The Fleet's First Choice

DURABLE ENGINEERING FOR SAFER BRAKING

A-Line air disc rotors are engineered to meet the highest OE standards for durability and dependability under the most demanding conditions on the road.

Every rotor is built with proprietary alloys that exceed the OE standard of ASTM G3500b grey iron for the precise balance of tensile strength, heat dissipation characteristics and thermal wicking.

Inferior rotors are made with porous low grey iron that can trap heat and shorten rotor and pad life. Excessive density in the grey iron can also lead to noise, vibration and harshness during driving.

HIGH DENSITY IRON

CORROSION RESISTANT

• THERMAL WICKING

AIR DISC ROTORS



4 Features Englineered For a Better Alr Disc Rotor

- **1.** OE-grade high tensile ASTM G3500b grey iron for high torque durability.
- 2. Balanced carbon and hardening alloys for thermal elasticity to reduce cracking and promote noise dampening.
- 3. Parallel mill balancing to reduce disc thickness variation.
- 4. GeoMet 360 corrosion-resistance coating to extend vent and ABS ring life.

TENSILE STRENGTH (PSI)



CARBON ALLOY EQUIVALENT



A-Line uses precise OE specifications to give you the best performance for durability, thermal reduction and ride stability.

PROPRETARY METALLURGY

Creating a long-lasting rotor starts with a precision blend of metallurgy. A-Line's metallurgical engineers consult with OE teams to determine the best grade of iron alloys for rugged air disc braking applications.

High torque and high-heat applications like those in the air disc environment will create more than 15,000 foot pounds of torque and temperatures that exceed 1,500 degrees F.

Some manufacturers focus on creating high tensile strength rotors that do not wick heat away from the pads. This results in noisey rotors that can trap heat against the pads, shorten pad life and crack the rotor.

Others focus on adding Carbon to the rotor to wick heat away. This eliminates noise by softening the rotor, but results in increased rotor wear.

BALANCING CARBON AND TENSILE

Creating an OE-grade rotor requires a precise mix of carbon and hardening alloys so the rotor can be hard enough to withstand high torque, and have thermal elastic properties for high heat applications.

TOP: Industry comparison shows A-Line rotors have among the highest tensile strength in the industry. But rotors need more than tensile strength.

BOTTOM: A-Line rotors have some of the highest Carbon Alloy Equivalents. This shows the rotor's mix of total Carbon for thermal elasticity, and alloys for tensile hardening. Only OE-Gade rotors have both.

PARALLEL MILLING AND BALANCING

Every A-Line rotor is finished with computer controlled parallel milling and balancing. Parallel milling cuts both faces of the rotor simultaneously to a tolerance of 20 microns or .00078". This precision milling eliminates disc thickness variation (DTV) that can cause brake judder.

ISO 1940/1 balancing standards are used to ensure that A-Line rotors are balanced to OE specifications.

GEOMET CORROSION PROTECTION

To extend rotor life and prevent corrosion, A-Line rotors are coated with GeoMet[®] 360 protection.

This blend of zinc and aluminum oxides interlace and bind to the metal surface so that they are four times more corrosion resistant than zinc-only coatings.

Applied in layers of eight to 10 microns thick, the coating resists more than 30 natural and synthetic corrosives, including:

- Acid Wash
- Brake Clean
- Alcohol

• Ammonia

• Antifreeze

- Brake Fluid
 - Calcium Chloride
- Diesel

- Gasoline
- Kerosene
- Magnesium Chloride
- Road Salt





TOP: (A & B) Uncoated rotors leave the ABS ring and vents vulnerable to rusting. This results in ABS sensor faults, and clogged vents that overheat rotors. Such corrosion causes premature replacement of the rotor, and increases maintenance costs.

BOTTOM: (C & D) A-LINE GeoMet coated rotors protect the ABS ring and vents. ABS rings will not fault due to corrosion and vents will remain unclogged from rust and run cooler. This extends rotor and pad life and reduces maintenance costs.

This corrosion protection is guaranteed to prevent debilitating rust for two years.









ROTOR DIAGNOSTICS

A visual inspection of your rotor can diagnose caliper and/or pad issues that affect safety and longevity.

A: Minimum Thickness is stamped into every rotor. OEstyled rotors will have a beveled edge. The inside bevel indicates minimum thickness has been reached.

B: Blueing of the rotor face means elevated temperatures. It can be caused by abuse, hanging pads or sticking caliper guide pins. Minor cracking is acceptable.

C: Thermal shocking will cause excessive cracking. Replace the rotor if a crack is .06 in (1.5mm). For splined rotors the tolerance is .04 in (1.0mm).

D: If a crack radiates from the hub to 75% of the edge, the rotor must be replaced. If the crack breaches the edge, the rotor must be replaced.

E: Elevated temperatures will cause Martensite spotting. This makes the rotor surface too hard for effective braking. Replace the rotor.

F: Ridging is caused by foreign matter entering the braking area. Ridges .06 in (1.5mm) deep are cause for immediate replacement.











FIND YOUR REPLACEMENT ROTOR USING COMPETITIVE CROSS-REFERENCE

A-Line #	OE #	Bendix	Durabrake	Meritor	Webb	Wabco
ATR325148173	CT826, Pan 17		75180	M44AD75180		CT826
ATR377163220	CT832, Pan 19		71601	M44D71601		CT832
ATR430105135	K034497 / Z000557 658470	K034497	76642	M44D76642		
ATR430131203	K021958	K021958	76612	M44D76612		
ATR430138220	802081	802081	76618	M44D76618		
ATR430150220	СТ807		76613	M44D76613		СТ807
ATR430150220-1	R6206M		76810	R44D6206		
ATR430150220-2	802082	802082	76617	M44D76617		
ATR431115135	Z006407 / 802669 / 611300	802669	76641	M44D76641		
ATR432045000	802569	802569	76692	M44D76692		
ATR432045000-1	802569	802569	76692	M44D76692		
ATR433131217	68326014		56641	68326014	54220P	
ATR433143216	23.123642-002		56642	23.123642-002	55060P	
ATR434130130	N508030038 / N508030040		76621	M44D76621		
ATR434135194	II37415N	II37415N	76603	M44D76603		
ATR434143194	23-123647-002		76606	23-123647-002	55070P	
ATR434180194	K021959	K021959	76604	M44D76604	56050F	

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ROTOR IDENTIFICATION

Rotor manufacturers use different part numbers, and vehicle manufacturers may use several different rotors for one application. So the easiest way to find your rotor is to find these measurements: A: Outside Diameter across the face of the disc

B: Rotor Thickness. Every rotor has a OE spec for New and Minimum Thickness. (Minimum is stamped on rotor.)

C: Overall Rotor Depth from top of hat or flange to opposite rotor face.

- **D:** Pilot Diameter
- E: Bolt Circle Diameter measured from center of bolt holes.
- F: Bolt Hole Size and Count

G: Note rotor style and ABS ring confirguration. Some rotors will have same measurements but different style.

	Α		В	С	D	E	F						
A-Line Part#	OUTSIDE DIA. (mm)	DISC THICKNESS (mm)		OVER ALL PILOT ROTOR DIA.	BOLT CIRCLE	BOLT HOLES		WEIGHT		STYLE	ABS	ADB MODEL / Application	
		New	Min.	DEPTH (mm)	(mm)	(mm)	SIZE	NUMBER	Kg	LBS			
ATR325148173	325.12	34	28.25	148.59	173	196.09	M14 - 2	8	19.05	42	U	Cast	Wabco Pan 17
ATR377163220	376.94	45	39	163.58	220	249.43	M16 - 2	10	27.67	61	UL	Cast	Wabco Pan 19
ATR430105135	430	45	37	104.7	135	165	14.75mm	14	35.38	78	H	Cast	Prevost Front and Tag Bendix Knorr SB-7/ SN7
ATR430131203	430	45	39	131	203	235	M16 - 1.5	10	34.47	76	U	No	NOVA Bus/BCI Drive Axle Bendix Knorr SB-7/SN-7
ATR430138220	430	45	37	138.3	220	250	0.625 - 11	10	33.8	74.5	UL	No	Bendix/Knorr ADB22X/ADB225
ATR430150220	430	45	39	150	220	249.5	M16 - 2	10	32.2	71	UL	Cast	Wabco Pan 22
ATR430150220-1	430	45	41.4	150	219.71	249.5	0.625 - 11	10	33.8	74.5	UL	Cast	Haldex DB22 and DB22LT
ATR430150220-2	430	45	37	150	220	250	0.625 - 11	10	39.1	86.2	UL	No	Bendix/Knorr ADB22X/ADB225
ATR431115135	431	45	37	104.7	135	165	14.75mm	14	35.38	78	Н	No	Bendix Knorr SN-7
ATR432045000	432	45	37	45	220	N/A	N/A	10	27	59.5	F	No	ADB22X
ATR432045000-1	432	45	37	45	220	N/A	N/A	10	27	59.5	F	No	ADB22X
ATR433131217	433.83	45	37	131.06	217	168	.75 in	12	36.31	80	Н	No	EX225 H2
ATR433143216	433.57	45	37	143.51	216	266.7	.58 in	10	36.31	80	UL	No	EX225, MCI 15-03- 1012
ATR434130130	434.34	45	39	130.05	130.81	167.89	0.75 in	12	34.92	77	Н	No	Vanhool Front and Tag
ATR434135194	434.34	45	37	135.9	194	220	M16 - 1.5	10	35.83	79	U	No	Prevost Front and Tag Bendix Knorr SB-7/ SN7
ATR434143194	433.83	45	37	143.51	194.05	249.42	M16 - 2	10	37.02	81.63	UL	Bolt on	ELSA, EX225
ATR434180194	434.34	45	37	179.9	194	250	0.625 - 18	10	43.54	96	U	Cast	Prevost Drive Bendix Knorr SB-7/SN-7



F-STYLE

UL-STYLE: U-style with bolt lobes. **U-STYLE: U-style with roun**d bolt flange. **F-STYLE:** Flat rotor. May be splined. **H-STYLE:** Hat style rotor.





C.



Durable Engineering For All Your Air Disc Braking Needs

- Transit
- Class 8 Truck and Trailer
- School Bus
- Fire Truck
- Refuse Vehicles
- Severe Service Vehicles



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