



OVERDRIVE SOLENOID  
VOLTAGE REDUCER / RELAY  
12 VOLTS TO 6 VOLTS  
Part number VRODS1

These instructions will help you install and test your new 12 volt to 6 volt reducer/relay for overdrive solenoid. Please read completely before attempting to install.

The VRODS1 is designed to replace your original-style overdrive relay and also reduce the voltage from 12 volts to 6 volts to operate a 6-volt overdrive solenoid. It also has a 6-volt output that is not switched by the relay, and this is useful for powering 6-volt power motors commonly found in power seats, windows and electric tops. This unit will only work on negative ground electrical system and will not work on positive grounded systems.

Specifications:

- Intended for use with 6-volt Borg Warner overdrive solenoids.
- Intended for applications with intermittent use motors like windows, convertible tops, electric seat motors.
- Input voltage 12 volts negative ground.
- Output 6-8 volts continuously for engaging overdrive solenoids.
- Output 6-8 volts 15 amps for up to 45 second duration for use with window, seat, and top motors.
- Circuit breaker is built in and resets automatically.
- Unit will get warm when it is used.
- Must be mounted in well ventilated area away from materials that can melt such as plastics.
- Needs a cool-down period between uses on high current motors.

Installation: **Before you get started always disconnect your battery.**

1. Mount unit in well ventilated area away from materials that can melt or someone can touch the case. Unit will get warm during operation.
2. Supply 12 volts switched voltage to the input. Note if constant voltage (non-switched) is supplied this unit will draw the battery down if battery is not disconnected.
3. Connect a good ground to the ground terminal. Negative ground systems only.
4. Connect 6 volt output directly to the motor of a power seat, window, or convertible top. If running more than one motor, connect the output to a common buss that will supply current to multiple motors. Note if running multiple motors, recommend operating one motor at a time, this will prevent overheating and potential of shutting down.
5. SOL, IGN, and TH. SW. terminals replicate the terminals of the same names on an original-style overdrive relay, and should be connected the same way.
6. Connect SOL terminal to overdrive solenoid terminal 4.
7. Connect IGN terminal to a switched ignition power source such as the ignition switch. Because the 12V IN terminal is also connected to a switched power source, you may use the enclosed jumper to connect 12V IN to IGN.
8. Connect TH. SW. terminal to one of the upper terminals on the O.D. Kickdown Switch.
9. Reconnect the battery and test operation.

