

REFRIGERANT HOSE ROUTING

The installation of refrigerant hoses can start at any point on the AC system; however, the best results will occur when the system components are open to the atmosphere for a minimum amount of time. Moisture and dirt within the closed system will almost always result in system failure at some point in the life of the air conditioner.

During the installation of the Refrigerant hoses, it is very important to anticipate how the hoses might:

- Contact moving parts of the engine
- Come in contact with hot areas of the exhaust
- Become abraded by engine and vehicle motion.

Anticipating these problems and routing the hoses accordingly will reduce the potential for hose failures.

Starting at the **Evaporator**, connect the **#10 Suction Hose** to the outlet fitting of the **Evaporator** and route that hose through the firewall and to the **Compressor**. Connect the **#10 Suction Hose** to the suction port of the **Compressor** (the suction port is almost always marked with either the word "suction" or the letter "S").

Connect the **#8 Discharge Hose** to the discharge port of the **Compressor** (this port will often be marked with the word "discharge" or the letter "D". Route the **#8 Discharge Hose** to the top port of the **Condenser** and make that connection.

Connect a **#6 Liquid Hose** to the outlet port (the lowest port) on the **Condenser**. Route that hose to the inlet of the **Receiver/Drier**. [Note: Pay special attention to the orientation of the **Receiver/Drier**. The intended direction of refrigerant flow through the **Receiver/Drier** is always marked with either an arrow or the word "IN".] Do not allow the **Receiver/Drier** to remain uncapped for any amount of time other than what is required for the hose connection.

Connect the remaining **#6 Liquid Hose** to the outlet port of the **Receiver/Drier**. Route the other end of the hose to the **Expansion Valve**.

Once the hoses are all properly routed and the fittings tightened, it is time to evacuate and charge the system. Many installation failures can be traced to incomplete evacuation and over charging. Furthermore, many personal injuries can be avoided by close adherence to all recommended AC shop safety practices. Rely on only the most qualified and licensed shop technicians for evacuation, charging and trouble-shooting.

HOSE ROUTING AND DESCRIPTION OF SYSTEM COMPONENTS

The following illustration describes the basic elements of the AC system and illustrates the flow of refrigerant through the various components.

