

CHECKING COMPRESSOR DIFFERENTIAL OIL PRESSURE

Required Tools: two refrigeration manifold gauge sets with hoses, clean-up rag, wrench for opening the compressor suction valve, required PPE.



1. Working at the front of the compressor, screw on the fitting at the end of the low pressure refrigeration gauge hose to the top of the oil pump.



2. CAUTION: compressor oil is mixed with refrigerant vapor under pressure; when the hose fitting is attached, a foam mixture will escape from the compressor oil pump. A rag should be kept handy for cleanup purposes.

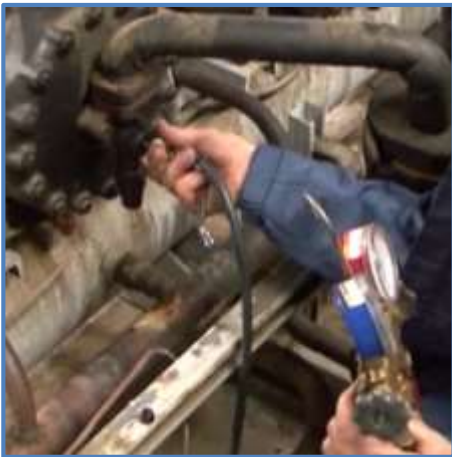


3. Read the value of oil pump pressure as indicated on the dial of the pressure gauge.

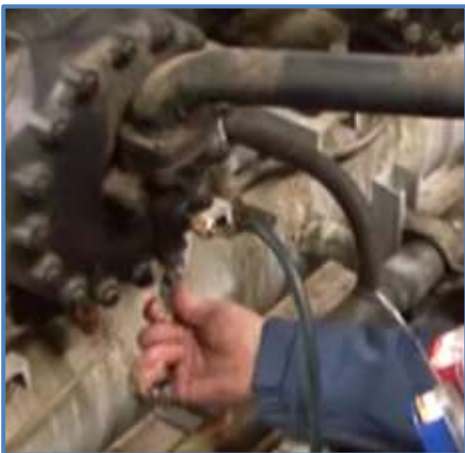
CHECKING COMPRESSOR DIFFERENTIAL OIL PRESSURE (continued)



4. Loosen and remove the cap from the Schrader fitting on the back of the compressor.



5. Connect the fitting at the end of the hose from the second set of refrigeration manifold gauges to the suction port on the back of the compressor.



6. Use a wrench to open the suction valve on the back of the compressor so that the suction pressure may be read on the connected gauge.

CHECKING COMPRESSOR DIFFERENTIAL OIL PRESSURE (continued)



7. Once the suction valve has been opened, the suction pressure may then be read on the connected gauge.



8. The *net* oil pressure of the compressor can only be determined by comparing the oil pump pressure to the suction pressure. *Net* oil pressure is always going to be the *difference* between the oil pump pressure and the suction pressure.

$$\frac{\text{(Oil Pump Pressure)}}{\text{— (Suction Pressure)}}$$

Net Oil Pump Pressure

9. The simple equation shown at left is used to determine *net* compressor oil pump pressure. It is the difference between the oil pump pressure and the suction pressure.