

# Installation Instruction


**NOTE:** Read the entire instruction manual before starting the installation.

Use only the kit components described in this installation procedure.

## SAFETY CONSIDERATIONS

Installing and servicing air conditioning equipment can be hazardous due to system pressures and electrical components. Only trained personnel should install or service air conditioning equipment.

Untrained personnel can perform basic maintenance functions such as cleaning coils, or cleaning and replacing filters. All other operations should be performed by trained service personnel. When working on air conditioning equipment, observe precautions in the literature, on tags, and on labels attached to the unit.

Recognize safety information. This is the safety-alert symbol . When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury.

Understand these signal words; DANGER, WARNING, and CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies hazards which **could** result in personal injury or death. CAUTION is used to identify unsafe practices which **may** result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

Follow all safety codes. Wear safety glasses and work gloves.

## INTRODUCTION

These instructions cover installation of Low-Pressure Switch Kit KAALP0301R22 on split system air conditioners containing R-22 refrigerant and KAALP0401PUR on air conditioners containing Puron® (R-410A) refrigerant.

### Kit contents:

- Low-Pressure Switch- 1
- Adapter Tee - 1
- Flare Gasket - 2
- Pressure Switch Adapter Tube - 1
- Installation Instructions - 1

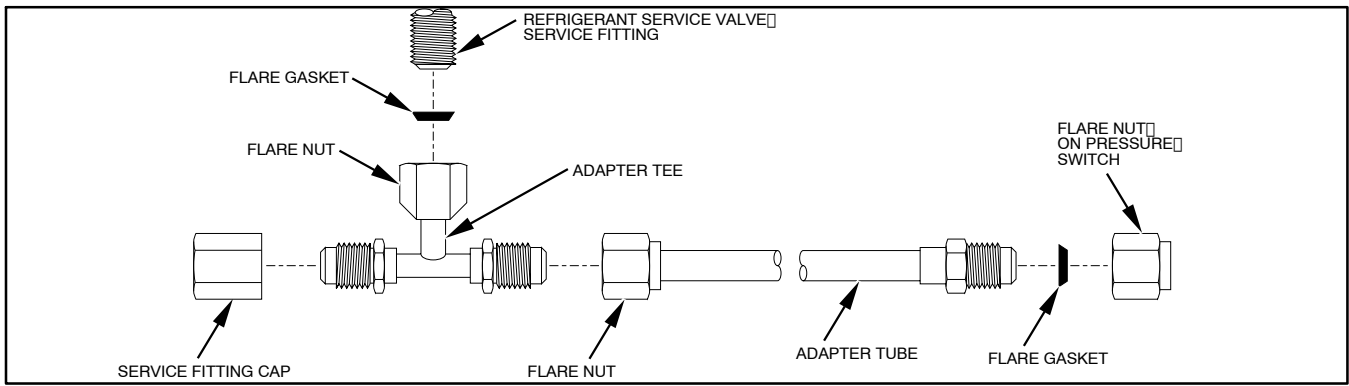


## WARNING

### **ELECTRICAL SHOCK HAZARD**

Failure to follow this warning could result in personal injury or death.

Before beginning any installation or modification, be sure the main electrical disconnect switch is in the OFF position. TAG THE DISCONNECT SWITCH WITH A SUITABLE WARNING LABEL.



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Fig. 1 - Low-Pressure Switch Refrigerant Connections

## INSTALLATION

### ⚠ CAUTION

#### EQUIPMENT DAMAGE AND/OR OPERATION HAZARD

Failure to follow this caution may result in equipment damage or improper operation.

When making flare connections, use one of the flare gaskets provided in the kit to ensure a leak-tight refrigerant connection. Use a backup wrench to avoid breaking connection or splitting flare.

**NOTE:** The liquid- and vapor-service valves are located outside of the unit at the rear. The smaller valve is the liquid-service valve; the larger valve is the vapor-service valve.

#### Switch Refrigerant Connections:

**NOTE:** Make sure the liquid-service valve is in the fully back seated (counterclockwise) position before installation (Back seating service valves have no valve core in the service port).

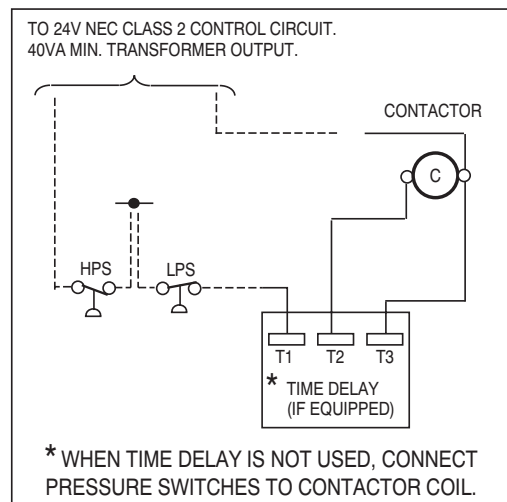
Refer to Fig. 1 and proceed as follows to install the low-pressure switch.

1. Remove knockout in service panel next to service valves.
2. Remove valve core from one end of adapter tee provided in kit.
3. Securely connect pressure switch adapter tube flare nut to side of adapter tee without valve core.
4. Route the adapter tube completely through knockout so that tee can be attached to liquid-service valve later.
5. Securely connect pressure switch flare nut, using flare gasket, to male flare fitting on the pressure switch adapter tube inside the unit.
6. Remove seal cap from service fitting on vapor-service valve on unit and securely connect to remaining male flare fitting on adapter tee.
7. Securely connect flare nut on adapter tee, using flare gasket to service fitting on service valve.
8. On back seating valves, remove service valve stem cap and open valve 3/4 turn.
9. Replace service valve stem cap fingertight and further tighten cap 1/6 turn, or 1/12 turn on back seating valves.
10. Check all refrigerant connections for leaks and repair if necessary.

## ELECTRICAL CONNECTIONS

Refer to Fig. 2 and proceed as follows:

1. Locate unit contactor coil terminals or, if equipped, compressor time delay terminal T1.
2. On units without compressor time delay, make electrical connections as follows:
  - a. One pressure switch in unit: Disconnect Y lead from contactor coil terminal. Connect 1 pressure switch lead to Y lead. Connect other pressure switch lead to contactor coil terminal.
  - b. Both high- and low-pressure switches in unit: Disconnect Y lead from contactor coil terminal. Connect 1 high pressure switch lead to Y lead, then connect other high-pressure lead to 1 low-pressure lead. Connect remaining low-pressure lead to contactor coil terminal.
3. On units with compressor time delay, make electrical connections as follows:
  - a. One pressure switch in unit: Disconnect wire leading to T1 on time delay board. Connect 1 pressure switch lead to disconnected lead. Connect other pressure switch lead to T1 on time delay board.
  - b. Both high- and low-pressure switches in unit: Disconnect wire leading to T1 on time delay board. Connect 1 high-pressure lead to disconnected lead, then connect other high-pressure lead to 1 low-pressure lead. Connect remaining low-pressure lead to T1 on time delay board.
4. Restore power and check unit operation.



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Fig. 2 - Air Conditioner Electrical Connections