

INSTALLATION GUIDE

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OWNER'S GUIDE

REMOTE STARTER MODELS RS92 / RS92E

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Technical Assistance

All tech personnel are expertly qualified to answer any technical questions.
Technicians are available Monday through Friday from 9:00 a.m. until 8:00 p.m. and Saturday 10:00 a.m. until 4:00 p.m.

Address

288 Canton Avenue • Wintersville, Ohio 43953

Telephone

Phone: 740-264-4710 • 800-878-8007 • Fax: 740-264-7306

SYSTEM FEATURES

Four-Button Extended Range Remote Control	Remotely start your car to run the heater or air conditioning from an extended distance.
Instant Panic	Works as personal protection. The horn sounds and the lights flash for 30 seconds.
Car Finder	The horn will sound and the lights will flash to help you locate your vehicle in a crowded parking lot.
Remote Programmable Run Time	Remotely program your vehicle to run 5 to 15 minutes.
Run Time Confirmation	Lets you check the run time that the unit is programmed for.
Tach/Tachless Option	A programmable feature that lets you choose from the easy to install tachless operation or the standard 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.
Automatic Hot and Cold Start	Remotely program your car to start at a preset temperature. Automatically starts your car in extreme temperatures.
Pit Stop Mode	Allows you to exit the vehicle while the engine remains running.
Extended Range Antenna	Allows you to operate your system from up to 400 feet away. (800 feet for E Models)
Code Learning	Allows your remote starter 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:

1-Installation & Operation Guide	1-Extended Range Antenna (E Model Only)
1-Main Control Module	2-Window Clips (E Model Only)
1-Four Button Remote Transmitter with Slide Protector	1-Warranty
1-(4) Relay Harness with Relays	1-Warning Sticker for Under the Hood
1-12-Pin Wire Harness	2-Bulldog Window Decals
1-Hood Pin Switch	

REQUIRED TOOLS

You will need a computer-friendly test light and a 5/16 drill bit when moubting the hood pin switch. In most cases no additional tools are required, however if the bottom of your dash on the driver's side will come off you must remove it. In this case a screwdriver or socket set may be needed.

TECHNICAL ASSISTANCE

Should you need help. First check our website at www.bulldogsecurity.com/wires.htm or call our toll-free Tech Support Hotline Monday through Friday 9AM-8PM and Saturday 10AM-4PM 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 number of the system 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, usually within 10 minutes.

BEFORE YOU BEGIN

Congratulations, you have purchased one of the most advanced remote starter systems ever made. Your new remote starter 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 required that your installation is 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/wires.htm.

Read this manual thoroughly before starting the installation. You must decide if the parking light option is desired. An optional part #775 **will be needed**. Please do not skip any steps.

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 to be used with fuel-injected, automatic transmission vehicles only.

SAFETY FIRST!

Never start your vehicle if it is indoors, if the keys are in the ignition and 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 below.

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**. Place the warning sticker under the hood.

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.

a) The key will only turn to start position when the gear selector is in park or neutral.

b) 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 page 7.

TESTING YOUR WIRES

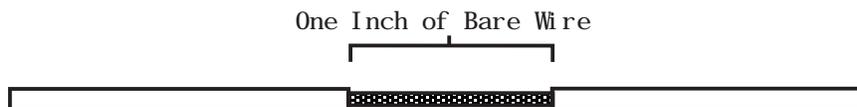
When testing for a positive or negative voltage, you must use a computer friendly test light (logic probe) or a volt/ohm meter. Make sure to probe and test each wire before making your connections.

MAKING WIRING CONNECTIONS

1. Strip back two inches of insulation on the wire from the keyless entry.



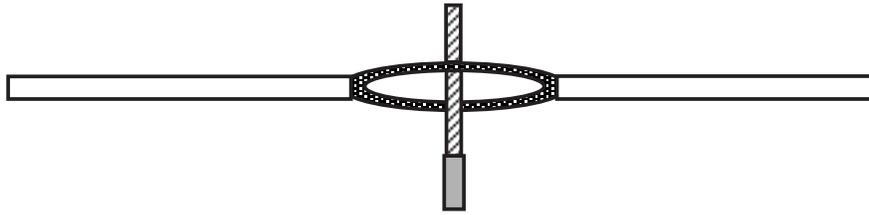
2. Strip back one inch of insulation on the wire you need to connect to.



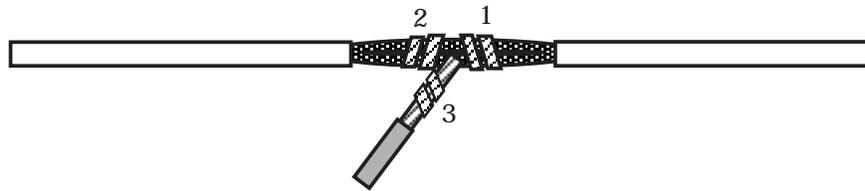
3. Separate the vehicle wire as shown. Make the separation large enough to fit the other wire through.



4. Insert the wire from the unit through the hole as shown.



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



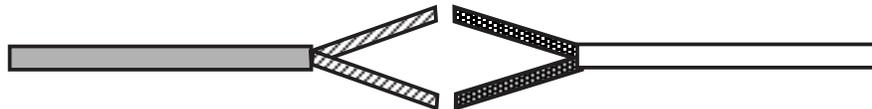
6. Use electrical tape to wrap. Be sure to cover the wire about two inches on either side of the connection. First pull the wire that you have just connected along side the wire you connected to, tape and wire tie them together. Use this method for all connections.



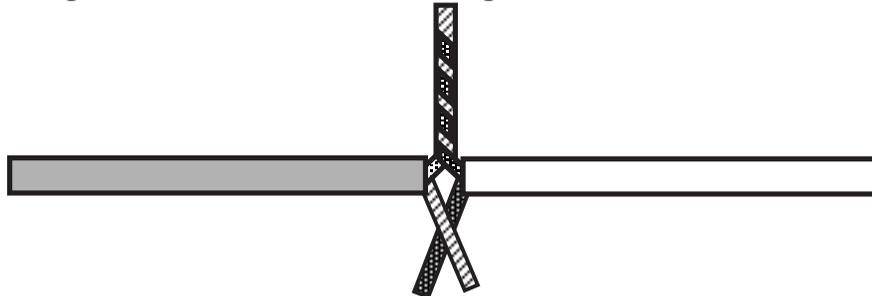
CAUTION: All wires must be wrapped and taped.

MAKING END TO END CONNECTIONS FOLLOW THESE INSTRUCTIONS

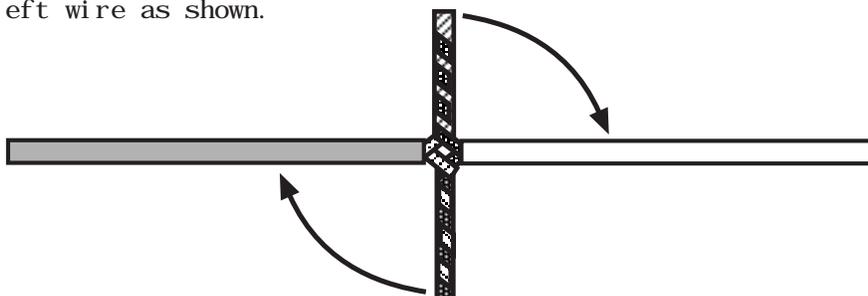
1. When tying two separate wires together at their ends, strip back 1" of insulation on both wires and separate the strands of wire as shown below.



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

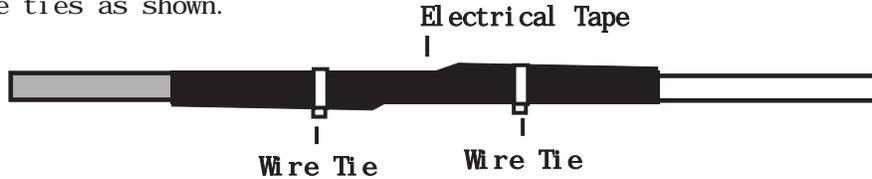


3. Lay upper twisted pair of wires over right wire as shown. Bring lower twisted pair of wires up to meet the left wire as shown.





- 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.

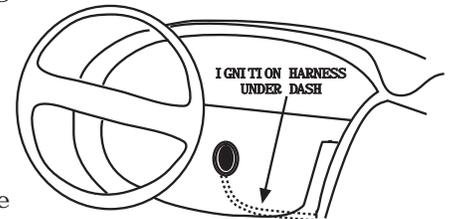
LOCATING & MAKING CONNECTIONS

Please see the wiring chart on our website, www.bulldogsecurity.com.

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

These wire(s) are in your vehicle's main ignition harness, usually located on the steering column coming from the ignition switch. Probe each wire with your test light. The correct wire(s) will show +12V when the ignition switch is in these **5 positions (ACC- LOCK- OFF- RUN- CRANK)**.

- If your vehicle has only (1) constant power wire, attach the **RED** wire from the 12-pin harness and both large **RED** wires from the 4-relay harness to the constant power wire in the vehicle.
- If your vehicle has (2) constant power wires, attach the **RED** wire from the 12-pin harness and (1) large **RED** wire from the 4-relay harness to one of these constant power wires. Then connect the other large **RED** wire from the 4-relay harness to the second constant power wire in the vehicle.



Make sure to wrap electrical tape around all (3) fuse holders to prevent shorting to ground.

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

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

- Strip back the **YELLOW** wire from the 12-pin harness and then strip back (1) of the (2) **WHITE** wires from the 4-relay harness and twist both of these wires together.
- Connect the **YELLOW** wire and the **WHITE** wire from step (1) to the ignition wire in the main harness. If your vehicle has only (1) ignition wire, tape off the end of the second **WHITE** wire from the 4-relay harness and do not use.
- If your vehicle has (2) ignition wires, connect the second **WHITE** wire from the 4-relay harness to it.
- If your vehicle has (3) ignition wires (some GMs) connect the second **WHITE** wire from the 4-relay harness to both the second and third ignition wires in the vehicle.

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 usually located in the steering column. Make all connections as close to the ignition switch harness as possible.

Most vehicles will have (1) accessory wire; however **some** Fords, newer GM vehicles and Chrysler 94 and up will have (2) or more accessory wires. To locate these wire(s) probe for wire(s) that only show +12V 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.

- If your vehicle has only (1) accessory wire connect the **WHITE WITH BLACK STRIPE** wire from the 4-relay harness to this wire.
- If your vehicle has (2) accessory wires, connect the **WHITE WITH BLACK STRIPE** wire to both.
- If your vehicle has (3) accessory wires connect the unused **WHITE** wire from the 4-relay harness to the third accessory wire.

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

The starter/crank wire is also in the main harness. Locate the wire that shows +12V on your test light **only** in the cranking position. This wire will not show +12V in any other position. Attach the **YELLOW WITH BLACK STRIPE** wire from the 4-relay harness to this wire.

CHASSIS GROUND

Locate an easy to bolt or screw located under the driver's side of the dash and attach the **BLACK** ground wire from the 11-pin harness securely as pictured.

Factory Bolt

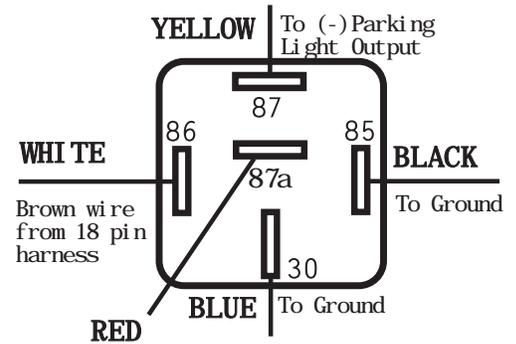


Black Ground Wire

Note: Remove any paint below the spade connector.

PARKING LIGHTS (+12V only with parking lights on)

Turn the parking lights to the ON position. (NOT YOUR HEADLAMPS). Probe the wire(s) coming from your headlamp control switch. Find a wire that will show +12V only when the parking lights are ON. Connect the **BROWN** wire from the 12-pin harness to this wire. If this wire tests as a (-) negative, see diagram above.



NEGATIVE PARKING LIGHT OUTPUT
Optional part #775 required.

DO NOT USE THE RED WIRE, TAPE OFF.

BRAKE INPUT

The brake wire is located on the switch near and above the brake pedal. The correct wire will show +12V on the test light only when the brake is pressed. Connect the **ORANGE** from the 12-pin harness to this wire.

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) 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 key. This wire will usually show a (+) positive voltage before turning the key. **NOTE:** Some factory disarm wires remain neutral before you turn the key to unlock instead of +12v positive. Connect the **WHITE WITH RED STRIPE** wire from the 12-pin harness to this wire.

HOOD PIN SWITCH

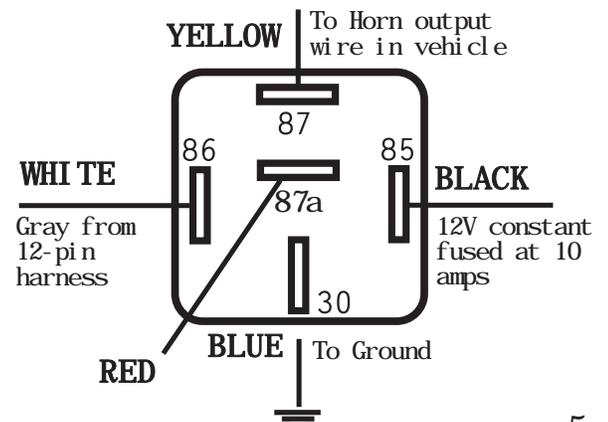
This feature will keep the engine from starting or shut off the engine when the hood is opened. Locate a good chassis ground, if at all possible do not install the pin switch in the rain gutter. Drill a 5/16 hole, insert the pin switch into the hole and tighten. Check for the hood adjustment, there is 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. Plug the **BLUE WITH WHITE STRIPE** wire from the 12-pin harness into the bottom of the hood pin switch.

TACH INPUT (Optional)

By this time, you should have determined the way you want your vehicle to start (tach or tachless). If you have chosen the TACHLESS start option, simply proceed to the next step and skip the following connection instructions. Make sure to tape the **GREEN WITH BLACK STRIPE** wire up if not used. For TACH mode connect the **GREEN WITH BLACK STRIPE** wire from the 12-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 the termination point. **To operate in tach mode, make sure to program tach option, see programming tach option page 8.**

HORN HONK OUTPUT (-) (Optional part #775 required)

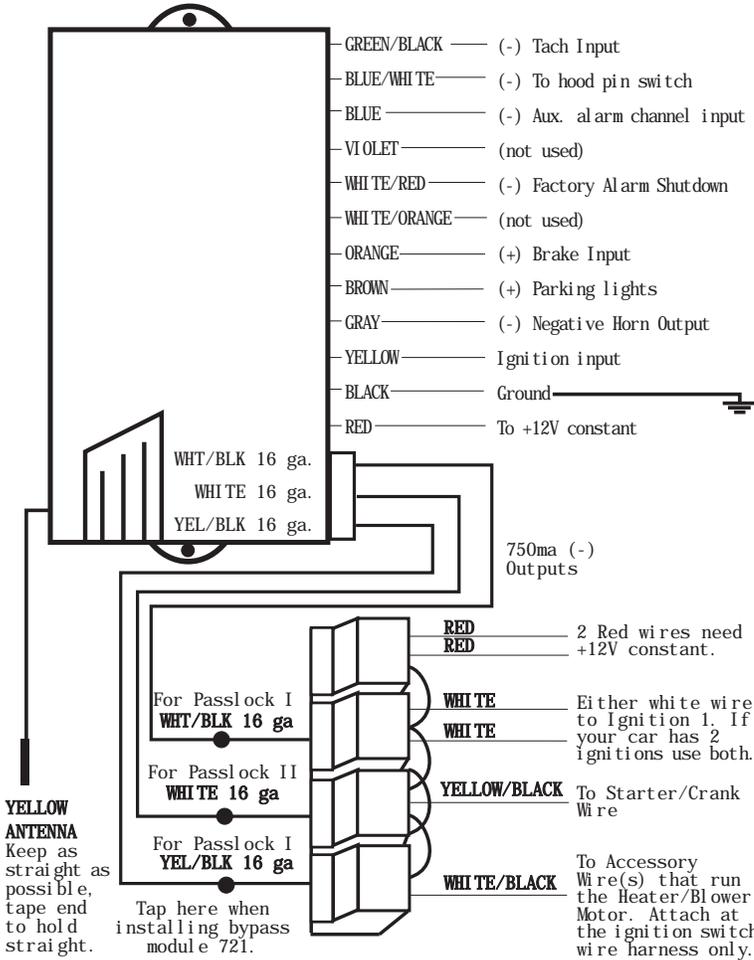
The horn wire is usually located in the ignition switch harness. This wire will test as a ground (-) when the horn is honked. An optional relay is needed to make this connection. Connect the **GRAY** wire from the 12-pin harness to this relay.



AUXILIARY INPUT

If you wish to use this starter with an aftermarket alarm, connect the **BLUE** wire from the 12-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.

CONNECTING THE 12-PIN HARNESS & 4-RELAY HARNESS



CAUTION: Before connecting the 12-pin harness to the module, 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 7.) Plug the 12-pin harness into the main control module. Once it is plugged in, 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. Once the module is programmed, connect the 3-pin harness from the 4-relay harness to the module. **NOTE:** There are (2) wires in the 12-pin harness that will not be used. All unused wires must be taped.

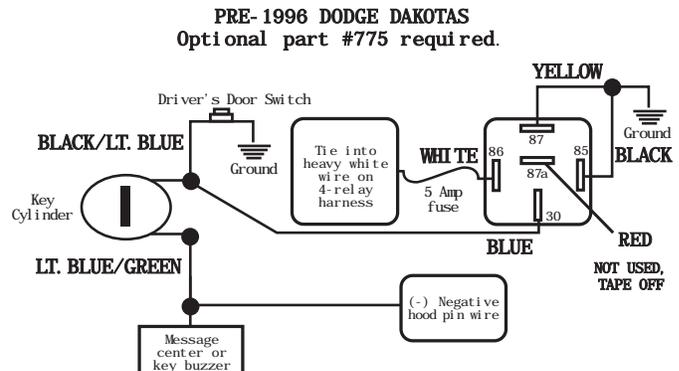
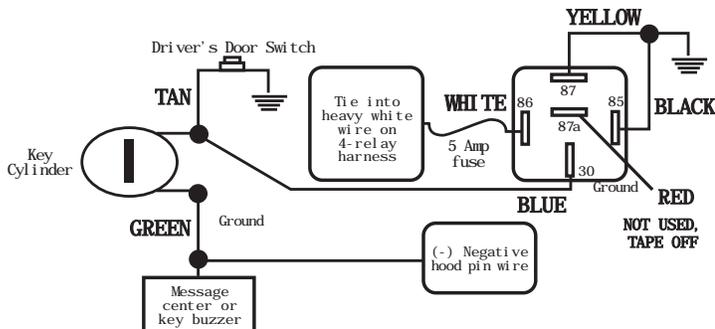
Press the start button, the parking lights will flash once and the vehicle will start and run. **NOTE:** If your vehicle does not start and run you may have a factory anti-theft system. Refer to page 7 to see if this applies to your vehicle.

NEUTRAL SAFETY SWITCH

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

MECHANICAL NEUTRAL SAFETY SWITCH (Rear Wheel Drive Only)

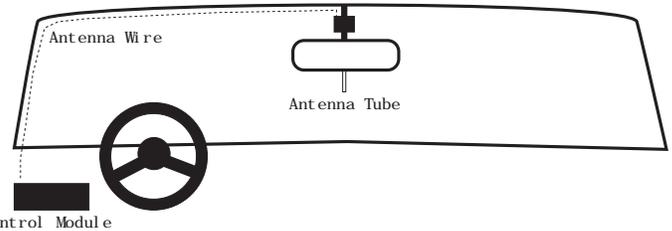
When installing a Bulldog remote starter on GM vehicles or Dodge Dakotas built prior to 1996, you must: Use the diagram below to create a circuit that will prevent the remote starter from starting the vehicle unless the key is removed from the ignition switch.



ANTENNA PLACEMENT

ANTENNA

For best results, run the antenna (**YELLOW WIRE WITH BLACK TIP** from the back of the unit) as straight as possible. **Do not place the antenna next to any metal parts or the vehicle's main computer control module.** Range is up to 400 feet.



E MODEL REMOTE STARTERS

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 400 feet (800 feet, E models) of clear air reception. While 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.

FACTORY ANTI-THEFT SYSTEMS

FOR GENERAL MOTORS CARS ONLY

System 1: PASSKEY I and II system (1985 and up). This system has a resistor pill in the key. Measure resistance of the pill using a volt/ohm meter. A bypass module is available, part #VATS-WR module.

System 2: PASSLOCK I and II system (1995 and up). Passlock does not have a pill in the key. It has a light on the dash that states **ANTITHEFT OR SECURITY** system. A bypass module is available, part #GMBP-721 module.

System 3: PASSKEY III system (GM 1998 and up). Passkey III is GM's version of a transponder system. This key will have the letters PK3 on it. A bypass module is available. (Part #781)

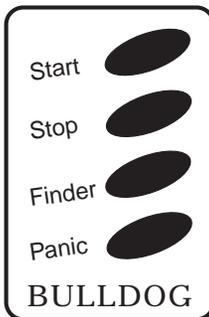
FORD ANTI-THEFT SYSTEM: PATS

Ford uses a bypass part #FBP-718 module, 1995-1998. (1999 and up will use part #781.)

CHRYSLER AND MOST IMPORTS ANTI-THEFT SYSTEM: TRANSPONDER

1998 and up will use part #781.

HOW TO USE YOUR REMOTE TRANSMITTER



- BUTTON #1**
Starts your vehicle from 400 feet away. (E-Model, up to 800 feet)
- BUTTON #2**
Shuts engine off and programs runtime.
- BUTTON #3**
Locates your vehicle in a crowded parking lot.
- BUTTON #4**
Sounds alarm.

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 #2 (stop) or press the brake pedal. **NOTE:** If your car does not start on the first crank it will automatically attempt to start up to 2 more times. (only in tachless mode) 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 (start) before turning the ignition switch off. (The engine will remain running for the preset time.)

Runtime Confirmation (Engine Not Running)

To check programmed runtime, press and release Button #2 (stop), the parking lights will flash for the programmed length of time.

Finder

Press and release this Button #3 to sound the horn and flash the parking lights to locate your vehicle in a crowded parking lot.

Panic

Press and release this Button #4, the horn and parking lights will cycle in full panic for 35 seconds.

PROGRAMMING INSTRUCTIONS

ENTERING PROGRAMMING MODE

Make sure your vehicle is not running and the brake is pressed. The brake is to remain pressed as long as you want to remain in programming mode.

Adding New Transmitters

Press and hold the brake, then press and hold Button #1 (start) on the working transmitter until the parking lights flash once. Release Button #1. Press any button on the new remote, the parking lights will flash three (3) times, the new remote is now programmed.

Programming Automatic Start

Press and hold the brake, then press and hold Button #2 (stop) until the parking lights flash twice. Release. Press and release Button #1 (start) the parking lights will flash once. The unit is now programmed for Automatic Start. This feature lets the vehicle start every three (3) hours regardless of temperature. To turn off Automatic Start, press and hold Button #1 (start) until the parking lights flash twice. Release the brake, the parking lights will flash three (3) times. **NOTE:** The factory setting is Automatic Start off.

Programming Cold Start

Press and hold the brake, then press and hold Button #2 (stop) until the parking lights flash twice. Release Button #2. Press and hold Button #2, the parking lights will flash once. Each continuous flash represents a progression in degrees: one (1) flash= -40°F, two (2) flashes=-30°F, three (3) flashes=-20°F, four (4) flashes=-10°F, five (5) flashes=0°F, six (6) flashes=10°F, seven (7) flashes=20°F. To disable Cold Start, press and hold Button #2 until the parking lights flash seven (7) times, then two (2) quick flashes 8 and 9. The Cold 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 Cold Start off.

Programming Hot Start

Press and hold the brake, then press and hold Button #2 (stop) 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, seven (7) flashes=100°F. To disable Hot Start, press and hold Button #3 until the parking lights flash seven (7) times, then two (2) quick flashes 8 and 9. 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.

Programming Tach/Tachless Start

Press and hold the brake, then press and hold Button #3 (finder) until the parking lights flash three (3) times. Release Button #3. Press and release Button #4, the parking lights will flash once. The unit is now in Tachless Start Mode. Press and release Button #4, the parking lights will flash twice. The unit is now in Tach Start Mode. Release the brake, the parking lights will flash three (3) times. The programming is now entered. **NOTE:** Factory setting is Tachless Start Mode.

Programming Runtime

(Can be changed without entering programming mode)

Your engine must be off. Press and hold Button #2, within 10 seconds the parking lights will begin to flash. Release Button #2 when the desired time has been reached. The maximum time is 15 minutes or 3 flashes. **To check runtime,** press and release Button #2 and the unit will indicate how long the runtime is with flashing the parking lights (each flash equals 5 minutes of runtime).