

Recall Campaign



October 2005
FL448A
NHTSA #05V-185

Copy of Letter to Owner

Subject: Accuride 29644 ANP Aluminum Wheels

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act and the Canadian Motor Vehicles Safety Act.

Freightliner LLC, on behalf of its Freightliner Trucks Division and wholly owned subsidiaries, Sterling Truck Corporation, Freightliner Custom Chassis Corporation, and Western Star Trucks Incorporated, has decided that a defect which relates to motor vehicle safety exists on specific Freightliner Argosy, Business Class M2, Century S/T, Classic, Columbia, Condor, and Coronado vehicles; Sterling A/L-Line, Acterra, and Condor vehicles; Western Star 4900 vehicles; and Freightliner Custom Chassis B2 and XC chassis manufactured between February 18, 2005, and April 18, 2005, with Accuride 29644 ANP aluminum wheels.

Certain Accuride 29644 ANP aluminum wheels may have been improperly pre-stressed. These wheels could experience premature cracking on the disc face, resulting in a wheel failure or possible vehicle crash without prior warning.

Vehicles will be inspected, and, if found to be equipped with wheels included in this recall, those wheels will be replaced.

Repair kits are now available for authorized dealers to order. Contact your authorized dealer to arrange to have your vehicle(s) modified and to assure that parts are available at the dealer. To locate a dealer, search online at www.Freightliner.com or contact the Warranty Campaigns Department for assistance.

When you contact your dealer, refer to campaign number **FL448A**. Once kit(s) are received at the dealership, the modification can take slightly more than an hour per wheel when replacements are necessary and will be performed at no charge to you.

IMPORTANT: When the recall has been completed, please ensure that a label has been affixed to your vehicle referencing **FL448A**.

As stated in the terms of your express limited warranty, Freightliner LLC will not pay for any damage caused by failure to properly maintain your vehicle. Freightliner LLC considers the work necessary under this campaign to be proper maintenance and will, therefore, not pay for any damage to your vehicle caused by your failure to have the repairs that are the subject of this campaign performed in a reasonable time.

If you do not own the vehicle that corresponds to the identification number(s) which appears on the Recall Notification, please return the notification to the Warranty Campaigns Department with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, please make sure this notification is immediately forwarded to the lessee.

If you are not able to have the defect remedied without charge and within a reasonable time, which is not longer than 60 days after you tender the vehicle for repair, please contact the Warranty Campaigns Department at (800) 547-0712, 7:00 a.m. to 4:00 p.m. Pacific Time Monday through Friday, e-mail address WarrantyCampaigns@freightliner.com, or the Customer Assistance Center at (800) FTL-HELP or (800) STL-HELP, after normal business hours. You may also wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 400 7th Street S.W., Washington, D.C. 20590; or call the Vehicle Safety Hotline at (888) 327-4236 (TTY: 800-424-9253); or to <http://www.safercar.gov>. If your vehicle is involved in the Canadian portion, you may wish to notify Transport Canada, ASFAD, Place de Ville Tower C, 330 Sparks Street, Ottawa, ON K1A 0N5, or phone (800) 333-0510.

We regret any inconvenience this action may cause but feel certain you understand our interest in motor vehicle safety.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

Work Instructions

Subject: Accuride 29644 ANP Aluminum Wheels

Models Affected: Specific Freightliner Argosy, Business Class M2, Century S/T, Classic, Columbia, Condor, and Coronado vehicles; Sterling A/L-Line, Acterra, and Condor vehicles; Western Star 4900 vehicles; and Freightliner Custom Chassis B2 and XC chassis manufactured between February 18, 2005, and April 18, 2005, with Accuride 29644 ANP aluminum wheels.

Wheel Inspection and Replacement Procedures

NOTE: Only 50 wheels are expected to require replacement, therefore, kits should not be stocked. If any wheel replacements are required, order with the vehicle serial number and use one kit for each wheel replaced. You may include critical freight on your claim.

1. Park the vehicle on a level surface. Turn the steering wheel as far left as it can be turned. Shut down the engine, set the parking brake, and chock the tires. Open the hood.
2. Check the base label (Form WAR259) for a completion sticker for FL448 (Form WAR260) indicating this work has been done. The base label is usually located on the passenger-side door about 12 inches (30 cm) below the door latch. If a completion sticker is present, no further work is needed. If there is no completion sticker, go to the next step.
3. Inspect the wheels for the manufacturer's date stamp and part number 29644 ANP. The first six digits of the stamp are the manufacturing date (day, month, year). The manufacturing dates covered by this recall are January 15, 2005, through January 17, 2005 (one of these three date codes: 011505, 011605, or 011705). See **Fig. 1**.
 - On the front axle, clean the inboard side of the front wheels and inspect.
 - On tandem rear wheels, the inboard and outboard wheels are mounted back-to-back. To inspect the inboard tandem wheels, use a flashlight to look between the brake drum and the wheel. On the outboard wheels, the date stamp will be on the outside face.
 - If the manufacturing date is **not** January 15, 2005, through January 17, 2005 (011505, 011605, or 011705), no further work is needed.

Clean a spot on the base label (Form WAR259). The base label is usually located on the passenger-side door about 12 inches (30 cm) below the door latch. Write recall number FL448 on a blank, red completion sticker (Form WAR260) and attach it to the base label.

 - If the manufacturing date is January 15, 2005, through January 17, 2005 (011505, 011605, or 011705), replace the wheel, following the procedures below.
4. Remove the disc wheel.
 - 4.1 If working on the front axle wheels, raise the front of the vehicle until the tires clear the floor. Place safety stands under the front axle.

If working on the rear axle wheels, raise the rear of the vehicle until the tires clear the floor. Place safety stands under the axle being serviced.
 - 4.2 Deflate the tire being serviced (or tires, on a dual assembly), by removing the valve core.
 - 4.3 Turn the wheel until one hub-pilot pad is in the top-center position.

Recall Campaign

October 2005
FL448A
NHTSA #05V-185

- 4.4 Leaving the top and bottom nuts until last, remove the other eight two-piece flange nuts.
- 4.5 Place a jack or wheel-and-tire dolly under the wheel assembly being serviced. Remove the top and bottom nuts.

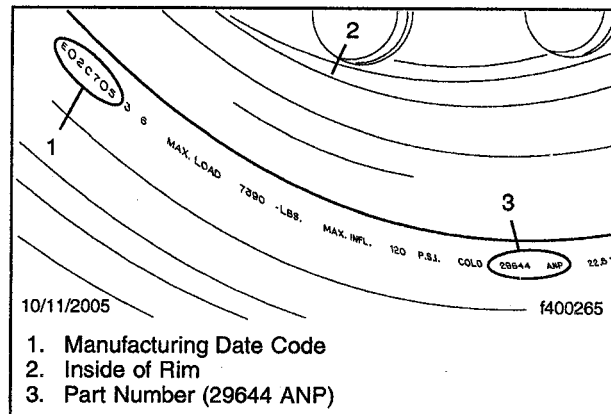


Fig. 1, Wheel Inspection (front wheel shown)

⚠ CAUTION

The wheel center hole and hub pilot have close tolerances. If the wheel is not kept square to the hub, it could bind during removal and damage the stud threads or hub-pilot pads. Keep the wheel square to the hub during removal.

IMPORTANT: On both sides of the vehicle, the two-piece flange nuts have right-hand metric threads.

- 4.6 Remove the wheel. Do not let it drop on or drag across the stud threads.
5. Demount the tire.
 - 5.1 Loosen both beads from the rim by driving the flat end of the tire tool between the tire bead and the rim flange. Holding the tool upright, hammer on the neck to free the tire bead from the rim. See Fig. 2. Repeat at 8-inch (20 cm) intervals around the flanges, until both beads are free from the rim.

⚠ CAUTION

Lubricate the tire with an approved tire-mounting lubricant. Never use antifreeze, silicones, petroleum-based lubricants, or any flammable material.

- 5.2 Place the wide side of the rim down. Lubricate the tire bead and the rim. Insert the curved end of two tire tools between the bead and the rim, and just to one side of the tire valve. Step on the side of the tire, opposite from the valve, to force the first bead into the rim well. See Fig. 3. Hold one of the tools in place with your foot and pry with the second tool, forcing the bead over the rim flange. Continue to work the first bead off of the rim.
- 5.3 When the first bead is off the rim, and the second bead is in the rim well, stand the assembly upright with the valve stem near the top. Lubricate the second bead and rim. Insert the straight end of the tool between the tire bead and the back rim flange, hooking the tool over the second flange. Lean the tire assembly toward the tool and use a rocking or bouncing action to pry the rim out of the tire. See Fig. 4.

Recall Campaign

October 2005
FL448A
NHTSA #05V-185

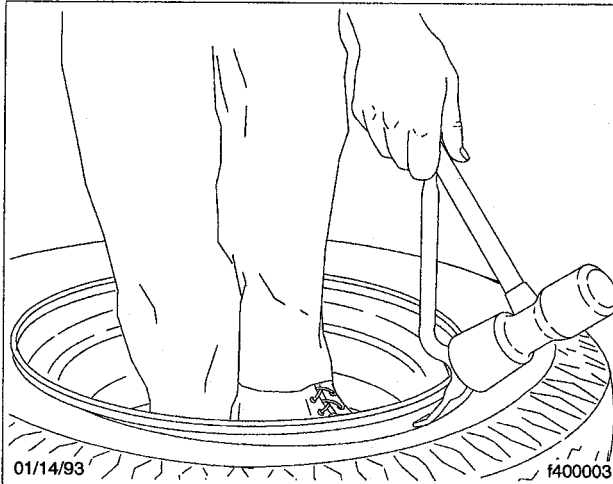


Fig. 2, Free the Tire Bead From the Rim

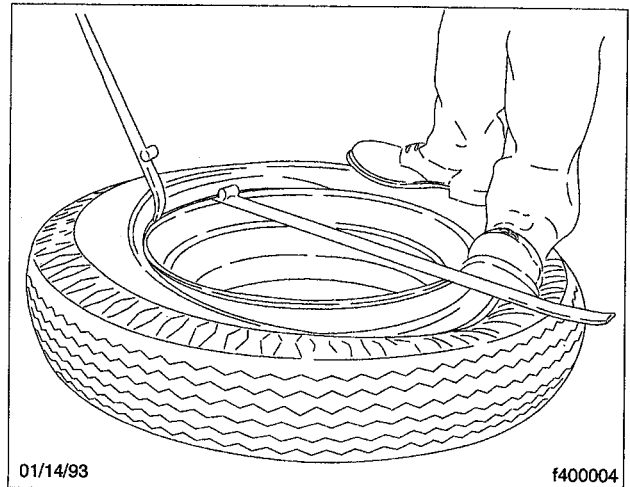


Fig. 3, Force the First Bead into the Rim Well

6. Mount the tire onto a new rim.

- 6.1 Place the valve stem, with a rubber washer, through the valve hole from the tire side of the rim. Screw on the valve nut from the opposite side. Make sure the rubber bushing and metal collar or nut are centered and fit snugly in the valve hole. See Fig. 5. Tighten the nut securely.
- 6.2 Place the rim on the floor with the wide side down. Using a brush or swab, lubricate both bead seats (flanges) of the rim, and both tire beads, with an approved lubricant. Apply enough lubricant to enable correct bead seating, and to make mounting easier. Do not let excess lubricant run inside the tire.
- 6.3 Lay the tire on the rim. If there is a balance mark on the tire, line up this mark with the valve stem. Push the lower bead over the flange and into the rim well. Using the straight end of the tire tool (with the stop resting on the rim flange), proceed in small increments to work the remaining section of the bead into the rim. See Fig. 6.

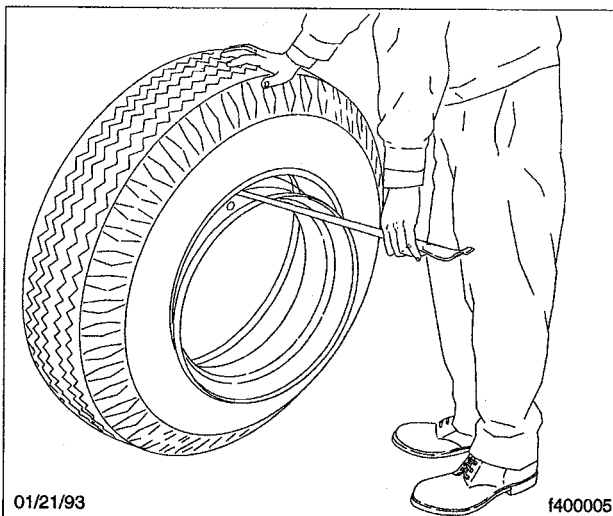


Fig. 4, Pry the Rim Out of the Tire

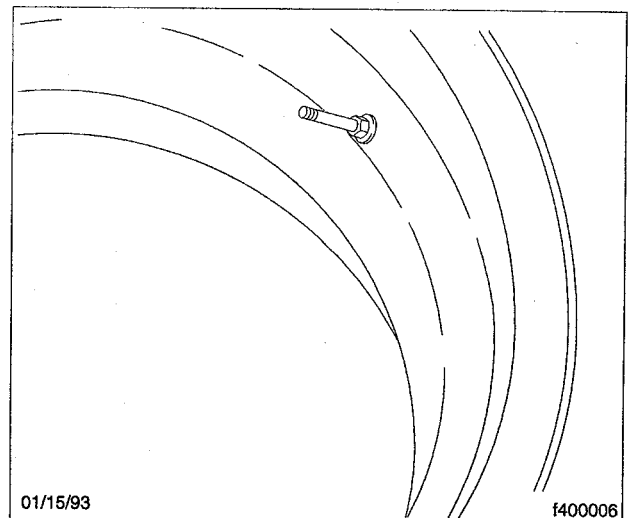


Fig. 5, Valve Stem

Recall Campaign

October 2005
FL448A
NHTSA #05V-185

- 6.4 Start the upper bead over the rim flange and into the rim well by standing on the tire. If necessary, push a section of the bead into the rim well, and anchor it by attaching Vise-Grip® pliers to the rim flange (snub side toward the tire). Using the spoon end of the tire iron, with the stop toward the rim, work around the bead. See Fig. 7. Proceed in small increments until the bead slips over the flange and into the rim well. If necessary, insert a second tire iron and relubricate the last 8 inches (20 cm) of bead.
 - 6.5 Inflate the tire per the manufacturer's recommended procedures.
7. Install the wheel and tire assembly on the axle.
- IMPORTANT:** Before installing the wheels, it is recommended that an anti-seize compound be applied on the wheel pilot of the hubs on front axles. After time in service, a small amount of rust or corrosion may make the wheel difficult to remove because of the extended wheel-to-hub contact. Applying an anti-seize compound on the wheel pilot of the hub will ensure easy wheel removal at a later date.
- 7.1 Clean the hub and wheel mounting surfaces, and all disc faces of dual wheels. Make sure the tire is correctly inflated.
 - 7.2 Apply a few drops of light engine oil to the wheel studs and the area between the body and the flange of each two-piece flange nut. Wipe off any excess oil.

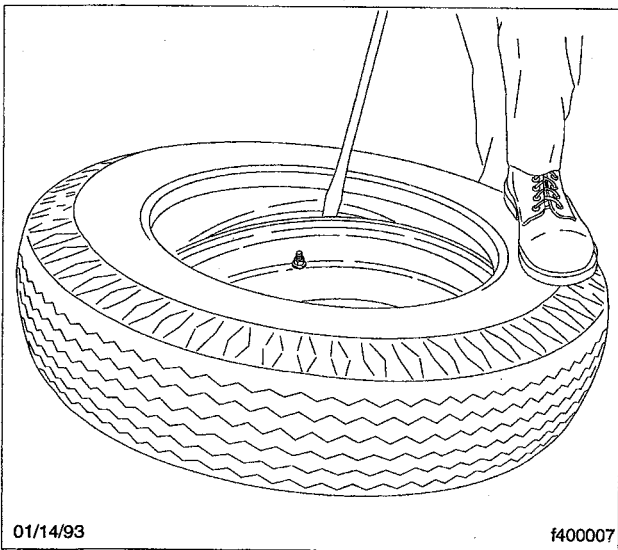


Fig. 6, Work the Bead into the Rim

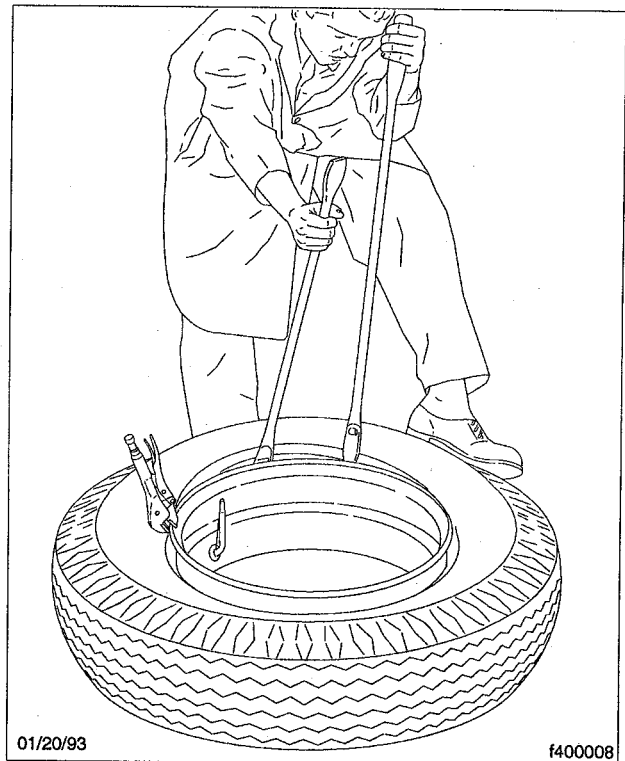


Fig. 7, Using a Second Tire Iron

⚠ CAUTION

The wheel center hole and hub pilot have close tolerances. If the wheel is not kept square to the hub, it could bind during installation and damage the stud threads or hub-pilot pads. Keep the wheel square to the hub during installation.

IMPORTANT: Before installing the wheels, make sure the drum is positioned on the raised step of the pilot pad. One of the hub pilot pads must be at the top location. To help keep the drum in place, it may be necessary to adjust the brakes before installing the wheels.

- 7.3 Locate one hub-pilot pad in the top-center position. Using a jack or wheel-and-tire dolly, position the wheel assembly (or inner wheel assembly) on the hub. Make sure the wheel is square to the hub so that the stud threads or hub-pilot pads are not damaged by contact with the wheel during installation.
- 7.4 Using the same procedure, mount the outer wheel against the inner wheel. Make sure the hub-pilot pad is still centered at the top.
- 7.5 Install and hand-tighten a two-piece flange nut on the top and bottom studs.

⚠ CAUTION

The two-piece flange nuts have right-hand metric threads. Do not try to install a similar size SAE nut on a stud, or the stud and nut will be damaged.

- 7.6 Install and hand-tighten the remaining two-piece flange nuts. Tighten the nuts 50 lbf-ft (68 N·m) following the sequence in Fig. 8.
- 7.7 Check that the wheel is correctly seated against the hub and on the hub-pilot pads.
- 7.8 Following the sequence in Fig. 8, tighten the two-piece flange nuts 450 to 500 lbf-ft (610 to 678 N·m).

⚠ WARNING

Failure to replace damaged parts could result in the loss of a wheel or loss of vehicle control, causing personal injury or property damage. Always replace damaged parts with new parts.

IMPORTANT: If the wheel nuts cannot be tightened to minimum torque values, the studs could be turning in the hub flange, having lost their locking ability. In this situation, the wheel hub assembly is damaged and must be replaced with a new assembly. Failure to reach minimum torque values could also be caused by stripped threads on the wheel studs or wheel nuts. Again, damaged parts must be replaced with new parts.

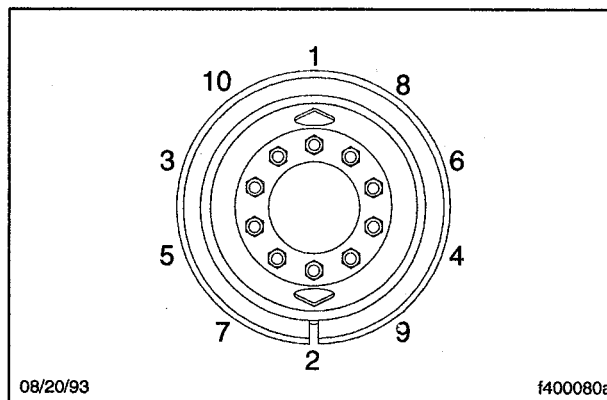


Fig. 8, 10-Stud Disc Wheel Tightening Sequence

Recall Campaign

October 2005
FL448A
NHTSA #05V-185

- 7.9 Remove the safety stands, lower the vehicle, and remove the chocks.

 **CAUTION**

Too little wheel nut torque can cause wheel shimmy, wheel damage, stud breakage, and extreme tire tread wear. Too much wheel nut torque can break studs, damage threads, and crack discs in the stud hole area. Use the specified torque values, and follow the tightening sequence in Fig. 8.

IMPORTANT: The two-piece flange nuts will seat during vehicle operation. It is necessary to periodically tighten the wheel nuts to the specified torque. Tighten the two-piece flange nuts to the specified torque 50 to 100 miles (80 to 160 km) after service work, and check the torque every 10,000 miles (16 000 km) thereafter.

- 7.10 After operating the vehicle for 50 to 100 miles (80 to 160 km), retighten the wheel nuts 450 to 500 lbf·ft (610 to 678 N·m). Follow the sequence in **Fig. 8**.
8. Clean a spot on the base label (Form WAR259). The base label is usually located on the passenger-side door about 12 inches (30 cm) below the door latch. Write the campaign number, FL448, on the blank completion sticker (Form WAR260) from the recall kit, and attach it to the base label.
9. Close the hood and remove the chocks from the tires.