

3.2 FRONT WHEEL HUB, BRAKE DISC OR BRAKE SHIELD

NOTE 1:

Apart from wheel stud replacement, there are no serviceable items in the front wheel hub assembly. As the unit is a 'sealed for life' assembly, neither bearing adjustment nor lubrication maintenance is required. Should a non-standard condition develop, then the hub assembly must be replaced as a complete unit.

NOTE 2:

If an ABS hub requires replacement, the correct assembly must be fitted. If not, the ABS will malfunction. Either the hub will have an ABS lead connection or it will not.

NOTE 3:

While the front wheel hub is designed to have zero axial free play or 'end-float', some angular movement may be evident when a rocking force is applied to the mounted wheel and tyre assembly. Before a hub is replaced, refer to checking procedure, detailed in Operation [2.4](#) in this Section of the Service Manual.

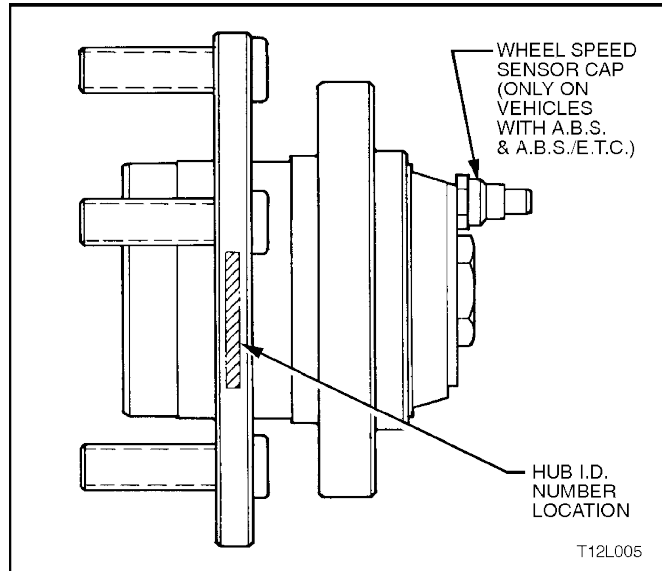


Figure 3-18

REMOVE

1. Raise front of vehicle and support on safety stands. Observe jacking precautions as outlined in [2.3 JACKING PRECAUTIONS](#) in this Section.
2. Remove wheel cover (steel wheels) or centre cap (alloy wheels).
3. Mark relationship of wheel to hub or brake disc. Remove wheel attaching nuts and remove wheel.
4. Remove brake caliper anchor plate retaining bolts and washers, lift caliper assembly from brake disc. Position caliper in such a way that no strain is placed on the brake hose. If necessary, tie caliper to the suspension spring with a piece of wire. **THE CALIPER IS NOT TO HANG BY BRAKE HOSE.**
5. Remove brake disc from the wheel bearing hub.

NOTE:

For vehicles equipped with ABS, disconnect the wheel speed sensor connector from the steering knuckle. To do this, use a 5 mm Allen key (or socket), remove the set screw and then, holding the cable retaining bracket, twist and gently pull on the sensor connector end. Don't lose the sealing O-ring.

6. Using a commercially available 10 mm Allen key socket and a suitable socket bar, loosen each of the three bolts holding the hub to the steering knuckle.

NOTE 1:

For the front lower hub bolt, turn wheel outwards to provide clearance between the ball joint rivet and the hub bolt.

NOTE 2:

If the Allen key socket is too long to fit into the front, upper hub bolt, then the lower strut to steering knuckle nut will need to be removed and the bolt withdrawn.

7. If the hub is a tight fit to the knuckle, it may be necessary to loosen the three loosened bolts and tap on the heads. **DO NOT STRIKE THE HUB.**
8. Remove the three bolts and then the hub from steering knuckle.
9. If removal of the brake shield is necessary, drill the heads from the three rivets securing the shield to the steering knuckle support.
10. After removal of the shield, carefully drill out the remainder of the rivets, using a suitable sized, sharp drill.

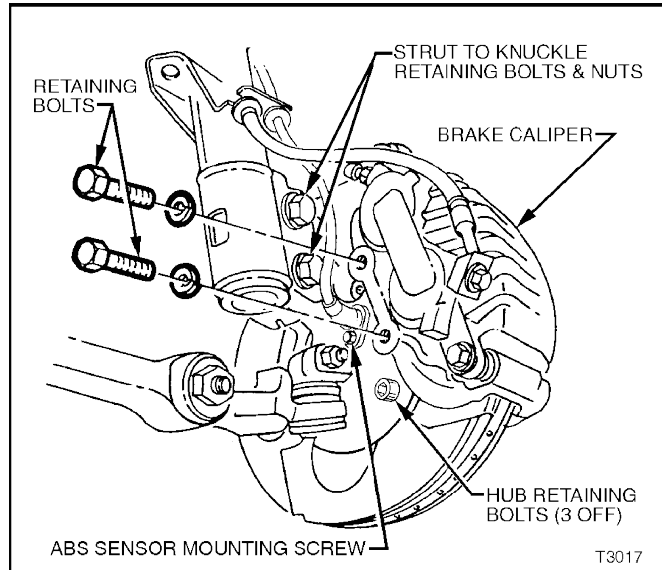


Figure 3-19

INSPECT

1. Check wheel studs to ensure threads are not damaged, and that studs are pressed firmly into the front wheel hub.
If one or more wheel studs require replacement, refer to operation [3.3 FRONT HUB WHEEL STUD](#) in this Section, for details.
2. Examine brake disc for scores or damage.
If either of these conditions exist, the brake disc should be machined. Refer to [Section 5A BRAKES](#) for details.
3. Check for damage to the shield that may cause fouling of any rotating parts and if suspect, the shield should be replaced.

REINSTALL

Installation of the front wheel hub and brake disc is the reverse of removal procedures, except for the following points:

All Models:

1. If the brake shield has been removed, install three, common pop rivets, using a commercially available pop rivet gun.

NOTE:

Install the first rivet in the brake shield hole with the round hole. This will ensure that the clearance to brake caliper is correct.

2. Before installing the hub, inspect both mating surfaces to make sure that they are clean and free from burrs that could prevent correct alignment of both parts, once installed.
3. Prior to installation, it is also vital that the sealing O-ring located around the mounting flange, is checked to ensure its serviceability. Failing to adequately seal the hub to steering knuckle interface, will cause water to be drawn into the cavity in the steering knuckle, during the normal heating and cooling cycle of vehicle operation.

Without ABS:

- 4a. Install the hub assembly to the steering knuckle.
- 5a. Install the three attaching bolts and tighten to the correct torque specification.

FRONT HUB TO STEERING KNUCKLE ATTACHING BOLT TORQUE SPECIFICATION	100 - 115 Nm
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NOTE:

The three hub attaching bolts are micro-encapsulated with thread sealant and are not to be re-used more than three times. If in doubt, the bolts should be replaced.

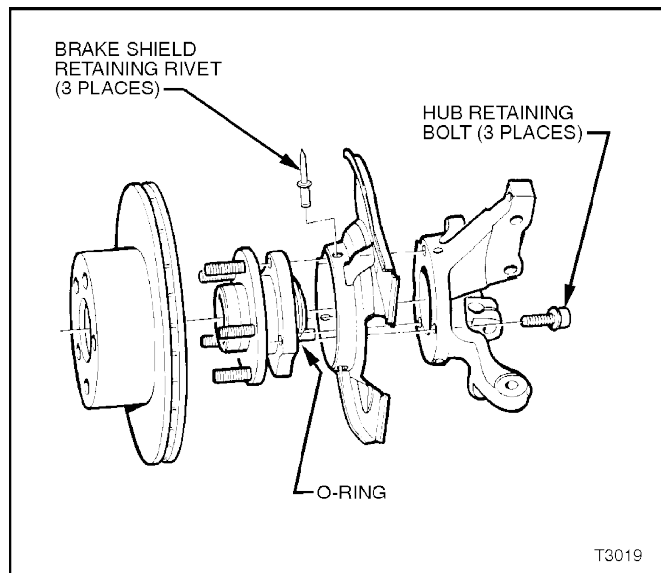


Figure 3-20