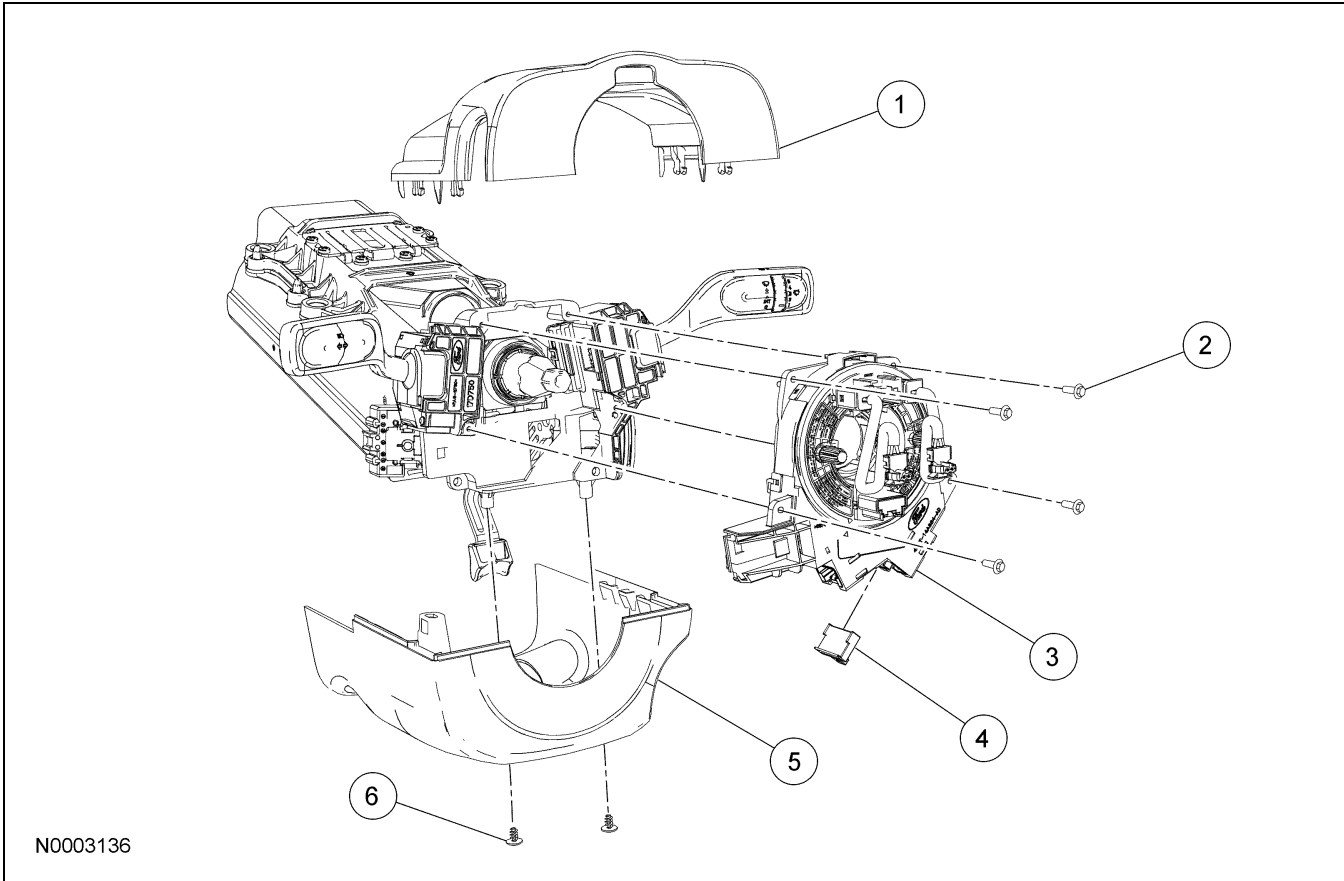


REMOVAL AND INSTALLATION

Clockspring



Item	Part Number	Description
1	3530	Upper steering column shroud
2	—	Clockspring screws (4 required) (part of 14A644)
3	14A644	Clockspring
4	—	Clockspring electrical connector (part of 14401)
5	3K512	Lower steering column shroud
6	W504041-S	Lower steering column shroud screws (2 required)

NOTE: The air bag warning lamp illuminates when the RCM fuse is removed and the ignition switch is ON. This is normal operation and does not indicate a supplemental restraint system (SRS) fault.

NOTE: The SRS must be fully operational and free of faults before releasing the vehicle to the customer.

NOTE: Repair is made by installing a new part only. If the new part does not correct the condition, install the original part and carry out the diagnostic procedure again.

Removal

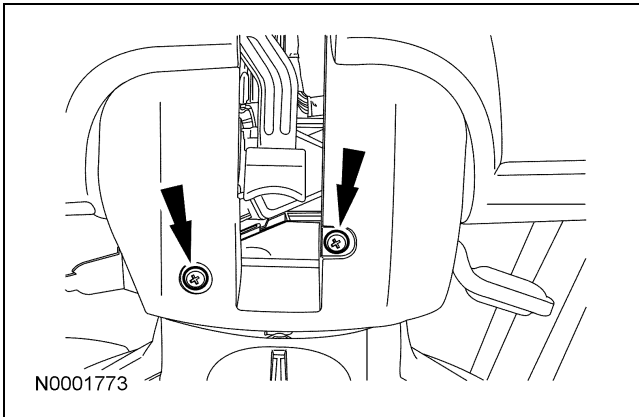
⚠ WARNING: Always wear safety glasses when repairing an air bag supplemental restraint system (SRS) vehicle and when handling an air bag module. This will reduce the risk of injury in the event of an accidental deployment.

⚠ WARNING: To reduce the risk of personal injury, do not use any memory saver devices.

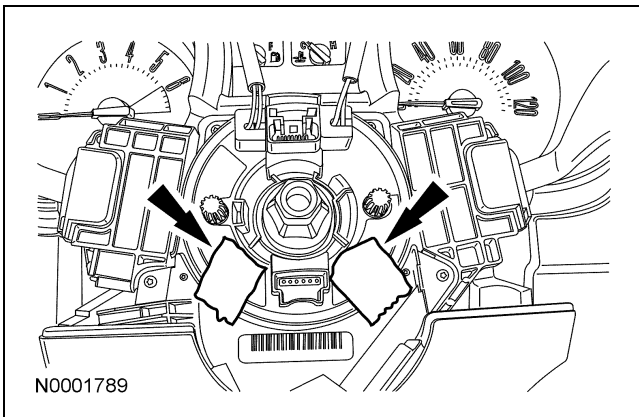
1. Depower the system. For additional information, refer to Supplemental Restraint System (SRS) Depowering and Repowering in the General Procedures portion of this section.
2. Make sure the road wheels are in the straight-ahead position.

REMOVAL AND INSTALLATION (Continued)

3. Tilt the steering wheel in the **DOWNWARD** position and **LOCK** the tilt handle.
4. Remove the driver air bag module. For additional information, refer to Driver Air Bag Module in this section.
5. Remove the steering wheel. For additional information, refer to Section 211-04.
6. Remove the lower steering column shroud 2 screws.



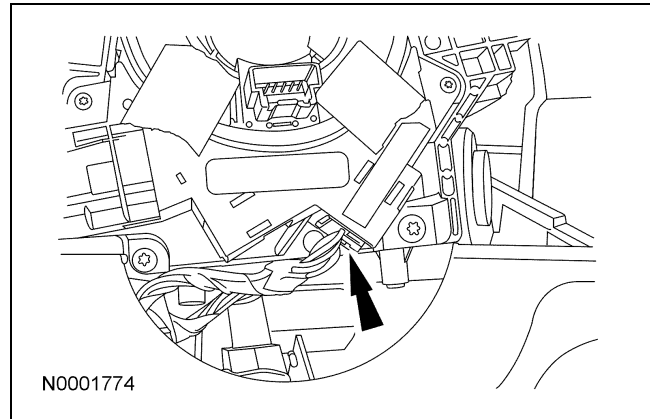
7. Remove the upper steering column shroud.
8. **NOTE:** If the clockspring is to be reinstalled, do not allow the clockspring to turn from its removal position.
If reusing the clockspring, tape the clockspring center rotor to the outer housing to keep it from rotating.



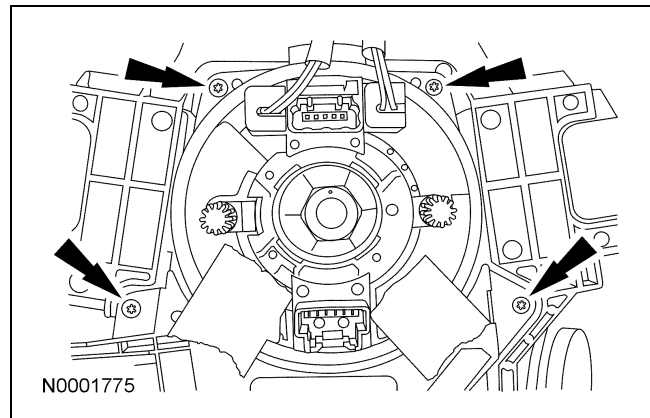
9. **NOTE:** The tilt steering column mechanism is spring loaded, carefully release the tilt handle while repositioning.

Carefully position the steering column up and leave the tilt handle in the unlocked position.


10. Position the lower steering column shroud downward.
11. Disconnect the clockspring electrical connector.




12. Remove the 4 clockspring screws and remove the clockspring.




REMOVAL AND INSTALLATION (Continued)**Installation****Vehicles needing clockspring recentering**

1.  **WARNING: Incorrect centralization may result in premature component failure. If in doubt when centralizing the clockspring, repeat the centralizing procedure. Failure to follow this instruction may result in personal injury.**

 **CAUTION: Make sure the road wheels are in the straight-ahead position.**

If the vehicle's clockspring has rotated out of center, follow these steps to center the clockspring.

- 1 Hold the clockspring outer housing stationary.

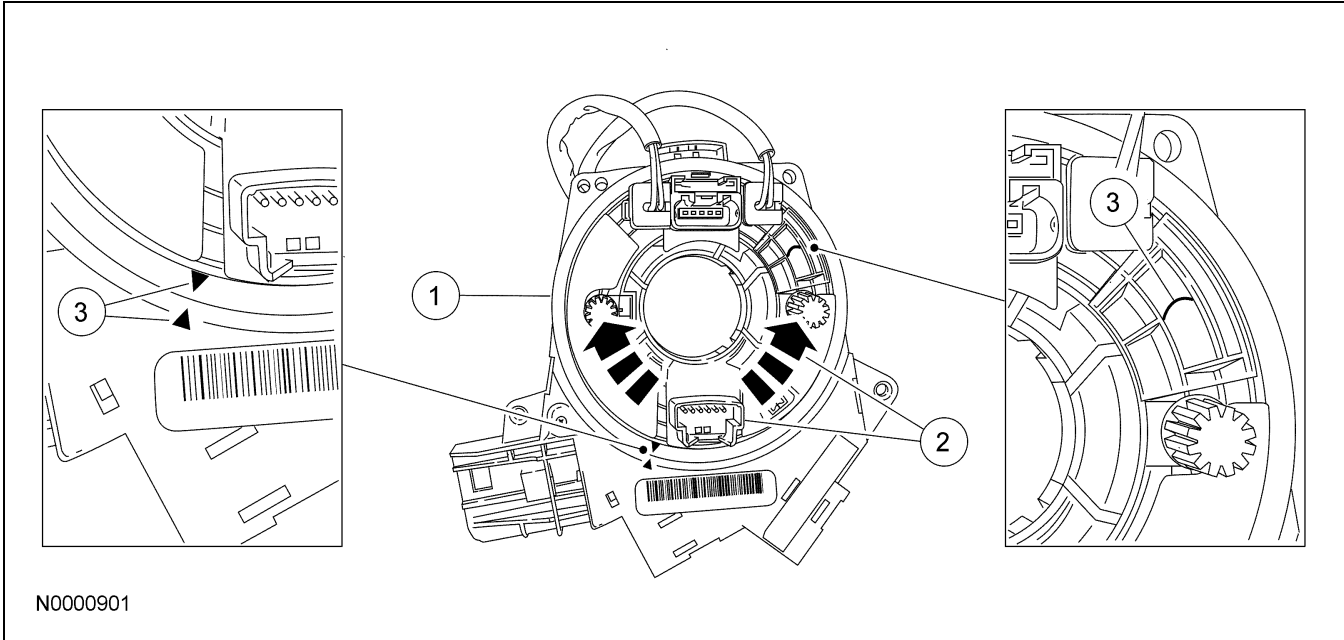
- 2  **CAUTION: Overturning will destroy the clockspring. The internal ribbon wire acts as the stop and can be broken from its internal connection.**

While turning the rotor counterclockwise, carefully feel for the ribbon wire to run out of length and for a slight resistance. Stop turning at this point.

- 3 Turn the clockspring clockwise (approximately 3 turns) until the ribbon wire shows anywhere across the window (window will be near the 2 o'clock position) and the arrow on the rotor lines up with the arrow on the bottom left of the housing. Clockspring is now centered.

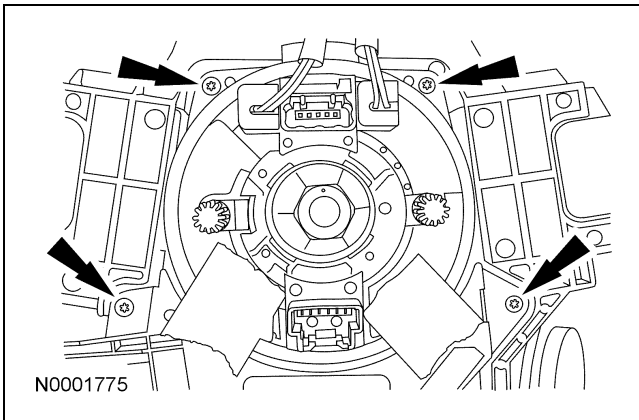
- Do not allow the rotor to turn from this position.

REMOVAL AND INSTALLATION (Continued)



All vehicles

2. Install the clockspring and the 4 screws.

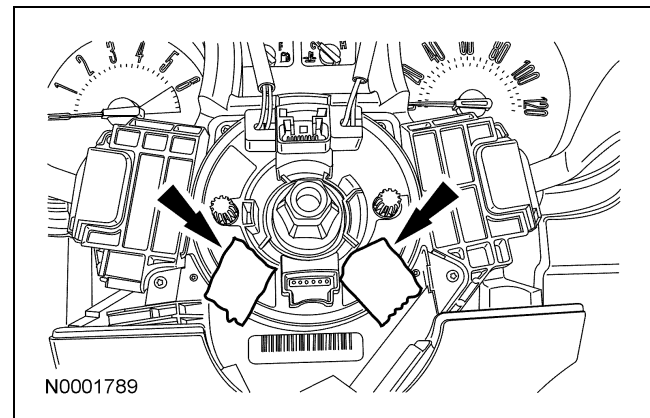
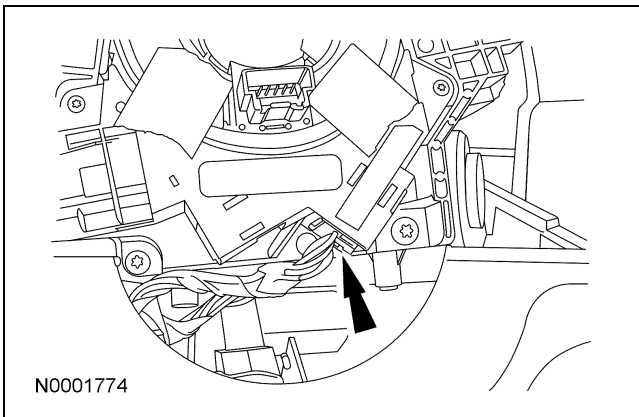


4. Position the lower steering column shroud upward.
5. Carefully position the steering column down and place the tilt handle in the LOCKED position.

Vehicle repairs reusing the same clockspring

6. **NOTE:** When the tape is removed, do not allow the clockspring to turn.
Remove the tape applied during clockspring removal.

3. Connect the clockspring electrical connector.



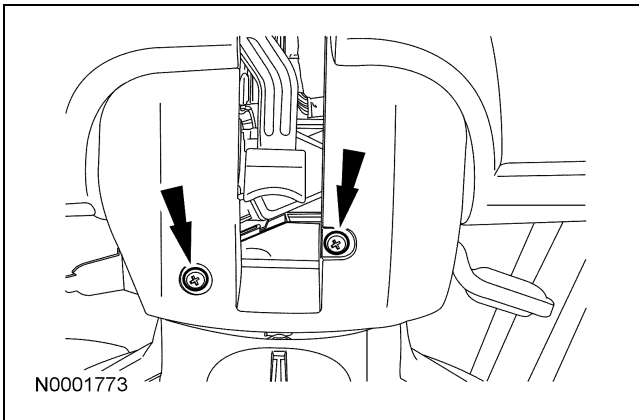
REMOVAL AND INSTALLATION (Continued)**Vehicles installing a new clockspring**

7. **⚠ CAUTION:** Do not rotate the new clockspring between removing the sealing key and installing the steering wheel. If the vehicle is left unattended by the technician between removing the sealing key and installing the steering wheel, carry out the centralizing procedure.

Remove the sealing key.

All vehicles

8. Install the upper steering column shroud.
9. Install the 2 lower steering column shroud screws.



10. **⚠ CAUTION:** If the vehicle is left unattended by the technician between centralizing the clockspring and installing the steering wheel, the centralizing procedure must be repeated.

Install the steering wheel. For additional information, refer to Section 211-00.

11. Install the driver air bag module. For additional information, refer to Driver Air Bag Module in this section.
12. Repower the system. For additional information, refer to Supplemental Restraint System (SRS) Depowering and Repowering in the General Procedures portion of this section.