

MULTI BATTERY ISOLATOR



Suitable for boats, ships, Rv's, trucks, police, fire, emergence vehicles and industrial equipment.

Why isolate your batteries

Many vehicles have multiple batteries: one to start the engine and others to power accessories. Without a Battery Isolator (BI), a battery with a lower charge will rob power from a battery with a higher charge, until the batteries equalize. This problem is known as multiple battery drain and could leave you with dead batteries.

The solution

To eliminate the multi-battery drain problem, a Battery Isolator acts as a check valve between the batteries, preventing the current from flowing from one battery to another. Each battery is isolated and acts as an independent power source. So no matter how drained your accessory batteries become, they will never drain power from the battery you're depending on to start your engine.

When the alternator is charging, current can only flow from one direction, from the alternator to the batteries. Each battery then determines the amount of current which flows into it by its own state of charge based on the voltage regulator setting.

With this system, the alternator is protected, the batteries are protected. The balanced circuit electronic isolator is the absolutely the best way that proper isolation and control can be accomplished, solving every multi-battery drain problem.

Features

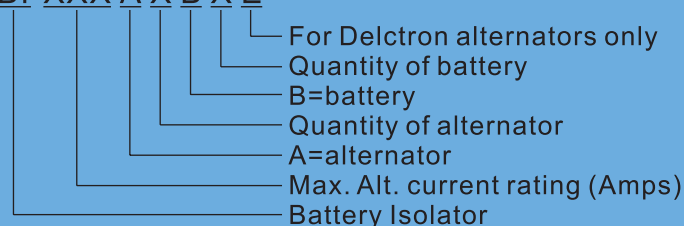
- ❑ Eliminates multi-battery drain when two or more battery banks are in a charging system.
- ❑ Isolates each battery circuit and allows each battery to discharge and charge according to its own needing.
- ❑ Solid-state electronics. More efficient and reliable than mechanical and solenoid systems.
- ❑ Full current in either post.
- ❑ Anodized aluminum heatsink.
- ❑ Sealed to protect against oil, gas, salt, water and harsh environments.
- ❑ Designed to exceed OEM specifications. The most comprehensive line of Battery Isolators on the market.
- ❑ CE certified.

Specifications

- ❑ System voltage: 0-50 Vdc
- ❑ Current: up to 200Amp
- ❑ Voltage drop: 0.90Vdc max.
- ❑ System ground: negative
- ❑ Mounting hardwares included

Available models

BI-XXX A X B X E



Typical models

MODEL	AMPS	GROUP	LENGTH
BI070A1B2	70	1	3.25"
BI070A1B3	70	1	3.25"
BI090A1B2	90	1	4.00"
BI090A1B3	90	1	4.00"
BI090A1B2E	90	2	4.00"
BI120A1B2	120	1	6.50"
BI120A1B3	120	1	6.50"
BI120A1B2E	120	2	6.50"
BI160A1B2	160	1	8.00"
BI160A1B3	160	1	8.00"
BI160A1B2E	160	2	8.00"
BI200A1B2	200	1	11.0"
BI200A1B3	200	1	11.0"
BI200A1B2E	200	2	11.0"

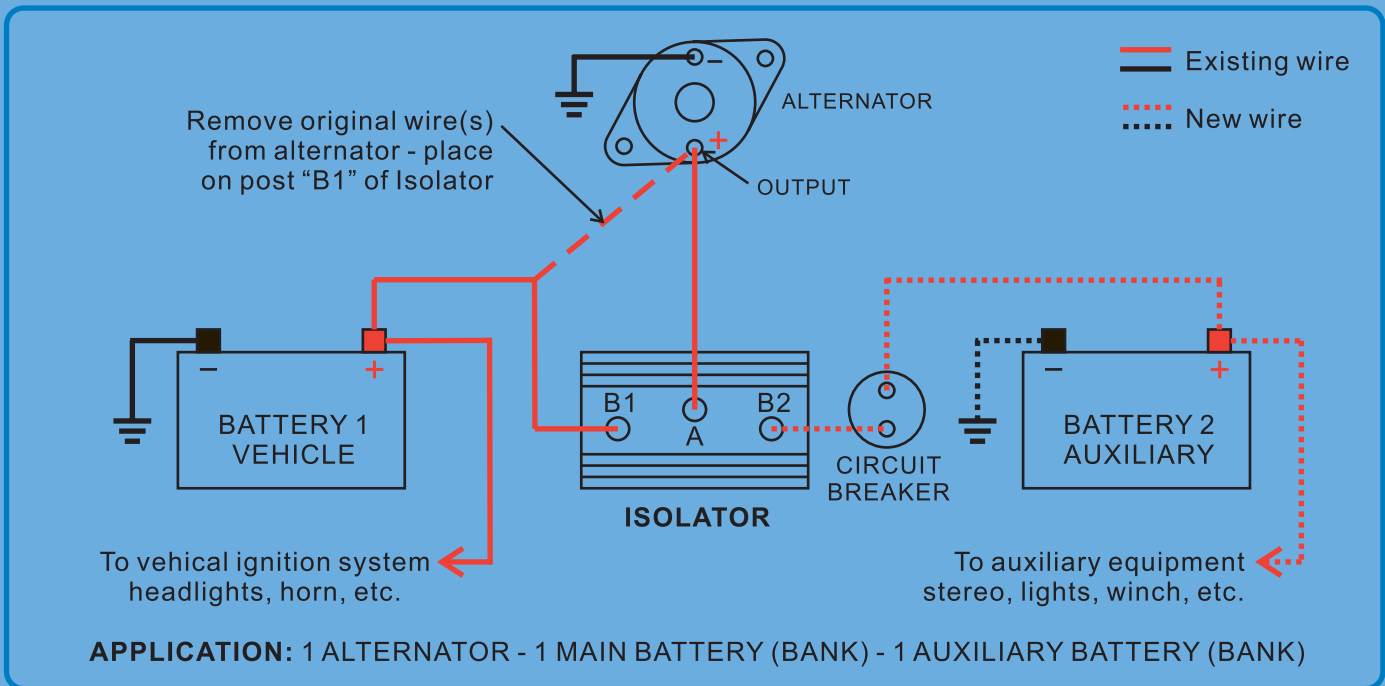
NOTE:

GROUP 1: has an alternator post and up to three battery posts.

GROUP 2: has an additional Excitation(E) terminal for Delco CS series alternators.

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Typical installation



Recommended wire size and circuit breaker

MAXIMUM ALTERNATOR RATING	WIRE SIZE (Gauge)				CIRCUIT BREAKER (Amp)
	Up to 15Ft	15Ft to 20Ft	20Ft to 25Ft	25Ft to 30Ft	
70 AMPS	#8	#8	#6	#6	50
90 AMPS	#8	#6	#4	#4	50
120 AMPS	#6	#4	#2	#1	80
160 AMPS	#4	#2	#2	#0	120
200 AMPS	#000	#000	#0000	#0000	150

Electrical test

- Engine not running:** B1 terminal of isolator should read vehicle battery voltage. B2 terminal should read auxiliary battery voltage. The "A" terminal may read from zero to 13 volts. The "E" terminal on Group 2 series isolators should read zero volts.
- Engine running and alternator charging:** B1, B2, and "E" terminal on Group 2 isolators should read voltage regulator setting of approximately 13.8 to 14.5 volts. The "A" terminal on Group 2 series isolators should read 0.8 to 1.0 Volt higher than the reading of the B1, B2 terminals and "E" terminals.
- For 12 volt systems the "A" post should read approximately 14.8 to 15.5 volts. The B1 and B2 terminal should read 13.8 to 14.5 volts. If the "A" terminal reads 13.8 to 14.2 volts the regulator may be sensing the alternator output rather than the main battery. This situation needs to be corrected for proper charging of batteries.
- Colored terminal indicates "E" post on group 2 isolators.

Heatsink dimensions

