



Service Bulletin

INFORMATION

Subject: Information to Prevent CVT Transmission Replacement Due to Misdiagnosis of Noise

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	City Express	2015	2017			All	All

Involved Region or Country	North America
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Service Information

With the engine running and the vehicle on a hoist, noise heard from the CVT may be louder (in Park, Neutral, Drive, or Reverse) than a non-CVT type transmission.

CVT transmissions are much louder without drive load, which may lead to misdiagnosis.

Important: Do NOT judge CVT noise as abnormal due only to noise on a hoist (with or without the wheels turning).

CVTs replaced for a noise issue may be requested for return. CVTs that do not have a defect will be charged back to the dealer.

Refer to the information in this bulletin before replacing a CVT for a noise issue.

- General noise descriptions from front of vehicle when driving/idling – commonly blamed on CVT
- Bearing Noise Diagnosis
- Bearing Noise From Front of Vehicle Flow Chart
- CVT Replacement For Noise – Check Sheet

General Noise Description - From Front of Vehicle When Driving/Idling

Noise Descriptions Commonly Blamed on CVT	Explanation
Cabin booming (low frequency) noise or steering vibration at lowest rpm after CVT torque converter lockup (about 1200 engine rpm and about 48 km/h (30 mph).	CVT is designed to allow very low engine rpm with torque converter locked to improve fuel economy. This is normal behavior and not warrantable. If noise or vibration is worse than a known good vehicle, check for exhaust contact with body due to incorrect installation or impact damage
Warbling/whining noise in Drive when moving, but is not heard in Drive when stopped.	If noise only occurs when in motion, check for noise from wheel bearings and propeller shaft bearings. If a CVT is replaced for noise and follow up repair of front wheel bearing is performed due to improper noise diagnosis, CVT repair may be charged back.

Slight whining noise when coming to a stop while braking	A slight whine noise when coasting or braking to a stop at less than 16 km/h (10 mph) may occur. This is normal, and is not warrantable. If noise is worse than a known good vehicle, check for contact between CVT and body.
Slight whining noise idle and accelerating, any gear position	A slight whine noise when idling or accelerating can be due to engine oil pump, H-EPS power steering pump (if equipped), or CVT oil pump. This is normal and not warrantable. If noise is worse than a known good vehicle, unplug the H-EPS pump (if equipped) to see if noise goes away, or use chassis ears to isolate the source of the noise.

Bearing Noise Diagnosis

General bearing noise description: A warbling noise that increases frequency with vehicle speed or engine speed.

General Noise Location	Action
Noise direction from Front of vehicle	Proceed to Bearing Noise From Front of Vehicle Flow Chart
Noise direction from Rear of vehicle	Perform a chassis ear test, one on each rear spindle, to confirm rear bearing noise. (If AWD, perform a 3 channel test and include rear propeller shaft bearing.)
Noise direction cannot be determined	Perform a chassis ear test, one on each rear spindle, to confirm rear bearing noise. (If AWD, perform a 3 channel test and include rear propeller shaft bearing.) If no abnormal noise is isolated with chassis ears, proceed to Bearing Noise From Front of Vehicle Flow Chart.

Bearing Noise From Front of Vehicle Flow Chart

Step 1	Step 2	Step 3
Noise occurs in Neutral/Park – Not moving	Noise is unaffected by shifter position or A/C ON/OFF	Remove drive belt or use stethoscope to check bearings on belt tensioner pulley / AC compressor clutch / alternator / PS pump
	Noise stops when A/C compressor is turned OFF	Use chassis ears on A/C compressor to confirm A/C compressor bearing noise
	Noise stops when shifting into Drive, but vehicle not moving	Use chassis ears on CVT to confirm CVT input shaft bearing noise
Noise only occurs when vehicle is moving	With noise occurring while driving at constant speed, does noise increase or decrease with steering input (back and forth) or when cornering?	YES Perform a 2 channel chassis ear test (1 channel on each front spindle) to confirm front wheel bearing noise and isolate which side

		<p style="text-align: center;">No</p> <p style="text-align: center;">Perform a 4 channel chassis ear test (1 channel on each front spindle, 1 on CVT body, and 1 on drive shaft bearing) to isolate the source of the noise.</p>
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CVT Replacement for Noise – Check Sheet

Before replacing a CVT for a noise issue, perform diagnostics to confirm the noise is coming from the CVT. Confirm the following diagnosis for that items below has been done.

- Noise was confirmed with customer on road test (test drive), not on hoist
- Noise IS much louder than know good vehicle
- Noise is NOT a wheel bearing
- Noise is NOT a driveshaft/axle or propeller shaft bearing
- Noise is NOT engine oil pump noise
- Noise is NOT engine accessory (idler pulley/alternator/AC compressor)
- Noise is NOT H-EPS Pump or power steering pump

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