

Document Number		RG_TN-0015	
Title		Remote Battery Disconnect	
Revision	Date	Prepared By	Change History
1.0	5/24/2016	Chris Brown	Initial Release

Introduction

The RBD-190 is designed to be the main battery isolator / switching element in a manual battery control system. It quickly disconnects the battery positive using a toggle switch that can be mounted anywhere.

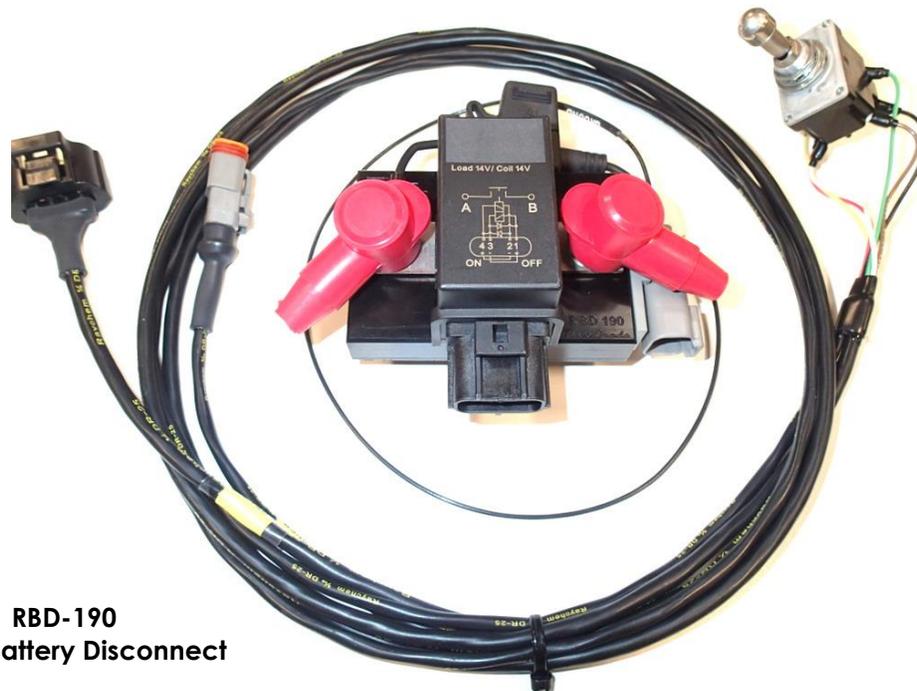
Caution! : Stop a running engine before switching the RBD-190 to open circuit. Failure to follow this instruction may result in alternator or other electrical damage.

Specifications

Max Continuous Current: 190 amps
Max Peak Current: 1000 amps

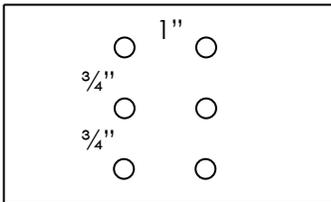
Switch Connections:

1. Green
2. Black
3. Brown
4. Yellow
5. Red
6. White



RBD-190
Single Battery Disconnect

Mounting RBD-190 Relays

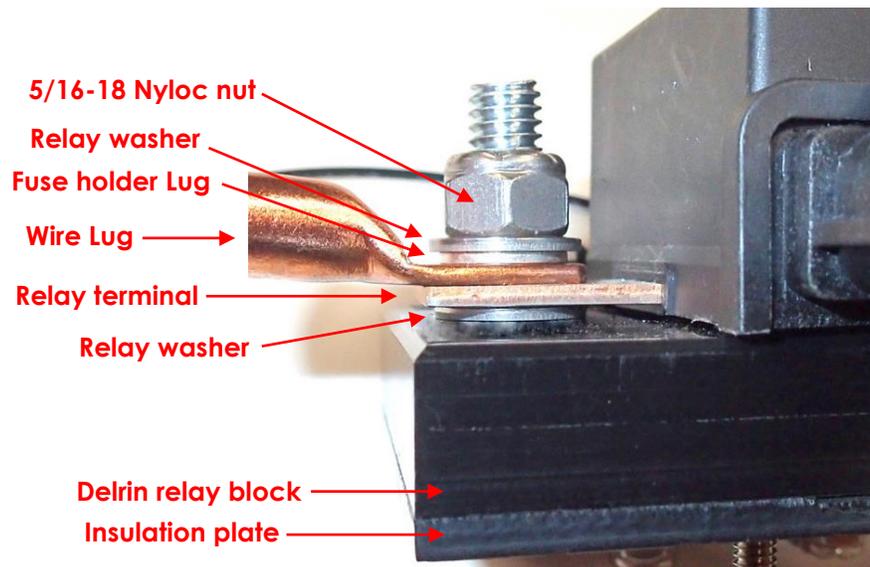
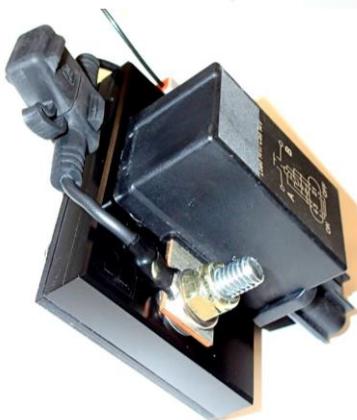


- Locate a suitable mounting location for the relays.
- For the best water ingress protection, mount with electrical plug facing downward.
- The relay plate has 6 possible holes to utilize.
- Minimum of two screws required. Four will provide a more secure mounting.



Remove the nut, washers, lugs and relay to access the mounting screws. Use the provided 8-32 screws. Once secured, return the washers, lugs and relay in the order shown below. The provided mounting plate must be used behind the relay block to prevent accidental shorting of the power studs to the mounting location.

When mounting two relay packs back to back on a single plate, please contact RaceGrade for additional options.



Attach Battery-side Power Cables to RBD-190

Slip one of the provided red boots onto the lead from battery positive. Attach battery positive lead to the B+ side of the RBD-190 block using a 5/16" eye terminal. For best electrical performance the terminal should sit directly on the relay without a washer in between. Place a washer over the eye terminal and tighten down a nut on top. It is not permitted to run the ground wire through this relay. Maintain the positive polarity across relay as shown.

Attach Car-side Power Cables to RBD-190

Slip a red boot over the main power lead from the car's wiring harness, (Usually the starter lead). Attach lead to the other side of the RBD-190 with another 5/16" eye terminal. Place a washer over the eye terminal and tighten down a nut on top.

Note: Batteries turned off will not receive charging from alternator.

Attach control cables to RBD-190

Attach the 14 AWG flying black ground lead to a suitable chassis ground near the RBD190 relay with a suitable ring terminal (not provided) Attach harness connectors to the relay and the gray DT plug.