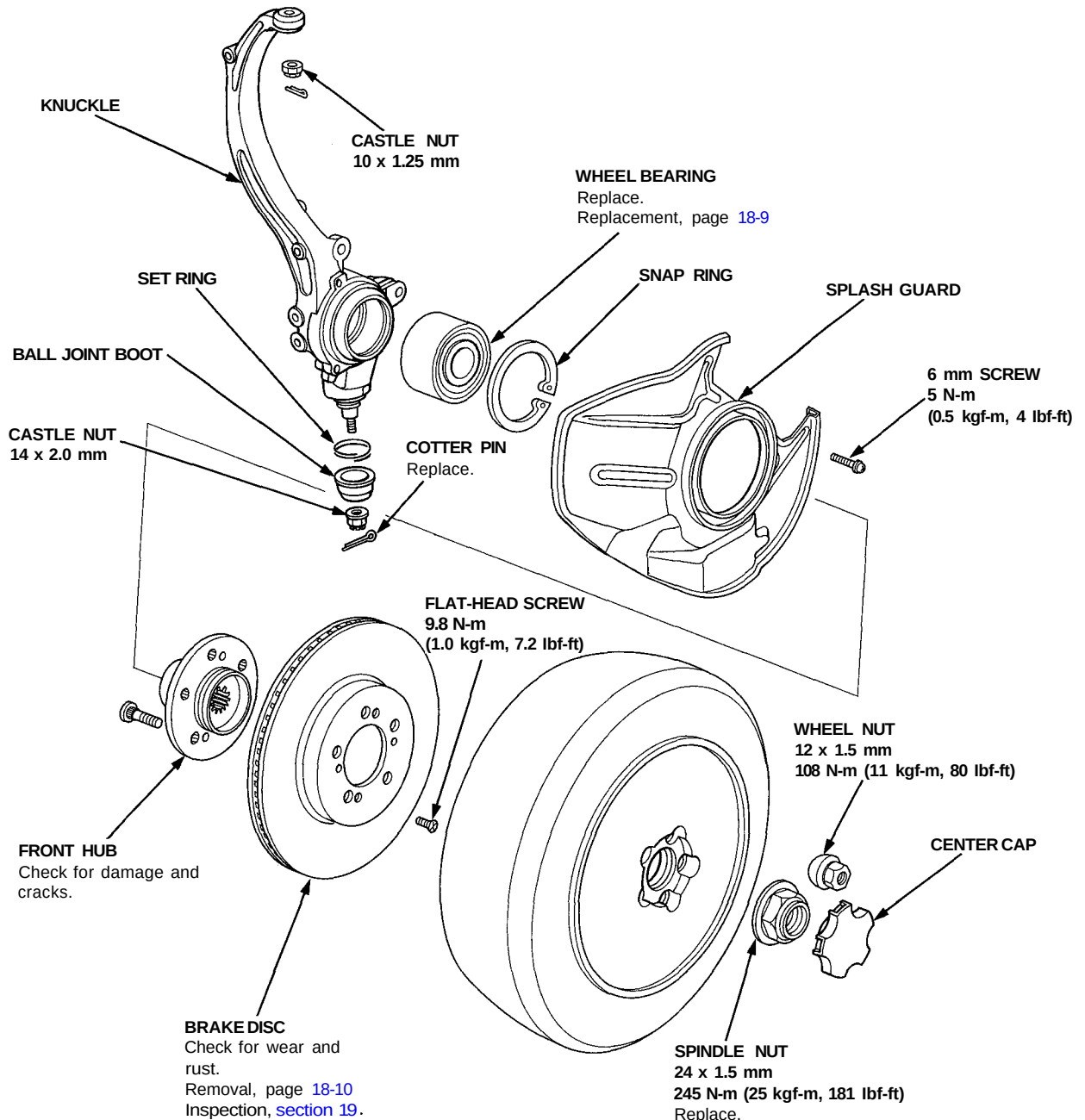


Front Suspension

Knuckle/Hub Replacement

NOTE:

- Use only genuine Honda wheel weights for aluminum wheels. Non-genuine wheel weights may corrode and damage aluminum wheels.
- Before installing the wheel, clean the mating surface of the brake disc and inside of the wheel.



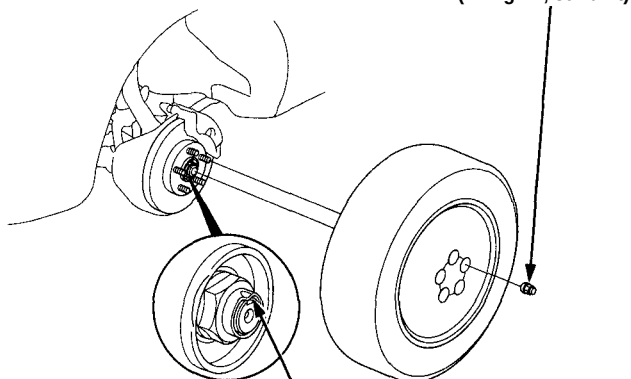
NOTE:

- Before installing the spindle nut, apply engine oil to the seating surface of the nut.
- After tightening, use a drift to stake the spindle nut shoulder against the spindle.



1. Loosen the wheel nuts slightly.
2. Raise the front of the vehicle, and support it with safety stands in the proper locations (see [section 1](#)).
3. Remove the wheel nuts and front wheel.

WHEEL NUT
108 N-m
(11 kgf-m, 80 lbf-ft)



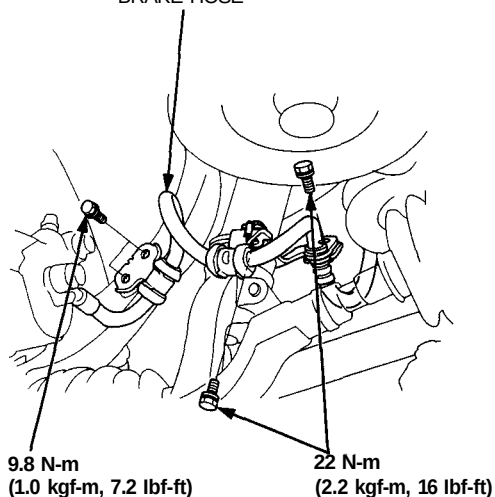
SPINDLE NUT 24 x 1.5 mm
245 N-m
(25 kgf-m, 181 lbf-ft)
Replace.

NOTE:

- Before installing the spindle nut, apply engine oil to the seating surface of the nut.
- After tightening, use a drift to stake the spindle shoulder against the spindle.

4. Raise the locking tab on the spindle nut, then remove the nut.
5. Remove the brake hose mounting bolts.

BRAKE HOSE



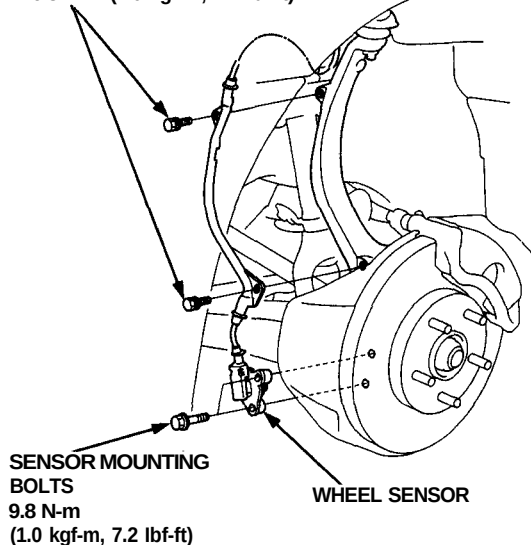
9.8 N-m
(1.0 kgf-m, 7.2 lbf-ft)

22 N-m
(2.2 kgf-m, 16 lbf-ft)

6. Remove the wheel sensor from the knuckle.

NOTE: Do not disconnect the wheel sensor connector.

9.8 N-m (1.0 kgf-m, 7.2 lbf-ft)



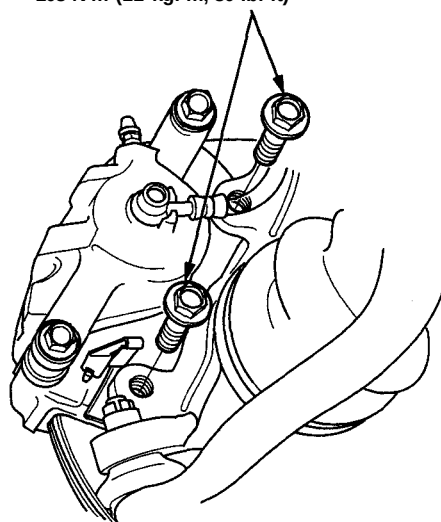
SENSOR MOUNTING BOLTS
9.8 N-m
(1.0 kgf-m, 7.2 lbf-ft)

WHEEL SENSOR

7. Remove the caliper bracket mounting bolts, and hang the caliper assembly to one side.

CAUTION: To prevent accidental damage to the caliper or brake hose, use a short piece of wire to hang the caliper from the undercarriage.

CALIPER BRACKET MOUNTING BOLTS
12 x 1.25 mm
108 N-m (11 kgf-m, 80 lbf-ft)

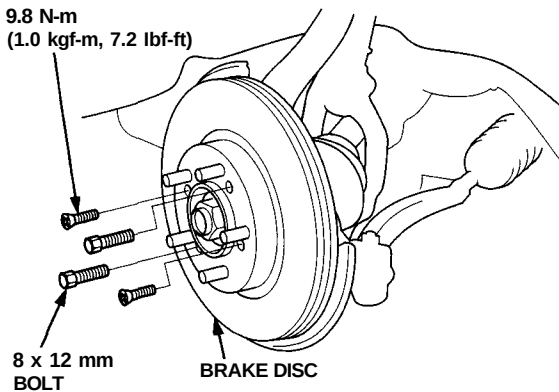


(cont'd)

Front Suspension

Knuckle/Hub Replacement (cont'd)

8. Remove the 6 mm brake disc retaining screws.

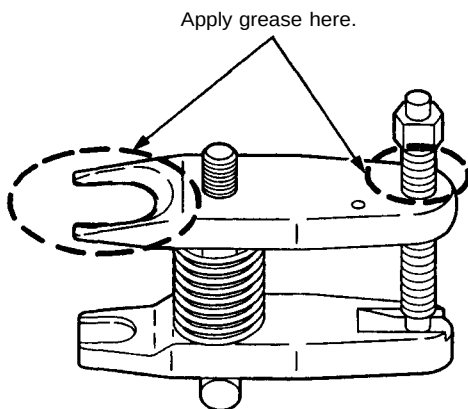


CAUTION: Be careful not to damage the ball joint boot.

9. Screw two 8 x 12 mm bolts into the disc to push it away from the hub.

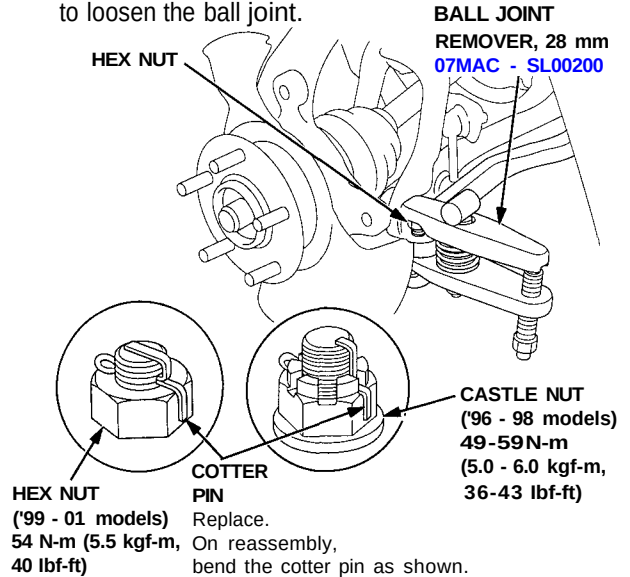
NOTE: Turn each bolt two turns at a time to prevent cocking the disc excessively.

10. Clean any dirt or grease off the ball joint.
11. Remove the cotter pin from the ball joint castle nut, and remove the nut.
12. Install a 12 mm hex nut on the ball joint. Make sure the 12 mm hex nut is flush with the ball joint pin end to prevent damage to the threaded end of the ball joint.
13. Apply grease to the special tool on the areas shown. This will ease installation of the tool and prevent damage to the pressure bolt threads.

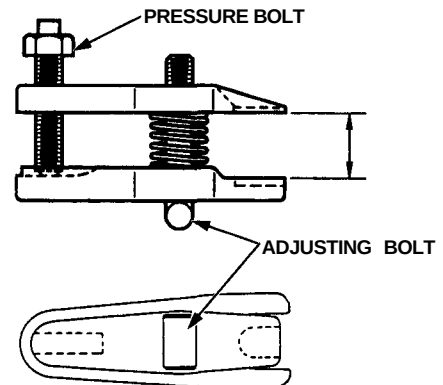


14. Install the special tool as shown. Insert the jaws carefully, making sure you do not damage the ball joint boot. Adjust the jaw spacing by turning the pressure bolt.

NOTE: If necessary, apply penetrating type lubricant to loosen the ball joint.



15. Once the tool is in place, turn the adjusting bolt as necessary to make the jaws parallel. Then hand-tighten the pressure bolt, and recheck the jaws to make sure they are still parallel.

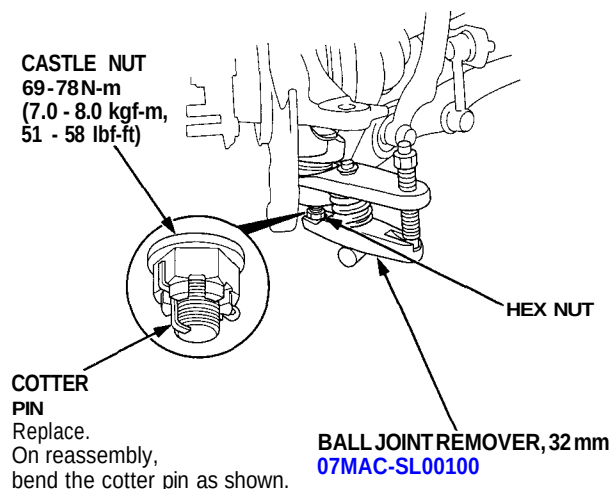


NOTE: After making the adjustment to the adjusting bolt, make sure the head of the adjusting bolt is in this position to allow the jaw to pivot.

16. With a wrench, tighten the pressure bolt until the ball joint shaft pops loose from the steering arm.
- ⚠ WARNING** Wear eye protection. The ball joint can break loose suddenly and scatter dirt or other debris in your eyes.
17. Remove the tool, then remove the nut from the end of the ball joint, and pull the ball joint out of the steering/suspension arm. Inspect the ball joint boot, and replace it if damaged.



18. Remove the cotter pin and lower arm ball joint nut.

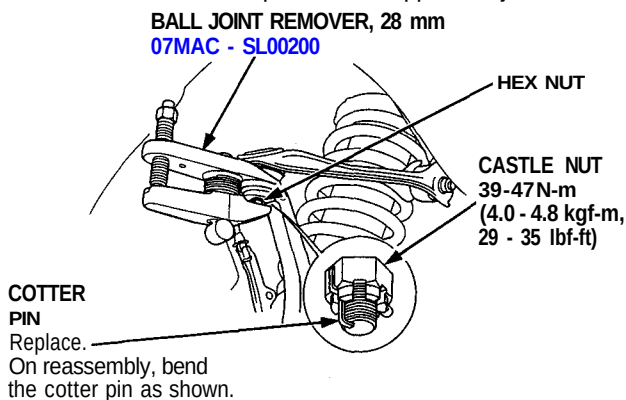


19. Install a 14 mm hex nut on the ball joint. Make sure that the 14 mm hex nut is flush with the ball joint pin end, or the threaded section of the ball joint pin might be damaged by the ball joint remover.

20. Use the special tool as shown on page 18-8 to separate the ball joint and lower arm.

NOTE: If necessary, apply penetrating type lubricant to loosen the ball joint.

21. Remove the cotter pin and the upper ball joint nut.

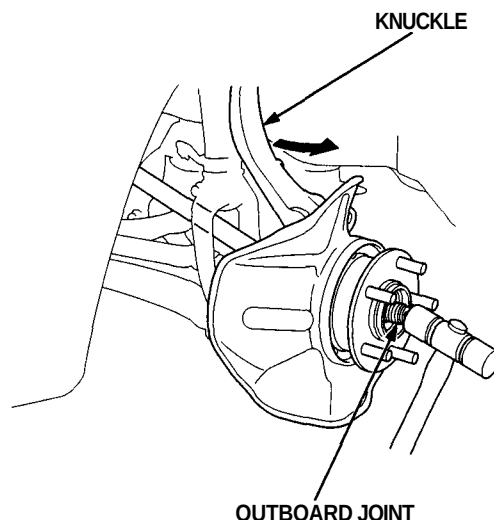


22. Install a 10 mm hex nut on the ball joint. Make sure the 10 mm hex nut is flush with the ball joint pin end, or the threaded section of the ball joint pin might be damaged by the ball joint remover.

23. Use the special tool as shown on page 18-10 to separate the ball joint and knuckle.

NOTE: If necessary, apply penetrating type lubricant to loosen the ball joint.

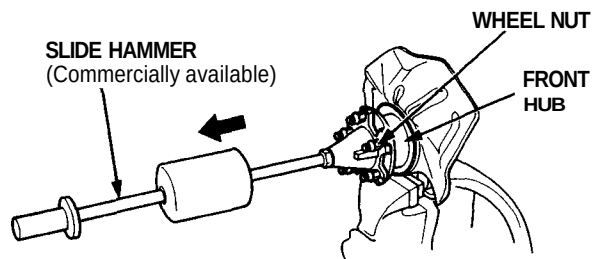
24. Pull the knuckle outward, and remove the driveshaft outboard joint from the knuckle by tapping the driveshaft end with a plastic hammer, then remove the knuckle.



Wheel Bearing Replacement

NOTE: Replace the bearing with a new one after removal.

25. Carefully clamp the caliper bracket mount section of the knuckle in a vise with soft jaws.



26. Separate the hub from the knuckle using a commercially available hub puller.

CAUTION:

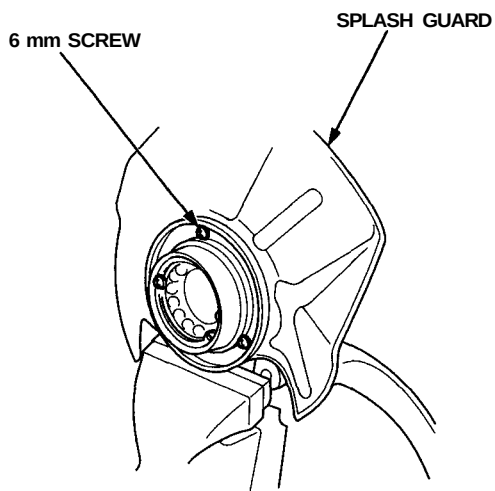
- Hold the knuckle securely so it does not slip out of the vise from the impact.
- Take care not to distort the splash guard.

(cont'd)

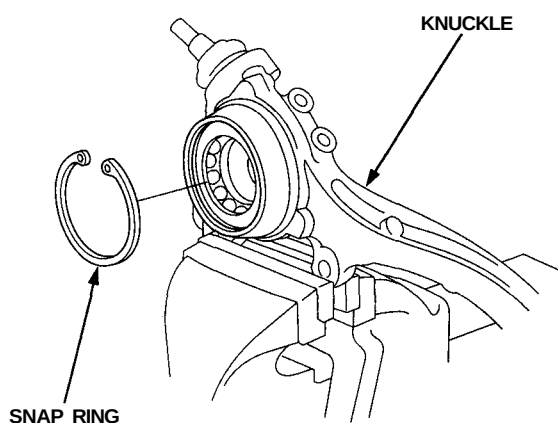
Front Suspension

Knuckle/Hub Replacement(cont'd)

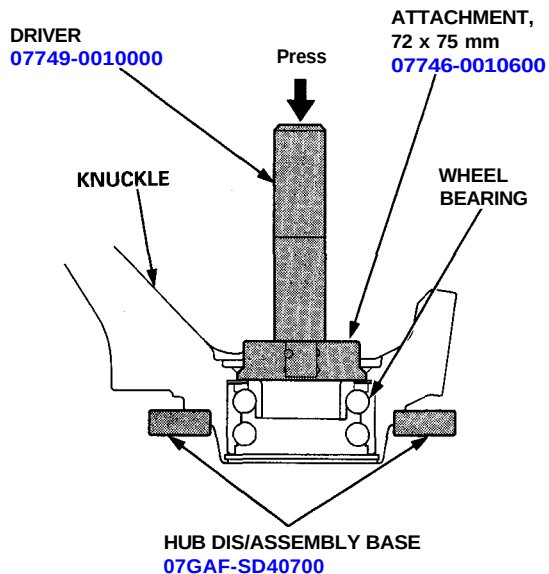
27. Remove the splash guard.



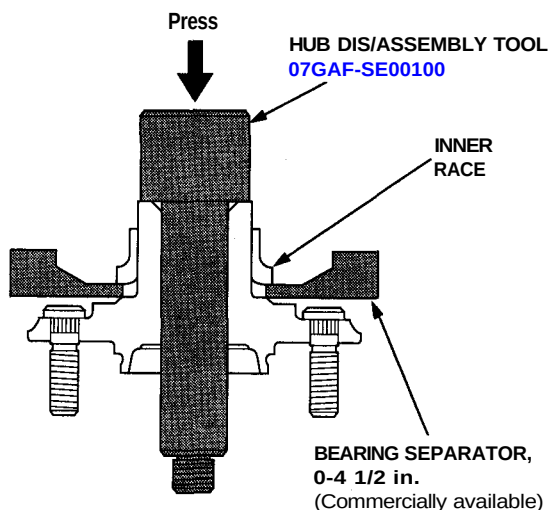
28. Remove the snap ring from the knuckle.



29. Press the wheel bearing out of the knuckle using the special tools and a press.



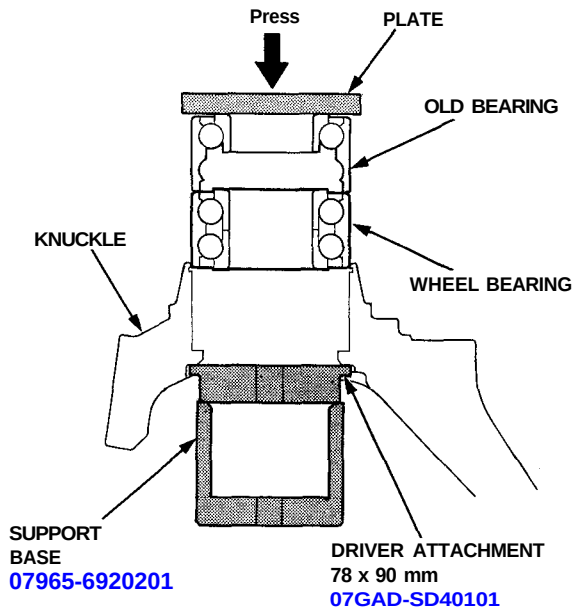
30. Remove the outboard bearing inner race from the hub using the special tools and a commercially available bearing separator.



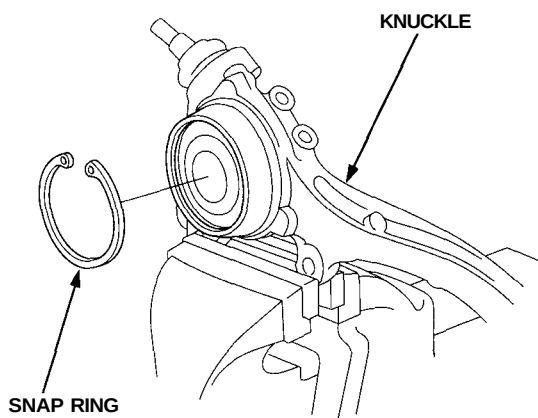


NOTE: Wash the knuckle and hub thoroughly in high flash point solvent before reassembly.

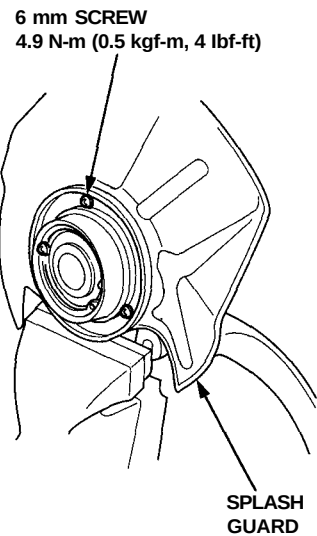
31. Press a new wheel bearing into the knuckle using the old bearing, plate and a press.



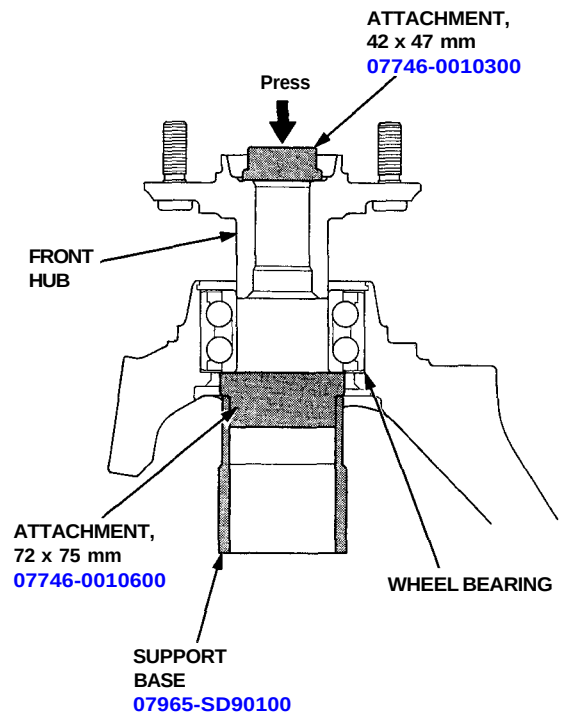
32. Install the snap ring securely in the knuckle groove.



33. Install the splash guard, and tighten the screws.



34. Place the front hub in the special tool fixture, then set the knuckle in position, and apply downward pressure using the special tools and a press.



35. Install in reverse order of removal.