MGR, MGI Modular Gravity Hood
(throat sizes 72" & smaller)

IM-4720NFS

August 2013

INSTALLATION, OPERATION & MAINTENANCE MANUAL

TCF — TWIN CITY FAN

See Catalog 4720 for sizes that ship assembled.

Qty	Hardware Kit #1A
	Item
24	Cap Screw, Serrated Flange, 1/4-20 x 5/8"
24	Hex Nut, Serrated Flange, 1/4-20

Qty	Hardware Kit #1C
	Item
4	Doubler Plates
4	Cap Screw, Serrated Flange, 5/16-18 x 3/4"
4	Hex Nut, Serrated Flange, 5/16-18

Note: Not always required.

Qty	Hardware Kit #2
	Item
16	Nut Clip - 1/4-20
24	Cap Screw, Serrated Flange, 1/4-20 x 1"
8	Hex Nut, 1/4-20

Qty	Hardware Kit #3
	Item
8	Cap Screw, Serrated Flange, 5/16-18 x 3/4"
8	Hex Nut, Serrated Flange, 5/16-18

Qty	Hardware Kit #4A
	Item
40	Screws, #12 x 3/8"

Qty	Hardware Kit #5
	Item
A/R	Hood Clips (Only for hood panels longer than 108")

Figure 1.

Hood Panel

Hood End Panel Assembly (Female Rib)

Hood End Panel Assembly (Male Rib)

Hood Rail Assy

Bird Screen Assy Fixed

Base Assy

Bird Screen Assy Removable

Hood Support Angle
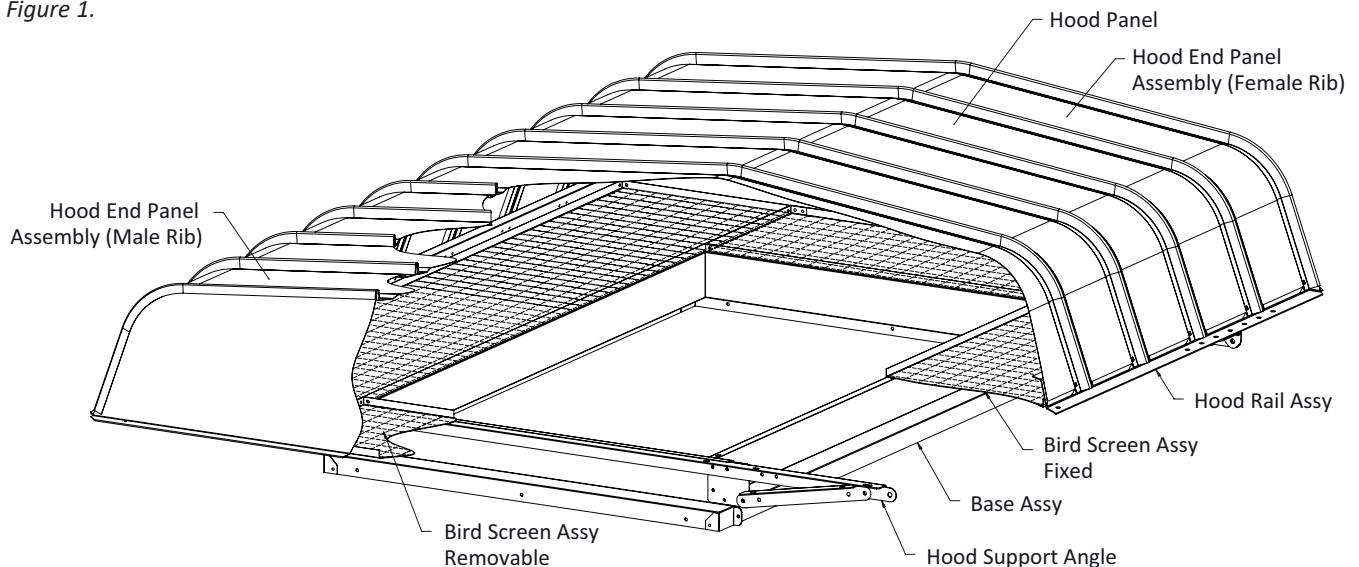
Step 1 – Base Assembly

Fasteners (Kit #1A and #1C) – **Note: There may be extra fasteners.**

Lay out the **Curb Cap Side** and **Curb Cap End** in approximate location to each other. See Figure 2. Use (3) 1/4-20 fasteners for 5" base height and (4) 1/4-20 fasteners for 12" base height. Leave top two holes open on the **Base End**. Note: Hand tighten only until Step 3. On some hoods, a **Doubler Plate** is required. See Detail A in Figure 2.

Figure 2.

Screw
Curb Cap Side
Curb Cap End
Hex Nut

Doubler Plate

DETAIL A
* When Kit 1C provided.
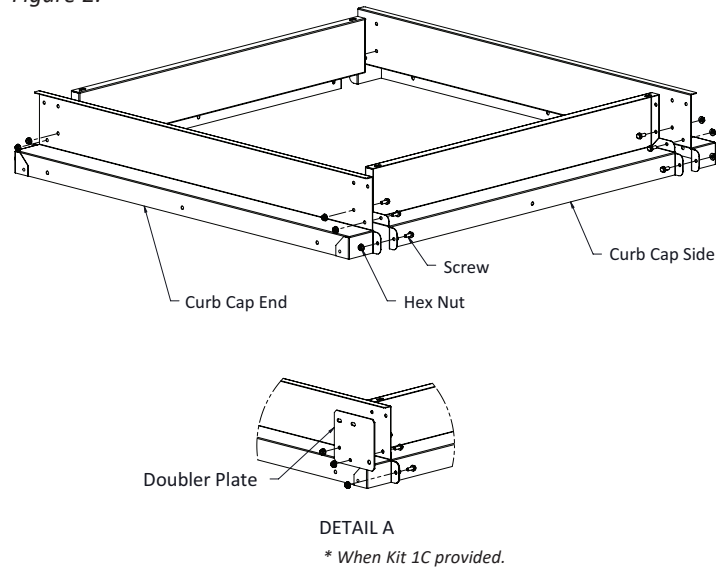
Step 2 – Hood Mount Bars

Fasteners (Kit #1A and #1C)

Loosely assemble **Hood Mount Bars** on both sides of the **Curb Cap Ends** using (4) 1/4-20 fasteners per side. On hoods using a **Doubler Plate**, mount **Brace** using 5/16-18 hardware. See Figure 3b.
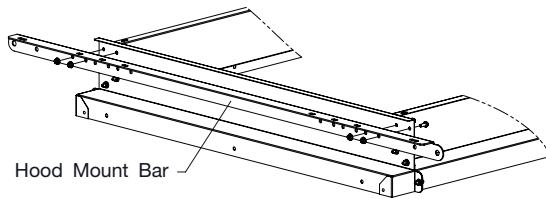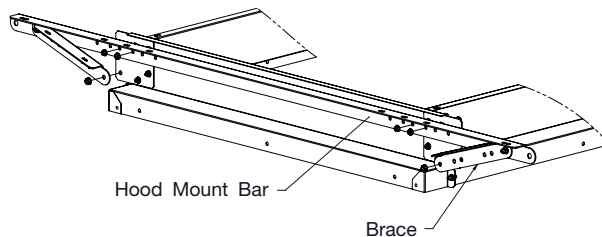
Figure 3a.

Hood Mount Bar

Figure 3b.

Hood Mount Bar
Brace

Step 3 – Caulk

Caulk inside corners of base assembly and tighten all fasteners. Install assembly onto roof curb before proceeding. Ensure that assembly is properly anchored to roof curb.

Step 4 – Bird Screen

Fasteners (Kit #2) – **Note: There may be extra fasteners.**

Install nut clips onto Hood Mount Bars as shown. Center Fixed Bird Screen on assembly with equal overhang on both sides. Attach using (4) 1/4-20 x 3/4" fasteners per bird screen as shown.
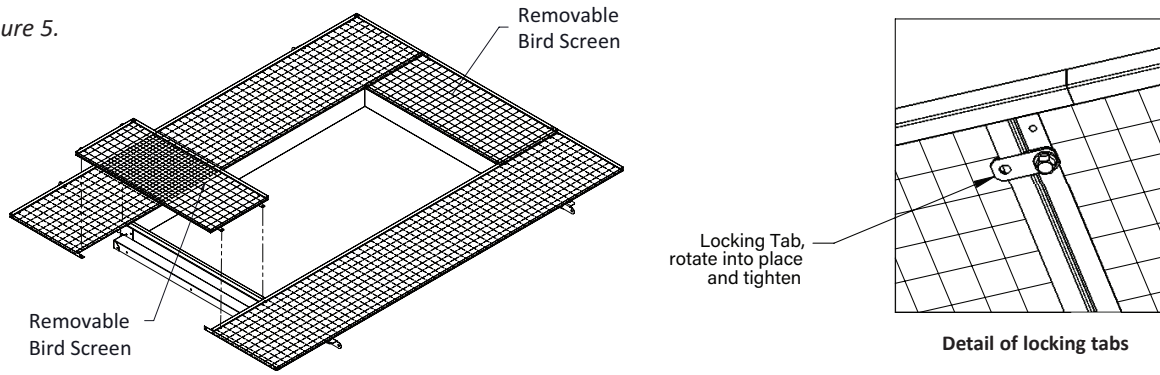
Figure 4.

Screw
Nut Clip
Hood Mount Bar
Extension Tab
Fixed Bird Screen
Overhang
Overhang
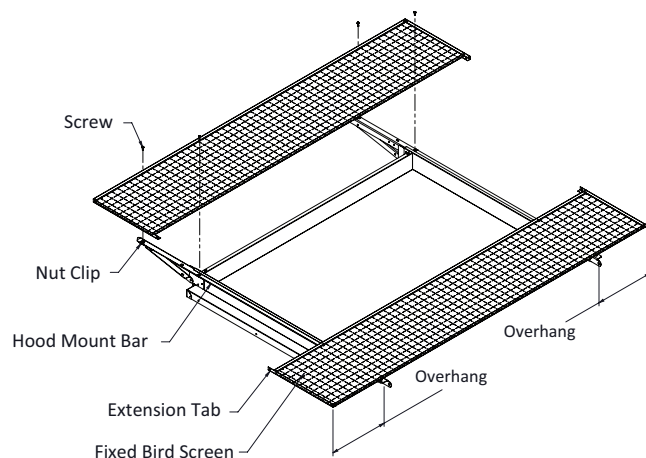
Step 4 – Bird Screen (Continued)

Install two **Removable Bird Screens**. After positioning the assemblies, rotate the locking tabs in place and tighten.

Figure 5.

Removable Bird Screen

Removable Bird Screen

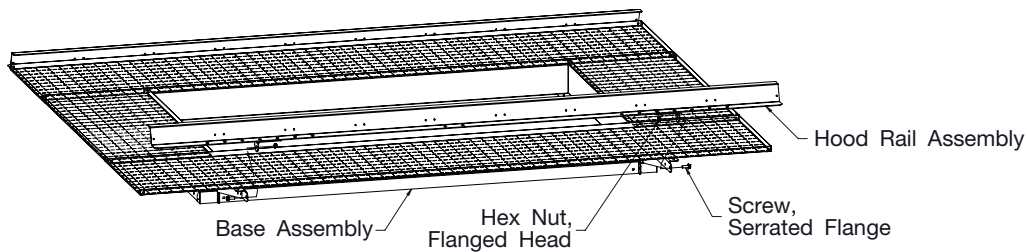Locking Tab, rotate into place and tighten

Detail of locking tabs

Step 5 – Hood Rails

Fasteners (Kit #3) – **Note: There may be extra fasteners.**

Install two **Hood Rail Assemblies** to the Hood Mount Bars using cap screws and nuts. Do not fully tighten fasteners. They will be tightened in Step 8.

Figure 6.

Hood Rail Assembly

Base Assembly

Hex Nut, Flanged Head

Screw, Serrated Flange

Step 6 – Hood End Panel

Fasteners (Kit #4A and #5) – **Note: There may be extra fasteners.**

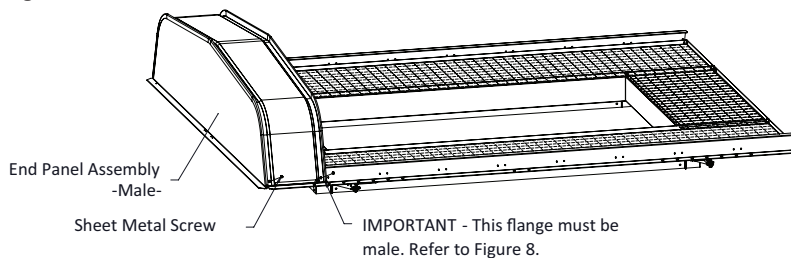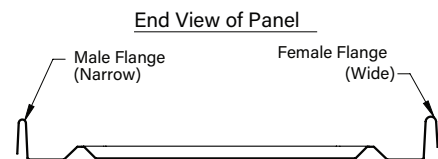Install **Male End Panel Assembly** using #12 screws.

Figure 7.

End Panel Assembly -Male-

Sheet Metal Screw

IMPORTANT - This flange must be male. Refer to Figure 8.

Figure 8.

End View of Panel

Male Flange (Narrow)

Female Flange (Wide)

Step 7 – Hood Panels

Fasteners (Kit #4A and #5)

Install **Hood Panels** using #12 screws. Place female end of next panel over male end of end panel. See Detail A. On sizes where hood width is 108" and larger, hood clips must be installed at each interlocking rib while installing the panels. Position the **Hood Panel** in place and reach underneath to slide the **Hood Clip** into place. See Detail B.

Figure 9.

Hood Panel

Hood Width
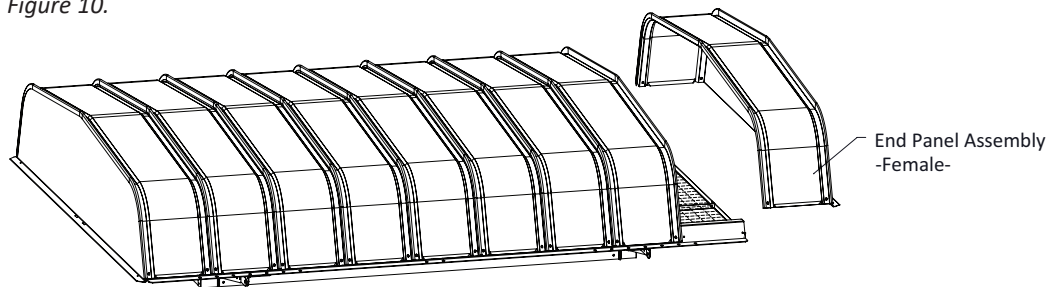
Female
Male

Female

Male
Hood Clip

DETAIL A
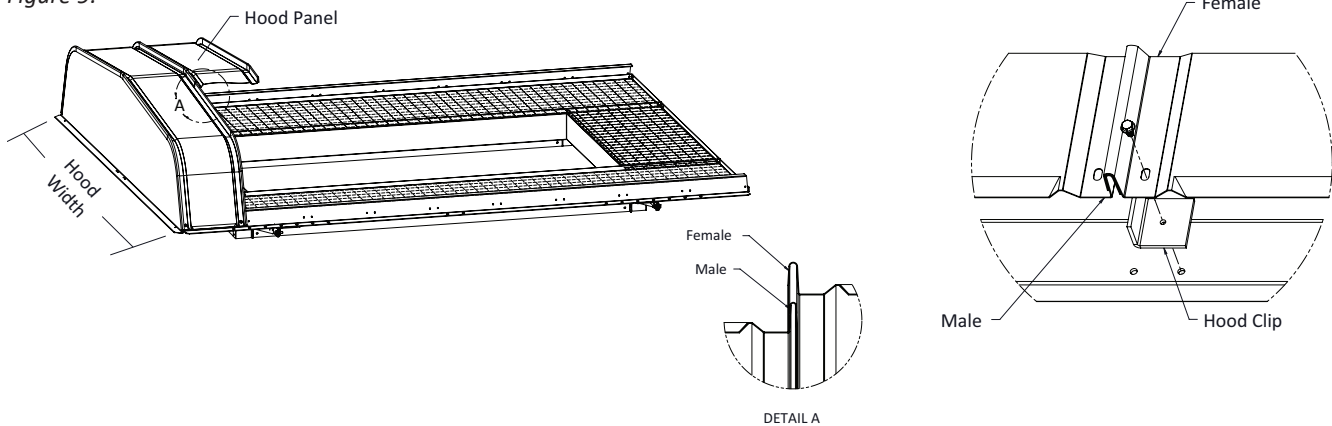
Step 8 – Hood End Panel

Fasteners (Kit #4A)

Install **Female End Panel Assembly** using #12 screws. Fully tighten the **Hood Mount Bar/Side Rail** fasteners from Step 5.
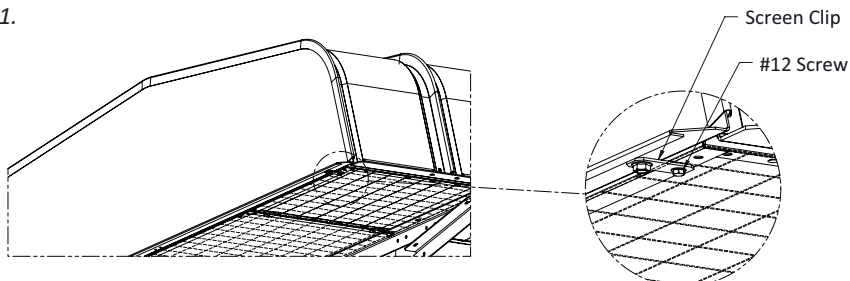
Figure 10.

End Panel Assembly
-Female-

Step 9 – Screen Clips

Rotate **Screen Clips** on **End Panel Assembly** to support the bird screen.

Figure 11.

Screen Clip

#12 Screw