



# TIP SHEET

## Installation Tips for your Excalibur RS-360 + OL-IB-PL (6) + DLRC + SPDT **T0491**

For Chevrolet: Astro 1998-2005 , Avalanche 2002 , Blazer 1998-2005 , Cavalier 2000-2003 , Express Van 1998-2005 , S10 Pickup 1998-2004 , Silverado 1999-2002 , Suburban 1999-2002 , Tahoe 1999-2002 , Venture 2000-2003

Thank you for purchasing your remote start from MyPushcart.com - an industry leader in providing remote starts to do-it-yourself installers since 1999. We've put this tip sheet together to help you with your installation. The purpose of this sheet is to help you organize your installation - not to replace your installation manual. You will still need to refer to that.

If you provided us with your vehicle model/year at the time of purchase, you will have a wiring chart for your particular vehicle. We're going to refer to that a lot. If you do not have the wiring chart, email us at [sales@mypushcart.com](mailto:sales@mypushcart.com) so we can send you a copy. Be sure to include the model/year of your vehicle, your name and your sales order number.

**Overview:** There are 4 basic steps to this remote start installation. We're going to address each of these:

1. Make your wiring connections for the Excalibur
  2. Make your wiring connections for the door locks and trunk pop
  3. Connect and program the bypass module
  4. Test the system and Button it up!
- 🔴 Need to know where all the components go? See Installer's Tip #1 later in this tip sheet

### Step 1 – Wiring the Excalibur remote starter

When you open up your remote start, you're going to see a whole bunch of wires. You're not going to use all of them. The remote starts are designed with wiring options for a variety of cars and no car is going to use all of them. We're going to break the wiring down into four parts - your main power connections, what we'll call your 'secondary' connections for your remote start, connections for your door locks/trunk release and connections for the bypass module.

Here's where the vehicle wiring chart comes into play. The wiring chart will help you locate the wires in your car that you're going to use. Don't be intimidated by all the different wires listed on the chart – you're only going to be using a few of them.

#### Reading your wiring chart

Each line of the wiring chart contains 3 pieces of information that you will need:

- The "Circuit" or "Wire/Function"
- The color of the wire in the car
- The polarity of the wire in the car
- The location of the wire in the car

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
<b>12volts</b>	white	+	ignition harness
<b>Starter</b>	black/white	+	ignition harness
<b>Second Starter</b>	N/A		
<b>Ignition</b>	black/yellow	+	ignition harness
<b>Second Ignition</b>	N/A		

## Making your wiring connections

The following table shows you what to connect from your remote start into the car. Any wires on your remote start that are NOT listed in the table are NOT USED.

- ✓ *Helpful Hint:* In most cases, the wires on the remote start are way longer than needed. Trim off excess wire when you make your connections, but leave some slack - this will allow you a little flexibility when it comes time to stow the remote start module after the installation is completed.

Remote Start Wire	Connect to the wire for the circuit on the vehicle chart labeled:
Red (6-pin harness)	Constant 12 Volts
Red/White (6-pin harness)	Constant 12 Volts
Pink (6-pin harness)	Ignition 12-Volts
Pink/White (6-pin harness)	Ignition # 2 (not present on all vehicles)
Violet (6-pin harness)	Starter
Orange (6-pin harness)	Accessory
White (14-pin harness)	Parking Lamp (+) (SEE NOTE 1)
White/Black (14-pin harness)	Parking Lamp (-) (SEE NOTE 1)
Black (14-pin harness)	System Ground (connect this to a solid metal ground in the car)
Brown/Red (14-pin harness)	Brake Light switch
Black/White (14-pin harness)	Neutral Safety (connect this to a solid metal ground in the car)
Grey (14-pin harness)	Hood Input (See NOTE 2)
Red/White (14-pin harness)	Trunk release (SEE TRUNK POP SECTION BELOW)
Blue (3-pin Door Lock harness)	UNLOCK (SEE DOOR LOCK SECTION BELOW)
Green (3-pin Door Lock harness)	LOCK (SEE DOOR LOCK SECTION BELOW)
	<b><i>The connections below MAY be needed</i></b>
Green/Black (14-pin harness)	OEM Alarm Disarm - <i>connect this only if your car has a factory alarm system that goes off when you try to use the remote start.</i>
Violet/White (14-pin harness)	Tach Signal (See NOTE 3)

- **NOTE 1** The remote start has two parking light wires. You will only use one of them. On your vehicle wiring chart, look up the wire for the parking lights. Next to the wire color will be either a "+" or a "-". If yours has the "+", then use the white wire. If it has a "-", use the white/black wire.
- **NOTE 2** The grey wire is used with a pin switch (included in your kit) to prohibit the remote start from activating while the hood is open. This is an important safety feature!
- **NOTE 3** Most vehicles will not require this connection. The remote start has a 'tach sensing' circuit built in. The purpose of that circuit (or the tach wire if you need it) is to enable the remote start to detect when the engine has started so it will stop cranking the starter. When you test your system, if the starter keeps cranking after the engine has started, you'll need to connect the tach wire. Once the wire is connected, take two additional steps: 1) Change "Installer Feature Programming Option # 3 of the Excalibur to the 'tach wire' setting (see page 11 in the installer's manual). 2) Program the tach circuit as shown on page 10 of the installation manual.

## STEP 2 – Wiring the DLRC for door locks, and RELAY for trunk pop

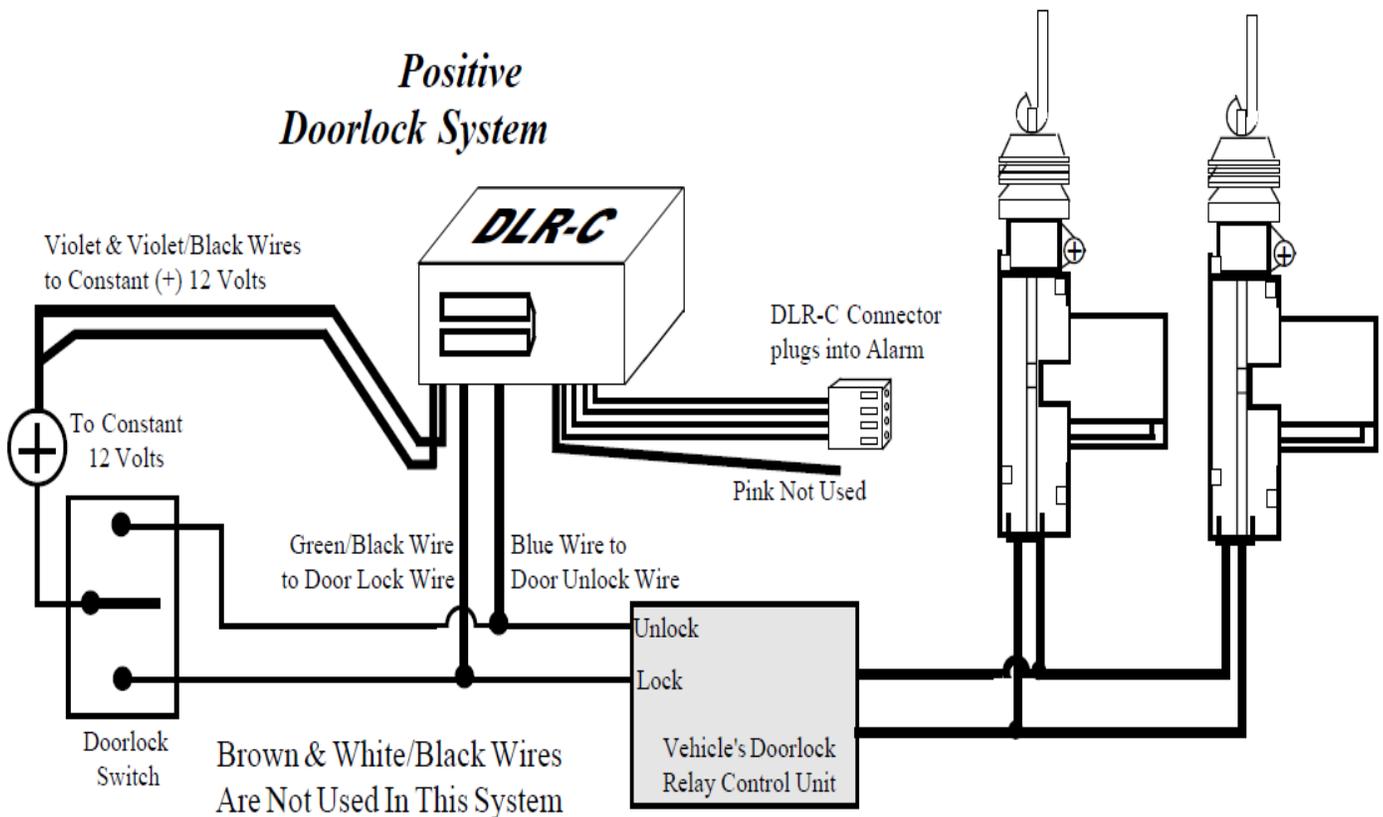
- Your car will have one of three different types of door lock systems. Your wiring chart will tell you which you have. If the wiring chart indicated 'Negative', you can connect the remote start's blue & green door lock output wires directly to the vehicles lock & unlock wires. For door lock types (+) POSITIVE, or (5-wire) REVERSING POLARITY, you will need to use the door lock relay module included in your kit and follow the corresponding DLR-C wiring instructions below:

### DLR-C:

- The red plug on the DLRC plugs in to the 3-pin door lock connector on the Excalibur remote start brain. The plug has 4 pins in the connector, but is designed to be able to mate with the 3-pin connector on the brain. Slide the plug into the connector so that the side of the plug with the pink wire is occupying the empty space on the right side of the connector. The pink wires are not used.
- The Violet, and Violet/Black wires from the DLR-C will both connect to constant 12 volts, you can connect them to the red wire in the 6-pin power harness or the Excalibur.
- Connect the blue, brown, white/black, and green/black wires from the DLR-C to the door lock wires in the vehicle (listed on your vehicle wiring chart) according to your door lock type as follows:

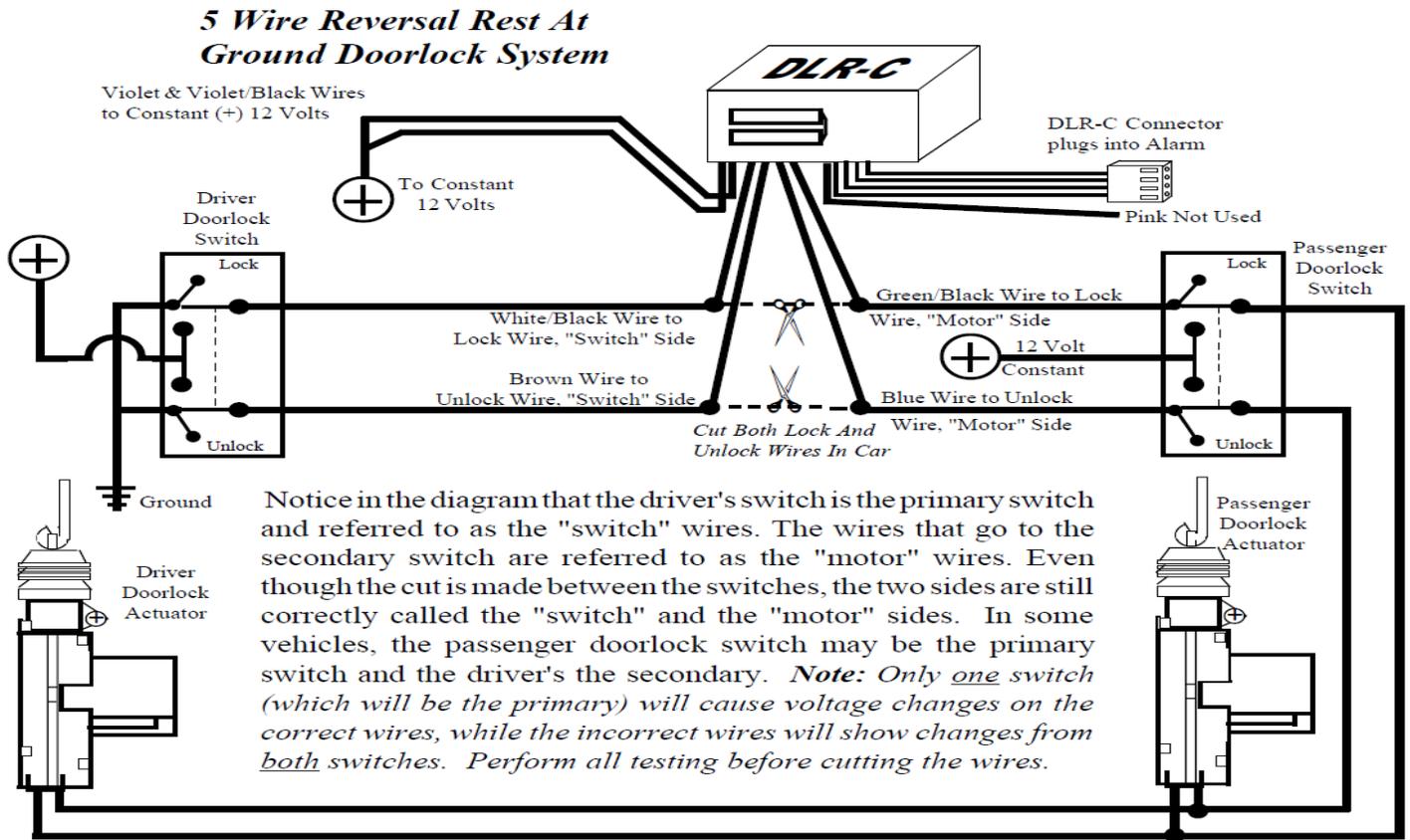
### For (+) positive trigger door lock type:

- Connect the Green/black wire from the DLR-C to vehicle door **lock** wire
- Connect the Blue wire from the DLR-C to the vehicle door **unlock** wire
- The brown and white/black wires do not get connected

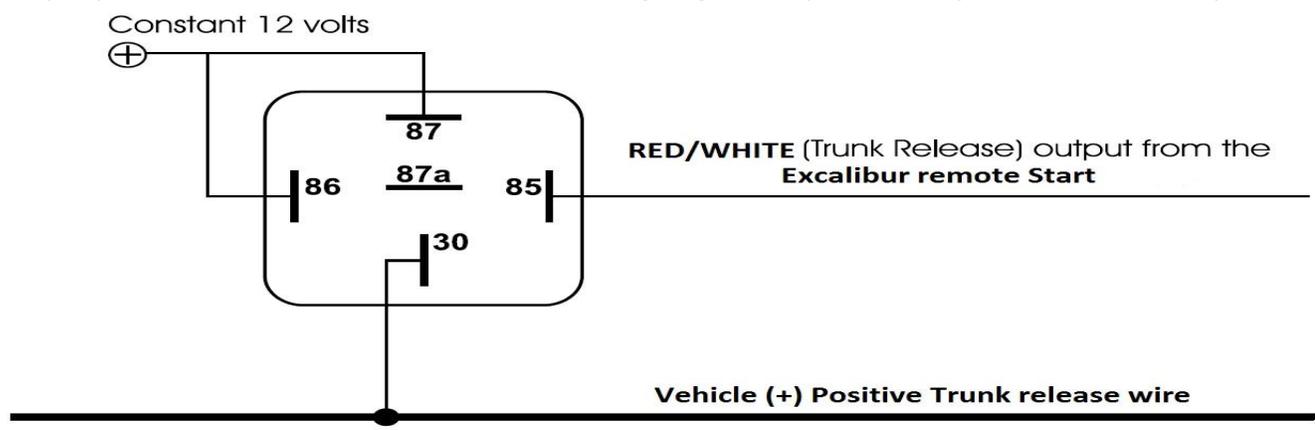


**For (5-wire) reversing polarity door lock type:**

- Cut the vehicle **lock** wire
- > Then from the DLR-C, connect the white/black wire to the switch side and the green/black to the motor side.
- Cut the vehicle **unlock** wire
- > Then from the DLR-C, connect the brown wire to the switch side and the blue wire to the motor side



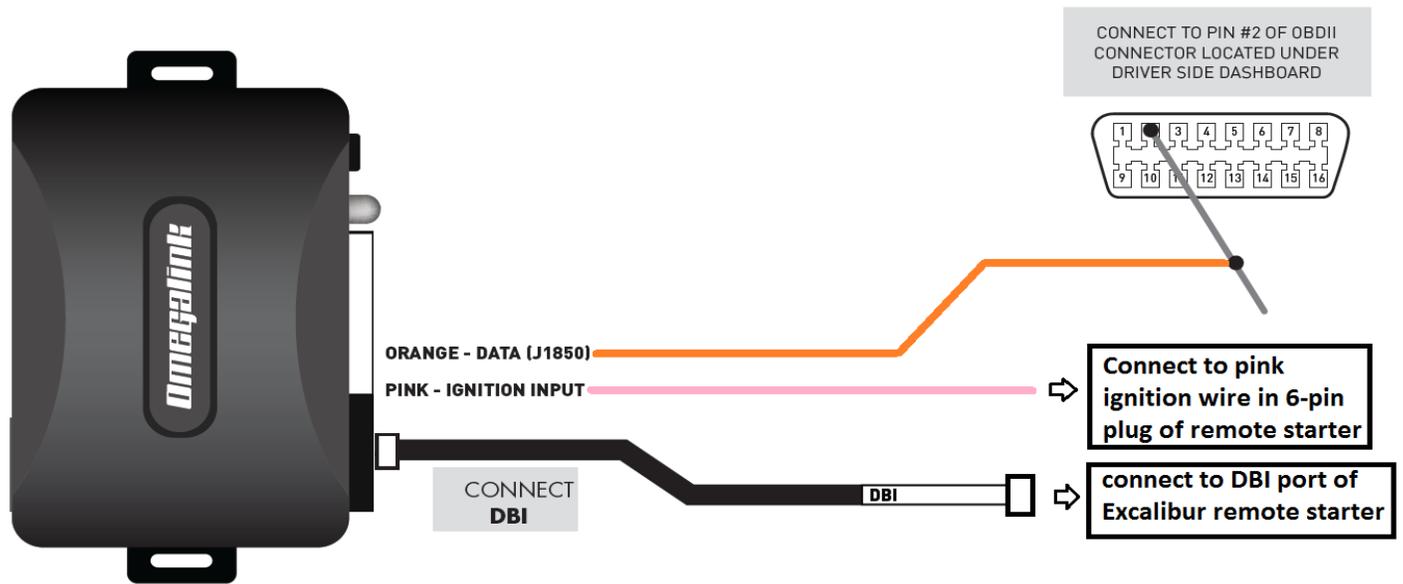
**TRUNK RELEASE:** If your vehicle is equipped with an electronic trunk/hatch release, you can control that function with your new remotes. The relay in your kit is only used when you have positive trigger (+) trunk release. Refer to your wiring sheet for this information. If you see a (-) next to trunk release on your wiring diagram, you will not need the relay. If you see a (+) next to trunk release in the wiring diagram for your vehicle you will need the relay.



- ✓ Your kit also includes a programming button. Plug the button into the remote start. For tips on where to install the button, see Installer's Tip #1 towards the end of this document.
- ✓ See Installer's Tip # 2 towards the end of this document for tips on how to make your wiring connections.

## STEP 3 - Installing the bypass module:

### TYPE 6 - WIRING DIAGRAM



## Program the bypass:

First, select data mode for the module:

### INSTALLATION MODE SELECTION

**1**

**PRESS AND RELEASE** programming button to select installation mode.

Remote Starter **Data Mode** LED flashes once

Remote Starter **Standard Mode** LED flashes twice

**2**

**PRESS AND HOLD** programming button until LED turns solid GREEN to register selection.

After registration, follow Factory Reset Procedure to change installation mode and restart this procedure.

Next, perform the module programming procedure:

### MODULE PROGRAMMING PROCEDURE

**1**

Close driver door.

Re-open driver door to wake up data bus.

**2**

Insert key into ignition.

**3**

Turn key to START position.

**4**

Wait, LED will turn solid GREEN for 2 seconds.

(If after 15 seconds the LED did not turn solid GREEN, press on the programming button once.)

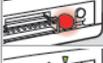
**5**

Turn key to OFF position.

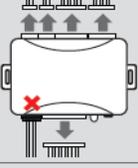
**6**

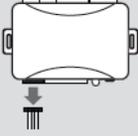
Module Programming Procedure completed.

If you do not have success programming the module, here are a few things that can help diagnose why, if you attempt to re-program the module it must be reset first:

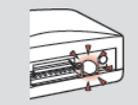
MODULE DIAGNOSTICS			
LED STATUS	DIAGNOSTICS		
	DURING PROGRAMMING	DURING REMOTE START	WITH IGNITION OFF
 Flashing RED	Missing/wrong information from firmware or vehicle	Incorrectly programmed	Incorrectly programmed or connected
 Solid RED	Waiting for more vehicle information	Incorrectly programmed	Not programmed waiting for more vehicle information
 Flashing GREEN	Additional steps required to complete programming	Correctly programmed and operational	False ground when running status from remote starter
 Solid GREEN then OFF	Correctly programmed	Reset in progress	Reset in progress
 OFF	No activity or already programmed	Invalid ground when running status from remote starter	At rest and ready for a remote start sequence

### FACTORY RESET PROCEDURE

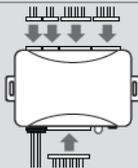
**1**  **DISCONNECT** all connectors from module **EXCEPT** the black 4-PIN standard or optional data connector.

**2**  **DISCONNECT** black 4-PIN standard or optional data connector.

**3**  **PRESS AND HOLD** programming button while connecting either 4-PIN standard or optional data connector.

**4**  When LED flashes red, **RELEASE** programming button.

**5**  LED will turn solid red for 2 seconds.  
**RESET COMPLETED.**

**6**  **RECONNECT** all connectors.

**7** Repeat programming procedure.

**!** Failure to follow procedure may result with a DTC or a CHECK ENGINE error message.

## Step 4 – Test the system and button it up!

Once all your connections are made, you should test the system before putting everything back together.

1. Press the ‘lock’ and ‘unlock’ buttons on your remote and confirm that the door locks are operating properly.
2. If you have the trunk/hatch release feature connected, press and hold the ‘trunk’ button for 3 seconds. The trunk should open and the doors should unlock.
3. Press the “start” button on your remote to start the vehicle.

Stop the engine by stepping on the brake.

Once you’ve completed testing the system, it’s time to close it up.

Gather up all your wiring and neatly bundle it together using zip ties or electrical tape. Find a secure place to put the remote start module and use zip ties to secure it. **Make sure that the remote start wires are not near any moving parts on the steering wheel, pedals or emergency brake!**

## **Installer's Tips:**

### **Tip #1 – Where Everything Goes**

1. *Remote start module* – the wiring for the module is done under the dash on the driver's side, so you'll want to install the module in that general area. Before you start wiring, look for a location where there's some open space that will fit the module. Pay attention to moving parts like the pedals, e-brake and steering column. Be sure to route your wiring away from those areas.
2. *Bypass module* – can be stowed along with the remote start.
3. *Programming button* – Requires a ¼" hole. Usually put in the driver's kick panel (that's the area forward of the door), the driver's side of the center console, or the underside of the dash.
4. *Hood Pin Switch* – An important safety component! Requires a 3/8" hole. Find a location in the engine compartment to mount the switch where the closed hood will keep the plunger in the switch depressed. This is what prevents the car from starting when the hood is open.
5. *Status LED* – Not required for normal operation but can be helpful for troubleshooting. Can be mounted anywhere you like – or unplugged and not used once the installation is completed.
6. Activation relay – can be stowed along with the remote start.

### **Tip #2 – How to make your wiring connections**

*It's very important that all your wiring connections be solid and secure. All remote start connections are "tap on" connections. This means that you do not need to cut the wires in the car. You simply need to "tap on" to the wires in the car to make your connections. Here are three different ways to do this:*

#### **Method 1 – Solder and tape**

This is the method preferred by the best professional installers. It makes for the most reliable connections, but it is also the most difficult to do. Sometimes there isn't enough room in the wiring harness to safely solder a wire without damaging adjacent wires, but if you have the soldering skills, go for it. To make a connection, strip back a section of the insulation on the wire in the car. On heavy gauge wires, 1" is about the right amount. On lighter gauge wires, ½" is fine. Strip 1" of insulation off the end of the remote start wire. Tin the bare section of wire in the car. Wrap the remote start wire around the tinned section and then carefully solder it in place. Wrap the splice tightly with electrical tape.

## Method 2 – Wrap and tape

This is the most popular method and is also very reliable. Strip back a section of the insulation on the wire in the car. On heavy gauge wires, 1" is about the right amount. On lighter gauge wires, ½" is fine. Strip 1" of insulation off the end of the remote start wire. Separate the strands of the wire like this:



Pass the wire from the remote through the opening as shown below



Wrap the remote start wire around both sides of the car wire, then back around itself as shown below



Use electrical tape to wrap the connection and secure the wires together. A wire tie will help prevent the tape from unraveling in the future.



## Method #3 – “T-Taps”

T-taps are plastic clips that are squeezed onto the wires in the car. The wire from the remote start goes into the tap and the whole thing is crimped together. T-taps come in different sizes for different size wires. Use yellow t-taps for the larger wires in your main power harness. Red t-taps are good for the smaller wires. Tape and wire tie the connections as shown in the “wrap and tape” section above – that will prevent the t-taps from ever opening up.

### Using T-Taps

Use a pair of pliers to attach the quick-connects to the wires in your car. Hold the quick connect as shown below in Figure 1, then clamp it on to the wire as shown in Figure 2. There is a locking tab at the front of the connector (Figure 3) – make sure it is secure and locked in place when you are done.



Figure 1



Figure 2



Figure 3