



Service Bulletin

PRELIMINARY INFORMATION

Subject: Steering Feels Loose And/Or Excessive Lash (Adjust Steering Gear)

Models: 2016 Chevrolet Silverado 2500/3500
2016 GMC Sierra 2500/3500
With Digital Steering Assist (RPO NV8)

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

Condition/Concern

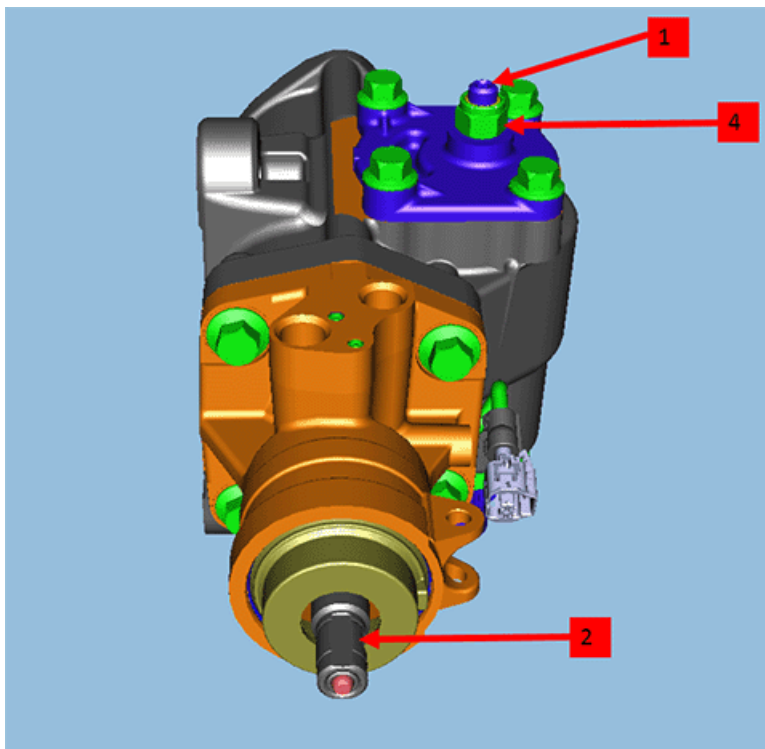
Some owners may comment the steering feels loose or has excessive play. This concern could be caused by an incorrect Pitman Shaft Over-Center Preload Adjustment.

Recommendation/Instructions

Do NOT replace the steering gear for this concern

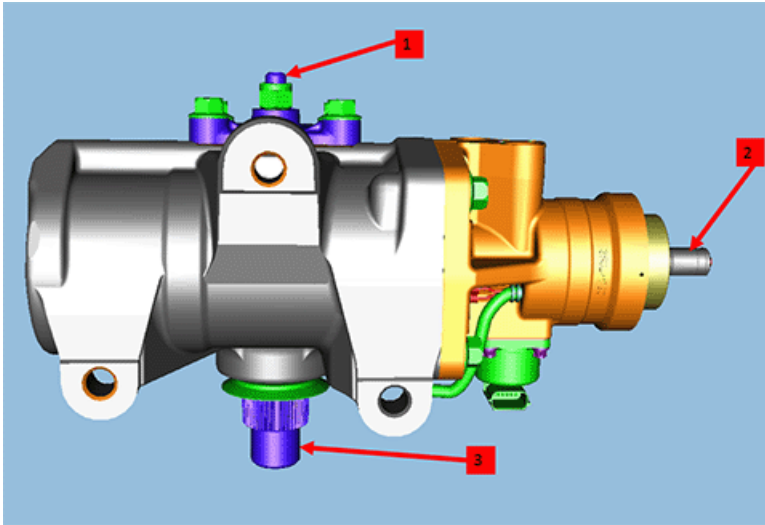
Perform the "Steering Gear Pitman Shaft Over-Center Preload Adjustment" procedure below. SI will be updated shortly with this revised procedure.

1. Remove the steering gear from the vehicle.



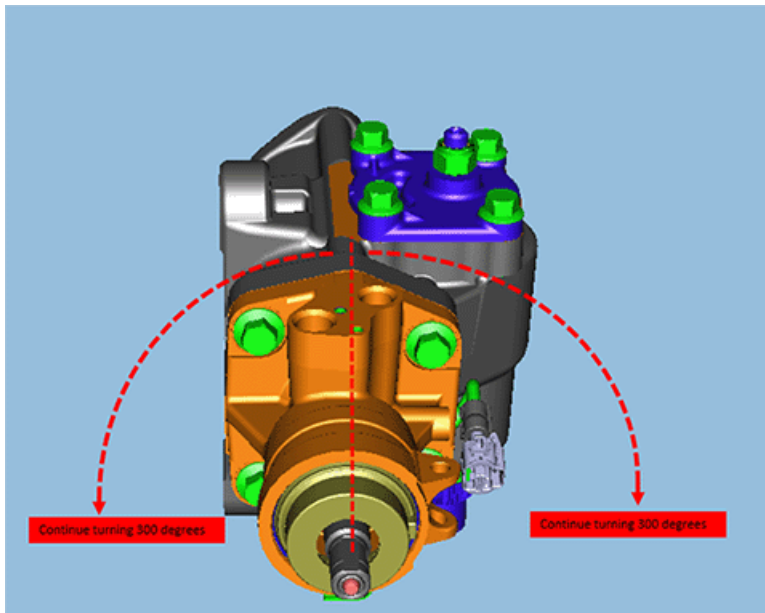
2. Loosen the steering gear pitman shaft lash adjuster nut (4).
3. Turn the steering gear pitman shaft lash adjuster screw (1) counterclockwise until fully extended.

4. Turn the steering gear pitman shaft lash adjuster screw clockwise 1 full turn.
5. Rotate the steering gear input shaft (2) from stop to stop using a socket designed for the input shaft geometry, or crows foot with ratchet while counting the number of turns.
6. Starting at either stop, turn the steering gear input shaft (2) back half the total number of turns counted previously. This is the center position.

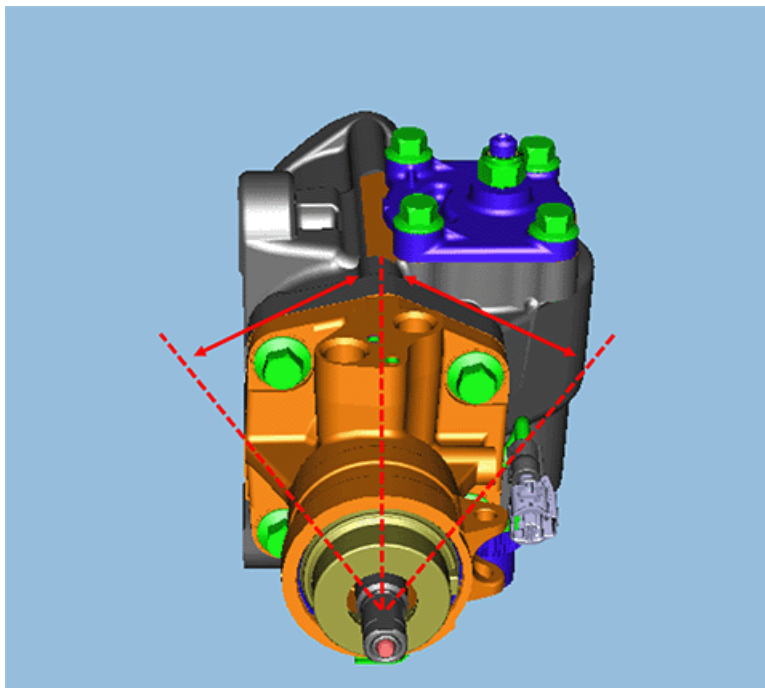


7. Ensure the steering gear pitman shaft is centered by inspecting the following items:
 - The flat on the steering gear input shaft (2) faces upward.
 - The flat on the steering gear input shaft (2) is parallel with the steering gear side cover.
 - The master spline (3) on the steering gear pitman shaft is in line with the steering gear pitman shaft lash adjuster screw (1).
8. Place a torque wrench on the steering gear input shaft (2) with the handle in the vertical position.



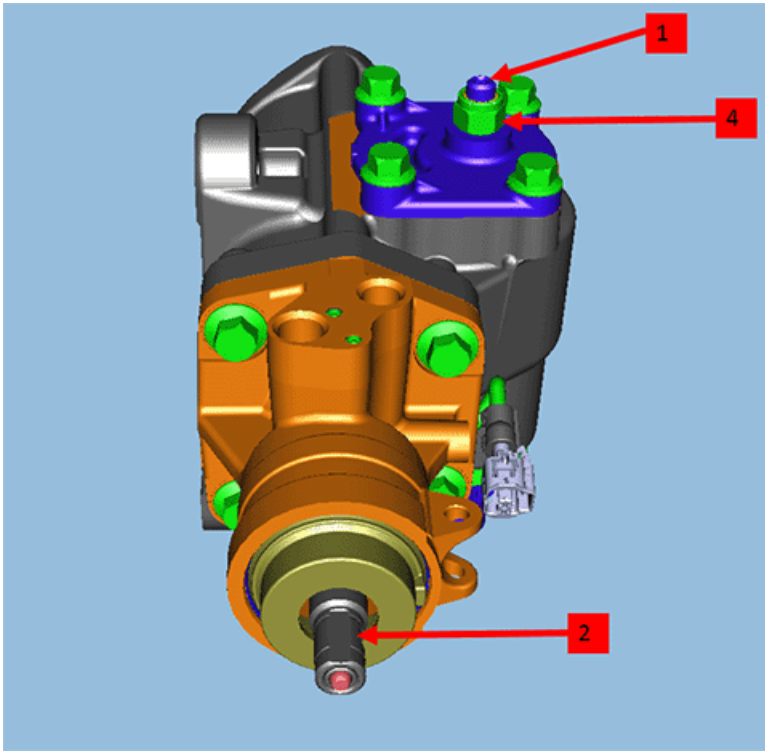


9. Rotate the steering gear input shaft 300 degrees from each side of the center of the input shaft. The input shaft **MUST** rotate smoothly and must **NOT** stick or bind.
10. Record the average turning torque from -300 to +300 degree sweep. This value is the "off center friction" torque.
11. The average "off center friction" torque must be 0.4 to 1.1 Nm (4 to 10 in lbs). If the torque is outside this range, replace the steering gear assembly.



12. Next, adjust the "over center preload" torque.
 - Start by ensuring the steering gear is centered, as explained in step 7.
 - Check the "over center preload" torque by installing a torque wrench on the steering gear input shaft (2) with the handle in the vertical position and rotate the steering gear input shaft 45 degrees from each side of center of the input shaft, as shown above.
 - Adjust the lash adjuster screw (1) until the over center preload torque is 0.65 - 1.1Nm (6 to 10 in lbs) above the "off center friction" torque recorded in step 10.

Example, if the recorded value in step 10 was .8 Nm (7 in lbs) then adjust the lash adjuster screw (1) until the over center preload torque is between 1.45 to 1.9 Nm (13 to 17 in lbs).



13. Tighten the steering gear pitman shaft lash adjuster nut (4) to 75-85Nm (55-63 lb ft).

Note: Prevent the steering gear pitman shaft lash adjuster screw (1) from turning while tightening the steering gear pitman shaft lash adjuster nut (4).

14. Reinstall the steering gear.

Warranty Information

For vehicles repaired under warranty use:

| Labor Operation | Description | Labor Time |
|---|--|------------|
| 7480228* | R and R Steering Gear, Perform Over Center Adjustment, Bleed Power Steering System, Adjust Toe | 3.6 hr |
| * This is a unique labor operation for bulletin use only. | | |

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.

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



WE SUPPORT VOLUNTARY TECHNICIAN CERTIFICATION