

INSTALLING DELCO REMY HEAVY DUTY STARTING MOTORS (37MT, 40MT, 41MT, 42MT & 50MT)

WARNING!!! ALWAYS USE PROPER EYE PROTECTION WHEN PERFORMING ANY MECHANICAL REPAIRS TO A VEHICLE – INCLUDING, BUT NOT LIMITED TO, ANY INSTALLATION AND OR REPAIRS TO THE DELCO REMY STARTING MOTORS. FAILURE TO USE PROPER EYE PROTECTION CAN LEAD TO SERIOUS AND PERMANENT EYE DAMAGE.

Only perform the mechanical functions that you are properly qualified to perform. A professional installation specialist should handle mechanical repairs that are beyond your technical capabilities.

DANGER!!! ALWAYS DISCONNECT BATTERY GROUND BEFORE REMOVING OR REPLACING CABLES AT THE STARTER. FAILURE TO DISCONNECT THE BATTERY GROUND CABLE CAN LEAD TO SERIOUS INJURY.

NOTICE! FOLLOW ENGINE AND/OR VEHICLE MANUFACTURER'S INSTRUCTIONS CAREFULLY WHEN REMOVING AND INSTALLING THE STARTERS.

The Magnetic Switch (Relay) contained in this package may differ in appearance from the switch (relay) formerly used. With the proper modification, however, this switch which is of equal or better quality will function satisfactorily on applications formerly using a different appearing switch. There are four different conditions where this magnetic switch (relay) can be used to replace another switch. Determine which condition fits your needs. Then refer to the section that applies and proceed as directed.

SECTION A: When used as a direct replacement (Note the number of terminals present on the switch (relay) that is to be replaced).

If switch (relay) has four terminals:

1. Install the replacement switch (relay) on the vehicle without modification.

If original switch (relay) has three terminals, a modification is required.

1. Install the replacement switch (relay) and the ground lead, provided in this package, on the vehicle. The ground lead should be connected between one of the small switch terminals and one of the mounting bracket hold-down bolts which must have a good electrical ground. The remaining three switch terminals are then connected as they were on the original three-terminal switch hook-up.

SECTION B: To provide automatic disengagement and lockout (ADLO) protection.

If switch (relay) is used in conjunction with a D.C. Generator or an Alternator:

1. Make connections to the magnetic switch (relay) as shown in Figure 1. Do not use the small ground lead.

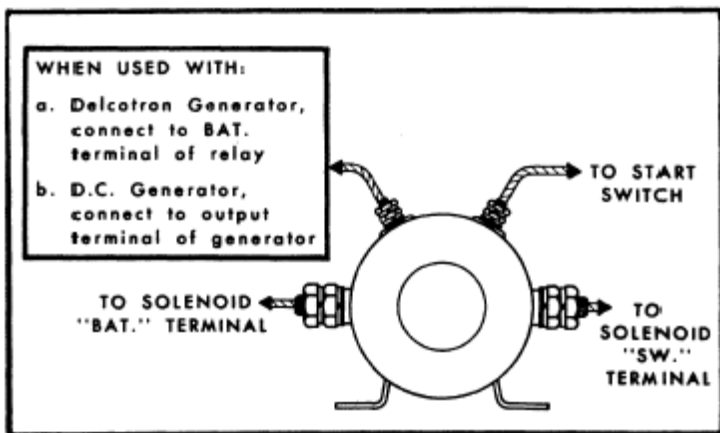


Figure 1

SECTION C: When replacing a starter having a frame-mounted magnetic switch (relay) with a starter and a separately mounted magnetic switch (relay):

1. Mount the switch (relay) away from exhaust manifolds, but as close to the starter as possible. Use suitable bolts, nuts and lock washers for mounting.
2. Insure that the switch (relay) base is well grounded. If the switch (relay) has two small terminals, one small terminal must also be grounded. See Figure 2.
3. Connect the original lead from the start switch to the small terminal on the magnetic Switch (relay). If the lead will not reach, use new stranded wire of the same size or larger than the original lead. Securely crimp and solder all terminals.
4. Connect the heavy battery cable to one of the large switch terminals as in the original installation. If new cable is required, use stranded cable of the same size as or larger than the original cable. Securely crimp and solder all terminals.

5. Mount the starter and make a new cable for connecting the other larger switch terminal to the motor terminal. Use stranded cable of comparable size as the other heavy cable. Crimp and solder all terminals.
6. If there is interference with the motor terminal, the frame can be rotated 180 by removing the two thru bolts, rotating the frame and retightening the thru bolts.

NOTICE - Only licensed Remy International, Inc. product and component parts should be used, and the use of other parts or modifications not approved by Remy International, Inc. will void all applicable warranties. The failure to carefully follow these Installation Instructions, set forth above, will void all applicable warranties. DELCO REMY is a registered trademark of General Motors Corporation, licensed to Remy International, Inc. Pendleton, IN 46064.

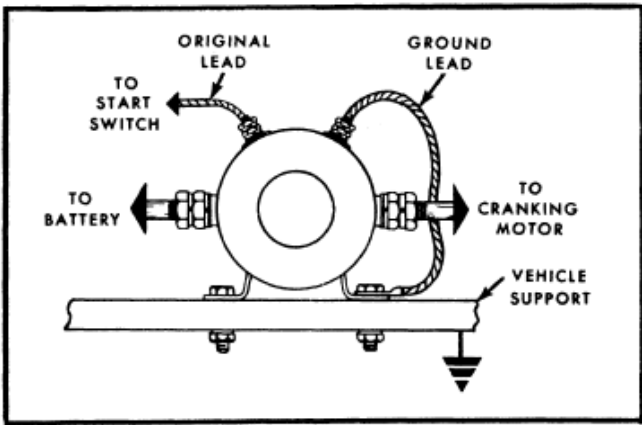


Figure 2

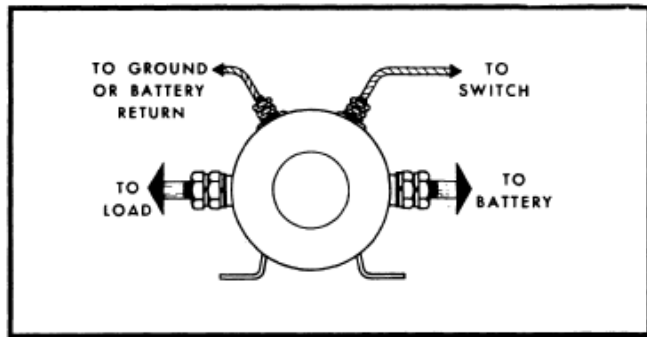


Figure 3

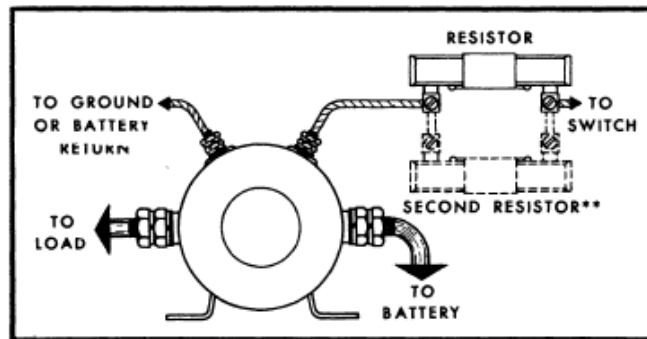


Figure 4

SECTION D: When installing continuous duty magnetic switch (relay) model 1114223 or 1119841 on vehicle having 12-volt system, or with resistor/s on vehicle having 24-, 30- or 32-volt system

1. Mount the switch using suitable bolts, nuts and lock washers.
2. Stranded copper wire of adequate size to carry the current should be used, and all connectors should be crimped and soldered to the wiring.
3. The following chart indicates the proper resistor to be used in a 24-, 30- or 32-volt system for each magnetic switch. The resistor is available at any AC-Delco Distributor.

| SWITCH MODEL | SYSTEM VOLTAGE | RESISTER PART NUMBER | CURRENT CAPACITY |
|--------------|----------------|----------------------|------------------|
| 1114223 | 12 | None | 50* |
| 1114223 | 24 | 1970166 | 50* |
| 1114223 | 30, 32 | 1970168 | 50* |
| 1119841 | 12 | None | 500* |
| 1119841 | 24 | 1970166** (use two) | 500* |
| 1119841 | 30, 32 | 1970166 | 500* |

* Current capacity in continuous amperes through large terminal of switch.

** Use second resistor only with 1119841 on 24-volt system.

4. Make connections as shown in Figure 3 for 12-volt system, or as shown in Figure 4 for 24-, 30- or 32-volt system.

Technical support: USA 800 854 0076, Mexico 01 800 000 7378, Brazil 0800 703 3526, South America 55 11 2106 6510 or visit delcoremy.com

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