



SERVICE BULLETIN NO. SB-20-002

Issue date: August 24, 2010

SUBJECT: ALCOA – Trouble Shooting and Maintaining the Aluminum Wheel

ALCOA has now made available a technical bulletin for trouble shooting and maintaining the aluminum wheel. The following pages display Alcoa's tips on maintenance against corrosion (non-Dura-Bright surface treated wheels), cleaning and maintenance for the Dura-Bright surface treated wheels, and instructions on tightening hub piloted mounting for two-piece flange nuts.

Any questions regarding the content of their technical bulletin may be directed to:

ALCOA at 888-MY-WHEEL

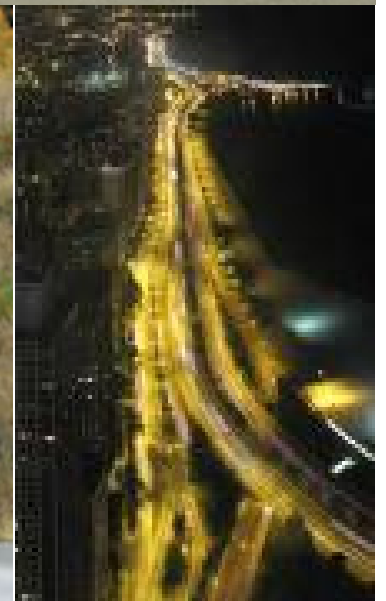
Any other questions regarding this service bulletin should be directed to Utility's Field Service Department at 800-423-6591.

Field Service Department

UTILITY TRAILER MANUFACTURING COMPANY



ALCOA



Maintenance against corrosion (non-Dura-Bright® surface treated wheels)

The following information is for standard Alcoa forged aluminum wheels without the Dura-Bright® surface treatment. See Section 3-15 for specific instructions on the care and cleaning of Alcoa Dura-Bright® surface treated wheels.

1. Clean frequently with high pressure water from a hose. The use of a mild detergent will speed the cleaning process. Use no strong cleaners.
2. When tires are removed the entire wheel must be cleaned and inspected. (See Section 3). With a wire brush, remove any foreign products from the tire side of the rim. Do not use a wire brush to remove dirt and corrosion products from the appearance surface of the wheel. Generously coat the entire air chamber surface with an approved surface protectant and lubricant each time the tire is removed (see Section 4-1).
3. To maintain the original appearance of your Alcoa wheels, the following procedures are recommended:
 - a. After installing new wheels and prior to operating your vehicle, use a sponge, cloth or soft fiber brush to wash exposed wheel surfaces with a mild detergent and warm water solution.
 - b. Rinse thoroughly with clean water.
 - c. Wipe dry to avoid water spots.
 - d. Wax the cleaned surface with Alcoa Advanced Aluminum Care System Polish or any automotive polish equivalent.
 - e. Clean your Alcoa truck wheels as frequently as required to maintain their appearance.

Dura-Bright® surface treated wheels cleaning and maintenance

1. The Dura-Bright® surface treatment is designed to be easy to clean and generally only requires water. If soils attached to the surface do not come off with cold water, try warm water and wipe with a soft towel or chamois material. If soils remain, use warm water and a mild detergent (with assistance of a commercial high pressure power washer, if available). Always dilute the detergent according to the manufacturer's recommendation; never use the detergent straight without diluting with water. In the mixed, diluted state the cleaner acidity should be at pH equal or greater than 5; avoid cleaners that contain any hydrofluoric acid. In the mixed, diluted state the cleaner alkalinity (basicity) should be at pH equal or lower than 9.
 2. When tires are removed, the entire rim must be cleaned and inspected (see Section 3). With a soft brush, remove any foreign products from the rim (portion of the wheel that supports the tire). Generously coat the entire air chamber surface with an approved surface protectant and lubricate each time the tire is removed (see Section 4-1).
 3. Once in service, Dura-Bright® wheels can become nicked or scratched by road debris and/or mechanical damage. If this occurs, continue to follow the normal washing and cleaning instructions provided above.
 4. Even as durable as Dura-Bright® wheels are, the mounting area can become scratched, marred or discolored when mounted against another wheel, hub or drum. The use of a wheel mounting surface guard, such as Disc Mates, are highly recommended.
- Note: pH value can be found in chemical MSDS (Material Safety Data Sheet). If the cleaner is in concentrated form, contact your cleaning chemical supplier to determine pH levels.

Tightening hub piloted mounting, two-piece flange nuts

Flange nuts must be kept tight, and studs and nuts should be checked frequently. At tire changes, nuts and studs should be inspected to be sure they are in good condition. If nuts require frequent tightening or studs break frequently, hardware and mounting practices should be reviewed.

Impact wrenches, if used, should be carefully adjusted to apply torques within the limits recommended. Torquing of flange nuts should be done in recommended sequences.

Two-piece flange nuts with a 33mm hex head design (see Section 5-2), used with hub piloted wheels should be tightened to a torque of 450 to 500 foot-pounds. Two-piece flange nuts with 1-1/2-inch hex head design and other designs have different torque requirements. Inquire of the manufacturer for the proper torque values.

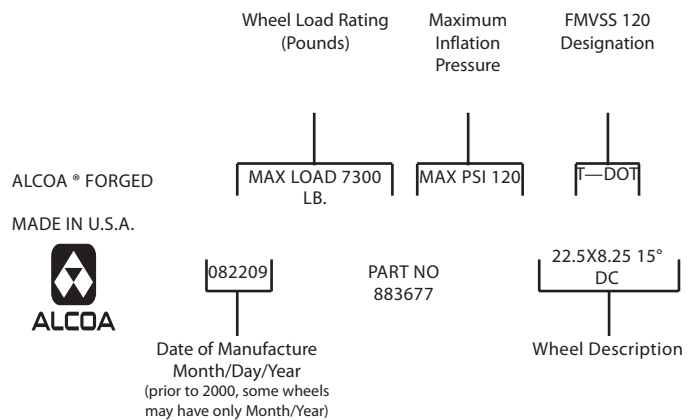
Wheel studs on both the right and left side hubs of vehicles utilizing the hub piloted wheel system have right-hand threads.

Prior to mounting hub piloted wheels, generously coat the wheel pilot or hub pads with a non-water-based lubricant to minimize corrosion product build-up between the wheel and hub pilot. Excessive corrosion build-up between the wheel and hub pilots can make wheel removal difficult. Do not lubricate the face of the wheel, hub or brake drum (see illustration on the next page).

Since 1977, all Alcoa aluminum disc wheels have been identified with a stamp that shows the wheel load rating, maximum inflation pressure, date of manufacture, part number, wheel description and DOT marking designation.

Prior to June 1996, all Alcoa heavy duty truck wheels had the Alcoa identification symbol on the outside of the disc near the hand hole in line with the valve location. This marking was phased out on heavy duty truck wheels manufactured after June 1996.

Alcoa wheel identification



All Dura-Bright® surface treated wheels are designated by the letters “DB” following the part number such as 883640DB.

Note: Dura-Bright® wheels produced after November 2002 have Alcoa wheel part numbers ending with “DB” (earlier wheels have part numbers ending in a 4 or 7) with bead seat diameters measured in 0.5-inch increments. Not all Alcoa wheels are available with the Dura-Bright® surface treatment.

All Dura-Flange® wheels are designated by the letters “DF” following the part number such as 883640DF.

All Dura-Bright® / Dura-Flange® wheels are designated by the letters "DD" following the part number such as 883640DD.

If you cannot identify the size or load rating of the wheel it should not be used.

As of January 2009 Alcoa introduced a new logo label.