



# **Electrical Devices for Classic and Muscle Cars**

Shown below are some of the thousands of electrical devices and electrical motors we offer. Consult our online catalog for our complete line of electrical devices, specific to your year/make/model vehicle.

- · Air Conditioning Relays & Thermal Limiters
- Air Induction Solenoids
- Alarm System Relays
- Blower Motor Resistors
- Camshaft Position Sensors
- · Carburetor Electric Choke Relays
- · Carburetor Idle Stop Solenoids
- Circuit Breakers
- Cowl Induction Relays & Solenoids

- Flashers • Fuel Level Warning Modules • Gauge Light Dimmer Modules
- Headlight Door Relays
- · Hood Scoop Air Door Solenoids
- Horn Relays
- **Ignition Coils**
- Ignition Key Warning Buzzers
- **Knock Sensors**
- Oil Pressure Sending Units
- Oxygen Sensors
- Power Door Lock Relays
- Power Trunk, Hatch & Tailgate Release Relays
- Power Window Motors
- Power Window Motors Relays
- · Radio Capacitors
- Ram Air Solenoids
- Rear Window Defogger Relays
- Seat Belt Warning Buzzers
- Shaker Hood Scoop Solenoids

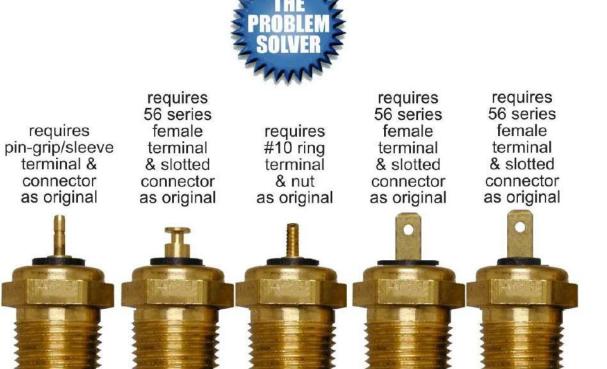
- Speed Sensors
- Temperature Sending Units
- Throttle Position Sensors
- T.I. Amplifier Box Modules
- Transmission Controlled Spark Solenoids
- Transmission Kickdown Solenoids
- · Voltage Regulators
- Windshield Wiper Door Solenoids
- Windshield Wiper Modules (Intermittent)
- Windshield Wiper Motors & Relays
- ...and many more!

**REPRODUCTIONS** - Some of our electrical devices in our catalog are listed as reproductions. Many are manufactured by an O.E.M. (Original Equipment Manufacturer), on the original tooling. They are correct in appearance to the original, and will connect to an original wiring harness, fit, mount, and function exactly as original. See our online catalog for photos and additional information.

**REPLACMENTS** - Some of our electrical devices in our catalog are listed as replacements. Replacements are not necessarily manufactured by an O.E.M. (Original Equipment Manufacturer). They do not necessarily have the same appearance as the original. However, they will connect to an original wiring harness, fit, mount, and function exactly as original. See our online catalog for photos and additional information.

Shown below are only fraction of the thousands of electrical devices we offer. Consult our online catalogfor our complete line of electrical devices, specific to your year/make/model vehicle.

## **Temperature Sending Units (Accurate Replacements)**



Temperature Sending Unit Examples (click to enlarge)

Is your car running too hot? Maybe your temperature gauge is not telling you the truth. Most cars have had their temperature sending unit replaced with a GM/Delco or an auto part's store replacement temperature sending unit that do not produce an accurate gauge reading in vintage cars. This may be your problem! Sending units from those locations are only a generic replacements; often requiring a new, matching gauge or re-calibration of your original gauge.

Finally, accurate temperature sending units for many Chevrolet, Buick, Oldsmobile, Pontiac & Cadillac vehicles. Months of research were devoted to provide our customers with sending units that have the original-type terminal connection and resistance (thermistor); resulting in an accurate gauge reading. They screw into the original size 1/2" x 14 N.P.T.F. pipe thread-size hole (not the smaller 3/8" hole).

Note: The terminal connections on all our sending units are exactly as-original. Through the years, the mating terminal & connector on your wiring harness may have been changed by a previous owner. This was not uncommon. This change was most likely made in order to try different sending units when the "exact replacement" unit didn't work or was not available.

If your wiring harness had been modified from original, we may offer replacement Temperature Sending Unit Lead Repair Kits. (See our "Repair Components" section of our catalog.)

#### **NEW! Blower Motor Resistors**



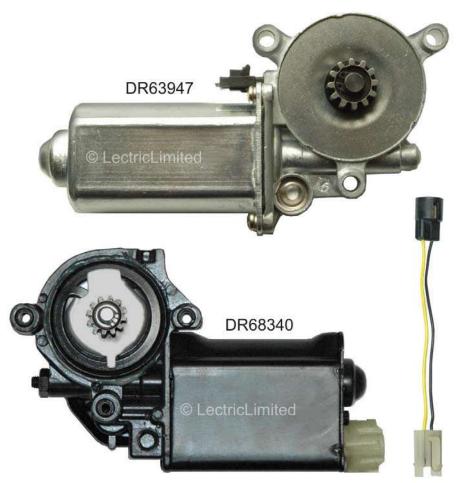
Heater and A/C Blower Motor Resistor Examples (click to enlarge)

The blower motor resistor is an electrical component that is a part of the vehicle's heating and air conditioning system (if the vehicle has A/C). It is responsible for controlling the fan speed of the blower motor. When the fan speed is changed from the the highest speed via the knob on the instrument cluster, current to the blower motor is directed through a one of the coils (resistors) within the blower motor resistor. Depending on the resistance of the coil, the blower motor fan speed changes (faster or slower).

Since the fan speed is one of the most frequently adjusted settings of the heating and air conditioning system, the blower motor resistor is put under constant stress, which can cause it to eventually fail. A failed blower motor resistor can cause issues with the operation of the entire heating and air conditioning system.

A bad or failing blower motor resistor will produce a few symptoms that can alert the driver of a potential issue. Usually, if the blower motor resistor fails, the blower motor will only functions at its highest speed and will not operate at lower speeds. Replacing the blower motor resistor typically corrects this problem.

#### **NEW! Power Window Motors**



Power Window Motor Examples (click to enlarge)

Power windows that go up and down with the flip of a switch are great convenience, but they can become a very inconvenient when something goes wrong and the windows won't budge. When power windows stop working, there may be a variety of culprits at the root of the problem, one of which is a faulty power window motor. There is one motor on each side of the vehicle and is usually housed on the inside panel of the door. The motor is attached to a regulator, which is a mechanical device that physically moves the windows up and down.

Replacing a power window motor by a professional can be an expensive process, but one way you can save money is by purchasing your replacement power window motor from Lectric Limited and installing it yourself!

Lectric Limited's power window motors meet or exceed original equipment performance. All our power window motors are brand new, manufactured with new components, and not rebuilt from old motors. There is never a core charge because we do not require that you send us your old motor, as many rebuilders do.

# **Radio Capacitors (Correct Reproductions)**



Radio Capacitor Examples (click to enlarge)

Ignition systems, charging systems and electrical devices can create magnetic pulses that are of the same frequency range as AM radio, resulting in radio "noise". These radio noise suppression capacitors divert this noise to ground so it isn't heard through the radio's speakers as an annoying buzz or whine.

Radio capacitors were installed in any area of the vehicle that could create radio "noise". Some of these locations were the: ignition coil, voltage regulator, ammeter, ignition switch, turn signal switch and parking brake alarm switch. Lectric Limited's radio noise capacitors include the mounting bracket (as original).

# Horn Relays (1957-86 GM Vehicles)



Horn Relay Examples (click to enlarge)

Horn relays carry high-amperage current controlled by a low-current horn switch. When a faulty relay is not replaced, the circuit will either be non-functional or remain engaged.

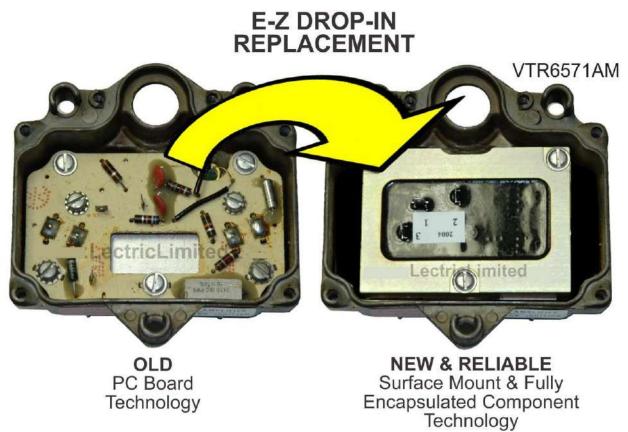
All of our horn relays are manufactured by current or former OEM suppliers. Every relay either matches or improves on the OE design to ensure fast, easy installation, superior performance and reliability. Some of these relays are already discontinued by General Motors, and we are the only remaining source.

# **Transistor Ignition Amplifier Box Module (1964-71 Corvette)**

What's <u>inside</u> your T.I. box is what really counts!

Replace your faulty or old-technology PC board with our new module!





VTR6571AM shown (click to enlarge)

Convert your T.I. Amplifier Box from old technology to new. This is an extremely reliable, sealed solid-state T.I. module that replaces the original circuit board inside your T.I. box. It fits completely inside your amplifier box making it indistinguishable from original. It is a simple screw-in replacement. We offer this module for 1964-71 Corvettes. (T.I. box not included)

Did you know that many times a problem with an original T.I. system can be traced back to the electronic components? Many years ago, when the T.I. system was developed, Germanium transistors were "state-of-the-art" in electronic technology. This type of transistor, however, had many limitations and many amplifier failures can be traced back to these transistors. Our VTR6571AM replacement module uses the newer type Silicone transistors that rarely fail. Other problems that led to amplifier failure were due to water from a faulty cover seal. Moisture trapped inside the amplifier box will cause corrosion to the extent it will rust electrical component leads and destroy copper tracks (traces) on the printed circuit board, thus leading to failure. All of the electronic components in our VTR6571AM are completely encapsulated/sealed. If water does get trapped inside your box, the VTR6571AM will not be effected.

See our <u>F.A.Q.s</u> for more information about the T.I. (transistorized ignition) system. **Voltage Regulators** 



Voltage Regulator Examples (click to enlarge)

A voltage regulator is the device that regulates the output of a generator or alternator to maintain a constant voltage level. For budget minded owner, Lectric Limited offers these OEM quality replacement voltage regulators. Manufactured by an OEM supplier, but cost significantly less than a Delco replacement. Your original "Delco" cap can easily replace the existing cap on this voltage regulator by removing the 2 screws (not rivets) for a more original look. 01119000 and 01119002 include mounting grommets.

Voltage regulators can not be returned or replaced.

## Windshield Wiper Door Solenoid (1968-72 Corvette)



#### 05638276 shown (click to enlarge)

This solenoid controls vacuum to the windshield wiper door on 1968-72 Corvettes. The solenoid determines when to apply vacuum and when to release. Typically a vacuum line enters the solenoid and another vacuum line exits the solenoid. The solenoid also relies on an electrical signal provided by other wiper system switches/relays via an electrical connection on the back or side of the solenoid (the Dash Harness plugs into this connection).

## **Transmission Controlled Spark Solenoid**



#### TCS4432 shown (click to enlarge)

Often referred to as T.C.S. solenoid, these devices control vacuum to the distributor vacuum advance unit. The solenoid determines when and how much vacuum to release. Typically a vacuum line from the carburetor enters the solenoid and another vacuum line exits the solenoid to the distributor vacuum advance unit (some applications have multiple inlet and outlet lines). The solenoids also rely on an electrical signal provided by other T.C.S. system switches/senders via an electrical connection on the back or side of the solenoid (the Engine Harness or T.C.S. Harness plugs into this connection).

### **Circuit Breakers**



Circuit Breaker Examples (click to enlarge)

A circuit breaker protects the wiring harness in case of an overload or short circuit from various power accessories.

Our circuit breakers made by an OEM (original equipment manufacturer) and have the correct amperage rating (30 or 40 amp) as specified by the vehicle's manufacturer. Amperage rating is stamped on the bracket or case.

These circuit breakers were used on 1955 to mid 1970s GM cars & trucks for power accessories and general use.

### **NEW!** Windshield Wiper Motors



Windshield Wiper Motor Examples (click to enlarge)

Replacing a windshield wiper motor by a professional can be an expensive process, but one way you can save money is by purchasing your replacement windshield wiper motor from Lectric Limited and installing it yourself!

All Lectric Limited windshield wiper motors are manufactured by an OEM and meet or exceed original equipment performance.

All Lectric Limited's windshield wiper motors are brand new, manufactured with new components, and not rebuilt from old motors. There is never a core charge because we do not require that you send us your old motor, as many rebuilders do.

## **Intermittent Windshield Wiper Module (1978-82 Corvette)**



Intermittent Windshield Wiper Module (click to enlarge)

Did you know that when your intermittent windshield wiper module fails, your wipers will not work AT ALL? And it's not a question of IF your original module will fail, it's WHEN! Don't take the chance of being caught in the rain when it happens.

Original wiper modules have long been obsolete and are very hard to find. If you can even find one, expect to pay several hundred dollars. These original modules have a large mechanical relay and PC board-mounted electronics.

Comparing an original module to Lectric Limited's "New & Improved" wiper module will make your wiper delay function as-original. But that's not all. Our new module is more reliable, has a more accurate delay cycle, draws less amperage and generates less heat, has no moving parts (because there is no relay), and is over-load protected. The control board with all the electronic components are manufactured utilizing today's surface mount technology (SMT) process. The control board is housed in a protective case and mounts to the original location with 2 screws (included).