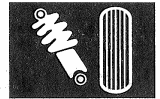
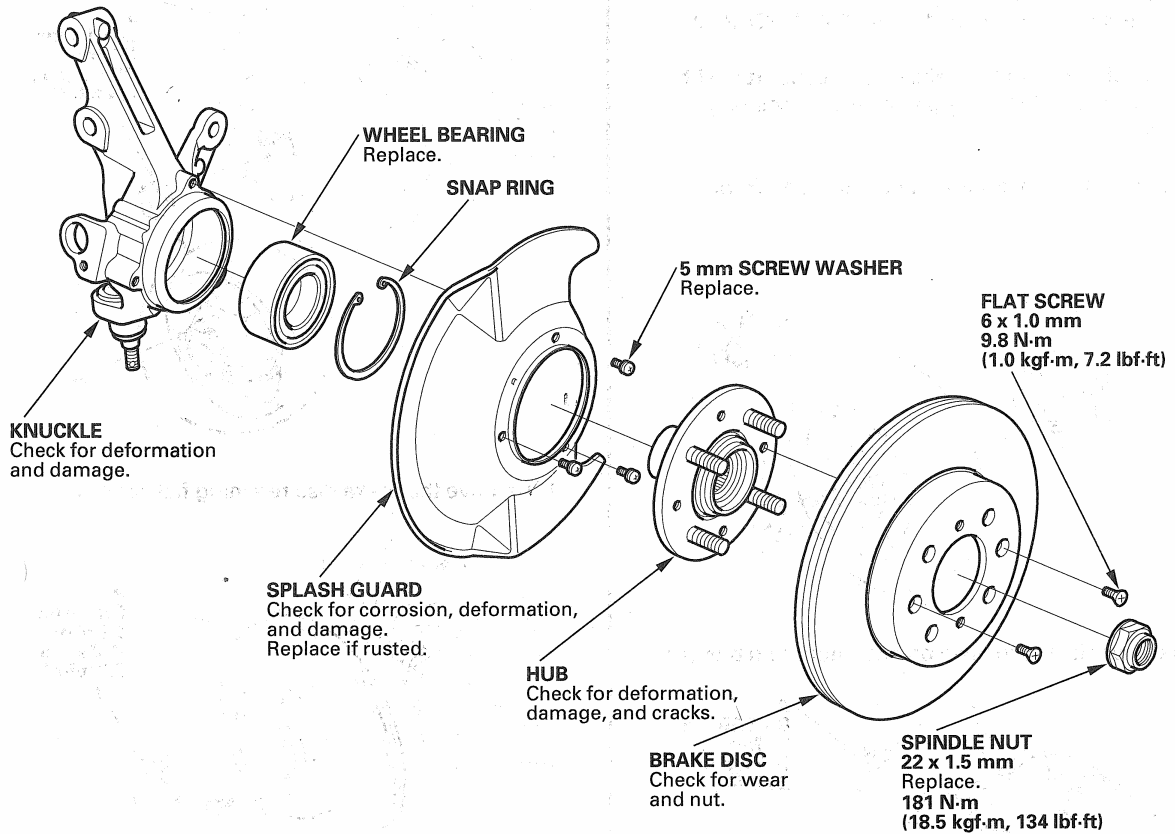


Front Suspension



Knuckle/Hub/Wheel Bearing Replacement

Exploded View



Apply a small amount of engine oil to the seating surface.

(cont'd)

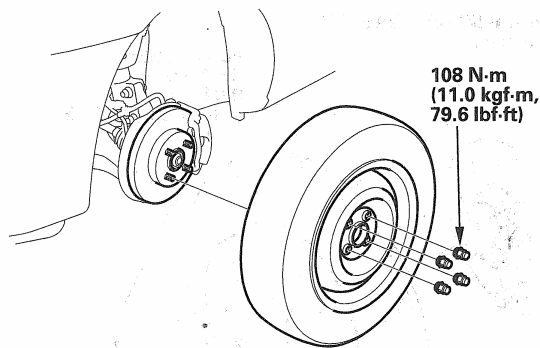
Front Suspension

Knuckle/Hub/Wheel Bearing Replacement (cont'd)

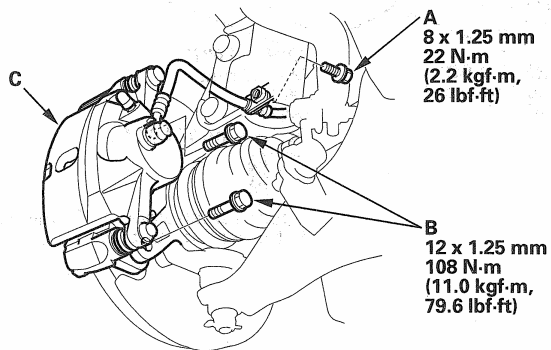
Special Tools Required

- Hub dis/assembly tool, 40 mm 07GAF-SE00100
- Ball joint remover, 28 mm 07MAC-SL00200
- Attachment, 62 x 68 mm 07746-0010500
- Driver 07749-0010000
- Support base 07965-SD90100
- Ball joint thread protector, 12 mm 07AAF-SDAA100

1. Raise the front of the vehicle, and support it with safety stands in the proper locations (see page 1-20).
2. Remove the wheel cap, wheel nuts, and front wheels.

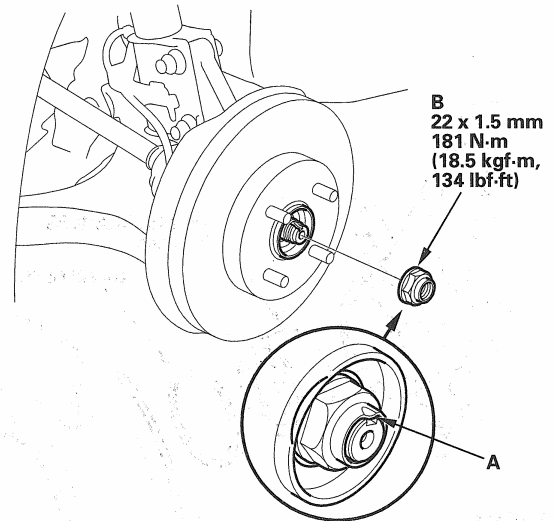


3. Remove the brake hose bracket mounting bolt (A).

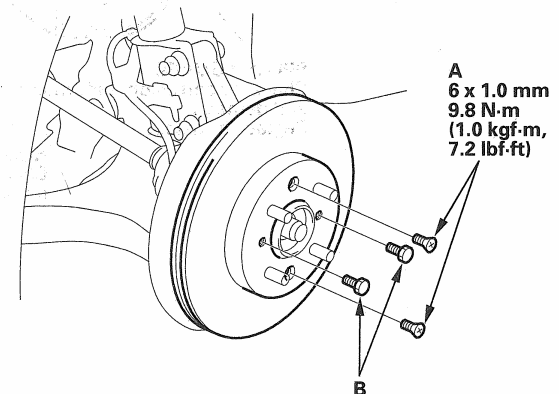


4. Remove the caliper bracket mounting bolts (B), and remove the caliper assembly (C) from the knuckle. To prevent damage to the caliper assembly or brake hose, use a short piece of wire to hang the caliper assembly from the undercarriage. Do not twist the brake hose with force.

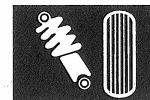
5. Raise the stake (A), and remove the spindle nut (B), then remove and discard the nut.



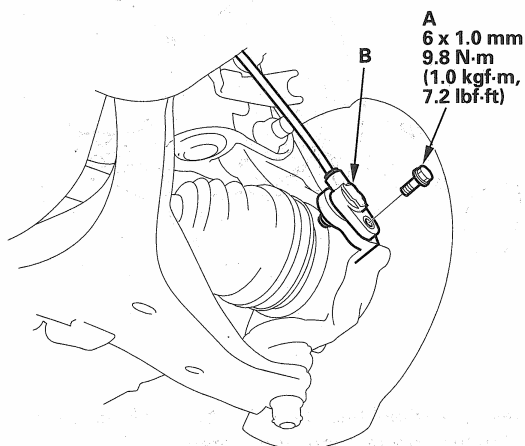
6. Remove the brake disc retaining flat screws (A).



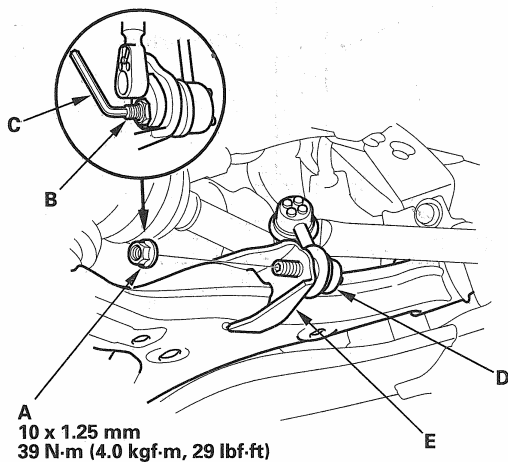
7. Screw two 8 x 1.25 mm bolts (B) into the disc to push it away from the hub. Turn each bolt two turns at a time to prevent cocking the disc excessively.



8. Remove the flange bolt (A) and wheel sensor (B) from the knuckle. Do not disconnect the wheel sensor connector.

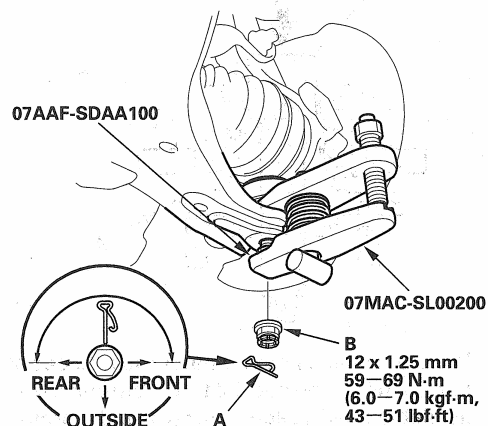


9. Remove the flange nut (A) while holding the joint pin (B) with a hex wrench (C), and disconnect the stabilizer link (D) from the lower arm (E).

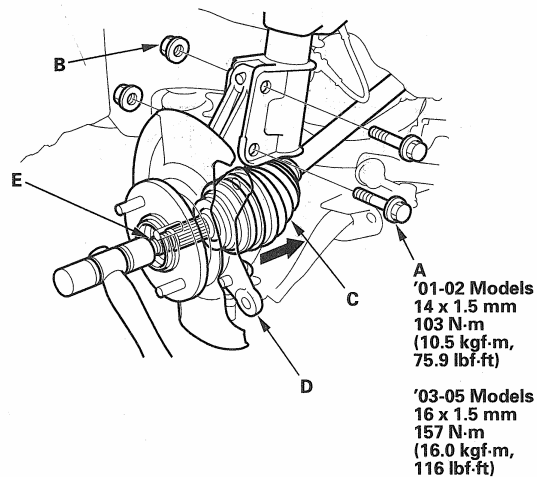


10. Remove the lock pin (A) from the lower arm ball joint, and remove the castle nut (B).

NOTE: During installation, insert the lock pin into the ball joint pin from the inside to the outside of the vehicle. The closed end of the lock pin must be in the range shown.



11. Disconnect the lower arm from the knuckle using the special tools (see page 18-9).
12. Loosen the damper pinch bolts (A) while holding the nuts (B), and remove the bolts and nuts.



13. Remove the driveshaft outboard joint (C) from the knuckle (D) by tapping the driveshaft end (E) with a plastic hammer while pulling the knuckle outward, then remove the knuckle.

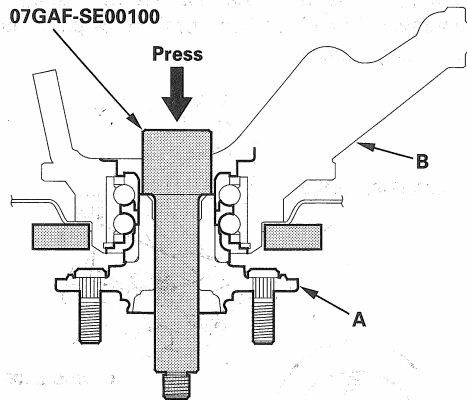
NOTE: Do not pull the driveshaft end outward. The driveshaft joint may come apart.

(cont'd)

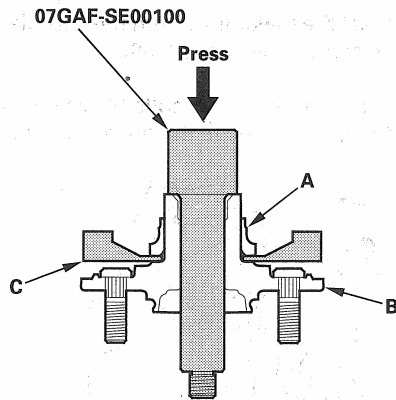
Front Suspension

Knuckle/Hub/Wheel Bearing Replacement (cont'd)

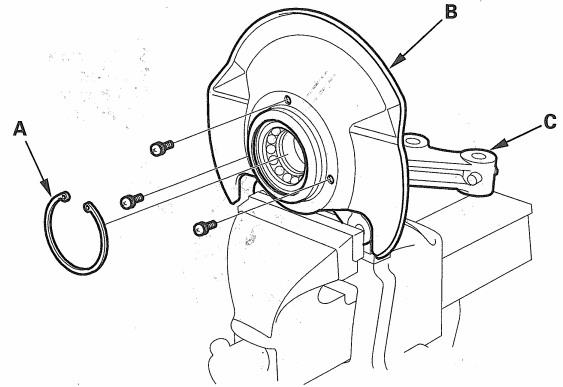
14. Separate the hub (A) from the knuckle (B) using the special tool and a hydraulic press. Be careful not to deform the splash guard. Hold onto the hub to keep it from falling when pressed clear.



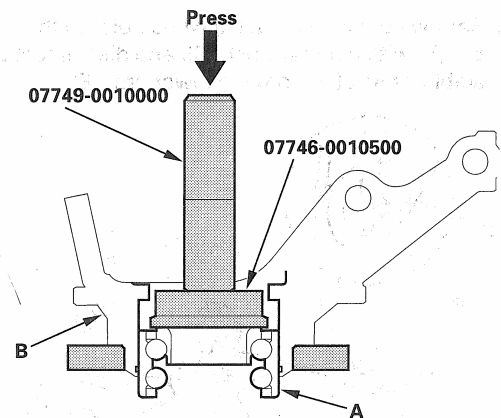
15. Press the wheel bearing inner race (A) out of the hub (B) using the special tool, commercially available bearing separator (C), and a press.

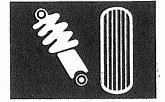


16. Remove the snap ring (A) and the splash guard (B) from the knuckle (C).



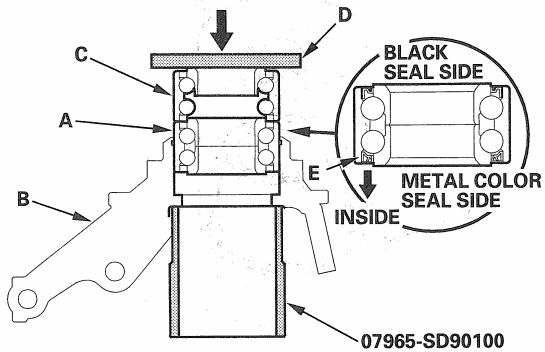
17. Press the wheel bearing (A) out of the knuckle (B) using the special tools and a press.



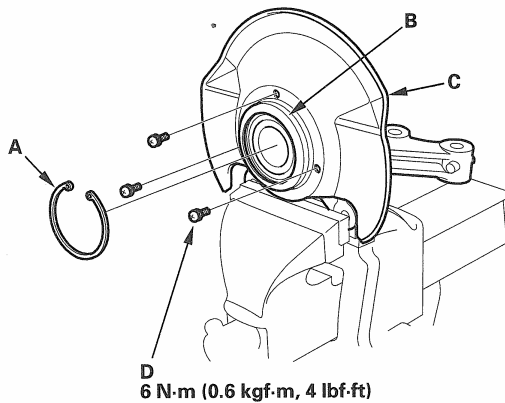


18. Wash the knuckle and hub thoroughly in high flash point solvent before reassembly.

19. Press a new wheel bearing (A) into the knuckle (B) using the old bearing (C), a steel plate (D), the special tool, and a press. Place the wheel bearing on the knuckle with the pack seal side facing (E) (metal color) toward the inside. Be careful not to damage the sleeve of the pack seal.

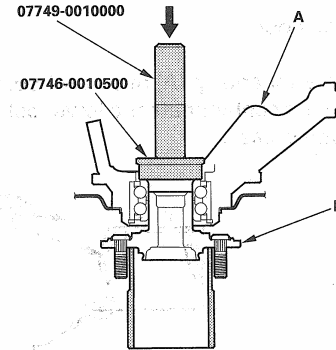


20. Install the snap ring (A) securely in the knuckle (B).



21. Install the splash guard (C), and tighten the screws (D) to the specified torque.

22. Press a new hub unit (A) into the hub (B) using the special tools and a press.



23. Install the knuckle unit in the reverse order of removal, and note these items:

- Be careful not to damage the ball joint boot when installing the knuckle.
- First install the all the components and lightly tighten the bolts and nuts, then raise the suspension to load it with the vehicle's weight before fully tightening to the specified torque value. Do not place the jack against the ball joint pin of the knuckle.
- Tighten all mounting hardware to the specified torque values.
- Before connecting the ball joint to the arm, decrease the threaded section and tapered portion of the ball joint pin, and the arm connecting hole, and the threaded section and mating surface of the castle nut.
- Torque the castle nut to the lower torque specification, then tighten it only far enough to align the slot with the ball joint pin hole. Do not align the castle nut by loosening it.
- Install a new lock pin on the castle nut after torquing.
- Use a new spindle nut on reassembly.
- Before installing the new spindle nut, apply a small amount of engine oil to the seating surface of the nut. After tightening, use a drift to stake the spindle nut shoulder against the driveshaft.
- Before installing the brake disc, clean the mating surface of the front hub and the inside of the brake disc.
- Before installing the wheel, clean the mating surface of the brake disc and the inside of the wheel.
- Check the front wheel alignment, and adjust it if necessary (see page 18-4).