

Drive Belts, Mounts, Brackets and Accessories: Testing and Inspection Procedures

Noise

Drive belt chirp occurs due to pulley misalignment or excessive pulley runout. It can be the result of a damaged pulley or an incorrectly aligned pulley.

To correct, determine the area the noise comes from. Check each of the pulleys in that area with a straightedge to the crankshaft pulley. Look for accessory pulleys out of position in the fore/aft direction or at an angle to the straightedge.

Drive belt squeal is an intermittent noise that occurs when the drive belt slips on a pulley during certain conditions, such as engine start-up, rapid engine acceleration or A/C clutch engagement.

Drive belt squeal can occur under the following conditions:

1. The A/C discharge pressure goes above specifications, causing one of the following:
 - ^ The A/C system is overcharged.
 - ^ The A/C condenser core airflow is blocked.
2. The A/C OFF equalized pressure (the common discharge and suction pressure that occurs after several minutes) exceeds specifications.
3. Any of the accessories are damaged or have a worn or damaged bearing or internal torsional resistance above normal. All accessories must be rotatable by hand in the unloaded condition. If not, inspect the accessory.
4. Fluid gets on the drive belt. This includes power steering fluid, engine coolant, engine oil or air conditioning system lubricant. If fluid gets on the drive belt during repairs, clean the drive belt with soap and water, and thoroughly rinse with clean water. A new drive belt does not have to be installed if no apparent damage has occurred.
5. The drive belt is too long. A drive belt that is too long will allow the drive belt tensioner arm to go all the way to the arm travel stop under certain load conditions, which will release tension to the drive belt. If the drive belt tensioner indicator is outside of the wear range window, install a new drive belt.
6. **NOTE:** The drive belt tensioner arm must rotate freely without binding.

The drive belt tensioner is worn or damaged.