File in Section:

Bulletin No.: PI0700B

Date: February, 2013

# PRELIMINARY INFORMATION

Subject: Shudder Feel While Driving in 40-50 MPH Range

Models: 2012 Cadillac CTS

2012 Chevrolet Camaro

Equipped with 3.0L or 3.6L Engine (RPO LFW, LFX) and 6L45 or 6L50 Automatic

Transmission (RPO MYA, MYB)

This PI is being revised to update the part number in Parts Information and add a second Important statement. Please discard PI0700A.

### Condition/Concern

Some customers may comment on a shudder feeling when driving, typically in the 64-80 km/h (40-50 mph) range. They may state that the condition feels like an engine misfire or like the car is driving over rumble strips on the road. This condition may be caused by a torque converter clutch (TCC) apply shudder.

#### Recommendation/Instructions

Drive the vehicle under the conditions as described by the customer to duplicate the concern while using a scan tool to monitor the parameter TCC slip speed.

- Actively command the torque converter clutch off to see if the shudder concern is still present.
- Actively command the torque converter clutch on. The TCC slip speed should drop to zero.
- If the concern is gone with the torque converter clutch commanded off and is gone when the torque converter clutch is commanded on (slip speed at zero), the torque converter should be replaced.
- If the concern is still present with the torque converter clutch commanded on and a zero slip speed cannot be attained, the torque converter should be replaced.
- If the concern is still present with the torque converter clutch commanded off or with the torque converter clutch commanded on (slip speed at zero), the torque converter should not be replaced. Torque converter replacement will not correct the condition. The latest version of Corporate Bulletin Number 03-00-91-001 should be followed to aid in finding the root cause of this concern.

TCC shudder is not a drone or growl noise, the shudder condition can be felt. It typically feels like an engine misfire or like the car is driving over rumble strips on the road.

**Important:** If the torque converter is replaced, the transmission fluid and filter should also be replaced. Also flush and flow check the transmission cooler circuit following SI directions for Transmission Fluid Cooler Flushing and Flow Test. While the transmission fluid pan is removed, allow the transmission to drain to remove as much old fluid as possible. Install a new transmission fluid filter, reinstall the fluid pan and refill the transmission following SI directions for Transmission Fluid Fill Procedure. Failure to replace the fluid and filter and to flush and flow check the cooler may lead to a repeat shudder concern.

**Important:** Under certain load conditions, a minor chuggle/shudder feel may be felt in the passenger compartment due to the natural firing order frequency of the V6 engine. Because of this, some level of concern may still be felt after the repair. Generally, this can be confirmed by using the scan tool to command the TCC on during the concern. If the slip speed drops to around 0 RPM and there is no change in the chuggle/shudder, it should be considered to be within the design intent of the drivetrain.

#### **Parts Information**

| Part Number | Description      |
|-------------|------------------|
| 24265772    | Torque Converter |

## **Warranty Information**

For vehicles repaired under warranty, use:

| Labor Operation | Description                  | Labor Time                               |
|-----------------|------------------------------|--|
| K7020           | Torque Converter Replacement | Use Published<br>Labor<br>Operation Time |