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2005 CHEVROLET Avalanche OEM Service and Repair Workshop Manual

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Step	Action	Yes	No
3	Install a new drive belt. Refer to Drive Belt Replacement - Accessory . Does the drive belt continue to fall off?	Go to Step 4	System OK
4	Inspect for misalignment of the pulleys. Did you find and repair the condition?	Go to Step 12	Go to Step 5
5	Inspect for a bent or dented pulley. Did you find and repair the condition?	Go to Step 12	Go to Step 6
6	Inspect for a bent or a cracked bracket. Did you find and repair the condition?	Go to Step 12	Go to Step 7
7	Inspect for improper, loose or missing fasteners. Did you find loose or missing fasteners?	Go to Step 8	Go to Step 9
8	<div>1. CAUTION</div> <div> Caution Refer to Fastener Caution. Tighten any loose fasteners. Refer to Fastener Specifications. 2. Replace improper or missing fasteners. Does the drive belt continue to fall off? </div>	Go to Step 9	System OK
9	Test the drive belt tensioner for operating correctly. Refer to Drive Belt Tensioner Diagnosis . Does the drive belt tensioner operate correctly?	Go to Step 11	Go to Step 10
10	Replace the drive belt tensioner. Refer to Drive Belt Tensioner Replacement . Does the drive belt continue to fall off?	Go to Step 11	System OK
11	Inspect for failed drive belt idler and drive belt tensioner pulley bearings. Did you find and repair the condition?	Go to Step 12	Go to Diagnostic Aids

YOUR CURRENT VEHICLE

Drive Belt Rumbling and Vibration Diagnosis

Drive Belt Rumbling and Vibration Diagnosis

Diagnostic Aids

The accessory drive components can have an affect on engine vibration. Vibration from the engine operating may cause a body component or another part of the vehicle to make rumbling noise. Vibration can be caused by, but not limited to the air conditioning (A/C) system over charged, the power steering system restricted or the incorrect fluid, or an extra load on the generator. To help identify an intermittent or an improper condition, vary the loads on the accessory drive components.

The drive belt may have a rumbling condition that can not be seen or felt. Sometimes replacing the drive belt may be the only repair for the symptom.

If replacing the drive belt, completing the diagnostic table, and the noise is only heard when the drive belts are installed, there might be an accessory drive component with a failure. Varying the load on the different accessory drive components may aid in identifying which component is causing the rumbling noise.

Test Description

The numbers below refer to the step numbers on the diagnostic table.

2. This test is to verify that the symptom is present during diagnosing. Other vehicle components may cause a similar symptom.
3. This test is to verify that one of the drive belts is causing the rumbling noise or vibration. Rumbling noise may be confused with an internal engine noise due to the similarity in the description. Remove only one drive belt at a time if the vehicle has multiple drive belts. When removing the drive belts the water pump may not be operating and the engine may overheat. Also DTCs may set when the engine is operating with the drive belts removed.
4. Inspecting the drive belts is to ensure that they are not causing the noise. Small cracks across the ribs of the drive belt will not cause the noise. Belt separation is identified by the plys of the belt separating and may be seen at the edge of the belt or felt as a lump in the belt.

Step	Action	Yes	No
	Does the engine make the rumbling noise or vibration?		
3	<p>1. NOTE</p> <p>Note If the engine has multiple drive belts, remove the belts one at a time and perform the test below each time a belt is removed.</p> <p>Remove the drive belt.</p> <p>2. Operate the engine for no longer than 30–40 seconds.</p> <p>3. Repeat this test if necessary by removing the remaining belt(s).</p> <p>Does the rumbling or vibration still exist?</p>	Go to Symptoms - Engine Mechanical or Vibration Analysis - Engine	Go to Step 4
4	<p>Inspect the drive belts for wear, damage, separation, sections of missing ribs, and debris build-up.</p> <p>Did you find any of these conditions?</p>	Go to Step 7	Go to Step 5
5	<p>Inspect for severe pilling of more than 1/3 of the drive belt pulley grooves.</p> <p>Did you find severe pilling?</p>	Go to Step 6	Go to Step 7
6	<p>1. Clean the drive belt pulleys using a suitable wire brush.</p> <p>2. Reinstall the drive belts. Refer to Drive Belt Replacement - Accessory.</p> <p>Did you correct the condition?</p>	Go to Step 8	Go to Step 7
7	<p>Install a new drive belt. Refer to Drive Belt Replacement - Accessory.</p> <p>Did you complete the replacement?</p>	Go to Step 8	Go to Step 9

YOUR CURRENT VEHICLE

Oil Consumption Diagnosis

Oil Consumption Diagnosis

Oil Consumption Diagnosis

Checks	Causes
Excessive oil consumption, not due to leaks, is the use of 0.9 L (1 qt) or more of engine oil within 3 218 kilometers (2,000 miles).	
Preliminary	<p>The causes of excessive oil consumption may include the following conditions:</p> <ul style="list-style-type: none"> External oil leaks Refer to Oil Leak Diagnosis. Incorrect oil level or improper reading of the oil level indicator With the vehicle on a level surface, run the engine for a few minutes, allow adequate drain down time, 2–3 minutes, and measure for the correct engine oil level. Improper oil viscosity Refer to the vehicle owners manual and use the recommended SAE grade and viscosity for the prevailing temperatures. Continuous high speed driving and/or severe usage Crankcase ventilation system restrictions or malfunctioning components Refer to Crankcase Ventilation System Inspection/Diagnosis. Worn valve guides and/or valve stems Worn or improperly installed valve stem oil seals Refer to Gas Engine Ignition Spark Plug Inspection. Piston rings broken, worn, or not seated properly Allow adequate time for the rings to seat. Replace worn piston rings, as necessary. Refer to Cylinder Leakage Test. Piston and rings improperly installed or not fitted to the cylinder bore