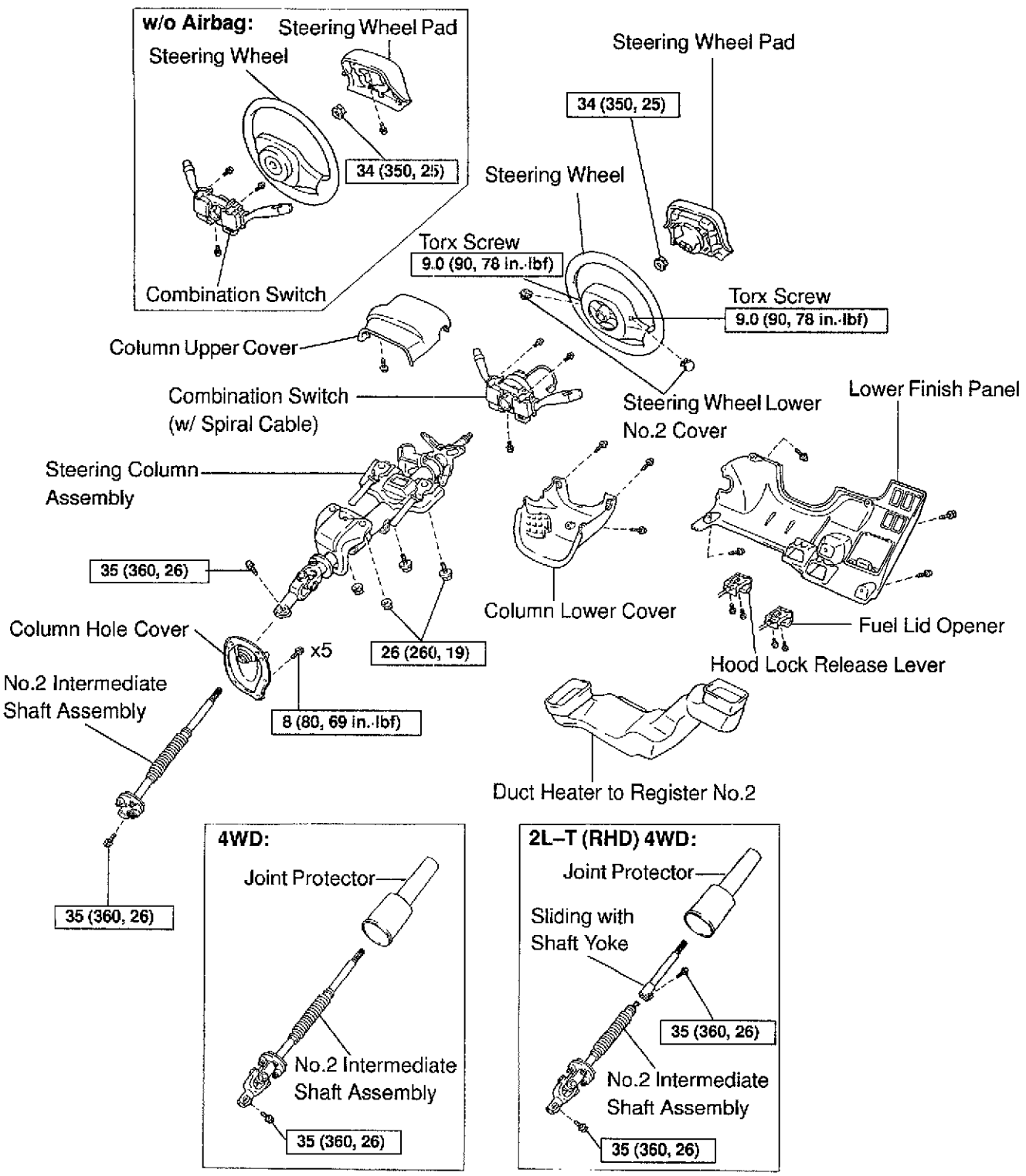
STEERING COLUMN

COMPONENTS

SR09C–01

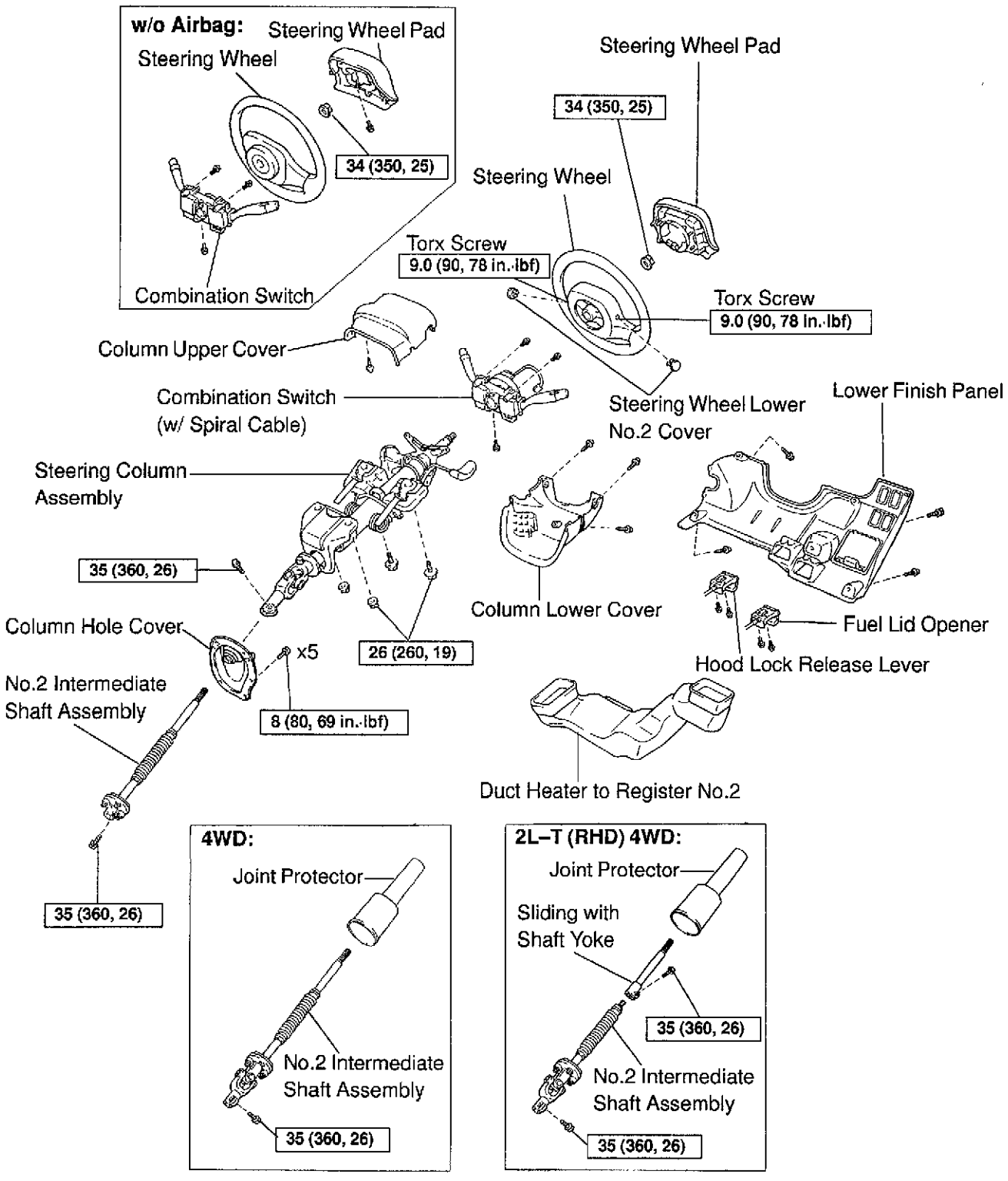
Non–tilt steering column:



N·m (kgf·cm, ft·lbf) : Specified torque

F02542

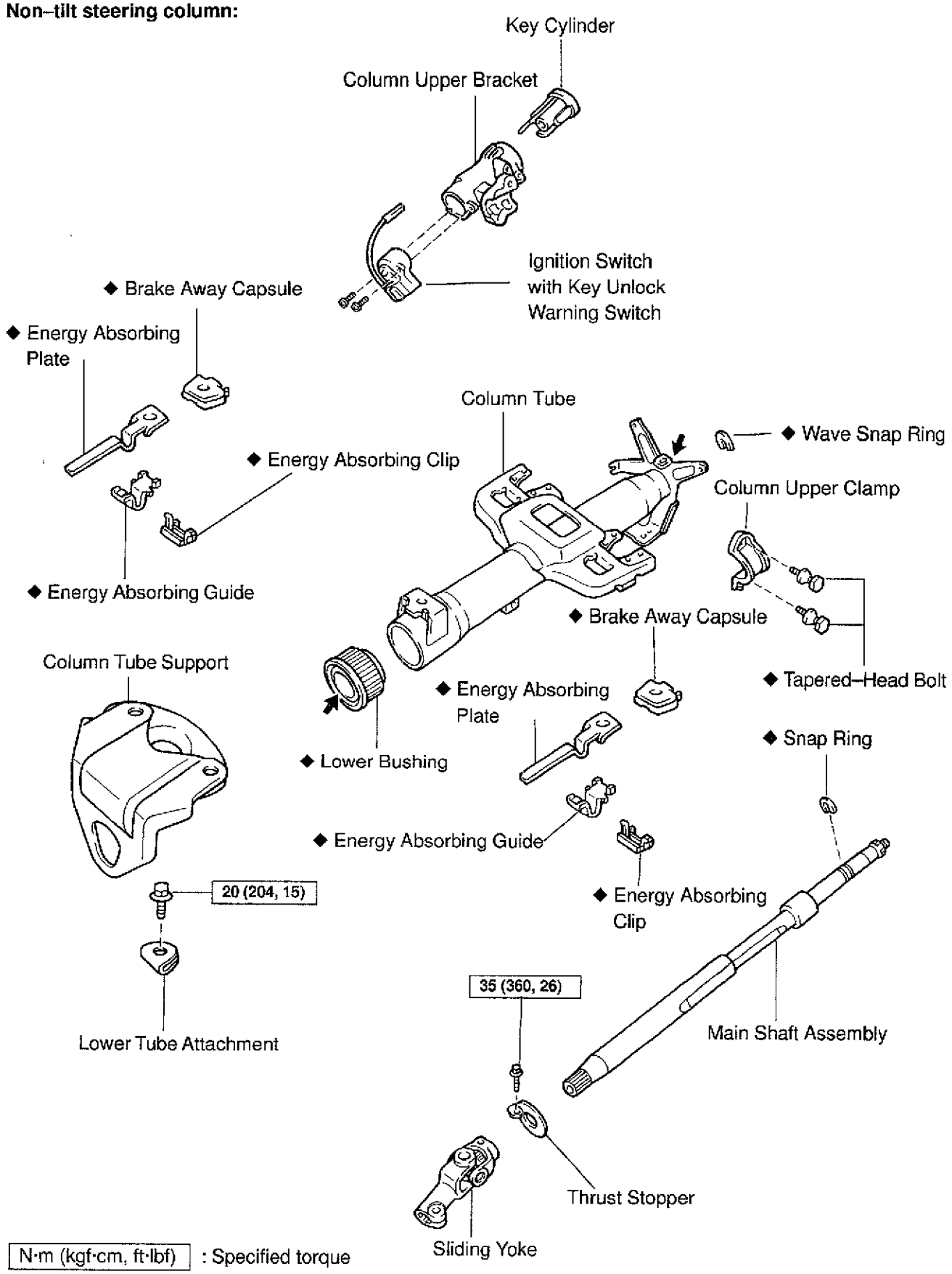
Tit steering column:



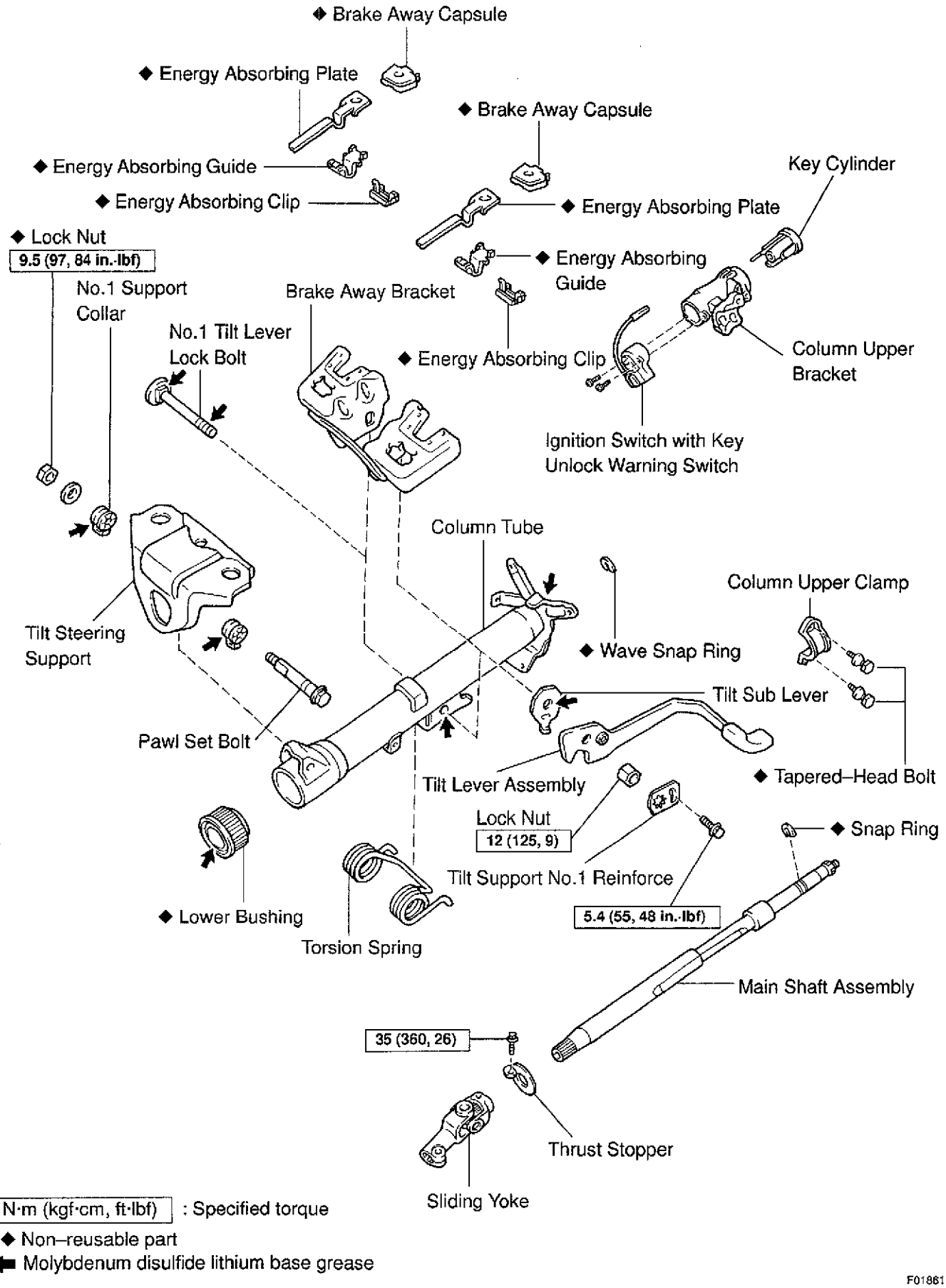
N·m (kgf·cm, ft·lbf) : Specified torque

F02543

Non–tilt steering column:



Tilt steering column:



N·m (kgf·cm, ft·lbf) : Specified torque

◆ Non–reusable part

⬅ Molybdenum disulfide lithium base grease

F01861

SR03D-01

REMOVAL

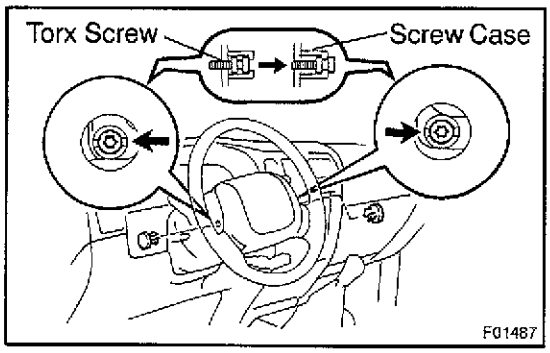
1. **w/o Airbag:**
   REMOVE STEERING WHEEL PAD

(a) Remove the screw.
(b) Remove the pad.
(c) Disconnect the terminal.

2. **w/ Airbag:**
   REMOVE STEERING WHEEL PAD

NOTICE:

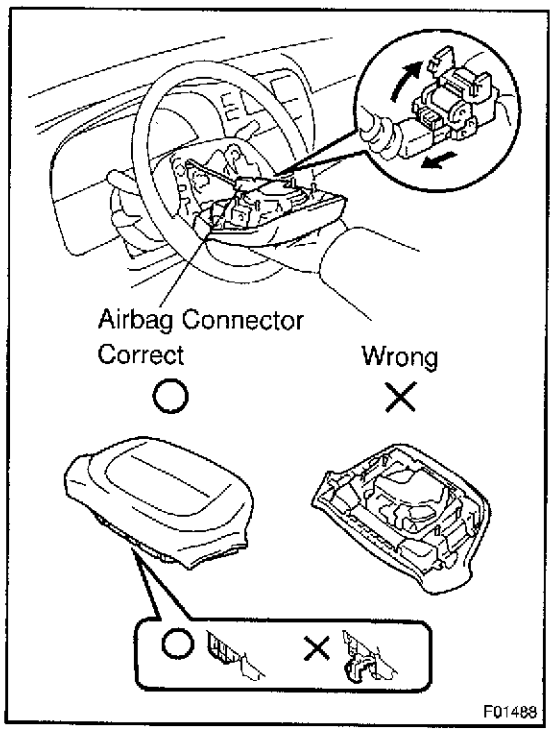
- **If the airbag connector is disconnected with the ignition switch at ON or ACC, DTCs will be recorded.**
- **Never use airbag parts from another vehicle. When replacing parts, replace with new ones.**



(a) Place the front wheels facing straight ahead.
(b) Remove the 2 steering wheel lower No.2 covers.
(c) Using a torx socket wrench, loosen the 2 torx screws.

HINT:

Loosen the screw until the groove along the screw circumference catches on the screw case.



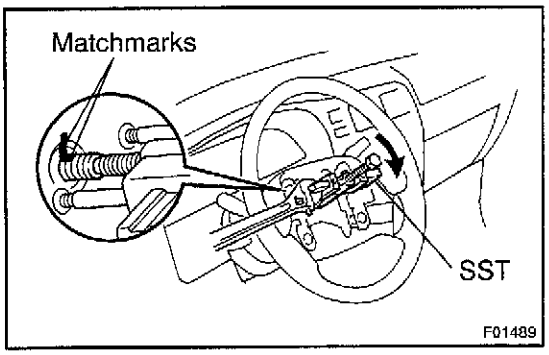
(d) Pull out the wheel pad from the steering wheel and disconnect the airbag connector.

CAUTION:

- **When storing the wheel pad, keep the upper surface of the pad facing upward.**
- **Never disassemble the wheel pad.**

NOTICE:

When removing the wheel pad, take care not to pull the airbag wire harness.



3. REMOVE STEERING WHEEL

(a) w/ Airbag:
Disconnect the connector.

(b) Remove the steering wheel set nut.

(c) Place matchmarks on the steering wheel and main shaft assembly.

(d) Using SST, remove the wheel.
SST 09950–50010 (09951–05010, 09952–05010, 09953–05020, 09954–05020)

4. REMOVE UPPER AND LOWER COLUMN COVERS

Remove the 4 screws.

5. w/o Airbag:
REMOVE COMBINATION SWITCH

(a) Disconnect the 2 connectors.

(b) Remove the 3 screws.

6. w/ Airbag:
REMOVE COMBINATION SWITCH WITH SPIRAL CABLE

(a) Disconnect the 3 connectors.

(b) Disconnect the airbag connector.

(c) Remove the 3 screws.

7. w/ Airbag:
REMOVE SPIRAL CABLE
(See page BE–19)

NOTICE:
Do not disassemble the cable or apply oil to it.

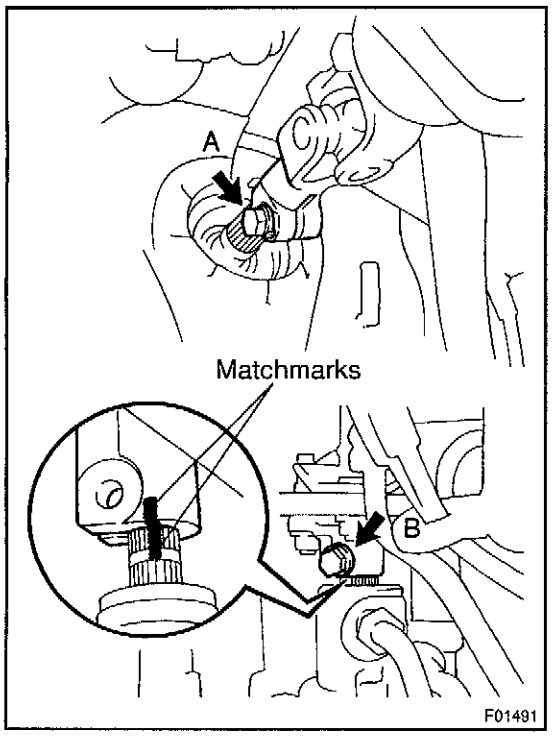
8. REMOVE LOWER FINISH PANEL

(a) Remove the 2 screws and disconnect the fuel lid opener from the panel.

(b) Remove the 2 screws and disconnect the hood lock release lever from the panel.

(c) Remove the 3 panel set screws and bolt.

9. REMOVE DUCT HEATER TO REGISTER NO.2



10. DISCONNECT NO.2 INTERMEDIATE SHAFT ASSEMBLY

(a) Place matchmarks on the shaft assembly and worm gear valve shaft.

(b) Loosen the bolt A and remove the bolt B.

11. DISCONNECT COLUMN HOLE COVER

Remove the 5 bolts.

12. REMOVE STEERING COLUMN ASSEMBLY

(a) Disconnect the connectors.

(b) Remove the 2 column assembly set bolts and nuts.

13. REMOVE NO.2 INTERMEDIATE SHAFT ASSEMBLY

Remove the bolt A.

14. 4WD:
REMOVE JOINT PROTECTOR

15. 2L–T (RHD) 4WD:
REMOVE SLIDING WITH SHAFT YOKE

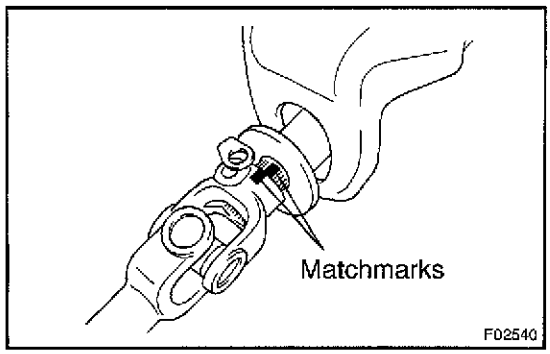
Remove the bolt.

SR09E-01

DISASSEMBLY

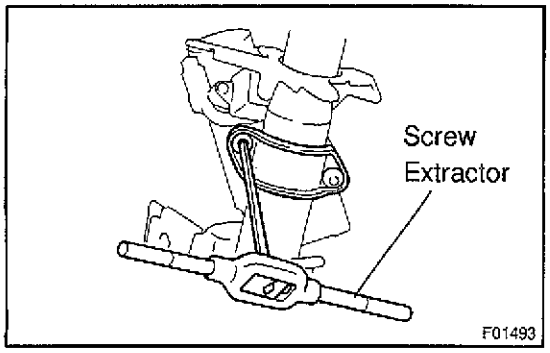
NOTICE:

When using a vise, do not overtighten it.



1. REMOVE SLIDING YOKE

(a) Place matchmarks on the yoke and main shaft assembly.
(b) Remove the bolt.
(c) Remove the thrust stopper.



2. REMOVE COLUMN UPPER BRACKET AND COLUMN UPPER CLAMP

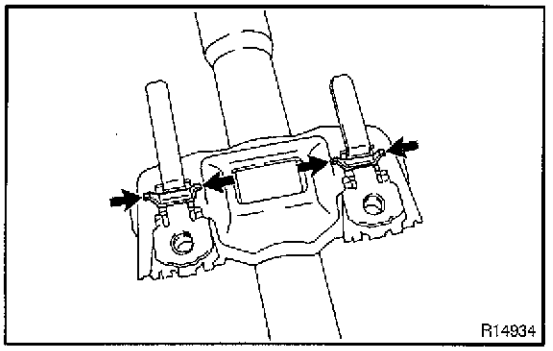
(a) Using a centering punch, mark the center of the 2 tapered–head bolts.
(b) Using a 3–4 mm (0.12–0.16 in.) drill, drill into the 2 bolts.
(c) Using a screw extractor, remove the 2 bolts.

3. NON–TILT STEERING COLUMN: REMOVE COLUMN TUBE SUPPORT

(a) Remove the bolt.
(b) Remove the tube support with lower tube attachment.
(c) Remove the tube attachment from the tube support.

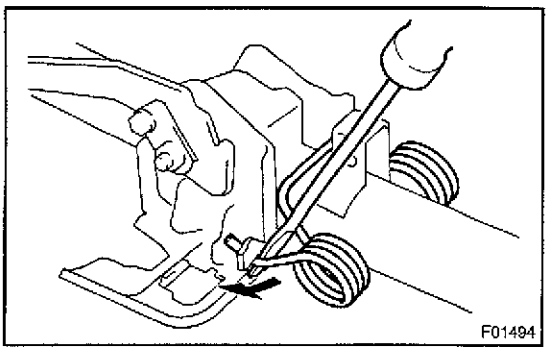
4. TILT STEERING COLUMN: REMOVE TILT STEERING SUPPORT

(a) Remove the pawl set bolt, lock nut and washer.
(b) Remove the 2 No.1 support collars and tilt steering support.



5. REMOVE 2 ENERGY ABSORBING PLATES

(a) Using pliers, remove the energy absorbing clip.
(b) Remove the energy absorbing plate, energy absorbing guide and brake away capsule.

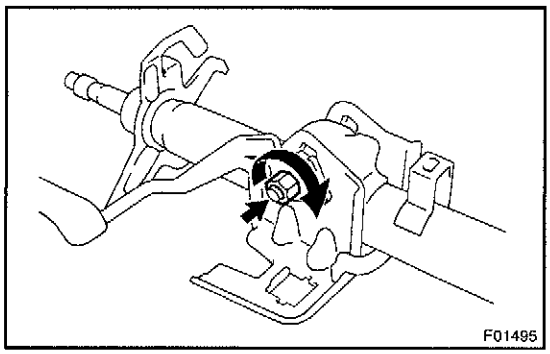


6. TILT STEERING COLUMN: REMOVE TILT LEVER ASSEMBLY AND BREAK AWAY BRACKET

(a) Using a screwdriver, remove the torsion spring.
(b) Remove the tilt support No.1 reinforce with the bolt.

HINT:

This bolt is left–handed one.



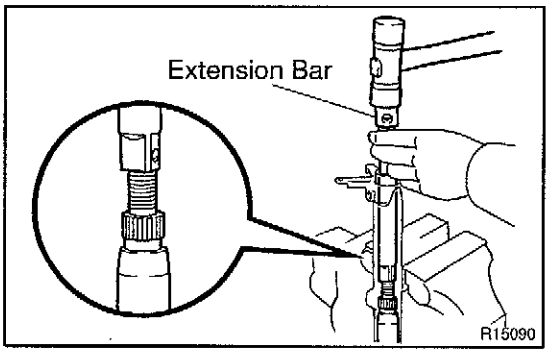
(c) To remove the lock nut, turn it clockwise.

HINT:

This nut is left–handed one.

(d) Remove the No.1 tilt lever lock bolt, tilt lever assembly and tilt sub lever.

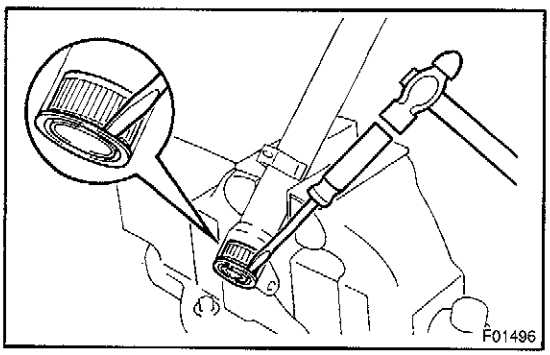
(e) Remove the break away bracket.



7. REMOVE MAIN SHAFT ASSEMBLY AND LOWER BUSHING

(a) Using a snap ring expander, remove the wave snap ring from the shaft assembly.

(b) Using an extension bar and a hammer, tap out the shaft assembly.

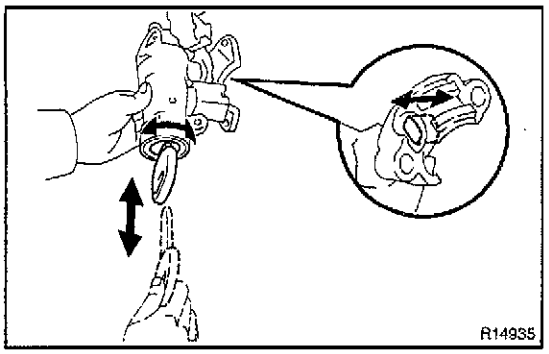


(c) Using a screwdriver, tap out the bushing.

(d) Using a snap ring expander, remove the snap ring from the shaft assembly.

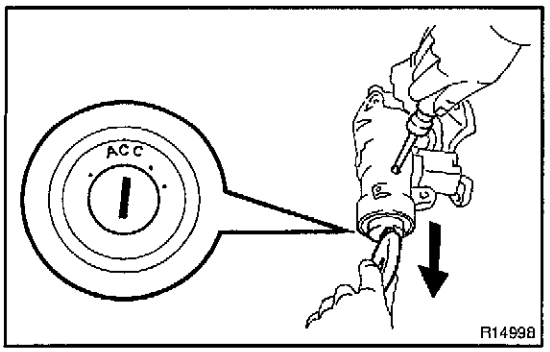
SR09F 01

INSPECTION



1. INSPECT STEERING LOCK OPERATION

Check that the steering lock mechanism operates properly.



2. IF NECESSARY, REPLACE KEY CYLINDER

(a) Place the ignition key at the ACC position.

(b) Push down the stop pin with a screwdriver, and pull out the cylinder.

(c) Install a new cylinder.

HINT:

Make sure the key is at the ACC position.

3. INSPECT IGNITION SWITCH

(See page BE–13)

4. INSPECT KEY UNLOCK WARNING SWITCH

(See page BE–13)

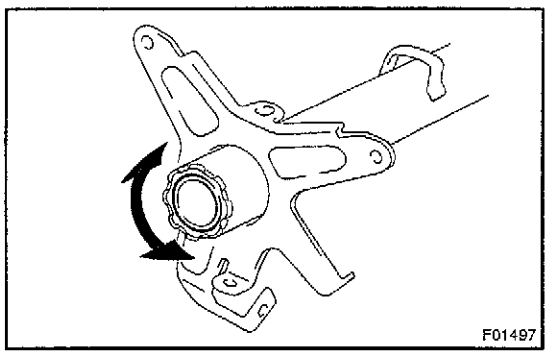
5. IF NECESSARY, REPLACE IGNITION SWITCH WITH KEY UNLOCK WARNING SWITCH

(a) Remove the 2 screws from the upper bracket.

(b) Remove the key cylinder.

(c) Slide out the switch.

(d) Install a new ignition switch with key unlock warning switch with the 2 screws.



6. INSPECT BEARING

Check the bearing rotation condition and check for abnormal noise.

If the bearing is worn or damaged, replace the column tube.

SR009G-01

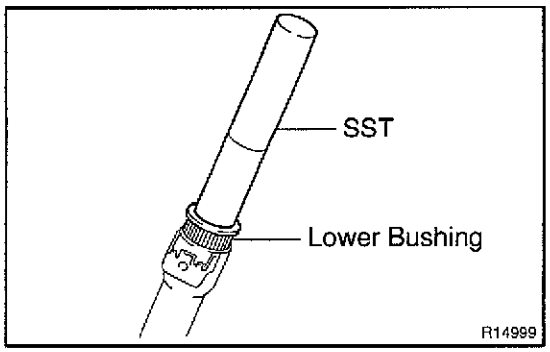
REASSEMBLY

NOTICE:

When using a vise, do not overtighten it.

1. COAT WITH MOLYBDENUM DISULFIDE LITHIUM BASE GREASE

(See page SR–13)



2. INSTALL MAIN SHAFT ASSEMBLY AND LOWER BUSHING

(a) Using a snap ring expander, install a new snap ring to the shaft assembly.

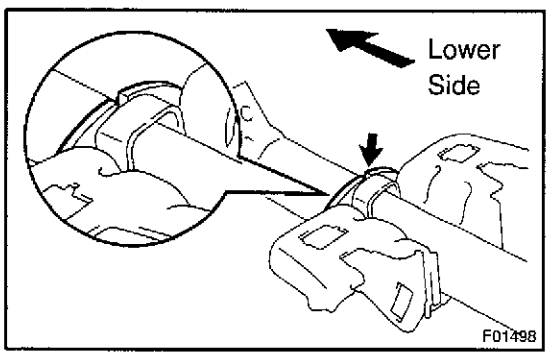
(b) Install the shaft assembly into the column tube.

(c) Coat a new bushing with molybdenum disulfide lithium base grease.

(d) Using SST and a hammer, tap in the bushing.

SST 09612–22011

(e) Using a snap ring expander, install a new wave snap ring to the shaft assembly.

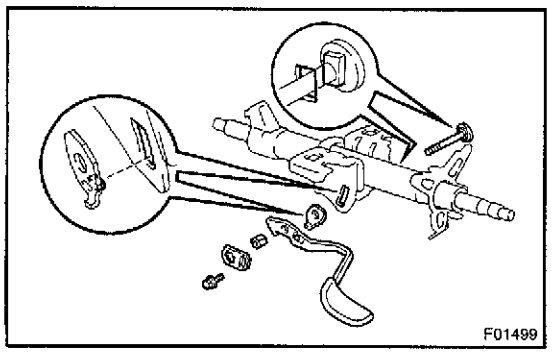


3. TILT STEERING COLUMN: INSTALL TILT LEVER ASSEMBLY AND BREAK AWAY BRACKET

(a) Install the break away bracket.

HINT:

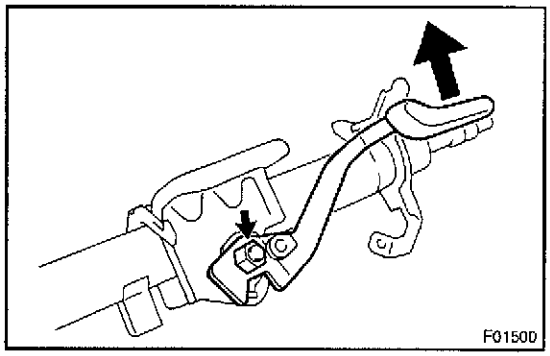
Install the bracket so that its bridge comes to the back of the tube surface stopper.



(b) Install the No.1 tilt lever lock bolt, tilt lever assembly and tilt sub lever.

HINT:

Align the holes of the break away bracket and projections of the tilt sub lever and No.1 tilt lever lock bolt.



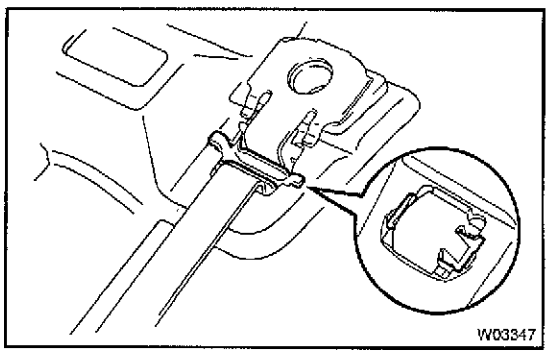
(c) Torque the lock nut by turning it counterclockwise.
Torque: 12 N·m (125 kgf·cm, 9 ft·lbf)

HINT:
While tilting up the steering column, fix the tilt lever to the highest position and tighten the nut.

(d) Install the tilt support No.1 reinforce with the bolt.
Torque: 5.4 N·m (55 kgf·cm, 48 in.·lbf)

HINT:
Align the reinforce and nut to eliminate looseness by turning the reinforce counterclockwise a little, then torque the bolt.

(e) Install the torsion spring.



4. INSTALL 2 ENERGY ABSORBING PLATES

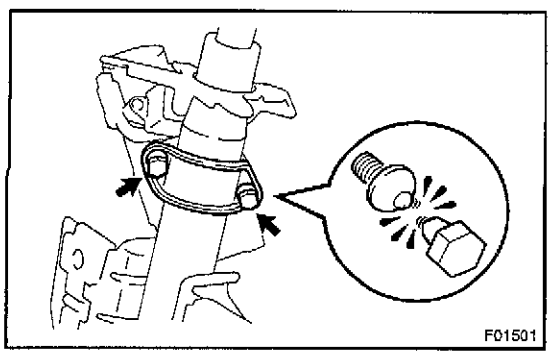
(a) Install the new break away capsule.
(b) Install the new energy absorbing guide and new absorbing plate.
(c) Install the new energy absorbing clip.

5. NON–TILT STEERING COLUMN: INSTALL COLUMN TUBE SUPPORT

(a) Install the tube attachment to the tube support.
(b) Torque the bolt .
Torque: 20 N·m (204 kgf·cm, 15 ft·lbf)

6. TILT STEERING COLUMN: INSTALL TILT STEERING SUPPORT

(a) Install the 2 No.1 support collars to the tilt steering support.
(b) Install the tilt steering support to the column tube.
(c) Install the pawl set bolt and plate washer.
(d) Torque a new lock nut.
Torque: 9.5 N·m (97 kgf·cm, 84 in.·lbf)



7. INSTALL COLUMN UPPER BRACKET AND COLUMN UPPER CLAMP

Tighten the 2 new tapered–head bolts until the bolt heads break off.

8. INSTALL SLIDING YOKE

(a) Install the thrust stopper.
(b) Align the matchmarks on the yoke and main shaft assembly.
Torque: 35 N·m (360 kgf·cm, 25 ft·lbf)

SR09H-01

INSTALLATION

1. **2L–T (RHD) 4WD:**
   INSTALL SLIDING WITH SHAFT YOKE

Torque the bolt.

Torque: 35 N·m (360 kgf·cm, 26 ft·lbf)

2. **4WD:**
   INSTALL JOINT PROTECTOR
3. **INSTALL NO.2 INTERMEDIATE SHAFT ASSEMBLY**

Temporarily tighten the bolt A.

4. **INSTALL STEERING COLUMN ASSEMBLY**

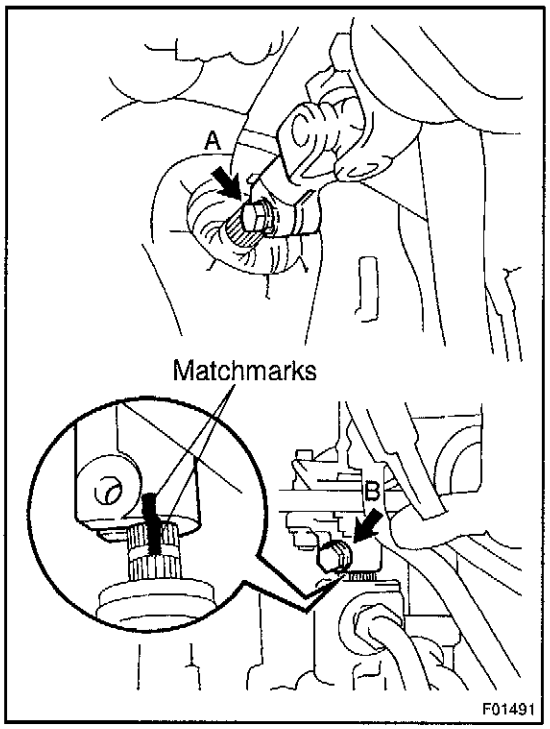
(a) Torque the 2 column assembly set bolts and nuts.
Torque: 26 N·m (260 kgf·cm, 19 ft·lbf)

(b) Connect the connectors.

5. **CONNECT COLUMN HOLE COVER**

Torque the 5 bolt.

Torque: 8 N·m (80 kgf·cm, 69 in.·lbf)



6. **CONNECT NO.2 INTERMEDIATE SHAFT ASSEMBLY**

(a) Align the matchmarks on the shaft assembly and worm gear valve shaft.

(b) Torque the bolt B.
Torque: 35 N·m (360 kgf·cm, 26 ft·lbf)

(c) Torque the bolt A.
Torque: 35 N·m (360 kgf·cm, 26 ft·lbf)

7. **INSTALL DUCT HEATER TO REGISTER NO.2**
8. **INSTALL LOWER FINISH PANEL**

(a) Tighten the 3 panel set screws and bolt.

(b) Connect the hood lock release lever with the 2 screws.

(c) Connect the fuel lid opener with the 2 screws.

9. **w/o Airbag:**
   INSTALL COMBINATION SWITCH

(a) Tighten the 3 screws.

(b) Connect the 2 connectors.

10. **w/ Airbag:**
    INSTALL SPIRAL CABLE
    (See page BE–19)
11. **w/ Airbag:**
    INSTALL COMBINATION SWITCH WITH SPIRAL CABLE

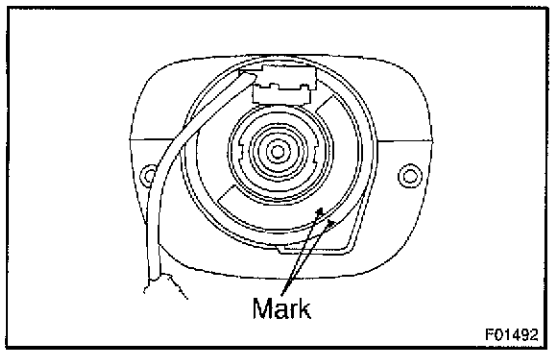
(a) Tighten the 3 screws.

(b) Connect the airbag connector.

(c) Connect the 3 connectors.

12. **INSTALL UPPER AND LOWER COLUMN COVERS**

Tighten the 4 screws.



13. w/ Airbag:
CENTER SPIRAL CABLE

(a) Check that the front wheels are facing straight ahead.
(b) Turn the cable counterclockwise by hand until it becomes harder to turn the cable.
(c) Then rotate the cable clockwise about 2.5 turns to align the mark.

HINT:
The cable will rotate about 2.5 turns to either left or right of the center.

14. INSTALL STEERING WHEEL

(a) Align the matchmarks on the wheel and main shaft assembly.
(b) Torque the wheel set nut.
Torque: 34 N·m (350 kgf·cm, 25 ft·lbf)
(c) w/ Airbag:
Connect the connector.

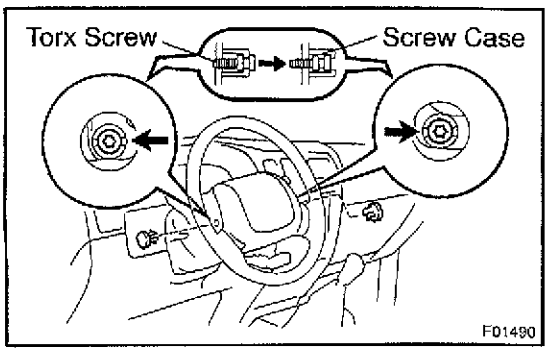
15. w/o Airbag:
INSTALL STEERING WHEEL PAD

(a) Connect the connector.
(b) Install the pad.
(c) Install the screw.

16. w/ Airbag:
INSTALL STEERING WHEEL PAD

NOTICE:

- **Make sure the wheel pad is installed to the specified torque.**
- **If the wheel pad has been dropped, or there are cracks, dents or other defects in the case or connector, replace the wheel pad with a new one.**
- **When installing the wheel pad, take care that the wirings do not interfere with other parts and are not pinched between other parts.**



(a) Connect the airbag connector.
(b) Install the wheel pad after confirming that the circumference groove of the torx screw is caught on the screw case.
(c) Using a torx socket wrench, torque the 2 screws.
Torque: 9.0 N·m (90 kgf·cm, 78 in.·lbf)
(d) Install the 2 steering wheel lower No.2 covers.

17. CHECK STEERING WHEEL CENTER POINT