

Assembly Instructions

Please read these instructions carefully before attempting to assemble the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage!

Step 1: Unpack and Inspect Parts

| Parts Description | Filtered Supply Fans | | | | | | | | | |
|--|---|----|----|----|----|----|----|----|----|----|
| | Fan Size / Quantity of Parts per Fan Size | | | | | | | | | |
| | 20 | 24 | 30 | 36 | 42 | 48 | 54 | 60 | 72 | |
| Fan / Base Assembly | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Hood Support Rail Assembly | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Outer Filter Channel | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Inner Filter Channel | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Filter End Channel | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 |
| Filter Retaining Angle | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| End Filter Angle | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| End Filters | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 6 |
| Side Filters | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 10 | 10 |
| Hood Rails | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Hood Enclosure Panels - 1 male and 1 female panel | 4 | 5 | 7 | 7 | 8 | 9 | 10 | 11 | 12 | |
| Hood Clips for sizes 48 - 72 | - | - | - | - | - | 16 | 18 | 20 | 22 | |

Shaded sizes will always ship fully assembled unless otherwise specified.

Tools required to assemble fans:

- Drill, Electric or pneumatic preferred.
- 3/8", 7/16", 1/2", and 9/16" wrenches and sockets
- 5/16" nut runner bit for drill
- Rubber mallet
- Awl for hole alignment

Each fan that is shipped knocked down has the following hardware package PN 816529 containing:

Part Number 816529 - Hardware Package includes

Part Number 816526 - Hood Support Fasteners

- (16) 3/8" - 16 x 3/4" Spinlock Bolts
- (12) 3/8" - 16 Spinlock Nuts

Part Number 816527 - Hood Fasteners

- (75) #12 x 3/8" Sheet Metal Screws with Washer
- (4) 3/8" - 16 x 1-1/2" Spinlock Bolts
- (4) 3/8" - 16 Spinlock Nuts

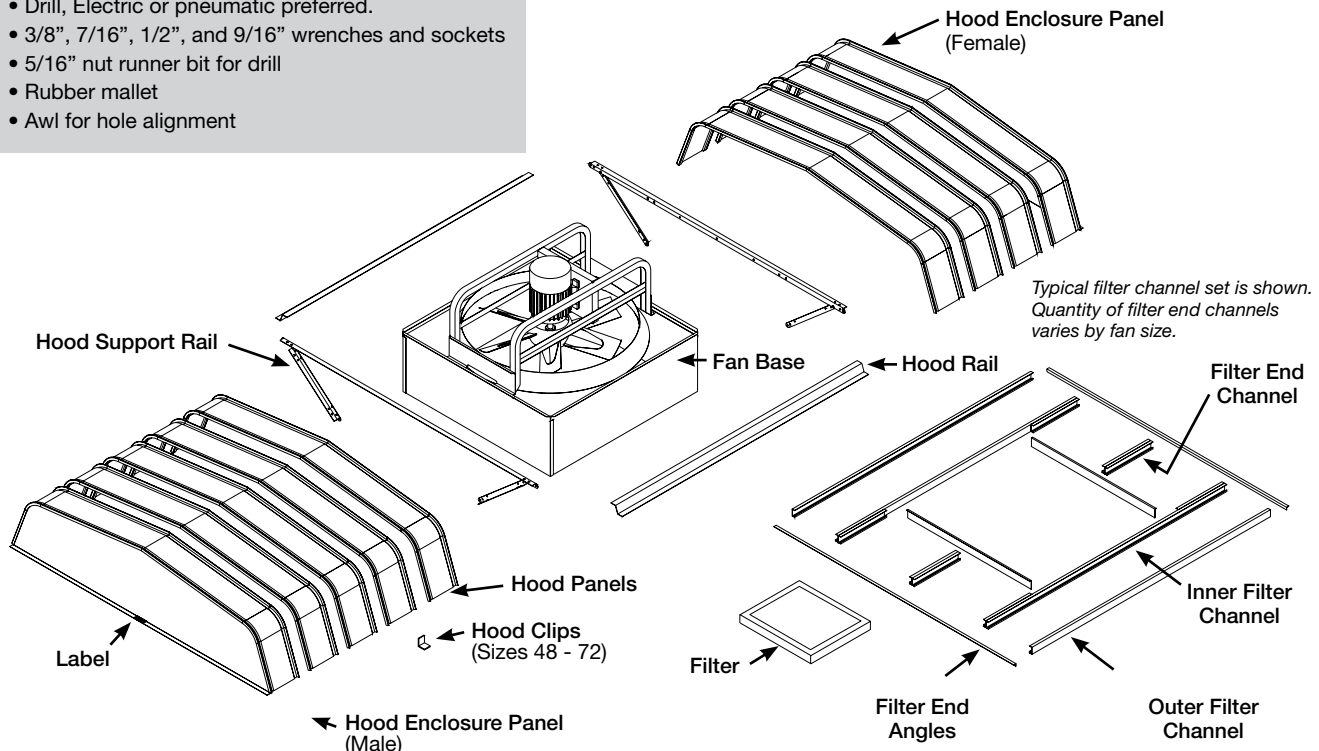
Part Number 816528 - Birdscreen / Filter Fasteners

- (26) 5/16" - 18 x 3/4" Weld Stud Bolts
- (26) 5/16" - 18 Spinlock Nuts

Note: Hardware package is designed for the filtered 72 inch fan. When used on smaller sizes, there will be some fasteners left over.

IMPORTANT

It is recommended that a two man crew minimum be used for fan/hood assembly.



Step 2: Fasten Hood Support Rails

Hardware Required:

Hardware Package Part Number 816526
3/8" - 16 x 3/4" hex head spinlock bolts & nuts

Quantity:

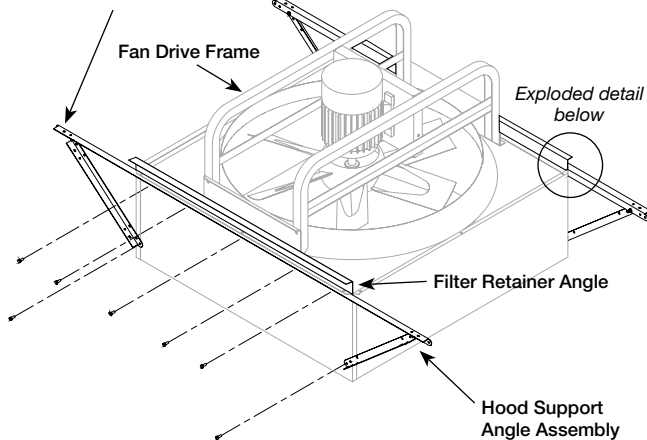
Up to (8) fasteners per side for 72 inch fans; less required for smaller sizes.

Instructions:

The bolts that fasten the fan panel to the base will also be used to secure the hood support rails and filter retaining angles. (see Detail 2).

- A. Remove the 3/8" - 16 x 3/4" bolts from ONE SIDE of the fan panel (up to six bolts for size 72).
- B. Assemble the parts and **wrench tighten** the hood support rails and filter retaining angles perpendicular to fan drive frame as shown. Mounting holes in fan base will line up with holes in hood support rails and filter retaining angles.
- C. Repeat for opposite side.

Hood support rails perpendicular to fan drive frame



Step 3: Install Filter Channels

Hardware Required:

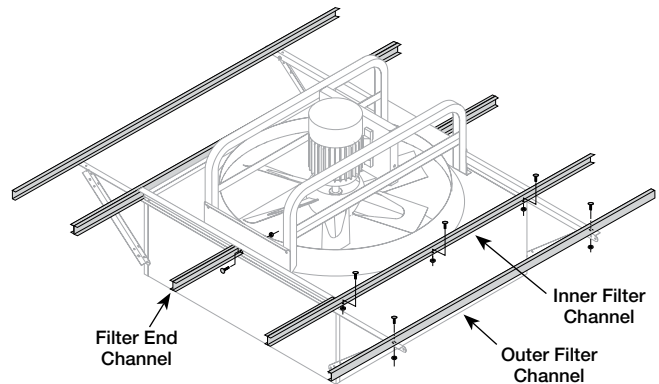
Hardware Package Part Number 816528
5/16" - 18 x 3/4" weld studs and spinlock nuts

Quantity:

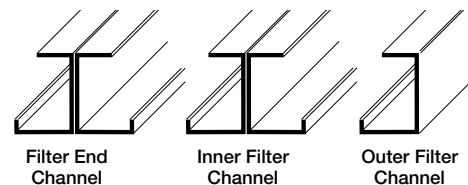
As required.

Instructions:

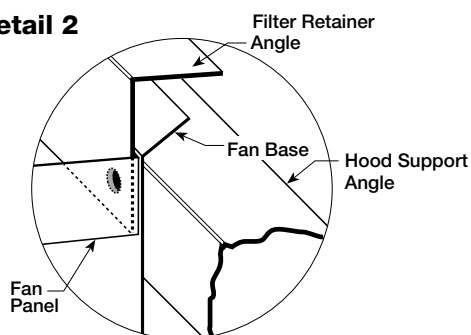
Finger tighten the channels in place as shown. Bolt hole locations as shown are typical, but larger units will have additional filter end channel sections. The detail below will help identify the correct channel and its proper orientation.



Channel End Profiles



Detail 2



Step 4: Install Filter End Angles

Hardware Required:

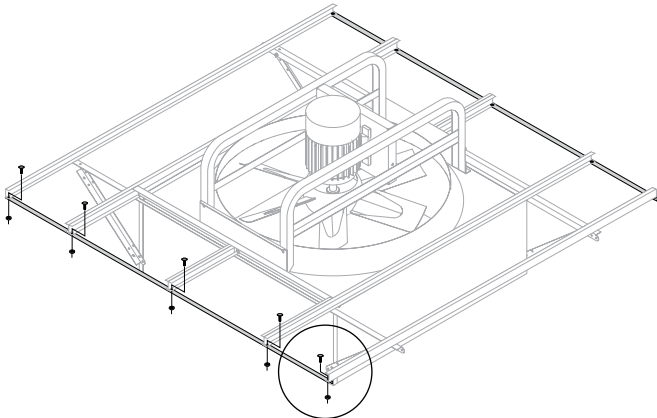
Hardware Package Part Number 816528
5/16" - 18 x 3/4" weld studs and spinlock nuts

Quantity:

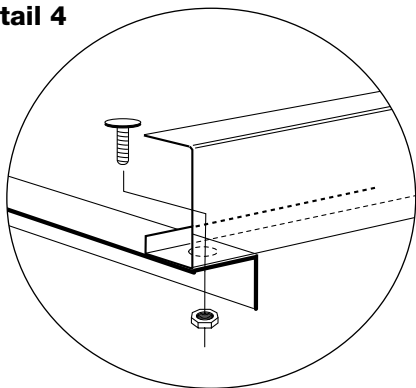
As required.

Instructions:

- A. **Finger tighten** the end angles in place as shown. Note correct position of end angle in Detail 4 with angle leg down and facing the fan base. Install on both ends.
- B. After all filter channels and end angles are bolted together, square-up assembly and **wrench tighten** all fasteners.



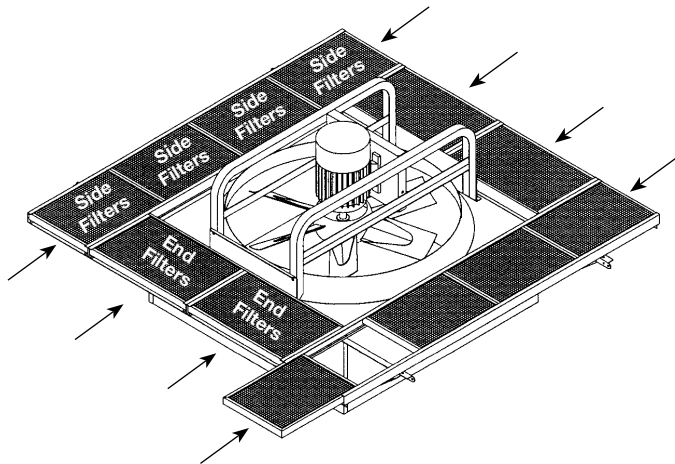
Detail 4



Step 5: Install Filters

Instructions:

Slide filters into filter channels as indicated by the arrows. No fasteners or hardware are required in this step.



Step 6: Install Hood Rails

Hardware Required:

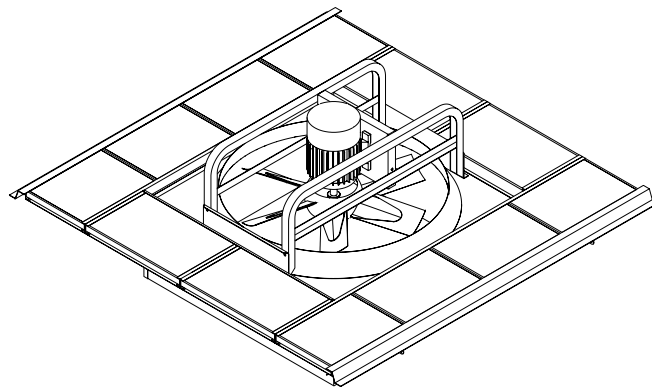
Hardware Package Part Number 816527
3/8" - 16 x 1-1/2" hex head spinlock bolts and nuts

Quantity:

4 sets

Instructions:

- A. Position the two hood rails as shown and **finger tighten** the fasteners. These fasteners will be wrench tightened in Step 7 D after the hood panels are installed and secured.



Step 7: Install Hood Panels

Hardware Required:

Hardware Package Part Number 816527
#12 x 3/8" sheet metal screws with washer

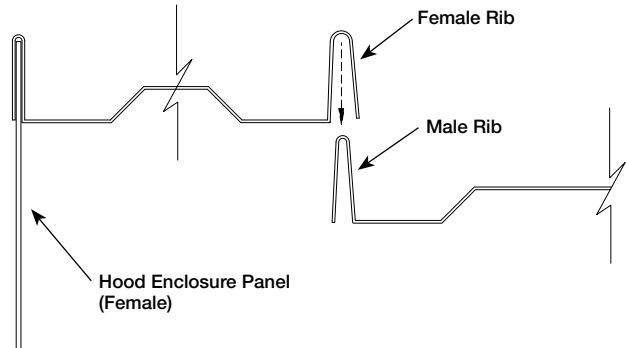
Quantity:

75 pcs. required for 72 inch fan; less required for smaller sizes.

Instructions:

- A. Locate the **male hood enclosure panel**. This panel has a label that reads: "Male hood enclosure panel. Start with this assembly first." This is the starter panel. Place this panel on the hood rails and fasten tight with four (4) screws.
- B. Install the intermediate panels one at a time. The panels have interlocking ribs (see Detail 7A). For fan sizes 48 and larger, hood clips must also be installed on each panel. Each panel is predrilled for hood clip installation (see Detail 7B). Secure each hood clip with a screw and secure each intermediate panel to the hood rails with four (4) screws.
- C. Install the **female hood enclosure panel**. Secure this panel to the hood rails with four (4) screws. To install the hood clips (sizes 48 and larger), remove the end filters prior to installing and securing the female hood enclosure panel to gain access to the underside of the hood. Reinstall the end filters after hood clips are installed.
- D. **Wrench tighten** the four (4) bolts that secure the hood rails to the hood support rails.

Detail 7A



Detail 7B

