

TILT STEERING COLUMN DISASSEMBLY

NOTICE: When using a vise, do not overtighten it.

1. REMOVE INTERMEDIATE NO.2 SHAFT

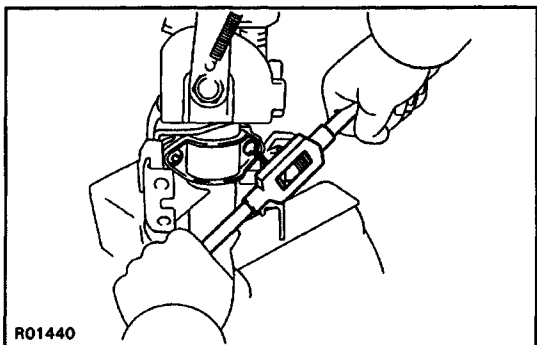
Remove the bolt.

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.



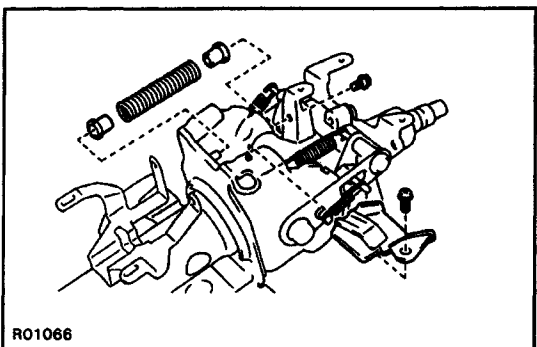
3. REMOVE COMPRESSION SPRING

(a) Remove the bolt.

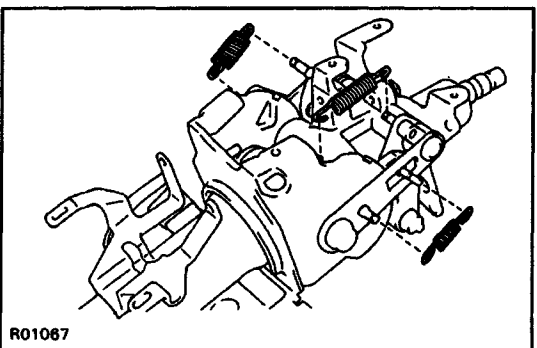
(b) Remove the 2 bushings from the spring.

4. REMOVE PROTECTOR

Remove the bolt.

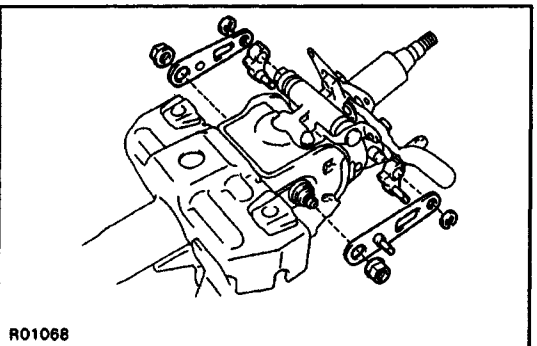


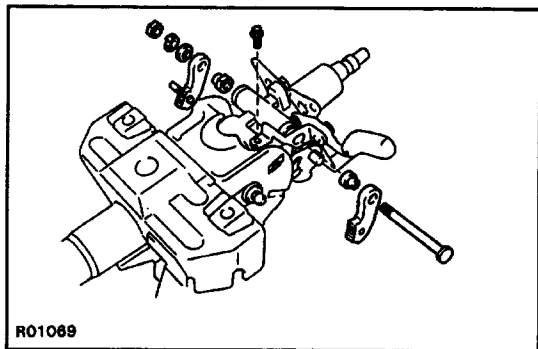
5. REMOVE 3 TENSION SPRINGS



6. REMOVE 2 TILT LEVER RETAINERS AND TILT PAWL STOPPERS

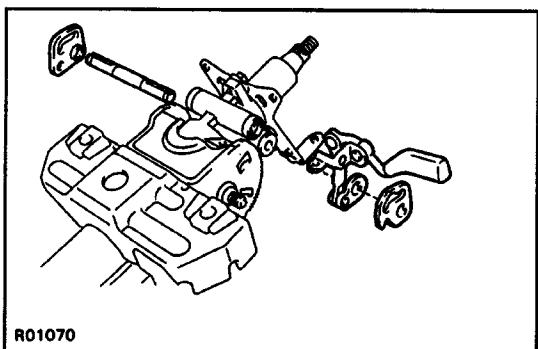
Remove the 2 E-rings and nuts.



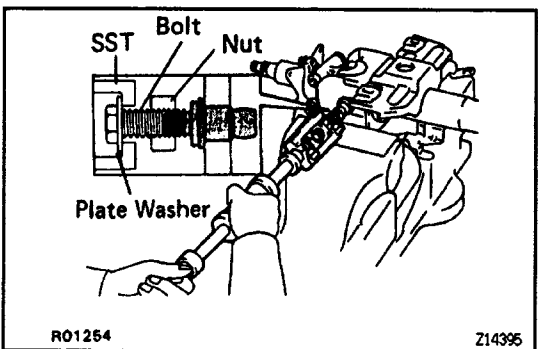


7. REMOVE 2 TILT PAWLS

- (a) Remove the nut, 2 washers and bolt.
- (b) Remove tilt lever assembly set bolt.
- (c) Remove the 2 pawls with the collars.



8. REMOVE TILT LEVER ASSEMBLY, TILT LEVER, TILT SUB LEVER AND TILT LEVER LOCK SHAFT



9. REMOVE COLUMN UPPER TUBE

- (a) Set SST, the nut (10 mm diameter, 1.25 mm pitch), plate washer (36 mm outer diameter) and bolt (10 mm diameter, 1.25 mm pitch, 50 mm length), as shown.

And then remove the 2 tilt No.2 bolts.

SST 09910-00015 (09911-00011, 09912-00010)

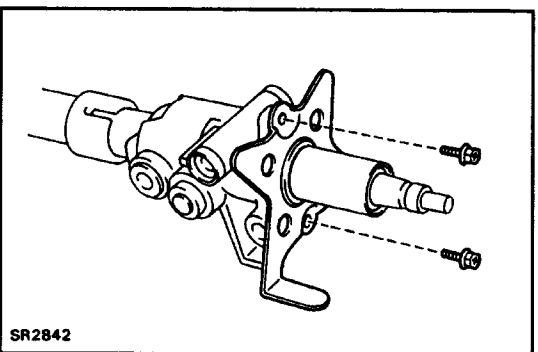
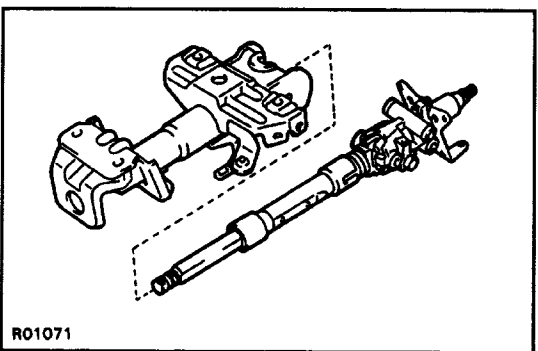
Reference

Nut: 90170-10004

Plate washer: 90201-10201

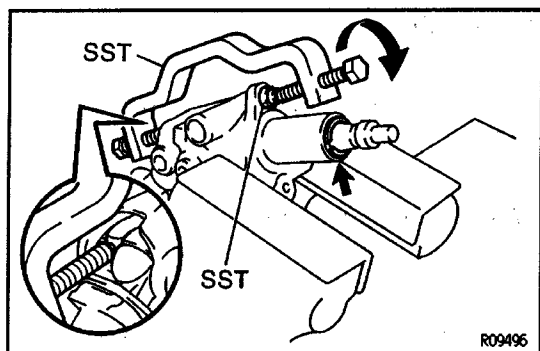
Bolt: 91111-51050

- (b) Remove the column upper tube with the shaft assembly from the lower tube.



10. REMOVE TURN SIGNAL BRACKET

Remove the 2 bolts.



11. REMOVE MAIN SHAFT ASSEMBLY

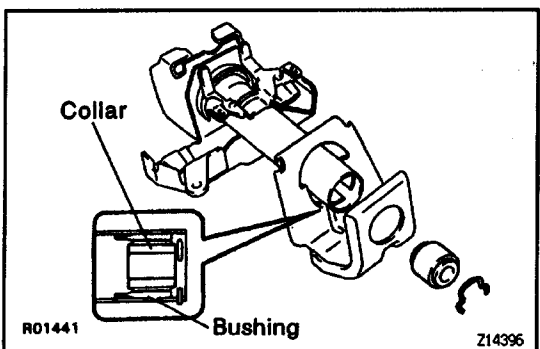
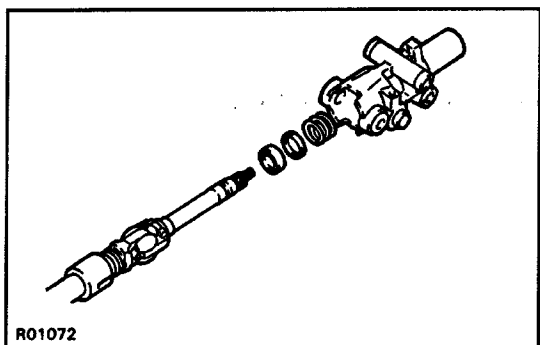
- (a) Using SST, compress the compression spring.
SST 09950-40010 (09957-04010, 09958-04010)

NOTICE: Do not bend the universal joint of the main shaft assembly more than 20°.

- (b) Using snap ring pliers, remove the snap ring.

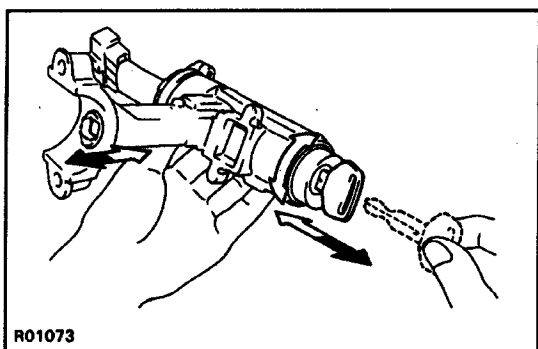
- (c) Remove the shaft assembly from the column upper tube.

- (d) Remove the compression spring, bearing thrust collar and bearing from the shaft assembly.



12. REMOVE COLLAR

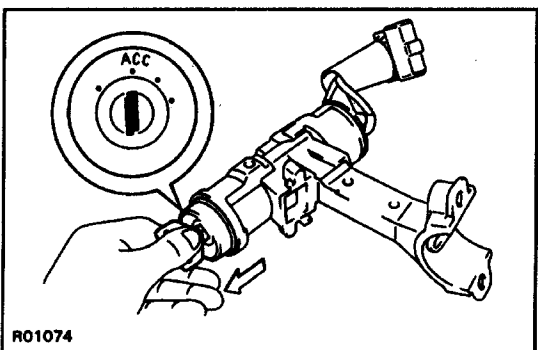
- (a) Remove the snap ring from the column lower tube.
(b) Remove the collar and stopper.



TILT STEERING COLUMN INSPECTION AND, REPLACEMENT

1. INSPECT STEERING LOCK OPERATION

Check that the steering lock mechanism operates properly.



2. IF NECESSARY, REPLACE KEY CYLINDER

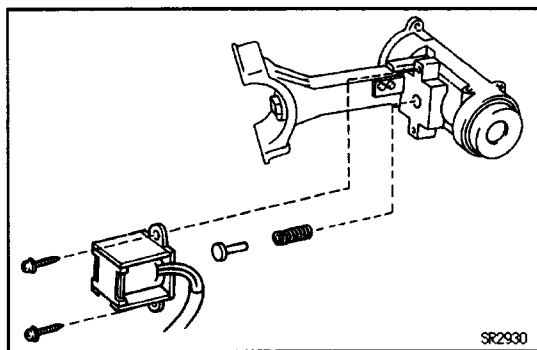
- (a) Place the ignition key at the ACC position.
(b) Push down the stop pin with a thin rod, and pull out the key cylinder.
(c) Install the new key cylinder.

HINT: Make sure the ignition key is at the ACC position.

3. INSPECT IGNITION SWITCH(See page [BE-12](#))**4. INSPECT KEY UNLOCK WARNING SWITCH**(See page [BE-13](#))**5. A/T:****INSPECT KEY INTERLOCK SOLENOID**A340E,F: (See page [AT1-77](#))A340H: (See page [AT2-77](#))**6. IF NECESSARY, REPLACE IGNITION SWITCH ASSEMBLY****M /T:**

(a) Remove the 3 screws.

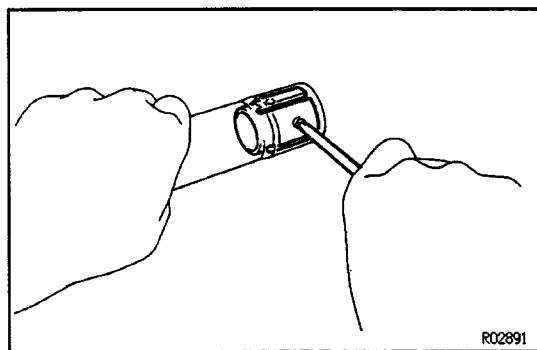
(b) Install a new switch assembly with the 3 screws.

**A/T:**

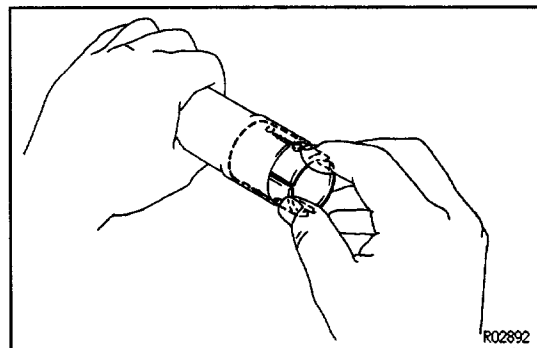
(a) Remove the 5 screws.

(b) Remove/install the spring and lock pin.

(c) Install a new switch assembly with the 5 screws.

**7. IF NECESSARY, REPLACE BUSHING**

(a) Using a screwdriver, depress the projections on the bushing to release the bushing, then remove it from the column lower tube.

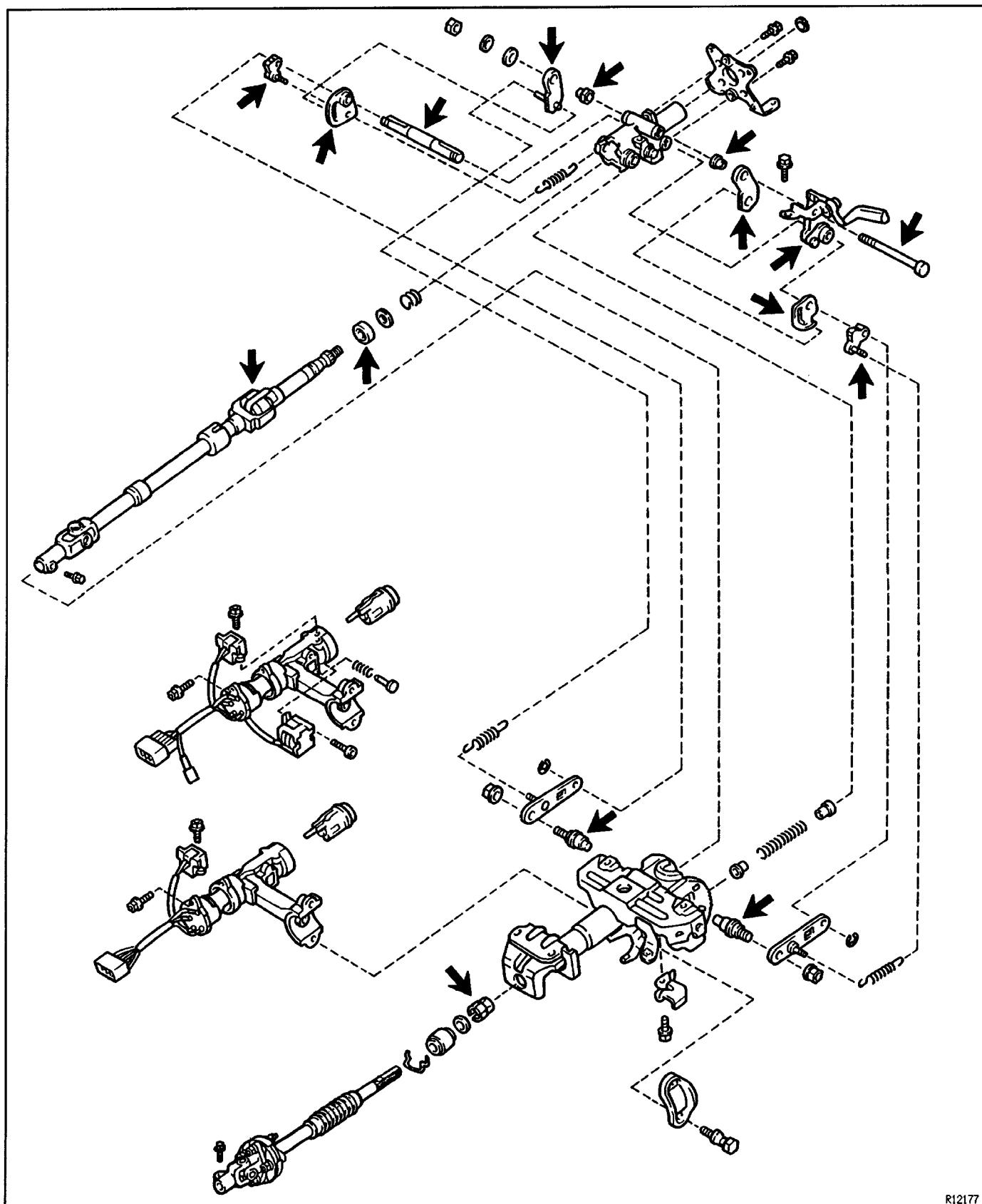


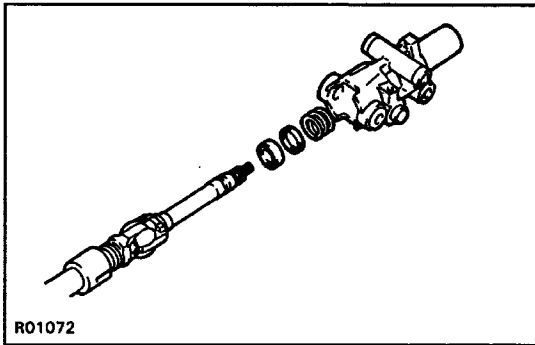
(b) Align the projections on a new bushing with the holes in the column lower tube. Install the bushing until the projections are firmly engaged in the holes in the tube.

TILT STEERING COLUMN ASSEMBLY

NOTICE: When using a visa, do not overtighten it.

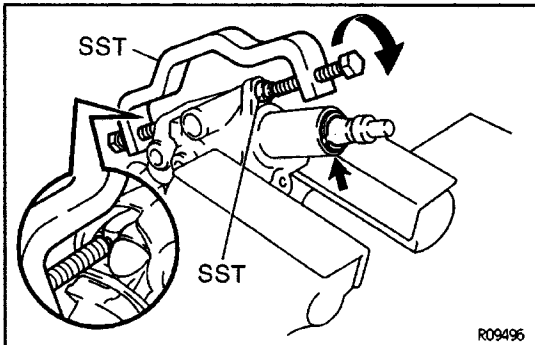
1. APPLY MOLYBDENUM DISULPHIDE LITHIUM BASE GREASE ON FOLLOWING PARTS:





2. INSTALL MAIN SHAFT ASSEMBLY

- (a) Install the bearing, bearing thrust collar and compression spring.
- (b) Install the shaft assembly to the column upper tube.

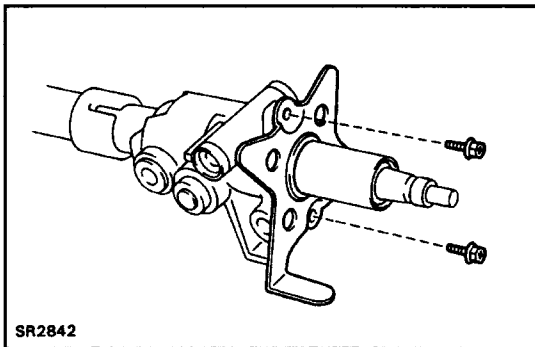


- (c) Using SST compress the compression spring.

SST 09950 – 40010 (09957 – 04010, 09958 – 04010)

NOTICE: Do not bend the universal joint of the main shaft more than 20°.

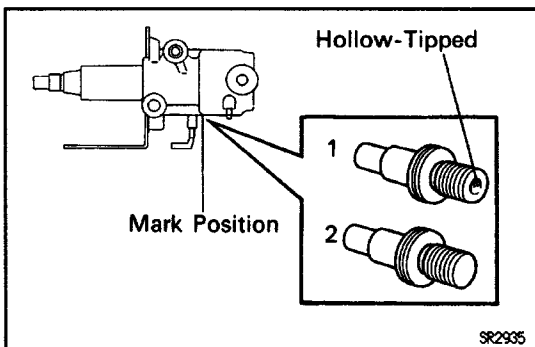
- (d) Using snap ring pliers, install a new ring.



3. INSTALL TURN SIGNAL BRACKET

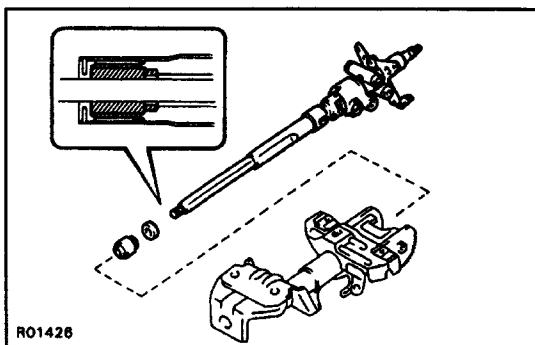
Install the 2 bolts.

Torque: 7.8 N-m (80 kgf-cm, 69 in.-lbf)



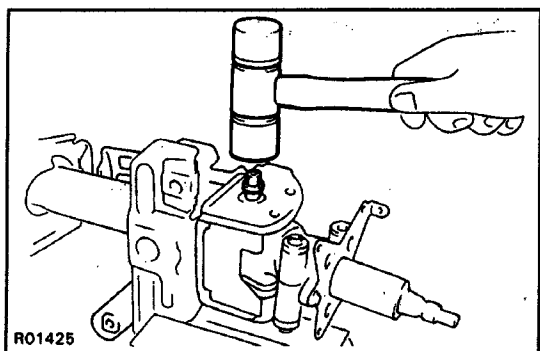
4. SELECT TILT NO.2 BOLT

Select the bolt with the plain thread end when the column upper tube mark is 2, and the bolt with the hollow-tipped thread end when the mark is 1.

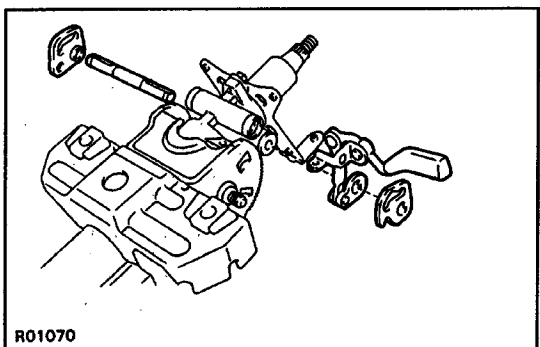


5. INSTALL MAIN SHAFT ASSEMBLY WITH COLUMN UPPER TUBE

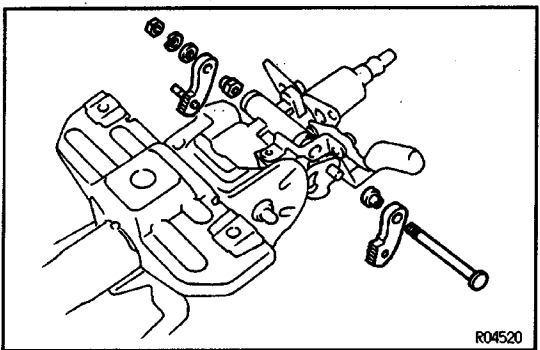
- (a) Install the stopper and collar to the shaft assembly, as shown.
- (b) Install the shaft assembly with the upper tube to the column lower tube.



(c) Using a plastic hammer, drive in the 2 tilt No.2 bolts.

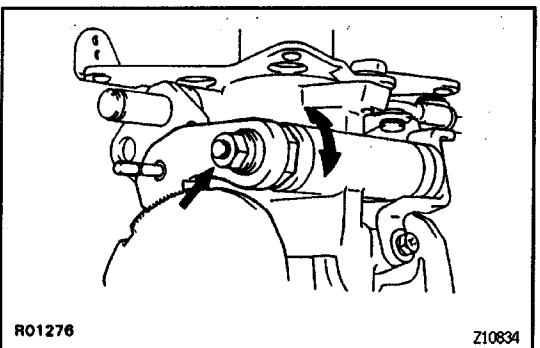


6. INSTALL TILT LEVER LOCK SHAFT, TILT SUB LEVER, TILT LEVER, AND TILT LEVER ASSEMBLY



7. INSTALL TILT PAWLS

- Insert the collar to the tilt pawl.
- Temporarily install the 2 tilt pawls, bolt, 2 washers and nut.

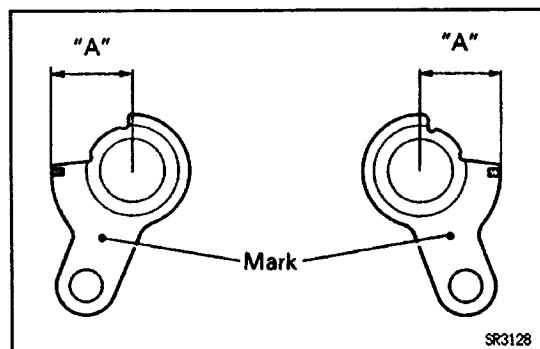
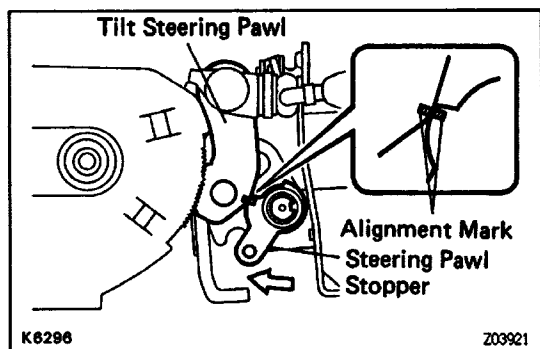


8. ENGAGE AND ADJUST 2 TILT PAWLS

- Engage the tilt sub lever side pawl to the center of the ratchet.
- While turning the tilt lever side collar, engage the tilt sub lever side pawl to the ratchet completely.
- Do not turn the collars after the tilt sub lever side pawl is engaged.
- Torque the nut.

Torque: 5.9 N-m (60 kgf-cm, 52 in.-lbf)

- Check that the pawls rotate smoothly.

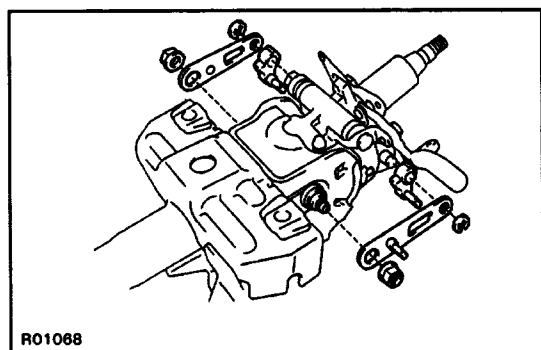


9. SELECT 2 TILT PAWL STOPPERS

- With the tilt pawl and ratchet engaged, install the stopper.
- Check that the alignment marks on the stopper and pawl align when the stopper is lightly rotated to the pawl side.
- If the alignment marks do not align, select pawl stopper according to the following table.

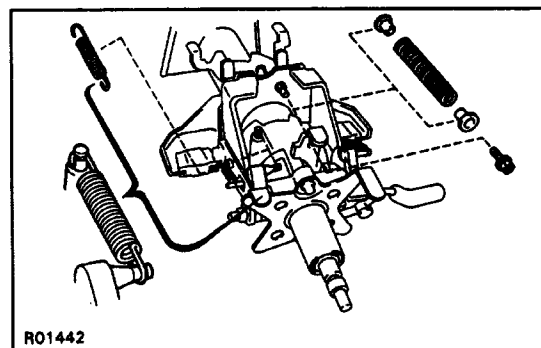
Tilt lever side	Tilt sub lever side	Dimension 'A' mm (in.)
1	A	12.65–12.75 (0.4980–0.5020)
2	B	12.55–12.65 (0.4941–0.4980)
3	C	12.45–12.55 (0.4902–0.4941)
4	D	12.35–12.45 (0.4862–0.4902)
5	E	12.25–12.35 (0.4823–0.4862)

- After selecting the stoppers, check that on both sides the pawl and ratchet are fully engaged.



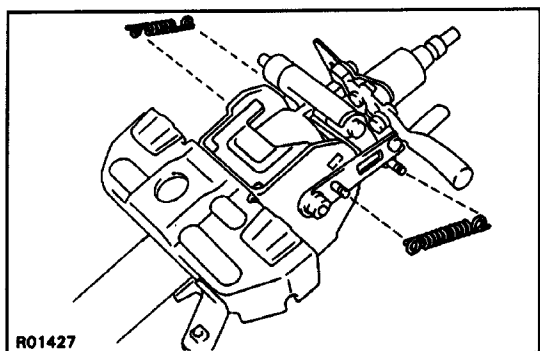
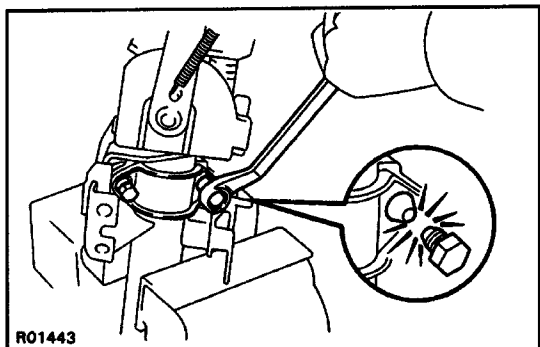
10. INSTALL 2 PAWL STOPPERS AND TILT LEVER RETAINERS

- Torque the 2 nuts.
Torque: 15 N–m (150 kgf–cm, 11 ft–lbf)
- Install 2 new E-rings.



11. INSTALL COMPRESSION SPRING AND TENSION SPRING

- Install the 2 bushings to the compression spring.
- Torque the bolt.
Torque: 7.8 N–m (80 kgf–cm, 69 in.–lbf)
- Install the tension spring.

**12. INSTALL 2 TENSION SPRINGS****13. INSTALL COLUMN UPPER BRACKET AND COLUMN UPPER CLAMP**

- (a) Install the upper column bracket with the 2 new tapered-head bolts.
- (b) Tighten the bolts until the bolt heads break off.

14. CHECK TILT STEERING OPERATION

- (a) Check that there is no axial play at the end of the main shaft.
- (b) With the main shaft in the neutral position, pull the tilt lever and check that the main shaft rises to the uppermost position.
- (c) Lower the main shaft, and check that it locks in the lowermost position.