Bulletin No.: PIT5501D

Date: Nov-2016

Service Bulletin

PRELIMINARY INFORMATION

Subject: **Steering Feels Loose / Excessive Lash / Fluid Leak At Lash Adjuster (Replace Pitman Shaft and Adjust over center lash)**

Models: **2016 Chevrolet Silverado 2500/3500**

2016 GMC Sierra 2500/3500

This PI was superseded to update the Condition and Recommendation. Please discard PIT5501C.

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

Condition/Concern

Some owners may comment of the following: the steering feels loose, there is excessive play in the steering, and/or a small power steering fluid leak from the steering gear lash adjuster stud/nut area. These concerns could be caused by the Pitman Shaft Over-Center Preload Adjustment becoming misadjusted.

- If a fluid leak is noted at the lash adjuster stud/nut/cover interface or if the lash adjuster stud/nut is misadjusted/loose, continue to the recommendations section.
- If it is not obvious that the lash adjuster stud/nut has become misadjusted/loose, the following test can be performed to determine if there is excessive lash in the steering gear:

1. Disconnect the Relay Rod/Center link from the steering gear pitman arm and idler arm. Allow the relay rod/center link to drop down and clear the pitmar arm.
2. With the steering gear in the centered position (wheels straight forward), have an assistant hold the steering wheel from turning.
3. While the steering wheel is being held in the centered position, wiggle the pitman arm and feel for any lash/play.
4. If lash/play is found, continue to the recommendations section.

Recommendation/Instructions

Do NOT replace the steering gear for this concern.

1. Replace the steering gear pitman arm shaft with an updated design, GM Part number 84240812. Follow SI "Steering Gear Pitman Shaft Replacement (Heavy Duty)" procedure, document ID: 4165698 to install the new pitman shaft. Part number 84240812 is a pitman arm shaft kit, which comes with a new pitman arm shaft, cover and bolts.

   Note: Do NOT reinstall the Pitman Arm or the steering gear into the truck at this point.

2. Perform the "Steering Gear Pitman Shaft Over-Center Preload Adjustment" per SI Document ID: 4492395.

   It is recommended to review the June 2016 Emerging Issues Video "Steering Gear Over Center Adjustment", before performing the procedure.

   US Dealers should access the video as follows:

   - https://www.centerlearning.com
   - Log in
   - Select the "Catalog" icon at top
   - Change "Course Name" to "Course Numbers"
   - Enter “10216.06V” in the Search box
   - Select "View"
   - Select "Take or Continue Course" near the top right

The steering over center adjustment video is approximately 7 minutes long and starts approximately 35 minutes into the emerging issues video. The video scroll bar can be pulled across to the 35 minute mark and start watching the video from that point. Note: You may not be able to fast forward the video until it is fully loaded.

Canada Dealers should access the GM Centre of Learning website, then follow this path:

-Resources

-Video on Demand

-GM Pro Centre of Learning

-Service Technical

-PIT5501B

3. Reinstall the Pitman arm, washer, and nut. Tighten to 370 Nm (273 lb. ft.)
4. Reinstall the steering gear and bleed the power steering system, see important note below.

   Important: Correct bolt torque and gear position are very important to steering feel. When installing the steering gear have an assistant push up on the steering gear while tightening the steering gear mounting bolts. Torque the steering gear mounting bolts to 275 NM (203 ft. lbs.).
5. Measure and adjust the front toe.

   Trucks withOUT Active Hydraulic Assist system (RPO NV8) test drive to verify customer complaint is corrected.

   Trucks with the Active Hydraulic Assist system (RPO NV8) continue with the following steps.
6. Reprogram the Power Steering Control module with the latest calibrations in Tis2Web
7. Using the scan tool perform a Steering Angle Sensor Centering procedure listed in SI (example doc id 3970641).
8. Next, with the ignition ON, engine OFF, steering wheel straight forward and NO steering wheel input, use the scan tool and go into the Power Steering Control Module/ Configuration and Reset Functions and perform a "Power Steering Pressure Sensor Learn".
9. Test drive the truck and make sure the steering wheel is level and the "Steering Wheel Angle" parameter is 0 degrees (+/-3 degrees) the while driving the truck on a flat level straight road at slower speeds (approximately 25 mph). To view the "Steering Wheel Angle" parameter, using the scan tool and go into the Power Steering Control Module/Data Display.
10. Complete test drive to verify customer complaint is corrected.

Parts Information

Part Number	Description	Qty
84240812	Steering Gear Pitman Shaft Kit	1

excel sheet

Warranty Information

For vehicles repaired under warranty use:

Labor Operation	Description	Labor Time
7480268*	R and R Steering Gear, Replace Pitman Shaft, Perform Over Center Adjustment, Bleed Power Steering System, Adjust Toe	3.2 hr
Add	Perform GDS2 SAS and Pressure Sensor Relearns	0.3 hr
ONLY WITH RPO NV8		
Add	If Necessary Reprogram the Power Steering Control Module	0.3 hr
ONLY WITH RPO NV8		
* This is a unique labor operation for bulletin use only. This will not be published in the Labor Time Guide.		

Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the

remaining steps do not need to be performed.
