Evaporator Header Replacement Kit

Installation Instructions

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

SAFETY CONSIDERATIONS
Installing and servicing of air conditioning equipment or heat pumps can be hazardous due to system pressures 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. Trained service personnel should perform all other operations. 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 Evaporator Header Replacement assembly for small packaged and small rooftop units, up to 12.5 tons in capacity, equipped with the fixed orifice refrigerant metering system.

The following items are included:
Evaporator Header Replacement Kit Assembly
Refrigerant Feed Tubes (1.9” x 3/8”)
Instruction Sheet

INSTALLATION

CAUTION
Verify existing device is restricted using standard refrigerant techniques and practices to avoid injury and equipment damage.

Recover refrigerant and ensure system contains no refrigerant pressure before attempting this procedure.

Depending on unit design, accessing the restricted header assembly may best be done by removing the top cover of the unit allowing easier access to the coil for removal of the restricted header assembly. In some situations, especially in the smaller cabinet units, removal of the evaporator coil from the unit may allow for easier accessibility to components.

1. Ensure electrical disconnect switch to equipment is in the OFF position and tagged.
2. Ensure ALL refrigerant has been recovered according to regulations.
3. Ensure refrigerant system does not contain any pressure.
4. Using a tubing cutter, cut the liquid line inlet at the existing header assembly.
5. Remove existing strainer or filter drier located between condensing coil and header assembly.

NOTE: The metering device is located in the horizontal liquid refrigerant feed tubes of the header assembly. Two dimples will be detectable approximately 1” from the header tube, the metering devices are located between the dimples.

6. Using sheet metal cutters (Reds, Greens, or Yellows) or dikes, cut just DOWNSTREAM of the metering device leaving approximately 1.75” of feeder tube remaining in the tube sheet of the coil. Remove and discard restricted header assembly.
7. Using a torch unbraze the existing "cut" feeder tube from the tube sheet. While the fitting is still hot, use one replacement feed tube from the kit, insert “swaged” end into the coil tube sheet fitting and braze.
8. Repeat the procedure for each feed tube of the replacement header assembly.
9. Carefully align and insert the replacement header assembly into the "belled" ends of the feeder tubes protruding from the coil tube sheet.
10. Ensure header assembly is firmly seated into the feeder tubes.
11. Using standard brazing techniques, braze header assembly to ALL feed tubes.
12. Reinstall evaporator coil if previously removed.
13. Install new R-22 liquid line filter drier.
15. Leak test the assembly and unit using standard refrigerant service practices.
16. Evacuate refrigerant system to 500 microns.
17. Recharge by either weighted method or by superheat charging chart located on unit.
Fig. 1—Replacement Header Assembly