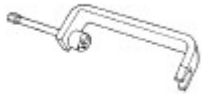


SECTION 211-04: Steering Column
DISASSEMBLY AND ASSEMBLY

1998 Mark VIII Workshop Manual

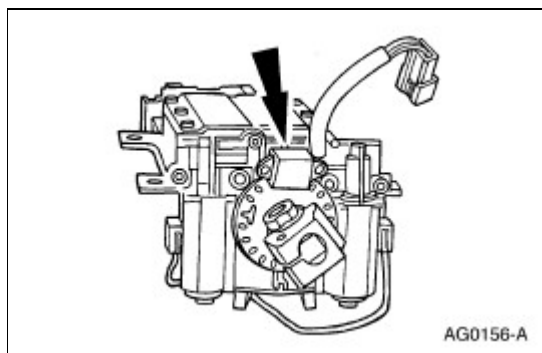
Steering Column

Special Tool(s)

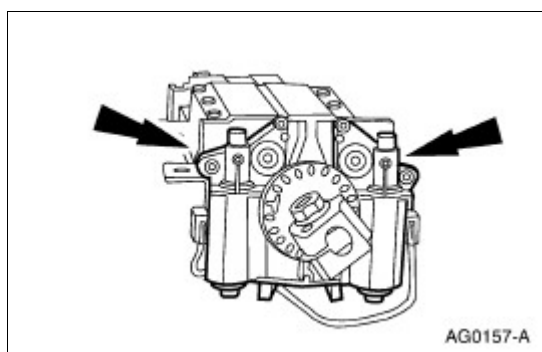
 ST1692-A	Tilt Spring Compressor 211-201 (T97P-3D655-A)
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Disassembly

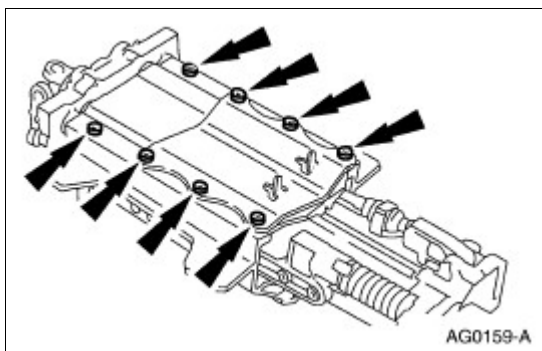
1. Remove the steering column assembly; refer to Column in this section.
2. Remove the shock absorber electronic steering sensor (18B015).



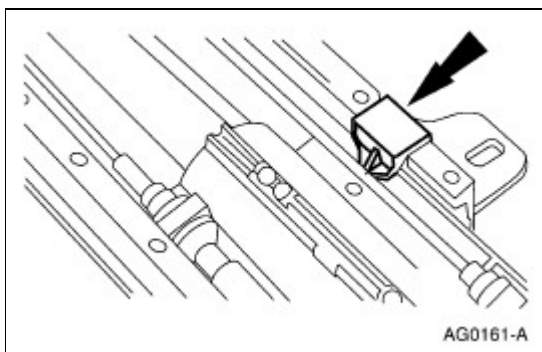
3. Remove the tilt and telescope motors.



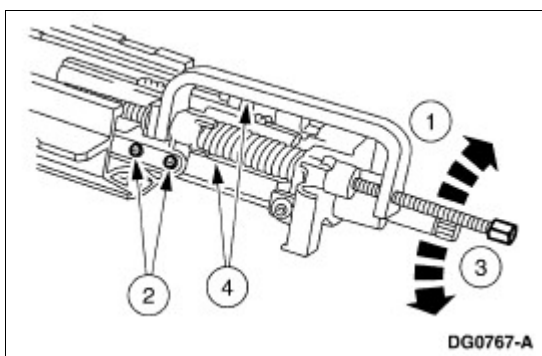
4. Remove the housing cover.



5. Remove the potentiometer link.

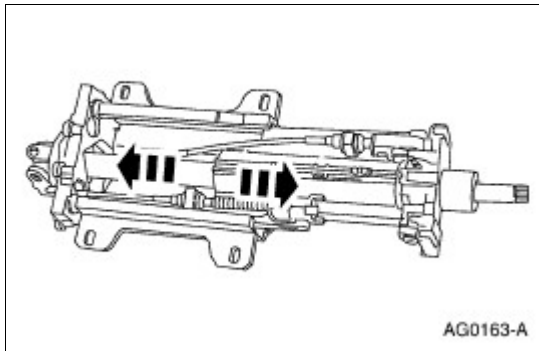


6. Remove the tilt spring.
1. Install the Tilt Spring Compressor finger-tight.
 2. Remove the telescoping actuator retaining bolts.
 3. Slowly turn the tilt spring compressor bolt counterclockwise to release the spring tension.
 4. Remove the tilt spring compressor and the tilt spring.

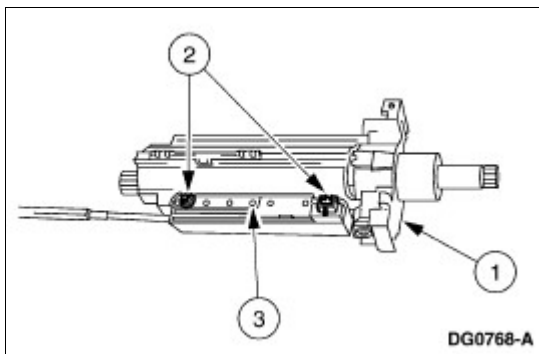


7. **NOTE:** Index-mark the steering shaft tube to show the location of the steering shaft flat.

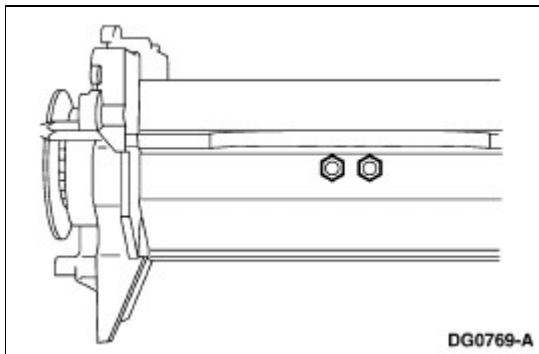
Separate the front and rear halves of the steering column shaft.



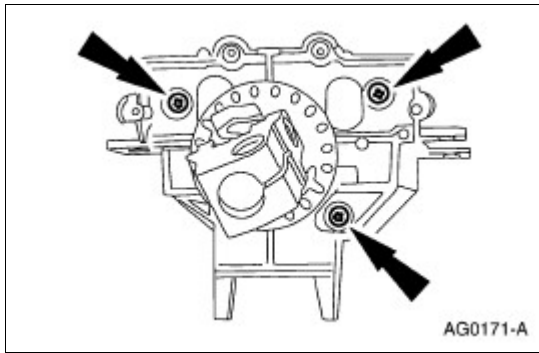
8. Remove the potentiometer.
1. Turn the housing upside down.
 2. Remove the retaining screws.
 3. Remove the potentiometer.



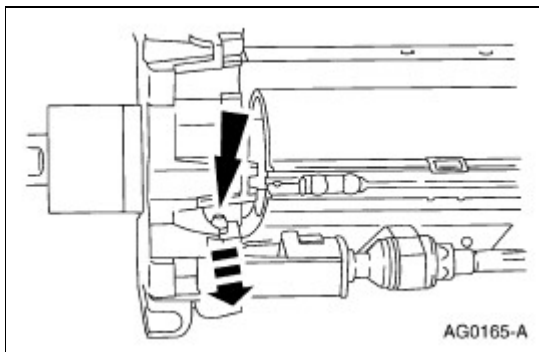
9. Remove the retaining nuts, then the telescope actuator.



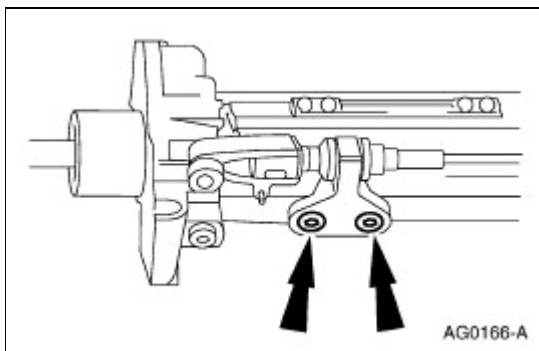
10. Separate the front steering shaft assembly from the support housing.



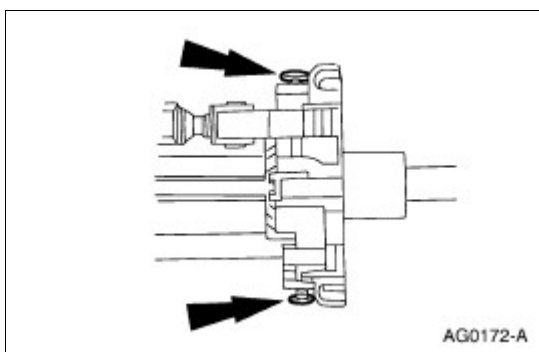
11. Remove the tilt actuator pivot pin.



12. Remove retaining bolts, and remove the tilt actuator.

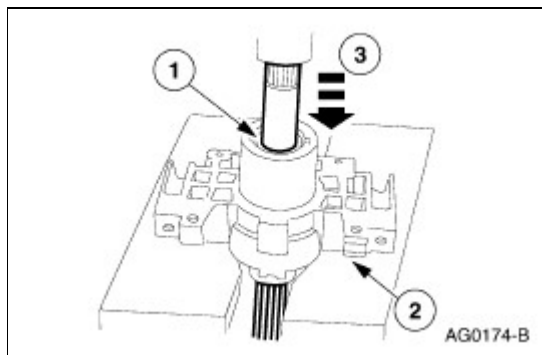


13. Remove the tilt pivot bolts.

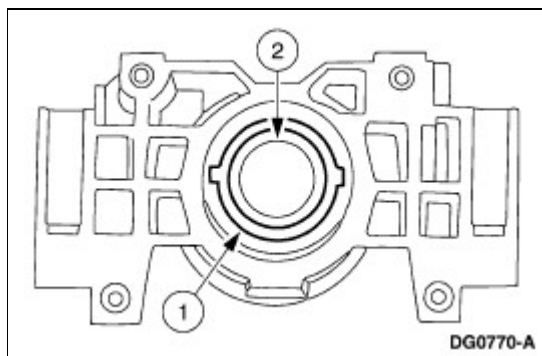


14. Press out the rear steering shaft.

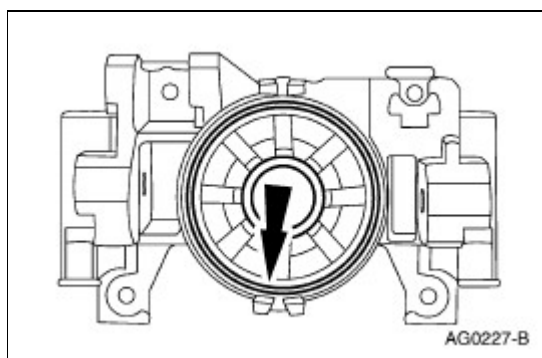
1. Remove the retaining ring.
2. Position the bearing housing on the press bed.
3. Press out the steering shaft.



15. Remove the steering column rear small bearing.
 1. Remove the small bearing retaining ring.
 2. Using a suitable brass drift, drive out the small bearing.

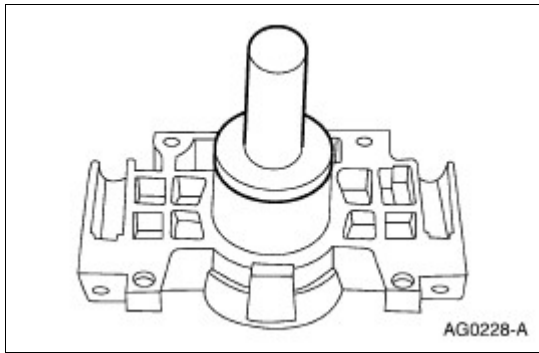


16. Remove the steering column rear large bearing.
 - Using a suitable brass drift, drive out the large bearing.

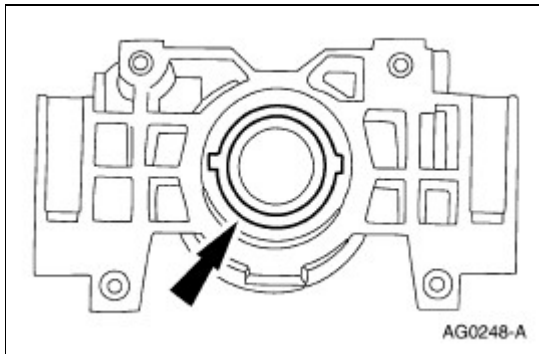


Assembly

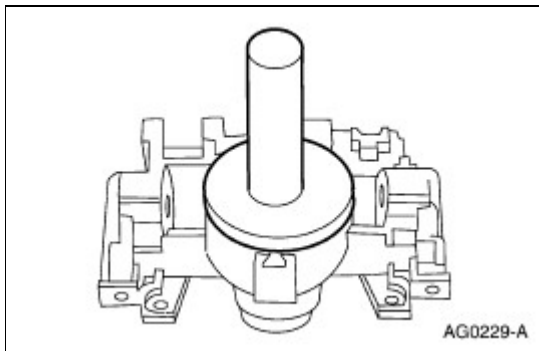
1. Install the steering column rear small bearing, pressing only on the outside race.



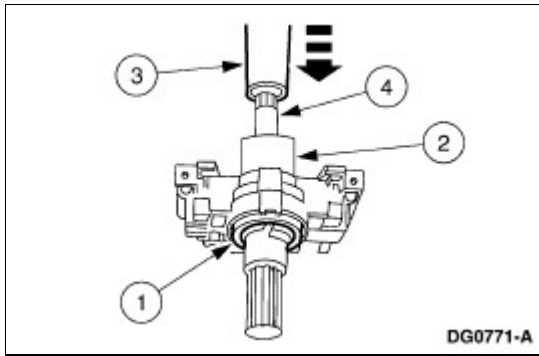
2. Install the steering column rear small bearing retaining ring.



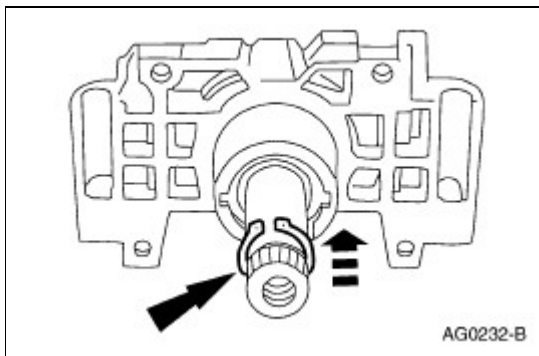
3. Install the steering column rear large bearing, pressing only on the outside race.



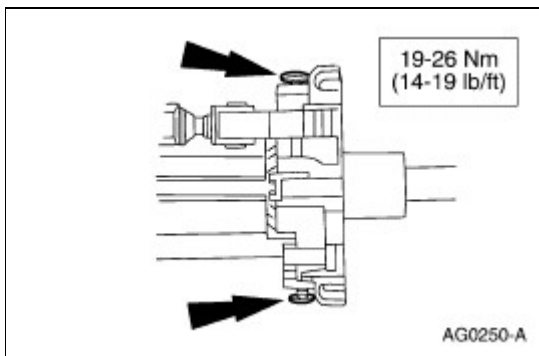
4. Press the rear bearings and housing onto the steering column shaft.
 1. Support the large bearing inner race on a press bed with a suitable sleeve.
 2. Place the bearing housing over the steering column shaft.
 3. Place a suitable sleeve over the short end of the steering column shaft that will seat on the small bearing inner race.
 4. Press the bearings and housing onto the shaft.



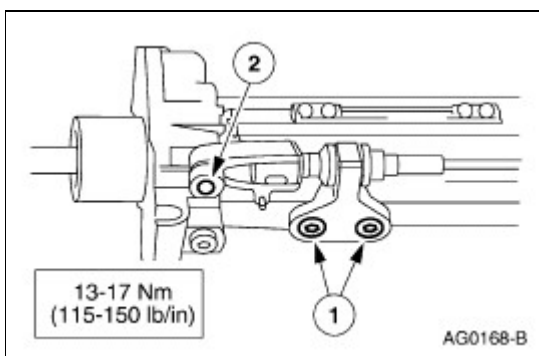
5. Install the steering column shaft retaining ring.



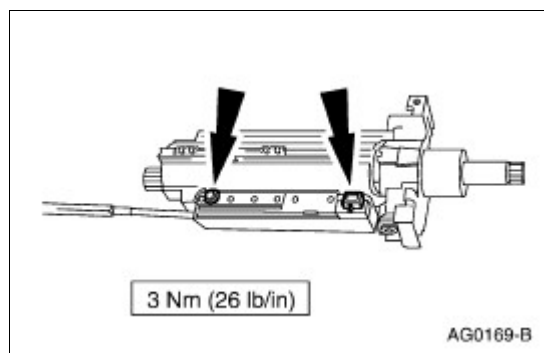
6. Attach the bearing housing to the center housing. Install the pivot bolts.



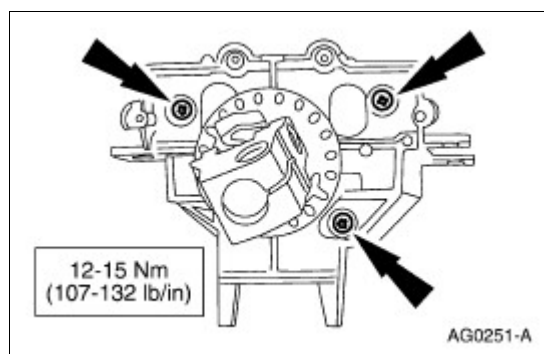
7. Install the tilt actuator.
1. Install the retaining bolts.
 2. Drive the pivot pin into place.



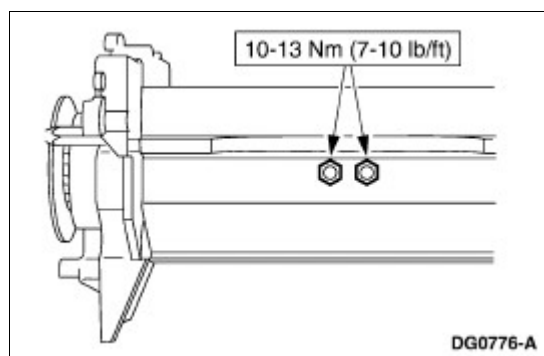
8. Install the potentiometer. Tighten retaining screws to specification.



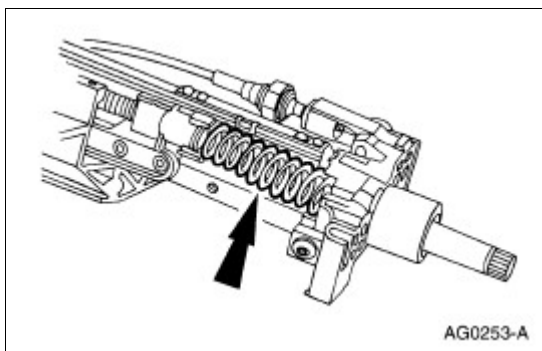
9. Attach the front steering shaft assembly to the support housing, install the retaining bolts.



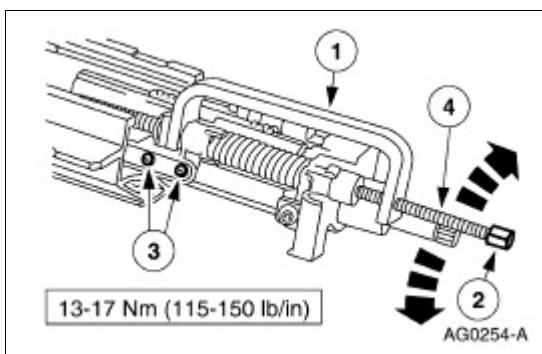
10. Install the telescope actuator.
- Position the actuator inside the support housing.
 - Install the retaining nuts. Tighten nuts to specification.



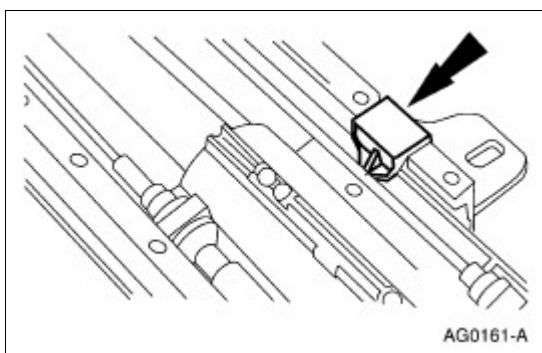
11. Connect the front and rear steering column shafts.
1. Align the index mark on the front shaft with the flat on the spline of the rear shaft.
 2. Slide the rear shaft into the front shaft.
12. Install the tilt spring.



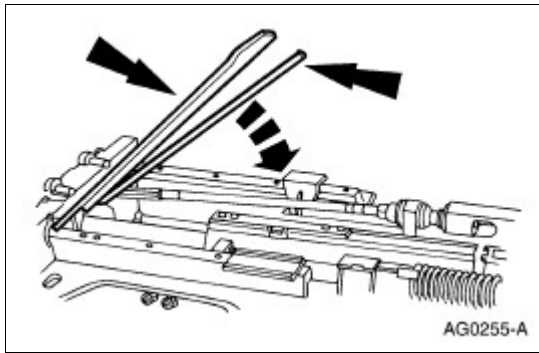
13. Install the telescope actuator retaining bolts.
 1. Install the tilt spring compressor.
 2. Turn the tilt spring compressor bolt clockwise until the bolt holes for the telescope actuator align.
 3. Install the telescope actuator retaining bolts.
 4. Remove the tilt spring compressor.



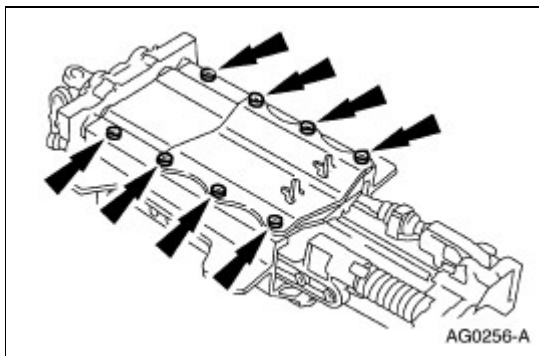
14. Install the telescope potentiometer link.



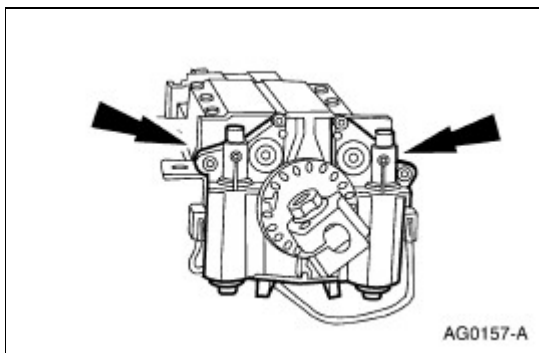
15. Position the ball bearing track and housing cover into place.



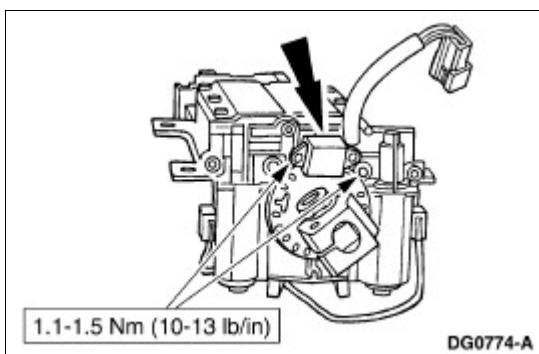
16. Install the housing cover retaining bolts.



17. Install the tilt and telescope motors.



18. Install the shock absorber electronic steering sensor. Tighten to specifications.



19. Install the steering column; refer to Column in this section.

