

Installation Instruction

Low-Pressure
Switch Kit

KAALP0101LPS
KHALP0101LPS

NOTE: Read the entire instruction manual before starting the installation.
This symbol → indicates a change since last issue.

SAFETY CONSIDERATIONS

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

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

Follow all safety codes. Wear safety glasses and work gloves. Use a quenching cloth for brazing operations. Have a fire extinguisher available.

⚠ WARNING: Before beginning any modification, be sure main electrical disconnect switch is in the OFF position. TAG DISCONNECT SWITCH WITH A SUITABLE WARNING LABEL. Electrical shock can cause personal injury or death.

INTRODUCTION

These instructions cover the installation of Low-Pressure Switch Kit KAALP0101LPS on air conditioning equipment and KHALP0101LPS on heat pump equipment.

The following items are included in the kit:

Low-pressure switch	1
Adapter tee	1
Flare gasket	2
Extender tube	1
Wirenut	2

INSTALLATION

⚠ CAUTION: When making flare connections, use one of the flare gaskets provided in the kit to ensure a leaktight refrigerant connection. Use a backup wrench to avoid breaking connection or splitting flare.

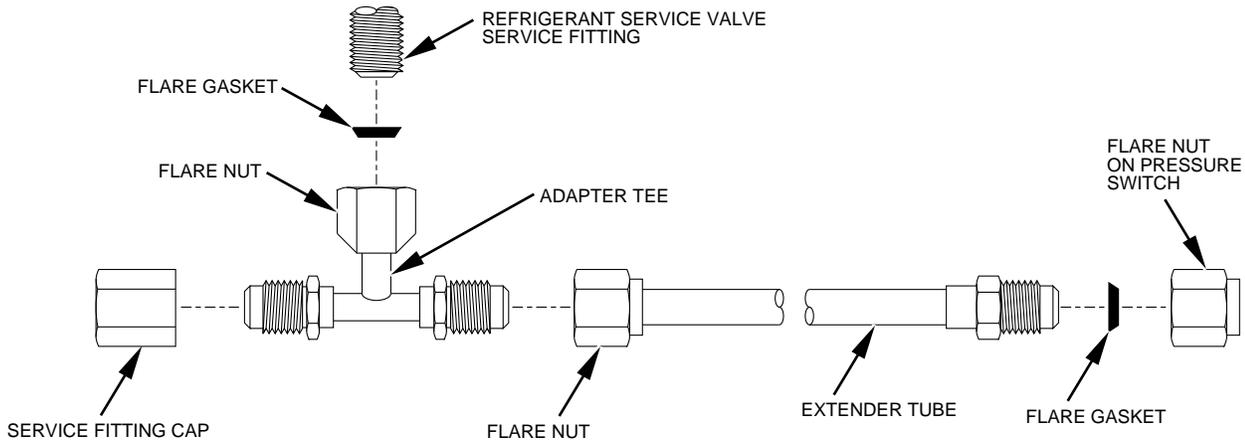
→ **NOTE:** The liquid- and vapor-service valves are located outside the unit at the rear. The smaller valve is the liquid-service valve and the larger valve is the vapor-service valve.

→ PROCEDURE 1—LOW-PRESSURE SWITCH INSTALLATION

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

NOTE: Back seating service valves must be in the fully back seated (counterclockwise) position before installation. (Back seating service valves have no valve core in the service port.)

1. Remove knockout in service panel next to service valves.
2. Remove valve core from 1 end of adapter tee provided in kit.
3. Carefully uncoil extender tube—tube must not be kinked. Securely connect extender nut flare tube to end of adapter tee without valve core.
4. Route extender tube completely through knockout so tee can be attached to service valve later.
5. Securely connect pressure switch flare nut, using flare gasket, to male flare fitting on extender tube inside unit.
6. Remove seal cap from service fitting on vapor-service valve for air conditioner units, or liquid-service valve for heat pump units, 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.



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Fig. 1—Low-Pressure Switch Refrigerant Connections

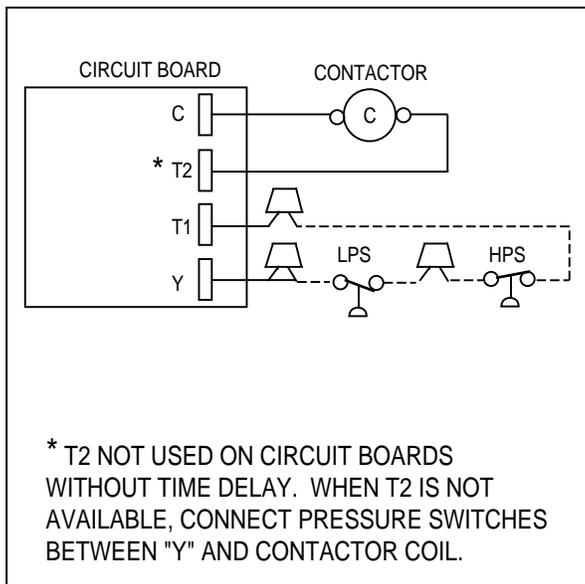
9. Replace service valve stem cap fingertight and further tighten cap 1/6 turn, or 1/12 turn on back seating valves.
10. Check all refrigerant connections for leaks and repair if necessary.

→ **PROCEDURE 2—ELECTRICAL CONNECTION**

(See Fig. 2 for Heat Pump and Fig. 3 for Air Conditioner.)

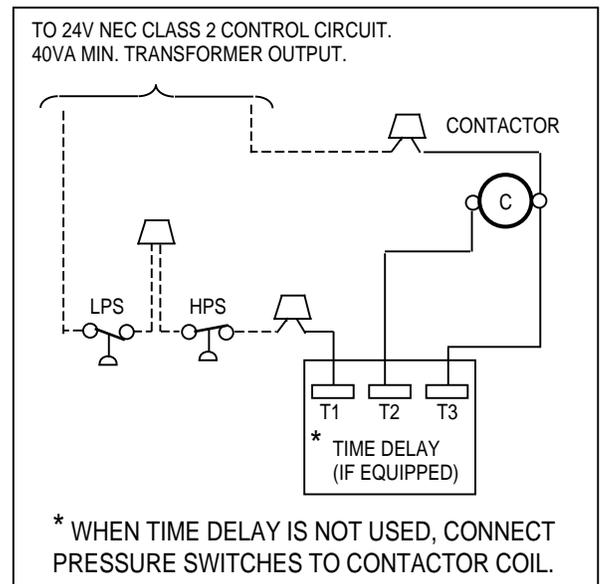
NOTE: In some instances it may be necessary to clip the quick-connect terminals from the wire leads and strip the insulation from end of the lead to make an electrical connection. Wirenuts have been provided for this purpose.

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: Cut Y lead approximately 4 in. from contactor coil terminal. Connect 1 pressure switch lead to 1 cut lead. Connect other pressure switch lead to other cut lead.
 - b. Both high- and low-pressure switches in unit: Cut Y lead approximately 4 in. from contactor coil terminal. Connect 1 high-pressure switch lead to 1 cut lead, then connect other high-pressure lead to 1 low-pressure lead. Connect remaining low-pressure lead to other cut lead.
3. On units with compressor time delay, make electrical connections as follows:
 - a. One pressure switch in unit: Cut wire leading to T1 on time delay board. Connect 1 pressure switch lead to 1 cut lead. Connect other pressure switch lead to other cut lead.
 - b. Both high- and low-pressure switches in unit: Cut wire leading to T1 on time delay board. Connect 1 high-pressure lead to 1 cut lead, then connect other high-pressure lead to 1 low-pressure lead. Connect remaining low-pressure lead to other cut lead.
4. Restore power and check unit operation.



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→ **Fig. 2—Heat Pump Electrical Connections**



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→ **Fig. 3—Air Conditioner Electrical Connections**