EPC Enclosures Model M75 7", 9" & 11" Internal Diameter

Installation & Maintenance Information

IF143

EPC COMBINATION LINE STARTER AND CIRCUIT BREAKER

1. Remove top and bottom covers. To remove top cover, depress lock and unscrew cover. See Figure 1. To remove bottom cover, lift and disengage lock then unscrew cover. Both covers are quick opening type requiring less than two turns to remove or install.

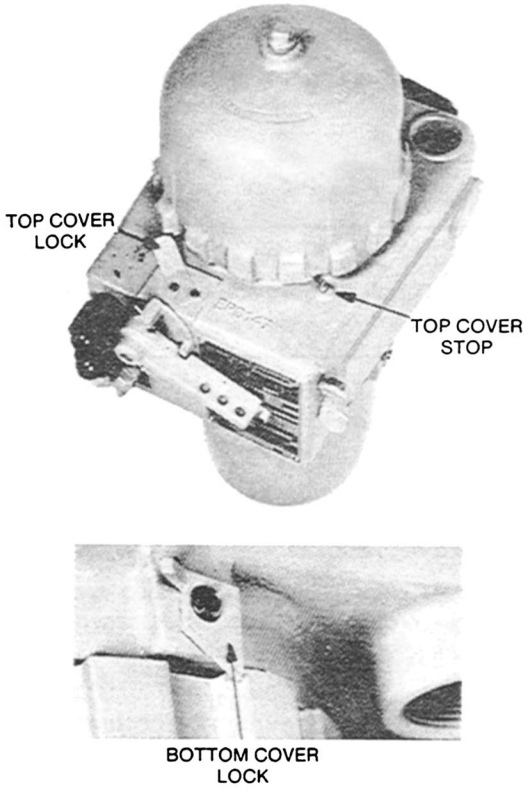

Figure 1
Top and Bottom Cover Locks

All screw threads have been treated with a corrosion-resistant lubricant which penetrates the metal. Whenever disturbing threaded joints, relubricate the threads with STL thread lubricant.

CAUTION

During installation, exercise care to prevent grit, dirt or other foreign material from lodging on threads. If such foreign material does settle on these threads, clean them with kerosene or Stoddard solvent*, then relubricate with STL thread lubricant.

*To avoid the possibilities of an explosion, oxidation and corrosion, do not use gasoline or similar solvents.

2. **Remove Reset Frame**
The reset frame consists of a cross arm with reset fingers and reset operating rod. See Figure 2. To remove the reset frame, grasp one side of the hinge strap and the cross arm (near the hinge pin or pivot point) and separate the two to release the cross arm from the hinge pins. Let the reset frame hang or remove it by disengaging the reset operating rod from the reset arm. The frame will not be needed again until the unit has been completely wired.

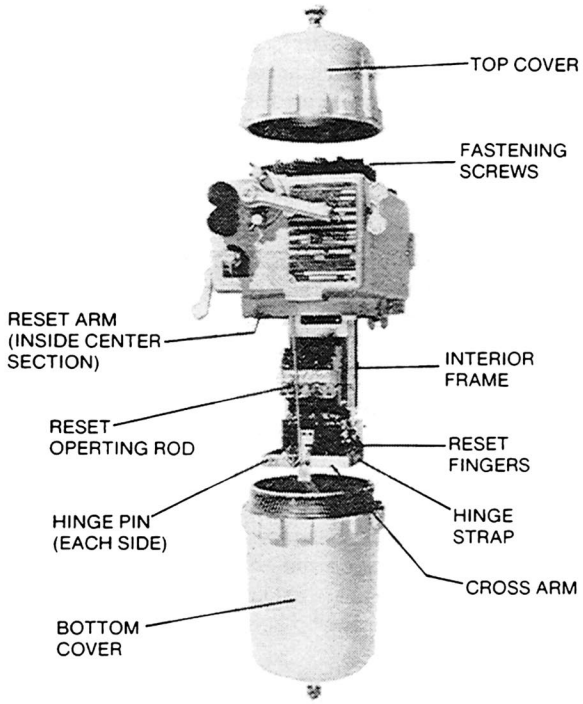

Figure 2 - Separated View
Shown with Breather & Drain Option Installed.

3. **Remove Internal Frame**
7" and 9" Internal Diameter:
Loosen fastening screws securing the two mounting shoes until the shoes are free to pivot, **but do not remove screws from body**. Then swing the shoes inward and remove the frame. Lowering the frame will release the lower supports (the bracket on the interior frame and the brace on the center section).

11" Internal Diameter:
Remove fastening screws securing interior frame to upper mounting brackets. Then release the lower studs from hooks by lifting frame, sliding the device through the lower opening.

4. **Install Center Section (Body)**
Install the sealing fittings and mount the body on the wall, rack or frame. Three-point suspension permits hanging and leveling the body from the top screw before locating and installing the two bottom screws. After tightening all screws evenly, install the conduit and pull the wires. See Figure 3 and WARNING notice on page 2.

IMPORTANT

Use of maximum size conduit requires that union, if used, be installed at least 4" from face of conduit entrance to avoid interference with cover.

Dimensions	EPC Internal Diameter 7"	9"	11"
a	9-3/8"	9-3/8	11
b	4-11/16	4-11/16	5-1/2
c	5-1/4	5-1/4	5-1/2

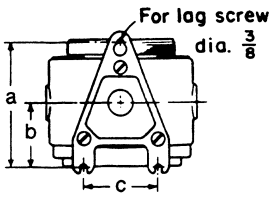

Figure 3
Three-Point Suspension

WARNING

No conduit openings are to be added in the field. All unused conduit openings must be plugged. Plugs must be at least ⅛" thick and have a minimum of five threads engaged. All conduits entering and leaving the enclosure must be sealed, using explosionproof seals, within 18" of the enclosure.

5. **Electrical Control Assembly**
   For an enclosure supplied without electrical control equipment, mount the internal devices on the interior frame and make necessary electrical connections in accordance with National Electrical Code® and any other applicable local codes. Line starter and circuit breaker combinations require electrical connections between the circuit breaker "load" terminals and the starter "line" terminals.

6. **Replace Interior**
   7" and 9" Internal Diameter:
   Before replacing the interior frame, engage the lower support bracket and brace and place the circuit breaker operating arm in position to operate the breaker. Place mounting shoes in position and tighten screws to secure frame.

   11" Internal Diameter:
   To replace interior frame, insert through lower opening, engaging frame's studs in hooks. Position circuit breaker operating mechanism by pivoting top of frame toward back of body, then bringing frame forward to engage circuit breaker operating handle with operating fork. Secure frame with fastening screws.

7. **Connections**
   The internal frame now installed, make necessary "line" connections to the circuit breaker and "load" connections to starter. Keep the amount of wire to a minimum so that it won't interfere with the assembling of the covers. Install overload relay heaters and tighten all connections.

   Field terminal tightening torque values found in the starter or circuit breaker manufacturers' installation information or listed on the product itself should be used for all field wiring connections.

8. **Replace Reset Frame**
   To replace the reset frame hanging from the center section, place one end of the cross arm over hinge pin and spring other end in place. If the reset frame was removed, hook reset operating rod through reset arm in center section and spring frame in place as explained in the preceding sentence. See Figure 2.

9. **Replacement of Covers**
   Turn covers on until mechanical stops engage. Check locks to see that they are in position to prevent loosening the covers. See Figure 1.

EPC MAGNETIC LINE STARTER ONLY

1. Follow general instructions for combination line starter and circuit breaker enclosures; ignore the reference to circuit breaker operation.

EPC CIRCUIT BREAKER ONLY

1. Follow general instructions for combination line starter and circuit breaker enclosures; ignore reference to starter or reset frame.

MAINTENANCE

WARNING

Always disconnect primary power source before opening enclosure for inspection or service.

1. Frequent inspections should be made. A schedule for maintenance check should be determined by the environment and frequency of use. It is recommended that it should be at least once a year.
2. Perform visual, electrical, and mechanical checks on all components on a regular basis.
   - Visually check for undue heating evidenced by discoloration of wires or other components, damaged or worn parts, or leakage evidenced by water or corrosion in the interior.
   - Electrically check to make sure that all connections are clean and tight, and that contacts in the components make or break as required.
   - Mechanically check that all parts are properly assembled, and operating mechanisms move freely.

In addition to these required maintenance procedures, we recommend an Electrical Preventive Maintenance program as described in the National Fire Protection Association Bulletin NFPA No. 70B.

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