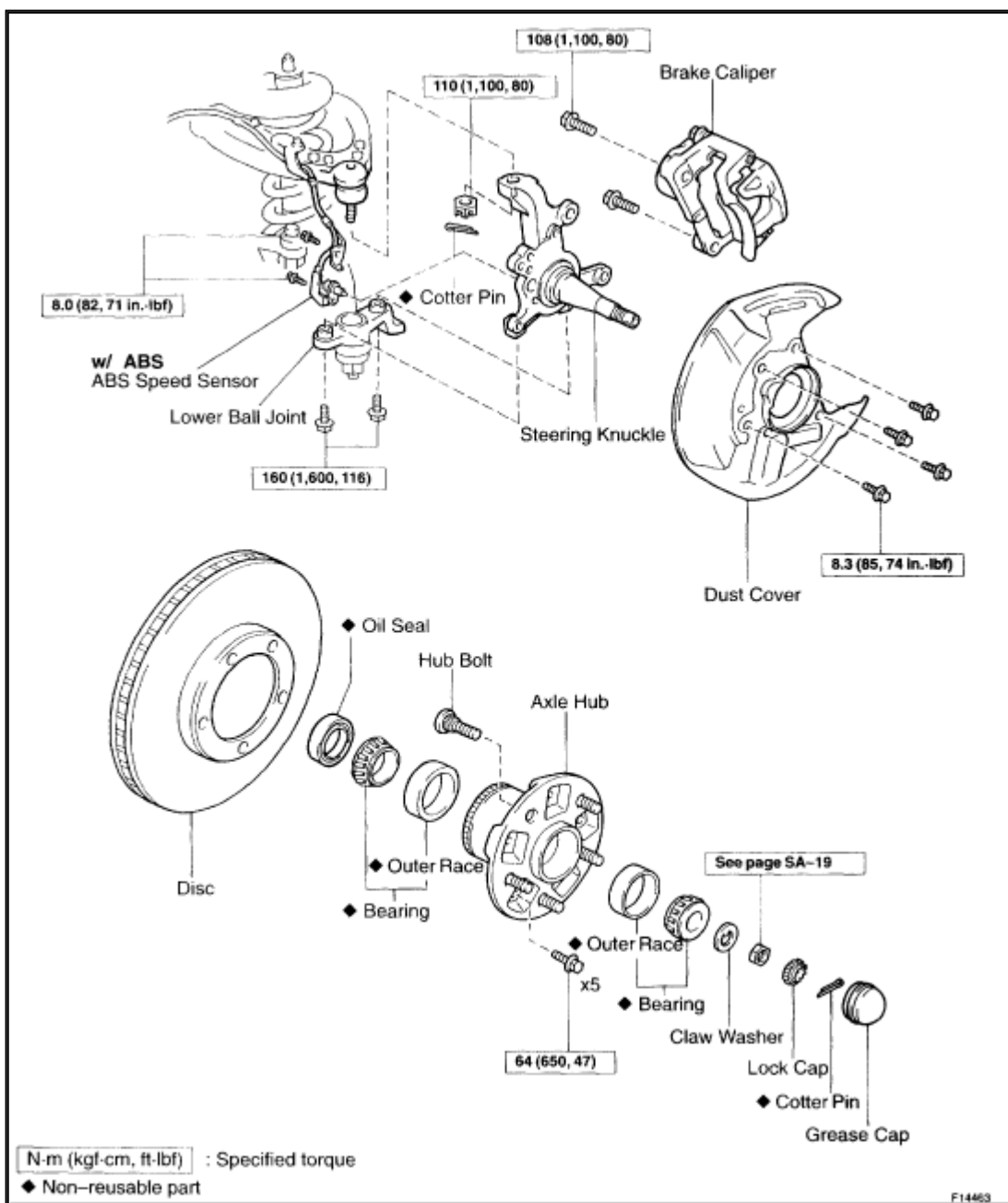


2003 Toyota Truck Tacoma 2WD V6-3.4L (5VZ-FE)

Vehicle Level → Steering and Suspension → Suspension → Wheel Hub → Service and Repair → Removal and Installation ←

Removal and Installation

Notes

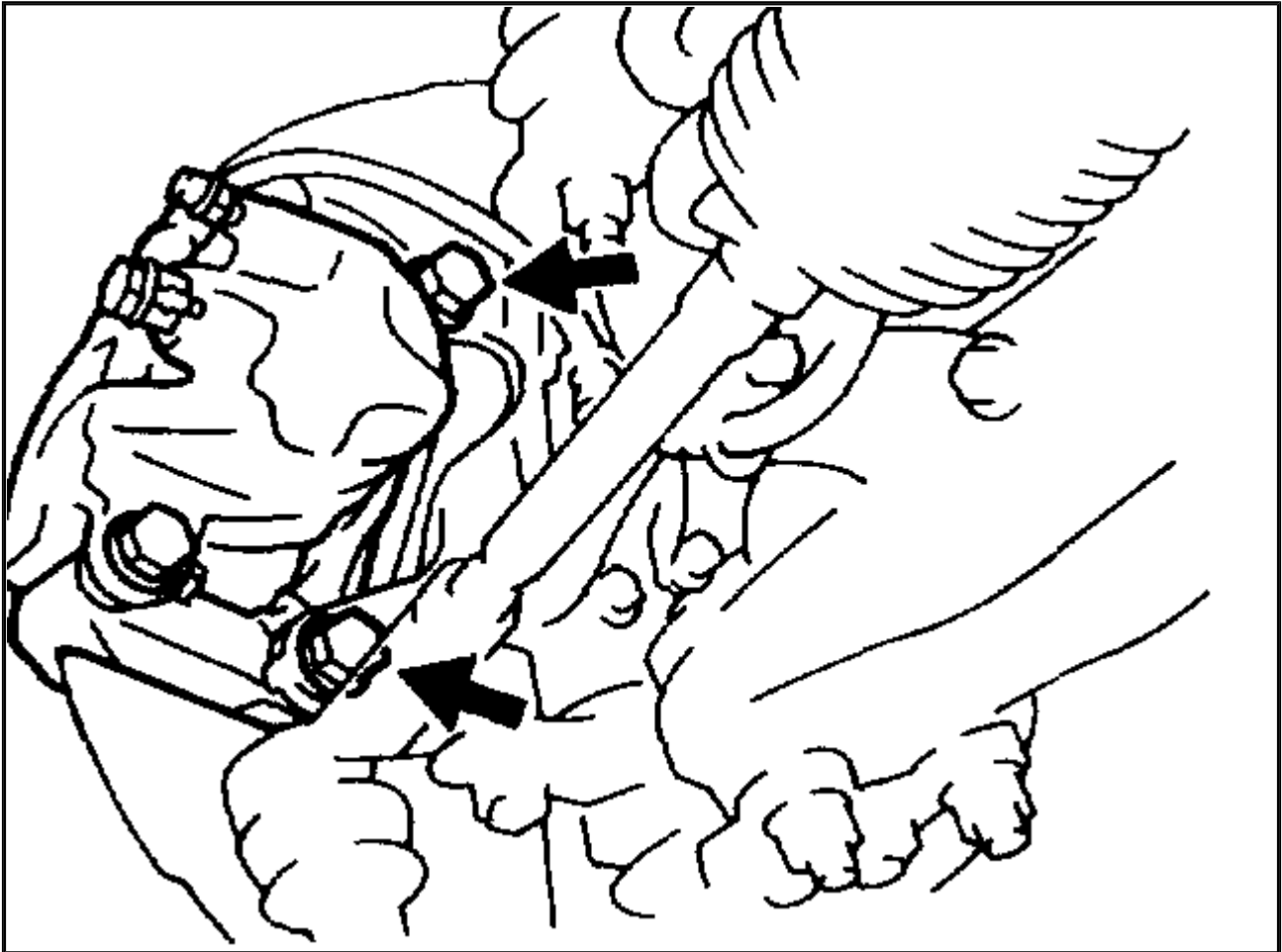


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REMOVAL

1. REMOVE FRONT WHEEL
2. w/ ABS: DISCONNECT ABS SPEED SENSOR AND WIRE HARNESS CLAMP FROM STEERING KNUCKLE Remove the 2 bolts and disconnect the ABS speed sensor and wire harness clamp from the steering knuckle.



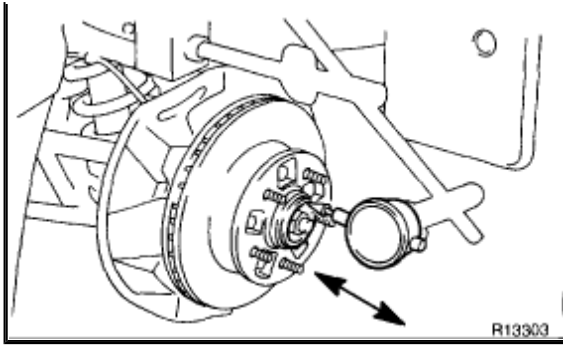
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3. DISCONNECT BRAKE CALIPER

- a. Remove the 2 bolts and brake caliper.
- b. Support the brake caliper securely.



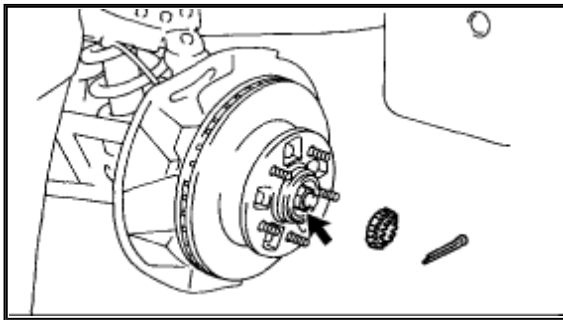


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4. CHECK AXLE HUB BEARING BACKLASH

- a. Using a screwdriver, remove the grease cap.
- b. Using a dial indicator near the center of the axle hub and check the backlash in the bearing shaft direction. Maximum: **0.05 mm (0.0020 inch)** If the backlash exceeds the maximum, replace the axle hub bearing.



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5. REMOVE AXLE HUB WITH DISC

- a. Remove the cotter pin and lock cap.
- b. Using a 30 mm socket wrench, remove the nut.
- c. Remove the claw washer, outer bearing and axle hub with the disc from the steering knuckle. **NOTICE:** Be careful not to drop the outer bearing.

6. REMOVE OIL SEAL AND INNER BEARING

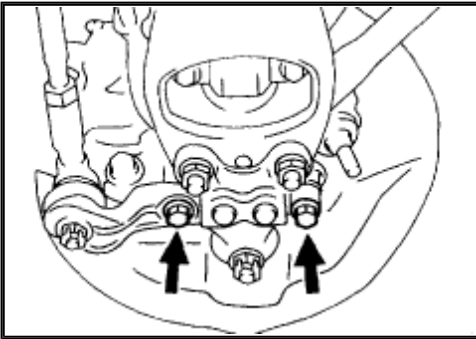
- a. Using a screwdriver, pry out the oil seal. **NOTICE:** Be careful not to damage the ABS speed sensor rotor.
- b. Remove the inner bearing from the axle hub.

7. REMOVE DUST COVER Remove the 4 bolts and dust cover.

8. REMOVE STABILIZER BAR LINK Hold the bolt with a wrench, then remove the nut, 5 retainers, collar, 4 cushions and bolt.

9. REMOVE STEERING KNUCKLE

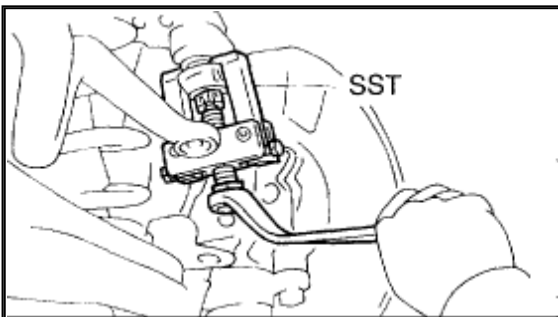
- a. Support the lower suspension arm with a jack.



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- b. Loosen the 2 lower ball joint set bolts.
- c. Remove the cotter pin and loosen the nut.



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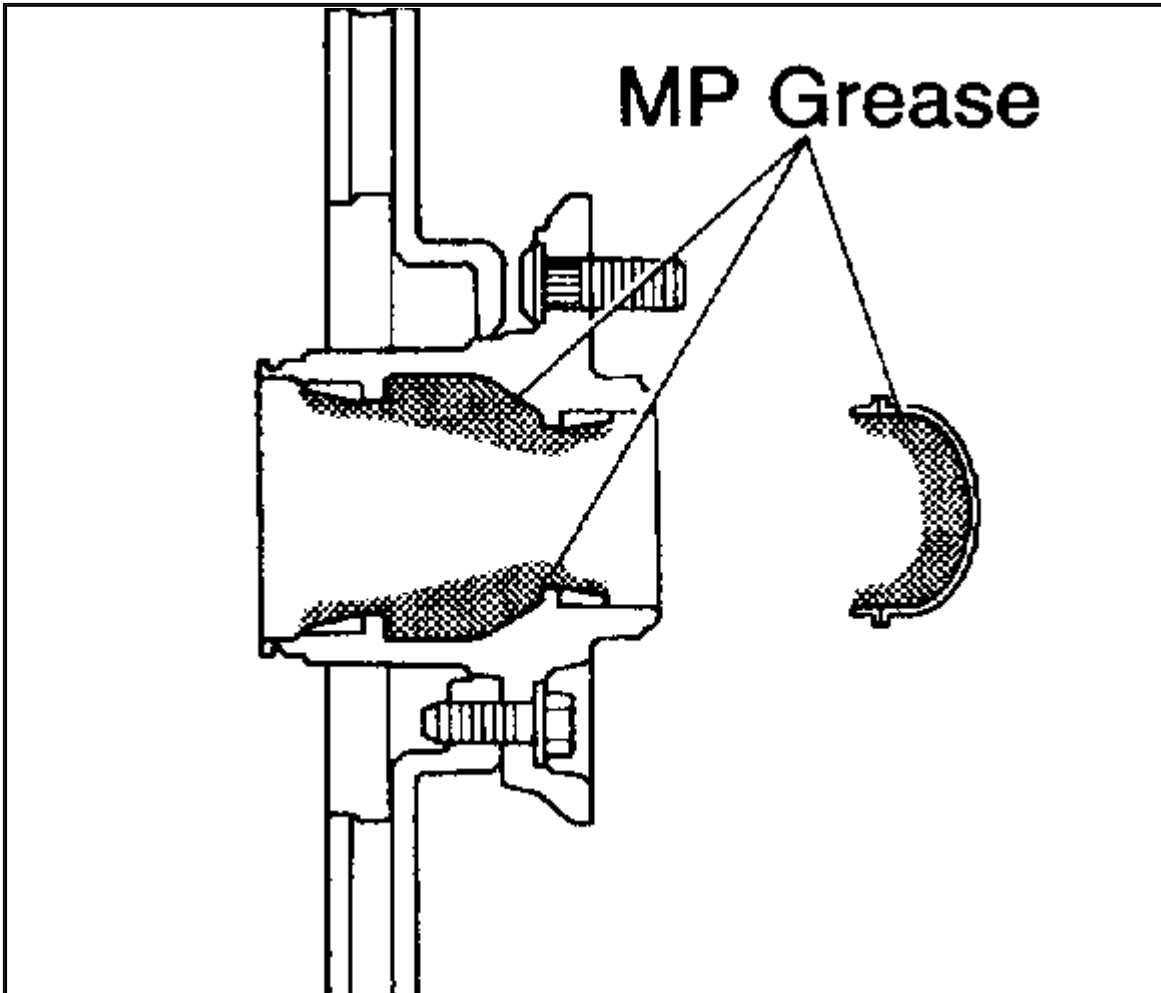
- d. Using SST, disconnect the steering knuckle from the upper ball joint. SST 09628-62011
- e. Remove the 2 lower ball joint set bolts.
- f. Remove the nut and steering knuckle. **NOTICE:** Do not remove the jack.

INSTALLATION

1. INSTALL STEERING KNUCKLE

- a. Support the lower suspension arm with a jack.
- b. Place the steering knuckle to the lower ball joint and temporarily install the 2 bolts.
- c. Push down the upper suspension arm and connect the upper ball joint to the steering knuckle and install the nut. Torque: **110 Nm (1,100 kgf-cm, 80 ft. lbs.)**
- d. Install a new cotter pin. If the holes for the cotter pin are not aligned, tighten the nut further up to **60°**.
- e. Torque the 2 lower ball joint bolts. Torque: **160 Nm (1,600 kgf-cm, 116 ft. lbs.)**

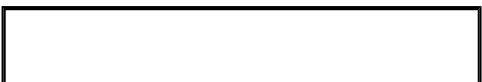
2. INSTALL DUST COVER Install the dust cover with the 4 bolts. Torque: **8.3 Nm (85 kgf-cm, 74 inch lbs.)**
3. INSTALL STABILIZER BAR LINK Install the bolt, 5 retainers, collar, 4 cushions and a new nut.
4. PACK BEARINGS WITH MP GREASE
 - a. Place MP grease in the your palm.
 - b. Pack grease into the bearing, continuing until the grease oozes out from the other side.
 - c. Employ the same manner around the bearing circumference.

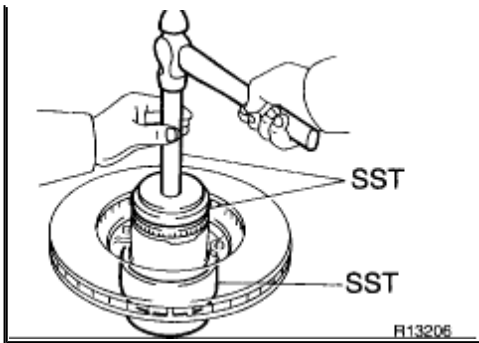


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5. COAT INSIDE OF HUB AND CAP WITH MP GREASE
6. INSTALL INNER BEARING AND OIL SEAL
 - a. Place inner bearing into the axle hub.





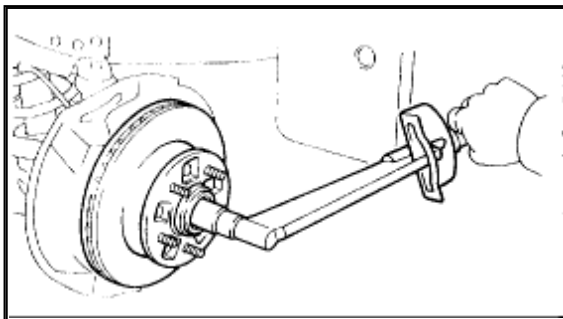
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- b. Using SST and a hammer, install a new oil seal into the axle hub. SST 09527-17011, 09950-60020 (09951-00710), 09950-70010 (09951-07150) **NOTICE:** Be careful not to damage the ABS speed sensor rotor.
- c. Coat the oil seal lip with MP grease.

7. INSTALL AXLE HUB WITH DISC

- a. Place the axle hub on the spindle.
- b. Install a new outer bearing and claw washer.

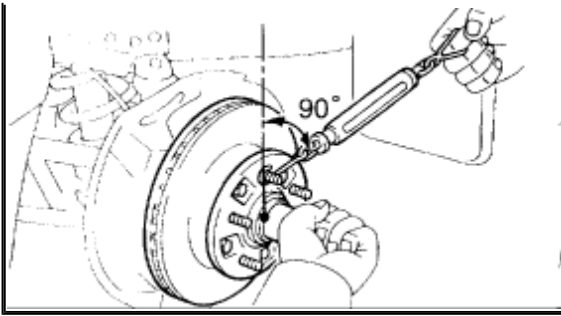
8. ADJUST PRELOAD



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- a. Install and torque the nut. Torque: **34 Nm (350 kgf-cm, 25 ft. lbs.)**
- b. Turn the hub several times to make the bearing more smoothly.
- c. Loosen the nut until it can be turned by hand.

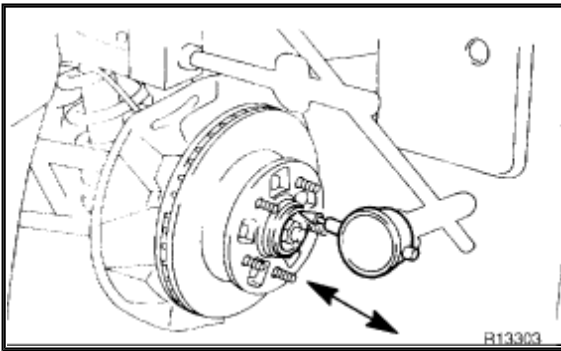




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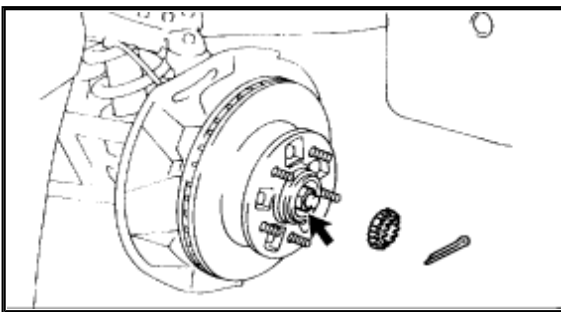
- d. Using a spring tension gauge, measure and make a note down of the frictional force of the oil seal. **HINT:** Make sure to check preload in the direction of rotation.
- e. Tighten the nut until the preload is within the specified value. Preload (at starting): Frictional force plus **6 - 18 N (0.6 - 1.8 kgf, 1.3 - 4.0 lbs.)** **HINT:** Make sure to check preload in the direction of rotation.



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- f. Using a dial indicator near the center of the axle hub and measure the backlash in the bearing shaft direction. Maximum: **0.05 mm (0.0020 inch) or less**

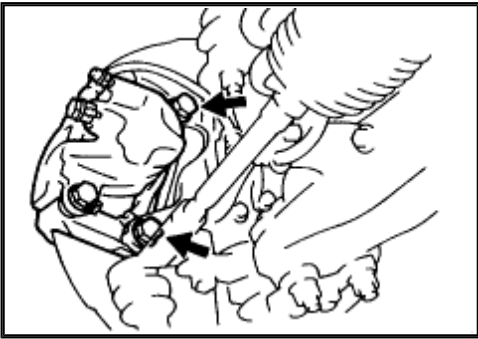


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9. INSTALL LOCK CAP, COTTER PIN AND GREASE CAP

- a. Install the lock cap and a new cotter pin. If the holes for the cotter pin are not aligned, tighten the nut further up to **60°**.
- b. Install the grease cap.

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10. **INSTALL BRAKE CALIPER** Install the brake caliper with the 2 bolts. Torque: **108 Nm (1,100 kgf-cm, 80 ft. lbs.)**
11. **w/ ABS: CONNECT ABS SPEED SENSOR AND WIRE HARNESS CLAMP TO STEERING KNUCKLE** Connect the ABS speed sensor and wire harness clamp with the 2 bolts. Torque: **8.0 Nm (82 kgf-cm, 71 inch lbs.)**
12. **INSTALL FRONT WHEEL** Torque: **110 Nm (1,150 kgf-cm, 83 ft. lbs.)**
13. **DEPRESS BRAKE PEDAL SEVERAL TIMES**
14. **CHECK FRONT WHEEL ALIGNMENT**
15. **w/ ABS: CHECK ABS SPEED SENSOR SIGNAL**