

Model RST760
REMOTE ENGINE STARTER WITH ALARM SYSTEM
OWNER'S MANUAL

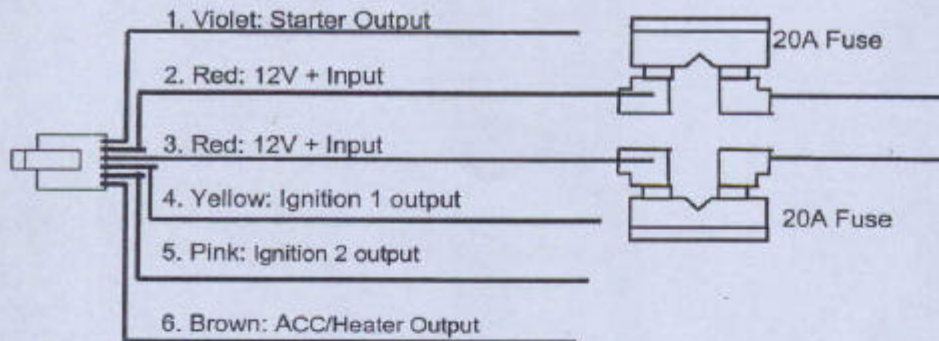
INTRODUCTION

INSTALLER WARNINGS

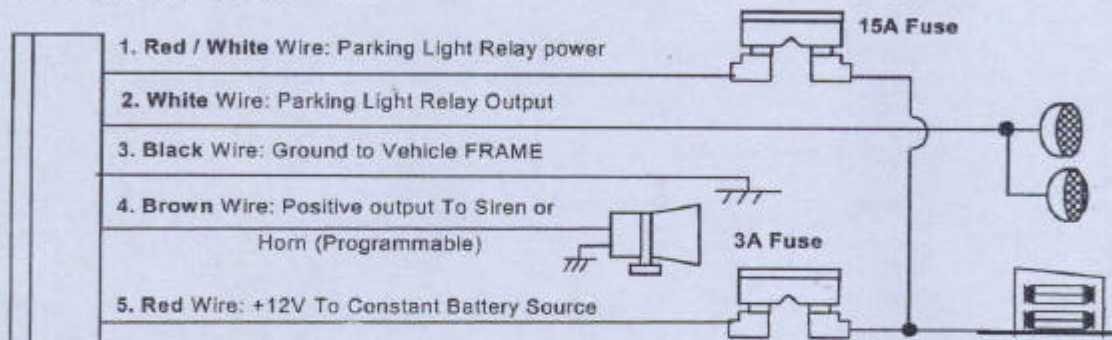
This Remote Starter with Security and Keyless Entry System is designed to be installed on fuel injected vehicles with an automatic transmission **ONLY**.

- Never install this remote starter on a manual transmission vehicle.
- This system must be installed and wired through a safety switch it will not start in any forward or reverse gear.
- Some automatic transmission vehicle [mainly older GM vehicles with a purple starter wire] have a mechanical-type park safety switch instead of electrical safety switch. The mechanical type does not interrupt the starter circuit when the transmission is any gear and does not offer the 100% level of safety required for remote starting purposes. Therefore, our system should never be installed on any vehicle that uses a mechanical type park safety switch.
- Once you install this system, you must verify that the vehicle will not start any forward or reverse gear. Regardless of the type of vehicle.
- Read operation manual for operating and programming routine.
- Do not install any component near the brake, gas pedal or steering linkage.
- Some vehicles have a factory installed transponder immobilizer system that can severely complicate the installation. There is possibility that this system can not be installed on some immobilizer equipped vehicles.
- Most vehicles have an SRS air bag system. Use extreme care and do not probe any wires of the SRS system.
- Disconnect the car battery before connecting work on the vehicle.
- Check behind panels before drilling any holes. Ensure that no wiring harness or other components are located behind the panels that would otherwise be damaged.
- Use conventional crimp lock, bullet on any wiring. Poor wiring, i.e. taped joints will possibly introduce unreliability into the alarm system and may result in false alarms or incorrect operation.
- Install wiring neatly under carpets or behind trim to prevent possible damage to wires.
- For the wire operates the current more than 10A. We suggest soldering all connection point. Do not use crimp lock type connectors or wire nuts.

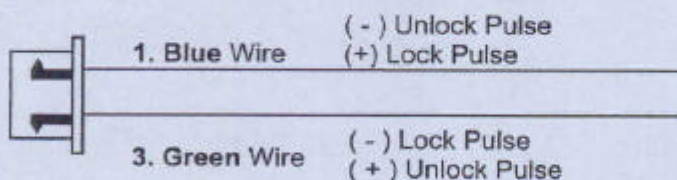
#H1 6 PIN HEAVY GAUGE WIRE HARNESS



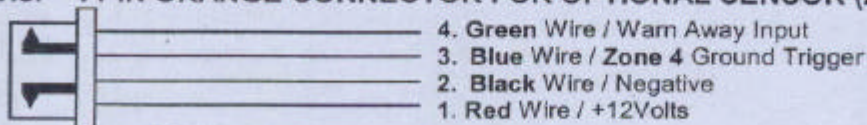
#H2 5 PIN WIRE HARNESS



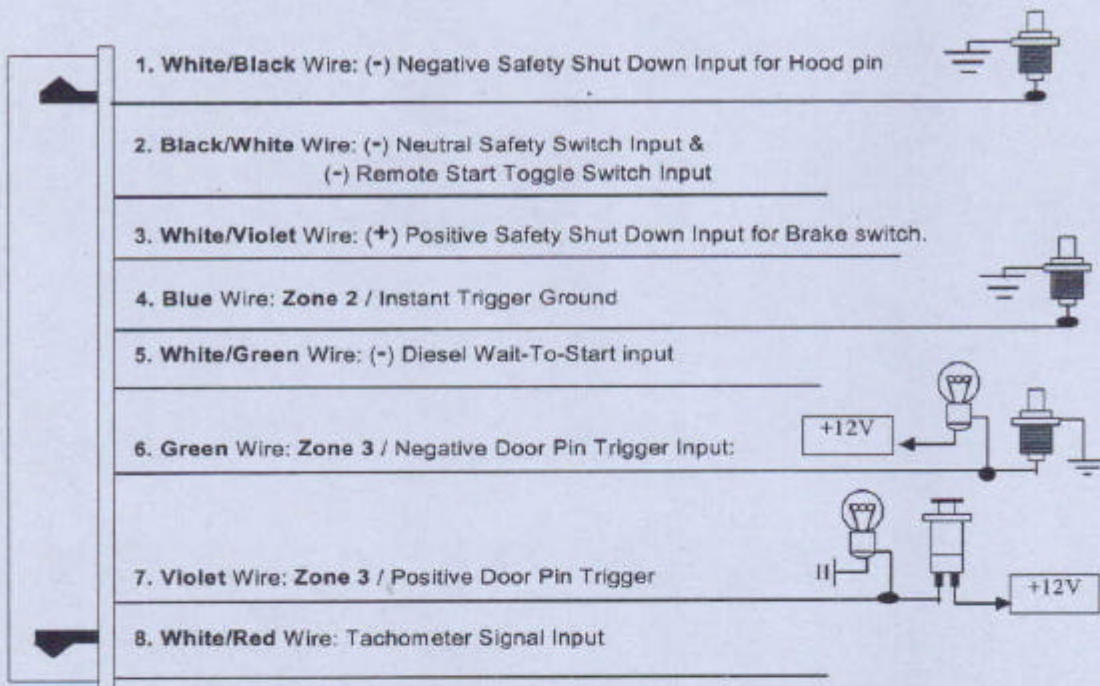
#H7. 3 PIN DOOR LOCK CONNECTOR



#H8. 4 PIN ORANGE CONNECTOR FOR OPTIONAL SENSOR (ZONE 4)

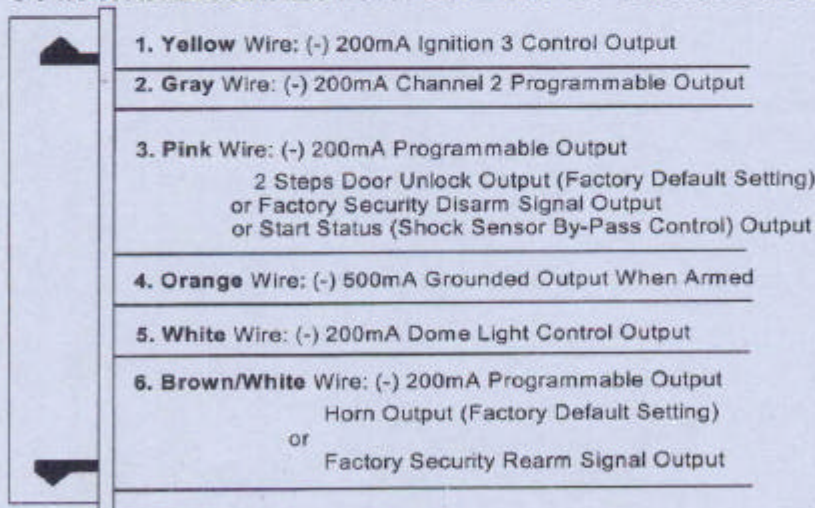


#H6. 8 PIN BLACK CONNECTOR FOR INPUT CONNECTION:



IMPORTANT NOTE: Directly connect the BLACK/WHITE wire to the "GROUND" when this wire is not used.

#H9. 6 PIN WHITE CONNECTOR FOR OUTPUT CONNECTION



Keep wiring away from moving engine parts, exhaust pipes and high-tension cable. Tape wires that pass through holes on the firewall to prevent fraying. Watch out sharp edges that may damage wires and causes short circuit.

CAUTION: Do not connect the wire harness to the control module until all wiring to vehicle is complete.

H1: 6 PIN HEAVY GAUGE WIRING CONNECTION:

Remember that the system does to start a vehicle is duplicate the functions of the ignition key switch! Below, we will explain the three basic functions of the ignition switch. Since this installation will require analysis of the ignition switch functions, we recommend making the three connections below at the ignition switch harness directly.

H1/1. Violet Wire—Starter Output

Careful consideration for the connection of this wire must be made to prevent the vehicle from starting while in gear. Understanding the difference between a mechanical and an electrical Neutral Start Switch will allow you to properly identify the circuit and select the correct installation method. In addition you will realize why the connection of the safety wire is required for all mechanical switch configurations.

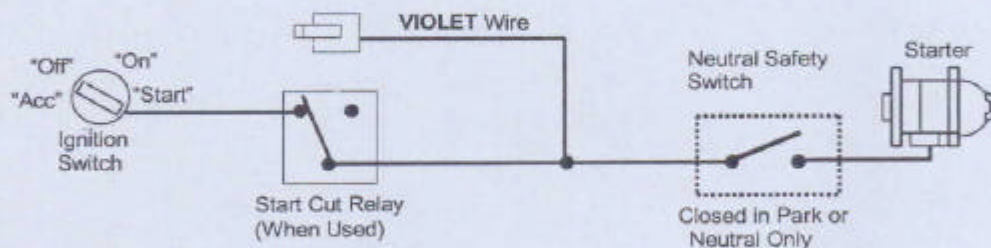
Failure to make this connection properly can result in personal injury and property damage.

In all installations it is the responsibility of the installing technician to test the remote start unit and assure that the vehicle can not start via RF control in any gear selection other than park or neutral.

In both mechanical and electrical neutral start switch configurations, the connection of the VIOLET wire will be made to the low current start solenoid wire of the ignition switch harness. This wire have +12 volts when the ignition switch is turned to the "START" (CRANK) position only. This wire have 0 volts in all other ignition switch positions.

NOTE: This wire must be connected to the vehicle side of the starter cut relay (when used). For the electrical neutral switch configuration, this connection must be made between the starter inhibit relay (when used) and the neutral safety switch as shown in the following diagram.

Failure to connect this wire to the ignition switch side of the neutral safety switch can result in personal injury and property damage. SEE NEUTRAL START SAFETY TEST FOR FURTHER DETAILS.



H1/2 & H1/3. Red Wire (2)-- +12V Power Input

Remove the two 20A fuses prior to connecting these wires and do not replace them until the satellite has been plugged into the control module. These wires are the source of current for all the circuits the relay satellite will energize. They must be connected to a high current source. Since the factory supplies (+) 12V to the key switch that is used to operate the motor, it is recommended that these wires be connected there.

Note: If the factory supplies two separate (+) 12V feeds to the ignition switch, connect one RED wire of the satellite to each feed at the switch.

H1/4. Yellow Wire – Ignition 1 Output

Connect the YELLOW wire to the ignition 1 wire from the ignition switch. The ignition wire should receive "12 volts" when the ignition key is in the "ON" or "RUN" and "START" or "CRANK" position. When the ignition is turned "OFF", the ignition wire should receive "0" voltage.. **The YELLOW wire must be connected.**

H1/5. PINK Wire – Ignition 2 Output

Some vehicles have [2] ignition wires that must be power. Connect the PINK wire to the ignition 2 wire from the ignition switch. The ignition wire should receive "12 volts" when the ignition key is in the "ON" or "RUN" and "START" or "CRANK" position. When the ignition is turned "OFF", the ignition wire should receive "0" voltage. If the PINK wire is not used, cap the end of the wire.

H1/6. Brown Wire –Accessory Output (Heater /ACC Output)

Connect the BROWN wire to the accessory wire in the vehicle that powers the climate control system.

An accessory wire will show + 12 volts when the ignition switch is turned to the "ACCESSORY" or "ON" and "RUN" positions, and will show 0 Volts when the key is turned to the "OFF" and "START" or "CRANK" position. There will often be more than one accessory wire in the ignition harness. The correct accessory

wire will power the vehicle's climate control system. Some vehicle may have separate wires for the blower motor and the air conditioning compressor. In such cases, it will be necessary to add a relay to power the second accessory wire.

H2: 5 PIN WIRE HARNESS:

H2/1. RED / WHITE WIRE --PARKING LIGHT RELAY INPUT --

The RED/WHITE wire is the input to the flashing parking light relay. The connection of the RED/WHITE wire will determine the output polarity of the flashing parking light relay.

If the vehicle you are working on has +12volt switched parking lights, you don't need connect this wire. This wire already connected to +12volt.

If the vehicle's parking lights are ground switched, cut the RED/WHITE wire, connect the RED/WHITE wire to chassis ground.

H2/2. WHITE WIRE -- PARKING LIGHT RELAY OUTPUT (+12 V 10A OUTPUT) --

Connect the WHITE wire to the parking light wire coming from the headlight switch. Do not connect the WHITE wire to the dashboard lighting dimmer switch. (Damage to the dimmer will result). The limitation of the WHITE wire is 10 AMP max. Do not exceed this limit or damage to the alarm and parking relay will result.

H2/3. BLACK WIRE -- SYSTEM GROUND --

This is main ground connection of the alarm module. Make this connection to a solid section of the vehicle frame. Do not connect this wire to any existing ground wires supplied by the factory wire loom, make the connection to the vehicle's frame directly.

H2/4. BROWN WIRE -- SIREN DRIVE OUTPUT -- (See Feature II - 3 Programming)

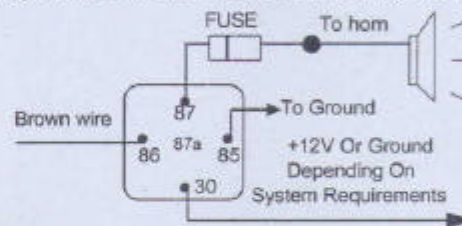
SIREN DRIVE OUTPUT (Factory default setting)

This is the positive (+) output connection for the siren. Current capacity is 2 amps. Make connection to the (+) red wire from the siren. Make the (-) black wire coming from the siren to a good chassis ground.

(+) Low Current HORN OUTPUT -- (Set Alarm

Feature II - 3 To Horn Output)

This wire is provided to use the existing vehicle's horn as the alarm system's optional's warning audible device. It's a transistorized low current output, and should only be connected to the low current positive (+) output from the vehicle's horn switch.



H2/5. RED WIRE -- SYSTEM POWER (+12V CONSTANT) --

The RED wire supplies power to the system. Connect this wire to a constant +12 volt source.

H3. 2 PIN WHITE CONNECTOR FOR THE LED STATUS INDICATOR:

The led indicator status should be mounted in a highly visible area such as top of the dashboard, on top of the shifter console or on dashboard face. Leave at least 6mm space behind the mounting location for LED housing. Once a suitable location is chosen, drill a 6mm hole. Run the LED wires through the hole then press the 2 pin LED housing into the place. Route the LED wires to the control module.

H4. BLACK 3-PIN CONNECTOR. -- TWO-WAY TRANSCEIVER/ANTENNA MODULE

The Two-way transceiver/antenna mounts on the windshield (Inside). We suggest you mount it on the lower left or upper left-hand side of windshield.

Warning! Do not mount in such a manner that it obstructs the driver's view.

- The Two-way transceiver/antenna whip must be vertical.
- Remove the protective tape backing.
- Carefully align the two-way transceiver/antenna and apply to windshield.
- Route the black connector wire behind the trim and connect to the two-way transceiver/antenna.
- Connect the other end to the control module.
- Special considerations must be made for windshield glass as some newer vehicles utilize a metallic shielded window glass that will inhibit or restrict RF reception. In these vehicle, route the two way transceiver/antenna module away from metallic shielded window glass as far as possible.

H5. 3-PIN ORANGE CONNECTOR FOR OPTIONAL PAGING (KNOCK) SENSOR

The optional Paging (Knock) Sensor can be add on.

1. Detach the protecting paper from the double-sided adhesive tape and attach one side of the double-sided adhesive tape to the bottom part of the Paging (Knock) Sensor.

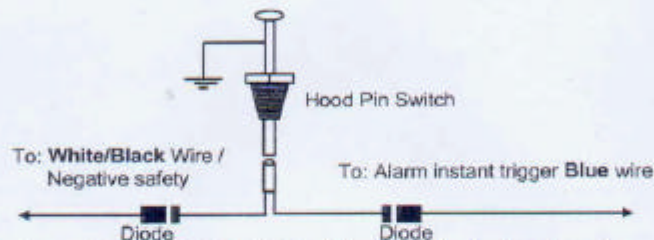
2. After cleansing the area around left bottom part of the front window so that it stays attached firmly, the Paging Sensor should be attached on the front window so that the side on which a sticker with a printed words "Tap Here Paging Driver" is attached face outward.
3. Hide the wire by carefully pushing it inside the space of the front window's mold trim.
4. Adjust the sensitivity of the Paging Sensor, If you turn the tuning screw at the center of the Paging Sensor clockwise, the sensitivity goes sharp and if turned counter-clockwise, the sensitivity goes dull.

H6: 8 PIN MINI BLACK CONNECTOR :

H6/1. WHITE/BLACK WIRE – NEGATIVE SAFETY SHUT DOWN INPUT --

The WHITE/BLACK wire provides an instant shutdown for the remote start, whenever it is grounded. Connect the wire to the hood pin switch previously installed. This wire must be routed through a grommet in the firewall and connected to the hood pin switch. If the pin switch is to be used with an alarm system, connect this wire with diode.

Important! This connection is a safety wire and must be connected as shown and tested as specified. Failure to do so may result in personal injury or property damage. See detail of wiring in the following diagram. This wire may also be used if the vehicle brake light circuit switches ground to the brake lights. An isolation diode must be used for ground switched brake light circuits and must be connected to the output of the brake switch.



H6/2. BLACK/WHITE wire —(-)Remote Start Enable Toggle Switch Input — — (-)Neutral Safety Switch Input —

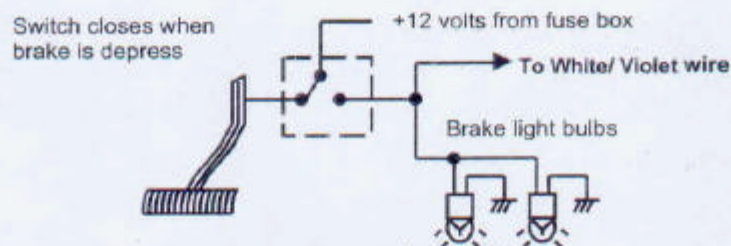
When the BLACK/WHITE wire is grounded, the remote start unit is operable. When this wire is open from ground, the remote start is disable.

1. The optional "remote start toggle switch" can be added on to temporarily disable the Remote Start Device, it can prevent the vehicle from being remote started accidentally. This feature is useful if the vehicle is being serviced or stored in an enclosed area. To disable the remote start, move the optional remote start enable toggle switch to the OFF position. To enable the remote start, move the optional remote start enable toggle switch to the ON position.
2. If needed, This wire can connect to the PARK/NEUTRAL switch in the vehicle. (See the TESTING YOUR INSTALLATION GUIDE)

IMPORTANT NOTE: Directly connect the BLACK/WHITE wire to the "GROUND" when this wire is not used.

H6/3. WHITE/VIOLET WIRE:– POSITIVE SAFETY SHUT DOWN INPUT

This wire provides an instant shutdown for the remote start, whenever it gets +12volts. If the brake lights switch in the vehicle switches +12 volts to the brake light circuit, connect this wire to the output side of the brake switch. This will allow the remote start to shut down if an attempt is made to operate the vehicle without the key while running under the control of the remote start. In most vehicles, in order to shift gear, the brake pedal must be depressed. The brake input will in turn cause the remote start unit to shut off. See below diagram.



H6/4. BLUE WIRE – GROUND INSTANT TRIGGER INPUT --

This wire is the ground trigger input wire for hood/trunk pin switches.

H6/5. WHITE/GREEN WIRE —(-) DIESEL WAIT – TO - START INPUT –

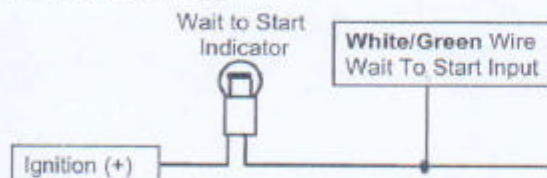
In diesel vehicles it is necessary to interface with the wire that on the WAIT-TO-START light in the dashboard. This wire illuminates the bulb until the vehicle's glow plugs are properly heated. When the light goes out the vehicle can be started. This wire is always at the connector leading to the bulb in the dashboard. It can also be found at the Engine Control Module (ECM) in many vehicles.

To test and determine the polarity of this wire:

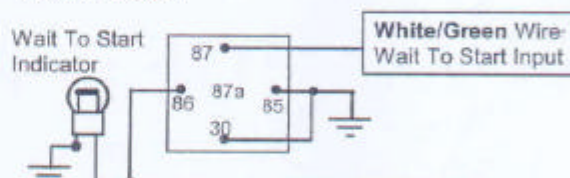
1. Set your multi-meter to DVC or DC voltage (12V or 20V is fine).
2. Attach the (+) probe of the meter to (+) 12V.
3. Probe the wire that you suspect leads to the bulb with the (-) probe of the meter.
4. Turn the Ignition switch to the ON position.
5. If the meter indicates 12 volts until the light goes out you have isolated the connect wire and the wire's polarity is negative (ground while the bulb is on).
6. If the meter reads zero volts until the light goes out and then reads 12 volts, you have isolated the connect wire and the wire's polarity is positive.

Connect this wire to the wire in the vehicle that sends the signal to turn on the WAIT-TO-START bulb in the dashboard. In most diesels the wire is negative (ground turns on the bulb) and this wire can be directly connected to the wire in the vehicle. If the vehicle use a positive wire (12V to turn the bulb) a relay must be used to change the polarity.

(-) Wait To Start Wire



(+) Wait To Start



H6/6. GREEN WIRE -- NEGATIVE DOOR SWITCH SENSING INPUT --

This wire is the ground trigger input wire for negative door pin switch. This wire is connection for "grounding" type factory door pins locate the "common wire" that connects the door pin switches. Make the connection of the GREEN Wire here.

H6/7. VIOLET WIRE -- POSITIVE DOOR SWITCH SENSING INPUT--

This wire is the positive trigger input wire for positive door pin switch. This wire is connection for "positive" type factory door pins (typical FORD MOTOR). Locate the "common wire" for all door pins and make the connection of the VIOLET Wire here.

H6/8. WHITE/RED wire—Tachometer Signal connection—

This input provides the remote start system with information about the engine's revolutions per minute (RPM). It can be connected to the negative side of the coil in vehicle with conventional coils. In multi-coil and high energy ignition system locating a proper signal may be more difficult. Once connected, You must Program the Start Feature II – 3 to "Tachometer checking type" and teach the system the RPM signal. (See Start Feature II – 4 / 6 Programming.)

To test for a tachometer wire, a multi-meter capable of test AC voltage must be used. The tachometer wire will show between 1V and 6V AC at idle, and will increase as engine RPM increases. In multi-coil ignition system, the system can learn individual coil wire. Individual coil wires in a multi-coil ignition system will register lower amounts of AC voltage. Also, if necessary, the system can use a fuel injector control wire for engine speed sensing. Common locations for a tachometer wire are the ignition coil itself, the back of the gauges, engine computers, and automatic transmission computers.

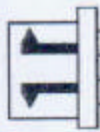
IMPORTANT! Do not test tachometer wires with a test light or logic probe. The vehicle will be damaged.

How to find a tachometer wire with your multi-meter

1. Set the ACV or AC voltage (12V or 20V is fine.)
2. Attach the (-) probe of the meter to chassis ground.
3. Start and run the vehicle.
4. Probe the wire you suspect of being the tachometer wire with the red probe of the meter.
5. If this is the correct wire the meter will read between 1V and 6V.

NOTE: No connection of this wire is required, if you use the voltage or timer checking type mode.

H8. 4 PIN ORANGE CONNECTOR FOR OPTIONAL 2 STAGE SENSOR (ZONE 4)



4. **Green Wire / Warn Away Input**
3. **Blue Wire / Zone 4 Ground Trigger**
2. **Black Wire / Negative**
1. **Red Wire / +12Volts**

Function: Allows easy positive, negative, instant trigger, and warn-away trigger connection with quick disconnect ability for other detection devices.

Connection:

1. + 12 volts positive = Carry 12 volts all the time. Be sure not to touch ground directly (without a load), it might cause short circuit.
2. Negative = When alarm armed this pin become ground.
3. Zone 4 Ground trigger = With alarm armed, if this pin becomes grounded the alarm Zone 4 will trigger .
4. Warn away ground trigger = If the sensor or detector connect to this pin, intrude the detector, a pre-warning tone and light flash warn the intruder to turn back.

H9: 6-PIN MINI WHITE CONNECTOR WIRE HARNESS:

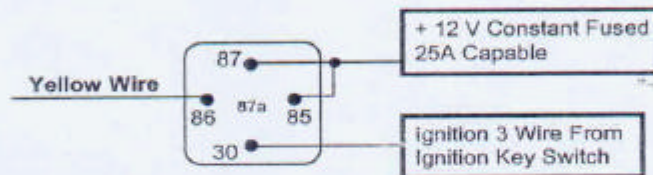
H9/1. YELLOW WIRE:- (-) 200ma IGNITION 3 OUTPUT-

This wire provides a 200mA (-) ground output that becomes active 4 seconds before the remote start unit initialize, and remains grounded while running.

Ignition 3 output:

Some newer vehicles use a third ignition wire which is required to start and keep the vehicle's engine running. If this is the case, wire an IGN 3 relay (not supplied) as shown below:

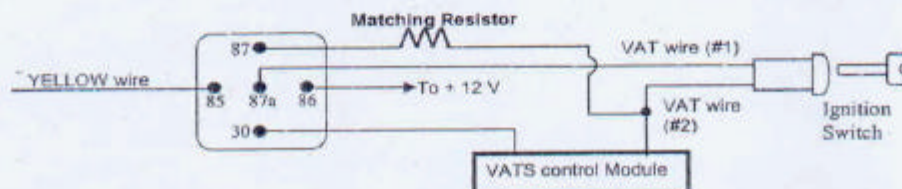
Do not connect any vehicle circuits together, they are isolated for a reason.



GM VATS KEY OVERRIDE:

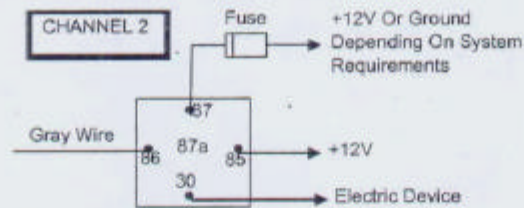
If the vehicle has the General Motor VATS system installed, you will need to by-pass the system while the vehicle is operating under the control of the Remote Start Unit. To do this:

1. Measure the resistance of the resistor pellet on the ignition key then select a resistor within 5% of the key's value.
2. Locate the pair of VATS wires in the vehicle, usually a pair of thin gauge wires running from the ignition switch to the VATS control module.
3. Connect the YELLOW wire from Remote Start Unit to TERMINAL #85 of an external relay. Connect terminal #86 of the relay to a fused +12 volt.
4. Cut (#1) wire (as shown), and connect the ignition switch side of the cut wire to terminal #87a of the relay. Connect the other side of the (#1) wire to terminal #30.
5. Connect the previously selected resistor from terminal #87 to the second(#2) wire (as shown).



H9/2 . GRAY WIRE – (-) 200ma CHANNEL 2 Programmable Output –

This will become a 1 second pulse ground by activate channel 2 on transmitter for two seconds, the current capacity of this wire is 200 mA. This feature allows you to remote control trunk release or other electric device. This output can also be programmed to provide the following type of output: momentary, latched, latched-reset with ignition, 30-second timed. (See Alarm Feature II-6 Programming)



**H9/3. Pink wire (-) 200ma PROGRAMMABLE OUTPUT (See Start Feature I – 6 Programming)
2 STEPS UNLOCK OUTPUT – (Factory default setting)**

The 2 steps unlock feature will work for the most fully electronic door lock circuit. The vehicle must have an electronic door lock switch (not the lock knob or key switch), which locks and unlocks all of vehicle's doors. When wired for this feature, press the disarm (or unlock) button one time will disarm the alarm and unlock the driver's door only. If, press disarm (or unlock) button two times within 3 seconds, the alarm will disarm and all doors will unlock.

FACTORY SECURITY DISARM SIGNAL OUTPUT –

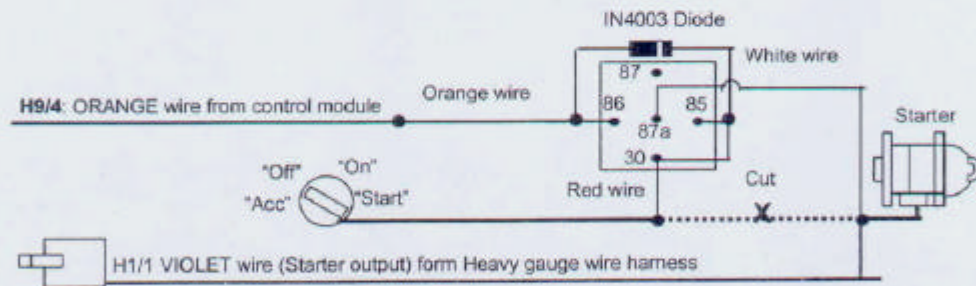
This wire is designed to disarm a factory installed security system. This wire sends a negative (-) 1 seconds pulse upon a remote start and remote door unlocking. Some factory systems must be disarmed to allow remote starting. In most cases, this wire may be connected directly to the factory alarm disarm wire. The correct wire will show negative ground when the key is used to unlock the doors or trunk. This wire is usually found in the kick panel area in the wiring harness coming into the car body from the door.

START STATUS (Shock Sensor By-Pass Control) OUTPUT –

This wire is designed to by-pass shock sensor module. This wire will supply an output at all times the remote start is operating plus an additional 3 seconds after the remote start unit turn off.

H9/4. ORANGE WIRE – (-) 200ma GROUNDED OUTPUT WHEN ARMED –

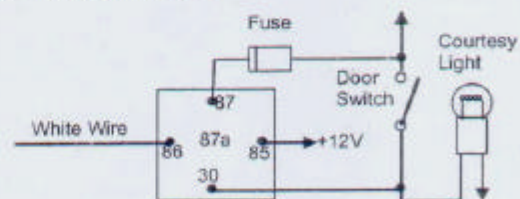
This wire will become grounded when the alarm is armed. The current capacity of this wire is 200mA. This output can control starter disable, when an intrusion is detected and the system is triggered. The vehicles prevent from any unauthorized starting.



H9/5. WHITE WIRE – (-) 200ma DOME LIGHT CONTROL OUTPUT –

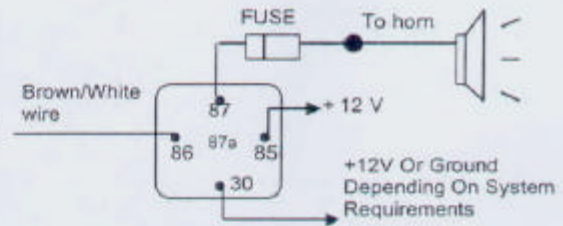
This wire becomes grounded when the dome light controls circuit active. The current capacity of this wire is 200mA. This wire can control the operation of the interior lights. An optional 10 Amps relay can be used to this system for interior lights operation.

- a). Upon disarming, the interior lights will remain on for 30 seconds.
- b). If the vehicle is violated, the interior light will flash for the same duration as the siren.



**H9/6. Brown/White WIRE (-) 200ma PROGRAMMABLE OUTPUT (See Start Feature I – 7 Programming)
HORN OUTPUT – (Factory default setting)**

This wire is provided to use the existing vehicle's horn as the alarm system's optional's warning audible device. It's a transistorized low current output, and should only be connected to the low current ground output from the vehicle's horn switch. When the system is triggered, the horn will sound.



FACTORY SECURITY REARM SIGNAL OUTPUT –

This output is programmable. If programmed rearm a factory installed security system. This wire will supply a pulse whenever the remote start times out or is shut down using the transmitter and remote door locking..

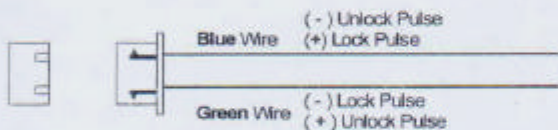
H10. 3 PIN GREEN CONNECTOR FOR OPTIONAL TEMPERATURE SENSOR.

The optional Temperature Sensor can be add on. You can monitor, thru the LCD screen, the present indoor temperature of the passenger compartment before cooling or heating your vehicle.

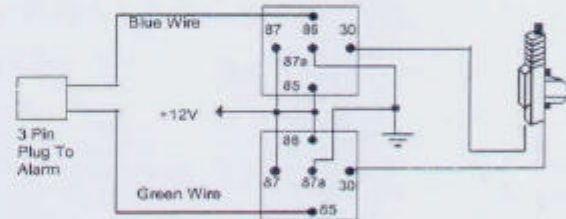
H11. 2 PIN BLUE CONNECTOR FOR THE VALET SWITCH:

Select a mounting location for the switch that is easily accessible to the driver of the vehicle. The switch does not have to be concealed, however, concealing the switch is always recommended, as this provides an even higher level of security to the vehicle. Mount the valet switch in a hidden but accessible location. Route the valet switch wires to the control module.

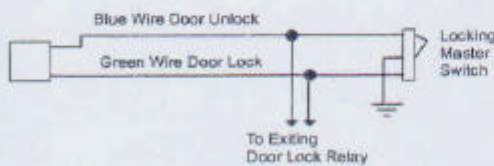
H7. 3 PIN DOOR LOCK CONNECTOR:



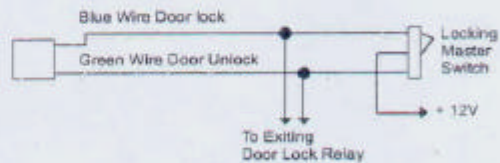
INSTALL NEW DOOR LOCK MOTOR



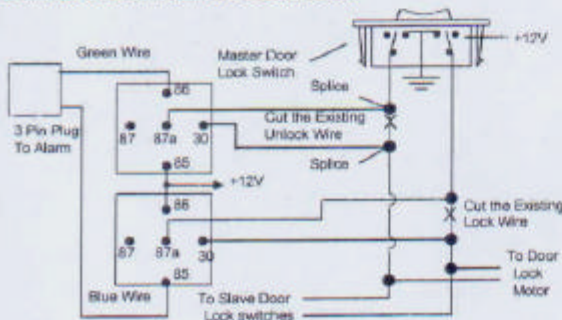
NEGATIVE TRIGGER DOOR LOCK SYSTEM



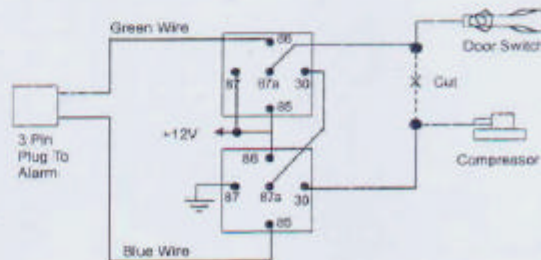
POSITIVE TRIGGER DOOR LOCK SYSTEM



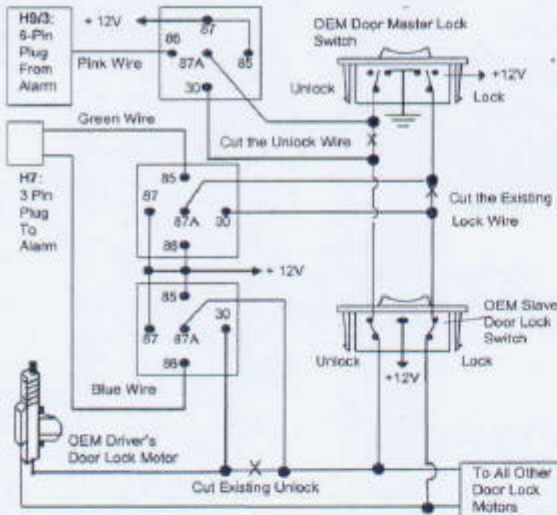
5-WIRE ALTERNATING DOOR LOCK



VACUUM OPERATED CENTROL LOCKING



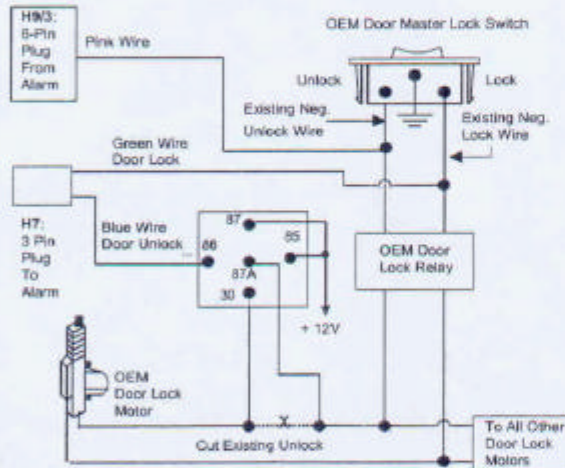
2 STEP DOOR UNLOCK WIRE CONNECTION FOR 5 WIRE ALTERNATING DOOR LOCKS



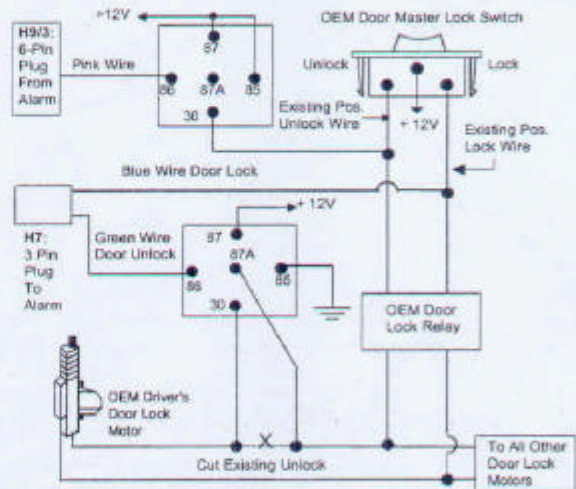
VACUUM OPERATED DOOR LOCKING SYSTEM: TYPICAL OF MERCEDES BENZ AND AUDI.

Locate the wire under the driver's kick panel. Use the voltmeter connecting to ground, verify that you have the correct wire with the doors unlocked, the voltmeter will receive "12 volts". Lock the doors and the voltmeter will read "0 volt". Move the alligator clip to +12V and the voltmeter will receive "12 volts". Cut this wire and make connections. Be sure to program door lock timer to 3.5 seconds. (See Feature II - 1 Programming.)

2 STEP DOOR UNLOCK WIRE CONNECTION FOR GROUND SWITCHED DOOR LOCKS



2 STEP DOOR UNLOCK WIRE CONNECTION FOR POSITIVE SWITCHED DOOR LOCKS



PROGRAMMING

A. PROGRAMMING TRANSMITTER:

PROGRAMMING THE REGULAR REMOTE TRANSMITTER

Important Note: This program mode is for regular remote transmitter and passive/active transmitter programming only; do not program the TX780V two-way LCD screen transmitter on this mode.

Note: This mode will only retain the last 4 remote transmitters programmed. If the transmitter memory is exceeded, the security system will start deleting transmitters from memory in chronological order.

Enter:

1. Turn the Ignition 'switch 'OFF/ON' 3 TIMES and stay in ON position. Within 15 seconds.
2. Push the Valet switch 3 times and hold it until a long chirp is hearing then release the valet switch. You are now in the Transmitter programming mode.

Program: