

# WHEELS AND RIMS



## ALCOA ALUMINUM LIGHT TRUCK WHEELS



Alcoa Forged Specialty Wheels offers a full portfolio of wheel surface options by bringing you the latest in wheel technology and innovation. The proper wheel surface is an important component to a quality wheel. Different wheel surface options offer various qualities and benefits to a wheel owner. Wheel appearance, durability and maintenance requirements should all be considered when choosing a wheel surface. Alcoa Forged Specialty Wheels leads the way in offering many leading-edge surface options to our customers. We conduct ongoing and exhaustive testing and work closely with the Alcoa Technical Center, the largest light metals research laboratory in the world, to offer the latest in wheel surface technology. **Available in 15", 16" and 19.5".**



## ALUMINUM HEAVY-DUTY TRUCK WHEELS **ALCOA ACCURIDE** WHEELS

INTRODUCING AVAILABLE ALCOA DURA-BRIGHT® WHEEL WITH XBR® TECHNOLOGY

- Still cleans with soap and water
- Now even brighter
- 53% more reflective than the first generation\*
- Image clarity has improved 74%\*
- Maintains shine even after hundreds of washes and thousands of miles
- Featuring Alcoa's legendary one-piece forged aluminum strength
- Five-year limited warranty

**Available in Stud or Hub Pilot - 22.5" and 24.5"**



## NO-MAR RIM GUARD

Protects from scratching chrome, aluminum, and painted truck wheels when removing lug nuts. Fits 10 Hole 22.5" or 24.5" Wheels

PART NO.	DESCRIPTION
NMRG	NO-MAR Rim Guard

## TRUCK WHEEL ATTACHING PARTS

### STUDS AND NUTS FOR DISC WHEELS

Typical examples of studs, nuts and clamping plates used with disc wheels are illustrated in this section. A typical stud (Fig.1) used with in-board brake drums has a thread on both ends, a shoulder with two flats, and is longer from the shoulder on the one end with an unthreaded section. The flat surfaces of the shoulder fit into the recessed outer surface of the hub to keep the stud from turning. The smooth portion is long enough to fit through the brake drum, and is then held in place by a back or jam nut (Fig.2). For outboard brake drums a serrated stud with threads on one side is typically used (Fig. 3).

On front stud mount wheels, an outer cap nut (Fig.4) or (Fig.6) is used. On stud mount rear dual wheel applications, the inner wheel is held in place by an inner cap nut (Fig.5) and the outer wheel by an outer cap nut (Fig.6).

For hub mount wheels which pilot from the center hole, flange nuts are used on both the front and rear wheels. One-piece flanged cap nuts (Fig.7) are used on light truck and medium truck applications. Heavy trucks and buses and some light trucks use a two-piece flange nut or swiveling lug nut (Fig.8) when hub mount wheels are used. Some light trucks use a clamping plate (Fig.9) and 90 degree cone nuts (Fig.10) for both the front and rear wheel. Light trucks which use single wheels on the front and rear axle require 90 degree cone nuts or 60 degree cone nuts (Fig.11), depending on the truck manufacturer.

### RIM CLAMPS, STUDS AND NUTS FOR DEMOUNTABLE RIMS

The stud for cast spoke wheels (Fig.12), threaded on both ends, is installed in a threaded hole at the end of a spoke. The front clamp (Fig.13) and a rear clamp (Fig.14) hold the demountable rim in position with studs and nuts (Fig.15). A clamp for a three-spoke wheel with two stud holes is shown in (Fig.16).

