



## Installation Tips for your Add-on Remote Start (for Ford Vehicles) v3.01 Updated 2/22/2012

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.

### ***Two very important things before you get started:***

- Read the entire installation manual. There are several safety tips in there that you need to know before you start
- Avoid using a test light to probe wires. Test lights can set off air bags if you probe the wrong wire. Your vehicle wiring chart will identify the correct wires that you'll be tapping on to in your car. If you must probe, use a digital multi-meter. They're inexpensive and won't set off air bags.

### **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 remote start
2. Test the system
3. Program the bypass
4. Button it up!

❓ Need to know where all the components go? See Installer's Tip #1 on page 6

### **Step 1 – Wiring**

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 three parts – your main power connections, what we'll call your 'secondary' connections for your remote start, and connections for the bypass module (if you're using one).

Here's where the vehicle wiring chart comes into play. The wiring chart will help you locate the wires that you're going to need in your car. Don't be intimidated by all the different wires listed on the chart – you're only going to be using a few of them. Your wiring chart will either be from Omega R&D or Crimestopper. Regardless of which chart you have, they all display the same information in basically the same format.

### **Reading your wiring chart**

Each line of the wiring chart contains 3 pieces of information that you will need (continued on next page):

- The “Circuit” or “Wire/Function”
- The color of the wire in the car
- The location of the wire in the car

The illustrations below will show you where to find that information on your chart.

**Omega R&D Wiring Charts**

Ignition 12 volts	BLUE/GREEN	IGNITION SWITCH HARNESS
Starter	RED/BLUE	IGNITION SWITCH HARNESS
Dome Light	BLACK/BLUE (+)	DRIVER KICK PANEL

**Crimestopper TechWeb Wiring Charts**

ACCESSORY 2	select			
STARTER	Brown (7-pin plug)	Yellow	Ignition harness	+
STARTER 3	Pink/white (7-pin plug) Jumper			

\* Some Crimestopper wiring charts will include this cross-reference that shows which wire from the remote start gets connected to the circuit. Disregard this. We will provide the cross-reference information in the table below.

**Making your wiring connections**

The tables on the next 2 pages show you where to connect the wires 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.

- ❓ **How does the remote start work with factory fobs?** Answer: Your remote start has an ‘activation’ wire that gets connected to the wire that goes to the door lock motor. The remote start will activate when it senses three electrical pulses on that activation wire. Pressing the ‘Lock’ button on your remote fob three times will generate those three pulses.

### For EXCALIBUR Remote Starts

Remote Start Wire	Connect to the wire for the circuit on the vehicle chart labeled:
Red/White (6-pin harness)	Constant 12 Volts
Red (6-pin harness)	Constant 12 Volts
Pink (6-pin harness)	Ignition 12-Volts
Violet (6-pin harness)	Starter
Orange (6-pin harness)	Accessory
Pink/White (6-pin harness)	Ignition # 2 (not present on all vehicles)
White/Blue (12-pin harness)	Motor Lock (See NOTE 1) 2009-10 F-Series truck owners, also see NOTE 5
White/Black (12-pin harness)	Parking Lamp (IMPORTANT – SEE NOTE 2)
White (12-pin harness)	Parking Lamp (IMPORTANT – SEE NOTE 2)
Black (12-pin harness)	System Ground – connect this to a solid metal ground in the car
Brown/Red (12-pin harness)	Brake Light (also called “Brake Switch”)
Black/White (12-pin harness)	Neutral Safety – if you have an automatic transmission, ground this wire
Grey (12-pin harness)	Hood Input (See NOTE 3)
	<b><i>The connections below MAY be needed</i></b>
Light Green/Red (12-pin harness)	OEM Alarm Disarm – <i>connect this if your car has a factory alarm system</i>
Violet/White (12-pin harness)	Tach Signal (See NOTE 4)

- **NOTE 1** Leave this wire disconnected for now. We’re going to use it in Step 2 to test the system. Make this connection into the car after the test is successfully completed.
- **NOTE 2** 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 3** 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 4** 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 Programming Option # 2 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.
- **NOTE 5** On some 2009-2010 F-Series trucks, the “Motor Lock” wire is a gray/brown wire that can be found either in the driver’s kick panel, or at position 6 in the black 32-pin plug at the Smart Junction Box in the passenger kick panel.

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 on Page 6

See Installer’s Tip # 2 on Page 6 for tips on how to make your wiring connections

## For CRIMESTOPPER Remote Starts

Remote Start Wire	Connect to the wire for the circuit on the vehicle chart labeled:
Red (6-pin harness, 2 wires)	Constant 12 Volts
Pink (6-pin harness)	Ignition 12-Volts
Brown (6-pin harness)	Starter
Grey (6-pin harness)	Accessory
Pink/White (6-pin harness)	Ignition # 2 (not present on all vehicles)
Black (12-pin harness)	System Ground – connect this to a solid metal ground in the car
Yellow/Black (12-pin harness)	Connect to bypass blue/white 'ground when running' wire. SEE NOTE 1
Red/Black (12-pin harness)	Connect to +12volts *or* Ground. See NOTE 2
White (12-pin harness)	Parking Lamp
Purple (12-pin harness)	Brake Light (also called "Brake Switch")
Green (3-pin harness, red plug)	Motor Lock (See NOTE 3) 2009-10 F-Series truck owners, also see NOTE 6
Grey (12-pin harness)	Hood Input (See NOTE 4)
	<b><i>The connections below MAY be needed</i></b>
Orange/Black (12-pin harness)	OEM Alarm Disarm – <i>connect this if your car has a factory alarm system</i>
Red/White (12-pin harness)	Tach Signal (See NOTE 5)
Pink (12-pin harness)	Glow Plug Input (for diesels only)

- **NOTE 1** When referring to the install guide for the bypass, you'll be using the "standard wiring" configuration, so you'll make the connections shown in the bypass manual as dashed red lines.
- **NOTE 2** 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 3** Leave this wire disconnected for now. We're going to use it in Step 2 to test the system. Make this connection into the car after the test is successfully completed.
- **NOTE 4** 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!
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- **NOTE 6** On some 2009-2010 F-Series trucks, the "Motor Lock" wire is a gray/brown wire that can be found either in the driver's kick panel, or at position 6 in the black 32-pin plug at the Smart Junction Box in the passenger kick panel.

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 on Page 6

See Installer's Tip #2 on Page 6 for tips on how to make your wiring connections

## Installing your bypass (Using a Crimestopper/ProStart remote start)

The OL-IB-FMTL bypass requires a total of 6 connections.

- The blue/white wire goes to the Yellow/Black wire in the remote start 12-pin harness.
  - The Red wire gets connected to a constant +12v power source. (+12v is present whether the key is on or off)
  - The Black wire goes to ground
  - The Pink wire gets connected to the vehicle's primary ignition circuit. The pink wire from the remote start's 6-pin harness is already connected to that circuit, so you can just tap on to that.
  - The Green/Red and Gray/Red wires connect to the "RX" and "TX" wires on your PATS connector. The connector is located on the steering column, near the key cylinder. The OL-IB-FMTL installation manual shows all the different types of PATS connectors, and where the RX and TX wires are found on each type.
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## Installing your bypass (Using an Excalibur remote start)

The OL-IB-FMTL bypass requires a total of 4 connections.

- The large black cable with the 4-pin green connector goes from the bypass to the data port on the remote start. There is another, similar black cable in the kit with two black connectors – you will not use that one.
  - The Pink wire gets connected to the vehicle's primary ignition circuit. The pink wire from the remote start's 6-pin harness is already connected to that circuit, so you can just tap on to that.
  - The Green/Red and Gray/Red wires connect to the "RX" and "TX" wires on your PATS connector. The connector is located on the steering column, near the key cylinder. The OL-IB-FMTL installation manual shows all the different types of PATS connectors, and where the RX and TX wires are found on each type.
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Suggestion: Don't use tap connectors on the RX and TX wires. The wires are small and sometimes a tap connector won't make good contact. We suggest you either wrap and tape or solder and tape these connections. See Installer's Tip #2 on page 6.

Another suggestion: Don't program the bypass yet. We want to make sure the remote start is connected and working properly first.

## Step 2 – Test the System

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

1. Put your key in the ignition, but leave it in the 'off' position.
2. Locate the 'Activation Wire' on your remote start's 12-pin harness (Green for Crimestopper, White/Blue for Excalibur). Touch it to ground three times quickly in succession. This should start the car.

Turn the car off by pressing the brake pedal. Now connect the 'Activation Wire' to the 'Lock Motor' wire in the car. Repeat the test, but this time instead of touching the Activation Wire to ground, press 'Lock' on your remote fob three times three times quickly in succession. This should start the car again. Shut the car down again...we're almost done.

## Step 3 – Program the Bypass

Instructions for programming your bypass can be found at the end of this document. Make sure you have both of your keys and your remote fob handy, as the programming actions **MUST** be done within only a few seconds, as detailed in the instructions. *Read through the instructions first* before actually doing the programming! It will help enable you to complete the steps within the specified time.

### Two Important Things:

1. The first step of the programming process is the “Installation Mode Selection” If you are using the bypass with a Crimestopper/ProStart remote start, be sure to select STANDARD MODE. If you are using an Excalibur remote start, select DATA MODE. See Page 7 in the OL-IB-FMTL manual.
2. There are 6 steps within the Module Programming sequence. You **MUST** remove the 2<sup>nd</sup> key from the ignition after completing Step 4 and before doing Step 5. The manual isn’t very clear on this, but it is an important part of the programming sequence. If you do not remove the key at that time, the module will not program.

## Step 4 – Close it Up!

Once the bypass has been programmed, give the system one final test.

Now 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

There are 4 parts to your system:

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.

## 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, 1/2" 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, 1/2" is fine. Strip 1" of insulation off the end of the remote start wire. Separate the strands of the wire like this:



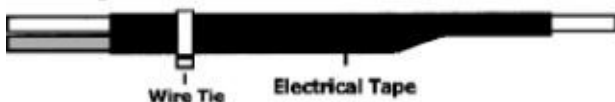
*Pass the wire from the remote through the opening as shown below*



*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.

We now have a “tap kit” available for purchase for those who prefer to use this method. The kit consists of two types of connectors - The taps and insulated male spade connectors that plug into them. The taps attach to the wires in the car and the spade connectors attach to the wires on the remote start. The spades then plug in to the taps. A crimping tool is required.

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## INSTALL GUIDE OL-IB-FMTL

# FMTL

**AVAILABLE FOR: OL-IB-FMTL**

*Rev. Date: February 10, 2009*

*Doc. No.: ##00832##*

PLEASE VISIT [WWW.CARALARM.COM](http://WWW.CARALARM.COM) FOR COMPLETE PRODUCT DETAILS

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mazda



LINCOLN



MERCURY



JAGUAR

Pages: 2 to 8



TOYOTA LEXUS SCION PONTIAC

Pages: 9 to 20

**NOTICE:** The manufacturer will accept no responsibility for any electrical damage resulting from improper installation of this product, be that either damage to the vehicle itself or to the installed device. This device must be installed by a certified technician. This guide has been written for properly trained technicians; a certain level of skill & knowledge is therefore assumed. Please review the Installation Guide carefully before beginning any work.

### VEHICLE COMPATIBILITY CHART

1. DETERMINE INSTALL TYPE

Refer to chart below

VEHICLE		INSTALL TYPE												
MAKE	MODEL	98	99	00	01	02	03	04	05	06	07	08	09	
FORD	Contour	1	1	1										
	Crown Victoria	1	1	1	1	1	1	1	1	1	1	1	1	
	E-Series											1	1	
	Edge										1	1	1	
	Escape				1	1	1	1	1	1	1	1	1	
	Escape Hybrid								1	1	1	1	1	
	Excursion			1	1	1	1	1	1	1				
	Expedition		1	1	1	1	1	1	1	1	1	1	1	
	Explorer	1	1	1	1	1	1	1	1	1	1	1	1	
	Explorer Sport Trac				1	1	1	1	1		1	1	1	
	F150		1	1	1	1	1	1	1	1	1	1	1	
	F-Series Super Duty												1	1
	Five Hundred									1	1	1		
	Flex													1
	Focus			1	1	1	1	1	1	1	1	1	1	1
	Freestar								1	1	1	1		
	Freestyle									1	1	1		
	Fusion										1	1	1	1
	GT									1	1			
	Mustang		1	1	1	1	1	1	1	1	1	1	1	1
Ranger		1	1	1	1	1	1	1	1	1	1	1	1	
Taurus	1	1	1	1	1	1	1	1	1	1	1	1	1	
Taurus X												1	1	
Thunderbird						3	3	3	3					
Windstar		1	1	1	1	1	1							
JAGUAR	X-Type					3	3	3	3	3	3	3		
LINCOLN	Aviator						1	1	1					
	Blackwood					1	1							
	Continental	1	1	1	1	1								
	LS			3	3	3	3	3	3	3				
	Mark LT									1	1	1		
	MKS												1*	
	MKX										1	1	1	
	MKZ										1	1	1	
	Navigator		1	1	1	1	1	1	1	1	1	1	1	
	Town Car	1	1	1	1	1	1	1	1	1	1	1	1	
Zephyr									1					
MAZDA	3							2	2	2	2	2	2	
	5									2	2	2	2	
	6							2	2	2	2	2	2*	
	B-Series		1	1	1	1	1	1	1	1	1	1	1	
	CX7										2	2	2	
	CX9										2	2	2	
	MX-5									2	2	2	2	
	RX-8								2	2	2	2	2	
	Tribute				1	1	1	1	1	1	1	1	1	
MERCURY	Cougar		1	1	1	1								
	Grand Marquis	1	1	1	1	1	1	1	1	1	1	1	1	
	Marauder						1	1						
	Mariner								1	1	1	1	1	
	Mariner Hybrid									1	1	1	1	
	Milan									1	1	1	1	
	Montego								1	1	1			
	Monterey								1	1	1			
	Mountaineer	1	1	1	1	1	1	1	1	1	1	1	1	
	Mystique	1	1	1										
	Sable	1	1	1	1	1	1	1	1				1	

\* without smartkey system ONLY

2. PROCEED WITH INSTALLATION

See applicable wiring diagram

**NOTE:** ENSURE ALL CONNECTIONS ARE COMPLETED AND PROPERLY SECURED PRIOR TO CONNECTING THE WIRE HARNESSSES TO THE MODULE.

## WIRE CROSS REFERENCE CHART

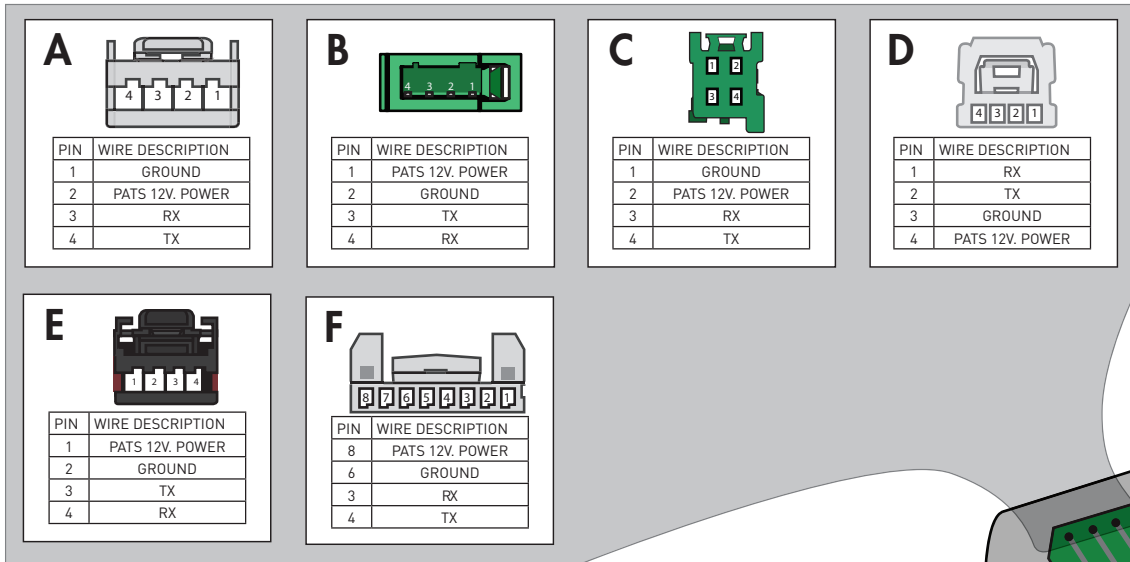
FORD VEHICLES						
MODEL	YEAR	PIN	TX	PIN	RX	CONN
Contour	1998-2000	3	Gray/Orange	4	White/Lt Green	B
Crown Victoria	1998-2002	4	White/Lt Green	3	Gray/Orange	A
	2003-2004	4	White/Lt Green	3	Gray/Orange	C
	2005-2009	3	White/Lt Green	4	Gray/Orange	E
E-Series	2008	4	White/Lt Green	3	Gray/Orange	C
	2009	4	Yellow/Orange	3	Violet/Gray	C
Edge	2007-2009	3	Violet/Gray	4	Yellow/Orange	E
Escape / Hybrid	2001-2007	3	Brown/Orange	4	Red/Black	B
	2008-2009	3	Yellow/Orange	4	Violet/Gray	E
Excursion	2000-2002 2003 (early prod)	4	White/Lt Green	3	Gray/Orange	A
	2003 (late prod) 2004-2005	4	White/Lt Green	3	Gray/Orange	C
Expedition	1999-2002	4	White/Lt Green	3	Gray/Orange	A
	2003-2006	3	White/Lt Green	4	Gray/Orange	B
	2007-2009	3	Violet/Brown	4	Blue/Gray	E
Explorer	1998-2000 2001 (early prod)	4	White/Lt Green	3	Gray/Orange	A
	2001 (late prod) 2002-2003 (2dr)	4	White/Lt Green	3	Gray/Orange	C
	2002-2005	3	White/Lt Green	4	Gray/Orange	B
	2006-2009	3	Yellow/Orange	4	Violet/Gray	E
	2001 (early prod) 2001 (late prod) 2002-2005	4	White/Lt Green	3	Gray/Orange	A
Explorer Sport Trac	2001 (early prod)	4	White/Lt Green	3	Gray/Orange	A
	2001 (late prod) 2002-2005	4	White/Lt Green	3	Gray/Orange	C
	2007-2009	3	Yellow/Orange	4	Violet/Gray	E
F-150	1999-2002	4	White/Lt Green	3	Gray/Orange	A
	2003	4	White/Lt Green	3	Gray/Orange	C
	2004-2008	3	White/Lt Green	4	Gray/Orange	B
	2009	3	Violet/Gray	4	Yellow/Orange	E
F-Series Super Duty	2008-2009	3	Yellow/Orange	4	Violet/Gray	E
Five Hundred	2005-2007	3	White/Lt Green	4	Gray/Orange	E
Flex	2009	3	Yellow/Orange	4	Violet/Gray	E
Focus	2000-2007	3	Gray/Orange	4	White/Green	B
	2008-2009	4	Violet/Gray	3	Yellow/Orange	F
Freestar	2004-2007	4	White/Lt Green	3	Gray/Orange	C
Freestyle	2005-2007	3	White/Lt Green	4	Gray/Orange	E
Fusion	2006	3	Violet/Gray	4	Yellow/Orange	E
	2007 (early prod) 2007 (late prod) 2008-2009	3	Yellow/Orange	4	Violet/Gray	E
GT	2005-2006	3	White/Orange	4	Brown/Orange	B
Mustang	1999-2002	4	White/Lt Green	3	Gray/Orange	A
	2003-2004	4	White/Lt Green	3	Gray/Orange	C
	2005-2009	3	White/Lt Green	4	Gray/Orange	E
Ranger	1999-2000	4	White/Lt Green	3	Gray/Orange	A
	2001-2006	4	White/Lt Green	3	Gray/Orange	C
	2007-2009	4	Violet/Brown	3	Blue/Gray	C
Taurus	1998-2001	4	Brown/Orange	3	Red/Black	A
	2002	4	Gray/Red	3	Brown/Yellow	A
	2003	4	Brown/Yellow	3	Gray/Red	C
	2004-2007 2008-2009	4	White/Lt Green Yellow/Orange	3 4	Gray/Orange Violet/Gray	C E
Taurus X	2008-2009	3	Yellow/Orange	4	Violet/Gray	E
Thunderbird	2002-2005	3	White/Red	4	Gray/red	B
Windstar	1999-2002	4	White/Lt Green	3	Gray/Orange	A
	2003	4	White/Lt Green	3	Gray/Orange	C
JAGUAR VEHICLES						
MODEL	YEAR	PIN	TX	PIN	RX	CONN
X-Type	2002-2008	3	White/Green	4	Orange	B

LINCOLN VEHICLES						
MODEL	YEAR	PIN	TX	PIN	RX	CONN
Aviator	2003-2005	3	White/Lt Green	4	Gray/Orange	B
Blackwood	2002	4	White/Lt Green	3	Gray/Orange	A
	2003	4	White/Lt Green	3	Gray/Orange	C
Continental	1998 (early prod)	3	White/Lt Green	4	Gray/Orange	A
	1998 (late prod) 1999-2002	4	White/Lt Green	3	Gray/Orange	A
LS	2000-2006	3	White/Red	4	Gray/red	B
Mark LT	2006-2008	3	White/Lt Green	4	Gray/Orange	B
MKS (w/o smartkey)	2009	3	Yellow/Orange	4	Violet/Gray	E
MKX	2007-2009	3	Violet/Gray	4	Yellow/Orange	E
MKZ	2007 (early prod)	3	Violet/Gray	4	Yellow/Orange	E
	2007 (late prod) 2008-2009	3	Yellow/Orange	4	Violet/Gray	E
Navigator	1999-2002	4	White/Lt Green	3	Gray/Orange	A
	2003-2006	3	White/Lt Green	4	Gray/Orange	B
	2007-2009	3	Violet/Brown	4	Blue/Gray	E
Town Car	1998-2002	4	White/Lt Green	3	Gray/Orange	A
	2003-2004	4	White/Lt Green	3	Gray/Orange	C
	2005-2009	3	White/Lt Green	4	Gray/Orange	E
Zephyr	2006	3	Violet/Gray	4	Yellow/Orange	E
MAZDA VEHICLES						
MODEL	YEAR	PIN	TX	PIN	RX	CONN
3	2004-2009	2	Gray/Orange	1	White/Lt Green	D
5	2006-2009	2	Green	1	Pink/Black	D
6 (w/o smartkey)	2003-2008	2	Green	1	Orange/Lt Blue	D
6 (with smartkey)	2006-2008	2	Yellow/Green	1	Gray	D
6 (w/o smartkey)	2009	4	Gray/Orange	3	White/Lt Green	F
B-Series	1999-2000	4	White/Lt Green	3	Gray/Orange	A
	2001-2006	4	White/Lt Green	3	Gray/Orange	C
	2007-2009	4	Violet/Brown	3	Blue/Gray	C
CX7	2007-2009	2	Gray/Orange	1	White/Lt Green	D
CX9	2007-2009	2	Blue/Yellow	1	Blue/Orange	D
MX-5 (w/o smartkey)	2006-2009	2	Yellow/Black	1	Lt Blue/Orange	D
MX-5 (with smartkey)	2006-2009	2	Gray/Lt Blue	1	Violet	D
RX-8	2004-2009	2	Lt Blue/Orange	1	Yellow/Black	D
Tribute	2001-2007	3	Brown/Orange	4	Red/Black	B
	2008-2009	3	Yellow/Orange	4	Violet/Gray	E
MERCURY VEHICLES						
MODEL	YEAR	PIN	TX	PIN	RX	CONN
Cougar	1999-2002	3	Gray/Orange	4	White/Green	B
Grand Marquis	1998-2002	4	White/Lt Green	3	Gray/Orange	A
	2003-2004	4	White/Lt Green	3	Gray/Orange	C
	2005-2009	3	White/Lt Green	4	Gray/Orange	E
Marauder	2003-2004	4	White/Lt Green	3	Gray/Orange	C
Mariner / Hybrid	2005-2007	3	Brown/Orange	4	Red/Black	B
	2008-2009	3	Yellow/Orange	4	Violet/Gray	E
Milan	2006 2007 (early prod)	3	Violet/Gray	4	Yellow/Orange	E
	2007 (late prod) 2008-2009	3	Yellow/Orange	4	Violet/Gray	E
Montego	2005-2007	3	White/Lt Green	4	Gray/Orange	E
Monterey	2004-2007	4	White/Lt Green	3	Gray/Orange	C
Mountaineer	1998-2001	4	White/Lt Green	3	Gray/Orange	A
	2002-2005	3	White/Lt Green	4	Gray/Orange	B
	2006-2009	3	Yellow/Orange	4	Violet/Gray	E
Mystique	1998-2000	3	Gray/Orange	4	White/Lt Green	B
Sable	1998-2001	4	Brown/Orange	3	Red/Black	A
	2002	4	Gray/Red	3	Brown/Yellow	A
	2003	4	Brown/Yellow	3	Gray/Red	C
	2004-2005	4	White/Lt Green	3	Gray/Orange	C
	2008-2009	3	Yellow/Orange	4	Violet/Gray	E

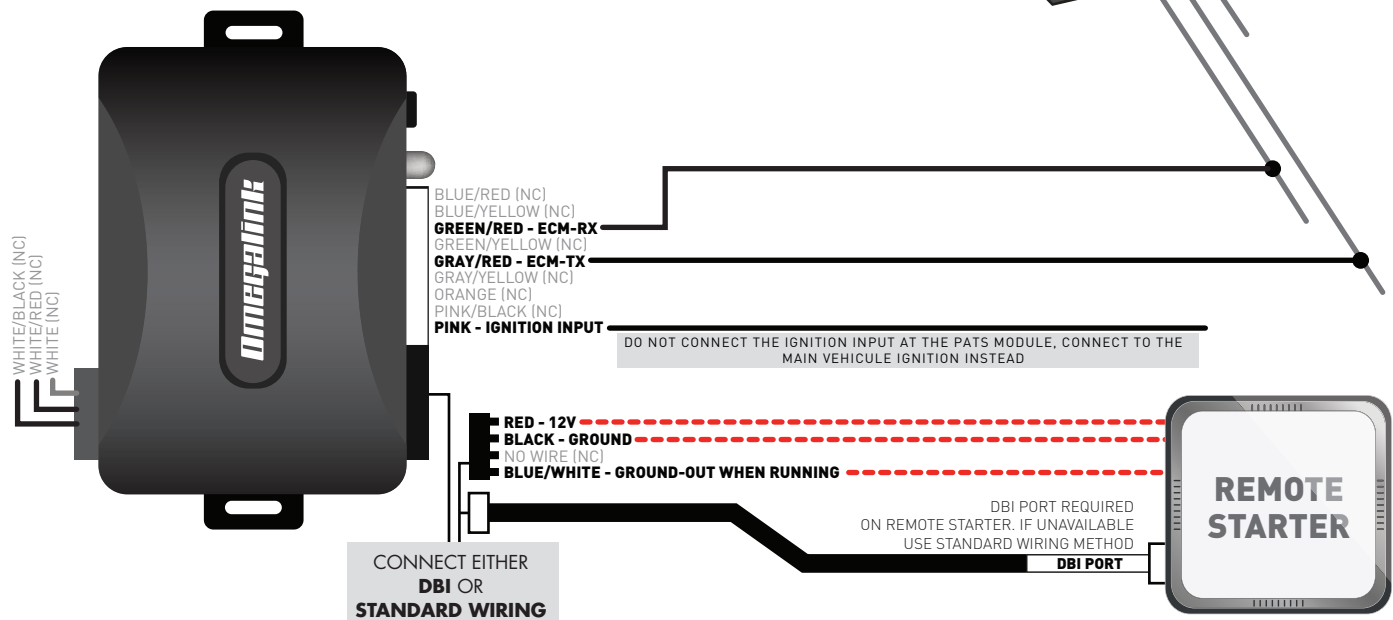
### TYPE 1 WIRING DIAGRAM

#### IMMOBILIZER CONNECTOR TYPE:

Connectors B, D, E, F and G located at immobilizer near key barrel  
Connectors A and C are found 8 inches lower on PATS harness.



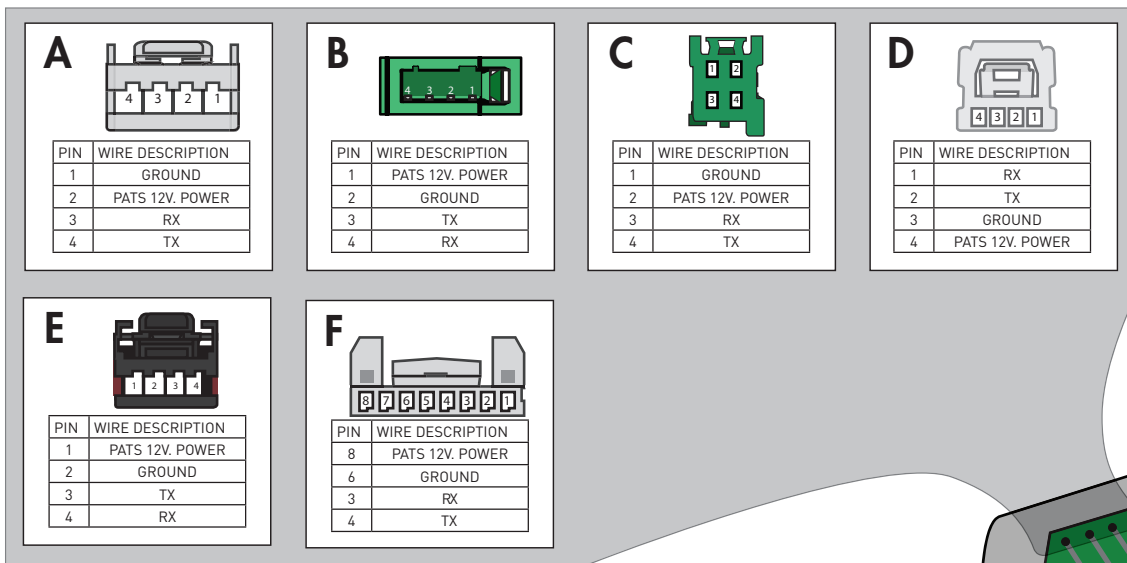
**LEGEND**  
- - - - Wiring connections not required when using the DBI Port.



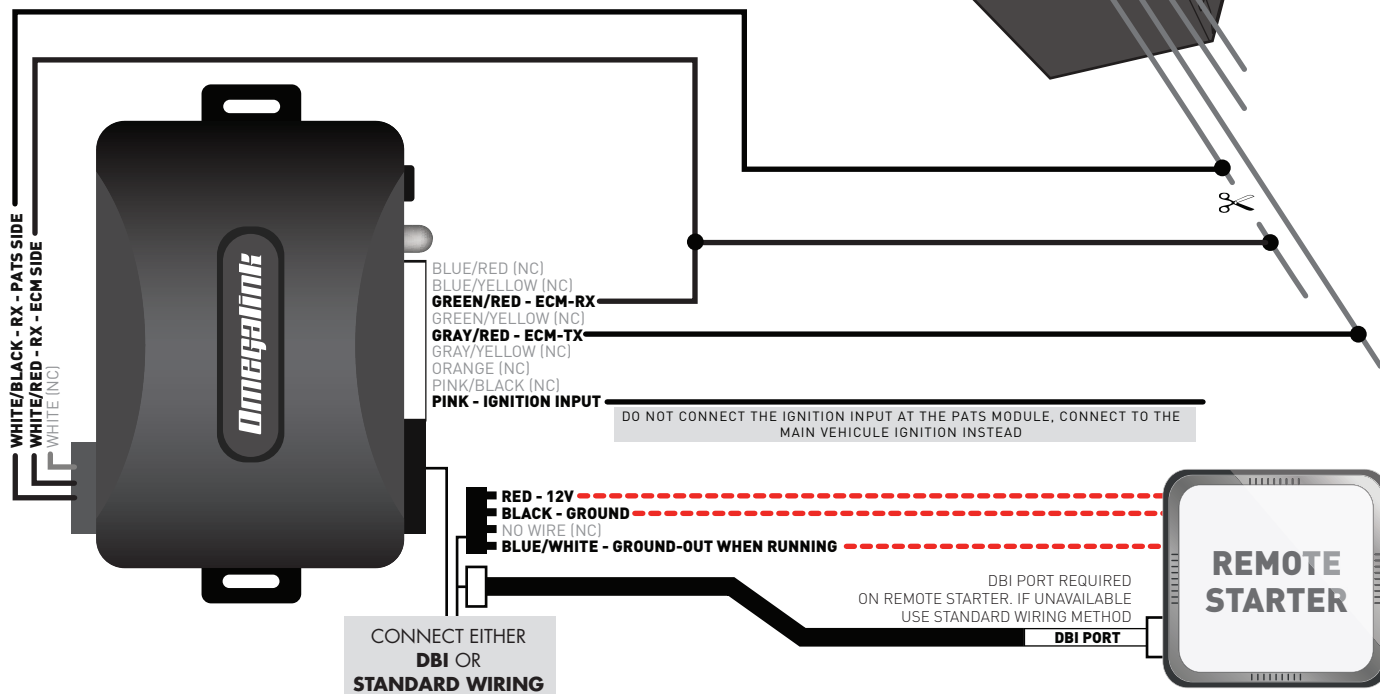
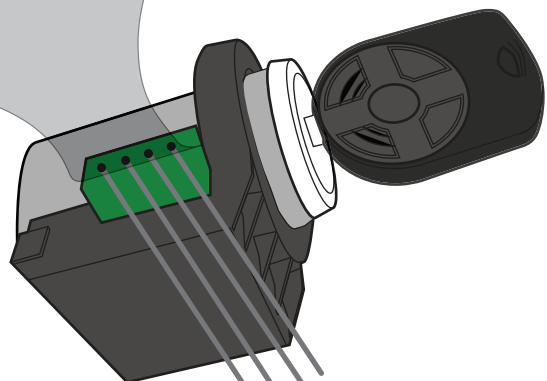
### TYPE 2 WIRING DIAGRAM

#### IMMOBILIZER CONNECTOR TYPE:

Connectors B, D, E, F and G located at immobilizer near key barrel  
Connectors A and C are found 8 inches lower on PATS harness.



**LEGEND**  
- - - - - Wiring connections not required when using the DBI Port.



### TYPE 3 WIRING DIAGRAM

#### IMMOBILIZER CONNECTOR TYPE:

Connector B is located at immobilizer near key barrel

**B**

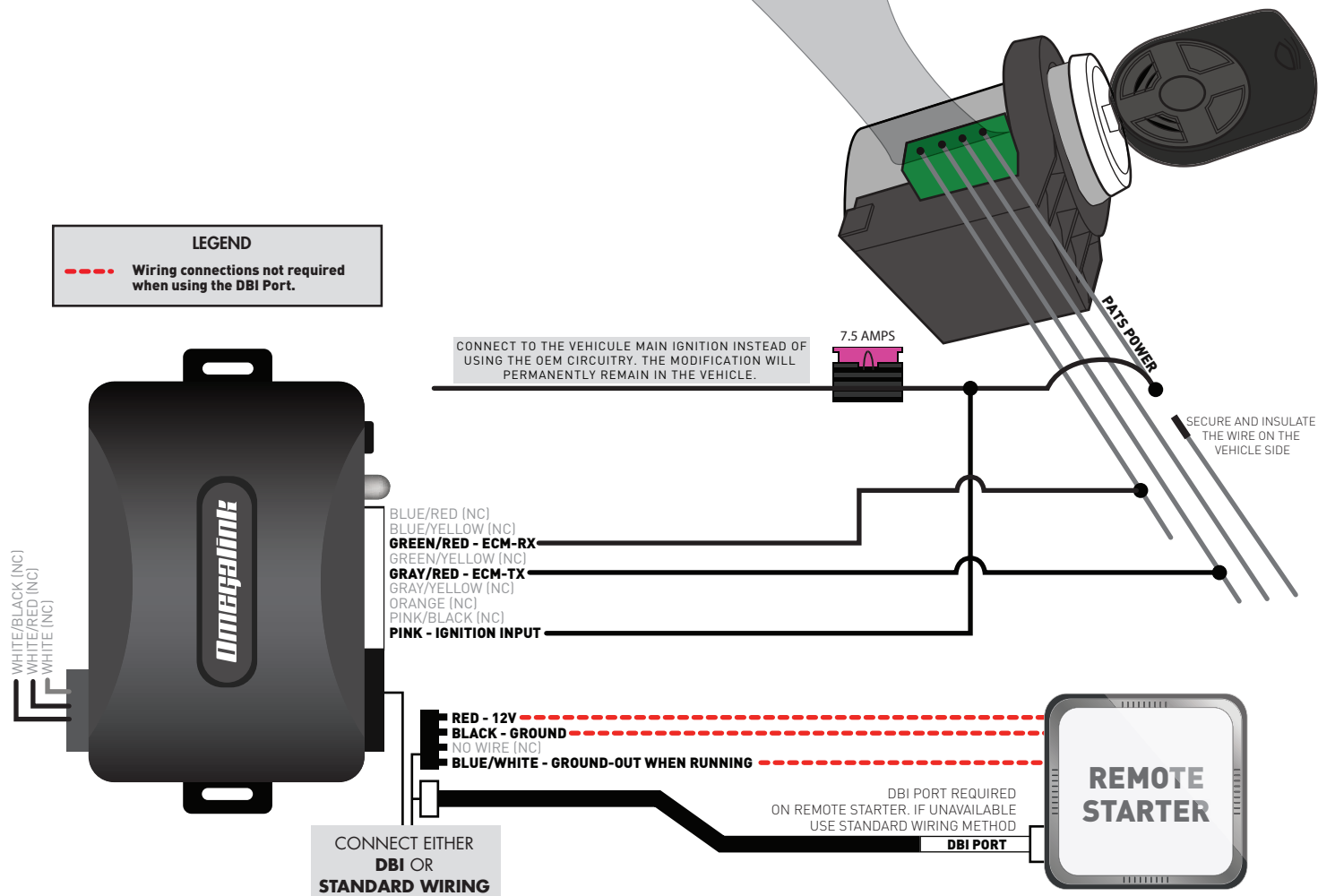
PIN	WIRE DESCRIPTION
1	PATS 12V. POWER
2	GROUND
3	TX
4	RX

PATS POWER WIRING CHART					
MAKE	MODEL	YEAR	PIN	PATS POWER	CONN
Ford	Thunderbird	2002-2005	1	Orange/Blue	B
Jaguar	X-Type	2002-2007	1	Green	B
Lincoln	LS	2000-2006	1	Orange/Blue	B

For RX and TX wires listing, please refer to the Wiring chart found at the beginning of this guide

**LEGEND**

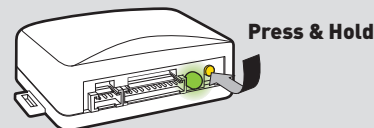
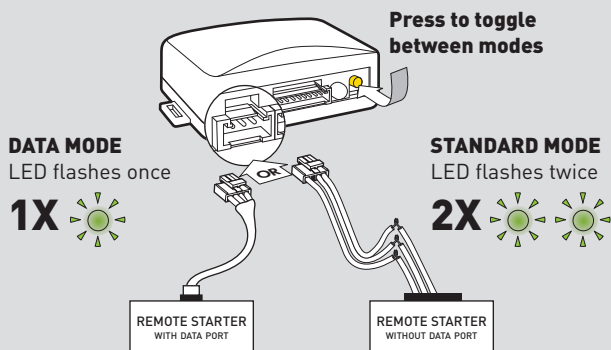
--- Wiring connections not required when using the DBI Port.



### INSTALLATION MODE SELECTION

**1** Press and release the programming button to select installation mode.

**2** To register selection, hold the programming button down until the LED displays a solid GREEN light.



#### NOTE

To change the current installation mode once registered, apply a "Factory Reset" and restart this procedure.

### MODULE PROGRAMMING

**IMPORTANT: BOTH KEYS ARE REQUIRED TO COMPLETE THE PROGRAMMING PROCEDURE**

#### PROGRAMMING STEP 1

**1** Insert the **FIRST** vehicle key into the ignition and turn the ignition to the "ON" position. (Note: if the LED begins to flash RED, please verify the RX and TX connections between the module and the vehicle).

**2** If the LED illuminates GREEN for 2 SECONDS. Programming is completed and the module is ready for remote start. IF THE LED ILLUMINATES RED, PROCEED WITH PROGRAMMING STEP 2 WITHIN 5 SECONDS AFTER THE LED TURNED OFF.

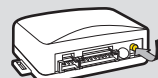
#### PROGRAMMING STEP 2

**REQUIRED FOR MOST 2000+ VEHICLES**

**3** Insert the **SECOND** key and turn the ignition to the "ON" position. (Module LED will illuminate RED.) **LED RED**

**4** The LED will turn "OFF" to confirm the vehicle has validated the key. (Note: if the LED begins to flash RED, you are using a cloned key or used the same key twice).

**5** Press and release the programming button and, **WITHIN 5 SECONDS**, remote start the vehicle or jump the main ignition to a main 12V wire .



**PRESS + RELEASE**

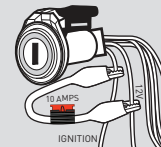


Start the vehicle using the remote controlled starter

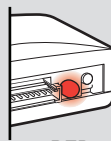


OR

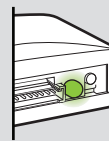
Jump the ignition to 12 Volts.



**6** The LED will turn RED to indicate the learning procedure has begun. The LED will then turn GREEN to confirm programming has succeeded. The green LED will remain illuminated until ignition is turned off.



**RED**



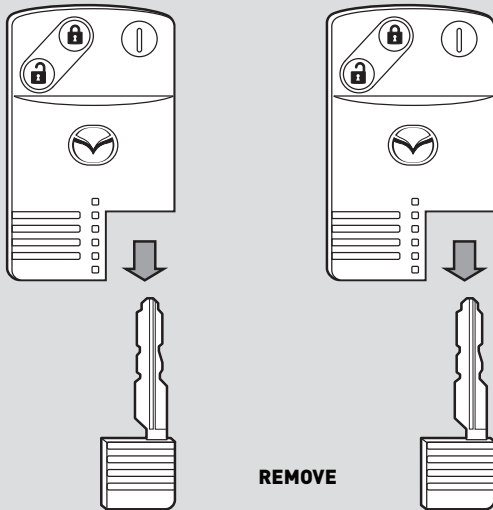
**THEN GREEN IF SUCCESSFUL**

FOR RFID "SMART KEYS" PLEASE REFER TO THE THE NEXT PAGE

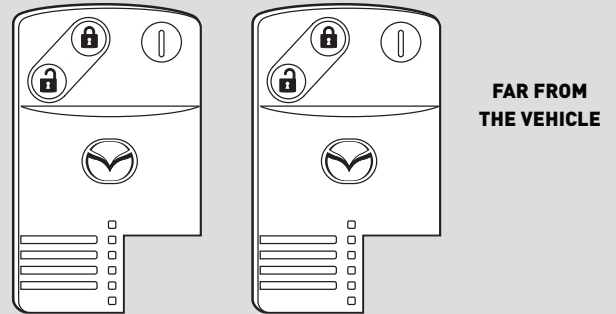
### “SMART KEY” MODULE PROGRAMMING

IMPORTANT: BOTH KEYS ARE REQUIRED FOR PROGRAMMING

**1** Remove the valet keys from each SMART KEY card.



**2** Put the cards far from the vehicle.

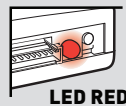
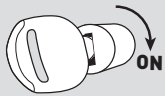


**3** Use the valet keys to continue programming.

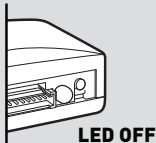


### PROGRAMMING

**1** Insert the first key and turn the ignition to the “ON” position. (Module LED will illuminate RED.)



**2** The LED will turn “OFF” to confirm the vehicle has validated the key. (Note: if the LED begins to flash RED, please verify the RX and TX connections between the module and the vehicle).



**3** REPEAT STEPS 1 & 2 WITH SECOND KEY

**4** Press and release the programming button and, WITHIN 5 SECONDS, remote start the vehicle or jump the main ignition to a main 12V wire .

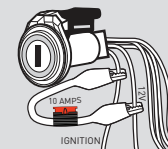


Start the vehicle using the remote controlled starter

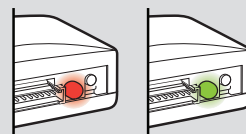


OR

Jump the ignition to 12 Volts.



**5** The LED will turn RED to indicate the learning procedure has begun. The LED will then turn GREEN to confirm programming has succeeded. The green LED will remain illuminated until ignition is turned off.



**RED THEN GREEN IF SUCCESSFUL**



## VEHICLE COMPATIBILITY CHART

### 1. DETERMINE INSTALL TYPE

Refer to chart below

MAKE	MODEL	INSTALL TYPE											
		98	99	00	01	02	03	04	05	06	07	08	09
TOYOTA	4Runner		1	1	1	1	2	2	2	2	2	2	2
	Avalon	1	1	1	1	1	1	1	2/3	2/3	2/3	2/3	2/3
	Camry	1	1	1	1	1	1/2	1/2	2	2	2/3	2/3	2/3
	Camry Hybrid										3	3	3
	Corolla								2	2	2	2	2/3
	FJ Cruiser										2	2	2
	Hiace									2	2	2	2
	Highlander				1	1	1	2	2	2	2	2/3	2/3
	Highlander Hybrid									5	5	3	3
	Hilux							2	2	2	2	2	2
	Land Cruiser	1	1	1	1	1	2	2	2	2	2	3	NC
	Matrix								2	2	2	2	2
	MR2 Spyder			1	1	1	1	1	1				
	Prius							4	4	4	4	4	4
	RAV4				1	1	1	2	2	2	2	2	2/3
	Sequoia				1	1	1	1	1	1	1	1	2
	Sienna		1	1	1	1	1	2	2	2	2	2	2
	Solara		1	1	1	1	1/2	1/2	2	2	2	2	
	Tacoma									2	2	2	2
Tundra										1	2	2	
Venza (standard key only)												2	
Yaris										2	2	2	
LEXUS	ES 300	1	1	1	1	1	1						
	ES 330							2	2	2			
	ES 350										3	3	NC
	GS 300	1	1	1	1	1	1	1	1	3			
	GS 350										3	3	NC
	GS 400	1	1	1									
	GS 430				1	1	1	1	1	3	3		
	GS 450 Hybrid										3	3	NC
	GS 460											3	NC
	GX 470						2	2	2	2	2	2	2
	IS 250									3	3	3	NC
	IS 300				1	1	1	1	1				
	IS 350									3	3	3	NC
	IS-F											3	NC
	LS 400	1	1	1									
	LS 430				1	1	1	1/2	1/2	1/2			
	LS 460										3	3	NC
	LS 600 Hybrid											3	NC
	LX 470	1	1	1	1	1	2	2	2	2	2		
	LX 570											NC	NC
RX 300		1	1	1	1	1							
RX 330							2	2	2				
RX 350										2	2	2	
RX 400 Hybrid									5	5	5		
SC 300	1	1	1										
SC 400	1	1	1										
SC 430					1	1	1	1	1	1	1	1	
PONTIAC	Vibe											2	2
SCION	tC								2	2	2	2	2

**LEGEND**  
1/2 - Type may vary by vehicle equipment level.

2/3 - Type may be standard key or push to start.

NC - Not covered

### WARNING

Please advise that the install type numbers have changed since the last revision of this install guide.

### NOTES

Type 3 install provides simulated tach output for hybrid vehicles.

A hybrid vehicle might be running without its engine being running.

To determine whether a hybrid vehicle is running or not, look at the instrument cluster, radio and heating system.

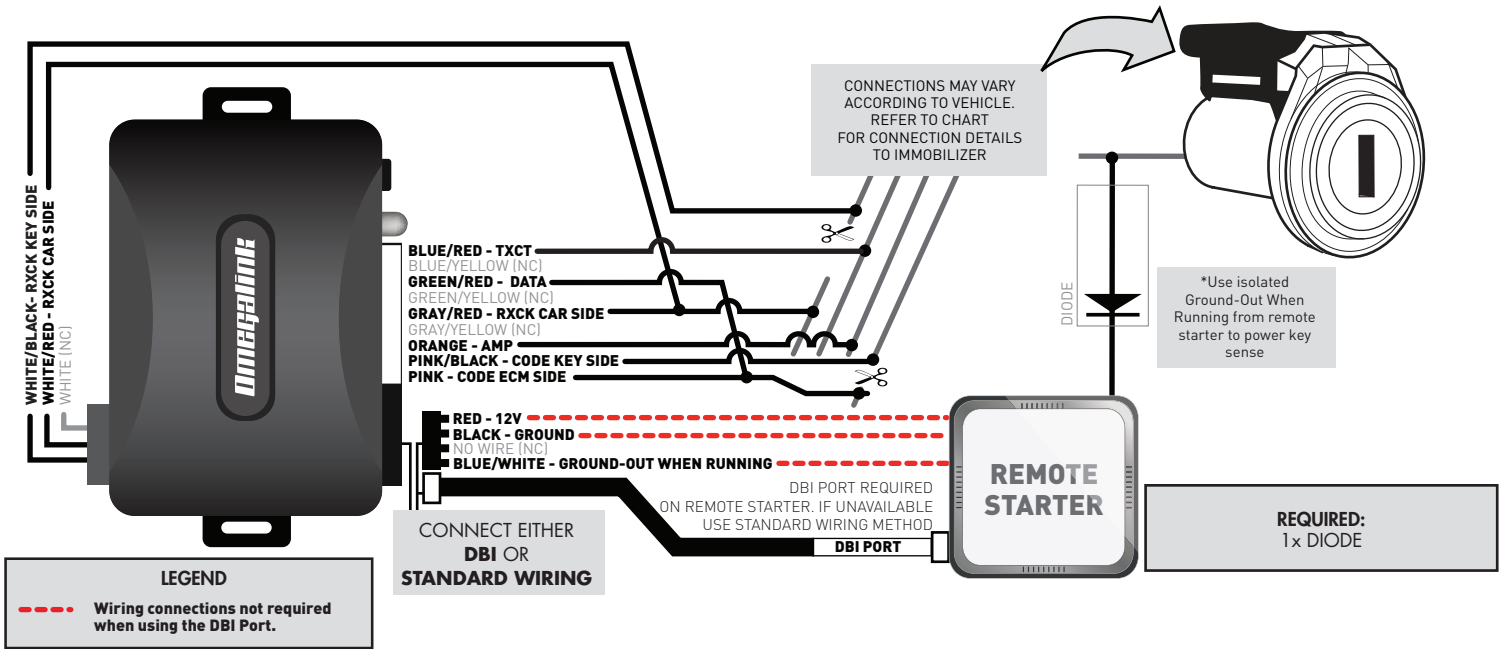
“Push to Start” vehicles have a maximum take over time of 45 seconds:

for security reasons, during the remote starter runtime, the driver must press the unlock button of the remote starter fob to trigger a 45 seconds time window which will permit him/her to step into the vehicle and press the brake pedal to complete take over.

### 2. PROCEED WITH INSTALLATION

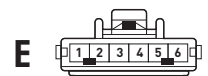
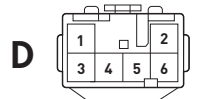
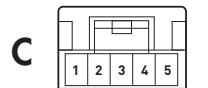
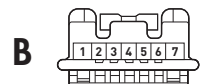
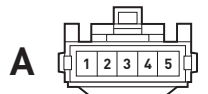
See applicable wiring diagram

### TYPE 1 WIRING DIAGRAM AND CROSS-REFERENCE CHART

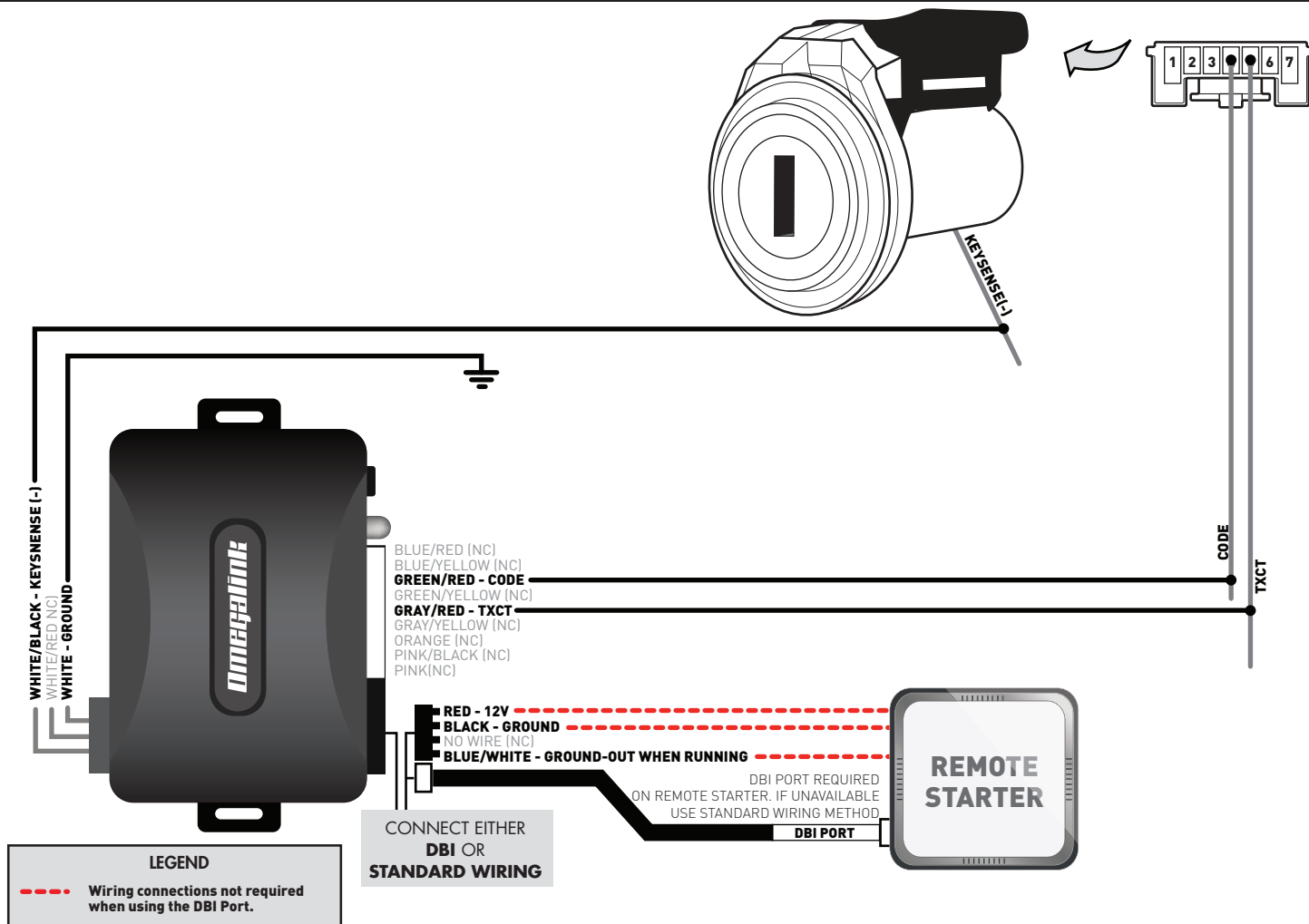


MODEL	YEAR	PIN AMP	PIN CODE	PIN RXCK	PIN TXCT	PIN GROUND (-)	KEY SENSE	CONN.
4Runner	1999-02	1 White/Blue	2 Gray/Red	3 Red/Black	4 Pink/Black	5 Brown	Yellow/Red	A
Avalon	1998-99	1 Light Green	2 Black/Red	3 Yellow	4 Green	5 White/Black	Red/Yellow	A
Avalon	2000-04	1 Black/White	2 Pink/Green	3 Blue/Orange	4 Blue/Yellow	5 White/Black	Red/White	A
Camry	1998-01	1 Black/Yellow	2 Green/White	3 Red/Blue	4 Blue/Yellow	5 White/Black	Blue/Black	A
Camry (4cyl)	2002-04	1 Black/Red	4 Green/White	3 Red/Blue	5 Blue/Yellow	7 White/Black	Blue	B
Camry (6cyl)	2002-03	1 Black/Red	4 Green/White	3 Red/Blue	5 Blue/Yellow	7 White/Black	Blue	B
ES300	1998-01	1 Black/Yellow	2 Green/White	3 Red/Blue	4 Blue/Yellow	5 White/Black	Blue/Black	A
ES300	2002-03	1 Black/Red	4 Green/White	3 Red/Blue	5 Blue/Yellow	7 White/Black	Blue	B
GS 300	1998-00	1 Black/Red	2 Green/Black	3 Black/White	4 Blue/Red	5 White/Black	Yellow	E
GS 300	2001-05	1 Black/Red	2 Green/Black	3 Black/White	4 Blue/Red	5 White/Black	Yellow	A
GS 400	1998-00	1 Black/Red	2 Green/Black	3 Black/White	4 Blue/Red	5 White/Black	Yellow	E
GS 430	2001-05	1 Black/Red	2 Green/Black	3 Black/White	4 Blue/Red	5 White/Black	Yellow	A
Highlander	2001-03	1 White	4 Gray/Blue	3 Pink	5 Gray	7 White/Black	Blue	B
IS 300	2001	1 Black/Red	2 Green	3 Purple	4 Pink	5 White/Black	Black/Yellow	A
IS 300	2002-05	1 Black/Red	2 Green/Black	3 Purple	4 Pink/Black	5 White/Black	Black/Yellow	A
Land Cruiser	1998-02	1 Black/Yellow	2 Blue/Black	3 Purple/Green	4 Red/Yellow	5 White/Black	Red/Black	E
LS 400	1998-00	1 White	2 Red/White	3 Red/Black	4 Red	5 White/Black	Yellow	A
LS 430	2001-03	1 Orange	4 Red/White	3 White/Red	5 Light-Blue/Black	7 Violet	Lt Green/Black	B
LS 430 (smartkey)	2004-06	1 Red	4 Orange	3 Light Blue	5 Yellow/Black	7 Violet	Lt Green/Black	B
LX 470	1998-02	1 Black/Yellow	2 Blue/Black	3 Purple/Green	4 Red/Yellow	5 White/Black	Red/White	E
MR2 Spyder	2000-05	5 Black	2 Blue/Yellow	4 Yellow	1 Blue/Black	3 White/Black	Yellow/Red	C
RAV4	2001-03	5 Black/Red	2 Yellow/Green	4 Yellow	1 Yellow/Black	3 White/Black	Blue/Red	C
RX 300	1999	1 Blue/White	2 Purple	3 Black	4 Gray	5 White/Black	Blue	A
RX 300	2000	1 Blue/White	2 Purple	3 Pink	4 Gray	5 White/Black	Blue	A
RX 300	2001-03	1 Black/Red	2 Purple	3 Pink	4 Gray	5 White/Black	Blue	A
SC 300	1998-00	1 Black/Red	2 Black/Orange	3 Blue	4 Green/Orange	5 White/Green	Yellow	A
SC 400	1998-00	1 Black/Red	2 Black/Orange	3 Blue	4 Green/Orange	5 White/Green	Yellow	A
SC 430	2002-09	1 Yellow	2 Violet/White	3 Red	4 Green	5 Violet	Light Green/Black	A
Sequoia	2001-02	1 Black/Red	4 Red/Yellow	5 Light Green	6 Yellow/Green	2 Orange	Yellow/Green	D
Sequoia	2003-07	1 Gray/Black	4 Red/Yellow	5 Light Green	6 Yellow/Green	2 Gray/Light Blue	Yellow/Green	D
Sienna	1999-03	1 Black/Red	2 Brown/White	3 Brown/Red	4 Brown/Yellow	5 White/Black	Blue/Black	A
Solara	1999-03	1 Red	2 Green/White	3 Red/Blue	4 Blue/Yellow	5 White/Black	Blue/Black	A
Tundra S. Cab	2006	1 Red	3 Green	4 Blue/Red	5 Gray	2 Pink	Pink/Black	D
Tundra D. Cab	2006	1 White	4 Green	5 Red	6 Black	2 Gray	Yellow/Green	D

**CONNECTOR TYPE:**  
 Connector is located at immobilizer near key barrel or 8 inches lower on the immobilizer harness.



### TYPE 2 WIRING DIAGRAM

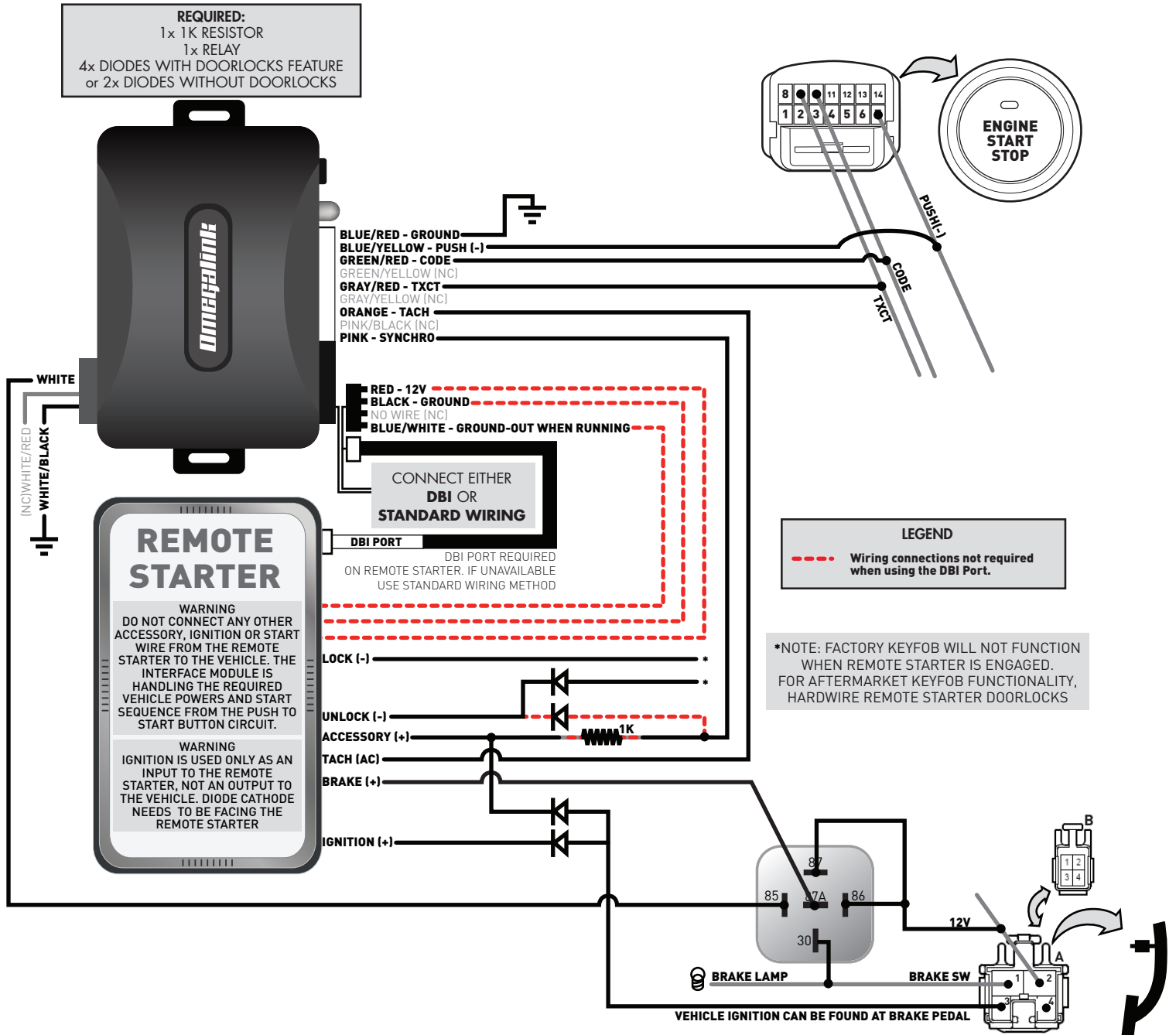


PLEASE REFER TO THE WIRING CROSS-REFERENCE CHART FOUND ON NEXT PAGE

## TYPE 2 WIRE CROSS REFERENCE CHART

MODEL	YEARS	PIN	CODE	PIN	TXCT	KEY SENSE
4Runner	2003-09	4	Pink/Green	5	Light Green/Red	Green/Yellow
Avalon	2005-09	4	Light/Green	5	Brown	Black
Camry	2003-06	4	Green/White	5	Blue/Yellow	Blue
Camry	2007-09	4	Brown	5	Red	Blue
Corolla	2005-08	4	Blue	5	Green	Blue/Black
Corolla (Japan)	2009	4	Light Blue	5	Beige	Light Blue
Corolla (Canada)	2009	4	Pink	5	Green	Light Blue
FJ Cruiser	2007-09	4	Pink/Green	5	Light Green/Red	Green/Yellow
Hiace	2006-09	4	Blue	5	Yellow	Yellow/Black
Highlander	2004-07	4	Gray	5	White	Green
Highlander	2008-09	4	Red	5	Light Blue	Light Blue
Hilux	2004-09	4	Light Blue/Yellow	5	Light Blue/Black	Green/Yellow
Land Cruiser	2003-07	4	Blue/Black	5	Violet/Green	Red/Black
Matrix	2005-08	4	Blue	5	Green	Blue/Black
Matrix	2009	4	Light Blue	5	Beige	Blue
RAV4	2004-05	4	Blue/Red	5	Pink	Blue/Red
RAV4	2006-09	4	Pink	5	Green	Blue
Sequoia	2008-09	4	Light Green	5	Blue	Gray
Sienna	2004-09	4	Yellow	5	Yellow/Red	Blue/Black
Solara (Convertible)	2004-08	4	Green/White	5	Blue/Yellow	Blue
Solara (Coupe)	2004-08	4	Yellow	5	Yellow/Red	Blue
Tacoma	2005-09	4	Pink/Green	5	Light Green/Red	Green/Black
Tundra	2007-09	4	Light Green	5	Blue	Gray
Venza	2009	4	Light Green	5	Brown	Brown
Yaris	2006-09	4	Green	5	Violet	Yellow
ES 330	2004-06	4	Green/White	5	Blue/Yellow	Blue
GX 470	2003-09	4	Yellow	5	Yellow/Black	Green/Yellow
LS 430	2004-06	4	Red/White	5	Blue/Black	Light Green/Black
LX 470	2003-07	4	Blue/Black	5	Violet/Green	Red/Black
RX 330	2004-06	4	Light Green	5	Brown	Black
RX 350	2007-08	4	Light Green	5	Brown	Black
Vibe	2008	4	Blue	5	Green	Blue/Black
Vibe	2009	4	Light Blue	5	Beige	Blue
tC	2005-09	4	Yellow	5	Red	Black

### TYPE 3 WIRING DIAGRAM

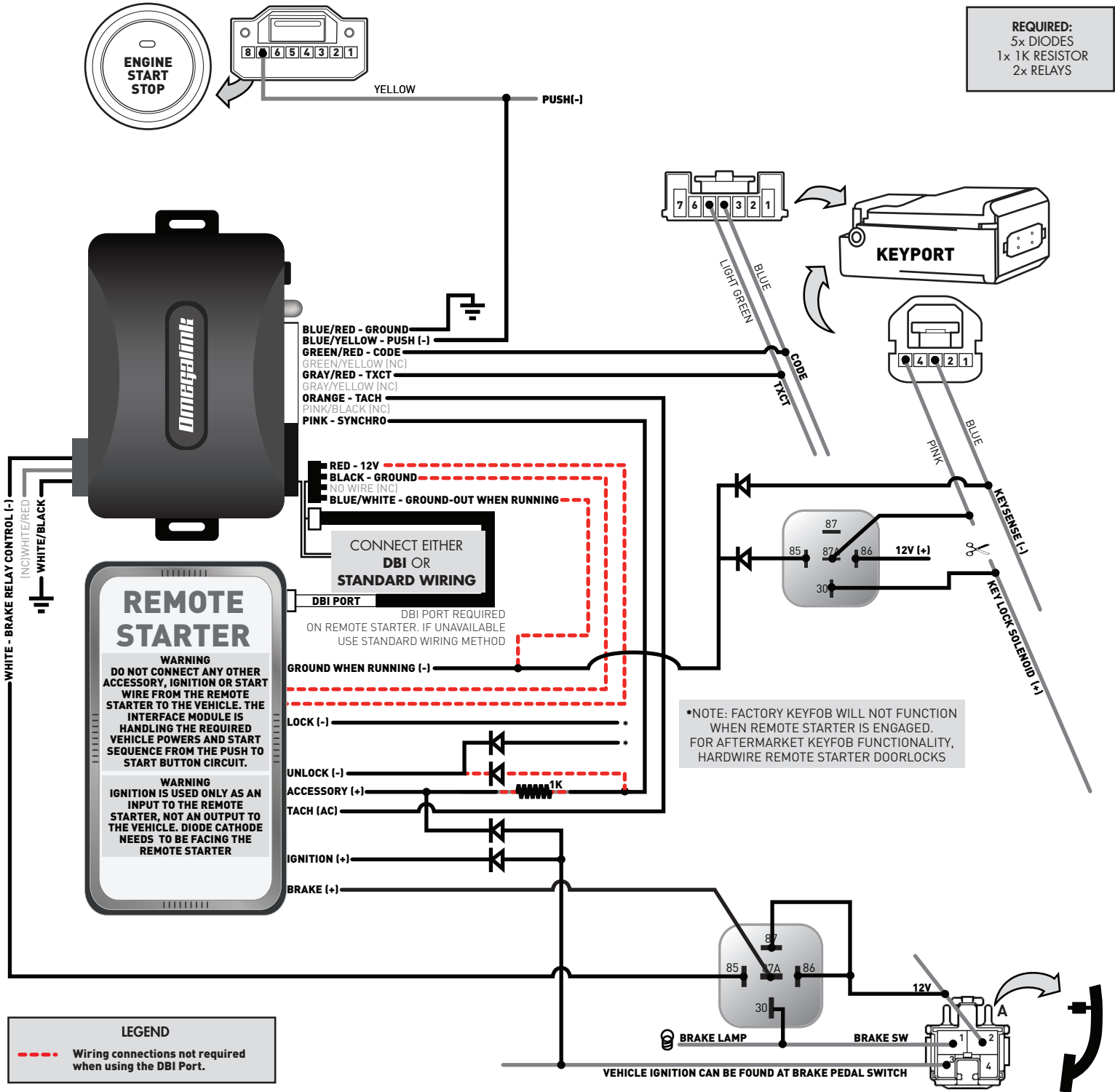


PLEASE REFER TO THE WIRING CROSS-REFERENCE CHART FOUND ON NEXT PAGE

## TYPE 3 WIRE CROSS REFERENCE CHART

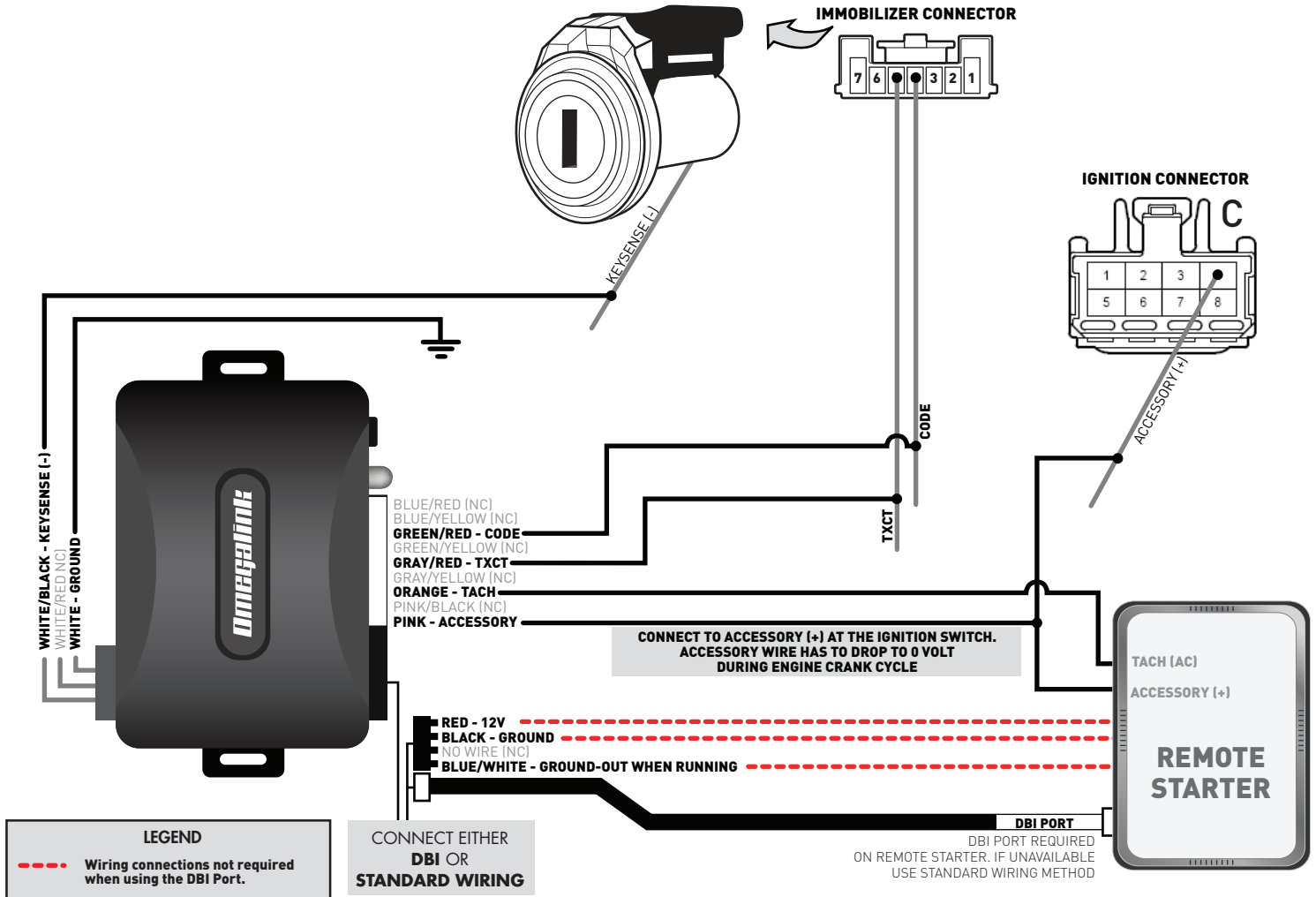
MODEL	YEARS	PIN	CODE	PIN	TXCT	PIN	PUSH	PIN	IGNITION	PIN	12V (BRAKE)	PIN	BRAKE
Avalon (smart key)	2005-09	10	White	9	Gray	7	Blue	A3	Brown	A2	Black	A1	White
Camry Hybrid	2007-09	10	White	9	Gray	7	Blue	A3	Black	A2	Black	A1	White
Camry (smart key)	2007-09	10	White	9	Gray	7	Blue	A3	Black	A2	Black	A1	Blue
Corolla (smart key)	2009	10	Green	9	Light Blue	7	White	A3	Black	A2	White	A1	Blue
Highlander (smart key)	2008-09	10	Gray	9	Orange	7	Pink	A3	White	A2	Violet	A1	Blue
Highlander Hybrid	2008-09	10	Gray	9	Orange	7	Pink	A3	White	A2	Violet	A1	Blue
Land Cruiser	2008	10	Green	9	Light Blue	7	Black	B3	Black	B2	Blue/Black	B1	Red
RAV4 (smart key)	2009	10	White	9	Blue	7	White	B4	Black	B2	White	B1	Blue
ES 350	2007-08	10	White	9	Gray	7	Blue	A3	Black	A2	Black	A1	Blue
GS 300	2006	10	Yellow	9	Blue	7	Pink	B3	Black/White	A2	Blue/White	B1	Red/Black
GS 350	2007-08	10	Yellow	9	Blue	7	Pink	B3	Black/White	B2	Blue/White	B1	Red/Black
GS 430	2006-07	10	Yellow	9	Blue	7	Pink	B3	Black/White	B2	Blue/White	B1	Red/Black
GS 450 Hybrid	2007-08	10	Yellow	9	Blue	7	Pink	B3	Black/White	B2	Blue/White	B1	Red/Black
GS 460	2008	10	Yellow	9	Blue	7	Pink	B3	Black/White	B2	Blue/White	B1	Red/Black
IS 250	2006-08	10	Light Blue	9	Blue	7	Black	B4	Light Green	B2	Blue/White	B1	Red/Black
IS 350	2006-08	10	Light Blue	9	Blue	7	Black	B4	Light Green	B2	Blue/White	B1	Red/Black
IS-F	2008	10	Light Blue	9	Blue	7	Black	B4	Light Green	B2	Blue/White	B1	Red/Black
LS 460	2007-08	10	White	9	Orange	7	White	B3	Red	B2	Green	B1	Blue
LS 600 Hybrid	2008	10	White	9	Orange	7	White	B4	Light Green	B2	Green	B1	Red/Black

### TYPE 4 WIRING DIAGRAM AND CROSS-REFERENCE CHART



MODEL	YEARS	PIN	CODE	PIN	TXCT	PIN	PUSH	PIN	IGNITION	PIN	12V (BRAKE)	PIN	BRAKE
Prius	2004-09	4	Blue	5	Light Green	7	Yellow	A3	Orange	A2	Black	A1	Blue

## TYPE 5 WIRING DIAGRAM AND CROSS-REFERENCE CHART

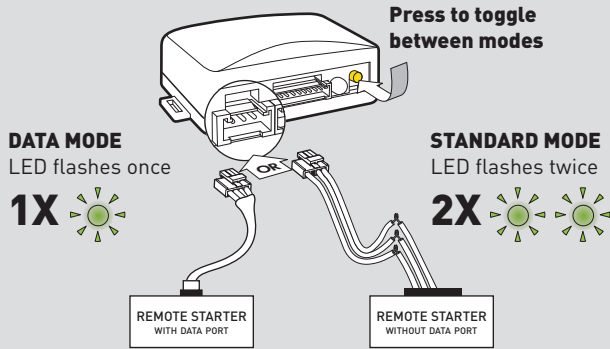


MODEL	YEARS	PIN	CODE	PIN	TXCT	KEYSENSE	PIN	ACCESSORY
Highlander Hybrid	2006-07	4	Grey	5	Light Blue	Green	C4	Green
RX 400 Hybrid	2006-08	4	Light Green	5	Brown	Black	C4	Green

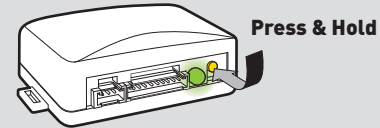


## INSTALLATION MODE SELECTION

- 1 Press and release the programming button to select installation mode.



- 2 To register selection, hold the programming button down until the LED displays a solid GREEN light.



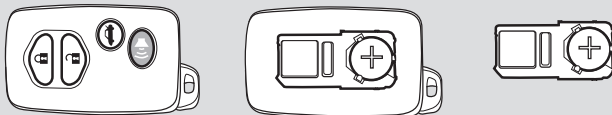
### NOTE

To change the current installation mode once registered, apply a "Factory Reset" and restart this procedure.

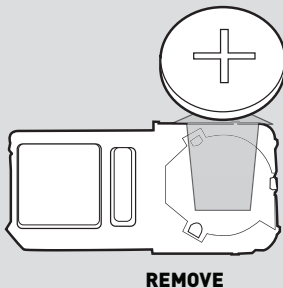
## MODULE PROGRAMMING

### "PUSH TO START" VEHICLE PROGRAMMING

- 1 Open the KEYFOB and remove the CIRCUIT BOARD.

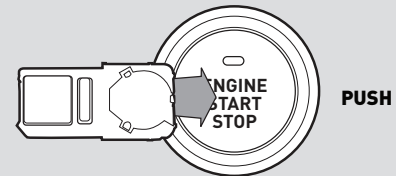


- 2 Remove the BATTERY from the circuit board.

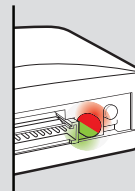


- 3 Confirm there isn't another RFID fob in the vehicle. Try to start the vehicle by pressing on the brake pedal and the start/stop button. If the vehicle refuses to start you are ready to proceed with step 4. If the vehicle starts, find and remove the remaining RFID fob from the vehicle before proceeding with step 4.

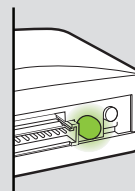
- 4 Place the circuit board against the engine start/stop button. Press the start/stop button. Make sure to obtain a successful ignition cycle. As soon as the ignition will be powered up, the module will learn.



- 5 The LED will blink GREEN and RED during the learning process. Keep the vehicle ignition ON.

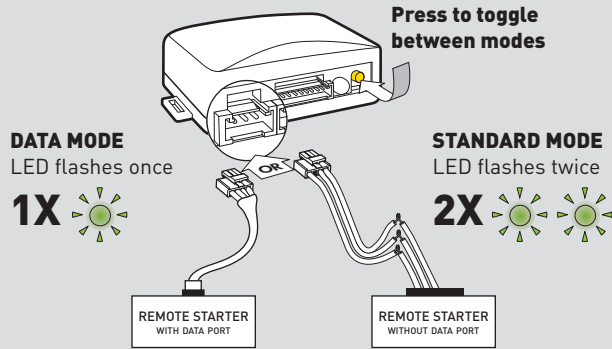


- 6 Wait for the LED to illuminate GREEN for 2 SECONDS. Programming is complete.

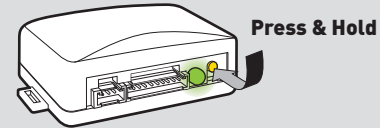


## INSTALLATION MODE SELECTION

- 1 Press and release the programming button to select installation mode.



- 2 To register selection, hold the programming button down until the LED displays a solid GREEN light.



### NOTE

To change the current installation mode once registered, apply a "Factory Reset" and restart this procedure.

## MODULE PROGRAMMING

### VEHICLES "WITH KEY" PROGRAMMING

- 1 Insert the vehicle key into the ignition.

- 2 Once the key will be inserted in the ignition the learning process will begin, which will be indicated by the LED flashing GREEN and RED as long as the module is learning.  
**LED BLINKING 2 COLORS**

- 3 Wait for the LED to illuminate solid GREEN for 2 SECONDS. Programming is complete.  
**LED "ON" 2 SEC**

### VEHICLES "WITH KEYPORT" PROGRAMMING

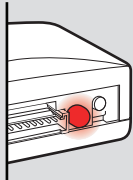
- 1 Insert the key into the keyport.

- 2 Once the key will be inserted in the keyport the learning process will begin, which will be indicated by the LED flashing GREEN and RED as long as the module is learning.  
**LED BLINKING 2 COLORS**

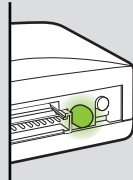
- 3 Wait for the LED to illuminate solid GREEN for 2 SECONDS. Programming is complete.  
**LED "ON" 2 SEC**

## MODULE DIAGNOSTICS

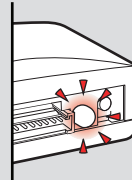
### MODULE DIAGNOSTICS DURING PROGRAMMING



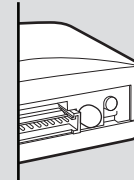
**SOLID RED**  
MODULE WAITING  
FOR MORE VEHICLE  
INFORMATIONS



**LED GREEN SOLID**  
THEN OFF  
CORRECTLY  
PROGRAMMED

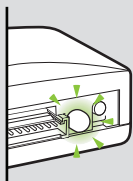


**FLASHING RED**  
MISSING/WRONG  
CONNECTIONS OR  
FIRMWARE

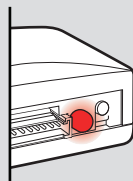


**LED OFF**  
NO ACTIVITY  
OR ALREADY  
PROGRAMMED

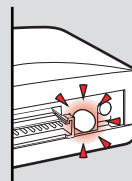
### MODULE DIAGNOSTICS DURING REMOTE START



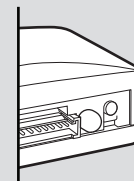
**FLASHING GREEN**  
CORRECTLY  
PROGRAMMED  
AND OPERATIONAL



**SOLID RED**  
INCORRECTLY  
PROGRAMMED

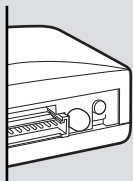


**FLASHING RED**  
INCORRECTLY  
PROGRAMMED

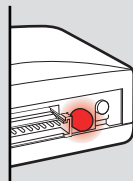


**LED OFF**  
INVALID GROUND  
WHEN RUNNING  
STATUS FROM R.S.

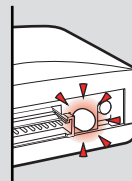
### MODULE DIAGNOSTICS WITH IGNITION OFF



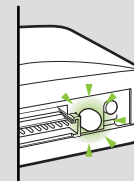
**LED OFF**  
AT REST AND  
READY FOR A  
R.S. SEQUENCE



**SOLID RED**  
NOT PROGRAMMED  
AND STILL WAITING  
FOR VEHICLE INFO



**FLASHING RED**  
INCORRECTLY  
PROGRAMMED  
OR CONNECTED

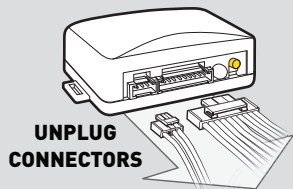


**FLASHING GREEN**  
FALSE GROUND  
WHEN RUNNING  
STATUS FROM R.S.

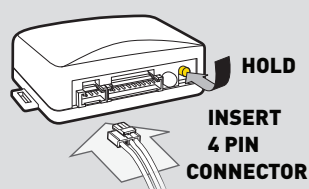
## FACTORY RESET

### FACTORY RESET PROCEDURE

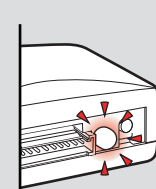
- 1 Unplug all connectors from the module.



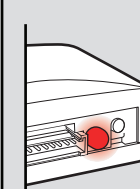
- 2 Press and hold the programming button while inserting either the 4-PIN standard or 4-PIN optional data connector.



- 3 The LED will begin to flash red. Immediately release the programming button. The LED will turn on solid red for 2 seconds to confirm module reset.



- 4 Once the reset is confirmed, reconnect all the remaining connectors and repeat the programming procedure



# PUSH TO START VEHICLE USER NOTE

## ATTENTION! PRIOR TO ENTERING THE VEHICLE...

1. Press the UNLOCK button on your after-market remote or OEM fob.
2. You will then have a 45 second delay during which you have to step in the vehicle and press on the brake pedal to complete take over without engine shutdown.
3. Please note that if an RFID remote is present in the vehicle, it will prevent proper remote start sequence.