



NUMBER: 19-005-04 REV. A

GROUP: Steering

DATE: October 25, 2004

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THIS BULLETIN SUPERSEDES SERVICE BULLETIN 19-005-04 DATED MAY 25, 2004, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH **ASTERISKS**** AND INCLUDES A REVISED FIGURE 1 AND STEP 16 OF THE REPAIR PROCEDURE.**

SUBJECT:

Pop/Tick/Creak Sound In Steering Column

OVERVIEW:

This bulletin involves installing a shim in the steering column, replacing the upper tilt head housing assembly and on WG/WJ vehicles, replacing the jacket clamp bracket and adding multi function switch tape to steering columns on vehicles built on or after October 10, 2002.

MODELS:

2002 - 2004	(RG)	Chrysler Voyager (International Markets)
2002 - 2004	(RS)	Town & Country/Caravan/Voyager
2002 - 2004	(WG)	Grand Cherokee (International Markets)
2002 - 2004	(WJ)	Grand Cherokee

NOTE: This bulletin applies to vehicles equipped with tilt steering (sales code SUA) and built on or after January 14, 2002.

NOTE: For vehicles built on or before January 13, 2002 refer to service bulletin 19-003-03 dated August 29, 2003.

SYMPTOM/CONDITION:

A pop/tick/creak sound may be heard coming from the steering wheel area while the vehicle is in motion. The sound is associated with input from the road surface. It may be difficult to readily repeat the sound once it has occurred until additional road input is experienced, such as driving over an expansion strip.

On WG/WJ vehicles a creaking sound may be detected coming from the lower steering column area.

DIAGNOSIS:

If the customer describes the Symptom/Condition, perform the Repair Procedure.

PARTS REQUIRED:

Qty.	Part No.	Description
1	05114169AB	Kit, Steering Column Repair (All Models) Kit consists of: (2) 05143813AA Shim (2) 06032364 Snap Ring (1) 05083385AA Installer, Snap Ring (1) 05083729AA Tilt Head Housing Assembly
AR	04690101	Bracket, Jacket Clamp (WG/WJ Only)
AR	04690375	Tape, Multifunction Switch (WG/WJ Only)
AR	04717121	Tape (WG/WJ Only)
AR	04318031	Lock & Seal Adhesive
AR	04318070	Silicone Spray Lube

SPECIAL TOOLS/EQUIPMENT REQUIRED:

C-3428-B	Steering Wheel Puller (RG/RS)
C-3894-A	Steering Wheel Puller (WG/WJ)

REPAIR PROCEDURE:

1. Make sure the front wheels of the vehicle are in the STRAIGHT AHEAD position before beginning steering wheel removal procedure.
2. Open the hood and disconnect and isolate the negative battery cable from the battery.

WARNING: Wait two minutes for the airbag system reserve capacitor to discharge before beginning any airbag component service. Failure to do this could result in accidental air bag deployment and possible personal injury.

3. Remove the lower and upper steering column shrouds.
4. Remove the driver's air bag from the steering wheel. Disconnect the clock spring, speed control (if equipped), and radio control (if equipped) wiring connections.
5. Remove the steering wheel attaching nut.
6. Using the appropriate steering wheel puller, remove the steering wheel.
7. Disconnect the multi-function switch wiring connector and remove the multi-function switch.
8. Disconnect the clock spring wiring connector and remove the clock spring.

NOTE: When removing the clock spring, do not change the orientation of the clock spring inner wheel. If the orientation of the clock spring inner wheel is changed, the clock spring will have to be centered. Refer to the service information available on TechCONNECT, Refer to 8 - Restraints, Clockspring, Standard Procedure, Clockspring Centering.

9. Using needle nose pliers, remove both tilt head return springs from the tilt head assembly.
10. Remove the snap ring from the steering shaft upper tilt head assembly.
11. Remove the two #25 torx bit screws attaching the tilt rack to the tilt head housing.

12. Remove the two #45 torx bit screws attaching the tilt head assembly to the steering column.
13. Lift the tilt steering column lever and remove the tilt head housing and the tilt rack from the steering column.
14. Remove the tilt head housing from the shaft being careful not to misplace the lower bearing wedge.
15. Remove the wave washer from the shaft being careful not to misplace it. The wave washer will be reused later.
16. ****To the base of the shaft, install in order:**
 - a. The wave washer that was removed in [Step #15](#).
 - b. 2 shims.******
 - c. The lower bearing wedge ([Fig. 1](#)).

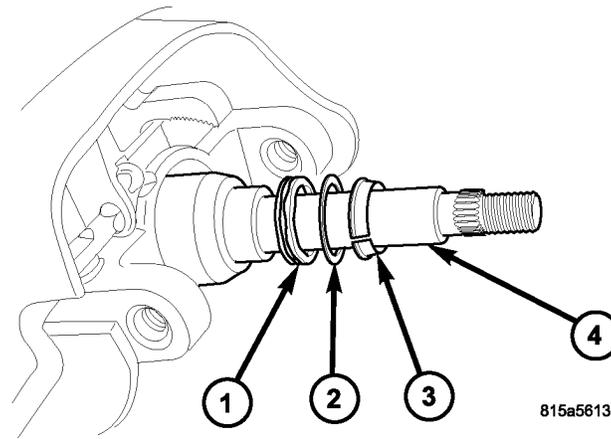


Fig. 1 **WAVE WASHER, SHIM, AND LOWER BEARING WEDGE INSTALLATION******

- 1 - ****WAVE WASHER (REUSE THE ORIGINAL)****
- 2 - ****SHIMS (2)****
- 3 - LOWER BEARING WEDGE
- 4 - STEERING SHAFT

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17. Install the revised tilt head assembly, p/n 05083729AA, to the steering shaft. Apply Mopar Lock & Seal adhesive (or equivalent) to both #45 torx screw threads and tighten to 11 N·m (100 in. lbs.)
 18. Install the upper bearing wedge to the tilt steering shaft.
 19. Apply a light coat of Mopar silicon spray lubricant, p/n 04318070, on the steering shaft near the snap ring groove. This will facilitate snap ring installation.
 20. Position the new snap ring onto the shaft near the bearing wedge. With one hand, pull the steering shaft outward and push the snap ring as far down the shaft as possible.
 21. From the parts package, use special tool 05083385AA (Installer) and place it over the steering shaft so the one end of the tool is resting on the snap ring ([Fig. 2](#)).

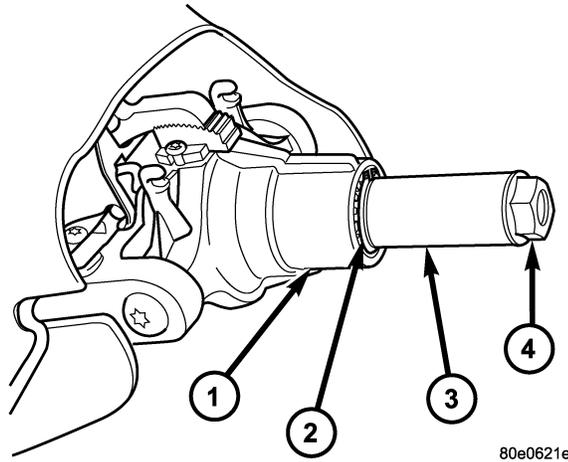


Fig. 2 SNAP RING INSTALLATION USING TOOL 05083385AA

- 1 - UPPER TILT HEAD HOUSING
- 2 - SNAP RING
- 3 - SNAP RING INSTALLER
- 4 - STEERING WHEEL NUT

22. Thread the steering wheel nut onto the steering shaft and against the end of the snap ring installer. Slowly tighten the steering wheel nut to 16 N·m (12 ft. lbs.) This will slide the snap ring into its groove on the steering shaft.

NOTE: A flat screwdriver may be used to lift the bottom of the bell upward into the tilt housing to allow easier installation of the snap ring.

CAUTION: Do not damage the nylon portion of the shaft bell.

NOTE: Do not over torque steering wheel nut.

NOTE: Make sure the snap ring is fully seated into its groove.

23. Lift the tilt lever and slide the tilt head rack into position. Apply Mopar Lock and Seal adhesive, p/n 04318031, to the #25 torx screw threads and install the torx screws and tighten to 6 N·m (50 in. lbs.).

NOTE: When installing the clock spring, do not change the orientation of the clock spring inner wheel. If the orientation of the clock spring inner wheel is changed, the clock spring will have to be centered. Refer to the service information available on TechCONNECT, Refer to 8 - Restraints, Clockspring, Standard Procedure, Clockspring Centering.

- 24. Install the clock spring and its wiring connections.
- 25. Install the multi-function switch and its wiring connections.
- 26. Install the steering wheel and tighten steering wheel nut to 61 N·m (45 ft. lbs.).

27. Connect the clock spring, speed control (if equipped), and radio control (if equipped) wiring connections.
28. Install driver's air bag and tighten screws to 10 N·m (90 in. lbs.). RG/RS vehicles proceed to [Step #34](#)
29. For WG/WJ vehicles, after installing the tilt head housing assembly, remove the steering column opening cover. Refer to the service information available on TechCONNECT, Refer to 23 - Body, Instrument Panel, Steering Column Opening Cover, Removal.
30. For WG/WJ vehicles whose steering column is exhibiting a creaking sound or was built on or before October 10, 2002 (MDH1010XX), proceed to [Step #31](#). For WG/WJ vehicles whose steering column is **NOT** exhibiting a creaking sound and was built on or after October 11, 2002 (MDH1011XX), proceed to [Step #32](#).
31. After installing the steering column repair kit, replace the jacket clamp bracket (p/n 04690101) as follows:
 - a. Remove the instrument panel steering column bracket. Refer to the service information available on TechCONNECT. Refer to 23 - Body, Instrument Panel, Steering Column, Support Bracket - Removal.
 - b. Remove the two screws that secure the jacket/tube clamp bracket to the upper mounting bracket of the column.
 - c. Remove and discard the jacket clamp bracket.
 - d. Place the clear mylar tape, p/n 04717121, on top of the multifunction switch tape, p/n 04690375.
 - e. Apply the tape crosswise on the column jacket tube, aligning it with the bracket holes on the upper mounting bracket ([Fig. 3](#)).

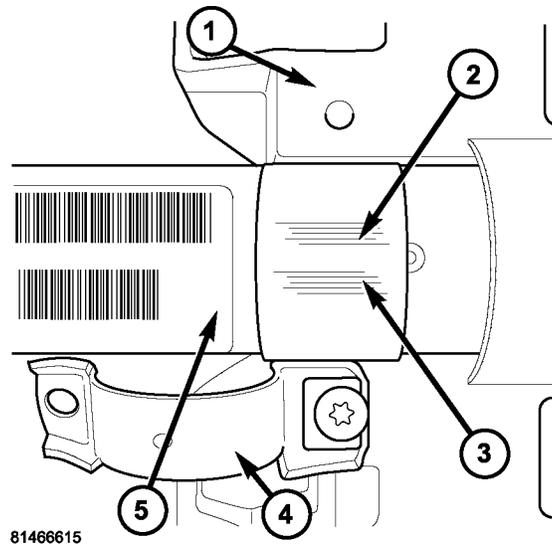


Fig. 3 APPLYING TAPE TO STEERING COLUMN

- 1 - MULTIFUNCTION SWITCH TAPE
 - 2 - MULTIFUNCTION SWITCH TAPE (MASTIC TAPE)
 - 3 - CLEAR TAPE OVER THE MULTIFUNCTION SWITCH TAPE
 - 4 - CLAMP BRACKET 90° OUT OF PLACE
 - 5 - STEERING COLUMN
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32. Install the new jacket clamp bracket, p/n 04690101, and tighten the screws to 10.2 Nm (90 in. lbs.).

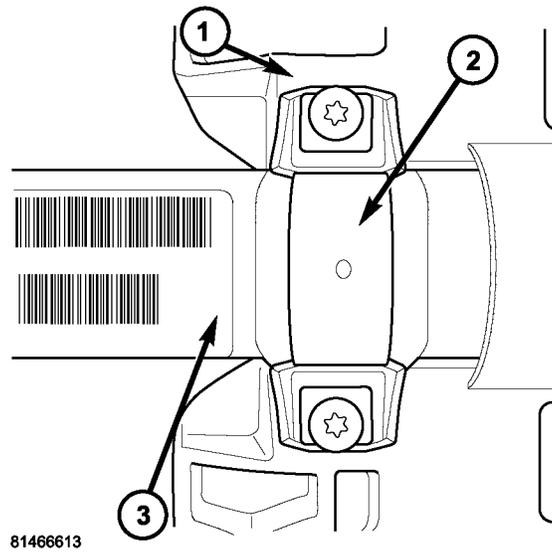


Fig. 4 JACKET CLAMP BRACKET

- 1 - STEERING COLUMN UPPER MOUNT
- 2 - JACKET CLAMP BRACKET
- 3 - STEERING COLUMN

- 33. Install the steering column opening cover.
- 34. Install the upper and lower steering column shrouds.
- 35. Connect negative battery cable and close the hood.

NOTE: In the interest of customer satisfaction, reset the clock when the procedure is complete.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Amount
19-34-05-98	Steering Column Parts Package, Install	0.6 Hrs.

FAILURE CODE:

68	Noisy
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