Steering Wheel Vibration at Highway Speeds (Replace Both Front Lower Control Arm Assemblies) #04-03-08-001 - (Jan 27, 2004)

Steering Wheel Vibration At Highway Speeds (Replace Both Front Lower Control Arm Assemblies)

2004 Cadillac CTS with RPO FE3

Built Prior To VIN Breakpoint 40121460

Important

This bulletin applies ONLY to 2004 CTS vehicles equipped with the FE3 sport suspension built within the above described VIN range and exhibiting the described condition. NO attempts should be made to match, balance, force variation diagnose or replace tires for this vibration condition without first performing the following repair.

Condition

Some customers may comment on feeling a vibration in the steering wheel when driving at highway speeds.

Correction

Remove both of the existing front lower control arm assemblies and install the following components:

- 25758282-LH Front Lower Control Arm Assembly
- 25758283-RH Front Lower Control Arm Assembly

Refer to the procedures in this bulletin.

Removal-Front Lower Control Arm
Tools Required

- J 24319-01 Universal Steering Linkage Puller
- J 43631 Ball Joint Remover

1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle in the General Information sub-section of the Service Manual or SI document #813128.
2. Remove the tire and wheel assembly. Refer to Tire and Wheel Removal and Installation in the Tires and Wheels sub-section of the Service Manual or SI document #1318233.

3. Remove the stabilizer shaft link lower retaining nut. An allen wrench may be required.
4. Disconnect the stabilizer shaft link from the lower control arm.
5. Remove the shock module assembly lower retaining bolts (1).

6. Remove the outer tie rod to steering knuckle retaining nut.
7. Use J 24319-01 to disconnect the outer tie rod from the steering knuckle.

8. Remove the ABS wire harness from the lower control arm.
A. Disconnect the wire harness from the wheel speed sensor.
B. Unclip the wire harness from the stabilizer link and control arm.

9. Loosen the lower ball joint retaining nut. DO NOT separate the lower ball joint from the steering knuckle at this time.
10. Paint witness/location marks across lower control arm mounting bolt, nut and washer to engine frame.
11. Remove the lower control arm mounting nuts.
12. Remove the lower control arm mounting bolts.
13. Remove the lower ball joint retaining nut.

14. Use J 43631 to separate the lower ball joint from the steering knuckle.
15. Remove the lower control arm from the vehicle.

Installation-Front Lower Control Arm
1. Install the lower control arm to the vehicle.
   A. Connect the lower ball joint to the steering knuckle.
   B. Install a new lower ball joint retaining nut, P/N 10282253. Hand tighten only.
2. Install the lower control arm mounting bolts.
3. Adjust the lower control arm to Z height. Refer to the Trim Height Inspection Procedure in Suspension General Diagnosis in the Suspension sub-section of the Service Manual or SI document #803078.
4. Install the lower control arm mounting nuts. **Tighten**

   Tighten the nuts to 135N·m(100 lb ft).

5. Tighten the new lower ball joint retaining nut in the following order: **Tighten**
   A. Tighten the nut to 20N·m(15 lb ft).
   B. Tighten the nut an additional 210 degree turn.

6. Install the ABS wire harness to the lower control arm.
   A. Clip the wire harness to the stabilizer link and control arm.
   B. Connect the wire harness to the wheel speed sensor.
7. Connect the outer tie rod to the steering knuckle.
8. Install the outer tie rod to steering knuckle retaining nut. **Tighten**

   Tighten the nut to 75N·m (55 lb ft).
9. Install the shock module assembly lower retaining bolts. **Tighten**

Tighten the bolts to 25N·m (18 lb ft).
Important

Apply threadlocker 242, or equivalent, to the threads of the stabilizer shaft link.

10. Connect the stabilizer shaft link to the lower control arm.
11. Install the stabilizer shaft link lower retaining nut. **Tighten**

   Tighten the nut to 50N·m (37 lb ft).

12. Install the tire and wheel assembly. Refer to Tire and Wheel Removal and Installation in the Tires and Wheels sub-section of the Service Manual or SI document #1318233.
13. Repeat the Removal and Installation Procedures for the opposite front lower control arm.
14. Lower the vehicle.
15. Align the front end. Refer to Measuring Wheel Alignment in Wheel Alignment in the Suspension sub-section of the Service Manual or SI document #784867.

**Parts Information**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>25758282</td>
<td>Arm Asm-Frt Lwr Control, LH-Replace</td>
</tr>
<tr>
<td>25758283</td>
<td>Arm Asm-Frt Lwr Control, RH-Replace</td>
</tr>
<tr>
<td>3537773</td>
<td>Nut, Frt Lwr Cont Arm (To Cradle) (Qty-2)</td>
</tr>
<tr>
<td>10282253</td>
<td>Nut, Frt Lwr Cont Arm Ball Joint (To Knuckle)</td>
</tr>
</tbody>
</table>

Parts are currently available from GMSPO.

**Warranty Information**

For vehicles repaired under warranty, use:

<table>
<thead>
<tr>
<th>Labor Operation</th>
<th>Description</th>
<th>Labor Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>E3537</td>
<td>Arm Asm, Frt Control Lwr-Both-Replace</td>
<td>1.7 hr*</td>
</tr>
</tbody>
</table>
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.

© Copyright General Motors Corporation. All Rights Reserved.