



Care and Maintenance

Regular cleaning

Clean the wheels regularly with steam or high-pressure water. The use of a mild detergent is recommended. Do not use harsh alkaline / acid cleaners.

Use ALclean and ALpolish

Alcoa wheels are uncoated. The highly corrosion resistant alloy that is used for Alcoa wheels reduces oxidation to a minimum. Maintaining the original lustre of the wheels is easy with ALclean and ALpolish. Will keep your wheels bright and shiny for years.

Corrosion

Due to aluminium's natural resistance to corrosion, Alcoa forged aluminium wheels do not need to be painted. Certain environments, such as livestock hauling, can lead to corrosion. Other potentially corrosive materials include salt, highly alkaline substances and chloride compounds.

Avoid abuse

Lack of care in changing a tyre, heavy impacts of the wheel rim, overloading or hitting kerbs can damage wheels.

Do not straighten wheels

Do not heat wheels in an attempt to soften them for straightening or to repair other damage. The special alloy used in these wheels is heat-treated, and uncontrolled heating will weaken the wheel.

Do not weld the wheels for any reason

Five-year warranty

Alcoa warrants to the original purchaser that a new Alcoa aluminium disc wheel is free from defects in material and workmanship. Alcoa agrees to replace without charge a wheel that fails in normal use and service because of defects in material or workmanship within sixty (60) months of the date of manufacture as shown on the wheel.

Alcoa does not warrant and will not replace any wheel which has been subjected to misuse or abuse including, without limitation, the following;

- Using a tyre which is oversized according to standards recommended by the European Tyre and Rim Technical Organisation;
- Loading the wheel beyond the applicable maximum wheel load as specified by Alcoa;
- Inflating beyond the applicable maximum as specified by Alcoa;
- Changing the original condition of the wheel by alteration or by subjecting it to any processing, such as welding or straightening.

There is no warranty that the wheel shall be merchantable or satisfactory for any particular purpose, nor is there any other warranty expressed or implied, except such as is expressly set forth herein. Alcoa shall not be liable for any incidental or consequential damages for any breach of warranty, its liability and the purchaser's exclusive remedy being expressly limited to replacement of the wheel as herein provided. Replacement will be handled by any authorised Alcoa wheel distributor or by any Alcoa sales office. This warranty gives you specific legal rights. You may also have other rights under other applicable laws.



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Technical Data



THE LIGHTEST, THE STRONGEST

General characteristics

Material:	6061-T6 forged aluminium
Approved by:	LBF, TÜV, JWL-T, and all European vehicle manufacturers
ISO certificates:	ISO 9002 / QS 9000 / VDA 6.1 quality system ISO 14001 EMS (Environmental Management System)
Tyre sizes:	All ETRTO approved sizes
Cap nuts:	Two-piece cap nut DIN 74361 T3 or sleeved cap nut
Mounting:	Hub centred DIN 74361 T3
Valve torque:	9.0-14.6 Nm
Wheel nut/ cap nut torque:	Recommended by truck/ axle manufacturer. If not: 550-660 Nm
Availability:	Through all vehicle manufacturers or your local Alcoa distributor. For information call Alcoa.

Tyre mounting

Follow the existing procedures and safety rules

- Use only the proper tools.
- Use only the appropriate tyre size.
- Do not use a damaged tyre or wheel- inspect them carefully before mounting.
- Check if the valve is mounted in the right way.
- Apply Freylube as rim protector and tyre-mounting lubricant.
- Ensure that the tyre bead is properly seated.
- Do not over-inflate.
- Use a protective cage during inflation.

Balancing

Since Alcoa wheels are fully machined they do not require balancing. The tyre-wheel combination, however, may need corrective weighting. Liquid balancing is not recommended. Special Hofmann designed clip-on balance weights are suitable (see technical data sheet).

Valves

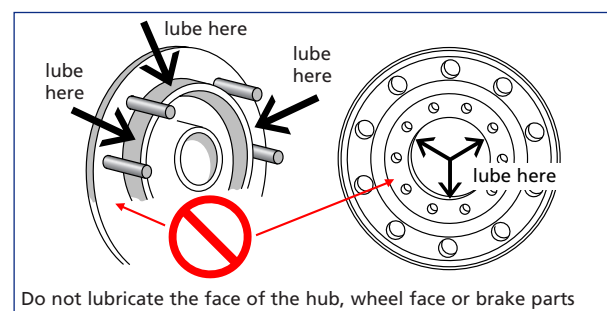
Alcoa wheels are supplied with nickel or chrome-plated valves installed. Never install brass valves. Brass is not compatible with aluminium and corrosion will result. The Alcoa standard valve should never be bent to another shape. Different valve extensions may be used. If the valve is changed for any reason, apply 'Freylube' or an equivalent lubricant to the valve hole area and valve seat.

Mounting on the truck

Freylube

Before mounting, lubricate the spigots or the wheel hub bore with Freylube. This minimize corrosion between the wheel and hub. Do not lubricate the face of the wheel or hub. Freylube or equivalent lubricants are heat resistant and are safe for aluminium and tyres. They can also be used for mounting tyres and valves. Other lubricants that are water-based or contain heavy metals can cause corrosion and should not be used.

Freylube can be ordered from your Alcoa distributor.



Centre-mounting system

Alcoa wheels are designed for hub-centred systems. The wheel is held in place on studs by cap nuts with an integral flat washer. Do not alter the mounting holes or use conical or spherical cap nuts. Such modifications will invalidate the warranty.

Spigot length

For single and dual wheel mounting, the spigots should be in contact with the wheels for at least 3 mm. Longer spigots make mounting easier.

Torque

Always use the correct torque:

Cap nuts: recommended by truck/ axle manufacturer.

If not mentioned, use 550-660 Nm.

Valves: 9.0-14.6 Nm.

Check the torque of valves and cap nuts frequently.

Studs and wheel nuts

The mounting flange of Alcoa wheels is thicker (22 or 28 mm) than the disc of steel wheels (11 or 13 mm) and requires a different mounting system. Therefore either correspondingly longer mounting studs, or special sleeved cap nuts should be used on standard length studs.

CAUTION

Some trailer axle manufacturers offer axles with "combined" stud lengths, suitable for both thinner steel wheels and thicker aluminium wheels. The length of these studs is designed for a maximum wheel disc thickness of 24.5 mm and does not fit Alcoa wheel size 11.75 x 22.5 / 120 mm inset with 28 mm disc. Longer studs (available) or sleeved cap nuts must be used for this combination. Alcoa wheel size 11.75 x 22.5 / 0 mm inset can be mounted on these axles without any modification.

Wheels with 26 mm bolt hole diameter. Longer studs, standard wheel nut.

This wheel version requires longer wheel studs than for steel wheels. The stud length must be checked very carefully.

Dual mounting:

Minimum standout should be 72 mm. Standout is measured from the nave attachment surface to the outer end of the stud.

Single mounted wheels:

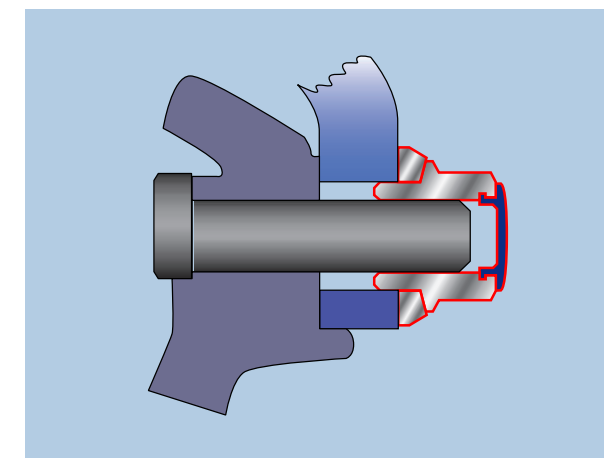
- For 7.50 x 22.5, 8.25 x 22.5, 9.00 x 22.5 and 11.75 x 22.5 / 0 mm inset the standout should be at least 50 mm.
- 11.75 x 22.5 / 120 mm or 135 mm inset and 13.00 x 22.5 require a min. standout of 55 mm.

The normal wheel nut with integral flat washer must be used in connection with longer studs. Correct, longer studs for Alcoa wheels are available from truck and/or axle manufacturers.

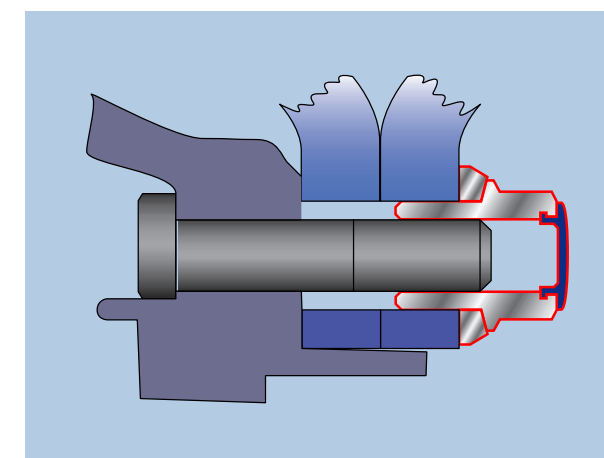
Wheels with 32 mm bolt hole diameter, Standard studs, Alcoa wheel nuts.

The standard steel wheel stud length can accommodate Alcoa wheels with more disc thickness when a special sleeved cap nut is used. The shank of these nuts reaches into the 32 mm mounting holes and compensates the standard stud length.

The shanks do not centre the wheel, the system still requires a hub-piloted axle. Short and long sleeved cap nuts are available from Alcoa in thread sizes for all European vehicles. The torque to obtain the correct clamping force is recommended by your truck/ axle manufacturer. If not, use 550 - 650 Nm.



Single wheels require sleeved nuts with a short shank.



For dual mounting wheels must be mounted with long shank nuts.