

ACCESSORY KIT INSTALLATION INSTRUCTIONS

PUMP OUT Accessory - Model 2PO04702124

**FOR 208/230/460 VOLT SPLIT-SYSTEM COOLING ONLY INDOOR UNITS
15 TON THROUGH 20 TON KEU180/LEU240 & KBU180/LBC240 MODELS
WHEN MATCHED WITH HCE180/240 and HHB180/240 CONDENSING UNIT MODELS ONLY**

GENERAL

The pumpout accessory is intended to prevent a possible liquid refrigerant slug to the compressor on startup. This condition may be caused by a migration of refrigerant to the evaporator during the normal off-cycle. These instructions provide the necessary information to properly field install a pumpout accessory on the indoor units listed above. Components that are required in the accessory are listed in Table 1, and pictured in Figure 1.

Table 1: Accessory Components (Internal Connection Wiring is also included)

ITEM	QTY.	PART NO.	DESCRIPTION
1	1 ea	7846	Solenoid Valve ME14S250
2	1 ea	116	Relay (POR1)
3	1 ea	66059	(AUX) Transformer
4	2 ea	1269	Transformer Pri. Fuse Holder
5	2 ea	7806	Transformer Pri. Fuse
6	1 ea	65939	Transformer Sec. Circuit Breaker
7	8 ea	5814	Screw, PNH #6-32 X .5
8	4 ea	5816	Screw, PNH #8-32 X .5
9	4 ea	7562	Wire Nut
10	1 ea	7304	Bushing, Strain Relief
11	2 ea	7324	Bushing, Snap
12	6 ea	7768	Wire Tie

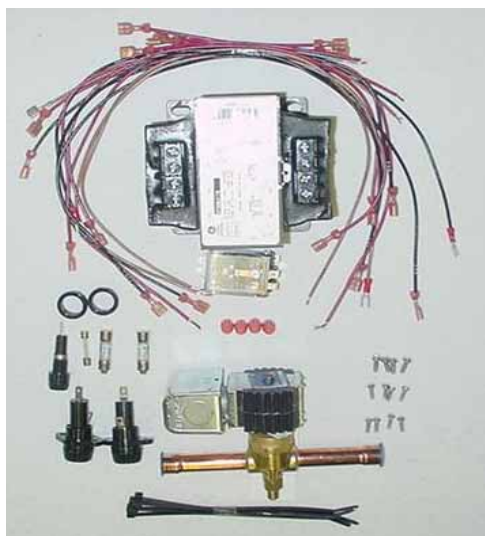


Figure 1 - Accessory Components

⚠ WARNING

Improper installation, adjustment, service or maintenance can cause injury or property damage. Therefore, only a qualified installer or qualified service personnel should perform this conversion.

⚠ WARNING

If the unit is connected to power sources, make sure that all electrical power to the unit has been disconnected prior to servicing.

1. Disconnect electrical power to the unit. The unit may have more than one power source.
2. Recover refrigerant charge from Systems #1, and #2.
3. Remove the indoor unit control box access panel.
4. Install pump out relay (POR1) in the indoor unit control box. Mounting holes are pre-punched in the control panel at the position marked (POR1) as shown on the unit connection diagram.
5. Install (AUX) transformer in the indoor unit control box. Mounting holes are pre-punched in the control panel at the position marked (AUX) transformer as shown on the unit connection diagram.
6. Install (AUX) transformer fuse holders and fuses (FU1/FU2) in the indoor unit control box. Mounting holes are pre-punched in the control panel at the position marked transformer fuses (FU1/FU2) as shown on the unit connection diagram.
7. Install (AUX) transformer circuit breaker (CB) in the indoor unit control box. Mounting holes are pre-punched in the control panel at the position marked transformer fuse as shown on the unit connection diagram.

8. Install the solenoid valve (POs1) in the liquid line, as close to the indoor unit evaporator coils as possible; within the indoor unit cabinet (see Figure 2). As with all solenoid operated devices, the valve is position sensitive and must **NEVER** be installed with the coil below the body of the valve. Some examples of Correct and Incorrect positions are shown in Figure 3. The solenoid valve is unidirectional. Because of this, it **MUST** be installed with the "IN" port marked on the valve body away from the indoor coil and the arrow on the valve body toward the indoor coil (see Figure 4).

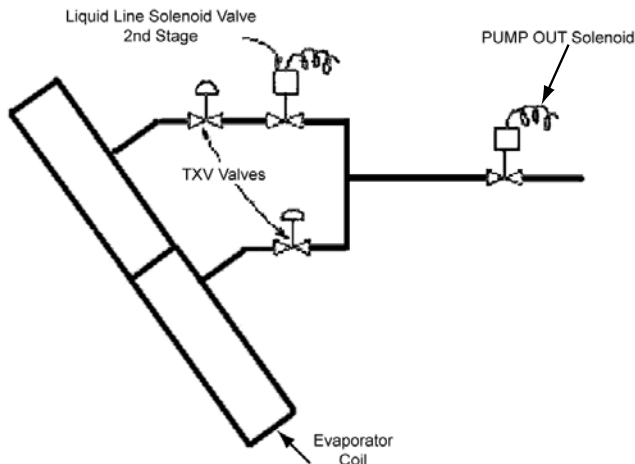


Figure 2 - Solenoid Valve Location

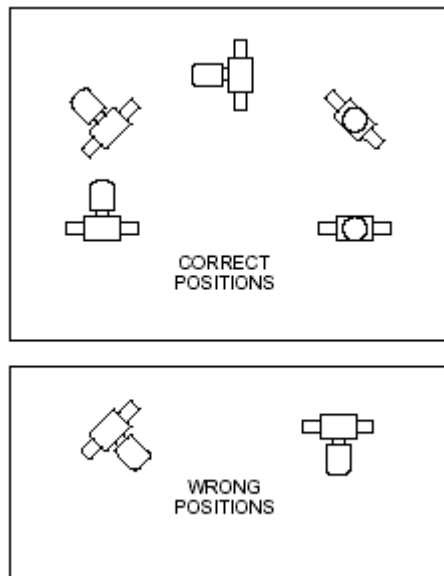


Figure 3 - Solenoid Valve Positions

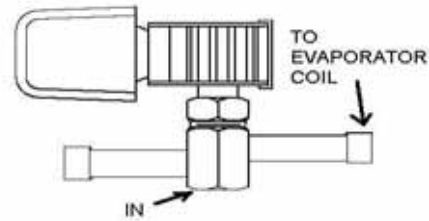


Figure 4 - Solenoid Valve Direction

9. Because of the extended copper connections on the valve, disassembly of the valve is not required when brazing. However, it **IS REQUIRED** that a wet rag be wrapped around the body of the valve when brazing to prevent overheating on internal seals. Refer to the manufacturer's installation instructions for additional information. (Sporlan Bulletin 30-10, 30-11). Use industry accepted practices for brazing, evacuation and charging the unit.
10. After brazing in the valve, check for leaks, then evacuate and charge the system.
11. All wiring must comply with prevailing Local and National wiring codes and ordinances.

NOTE: Refer to unit wiring diagram and simplified diagram Figure 5 provided with this instruction.

- Connect wire 101/BLK from L3 on (1M) contactor to fuse (FU1).
- Connect wire 102/BLK from L2 on (1M) contactor to fuse (FU2).
- Connect wire 103/BLK from fuse (FU1) to the (AUX) transformer terminal (H1).
- Connect wire 104/BLK from fuse (FU2) to the (AUX) transformer terminal (H4) for a 460 Volt application, or terminal (H3) for a 230 Volt application, or terminal (H2) for 208 Volt application.
- Connect wire 203/RED from (AUX) transformer terminal (X2) to circuit breaker (CB).
- Connect wire 204/RED from circuit breaker (CB) to Relay (POR1) terminal (5).
- Connect wire 201/GRN from (AUX) transformer terminal (X1) to ground (GRN).
- Connect wire 212/BRN from (AUX) transformer terminal (X1) to solenoid (POs1) (with wire nuts provided). Be sure to run the wire through both the

strain relief bushing hole in the control box, and the snap bushing that is to be installed in the conduit boss on the solenoid valve.

- Connect wire 207/RED from relay (POR1) terminal (7) to solenoid (POs1) (with wire nuts provided). Be sure to run the wire through both the strain relief bushing hole in the control box, and the snap bushing that is to be installed in the conduit boss on the solenoid valve.
- Install strain relief bushing in control box.
- Connect wire 208/BRN from terminal block (TB1) terminal (C) to relay (POR1) terminal (B).
- Connect wire 210/RED from terminal block (TB1) terminal (PO1) to relay (POR1) terminal (A).
- Connect field supplied wires from terminal block (TB2) terminal (PO1) to terminal block (TB1) terminal (PO1).

NOTE: Terminal block (TB3) located in outdoor unit.

12. Secure wiring in the unit control box in a neat workman like manner using wire ties.
13. Close unit control box, replace unit access panel and restore power to the unit.
14. Verify proper unit operation. On a call for cooling, the compressor, O.D. fans, and I.D. fan start and run. The pumpout solenoid valve remains closed until the low pressure switch opens. When the low pressure switch opens, the pumpout solenoid valve will open and allow the unit to run properly.
15. Contact your local branch or distributor for questions regarding installation.

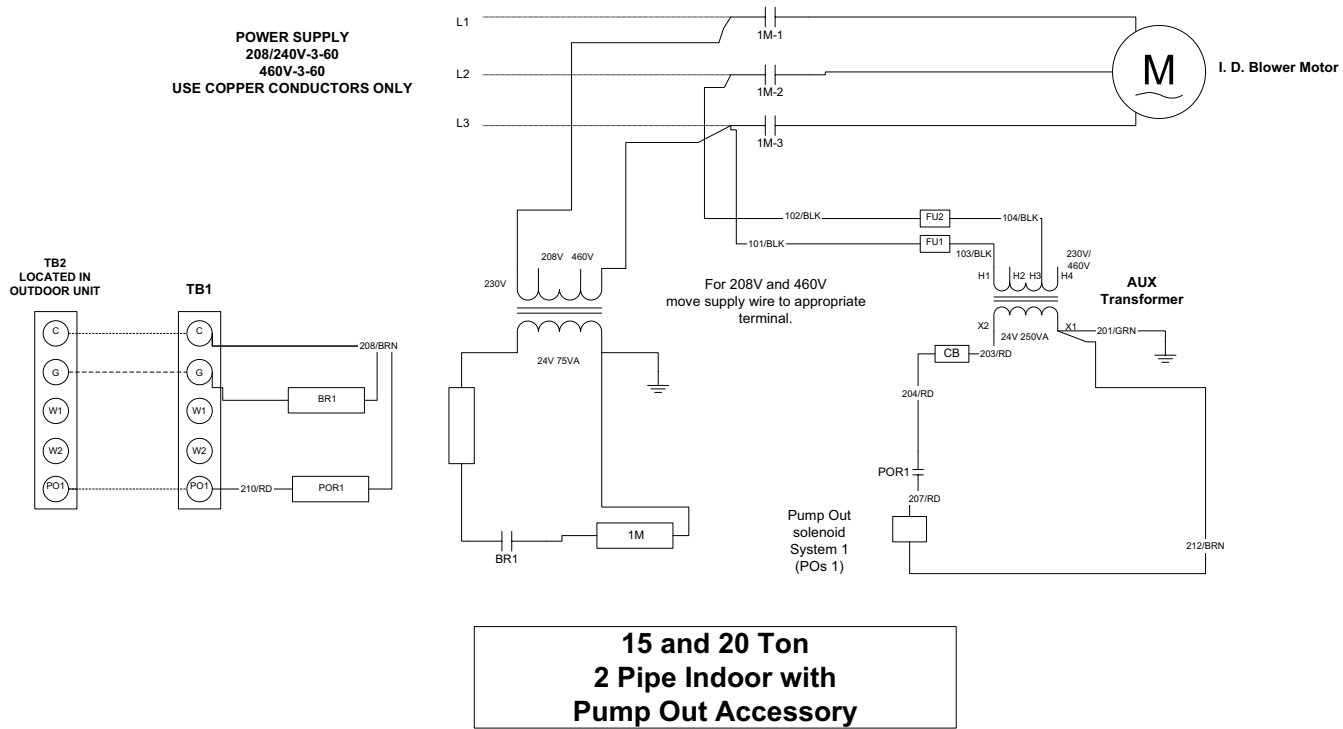


Figure 5 - Simplified Wiring Diagram

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