

TECH TIP

Chrysler Minivan Belt Squeal

We have received complaints from numerous sources of a belt slipping noise on Chrysler Minivans. Chrysler has printed several TSB's to help understand and diagnose this problem. (*See Chrysler TSB 24-15-99*). The first procedure is to verify that the belt is truly causing the noise.

In some cases, late model (2000 – 2001) Minivans have produced a “belt-like squeal” through a heater valve restriction device (*TSB 07-005-01*). If the squealing noise is not produced from the drive belt area, pinch off the outlet tube of the heater core, the top hose coming out of the firewall. If the noise quiets down a replacement restrictor (*Chrysler part number 05072197AA*) may need to be installed.

Prior to 2000, Chrysler says that the compressor may lock up at initial start up, depending on the length of time the AC system has been dormant. If the system has not been used for up to two weeks the compressor will be prone to produce a squealing noise at start up. The compressor will continue to squeal until oil is properly distributed through out the system.

High head pressure will also cause belts to squeal. Verify that the system pressures are not abnormally high. A restricted condenser or discharge hose assembly could possibly be the cause. Make sure that the electric cooling fans are performing properly. Pay close attention to the location of the high-pressure service valve. A valve located after the condenser, discharge line, or muffler could cause a false pressure reading. Remember, if there is a restriction prior to the service port, the pressure will back up towards the compressor, and only allow the gauges to show a lower pressure leaking past the blockage. For more information on diagnosing restrictions refer to “Tips and Techniques” training manual. Publication number 99900.

If the belt continues to squeal after a thorough examination of the AC system, installation of a wider V-belt may solve the irritating noise. Keep in mind that a new belt is not the solution for a system with malfunctioning components. See also Tech Tip 4S XXX which discusses a belt and pulley replacement kit.