5005B–01

OVERHAUL

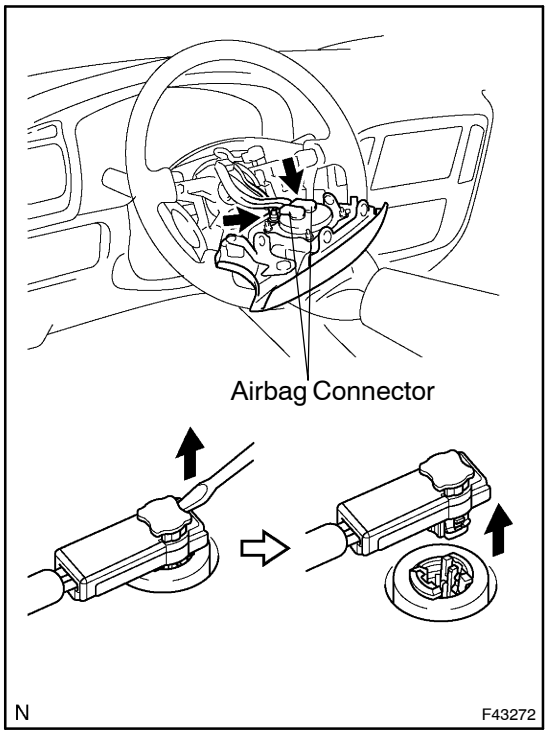
HINT: Overhaul the RHD side by the same procedures with LHD side.

1. **PRECAUTION (See page 60–1)**
2. **SEPARATE BATTERY NEGATIVE TERMINAL**
3. **PLACE FRONT WHEELS FACING STRAIGHT AHEAD**
4. **REMOVE STEERING WHEEL COVER LOWER NO.3**
5. **REMOVE STEERING WHEEL COVER LOWER NO.2**
6. **REMOVE HORN BUTTON ASSY**

NOTICE:

If the airbag connector is disconnected with the ignition switch being at ON, DTCs will be recorded.

(a) Using a torx socket wrench (Torx socket wrench (T= 30)), loosen the 2 torx screws until the groove along the screw circumference catches on the screw case.



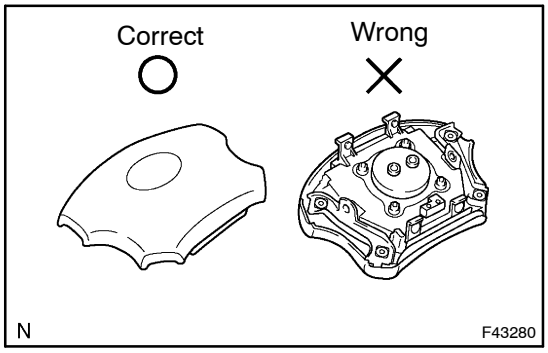
NOTICE:

When removing the horn button assy, take care not to pull the airbag wire harness.

(b) Pull out the horn button assy from the steering wheel assy.

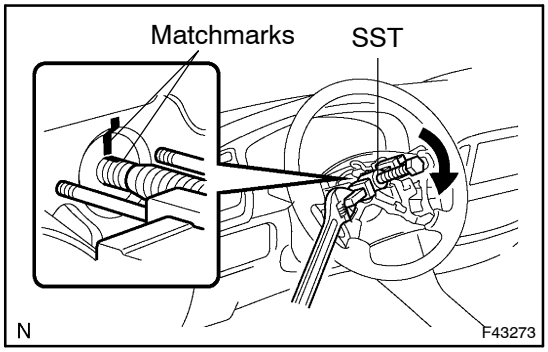
(c) Using a screwdriver, release the lock part of each of the airbag connectors and disconnect the 2 airbag connectors.

(d) Disconnect the horn ground harness from the horn button assy.



CAUTION:

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



7. REMOVE STEERING WHEEL ASSY

(a) Remove the steering wheel assy set nut.

(b) Place matchmarks on the steering wheel assy and main shaft assy.

(c) Using SST, remove the steering wheel assy.

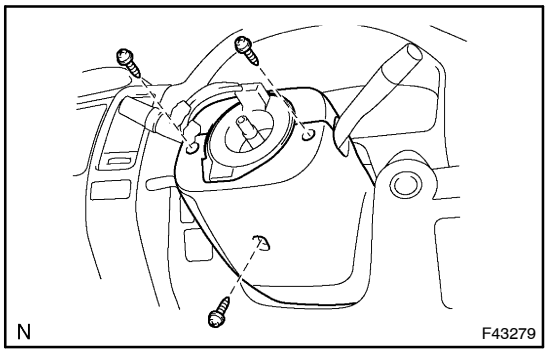
SST 09950–50013 (09951–05010, 09952–05010, 09953–05020, 09954–05021)

8. REMOVE FRONT DOOR SCUFF PLATE RH

9. REMOVE FRONT FLOOR FOOTREST

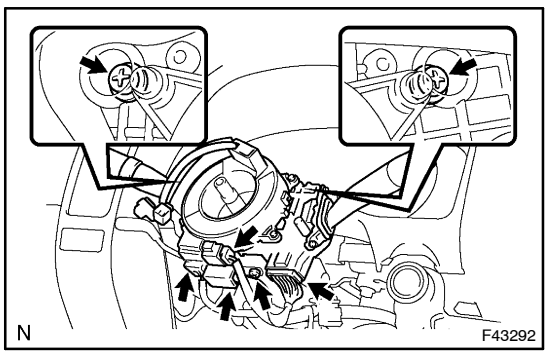
10. REMOVE COWL SIDE TRIM BOARD RH

11. REMOVE INSTRUMENT PANEL FINISH LOWER PANEL RH (See page 71–13)



12. REMOVE STEERING COLUMN COVER

(a) Remove the 3 screws and steering column cover upper and lower.



13. REMOVE TURN SIGNAL SWITCH W/SPIRAL CABLE ASSY

(a) Disconnect the 2 connectors from the spiral cable sub–assy.

(b) Disconnect the 3 connectors from the turn signal switch assy.

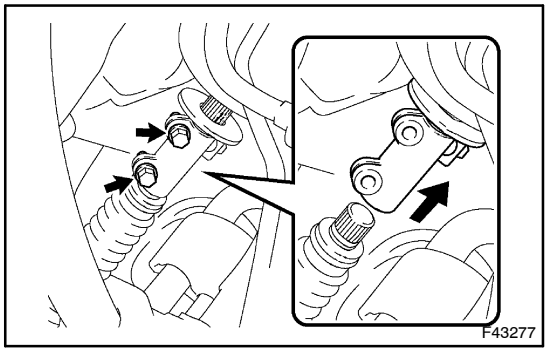
(c) Remove the 3 screws and turn signal switch assy w/spiral cable sub–assy.

14. REMOVE ENGINE UNDER COVER SUB–ASSY NO.1

Remove the 4 bolts and engine under cover sub–assy No.1.

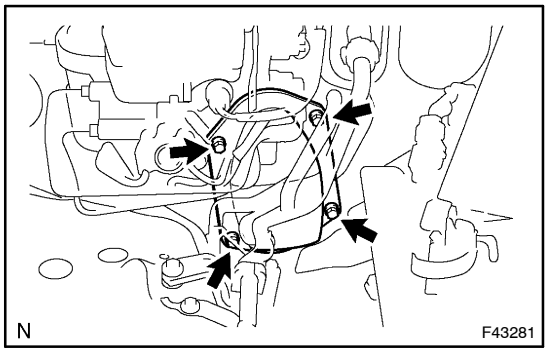
15. REMOVE ENGINE UNDER COVER ASSY REAR

Remove the 4 bolts and engine under cover assy rear.



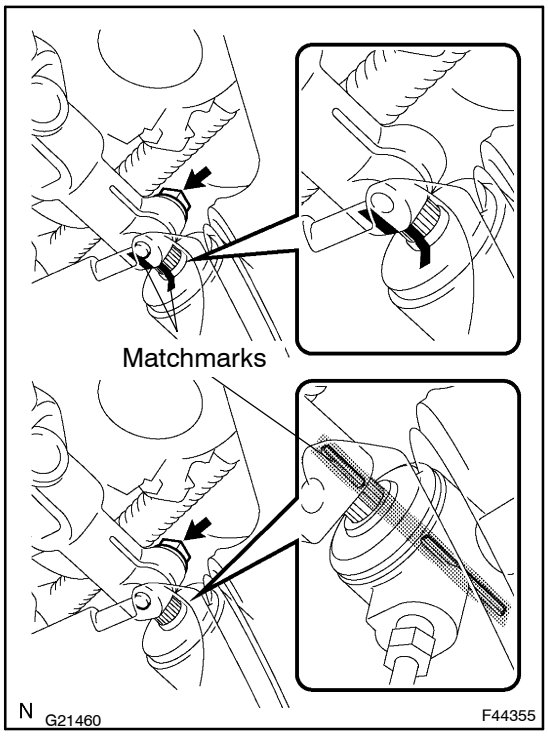
16. REMOVE STEERING SLIDING YOKE

(a) Remove the 2 bolts from the steering sliding yoke.
(b) Slide the steering sliding yoke up and separate it from the steering intermediate shaft sub–assy No.2.
(c) Pull down the steering sliding yoke from the steering intermediate shaft assy to remove.



17. REMOVE STEERING INTERMEDIATE SHAFT COVER

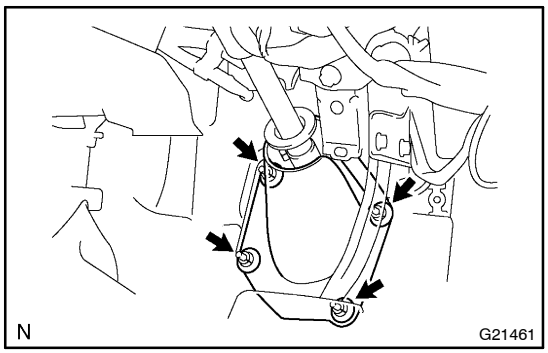
(a) Remove the 4 bolts and steering intermediate shaft cover.



18. REMOVE STEERING INTERMEDIATE SHAFT NO.2

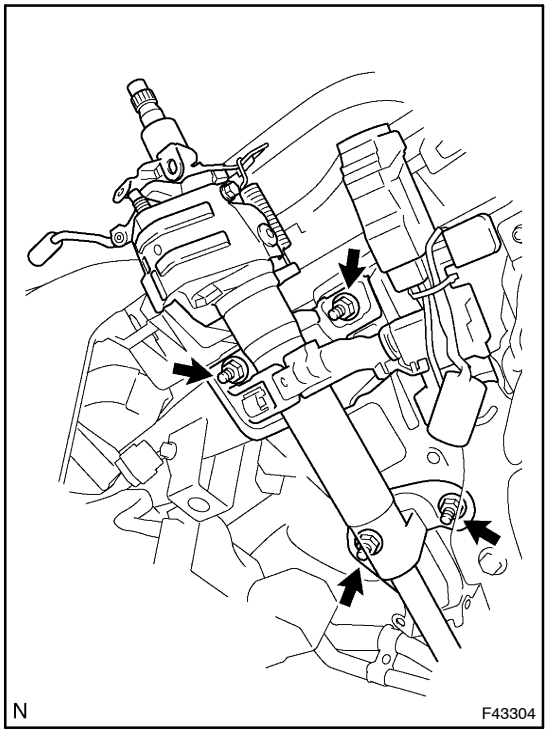
(a) Align the notch with the protrusion of the gear box to make a matchmarks on the intermediate shaft No.2.
(b) Remove the bolt and intermediate shaft sub–assy No.2 from the power steering gear assy.

HINT:
When replacing the gear box with a new one, be sure to align the matchmarks with the protrusion to install.



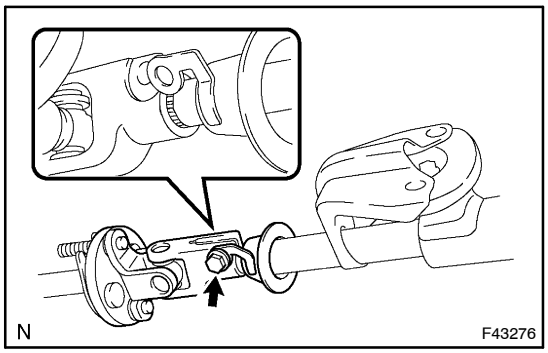
19. REMOVE STEERING COLUMN HOLE COVER

(a) Remove the heater to register duct.
(b) Remove the 4 clips and steering column hole cover.



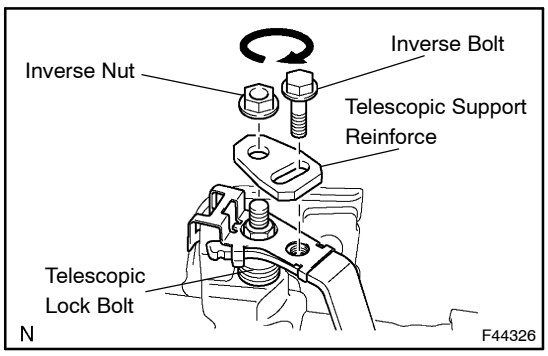
20. REMOVE STEERING COLUMN ASSY

(a) Disconnect the each of the connectors from the steering column assy.
(b) Disconnect the wire harness from the steering column assy.
(c) Remove the 4 steering column set nuts.
(d) Pull out the steering column assy with the intermediate shaft assy.



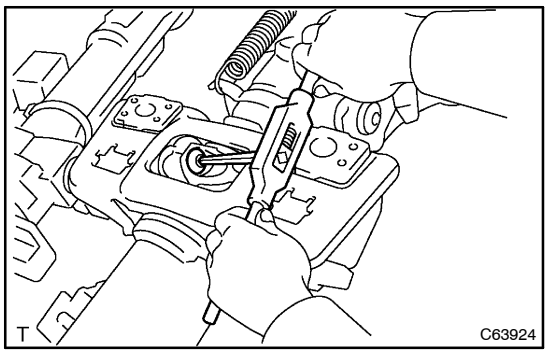
21. REMOVE STEERING INTERMEDIATE SHAFT ASSY

(a) Remove the bolt and separate the steering shaft thrust stopper from the steering intermediate shaft assy.
(b) Pull out the intermediate shaft assy and steering shaft thrust stopper from the steering column assy.

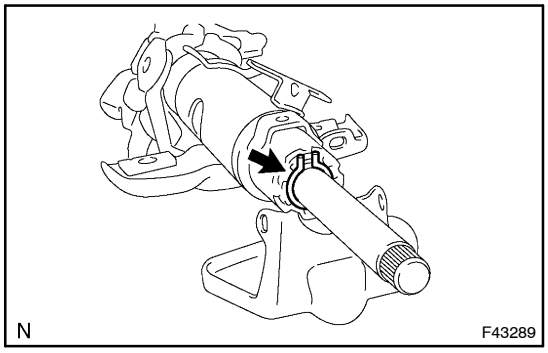


22. REMOVE STEERING COLUMN BRACKET ASSY UPPER (TILT & TELESCOPIC STEERING)

(a) Remove the inverse bolt and inverse nut from the telescopic lever.
(b) Remove the telescopic lever and telescopic steering support reinforce from the telescopic lock bolt.

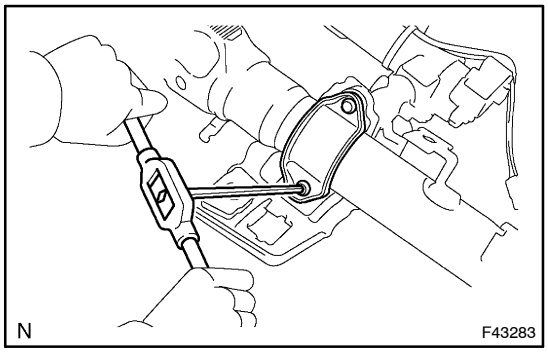


(c) Using a 3 mm (0.12 in.) pin punch, mark the center of the 2 tapered–head bolts.
(d) Using a 3 – 4 mm (0.12 – 0.16 in.) drill, drill in to the 2 bolts.
(e) Using a screw extractor, remove the 2 bolts and steering column bracket assy upper.



23. REMOVE STEERING COLUMN NO.1 RING (TILT & TELESCOPIC STEERING)

(a) Using a screwdriver, remove the steering column No.1 ring from the steering main shaft.

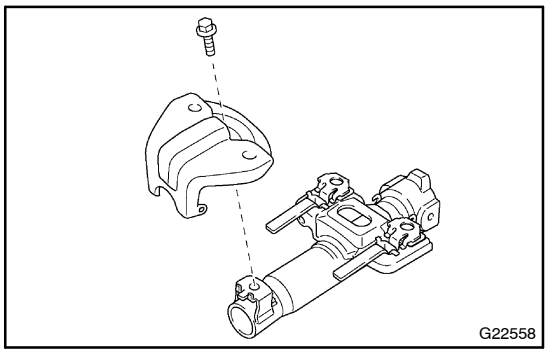


24. REMOVE STEERING COLUMN BRACKET ASSY UPPER (TILT STEERING)

(a) Using a 3 mm (0.12 in.) pin punch, mark the center of the 2 tapered–head bolts.

(b) Using a 3 – 4 mm (0.12 – 0.16 in.) drill, drill in to the 2 bolts.

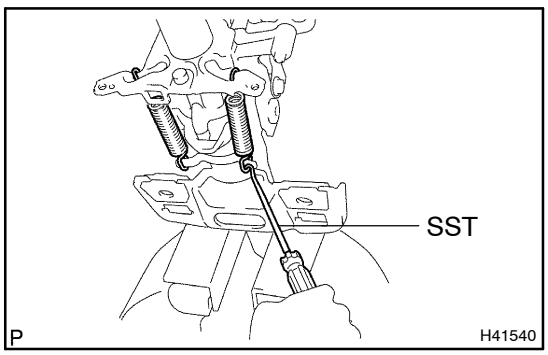
(c) Using a screw extractor, remove the 2 bolts and steering column bracket assy upper.



25. REMOVE TILT STEERING SUPPORT SUB–ASSY

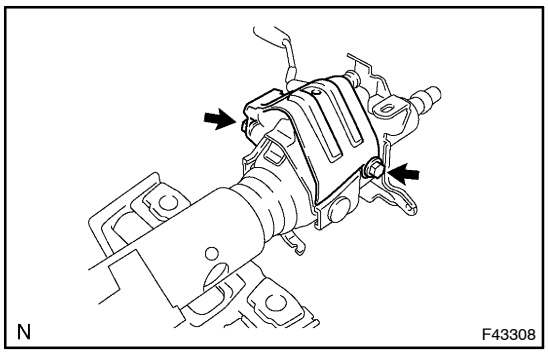
(a) Remove the bolt from the column tube support.

(b) Remove the column tube support from the steering column tube.

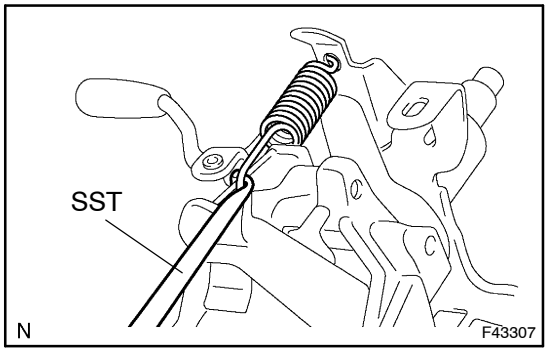


26. REMOVE STEERING MAIN SHAFT ASSY

(a) Using SST, remove the 2 tension springs.
SST 09921–00010

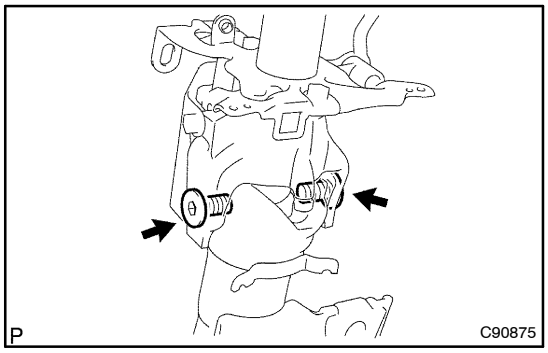


(b) Remove the 2 bolts and steering column protector.



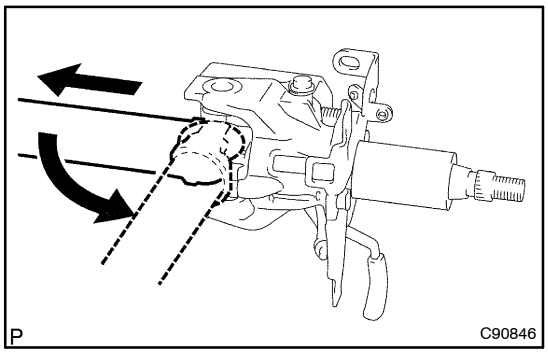
(c) Using SST, remove the tension spring.
SST 09921–00010

(d) Remove the 2 bolts and turn signal bracket.

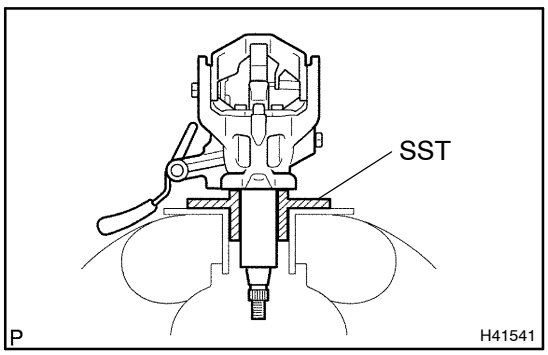


(e) Using a hexagon wrench (6 mm), remove the 2 tilt steering bolts.

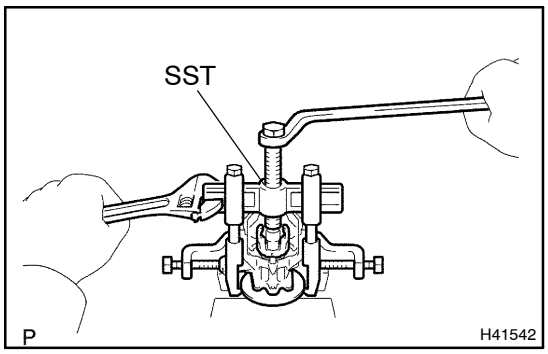
(f) Pull out the main shaft with the steering column tube sub–assy upper and steering main shaft bearing sheet from the column tube.



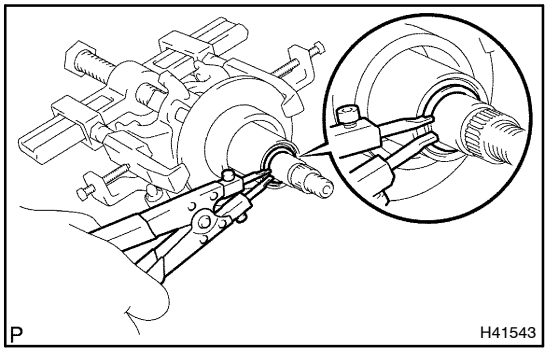
(g) Bend the joint of the main shaft at right angles, leaving the cross ball in the No.2 main shaft sub–assy, divide the main shaft into the No.1 main shaft with the steering column tube sub–assy upper and No.2 main shaft sub–assy.



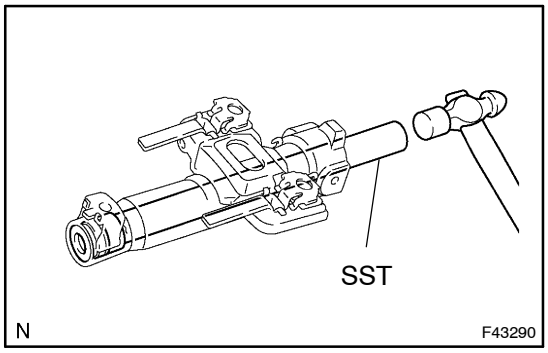
(h) Secure the No.1 main shaft with the steering column tube sub–assy upper and SST in a vise.
SST 09316–60011 (09316–00051)



(i) Using SST, compress the spring of the steering column tube sub–assy upper.
SST 09950–40011 (09951–04010, 09952–04010, 09953–04020, 09955–04061, 09958–04011)

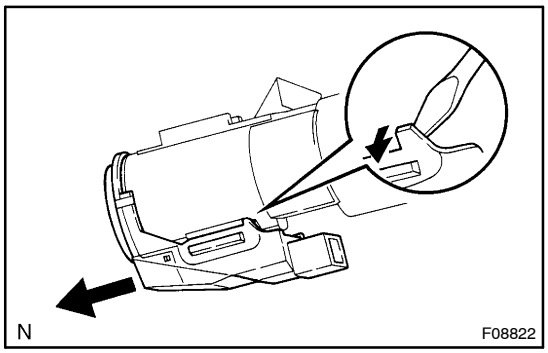


(j) Using a snap ring expander, remove the snap ring and No.1 main shaft.
(k) Remove the compression spring, bearing thrust collar and bearing from the No.1 main shaft.



27. REMOVE STEERING MAIN SHAFT BEARING (TILT STEERING)

(a) Using SST and a hammer, pull out the steering main shaft bearing from the steering column tube lower.
SST 09950–70010 (09951–07360), 09950–60010 (09951–00300)

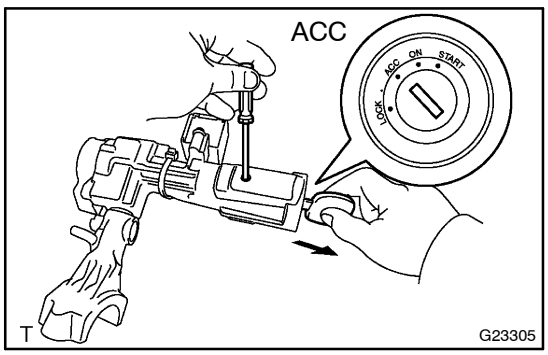


28. REMOVE TRANSPONDER KEY AMPLIFIER

NOTICE:

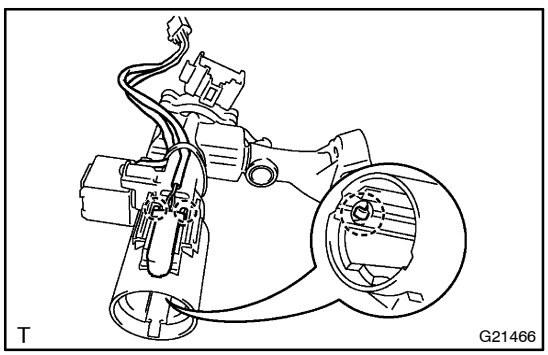
Take care not to use excessive force to prevent the case from being damaged.

(a) Expand the claw hung on the upper bracket by approx. 1.0 mm (0.039 in.) using a screwdriver.
(b) Pull the key cylinder lamp assy toward the rear of the vehicle with the claw open.



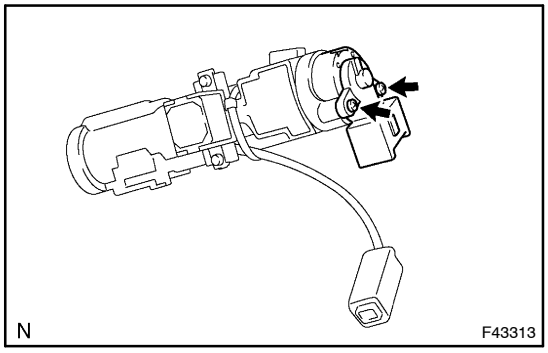
29. REMOVE IGNITION SWITCH LOCK CYLINDER ASSY

(a) Place the ignition switch lock cylinder assy at the ACC position.
(b) Push down the stop pin with a screwdriver and pull out the ignition switch lock cylinder assy.



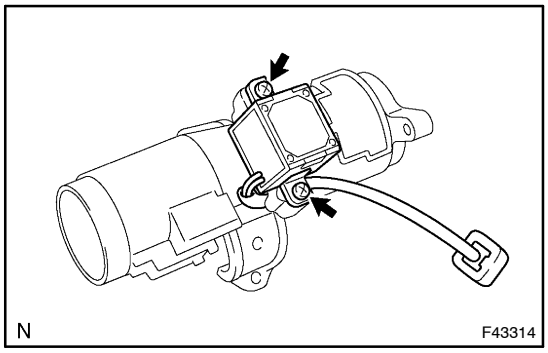
30. REMOVE UN–LOCK WARNING SWITCH ASSY

(a) Disconnect the un–lock warning switch assy connector from the ignition or start switch assy.
(b) Remove the un–lock warning switch assy toward the rear of the vehicle by pushing up the center part.



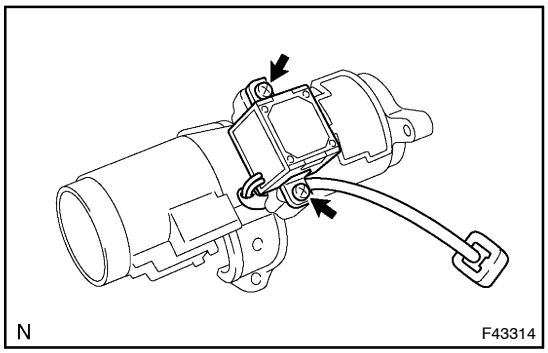
31. REMOVE IGNITION OR STARTER SWITCH ASSY

(a) Remove the 2 screws and ignition or starter switch assy from the steering column bracket assy upper.



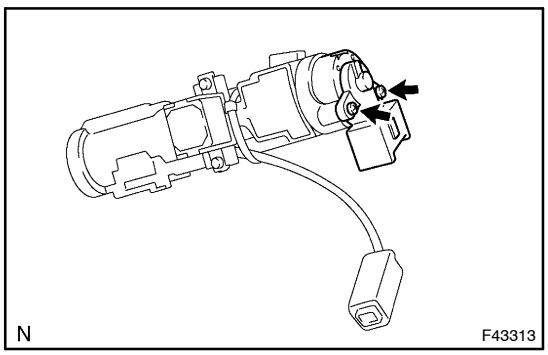
32. REMOVE KEY INTER LOCK SOLENOID

(a) Remove the 2 screws and key inter lock solenoid from the steering column bracket assy upper.



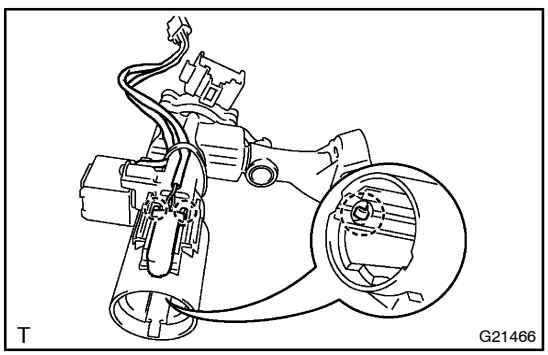
33. INSTALL KEY INTER LOCK SOLENOID

(a) Install the key inter lock solenoid to the steering column bracket assy upper with the 2 screws.



34. INSTALL IGNITION OR STARTER SWITCH ASSY

(a) Install the ignition or starter switch assy to the steering column bracket assy upper with the 2 screws.



35. INSTALL UN–LOCK WARNING SWITCH ASSY

(a) Install the un–lock warning switch assy to the steering column bracket assy upper.

(b) Connect the un–lock warning switch assy connector to the ignition or starter switch assy.

36. INSTALL IGNITION SWITCH LOCK CYLINDER ASSY

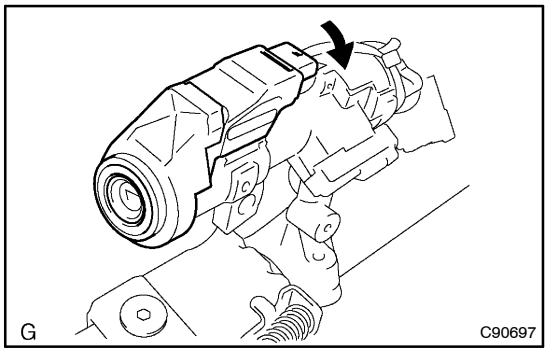
(a) Make sure that the ignition switch lock cylinder assy is at the ACC position.

(b) Install the ignition switch lock cylinder assy.

37. INSPECT STEERING LOCK OPERATION

(a) Check that the steering lock mechanism is activated when removing the key.

(b) Check that the steering lock mechanism is deactivated when inserting the key and turning it to ACC position.



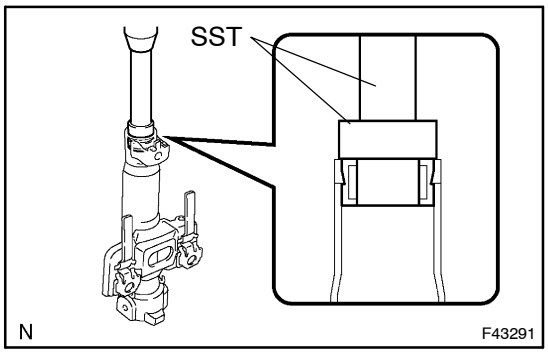
38. INSTALL TRANSPONDER KEY AMPLIFIER

NOTICE:

Take care not to push the amplifier up with excessive force to prevent it from being damaged.

(a) Align the key cylinder lamp assy with the installation position of the upper bracket with the amplifier inclined.

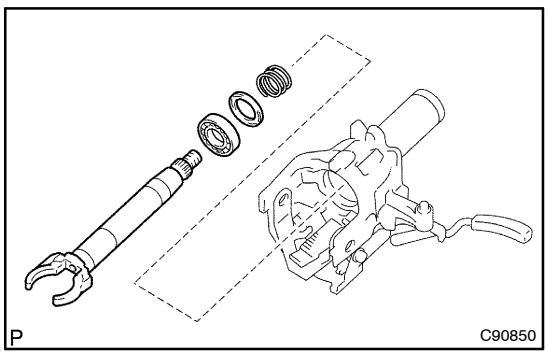
(b) Push up the key cylinder lamp assy and connect it to the upper bracket.



39. INSTALL STEERING MAIN SHAFT BEARING (TILT STEERING)

(a) Using SST and a hammer, install the steering main shaft bearing to the steering column tube lower.

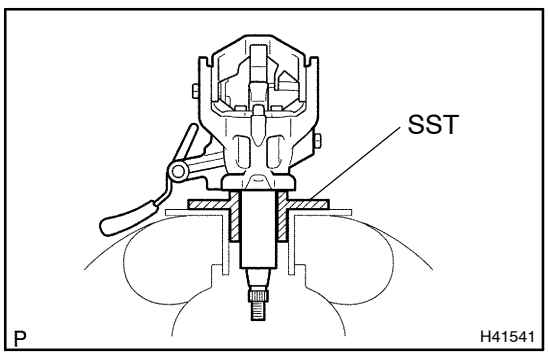
SST 09950–60010 (09951–00340), 09950–70010 (09951–07150)



40. INSTALL STEERING MAIN SHAFT ASSY

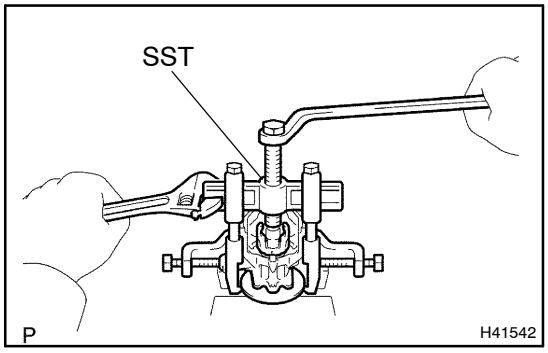
(a) Install the compression spring, bearing thrust collar and bearing to the No.1 main shaft.

(b) Temporarily install the steering column tube sub–assy upper to the No.1 main shaft.



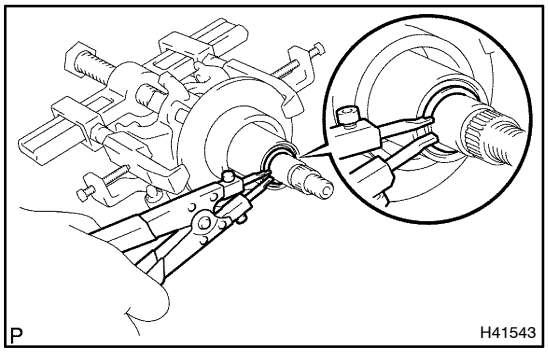
(c) Secure the No.1 main shaft with the steering column tube sub–assy upper and SST in a vise.

SST 09316–60011 (09316–00051)

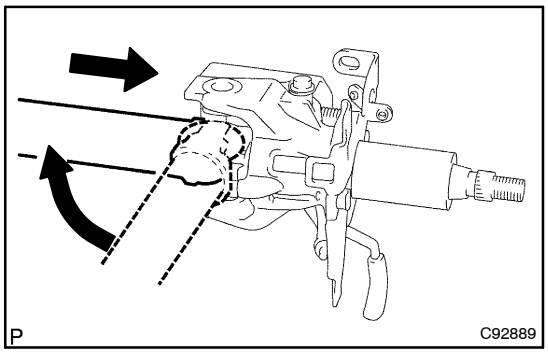


(d) Using SST, compress the spring of the steering column tube sub–assy upper.
SST 09950–40011 (09951–04010, 09952–04010, 09953–04020, 09954–04010, 09955–04061, 09958–04011)

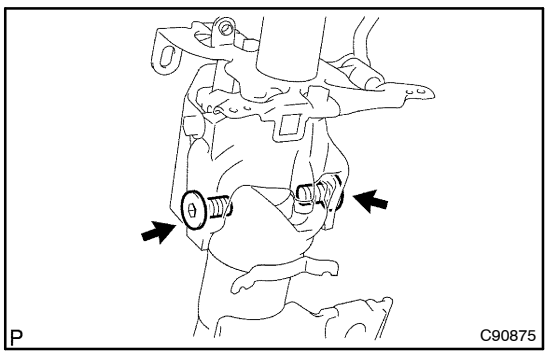
NOTICE:
Do not overtighten the SST.



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

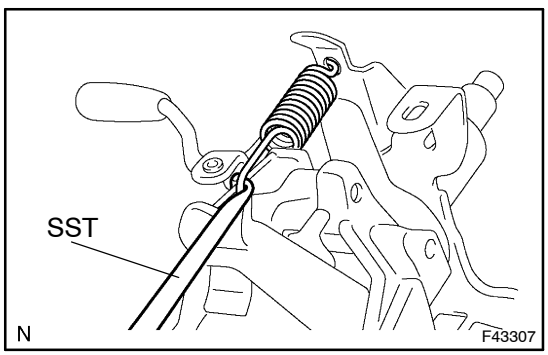


(f) Assemble the No.1 main shaft with the steering column tube sub–assy upper and No.2 main shaft sub–assy.



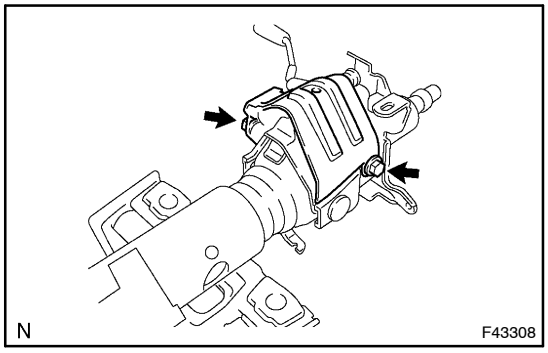
(g) Install the main shaft with the steering column tube sub–assy upper and steering main shaft bearing sheet to the column tube.

(h) Using a hexagon wrench (6 mm), install the 2 tilt steering bolts.
Torque: 20 N·m (204 kgf·cm, 15 ft·lbf)

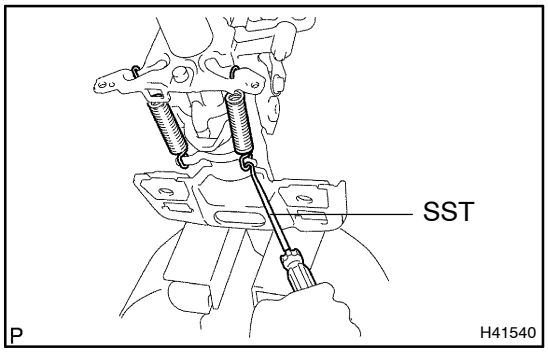


(i) Install the turn signal bracket with the 2 bolts.
Torque: 5.7 N·m (58 kgf·cm, 50 in.·lbf)

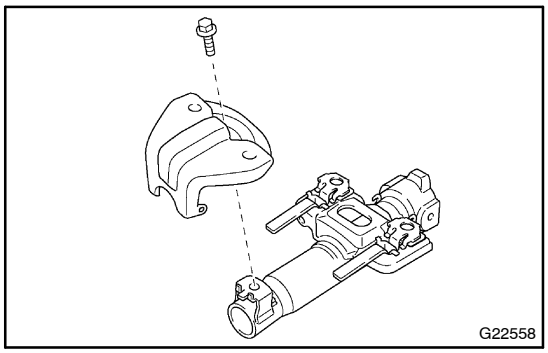
(j) Using SST, install the tension spring.
SST 09921–00010



(k) Install the steering column protector with the 2 bolts.
Torque: 6 N·m (60 kgf·cm, 52 in.·lbf)

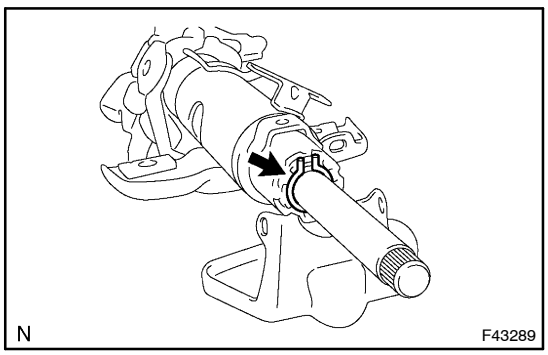


(l) Using SST, install the 2 tension springs.
SST 09921–00010



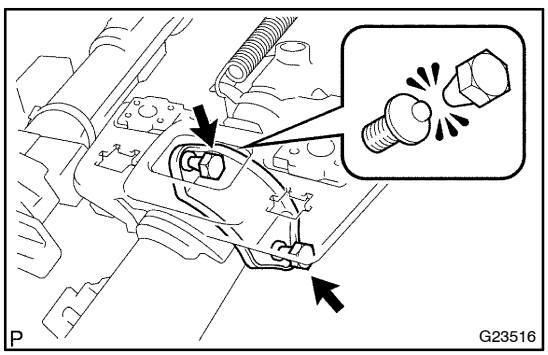
41. INSTALL TILT STEERING SUPPORT SUB–ASSY

(a) Install the tilt steering support sub–assy to the steering column tube sub–assy with the bolt.
Torque: 15 N·m (150 kgf·cm, 11 ft·lbf)



42. INSTALL STEERING COLUMN NO.1 RING (TILT & TELESCOPIC STEERING)

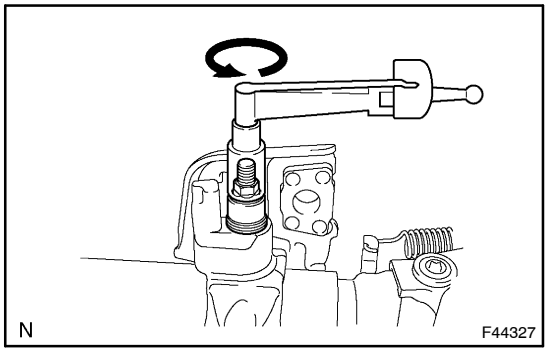
(a) Install the steering column No.1 ring to the steering main shaft.



43. INSTALL STEERING COLUMN BRACKET ASSY UPPER (TILT & TELESCOPIC STEERING)

(a) Temporarily install the steering column bracket assy upper and steering column upper clump with 2 new tapered–head bolts.

(b) Tighten the 2 tapered–head bolts until the bolt heads break off.

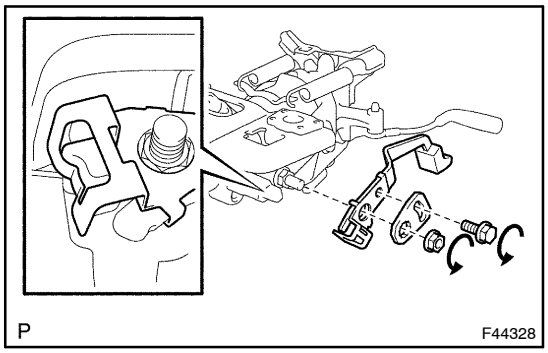


44. INSTALL STEERING TELESCOPIC LEVER (TILT & TELESCOPIC STEERING)

(a) Make the telescopic mechanism most extended condition.

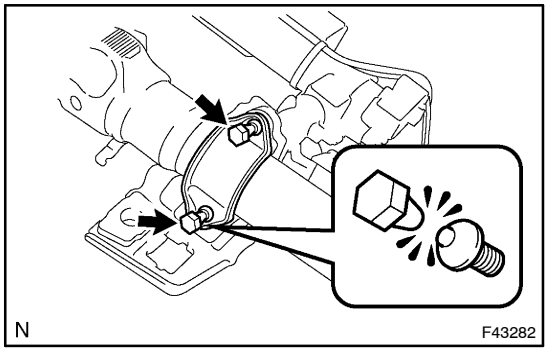
(b) After tightening the telescopic lever bolt, perform the loosening procedure at least 5 times to stabilize.
Torque:
Tighten: 20 N·m (205 kgf·cm, 15 ft·lbf)

(c) Fix the telescopic lever bolt.
Torque: 13 N·m (130 kgf·cm, 9 ft·lbf)



(d) Install the telescopic lever and telescopic steering support reinforce on the position where the telescopic locks.

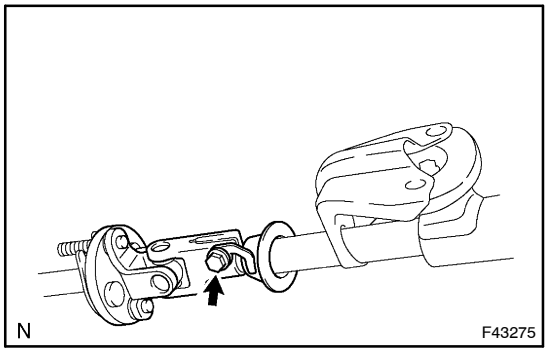
(e) Fix the telescopic lever to the steering column assy with a inverse nut.
Torque:
Inverse nut: 23 N·m (240 kgf·cm, 17 ft·lbf)
Inverse bolt: 5 N·m (50 kgf·cm, 44 in.·lbf)



45. INSTALL STEERING COLUMN BRACKET ASSY UPPER (TILT STEERING)

(a) Temporarily install the steering column bracket assy upper and steering column upper clump with 2 new tapered–head bolts.

(b) Tighten the 2 tapered–head bolts until the bolt heads break off.



46. INSTALL STEERING INTERMEDIATE SHAFT ASSY

(a) Install the steering intermediate shaft assy and thrust stopper to the steering column assy with the bolt.
Torque: 36 N·m (370 kgf·cm, 27 ft·lbf)

47. INSTALL STEERING COLUMN ASSY

(a) Install the steering column assy with the steering intermediate shaft assy with the 4 steering column set nuts.
Torque: 26 N·m (270 kgf·cm, 20 ft·lbf)

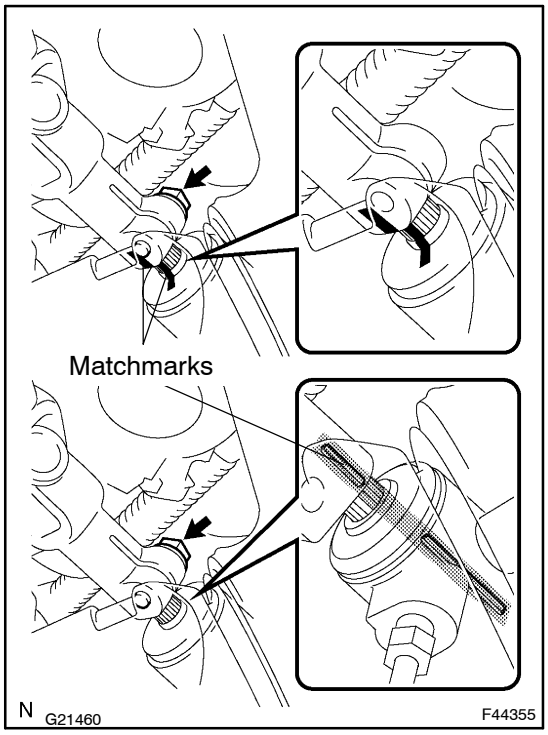
(b) Connect the wire harness to the steering column assy.

(c) Connect each of the connectors to the steering column assy.

48. INSTALL STEERING COLUMN HOLE COVER

(a) Install the steering column hole cover with the 4 clips.

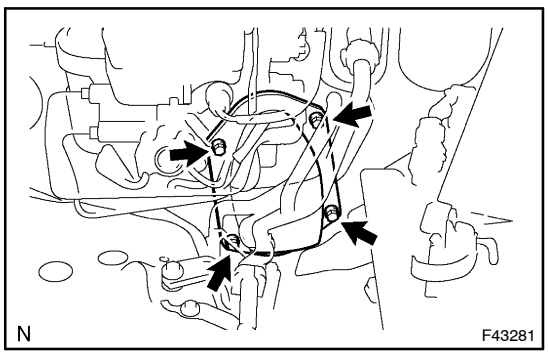
(b) Install the heater to register duct to the heater unit.



49. INSTALL STEERING INTERMEDIATE SHAFT NO.2

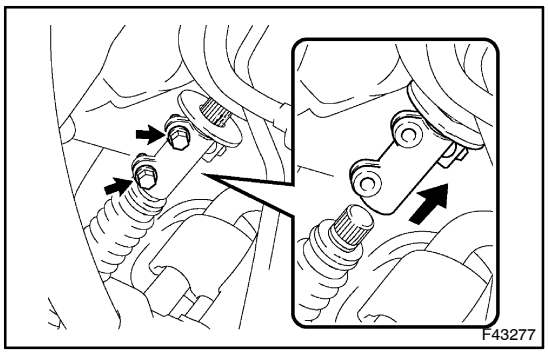
(a) Install the steering intermediate shaft sub–assy No.2 to the steering gear box with the bolt.
Torque: 36 N·m (370 kgf·cm, 27 ft·lbf)

HINT:
When replacing the gear box with a new one, be sure to align the matchmarks with the protrusion to install.



50. INSTALL STEERING INTERMEDIATE SHAFT COVER

(a) Install the steering intermediate shaft cover with the 4 bolts.
Torque: 5 N·m (50 kgf·cm, 44 in.·lbf)



51. INSTALL STEERING SLIDING YOKE

(a) Install the steering sliding yoke to the steering column assy and slide it upward.

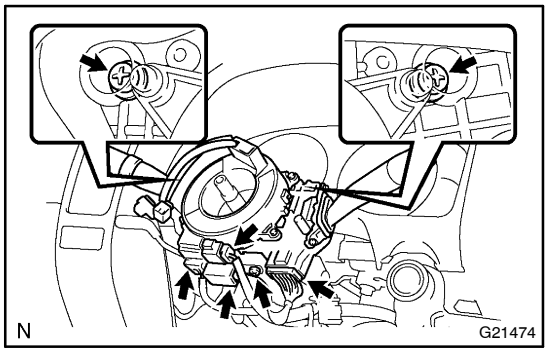
(b) Install the steering sliding yoke to the intermediate shaft sub–assy No.2 with the 2 bolts.
Torque: 36 N·m (370 kgf·cm, 27 ft·lbf)

52. INSTALL ENGINE UNDER COVER ASSY REAR

(a) Install the engine under cover assy rear with the 4 bolts.
Torque: 29 N·m (300 kgf·cm, 22 ft·lbf)

53. INSTALL ENGINE UNDER COVER SUB–ASSY NO.1

(a) Install the engine under cover sub–assy No.1 with the 4 bolts.
Torque: 29 N·m (300 kgf·cm, 22 ft·lbf)

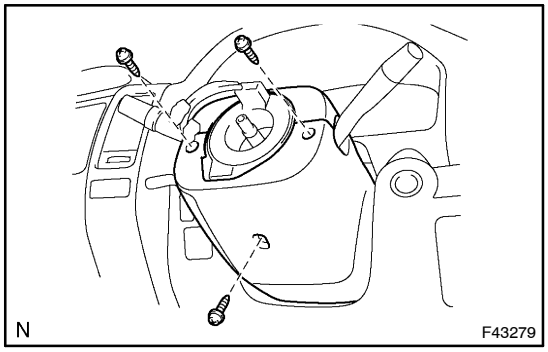


54. INSTALL TURN SIGNAL SWITCH W/SPIRAL CABLE ASSY

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

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

(d) Install the turn signal switch w/spiral cable assy.
(e) Connect the 3 connectors to the turn signal switch assy.
(f) Connect the 2 connectors to the spiral cable assy.



55. INSTALL STEERING COLUMN COVER

(a) Install the steering column cover upper and lower with the 3 screws.

56. INSTALL INSTRUMENT PANEL FINISH LOWER PANEL RH (See page 71–13)

57. INSTALL COWL SIDE TRIM BOARD RH

58. INSTALL FRONT FLOOR FOOTREST

59. INSTALL FRONT DOOR SCUFF PLATE RH

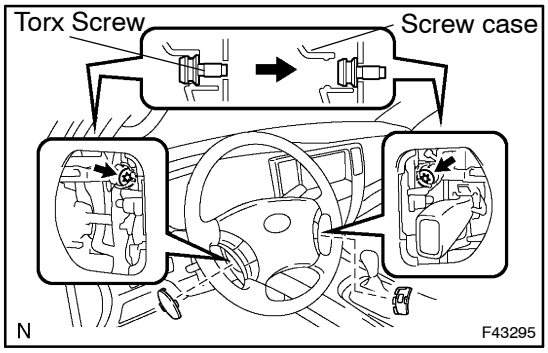
60. INSTALL STEERING WHEEL ASSY

(a) Align the matchmarks on the steering wheel and main shaft assy.
(b) Install the steering set nut.
Torque: 50 N·m (510 kgf·cm, 37 ft·lbf)
(c) Connect the connector.

61. INSTALL HORN BUTTON ASSY

NOTICE:

- **Never use airbag parts from another vehicle. When replacing parts, replace with new ones.**
- **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 horn ground harness to the horn button assy.

(b) Connect the airbag connector.

(c) Install the horn button assy after confirming that the circumference groove of torx screw is caught on the screw case.

(d) Using a torx socket wrench (Torx socket wrench (T= 30)), torque the 2 screws.

Torque: 8.8 N·m (90 kgf·cm, 78 in.·lbf)

62. INSTALL STEERING WHEEL COVER LOWER NO.2

63. INSTALL STEERING WHEEL COVER LOWER NO.3

64. CHECK FRONT WHEELS FACING STRAIGHT AHEAD

65. CONNECT BATTERY NEGATIVE TERMINAL

66. INSPECT SRS WARNING LIGHT (See page 05–1122)