

**KNUCKLE/HUB ASSEMBLY**

**NOTE:** Illustration shows 2004 model. For 2003 models, the installation directions of the damper pinch bolts are reversed.

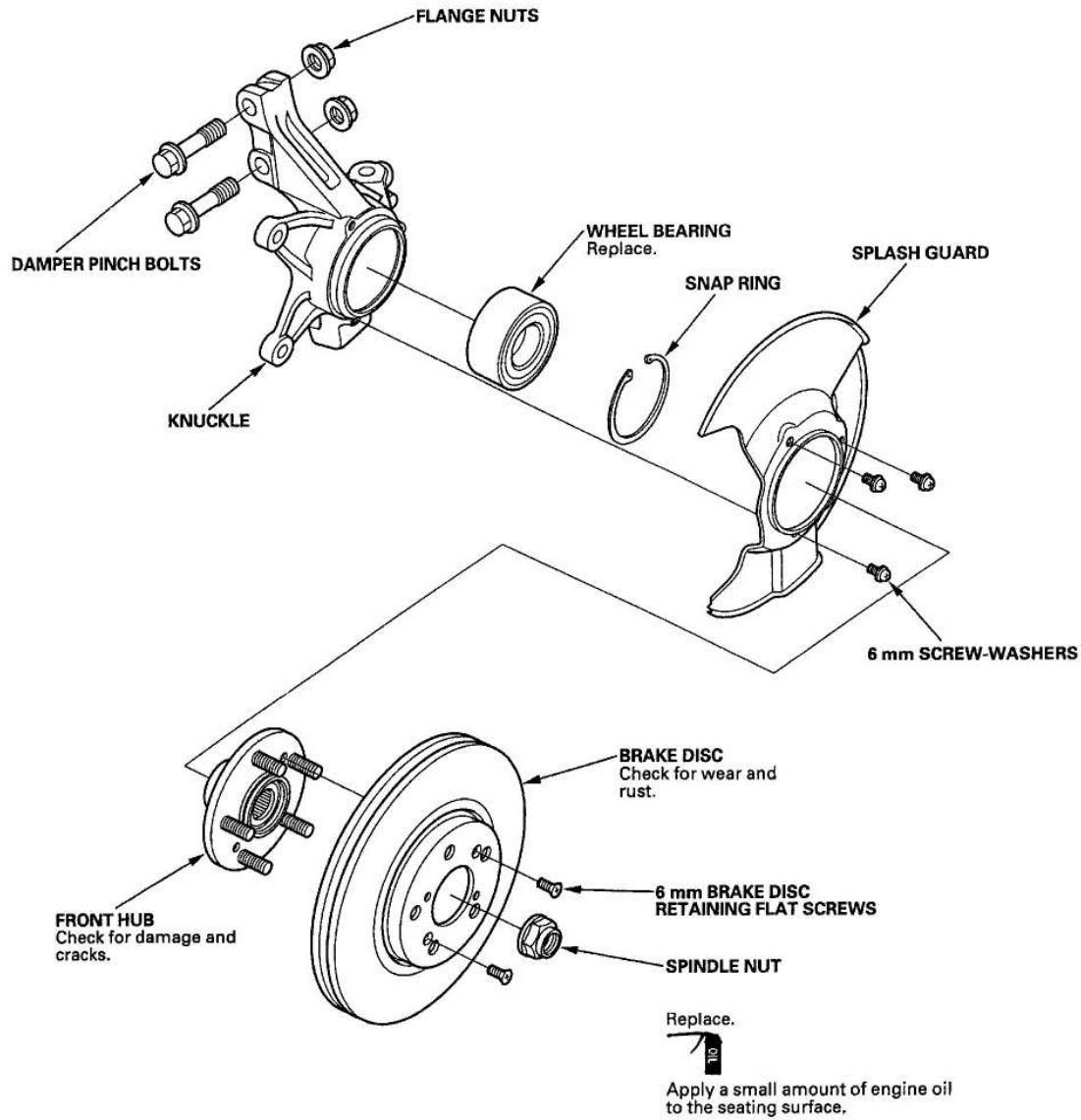
For exploded view of knuckle/hub assembly, see [Fig. 10](#).

**Removal & Installation**

1. Raise the front of the vehicle, and support it with safety stands in the proper locations.
2. Remove the wheel nuts, and front wheel.
3. Remove the brake hose mounting bracket (A). See [Fig. 11](#).
4. Remove the brake caliper bracket mounting bolts (B), and remove 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. Remove the wheel sensor (A) from the knuckle (B). See [Fig. 12](#). DO NOT disconnect the wheel sensor connector.
6. Raise the stake (A), and remove the spindle nut (B). See [Fig. 13](#).
7. Remove the brake disc retaining screws (A). See [Fig. 14](#).
8. Screw two 8 x 1.25 mm bolts (B) into the disc to push it away from the hub. Turn each bolt 2 turns at a time to prevent cocking the disc excessively.
9. Remove the brake disc from the hub.
10. Inspect the front hub for damage and cracks.
11. Remove the cotter pin (A) from the tie-rod end ball joint, then loosen the nut (B). See [Fig. 15](#).
12. Disconnect the tie-rod ball joint from the knuckle using the ball joint remover.

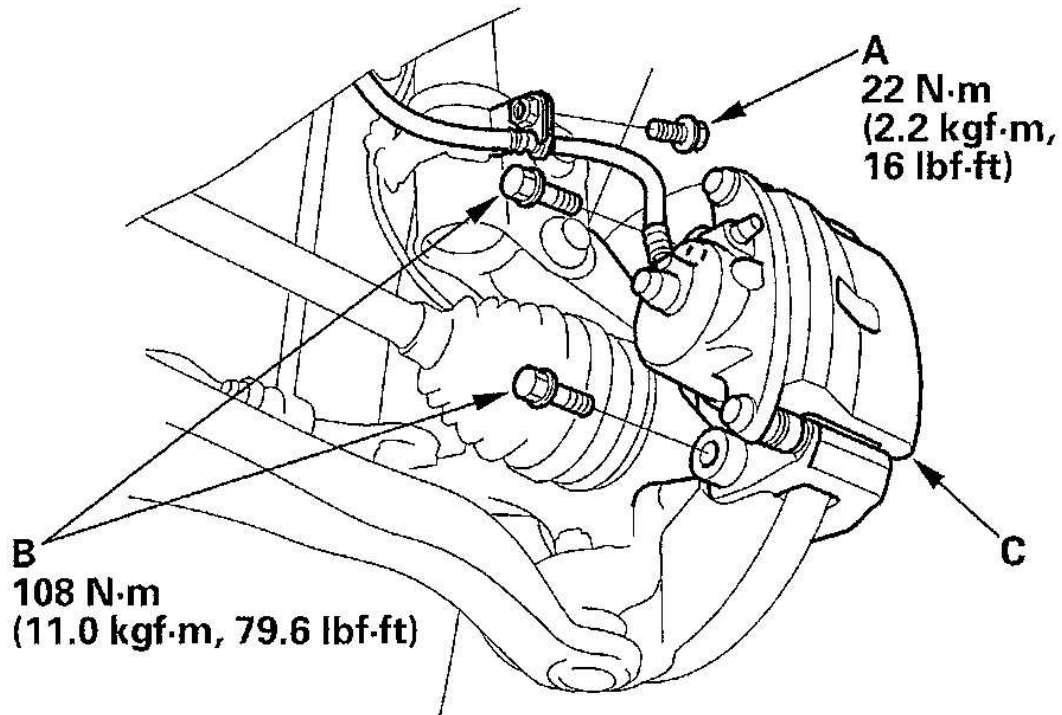
# 2003 Honda Pilot LX

2003-04 SUSPENSION Front - Pilot



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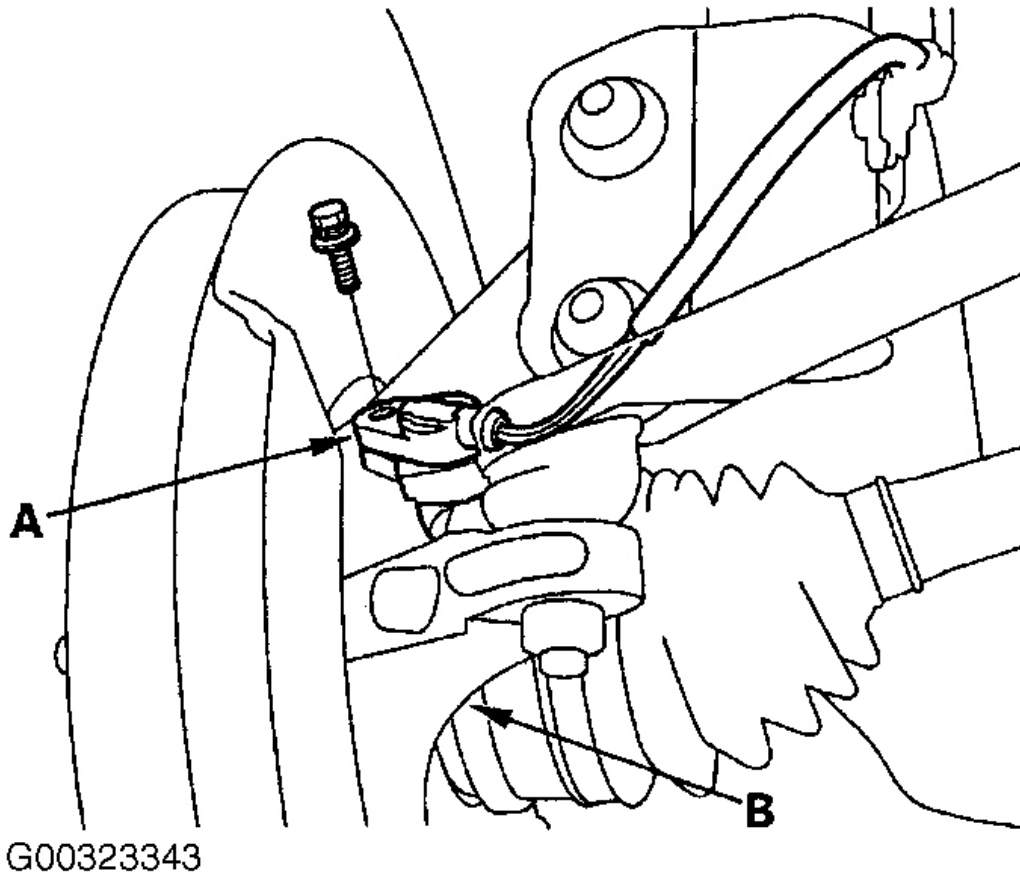
**Fig. 10: Exploded View Of Knuckle/Hub Assembly**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.



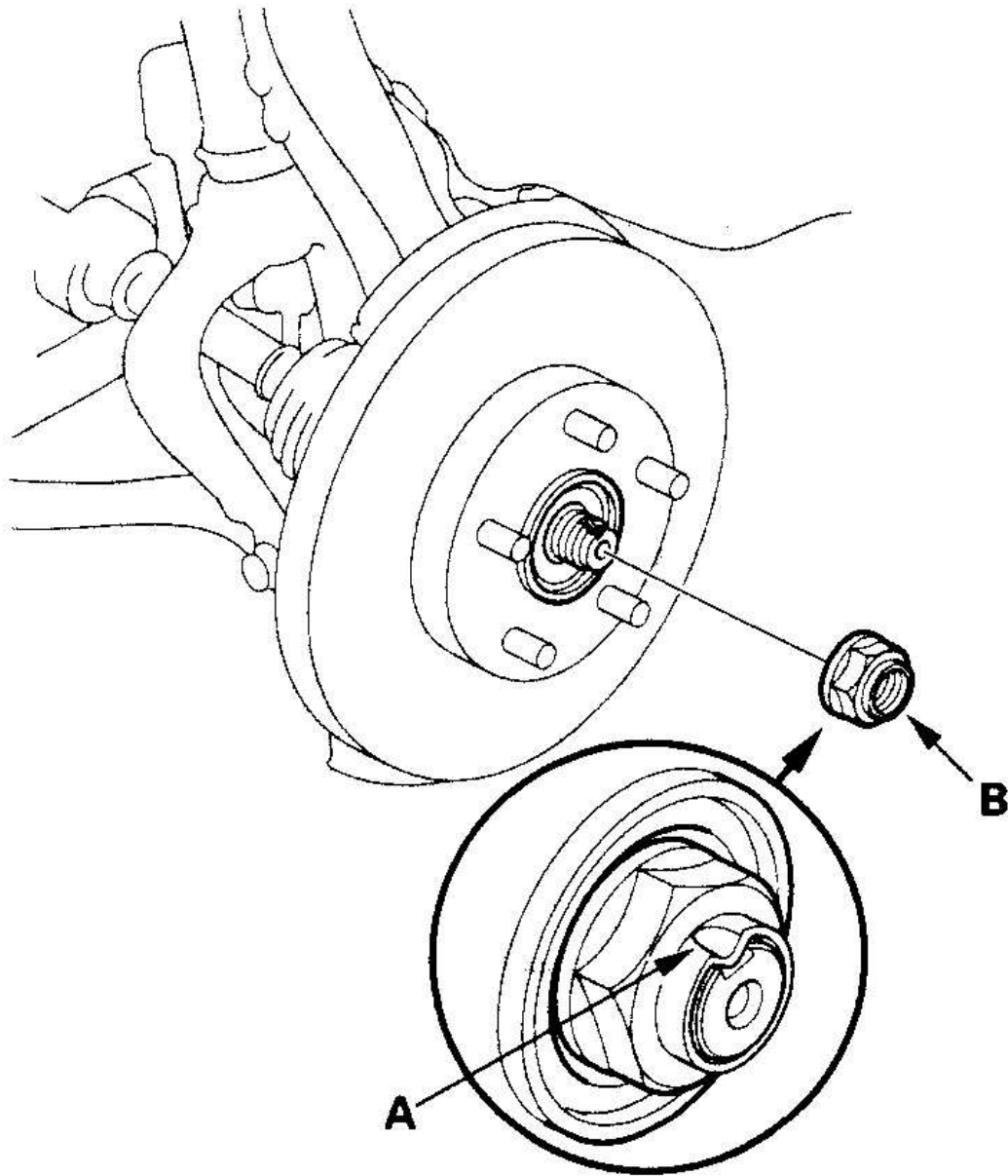
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**Fig. 11: Removing Brake Caliper**

Courtesy of AMERICAN HONDA MOTOR CO., INC.



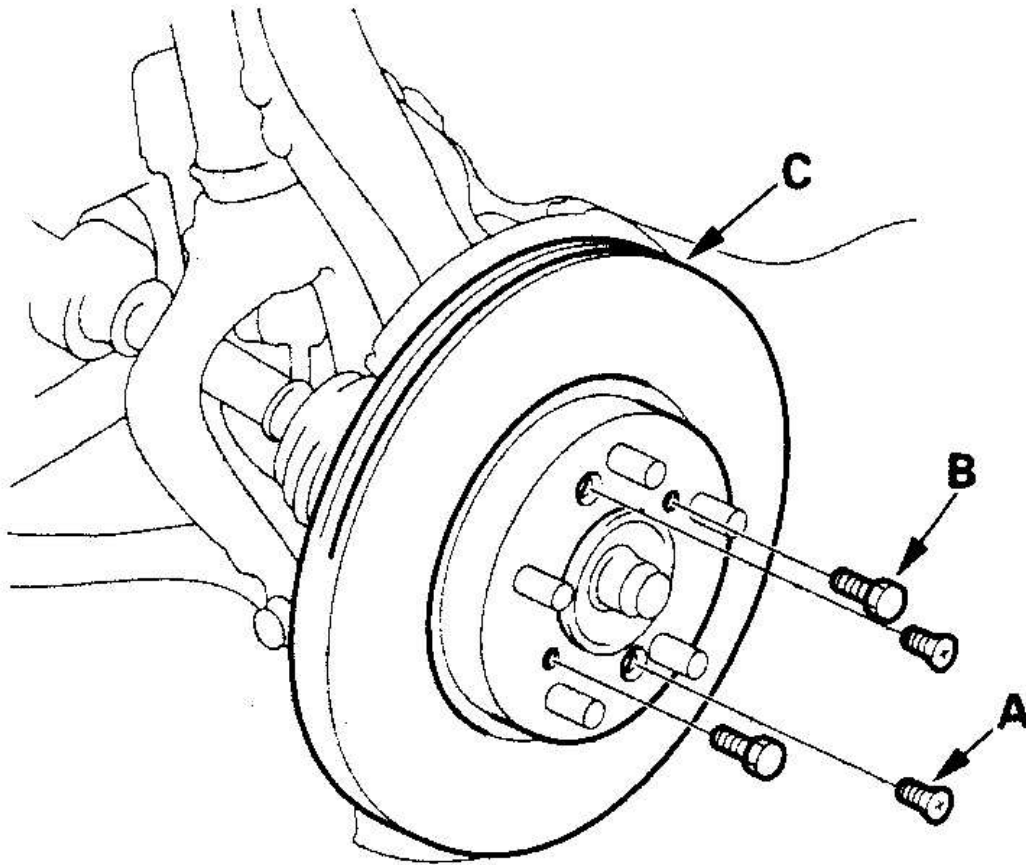
**Fig. 12: Removing Wheel Sensor From Knuckle**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.



A - Stake    B - Spindle Nut

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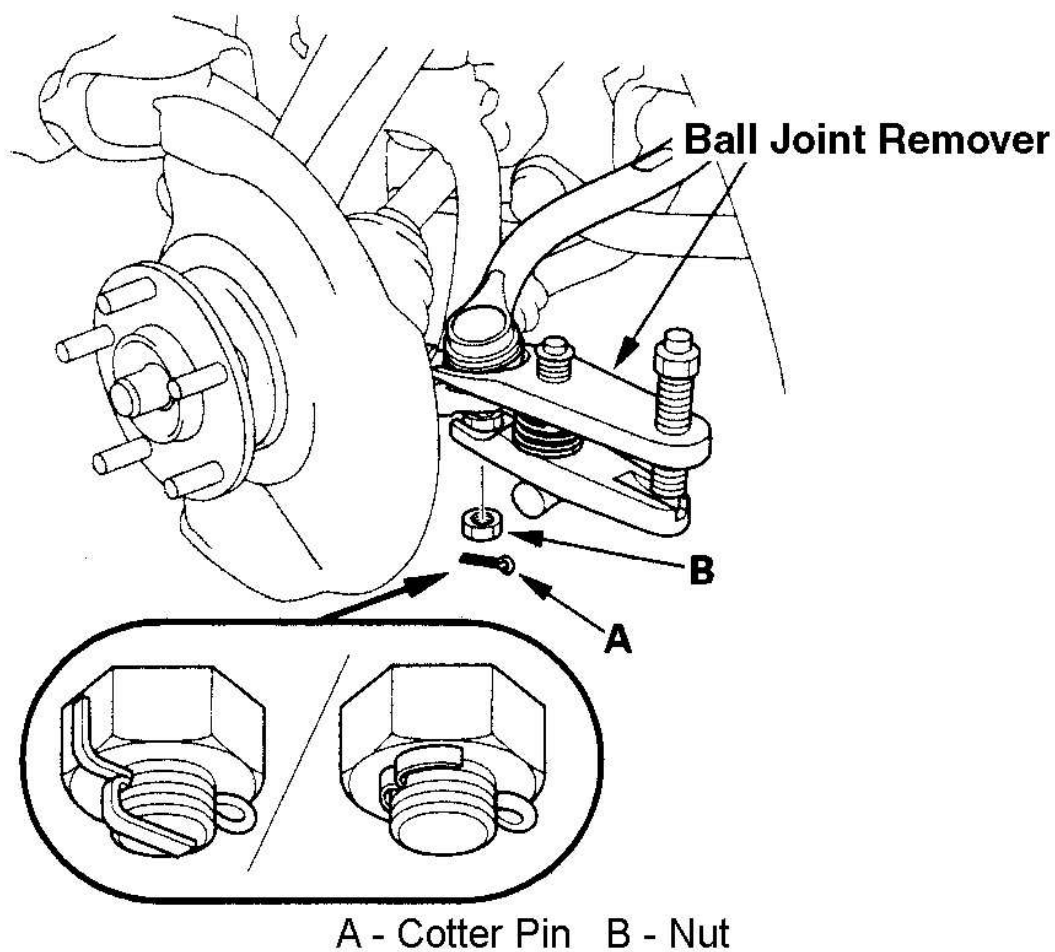
**Fig. 13: Removing Spindle Nut**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.



- A - Brake Disc Retaining Screws (6 mm)
- B - Bolts (8 mm)
- C - Brake Disc

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**Fig. 14: Locating Brake Disc Screws**  
Courtesy of AMERICAN HONDA MOTOR CO., INC.



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**Fig. 15: Removing Cotter Pin From Tie-Rod End Ball Joint**  
 Courtesy of AMERICAN HONDA MOTOR CO., INC.

**NOTE:**        **DO NOT force or hammer on the lower arm or pry between the lower arm and the knuckle. You could damage the ball joint.**

13. Remove the lock pin (A) from the lower arm ball joint castle nut (B), and remove the nut. See [Fig. 16](#).
14. Remove the lower arm ball joint from the knuckle using the ball joint remover.

**NOTE:**        **The illustration shows 2003 model. For 2004 model, the installation directions of the damper pinch bolts are reversed.**

15. Remove the damper pinch bolts (A) and flange nuts (B) from the damper. See [Fig. 17](#).

16. Pull the knuckle outward, and remove the axle shaft outboard joint (C) from the knuckle (D) by tapping the axle shaft end (E) with a plastic hammer, then remove the knuckle.
17. Separate the hub (A) from the knuckle (B) using appropriate driver and a hydraulic press. See **Fig. 18** . Be careful not to deform the splash guard. Hold onto the hub to keep it from falling when pressed clear.
18. Remove the snap ring (A) and the splash guard (B) from the knuckle. See **Fig. 19** .
19. Remove the wheel bearing (A) out of the knuckle (B) using the driver, attachment, and a press. See **Fig. 20** .
20. Press the wheel bearing inner race (A) from the hub (B) using appropriate driver, appropriate bearing separator (C), and a press. See **Fig. 21** .
21. Wash the knuckle hub thoroughly in high flash point solvent before reassembly.
22. Press the new wheel bearing wheel bearing (A) into the knuckle (B) using the old bearing (C), a steel plate (D), the attachment, support base, and a press. See **Fig. 22** . Be careful not to damage the sleeve of the pack seal.
23. Install the snap ring (A) securely in the knuckle (C). See **Fig. 19** .
24. Install the splash guard (B), and tighten the screws.
25. Install the hub (A) onto the knuckle (B) using the support base, driver, attachment, and a press. See **Fig. 23** . Be careful not to deform the splash guard (C).