

Tire and Wheel Removal and Installation

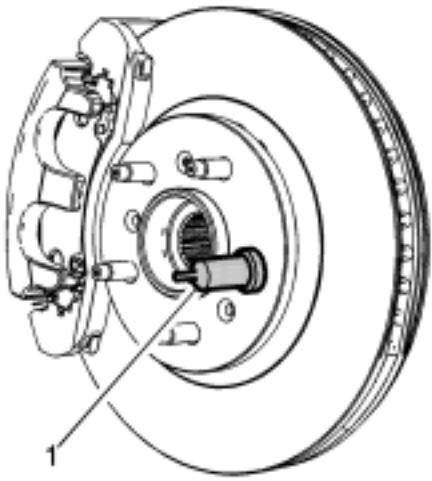
Removal Procedure

1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#) .
2. If rotating the tires, refer to [Tire Rotation](#) .
3. Remove the wheel center cap, if equipped.
4. Remove the wheel center cap nuts, if equipped.
5. Remove the wheel nuts.
6. Remove the tire and wheel assembly.
Caution: Never use heat to loosen a tight wheel bolt or nut. This can shorten the life of wheel and damage wheel bearings.
7. If the tire and wheel assembly is difficult to remove or cannot be removed, perform the following steps:
 - 7.1 Apply a small amount of penetrating oil to the wheel nuts, and the center hub. Allow a few moments for the penetrating oil to work.
 - 7.2 Loosen each wheel nut 2 complete turns.
 - 7.3 Lower the vehicle.
 - 7.4 Rock the vehicle from side to side.
 - 7.5 Repeat the procedure if necessary.
8. If the tire and wheel assembly still does not loosen, perform the following:
 - 8.1 Start the engine.
 - 8.2 Allow the vehicle to move forward, and quickly apply the brakes. Repeat this procedure in reverse.
 - 8.3 Repeat this procedure if necessary.
9. With the tire and wheel assembly loose, raise and support the vehicle.
10. Remove the tire and wheel assembly.

Caution: Before installing wheels, remove any build-up of corrosion on the wheel mounting surface by scraping and wire brushing. Installing wheels without good metal-to-metal contact at the mounting surfaces can cause wheel bolts or nuts to loosen, which can later allow a wheel bolt or nut to come off while the vehicle is moving. Wheel bolts or nuts must be tightened in sequence and to proper torque to avoid bending the wheel, brake drum or rotor.

Note:

- Wear approved safety glasses when performing the following service procedures.
 - DO NOT use power grinders to clean any of the brake rotor or brake drum to wheel contact areas.
11. Using a wire brush or wire wheel, clean the rotor to the wheel or brake drum to wheel hub contact area.
 12. Using the appropriate special tool, clean the contact areas of the wheel to brake rotor or brake drum.



13. Using the appropriate special tool (1), clean the surface around the wheel studs.
14. Clean the threads of the wheel studs. If the threads are damaged, replace the wheel stud.
 - For the front wheel stud replacement, refer to [Wheel Stud Replacement](#) .
 - For the rear wheel stud replacement, refer to [Wheel Stud Replacement](#) .
15. After cleaning all the contact areas, use brake clean or denatured alcohol to remove all the penetrating oil, dirt and debris from the wheel nuts, brake rotor or brake drum.
16. Inspect and clean the contact area of the wheel. Refer to [Wheel Mounting Surface Check](#) .