



# R-9727 Rooftop Air Conditioner

## INSTALLATION INSTRUCTIONS

**(FOR NEGATIVE GROUND ELECTRICAL SYSTEMS, POSITIVE GROUND SEE SECTION D)**

### NOTE

1. Please read instructions all the way through, making sure you have all the parts and tools.
2. While working on or around a vehicle disconnect the battery to prevent accidental start-up or electrical shorts.
3. It has been established that R-12 refrigerant does deplete the earth's protective ozone layer. Use care so as not to release this material into the atmosphere.
4. A/C systems operate under high pressure. At 77°F the refrigerant container will be pressurized to approximately 80psi. Use caution when working with these materials. Goggles are recommended.
5. To function properly the A/C system must be clean and dry. Keep caps or protective covers on all hoses and fittings until final assembly.
7. **IMPORTANT:** Attach appropriate SAE warning label to vehicle.
8. A compressor, bracket, belts and refrigeration hoses are required to complete the installation. These items may be obtained from your RED DOT Distributor.
9. The compressor must have sufficient capacity to allow the unit to deliver the rated BTU output. A 10 cubic inch compressor (Tecumseh HG1000, Sankyo SD-510 or equiv.) turning faster than 1,750 rpm is required.
10. A fresh air filter, RD-5-3905-0 is available for use in dusty environments. Replacement element for filter is Donaldson No. P-101246 (not stocked by Red Dot).
11. Galaxy hose with crimp fittings are recommended for use with R-134a systems.
12. In applications with significant ram air to the condenser (greater than 15 MPH) it is recommended that the compressor clutch be wired using a relay.

### A. MOUNTING THE UNIT ON CAB ROOF

**Choose a mounting location for the unit that will not destroy or void warranty or effectiveness of either the Roll Over Protection Structure or Falling Object Protection Structure.**

1. Remove the headliner or loosen enough to drop the center portion. (Disregard if no headliner).
2. Determine the most suitable location for mounting the air conditioning unit. (See Figure 1)
  - a. Mark the front-to-rear centerline of the cab on the outside of the cab roof.
  - b. Place the mounting template on the roof using the centerline as a guide.
  - c. Insure that air flow to the unit is not obstructed.
  - d. Do not mount the unit with the front lower than the rear, as this will prohibit water drainage.
  - e. Avoid cutting roof stiffeners if possible. If stiffeners are cut or roof is weakened due to the cut-out, reinforcement may be required.
3. Tape the template to the roof at the desired location. Mark the roof cut-out area (scribe the roof).
4. Cut the roof where marked and drill the 3/8" dia. mounting holes. Remove burrs and sharp edges.
5. Temporarily install the headliner and trace the cut-out onto it from the roof. Remove the headliner and cut out the area marked. Use caution and do not cut headliner opening larger than roof opening. (Check against template if in doubt).
6. Should roof reinforcing be required, fabricate and install at this time.
7. Clean the outside roof area around the cut-out and mounting holes using a mild solvent.