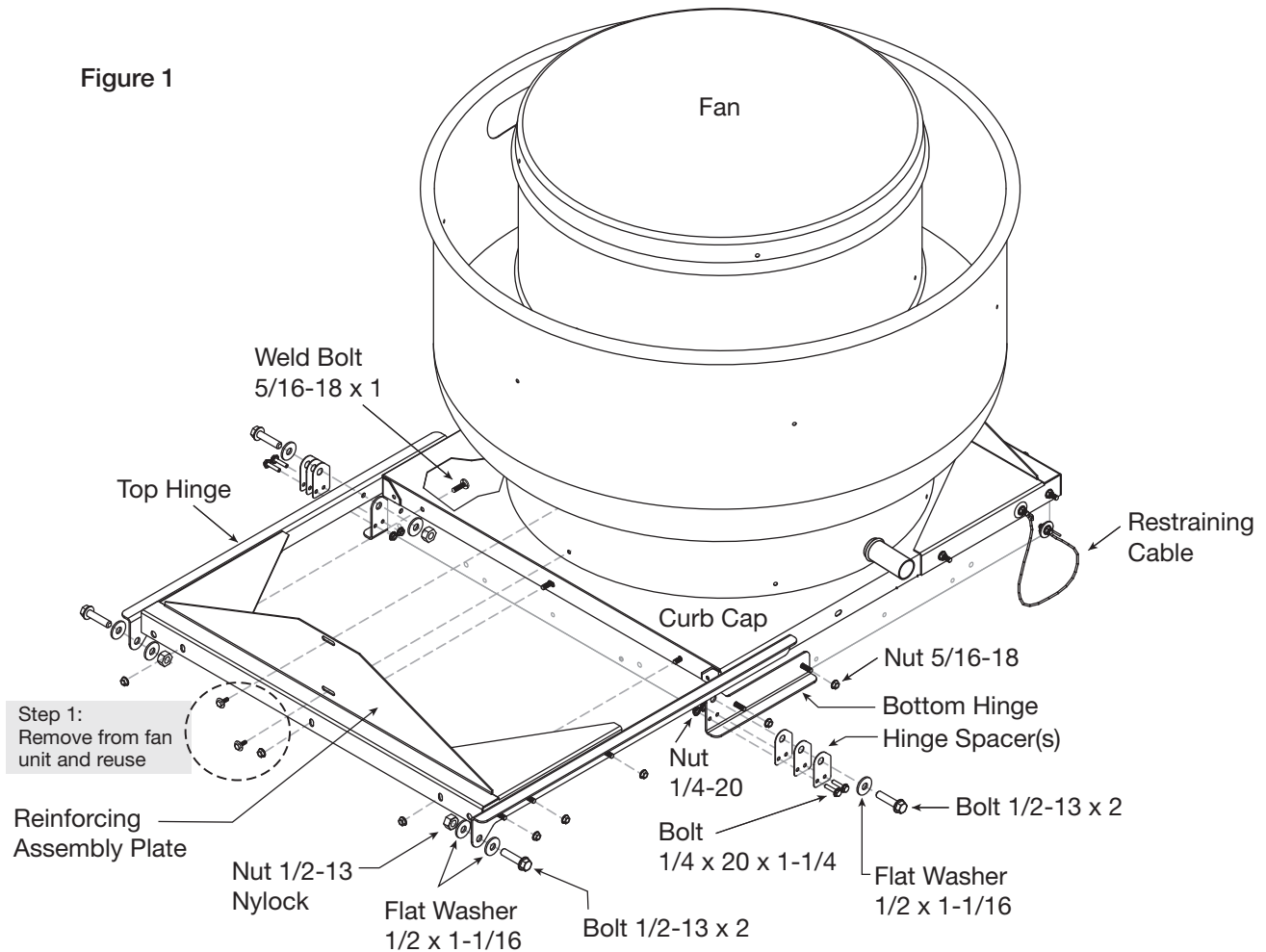


Installation, Operation and Maintenance Manual

Please read and save these instructions for future reference. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with these instructions will result in voiding of the product warranty and may result in personal injury and/or property damage.

Figure 1



WARNING

Disconnect power and observe proper lock out tag out procedures per OSHA regulation (Title 29 code of federal regulations part 1910.147 & 1910.333).

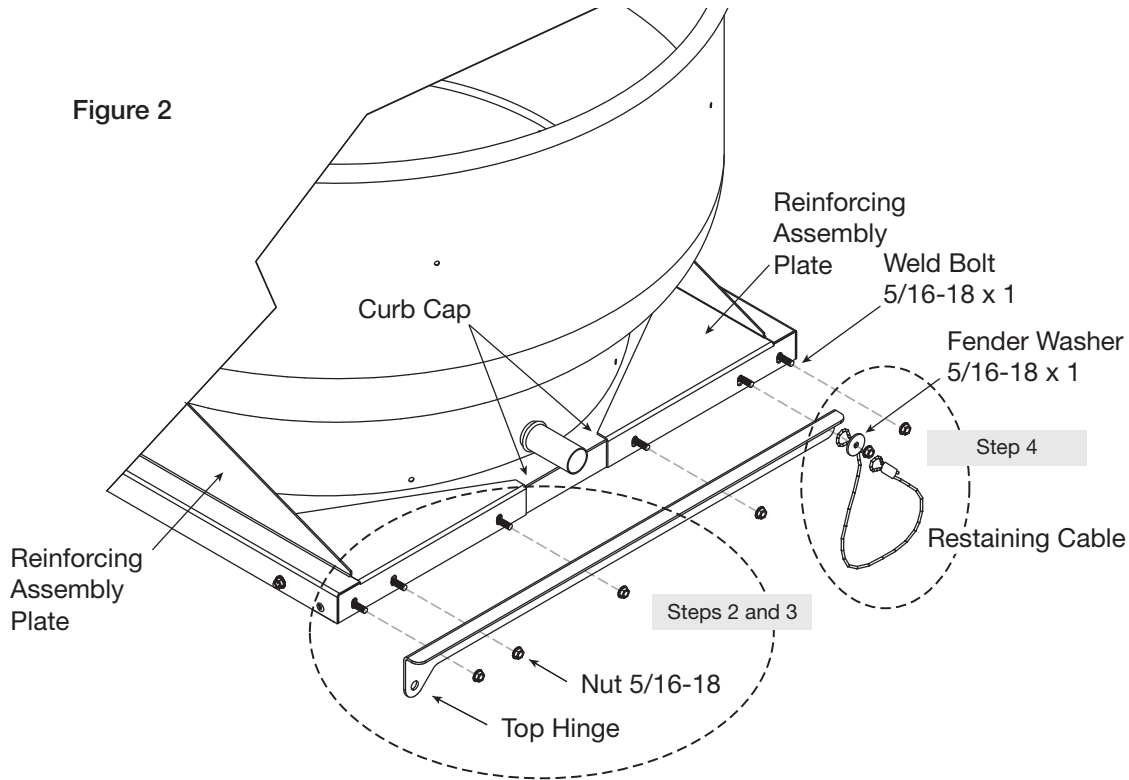
Note: If fan is connected to electrical source via rigid connection, a qualified electrician will need to change the rigid connection to a flexible connection long enough per local electrical codes to allow for fan movement.

Installation

1. Step 1, remove bolts/screws from fan unit that will be used to connect the reinforcing assembly plate. Figure 1.

If fan is currently installed on a curb, remove screws holding the cap to the curb. If this does not apply go to Step 2.

Figure 2



2. Place reinforcing assembly on the curb cap; loosely install the four screws removed in Step 1. If cap has factory holes that line up with hinge holes, go to Step 3. If cap does not have matching holes from the factory, mark the remaining hole locations for drilling. Drill a 5/16 inch hole in the curb cap at these locations.
3. Attach each top hinge and reinforcing assembly to the curb cap with 5/16 inch - 18 x 1 inch long weld-bolt screws and 5/16 inch spinlock nuts. Refer to Figure 2.

NOTE: The stop cable is installed to the top hinge under the nut furthest from the pivot point. Secure the cable with the 5/16 inch x 1-1/4 inch fender washer. Allow the opposite end to hang loose until Step 8. Figure 2

4. Set unit on roof curb or hinge base. Center curb cap on the curb or hinge base so there is equal space around the perimeter. If curb cap has a hinge base, align hold down screws with threaded holes and loosely install thumb screws. Refer to Figure 4.
5. Attach each lower hinge to the upper hinge with the 1/2 inch - 13 x 2 inch bolt, 1/2 inch washers and 1/2 inch nylock nut. Attach equal number of hinge spacers to bottom hinge with 1/4 inch - 20 x 1-1/4 inch bolts and 1/4 inch nut to take up the gap between the top and bottom hinges. THE NUMBER OF SPACERS WILL VARY FROM UNIT TO UNIT. Refer to Figure 3.

Figure 3 - Reinforcing Assembly

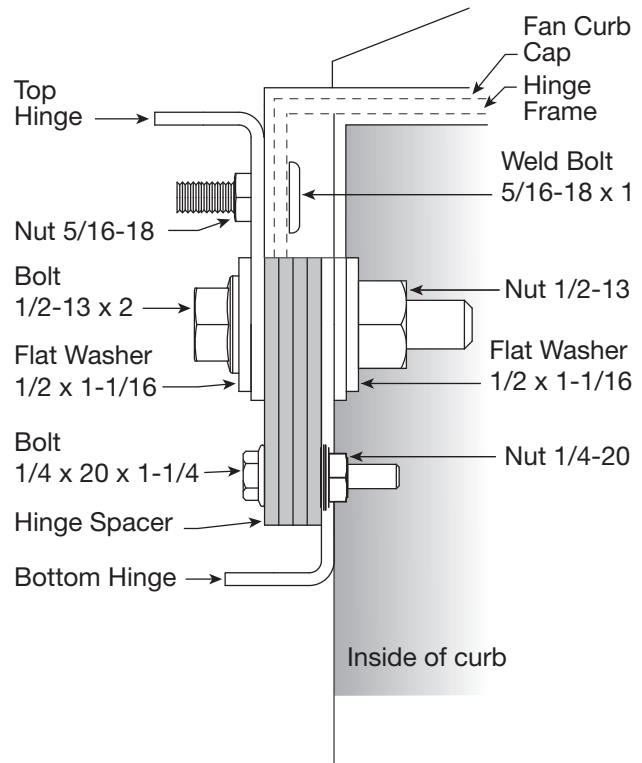
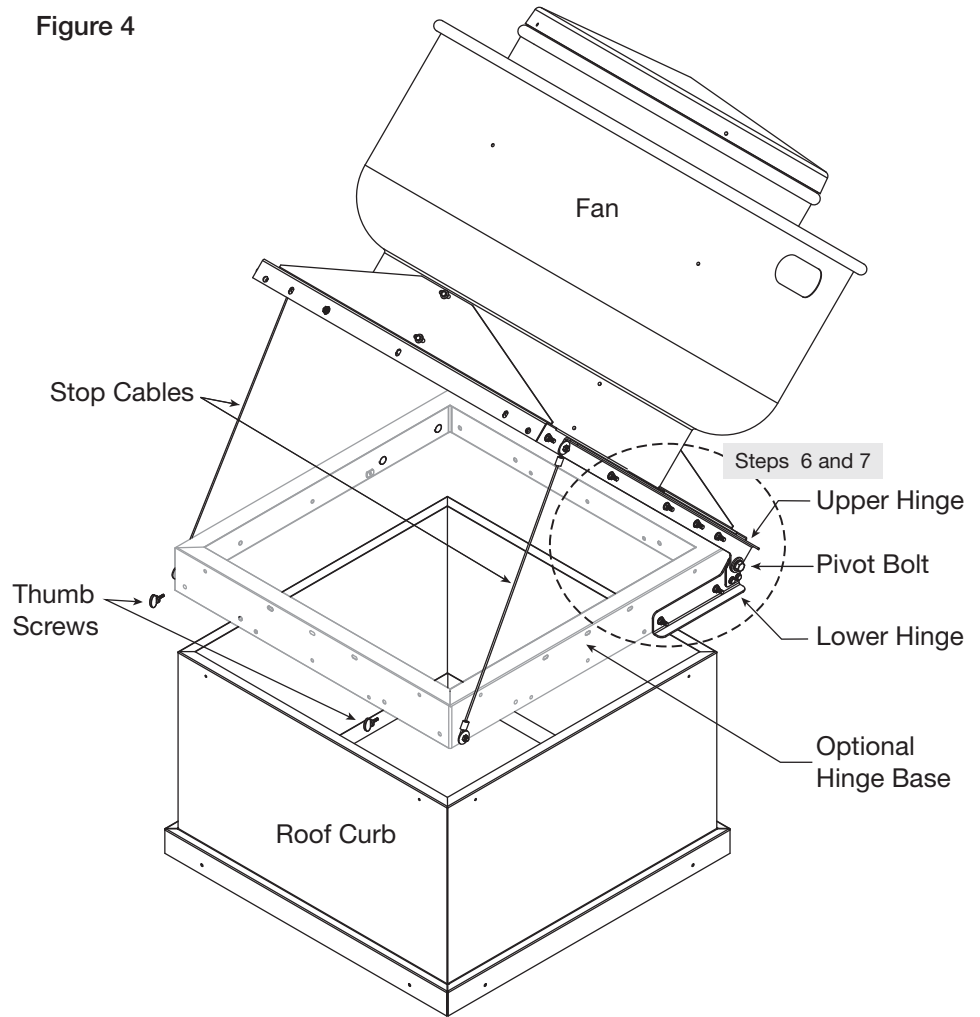


Figure 4



6. Rotate the lower hinge until parallel with the upper hinge. If cap has factory holes that line up with hinge holes, go to Step 7. If cap does not have matching holes from the factory, mark the hole locations in the curb and drill a 5/16 inch hole at each location. Reference Figure 4.

CAUTION

Roof curb or extended base should be properly attached to the roof to support the fan and curb when moved to the open position.

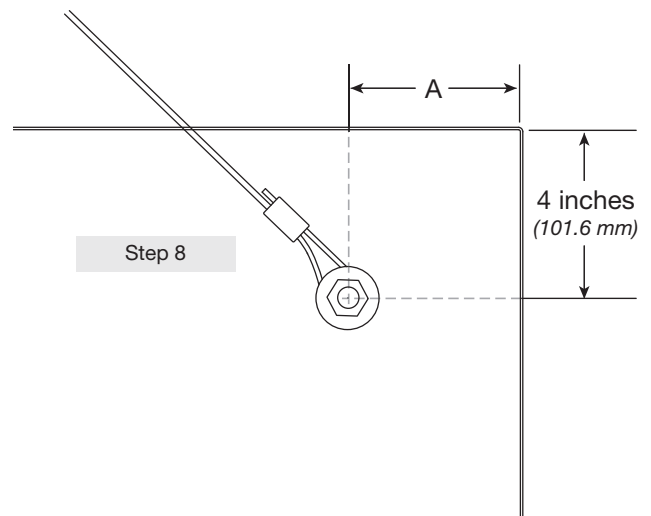
7. Install 5/16 inch weld bolts through lower hinge into curb and install nuts. If necessary, disconnect hinge bolt and remove unit from curb to install lower hinge.

NOTE: If curb is of construction other than sheet metal, use appropriate connector. For example, if the curb is made of wood, use a lag bolt.

8. Attach the loose end of the stop cable to the curb with appropriate fastener and fender washer. See Figure 5 for hole location.
9. Wind gusts are capable of lifting the curb cap off from the curb. Secure the curb cap to the curb with the thumb screws provided with a hinge base or other appropriate method.

Figure 5

| Dimension A | Model |
|-------------|-----------|
| 8 inches | 200 - 480 |
| 16 inches | 500 - 540 |



Downblast Centrifugal Replacement Parts

| Item No. | Description | Model No. | 220-240 | 260-300 | 330-360 | 420 | 480 | 500-540 |
|----------|----------------------------------|-----------------|---------|---------|---------|--------|--------|---------|
| | | Length (inches) | 34 | 40 | 46 | 52 | 58 | 64 |
| 1 | Reinforcing Assembly | | 822348 | 829561 | 830873 | 830874 | 830875 | 868633 |
| 2 | Hinge, Galvanized, Top, Left | | 742407 | 742410 | 742417 | 742413 | 742414 | 742415 |
| 3 | Hinge, Galvanized, Top, Right | | 742448 | 742450 | 742578 | 742617 | 742669 | 742724 |
| 4 | Hinge, Galvanized, Bottom, Left | | 742416 | 742412 | 742418 | 742419 | 742420 | 742421 |
| 5 | Hinge, Galvanized, Bottom, Right | | 742449 | 742451 | 742579 | 742629 | 742670 | 742725 |

Upblast Centrifugal Replacement Parts

| Item No. | Description | Model No. | 220-240 | 300 | 360 | 420 | 480 | N/A |
|----------|----------------------------------|-----------------|---------|--------|--------|--------|--------|--------|
| | | Length (inches) | 34 | 40 | 46 | 52 | 58 | 64 |
| 1 | Reinforcing Assembly | | 817129 | 817130 | 817133 | 817131 | 817132 | N/A |
| 2 | Hinge, Galvanized, Top, Left | | 742407 | 742410 | 742417 | 742413 | 742414 | 742415 |
| 3 | Hinge, Galvanized, Top, Right | | 742448 | 742450 | 742578 | 742617 | 742669 | 742724 |
| 4 | Hinge, Galvanized, Bottom, Left | | 742416 | 742412 | 742418 | 742419 | 742420 | 742421 |
| 5 | Hinge, Galvanized, Bottom, Right | | 742449 | 742451 | 742579 | 742629 | 742670 | 742725 |

