RS1-G4 / RS3-G4 / RS4-G4
RS7-G4 (PAGING SYSTEM)
RS00-G4 (ADD-ON MODULE)

REMOTE START SYSTEM

INSTALLATION INSTRUCTIONS

CONGRATULATIONS on your choice of a "Cool Start" System with Data Port Technology for direct connection to bypass module by Crimestopper Security Products Inc. This booklet contains the information necessary for installing your remote starter system. If any questions arise, contact your installation dealer or Crimestopper Security Products Inc. at the Tech Support number below.

Note: Some features will not be available on units with 1 button, 3 button, and 4 button remotes.

DISCLAIMER:

This installation book is designed for the installer or individual with an existing understanding of automotive electrical systems, along with the ability to test and connect wires for proper operation. To ease installation, we suggest that you **READ THIS MANUAL** *before beginning your installation. This book is provided as a GENERAL GUIDELINE and the information contained herein may differ from your vehicle. Crimestopper Security Products, Inc. and its' vendors shall not be liable for any accident resulting from the use of this product. This system is designed to be professionally installed into a vehicle in which all systems and associated components are in perfect working condition.*

TECHNICAL SUPPORT: (800) 998-6880
Monday - Friday 8:00am - 4:30pm Pacific Std. Time
Web Site: www.crimestopper.com
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REV A 08-2013

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PRE-INSTALLATION CONSIDERATIONS

BEFORE BEGINNING, check all vehicle manufacturer cautions and warnings regarding electrical service (AIR BAGS, ABS BRAKES, ENGINE / BODY COMPUTER AND BATTERY).

PLAN OUT YOUR INSTALLATION and determine most suitable locations for all components to be placed. These components include: the module itself, valet/program button, possible relays, and antenna/receiver (RS1, RS3, RS4 and RS7 only, the RS00 model does not include antenna or remotes.) Allow enough wire to create a service loop with strain relief, should servicing be required. This will also allow easier access and mounting.

DAMAGE to the CoolStart unit resulting from incorrect installation or failure to follow guidelines stated in this book will not be covered under warranty and will be subject to repair or replacement charges.

USE A VOLT OHM METER to test and locate all connections. Test Lights can damage a vehicle's computer systems.

ADDITIONAL PARTS, which are not included with this unit, may be needed for your particular vehicle. These items may include extra relays or Anti-Theft System Bypass modules.

INSTALLATION CAUTIONS & WARNINGS

DO NOT extend the Remote start ignition harness length. Mount the module so that main harness reaches all ignition switch wiring. Extending these wires could result in poor or improper performance.

DO NOT route any wiring that may become entangled with brake, gas pedals, steering column or any other moving parts in the vehicle.

DO NOT exceed the rated output current of any circuit on the Remote start module. Failure to observe this warning will result in damage to the unit not covered under warranty.

DO NOT remote start the vehicle in a closed garage! Make sure that the garage door is open or there is adequate ventilation. Failure to observe this rule could result in injury or death from poisonous Carbon Monoxide fumes.

WIRING Low Current 12 Pin Plug

YELLOW: (-) HORN CHIRP HONK OUTPUT (Programmable 15, 20 or 40 milliseconds)

Connect to the LOW CURRENT Negative Horn Trigger wire usually located near the steering column. If the vehicle horn circuit requires 12V, then a relay is required. RELAY WIRING: Connect the Yellow wire to terminal #85, connect relay terminals #86 and #87 to 12V constant power. Connect terminal #30 to the 12V positive Horn activation wire.

BLACK: MAIN SYSTEM GROUND

Connect to chassis metal of the vehicle. An existing bolt or screw may provide an adequate ground, or drill a small hole, scrape away paint and attach using a sheet metal screw & star washer. This wire must be connected to a proper ground or undesirable and inconsistent operation will occur. Do not use Factory ground locations.

YELLOW / BLACK: (-) GROUND OUT WHEN RUNNING

The Ground Out when Running output is used for Anti-theft and Transponder Bypass modules. It can be used for a Anti grind / Starter Disable. This wire turns on when the remote start button is pressed and stays on through the duration of the remote start. When using this wire for an Anti grind/Starter disable, an optional Relay is needed to interrupt the Starter circuit. The starter disable circuit prevents accidental grinding of the starter if key is turned too far after a remote start. This required an optional Diode, see diagrams on NEXT PAGE.

WIRING Low Current 12 Pin Plug

YELLOW / BLACK OUTPUT: Ground Out when Running (Relay and/or Module not included)

ANTI-THEFT/
TRANSPONDER
MODULE

OR

YELLOW/BLACK

OR

Diode isolate
if using both!

85   86

30   87

+12V CONSTANT

3rd IGN
(If needed)

IGN SW.
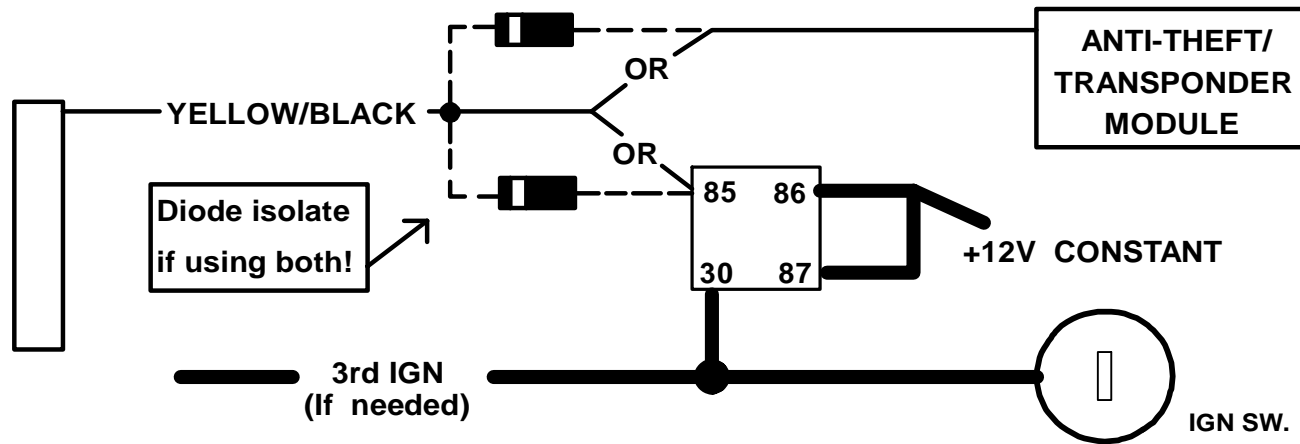
ANTI-GRIND RELAY: (Relay not included)

TO
ENGINE

IGN 1

IGN 2

ACC

START

CUT

IGNITION
SWITCH

BROWN

30 87A 87

YELLOW/BLACK

85   86

MAKE CERTAIN TO CONNECT "BROWN" START OUTPUT WIRE TO
STARTER SIDE OF ANTI-GRIND/START DISABLE RELAY.

MAKE SURE 86 TERMINAL HAS POWER WITH IGNITION ON AND CRANK
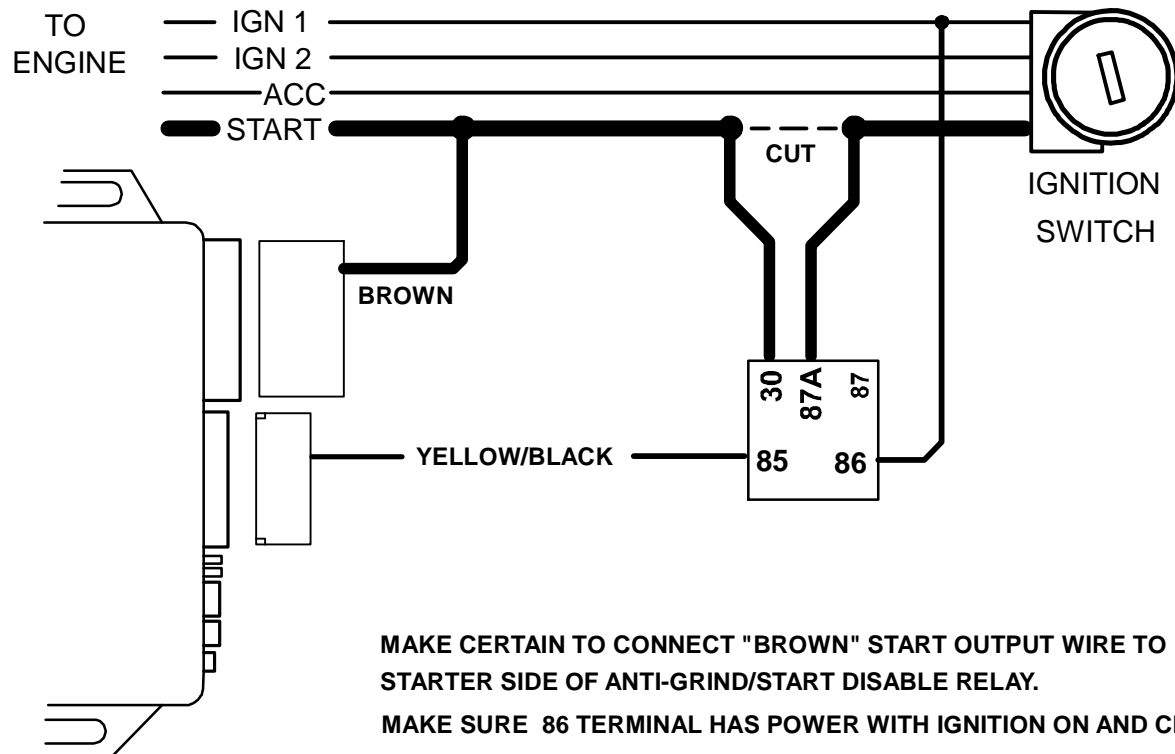
WIRING Low Current 12 Pin Plug

BROWN: (-) AUX OUTPUT (Trunk POP or Dome Light Illumination, Option 9)
This output is programmable for Trunk Pop or Dome Light Illumination. To eliminate the possibility of accidentally opening up the trunk, there are (3) choices for button press selection. There are 4 choices for this option.

1. 30 second dome light illumination with unlock.
2. **Trunk Pop with ½ second press – Default**
3. Double press Trunk Pop.
4. Press and Hold 2 seconds for Trunk Pop.

Note: Some vehicles like Lexus and Toyota require a 2 to 3 second output for the Trunk Pop to operate.
Option 9-4 (Push and Hold), Allows output to stay on until Transmitter button is released.

TRUNK OUTPUT or DOME LIGHT

+12V CONSTANT

BROWN

| 85 | 86 |
| 30 | 87 |

+12V CONSTANT

OR *

Trunk Soleniod (Default) -OR- Dome Light Circuit
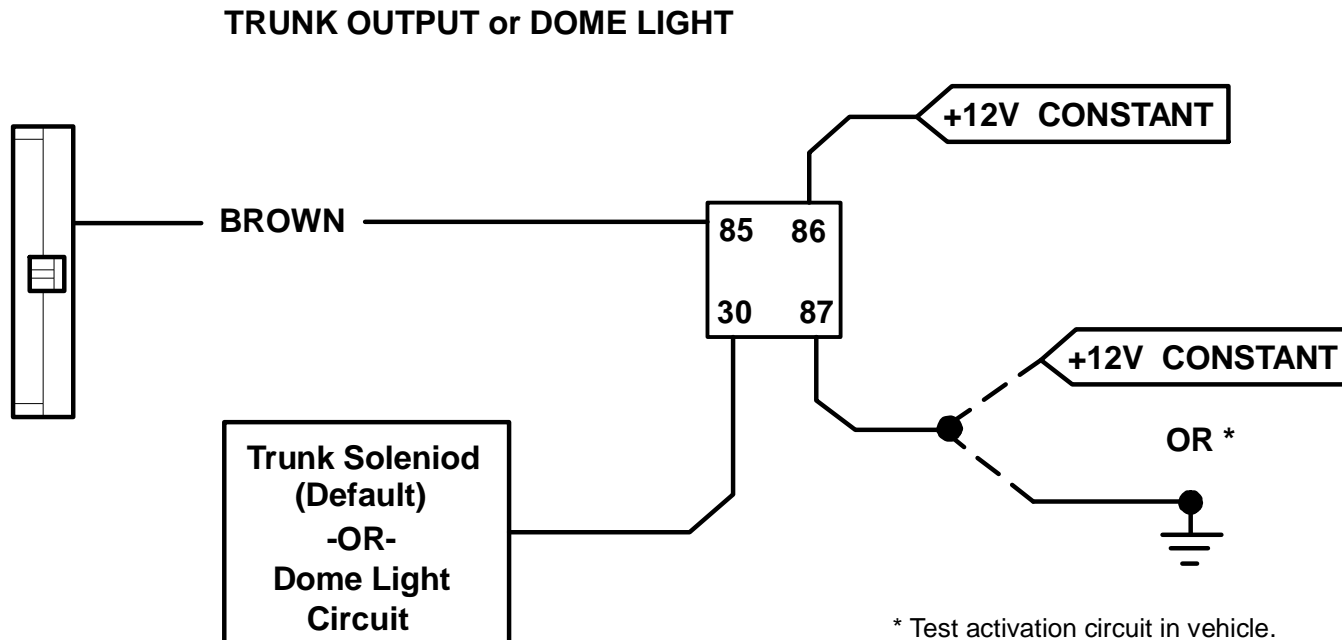
* Test activation circuit in vehicle.
Connect to+12V for Positive circuits
or Ground for Negative circuits. Relay
not included.

RED / BLACK: INPUT SOURCE (12 Volts or Ground)
WHITE: PARKING LIGHT OUTPUT

The Parking Light circuit can be connected up as a high current positive or negative trigger. Connect to vehicle parking light circuit at the back of light switch or if this is not possible, connect directly to one of the parking lights at the front of the vehicle. If your vehicle has a multiplex lighting system, that will require a resistor connected in series with the white wire to the light switch. Use the Negative parking light circuit for Multiplex resistor lights.

Positive Parking Lights

(+) Parking Lights

(+)

10 AMP FUSE

Red/black
(Lights)

White

12 Volt Battery

Negative Parking Lights

(-) Parking Lights

10 AMP FUSE

Red/black
(Lights)

White
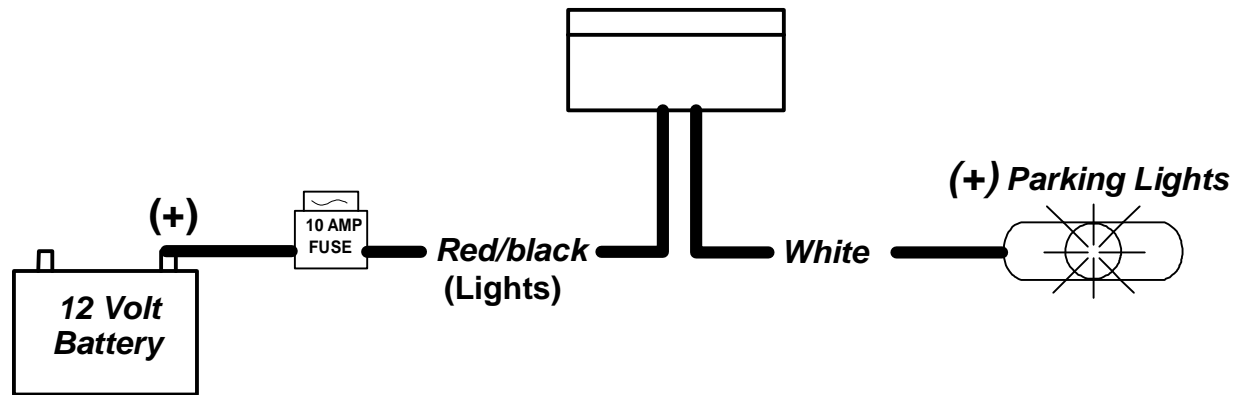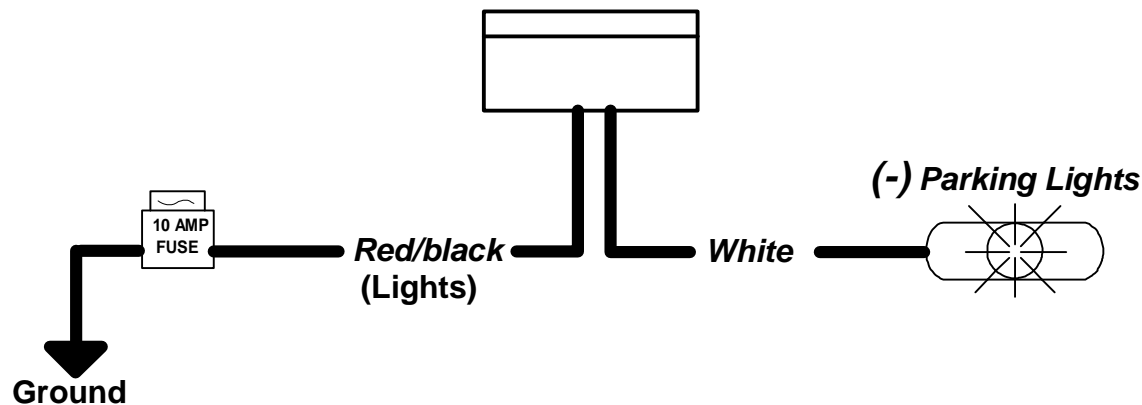
Ground

WIRING Low Current 12 Pin Plug

GRAY: (-) NEGATIVE HOOD PIN SWITCH
Connect the Gray wire to a switch that is at ground when the hood is open. If an existing switch is not available, then we recommend one to be installed. When this wire is grounded, the remote start is inhibited. The unit will not attempt to start if hood is open.

PINK: (-) GLOW PLUG or (-) Door switch in Manual Transmission Mode (Programmable)
Connect Pink wire to indicator circuit that shows a (-) Signal while the WAIT TO START LAMP is on. When this wire is used, the system will wait until light turns off before attempting a remote start. Programmable for 10, 15 or 20 second fixed time delay. **Default = Glow Plug Delay**

PURPLE: (+) BRAKE RESET
Connect the Purple wire to the side of brake pedal switch that shows 12 volts ONLY when pedal is depressed. This is the wire that turns off the remote start once the driver's key is in the Ignition and turned to the ON position.

ORANGE / BLACK: (-) OEM DISARM OUTPUT
This wire provides a Ground pulse to disarm the vehicles' Factory anti-theft system prior to a Remote Start. Connect this wire to the vehicles' anti-theft disarm wire. This wire is sometimes found coming off the Driver's door key switch or at the Factory Anti-theft control module. This wire may not be needed if Factory Security only requires a door unlock pulse.

ORANGE: (-) OEM REARM OUTPUT of AUX 2 Output (programmable option 25)
This wire is programmable as OEM Rearm or 2nd Aux output. This provides a ground pulse to rearm the vehicles' FACTORY anti-theft system after a timed-out or aborted remote start. Connect this wire to the vehicles' anti-theft rearm wire or to the door pin circuit depending on your requirements. This wire may be needed to pulse the door pin circuit on vehicles with retained accessory power.

RED / WHITE: TACHOMETER INPUT
When installing the system in Tach mode, this wire must be connected to a valid source of AC voltage. This wire allows the unit to sense the engine running and control the starter motor.
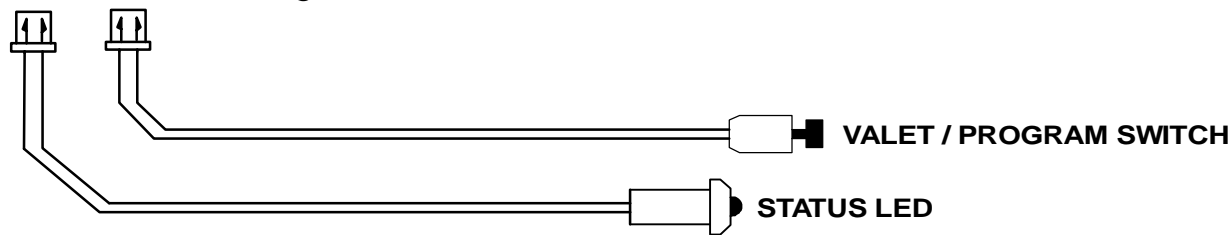
WIRING LED and Valet Switch

PROGRAM OVERRIDE SWITCH: 2 PIN PLUG (REQUIRED FOR PROGRAMMING & LEARNING REMOTES)
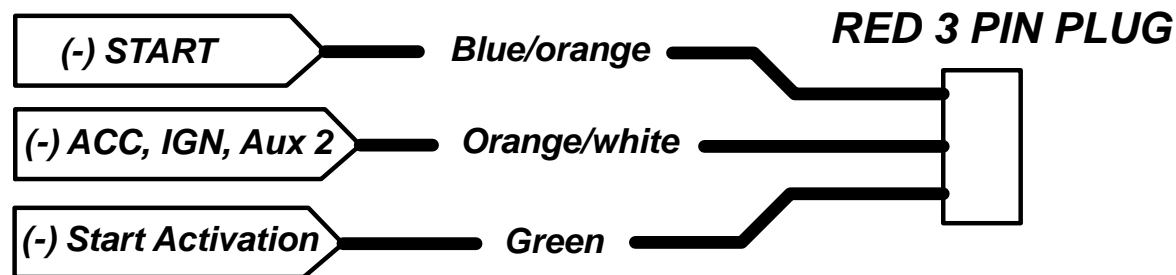This is a multi-function switch used for programming options, transmitters and valet mode.

LED: 2 PIN PLUG

The LED is used for Remote Start Diagnostics and a Valet indicator. It will also Flash for use as security deterrent.

VALET / PROGRAM SWITCH

STATUS LED

WIRING Low Current 3 Pin Plug

(-) START — Blue/orange

(-) ACC, IGN, Aux 2 — Orange/white

(-) Start Activation — Green

RED 3 PIN PLUG

ORANGE / WHITE (-) ACC, IGN or AUX 2 OUTPUT (Programmable option 24)
This output is selectable (-) Accessory, (-) Ignition or (-) AUX 2. **Default = (-) ACC**

BLUE / ORANGE (-) STARTER OUTPUT: Some vehicle require a (-) Start for "Push to Start".

GREEN (-) START ACTIVATION INPUT or OEM INTERFACE (3 Pulse Start)

Option 17-1 OEM Interface (3 Pulse Start):
This mode allows the system to Remote Start or Stop with 3 successive Lock pulses. There are 2 Modes of operation.
1. Remote Start thru data (green wire not connected). This feature only works on newer CANBUS vehicle using a Data Module that supports this feature. With this option you can use both the OEM and Crimestopper remote.
2. Connect the Green input wire to the Negative lock signal wire of the factory system. If your Factory OEM system does not have this type of signal, then a relay is required.

Option 17-2 Default (-) Neg. Start Activation (1 Pulse Start):
This wire allows an alarm or keyless entry system with a remote Aux channel to activate the Remote Start by sending a (-) momentary pulse to the Green input wire. This triggers a remote engine start or stop

POWER DOOR LOCK WIRING CONNECTOR

BLUE: (-) Negative pulse for UNLOCK
RED: 12V When using external relays (TERM 86)
GREEN: (-) Negative pulse for LOCK

DETERMINING DOOR LOCK TYPE: We recommend determining the type of locking system the vehicle has before connecting any wires. Incorrect connection may result in damage to the alarm and/or vehicle locking system. Door lock information is provided as a guide. Your vehicle may differ.

> **Crimestopper Door Lock Accessories:**
> **CS-6600DLM:** Dual-relay plug-in module for Reverse Polarity, Positive, or Aftermarket Motors.
> **CS-6500DLI:** Plug-in pulse inverter that converts the Negative outputs of the system to Positive type for Positive Door Lock systems.
> **CS-610S1:** Aftermarket door lock actuator (motor).

Negative Trigger (-): Many Imports; Late model Ford & General Motors
Negative trigger door lock systems send a Negative (Ground) pulse to existing factory relays to lock and unlock the vehicle doors.

Positive Trigger (+): Many General Motors; Chrysler / Dodge / Plymouth
Positive trigger door lock systems send a Positive (12V) pulse to existing factory relays to lock and unlock the vehicle doors.

Reverse Polarity: Many Ford/Lincoln/Mercury/Dodge/Chrysler/Plymouth and early 90's GM Trucks
Reverse Polarity systems use no relays, but instead the door lock/unlock motors are controlled directly from the lock and unlock switches in the door. The lock and unlock wires rest at Negative Ground when not in use. When the lock or unlock button is pressed, one of the circuits is "Lifted" and replaced with +12V causing a lock or unlock to occur.

Single Wire (Dual Voltage): Late model Chrysler/Dodge/Plymouth Vehicles, some 2000 GM
Dual Voltage systems have lock/unlock switches that send varying levels of Positive voltage OR Negative ground current to the SAME wire for both lock and unlock. When the vehicle's Body Computer Module (BCM) or door lock module senses different voltages on this wire, the system will either lock or unlock. Single wire door lock systems require relays and resistors.

Databus and Canbus Systems (Data Module Required)
Databus systems send low current "Data messages" to the door lock controllers on a network in order to lock and unlock the vehicle. To install aftermarket systems in these vehicles, an interface module is required that converts the regular lock/unlock pulses into "Data messages" to allow locking & unlocking. Interface modules are sold separately.

BASIC DOOR LOCK DIAGRAMS

NEGATIVE TRIGGER DOORLOCK WIRING

GREEN
RED
BLUE

L
UL

FACTORY
POWER
LOCKING
RELAYS

POSITIVE TRIGGER DOORLOCK WIRING

GREEN
RED
BLUE

FUSED
+12V
+

85   86
      87
87A   30

85   86
      87
87A   30

L
UL

FACTORY
POWER
LOCKING
RELAYS
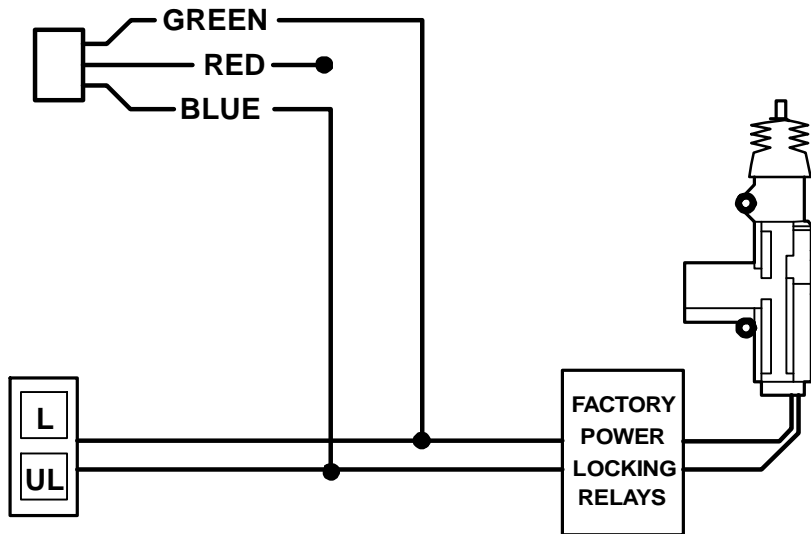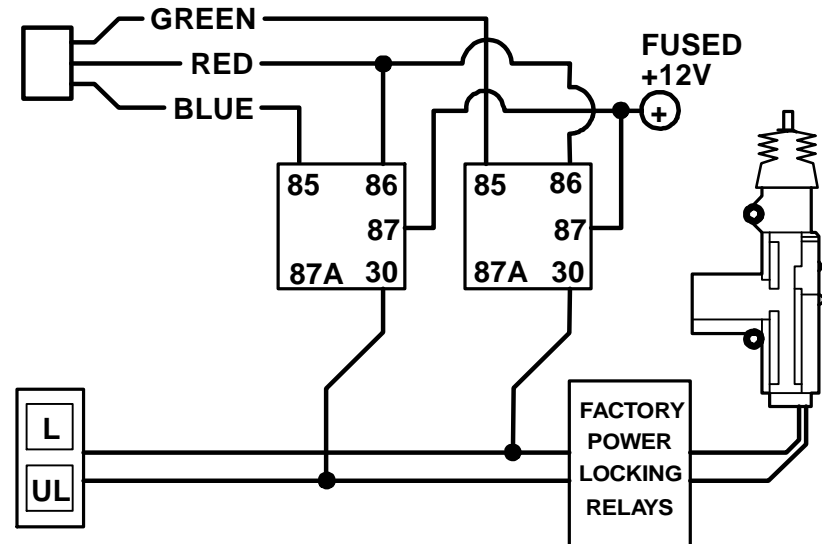
REVERSE POLARITY DOOR LOCK WIRING

GREEN
RED
BLUE

FUSED
+12V
+

85   86
      87
87A   30

85   86
      87
87A   30

MASTER
SWITCH

+

L
UL

CUT

CUT
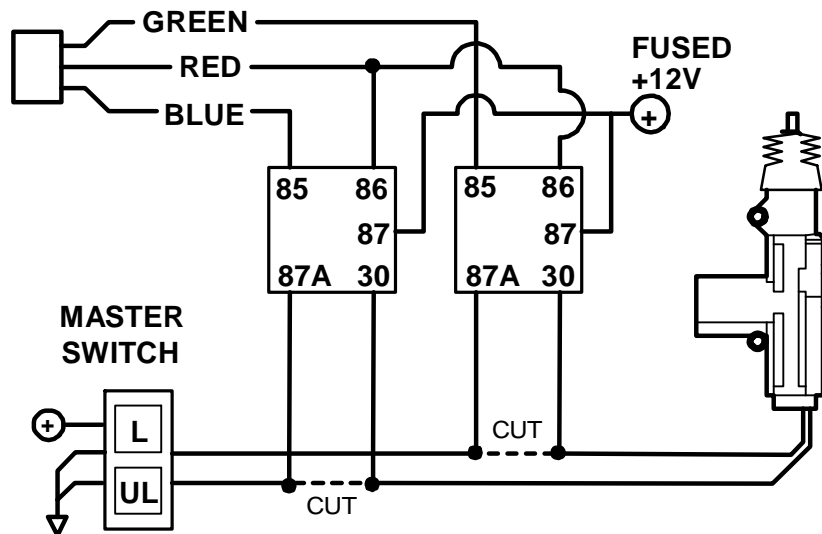
AFTERMARKET MOTOR/DOOR LOCK WIRING

GREEN
RED
BLUE

FUSED
+12V
+

85   86
      87
87A   30

85   86
      87
87A   30
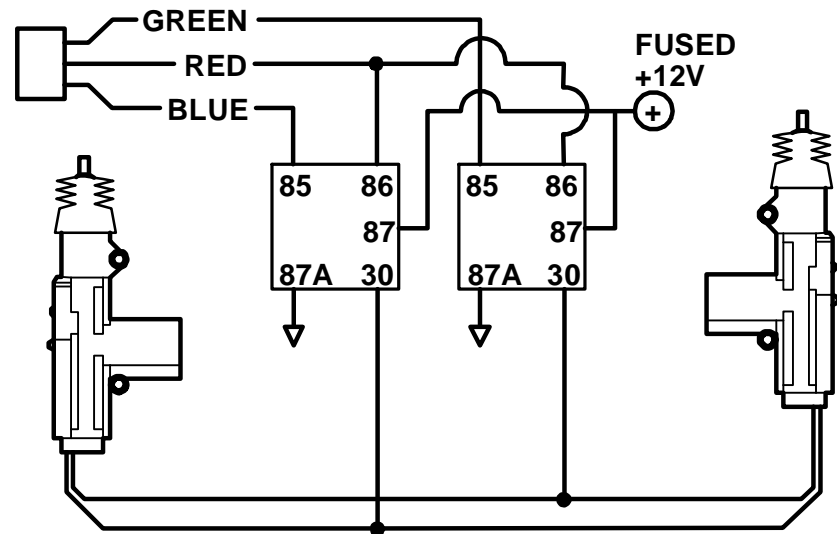
"SMART TACHLESS" MODE

Your CoolStart system includes a unique voltage monitor called "Smart Tachless" mode. This mode allows this unit to efficiently start an engine without the use of a tach signal wire. These modules actively monitor the voltage level of the vehicle to control the starter motor each time a remote start is requested.

IMPORTANT NOTES:
(1) On the rare occasion that "Smart Tachless" mode does not operate satisfactorily, change the voltage reference level as described below, or use a different mode such as "Tach" mode, or "Timed Crank" mode.

"SMART TACHLESS" ADJUSTMENT:

In the event "Smart Tachless" over-cranks or under-cranks your starter, the settings can be changed. The purpose of adjusting the "Smart Tachless" Mode is to raise or lower the voltage reference threshold from the 93% default point. Raising or lowering this 93% point should increase or decrease your cranking time respectively. The adjustment range is from 79% to 100% in one percent increments. Follow steps below to adjust the reference level.

1. Turn the key to the ON position.
2. Press program button 5 times, after a few seconds the unit will flash the lights and/or honk horn 5 times.
3. Carefully press the program button 21 times to get to option level 21. You must get a light flash and/or horn honk after each press. If the lights didn't flash and/or horn does not honk, then the unit did not register your button press. Only count the light flash and/or horn honk.
4. Press the Lock Button #1 on the remote to decrease by 1% (lights will flash and/or horn honk 1X for each press); Press the Unlock Button #2 to increase by 1% (lights will flash and/or honk horn 2X for each press); Press the Trunk Button #3 to reset to 93% (lights will flash 3X). The unit will stop providing light flashes when you reach the bottom (79%) or the top (100%) of the adjustment range. If you lost track, then just press Button #3 to reset back to 93% and begin raising or lower again.
5. Turn Ignition OFF and check operation.

NOTE: This Smart Tachless adjustment feature is not available on the RS00 Model that has no remote transmitters or antenna. If you must use this feature on a RS00, then a remote and an antenna module from an RS3 or RS4 must be used to set the desired level. Once programmed, remove antenna.

TACH FINDER MODE:

This Tach Finder mode can assist in locating a Tach source for your installation. When following the steps, the unit will begin to flash the parking lights if you have the Red/White wire connected to a tach source. If lights do not flash, then try another wire until you locate a tach signal that will cause the Parking lights to flash.   NOTE: On some vehicles equipped with daytime running lights, it may be difficult to see any flashing parking lights. In this case your only notification will be the slight "ticking" sound coming from the module's flashing light relay.

TACH FINDER STEPS:

1. Open hood (or ground Gray hood pin wire if no hood pin is installed)
2. Start Engine with the key.
3. Press the Program button for 2 seconds
4. Lights will begin flashing if the Red/White wire is connected to a valid tach source. If not try a different tach wire.
5. Once Tach is located then turn off engine and close hood to abort (Remove Gray hood pin wire from ground).
6. Now follow the Tach Programming steps.

TACH FINDER TIP: Cold Weather / High Idle Simulation:

The tach finder mode can also be used to help determine how your CoolStart system may operate in a cold weather situation. Once you have a valid tach source programmed into your system, follow test steps below.

1. Go into the tach finder mode.
2. You should have a consistent light flash (like directional or emergency flashers).
3. Slowly raise the RPM level on your vehicle to simulate a "warm-up idle" that is higher than the normal idle level. If and when the lights STOP flashing. Means that this is the point at which the tach signal is out of range of the system.
4. We recommend that you bring the RPM level up to around 1000 RPM's to simulate a cold morning idle.
5. If the lights stop flashing, then we recommend using another tach source. This may help prevent the engine from starting and stalling in the morning or cold weather.
6. If lights flash with engine off, you're connected to a vehicle data wire.

TACH PROGRAMMING & TACH SIGNALS

INTRODUCTION

This system has 3 methods of monitoring the engine running. Option #1 controls how the system monitors the engine running.

1. ***Tach Reference Mode – Monitors Engine R.P.M.*** - Most reliable method, see Tach programming below.
2. ***Tachless Mode - Default.*** When vehicle is remote started, the battery voltage rate will go up because the Alternator starts working. The Tachless Mode is adjustable in 1% increments thru Option 21.
3. **Not Used.**
4. **Hybrid Mode –** For electric motors that are computer controlled. This provides a 4 second crank output to activate the start sequence on Hybrid vehicle. Don't use on vehicles with gas or diesel engine, doesn't monitor stalled engine or low battery voltage.

Tach Reference Mode: Provides reliable remote starting performance though engine speed sensing. When using Tach Reference Mode, the RED/WHITE wire is used for Tach signal [Engine RPM] input. Most modern engines include various points where the Engine Speed [Tach] or A/C signal may be obtained. Tach Signal examples: Fuel Injection Solenoids, Negative (-) side of ignition coil, at the Distributor or Ignition Control Module, Coil Pack, Engine Computer, or Crankshaft Sensor. Sometimes an Alternator Stator pin can be used. These Tach Signal locations mentioned are provided as a guide, your vehicle may differ. Some locations will NOT be a good location for Tach source due to RF noise or Computer Data**.**

Note: When using a Databus module for Tach signal, don't connect up the Tach wire. This will create a conflict. The System can only use one Tach source.

TACH PROGRAMMING:

1. Red / White wire should be connected to a valid Tach source.
2. Start engine with key.
3. Press program button 5 times, then wait for 5 light flashes and/or 5 horn honks.
4. Push program button once more. (You must get one light flash and/or honk after button is pressed.) This unit is now at option #1-Tach Learning.
5. Press the #1 Lock Button on remote transmitter. The unit will read the Tach source and flash the lights and or honk once for program confirmation. (On models without remote transmitters, press the brake pedal in this step.)
6. If lights do not flash for confirmation, then try another tach source or try the tach finder to locate another wire

DIESEL GLOW PLUG DELAY

This feature provides a solution for diesel vehicles without having to connect to the Glow Plug-Wait to Start Circuit. This may be needed for various reasons. If your vehicle does not have a viable Wait to Start Circuit, or you cannot locate and identify the circuit, then change your system to Diesel Glow Plug Delay mode. You can choose from a selection of pre-cranking delay times. Once this mode is activated, the system will NO LONGER monitor the PINK glow plug input wire and will use a delay setting chosen by the installer in the option chart.

NOTES: This feature is OFF by default and must be programmed before use. Once this feature is turned ON, the Pink Glow plug input wire is not used. The Remote start unit will always wait the programmed time before cranking EVEN IF the glow plug warms up first. There are 3 different Delay times available for use: 10, 15, or 20 seconds. SEE OPTION PROGRAMMING CHART on Pages 15-16.

HOW TO USE THIS FEATURE:
1. See the Option Programming section on Pages 15-16 and change Option #19 from Monitor Glow Plug Light to one of the delayed time values. (Default setting is to always monitor the PINK Glow Plug input wire.)
2. Once this option has changed, the system will wait for the selected time before cranking.

OPTION PROGRAMMING

This system has 28 programmable options to customize operating features and installer preferences. You may change one option at a time, or program multiple options in one session. If you start with the lowest option and continue on to higher options, you do not need to repeat steps #1-3 each time. For example, you can change Option #2 to "ON", then you can continue pressing the program button to get to a higher number option and change it as well.

To Engage Option Programming:

1. Turn Ignition Key to the ON position. Do not start vehicle.
2. Press the Program / Valet button 5 times. Wait for the unit to flash the lights and/or horn honk 5 times.
3. Push the valet program button the number of times that corresponds to the option number desired (1-28X). You must get a light flash and/or honk after each button press. If the system did not flash the lights and/or honk, then it did not register your press. Press carefully and do not lose count.
4. *For RS3, RS4, RS7:* When you reach the desired option #, to change the option: Press button #1 *Lock*, *#2 Unlock, #3 Trunk, #4 Start.* (Some option numbers use ALL 4 remote buttons to select settings)

5. **For RS00, RS1:** (No Lock button) Tap the brake pedal to toggle through the option values: Tap brake once (lights flash 1X) Tap the brake pedal again (Lights flash 2X) tap 3 or 4 times for options that have 3 or 4 values.
6. When finished, turn Ignition OFF, and check for changed features.

Option #	Option Description	TX Button #1 (Lock)	TX Button #2 (Unlock) Default Value	TX Button #3 (Trunk)	TX Button #4 (Start)
	OPTION PROGRAMMING TABLE				
1	Engine Monitoring	Tach	*Tachless*		Hybrid
2	Autolock with RPM / Ignition	ON	*OFF*		
3	Door Lock Pulse	3 Seconds	*0.50 Seconds*	Double Unlock	"Wake Up" pulse with Unlock
4	Pink/white Wire Selection	ACC	*IGN*	START	
5	Data Port Protocol	ADS iDatalink - OFA Series	*Fortin - EVO / SL Series*		
6	Remote Start Button Selection	Double Button Press	*½ Second Press*	Press 2 seconds & release	
7	Horn Chirps on Remote Start	ON	*OFF*		
8	Lock with Remote Start / Abort	OFF	*Lock after Remote Start*	Lock after Remote Start and Arm OEM Alarm with Abort	Lock / Arm OEM Alarm with Abort
9	Brown wire function	Dome Light	*Trunk pop*	Double Press Trunk	Press and Hold 2 seconds
10	Unlock before Remote Start (to Disarm OEM Alarm)	ON	*OFF*		
11	Transmission Type	Manual Transmission with Remote Control	*OFF*	Manual Transmission set with Hand Brake	Manual Transmission with auto shut down after door closed
12	Idle Down Timer	10 Minutes	*20 Minutes*	30 Minutes	Infinity Run

OPTION PROGRAMMING TABLE

Option #	Option Description	TX Button #1 (Lock)	TX Button #2 (Unlock) Default Value	TX Button #3 (Trunk)	TX Button #4 (Start)
13	Horn Chirp Confirmation	1 Press	*2 Press*		
14	Unlock with Trunk Pop	Unlock/Trunk Pop	*Trunk Pop only*		
15	30 Sec. Park Lights with Unlock	OFF	*ON*		
16	Horn Pulse (Chirp)	15 milliseconds	*20 milliseconds*	40 milliseconds	
17	OEM Interface Green input wire	3 pulse start with OEM remote thru Data	*1 Pulse*		
18	Minimum Starter Cranking Time	(-) 0.1 Seconds	*0.8 Seconds*	(+) 0.1 Seconds	(+) 0.4 Seconds
19	Diesel Glow Plug Delay	10 Seconds	*Monitor Glow Plug*	15 Seconds	20 Seconds
20	Remote Start Engine Run Time	10 Minutes	*20 Minutes*	30 Minutes	5 Minutes
21	Smart Tachless Voltage Adjustment 79-100%	-1%	*Set to 93% default*	+1%	
22	Turbo Timer Mode	1 Minute	*OFF*	3 Minutes	5 Minutes
23	Unlock on Start Button with Ignition ON	Momentary press = Unlock 2 Sec. press = Abort Start	*OFF*		
24	Orange/white wire Selection	IGN	*ACC*	AUX 2	
25	Orange Wire Selection	AUX 2	OEM Arm		
26	1-Way or 2-Way System	2-Way	1-Way		
27	1 or 2 VEH Mode	2 VEH Mode	1 VEH Mode	In 1 VEH Mode, the Red and Blue LED on Remote Control operate the same vehicle	
28	Reset Options to Default (*)	Reset Options 1 thru 25 (2 Flashes)			

1. Engine Monitoring:

This option controls how the system monitors the engine running. You can program for Tachless mode that monitors battery voltage, Tach mode in which the unit uses a Tach signal (RPM) or for Timed Crank as an alternative. There are 4 choices for this option:

1. Engine R.P.M. (Tach) - Most reliable method. Tach must be programmed for this option to work.
2. **Tachless Mode - Default.** When vehicle is remote started, the battery voltage rate will go up because the Alternator starts working. The Tachless Mode is adjustable in 1% increments thru Option 21.
3. Blank – No Function
4. Hybrid Mode – For Push to Start (PTS) vehicles. This provides a 4.0 second crank output to activate the start sequence on PTS or Hybrid vehicle. Option #18 allows you to shorten starter crank time if necessary.

2. AUTO LOCK and UNLOCK with IGNITION:

This feature controls whether the doors will automatically lock when the ignition is turned on and unlock when the ignition is turned off. If the system is in Tach mode, then the doors will lock as the engine RPM's increase (driving). Some vehicles already have this feature from the factory you should turn off this option. *Doors will not lock if they are open to prevent locking the keys in*. There are 2 choices:

1. *OFF = No Lock or Unlock with ignition.*
2. *Ignition ON = Lock, Ignition OFF = Unlock - Default.*

3. DOOR LOCKS:

This option sets how the door lock circuit works. There are 4 choices:

1. 3 Second Lock and Unlock - For older European vehicles that require a long lock and unlock pulse to operate Vacuum door lock systems.
2. *0.5 Second Lock and Unlock - Default.*
3. Double Unlock – This feature may be required to interface with a factory alarm or keyless entry system. The first pulse disarms the factory alarm; the 2nd pulse unlocks the doors.
4. "Wake Up" pulse on Unlock - 0.5 second unlock pulse along with Ignition, Accessory, Disarm and (-) RUN to wake up a BCM. This feature is required on new vehicles that disarm the factory alarm by turning on the ignition key.

4. PINK / WHITE WIRE SELECTION:

This option controls the Pink / White wire function.

    1. Pink / White = Accessory 2
    2. *Pink / White = Ignition 2 - Default.*
    3. Pink / White = Start 2

5. DATA PORT PROTOCOL: *Default = EVO / SL Series*

This option controls the Data Port Protocol for ADS / OFA Series modules or EVO / SL Series modules. The default is set for EVO / SL Series Protocol. This option has no effect on conventional wiring of Bypass modules. Both Data Protocols are 2-Way communication.

6. REMOTE START: Button Press Selection:

To eliminate the possibility of accidentally starting the vehicle, there are (3) options for button press selection. This option will allow you to change whether the remote starter activates by a:

    1. Double button press- ½ second presses.
    2. *Single ½ second press - Default.*
    3. Press 2 seconds and release.

7. HORN CHIRPS with REMOTE START ACTIVATION:

This option allows the unit to provide 3 short chirps for audible confirmation of a remote start. The horn output wire must be connected for this feature. ***Default = OFF.***

8. LOCK with REMOTE START:

This option controls whether the unit will automatically lock during and after a remote Start abort or time-out. There are 4 choices for this option:

    1. OFF
    2. *Lock with Remote Start Only - Default.*
    3. Lock with Remote Start and Lock / Arm with Remote Start Abort - Default.
    4. Lock and Arm with Remote Start Abort only

9. BROWN WIRE FUNCTION: AUX 1 - Trunk Pop or Dome Light Output:

There are 4 choices for this option.

1. 30 second dome light illumination with unlock.
2. **Trunk Pop with ½ second press – Default**
3. Double press Trunk Pop.
4. Press and Hold 2 seconds for Trunk Pop.

10. UNLOCK BEFORE REMOTE START:

This option is used to disarm an OEM Alarm System before Remote Start. ***Default = OFF***

11. TRANSMISSION TYPE: Requires Tach Wire connected and programmed

This option selects automatic or manual transmission mode

1. Manual Shift Transmission - Requires Remote Start Button pressed with (-) Hand Brake Activated.
2. ***Automatic Transmission – Default.***
3. Manual Shift Transmission – Starts Exit procedure with (-) Hand Brake Set and engine running.
4. Manual Shift Transmission – Same as 3 with auto shut down 2 seconds after closing last door.

12. IDLE DOWN RUN TIME:

This feature allows the remote starter to take over operation of a parked vehicle when the ignition key is removed and you exit the vehicle. The vehicle will remain running for the programmed time or until canceled. The choices are: 10, 20, 30 minutes or Infinity Run. ***Default = 20 minutes.***

13. HORN CHIRP with LOCK and UNLOCK - 1 or 2 Button Press

This option allows the system to chirp the vehicle horn for Lock/Unlock confirmation on 1 button press or a 2nd press within 3 seconds. The horn output must be connected to use this feature. ***Default = 2 Press.***

14. UNLOCK With TRUNK POP:

This option controls whether the system will provide an Unlock / Disarm pulse when the Trunk release is activated from the remote control. This may be required to prevent unnecessary triggering of a factory alarm on some vehicles. ***Default = OFF.***

15. PARK LIGHTS ON 30 SECONDS with UNLOCK:

Keeps parking lights on with remote unlock to assist in locating and providing illumination near your vehicle when approaching at night for safety. The parking lights turn off when the ignition is turned on. ***Default = ON.***

16. HORN PULSE DURATION:
This option allows adjustment the "CHIRP" pulse duration of the car horns. The choices are 15, 20 or 40 milliseconds.

17 OEM Interface (RS00 Add on Model): *1 Pulse or 3 Pulse Start*
Green Wire (-) Start Activation Selection – *Default = 1 Pulse*

> **1 Pulse Start -** When using an Aftermarket Alarm or Keyless Entry System, leave the setting as "1 Pulse" and connect the Green wire to the (-) Auxiliary remote output wire of the Alarm or Keyless Entry System.
> **3 Pulse Start** - This mode allows the system to use the OEM Remote Control to Remote Start or Stop with 3 successive Lock pulses. There are 2 Modes of operation.
> 1. **Remote Start thru Data** (green wire not connected). This feature only works on newer CANBUS vehicle using a Data Module that supports this feature. With this option you can use both the OEM and Crimestopper remote.
> 2. Connect the Green input wire to the Negative lock signal wire of the factory system. If your Factory OEM system does not have this type of signal, then a relay is required.

18. MINIMUN STARTER CRANK TIME: *Default = 0.8 seconds*
This option controls the Minimum Starter Cranking time. This does not affect maximum crank time. This can be adjusted in 0.1 second increments Up or Down from 0.5 to 4 seconds. The starter can still crank up to 4 seconds with a 0.8 setting, depending on Tach or Tachless setting.

> **TIMED START**, use Hybrid Mode (option 1-4) with this option to set a fixed crank time. Please Note: In Hybrid Mode there is only 1 start attempt and the ignition is left on.

19. DIESEL GLOW PLUG DELAY:
This option controls the system's Diesel vehicle interface. Using this option you can control whether the unit monitors the vehicle's glow plug circuit using the Pink input wire (Default), or you may select a specific delay time before cranking. Selections: 10, 15 or 20 seconds. *Default = Monitor Pink Wire.*

20. REMOTE START ENGINE RUN TIME: Set engine run time for 10, 20, 30 or 5 minutes as desired.

21. SMART TACHLESS Voltage Adjustment:
This option controls the voltage reference point when using smart Tachless mode. Pressing the Lock or Trunk buttons on the remote raises or lowers the reference level in 1% increments from 79%-100%. Button #2 (unlock) resets the unit to the factory default reference point of 93%. The default 93% setting works for most vehicles.

22. TURBO TIMER: Using Remote Start Button

The optional Turbo Timer mode allows the CoolStart system to keep a Turbo or Turbo Diesel vehicle running for 1, 3 or 5 minutes [selectively] after you remove the key and exit the vehicle. This is handy for turbo cool-down without the need for expensive turbo timers. The *Default = OFF.*

23. UNLOCK ON START BUTTON:

While remote started, this option allows the remote start button to unlock the doors with a ½ second press. To Abort Remote Start with this option requires pressing Start button 2 seconds. The *Default = OFF*

24. ORANGE / WHITE WIRE SELECTION:

This option controls the Orange/white wire function.
1. Orange / white = Ignition 2
2. *Orange / white = Accessory 2 Default*
3. Orange / white = AUX 2 Momentary.

25. ORANGE WIRE SELECTION:

This option controls the orange wire function.
1. Orange wire = AUX 2 Momentary.
2. *Orange wire = OEM Arm / Rearm Default*

26. 1-WAY or 2-WAY SYSTEM:

This selects 1-Way or 2-Way antenna system. The 1-Way system uses AM transmission. The 2-Way system uses FM transmission. The RF range will be much improved using the FM 2-Way antenna system. You must select this option using the brake pedal or remote control. If you accidentally change system from 1-Way to 2-Way (or vise versa), you need to use the brake pedal to change option 26 back to correct antenna system.

27. 1 or 2 VEHICLE Usage: 1-Way Systems only

This option allows the remote control to operate 2 Vehicles. The *Default = 1-Vehicle only.*
Note: This Option does not apply to 2-Way Paging systems

28. OPTION RESET: (RESTORE TO DEFAULT)

This option restores all programmable options 1 thru 25 to factory default. The unit will flash the lights 2 times and all values will be reset to factory original settings. *Resetting the option table to default does not change the type of antenna system.*

ANTENNA DIAGRAM

Antenna should be located at top of widow at least one inch away from metal surface.

ANTENNA
LOCATIONS

WINDSHIELD
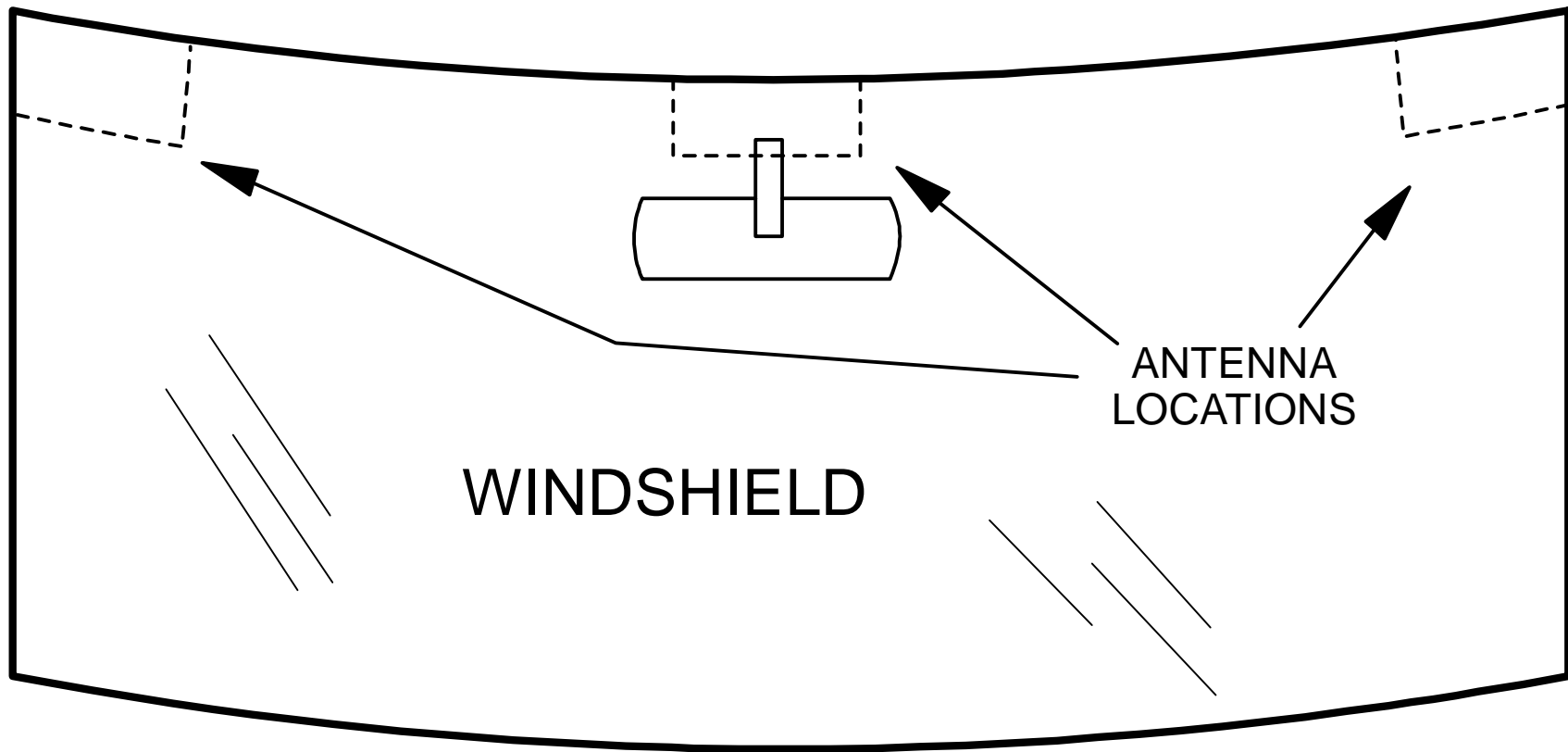
NOTE:
The 1-Way and 2-Way antenna look the same. The 2-Way FM antenna can be identified by the FCC # on the side. The 1-Way AM antenna does not have a FCC #. The system can be changed from 1-way to 2-way by selecting option 26 and changing the antenna. If you accidentally change option 26 and do not change the antenna, the system will stop working. The system will not go into Transmitter Learn Mode with wrong antenna plugged in. You need to use the brake pedal to change option 26 back to correct antenna system.

Transmitter Programming:

Notes: Remote Transmitters/Transceivers come pre-programmed from the Factory. When re-learning remotes or adding remotes, ALL your system's remote codes must be learned at time of programming!! These systems allow storage of up to 4 different remote codes in memory.

1. Turn Ignition Key to the ON position. (Do not start vehicle).
2. Press Program/Valet button 4 times. Wait for the unit to flash the parking lights and/or honk horn exactly 4 times.
3. Press button #1 of the first transmitter. You should get 1 light flash confirming the remote is coded, then press button #1 of a second transmitter, the unit will flash 2 times confirming the remote is coded and so on. If all 4 codes are learned, the unit will automatically exit code learning mode, otherwise turn key off. See diagram below.

OFF — IGN

PRESS 4X's

WAIT FOR
4 FLASHES

RS1-G4 Only

RS3-G4 thru RS7-G4

PRESS
START ONLY

PRESS
LOCK

FLASH 2, 3, or 4 X's

OFF — IGN

COMPLETE
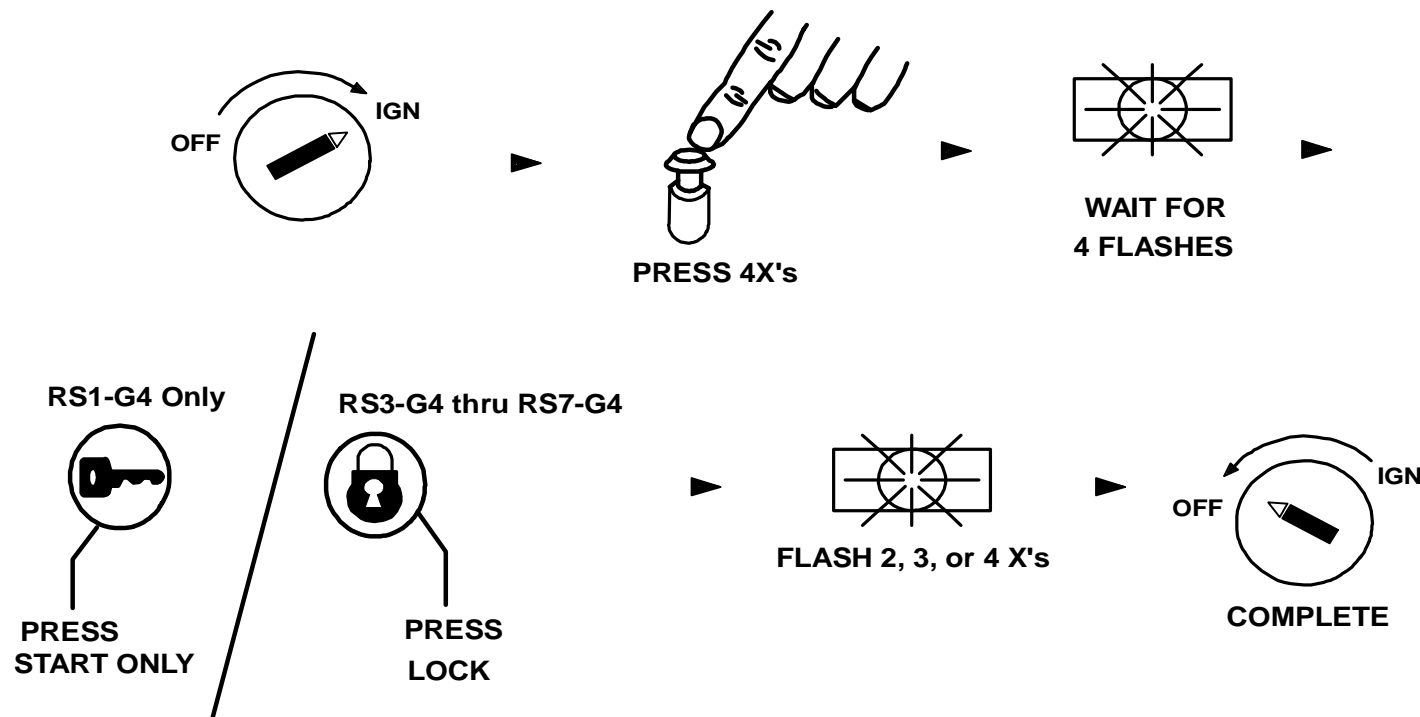
2 VEHICLE OPERATION and PROGRAMMING: Option 27-1 must be selected for 2-Vehicle Mode

To set up the 2 vehicle operation you must have all 4 remotes for programming. For the first vehicle (remotes 1 & 2) press the Lock as in step 1 thru 3. To change from vehicle 1 to vehicle 2, press the **VEH** button on remote for about 2 seconds. The LED on remote will change from blue to red.

MANUAL TRANSMISSION INSTALLATION: OPTION 11

TACH WIRE = White/Red must be connected and programmed. (Default = Tachless Mode)
PINK WIRE = (-) Door Switch (default = Glow Plug)
GREEN WIRE = (-) Hand Brake (default = OEM Start)

After programming Option 11-1, 11-3 or 11-4 for manual transmission mode, the Door Trigger and Hand Brake wire must be connected for the manual transmission remote start procedure. The Pink "Glow Plug" wire becomes a Door Pin input and the Green "OEM Start" wire becomes a Hand Brake input that must be used for the manual transmission remote start procedure. A Databus module can also supply the Door, Hand Brake status and Tach signal on most late model vehicles. Please check Databus module features before connecting door and hand brake wires. A door opening will now cancel a remote start that was previously "set-up" by the user. The Hand Brake and Door Trigger is a safety feature to cancel a remote start. **Note: You can't use the interior lights as a door trigger if the interior lights turn on with ignition off.**

OPTION 11 - TRANSMISSION TYPE: Manual Transmission Requires Tach Wire Connected and programmed.
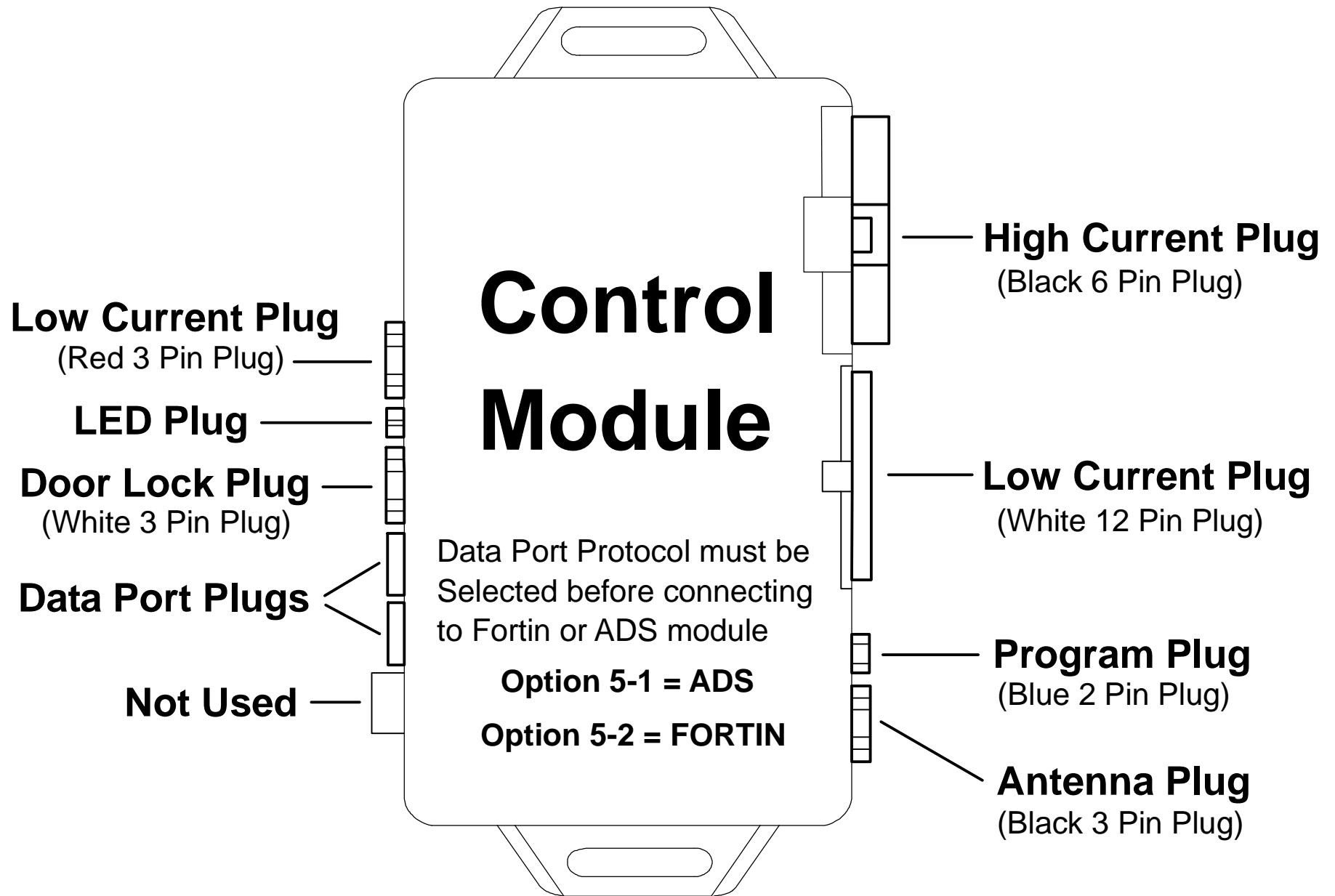This option selects automatic or manual transmission mode - 3 Choices of operation.
1. Manual Shift Transmission - Requires Remote Start Button pressed with (-) Hand Brake set.
2. *Automatic Transmission – Default.*
3. Manual Shift Transmission – Starts Exit procedure with (-) Hand Brake Set and engine running.
4. Manual Shift Transmission – Starts Exit procedure with (-) Hand Brake Set, engine running and auto shut down after last door closed.

Manual Transmission Exit Procedure:
1. *Option 11-1:* With engine running and vehicle in neutral, set parking brake, then press "Start" button on transmitter. The remote starter will turn on and take over operation of the vehicle.
2. *Option 11-3:* With engine running and vehicle in neutral, set parking brake. The remote starter will turn on and take over operation of the vehicle.
3. Remove key, exit vehicle (remote starter unit must "SEE" door opened, then closed with engine running).
4. Press Lock button within 10 seconds of closing door for "Idle Down" (engine stays running). Press Lock a 2nd time to cancel "Idle Down" (engine turns off) and set up Manual Transmission Mode.
5. Press Lock button after 10 seconds to Lock the doors and shut down the engine. From this point, the system will remote start engine unless a door is opened. **NOTE:** Pressing the Remote Start or Lock Button after closing door to set up Manual Transmission Mode is not required with option 11-4

Control Module

Data Port Protocol must be Selected before connecting to Fortin or ADS module

Option 5-1 = ADS

Option 5-2 = FORTIN

High Current Plug
(Black 6 Pin Plug)

Low Current Plug
(White 12 Pin Plug)

Program Plug
(Blue 2 Pin Plug)

Antenna Plug
(Black 3 Pin Plug)

Low Current Plug
(Red 3 Pin Plug)

LED Plug

Door Lock Plug
(White 3 Pin Plug)

Data Port Plugs

Not Used

WIRING DIAGRAM

Factory Car Horn

30	86
87	85
87A	

Yellow
(-) 500mA

Orange/black
(-) 500mA

(-) OEM Disarm

Parking Lights

White
10 Amps

(+ or -)

(-) OEM Arm or Aux 2

Option # 25

Orange
(-) 500mA

Yellow/black
(-) 500mA

Ground when RUNNING

(Bypass Module)

WAIT to Start

(-) Glow Plug (Default)
Pink

Brown
(-) 500mA

Door Switch in Manual Transmission Mode (Option 11)

(-) Trunk Pop Relay

86	30
85	87
	87A

(-) Hood Switch
Gray

Black Ground

OPTION # 9
Trunk Pop or Dome Light

(+) Brake Switch

Purple

10 Amp FUSE

Red/white

TACH
ENGINE MONITOR

Red/black
Park Light Input
Select: 12Volts or Ground

RED 3 PIN PLUG

(-) START **Blue/orange**

(-) ACC, IGN or Aux 2 **Orange/white**
Option # 24

(-) Start Activation **Green**

NOTE: The Green wire is programmable for OEM Start activation (default)
or (-) Hand Brake (Manual Transmission Mode - Option 11)

26

REMOTE START DIAGNOSTICS

If the system flashes the LED and Parking Lights one to seven times and doesn't attempt remote. The LED will continue to flashing the error code until the ignition is turned on, it means the following:

1 Parking Light Flash (1 LED Flash) = Problem with Brake Switch.
2 Parking Light Flashes (2 LED Flashes) = Problem with Hood Switch.
3 Parking Light Flashes (Solid LED) = Valet Service Mode.
5 Parking Light Flashes (5 LED Flashes) = Ignition On before Remote Start or Tach problem.
6 Parking Light Flashes (6 LED Flashes) = Tach Problem (Tach signal without engine running)
7 Parking Light Flashes (7 LED Flashes) = Manual Transmission Error.

Note: In Manual Transmission Mode, the LED will Flash 3 times if the parking park is not set.

HIGH CURRENT 6-PIN HIGH-CURRENT CONNECTOR

(2) RED: 12V POWER INPUT WIRES (30A Fused):
Connect to both of these leads to 12V Constant Power. We recommend the BATTERY POSITIVE TERMINAL.

BROWN: 12V STARTER OUTPUT 30A:
Connect to circuit in the vehicle that has power ONLY while the STARTER MOTOR is CRANKING.
GRAY: 12V ACCESSORY OUTPUT 30A:
Connect to circuit in the vehicle that provides Accessory Power for systems such as HEAT and A/C. Typically, this wire turns ON with the first position of the key, DROPS OUT WHEN CRANKING, then returns as the engine starts and runs.
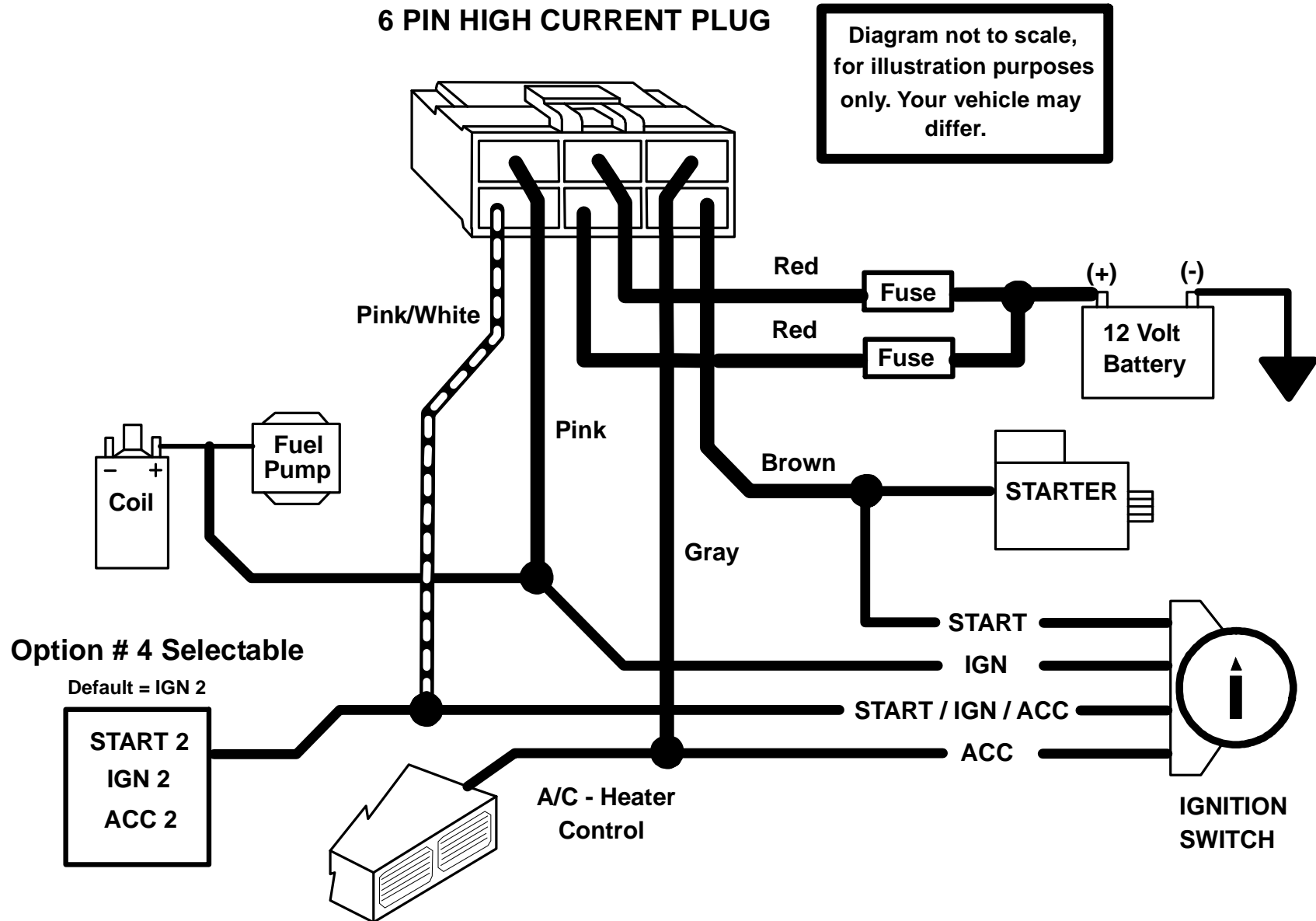
PINK: 12V IGNITION OUTPUT 20A:
Connect to circuit in the vehicle that provides true Ignition Power for systems such as Spark and Fuel. Typically, this wire turns ON with the second position of the key, STAYS ON WHEN CRANKING, and continues ON as the vehicle runs.

PINK / WHITE: 12V MULTIFUNCTION OUTPUT 20A (Option 4):
This is an optional multi-function output wire the can be configured as a Second IGN, ACC or STARTER output. Use Option #4 to select ACC, IGN or STARTER. The DEFAULT setting is IGNITION.

6 PIN HIGH CURRENT PLUG

Diagram not to scale, for illustration purposes only. Your vehicle may differ.

Pink/White

Red

Fuse

(+) (-)

Red

Fuse

12 Volt Battery

Coil

Fuel Pump

Pink

Brown

STARTER

Gray

START

Option # 4 Selectable

Default = IGN 2

IGN

START / IGN / ACC

START 2
IGN 2
ACC 2

ACC

A/C - Heater Control

IGNITION SWITCH

DATA PORT

This unit includes DP Technology that will allow you to directly Plug-In our Data Port Bypass Modules. There are 2 types of Protocol, OFA series and SL series modules. The default is set for SL series Protocol. Please refer to Databus module manual for detail instructions. The Data Port Protocol must be programmed for the correct module.

See Option # 5 on page 15 for programming Data Port

Some vehicles require a Databus Module to Bypass the factory Immobilizer and operate the keyless entry

Databus modules are used to communicate with the vehicles computer at the OBD2 Data connector or Canbus wires. This reduces installation error. Crimestopper Systems with DP Series have a direct Data Port Plug-In for the Databus bypass module. This eliminates conventional wiring between the Alarm/Remote Starter and the bypass interface module.

Features Include

- Transponder Immobilizer.
- PassLock Immobilizer.
- O.E.M. Alarm Control.
- R.A.P. Shutdown.
- Power Door Locks.
- Priority Unlock.
- Trunk Release.
- Parking Lights.
- Courtesy Lights.
- Brake Pedal and Hand Brake
- Hood, Door and Trunk Status
- Tachometer.
- Heated Seats.
- Rear Defrost.
- Driver 1 and 2 Memory presets.

The actual features controlled depend on the vehicle and Databus module.

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