A/C COMPRESSOR OIL CHECKING

1988 Jeep Cherokee

A/C General Servicing COMPRESSOR OIL CHECK

* PLEASE READ THIS FIRST *

CAUTION: When discharging air conditioning system, use only approved refrigerant recovery/recycling equipment. Make every attempt to avoid discharging refrigerant into the atmosphere.

ISOLATING COMPRESSOR - GRAND WAGONEER ONLY

- 1) Connect service gauge set to the compressor service valves and open compressor valves slightly (turn clockwise). Start engine and operate air conditioning. Slowly turn compressor suction valve clockwise toward closed (front-seated) position.
- 2) When suction pressure is reduced to zero or less, turn off engine and compressor and quickly turn suction valve stem in to full front-seated position. Suction pressure should be slightly above zero. Turn discharge valve into front-seated position.
- 3) To check oil lever, slowly open crankcase plug to relieve any remaining pressure. After oil level is correct, cap service gauge parts on both valves. Back-seat suction service valve to allow refrigerant to enter compressor. Open discharge valve halfway.
- 4) Loosen discharge service valve cap, allowing refrigerant pressure to force air out of compressor. Back-seat service valve and tighten cap. Compressor is now ready for operation.

REFRIGERANT OIL

Only new, pure, moisture-free refrigerant oil should be used in the air conditioning system. This oil is highly refined and dehydrated to a point where moisture content is less than 10 parts per million. The oil container must be tightly closed at all times when not in use, or moisture will be absorbed from the air and introduced into the refrigeration system.

DISCHARGING SYSTEM

CAUTION: When discharging air conditioning system, use only approved refrigerant recovery/recycling equipment. Make every attempt to avoid discharging refrigerant into the atmosphere.

If compressor has stem-type service valves, it can be isolated and removed without discharging entire system. Otherwise, discharge system completely using approved refrigerant recovery/recycling equipment before loosening any fittings.

DISCONNECTING LINES & FITTINGS

After system is discharged, carefully clean area around all fittings to be opened. Always use 2 wrenches when tightening or loosening fittings to avoid twisting or distorting lines. Cap or plug all openings as soon as lines are removed. Do not remove caps until immediately before connections are made. This will keep entry of air and moisture to a minimum, reducing the chance of damage to components.

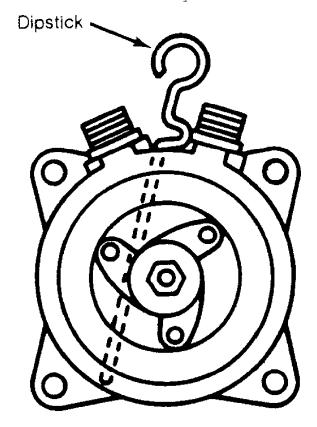
PLACING SYSTEM IN OPERATION

After component service or replacement has been completed and all connections have been made, evacuate system throughly with a vacuum pump. Charge system with proper amount of refrigerant and perform a leak test. Be sure to check all fittings that have been opened. After system has been leak tested, make a system performance check.

SANDEN SD508 5-CYLINDER OIL CHECKING

1) Discharge system using approved refrigerant recovery/recycling equipment. Remove compressor belt and loosen mounting bolts. Rotate compressor in brackets until filler plug is at top. Clean area around filler plug and remove plug slowly. Rotate front hub plate so notch in lobe is 110 degrees from the bottom. This rotates ball end of top piston to align with oil fill port and allows clearance for dipstick. See Fig. 1.

2) Insert compressor dipstick diagonally from right to left until stop on dipstick contacts filler plug surface. Remove dipstick and note oil fill level. Each mark on dipstick represents one ounce of oil. Add oil if necessary to reach 3-4 ounce level.

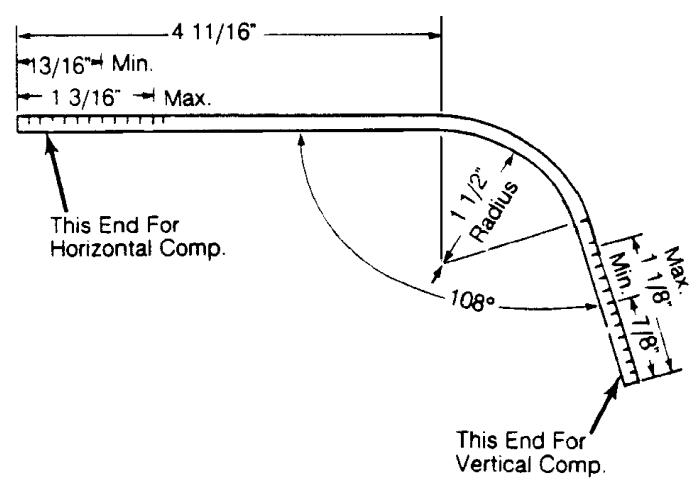


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Fig. 1: Sanden 5-Cylinder Oil Level Checking

- 1) Remove gauge set and place caps on service valve ports. Back-seat the suction service valve to allow refrigerant to enter compressor. $\ \ \,$
- 2) Loosen discharge port valve slightly. Loosen valve port cap to allow refrigerant to force out air from compressor. Back-seat the discharge valve and tighten the port cap. Compressor is ready for service.

YORK - 2-CYLINDER COMPRESSOR OIL CHECKING

- $\,$ 1) Operate system for 10 minutes, then stop and isolate compressor. Loosen filler plug slowly to release any pressure in crankcase.
- 2) Use dipstick to check oil level. See Fig. 2. Add oil as necessary, then install plug with new "O" ring. Purge compressor of air.



17494 Fig. 2: York A/C Compressor Oil Level Dipstick (Check oil w/ shaft keyway facing head) Courtesy of Chrysler Motors.