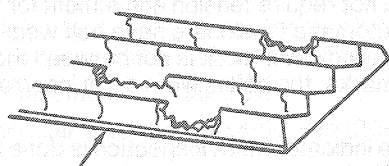


## DIAGNOSIS (Continued)

**"V" Ribbed Belt With Chunks of Rib Missing**

CHUNKS OF RIBS MISSING NOT  
ACCEPTABLE

Q3243-A

**Belt Noise**

Belt chirp is regularly occurring "chirping" noise that occurs due to pulley misalignment or excessive pulley runout. It can be a result of a damaged pulley or an improperly replaced pulley that was not properly aligned.

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

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

Belt squeal can occur under the following conditions:

1. If the A/C discharge pressure goes above 2895 kPa (420 psi). This can occur if:
  - a. The A/C system is overcharged.
  - b. The A/C condenser airflow is blocked.
  - c. The engine fan is not engaging fully at idle.
2. If A/C off equalized pressure (the common discharge and suction pressure that occurs after several minutes) exceeds 965 kPa (140 psi), which is a rare occurrence at high ambient temperatures with a hot engine, turn A/C OFF for a few seconds and then back ON after fan begins to cool condenser.
3. If any of the accessories are damaged, have a worn or damaged bearing or internal torsional resistance above normal for any reason. All of the accessories should be rotatable by hand in the unloaded condition. If any are not, the accessory should be inspected.

4. If fluids get on the belt. This would include power steering fluid, engine coolant, engine oil, air conditioning system lubricant.

If fluids get on the belt during service, the best policy is to clean the belt with soap and water and thoroughly rinse with clean water. The belt does not have to be replaced if no apparent damage has occurred.

5. If the belt is too long. A belt that is too long will allow the tensioner arm to go all the way to tensioner arm travel stop under certain load conditions, which will untension the belt. If the tensioner is resting on the stop, replace the belt.
6. If the tensioner is worn or damaged. Only replace the tensioner if a torque reading of under 40 N-m (30 lb-ft) is measured with a 1/2-inch drive torque wrench, in the tensioner lifting 1/2-inch hole, with the torque wrench in the vertical position.

NOTE: The tensioner arm should rotate freely without binding.

**ADJUSTMENTS**

To ensure proper tension, follow these procedures. Refer to the applicable adjustment illustration and belt tension specification chart.

NOTE: Use Rotunda Offset Belt Tension Gauge 021-00028-A or equivalent on 3.0L SHO engine equipped vehicles only.

**3.0L SHO Engine**

1. Loosen idler pulley nut and turn adjusting screw until belt is adjusted to specification.  
NOTE: Turning wrench to right tightens belt and turning wrench to left loosens belt.
2. Tighten idler pulley nut to 34-50 N-m (25-37 lb-ft) and check belt tension.

The generator, power steering, air conditioning drive belt should be checked for proper tension after both belts are adjusted and the component retaining bolts are properly tightened.