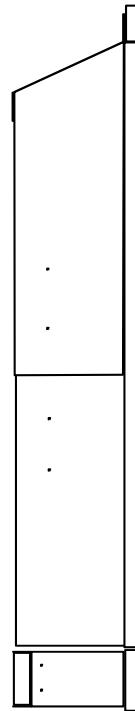




# Turbo-Cool™ Stand-Off Kit Installation Instruction Manual

(supplement to MV1644, Turbo-Cool™ System Instruction Manual)

All warranties and safety issues are covered in the Base Manual, part number MV1644; Turbo-Cool™ System Installation manual.



MV1609-109 6/99

## Planning Information



1. Know the length of the Pad system (5' increments).
2. If installed, remove the existing inlet curtain from the wall.
3. Check the building grade/slope. The maximum allowable slope is 1-1/2" per pad system.

**Note:** When working with an existing structure it may require additional planning to the recommendations in this supplement.

# Recommended Framing and Installation

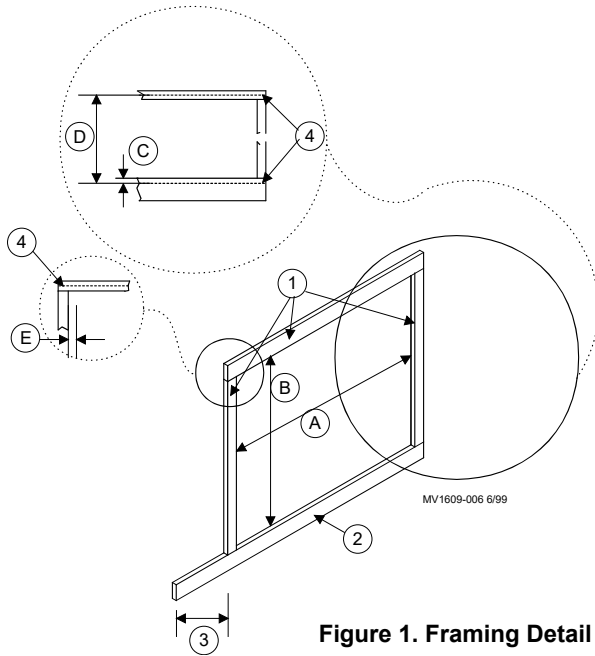


Figure 1. Framing Detail

Pad Height	A.	B.	C.	D.	E.
36"	Pad Length + 2-1/8"	43"	9/16"	44-3/4"	1-1/16"
48"		55"		56-3/4"	
60"		67"		68-3/4"	
72"		79"		80-3/4"	

1. Install 2 x 4 and 2 x 6 framing to building according to Table Dimensions.
2. Snap a chalk line on the bottom 2 x 6 **Figure 1-Item C**, 9/16" from the top edge going downward.
3. Measure upward from the chalk line on bottom 2 x 6 using the measurement according to **Table 1,-Item D**, then snap a chalk line.

1	2 x 4 Treated (optional 2 x 6)
2	2 x 6 Treated-Optional 2 x 8 Treated
3	Approximately 20" overhang on sump end.
4	Chalkline

**Important!** Secure the bottom 2 x 6 with lag bolts or proper concrete studs. All 2 x 4s are to be secured with screws (not provided). Do NOT secure the lumber with nails!

Install bottom mounting 2 x 6 approximately 3" below the curtain opening to allow for an adequate seal between the curtain and the building.

Once framing is completed, install the Inlet Curtain.

**Note:** It is recommended to pull the curtain up to assure the Tunnel Inlet is fully open.

## Top Covers



Figure 2. Top Cover

Install top covers to framing.

Start first cover from sump end. Align holes in top cover as shown in **Figure 1, Dim E**.

Aligned on the chalk line 1-1/16" from inside edge of side 2 x 4, then mount cover to top 2 x 4.

## End Panels

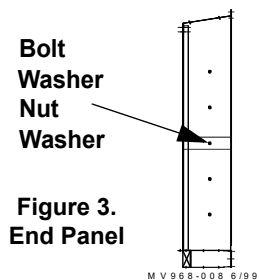


Figure 3. End Panel

1. Put the End Panels together using 1/4-20 hardware supplied. Be sure to adjust for proper height of system. (End panels for 48", 60" and 72" are adjustable. The 36" systems have one piece End Panels.)

2. Install the End Panel to the Top Cover using 1/4-20 hardware.

3. Level end panel and lag to 2 x 4.

# Bottom Brackets

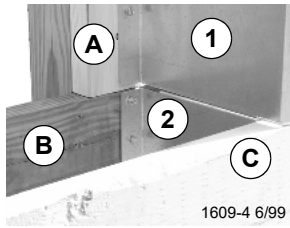


Figure 4. Sump End

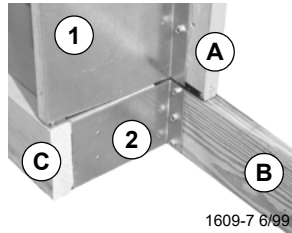


Figure 5. Non-Sump End

Part Description	
1	End Panel
2	Bottom End Bracket (to be reversed on non-sump end.)
A	Side 2 x 4
B	2 x 6 Mounting Board
C	2 x 6 Trough Mounting Board

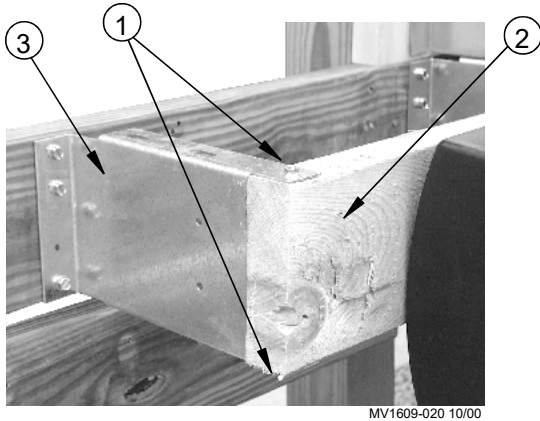


Figure 7. Bottom Bracket Connection

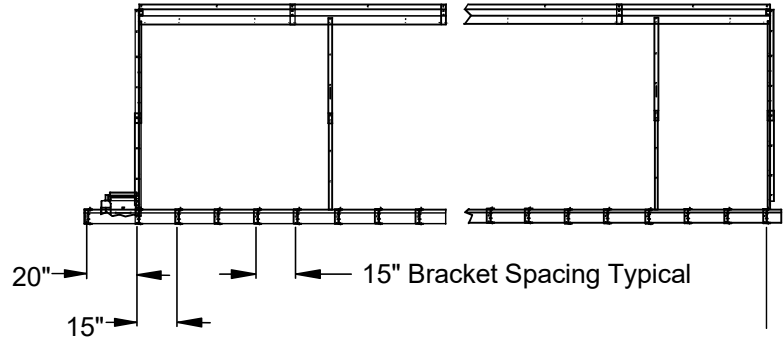
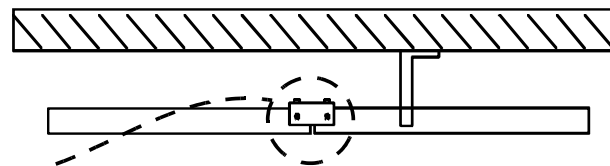
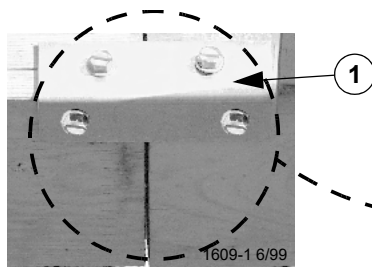


Figure 6. Bottom Bracket Spacing.

Lag Bolt Placement	Part No.	
1	Lag Bolt top and bottom	41561
2	Trough Mounting 2 x 6	
3	Bottom Bracket	43831

**Important!** Put lag bolt in the top and the bottom of the Bottom Bracket, as shown in Figure 7.

1. First Install Bottom Bracket on sump end, by aligning the Bottom Bracket with side panels, see **Figure 4**.
2. Bottom Bracket should align with chalkline, see **Figure 1, Dim C**.
3. Install Bottom Brackets every 15" except for non-sump end, shown in **Figure 6**.
4. Reverse the Bottom Bracket at the non-sump end and mount as shown in **Figure 5**.
5. Install trough mounting 2 x 6's the full length of system using Lag Screws provided, shown in **Figure 7**. Use 2X Connecting Brackets (**Item 1, Figure 8**) to join the 2 x 6s together.

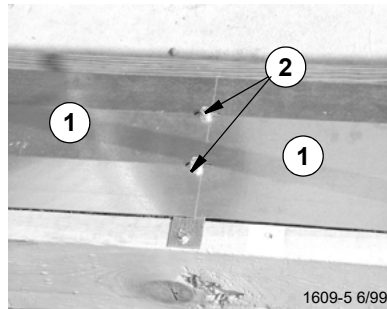


Lag Bolt Placement	Part No.	
1	2X Connector Bracket	44379

Figure 8. Connect 2 x 6's with 2X Connector Brackets

# Bottom Covers

1. Install Bottom Cover Plates with 1/4-20 hardware supplied.
2. Ribs of Bottom Cover to be coned up. Shown in **Figure 9**.
3. Center, Bottom Covers from bracket to bracket.



Bottom Covers		Part No.
1	Overlapped Bottom Covers	43833
2	Bolt Overlapped pieces together	

**Figure 9. Bottom Cover Installation**

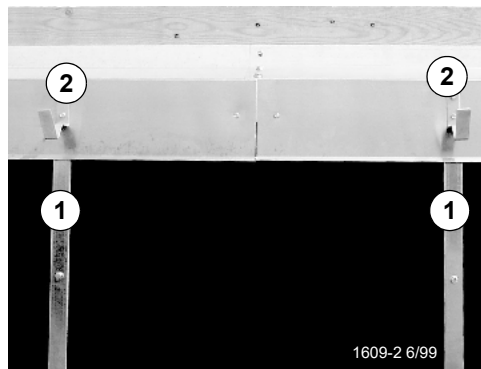
# Support Braces

Put Support Braces together using 1/4-20 hardware. Be sure to adjust Support Braces for proper height of system 36; 48-60-72.

The Support Braces are to be installed with self tapping screws, (supplied with kit), behind the splash plates and pipe hangers, as shown in **Figure 10**.

Lag bolt the bottom of the Support Brace to the trough mounting 2 x 6.

**Note: Install braces every 60" at every other pipe hanger**



Support Brace Placement		Part No.
1	Support Braces	43834
2	Pipe Hangers	43884

**Figure 10. Close-up View of Support Brace Installation**

**Note: All splash plates, end panels, and pipe hangers are to be fastened with self tapping screws provided with the Stand Off Kit.**

## Extension Kit Part Numbers

If extending a Turbo-Cool™ System use the appropriate Stand-off Kits to achieve the length needed along with the appropriate end Kit. See the following for Kit part numbers.

### Kits for 3' Turbo-Cool™ Stand-off

End Kit (44377)	
Description	Part No.
36" LH Turbo-Cool Panel	44380-1
36" RH Turbo-Cool Panel	44380-2
Bottom Bracket	43831
Hardware Package	44378

5' Extension Kit (44398)	
Description	Part No.
Bottom Cover Plate	43833
Top Cover Bracket	43832
Bottom Bracket	43831
Support Spacing Brace	44389
2X Connecting Bracket	44379
Hardware Package	44014

20' Extension Kit (44397)	
Description	Part No.
Bottom Cover Plate	43833
Top Cover Bracket	43832
Bottom Bracket	43831
Support Spacing Brace	44389
Hardware Package	44381

### Kits for 4',5',and 6' Turbo-Cool™ Stand-off

End Kit (43999)	
Description	Part No.
Upper LH Turbo-Cool Panel	43836-1
Lower LH Turbo-Cool Panel	43837-1
Upper RH Turbo-Cool Panel	43836-2
Lower RH Turbo-Cool Panel	43837-2
Bottom Bracket	43831
Hardware Package	44012

5' Extension Kit (44001)	
Description	Part No.
Bottom Cover Plate	43833
Top Cover Bracket	43832
Bottom Bracket	43831
Support Spacing Brace	43834
Support Spacing Brace	43884
Hardware Package	44014
2X Connecting Bracket	44379

20' Extension Kit (44298)	
Description	Part No.
Bottom Cover Plate	43833
Top Cover Bracket	43832
Bottom Bracket	43831
Support Spacing Brace	43834
Support Spacing Brace	43884
Hardware Package	44381



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**Revisions to this Manual**

<b>Page No.</b>	<b>Description of Change</b>
5	Added Kit Part Numbers
Various	Added Part numbers to Bom's

Contact your nearby Chore-Time distributor or representative for additional parts and information.

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