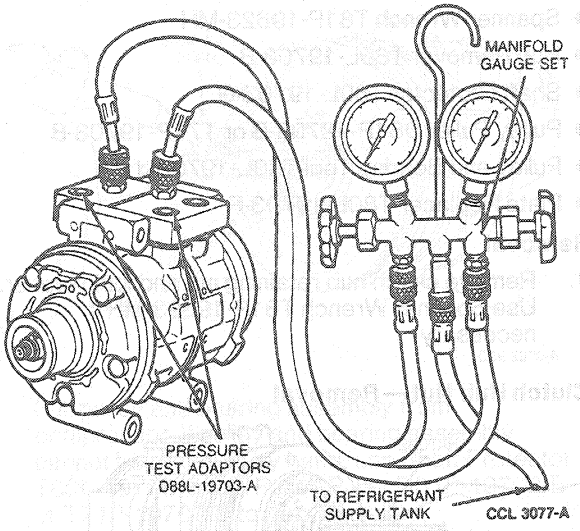
TESTING (Continued)

Compressor Testing for External Leaks



4. Prior to leak testing the shaft seal, rotate the compressor shaft 10 revolutions to distribute oil in the compressor.
5. Connect high- and low-pressure hoses of a manifold gauge set to fittings of pressure test adapters.
6. Attach center hose of manifold gauge set to a refrigerant drum standing in an upright position.
7. Open low-pressure gauge valve, high-pressure gauge valve, and valve on refrigerant drum to allow refrigerant vapor to flow into compressor.
8. Using Rotunda Electronic Leak Detector 055-00015 or equivalent, check for leaks at compressor rear head seal, compressor front head seal, compressor shaft seal, center joint seal and around compressor cylinder bolts. After checking, turn off manifold gauge valves and refrigerant drum valve.
9. If an external leak is found at either head or at shaft seal, service as necessary. If an external leak is found at center joint of compressor body, install a new compressor assembly.
10. If refrigerant leak is found around head of a cylinder bolt, install a new brass washer on the bolt and leak test as outlined. If a leak cannot be corrected with a new brass washer, install a new head, new cylinder bolt, and new brass washers on all bolts.
11. Carefully disconnect manifold gauge hoses from the pressure fitting / adapter(s), allowing the refrigerant in the compressor to escape. Remove the adapter(s) from the compressor.
12. Install compressor as outlined.

Compressor Rotating Torque Check

The rotational torque of a used compressor should be checked if excessive compressor drag is suspected.

1. Discharge refrigerant system following recommended service procedures. Observe all safety precautions.
2. Remove compressor from vehicle.
3. Rotate compressor shaft and note torque required for one complete rotation. Observe torque while rotating shaft, not starting torque.
4. If rotational torque exceeds 10 N·m (7 lb-ft), replace compressor assembly.
5. If rotational torque is less than specified, excessive drag does not exist in compressor. Install compressor, leak test, and evacuate and charge system.
6. Check system for proper operation.

REMOVAL AND INSTALLATION

Suction or Discharge Manifold

NOTE: Two different O-rings are used on compressor manifolds and they are not interchangeable. One is **black** and is used with aluminum manifolds. The other O-ring is **red** and is used with brazed steel manifolds. Either O-ring must be replaced with one of the same color.

Removal

1. Discharge refrigerant from system following recommended procedures.
2. Remove two bolts attaching manifold to compressor, and remove manifold and O-rings.

Suction and Discharge Manifold Installation—Typical