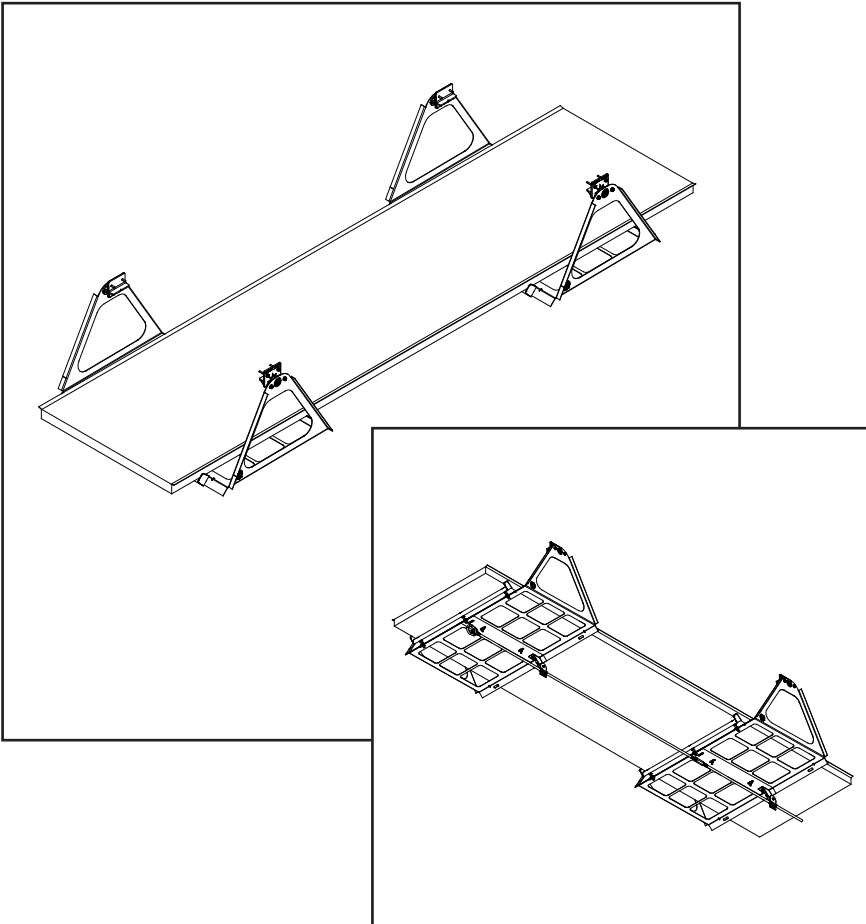


Pivot Air

Ceiling Inlet

Instruction Manual



Pivot Air

Ceiling Inlet

Models: PA1296 • PA2096



Pivot Air Ceiling Inlet

Manual for use and Maintenance

Thank You:

Thank you for purchasing a Munters Pivot Air Inlet. Munters equipment is designed to be the highest performing, highest quality equipment you can buy. With the proper installation and maintenance it will provide many years of service.

Please Note:

To achieve maximum performance and insure long life from your Munters product it is essential that it be installed and maintained properly. Please read all instructions carefully before beginning installation.

Warranty:

For Warranty claims information see the "Warranty Claims and Return Policy" form QM1021 available from the [Munters Corporation office at 1-800-227-2376 or by e-mail at aghort.info@munters.com](mailto:aghort.info@munters.com).

Conditions and Limitations:

- Products and Systems involved in a warranty claim under the "Warranty Claims and Return Policy" shall have been properly installed, maintained and operated under competent supervision, according to the instructions provided by Munters Corporation.
- Malfunction or failure resulting from misuse, abuse, negligence, alteration, accident or lack of proper installation or maintenance shall not be considered a defect under the Warranty.

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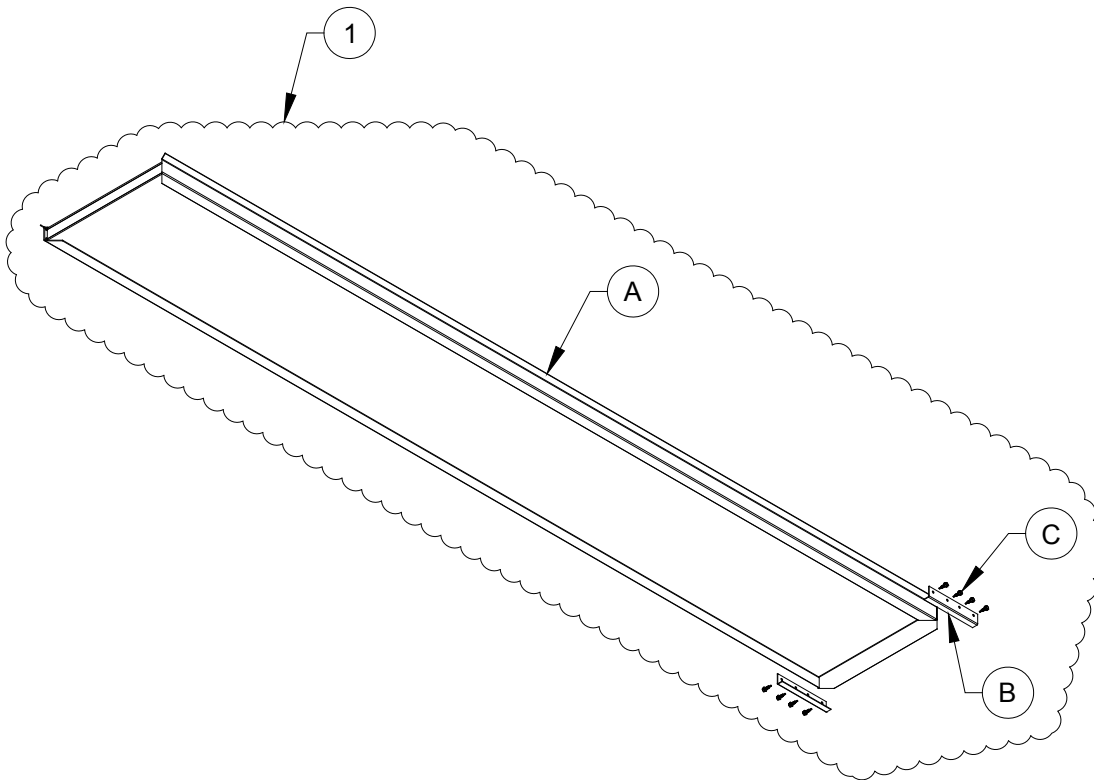
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Unpacking the Equipment

1.

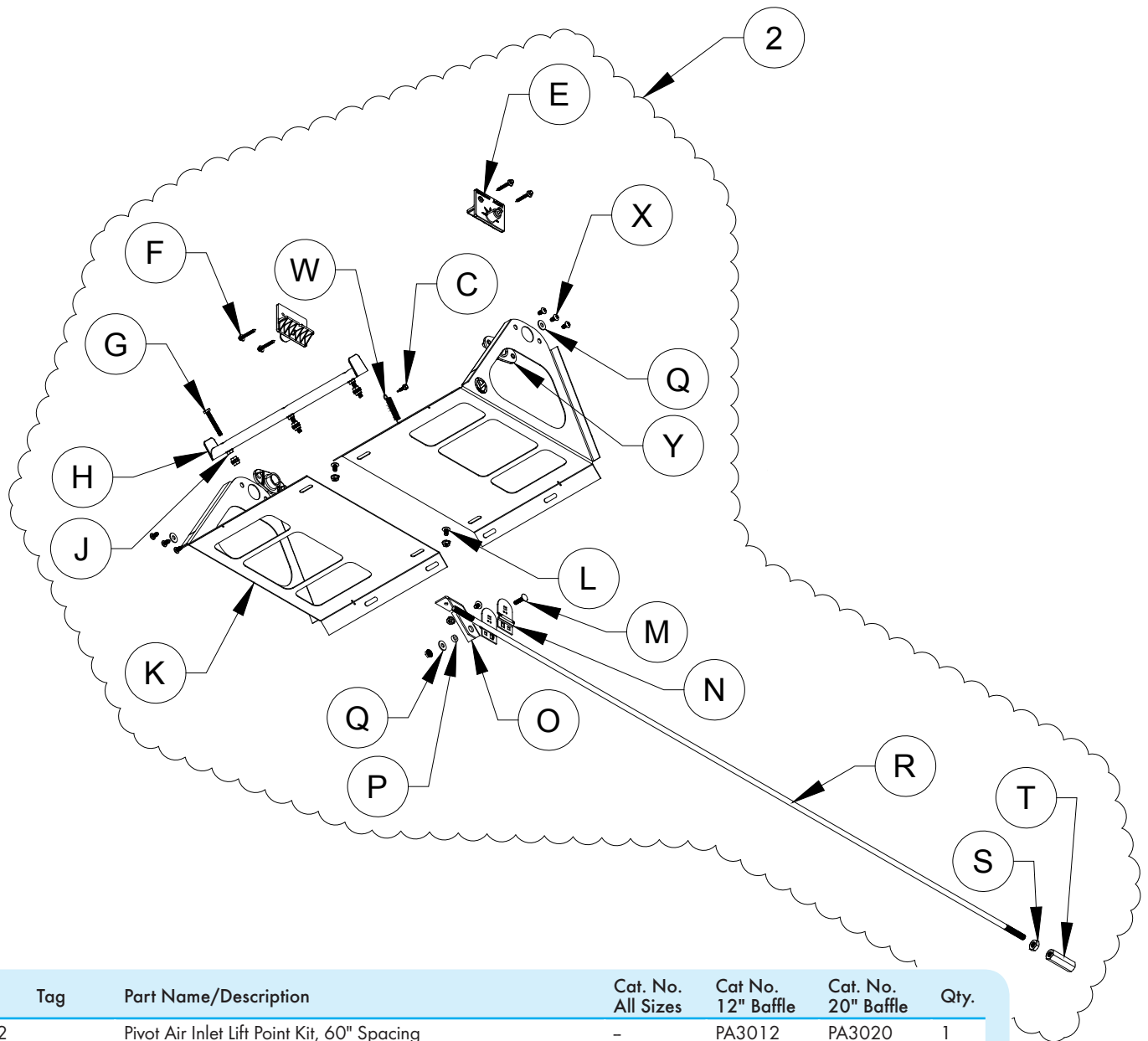
1.1 Exploded View

Before beginning installation, check the overall condition of the equipment. Remove packing materials, and examine all components for signs of shipping damage. Any shipping damage is the customer's responsibility and should be reported immediately to your freight carrier.



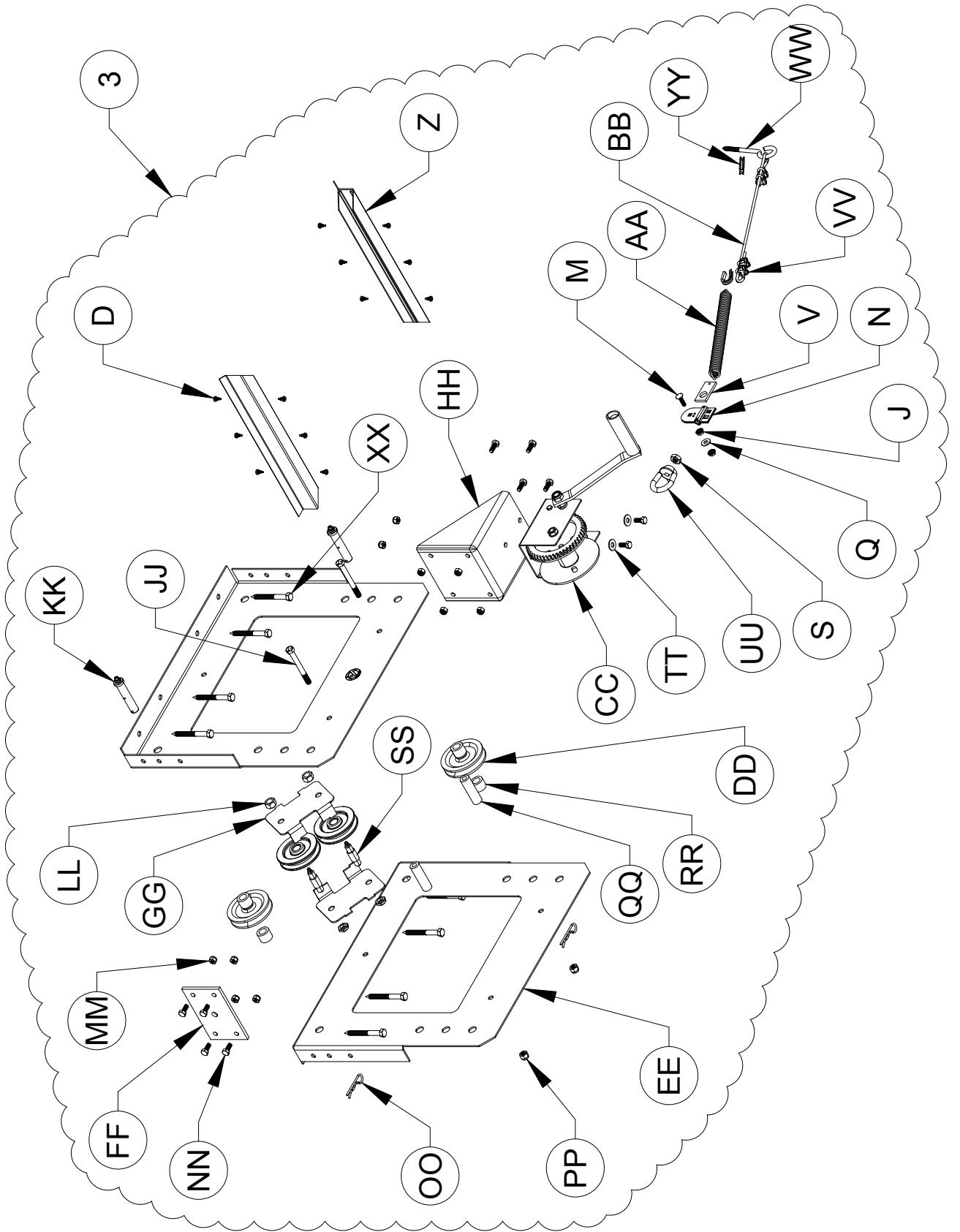
Tag	Part Name/Description	Cat. No. All Sizes	Cat No. 12" Baffle	Cat. No. 20" Baffle	Qty.
1	Pivot Air Inlet Door Kit, 96"L., Plastic	-	PA1296	PA2096	1
A	Inlet Door, 96"L., PLST	-	AC2312	AC2320	1
B	Joiner Plate Bracket, L-Shaped, 6"L., GZ	AC2507	-	-	2
C	#10-16 x 3/4" Hex Washer TEK Screw, SS	KS2282	-	-	8

Continued on next page



Tag	Part Name/Description	Cat. No. All Sizes	Cat. No. 12" Baffle	Cat. No. 20" Baffle	Qty.
2	Pivot Air Inlet Lift Point Kit, 60" Spacing	-	PA3012	PA3020	1
E	Pivot Air Square Base Swivel, BLK PLSTC	AC2801	-	-	2
F	#9-15 x 1.5", Hex Seal Washer Polebarn Screw, CLIMASEAL	KS1402	-	-	4
G	1/4"-20 x 2" Hex Bolt, SS	KS1061	-	-	3
H	Pivot Air Lift Bar, BLK PLSTC	-	AC2712	AC2720	1
J	1/4"-20 Hex, Serrated Flange Nut, ZP	KN0730	-	-	13
K	Pivot Air Door Carrier Arm, GZ	-	AC2512	AC2520	2
L	1/4"-20 x 1/2", Phillips Truss Head, Machine Screw, ZP	KS0855	-	-	3
M	1/4"-20 x 1", Carriage Bolt, ZP	KS1500	-	-	1
N	Pivot Air Lift Rod Clamp, GZ	AC1376	-	-	2
O	Pivot Air Pull Bracket for Carrier Arm, GZ	AC2505	-	-	1
P	1/4" x 1/2" O.D. x 3/16" L. Spacer, ZP	KX1309	-	-	1
Q	1/4" x 0.75" O.D. Hardened Washer, ZP	KW3046	-	-	3
R	0.39" D. x 59.7"L. Rod with 7/16"-14 Threaded Ends, ZP	AC1378	-	-	1
S	7/16"-14 Jam Nut, ZP	KN1713	-	-	1
T	7/16"-14 x 1.75"L., Coupling Hex Nut, ZP	KN1903	-	-	1
U	#8 x 3/4" Phillips Pan Head TEK Screw, ZP	KS2304	-	-	1
C	#10-16 x 3/4" Hex Washer TEK Screw, SS	KS2282	-	-	1
W	2"L. x 3/8" D, Loop x Hook Tension Spring, SS	AC1193	-	-	1
X	1/4"-20 x 1/2" Phillips Pan Head Type-F Screw, ZP	KS2207	-	-	6
Y	Pivot Air Swivel Flange for Carrier Arm, BLK PLSTC	AC2803	-	-	2

Continued on next page



Continued on next page

Tag	Part Name/Description	Cat. No. All Sizes	Cat No. 12" Baffle	Cat. No. 20" Baffle	Qty.
3	Pivot Air Ending Kit	PA3100	-	-	1
Z	Edge Seal, Mitered, BLK PVC	-	AC2280	AC2279	2
AA	7/8" x 9"L. Tension Spring, SS	AC1194	-	-	1
BB	3/16"Dia., 7x19 Aircraft Cable, SS	AC2187	-	-	20'
CC	Winch with Hand Crank, 1100# Max, PNTD	AC1004	-	-	1
DD	3.5" Dia. Pulley Only, Steel with Bearing, RED	AC1943	-	-	4
EE	Pivot Air Cable Transition Plate, 20 3/4"L. x 18 3/4"H. GZ	AC1791	-	-	2
FF	Pivot Air Cable Anchor Plate, CTDSTL	AC1796	-	-	1
GG	Pivot Air Double Pulley Bracket, GZ	AC1797	-	-	2
HH	Pivot Air Winch Mounting Bracket, CTDSTL	AC1792	-	-	1
	Pivot Air Ending Kit Hardware Package (HP1250)	HP1250	-	-	1
D	#10 x 1/2", Phillips Pan Head TEK Screw, ZP	KS2301	-	-	12
J	1/4"-20 Hex, Serrated Flange Nut, ZP	KN0730	-	-	2
M	1/4"-20 x 1", Carriage Bolt, ZP	KS1500	-	-	1
N	Pivot Air Lift Rod Clamp, GZ	AC1376	-	-	2
JJ	3/8"-16 x 3.5" Hex Bolt, ZP	KS1065	-	-	2
KK	5/8" Dia. x 3"L. Greaseable Clevis Pin, ZP	KP1253	-	-	3
LL	1/2"-13 Nylock Jam Nut, ZP	KN1711	-	-	4
MM	5/16"-18 Nylock Nut, ZP	KN1706	-	-	10
NN	5/16"-18x3/4" Hex Bolt, ZP	KS1013	-	-	10
OO	1/8" Dia. x 2.5"L. Hairpin Cotter Pin, ZP	KP1108	-	-	3
PP	3/8"-16 Nylock Nut, ZP	KN1709	-	-	2
QQ	0.75" O.D. x 0.387" I.D. x 2.5"L. Spacer, ZP	KX1310	-	-	2
RR	1.0" O.D. x 0.63" I.D. x 0.75"L. Round Spacer, NY	KX1258	-	-	6
SS	Spindle Only for 3.5"Dia. Steel Pulley	AC1961	-	-	2
TT	5/16" Type-A Narrow Flat Washer, ZP	KW3005	-	-	2
UU	7/16"-14 x 1" I.D. Eye Nut, HOT DIP, GZ	KN1902	-	-	1
Q	1/4" x 0.75" O.D. Hardened Washer, ZP	KW3046	-	-	3
S	7/16"-14 Jam Nut, ZP	KN1713	-	-	1
V	Connecting Strap, STL	AC1986	-	-	1
VV	5/16" Dia. Cable Clamp, GZ	AC1383	-	-	10
WW	5/16" x 5"L. Open Eye Lag Screw, ZP	KS2650	-	-	1
XX	3/8" x 3.5" Hex Lag Screw, HOT DIP, GZ	KS2462	-	-	8
YY	Cable Thimble, ZP	AC1060	-	-	4

Installation Instructions

2.

2.1 Constructing A Framed Opening (Slot)

The Pivot Air requires 6' clear space at the Pull End of the baffle and 24" clear at the Spring End of the baffle.

Step 1

Create a slot for the Pivot Air. For 12" PA the slot shall be 12" W. x Baffle Length - 8"
For the 20" PA the slot shall be 20" W. x Baffle Length - 10".

Step 2

The slot should be framed with 2x4 material and securely attached to trusses to prevent warping and the framing should extend 12" past each end of the baffle length. *See Figure 1A.*

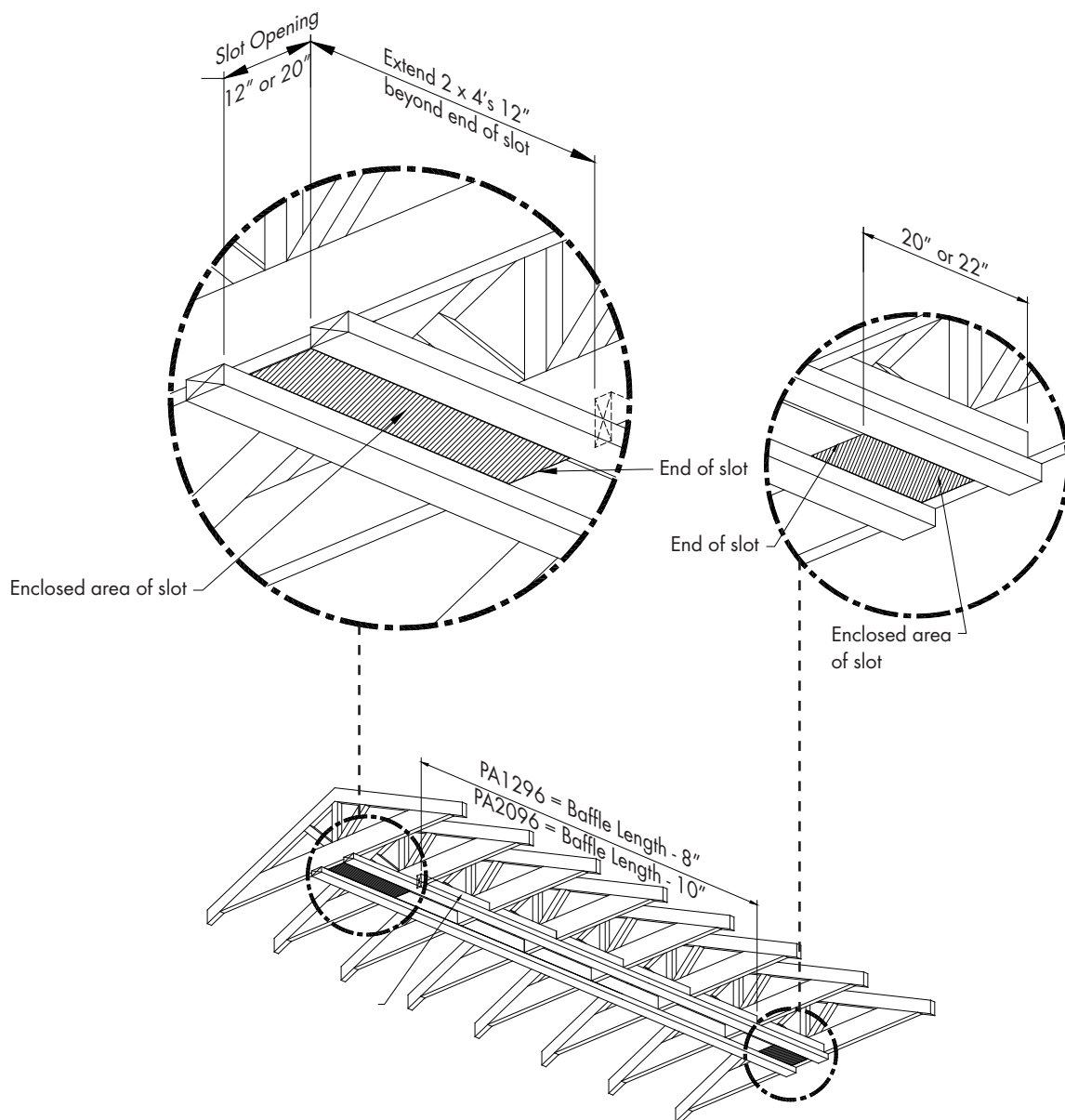


Figure 1A

Step 3

The attic side of the slot should incorporate an insulation barrier to stop the insulation from entering the slot during operation. The insulation barrier should extend above the insulation along the entire length of the slot. See Figure 1A and 1B. The ends of the slot should also include insulation barrier. See Figures 1B and 1C for clearance dimensions of the Inlet and Transition Assembly.

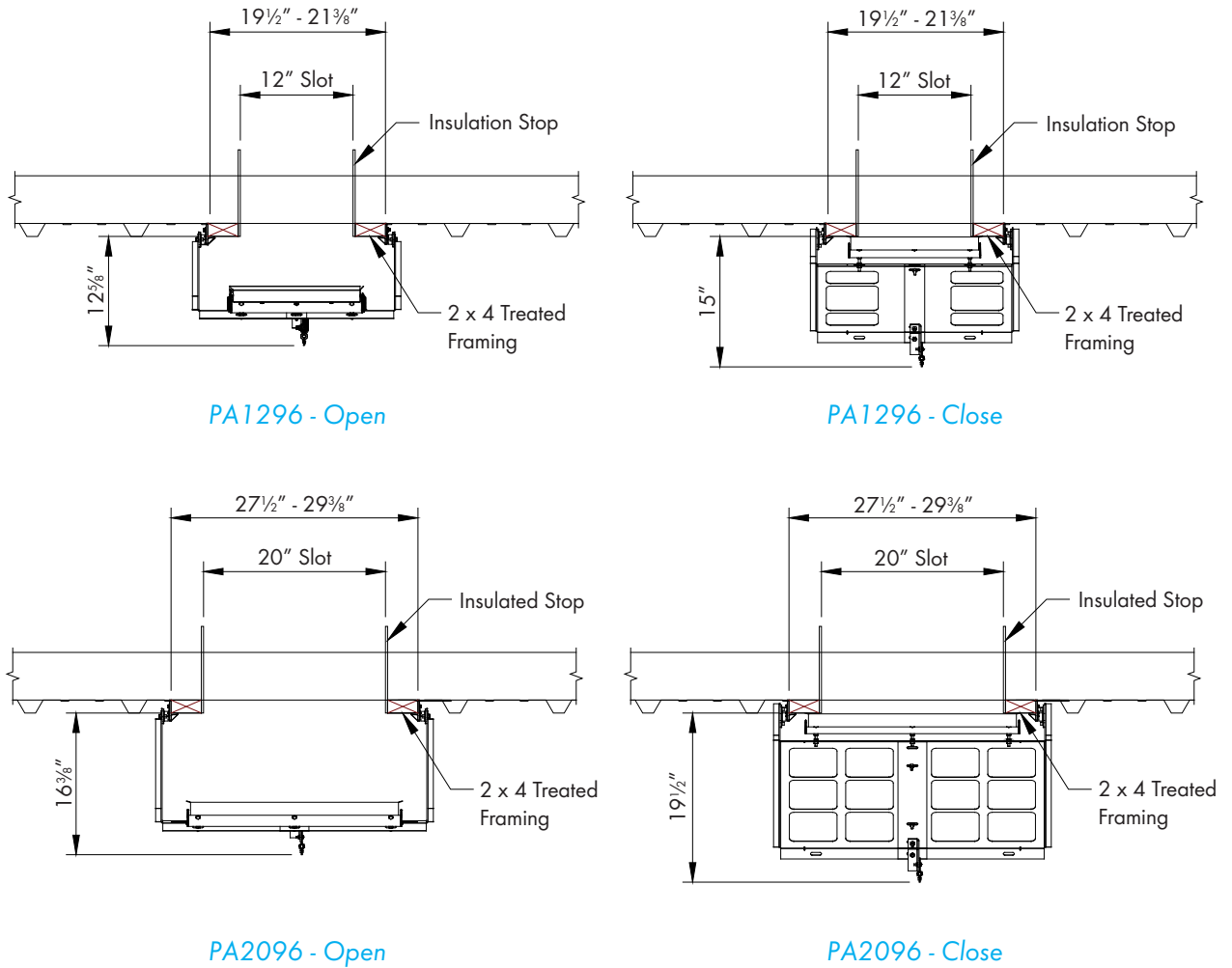
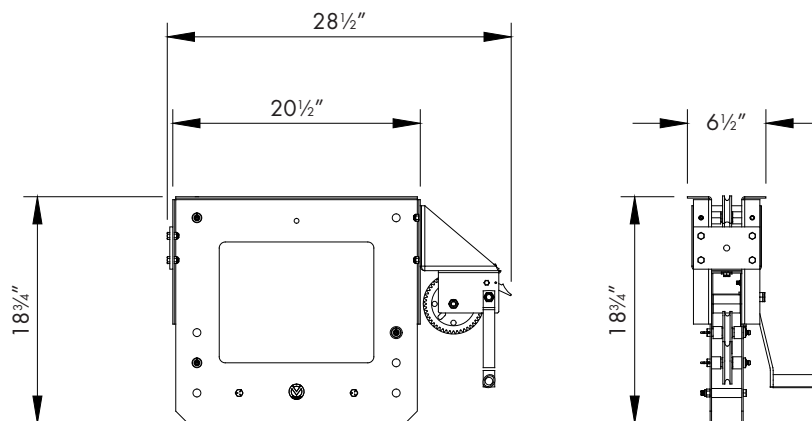


Figure 1B



Transition Assembly
Figure 1C

2.2 Inlet Installation

Step 1

Locate 2 Door Carrier Arms [K] and a Pull Bracket [O] and fasten them together using (3) KS0855 Screws [L] and KN0730 Nuts [J]. See Figure 2. Do not tighten at this time.

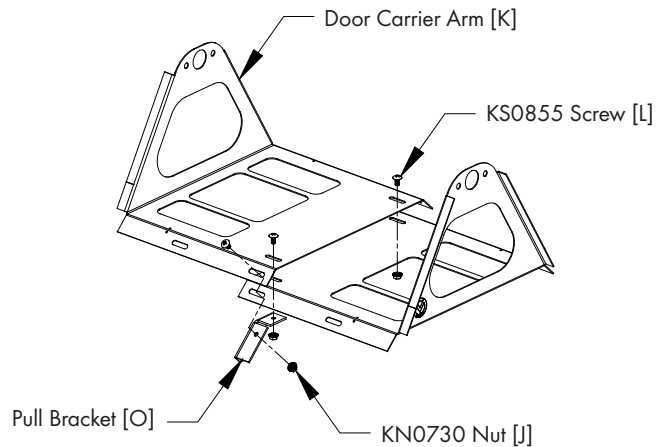


Figure 2

Step 2

Locate (1) Lift Bar [H] and insert a KS1061 Bolt [G] into one of the holes, so the head sits down into the recess and secure with a KN0730 Nut [J], then install a second KN0730 Nut [J] on the same bolt, but thread it half way onto the bolt. Repeat with 2 more bolts. See Figure 3.

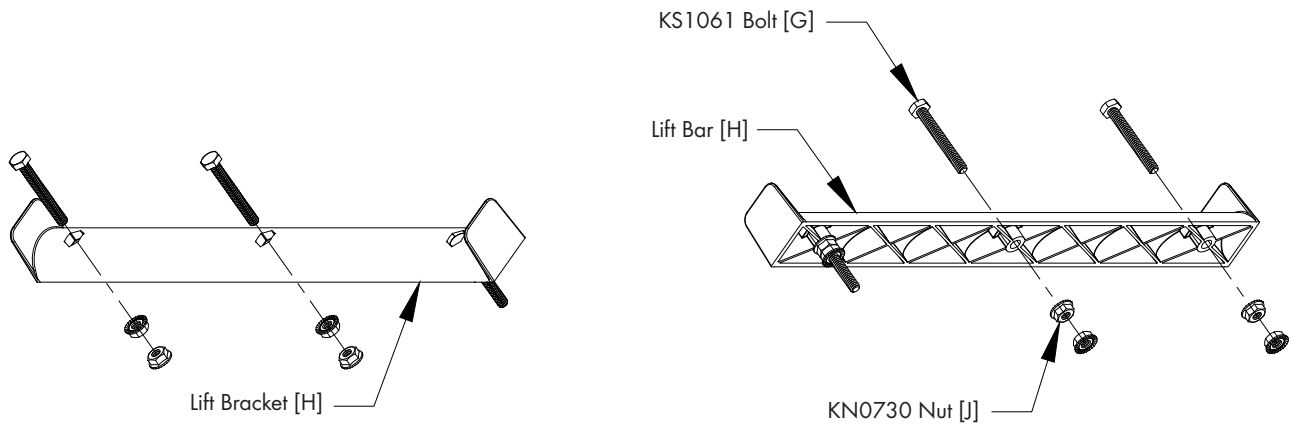


Figure 3

Step 3

Attach Lift Bar [H] with (3) bolts to Carrier Arm Assembly using (3) KN0730 Nuts [J]. Lift Bar should be on the opposite side of the assembly as the Pull Bracket. See Figure 4.

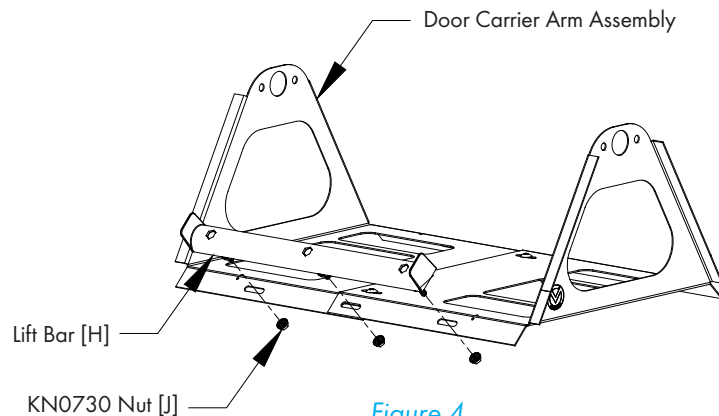


Figure 4

Step 4

Attach Swivel Flange [Y] to the inside of each of the Carrier Arms with (2) KS2207 Screw [D]. See Figure 5.

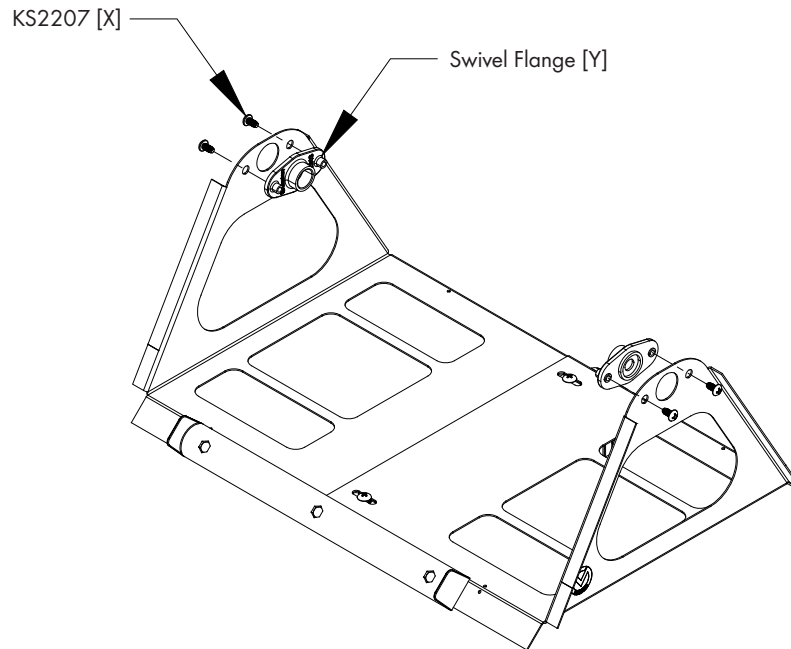


Figure 5

Step 5

Attach a Square Swivel Base [E] to each side of the framing starting 13 1/2" from the end of the slot using (2) KS1402 Screws [F] and then every 60" O.C., do not install the last pair of Swivel Bases to the farming at this time. See Figure 6.

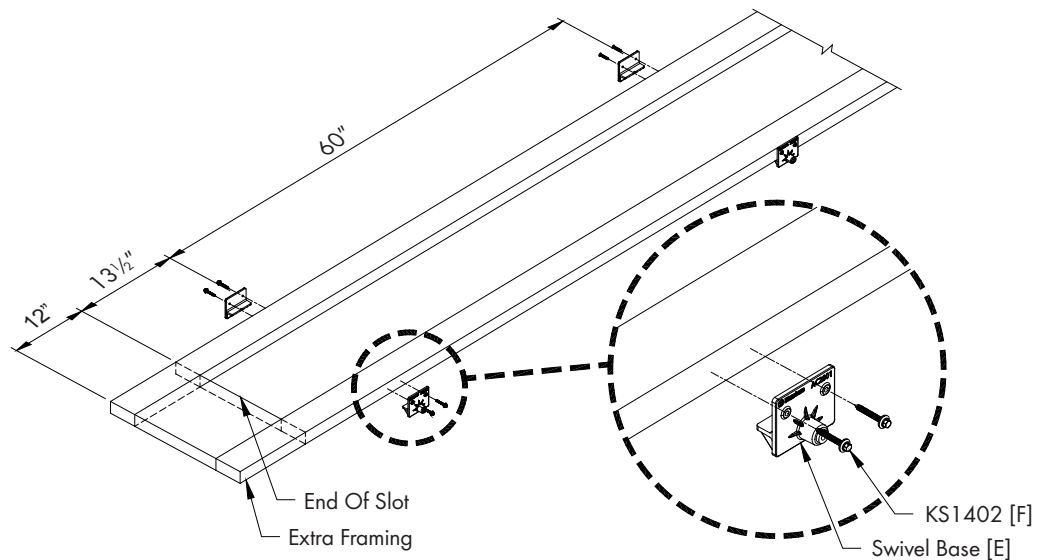


Figure 6

Step 6

Take 1 of the Carrier Arm Assemblies and carefully pull the sides out to slip the Swivel Flanges [Y] over each pair of Swivel Bases [E] and attach using (2) KS2207 Screws [X] and KW3046 Washers [Q]. See Figure 7.

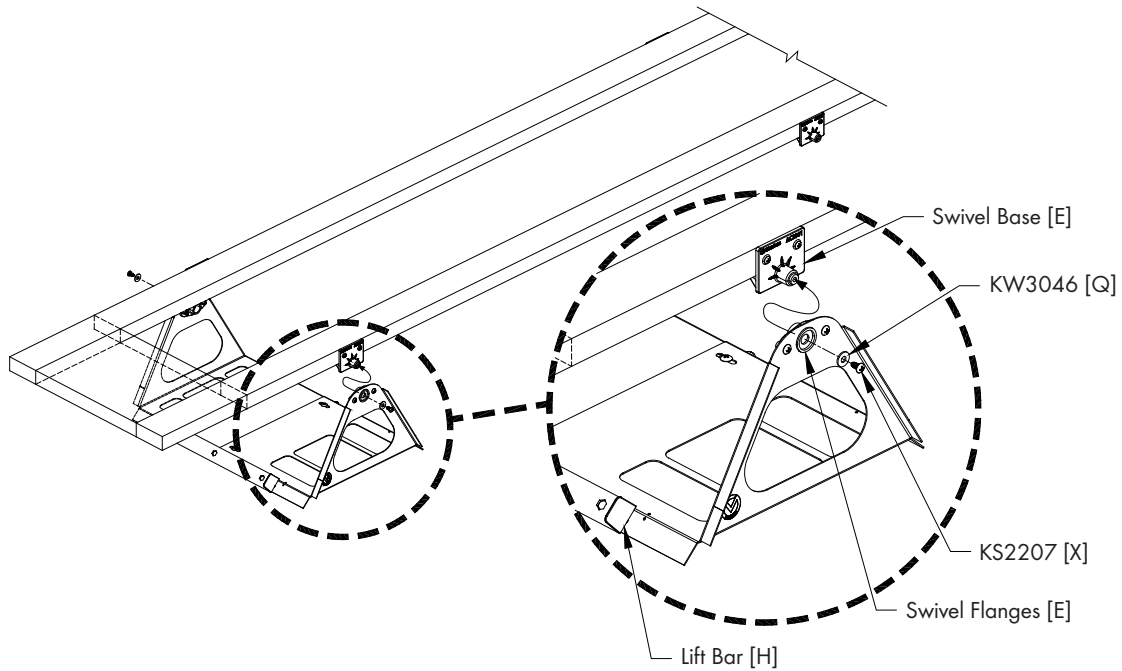


Figure 7

Step 7

Find 1 Baffle Door [A] and slide into the first Carrier Arm assemblies with the installed "I" Beam away from the front of the slot. The end of the Baffle Door closest to the end of the slot should hang over the end of the slot by 3" which should be approximately 8" past the Lift Bar for the 12" Pivot Air and 6" for the 20" Pivot Air.

See Figure 8A and 8B.

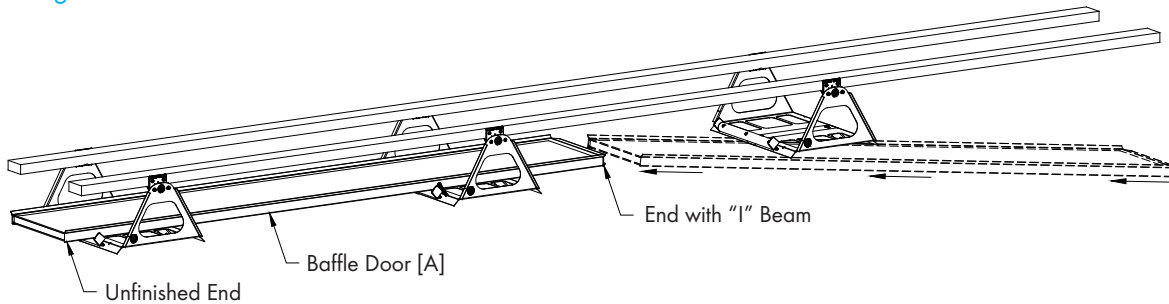


Figure 8A

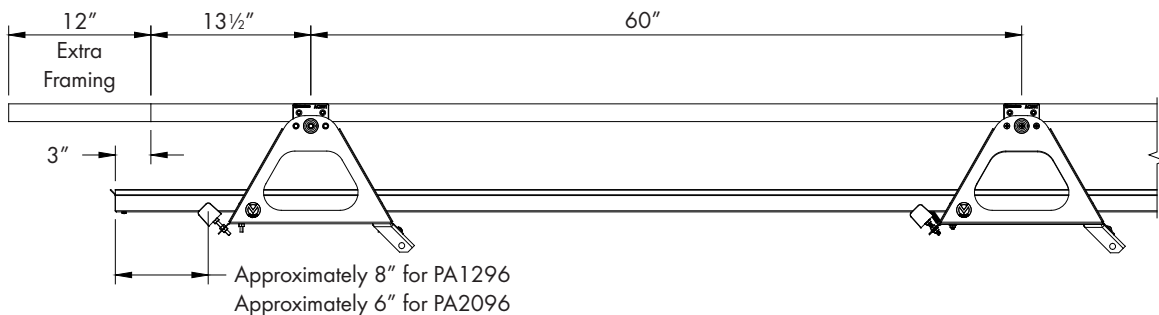


Figure 8B

Step 8

Slide the next Baffle Door into position and insert the end of the door into the "I" Beam of the first door. See Figure 9A. Continue installing Baffle doors down the length of the slot. When the last door is installed, install the last Swivel Bases [E] so that the last Carrier Arm Assembly will be mounted with the Lift Bar 6" from the end install of the baffle. See Figure 9B.

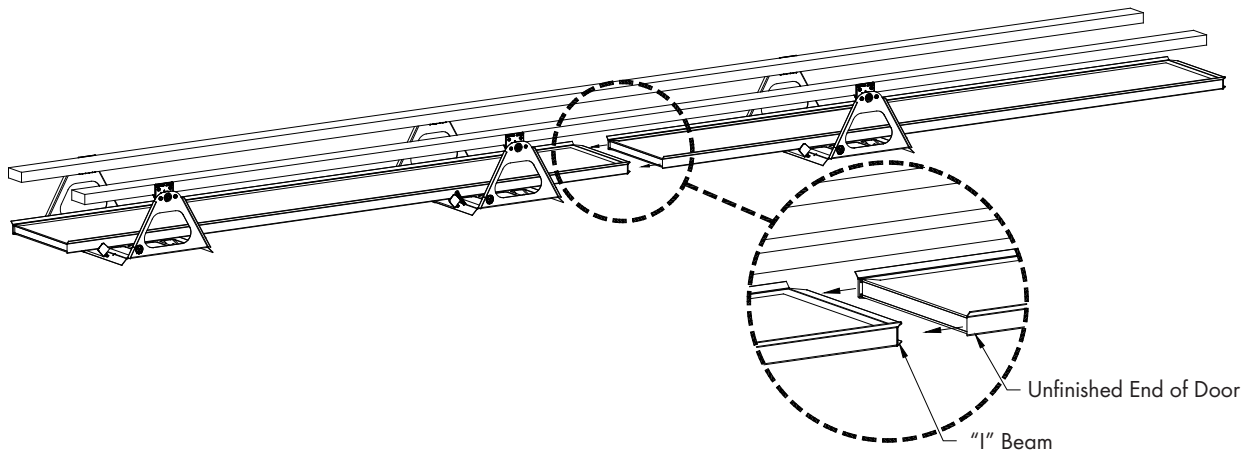


Figure 9A

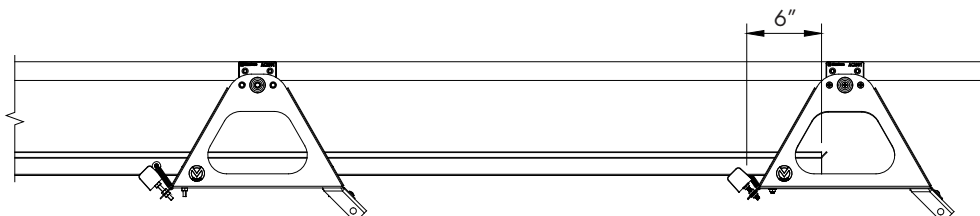
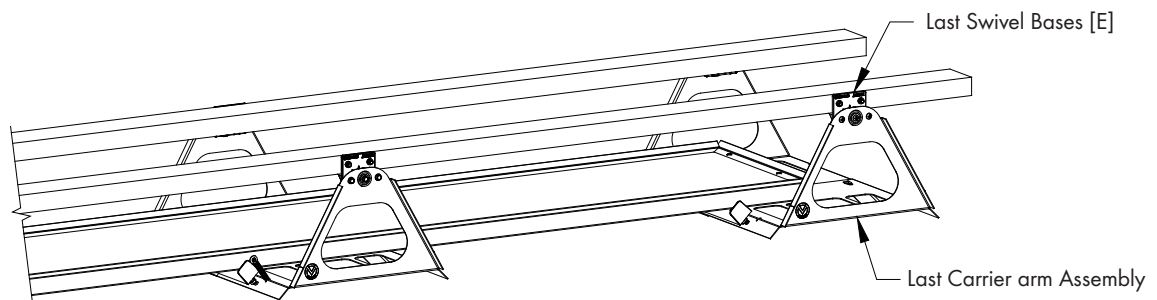


Figure 9B

Step 9

At the joint between each baffle Door install a Joiner Plate Bracket [B] to each side using (4) KS2282 TEK Screws [C]. See Figure 10.

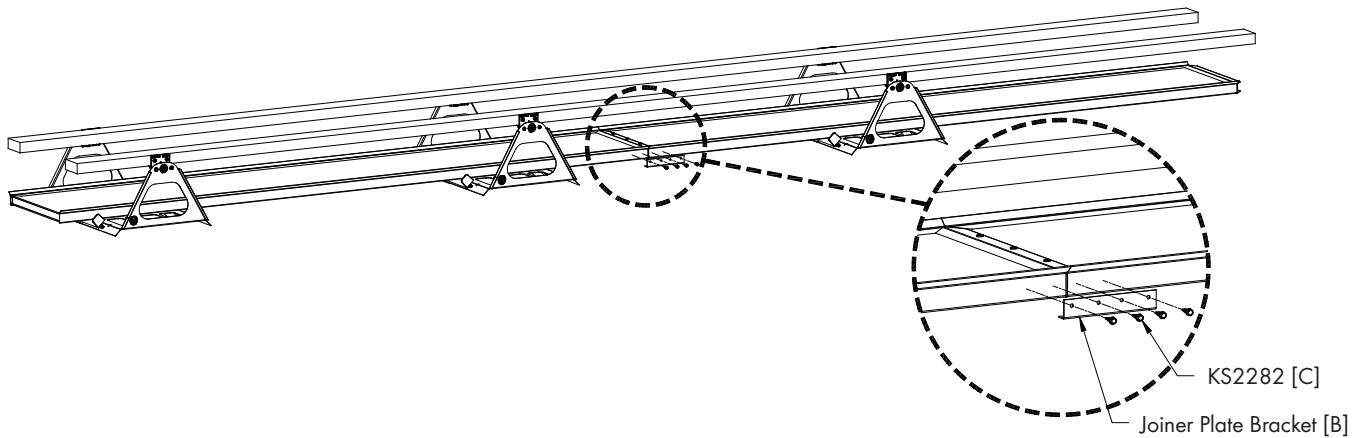


Figure 10

Step 10

At first Lift Point fasten door to Carrier Arm Assembly by installing the hook end of (1) Tension Spring [W] through the 2 holes in Carrier Arm Assembly and then securing the loop end of the spring to door using (1) KS2282 TEK Screw [C]. See Figure 11. Repeat for each Lift point, alternating the side that the spring is installed on.

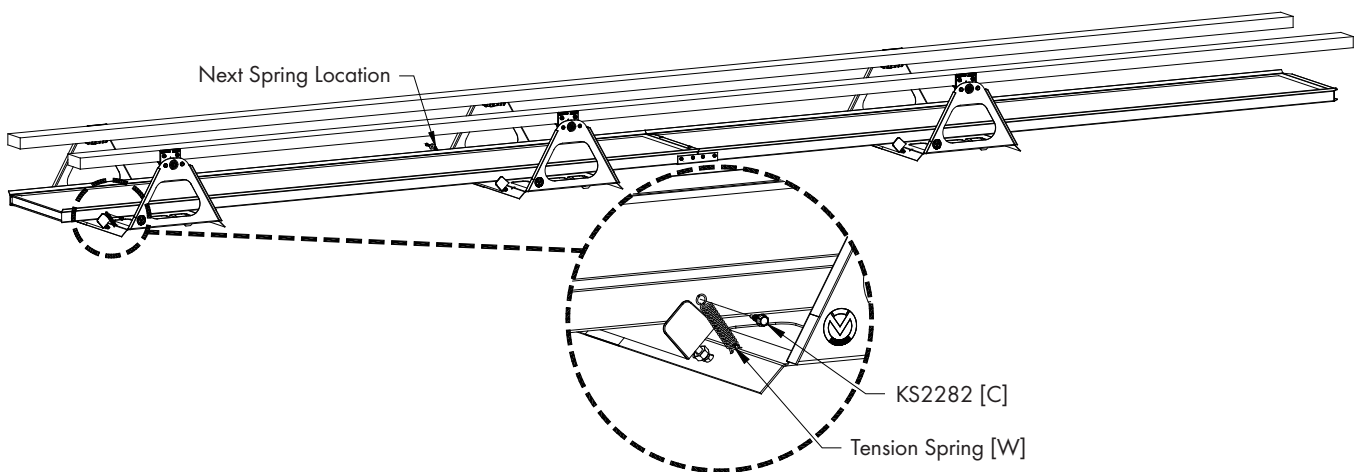


Figure 11

Step 11

On end of the Baffle closest to where the actuator will be installed, slide Edge Seal [Z] over end of Baffle and secure with (6) KS2301 TEK Screws [D]. On the opposite end of Baffle remove the "1" Beam and install the Edge Seal and secure with (6) KS2301 TEK Screws [D]. See Figure 12.

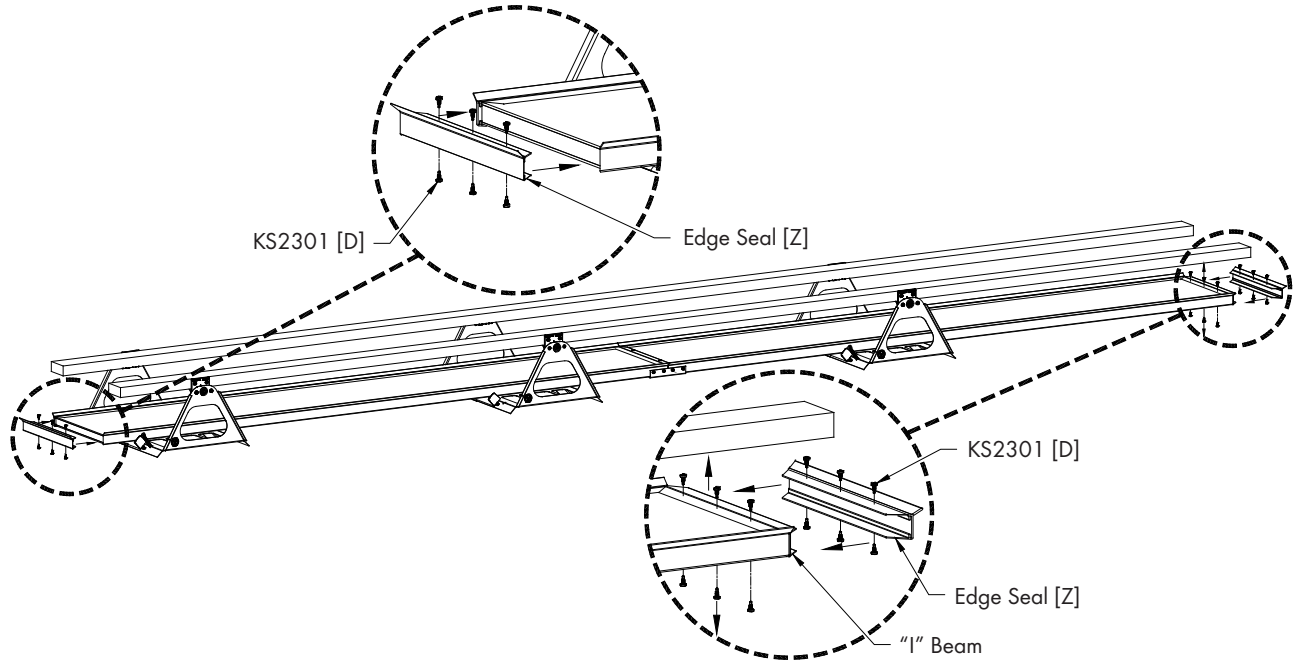


Figure 12

2.3 Lift Rod Installation

Step 1

Install (1) Lift Rod [R] to the Pull Bracket [O] on the first Lift Point so that the end of the rod is 3" from the Pull Bracket towards the Actuator using (2) Lift Rod Clamps [N], (1) KS1500 Carrier Bolt [M], KW3046 Washer [Q], KX1309 Spacer [P] and (1) KN0730 Nut [J]. See Figure 13.

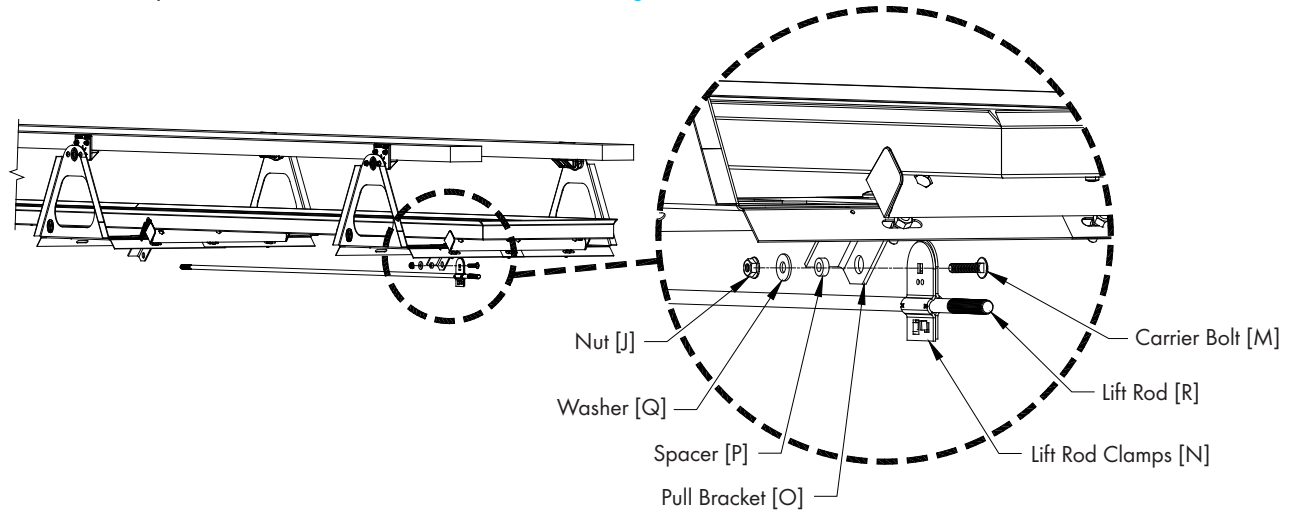


Figure 13

Step 2

Install (1) KN1713 Jam Nut [S] on the far end of the Lift Rod about half way up threads, then install (1) KN1903 Coupling Nut [T] on end of the Lift Rod and run it up tight to the Jam Nut. Then Install next lift Rod into Coupling Nut [T] and fasten the Lift Rod to Pull Bracket on the 2nd Lift point as done in Step 1. See Figure 14.

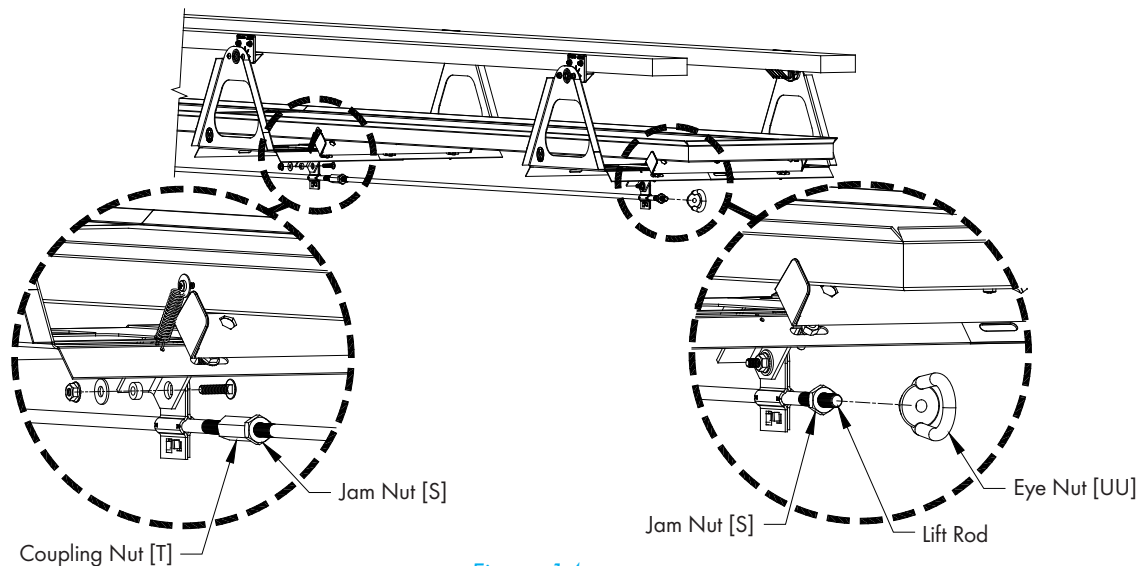


Figure 14

Step 3

Repeat Step 2 until the last Lift Rod is installed.

Step 4

On the Actuator end of the Lift Rod install (1) KN1713 Jam Nut [S] on the Lift Rod about half way up the threads, then install (1) KN1902 Eye Nut [UU] on the Lift Rod and run it up tight to the Jam Nut.

See Figure 14.

Step 5

On the far end of the system if Lift Rod extends past the last Pull Bracket 5" - 7", install (2) Lift Rod Clamps [N] using (1) KS1500 Carriage Bolt [M] and KN0730 Nut [J]. Then attach Connecting Strap [V] to Lift Rod Clamps using (1) KW3046 Washer [Q] and KN0730 Nut [J]. See Figure 15. If the Lift Rod extends past the Pull Bracket by more than 7", cut off the Lift Rod at 6" past the Pull Bracket and install (2) Lift Rod Clamps [N] using (1) KS1500 Carriage Bolt [M] and KN0730 Nut [J]. Then attach Connecting Strap [V] to Lift Rod Clamps using (1) KW3046 Washer [Q] and KN0730 Nut [J]. See Figure 15.

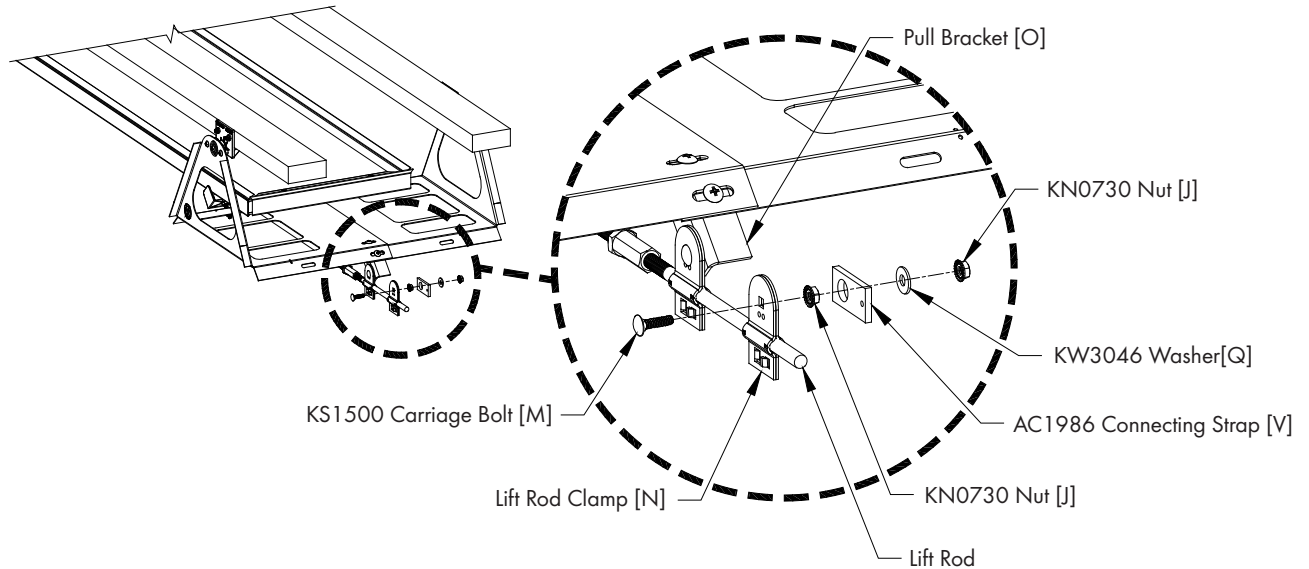


Figure 15

2.4 Transition Unit Assembly

Double Back Configuration:

Step 1

Locate (2) Cable Transition Plates [EE] and fasten them together with (2) KS1065 Bolt [JJ], KX1310 Spacers [QQ] and KN1709 Nuts [PP]. Also install (3) KP1253 Greaseable Clevis Pins [KK], 3.5" D Steel Pulleys [DD], (6) KX1258 Plastic Spacers [RR] and (3) KP1108 Cotter Pins [OO]. See Figure 17.

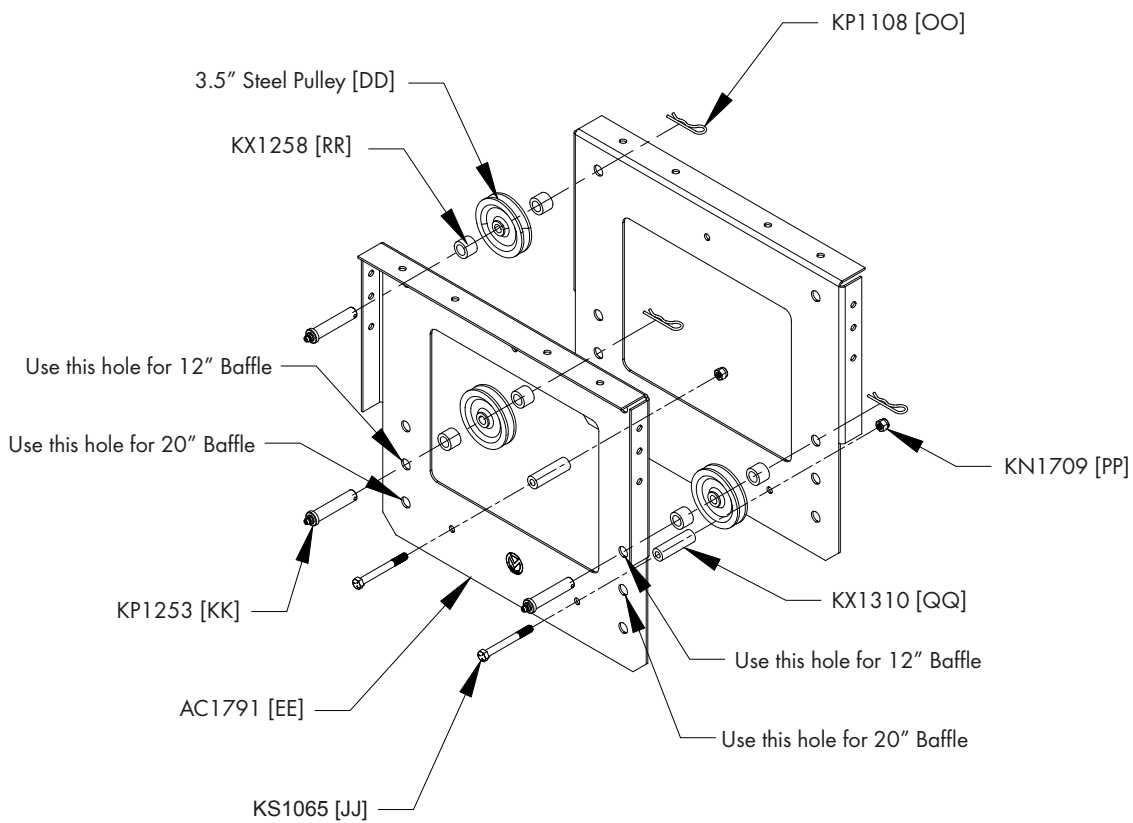


Figure 17

Step 2

Attach the Cable Anchor Plate [FF] and Winch Mounting Bracket [HH] using (8) KS1013 Bolt [NN] and KN1706 Nylock Nuts [MM]. See Figure 18.

Step 3

Attach the Winch [CC] to the Winch Bracket using (2) KS1013 Bolts [NN], KW3005 Washer [TT] and KN1706 Nylock Nuts [MM]. Then attach Hand Crank Handle to Winch using Nut provided on Winch Shaft. See Figure 18.

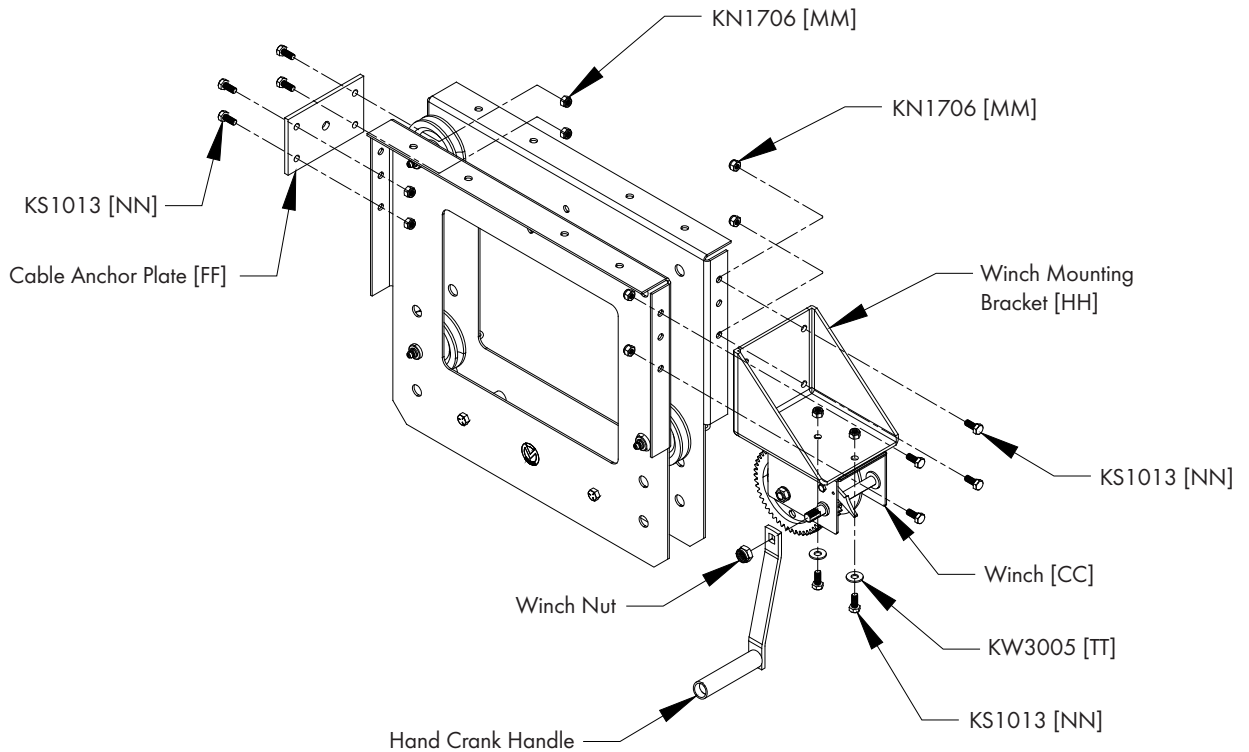


Figure 18

One to One Configuration:

Step 4

Fasten (2) Double Pulley Brackets [GG] together with (2) 3.5" Dia. Steel Pulleys [DD] using (2) AC1961 Spindle [SS] and (4) KN1711 Jam Nuts [LL]. See Figure 19.

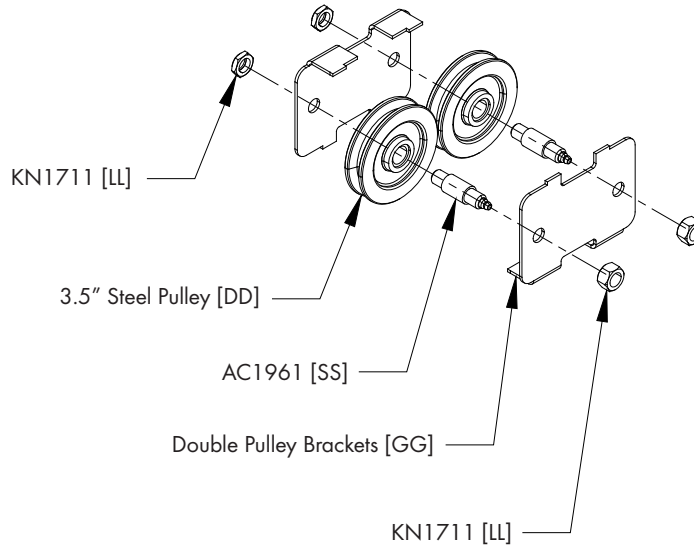


Figure 19

Step 5

Locate (2) Cable Transitions Plates [EE] and fasten them together with (2) KS1065 Bolts [JJ], KX1310 Spacers [QQ] and KN1709 Nuts [PP]. Also Install (2) KP1253 Clevis Pins [KK], 3.5" D. Steel Pulleys [DD] and (4) KX1258 Plastic Spacers [RR] and (2) KP1108 Cotter Pins [OO]. See Figure 20.

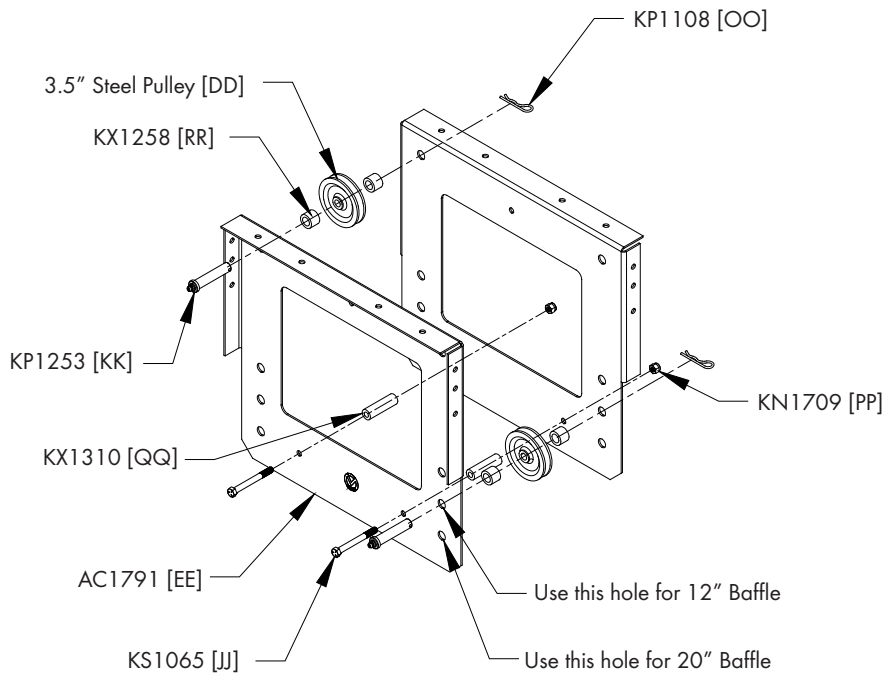


Figure 20

Step 6

Attach the Cable Anchor Plate [FF] and Winch Mounting Bracket [HH] using (8) KS1013 Bolt [NN] and KN1706 Nylock Nuts [MM]. See Figure 21.

Step 7

Attach the Winch [CC] to the Winch Bracket using (2) KS1013 Bolts [NN], KW3005 Washer [TT] and KN1706 Nylock Nuts [MM]. Then attach Hand Crank Handle to Winch using Nut provided on Winch Shaft. See Figure 21.

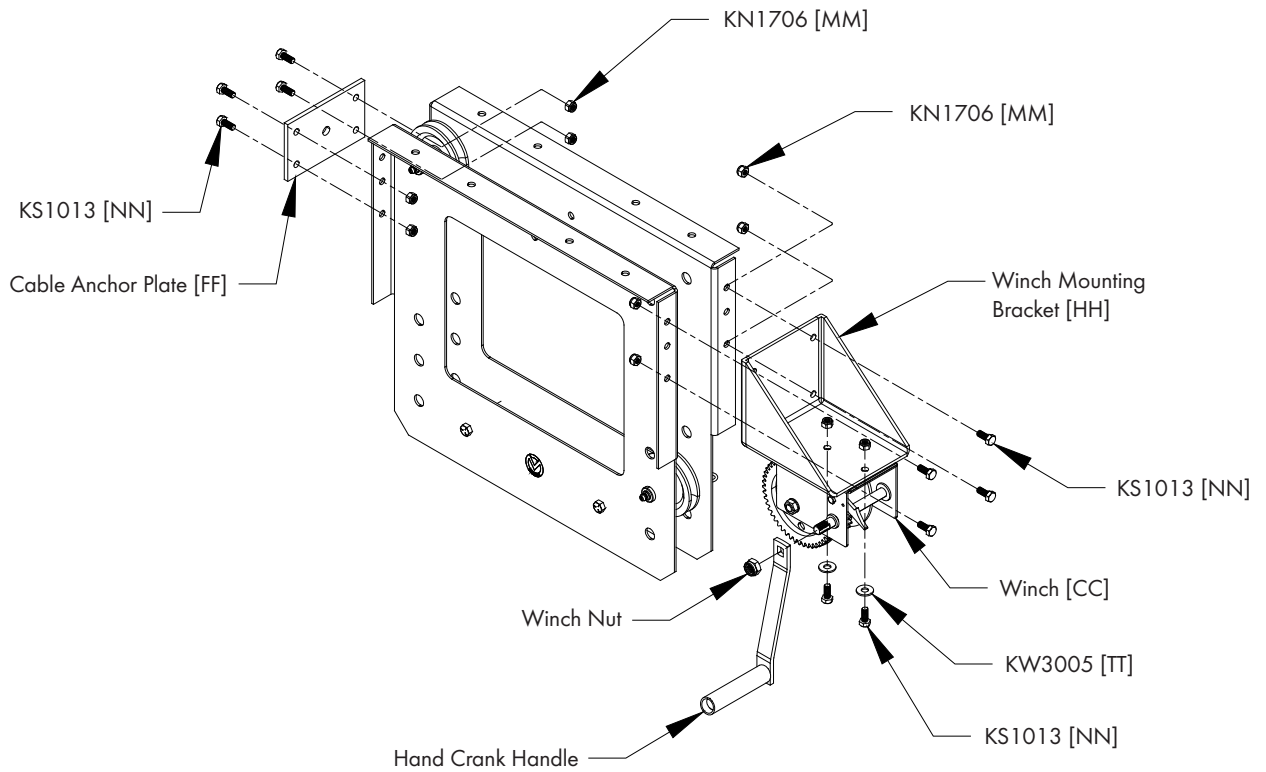


Figure 21

2.5 Transition Assembly Mounting

Step 1

Mount the Transition Assembly to the framing so the pulley end of the Transition Assembly is 18" from the end of the slot and centered on the slot. Secure the Transition Assembly using (8) KS2462 Lag Screws [XX]. See Figure 22A & 22B.

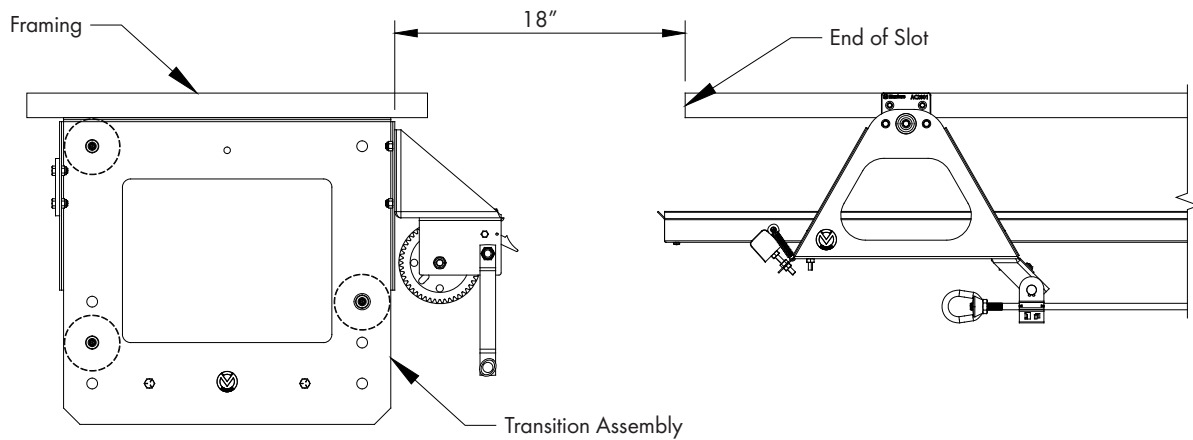


Figure 22A

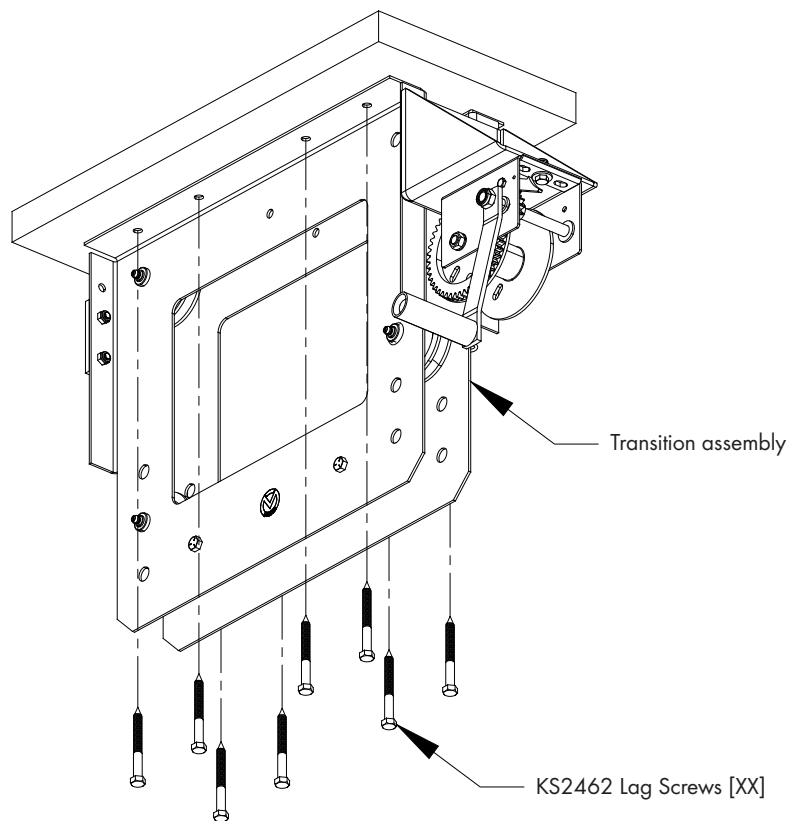


Figure 22B

2.6 Cabling

Double Back Cabling Configuration:

Step 1

Fasten (2) Double Pulley Brackets [GG] together with (1) 3.5" Dia. Steel Pulley [DD] using (2) Spindles AC1961 [SS] and (4) KN1711 Jam Nuts [LL]. The Spindle with no Pulley goes through the Eye Nut on the actuator end of the Lift Rod. See Figure 23.

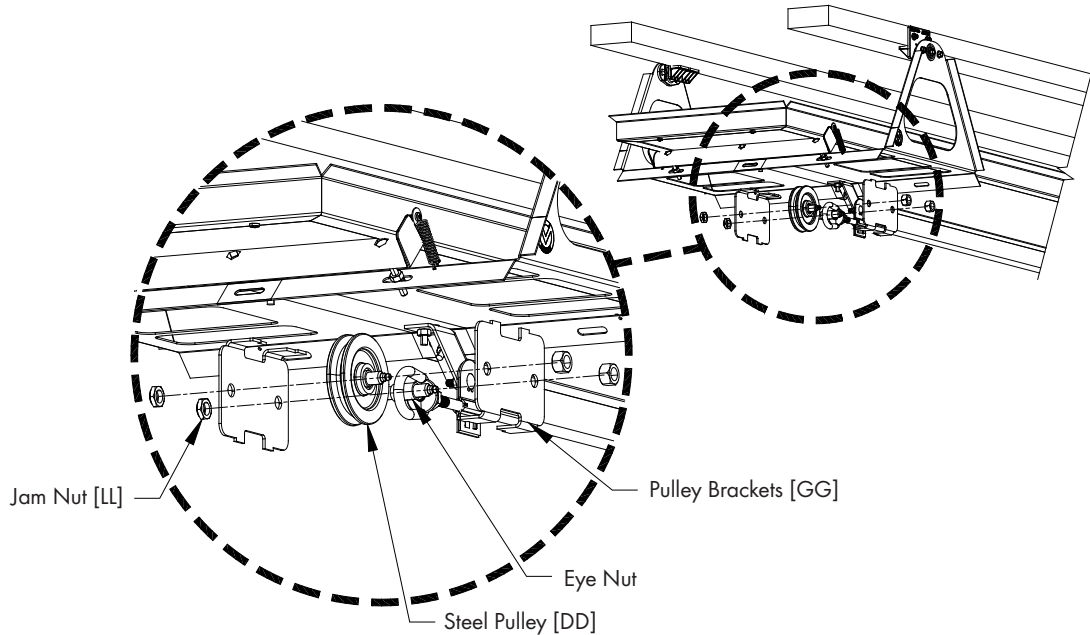


Figure 23

Step 2

Route the cable from the Actuator/Pipe Drive System through the transition Unit to the inlet and back to the Winch as shown. See Figure 24.

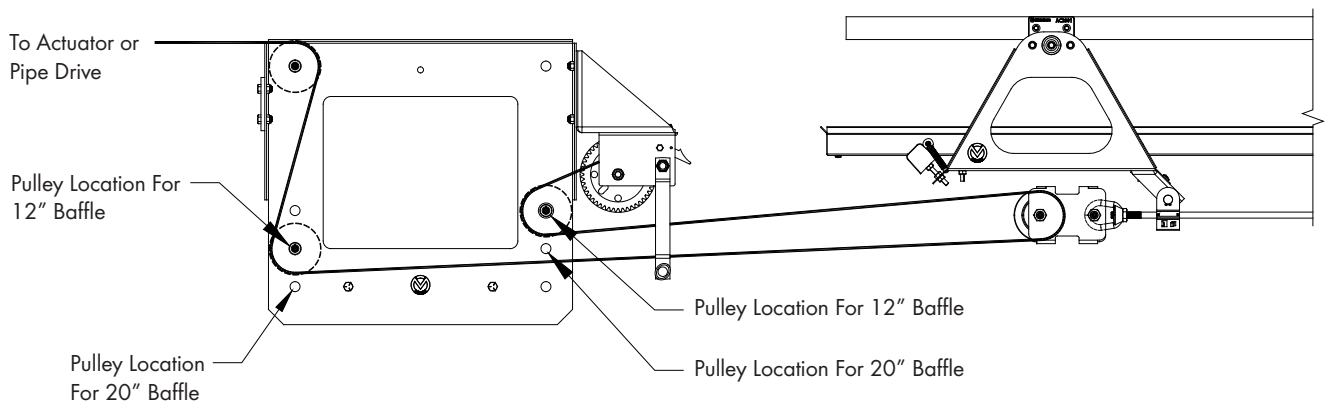


Figure 24

One to One Cabling Configuration:

Step 3

Route the cable from the Actuator/Pipe Drive system through the Transition Unit to the inlet and back to the Winch as shown. See Figure 25.

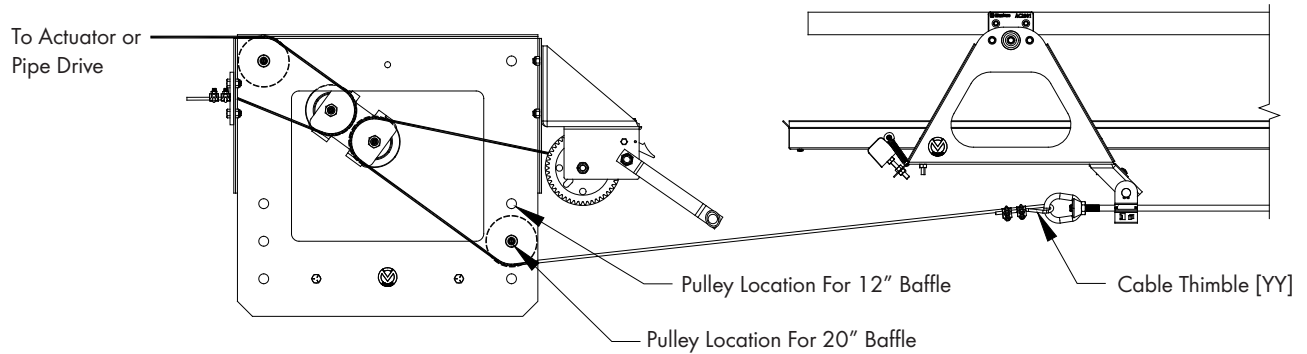


Figure 25

2.7 End Spring Installation

Step 1

On the far end of the system install (1) Open Eye Lag Screw [WW] to the ceiling or other framing 24" from the last Lift Point. Attach the hook end of the Return Spring [AA] to the Connecting Strap [V]. Then attach a section of 1/8" dia. Cable [BB] to between the loop end of the Return Spring and the Open Eye Lag Screw [WW]. See Figure 26. When the Pivot Air is in the open position, the Return Spring/Cable should be taut, so that when the Pivot Air closes there is tension on the spring.

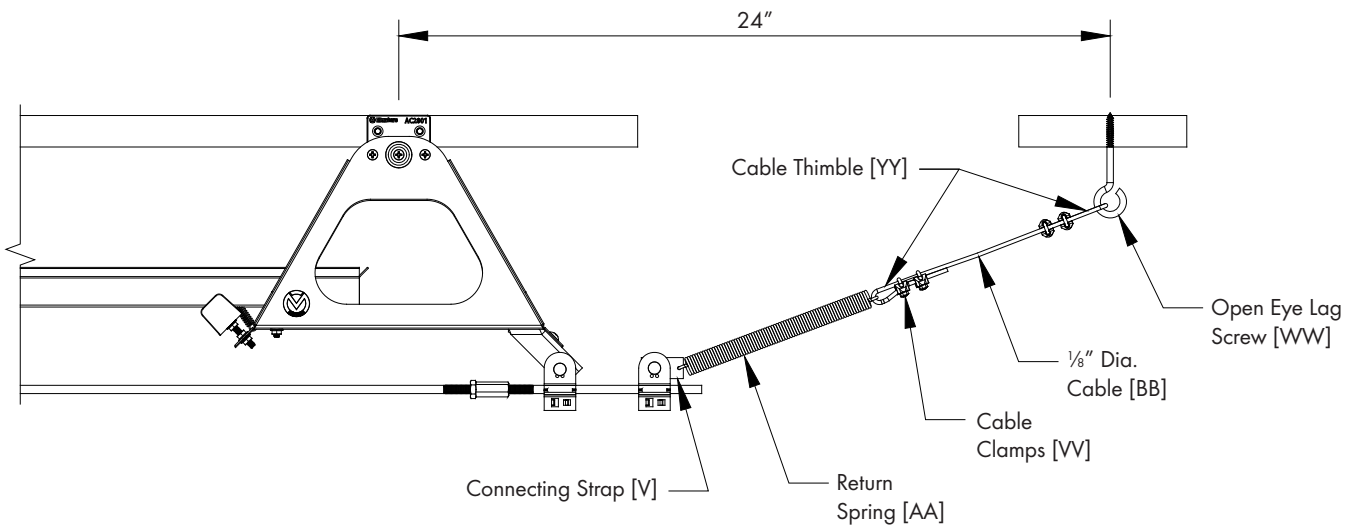


Figure 26

2.8 Baffle Adjustment

Step 1

Adjust the lift points by loosening or tightening the nuts to raise or lower the lift bar until the inlet door seal makes contact with the 2x4 frame.

Step 2

After adjusting the lift points verify that return springs are being stretched before the baffle is closed.

Installation Complete.

3.0 Baffle Adjustment

Step 1

As the building settles with time, it is recommended to inspect the slot to baffle relationship along the entire length of the inlet. Some lift bar adjustment may be required to maintain uniform open area.

Step 2

Inspect baffle carrier arms and cable system and remove all foreign debris.

Step 3

Inspect return spring for proper functionality as described in Section 2.6.

Step 4

The inlet must be in the closed position for power washing. Failure to close the inlet/baffle may result in damaged components.

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Pivot Air Inlet is developed and produced by Munters Corporation Lansing, Michigan 48917 U.S.A. 1-800-227-2376



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