Bosch Type Relay Wiring Diagrams

ALARM TRIGGER INVERTER

Most alarms on the market have both a positive and a negative trigger. Although both are supplied, only *ONE* type of trigger can be wired, not both. If you have a car that switches 12V to a dome light and you want to install a motion sensor that supplies a ground, you must invert one of the signals. (i.e. The grounding motion sensor to a 12V sensor.)

FIG. A
Switches a grounding dome light to a 12V sensor output.

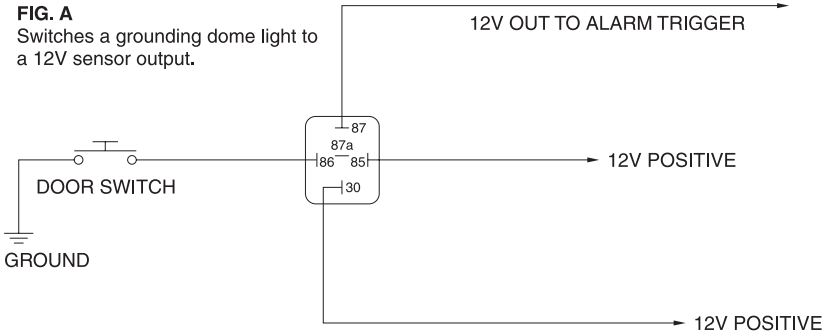

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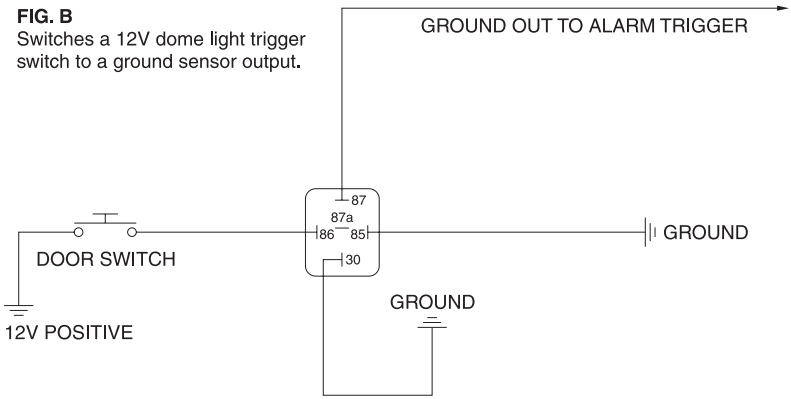
FIG. B
Switches a 12V dome light trigger switch to a ground sensor output.



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The door switches can be motion sensors, shaker boxes, glass sensors...etc., any trigger you wish to invert.

ENGINE DISABLE SYSTEMS

There are many ways of disabling a car from starting. Check with the car's service manual to see which method best fits your needs.

FIG. A
The ignition switch must be on and the hidden switch must be closed, to trigger the relay to close. When relay is closed, fuel pump will have power and car will get gas to run. IMPORTANT NOTE: THIS METHOD IS NOT TO BE USED FOR DIESEL ENGINES!

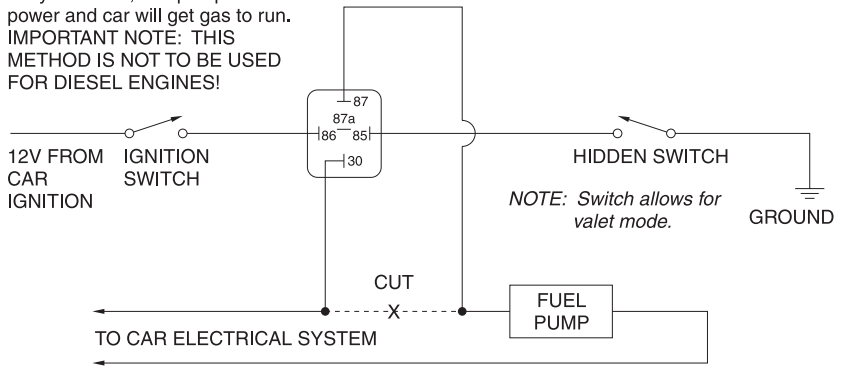

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FIG. B
When ignition switch is on and hidden switch is closed, relay is triggered and the neutral safety switch is closed, allowing car to start. When neutral safety switch is open, car will not start as car "thinks" it is in DRIVE gear.

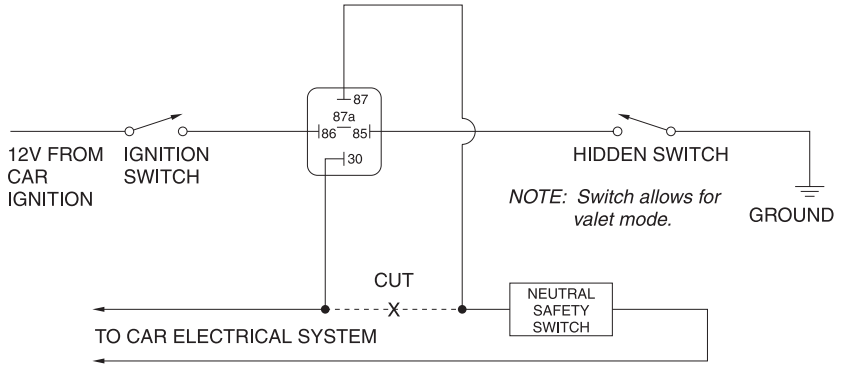

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FIG. C
When the ignition is on and the hidden switch is closed, then the relay will be triggered, When the relay is triggered, the short circuit is taken off the coil and the car will start.

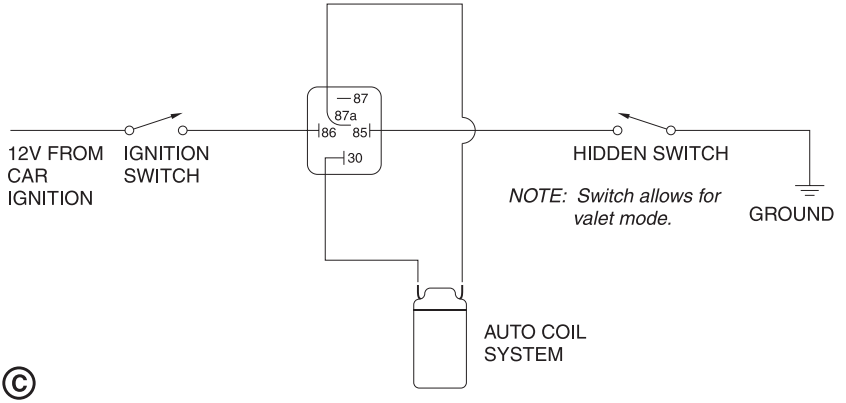

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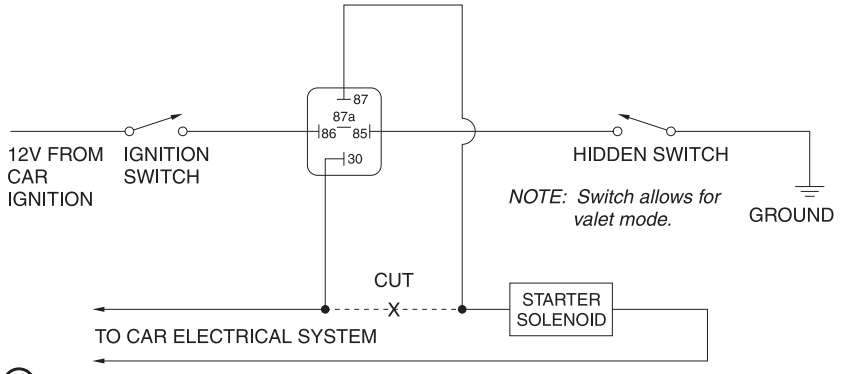
FIG. D
When the ignition is on and the hidden switch is closed, then the relay will be triggered. When relay is triggered, the starter solenoid gets power enabling car to start.



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IGNITION KILL CIRCUIT

To prevent car from starting after the alarm has been triggered and until alarm is reset, you can wire a relay to the car's ignition system. Note: When doing any ignition kill circuitry, it is recommended (when possible) that connections be made at the terminals or connectors, as opposed to splicing into the wiring. This enables you to wire in series rather than interrupting. (Most vehicle manufacturers have some stipulations concerning alterations in ignition system wiring. CHECK YOUR CAR'S WARRANTY THOROUGHLY.

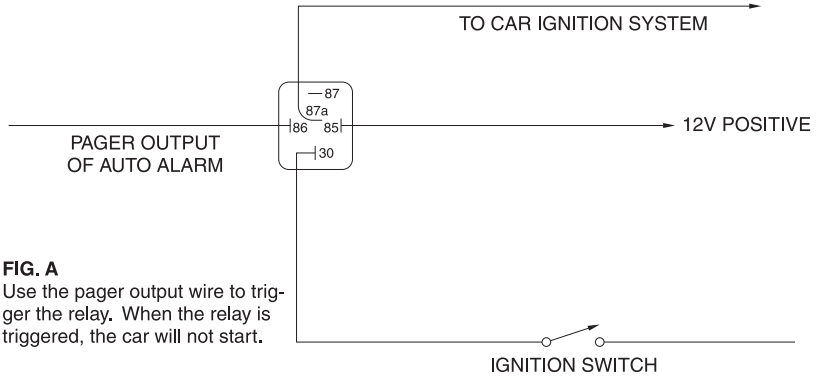

FIG. A
Use the pager output wire to trigger the relay. When the relay is triggered, the car will not start.

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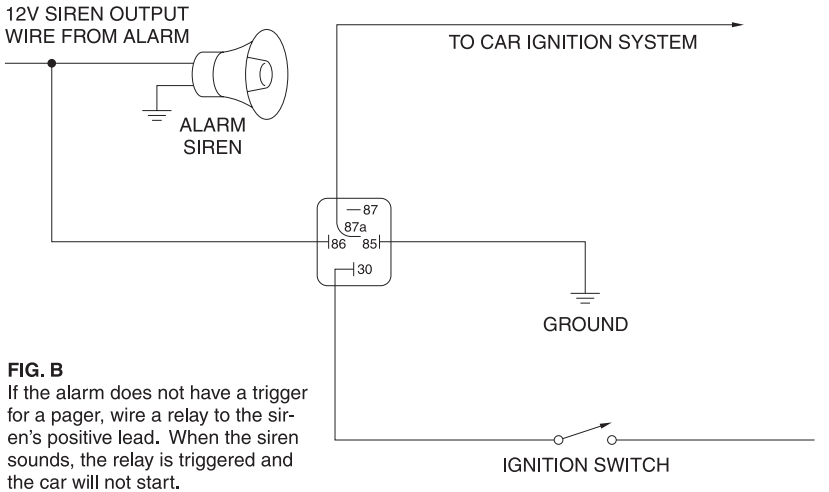

FIG. B
If the alarm does not have a trigger for a pager, wire a relay to the siren's positive lead. When the siren sounds, the relay is triggered and the car will not start.

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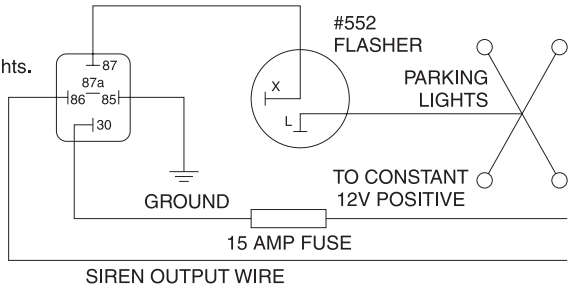
PARKING LIGHT FLASHER CIRCUIT

This circuit will work with most American, Japanese, and Korean cars.

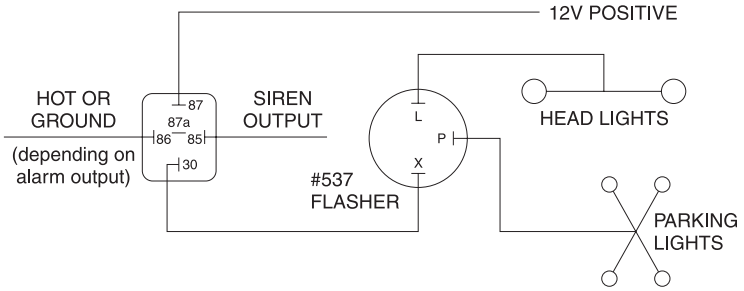
See diagram below for headlights.

DO NOT TRY THIS CIRCUIT TO FLASH HEADLIGHTS AS THIS MAY CAUSE HEADLIGHTS TO BURN-OUT.



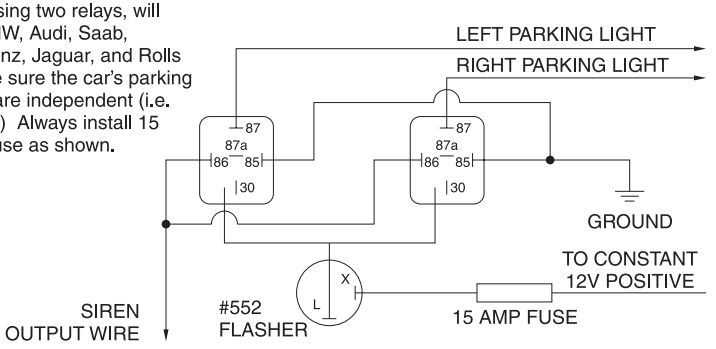
TWO-WAY FLASHER

Using a #537 flasher, this circuit enables both parking lights and head lights to flash.



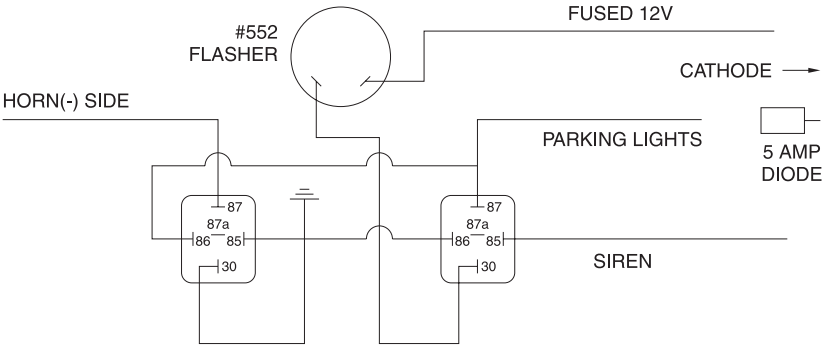
FLASHER CIRCUIT FOR EUROPEAN CARS

This circuit using two relays, will work with BMW, Audi, Saab, Mercedes Benz, Jaguar, and Rolls Royce. Make sure the car's parking light circuits are independent (i.e. left from right) Always install 15 amp in-line fuse as shown.



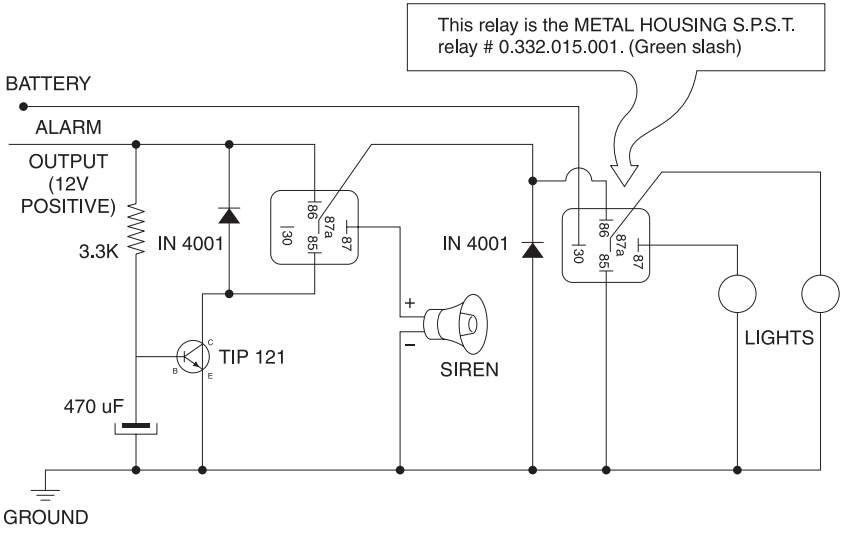
FLASHER/HONKER CIRCUIT

For positive output and flipped-negative output, this application enables you to flash the parking lights and honk the horn.



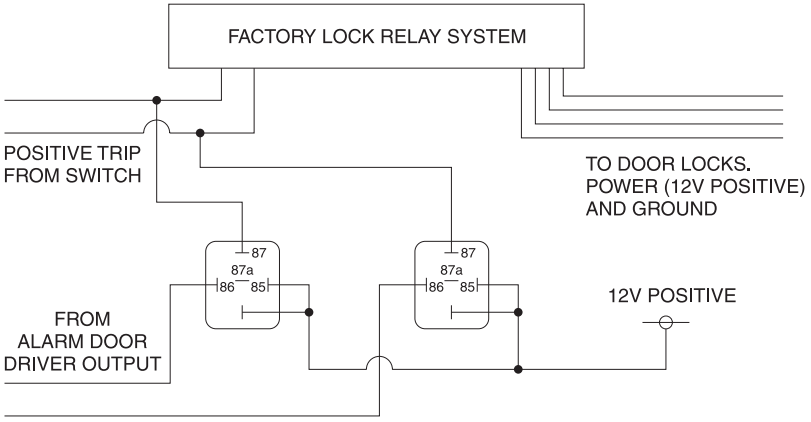
AUDIBLE "CHIRP" TO VISUAL "BLINK" CONVERSION

For customers who don't like the "CHIRP" sound made by alarm when arming and disarming use the diagram below to convert a chirping alarm to a blinking alarm.



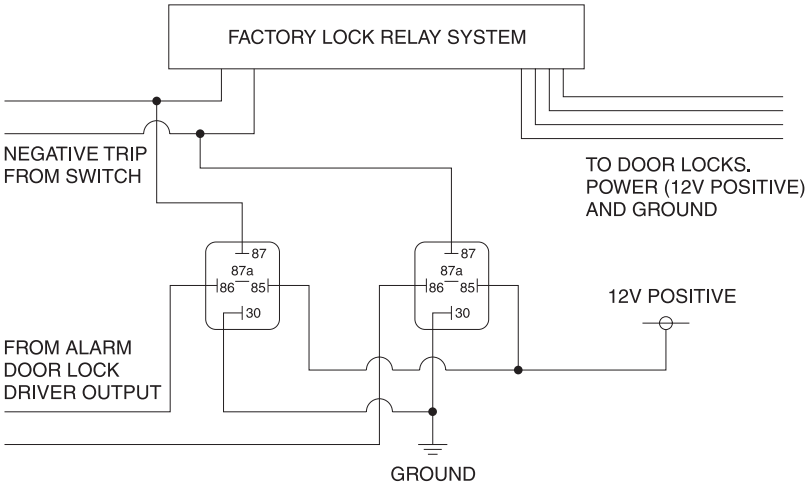
POSITIVE-SWITCHING DOOR LOCKS

This wiring diagram is for cars with factory lock relays.

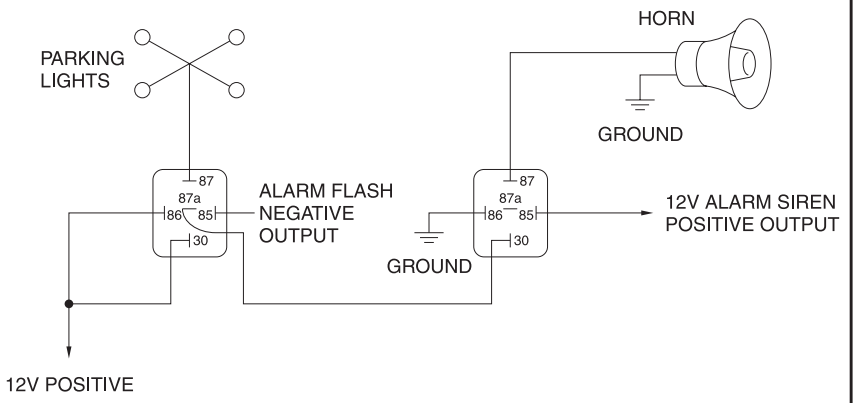


NEGATIVE-SWITCHING DOOR LOCKS

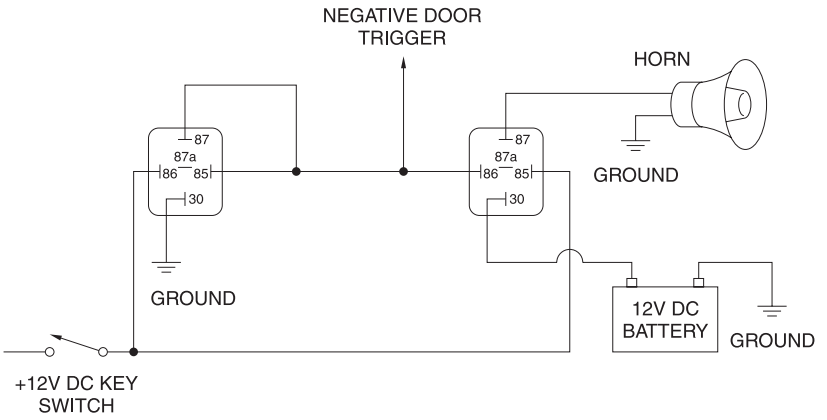
This wiring diagram is for cars with factory lock relays.



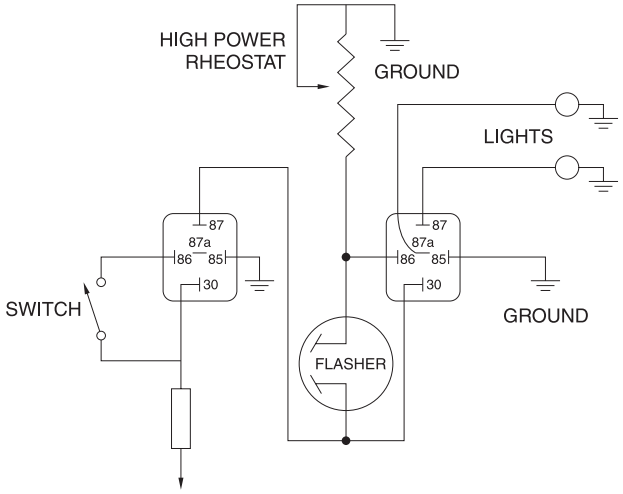
ALTERNATELY FLASHING PARK LIGHT/HORN



CHEAP, BUT DEPENDABLE CAR ALARM

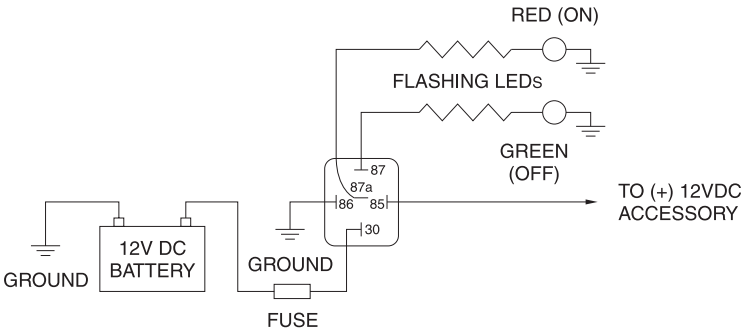


LEFT TO RIGHT FLASHING LIGHTS



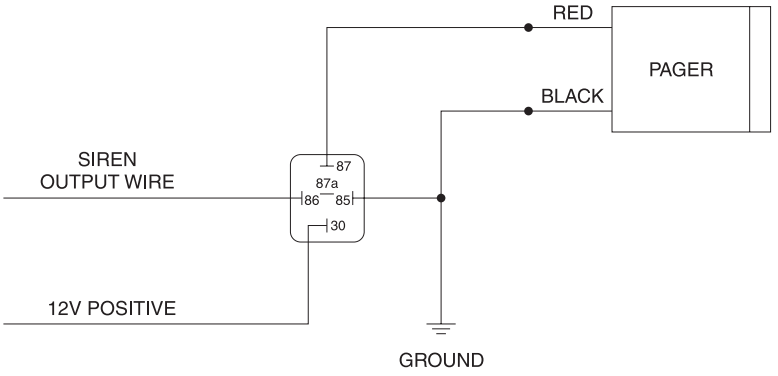
NOTE: The rheostat can be replaced by a 12V bulb. If this is done the flash rate cannot be adjusted.

FAKE ALARM FLASHING LED



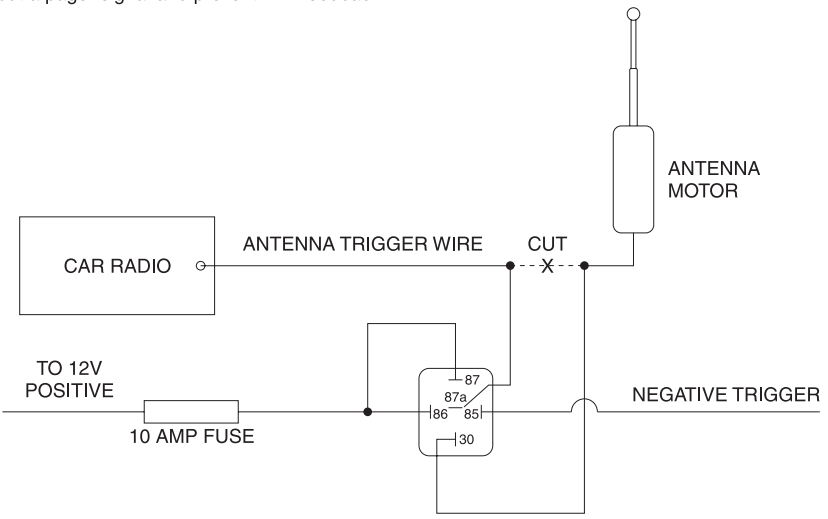
NOTE: Any color LED's can be used instead of the red and green indicated in the diagram.

ADDING A PAGER TO AN EXISTING ALARM



ACTIVE ANTENNA DRIVER

This diagram shows how to raise a power antenna with a negative alarm trigger in order to send out a pager signal and prevent 12V feedback.



HORN ALERT FOR CELLULAR PHONES

Most cellular phones on the market today have a horn alert option. When wired-up to a car's horn, the horn alert will sound the horn when a call is received. (The "ring" key on the phone must be in the OFF position so that the phone "knows" you are out of the car.)

NOTE: The phone alert wire supplies a low-current ground that must be isolated and sometimes converted, depending on the style of the car horn.

FIG. A
The phone is being isolated by the relay and a high-current. 12 volts supplied by the battery is going to the car horn's switched power lead.

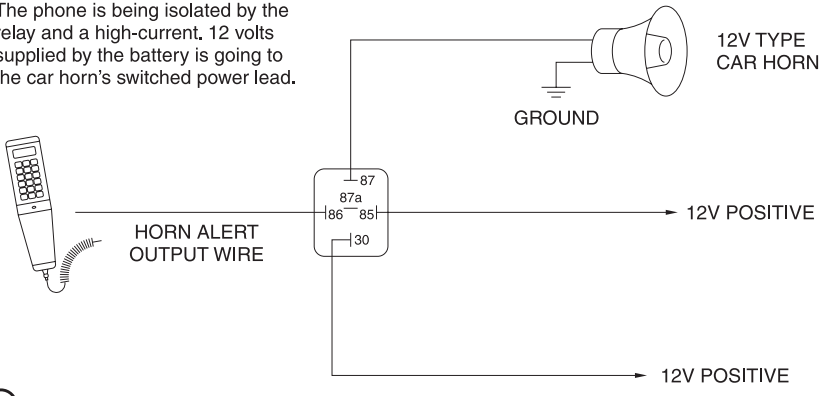


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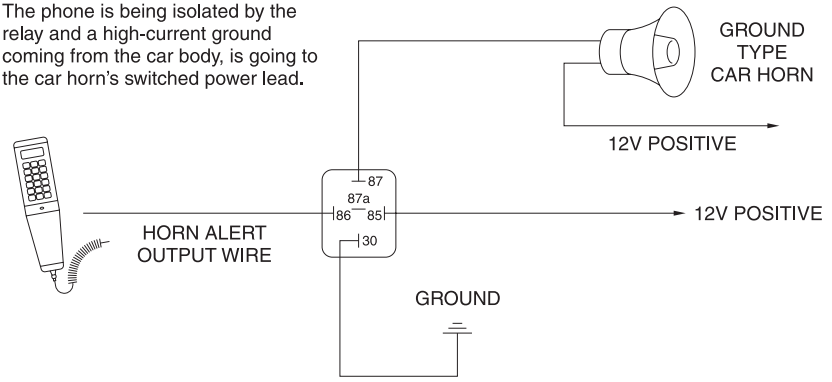
FIG. B
The phone is being isolated by the relay and a high-current ground coming from the car body, is going to the car horn's switched power lead.



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IGNITION BYPASS TO ELIMINATE NOISE

On some import or older model cars, the vehicle's ignition or charging system can cause noise to be picked-up by high end audio systems or cellular phones. To eliminate this noise, use the following two diagrams.

FIG. A
When ignition is on, the relay is closed and the stereo/amp system is supplied a clean 12V from the battery. When ignition is off, the relay opens and the stereo system shuts off.

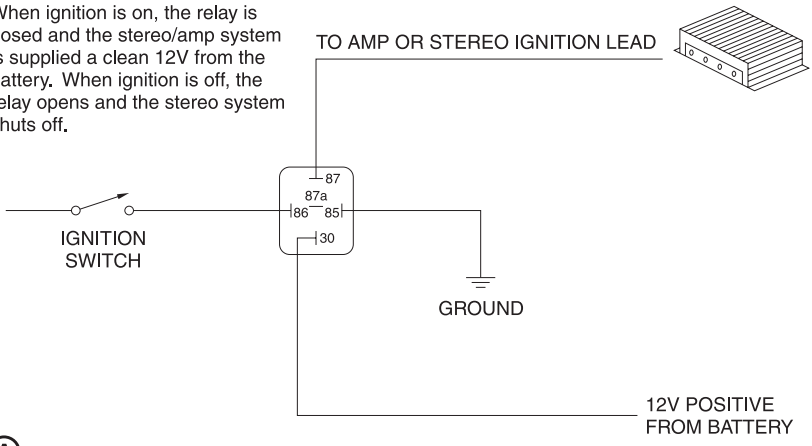

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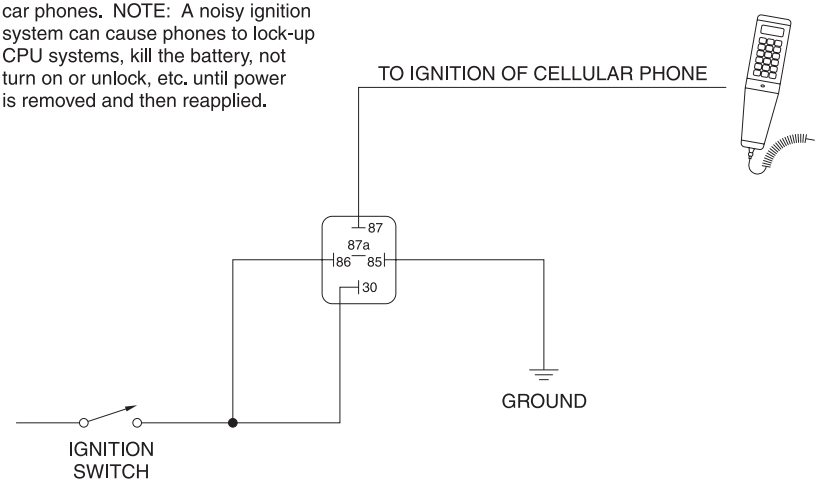
FIG. B
Same method as above is used for car phones. NOTE: A noisy ignition system can cause phones to lock-up CPU systems, kill the battery, not turn on or unlock, etc. until power is removed and then reapplied.



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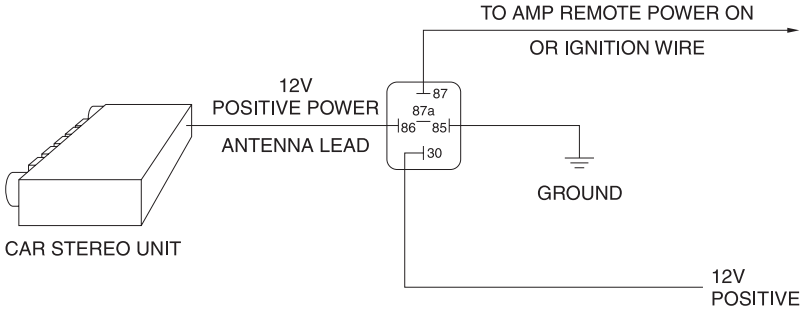
AMP SYSTEM REMOTE POWER SWITCH

The diagram below displays a remote turn-on system. When the radio is turned ON, the relay is triggered. When the radio is turned OFF, the system shuts down.

When the radio is on, the relay closes, and the AMP or E.Q. system turn-on wires receive 12V power, then the system turns on.



BASIC FOG LIGHT SWITCH SYSTEMS

The two diagrams below show how to control and isolate low-current switches to high-current fog lights.

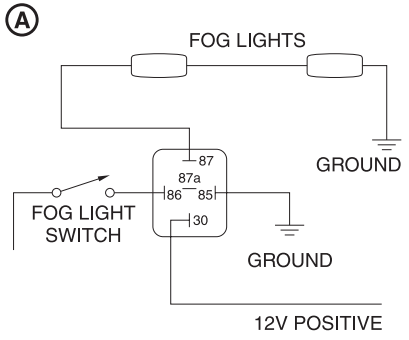


FIG. A
A dash switch is closed, triggering the relay to close and fog lights to turn on with high-current power from the battery.

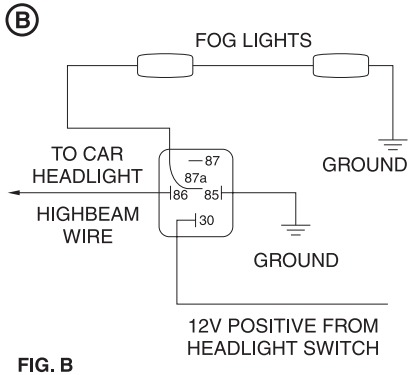
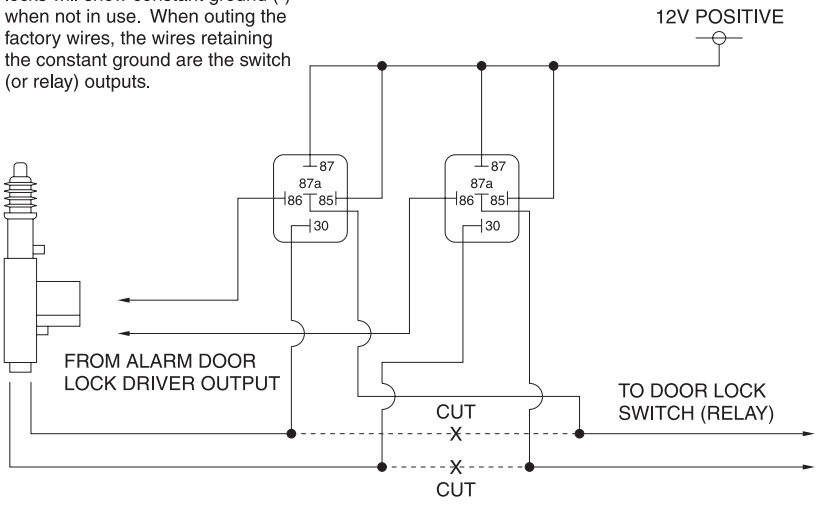


FIG. B
Relay is connected to high beam of car lights so when high beams are on, fog lights are off. When low beams are on, fog lights also turn on. When all headlights are off, fog lights shut off.

NOTE: Fog lights will turn on with headlights but will shut off when high beams are used.

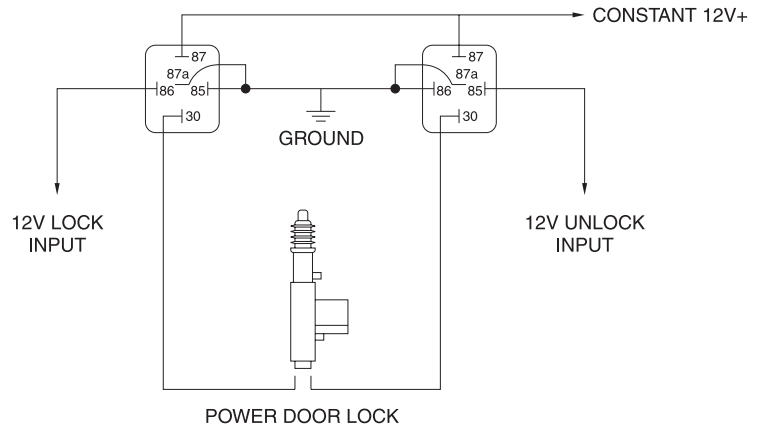
REVERSING POLARITY DOOR LOCKS

Wires for factory reversing polarity locks will show constant ground (-) when not in use. When outing the factory wires, the wires retaining the constant ground are the switch (or relay) outputs.

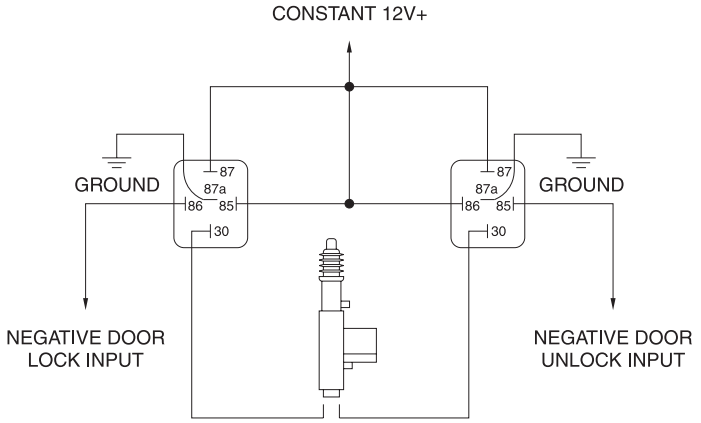


REVERSING POLARITY NEGATIVE OUTPUT

Adding a door actuator using door lock and unlock circuit, reversing polarity positive 12V output.



DOOR LOCKS NEGATIVE TRIGGER



Negative door lock and unlock output reversing polarity

HORN ALERT WITH BUZZER

When horn alert is activated amp
will shut off each pulse at same time
inside buzzer will turn on.