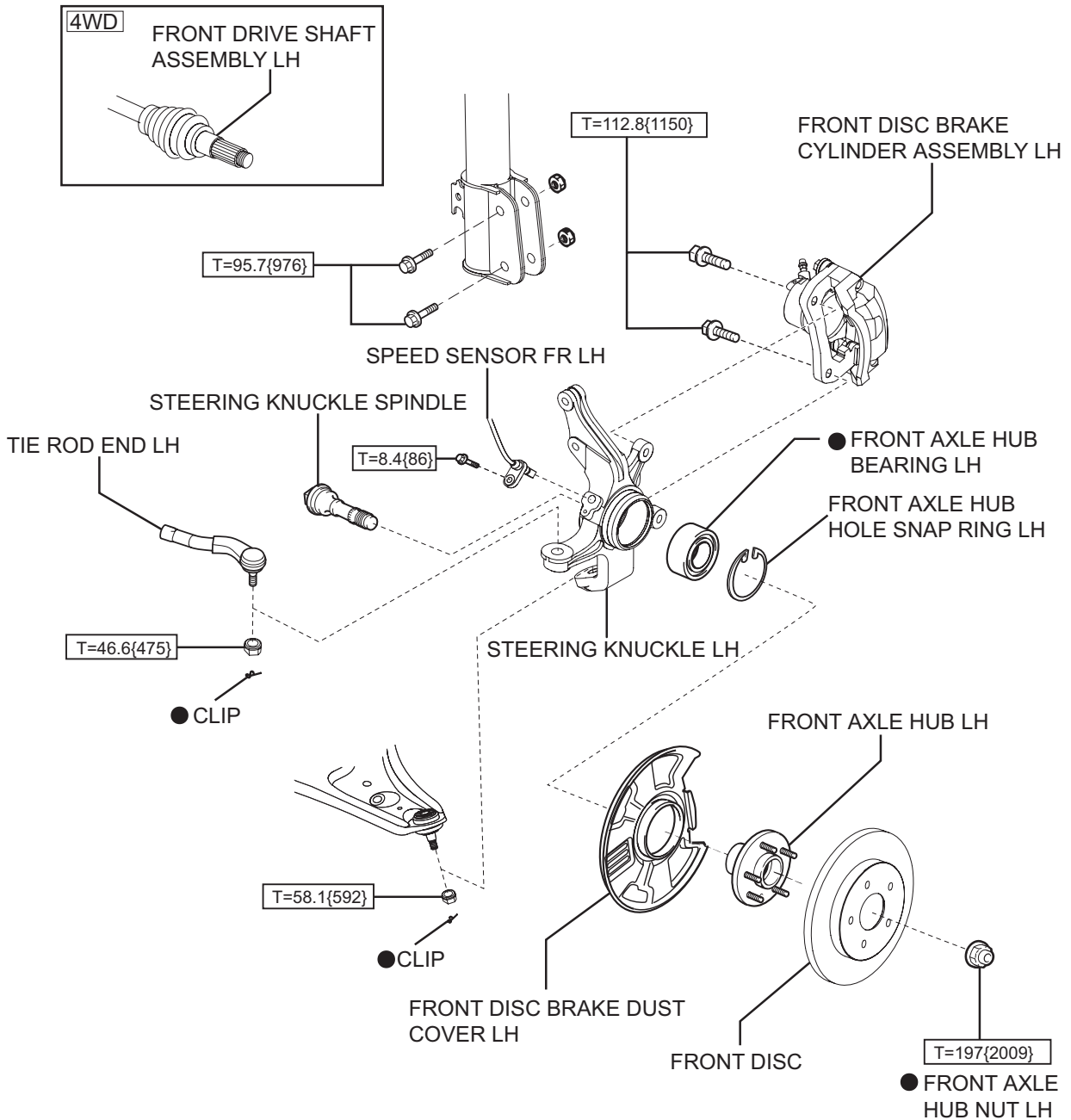


STEERING KNUCKLE LH

COMPONENTS



● NON-REUSEABLE PART TIGHTENING TORQUE [N*m{kgf*cm}]

C140816J01

AH



REMOVAL

1. REMOVE FRONT TIRE
2. DISCONNECT SPEED SENSOR FR LH
3. DISCONNECT FRONT DISC BRAKE CYLINDER ASSEMBLY LH
(See page EM-46)

4. REMOVE FRONT DISC

5. INSPECT FRONT AXLE HUB BEARING LH

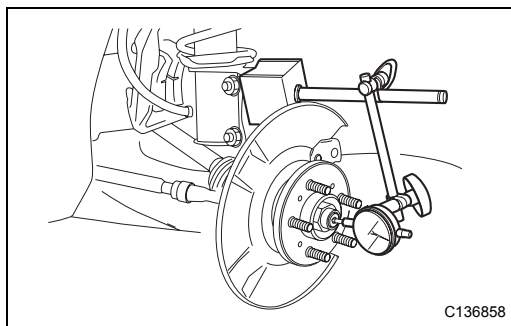
- (a) Set the dial indicator to the edge of the drive shaft, and check the looseness in the axial direction of the bearing.

Maximum limit:

0.05 mm

NOTICE:

If it exceeds the maximum limit, replace the axle hub and radial ball bearing.



6. INSPECT FRONT AXLE RUNOUT

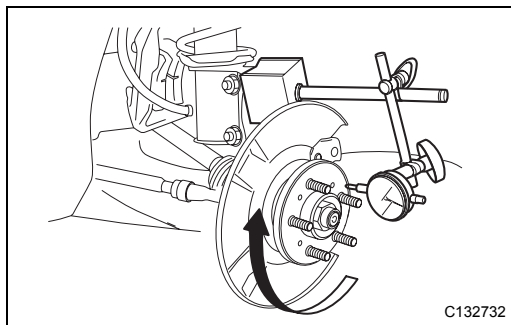
- (a) Set the dial indicator to the periphery of the axle hub, and inspect the axle hub by turning it.

Maximum limit:

0.05 mm

NOTICE:

If it exceeds the maximum limit, replace the axle hub and radial ball bearing.



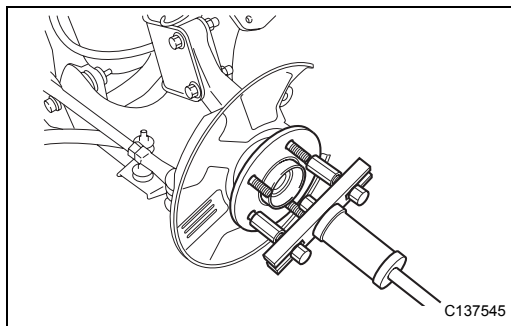
7. REMOVE FRONT AXLE HUB NUT LH (for 4WD) (See page DS-5)

8. REMOVE FRONT AXLE HUB LH (for 4WD)

SST 09520-00031, 09950-97201

- (a) Using the SST, remove the front axle hub LH.

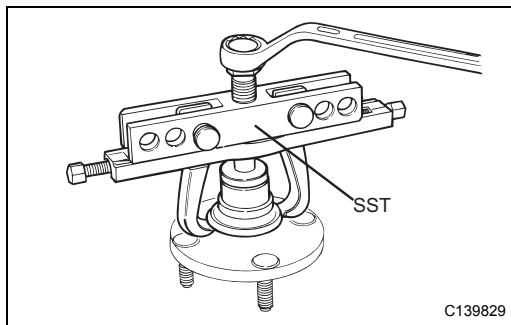
SST 09520-00031

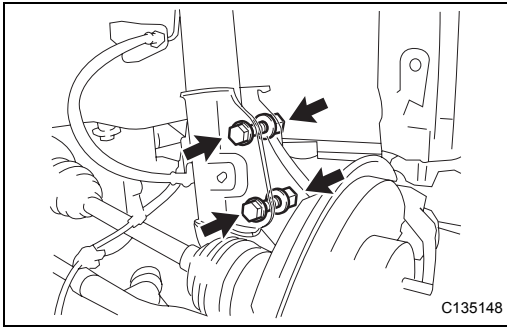


AH

- (b) Using the SST, remove the hub bearing inner race (outer side) from the axle hub.

9. REMOVE TIE ROD END LH (for 4WD) (See page DS-5)





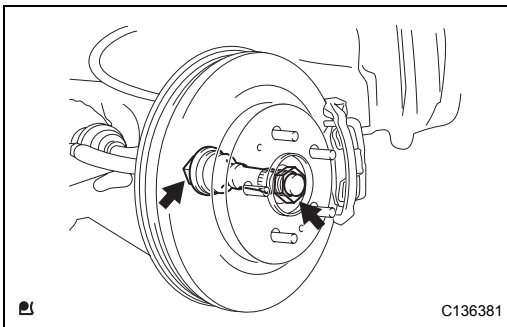
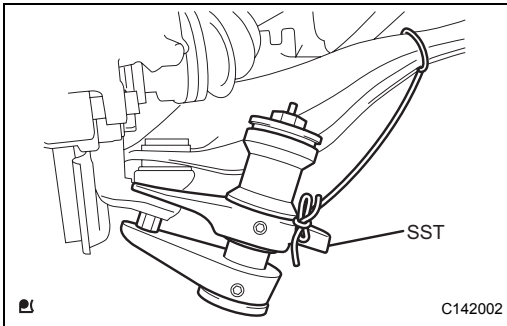
10. REMOVE FRONT AXLE ASSEMBLY LH

- (a) Remove the 2 bolts and the 2 nuts of the shock absorber assembly.
- (b) Push the front axle assembly towards the outside of the vehicle, and remove the front drive shaft assembly from the front axle assembly.

NOTICE:

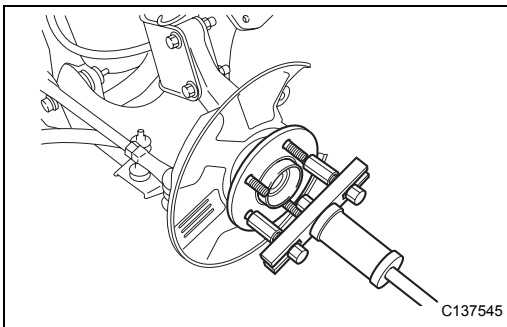
- Do not push the front axle assembly more than necessary.
 - Be careful not to damage the drive shaft outboard joint boot.
 - Be careful not to deform the speed sensor harness clamp.
 - Be careful not to damage the speed sensor rotor.
 - Hang the drive shaft assembly with a piece of string or similar.
- (c) Remove the clip and nut of the suspension lower arm ball joint.
 - (d) Using the SST, remove the front axle assembly LH from the lower arm.

SST 09628-00011



11. REMOVE STEERING KNUCKLE SPINDLE (for 2WD)

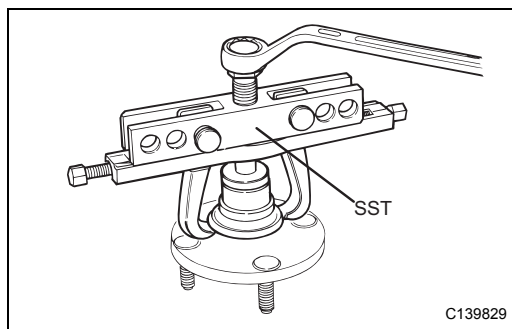
- (a) Secure the steering knuckle spindle from behind, and remove the front axle hub nut LH.



12. REMOVE FRONT AXLE HUB LH (for 2WD)

- (a) Using the SST, remove the front axle hub LH.

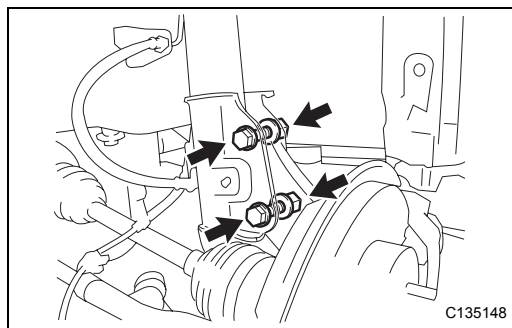
SST 09520-00031



- (b) Using the SST, remove the hub bearing inner race (outer side) from the axle hub.

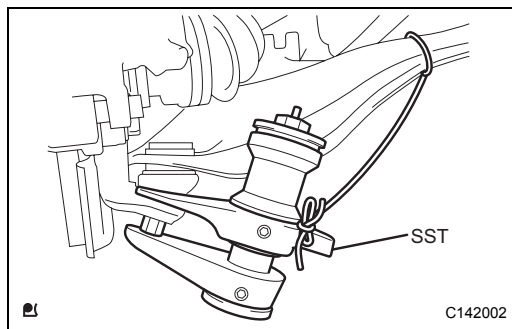
SST 09950-40011

13. REMOVE TIE ROD END LH (for 2WD) (See page DS-5)



14. REMOVE FRONT AXLE ASSEMBLY LH (for 2WD)

- (a) Remove the 2 bolts and the 2 nuts of the shock absorber assembly.
 (b) Remove the clip and nut of the suspension lower arm ball joint.



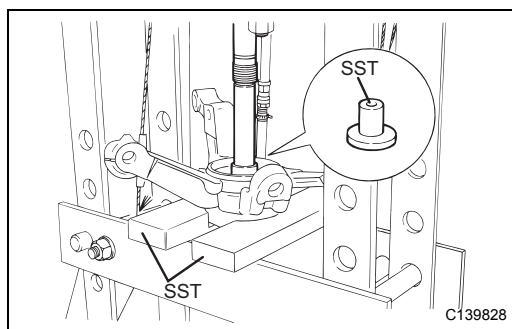
- (c) Using the SST, remove the front axle assembly LH from the lower arm.

SST 09628-00011

15. REMOVE FRONT DISC BRAKE DUST COVER LH

16. REMOVE FRONT AXLE HUB HOLE SNAP RING LH

- (a) Remove the front axle hub hole snap ring LH.



17. REMOVE FRONT AXLE HUB BEARING LH

- (a) Using the SST and a press, remove the bearing from the steering knuckle.

SST 09550-10012 (09554-10010)

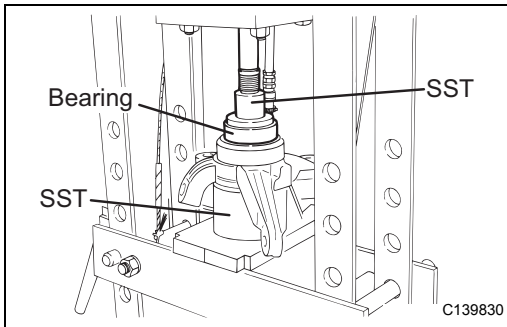
NOTICE:

- Check that the SST is positioned in the center of the bearing.
- Remove the bearing slowly and carefully.

INSTALLATION

1. INSTALL FRONT AXLE HUB BEARING LH

SST 09506-87302, 09550-10012 (09554-10010)



- (a) Using the SST and a press, press-fit a new bearing into the steering knuckle.

NOTICE:

- Do not remove the inner race because the oil seal is built-into the axle hub bearing.
- If the inner race has been removed from a bearing, do not re-use the bearing.
- Do not wipe the grease off from a new bearing.
- Press-fit the bearing in the direction that allows the inside of the sensor encoder to face the brown side of the oil seal.
- Keep the magnetic rotor side away from a magnet.

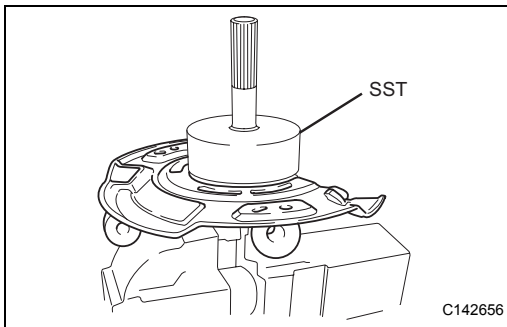
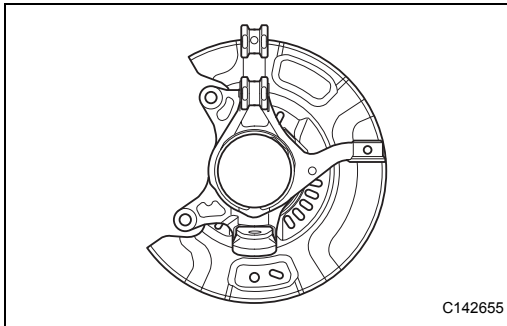
2. INSTALL FRONT AXLE HUB WHEEL SNAP RING LH

- (a) Install the front axle hub wheel snap ring LH.

3. INSTALL FRONT DISC BRAKE DUST COVER LH

SST 09506-87302, 09718-87702

- (a) Install a new brake dust cover to the steering knuckle.



- (b) Using the SST and a hammer, install the brake dust cover.

NOTICE:

- By gradually sliding the SST, uniformly press-fit it.
- Securely set it in the press-fit seat.

4. INSTALL FRONT AXLE HUB LH

SST 09550-10012 (09554-10010)

- (a) Using the SST and a press, press-fit the axle hub into the steering knuckle.

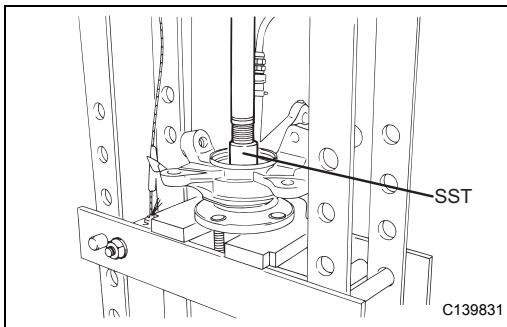
5. INSTALL FRONT AXLE ASSEMBLY LH (for 4WD)

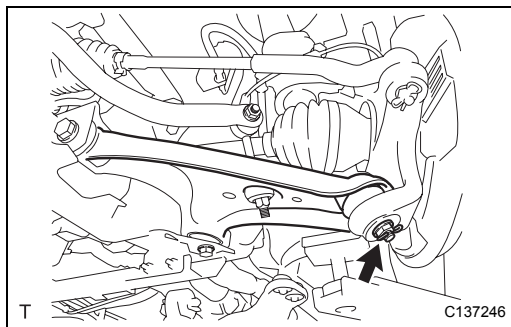
- (a) Install the front assembly to the lower arm and tighten it with a nut.

Torque: 58.1 N*m (592.4 kgf*cm)

NOTICE:

Keep the screws and the tapered portions free of oil or grease.

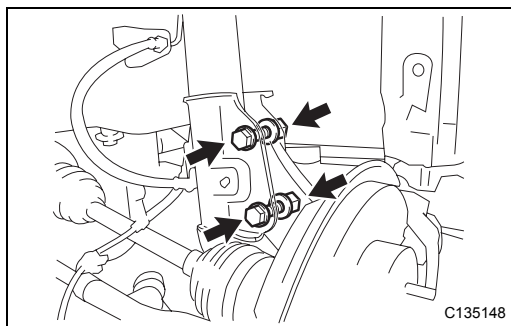




- (b) Install a new clip.
- (c) Push the front axle assembly towards the outside of the vehicle, then align and insert the spline of the drive shaft assembly to the axle assembly.

NOTICE:

- Do not push the axle assembly more than necessary.
- Be careful not to damage the drive shaft outboard joint boot.



- (d) Install the front axle assembly to the shock absorber, then insert the 2 bolts and tighten the 2 nuts.

Torque: 95.7 N*m (976 kgf*cm)

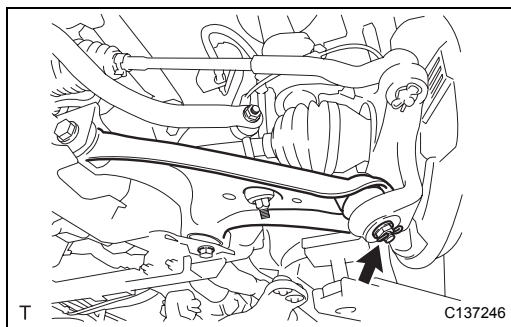
6. INSTALL FRONT AXLE ASSEMBLY LH (for 2WD)

- (a) Install the front assembly to the lower arm and tighten it with a nut.

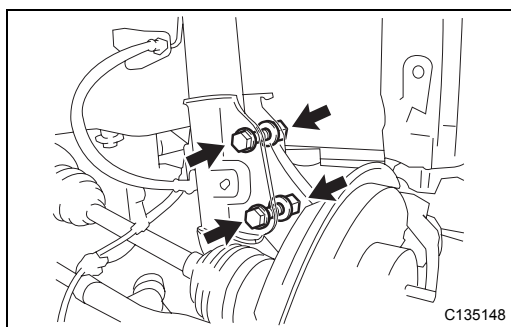
Torque: 58.1 N*m (592.4 kgf*cm)

NOTICE:

Keep the screws and the tapered areas free of oil or grease.



- (b) Install a new clip.



- (c) Install the front axle assembly to the shock absorber, then insert the 2 bolts and tighten the 2 nuts.

Torque: 95.7 N*m (976 kgf*cm)

7. CONNECT TIE ROD END LH

- (a) Connect the tie rod end to the steering knuckle, and tighten it with a nut.

Torque: 46.6 N*m (475 kgf*cm)

NOTICE:

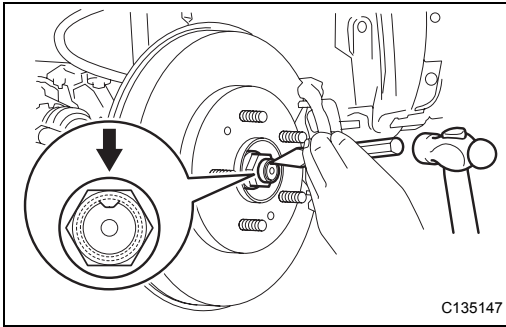
Be careful not to damage the ball joint dust cover.

- (b) Install a new clip.

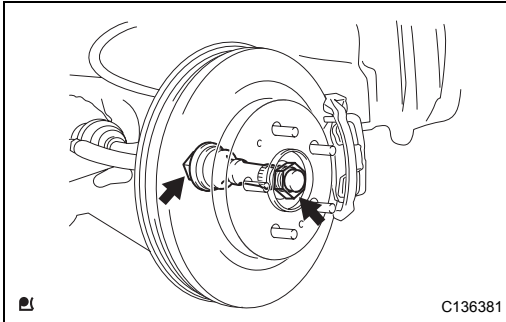
8. INSTALL FRONT AXLE HUB NUT LH

- (a) Install a new front axle hub nut LH.

Torque: 197 N*m (2009 kgf*cm)



- (b) Using a chisel and a hammer, stake the front axle hub nut LH.



9. INSTALL STEERING KNUCKLE SPINDLE (for 2WD)

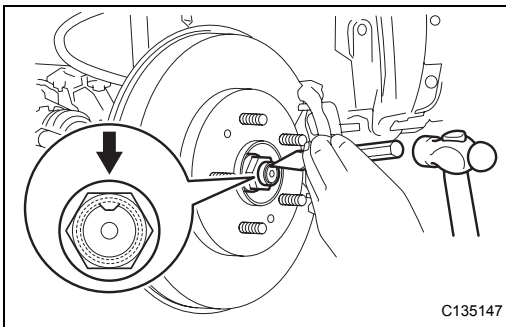
- (a) Secure the steering knuckle spindle from behind, and tighten the hub nut.

NOTICE:

When securing the steering knuckle spindle, do not put the tools on the lower arm or tie rod end.

Torque: 197 N*m (2009 kgf*cm)

Using a chisel and a hammer, stake the front axle hub nut LH.



10. INSPECT LOOSENESS OF FRONT AXLE HUB AND BEARING ASSEMBLY IN THE AXIAL DIRECTION (See page AH-3)

11. INSPECT RUNOUT OF FRONT AXLE HUB AND BEARING ASSEMBLY (See page AH-3)

12. INSTALL FRONT DISC

NOTICE:

Do not allow the disc surface to come into contact with lubricant.

13. INSTALL FRONT DISC BRAKE CYLINDER ASSEMBLY LH (See page EM-65)

14. INSTALL SPEED SENSOR FR LH (See page EM-65)

15. INSTALL FRONT TIRE

Torque: 103 N*m (1050 kgf*cm)

16. ADJUST FRONT WHEEL ALIGNMENT
(See page SP-4)

17. TEST MODE INSPECTION (SPEED SENSOR)

- (a) WITHOUT VSC (See page BC-9)
(b) WITH VSC (See page BC-65)

