



Alcoa Light Truck, SUV, RV and Motorhome Wheels
Fitment Guide



October 2001 – Supersedes All Previous Editions

16" Wheels



16 x 6K Hot Shot, 8 on 6.5"
P/N 161251(2), 161261(2), 161291(2),
163251(2) and 163291(2)
8 on 170mm P/N 161281(2)



16 x 6K LTS 5-spoke
8 on 6.5"
P/N 160251(2)



16 x 6K, 8 on 6.5" Classic
P/N's 160231(2), 160241(2),
160281(2) and 160291(2)



16 x 6K Classic
10 on 7.250"
P/N 160301(2)



16 x 7J LTS 5-spoke
8 on 6.5"
P/N 167031



16 x 7J Classic
8 on 6.5"
P/N 167001A

19.5" Wheels



19.5 x 6K Classic
10 on 7.25"
P/N 761000(1,2,3)



19.5 x 6K Classic
5 on 8.00"
P/N 763220(1,2,3)



19.5 x 6K Classic
8 on 225mm
P/N 763800(1,2,3)

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WHEEL SPECIFICATIONS

Do not exceed maximum wheel load. Fitment recommendations are for REFERENCE ONLY. Customer must compare OEM vehicle load rating to maximum wheel load rating. 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. Alcoa aluminum wheel mounting dimensions are consistent with SAE Information Report J694 August 98. Available polish finishes are indicated by the last digit of the six-digit part number. Part numbers ending in "0" are machine finish. For polished outside only, part number ends in "1." For polished inside only, part number ends in "2." For polished both sides, part number ends in "3." 16x7 wheels available only with polished outside finish. 16x6 wheels available only with polished inside or polished outside finish.

Stock Alcoa wheels

Item No.	Part Number	Size	Style	Bolt Circle Inches	Bolt Hole Dia. Inches	Hub Bore Dia. Inches	Backspace ² Inches	Offset/SRW ¹ or Half Dual Space/DRW Inches	Max. Wheel Load ³ Pounds	Max. Inflation PSI - cold	Wheel Weight Pounds	Pilot Type	Valve
1	160231(2)	16x6K	Classic 8	8x6.500	.670	4.567	8.150	5.150	2780	95	19	Hub	TR-543
2	160241(2)	16x6K	Classic 8	8x6.500	.670	4.883	8.150	5.150	2780	95	19	Hub	TR-543
3	160251(2)*	16x6K	LTS 5	8x6.500	.670	4.567	8.150	5.150	2440	95	19	Hub	TR-543
4	160281(2)	16x6K	Classic 8	8x6.500	.670	4.883	8.390	5.400	2780	95	19	Hub	TR-543
5	160291(2)	16x6K	Classic 8	8x6.500	.670	4.773	8.150	5.150	2440	95	19	Hub	TR-543
6	160301(2)	16x6K	Classic 10	10x7.250	.670	5.464	8.280	5.350	3050	95	21	Hub	TR-543
7	161251(2)	16x6K	Hot Shot	8x6.500	.670	4.567	8.150	5.150	2780	95	20	Hub	TR-543
8	161261(2)	16x6K	Hot Shot	8x6.500	.670	4.883	8.150	5.150	2870	95	20	Hub	TR-543
9	161281(2)	16x6K	Hot Shot	8x170mm	.598	4.930	8.290	5.350	2780	95	20	Hub	TR-543
10	161291(2)	16x6K	Hot Shot	8x6.500	.670	4.773	8.150	5.150	2780	95	20	Hub	TR-543
11	163251(2)	16x6K	Hot Shot	8x6.500	.670	4.599	8.130	5.150	2780	95	20	Hub	TR-543
12	163291(2)	16x6K	Hot Shot	8x6.500	.670	4.773	8.330	5.350	2780	95	20	Hub	TR-543
13	167001A	16x7J	Classic 8	8x6.500	.620	5.155	4.290	.250	3415	95	19	Stud	TR-542
14	167031	16x7J	LTS 5	8x6.500	.620	5.155	4.290	.250	3415	95	18	Stud	TR-542
15	761000(1,2,3)	19.500x6	Classic 10	10x7.25	.660	5.254	8.127	5.000	2780	95	28	Hub	TR-543
16	763220(1,2,3)	19.500x6	Classic 5	5x8	1.219	6.035	7.892	5	3500	110	32	Stud	TR-543
17	763800(1,2,3)	19.500x6	Classic 8	8x225mm	.598	6.705	8.337	5.350	3750	110	34	Hub	TR-543

Non-stock Alcoa wheels

Availability is based on existing inventory or 500 piece minimum production runs.

Item No.	Part Number	Size	Style	Bolt Circle Inches	Bolt Hole Dia. Inches	Hub Bore Dia. Inches	Backspace ² Inches	Offset/SRW ¹ or Half Dual Space/DRW Inches	Max. Wheel Load ³ Pounds	Max. Inflation PSI - cold	Wheel Weight Pounds	Pilot Type	Valve
1	160261(2)	16x6K	LTS 5	8x6.500	.670	4.883	8.150	5.150	2440	95	19	Hub	TR-543
2	160271(2)	16x6K	LTS 5	8x6.500	.670	4.773	8.150	5.150	2440	95	19	Hub	TR-543
3	167101	16x7J	Classic 8	6x5.500	.620	4.250	4.290	.250	3040	95	19	Stud	TR-542
4	167121	16x7J	LTS 5	6x5.500	.620	4.250	5.730	1.730	2600	95	18	Stud	TR-542
5	761010(1,2,3)	19.500x6	LTS 6	10x7.250	.660	5.254	8.127	5.000	2780	95	29	Hub	TR-543
6	763100(1,2,3)	19.500x6	Classic 6	6x8.750	1.219	6.500	7.892	5.000	4080	110	30	Stud	TR-543

Do not exceed maximum wheel load. Do not overinflate. Before mounting the tire, perform a wheel fitment check to ensure proper clearance from any obstructions. See Alcoa wheel service manuals and catalogs, your vehicle dealer or Alcoa representative for information on proper vehicle fitment procedures or before servicing these wheels for proper load inflation and part compatibility information. Refer to the Alcoa Wheel Fitment Guide for detailed vehicle application, hardware and Alcoa accessory information. Please note: changing from original equipment tire size to aftermarket tire size can affect speedometer.

1 Offset (positive or negative) - The distance from the rim centerline to the mounting face of the wheel. Positive places the rim centerline inboard of the wheel mounting face. Negative places the rim centerline outboard of the wheel mounting face. Measurements in inches unless otherwise noted. SRW = Single rear wheel. DRW = Dual rear wheel.

2 Backspace - The distance from the wheel mounting surface to the inboard rim flange.

3 Capacity ratings as dual or single in highway service - bias-ply or radial.

*P/N 160251(2) is not suitable for use on rear axles with axle load rating greater than 9,760 pounds.

Chevrolet/GMC	Year	Part Numbers	Size	Bolt Pattern	Hub Bore	Front Cover Options	Rear Cover Options	Lug Nut	Lug Nut Thread	Lug Nut Torque (ft. lbs.)	Lug Nut Cover Options
All C/P/G300 Dual	76-87	160231(2), 160251(2), 161251(2)	16 x 6K	8 x 6.500	4.567	003611	003612	139987	9/16 x 18	130-150	000190
All C/P/G300 Dual	88-00	160231(2), 160251(2), 161251(2)	16 x 6K	8 x 6.500	4.567	003611	003612	139698	M14 x 1.500	130-150	000190
½ T C20 4x2, C2500	71-87	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5916	9/16 x 18	120-140	000078
3/4 T V2500 4x4 Suburban	88-91	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167, 003167	5916	9/16 x 18	120-140	000078
3/4 T C20 4x2, C2500 Suburban	71-91	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5916	9/16 x 18	120-140	000078
3/4 T C20 4x2, C2500 (HD)	88-02	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5014	M14 x 1.500	100-110	000078
3/4 T GE, GS2500 4x2 Van	71-95	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5916	9/16 x 18	120-140	000078
3/4 T GE, GS2500 Van	96-00	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5916	M14 x 1.500	100-110	000078
3/4 T K20 4x4 K2500 (HD)	88-02	167001A, 167031	16 x 7J	8 x 6.500	5.155	003167	003167	5014	M14 x 1.500	100-110	000078
3/4 T K20 4x4 K2500 Suburban	92-02	167001A, 167031	16 x 7J	8 x 6.500	5.155	003167	003167	5014	M14 x 1.500	100-110	000078
3/4 T K20 4x4 P/U K2500 Suburban	71-87	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167, 003167	5916	9/16 x 18	120-140	000078
3/4 T K2500 4x4	71-87	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167, 008167	004167, 003167	5916	9/16 x 18	120-140	000078
3/4 T K2500 4x4 (HD)	88-02	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167, 008167	004167	5916	M14 x 1.500	100-110	000078
3/4 T P2500 4x2 Single, Step Van	71-95	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5916	9/16 x 18	120-140	000078
3/4 T P2500 4x2 Single, Step Van	96-00	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5916	M14 x 1.500	100-110	000078
3/4 T R20 4x2 P/U Suburban	88-91	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5916	9/16 x 18	120-140	000078
3/4 T R2500 4x2 Suburban	88-91	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5916	9/16 x 18	120-140	000078
1 T CK3500 Dual	01-02	163251(2)	16 x 6K	8 x 6.500	4.599	003611	003612	139698	M14 x 1.500	130-150	000190
1 T V30 4x4, P/U and Blazer	88-91	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5916	9/16 x 18	120-140	000078
1 T R3500 4x2 Single	88-91	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5916	9/16 x 18	120-140	000078
1 T R30 4x2 P/U	88-91	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5916	9/16 x 18	120-140	000078
1 T P3500 Dual	76-87	160231(2), 161251(2)	16 x 6K	8 x 6.500	4.567	003611	003612	139987	9/16 x 18	130-150	000190
1 T P3500 Dual	88-00	160231(2), 161251(2)	16 x 6K	8 x 6.500	4.567	003611	003612	139698	M14 x 1.500	130-150	000190

Chevrolet/GMC	Year	Part Numbers	Size	Bolt Pattern	Hub Bore	Front Cover Options	Rear Cover Options	Lug Nut	Lug Nut Thread	Lug Nut Torque (ft. lbs.)	Lug Nut Cover Options
1 T P3500	88-00	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5014	M14 x 1.500	100-110	000078
1 T P3500	71-87	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5916	9/16 x 18	120-140	000078
1 T P30 Dual, 11000# Axle	76-92	761000(1,2,3), 761010(1,2,3)	19.500 x 6	10 x 7.250	5.250	011911	011912	39946	5/8 X 18	140-160	000190
1 T P30 Dual	76-00	160231(2), 161251(2)	16 x 6K	8 x 6.500	4.567	003611	003612	139987	9/16 x 18	130-150	000190
1 T P30	71-00	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5916	9/16 x 18	120-140	000078
1 T K3500 4x4, Dual	76-87	160231(2), 160251(2), 161251(2)	16 x 6K	8 x 6.500	4.567	003611	003612	139987	9/16 x 18	130-150	000190
1 T K3500 4x4, Dual	88-00	160231(2), 160251(2), 161251(2)	16 x 6K	8 x 6.500	4.567	003611	003612	139698	M14 x 1.500	130-150	000190
1 T K3500 4x4	71-87	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167, 008167	004167	5916	9/16 x 18	120-140	000078
1 T K3500 4x4	88-00	167001A, 167031	16 x 7J	8 x 6.500	5.155	003167	003167	5014	M14 x 1.500	100-110	000078
1 T K30 4x4, Dual	76-87	160231(2), 160251(2), 161251(2)	16 x 6K	8 x 6.500	4.567	003611	003612	139987	9/16 x 18	130-150	000190
1 T K30 4x4, Dual	88-00	160231(2), 160251(2), 161251(2)	16 x 6K	8 x 6.500	4.567	003611	003612	139698	M14 x 1.500	130-150	000190
1 T K30 4x4 K3500	71-87	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167, 008167	004167	5916	9/16 x 18	120-140	000078
1 T K30 4x4 K3500	88-00	167001A, 167031	16 x 7J	8 x 6.500	5.155	003167	003167	5014	M14 x 1.500	100-110	000078
1 T GE GS3500 4x2 Van, Dual	76-96	160231(2), 160251(2), 161251(2)	16 x 6K	8 x 6.500	4.567	003611	003612	139987	9/16 x 18	130-150	000190
1 T GE GS3500 4x2 Van, Dual	97-00	160231(2), 160251(2), 161251(2)	16 x 6K	8 x 6.500	4.567	003611	003612	139698	M14 x 1.500	130-150	000190
1 T G30 Single	76-90	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5916	9/16 x 18	120-140	000078
1 T G30 Single	91-00	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5014	M14 x 1.500	100-110	000078
1 T G30 Dual	76-96	160231(2), 160251(2), 161251(2)	16 x 6K	8 x 6.500	4.567	003611	003612	139987	9/16 x 18	130-150	000190
1 T G30 Dual	97-00	160231(2), 160251(2), 161251(2)	16 x 6K	8 x 6.500	4.567	003611	003612	139698	M14 x 1.500	130-150	000190
1 T C3500 HD 4x2 Dual	76-00	761000(1,2,3), 761010(1,2,3)	19.500 x 6	10 x 7.250	5.254	011911	011912	39946	5/8 x 18	140-160	000190
1 T C30 4x2, C3500 Dual	76-87	160231(2), 160251(2), 161251(2)	16 x 6K	8 x 6.500	4.567	003611	003612	139987	9/16 x 18	130-150	000190

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

Do not exceed maximum wheel load. Fitment recommendations are for REFERENCE ONLY. Customer must compare OEM vehicle load rating to maximum wheel load rating. 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.

Chevrolet/GMC	Year	Part Numbers	Size	Bolt Pattern	Hub Bore	Front Cover Options	Rear Cover Options	Lug Nut	Lug Nut Thread	Lug Nut Torque (ft. lbs.)	Lug Nut Cover Options
1 T C30 4x2, C3500 Dual	88-00	160231(2), 160251(2), 161251(2)	16 x 6K	8 x 6.500	4.567	003611	003612	139698	M14 x 1.500	130-150	000190
1 T C30 4x2, C3500	71-87	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5916	9/16 x 18	120-140	000078
1 T C30 4x2, C3500	88-00	167001A, 167031	16 x 7J	8 x 6.500	5.155	004167	004167	5014	M14 x 1.500	100-110	000078

Dodge	Year	Part Numbers	Size	Bolt Pattern	Hub Bore	Front Cover Options	Rear Cover Options	Lug Nut	Lug Nut Thread	Lug Nut Torque (ft. lbs.)	Lug Nut Cover Options
Ram 2500 4x2, 4x4, 4x4 (HD) (Remove Quad Cab applications with V10 or Diesel Engine)	94-02	167001A, 167031	16 x 7J	8 x 6.500	5.155	003167	003167	5916	9/16 x 18	120-140	000078
Ram 3500 4x2 Dual, 4x4 Dual	94-99	160291(2), 160271(2), 161291(2)	16 x 6K	8 x 6.500	4.773	001611, 001681	001612	139987	9/16 x 18	130-150	000190
3/4 T D200/250	68-93	167001A, 167031	16 x 7J	8 x 6.500	5.155	003167, 003267, 004167	003167, 004167	5120	½ x 20	90-100	000078
3/4 T P200 Step Van	71-74	167001A, 167031	16 x 7J	8 x 6.500	5.155	003167, 003267, 004167	003167, 004167	5120	½ x 20	90-100	000078
3/4 T W200/250	69-93	167001A, 167031	16 x 7J	8 x 6.500	5.155	003167, 003267, 004167, 008167	003167, 004167	5120	½ x 20	90-100	000078
1 T B300/350 Ram Van/Wagon	73-00	167001A, 167031	16 x 7J	8 x 6.500	5.155	003167, 003267, 004167	003167, 004167	5120	½ x 20	90-100	000078
1 T BR3500 Dual	00-02	163291(2)	16 x 6K	8 x 6.500	4.773	001611, 001681	001612	139987	9/16 x 18	130-150	000190
1 T D300/350	69-93	167001A, 167031	16 x 7J	8 x 6.500	5.155	003167, 003267, 004167	003167, 004167	5120	½ x 20	90-100	000078
1 T P300 Step Van	72-92	167001A, 167031	16 x 7J	8 x 6.500	5.155	003167, 003267, 004167	003167, 004167	5120	½ x 20	90-100	000078
1 T W300/350	69-93	167001A, 167031	16 x 7J	8 x 6.500	5.155	003167, 003267, 004167, 008167	003167, 004167	5120	½ x 20	90-100	000078

Ford	Year	Part Numbers	Size	Bolt Pattern	Hub Bore	Front Cover Options	Rear Cover Options	Lug Nut	Lug Nut Thread	Lug Nut Torque (ft. lbs.)	Lug Nut Cover Options
F-Super Duty	87-98	160301(2)	16 x 6K	10 x 7.25	5.464	011911	011912	139987	9/16 x 18	130-150	000190
3/4 T Econoline E200/250	75-85	167001A, 167031	16 x 7J	8 x 6.500	5.155	003167, 003267	002167	5120	½ x 20	90-100	000078
3/4 T Econoline E200/250	86-98	167001A, 167031	16 x 7J	8 x 6.500	5.155	002167, 003167, 003267	002167	5916	9/16 x 18	120-140	000078
3/4 T F250, 4x2, 4x4	67-98	167001A, 167031	16 x 7J	8 x 6.500	5.155	003167, 008167	002167	5120	½ x 20	90-100	000078
3/4 T F250, 4x2, 4x4	81-98	167001A, 167031	16 x 7J	8 x 6.500	5.155	003167, 008167	002167	5916	9/16 x 18	120-140	000078
1 T Econoline E300/350 (Remove application to Cutaway Vans)	68-98	167001A, 167031	16 x 7J	8 x 6.500	5.155	003167, 008167	002167	5916	9/16 x 18	120-140	000078
1 T F350 4x2 Dual	84-98	160241(2), 160261(2), 161261(2)	16 x 6K	8 x 6.500	4.883	001611, 001681	001612	139987	9/16 x 18	130-150	000190
1 T F350 4x4 Dual	87-98	160281(2)	16 x 6K	8 x 6.500	4.883	001611, 001681	001612	139987	9/16 x 18	130-150	000190
1 T F350 4x2 Dual, 4x4 Dual	99-01	161281(2)	16 x 6K	8 x 170mm	4.930	004611	004612	139799	M14 x 2.0	130-150	000190
1 T F350, 4x2, 4x4	67-98	167001A, 167031	16 x 7J	8 x 6.500	5.155	003167, 003267, 008167	002167	5916	9/16 x 18	120-140	000078
F450-550 Dual	00-01	763800(1,2,3)	19.500 x 6	8x225mm	6.705	Kit 089600 (contains two front axle end covers, two rear axle end covers and 32 Hug-A-Lug® nut covers)		NA	NA	NA	000190

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Wheel fitment check

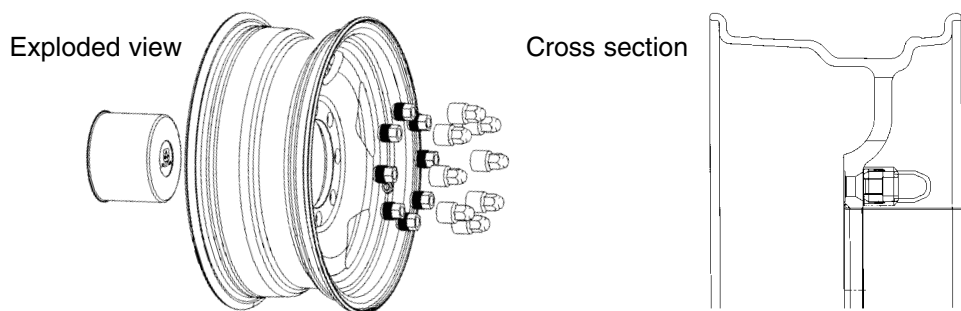
Before mounting tires, perform a wheel fitment check in the following manner:

1. Remove one front wheel.
2. Clean the mounting surface of the hub with a wire brush and remove any retainer (spring) clips.
3. Hold the wheel on the hub and check for a flush mount. The mounting surface of the wheel must fit flush to the hub mounting surface. The back side of the wheel must not rest against any obstructions, such as the brake caliper, suspension components, balance weights, rivets, etc.
4. Install three lug nuts and hand tighten. Rotate the wheel and turn the steering column fully in both directions to ensure clearance from any obstructions.
5. Perform the above steps on the rear of the vehicle.

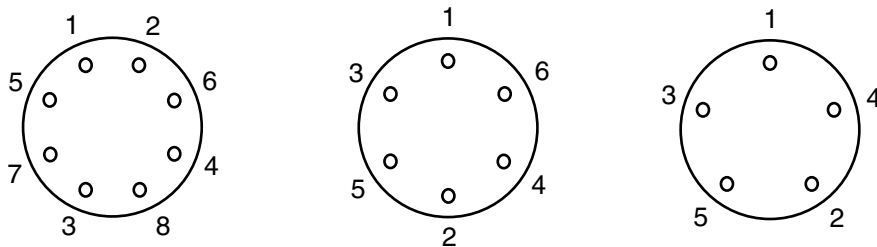
Stud standout

Stud standout is the length of stud, from the wheel seating surface (hub or brake drum), that penetrates the wheel and engages the cap nut. For 5-, 6- and 8-hole 16x7 cone seat wheels, the minimum thread engagement (length of stud threads in the cap nut) is equal to the diameter of the stud (approximately 10 full turns of hand tightness).

Mounting instructions



1. **Front/Rear** - Push the hub cover – with the rubber o-ring intact – through the inside of the wheel and position the wheel on hub.
2. Install Alcoa cap nuts (P/N's 005XXX or 006XXX, whichever applies). Do not use chrome plated cap nuts. Follow the torque sequence and specifications for your application.
3. Install screw-on lug nut covers on the individual cap nuts.
4. Follow the torque sequence as shown.



Warning

Use of cap nuts that have chrome plating on the contact surfaces can cause reduced and inconsistent wheel clamping.

This condition can cause wheels to loosen and disengage from the vehicle, causing injury or death.

Never use cap nuts with chrome-plated contact surfaces.

Use only recommended hardware on Alcoa aluminum wheels.

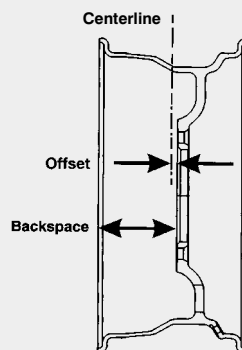
Note

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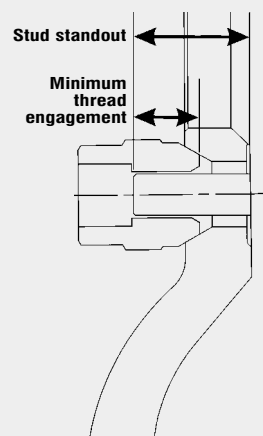
Note

Do Not mount Alcoa 16x7 wheels on vehicles with 5/8" (.625") studs due to insufficient bolt hole diameter clearance (16x7 wheels have a bolt hole diameter of .620"). Also, 5/8" nuts have 90° cone seats, but Alcoa wheels have 60° cone seats.

Backspace and offset



Stud standout



Note

Do not exceed maximum wheel load. Fitment recommendations are for REFERENCE ONLY. Customer must compare OEM vehicle load rating to maximum wheel load rating. 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.

Note

Be sure brake drum or caliper does not contact inner surface of the wheel except in mounting area. When using outboard mounted drums, be sure the surface which contacts the wheel is flat and true and provides contact with the wheel at least to 8.250" diameter.

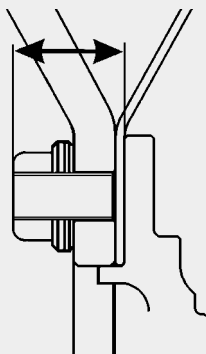
Note

Specify only hubs which are designed for aluminum hub piloted wheels. Hubs designed for steel hub-piloted wheels do not have sufficient pilot length to locate dual aluminum wheels. Because of the pilot length, Alcoa 16x6 aluminum wheels must be dual with an inner steel wheel. Stud lengths must also be sufficient to clamp aluminum wheels. Before mounting hub-piloted wheels, generously coat the wheel pilot or hub pads with a non-water-based lubricant, such as Freylube or equivalent, to minimize corrosion build up. DO NOT LUBRICATE THE FACE OF THE WHEEL OR THE HUB.

Note

MINIMUM BRAKE DRUM FLATNESS: When using outboard mounted drums with HUB PILOTED 19.5x6 wheels, be sure the surface which contacts the wheel is flat and true and provides contact with the wheel to at least 10.750" diameter.

Stud standout



Wheel fitment check

Before mounting tires, perform a wheel fitment check in the following manner:

1. Remove one front wheel.
2. Clean the mounting surface of the hub with a wire brush and remove any retainer (spring) clips.
3. Hold the wheel on the hub and check for a flush mount. The mounting surface of the wheel must fit flush to the hub mounting surface. The back side of the wheel must not rest against any obstructions, such as the brake caliper, suspension components, balance weights, rivets, etc.
4. Install three lug nuts and hand tighten. Rotate the wheel and turn the steering column fully in both directions to ensure clearance from any obstructions.
5. Perform the above steps on the rear of the vehicle.

Brake assembly

Wheels are compatible with most disc brakes or inboard and outboard mounted brake drums specified by the vehicle manufacturer.

Hubs

Ferrous or aluminum hub piloted type only and 8-stud with 6.500" bolt circle or 10-stud with 7.250" bolt circle.

Stud Standout

Stud standout is the length of stud from the wheel seating surface (hub or brake drum), that penetrates the wheel and engages the cap nut. Single 8- and 10-hole 16x6 hub-piloted wheels and single 10-hole 19.5x6 hub-piloted wheels have a minimum stud standout of 38mm (1.500"). Dual 8- and 10-hole 16x6 hub-piloted wheels and dual 19.5x6 hub-piloted wheels have a minimum stud standout of 45mm (1.770"). Do NOT dual two aluminum wheels. An inner steel and an outer aluminum wheel are required for these applications.



Warning

Use of a wheel clamping plate and matching lugs with a 16x6 or 19.5x6 aluminum wheel can cause insufficient thread engagement of lug nuts on studs.

This condition can cause wheels to loosen and disengage from the vehicle, causing injury or death.

Never use a wheel clamping plate and matching lugs with a 16x6 or 19.5x6 aluminum wheel. Use only recommended hardware on Alcoa aluminum wheels.



Warning

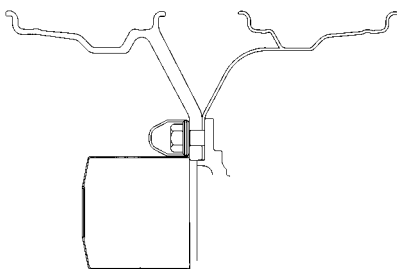
Use of cap nuts that have chrome plating on the contact surfaces can cause reduced and inconsistent wheel clamping.

This condition can cause wheels to loosen and disengage from the vehicle, causing injury or death.

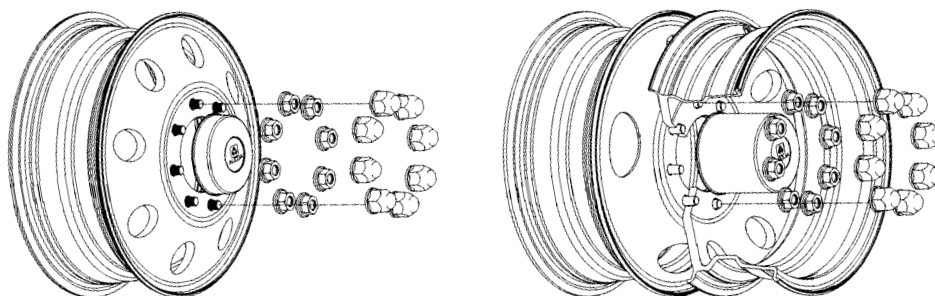
Never use cap nuts with chrome-plated contact surfaces. Use only recommended hardware on Alcoa aluminum wheels.

Mounting instructions

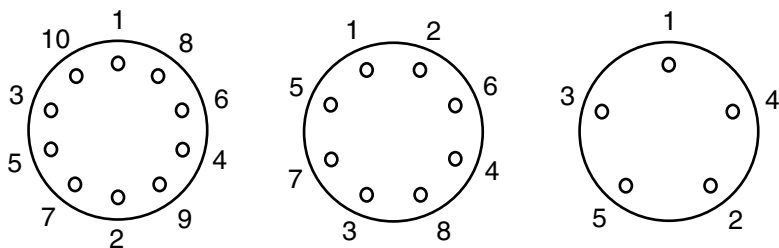
Cross Section



Exploded Views



- 1. Front** - Position Alcoa wheel on hub. **Rear*** - Position rear inner steel first and then the Alcoa aluminum outer wheel.
- Install four Alcoa cap nuts on bottom studs, hand tighten (*do not use chrome-plated cap nuts*).
- Position front or rear axle cover against the face of the wheel, letting the edge of the cover rest between the wheel and the chamfered edge of the washer (*do not attempt to push the cover through the rear of the wheel*).
- Install the balance of cap nuts.
- Follow the torque sequence as shown.



- Install cap nut covers (Alcoa P/N 000190) by pushing onto individual cap nuts (a Hug-A-Lug® removal tool is now available - P/N 000900).

*16x7 hub-piloted single wheels are **not** dualable. These wheels mount the same in the rear position as the front position.

Note

Do not exceed maximum wheel load. Fitment recommendations are for **REFERENCE ONLY**. Customer must compare OEM vehicle load rating to maximum wheel load rating. 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.

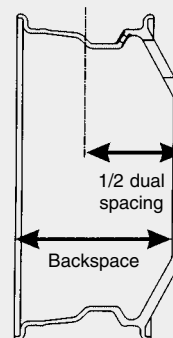
Note

Do not use cap nuts intended for stud located (cone seat or ball seat) wheels on hub-piloted wheels.

Note

Alcoa axle covers for 16x6 dualie wheels can only be used with Alcoa lug nuts (P/N 139987 and P/N 139698). These are not push-through axle covers. Do not use OEM cap nuts with Alcoa axle covers.

Backspace and 1/2 dual spacing



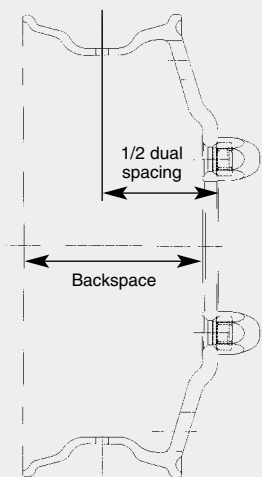
Note

Do not exceed maximum wheel load. Fitment recommendations are for REFERENCE ONLY. Customer must compare OEM vehicle load rating to maximum wheel load rating. 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.

Note

Do not use cap nuts intended for hub-piloted wheels on stud located, ball seat wheels.

Backspace and 1/2 dual spacing



Wheel fitment check

Before mounting tires, perform a wheel fitment check in the following manner:

1. Remove one front wheel.
2. Clean the mounting surface (on the hub) with a wire brush and remove any retainer (spring) clips.
3. Hold the wheel on the hub and check for a flush mount. The mounting surface of the wheel must fit flush to the hub mounting surface. The back side of the wheel must not rest against any obstructions such as the brake caliper, suspension components, balance weights, rivets, etc.
4. Install three lug nuts and hand tighten. Rotate the wheel and turn the steering column fully in both directions to insure clearance from any obstructions.
5. Perform the above steps on the rear of the vehicle.

Stud standout

Stud standout is the length of stud from the wheel seating surface (hub or brake drum) which penetrates the wheel and engages the cap nut.

Front single 5 and 6-hole 19.5x6 stud located wheels have a minimum stud standout of 1.600". **Rear dualed** 5 and 6-hole 19.5x6 stud located wheels have a minimum stud standout of 1.310"-1.440".

Hubs

Ferrous or aluminum stud located hubs are available for 6-stud (ball seat) with 8.750" bolt circle. Hub requirements will vary according to axle and brake manufacturer specifications.

Brake assembly

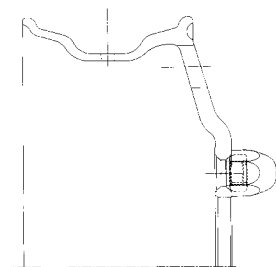
Wheels are compatible with most disc brakes or inboard and outboard mounted brake drums specified by the vehicle manufacturer.

Be sure the brake drum or caliper does not contact the inner surface of the wheel except in the mounting area.

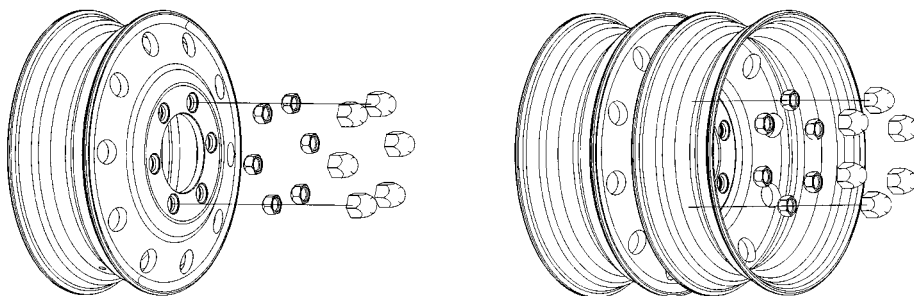
When using outboard mounted drums with **stud located** 19.5x6 wheels, be sure the surface that contacts the wheel is flat and true and provides contact with the wheel to at least to 11" diameter.

Mounting instructions

Cross Section



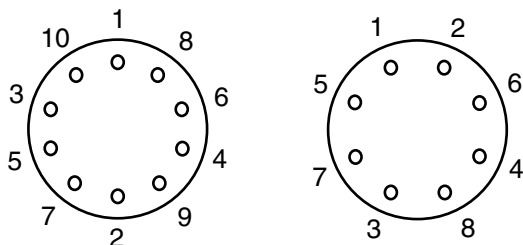
Exploded Views



1. Front - Position Alcoa wheel over the studs on the front hub and hand tighten outer cap nuts (*do not use chrome-plated cap nuts*). Cap nuts for stud located, ball seat wheels have right- and left-hand threads, so be sure to use the proper thread for each side of the vehicle.

Rear - Position rear inner wheel over the studs on the hub and hand tighten the inner cap nuts of the rear wheel as well as each outer cap nut (*do not use chrome-plated cap nuts*). Cap nuts for stud located, ball seat wheels have right- and left-hand threads, so be sure to use the proper thread for each side of the vehicle.

2. Follow the torque sequence as shown for the outer cap nuts on the front wheel and the inner cap nuts of the rear wheel.



3. Install cap nut covers (Alcoa P/N 000150) by pushing onto individual cap nuts. Axle end covers for Alcoa stud-located, ball seat wheels are not available from Alcoa.



Warning

Use of a wheel clamping plate and matching lugs with the 16x6 or 19.5x6 aluminum wheel can cause insufficient thread engagement of lug nuts on studs.

This condition can cause wheels to loosen and disengage from the vehicle, causing injury or death.

Never use a wheel clamping plate and matching lugs with the 16x6 or 19.5x6 aluminum wheel.

Use only recommended hardware on Alcoa aluminum wheels.

Note

Do not exceed maximum wheel load. Fitment recommendations are for REFERENCE ONLY. Customer must compare OEM vehicle load rating to maximum wheel load rating. 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.

AXLE END COVERS

All closed-end axle covers feature the Alcoa logo.

AXLE END COVER SPECIFICATIONS	
PART NO.	DESCRIPTION
004610	Center cover, 1.500" long, 3.500" open-end, straight side, for Ford dualie application (8 on 170mm); 8 pieces/case
004611	Front dualie cover, 1.500" long, straight side with Alcoa logo, for Ford dualie application (8 on 170mm); 8 pieces/case
004612	Rear dualie cover, 4.750" long, straight side with Alcoa logo, for Ford dualie application (8 on 170mm); 8 pieces/case
001611	Front dualie cover, 1.125" long, with Alcoa logo (for 8-hole); 8 pieces/case
001612	Rear dualie cover, 4.750" long, with Alcoa logo (for 8-hole); 8 pieces/case
001681	Front dualie cover, 4.750" long, 3.500" open-end (for 8-hole); 8 pieces/case
002167	Center cover, 5.875" long, with Alcoa logo; 8 pieces/case
003167	Center cover, 4.700" long, with Alcoa logo; 8 pieces/case
003267	Front cover, 2" long, with Alcoa logo; 8 pieces/case
003611	Front dualie cover, 1.125" long, with Alcoa logo; 8 pieces/case
003612	Rear dualie cover, 4.750" long, with Alcoa logo; 8 pieces/case
004167	Center cover, 4" long, with Alcoa logo; 8 pieces/case
005167	Center cover, 4.150" long, straight side, with Alcoa logo; 8 pieces/case
005267	Front cover, 2" long, with Alcoa logo; 8 pieces/case
006167	Center cover, 4" long, 3.500" open-end; 8 pieces/case
007167	Center cover, 4" long, bullet shape, with Alcoa logo; 8 pieces/case
008167	Center cover, 4.650" long, 4.490" open-end; 8 pieces/case
009167	Center cover, 3.090" long, with Alcoa logo; 8 pieces/case
009267	Front cover, 2" long, with Alcoa logo; 8 pieces/case
011167	Center cover, 3.688" long, 2.900" open-end; 8 pieces/case
011911	Front dualie cover, 1.630" long, with Alcoa logo (for 10-hole); 8 pieces/case
011912	Rear dualie cover, 5.530" long, with Alcoa logo (for 10-hole); 8 pieces/case
012167	Center cover, 2.860" long, bullet shape, with Alcoa logo; 8 pieces/case
089600	Stainless steel accessory kit for Alcoa 19.500" wheel P/N 763800(1,2,3). Kit contains two front axle end covers, two rear axle end covers and 32 Hug-A-Lug® cap nut covers.



ALCOA CHROME-PLATED CAP NUT COVERS



P/N 000078
Chrome-plated ABS
nut cover, 2.125" height,
7/8" hex, fits 005XXX



P/N 000079
Chrome-plated ABS
nut cover, 1.515" height,
7/8" hex, fits 005XXX



P/N 000080
Chrome-plated ABS
nut cover, 1.669" height,
3/4" hex, fits 006XXX



P/N 000150
Chrome-plated ABS nut
cover, 3/4" height, 1.500"
hex, fits 5995, 5996 (ball
seat, stud located wheels)



P/N 000190
Chrome-plated ABS
nut cover, 1.500" height,
1 1/16" hex, fits X39XXX
(light truck
applications only)

ALCOA MOUNTING HARDWARE

60° cone seat cap nuts for Alcoa 16" stud located single wheels



Each lug nut has specific inner threads for each application and universal outside threads to accept the Alcoa chrome-plated nut cover (see P/Ns 000078, 79 and 80).

	Part No.	Thread Size	Hex	Cap Nut Torque (ft. lbs)
16" Single	005012	M12 X 1.5	7/8"	80-90
	005014	M14 X 1.5	7/8"	100-110
	005120	1/2 X 20	7/8"	90-100
	005716	7/16 X 20	7/8"	90-100
	005916	9/16 X 18	7/8"	120-140

Two-piece flange nuts for Alcoa single and dual hub piloted wheels



P/N 139987 two-piece 1 1/16" hex head flange nut, 9/16"x18 RH threads. Mounts single and dual hub piloted wheels. 130-150 ft. lbs.



P/N 139698 two-piece M14 1 1/16" hex head flange nut, M14x1.5 RH threads. Mounts single and dual hub piloted wheels. 130-150 ft. lbs.



P/N 039913 two-piece 1 1/16" hex head flange nut, M14x2.0 RH threads. Mounts single and dual hub piloted wheels. 130-150 ft. lbs.



P/N 039946 two-piece 1 1/16" hex head flange nut, 5/8"x18 RH threads. Mounts single and dual hub piloted wheels. 140-160 ft. lbs.

Inner and outer cap nuts for Alcoa single and dual stud located, ball seat wheels



P/N 5996R, 5996L 1 1/8" cap nut. Mounts standard single wheels to 1 1/8" studs. Also mounts outer dual wheel to 1 1/8" inner cap nut.



P/N 5995R, 5995L 3/4" cap nut. Mounts standard single wheels to 3/4" studs.



P/N 5988R, 5988L inner cap nut. For use with standard length studs (1.310" to 1.440" stud standout) or longer studs not to exceed 1.880" stud standout. Full internal and external threads, counter bore 5/16" deep at open end. Prevents stud from bottoming out in cap nut (grade 8).

Aluminum Care Products

New Alcoa Aluminum Care System protects shine six times longer Alcoa developed a new three-step care system for uncoated aluminum surfaces, such as wheels and fuel tanks. The cleaner removes moderate grime and prepares the surface for polishing. The polish brings out aluminum's brilliant luster. The sealant chemically bonds with the aluminum surface to prevent oxidation. The Alcoa Aluminum Care System protects aluminum shine 6 times longer than ordinary cleaning and polishing* proven in laboratory tests! Not for use on coated or anodized surfaces. **To find out how to order the Alcoa Aluminum Care System, contact Alcoa at 800-242-9898 or fax 216-641-5099.**



P/N 199709
Alcoa aluminum cleaner
22 oz. net wt.



P/N 199716
Alcoa aluminum polish
16 oz. net wt.



P/N 199723
Alcoa aluminum sealant
13 oz. net wt.



P/N 199747
Alcoa PDQ Brightener
8 fl. oz.



P/N 199754
Alcoa PDQ Brightener
16 fl. oz.

Obsolete accessories

Part Number	Description	Recommended Alcoa Repl. Part
039691	M22 - 1.5, 33mm hex wheel nut	039874
039701	M22 - 1.5, 33mm hex wheel nut	039874
039536	9/16" - 18 two-piece wheel nut	139987
FN1032L	Japanese inner nut left-hand thread	None
FN1032R	Japanese inner nut right-hand thread	None
000800	Heavy truck Hug-a-Lug® removal tool	None
000900	Light Truck Hug-a-Lug® removal tool	None
000187	Hub pilot snap-on Hug-a-Lug®	000188
000080	Cone seat cap nut - 15" Wheels	None
076000	Heavy truck steer axle cover	076100
077000	Heavy truck drive axle cover	077100
076152	Steer axle ball seat clamshell kit	076155
077152	Drive axle ball seat clamshell kit	077155
076185	Steer axle hub pilot clamshell kit	076188
077185	Drive axle hub pilot clamshell kit	077188
000152	Ball seat Hug-a-Lug®	000155
001167	Hub cover, height 4.700", 3.500" open end	008167
001601	Front axle cover, without Alcoa logo, 1.125" straight for Chevy & Ford	001611, 003611
001602	Rear axle cover, without Alcoa logo, 1.125" straight for Chevy & Ford	001612, 003612
001620	Beauty ring	None
001621	Front axle cover, height 1.061", Ford F Super Duty	011911
001622	Rear axle cover, height 1.061", Ford F Super Duty	011912
001901	Front axle cover for FMC, 5-hole ball seat, 19.500" with 6.030" hub bore diameter	None
001902	Rear axle cover for FMC, 5-hole ball seat, 19.500" with 6.030" hub bore diameter	None
001911	Front axle cover, height 1.500", straight	011911
001912	Rear axle cover, height 5.375", straight	011912
001914	Front beauty ring	None
001914	Rear beauty ring	None
009600	Lug nut cover, 1-1/16" stainless steel	000190
0096AM	Lug nut cover, 1-1/16" stainless steel for GM	000190
010167	2.150" high, bullet shape axle cover	012167
039536	9/16" - 18 two-piece flange wheel nut	139987
139575	9/16" - 18 two-piece wheel nut	139987
2032L	Japanese inner nut left-hand thread	None
2023R	Japanese inner nut right-hand thread	None
5548L	O.T. 1-1/8" x 16 I.T. 3/4" x 16 left-hand inner cap nut	5988L
5548R	O.T. 1-1/8" x 16 I.T. 3/4" x 16 right-hand inner cap nut	5998R
5554L	3/4" x 16 left-hand thread outer cap nut	5995L
5554R	3/4" x 16 right-hand thread outer cap nut	5995R
5735L	O.T. 1-1/8" x 16 I.T. 3/4" x 16 left-hand inner cap nut	7896L
5735R	O.T. 1-1/8" x 16 I.T. 3/4" x 16 right-hand inner cap nut	7896R
L101AM	Lug nut cover, straight skirt, stainless steel with 1.500" washer	000190
L102AM	Lug nut cover, 1-1/16" stainless steel with 1.500" washer	000190

Warranty



Alcoa warrants to the original purchaser that a new Alcoa Aluminum Disc Wheel is free from defects in material and workmanship and agrees, without charge, to repair or replace a wheel which fails in normal use and service because of defects in material and workmanship. Truck and motorhome wheels are warranted for 60 months from the date of manufacture as shown on the wheel. Alcoa does not warrant and will not repair or replace or make adjustment with respect to any wheel that has been subjected to misuse or abuse, including the following:

- (a) Using a tire that is oversized according to standards recommended by the Tire and Rim Association, Inc.;
- (b) Loading the wheel beyond the applicable maximum wheel load as specified by Alcoa;
- (c) Inflating beyond the applicable maximum as specified by Alcoa; or
- (d) 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 REPAIR OR REPLACEMENT OF THE WHEEL, AS HEREIN PROVIDED. Repair or replacement will be handled by an authorized Alcoa wheel distributor or by any Alcoa truck wheel representative. This warranty gives you specific legal rights. You may also have other rights under other applicable laws.

Alcoa Wheel Products
1600 Harvard Avenue, Cleveland, Ohio 44105

Alcoa Wheel Products
1600 Harvard Avenue
Cleveland, Ohio 44105
800-242-9898



Alcoa Inter-America, Inc.
115-A Matheson Blvd., West, Suite 207
Mississauga, Ontario, Canada L5R 3L1
800-668-1150

www.alcoawheels.com