

SURE POWER MULTI-BATTERY ISOLATOR APPLICATION AND INSTALLATION INSTRUCTIONS

The installation of a Sure Power multi-battery isolator is quite simple as long as you carefully read and understand these instructions, and most importantly review the application chart below, before you begin.

First, make sure you have all the tools, wire, connectors and circuit breakers you will need. Sure Power offers a range of installation wiring kits that make the job a snap. See the table that follows for the right kit for your installation.

For optimum system performance it is recommended that a battery labeled "Deep Cycle" be used in the auxiliary position.

Finally, Sure Power multi-battery isolators are designed for alternator systems with negative ground, and batteries of the same nominal voltage. Batteries of differing voltages cannot be used. **For positive ground systems, marine outboard systems, or heavy duty truck systems, contact Sure Power for the proper isolator for your specialized application.**

PLEASE READ INSTRUCTIONS COMPLETELY PRIOR TO STARTING INSTALLATION MULTI-BATTERY ISOLATOR APPLICATION CHART

ALTERNATOR TYPE	SURE POWER MODEL NUMBER			RECOMMENDED WIRE SIZE CIRCUIT BREAKER OR INSTALLATION KIT			
	MAXIMUM ALT. OUTPUT	2 Batteries 1 main (bank) 1 aux. (banks)	3 Batteries 1 main (bank) 2 aux. (banks)	Up to 15 Ft	15 Ft to 20 Ft	20 Ft to 25 Ft	25 Ft to 30 Ft
GROUP #1 Original Equipment Delco (GM), except Delcotron CS series alternators (CS series used on most 1985 and newer GM vehicles). Motorcraft (Ford) All models, all years. (Chrysler) All models, all years - including Nippondenso externally regulated alternators. Jeeps equipped with Nippondenso alternators, externally regulated. Japanese Imports with alternators using external voltage regulator or external sensing Motorola - Load Handler Series. 8EM Remote Sense Series.	Up to 70 Amps	702	703	#8 ga. 50 Amp (1)	#8 ga. 50 Amp (2)	#6 ga. 50 Amp (3)	#6 ga. 50 Amp
	Up to 95 Amps	952 or 9523A	1203, 1303 or 12033A, 13033A	#8 ga. 50 Amp (1)	#6 ga. 50 Amp (3)	#4 ga. 50 Amp	#4 ga. 50 Amp
	Up to 120 Amps	1202, 1302 or 12023A, 13023A	1203, 1303 or 12033A, 13033A	#6 ga. 80 Amp (4)	#4 ga. 80 Amp	#2 ga. 80 Amp	#1 ga. 80 Amp
	Up to 160 Amps	1602, 2002	1603	#4 ga. 120 Amp	#2 ga. 120 Amp	#2 ga. 120 Amp	#0 ga. 120 Amp
	Up to 240 Amps	2402	2403	#2 ga. 150 Amp	#0 ga. 150 Amp	#00 ga. 150 Amp	#000 ga. 150 Amp
GROUP #2 DELCO (GM) equipped with Delcotron CS series alt. (most 1985 and newer). Or CS-130D, 1993 and newer.*** Jeep vehicles equipped with Delcotron CS series alt. (most 1985 and newer). Toyota, Honda and Some Imports equipped with Nippondenso alternator with internal regulator.	Up to 95 Amps	9523A**	12033A** 13033A	#8 ga. 50 Amp (1)	#6 ga. 50 Amp (3)	#4 ga. 50 Amp	#4 ga. 50 Amp
	Up to 120 Amps	12032A** 13023A**	12033A** 13033A	#6 ga. 80 Amp (4)	#4 ga. 80 Amp	#2 ga. 80 Amp	#1 ga. 80 Amp
<p>* The CS series alternator can be identified by unplugging the plug-in connector from the alternator and counting the number of holes in the connector. The CS series will have 3 small and one larger hole. The CS130D alternator has 4 holes all the same size. The SI series alternator will only have 2 slotted holes in the connector.</p> <p>** Sure Power model 144-CD connector kit required for Delcotron group #2 applications.</p> <p>*** Delco CS130D alternator requires the part #640059 sense wire which is included with the 144 kit or available separately from Sure Power Industries. All group #2 isolators may also be used in group #1 applications - simply disregard the additional excitation ("E") terminal. The colored terminal indicates "E" terminal on group #2 isolators.</p>							
GROUP #3 Motorola (other than Load Handler) Bosch (requiring regulator sensing).	Up to 70 Amps	702R	703R	#8 ga. 50 Amp (1)	#8 ga. 50 Amp (2)	#6 ga. 50 Amp (3)	#6 ga. 50 Amp
	Up to 95 Amps	952R	N/A	#8 ga. 50 Amp (1)	#6 ga. 50 Amp (3)	#4 ga. 50 Amp	#4 ga. 50 Amp
	Up to 120 Amps	1202R	1203R	#6 ga. 80 Amp (4)	#4 ga. 80 Amp	#2 ga. 80 Amp	#1 ga. 80 Amp
Colored terminal indicates "R" post on most Group 3 Isolators. All Group #3 Isolators may also be used in Group #1 applications - disregard the "R" terminal.							
GROUP #4 For alternators with internal voltage sensing, ie; some Mitsubishi and Hitachi, or single wire self exciting Delco alternators.	N/A	*1314 BATTERY SEPARATOR	N/A	#6 ga. N/A (4)	#6 ga. N/A (3)	#4 ga. N/A N/A	#2 ga. N/A N/A
	*A SOLENOID PRIORITY SYSTEM. NOT AN ELECTRONIC ISOLATOR. ISOLATOR MAY BE USED BY MODIFYING ALTERNATOR.						

APPLICABLE SURE POWER WIRING KITS AVAILABLE

- (1) 8 gauge wire, 50 amp circuit breaker or SURE POWER KIT #1882-D (includes 15 ft. #8 ga., 50 amp CB, terminals and connector)
- (2) 8 gauge wire, 50 amp circuit breaker or SURE POWER KIT #1884-D (includes 25 ft. #8 ga., 50 amp CB, terminals and connector)
- (3) 6 gauge wire or SURE POWER KIT #1887 (includes 25 ft. #6 ga., terminals and connector)
- (4) 6 gauge wire or SURE POWER KIT #1886-D (includes 15 ft. #6 ga., terminals and connector)