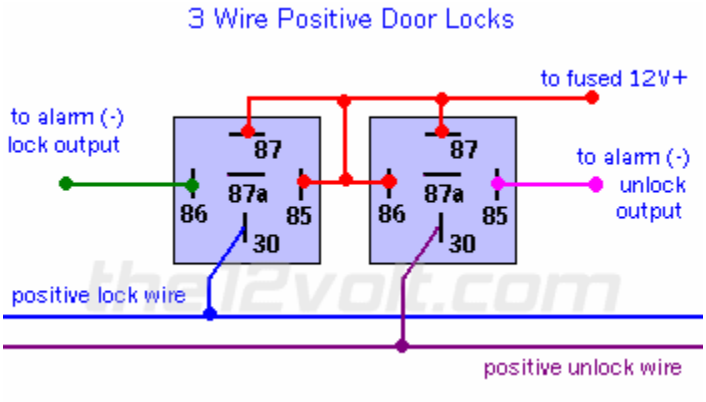
Car Security and Convenience / Power Door Locks, Multiple Wire Systems, Add Auto Lock/Unlock

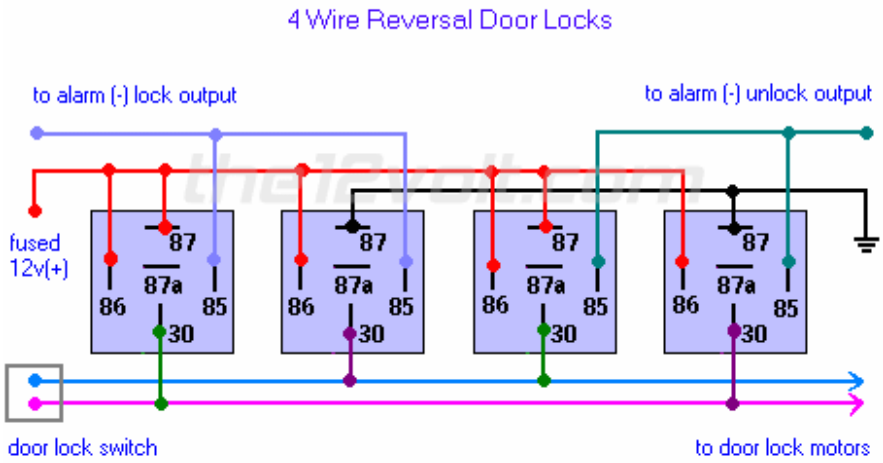
Once you have determined which type of door lock switch you are working with, adding keyless entry and other locking features is very simple.

This is one of the most common type of door lock switch configurations found in most vehicles. In most cases you will not need to add relays for this type. Most of the newer alarms and keyless entries on the market today have both positive and negative 200 ma door lock outputs that are usually capable of activating the factory relays. Should you need to add relays for a **"3 wire negative"** door lock system, just change both normally open terminals (87) from 12V(+) to ground. If your alarm or keyless entry has positive outputs only, you will have to connect the other side of the coils to ground and connect your outputs as shown. The lock and unlock wires below refer to the switch wires, **not** the motor legs.



3 Wire Positive Door Locks Relay Diagram

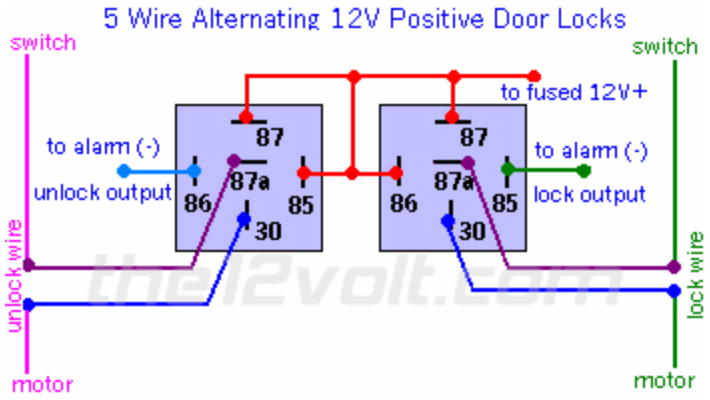
In this case, both motor legs of the door locks are normally open. They neither rest at ground or 12v(+). The switch, when moved in either direction, applies both power and ground directly to them without the use of any relays.



4 Wire Reversal Door Locks Relay Diagram

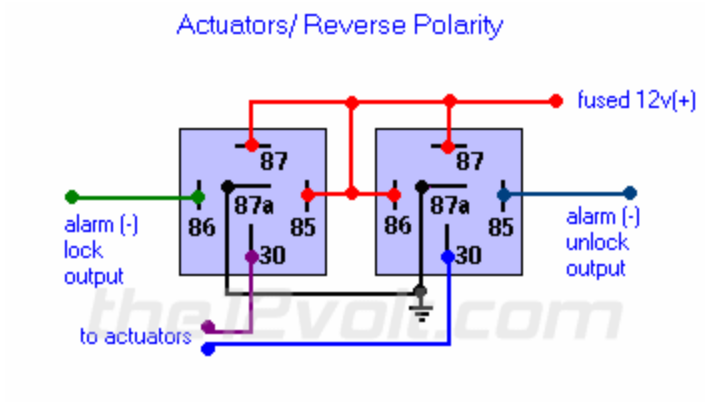
Like the configuration above, the switch, when moved in either direction, applies both power and

ground directly to motor legs without the use of any relays. Except, at the switch in this case, both motor legs rest at ground . Therefore it is only necessary to change the polarity of one motor leg to lock or unlock the vehicle.



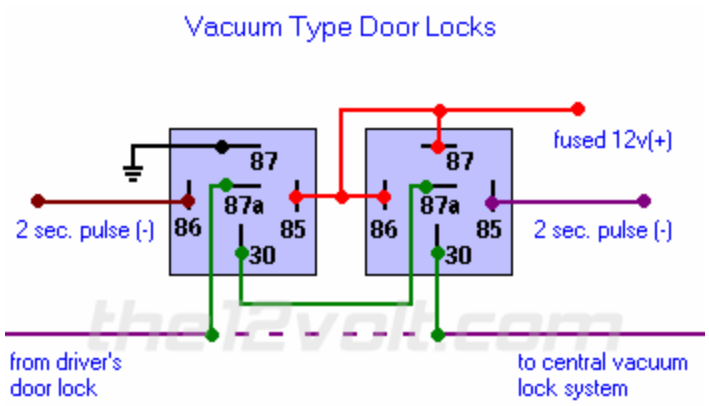
5 Wire Alternating 12v(+) Door Locks Relay Diagram

This is practically identical to the 5 wire alternating 12V(+) system above. The only difference is there's no switch! Both motor legs rest at ground at the relays. To lock or unlock the vehicle, polarity is changed on one motor leg.



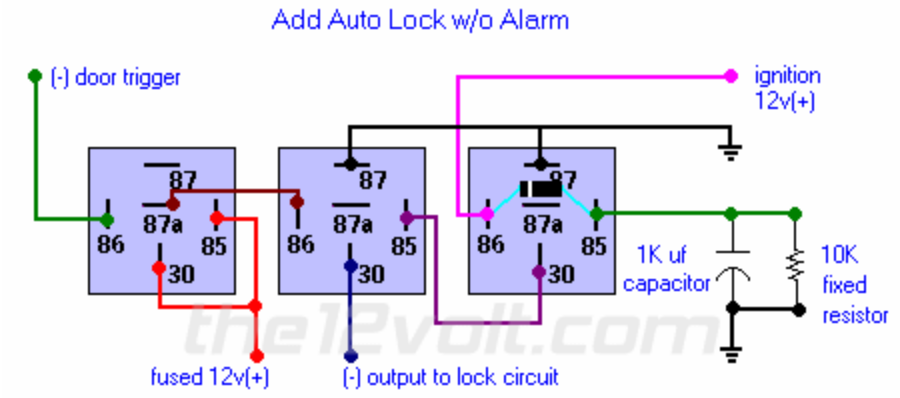
Actuators / Reverse Polarity Relay Diagram

Found mostly on Mercedes Benz vehicles, the movement of the door lock actuators is controlled by a central vacuum pump. The switch changes polarity on a single wire that may rest at power or ground depending on the state of the door locks. You can duplicate this with at least a 2 second pulse. If the alarm or keyless entry you are installing does not have a 2 second or longer duration option for the door lock outputs, do not use this diagram (it will not work unless you incorporate a timer into this circuit).



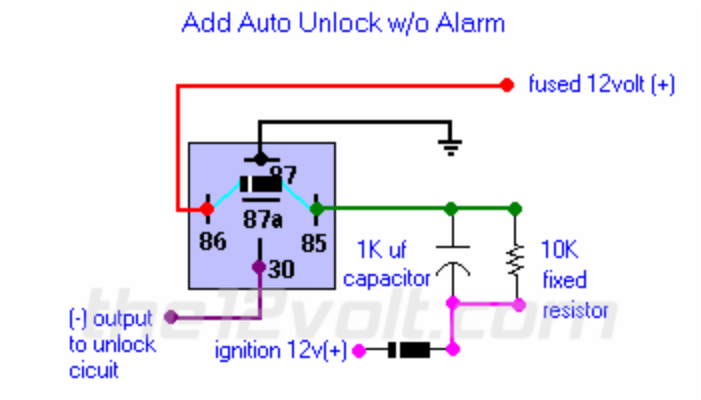
Vacuum Door Locks Relay Diagram

You can easily add the convenience of auto lock to any vehicle equipped with power locks without adding a keyless entry or alarm (or if the one you have does not have this feature). Please notice the relay on the left. This is an inhibit to prevent the doors from locking the customer out of his vehicle. When the key is turned to the "ignition on" position, the doors will only lock automatically if the doors are closed. If the vehicle has a positive door trigger, change terminal #85 of the left relay to ground and connect the door trigger to #86 as shown. For auto unlock, see next. For more info, click here.



Add Auto Lock w/o Alarm Relay Diagram

Like above, you can add auto unlock to any vehicle equipped with power locks. Just connect the output of this circuit to the vehicle's door lock circuit using the appropriate application. more info.



Add Auto Unlock w/o Alarm Relay Diagram