

Installation Instructions

Part No. 30HK900011

SAFETY CONSIDERATIONS

Installing, starting-up and servicing air conditioning equipment can be hazardous due to system pressures, electrical components, etc.

Only trained, qualified installers and service mechanics should install, start-up and service this equipment. Untrained personnel can perform basic maintenance functions such as cleaning coils. All other operations should be performed by trained service personnel. When working on the equipment, observe precautions in the literature and on tags, stickers and labels attached to the equipment.

Follow all safety codes, wear safety glasses and work gloves, and keep quenching cloth and fire extinguisher nearby.

⚠ WARNING

Before beginning installation of this equipment, be sure all power to the unit is disconnected, and tags are properly placed to alert others.

INSTALLATION

Step 1 — Mount Oil Safety Switch (OPS) —
Pre-drilled holes for mounting the oil pressure safety

switch are provided in the bottom flange of the control box. Use the no. 6B screws (Package Contents table, item 4) to attach the oil pressure safety switch (item 1) to the bottom flange of the control box, between main power and control power inlet holes (see Fig. 1). Install oil safety switch so that terminals face toward the side.

Step 2 — Route Capillary Tubes from Switch
pass the 24-in. lengths of capillary tube, marked LUBE and SUCTION, through the 7/8-in. diameter hole near the switch. See Fig. 1. Place the plug button (Package Contents table, item 5) in the hole to protect the tubing and to close the opening.

Package Contents

ITEM	DESCRIPTION	QTY
1	Oil Safety Switch*	1
2	Elbow, 90° - 1/4 FI x 1/4 MPT	1
3	Coupling, 1/4 FI x 1/4 MPT	1
4	Self Tapping Screws, No. 6B x 1/2 lg	2
5	Capillary Plug Button, 7/8 OD	1
6	Capillary Assembly, 1/8-in. OD x 102 lg	2
7	Elbow, 90° - 1/4 M FI x 1/4 F FI	1

*Includes 2 wires with quick-connect terminals.

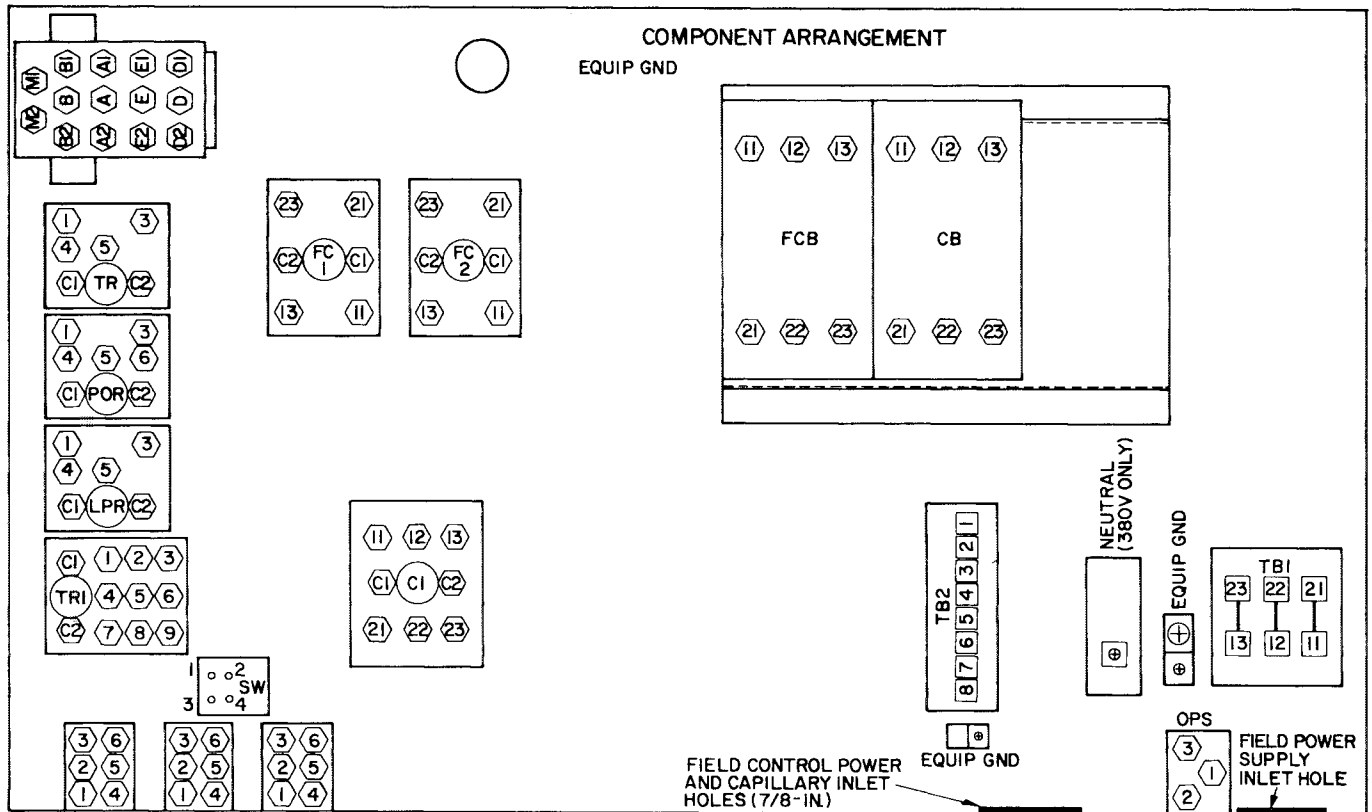


Fig. 1 — Oil Pressure Safety Switch (OPS) Location

Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice and without incurring obligations.

Step 3 — Attach Capillary Tubes to Compressor

1. Shut off compressor suction and discharge service valves to isolate the compressor.
Take care to bleed off refrigerant pressure; then remove the two 1/4-in. pipe plugs near the pump-end bearing head. See Fig. 2. Attach the coupling (item 3) and elbow (item 7) at the SUCTION opening. See Fig. 2. Attach the elbow (item 2) at the LUBE opening.
2. Attach each capillary tube (item 6) to the elbows and run the tubes as required to meet the capillary from the pressure switch.

Step 4 — Join Capillary Tubes — Cut off any excess tubing and insert the tube end approximately one in. into the bulb joint. Braze the joint, taking care not to pinch the capillary nor fill it with braze.

Step 5 — Make Electrical Connections — For electrical hook-up, wires and terminal connectors must be field supplied. Use 16 AWG, 90 C wire. All terminal connections are 1/4-in. quick-connect. Use multiple connection terminals as required.

1. Refer to unit wiring label inside front access door for complete wiring schematic.

2. Route the wiring in the control box along existing wire harness, taping or tying to harness as needed. Be sure wires do not make contact with rough or sharp equipment parts.
3. Remove wires attached to oil safety switch. Remove black wire between terminal C1 of TR and terminal 3 of TR1.
4. Make wiring connections as shown in Fig. 3.

NOTE: Refer to Component Arrangement of unit wiring label and Fig. 1 for location of TR, TR1 and TM terminals. Timer Motor (TM) is located above TR. Terminals E, E1, E2 are not shown in control schematic.

TESTING

To test the control circuit for proper operation after oil safety switch installation:

1. Restore power to unit.
2. Open compressor circuit breaker.
3. Turn STOP-START switch to START and let contactors pull in. The contactors should drop out 35 seconds after being energized as the oil safety switch remains open from lack of oil pressure.

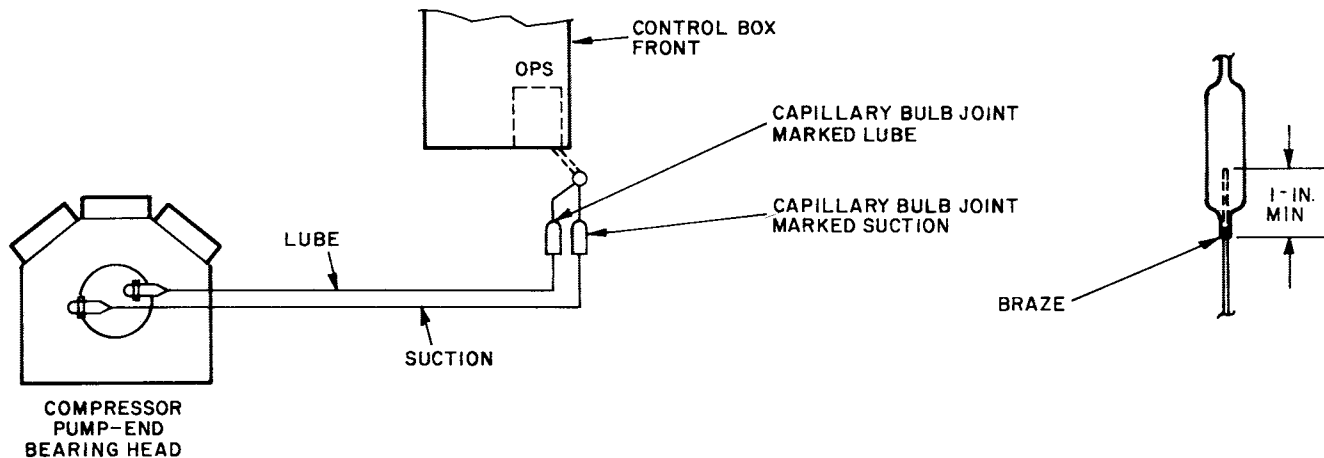
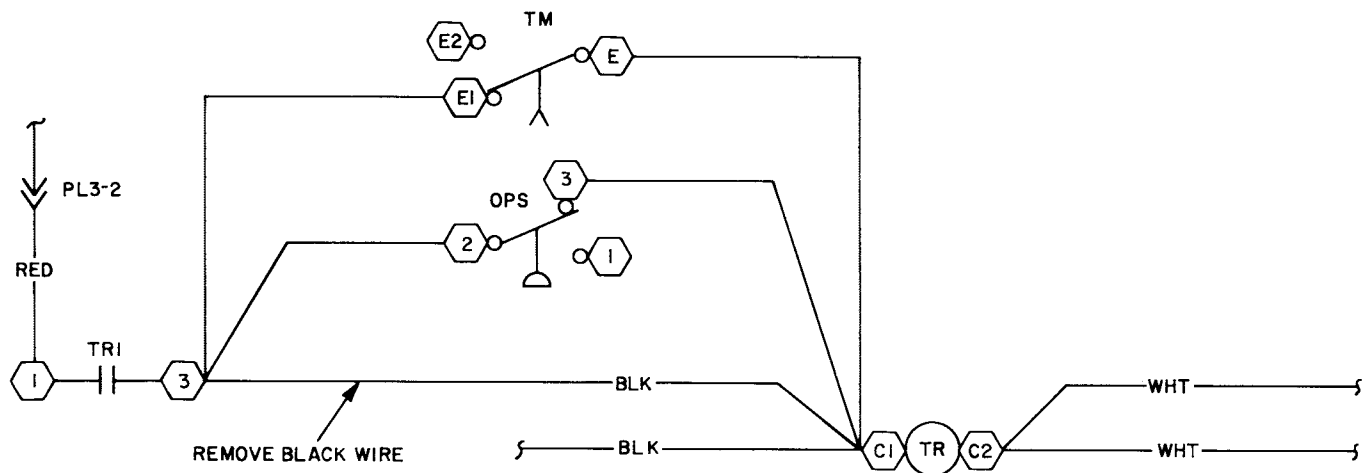


Fig. 2 — Oil Pressure Switch (OPS) Capillary Connections



OPS — Oil Pressure Safety Switch
 TM — Timer Motor
 TR — Timer Relay

Fig. 3 — Oil Pressure Safety Switch Control Box Wiring Connections