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FOR TECHNICAL ASSISTANCE

www.bulldogsecurity.com
800-878-8007
225 Technology Way
Steubenville, OH 43952

YOUR WARRANTY

Here's how your warranty works:

Access 2 Communications (A2C) warrants to the original customer, and the original car a limited lifetime warranty. Within 12 months of purchase, A2C will repair or replace, our option, any defective system at no charge. After 12 months from date of purchase, A2C will, at our option, repair or replace the system for a \$30 shipping and handling fee.

Installation, labor, removal and reinstallation are not the responsibility of A2C. Registration must be completed and sent in within fourteen (14) days of purchase in order to validate the warranty. A2C makes no warranty against the theft of a vehicle or its contents. This warranty is not to be construed as an insurance policy against loss.

DISCLAIMER

A2C disclaims the warranty of merchantability and fitness for any particular use. This disclaimer shall be effective as to all claims of any kind made by or through any wholesaler, retailer, consumer or any other person or entity. Some states do not permit the disclaimer of implied warranties in some sales. Hence, this disclaimer may not apply to you.

LIMITATION OF REMEDIES

Consumer's remedy is limited to repair or replacement of the unit, and in no event shall exceed the purchase price. Incidental, consequential and/or indirect damages are expressly disclaimed. NO person or entity is authorized to alter, amend or increase this limited warranty.

WARRANTY VALIDATION

PLEASE FILL OUT THIS FORM TO REGISTER YOUR WARRANTY

Your Name _____

Address _____

Dealer Name _____

Address _____

Date of Purchase ___/___/___ Model # _____

Make/Model of Car _____

Year of Car _____ V.I.N. # _____

Final Quality Check By _____

Mail to: Access 2 Communications
225 Technology Way • Steubenville, Ohio 43952

PROGRAMMING FUNCTIONS FOR YOUR WALLET OR GLOVE BOX

ATTENTION:

We urge you to immediately place this card in your wallet.

Adding Additional Remotes Press and hold brake. Next, press and hold Button #1 on the working remote until the parking lights flash once. Release. Press and release Button #4 on the new remote. The parking lights will flash three (3) times confirming that the new remote was learned. **Cold Start On and Off (Degree Select)** Press and hold brake. Press and hold Button #2 until the parking lights flash twice. Release. Press and hold Button #2. Each parking light flash is a progression in degrees. Flash #1 is -40°F, flash #2 is -30°F, flash #3 is -20°F, flash #4 is -10°F, flash #5 is 0°F, flash #6 is +10°F, flash #7 is +20°F. Two rapid parking light flashes is Cold Start Off. Release the brake, the parking lights will flash three (3) times. **NOTE:** Factory setting is OFF. **Tach Mode - ON** Press and hold brake. Press and hold Button #3, the parking lights will flash three (3) times. Release. Press and release Button #4, the parking lights will flash twice. The Tach Start is programmed ON. Release the brake, the parking lights will flash three (3) times. **Tachless Mode - ON** Press and hold brake. Press and hold Button #3, the parking lights will flash three (3) times. Release. Press and release Button #4, the parking lights will flash once. The Tachless Start is programmed ON. **NOTE:** Factory setting is Tachless Start ON. Release the brake, the parking lights will flash three (3) times. **Programming Runtime with Brake not Pressed** Press and hold Button #4. The parking lights will flash once for every five (5) minutes you want to program. Release button at desired runtime. Maximum length, 15 minutes.

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Protected by one or more
of the following patents:

Patent #08528768 Patent #5477090
Patent #55459447 Patent #5677664
Patent #60087174 Patent #60097821
Patent #5886622 Patent #5942988
Other patents pending.

SYSTEM FEATURES

2 Four-Button Extended Range Remote Controls	Remotely start your car to run the heater, air conditioning or defroster from an extended distance.
Keyless Entry	Remotely locks and unlocks your power door locks.
Built In Alarm Features	Provides door, hood and impact protection.
Horn and Siren Output	Lets you choose between the vehicle's factory horn or an optional six tone siren.
Starter Immobilizer	When the alarm is armed, this option breaks the starter wire in half so the vehicle cannot be hotwired.
Door Trigger Protection	Provides protection when doors are opened.
Shock Sensor Input	Provides an additional input so an external sensor can be added to provide extra protection.
Trunk Release/Sliding Door	Remotely open your power trunk or your power sliding van door with a push of a button.
Remote Programmable Run Time	Remotely program your vehicle to run 5 to 25 minutes.
Ignition Controlled Door Locks	A programmable feature that locks and unlocks the doors when the brake is pressed or the ignition is cycled.
Run Time Confirmation	Remotely check the programmed run time of 5, 10, 15, 20 or 25 minutes.
Tach/Tachless Option	A programmable feature that lets you choose from the easy to install tachless operation or the wire-in, tach operation.
Parking Light Confirmation	Confirms that your vehicle has received a remote signal and will remain on if the engine is remotely started.
Dome Light Supervision	Never walk up to a dark vehicle again. When unlocking the doors by remote control, the dome light will come on and stay on for 1 minute. This feature will shut off when you activate the ignition switch or step on the brake.
Automatic Hot and Cold Start	Remotely program your car to start at a preset temperature. Automatically starts your car in extreme temperatures.
Automatic Start	Remotely program your car to start every 3 hours regardless of temperature.
Pit Stop Mode	Allows you to exit the vehicle while the engine remains running without leaving the key in the ignition switch.
Extended Range	Allows you to operate your system from up to 800 feet away.
Code Learning	Allows your remote starter/alarm to learn new remotes, should you want to add remotes, or if remotes are lost.
Limited Lifetime Warranty	Guarantees life-long protection.

SYSTEM COMPONENTS

Your system includes:

- 2- Four Button Remote Transmitters
- 1- Main Control Module
- 1- 16-Pin Wire Harness
- 1- 5-Pin Door Lock Harness
- 6- Heavy Gauge Wires w/ Spade Connectors
- 1- Hood Pin Switch
- 1- Extended Range Antenna
- 2- Window Antenna Clips
- 1- Warranty

- 1-Warning Sticker for Under the Hood
- 2-Bulldog Window Decals
- 1-Installation & Operation Guide
- 1-Bonus Installation Kit (with selected models including)
 - Installation Video
 - Computer-friendly Test Light
 - Electrical Tape
 - Wire Ties
 - Razor Knife



800-878-8007

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OPERATING FUNCTIONS FOR YOUR WALLET OR GLOVE BOX

ATTENTION:

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Starting with the Remote Transmitter Press and release button #1. The parking lights will flash once, confirming the car starter received the signal. The car will then start and the parking lights will remain on while the vehicle is running. To shut off the engine before the preset time, press button #4 or press the brake pedal. **NOTE:** If your car does not start on the first crank it will automatically attempt to start 2 more times (in tachless mode). While in tachless mode, parking lights will wait approximately 10 seconds before turning on. **Pit Stop: Exiting the Car with the Engine Running** Make sure the transmission is in park and press button #1 before turning the ignition switch off. **Keyless Entry Operation** Press button #2, the parking lights will flash once and the doors will lock. Press button #2 again, the parking lights will flash twice, the doors will unlock, and the parking lights will remain on for one minute or until you turn the ignition on or press the brake. **Dome Light Option** (optional) The dome light will remain on for one minute or until you turn the ignition on or press the brake. **Trunk Release Output** Optional output modules are available to do one of the following: open the trunk open your sliding door, roll up the windows, close the sun roof etc. This output will pulse .75 seconds when pressed and released. In instances where a continuous signal is needed such as sun roof and power windows, hold down button #3 as long as the signal is needed. The parking lights will remain on as long as this button is being pressed. **Runtime Confirmation** Press and release Button #4. The parking lights will begin to flash. Each flash equals 5 minutes of runtime.

VEHICLES WITH FACTORY ANTI-THEFT SYSTEMS

Manufacturer	Model/Year	Anti-theft
FORD (cont.)	F150/250 98+	TRANSPONDER
	RANGER 99+	TRANSPONDER
	TAURUS 96+	TRANSPONDER
	WINDSTAR 2000+	TRANSPONDER
GMC	DENALI 99+	PASSLOCK 2
	ENVOY 99+	PASSLOCK 2
	S-15 JIMMY 98+	PASSLOCK 2
	SAFARI 98+	PASSLOCK 2
	SIERRA 98+	PASSLOCK 2
	SONOMA 98+	PASSLOCK 2
	SUBURBAN 98+	PASSLOCK 2
	YUKON 98+	PASSLOCK 2
HONDA	YUKON XL 2000+	PASSLOCK 2
	ACCORD 98+	TRANSPONDER
	ODYSSEY 98+	TRANSPONDER
INFINITI	PRELUDE 98+	TRANSPONDER
	S2000	TRANSPONDER
	I30 98+	TRANSPONDER
	Q45 98+	TRANSPONDER
JAGUAR	QX4 98+	TRANSPONDER
	ALL 98+	TRANSPONDER
JEEP	GRAND CHEROKEE 99+	TRANSPONDER (GREY KEY ONLY)
	WRANGLER 99+	TRANSPONDER (GREY KEY ONLY)
LEXUS	ALL 97+	TRANSPONDER
	CONTINENTAL 97+	TRANSPONDER
LINCOLN	LS 2000+	TRANSPONDER
	MARK VIII 97+	TRANSPONDER
MERCEDES	NAVIGATOR 97+	TRANSPONDER
	TOWN CAR 97+	TRANSPONDER
	ALL 97+	TRANSPONDER
	COUGAR 99+	TRANSPONDER
MERCURY	MOUNTAINEER 98+	TRANSPONDER (Some)
	MYSTIQUE 97+	TRANSPONDER (Some)
NISSAN	SABLE 96+	TRANSPONDER
	MAXIMA 98+	TRANSPONDER
	ACHIEVA 95+	PASSLOCK 1
	ALERO 99+	PASSLOCK 2
	AURORA 95+	VATS
	BRAVADA 98+	PASSLOCK 2
	CUTLASS 97+	PASSLOCK 2
	NINETY-EIGHT	VATS
	SILHOUETTE 99+	TRANSPONDER
	BONNEVILLE 89+	VATS
PONTIAC	FIREBIRD 88+	VATS
	GRAND AM 96-98	PASSLOCK 1
	GRAND AM 99+	PASSLOCK 2
	GRAND PRIX 92-96	VATS
	MONTANA 99+	TRANSPONDER
	SUNFIRE 96-99	PASSLOCK 1
	SUNFIRE 2000+	PASSLOCK 2
	ALL 97+	TRANSPONDER
PORSCHE	ALL 97+	TRANSPONDER
	SAAB	FACTORY
	SATURN	TRANSPONDER
TOYOTA	2000+	TRANSPONDER
	AVALON 98+	TRANSPONDER
	CAMRY 98+	TRANSPONDER
	LAND CRUISER 98+	TRANSPONDER
	SOLARA 99+	TRANSPONDER
VOLKSWAGON	SUPRA 98+	TRANSPONDER
	BEETLE 98+	TRANSPONDER
	GOLF 98+	TRANSPONDER
	PASSAT 98+	TRANSPONDER
VOLVO	ALL 98+	TRANSPONDER

REQUIRED TOOLS

Unless your remote starter/alarm includes a Bonus Installation Kit you will need the following items: a sharp knife, electrical tape and a computer-friendly test light or volt meter. A 5/16 inch drill bit may be needed to install the hood pin switch. If the bottom of your dash on the driver's side will come off, you must remove it. If this is the case a screwdriver or a wrench may be needed.

TECHNICAL ASSISTANCE

Should you need help. First check our website at www.bulldogsecurity.com or call our toll-free Tech Support Hotline Monday through Friday 9 AM-5:30PM EST at 800-878-8007.

You must give the following information:

- Name
- Telephone Number with Area Code (Fax number if applicable)
- Year, Make, and Model of the vehicle
- The model you are installing
- The type of assistance you are requesting

If you give the above information you will be called back as soon as possible.

Please do not skip any steps.

BEFORE YOU BEGIN

If your vehicle has an anti-theft system, you will need an additional module, see vehicle wiring information on our website.

Congratulations, you have purchased one of the most advanced remote starter/alarms systems ever made. Your new remote starter/alarm is a technological breakthrough utilizing the most advanced, state of the art technology and components. It is computer controlled and manufactured in the U.S.A. The dependability and variety of features make Bulldog Security the leader in the industry. Enjoy your new remote starter for years to come!

This remote system is designed to start your vehicle by sending a command signal from the remote transmitter. It is important that your installation be done in a well-ventilated area. It is the responsibility of the owner to ensure that the remote system is not used to start the vehicle in an undesired location.

It is recommended that a carbon monoxide detector be installed in the living area near a location where the vehicle may be garaged.

Since there are many different makes and models of vehicles, look at the wiring chart on our website, www.bulldogsecurity.com.

Read this manual thoroughly before starting the installation.

TACH/TACHLESS OPERATION

In most cases the decision to go with tachless mode will save time during the installation. If your vehicle is hard-starting then you should use tach mode.

MAKE SURE YOU PLACE

THE WARNING STICKER UNDER YOUR HOOD.

PRECAUTIONS

This system is designed for use with vehicles equipped with fuel-injected, gasoline engines with automatic transmissions only.

SAFETY FIRST!

Never start your vehicle if it is indoors, if the keys are in the ignition and unless you're sure the car is in park. A periodic safety check is recommended to ensure that your system is in proper working order.

DO NOT use mechanical wiring connections, such as crimp or snap together taps. Follow instructions on page 6-8.

DO NOT disconnect the battery if the vehicle has an anti-theft-coded radio or is equipped with an airbag. Doing so may cause a warning light to be displayed and may require a trip to the dealer to be corrected.

DO NOT leave the interior or exterior lights on for an extended period of time as it may cause battery drain. Remove the dome light fuse from the fuse box. **NOTE:** Starter systems do not work well with a partially discharged battery.

DO NOT mount the control module until all connections have been made and tested. Using wire ties or double sided tape, MOUNT THE MODULE UNDER THE DASH.

WARNING!

GENERAL MOTORS REAR WHEEL DRIVE VEHICLES AND DODGE DAKOTAS
All General Motors rear wheel drive vehicles and Dodge Dakotas built prior to 1996 do not have an electrical Neutral Safety switch. They have a mechanical neutral safety switch. The mechanical neutral safety switch operates as follows.

- The key will only turn to start position when the gear selector is in park or neutral.
- The key can only be removed from the ignition switch when the gear selector is in the park position.

You must use special precautions with this system. For more information see pages 12-13.

USING YOUR TEST PROBE

To operate your test probe, connect the black clip to a good chassis ground. Connect the red clip to a good 12V positive source. If the test probe is connected correctly, both the green and the red lights will be dimly illuminated. If a positive source is probed, the red light will glow bright and the green light will go out. If a negative source is probed, the green light will glow bright and the red light will go out.

MAKING CONNECTIONS

NOTE: In most cases you should not cut your vehicle wire in two. If it is necessary to cut a factory wire, see Making End to End Connections on page 8.

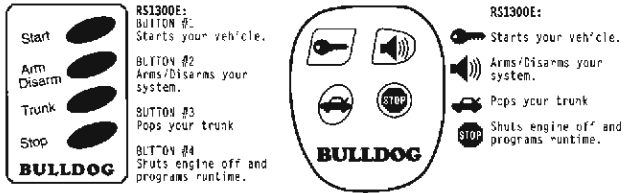
- Strip back two inches of insulation on the wire from the remote starter.

Two Inches of Bare Wire

VEHICLES WITH FACTORY ANTI-THEFT SYSTEMS

Manufacturer	Model/Year	Anti-theft	
Acura	TL 99+	TRANSPONDER	
	CL 98+	TRANSPONDER	
	RL 99+	TRANSPONDER	
	INTEGRA 00 +	TRANSPONDER	
AUDI	NSX	TRANSPONDER	
	A4 00+	TRANSPONDER	
	A6 00+	TRANSPONDER	
	A8 98+	TRANSPONDER	
BMW	ALL 97+	TRANSPONDER	
	CENTURY 97+	VATS	
	LESABRE 90-96, 2000	VATS	
	PARK AVE 91-96	VATS	
	PARK AVE 97+	TRANSPONDER	
	REGAL 93-96	VATS (Some)	
	RIVIERA 93-99	VATS (Some)	
	ROADMASTER 93-96	VATS	
	SKYLARK 96-98	PASSLOCK 1	
	ALLANTE 91-93	VATS	
CADILLAC	BROUGHAM 90-96	VATS	
	CATERA 98+	TRANSPONDER	
	DEVILLE 92-96	VATS	
	DEVILLE 99+	TRANSPONDER	
	ELDORADO 89-98	VATS	
	ELDORADO 99+	VATS	
	ESCALADE 99+	PASSLOCK 2	
	FLEETWOOD 90-96	VATS	
	SEVILLE 90-98	VATS	
	SEVILLE 99+	TRANSPONDER	
CHEVROLET	SLS/ STS 97+	TRANSPONDER	
	ASTRO 98+	PASSLOCK 2	
	BLAZER 98+	PASSLOCK 2	
	CAMARO 86+	VATS	
	CAVALIER 95-99	PASSLOCK 1	
	CAVALIER 2000+	PASSLOCK 2	
	CORVETTE 88+	VATS	
	EXPRESS 98+	PASSLOCK 2	
	IMPALA 2000+	PASSLOCK 2	
	LUMINA 96+	VATS	
CHRYSLER	MALIBU 97+	PASSLOCK 2	
	MONTE CARLO 96-99	VATS	
	MONTE CARLO 2000+	PASSLOCK 2	
	FULL-SIZE PU 98+	PASSLOCK 2	
	S-10 98+	PASSLOCK 2	
	SAVANNAH 98+	PASSLOCK 2	
	SUBURBAN 98+	PASSLOCK 2	
	TAHOE 98+	PASSLOCK 2	
	VAN 98+	PASSLOCK 2	
	VENTURE 99+	TRANSPONDER	
DODGE	CONCORD 98+	TRANSPONDER	
	LHS 98+	(GREY KEY ONLY) TRANSPONDER	
	SEBRING CONV. 98+	(GREY KEY ONLY) TRANSPONDER	
	300M 99+	(GREY KEY ONLY) TRANSPONDER	
	INTREPID 98+	(GREY KEY ONLY) TRANSPONDER	
	NEON 2000+	(GREY KEY ONLY) TRANSPONDER	
	FORD	CONTOUR 97+	(GREY KEY ONLY) TRANSPONDER
		CROWN VIC 98+	(Some) TRANSPONDER
		EXCURSION 2000+	TRANSPONDER
		EXPEDITION 97+	TRANSPONDER
EXPLORER 97+		TRANSPONDER	
FOCUS 2000+		TRANSPONDER	
MUSTANG 98+	TRANSPONDER		

HOW TO USE YOUR REMOTE TRANSMITTER



Starting the Vehicle with the Remote Transmitter

Press and release button #1 (start). The parking lights will flash once, confirming the car starter received the signal. The car will then start and the parking lights will turn on and remain on while the vehicle is running. To shut off the engine before the preset time, press Button #4, press the brake pedal or open the hood. **NOTE:** In tachless mode, parking lights will wait approximately 10 seconds before turning on after the vehicle is running.

Pit Stop: Exiting the Car with the Engine Running

Make sure the transmission is in park; press Button #1 before turning the ignition switch off. (The engine will remain running for the preset time.)

Keyless Entry Operation

Press Button #2, the system will arm, the doors will lock and the parking lights will flash once. Press Button #2 again, the system will disarm, the doors will unlock and the parking lights will flash twice. The parking lights will remain on for one minute or until you turn the ignition on and press the brake.

Dome Light Option

The remote starter includes an optional output that can be used to operate the dome light when pressing Button #2, unlock your power door locks. The dome light will remain on for one minute or until you turn the ignition on or press the brake.

Trunk Release Output

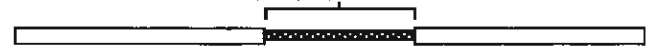
The remote car starter includes an optional output from our unit that with a press and release of **Button #3** will give a pulse of (+) positive voltage or (-) negative voltage (depending on the dipswitch settings) for .75 seconds and if **Button #3** is held down, this output will hold (+) positive voltage on this wire until Button #3 is released. The parking lights will remain on for as long as this button is held down. With a momentary press of this button the parking lights will flash once. This output can be used to operate a power trunk release, power sliding doors, rear lift gates, or operate a power sunroof.

Runtime Confirmation (Engine Not Running)

To check programmed runtime, press and release Button #4, the parking lights will flash for the programmed length of time. Each flash will equal 5 minutes of runtime. **Example:** Three parking light flashes represents 15 minutes of runtime.

MAKING CONNECTIONS (CONT.)

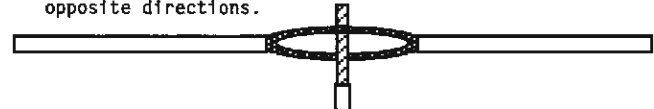
- Strip back one inch of insulation on the wire you need to connect to. One Inch of Bare Wire



- Separate the vehicle wire as shown. Make the separation large enough to fit the other wire through.



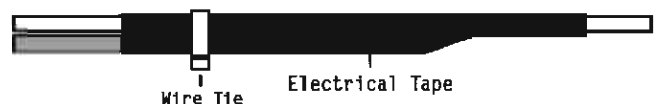
- Insert the wire(s) from the starter through the hole as shown. If two or more wires are inserted, wrap them in opposite directions.



- Wrap the wire around one side then the other and finally around itself as shown.



- Use electrical tape to wrap. Be sure to cover the wire about two inches on either side of the connection. First pull the wire that you have just connected along side the wire you connected to, tape and wire tie them together. Use this method for all connections.



CAUTION: All wires must be wrapped with tape and wire tied.

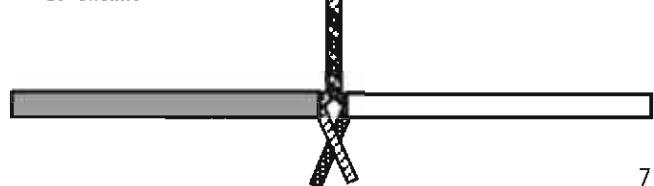
MAKING END TO END CONNECTIONS

Use this method **ONLY** when connecting two separate wires end to end.

- When tying two separate wires together at their ends, strip back one inch of insulation on both wires and separate the strands of wire as shown below.

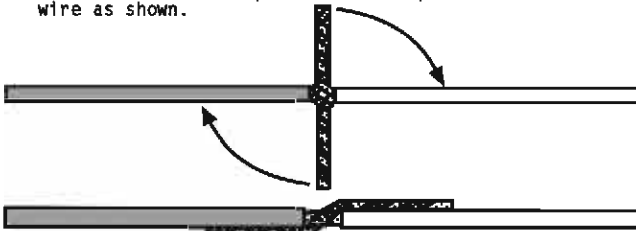


- Twist upper wires together, twist lower wires together as shown.

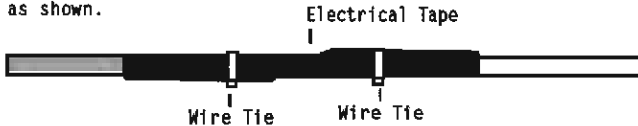


MAKING CONNECTIONS (CONT.)

3. Lay upper twisted pair of wires over right wire as shown. Bring lower twisted pair of wires up to meet the left wire as shown.



4. Use electrical tape to wrap, be sure to cover about 2 inches on either side of connection. Secure with wire ties as shown.



Use this method **ONLY** when connecting two separate wires end to end.

LOCATING & MAKING CONNECTIONS

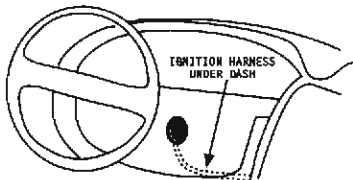
Please see the wiring chart for your vehicle on our website at www.bulldogsecurity.com

Most of the wires you will be using will be in a taped or nylon sleeve coming from the ignition switch. You must find and remove about six inches of this outer covering for testing and connecting.

CONSTANT POWER (+12V, key in any position including off)

Make all connections as close to the ignition switch as possible. These wire(s) are in your vehicle's main ignition harness, usually located in the steering column coming from the ignition switch. Probe each wire with your provided test probe. The correct wire(s) will show +12V and the RED light will glow bright on the test probe when the ignition switch is in these 5 positions (ACC-LOCK-OFF-RUN-CRANK).

1. If your vehicle has only (1) constant power wire, attach both heavy gauge RED wires to it.
2. If your vehicle has (2) constant power wires, attach one RED wire to each.



OPERATOR PROGRAMMING INSTRUCTIONS

Dual Pulse Door Lock

If your vehicle requires a Dual Pulse Lock output to lock the doors or to arm your factory alarm, you must program your unit to do this. Press and hold the brake pedal, press and hold **Button #3** until the parking lights flash three (3) times. Release **Button #3** then press **Button #3** again and release. The parking lights will flash once the unit is now programmed to dual pulse the lock output. Release the brake and the parking lights will flash three (3) times. To turn Dual Pulse Lock off, repeat the above steps, then when you press and release **Button #3**, the parking lights will flash twice. Release, the brake and the parking lights will flash three (3) times.

Dual Pulse Door Unlock

If your vehicle requires a Dual Pulse Unlock output to unlock the doors or to disarm your factory alarm, you must program your unit to do this. Press and hold the brake pedal, press and hold **Button #4** until the parking lights flash four (4) times. Release **Button #4** then press **Button #3** and release. The parking lights will flash once the unit is now programmed to dual pulse the unlock output. Release the brake and the parking lights will flash three (3) times. To turn Dual Pulse Unlock off, repeat the above steps, then when you press and release **Button #3**, the parking lights will flash twice. Release the brake, the parking lights will flash three (3) times.

Programming Doorpin Inputs

Press and hold the brake, then press and hold **Button #4**, the parking lights will flash (4) times, release. Now press and release **Button #1**. The parking lights will flash once, the unit is now programmed for a (+) positive doorpin. Press and release **Button #1** again, the parking lights will flash twice, the unit is now programmed for a (-) negative doorpin.

Programming Runtime

Press and hold **Button #4**. The parking lights will flash once for every five (5) minutes you want the engine to run. Release button at desired runtime. Maximum length, 25 minutes.

Clearing the Memory of the Unit

Press and hold the brake pedal, now cycle the key in the ignition switch from OFF to RUN (not start) five 15 times as fast as you can. Release the brake and try the remote. The unit should not function with the remote. If the unit does not function, unplug the unit from both harnesses, wait one (1) minute and plug it back in. Press **Button #4** (stop) the parking lights will flash three (3) times, the unit is now back to factory default and ready to operate. If memory does not clear, check to see if the heavy gauge WHITE wire is on the proper ignition wire.

OPERATOR PROGRAMMING INSTRUCTIONS

Tach Mode - ON

Press and hold the brake pedal. Press and hold **Button #3** until the parking lights flash three (3) times. Release. Press and release **Button #4**, the parking lights will flash twice. Release the brake, the parking lights will flash three (3) times. The unit is now programmed for Tach Mode. **NOTE:** Factory setting is Tachless Start ON.

Tachless Mode - ON

Press and hold the brake pedal. Press and hold **Button #3** until the parking lights flash three (3) times, release, press and release **Button #4**, the parking lights will flash once. Release the brake, the parking lights will flash three (3) times. The unit is now programmed for Tachless Mode.

Tach Learn

To program your unit to Learn your tach signal. Press and hold the brake pedal, now press and hold **Button #2** until the parking lights flash twice. Release **Button #2**. Turn your ignition key to the RUN or ON position while still holding the brake, press and hold **Button #4** until the vehicle starts. After the engine starts, release **Button #4** to disengage the starter. Release the brake and turn the ignition OFF. After the Tach Learn is complete, the unit will flash the parking lights once to show that the Tach Learn is now programmed. Now try the remote starter, to be sure there is no over crank and the unit does crank long enough.

Programming Lock with Brake, Unlock with Ignition Off

Press and hold the brake, then press and hold **Button #3** (trunk) until the parking lights flash three (3) times. Release **Button #3**. Press and release **Button #2**, the parking lights will flash once. The unit will now lock with the brake and unlock when the ignition is turned off. Press and release **Button #2** again, the parking lights will flash twice. The Lock with Brake feature is now turned off. Release the brake, the parking lights will flash three (3) times. The programming is now entered. **NOTE:** Factory setting is Lock with Brake off.

Door Lock Pulse Length (Long) (For European type door locks)

Press and hold brake. Next, press and hold **Button #3**, the parking lights will flash three (3) times, release, press and release **Button #1**. The parking lights will flash once, the door lock pulse length will be 3.5 seconds. Release the brake, the parking lights will flash three (3) times.

Door Lock Pulse Length (Short) (For domestic type door locks)

Press and hold brake. Next, press and hold **Button #3**, the parking lights will flash three (3) times, release, press and release **Button #1**. The parking lights will flash twice, the door lock pulse length will be 0.7 seconds. Release the brake, the parking lights will flash three (3) times. **NOTE:** Factory setting is SHORT pulse length.

LOCATING & MAKING CONNECTIONS

IGNITION WIRE(S) (+12V in run and crank position only)

Make all connections as close to the ignition switch as possible.

The ignition wire(s) are also located in the main harness coming from the ignition switch. Check your chart for probable colors and probe each wire with your provided test probe. The correct wire(s) will show +12V and the RED light will glow bright **only** when the ignition switch is in the RUN AND CRANK positions. The correct wires will not show +12V when in the OFF or ACCESSORY position. Most Ford, GM, and Chrysler vehicles have at least two (2) ignition wires. Most foreign vehicles have only one (1).

1. If your vehicle has only one (1) ignition wire, as most 1993 and older domestic and import vehicles do, connect the heavy gauge WHITE wire to it.
2. If your vehicle has two (2) ignition wires, as most 1994 and newer vehicles do, connect the heavy gauge RED with WHITE stripe wire to the Ignition 2 wire.
3. If your vehicle has three (3) ignition wires, as some newer GMs, Fords and Chryslers do, connect the heavy gauge WHITE wire to the third ignition along with the Ignition 1 wire.

ACCESSORY WIRE(S) THAT POWER THE HEATER/BLOWER MOTOR

(+12V in run or on positions) This wire is also in the main ignition switch harness. **Make this connection as close to the ignition switch as possible.**

Most vehicles will have one (1) accessory wire; however some Fords, newer GM vehicles and Chrysler 94 and up will have two (2) or more accessory wires. Check your wire color chart and then verify these wire(s). The correct wire(s) will show +12V and the RED light will glow bright when the ignition switch is in the RUN or ON positions. This wire(s) will not show +12V when the ignition switch is in any other position.

1. If your vehicle has only one (1) accessory wire connect the heavy gauge WHITE WITH BLACK STRIPE wire to this wire.
2. If your vehicle has two (2) accessory wires, connect the WHITE WITH BLACK STRIPE wire to both accessory wires.
3. If your vehicle has three (3) accessory wires, connect the WHITE WITH BLACK STRIPE wire to all three.

STARTER/CRANK WIRE (+12V in the start position only)

Make all connections as close to the ignition switch as possible.

The starter/crank wire is also in the main harness. Check your chart for probable colors and verify the wire. The correct wire(s) will show +12V and the RED light will glow bright **only** in the crank position. This wire will not show +12V in any other position. Attach the YELLOW WITH BLACK STRIPE wire to it. **NOTE:** Most Nissans will have two (2) starter/crank wires. Both must be connected to the YELLOW WITH BLACK STRIPE wire.

CHASSIS GROUND

Locate an easy to get to bolt or screw located under the driver's side of the dash and attach the BLACK ground wire from the 16-pin harness securely as pictured. A good ground is vital for your system to operate correctly.



Note: Remove any paint below the spade connector.

LOCATING & MAKING CONNECTIONS

FACTORY ALARM SHUT DOWN WIRE (FASD)

If your vehicle is equipped with a factory alarm system (as most vehicles with a factory keyless entry are) and you can disarm your factory alarm by using the key in the door you will need to use the FASD wire. Probe for a small gauge wire (usually found in the driver's side kick panel) that shows ground when the door lock cylinder is turned to the unlock position using the door key. This wire will usually show a positive voltage before turning the key. **NOTE:** Some factory disarm wires remain neutral (shows no voltage) before you turn the key to unlock instead of +12V positive. Connect the **RED WITH BLACK STRIPE** wire from the 16-pin harness to this wire.

IGNITION OUTPUT (-) (Security bypass activation wire)

This wire will be used to operate the security bypass module. This **WHITE** wire holds a ground output the entire time the remote starter is activated. Connect this wire to the negative activation wire on the bypass module to control when the bypass is on and off.

HOOD PIN SWITCH (-)

This feature will keep the engine from starting, or shut off the engine when the hood is opened. Locate a good chassis ground, if at all possible do not install the pin switch in the rain gutter. Drill a 5/16 hole, insert the pin switch into the hole and tighten. Check for the hood adjustment, there is approximately 1/4" adjustment in the pin switch. Close the hood easy, making sure that the pin switch is not keeping the hood from closing all the way. If it does, cut off approximately 1/8" of the black plastic off of the top of the hoodpin switch and try closing the hood again. Check to make sure that the hoodpin switch remains neutral when the hood is closed and shows ground when the hood is open. Route the **BLACK WITH BLUE STRIPE** wire from the 16-pin harness through the firewall and plug it into the bottom of the hood pin switch.

BRAKE INPUT (+)

The brake wire is located on the brake switch near or above the brake pedal. The correct wire will show +12V and the **RED** light will glow bright only when the brake is pressed. Connect the **BLUE WITH BLACK STRIPE** from the 16-pin harness to this wire.

TACH INPUT (Optional)

If you have chosen the TACHLESS start option, simply proceed to the next step and skip the following instructions. Make sure to tape the **BLACK WITH WHITE STRIPE** wire if not used. For TACH mode connect the **BLACK WITH WHITE STRIPE** wire from the 16-pin harness to the negative side of the coil or the tach wire at the coil pack under the hood. To find the coil pack follow the spark plug wires back to their beginning point. To operate in tach mode, make sure to program Tach Mode On. See programming, page 20.

OPTIONAL FEATURES (CONT.)

AUXILIARY INPUT (-)

If you wish to use this starter with an aftermarket alarm, connect the **BLUE** wire from the 16-pin harness to the second or third channel (-) output of your existing alarm. When the output is activated, a (-) signal will be supplied to the remote starter which will start the vehicle.

OPERATOR PROGRAMMING INSTRUCTIONS

Adding Additional Remotes

Press and hold brake. Next, press and hold **Button #1** on the working remote until the parking lights flash once. release. Press and release **Button #4** on the new remote. The parking lights will flash three (3) times confirming that the new remote was learned.

Cold Start On and Off (Degree Select)

Press and hold brake. Next, press and hold **Button #2** until the parking lights flash twice, release, press and hold **Button #2**. Each parking light flash is a progression in degrees. Flash #1 is -40°F, flash #2 is -30°F, flash #3 is -20°F, flash #4 is -10°F, flash #5 is 0°F, flash #6 is +10°F, flash #7 is +20°F. Two rapid flash parking light flashes is Cold Start Off. Release the brake, the parking lights will flash three (3) times. **NOTE:** Factory setting is OFF.

Hot Start (Degree Select)

Press and hold the brake, then press and hold **Button #2** (arm/disarm) until the parking lights flash twice. Release **Button #2**. Press and hold **Button #3**, the parking lights will flash once. Each continuous flash represents a progression in degrees: one (1) flash= 160°F, two (2) flashes=150°F, three (3) flashes=140°F, four (4) flashes=130°F, five (5) flashes=120°F, six (6) flashes=110°F. To disable Hot Start, press and hold **Button #3** until the parking lights flash six (6) times, then two (2) quick flashes 7 and 8. The Hot Start is now disabled. Release the brake, the parking lights will flash three (3) times, the programming is now entered. **NOTE:** The factory setting is Hot Start off. **NOTE:** Only Cold and Hot Start functions can be enabled at the same time. If **Button #1** is pressed for programming, Cold/Hot Start is disabled. When **Buttons #2** and **#3** are pressed, then the Automatic and Low Voltage Starts are disabled.

Automatic Start - On

Press and hold brake. Press and hold **Button #2** until the parking lights flash twice. Release. Press and release **Button #1**. The parking lights will flash once. The automatic start is programmed ON. Release the brake, the parking lights will flash three (3) times. **NOTE:** Factory setting is OFF.

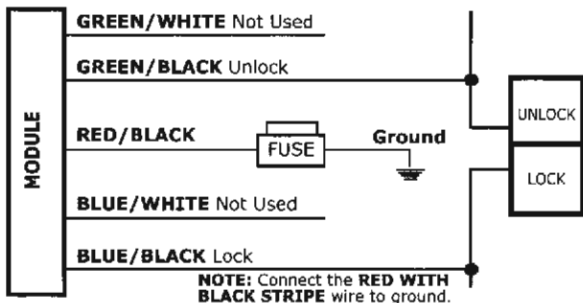
Automatic Start - Off

Press and hold brake. Press and hold **Button #2** until the parking lights flash twice. Release. Press and release **Button #1**. The parking lights will flash twice. The automatic start is programmed OFF. Release the brake, the parking lights will flash three (3) times. **NOTE:** Factory setting is OFF.

For more detailed information, visit www.bulldogsecurity.com or contact Technical Support at 800-878-8007.

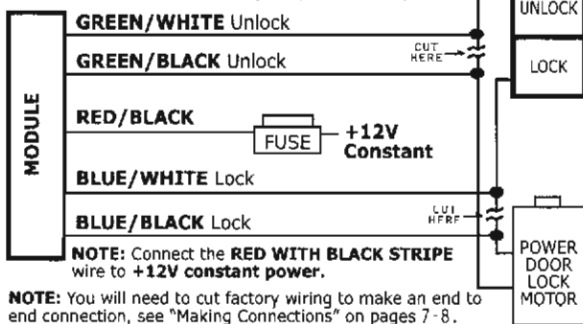
OPTIONAL FEATURES

"Type B" (-) Negative (5-pin harness)



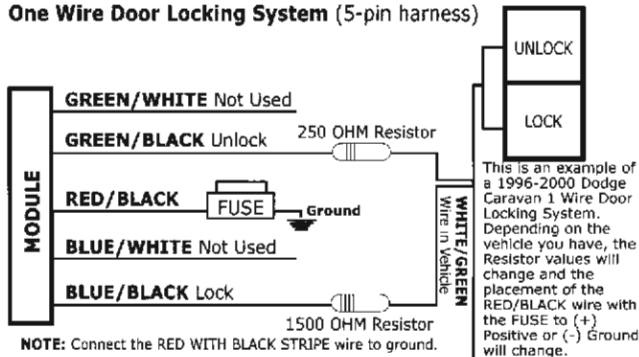
NOTE: Once you have made the connections for the 5-pin door lock harness, you will need to plug the door lock harness into the main module 5-pin plug on the front of the unit.

"Type C" Reverse Polarity (5-pin harness)



NOTE: You will need to cut factory wiring to make an end to end connection, see "Making Connections" on pages 7-8.

One Wire Door Locking System (5-pin harness)



This is an example of a 1995-2000 Dodge Caravan 1 Wire Door Locking System. Depending on the vehicle you have, the Resistor values will change and the placement of the RED/BLACK wire with the FUSE to (+) Positive or (-) Ground will change.

LOCATING & MAKING CONNECTIONS

PARKING LIGHTS (+) or (-) Output / BROWN WIRE

CAUTION: Please check the position of the switch before the wire connection is made. You may cause damage to the control module if the incorrect switch polarity is chosen.

Turn the parking lights to the ON position. (NOT YOUR HEADLIGHTS). Probe the wire(s) coming from your headlight control switch. The correct wire will show +12V and the RED light will glow bright only when the parking lights are ON. Make sure the dip switch for the parking light output is flipped to the (+) positive IN position. (IN is set towards the onboard relays) If this wire tests as a (-) negative, the GREEN light glows bright with the parking light switch on. Make sure the dip switch for the parking light output is flipped to the (-) negative OUT position.

HORN HONK OUTPUT (-)

The existing horn wire will usually be found in the main ignition switch harness in the steering column. Probe for a wire which will remain neutral (in some cases may show a (+) positive). When the horn is pressed this wire will test as a ground or (-) negative. Connect the GRAY WITH BLACK STRIPE wire from the 16-pin harness to the horn honk wire in the vehicle.

SIREN OUTPUT (+) (Optional Siren Part #724)

Connect the GRAY wire from the 16-pin harness to the RED (+) positive input on the siren. Make sure you ground the BLACK wire on the siren.

DOOR PIN TRIGGER

To determine if your door pin is turned on with (+) positive or (-) negative trigger, probe for a wire in the driver's side kick panel that switches polarity when the door is closed then opened. You can also find this wire going to the under dash courtesy lights.

- If this wire reads +12V when the door is open and (-) ground when the door is closed, it is (+) positive. (most Fords)
- If this wire reads (-) ground when the door is open and +12V when the door is closed, it is (-) negative.

If your vehicle is a (+) positive door pin connect the BLACK WITH WITH YELLOW STRIPE wire from the 16-pin harness to the door pin wire. Follow the instructions, Programming Door Pin Inputs, page 21 to program your unit to work with a (+) positive door pin. If your vehicle is a (-) negative door pin, connect the BLACK WITH WITH YELLOW STRIPE wire from the 16-pin harness to the door pin wire. The unit will not need to be programmed. **NOTE:** When testing the door pin wire, make sure the dome light is on. Some vehicles, if the door is left open for a period of time, the dome light will go out, resulting in a false reading.

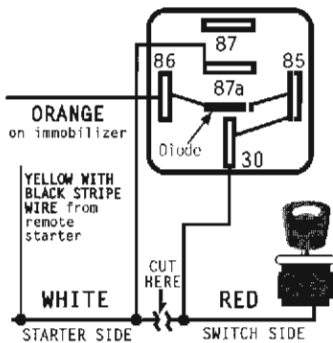
SHOCK SENSOR INPUT (-) (Optional)

The GREEN WIRE on the 16-pin harness is a negative input to be used when installing an external shock sensor, motion sensor or trunk pin. If this wire is not used, make sure to tape it up.

OPTIONAL CONNECTIONS

INSTALLING STARTER IMMOBILIZER (-) Output (Optional part #773)

Locate the same starter/crank wire located in the main wiring harness that you have tied the **YELLOW WITH BLACK STRIPE** wire from the control module. Cut the starter/crank wire in half, making sure that the **YELLOW WITH BLACK STRIPE** wire from the control module stays on the "starter side" and not the "switch side" of your starter immobilizer circuit. Connect the **RED** wire from the starter immobilizer to the "switch side" of the starter/crank wire then connect the **WHITE** wire to the "starter side" of the starter/crank wire. Connect the **ORANGE** wire from the starter immobilizer to the **ORANGE** wire on the 16-pin harness. **NOTE: You will need to cut factory wiring to make an end to end connection, see "Making Connections" on page 7-8.**

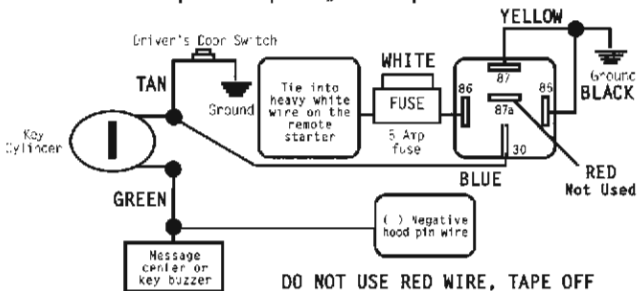


NEUTRAL SAFETY SWITCH

MECHANICAL NEUTRAL SAFETY SWITCH (Rear Wheel Drive Only)
When installing a Bulldog remote starter on GM vehicles or Dodge Dakotas built prior to 1996, you must:

Use the diagram below to create a circuit that will prevent the remote starter from starting the vehicle unless the key is removed from the ignition switch.

PRE-1996 GM REAR WHEEL DRIVES WITH PURPLE CRANK WIRE
Optional part #775 required.



OPTIONAL FEATURES

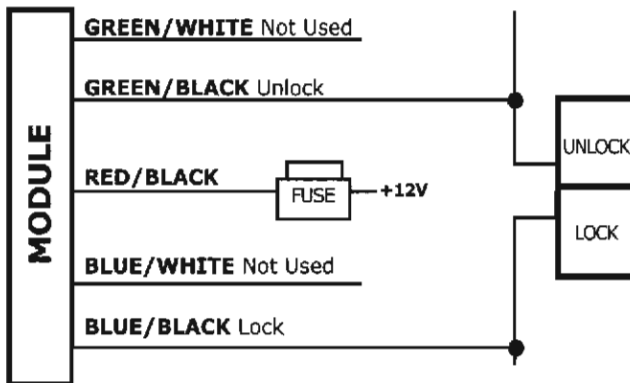
"Type B" Door Lock Test (Most Imports, some newer Fords)

Probe both of your door lock wires going to the door lock switch usually located in the driver's kick panel. Probe the lock and the unlock wires, the test probe will glow both **GREEN** and **RED** (dimly) on both the lock and the unlock wires. Press and hold the lock button on the switch and test the lock wire. The correct wire will test (-) negative and the **GREEN** light will glow bright. Release the lock button and this wire should again glow both **GREEN** and **RED** (dimly). Now press and hold the unlock button on the switch and test the unlock wire. The correct wire will test (-) negative and the **GREEN** light will glow bright. Release the unlock button and this wire should again glow both **GREEN** and **RED** (dimly). Your vehicle has a **"Type B"** door locking system. Make sure to mark which wire is lock and unlock. Proceed to Connecting Door Locks. Make sure to mark which wire is lock and unlock.

"Type C" Door Lock Test (Most Fords, some Chryslers, GM Trucks)

Once you have located the lock and unlock wires in the vehicle using the wire color chart in this manual or from our website, you will need to perform the same test as for the **"Type A"** system. Once you have completed this test, and it tests the same as a **"Type A"** (as it should) you will need to cut the lock wire in two. Now try the door lock switch in both the lock and unlock positions. The door locks should not function, this is a **"Type C"** system. Proceed to page 18, Connecting Door Locks. **NOTE: If for any reason the doors unlock but do not lock with this wire, cut in two, this is a "Type A" system.**

"Type A" (+) Positive (5-pin harness)

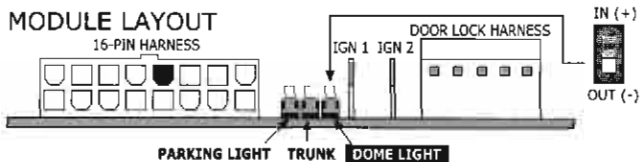


NOTE: Connect the RED WITH BLACK STRIPE wire to +12V constant.

NOTE: Some newer vehicles may require a Dual Pulse Lock or Unlock to operate your power door locks from the keyless entry section of the starter/alarm. To verify if your vehicle is so equipped, check our website at www.bulldogsecurity.com or contact Tech Support at 800-878-8007. If your vehicle does require this feature, see Dual Pulse Door Lock/Unlock, page 21.

OPTIONAL FEATURES

MODULE LAYOUT



TRUNK RELEASE (+) or (-) Output / WHITE WITH RED STRIPE WIRE

CAUTION: Please check the position of the switch before the wire connection is made. You may cause damage to the control module if the incorrect switch polarity is chosen.

Locate the trunk release or sliding van door release wire coming from the back of the release switch. To determine if your release is tripped by a (+) positive or a (-) negative, press the trunk or sliding door button and probe this wire with the test probe. If the RED light glows bright, you have a (+) positive release. Make sure you flip the trunk release output dip switch to the IN position (IN is set towards the onboard relays) if the GREEN light glows bright, you have a (-) negative release. Make sure you flip the trunk release output dip switch to the OUT position (OUT is set away from the onboard relays).

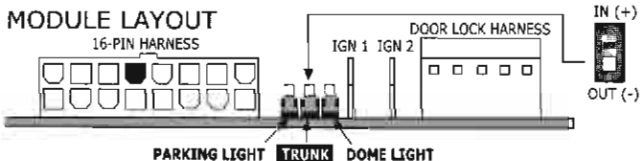
The negative output is only 250ma and is designed for relay or BCM (computer module) connections only.

When not hooking directly to the Body control module a relay must be used to energize a negative circuit.

The part number for the relay is #775. You can purchase this part online at www.directwholesale.net or call 800-659-0764.

You will need to connect the **WHITE WITH RED STRIPE** wire from the 16-pin harness to the wire from your release switch.

MODULE LAYOUT



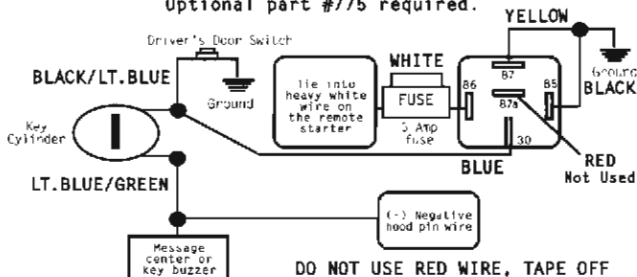
TESTING: Door Locks

"Type A" Door Lock Test (Most GMs and some Chryslers)

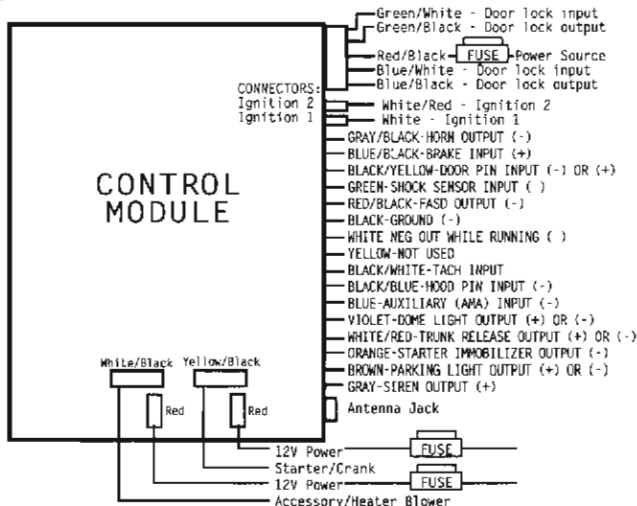
Probe both of your door lock wires going to the door lock switch usually located in the driver's kick panel. Probe the lock and the unlock wires, the test probe will show a (-) negative and the GREEN light will glow bright on both the lock and the unlock wires. Press and hold the lock button on the switch and test the lock wire. The correct wire will test (+) positive and the RED light will glow bright. Release the lock button and this wire should show a (-) negative and the GREEN light will glow bright. Now press and hold the unlock button on the switch and test the unlock wire. The correct wire will test (+) positive and the RED light will glow bright. Release the unlock button and this wire should show a (-) negative and the GREEN light will glow bright. Your vehicle has a "Type A" door locking system. Make sure to mark which wire is lock and unlock. Proceed to Connecting Door Locks. **NOTE: "Type A" and "Type C" locks will test the same. Make sure you run both tests before making your connections.**

NEUTRAL SAFETY SWITCH (CONT.)

PRE-1996 DODGE DAKOTAS
Optional part #775 required.



CONNECTING THE WIRING HARNESS



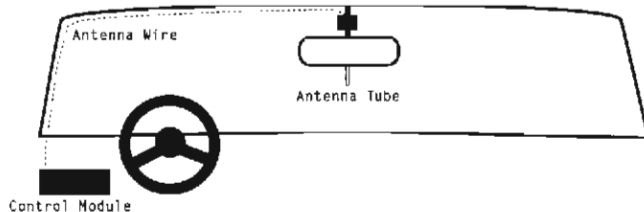
CAUTION: Before connecting the 16-pin harness to the module. All unused wires must be taped. Double check all connections to be sure they are secure and properly wrapped with electrical tape. Mount the unit under the driver's side dash. Make sure to properly place antenna. (See antenna placement page 14.) Plug the 16-pin harness into the main control module. Once it is plugged in. Plug in all six (6) spade connectors on the module. Be sure to plug connectors in their correct openings. Press and release transmitter button #4, the parking lights flash 3 times. The flash confirms that the transmitter code has been programmed to the unit. **NOTE:** There are several wires in the 16-pin harness that will not be used.

Press the start button, the parking lights will flash once and the vehicle will start and run. **NOTE:** If your unit receives a signal and the vehicle does not start and run, or starts then dies within five (5) seconds, you may have a factory anti-theft system. Refer to pages 23 and 24 to see if this applies to your vehicle. If your vehicle starts and remains running and you wish to connect your door locks, proceed to page 16, "Testing Door Locks", and follow the provided instructions.

ANTENNA PLACEMENT

Run the antenna up the windshield pillar on the driver's side and across the top of the windshield to the center, behind the rearview mirror. Use the antenna clips provided to hold it in place. Be sure to expose the full length of the clear antenna. It will perform best if mounted vertically, below the dark windshield tint. **Never leave antenna in headliner.** Range is up to 800 feet.

Each receiver is tested to more than 800 feet of clear air reception. Many times you will see a higher range. Many factors will affect the range, including the amount of radio signals in the area, battery strength, window tint, etc.



OPTIONAL FEATURES

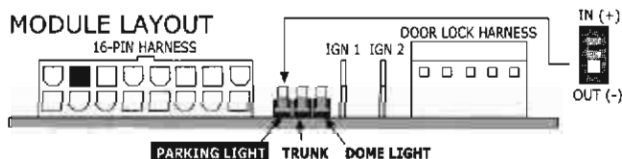
The parking light circuit is rated at 10 amps max and is suitable for most vehicles. If your vehicle has additional lights or devices added to the parking light circuit, a volt meter should be used to measure the current draw. If the current draw exceeds 10 amps, a relay is required for the parking light circuit (Part #775).

The negative output is only 250ma and is designed for relay or BCM (computer module) connections only.

When not hooking directly to the Body control module a relay must be used to energize a negative circuit.

The part number for the relay is #775. You can purchase this part online at www.directwholesale.net or call 800-659-0764.

(OUT is set away from the onboard relays) After you have adjusted the dip switch for positive or negative, connect the BROWN wire from the 16-pin harness to the parking light wire in the vehicle.



FACTORY ANTI-THEFT SYSTEMS

There are four basic types of anti-theft systems on today's vehicles.

VATS OR PASSKEY

This system has a resistor pill in the ignition key and is on select models of General Motors vehicles only. Generally 1985-present models.

PASSLOCK 1

This system does not have a pill in the key but will have a light on the dash that states either "Security" or "Anti-Theft".

Passlock 1 is only on select models of General Motors vehicles. Generally 1995-1999 models.

PASSLOCK 2

This system does not have a pill in the key but will have a light on the dash that states either "Security" or "Anti-Theft".

Passlock 2 is only on select models of General Motors vehicles. Generally 1998-present model years.

TRANSPONDER

This system has a radio frequency tube hidden inside the plastic or rubber portion of the ignition key.

Transponder systems are available on every automobile manufactured. Generally 1997-present model vehicles.

Check www.bulldogsecurity.com and look under Wire Diagrams to verify if your vehicle has an anti-theft system.

If your vehicle is equipped with a factory anti-theft system you will need a bypass module.

This item is available at your retailer or online at www.directwholesale.net or by calling 1-800-659-0764.

OPTIONAL FEATURES

DOME LIGHT (+) or (-) Output / Violet Wire

CAUTION: Please check the position of the switch before the wire connection is made. You may cause damage to the control module if the incorrect switch polarity is chosen.

To determine if your dome light is turned on with (+) positive or (-) negative trigger, probe for a wire in the driver's kick panel that controls the dome light or an underdash light. With the door open and the dome light on, probe the wire. When probing this wire and the GREEN light glows bright, close the door. If the dome light turns out and the GREEN light and the RED light glows dimly or the RED light glows bright, this is a (-) negative dome light trigger. Make sure the dome light switch is in the "out" position.

The negative output is only 250ma and is designed for relay or BCM (computer module) connections only.

When not hooking directly to the Body control module a relay must be used to energize a negative circuit.

The part number for the relay is #775. You can purchase this part online at www.directwholesale.net or call 800-659-0764.

With the door open and the dome light on, probe the wire. When probing this wire and the RED light glows bright, close the door. If the dome light turns out and the GREEN light and the RED light glows dimly or the GREEN light glows bright, this is a (+) positive dome light trigger. Make sure the dome light switch is in the "in" position. Connect the door wire from the 16-pin harness to the dome light wire in the vehicle.