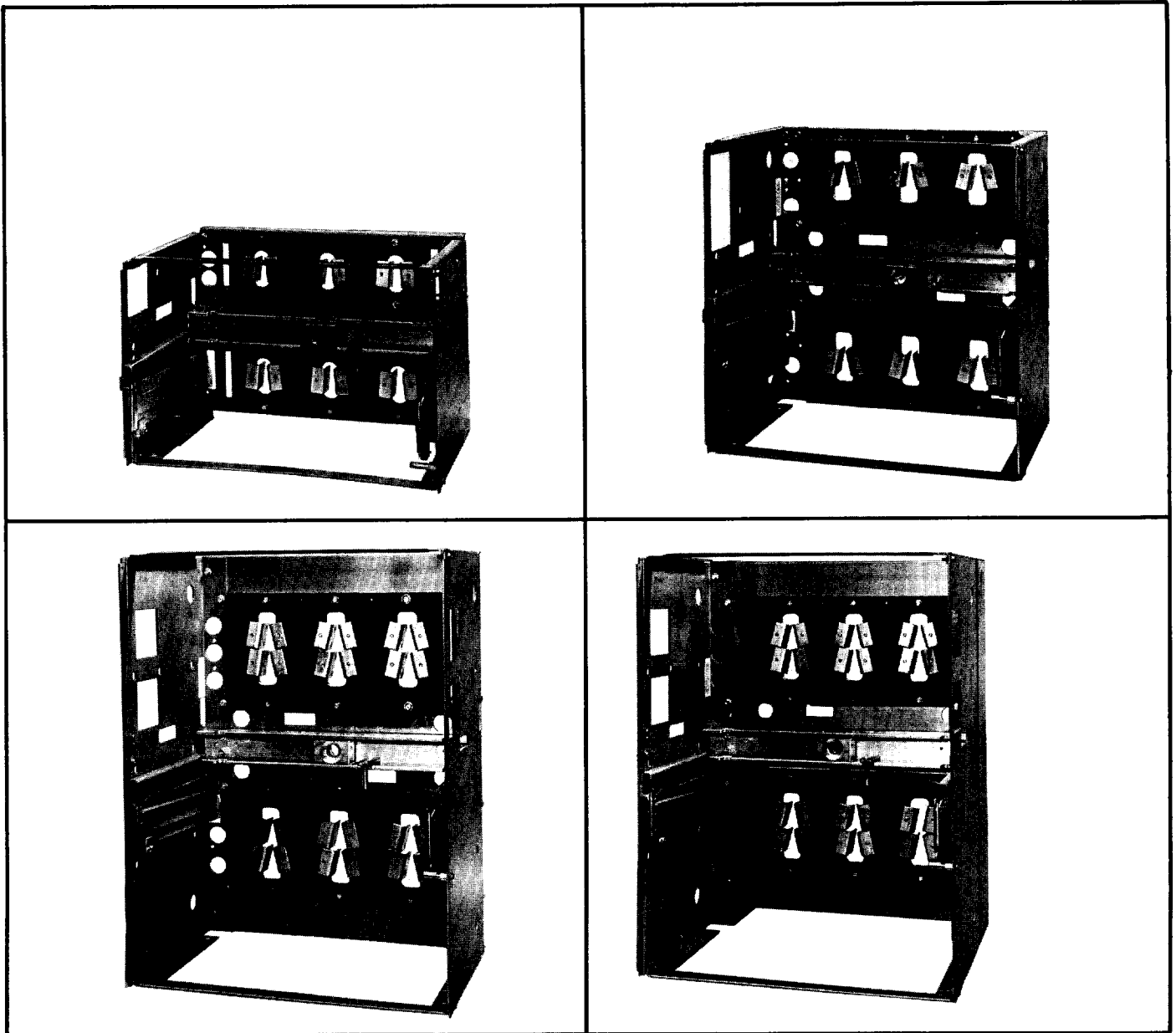


Assembly
Instructions



POWER BREAK[®]

Substructure Kits 800-4000A Frames



POWER BREAK® Substructure Kits

PREASSEMBLY OF SIDE SHEET AND REAR SUB-ASSEMBLY (ALL FRAMES)

Refer to Fig. 1-3. Lubricate surface with grease supplied as shown in Fig. 1. Then, position the rail as shown with the end with the studs extending through the window in the back flange so that the forward stud passes through the entry notch.

Swing the rail flat against the rail guide, and pull the rail toward the front.

Install the lock screw as shown in Fig. 2.

Figure 3 shows the left and right side sheet and rail sub-assemblies completely assembled.

(NOTE: Grease supplied is Mobilgrease #28)

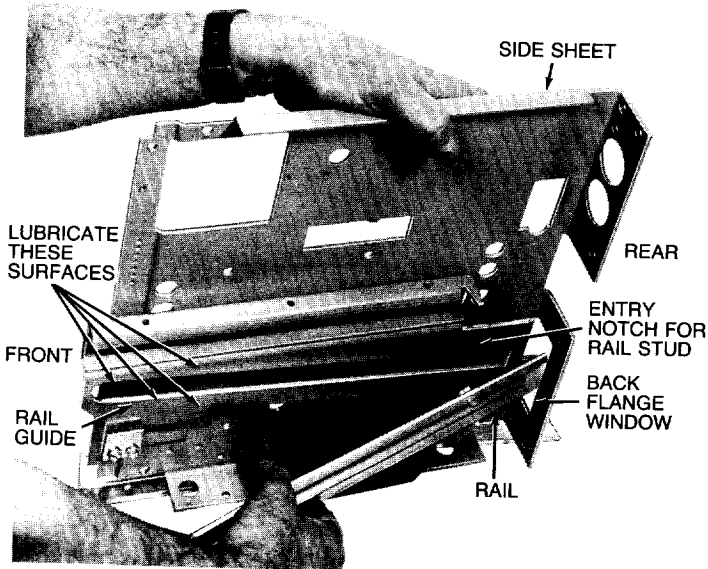


Fig. 1 Assembly of rail to side sheet.

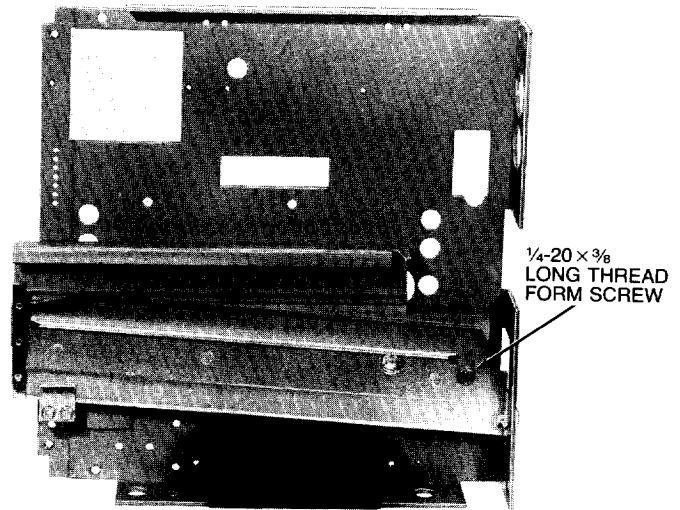


Fig. 2 Assembly of lock screw into rail.

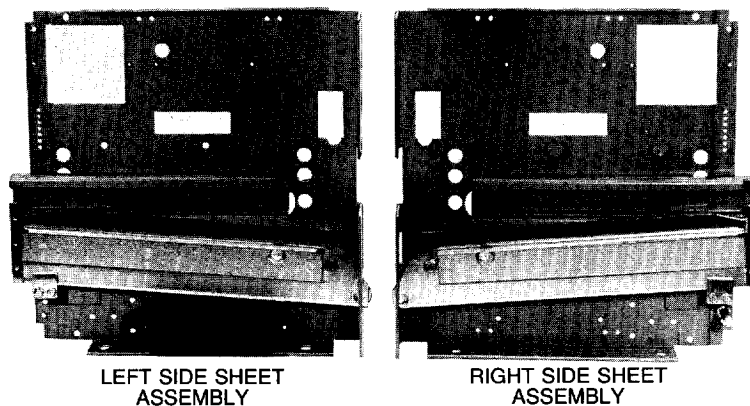


Fig. 3

POWER BREAK® Substructure Kits

800 AMPERE FRAME

(See Figs. 4-9 for parts and complete assembly).

Step 1

Partially drive in all back assembly strap bracket screws, but do not tighten. Fig. 6.

Step 2

Partially drive in all back assembly base screws, but do not tighten. Fig. 6.

Step 3

Lay the back assembly face up on a bench, or work surface, and start (4) 1 $\frac{3}{4}$ " long thread form screws through the nut channel, back channel, and into the nut brackets shown in Fig. 7. Next tighten the two diagonally opposite screws located in "A", Fig. 8 or 9, then the two remaining screws.

Step 4

Position the left side sheet assembly, as shown in Fig. 8 or 9, and first drive the (2) 5/8" long screws into the nut bracket, followed by (4) 5/8" long screws top and bottom. Repeat for the right side sheet assembly.

Step 5

Tighten all the 5/8" long thread form screws started on the back assembly in Step 2.

Step 6

Position the insulated top and uninsulated bottom supports, and drive the (4) 3/8" long thread form screws starting with top right and left, then bottom left and right.

Step 7

Apply the label at position shown in Fig. 8 or 9.

Step 8

Install the rejection system as shown in Fig. 20-21, page 9

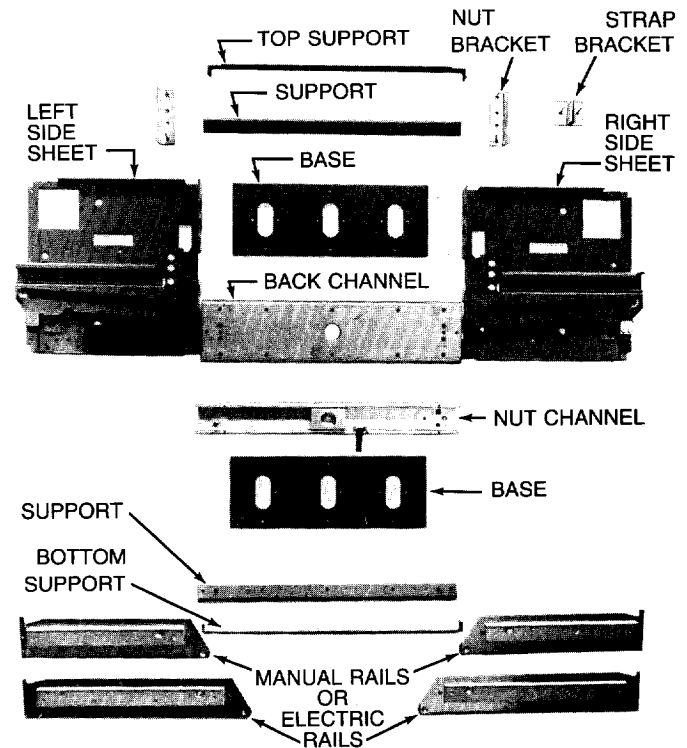


Fig. 4 Parts for 800 ampere frame.

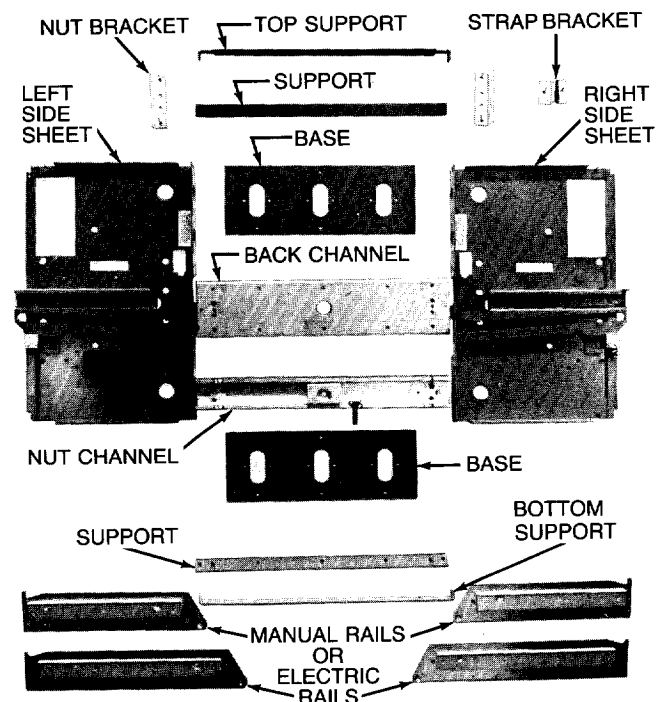


Fig. 5 Parts for 800 ampere "L" frame.

POWER BREAK® Substructure Kits

800 AMPERE FRAME (Cont.)

(See Figs. 4-9 for parts and complete assembly).

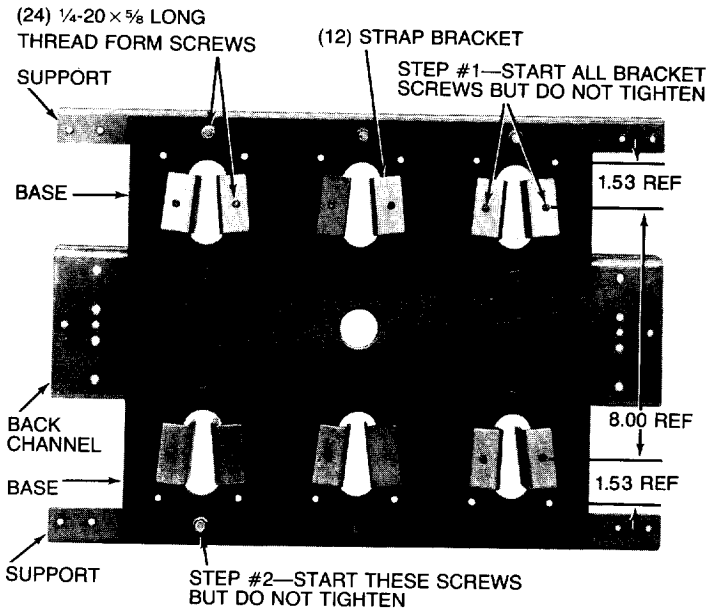


Fig. 6 Front view 800/800 "L" A unit back assembly.

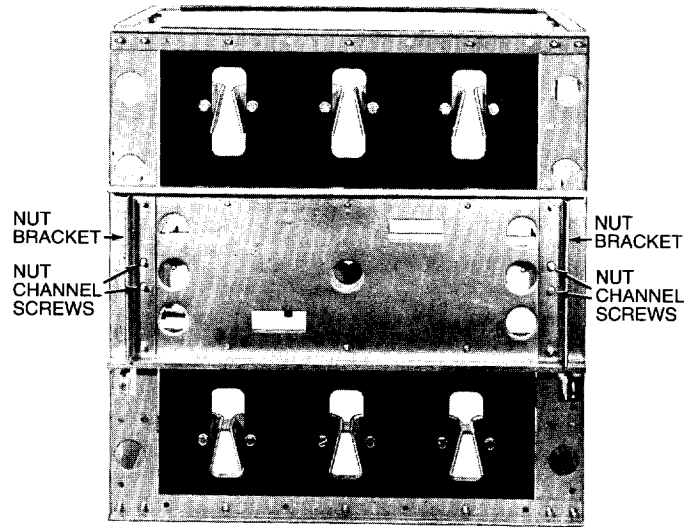


Fig. 7 Back view showing assembly of nut brackets used on 800-3000A units

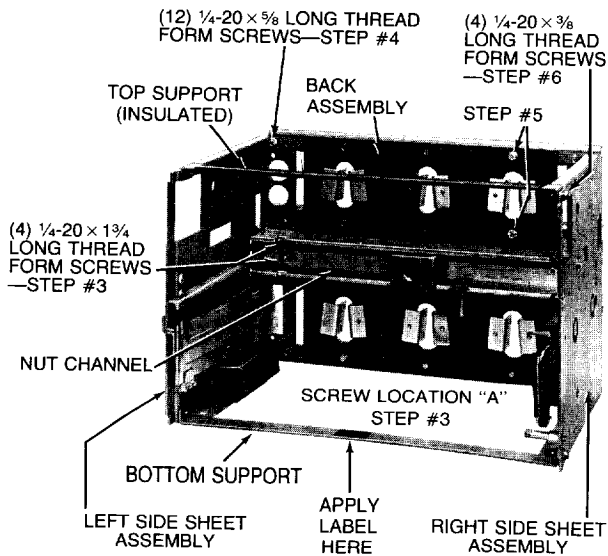


Fig. 8 800A unit front view.

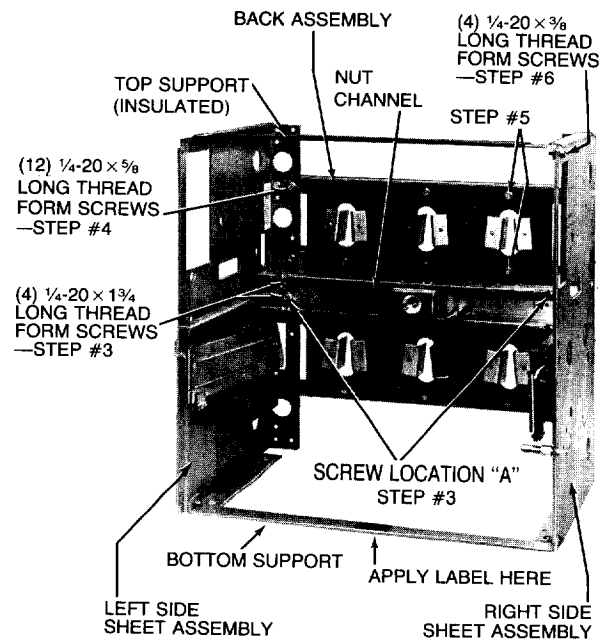


Fig. 9 800A "L" unit front view.

POWER BREAK® Substructure Kits

1600-2000 AMPERE FRAME

(See Figs. 10-12 for parts and complete assembly)

Step 1

Partially drive in all back assembly strap bracket screws, but do not tighten. Fig. 11.

Step 2

Partially drive in all back assembly base screws, but do not tighten. Fig. 11.

Step 3

Lay the back assembly face up on a bench or work surface, and start (4) 1/4-20 x 1 3/4" long thread form screws through the nut channel, back channel, and into the nut brackets as shown in Fig. 7. Next tighten the two diagonally opposite screws, location "A", Fig. 12, then, the two remaining screws.

Step 4

Position the left side sheet assembly as shown in Fig. 12 and first drive the (2) 7/8" long thread form screws into the nut bracket, followed by (4) 5/8" long thread form screws top and bottom. Repeat for the right side sheet assembly.

Step 5

Tighten all the 5/8" long thread form screws started on the back assembly in Step 2.

Step 6

Position the insulated top and uninsulated bottom supports and drive the (4) 3/8" long thread form screws starting with top right and left, then bottom left and right.

Step 7

Apply the label at position shown in Fig. 12

Step 8

Install the rejection system as shown in Fig. 20-21, page 9

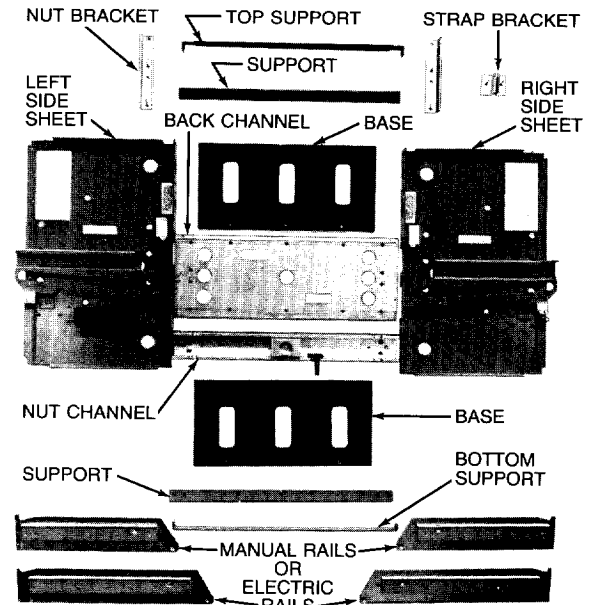


Fig. 10 Parts for 1600/2000A unit.

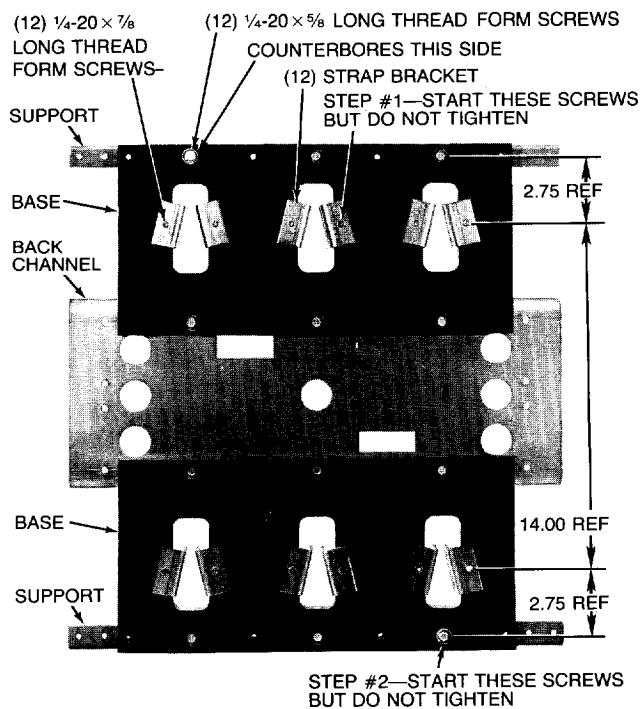


Fig. 11 Front view 1600/2000A unit back assembly

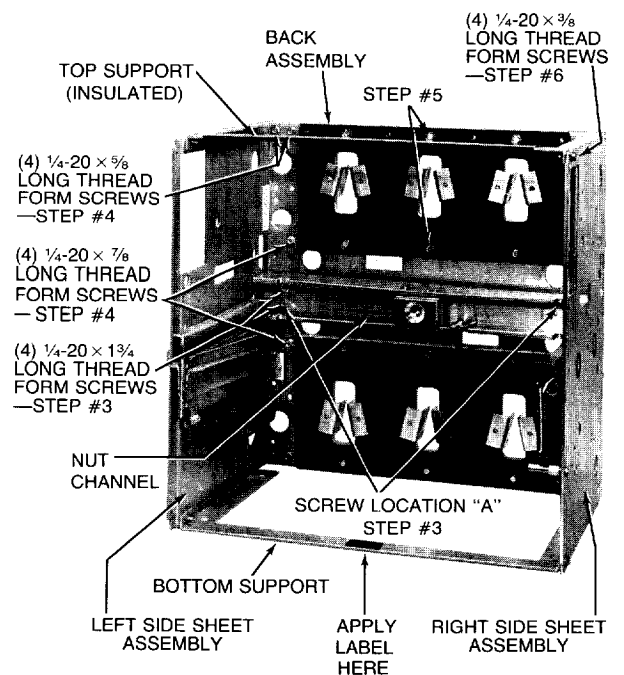


Fig. 12 1600/2000A unit front view.

POWER BREAK® Substructure Kits

2500-3000 AMPERE FRAME

(See Fig. 13-15 for parts and complete assembly.)

Step 1

Partially drive in all back assembly strap bracket screws, but do not tighten. Fig. 14.

Step 2

Partially drive in all back assembly base screws, but do not tighten. Fig. 14.

Step 3

Lay the back assembly face up on a bench or work surface, and start (4) 7/8" long thread form screws through the nut channel, back channel, and into the nut brackets as shown in Fig. 7. Next, tighten the two diagonally opposite screws, location "A", Fig. 15, then the two remaining screws.

Step 4

Position the left side sheet assembly as shown in Fig. 15, and first drive the (2) 7/8" long form thread screws into the nut bracket, followed by (4) 5/8" long thread form screws top and bottom. Repeat for the right side assembly.

Step 5

Tighten all the 5/8" long thread form screws started on the back assembly in Step 2.

Step 6

Position the insulated top and uninsulated bottom supports and drive the (4) 3/8" long thread form screws starting with top right and left, then bottom left and right.

Step 7

Apply the label at position shown in Fig. 15.

Step 8

Install the rejection system as shown in Fig. 20-21 page 9

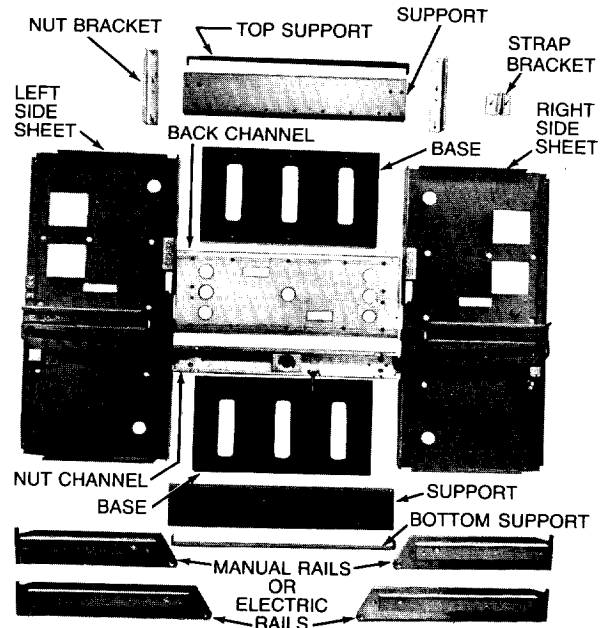


Fig. 13 Parts for 2500/3000A units.

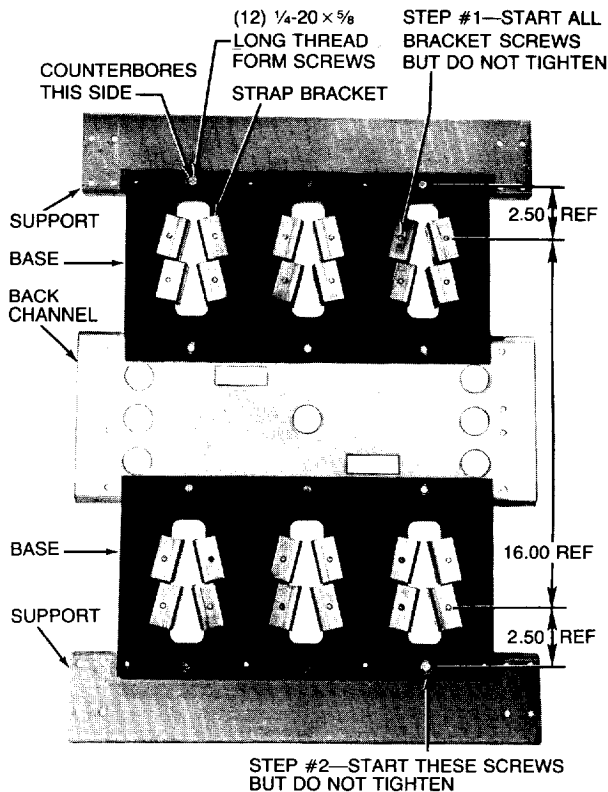


Fig. 14 Front view 2500/3000A unit back assembly.

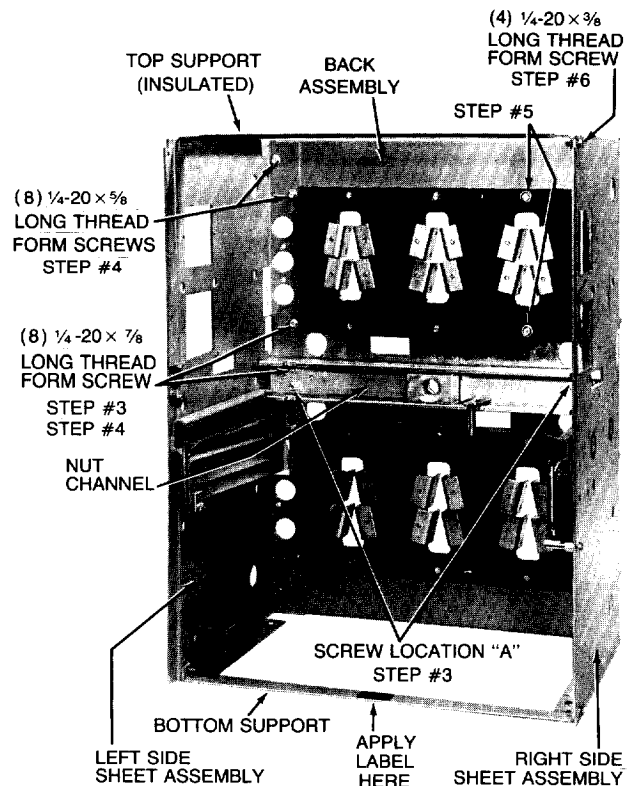


Fig. 15 2500/3000A unit front view.

POWER BREAK® Substructure Kits

4000 AMPERE FRAME

(See Figs. 16-19 for parts and complete assembly)

Step 1

Partially drive in all back assembly strap bracket screws, but do not tighten. Fig. 14.

Step 2

Partially drive in all back assembly base screws, but do not tighten. Fig. 14.

Step 3

Nest the spacer channels together in pairs. Make sure the larger screw holes are in the outer flanges with the slots toward center. Lay them down on a bench or work surface parallel to each other, and far enough apart so the back assembly will drop on, and the holes will line up. Refer to Fig. 18. Note that the out-

side corners of the spacer channel sets nearest the back assembly must have the outside bent flange exposed, not the edge of the steel. Position the back assembly face down on top of the spacer channel pairs. Fig. 17. Line up the holes and first drive the (4) 7/8" long thread form screws through the back channel into the inner flange of the spacer channels. Next, drive the (8) 5/8" long thread form screws top and bottom at positions shown.

Turn the entire assembly over so the back assembly is face up. Fig. 19. Position the nut channel, as shown, and start the (4) 7/8" long thread form screws through the nut channel and into the inner flanges of the post channels. Next, tighten the two diagonally opposite screws, location "A", Fig. 19, then the two remaining screws.

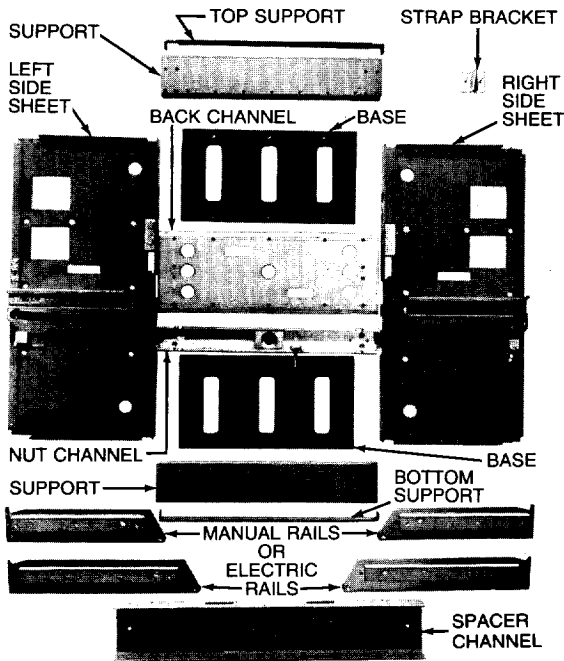
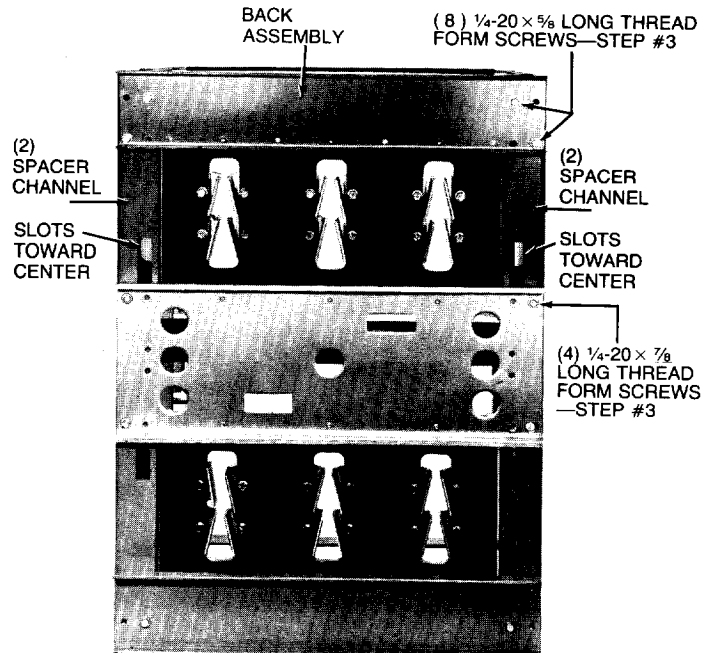


Fig. 16 Parts for 4000A unit.

Fig. 17 4000A unit back view



POWER BREAK® Substructure Kits

4000 AMPERE FRAME (Cont.)

(See Figs. 16–19 for parts and complete assembly)

Step 4

Position the left side sheet assembly as shown in Fig. 19, and drive (6) 5/8" long thread form screws starting nearest the nut channel. Repeat for the right side sheet assembly.

Step 5

Tighten all the 5/8" long thread form screws started on the back assembly in Step 2.

Step 6

Position the insulated top and uninsulated bottom

supports and drive the (4) 3/8" long thread form screws starting with top right and left, then bottom left and right.

Step 7

Apply the label as shown in Fig. 19.

Step 8

Install the rejection system as shown in Figs. 20–21, page 9.

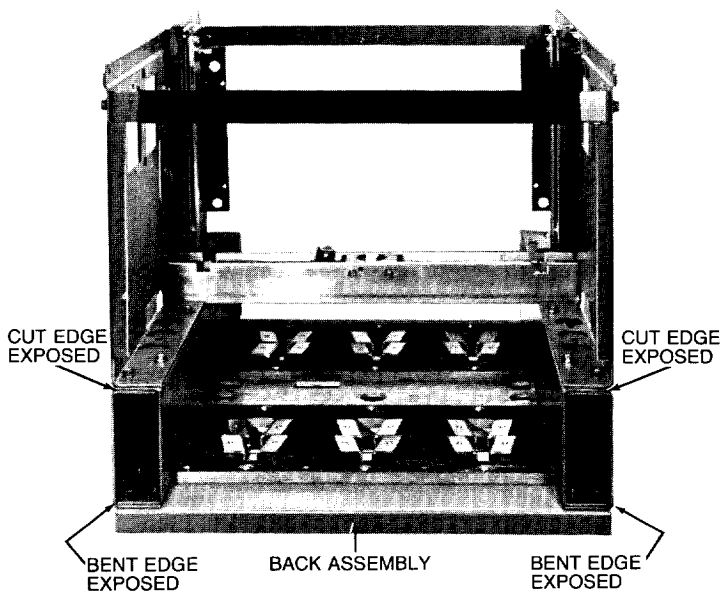


Fig. 18 4000A unit top view

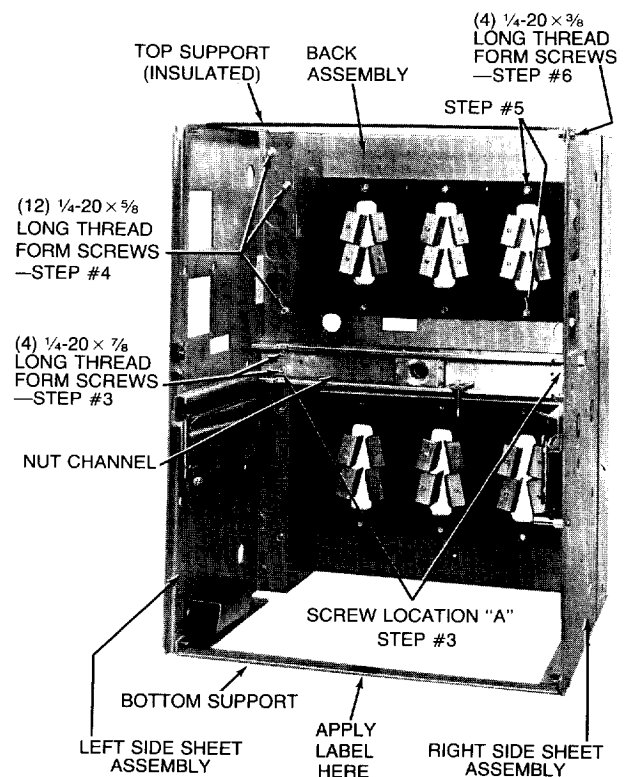


Fig. 19 4000A unit front view.

POWER BREAK® Substructure Kits

REJECTION SYSTEM

Rejection brackets are supplied in order to prevent installation of an improperly rated circuit breaker. They must be installed on the left side sheet to interact with a rejector blade supplied on the breaker unit. A typical left side sheet with rejector bracket mounting holes identified is shown in Fig. 20. The rejection brackets are shown attached in Fig. 21, using the one-way thread form screws provided. Depending on the Kit Cat. No., sufficient quantity of two sizes of rejector

brackets (small or large) are supplied. The small size is shown.

To install the rejector brackets, position and fasten them at the locations shown in Fig. 20 and Table 1, pg. 10. Table 1 indicates by unit catalog number the size and location of rejectors to be assembled. The large rejector is always positioned with the longer side down.

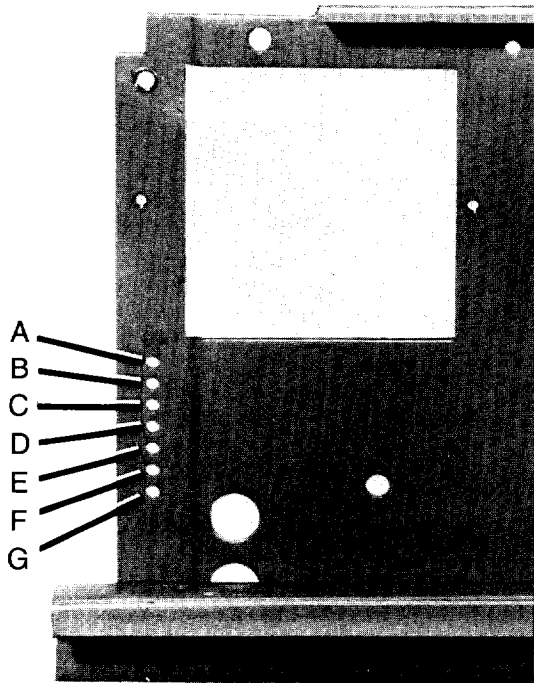
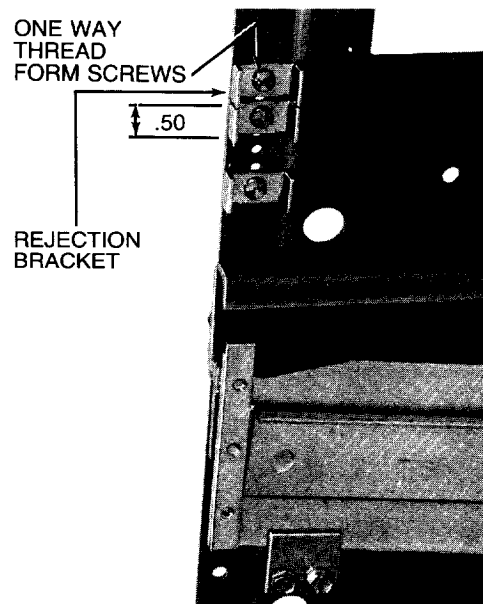


Fig. 20

Fig. 21 Assembly of rejection brackets



POWER BREAK® Substructure Kits

REJECTION SYSTEM (Cont.)

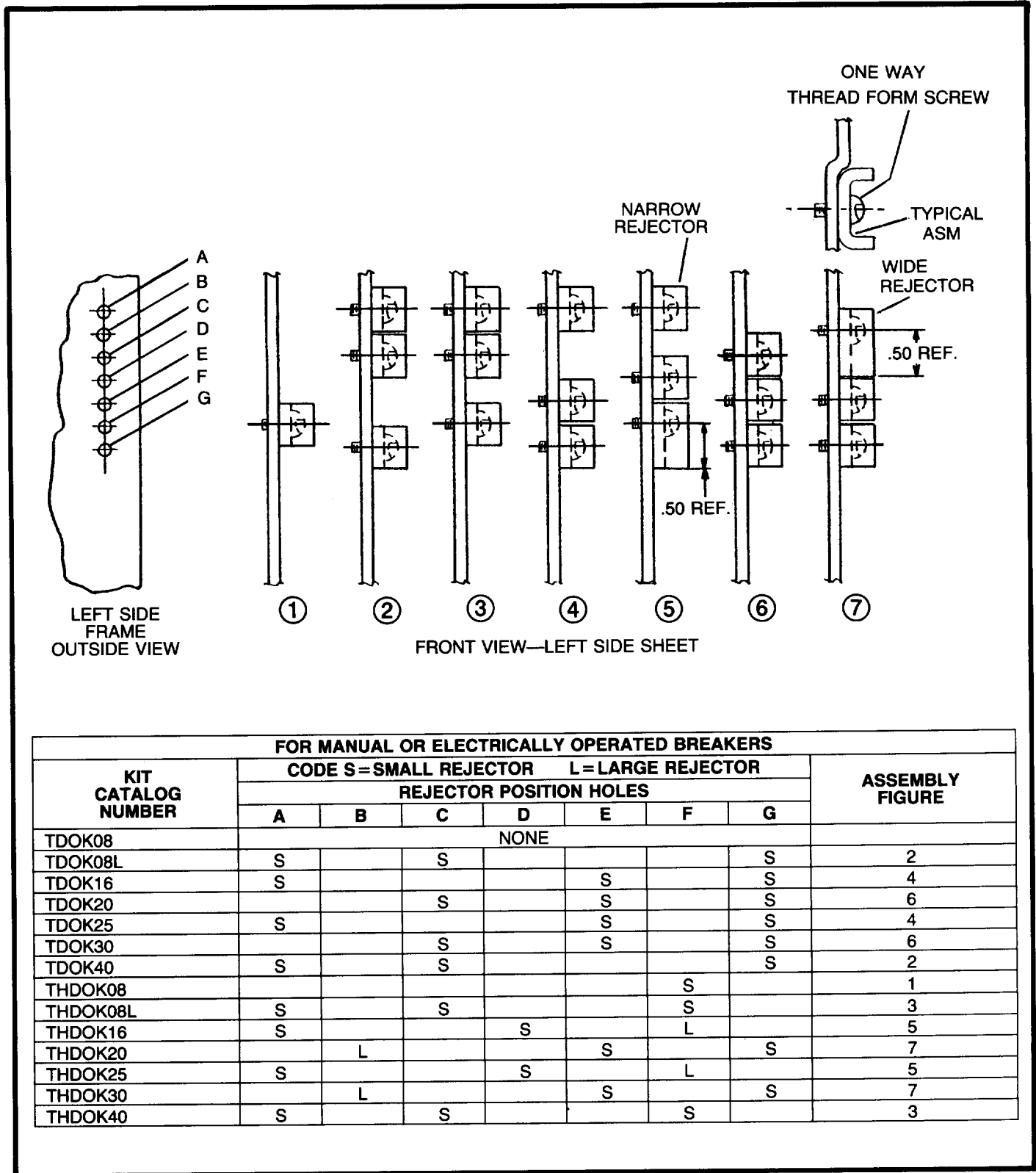


Table 1

POWER BREAK® Substructure Kits

PRIMARY STAB DATA

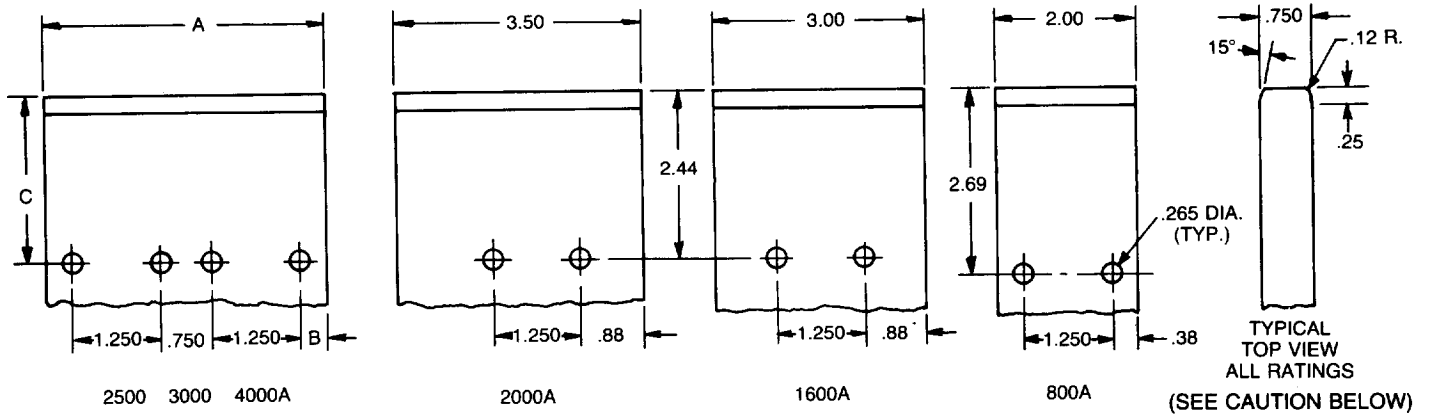
Copper primary stabs are not supplied with Power Break substructure kits. Refer to Fig. 22 for required shapes and mounting holes for Power Break breaker frame sizes. Mounting hardware is supplied with the substructure kit. Fig. 23 shows a partial primary stab section with mounting hardware installed through the customer disconnect and the mounting brackets.

Position the completed substructure in the equipment

compartment and position the copper primary stabs between the loose mounting brackets. Finger tighten the bolts, nuts and lockwashers.

Tighten the thread forming screws previously installed, then tighten the bolts.

Lubricate the stab surfaces as indicated in Fig. 23, using the grease supplied.



ALL CONDUCTORS MUST BE
.0002 INCH SILVER ELECTROPLATED

**CAUTION—SHAPE OF STAB
LEAD-IN IS CRITICAL FOR
PROPER OPERATION**

Fig. 22 Required copper primary stab configuration

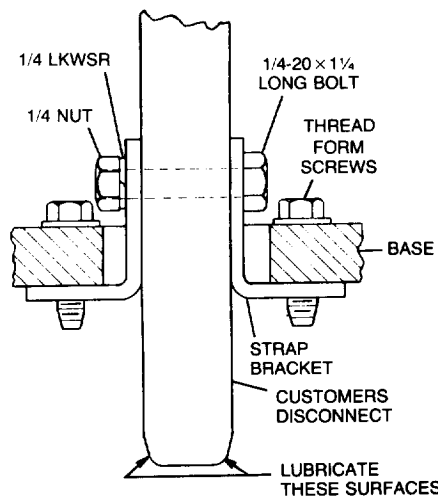


Fig. 23 Typical assembly of customers disconnect to strap brackets

These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to the General Electric Company.

For further information
call or write your local
General Electric
Sales Office or . . .

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570 Lexington, Avenue, New York, NY 10022 U.S.A.

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