

Clockspring**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: Carry a live air bag module with the air bag and trim cover pointed away from your body. This will reduce the risk of injury in the event of an accidental deployment.

⚠ WARNING: Do not set a live air bag module down with the trim cover face down. This will reduce the risk of injury in the event of an accidental deployment.

⚠ WARNING: After deployment, the air bag surface can contain deposits of sodium hydroxide, a product of the gas generant combustion that is irritating to the skin. Wash your hands with soap and water afterwards.

⚠ WARNING: Never probe the connectors on the air bag module. Doing so can result in air bag deployment, which can result in personal injury.

⚠ WARNING: Air bag modules with discolored or damaged trim covers must be replaced, not repainted.

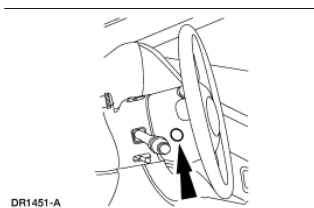
⚠ WARNING: To reduce the risk of personal injury, do not use any memory saver devices.

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.

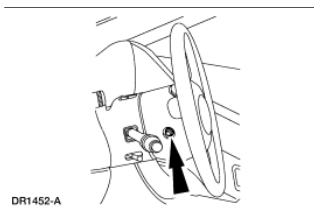
NOTE: The SRS must be fully operational and free of faults before releasing the vehicle to the customer.

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

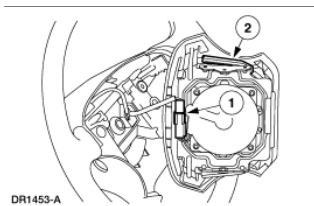
1. Depower the system. For additional information, refer to [Supplemental Restraint System \(SRS\) Depowering and Repowering](#) in this section.
2. Remove the two steering wheel back cover plugs.



3. Remove the two driver air bag module retaining bolts.



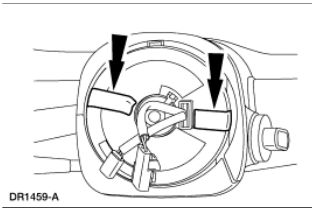
4. Remove the driver air bag module.
 1. Disconnect the driver air bag module electrical connector.
 2. Remove the driver air bag module.



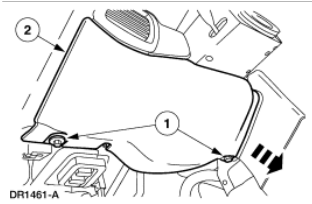
5. **NOTE:** Make sure the wheels (1007) are in the straight-ahead position.

Remove the steering wheel (3600). For additional information, refer to [Section 211-04](#).

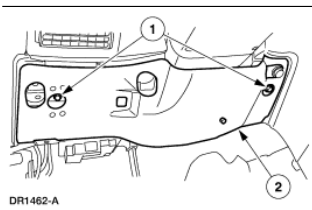
6. Apply two strips of masking tape across the clockspring (14A664) to prevent accidental rotation when the clockspring is removed.



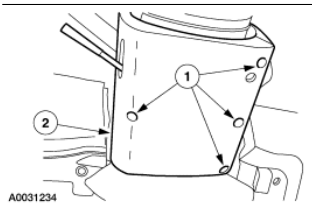
7. Remove the steering column opening lower finish panel.
 1. Remove the screws.
 2. Pull out to release the retaining clips and remove the steering column opening lower finish panel.



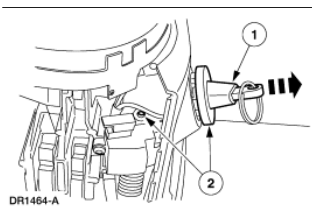
8. Remove the steering column opening lower reinforcement.
 1. Remove the bolts.
 2. Remove the steering column opening lower reinforcement.



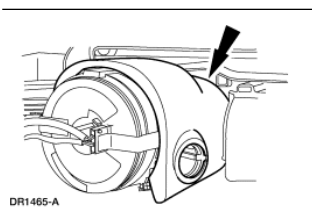
9. Remove the lower steering column shroud (3530).
 1. Remove the tilt wheel handle and shank (3F609).
 2. Remove the four screws.
 3. Remove the lower steering column shroud.



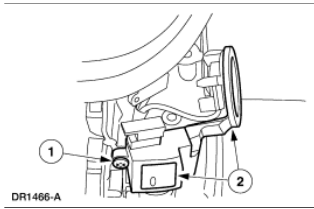
10. Remove the ignition switch lock cylinder (11582).
 1. Position the ignition switch lock cylinder to the RUN position.
 2. Using the suitable tool, push upward on the cylinder release tab while pulling the ignition switch lock cylinder outward.



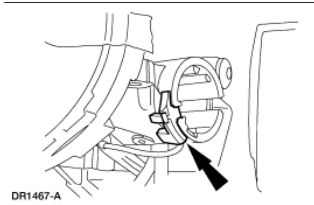
11. Raise the upper steering column shroud.



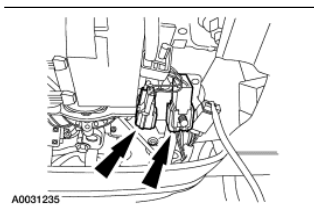
12. Remove the passive anti-theft system (PATS) transmitter.
 1. Remove the PATS transmitter retaining screw.
 2. Position the PATS transmitter out of the way.



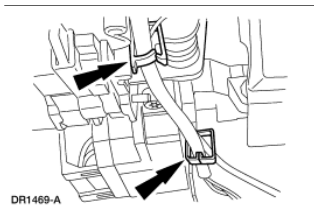
13. Remove the key-in-ignition warning indicator switch.



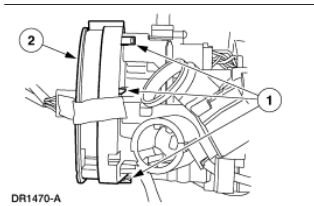
14. Disconnect and remove the two clockspring electrical connectors from the bracket.



15. Remove the wire harness from its holders.



16. Remove the clockspring.
 1. Pry the clockspring retaining clips loose.
 2. Remove the clockspring.



Installation

Vehicles receiving a new clockspring

1. **NOTE:** A new clockspring is supplied in a centralized position and held there with a key.

Remove the key from the clockspring, holding the rotor in its centralized position.

- Do not allow the clockspring rotor to turn.

Vehicles needing clockspring recentering

2. **⚠ 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.

NOTE: If a clockspring has rotated out of center, follow through with this step.

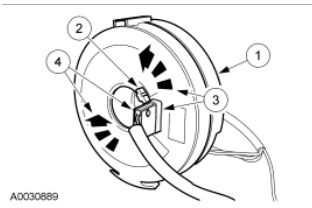
Centralize the clockspring.

- Hold the clockspring outer housing stationary.
- Depress the clockspring locking tab to release the rotor.

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

While holding the clockspring locking tab in the released position, turn the rotor counterclockwise, carefully feeling for the ribbon wire to run out of length, and a slight resistance is felt. Stop turning at this point.

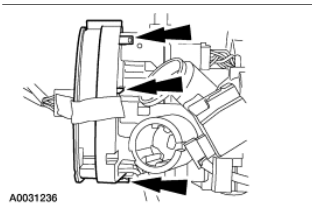
4. While holding the clockspring locking tab in the released position, turn the clockspring clockwise approximately three turns. This is the center point of the clockspring.
- Release the clockspring locking tab. Do not allow the rotor to turn from this position.



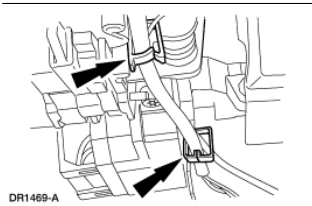
All vehicles

3. **NOTE:** Slight turning of the clockspring rotor is allowable for alignment purposes to the steering column.

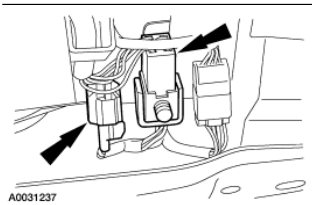
With the flats of the clockspring aligned to the flats of the steering column, slide the clockspring onto the steering column engaging the retaining tabs.



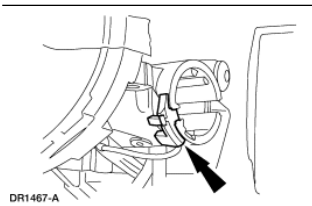
4. Route the clockspring wire harness down the side of the steering column and into the holders.



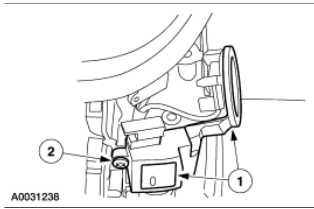
5. Connect the two clockspring electrical connectors. Position the clockspring electrical connectors onto the bracket.



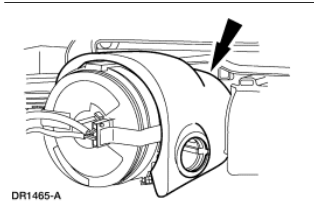
6. Install the key-in-ignition warning indicator switch.



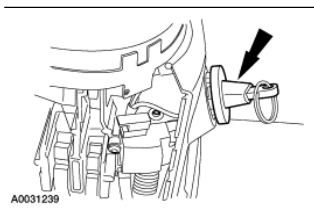
7. Install the passive anti-theft system (PATS) transmitter.
1. Position the PATS transmitter to the steering column.
 2. Install the screw.



8. Reposition the upper steering column shroud.



9. Install the ignition switch lock cylinder.

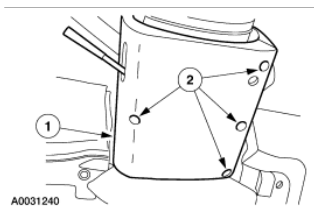


Vehicle repairs reusing the same clockspring

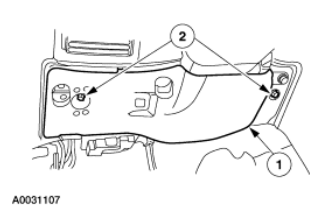
10. Remove the tape applied during clockspring removal.

All vehicles

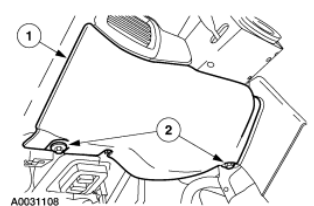
11. Install the lower steering column shroud.
 1. Position the lower steering column shroud.
 2. Install the screws.



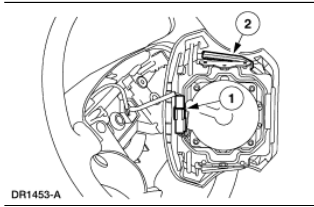
12. Install the steering column opening lower reinforcement.
 1. Position the steering column opening lower reinforcement.
 2. Install the bolts.



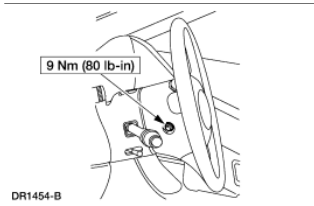
13. Install the steering column opening lower finish panel.
 1. Align the steering column opening lower finish panel and push in, seating the retaining clips.
 2. Install the screws.



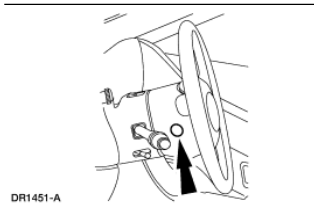
14. Install the steering wheel. For additional information, refer to [Section 211-04](#).
15. Connect and position the driver air bag module to the steering wheel.
 1. Connect the driver air bag module electrical connector.
 2. Position the driver air bag module to the steering wheel.



16. Install the two driver air bag module bolts.



17. Install the two steering wheel back cover plugs.



18. Repower the system. For additional information, refer to [Supplemental Restraint System \(SRS\) Depowering and Repowering](#) in this section.
-