BBC
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INSTRUCTIONS FOR REPLACING A COMPLETE POLE ASSEMBLY IN A 15HKV 1000 CIRCUIT BREAKER

IB 8527

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1. GENERAL

1.1 For general instructions, refer to Instruction Bulletin IB 6.2.4.7-1C.

1.2 The circuit breaker must be removed from the switchboard.

FOR SAFETY - UNLESS STATED OTHERWISE, THE BREAKER IS TO BE OPEN WITH THE CLOSING SPRINGS DISCHARGED.

1.3 Note that the new pole assembly supplied is the updated model. Before this is installed on the early model 15HKV03C circuit breaker, it is necessary to drill and tap a hole in the truck for installation of the stand-off insulator. See Fig. 2.

2. REMOVAL OF OLD POLE ASSEMBLY (See Fig. 1)

2.1 Make sure breaker is open and closing springs discharged.

2.2 Loosen pushrod nuts (1). Remove two pushrod pins (2). Remove pushrod link (3).

2.3 Remove two support rod nuts (4) and beveled spacers (13) and turn four jam nuts (5) down approximately three turns.

2.4 Remove the four moulding hold-down bolts (6).

2.5 The complete pole assembly can now be removed except on the newer models, where the standoff insulator (7) must be loosened as the pole assembly is moved up.

3. TAPPED HOLE FOR STANDOFF INSULATOR. (See Fig. 2)

3.1 If the breaker as originally supplied does not include the standoff insulator (7), then this hole must be drilled and tapped per Figure 2.

4. INSTALLATION OF NEW POLE ASSEMBLY (See Fig. 1.)

4.1 Turn the standoff adjusting screw (8) as far as possible into the standoff.

4.2 Place the standoff insulator in the moulding. While lowering the pole assembly onto the truck, guide the support rod studs (9) into the mating holes of plate (11). The standoff insulator must be turned into the tapped hole to allow the pole assembly to seat fully on the truck. Make sure the insulator (7) is tight and fully seated on the truck.

4.3 Center the pole assembly on the truck so that the mounting holes line up.

4.4 In order to reduce any stresses in the moulding at the mounting bolts, any gap between the truck and the moulding at the mounting surfaces should filled with shims (12). The shims should normally be required at only one mounting hole.

4.5 Install the hardware at the four mounting holes loosely and position the assembly so that the horizontal center to center distance between the new pole and adjacent pole/poles is 10" average and the rear end of the terminals are in line with the other poles. Torque the four mounting bolts (6) to 12 ft. lbs.

4.6 Turn the adjusting bolt (8) in the insulator up until it touches the lower lead (17) with a slight amount of preload. Turn lower jam nut (10) down against the standoff and tighten. Turn the upper jam nut (10) down and tighten to jam against the lower nut.

4.7 While turning the upper jam nut (5) up, position the lower beveled washer (13) so that it's surface at the nut is square to the support rod center line. Turn the jam nut up until the nut and lower beveled washer are snug together.

4.8 Turn up the lower jam nut (5) against the upper jam nut (5) and tighten.

4.9 While holding the jam nuts (5) in place and beveled washers (13) as shown, tighten nut (4).

4.10 Before the pushrod can be assembled to the operating arm (14), the new pole assembly must be positioned in the full open position if not already in that position.

CAUTION: IF THE ARMS (14) ARE IN THE FULL CLOSE POSITION OR CLOSE TO THIS POSITION, THE ARMS WILL SNAP DOWN WHEN DOWNWARD PRESSURE IS APPLIED ON THE PRY BAR: THEREFORE, USE CAUTION WHEN MOVING FROM THIS POSITION TO FULL OPEN.

Moving the arms to the full open position is done by placing a pry bar as shown in Figure 1 and pushing down.

4.11 Install pushrod link (3) in the new pole assembly.

4.12 Install two pushrod pins (2) and retainers.

4.13 Adjust the two nuts (1) to position the arms (14) in the open position to dim. "C".

4.14 For Safety - Refer to step 3, "Adjustment Procedure" on page 7 of of IB 6.2.4.7-1 for adjustment.

Close the breaker and readjust, if necessary, the two nuts (1) to position arms (14) in the close position to Dim. "A". Make sure that the nuts are tight.

4.15 Operate the breaker approximately five times, then recheck Dim. "A" with the breaker closed. Also note that with the breaker closed, there should always be a gap between nut (15) and part (16).

5. TESTING

5.1 In addition to the "contact sequence" and "dielectric", for the 3 poles, as specified in the General Instruction Bulletin, 6.2.4.7-1, it is recommended that the breaker be checked as specified in the "Maintenance, Adjustment and Test" section of the above bulletin.

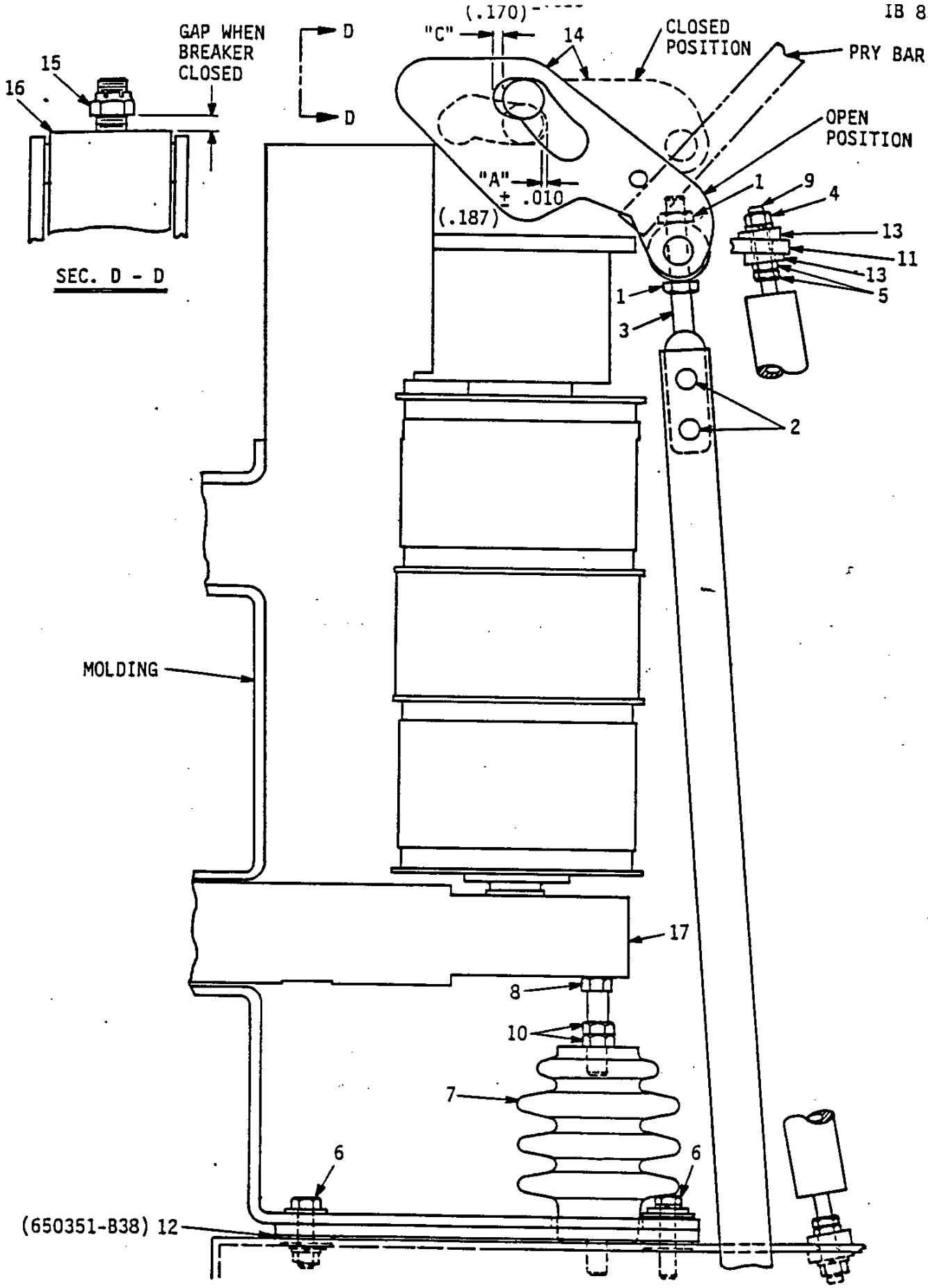
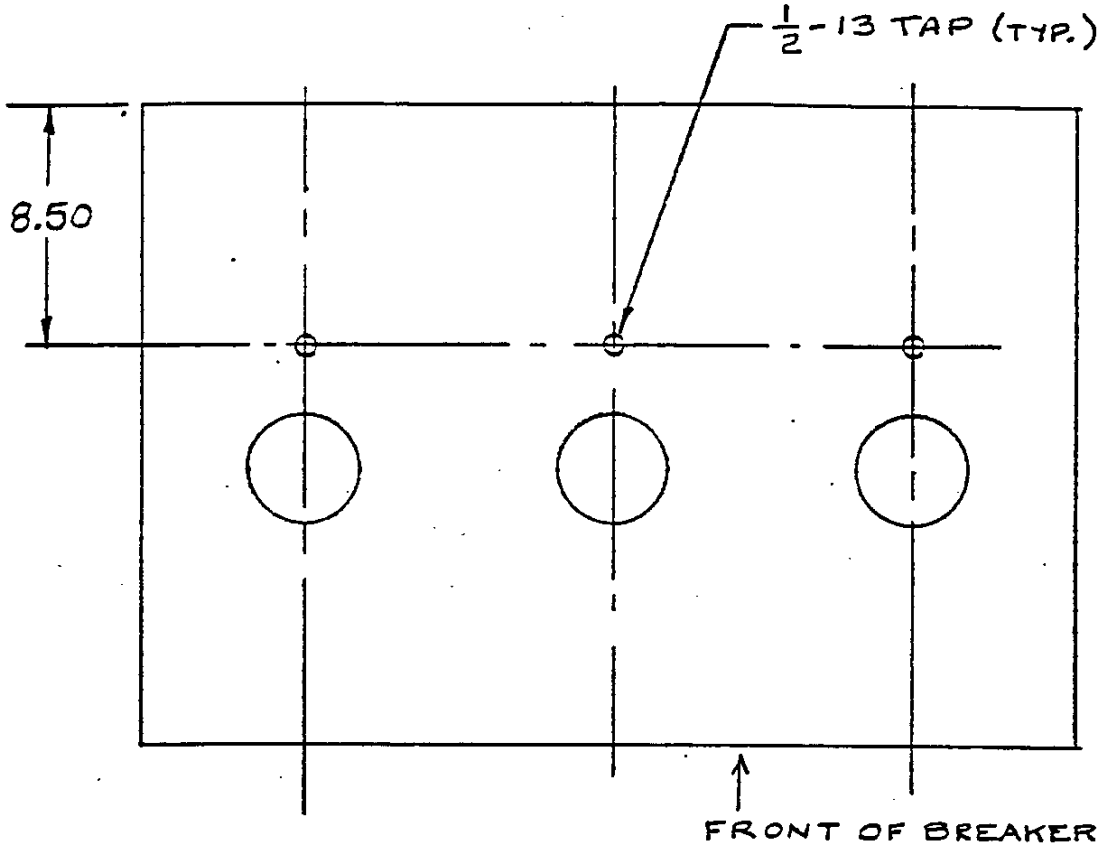

GAP WHEN BREAKER CLOSED
15
16
D
D
(.170)
"C"
14
CLOSED POSITION
PRY BAR
OPEN POSITION
"A" ± .010
(.187)
1
9
4
13
11
13
5
1
3
2
SEC. D - D
MOLDING
17
8
10
7
6
6
(650351-B38) 12

FIG. 1



TOP VIEW

FIG. 2