

Hamilton Overhead Service Carrier

Assembly Instructions

Overhead Carrier models vary in length and height. For quick service when ordering damaged or replacement parts, have a complete description and model of your unit. Refer any questions or problems to your project sales manager.

Before starting assembly, have the proper tools and required materials available. Wear appropriate safety equipment when using all hand or power driven tools.

Tools Required: (Not Included)

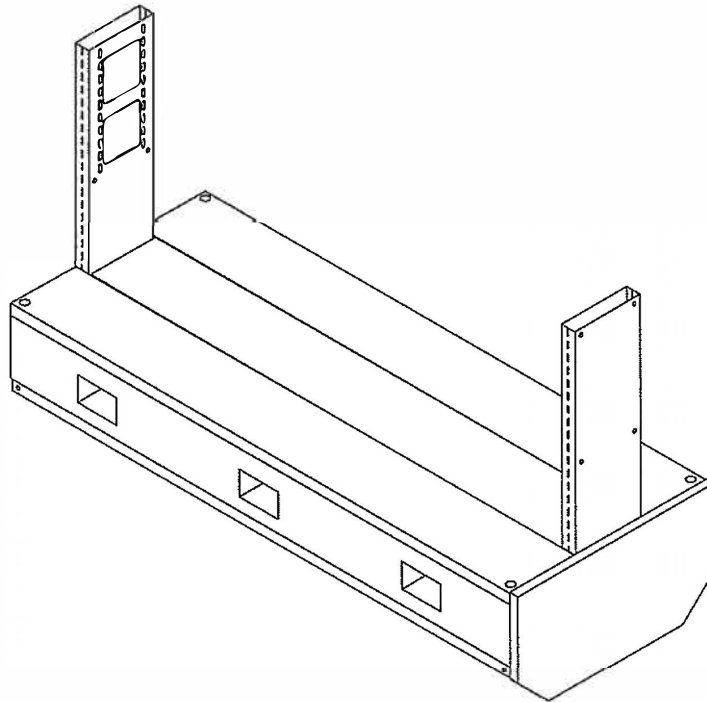
Tape Measure
Screwdrivers- Phillips head and flat head
Electric Drill
Set of Drill Bits
Center punch
Bubble Type Level
Wrenches- Open End or Box
Socket Wrench Set- 3/8" or 1/2" Drive
Marking Device (Pencil, Scribe, etc.)
Plumb Bob

Optional Tools: (Not included)

(Available from your local dealer)

Receptacle Installation Tool - Product No. 00018264

Push on Retainer Tool - Product No. 00018263

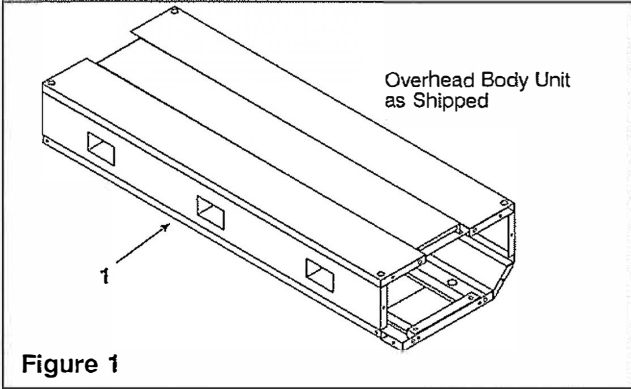


Assembly Instructions

A – Carrier Body Unit Preparation and Cover Removal

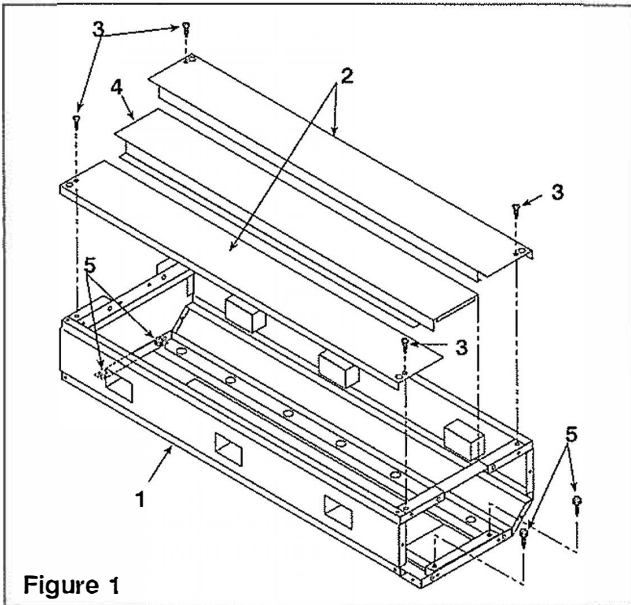
(Refer to Fig. 1)

1. Locate the overhead carrier body unit (1) and lay it on clean surface.



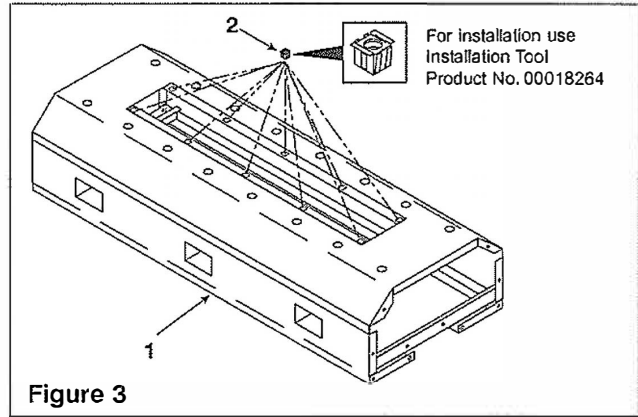
(Refer to Fig. 2)

2. Remove the two mounting screws (3) from each of the two outside covers (2). Lift the covers off. Retain screws for later installation.
3. Removing the two outside covers first, allows access for removal of the center cover.
4. Lift off the center cover (4).
5. Remove the two 1/4" slotted hex head screws (5) from the front and rear bottom flanges of the carrier body unit (1). Retain screws, these will be reused in Section- B.



(Refer to Fig- 3, Also Fig- 19)

NOTE: An optional receptacle insertion tool may be purchased from Hamilton to ease insertion of the Quarter-Turn Fastener Receptacles. See page-1

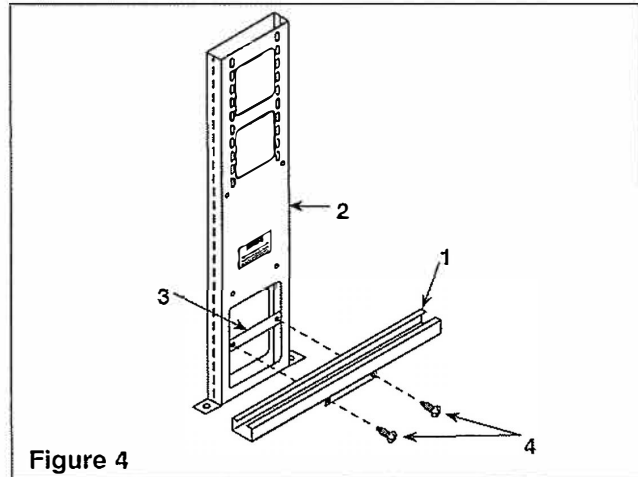


6. Turn the carrier body unit (1) over and insert the appropriate number of Quarter-Turn Receptacles (2) into the 5/16" square holes.
7. For proper anchoring, make sure all four legs of each receptacle snap out behind the panel or body unit.

B – Attaching the Ceiling Risers and Pipe Supports

(Refer to Fig. 4)

NOTE: The Pipe Support Assemblies may not be required on all installations. To be determined by installer.



1. Locate the ceiling risers (2) and rotate so the slots, upper cutouts and warning labels will be facing inward when attached to the body unit.
2. Locate the pipe support bracket assembly (1 & 3). Loosen the 1/4" hex head screws (4) holding the clamping brackets (3) and insert into the lower openings of the ceiling risers. Position the pipe support (1) against the ceiling riser and align with the clamping bracket holes (3). Attach the bracket by tightening the two 1/4" hex head screws (4).

(Refer to Fig. 5)

3. Place the lower riser flange onto the lower flange of the body unity (1) and into the recess of the upper body cross piece (4).

Assembly Instructions

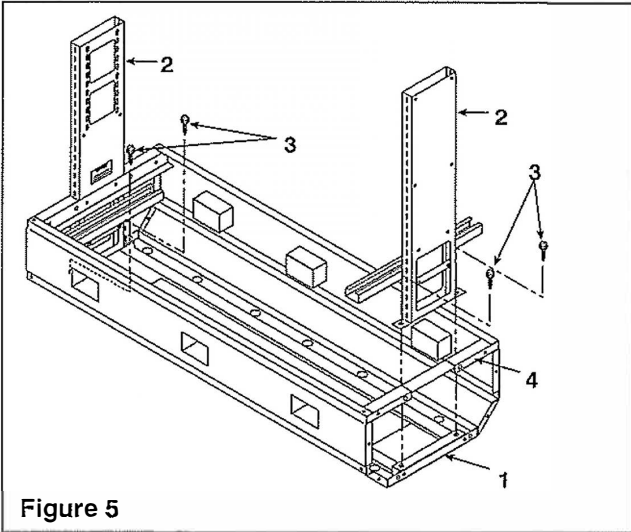


Figure 5

4. Locate the two previously removed 1/4" hex head screws (3). Insert them through the lower riser flange and into the lower body flange (1).

(Refer to Fig. 6)

5. Insert two No.10 x 5/8" Pan Head screws (5) through the upper body cross pieces (4) and into the previously installed riser (2) as shown.

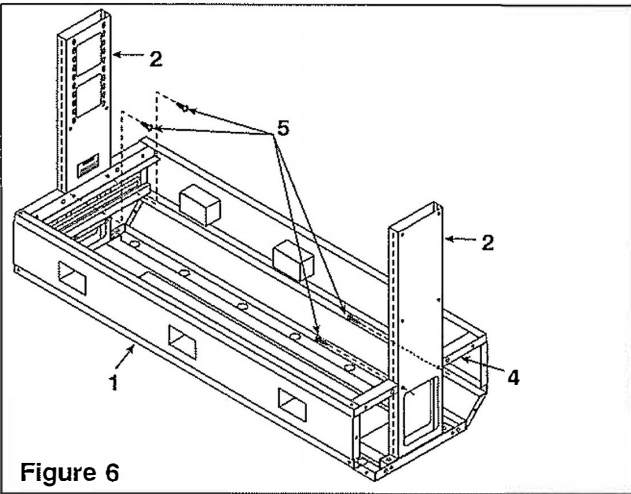


Figure 6

6. Refer to Fig. 5 & 6. Repeat Steps 1-5 for attaching a riser at the opposite end of the body unit (1).

C – Attaching the Carrier Unit to the Ceiling

(Refer to Fig. 7)

1. The best method of mounting the overhead carrier unit or units to the ceiling will be left to the installers discretion as ceilings vary greatly in structure and materials.
2. The following are suggested methods for anchoring the overhead unit. Note that optional brackets, gussets or ceiling extensions are available to aid the installer due to varying field conditions.

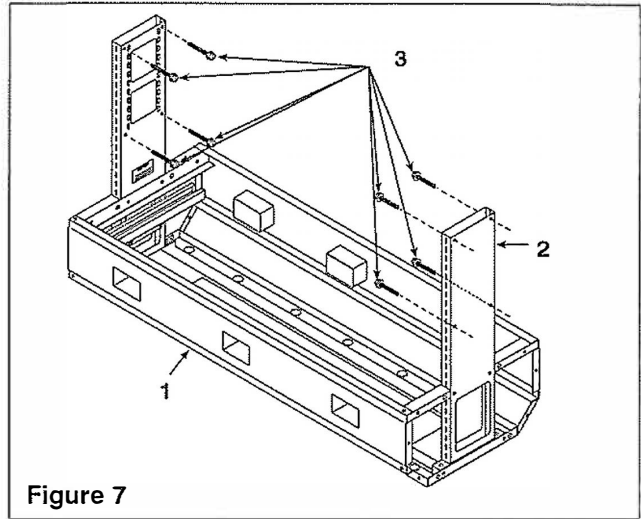


Figure 7

3. The standard ceiling risers (2) should be anchored to the installer or contractor supplied framing or bracing. The proper mounting hardware will also be determined and supplied by the contractor.

4. Raise the Carrier unit to the ceiling and hold in place. Level and plumb the carrier unit. When properly leveled, mark and prepare the framing for accepting the proper hardware to be used.

5. The risers (2) are attached by inserting the proper anchors (3) through the four upper outside mounting holes as illustrated.

D – Attaching the Optional Ceiling Riser Extensions

(Refer to Fig. 8)

1. The Ceiling extensions (2) are attached by sliding them down and inside the ceiling riser (1). The extensions must be oriented so the holes align with the slots in the ceiling riser (1).

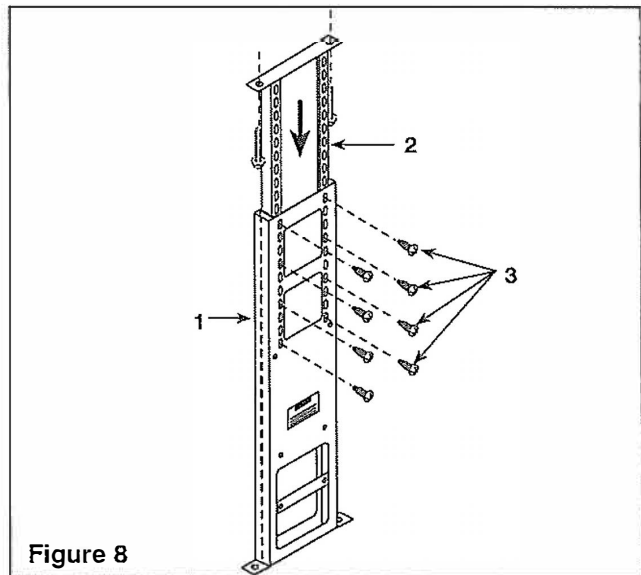


Figure 8

Dimensions are nominal and illustrations and specifications are based on the latest product information available at the time of publication. The right is reserved to make changes at any time without notice.

Assembly Instructions

- Adjust the ceiling extensions (2) to the proper height and secure to the ceiling riser (1) by inserting four No.10 x 3/8" thread forming screws (3) into four slots on each side of the ceiling riser and into the ceiling extension.
- See Section-C Step-4 and attach to the ceiling using the proper contractor supplied hardware.

E – Attaching the Optional Ceiling Riser Gussets

(Refer to Fig. 9 &10)

- Where a greater span is required for anchoring, the optional ceiling gussets (2) may be added to the ceiling extensions (1).
- Set the gussets (2) on top of the ceiling extension (1). Make sure the two top center holes of the gusset align with the two holes in the ceiling extension flange.

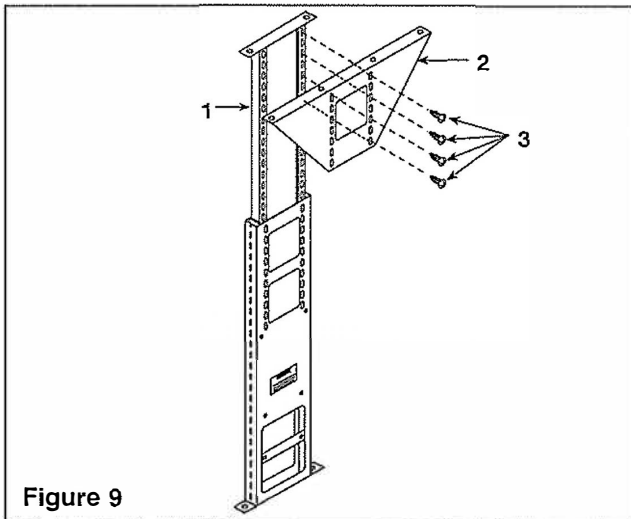


Figure 9

- Align the rows of gusset holes with the holes in the ceiling extension (1) Insert four No.10 x 3/8" thread forming screws (3) through each side and into the ceiling extension (1).

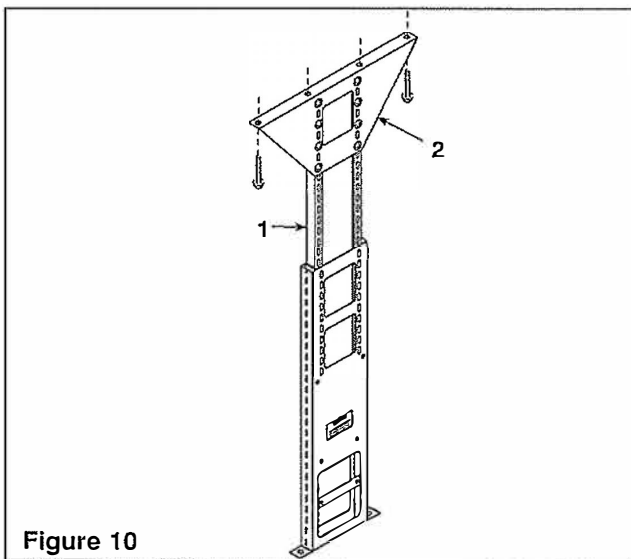


Figure 10

- See Section-C Step-4 and attach to the ceiling using the proper contractor supplied hardware.

F – Installing Multiple units

(Refer to Fig. 11)

- For assembly of additional units follow the steps outlined in Sections-A thru E where applicable.

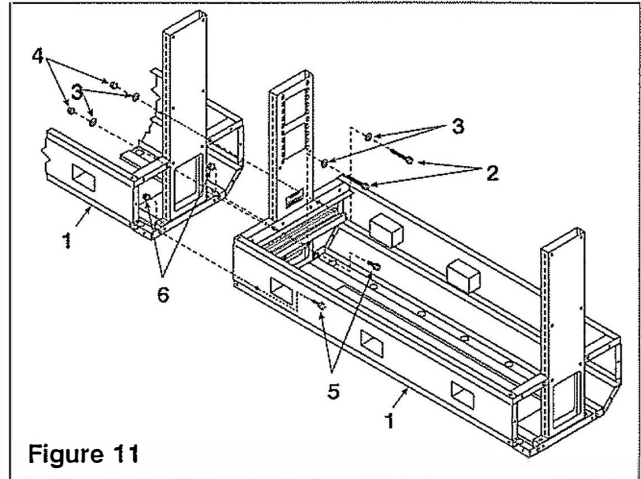


Figure 11

- When the additional carrier unit is ready for final assembly, raise it to the ceiling and align it to the previously anchored carrier unit.
- Level and plumb the unit. Make sure all units are aligned and level. The four holes on the ends of the two carrier units must align.
- Mark and drill ceiling pilot or anchor holes and attach the additional unit to the ceiling structure.
- Access for the mounting bolts in Steps-5 and 8 may be accomplished through the top and ends of the carrier body units. Access from the bottom is also possible if units do not include light assemblies.
- Locate two of the 5/16" x 3-1/2" long hex head bolts (2) and attach a 5/16" flat washer (3) to each.
- Insert the bolt assemblies through the top holes of both carrier units (1).
- Attach another flat washer (3) and fasten with 5/16" hex nuts (4). Do not tighten nuts at this time.
- Locate two 1/4 x 1/2" hex head bolts and insert them through the two bottom holes of the carrier units (1).
- Loosely fasten the assembly with two hex head Keps nuts (6).

(Refer to Fig. 12)

- Check alignment and level both units. Tighten the four hex nuts securing the two assemblies.
- Repeat the steps outlined in this section for adding multiple units.

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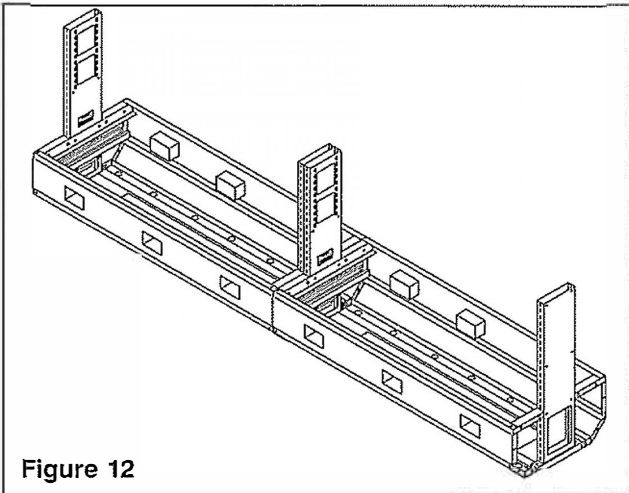


Figure 12

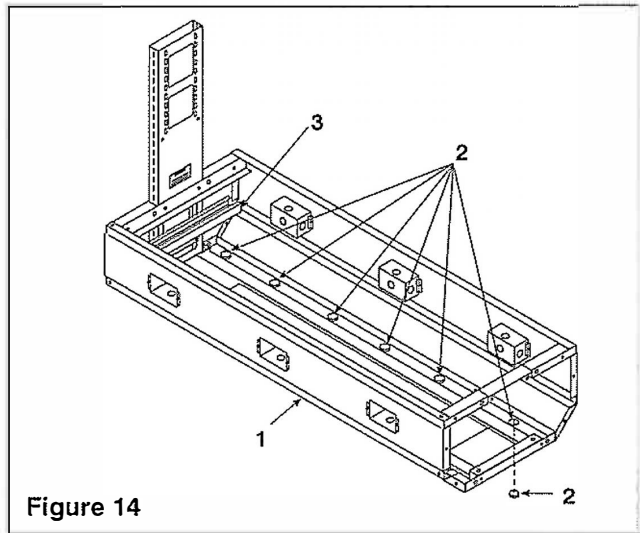


Figure 14

G – Installing Electrical and Plumbing

(Refer to Fig. 13)

NOTE: All electrical and plumbing connections should be made by qualified tradesman.

NOTE: Check out and follow all applicable codes (City, county etc.)

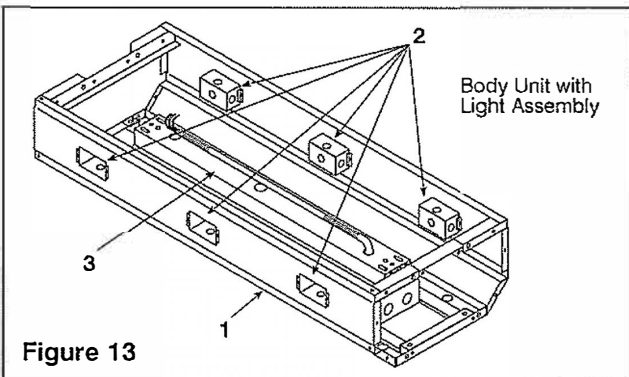


Figure 13

H – Attaching the End Cover Plates and End Panels

(Refer to Fig. 15)

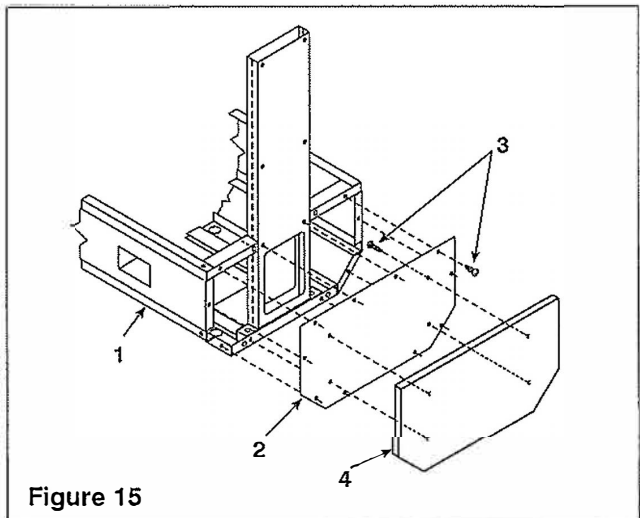


Figure 15

1. When all carrier units have been installed and leveled, the electrical wiring and piping may be installed.
2. Wire up all the electrical outlets (2) and light assemblies (3). (Refer to Fig. 14)
3. Run all plumbing lines to the carrier units, (Gas, Water, air etc.).
4. Plumbing lines may also be run down into and exited from the bottom of the carrier unit (1) by removing as many small access caps (2) as needed.
5. Piping may be run to as many carrier units as required and anchored to the optional pipe support brackets (3) if used.

1. Locate the end cover plates (2). Attach each plate to the ends of the body unit (1) with ten No. 8 x 1/2" pan head screws (3).
2. Align the two top center holes of the cover plates and attach to the ceiling risers with screws (3).
3. The finished end cover panels (4) may now be attached. These are attached to the previously mounted end cover plates (2) from inside the body unit (1). Attach through the top opening using four No. 8 x 1/2" pan head screws (3).
4. If filler panels are not used, the three top covers may be installed using the previously removed cover screws. See Fig. 2 Items 2, 3 and 4.

Assembly Instructions

I – Installing the Optional Filler Panels and Top Covers

(Refer to Fig. 16)

NOTE: There are various sizes of optional Filler Panels available depending on the height and spacing of the risers used.

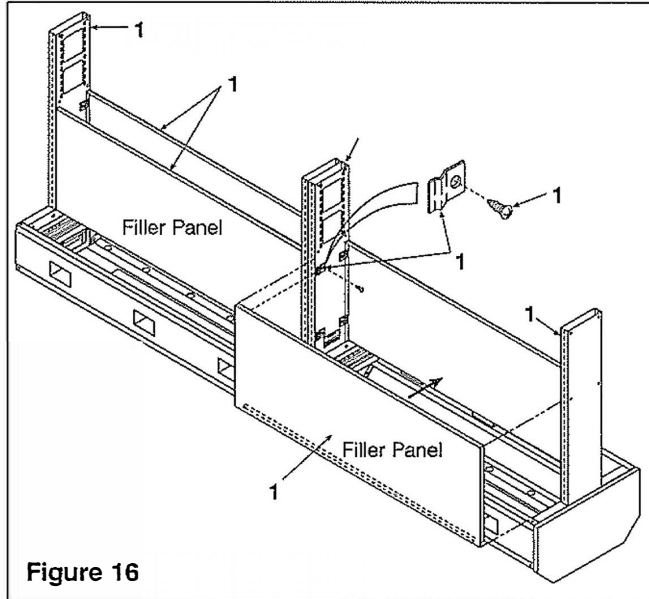


Figure 16

1. Locate the filler panels (4) and scribe clips (2) that were ordered for your overhead carrier unit.
2. Attach the required number of scribe clips (2) to the insides of the ceiling risers (1) as shown. Use one No.6 x 3/8" pan head drive screw (3) per clip. The number of scribe clips and screws required varies with the number of body units and height of the filler panels used.
3. When all scribe clips are anchored to the ceiling risers, the filler panels (4) can be slid between the spring loaded scribe clips (2) and ceiling risers (1).
4. Slide the filler panels down until the bottom flange rests on the inside ledge of the body units. Finish attaching the rest of the filler panels.

(Refer to Fig. 17)

5. When all the filler panels (4) are in place, the top covers (2) can now be attached to each side the carrier body units (1) by inserting the same screws (3) that were used with their removal. Note that the center cover is no longer required.

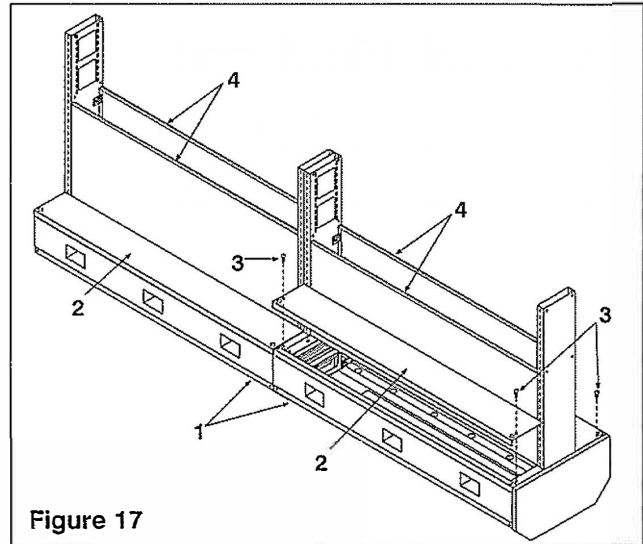


Figure 17

J – Installing the Lower Panels and Fasteners

NOTE: There are various sizes of Optional Lower Panels depending on the length of the carrier bodies used.

NOTE: An optional push on retainer tool may be purchased from Hamilton to ease insertion of the Quarter- Turn Fasteners. See page-1 Optional Tools

(Refer to Fig. 18)

1. Quarter- Turn Fasteners must be attached to all lower panels to permit attachment to the carrier body units.
2. Fig.18 Illustrates the components and procedure for attaching the Quarter-Turn Fasteners.

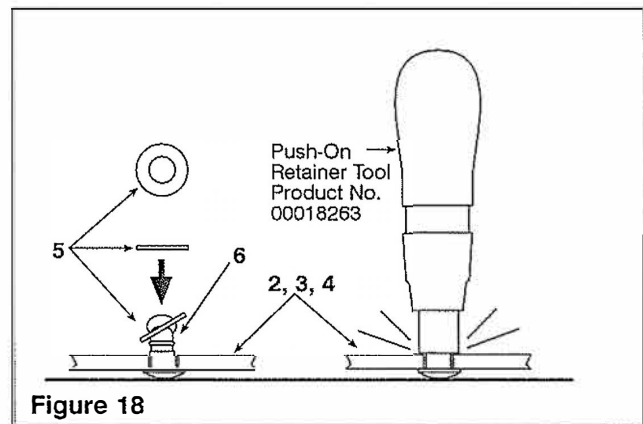


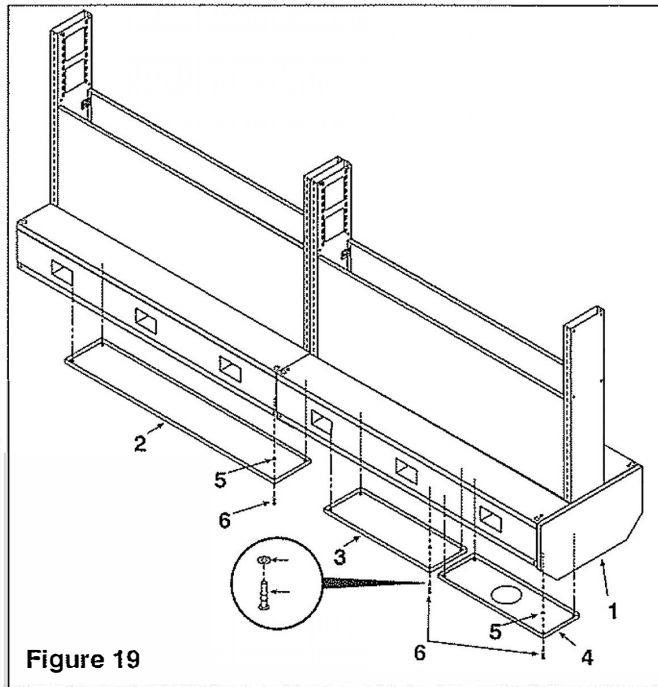
Figure 18

3. Components required: Quarter-Turn Fastener studs (6), retainers (5) panels (2-4) and the optional push on retainer tool.

Assembly Instructions

(Refer to Fig. 18, 19)

4. Locate the panels ordered for your unit or units.
Note in Fig. 19, three types of optional panels are illustrated (2, 3 & 4).



5. Insert a Quarter-Turn stud (6) through one of the holes from the bottom of the panel. Lay the panel on a smooth clean solid surface. Set a retainer ring (5) on the inside protruding end of the stud. (See Fig. 18).
6. Using the push on retainer tool, force the retainer (5) over the end of the stud (6) securing the fastener and retainer to the panel.
7. Use the same procedure for attaching the rest of the fasteners to the remaining panels.
8. Hold the panel to the bottom of the carrier body unit (1). Using a flat screwdriver, turn each fastener one quarter turn securing the panel to the body.
9. Follow the same procedure for attaching the remaining fasteners and panels.

K – Installing Optional Standard Shelving

NOTE: Refer to MAX/LAB Laboratory Furniture Installation Manual PL-377.

L – Final Inspection

1. Double check and test all electrical and piping connections. Make sure all covers and panels are properly secured.
2. This completes assembly of the overhead carrier units.

