

2-Speed Reversing Valve Replacement Kit


Installation Instructions

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

SAFETY CONSIDERATIONS

Improper installation, adjustment, alteration, service, maintenance, or use can cause explosion, fire, electrical shock, or other conditions which may cause death, personal injury, or property damage. Consult a qualified installer, service agency, or your distributor or branch for information or assistance. The qualified installer or agency must use factory-authorized kits or accessories when modifying this product. Refer to the individual instructions packaged with the kits or accessories when installing.

Follow all safety codes. Wear safety glasses, protective clothing, and work gloves. Use quenching cloth for brazing operations. Have fire extinguisher available. Read these instructions thoroughly and follow all warnings or cautions included in literature and attached to the unit. Consult local building codes and current editions of the National Electrical Code (NEC) NFPA 70. In Canada, refer to current editions of the Canadian electrical code CSA 22.1.

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 the 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.



WARNING

ELECTRICAL SHOCK HAZARD

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

Before installing, modifying, or servicing system, main electrical disconnect switch must be in the OFF position and install a lockout tag. There may be more than 1 disconnect switch. Lock out and tag switch with a suitable warning label.



CAUTION

CUT HAZARD

Failure to follow this caution may result in personal injury.

Sheet metal parts may have sharp edges or burrs. Use care and wear appropriate protective clothing and gloves when handling parts.

INTRODUCTION

This instruction covers installation of replacement reversing valve into 24 size 2-stage heat pumps.

DESCRIPTION AND USAGE

The replacement reversing valve kit is designed to allow easier replacement of existing reversing valve

NOTE: Replacement of the reversing valve must include recovery and recycling of refrigerant currently in the system. Provided the refrigerant has not been contaminated with moisture, acid, solid particulate, or non-condensable, it may be recovered by following the procedures listed below. However, if the refrigerant is contaminated, recycling or reclaiming methods are required.

If leaks are present in the system, meaning the refrigerant may be contaminated, recycling or reclaiming methods **MUST** be used. Installation of new filter drier(s) is required. The filter drier-type will depend upon the contaminants in the system. See Split-System Residential Air Conditioners and Heat Pumps Service Manuals for further information.



WARNING

PERSONAL INJURY AND UNIT DAMAGE HAZARD

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

Relieve pressure and recover all refrigerant before system repair or final unit disposal. Use all service ports and open all flow-control devices, including solenoid valves.



WARNING

UNIT OPERATION AND SAFETY HAZARD

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

Puron® (R-410A) refrigerant systems operate at higher pressures than standard R-22 systems. Do not use R-22 service equipment or components on Puron® refrigerant equipment.

INSTALLATION



WARNING

ELECTRICAL SHOCK HAZARD

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

Before installing, modifying, or servicing system, main electrical disconnect switch must be in the OFF position and install a lockout tag. There may be more than 1 disconnect switch. Lock out and tag switch with a suitable warning label.

1. Shut off all power to system, including indoor unit.
2. Remove charge from system and disconnect wiring from reversing valve solenoid.
3. Mark cut point using measurements in Fig. 1.

NOTE: This is final cut dimension.



WARNING

PERSONAL INJURY OR DEATH HAZARD

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

Use of torch may cause oil to catch fire, resulting in personal injury or death.

To remove components, use tubing cutter **ONLY**.

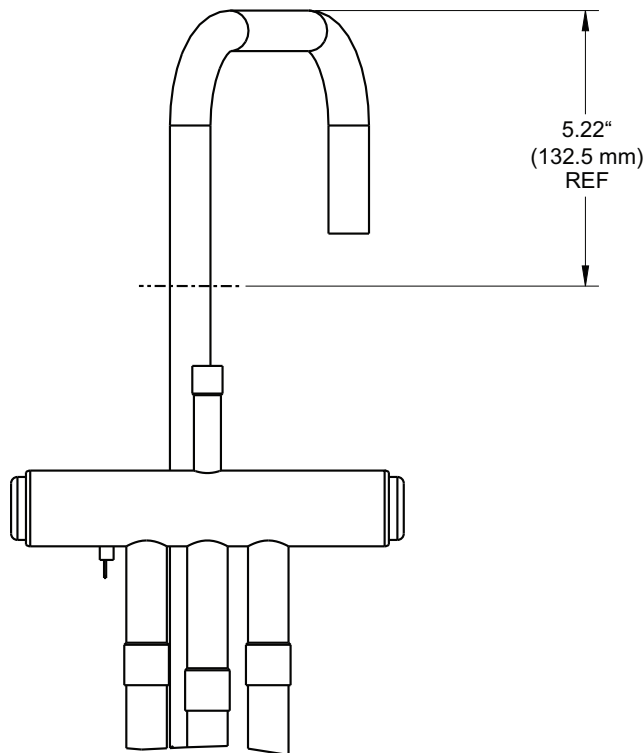


Fig. 1- Cut Point Location

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4. Use tubing cutter to cut existing tubing in order to avoid contaminating system with metal shavings. Multiple cuts may be required due to clearance needed with style of tubing cutter used.
5. Cut existing field connection to vapor service valve. The kit includes the new vapor service valve.
6. Cut the existing “tube vapor” tubing prior to un-brazing coil header joint. See Fig. 2.
7. Cut the existing “tube suction” at location marked in step 3.
8. Carefully un-braze the top inlet tube; this will be reused for new installation.
9. Remove the screws holding the vapor service valve and suction gage port to the basepan.
10. Remove old assembly from unit and replace with the contents of this kit. Remove solenoid of new assembly before brazing. This will prevent burning solenoid and provide additional clearance for brazing.
11. Wrap reversing valve with wet rag before brazing all new joints with silver bearing or non-silver bearing brazing material. Do not use soft solder (materials which melt below 800°F/427°C)
12. Hook up new reversing valve solenoid wiring plug.
13. Check for leaks in system using nitrogen. Evacuate and charge system using methods outlined in unit Installation Instructions.

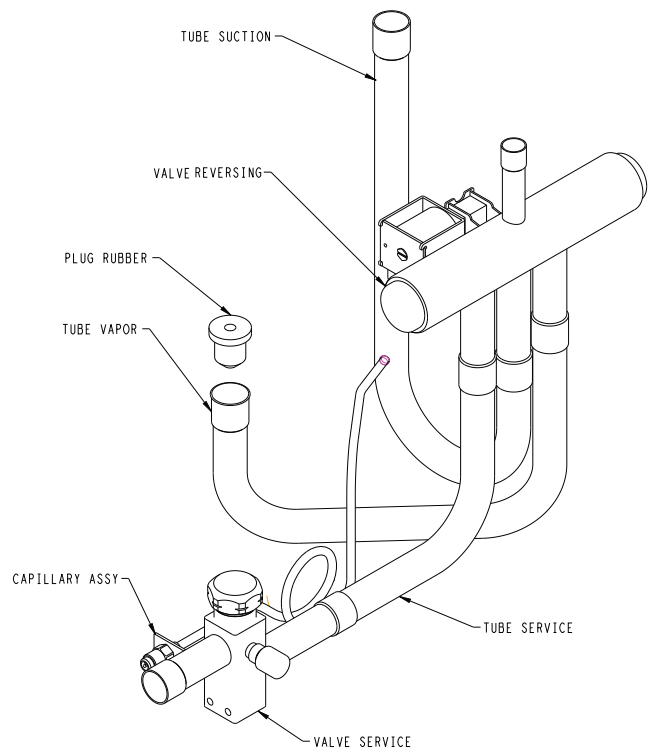


Fig. 2- Tube Vapor and Suction Locations

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