



# Service Bulletin

Bulletin No.: 20-NA-187

Date: September, 2020

## TECHNICAL

**Subject: Delayed and/or Harsh Engagement of Transmission Shift After Vehicle Sitting with Engine Off**

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission (Automatic):			
		from	to	from	to					
Cadillac	ATS	2018	2019	—	—	—	M5T, M5N, M5U			
	CTS	2018	2019				M5N			
	CT4	2021	2021				M5N, M5X			
	CT6	2018	2019				M5T, M5N, M5U			
Chevrolet	Camaro	2018	2021				—	—	—	M5T
	Colorado	2018	2021							M5U
	Corvette	2018	2019							M5U, MQD
	Express	2018	2020							M5U, M5X, MQE
	Silverado	2018	2018							
	Silverado LD	2019	2019							
	Silverado 1500 (New Model)	2019	2021							
GMC	Canyon	2018	2021				—	—	—	M5T
	Savana	2018	2021	M5U, MQD						
	Sierra	2018	2018	M5U, M5X, MQE						
	Sierra Limited	2019	2019							
	Sierra 1500 (New Model)	2019	2021							

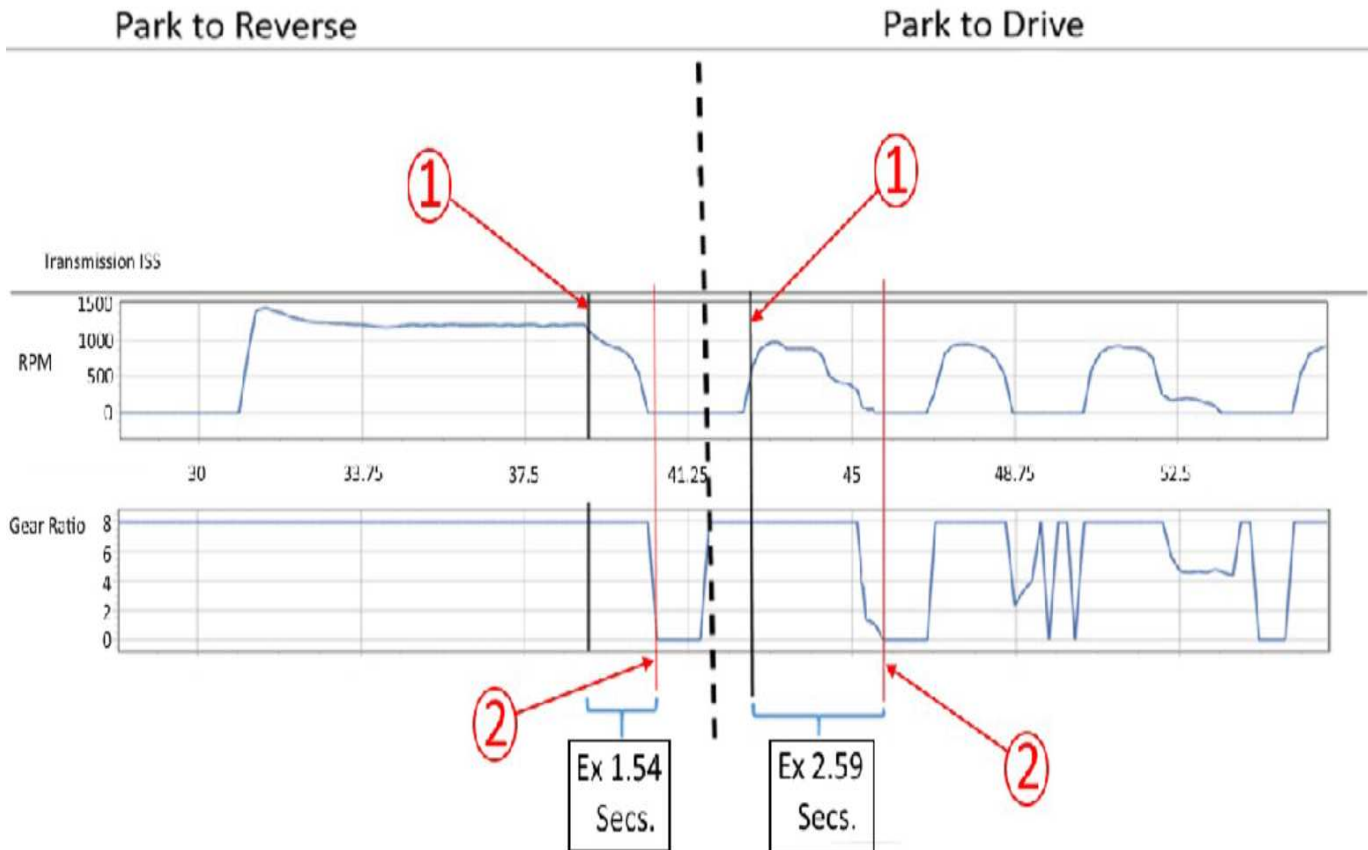
<b>Involved Region or Country</b>	North America, Europe
<b>Condition</b>	<p>Some customers may comment on a condition of delayed engagement when the transmission is shifted from Park to Reverse or Park to Drive after the vehicle has been sitting with the engine off.</p> <p><b>Note:</b> This condition may typically occur after several hours or more commonly overnight.</p> <p>Customers may describe this condition as:</p> <ul style="list-style-type: none"> <li>• Vehicle delaying into gear</li> <li>• Feeling like the transmission is slipping</li> <li>• Delayed engagement followed by a harsh engagement</li> </ul>
<b>Information</b>	<p>General Motors allows 3 seconds for the transmission to complete a garage shift, shifting from Park to Reverse or Park to Drive. If the engine speed is increased before the transmission has engaged, the garage shift may be harsh.</p> <p>Operation will be normal for the subsequent engagements throughout the day and the condition will not occur until the vehicle sits again with the engine off for several hours or overnight.</p>

## Service Procedure

### Delayed Engagement Test:

**Note:** Vehicle should only be evaluated after sitting for a minimum of 8 hours but less than 24 hours. To be measured at 10°C (50°F) and above.

Delayed Engagement Park to Reverse or Drive is present if the time difference between Gear Selected (Pt. 1) and Transmission Input Shaft Speed reaching 0 RPMs (Pt. 2) exceeds 3 seconds. Foot is HELD on Brake during maneuver.



If the customer describes the condition as a delayed or slow engagement time with or without a harsh or bump engagement feel when shifting the vehicle from Park to Drive or Reverse, use GDS and monitor engine RPM and the transmission Input Speed Sensor (ISS) prior to starting the engine. Start the engine with the transmission in Park. Shift the vehicle from Park to Drive or Reverse leaving the service brake applied. The ISS should drop to zero "0" within 3 seconds; this is clutch engagement time. Recording a GDS session log can be useful in diagnosing this condition.

In most cases the transmission will engage in 3 seconds or less, which is considered an acceptable engagement time and no repairs should be attempted.

If the vehicle has less than 4000 km (2500 mi), the transmission or valve body has been replaced or a clutch repair, follow the clutch learn procedure in Service Bulletin #16-NA-019 to learn the C5 Reverse and C3 Drive Clutch.

If engagement time exceeds 3 seconds, refer to the following procedures:

- Attempt to learn the C3 – Drive and C5 Reverse - Clutch using the following steps:
  1. Allow the transmission sump temperature to rise between 20° and 30°C (68° and 86°F).

**Note:** DO NOT apply the accelerator pedal.

2. Perform 20 Park to Reverse shifts or 20 Park to Drive shifts releasing the brake pedal with each shift, allowing the vehicle to roll 5-10 feet (1.5-3.0 m) per engagement into gear.
- If the learn procedure does not correct the condition, disassemble the transmission and inspect the 1-3-5-6-7 Clutch (C3) for a delay into Drive and inspect the 4-5-6-7-8 Reverse Clutch (C5) for a delay into Reverse. The respective clutch plates and seals should be inspected for wear and or damage and repaired accordingly.

## Parts Information

No parts are required for this repair.

## Warranty Information

For vehicles repaired under the Powertrain coverage, use the following Labor Operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
8481068*	Evaluate Transmission Engagement Time	0.3 hr
Add	Perform C3 and C5 Clutch Learn	0.2 hr
*This is a unique Labor Operation for bulletin use only.		

Version	1
Modified	Released September 09, 2020

