

# INSTALLATION INSTRUCTIONS

## 2442-7001 & 2455-7001 SWEAT FIT ADAPTER KITS

### IMPORTANT NOTICE

These instructions are intended for the use of qualified individuals specially trained and experienced in installation of this type of equipment and related system components.

Installation and service personnel are required by some states to be licensed.

**Persons not qualified shall not install this equipment or interpret these instructions.**

### NOTE

The words "Shall" or "Must" indicate a requirement which is essential to satisfactory and safe product performance.

The words "Should" or "May" indicate a recommendation or advice which is not essential and not required but which may be useful or helpful.

### WARNING

1. IMPROPER INSTALLATION OR SERVICE MAY DAMAGE EQUIPMENT, CAN CREATE A HAZARD AND WILL VOID THE WARRANTY.
2. WHEN WORKING WITH HIGH PRESSURE GASES AND REFRIGERANTS USE PROTECTIVE GOGGLES - OR FACE SHIELD - TO AVOID INJURY AND/OR

**POSSIBLE LOSS OF VISION. LIQUID REFRIGERANTS CAN CAUSE SERIOUS INJURIES BY FREEZING AFFECTED AREAS.**

### IMPORTANT

**These one-shot adapter fittings shall be connected ONLY to the type of one-shot valve as used on:**

Indoor Coils: 2400, 3800, 6200, MBC, MBH Series

Outdoor Units: 2400, 3800, 6200, BRCQ & BRHQ Series

2442-7001 Adapter Kit

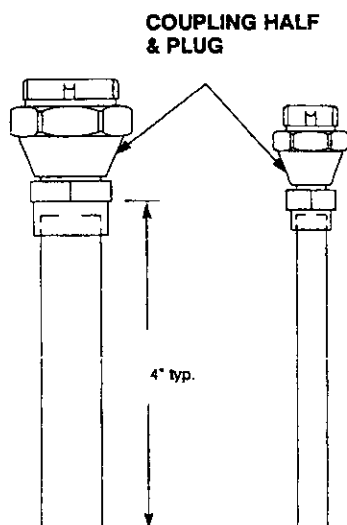
Tubing size is 3/4" and 3/8".

2455-7001 Adapter Kit

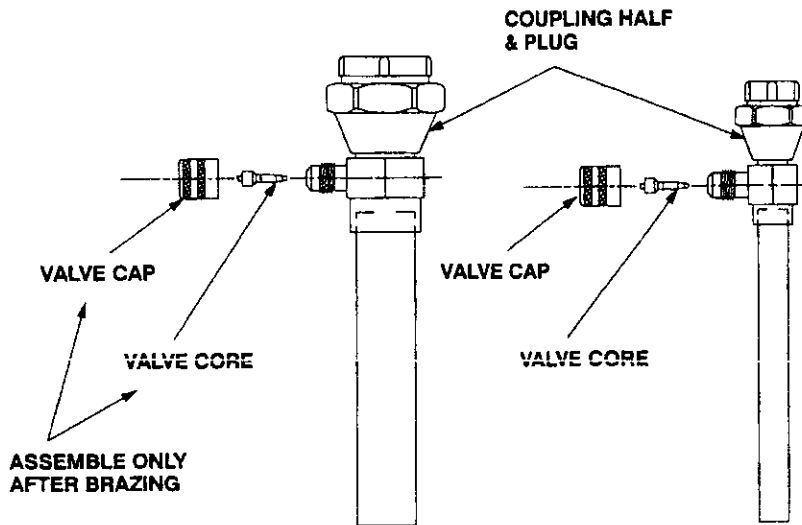
Tubing size is 7/8" and 3/8".

**The following essential tools are needed for a satisfactory installation:**

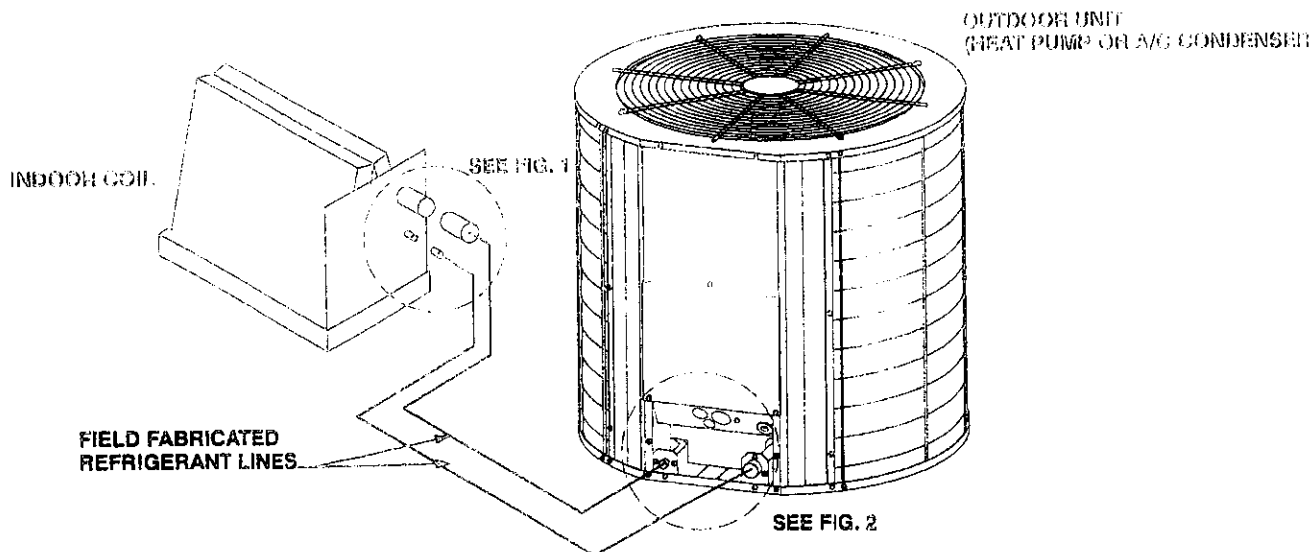
1. Bottle of dry nitrogen and correct regulator.
2. Oxyacetylene welding unit.
3. Two-stage vacuum pump capable of pulling a deep vacuum of 500 microns or below.
4. Micron gauge.
5. Service charging and testing manifold gauges.
6. Bottle of HCFC-22.
7. Hand tools.



INDOOR COIL ADAPTERS  
FIG. 1



OUTDOOR UNIT ADAPTERS  
FIG. 2



### Installation Procedure

The following steps are very important when installing a refrigerant cooling/heating system, and next to be followed precisely to insure a strong, leak tight and trouble free system free of dirt and moisture. A sweat fit refrigerant line system **must** be installed by a qualified air conditioning service person. Only persons experienced in sweat fit refrigeration line installation and familiar with silver brazing techniques should make this installation.

1. Set outdoor unit and indoor coil in place.
2. Apply a small amount of refrigerant oil to the threads on the sweat fit adapters. Adapters with schraeder fittings should be installed at the outdoor unit. Install these adapters hand tight on the outdoor unit.

**CAUTION: Do not overtighten the fittings as this may pierce the fitting diaphragm which would cause a loss of refrigerant.**

3. If sweat fit fittings are installed on indoor coil, indoor coil fittings must be tightened all the way, piercing the fittings, thereby releasing the coil charge. This step will allow nitrogen to flow through the system while brazing.
4. Use only a good refrigerant grade copper tubing which is seamless and has been kept sealed until ready to use.
5. Determine the route the refrigerant lines will follow, sloping the lines toward the outdoor unit.
6. Cut the refrigerant lines to length using a tubing cutter. (Never use a hacksaw to cut refrigerant lines. This will create an abundant supply of metal particles to contaminate the system. The metal "dust" cannot be easily removed.)
7. Remove all burrs from the lines using a reamer or deburring tool.
8. Seal the refrigerant lines until ready to braze to keep from contaminating them.

9. Clean the socket of the fittings and pipe ends to be joined with a fine grit sanding cloth or tubing brush.
10. Do not wipe or handle surfaces after cleaning. All surfaces to be joined must be free of oil, grease, dust, and oxides.
11. Remove the plug from the refrigerant line end before joining.
12. Assemble all adapters, pipes, and fittings to be brazed.
13. Remove the cores from the schraeder valves on the adapter fittings.
14. Wrap the adapter fittings with a heat sink, e.g. wet rag to protect the "O" ring when brazing.
15. Attach the hose from the nitrogen drum regulator to the schraeder valve on the adapter fitting to be brazed.
16. Using a 15% silver bearing alloy braze all fittings except one end of the vapor line.
17. Pull this fitting joint apart and plug the line so it will not become contaminated with insulation.
18. Next, install vapor line insulation, then push back from final connection and braze this joint.
19. Remove the nitrogen connections and heat sinks.
20. Reinstall the schraeder valve cores of the adapter fittings.
21. Pressurize the line and indoor coil with full drum pressure of HCFC-22.
22. Leak check all joints and repair any leaks.
23. Connect vacuum pump to both lines and triple evacuate to 500 microns or below.
24. Add correct amount of refrigerant to the refrigerant lines and indoor coil. See data sheet of outdoor unit model installed for correct charge information.
25. Tighten both fittings at the outdoor unit.
26. Leak check all adapter fittings and repair any leaks.
27. The refrigerant portion of the system should now be ready to operate.

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