

ALCOA FORGED ALUMINUM WHEEL ACCESSORIES

HUB COVER SYSTEMS



The Alcoa Hub Cover System, made from high impact strength ABS/PC plastic, has a gleaming chrome-plated finish that resists corrosion so the good looks last. Fits 10-hole 22.5" and 24.5" wheels with 285.75mm (11.25") bolt circles. Hug-A-Lug® wrench, P/N 000600 for hub piloted kits and P/N 000500 for ball seat kits, are included.



Hub Piloted Wheel Kits — Clamp-On Nut Covers

P/N 076018	Steer axle wheel kit for two hub piloted wheels
P/N 077018	Drive axle wheel kit for four hub piloted wheels

Ball Seat, Stud Located Wheel Kits — Clamp-On Nut Covers

P/N 076015	Steer axle wheel kit for two ball seat wheels
P/N 077015	Drive axle wheel kit for four ball seat wheels

Hub Piloted Wheel Kits — Screw-On Nut Covers

P/N 076085	Steer axle wheel kit for two hub piloted wheels
P/N 077085	Drive axle wheel kit for four hub piloted wheels

To request a copy of the printed Accessories Catalog, call toll-free 800-242-9898, opt 1. See www.alcoawheels.com for literature and service information.

HUG-A-LUG® COVERS



Hug-A-Lug® cap nut covers snap on, snap off by hand. Available to fit ball seat or hub piloted lug nuts. Alcoa Hug-A-Lug® cap nut covers are made of impact resistant ABS plastic and have a brilliant chrome finish.

Ball Seat, Stud Located Cap Nut Cover

P/N	TYPE	FITS CAP NUTS
000150	Truck, Bus, Motorhome	1-1/2" hex, 3/4" height

Hub Piloted Cap Nut Covers

P/N	TYPE	FITS CAP NUTS
000180	Bus	33mm hex, .886 to 1" height
000181	Truck	33mm hex, 27-31mm height
000182	Truck	1-1/2" hex, 1-7/16" height
000183	Bus	1-1/2" hex, 7/8" height



AIR VALVES, VALVE EXTENSIONS AND VALVE EXTENSION STABILIZER SYSTEMS



All Alcoa drop center wheels for tubeless tires come with nickel-plated air valves installed. Valve number TR-509 should be installed with 10 to 14 ft. lbs. torque. Valve numbers TR-543, TR-543C, TR-543E, TR-544D, TR-545D, TR-545E, TR-546E and 60MS27N should be installed with 6.8 to 10.6 ft. lbs. torque.

Valve stem extension and stabilizer system makes inner dual valve stem easy to reach, reducing extension breakage. For use with aluminum inner and aluminum outer dual wheel applications only. Available for 19.5", 22.5", 24.5" Alcoa Classic and New Generation hub piloted or ball seat mounting wheels. Contact your local Alcoa wheel sales representative for complete part number and fitment information.

ALCOA ALUMINUM WHEELS

SPEC DATA

MARCH 2007

SPEC DATA

PRODUCT CATALOG

ALCOA FORGED ALUMINUM WHEEL MOUNTING HARDWARE



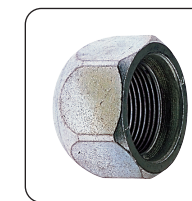
Two-piece, 33mm hex, M22 x 1.5mm, RH thread, flange nut. Mounts single and dual wheels to wheel centering hubs. Right-hand threads used on both sides of vehicle. Single wheels require 2" (50.8mm) stud stand-out. Dual wheels require 2-13/16" stud stand-out. P/N 39874 (supersedes P/N 39701)



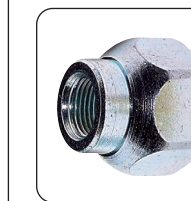
Two-piece, 33mm hex, M22 x 1.5mm, RH thread, sleeved cap nut. Mounts single aluminum wheels, with 32mm bolt holes, to wheel centering hubs with stud stand-outs less than 1.92" (48.75mm). Right-hand threads used on both sides of vehicle. P/N 4306.32



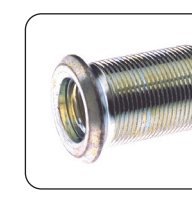
Two-piece, 33mm hex, M22 x 1.5mm, RH thread, sleeved cap nut. Mounts single aluminum wheels, with 32mm bolt holes, to wheel centering hubs with stud stand-outs less than 2.85" (72mm). Right-hand threads used on both sides of vehicle. P/N 4307.32



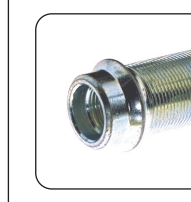
1-1/8"x16 cap nut. Mounts standard single wheels and wide base wheels to 1-1/8" studs and provides additional 1/8" hex height. Also mounts outer dual wheel to 1-1/8" inner cap nut. P/N 5996R, 5996L (replaces P/N 5552R, 5552L).



3/4"x16 cap nut. Mounts standard single wheels and wide base wheels to 3/4" studs. P/N 5995R, 5995L (replaces P/N 5554R, 5554L).



Inner cap nut, inner thread 3/4"x16, outer thread 1-1/8"x16. For use with steel inner dual wheel and aluminum outer dual wheel with 1.31" to 1.44" stud stand-out. P/N 7896R, 7896L (Grade 8).



Inner cap nut for use with standard length studs (1.31" to 1.44" stud stand-out) or longer studs not to exceed 1.88" stud stand-out. Full external threads, counter bore 5/16" deep at open end. For use with aluminum inner and aluminum outer wheels. Prevents stud from bottoming out in cap nut. P/N 5988R, 5988L (Grade 8).

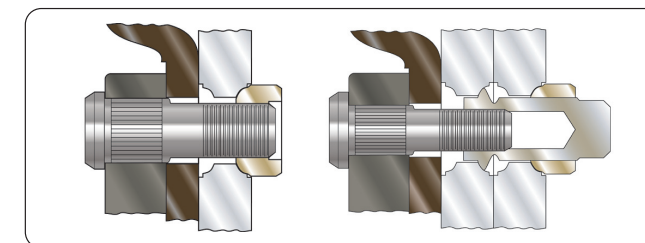
FOLLOW PROPER SERVICE AND OPERATING PROCEDURES

Alcoa wheels for heavy duty trucks and for motorhomes are as easy to service as other disc wheels. It is important that the tools be kept smooth and free of nicks or spurs to avoid damage to the wheel surfaces. Tire mounting, tire demounting and wheel inspection procedures are also the same for most Alcoa aluminum wheels, with the exception of the 19.5" RW wheels. Alcoa 19.5" RW wheels must have the tires mounted and demounted over the disc of the wheel only. For complete instructions on the proper mounting and demounting of tires on Alcoa 19.5" RW wheels, contact Alcoa at (800) 242-9898, option 1.

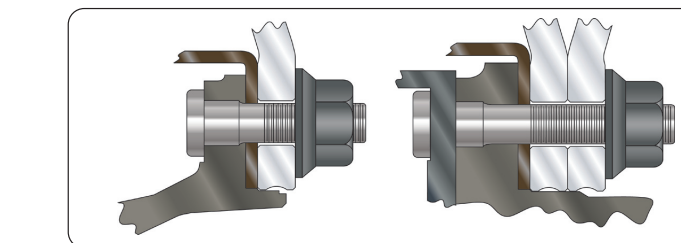
Correct torque is as important for aluminum as it is for steel disc wheels. Overtorquing stresses the studs and damages the wheels. Undertorquing results in loose wheels. To get the right tightness, use the right torque ... no more, no less. Inner and single cap nuts used with stud located wheels should be tightened to a torque of 450-500 foot-pounds if the threads are not lubricated; if the threads are lubricated, nuts should be tightened to a torque of 350-400 foot-pounds. Note: when dualing steel wheels with Alcoa aluminum wheels, follow the steel wheel manufacturer's recommendations regarding the proper torque and use of thread lubricants to mount the wheel. Two-piece cone lock cap nuts with a 33mm hex head design used with hub piloted wheel should be tightened to a torque of 450-500 foot-pounds. Follow the same safety precautions and OSHA regulations for both steel and aluminum disc wheels. These include using an OSHA-approved safety cage to inflate the tires; do not overinflate and never use a tube in a tubeless tire.

Do not weld or heat aluminum wheels. Destroy and scrap damaged wheels. Wheels get their strength from heat treating. The heat of welding destroys the strength of the wheel.

Follow the procedures outlined in the Alcoa Aluminum Truck Wheel Service Manual and Operating Instructions. To request a copy of the truck wheel service manual, call toll-free 800-242-9898, option 1. To view online, go to www.alcoawheels.com.

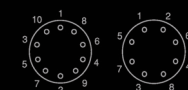


Typical configuration of single wheel and dual wheel mounting on stud located, ball seat (double cap nut) wheels.



Typical assembly of single and dual wheels of hub piloted type.

TRUCK | TRAILER | BUS



Alcoa Wheel Products
1600 Harvard Avenue
Cleveland, Ohio 44105
800-242-9898
www.alcoawheels.com

Wheel Specifications

Alcoa aluminum disc wheel mounting dimensions are consistent with SAE Recommended Practice J694 February 2001. Part numbers listed for all sizes are satin finish (the last digit of the six-digit numerical part number is "0"). Polished finishes are indicated by changing the last digit of the part number listed to one of the following: For polished outside only, part number should end in "1." For polished inside only, part number should end in "2." For polished both sides, part number should end in "3." Only for item numbers marked with a single asterisk (*), part numbers ending in "9" are inset position wheels satin finished (see footnote).

Dura-Bright® Wheels with XBR™ Technology are identified by using the regular numerical part number and the addition of "DB" at the end. Finishes are indicated by changing the last numerical digit of the part number to one of the following. For brushed both sides, the number is "0." For buffed outside only, the number is "1." For buffed inside only, the number is "2." For buffed both sides, the number is "3." Only the wheel part numbers with available surface finishes having the "DB" suffix are available with the Dura-Bright® with XBR™ Technology option. Dura-Flange® Wear Protection wheels are identified by using the regular numerical part number and the addition of "DF" at the end. Only the wheel part numbers with available surface finishes having the "DF" suffix are available with the Dura-Flange® option. **Note:** The Dura-Bright® with XBR™ Technology surface treatment and the Dura-Flange® Wear Protection options are not currently available together on the same wheel.

TUBELESS WHEELS (round hand holes) ENGLISH UNITS														
Item no.	Wheel description	Maximum wheel load ¹ in lbs.	Wheel wt. lbs.	Outset inches ³	Inset inches	Maximum inflation PSI—cold	Valve stem	Part number ²	Available finishes ⁴	Stabilizer	Front outer cap nuts	Rear inner cap nuts A/AI	Rear inner cap nuts AI/StI	Rear outer cap nuts
Six-hole, stud located, ball seat mounting—8.750 in. bolt circle, 6.495 in. hub bore, 1.219 in. bolt hole diameter <i>DiscMate: N/A Lug nut covers: 150 Hub covers: N/A</i>														
1	17.5x8.75-15°DC	5070	32	5.55	4.72	125	TR543C	663170	0, 2	-	3/4" Stud 5995 L&R, 1-1/8" Stud 5996 L&R	5988 L&R	7896 L&R	5996 L&R
10-hole, stud located, ball seat mounting—8.750 in. bolt circle, 6.495 in. hub bore, 1.219 in. bolt hole diameter <i>DiscMate: N/A Lug nut covers: 150 Hub covers: N/A</i>														
2	17.5x6.75-15°DC	5070	31	5.55	4.72	125	TR543C	663070	0, 2	-	3/4" Stud 5995 L&R, 1-1/8" Stud 5996 L&R	5988 L&R	7896 L&R	5996 L&R
10-hole, stud located, ball seat mounting—11.25 in. bolt circle, 8.73 in. hub bore, 1.219 in. bolt hole diameter <i>DiscMate: 3/4" - 016000, 1-1/8" 017000 Lug nut covers: 150 Hub covers: Front - 076015, Rear - 077015</i>														
3	22.5x8.25-15°DC	7200	53	6.66	5.68	120	TR545D	883110	0, 1, 2, ODB, 1DB, 2DB	2225	3/4" Stud 5995 L&R, 1-1/8" Stud 5996 L&R	5988 L&R	7896 L&R	3/4" Stud 5995 L&R, 1-1/8" Stud 5996 L&R
4	22.5x9.00-15°DC	9000	60	6.94	5.94	130	TR543C	893000	0, 1, 2	-	3/4" Stud 5995 L&R, 1-1/8" Stud 5996 L&R	5988 L&R	7896 L&R	3/4" Stud 5995 L&R, 1-1/8" Stud 5996 L&R
5	22.5x12.25-15°DC	11,400	62	.56 Reversible	—	130	TR543E	823000	0, 2	-	3/4" Stud 5995 L&R, 1-1/8" Stud 5996 L&R	-	-	3/4" Stud 5995 L&R, 1-1/8" Stud 5996 L&R
*6	22.5x12.25-15°DC	11,400	66	3.88	2.76	130	TR543E outset TR545E inset	823050	0, 1, 2, 9	-	3/4" Stud 5995 L&R, 1-1/8" Stud 5996 L&R	-	-	3/4" Stud 5995 L&R, 1-1/8" Stud 5996 L&R
7	22.5x12.25-15°DC	11,000	70	5.84	4.68	130	TR545E	823060A	0, 1	-	3/4" Stud 5995 L&R, 1-1/8" Stud 5996 L&R	-	-	3/4" Stud 5995 L&R, 1-1/8" Stud 5996 L&R
*18	22.5x14.00-15°DC	12,800	71	2.0	—	130	TR543E outset	841100	0, 2	-	3/4" Stud 5995 L&R, 1-1/8" Stud 5996 L&R	-	-	3/4" Stud 5995 L&R, 1-1/8" Stud 5996 L&R
9	24.5x8.25-15°DC	7200	59	6.6	5.59	120	TR545D	983120	0, 1, 2	-	3/4" Stud 5995 L&R, 1-1/8" Stud 5996 L&R	5988 L&R	7896 L&R	3/4" Stud 5995 L&R, 1-1/8" Stud 5996 L&R
Eight-hole, hub piloted mounting—275mm bolt circle, 221.1mm hub bore, 26.75mm bolt hole diameter (use two-piece flange nuts) <i>DiscMate: 014000 Lug nut covers: 181 Hub covers: N/A</i>														
10	22.5x7.50-15°DC	7300	53	6.28	5.44	120	TR545D	873400	0, 1, 2, ODB, 1DB, 2DB	2225	39874	-	-	39874
11	22.5x8.25-15°DC	7400	50	6.66	5.82	130	TR544D	883440	0, 1, 2, ODF, 1DF, 2DF	8864	39874	-	-	39874
*12	22.5x14.00-15°DC	12,800	71	2.0	—	130	TR543E outset	841400	0, 2	-	39874	-	-	39874
13	24.5x8.25-15°DC	7300	62	6.6	5.77	120	TR509	983400	0, 1, 2	2245	39874	-	-	39874
10-hole, hub piloted mounting—285.75mm bolt circle, 220.1mm hub bore, 26.75mm bolt hole diameter (use two-piece flange nuts) <i>DiscMate: 011000 Lug nut covers: 181 Hub covers: Front - 076018 or 076085‡ Rear - 077018 or 077085‡</i>														
14	22.5x7.50-15°DC	7300	53	6.28	5.44	120	TR545D	873600	0, 1, 2, 3, ODB, 1DB, 2DB, 3DB	2225	39874	-	-	39874
15	22.5x8.25-15°DC	7400	48	6.66	5.81	130	TR544D	883640	0, 1, 2, 3, ODB, 1DB, 2DB, 3DB, ODF, 1DF, 2DF, 3DF	8864	39874	-	-	39874
*16	22.5x8.25-15°DC	8000	55	6.66	5.69	130	TR543C	885600	0, 1, 2, ODF, 1DF, 2DF	-	39874	-	-	39874
17	22.5x9.00-15°DC	9000	60	6.94	6.04	130	TR544D	893640	0, 1, 2, 3, ODB, 1DB, 2DB, 3DB	8964	39874	-	-	39874
18	22.5x9.00-15°DC	10,000	53	—	3.12	130	TR545E	893630	0, 1, ODB, 1DB	-	39874	-	-	39874
**19	22.5x10.50-15°DC	10,500	68	6.61	5.5	130	TR543	803600	0, 1, ODB, 1DB	-	39874	-	-	-
20	22.5x12.25-15°DC	12,300	63	.56 Reversible	—	130	TR543E	823600	0, 2	-	39874	-	-	39874
*21	22.5x12.25-15°DC	11,400	66	3.88	2.75	130	TR543E outset TR545E inset	823650	0, 1, 2, ODB, 1DB, 2DB, ODF, 1DF, 2DF, 9, 9DB, 9DF	-	39874	-	-	39874
22	22.5x12.25-15°DC	11,000	68	5.8	4.68	130	TR542	823640	0, 1, ODB, 1DB, ODF, 1DF	-	39874	-	-	39874
*23	22.5x13.00-15°DC	12,300	73	3.5	2.38	130	TR543E outset TR545E inset	833650	0, 1, 2, 9	-	39874	-	-	39874
24	22.5x13.00-15°DC	11,000	74	6.42	5.3	130	TR542	833640	0, 1	-	39874	-	-	39874
*25	22.5x14.00-15°DC	12,800	68	2.0	—	130	TR543E outset	841600	0, 2, ODB, 2DB	-	39874	-	-	39874
*26	22.5x14.00-15°DC	12,800	71	1.13	0	130	TR545E outset TR543E inset	841610	0, 1, 2, 9, ODB, 1DB, 2DB, 9DB	-	39874	-	-	39874
27	24.5x8.25-15°DC	7400	56	6.6	5.73	130	TR545D	983640	0, 1, 2, 3, ODB, 1DB, 2DB, 3DB, ODF, 1DF, 2DF, 3DF	8864	39874	-	-	39874
*28	24.5x8.25-15°DC	8000	65	6.6	5.63	130	TR545D	985600	0, 1, 2, ODF, 1DF, 2DF	-	39874	-	-	39874

TUBELESS WHEELS (round hand holes) ENGLISH UNITS <i>continued</i>														
Item no.	Wheel description	Maximum wheel load ¹ in lbs.	Wheel wt. lbs.	Outset inches ³	Inset inches	Maximum inflation PSI—cold	Valve stem	Part number ²	Available finishes ⁴	Stabilizer	Front outer cap nuts	Rear inner cap nuts A/AI	Rear inner cap nuts AI/StI	Rear outer cap nuts
10-hole, hub piloted bus mounting—11.25 in. bolt circle, 8.670 in. hub bore, 1.219 in. bolt hole diameter (use two-piece flange nuts) <i>DiscMate: 015000 Lug nut cover: 182 Hub covers: N/A</i>														
29	22.5x8.25-15°DC	7300	53	6.66	5.82	120	TR545D	883610	0, 3, ODB, 3DB, ODF, 3DF	-	-	-	-	-
**30	24.5x8.25-15°DC	7300	62	6.6	5.77	120	TR545D	983610	0, 3, ODB, 3DB	2245	-	-	-	-

TUBELESS WHEELS (round hand holes) ENGLISH UNITS (METRIC UNITS)														
Item no.	Wheel description	Maximum wheel load ¹ in lbs. (kilograms)	Wheel wt. lbs. (kilograms)	Outset inches ³ (mm)	Inset inches (mm)	Maximum inflation PSI—cold (KPa)	Valve stem	Part number ²	Available finishes ⁴	Stabilizer	Front outer cap nuts	Rear inner cap nuts A/AI	Rear inner cap nuts AI/StI	Rear outer cap nuts
Eight-hole, hub piloted mounting—275mm bolt circle, 221.1mm hub bore, 24.75mm bolt hole diameter (use two-piece flange nuts) <i>DiscMate: 014000 Lug nut covers: 181 Hub covers: N/A</i>														
31	17.5x6.75-15°DC	5515 (2500)	29.5 (13.4)	5.55 (141)	4.72 (120)	142 (978)	TR543C	663470	0, 2	-	39874	-	-	39874
32	19.5x6.75RW-15°DC	5515 (2500)	37.0 (16.8)	5.55 (141)	4.72 (120)	142 (978)	TR543C	764490	0, 1, 2, 3	-	39874	-	-	39874
33	19.5x7.50RW-15°DC	6615 (3000)	37.7 (17.1)	6.10 (155)	5.28 (134)	142 (978)	TR543C	773400	0, 1, 2, 3	-	39874	-	-	39874
10-hole, hub piloted mounting—225mm bolt circle, 176.1mm hub bore, 26.50mm bolt hole diameter (use two-piece flange nuts) <i>DiscMate: N/A Lug nut covers: 181 Hub covers: N/A</i>														
34	17.5x6.00-15°DC	5515 (2500)	28.0 (12.7)	5.24 (133)	4.49 (114)	142 (976)	TR543D	663200	0, 1, 2	2125	39874	-	-	39874
10-hole, hub piloted mounting—285.75mm bolt circle, 220.1mm hub bore, 26.75mm bolt hole diameter (use two-piece flange nuts) <i>DiscMate: 011000 Lug nut covers: 181 Hub covers: Front - 076018 or 076085‡ Rear - 077018 or 077085‡</i>														
35	19.5x7.50RW-15°DC	6615 (3000)	37.7 (17.1)	6.10 (155)	5.28 (134)	142 (978)	TR543C	773600	0, 1, 2, 3	-	39874	-	-	39874
10-hole, hub piloted mounting—335mm bolt circle, 281.2mm hub bore, 26.75mm bolt hole diameter (use two-piece flange nuts) <i>DiscMate: 013000 Lug nut covers: 181 Hub covers: 5811 polished with view port for P/N 833580 only, all others: N/A</i>														
†36	22.5x8.25-15°DC	8047 (3650)	52.0 (23.6)	6.57 (167)	5.70 (145)	138 (952)	70MS7	886520	0, 3, ODB, 3DB	-	39874	-	-	39874
†37	22.5x9.00-15°DC	9094 (4125)	54.2 (24.6)	6.89 (175)	6.02 (153)	142 (978)	70MS7	896520	0, 3, ODB, 3DB	-	39874	-	-	39874
‡38	22.5x13.00-15°DC	12,800 (5806)	76.0 (34.5)	—	6.12 (155)	130 (896)	TR543	833580	0, 1	-	39874	-	-	39874
39	24.5x8.25-15°DC	8500 (3855)	62.6 (28.4)	6.79 (172.5)	5.81 (147.5)	120 (827)	TR544D	983500	0, 3	-	39874	-	-	39874
10-hole, hub piloted mounting—335mm bolt circle, 281.2mm hub bore, 32.87mm bolt hole diameter (use two-piece sleeved cap nuts) <i>DiscMate: 018000 Lug nut covers: N/A Hub covers: N/A</i>														
†40	22.5x8.25-15°DC (32mm bolt hole)	8047 (3650)	52.0 (23.6)	6.57 (167)	5.70 (145)	138 (952)	70MS7	886510	0, 3, ODB, 3DB	-	4306.32	-	-	4307.32
†41	22.5x9.00-15°DC (32mm bolt hole)	9094 (4125)	54.2 (24.6)	6.89 (175)	6.02 (153)	142 (978)	70MS7	896510	0, 3, ODB, 3DB	-	4306.32	-	-	4307.32
Six-hole, hub piloted mounting—205mm bolt circle, 160.2mm hub bore, 21.5mm bolt hole diameter (use two-piece flange nuts) <i>DiscMate: N/A Lug nut covers: N/A Hub covers: N/A</i>														
42	17.5x6.00-15°DC	4000 (1814)	29.6 (13.4)	5.0 (127)	4.25 (108)	110 (758)	60MS27	664220	0, 1	-	-	-	-	-

Do not exceed maximum wheel load. Customer must compare OEM vehicle load rating to maximum wheel load rating. Do not overinflate. Refer to tire manufacturer's recommendation for proper tire pressure. Before mounting the tire, perform a wheel fitment check to ensure proper clearance from any obstructions.

¹Capacity ratings as dual or single in highway service — bias-ply or radial. Load ratings in lbs. for items 31 through 42 rounded to nearest multiple of 5.

²Part numbers listed for all sizes are satin finish (the last digit of the six-digit numerical part number is "0"). Polished finishes are indicated by changing the "0" with any of the suffixes in the adjacent column (Available Finishes). Some wheels may bear part numbers not shown in this manual. Before servicing these wheels, contact your Alcoa wheel representative for proper load, inflation and part compatibility information.

³Outset (positive)/inset (negative) — The distance from the rim centerline to the mounting face of the wheel. Inset (negative) places the rim centerline inboard of the wheel mounting face and outset (positive) places the rim centerline outboard of the wheel mounting face (½ dual spacing = offset).

⁴The Dura-Bright® surface treatment and the Dura-Flange® options are not currently available together on the same wheel.

* Part numbers should end in "1" or "9" when used in an inset position and "0" or "2" when used in an outset position.

** Effective April 1, 2007, the DB Finish Option will fall under the Non-Stock Policy.

[†] Indicates European New Generation Wheels.

[‡] Check with vehicle manufacturer or axle manufacturer before retrofitting to outset wide base wheels to insure compatibility with axle and wheel end components. P/Ns 841100, 841400, and 841600 are not recommended for use on "N" spindle trailer axles.

[‡] Hub cover system kits P/N 076085 (front) and P/N 077085 (rear) contain screw-on Hug-a-lug® nut covers and require a minimum of four threads of the stud to extend above the tightened cap nut for use.

[‡] The minimum stud stand out required for P/N 833580 is 2.375 inches (60.3mm) when using wheel nut P/N 39874. Taller nuts will require more stud stand out.

[‡] P/Ns 885600 and 985600 are Alcoa Severe Service Wheels.

Dura-Bright® wheels with XBR™ Technology surface treatment option **shine without polishing**. Just wash with soap and water, do not polish or clean with abrasives. For more information call 800-242-9898 option 6 or visit www.alcoawheels.com/durabrightxbr.