



Sedan Range

DATE 12/97

10-12

SERVICE

## TECHNICAL BULLETIN

Steering Column Tilt Motor Seized –  
Replace Motor and Column/Mirror  
Movement Control Module – Procedure

MODEL 1995-97 MY  
Sedan Range  
VIN 720001-790277

This Technical Bulletin supersedes Technical Bulletin 10-10 which can still be referred to for the steering column replacement procedure when necessary.

### ISSUE:

An improved column/mirror movement control module (C/MCM) is now available for the above vehicles, which incorporates electronic sensing of the end stop of the steering column tilt mechanism.


This bulletin provides a revised repair procedure which involves replacing the tilt motor and changing to the improved C/MCM. This action will provide a more effective repair than that detailed in the Technical Bulletin 10-10, which should now be disregarded.

### ACTION:

In case of a customer complaint of stuck steering column tilt function on a 1995-97 MY Sedan Range vehicle within the above VIN range, refer to the following procedure:

#### REMOVING TILT MOTOR & COLUMN/MIRROR MEMORY CONTROL MODULE:

1. Move the driver's seat fully rearwards.
2. Disconnect the battery negative cable.
3. Remove the 2 screws that secure the steering column lower cowl and remove the cowl for access to the multiplugs.
4. Disconnect the following multiplugs: instrument rheostat, steering column tilt function, steering column telescope function.
5. Remove the lower cowl.

 **WARNING:** Ensure the battery has been disconnected for a minimum of 1 minute before attempting to work on airbag removal.

6. Turn the steering wheel 90° from the straight ahead position, and completely loosen the accessible bolt securing the airbag module (bolt remains captive).
7. Turn the steering wheel 180° to obtain access to the other airbag module bolt, and loosen the bolt completely (bolt remains captive).

8. Release the airbag module, disconnect the multiplug and remove airbag module.
9. Disconnect the horn multiplug.
10. Center the steering wheel and remove the steering wheel retaining bolt.
11. Release the steering wheel from the steering column.
12. Pass the horn and airbag harnesses through the steering wheel opening, and remove the steering wheel.
13. Remove the 4 screws securing the driver side dash-liner.
14. Use the special tool JD-188 to remove the dash-liner securing clip.
15. Disconnect the air-conditioning aspirator multiplug and remove the dash liner.
16. Release the tilt-motor potentiometer multiplug from the mounting bracket and disconnect the multiplug.
17. Remove the 2 bolts securing the tilt motor.
18. Release the tilt motor from the drive coupling.
19. Release the anti-backout device from the tilt-motor potentiometer multiplug.
20. **Noting their installed position**, use special tool MS-1540 to release the red and brown motor wire terminals from the multiplug. Then remove the wires from the black sleeve.
21. Release the securing tang from the tilt-motor potentiometer and remove the potentiometer.
22. Remove the tilt motor.
23. Remove the 2 bolts securing C/MCM.
24. Disconnect the multiplugs and remove the C/MCM.

#### INSTALLING TILT MOTOR & COLUMN/MIRROR MEMORY CONTROL MODULE:

1. Install the improved C/MCM and connect the multiplugs.
2. Reinstall the 2 bolts to secure the C/MCM.
3. Install the existing potentiometer on the new tilt motor.
4. Insert the motor wires through the black sleeve with the potentiometer wires.
5. Insert the pins of the motor wires into the connector in the locations noted in step 21 of the removal procedure. Reinstall the anti-backout device in the connector.
6. Engage the tilt motor in the drive coupling and secure the tilt motor using the 2 screws.
7. Reinstall the multiplug connector for the tilt motor on the mounting bracket and reconnect the multiplug.
8. Position the dash liner and reconnect the multiplug for the air conditioning aspirator.
9. Reinstall the dash liner securing clip and the 4 screws to secure the dash liner.
10. Ensure that the front wheels are in the straight ahead position.

11. Pass the horn and airbag harnesses through the steering wheel opening and place the steering wheel on the steering shaft in the center position.
12. Reinstall the steering wheel retaining bolt and torque to 40 Nm (30 lb ft).
13. Reconnect the multiplug for the horn.
14. Reconnect the multiplug for the airbag module and place the airbag module in position.
15. Turn the steering wheel 90° from the straight ahead position, and tighten the accessible bolt.
16. Turn the steering wheel 180° to obtain access to the other airbag module bolt, and tighten the bolt completely to secure the airbag module.
17. Reconnect the following connectors: instrument rheostat, steering column tilt function, steering column telescope function.
18. Reinstall the lower cowl (2 screws).
19. Reconnect the battery negative cable and reset the clock.
20. Road test vehicle to check steering wheel position and to verify repair.

**⚠ WARNING:** If it is necessary to adjust the position of the steering wheel after the road test, **ensure that a minimum of 1 minute has elapsed after disconnecting the battery before working on removal of the airbag.**

### PARTS INFORMATION:

<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>QTY</u>
Tilt motor modification kit includes:	JLM 20607	1
- Steering column tilt motor (JLM 20194)		
- Column/Mirror Memory Control Module		

### WARRANTY INFORMATION:

<u>FAULT CODE</u>	<u>R.O. NUMBER</u>	<u>DESCRIPTION</u>	<u>TIME ALLOWANCE</u>
TD FD GH	57.91.12	Steering column tilt motor - modify	0.75 hrs.