Aftermarket Catalog

Solutions for all Brands











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Aftermarket Catalog

AD11185

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Valmont Irrigation 402-359-2201 www.valmont.com/irrigation/

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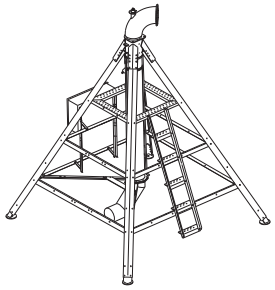
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These Packages all include the following:

- Aeromotive 11 Conductor Collector Ring
- Panel Mounts (Panel must be ordered separately)
- Ground Rod
- Anchor Bolts



Description		*Part #*
6-5/8" FULL STANDARD PROFILE w/ PIVOT FLEX	*Series 8000*	**0000J30**

- **Swivel Elbow has Pivot Flex assembly attached.**
- **Pivot Flex end has 6-5/8" bolt pattern to use w/ 6" First Span requiring a Pivot Flex.**
- **Utilizes the "New Style" galvanized longer Upper Bearing design. Stainless Steel Nipple is attached separately.**
- **Ladder included.**
- **Lower Pivot Elbow included (6-5/8" Valley Flange elbow w/ 6-5/8" Valley Flange on outlet end. 6-5/8" Flat Gasket included for outlet end).**



Description		*Part #*
6-5/8" FULL STANDARD PROFILE w/ 6-5/8" FLANGE	*Series 8000*	**0000J29**
6-5/8" FULL STANDARD PROFILE w/ 8" FLANGE	*Series 8000*	**0000J31**
6-5/8" FULL STANDARD PROFILE w/ 8-5/8" FLANGE	*Series 8000*	**0000J32**

- **Swivel Elbow has a 6-5/8" Valley Flange. 6" Pivot Pipe will bolt directly to flange. (0000J29 only)**
- **Swivel Elbow has a 8" Valley Flange. 6-5/8" Pivot Pipe w/ 8" flange will bolt directly to flange. (0000J31 only)**
- **Swivel Elbow has a 8-5/8" Valley Flange. 6-5/8" Pivot Pipe w/ 8-5/8" flange will bolt directly to flange. (0000J32 only)**
- **Utilizes the "New Style" longer Upper Bearing design. Stainless Steel Nipple is attached separately.**
- **Lower Pivot Elbow included (6-5/8" Valley Flange elbow w/ 6-5/8" Valley Flange on outlet end. 6-5/8" Flat Gasket included for outlet end).**

NOTE: New Full Standard 6-5/8" Pivot Points same height as 8" & 8-5/8" Pivot Points but has same foot pattern as original 6-5/8" Pivot Points.

Description		*Part #*
8-5/8" STANDARD PROFILE w/ 8-5/8" Flange	*Series 8000*	**0000J56**
8-5/8" STANDARD PROFILE w/ 8" Flange	*Series 8000*	**0000J57**

- **Utilizes the "New Style" Galvanized longer Upper Bearing design. Stainless Steel Nipple is attached separately.**
- **Ladder included.**
- **Lower Pivot Elbow included (8-5/8" Valley Flange elbow w/ non-flanged 8" outlet end).**

NOTE: New roll formed legs same as old style 8" Pivot Point.

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Description		*Part #*
10” STANDARD PROFILE	*Series 6000 / 8000*	**0000C57**

- **Includes the following:**
  - **Aeromotive 11 Conductor Collector Ring**
  - **Panel Mounts (Panel must me ordered separately)**
  - **Ground Rod**
  - **Pivot Ladder**
  - **Lower Riser**
  - **Pivot Platform**
  - **Anchor Bolts**

Description		*Part #*
UPGRADE FOR “OLD STYLE” 10” STANDARD PROFILE SINGLE BEARING DESIGN TO LONGER BEARING DESIGN	*Series 6000 / 8000*	**0000C55**

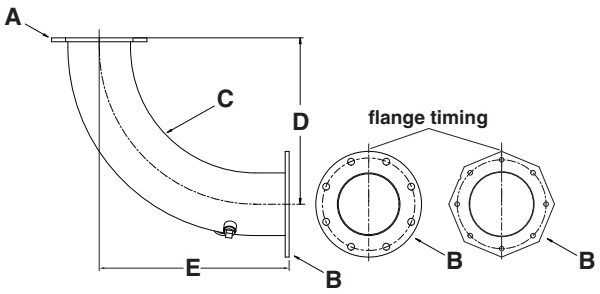
ONLY USED FOR PIVOT POINTS SHIPPED AFTER SEPTEMBER 1991. **(NOTE: Specific changes in SEP 1991 include change from hex bolts to carriage bolts with square holes in legs. Prior to SEP 1991, the holes to mount the platform would not be in the right location. The platform must be in the correct location to tie in the 4 upper bearing braces.)**

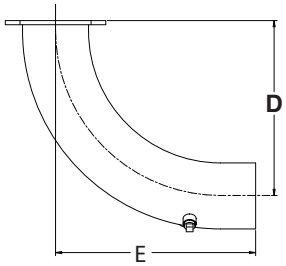
- **Includes the following:**
  - **Swivel**
  - **Riser**
  - **Platform**
  - **Lower Bearing Braces**
  - **Tie Rods for Riser Support**
  - **J-Pipe (w/o V-Packing and associated hardware)**
  - **Hardware for installation**
- **To be used to upgrade Old Style 10” Pivot w/ Single Riser Bearing design.**
- **NOT A COMPLETE PIVOT POINT.**
- **ONLY INCLUDES NECESSARY HARDWARE TO CONVERT TO NEW STYLE EXTENDED DOUBLE BEARING SWIVEL.**

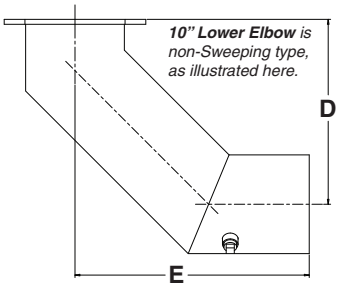
NOTE: For 10” HIGH PROFILE ordering or availability contact the Parts Department.

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SERIES TABLE		
SERIES ID	SERIES DESCRIPTION	PROFILE
1	8000 - 6 5/8" Pivot	Standard
2	8000 - 6 5/8" Pivot	Low
3	8000/6000 - 8" Pivot	All Profiles
4	8000 - 8 5/8 Pivot (Prior 10/13)	Standard
5	8000 - 8 5/8" Pivot (Eff 10/13)	Low & Standard
6	8000/6000 - 10" Pivot	Standard & High
7	6000 - 8" Pivot (eff. 9/1/84)	High
8	6000 - 8" Pivot (eff. 9/1/84)	Low
9	8000 - 8 5/8" Pivot	Standard
10	8000 - 10" Pivot	Standard
11	8000 - 10" Pivot	High
12	6000 - 10" Pivot	Standard
13	6000 - 10" Pivot	High



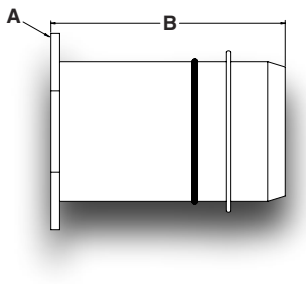


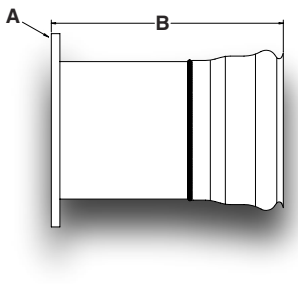


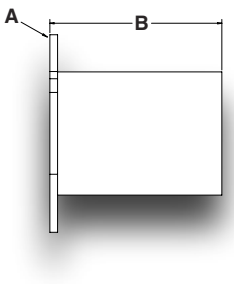
GALVANIZED LOWER ELBOWS						
PART #	A FLANGE TYPE & BOLT CIRCLE (BC)	B FLANGE TYPE & BOLT CIRCLE (BC)	C TUBE OD (IN.)	D DISTANCE (IN.)	E DISTANCE (IN.)	WHERE USED? (SEE SERIES TABLE)
1703928	6 5/8" Valley w/8.812" BC	6 5/8" Valley w/8.812" BC	6.625	20.03	9.27	1, 2
9361236	6 5/8" Valley w/8.812" BC	8" Valley w/10.188" BC	6.625	20.03	9.39	1, 2
9361894	6 5/8" Valley w/8.812" BC	6" ANSI w/9.50" BC	6.625	20.03	9.50	1, 2
1780278	8" Valley w/10.188" BC	No Flange	8.00	21.25	24.25	3
1781707	8" Valley w/10.188" BC	8" ANSI w/11.75" BC	8.00	21.25	24.75	3
9361564	8 5/8" Valley w/10.812" BC	No Flange	8.00	26.00	25.50	4
9364354	8 5/8" Valley w/10.812" BC	8" & 8 5/8" Universal BC	8.00	26.00	26.00	4
9361566	8 5/8" Valley w/10.812" BC	8" ANSI w/11.75" BC	8.00	26.00	26.00	4
9361360	8 5/8" Valley w/10.812" BC	No Flange	8.00	21.25	24.25	5
9364358	8 5/8" Valley w/10.812" BC	8" & 8 5/8" Universal BC	8.00	21.25	24.75	5
9361469	8 5/8" Valley w/10.812" BC	8" ANSI w/11.75" BC	8.00	21.25	24.75	5
1702447	10" Valley w/12.188" BC	No Flange	10.00	18.69	23.69	6

STAINLESS STEEL LOWER ELBOWS						
PART #	A FLANGE TYPE & BOLT CIRCLE (BC)	B FLANGE TYPE & BOLT CIRCLE (BC)	C TUBE OD (IN.)	D DISTANCE (IN.)	E DISTANCE (IN.)	WHERE USED? (SEE SERIES TABLE)
9363704	8" Valley w/10.188" BC	No Flange	8.00	21.25	24.25	3
9361567	8 5/8" Valley w/10.812" BC	No Flange	8.00	26.00	25.50	4
9361568	8 5/8" Valley w/10.812" BC	8" Valley w/10.188" BC	8.00	26.00	26.00	4
9363122	8 5/8" Valley w/10.812" BC	8" ANSI w/11.75" BC	8.00	26.00	26.00	4
9361434	8 5/8" Valley w/10.812" BC	No Flange	8.00	21.25	24.25	5
9364357	8 5/8" Valley w/10.812" BC	8" ANSI w/11.75" BC	8.00	21.25	24.75	5
9361300	10" Valley w/12.188" BC	No Flange	10.00	18.69	23.69	6

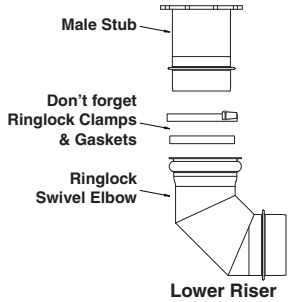
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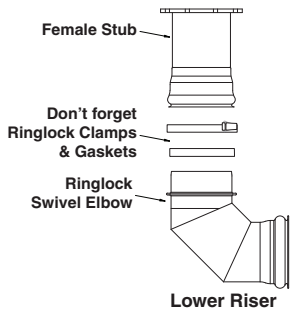




LOWER PIVOT ELBOW - ADAPTER STUBS FOR HOOKUPS					
PART #	A FLANGE TYPE	END TYPE	B LENGTH (IN.)	FINISH TYPE	FOR USE WITH:
1781708	8" Valley w/10.188" BC	8" Pierce type FEMALE coupler (gasket not included)	13.50	Galvanized	9361565 or 9361236
1781711	8" Valley w/10.188" BC	8" Pierce type MALE coupler (gasket not included)	13.44	Galvanized	9361565 or 9361236
9361545	8 5/8" Valley w/10.812" BC	8" Pierce type FEMALE coupler (gasket not included)	18.63	Galvanized	Mating to 8 5/8" riser pipes
9361546	8 5/8" Valley w/10.812" BC	8" Pierce type MALE coupler (gasket not included)	18.13	Galvanized	Mating to 8 5/8" riser pipes
1703973	6 5/8" Valley w/8.812" BC	6.00" OD Butt End	8.38	Galvanized	1703928
9361237	8" Valley w/10.188" BC	8.00" OD Butt End	8.25	Galvanized	9361236
1703974	6 5/8" Valley w/8.812" BC	6" Pierce type MALE coupler (gasket not included)	13.38	Galvanized	1703928
1703975	6 5/8" Valley w/8.812" BC	6" Pierce type FEMALE coupler (gasket not included)	13.57	Galvanized	1703928



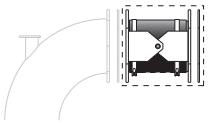
Lower Riser Swivel Option w/ Male Stub



Lower Riser Swivel Option w/ Female Stub

ADAPTER STUBS FOR SWIVEL ELBOW HOOKUPS			
PART #	STUB TYPE	APPLICATION	RING LOCK SWIVEL ELBOW PART # REQUIRED
1703975	FEMALE	6 5/8" Std Profile Pivot Point Lower Riser Pipe	1K01249 - 6" Ring Lock Elbow
1703974	MALE	6 5/8" Std Profile Pivot Point Lower Riser Pipe	1K01249 - 6" Ring Lock Elbow
1781708	FEMALE	8" Std Profile Pivot Point Lower Riser Pipe	1K01251 - 8" Ring Lock Elbow
1781711	MALE	8" Std Profile Pivot Point Lower Riser Pipe	1K01251 - 8" Ring Lock Elbow
9361545	FEMALE	8 5/8" Std Profile Pivot Point Lower Riser Pipe	1K01251 - 8" Ring Lock Elbow
9361546	MALE	8 5/8"" Std Profile Pivot Point Lower Riser Pipe	1K01251 - 8" Ring Lock Elbow

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PIVOT FLEX PACKAGES

(All include Boot, Clamps, Hardware, 1 Set of Bolts & 1 Flat Gasket)

Description		*Part #*
6-5/8" x 6-5/8"	*8000 Series*	**0000G52**

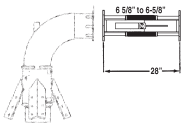
- **6-5/8" Valley Flange bolt pattern x 6-5/8" Valley Flange bolt pattern.**
- **13" in length (flange to flange).**
- **for 8000 Series Pivot Points or any other application.**

Description		*Part #*
8" x 8"	*pre-6000 Series*	**0000990**

- **8" Valley Flange bolt pattern x 8" Valley Flange bolt pattern.**
- **28" in length (flange to flange).**
- **for Pre-8000 Series Pivot Points.**

Description		*Part #*
6-5/8" x 6-5/8"	*pre-6000 Series*	**0000991**

- **6-5/8" Valley Flange bolt pattern x 6-5/8" Valley Flange bolt pattern.**
- **28" in length (flange to flange).**
- **for Pre-8000 Series Pivot Points.**



Description	*Part #*
UNIVERSAL 8" / 8-5/8"	**0000C23**

- **Flange slotted on both ends to accept 8" & 8-5/8" Valley Flange bolt pattern.**
- **13" in length (flange to flange).**



Description		*Part #*
UNIVERSAL 8" / 8-5/8"	*Stainless Steel*	**0000J58**

- **Flange slotted on both ends to accept 8" & 8-5/8" Valley Flange bolt pattern.**
- **13" in length (flange to flange).**

Description	*Part #*
10" x 10"	**0000B92**

- **10" Valley Flange bolt pattern x 10" Valley Flange bolt pattern.**
- **13" in length (flange to flange).**



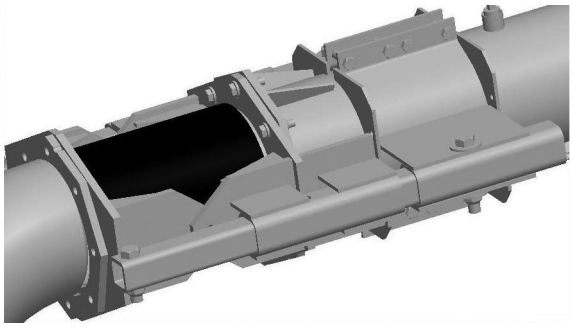
PIVOT FLEX HOSES

Description		*Part #*
6-5/8" PIVOT FLEX HOSE	*for Series 8000 6-5/8" Pivots*	**1703138**
Description		*Part #*
6-5/8" PIVOT FLEX HOSE	*used in 0000991 Pivot Flex Pkgs (16" in Length)*	**1800318**
Description		*Part #*
8" PIVOT FLEX HOSE	*used in 0000C23 Pivot Flex Pkg*	**1780265**
Description		*Part #*
10" PIVOT FLEX HOSE	*used in 0000B92 Pivot Flex Pkgs*	**1780890**

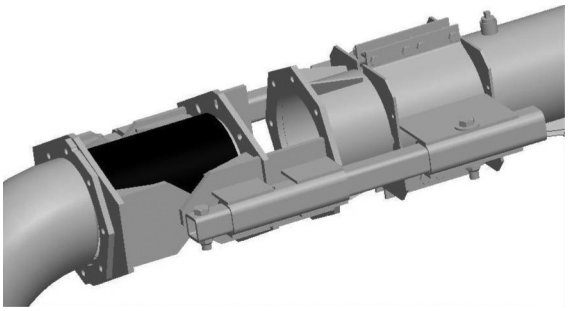
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Valley Extending Pivot Flex Option

- *Provides extension up to 7”*
- *Recommended for all long machines in applications that experience significant temperature changes in the off-season*
- *Minimizes the load applied to the pivot point during the off-season due to contraction of the steel during cold weather*
- *Retrofit the following:*
  - *8 5/8” pivot point with an 8 5/8” diameter first span*
  - *10” pivot point with a 10” diameter first span. **Will NOT** retrofit to 8” diameter pivot pipe.*



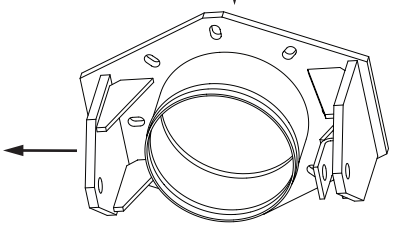
Normal Operation



Extended Operation

EXTENDING PIVOT FLEX PACKAGES		
Part #	**Description**	**Comments**
0000F60	Extending Pivot Flex for 8 5/8” Diameter Pipe	Both packages require a previously installed pivot flex. If one is not installed, must also order flex assembly as illustrated below.
0000F59	Extending Pivot Flex for 10” Diameter Pipe	

Part #	Description
9361768	8” / 8 5/8” Flex Assembly
1780907	10” Flex Assembly

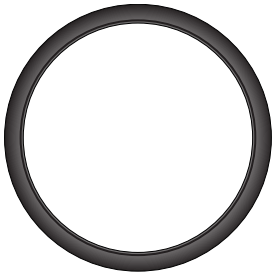


How does an Extending Pivot Flex work?

The new extending pivot flex replaces the pivot pipe half of a standard pivot flex and has an additional assembly that attaches to the pivot pipe. At the end of the season, the user removes four of the pivot flex attaching bolts and installs 4 threaded rods with nuts. The remaining four attaching bolts are removed, and the four nuts on the threaded rods are slowly loosened to relieve any loads that may be on the pivot point. In the spring, the user simply reverses the process using the four threaded rods to pull the pivot pipe back tight to the pivot flex. The machine can be operated without water with the pivot flex in the extended position. Installation and operating instructions (part # 0996790) will be shipped with each extending pivot flex.

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TRIPLE LIP RISER GASKETS

Part # *Description*	*Part #* *Description*	*Part #* *Description*
0996279	**0221001**	**0995298**
6-5/8” **For 6-5/8” Pivot Point**	**8”** **For 8” or 8-5/8” Pivot Point** **(Coupler for 8-5/8” Riser utilizes 8” Coupler)**	**10”** **For 10” Pivot Point**
		

Triple Lip Riser Gaskets

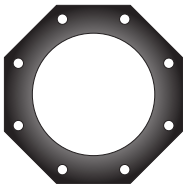
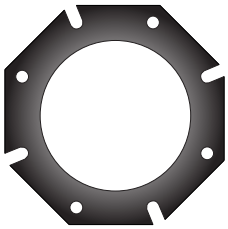
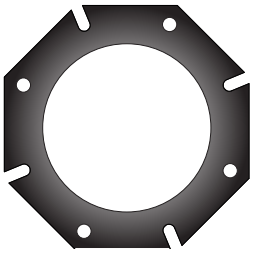
- *Triple lip Teflon impregnated seal for leak free operation*
- *Seals on the inside as well as the outside*
- *Seals at both high and low operating pressures*
- *Provides long leak free seal life*



cutaway

FLAT RUBBER GASKETS

for Pivot Flexes, Pivot Riser Pipes and Pivot Elbow connections

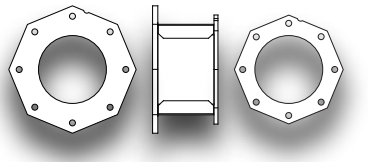
Part # *Description*	*Part #* *Description*	*Part #* *Description*
0992211	**0996566**	**0992385**
6-5/8” **8-bolt** **Valley Flange Pattern**	**8” or 8-5/8”** **8-bolt** **Valley Flange Pattern**	**10”** **8-bolt** **Valley Flange Pattern**
		

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ADAPTER STUBS & SPACERS - Galvanized
(all flanges utilize Valley bolt pattern)

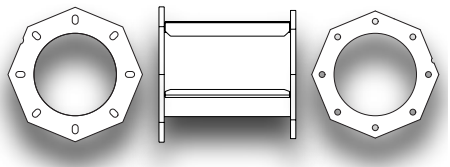
Part #
Description

1702299
8” X 6-5/8”
6.25” in length



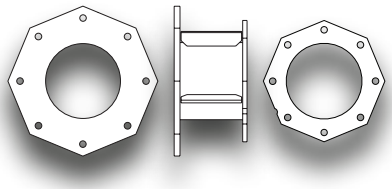
BOLT CIRCLE 10.188” | **BOLT CIRCLE** 8.812”

9361466
8” x 8-5/8”
13” in length



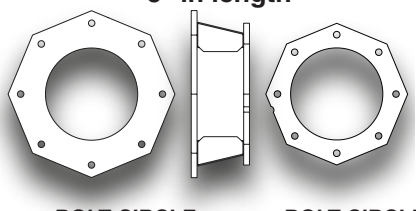
UNIVERSAL 10.500” | **BOLT CIRCLE** 10.812”

9361429
8-5/8” X 6-5/8”
6.25” in length



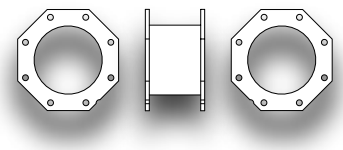
BOLT CIRCLE 10.812” | **BOLT CIRCLE** 8.812”

1780584
10” x 8”
5” in length



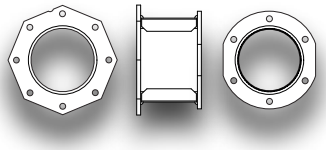
BOLT CIRCLE 12.188” | **BOLT CIRCLE** 10.188”

9361634
6-5/8” x 6-5/8”
5.63” in length



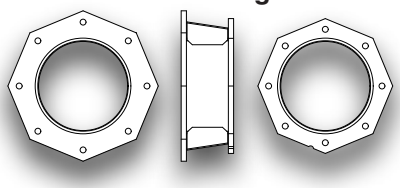
BOLT CIRCLE 8.812” | **BOLT CIRCLE** 8.812”

1704065
6-5/8” x 6” round (6-bolt)
6.25” in length



BOLT CIRCLE 8.812” | **BOLT CIRCLE** 7.812”

9362441
10” x 8-5/8”
5.00” in length

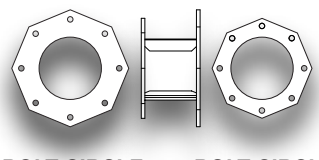


BOLT CIRCLE 12.188” | **BOLT CIRCLE** 10.812”

ADAPTER STUBS & SPACERS - Stainless Steel
(all flanges utilize Valley bolt pattern)

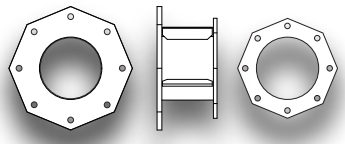
Part #
Description

9360495
8” X 6-5/8” Stainless Steel
6.13” in length



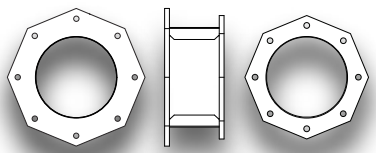
BOLT CIRCLE 10.188” | **BOLT CIRCLE** 8.812”

9361419
8-5/8” x 6-5/8” Stainless Steel
6.25” in length



BOLT CIRCLE 10.812” | **BOLT CIRCLE** 8.812”

9361299
10” x 8-5/8” Stainless Steel
6.19” in length



BOLT CIRCLE 12.188” | **BOLT CIRCLE** 10.812

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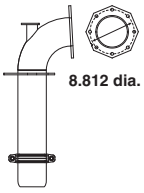
Description	*Part #*
PIVOT SWIVEL with FLEX	**1703898**

- **6 5/8” half of Pivot Flex 1703955**
- **5” Pivot Pipe - bolts directly to Pivot Flex 9363294**
- **6” Pivot Pipe 108” coupler spacing - bolts directly to Pivot Flex 9361219**
- **6” Pivot Pipe 30” coupler spacing - bolts directly to Pivot Flex 9361221**



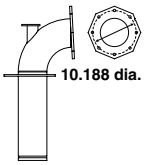
Description	*Part #*
PIVOT SWIVEL without FLEX	**1703951**

- **5” Pivot Pipe - bolts directly to Pivot Flex 9363294**
- **6” Pivot Pipe 108” coupler spacing - bolts directly to Swivel 9361219**
- **6” Pivot Pipe 30” coupler spacing - bolts directly to Swivel 9361221**
- **Complete 6 5/8" Pivot Flex Assembly 0000G52**



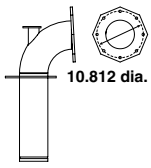
Description	*Part #*
PIVOT SWIVEL without FLEX with 8” Flange	**9361622**

- **6 5/8 ” Pivot Pipe 108” coupler spacing - bolts directly to Swivel 9360014**
- **6 5/8” Pivot Pipe 30” coupler spacing - bolts directly to Swivel 9360453**
- **6 5/8" Pivot Pipe POLY 108” coupler spacing - bolts directly to Swivel ... 9362958**
- **6 5/8” Pivot Pipe POLY 60” coupler spacing - bolts directly to Swivel..... 9362954**
- **Complete 8”-8 5/8” Pivot Flex Assembly 0000C23**



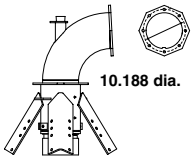
Description	*Part #*
PIVOT SWIVEL without FLEX with 8 5/8” Flange	**9361672**

- **6 5/8 ” Pivot Pipe 108” coupler spacing - bolts directly to Swivel 9361459**
- **6 5/8” Pivot Pipe 30” coupler spacing - bolts directly to Swivel 9361457**
- **6 5/8" Pivot Pipe POLY 108” coupler spacing - bolts directly to Swivel ... 9362958**
- **6 5/8” Pivot Pipe POLY 60” coupler spacing - bolts directly to Swivel..... 9362954**
- **Complete 8”-8 5/8” Pivot Flex Assembly 0000C23**



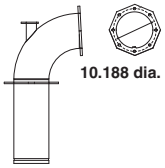
FOR COMPLETE PIVOT POINT PACKAGES REFER TO PAGE 1-1 IN THIS SECTION.

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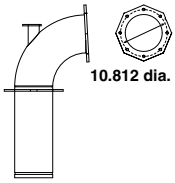
Description	*Part #*
8” PIVOT SWIVEL with STAINLESS STEEL NIPPLE	**9360416**

- **6 5/8” Pivot Pipe 108” coupler spacing - bolts directly to Swivel 9364352**
- **6 5/8” Pivot Pipe 30” coupler spacing - bolts directly to Swivel 9364353**
- **6 5/8” Pivot Pipe POLY 108” spacing - bolts directly to Swivel..... 9362958**
- **6 5/8” Pivot Pipe POLY 60” coupler spacing - bolts directly to Swivel..... 9362954**
- **Complete 8”-8 5/8” Pivot Flex Assembly 0000C23**



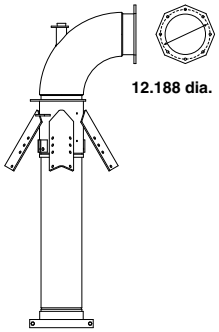
Description	*Part #*
8 5/8” PIVOT SWIVEL with 8” FLANGE	**9361420**

- **6 5/8” Pivot Pipe 108” coupler spacing - bolts directly to Swivel 9364352**
- **6 5/8” Pivot Pipe 30” coupler spacing - bolts directly to Swivel 9364353**
- **6 5/8” Pivot Pipe POLY 108” spacing - bolts directly to Swivel..... 9362958**
- **6 5/8” Pivot Pipe POLY 60” coupler spacing - bolts directly to Swivel..... 9362954**
- **Complete 8”-8 5/8” Pivot Flex Assembly 0000C23**



Description	*Part #*
8 5/8” PIVOT SWIVEL with 8 5/8” FLANGE	**9361392**

- **6 5/8” Pivot Pipe 108” coupler spacing - bolts directly to Swivel 9361459**
- **6 5/8” Pivot Pipe 30” coupler spacing - bolts directly to Swivel 9361457**
- **6 5/8” Pivot Pipe POLY 108” spacing - bolts directly to Swivel..... 9362958**
- **6 5/8” Pivot Pipe POLY 60” coupler spacing - bolts directly to Swivel..... 9362954**
- **8 5/8” Pivot Pipe 108” coupler spacing - bolts directly to Swivel 9360087**
- **8 5/8” Pivot Pipe 30” coupler spacing - bolts directly to Swivel 9360491**
- **Complete 8”-8 5/8” Pivot Flex Assembly 0000C23**



Description	*Part #*
10” PIVOT SWIVEL	**9360371**

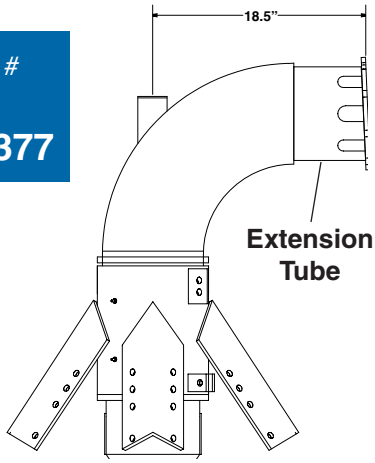
- **10” Pivot Pipe 108” coupler spacing - bolts directly to Swivel 9361747**
- **Complete 10” Pivot Flex required on all 10” pivot points..... 0000B92**

FOR COMPLETE PIVOT POINT PACKAGES REFER TO PAGE 1-1 OR 1-2 IN THIS SECTION.

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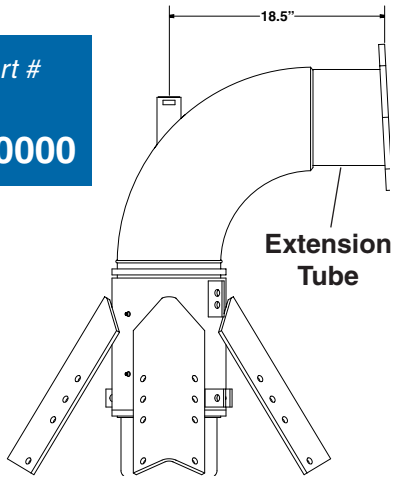
Description	*Part #*
PIVOT SWIVEL REPLACEMENT FOR PRE-6000 SERIES PIVOT POINTS w/ 6 5/8" FLANGE	**1700377**

- **6 5/8" Valley flange w/8.812" bolt circle - 1800010**
- **Black Steel Extension Tube only (6" in length) - 1710076**
- **Swivel Elbow is 8" diameter tube**



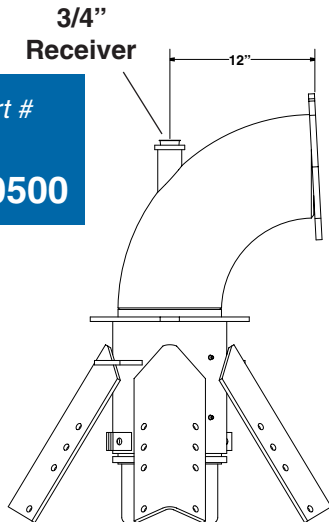
Description	*Part #*
PIVOT SWIVEL REPLACEMENT FOR PRE-6000 SERIES PIVOT POINTS w/ 8" FLANGE	**1710000**

- **8" Valley flange w/10.188" bolt circle - 1710002**
- **Black Steel Extension Tube only (6" in length) - 1710001**



Description	*Part #*
PIVOT SWIVEL REPLACEMENT FOR 6000 SERIES PIVOT POINTS w/ ¾ RECEIVER FOR ¾ J-PIPE (prior to Sep 91)	**1780500**

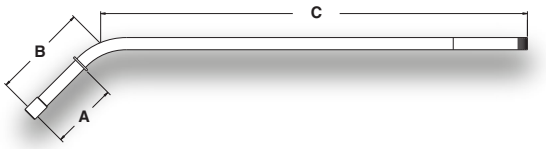
- **8" Valley flange w/10.188" bolt circle - 1780238**



ALL OTHER PIVOT SWIVELS

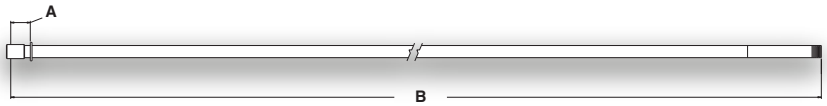
For all other Pivot Swivel replacements, please refer to the Valley Illustrated Parts Manual for part numbers and appropriate applications.

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1” J-PIPES				
PART #	DESCRIPTION	“A” DIM.	“B” DIM.	“C” DIM.
0996257	for Series 8000 6-5/8” pivot	7.20”	10.37”	44.50”
1781355	for Series 8000 & 6000 8” pivot	7.20”	11.09”	38.75”
9361379	for Series 8000 8-5/8” pivot	7.20”	11.57”	47.50”
9360370	for Series 8000 10” pivot w/ extended bearing	7.20”	12.50”	80.00”
1780888	for Series 6000 10” pivot w/o extended bearing	7.20”	12.50”	42.88”
1702433	for 10” pivot prior to 1990 w/ welded washer at bottom	2.44”	10.00”	44.88”

3/4” J-PIPES				
PART #	DESCRIPTION	“A” DIM.	“B” DIM.	“C” DIM.
1780504	for Series 6000 8” pivot prior to Sep 1991	5.90”	10.00”	39.75”
1701203	for 8” pivot prior to 1990 w/ welded washer at bottom	1.97”	9.94”	40.00”

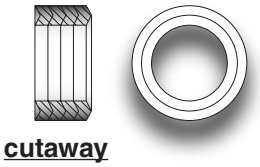


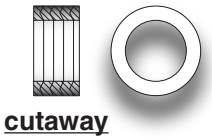
1” UNIVERSAL J-PIPE			
PART #	DESCRIPTION	“A” DIM.	“B” DIM.
0996329	UNIVERSAL J-Pipe - must bend w/ pipe bender, cut to length at top & then thread, or can be used from the top through the bottom of Pivot Elbow for Competitive conversions.	7.20”	151.50”

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V-PACKING

Part # *Description*	*Part #* *Description*
0254004 **for 1" J-Tube**	**0253004** **for 3/4" J-Tube**





Description	*Part #*
J-PIPE WELD-ON CONVERSION KIT	**KA01275**

Complete Weld-on Hardware Kit to add-on a 1" J-Pipe to a pivot point.
(MUST order 1" J-Pipe Separately)

KIT includes the following:

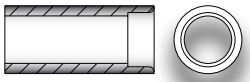
- **Top and bottom Black Weld-On Receivers**
- **Conduit Guides**
- **V-Packing and associated hardware**
- **1" Cord Connectors (qty. 2)**
- **All necessary hardware for installation**

NOT INCLUDED:

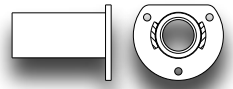
Collector Ring, 1" Nipple Extending from Collector Ring, J-Pipe and Raceway Cable.

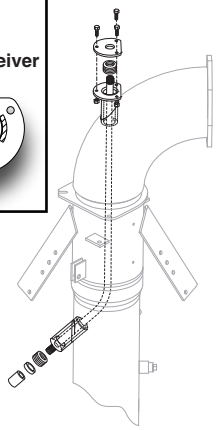
(accepts 1" J-Pipe only)

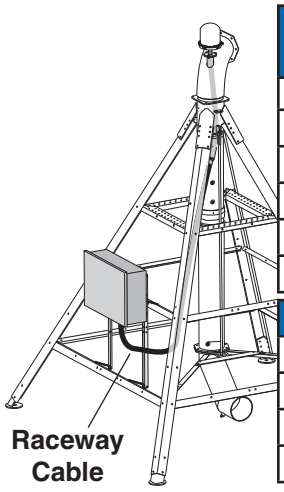
1781641
Black Weld-On Bottom Receiver



1781645
Black Weld-on Top Receiver







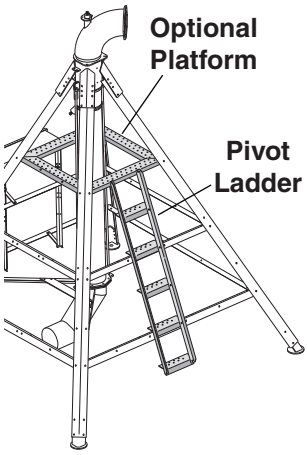
PIVOT RACEWAY CABLES WITHOUT RESOLVER CONDUCTORS INCLUDED			
PART #	**LENGTH**	**GAUGE**	**CONDUCTOR**
9310211	**16'**	**12**	**11**
9310212	**16'**	**12**	**12**
1812012	**16'**	**10**	**11**
1813106	**16'**	**10**	**12**
1812439	**16'**	**8**	**11**
WITH RESOLVER & ENCODER CONDUCTORS INCLUDED			
1813096	**20'**	**10**	**16**
1813095	**20'**	**8**	**16**
9310270	**24'**	**10**	**16**
9310372	**24'**	**8**	**16**

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LADDER PACKAGE

(8" or 8-5/8" Standard Profile Pivot)

0000F37



KIT includes the following:

Ladder Steps & Angles (8" & 8-5/8") KA01092
Ladder Hardware Kit KA09384

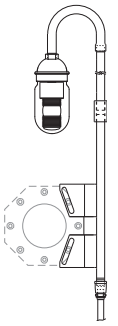
For High and Low Profile Pivot Ladders or 10" Pivot Ladders please refer to Illustrated Parts Manual for part numbers.

NOTE: Optional Platform:

8" Standard Profile Pivot .....1781378 (4 req. for complete platform)
8-5/8" Standard Profile Pivot.....9361548 (4 req. for complete platform)

NOTE: 6-5/8" Profile Pivot Ladder:

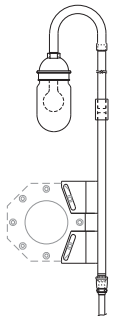
Ladder Side Angle 9364150
Ladder Steps 1781371
Ladder Hardware Kit..... KA09384



TOMAR Brand Strobe Running Light Packages

RUNNING LIGHT PACKAGES	
Description	**Part #**
Tomar w/ Blue Strobe	**0000C29**
Tomar w/ Amber Strobe	**0000C30**
Tomar w/ Red Strobe	**0000C54**
Tomar w/ Clear Strobe	**0000E18**
LED Running Light	**0000K11**
Standard **w/ Heavy Duty Light Bulb**	**0000530**

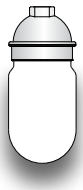
NOTE: All packages include Running Light Cable (1810286) and Mounting Bracket (1781544).

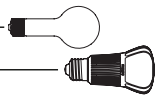


STANDARD

REPLACEMENT BULBS & RUNNING LIGHT CABLE	
Description	**Part #**
Strobe Light Screw-in Lamp - BLUE	**03E1661**
Strobe Light Screw-in Lamp - AMBER	**03E1660**
Strobe Light Screw-in Lamp - RED	**03E1885**
Strobe Light Screw-in Lamp - CLEAR	**03E2149**
Strobe Light Replacement Lamp	**03E1803**
Standard Heavy Duty Running Light Bulb	**0314820**
LED Replacement Bulb	**03E3825**
Running Light Globe & Pendant w/o Bulb (can be used for both the Strobe & Standard Running Lights)	**0315737**
Globe Only	**03E2198**
Running Light Cable - 20' long - 14 gauge - 4 conductor	**1810286**
Globe Gasket	**0995205**
Running Light Bracket, Short	**9363972**







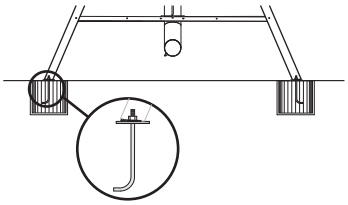


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PIVOT ANCHOR BOLTS	
Description	**Part #**
7/8" Steel (use for all pivot points)	1702191
7/8" Stainless Steel	1703761

HARDWARE
Part #
KA01153*
KA01189*

** (includes 4 hex nuts & flat washers)*



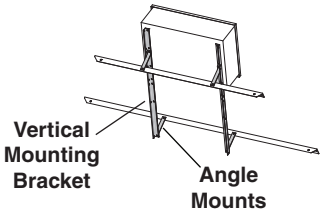
PIVOT PANEL MOUNTING HARDWARE PACKAGE 0000G54

PACKAGE includes the following:

- 2 - Vertical Mounting Bracket..... 1780272
- 4 - Angle Mount..... 1780273
- 4 - 3/8" Hex Nuts..... 0131018
- 8 - 3/8" x 1" Cap Screws 0161045
- 8 - 3/8" Lock Nuts..... 0133006

Note: Mounting hardware will require field modification for many pivot brands to retrofit hardware to existing pivot structures.

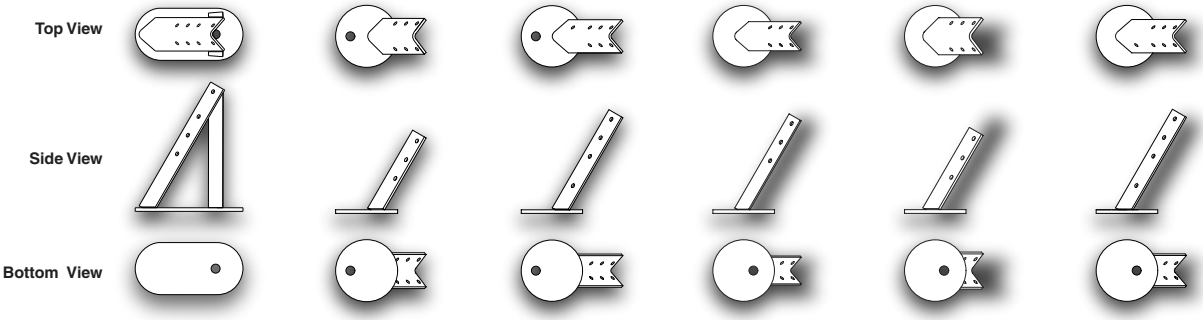
(see "Control Panels and Options" section for Classic control panel Mounting options.

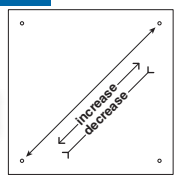


Note: Mounting hardware will require field modification for many pivot brands to retrofit hardware to existing pivot structures.

PIVOT FOOT ADAPTERS

Reinke® for 6-5/8" Low Profile Pivot	*Zimmatic®* for 8" & 8-5/8" Pivot (EFF. 2014)	*Zimmatic®* for 8-5/8" Pivot (PRIOR To 2014)	*Valley®* for 6-5/8" Low Profile Pivot	*Valley®* for 8" & 10" Pivot 8-5/8" Pivot (EFF. 2014)	*Valley®* for 8-5/8" Pivot (PRIOR To 2014)
9361631	**9361948**	**9361949**	**1703931**	**1702150**	**1704017**
This adapter reduces bolt diagonal by 15.5"	These adapters increase bolt diagonal by 10.5"	These adapters increase bolt diagonal by 10.5"			

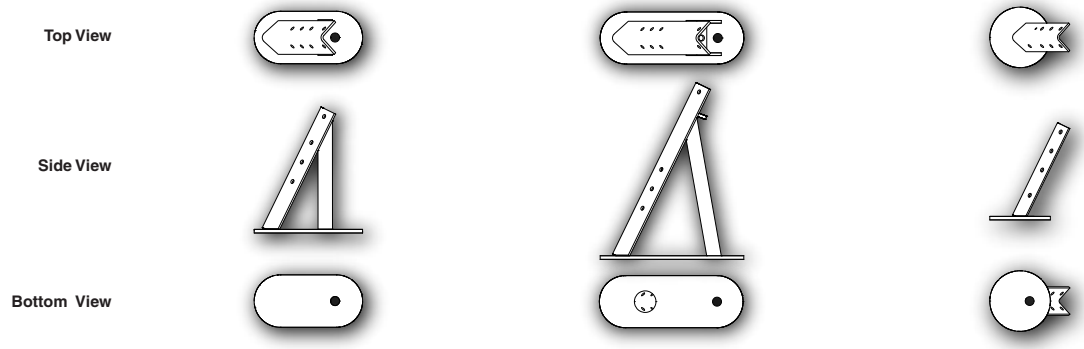




Pivot Pad Bolt Diagonal

PIVOT FOOT ADAPTERS

Reinke® for 6-5/8" Full Standard Pivot	*T-L®* for 6-5/8" Full Standard Pivot	*Valley®* for 6-5/8" Full Standard Pivot
9364155	**9364160**	**9364152**
This adapter reduces bolt diagonal by 14.40"	This adapter reduces bolt diagonal by 23.58"	



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Reasons to Upgrade or Convert

- *Outdated controls cause problems. A panel upgrade or conversion can take care of many nuisance service calls for the customer.*
- *Bring new Valley technology to all of your customer's machines*
- *Extend the life of your customer's machines*
- *Orphaned machines need parts – this makes it easy*
- *Makes servicing competitive machines much easier*



Every Valley control panel includes NEMA 3R enclosures, transient and induced voltage protection (only on ICON series), heavy duty disconnect and a lockable inner door (lockable inner door not available for Classic Panel) to help guarantee reliability, safe usage and a long lifespan. Valley manuals contain all necessary safety measures and all components are clearly labeled.

Consider upgrading Valley machines to new control technology or converting those competitive machines. There is a great opportunity for replacing older control systems with one of the Valley control panel choices.



Quick Tips
Ordering Valley Control Panels

- ICON Series, ClassicPlus and Classic control panels can be built-to-order out of the Valley, NE manufacturing location. This means that selected options will be factory installed, saving you labor in the field.
- To order a "Built-to-Order" control panel, it must be submitted on a special EP (Electrical Panel) order type out of the Valley, NE location. Only one type of control panel can be placed per "EP" order type. However, if you order a quantity of control panels that are exactly the same, they can be placed on the same order.
- You will notice that "Stock" panels are offered that give you a panel without or with limited options and can be ordered through any of the 4 Distribution Centers. Field installed options can be ordered separately to upgrade your control panel to your customer's requirements.

Call any order manager or Distribution Center Manager for assistance in ordering control panels!

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EXCEPTIONAL WARRANTY SUPPORT

Valmont Irrigation offers outstanding warranties for the following aftermarket products:

ICON Series Complete Control Panels

Following is a summary of the warranty Valmont Irrigation offers for the ICON Series panels and components that are sold through the aftermarket:

Complete Panels sold as conversions or upgrades through the aftermarket

ICON Series	**5 years from the date of purchase on the entire panel, including all electronic and electromechanical components inside the panel. (*fuses and transient voltage protection components not covered)***

Component Parts for the ICON Series Control Panels sold through the aftermarket for rebuild or repair

3 years from the date of purchase on any part listed below.

- ✓ **ICON Series Displays**
- ✓ **ICON Series Smart Relay Boards**
- ✓ **Encoders**
- ✓ **Pressure Transducers**

2 years from the date of purchase on any part listed below.

- ✓ **GPS Positioning**

Classic and ClassicPlus Complete Control Panels

Complete Panels sold as conversions or upgrades through the aftermarket

ClassicPlus	**1 year from the date of purchase on the entire panel. (*fuses not covered)***
Classic	**1 year from the date of purchase on the entire panel. (*fuses not covered)***

All warranties described herein are for parts only, FOB Valley, NE. No labor or freight allowances included.

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Valley ICON10 Panel

Valley ICON10 is the most advanced user friendly pivot control panel ever made.

The ICON10 features the largest touchscreen in the new ICON line with a 10-inch, full-color touch display, so you can view and control more right from your screen. The easy-to-use display makes monitoring and controlling every aspect of your pivot simple. It's similar to using the touchscreen on your smart tablet, but now it's on your pivot.

The ICON10 provides all of the features currently offered in the Valley Pro2 panel with significantly enhanced memory and speed for future upgrades. It is GPS Ready, VRI Speed, Zone, and Individual Sprinkler program capable, and allows for precise and programmable application of water, fertilizers and chemicals.



Key Features:

- *10-inch, full-color touchscreen display*
- *Intuitive user interface*
- *AgSense® Enabled – AgSense ICON Link installed standard**
- *BaseStation3™ compatible**
- *Variable rate irrigation (VRI) equipped*
- *Cable theft monitoring**
- *Remote access WiFi***

*Additional hardware or subscription required.
**Limitations based on distance, field condition and additional hardware.

How to Order:

Step 1: Select one of the following control panels.
Step 2: Select the appropriate SIM Card for GSM Panel.
Step 3: Order other components such as positioning, encoder, J-Pipes, collector rings and pivot mounting hardware if needed.

VALLEY ICON10 CONTROL PANELS			
Part #	**Description**	**Don't Forget**	**"Build to Order" or Stock**
KA01946	ICON10 Panel 30 Amp - CDMA		Stock Item at Valley Distrubition Centers. Any options must be field installed.
KA02289	ICON10 Panel 30 Amp - GSM	SIM Card (See Part#'s below)	Stock Item at Valley Distrubition Centers. Any options must be field installed.
KA01945	ICON10 Panel 30 Amp - CDMA		"Build to Order" Control Panel from Valley, NE only. Some options can be factory installed.
KA02284	ICON10 Panel 30 Amp - GSM	SIM Card (See Part#'s below)	"Build to Order" Control Panel from Valley, NE only. Some options can be factory installed.
KA01959	ICON10 Panel 45 Amp - CDMA		"Build to Order" Control Panel from Valley, NE only. Some options can be factory installed.
KA02338	ICON10 Panel 45 Amp - GSM	SIM Card (See Part#'s below)	"Build to Order" Control Panel from Valley, NE only. Some options can be factory installed.

ICON10 WIFI PACKAGE		
Part #	**Description**	**Comments**
0000K97	ICON10 & ICON1 WIFI - U.S. And Canada	Optional with the ICON10 series.

GSM SIM CARDS		
Part #	**Descritpion**	**Comments**
KA02356	SIM Card AT&T Celluar Carrier - DOM.	MUST order with the GSM "BTO" or "Stock" Panel to utilize ICON LINK
KA02710	SIM Card Aeris - GLOBAL	MUST order with the GSM "BTO" or "Stock" Panel to utilize ICON LINK

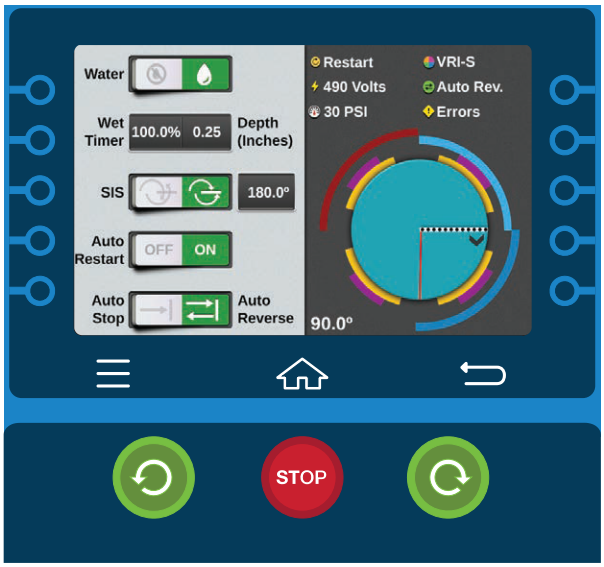
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Valley ICON5 Panel

A comprenhensive combination of soft-touch navigation and ultimate control.

The Valley ICON5 is an excellent option for growers who want the latest technology in pivot irrigation control. Similar to the ICON10, it comes standard with AgSense ICON Link so you can gain full control of your pivots with BaseStation3 or AgSense from anywhere, at any time.

The ICON5 captures many of the same benefits of the ICON10, but in a 5-inch screen. The smaller screen features a touch interface with soft keys that mirror the touch control functions. Comparable to the ICON10, it comes with all the technology and features of the Valley Pro2 panel, as well as plently of memory for upgrades.



Key Features:

- *5-inch, full-color touchscreen display*
- *Intuitive user interface*
- *Soft touch buttons for feature selection and navigation*
- *AgSense® Enabled – AgSense ICON Link installed standard**
- *BaseStation3™ compatible**
- *Variable rate irrigation (VRI) equipped*
- *Cable theft monitoring**

*Additional hardware or subscription required.

How to Order:

Step 1: Select one of the following control panels.
Step 2: Select the appropriate SIM Card for GSM Panel.
Step 3: Order other components such as encoder, J-Pipes, collector rings and pivot mounting hardware if needed.

Valley ICON5 CONTROL PANELS			
Part #	**Description**	**Don't Forget**	**"Build to Order" or Stock**
KA01918	ICON5 Panel 30 Amp - CDMA		Stock Item at Valley Distrubition Centers. Any options must be field installed.
KA02271	ICON5 Panel 30 Amp - GSM	SIM Card (See Part#'s below)	Stock Item at Valley Distrubition Centers. Any options must be field installed.
KA01917	ICON5 Panel 30 Amp - CDMA		"Build to Order" Control Panel from Valley, NE only. Some options can be factory installed.
KA02266	ICON5 Panel 30 Amp - GSM	SIM Card (See Part#'s below)	"Build to Order" Control Panel from Valley, NE only. Some options can be factory installed.
KA01931	ICON5 Panel 45 Amp - CDMA		"Build to Order" Control Panel from Valley, NE only. Some options can be factory installed.
KA02320	ICON5 Panel 45 Amp - GSM	SIM Card (See Part#'s below)	"Build to Order" Control Panel from Valley, NE only. Some options can be factory installed.

GSM SIM CARDS		
Part #	**Descritpion**	**Comments**
KA02356	SIM Card AT&T Celluar Carrier - DOM.	MUST order with the GSM "BTO" or "Stock" Panel to utilize ICON LINK
KA02710	SIM Card Aeris - GLOBAL	MUST order with the GSM "BTO" or "Stock" Panel to utilize ICON LINK

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Valley ICON1 Panel

Pivot control through a remote panel interface.

*Introducing the first digital pivot control panel with no display screen and built-in remote panel control through Edge-of-Field WiFi.***

The panel module features only three soft touch buttons - Start Forward, Stop, and Start Reverse. But that doesn't mean you lose any functionality. You benefit from the same monitor and control capabilities as the ICON10. There's simply no screen on the panel itself, giving you the flexibility of using the mobile device of your choice.

With ICON1, you can control your pivot from the edge of the field with any mobile device. You no longer have to worry about making trips to the pivot panel to monitor and control your pivot. With Edge-of-Field WiFi, those trips become nonessential, and can make better use of your time, right from the seat of your truck.



Key Features:

- *AgSense® Enabled - AgSense ICON Link Installed standard**
- *BaseStation3™ Compatible**
- *Remote access interface via Edge-of-Field WiFi***
  - *No cell service or or internet required*
- *Wireless display through tablet or smart phone*
- *ICON app available on the App Store and Google Play*
- *Cable theft monitoring*

*Additional hardware or subscription required.

**Limitations based on field conditions and additional hardware

How to Order:

Step 1: Select one of the following control panels.
Step 2: Select the appropriate SIM Card for GSM Panel.
Step 3: MUST order Wifi Package.
Step 4: Order other components such as positioning, encoder, J-Pipes, collector rings and pivot mounting hardware if needed.

Valley ICON1 CONTROL PANELS			
Part #	**Description**	**Don't Forget**	**"Build to Order" or Stock**
KA01890	ICON1 Panel 30 Amp - CDMA		Stock Item at Valley Distrubition Centers. Any options must be field installed.
KA02253	ICON1 Panel 30 Amp - GSM	SIM Card (See Part#'s below)	Stock Item at Valley Distrubition Centers. Any options must be field installed.
KA01889	ICON1 Panel 30 Amp - CDMA		"Build to Order" Control Panel from Valley, NE only. Some options can be factory installed.
KA02248	ICON1 Panel 30 Amp - GSM	SIM Card (See Part#'s below)	"Build to Order" Control Panel from Valley, NE only. Some options can be factory installed.
KA01903	ICON1 Panel 45 Amp - CDMA		"Build to Order" Control Panel from Valley, NE only. Some options can be factory installed.
KA02302	ICON1 Panel 45 Amp - GSM	SIM Card (See Part#'s below)	"Build to Order" Control Panel from Valley, NE only. Some options can be factory installed.

ICON10 WIFI PACKAGE		
Part #	**Description**	**Comments**
0000K97	ICON10 & ICON1 WIFI - U.S. And Canada	MUST be ordered if ordering any of the above options.

GSM SIM CARDS		
Part #	**Descritpion**	**Comments**
KA02356	SIM Card AT&T Celluar Carrier - DOM.	MUST order with the GSM "BTO" or "Stock" Panel to utilize ICON LINK
KA02710	SIM Card Aeris - GLOBAL	MUST order with the GSM "BTO" or "Stock" Panel to utilize ICON LINK

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ICON SERIES CONTROL PANEL OPTIONS AVAILABLE			
Part #	**Description**	**Can be Factory Installed?**	**Comments**
933K431	4-20mA Pressure Transducer Kit	No	This option can only be installed on ICON Series Panels
931K013	Pressure Transducer Kit - Optional	No	This option can be used on the ICON Series or Pro/Select. Included 03E2331 pressure transducer, 9311054 cable, enclosure, hardware and wiring diagrams
0000L17	Valley GPS Positioning ICON	No	Provides ALL necessary components for providing GPS positioning to any ICON panel application.
0000L16	Valley GPS Positioning - Pro2/Select2	No	Provides ALL necessary components for providing GPS positioning to any Pro2/Select2 application.
0000L39	Valley GPS Positioning - TouchPro	No	Provides ALL necessary components for providing GPS positioning to any TouchPro application.
KA02669	Valley End of Field Pressure	No	Provides end of field pressure to any ICON series pivot panel using 4-20 mA transducer.
KA02228	Encoder Option	No	This option can be installed if GPS Positioning is not used. Only compatible with ICON Series Panels.
933K274	Low Pressure Switch Field Install (Low range 0.6-15 psi)	Yes	This is a mechanical pressure switch. Pressure readout will NOT display on screen. Includes switch to be mounted in panel, tubing, and mounting hardware. KA02449 - Field Install
933K275	Low Pressure Switch Field Install (High range 3-90 psi)	Yes	This is a mechanical pressure switch. Pressure readout will NOT display on screen. Includes switch to be mounted in panel, tubing, and mounting hardware. KA02450 - Field Install
See Auxiliary Options	Auxiliary Control Options	Yes	See the "Auxiliary Control Options for Control Panels" Section for a complete listing.
KA00416	Induced Voltage Dissipation Kit	No	IMPORTANT: MUST use if any of the following are true 1) Machine is 9 towers or more 2) Machine is equipped with Drive Unit Mounted Auto Reverse 3) Machine is a Precision Corner
0000654	Lightning Arrestor Field Install Kit	No	Provides lightning protection on the incoming 480 volt power lines. Mounts under the panel.
932K384	End Gun Auto Test Switch Kit	Yes	Allows for quick testing of the endgun operation. Includes rocker switch and wiring materials. Field Install - KA01604.
932K386	End Gun Selector Switch Kit	Yes	Allows for selecting "Endgun Sequence 1" or "Endgun Sequence 2" for towable applications. Includes switch, label, wiring materials and diagram. Field Install - KA01606.
932K387	End Gun Auto Test and Selector Switch Kit Combined	Yes	Order this option if the 2 previous options are required. Includes appropriate wiring to reflect both options ordered together. Field Install - KA01607.
931K007	Corner Panel Option	Yes	Includes oscillator lightning protection and wiring harness. (does not include oscillator). Field Install - KA01378.
932K370	Ground Fault Protection (C.S.A. Option)	Yes	For applications in Canada requiring ground fault protection. Field Install - KA01600.
932K373	Phase Loss Contactor Option for 30 amp panels	Yes	Will shut down the machine if one of the three phases of 480 voltage is lost. (option included in all 45 amp panels). Field Install - KA01603.
932K371	Power Distribution Block	Yes	Field Install - KA01601.
KA09012	Service/Run Switch Kit	No	Includes rocker switch and field install guide.
932K385	Endgun Auto/Off/Override Switch	Yes	Field Install - KA01605

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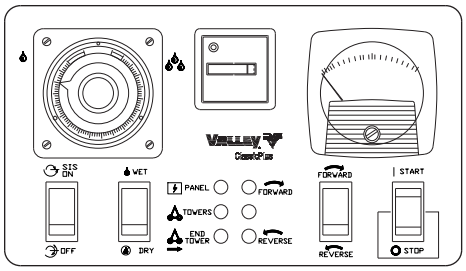
Valley ClassicPlus Panel

A panel that can grow as your needs grow

The Valley ClassicPlus Panel offers easy-to-operate switches for manual operation and is available on corner and linear equipment.

Features include mechanical auto reverse, a mechanical pressure switch that allows you to monitor for low pressure, percent timer dial to control application and optional mechanical switches to set pivot direction.

For monitoring 24/7 from any location, connect to AgSense® Field Commander through your mobile device.



Compatible With:

AgSense Field Commander and Crop Link.

How to Order:

Step 1: Select one of the following control panels.

Step 2: Select the appropriate panel options if required.

Step 3: Order other components such as J-Pipes, collector rings and pivot mounting hardware if needed.

ClassicPlus CONTROL PANELS		
Part #	**Description**	**"Build to Order" or Stock**
KA01640	ClassicPlus 30 Amp Control Panel	Part # for "Build to Order" Control Panels from Valley, NE. Some options can be factory installed.
KA01647	ClassicPlus 30 Amp Control Panel with Auto-Reverse Option	Part # for "Build to Order" Control Panels from Valley, NE. Some options can be factory installed.
KA01674	ClassicPlus 45 Amp Control Panel	Part # for "Build to Order" Control Panels from Valley, NE. Some options can be factory installed.
KA01675	ClassicPlus 45 Amp Control Panel with Auto-Reverse Option	Part # for "Build to Order" Control Panels from Valley, NE. Some options can be factory installed.
KA01641	ClassicPlus 30 Amp Control Panel	**Stock Item** at Valley Distribution Centers. Any options must be field installed.
KA01648	ClassicPlus 30 Amp Control Panel with Auto-Reverse Option	**Stock Item** at Valley Distribution Centers. Any other options must be field installed.

NOTE: Auto Reverse option is required for any Precision Corner.

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ClassicPlus PANEL OPTIONS AVAILABLE			
Part #	Description	Can be Factory Installed?	Comments
931K584	Low Pressure Switch Factory Install Kit (High Range 3-90 psi)	Yes	This is a mechanical pressure switch. Includes switch to be mounted in panel, tubing and mounting hardware.
931K585	Low Pressure Switch Factory Install Kit (Low Range 0.6-15 psi)	Yes	This is a mechanical pressure switch. Includes switch to be mounted in panel, tubing and mounting hardware.
931K899	Low Pressure Switch Field Install Kit (High Range 3-90 psi)	No	This is a mechanical pressure switch. Includes switch to be mounted in panel, tubing and mounting hardware.
931K900	Low Pressure Switch Field Install Kit (Low Range 0.6-15 psi)	No	This is a mechanical pressure switch. Includes switch to be mounted in panel, tubing and mounting hardware.
See Auxiliary Options	Auxiliary Control Options	Yes	See the "Auxiliary Control Options for Control Panels" Section for a complete listing.
0000654	Lightning Arrestor Field Install Kit	No	Provides lightning protection on the incoming 480 volt power lines. Mounts under the panel.
931K007	Corner Panel Option	Yes	Includes oscillator lightning protection and wiring harness. (does not include oscillator)
932K372	Low Voltage Monitor Option	Yes	Monitors the incoming voltage and will shut pivot down if voltage drops below a pre-set point. Field Install - KA01602.
03E1802	Solid State Percentage Timer Option	No	Solid state timer, adjustable for 15, 30, 60 or 120 sec ranges.
932K370	Ground Fault Protection (C.S.A. Option)	Yes	For applications in Canada requiring ground fault protection. Field Install - KA01600.
932K373	Phase Loss Contactor Option for 30 amp panels	Yes	Will shut down the machine if one of the three phases of 480 voltage is lost. (option included in all 45 amp panels)
931K531	Delay Timer Auto Restart	No	Pivot must have Low Pressure Switch Installed
(1) 931K011 (1) 03E1723 (1) 03E1650 (1) 0314936	Pressure Remote Restart	No	Will need one of each part listed. Pressure switch and hardware, Rocker switch, Relay socket, and Relay to install.

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Valley Classic Panel

Entry-level panel designed for in-field control.

The Valley Classic Panel offers the lowest initial investment and provides push button, manual operation. It is designed for growers with center pivots only.

Features include a solid state timer to control application, mechanical switches for start/stop, direction and option control, voltage meter and hour meter.

Observe your pivot and perform basic controls on this panel from your cell phone through AgSense® Field Commander.



Compatible With:
AgSense Field Commander and Crop Link.

Classic Control Panels include the following:

- **Start & Stop switch**
- **Safety override**
- **1 return safety light**
- **Forward / Reverse control**
- **Neon lights for Forward / Reverse**
- **Wet / Dry run mode switch**
- **Solid State timer**
- **3-Second Delay (for pump control and/or to prevent public power nuisance shutdowns.)**
- **5 amp breaker**
- **Engine Run / Start switch**
- **Volt meter**
- **Hour meter**
- **Pre-labeled Stop-in-Slot switch (must order option to activate)**
- **Pre-labeled Auto-Reverse / Auto-Stop switch *(must order option to activate)**
- **Expandable switch slot for auxiliary control option**

***Auto reverse option must be ordered from the factory. All other options must be field installed and ordered separately.**

Classic Control Panel Limitations:

- **Utilizes up to 20 amp Class CC fuses, but machine current is limited to 16 amps due to fuse current limitations**
- **Not available for corners or linears**
- **Is not modular - not upgradable to ICON Series**
- **Auto-reverse option must be ordered as part of the control panel - this option can't be field installed easily**

How to Order:

Step 1: Select one of the following control panels.

Step 2: Select the appropriate panel options if required.

Step 3: Order other components such as J-Pipes, collector rings and pivot mounting hardware if needed.

Classic CONTROL PANELS		
Part #	**Description**	**"Build to Order" or Stock**
9311451	**Valley Classic Control Panel w/ manual - 20 Amp**	**Stock Item at Valley and ALL Distribution Centers. Any options must be field installed.**
9311450	**Valley Classic Control Panel with Auto-Reverse w/manual - 20 Amp**	**Stock Item at Valley and ALL Distribution Centers. Any options must be field installed.**

NOTE: Refer to the following page for Classic Panel mounting options.

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A Valley Classic Control Panel has 1 open rectangular rocker switch slot for an auxiliary control option.

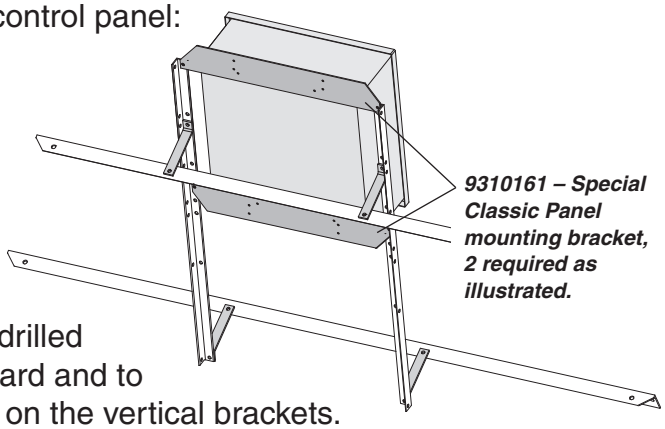
CLASSIC PANEL OPTIONS AVAILABLE			
Part #	**Description**	**Can be Factory Installed?**	**Comments**
931K899	**Low Pressure Switch Field Install Kit (High Range 3-90 psi)**	**No**	**This is a mechanical pressure switch. Includes switch to be mounted in panel, tubing and mounting hardware.**
931K900	**Low Pressure Switch Field Install Kit (Low Range 0.6-15 psi)**	**No**	**This is a mechanical pressure switch. Includes switch to be mounted in panel, tubing and mounting hardware.**
See Auxiliary Options	**Auxiliary Control Options (limit of 1 can be installed)**	**No**	**See the "Auxiliary Control Options for Control Panels" Section for a complete listing. This option can not be installed at the factory.**
(1) 931K011 (1) 03E1723 (1) 03E1650 (1) 0314936	**Pressure Remote Restart**	**No**	**Will need one of each part listed. Pressure switch and hardware, Rocker switch, Relay socket, and Relay to install.**

Installing a Classic Control Panel on a Valley Machine.

Two options are available for mounting a Classic control panel:

Option 1 – Use new brackets

Order quantity 2 of part # 9310161. This allows for utilizing the existing mounting hardware. Hardware to mount these brackets is included when the Classic Panel package is ordered.



9310161 – Special Classic Panel mounting bracket, 2 required as illustrated.

Option 2 – Drill new holes

If option 1 is not utilized, then new holes must be drilled to move one of the vertical mounting brackets inward and to provide a new set of holes for mounting the panel on the vertical brackets. Installation instructions are included with each Classic Panel package.

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What is included with each field install kit?

Each kit includes a motor controller auxiliary contactor with an adjustable overload relay along with the appropriate branch circuit fusing. All necessary wires, hardware and installation diagrams are included also. The kits for the ClassicPlus and Classic Control Panels also include the necessary rocker switch for manual control. These kits can also be ordered separately for field installation after the panel has been installed.

How do I select the appropriate auxiliary kit?

Select the appropriate Auxiliary Option based on the full load amp rating of the motor you are controlling and the panel type you are using. Use this value to select the appropriate range from the options below. If you are not aware of this value, then use the table below that gives full load motor current for different 3 phase, 480 volt AC motors per the National Electric Code. Keep in mind that this is usually a higher value than the actual (worst case scenario).

Approximate full load amps for 3-phase 480 VAC Motors per the National Electric Code.

HP RATING	FULL LOAD AMPS
1/4 HP	0.47
1/3 HP	0.57
1/2 HP	1.00
3/4 HP	1.40
1 HP	1.80
1 1/2 HP	2.60
2 HP	3.40
3 HP	4.80

ICON SERIES PANEL AUXILIARY OPTIONS AVAILABLE			
Field Install #	**Description**	**Factory Install AUX1**	**Factory Install AUX2**
KA01993	ICON Auxiliary #1 (0.63-1.00 Amps)	933K276	933K281
KA01994	ICON Auxiliary #1 (1.00-1.6 Amps)	933K277	933K282
KA01995	ICON Auxiliary #1 (1.6-2.5 Amps)	933K278	933K283
KA01996	ICON Auxiliary #1 (2.5-4.0 Amps)	933K279	933K284
KA01997	ICON Auxiliary #1 (4.0-6.0 Amps)	933K280	933K285
ICON SERIES PANEL SINGLE PHASE OPTIONS AVAILABLE			
KA02135	ICON Auxiliary #1 (0.63-1.00 Amps)	933K296	933K301
KA02136	ICON Auxiliary #1 (1.00-1.6 Amps)	933K297	933K302
KA02137	ICON Auxiliary #1 (1.6-2.5 Amps)	933K298	933K303
KA02138	ICON Auxiliary #1 (2.5-4.0 Amps)	933K299	933K304
KA02139	ICON Auxiliary #1 (4.0-6.0 Amps)	933K300	933K305

Note: For field installations using a second auxiliary option, order quantity 2 of the field install kits with the designated amp range.

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ClassicPlus PANEL AUXILIARY OPTIONS AVAILABLE			
Field Install #	Description	Factory Install AUX1	Factory Install AUX2
KA01612	Auxiliary #1 (0.63-1.00 Amps)	932K374	932K379
KA01613	Auxiliary #1 (1.00-1.6 Amps)	932K375	932K380
KA01614	Auxiliary #1 (1.6-2.5 Amps)	932K376	932K381
KA01615	Auxiliary #1 (2.5-4.0 Amps)	932K377	932K382
KA01616	Auxiliary #1 (4.0-6.0 Amps)	932K378	932K383
ClassicPlus PANEL SINGLE PHASE OPTIONS AVAILABLE			
KA01622	ICON Auxiliary #1 (0.63-1.00 Amps)	932K403	932K408
KA01623	ICON Auxiliary #1 (1.00-1.6 Amps)	932K404	932K409
KA01624	ICON Auxiliary #1 (1.6-2.5 Amps)	932K405	932K410
KA01625	ICON Auxiliary #1 (2.5-4.0 Amps)	932K406	932K411
KA01626	ICON Auxiliary #1 (4.0-6.0 Amps)	932K407	932K412

Note: For field installations using a second auxiliary option, order quantity 2 of the field install kits with the designated amp range.

CLASSIC PANEL AUXILIARY OPTIONS AVAILABLE			
Part #	Description	Overload Relay Amp Ranges	Can be Factory Installed?
931K886	Classic Auxiliary #1 Control Kit	0.63 - 1.00 Amps	No
931K887	Classic Auxiliary #1 Control Kit	1.0 - 1.6 Amps	No
931K888	Classic Auxiliary #1 Control Kit	1.6 - 2.5 Amps	No
931K889	Classic Auxiliary #1 Control Kit	2.5 - 4.0 Amps	No
931K890	Classic Auxiliary #1 Control Kit	4.0 - 6.0 Amps	No

Note: Classic Control Panels will only allow for one auxiliary option to be installed.

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Step by Step Process to add a Valley Control Panel to a Non-Valley Machine

Reasons to Upgrade or Convert:

- *Outdated controls cause problems. A panel upgrade or conversion can take care of many nuisance service calls for the customer.*
- *Bring new Valley technology to all of your customer's machines*
- *Extend the life of your customer's machines*
- *Orphaned machines need parts*
- *Makes servicing competitive machines much easier*
- *A minimum investment for a maximum return in reliability*
- *A new control panel coupled with new tower box controls gives the customer a completely updated control system for maximum renewed reliability*



A Valley control panel installed on a Non-Valley center pivot machine.

STEP 1 ***Select a control panel. Refer to "Valley Control Panels" in this section of the catalogue and choose one of the following control panels and any other options required:***

- ❑ **ICON10**
- ❑ **ICON5**
- ❑ **ICON1**
- ❑ **ICONX**
- ❑ **ClassicPlus**
- ❑ **Classic**

If you are installing a ClassicPlus or Classic panel, go to Step 2.

If you are installing an ICON Series panel, go to Step 3.

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STEP 2 ***Select a new collector ring for ClassicPlus or Classic control panels (if required):***

Examine the existing collector ring on the non-Valley machine. It will either be an external collector ring (which means mounted on top of the pivot elbow) or the "Zimmatic®" style that is an integral part of the elbow as illustrated in the photo. If the collector ring is in good shape, the existing one can be used. If the external collector ring needs replacing, select a collector ring choice from the following table. (refer to the electrical section for more collector ring options and details)



Zimmatic® Style Collector Ring



External Collector Ring

COLLECTOR RING CHOICES	
Part #	**Description**
0315165	30 Amp Aeromotive 11 Conductor Collector Ring
03E2197	30 Amp Insul-8 11 Conductor Collector Ring

NOTE: If installing a new collector ring and the existing J-Pipe is ¾" vs. 1", a 0244038 1" X ¾" reducer busing may be required to mount the new collector ring as it will have 1" Female NPT mounting threads.

PROCEED TO STEP 5

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STEP 3 *Choose the desired method for field positioning. (RECOMMENDED)*

Valley offers a Valley GPS positioning option with ICON Series panels.

GPS positioning was introduced in 2008 and has proven to be an accurate alternative to resolver/encoder positioning. The positioning package provides accuracy of +/- 10 feet (3 meters) with most installations at greater accuracy. When converting a non-valley control panel, this is an excellent way to lower installation costs and enhance control capabilities.

If GPS positioning is not used, proceed to step 4 for encoder installation.

Choose one package below depending on the Panel type and last span pipe diameter.



6 5/8" VALLEY GPS POSITIONING	
Part #	**Description**
0000L17	Valley GPS for ICON Panels
0000L16	Valley GPS for Pro/Select Panels
0000L39	Valley GPS for TouchPro Panels

5" VALLEY GPS POSITIONING	
Part #	**Description**
0000L89	Valley GPS for ICON Panels
0000L86	Valley GPS for Pro/Select Panels
0000M02	Valley GPS for TouchPro Panels

6" VALLEY GPS POSITIONING	
Part #	**Description**
0000L90	Valley GPS for ICON Panels
0000L87	Valley GPS for Pro/Select Panels
0000M03	Valley GPS for TouchPro Panels

8 5/8" VALLEY GPS POSITIONING	
Part #	**Description**
0000L91	Valley GPS for ICON Panels
0000L88	Valley GPS for Pro/Select Panels
0000M04	Valley GPS for TouchPro Panels

END PRESSURE OPTION	
Part #	**Description**
KA02669	End Pressure w/Valley GPS Option

Note: Only used with Valley GPS and an ICON Series Panel

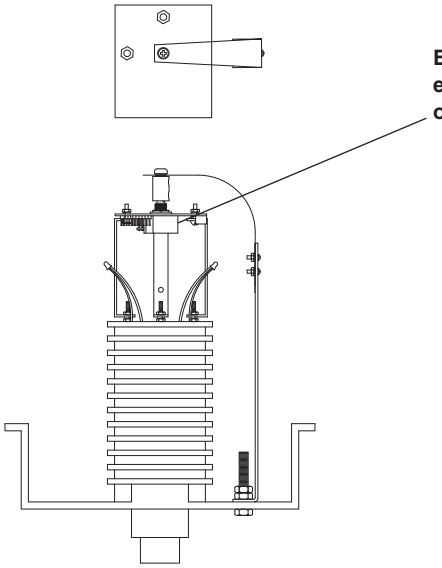
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STEP 4 ***Selecting encoder mounting components for ICON Series control panels. Determine which of the following 2 situations apply:***

Situation 1

Pivots WITH an external collector ring *(those installed on top of the pivot elbow like a Valley).*

ICON Series control panels require the installation of the encoder. A encoder must be installed in an external collector ring. If the non-Valley machine has an external collector ring, examine the collector ring to ensure that the resolver can be installed. Here are 2 ✓ points to keep in mind:



✓ **If the collector ring is an Aeromotive brand and in good working condition, it will most likely allow for the encoder installation. However you will need to order the items in the following table:**

Part #	Qty Required	Description	What's Included?
KA09080	1	Extended Dome w/20' 16 Conductor Cable Kit	Includes the following: 1-1813096 16 conductor, 10 gauge pivot raceway cable, 1-03E1496 extended dome lid for a 0315165 Aeromotive collector ring, 1-0243005 1 x 3/4" bushing for cable entrance into J-Pipe.
0314466	1	1" Cable Connector for J-Pipe Entrance	

NOTE: If the existing J-Pipe is ¾", the raceway cable will have to be stripped carefully of the outer jacketing before being threaded through the J-Pipe. A 1" J-Pipe will not require jacket stripping.

✓ **If in doubt that the collector ring will support the installation of the encoder hardware or if the collector ring is worn, then install a new one (refer to the table illustrated in Step 2).**

PROCEED TO STEP 5

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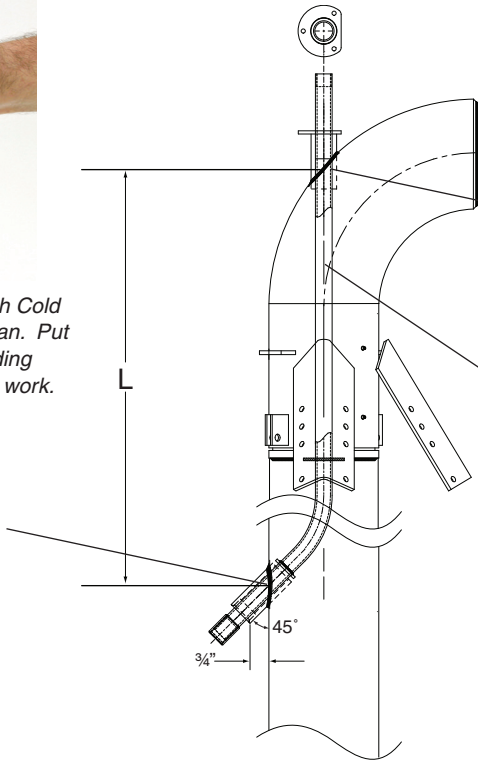
Situation 2

Pivots WITHOUT an external collector ring.

If the pivot point is not equipped for an external collector ring, then you must install one. This requires some minimal cutting and welding to install a J-Pipe. Once the J-Pipe is installed, the new collector ring is easily added.



Don't forget 0991375 – Zinc Rich Cold Galvanizing 12 ounce aerosol can. Put that finishing touch on your welding projects for professional looking work.



Hole must be cut and top receiver is welded in place. This is in the ROTATING part of the elbow.

Hole must be cut and bottom receiver is welded in place. This is in the NON-ROTATING part of the riser.

Typically, the 9361379 47.5" long J-Pipe will work for most installations. It is a good idea to measure a distance "L" to see if the J-Pipe will install correctly. The bottom hole must be cut in an area below the rotation point and must be free from obstructions to cut the hole and weld in the bottom receiver. Other length J-Pipes are available and a long straight raceway tube is also available to run the cable all the way down through the bottom elbow. See the "Pivot Point" section in this catalogue under "J-Pipes" for a complete selection and specifications of all available J-Pipes. Note special J-Pipes for 10" and 6 5/8" pivot points

The following items are required to install an external collector ring on a non-Valley center pivot:

REQUIRED ITEMS TO ADD A J-PIPE AND EXTERNAL COLLECTOR RING:			
Part #	**Qty Required**	**Description**	**What's Included?**
See Table in step 1	**1**	**Pick a collector ring from the table in step 1**	**Refer to the "Electrical" section of this catalogue for a complete selection and details regarding collector rings.**
KA01275	**1**	**J-Pipe Weld-On Conversion Kit**	**Includes the following: Top and bottom black weld-on receivers, conduit guides, V-Packing and associated hardware, 2 - 1" Cord connectors, and all necessary hardware for the installation.**
9361379	**1**	**1" J-Pipe 47.5" long**	**Will work for most installations. See note in the preceding diagram. For a complete listing and specifications of all J-Pipes available, please refer to the "Pivot Point" section under "J-Pipes".**
9310270	**1**	**16 Conductor, 24', 10 gauge raceway cable**	**See the "Pivot Point" section for a complete listing of available raceway cables.**

PROCEED TO STEP 5

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Step 5 Determine if panel mounting hardware is required.

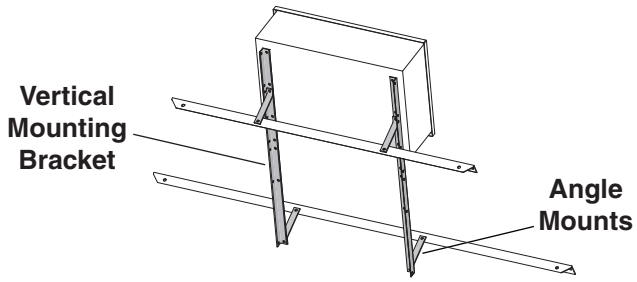
Many installations of Valley control panels on non-Valley machines will require panel mounting hardware. Mounting hardware supplied will require field modification for many pivot brands to retrofit hardware to existing pivot structures. Please order the following if required:

PIVOT PANEL MOUNTING HARDWARE PACKAGE	0000G54

PACKAGE includes the following:

2 - Vertical Mounting Bracket..... 1780272
4 - Angle Mount..... 1780273
4 - 3/8" Hex Nuts..... 0131018
8 - 3/8" x 1" Cap Screws 0161045
8 - 3/8" Lock Nuts..... 0133006

Note: Mounting hardware will require field modification for many pivot brands to retrofit hardware to existing pivot structures. Classic Panel will require at least one new hole be drilled in the vertical mounting bracket.



STOP HERE - Process is complete

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Valley ICONX Panel

Developed to fulfill the needs of growers.

By using your existing pivot control panel as a host for the ICONX, you now have the ability to update and bring your operation into the future. It's an affordable way to add remote monitoring and control access through AgSense or BaseStation3 without a full panel upgrade.

ICONX takes control of existing pivot panels using the panel's circuits and delivering full ICON touch control. Easily connect to AgSense or BaseStation3. Now, all of your pivots can be on one network.

ICONX smart panels are compatible with any major brand of pivot, and are easy upgrade to add new features and capabilities.



Key Features:

- *Compatible with all major pivot brands*
- *Uses power and control circuits in the host panel and transfers control to the ICONX*
- *Full ICON control functions right at the pivot*
- *Intuitive user interface*
- *5-inch, full-color touchscreen display*
- *AgSense Enabled – AgSense ICON Link installed standard**
- *BaseStation3 compatible**
- *Cable theft monitoring**

*Additional hardware or subscription required.

NOTE: The ICONX is not a fully functional panel by itself. Rather, it uses the power of the existing host panel.

VALLEY ICONX CONTROL PANELS	
Part #	**Description**
0000L20	ICONX/CDMA - Valley GPS
0000L21	ICONX/BaseStation - Valley GPS
0000L22	ICONX/GSM - Valley GPS

NOTE 1: Add KA02669 for end of field pressure option.

NOTE 2: GSM SIM Cards are ordered separately. See pages 2-3 through 2-5 for part numbers.

ICONX TRANSFORMER	
Part #	**Description**
KA02484	480VAC to 24VAC Transformer

NOTE: When installing an ICONX on a Reinke machine this transformer may be needed.

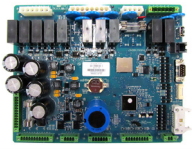
PANEL UPGRADE PACKAGES		
Part #	**Description**	**Comments**
0000K41	PKG Panel Upgrade to ICON1 w/ICON Link CDMA	Includes ICON1 Module, ICON Link, WiFi, Smart Relay Board, Power Supply, hardware, and upgrade manuals.
0000K42	PKG Panel Upgrade to ICON5 w/ICON Link CDMA	Includes ICON5 Module, ICON Link, Smart Relay Board, Power Supply, hardware, and upgrade manuals.
0000K43	PKG Panel Upgrade to ICON10 w/ICON Link CDMA	Includes ICON10 Module, ICON Link, Smart Relay Board, Power Supply, hardware, and upgrade manuals.
0000K81	PKG Panel Upgrade to ICON1 w/ICON Link GSM	Includes ICON1 Module, ICON Link, WiFi, Smart Relay Board, Power Supply, hardware, and upgrade manuals.
0000K82	PKG Panel Upgrade to ICON5 w/ICON Link GSM	Includes ICON5 Module, ICON Link, Smart Relay Board, Power Supply, hardware, and upgrade manuals.
0000K83	PKG Panel Upgrade to ICON10 w/ICON Link GSM	Includes ICON10 Module, ICON Link, Smart Relay Board, Power Supply, hardware, and upgrade manuals.

Note: SIM Cards required with GSM ICON Links. See Valley ICON Panel pages in this section for part numbers.

Note: Upgrade packages DO NOT include an Encoder, GPS Positioning or Pressure Transducer. Those must be ordered separately.

ClassicPlus TO AUTO-REVERSE UPGRADE		
Part #	**Description**	**Comments**
* Order both part #s noted below for this solution:		
*9312036	ClassicPlus Auto-Reverse Module	Needed if mechanical panel is not equipped with auto-reverse module.
*932K433	Auto-Reverse Hardware Kit	Needed with auto-reverse module.

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	03E3937	ICON10 Complete Module/Display, BOXED
	03E3938	ICON5 Complete Module/Display, BOXED
	03E3939	ICON1 Complete Module/Display, BOXED
	03E3936	ICON Series Smart Relay Board, BOXED
	03E2809	ICON Series Power Supply (03E0412 - Plastic Standoffs not included)
	03E3931	ICON Series Power Cable(Included with Display)
	03E3932	ICON Series Data Cable(Included with Display)
	1815301	ICON Series Power Supply Harness
	1815303	ICON Series SRB Power Harness
	03E3933	USB Panel Mount Cable Single Terminal - Only used with the ICON5
	03E3934	USB Panel Mount Cable Double Terminal - Only used with the ICON1 and ICON10

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	9312035	ClassicPlus Module - BOXED
	9312036	ClassicPlus w/ ARAS Module - BOXED
	KA02244	ICON10 Simulator with Pelican Case
	KA02243	ICON5 Simulator with Pelican Case
	KA02490	ICON Battery Backup - Used with BaseStation
	03E4129	POE Adapter
	0000K49	Tipping Bucket Rain Gauge
	0000K89	Wind Sensor Shutdown
	KA09642	Temperature Sensor

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PRE-CUT SPAN CABLE							
Span Length	Cable Length	12 Gauge	10 Gauge	8 Gauge	12 Gauge	10 Gauge	8 Gauge
Feet	Feet	11 Cond.	11 Cond.	11 Cond.	12 Cond.	12 Cond.	12 Cond.
109.7’	116’-0”	9310176	1812432	1812433	9310195	9310068	9310066
115.1’	122’-0”	9310183	9310140	9310139	9310198	9310142	9310141
120.1’	127’-0”	9310180	1813359	1813360	9310193	1813362	1813361
127.8’	135’-0”	9310177	1812434	1812435	9310187	1813035	1813041
135.2’	142’-0”	9310181	9310025	9310061	9310194	9310067	9310063
140.0’	147’-0”	9310184	9310144	9310143	9310199	9310146	9310145
142.3’	149’-0”	9310438	9310439	9310446	9310440	9310441	9310447
157.5’/160.0’/161.2’	167’-0”	9310174	1811452	1811453	9310189	1813037	1813043
180.0’	186’-9”	9310178	1813007	1813068	9310191	1813066	1813064
184.8’	192’-0”	9310170	1810324	1810328	9310196	9310069	9310064
186.7’	193’-9”	9310179	1813008	1813069	9310192	1813067	1813065
198.9’	208’-0”	9310175	1812003	1812021	9310190	1813040	1813046
202.5’/204.9’	212’-0”	9310182	9310071	9310062	9310197	9310070	9310065
PER FOOT AND BULK LENGTHS							
Per Foot		03E1717	0314328	0314569	03E1718	0314838	03E0315
	1325’-0”		1811851				



DRIVE UNIT MOTOR LEAD AND RUNNING LIGHT CABLE				
Part #	Description	Length	Gauge	Conductors
1811455	Drive Unit Motor Lead (Low Profile)	13’-3”	14	4
1811218	Drive Unit Motor Lead (High Profile)	24’-0”	14	4
1812008	Drive Unit Motor Lead (Std Profile)	20’-6”	14	4
1810286	Running Light	20’-0”	14	4
0314571	Bulk 4 Conductor Wire	Per Foot	14	4
1814721	Single Phase - Drive Unit Motor Lead (Std. Profile)	20’-6”	14	6

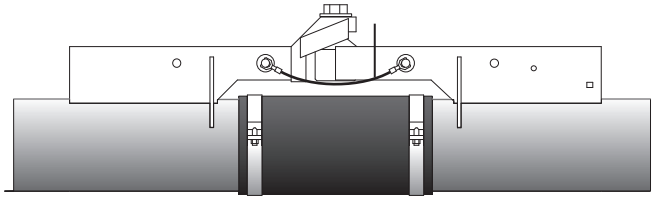
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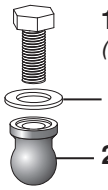
CUT-TO-LENGTH SPAN CABLE					
Part #	# Wires	Power Wires	120 Volt Control Wires (Stranded Copper)	Ordering Notes	Approx. Feet on a Master Reel
03E1717	11 Wire Shielded	4-12 Gauge	7-14 gauge	Priced by the foot. Order number of feet required	6000
0314328	11 Wire Shielded	4-10 Gauge	7-14 gauge	Priced by the foot. Order number of feet required	5000
0314569	11 Wire Shielded	4-8 Gauge	7-14 gauge	Priced by the foot. Order number of feet required	5000
03E1718	12 Wire Shielded	4-12 Gauge	8-14 gauge	Priced by the foot. Order number of feet required	5000
0314838	12 Wire Shielded	4-10 Gauge	8-14 gauge	Priced by the foot. Order number of feet required	5000
03E0315	12 Wire Shielded	4-8 Gauge	8-14 gauge	Priced by the foot. Order number of feet required	4500

PROOF POSITIVE CUT-TO-LENGTH SPAN CABLE					
Part #	# Wires	Power Wires	120 Volt Control Wires (Stranded Copper)	Ordering Notes	Approx. Feet on a Master Reel
03E3592	11 Wire Shielded	4-8 Gauge	7-14 gauge	Priced by the foot. Order number of feet required	6000
03E3593	11 Wire Shielded	4-10 Gauge	7-14 gauge	Priced by the foot. Order number of feet required	6000
03E3594	11 Wire Shielded	4-12 Gauge	7-14 gauge	Priced by the foot. Order number of feet required	6000
03E3595	12 Wire Shielded	4-8 Gauge	8-14 gauge	Priced by the foot. Order number of feet required	5000
03E3596	12 Wire Shielded	4-10 Gauge	8-14 gauge	Priced by the foot. Order number of feet required	5000
03E3597	12 Wire Shielded	4-12 Gauge	8-14 gauge	Priced by the foot. Order number of feet required	4500

PIVOT RACEWAY CABLE				
Part #	Length	Gauge	Conductors	Where Used
9310211	16’-0”	12,14	11	Pivot Raceway (Std & Low Profile)
9310212	16’-0”	12,14	12	Pivot Raceway (Std & Low Profile)
1812012	16’0”	10,14	11	Pivot Raceway (Std & Low Profile)
1813106	16’-0”	10,14	12	Pivot Raceway (Std & Low Profile)
1813096	20’-0”	10,14,18	16	Pivot Raceway (Std & Low Profile)
9310266	24’-0”	12,14	11	Pivot Raceway (High Profile)
9310267	24’-0”	12,14	12	Pivot Raceway (High Profile)
1811605	24’-0”	10,14	11	Pivot Raceway (High Profile)
1811446	24’-0”	10,14	12	Pivot Raceway (High Profile)
9310270	24’-0”	10,14,18	16	Pivot Raceway (High Profile)
9310373	24’-0”	8,14	11	Pivot Raceway (High Profile)
9310372	24’-0”	8,14,18	16	Pivot Raceway (High Profile)

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1” Cap Screw *(grade 5)*
(grade 8 available Part # 0161415)

1” Flat Washer

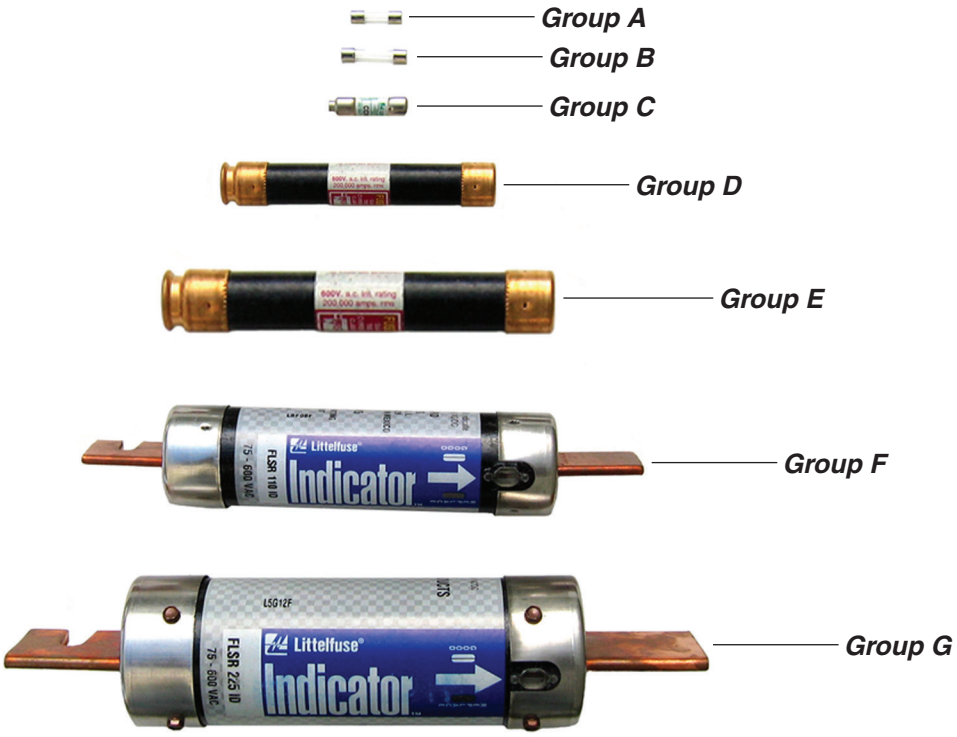
2” Hitch Ball

HITCH BALL MOUNTING ASSEMBLY

2) - 1/2” Hex Nut..... 0131015 *
2) - 1/2” Flat Washer ..... 0142025 *
1) - 1” Flat Washer 0142088
2) - 1/2” x 4” Cap Screw ..... 0161020 *
1) - 1” x 2-1/2” Cap Screw (grade 5)..... 0161174 **
1) - 2” Hitch Ball..... 0991211
1) - 10 Ga. Electrical Cable ..... 1811101 *

*** Included in Grounding Jumper Kit..... KA00424**
**** 1” x 2-1/2” Bolt (grade 8)..... 0161415**
(available for high stress applications)

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GROUP A						
Part #	Length	Diameter	Amperage	Voltage	Description	Where Used
0315137	1”	.25”	1/2	250	GLASS	Service Part
0314824	1”	.25”	3/4	250	GLASS	Service Part
0314823	1”	.25”	1.5	250	GLASS	Service Part

GROUP B						
Part #	Length	Diameter	Amperage	Voltage	Description	Where Used
0314929	1.25”	.25”	1/4	250	GLASS	Guidance Receiver
0315017	1.25”	.25”	3/8	250	GLASS SLO BLO	Guidance Receiver
03E1987	1.25”	.25”	0.4	250	GLASS	Slurry PLC
0315180	1.25”	.25”	1/2	250	GLASS FAST ACTING	Guidance Oscillator
0315019	1.25”	.25”	3/4	250	GLASS FAST ACTING	Guidance Receiver, Oscillator, EOLPB
03E2081	1.25”	.25”	1	250	GLASS	RTU PCB, Remote Link, Data Radio
03E2091	1.25”	.25”	1	250	CERAMIC SLO BLO	Service Part
0314858	1.25”	.25”	1.5	250	GLASS	Running Light, Booster Pump Solenoid
03E2315	1.25”	.25”	2	250	GLASS SLO BLO	cams Module Relay Board
03E1669	1.25”	.25”	2	250	GLASS FAST ACTING	Slurry, Accu-Pulse
03E2092	1.25”	.25”	2.5	250	GLASS FAST ACTING	Service Part
03E1971	1.25”	.25”	3	250	GLASS FAST ACTING	Tracker PSI or Position, Slurry
03E2157	1.25”	.25”	4	250	GLASS FAST ACTING	Service Part
0314859	1.25”	.25”	5	250	GLASS SLO BLO	Guidance Receiver, Lamp Kit
03E1950	1.25”	.25”	10	250	GLASS	Service Part
03E1779	1.25”	.25”	3	250	GLASS SLO BLO	Surge Suppression

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GROUP C						
Part #	**Length**	**Diameter**	**Amperage**	**Voltage**	**Description**	**Where Used**
0314178	1.50”	.406”	.5	500	SLO BLO	Linear Cord Drag GFI Junction Box
0314468	1.50”	.406”	1	500	SLO BLO	Service Part
0314755	1.50”	.406”	3	500	SLO BLO	Pivot Panel Fuse Kit
0315983	1.50”	.406”	15	500	SLO BLO	Service Part
0315621	1.50”	.406”	20	500	SLO BLO	Service Part
0315458	1.50”	.406”	30	500	SLO BLO	Service Part
03E1988	1.50”	.406”	1	600	SLO BLO	Slurry PLC
03E1733	1.50”	.406”	2.5	600	SLO BLO	Tower Box Transformer
03E2874	1.50”	.406”	1.25	600	SLO BLO	VRI Zone Tower Box
03E1616	1.50”	.406”	3	600	SLO BLO	Linear Swing Around, Accu-Pulse Pump Control
03E0389	1.50”	.406”	4	600	SLO BLO	Self Cleaning, Rotating Inlet
03E1678	1.50”	.406”	5	600	SLO BLO	Pivot Transformer, Booster Pump Box
03E1734	1.50”	.406”	5.6	600	SLO BLO	Corner LRDU Panel, Linear Booster Pump
03E2691	1.50”	.406”	6	600	SLO BLO	Classic Panel
03E2189	1.50”	.406”	7	600	SLO BLO	Accu-Pulse Transformer
03E1620	1.50”	.406”	8	600	SLO BLO	Booster Pump Box, Auxiliary Control
03E2690	1.50”	.406”	12	600	SLO BLO	Classic Panel
03E1740	1.50”	.406”	15	600	SLO BLO	SDU Control Panel, Booster Pump Box
03E2689	1.50”	.406”	17.5	600	SLO BLO	Classic Panel
03E1726	1.50”	.406”	20	600	SLO BLO	Booster Pump Box, Four Wheel Articulating
03E1738	1.50”	.406”	30	600	SLO BLO	Booster Transformer Tower Box
03E2639	1.50”	.406”	.5	600	SLO BLO	ICON X Transformer - Reinke

GROUP D						
Part #	**Length**	**Diameter**	**Amperage**	**Voltage**	**Description**	**Where Used**
03E1736	5”	.81”	2.5	600	SLO BLO	Drive Unit Fuse Kit, Linear Convert to 45A
03E0259	5”	.81”	4	600	SLO BLO	Control Panel Simulator, Hi-Speed T.B. Fuse Kit
0314591	5”	.81”	6	600	SLO BLO	Main Control Panel
0314342	5”	.81”	8	600	SLO BLO	Service Part
0314343	5”	.81”	12	600	SLO BLO	Main Control Panel, 7.5 kw Genset
0314344	5”	.81”	15	600	SLO BLO	Main Control Panel, 10 kw Genset
0314345	5”	.81”	17.5	600	SLO BLO	Main Control Panel, 12 kw Genset
0314167	5”	.81”	20	600	SLO BLO	Main Control Panel
0314346	5”	.81”	25	600	SLO BLO	Main Control Panel
0315411	5”	.81”	30	600	SLO BLO	Main Control Panel, Cord Drag Linear
0314885	5”	.81”	N/A		SHORTING BAR CLIP	Shorting Bar

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GROUP E						
Part #	Length	Diameter	Amperage	Voltage	Description	Where Used
03E1913	5.5”	1.06”	35	600	SLO BLO	Main Control Panel
03E1910	5.5”	1.06”	40	600	SLO BLO	Main Control Panel
0315459	5.5”	1.06”	45	600	SLO BLO	Main Control Panel
03E1911	5.5”	1.06”	50	600	SLO BLO	Disconnect/Pump Panel Service Part
03E1923	5.5”	1.06”	60	600	SLO BLO	Disconnect/Pump Panel Service Part
03E3590	2.25”	.81”	4	600	CLASS J	Deeper Control Panel
03E3456	2.25”	.81”	6	600	CLASS J	Deeper Control Panel
03E3457	2.25”	.81”	12	600	CLASS J	Deeper Control Panel
03E3458	2.25”	.81”	15	600	CLASS J	Deeper Control Panel
03E3459	2.25”	.81”	17.5	600	CLASS J	Deeper Control Panel
03E3460	2.25”	.81”	20	600	CLASS J	Deeper Control Panel
03E3461	2.25”	.81”	25	600	CLASS J	Deeper Control Panel
03E3462	2.25”	.81”	30	600	CLASS J	Deeper Control Panel
03E3588	2.38”	1.06”	35	600	CLASS J	Deeper Control Panel
03E3589	2.38”	1.06”	40	600	CLASS J	Deeper Control Panel
03E3463	2.38”	1.06”	45	600	CLASS J	Deeper Control Panel
03E3641	2.25”	.81”	30	N/A	SHORTING BAR	30 Amp Deeper Control Panel
03E3642	2.38”	1.06”	60	N/A	SHORTING BAR	45 Amp Deeper Control Panel

GROUP F						
Part #	Length	Diameter	Amperage	Voltage	Description	Where Used
03E2011	5.75”	1.31”	70	600	SLO BLO	Disconnect/Pump Panel Service Part
03E1924	5.75”	1.31”	80	600	SLO BLO	Disconnect/Pump Panel Service Part
03E2012	5.75”	1.31”	90	600	SLO BLO	Disconnect/Pump Panel Service Part
03E1925	5.75”	1.31”	100	600	SLO BLO	Disconnect/Pump Panel Service Part

GROUP G						
Part #	Length	Diameter	Amperage	Voltage	Description	Where Used
03E1926	6.69”	1.84”	110	600	SLO BLO	Disconnect/Pump Panel Service Part
03E1927	6.69”	1.84”	125	600	SLO BLO	Disconnect/Pump Panel Service Part
03E1928	6.69”	1.84”	150	600	SLO BLO	Disconnect/Pump Panel Service Part
03E1929	6.69”	1.84”	175	600	SLO BLO	Disconnect/Pump Panel Service Part
03E1930	6.69”	1.84”	200	600	SLO BLO	Disconnect/Pump Panel Service Part
03E1931	7.63”	2.59”	225	600	SLO BLO	Disconnect/Pump Panel Service Part

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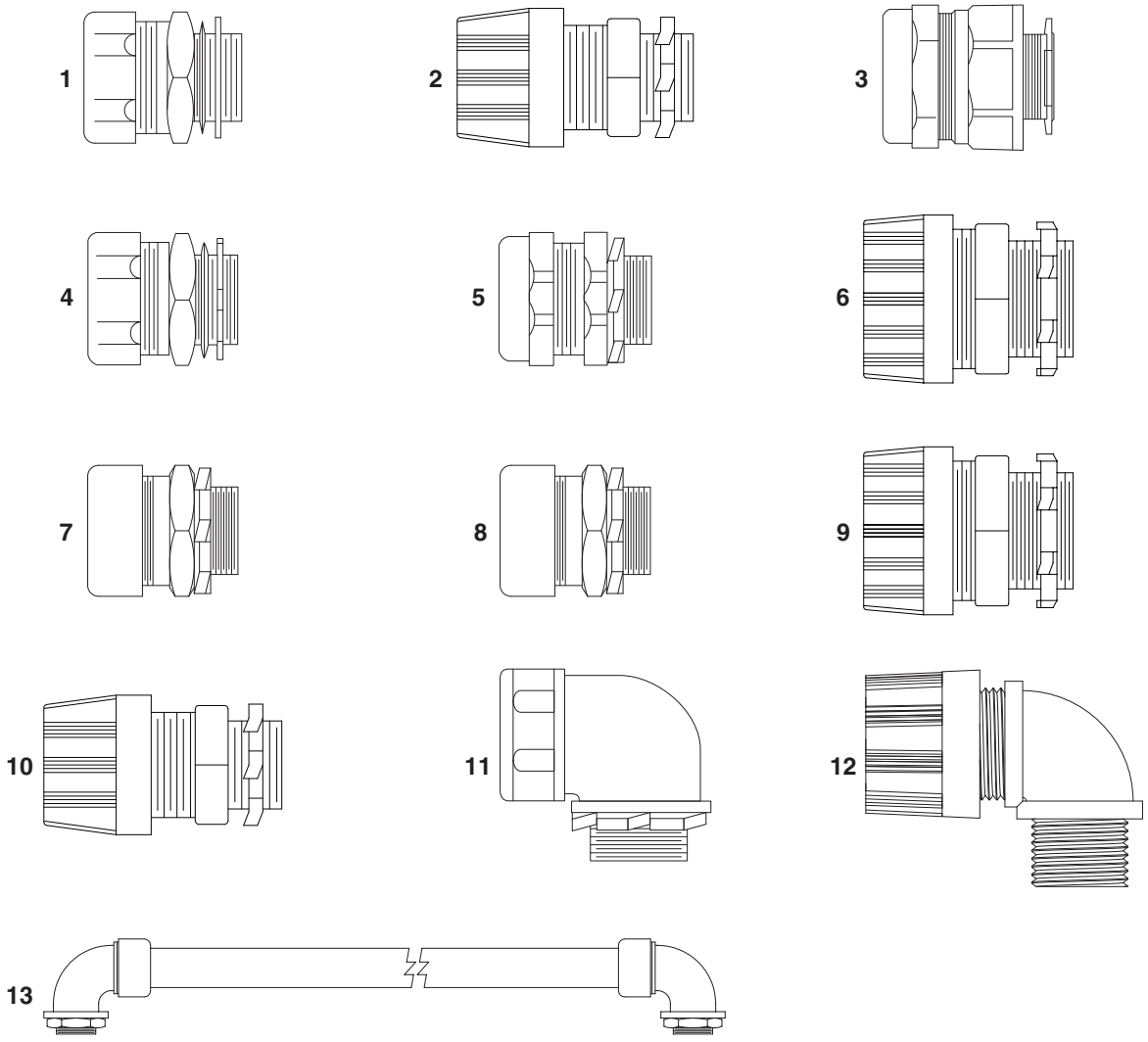
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5

FUSE PACKAGES									
Item #	Part #	Amperage	Voltage	Description	Item #	Part #	Amperage	Voltage	Description
1	099P088	12	600	Panel Fuses	5	099P182	6	600	Deep Control Panel
1	099P089	15	600	Panel Fuses	5	099P183	12	600	Deep Control Panel
1	099P090	17.5	600	Panel Fuses	5	099P184	15	600	Deep Control Panel
1	099P091	25	600	Panel Fuses	5	099P185	17.5	600	Deep Control Panel
1	099P092	30	600	Panel Fuses	5	099P186	20	600	Deep Control Panel
1	099P093	20	600	Panel Fuses	5	099P187	25	600	Deep Control Panel
2	099P100	Assorted		Corner Fuse Kit	5	099P188	30	600	Deep Control Panel
3	099P101	Assorted		Pivot Panel Fuse Kit	5	099P189	45	600	Deep Control Panel
4	931K878	6	600	Classic Panel Fuses					
4	931K879	12	600	Classic Panel Fuses					
4	931K880	15	600	Classic Panel Fuses					
4	931K881	17.5	600	Classic Panel Fuses					
4	931K882	20	600	Classic Panel Fuses					

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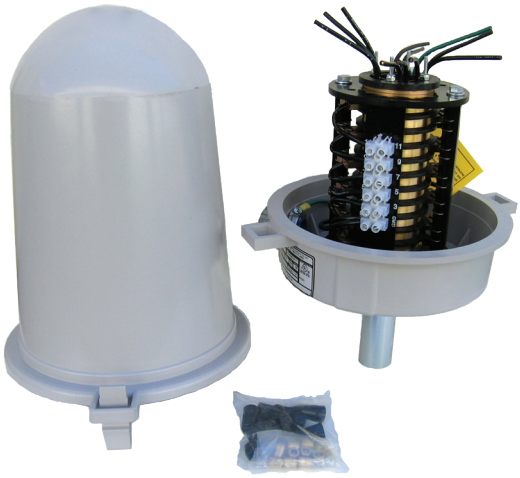
CABLE CONNECTORS					
Part ID	Part #	Hub Size	Material	Wire O.D.	Where Used
1	03E2132	0.50	Plastic	.170” - .470”	Proximity Switch Cable, Pressure Transducer
2	0314119	0.50	Plastic	.500” - .562”	14 AWG - 4 and 5 Conductor
3	0314465	0.75	Steel	.625” - .750”	12 AWG - 11 and 12 Conductor
4	0315311	0.75	Steel	.700” - .800”	12 AWG or 10 AWG - 11 and 12 Conductor
5	0315674	0.75	Steel	.900” - 1.00”	8 AWG - 11 and 12 Conductor, 8 AWG or 10 AWG - 16 Conductor
6	0314466	1	Plastic	.687” - .812”	12 AWG, 10 AWG or 8 AWG - 11, 12 and 16 Conductor - Yellow Grommet
7	0314121	0.75	Steel		Sealtite Raceway
8	0314120	0.50	Steel		Sealtite Raceway
9	0314467	1	Plastic	.812” - .937”	10 AWG or 8 AWG - 11, 12 and 16 Conductor - Gray Grommet
10	03E2481	0.75	Plastic	.562” - .687”	Communication Cable Precision Corner
11	0315400	0.50	-	-	Elbow for Raceway
12	03E3967	0.50	Plastic	.562”-.625”	X-Tec Motors
13	1812005	-	-	-	Raceway for End Gun / Stop-in-Slot

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AEROMOTIVE COLLECTOR RINGS - COMPLETE	
Part #	**Type & Size**
0315165	11 Conductor 30 Amp Collector Ring
03E0471	12 Conductor 30 Amp Collector Ring



INSUL 8 COLLECTOR RINGS - COMPLETE	
Part #	**Type & Size**
03E2197	11 Conductor 30 Amp Collector Ring
03E2425	11 Conductor 45 Amp Collector Ring
03E2426	12 Conductor 30 Amp Collector Ring
03E2427	14 Conductor 30 Amp Collector Ring



EXTENDED DOME	
Part #	**Comments**
03E1496	To be used for Aeromotive Collector Ring (0315165) with the “shorter dome” to provide proper clearance for the encoder.

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SURGE SUPPRESSORS			
Part ID	Part #	Description	Where Used
1	03E1782	250 V Surge Suppressor	Panel, Corner Guidance
2	03E1788	Insulating Tube	Used with 03E1782
3	03E2232	200 V Surge Suppressor	Panel & Tower Box Contactors
4	03E2069	550 V Surge Suppressor	Panel Voltmeter



LIGHTNING ARRESTORS			
Part ID	Part #	Description	Where Used
1	0315130	600V 3 Pole Lightning Arrestor	Main Control Panel, Corner Swing Tower Box
2	1702384	Lightning Arrestor Bracket	120V Lightning Arrestor
3	0315605	120/240V Lightning Arrestor	Main Control Panel



GROUND FAULT PROTECTION			
Part ID	Part #	Description	Where Used
1	03E3109	Ground Fault Sensor	Main Control Panel
2	03E3110	Ground Fault Relay	Main Control Panel

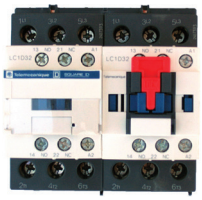
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CABLE TIES		
Part ID	**Part #**	**Description**
1	03E1605	5.5" Plastic Cable Tie
2	0314793	6" Plastic Cable Tie W/ Screw Attachment
3	0314225	7.5" Plastic Cable Tie
4	0314834	11" Plastic Cable Tie

Reversing Contactor Changes

03E2712

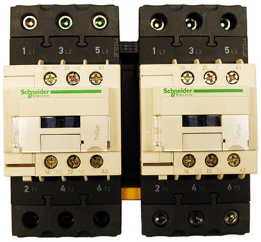


Used only in Classic Panel

See page 3-12 for repair parts.

Reversing Contactor

03E3444



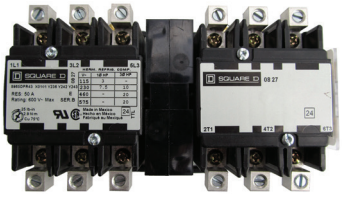
Used in Deep Enclosure

40 amp

Effective to 12-13

Discontinued Auxiliaries

03E2777



099P174 - 2 N.O.

099P175 - 1 N.O. 1 N.C.

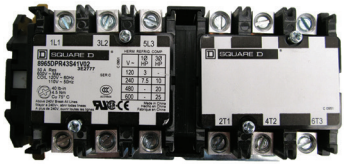
099P176 - 1 N.O.

Prior to 6-09

Series B

Auxiliaries

03E2777



099P179 - 1 N.C.

099P180 - 1 N.O. 1 N.C.

099P181 - 2 N.O.

After to 6-09

Series C

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03E2697



03E3232



PERCENT TIMERS			
Part #	**Description**	**Application**	**Special Notes**
03E2697	Solid State 60 Second Percent Timer	Used in the Main Control Panels on Mechanical Panels	Timer is rated for 120vac. 60 Hz. Can be changed to 30, 60 & 120.
* 03E3232	Electronic Overwatering Delay Timer	Overwatering Timer Tower Box, Linear Pulse Timer Tower Box	Timer is rated for 120vac. 60 Hz.

*KA01519 to convert OLD Overwatering Timer (03E2939) to NEW Electronic Overwatering Delay Timer (03E3232).

03E3785



03E1848



03E1861



03E3444



CONTACTORS			
Part #	**Description**	**Application**	**Special Notes**
03E3785	3 Pole Contactor	Tower Boxes and Booster Pump Boxes	Coil is rated for 120vac. 60hz. Contacts are rated for 460vac. 30 Full load amps
099P190	3 Pole Contactor	Tower Boxes and Booster Pump Boxes	Coil is rated for 120vac. 60hz. Contacts are rated for 460vac. 30 Full load amps
03E1848	4 Pole Contactor	Main Control Panels 30 and 40 Amp Panels	Coil is rated for 120vac. 60 Hz. Contacts are rated for 460vac. 30 Full load amps. 3 N.O. And 1 N.C. Contact SERVICE ONLY
03E3542	4 Pole 40 Amp 120V Contactor	Deeper Enclosure Panel	Coil is rated for 120 vac. 60 Hz. Contacts are rated for 460 volts vac. 2 N.O. And 2 N.C.
03E1861	4 Pole Phase Change Contactor	Booster Pump Box and Universal Linear	
03E1863	40 Amp 3 Pole Contactor	Retro Corner	Coil is rated for 120vac. 60hz. And the poles are rated at 40 amps
03E3536	Phase Loss 3 Pole Contactor	For Deeper Enclosure Panel	Coil is rated for 460vac. 60hz. Contacts are rated for 40 full load amps. 3 N.O. Contacts
03E1849	Phase Loss 3 Pole Contactor	For all control panels	
03E2333	Reversing Contactor / Steering	Corner Swing Tower Box and the Universal Linear Panel as well as the Auxiliary Control Panel	This part # includes 2 (03E2325) and 1 mechanical interlock
03E2710	Single 32 Amp, 3 Pole Contactor	Classic panel	Must be interlocked
03E2711	Reversing Contactor Interlock Kit	Classic panel	
03E2712	Complete UL Approved Reversing Contactor	Classic panel	Includes 2 (03E2710) contactors interlocked with 1 (03E2711) interlock kit
03E3444	40 Amp 3 Pole Reversing Contactor	Deeper Enclosure Panel	
099P172	30 Amp 120V Coil 4 NO Pole	Control Panel	For Zimmatic Panel
03E2765	12 Amp 120V 2 NO-2 NC 4 Pole Contactor	1 Phase Tower Boxes	

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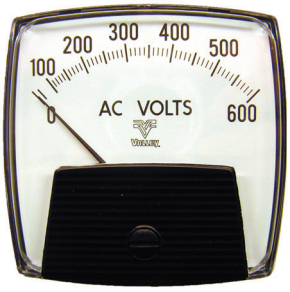


MICRO SWITCHES				
Part ID	**Part #**	**Description**	**Application**	**Notes**
1	03E0307	Adjustable micro switch close tolerance	Tower boxes on all systems	Switches are close tolerance
2	0314213	Non adjustable micro switch	Corner run cycle boxes seq box and in the auto rev auto stop box	This is not a close tolerance switch
3	03E2031	Over travel plunger switch w/o roller	Linear steering boxes and also used in sis box on pivots	
4	0314893	Over travel plunger switch w/ roller	Linear steering boxes and also used in sis box on pivots	
5	099P023	Microswitch-long arm	Zimmatic tower box	



TRANSFORMERS		
Part #	**Description**	**Applications**
03E1540	Universal transformer	Pivot box
03E2175	Transformer 500 kva-Square D	Used in Booster transformer packages
03E2188	Transformer 750 va 480 to 120 vac	
03E2194	TF transformer 75 va 120 vac 50/60hz class 2	
03E2640	Transformer only 480 to 24 vac	Used in the secondary transformer kit in Pro and Select
0000A18	Booster Transformer Package 45 AMP	Pivots and Linear Applications
KA09722	Secondary transformer kit 480 to 24 vac	Secondary transformer for Pro and Select panels

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METERS		
Part ID	**Part #**	**Description**
1	03E2173	Panel Voltmeter 600v
2	03E1562	Panel Hourmeter

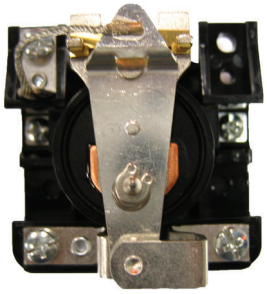
0314815



0314610

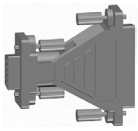
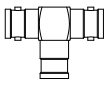
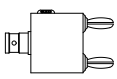


0314480



RELAYS		
Part #	**Description**	**Applications**
0315559	110 vdc relay	Used in Pivot Panels and Linear Panels
0314936	3 Pole relay 120 vac 250 volt contact rating	Used in Pivot Panels and Linear Panels Corner Run Cycle Box as well as the Precision Corner Control Panels
0314815	Latching relay 120 vac 250 volt contact rating	Used in all 6000, 8000 Pivot and Linear Control Panels
03E2230	Enable relay 120 vac	Used in Precision Control Panels
0314610	4 Pole mini relay 120 vac	Used in Induced Voltage Dissipation Kit and on the 5 Relay PCB in the Corner SDU Box
03E2179	Solid State relay 120 vac	Used on the Precision Corner Control Panels and in the Linear Pro2 Panel
03E2564	12 vdc relay	Used in Dual Span Control Panel, Pro2 Control Panel for Optional Equipment
0314480	120 vac open face relay 250 volt contact rating	Used in Corner Run Cycle Box
0314727	120 vac open face relay DPDT 250 volt contact rating	Used in Pre 6000 Pivot and Linear Panels
03E3110	Ground sensor relay (GFI)	Optional Protection for Pivot and Linear Panels
03E4197	120VAC w/ indicator	Run Cycle/Switch Box/Corner Panel

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	0178021	FTDI Chipset USB to serial converter
	03E2445	6’ Straight Through Serial Cable Extension (Other serial cable lengths are OK)
	03E2858	Pro2 / Select2 Computer Programming Adapter
	03E2551 03E2783 03E2317	Male to Male Adapter Female to Female Adapter Null Modem Adapter
	03E2770	PLC Programming Cable - Serial to RJ45
	03E3638	GPS Antenna Tester DB9F to RJ12
	KA01789	Computer Service School Tool Kit - Includes USB to serial converter, 6ft extension serial cable, computer programming adapter, male to male adapter, female to female adapter, null modem adapter, PLC programming cable (RJ45) and GPS antenna tester (DB9F to RJ12)
	03E4431 03E4432	12.00” Coaxial Cable - BNC Male x BNC Male 24.00” Coaxial Cable - BNC Male x BNC Male
	03E4433	BNC Female RF Tee
	03E4434	BNC Female to Double Stacking Banana Plug

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	0178013	Fluke 87.5 Meter
	0178014	Fluke 114 Meter
	0178015	Megohmeter
	0178016	T-Pak
	0178017	Circuit Breaker (5 Amp)
	0178018 0178019 0178020	Wiha Screwdriver 9/64 x 4” Wiha Screwdriver 3/16 x 5” Wiha Screwdriver 7/32 x 7”
	0178022	Fluke Meter Fuse - 440 mAMP (for 83 & 87 Fluke Meters)
	0178023	Fluke Meter Fuse - 11 AMP (for 83 & 87 Fluke Meters)
	0178024	Small Valley Screwdriver
	0178025	Wiha Screwdriver #2 x 4” Phillips
	0178026	Fluke 400 Amp Clamp Probe (for use with any Fluke Multi-Meter with banana inputs and 2-mA or greater current range)

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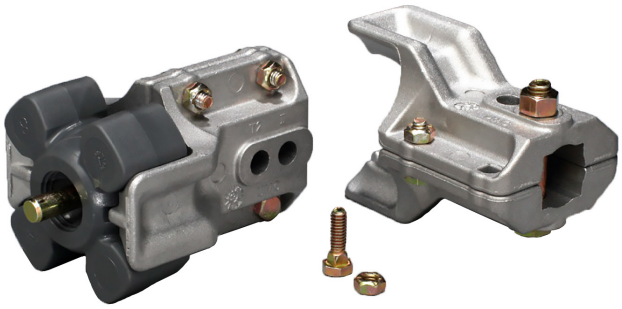
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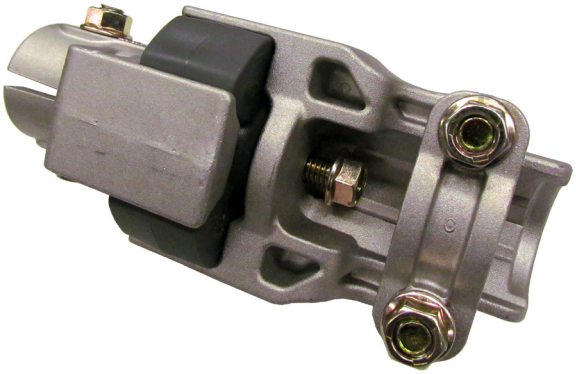
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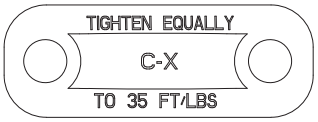


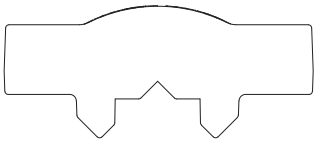
CX-Universal U-Joint

UMC Ultra Heavy-Duty Pinned U-Joints

Quality driveline U-Joints for any brand machine.

- *30% higher torque ratings over standard non-pinned industry designs*
- *Steel insert pins – prevents casting separation under high loads*
- *Provides longer U-Joint life and reduced maintenance*



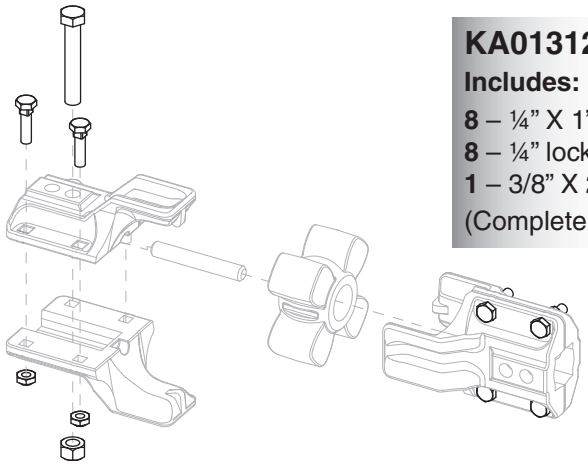


UMC Universal Coupler Saddle
0980216 - Used on above Universal U-Joint

Coupler Hardware Kit
KA02767

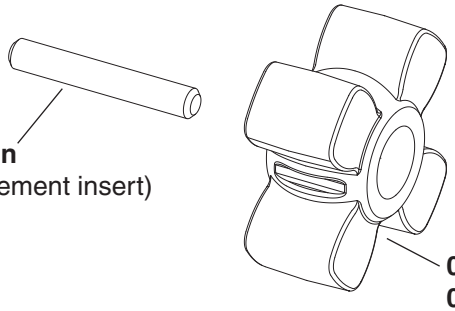
ULTRA-HEAVY DUTY PINNED U-JOINTS					
Part #	**Description**	**Drive Shaft End**	**Gearmotor Shaft End**	**Qty / Box**	**Replaces Previous Parts:**
KA01300	U-Joint - Non-Tow, 7/8" Square x 1" Round	7/8" Square	1" Round	14	KA01075 KA01076 KA01299
KA01078	U-Joint - Tow or Non-Tow, 3/4" Square x 1" Round with Keyway slot	3/4" Square	1" Round with 1/4" Keyway slot	14	KA01077
KA01080	U-Joint - Tow or Non-Tow, 1" Square x 1" Round	1" Square	1" Round	14	KA01079
KA01375	U-Joint - Tow, 7/8" Square x 1" Round	7/8" Square	1" Round	14	
0980070	CX-Universal	3/4"-1" Square	1" Round	14	All of the Above

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KA01312 – U-Joint Hardware Bolt Kit
Includes:
8 – ¼" X 1" square headed bolt (pt# 0161421)
8 – ¼" lock nuts (pt# 0133008)
1 – 3/8" X 2 ¼" bolt with 3/8" lock nut
(Complete set of hardware for one U-Joint)

UMC Ultra Heavy-Duty Pinned Insert Replacement



0997166 – Steel Insert Pin
(NOT included with replacement insert)

Insert includes 3/8" hole for pin insert. Replacement insert does not include the 0997166 steel insert pin. Use the existing pin in the U-Joint being replaced.

0996201 – Replacement Insert (non-tow)
0997424 – Replacement Insert (towable)

ULTRA-HEAVY DUTY PINNED INSERT REPLACEMENT		
Part #	**Description**	**Replaces Previous Parts:**
***0996201**	**Ultra-Heavy Duty Insert Replacement for Non-Tow. Includes hole for 3/8" pin. Pin not included.**	**0994350 0996169 0996202 0996169**
*** This replacement insert will work for the older style U-Joints that did not include the pin prior to June 2005. This insert is a direct replacement. A pin is not required in the hole and it will be stronger than the insert being replaced.**		

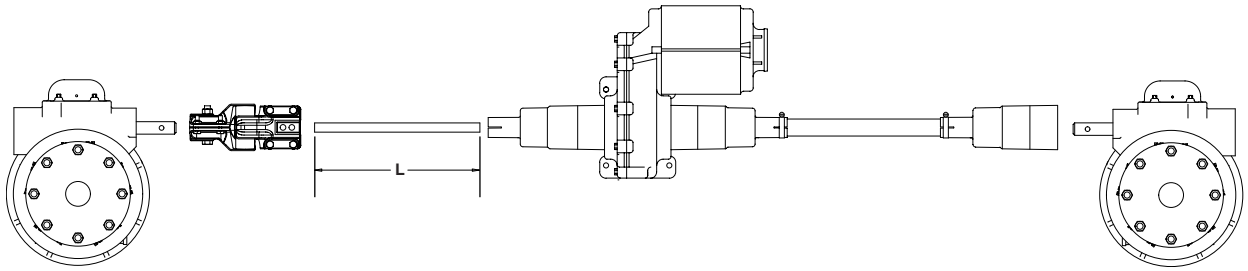
Why is the Ultra-Heavy Duty PINNED U-Joint Design Superior to the NON-PINNED version?

The Ultra Heavy Duty insert has a steel centering pin that holds the u-joint castings aligned to the insert. When torque or force is applied to drive the tires, the insert deflects and the u-joint castings want to move sideways relative to each other, causing uneven loading. As more load is applied, the insert continues to deform until either the insert pops out of the casting or the insert ear tears off. Occasionally the aluminum casting may break because of the mismatch between the insert and castings.

The steel pin eliminates the mismatch problem under load. The pin is held in position by two small bores in the casting assemblies. The steel pin keeps the insert and the two casting assemblies aligned as the torque is increased. Since the castings can't move sideways relative to each other, the load is evenly distributed over all four insert lugs. By keeping the castings aligned, the load can be increased by 30% before separation and failure occurs. Valmont has used the insert and steel pin on 16.9 X 24 tires and 11.2 x 38 tires with very good results on applications where the NON-PINNED heavy duty u-joint was not acceptable.

If your customer has had a u-joint failure, the Ultra Heavy Duty Pinned U-Joint is the best replacement. It protects the drive train while eliminating those future annoying u-joint failures. This should be the customer's u-joint of choice.

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Drive Unit Drive Shafts

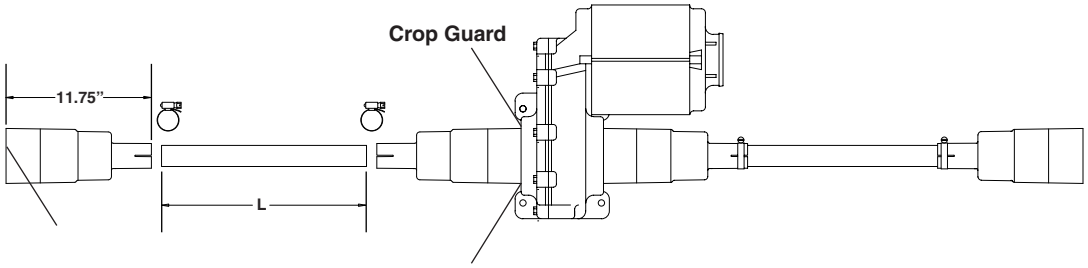
- *Select lengths available "Hot Rolled" or "Cold Drawn"*
- *"Cold Drawn" adds extra strength in extreme duty applications*
- *"Hot Rolled" material for normal applications*
- *Variety of lengths to fit all your drive line component needs.*

DRIVE SHAFTS						
Part #	Description	L Length (in.)	Profile	Material	Finish	Application
1702258	7/8" Square Drive Shaft - Hot Rolled	45.38	Low	Hot Rolled Steel	Black (non painted)	LOW Profile series 8000 drive units.
1702215	7/8" Square Drive Shaft - Cold Drawn	60.12	Standard	Cold Drawn Steel	Black (non painted)	STANDARD Profile series 8000 prior to Oct. 1998 and current linear cart applications.
9361713	7/8" Square Drive Shaft - Hot Rolled	60.12	Standard	Hot Rolled Steel	Black (non painted)	STANDARD Profile series 8000 drive units.
1702284	7/8" Square Drive Shaft - Cold Drawn	81.06	High	Cold Drawn Steel	Black (non painted)	HIGH Profile series 8000 prior to Oct. 1998 and current linear hose drag cart applications.
9361714	7/8" Square Drive Shaft - Hot Rolled	81.06	High	Hot Rolled Steel	Black (non painted)	HIGH Profile series 8000 drive units.
9360178	7/8" Square Drive Shaft - Hot Rolled	101.09	Ultra-High	Hot Rolled Steel	Black (non painted)	ULTRA-HIGH Profile series 8000 drive units.

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- *Ideal for updating machines with missing or non-working shields*
- *Update Valley or competitive machines*
- *Adaptable to most brands*
- *High density polyethylene grey material*

DRIVE SHAFT SHIELD COMPONENTS (see diagram)		
ITEM	Part #	Description
1	0992716	Low Profile Shield (40.6”)
1	0992715	Standard Profile Shield (55.4”)
1	0992717	High Profile Shield (75.8”)
1	0994598	Ultra-High Profile Shield (96.3”)
2	1702614	Bell Shield (11.75”)
3	0271013	Stainless Steel Clamp



NOTE: Install shields inside crop guard with 1/8” gap between shield and gearboxes/center drive. Shield assemblies should rotate freely over drive shaft and u-joints.

DRIVE SHAFT SHIELD COMPLETE PACKAGES				
Part #	Description	L Shield Length (in.)	Profile	What’s Included?
0000723	Standard Profile Complete Drive Shaft Shield Package	55.40	Standard	Includes 4 - Bells, 4 clamps and 2 drive shaft shields.
0000653	High Profile Complete Drive Shaft Shield Package	75.80	High	Includes 4 - Bells, 4 clamps and 2 drive shaft shields.

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Helical Gearmotors

Valley offers a complete line of centerdrive gearmotors to meet your customers needs. These include Helical and Worm Centerdrives as outlined in this section.

Large 1 3/16" motor shaft

Pinion gear— integral with motor shaft

25° tooth angles— provides 40% greater load capacity and wear resistance than other manufacturers' 14 1/2° tooth angles

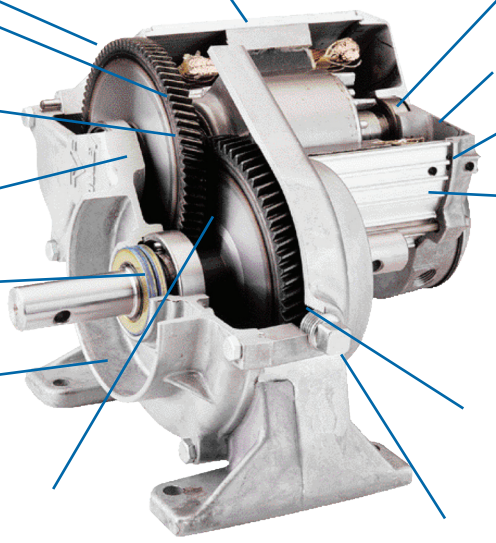
Extra-large intermediate gear bearings— assure longer life

Double output shaft seals

Built-in crop guard over U-joint— prevents crop wrapping in or near oil seals

Double reduction gearing— requires fewer gears, shafts and bearings for greater reliability and efficiency

Stator can be replaced independent of rotor, and is held in place with corrosion- resistant, stainless steel bolts for easy maintenance



Extra-large motor bearing

Exclusive coating— applied to internal surfaces to prevent corrosion

Watertight seal— between housing components

Finned aluminum housing— for cool-running efficiency. Operates at temperatures 20° F (11° C) lower than comparable motors with steel housing, because the Valley aluminum housing and fins dissipate heat more effectively. This doubles insulation life and increases motor life.

Case-hardened steel helical gears— More teeth meshed at all times for smoother power transmission.

Drain plug— easily accessible, extra large

Valley® Center Drive… engineered for reliable service

The Valley®Center Drive is built stronger, lasts longer and uses less energy than other irrigation drive motors. The standard-speed motor has the lowest power requirements in the industry. The high-speed option significantly reduces rotation time.

Center Drive Features	Center Drive Benefits
Steel gears	Provide more strength than powdered metal
Aluminum finned housing	Runs 20° F cooler for a longer motor life No paint to chip, scratch or corrode
Internally vented junction box	Prevents moisture and contaminants from corroding the wire connections
Crop guard	Protects shaft seals for extended life
Integral pinion gear	Eliminates coupler, improves reliability
Helical gears	More tooth contact than spur gears, providing more torque capacity and quieter operation
Special motor windings for high-torque applications	40% higher operating torque than the competition

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Helical Gearmotors

In the Valley tradition of continuously improving our products, the center drive has proven to be the most reliable and energy efficient unit available today. Significant changes have been made to the motor to improve the overall design reliability.

Field and Accelerated test results

- ✓ **The Valley design averaged 3 times the life of competitive center drives**
- ✓ **40% higher torque rating than competition**
- ✓ **Highest efficiency available**
- ✓ **Lowest power consumption available**



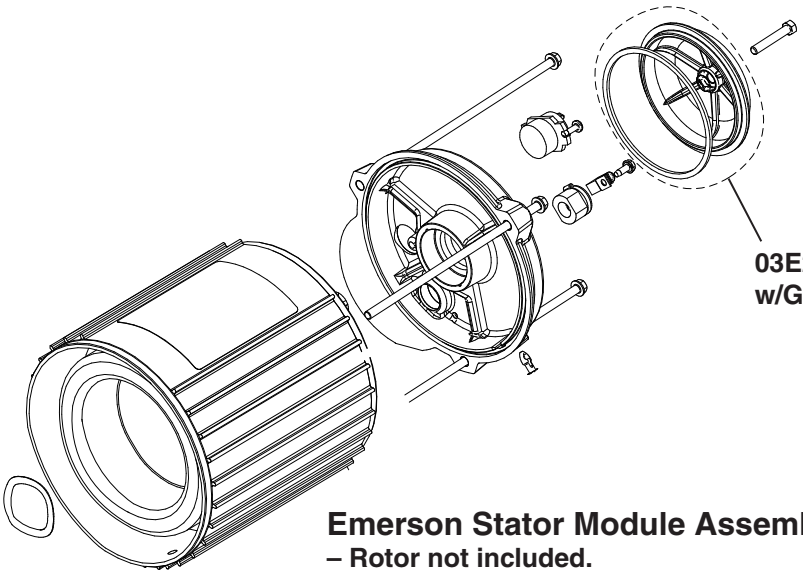
SINGLE PHASE HELICAL GEARMOTOR					
Part #	Description	Brand	HP	Motor Housing Material	Applications
03E2788	SINGLE PHASE - 34 Output RPM Helical Centerdrive Gearmotor with Thermal Protection	Valley with Baldor Motor	0.60	Painted Steel	Valley 5000 - 4 spans or less

HELICAL GEARMOTORS					
Part #	Description	Brand	HP	Motor Housing Material	Applications
03E1554	34 Output RPM Helical Centerdrive Gearmotor with thermal protection	Valley with Emerson Motor	0.60	Aluminum	Valley and Competitive Machines
03E1558	68 Output RPM Helical Centerdrive Gearmotor with thermal protection	Valley with Emerson Motor	1.20	Aluminum	Valley and Competitive Machines
03E2088	43 Output RPM Helical Centerdrive Gearmotor with thermal protection	Valley with Emerson Motor	0.75	Aluminum	Specifically designed for a 43 output RPM to replace Zimmatic® centerdrive gearmotors.
03E2468	34 Output RPM Helical Centerdrive Gearmotor with thermal protection	Valley with Baldor Motor	0.60	Aluminum	Valley and Competitive Machines
03E2469	68 Output RPM Helical Centerdrive Gearmotor with thermal protection	Valley with Baldor Motor	1.20	Aluminum	Valley and Competitive Machines
03E3452	34 Output RPM Helical Centerdrive Gearmotor with thermal protection	Valley with Nidec Motor	0.60	Aluminum	Valley and Competitive Machines
03E3476	68 Output RPM Helical Centerdrive Gearmotor with thermal protection	Valley with Nidec Motor	1.20	Aluminum	Valley and Competitive Machines
03E3473	43 Output RPM Helical Centerdrive Gearmotor with thermal protection	Valley with Nidec Motor	1.20	Aluminum	Valley and Competitive Machines
03E1536	86 Output RPM UMC Helical Centerdrive Gearmotor with thermal protection	UMC	1.50	Aluminum	Valley and Competitive Machines for extremely high speed applications. Contact Valmont before utilizing in pivot applications.

NOTE: All output RPM are based on 60 Hertz, 3 phase power at 460 VAC, except 03E2788, which is 1 phase.

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Stator Module Assemblies



Emerson Stator Module Assembly
– Rotor not included.

EMERSON HELICAL MOTOR MODULE REPLACEMENTS		
Part #	**Description**	**Applications**
03E1556	34 RPM - Emerson Helical Motor Module Replacement - rotor not included	For replacing motor modules on gearmotor assemblies 34 RPM 03E1554 and 43 RPM 03E2088
03E1556	43 RPM - Emerson Helical Motor Module Replacement - rotor not included	For replacing motor modules on gearmotor assemblies 34 RPM 03E1554 and 43 RPM 03E2088
03E1559	68 RPM - Emerson Helical Motor Module Replacement - rotor not included	For replacing motor modules on gearmotor assembly 68 RPM 03E1558

IMPORTANT: ***Emerson motor module replacements will not replace a Baldor motor module.***

BALDOR HELICAL MOTOR MODULE REPLACEMENTS		
Part #	**Description**	**Comments**
03E2839	34 RPM - Baldor Helical Motor Module Replacement - rotor not included	For replacing motor module on gearmotor assembly 03E2468
03E2840	68 RPM - Baldor Helical Motor Module Replacement - rotor not included	For replacing motor module on gearmotor assembly 03E2469

NIDEC HELICAL MOTOR MODULE REPLACEMENTS		
Part #	**Description**	**Comments**
03E3582	34 RPM - Nidec Helical Motor Module Replacement - rotor not included	Nidec and US Motor stators are interchangeable. Rotors are not.
03E3587	68 RPM - Nidec Helical Motor Module Replacement - rotor not included	Nidec and US Motor stators are interchangeable. Rotors are not.
03E3585	43 RPM - Nidec Helical Motor Module Replacement - rotor not included	Nidec and US Motor stators are interchangeable. Rotors are not.

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VS-7000 – Centerdrive Choice*

In the Valley tradition of continuously improving our products, the center drive has been designed to be the most reliable and energy efficient unit available today.

Field and Accelerated Test Results

- The Valley center drive averages three times the life of competitive center drives.
- 40% higher torque rating than competition
- Highest efficiency available
- Lowest power consumption available

Valley offers a wide selection of center drive options to match your farming practices.

The VS-7000 center drive offers the performance you have come to expect from Valley but at a lower price point. The VS-7000 is similar to the original Valley center drive except for the autophoretic painted steel housing.



- Same performance specifications
- Same helical gearbox
- Same amp draw
- Same torque rating

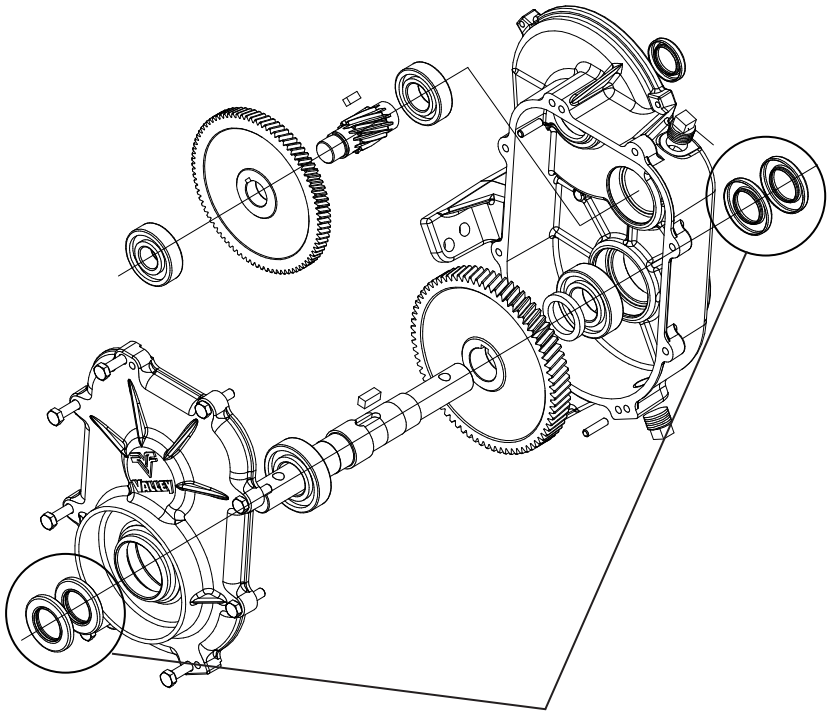
* Not available on the 8000 series. Only available in US & Canada

Part #	Gearbox Description	Brand	HP	Motor Housing Material	Applications
03E2763	34 Output RPM Helical Centerdrive Gearmotor	VS-7000 w/ Baldor Motor	0.60	Painted Steel	Valley - Competitive Machines
03E2764	68 Output RPM Helical Centerdrive Gearmotor	VS-7000 w/ Baldor Motor	1.20	Painted Steel	Valley - Competitive Machines

VS-7000 MOTOR MODULE REPLACEMENTS			
Part #	Gearbox Description	Brand	Applications
03E2761	34 RPM Helical Motor Module (rotor not included)	Baldor	For replacing motor modules on 03E2763
03E2762	68 RPM Helical Motor Module (rotor not included)	Baldor	For replacing motor modules on 03E2764

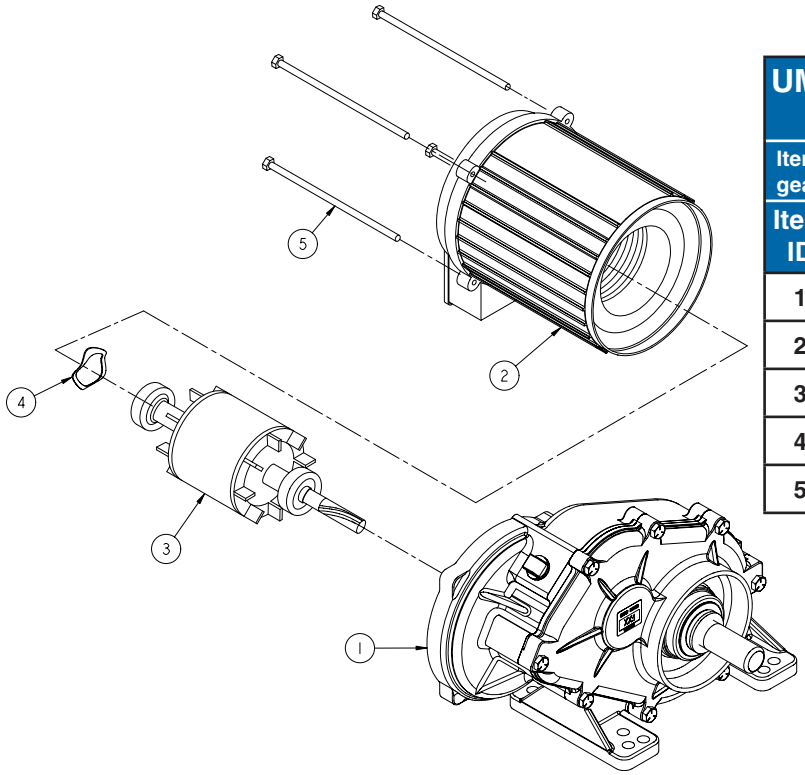
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Gearmotor Gearbox Output Shaft Seals



03E1756 - Output Shaft Seals for Valley Helical Gearbox with Emerson Motor

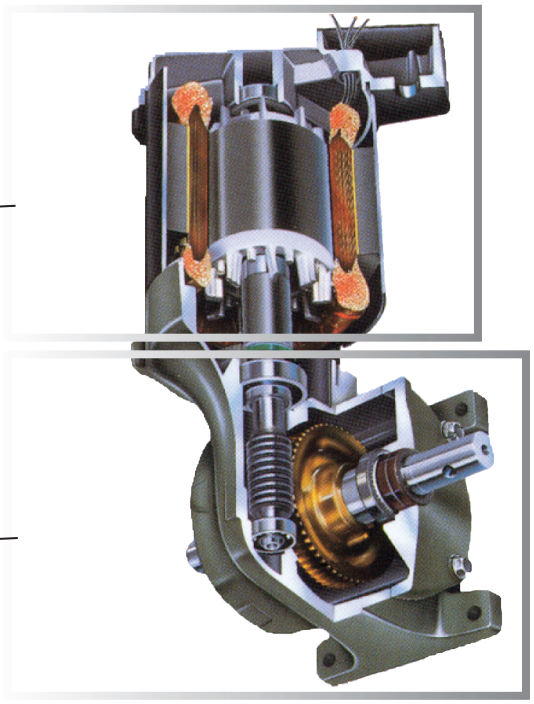
86 Output RPM UMC Helical Gearmotor Repair Items



UMC 86 RPM HELICAL GEARMOTOR REPAIR ITEMS		
Items listed below apply to the following complete gearmotor assemblies: 03E1536		
Item ID	**Part #**	**Description**
1	03E2636	Complete Gearbox Assembly
2	03E2635	Motor module stator only
3	03E2633	Rotor assembly only
4	03E2634	Washer, wave spring
5	03E2632	Stator bolts

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Replacement Motor Modules and Gearboxes



U.S. / Emerson Worm Drive Motor Module

U.S. / Emerson Worm Drive Gearbox Only

U.S. / EMERSON WORM DRIVE UPRIGHT GEARMOTOR MOTORS & GEARBOXES					
Part #	Description	Motor Module Replacement	Motor Horsepower	Gearbox Replacement Only	Gearbox Gear Ratio
03E2044	30 Output RPM Worm Drive Upright Centerdrive Gearmotor with thermal protection	*03E2045	1.00	0314915	58:1
03E2039	37 Output RPM Worm Drive Upright Centerdrive Gearmotor with thermal protection	*03E2045	1.00	0314916	47:1
03E2056	56 Output RPM Worm Drive Upright Centerdrive Gearmotor with thermal protection	*03E2046	1.50	0314928	31:1
03E2040	68 Output RPM Worm Drive Upright Centerdrive Gearmotor with thermal protection	*03E2046	1.50	0314922	26:1
03E2540	100 Output RPM Worm Drive Upright Centerdrive Gearmotor with thermal protection	*03E2046	1.50	0314924	17:1
03E2057	84 Output RPM Worm Drive Upright Centerdrive Gearmotor with thermal protection	*03E2046	1.50	0314924	21:1

*Motor modules listed above include the stator and rotor both. Motor module material is stainless steel.

Does the U.S. motor module you are replacing have INTERNAL STATOR BOLTS?

If the answer is yes, this motor module will be 25+ years old. The replacement U.S. / Emerson motor modules listed in the table above will support the EXTERNAL & INTERNAL stator bolt design. Valley also offers a Baldor replacement motor module that will work for these replacements. Please refer to the "Baldor Replacement Motor Modules" section to order the appropriate motor. The Baldor replacement motor modules will interchange with any of the U.S. / Emerson Worm Drive Upright Gearmotor Designs.

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Baldor Replacement Motor Modules

The following replacement Baldor Motor Modules will interchange with any of the U.S. Motors / Emerson Worm Drive Upright Gearmotor Designs. These motor modules will accommodate the "old style" internal stator bolt design.



Baldor Motor Module Replacement

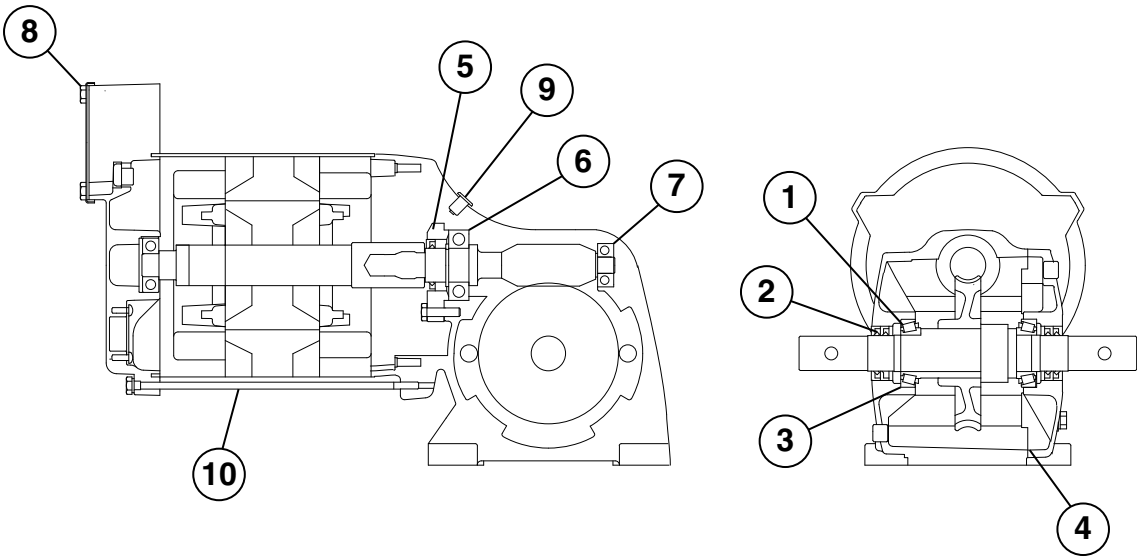
(includes both the stator and rotor. Painted Dark Grey with a special autophoretic painting process for added corrosion protection.)

Corrosion Protection - Baldor has dramatically improved the corrosion protection of years past with a special "autophoretic" painting process. This process is widely used in the automotive industry to protect parts that require advanced corrosion protection. The special paint process provides corrosion protection that equals that of stainless steel.

BALDOR WORM DRIVE MOTOR MODULE REPLACEMENTS		
Part #	**Description**	**Applications**
***1770170**	**1 HP Baldor Motor Module - for Worm Drive Gearboxes**	**For replacing motor modules on U.S. Motors / Emerson Worm Drive gearmotor assemblies. Direct replacement for a 03E2045.**
***1770171**	**1.5 HP Baldor Motor Module - for Worm Drive Gearboxes**	**For replacing motor modules on U.S. Motors / Emerson Worm Drive gearmotor assemblies. Direct replacement for a 03E2046.**
*** Baldor replacement motor modules support the "old style" internal stator bolt design. Includes both the stator and rotor.**		

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Miscellaneous Repair and Maintenance Items



U.S. / EMERSON WORM DRIVE UPRIGHT GEARMOTOR REPAIR ITEMS		
Items listed below apply to the following complete gearmotor assemblies: 03E2044, 03E2039, 03E2056, 03E2040, 03E2540		
Item ID	**Part #**	**Description**
1	0192061	Output bearing
2	0258021	Output shaft seal
3	0192060	Output bearing race
4	0994330	Endplate gasket
5	0258022	Input Seal
6	0191060	Upper Input Bearing
7	0191059	Lower Input Bearing
8	0164146	1/4” - #20 X 5/8” Self Tapping Screw
9	0123022	Plastic Rivet 11/64”
10	0161416	1/4” X 7 1/4” Stator Bolt

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Replacements for Valley Machines

Built to Last

Largest capacity rubber diaphragm — expands with heat and pressure to minimize water condensation.

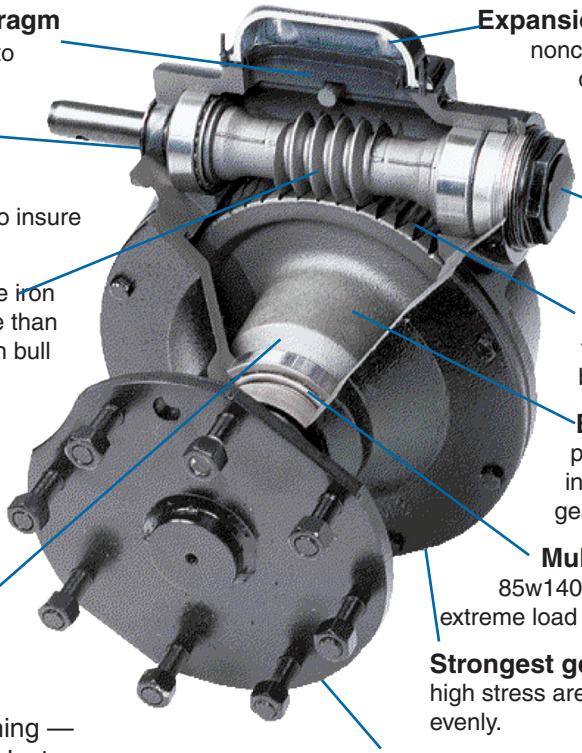
Input and output bearings — American made and case hardened to provide the highest quality and load rating available in the industry to insure long trouble free life.

Worm gear — high strength ductile iron provides significantly longer wear life than steel when combined with a cast iron bull gear.

Tooth design — Industry exclusive 25° tooth angle provides 40% longer life and better reliability in tough conditions compared to normal 14 1/2° tooth designs.

Largest bull gear neck and keyway — for strength in critical load-bearing area.

All these factors add up to one thing — the best quality gearbox in the industry, giving you long, trouble-free economical equipment life.



Expansion chamber — cap made of noncorrosive cast aluminum; rubber diaphragm allows oil to expand and contract during operation. Vented cap prevents pressure buildup, prevents seal from leaking.

Threaded endcap — allows accurate bearing preload, to increase bearing life.

52:1 gear ratio — full recessed tooth design keeps oil engaged between gears.

Bull gear — High strength cast iron provides the highest load capacity in the industry and longest life. Optional bronze gear is available for extreme conditions.

Multi-viscosity gearbox oil — exceeds 85w140 GL5 oil for long gear wear under extreme load conditions.

Strongest gearbox housing — more material in high stress areas. Designed to distribute loads more evenly.

Longest output shaft (steel) — exclusive to Valley gearboxes. Provides extra clearance between the gearbox and wheel flange, reducing mud buildup, resulting in reduced seal damage and extending gearbox life. Special offset rims position the tire back close to the gearbox to minimize bearing loads… another Valley exclusive.

Valley® Gearboxes… built to last

Operating requirements are continually changing. Spans are getting longer, tires are getting bigger, operating hours are increasing. That is why Valley® continues to make design changes to stay ahead of trends…and always provide the best products available.

The Valley gearbox is built by Valley to ensure the quality and performance you have come to expect from Valley. Valley in-house quality assurance personnel, work to ensure the industry's most reliable gearbox. In addition, Valley tests every gearbox prior to shipping.

Gearbox Features	Gearbox Benefits
Superior Design	Three times the life of competitive gearboxes based upon independent tests
Ductile worm	Reduced wear compared to steel
Stronger bull gear	20% higher torque capacity based on independent tests
Longer output shaft	Increases mud and crop clearance, reducing chance of seal damage
Special offset rims	Positions tire close to gearbox to minimize bearing loads for longer life
Case hardened American Input and output bearings	Industries highest load rating for longer life
Heaviest gearbox housing	More material in high stressed areas to handle extreme operating conditions
Bronze bull gear option with hardened steel worm	Provides additional load capabilities for extreme operating conditions or extends life under less severe conditions

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Replacements for Valley Machines

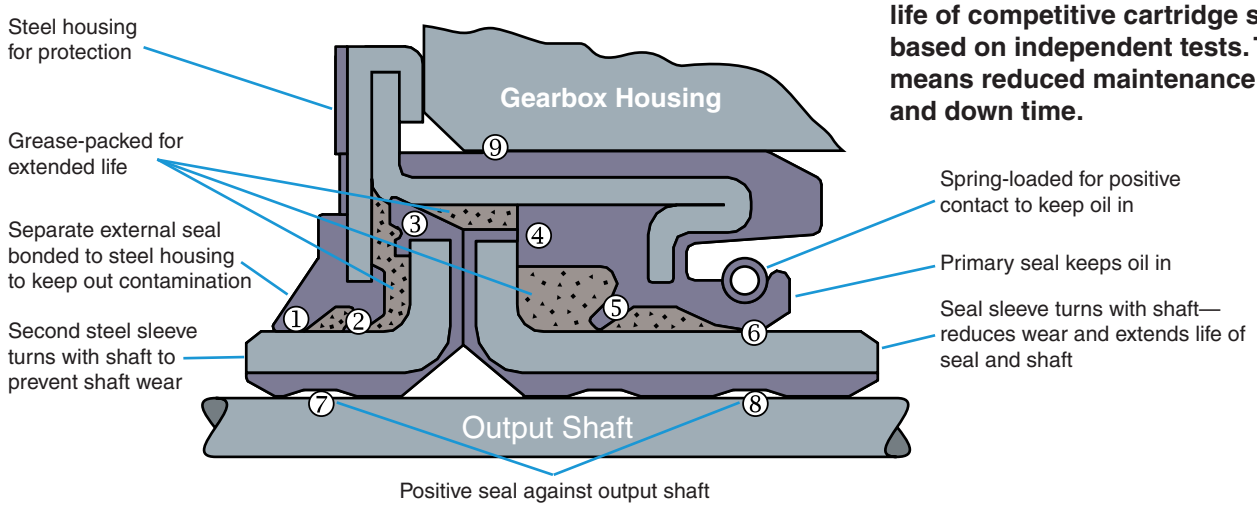
Patented Input and Output Seals

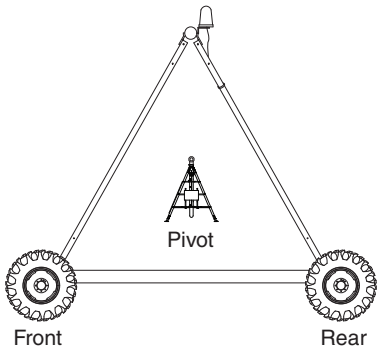
Keeping with the Valley tradition of continuous improvement, Valley partnered with a leading seal manufacturer to develop a new seal specifically for tough irrigation applications. The performance of the resulting seals was so superior to other dual lip and cartridge seals that a patent was granted for the new design.

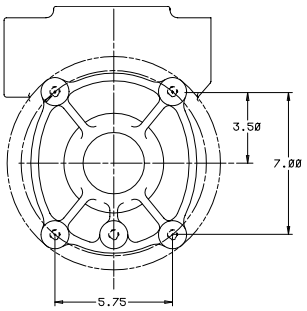
These unique seals are standard on all new Valley gearboxes … or you can retrofit any existing Valley gearbox

9 barriers keep out dirt and protects against contamination.

Valley seals have four times the life of competitive cartridge seals based on independent tests. That means reduced maintenance cost and down time.







Valley Bolt Pattern

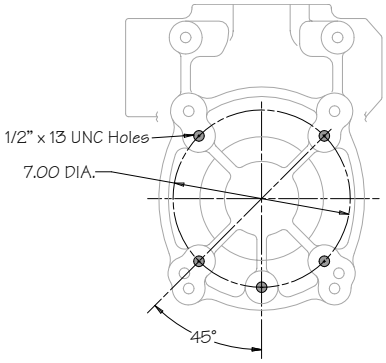
52:1 NON-TOW VALLEY WHEEL DRIVE GEARBOXES							
Part #	Gearbox Type	Gear Ratio	Output Shaft	Bull Gear Material	Worm Gear Material	Bolt Pattern	Application
1701965	REAR Single Input Shaft - Non Tow Valley Gearbox	52:1	Long Output	Cast Iron	Ductile Iron	Valley Bolt Pattern	Replaces Valley Gearboxes
1701966	FRONT Single Input Shaft - Non Tow Valley Gearbox	52:1	Long Output	Cast Iron	Ductile Iron	Valley Bolt Pattern	Replaces Valley Gearboxes
1703321	UNIVERSAL Double Input Shaft - Non Tow Valley Gearbox	52:1	Long Output	Cast Iron	Ductile Iron	Valley Bolt Pattern	Replaces Valley Gearboxes - one gearbox works as a front or rear
1732143	REAR HEAVY DUTY Single Input Shaft - Non Tow Valley Gearbox	52:1	Long Output	Bronze	Hardened Steel	Valley Bolt Pattern	Replaces Valley Gearboxes
1732144	FRONT HEAVY DUTY Single Input Shaft - Non Tow Valley Gearbox	52:1	Long Output	Bronze	Hardened Steel	Valley Bolt Pattern	Replaces Valley Gearboxes

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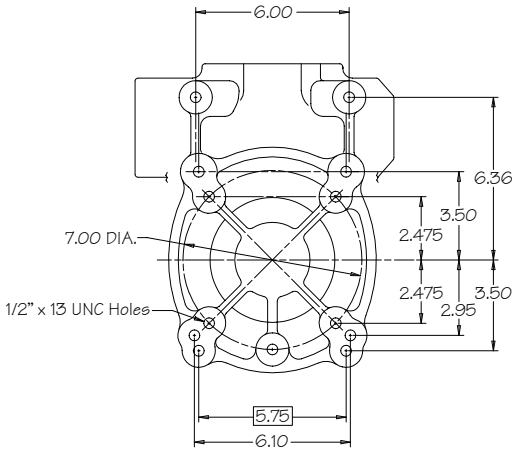
Replacements for non-Valley Machines

Same Valley quality is built into these gearboxes with the following different features:

- *50:1 Gear Ratio to match competitors wheel gearbox ratio in the field. (A 52:1 and a 50:1 gear ratio can't be placed on the same drive unit)*
- *Utilizes an output shaft that is approximately 2" shorter to accommodate competitive machines. Wheel gearboxes placed on Valley machines utilize the longer output shaft with specially designed rims with offsets to bring the load back towards the gearbox. This exclusive feature provides extra clearance between the gearbox and the wheel flange, reducing mud buildup and results in reduced seal damage for long gearbox life.*
- *Utilizes a "UNIVERSAL" casting with a competitive bolt pattern to accommodate most all brands.*

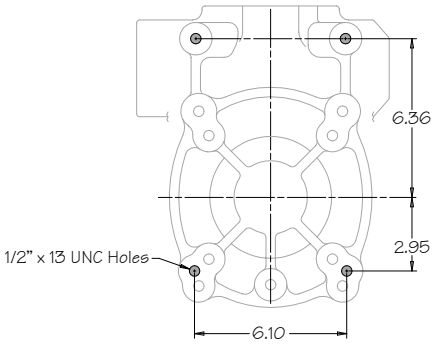


UMC & Durst Bolt Pattern
(used by Reinke®, Zimmatic® and many other brand machines)



Competitive Bolt Pattern
(bolt pattern on the 1703280, 1781677, 1781676)

NOTE: All dimensions displayed are in inches.



Lockwood Bolt Pattern

50:1 NON-TOW VALLEY WHEEL DRIVE GEARBOXES							
Part #	**Gearbox Type**	**Gear Ratio**	**Output Shaft**	**Bull Gear Material**	**Worm Gear Material**	**Bolt Pattern**	**Application**
1703280	**UNIVERSAL Double Input Shaft - Non Tow Valley Gearbox**	**50:1**	**Short Output**	**Cast Iron**	**Ductile Iron**	**Universal Competitive Bolt Pattern**	**Replaces Durst, UMC brand gearboxes. Reinke®, Zimmatic®, Lockwood and others - one gearbox works as both a front or rear.**
1781677	**REAR Single Input Shaft - Non Tow Valley Gearbox**	**50:1**	**Short Output**	**Cast Iron**	**Ductile Iron**	**Universal Competitive Bolt Pattern**	**Replaces Durst, UMC brand gearboxes. Reinke®, Zimmatic®, Lockwood and others.**
1781676	**FRONT Single Input Shaft - Non Tow Valley Gearbox**	**50:1**	**Short Output**	**Cast Iron**	**Ductile Iron**	**Universal Competitive Bolt Pattern**	**Replaces Durst, UMC brand gearboxes. Reinke®, Zimmatic®, Lockwood and others.**
1703320	**UNIVERSAL Double Input Shaft - Non Tow Valley Gearbox**	**50:1**	**Long Output**	**Cast Iron**	**Ductile Iron**	**Universal Competitive Bolt Pattern**	**Utilizes Long Output Shaft - Only works with "Valley Style" offset wheel rims - one gearbox works as a front or rear.**

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VS-7000 Wheel Gearbox

An additional option for servicing all drive trains

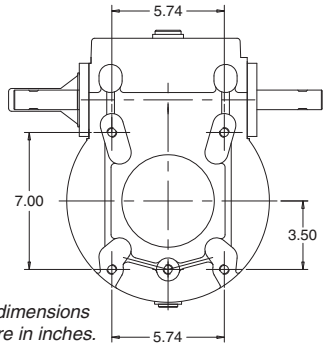
- *Non-Valley competitive machines & Valley Machines*
- *Customers seeking short term drivetrain solutions*
- *Price buyers who do not value the long life and reliability that a Valley gearbox delivers*
- *Up-sell to the industry leading premium Valley gearbox*

VS-7000 brand wheel gearbox specifications and features

- *14 ½ degree pressure angle*
- *Ductile worm*
- *Dual lip Nitrile rubber seals*
- *GL-5 85-140 gear oil included*
- *4 year / 4000 hour warranty with full conversion*
- *2 year / 2000 hour over-the-counter warranty*

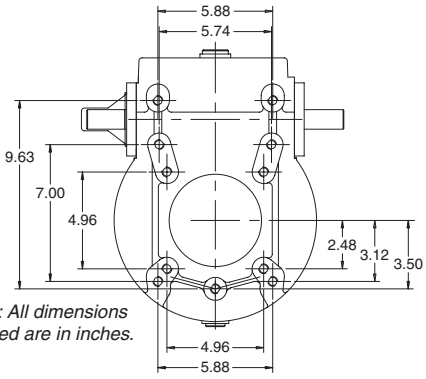


VS-7000 wheel gearbox utilizing Valley Bolt Pattern



NOTE: All dimensions displayed are in inches.

VS-7000 wheel gearbox utilizing Competitive Bolt Pattern



NOTE: All dimensions displayed are in inches.

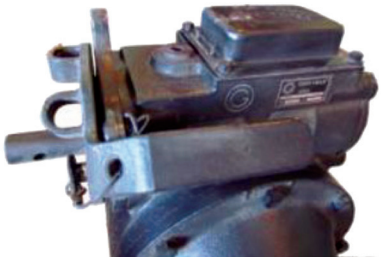
Part #	Gearbox Description	Application
9363488	VS-7000 Competitive Short Shaft 50:1 Wheel Gearbox	Replaces Durst, UMC brand gearboxes. Reinke®, Zimmatic®, Lockwood and others. Short output shaft requires non-Valley rim offsets.
9363185	VS-7000 Gearbox Double Input Long Shaft 52:1 Wheel Gearbox	Replaces Valley Gearbox - one gearbox works as a Front or Rear
9363183	VS-7000 Gearbox Single Input Long Shaft 52:1 Rear Wheel Gearbox	Replaces Valley Gearbox
9363184	VS-7000 Gearbox Single Input Long Shaft 52:1 Front Wheel Gearbox	Replaces Valley Gearbox

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The Omni towable gearbox includes the same VS-7000 features that you are already familiar with, but has the added feature of a disengaging worm gear design. Rather than freewheeling the gearbox hub, this design disengages the worm gear from the bull gear and allows the bull gear to freewheel in the housing while towing. Valley is introducing this option based on requests from dealers and growers for a towable gearbox with this design.



When the handle is in the forward position, (toward the wheel flange) the worm gear is engaged and the gearbox is set for normal operation.



To go to the tow position, the set pin is removed and the handle is rotated toward the back (away from the wheel flange) until the set pin can be reinstalled in the tow position. To reengage the worm gear for normal operation, simply reverse the process.



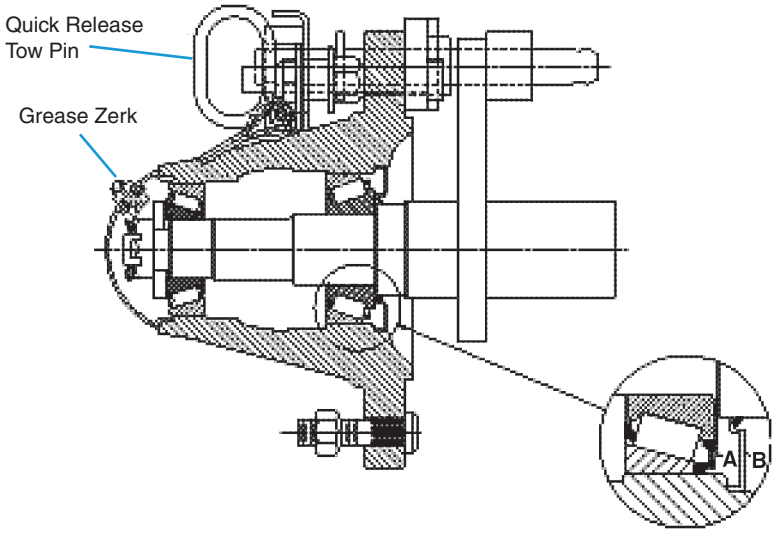
Part #	Description	Application
0996213	Rear Omni Towable Gearbox	8000 2 and 4 Wheel EZ Tow, 5000 Series Towable, 2 Wheel Linear Towable, Single Span Linear Towable, Universal Linear Towable
0996214	Front Omni Towable Gearbox	8000 2 and 4 Wheel EZ Tow, 5000 Series Towable, 2 Wheel Linear Towable, Single Span Linear Towable, Universal Linear Towable

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Replacements for Valley Machines

A Valley towable gearbox includes all of the features and benefits of the Valley brand gearbox plus the added feature of being able to tow as illustrated below.

Increase the versatility of your Valley® investment— maximize use by towing one machine between fields.



It takes only a few minutes to switch to the towable configuration. Simply remove the drive torque pin and rotate the gearbox 90 degrees. The wheel will now rotate freely on the drive axle.

Valley® Towable Hubs

Inner bearing seal (A) resists the grease flow, causing a slight pressure to exist inside the housing – a Valley exclusive.

Any contaminant getting past the outer seal (B) is contained between the two seals and then flushed out during the next grease application.

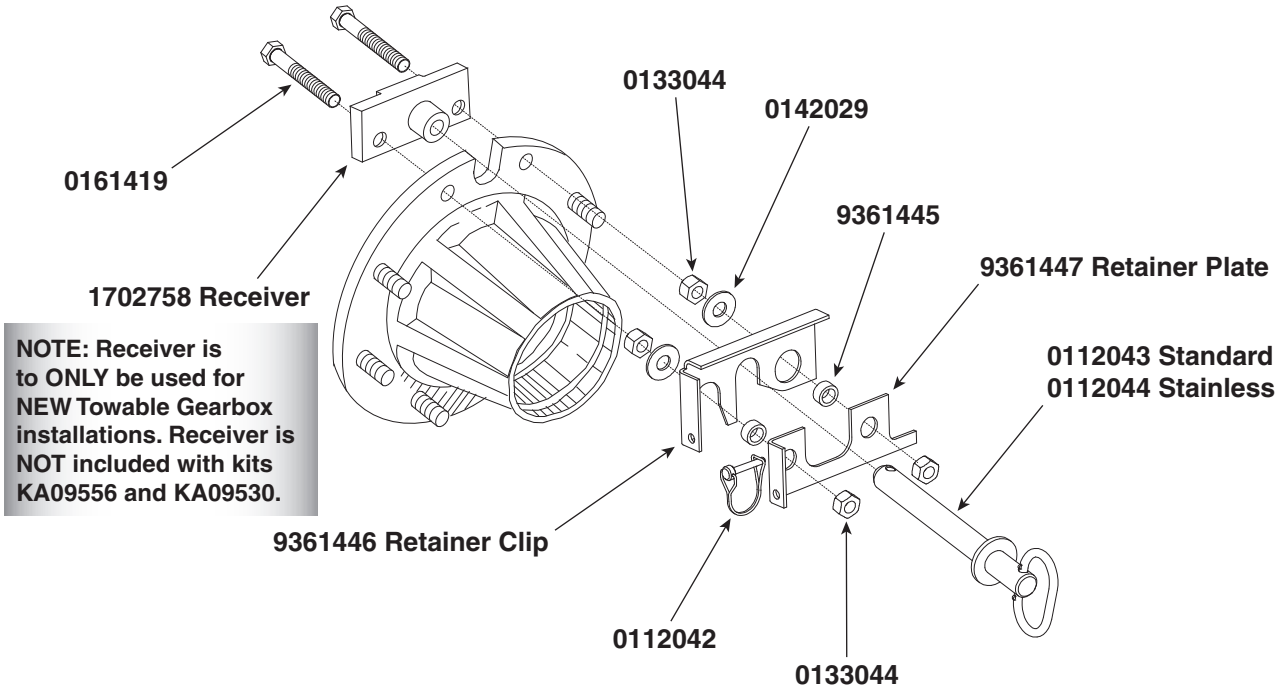
Uncontaminated grease always fills both tapered roller bearings to insure long life.

TOWABLE VALLEY WHEEL DRIVE GEARBOXES							
Part #	Gearbox Type	Gear Ratio	Output Shaft	Bull Gear Material	Worm Gear Material	Bolt Pattern	Application
1702761	REAR Single Input Shaft - TOWABLE Valley Gearbox	52:1	Long Output	Cast Iron	Ductile Iron	Valley Bolt Pattern	Replaces Valley Towable Gearboxes
1702760	FRONT Single Input Shaft - TOWABLE Valley Gearbox	52:1	Long Output	Cast Iron	Ductile Iron	Valley Bolt Pattern	Replaces Valley Towable Gearboxes
1703768	UNIVERSAL Double Input Shaft - TOWABLE Valley Gearbox	52:1	Long Output	Cast Iron	Ductile Iron	Valley Bolt Pattern	Replaces Valley Towable Gearboxes - one gearbox works as a front or rear.
1732836	REAR HEAVY DUTY Single Input Shaft - TOWABLE Valley Gearbox	52:1	Long Output	Bronze	Hardened Steel	Valley Bolt Pattern	Replaces Valley Towable Gearboxes
1732835	FRONT HEAVY DUTY Single Input Shaft - TOWABLE Valley Gearbox	52:1	Long Output	Bronze	Hardened Steel	Valley Bolt Pattern	Replaces Valley Towable Gearboxes
1703527	UNIVERSAL Double Input Shaft - TOWABLE Valley Gearbox	50:1	Long Output	Cast Iron	Ductile Iron	Competitive Bolt Pattern	Replaces Valley Towable Gearboxes - one gearbox works as a front or rear. Same as 1703768 except is 50:1 vs 52:1 gear ratio - do not mix.

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NEW Style Pin Hardware introduced in AUG of 2001

- *If your customer is having problems with towable pins breaking, convert to this style of hardware with a stainless steel pin to eliminate the problem.*
- *Stainless steel pin provides a tremendous increase in cycle life when used with the newer style hardware*



TOWABLE HARDWARE KITS FOR EXISTING TOWABLE GEARBOXES		
Part #	**Description**	**Applications**
KA09556	Towable Hardware Kit with STANDARD Pin (Receiver NOT included)	Replacing Pin Hardware for existing towable gearboxes
KA09530	Towable Hardware Kit with STAINLESS Steel Pin (Receiver NOT included)	Replacing Pin Hardware for existing towable gearboxes

NOTE: Each kit listed in the table includes the items called out in the diagram above except for the receiver. The tow pin will be either standard or stainless respectively. Remember – the receiver is not to be installed for any gearbox other than brand new gearboxes. If the receiver is installed, pre mature breakage of the pin can occur due to previous wear of the drive arm hole.

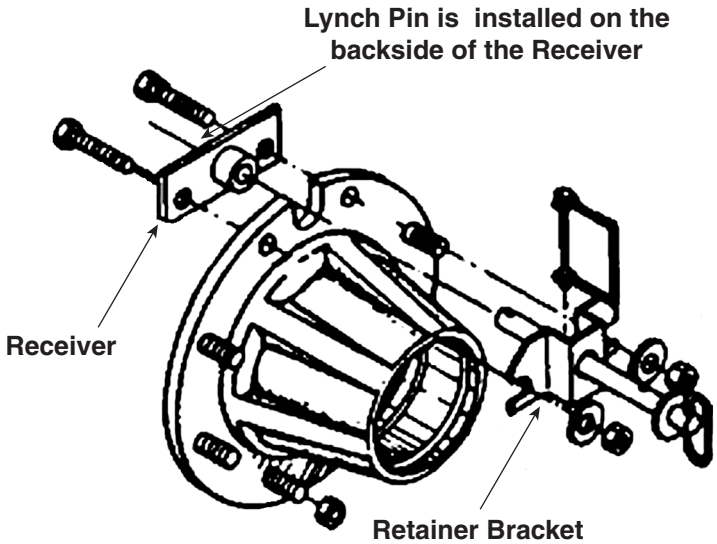
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TOWABLE HARDWARE KITS FOR NEW TOWABLE GEARBOXES		
Part #	**Description**	**Applications**
KA00520	**Towable Hardware Kit with Standard Pin (Receiver is included)**	**Towable Pin Hardware for NEW gearboxes**

NOTE: The KA00520 kit listed in the table includes the items called out in the previous diagram. The tow pin will be standard. To receive a Stainless Steel pin, you MUST order part #0112044 along with this kit.

Replacing Tow Pins with older style hardware

If the hardware on the towable hub looks like the diagram below, please note what is required for pin replacement.



To use 0112043 or 0112044 Pins in old style Tow Hub hardware as shown, you must remove the Retainer Bracket. The Pin will not be long enough if Retainer is not removed.

Lynch Pin is then installed on the backside of the Receiver.

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Converting NON-TOW Gearboxes to TOWABLE

This kit converts the following Valley gearboxes from NON-TOW to TOWABLE

- *1701965 Rear Single Input Shaft, Non Tow, 52:1, Long Output Shaft*
- *1701966 Front Single Input Shaft, Non Tow, 52:1, Long Output Shaft*
- *1703321 Universal Double Input Shaft, Non Tow, 52:1, Long Output Shaft*
- *1732143 Rear HEAVY DUTY Single Input Shaft, Non Tow, 52:1, Long Output Shaft*
- *1732144 Front HEAVY DUTY Single Input Shaft, Non Tow, 52:1, Long Output Shaft*

Description	*Part #*
TOWABLE HUB AND AXLE ASSEMBLY W/ STANDARD PIN HARDWARE	**KA00510**

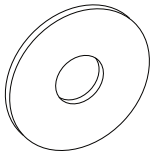
Includes the following:

- **Complete towable hub**
- **New towable axle**
- **Towable pin hardware with standard pin**

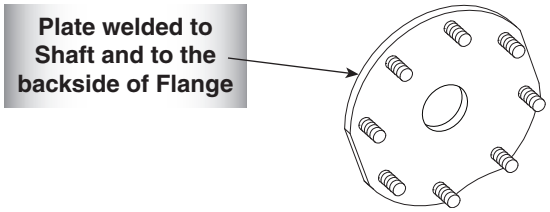
Converting TOWABLE Gearboxes to NON-TOW

The items listed in the following table are required to convert an existing towable gearbox to a now tow version. This requires the removal of the towable hub, welding the "Output Flange Support Plate" to the axle and then welding the "Wheel Flange with Studs" to the axle and support plate.

CONVERTING TOWABLE GEARBOXES TO NON-TOW		
Part #	**Description**	**Comments**
Order both part #s listed below for this solution:		
1701791	Output Flange Support Plate	This item is not finished. Will require painting for finished look. Remove the towable hub and place this support plate on the existing axle. Weld in place.
1701963	Complete Wheel Flange with Studs	This item is not finished. Will require painting for finished look. Place this flange with stud bolts up against the support plate welded on previously. Weld all around flange plate and the axle. Paint and mount tire assembly.



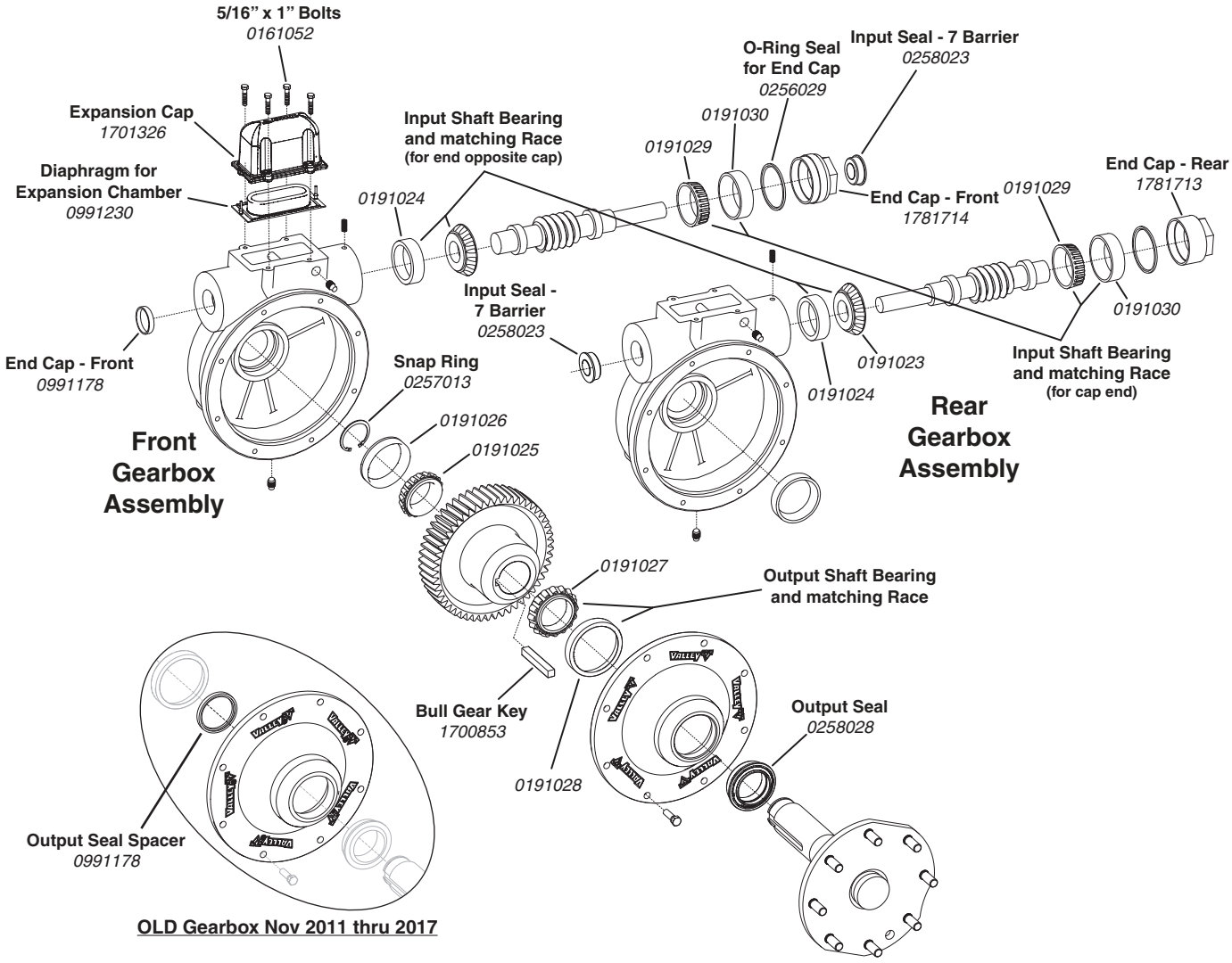
1701791 - 3/8" Flange Support Plate



1701963 - Complete Wheel Flange w/ Studs

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The following repair items are applicable to Valley brand wheel gearboxes only. The items listed are the most commonly requested parts. For a full detailed breakdown of a Valley wheel gearbox, please refer to the Illustrated Parts Manual.



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Seals

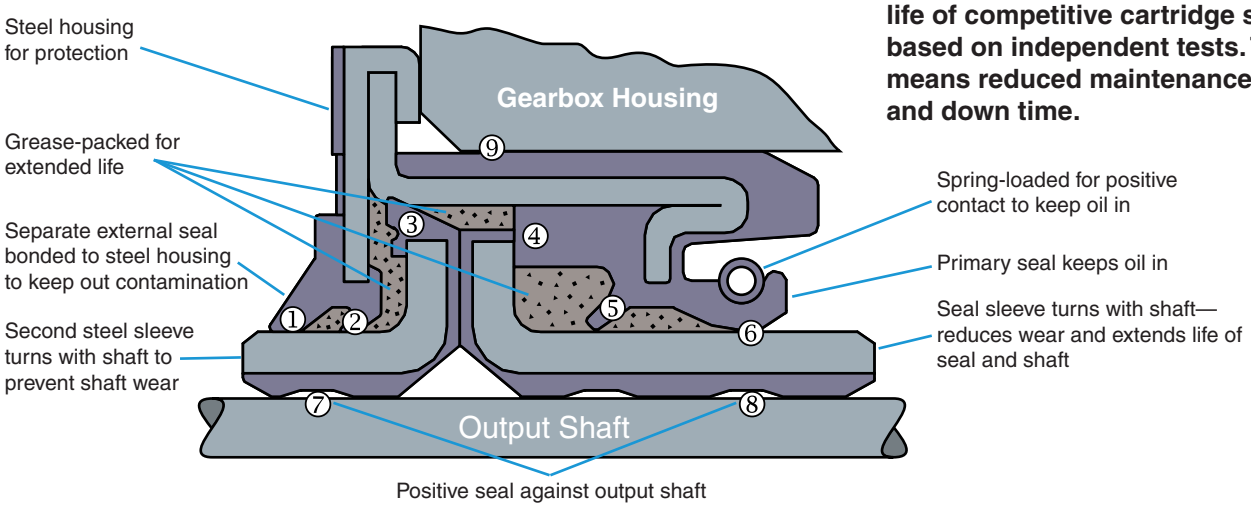
Patented Input and Output Seals

Keeping with the Valley tradition of continuous improvement, Valley partnered with a leading seal manufacturer to develop a new seal specifically for tough irrigation applications. The performance of the resulting seals was so superior to other dual lip and cartridge seals that a patent was granted for the new design.

These unique seals are standard on all new Valley gearboxes … or you can retrofit any existing Valley gearbox

9 barriers keep out dirt and protects against contamination.

Valley seals have four times the life of competitive cartridge seals based on independent tests. That means reduced maintenance cost and down time.





0258023 **- Input Seal**



0258028 **- Output Seal**



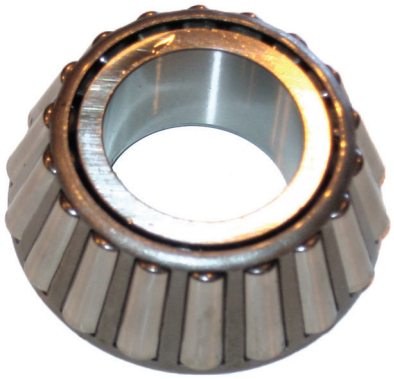
1781715 **- Input Seal Field Installation Tool. Developed specifically for input seal installations in Valley brand wheel gearboxes.**

VALLEY WHEEL GEARBOX SEALS		
Part #	**Description**	**Applications**
***0258023**	**Input Seal**	**All Valley Wheel Gearboxes including towable.**
0258028	**Output Seal**	**All Valley Wheel Gearboxes including towable.**

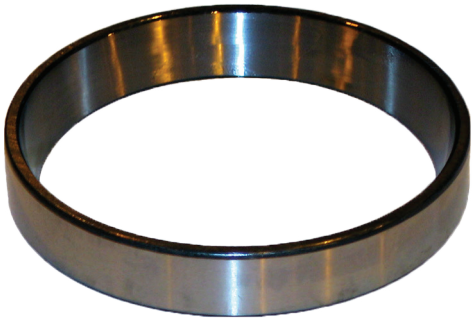
* **If installing a current style 7 barrier input seal in a gearbox shipped prior to FEB of 1998 without the 7 barrier seal,** then a new endcap and seal (part # KA01276) should be ordered for a FRONT gearbox or a double input shaft gearbox (new end cap not required on a Rear Gearbox). The input housing without the endcap will also need to be chamfered slightly with a fine file for seal installation.

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Bearings and Races



Valley Wheel Gearbox Bearings



Valley Wheel Gearbox Races

VALLEY WHEEL GEARBOX BEARINGS AND RACES				
Part #	Description	Bearing Shaft Size (inches)	Matching Race Part #	Applications
0191029	Input Shaft Bearing - Cap End	1.375	0191030	All Valley Wheel Gearboxes including towable.
0191023	Input Shaft Bearing - End Opposite Cap	1.375	0191024	All Valley Wheel Gearboxes including towable.
0191025	Inner Output Shaft Bearing	2.000	0191026	All Valley Wheel Gearboxes including towable.
0191027	Outer Output Shaft Bearing	2.250	0191028	All Valley Wheel Gearboxes including towable.

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Other Wheel Gearbox Repair Items



1701326 **- Expansion Cap for Valley Gearbox (5/16" x 1" bolts to attach cap - pt# 0161052)**



0991230 **- Replacement Diaphragm for Expansion**



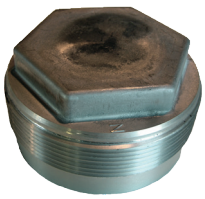
0257013 **- Snap Ring for Output Shaft**



1700853 **- Bull Gear Key**



0256029 **- "O" Ring Seal for Endcap**



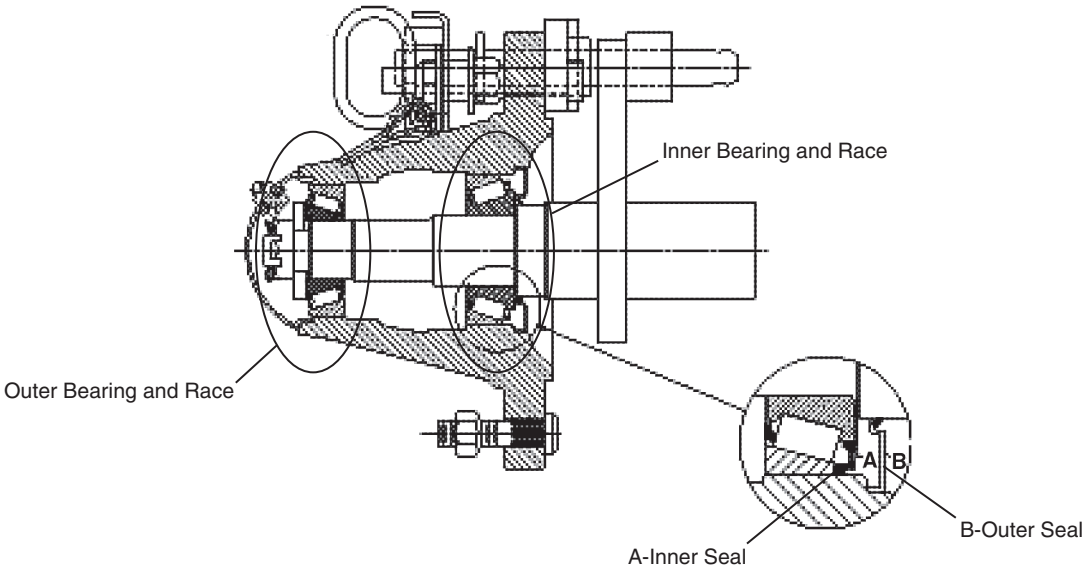
1781713 **- Endcap (Rear Only)**



1781714 **- Endcap (Front Only)**

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Valley Towable Hub Repair Items



VALLEY TOWABLE HUB REPAIR ITEMS	
Part #	**Description**
0992112	Inner Bearing for Valley Towable Hub
0992111	Race for Inner Bearing for Valley Towable Hub
0992114	Outer Bearing for Valley Towable Hub
0992113	Race for Outer Bearing for Valley Towable Hub
0258020	Inner Seal for Valley Towable Hub (A)
0992117	Outer Seal for Valley Towable Hub (B)

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The following repair items are applicable to the OMNI brand & VS-7000 wheel gearboxes only. Other repair items may be available on request.



OMNI Gear Wheel Drive Double Input 50:1 Gearbox mounted on a Reinke® Drive Unit

OMNI BRAND WHEEL GEARBOX (9363488) PARTS		
Part #	**Description**	**Applications**
0997434	OMNI Triple Lip Input Shaft Seal	All OMNI & VS-7000 Wheel Gearboxes shipped from Valley starting in JAN of 2005.
0997435	OMNI Triple Lip Output Shaft Seal	All OMNI & VS-7000 Wheel Gearboxes shipped from Valley starting in JAN of 2005.
0997436	OMNI Diaphragm Only for Expansion Chamber	All OMNI Wheel Gearboxes (0996680) shipped from Valley starting in JAN of 2005.

** VS-7000 does not have Expansion Chamber therefore does not require 0997436.*

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When it comes to gear case oil, comments will come up that suggest all oils are the same anyway. The fact is, all oils are not the same. Valley brand gear case oil has been specifically formulated for pivot and linear drive trains, a unique application. Proper maintenance of the drive train that includes timely oil changes with proper oil, will pay dividends over the lifespan of the machine.

How often should the oil be changed?

1) *After the first season of operation, change oil in the wheel gearboxes and centerdrive gearmotors.*
2) *It is recommended that under typical operating conditions (500-1000 hours / year), the wheel gearbox and centerdrive gearmotor oil be changed every third year or after 3000 operating hours, whichever occurs first.*
3) *It is essential that at the end of each operating season, all gearboxes be drained of any condensation that may have accumulated over the season. Top off with Valley brand gear case oil.*

How much is needed?

A 2 ½ gallon container will be enough oil to change out 2 – wheel gearboxes and a centerdrive gearmotor gearbox --- one complete drive unit.

vLUBE XTREME VALLEY BRAND GEAR CASE OIL
for all Valley drive train components, including corner arms

- *Exceeds API GL-5 Classification for heavy duty applications*
- *SAE - 85 w/140*
- *Unique BLUE color for easy identification of Valley brand gear case oil*
- *Specifically formulated for today's higher load applications*
- *For use with all gear materials – ductile & cast iron, steel, bronze*
- *Multi-viscosity properties provide excellent operating characteristics across a wide range of temperatures*
- *Contains no corrosive additives*
- *Contains extra additive package providing improved gear wear properties*
- *Exclusive additives to optimize oil adhesion to gears*
- *Outstanding water-oil separation properties*



***2-1/2 Gallon vLUBE Xtreme Gear Case Oil* – 0999980**

Applications:

- For use in all wheel gearboxes and center drives – Valley or competitive brands
- Use is required to receive drivetrain warranty.

Available in 4 different size containers to meet all your customer's needs: 2 ½ , 5, 16 and 55 gallon containers

vLUBE XTREME VALLEY BRAND GEAR CASE OIL		
Part #	**Description**	**Quantities per Pallet**
0999980	**2 1/2 Gallon Container of vLube Xtreme Gear Case Oil**	**2 - 2 1/2 Gallon jugs per box (36 boxes or 72 jugs per pallet)**
0999948	**5 Gallon Container of vLube Xtreme Gear Case Oil**	**24 containers per pallet**
0999946	**16 Gallon Container of vLube Xtreme Gear Case Oil**	**8 containers per pallet**
0999999	**55 Gallon Container of vLube Xtreme Gear Case Oil**	**4 barrels per pallet**

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TIRE FLOTATION

According to the tire manufacturers, flotation is the ability of a tire to resist sinking into the soil and creating a rut. The old foot print area (square inches) as a measure of flotation can be misleading because it only applies at the rated tire load and rated tire pressure under specific soil conditions. The best measure of flotation is ground pressure which is defined as the tire's inflated pressure plus 2 PSI. The lower the tire pressure the greater the ground contact area and therefore the lower the ground pressure. For a given load the larger the tire size, the lower the required pressure to carry that load. Wider tires also provide a wider track which can reduce the amount of soil pushed out of the wheel track and thus decreasing rut depths.

SUMMARY OF TIRE OPTIONS			
Option	**Ground Pressure***	**Traction**	**Comments**
11.2 x 24	38 PSI	GOOD	Recommended for sandy soils and limited operating hours
11.2 X 38	27 PSI	GOOD	Maximum base beam clearance and narrow wheel track
14.9 X 24	22 PSI	GOOD	Increased base beam clearance, a wider, shallower wheel track
16.9 X 24	22 PSI	GOOD	Increased base beam clearance, a wider, shallower wheel track
18.4 X 26	18 PSI	GOOD	Maximum base beam clearance, a wider, shallower wheel track

*** Rated tire pressure + 2 PSI**

NEW TIRE OPTIONS	
Features	**Benefits**
• Full size tractor tire	• Thicker, longer lugs than the competitor's "irrigation specials" for improved traction
• Wide range of tire sizes	• Ability to match your traction and flotation needs
• Special high strength 11.2 X 38 rims	• Provides longer life by preventing rim cracking

RECAPPED TIRE OPTIONS	
Features	**Benefits**
• Steel Valve Stem	• Lasts longer than rubber valve stems
• 12 & 14 ply side walls	• Lasts longer than new tires - resists punctures
• Deeper lugs	• Provides improved traction

Valley Exclusive

11.2 x 38" Rims



Valley	Competitor

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Valley offers a full line of new tire assemblies with "Competitive offset" rims.

COMPETITIVE TIRE ASSEMBLIES with COMPETITIVE RIM OFFSETS						
Front Part #	Rear Part #	Tire Assembly Description	Tube Part #	Tire Part #	Rim Part #	Application
1703721	1703722	11R X 24.5 Radial Re-Tread	0991290	1702249	1703728	Valley or Competitive "Short Output" Shaft Gearboxes
1704060	1704061	11.2 X 24 NEW Firestone	0991290	0996656	1704064	Valley or Competitive "Short Output" Shaft Gearboxes
1704058	1704059	11.2 X 24 NEW Firestone		0996656	1704064	Valley or Competitive "Short Output" Shaft Gearboxes
1703401	1703400	14.9 X 24 NEW Titan		0991256	1703667	Valley or Competitive "Short Output" Shaft Gearboxes
1704096	1704097	14.9 X 24 NEW Firestone	0991175	0996552	1703667	Valley or Competitive "Short Output" Shaft Gearboxes
1704095	1704094	14.9 X 24 NEW Firestone		0996552	1703667	Valley or Competitive "Short Output" Shaft Gearboxes
1703743	1703744	11.2 X 38 NEW Titan	0994215	0994214	1703723	This tire assembly is designed to work on Valley or Competitive "Short Output" Shaft Gearboxes if the tire is mounted backwards. Valve stem will be facing towards the pivot point.
1703715	1703714	11.2 X 38 NEW Titan		0994214	1703723	This tire assembly is designed to work on Valley or Competitive "Short Output" Shaft Gearboxes if the tire is mounted backwards. Valve stem will be facing towards the pivot point.
1703852	1703853	11.2 X 38 NEW Firestone	0994215	0996658	1703723	This tire assembly is designed to work on Valley or Competitive "Short Output" Shaft Gearboxes if the tire is mounted backwards. Valve stem will be facing towards the pivot point.
1703851	1703850	11.2 X 38 NEW Firestone		0996658	1703723	This tire assembly is designed to work on Valley or Competitive "Short Output" Shaft Gearboxes if the tire is mounted backwards. Valve stem will be facing towards the pivot point.
1704283	1704284	11.2 X 38 NEW Titan	0994215	0994214	1704285	Valley or Competitive "Short Output" Shaft Gearboxes
1704281	1704282	11.2 X 38 NEW Titan		0994214	1704285	Valley or Competitive "Short Output" Shaft Gearboxes
9364746	9364747	12.4R x 38 Firestone Tubeless	-	0980054	1703723	The tire assembly is designed to work on Valley or Competitive "Short Output" Shaft Gearboxes if the tire is mounted backwards. Valve stem will be facing torwars the pivot point.
9364744	9364745	12.4R x 38 Firestone w/Tube	0994215	0980054	1703723	The tire assembly is designed to work on Valley or Competitive "Short Output" Shaft Gearboxes if the tire is mounted backwards. Valve stem will be facing torwars the pivot point.

Please check for availability on different brand tire assemblies. This will vary based on supplier availability.

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Valley offers a full line of new tire assemblies with "Valley offset" rims.



NEW TIRE ASSEMBLIES with VALLEY RIM OFFSETS						
Front Part #	Rear Part #	Tire Assembly Description	Tube Part #	Tire Part #	Rim Part #	Application
1703608	1703609	11.2 X 24 NEW Titan	0991290	0991257	1702357	Valley "Long Output" Shaft Gearboxes
1700168	1700167	11.2 X 24 NEW Titan	-	0991257	1702357	Valley "Long Output" Shaft Gearboxes
1704040	1704041	11.2 X 24 NEW Firestone	0991290	0996656	1702357	Valley "Long Output" Shaft Gearboxes
1704039	1704038	11.2 X 24 NEW Firestone	-	0996656	1702357	Valley "Long Output" Shaft Gearboxes
1704291	1704292	11.2 X 24 Valley V-Grip	0991290	0999014	1702357	Valley "Long Output" Shaft Gearboxes
1704289	1704290	11.2 X 24 Valley V-Grip	-	0999014	1702357	Valley "Long Output" Shaft Gearboxes
1703788	1703787	14.9 X 24 NEW Titan	0991175	0991256	1702348	Valley "Long Output" Shaft Gearboxes
1701103	1701104	14.9 X 24 NEW Titan	-	0991256	1702348	Valley "Long Output" Shaft Gearboxes
1704028	1704029	14.9 X 24 NEW Firestone	0991175	0996552	1702348	Valley "Long Output" Shaft Gearboxes
1704026	1704027	14.9 X 24 NEW Firestone	-	0996552	1702348	Valley "Long Output" Shaft Gearboxes
1704144	1704145	14.9 X 24 Valley V-Grip	-	0997646	1702348	Valley "Long Output" Shaft Gearboxes
1704147	1704146	14.9 X 24 Valley V-Grip	0991175	0997646	1702348	Valley "Long Output" Shaft Gearboxes
1704148	1704149	14.9 X 24 Valley V-Grip	-	0991256	1704064	Valley "Long Output" Shaft Gearboxes
1704150	1704151	14.9 X 24 Valley V-Grip	0991175	0991256	1704064	Valley "Long Output" Shaft Gearboxes
1703793	1703794	16.9 X 24 NEW Titan	0991175	0991608	1702349	Valley "Long Output" Shaft Gearboxes
1703611	1703612	16.9 X 24 NEW Titan	-	0991608	1702349	Valley "Long Output" Shaft Gearboxes
1703836	1703837	16.9 X 24 NEW Firestone	0991175	0996657	1702349	Valley "Long Output" Shaft Gearboxes
1703834	1703835	16.9 X 24 NEW Firestone	-	0996657	1702349	Valley "Long Output" Shaft Gearboxes

Please check for availability on different brand tire assemblies. This will vary based on supplier availability.

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NEW TIRE ASSEMBLIES with VALLEY RIM OFFSETS						
Front Part #	Rear Part #	Tire Assembly Description	Tube Part #	Tire Part #	Rim Part #	Application
1703743	1703744	11.2 X 38 NEW Titan	0994215	0994214	1703723	Valley “Long Output” Shaft Gearboxes
1703715	1703714	11.2 X 38 NEW Titan	-	0994214	1703723	Valley “Long Output” Shaft Gearboxes
1703852	1703853	11.2 X 38 NEW Firestone	0994215	0996658	1703723	Valley “Long Output” Shaft Gearboxes
1703851	1703850	11.2 X 38 NEW Firestone	-	0996658	1703723	Valley “Long Output” Shaft Gearboxes
9364491	9364492	11.2 X 38 Firestone	0994215	0999117	1703723	Valley “Long Output” Shaft Gearboxes
9364493	9364494	11.2 X 38 Firestone	-	0999117	1703723	Valley “Long Output” Shaft Gearboxes
9363153	9363154	11.2 X 38 - 6 Ply	-	0997337	1703723	Valley “Long Output” Shaft Gearboxes
9363155	9363156	11.2 X 38 - 6 Ply	0994215	0997337	1703723	Valley “Long Output” Shaft Gearboxes
1704103	1704102	11.2 X 38 NEW Titan Without Backup Ring	-	0994214	1704106	Valley "Long Output" Shaft Gearboxes
1704160	1704159	11.2 X 38 Valley V-Grip Without Backup Ring	-	0997169	1704106	Valley "Long Output" Shaft Gearboxes
1704104	1704105	11.2 X 38 NEW Titan Without Backup Ring	0994215	0994214	1704106	Valley "Long Output" Shaft Gearboxes
1704161	1704162	11.2 X 38 Valley V-Grip Without Backup Ring	0994215	0997169	1704106	Valley "Long Output" Shaft Gearboxes
1704019	1704020	18.4 X 26 NEW Firestone	-	0991531	1704018	Valley “Long Output” Shaft Gearboxes
1704136	1704137	18.4 X 26 NEW Firestone	0991566	0991531	1704018	Valley "Long Output" Shaft Gearboxes

Please check for availability on different brand tire assemblies. This will vary based on supplier availability.



NON DIRECTIONAL TIRE ASSEMBLIES					
Tubed Part #	Tubeless Part #	Tire Assembly Description	Tire Part #	Rim Part #	Application
1704295	1704294	11.2 X 38 Non Directional NEW Firestone	0999565	1703723	Valley “Long Output” Shaft Gearboxes
1704163	1704164	14.9 X 24 Non Directional NEW Firestone	0997900	1702348	Valley “Long Output” Shaft Gearboxes
1704247	1704248	14.9 X 24 Non Directional	0997900	1703667	Competitive “Short Output” Shaft Gearboxes

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1702251 - 11R x 24.5 Radial Re-tread



9364746 - 12.4R x 38 Firestone Re-tread

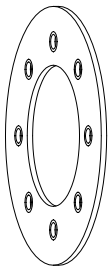
RETREAD TIRE ASSEMBLIES						
Front Part #	Rear Part #	Tire Assembly Description	Tube Part #	Tire Part #	Rim Part #	Application
1702251	1702250	11R X 24.5 Radial Re-Tread	0991290	1702249	1702354	Valley “Long Output” Shaft Gearboxes
1703888	1703889	11R X 24.5 Radial Re-Tread	-	1702249	1702354	Valley “Long Output” Shaft Gearboxes
1703721	1703722	11R X 24.5 Radial Re-Tread	0991290	1702249	1703728	Valley or Competitive “Short Output” Shaft Gearboxes
1703804	1703805	11R X 22.5 Radial Re-Tread	0994885	0995788	1703782	Valley “Long Output” Shaft Gearboxes
1703885	1703886	11R X 22.5 Radial Re-Tread	-	0995788	1703782	Valley “Long Output” Shaft Gearboxes
1704242	1704243	11R X 22.5 Radial Re-Tread	0994885	0995788	1704240	Valley or Competitive “Short Output” Shaft Gearboxes
1704244	1704245	11R X 22.5 Radial Re-Tread	-	0995788	1704240	Valley or Competitive “Short Output” Shaft Gearboxes
1704133	1704134	18.4 X 26 Radial Re-Tread	0994885	0997474	1704018	Valley “Long Output” Shaft Gearboxes
1704209	1704208	18.4 X 26 Radial Re-Tread	-	0997474	1704018	Valley “Long Output” Shaft Gearboxes
9364746	9364747	12.4R x 38 Firestone Tubeless	-	0980054	1703723	Valley "Long Output" Shaft Gearboxes
9364744	9364745	12.4R x 38 Firestone w/Tube	0994215	0980054	1703723	Valley "Long Output" Shaft Gearboxes

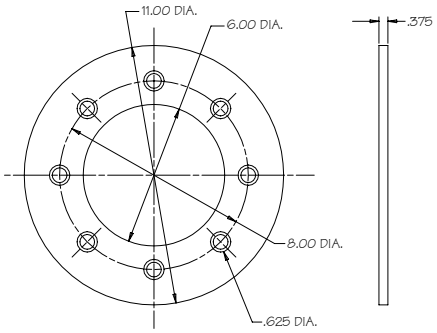


AIRLESS TIRE ASSEMBLIES				
Front Part #	Front Part #	Tire Assembly Description	Valley Offset	Application
0999431	0999431	15 X 47 Valley Revolution Solidseal	-	Valley “Long Output” Shaft Gearboxes

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Wheel Repair Plate





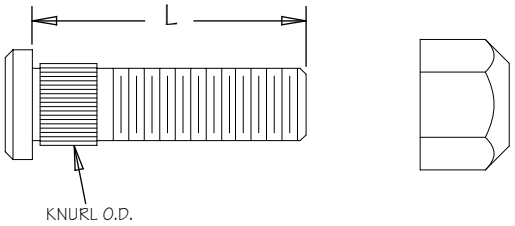
0994432 **- Wheel Repair / Spacer Plate (3/8" thick)**

For use in repairing cracked rims, adapting T-L planetary rims for worm drive Valley gearboxes or for spacers to provide additional wheel clearance (will need longer *0164140* 2-1/8" stud bolts to accommodate a spacer plate.

T-L ADAPTER FLANGE w/BOLTS PACKAGE 0000F11

- **9/16" x 2-1/8" Wheel Bolts - Knurled (8 ea).....0164140**
- **Wheel Repair Plate - 8" Bolt Circle.....0994432**

Wheel Stud Bolts and Lug Nuts



LUG STUD BOLTS				
Part #	**Description**	**L (in.)**	**Knurl Diameter (in.)**	**Applications**
0164105	**9/16" X 1 13/16" 18 UNF Stud Bolt Grade 8**	**1 13/16**	**0.6305-0.6355**	**Standard Stud Bolt used in all NON-TOW Valley Gearboxes**
0164149	**9/16" X 2 1/4" 18 UNF Stud Bolt Grade 8**	**2 1/4**	**0.6125-0.6175**	**Used in ALL Valley TOWABLE Gearboxes. Please note the knurl is slightly less. Using these in a Non-Tow gearbox will allow stud slippage when the lug nuts are removed later.**
0164140	**9/16" X 2 1/8" 18 UNF Stud Bolt Grade 8**	**2 1/8**	**0.6305-0.6355**	**Used for Spider Wheel applications or if spacer plates are needed for clearance.**

LUG NUTS		
Part #	**Description**	**Applications**
0134049	**9/16" 18 UNF Wheel Lug Nut with Special 1" Flats**	**For use on all tire assemblies. Provides more contact surface area between the nut and the rim hole. This helps to keep the lug nuts tight in high torque situations.**

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Engine Drive Applications

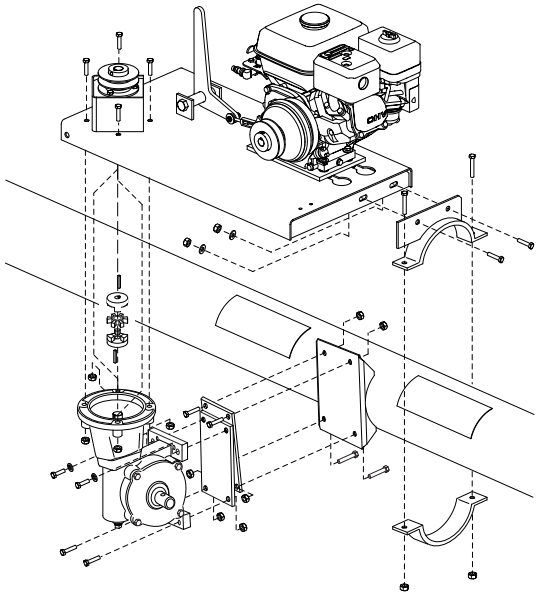
- **Excellent solution for small fields where electric power is not readily available**
- **Works well to adapt used pivot spans to small fields**
- **Single span pivots only**
- **Span lengths up to 205’**
- **Can be adapted to any span diameter**
- **Sufficient power to drive tire sizes up to 11.2 x 38”**
- **Maximum slope capability is 10%**



Engine Drive Features

- **Utilizes a 5.5HP Honda engine**
- **High and standard speed options available.**
- **Internal oil level sensor for shutdown at low oil levels**
- **V-Belt transfers power to a worm centerdrive gearbox**
- **Over centered lever arrangement tightens the belt easily and allows for easy direction changes by flipping the belt.**
- **Fuel capacity allows for run times of 90-100 hours depending on operating conditions**





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An approximate speed of the drive unit can be determined from the chart below:

THEORETICAL SINGLE SPAN ENGINE DRIVE, MACHINE SPEED IN FEET PER MINUTE								
	ENGINE RPM							
	2000		2500		3000		3500	
TIRE SIZE	STANDARD SPEED PULLEYS	HIGH SPEED PULLEYS	STANDARD SPEED PULLEYS	HIGH SPEED PULLEYS	STANDARD SPEED PULLEYS	HIGH SPEED PULLEYS	STANDARD SPEED PULLEYS	HIGH SPEED PULLEYS
11.2 X 24	2.31 ft/min.	4.77 ft/min.	2.89 ft/min.	5.96 ft/min.	3.47 ft/min.	7.15 ft/min.	4.05 ft/min.	8.34 ft/min.
14.9 X 24	2.67 ft/min.	5.50 ft/min.	3.34 ft/min.	6.88 ft/min.	4.01 ft/min.	8.25 ft/min.	4.67 ft/min.	9.63 ft/min.
16.9 X 24	2.80 ft/min.	5.76 ft/min.	3.49 ft/min.	7.20 ft/min.	4.19 ft/min.	8.64 ft/min.	4.89 ft/min.	10.08 ft/min.
11.2 X 38	3.13 ft/min.	6.46 ft/min.	3.92 ft/min.	8.07 ft/min.	4.70 ft/min.	9.68 ft/min.	5.48 ft/min.	11.30 ft/min.

ENGINE DRIVE SINGLE SPAN RETROFIT PACKAGES		
Part #	Description	What's Included?
0000G60*	Standard Speed Engine Drive Retrofit Package	5.5 HP Honda engine with belt, 19 gallon auxiliary fuel tank with mounting hardware, 30:1 centerdrive gearbox and mounting hardware for 6 5/8" basebeam. High speed option includes a special high speed pulley kit (KA09788).
0000G61*	High Speed Engine Drive Retrofit Package	
KA09731	Optional Tachometer / Hour Meter Add-On Kit	Includes tachometer and hour meter with required mounting hardware. This is a field installed option.

* Packages listed will retrofit to both Valley and competitive spans with 6 5/8" basebeams.

0997299 - Operators Manual for Engine Drive (included)
0997276 - Assembly Manual for Engine Drive (included)

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Considerations Before Updating or Converting Drive Trains:

1. Before attempting a drive train conversion/update on a competitive machine, you must be able to answer YES to all of the following. If NO is the answer, then the machine should not be converted or updated:

   The machine MUST be inspected first to answer these questions.
   - Does the machine have 6" (or larger) diameter pipe?
   - Do the drive units have tower supports? (supports from the drive unit back to pipeline or to the trussing)
   - Is the pipeline (especially the fixed pipe), basebeams and trussing in good condition?
   - The truss attachment ear weldments are not cracked and are in good condition, especially at the first truss from the drive unit?

2. All weld-on or bolt-on brackets MUST be installed so that the tires mount/run on the same side of the drive unit as the original manufacturer. Failure to do so, can result in structural failure as the loads will change significantly.

3. If gearbox mounting brackets are being welded on to the existing basebeam or a new Valley basebeam is being installed, they must be positioned so the tires are the same angle as the original manufacturer.



Make sure the basebeam or weld-on gearbox mounting brackets are installed such that the vertical angle of the tire/wheel assembly is at the original position. Having the wheel run at an angle to the inside or outside, may result in structural failure.

4. A very important point to consider when converting drive trains is to make sure that the centerline of the tire remains the same distance from the basebeam center as the original drive train. Failure to do so may cause excessive stress on the drive unit structure and spans, resulting in structural failure.



Distance "L" should remain the same after the drive train conversion to avoid structural failure.

(**Considerations** *continued on the following page)*

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5. The gearmotor ouput shaft and the wheel gearbox input shaft MUST be lined up so the U-Joints run in a straight line (within +/- ½").



Incorrect Installation. *Drive shafts are not installed in a straight line.*

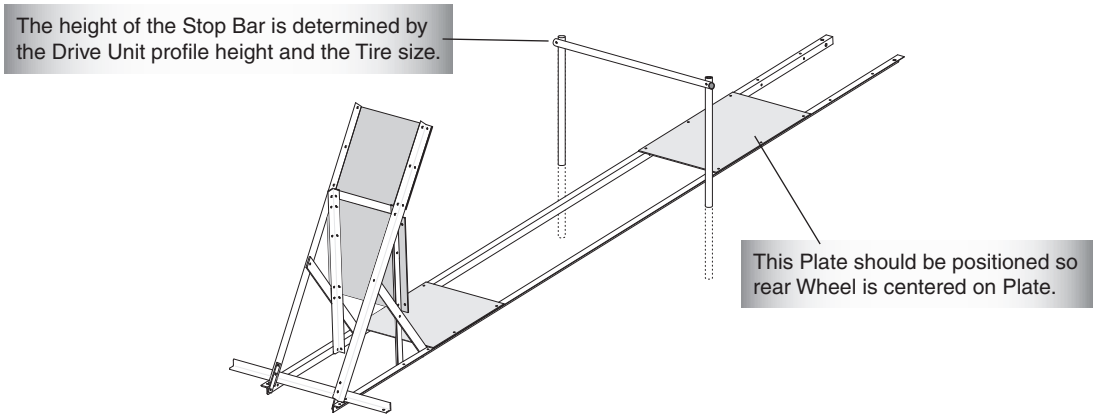


Correct Installation. *Drive shafts are installed in a straight line.*

6. 11.2 X 38" tire assemblies should only be installed on gearboxes that have 2 ¼" or larger output shafts.
7. If using the "SKID STYLE" or "POST STYLE" end of field barriers, you must keep these points in mind after converting a drive train:

SKID STYLE

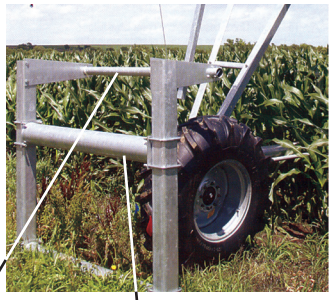
Check for proper skid plate location by running the drive unit on top of it to make sure both wheels are in the center (or slightly to the rear) of the skid plates. Gearbox location and basebeam length can affect the positioning of the wheels. If both tires are not centered, the rear skid plate should be unbolted and repositioned.



(**Considerations** *continued on the following page)*

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POST STYLE



Actuator Bar must be adjusted for proper contact with the Valley vertical arm or competitive arm.

Height must be adjusted properly for tire size. If not adjusted, barricade may not stop the drive unit.

8. Zinc Rich Cold Galvanizing (part # 0991375) should be used on all welds and “black steel” weld-on components.



Don’t forget 0991375 – Zinc Rich Cold Galvanizing 12 ounce aerosol can. Put that finishing touch on your welding projects for professional looking work.

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The following step by step procedure will guide you through making decisions in selecting the appropriate components to complete your drive train conversion or update.

STEP 1 ***Select the required # of "Universal Gearbox Conversion Packages" from the list below:***

UNIVERSAL PACKAGES FOR GEARBOX UPDATES/CONVERSIONS				
QTY Required (# Towers)	Part #	Description	Gearbox Bolt Pattern	For Use with these Rims
	0000F66	Drive Train Update/Conversion Package with SINGLE Input 50:1 Valley Short Shaft Gearboxes	Universal Bolt Pattern	Competitive Style Rims ONLY
	0000F65	Drive Train Update/Conversion Package with DOUBLE Input 50:1 Valley Short Shaft Gearboxes	Universal Bolt Pattern	Competitive Style Rims ONLY
	0000F67	Drive Train Update/Conversion Package with SINGLE Input 52:1 Valley LONG Shaft Gearboxes	Valley Bolt Pattern Only	Valley Rims ONLY
	0000F64	Drive Train Update/Conversion Package with DOUBLE Input 50:1 VS-7000 Short Shaft Gearboxes	Universal Bolt Pattern	Competitive Style Rims ONLY
	0000K38	Drive Train Update/Conversion Package with DOUBLE Input 52:1 Valley Long Shaft Gearboxes	Valley Bolt Pattern	Valley Rims ONLY

The following items are included in each of the packages previously listed:

BOM FOR UNIVERSAL GEARBOX CONVERSION PACKAGES		
Quantity	Part #	Description
2	Various	Valley or OMNI Gearboxes (Dependent on the package selected above)
2	*1702284	7/8" Square drive shafts (Long) 81"
4	KA01300	UMC Ultra Heavy Duty Pinned U-Joint w/hardware (7/8" square X 1" round)
2	**0992717	Drive shaft shield - 76.3" long
4	1702614	Bell Ends - drive shaft shields
4	0271013	Screw Clamp - Adjustable 1"-2"
1	KA00018	Mounting Hardware Kit (for gearboxes and centerdrives)
6	0271021	Band Clamps - 24" long
2	0314119	Strain Relief, 1/2" hub, 0.50"-0.56" cable range
1	1812008	Cable, Motor lead, 4 conductor, 14 gauge, 20.5' long

* 1702215 7/8" Square drive shaft - 60.1" long is substituted in the 0000F67 package for 1702284

** 0992715 Drive shaft shield - 55.4" long is substituted in the 0000F67 package for 0992717

PROCEED TO STEP 2

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STEP 2 ***Select the # of gearmotors required for the update/conversion from the list below:***

GEARMOTOR SELECTIONS		
QTY Required (# Towers)	Part #	Description
	03E1554	Valley with Emerson/US motor, Helical 34 RPM, 0.6 HP
	03E1558	Valley with Emerson/US motor, Helical 68 RPM, 1.2 HP
	03E2088	Valley with Emerson/US motor, Helical 43 RPM, 0.75 HP
	03E2468	Valley with Baldor motor, Helical 34 RPM, 0.6 HP
	03E2469	Valley with Baldor motor, Helical 68 RPM, 1.2 HP
	03E2044	Emerson/US Gearmotor, Worm-Upright, 30 RPM, 1 HP
	03E2056	Emerson/US Gearmotor, Worm-Upright, 56 RPM, 1.5 HP
	03E2763	VS-7000 with Baldor Motor, Helical 34 RPM, .6 HP
	03E2764	VS-7000 with Baldor Motor, Helical 68 RPM, 1.2 HP
	03E3452	Valley with Nidec motor, Helical 34 RPM, 0.6 HP
	03E3476	Valley with Nidec motor, Helical 68 RPM, 1.2 HP
	03E3473	Valley with Nidec motor, Helical 43 RPM, 1.2 HP

NOTE: A complete listing of all gearmotors can be found in the "Centerdrive Gearmotors" section along with additional information about these gearmotors.

PROCEED TO STEP 3

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STEP 3 ***Select the appropriate method of mounting the gearboxes & gearmotors to the existing machine from the following methods 1 - 4:***

The method selected will vary with the type / brand of machine. An inspection of the machine and / or asking several questions to the prospective buyer is the only sure way to determine the appropriate method and thus put together an accurate quote. In some cases more than one method wil work.

☑ **METHOD 1** **Use Specifically Designed Mounting Bracket Packages for Gearbox and Gearmotor Mounting.**

OPTION A
Use BOLT-ON drop down brackets for horizontal mounting plates on the basebeam.

OPTION B
Zimmatic® Planetary Only - Use BOLT-ON mounting plates for direct mounting of gearboxes.

☑ **METHOD 2** **Use the existing basebeam gearbox mounts to bolt the new gearboxes directly to the existing gearbox mounting plate.**

☑ **METHOD 3** **Use the existing basebeam but WELD-ON gearbox and gearmotor mounting brackets.**

☑ **METHOD 4** **Replace the existing basebeam with a new Valley basebeam.**

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METHOD 1 Use Specifically Designed Mounting Bracket Packages for Gearbox and Gearmotor Mounting.

OPTION A Use BOLT-ON drop down brackets for horizontal mounting plates on the basebeam.

Does the existing drive train look similar to these photos?
If NO, skip to Option B. If YES, select appropriate brackets.

Note ROUND basebeam



Note SQUARE basebeam



Note the horizontal plate that allows a "Drop Down" bracket to be bolted up to allow gearbox mounting.

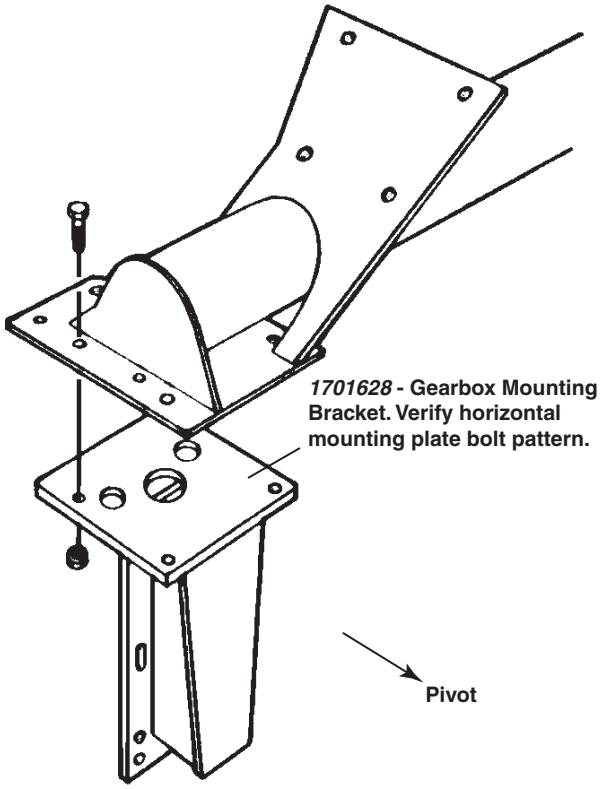
Some of the pivot brands (not necessarily all) that utilized this method of gearbox mounting sometime during their existence. Verify mounting method with an in-field machine survey.

- ✓ ***Electrogator (Reinke®)***
- ✓ ***Gifford Hill***
- ✓ ***Higromatic***
- ✓ ***Pierce***
- ✓ ***Raincat***
- ✓ ***Yumatic***

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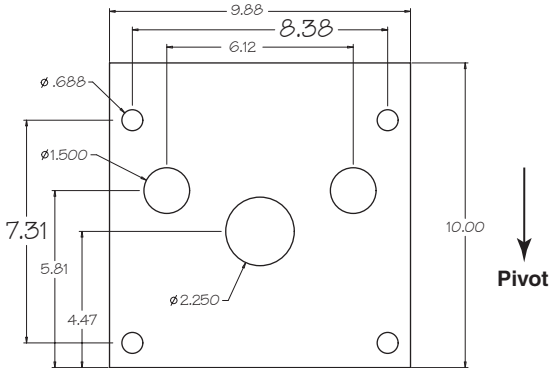
DETERMINE BOLT MOUNTING PATTERN and SELECT APPROPRIATE PACKAGE on the following page.

Determine which drop down gearbox mounting bracket is required. It should be one of 2 brackets as illustrated. Choose the appropriate one based on the bolt mounting pattern. This must be verified in the field prior to ordering.



1701628 **- Gearbox Mounting Bracket. Verify horizontal mounting plate bolt pattern.**

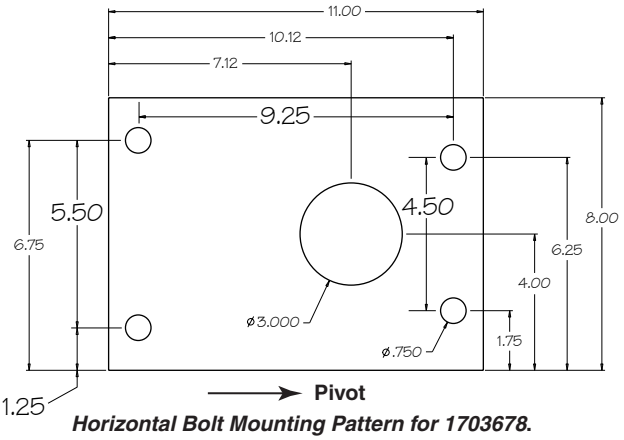
Pivot



Horizontal Bolt Mounting Pattern for 1701628.



1703678 **- Gearbox Mounting Bracket. Verify horizontal mounting plate bolt pattern.**



Horizontal Bolt Mounting Pattern for 1703678.

NOTE: All dimensions displayed are in inches.

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1701628 BOLT PATTERN DROP-DOWN GEARBOX BOLT-ON PACKAGES				
QTY Required (# Towers)	Part #	Package Description	Center Drive Mounting Type	What's Included?
	0000G64	Drop down BOLT-ON gearbox mounts & Center Drive BOLT-ON Mounts for ROUND basebeam with mounting hardware (sometimes referred to as the 1 HP US Wheel Drive)	Bolt-on for Round Basebeam	2 - 1701628 gearbox mounting brackets, 1 - 1703187 bolt on center drive mounting bracket with half clamp and all hardware.
	0000G65	Drop down BOLT-ON gearbox mounts & Center Drive WELD-ON Mounts for SQUARE basebeam with mounting hardware (sometimes referred to as the 1 HP US Wheel Drive)	Weld-on for Square Basebeam	2 - 1701628 gearbox mounting brackets, 1 - 1702331 weld on center drive mounting bracket with gusset and all hardware.





TOP VIEW
(bolt pattern)

1701628 - Mounting Bracket



1703187 - Bolt-On Drop Down Center Drive Mounting Bracket



1702331 - Weld-On Drop Down Center Drive Mounting Bracket



1702332 - Support Gusset - black unpainted



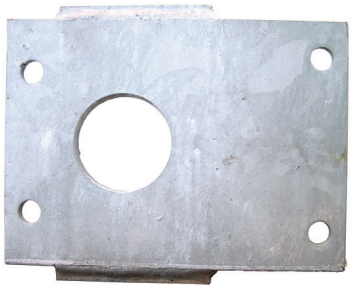
1700622 - 6-5/8" 4-Bolt Half Clamp

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1703678 BOLT PATTERN DROP-DOWN GEARBOX BOLT-ON PACKAGES				
QTY Required (# Towers)	Part #	Package Description	Center Drive Mounting Type	What's Included?
	0000G62	Drop down BOLT-ON gearbox mounts & Center Drive BOLT-ON Mounts for ROUND basebeam with mounting hardware (sometimes referred to as the 3/4 HP US Wheel Drive)	Bolt-on for Round Basebeam	2 - 1703678 gearbox mounting brackets, 1 - 1703187 bolt on center drive mounting bracket with half clamp and all hardware.
	0000G63	Drop down BOLT-ON gearbox mounts & Center Drive WELD-ON Mounts for SQUARE basebeam with mounting hardware (sometimes referred to as the 3/4 HP US Wheel Drive)	Weld-on for Square Basebeam	2 - 1703678 gearbox mounting brackets, 1 - 1702331 weld on center drive mounting bracket with gusset and all hardware.



1703678 - Mounting Bracket



TOP VIEW
(bolt pattern)



1703187 - Bolt-On Drop Down Center Drive Mounting Bracket



1702331 - Weld-On Drop Down Center Drive Mounting Bracket



1702332 - Support Gusset - black unpainted



1700622 - 6-5/8" 4-Bolt Half Clamp

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OPTION B *Zimmatic® Planetary ONLY – Use BOLT-ON mounting plates for direct mounting of gearboxes.*

Does the existing drive train look similar to these photos?

If NO, skip to Method 2. If YES, select appropriate brackets.



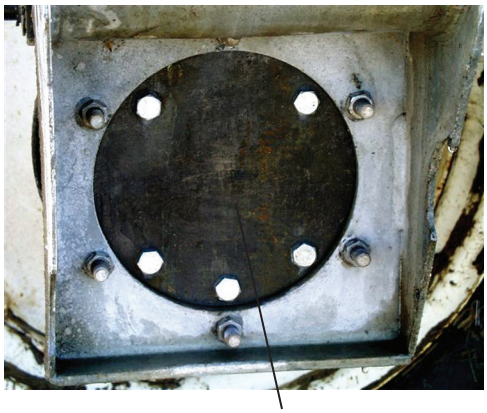
Zimmatic® Planetary Gearbox



Note the Centerdrive gearmotor is mounted at an angle.

SOLUTION:

Remove planetary gearboxes, bolt on the adapter plate and mount Valley gearboxes. Centerdrive gearmotor mounting bracket can be bolted or welded on. (see photos below)



9363316 **- Adapter Plate Zimmatic® Planetary to Valley Gearbox**



Valley wheel gearbox mounted to adapter plate

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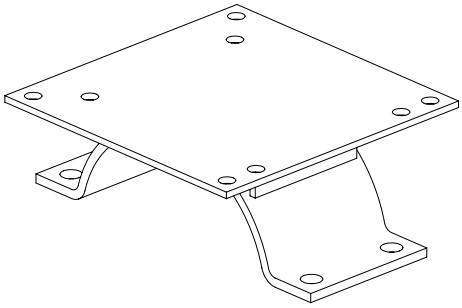
Valley centerdrive gearmotor mounted to Zimmatic® planetary drive basebeam with weld-on mounting bracket.

Select the required number of parts from the following table:

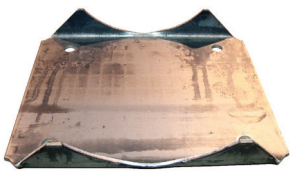
Zimmatic® PLANETARY ADAPTER PLATE SOLUTION			
Qty Required (# Towers)	Part #	Description	Qty Required per Tower
	9363316	Zimmatic® Planetary Adapter Plate	2
	0161014	5/8" x 2" Bolt for Mount Plates	12
	0133010	5/8" Lock Nut	12

Select the required number of towers for centerdrive gearmotor mounts. Choose one of the 3 mounting options:

CENTERDRIVE GEARMOTOR MOUNTING OPTIONS				
QTY Required (# Towers)	Part #	Description	Finish	What's Included?
	0000G66	Centerdrive gearmotor BOLT-ON Package	Galvanized	1 - 1703658 bolt-on centerdrive mounting bracket with half clamp and mounting hardware
	9360640	Centerdrive gearmotor WELD-ON Bracket - Rounded	Black	For 6"- 6 5/8" rounded fit, weld will be in vertical direction



1703658 **- Mounting Bracket (included in the 0000G66 package)**



9360640 **- Centerdrive Weld-on Bracket - Rounded**

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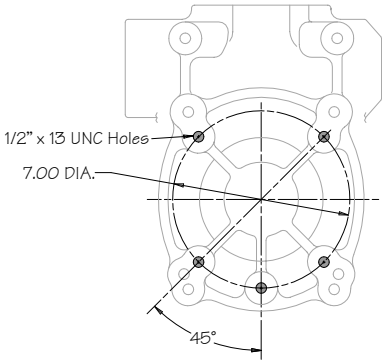
METHOD 2 Use the existing basebeam gearbox mounts to bolt the new gearboxes directly to the existing gearbox mounting plate.

Does the existing drive train utilize either Durst, Von Ruden or UMC gearboxes?

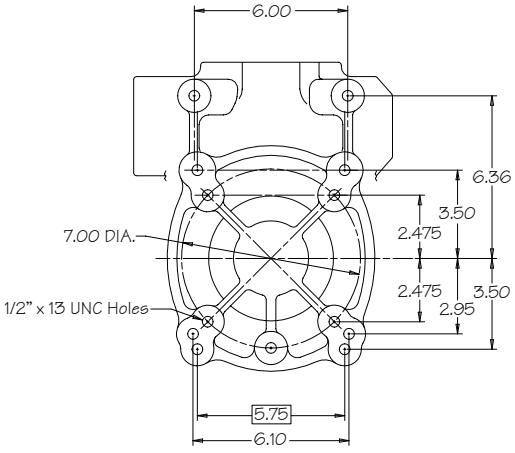
If NO, skip to Method 3. The gearboxes will NOT mount directly.

If YES, the gearboxes should mount directly. Review the following information.

Following are illustrations showing the bolt patterns for both the Competitive bolt pattern and Valley bolt pattern gearboxes:

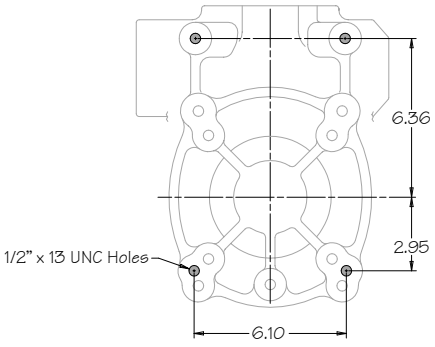


UMC & Durst Bolt Pattern
(used by Reinke®, Zimmatic® and many other brand machines)

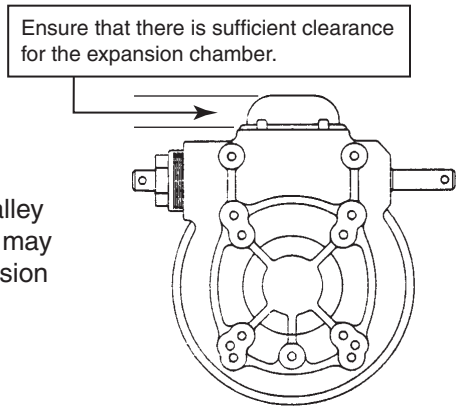


Competitive Bolt Pattern
(bolt pattern on the 1703280, 1781677, 1781676)

NOTE: All dimensions displayed are in inches.



Lockwood Bolt Pattern



Make sure you look for the following:

Ensure that there is sufficient clearance for the Valley Expansion Cap as illustrated. Some conversions may require that a flat plate replace the existing expansion chamber cap due to insufficient clearance.

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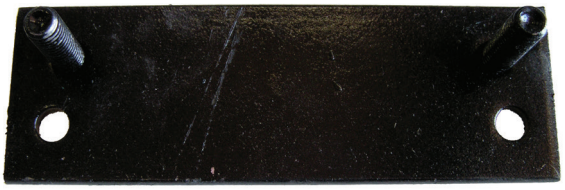
Does the existing drive train utilize a centerdrive gearmotor mount in the center of the basebeam?

If **YES**, the new gearmotor should mount directly. (see the following notes regarding Lockwood and Reinke® centerdrive gearmotor mounting)

If **NO**, then utilize either a bolt-on or weld-on center drive mounting bracket for the tower. (see the table illustrated on the following page for motor mounting bracket options)

Older Reinke® Centerdrive Gearmotor Bolt Mounting Patterns

Some of the older Reinke® centerdrive gearmotors will require the following adapter. The studs (with a 4.75" distance between them) bolt into the existing holes of the mounting plate. The other holes at 5" centers provide the proper mounting holes for the new centerdrive.



099P171 **- Reinke® Centerdrive Mounting Adapter Plate (2 required per centerdrive)**

NOTE: If a universal package was ordered in step 1, you will have the required hardware to mount a center drive including: 4 – 0161082 3/8" x 1 ½" bolts, 4 – 0131018 3/8" hex nuts & 4 – 0141007 3/8" lock washers. In addition, you will need 4 more 0131018 3/8" hex nuts & 4 more 0141007 3/8" lock washers to mount the studs to the mounting plate.

Lockwood Centerdrive Gearmotor Bolt Mounting Patterns

Lockwood centerdrive gearmotors will require the following adapter plate if the U.S./Emerson Worm Drive Upright Gearmotor is used. Valley Helical Gearmotors incorporate the Lockwood bolt pattern into the casting of the gearbox so the adapter plate is not required. The studs (with a 3.375" distance between them) bolt into the existing holes of the mounting plate. The other holes at 5" centers provide the proper mounting holes for the new centerdrive.



099P001 **- Lockwood Centerdrive Mounting Adapter Plate (2 required per centerdrive)**

NOTE: If a universal package was ordered in step 1, you will have the required hardware to mount a center drive including: 4 – 0161082 3/8" x 1 ½" bolts, 4 – 0131018 3/8" hex nuts & 4 – 0141007 3/8" lock washers. In addition, you will need 4 more 0131018 3/8" hex nuts & 4 more 0141007 3/8" lock washers to mount the studs to the mounting plate.

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If the existing centerdrive gearmotor mount is not in the center of the basebeam or will not allow for direct bolt up of a new centerdrive gearmotor, then a new centerdrive mounting bracket must be installed.

Select the required number of towers for centerdrive gearmotor mounts. Choose one of the 3 mounting options:

CENTERDRIVE GEARMOTOR MOUNTING OPTIONS				
QTY Required (# Towers)	**Part #**	**Package Description**	**Finish**	**What's Included?**
	0000G66	**Centerdrive gearmotor BOLT-ON Package**	**Galvanized**	**1 - 1703658 bolt-on centerdrive mounting bracket with half clamp and mounting hardware**
	9360640	**Centerdrive gearmotor WELD-ON Bracket - Rounded**	**Black**	**For 6"- 6 5/8" rounded fit, weld will be in vertical direction**
	1700635	**Centerdrive gearmotor WELD-ON Bracket - with tabs (for round or square basebeams)**	**Black**	**Weld will be from top and underneath on either round or square basebeam.**

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METHOD 3 Use the existing basebeam with WELD-ON gearbox and gearmotor mounting brackets.

The following mounting bracket packages are available to utilize the existing basebeam, but to modify it by welding on brackets. The other option would be to replace the entire basebeam to avoid modifying the existing one. Method 4 outlines your options to replace the entire basebeam as another option.

WELD-ON GEARBOX BRACKET PACKAGES			
QTY Required (# Towers)	Part #	Package Description	What's Included?
	0000G67	Weld-On Gearbox & Centerdrive Mounts - for SQUARE Basebeams	Includes: 2 - 1701624 gearbox mounting plates, 3 - 1702332 support gussets and 1 - 1702331 weld-on gearmotor mounting plate.
	0000G68	Weld-On Gearbox & Centerdrive Mounts - for ROUND Basebeams	Includes: 1 - 1703332 Rear gearbox weld-on bracket, 1 - 1703333 Front gearbox weld-on bracket and 1 - 1700635 centerdrive gearmotor weld-on bracket with tabs.
	0000G69	Weld-On Gearbox Mounts & BOLT-ON Center Drive Mount for ROUND Basebeams	Includes: 1 - 1703332 Rear gearbox weld-on bracket, 1 - 1703333 Front gearbox weld-on bracket and 1 - 1703658 bolt-on centerdrive mounting bracket with half clamp and hardware.

Following are photos showing the components included in the packages listed in the preceding table:



1701624 **- Weld-On Gearbox Mounting Plate - black unpainted**



1702332 **- Support Gusset - black unpainted**



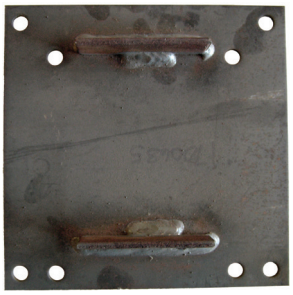
1702331 **- Weld-On Drop Down Center Drive Mounting Bracket**

0000G67 Package Components

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1703332 **- Rear Gearbox Weld-On Mounting Plate - black unpainted**



1700635 **- Centerdrive Weld-On Bracket w/ Weld Tabs**

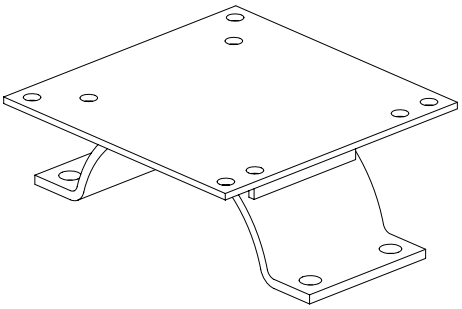


1703333 **- Front Gearbox Weld-On Mounting Plate - black unpainted**

0000G68 Package Components



1703332 **- Rear Gearbox Weld-On Mounting Plate - black unpainted**



1703658 **- Bolt-On Centerdrive Mounting Bracket with Half Clamp and Mounting Hardware**



1703333 **- Front Gearbox Weld-On Mounting Plate - black unpainted**

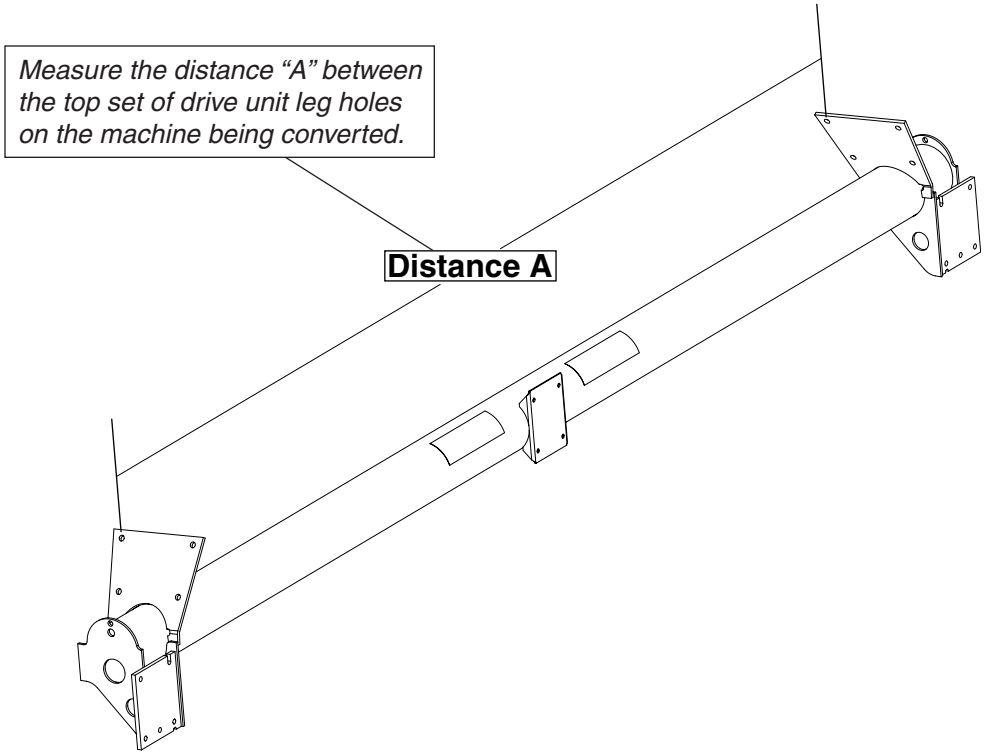
0000G69 Package Components

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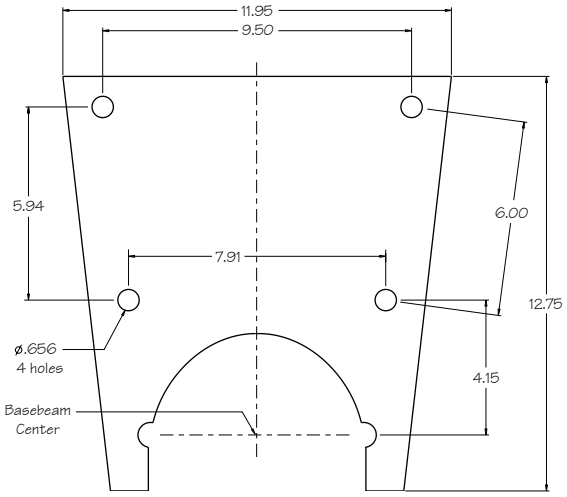
METHOD 4 Replace the existing basebeam with a new Valley basebeam.

The following basebeams are available. It is important to measure the existing base beam dimensions (distance A) in the field as shown in the diagram. Normally, the legs can be moved in or out 4”- 5” to accommodate the new basebeam. Choose the correct basebeam depending on the information from your measurements.

VALLEY BASEBEAM SELECTIONS			
QTY Required (# Towers)	Part #	Description	Distance A (inches)
	1780995	Basebeam - Standard Profile, Series 8000/6000	141.9
	1702019	Basebeam - Standard Profile, Series Pre-6000	120.3

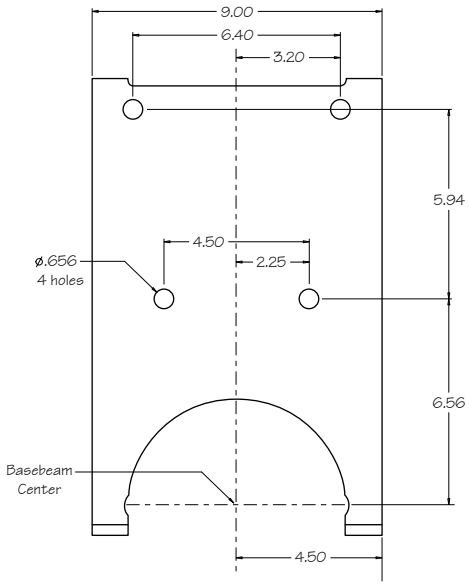


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NOTE: All dimensions displayed are in inches.

Drive Unit Leg Mounting Bolt Pattern for 1780995 Basebeam series 8000 / 6000



Drive Unit Leg Mounting Bolt Pattern for 1702019 Basebeam Pre-6000 series

Mounting Guidelines

1) 5/8" bolt holes in either the drive unit legs or the mounting plates will likely need to be re-drilled or cut to accommodate the new basebeam. Following is the hardware that you would need to order for attaching the basebeam.

DRIVE UNIT LEG MOUNTING HARDWARE		
QTY Required	**Part #**	**Description**
8/tower	**0161088**	**5/8" X 1 3/4" Drive Unit Leg Mounting Bolt**
8/tower	**0133010**	**5/8" Lock Nut**
8/tower	**0142011**	**5/8" Flat washer, 1.75" OD**

2) When positioning the new basebeam to the drive unit legs, make sure the basebeam will be set at the same angle as the old basebeam. Failure to do so, may result in structural failure as the tower may walk itself inside or outside and cause the tower to fail.

Valley Basebeam on a Gifford Hill Drive Unit



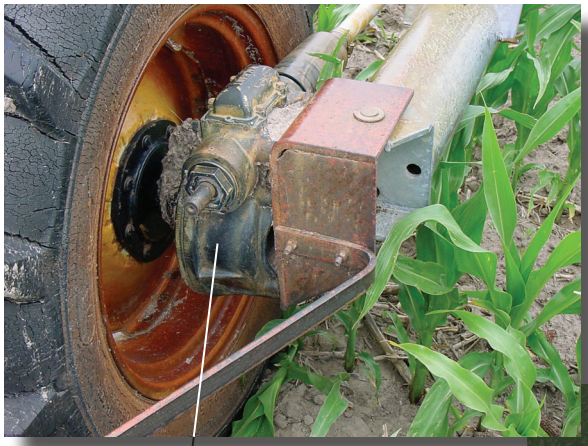
Make sure the basebeam is installed such that the vertical angle of the tire/wheel assembly is at the original position. Mounting the basebeam at an angle to the inside or outside, will result in structural failure.

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Following are some photos to provide some insight of what some finished drivetrain conversions would look like on the following machines. There may be many different models of each brand so the finished product may look different depending on the particular model of the machine:

Zimmatic® Drive Train Conversion

Method 2 example - Utilizes existing basebeam. Gearboxes and centerdrive gearmotor mount directly to the existing brackets.



1703280 **- Double Input 50:1 Valley Competitive Bolt Pattern Wheel Gearbox utilized**



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Reinke® Drive Train Conversion

Method 2 example - Utilizes existing basebeam. Gearboxes and centerdrive gearmotor mount directly to the existing brackets.



Valley Helical Centerdrive Gearmotor utilized for drive train conversion. Special adapter brackets 099P171 (2 req.) to mount centerdrive.



***1703280* - Double Input 50:1 Valley Competitive Bolt Pattern Wheel Gearbox utilized**

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T-L Drive Train Conversion

Method 4 example - Utilizes a specially designed Valley basebeam specifically for T-L machines. Please refer to the complete conversion manual for converting T-L Oil Hydraulic machines to electric drive machines for all of the step by step instructions and ordering details.



New Special T-L Basebeam designed specifically for T-L machines.



Specially designed tower box mounting hardware is also available for T-L machines for conversion to electric drive.

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Lockwood® Drive Train Conversion

Method 2 example - Utilizes existing basebeam. Gearboxes and centerdrive gearmotor mount directly to the existing brackets.



Valley gearboxes with the competitive bolt pattern will work to replace gearboxes.



Valley Helical centerdrive gearmotors will bolt up directly to the centerdrive mounting bracket. Don't forget to replace driveshafts and shields.

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Gifford Hill Drive Train Conversion

Method 1 example - Option A Utilizes bolt-on drop down geabox mounting brackets (verify bolt pattern to get the correct bracket). Weld-on drop down center drive mount for a square basebeam is also utilized.



Method 4 example - Utilizes a new Valley basebeam.



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Tower Box Controls and Alignment Components

5

VALLEY TOWER BOXES 5-1
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- Lockwood Alignment Conversion - Weld-On 5-26

TOWER BOX MOUNTING OPTIONS 5-27

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Valley Brand Tower Boxes

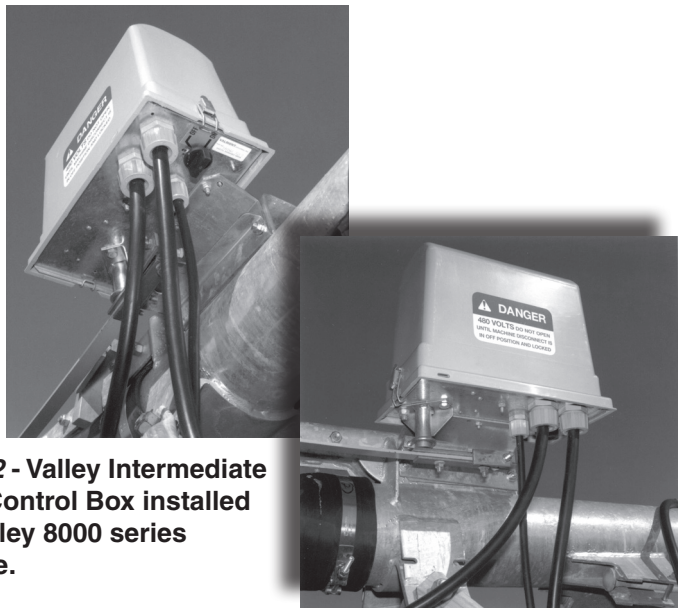


- ✓ ***The only choice when it comes to pivot tower controls***
- ✓ ***Valley design incorporates the details that pay big dividends in reliability and performance***
  - ***Galvanized steel construction with stainless steel shaft and nylon bearing assembly ensures long life.***
  - ***Non-flexing base for repeatability and accuracy of alignment***
  - ***External alignment adjustment – no bending of micro-switches, simply adjust the rod right below the box***
  - ***Field proven heavy-duty steel cam design***
  - ***Valley microswitches***
    - — *Stainless steel internal springs vs. alloy copper provides much longer switch life*
    - — *Low thermal expansion switch case material is less affected by temperature for improved accuracy*
    - — *Tested to 10 million switch cycles under load*
  - ***Valley Specified Contactors***
    - — *Class H Double Insulated Coil – allows coil to withstand more extreme high/low voltages resulting in longer coil life*
    - — *Low thermal expansion switch case material is less affected by temperature for improved accuracy*
    - — *Tested to 10 Million Switch Cycles under load*

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1812442 **- Valley Intermediate Tower Control Box**



1812442 **- Valley Intermediate Tower Control Box installed on a Valley 8000 series machine.**

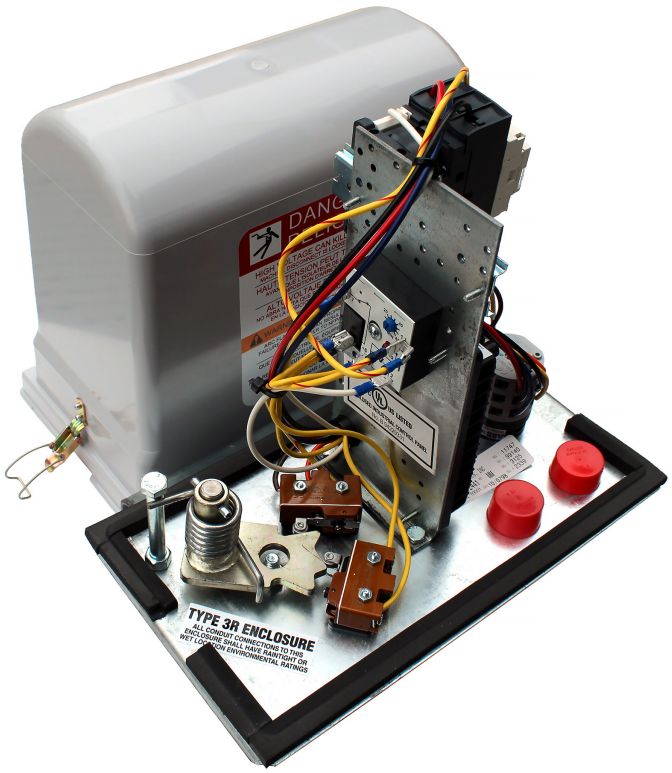
INTERMEDIATE TOWER BOXES		
Part #	**Description**	**What's Included?**
1812442	Intermediate Tower Box (Standard Alignment)	Complete tower box with lid. Hardware and mounting plate for attaching to drive unit not included.
1811698*	Intermediate Tower Box (Modified Alignment)	

* Modified alignment box is the same exact box as the standard 1812442 box, except the safety microswitch is set for 8 degrees vs. 4 degrees for a standard alignment box. Boxes with adjustable micro-switches can be adjusted from standard to modified alignment - please refer to the Technical Service Manual.

INTERMEDIATE TOWER BOX SERVICE ITEMS

REPAIR ITEMS FOR INTERMEDIATE TOWER BOXES	
Part #	**Description**
9311146	Tower box lid
03E3785	Tower box run contactor, boxed, 25 amp, 120 volt, 3 pole, with premium coil
03E0307	Adjustable Valley Micro-Switch
0315746	Disconnect Switch
03E1899	Terminal Block

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1812441 **- Valley Time Delay (Overwatering) Standard Tower Box**

TIME DELAY (OVERWATERING) TOWER BOXES		
Part #	**Description**	**What's Included?**
1812441	**Time Delay (Overwatering) Tower Box (Standard Alignment)**	**Complete tower box with lid. Timer included to shut down machine if tower does not move for a pre-selected time period. Hardware and mounting plate for attaching to drive unit not included.**
1811697*	**Time Delay (Overwatering) Tower Box (Modified Alignment)**	

* Modified alignment box is the same exact box as the standard 1812441 box, except the safety microswitch is set for 8 degrees vs. 4 degrees for a standard alignment box. Boxes with adjustable micro-switches can be adjusted from standard to modified alignment - please refer to the Technical Service Manual.

TIME DELAY TOWER BOX SERVICE ITEMS

SERVICE ITEMS FOR TIME DELAY TOWER BOXES	
Part #	**Description**
9311146	**Tower box lid**
03E3785	**Tower box run contactor, boxed, 25 amp, 120 volt, 3 pole, with premium coil**
03E3232	**Electronic Overwatering Delay Timer**
03E0307	**Adjustable Valley Micro-Switch**
0315746	**Disconnect Switch**
03E1899	**Terminal Block**

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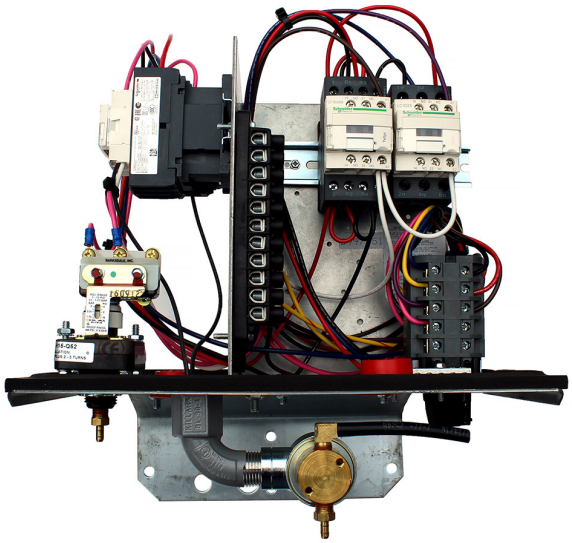


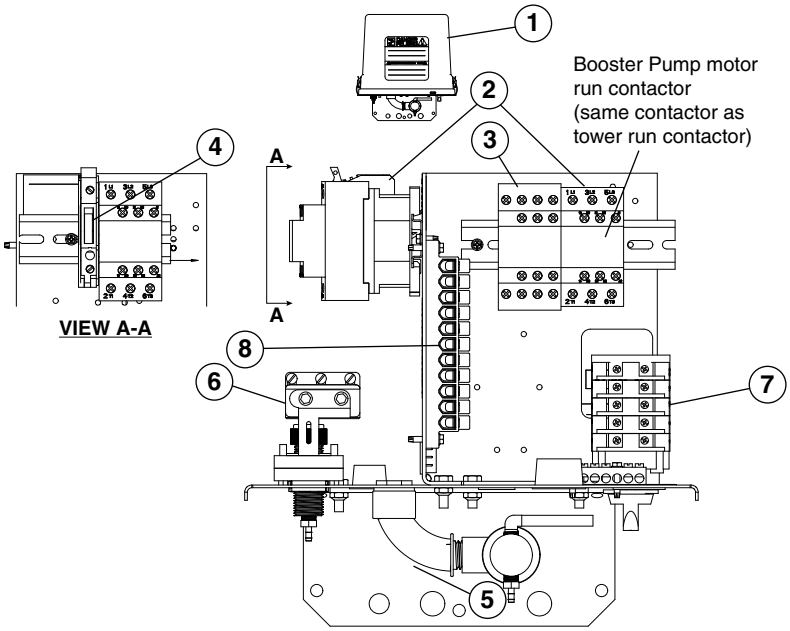
LAST TOWER BOX		
Part #	**Description**	**What's Included?**
1811363	Last Tower Box (Standard or Modified Alignment)	Complete tower box with lid. Hardware and mounting plate for attaching to drive unit not included.

LAST TOWER BOX SERVICE ITEMS

SERVICE ITEMS FOR LAST TOWER BOX	
Part #	**Description**
9311146	Tower box lid
03E3785	Tower box run contactor, boxed, 25 amp, 120 volt, 3 pole, with premium coil
0315746	Disconnect Switch
03E1899	Terminal Block

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2, 5 OR 7.5 HP BOOSTER PUMP BOX		
Part #	**Description**	**Comments**
1811602	Complete Booster Pump Box for 2, 5 or 7.5 HP.	Any Booster Pump Fuses and fuse blocks required for 5 or 7.5 HP or 2 HP with amp draw exceeding 30 amps are not included and must be ordered separately. For fusing requirements, please refer to the OPTIONS section.
1814967	Complete Booster Pump Box without Solenoid Valve for 2, 5 or 7.5 HP.	Used with Nelson or Komet End Gun Valves.

BOOSTER PUMP BOX SERVICE ITEMS

SERVICE ITEMS FOR BOOSTER PUMP BOX		
ID	**Part #**	**Description**
1	9311146	Tower box lid
2	03E3785	Tower box & Booster Pump run contactor, boxed, 25 amp, 120 volt, 3 pole, with premium coil
3	03E1861	Phase Reversing contactor, 30 amp, 120 volt, 4 pole
4	0314858	1.5 Amp Fuse for fusing Solenoid Valve
5	0232452	Solenoid Valve with Coil, 120 volt, normally open
6	0315994	Pressure Switch, 0.6 - 15 psi low range
7	0314540	Disconnect Switch
8	03E1899	Terminal Block

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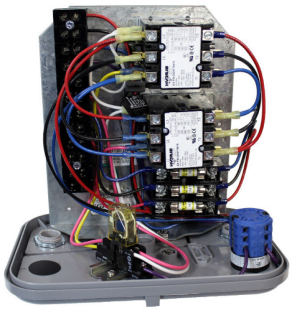
0980536



0980535



0980534



0980533

ZIMMATIC STYLE TOWER BOXES		
Part #	**Description**	**Comments**
0980536	Zimmatic Intermediate Tower Box	Note: Tower boxes have Zimmatic wire colors for easy installation
0980535	Zimmatic Overwatering Tower Box	
0980534	Zimmatic Last Tower Box	
0980533	Zimmatic Booster Pump Tower Box	
NOTE: All tower boxes are complete with tower box cover.		



0980532



0980531



0980525



099P023



0980541



0980529



0980528



0980530



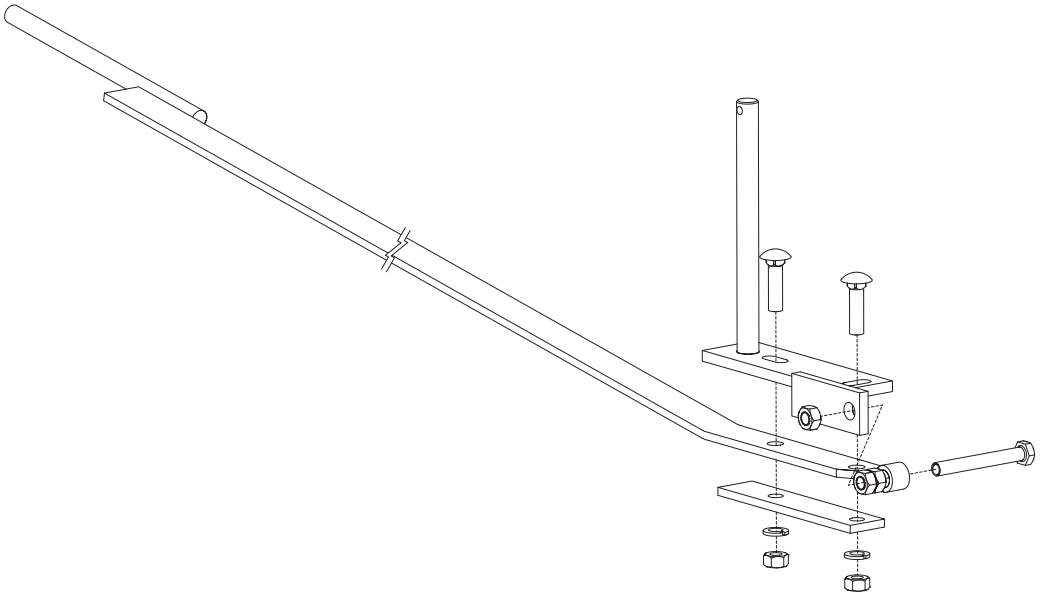
0980526 - 12in 0980527 - 16in

ZIMMATIC TOWER BOX & ALIGNMENT COMPONENTS	
Part #	**Description**
0980532	Zimmatic Style Tower Box Lid w/Latches
0980531	Zimmatic Style Tower Box Base
0980525	Zimmatic Style Disconnect Switch
099P023	Zimmatic Style Microswitch
0980529	Zimmatic Style Linkage Kit, Stainless
0980528	Zimmatic Style Swivel Ball Joint w/Hex Nut
0980541	Zimmatic Style Cam
0980530	Zimmatic Style Cam Arm
0980526	Zimmatic Style Linkage Rod - 12 inches
0980527	Zimmatic Style Linkage Rod - 16 inches

Complete tower boxes and replacement components are manufactured by a third party vendor and not associated with Zimmatic.

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TOWER BOX MOUNTING KITS		
Part #	**Description**	**What's Included?**
KA09001	**Intermediate and First Tower Box Hardware Mounting Kit**	**Hardware required to mount box to the channel, Stainless steel bolt w/nuts for alignment rod adjustment, Keeper plate with 2 carriage bolts for attaching alignment rod, grounding leads, 3 - Keepers for securing motor lead, 3 scotch lock connectors and 2 - 0.50 in. strain reliefs for motor lead connection. Alignment rod control bar (part # 1701295) not included.**
KA09008	**Last Tower Box Hardware Mounting Kit**	**Hardware required to mount box on the last tower, Last tower box mounting plate, grounding leads, 3 - Keepers for securing motor lead, 3 scotch lock connectors and 2 - 0.50 in. strain reliefs for motor lead connection.**
1701295	**Control Bar Assembly**	**Not included with kits.**

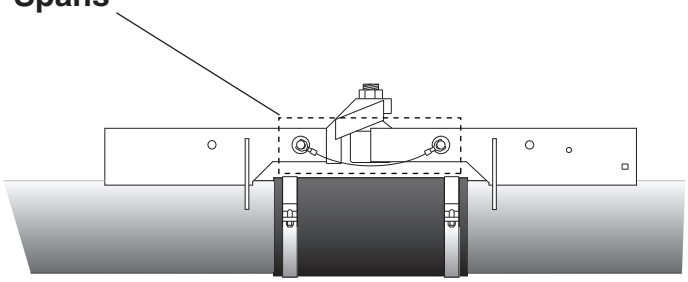


Don't forget Bonding Jumpers between each span for proper grounding. Installation method will vary for non-Valley machines and modifications will likely be necessary.

KA00424 - Bonding Jumper Kit for Spans

Includes the following:

- **1 - *10 Gauge Grounding Wire***
- **2 - *1/2" x 2" Bolts***
- **2 - *1/2" Hex Nuts***
- **2 - *1/2" Flat Washers***



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Adding to a Valley Machine

Valley Modified Alignment

- ✓ ***Provides additional alignment sensitivity***
- ✓ ***Strongly recommended on machines greater than 1500' in length***
- ✓ ***Absolutely required on machines 2000' or greater***



Modified Alignment Installed on a Valley machine

Steps to convert to Modified Alignment for an existing Valley machine

Step 1. **A modified alignment box is the same exact box as a standard tower box, except the safety microswitch is set for 8 degrees vs. 4 degrees for a standard alignment box. Boxes with adjustable micro-switches can be adjusted from standard to modified alignment - please refer to the Technical Service Manual for information on how to do this in the field. Any boxes with non-adjustable micro-switches should be replaced with the appropriate modified alignment tower box.**

Step 2. **If it is determined that new modified alignment tower boxes are needed, then refer to the previous sections entitled:**

- Intermediate Tower Boxes

- Time Delay (Overwatering) Tower Boxes

These sections include the appropriate part numbers for modified alignment tower boxes with the correct micro-switch settings.

Step 3. **Select the appropriate Modified Alignment Package** (refer to the next page) **for the application. You will need to know the following to make your selection:**

What series of Valley tower structure is this being installed on?

8000 / 6000 Series (after 1984)
Pre 6000 Series with centered basebeam (1979-1984)
Pre 6000 Series with offset basebeam (Prior to 1979)

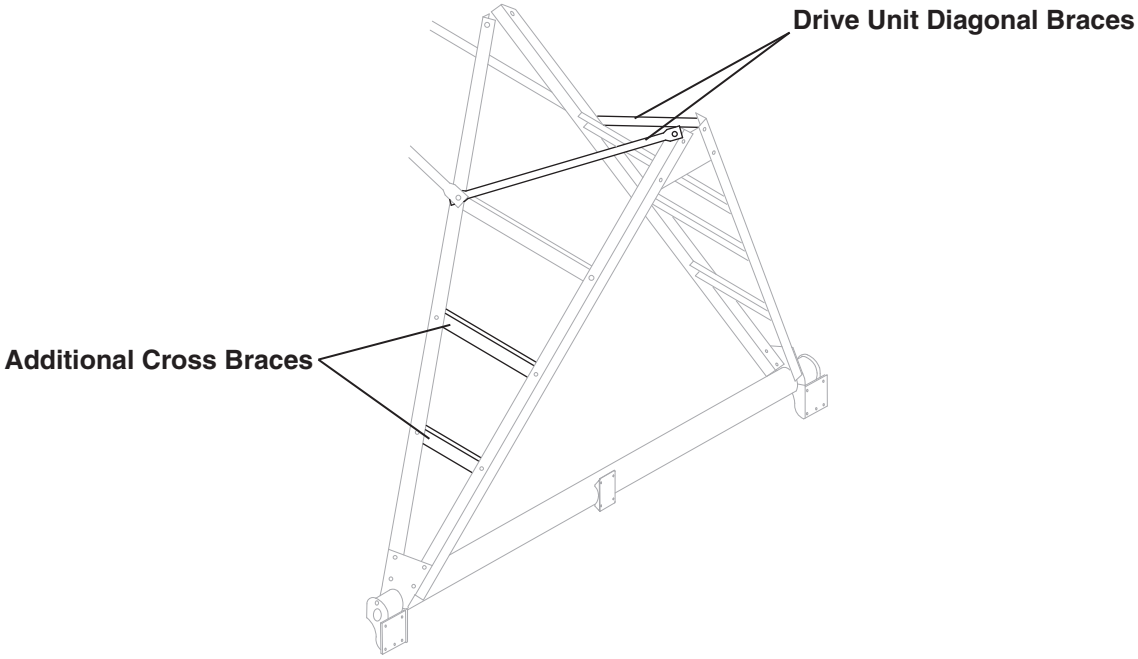
Is the tower located at a transition point from bigger to smaller diameter pipe?

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Add-on Packages

Select the appropriate Modified Alignment Package for the application

MODIFIED ALIGNMENT ADD-ON PACKAGES				
Part #	**Description**	**Application**	**Tower Type?**	**What's Included?**
0000F33	Modified Alignment Add-On Package for 8000/6000 Series - Standard Tower	Valley 8000 or 6000 Series machines	Non-transition Tower	All items listed in the diagram following this table.
0000F32	Modified Alignment Add-On Package for 8000/6000 Series - Transition Tower	Valley 8000 or 6000 Series machines	Transition Tower	All items listed in the diagram following this table.
0000B30	Modified Alignment Add-On Package for Pre-6000 Series - Standard Tower with Centered Basebeam	Valley Pre-6000 machines with Centered Basebeam (1979-1984)	Non-transition Tower with Centered Basebeam	All items listed in the diagram following this table. Also includes the required additional cross braces (2-steps), 2-drive unit diagonal braces and hardware to mount these. These must be installed for structural integrity.
0000B33	Modified Alignment Add-On Package for Pre-6000 Series - Transition Tower with Centered Basebeam	Valley Pre-6000 machines with Centered Basebeam (1979-1984)	Transition Tower with Centered Basebeam	
0000B31	Modified Alignment Add-On Package for Pre-6000 Series - Standard Tower with Off-Set Basebeam	Valley Pre-6000 machines with Off-Set Basebeam (Prior to 1979)	Non-transition Tower with Off-Set Basebeam	
0000B32	Modified Alignment Add-On Package for Pre-6000 Series - Transition Tower with Off-Set Basebeam	Valley Pre-6000 machines with Off-Set Basebeam (Prior to 1979)	Transition Tower with Off-Set Basebeam	



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Add-on Packages

What is included with each Modified Alignment Add-on Package?

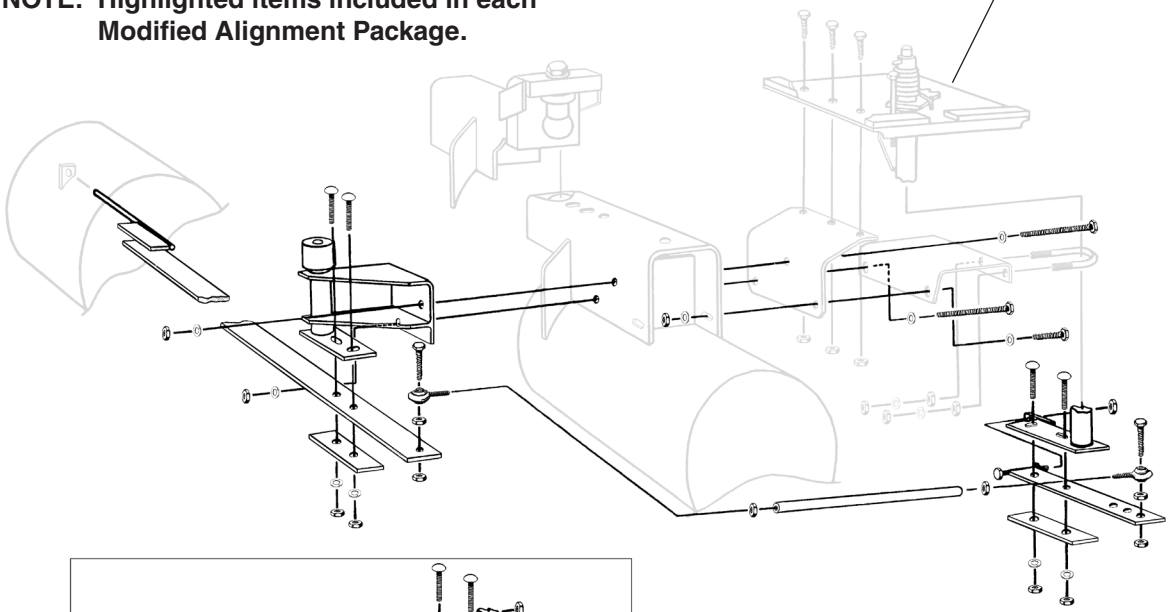
Additional items included but not illustrated:

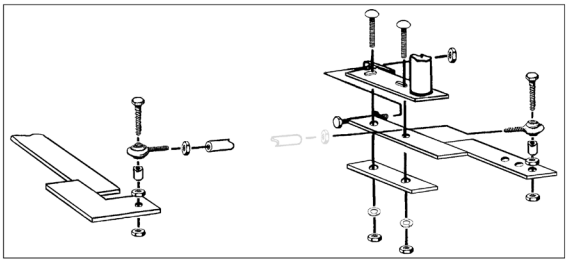
- 2 - 1” strain reliefs for span cable connections
- 2 - 0.5” strain reliefs for motor lead connections
- 3 - scotch lock connectors
- Grounding leads
- 3 - keepers for securing motor leads

TOWER BOX IS NOT INCLUDED.

Tower Box is NOT included with the packages.

NOTE: Highlighted items included in each Modified Alignment Package.





Transition Span Components
(if transition span package is ordered)

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Adding to a Valley 8000 series Machine

Valley Pivot Floating Alignment

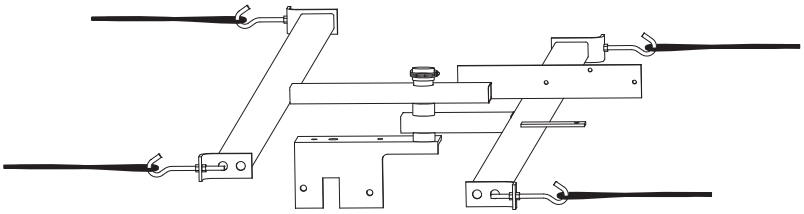
- ✓ **Provides superior alignment sensitivity – better than modified.**
- ✓ **Significantly improves alignment for machines of length greater than 2000 feet operating in one or several of the following conditions: windy regions, deep ridges or part circle machines.**
- ✓ **Adaptable to Valley Series 8000 machines only.**

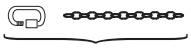


Pivot Floating Alignment installed on a Valley machine.



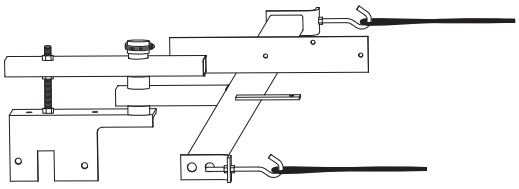
Pivot Floating Alignment hardware at the tower box.





Transition Span Additional Parts

Intermediate Tower Pivot Floating Alignment Hardware.



Next-to-Last Tower Pivot Floating Alignment Hardware.

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Converting Standard or Modified Alignment on a Valley 8000 series Machine

Step 1 **Order the necessary 0000E39 Intermediate Pivot Drive Unit Floating Alignment Packages. Determine the total # of spans and subtract 2**. (Example: 16 tower machine = 16 – 2 = 14 0000E39 Intermediate Pivot Drive Unit Floating Alignment Packages required. The 0000E39 contains all the necessary hardware (less the cables) for the intermediate drive units (not the first or the last) to retrofit modified or standard alignment.

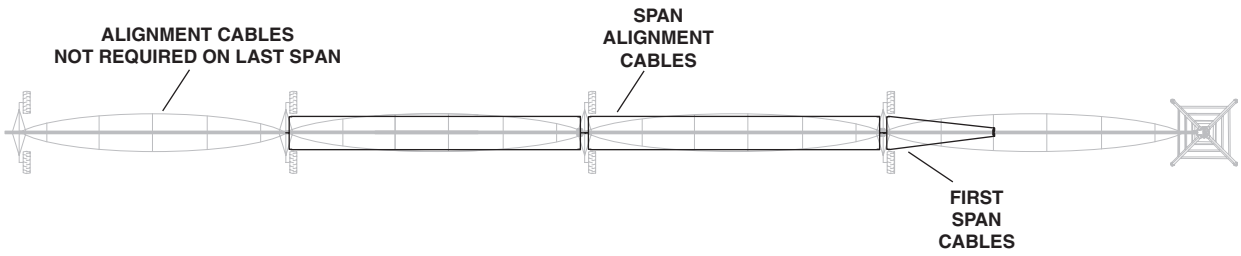
Note that the existing tower boxes must be re-used or ordered separately if needed. Pivot floating alignment requires a modified alignment tower box. A modified alignment box is the same exact box as a standard tower box, except the safety microswitch is set for 8 degrees vs. 4 degrees for a standard alignment box. Boxes with adjustable micro-switches can be adjusted from standard to modified alignment - please refer to the Technical Service Manual for information on how to do this in the field.

Step 2 **Order the necessary 0000E40 Next to Last Pivot Drive Unit Floating Alignment Package. One of these is required for each machine**. (This package contains all the necessary hardware for the next to last drive unit and the first drive unit – one package is required per machine)

Step 3 **If the machine has a transition pipe(s) (change from bigger to smaller diameter spans), you will need to order the following:**

2 per transition required	1730581	Transition chain
2 per transition required	0323042	Threaded chain connector

Step 4 **Order the appropriate alignment cables. Two cables are required for each span length. First span requires 2- "first span short cables" and last span does not require cables. (please reference the following illustration to select the appropriate cables)**



8000 series SPANS	
SPAN LENGTH	CABLE PART #
115'	9361046
135'	9361050
140'	9361051
160'	9361054
180'	9361056
185'	9361057
187'	9361058
205'	9361061

10" SPANS	
SPAN LENGTH	CABLE PART #
109'	9361045
120'	9361047
128'	9361049

EXPORT SPANS	
SPAN LENGTH	CABLE PART #
135'	9361050
158'	9361053
180'	9361056
202'	9361060

8120 series SPANS	
SPAN LENGTH	CABLE PART #
142'	9361052
161'	9361055
180'	9361056
199'	9361059

1ST SPAN CABLE	
PIPE LENGTH	CABLE PART #
36'	9361271
38'	9361272
45'	9361116

← use for series 8000

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Valley Competitive Alignment Updates

- *A tower box update or conversion on older competitive machines can substantially reduce electrical shutdowns and service calls for the grower*
- *Includes the Valley brand, field proven tower control boxes*
- *Bolt-on brackets for easy installation (bolt-on will not work for all machines)*
- *Weld-on available for applications where bolt-on is not applicable*
- *Packaged solution manufactured and designed by Valley for long life*
- *Packages adaptable to many competitive brand machines*
- *This minimum investment provides maximum value with increased reliability*



Valley Tower Box on a Zimmatic®



Valley Tower Box on a Lockwood

You MUST consider the following when updating / converting the alignment on competitive machines:

1. Valmont offers both weld-on and bolt-on brackets for a tower box update/conversion. Regardless of the method that you choose, the following guidelines MUST be adhered to:
   - ***a) The tower box must be mounted ≤ 9.5" from the centerline of the ball and socket joint.*** (see illustration on next page)
   - ***b) The location of the control rod needs to be parallel and run in-line with the ball and socket joint or other method of joining spans.*** (see illustration on next page)
   - c) The machine must be inspected with the previous points a & b in mind to select the appropriate packaged solution – bolt-on or weld-on. If using bolt-on brackets, there must be room to bolt the brackets on and still adhere to the requirements in a and b. The weld-on option generally provides more flexibility in placing the tower boxes to meet the mounting requirements stated in a and b.
2. Machines that are longer than 1500' should utilize modified alignment.
3. Machines longer than 1500', should have “step” bracing on both sides of the drive unit and especially should include drive unit diagonal braces. Special bracing may need to be manufactured to prepare the machine for the alignment conversion.
4. Machines longer than 2000', operating in windy conditions, deep ridges or part circles may need adapted to Pivot Floating Alignment.
5. Pivot Floating Alignment significantly improves alignment on machines in such conditions but will require field modifications. So please contact your Service Representative or call the Aftermarket Parts Department for further information.

(cont'd on the following page)

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You MUST consider the following when updating / converting the alignment on competitive machines:

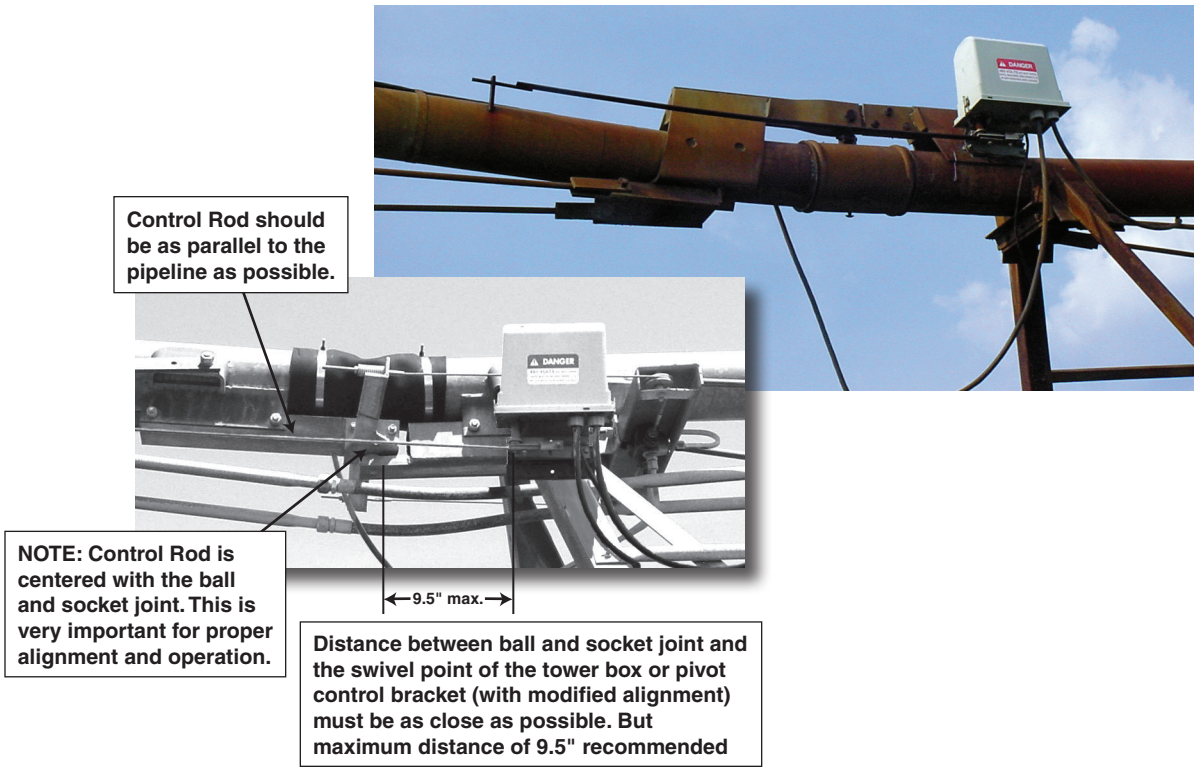
6. The “Joint” (ball and socket, bolt, hook & eye) of the spans, should be inspected for excessive wear and “slop”. A loose joint can have an adverse affect on the accuracy of the alignment.
7. A Valley alignment (tower box) update/conversion is best supported with the addition of a new Valley Pivot Control Panel. This ensures a new “Valley Electrical System” that is familiar to your service personnel and may require less installation time.
8. When installing an alignment update / conversion without a new gear motor as part of a drive train update/conversion, ensure that the older motors are internally protected. If they are not, the following overload relay kits should be ordered to protect the motors if desired:

   KA00514 – Overload Relay Kit for 1 HP Worm Drive Gearmotors
   Includes 12 amp, 3 pole, 120 VAC contactor with 1.6A – 2.5A adjustable overload relay.

   KA00515 – Overload Relay Kit for 1.5 HP Worm Drive Gearmotors
   Includes 12 amp, 3 pole, 120 VAC contactor with 2.5A – 4.0A adjustable overload relay.

9. The addition of new alignment to a machine will affect how straight the machine runs. This means that if wheel tracks greater than 4” exist, they must be re-established with the new alignment. With the new alignment installation, the machine may run straighter in some instances, and with deep wheel tracks, this can put excessive stress on the structure if wheel tracks are present.
10. Don’t forget Bonding Jumpers between each span for proper grounding. Installation method will vary for non-Valley machines and modifications will likely be necessary.

    KA00424 – Bonding Jumper Kit for Spans
    Includes 1 – 10 Gauge Grounding Wire, 2 – 1/2” x 2 Bolts, 2 – 1/2” Hex Nuts, 2 – 1/2” Flat Washers.



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Illustration of Bolt-on Alignment Package



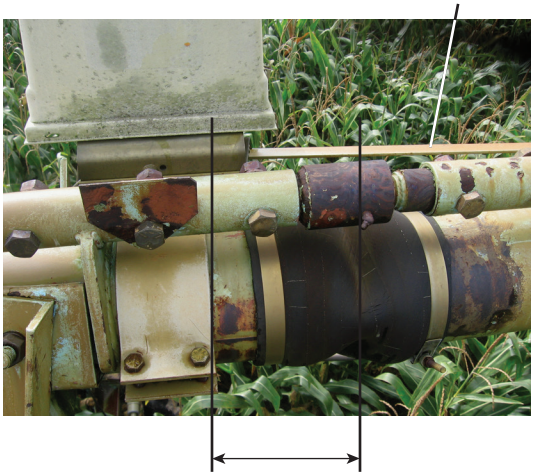
Bolt-on Alignment Conversion on a 30+ year old Pringle Span





Bolt-on Alignment Rod Ear Clamp

Control rod is close to parallel and runs in-line with the connection joint



Approximately 9” from tower box cam shaft to center of span connection joint

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BOLT-ON STANDARD ALIGNMENT UPDATE/CONVERSION PACKAGES		
Part #	**Description**	**Applications**
0000A46	INTERMEDIATE TOWER - 6 5/8" Bolt-On Alignment Update/Conversion Package	For updating Non-Valley machines alignment to Valley-Style alignment and boxes. Must verify that there is sufficient room to mount clamps. Standard alignment is good for machines less than 1500' long.
0000A49	TIME DELAY (Overwatering) - 6 5/8" Bolt-On Alignment Update/Conversion Package	
0000A47	LAST Tower - 6 5/8" Bolt-On Update/Conversion Package	
0000A98*	BOOSTER PUMP Box - 6 5/8" Bolt-On Update/ Conversion Package	

** The 0000A98 package includes an isolation relay kit to convert a 10 wire machine to an 11 wire. This will not be required if the machine is an 11 wire design.*

DO YOU HAVE 6" PIPE INSTEAD OF 6 5/8"? If so, order 2 of the following spacers per clamp or 4 per tower. These are placed inside the clamp before securing to the pipeline and will allow the 6 5/8" clamps to work properly on 6" diameter pipelines.



1701025 - 6" Spacer to use with 6-5/8" half clamps for 6" O.D. pipe — One required per half clamp

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What is included with the Bolt-on Alignment / Conversion Packages?



Bolt-on Control Rod Top Half Bracket
1702408 - 6-5/8”
1704092 - 8”



Bolt-on Control Box Top Half Bracket
1703189 - 6-5/8”
9362939 - 8” (2-Bolt Clamp)



4-Bolt Half Clamp
1700622 - 6-5/8”
1702522 - 8” (2-Bolt Clamp)
(2 per package)

Other items included in the packages:

- Tower control box (One of the following: Intermediate Standard alignment, Time Delay Overwatering Standard alignment, Last Tower Box, or Booster Pump Box)
- Clamps as shown above.
- Alignment control rod
- Mounting hardware for box to clamp(s)
- 1 – 0.50” strain relief for motor lead
- 2 – 1.00” strain reliefs for span cable
- Keeper plate with 2 carriage bolts for attaching alignment rod (alignment rod not included with last or booster pump box package)
- Grounding leads

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Illustration of Weld-on Alignment Package



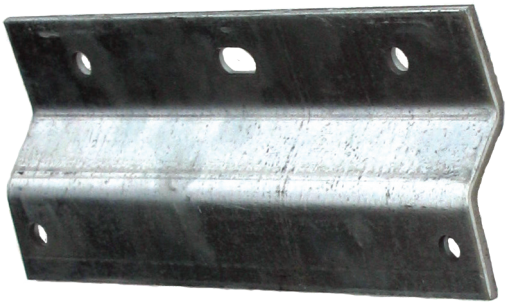


Weld-on Tower Box Conversion on a Zimmatic® Intermediate Tower

WELD-ON STANDARD ALIGNMENT UPDATE/CONVERSION PACKAGES		
Part #	**Description**	**Applications**
0000877	**INTERMEDIATE TOWER - WELD-ON Alignment Update/Conversion Package**	**For updating NON-VALLEY machines alignment to Valley-Style alignment and boxes. Welding of mounting brackets is required for non-Valley machines. Boxes will bolt-on to existing Valley machines and you will not use the weld-on brackets. Standard alignment is good for machines less than 1500' long.**
0000876	**TIME DELAY (Overwatering) - WELD- ON Alignment Update/Conversion Package**	
0000878	**LAST Tower - WELD-ON Update/Conversion Package**	
1700494	**Control Box Mounting Plate**	**Sold Separately - only needed on competitive conversions.**

See next page for "Upgrading to a Bolt-on Alignment Ear" for these packages.

Parts need to be ordered separately when used on a competitive machine.



1700494 - Control Box Mounting Plate

Other items included:

- Tower control box (One of the following: Intermediate Standard alignment, Time Delay Overwatering Standard alignment or Last Tower Box)
- Alignment control rod
- Mounting hardware for box to weld-on clamp
- 1 – 0.50" strain relief for motor lead
- 2 – 1.00" strain reliefs for span cable
- Keeper plate with 2 carriage bolts for attaching alignment rod (not included with last tower box package)
- Grounding leads

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Upgrade to a Bolt-on Alignment Ear

In many instances, a bolt-on alignment ear as illustrated, is preferred to prevent welding to the pipeline



Order the following parts listed in the table times the number of drive units requiring an alignment ear. This would be in addition to the weld-on packages required. (this would mean that a 1702407 weld-on ear would be left over from each package)

ITEMS REQUIRED FOR BOLT-ON ALIGNMENT EAR FOR *6 5/8" PIPELINE

QTY Required	Part #	Description
1	1702408	6 5/8" Bolt-on Control Rod Top Half Bracket
1	1700622	6 5/8" 4-Bolt Half Clamp Bottom Bracket
4	0161023	1/2" X 2 1/2" Grade 5 Bolts for Clamps
4	0133005	1/2" Hex Nuts for Clamp Bolts

*** Clamps can be utilized with 6" OD pipelines but 2 - 1701025 spacers must be ordered in addition to the other items listed.**

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Adding Modified Alignment to a Competitive Machine

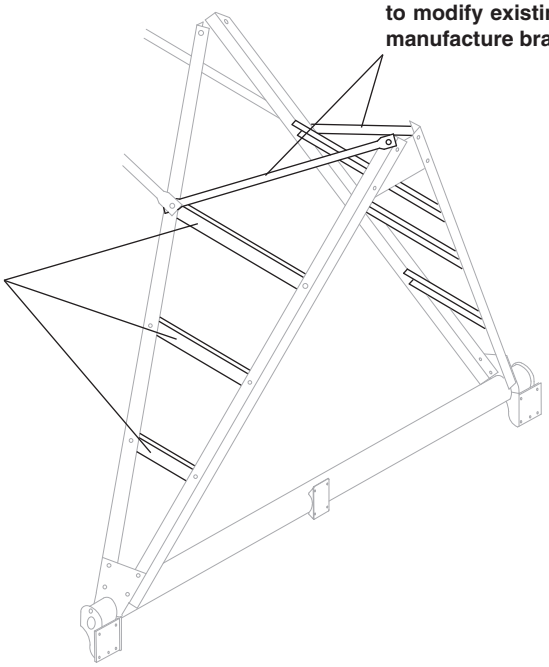
Modified alignment has been added to competitive machines by dealers, but it is somewhat more complicated than standard alignment. This section explains in general what is required to do so. If this is a first time installation, it would be good to call the Valley Aftermarket Sales Group to discuss further details about the installation.

Points to consider if adding modified alignment to a competitive machine:

- ✓ Provides additional alignment sensitivity vs. standard alignment
- ✓ Required on machines greater than 1500' in length
- ✓ Channel assembly must be welded to pipeline to install modified alignment.
- ✓ Competitive machine must be inspected to verify that the channel assembly can be welded to the pipeline and modified linkage assemblies have proper clearance before installation.
- ✓ Modified alignment requires at least 3 steps (cross braces) on each side of the drive unit and drive unit diagonal braces on each side. These may have to be measured and manufactured at the dealership if required.

Drive unit Diagonal Braces required on each side of drive unit. Will have to modify existing Valley braces or manufacture bracing to fit.

A minimum of 3 Cross Braces required on each side of the standard profile drive unit. Will have to modify existing Valley braces or manufacture cross braces to fit.



- ✓ All of the considerations listed at the beginning of the "Alignment Packages for Competitive Machines" must also be considered and adhered to.

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Installing on a Competitive Machine

Step 1 One of the following channel assemblies must be ordered and welded to the pipeline. (not required for last tower)

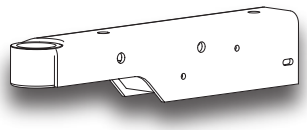
Flex Joint Weld-on Components

- *All components listed are black steel*
- *Uses include:*
  - *Adapting competitive spans*
  - *Easy mounting for alignment*

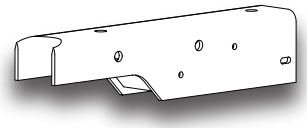


Don't forget 0991375 – Zinc Rich Cold Galvanizing 12 ounce aerosol can. Put that finishing touch on your welding projects for professional looking work.

Description		*Part #*
COMPLETE FEMALE CHANNEL ASSEMBLY	*Black*	**1701303**

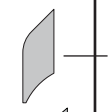


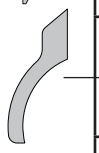
Description		*Part #*
CHANNEL ASSEMBLY ONLY	*for mounting alignment*	**1701302**

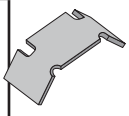


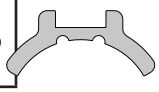
FEMALE HITCH ASSEMBLY SUPPORT GUSSETS

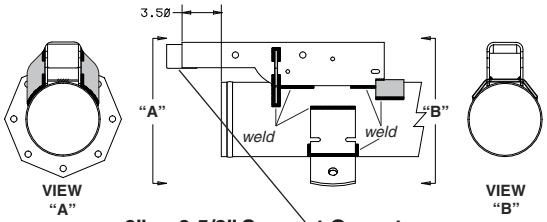
Part #	Description	Application	Special Notes
1700516	Support Gussets for Complete Female Channel Assembly or Channel Assembly Only	For 6" / 6 5/8" diameter Pipe	2 required. Must use for all applications. (see drawing)
9360067	Support Gussets for Complete Female Channel Assembly or Channel Assembly Only	For 8" / 8 5/8" diameter Pipe	2 required. Must use for all applications. (see drawing)
9361648	Rear Channel Assembly Support Gusset	For 6" / 6 5/8" diameter Pipe	1 required. Must use if Complete Female Channel Assembly is being used to support a span. Not required if channel only is utilized to support alignment hardware. (see drawing)
9360138	Rear Channel Assembly Support Gusset	For 8" / 8 5/8" diameter Pipe	1 required. Must use if Complete Female Channel Assembly is being used to support a span. Not required if channel only is utilized to support alignment hardware. (see drawing)



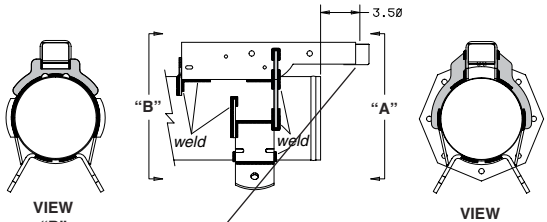








6" or 6-5/8" Support Gussets



8" or 8-5/8" Support Gussets

Channel assembly should be mounted such that the receiver location would be located at the center of the span connection joint. This would position the tower box shaft the required 9" from the span connection joint.

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Installing on a Competitive Machine

Step 2 **Select the appropriate number of tower control boxes:**

Order the appropriate number of Intermediate Modified Alignment Tower Boxes (# towers – 2) (refer to the "Intermediate Tower Boxes" section)

Order 1 Time Delay (Overwatering) Modified Alignment Tower Box (refer to the "Time Delay (Overwatering) Tower Boxes" section)

Choose one of the following for the last tower:

OPTIONS FOR LAST TOWER WHEN ADDING MODIFIED ALIGNMENT TO COMPETITIVE MACHINES.	
Part #	**Description**
0000878	LAST Tower - WELD-ON Update/Conversion Package
0000A47	LAST Tower - 6 5/8" Bolt-On Update/Conversion Package
0000A98	BOOSTER PUMP Box - 6 5/8" Bolt-On Update/Conversion Package

Step 3 **Select the appropriate modified alignment package for the application and order quantity needed (# Towers – 1).** These packages are also listed in the "Modified Alignment – Adding to a Valley Machine" section.

MODIFIED ALIGNMENT ADD-ON PACKAGES				
Part #	**Description**	**Application**	**Tower Type?**	**Comments**
0000F33	Modified Alignment Add-On Package for 8000/6000 Series and competitive machines - Standard Tower	Valley 8000 or 6000 series and competitive machines	Non-transition Tower	Does not include any extra cross braces (steps) or diagonal braces
0000F32	Modified Alignment Add-On Package for 8000/6000 Series and competitive machines - Transition Tower	Valley 8000 or 6000 series and competitive machines	Transition Tower	Does not include any extra cross braces (steps) or diagonal braces
0000B30	Modified Alignment Add-On Package for Pre-6000 Series and competitive machines (includes additional bracing)	Valley Pre-6000 machines with Centered Basebeam (1979-1984) and competitive machines	Non-transition Tower with Valley Centered Basebeam	Both packages include 1 - 1702013 cross brace (24.4" hole to hole), 1 - 1702014 cross brace (15.41" hole to hole) and 2 - 1732383 diagonal braces (54.4" hole to hole). These can be modified in some cases to provide additional bracing on some competitive machines.
0000B33	Modified Alignment Add-On Package for Pre-6000 Series and competitive machines (includes additional bracing)	Valley Pre-6000 machines with Centered Basebeam (1979-1984) and competitive machines	Transition Tower with Valley Centered Basebeam	

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Following are some photos to provide some insight what a finished conversion on the following machine would look like. There may be many different models of each brand so the finished product may look different depending on the particular model of the machine:

Zimmatic® Alignment Conversion - Weld-On

Weld-on control rod ear is utilized. A bolt on ear would work also.





1700494 **- Control box mounting plate is used to bolt the tower box to and then the bracket is welded to the machine.**

Note that there is not a good place for a bolt-on bracket and still keep the tower box cam shaft 9" from the span connection point.

See page 5-6 for Zimmatic style tower boxes and components for direct replacements.

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Following are some photos to provide some insight what a finished conversion on the following machine would look like. There may be many different models of each brand so the finished product may look different depending on the particular model of the machine:

Reinke® Alignment Conversion - Weld-On



Weld-on Alignment Rod Ear.



Installer chose to utilize a piece of angle to provide a surface to weld the tower box to. The 1700494 – Control box mounting plate could have also been used to bolt the tower box to and then weld the bracket to the machine with the same results. This would not have required the special angle bracket illustrated.

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Following are some photos to provide some insight what a finished conversion on the following machine would look like. There may be many different models of each brand so the finished product may look different depending on the particular model of the machine:

Gifford Hill Alignment Conversion - Weld-On



The *1700494* – Control box mounting plate was used to bolt the tower box to and then weld the bracket to the machine. Note the appropriate distance from the cam shaft of the tower box to the span connection joint.

Note that in this case if the square mounting bracket on the stub pipe was cut off, then a bolt-on tower box could have also been utilized.

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Following are some photos to provide some insight what a finished conversion on the following machine would look like. There may be many different models of each brand so the finished product may look different depending on the particular model of the machine:

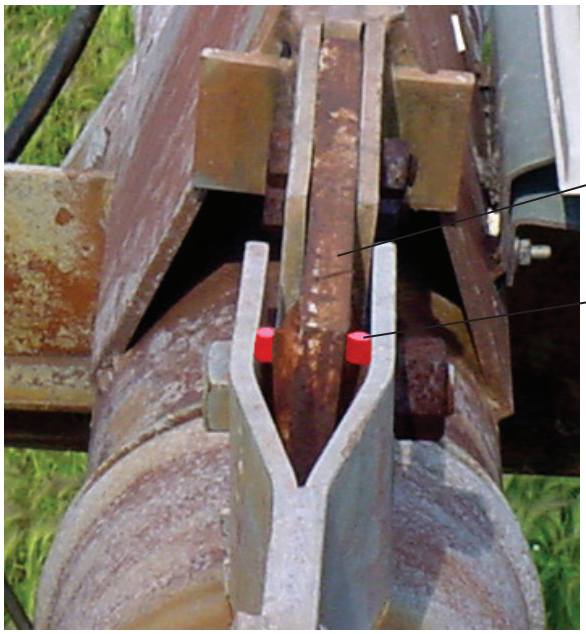
Lockwood Alignment Conversion - Weld-On

Note that the joint is on top. Therefore it is appropriate to mount the tower box as it is, to try and keep the control rod running close to the center of the span connection joint.



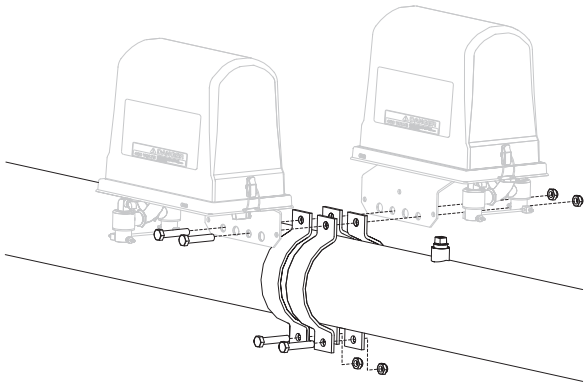
The *1700494* – Control box mounting plate was used to bolt the tower box to and then weld the bracket to the machine. Notice that in this case, there is no possible way to utilize a bolt-on tower box.



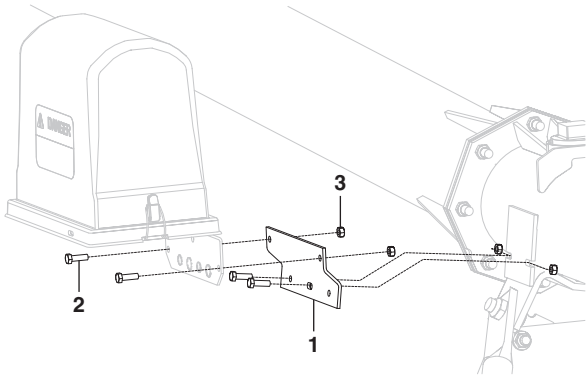


This a typical joint for some Lockwood machines. Notice that over time, the joint tends to spread out. This causes "sloppiness" in the alignment. If this is the case after the machine inspection, make sure that the joint is shimmed with round pins placed above the hitch pin to make the joint tight, but to allow the hitch the range of motion it was designed for. This is absolutely critical on machines longer than 7 spans.

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PIPE MOUNTED TOWER BOX KITS	
Part #	**Description**
KA01449	5" Pipe Diameter
KA01450	6" Pipe Diameter
KA01451	6 5/8" Pipe Diameter
KA01452	8" Pipe Diameter
KA01453	8 5/8"Pipe Diameter
KA01454	10" Pipe Diameter



DRIVE UNIT MOUNTED TOWER BOX		
Item #	**Part #**	**Description**
1	1700494	Control Box Mounting Plate
2	0161052	5/16" x 1" Cap Screw
3	0131019	5/16" Hex Nut

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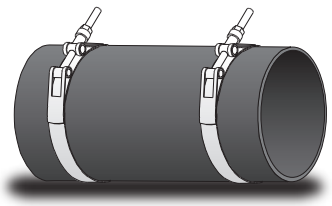
TOWER FLEX BOOTS. 6-1
TABBED FLEX BOOTS 6-2
FLEX BOOT T-BOLT CLAMPS 6-3
HEAVY DUTY PIPE FLANGE GASKETS 6-4
FLAT RUBBER GASKETS 6-5
TOWER DRAINS 6-6
CABLE CLAMPS. 6-7
VALLEY BLACK STEEL FLANGES 6-8
GALVANIZED TRANSITION STUBS. 6-9
FLEX JOINT WELD-ON COMPONENTS 6-10
FLEX JOINT WELD-ON COMPONENTS (CONT'D). 6-11
MISCELLANEOUS TRUSSING HARDWARE / ACCESSORIES 6-12
RETROFIT FORGED HITCH BALL. 6-13

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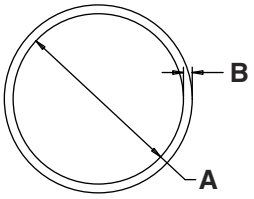
Valley Flex Boots

Quality boots for any brand machine

- *Quality material specifications for long boot life*
- *EPDM material for strength*
- *4 ply high strength polyester yarn for structural integrity under pressure*
- *100 psi working pressure with 300-400 psi burst pressure depending on length*

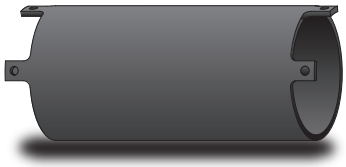


FLEX BOOTS				
Part #	Description	A ID (in.)	Length (in.)	B Thickness (in.)
0996080	Standard Flex Boot	5.00	16.00	0.31
0991187	Standard Flex Boot	6.00	16.00	0.31
1800318	Standard Flex Boot	6.625	16.00	0.31
0996389	Rough Terrain Long Flex Boot	6.625	20.00	0.31
1710029	Standard Flex Boot	8.00	16.00	0.31
0994520	Standard Flex Boot	8.625	16.00	0.31
0996390	Rough Terrain Long Flex Boot	8.625	20.00	0.31
1702326	Standard Flex Boot	10.00	16.00	0.31
0996663	Rough Terrain Long Flex Boot	10.00	20.00	0.31



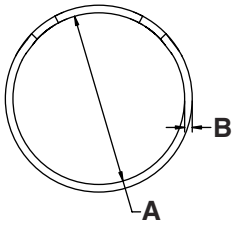
FLEX BOOTS - POLY SPAN				
Part #	Description	A ID (in.)	Length (in.)	B Thickness (in.)
0995628	Standard Flex Boot for POLY SPAN	7.00	16.00	0.31
0996027	Standard Flex Boot for POLY SPAN	9.00	16.00	0.31

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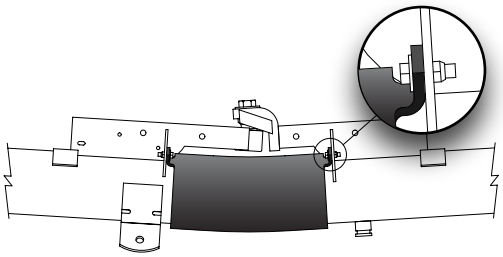


Valley Tabbed Flex Boots

- *Designed for tough applications where non-tabbed boots tend to slip off of the wraparound poly ends*
- *EPDM material for strength*
- *4 tabs for bolt-on application*
- *4 ply high strength polyester yarn for structural integrity under pressure*
- *100 psi working pressure with 300-400 psi burst pressure depending on length*



TABBED FLEX BOOTS - POLY SPAN				
Part #	Description	A ID (in.)	Length (in.)	A Thickness (in.)
0996625	Tabbed Flex Boot for POLY SPAN	7.000	18.00	0.31
0996669	Tabbed Flex Boot for POLY SPAN	9.000	18.00	0.31



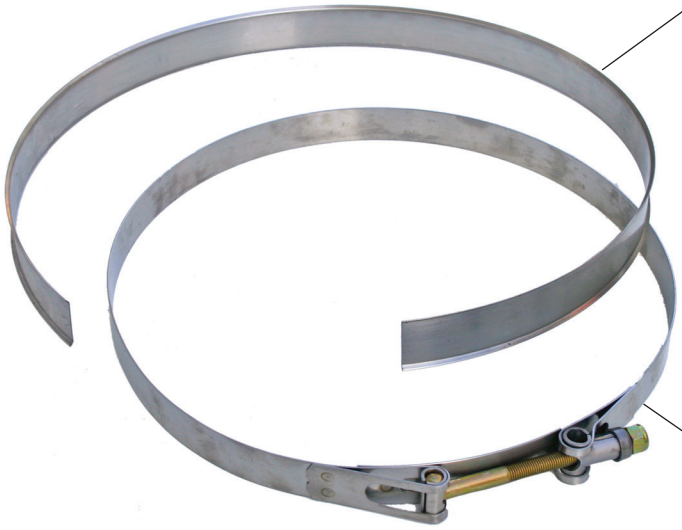
TABBED FLEX BOOT PACKAGES	
Package #	Description
0000F42	**7" Tabbed Boot Package** *(includes 7" tabbed boot, 4 bolts, 4 nuts, 4 washers & installation drawing)*
0000F55	**9" Tabbed Boot Package** *(includes 9" tabbed boot, 4 bolts, 4 nuts, 4 washers & installation drawing)*

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Quality T-Bolt Flex Boot Clamps for any application

- *Stainless steel material for long life.*
- *Designed with floating bridge.*
- *5/16" T-Bolt design*
- *Designed for heavy duty high torque applications*

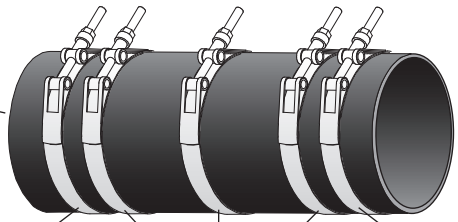
Special Liner featured with Clamp 0992441 for 10" Boot support



Standard T-Bolt Clamp

T-BOLT CLAMPS	
Part #	**Description and Application**
0995199	**5" Flex Boot Clamp**
0991186	**6" Flex Boot Clamp**
0991087	**6 5/8" Flex Boot Clamp**
0995627	**7" Flex Boot Clamp** *(for 6 5/8" Poly Span)*
0991147	**8" Flex Boot Clamp**
0994507	**8 5/8" Flex Boot Clamp**
0996085	**9" Flex Boot Clamp** *(for 8 5/8" Poly Span)*
0992386	**10" Flex Boot Clamp (featured below)**
0992441	**10" Flex Boot Clamp w/ Liner (featured below)**

10" Boot



10" Flex Boot Clamp w/ Liner
for added Boot Structural Integrity
(in contact with boot only)

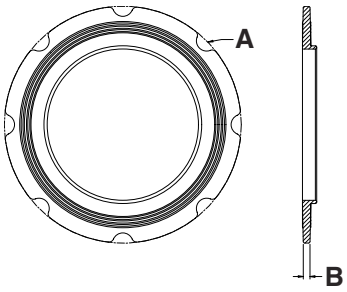
Standard 10" Flex Boot Clamp
(in contact with pipeline)

Standard 10" Flex Boot Clamp
(in contact with pipeline)

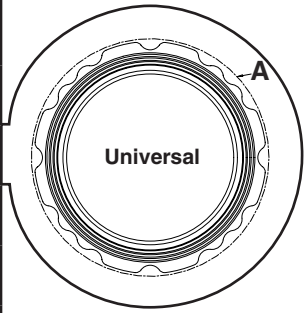
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Valley Pipe Flange Heavy Duty Gaskets

- *Extra thick heavy duty material for the longest life gasket in the industry*
- *Thermoplastic urethane material for long gasket life*



THERMOPLASTIC URETHANE PIPE FLANGE GASKETS			
Part #	Description	A Bolt Circle Diameter (in)	B Gasket Thickness (in.)
0994469	6" - 8 bolt Pipe Flange Gasket	8.812	0.25
1900144	6" - UNIVERSAL 6 Bolt (Round flange) or 8 bolt Octagon Pipe Flange Gasket.	7.812	0.25
0991107	6 5/8" - 8 bolt Pipe Flange Gasket	8.812	0.25
0992439	8" - 8 bolt Pipe Flange Gasket	10.188	0.25
0994500	8 5/8" - 8 bolt Pipe Flange Gasket	10.812	0.25



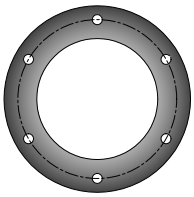
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FLAT RUBBER GASKETS

Part #
Description

0991016

6”
6 bolt

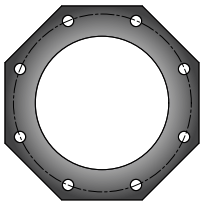


BOLT CIRCLE
7.875”
INSIDE DIAMETER
6.000”

Part #
Description

0992211

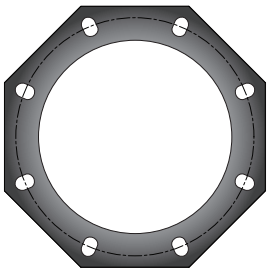
6-5/8”
8 bolt



BOLT CIRCLE
8.812”
INSIDE DIAMETER
6.625”

0996566

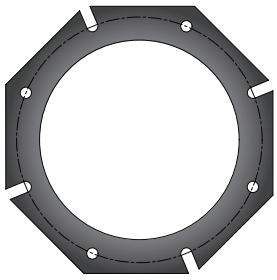
8” & 8-5/8”
8 bolt UNIVERSAL



BOLT CIRCLE
10.188” / 10.812”
INSIDE DIAMETER
8.500”

0992385

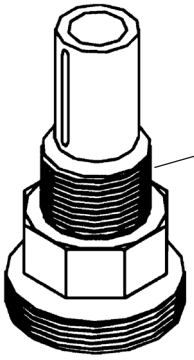
10”
8 bolt



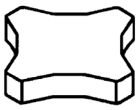
BOLT CIRCLE
12.188”
INSIDE DIAMETER
9.900”

FLAT RUBBER GASKETS			
Part #	**Description**	**Gasket Thickness (in.)**	**Applications**
0991016	6” - 6 bolt ROUND Flat Rubber Gasket	0.188	Pre-6000 overhangs & endplates
0992211	6 5/8” - 8 bolt Flat Rubber Gasket	0.188	Overhangs, endplates, Pre6000 pivot points, 6 5/8” pivot point
0996566	8” & 8 5/8” - Universal 8 bolt Flat Rubber Gasket with slotted holes	0.188	8 & 8 5/8” pivot points, pivot flexes, riser pipes on 8 & 8 5/8” pivot points
0992385	10” - 8 bolt Flat Rubber Gasket	0.188	10” spans & 10” pivot point / riser pipe

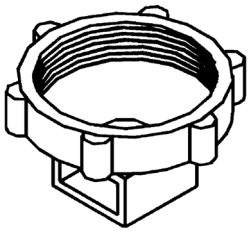
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Upper Drain Body 0246170
Upper Drain Body (POLY) 0246227
(High grade plastic body construction)



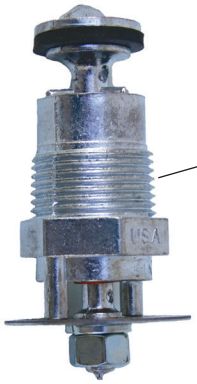
Drain Seal 0232568



Lower Drain Body 0232004
(Aluminum)

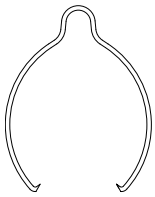
Description		*Part #*
1” POWERROLL DRAIN	*Wade Rain*	**0232418**

Spring activated to open. Die cast body construction.

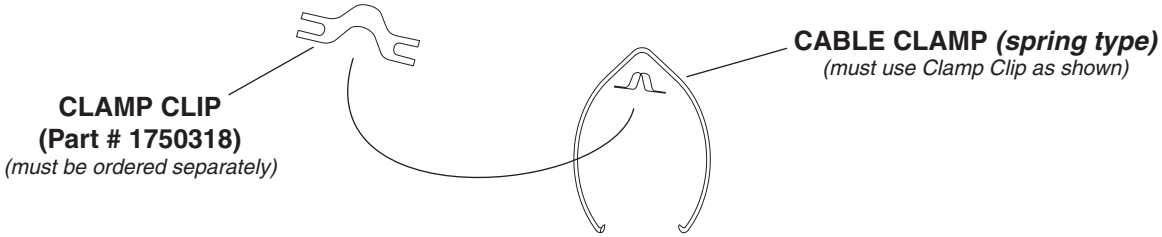


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Description		*Part #*
CABLE CLAMP (spring type)	*for 6" & 6-5/8" Pipelines*	**0271116**



Description		*Part #*
CABLE CLAMP (spring type) w/ CLAMP CLIP	*for 6" & 6-5/8" Pipelines*	**0271040**



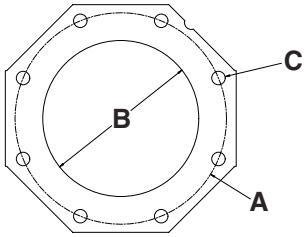
CABLE BANDING CLAMPS			
Part #	**Description**	**Clamp Diameter Ranges**	**Packaging Information**
0271021	6 5/8" - 6" Diameter Cable Banding Clamp	1" - 7"	275 / box or 11 / bundle
0271024	8" - 8 5/8" Diameter Cable Banding Clamp	1" - 9"	300 / box or 10 / bundle
0271051	10" Diameter Cable Banding Clamp	1" - 14 1/2"	250 / box or 10 / bundle



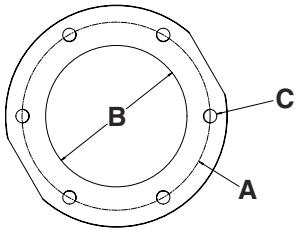
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Valley Black Steel Flanges

- *Black hot rolled mild steel flanges*
- *Ready to weld*
- *Make specialized adapters not offered*



OCTAGON 8 BOLT



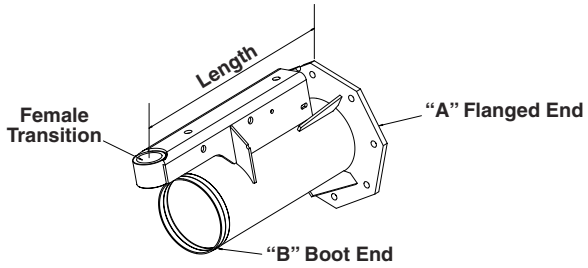
ROUND 6 BOLT



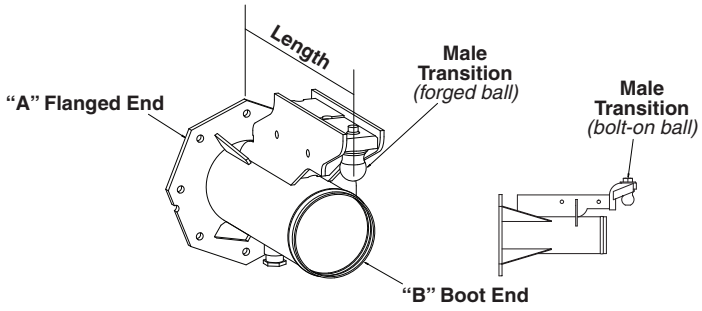
Don't forget 0991375 – Zinc Rich Cold Galvanizing 12 ounce aerosol can. Put that finishing touch on your welding projects for professional looking work.

BLACK STEEL FLANGES WITH VALLEY BOLT PATTERNS						
Part #	Description	Type	A Bolt Circle Diameter (in.)	B Inside Diameter (in.)	C Bolt Hole Size (in.)	Flange Thickness (in.)
1750481	6" Pipe Flange	Octagon 8 bolt	8.812 (6 5/8")	5.890	0.562	0.375
1800010	6 5/8" Pipe Flange	Octagon 8 bolt	8.812 (6 5/8")	6.500	0.562	0.375
1702050	6 5/8" Pipe Flange (w/notch for overhang)	Octagon 8 bolt	8.812 (6 5/8")	6.120	0.562	0.375
1703083	6 5/8" Pipe Flange (w/notch for overhang)	Octagon 8 bolt	8.812 (6 5/8")	6.750	0.562	0.375
1710002	8" Pipe Flange	Octagon 8 bolt	10.188 (8")	7.900	0.562	0.500
9360121	8 5/8" Pipe Flange	Octagon 8 bolt	10.812 (8 5/8")	8.500	0.562	0.500
1702309	10" Pipe Flange	Octagon 8 bolt	12.188 (10")	9.896	0.562	0.500
1901107	Round 6 bolt Pipe Flange with 2 cupped sides (pre 6000 series)	Round 6 bolt	7.812 (6")	5.890	0.562	0.375
1750321	6 5/8" Blank Flange Galvanized	Octagon 8 bolt	8.812 (6 5/8")	No Center Hole	0.562	0.375
1730267	8" Blank Flange Galvanized	Octagon 8 bolt	10.188 (8")	No Center Hole	0.562	0.500
9330013	8 5/8" Blank Flange Galvanized	Octagon 8 bolt	10.812 (8 5/8")	No Center Hole	0.562	0.500
1750026	Round 6 bolt Blank Flange (pre 6000 series) - Completely Round	Round 6 bolt	7.812 (6")	No Center Hole	0.562	0.375
1780872	Transition Flange	Octagon 8 bolt	10.188 (8")	5.890	0.562	0.500
1710066	Transition Flange	Octagon 8 bolt	10.188 (8")	6.500	0.562	0.500
9360015	Transition Flange	Octagon 8 bolt	10.812 (8 5/8")	6.500	0.562	0.500
9361408	Transition Flange	Octagon 8 bolt	8.812 (8 5/8")	7.900	0.562	0.500
1702319	Transition Flange	Octagon 8 bolt	12.188 (10")	6.500	0.562	0.500
1702320	Transition Flange	Octagon 8 bolt	12.188 (10")	7.900	0.562	0.500
9360127	Transition Flange	Octagon 8 bolt	12.188 (10")	8.500	0.562	0.500
0996672	8" ANSI Stainless Steel	Round 8 bolt	11.75 (8")	8.063	0.875	0.500
9364351	8-5/8" Transition Flange	Octagon 8 bolt	10.50 (8")	6.500	0.562	0.500
9361408	8 5/8" Flange (Lower Elbow)	Octagon 8 bolt	8.812 (6 5/8")	7.900	0.562	0.500

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FEMALE GALVANIZED TRANSITION STUBS				
Part #	Description	A Flanged End Bolt Circle Diameter (in.)	B Boot End Size (in.)	Length [flange to swivel point] (in.)
1730255	Female Transition Stub 6 5/8" X 6 5/8"	8.812 (6 5/8")	6.625	21.000
1710068	Female Transition Stub 8" X 6 5/8"	10.188 (8")	6.625	21.000
1730250	Female Transition Stub 8" X 8"	10.188 (8")	8.000	21.000
9360013	Female Transition Stub 8 5/8" X 6 5/8"	10.812 (8 5/8")	6.625	21.000
9330005	Female Transition Stub 8 5/8" X 8 5/8"	10.812 (8 5/8")	8.625	21.000
1702322	Female Transition Stub 10" X 8"	12.188 (10")	8.000	21.000
9360017	Female Transition Stub 10" X 8 5/8"	12.188 (10")	8.625	21.000



MALE GALVANIZED TRANSITION STUBS					
Part #	Description	A Flanged End Bolt Circle Diameter (in.)	B Boot End Size (in.)	Length [flange to swivel point] (in.)	Ball Type
9330006	Male Transition Stub 8 5/8" X 6 5/8"	10.812 (8 5/8")	6.625	21.000	Forged
1702724	Male Transition Stub 10" X 8"	12.188 (10")	8.000	21.000	Forged
9330007	Male Transition Stub 10" X 8 5/8"	12.188 (10")	8.625	21.000	Forged

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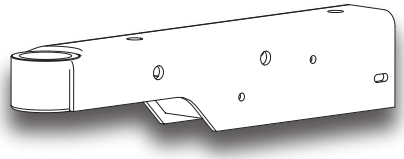
Flex Joint Weld-on Components

- *All components listed are black steel*
- *Uses include:*
  - *Adapting competitive spans*
  - *Easy mounting for alignment*

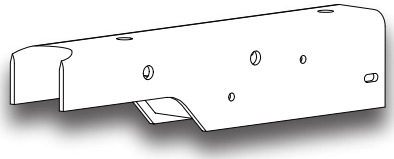


Don't forget 0991375 – Zinc Rich Cold Galvanizing 12 ounce aerosol can. Put that finishing touch on your welding projects for professional looking work.

Description		*Part #*
COMPLETE FEMALE CHANNEL ASSEMBLY	*Black*	**1701303**



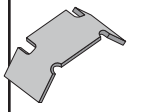
Description		*Part #*
CHANNEL ASSEMBLY ONLY	*for mounting alignment*	**1701302**

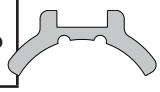


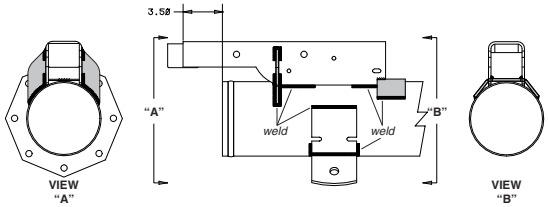
FEMALE HITCH ASSEMBLY SUPPORT GUSSETS

Part #	Description	Application	Special Notes
1700516	Support Gussets for Complete Female Channel Assembly or Channel Assembly Only	For 6" / 6 5/8" diameter Pipe	2 required. Must use for all applications. (see drawing)
9360067	Support Gussets for Complete Female Channel Assembly or Channel Assembly Only	For 8" / 8 5/8" diameter Pipe	2 required. Must use for all applications. (see drawing)
9361648	Rear Channel Assembly Support Gusset	For 6" / 6 5/8" diameter Pipe	1 required. Must use if Complete Female Channel Assembly is being used to support a span. Not required if channel only is utilized to support alignment hardware. (see drawing)
9360138	Rear Channel Assembly Support Gusset	For 8" / 8 5/8" diameter Pipe	1 required. Must use if Complete Female Channel Assembly is being used to support a span. Not required if channel only is utilized to support alignment hardware. (see drawing)

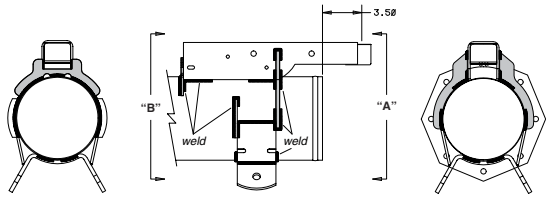








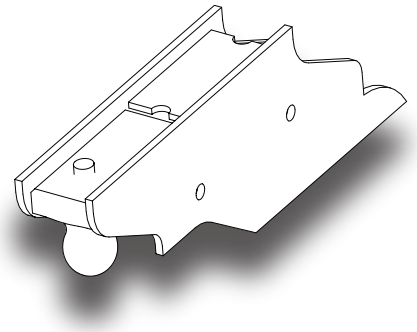
6" or 6-5/8" Support Gussets



8" or 8-5/8" Support Gussets

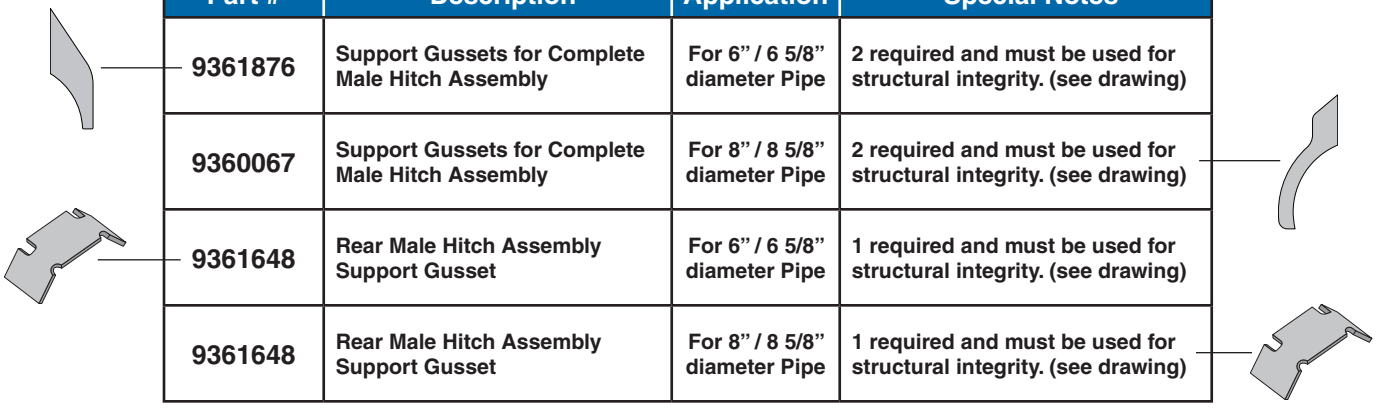
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Description		*Part #*
COMPLETE MALE HITCH ASSEMBLY	*Black*	**9361875**

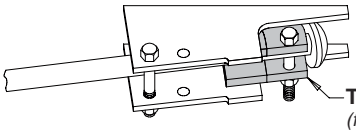


MALE HITCH ASSEMBLY SUPPORT GUSSETS

Part #	Description	Application	Special Notes
9361876	Support Gussets for Complete Male Hitch Assembly	For 6" / 6 5/8" diameter Pipe	2 required and must be used for structural integrity. (see drawing)
9360067	Support Gussets for Complete Male Hitch Assembly	For 8" / 8 5/8" diameter Pipe	2 required and must be used for structural integrity. (see drawing)
9361648	Rear Male Hitch Assembly Support Gusset	For 6" / 6 5/8" diameter Pipe	1 required and must be used for structural integrity. (see drawing)
9361648	Rear Male Hitch Assembly Support Gusset	For 8" / 8 5/8" diameter Pipe	1 required and must be used for structural integrity. (see drawing)



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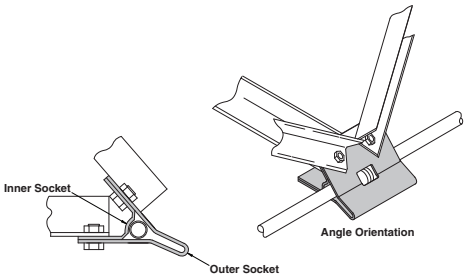


Truss Rod Spacer
(for 115', 135', 140' & 160' Series 8000 Spans)

Description	*Part #*
TRUSS ROD SPACER KIT	**KA09002**

KIT includes the following:

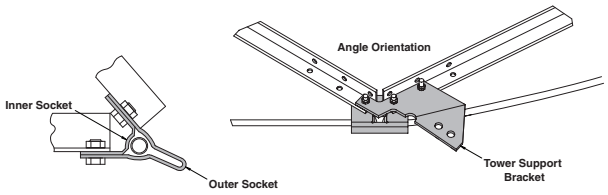
3/8" Lock Nut (8 ea.) 0133006
3/8" x 3" Cap Screw (8 ea.).....0161037
Truss Rod Spacer (4 ea.).....9360080
Field Assembly Diagram 9360354



Description		*Part #*
OUTER TRUSS ROD SOCKET (30/box)	*for series 8000 Spans*	**9360069**
INNER TRUSS ROD SOCKET (30/box)	*for series 8000 Spans*	**9360070**

each socket installation requires the following:

1/2" Lock Nut (3 ea.) 0133005
1/2" x 1-1/4" Cap Screw (3 ea.).....0161027

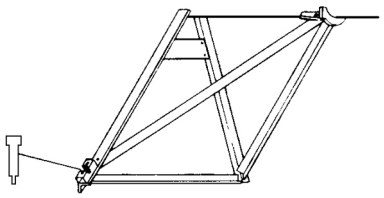


Description		*Part #*
OUTER TRUSS ROD SOCKET (30/box)	*for series 7000 Spans*	**9363186**
INNER TRUSS ROD SOCKET (30/box)	*for series 7000 Spans*	**9362582**

each socket installation requires the following:

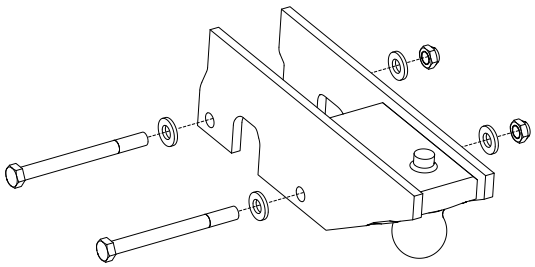
1/2" Lock Nut (3 ea.) 0133005
1/2" x 1-1/4" Cap Screw (3 ea.).....0161027
Tower Support Bracket - Left.....9362580 *
Tower Support Bracket - Right.....9362579 *
1/2" x 1-3/4" Cap Screw (3 ea.).....0161029 *

*** Required on End Truss near Drive Unit**



Description		*Part #*
KEEPER TAB	*for Series 6000 Spans*	**1701850**

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Description	*Part #*
RETROFIT FORGED HITCH BALL PACKAGE	**0000F71**

PACKAGE includes the following:

2) - 1/2" Lock Nut 0133005
4) - 1/2" Flat Washer 0142025
2) - 1/2" x 5-1/2" Cap Screw 0161018
1) - Retrofit Forged Hitch 9362529

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VALLEY CORNER EXTENDED CRADLE CONVERSION 7-1
VALLEY CORNER CHAIN DRIVE CONVERSION 7-2
CORNER DUAL DRIVE 7-3
BURIED WIRE CABLE 7-4
STEERING GEARBOX AND ARM 7-5
ANTENNAS, RECEIVER AND OSCILLATOR. 7-6
TUBING HARNESSES AND VALVES 7-7
CORNER TOWER BOXES. 7-8
CORNER CAM LINES & SENSOR CONTROL BOX SERVICE KIT. 7-9
RTK GPS RETROFIT PACKAGES . . . . . .7-10 - 7-11
SINGLE FREQUENCY RTK GPS GUIDANCE 7-12
TERRAIN COMPENSATION AND CORNER GEARBOX BREATHER VENT 7-13
CORNER SPAN STRUCTURE ONLY 7-14

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Description	*Part #*
EXTENDED CRADLE CONVERSION PACKAGE	**0000C26**



Pre-1996 Cradle



Extended Cradle

Extended Cradle Advantages

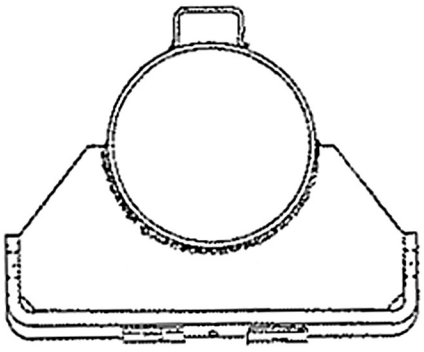
- **Longer Safety band = More reliable operation in deep ruts.**
- **Flex hose connection has less problems binding.**

Complete Package includes:

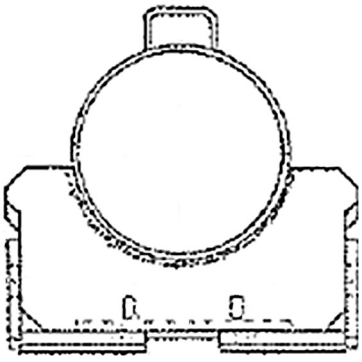
- **Extended cradle with rollers and hardware**
- **Extended Cradle Run Cycle Box**
- **Transition Ball mount stub**

Things to be aware of:

- **Interference may occur between Corner Swivel pipe and new Extended Cradle on machines prior to April 1979**
- **Pre-1980 Extended Cradle Roller Strap - 0000H10**



Pre-1979 Cradle



Post 1979 Cradle

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Chain Drive Steering



Steering Motor / Gearbox

Gearbox Conversion Advantages

- Significantly More reliable operation
- Complete conversion includes brackets, motor, gearbox, and all required hardware

Description	*Part #*
CHAIN TO GEARBOX RETROFIT WITH BASEBEAM	0000B93

Parts Included in 0000B93:

- Valley Corner Basebeam complete
- Steering Motor
- Flanged Steering gearbox w/ flanged steering arm
- Hardware to install

Description	*Part #*
CHAIN TO GEARBOX RETROFIT WITHOUT BASEBEAM	0000E27

Parts Included in 0000E27

- Steering Motor
- Flanged Steering gearbox w/ flanged steering arm
- Hardware to install
- Weld on mounting brackets for Motor and Gearbox mounts

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The Corner DualDrive™ option for the Valley Precision® and VFlex™ Corners provides additional flotation and traction for the corner steerable drive unit. This option is a great choice for machines operating in difficult field conditions.

- **Offers excellent traction and increased flotation**
- **Available with 11.2 x 38" tires ONLY**
- **Utilizes "ironman" gearbox which is similar to our heavy duty gearbox**





DUAL DRIVE PACKAGES		
Part #	**Corner**	**Tire**
0000J33	Precision	11.2-38 Tubeless ND
0000K15	Precision	11.2-38 Tubeless Tractor
0000K18	Precision	11.2-38 Tractor w/Tube
0000K01	Standard Speed VFlex	11.2-38 Tubeless ND
0000K16	Standard Speed VFlex	11.2-38 Tubeless Tractor
0000K19	Standard Speed VFlex	11.2-38 Tractor w/Tube
0000K10	High Speed VFlex	11.2-38 Tubeless ND
0000K17	High Speed VFlex	11.2-38 Tubeless Tractor
0000K20	High Speed VFlex	11.2-38 Tractor w/Tube

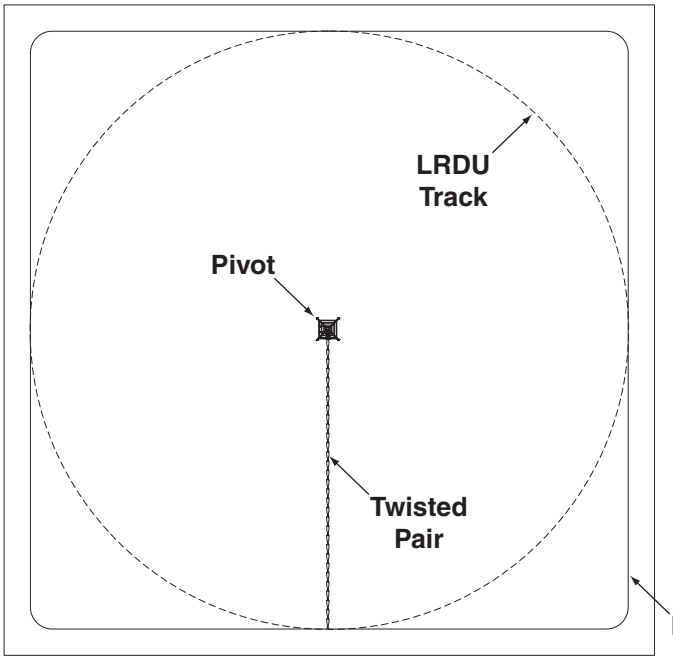
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Perimeter Wire



Twisted pair



Distance to LRDU	Twisted Pair			Perimeter Wire			
	Installed Length	Non-Shielded Part #	Shielded Part #	Installed Length	Spool Length	Non-Shielded Part #	Shielded Part #
0 - 1289	1330	0314734	0314965	9200	9200	0314730	0314964
1290 - 1539	1550	0314743	0314967	11000	11000	0314742	0314966
1540 - 1899	2000	0314785	0314969	13000	13000	0314786	0314968
1900 - 2660	1330	0314734 *	0314965 *	18400	9200	0314730 *	0314964 *
				Replacement Lengths	5000	03E2662	03E2661
					1150		0315513
					20	1811493	

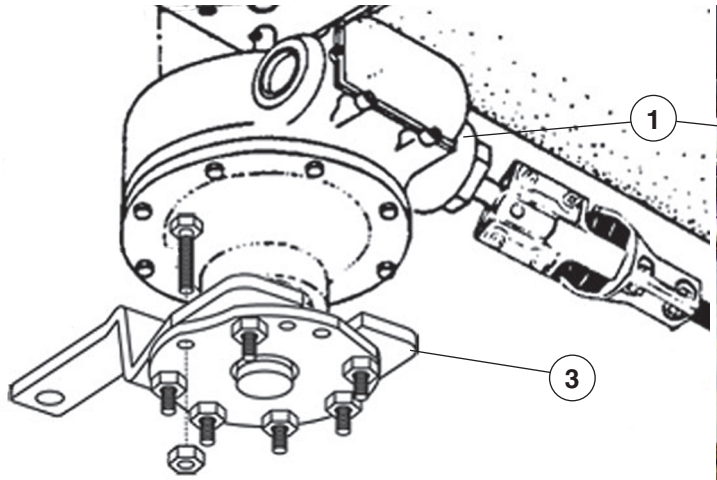
Heat Shrink Tubing (not shown) - 0991358

* Two spools required for proper length.

Lengths in feet unless otherwise specified.

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FLANGED STEERING GEARBOX
Effective Feb 2006



SHAFT STEERING GEARBOX
Prior to Feb 2006



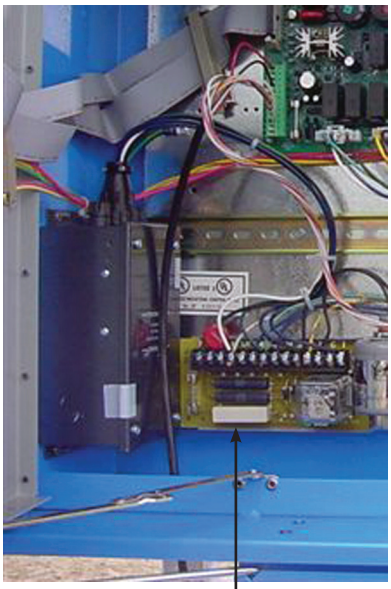
STEERING GEARBOX AND ARM FOR VALLEY CORNER		
Item #	**Description**	**Part #**
1	Shaft Style Steering Gearbox (While inventory lasts) *	1750853
	Shaft Style Steering Gearbox w/ Bronze Gear (While inventory lasts) *	1750941
	Flanged Style Steering Gearbox	1751037
	Flanged Style Steering Gearbox w/ Bronze Gear	1751036
2	Mechanical Corner Shaft Style Steering Arm	1750842
	Precision Corner Shaft Style Steering Arm	9360574
3	Mechanical Corner Flanged Style Steering Arm	1751039
	Precision Corner Flanged Style Steering Arm	1751040

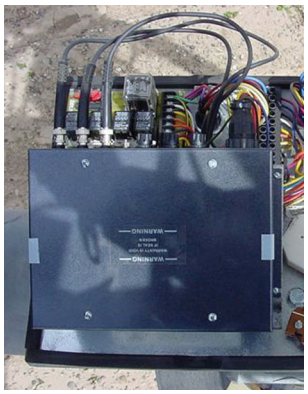
* Shaft style gearboxes are being discontinued

Note: When changing the steering gearbox you may be required to use the new style gearbox, this might also require using the new style steering arm.

Old Style Part #	New Flanged Style Part #
1750853	1 - 1751037
	1 - 1751039
1750941	1 - 1751036
	1 - 1751040

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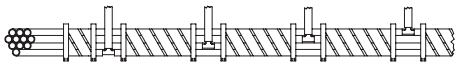
ANTENNAS, OSCILLATORS, AND RECEIVERS			
Frequency	Antenna Part #	Oscillator Part #	Receiver Part #
833 Hz	03E3835	03E2244	*03E1501
1000 Hz	03E3829	03E2245	*03E1501
1200 Hz	03E3830	03E2246	*03E1501

Description	Part #
Oscillator Lightning Protection Assembly Kit	KA01378
Dummy Load Adapter	0992549
Antenna Attenuator Resistor to Resource Signal (Phone Jack Style)(Pre-1984)	1811210
Antenna Attenuator Resistor (Serial Port Style) (1984 - Current)	1812223

NOTE: When changing frequency to avoid interference from power lines or other sources, both the antennas and oscillator need to be changed, the receiver is not frequency sensitive and therefore does not need to be replaced.

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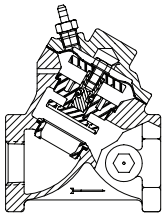
VALLEY CORNER SYSTEM TUBING HARNESSES			
Span Length	Sprinkler Spacing	Color Code	Part #
Prior To June, 1981			
185'	17' Variable Spacing	Blue/White	0270009
185'	8.5' Variable Spacing	Red/White	0270014
170'	17' Variable Spacing	Gold/White	0270015
170'	8.5' Variable Spacing	Green/White	0270016
Effective June, 1981			
185'	17' Uniform Spacing	Gold	0270026
185'	8.5' Uniform Spacing	Green	0270025
170'	17' Uniform Spacing	Blue	0270024
170'	8.5' Uniform Spacing	Red	0270023



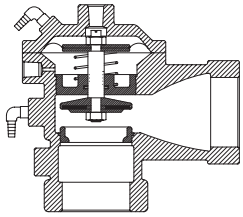
PRECISION CORNER SYSTEM TUBING HARNESSES		
Span Length	Color Code	Part #
205'	Yellow	0270034
185'	Purple	0270038
205' Corner Span (82' OH)	Yellow/White	0270035
185' Corner Span (82' OH)	Purple/White	0270039
SPAN AND OVERHANG HARNESS W/ WATER UTILIZATION		
205'	Brown	0270031
185'	Orange	0270036
205' Corner Span (82' OH)	Brown/White	0270032
185' Corner Span (82' OH)	Orange/White	0270037

VFLEX CORNER SYSTEM TUBING HARNESSES				
Span Length	Color Code	Span Harness Part #	Color Code	Overhang Harness Part #
185' (82' OH)	Blue / Green	0270061	Blue / Purple	0270062
205' (82' OH)	Gold / Green	0270063	Gold / Purple	0270064
205' (100' OH)	Brown / Orange	0270067	Brown / Red	0270068
218' (82' OH)	Blue/Orange	0270070	Blue / Red	0270069

SPRINKLER AND ENDGUN AQUAMATIC VALVES	
Description	Part #
3/4" Normally Open Sprinkler Valve w/ Drain	0232483
3/4" Normally Open Superior Valve w/ Drain	0232574
1" Normally Open Sprinkler Valve w/ Drain	0232186
2" Normally Closed Endgun Valve w/ Drain	0232480



Sprinkler
Normally Open
Aquamatic Valve w/ Drain



End Gun
Normally Closed
Aquamatic Valve w/ Drain

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1



2



3

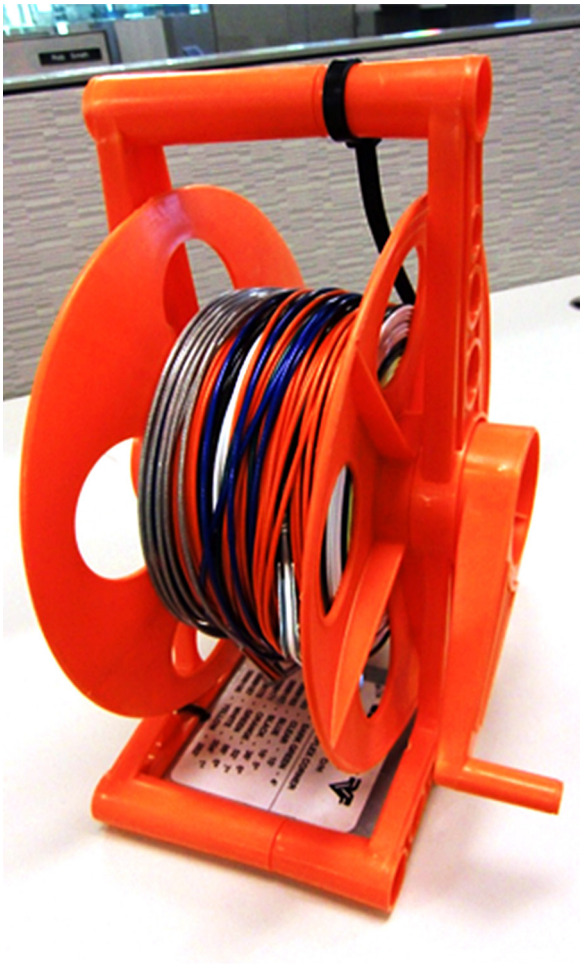
CORNER BOXES			
ITEM #	BOX NUMBER	DESCRIPTION	COVER NUMBER
1	1811226	Valley Corner 7 Solenoid Valve Box	1703791
	1811227	Valley Corner 9 Solenoid Valve Box	
	9310437	Precision Corner 13 Solenoid Valve Box	
	9310588	Precision Corner 11 Solenoid Valve Box	
2	1750685	Valley Corner Swing Tower Box	1750812
	9310435	Precision Corner Swing Tower Box	
	9310587	Precision Corner Swing Tower Box, 5 h.p. Booster Pump	
	9311131	Precision Corner Swing Tower Box, Track and Roller Conversion	
3	1810889	Valley Corner Run Cycle Box	1701418
	1812238	Valley Corner Sequencing 7 Solenoid Internal Chain	
	1812240	Valley Corner Sequencing 9 Solenoid Internal Chain	
	1812378	Valley Corner Run Cycle Box Extended Cradle	
	1814355	Valley Corner Sequencing 9 Solenoid Internal Chain-Conversion	

Note: None of these tower boxes come with the tower box cover when ordered new.

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CAM Lines are used to flag fields for buried guidance wire on Valley Mechanical, Precision and VFlex Corners. Each kit contains a cam line on an orange plastic reel with a decal indicating which corner it's used for and a laminated Quick Reference Guide to help for setup and use.

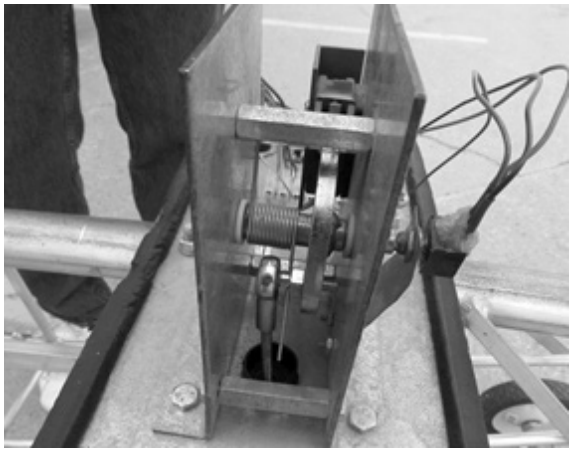
CAM Lines have been ordered through the Service Department for many years but are now available to order through V2O by using the part numbers below.



PART #	CAM LINE KIT FOR
KA01768	205'/82' VFlex and Precision Corner
KA01769	205'/100' VFlex Corner
KA01770	185'/82' VFlex and Precision Corner
KA01771	218'/82' VFlex International Corner
KA01772	185'/84' Valley Mechanical Corner

Maitenance Concerns & Recommendations

All Precision Corner machines should have span sensor boxes inspected and maintained during the off season. The ball joint shown below is subject to wear and corrision over time. Replacing the ball joint could prevent structural damage.





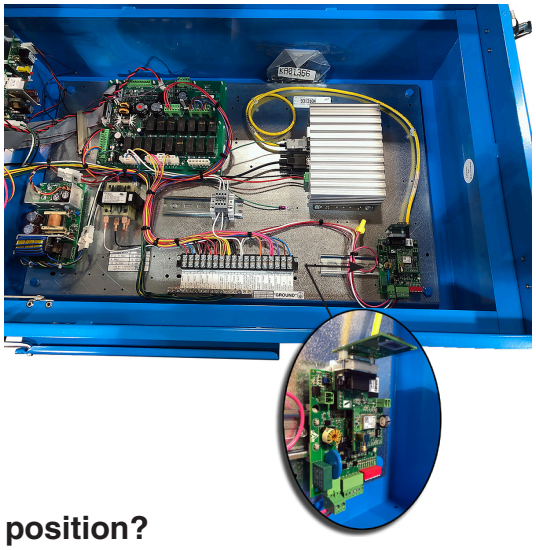
Ball Joint w/Oil Embedded Bronze Bearing
0980448

SENSOR CONTROL BOX SERVICE KIT		
PART #	**DESCRIPTION**	**COMMENTS**
KA02720	Precision Corner Span Sensor Control Box Service Kit	Reminder: Span Sensor calibration should be checked and calibrated as necessary during inspection.

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Key Features include:

* Valley-designed GPS guidance components
* Utilizes power line carrier (PLC) technology for correction communication eliminating the need for radios
* Terrain compensation built in as a standard feature
* Can also provide GPS position to GPS-Ready Valley Control Panels



Questions about using Valley RTK GPS and GPS position?

The Valley RTK GPS can communicate pivot position back to the Valley GPS Ready Control Panel. This includes the Valley ICON®, Select2, and Pro2 panels. If a GPS Ready Control Panel is not installed on the existing machine, it may be required to update the module or convert to an ICON series. For positioning ONLY.

What if the existing panel currently utilizes Valley GPS positioning?

The RTK GPS and Valley GPS position can both be installed on one machine. However, only one OPMC5 with filter will be required in the existing panel for communicating to both the RTK GPS and Valley GPS position and controls. If adding the Valley RTK GPS to an existing panel that already has Valley GPS installed, it may be best suited to remove the Valley GPS positioning from the existing machine. The Valley GPS could then be converted to another machine or bought back by the dealer to resell. If end pressure is being utilized then one must use the Valley GPS positioning with the RTK GPS guidance.

If installing RTK GPS to a Valley (T&R) Corner, one must know:

Due to the terrain compensation feature, the GPS guidance panel must be mounted on the corner span pipe above the SDU. Field modifications may be required.

Mapping and Setup Questions?

RTK equipment (Reference station and Rover) is required to map a field boundary and center point. The RTK GPS can use the existing guidance path. However, it is recommended that all corner wheel tracks be removed from the field prior to running the machine after any GPS guidance hardware conversion. If looking for the RTK GPS Setup Tool, this is located on V2O under the Service tab.

See next page for conversion and complete retrofit packages.

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BURIED WIRE TO VALLEY RTK GPS CONVERSION PACKAGES		
Part #	**Description**	**Application**
0000M24	Precision Corner RTK GPS Guidance Pro/Sel/Classic	Use with Precision Corner & Pro/Select/Classic Panel
0000M25	Precision Corner RTK GPS Guidance ICON	Use with Precision Corner & ICON Series Panel
0000M28	6" VFlex Corner RTK GPS Guidance Pro/Sel/Classic	Use with VFlex Corner 6" Pipe & Pro/Select/Classic Panel
0000M29	6" VFlex Corner RTK GPS Guidance ICON	Use with VFlexCorner 6" Pipe & ICON Series Panel
0000M26*	6 5/8" VFlex Corner RTK GPS Guidance Pro/Sel/Classic	Use with VFlex Corner 6 5/8" Pipe & Pro/Select/Classic Panel
0000M27*	6 5/8" VFlex Corner RTK GPS Guidance ICON	Use with VFlex Corner 6 5/8" Pipe & ICON Series Panel

NOTE: For competitive panels or older mechanical panels, please select RTK GPS Guidance for ClassicPlus Retro Corners.

* 6 5/8" pipe line is used with Export/International and Poly line Vflex Corners.

SINGLE FREQUENCY GPS TO VALLEY RTK GPS CONVERSION PACKAGES		
Part #	**Description**	**Application**
0000M15	SF Trimble To Valley GPS RTK ICON	Use with Precision & VFlex Corners & ICON Series Panel
0000M16	SFTrimble to Valley GPS RTK Select/Pro/Classic	Use with Precision & VFlex Corners & Pro/Select/Classic Panel

NOTE: For competitive panels or older mechanical panels, please select RTK GPS Guidance for ClassicPlus Retro Corners.

MULTI-FREQUENCY GPS TO VALLEY RTK GPS CONVERSION PACKAGES		
Part #	**Description**	**Application**
0000M12	Valley GPS RTK ICON	Use with Precision & VFlex Corners & ICON Series Panel
0000M13	Valley GPS RTK Pro/Select/Classic	Use with Precision & VFlex Corners & Pro/Select/Classic Panel

NOTE: For competitive panels or older mechanical panels, please select RTK GPS Guidance for ClassicPlus Retro Corners.

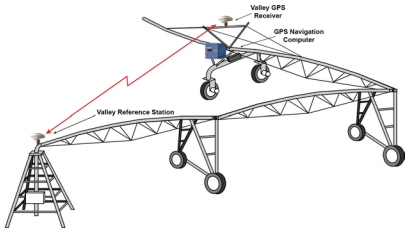
The RTK GPS requires a Valley-style collector ring for both mounting and wiring purposes. Therefore, a Valley collector ring is required for use on competitive machines.

VALLEY COLLECTOR RING OPTIONS		
Part #	**Description**	**Application**
0315165	Aeromotive 11 Conductor 30A Collector Ring	Choose one of the collector rings to go with a conversion packages above when installing RTK GPS on a competitive machine.
03E0471	Aeromotive 12 Conductor 30A Collector Ring	
03E2197	Insul 8 - 11 Conductor 30A Collector Ring	
03E2426	Insul 8 - 12 Conductor 30A Collector Ring	

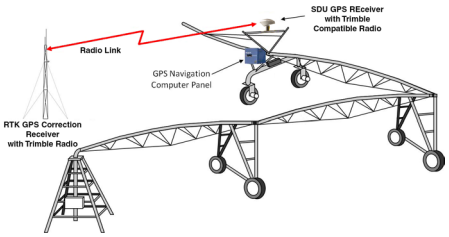
NOTE: See page 2-17 for additional hardware when installing a Valley collector ring onto a competitive machine.

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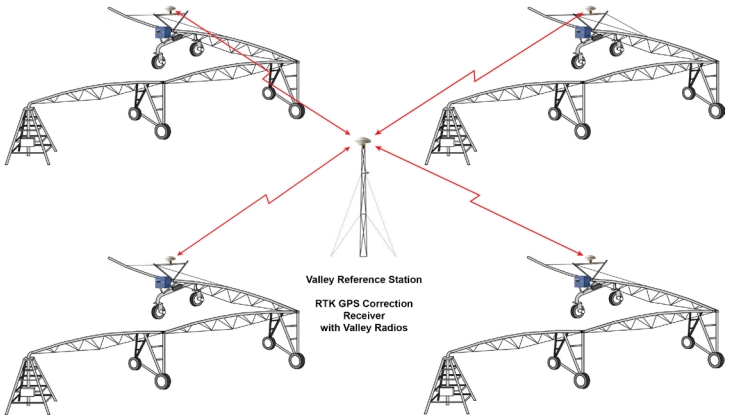
Configuration 1: Pivot Point Mounted Single Frequency Reference Station



Configuration 2: Single Frequency GPS RTK for Trimble Multi-Frequency Reference Station



Configuration 3: Single Frequency GPS RTK for Valley Trimble Single Frequency Reference Station Supporting one or more Pivots



RETROFIT PACKAGES		
Part #	**Description**	**Configuration**
0000J88	Single Frequency GPS RTK w/Pivot Reference Station for VFlex	1
0000J89	Single Frequency GPS RTK w/Pivot Reference Station for Precision	1
0000J90	Single Frequency GPS RTK w/Pivot Reference Station for Mechanical	1
0000J91	Single Frequency GPS RTK Trimble Multi-Frequency for VFlex	2
0000J92	Single Frequency GPS RTK Trimble Multi-Frequency for Precision	2
0000J93	Single Frequency GPS RTK Trimble Multi-Frequency for Mechanical	2
0000J94	Single Frequency GPS RTK Trimble Single Frequency for VFlex	3
0000J95	Single Frequency GPS RTK Trimble Single Frequency for Precision	3
0000J96	Single Frequency GPS RTK Trimble Single Frequency for Mechanical	3
0000J97	Single Frequency GPS RTK Reference Station Antenna	3

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Terrain Compensation module for GPS guided Precision® and VFlex™ Corners is designed to ensure a consistent wheel track on corners operating on rough terrain or on highly ridged row crops such as potatoes.

The Terrain Compensation module works by sensing the rocking movement of the Steerable Drive Unit as it moves through the field. Using this data, it calculates the difference between the GPS antenna's location on the overhang brace and the desired position of the center of the Steerable Drive Unit on the ground. This adjusted data is used by the guidance computer to steer the corner through the field.

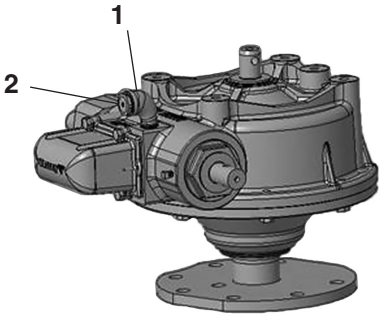




Description	*Part #*
TERRAIN COMPENSATION PACKAGE	**0000K29**

Corner Gearbox Vent Additional Information:
The breather assembly allows the gearbox to freely regulate the internal pressure within the gearbox. It does this without allowing the intrusion of water, dirt, or any foreign matter into the gearbox.

Corner Gearbox Breather Vent		
Part Number	**Item #**	**Description**
0241056	1	1/2 x 90 GV NPT
0980292	2	1/2 NPT Submersible Breather Vent
KA02671		Breather Vent Kit



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Storm damage or structure damage occur to a corner arm? The below packages allow one to order the necessary strucutral components to repair or fix most corner arms. The packages include pipe, trussing, truss rods and hardware that is typically required when a corner arm goes down.

VFLEX CORNER SPAN STRUCTURE ONLY		
Part #	**Description**	**Comments**
0000L40	PKG 205' Vflex Span Structure Corner	Includes everything except the SDU componets.
0000L41	PKG 82' Vflex Overhang Structure	Includes hardware, pipe, cables, brackets and gaskets.
0000L42	PKG 100' Vflex Overhang Structure	Includes hardware, pipe, cables, brackets and gaskets.

PRECISION CORNER SPAN STRUCTURE ONLY		
Part #	**Description**	**Comments**
0000G79	PKG 205' Precision Corner Span Structure	Includes everything except the SDU componets.
0000G80	PKG 82' Precision Overhang Structure	Includes hardware, pipe, cables, brackets and gaskets.

VALLEY CORNER SPAN STRUCTURE ONLY		
Part #	**Description**	**Comments**
0000G81	PKG 185' Valley Corner Span Structure	Includes everything except the SDU componets.
0000G82	PKG 84' Valley Overhang Structure	Includes hardware, pipe, cables, brackets and gaskets.

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ENDGUN / STOP-IN-SLOT CONTROL PACKAGES 8-1
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PUMP CONNECT VFD 8-23
BOOMBACKS 8-24

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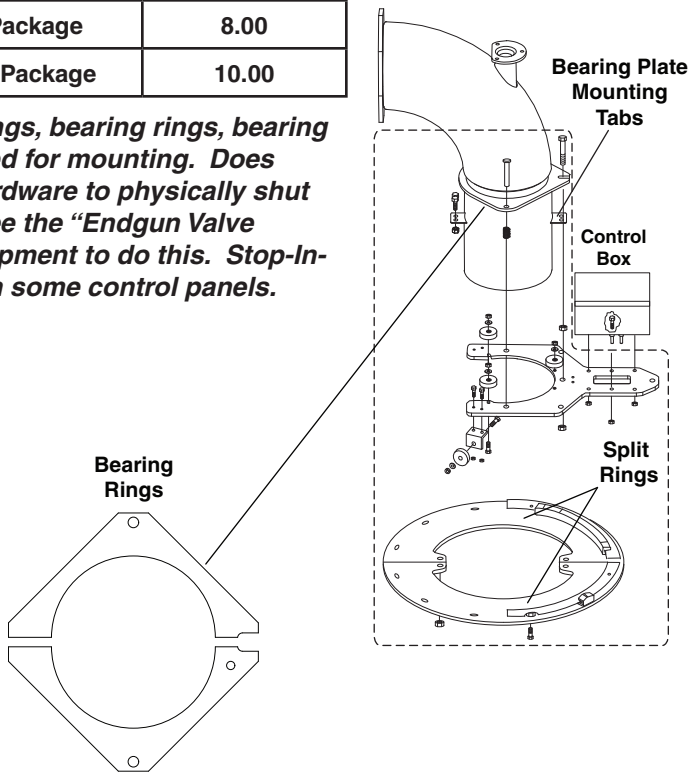
Valley Endgun and Stop-In-Slot Control
Updates for Valley and Competitive Brand Machines

- *Accurate, reliable controls for endgun and stopping control*
- *Manufactured and designed by Valley for long life*
- *Packages adaptable to many competitive brand machines*



ENDGUN / STOP-IN-SLOT PACKAGES		
Part #	**Description**	**For Swivel OD (in.)**
0000F16	**6 5/8" Endgun Shutoff / SIS Add-On or Upgrade Package**	**6.625**
0000A95	**8" Endgun Shutoff / SIS Add-On or Upgrade Package**	**8.00**
0000G55	**10" Endgun Shutoff / SIS Add-On or Upgrade Package**	**10.00**

Note: ***All packages include the control box, split rings, bearing rings, bearing plate mounting tabs and all hardware required for mounting. Does NOT include any valve, filter, plumbing or hardware to physically shut off the endgun at the end of the machine. See the "Endgun Valve Shutoff" options to order the necessary equipment to do this. Stop-In-Slot switch may be required to be installed in some control panels.***



Basic Requirements for Adding Endgun Shutoff / SIS to Competitive Machines

- *Stop-In-Slot requires an extra wire in the J-Pipe.*
- *Some competitive panels may not easily support the Stop-In-Slot feature. Installing a new Valley Control Panel will ensure that this feature will operate correctly.*
- *The End Gun Shut Off feature requires an extra wire in the span cable to control the solenoid at the end of the machine. A 10 wire machine will require an isolation relay.*
- *Contact the Valmont Service Department for questions concerning the installation and wiring of this feature on competitive machines.*

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Valley Pivot Mounted Auto-Reverse Control Packages
Updates for Valley and Competitive Brand Machines

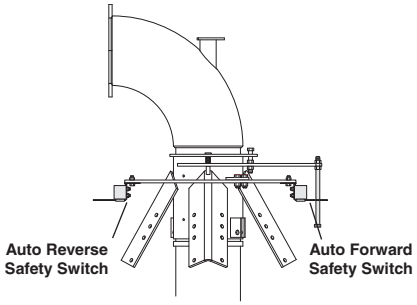
- *Forward and reverse switches mounted at the pivot point to change direction of the machine.*
- *Accuracy not as good as Drive Unit Mounted Auto-Reverse hardware*
- *Applicable if no physical objects are in the path of the machine (for open fields in split cropping applications).*
- *Packages adaptable to many competitive brand machines*

PIVOT MOUNTED AUTO-REVERSE CONTROLS ADD-ON PACKAGES

0000B34

for pivots that have EGSO / SIS installed

Includes switches & necessary electrical components to add-on to existing EGSO / SIS hardware (Split-Ring hardware not included)

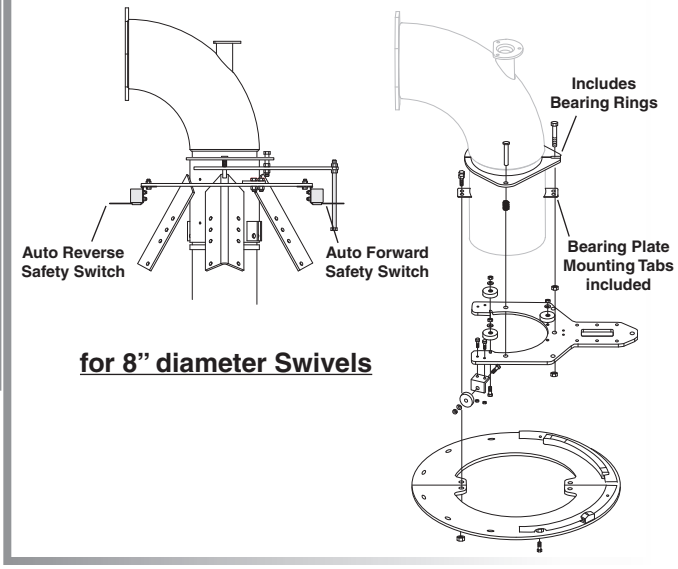


for 8" diameter Swivels

0000B26

for pivots that DO NOT have EGSO / SIS installed

Includes switches, necessary electrical components and Split-Ring hardware



for 8" diameter Swivels

NOTE 1: ***Packages for pivot mounted auto-reverse requires one of the following: 1) ICON Series 2) Pro panel 3) Select panel 3) Series 8000 Auto Reverse module in the mechanical panel box. If the mechanical panel is not equipped with the auto-reverse module, a new auto-reverse module (9312036) must be ordered also.***

NOTE 2: ***If these packages are being installed on a 6000 series, pre-6000 series or a competitive machine, you must order KA00811 if panel is not auto-reverse.***

NOTE 3: ***Not for use if the control panel is remote mounted from the pivot point.***

NOTE 4: ***Installation on the 6 5/8" pivot point use one of the above packages and add quantity 3 of the 1703957 roller.***

Basic Requirements for Adding Pivot-Mounted Auto Reverse to Competitive Machines

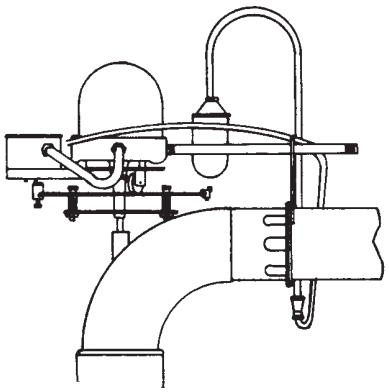
- *An induced voltage kit (part # KA00416) should be installed in the control panel to bleed off any induced voltage.*
- *Some competitive control panels will not support Valley's method of auto-reversing a machine. Verify if the control panel will support the addition of the auto-reverse feature. Upgrading to a Valley control panel equipped with auto-reverse will ensure proper operation of the auto-reverse feature.*
- *Contact the Valmont Service Department for questions concerning the installation and wiring of this feature on competitive machines.*

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Follow the installation instructions for both situations described below:

1) **On Valley machines prior to year 1987.** *If the endgun shutoff stop-in-slot looks like the following (illustration to the right), then updating to the new style hardware is an excellent upgrade. The controls will be more accurate and easier to install. It is important to note that installation of a replacement collector ring with the type of controls (illustration to the right), requires 3 holes to be drilled in the bottom base of the collector ring (another reason for upgrading the controls).*

2) **On competitive machines.** *Many competitive machines can be retrofitted with Valley Style controls. These installation instructions will assist in determining if the retrofit can be accomplished.*



Installing the Bearing Plates and Bearing Ring Mounting Tabs on Older Valleys or Competitive Machines

1. **Measure and place a mark 3-3/8" down from top of swivel bearing between the pivot leg mounting brackets on two opposing sides. See Figure 7.1.**

2. **Assemble two ring halves and two bearing plates around pivot swivel bearing with four 1/2"x 1-1/2" c a p screws and lock nuts. See figure 7.1.**

3. **Align top of each bearing plate with one of the marks on the side of swivel bearing. Grind Corners of bearing plates as needed to fit between pivot leg mounting brackets. Ring Halves and bearing plates should be 90° to swivel bearing in all directions. See figure 7.1.**

4. **Tack weld bearing plates in position on swivel bearing, then apply a 1/4" weld all the way around each bearing plate. See figure 7.1.**

5. **Position two bearing rings around the bottom edge of swivel elbow. See figure 7.2.**

6. **Tack weld bearing rings in position on the swivel elbow, then apply a 1/4" x 1" weld every 3" around the diameter of swivel elbow on top of bearing ring only. Make sure time slot is to back of swivel elbow. Bearing rings must rotate with swivel elbow. See figure 7.2.**

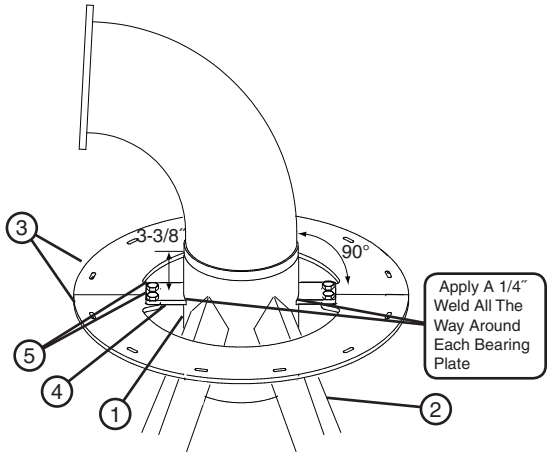


Figure 7.1

1. **Swivel Bearing**
2. **Pivot Leg mounting**
3. **Ring Half**
4. **Bearing Plate**
5. **1/2˝ x 1-1/2˝ Cap Screw and Lock Nut**

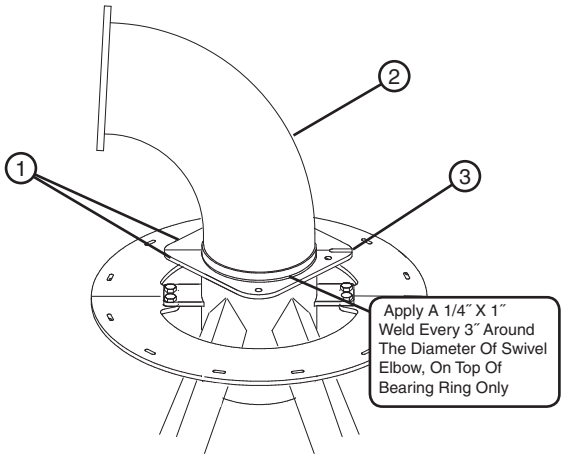


Figure 7.2

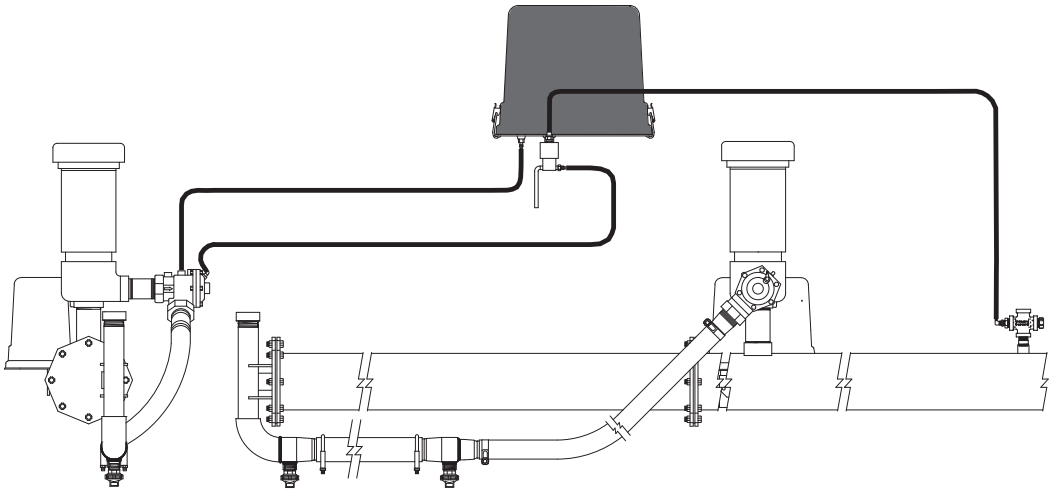
1. **Bearing Ring**
2. **Swivel Elbow**
3. **Time Slot**

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Valley Booster Pump Retrofits
Updates for Valley and Competitive Brand Machines

- *Berkley pump with Baldor motor*
- *Packages manufactured and designed by Valley for long life and durability*
- *Packages adaptable to most competitive brand machines (see Basic Requirements at the end of this section)*
- *See End Gun Shutoff Package page in Options section for alternative method using 2" Nelson or Komet end gun valves.*





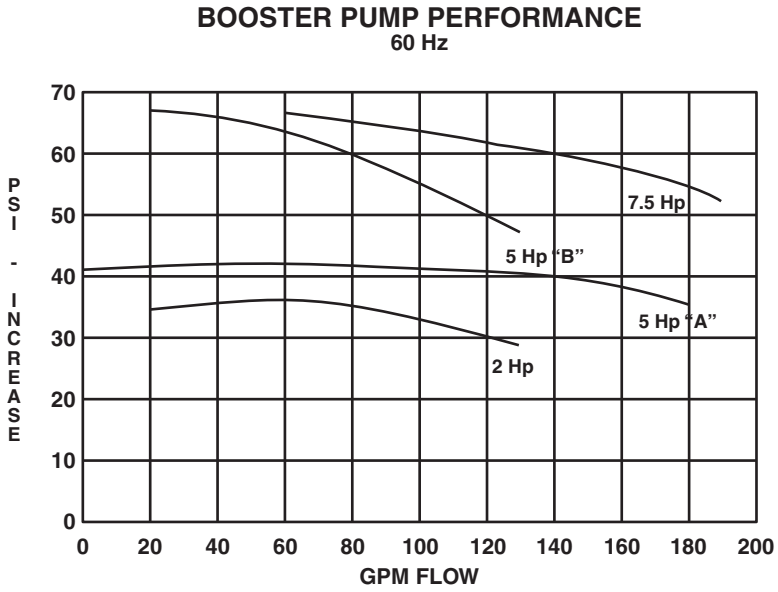
PIVOT & CORNER APPLICATIONS

Follow these steps to determine the requirements:

1) *Select appropriate retrofit package.*
2) *Determine if adapter spacer 1704065 is required and order if necessary.*
3) *Select appropriate poly hoses for the booster pump application (if for a pivot).*
4) *Select appropriate panel fusing.*
5) *Select appropriate fuses for booster pump and drive unit motor if using a 5 or 7.5 HP booster pump.*
6) *Select the appropriate drive unit fuse packages for all drive units other than the last one if using a 5 or 7.5 HP booster pump.*
7) *Select a phase loss contactor field install kit for the control panel if using a 5 or 7.5 HP booster pump.*
8) *If the booster pump retrofit is for a Valley Corner (not a Precision), then the corner arm fusing package must also be ordered.*

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1) Select the appropriate package



NOTE: 5 HP High Flow pump (0993417) included in 0000F78.
Low Flow (0992898) may be substituted on request.

BOOSTER PUMP RETROFIT PACKAGES FOR PIVOTS	
Part #	**Description**
0000F79	2 HP Retrofit Booster Pump Package For Pivots Without Hose
0000F78	5 HP Retrofit Booster Pump Package For Pivots Without Hose
0000F77	7.5 HP Retrofit Booster Pump Package For Pivots Without Hose
0000K60	2 HP Retrofit Booster Pump Package w/ 2" Komet End Gun Valve
0000K61	2 HP Retrofit Booster Pump Package w/ Nelson End Gun Valve
BOOSTER PUMP RETROFIT PACKAGES FOR CORNERS	
KA09150	2 HP Retrofit Booster Pump Package For Valley Corners - Includes Hose
KA09151	5 HP Retrofit Booster Pump Package For Valley Corners - Includes Hose
KA09152	7.5 HP Retrofit Booster Pump Package For Valley Corners - Includes Hose

NOTE 1: ***All packages include a booster pump electrical box (either a standard pivot booster pump box or a corner booster pump box), Aquamatic 90 degree endgun valve, 9360136 endgun plate, booster pump assembly, 1 hose splice with clamps, ¾" cross type filter, all necessary plumbing hardware, mounting hardware and installation instructions. Kits listed for corners also include the poly hose required but do not include the filter as filtering will be in the solenoid valve box.***

NOTE 2: ***The 5 and 7.5 HP packages include kit number KA00333 that includes 2 fuse blocks, wires and a diagram for fusing the booster pump motor and the drive unit motor. (Fuses are NOT included and must be ordered separately).***

FOR A PRECISION CORNER

- *The corner retrofit kits will work for a Precision Corner, but the following must also be ordered: 1 – 1811129 4 conductor cable and 2 – 0314119 0.5" cord connectors.*
- *Adding a 2 HP booster pump to a Precision Corner does not require any special fusing unless the amp draw exceeds 30 amps. STOP after proceeding through step 4 if ordering a 2 HP booster pump retrofit for a Precision Corner.*
- *If adding a 5 or 7.5 HP booster pump to a Precision Corner, or if adding a 2 HP booster pump to a Precision Corner causes the amp draw to exceed 30 amps, do not use any of the fusing requirements listed.* ***CONTACT THE VALMONT PARTS DEPARTMENT FOR SPECIAL DESIGN AND FUSING REQUIREMENTS FOR THESE CASES.***

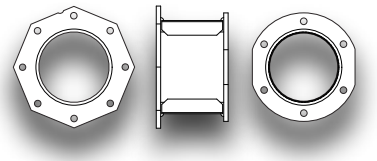
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2) Select Spacer if Needed

If you are adding a booster pump to a Valley machine with the 6 bolt round 6” flange on the last pipe of the overhang, the following spacer will be required:

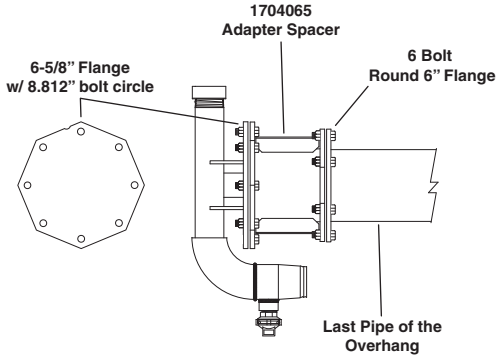
1704065

6-5/8” x 6”
round (6-bolt)
6.25” in length



BOLT CIRCLE
8.812”

BOLT CIRCLE
7.812”



3) Select Appropriate Poly Hose(s) for the Booster Pump Application if the booster pump is for a pivot

BOOSTER PUMP POLY HOSE SELECTIONS			
Overhang Length (ft)	Qty Required	Part #	Description
2.5	1	0995268	2.5” I.D X 8” length Poly Hose
9	1	0995665	2.5” I.D X 9’ length Poly Hose
18	1	0992894	2.5” I.D X 18’ length Poly Hose
27	1	0992895	2.5” I.D X 28’ length Poly Hose
36	1	0993260	2.5” I.D X 36’ length Poly Hose
45	1	0992894	2.5” I.D X 18’ length Poly Hose
	1	0992895	2.5” I.D X 28’ length Poly Hose
54	2	0992895	2.5” I.D X 28’ length Poly Hose
64	2	0993260	2.5” I.D X 36’ length Poly Hose
73	2	0993260	2.5” I.D X 36’ length Poly Hose
74	2	0993260	2.5” I.D X 36’ length Poly Hose
82	2	0992752	2.5” I.D X 42’-6” length Poly Hose
100	3	0993260	2.5” I.D X 36’ length Poly Hose

← **NOTE:** ***Poly hose is included in the corner booster pump kits so hose does not need to be ordered. Skip to step 4.***

4) Select Appropriate Panel Fuses

The addition of a booster pump may likely require larger control panel fuses. Consult with V-Tools, SOC and the Design Guide to determine the appropriate control panel fuse sizing and order them. (control panel fuses can be found in the Electrical section).

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IF A 2 HP BOOSTER PUMP RETROFIT PACKAGE WAS SELECTED PREVIOUSLY AND THE AMP DRAW IS LESS THAN 30 AMPS, STOP HERE. IF USING A 5 OR 7.5 HP BOOSTER PUMP OR A 2 HP WITH 30+ AMP DRAW, CONTINUE WITH STEP 5.

5) Select Appropriate Fuses for 5 or 7.5 HP Booster Pumps

Select the appropriate fuses from each table. Fusing is required for both the booster pump motor and the drive unit motor when 5 or 7.5 HP booster pumps are installed. The fuse blocks are included in the booster pump retrofit packages.

BOOSTER PUMP MOTOR FUSING			
Booster Pump Motor Size	Qty Required	Part #	Description
2 HP*	3	03E1620	8 Amp Class CC Fuse
5 HP	3	03E1740	15 Amp Class CC Fuse
7.5 HP	3	03E1726	20 Amp Class CC Fuse

* 2 HP Booster pump fusing only required if amp draw exceeds 30 amps. If this is the case, order 3 fuses in this table, appropriate drive unit fuses in the next table, and kit KA00333 that provides the fuse blocks.

LAST DRIVE UNIT MOTOR FUSING*			
Last Regular Drive Unit Motor	Qty Required	Part #	Description
34 RPM 0.6 HP Helical	3	03E1678	5 Amp Class CC Fuse
68 RPM 0.6 HP Helical	3	03E1678	5 Amp Class CC Fuse
30 RPM 1 HP Worm	3	03E1678	5 Amp Class CC Fuse
56 RPM 1.5 HP Worm	3	03E1678	5 Amp Class CC Fuse

* If ordering a booster pump for a corner machine, the fusing for the last regular drive unit will be included in the corner arm fusing package. Do not order them here.

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6) Select the appropriate drive unit fuse packages if using 5 or 7.5 HP booster pump

In step 5, you already selected appropriate fusing for the last drive unit if the booster pump is for a pivot. You now need to select the appropriate drive unit fuse packages for the remaining drive units for a pivot or a corner. Select one per drive unit or quantity of (Total # of pivot drive units – 1).

DRIVE UNIT MOTOR FUSING PACKAGES		
Last Regular Drive Unit Motor	**Part #**	**Description**
34 RPM 0.6 HP Helical	KA01196	2.5 Amp Drive Unit Fuse Kit
68 RPM 1.2 HP Helical	KA00763	4 Amp Drive Unit Fuse Kit
30 RPM 1 HP Worm	KA01196	2.5 Amp Drive Unit Fuse Kit
56 RPM 1.5 HP Worm	KA00763	4 Amp Drive Unit Fuse Kit

Note: Each fuse package includes fuse block, mounting bracket, 3 fuses, wires and wiring diagram. (uses the larger 5" long fuses)

7) Select a phase loss contactor field install kit for the control panel if using a 5 or 7.5 HP booster pump or if using a 2 HP Booster Pump with an amp draw exceeding 30 amps

Part #	Description
931K043	Phase Loss Contactor Option (field install in control panel)

8) If this is Valley Mechanical Corner (not a Precision Corner), then choose the appropriate Corner Arm Fusing

If a 5 or 7.5 HP (or a 2 HP with amp draw exceeding 30 amps) is added to a Valley Mechanical Corner, then a corner arm fusing package is required to fuse the last regular drive unit, the 2 steerable drive unit motors and the 1 steering motor. Select the appropriate package from the table.

VALLEY MECHANICAL CORNER ARM FUSING			
Corner Speed	**Qty Required**	**Part #**	**Description**
HIGH SPEED	1	KA01198	High Speed Valley Mechanical Corner Arm Fusing Kit
STANDARD SPEED	1	KA01197	Standard Speed Valley Mechanical Corner Arm Fusing Kit

NOTE: Fusing kits listed in this table are not valid for Precision Corners.

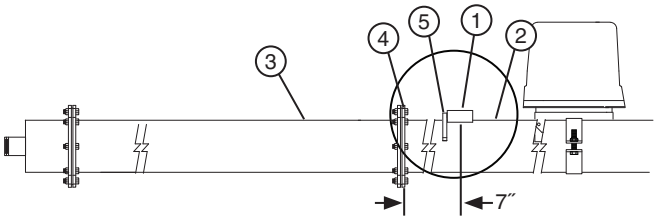
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Other Design Considerations

- *When adding a booster pump to any machine, use V-Tools to ensure an acceptable voltage drop and amp draw. In some cases, a booster transformer or larger span cable may be required.*
- *The addition of a booster pump may require a larger size generator or rotophase if these are being utilized to power the machine. Consult V-Tools to ensure appropriate sizing of these items.*
- *If adding a booster pump causes the amp draw to exceed 30 amps, the control panel must be modified / upgraded to 45 amp capacity. Contact the parts department if this is required (it may be much easier and cost effective to order a new "45 Amp" control panel).*

Basic Requirements for Adding Booster Pumps to Competitive Machines

- *Contact the Valmont Service Department for questions concerning the installation and wiring of this feature on competitive machines.*
- *A 2 ½" coupler is required at the last span to mount the booster pump assembly. If the last span is not equipped with a 2 ½" coupler, one will need to be installed as displayed.*

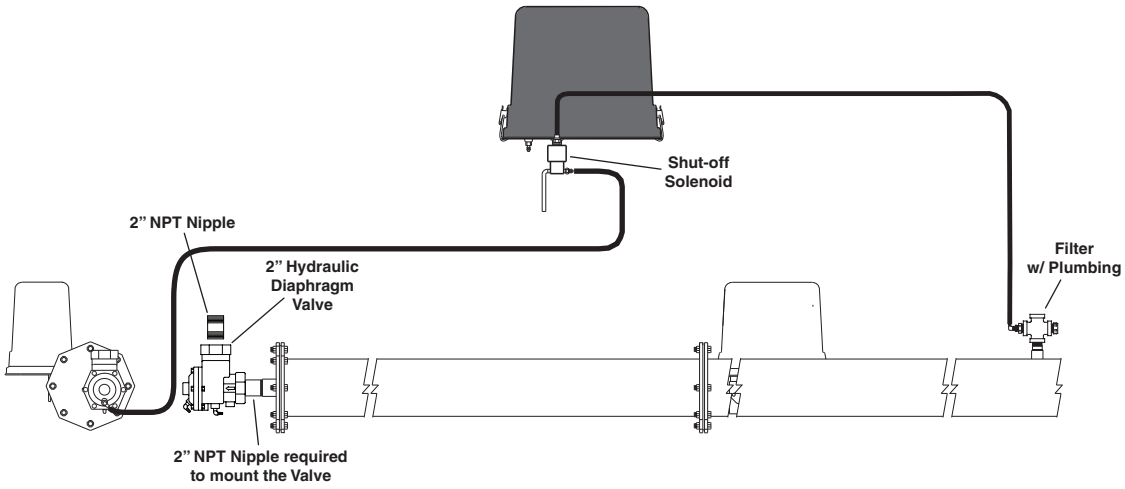


1. 2-1/2″ Coupling (part # 1702451)
2. Last Span Pipe
3. Overhang Pipe
4. Flange
5. Half Saddle Truss (part # 1780851)

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Are you adding an endgun without a booster pump and need to control the endgun?

If you are, then you need to order the following in this table:

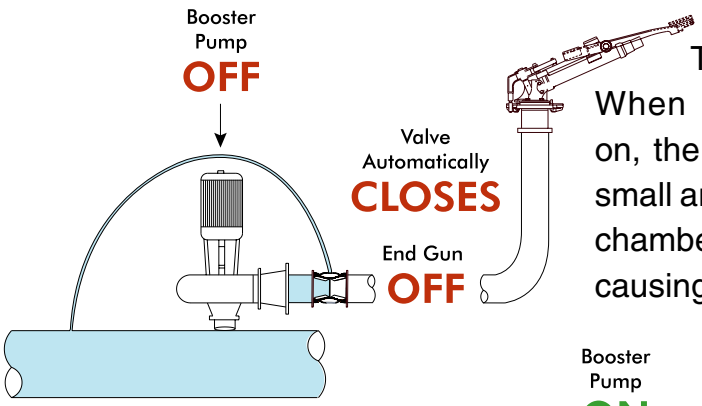


ENDGUN SHUTOFF WITHOUT A BOOSTER PUMP			
Qty Required	**Part #**	**Description**	**Comments**
1	KA00023	Endgun Shut-Off Kit without Valve	Includes solenoid valve, tubing/fittings, cross filter and plumbing.
1	0232480	2" Right Angle Aquamatic Endgun Valve	Valve only
1	0211047	2" NPT X 4 1/2" long galvanized nipple	For mounting the endgun to the valve. Assumes endplate has a 2" NPT nipple.

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Alternative method to controlling the endgun only for machines that utilize a booster pump.

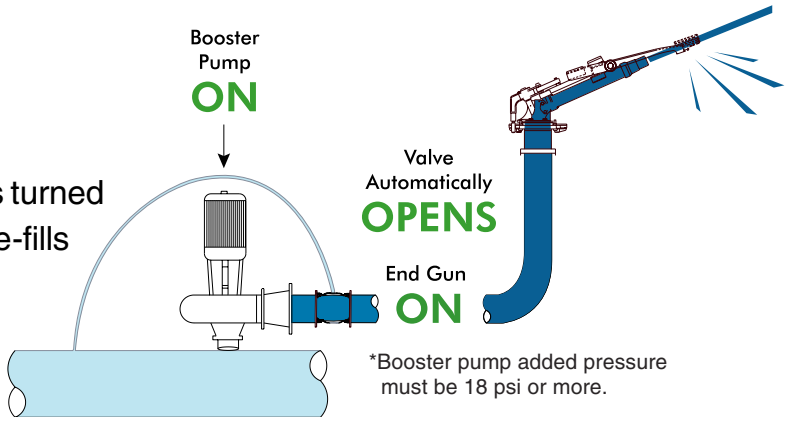
Valmont Part #	Description
KA09520	2” Nelson Endgun Retrofit Kit
KA09914	2” Komet Endgun Retrofit Kit



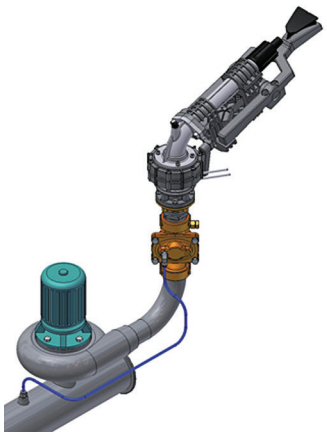
PRINCIPLE OF OPERATION.

The valve is normally closed. When the booster pump is turned on, the added pressure* forces the small amount of water in the valve’s chamber back into the system, causing the valve to open.

When the booster pump is turned off, the system pressure re-fills the valve’s chamber and closes the valve.



*Booster pump added pressure must be 18 psi or more.



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Valley Drive Unit Mounted End of Field Auto-Reverse / Stop Packages

Retrofits for Valley and Competitive Brand Machines

- *Accurate, reliable controls for auto-reverse and stopping.*
- *Machine stops or reverses at the location the arm is tripped on the drive unit for accurate control.*
- *Designed by Valley for durability and reliability*
- *Packages adaptable to many competitive brand machines*



Drive Unit Mounted Auto-Reverse / Auto Stop

DRIVE UNIT MOUNTED END OF FIELD STOP ONLY PACKAGE		
Part #	**Description**	**Comments**
0000C13	End-of-Field Stop ONLY Package for Series 8000, 6000 or Pre-6000 and Competitive Machines	Includes: Arm hardware, auto stop switch box, tower junction box, all necessary hardware and installation instructions.

DRIVE UNIT MOUNTED END OF FIELD STOP AND AUTO-REVERSE PACKAGES		
Part #	**Description**	**Comments**
0000C14	End-of-Field Stop / Auto-Reverse Package for Series 8000 Machines	Includes: Arm hardware, auto stop/ reverse switch box, tower junction box, all necessary hardware and installation instructions. (see Note 1)
0000A75	End-of-Field Stop / Auto-Reverse Package for Series 6000 , Pre-6000 and Competitive Machines	Includes: Arm hardware, auto stop/ reverse switch box, tower junction box, KA00811 auto reverse electrical component kit for panel installation, all necessary hardware and installation instructions. (see Note 2)

Physical Barricades or Goal Posts not included with any of the Drive Unit Mounted Packages listed in the previous 2 Tables

NOTE 1: ***Package 0000C14 requires one of the following: 1) ICON Series 2) Pro panel 3) Select panel 3) Series 8000 Auto Reverse module in the mechanical panel box. If the mechanical panel is not equipped with the auto-reverse module, a new auto-reverse module (9312036 & 932K433) must be ordered also.***

NOTE 2: ***Package 0000A75 includes kit KA00811. This provides all the necessary electrical components and wiring to install the kit in the control panel. This kit allows the panel to auto-reverse for series 6000 and pre-6000 control panels.***

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Installation on Competitive Machines

Many competitive machines can be retrofitted with the Valley Style Drive Unit Mounted End of Field Stop / Auto-Reverse controls. These installation instructions will assist in the physical mounting of the hardware.

1. Attach each beam mount loosely to the mounting beam with one 3/8″ x 2″ U-bolt, two flat washers, lock washers and nuts. See figure 7.3.
2. Center the mounting beam across end of drive unit approximately 62″ to 73″ above the center of gearbox output shaft, align the pivoting arms with the centerline of tires. Clamp the beam mounts in position on the outside of the drive unit legs. See figure 7.3.
3. Drill mounting holes through beam mount and each drive unit leg as required and secure each beam mount with two 5/8″ x 1-1/4″ cap screws flat washers and lock nuts. See figure 7.3.
4. Tighten all beam mount, mounting hardware.
5. Attach junction box next to last tower box on control box clamp with the two existing 5/16″ x 1-1/4″ cap screws, flat washers, lock washers and nuts. See figure 7.3.
6. Use the appropriate field install drawing to wire the box:
   - End of field stop drawing pn. 1812364.
   - Auto reverse auto stop drawing pn. 1812361.
7. Adjust cam and microswitch as required.

1. Beam Mount
2. Mounting Beam
3. 3/8″ x 2″ U-bolts, Flat Washer Lock Washer and Nut
4. Tire
5. Pivoting Arm
6. Drive Unit Leg
7. 5/8″ x 1-1/4″ Cap Screw, Flat Washer and Lock Nut
8. Junction Box
9. Last Tower box
10. Control Box Clamp
11. 5/16″ x 3/4″ Cap Screw, Flat Washer, Lock Washer and Nut
12. Center of Gearbox Output Shaft

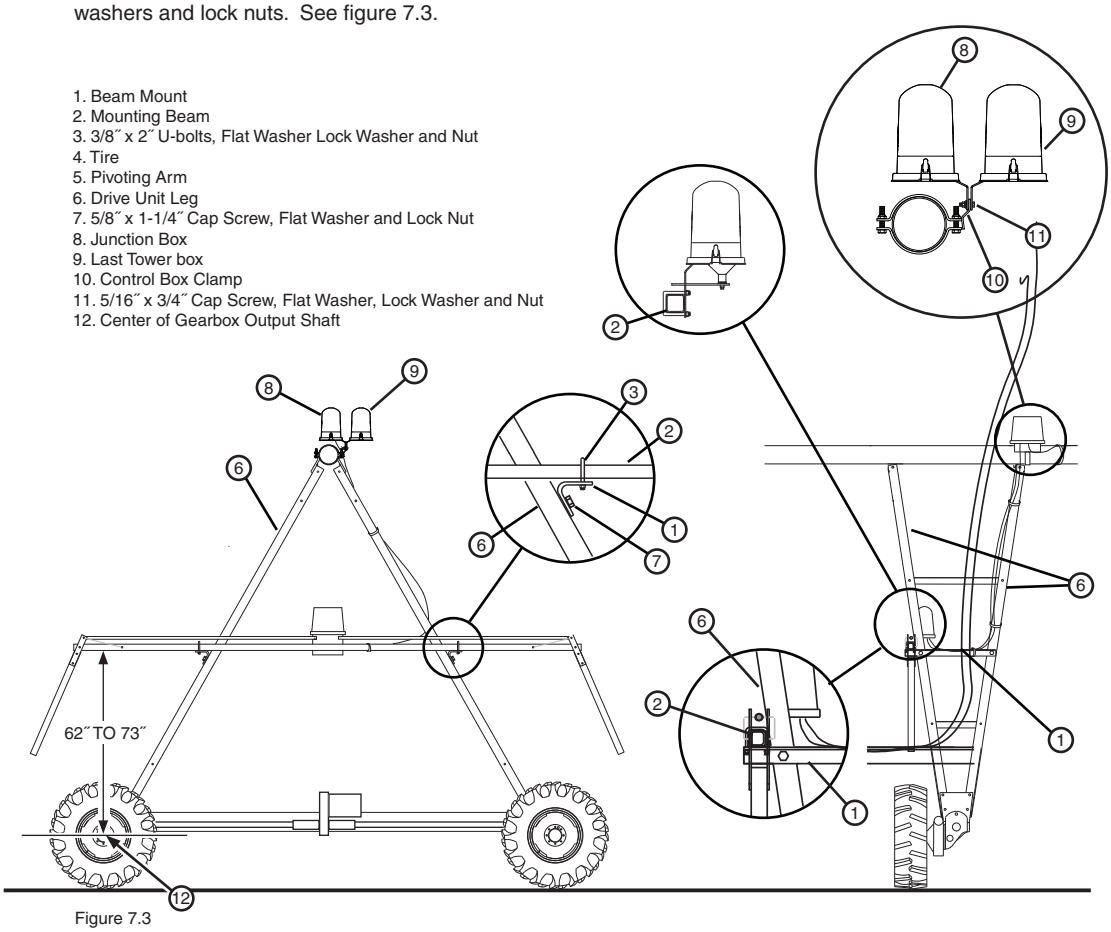


Figure 7.3

Basic Requirements for Adding Drive Unit Mounted End of Field Stop / Auto-Reverse to Competitive Machines

- *Hardware mounted at the drive unit must not be mounted more than 1500' from the control panel.*
- *An induced voltage kit (part # KA00416) must be installed in the control panel to bleed off any induced voltage.*
- *Must have a wire dedicated to safety out. 10 Wire machine will not work.*
- *Some competitive control panels will not support Valley's method of auto-reversing a machine. Verify if the control panel will support the addition of the auto-reverse feature. Upgrading to a Valley control panel equipped with auto-reverse will ensure proper operation of the auto-reverse feature.*
- *Contact the Valmont Service Department for questions concerning the installation and wiring of this feature on competitive machines.*

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Valley POST STYLE End of Field Stop Barricade

Retrofits for Valley and Competitive Brand Machines

- *Heavy duty design and construction providing the best value in physical barricades.*
- *Does not move, stopping the machine each and every time.*
- *Serves as both a physical barricade in case of switch failure and also to trip the vertical arm.*
- *Can be used for competitive machines. Must check for correct height settings.*
- *Required for all part circle machines with physical obstacles in the path of the machine.*



Actuator Bar must be adjusted for proper contact with the Valley vertical arm or competitive arm.

Height must be adjusted properly for tire size. If not adjusted, barricade may not stop the drive unit.

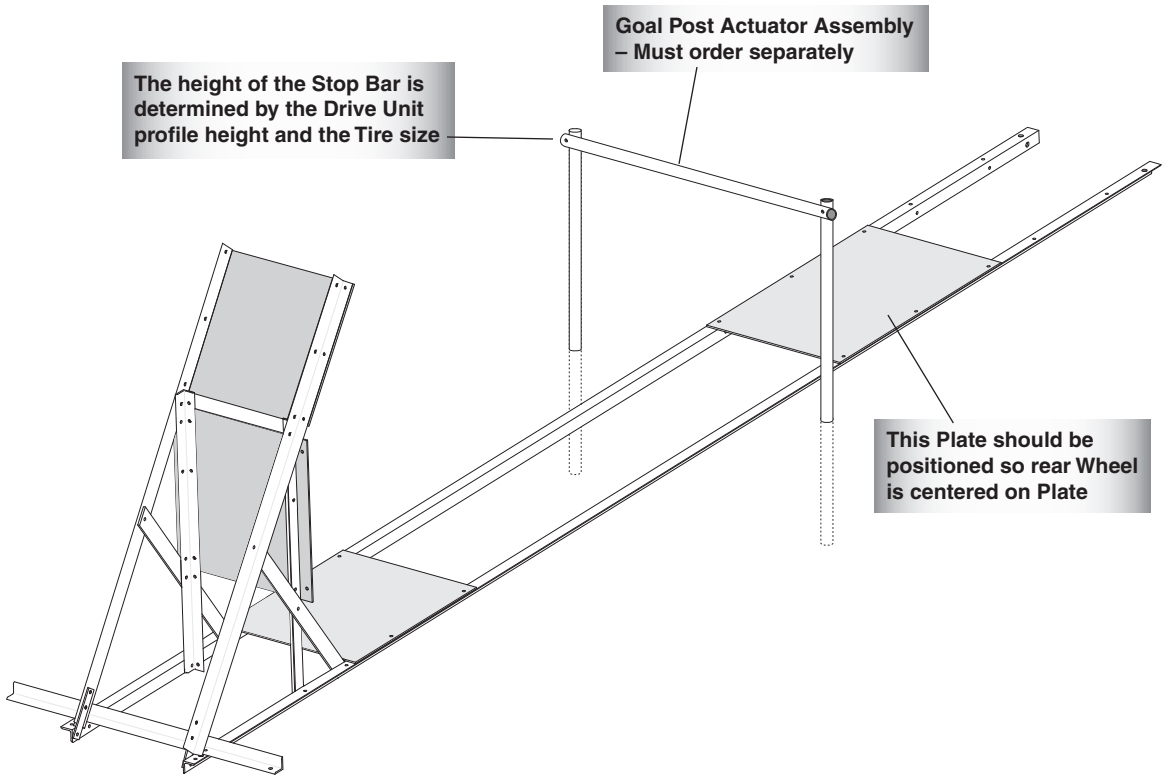
POST STYLE BARRICADES		
Part #	**Description**	**Comments**
0000E02	**Post Style Barricade**	**One barricade only included in the 0000E02 package.**

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Valley SKID STYLE End of Field Stop Barricade and Goal Posts

Retrofits for Valley and Competitive Brand Machines

- *Heavy duty design and construction*
- *Portable design. Can be moved for field operations.*
- *Serves as a physical barricade only. A goal post MUST be used to actuate the vertical trip arm.*
- *Can be used for competitive machines. Must check for correct rear plate location settings.*
- *Required for all part circle machines with physical obstacles in the path of the machine.*

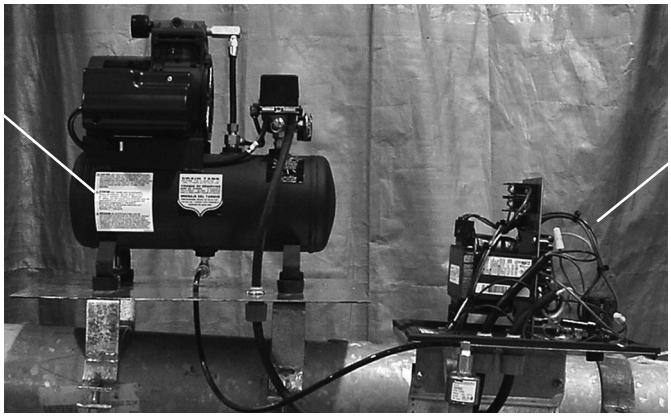


SKID STYLE BARRICADE and GOAL POSTS		
Part #	**Description**	**Comments**
0000A99	**Skid Style Barricade Package**	**One barricade only included in the 0000A99 package.**
0000A76	**Goal Post Package (includes 2)**	**Includes 2 complete goal posts ready for installation.**

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- *An alternative method to controlling sprinklers and end guns in dirty water applications where water hydraulic pilot line filters plug easily.*
- *Utilizes compressed air to control the valves.*
- *Industrial grade ½ HP, 120 volt, two gallon air compressor with low amp draw of 3.9 amps.*
- *A ventilated steel cover protects the air compressor motor.*
- *Package includes an adjustable pressure regulator, transformer tower box w/fusing, and all hardware necessary to install on 6 5/8" or 6" pipelines.*
- *Transformer tower box assembly includes a solenoid plumbed to the air tank. When power is lost, the solenoid will open and drain moisture in the tank.*
- *Can be used on competitive machines.*

½ HP – 120 volt AC, 2 gallon air compressor

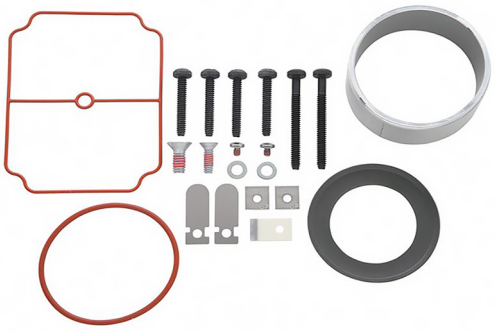


Transformer Tower Box Assembly

AIR COMPRESSOR SPRINKLER / END GUN CONTROL PACKAGES	
Part #	**Description**
0000F49	**Air Compressor Sprinkler / End Gun Control Package FOR 6 5/8" PIPELINES**
0000F50	**Air Compressor Sprinkler / End Gun Control Package FOR 6" PIPELINES**

Description **GRAINGER AIR COMPRESSOR REBUILD KIT** *Part #* **0999501**

Kit Includes:
- **Cylinder Sleeve**
- **Piston Cup & Retainer**
- **O-Rings**
- **Valve Flappers**
- **Screws**





Description **Oetiker Crimp Clamp Tube Harness** *Part #* **0271115**

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Valley offers two products to allow dealers and growers even more options for maximizing irrigated acres in fields with odd shapes or obstructions.

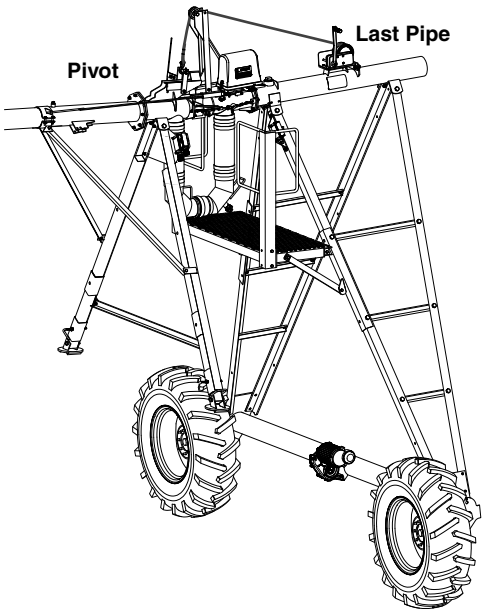
Offers several innovative features:

- *Valley exclusive integrated Speed Up timer improves water application while the machine is bending.*
- *Bender160™ offers an innovative belt driven alignment system monitors machine position while bending for control of end guns.*
- *The Bender30™ requires no structural changes, so it can easily be retro fit to existing part circle machines to add irrigated acres.*
- *Multiple bends are allowed per machine. The design can include Bender30 and Bender160 options on the same machine.*
- *Both options offer can utilize water shut off solenoid and shut off valves (sold separately) allows shutting off water to stopped spans while bending.*
- *Available for both 7000 and 8000 series machines. Not available on 5000 series machines.*
- *KA09987 - Solenoid Valve Kit to shut off outlets on stationary spans.*



BENDER PACKAGES		
Part #	**Description**	**Comments**
0000H48	Bender30 Retro Fit Package	Includes: Bender30 Tower Box, ARAS Control Arms, 1 Set Post Styl Barricade, and all necessary components for Bender30 Retro Fit.
0000H76	Bender160 6 5/8" 108" Spaced Retro Fit Package	Includes: Bender160 Belt Driven Alignment System, Fixed Pipe, Bender 160 Inlet, ARAS Control Arms, 1 Set Post Styl Barricade, and all necessary components for Bender160 Retro Fit.
0000H77	Bender160 6 5/8" 30" Spaced Retro Fit Package	Includes: Bender160 Belt Driven Alignment System, Fixed Pipe, Bender 160 Inlet, ARAS Control Arms, 1 Set Post Styl Barricade, and all necessary components for Bender160 Retro Fit.
0000J28	Bender160 Weld-On Retro Conversion Parts Pkg.	Includes: Bender 160 Tower Box, ARAS Control Arms, 1 Set Post Style Barricade, all necessary Components Bender 160 Retro Fit.
0000J11	Bender160 Weld-On Pipe Conversion Pkg. - 6-5/8”	Includes: Pipe Flanges, Gussets, Brackets. (may require extra bracing on Drive Unit) Used on Pre-8000 Models & Competitive Machines.
0000J98	Standard Bender Anchor	Required on all machines exceeding 1000ft. beyond Bender Drive Unit.
0000J99	Bender Anchor Hook	Recommended on machines exceeding 1500ft. beyond Bender Drive Unit.
0000K12	Bender End-of-Field Stop	See Illustrated Parts Manual for breakdown.
KA01435	Bender 160 Mounting Kit	See Illustrated Parts Manual for breakdown.
KA02493	Splice Belt Clamp Kit	See Illustrated Parts Manual for breakdown.

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DROP SPAN™ PACKAGES		
Part #	**Description**	**Comments**
0000J27	**Drop Span Field Install - 30" Spacing w/ Hardware Package**	**Includes: Last Pipe Assm. (9360024), Pivot Pipe Assm. (9361457) & 6-5/8" Drop Span Add-On Conversion Package (0000J23).**
0000J26	**Drop Span Field Install - 108" Spacing w/ Hardware Package**	**Includes: Last Pipe Assm. (9360016), Pivot Pipe Assm. (9361459) & 6-5/8" Drop Span Add-On Conversion Package (0000J23).**
Also need to order the following: End-of-Field Stop / Auto-Reverse Package (0000C14) as well as the Post Style Barricate (0000E02).		

Keep in mind the following limitations when ordering a Drop Span:

- *Multiple drop spans are allowed on a machine.*
- *Drop Span can be used with Corner machines and machines with Benders.*
- *Only available for 6 5/8" galvanized pipe.*

Optional Features:

- *An End Gun at the Drop Span Drive Unit can be added to these packages.*
- *Retro Packages – Manual End Gun Valve (0000J25) & Komet End Gun Valve (0000J24).*

NOTES:

- *No Booster Pump available with this optional End Gun.*
- *The optional End Gun Valves **DOES NOT** include the End Gun.*
- *Can be added to PolySpans, but Stub pipe is NOT Poly, only Galvanized.*

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SPAN CABLE ARMOR

Key Features Include:

- *12-Gauge steel flashing (10' in length) which is clamped to the pipe using heavy duty band clamps and a 5/8" bolt.*
- *A formed bracket is used to protect the cable in flanged area. Which is installed offset to one side.*

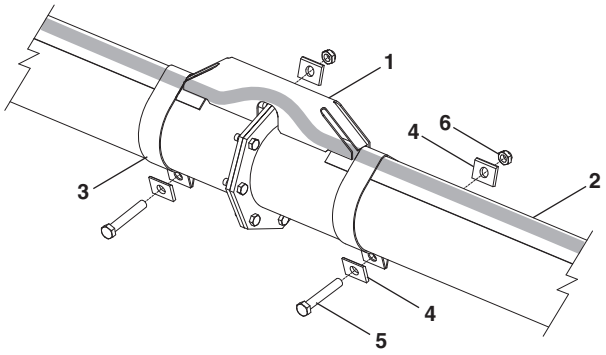


MOTOR LEAD ARMOR

Key Features Include:

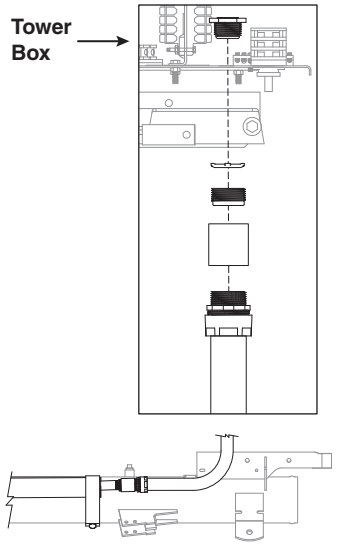
- *The Motor Lead Armor consists of a steel shield bolts to the inside of the drive unit leg with four ½" bolts and a piece of flashing along the base beam clamped down with the heavy duty steel band clamps.*
- *This kit is also an ideal solution for machines where the motor lead could be damaged by livestock.*

For complete information regarding the proper sizing and application of the Cable Armor, please call the Aftermarket Parts Department. If you are needing a complete breakdown of the parts included you can refer to our the Aftermarket Parts Department or our Vmanual pages located in the 8000/8120 section under Options/Miscellaneous. Pages are labeled as Cable Theft Deterrent.



1	Flange Cover Assm.	9364064
2	Flashing - 28.00" Long	9364106
	- 45.00" Long	9363522
	- 120.00" Long	9363526
3	Clamp - 5"	9363674
	- 6"	9364095
	- 6-5/8"	9364062
	- 8-5/8"	9364082
	- 10"	9364083
4	Heavy Washer	9364061 *
5	5/8" x 4" Cap Screw - All Thread	0161434 *
6	5/8" Lock Nut	0133010 *

* Cable Theft Deterrent Clamp Kit KA01517
(2 ea. Heavy Washer 9364061)



SPAN CABLE ARMOR & CABLE THEFT DETERRENT PACKAGES	
Part #	**Description**
0000G24	Cable Armor Conduit to Tower Box
0000G25	Cable Armor Conduit to Collector Ring
0000J17	Cable Guard Panel to J-Tube
0000J16	Motor Lead Cable Guard
0000J21	Conduit Last Tower Box to Auto Start Box/ Auto Start to Booster Tower box

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Valley® X-Tec® Center Drive *combines advanced DC motor with a patented new alignment system to deliver the ultimate combination of speed and power. The new center drive can operate at up to 136 RPM with full torque at any speed. This enables the pivot to complete a full circle in approximately four hours, depending on individual field conditions.*



Things to know when designing a X-Tec machine or retrofit:

1. All design considerations (slope, tires, soil type) are all the same as for standard high speed AC center drive motors.
2. Currently X-Tec is limited to system length up to 2,000'
3. X-Tec Motors are 2.5HP and draw 3.66 Amps
4. Larger Span Cable may be a result as well as:
   a. Increased Panel Fusing
   b. Increase Panel Disconnect Size
   c. Heavy Duty Collector Ring
   NOTE: Choose the next length up when selecting a new span cable.
5. Available only on 8000 and 7000 Series Pivots
6. ICON Series or Pro2+ Panel Required
7. Check power frequency (60 Hz for Domestic, 50 Hz for International)
8. For retrofits it is recommended to be checked in SOC by running a new machine design similar to existing machine.

SERVICE/INSTALLATION TOOLS REQUIRED		
Part #	**Description**	**Comments**
03E3890	ELC MS USB TO CAN CONVERTER	Only one required
03E4242	ELC MS DB9F TO 3 POLETERM PLUG CAN CABLE	One per tower recommended due to installation requirements.

Note: If only one can cable is used, this may result in double or triple the installation time due to trips back to pivot to eliminate power.

FIRST AND INTERMEDIATE SPAN PACKAGES			
ADD			
Part #	**Description**	**Qty Per**	
0000L84	PKG XTEC RETROFIT 5 FIRST/ADD SPAN	1	NOTE: Choose one package for each X-Tec span based on Span Pipe Diameter.
0000L26	PKG XTEC RETROFIT 6" FIRST/ADD SPAN	1	
0000J76	PKG XTEC RETROFIT 6 5/8" FIRST/ADD SPAN	1	
0000K22	PKG XTEC RETROFIT 8 5/8" FIRST/ADD SPAN	1	
0000K23	PKG XTEC RETROFIT 10" FIRST/ADD SPAN	1	

LAST SPAN PACKAGES			
ADD			
Part #	**Description**	**Qty Per**	
0000L85	PKG XTEC RETROFIT 5 LAST SPAN	1	NOTE: Choose one package for each X-Tec span based on Span Pipe Diameter.
0000L27	PKG XTEC RETROFIT 6" LAST SPAN	1	
0000J77	PKG XTEC RETROFIT 6 5/8" LAST SPAN	1	

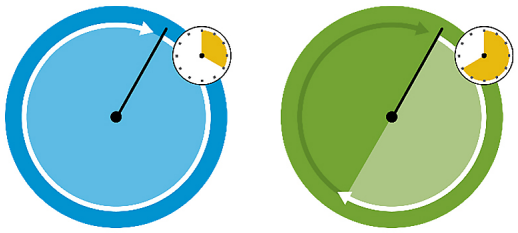
PIVOT PANEL ADDITIONS			
ADD			
Part #	**Description**	**Qty Per**	
KA02719	KTA 30TDVST EMI FILTER (20 & 30 Amp Panel)	1	NOTE: Choose one EMI Filter package for each pivot based on Pivot Panel Amperage. One Phase Loss Monitor must be added to each pivot, if not already installed. Panel Fusing and the Fusing Decal will also need to be updated alongside Span Cable Gauge size.
KA02718	KTA 55TDVST EMI FILTER (45 Amp Panel)	1	
KA01603	KTA PHASE LOSS MONITOR	1	

SEE NEXT PAGE FOR ADDITIONAL REQUIREMENTS

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Other options to consider:

Valley FastPass™ Technology
Typical Seven-Tower Machine Comparison



Valley X-Tec Drive
4 hours total to
finish irrigating a field
Limitations based on field conditions

Standard AC Drive
8 hours total to
finish irrigating a field

DRIVE UNIT FUSING			
ADD			NOTE: Drive Unit fusing must be added to standard drives if it is not already installed.
Part #	Description	Qty Per	
KA01777	KTA INTERMEDIATE TOWERBOX FUSE KIT 5 AMP	1	

Note: All standard and high speed drives require additional fusing because X-Tec is a 2.5HP motor.

$$\text{Transition Point} = 0.9 * \left(\frac{RPM}{136}\right) * \left(\frac{Hz}{60}\right) * (System\ Length)$$

- RPM = motor speed $\begin{cases} 68\ RPM\ for\ High\ Speed \\ 34\ RPM\ for\ Standard\ Speed \end{cases}$
- Hz = pivot power frequency $\begin{cases} 60\ Hz\ for\ Domestic \\ 50\ Hz\ for\ International \end{cases}$

TRANSITION POINT PACKAGES			
ADD			NOTE: Choose one package for each span cable transition point where the Span Cable Gauge must be increased.
Part #	Description	Qty Per	
0000M19	PKG ADD FUSE PKG 10 GA.TO 12 GA. CABLE	1	
0000M20	PKG ADD FUSE PKG 8 GA. TO 10 GA. CABLE	1	

JUNCTION BOX PACKAGES			
ADD			NOTE: Choose one package for each span where the Span Cable Length needs to be extended.
Part #	Description	Qty Per	
0000L43	PKG X-TEC 10GA JUNCTION BOX	1	
0000L44	PKG X-TEC 8GA JUNCTION BOX	1	

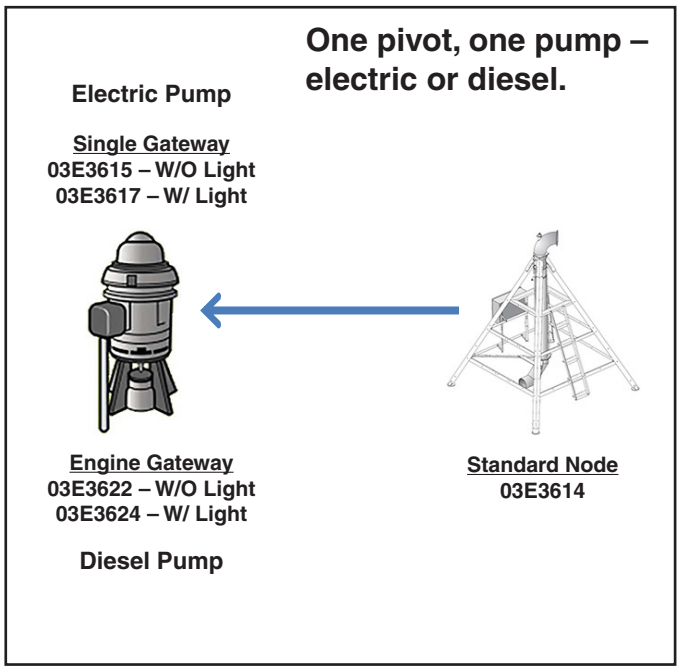
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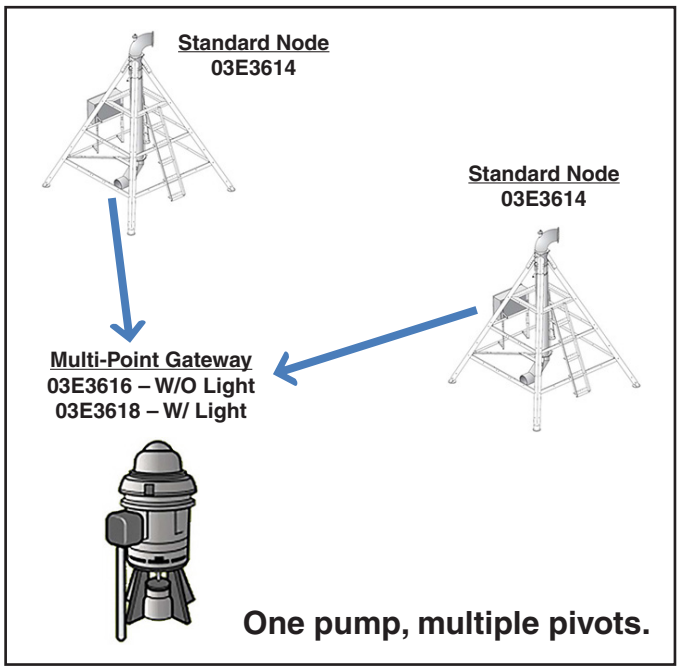
Pump Connect™

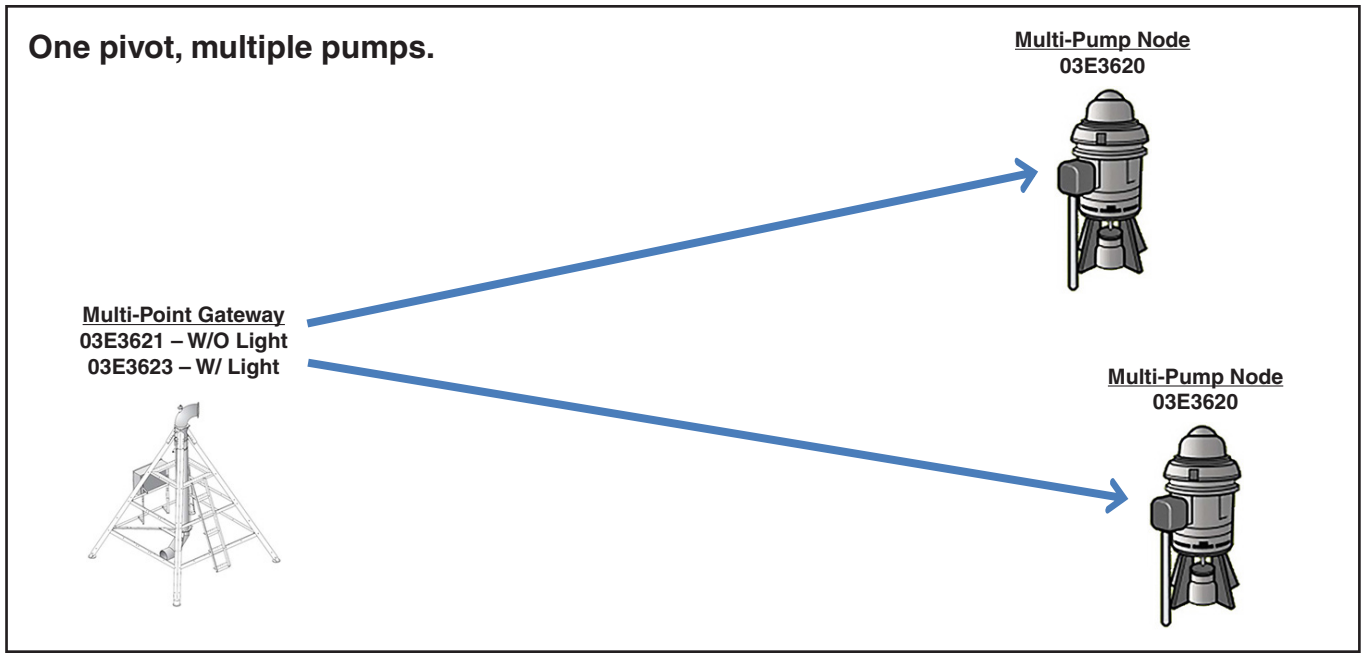
Pump Connect™ allows growers to wirelessly control pumps from the center pivot control panel, eliminating time-consuming trips to pump sites or expensive trenching to install wires.

Pump Connect™ is available in a variety of configurations designed to meet the needs of nearly any situation in the field.

- *Single pivot, single pump.*
- *Multiple pivots from a single pump.*
- *Multiple pumps supplying a single pivot or linear.*
- *Up to 48 radios in a single network – very flexible!*
- *Pivots or Linears supplied by engine driven pumps.*
- *Optional indicator light available – green indicates normal operation, flashing red indicates a loss of communication.*







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Valley® Drive Connect™

Drive Connect™ allows growers to remotely monitor pivot pressure anywhere along the machine and use that pressure signal to control a Variable Frequency Drive at their pump site.

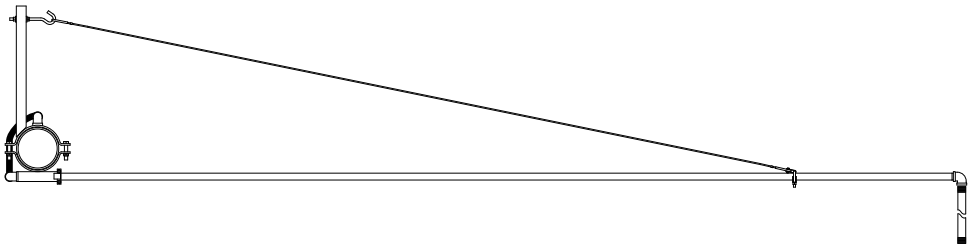
Drive Connect™ can also be used in conjunction with Pump Connect™ for on/off pump control. A Pump Connect™ node can be added at the pivot point and will communicate with the Drive Connect Gateway at the pump site to turn the pump on and off based on the pivot water on/water off control.



PUMP AND DRIVE CONNECT PARTS	
Part #	**Description**
PRESSURE TRANSDUCER AND CABLES	
03E3779	200# Pressure Transducer (4-20 mA)
03E3780	Transducer Cable (10m)
03E3781	Transducer Cable (5m)
PUMP CONNECT	
03E3614	Standard Node
03E3615	Electric Single Gateway (w/o Light)
03E3617	Electric Single Gateway (with Light)
03E3616	Multi-Pivot Gateway (w/o Light)
03E3618	Multi-Pivot Gateway (with Light)
03E3620	Multi-Pump Node
03E3621	Multi-Pump Gateway (w/o Light)
03E3623	Multi-Pump Gateway (with Light)
03E3622	Engine Gateway (w/o Light)
03E3624	Engine Gateway (with Light)
DRIVE CONNECT	
03E3777	Drive Connect Gateway
03E3778	Drive Connect Node
ANTENNAS AND CABLES	
03E3625	Omni Rubber Ducky Antenna Upgrade (5 dbi)
03E3626	Omni Fiberglass Antenna Upgrade (6 dbi)
03E3627	Directional Antenna
03E4139	N Male to RP SMA Male 12" PFP100 (6dBi and directional)
03E4140	698 to 2700 MHZ Coaxial DC Blocking Filter (6dBi and directional)
03E4141	Block Filter Fland to Bulhead Adapter (6dBi and directional)
1814333	Antenna Cable (16') N Male to N Male (6dBi and directional)
1814334	Antenna Cable (30') N Male to N Male (6dBi and directional)
03E3631	Antenna Extension Cable (15') (standard & 5dBi)
03E3791	Magnetic Antenna Mount (w/10' cable) (standard & 5dBi)

For any custom applications, please contact your Valley Water Management Project Sales Manager.

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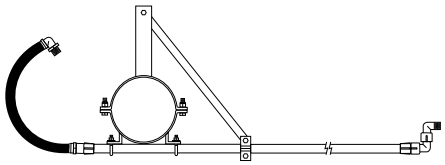
– Very durable. Made of schedule 40 tube.

– Perfect for part circle sprays.

– Easily controlled.

VALLEY SINGLE & DOUBLE BOOMBACK PACKAGES

			Pipe Diameter				
			5"	6"	6 5/8"	8 5/8"	10"
Drop Tube Length	24"	Single	0000G37	0000G38	0000G39	0000G40	0000G41
		Double	0000G27	0000G28	0000G29	0000G30	0000G31
	72"	Single	0000G42	0000G43	0000G44	0000G45	0000G46
		Double	0000G32	0000G33	0000G34	0000G35	0000G36

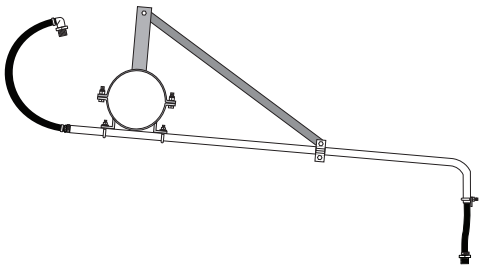


– Simple, reliable construction.

– Good for part circle sprays.

IACO BOOMBACK PACKAGES

Pipe Diameter			
5"	6"	6 5/8"	8"-8 5/8"
0000F43	0000F44	0000F45	0000F46



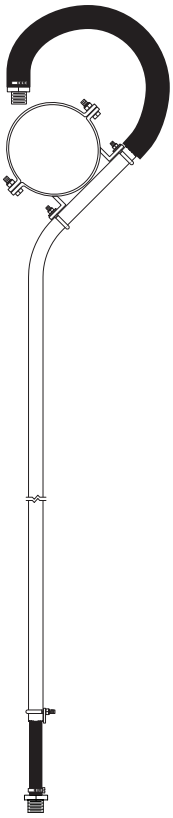
– Minimize wheel track rutting.

– Great for part circle sprinklers.

IACO HOSE BOOM PACKAGES

Bracket Pipe Diameter				
5"	6"	6 5/8"	8"	8"-8 5/8"
0000H55	0000H54	0000H53	0000K28	0000H56

NOTE: All use galvanized 15' Hose Boom with package.



– Used w/ dry wheel track packages on Poly machines.

– Similar construction to the IACO hose boom.

IACO RIGID HOSE BOOMBACK PARTS PACKAGES

Pipe Diameter				
5"	6"	6 5/8"	8"	8"-8 5/8"
0000J83	0000J84	0000J85	0000J86	0000J87

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FLOTATION OPTIONS. 9-1
VALLEY 3-WHEEL DRIVE RETROFIT 9-2
VALLEY 3-WHEEL DRIVE RETROFIT PACKAGES. 9-3
VALLEY TRACK DRIVE RETROFIT 9-4
VALLEY TRACK DRIVE RETROFIT PACKAGES. 9-5
VALLEY ARTICULATING 4-WHEEL DRIVE RETROFIT 9-6
VALLEY ARTICULATING 4-WHEEL DRIVE RETROFIT PACKAGES 9-7
VALLEY ARTICULATING TRACK DRIVE RETROFIT 9-8
VALLEY ARTICULATING TRACK DRIVE RETROFIT PACKAGES 9-9
AGRI - TRACS . . . . . .9-10 - 9-11
RAAFT TRACKS 9-12
SPIDER WHEELS & SOILPAM™ — TRACK SACK. 9-13

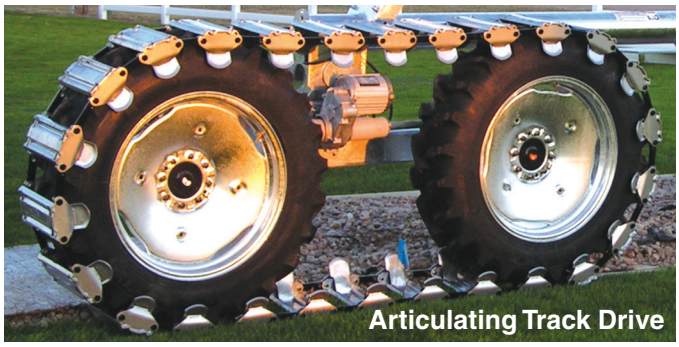
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Drive Unit Options that can be Retrofitted to Existing Machines


3-Wheel


Articulating 4-Wheel


Valley Track Drive

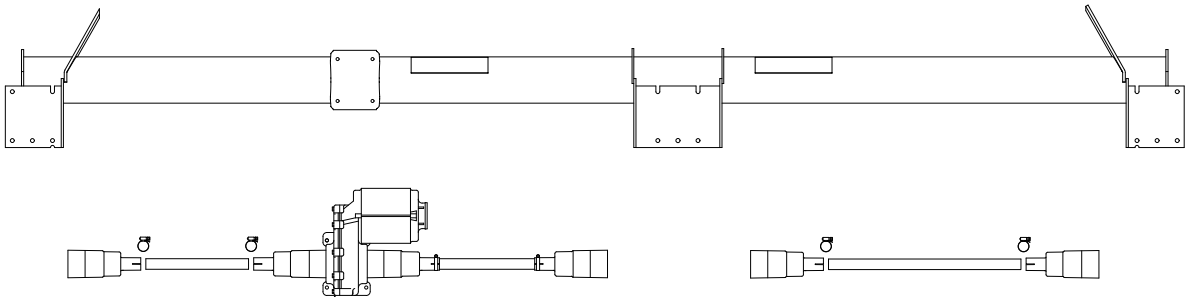

Articulating Track Drive

SELECT THE BEST OPTION FOR THE GIVEN FIELD SITUATION:				
Drive Type	**Traction (Prevent Getting Stuck)**	**Flotation (Reduce Wheel Rut)**	**Rough Ground Capabilities**	**Retrofit Applications**
Standard 2-Wheel	Good	Good	Best	Not Applicable
3 - Wheel	Better	Good	Better	Valley 6000 and 8000 series Standard Profile Pivot or Linear Drive units (not on linear carts or any 6” spans)
Articulating 4-Wheel	Best	Better	Best	Valley 8000 series Standard Profile Pivot drive units and the Valley Corner and Precision Corner LRDU. Not available for linears or any 6” spans.
Track Drive	Best	Best	Good	Valley 6000 or 8000 series Standard Profile Pivot Drive Units and LRDU on Precision or Valley Corner.
Articulating Track Drive	Best	Best	Best	Valley 8000 series Standard Profile Pivot drive units and the Valley Corner and Precision Corner LRDU. Not available for linears or 6” spans.
Agri-Tracs	Fair	Better	Good	All drive units with 11R X 22.5 or 11R X 24.5 Retread Tires. Can be installed on the Valley Corner or Precision Corner if gearboxes are equipped with the “extended neck” assembly.
Raaft-Tracks	Fair	Better	Good	All drive units with 11 x 22.5, 11.2 x 24.5, 14.9 x 24 or 11.2 x 38 New Tires.

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1 Gearmotor drives 3 wheels utilizing a fixed basebeam.



VALLEY 3-WHEEL DRIVE	
Features	**Benefits**
Three Driven Tires	More traction to help prevent stuck drive units
Heavy Duty Base Beam	Strength to support center tire on ridges
Available with all Valley Tires	Traction and Flotation options to match your field conditions
Standard Center Wheel Gearbox has Steel Worm & Cast Iron Bull Gear	Strength to transfer torque to second gearbox
Heavy Duty Center Wheel Gearbox has Steel Worm and Bronze Bull Gear	Additional load capacity for tough conditions and longer life

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Description	*Model*	*Part #*
3-WHEEL DRIVE RETROFIT PKG. WITH BASEBEAM - STANDARD PROFILE	8000	0000F31
3-WHEEL DRIVE RETROFIT PKG. WITH BASEBEAM - HIGH PROFILE	8000	0000J52
3-WHEEL DRIVE RETROFIT PKG. WITH BASEBEAM - 135'-160' SPANS SHALLOW TRUSS	7000	0000H44
3-WHEEL DRIVE RETROFIT PKG. WITH BASEBEAM - > 160' SPANS SHALLOW TRUSS	7000	0000H45

Also need to order the following:

- 1 additional tire assembly to match the existing 2

Retrofit Notes:

- Retrofit requires existing gearmotor, wheel drive gearboxes and tire assemblies to be re-used to complete the retrofit

Application:

- Drive units requiring a 3-wheel basebeam because it wasn't originally ordered on the machine
- Valley 6000 and 8000 series standard profile pivot or linear drive units (not on linear carts or 6" spans)

Package **0000F31** ***Includes:***

- Heavy duty 3-wheel basebeam
- Drive shafts and shields
- Heavy duty diagonal braces
- 6 - Ultra Heavy Duty U-Joints
- All necessary hardware for mounting

NOTE: Heavy Duty Wheel Gearbox with the Steel Worm and Bronze Bull Gear is available - (part# 9363173). Please contact the Aftermarket Sales Group for this special substitution.

Description	*Model*	*Part #*
3-WHEEL DRIVE RETROFIT PKG. W / O BASEBEAM		0000G53
3-WHEEL DRIVE RETROFIT PKG. W / O BASEBEAM - HIGH PROFILE	8000	0000J53

Also need to order the following:

- 1 additional tire and rim assembly to match the existing 2.

Retrofit Notes:

- Retrofit requires existing gearmotor, wheel drive gearboxes and tire assemblies to be re-used to complete the retrofit. The special heavy duty 3-wheel basebeam must already have been installed on the machine.

Application:

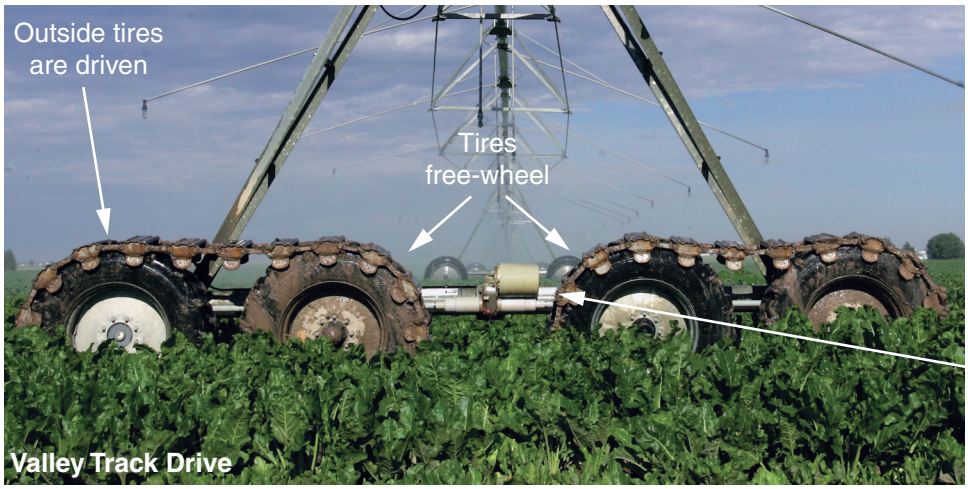
- Valley 6000 and 8000 series standard Profile Pivot or Linear Drive units (not on linear carts or 6" spans)
- Valley 6000 and 8000 series machines that were previously ordered with the special heavy duty 3-wheel basebeam

Package **0000G53** ***Includes:***

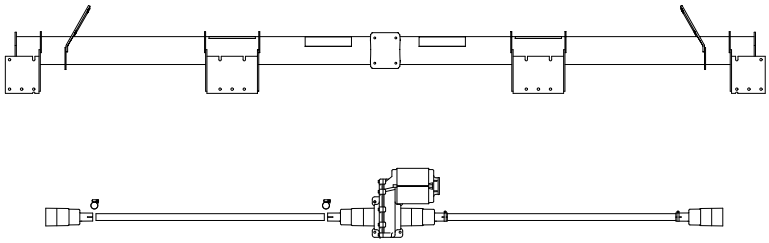
- Same as the 0000F31 package except the basebeam is not included

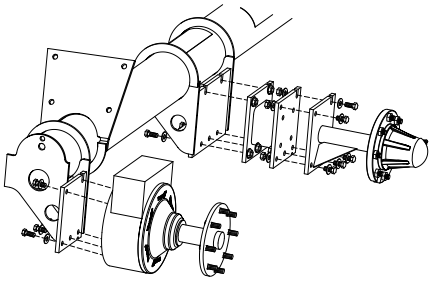
NOTE: Heavy Duty Wheel Gearbox with the Steel Worm and Bronze Bull Gear is available. Please contact the Aftermarket Sales Group for this special substitution.

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1 Gearmotor in the center drives the 2 outside wheel gearboxes that drive the 2 sets of tracks. Inner two tires free-wheel. Utilizes a fixed basebeam.





VALLEY TRACK DRIVE *Valley Exclusive*	
Features	**Benefits**
Tracked Drive Unit	**Distributes weight over a wider area than tire options - minimizing ground pressure**
Lower Ground Pressure	**Minimize soil compaction and rut depth**
Increased Traction	**Helps prevent stuck drive units**
Heavy Duty Steel Tracks	**Long life, same width as 14.9 x 24 tire**
Heavy Duty Base Beam	**Strength to support drive unit on ridges**

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Description	*Part #*
VALLEY TRACK DRIVE RETROFIT PACKAGE WITH BASEBEAM	**0000F61**

Package includes all items required

Retrofit Notes:

- **Retrofit requires existing gearmotor and 2 wheel drive gearboxes to be re-used to complete the retrofit**
- **Only 11R X 24.5 retread tires mounted on competitive rims (rim part # 1703728) are allowed (these are included in the package)**

Application:

- **Drive units requiring a heavy duty Track Drive Basebeam because it wasn't originally ordered on the machine**
- **Valley 8000 series Std Profile Pivot Drive Units and LRDU on Precision or Valley Corner. Not available on any 6" spans**

Limitations:

- **The Valley Track Drive is not recommended where significant slope changes occur in less than 15 feet such as crossing a raised pivot road, a terrace or sharp ditches. Since the tracks don't swivel relative to the basebeam, the load can be applied to the ends of the tracks instead of being distributed along the length of the track. This can cause the track to dig in and causes high stress points.**

Package* 0000F61 *Includes:

- **Heavy duty Track Drive basebeam**
- **Complete set of tracks**
- **Drive shafts and shields**
- **Heavy duty diagonal braces**
- **2 – Free-wheeling hubs and spacers**
- **4 – 11 X 24.5 Retread Tires with tubes (2 front / 2 rear) mounted on competitive rims (rim part # 1703728)**
- **Ultra Heavy Duty U-Joints**
- **All necessary hardware for mounting**

Description	*Part #*
VALLEY TRACK DRIVE RETROFIT PACKAGE WITHOUT BASEBEAM	**0000F62**

Package includes all items required

Retrofit Notes:

- **Retrofit requires existing gearmotor and 2 wheel drive gearboxes to be re-used to complete the retrofit. The special heavy duty Track Drive basebeam, drive shafts / shields and heavy duty diagonal supports must already be installed on the machine.**
- **Only 11R X 24.5 retread tires mounted on competitive rims (rim part # 1703728) are allowed (these are included in the package)**

Application:

- **Valley 8000 series Std Profile Pivot Drive Units and LRDU on Precision or Valley Corner**

Limitations:

- **See limitations under the 0000F61 package**

Package* 0000F62 *Includes:

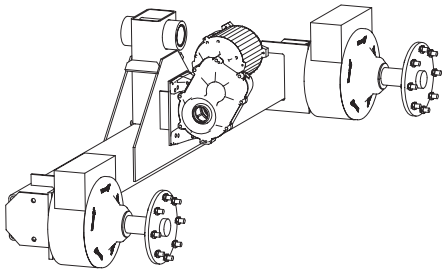
- **Complete set of tracks**
- **2 – Free-wheeling hubs and spacers**
- **4 – 11 X 24.5 Retread Tires with tubes (2 front / 2 rear) mounted on competitive rims (rim pt # 1703728)**
- **All necessary hardware for mounting**

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2 gearmotors each drive 2 wheel gearboxes resulting in 4-Wheel Drive. Each drive unit articulates for traversing rough terrain and maintaining ground contact at all times.





VALLEY ARTICULATING 4-WHEEL DRIVE *Valley Exclusive*	
Features	**Benefits**
4-Wheel Drive	**All four tires are driven providing better traction and less down time**
Articulating Drive Beams	**All four tires maintain contact with the ground for consistent traction and Flotation**
Four Tires on the Ground	**Half the weight per tire for improved Flotation, reduced soil compaction and reduced wheel rut depth**
Available with all Valley Tires	**Traction and Flotation options to match your field conditions**
Two Center Drives	**Reduced motor load for longer life**
Adaptable to Tracks	**Can add tracks in the future with minimal effort**
Conversion Packages	**Retrofit existing Valley drive units**

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Description	*Part #*
VALLEY ARTICULATING 4-WHEEL DRIVE RETROFIT PACKAGE WITH BASEBEAM	**0000F68**

Also need to order the following:

- **2 additional wheel gearboxes (1 front / 1 rear 52:1)**
- **1 additional gearmotor (speed must match the existing 1)**
- **2 additional tire assemblies (size must match the existing 2)**
- **1 Gearmotor Heater Protection Package (see table below)**

HEATER PACKAGES - Choose 1		
Part #	**Description**	**What is included?**
0000F92	**Heater Package for 68 RPM Helical Gearmotors - 4 Wheel Articulating**	**Includes a tower box enclosure, heaters for 68 rpm Helical motor, additional motor lead cable, hardware and installation instructions.**
0000F93	**Heater Package for 34 RPM Helical Gearmotors - 4 Wheel Articulating**	**Includes a tower box enclosure, heaters for 34 rpm Helical motor, additional motor lead cable, hardware and installation instructions.**
0000F99	**Heater Package for 56 RPM Worm Gearmotors - 4 Wheel Articulating on Valley Corner LRDU**	**FOR HIGH SPEED VALLEY CORNER Last Regular Drive Unit - Includes a tower box enclosure, heaters for 56 rpm Worm drive motor, additional motor lead cable, hardware and installation instructions.**

Retrofit Notes:

- **Retrofit requires existing gearmotor and 2 wheel drive gearboxes to be re-used to complete the retrofit**
- **All Valley tire assemblies can be utilized and must all be the same size. If tracks are to be installed at a later date, then use 11.2 X 38" tires.**
- **If End of Field Stop / Auto-Reverse is installed on the drive unit, a longer support tube and contact arms are required. Please see Illustrated parts for items to order.**
- **Voltage drop and amp load must be calculated using SOC. Please contact your order manager for assistance in this calculation. The additional amp draw in some cases may require adding a booster transformer or larger span cable. However, in most cases this should not be an issue.**
- **To calculate the correct generator size, add one additional drive unit for each 4-Wheel Articulating Drive being installed on the machine.**

Application:

- **Valley 8000 series Standard Profile Pivot Drive Units and the Valley Corner LRDU. Not available for linears, any 6" spans. For Precision Corner LRDU add 2 hp Inverter Duty Gearmotor and change VS Drive to 03E2659.**

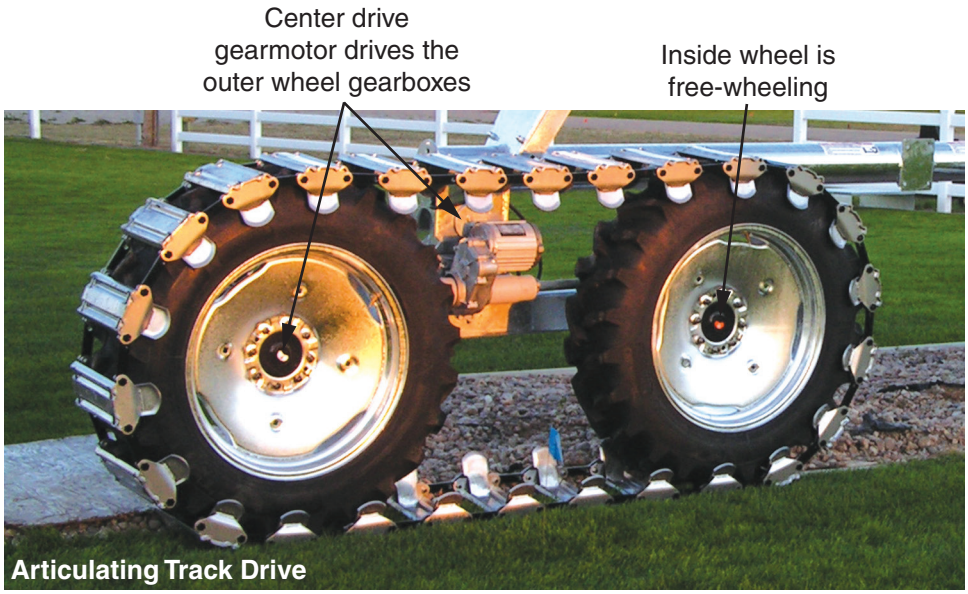
Limitations:

- **Do not use this retrofit package on a Precision Corner last regular drive unit. Special designs are required. Please contact the Aftermarket Sales Department if this is being considered.**
- **Do not place this retrofit on any linear machines or any 6" spans.**

Package* 0000F68 *Includes:

- **Heavy duty 4-Wheel Articulating basebeam**
- **Articulating arms**
- **Drive shafts and shields**
- **Heavy duty diagonal braces**
- **Ultra Heavy Duty U-Joints**
- **All necessary hardware for mounting**

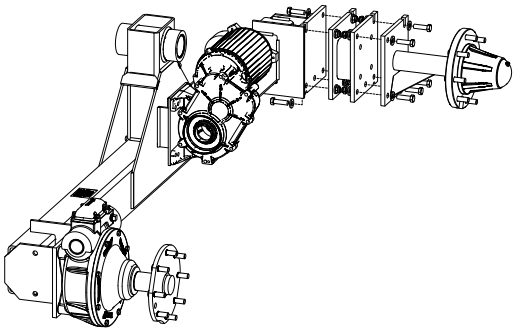
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Articulating Track Drive

1 gearmotor in the center of the unit drives the outer wheel gearbox. The inside wheel is free-wheeling. Each drive unit articulates for traversing rough terrain and maintaining ground contact at all times.





NOTE: For Track Option use one 42 Pad Steel Track and one 22 Pad Steel Track to make two 32 Pad Tracks. (1 for each set of tires) <u>Articulating 4-WD uses 38" Tires ONLY</u>

42 Pad Steel Track 0996792
22 Pad Steel Track 0996793

VALLEY ARTICULATING TRACK DRIVE *Valley Exclusive*	
Features	**Benefits**
Tracked Drive Unit with Longer Wheel Base	**Increased track length for more Flotation**
Lowest Ground Pressure	**Minimum soil compaction**
Maximum Flotation available	**Minimum rut depths**
Articulating Drive Beams	**Both tracks maintain contact with the ground and can follow sudden changes in field terrain**
Increased Traction	**Spend less time dealing with stuck drive units**
Heavy Duty Steel Tracks	**Long life, same width as a 14.9 x 24 tire**
Two Center Drives	**Reduced motor load for longer life**

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To retrofit an existing drive unit to an Articulating Track Drive, you must order the 0000F68 package as illustrated below along with the 0000F70 track option. Since the inner two wheels are free-wheeling, you will not need to order any additional wheel gearboxes. 11.2 X 38" tires are required with this option.

Description	*Part #*
VALLEY ARTICULATING 4-WHEEL DRIVE RETROFIT PACKAGE WITH BASEBEAM	**0000F68**

NOTE: *Tracks require the use of 11.2 x 38" tire assemblies*

Also need to order the following:

- **1 additional gearmotor (speed must match the existing 1)**
- **2 or 4 additional tire assemblies (all 4 tires must be 11.2 x 38")**
- **1 Gearmotor Heater Protection Package (see table below)**
- **Part # 0000F70 - Articulating Track Option**

HEATER PACKAGES - Choose 1		
Part #	**Description**	**What is included?**
0000F92	**Heater Package for 68 RPM Helical Gearmotors - 4 Wheel Articulating**	**Includes a tower box enclosure, heaters for 68 rpm Helical motor, addl. motor lead cable, hardware and installation instructions.**
0000F93	**Heater Package for 34 RPM Helical Gearmotors - 4 Wheel Articulating**	**Includes a tower box enclosure, heaters for 34 rpm Helical motor, addl. motor lead cable, hardware and installation instructions.**
0000F99	**Heater Package for 56 RPM Worm Gearmotors - 4 Wheel Articulating on Valley Corner LRDU**	**FOR HIGH SPEED VALLEY CORNER Last Regular Drive Unit - Includes a tower box enclosure, heaters for 56 rpm Worm drive motor, addl. motor lead cable, hardware and installation instructions.**

Description	*Part #*
VALLEY ARTICULATING TRACK OPTION	**0000F70**

Retrofit Notes:

- **Retrofit requires existing gearmotor to be re-used to complete the retrofit**
- **The Track Drive option requires the use of 11.2 X 38" tire assemblies**
- **If End of Field Stop / Auto-Reverse is installed on the drive unit, a longer support tube and contact arms are required. Please see Illustrated parts for items to order.**
- **Voltage drop and amp load must be calculated using SOC. Please contact your order manager for assistance in this calculation. The additional amp draw in some cases may require adding a booster transformer or larger span cable. However, in most cases this should not be an issue.**
- **To calculate the correct generator size, add one additional drive unit for each Articulating Track Drive being installed on the machine.**

Application:

- **Valley 8000 series Std Profile Pivot Drive Units and the Valley Corner LRDU**

Limitations:

- **Do not use this retrofit package on a Precision Corner last regular drive unit. Special designs are required. Please contact the Aftermarket Sales Department if this is being considered.**
- **Do not place this retrofit on any linear machines or 6" spans.**

Package 0000F68 Includes:

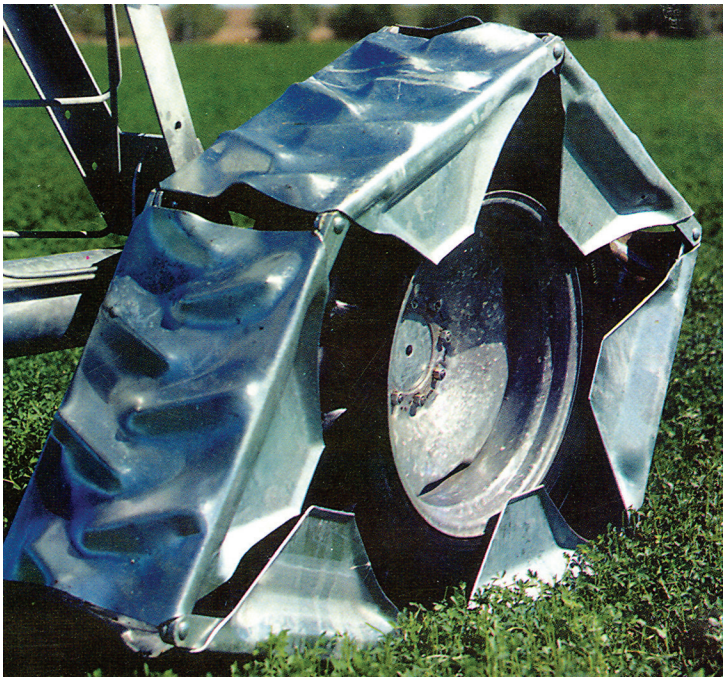
- **Heavy duty 4-Wheel Articulating basebeam**
- **Articulating arms**
- **Drive shafts and shields**
- **Heavy duty diagonal braces**
- **Ultra Heavy Duty U-Joints**
- **All necessary hardware for mounting**

Package 0000F70 Includes:

- **Complete set of tracks for both articulating arms**
- **Spacers and free-wheeling hubs**
- **All necessary hardware for mounting**

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- ***Successfully proven to help reduce wheel rutting for many center pivot owners.***
- ***Provides enhanced Flotation capabilities of the drive unit.***
- ***Must use Re-Tread Tires (see requirements below)***
- ***Valley rims require that the rims be installed backwards (reversed) to provide proper TRAC clearance. Most competitive rims require spacers to be installed. (see note concerning clearance in this section for more details.)***







Warranty Notes: *1) When using the Agri-TRAC with a Valley gearbox, only gearboxes manufactured after January of 1999 will be covered under the current gearbox warranty program.*

2) Can be installed on the Valley Corner or Precision Corner if gearboxes are equipped with the "extended neck" assembly. Any installation without the "extended neck" assembly will void gearbox warranty.

Agri - TRACs					
Part #	**Description**	**# of Tracs Included**	**Tire Size**	**Weight (lbs)**	**Pallet Size**
0996334	**Complete Agri-TRAC Set (2 TRACS Included) for 11R X 22.5 Retread Tires**	**2 TRACS Included.**	**11R x 22.5 Retreads**	**660 lbs for 2 Tracs**	**4' X 5' Pallet - 2 TRACS or 2 sets per pallet max.**
0997121*	**Complete Agri-TRAC Set (2 TRACS Included) for 11R X 24.5 Retread Tires**	**2 TRACS Included.**	**11R x 24.5 Retreads**	**660 lbs for 2 Tracs**	**4' X 5' Pallet - 2 TRACS or 2 sets per pallet max.**

* 11R X 24.5 Valley wheels shipped from October 2003 to October 2005 were not reversible. Therefore, Agri-TRACs for this size of tire shipped during those dates, must use an Agri-Trac spacer. Please order part # 0996391 – Agri-TRAC Wheel Spacer for each wheel assembly.

Before ordering Agri-TRACs, please review the following information:

CLEARANCE BETWEEN TIRE AND TOWER STRUCTURE:

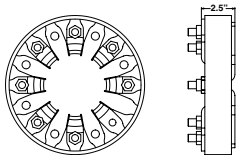
An additional 2 inches of space between the tire and the tower structure must be provided for the Agri-TRAC. Some center pivot wheels have offset centers, such as Valley and T-L planetary drives. These wheels can be reversed to provide the needed clearance. Other machines require the Agri-TRAC spacer part #0996391 to be installed between the wheel and the gearbox flange to provide the necessary clearance. Caution: This option changes the loads on the drive unit and span, which could cause structural damage on certain machines.

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Agri - TRAC REPLACEMENT PARTS	
Part #	**Description**
0996336*	Agri-TRAC Replacement Hinge Kit - for Agri-TRACs shipped from year 2000 to present (includes hinge, 2 carriage bolts, washers and nuts. 5/8" Bushing also included.)
0996752	Agri-TRAC 5/8" Bushing Only for Hinge
0996391	Agri-TRAC Wheel Spacer (lug nuts included)

*** Agri-Trac models prior to year 2000 utilize 1/2" bolts with 1/2" bushings. This hinge kit will not work for pre 2000 models.**

2.5" wide wheel spacer. Part # 0996391. Includes lug nuts.



Agri – TRAC Application Guidelines:

RECAP TIRES ARE REQUIRED FOR THE FOLLOWING REASONS:

- **The tread lugs are strong enough to climb the Agri-TRAC "ladder" when the tower is in trouble. Caution: Regular tire tread lugs will bend over and the tire will slip inside the track. Regular tire tread patterns are not uniform and usually will not mesh with the Agri-TRAC tread.**
- **With a few exceptions, recaps have a uniform tread pattern, 32 tread lugs and at least 1 inch tall. The Agri-TRAC can be used with recap sizes 11 x 24.5 and 11 x 22.5. Specify size when ordering.**

PROPER TOWER ALIGNMENT:

Proper tower alignment is VERY important when using the Agri-TRAC. Tower misalignment can result in unwanted stress on the tower structure especially when the system is being run dry. Be certain that both wheels follow the same path and that the tire is not crowding to one side of the track.

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RAAFT TRACK ASSEMBLIES		
Part No.	**Tire Application Sizes**	**Weight**
0997475	**11.2 x 24, 11R x 22.5, 11R x 24.5**	**172 lbs. per tire**
0997476	**11.2 x 38**	**204 lbs. per tire**
0997477	**14.9 x 24 (requires spacer)**	**228 lbs. per tire**

When ordering RAAFT Track assemblies, quantity of 1 is defined as one complete drive unit.

RAAFT Tracks can be installed on Valley 11.2 X 24, 11R X 22.5, 11R X 24.5 and 11.2 X 38 tires without the spacer by reversing the rim. 14.9 X 24 and competitive tires require the spacer.



RAAFT Track

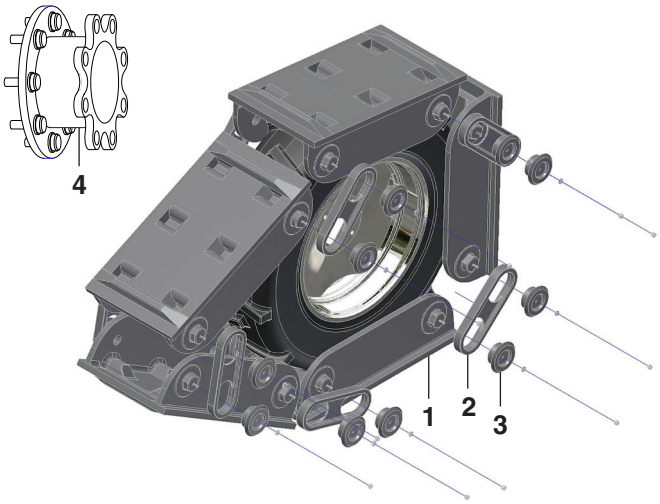


Spacer
(required w/ 14.9 x 24 tires)

Application Guidelines

- Limit side slopes to 20%
- Limit slopes in the direction of travel to 30%
- If installing with an existing deep track, operate with water during first revolution to soften the track
- Operating temperature range 10°F - 105°F
- Limit 11.2 x 38 wheel rim width to 10" max (wider rims could cause excessive wear)
- Limit 14.9 x 24 rim width to 13" max (wider rims could cause excessive wear)
- Not to be used with Precision Corners equipped with 11.2 x 38 on the SDU

ITEM	DESCRIPTION	PART #
1	Base Unit for 520 Series Track	0997567
	Base Unit for 700 Series Track	0997568
2	Joint Band	0997569
3	Bearing Cup	0997570
4	8-Bolt Wheel Spacer	0997478
	COMPLETE Track Assm. - 525H for 11.2 x 24 Tires	0997475
	COMPLETE Track Assm. - 526H for 11.2 x 38 Tires	0997476
	COMPLETE Track Assm. - 700H for 14.9 x 24 Tires	0997477
	Hardware Kit (Single Tire)	KA09853



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- For use with re-tread tires only.
- Care should be taken to adequately wet the soil before moving the drive unit if spider paddles are set firmly in “dried mud”. The drive train may be damaged if this is not done.



VALMONT SPIDER WHEEL PACKAGES	
Part #	**Description**
0000B88	**Spider Wheel Package (contains 1 spider wheel 1781614 and 1 - lug bolt kit)**
1781614	**Spider Wheel Only (qty of 1)**
KA01121	**Spider Wheel lug bolt kit (8 - 9/16" X 2 1/8 with nuts)**

SOILPAM™ – Track Sacks are very user-friendly and easy to apply. The active ingredient is a linear polymer called polyacrylamide (P.A.M.) and comes in the form of white tablets. Tablets are placed in a mesh bag and hung from the basebeam of the drive tower as illustrated in the photo. As water from the sprinklers flow over the sacks, the tablets slowly dissolve. The polymer-laden water falls downward, stabilizing the soil structure and helping to reduce the depth of the wheel track.



The USDA and EPA support the use of P.A.M. for soil stabilization. P.A.M. has been used for several years in flood irrigation to reduce furrow erosion and to improve water infiltration. The product has now been put into a slow release tablet form for use in treating wheel tracks.

Good results have been reported in some areas where 1500+ hours are run in a season. Several Valley dealers have tried this type of product with their customers and have had good initial success. The best way to prove it to yourself is to try the product with several customers. Placing the sacks on every other tower is an excellent test to see differences. One key point to keep in mind is to apply the product before the irrigation season. Don’t expect miracles after the track has been established as this is a preventative measure.

If you have any further questions, please feel free to call anyone in the Aftermarket Parts Group.



Part # 0996488 - 1 unit of SOILPAM™ Track Sacks

One unit contains the following:

- ✓ **32 pounds of product**
- ✓ **Eight mesh sacks**
- ✓ **Packaged in a box with plastic bag**

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8000 SERIES ADD SPANS AND OVERHANGS. 10-1
8000 BACK CABLE CHARTS. 10-2
6000 SERIES ADD SPANS AND OVERHANGS. 10-3
PRE-6000 SERIES ADD SPANS AND OVERHANGS 10-4
SPAN AND DRIVE UNIT HARDWARE KITS. 10-5
BACK CABLE CHARTS 10-6
8000 SERIES KITS & PACKAGES 10-7

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Add Spans & Overhangs



8000 series Add Spans and Overhangs are Easy to Order and Price. Take advantage of this program and realize the following benefits:

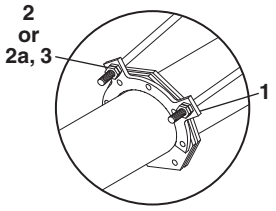
- ✓ No need to order pivot points as required when ordering a complete pivot.
- ✓ Pricing is consistent with Whole Goods Equipment.
- ✓ Consistent packaging. All add-spans at the Valley, NE and McCook, NE sites are packaged utilizing the “crate-lines” so that add-span orders will closely resemble a new equipment order when shipped from Valley or McCook (The Distribution Centers do not use a crate line system).
- ✓ Delivery is not dependent on receiving a new system load slot date.
- ✓ Order only the spans you need. No need to order a last span or first span if not required.
- ✓ Multiple add-spans and overhangs can be placed on one order.
- ✓ Easy and quick to select and price options added to the spans.
- ✓ **Complete 8000 add spans and overhangs are quoted and ordered in V2O.**

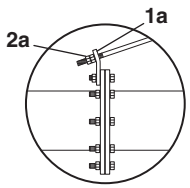


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8000 series BACK CABLES						
Overhang Length	Span Length	1/4" Cable	Cable Length	9/32" Cable	5/16" Cable	Cable Length
9',18',27',36'	All	9360084	501.12"			
36"HD,45',54',64',75'	115'	9360200	815.50"	9361987		816.00"
82', 100'	115'				9360746	816.00"
36"HD,45',54',64',75'	123'			9361988		940.00"
82', 100'	123'				9360958	940.00"
36"HD,45',54',64',75'	135'	9360025	1051.12"	9361989		1051.77"
82', 100'	135'				9360745	1051.77"
36"HD,45',54',64',75'	140'	9360201	1107.50"	9361990		1108.18"
82', 100'	140'				9360744	1108.18"
36"HD,45',54',64',75'	157.5	9360026	1316.62"	9361991		1317.43"
82', 100'	157.5				9360743	1317.43"
36"HD,45',54',64',75'	160'	9360027	1345.12"	9361992		1345.95"
82', 100'	160'				9360742	1345.95"
36"HD,45',54',64',75'	180'	9360028	1583.12"	9361993		1584.11"
82', 100'	180'				9360741	1584.11"
36"HD,45',54',64',75'	185'	9360029	1640.12"	9361994		1641.13"
82', 100'	185'				9360740	1641.13"
36"HD,45',54',64',75'	187'	9360030	1662.12"	9361995		1663.15"
82', 100'	187'				9360739	1663.15"
36"HD,45',54',64',75'	202.5'	9360031	1850.12"	9361996		1851.26"
82', 100'	202.5'				9360738	1851.26"
36"HD,45',54',64',75'	205'	9360032	1878.62"	9361997		1879.79"
82', 100'	205'				9360737	1879.79"
36"HD,45',54',64',75'	225'			9363855		2119.25"
82', 100'	225'				9363857	2119.25"

Item	Description	Part #
1	Cable Mounting Ear Bracket (6 5/8" Pipe w/82' O/H)	9361357
1a	Cable Mounting Ear (5" Pipe)	1700890
2	7/8" Hex Nut	0131005
2a	3/4" Jam Nut	0131008
3	3/4" Flat Washer	0142021
	Short Overhang Truss Kit	KA01187
	Short Overhang Truss Hardware Kit	KA01179
	Long Overhang Truss Package	0000K48





5" Cable Mount

Note:

1) 9/32" or 5/16" Cables can be used in place of 1/4" Cables if replaced in pairs.
2) Eff. June 04, 5/16" Cables are required for 82' Overhangs.
3) 1/4" Cables used on 6" overhangs only.

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The following is included with the listed 6" and 6 5/8" standard complete span packages:

- ✓ 30 RPM worm drive U.S./Emerson upright centerdrive
- ✓ 12 gauge 11 conductor span cable
- ✓ Valley 1701965 and 1701966 wheel gearboxes
- ✓ 11R X 24.5 radial retread tires with tubes
- ✓ 110” coupler spacing
- ✓ All other hardware and structure for a complete span assembly

Customized 6000 series add-spans

Substitutions for different diameter pipelines, centerdrive gearmotors, wheel gearboxes, tire assemblies, alignment and span cable can be made upon request. Please call the Valmont Aftermarket Parts Group for special packages and pricing.

6000 series ADD-SPAN PACKAGES - 6" PIPELINE

Description	PIVOT SPAN 110" Spacing Package #	INT SPAN 110" Spacing Package #	LAST SPAN 110" Spacing Package #
128' 6000 series Complete 6" Add Span	see note below chart	0000B99	0000C75
146' 6000 series Complete 6" Add Span	0000C76	0000C01	0000C77
160' 6000 series Complete 6" Add Span	0000C78	0000C02	0000C79
164' 6000 series Complete 6" Add Span	0000C80	0000C03	0000C81
183' 6000 series Complete 6" Add Span	0000C82	0000C04	0000C83
201' 6000 series Complete 6" Add Span	see note below chart	0000C05	0000C85

NOTE: For ordering or availability contact the Parts Department.

6000 series ADD-SPAN PACKAGES - 6 5/8" PIPELINE

Description	PIVOT SPAN 110" Spacing Package #	INT SPAN 110" Spacing Package #	LAST SPAN 110" Spacing Package #
109' 6000 series Complete 6 5/8" Add Span	see note below chart	0000C06	0000C87
128' 6000 series Complete 6 5/8" Add Span	0000C88	0000C07	0000C89
146' 6000 series Complete 6 5/8" Add Span	0000C90	0000C08	0000C91
160' 6000 series Complete 6 5/8" Add Span	see note below chart	0000C09	0000C93
164' 6000 series Complete 6 5/8" Add Span	0000C94	0000C10	0000C95
180' 6000 series Complete 6 5/8" Add Span	0000D00	0000C19	0000D01
183' 6000 series Complete 6 5/8" Add Span	0000C96	0000C11	0000C97
187' 6000 series Complete 6 5/8" Add Span	see note below chart	0000C20	0000D03
201' 6000 series Complete 6 5/8" Add Span	0000C98	0000C12	0000C99

NOTE: For ordering or availability contact the Parts Department.

6000 series OVERHANG PACKAGES

Description	110" Spacing Package #
18' 6000 series Overhang less backcables	0000B19
27' 6000 series Overhang less backcables	0000B20
36' 6000 series Overhang less backcables	0000B21
54' 6000 series Overhang less backcables	0000B22
64' 6000 series Overhang less backcables	0000B23
82' 6000 series Overhang less backcables	0000B24
NOTE: Overhang back cables & cable mounting ears MUST be ordered separately and are not included in the pricing of any packages listed in this table.	

NOTE: For 6000 series Back Cables refer to Back Cables page at the end of this section.

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The following is included with the listed 6" and 6 5/8" standard complete span packages:

- ✓ 30 RPM worm drive U.S./Emerson upright centerdrive
- ✓ 12 gauge 11 conductor span cable
- ✓ Valley 1701965 and 1701966 wheel gearboxes
- ✓ 11R X 24.5 radial retread tires with tubes
- ✓ 110” coupler spacing
- ✓ All other hardware and structure for a complete span assembly

Customized PRE- 6000 series add-spans

Substitutions for different diameter pipelines, centerdrive gearmotors, wheel gearboxes, tire assemblies, alignment and span cable can be made upon request. Please call the Valmont Aftermarket Parts Group for special packages and pricing.

PRE-6000 series ADD-SPAN PACKAGES			
Description	PIVOT SPAN STD Spacing Package #	INT SPAN STD Spacing Package #	LAST SPAN STD Spacing Package #
170' Pre-6000 series complete 6" Add Span	0000C70	0000B40	0000C71
185' Pre-6000 series complete 6" Add Span	0000C72	0000B41	0000C73
105' Pre-6000 series complete 6 5/8" Add Span	see note below chart	0000B36	0000C63
126' Pre-6000 series complete 6 5/8" Add Span	0000C64	0000B37	0000C65
147' Pre-6000 series complete 6 5/8" Add Span	0000C66	0000B38	0000C67
160' Pre-6000 series complete 6 5/8" Add Span	0000C68	0000B39	0000C69

NOTE: For ordering or availability contact the Parts Department.

PRE-6000 series OVERHANG PACKAGES	
Description	STD Spacing Package #
16' Pre-6000 series Overhang	*Package Not Available
26' Pre-6000 series Overhang	*Package Not Available
42' Pre-6000 series Overhang less backcables	**0000A91
84' Pre-6000 series Overhang less backcables	**0000A92

* To order 16' or 26' overhangs, please contact the Valmont Irrigation Aftermarket Parts Group.

***NOTE: For Pre-6000 series Back Cables refer to Back Cables page at the end of this section.**

****NOTE: These Overhang Packages are for 6-5/8” 8-bolt Last Pipe.**

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The following is included with the listed span hardware kits:

- ✓ Span gaskets
- ✓ Flange bolts/nuts
- ✓ Trussing bolts/nuts
- ✓ U-Bolts and hardware for tie bracing
- ✓ 3/4" bolts/nuts for drive unit leg attachment
- ✓ Pre-6000 series kits also include either 7/8" or 3/4" double nuts for the threaded truss rods.
- ✓ Pre-6000 and 6000 series kits also include new truss rod keeper tabs.

SPAN HARDWARE KITS	
Part #	**Description**
Pre-6000 series Spans	
KA00052	Pre-6000 series, 6" diameter, 170'-185' Span Hardware Kit
KA00065	Pre-6000 series, 6 5/8" diameter, 105'-160' Span Hardware Kit
KA01380	Pre-6000 series, 8" diameter, 105'-126' Span Hardware Kit
KA01382	105'–10" Span Hardware
6000 series Spans	
KA00962	6000 series, 6" diameter, 128'-183' Span Hardware Kit
KA00963	6000 series, 6" diameter, 201' Span Hardware Kit
KA00550	6000 series, 6 5/8" diameter, 109'-183' Span Hardware Kit
KA00865	6000 series, 6 5/8" diameter, 187'-201' Span Hardware Kit
KA01381	6000 series, 8" diameter, 128'-164' Span Hardware Kit
KA01382	6000 series, 10" diameter, 109'-128" Span Hardware Kit
8000 series Spans	
KA01793	8000 series, 6" diameter, 135'-160' Span Hardware Kit
KA01383	8000 series, 6" diameter, 180'-205' Span Hardware Kit
KA09491	8000 series, 6 5/8" diameter, 115' Span Hardware Kit
KA09492	8000 series, 6 5/8" diameter, 135' Span Hardware Kit
KA09493	8000 series, 6 5/8" diameter, 140' Span Hardware Kit
KA09494	8000 series, 6 5/8" diameter, 160' Span Hardware Kit
KA09495	8000 series, 6 5/8" diameter, 180' Span Hardware Kit
KA09496	8000 series, 6 5/8" diameter, 185'-187' Span Hardware Kit
KA09497	8000 series, 6 5/8" diameter, 205' & 225' Span Hardware Kit
KA09498	8000 series, 8 5/8" diameter, 115' Span Hardware Kit
KA09499	8000 series, 8 5/8" diameter, 135' Span Hardware Kit
KA09500	8000 series, 8 5/8" diameter, 140' Span Hardware Kit
KA09501	8000 series, 8 5/8" diameter, 160' & 180' Span Hardware Kit
KA01382	6000 series, 10" diameter, 109'-128" Span Hardware Kit
8000/6000 series PolySpan® Spans	
KA01374	8000/6000 series, 6 5/8" diameter, 115'-160' Span Hardware Kit
KA01794	8000/6000 series, 6 5/8" diameter, 180'-225' Span Hardware Kit
KA01795	8000/6000 series, 8 5/8" diameter, 115'-180' Span Hardware Kit

DRIVE UNIT HARDWARE KITS

The following is included with the listed drive unit hardware kits:

All hardware (nuts and bolts) to assemble a drive unit and attach it to the pipeline. The kits do not include hardware to attach the wheel gearboxes or centerdrives. These specific kits can be found in the drive unit section.

DRIVE UNIT HARDWARE KITS		
Part #	**Description**	**Application**
KA09489	Drive Unit Hardware Kit - includes 1/2" Bracing Bolts	For use on all Valley drive units prior to September of 1998. Utilized 1/2" bracing bolts on drive unit.
KA09490	Drive Unit Hardware Kit - includes 5/8" Bracing Bolts	For use on all Valley drive units after September of 1998. Utilized 5/8" bracing bolts on drive unit.

NOTE: To receive hardware for the complete span, please order the correct span hardware kit along with the appropriate drive unit hardware kit.

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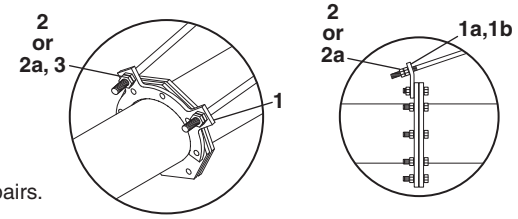
6000 series BACK CABLES				
Overhang Length	Last Span Length	1/4" Cable	5/16" Cable	Cable Length
18"	All	1780230	N/A	402"
27"	All	1780230	N/A	402"
36"	All	1780230	N/A	402"
54',64',82'	109'	N/A*	1781292	855"
54',64',82'	128'	1780586	1780589	1070"
54',64',82'	146'	1780231	1780286	1285.5"
54',64',82'	160'	1780763	1780764	1451"
54',64',82'	164'	1780587	1780590	1504"
54',64',82'	180'	N/A*	1781290	1687"
54',64',82'	183'	1780232	1780287	1721.5"
54',64',82'	187'	N/A*	1781291	1767"
54',64',82'	201'	1780588	1780591	1939.5"

Pre-6000 Series Back Cables				
Overhang Length	Last Span Length	1/4" Cable	5/16" Cable	Cable Length
16'	All	1901895	N/A	383"
26'	All	1901895	N/A	383"
42'	All	1703074*	N/A	489"
42' & 84'	126'	1702140	N/A	1013.12"
42' & 84'	147'	1702141	N/A	1260"
42' & 84'	160'	1702277	N/A	1408"
42' & 84'	170'	1700979	N/A	1510"
42' & 84'	185'	1701815	N/A	1698"
42' & 84'	126'	N/A	1702483	1013.12"
42' & 84'	147'	N/A	1702484	1260"
42' & 84'	160'	N/A	1702485	1408"
42' & 84'	170'	N/A	1702486	1510"
42' & 84'	185'	N/A	1702487	1698"

Item	Description	Part #
1	Cable Mounting Ear Bracket (6 5/8" Pipe w/82' O/H)	9361357
1a	Cable Mounting Ear (5" Pipe)	1700890
1b	Cable Mounting Ear (Heavy Duty)	1702456
2	7/8" Hex Nut	0131005
2a	3/4" Jam Nut	0131008
3	3/4" Flat Washer	0142021

Note:

1) 9/32" or 5/16" Cables can be used in place of 1/4" Cables if replaced in pairs.
2) Eff. June 04, 5/16" Cables are required for 82' Overhangs.
3) 1/4" Cables used on 6" overhangs only.



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8000 series TRUSS ROD KITS	
Part #	**Description**
KA09112	Truss Rod 6 5/8" Pipe 115' Span
KA09017	Truss Rod 6" & 6 5/8" Pipe 135' Span
KA09113	Truss Rod 6 5/8" Pipe 140' Span
KA09048	Truss Rod 6 5/8" Half Pipe 157' Span
KA09018	Truss Rod 6" & 6 5/8 Pipe 160' Span
KA09019	Truss Rod 6" & 6 5/8 Pipe 180' Span
KA09020	Truss Rod 6" & 6 5/8 Pipe 185 Span
KA09021	Truss Rod 6" & 6 5/8 Pipe 187' Span
KA09051	Truss Rod 6 5/8" Half Pipe 202' Span
KA09022	Truss Rod 6 5/8" Pipe 205' Span
KA09114	Truss Rod 8 5/8" Pipe 115' Span
KA09115	Truss Rod 8 5/8" Pipe 140' Span
KA09052	Truss Rod 8 5/8" Pipe 157' Span
KA09056	Truss Rod 8 5/8" Pipe 160' Span
KA09870	Truss Rod 8 5/8" Pipe 180' Span
KA09553	Truss Rod 10" Pipe - 112' Span
KA09555	Truss Rod 10" Pipe - 120' Span
KA09554	Truss Rod 10" Pipe - 135' Span
KA09929	Truss Rod 10" Pipe 140' Span

8000 series TRUSS ANGLE KITS	
Part #	**Description**
KA09436	135' Truss Angle 6" Pipe
KA09438	160' Truss Angle 6" Pipe
KA09440	180', 185' & 187' Truss Angle 6" Pipe
KA09997	205' Truss Angle 6" Pipe
KA09116	115' Truss Angle 6 5/8" Pipe
KA09023	135' & 140' Truss Angle 6 5/8" Pipe
KA09024	160' Truss Angle 6 5/8" Pipe
KA09025	180', 185' & 187' Truss Angle 6 5/8" Pipe
KA09026	205' Truss Angle 6 5/8" Pipe
KA09843	225' Truss Angle 6 5/8" Pipe
KA09117	115' Truss Angle 8 5/8" Pipe
KA09047	135' & 140' Truss Angle 8 5/8" Pipe
KA09050	160' Truss Angle 8 5/8" Pipe
KA09551	112.5' & 115' Truss Angle 10" Pipe
KA09552	120', 135' & 140' Truss Angle 10" Pipe
KA09930	160' Truss Angle 10" Pipe

DRIVE UNIT CONVERSION PACKAGES		
Part #	**Description**	**Comments**
0000E70	Standard Profile Drive Unit to High Profile	Packages are used to convert a drive unit to high or ultra high profile. Includes basebeam, legs, braces, drive shafts, shields and hardware.
0000E71	Standard Profile Drive Unit to Ultra High	

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GALVANIZED PIPELINES 11-1

RE-PIPING A VALLEY MACHINE WITH GALVANIZED PIPE 11-2

Pre 6000 series – 102" Spacing

170' & 185' Span – 6" Pipe 11-3

105', 126', 147' & 160' Span – 6-5/8" Pipe 11-3

105' & 126' – 8" Pipe 11-3

105' – 10" Pipe 11-3

Pre 6000 series - 30" Spacing

170' & 185' – 6" Pipe 11-4

105', 126', 147' & 160' – 6-5/8" Pipe 11-4

105' & 126' – 8" Pipe 11-4

105' – 10" Pipe. 11-4

6000 series - 6" Pipe

128', 146', 160', 164', 183' & 201' – 110" Spacing 11-5

128', 146', 160', 164', 183' & 201' – 30" Spacing 11-6

6000 series - 6-5/8" Pipe

109', 128', 146', 160', 164', 180' 183', 187' & 201' – 110" Spacing. 11-7

109', 128', 146', 160', 164', 180' 183', 187' & 201' – 30" Spacing. 11-8

6000 series - 8" Pipe

128', 146', 160' & 164' – 110" & 30" Spacing 11-9

6000 series - 10" Pipe

109' & 128' – 110" & 30" Spacing. 11-10

8000 series - 6" Pipe

135', 160', 180', 185', 187' & 205' – 108" & 30" Spacing 11-11

8000 series - 6-5/8" Pipe

115', 135', 140', 160', 180', 185', 187', 205 & 225' – 108" Spacing. 11-12

115', 135', 140', 160', 180', 185' & 187', 205' & 225' – 30" Spacing 11-13

8000 series - 8-5/8" Pipe

115', 135', 140', 160' & 180' – 108" & 30" Spacing. 11-14

8000 series - 10" Pipe

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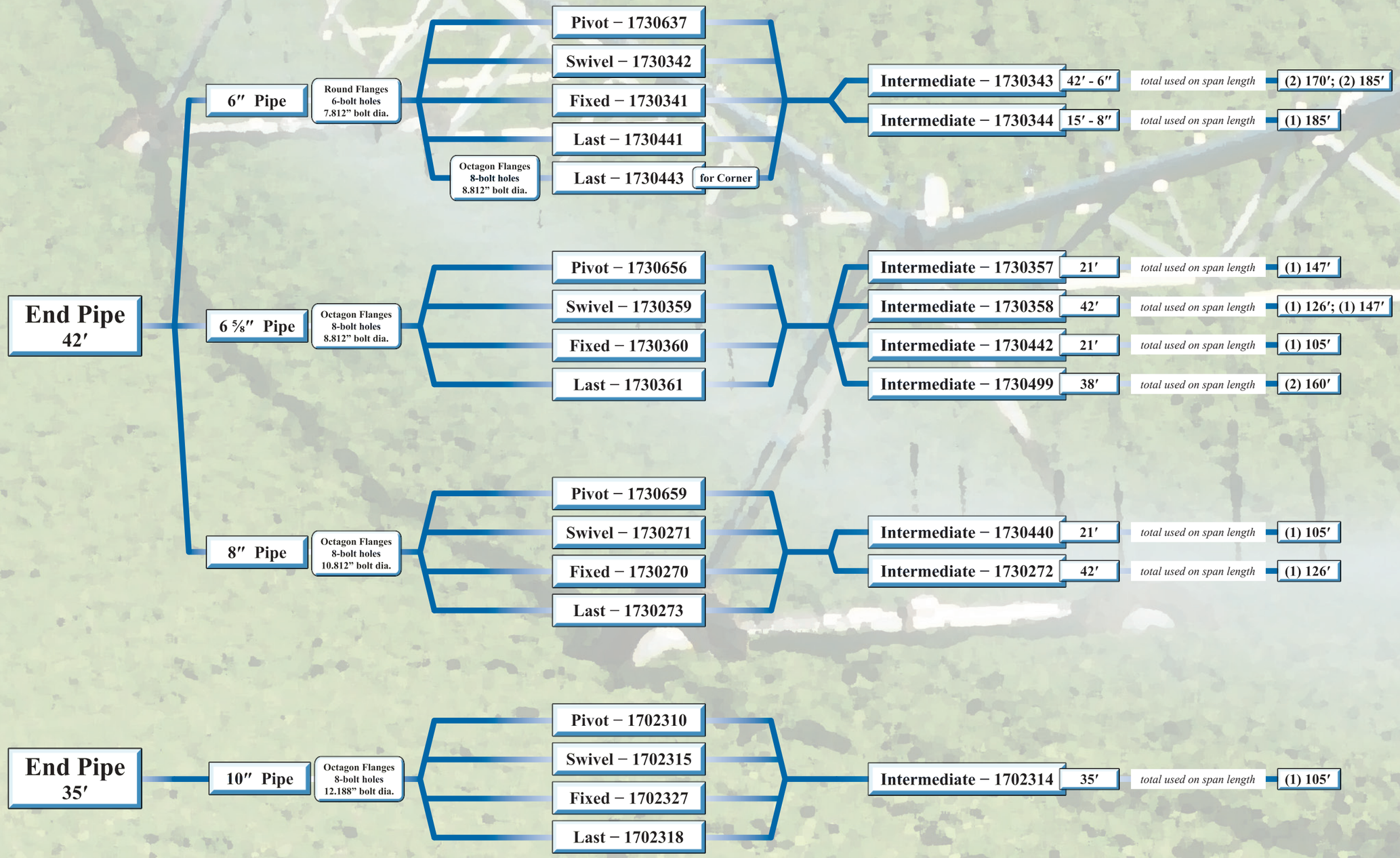
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VALLEY Pre-6000 series Pipe Chart



VALLEY 6000 series Pipe Chart

Standard Coupler Spacing

Tower Pipe
36′

- **6″ Pipe** — Round Flanges, 6-bolt holes, 7.812” bolt dia.
  - Pivot – 1780853
  - Swivel – 1780854
  - Fixed – 1780856
  - Last – 1780857
  - Intermediate – 1780863 — 27′ - 6″ — *total used on span length* — (2) 128′
  - Intermediate – 1780864 — 36′ - 6 5/8″ — *total used on span length* — (2) 146′; (2) 160′; (2) 164′; (2) 183′
  - Intermediate – 1780862 — 13′ - 8 3/8″ — *total used on span length* — (1) 160′
  - Intermediate – 1780858 — 18′ - 1 1/8″ — *total used on span length* — (1) 164′
  - Intermediate – 1780861 — 36′ - 6 5/8″ — *total used on span length* — (1) 183′
  - Intermediate – 1781212 — 36′ - 6 5/8″ — *total used on span length* — (2) 201′
  - Intermediate – 1780860 — 36′ - 6 5/8″ — *total used on span length* — (1) 201′
  - Intermediate – 1780859 — 18′ - 1 1/8″ — *total used on span length* — (1) 201′
- **6 5/8″ Pipe** — Octagon Flanges, 8-bolt holes, 8.812” bolt dia.
  - Pivot – 1780442
  - Swivel – 1780441
  - Fixed – 1780440
  - Last – 1780443
  - Intermediate – 1780765 — 36′ - 6 5/8″ — *total used on span length* — (1) 109′
  - Intermediate – 1780449 — 27′ - 4 15/16″ — *total used on span length* — (2) 128′
  - Intermediate – 1780438 — 36′ - 6 5/8″ — *total used on span length* — (2) 146′; (2) 160′; (2) 164′; (2) 180′; (2) 183′; (2) 187′; (2) 201′
  - Intermediate – 1780661 — 13′ - 8 3/8″ — *total used on span length* — (1) 160′
  - Intermediate – 1780447 — 18′ - 1 1/8″ — *total used on span length* — (1) 164′; (1) 201′
  - Intermediate – 1781336 — 33′ - 8 3/8″ — *total used on span length* — (1) 180′
  - Intermediate – 1780439 — 36′ - 6 5/8″ — *total used on span length* — (1) 183′
  - Intermediate – 1781337 — 40′ - 5 1/8″ — *total used on span length* — (1) 187′
  - Intermediate – 1780448 — 36′ - 6 5/8″ — *total used on span length* — (1) 201′
- **8″ Pipe** — Octagon Flanges, 8-bolt holes, 10.812” bolt dia.
  - Pivot – 1780311
  - Swivel – 1780309
  - Fixed – 1780363
  - Last – 1780312
  - Trans – 1780703
  - Intermediate – 1780355 — 27′ - 3 7/16″ — *total used on span length* — (2) 128′
  - Intermediate – 1780310 — 36′ - 4 9/16″ — *total used on span length* — (2) 146′ (2) 160′; (2) 164′
  - Intermediate – 1780662 — 14′ — *total used on span length* — (1) 160′
  - Intermediate – 1780576 — 18′ - 5 7/16″ — *total used on span length* — (1) 164′

VALLEY 6000 series Pipe Chart

30” Coupler Spacing

Tower Pipe
36′

6″ Pipe
Round Flanges
6-bolt holes
7.812” bolt dia.

- Pivot – 1780941
- Swivel – 1780942
- Fixed – 1780944
- Last – 1780945

Intermediate – 1780946	27′ - 6″	*total used on span length*	(2) 128′
Intermediate – 1780947	36′ - 6 5/8″	*total used on span length*	(2) 146′; (2) 160′; (2) 164′; (2) 183′
Intermediate – 1780948	13′ - 8 3/8″	*total used on span length*	(1) 160′
Intermediate – 1780949	18′ - 1 1/8″	*total used on span length*	(1) 164′
Intermediate – 1780950	36′ - 6 5/8″	*total used on span length*	(1) 183′
Intermediate – 1781213	36′ - 6 5/8″	*total used on span length*	(2) 201′
Intermediate – 1780952	36′ - 6 5/8″	*total used on span length*	(1) 201′
Intermediate – 1780951	18′ - 1 1/8″	*total used on span length*	(1) 201′

6 5/8″ Pipe
Octagon Flanges
8-bolt holes
8.812” bolt dia.

- Pivot – 1781293
- Swivel – 1781294
- Fixed – 1781295
- Last – 1781296

Intermediate – 1781339	36′ - 6 5/8″	*total used on span length*	(1) 109′
Intermediate – 1781229	27′ - 4 15/16″	*total used on span length*	(2) 128′
Intermediate – 1781297	36′ - 6 5/8″	*total used on span length*	(2) 146′; (2) 160′; (2) 164′; (2) 180′; (2) 183′; (2) 187′; (2) 201′
Intermediate – 1781300	13′ - 8 3/8″	*total used on span length*	(1) 160′
Intermediate – 1781301	18′ - 1 1/8″	*total used on span length*	(1) 164′; (1) 201′
Intermediate – 1781302	33′ - 8 3/8″	*total used on span length*	(1) 180′
Intermediate – 1781298	36′ - 6 5/8″	*total used on span length*	(1) 183′
Intermediate – 1781335	40′ - 5 1/8″	*total used on span length*	(1) 187′
Intermediate – 1781303	36′ - 6 5/8″	*total used on span length*	(1) 201′

8″ Pipe
Octagon Flanges
8-bolt holes
10.812” bolt dia.

- Pivot – 1781510
- Swivel – 1781511
- Fixed – 1781512
- Last – 1781513
- Trans – 1781534

Intermediate – 1781514	27′ - 3 7/16″	*total used on span length*	(2) 128′
Intermediate – 1781515	36′ - 4 9/16″	*total used on span length*	(2) 146′ (2) 160′; (2) 164′
Intermediate – 1781516	14′	*total used on span length*	(1) 160′
Intermediate – 1781517	18′ - 5 7/16″	*total used on span length*	(1) 164′

10″ Pipe
Octagon Flanges
8-bolt holes
12.188” bolt dia.

- Pivot – 1781557
- Swivel – 1781558
- Fixed – 1781559
- Trans – 1781560

Intermediate – 1781561	36′ - 6 5/8″	*total used on span length*	(1) 109′
Intermediate – 1781562	27′ - 3 7/16″	*total used on span length*	(2) 128′

VALLEY 8000 series Pipe Chart

Standard Coupler Spacing

End Pipe
45′

- **6″ Pipe** — Round Flanges, 8-bolt holes, 8.812” bolt dia.
  - **Pivot − 9361219**
  - **Swivel − 9361217**
  - **Fixed − 9361218**
  - **Last − 9361220**
  - **Intermediate − 9361216** — 44′ - 10 ¾″ — *total used on span length* — (1) 135′; (1) 160′; (2) 180′; (1) 185′; (1) 187′; (2) 225'
  - **Intermediate − 9361214** — 24′ - 10″ — *total used on span length* — (1) 160′; (2) 185′; (1) 225'
  - **Intermediate − 9361215** — 25′ - 9 ¼″ — *total used on span length* — (2) 187′
- **6 ⅝″ Pipe** — Octagon Flanges, 8-bolt holes, 8.812” bolt dia.
  - **Pivot − 9364352** — Universal Flange
  - **Pivot − 9361459** — 8 ⅝″ Flange
  - **Swivel − 9360012**
  - **Fixed − 9360010**
  - **Last − 9360016**
  - **Intermediate − 9360004** — 24′ - 10″ — *total used on span length* — (1) 115′; (2) 140′; (1) 160′; (2) 185′; (1) 205′
  - **Intermediate − 9360008** — 45′ — *total used on span length* — (1) 135′; (1) 160′; (2) 180′; (1) 185′; (1) 187′; (2) 205′; (3) 225'
  - **Intermediate − 9360019** — 25′ - 9 ¼″ — *total used on span length* — (2) 187′
- **8 ⅝″ Pipe** — Octagon Flanges, 8-bolt holes, 10.188” bolt dia.
  - **Pivot − 9360087**
  - **Swivel − 9360086**
  - **Fixed − 9360085**
  - **Trans − 9360088**
  - **Intermediate − 9360117** — 24′ - 10″ — *total used on span length* — (1) 115′ (2) 140′; (1) 160′
  - **Intermediate − 9360125** — 45′ — *total used on span length* — (1) 135′; (1) 160′; (2) 180'

End Pipe
45′

- **10″ Pipe** — Octagon Flanges, 8-bolt holes, 12.188” bolt dia. — *see 30" Coupler Spacing Chart*

VALLEY 8000 series Pipe Chart

30″ Coupler Spacing

End Pipe
45′

- **6″ Pipe** — Round Flanges, 8-bolt holes, 8.812” bolt dia.
  - Pivot – 9361221
  - Swivel – 9360143
  - Fixed – 9360144
  - Last – 9361222
  - Intermediate – 9360142 — 44′ - 10 ¾″ — *total used on span length* — (1) 135′; (1) 160′; (2) 180′; (1) 185′; (1) 187′; (2) 205′
  - Intermediate – 9360140 — 24′ - 10″ — *total used on span length* — (1) 160′; (2) 185′; (1) 205′
  - Intermediate – 9360141 — 25′ - 9 ¼″ — *total used on span length* — (2) 187′
- **6 ⅝″ Pipe** — Octagon Flanges, 8-bolt holes, 8.812” bolt dia.
  - Pivot – 9364353 — Universal Flange
  - Pivot – 9361457 — 8 ⅝″ Flange
  - Swivel – 9360022
  - Fixed – 9360021
  - Last – 9360024
  - Intermediate – 9360018 — 24′ - 10″ — *total used on span length* — (1) 115′; (2) 140′; (1) 160′; (2) 185′; (1) 205′
  - Intermediate – 9360020 — 45′ — *total used on span length* — (1) 135′; (1) 160′; (2) 180′; (1) 185′; (1) 187′; (2) 205′; (3) 225′
  - Intermediate – 9360019 — 25′ - 9 ¼″ — *total used on span length* — (2) 187′
- **8 ⅝″ Pipe** — Octagon Flanges, 8-bolt holes, 10.188” bolt dia.
  - Pivot – 9360491
  - Swivel – 9360092
  - Fixed – 9360091
  - Trans – 9360093
  - Intermediate – 9360089 — 24′ - 10″ — *total used on span length* — (1) 115′ (2) 140′; (1) 160′
  - Intermediate – 9360090 — 45′ — *total used on span length* — (1) 135′; (1) 160′; (2) 180′

End Pipe
45′

- **10″ Pipe** — Octagon Flanges, 8-bolt holes, 12.188” bolt dia.
  - Pivot – 9361747
  - Swivel – 9361751
  - Fixed – 9361750
  - Trans – 9361748
  - Intermediate – 9361762 — 24′ - 10″ — *total used on span length* — (1) 115′ (2) 140′; (1) 160′
  - Intermediate – 9361760 — 29′ - 9″ — *total used on span length* — (1) 120′
  - Intermediate – 9361749 — 45′ — *total used on span length* — (1) 135′; (1) 160′

PIPELINES THAT ARE BUILT TO LAST





Welded sprinkler outlet along pipeline adds strength and durability.

Valley Galvanized Pipe

Lengthen the life of any Valley machine.

- ✓ *Hot dipped galvanized for excellent corrosion protection in good water conditions*
- ✓ *State of the art galvanizing facilities ensure quick delivery and quality products*
- ✓ *Special re-piping programs provide solutions for growers to lengthen the life of their machine*
- ✓ *Easy to follow step-by-step procedures in this section makes re-piping a machine an easy solution*

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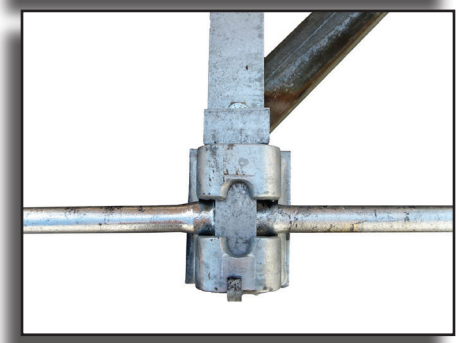
Step-by-step procedure of how to re-pipe a galvanized machine:

Step 1. Determine what series (model) the machine is. See flow charts on next pages, or look for the following.



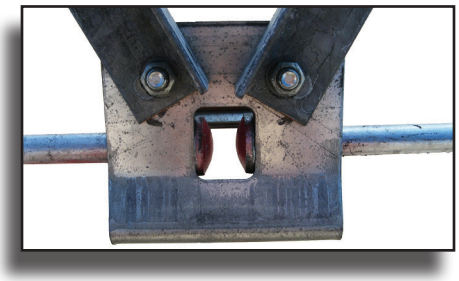
Pre-6000 series

1) Pre-6000 series will have threaded tower truss rods and also tabbed truss rods on the earlier machines.
2) Tower braces only on one side of tower
3) Tower legs bolt onto basebeam at aprox. 120" apart
4) Tower support tubes are 2 3/8" dia. And 17' 6" long
5) Truss angle brackets on pipe are a formed angle



6000 series

6) series 6000 will have welded sockets and uses a tab to hold truss rods.
7) Truss brackets on pipe are made up of a half moon strap with 2 other plates welded to it in line with pipe.
8) Tower braces on both sides of tower
9) Tower legs bolt to basebeam at approx. 140" apart.
10) Tower support tubes are 2 3/8" dia. and 20' long



8000 series

11) series 8000 have 2 piece bolt together truss rod sockets
12) Truss brackets on pipe are a saddle type assembly.
13) Tower same as series 6000 with braces on both sides and mounting to basebeam 140" apart.
14) Tower support tube is heavier than other series, 2 7/8" dia. And 14' 10" long.

Step 2. Make list of spans requiring re-piping. The following information is required.

1) Span type: Pivot, Intermediate, or Last
2) Length of each span
3) Pipe diameter
4) Coupler Spacing

Step 3. With the information gathered, refer to the appropriate tables listed in this section.

Step 4. Determine the required pipe part numbers and quantities.

Step 5. Determine the additional items required per span. These are found at the bottom of each table. This includes such items as hardware, boots, clamps and gaskets.

1) Hardware kits include flange gaskets, truss bolts & nuts, flange bolts & nuts, drains, clamps for attaching span cable,1" and ½" cord connectors, ¾" bolts and nuts for attaching pipe line to tower, u-bolts for spreader bar, and grounding leads. Everything you should need to install new pipe other than the flex boot and clamps.

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Pre 6000 series – 102" Spacing

PRE-6000 series GALVANIZED 102" SPACING												
Span Lengths	**170'**	**185'**	**105'**	**126'**	**147'**	**160'**	**105'**	**126'**	**105'**			
Pipe Diameter	**6"**	**6"**	**6-5/8"**	**6-5/8"**	**6-5/8"**	**6-5/8"**	**8"**	**8"**	**10"**			
Pipes												
Intermediates	2 1730343	1730344	1730442	1730358	1730357	2 1730499	1730440	1730272	1702314			
		2 1730343			1730358							
Pivot	1730637	1730637	1730656	1730656	1730656	1730656	1730659	1730659	1703210			
Fixed	1730341	1730341	1730360	1730360	1730360	1730360	1730270	1730270	1702327			
Swivel	1730342	1730342	1730359	1730359	1730359	1730359	1730271	1730271	1702315			
Last 8-Bolt	1730443	1730443	1730361	1730361	1730361	1730361	1730273	1730273	1702318			
Last 6-Bolt	1730441	1730441										
Trans. Swivel	1730346	1730346					1710068	1710068				
Trans.8" - 6-5/8"							1710038	1710038				
Trans. 10" - 8"									1703222			
Trans. 10" - 6-5/8"									1702321			
ADDITIONAL PARTS REQUIRED												
Hardware Kits	KA00052	KA00052	KA00065	KA00065	KA00065	KA00065	KA01380	KA01380	KA01382			
Flex Hose	0991187	0991187	1800318	1800318	1800318	1800318	1710029	1710029	1702326			
Flex Hose Clamp	2 0991186	2 0991186	2 0991087	2 0991087	2 0991087	2 0991087	2 0991147	2 0991147	2 0992386			
Clamp w/liner									3 0992441			
Flat Gasket-Pivot	0991016	0991016	0992211	0992211	0992211	0992211	0996566	0996566	0992385			

NOTE: Numbers in RED indicate quantities.

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Pre 6000 series - 30" Spacing

PRE-6000 series GALVANIZED 30" SPACING									
Span Lengths	170'	185'	105'	126'	147'	160'	105'	126'	105'
Pipe Diameter	6"	6"	6-5/8"	6-5/8"	6-5/8"	6-5/8"	8"	8"	10"
Pipes									
Intermediates	N/A	N/A	1730442	1703219	1703218	2 1703220	N/A	N/A	N/A
	N/A	N/A			1703219		N/A	N/A	N/A
Pivot	N/A	N/A	1703216	1703216	1703216	1703216	N/A	N/A	N/A
Fixed	N/A	N/A	1703215	1703215	1703215	1703215	N/A	N/A	N/A
Swivel	N/A	N/A	1703214	1703214	1703214	1703214	N/A	N/A	N/A
Last 8-Bolt	N/A	N/A	1703217	1703217	1703217	1703217	N/A	N/A	N/A
Last 6-Bolt	N/A	N/A					N/A	N/A	N/A
Trans. 8" - 6-5/8"							N/A	N/A	N/A
Trans. 10" - 8"									N/A
Trans. 10" - 6-5/8"									N/A
ADDITIONAL PARTS REQUIRED									
Hardware Kits	KA00052	KA00052	KA00065	KA00065	KA00065	KA00065	KA01380	KA01380	KA01382
Flex Hose	0991187	0991187	1800318	1800318	1800318	1800318	1710029	1710029	1702326
Flex Hose Clamp	2 0991186	2 0991186	2 0991087	2 0991087	2 0991087	2 0991087	2 0991147	2 0991147	2 0992386
Clamp w/liner									3 0992441
Flat Gasket-Pivot	0991016	0991016	0992211	0992211	0992211	0992211	0996566	0996566	0992385
NOTE: Numbers in RED indicate quantities.									

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6000 series - 6" Pipe

6000 series GALVANIZED 6" PIPE								
Span Lengths	128'	146'	160'	164'	183'	201'		
Coupler Spacing	110"	110"	110"	110"	110"	110"		
Pipes								
Intermediates	2 1780863	2 1780864	2 1780864	2 1780864	2 1780864	2 1781212		
			1780862	1780859	1780861	1780860		
						1780859		
Pivot	1780853	1780853	1780853	1780853	1780853	1780853		
Fixed	1780856	1780856	1780856	1780856	1780856	1780856		
Swivel	1780854	1780854	1780854	1780854	1780854	1780854		
Last	1780857	1780857	1780857	1780857	1780857	1780857		
Trans. Swivel	1780855	1780855	1780855	1780855	1780855	1780855		
ADDITIONAL PARTS REQUIRED								
Flex Hose	0991187	Flex Joint Hose 6"						
Flex Hose Clamp	2 0991186	Flex Joint Clamp 6"						
Flat Gasket-Pivot	0996566	Flat Rubber Gasket 8"/ 8-5/8" (Used on Pivot Span)						
Flat Gasket- Last	0992211	Flat Rubber Gasket 6-5/8" (Used on Last Span)						
Hardware Kits	KA00962	series 6000, 6" diameter, 128';146';160';164';183' Span Hardware Kit						
Hardware Kit	KA00963	series 6000, 6" diameter, 201' Span Hardware Kit						
NOTE: Numbers in RED indicate quantities.								

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6000 series - 6" Pipe

6000 series GALVANIZED 6" PIPE							
Span Lengths	128'	146'	160'	164'	183'	201'	
Coupler Spacing	30"	30"	30"	30"	30"	30"	
Pipes							
Intermediates	2 1780946	2 1780947	2 1780947	2 1780947	2 1780947	2 1781213	
			1780948	1780949	1780950	1780952	
						1780951	
Pivot	1780941	1780941	1780941	1780941	1780941	1780941	
Fixed	1780944	1780944	1780944	1780944	1780944	1780944	
Swivel	1780942	1780942	1780942	1780942	1780942	1780942	
Last	1780945	1780945	1780945	1780945	1780945	1780945	
Trans. Swivel	1780943	1780943	1780943	1780943	1780943	1780943	
ADDITIONAL PARTS REQUIRED							
Flex Hose	0991187	Flex Joint Hose 6"					
Flex Hose Clamp	2 0991186	Flex Joint Clamp 6"					
Flat Gasket-Pivot	0996566	Flat Rubber Gasket 8"/ 8-5/8" (Used on Pivot Span)					
Flat Gasket	0992211	Flat Rubber Gasket 6-5/8" (Used on Last Span)					
Hardware Kits	KA00962	series 6000, 6" diameter, 128';146';160';164';183' Span Hardware Kit					
Hardware Kit	KA00963	series 6000, 6" diameter, 201' Span Hardware Kit					

NOTE: Numbers in RED indicate quantities.

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6000 series - 6-5/8" Pipe

6000 series GALVANIZED 6-5/8" PIPE										
Span Lengths	**109'**	**128'**	**146'**	**160'**	**164'**	**180'**	**183'**	**187'**	**201'**
Coupler Spacing	**110"**	**110"**	**110"**	**110"**	**110"**	**110"**	**110"**	**110"**	**110"**	
Pipes										
Intermediates	1780765	2 1780449	2 1780438	2 1780438	2 1780438	2 1780438	2 1780438	2 1780438	2 1780438	2 1780438
				1780661	1780447	1781336	1780439	1781337	1780448	
									1780447	
Pivot	1780442	1780442	1780442	1780442	1780442	1780442	1780442	1780442	1780442	
Fixed	1780440	1780440	1780440	1780440	1780440	1780440	1780440	1780440	1780440	
Swivel	1780441	1780441	1780441	1780441	1780441	1780441	1780441	1780441	1780441	
Last	1780443	1780443	1780443	1780443	1780443	1780443	1780443	1780443	1780443	
ADDITIONAL PARTS REQUIRED										
Flex Hose	1800318	**Flex Joint Hose 6-5/8"**								
Flex Hose Clamp	2 0991087	**Flex Joint Clamp 6-5/8"**								
Flat Gasket-Pivot	0996566	**Flat Rubber Gasket 8" - 8-5/8" (Used on Pivot Span)**								
Flat Gasket-Last	0992211	**Flat Rubber Gasket 6-5/8" (Used on Last Span)**								
Hardware Kits	KA00550	**series 6000, 6-5/8" diameter,109'; 128';146';160';164';180',183' Span Hardware Kit**								
Hardware Kit	KA00865	**series 6000, 6-5/8" diameter,187' & 201' Span Hardware Kit**								

NOTE: Numbers in RED indicate quantities.

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6000 series - 6-5/8" Pipe

6000 series GALVANIZED 6-5/8" PIPE										
Span Lengths	**109'**	**128'**	**146'**	**160'**	**164'**	**180'**	**183'**	**187'**	**201'**	
Coupler Spacing	**30"**	**30"**	**30"**	**30"**	**30"**	**30"**	**30"**	**30"**	**30"**	
Pipes										
Intermediates	1781339	2 1781299	2 1781297	2 1781297	2 1781297	2 1781297	2 1781297	2 1781297	2 1781297	2 1781297
				1781300	1781301	1781302	1781298	1781335	1781303	
									1781301	
Pivot	1781293	1781293	1781293	1781293	1781293	1781293	1781293	1781293	1781293	1781293
Fixed	1781295	1781295	1781295	1781295	1781295	1781295	1781295	1781295	1781295	1781295
Swivel	1781294	1781294	1781294	1781294	1781294	1781294	1781294	1781294	1781294	1781294
Last	1781296	1781296	1781296	1781296	1781296	1781296	1781296	1781296	1781296	1781296
ADDITIONAL PARTS REQUIRED										
Flex Hose	1800318	**Flex Joint Hose 6-5/8"**								
Flex Hose Clamp	2 0991087	**Flex Joint Clamp 6-5/8"**								
Flat Gasket-Pivot	0996566	**Flat Rubber Gasket 8" - 8-5/8" (Used on Pivot Span)**								
Flat Gasket-Last	0992211	**Flat Rubber Gasket 6-5/8" (Used on Last Span)**								
Hardware Kits	KA00550	**series 6000, 6-5/8" diameter,109'; 128';146';160';164';180',183' Span Hardware Kit**								
Hardware Kit	KA00865	**series 6000, 6-5/8" diameter, 187' & 201' Span Hardware Kit**								

NOTE: Numbers in RED indicate quantities.

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6000 series - 8" Pipe

6000 series GALVANIZED 8" PIPE										
Span Lengths	128'	128'	146'	146'	160'	160'	164'	164'		
Coupler Spacing	110"	30"	110"	30"	110"	30"	110"	30"		
Pipes										
Intermediates	2 1780355	2 1781514	2 1780310	2 1781515	2 1780310	2 1781515	2 1780310	2 1781515		
					1780662	1781516	1780576	1781517		
Pivot	1780311	1781510	1780311	1781510	1780311	1781510	1780311	1781510		
Fixed	1780363	1781512	1780363	1781512	1780363	1781512	1780363	1781512		
Swivel	1780309	1781511	1780309	1781511	1780309	1781511	1780309	1781511		
Last	1780312	1781513	1780312	1781513	1780312	1781513	1780312	1781513		
Transition	1780703	1781534	1780703	1781534	1780703	1781534	1780703	1781534		
Trans. Stub 8" - 6-5/8"	1710068	1710068	1710068	1710068	1710068	1710068	1710068	1710068		
ADDITIONAL PARTS REQUIRED										
Flex Hose	1710029	Flex Joint Hose 8"								
Flex Hose Clamp	2 0991147	Flex Joint Clamp 8"								
Flat Gasket-Pivot	0996566	Flat Rubber Gasket 8"/ 8-5/8" (Used on Pivot, Last,& Transition Spans)								
Hardware Kit	KA01381	series 6000, 8" diameter, 128';146';160';164' Span Hardware Kit								

NOTE: Numbers in RED indicate quantities.

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6000 series - 10" Pipe

6000 series GALVANIZED 10" PIPE						
Span Lengths	109'	109'	128'	128'	128'	
Coupler Spacing	110"	30"	110"	30"		
Pipes						
Intermediates	N/A	1781561	N/A	2 1781562		
	N/A		N/A			
	N/A		N/A			
Pivot	N/A	1781557	N/A	1781557		
Fixed	N/A	1781559	N/A	1781559		
Swivel	N/A	1781558	N/A	1781558		
Transition Pipe	N/A	1781560	N/A	1781560		
Trans. 10" - 8"	N/A	1702322	N/A	1702322		
Trans. 10" - 6-5/8"	N/A	1702321	N/A	1702321		
ADDITIONAL PARTS REQUIRED						
Flex Hose	1702326	Flex Joint Hose 10"				
Flex Hose Clamp	2 0992386	Flex Joint Clamp 10" without Liner				
Flex Hose Clamp	3 0992441	Flex Joint Clamp 10" with Liner				
Flat Gasket-Pivot	0992385	Flat Rubber Gasket 10" (Used on Pivot & Transition Spans)				
Hardware Kit	KA01382	6000 series, 10" diameter, 109',& 128' Span Hardware Kit				
NOTE: Numbers in RED indicate quantities.						

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8000 series GALVANIZED 6" PIPE												
Span Lengths	135'	135'	160'	160'	180'	180'	185'	185'	187'	187'	205'	205'
Coupler Spacing	108"	30"	108"	30"	108"	30"	108"	30"	108"	30"	108"	30"
Pipes												
Intermediates	9361216	9360142	9361216	9360142	2 9361216	2 9360142	9361216	9360142	9361216	9360142	2 9361216	2 9360142
			9361214	9360140			2 9361214	2 9360140	2 9361215	2 9360141	9361214	9360140
Pivot	9361219	9361221	9361219	9361221	9361219	9361221	9361219	9361221	9361219	9361221	9361219	9361221
Fixed	9361218	9360144	9361218	9360144	9361218	9360144	9361218	9360144	9361218	9360144	9361218	9360144
Swivel	9361217	9360143	9361217	9360143	9361217	9360143	9361217	9360143	9361217	9360143	9361217	9360143
Last	9361220	9361222	9361220	9361222	9361220	9361222	9361220	9361222	9361220	9361222	9361220	9361222
6-5/8" Swivel pipe used to transition from 6-5/8" to 6" spans												

ADDITIONAL PARTS REQUIRED		
Flex Hose	0991187	Flex Joint Hose 6"
Flex Hose Clamp	2 0991186	Flex Joint Clamp 6"
Flat Gasket-Pivot	0992211	Flat Rubber Gasket 6-5/8" (Used on Pivot & Last Span)
Hardware Kit	KA01793	8000 series, 6" diameter, 135' -- 160' Span Hardware Kit
Hardware Kit	KA01383	8000 series, 6" diameter, 180' -- 205' Span Hardware Kit
Truss Rod Spacer Kit	KA09002	8000 series, 135' -- 160' Spans ONLY
Truss Rod Spacer Kit	KA01360	7000 series, 135' -- 160' Spans ONLY
NOTE: Numbers in RED indicate quantities.		

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8000 series - 6-5/8" Pipe

8000 series GALVANIZED 6-5/8" PIPE										
Span Lengths	115'	135'	140'	160'	180'	185'	187'	205'	225'	
Coupler Spacing	108"	108"	108"	108"	108"	108"	108"	108"	108"	
Pipes										
Intermediates	9360004	9360008	2 9360004	9360004	2 9360008	2 9360004	2 9360019	2 9360008	3 9360008	
				9360008		9360008	9360008	9360004		
Pivot Universal Flange	9364352	9364352	9364352	9364352	9364352	9364352	9364352	9364352	9364352	
Pivot 8 5/8" Flange	9361459	9361459	9361459	9361459	9361459	9361459	9361459	9361459	9361459	
Fixed	9360010	9360010	9360010	9360010	9360010	9360010	9360010	9360010	9360010	
Swivel	9360012	9360012	9360012	9360012	9360012	9360012	9360012	9360012	9360012	
Last	9360016	9360016	9360016	9360016	9360016	9360016	9360016	9360016	9360016	
ADDITIONAL PARTS REQUIRED										
Flex Hose	1800318	Flex Joint Hose 6-5/8"								
Flex Hose Clamp	2 0991087	Flex Joint Clamp 6-5/8"								
Flat Gasket-Pivot	0996566	Flat Rubber Gasket 8"- 8-5/8" (Used on Pivot Span)								
Flat Gasket-Last	0992211	Flat Rubber Gasket 6-5/8" (Used on Last Span)								
Hardware Kits	KA09491	8000 series, 6-5/8" diameter, 115' Span Hardware Kit								
Hardware Kits	KA09492	8000 series, 6-5/8" diameter, 135' Span Hardware Kit								
Hardware Kits	KA09493	8000 series, 6-5/8" diameter, 140' Span Hardware Kit								
Hardware Kits	KA09494	8000 series, 6-5/8" diameter, 160' Span Hardware Kit								
Hardware Kits	KA09495	8000 series, 6-5/8" diameter, 180' Span Hardware Kit								
Hardware Kits	KA09496	8000 series, 6-5/8" diameter, 185' & 187' Span Hardware Kit								
Hardware Kits	KA09497	8000 series, 6-5/8" diameter, 205' & 225' Span Hardware Kit								
Truss Rod Spacer Kit	KA09002	8000 series, 115', 135', 140' & 160' Spans								
Truss Rod Spacer Kit	KA01360	7000 series, 115', 135', 140' & 160' Spans								

NOTE: Numbers in RED indicate quantities.

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8000 series - 6-5/8" Pipe

8000 series GALVANIZED 6-5/8" PIPE											
Span Lengths	115'	135'	140'	160'	180'	185'	187'	205'	225'		
Coupler Spacing	30"	30"	30"	30"	30"	30"	30"	30"	30"		
Pipes											
Intermediates	9360018	9360020	2 9360018	9360018	2 9360020	2 9360018	2 9360019	2 9360020	3 9360020		
				9360020		9360020	9360020	9360018			
Pivot Universal Flange	9364353	9364353	9364353	9364353	9364353	9364353	9364353	9364353	9364353		
Pivot 8 5/8" Flange	9361457	9361457	9361457	9361457	9361457	9361457	9361457	9361457	9361457		
Fixed	9360021	9360021	9360021	9360021	9360021	9360021	9360021	9360021	9360021		
Swivel	9360022	9360022	9360022	9360022	9360022	9360022	9360022	9360022	9360022		
Last	9360024	9360024	9360024	9360024	9360024	9360024	9360024	9360024	9360024		
ADDITIONAL PARTS REQUIRED											
Flex Hose	1800318	Flex Joint Hose 6-5/8"									
Flex Hose Clamp	2 0991087	Flex Joint Clamp 6-5/8"									
Flat Gasket-Pivot	0996566	Flat Rubber Gasket 8" - 8-5/8" (Used on Pivot Span)									
Flat Gasket-Last	0992211	Flat Rubber Gasket 6-5/8" (Used on Last Span)									
Hardware Kits	KA09491	8000 series, 6-5/8" diameter, 115' Span Hardware Kit									
Hardware Kits	KA09492	8000 series, 6-5/8" diameter, 135' Span Hardware Kit									
Hardware Kits	KA09493	8000 series, 6-5/8" diameter, 140' Span Hardware Kit									
Hardware Kits	KA09494	8000 series, 6-5/8" diameter, 160' Span Hardware Kit									
Hardware Kits	KA09495	8000 series, 6-5/8" diameter, 180' Span Hardware Kit									
Hardware Kits	KA09496	8000 series, 6-5/8" diameter, 185' & 187' Span Hardware Kit									
Hardware Kits	KA09497	8000 series, 6-5/8" diameter, 205' & 225' Span Hardware Kit									
Truss Rod Spacer Kit	KA09002	8000 series, 115', 135', 140' & 160' Spans									
Truss Rod Spacer Kit	KA01360	7000 series, 115', 135', 140' & 160' Spans									

NOTE: Numbers in RED indicate quantities.

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8000 series - 8-5/8" Pipe

8000 series GALVANIZED 8-5/8" PIPE												
Span Lengths	115'	115'	135'	135'	140'	140'	160'	160'	180'	180'	180'	
Coupler Spacing	108"	30"	108"	30"	108"	30"	108"	30"	108"	30"		
Pipes												
Intermediates	9360117	9360089	9360125	9360090	2 9360117	2 9360089	9360125	9360090	2 9360125	2 9360090		
							9360117	9360089				
Pivot 8" Flange	9360087	9360491	9360087	9360491	9360087	9360491	9360087	9360491	9360087	9360491		
Fixed	9360085	9360091	9360085	9360091	9360085	9360091	9360085	9360091	9360085	9360091		
Swivel	9360086	9360092	9360086	9360092	9360086	9360092	9360086	9360092	9360086	9360092		
Transition Pipe	9360088	9360093	9360088	9360093	9360088	9360093	9360088	9360093	9360088	9360093		
Trans. Stub 8-5/8" - 6-5/8"	9360013	9360013	9360013	9360013	9360013	9360013	9360013	9360013	9360013	9360013		
ADDITIONAL PARTS REQUIRED												
Flex Hose	0994520	Flex Joint Hose 8-5/8"										
Flex Hose Clamp	2 0994507	Flex Joint Clamp 8-5/8"										
Flat Gasket-Pivot	0996566	Flat Rubber Gasket 8" - 8-5/8" (Used on Pivot & Transition Spans)										
Hardware Kits	KA09498	series 8000, 8-5/8" diameter, 115' Span Hardware Kit										
Hardware Kits	KA09499	series 8000, 8-5/8" diameter, 135' Span Hardware Kit										
Hardware Kits	KA09500	series 8000, 8-5/8" diameter, 140' Span Hardware Kit										
Hardware Kits	KA09501	series 8000, 8-5/8" diameter, 160' & 180' Span Hardware Kit										

NOTE: Numbers in RED indicate quantities.

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8000 series - 10" Pipe

8000 series GALVANIZED 10"							
Span Lengths	115'	120'	135'	140'	160'		
Coupler Spacing	30"	30"	30"	30"	30"		
Pipes							
Intermediates	9361752	9361760	9361749	2 9361762	9361762		
					9361749		
Pivot	9361747	9361747	9361747	9361747	9361747		
Fixed	9361750	9361750	9361750	9361750	9361750		
Swivel	9361751	9361751	9361751	9361751	9361751		
Transition Pipe	9361748	9361748	9361748	9361748	9361748		
Trans. Stub 10" - 8-5/8"	9360017	9360017	9360017	9360017	9360017		
Trans. Stub 10" - 6-5/8"	1702321	1702321	1702321	1702321	1702321		
ADDITIONAL PARTS REQUIRED							
Flex Hose	1702326	Flex Joint Hose 10"					
Flex Hose Clamp	3 0992441	Flex Joint Clamp 10" with liner					
Flex Hose Clamp	2 0992386	Flex Joint Clamp 10" without liner					
Flat Gasket-Pivot	0992385	Flat Rubber Gasket 10" (Used on Pivot & Transition Spans)					
Hardware Kits	KA01382	Series 8000, 10" diameter, 109'--160' Span Hardware Kit					
NOTE: Numbers in RED indicate quantities.							

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Unique Conditions Require Specific Solutions

Supply and Demand

In certain areas, water that was once known to be clean and non-corrosive is increasingly becoming more corrosive. Some producers are using less desirable sources - waste water, process water and corrosive water. Other producers are adding crop protection chemicals or soil amendment products. Under these conditions, corrosion of standard galvanized steel can occur at varying rates.

Corrosive Factors

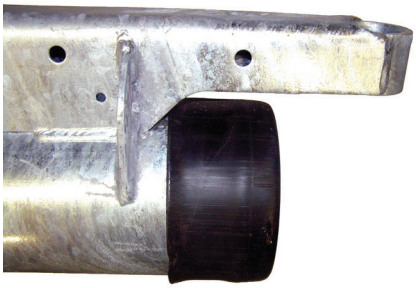
There are several characteristics that may lead to water being corrosive:



- Acidic (low pH)
- Alkaline (high pH)
- Corrosive chemicals (chlorides, sulfates, other salts)
- Soft water (low mineral content)
- Some chemical additives for crop management

Valley® Expertise

All materials except Valley® PolySpan® liners are susceptible to corrosion failure. Depending upon the water quality, corrosion failure can occur in a few years or it may take several decades. The industry standard galvanized pipe pioneered by Valmont is still acceptable for most applications but may not meet expectations under certain water conditions. Even in areas where galvanized products have been successful in the past, changes in water quality or management practices can lead to reduced life. **The only reliable method for determining water quality as it relates to the pipeline is to obtain a water sample and submit to Valmont Irrigation for an analysis and estimate of different pipeline life spans.**

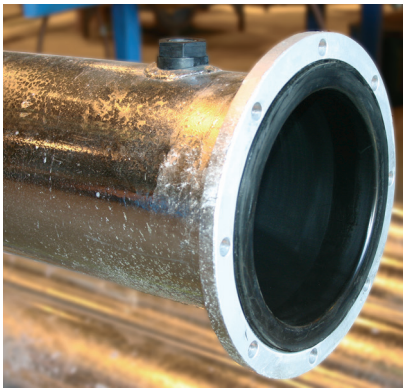


Valley Choices

Type of Water	PolySpan®*	Galvanized Steel
Salty Water (high in total dissolved solids and electroconductivity)	★★★★★	★
Salty Water (high in total dissolved solids and electroconductivity)	★★★★★	★
Acidic or Alkaline Water (pH less than 6.2 or higher than 8.5)	★★★★★	
High concentrations of chlorides and/or sulfates	★★★★★	

*** Patented**

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POLYSPAN®

PolySpan® - High Density Polyethylene (HDPE) Liner - Introduced by Valmont in 1992 to help resist the effects of acidic, alkaline, corrosive, and saline water. Utilizes a ¾" outlet fitting, the strongest in the industry. No stainless steel used to connect spans, which can be corroded by chlorides and sulfates in the water.

Versatility - Available with Valley® pivots, towables, and linears (6 5/8" & 8 5/8" pipe sizes). Eight span length choices up to a maximum of 205'. Also available in model 6000 series spans.

INDUSTRY BEST! 20/10 Year Pipeline Corrosion Limited Warranty* - 20 year prorated pipeline corrosion warranty starting on delivery date with full pipeline replacement during the first 10 years or 30,000 hours (whichever occurs first). Does not include freight, labor, or hardware.

NEW ¾" PolySpan® Coupler released in 2006

- ✓ ***Much larger base and heavier wall***
- ✓ ***Self locking tabs to prevent nut from loosening***
- ✓ ***Twice as strong as the previous ½" coupler design***
- ✓ ***Coupler utilized for both sprinkler outlets and span drains***



Step-by-step procedure of how to re-pipe a machine with PolySpan® Pipe:

Step1. Make a list of the spans requiring PolySpan® pipeline. The following information is required:

- ✓ ***series (model) – MUST BE AN 8000 or 6000 series Valley Machine***
- ✓ ***Pivot, Intermediate or Last***
- ✓ ***Length***
- ✓ ***Pipeline diameter (6 5/8" and 8 5/8" available in 8000 and 6000 series)***
- ✓ ***Coupler spacing***

Step 2. With the information gathered, refer to the appropriate tables listed in this section.

Step 3. Determine the required pipe part numbers and quantities.

Step 4. Determine the additional items required per span. These are found at the bottom of each table. This includes items such as hardware, boots, clamps and gaskets and any other required items.

Step 5. Don't forget to order plastic plugs and sprinkler components as outlined in the next "Sprinkler Package Requirements" section.

Step 6. Don't forget the required drain components as outlined in the "Drain Components" section.

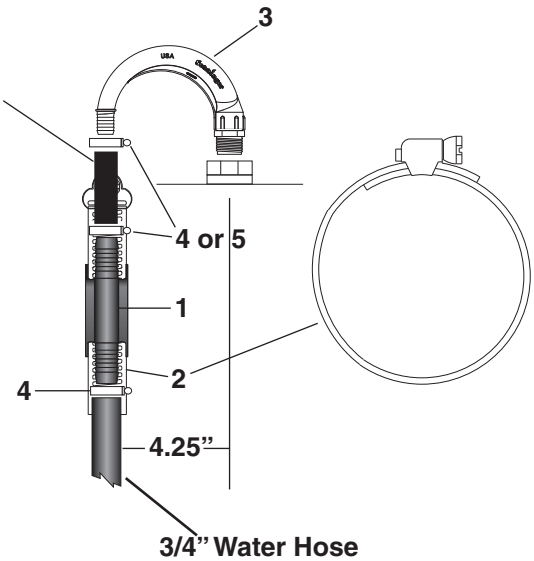
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Sprinkler Package Requirements for PolySpan® Pipelines 6000 or 8000 series

PolySpan® pipeline utilizes the "Bulkhead" type coupler as explained in this section. It is very important that sprinklers are not inserted directly into the coupler or that drops are attached directly to the coupler. Doing this allows too much stress and will damage the coupler and/ or the seal between the coupler and the pipeline. Following are several options available for attaching the sprinklers:

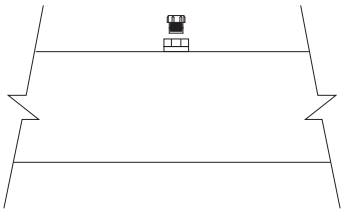
OPTION 1 — Fixed Loop

3/4" Water Hose
(5" Length)
0272043 **– Senninger Hose (250')**
OR
0272033 **– Valley Hose (250')**



3/4" Water Hose
(Length Varies)
0272043 **– Senninger Hose (250')**
OR
0272033 **– Valley Hose (250')**

Don't forget Plugs



0246193 **– ¾" NPT Plastic Pipe Plug**

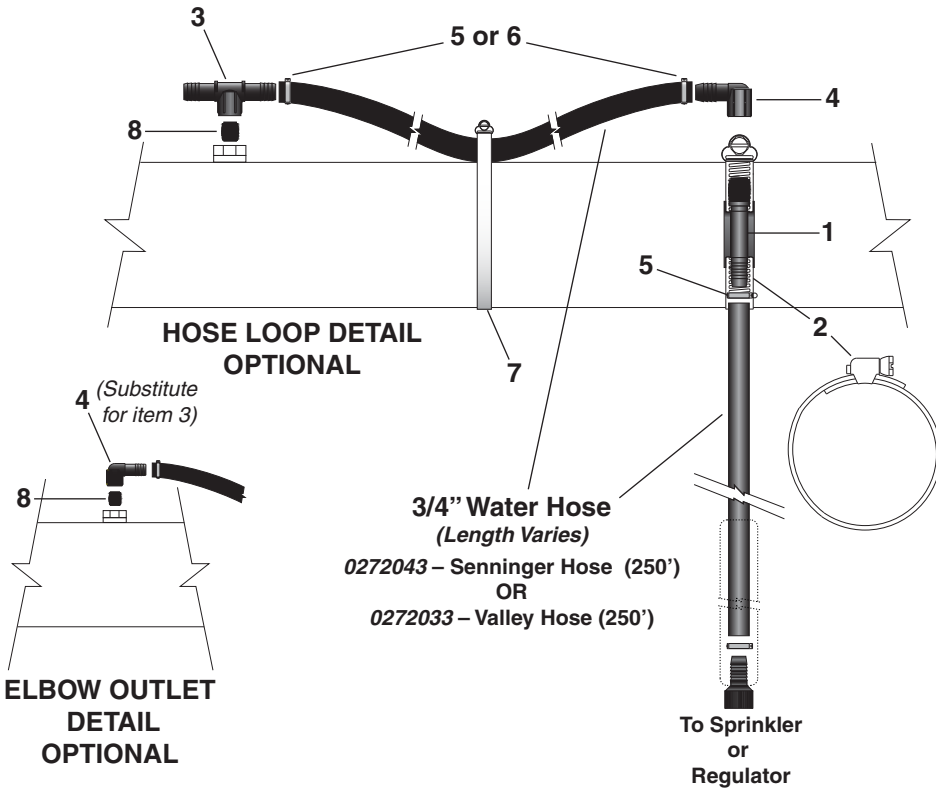
0246206 **– ½" NPT Plastic Pipe Plug (Prior to MAR 06)**

SPRINKLER COMPONENTS FOR OPTION 1			
Item ID	Part #	Qty Required per Drop	Description
1	9360365	1	3/4" Hose barb X Hose barb Adjustable Connector
2	0271087	1	6 5/8" Screw Clamp
2	0271105		8 5/8" Screw Clamp
3	0246222	1	3/4" M X Hose Barb Senninger U-Pipe - High Grade Plastic
4	0271084	1 or 3	1 1/4" SS Screw Clamp
5	0271080	2 or 0	1 1/16" Crimp Clamp

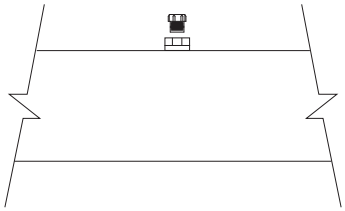
Don't Forget to Order Enough Hose as Illustrated in the Diagram

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OPTION 2 — Tee / Elbow Arrangement



Don't forget Plugs



0246193 – ¾" NPT Plastic Pipe Plug

0246206 – ½" NPT Plastic Pipe Plug
(Prior to MAR 06)

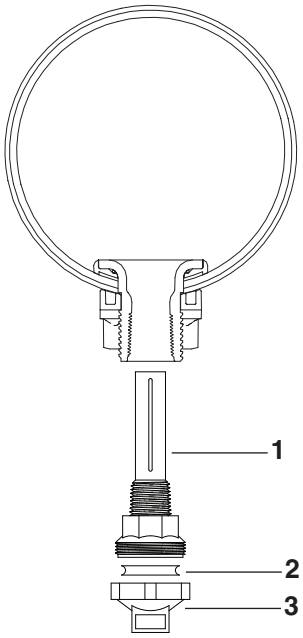
SPRINKLER COMPONENTS FOR OPTION 2			
Item ID	Part #	Qty Required per Drop	Description
1	9360956	1	3/4" Hose X 3/4" Male Adjustable Connector
2	0271087	1	6 5/8" Screw Clamp
2	0271105		8 5/8" Screw Clamp
3	0242061	1	3/4" X 3/4" X 3/4" Hose BarbTee Fitting
4	0271104	1	3/4" FNPT X 3/4" Hose Barb 90 deg. Elbow
5	0271084	1 or 3	1 1/4" SS Screw Clamp
6	0271080	2 or 0	1 1/16" Crimp Clamp
7	0271021	Varies	Hydraulic Tube Clamp
Optional 90 degree Elbow Outlet Items			
4	0271104	Substitute for Item 3	3/4" FNPT X 3/4" Hose Barb 90 deg. Elbow
8	0211103	1	3/4" X 2" PVC Nipple

Don't Forget to Order Enough Hose as Illustrated in the Diagram

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Adding Drain Components for PolySpan® Pipelines 6000 or 8000 series

PolySpan® spans and overhangs utilize the same ¾" coupler for the drain application as well as the sprinkler coupler. New longer Upper Drain Body with 3/4" threads developed for PolySpans®.



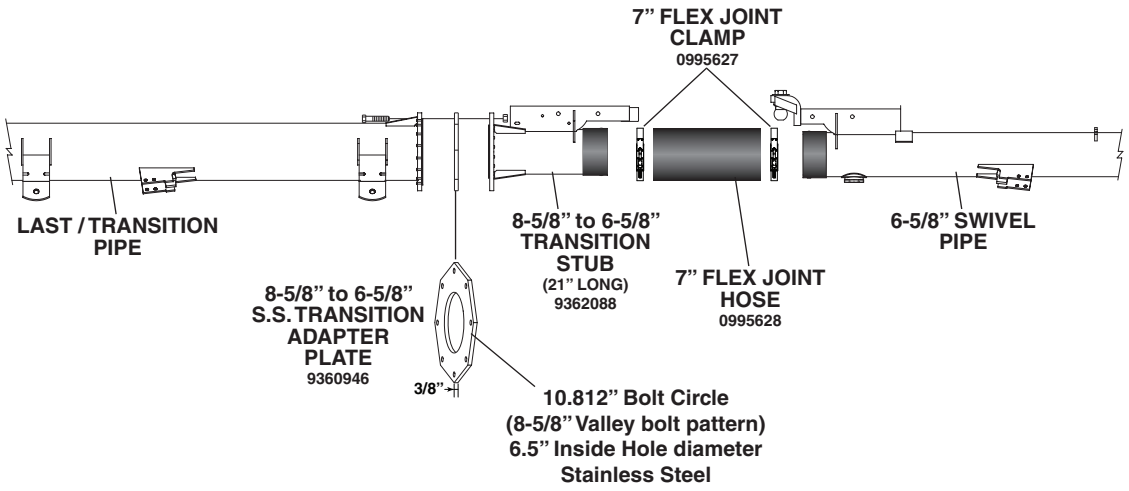
Order the following kit for each span and one for the overhang:

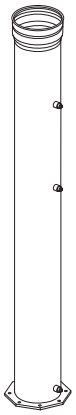
Description	*Part #*
PolySpan® DRAIN KIT	**KA01393**

3/4" Upper Drain Body..... 0246227
Drain Seal..... 0232001
Lower Drain Body..... 0232004

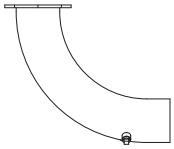
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Transition Components for PolySpan® Pipelines 6000 or 8000 series





Stainless Risers and Lower Pivot Elbows for PolySpan® Pipelines



Part #	Description
9363704	8" Lower Riser Elbow - S.S.
9363703	8" Riser Pipe - S.S.
9361567	8-5/8" Lower Pivot Elbow - S.S.
9361425	8-5/8" Riser Pipe - S.S.
9361568	8-5/8" Lower Pivot Elbow - 8-5/8"-8" S.S.
9363122	8-5/8" Lower Pivot Elbow - 8-5/8"-8" ANSI S.S.

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PolySpan® overhangs are available for 6000 and 8000 series pipelines. These are available in the following lengths:

10.1', 19.2', 28.5', 37.6', 46.6', 55.9', 64.7' 74.0' & 83.3'.

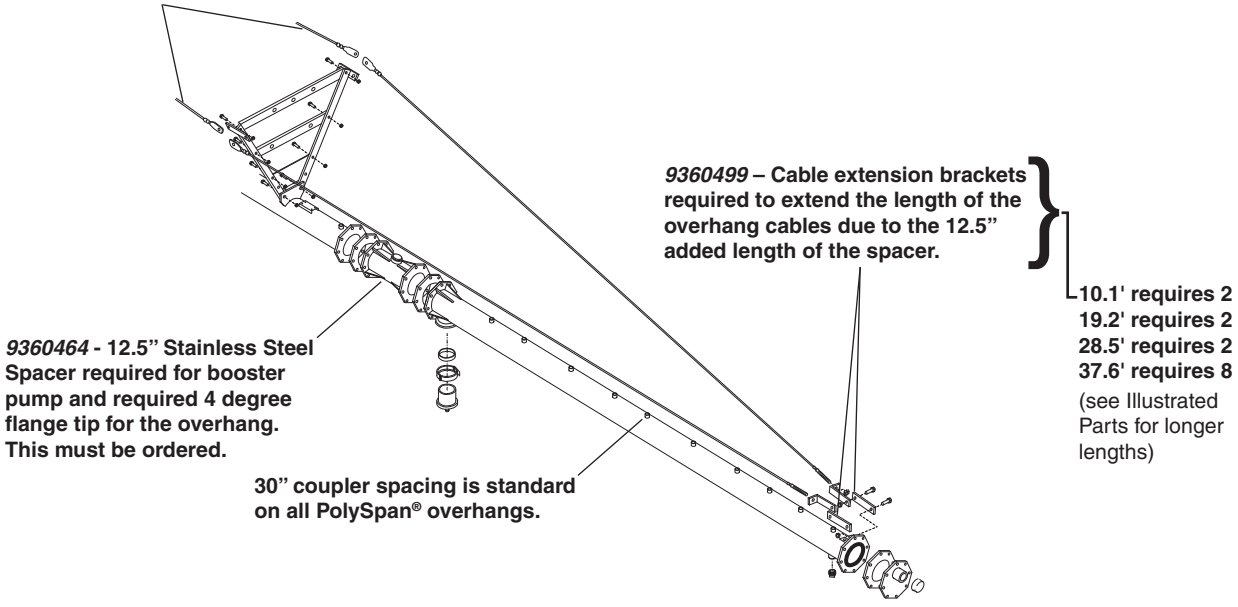
Overhangs longer than 37.6' are available with all poly-lined pipe when the last span length is 180' or greater. When the last span is shorter than 180' then you must use the 4" galvanized overhang pipe.

Key points to keep in mind when adding an overhang:

- ✓ ***Spacing on the overhang pipe is only available in 30" spacing. Don't forget to order the required number of plugs.***
- ✓ ***A stainless steel spacer is required between the last pipe and the first overhang pipe. This provides the overhang drain and a 2 ½" coupler for a booster pump if one is required. This spacer is required regardless if a booster pump is required or not because it provides the necessary 4 degree flange tip for the overhang.***
- ✓ ***Overhang cable extension brackets are required to extend the length of the existing cables due to the added length of the 12.5" spacer.***

Back-cables will be different for 6000 vs. 8000 series last pipe. If replacing cables, please order correct ones per the series.

28.5' PolySpan® Overhang Illustrated

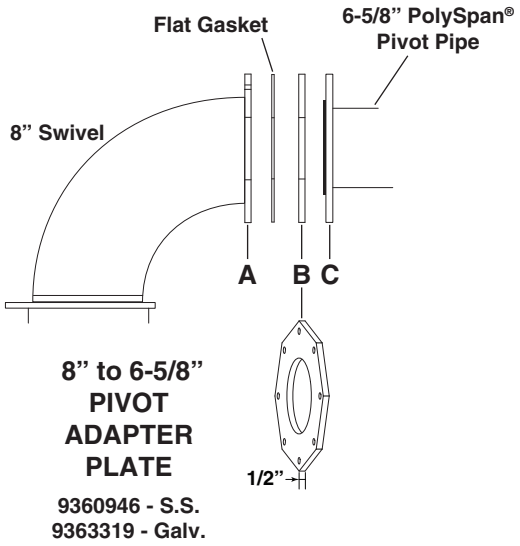


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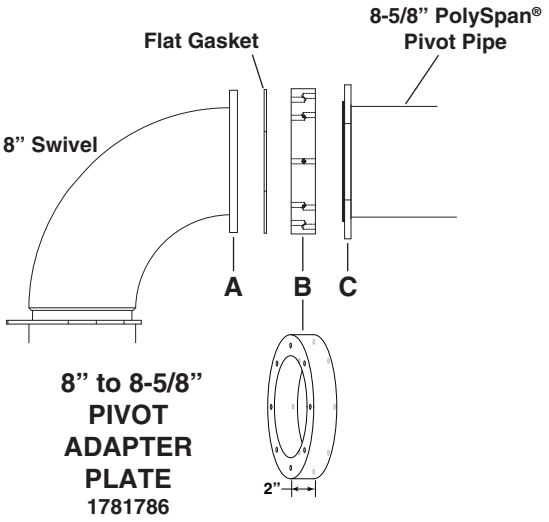
- ✓ ***6 Week Lead Time is required***
- ✓ ***Available Pipe Diameters and Outlet Spacing***
  - ***6 5/8" and 8 5/8" diameters - standard spacing only***
  - ***Existing 6" and 6 5/8" diameter pipe can be replaced with 6 5/8" diameter pipe using existing trussing (6" requires additional truss gusset plates)***
  - ***Existing 8" diameter pipe can be replaced with 8 5/8" diameter pipe using existing trussing (requires one new truss gusset plate)***
  - ***Connects to existing 8" pivot points***
    - *6 5/8" pivot pipe requires a ½" spacer plate for sealing between the pivot pipe and swivel*
    - *8 5/8" pivot pipe requires a 2" spacer plate for sealing between the pivot pipe and swivel*
  - ***PolySpan® overhangs***
    - *30" Outlet spacing only, same lengths as 8000 series*
    - *No Poly overhang for 8" last pipe*
- ✓ ***PolySpan® Re-Piping Warranty***
  - ***All PolySpan® re-pipes will receive the same pipeline warranty as a new machine***
    - *20 Year prorated pipeline corrosion warranty*
    - *First 10 years or 30,000 hours (whichever occurs first) unconditional replacement due to corrosion*
    - *Warranty does not cover labor, freight or misc. hardware*
    - *Must be a complete machine re-pipe*
    - *Must replace all bolts and nuts*
    - *Must submit re-pipe registration card (contact warranty department)*

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Two options available for connecting 6000 series Pivot Pipes to 8” Pivot Points. All necessary spacers, gaskets, etc. are included in the span tables.



OPTION 1



OPTION 2

FLANGE INFORMATION			
Flange ID	**Flange Type**	**Bolt Circle Diameter (in.)**	**Inside Hole Diameter (in.)**
A - Option 1	Octagon, 0.50" thick	10.188 (8" Valley bolt pattern)	8.625
B - Option 1	Octagon, 0.50" thick, Stainless steel	10.50 (slotted for 8” or 8 5/8” Valley bolt pattern)	6.50
C - Option 1	Round, 0.625" thick	10.50 (slotted for 8" or 8 5/8" Valley bolt pattern)	6.50
A - Option 2	Octagon, 0.50" thick	10.188 (8" Valley bolt pattern)	8.625
B - Option 2	Round, 2.00" thick, Holes tapped each side	Bolt pattern 1 = 10.188" (8") Bolt pattern 2 = 10.812" (8 5/8")	8.50
C - Option 2	Round, 0.625" thick	10.812 (8 5/8" Valley bolt pattern)	8.50

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6000 series PolySpan® Pipe – 6-5/8"

Span Lengths	109'	128'	146'	160'	164'	180'	183'	187'	201'
Coupler Spacing	110"	110”	110”	110”	110”	110”	110”	110”	110”
Pipes									
Intermediates	1781756	2 1781752	2 1781736	2 1781736	2 1781736	2 1781736	2 1781736	2 1781736	2 1781736
				1781754	1781748	1781758	1781738	1781760	1781750
									1781748
Pivot 8"& 8-5/8" Flange	1781784	1781784	1781784	1781784	1781784	1781784	1781784	1781784	1781784
Fixed	1781740	1781740	1781740	1781740	1781740	1781740	1781740	1781740	1781740
Swivel	1781742	1781742	1781742	1781742	1781742	1781742	1781742	1781742	1781742
Last	1781746	1781746	1781746	1781746	1781746	1781746	1781746	1781746	1781746

ADDITIONAL PARTS REQUIRED		
Flex Hose	0995628	Flex Joint Hose 7"
Flex Hose Clamp	2 0995627	Flex Joint Clamp 7"
Flat Gasket-Pivot	0996566	Flat Rubber Gasket 8"- 8-5/8" (Used on Pivot Span)
8" SS Flange	9360946	8" Stainless Steel Flange (Used on Pivot Spans Only)
Hardware Kits	KA01374	Span Hardware Kit, 6 5/8” diameter PolySpans, 8000/6000 series 115’ - 160’ Spans
Hardware Kits	KA01794	Span Hardware Kit, 6 5/8” diameter PolySpans, 8000/6000 series 180’ - 225’ Spans
Drain Kit	KA01393	Poly Span Drain Kit
Trapezoid Plate	1780424	Trussing Trapezoid Plate (Used when re-piping 6" Sans Only)

NOTE: Numbers in RED indicate quantities.

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6000 series PolySpan® – 8-5/8" Pipe

6000 series PolySpan Pipe – 8-5/8"				
Span Lengths	128'	146'	160'	164'
Coupler Spacing	110"	110"	110"	110"
Pipes				
Intermediates	2 1781770	2 1781764	2 1781764	2 1781764
			1781774	1781744
Pivot 8-5/8"Flange	1781766	1781766	1781766	1781766
Fixed	1781772	1781772	1781772	1781772
Swivel	1781762	1781762	1781762	1781762
Last / Transition	1781768	1781768	1781768	1781768
Transition Stub	9362088	9362088	9362088	9362088
ADDITIONAL PARTS REQUIRED				
Pivot Adapter	1781786	8" to 8-5/8" Pivot Adapter Flange (Used on Pivot Spans Only)		
Flex Hose	0996027	Flex Joint Hose 9"		
Flex Hose Clamp	2 0996085	Flex Joint Clamp 9"		
Flat Gasket-Pivot	0996566	Flat Rubber Gasket 8"- 8-5/8" (Used on Pivot Span)		
Hardware Kits	KA01795	Span Hardware Kit, 8 5/8" diameter PolySpans, 8000/6000 series 115' - 180' Spans		
Drain Kit	KA01393	Poly Span Drain Kit		
8-5/8" to 6-5/8" SS Flange	9360946	8-5/8" to 6-5/8" SS Flange (Used on Pivot and Transition Spans only)		
Trapezoid Plate	1781785	Trussing Trapezoid Plate (Required)		

NOTE: Numbers in RED indicate quantities.

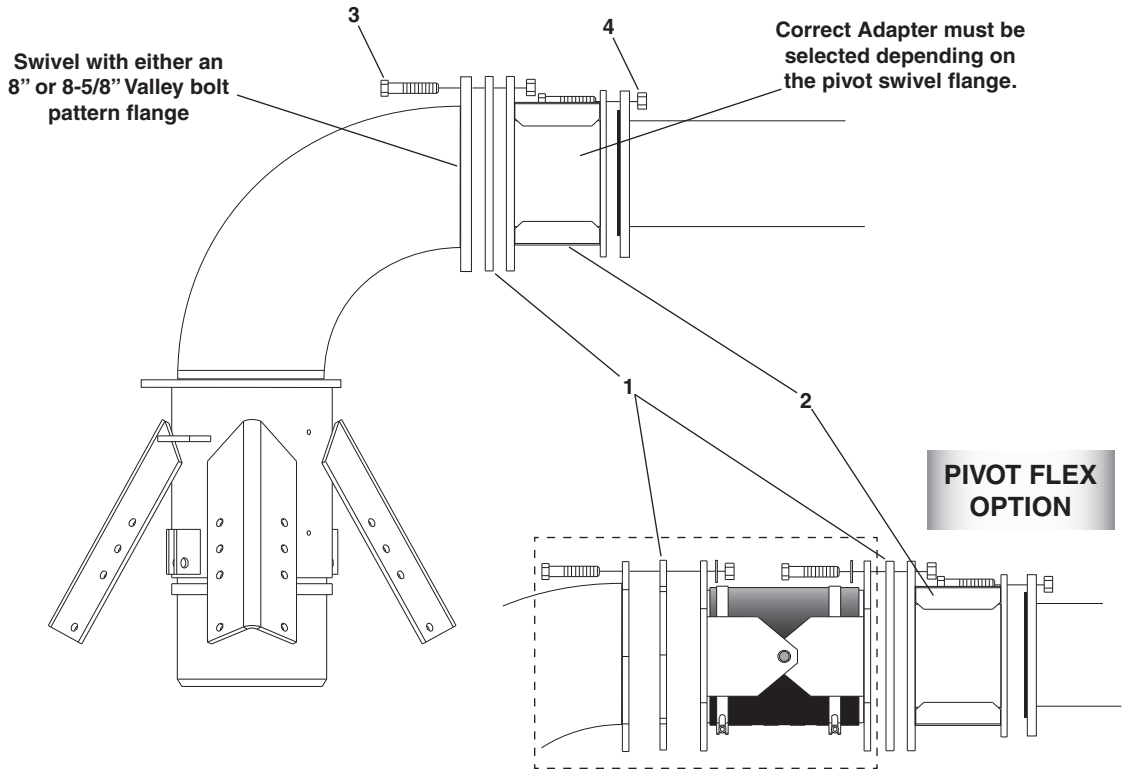
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- ✓ ***3 Week Lead Time is required***
- ✓ ***Available Pipe Diameters and Outlet Spacing***
  - ***6 5/8" and 8 5/8" diameters***
  - ***108" and 60" Spacing***
  - ***Connects to existing 8", 8 5/8" and 10" pivot points***
    - *Refer to the "Connecting to the pivot point with 8000 series PolySpan®" section for complete details on how connections are made.*
  - ***PolySpan® overhangs***
    - *30" Outlet spacing only*
    - *PolySpan® overhang lengths include:*
      - *10.1', 19.2', 28.5', 37.6'*
      - *55.9', 64.7' and 83.3' available with galvanized or stainless steel 4" last overhang pipe*
    - *No Poly overhang for 8 5/8" spans*
- ✓ ***PolySpan® Re-Piping Warranty***
  - ***All PolySpan® re-pipes will receive the same pipeline warranty as a new machine***
    - *20 Year prorated pipeline corrosion warranty*
    - *First 10 years or 30,000 hours (whichever occurs first) unconditional replacement due to corrosion*
    - *Warranty does not cover labor, freight or misc. hardware*
    - *Must be a complete machine re-pipe*
    - *Must replace all bolts and nuts*
    - *Must submit re-pipe registration card (contact warranty department)*

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Several options are available for connecting 8000 series Pivot Pipes to 8”, 8-5/8” or 10” Pivot Points. All necessary spacers, gaskets, etc. are included in the span tables.

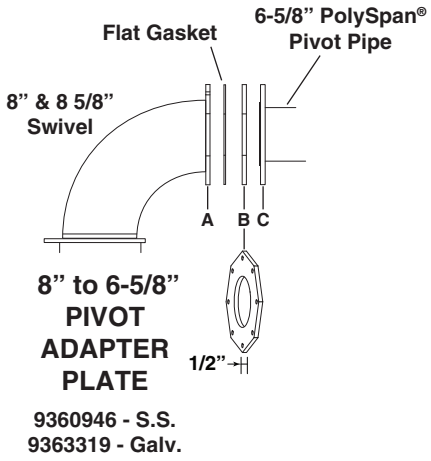
OPTION 1 – 6-5/8” Pivot Pipe w/6-5/8” Flange to an 8” or 8-5/8” Pivot Flange PRIOR To 2008



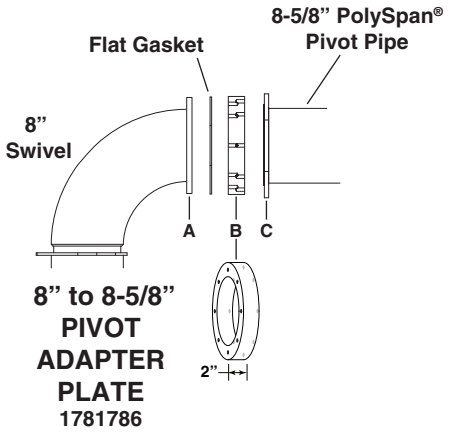
0000C23 - Universal 8” / 8-5/8” Pivot Flex Package

6 5/8" PIVOT PIPE TO AN 8" OR 8 5/8" SWIVEL FLANGE		
Item ID	**Part #**	**Description**
1	0996566	8" / 8 5/8" Universal Flat Gasket
2	9360495	8" - 6 5/8" Stainless Steel Adapter Spacer
	9361419	8 5/8" - 6 5/8" Stainless Steel Adapter Spacer
3	0161024	1/2" x 2" Bolt
4	0133005	1/2" Lock Nut

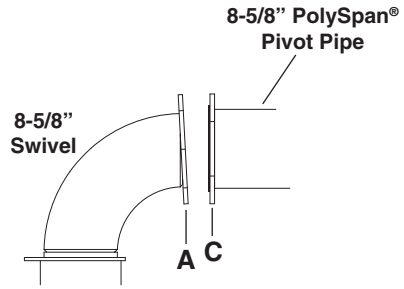
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OPTION 2



OPTION 3

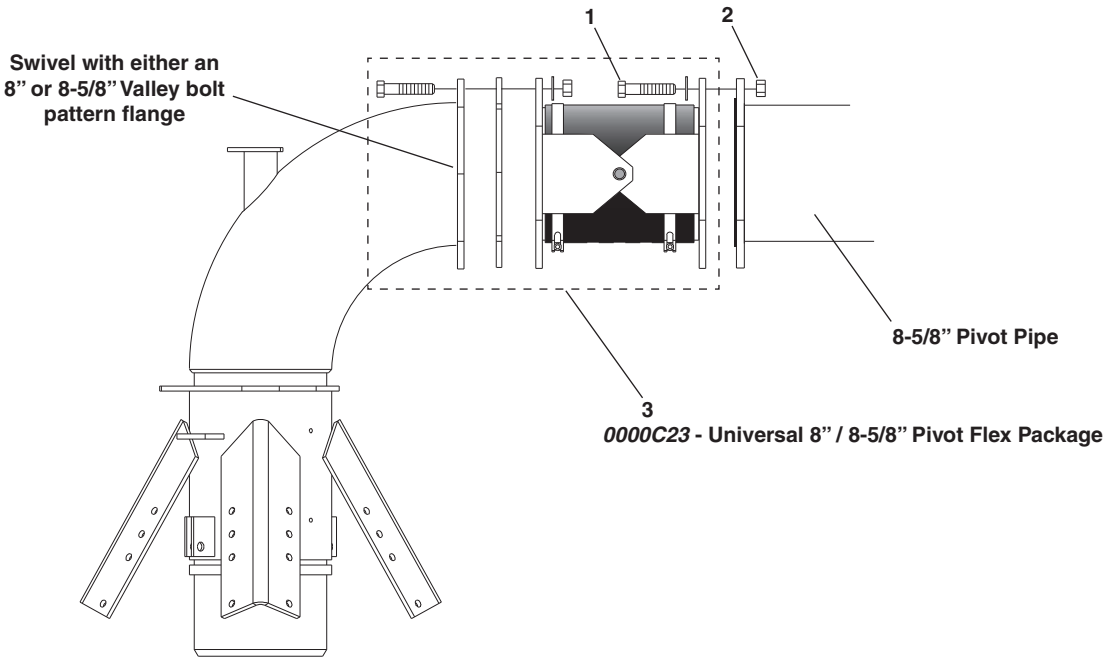


OPTION 4

FLANGE INFORMATION			
Flange ID	**Flange Type**	**Bolt Circle Diameter (in.)**	**Inside Hole Diameter (in.)**
A - Option 2	Octagon, 0.50" thick	10.188 (8" Valley bolt pattern) 10.812 (8 5/8" Valley bolt pattern)	8.625
B - Option 2	Octagon, 0.50" thick, Stainless steel	10.50 (slotted for 8" or 8 5/8" Valley bolt pattern)	6.50
C - Option 2	Round, 0.625" thick	10.50 (slotted for 8" or 8 5/8" Valley bolt pattern)	6.50
A - Option 3	Octagon, 0.50" thick	10.188 (8" Valley bolt pattern)	8.625
B - Option 3	Round, 2.00" thick, Holes tapped each side	Bolt pattern 1 = 10.188" (8") Bolt pattern 2 = 10.812" (8 5/8")	8.50
C - Option 3	Round, 0.625" thick	10.812 (8 5/8" Valley bolt pattern)	8.50
A - Option 4	Octagon, 0.50" thick	10.812 (8 5/8" Valley bolt pattern)	8.625
C - Option 4	Round, 0.625" thick	10.812 (8 5/8" Valley bolt pattern)	8.50

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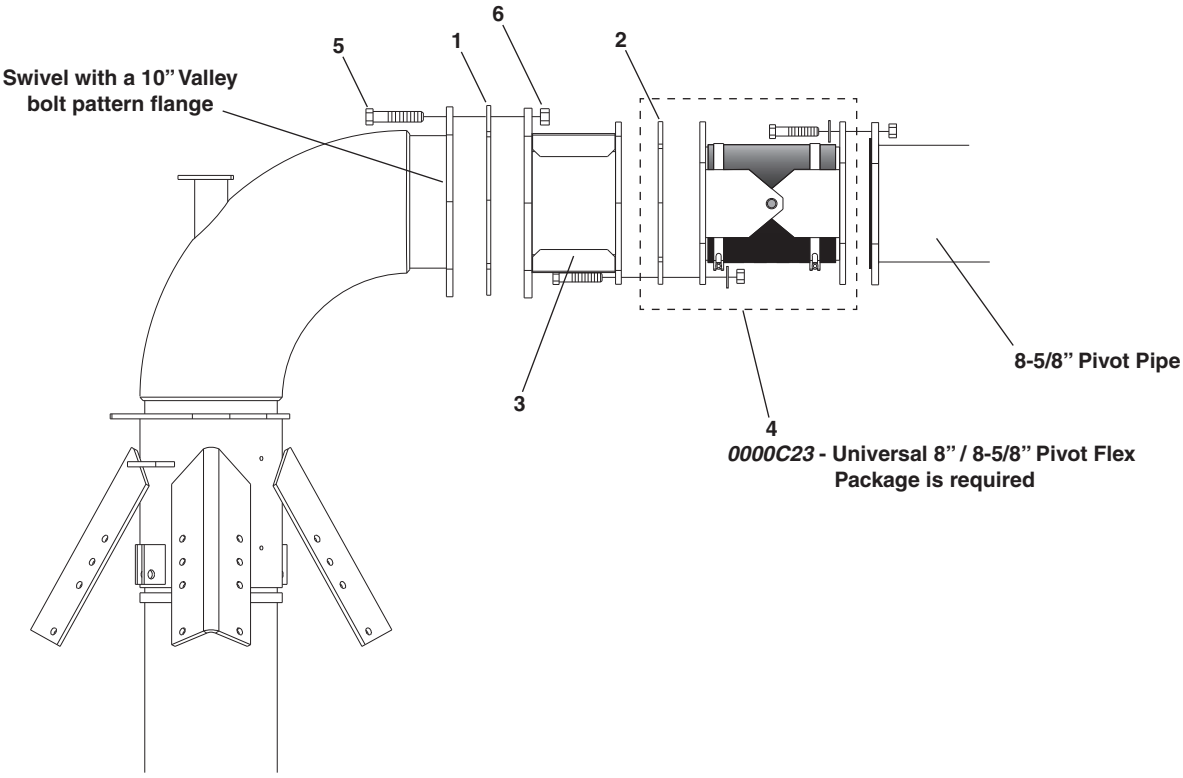
OPTION 5 – 8-5/8” Pivot Pipe to an 8” or 8-5/8” Pivot Flange w/ Pivot Flex



8 5/8" PIVOT PIPE TO AN 8" OR 8 5/8" SWIVEL FLANGE		
Item ID	**Part #**	**Description**
1	0161024	1/2" x 2" Bolt
2	0133005	1/2" Lock Nut
3	0000C23	Universal 8" / 8 5/8" Pivot Flex Package

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OPTION 6 – 8-5/8” Pivot Pipe to a 10” Pivot Flange



8 5/8" PIVOT PIPE TO A 10" PIVOT SWIVEL FLANGE		
Item ID	**Part #**	**Description**
1	0992385	10" Flat Gasket
2	0996566	8" & 8 5/8" Flat Gasket
3	9361299	10" - 8 5/8" Stainless Steel Adapter Spacer
4	0000C23	Universal 8" / 8 5/8" Pivot Flex Package
5	0161024	1/2" x 2" Bolt
6	0133005	1/2" Lock Nut

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8000 series PolySpan® – 6-5/8" Pipe

8000 series PolySpan® Pipe – 6-5/8"									
Span Lengths	115'	135'	140'	160'	180'	185'	187'	205'	225'
Coupler Spacing	108"	108"	108"	108"	108"	108"	108"	108"	108"
Pipes									
Intermediates	9362677	9362679	2 9362677	9362677	2 9362679	2 9362677	2 9362709	2 9362679	3 9362679
				9362679		9362679	9362679	9362677	
Pivot 8"- 8-5/8" Flange	9362958	9362958	9362958	9362958	9362958	9362958	9362958	9362958	9362958
Fixed	9362685	9362685	9362685	9362685	9362685	9362685	9362685	9362685	9362685
Swivel	9362683	9362683	9362683	9362683	9362683	9362683	9362683	9362683	9362683
Last	9362687	9362687	9362687	9362687	9362687	9362687	9362687	9362687	9362687

ADDITIONAL PARTS REQUIRED		
Flex Hose	0995628	Flex Joint Hose 7"
Flex Hose Clamp	2 0995627	Flex Joint Clamp 7"
Flat Gasket-Pivot	0996566	Flat Rubber Gasket 8"- 8-5/8" (Used on Pivot Span w/Pivot Spacer)
S.S. Flange	9360946	S.S. Flange (Used on Pivot Span After Jun 2006)
Drain Kit	KA01393	Poly Span Drain Kit
Hardware Kits	KA01374	Span Hardware Kit, 6 5/8" diameter Poly Spans, 8000/6000 series 115' - 160' spans
Hardware Kits	KA01794	Span Hardware Kit, 6 5/8" diameter Poly Spans, 8000/6000 series 180' - 225' spans
Truss Rod Spacer Kits	KA09002	8000 series, 115', 135', 140' & 160' spans
Truss Rod Spacer Kits	KA01360	7000 series, 115', 135', 140' & 160' spans

NOTE: Numbers in RED indicate quantities.

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8000 series PolySpan® – 6-5/8" Pipe

8000 series PolySpan® Pipe – 6-5/8"										
Span Lengths	115'	135'	140'	160'	180'	185'	187'	205'	225'	
Coupler Spacing	60"	60"	60"	60"	60"	60"	60"	60"	60"	
Pipes										
Intermediates	9362705	9362707	2 9362705	9362705	2 9362707	2 9362705	2 9362709	2 9362707	3 9362707	
				9362707		9362707	9362707	9362705		
Pivot 8" - 8 5/8" Flange	9362954	9362954	9362954	9362954	9362954	9362954	9362954	9362954	9362954	
Fixed	9362703	9362703	9362703	9362703	9362703	9362703	9362703	9362703	9362703	
Swivel	9362701	9362701	9362701	9362701	9362701	9362701	9362701	9362701	9362701	
Last	9362711	9362711	9362711	9362711	9362711	9362711	9362711	9362711	9362711	
ADDITIONAL PARTS REQUIRED										
Flex Hose	0995628	**Flex Joint Hose 7"**								
Flex Hose Clamp	2 0995627	**Flex Joint Clamp 7"**								
Flat Gasket-Pivot	0996566	**Flat Rubber Gasket 8" - 8-5/8" (Used on Pivot Span w/Pivot Spacer)**								
S.S. Flange	9360946	**S.S. Flange (Used on Pivot Span After Jun 2006)**								
Drain Kit	KA01393	**Poly Span Drain Kit**								
Hardware Kits	KA01374	**Span Hardware Kit, 6 5/8" diameter Poly Spans, 8000/6000 series 115' - 160' spans**								
Hardware Kits	KA01794	**Span Hardware Kit, 6 5/8" diameter Poly Spans, 8000/6000 series 180' - 225' spans**								
Truss Rod Spacer Kits	KA09002	**8000 series, 115', 135', 140' & 160' spans**								
Truss Rod Spacer Kits	KA01360	**7000 series, 115', 135', 140' & 160' spans**								

NOTE: Numbers in RED indicate quantities.

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8000 series PolySpan® Pipe – 8-5/8"										
Span Lengths	115'	115'	135'	135'	140'	140'	160'	160'	180'	180'
Coupler Spacing	108"	60"	108"	60"	108"	60"	108"	60"	108"	60"
Pipes										
Intermediates	9362725	9362747	9362727	9362749	2 9362725	2 9362747	9362725	9362747	2 9362727	2 9362749
							9362727	9362749		
Pivot	9362729	9362739	9362729	9362739	9362729	9362739	9362729	9362739	9362729	9362739
Fixed	9362733	9362743	9362733	9362743	9362733	9362743	9362733	9362743	9362733	9362743
Swivel	9362731	9362741	9362731	9362741	9362731	9362741	9362731	9362741	9362731	9362741
Transition Pipe	9362735	9362745	9362735	9362745	9362735	9362745	9362735	9362745	9362735	9362745
Trans. Stub 8-5/8" - 6-5/8"	9362088	9362088	9362088	9362088	9362088	9362088	9362088	9362088	9362088	9362088
ADDITIONAL PARTS REQUIRED										
Pivot Flex	0000C23	Universal 8" & 8-5/8" Pivot Flex Package for adapting 85/8" Pivot Pipe to an 8", 8-5/8" or 10" Pivot Swivel Flange								
SS Adapter	9361299	10" to 8-5/8" Stainless Steel Adapter Spacer (Used on 10" Pivot Point)								
Flat Rubber Gasket	0996566	Flat Rubber Gasket 8"- 8-5/8" (Used on Pivot Span w/Pivot Spacer)								
Flat Rubber Gasket	0992385	10" Flat Gasket (Used on 10" Pivot Point Only)								
Flex Hose	0996027	Flex Hose 9"								
Flex Hose Clamp	4 0996085	Flex Hose Clamp 9"								
Hardware Kits	KA01795	Span Hardware Kit,8 5/8" diameter Poly Spans, 8000/6000 series 115' - 180' spans								
Drain Kit	KA01393	Poly Span Drain Kit								
Adapter Plate	9360946	8-5/8" to 6-5/8" SS. Trans. Adapter Plate (Used on Transition Span Only)								
NOTE: Numbers in RED indicate quantities.										

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Pre 6000 series Galvanized Overhangs

PRE 6000 series GALVANIZED OVERHANGS					
QTY	Part #	Description	QTY	Part #	Description
Standard Spacing			30" Spacing		
Pre 6000 - 16'					
1	1730362	Overhang Pipe 6", 15' 8"	1	N/A	N/A
1	0991016	Flat Rubber Gasket 6", round	1	N/A	N/A
1	1900144	Universal 6 Bolt Flange Gasket	1	N/A	N/A
Overhang pipe has 8 bolt, 6 5/8" BC, flange on last pipe end, round 6 bolt flange on overhang end.					
Pre 6000 - 26'					
1	1730363	Overhang Pipe 6", 25' 8"	1	N/A	N/A
1	0991016	Flat Rubber Gasket 6", round	1	N/A	N/A
1	1900144	Universal 6 Bolt Flange Gasket	1	N/A	N/A
Overhang pipe has 8 bolt, 6 5/8" BC, flange on last pipe end, round 6 bolt flange on overhang end.					
Pre 6000 - 42'					
1	1781673	Overhang Pipe 4", 41' 0.75"	1	N/A	N/A
1	1800036	6 5/8" BC, 8 bolt end plate	1	N/A	N/A
1	1702137	OPTIONAL - 16.5" long, 8 bolt to 6 bolt adapter, for 6 5/8" BC, 8 bolt last span flange	1	N/A	N/A
1	0992211	Flat Rubber Gasket 6 5/8", requires 2 if 1702137 is being used.	1	N/A	N/A
1	1900144	Universal 6 Bolt Flange Gasket	1	N/A	N/A
Overhang pipe has 6 bolt, 6" BC, flange on last pipe end, 8 bolt 6 5/8" BC flange on overhang end. 1702137 is used to add a 42' or 84' overhang to a Pre 6000 span with an 8 bolt, 6 5/8" BC flange. If adding this overhang to a 170' or 185' 6" span, the 1702137 adapter is not required. If adding the 1702137 and it does not exist, then 2 - 1703072 OH cable extension straps must be ordered.					
Pre 6000 - 84'					
1	1730364	Overhang Pipe 6", 42' 6"	1	N/A	N/A
1	1781673	Overhang Pipe 4", 41' 0.75"	1	N/A	N/A
1	1800036	6 5/8" BC, 8 bolt end plate	1	N/A	N/A
1	1702137	OPTIONAL - 16.5" long, 8 bolt to 6 bolt adapter, for 6 5/8" BC, 8 bolt last span flange	1	N/A	N/A
1	0992211	Flat Rubber Gasket 6 5/8", requires 2 if 1702137 is being used.	1	N/A	N/A
1	1900144	Universal 6 Bolt Flange Gasket	1	N/A	N/A
1730364 pipe has 6 bolt, 6" BC, flange on both ends. 1702137 is used to add a 42' or 84' overhang to a Pre 6000 span with an 8 bolt, 6 5/8" BC flange. If adding this overhang to a 170' or 185' 6" span, the 1702137 adapter is not required. If adding the 1702137 and it does not exist, then 2 - 1730504 OH cable extension straps must be ordered.					

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6000 series Galvanized Overhangs

6000 series GALVANIZED OVERHANGS					
QTY	Part #	Description	QTY	Part #	Description
108" Spacing			30" Spacing		
6000 - 18'					
1	1780444	Overhang Pipe 6 5/8", 18.1'	1	1780800	Overhang Pipe 6 5/8", 18.1'
2	0991107	Flange Gasket, 6 5/8"	2	0991107	Flange Gasket, 6 5/8"
6000 - 27'					
1	1780445	Overhang Pipe 6", 27' 5"	1	1781322	Overhang Pipe 6", 27' 5"
2	0994469	Flange Gasket, 6"	2	0994469	Flange Gasket, 6"
6000 - 36'					
2	1780444	Overhang Pipe 6 5/8", 18.1'	2	1780800	Overhang Pipe 6 5/8", 18.1'
2	0991107	Flange Gasket, 6 5/8"	2	0991107	Flange Gasket, 6 5/8"
1	0992211	Flat Rubber Gasket, 6 5/8"	1	0992211	Flat Rubber Gasket, 6 5/8"
6000 - 54'					
1	1780445	Overhang Pipe 6", 27' 5"	1	1781322	Overhang Pipe 6", 27' 5"
1	1780446	Overhang Pipe 4", 27', 5"	1	1781323	Overhang Pipe 4", 27', 5"
2	0994469	Flange Gasket, 6"	2	0994469	Flange Gasket, 6"
1	0992211	Flat Rubber Gasket, 6 5/8"	1	0992211	Flat Rubber Gasket, 6 5/8"
6000 - 64'					
2	1780444	Overhang Pipe 6 5/8", 18.1'	2	1780800	Overhang Pipe 6 5/8", 18.1'
1	1780446	Overhang Pipe 4", 27', 5"	1	1781323	Overhang Pipe 4", 27', 5"
3	0991107	Flange Gasket, 6 5/8"	3	0991107	Flange Gasket, 6 5/8"
1	0992211	Flat Rubber Gasket, 6 5/8"	1	0992211	Flat Rubber Gasket, 6 5/8"
6000 - 82'					
2	1780445	Overhang Pipe 6", 27' 5"	2	1781322	Overhang Pipe 6", 27' 5"
1	1780446	Overhang Pipe 4", 27', 5"	1	1781323	Overhang Pipe 4", 27', 5"
3	0994469	Flange Gasket, 6"	3	0994469	Flange Gasket, 6"
1	0992211	Flat Rubber Gasket, 6 5/8"	1	0992211	Flat Rubber Gasket, 6 5/8"

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8000 series Galvanized Overhangs

8000 series GALVANIZED OVERHANGS (for 6", see note at bottom of table).					
QTY	Part #	Description	QTY	Part #	Description
108" Spacing			30" Spacing		
8000 - 2.5'					
1	9360650	Overhang Pipe 6 5/8", 2.5'	1	9360650	Overhang Pipe 6 5/8", 2.5'
8000 - 9'					
1	9360648	Overhang Pipe 6 5/8", 9' 1.12"	1	9360649	Overhang Pipe 6 5/8", 9' 1.12"
8000 - 18'					
1	9360643	Overhang Pipe 6 5/8", 18' 1.35"	1	9360644	Overhang Pipe 6 5/8", 18' 1.35"
8000 - 27'					
1	9360645	Overhang Pipe 6 5/8", 27' 5.12"	1	9360646	Overhang Pipe 6 5/8", 27' 5.12"
8000 - 36'					
1	9360643	Overhang Pipe 6 5/8", 18' 1.35"	1	9360644	Overhang Pipe 6 5/8", 18' 1.35"
1	9360647	Overhang Pipe 4", 18' 1.18"	1	9360641	Overhang Pipe 4", 18' 1.18"
8000 - 36' Heavy Duty					
1	9360643	Overhang Pipe 6 5/8", 18' 1.35"	1	9360644	Overhang Pipe 6 5/8", 18' 1.35"
1	1780444	Overhang Pipe 6 5/8", 18' 1.18"	1	1780800	Overhang Pipe 6 5/8", 18' 1.18"
8000 - 45'					
1	9360645	Overhang Pipe 6 5/8", 27' 5.12"	1	9360646	Overhang Pipe 6 5/8", 27' 5.12"
1	9360647	Overhang Pipe 4", 18' 1.18"	1	9360641	Overhang Pipe 4", 18' 1.18"
8000 - 54'					
1	9360645	Overhang Pipe 6 5/8", 27' 5.12"	1	9360646	Overhang Pipe 6 5/8", 27' 5.12"
1	1780446	Overhang Pipe 4", 27', 5"	1	1781323	Overhang Pipe 4", 27', 5"

NOTE: All series 8000 6 5/8" Overhang Pipes will substitute directly for series 8000 6" Overhang Pipes. For 8000 series 6" Overhang Pipe part numbers, please reference the series 8000 Illustrated Parts.

OVERHANG HARDWARE KITS		
Part #	Description	Includes
KA01882	8000 series 9' - 36' OH Hardware Kit	Overhang truss nuts & bolts, pipe nuts & bolts and 6-5/8" gaskets.
KA01883	8000 series 36' HD - 54' OH Hardware Kit	Overhang truss nuts & bolts, pipe nuts & bolts and 6-5/8" gaskets.

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8000 series Galvanized Overhangs

8000 series GALVANIZED OVERHANGS (for 6", see note at bottom of table).					
QTY	Part #	Description	QTY	Part #	Description
108" Spacing			30" Spacing		
8000 - 64'					
1	9360643	Overhang Pipe 6 5/8", 18' 1.35"	1	9360644	Overhang Pipe 6 5/8", 18' 1.35"
1	1780444	Overhang Pipe 6 5/8", 18' 1.18"	1	1780800	Overhang Pipe 6 5/8", 18' 1.18"
1	1780446	Overhang Pipe 4", 27', 5"	1	1781323	Overhang Pipe 4", 27', 5"
8000 - 75'					
1	9360645	Overhang Pipe 6 5/8", 27' 5.12"	1	9360645	Overhang Pipe 6 5/8", 27' 5.12"
1	1780444	Overhang Pipe 6 5/8", 18' 1.18"	1	1780800	Overhang Pipe 6 5/8", 18' 1.18"
1	1780446	Overhang Pipe 4", 27', 5"	1	1781323	Overhang Pipe 4", 27', 5"
8000 - 82'					
1	9360645	Overhang Pipe 6 5/8", 27' 5.12"	1	9360646	Overhang Pipe 6 5/8", 27' 5.12"
1	9360670	Overhang Pipe 6 5/8", 27' 4.97"	1	9360642	Overhang Pipe 6 5/8", 27' 4.97"
1	1780446	Overhang Pipe 4", 27', 5"	1	1781323	Overhang Pipe 4", 27', 5"
8000 - 100'					
1	9360039	Overhang Pipe 6", 27' 5.12"	1	9360040	Overhang Pipe 6", 27' 5.12"
2	1780445	Overhang Pipe 6", 27' 4.97"	2	1781322	Overhang Pipe 6", 27' 4.97"
1	9360647	Overhang Pipe 6", 18' 1.1"	1	9360647	Overhang Pipe 6", 18' 1.1"

NOTE: All series 8000 6 5/8" Overhang Pipes will substitute directly for series 8000 6" Overhang Pipes. For 8000 series 6" Overhang Pipe part numbers, please reference the series 8000 Illustrated Parts.

OVERHANG HARDWARE KITS		
Part #	Description	Includes
KA01884	8000 series 64' - 82' OH Hardware Kit	Overhang truss nuts & bolts, pipe nuts & bolts and 6-5/8" gaskets.
KA01885	8000 series 100' OH Hardware Kit	Overhang truss nuts & bolts, pipe nuts & bolts and 6-5/8" gaskets.

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8000 / 6000 series PolySpan® Overhangs

8000 / 6000 series PolySpan® OVERHANGS					
QTY	Part #	Description	QTY	Part #	Description
108" Spacing			30" Spacing		
8000 / 6000 PolySpan® - 10.1'					
1	N/A	Overhang Pipe, 9' 1"	1	9362691	6 5/8" Overhang Pipe, 9' 1"
1	N/A	12.5" S.S. Spacer w/4 deg. Tip	1	9360464	12.5" S.S. Spacer w/4 deg. Tip
2	N/A	Overhang cable extension brackets	2	9360499	Overhang cable extension brackets
			1	KA01393	Poly Drain Kit
8000 / 6000 PolySpan® - 19.2'					
1	N/A	Overhang Pipe, 18' 1"	1	9362693	6 5/8" Overhang Pipe, 18' 1"
1	N/A	12.5" S.S. Spacer w/4 deg. Tip	1	9360464	12.5" S.S. Spacer w/4 deg. Tip
2	N/A	Overhang cable extension brackets	2	9360499	Overhang cable extension brackets
			1	KA01393	Poly Drain Kit
8000 / 6000 PolySpan® - 28.5'					
1	N/A	Overhang Pipe, 27' 4.97"	1	9362695	6 5/8" Overhang Pipe, 27' 4.97"
1	N/A	12.5" S.S. Spacer w/4 deg. Tip	1	9360464	12.5" S.S. Spacer w/4 deg. Tip
2	N/A	Overhang cable extension brackets	2	9360499	Overhang cable extension brackets
			1	KA01393	Poly Drain Kit
8000 / 6000 PolySpan® - 37.6'					
1	N/A	6 5/8" Overhang Pipe, 36' 6.42"	1	9362697	6 5/8" Overhang Pipe, 36' 6.42"
1	N/A	12.5" S.S. Spacer w/4 deg. Tip	1	9360464	12.5" S.S. Spacer w/4 deg. Tip
8	N/A	Overhang cable extension brackets	8	9360499	Overhang cable extension brackets
			1	KA01393	Poly Drain Kit
8000 / 6000 PolySpan® - 46.6'					
1	N/A	6 5/8" Overhang Pipe, 36' 6.42"	1	9362695	6 5/8" Poly Overhang Pipe, 27' 4.97"
1	N/A	6 5/8" Overhang Pipe, 18' 1"	1	9362693	6 5/8" Overhang Pipe, 18' 1"
1	N/A	12.5" S.S. Spacer w/4 deg. Tip	1	9360464	12.5" S.S. Spacer w/4 deg. Tip
4	N/A	Overhang cable extension brackets	4	9360499	Overhang cable extension brackets
			2	KA01393	Poly Drain Kit
8000 / 6000 PolySpan® w/ S.S. or GALVANIZED 4" PIPE - 55.9'					
1	N/A	6 5/8" Poly Overhang Pipe, 27' 4.97"	2	*9362695	6 5/8" Poly Overhang Pipe, 27' 4.97"
1	N/A	4" Galvanized Pipe, 27' 5"	1	*1781323	4" Galvanized Pipe, 27' 5"
	N/A	4" Stainless Steel Pipe, 27' 5"	1	9360464	12.5" S.S. Spacer w/4 deg. Tip
1	N/A	12.5" S.S. Spacer w/4 deg. Tip	1	0992211	6 5/8" Flat Rubber Gasket
2	N/A	6 5/8" Flat Rubber Gasket	4	9360499	Overhang cable extension brackets
4	N/A	Overhang cable extension brackets	1	KA01393	Poly Drain Kit
* Complete poly overhang pipe is supported only when used with 180' and greater last span lengths. If last span is less than 180' a 4" galvanized pipe must be used.					
8000 / 6000 PolySpan® w/ S.S. or Galv. 4" Pipe - 64.7'					
2	N/A	6 5/8" Poly Overhang Pipe, 18' 1"	2	9362693	6 5/8" Poly Overhang Pipe, 18' 1"
1	N/A	4" Galvanized Pipe, 27' 5"	1	*9362695	6 5/8" Poly Overhang Pipe, 27' 4.97"
	N/A	4" Stainless Steel Pipe, 27' 5"		*1781323	4" Galvanized Pipe, 27' 5"
1	N/A	12.5" S.S. Spacer w/4 deg. Tip	1	9360464	12.5" S.S. Spacer w/4 deg. Tip
2	N/A	6 5/8" Flat Rubber Gasket	1	0992211	6 5/8" Flat Rubber Gasket
6	N/A	Overhang cable extension brackets	6	9360499	Overhang cable extension brackets
			2	KA01393	Poly Drain Kit
* Complete poly overhang pipe is supported only when used with 180' and greater last span lengths. If last span is less than 180' a 4" galvanized pipe must be used.					

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8000 / 6000 series PolySpan® Overhangs

8000 / 6000 PolySpan® w/ S.S. or Galv. 4" Pipe - 74.0'					
1	N/A	6 5/8" Poly Overhang Pipe, 27' 4.97"	2	*9362695	6 5/8" Poly Overhang Pipe, 27' 4.97"
1	N/A	6 5/8" Overhang Pipe, 18' 1"	1	9362693	6 5/8" Overhang Pipe, 18' 1"
1	N/A	4" Galvanized Pipe, 27' 5"	1	*1781323	4" Galvanized Pipe, 27' 5"
1	N/A	12.5" S.S. Spacer w/4 deg. Tip	1	9360464	12.5" S.S. Spacer w/4 deg. Tip
6	N/A	Overhang cable extension brackets	6	9360499	Overhang cable extension brackets
			3	KA01393	Poly Drain Kit
* Complete poly overhang pipe is supported only when used with 180' and greater last span lengths. If last span is less than 180' a 4" galvanized pipe must be used.					
8000 / 6000 PolySpan® w/ S.S. or Galv. 4" Pipe - 83.3'					
2	N/A	6 5/8" Poly Overhang Pipe, 27' 4.97"	3	*9362695	6 5/8" Poly Overhang Pipe, 27' 4.97"
1	N/A	4" Galvanized Pipe, 27' 5"	1	*1781323	4" Galvanized Pipe, 27' 5"
	N/A	4" Stainless Steel Pipe, 27' 5"	1	9360464	12.5" S.S. Spacer w/4 deg. Tip
1	N/A	12.5" S.S. Spacer w/4 deg. Tip	1	0992211	6 5/8" Flat Rubber Gasket
2	N/A	6 5/8" Flat Rubber Gasket	6	9360499	Overhang cable extension brackets
6	N/A	Overhang cable extension brackets	2	KA01393	Poly Drain Kit
* Complete poly overhang pipe is supported only when used with 180' and greater last span lengths. If last span is less than 180' a 4" galvanized pipe must be used.					
NOTE: All PolySpan Overhang Pipes will substitute directly for series 8000 or 6000 as long as the overhang being replaced matches up with the existing length in the field. If installing a different length, new overhang cables will be required.					

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Valmont Steel Tubing

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BLACK STEEL TUBING	
Part #	**12 GAUGE (.109") - 20 ft. lengths (all sizes based on O.D.)**
9360577	4 inch X 20' 12 gauge black
9360579	6 inch X 20' 12 gauge black
9360688	6 5/8 inch X 20' 12 gauge black
9360581	8 inch X 20' 12 gauge black
9360583	8 5/8 inch X 20' 12 gauge black
9360585	10 inch X 20' 12 gauge black
9360587	12 inch X 20' 12 gauge black
Part #	**10 GAUGE (.134") - 20 ft. lengths (all sizes based on O.D.)**
9360578	4 inch X 20' 10 gauge black
9360580	6 inch X 20' 10 gauge black
9360689	6 5/8 inch X 20' 10 gauge black
9360582	8 inch X 20' 10 gauge black
9360584	8 5/8 inch X 20' 10 gauge black
9360586	10 inch X 20' 10 gauge black
9360588	12 inch X 20' 10 gauge black

GALVANIZED STEEL TUBING	
Part #	**12 GAUGE (.109") - 20 ft. lengths (all sizes based on O.D.)**
9360589	4 inch X 20' 12 gauge galvanized
9360591	6 inch X 20' 12 gauge galvanized
9360690	6 5/8 inch X 20' 12 gauge galvanized
9360593	8 inch X 20' 12 gauge galvanized
9360595	8 5/8 inch X 20' 12 gauge galvanized
9360597	10 inch X 20' 12 gauge galvanized
9360599	12 inch X 20' 12 gauge galvanized
Part #	**10 GAUGE (.134") - 20 ft. lengths (all sizes based on O.D.)**
9360590	4 inch X 20' 10 gauge galvanized
9360592	6 inch X 20' 10 gauge galvanized
9360691	6 5/8 inch X 20' 10 gauge galvanized
9360594	8 inch X 20' 10 gauge galvanized
9360596	8 5/8 inch X 20' 10 gauge galvanized
9360598	10 inch X 20' 10 gauge galvanized
9360600	12 inch X 20' 10 gauge galvanized

NOTE: Contact Parts Department for availability. Long lead times may occur for certain pipe sizes. Minimum order quantities may be required.

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Valmont Welded Tubing
Pounds Per Foot

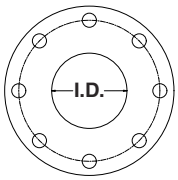
Gauge	18	17	16	15	14	13	12	11	1/8	10	9	5/32	8	7	3/16	6	5	4	1/4	2
	.049	.058	.065	.075	.083	.095	.109	.120	.125	.134	.148	.156	.165	.180	.188	.203	.220	.238	.250	.280
O.D. SIZE																				
4.000		2.442	2.732	3.144	3.472	3.962	4.530	4.973	5.173	5.533	6.089	6.404	6.758	7.344	7.654	8.232	8.881	9.562	10.013	
4.500		2.752	3.079	3.544	3.915	4.469	5.112	5.613	5.841	6.248	6.879	7.237	7.639	8.305	8.658	9.316	10.056	10.833	11.348	
4.900		3.000	3.356	3.864	4.270	4.875	5.577	6.126	6.374	6.821	7.511	7.904	8.344	9.074	9.461	10.183	10.996	11.850	12.416	
5.000		3.061	3.426	3.945	4.359	4.977	5.694	6.254	6.508	6.964	7.669	8.070	8.520	9.266	9.662	10.400	11.231	12.104	12.683	
5.500		3.371	3.773	4.345	4.802	5.484	6.276	6.895	7.176	7.679	8.460	8.904	9.401	10.227	10.666	11.484	12.406	13.375	14.018	15.610
5.563		3.410	3.817	4.396	4.858	5.548	6.349	6.976	7.260	7.770	8.559	9.008	9.512	10.348	10.792	11.621	12.554	13.535	14.186	15.796
6.000		3.681	4.120	4.746	5.245	5.991	6.858	7.536	7.843	8.395	9.250	9.737	10.282	11.188	11.670	12.568	13.581	14.646	15.353	17.105
6.250		3.836	4.294	4.946	5.467	6.245	7.149	7.856	8.177	8.753	9.645	10.153	10.723	11.669	12.172	13.110	14.168	15.282	16.020	17.853
6.296		3.864	4.326	4.983	5.507	6.292	7.202	7.915	8.238	8.819	9.718	10.230	10.804	11.757	12.264	13.210	14.276	15.398	16.143	17.990
6.354		3.900	4.366	5.029	5.559	6.350	7.270	7.989	8.316	8.902	9.809	10.326	10.906	11.869	12.380	13.336	14.412	15.546	16.298	18.164
6.625		4.068	4.554	5.247	5.799	6.625	7.585	8.337	8.678	9.289	10.238	10.778	11.384	12.390	12.924	13.923	15.049	16235	17.021	18.974
6.639		4.077	4.564	5.258	5.812	6.640	7.602	8.355	8.696	9.309	10.260	10.801	11.408	12.417	12.953	13.954	15.082	16.270	17.059	19.021
7.000		4.300	4.814	5.547	6.132	7.006	8.022	8.817	9.178	9.826	10.831	11.403	12.045	13.111	13.677	14.736	15.930	17.188	18.023	20.095

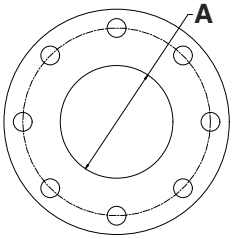
Gauge	18	17	16	15	14	13	12	11	1/8	10	9	5/32	8	7	3/16	6	5	4	1/4	2	1
	.049	.058	.065	.075	.083	.095	.109	.120	.125	.134	.148	.156	.165	.180	.188	.203	.220	.238	.250	.280	.312
O.D. SIZE																					
8.000		4.920	5.508	6.348	7.018	8.020	9.186	10.099	10.513	11.257	12.411	13.069	13.807	15.033	15.685	16.904	18.280	19.730	20.693	23.086	
8.625		5.307	5.942	6.849	7.572	8.655	9.914	10.900	11.348	12.152	13.399	14.110	14.908	16.235	16.940	18.259	19.748	21.318	22.361	24.955	27.700
10.000				7.950	8.791	10.050	11.514	12.662	13.183	14.119	15.572	16.401	17.331	18.878	19.701	21.240	22.979	24.813	26.033	29.067	32.282
12.000					10.564	12.079	13.843	15.225	15.853	16.982	18.734	19.733	20.856	22.723	23.717	25.576	27.678	29.897	31.373	35.047	38.946
12.375							14.264	15.690	16.337	17.500	19.306	20.337	21.494	23.419	24.444	26.362	28.530				
12.750							14.716	16.187	16.854	18.055	19.919	20.983	22.177	24.165	25.222	27.202	29.440				
14.000							16.171	17.789	18.523	19.844	21.895	23.065	24.390	26.568	27.732	29.912	32.377				
16.000							18.499	20.352	21.193	22.706	25.056	26.397	27.904	30.412	31.748	34.249	37.077				

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- ANSI Bolt Pattern
- 1/2" Thick Flanges – Machined and Drilled

1/2" THICK STEEL WELD-ON FLANGES							
Part #	Inside Dia. (in.)	Bolt Circle Dia. (in.)	Flange Outside Dia. (in.)	# of Holes	Hole Size (in.)	Bolt Size (in.)	Flange Weight
0996629	3	6.0	7.5	4	3/4	5/8	5
0996630	4	7.5	9.0	8	3/4	5/8	6
0996631	5	8.5	10.0	8	7/8	3/4	7
0996632	6	9.5	11.0	8	7/8	3/4	8.5
0996633	8	11.75	13.5	8	7/8	3/4	12
0996634	10	14.25	16.0	12	1	7/8	15
0996635	12	19.0	19.0	12	1	7/8	22
0998510	6.72	9.5	11.0	8	7/8	3/4	8
0998511	8.72	11.75	13.5	8	7/8	3/4	12



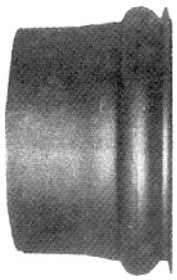


FULL FACE GASKETS			
Part #	A Size (in.)	Material Type	Gasket Thickness (in.)
0996636	3	Red Rubber	1/16
0996637	4	Red Rubber	1/16
0996638	5	Red Rubber	1/16
0996639	6	Red Rubber	1/16
0996640	8	Red Rubber	1/16
0996641	10	Red Rubber	1/16
0996642	12	Red Rubber	1/16

BOLT KITS FOR 1/2" WELD-ON FLANGES			
Part #	Description	# of Bolts	Bolt Size (in.)
KA01333	3" ANSI Flange Bolt Kit Only	4	5/8
KA01334	4" ANSI Flange Bolt Kit Only	8	5/8
KA01335	5", 6" or 8" ANSI Flange Bolt Kit Only	8	3/4
KA01336	10" or 12" ANSI Flange Bolt Kit Only	12	7/8

Note: Each kit contains bolts and nuts.

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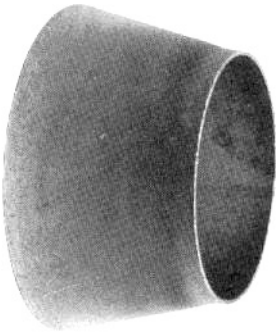
FEMALE RING-LOCK STARTER COUPLERS		
Part #	Size (in.)	Material Type
0221009	4	Black Steel
0221004	6	Black Steel
0221002	8	Black Steel
0221022	10	Black Steel



MALE RING-LOCK STARTER COUPLERS		
Part #	Size (in.)	Material Type
1K00612	4	Black Steel
1K00613	5	Black Steel
1K00614	6	Black Steel
1K00616	8	Black Steel
1K00617	10	Black Steel



90° ELBOWS		
Part #	Size (in.)	Material Type
1K00497	6	Black Steel
1K00499	8	Black Steel
1K00500	10	Black Steel



BLACK WELDING CONES		
Part #	Size (in.)	Material Type
1K00515	4" X 6"	Black Steel
1K00518	4" X 8"	Black Steel
1K00520	6" X 8"	Black Steel
1K00523	8" X 10"	Black Steel

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90° RING-LOCK ELBOWS		
Part #	**Size (in.)**	**Finish**
1K01249	6	Galvanized
1K01251	8	Galvanized
1K01252	10	Galvanized
099P169	6	Weld-on ring
099P170	8	Weld-on ring



RING-LOCK END PLUGS		
Part #	**Size (in.)**	**Finish**
1K01265	6	Galvanized
1K01267	8	Galvanized
1K01268	10	Galvanized



HIGH PRESSURE RING-LOCK CLAMPS		
Part #	**Size (in.)**	**Material Type**
0992084	4	Plated
0992896	5	Plated
0992318	6	Plated
1K00146	8	Plated
1K00147	10	Plated



"PIERCE STYLE" ROUND BACK GASKETS		
Part #	**Size (in.)**	**Type**
0221010	4	Single Lip - Non Turning Applications
0997128	5	Single Lip - Non Turning Applications
0221014	5	Western Square Back
0221015	6	Single Lip - Neoprene Self-Lubricating for Turning Applications
0996279	6	Triple Lip
1K01752	8	Single Lip - Non Turning Applications
0221001	8	Triple Lip
0995298	10	Triple Lip

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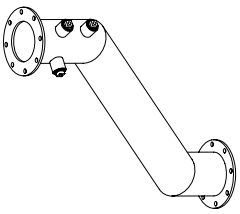
These pipe options provide a diverse range of options for well-to-pivot point water supply.

- ANSI Flanges
- 2 inch couplers

8-5/8" Z-PIPE

Part #		
Galvanized	Stainless Steel	Depth
9362522	N/A	73.54"
9362352	9361724	55.15"

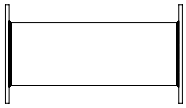
- Depth is measured from center of top pipe to center of bottom pipe; 2" Couplers; 8" stainless steel ANSI Flanges



8-5/8" SPOOL (GALVANIZED)

Part #	Length
9363787	6"
9363644	16.62"
9363630	22.25"
9362585	24.25"
9363631	25.75"
9363632	28.38"
9363634	33.50"
9362546	70.88"
9362452	109"

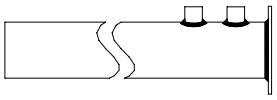
- 8" ANSI flanges included



8-5/8" STRAIGHT DIRECT WELL PIPE (STAINLESS STEEL)

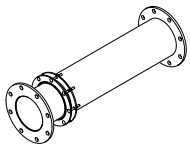
Part #	Length
9363007	236.22"
9363302	118.11"

- Stainless Steel 2" female couplers; ANSI flanged on one end only.



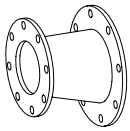
8-5/8" TELESCOPING PIPE (GALVANIZED)

	Telescoping Range	
Part #	Min	Max
0997249	35" (88.9cm)	42" (106.6cm)



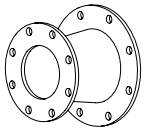
ECCENTRIC REDUCER CONE

Stainless Steel	Galvanized	Size (diameter)
9361726	n/a	8" - 6"



CONCENTRIC REDUCER CONE

Stainless Steel	Galvanized	Size (diameter)
9361727	9362350	8" - 6"



GASKETS

Part #	Description
0996639	6" Gasket
0996640	8" Gasket

AUTOMATIC FLUSH OUT WITH PURGE VALVE

Part #	Description
KA09725	Control last Tower Box
KA09726	Plumbing Kit

MANUAL DISCHARGE CONTROL VALVE

Part #	Description
0211008	2" (5cm) nipple
0242008	2" x 2" x 2" "T"
0232499	2" Ball Valve

- Three parts usually associated with this.

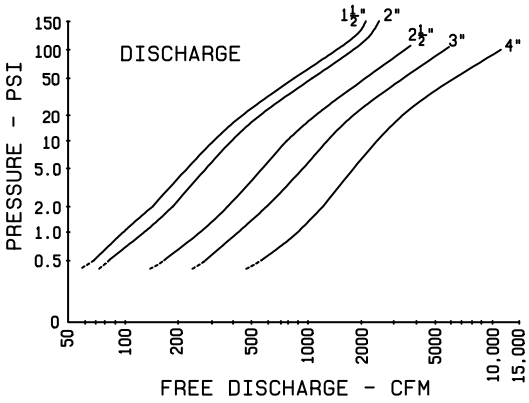
MISCELLANEOUS CLEMONS OPTIONS

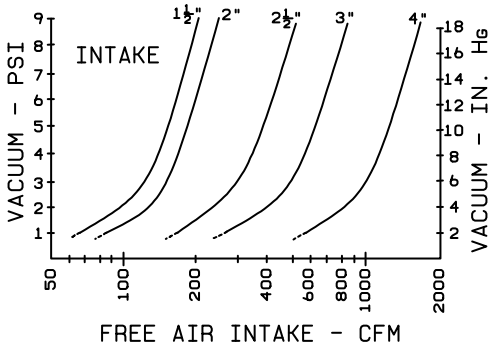
Part #	Description
0997280	Filter (Stainless Steel)
9362909	Filter Supports (2) (Stainless Steel)
0211008	2" Galvanized Nipple
0242008	2" x 2" x 2" "T"
0232499	2" Ball Valve

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TRAVIS AIR / VACUUM RELIEF VALVES		
Part #	**Model**	**Size (in.)**
1K00330	AV-200	2
1K00331	AV-300	3



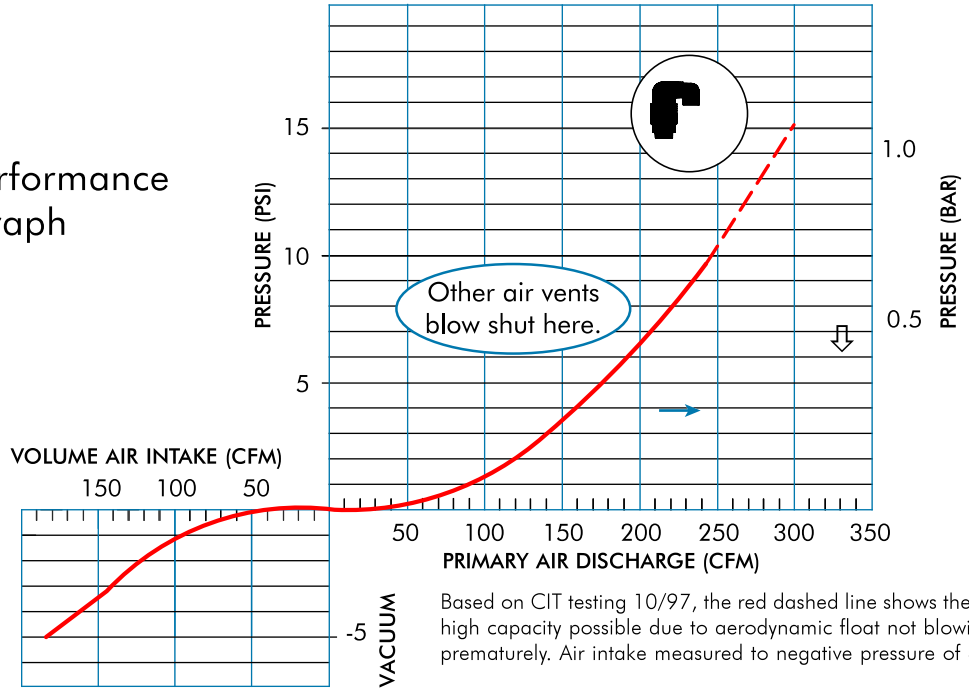


NELSON AIR / VACUUM RELIEF VALVES		
Part #	**Model**	**Size (in.)**
09S0046	ACV200P - Plastic Base	2 in. NPT



ACV200P Plastic Base

Performance Graph



Based on CIT testing 10/97, the red dashed line shows theoretical high capacity possible due to aerodynamic float not blowing shut prematurely. Air intake measured to negative pressure of 4 PSI

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LEVER OPERATED BUTTERFLY VALVES				
Part #	Model	Valve Style	Size (in.)	Vendor
0995560	B5-RLO4	Wafer Style-Lever	4	MATCO
0994156	B5-RLO6	Wafer Style-Lever	6	MATCO
0994157	B5-RLO8	Wafer Style-Lever	8	MATCO
0994158	B5-RLO10	Wafer Style-Lever	10	MATCO
0995561	B5-RLO12	Wafer Style-Lever	12	MATCO
0999548	WDNL040	Wafer Style-Lever	4	Smith Cooper
0999550	WDNL060	Wafer Style-Lever	6	Smith Cooper
0999553	WDNL080	Wafer Style-Lever	8	Smith Cooper
0999556	WDNL100	Wafer Style-Lever	10	Smith Cooper
0999558	WDNL120	Wafer Style-Lever	12	Smith Cooper

GEAR OPERATED BUTTERFLY VALVES					
Part #	Model	Valve Style	Size (in.)	Disc	Vendor
0995562	B5-RWG4	Wafer Style-Gear	4	Ductile Iron	MATCO
0994159	B5-RWG6	Wafer Style-Gear	6	Ductile Iron	MATCO
0997203	B5-RWG65	Wafer Style-Gear	6	Stainless Steel	MATCO
0994160	B5-RWG8	Wafer Style-Gear	8	Ductile Iron	MATCO
0997204	B5-RWG85	Wafer Style-Gear	8	Stainless Steel	MATCO
0994161	B5-RWG10	Wafer Style-Gear	10	Ductile Iron	MATCO
0995563	B5-RWG12	Wafer Style-Gear	12	Ductile Iron	MATCO
0999549	WDNG040	Wafer Style-Gear	4	Ductile Iron	Smith Cooper
0999551	WDNG060	Wafer Style-Gear	6	Ductile Iron	Smith Cooper
0999552	WSNG060	Wafer Style-Gear	6	Stainless Steel	Smith Cooper
0999554	WDNL080	Wafer Style-Gear	8	Ductile Iron	Smith Cooper
0999555	WSNG080	Wafer Style-Gear	8	Stainless Steel	Smith Cooper
0999557	WDNG100	Wafer Style-Gear	10	Ductile Iron	Smith Cooper
0999559	WDNG120	Wafer Style-Gear	12	Ductile Iron	Smith Cooper



MATCO EXTENSION KITS FOR UNDERGROUND INSTALLATIONS			
Part #	Model	Application	Lengths Available
Contact Valmont	B5-XL-B	4" Gear or Lever Operated	L = 36", 48", 60" or 72"
Contact Valmont	B5-XL-C	6" Gear or Lever Operated	L = 36", 48", 60" or 72"
Contact Valmont	B5-XL-D	8" Gear or Lever Operated	L = 36", 48", 60" or 72"
Contact Valmont	B5-XL-E	10" Gear Operated	L = 36", 48", 60" or 72"
Contact Valmont	B5-XL-F	12" Gear Operated	L = 36", 48", 60" or 72"

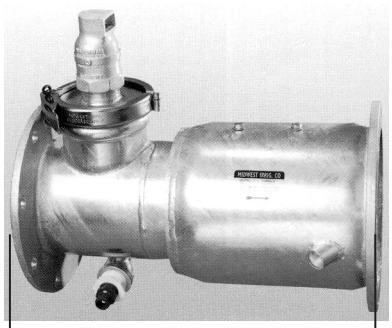
B5-XL-SIZE

B5 = Model
X designates an extension
L = Length (36", 48", 60" or 72"
SIZE = B for 4", C for 6", D for 8",
E for 10", F for 12"

B5 extensions feature one piece inner stem construction, solid outside housing with full face flanges with BUNA gaskets for water tight seal. The extensions accommodate 10 position levers or gear operators. The extension kits include all necessary hardware for proper mounting to the valve.

All extension kits will be drop shipped direct to your dealership from the Matco-Norca factory.

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KA01151 shown

kroyMIDWEST CHEMIGATION CHECK VALVES		
Part #	**Size (in.)**	**Flange to Flange Length**
KA01150	6	19.75"
KA01151	8	22.25"
KA01152	10	23.88"

16 – ¾" x 2-¼" bolts w/nuts and 2 – flange gasket included with all valves.

See "Weld On Steel Flanges" section for flanges and gaskets to insert into pipeline.

1. INSPECTION PORT
5" diameter with 1½" FIPT, positioned directly above the low pressure drain. Allows a larger area to service valve. Also incorporates a ring band lock for quick access. Optional item.

2. DISC
High quality chemical resistant resilient rubber completely encapsulating a steel disc. Non-slam, immediate sealing.

3. LINKAGE
Non-corrosive, stainless steel spring and mechanism. Provides instantaneous back flow prevention.

4. DAM
⅝" steel water dam allows for collection of liquid to the low pressure drain, allowing the area to completely drain.

5. AIR RELIEF VENT (1K00330)
2" cast aluminum with a ball check.

6. MANUAL DRAIN
½" FIPT with plug allows operator to winterize the valve with ease.

7. STEEL FLANGE
½" 125 LB ASA rated steel flange allows for greater stress on the valve.

8. LOW PRESSURE DRAIN (0994784)
Made of high impact chemical resistant plastic. 1½" MIPT inlet with ¾" MIPT outlet, 1" ID body, spring loaded plunger with rubber "O" ring. 5psi closing pressure.

9. BODY
Heavy gauge steel hot dipped galvanized or dry powder epoxy coated.

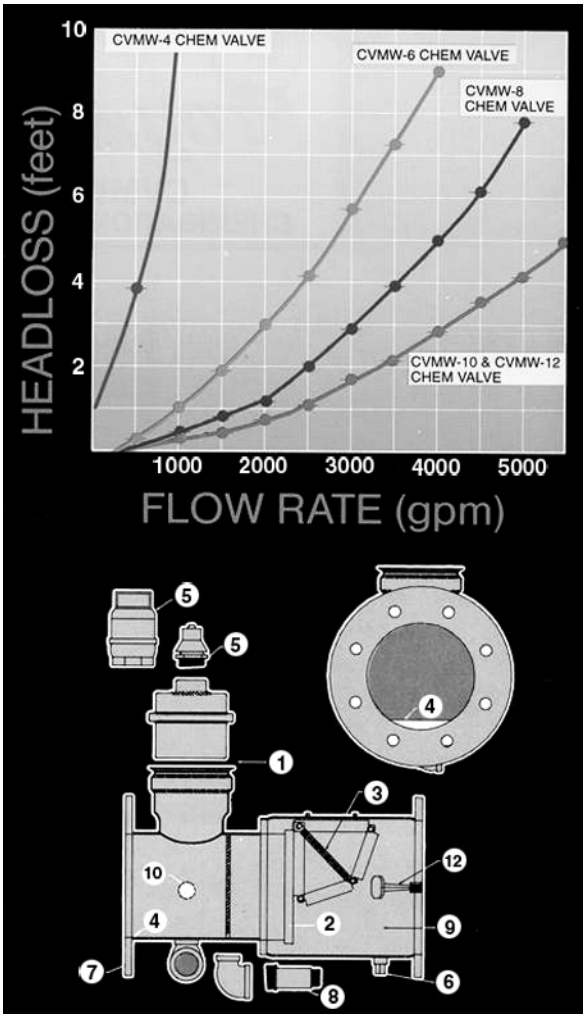
10, FRESH WATER PORT
¾" FIPT allows operator to draw clean water before chemical is injected into the main stream.

11. PRESSURE RATED
All valves certified at 300psi, rated at 150psi.

12. INJECTION PORT
¾" FIPT positioned at 45 degree, for a better injection into the water profile.

13. LABEL
Valve labeled with manufacturer's name, model, working pressure, maximum recommended flow and the direction of flow.

14. TESTING
Valves are tested prior to delivery guaranteeing the performance of each valve.



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- MO/D300 Series McCrometer meters
- Saddle Mount
- Over-Run Bearing assembly included for longer life
- All meters include: U-bolts, Nuts, Washers, Gasket and Template for cutting the hole

All flowmeters require specific distances of unobstructed flow before and after the propeller for accurate readings. Please consult McCrometer's detailed installation instructions for proper distances required.

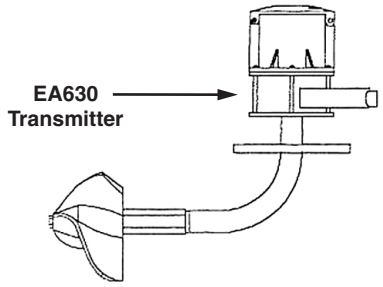


MCCROMETER SADDLE MOUNT FLOWMETERS							
Part #	Outside Diameter (in.)	Inside Diameter (in.)	Mount Location	Flowrate Readout	Totalizer Readout	Flow Range (GPM)	Over-Run Bearing (OT110)
0994239	6.00	5.79	Horizontal	GPM	Gallons	90-1300	Yes
0994843	6.625	6.420	Horizontal	GPM	Gallons	90-1300	Yes
0996272	6.625	6.420	Vertical	GPM	Gallons	90-1300	Yes
0993617	8.00	7.79	Horizontal	GPM	Acre-feet	100-2250	Yes
0996265	8.00	7.79	Vertical	GPM	Acre-feet	100-2250	Yes
0996474	8.625	8.420	Vertical	GPM	Acre-feet	100-2250	Yes
0992308	10.00	9.79	Horizontal	GPM	Gallons	125-2700	Yes
0992642	12.00	11.79	Horizontal	GPM	Gallons	150-3750	Yes
0993616	14.00	13.79	Horizontal	GPM	Gallons	250-4500	Yes

- Need a different meter configuration? Call the Valmont Aftermarket Parts Group for a special order.
- Valmont offers 2 special riser pipes with the hole pre-cut and with straightening vanes installed at the bottom end. This allows for a very clean installation. 8" riser (9361397) and 8-5/8" riser (9361433).

MCCROMETER SADDLE MOUNT FLOWMETERS WITH EA630 PULSE TRANSMITTER COMPATIBLE WITH VALLEY Pro2 CONTROL PANELS								
Part #	Outside Diameter (in.)	Inside Diameter (in.)	Mount Location	Flowrate Readout	Totalizer Readout	Flow Range (GPM)	Over-Run Bearing (OT110)	Notes
0996137	6.625	6.420	Horizontal	GPM	Gallons	90-1300	Yes	See Note 1
0996269	6.625	6.420	Vertical	GPM	Gallons	90-1300	Yes	See Note 1
0996267	8.00	7.79	Horizontal	GPM	Gallons	100-2250	Yes	See Note 1
0994396	8.00	7.79	Vertical	GPM	Gallons	100-2250	Yes	See Note 1
0996475	8.625	8.42	Vertical	GPM	Gallons	100-2250	Yes	See Note 1
0995464	10.00	9.79	Horizontal	GPM	Gallons	125-2700	Yes	See Note 1

Note #1: All McCrometer Meters with EA630 transmitter require a KA01133 for installation. This includes all the necessary wires, wiring diagrams and connections required for the installation.



- Need a different meter configuration? Call the Valmont Aftermarket Parts Group for a special order.

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Valley 3000 Flow Meter

The Valley® 3000 is a spool-type electromagnetic flowmeter for use in irrigation applications in 4" to 12" pipe. With no moving parts, the Valley 3000 provides unobstructed flow and superior resistance to wear from debris that can be found in ground or surface water.

The standard Valley® 3000 is battery powered with an available pulse output. Both rate and total indication are displayed. Bidirectional flow reading comes standard with totals available in forward, reverse, and net flow. Built-in data logging is an available option for secure flow logging.

Key Features:

- *Easy setup*
- *Minimal straight pipe*
- *Mounted or remote rate and total*
- *Tamper-evident seal*
- *Telemetry ready – for wireless meter reading*
- *Pulse or 4-20 mA output*
- *Battery powered with DC power option*
- *Options available for remote communications*

BATTERY POWERED BASE METER			
Part #	**Size**	**Seametrics Part #**	**Description**
0980035	4"	Valley3000-0400-F1-BX-X-XX-0000	Flanged In-Line MagMeter w/integral display, Base model, 4 inch
0980036	6"	Valley3000-0600-F1-BX-X-XX-0000	Flanged In-Line MagMeter w/integral display, Base model, 6 inch
0980037	8"	Valley3000-0800-F1-BX-X-XX-0000	Flanged In-Line MagMeter w/integral display, Base model, 8 inch
0980038	10"	Valley3000-1000-F1-BX-X-XX-0000	Flanged In-Line MagMeter w/integral display, Base model, 10 inch
0980039	12"	Valley3000-1200-F1-BX-X-XX-0000	Flanged In-Line MagMeter w/integral display, Base model, 12 inch

BATTERY POWERED W/ DATALOGGER			
Part #	**Size**	**Seametrics Part #**	**Description**
0980211	4"	Valley3000-0400-F1-BX-X-01-0000	Flanged In-Line MagMeter w/ Datalogger, Base model, 4 inch
0980212	6"	Valley3000-0600-F1-BX-X-01-0000	Flanged In-Line MagMeter w/ Datalogger, Base model, 6 inch
0980213	8"	Valley3000-0800-F1-BX-X-01-0000	Flanged In-Line MagMeter w/ Datalogger, Base model, 8 inch
0980214	10"	Valley3000-1000-F1-BX-X-01-0000	Flanged In-Line MagMeter w/ Datalogger, Base model, 10 inch
0980215	12"	Valley3000-1200-F1-BX-X-01-0000	Flanged In-Line MagMeter w/ Datalogger, Base model, 12 inch

DC POWERED W/ DATALOGGER/4-20MA			
Part #	**Size**	**Seametrics Part #**	**Description**
0980439	4"	Valley3000-0400-F1-D1-L-01-0000	Flanged In-Line MagMeter w/ Datalogger, DC, 4-20mA Base model, 4 inch
0980440	6"	Valley3000-0600-F1-D1-L-01-0000	Flanged In-Line MagMeter w/ Datalogger, DC, 4-20mA Base model, 6 inch
0980441	8"	Valley3000-0800-F1-D1-L-01-0000	Flanged In-Line MagMeter w/ Datalogger, DC, 4-20mA Base model, 8 inch
0980442	10"	Valley3000-1000-F1-D1-L-01-0000	Flanged In-Line MagMeter w/ Datalogger, DC, 4-20mA Base model, 10 inch
0980443	12"	Valley3000-1200-F1-D1-L-01-0000	Flanged In-Line MagMeter w/ Datalogger, DC, 4-20mA Base model, 12 inch

For other options please contact your Valley Technical Sales Team contact or the Aftermarket Parts Department.

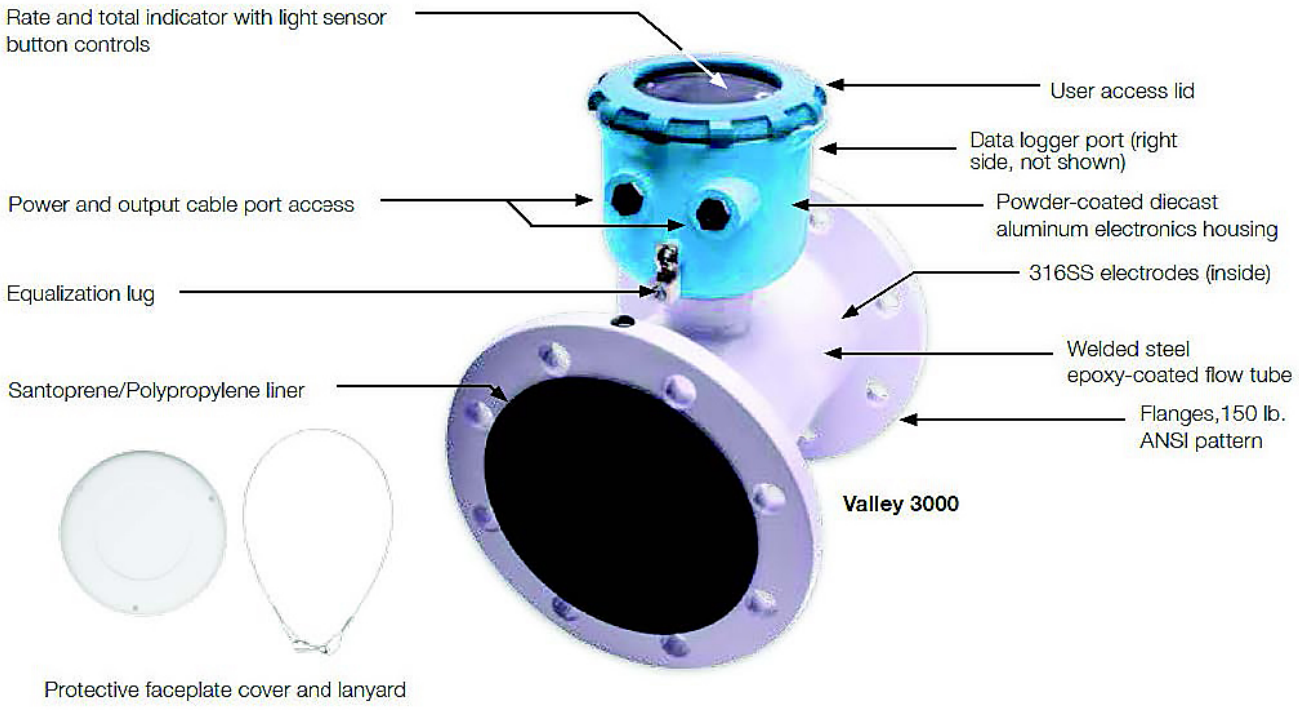
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BASE METER KITS			
Part #	Size	Description	Comments
KA09854	6"	Seametrics 6.00 Flowmeter 20FT Cable	Includes: Base Meter (0980036) w/ 20ft cable and cord connector
KA09855	6"	Seametrics 6.00 Flowmeter 50FT Cable	Includes: Base Meter (0980036) w/ 50ft cable and cord connector
KA09856	8"	Seametrics 8.00 Flowmeter 20FT Cable	Includes: Base Meter (0980037) w/ 20ft cable and cord connector
KA09857	8"	Seametrics 8.00 Flowmeter 50FT Cable	Includes: Base Meter (0980037) w/ 50ft cable and cord connector

FLOW METER CABLE KITS		
Part #	Description	Comments
KA02701	6 Conductor DC-Power/Output Cable 20FT	20FT DC Power cord, cord connector and field install diagram
KA02702	6 Conductor DC-Power/Output Cable 50FT	50FT DC Power cord, cord connector and field install diagram
KA02703	6 Conductor DC-Power/Output Cable 100FT	100FT DC Power cord, cord connector and field install diagram

REPLACMENT & MISC. FLOW METER PARTS		
Part #	Description	Comments
03E3927	Terminal Plug, 3.5MM, 9 Pole	J9 Plug to connect pulse output wires to smart relay board.
03E2860	Lithium DD Replacement Battery	Battery pack replacement for AG2000 and Valley3000
03E4236	Seametrics Grounding Ring-400 FLNG Meter	4" Grounding Ring
03E4237	Seametrics Grounding Ring-600 FLNG Meter	6" Grounding Ring
03E4238	Seametrics Grounding Ring-800 FLNG Meter	8" Grounding Ring
03E4239	Seametrics Grounding Ring-1000 FLNG Meter	10" Grounding Ring
03E4240	Seametrics Grounding Ring-1200 FLNG Meter	12" Grounding Ring
03E4241	Seametrics Data Logger Cable, USB, 3.3V	Data logger USB Download Cable

Product Specs



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NELSON 1000 SERIES VALVES							
Valley Part #	Nelson Part #	Valve Size (inches)	Connections	Operating Pressure (psi)	Control Function	On/Off Mode	Filter Options
2" Nelson 1000 Big Gun Valve Options							
0232612	12255-0215	2	Wafer w/o bolts	30-150	Manual On/Off	E29 12-40VDC Latching	Internal
3" Nelson 1000 Big Gun Valve Options							
0232611	12239-0414	3	Wafer w/o bolts	30-150	Manual On/Off	E29 12-40VDC Latching	Internal
4" Nelson 1000 Inline Valve Options							
0232607	12531-0157	4	Wafer w/o bolts	30-150	Manual On/Off	E53 110 volt AC	External
0232608	12531-0158	4	Wafer w/o bolts	30-150	Manual On/Off	E53 110 volt AC	Internal
0232609	12531-0159	4	Wafer w/o bolts	18-80	Manual On/Off	E53 110 volt AC	External
0232610	12531-0160	4	Wafer w/o bolts	18-80	Manual On/Off	E53 110 volt AC	Internal

For other valve configurations, please visit www.nelsonirrigation.com to view these other options and configurations.

NELSON 1000 SERIES FLANGE ADAPTER & STUD KITS			
Valley Part #	Nelson Part #	Description	Note
0980488	10142-001	Stud Kit, .50" X 8.25" (4 Studs, 4 Nuts)	For ANSI Big Gun (75 or 100 Series)
0980489	10142-002	Stud Kit, .50" X 9.75" (4 Studs, 4 Nuts)	For ANSI Big Gun (150 Series)
0980217	10142-101	Stud Kit, .50" X 8.25" (4 Studs, 8 Nuts)	For 2" Nelson FNPT Flanges (Nelson 10356)
0980295	11413	Stud Kit, 5/8" X 12" (8 Studs, 16 Nuts, 16 Washers)	For 1000 Series Inline Valves
0996405	13056	2" FNPT X ANSI Flange Adapter	
0980487	13065	Adapter Kit, 4" X 6" W/ Studs - 1000V4	
0980486	13038	Protection Kit, Tube (Service) - 800V/1000V	



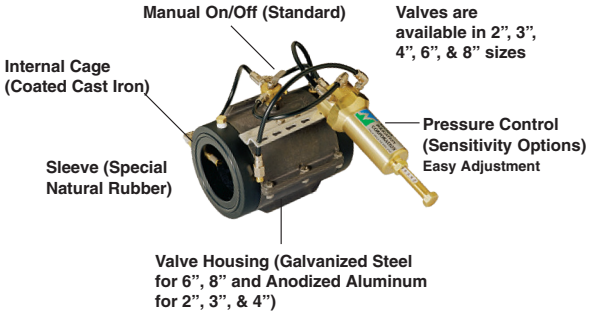




NELSON 1000 SERIES END GUN VALVES			
Valley Part #	Nelson Part #	Description	Note
0232585	12254-0013	1000P-V End Gun Valve	On/Off control with booster pumps end gun
0232587	12254-0037	1000P-X End Gun Valve	On/Off control with non-boosted end gun
0232586	12254-0038	1000P-RX End Gun Valve	On/Off control and pressure regulation with non-boosted end gun

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800 SERIES CONTROL VALVES



Valmont Irrigation offers Nelson Irrigation's 800 Series Control Valves from the American Falls, ID Western Region Distribution Center. Following is some information that will guide you in the purchase of this product from Valmont Irrigation:

The valve assemblies listed in this section will be stocked at the American Falls, ID Western Region Distribution Center based on demand. Other Distribution Centers may stock these valves in the future based on demand from the Valley Dealer Network.

What about other valve configurations?

Valmont will be able to supply your dealership with all your 800 series valve needs. If the configuration you are requiring is not listed, please call the American Falls, ID Valmont Distribution Center for a quote and delivery options.

Valve Applications

A typical application for these valves include the simple Electric ON/OFF function that can be used to turn the water supply on/off manually or through the use of an electric solenoid. Another option available allows for automatically reducing a higher inlet pressure to a constant lower downstream pressure of the valve (Pressure Reducing Option). A "Pressure Sustaining" option can be used to automatically sustain the upstream pressure of the valve. These are the most common applications.

Nelson Irrigation also offers a very good selection of information relating to the proper selection and application of their valves. If you do not already have this information at your dealership, please access Nelson Irrigation's web site at www.nelsonirrigation.com.

What about proper valve sizing?

Proper valve sizing is critical in designing control valve systems. The valves must be sized correctly for the reactive control functions to work (reducing, sustaining or shutoff). A high percentage of control valve problems can be directly traced to the initial selection of the wrong valve size. Be aware of these two common problems:

Potential Problem #1: The most common error occurs in over-sizing a pressure control valve. The error occurs by ignoring the operation and specifying that the size be the same diameter as the pipe. While this simplifies installation, it may result in the use of a valve that is too large. At lower flow rates this over sizing leads to severe problems such as cavitation, water hammer and pressure cycling.

Potential Problem #2: Almost as common as the above is selecting the control valve from flow graphs. Such graphs set the limits of minimum and maximum flow rates for each size but the graphs do not account for the pressure drop across the valve. Since both factors, flow rate and pressure drop, combine to determine valve performance, both must be taken into account for the proper sizing of reactive control valves.

For complete information regarding the proper sizing and application of the 800 Series Control Valves, please order the "Control Valve Application Guide" produced by Nelson Irrigation and available from Nelson Irrigation.

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The 4", 6" and 8" Nelson 800 Valve part numbers do not include the bolt kits/flange adapters. Please select the bolt kit/flange adapters for the specific valve size.

NELSON 800 SERIES VALVES							
		A	B	C	D	E	H
Valley Part #	Nelson Irrigation Part #	Valve Size (Inches)	Connection Style	Operating Pressure (Psi)	Control Function	On/Off Mode	Filter Options
3" Nelson 800 Valve Options							
0232509	A3B10C2D01E50H2	3	Wafer with Bolts	30-200	Manual On/Off	120 VOLT AC 1/16"	External
0232510	A3B10C2D01E50H3	3	Wafer with Bolts	30-200	Manual On/Off	120 VOLT AC 1/16"	Internal
4" Nelson 800 Valve Options							
0232589	A4B9C3D01E50H3	4	Wafer w/o Bolts	18-80	Manual On/Off	120 VOLT AC 1/16"	Internal
0232575	A4B9C3D01E50H2	4	Wafer w/o Bolts	18-80	Manual On/Off	120 VOLT AC 1/16"	External
0232512	A4B9C2D01E50H3	4	Wafer w/o Bolts	30-200	Manual On/Off	120 VOLT AC 1/16"	Internal
0232511	A4B9C2D01E50H2	4	Wafer w/o Bolts	30-200	Manual On/Off	120 VOLT AC 1/16"	External
0232590	A4B4C2D01E50H3	4	Wafer w/o Bolts	30-200	Manual On/Off	120 VOLT AC 1/16"	Internal
0232513	A4B9C2D03E50H2	4	Wafer w/o Bolts	30-200	Pressure Reducing	120 VOLT AC 1/16"	External
6" Nelson 800 Valve Options							
0232518	A6B4C2D01E50H3	6	Wafer w/o Bolts	30-200	Manual On/Off	120 VOLT AC 1/16"	Internal
0232514	A6B4C2D01E50H2	6	Wafer w/o Bolts	30-200	Manual On/Off	120 VOLT AC 1/16"	External
0232591	A6B4C3D01E50H3	6	Wafer w/o Bolts	18-80	Manual On/Off	120 VOLT AC 1/16"	Internal
0232517	A6B4C3D01E50H2	6	Wafer w/o Bolts	18-80	Manual On/Off	120 VOLT AC 1/16"	External
0232577	A6B4C2D01E41H2	6	Wafer w/o Bolts	30-200	Manual On/Off	24 VOLT AC	External
0232516	A6B4C2D03H50H2	6	Wafer w/o Bolts	30-200	Pressure Reducing	120 VOLT AC 1/16"	External
0232582	A6B4C2D03E52H2	6	Wafer w/o Bolts	30-200	Pressure Reducing	120 VOLT AC 1/16"	External
8" Nelson 800 Valve Options							
0232519	A8B4C2D01E52H2	8	Wafer w/o Bolts	30-200	Manual On/Off	120 VOLT AC 1/16"	External
0232579	A8B4C3D01E52H2	8	Wafer w/o Bolts	18-80	Manual On/Off	120 VOLT AC 1/16"	External
0232578	A8B4C2D03E52H2	8	Wafer w/o Bolts	30-200	Pressure Reducing	120 VOLT AC 1/16"	External

For other valve configurations, please visit www.nelsonirrigation.com to view these other options and configurations.

NELSON FLANGE ADAPTER & STUD KITS		
Valley Part #	Nelson Part #	Description
0999993	11433-001	4" Valve x 6" Flange Adapter w/ Stud Bolts Kit
0999994	12225-001	6" Valve x 8" Flange Adapter w/ Stud Bolts Kit
0980295	11413	4" Stud Kit (8 - 5/8" x 12" Stud, 16-5/8" Nuts, 16-5/8" Washers)
0999542	8976	6" Stud Kit (8 - 3/4" x 13.5" Stud, 16- 3/4" Nuts)
0999543	9524	8" Stud Kit (8 - 3/4" x 17" Stud, 16- 3/4" Nuts)
0980486	13038	Protection Kit, Tube (Service) - 800V/1000V

ADDITIONAL NELSON VALVE KITS		
Valley Part #	Nelson Part #	Description
0232592	9529-011	5-50Psi Pres. Reduce3/8" Kit 4,6,8" Nel Valv
0232593	9529-001	5-50Psi Pres. Reduce1/4" Kit 4,6,8" Nel Valv
0232594	9529-012	10-120Psi Pres. Reduce3/8" Kit 4,6,8" Nel Valv
0232595	9529-002	10-120Psi Pres. Reduce1/4" Kit 4,6,8" Nel Valv
0232596	9529-013	25-200Psi Pres. Reduce3/8" Kit 4,6,8" Nel Valv
0232598	9535-013	25-200Psi Pres. Sustain3/8" Kit 4,6,8" Nel Valv
0232599	9535-012	10-120Psi Pres. Sustain3/8" Kit 4,6,8" Nel Valv
0232600	9535-002	10-120Psi Pres. Sustain1/4" Kit 4,6,8" Nel Valv
0232601	9535-011	5-50Psi Pres. Sustain3/8" Kit 4,6,8" Nel Valv
0232602	9535-001	5-50Psi Pres. Sustain1/4" Kit 4,6,8" Nel Valv
0232603	9778-006	200-540Gpm D18 Rate-Flow Kit 4" Valv Low Flow
0232604	9778-007	330-1010Gpm D18 Rate-Flow Kit 6" Valv Low Flow
0232605	9778-003	500-2000Gpm D18 Rate-Flow Kit 6" Valv High Flow
0232606	9778-001	900-3800Gpm D18 Rate-Flow Kit 8" Valv High Flow

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Nelson Irrigation Part #	Valmont Part #	NELSON VALVE ACCESSORY KITS
9805-002	0232520	Internal Filter Assembly for Nelson Valves
9804-002	0232546	Internal Filter Only (does NOT include label and elbow tube connector)
9408	0232521	External Filter Assembly for Nelson Valves
8980	0232547	Manual Selector Valve Assembly Kit (includes valve, tubing, 2 elbow connectors and male run tee)
9529-003	0232522	25-200 PSI Pressure Reducing Kits for 4, 6 or 8" Nelson 800 Valves
9535-003	0232523	25-200PSI Pressure Sustaining Kit for 4, 6 or 8" Nelson 800 Valves

NELSON VALVE REPLACEMENT PARTS		
Nelson Irrigation Part #	Valmont Part #	SLEEVES
9501-003	0232505	2" Sleeve 18-80 PSI (for 2" endgun shutoff valve)
8961-001	0232524	6" Sleeve 30-200 PSI Prior to 1/96
9697-001	0232525	6" Sleeve 30-200 PSI New Style After 1/96
9697-002	0232526	6" Sleeve 10-50 PSI New Style After 1/96
9146-001	0232527	4" Sleeve 30-200 PSI
Nelson Irrigation Part #	Valmont Part #	SOLENOIDS AND COILS
7510-004	0232528	120 VAC Solenoid (E50) 0.2 amp in-rush 1/16"
7510-104	0232529	120 VAC Coil Only 0.2 amp in-rush
Nelson Irrigation Part #	Valmont Part #	FILTER SCREENS
9088	0232530	Screen for Internal Filter
Nelson Irrigation Part #	Valmont Part #	VALVES / TUBING / MISC
8972	0232531	Isolation Valve 1/4 FNPT X 1/4 MNPT
9905	0232532	Manual Selector Valve Only
8970-005	0232533	1/4 OD Nylon Tubing (order # feet required)
9494-005	0232534	3/8 OD Nylon Tubing (order # feet required)
9757	0232535	Stud/Nut Assembly for 6" Valve
9770	0996408	9.50" long 5/8" Threaded Rod for 2" Valve
9800	0232507	2" Nelson Replacement Drain
10356	0996405	2"FNPT X ANSI Flange Adapter for 2" Nelson Endgun Shutoff Valve
Nelson Irrigation Part #	Valmont Part #	STRAIGHT CONNECTOR FITTINGS
8970-001	0232536	Straight Connector 1/4 Tube X 1/8 MNPT
8970-003	0232537	Straight Connector 1/4 Tube X 1/8 FNPT
8970-008	0232538	Straight Connector 1/4 Tube X 1/4 MNPT
8970-002	0232539	Elbow Tube Connector 1/4 Tube X 1/8 MNPT
8970-006	0232540	Elbow Tube Connector 1/4 Tube X 1/4 MNPT
Nelson Irrigation Part #	Valmont Part #	TEE TUBE CONNECTORS
8970-004	0232541	Tee Tube Connector 1/4 Tube X 1/8 MNPT
8970-007	0232542	Tee Tube Connector 1/4 Tube X 1/4 MNPT
Nelson Irrigation Part #	Valmont Part #	MALE RUN TEES
8970-009	0232543	Male Run Tee 1/4 Tube X 1/4 MNPT
8970-010	0232544	Male Run Tee 1/4 Tube X 1/8 MNPT
Nelson Irrigation Part #	Valmont Part #	TUBE UNION TEE
8970-011	0232545	Tube Union Tee 1/4 OD Tube

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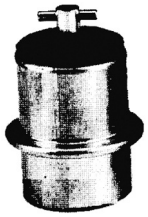
TRAVIS 4" PRESSURE RELIEF VALVES			
Part #	Model	Pre-Set Pressure Setting	Adjustable Pressure Range
1K00814	SEP41 - 4" Female Pipe Thread	Low Range - Preset at 80 psi	50 - 120 psi
1K00815	SEP43 - 4" Female Pipe Thread	High Range - Preset at 120 psi	120 - 180 psi



TRAVIS 3" PRESSURE RELIEF VALVE			
Part #	Model	Pre-Set Pressure Setting	Adjustable Pressure Range
1K00816	SEP4325 - 3" Female Pipe Thread	Low Range - Preset at 80 psi	50 - 120 psi



TRAVIS STEEL ELBOW VALVE OPENER		
Part #	Size (in.)	Type
1K01272	4" x 4"	Universal Elbow Opener
1K01277	6" x 6"	Universal Elbow Opener
1K02056	8" x 8"	Universal Elbow Opener



TRAVIS STEEL UNIVERSAL VALVE STUBS		
Part #	Size (in.)	Type
1K00263	4"	UVS-S400 Universal Valve Stub
1K00265	6"	UVS-S600 Universal Valve Stub
TRAVIS REPAIR PARTS		
1K01701	6 3/4" Stem (5/8" X 6 3/4" zinc)	
1K01702	9" Stem (5/8" X 9" zinc)	
1K01721	VALVE DISC - 4" Domed Disc	
1K01723	VALVE DISC - 6" Domed Disc	

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* *Reduces Chemical and Fertilizer Cost*
* *Perfect for Variable Rate Application*
* *Improves the efficiency of Inputs*
* *Easy Calibration*
* *Improved safety and Environmentally Sound*
* *Creates more efficient applications*

MacRoy SERIES FERTIGATION SYSTEMS

Each unit includes pump, base, cord, switch, strainer, Mister Mist'r and discharge hose.

Part #	Description
0980260	MacRoy 55 Gph Pumpcomplete 480V 3 Phase
0980261	MacRoy 55 Gph Pumpcomplete 110V 1 Phase
0980262	MacRoy 110 Gph Pumpcomplete 480V 3 Phase
0980263	MacRoy 110 Gph Pumpcomplete 110V 1 Phase
0980264	MacRoy 150 Gph Pumpcomplete 480V 3 Phase
0980265	MacRoy 150 Gph Pumpcomplete 110V 1 Phase



mRoy SERIES FERTIGATION SYSTEMS

Each unit includes 3-Phase 480 volt simplex diaphragm pump, switch, strainer and Mister Mist'r Injection check vlave mounted on polyethylene base.

Part #	Description
0995130	MROY 30 GPH A Fertilizer Injection System (max pressure of 150 psi)
0995131	MROY 85 GPH B Fertilizer Injection System (max pressure of 150 psi)



BLEEDER VALVES & OPTIONS

Part #	Description
0980266	Omni, Pvdf, Orange, 15# Spring Hastelloy
0980268	Agri-Inject Classicbleeder Valve - Black



CLASSIC MISTER MIST'R OPTIONS

Part #	Description
1K01823	Classic Mister Mist'r, PP, 15PSI SS Spring
0980269	Classic Bleeder Valvew/Fittings 1/2 X 1/2 Hose Barb
0980270	Classic Bleeder Valvew/Fittings 1/2 X 3/4 Hose Barb



Classic Mister Mist'r
Common Usees: Injection of low rates of fertilizers and ag chemicals.
Volume Capacity: 0.5 to 70 GPH
Pipeline Size: 4" to 12"

ULTRA MISTER MIST'R OPTIONS

Part #	Description
0980496	Ultra Mister Mist'r Polypropylene
0980497	Ultra Bleeder Valvew/Fittings 3/8" JG - Used With 55 GPH Unit
0980498	Ultra Bleeder Valvew/Fittings 1/2 Hose Barb - Used With 110 GPH Unit



Ultra Mister Mist'r
Common Usees: Injection of medium rates of fertilizers and ag chemicals.
Volume Capacity: 3 to 110 GPH
Pipeline Size: 6" to 12"

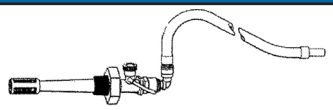
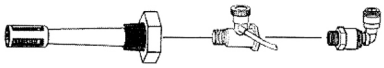
STAINLESS STEEL MISTER MIST'R OPTIONS

Part #	Description
0980267	Stainless Steel Mister Mist'r, 316SS1
0980499	Ultra Bleeder Valve w/Fittings 3/4" Hose Barb - Used w/ 150 GPH Unit



Stainless Steel Mister Mist'r
Common Usees: Injection of higher volumes of fertilizers and ag chemicals.
Volume Capacity: 15 to 300 GPH
Pipeline Size: 3" to 12"

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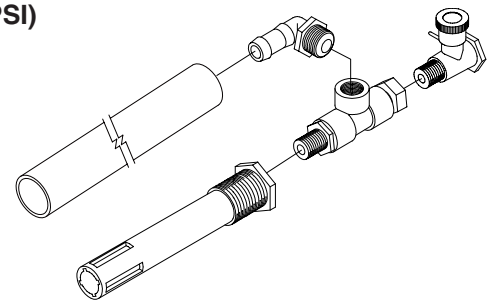
AGRI-INJECT PARTS / MISCELLANEOUS ITEMS		
Part #	**Description**	
1K02051	Dual Head Mister Mist'r Complete (includes 15 psi Poly Mister Mist'r Injection Check Valve w/bleeder, 12' black hose 1/4" X 3/8" with fittings)	
1K01826	Mister Mist'r Injection Check Valve (15 psi) and bleeder valve assembly with quick connect fittings.	
0995296	Mister Mist'r, 1/2" X 4", Stainless Steel, 20 psi, Injection Check Valve Only	
1K02053	High Pressure Hose Kit, 1/4" X 3/8", 12', includes ends	
0993447	JG Male connector, 3/8" X 1/4"	

Valmont Irrigation also offers a fertilizer injection package with a Mister Mist'r injection check valve as described below:

Description — *Part #*

FERTILIZER INJECTION PACKAGE — **0997018**

- **300 GPH capacity Mister Mist'r Injection Check Valve (20 PSI)**
- **½" female inlet X ¾" MNPT for insertion into 8" Pipeline**
- **Stainless Steel**
- **Bleeder valve**
- **12' ¾" clear nyobraid hose**

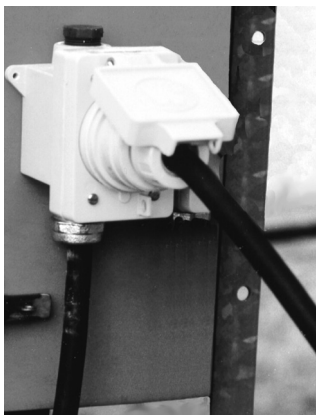


NOTE: ¾" hose barb x ¾" FNPT fitting required to connect hose to pump outlet. Prior to July 2007, a ¾" hose barb x ½" FNPT fitting is required.

Description — *Part #*

INJECTION PUMP ELECTRICAL CONNECTION PACKAGE — **KA09670**

- **Woodhead watertight 20 amp plug**
- **Receptacle and junction box**
- **20' of 4 conductor 14 gauge cord**
- **Strain reliefs and mounting hardware**
- **Scotchlok Connectors**

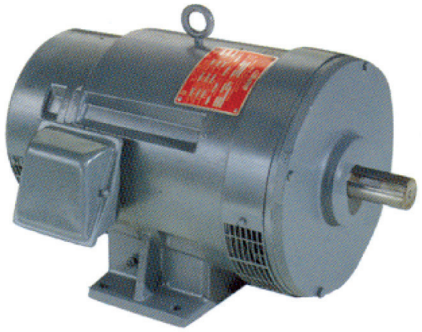


IMPORTANT: ***Consult your local electric codes and the National Electric code for proper electrical hook-ups. You MUST also refer to your state regulations for proper electrical interlocks when applying chemicals through the irrigation system.***

NOTE: An auxiliary control contactor with overload must be installed in the panel to utilize this package. Control of power to the receptacle is through the use of a manual switch or (relay with Pro2) to the auxiliary contactor in the panel.

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- *Superior motor starting capacity – 1 HP/kW, 3 phase, code G*
- *Inherent volts/hertz design, providing automatic protection from engine underspeed*
- *Self-regulated – no external regulator to fail*
- *Oversized bearings to handle belt side loads – providing longer life*
- *Rugged construction for harsh environments*



LIMA MAC GENERATORS				
Part #	**Description**	**Type**	**Frame Size**	**Weight (lbs)**
0314190	7.5 KW LIMA MAC Generator (double bearing)	3 Phase, 0.8 Power Factor, Continuous Duty	250	245
0314192	10 KW LIMA MAC Generator (double bearing)	3 Phase, 0.8 Power Factor, Continuous Duty	280	266
0314194	12 KW LIMA MAC Generator (double bearing)	3 Phase, 0.8 Power Factor, Continuous Duty	280	294
0314703	15 KW LIMA MAC Generator (double bearing)	3 Phase, 0.8 Power Factor, Continuous Duty	280	309
0980407	20 KW LIMA MAC Generator (double bearing)	3 Phase, 0.8 Power Factor, Continuous Duty	360	577
0980408	25 KW LIMA MAC Generator (double bearing)	3 Phase, 0.8 Power Factor, Continuous Duty	360	609
0980409	30 KW LIMA MAC Generator (double bearing)	3 Phase, 0.8 Power Factor, Continuous Duty	360	634
0980410	40 KW LIMA MAC Generator (double bearing)	3 Phase, 0.8 Power Factor, Continuous Duty	360	720
*440MDL0885	50 KW LIMA MAC Generator (double bearing)	3 Phase, 0.8 Power Factor, Continuous Duty	440	1,035
*440MDL0886	60 KW LIMA MAC Generator (double bearing)	3 Phase, 0.8 Power Factor, Continuous Duty	440	1,085
*440MDL0887	75 KW LIMA MAC Generator (double bearing)	3 Phase, 0.8 Power Factor, Continuous Duty	440	1,185
*440MDL0888	100 KW LIMA MAC Generator (double bearing)	3 Phase, 0.8 Power Factor, Continuous Duty	440	1,270

**** Models without Valmont part numbers. Call the Aftermarket Parts Group for pricing and special order / delivery options.***

SINGLE BEARING LIMA MAC GENERATORS

Single Bearing LIMA MAC GENERATORS for engine mounting are available also. Please call the Aftermarket Parts Group for pricing, availability and shipping options.

DROP SHIP PROGRAM FOR 7.5 - 30 KW DOUBLE BEARING GENERATORS	
Program Quantity	**Special Additional Discount**
Order 5 or more (any combination)	**5%**

See the following page for program details.

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Freight Pre-Paid: **Valmont will prepay the freight for all orders placed under this program, except for a freight adder applied to the following areas:**

An additional 2.0% freight adder will be added to any order shipped to the following states/areas: Arizona, California, Idaho, Nevada, Oregon, Utah, Washington and Western Canada.

Terms: **Standard Terms (net 10th prox.) apply for all orders received.**

Ordering: **ALL orders must be called into the Valmont Irrigation Aftermarket Parts Group at Valley, NE.**

Shipment: **Please allow at least 7-10 days for most orders from the time of order placement to shipment from the factory in Ohio. Large orders may require 2-3 weeks and you should call to verify delivery time frames.**

LIMA MAC GENERATOR REPAIR ITEMS		
BEARINGS		
Part #	**Description**	**Frame Size**
0191061	Drive End Bearing 7.5 - 15 KW models	250-280
0191062	Non-Drive End Bearing 10 - 15 KW models (for units sold BEFORE mid 1987, generator S/N begins with 3156	250-280
0191063	Non-Drive End Bearing 10 - 15 KW models (for units sold AFTER mid 1987, generator S/N begins with 3264	250-280
0191064	Drive End Bearing 20 - 40 KW models	360
0191065	Non-Drive End Bearing 20 - 40 KW models	360

RECTIFIERS		
Part #	**Description**	**Frame Size**
03E1486	Rectifier Assembly for 7.5 KW models (2 required/generator)	250
03E1487*	Rectifier Assembly for 10 - 15 KW models (for generators sold before August 2002)	280
03E2525**	Rectifier Assembly for 10 - 15 KW models (for generators sold after August 2002) This is a 2-piece rectifier, both halves are included.	280
03E1488	Rectifier Assembly for 20 - 40 KW models	360

***Use 03E1487 for 10-15 KW generators with starting serial #s prior to the following: 360951, 360943, 360941, 363228, 361255, 361403, 361931, 361532, 361529.**

****Use 03E2525 for 10-15 KW generators with starting serial #s beginning with the following: 360951, 360943, 360941, 363228, 361255, 361403, 361931, 361532, 361529. (except for 360949, 360950, 360967, 360954, and 360955)**

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BUSHINGS	
Part #	**Description**
0192055	Bushing 1 7/8" Bore with 1/2" Square Key for 7.5 - 15 KW Generators
0192056	Bushing 2 1/8" Bore with 1/2" Square Key for 20 - 30 KW Generators

"5V" SHEAVES							
Part #	**Description**	**Outside Diameter (in.)**	**Pitch Diameter (in.)**	**Type**	**Belt Type**	**Number Grooves**	**Approx. HP at 1800 rpm**
0995386	2 Groove Browning 5V Sheave	6.70	6.60	16	5V	2	38*
0995387	2 Groove Browning 5V Sheave	7.10	7.00	16	5V	2	35
0995388	2 Groove Browning 5V Sheave	7.50	7.40	16	5V	2	36
0995389	2 Groove Browning 5V Sheave	8.00	7.90	16	5V	2	40
0995390	2 Groove Browning 5V Sheave	8.50	8.40	16	5V	2	45
0995391	2 Groove Browning 5V Sheave	9.00	8.90	16	5V	2	48
0995392	2 Groove Browning 5V Sheave	9.25	9.15	16	5V	2	50

*Belt must be notched type for small diameter sheave

NOTE 1: 2 Groove is MAXIMUM that can be mounted on the front of the crankshaft on most new engines

NOTE 2: Notched belts will provide an approximate 20% increase in horsepower

NOTE 3: Approximate horsepowers assume that the minimum sheave size of the 2 sheaves is as stated in the table.

"B" SHEAVES							
Part #	**Description**	**Outside Diameter (in.)**	**Pitch Diameter (in.)**	**Type**	**Belt Type**	**Number Grooves**	**Approx. HP at 1800 rpm**
0992255	3 Groove Browing B Sheave	5.75	5.40	5	B	3	22
0992256	3 Groove Browing B Sheave	5.95	5.60	5	B	3	24
0992257	3 Groove Browing B Sheave	6.15	5.80	13	B	3	25
0992258	3 Groove Browing B Sheave	6.35	6.00	13	B	3	26
0992259	3 Groove Browing B Sheave	6.55	6.20	13	B	3	29
0992260	3 Groove Browing B Sheave	6.75	6.40	13	B	3	31
0992261	3 Groove Browing B Sheave	6.95	6.60	13	B	3	32
0992262	3 Groove Browing B Sheave	7.15	6.80	13	B	3	34
0992263	3 Groove Browing B Sheave	7.35	7.00	13	B	3	35
0992265	3 Groove Browing B Sheave	7.75	7.40	13	B	3	36
0992268	3 Groove Browing B Sheave	8.35	8.00	13	B	3	40
0992269	3 Groove Browing B Sheave	8.95	8.60	13	B	3	44

NOTE 1: Notched belts will provide an approximate 10% increase in horsepower.

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ARCO Valmont branded “Val Series Roto-Phases" provide three-phase power from a single-phase supply. These units are designed to give each motor it’s desired starting torque, even at the farthest tower.

- *5 Year ARCO Warranty*
- *CSA and NRTL/C Approved*
- *24 Hour support service*
- *TEFC Designed (totally enclosed fan cooled)*
- *Private labeled for Valmont*



ARCO Electric Products has continued to be the leader in the phase converter industry for over thirty years with their knowledge, technical support, reliability, and quality products. All of these factors are the reason why they are able to offer a 5-YEAR WARRANTY for their Roto-Phase converters.

SUPPORT

Sizing and Technical Information:	**Contact the Aftermarket Parts Group at Valley, NE. You can also contact either Tim Drake or Tony Abdou at ARCO direct at 800-428-4370. They are very familiar with the application of roto-phases for center pivot applications and very willing to assist you with any sizing applications.**
Service and Installation:	**Contact ARCO at 800-428-4370.**
Warranty Support:	**ARCO offers a 5 year domestic warranty. If you have a need for a warranty repair, call Tim or Tony at ARCO (800-428-4370) and they will direct you to the closest authorized ARCO service center. To see a list of authorized service centers in your area, you can access a website at www.easa.com and click on “Find a Member" to see the list for your area.**
ARCO website:	**http://www.arco-electric.com**

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ARCO ROTO-PHASE CONVERTERS (460 VOLT SINGLE PHASE REQUIRED)						
Part #	ARCO Roto-Phase Converter Models	KVA	Max Starting HP Capacity	Total System HP Capacity	Min Total HP Load w/o VR	Approx. Shipping Weight
09S0020	*VAL-0 Roto-phase Converter	4	2	4	0.5	92
09S0021	*VAL-1 Roto-phase Converter	8	4	8	2	144
09S0022	*VAL-2 Roto-phase Converter	12	6	12	3	211
09S0023	*VAL-3 Roto-phase Converter	16	8	16	4	250
09S0024	*VAL-4 Roto-phase Converter	25	12	25	6	385
09S0028	**VAL-5 Roto-phase Converter	30	15	30	8	500
09S0029	**VAL-6 Roto-phase Converter	40	20	40	10	550
09S0030	**VAL-7 Roto-phase Converter	50	25	50	12	820
09S0064	**VAL-8 Roto-phase Converter	70	30	60	12	835
09S0065	**VAL-9 Roto-phase Converter	80	40	80	12	845

*** Units inventoried at Valmont. (these do NOT include disconnects or voltage regulation. If you need these options, these MUST be installed at the ARCO Factory and drop shipped to your location.)**

**** Units NOT stocked at Valmont that must be drop shipped to your location.**

NOTE: Motor Run Capacitor CA0091 . . . 03E3082.

SPECIAL APPLICATIONS AND ORDERS

ARCO has a staff of individuals that will design a roto-phase installation for just about any application that may be required, including higher starting horsepowers than the largest unit indicated in the pervious table. These special design application units can be shipped direct from the ARCO factory in Shelbyville, IN. Our department has worked with many dealers over the years to provide special designs for those applications where the standard models will not get the job done. ARCO and Valmont will strive to provide you with all of your roto-phase converter needs at competitive pricing. Thanks for considering Valmont and ARCO.

VOLTAGE REGULATION AND OTHER OPTIONS FOR ARCO PHASE CONVERTERS			
Part #	Voltage Regulation Options* (must be factory installed and drop shipped)	Part #	Other Options for ARCO Roto-Phases*
09S0058	*Voltage Regulation for VAL5	09S0025	*Surge Arrestor (for VAL0 - VAL4)
09S0059	*Voltage Regulation for VAL6	09S0026	*Disconnect Switch (VAL0 - VAL3)
09S0060	*Voltage Regulation for VAL7	09S0027	*Disconnect Switch (VAL4 - VAL7)
09S0061	*Voltage Regulation for VAL8	09S0067	*Disconnect Switch (VAL8 - VAL9)
09S0062	Voltage Regulation for VAL9		

*** The Voltage Regulation option MUST be factory installed. This can't be retrofitted in the field on existing units. Add price to base unit.**

*** The Surge Arrestors are available from Valmont and can be purchased separately. The Disconnect Switches MUST be factory installed and then drop shipped to your location direct from the ARCO factory. Add price to base unit.**

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Magnetic starters can be built into any ARCO rotophase converter. Both Automatic and Manual starters are available. Any ARCO rotophase converter that is ordered through Valmont and shipped from the ARCO factory, can have this option built in the unit. Following are descriptions for the two different options available:

Automatic Starter: **This is a factory installed feature and provides overcurrent protection for the phase converter. It includes a built-in starter control package in the phase converter's control panel that includes a 3-pole magnetic starter, overload protection, and a time-delay circuit for remote operation with the irrigation system.**

Manual Starter: **This is a factory installed feature and provides overcurrent protection for the phase converter. It includes a built-in starter control package in the phase converter's control panel that includes a 3-pole magnetic starter, overload protection, and a push button START / STOP station for manually starting and stopping the phase converter.**

Please contact the Valmont Parts Department for current pricing on all Starter options.

SPECIAL DESIGN CONSIDERATIONS

- Installations with only 240 volt single phase power MUST utilize a transformer set to provide 480 single phase. These can and should be ordered as a matched set with the roto-phase. Please call Valmont for any installation requiring a transformer set to ensure proper sizing.
- For sizing information with single/multiple pivots or pivots with an ancillary motor, please call the Valmont Aftermarket Parts Group or Tim Drake / Hal Pike at ARCO direct at 800-428-4370..
- Any installation utilizing a corner or linear machine, please call Valmont. The only approved roto-phase to use with any Precision Corner is the ARCO brand, due to it's ability to provide balanced phasing.
- Any installation utilizing a SUBMERSIBLE PUMP, please call valmont. A submersible pump is treated differently by ARCO in a design due to the higher starting torques for different brand motors.

ORDERING

1) **To order any VAL0 through a VAL4 without the voltage regulation or disconnect option, simply place the order on V20, fax it or call the Aftermarket Parts Group at Valley or your local Parts Distribution Centers.**
2) **To order any VAL0 through a VAL4 WITH the voltage regulation or disconnect option, call the Valmont Aftermarket Parts Group to arrange for a DROP SHIP order. (normally a 2-7 day lead time)**
3) **To order any VAL5 through a VAL9 (WITH or WITHOUT options), call the Valmont Aftermarket Parts Group to arrange for a DROP SHIP order. (normally a 2-7 day lead time).**

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Description	*Part #*
REMOTE-MOUNTED CONTROL PANEL HARDWARE KIT	**0000J54**

- **2 – 9’ long 2-7/8" diameter 14 gauge galvanized steel tubes for mounting posts.**
- **All panel mounting hardware.**
- **Ground rod, lug and ground wire.**
- **Conduit and fittings for wire lead-in not included as illustrated in picture.**



RULES FOR REMOTE-MOUNTING ANY CONTROL PANEL

- *Drive Unit Mounted Auto Reverse / Auto Stop MUST NOT be mounted farther than 1500 feet from any panel (Standard, Select2 or Pro2). For example, if the panel is remote mounted 1000 feet from the pivot point, the Drive Unit Mounted Auto Reverse / Auto Stop option must be placed no farther than 500 feet from the pivot point.*
- *You MUST observe all requirements of the National Electric Code for wire sizing, grounding and installation methods.*
- *Additional rules apply to remote mounting Select2 and Pro2 panels. Please refer to the “Remote Mounting Select2 and Pro2 Panels” section in the next several pages.*

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OPTION 1

- **Use shielded span cable for power and 120 volt control wires. 8, 10 and 12 gauge available as "cut-to-length".**
- **Use V-Tools to ensure 3 phase power wires are sized adequately.**

SHIELDED SPAN CABLE FOR REMOTE MOUNTING PANELS				
600 volt individual insulated wires, UL listed, approved for direct burial				
Part #	# Wires	Power wires (Stranded Copper)	120 Volt Control Wires (Stranded Copper)	How to Order?
03E1717	11 Wire Shielded	4 -12 gauge	7-14 gauge	Per Foot
0314328	11 Wire Shielded	4 -10 gauge	7-14 gauge	Per Foot
1811851	11 Wire Shielded	4 -10 gauge	7-14 gauge	One 1325' Piece Length - order qty of 1
0314569	11 Wire Shielded	4 - 8 gauge	7-14 gauge	Per Foot

NOTE: All wires are color coded per Valmont Irrigation's specifications.

OPTION 2

- **Use any 4 Wire Service conductors rated for underground burial for the 3 phase power conductors and ground.**
- **Use the 7 conductor cable listed in the table for the 120 volt control wires to remote mount the panel.**

SHIELDED 7-WIRE CABLE FOR REMOTE MOUNTING PANELS			
600 volt individual insulated wires, UL listed, approved for direct burial			
Part #	# Wires	120 Volt Control Wires (Stranded Copper)	How to Order?
03E1730	7 Wire Shielded (Wht, Blk, Yel, Red, Grn, Brn, Bl)	7-14 gauge	Per Foot

OPTION 3

- **Use In-Conduit Cable. Larger 3 phase power wires (in comparison to span cable) can be combined with the appropriate 7 conductors needed for remote mounting the panel. Please refer to the "In-Conduit Cable" section to review this product offering.**

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RULES FOR SIZING 3-PHASE POWER WIRES AND 14 GAUGE CONTROL WIRES

3-PHASE POWER WIRES

V-Tools should be used to determine the correct sizing of the 3-phase power wires.

14 GAUGE CONTROL WIRES FOR PANEL OPERATION

Use the following factors to calculate the voltage drop for the 120 volt control wires:

Length of Run = **(2 X length of buried wire) + (2 X machine length)**

Amp Draw = **Maximum of 5 amps. You can refer to the following table to determine amp draws of individual components. Note that a running light requires the highest amp draw. In some cases, a separate fused transformer can be used to operate the running light to minimize voltage drop.**

Voltage Drop Allowed = **105 Volts minimum is required for the contactors.**

INDIVIDUAL COMPONENT AMP DRAWS	
120 VAC Components	Amp Draw
Tower Box Contactor	0.083
Solenoid	0.050
Standard Running Light	0.575
Strobe Running Light	0.850

CM	Wire Size
4107	14 AWG
6530	12 AWG
10380	10 AWG
16510	8 AWG
26250	6 AWG

To calculate 120 VAC voltage drops, use the following formula:

$$\text{Voltage Drop} = \frac{(22) \times (\text{amps}) \times (\text{Length of Run})}{\text{CM}}$$

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Select2 and Pro2 Control Panels may utilize a "Resolver" to indicate the position of the pivot in the field on the display screen. This requires low voltage signals to be transferred from the collector ring of the pivot point to the control panel. Therefore, a special cable must be used to bring this signal back to the control panel.

APPROVED CABLE FOR REMOTE-MOUNTING RESOLVERS			
Part #	**Description**	**Wire Size**	**How to Order?**
03E1729	**4 conductor, jelly filled and copper shielded phone wire**	**2 pairs of 19 gauge solid copper**	**Per Foot**

RULES FOR REMOTE-MOUNTING SELECT2 AND Pro2 PANELS

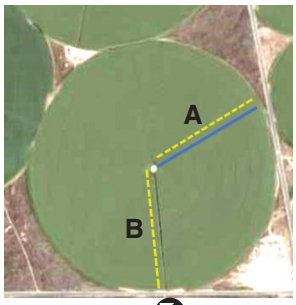
- *Maximum distance resolver can be remote mounted is 1500' for both Select2 and Pro2.*
- *Resolver Cable should be trenched (or ripped) in separately from the 3 Phase Power wires to prevent induced voltage. This is the best possible solution. If the cable must be placed in the same trench, it MUST be placed on one side of the PVC water pipeline with the 3 Phase Power wires placed on the other.*
- *Splicing is NOT recommended for the resolver cable.*
- *16 conductor span cable or 12/2 romex wire are NOT acceptable alternatives for remote mounting the resolver.*

Description **PIVOT GPS POSITIONING PACKAGE** *Part #* **0000L16**

"GPS" positioning for pivots is available with "GPS" Ready Select2 and Pro2 panels. GPS receivers calculate machine position by timing signals sent by GPS satellites located in outer space. This system called (WAAS) provides repeatable accuracies of +/- 10 feet.

LIMITATIONS

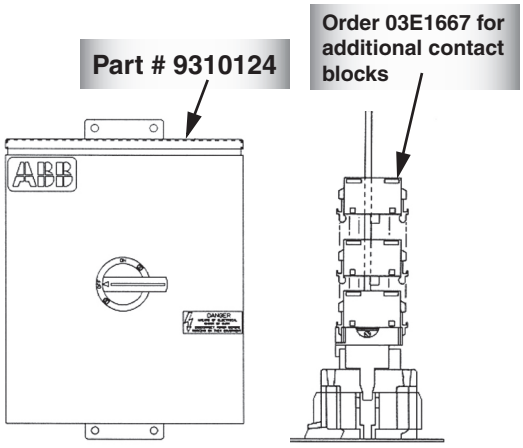
- *Remote mounting distance up to 4000 feet measured from panel to receiver. (total distance of wire path A+B)*
- *Not recommended in installation with variable frequency drives.*
- *Pivot Points in close proximity.*



DISCONNECT FOR REMOTE-MOUNTING

Control panels remote mounted more than 50 feet away from the pivot point, require a disconnect mounted at the pivot point. The following multiple contact disconnect can be used.

- **40 Amp Rotary switch. Accepts copper wire up to size 8 AWG.**
- **7 - NO Auxiliary contacts for 7-14 gauge control wires.**
- **Complete package with the disconnect box, mounting bracket and mounting hardware is available.**



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What is Cable-In-Conduit (CIC)?

Cable-In-Conduit (CIC) is electrical cable that is placed inside a polyethylene duct. CIC is manufactured as a continuous length, therefore, preventing the use of couplings and splices. A CIC system of cable installation is reliable, durable and minimizes the chance of irrigation failures due to damages caused by rodent attacks or chemical deterioration of the power wire. A sample section CIC can be shipped to you free of charge by contacting Brian Roschewski at 800-825-6668 ext. 3424.



Ordering Cable-In-Conduit?

Cut-To-Length Cable Lengths

Valmont Irrigation has invested in the necessary equipment to provide you with cut lengths of CIC. This equipment has been installed at both the McCook, NE and American Falls, ID Parts Distribution Centers. Orders for cut-to-length CIC, should be placed with these two distribution centers.

McCook, NE Central Region Distribution Center CIC Order Contacts:
Phone: 866-222-5803 Fax: 308-345-4187

American Falls, ID Western Region Distribution Center CIC Order Contacts:
Phone: 877-548-2559 Fax: 208-226-5641

The tables on the following pages indicate the wire sizes and configurations that Valmont currently stocks and will cut for you. If we find that dealers are requesting a reasonable quantity of other sizes, we will certainly be open to stocking some of those also if it makes sense.

Important: If Valmont Irrigation does not stock the cable you are requesting, we can have it shipped direct from the supplier.

Master Reel Shipments

Some dealers choose to buy their CIC in large "Master Reels". These large reels will contain 5000-6000 feet of CIC depending on the size of cable. The dealer is then responsible for managing their cuts from the master reels.

Valmont will also offer master reel sales. Typically, master reels will be sent directly from the supplier direct to your dealership. For ordering Master Reels please contact the Distribution Centers or the Aftermarket Parts Dept. in Valley, NE.

Pricing

Please note that master reels qualify for a quantity discount. Freight is pre-paid with an order of 4 or more master reels. All cut-to-length items will incur a $25/cut charge.

Installation

An installation guide is available for this product. Please contact the Aftermarket Parts Dept. in Valley, NE to have one sent to you.

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CABLE-IN-CONDUIT		
Part #	**Description**	**Stocked?**
#12 Copper (Cut-To-Length)		
03E2334	2 - #12 CU in 0.75" Duct TC7-THHN - std wall thickness	McCook & Idaho
03E2337	6 - #12 CU in 0.75" Duct TC7-THHN - std wall thickness	See Note 1
#6 Aluminum (Cut-To-Length)		
03E2346	4 - #6 AL in 1.25" Duct TC7-USE - std wall thickness	While supply lasts at McCook
03E2347	4 - #6 AL, 2 - #12 CU in 1.25" Duct TC7-USE - std wall thickness	McCook Only
03E2348	4 - #6 AL, 6 - #12 CU in 1.25" Duct TC7-USE - std wall thickness	While supply lasts at McCook
03E2349	4 - #6 AL, 7 - #12 CU in 1.25" Duct TC7-USE - std wall thickness	While supply lasts at McCook
#4 Aluminum (Cut-To-Length)		
03E2352	4 - #4 AL in 1.25" Duct TC7-USE - std wall thickness	McCook & Idaho
03E2353	4 - #4 AL, 2 - #12 CU in 1.25" Duct TC7-USE - std wall thickness	McCook & Idaho
03E2354	4 - #4 AL, 2 - #12 CU in 1.25" SCH 40 Duct TC7-USE - std wall thickness	Idaho Only
03E2357	4 - #4 AL, 7 - #12 CU in 1.25" Duct TC7-USE - std wall thickness	McCook Only
#2 Aluminum (Cut-To-Length)		
03E2361	3 - #2 AL, 1 - #4 AL in 1.25" Duct TC7-USE - std wall thickness	McCook & Idaho
03E2362	3 - #2 AL, 1 - #4 AL, 2 - #12 CU in 1.25" Duct TC7-USE - std wall thickness	McCook & Idaho
03E2363	3 - #2 AL, 1 - #4 AL, 2 - #12 CU in 1.25" SCH 40 Duct TC7-USE - std wall thickness	Idaho Only
03E2373	3 - #2 AL, 1 - #4 AL, 7 - #12 CU in 1.25" Duct TC7-USE - std wall thickness	See Note 1
# 1/0 Aluminum (Cut-To-Length)		
03E2378	3 - #1/0 AL,1 - #4 AL in 1.5" Duct TC7-USE -std wall thickness	While supply lasts at McCook
03E2379	3 - #1/0, 1 - #4 AL, 2 #12 CU in 1.5" Duct TC7-USE -std wall thickness	McCook Only
# 2/0 Aluminum (Cut-To-Length)		
03E2384	3 - #2/0 AL,1 - #2 AL in 2" Duct TC7-USE - std wall thickness	See Note 2
03E2385	3 - #2/0 AL,1 - #2 AL, 2 - #12 CU in 2" Duct TC7-USE - std wall thickness	McCook Only
# 4/0 Aluminum		
03E2391	3 - #4/0 AL,1 - #2 AL in 2" Duct TC7-USE - std wall thickness	See Note 2
03E2392	3 - #4/0, 1 - #2 AL, 2 - #12 CU in 2" Duct TC7-USE - std wall thickness	McCook ONLY Master reels ONLY available. (NO cut lengths)

Note 1 - Stocked at the Factory

Note 2 - Allow 3-4 weeks for delivery

Tolerance for cut lengths -0%, +3%

Call the Valmont Irrigation Aftermarket Parts Group for other cable configurations that may not be listed here. We will provide you with a quotation and availability.

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GE Heavy Duty Fused Disconnect Switch Boxes

- *Liberal amount of space above the disconnect for easy routing of wires*
- *Vertically hinged NEMA 3R Enclosure*
- *Ground kits included as standard*
- *Spring-reinforced fuse clips ensure reliable contact and cool operation*



GE HEAVY DUTY FUSED DISCONNECT BOXES			
Part #	Ampere Rating	Voltage Rating	Box Dimensions (in.)
03E2528	30	600	W=13.41", H=22.56", D=5.12"
03E2530	60	600	W=13.41", H=22.56", D=5.12"
03E2532	100	600	W=10.62", H=22.25", D=5.00"
03E2534	200	600	W=14.12", H=31.50", D=5.31"

NOTE 1: NEMA 3R Enclosure used for all GE Disconnect Boxes.
NOTE 2: Ground kits included with ALL boxes listed. These are field installed.
NOTE 3: Fuses NOT included with disconnect.



GE HEAVY DUTY NON-FUSED DISCONNECT BOXES			
Part #	Ampere Rating	Voltage Rating	Box Dimensions (in.)
03E2529	30	600	W=10.34", H=15.03", D=4.12"
03E2531	60	600	W=13.41", H=22.56", D=5.12"
03E2533	100	600	W=10.12", H=17.50", D=5.00"
03E2535	200	600	W=10.62", H=22.25", D=5.00"

NOTE 1: NEMA 3R Enclosure used for all GE Disconnect Boxes.
NOTE 2: Ground kits included with ALL boxes listed. These are field installed.

NEUTRAL KITS FOR GE DISCONNECT BOXES	
Part #	Ampere Rating
03E2536	30
03E2537	60
03E2538	100
03E2539	200

NOTE 1: Neutral kits required for boxes used as a Service Entry Disconnect.

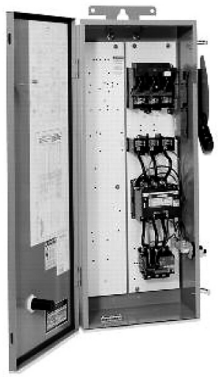


MIDWEST JUNCTION BOXES - UL LISTED					
Part #	Ampere Rating	Voltage Rating	# of Bars	Lugs/ Bar	Wire Range (Cu or Al)
09S0043	100	600	4	5	5 - (14 - 1/0)
09S0044	200	600	4	6	3 - (12 - 1/0), 3 - (1/0 - 250)

NOTE 1: Includes NEMA 3R Enclosure.

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- NEMA 3R enclosures
- Type S contactor provided as standard
- Approved for submersible pump applications
- Class 10 MOTOR LOGIC® SSOLR
- Includes START push button and HAND-OFF-AUTO Selector switch
- Adjustable trip current
- UL listed and marked “SUITABLE ONLY FOR USE AS SERVICE EQUIPMENT”



09S0017 - 30 HP Illustrated in Photo.

SQUARE D CLASS 8940 TYPE SS PUMP PANELS					
Part #	Maximum 3-Phase HP Rating	Volts	Coil Voltage	Maximum Fuse Rating	Vendor #
480 Volt Coil					
09S0015	3, 5, 7 1/2, 10	480 - 3 Phase	480 - 60 Hz	30	8940SSC4010
09S0016	15, 20, 25	480 - 3 Phase	480 - 60 Hz	60	8940SSD4025
09S0017	30	480 - 3 Phase	480 - 60 Hz	60	8940SSD4030
09S0018	40, 50	480 - 3 Phase	480 - 60 Hz	100	8940SSE4050
09S0019	60, 75, 100	480 - 3 Phase	480 - 60 Hz	200	8940SSF4100
03E3108	200	480 - 3 Phase	480 - 60 Hz	200	8940SSG4200
120 Volt Coil					
03E1873	10	480 - 3 Phase	120 - 60 Hz	30	SSD4010V2S
03E1886	25	480 - 3 Phase	120 - 60 Hz	60	SSD4025V02S
03E2931	50	480 - 3 Phase	120 - 60 Hz	100	8940SSE4050
03E2932	100	480 - 3 Phase	120 - 60 Hz	200	8940SSF4100

THERMAL UNITS FOR SQUARE D PUMP PANELS		
Valmont Part #	Square D #	Description
0997036	9065SS210	#2 Thermal unit (Up to 30 HP)
0997034	9365SS310	#3 Thermal unit (40, 50 HP)
0997035	9065SS410	#4 Thermal unit (60, 75, 100 HP)
REPLACEMENT STARTERS FOR SQUARE D PUMP PANELS		
Valmont Part #	Square D #	Description
0997037	8536SDO1V06	#2 Replacement Starter (Up to 30 HP)
0997038	8536SEO1V02S	#3 Replacement Starter (40, 50 HP)
0997039	8536SFO1V02S	#4 Replacement Starter (60, 75, 100 HP)
REPLACEMENT COILS FOR SQUARE D PUMP PANELS		
Valmont Part #	Square D #	Description
0997040	31063-409-57	#2 480 Volt Replacement Coil (Up to 30 HP)
0997041	31074-400-57	#3 480 Volt Replacement Coil (40, 50 HP)
0997042	31091-400-57	#4 480 Volt Replacement Coil (60, 75, 100 HP)
REPLACEMENT CONTACT KITS FOR SQUARE D PUMP PANELS		
Valmont Part #	Square D #	Description
0997043	9998SL4	#2 Replacement Contact Kit (Up to 25 HP)
0997044	9998SL7	#3 Replacement Contact Kit (30, 40, 50 HP)
0997045	9998SL8	#4 Replacement Contact Kit (60, 75, 100 HP)

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- Yaskawa iQpump1000 VFD
- NEMA 3R Service Entrance Rated
- 18kAIC Circuit Breaker
- Surge Suppressor
- Door mounted VFD keypad Operator
- Input Phase/Voltage: 3PH/380-480V
- 3% Line Reactor
- Door mounted VFD Hand-Off-Auto Selector Switch
- Door mounted Speed Potentiometer Dial

STANDARD CONFIGURATION FOR CENTRIFUGAL AND TURBINE PUMP MOTORS		
Part #	**VFD Amps**	**Valley Part Description**
03E3971	34	ELC MS YASKAWA 25 HP VFD W/LINE REACTOR
03E3972	40	ELC MS YASKAWA 30 HP VFD W/LINE REACTOR
03E3973	52	ELC MS YASKAWA 40 HP VFD W/LINE REACTOR
03E3974	65	ELC MS YASKAWA 50 HP VFD W/LINE REACTOR
03E3975	77	ELC MS YASKAWA 60 HP VFD W/LINE REACTOR
03E3976	96	ELC MS YASKAWA 75 HP VFD W/LINE REACTOR
03E3977	124	ELC MS YASKAWA 100 HP VFD W/LINE REACTOR
03E3978	156	ELC MS YASKAWA 125 HP VFD W/LINE REACTOR
03E3979	180	ELC MS YASKAWA 150 HP VFD W/LINE REACTOR
03E3980	240	ELC MS YASKAWA 200 HP VFD W/LINE REACTOR
03E3981	302	ELC MS YASKAWA 250 HP VFD W/LINE REACTOR
03E3982	361	ELC MS YASKAWA 300 HP VFD W/LINE REACTOR

Size VFD panel based on full load amps of motor. If full load amps exceeds amp rating select next largest panel.

STANDARD CONFIGURATION FOR SUBMERSIBLE PUMP MOTORS		
Part #	**VFD Amps**	**Valley Part Description**
03E3983	34	ELC MS YASKAWA 20 HP SUBVFD W/LOAD REACTOR
03E3984	40	ELC MS YASKAWA 25 HP SUBVFD W/LOAD REACTOR
03E3985	52	ELC MS YASKAWA 30 HP SUBVFD W/LOAD REACTOR
03E3986	65	ELC MS YASKAWA 40 HP SUBVFD W/LOAD REACTOR
03E3987	77	ELC MS YASKAWA 50 HP SUBVFD W/LOAD REACTOR
03E3988	96	ELC MS YASKAWA 60 HP SUBVFD W/LOAD REACTOR
03E3989	124	ELC MS YASKAWA 75 HP SUBVFD W/LOAD REACTOR
03E3990	156	ELC MS YASKAWA 100 HP SUBVFD W/LOAD REACTOR
03E3991	240	ELC MS YASKAWA 125-150HP SUBVFD W/LOAD REACTOR

Size VFD panel based on max amps (including service factor) of the submersible motor. If max amps (include service factor) of motor exceeds amp rating select next largest panel.

1Ph LOW HARMONIC VFD		
Part No.	**VFD Amps**	**Description**
0980444	40	YASKAWA IQPUMP100 1 PHASE CONV 30HP/40A
0980445	52	YASKAWA IQPUMP100 1 PHASE CONV 40HP/52A
0980446	65	YASKAWA IQPUMP100 1 PHASE CONV 50HP/65A
0980447	77	YASKAWA IQPUMP100 1 PHASE CONV 60HP/77A

For single phase VFD applications, sizing, or any other product questions, please contact your Valley Water Management Project Sales Manager.

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iQpump1000 VFD W/BYPASS		
Part #	**VFD Amps**	**Description**
03E4010	65	YASKAWA 50 HP VFD W/BYPASS
03E4011	77	YASKAWA 60 HP VFD W/BYPASS
03E4012	96	YASKAWA 75 HP VFD W/BYPASS
03E4013	124	YASKAWA 100 HP VFD W/BYPASS
03E4014	156	YASKAWA 125 HP VFD W/BYPASS
03E4015	180	YASKAWA 150 HP VFD W/BYPASS
03E4016	240	YASKAWA 200 HP VFD W/BYPASS

Size VFD panel based on full load amps of motor.
If full load amps exceeds amp rating select next largest panel.

IQPUMP1000 FLOOR STANDS	
Part #	**Description**
03E3968	Yaskawa 12" Floor Mount Legs
03E3969	Yaskawa 30" Floor Mount Legs

PRESSURE TRANSDUCER AND CABLES	
Part #	**Description**
03E3779	200# Pressure Transducer - 4-20mA
03E3780	32 Ft Transducer Cable (10m)
03E3781	16 Ft Transducer Cable (5m)

YASKAWA STANDARD CUBES		
Part #	**VFD Amps**	**Description**
03E4151	38	Yaskawa Std Drive Cube 25HP 38A 3PH 480V
03E4152	44	Yaskawa Std Drive Cube 30HP 44A 3PH 480V
03E4153	58	Yaskawa Std Drive Cube 40HP 58A 3PH 480V
03E4154	72	Yaskawa Std Drive Cube 50HP 72A 3PH 480V
03E4155	88	Yaskawa Std Drive Cube 60HP 88A 3PH 480V
03E4156	103	Yaskawa Std Drive Cube 75HP 103A 3PH 480V
03E4157	139	Yaskawa Std Drive Cube 100HP 139A 3PH 480V
03E4158	165	Yaskawa Std Drive Cube 125HP 165A 3PH 480V
03E4159	208	Yaskawa Std Drive Cube 150HP 208 3PH 480V
03E4160	250	Yaskawa Std Drive Cube 200HP 250A 3PH 480V
03E4161	296	Yaskawa Std Drive Cube 250HP 296A 3PH 480V
03E4162	362	Yaskawa Std Drive Cube 300HP 362A 3PH 480V

YASKAWA VFD REPLACEMENT COMPONENTS		
Part #	**Description**	**Vendor #**
03E3970	Yaskawa Key Pad	UOP000016
03E4164	Yaskawa PCB Control Board IQPUMP1000	ETC740111-S8554.M
03E4165	Yaskawa PCB Terminal Board IQPUMP1000	ETC740481.M
03E4166	Yaskawa Thermostat SPST IQPUMP1000	UTH000010
03E4167	Yaskawa Keypad Operator Cover IQPUMP1000	UCV00734-0102
03E4168	Yaskawa Relay 120V 12A SPDT W/Socket	URY000332

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1LH Series

- *Single Phase Input to Three Phase Output*
- *Configured for sumbersible and centrifugal pump motors*
- *HP Ranges 20 to 100HP for submersible, 20 to 100HP in centrifugal configuration*
- *NEMA 3R Enclosure*

For Submersible Pumps - Includes Output Filter
(1PH-3PH/480V PHASE CONVERTING LOW HARMONIC VFD)

Part #	Description	HP	AMP	H" x W" x D"
03E4350	ELC MS VFD SUB 1LH 480V 1-3PH 20HP OF	20	31	60 X 46 X 18
03E4351	ELC MS VFD SUB 1LH 480V 1-3PH 30HP OF	30	46	60 X 46 X 18
03E4352	ELC MS VFD SUB 1LH 480V 1-3PH 40HP OF	40	61	60 X 46 X 18
03E4353	ELC MS VFD SUB 1LH 480V 1-3PH 50HP OF	50	77	60 X 46 X 18
03E4354	ELC MS VFD SUB 1LH 480V 1-3PH 60HP OF	60	91	64 X 60 X 22
03E4355	ELC MS VFD SUB 1LH 480V 1-3PH 75HP OF	75	107	64 X 60 X 22
03E4356	ELC MS VFD SUB 1LH 480V 1-3PH 100HP OF	100	142	64 X 60 X 22

For Centrifugal Pumps
(1PH-3PH/480V PHASE CONVERTING LOW HARMONIC VFD)

Part #	Description	HP	AMP	H" x W" x D"
03E4365	ELC MS VFD CENT 1LH 480V 1-3PH 20HP	20	31	60 X 46 X 18
03E4366	ELC MS VFD CENT 1LH 480V 1-3PH 30HP	30	46	60 X 46 X 18
03E4367	ELC MS VFD CENT 1LH 480V 1-3PH 40HP	40	61	60 X 46 X 18
03E4368	ELC MS VFD CENT 1LH 480V 1-3PH 50HP	50	77	60 X 46 X 18
03E4369	ELC MS VFD CENT 1LH 480V 1-3PH 60HP	60	91	64 X 60 X 22
03E4370	ELC MS VFD CENT 1LH 480V 1-3PH 75HP	75	107	64 X 60 X 22
03E4371	ELC MS VFD CENT 1LH 480V 1-3PH 100HP	100	142	64 X 60 X 22

1LH Series - with Aux Power

- *Same features as 1LH except with added 18 amp power supply to power a center pivot*
- *Configured for sumbersible and centrifugal pump motors*

For Submersible Pumps - Includes Output Filter
(1PH-3PH/480V PHASE CONVERTING LOW HARMONIC VFD)

Part #	Description	HP	AMP	H" x W" x D"
03E4358	ELC MS VFD SUB 1LH 480V 1-3PH 20HP OF AUX OUT	20	31	60 X 46 X 18
03E4359	ELC MS VFD SUB 1LH 480V 1-3PH 30HP OF AUX OUT	30	46	60 X 46 X 18
03E4360	ELC MS VFD SUB 1LH 480V 1-3PH 40HP OF AUX OUT	40	61	60 X 46 X 18
03E4361	ELC MS VFD SUB 1LH 480V 1-3PH 50HP OF AUX OUT	50	77	60 X 46 X 18
03E4362	ELC MS VFD SUB 1LH 480V 1-3PH 60HP OF AUX OUT	60	91	64 X 60 X 22
03E4363	ELC MS VFD SUB 1LH 480V 1-3PH 75HP OF AUX OUT	75	107	64 X 60 X 22
03E4364	ELC MS VFD SUB 1LH 480V 1-3PH 100HP OF AUX OUT	100	142	64 X 60 X 22

For Centrifugal Pumps
(1PH-3PH/480V PHASE CONVERTING LOW HARMONIC VFD)

Part #	Description	HP	AMP	H" x W" x D"
03E4373	ELC MS VFD CENT 1LH 480V 1-3PH 20HP AUX OUT	20	31	60 X 46 X 18
03E4374	ELC MS VFD CENT 1LH 480V 1-3PH 30HP AUX OUT	30	46	60 X 46 X 18
03E4375	ELC MS VFD CENT 1LH 480V 1-3PH 40HP AUX OUT	40	61	60 X 46 X 18
03E4376	ELC MS VFD CENT 1LH 480V 1-3PH 50HP AUX OUT	50	77	60 X 46 X 18
03E4377	ELC MS VFD CENT 1LH 480V 1-3PH 60HP AUX OUT	60	91	64 X 60 X 22
03E4378	ELC MS VFD CENT 1LH 480V 1-3PH 75HP AUX OUT	75	107	64 X 60 X 22
03E4379	ELC MS VFD CENT 1LH 480V 1-3PH 100HP AUX OUT	100	142	64 X 60 X 22

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3LH Series

- *Three Phase Input / Three Phase Output*
- *HP Ranges 20 to 200HP*
- *NEMA 3R Enclosure*
- *Configured for sumbersible and centrifugal pump motors*

For Submersible Pumps - Includes Output Filter
(3PH/480V LH VFD LOW HARMONIC)

Part #	Description	HP	AMP	H" x W" x D"
03E4380	ELC MS VFD SUB 3LH 480V 3PH 20HP OF	20	31	51 X 40 X 20
03E4381	ELC MS VFD SUB 3LH 480V 3PH 30HP OF	30	46	51 X 40 X 20
03E4382	ELC MS VFD SUB 3LH 480V 3PH 40HP OF	40	61	51 X 40 X 20
03E4383	ELC MS VFD SUB 3LH 480V 3PH 50HP OF	50	77	51 X 40 X 20
03E4384	ELC MS VFD SUB 3LH 480V 3PH 60HP OF	60	91	64 X 46 X 22
03E4385	ELC MS VFD SUB 3LH 480V 3PH 75HP OF	75	107	64 X 46 X 22
03E4386	ELC MS VFD SUB 3LH 480V 3PH 100HP OF	100	142	64 X 46 X 22
03E4387	ELC MS VFD SUB 3LH 480V 3PH 125HP OF	125	172	66 X 60 X 22
03E4388	ELC MS VFD SUB 3LH 480V 3PH 150HP OF	150	198	66 X 60 X 22
03E4389	ELC MS VFD SUB 3LH 480V 3PH 200HP OF	200	250	66 X 60 X 22

For Centrifugal Pumps
(3PH/480V LH VFD LOW HARMONIC)

Part #	Description	HP	AMP	H" x W" x D"
03E4390	ELC MS VFD CENT 3LH 480V 3PH 20HP	20	31	51 X 40 X 20
03E4391	ELC MS VFD CENT 3LH 480V 3PH 30HP	30	46	51 X 40 X 20
03E4392	ELC MS VFD CENT 3LH 480V 3PH 40HP	40	61	51 X 40 X 20
03E4393	ELC MS VFD CENT 3LH 480V 3PH 50HP	50	77	51 X 40 X 20
03E4394	ELC MS VFD CENT 3LH 480V 3PH 60HP	60	91	64 X 46 X 22
03E4395	ELC MS VFD CENT 3LH 480V 3PH 75HP	75	107	64 X 46 X 22
03E4396	ELC MS VFD CENT 3LH 480V 3PH 100HP	100	142	64 X 46 X 22
03E4397	ELC MS VFD CENT 3LH 480V 3PH 125HP	125	172	66 X 60 X 22
03E4398	ELC MS VFD CENT 3LH 480V 3PH 150HP	150	198	66 X 60 X 22
03E4399	ELC MS VFD CENT 3LH 480V 3PH 200HP	200	250	66 X 60 X 22

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The Phase Technologies, Phase Perfect Digital Phase Converter is a single phase 480V to three phase 480V converter than can be used to provide 3PH/480V power to a Valley center pivot. The Phase Technologies Digital Phase Converter has been tested by Valley Engineering and is compatible with Valley center pivot electrical requirements.

The Phase Perfect converter is provided with a Circuit Breaker only or a Circuit Breaker with a Raycap Strikesorb surge arrestor. Part numbers for each configuration are provided below.



Part #	Description	HP	AMP	H" x W" x D"
0980432	Phase Perfect Converter 7.5Hp 13A W/Breaker	7.5	13	28 X 22 X 15
0980434	Phase Perfect Converter 10Hp 18A W/Breaker	10	18	28 X 22 X 15
0980436	Phase Perfect Converter 15Hp 27A W/Breaker	15	27	28 X 22 X 15
0980437	Phase Perfect Converter 20Hp 32A W/Breaker	20	32	28 X 22 X 15
0980451	Phase Perfect Converter 30Hp 46A W/Breaker	30	46	28 X 25 X 17

Includes: MCCB/Service Rated Disconnect, Type 3R Outdoor Enclosure

Part #	Description	HP	AMP	H" x W" x D"
0980431	Phase Perfect Converter 7.5Hp 13A W/Breaker/Surg	7.5	13	28 X 22 X 15
0980433	Phase Perfect Converter 10Hp 18A W/Breaker/Surge	10	18	28 X 22 X 15
0980435	Phase Perfect Converter 15Hp 27A W/Breaker/Surge	15	27	28 X 22 X 15
0980450	Phase Perfect Converter 20Hp 32A W/Breaker/Surge	20	32	28 X 22 X 15
0980438	Phase Perfect Converter 30Hp 46A W/Breaker/Surge	30	46	28 X 25 X 17

Includes: MCCB/Service Rated Disconnect and Raycap Strikesorb Surge Arrestor, Type 3R Outdoor Enclosure

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- VMX Soft Starter
- NEMA 12/4 Enclosure
- Input Phase/Voltage: 3PH/380-480V
- 35 KAIC Circuit Breaker
- Fused 120V Control Power Transformer
- Door Mounted:
  - Hand-Off Auto Selector Switch
  - Green "RUN" Pilot Light
  - Red "FAULT" Pilot Light
  - External Reset Push Button

STANDARD CONFIGURATION OR THE "S" MODEL SOFT STARTS		
*VMX Soft S tarter with **"RUN"** Rated Bypass Contactor. Size panel based on HP of motor or max amps (include service factor) for submersible*		
Part #	**Max Amps**	**Valley Part Description**
03E4051	62	ELC MS VIPS 40 HP SS RUN BYPASS
03E4052	78	ELC MS VIPS 50 HP SS RUN BYPASS
03E4053	92	ELC MS VIPS 60 HP SS RUN BYPASS
03E4054	112	ELC MS VIPS 75 HP SS RUN BYPASS
03E4055	150	ELC MS VIPS 100 HP SS RUN BYPASS
03E4056	180	ELC MS VIPS 125 HP SS RUN BYPASS
03E4057	210	ELC MS VIPS 150 HP SS RUN BYPASS
03E4058	300	ELC MS VIPS 200 HP SS RUN BYPASS
03E4059	350	ELC MS VIPS 250 HP SS RUN BYPASS
03E4060	420	ELC MS VIPS 300 HP SS RUN BYPASS

If full load amps or max amps (include service factor) exceeds amp rating select next largest panel.

HEAVY DUTY CONFIGURATION OR THE "H" MODEL SOFT STARTS		
*VMX Soft Starter with **"START"** Rated Bypass Contactor. Size panel based on HP of motor or max amps (include service factor) for submersible.*		
Part #	**Max Amps**	**Valley Part Description**
03E4069	39	ELC MS 65KAIC 25 HP VIPS SS START BYPASS
03E4070	48	ELC MS 65KAIC 30 HP VIPS SS START BYPASS
03E4061	60	ELC MS VIPS 40 HP SS START BYPASS
03E4062	78	ELC MS VIPS 50 HP SS START BYPASS
03E4063	90	ELC MS VIPS 60 HP SS START BYPASS
03E4064	112	ELC MS VIPS 75 HP SS START BYPASS
03E4065	150	ELC MS VIPS 100 HP SS START BYPASS
03E4066	180	ELC MS VIPS 125 HP SS START BYPASS
03E4067	210	ELC MS VIPS 150 HP SS START BYPASS
03E4068	300	ELC MS VIPS 200 HP SS START BYPASS
03E4079	350	ELC MS 65KAIC 250 HP VIPS SS START BYPASS
03E4080	420	ELC MS 65KAIC 300 HP VIPS SS START BYPASS

If full load amps or max amps (include service factor) exceeds amp rating select next largest panel.

SERVICE ENTRANCE RATED KIT AND FLOW STAND LEGS	
Part #	**Valley Part Description**
03E4048	ELC MS SOFTSTART SIZE 1 (37 X 15 X 12) SER KIT
03E4049	ELC MS SOFTSTART SIZE 2 (48 X 33 X 16) SER KIT
03E4050	ELC MOTORTRONICS SOFTSTARTER FLOOR STAND LEGS

For more information, please contact your Valley Water Management Project Sales Manager.

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MISCELLANEOUS DISPLAY ITEMS 13-1
SHELVING & ACCESSORIES. . . . . .13-2 - 13-3
DISPLAY SAMPLES . . . . . .13-4 - 13-5
STORE DISPLAY BANNERS AND HARDWARE 13-6
PART SKIN PACKS . . . . . .13-7 - 13-9

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Folder, Decals, Bags, Parts I.D. Cards

Each item should be ordered through www.valleystuff.net.

A



B



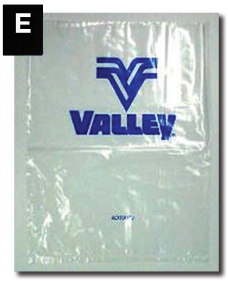
C



D



E



F



G



H



I



J



A. Valley Presentation Folder with 1/4” gusset, 2 inside pockets, full photo wrap and card slits. #PR10010

B. Trade Show Bags #PR10020

C. Blue Truck Decal 16” x 12.5” #PR10000

D. White Truck Decal 16” x 12.5” #PR10005

E. Bags
9” x 12” Bags 25 #AD10012
12” x 16” Bags 25 #AD10049

F. Water Sampling Kit
#PR10035
#AD10136
8” Bag Labels 25 #AD10137

G. Aftermarket Parts Flier #MISC1023

H. Aftermarket Parts Mat #MISC1024

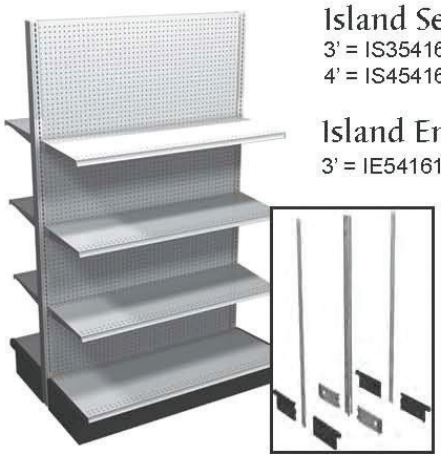
I. Parts Return Label #FM12170

J. Parts Return Tag #FM12165

In-store Displays

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VALLEY LOZIER®



Island Section
3' = IS354161606S
4' = IS454161606S

Island End
3' = IE54161606S

Finish: PLT



Wall Section
3' = WS3901906S
4' = WS4901906S

Island End
3' = WE901906S

Finish: PLT

Order Shelves separately

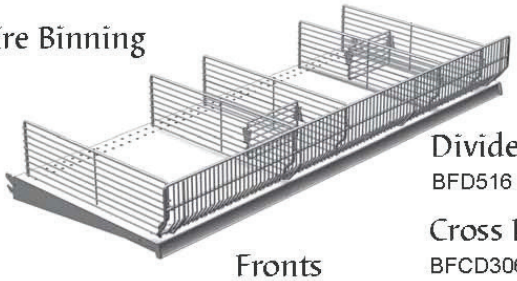
TL Style Shelf



2' = TL210N
3' = TL316N
4' = TL416N

Finish: PLT

Wire Binning

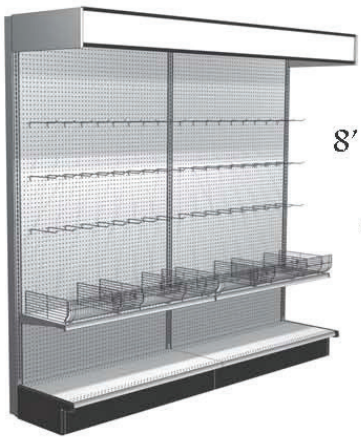


Dividers
BFD516

Cross Dividers
BFCD306

Fronts
3' = WBF35
4' = WBF45

Finish:
Bright Chrome



8' Lighted Display w/Canopy
See pricing for details

Finish: PLT



Sliding Peg Panel
SPDS4721606B
SPDS47206A

Finish: PLT

*** For other size & color options please contact Brian Hungate at 515-299-6329 or brian.hungate@hussmann.com.**

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VALLEY LOZIER®



Four Way Display w/Pallet Jack Deck

FWD542PPM
2' Shelves ordered separately

Finish: PLT



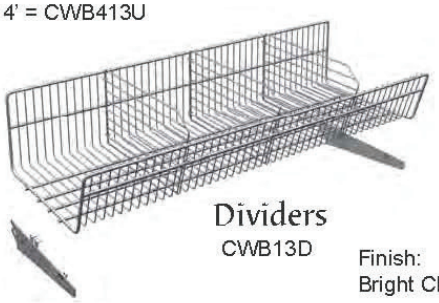
Wall End Display

WED3541606S
3' Shelves ordered separately

Finish: PLT

Continuous Wire Basket

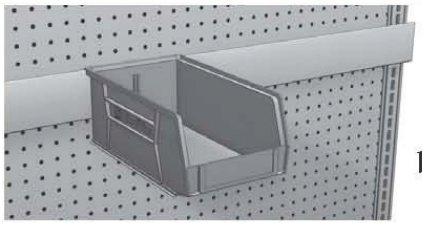
3' = CWB313U
4' = CWB413U



Dividers

CWB13D

Finish:
Bright Chrome



Plastic Bin System

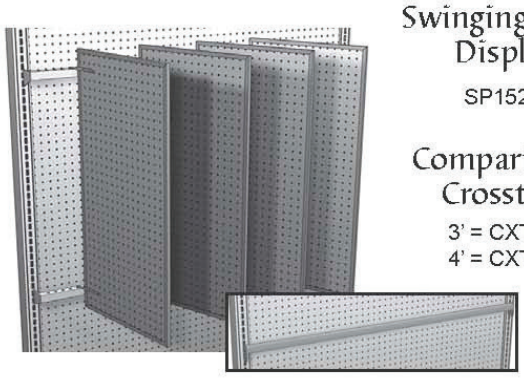
Finish:
XA1 - Blue

Depth	Width	Ht.	Part No.
5 3/8"	4 1/8"	3"	HB1341
7 3/8"	4 1/8"	3"	HB1342
10 7/8"	5 1/2"	5"	HB1343
14 3/4"	8 1/4"	7"	HB1344
14 3/4"	16 1/2"	7"	HB1345



S Series Storage Shelving

Contact Jeff Zadina for sizes & information



Swinging Panel Display

SP1528P

Compartment Crosstube

3' = CXT31
4' = CXT41

Finish: PLT

*** For other size & color options please contact Brian Hungate at 515-299-6329 or brian.hungate@hussmann.com.**

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In-Store displays have an ability to impact the buyer at the moment of decision. A good in-store display is a great way to market your product and enhance customer satisfaction. Here are some examples of Valley dealerships using in-store displays.





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Banners above available through valleystuff.net as indicated on next page.

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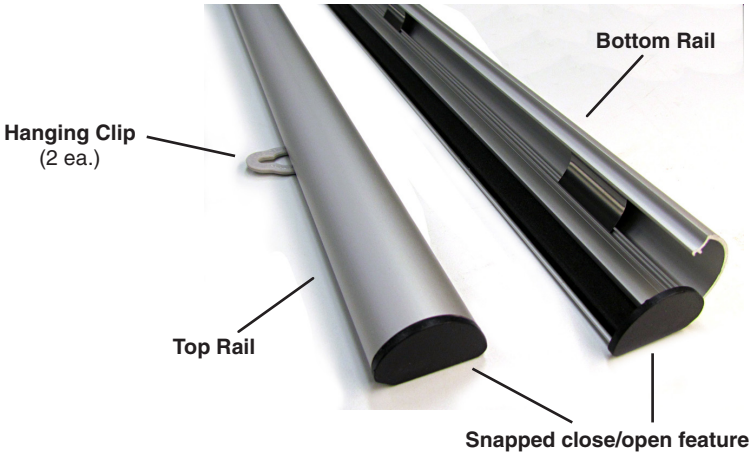
Each item should be ordered through valleystuff.net.



Actual size : 72in. x 14in.



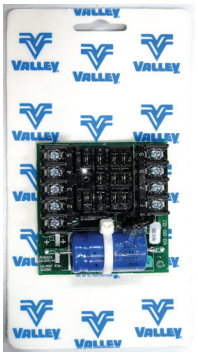
Actual size : 36in. x 24in.



Snap Rail required for hanging banners.

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PARENT ITEM	DESCRIPTION
099P034	MICRO SW MIN TRAVEL (03E0307) S-PAC
099P035	MICRO SW MIN TRAVEL (03E0307) BOX 14
099P036	ZIMM MICRO SWITCH (099P023) S-PAC
099P037	ZIMM MICRO SWITCH (099P023) BOX 14
099P038	MICRO SWITCH (0314213) S-PAC
099P039	MICRO SWITCH (0314213) BOX 14
099P044	ELC SUPPRESSOR DC (0315663) S-PAC
099P045	ELC SUPPRESSOR DC (0315663) BOX 20
099P046	ELC PC PCB BOARD 3 SEC (0315560) S-PAC
099P047	ELC PC PCB BOARD 3 SEC (0315560) BOX 10
099P048	REL SOCKET SNAP TRAC (03E1650) S-PAC
099P049	REL SOCKET SNAP TRAC (03E1560) BOX 10
099P050	RELAY 120V AC P&B (0314815) S-PAC
099P051	RELAY 120V AC P&B (0314815) BOX 5
099P052	RELAY 110V DC P&B (0315559) S-PAC
099P053	RELAY 110V DC P&B (0315559) BOX 7
099P054	RELAY 110V DC P&B (0314813) S-PAC
099P056	RELAY 3 AMP 120V (0314610) S-PAC
099P057	RELAY 3 AMP 120V (0314610) BOX 10
099P058	BRG CONE INPUT VAL (0191023) S-PAC
099P059	BRG CONE INPUT VAL (0191023) BOX 10
099P060	BRG CUP INPUT VAL (0191024) S-PAC
099P061	BRG CUP INPUT VAL (0191024) BOX 10
099P062	BRG CONE OUTPUT VAL (0191025) S-PAC
099P063	BRG CONE OUTPUT VAL (0191025) BOX 10
099P064	BRG CUP OUTPUT VAL/VR (0191026) S-PAC
099P065	BRG CUP OUTPUT VAL/VR (0191026) BOX 10
099P066	BRG CONE INPUT VAL (0191029) S-PAC
099P067	BRG CONE INPUT VAL (0191029) BOX 10
099P068	BRG CUP INPUT VAL (0191030) S-PAC
099P069	BRG CUP INPUT VAL (0191030) BOX 10
099P070	BRG CUP INPUT DURST (0191016) S-PAC
099P071	BRG CUP INPUT DURST (0191016) BOX 15



099P046
3 Second PCB S-Pac



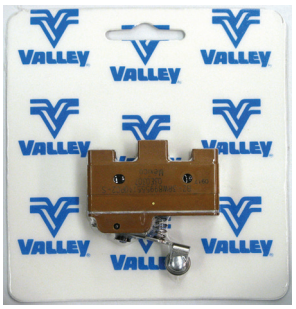
099P050
P&B Relay S-Pac



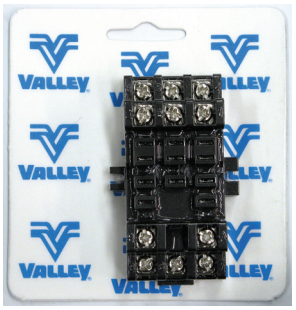
099P060
Input Bearing Cup S-Pac



099P068
Input Bearing Cup S-Pac



099P034
Microswitch S-Pac



099P048
Snap Track Socket S-Pac



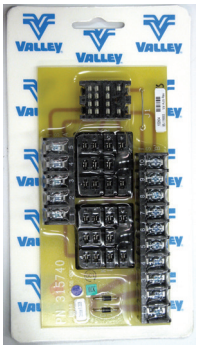
099P058
Input Bearing Cone S-Pac



099P064
Output Bearing Cup S-Pac

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PARENT ITEM	DESCRIPTION
099P073	RELAY P&B 12V DC (0314026) S-PAC
099P075	RELAY 120V P&B (0314936) S-PAC
099P076	RELAY 120V P&B (0314936) BOX 5
099P077	ELC PCB BOARD (0315740) S-PAC
099P078	PCB LIMIT SW & SAFETY (0314782) S-PAC
099P079	RELAY 25 AMP 115 AC (0314480) S-PAC
099P080	RELAY 25 AMP 115 AC (0314480) BOX 5
099P081	RELAY 120V DPDT (0314727) S-PAC
099P082	RELAY 120V DPDT (0314727) BOX 4
099P084	REL SOLENOID PC BRD (0314781) S-PAC
099P085	REL SOCKET PCB R.D. (0315688) S-PAC
099P086	ELC LOCKWOOD RECTIFIER (099P015) S-PAC
099P087	UPPER DRAIN BODY (0246170) S-PAC -2
099P088	FUSE MAIN PAN 12 AMP (0314343) S-PAC -3
099P089	FUSE MAIN PAN 15 AMP (0314344) S-PAC -3
099P090	FUSE MAIN PAN 17.5 AMP (0314345) S-PAC -3
099P091	FUSE MAIN PAN 25 AMP (0314346) S-PAC -3
099P092	FUSE 30 AMP TRS30R (0315411) S-PAC -3
099P093	FUSE MAIN PAN 20 AMP (0314167) S-PAC -3
099P094	VALVE SOL N.C. 120V (0232450) S-PAC
099P095	VALVE SOL COIL POTT (0232451) S-PAC
099P096	VALVE SOL W/COIL N.O. (0232452) S-PAC
099P097	VLV MS DRAIN SEAL (0232001) S-PAC-10
099P098	PRESSURE GAUGE 160 (0231001) S-PAC
099P099	PRESSURE GAUGE 60 (0232442) S-PAC
099P100	CORNER FUSE KIT (12-FUSE S, 6 DIFFERENT)
099P101	PVT PANEL FUSE KIT S-PAC (8 FUSE, 3 DIF)



099P077
PCB Board S-Pac



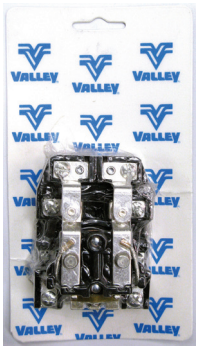
099P088
Main Panel Fuse S-Pac



099P095
Potted Solenoid Valve Coil S-Pac



099P101
Pivot Panel Fuse Kit S-Pac



099P081
DPDT Relay S-Pac



099P094
N.C. Solenoid Valve S-Pac



099P099
Pressure Gauge S-Pac

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PARENT ITEM	DESCRIPTION
099P102	NUT HX 3/4 (0131008) (QTY =25)
099P105	NUT HX 1/2 (0131015) (QTY =50)
099P106	NUT HX 3/8 (0131018) (QTY =100)
099P107	NUT HX 5/16 (0131019) (QTY=100)
099P108	NUT HX 1/4 (0131020) (QTY =50)
099P109	NUT LK 1/2 (0133005) (QTY =50)
099P112	NUT LK 1/4 (0133008) (QTY =100)
099P113	NUT LK 5/8 (0133010) (QTY =25)
099P114	NUT LK 3/4 (0133011) (QTY =10)
099P116	NUT WHL BLT 9/16NF (0134039) (QTY=25)
099P132	SCR CP 3/4 X 2 PLT (0161008)(QTY=5)
099P133	SCR CP 5/8 X 2 1/2 PLT (0161011)(QTY=10)
099P134	SCR CP 5/8 X 2 PLT (0161014)(QTY=10)
099P136	SCR CP 1/2 X 2 1/2 PLT (0161023)(QTY=10)
099P137	SCR CP 1/2 X 2 PLT (0161024)(QTY=25)
099P139	SCR CP 1/2 X 1 1/2 PLT (0161026)(QTY=25)
099P140	SCR CP 1/2 X 1 1/4 PLT (0161027)(QTY=25)
099P149	SCR CP 1/2 X 3 1/2 PLT (0161060)(QTY=10)
099P150	SCR CP 3/4 X 3 1/2 PLT (0161062)(QTY=10)
099P160	SCR CP 3/4 X 2 1/2 PLT (0161159)(QTY=5)
099P165	WHL BLT 9/16 X 1 13/16 (0164105)(QTY=16)
099P166	IRR MS WHEEL BLT 9/16 (0164169)(QTY=16)
099P167	BLT CR 5/16 X 1 PLT (0175014)(QTY=50)

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