

## Alliance Batteries

Alliance Group 31 batteries are specifically designed for commercial service applications such as starting, dual purpose and deep-cycle.



### GENERAL PRODUCT INFORMATION

- The battery's most important function is to provide power to crank and start the engine. Due to each engine's unique starting characteristics, it is impossible to use a simple rule to estimate the required battery capacity; **therefore, you must rely on the BCI Replacement Data Book, or owner's manual, to choose the correct CCA rating.** The two ratings are Cold Cranking Amps (CCA) and Cranking Amps (CA).

Never select a quality grade level lower than the O.E. CCA rating. Older vehicles, extra accessories and severe climatic conditions (extreme hot or cold) call for a more powerful battery. In these cases, always select a level above the O.E. requirement. Battery performance is measured at two different temperatures 0° F. (CCAs) and 32° F. (CAs). **When comparing ratings, always compare CCAs to CCAs and CAs to CAs – never mix the two!**

**Always select a battery by CAs or CCAs – never by months of warranty!** You can never have too many CCAs, but too few will shorten battery life because the underrated battery must work much harder.

- Today's trucks demand much more power to operate all the on-board auxiliary equipment. Typical starting batteries are designed to deliver quick bursts of electricity for engine starting, but operating this new auxiliary equipment calls for long, slow power draws over a period of hours – or even days – often when the engine is off. Starting batteries can't handle these increased power requirements, and they may wear out in short order.

**Alliance batteries provide all the cold cranking power needed for starting in any climate, plus abundant deep cycle power for typical auxiliary demands.**

### PART NUMBER CROSS REFERENCE

#### DUAL PURPOSE BATTERY PART NUMBERS

Alliance	Delco	Delphi	Douglas	Exide	Champion	Interstate	Powervolt	Trojan
EPM/AEDP31CS	1150	BU-31HC-700 S	—	HC-31D	PX31650C	—	—	—
EPM/AEDP31PCS	1151	BU-31HC-700 P	—	HC-31E	PC31650A	—	—	—
EPM/AE7T31	—	—	—	—	—	31-ECL	—	—
EPM/AE7T31P	—	—	—	—	—	—	—	—

#### STARTING BATTERY PART NUMBERS

Alliance	Delco	Delphi	Douglas	Exide	Champion	Interstate	Powervolt	Trojan
EPM/AE931MF	1200	BU-31-600 S	31-650T	COM-31D	—	31-VHD	V31S-5	—
EPM/AE931PMF	1201	BU-31-600 P	31-650	COM-31E	—	31P-VHD	V31P-5	—
EPM/AE1031MF	1110	BU-31-750 S	31-750T	—	PX31750C	31-LHD	VMF31S-5	C31HD-2
EPM/AE1031PMF	1111	BU-31-750 P	31-750	HP-31D	—	31P-LHD	VMF31P-5	C31HE-2
EPM/AE1131MF	31-900CT	BU-31-950 S	31-950T	HP-31E	PX31925C	31-MHD	VMF31S-7	—
EPM/AE1131PMF	31-901CT	BU-31-950 P	31-950	—	PX31925C	31P-MHD	VMF31P-7	—
EPM/AE1131XMF	—	—	—	—	—	—	V31S-7G	C31XHD-2
EPM/AE1131XPMF	—	—	—	—	—	—	V31P-7G	C31XHE-2
EPM/AE1231MF	—	—	—	—	—	—	—	—
EPM/AE1231PMF	—	—	—	—	—	—	—	—

### TOP SELLERS

#### GROUP 31 BATTERIES

Part Number	Description	Part Number	Description
EPM/AE1031MF	760CCA, 170RC, Stud Type	EPM/AE1131MF	925CCA, 170RC, Stud Type
EPM/AE7T31	700CCA, 190RC, Stud Type	EPM/AE1231MF	1125CCA, 195RC, Stud Type
EPM/AE1131XMF	1000CCA, 185RC, Stud Type	EPM/AE1031PMF	760CCA, 170RC, Post Type
EPM/AEDP31CS	650CCA, 180RC, Stud Type	EPM/AE1131XPMF	1000CCA, 185RC, Post Type
EPM/AE931MF	650CCA, 145RC, Stud Type		

## FEATURES & BENEFITS

- **Calcium/Calcium Maintenance-Free Design** – Significantly reduces maintenance costs and shortened life due to over/under watering.
- **Specially designed leak resistant cover with a tilt angle of 45 degrees** – Keeps battery compartments clean and dry even at severe tilt angles.
- **Covered Screw-in Vents** – Maintenance-free but not maintenance impossible if battery is overcharged.
- **Full Frame Compu-cast Grids** – No sharp X metal grid wires to cause short circuits.
- **Heavy-duty Plates with High Density Oxide** – To withstand “high cycling” type service such as P&D business class and step vans.
- **Special Glass Glued Envelope Separators** – Glued fiberglass strands act like “rebars” in concrete, locking the active material onto the plate for longer life.
- **Anchor Locked Elements** – The elements are locked into place at the bottom, to resist the damaging effects of pounding vibration typical of commercial service.
- **Quality Control** – All Alliance batteries must pass more than 250 quality control checks during manufacture, ensuring superior performance and long life. And Alliance Batteries are made in the U.S.A., your assurance of quality.

## QUICK REFERENCE CHART

### BATTERY TYPE BY APPLICATION

<b>SleeperCab</b>	Minimum of four (4) DUAL PURPOSE BATTERIES with a low voltage disconnect or battery management system.
<b>Day Cab Line Haul</b>	STARTING BATTERY with the number of batteries determined by the CCA capacity.
<b>Day Cab Delivery</b>	DUAL PURPOSE BATTERIES with the number of batteries per truck determined by the engine CCA requirement.
<b>P&amp;D</b>	DUAL PURPOSE BATTERIES with the number of batteries per truck determined by the engine CCA requirement.
<b>Reefer Unit</b>	DUAL PURPOSE BATTERY

## WARRANTY

Alliance Parts are backed by a one-year unlimited mile warranty, with coverage available throughout North America.



Did you know lead-acid batteries are virtually 100% recyclable? They have a higher recycling rate than other waste products such as aluminum, paper, glass and plastic. Be sure to return your scrap lead-acid battery to a retailer. In most states it is illegal to discard a battery in the trash.

## PERFORMANCE ADVANTAGES

In every significant test, the performance differences between Calcium Maintenance-Free vs Hybrid and Low Antimony batteries are dramatic. In addition, they offer all of these important advantages:

- Premium Envelope Separators
- Computer-Controlled Grids
- Humidity-Cured Plates
- Over 250 Quality Control Checks
- Highest CCA Ratings
- Demineralized Electrolyte
- Computer-Controlled Plates
- Radial “Power-Path” Grids
- Temperature-Controlled Formation

### Notes:

“Calcium Maintenance-Free” is pure calcium, with no antimony content in the grids or plates.

“Hybrid” is a battery with one calcium and one low antimony plate.

“Low Antimony” is a battery with 2 1/2% antimony content.

## BATTERY SAFETY TIPS

- Be careful! Batteries produce explosive gases.
- Always wear safety glasses when working on or near batteries.
- Keep sparks, flames and cigarettes away from batteries at all times.
- Never lean over a battery when jump starting or performing other maintenance.
- Follow the proper instructions found on your booster cable set or in the vehicle owner’s manual.

## PRODUCT AVAILABILITY

To locate your nearest dealer, please visit [www.freightliner.com](http://www.freightliner.com).

## WHEN YOU NEED MORE INFORMATION...

The catalogs listed below are available from your local dealer.

Catalog Number	Description
0125	Battery Application Data Guide
0007	Specification Guide

## WHEN REPLACING BATTERIES, CONSIDER THESE ADDITIONAL ITEMS

- Battery cables
- Battery boxes
- Starters
- Alternators
- Battery chargers
- Battery testers

## Alliance Electrical Assemblies

Freightliner LLC Customer Support proudly introduces electrical assemblies to the Alliance product line. These coiled and straight ABS, heavy duty and economy electrical assemblies are designed to fully support your semi-trailer and dolly braking needs.



### GENERAL PRODUCT INFORMATION

The two most important differentiating points for Alliance electrical assemblies are the internal conductors being stripped and tinned for better conductivity and the superior memory retention that the EVA (ethyl vinyl acetate) jacket provides after reversing the coil. This process keeps the electrical assembly from sagging into the drivetrain.

### FEATURES & BENEFITS

All Alliance electrical assemblies have the internal wires stripped and tinned making for a better crimped connection. The full contact between pin and conductor increases current carrying capacity. Crimping the insulated jacket as well as the wire helps seal the conductor from harmful moisture. Alliance crimped pin type inserts allow for a strong positive termination with no machine screws to vibrate loose.

### TOP SELLERS

ABP Part Number	Description
ABP/N54A-SFA125CE-N	Cable Assembly - ABS, Coiled, 12 Ft, 4/12, 2/10 and 1/8 gauge, Nylon Plugs
ABP/N54A-SFA155CE	Cable Assembly - ABS, Coiled, 15 Ft, 4/12, 2/10 and 1/8 gauge, Metal Plugs
ABP/N54A-SFA155CE-N	Cable Assembly - ABS, Coiled, 15 Ft, 4/12, 2/10 and 1/8 gauge, Nylon Plugs
ABP/N54A-SFA12SE	Cable Assembly - ABS, Straight, 12 Ft, 4/12, 2/10 and 1/8 gauge, Metal Plugs
ABP/N54A-SFA15SE	Cable Assembly - ABS, Straight, 15 Ft, 4/12, 2/10 and 1/8 gauge, Metal Plugs
ABP/N54A-SF155CE	Cable Assembly - Heavy Duty, Coiled 15 Ft, 6/12 and 1/10 gauge, Metal Plugs
ABP/N54A-SF155CE-N	Cable Assembly - Heavy Duty, Coiled, 15 Ft, 6/12 and 1/10 gauge, Nylon Plugs
ABP/N54A-SF15SE	Cable Assembly - Heavy Duty, Straight, 15 Ft, 6/12 and 1/10 gauge, Metal Plugs
ABP/N54A-SF0125CE	Cable Assembly - Economy, Coiled, 12 Ft, 6/14 and 1/12 gauge, Metal Plugs
ABP/N54A-SF0155CE	Cable Assembly - Economy, Coiled, 15 Ft, 6/14 and 1/12 gauge, Metal Plugs
ABP/N54A-SF0155CE-N	Cable Assembly - Economy, Coiled, 15 Ft, 6/14 and 1/12 gauge, Nylon Plugs
ABP/N54A-SF6WS	Socket - 6 Pin, Metallic
ABP/N54A-SF6WP	Plug - 6 Pin, with Cable Guard, Metallic
ABP/N54A-SF7WSSAE	Socket - 7 Pin, Solid Pin, 2 Hole Mount, Metallic
ABP/N54A-SF7WPSAE	Plug - 7 Pin, with Cable Guard, Metallic
ABP/N54A-SF155CE-72	Cable Assembly - Heavy Duty, Coiled, 15 Ft, 6/12 and 1/10 gauge, 72" Lead, Metal Plugs
ABP/N54A-SFA155CE-40	Cable Assembly - ABS, Coiled, 15 Ft, 40" Lead, 4/12, 2/10 and 1/8 gauge, Metal Plugs
ABP/N54A-SFA155CE-40N	Cable Assembly - ABS, Coiled, 15 Ft, 40" Lead, 4/12, 2/10 and 1/8 gauge, Nylon Plugs

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<b>CROSS REFERENCE GUIDE</b>						
Alliance Part Number	Description	Sureflex	Phillips	Tectran	Philatron	Midland
<b>ABS COILED POWERCORDS (1-8/2-10/4-12) CABLE CONSTRUCTION</b>						
ABP/N54A-SFA125CE-N	12' Nylon	SFA125CE-N	30-9320	N/A	2-412-CL	N/A
ABP/N54A-SFA155CE	15' Metal w/Spring	SFA155CE	30-4621	7ATG522MG	N/A	BE27071
ABP/N54A-SFA155CE-N	15' Nylon	SFA155CE-N	30-9620	N/A	2-415-CL	N/A
ABP/N54A-SFA155CE-40	15'-40" Metal w/Spring	SFA155CE-40	30-4921**	7ATG542MG	N/A	BE27072**
ABP/N54A-SFA155CE-40N	15'-40" Nylon	SFA155CE-40N	30-9920**	N/A	2-415-40-CL	N/A
<b>ABS STRAIGHT POWERCORDS (1-8/2-10/4-12) CABLE CONSTRUCTION</b>						
ABP/N54A-SFA12SE	12' Metal w/Spring	SFA12SE	30-2051	7AAB122MG	N/A	BE27457
ABP/N54A-SFA15SE	15' Metal w/Spring	SFA15SE	30-2071	7AAB152MG	N/A	BE27458
<b>HEAVY DUTY COILED POWERCORDS (1-10/6-12) CABLE CONSTRUCTION</b>						
ABP/N54A-SF155CE	15' Metal w/Spring	SF155CE	22-9621	7STS522MG	N/A	BE27031
ABP/N54A-SF155CE-N	15' Nylon	SF155CE-N	N/A	N/A	2-615-CL	BE27046
ABP/N54A-SF155CE-40	15'-40" Metal w/Spring	SF155CE-40	N/A	7STS542MG	N/A	N/A
ABP/N54A-SF155CE-72	15' Metal	SF155CE-72	22-9721	7ETB512MG	2-617-CM2	N/A
<b>HEAVY DUTY STRAIGHT POWERCORDS (1-10/6-12) CABLE CONSTRUCTION</b>						
ABP/N54A-SF15SE	15' Metal w/Spring	SF15SE	22-2071	7SAB152MG	N/A	N/A
<b>ECONOMY COILED POWERCORDS (1-12/6-14) CABLE CONSTRUCTION</b>						
ABP/N54A-SF0125CE	12' Metal w/Spring	SF0125CE	24-4321	7ETB222MG*	N/A	BE27039
ABP/N54A-SF0155CE	15' Metal w/Spring	SF0155CE	24-4621	7ETB522MG*	N/A	BE27019
ABP/N54A-SF0155CE-N	15' Nylon	SF0155CE-N	N/A	N/A	2-815-CL	BE27048
<b>METALLIC PLUGS</b>						
ABP/N54A-SF6WP	6 Pin w/Cable Guard	SF6WP	15-630	670-61SG	2906P	BE23604
ABP/N54A-SF7WPSAE	7 Pin w/Cable Guard	SF7WPSAE	15-730	670-71SG	2907P	BE23784
<b>METALLIC SOCKETS</b>						
ABP/N54A-SF6WS	6 Pin	SF6WS	15-600	670-62	2906S	BE23602
ABP/N54A-SF7WSSAE	7 Pin Solid 2 Hole Mnt	SF7WSSAE	15-721	670-72A	2907S	BE23703

\*7/14 Cable    \*\*48" Lead

## FREQUENTLY ASKED QUESTIONS

**What is the expected "road life" for an electrical assembly?**

**Answer:** Without any driver abuse an electrical assembly can last four to five years before needing to be replaced.

**What makes your coiled electrical assembly better than your competition's?**

**Answer:** The EVA (Ethyl Vinyl Acetate) cable jacket and the reverse coiling process during manufacturing offers superior memory retention of the electrical assembly therefore causing less sagging into the drivetrain and providing longer "road life."

## WARRANTY

Alliance parts are backed by a one-year unlimited mile warranty, with coverage available throughout North America.

## PRODUCT AVAILABILITY

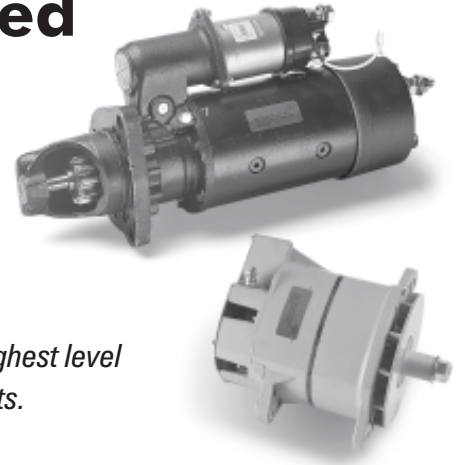
To locate your nearest dealer, please visit [www.freightliner.com](http://www.freightliner.com).

## ADDITIONAL INFORMATION

To learn more about Alliance parts, please visit [www.alliancebrandparts.com](http://www.alliancebrandparts.com).



## Alliance Remanufactured Heavy-Duty Starters and Alternators



- Alliance reman parts are torn down, cleaned, tested, reassembled and tested again. A typical rebuild is simply a fix of what is broken.
- Every Alliance heavy-duty alternator and starter is tested to assure the highest level of product quality. Each part is packaged and shipped with the test results.

### APPLICATION DATA

#### PART NUMBERING SYSTEM

Alliance electrical part numbers utilize the ABP prefix:

#### All Starters & Alternators

- ABP** = Part number prefix (Alliance Parts)
- R** = Classification of part (R=Reman, N=New)
- 15** = Major component group (15=Alternators/Starters)

**Example Starter Part No.: ABP/R15-42MT12V11T**

- 42MT** = Starter model number designation (Delco 42MT)
- 12V** = Voltage (12 volt)
- 11T** = Number of teeth (11-tooth model)

**Note:** Some starter numbers may have additional characters to denote the following:

- OC** = Starter equipped with Over Crank Protection
- CT** = Starter equipped with Over Crank Protection and offset nose housing for Cat engine applications

**Example Alternator Part No.: ABP/R15-21SI12V130A**

- 21SI** = Alternator model number designation (Delco 21SI)
- 12V** = Voltage (12 Volt)
- 100A** = Amperage (130 Amp)

### FEATURES & BENEFITS

#### COMPARISON OF COMPETITIVE PRODUCTS

ALLIANCE REMANUFACTURED	OTHER REBUILD (NON-OE) SOURCES
<b>ISO-9000 CERTIFIED</b> <ul style="list-style-type: none"> <li>• Process control plans</li> <li>• Specifications</li> <li>• Failure Analysis</li> <li>• Documentation</li> <li>• Employee Training</li> </ul>	Most are not certified
<b>EXTENSIVE FINAL TEST</b> <ul style="list-style-type: none"> <li>• 100% finished product testing</li> <li>• Every part shipped w/test results</li> <li>• High performance test standards</li> <li>• Load testing of starters and alternators</li> </ul>	Most are only "free spin" starters
<b>INDIVIDUAL COMPONENT TESTING</b> <ul style="list-style-type: none"> <li>• Individual components tested prior to final assembly</li> </ul>	Minimum testing
<b>100% REPLACEMENT ON MANY PARTS</b> <ul style="list-style-type: none"> <li>• Bearings</li> <li>• Oil Seals</li> <li>• Bushings</li> <li>• Oil Wicks</li> <li>• Numerous key components identified as typical failure mode</li> </ul>	Most parts are reused
<b>ONE-YEAR, UNLIMITED NATIONWIDE WARRANTY</b>	Local & limited warranty

### PRODUCT AVAILABILITY

To locate your nearest dealer, please visit [www.freightliner.com](http://www.freightliner.com).

### WARRANTY

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## COMPETITIVE CROSS REFERENCE

Alliance Reman	Description	Delco (Reman)	Delco (New)	Haldex	Cummins Recon	Leece-Neville (New)	Ford Motorcraft	Detroit Diesel
<b>ALTERNATORS</b>								
<b>ABP/R15-21SI12V145AX</b>	Delco 21SI 12 Volt 145 Amp, I & R Universal terminal connections, coreless	10459051 10459187 10459462	19010156 19010180	RA121002X	3604667RX			10459133
<b>ABP/R15-22SI12V130AX</b>	Delco 22SI 12 Volt 130 Amp, I & R Universal terminal connections, coreless	10459189 10459212 10459292	19020302 19020304 19020381	RA122001X	3675229RX			
<b>ABP/R15-22SI12V130AX</b>	Replaces Delco 21SI 12 Volt 130 Amp	10459037 10459049	19010147 19010165	RA121001X	3604667RX	110-555		10459111
<b>ABP/R15-22SI12V130AX</b>	Replaces Delco 21SI 12 Volt 100 Amp	10459013	19010100 19010105 19011041 9010154 19010181	RA121000X	3604666RX			10459109
<b>ABP/R15-33SI12V135AX</b>	Delco 33SI 12 Volt 135 Amp, coreless	10459141 10459142	19011152 19011155 19011156 19011159 19011173		3675233RX			10459195
<b>ABP/R15-33SI12V135A</b>	Replaces Delco 30SI, 12 Volt 105 Amp	10459008 10459079 10459097 10459258 10459259	1117801 1117809 1117818	RA130001X	3603877RX 3604652RX			10459108
<b>ABP/R15-34SI12V135QX</b>	Delco 34SI 12 Volt 135 Amp, coreless	10459206 10459451	19011167 19011201					10459198
<b>ABP/R15-34SI12V135PX</b>	Delco 34SI 12 Volt 135 Amp, Pad Mount, coreless	10459278	19011177					10459278
<b>ABP/R15-BBACK12V90A</b>	Ford Blueback 12 Volt 90 Amp				3604675RX 3604674RX		D4HZ-10346-B E2HT-10300-GA E2HZ-10346-B FOHT-10300-JA	
<b>ABP/R15-55512V130A</b>	Leece-Neville 110-555 12 Volt 130 Amp, coreless	10459555			3675200RX	110-555		
<b>ABP/R15-55512V145A</b>	Leece-Neville 110-555 12 Volt 145 Amp, coreless	10459555			3675200RX	110-555		
<b>ABP/R15-JB12V130A</b>	Leece-Neville JB Series 12 Volt 130 Amp, coreless	10459022					2670LC 2680LCF 2700JB 2700LC	10459140
<b>STARTERS</b>								
<b>ABP/R15-28MT12V10T</b>	Delco 28MT 12 Volt 10-tooth, Cummins drive end	10465043	1113276	RS128000X	3604482RX 3604654RX 3916854R			10465407
<b>ABP/R15-37MT12V10TA</b>	Delco 37MT 12 Volt 10-tooth, Mtn hole 3/8", Solenoid Stud 1/2" insulated ground for universal application	10461225 10478831	1993886		3675164RX			10461197
<b>ABP/R15-40MT12V11T</b>	Delco 40MT 12 Volt 11-tooth, universal drive end	10461045	1114095 1114098	RS140001X	3603863RX			10461178
<b>ABP/R15-42MT12V11T</b>	Delco 42MT 12 Volt 11-tooth, universal drive end	10461052	1990352 1990363 1990468 10479072	RS142001X	3604322RX			10461126
<b>ABP/R15-42MT12V11TOC</b>	Delco 42MT 12 Volt 11-tooth universal drive end w/Over Crank Protection	10461055	1990355	RS142005X	3604665RX			10461183
<b>ABP/R15-42MT12V11TCT</b>	Delco 42MT 12 Volt 11-tooth universal drive end w/Over Crank Protection, Cat application w/offset drive end housing	10461075	1990489	RS142022X	3604665RX			10461185