



**MASON  
COMPANY**

Designers and Manufacturers of  
Quality Animal Enclosures Since 1892.

## Installation Instructions for Back to Back Ultrabases

### Introduction

Thank you very much for your investment in Mason kennels. We take great pride in providing our customers with the highest quality animal enclosures combined with an enjoyable ordering experience. The following instructions will assist you with proper assembly, cleaning, and maintenance of your Mason kennels. It is important to follow these guidelines in order to receive the best results and maximum life from your investment.

#### Assembly

The following pages will show you how to assemble your new Mason kennel. Since every order is custom built to your specifications, the instructions are designed to show the various methods used to assemble our kennels and some of the demonstrations may not apply to your order. Be sure to use the enclosed scale drawings at the end of this document of the provided hardware to ensure proper identification and usage.

#### Hardware

Depending on your Kennel project you may have some or all of the following hardware:

<b>Part #</b>	<b>Description</b>	<b>Part #</b>	<b>Description</b>
356	5/16" x 1-1/2" galv. carriage bolt(s)	1468	Square to round clamp(s)
357	5/16" x 1-3/4" galv. carriage bolt(s)	330	Panel clamp(s)
423	5/16"-18 nut(s)	328	Triple clamp(s)
891	#12 x 1" hex head sheet metal screw(s)	1071	Special pulleys (w/Kennel Door option)
422	1/4" -20 hex nut(s)		Tie plate(s) 1-1/2" x length of panel
366	1/4"-20 X 1" hex head bolt(s)	1400	1/4" x 1-1/4" rawl spike(s) (anchored systems only)
369	1/4"-20 X 1-3/4" hex head bolt(s)	1465	Leg leveler Bolt(s) 1/2"-13 x 4"
2449	Sealant	430	1/2 - 13 nut(s)
2222	#10 x 5/8" TEK hex washer head sheet metal screw(s)	3120	Triple clamp(s) – 1" (w/stainless steel gate option)
369	1/4"-20 x 1-1/2" hex head bolt(s) (w/stainless steel gate option)	1955	5/16" x 1-1/2" SS carriage bolt(s)
		1771	5/16" x 1-3/4" SS carriage bolt(s)
		424	5/16" – 18 SS hex nut
3118	Single clamp(s) – 1" (w/stainless steel gate option)	3119	Double clamp(s) – 1" (w/stainless steel gate option)

## Installation

### Required installation tooling:

- Level (4' preferred)
- 1 /2" combination wrench
- 7/16" combination wrench
- Hammer
- 3/4" combination wrench
- #2 phillips bit (2-3)
- 5/16 socket and ratchet
- Caulk gun
- Drill (cordless)
- 5/32" drill bit
- Tape measure
- Chalk line
- Denatured alcohol
- Shop rags

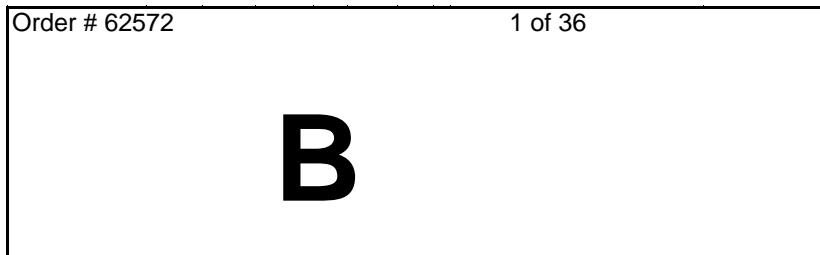
### Optional tools

- Visegrips – 8" locking C-clamps (3 pair recommended)
- WD40 or other thread lubricant

## Section A Panel Identification

Refer to the floor plan supplied.

Depending on the nature of your kennel project you will have either letter and or number designations on the tag(s) wired to the top of the panel as shown in Figure 1.



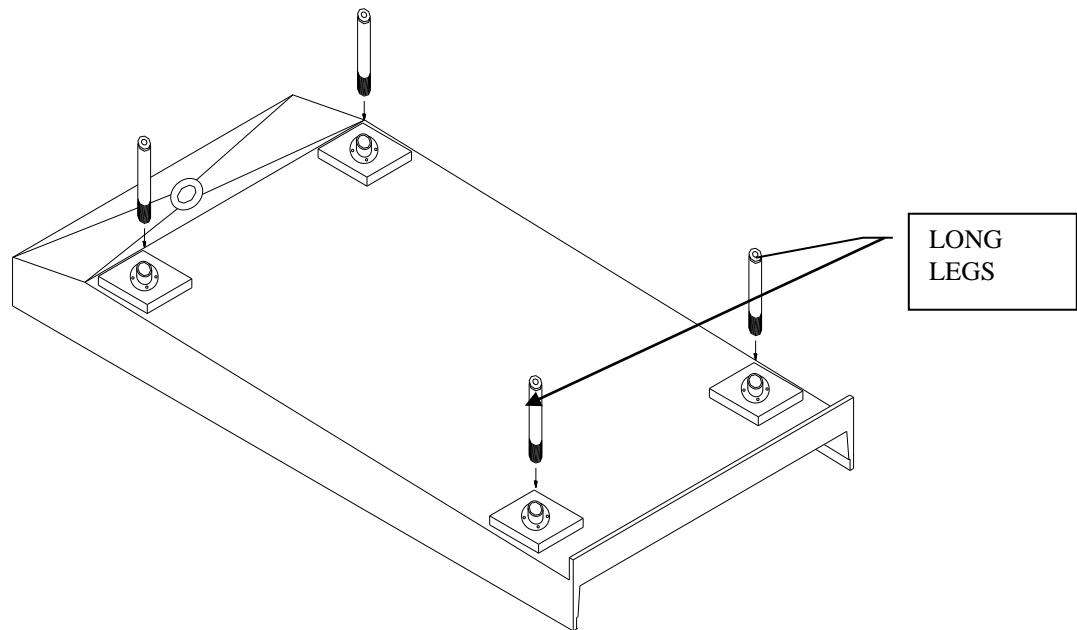
**Figure 1.**

On the floor plan each panel is marked with an alphanumeric designation that corresponds to the designation on the tag of the panel to be installed at a particular location.

Each connection point of the panels should be aligned as shown on the floor plan. It will make a difference as to how your runs go together if you do not align the panels properly and in some cases they may not go together at all.

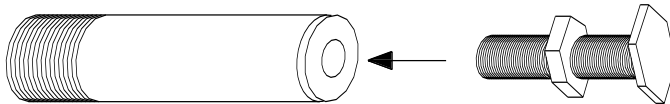
## Section B Leveling leg assembly

1. Turn each unit until the bottom side is up (be sure to pad the floor with cardboard or other suitable material to protect the finish). **There are two sets of legs**, (2) short legs and (2) long legs, the long ones are for the front of the Ultrabase and the shorter ones go in the rear mounts. Into each flange on the bottom of the base unit, screw a threaded leg assembly and tighten. See Figure 2.



**Figure 2.**

2. Screw on a 1/2"-13 Nut onto all of the supplied leveling bolts. Insert the leveling bolts in to the end of the leveling legs, screwing them in until they are all approx. halfway screwed in. see Figure 3.



**Figure 3.**

### **Section C Drain Fitting assembly**

1. Per the instructions in the package with the drain fitting, install and tighten.

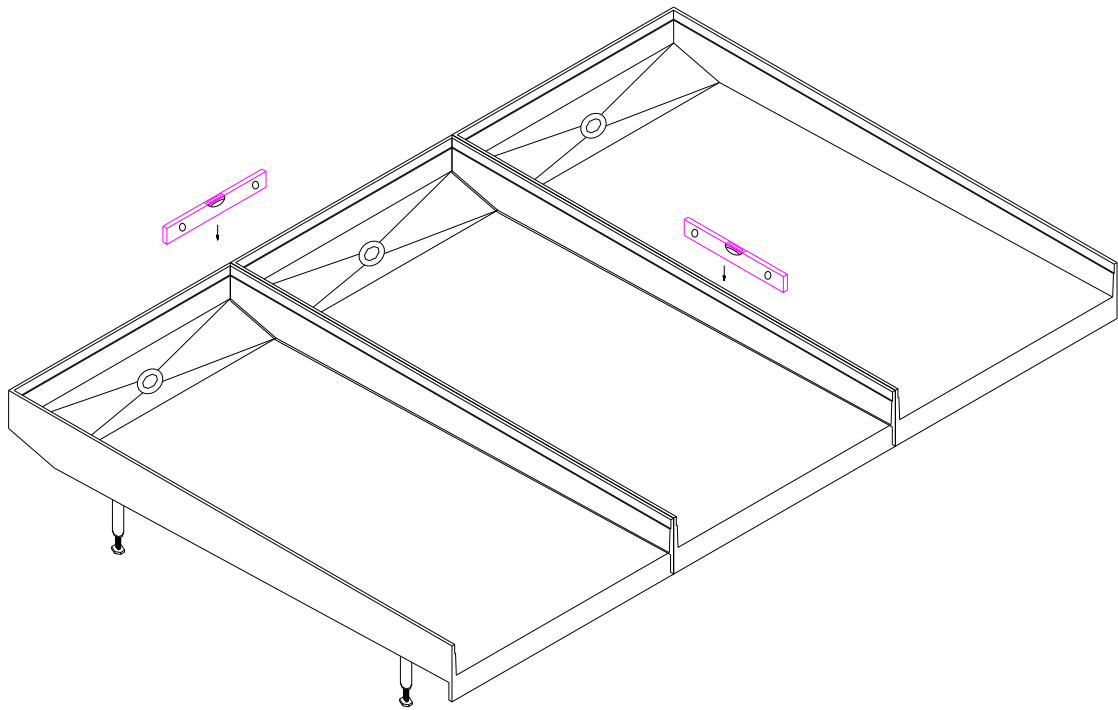
**IMPORTANT: Every Ultrabase system's plumbing requirements are different depending on location, drainage requirements and drain locations. Once this system is installed it is difficult to access the Ultrabase drains for installing plumbing so you will want to plan your plumbing installation requirements before proceeding.**

### **Section D Run Assembly**

1. Refer to the floor plan and select a starting point for assembling the runs, which is best for your application. Once selected, begin placing the bases right side up in the proper location.

### **Section E Leveling the System**

1. Level the system such that **ALL** of the units are level along their top edges and are **ALL** at the same height on their edges, using the leveling screws installed in Step 1. See Figure 4.

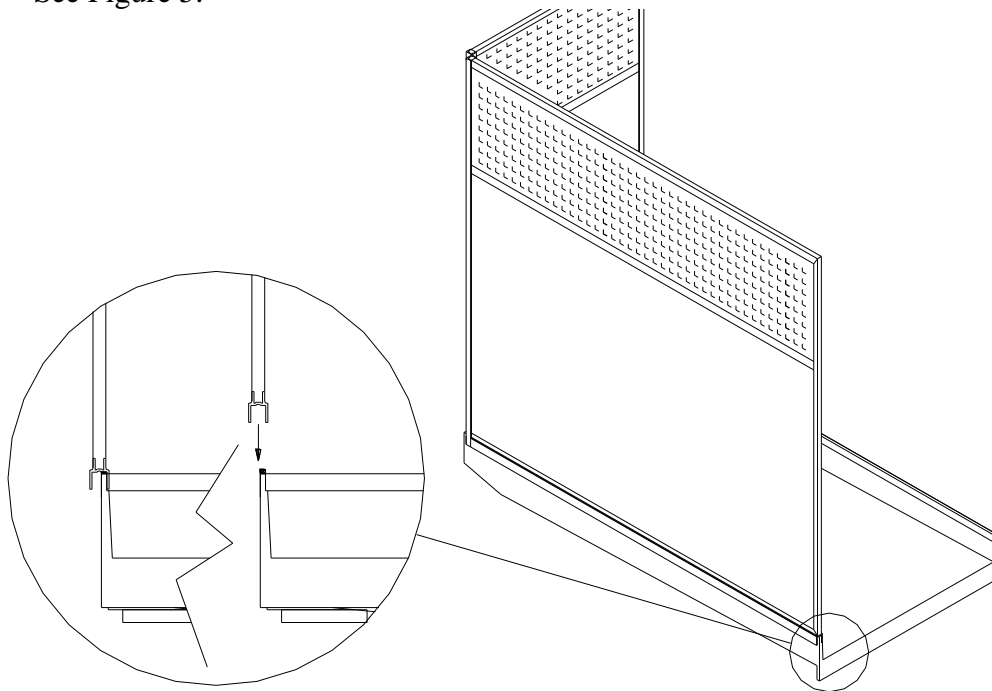


**Figure 4.**

2. Once all of the units are at the same level, tighten the 1/2"-13 nuts to lock the leveling bolts in that position.

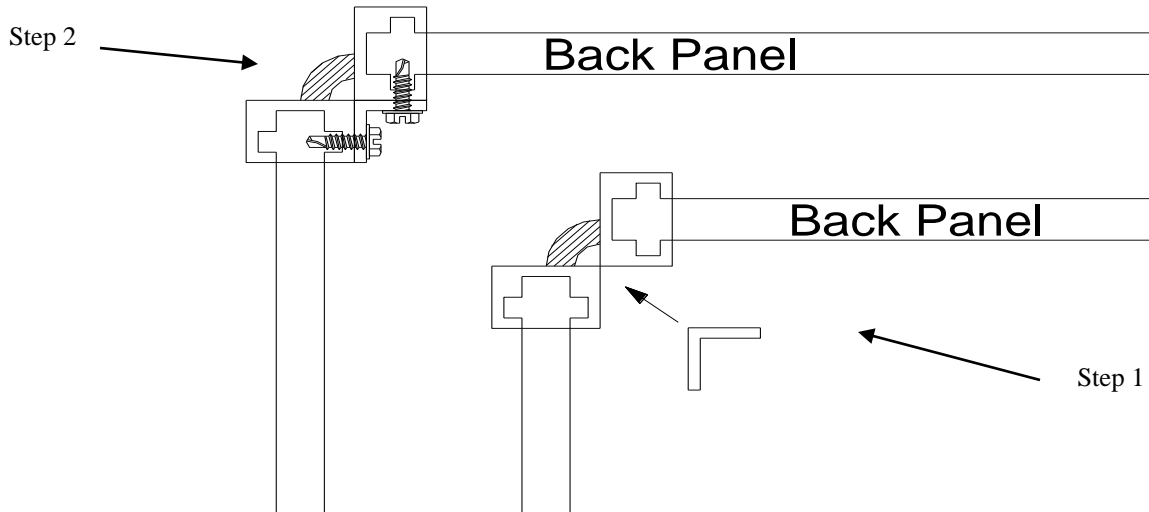
**Section F**  
**Installing Division and Back Panels (One side only)**

1. Beginning at one end of the system, place a division panel and a back panel onto the Ultrabase. See Figure 5.



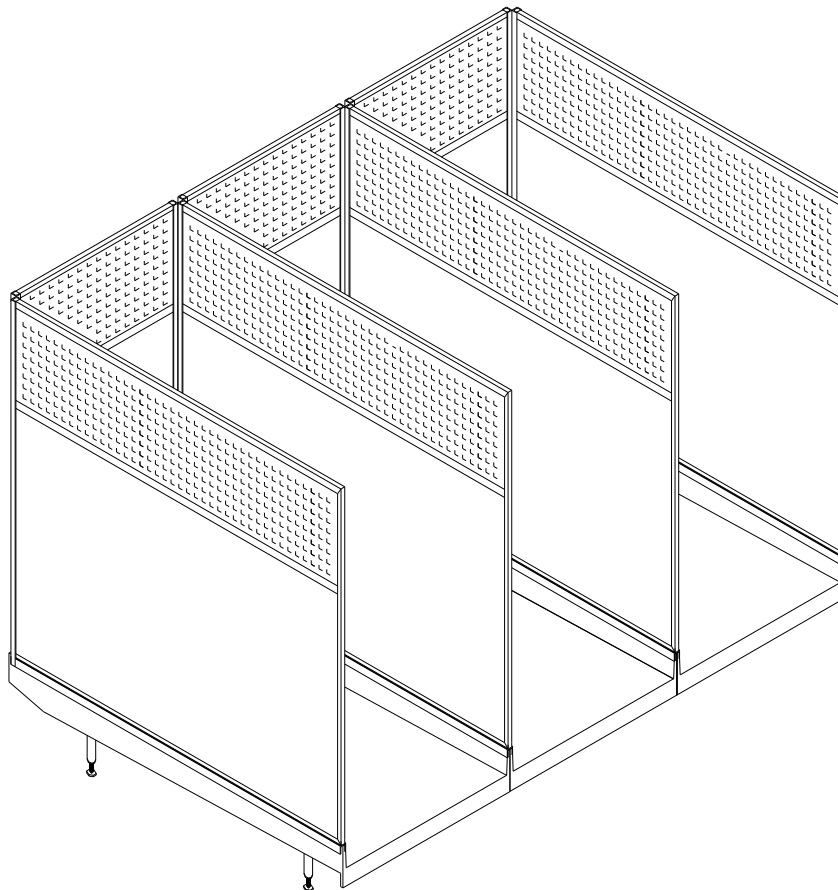
**Figure 5.**

2. Connect the first division panel to the first Back Panel using the 3/4" x 3/4" aluminum angle and #10 x 5/8" TEK hex washer head sheet metal screws (#2222). These screws are self drilling and do not require pilot holes. Using vise grips, clamp the 3/4" x 3/4" angle in place. See Figure 6.



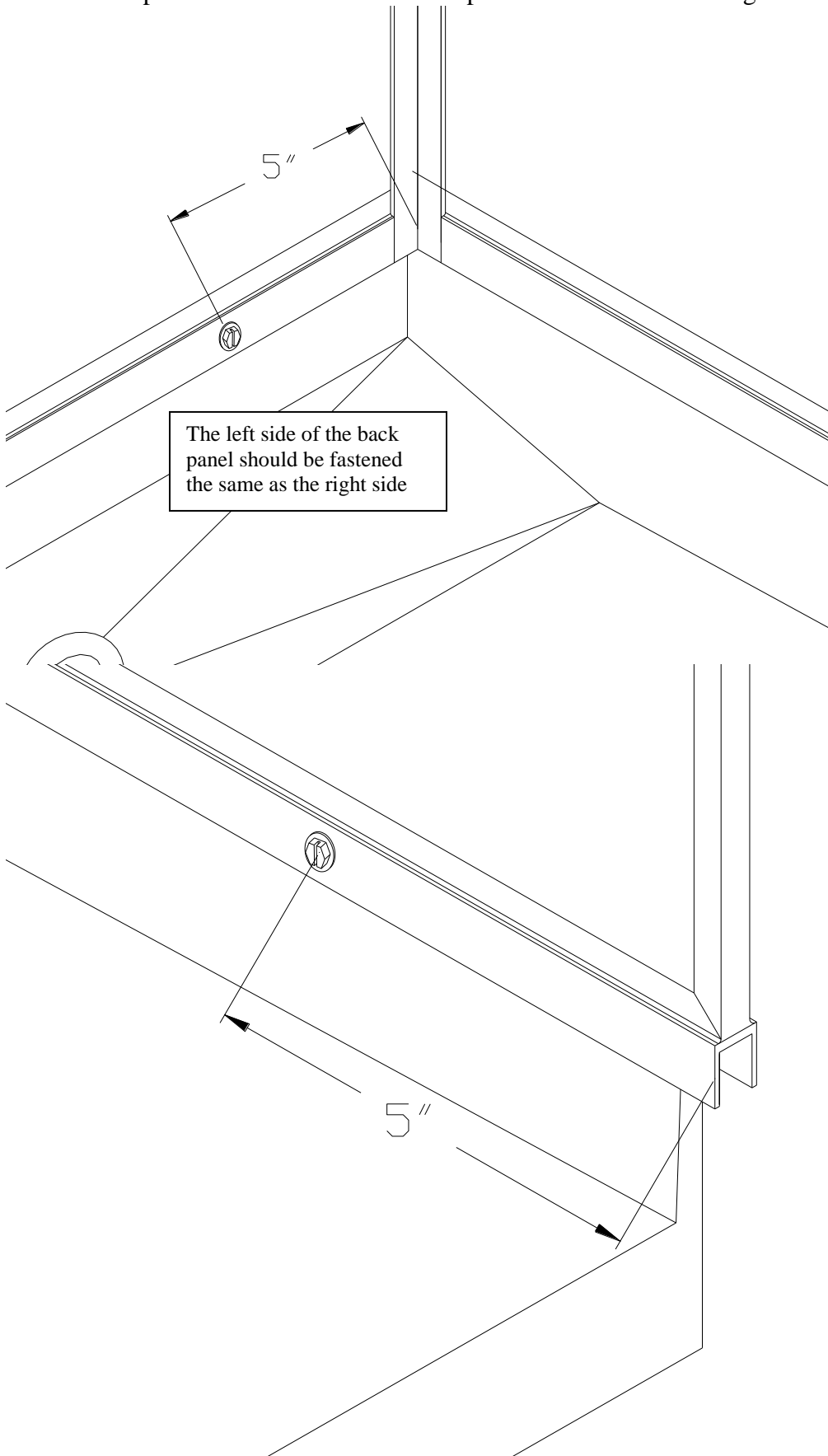
**Figure 6.**

3. Place the 2nd Division Panel in place and connect to the 1<sup>st</sup> Back Panel using the 3/4" x 3/4" aluminum angle and #10 x 5/8" TEK hex washer head sheet metal screws (#2222). These screws are self drilling and do not require pilot holes.
4. Continue down the length of the run in the same manner. See Figure 7.



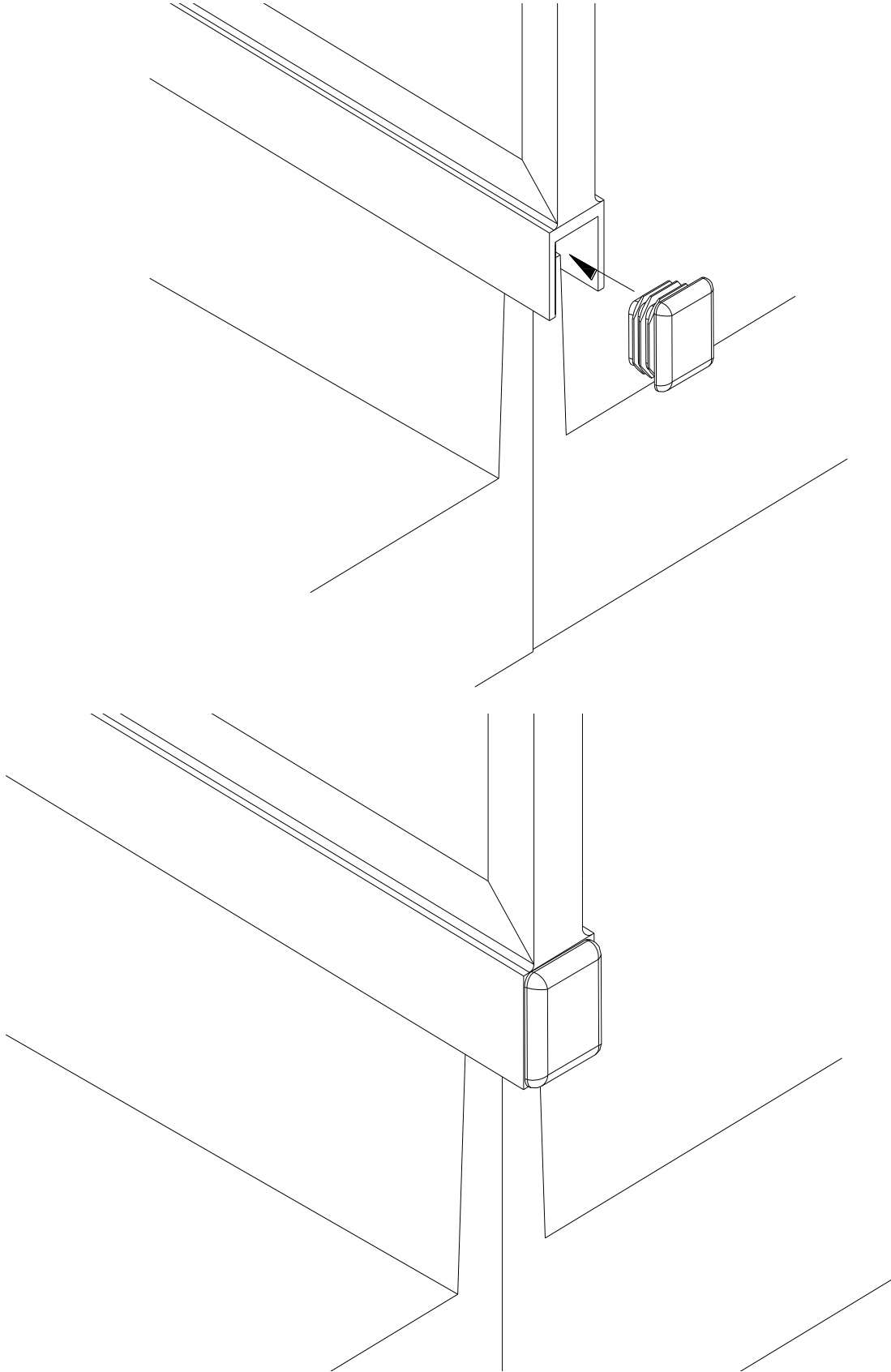
**Figure 7.**

5. Screw the Division Panels and Back Panels to the base units using #10 x 5/8" TEK hex washer head sheet metal screws (#2222). These screws are self drilling and do not require pilot holes. Use 2 screws per Back Panel and one screw per Division Panel. See Figure 8 for locations.



**Figure 8.**

1. **NOTE:** if your system has chain link gates this step is not required.  
Insert plastic plugs as shown at the bottom front corner of each division panel. See Figure 9.



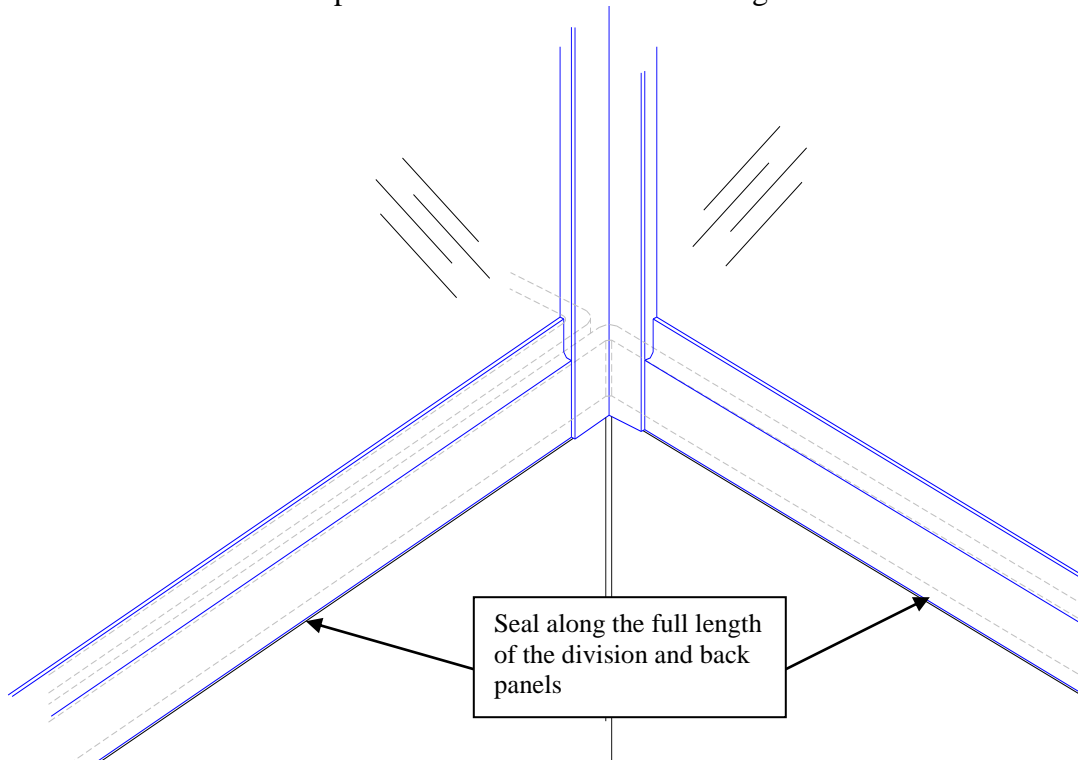
**Figure 9**

## Section G Installing Division Panels Second Side

1. Beginning at one end of the system, place a Division Panel onto the Ultrabase.
2. Connect the first Division Panel to the first back panel using the 3/4" x 3/4" aluminum angle and #10 x 5/8" TEK hex washer head sheet metal screws (#2222). Using vise grips, clamp the 3/4" x 3/4" angle in place. See Figure 6 above.
3. Place the 2nd Division Panel in place and connect to the 1<sup>st</sup> Back Panel using the 3/4" x 3/4" aluminum angle and pinning screws.
4. Continue down the length of the run in the same manner. See Figure 7 above.
5. Screw the Division Panels (the back panels should already be fastened) to the base units using #10 x 5/8" TEK hex washer head sheet metal screws (#2222). These screws are self drilling and do not require pilot holes. Use 2 screws per back panel and one screw per Division Panel. See Figure 8 above for locations.

## Section H Sealing

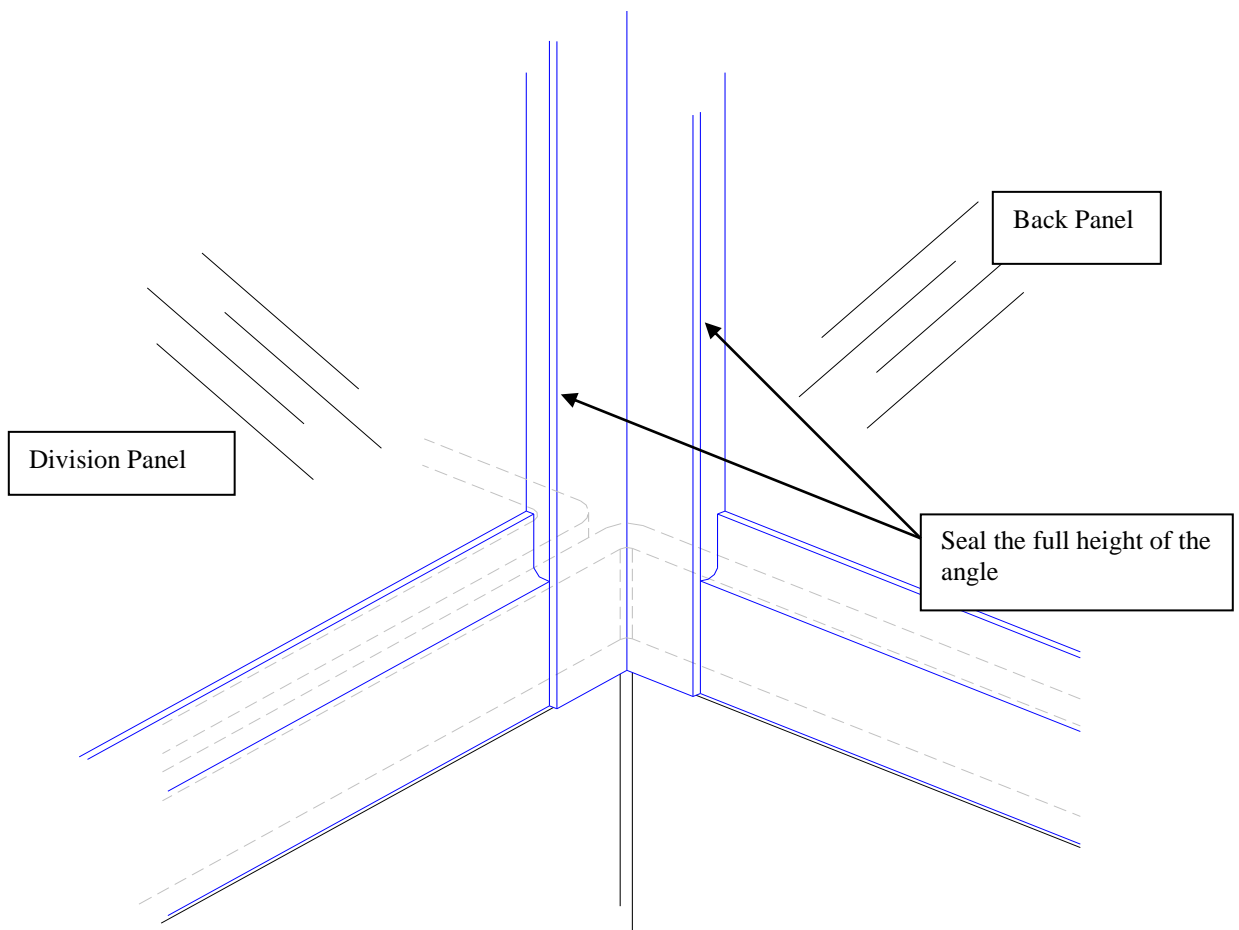
1. Seal the Division Panels and Back Panels to the base unit with silicone caulk along the joints where the bottoms of the panels meet the base unit. See Figure 10.



**Figure 10.**

2. Seal along both edges of the 3/4" x 3/4" angle used for the corner connections. See Figure 11.





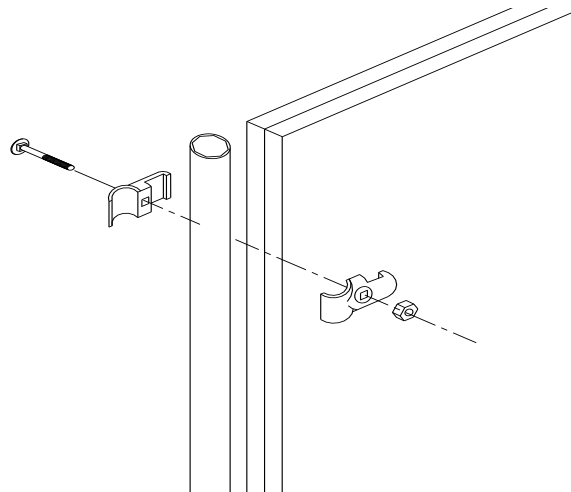
**Figure 11.**

## Section I

### Gate/Stall Front Hanging

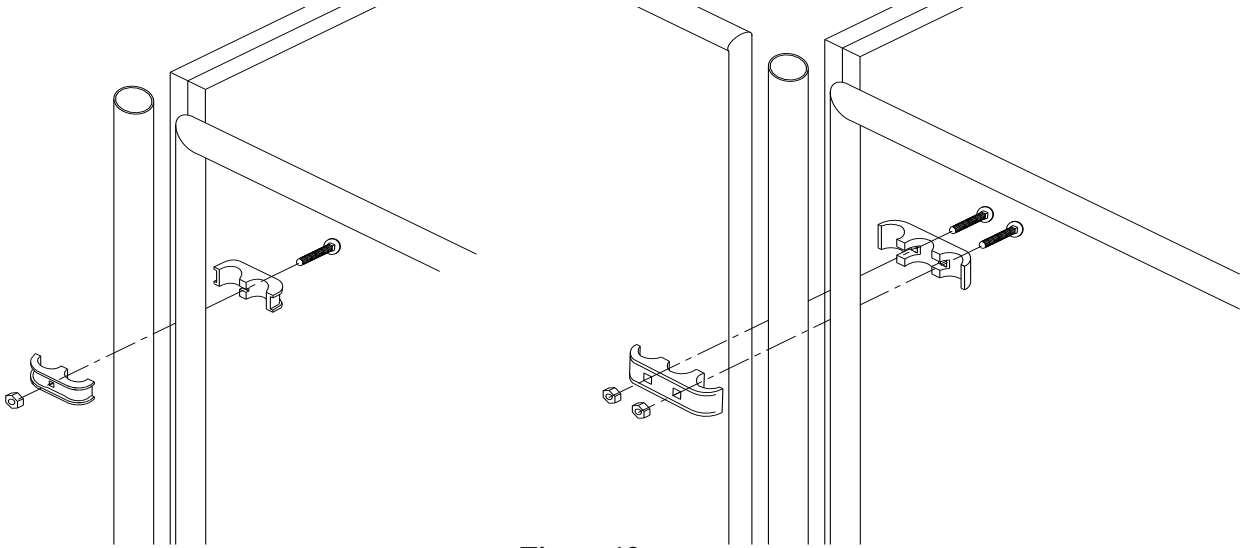
#### Chainlink Gates / Stall Fronts

1. Attach the filler pipes to the front end of each Division Panel with two square-round clamps (it takes two halves to make up one clamp) approximately 6" from either end of the filler pipe using the 5/16" x 1-3/4" galv. carriage bolts and 5/16" galv. nuts provided as shown in Figure 12.

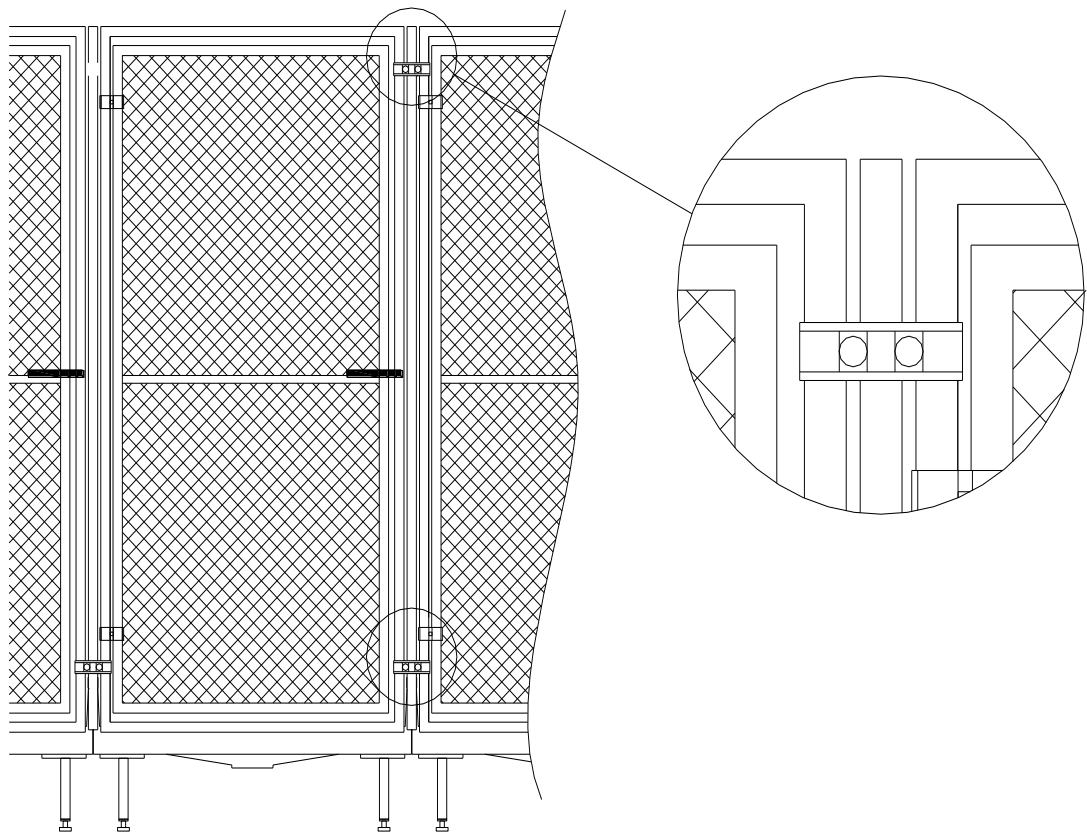


**Figure 12.**

2. Attach the gate/stall front on the front of each run between the filler pipes with two clamps on each side using the 5/16" x 1-1/2" galv. bolts and nuts provided as shown in Figure 13. Note: It takes two halves to make up one clamp. Attach gates / stall fronts to outside Division Panels using "panel clamps". All other gates/stall fronts will use "triple clamps". **To help insure the safety of the animals the round head of the bolt should be assembled toward the inside of the run.** Note: The triple clamps attach two gates/stall fronts together. Therefore you will have to hang two gates/stall fronts at the same time (see Figure 14).
3. Finish installing all gates on the lower level.
4. Adjust the gate latch following the instructions in Section L, "Gate Latch Adjustment".



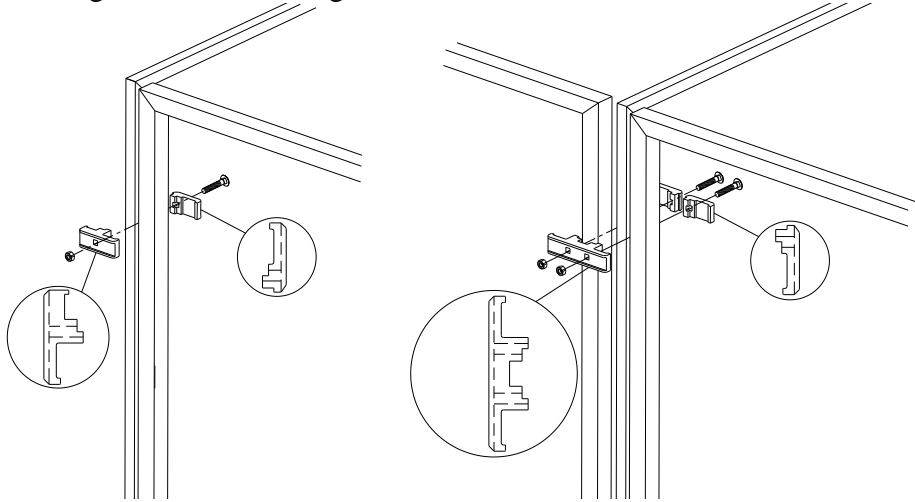
**Figure 13.**



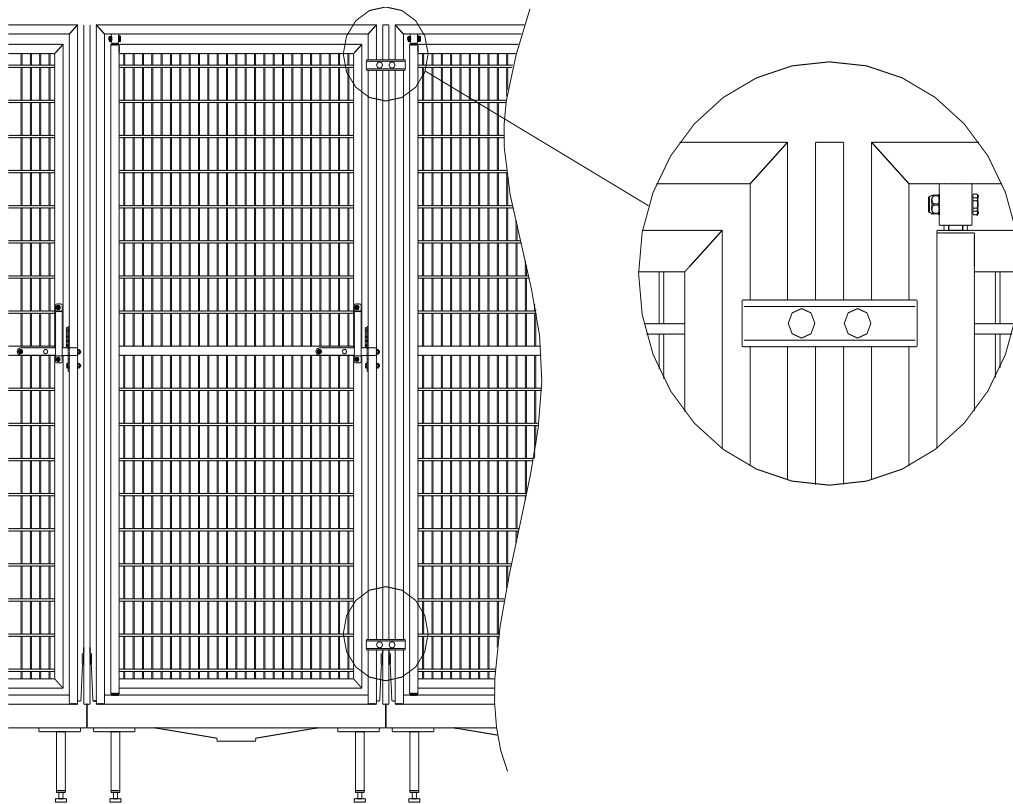
**Figure 14.**

## Stainless Steel Gates/Stall Fronts

1. Attach the gate/stall front on the front of each run between the Division Panels with two clamps on each side using the 5/16" x 1-1/2" bolts and nuts provided as shown in Figure 15. Note: It takes two halves to make up one clamp. Attach gates/stall fronts to outside Division Panels using "square-1" panel clamps". All other gates/stall fronts will use "square-1" triple clamps". **To help insure the safety of the animals the round head of the bolt should be assembled toward the inside of the run.** Note: The triple clamps attach two gates / stall fronts together. Therefore you will have to hang two gates/stall fronts at the same time (see Figure 16).
2. Adjust the gate latch following the instructions in section L, "Gate Latch Adjustment".



**Figure 15.**



**Figure 16.**

## Section J Plumbing the System

1. Install the drain fitting into the base units and the walkway units and tighten.
2. Using 2" PVC plumbing, plumb the system by connecting 3 base units together and then running to a vertical drop to the trench drain. Note: all plumbing to be at 1/8" slope per foot.

## Section K

### Top Cover Installation (Optional)

1. Position top covers onto the top of the division panels.
2. Using square to round clamps, 5/16"-18 x 1-3/4" galv. carriage bolts, and 5/16"-18 nuts, connect the back tube of the top covers to the top of the back panels. Place clamps approx. 3" from the division panels. See Figure 17.

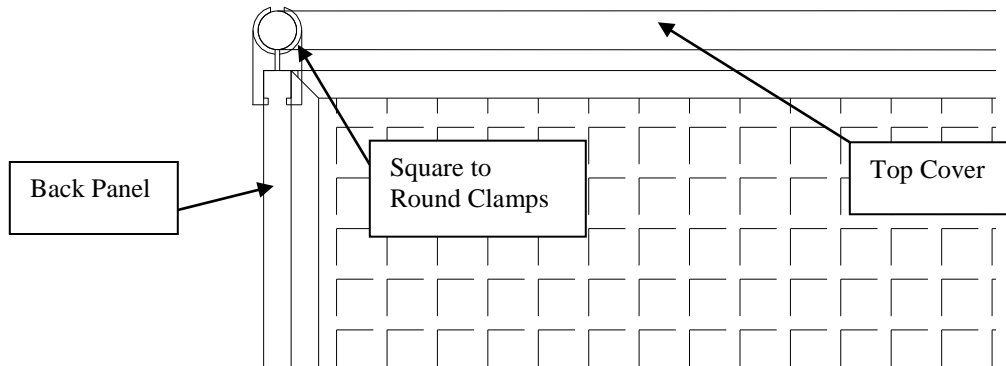


Figure 17.

3. Using panel clamps, 5/16"-18 x 1-3/4" galv. carriage bolts, and 5/16"-18 nuts, connect the front tube of the top covers to the top of the gate frames. See Figure 18.

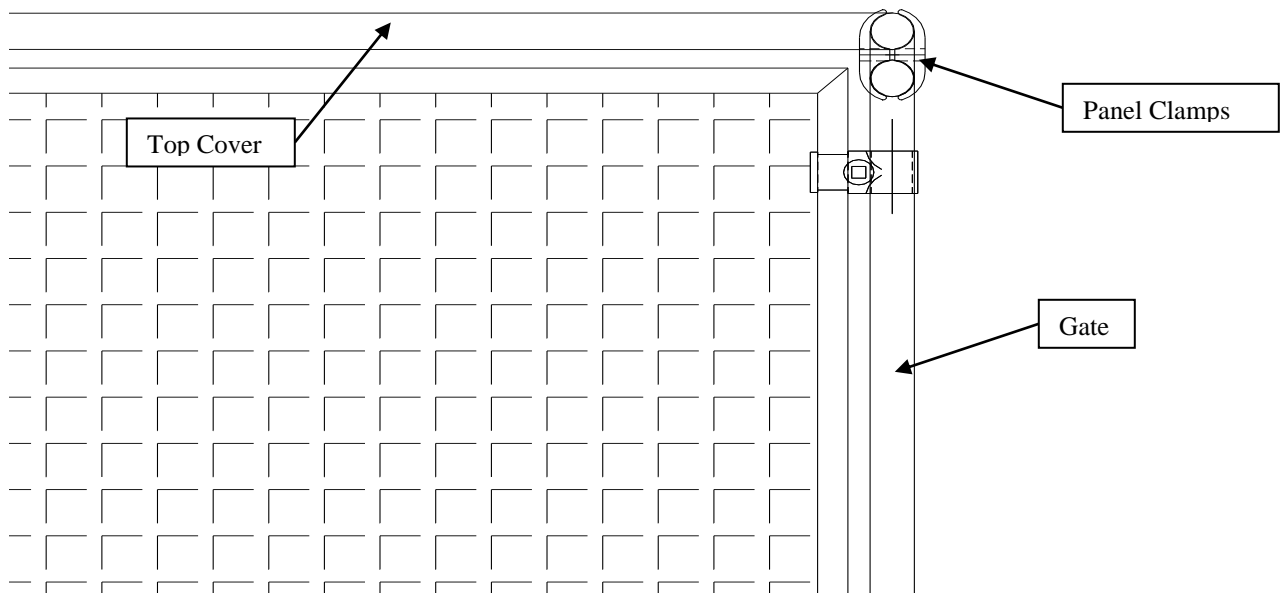


Figure 18.

4. Set rest benches in place if equipped.

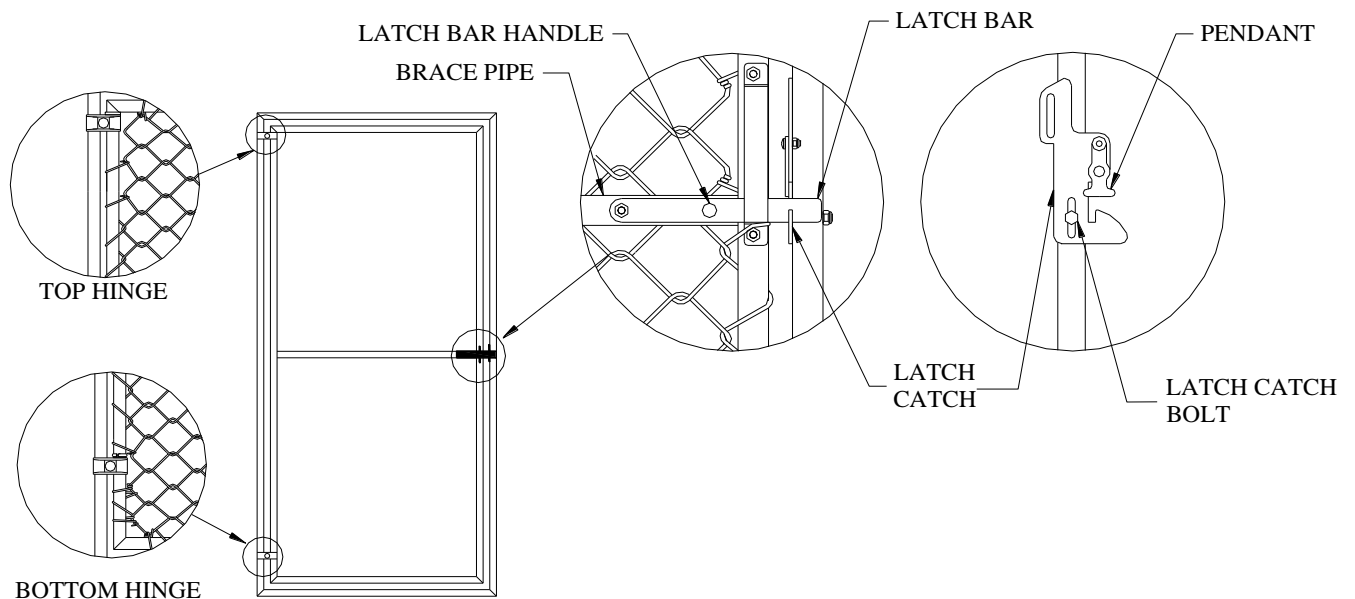
## Section L Gate / Stall Front Adjustment

During shipment and installation, gate assemblies may be forced out of adjustment. If your gate does not latch automatically when pushed closed, the latch can be adjusted by following these instructions.

### **Chainlink Gate / Stall Front** (Reference Figure 19)

During the following adjustment process you may need to move the wire mesh slightly. To do so, use a small block of wood and hammer to tap the wire out of the way.

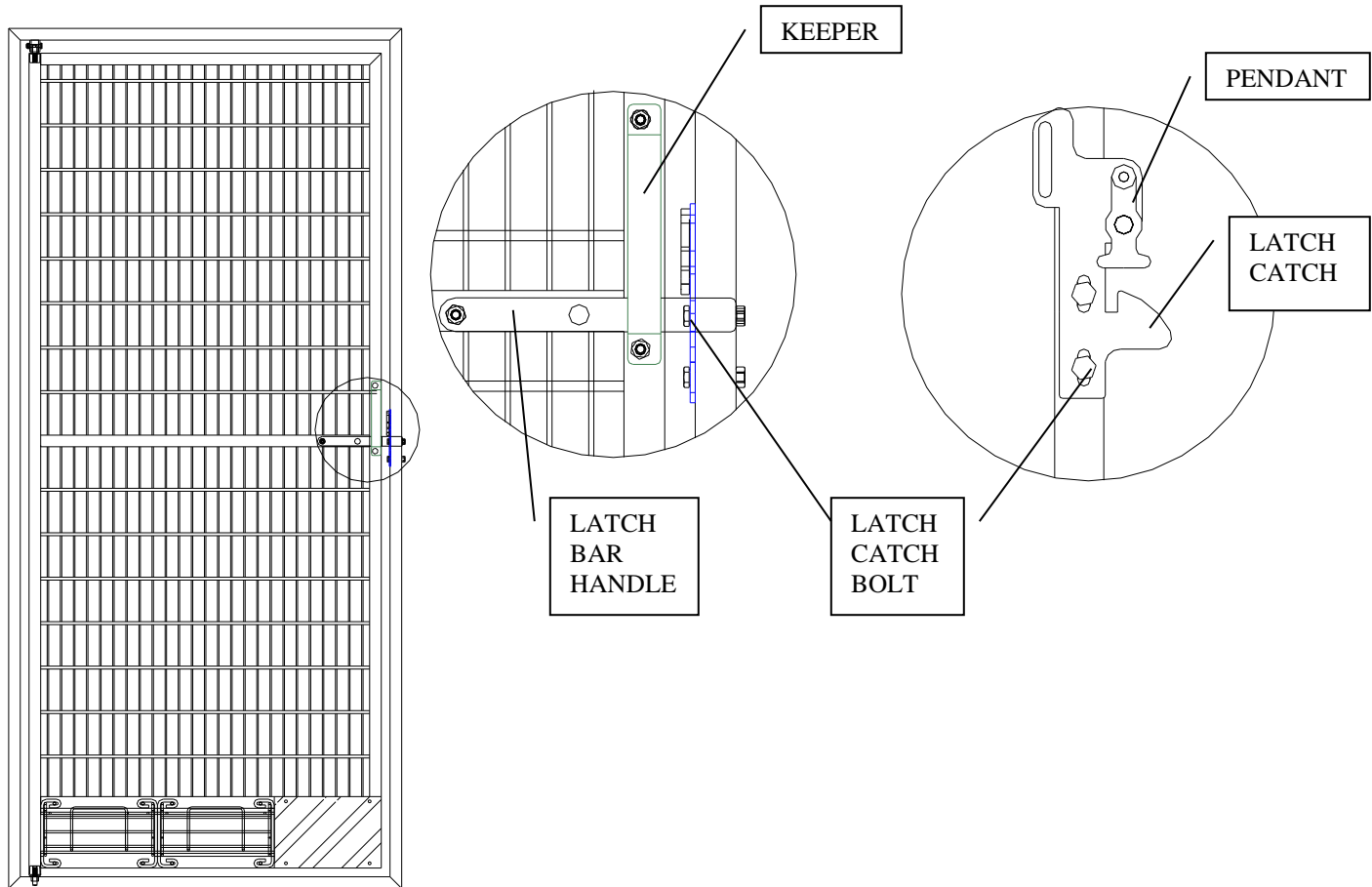
1. Loosen the latch catch bolt just enough to allow the latch catch to slide up and down.
2. Tap the latch catch up or down until the inside latch bar handle rests on the horizontal brace pipe and the latch bar rests in the bottom of the latch catch.
3. Check to insure the pendant swings freely. If it catches on the latch catch bolt or you've run out of adjustment in the latch catch slot you may have to raise the gate inside of its frame.
4. If the gate needs to be moved, loosen the top and bottom hinge bolts and raise (or lower) both the gate and the top hinge as needed then tighten both hinge bolts.
5. Re-adjust the latch catch bolt.
6. Tighten latch catch bolt.



**Figure 19.**

**Stainless Steel Gate / Stall Front** (Reference Figure 20)

1. Loosen the latch catch bolts just enough to allow the latch catch to slide up and down.
2. Tap the latch catch up or down until the inside latch bar handle rests on the inside of the keeper and the latch bar rests in the bottom of the latch catch.
3. Tighten latch catch bolts.



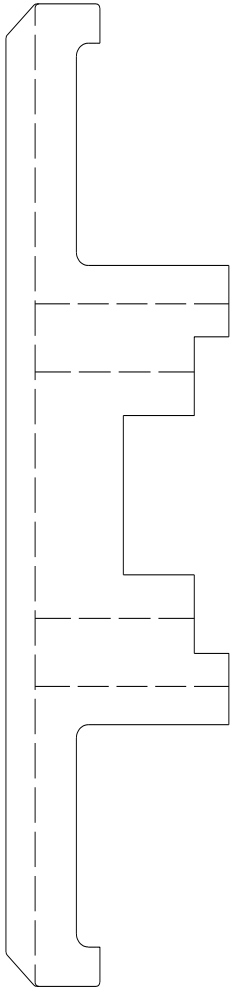
**Figure 20.**

**Maintenance**

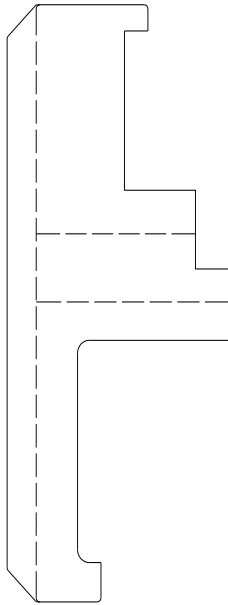
Over time, your Mason kennels might require adjustments, lubrication, or replacement parts in order to remain in top working condition. We recommend a yearly maintenance schedule to lubricate door hinges, adjust gate locks and any other moving parts. A standard industrial grease works well. If your kennels should need any replacement parts, our professional sales engineers will be happy to review your original order and assist you.

TRIPLE CLAMP - 1"

#3120

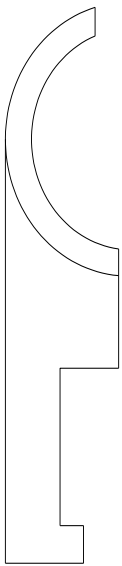
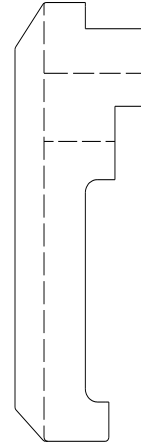


DOUBLE SQUARE  
CLAMP - 1" #3119

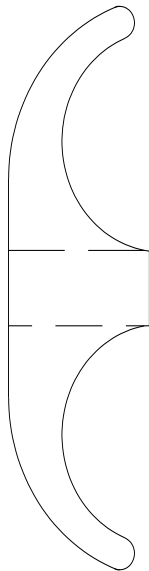


SINGLE CLAMP - 1"

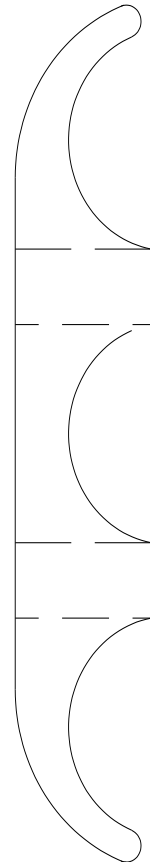
#3118



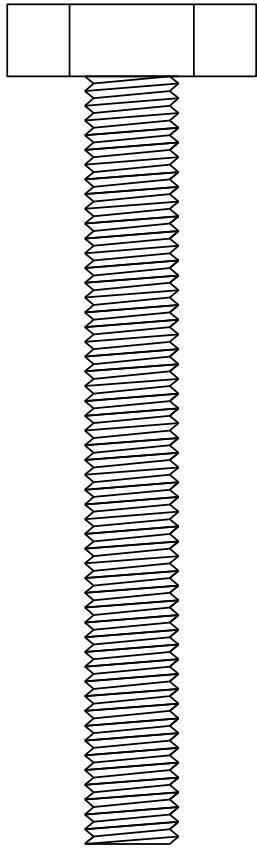
SQUARE TO  
ROUND CLAMP  
#1468



PANEL CLAMP  
#330



TRIPLE CLAMP  
#328

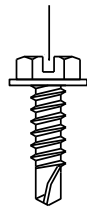


1/2-13 HEX LEVELER LEG  
ID# 1465

#12 X 1" SELF TAPPING  
SCREW HEX HEAD  
PART # 891



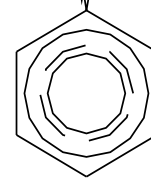
#10 X 5/8" TEK HEX  
WASHER HEAD SST  
PART # 2222



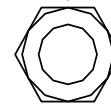
1/4-20 X 1" HHCS.  
PART # 366



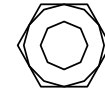
1/2-13 NUT  
PART # 430



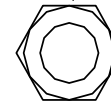
5/16-18 NUT  
PART # 423



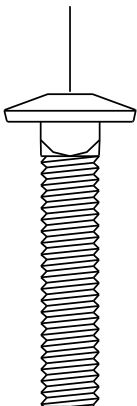
1/4-20 NUT  
PART # 422



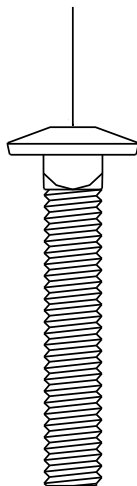
5/16-18 NUT  
STAINLESS STEEL  
PART # 424



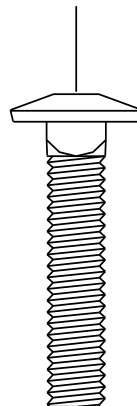
5/16" X 1-1/2"  
GALVANIZED  
CARRIAGE BOLT  
PART # 356



5/16" X 1-3/4"  
GALVANIZED  
CARRIAGE BOLT  
PART # 357



5/16" X 1-1/2"  
STAINLESS STEEL  
CARRIAGE BOLT  
PART # 1955



5/16" X 1-3/4"  
STAINLESS STEEL  
CARRIAGE BOLT  
PART # 357

