

AUTOMOTIVE AIR CONDITIONING REPAIR

Question:

What engine RPM should the engine be run at for AC servicing and testing?

Answer:

Compressors are designed to operate at a broad range of engine speeds. High RPM doesn't damage a compressor. Compressors are not designed to pump a liquid or quantities of oil. Because of this, compressors are not designed to be efficient at low RPM.

Refrigerant in liquid form and oil will be in the compressor when the system is at rest. The reed valves are designed to allow the compressor to pump without building full pressures at idle. In this manor, the compressor will not be damaged on startup

Manufacturers recommend an engine run from 1500 to 2000 RPM. This allows the system to operate without any damage and be efficient. Operating the engine at idle and attempting to analyze the system is a waste of time and inaccurate.

All testing for performance should be:

- 1500 RPM
- Max cold
- High blower
- Doors and windows closed