

DURACOOOL REFRIGERANTS

INSTALLATION PROCEDURE

BASIC AIR CONDITIONING MECHANICAL SKILLS ARE REQUIRED TO CARRY OUT AN EFFECTIVE RETROFIT AND RECHARGE TO ANY VEHICLE AIR CONDITIONING SYSTEM.

- Start the engine. Visually inspect the system and determine if the system is operating correctly. Any repairs should be determined and carried out prior to recharging.
- Check the system for refrigerant leaks using appropriate leak detection procedures. Repair any leaks in the system prior to carrying out a refrigerant recharge.
- If available, use a vent thermometer to capture and record the centre vent temperature. This will supply a temperature reference, allowing you to compare before and after passenger compartment temperature performance.
- Determine the type of refrigerant currently in the system. There will be a tag on the compressor or in the engine compartment from the OEM (Original equipment manufacturer) indicating the type and amount of refrigerant in the system. If this is missing contact the OEM for further information. This must be determined before initiating a recharge.
- An evacuation of the refrigerant in the system is recommended prior to a **Duracool 12a** installation. Although **Duracool 12a** is compatible with most refrigerants marketed throughout the world, “do not mix refrigerants”. Mixing refrigerants will not offer the maximum performance available from **Duracool 12a**. Recover the existing refrigerant charge into a suitable container as **Federal regulations prohibit the venting of refrigerants into the atmosphere.**
- **Install the correct OEM - high and low side installation fittings** on older R12 systems. This will upgrade them to R134a. All current R134a systems are compatible with **Duracool** containers. (These fittings are available from **Duracool** or your Automotive Parts Supplier).
- Determine the correct amount of **Duracool 12a** Refrigerant needed in the system with the use of the OEM information and the **Duracool** Conversion Chart. Ask your supplier for their assistance with this information. Do not overcharge the system. Poor performance will occur if this is done.

Year and Make of Vehicle: _____ . Type of Refrigerant:
_____. Amount in system: _____. **Recommended amount of
Duracool:** _____.

- **DURACOOOL** Refrigerant is installed through the **LOW SIDE** fitting and is charged as a **LIQUID**.

■ **RECHARGE CAN INSTALLATION:**

*Thread the can tapper from the **Duracool** installation kit onto the recharge can. Make sure the “T” handle is fully turned out before installing the can tapper. Thread the delivery hose onto the can tapper. Connect the female coupler on the hose onto the **male; low side fitting** on the air conditioning system. **Invert the can** (can tapper in the downward position) open the valve by screwing the “T” handle into the can piercing the can seal. Then; back the “T” handle out allowing the **Duracool** Refrigerant to flow into the system. **Allow the Duracool Refrigerant to enter the system slowly. Each can should take at least two (2) minutes.** Once the system will no longer take any more product, start the engine, turn the fan to maximum, the temperature to the coldest setting and install the remainder of the **Duracool**. As your holding the **inverted** can in your hand, shake the can. You will then feel the coolness of the product in your hand. As the valve is adjusted correctly, you will feel the product draw down out of the can and into the system. **Remember to feed the product slowly.** Faster installation speed can lead to a freezing condition of the compressor. This will not allow the full charge into the system. If available; place a thermometer into the centre vent of the dash to determine the interior temperature. Continue with the installation of the remaining product. “Remember”: **Do not overfill the system! Doing so will eliminate the maximum performance characteristics of the DURACOOL 12a product.** A slight undercharge of an ounce or two is more effective than an overfill.*

■ **CYLINDER INSTALLATION:**

*Connect the gauge set to the **Duracool** cylinder and the air conditioning system correctly. **The blue valve on our tank is the liquid outlet.** Install the correct amount of product for the system as per the OEM specifications and with reference to the **Duracool** Conversion Chart. The fill can be completed with volume or weight measuring devices. This depends on the equipment available to the installer. **Install the product slowly as a liquid using the above instructions..***

- Start the vehicle.
- Allow the system to run approximately five (5) minutes. Check the centre vent temperature with a thermometer or the operating pressures with a gauge set, if available.
- Check the system for leaks using appropriate leak detection procedures. Note: **Duracool** smells like propane. Should this odour emanate from the system, a leak is present and should be located and repaired before completing the system recharge.
- Tag the unit with the **Duracool** supplied conversion tags. Place this tag over the OEM tag in the engine compartment.
- The recharge is complete.

for additional information or technical assistance contact: