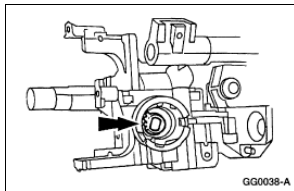


29. **NOTE:** The narrow section of the keyhole in the lock gear should be in the one o'clock position.

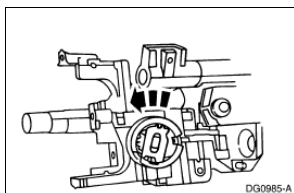
Install the steering column lock gear.

- Use Ignition Lock Grease FOAZ-19584-A or equivalent meeting Ford specification ESA-M1C232-A to coat the steering column lock gear.

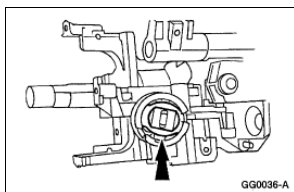


30. Install the steering column lock housing bearing.

- The narrow section of the keyhole should be in the one o'clock position, with the tab inboard at the three o'clock position, and rotate it counterclockwise.
- Lubricate the steering column lock housing bearing with Ignition Lock Grease FOAZ-19584-A or equivalent meeting Ford specification ESA-M1C232-A.



31. Install the steering column upper bearing retainer firmly to engage the four retention tabs into the lock housing.



32. Install the steering column. For additional information, refer to Steering Column Shaft in this section.

33. Install the air bag sliding contact. For additional information, refer to Section 501-20B .

34. Install the ignition switch lock cylinder. For additional information, refer to Ignition Switch Lock Cylinder Functional, or Ignition Switch Lock Cylinder Non-Functional, in this section.



SPECIFICATIONS

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## Torque Specifications

<b>Description</b>	<b>Nm</b>	<b>lb-in</b>
Battery ground cable	7-10	62-89
Ignition switch bolts	5.3-7.2	47-64
Ignition switch electrical connector bolt	0.8-1.2	7.1-10.6
Instrument panel steering column opening cover bolts	2-3	19-26
Multifunction switch screws	2-3	18-26
Reinforcement bolts	3-5	31-45

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DESCRIPTION AND OPERATION

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### Steering Column Switches

The steering column switches consist of the following components:

- the multifunction switch, which controls the following functions:
    - ◆ turn signals
    - ◆ headlamp dimmer
    - ◆ headlamp flash-to-pass
    - ◆ hazard warnings
    - ◆ cornering lamps
    - ◆ windshield washer/wipers
  - ignition switch
-

DIAGNOSIS AND TESTING

**Steering Column Switches**




Refer to Wiring Diagrams Cell 13 , Power Distribution for schematic and connector information.

Refer to Wiring Diagrams Cell 58 , Lighting Control Module (LCM) for schematic and connector information.

Refer to Wiring Diagrams Cell 87 , Autolamps/Delayed Exit for schematic and connector information.

Refer to Wiring Diagrams Cell 90 , Turn/Stop/Hazard Lamps for schematic and connector information.

Special Tool(s)

 <small>ST1137-A</small>	73III Automotive Meter 105-R0057 or equivalent
 <small>ST1176-A</small>	Vacuum Tester 014-R1054 or equivalent
 <small>ST2332-A</small>	Worldwide Diagnostic System (WDS) 418-F224  New Generation Star (NGS) Tester 418-F052 or equivalent diagnostic tool

**Inspection and Verification**

1. Verify the customer concern.
2. Visually inspect for obvious signs of mechanical and electrical damage.

Visual Inspection Chart

Mechanical	Electrical
<ul style="list-style-type: none"> <li>• Damaged multifunction switch</li> <li>• Damaged ignition switch</li> </ul>	<ul style="list-style-type: none"> <li>• Battery junction box (BJB) fuses:                             <ul style="list-style-type: none"> <li>◆ 9 (50A)</li> <li>◆ 10 (50A)</li> <li>◆ 2 (30A)</li> </ul> </li> <li>• Central junction box (CJB) fuses:                             <ul style="list-style-type: none"> <li>◆ 14 (10A)</li> <li>◆ 15 (15A)</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>◆ 22 (15A)</li> <li>◆ 8 (25A)</li> <li>◆ 6 (15A)</li> <li>• Circuitry</li> </ul>
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3. If inspection reveals an obvious concern that is readily repaired, correct the concern before continuing with Inspection and Verification.
  
4. If the concern remains after inspection, connect the diagnostic tool to the data link connector (DLC) located beneath the instrument panel to carries out DATA LINK DIAGNOSTICS (DTC) test. If the diagnostic tool responds with NO RESPONSE/NOT EQUIPPED for the lighting control module (LCM), refer to [Section 419-10](#) . If the DATA LINK DIAGNOSTICS test is passed for the LCM, retrieve continuous DTCs and execute self-test diagnostics for the LCM to retrieve current DTCs.
  
5. If the self-test is passed and no DTCs are retrieved, go to the Symptom Chart to continue diagnostics.
  
6. If DTCs are retrieved, go to the Lighting Control Module (LCM) Diagnostic Trouble Code (DTC) Index to continue diagnostics.
  
7. If the LCM cannot be accessed by the diagnostic tool, refer to [Section 419-10](#) .

**NOTE:** For a complete list of Lighting Control Module (LCM) DTCs, refer to [Section 419-10](#) .

Lighting Control Module (LCM) Diagnostic Trouble Code (DTC) Index

B1359	Ignition RUN/ACC Circuit Failure	LCM	GO to <a href="#">Pinpoint Test F</a> .
B1555	Ignition RUN/START Circuit Failure	LCM	GO to <a href="#">Pinpoint Test G</a> .

Symptom Chart

**Pinpoint Tests**

**PINPOINT TEST A: IGNITION SWITCH IS INOPERATIVE**

**PINPOINT TEST B: NO POWER IN ACC POSITION**

**PINPOINT TEST C: NO POWER IN ON POSITION**

**PINPOINT TEST D: NO POWER IN START POSITION**

**PINPOINT TEST E: MULTIFUNCTION SWITCH DOES NOT OPERATE CORRECTLY**

**PINPOINT TEST F: DTC B1359 IGNITION RUN/ACCY/CIRCUIT FAILURE**

**PINPOINT TEST G: DTC 1555 IGNITION RUN/START CIRCUIT FAILURE**

**Component Test**

**Ignition Switch Continuity Check**

Refer to Wiring Diagrams Cell 149 for schematic and connector information.

**Multifunction Switch**

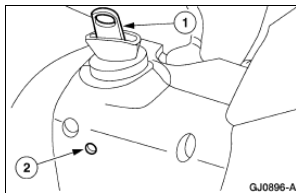
Refer to Wiring Diagrams Cell 149 for schematic and connector information.

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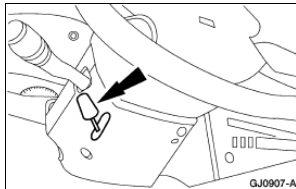
## REMOVAL AND INSTALLATION

**Multifunction Switch**

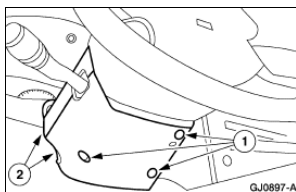
1. Disconnect the battery ground cable. For additional information refer to [Section 414-01](#) .
2. Remove the ignition switch lock cylinder.
  1. Insert the ignition key into the ignition switch lock cylinder and turn to the RUN position.
  2. Push the ignition switch lock cylinder release tab with a punch while pulling out the ignition switch lock cylinder.



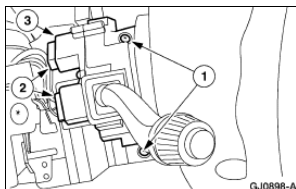
3. Remove the tilt wheel handle and shank.



4. Remove the upper and lower steering column shrouds.
  1. Remove the screws.
  2. Remove the shrouds.

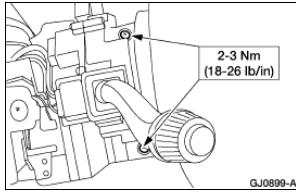


5. Remove the multifunction switch.
  1. Remove the screws.
  2. Disconnect the electrical connectors.
  3. Remove the switch.

**Installation**

1. To install, reverse the removal procedure.

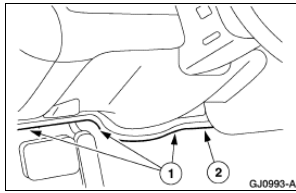




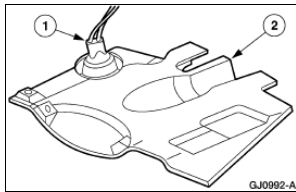
## REMOVAL AND INSTALLATION

**Ignition Switch****Removal**

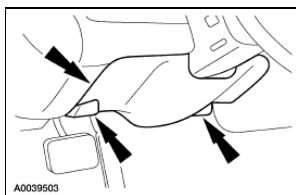
1. Disconnect the battery ground cable. For additional information, refer to [Section 414-01](#).
2. Position the LH instrument panel insulator aside.
  1. Remove the pin-type retainers.
  2. Position the insulator.



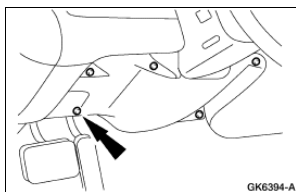
3. Remove the LH instrument panel insulator.
  1. Disconnect the courtesy lamp.
  2. Remove the insulator.



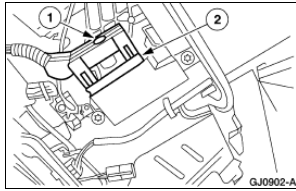
4. Remove the lower instrument panel steering column opening cover.
  - Remove the screws.
  - Unhook the parking brake release handle and position aside.
  - Remove the cover.



5. Remove the five bolts to remove the instrument panel steering column opening cover reinforcement.



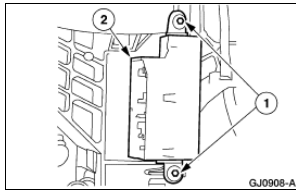
6. Disconnect the ignition switch electrical connector.
  1. Loosen the bolt.
  2. Disconnect the electrical connector.



7. **NOTE:** The ignition key should be in the OFF position.

Remove the ignition switch.

1. Remove the bolts.
2. Remove the switch.



### Installation

1. To install, reverse the removal procedure.

