

Installation Tips for your RS7 + KEY-OVERRIDE-ALL (4.a)

T1488

Toyota - 4 Runner: 2003-2009	Toyota – Yaris: 2006-2010
Toyota – Corolla: 2005-2008	Toyota – Yaris: SEDAN 2012-2014
Toyota - Land Cruiser: 2003-2007	Scion – XD: 2008-2010
Toyota – Matrix: 2005-2008	
Toyota - Rav4: 2004-2005	Lexus - GX470: 2008-2009
Toyota – Sequoia: 2008-2009	Lexus - LS 430: 2003-2006
Toyota – Sienna: 2004-2010	Lexus - LX 470: 2003-2007
Toyota – Tundra: 2007-2010	Lexus - RX 400H: 2006-2008

*Regular 40-bit key vehicles only (NOT for 80-bit “G” stamped key)

*Automatic transmission vehicles only

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 replace your installation manual. You will still need to refer to that.

Two very important things before you get started:

- Read the entire installation manual. There are several safety tips 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. Wiring
2. programming
3. Test the system & close it up!

Step 1 - Making your RS7 remote start wiring connections:

 This Tip Sheet will cover what wires need to be connected from the remote start kit and where those wires connect. Any wires on the remote start and bypass module that are not listed, are not required. 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 only the needed wires from the remote starter kit.

- ⊗ In most cases, the wires on the remote start and bypass module 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.

Vehicle wiring chart:

The vehicle wiring charts on the next 3 pages will list the needed wires from the remote starter, and help you locate the wires that you’re going to need to connect each wire to in your vehicle. The first column on the left of the chart is the wire from the remote starter that needs to be connected. Find your vehicle in top row. Find the intersecting box where the remote start wire meets the column of your vehicle, to find where to connect the remote starter wire to.

Each wire listed on the chart contains 3 pieces of information that you will need:

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

	4 Runner 2003-2009	Corolla 2005-2008	Land Cruiser 2003-2007	Matrix 2005-2008	Rav4 2004-2005	Sequoia 2008-2009
redx2 constant 12v @6pin	RED (+) @ IGNITION SWITCH, (WHITE, 8-Pin Plug) Pin 7	WHITE (+) @ IGNITION SWITCH HARNESS	Connect to BATTERY ONLY	WHITE (+) @ IGNITION SWITCH HARNESS	WHITE (+) and BLACK/RED (+) @ IGNITION SWITCH HARNESS	BLACK (+) @ DASH FUSEBOX, (WHITE, 1- Pin Plug(A) Pin 1
pink ignition @6pin	BLACK/RED (+) @ IGNITION SWITCH, (WHITE, 8-Pin Plug) Pin 6	BLACK/WHITE (+) @ IGNITION SWITCH HARNESS	BLACK/RED (+) @ IGNITION SWITCH HARNESS	BLACK/WHITE (+) @ IGNITION SWITCH HARNESS	BLACK (+) @ IGNITION SWITCH HARNESS	BLACK (+) @ IGNITION SWITCH (WHITE, 8-Pin Plug) Pin 6
pink/white ignition #2 @6pin	BLUE/YELLOW (+) @ IGNITION SWITCH, (WHITE, 8-Pin Plug) Pin 4	BLACK/YELLOW (+) @ IGNITION SWITCH HARNESS	BLUE/BLACK (+) @ IGNITION SWITCH HARNESS	BLACK/YELLOW (+) @ IGNITION SWITCH HARNESS	BLACK/YELLOW (+) @ IGNITION SWITCH HARNESS	LT. GREEN (+) @ IGNITION SWITCH (WHITE, 8-Pin Plug) Pin 1
gray accessory @6pin	WHITE/GREEN (+) @ IGNITION SWITCH, (WHITE, 8-Pin Plug) Pin 3	BLUE/RED (+) @ IGNITION SWITCH HARNESS	BLACK (+) @ IGNITION SWITCH HARNESS	BLUE/RED (+) @ IGNITION SWITCH HARNESS	BLUE/RED (+) @ IGNITION SWITCH HARNESS	GRAY (+) @ IGNITION SWITCH (WHITE, 8-Pin Plug) Pin 2
brown starter @6pin	GREEN/BLACK (+) @ IGNITION SWITCH, (WHITE, 8-Pin Plug) Pin 8	RED (+) @ IGNITION SWITCH HARNESS	BLACK/WHITE (+) @ IGNITION SWITCH HARNESS	RED (+) @ IGNITION SWITCH HARNESS	RED (+) @ IGNITION SWITCH HARNESS	GREEN (+) @ IGNITION SWITCH (WHITE, 8-Pin Plug) Pin 7
black ground @12pin	ground - solid metal of vehicle	ground - solid metal of vehicle	ground - solid metal of vehicle	ground - solid metal of vehicle	ground - solid metal of vehicle	ground - solid metal of vehicle
purple brake @12pin	GREEN/YELLOW @ BRAKE SWITCH or DASH FUSE BOX, (WHITE, 16-Pin Plug(F) Pin 16	GREEN/WHITE (+) @ SWITCH ABOVE BRAKE PEDAL	GREEN/WHITE (+) @ SWITCH ABOVE BRAKE PEDAL	GREEN/WHITE (+) @ SWITCH ABOVE BRAKE PEDAL	GREEN/WHITE (+) @ SWITCH ABOVE BRAKE PEDAL	TAN (+) @ BRAKE SWITCH, (BLUE, 4- Pin Plug) Pin 1
gray hood @12pin	Connect to hood pin supplied with kit	Connect to hood pin supplied with kit	Connect to hood pin supplied with kit	Connect to hood pin supplied with kit	Connect to hood pin supplied with kit	Connect to hood pin supplied with kit
yellow/black GWR @12pin	blue (-) when running @ 7-pin plug of KOALL	blue (-) when running @ 7-pin plug of KOALL	blue (-) when running @ 7-pin plug of KOALL	blue (-) when running @ 7-pin plug of KOALL	blue (-) when running @ 7-pin plug of KOALL	blue (-) when running @ 7-pin plug of KOALL
red/black park light select @12pin	constant 12v - can connect to one of the red wires in 6- pin of remote starter	constant 12v - can connect to one of the red wires in 6- pin of remote starter	constant 12v - can connect to one of the red wires in 6-pin of remote starter	constant 12v - can connect to one of the red wires in 6-pin of remote starter	constant 12v - can connect to one of the red wires in 6-pin of remote starter	constant 12v - can connect to one of the red wires in 6-pin of remote starter
white park light out @12pin	GREEN (+) @ DASH FUSE BOX, (WHITE, 16-Pin Plug(F) Pin 13	GREEN (+) IN DRIVERS KICK PANEL, HARNESS TO REAR OF VEHICLE	GREEN (+) @ BACK OF FUSEBOX IN DRIVERS KICK PANEL), 30-PIN PLUG, PIN 28	GREEN (+) IN DRIVERS KICK PANEL, HARNESS TO REAR OF VEHICLE	GREEN (+) or GREEN/RED (+) @ HEADLIGHT SWITCH	GREEN (+) @ DASH FUSEBOX, (WHITE, 24-Pin Plug(C) Pin 22
green lock @3pin	RED/WHITE to BLUE/WHITE (-), in DRIVERS KICK PANEL, (WHITE, 18-Pin Plug) Pin 4	GREEN (-) TEST BY TURNING KEY IN DRIVERS DOOR @10 PIN PLUG , DRIVER KICK PANEL	BLUE/WHITE (-), @ 42-PIN PLUG, BOTTOM of FUSEBOX: TEST WITH KEY IN PASSENGER DOOR	GREEN (-), @ DRIVERS KICK PANEL, BLUE, 12-PIN PLUG	BLUE/ORANGE (-) @ DRIVERS KICK PANEL, 14-PIN Plug, Pin 6	Light Green (-) @ Drivers kick panel, (Blue 17-pin plug) Pin 14: TEST WITH KEY IN DRIVER DOOR
blue unlock/disarm @3pin	GREEN (-) (Requires double Pulse) in DRIVERS KICK PANEL, (WHITE, 18-Pin Plug) Pin 8	BLUE/YELLOW (-) DOUBLE PULSE @ 10 PIN PLUG , DRIVER KICK PANEL	GREEN/BLACK (-), @ 42-PIN PLUG, BOTTOM of FUSEBOX: TEST WITH KEY IN THE PASSENGER DOOR	BLUE/YELLOW (-) (Double Pulse) @ DRIVERS KICK PANEL, BLUE, 12-PIN PLUG : TEST WITH KEY IN THE DRIVER DOOR	BLUE/YELLOW to BLUE/ORANGE (-) (Double Pulse) @ DRIVERS KICK PANEL, 14-PIN Plug, Pin 13	PINK (-) (double Pulse) @ DRIVERS KICK PANEL, (BLUE, 17-Pin Plug) Pin 16: TEST WITH KEY IN DRIVER DOOR
brown trunk pop @12pin	LOCKS/UNLOCKS with Doors	n/a	n/a	BLUE/WHITE (-), @ HATCH RELEASE SWITCH	n/a	Vehicles with Power Liftgate, Open/Close wire is RED (-) @ Switch on Dash or Body ECU, (WHITE, 26-Pin Plug) Pin 26.

	Sienna 2004-2007	Sienna 2008-2010	Tundra 2007-2010	Yaris 2006-2008	Yaris 2009-2010	Yaris SEDAN 2012-2014
redx2 constant 12v @6pin	WHITE/RED (+) @ IGNITION SWITCH, (WHITE, 6-Pin Plug) Pin 5	WHITE/RED (+) @ IGNITION SWITCH, (WHITE, 6-Pin Plug) Pin 5	BLACK (+) @ DASH FUSE BOX, WHITE 1- PIN PLUG (DA), Pin 1	YELLOW (+) and GRAY (+) @ IGNITION SWITCH HARNESS	CONNECT TO BATTERY ONLY!	BLACK (+) @ DASH FUSEBOX, WHITE 1-PIN PLUG, PIN 1
pink ignition @6pin	IGNITION 1 BLACK (+) @ IGNITION SWITCH, (WHITE, 6- Pin Plug) Pin 6	IGNITION 1 BLACK (+) @ IGNITION SWITCH, (WHITE, 6- Pin Plug) Pin 6	BLACK (+) @ IGNITION SWITCH HARNESS, WHITE 8- PIN PLUG, PIN 6	PINK (+) @ IGNITION SWITCH HARNESS	PINK (+) @ IGNITION SWITCH, (WHITE, 8-Pin Plug) Pin 6	PINK (+) @ IGNITION SWITCH, WHITE 8-PIN PLUG, PIN 6
pink/white ignition #2 @6pin	BLACK/YELLOW (+) @ IGNITION SWITCH, (WHITE, 6- Pin Plug) Pin 2	BLACK/YELLOW (+) @ IGNITION SWITCH, (WHITE, 6- Pin Plug) Pin 2	LT. GREEN (+) @ IGNITION SWITCH HARNESS, WHITE 8- PIN PLUG, PIN 1	GREEN (+) @ IGNITION SWITCH HARNESS	GREEN (+) @ IGNITION SWITCH, (WHITE, 8-Pin Plug) Pin 1	LIGHT BLUE (+) @ IGNITION SWITCH, WHITE 8-PIN PLUG, PIN 1
gray accessory @6pin	PINK (+) @ IGNITION SWITCH, (WHITE, 6-Pin Plug) Pin 3	PINK (+) @ IGNITION SWITCH, (WHITE, 6-Pin Plug) Pin 3	GRAY (+) @ IGNITION SWITCH HARNESS, WHITE 8- PIN PLUG, PIN 2	WHITE (+) @ IGNITION SWITCH HARNESS	WHITE (+) @ IGNITION SWITCH, (WHITE, 8-Pin Plug) Pin 2	BLUE (+) @ IGNITION SWITCH, WHITE 8-PIN PLUG, PIN 2
brown starter @6pin	BLACK/YELLOW (+) @ IGNITION SWITCH, (WHITE, 6- Pin Plug) Pin 4	BLACK/YELLOW (+) @ IGNITION SWITCH, (WHITE, 6- Pin Plug) Pin 4	GREEN (+) @ IGNITION SWITCH HARNESS, WHITE 8- PIN PLUG, PIN 7	BLACK (+) (2)Wires both are common) @ IGNITION SWITCH HARNESS	BLACK (+) (2 Common wire) @ IGNITION SWITCH, (WHITE, 8-Pin Plug) Pin 7	GREEN (+) @ IGNITION SWITCH, WHITE 8-PIN PLUG, PIN 7
black ground @12pin	ground - solid metal of vehicle	ground - solid metal of vehicle	ground - solid metal of vehicle	ground - solid metal of vehicle	ground - solid metal of vehicle	ground - solid metal of vehicle
purple brake @12pin	GREEN/WHITE (+) @ DASH FUSE BOX, (WHITE, 25-Pin Plug (P) Pin 3	GREEN/WHITE (+) @ DASH FUSE BOX, (WHITE, 25-Pin Plug (P) Pin 3	ORANGE (+) @ BRAKE PEDAL SWITCH, BLUE 4-PIN PLUG, PIN 1	GREEN to PURPLE (+) @ FUSE BOX, TOP LEFT, 30-Pin Plug, Pin 12	GREEN to PURPLE (+) @ BRAKE SWITCH or DASH FUSE BOX, (WHITE, 30-Pin Plug(A) Pin 12	GREEN (+) @ DASH FUSEBOX, WHITE 40-PIN PLUG, PIN 25
gray hood @12pin	Connect to hood pin supplied with kit	Connect to hood pin supplied with kit	Connect to hood pin supplied with kit	Connect to hood pin supplied with kit	Connect to hood pin supplied with kit	Connect to hood pin supplied with kit
yellow/black GWR @12pin	blue (-) when running @ 7-pin plug of KOALL	blue (-) when running @ 7-pin plug of KOALL	blue (-) when running @ 7-pin plug of KOALL	blue (-) when running @ 7-pin plug of KOALL	blue (-) when running @ 7-pin plug of KOALL	blue (-) when running @ 7-pin plug of KOALL
red/black park light select @12pin	ground - solid metal of vehicle	ground - solid metal of vehicle	constant 12v - can connect to one of the red wires in 6-pin of remote starter	constant 12v - can connect to one of the red wires in 6-pin of remote starter	constant 12v - can connect to one of the red wires in 6-pin of remote starter	constant 12v - can connect to one of the red wires in 6- pin of remote starter
white park light out @12pin	GREEN/BLACK (-) @ HEADLIGHT Switch, (WHITE, 17-Pin Plug) Pin 14	GREEN/BLACK (-) @ HEADLIGHT Switch, (WHITE, 17-Pin Plug) Pin 14	GREEN (+) @ DASH FUSE BOX, WHITE 24- PIN PLUG (DB), PIN 8	GREEN (+) @ FUSE BOX, TOP LEFT 30-Pin Plug, Pin 29	GREEN (+) @ DASH FUSE BOX, (WHITE, 30-Pin Plug(A) Pin 29	GREEN (+) @ DASH FUSEBOX, WHITE 36-PIN PLUG, PIN 10
green lock @3pin	Light Green (18-pin plug, Pin 5) @ Drivers Kick Panel	Light Green (18-pin plug, Pin 5) @ Drivers Kick Panel	Light Blue (blue 17- pin plug) @ driver kick panel	BROWN (-) @ DRIVERS KICK PANEL, 20-Pin Plug, Pin 7	BROWN to LT. GREEN (-) @ DRIVERS KICK PANEL, (WHITE, 20- Pin Plug) Pin 5: TEST WITH KEY IN DRIVER DOOR	BLACK (-) @ BECU on DASH FUSEBOX, WHITE 30-PIN PLUG, PIN 11
blue unlock/disarm @3pin	BLUE (-) (Double Pulse) @ DRIVERS KICK PANEL, (WHITE, 18-Pin Plug) Pin 7	BLUE (-) Requires Double Pulse @ DRIVERS KICK PANEL, (WHITE, 18- Pin Plug) Pin 7	Pink (-) (Double Pulse) @ driver kick panel (blue 17-pin plug)	YELLOW to GREEN (-) (Double Pulse) @ DRIVERS KICK PANEL, 20-Pin Plug, Pin 8	GREEN to YELLOW (-) (Double Pulse) @ DRIVERS KICK PANEL, (WHITE, 20-Pin Plug) Pin 8: TEST WITH KEY IN DRIVER DOOR	GREEN (-) TYPE B (DOUBLE PULSE) @ BECU on DASH FUSEBOX, WHITE 30-PIN PLUG, PIN 24
brown trunk pop @12pin	YELLOW/RED (-) @ BOTTOM LEFT of FUSEBOX, 22-PIN Plug	GREEN/BLACK (-) @ DASH JUNCTION BLOCK, (WHITE, 32- Pin Plug(J14) Pin 7	n/a	n/a	n/a	BLUE (-) @ BECU on DASH FUSEBOX, WHITE 30-PIN PLUG, PIN 23

	XD 2008-2010	GX470 2008-2009	LS 430 2003-2006	LX 470 2003-2007	RX 400H 2006-2008
redx2 constant 12v @6pin	CONNECT TO BATTERY ONLY!	WHITE/RED (+) @ IGNITION SWITCH, (8-PIN PLUG), PIN 7	Connect to BATTERY ONLY	Connect to BATTERY ONLY	RED (+) @ IGNITION SWITCH, (8-PIN PLUG), PIN 7
pink ignition @6pin	PINK (+) @ IGNITION SWITCH, (WHITE, 8-PIN PLUG), PIN 6	IGNITION 1 BLACK/RED (+) @ IGNITION SWITCH, (8-PIN PLUG), PIN 6	GREEN/YELLOW (+) @ IGNITION SWITCH HARNESS	BLACK/RED (+) @ IGNITION SWITCH HARNESS	PURPLE (+) @ IGNITION SWITCH, (8-PIN PLUG), PIN 6
pink/white ignition #2 @6pin	GREEN (+) @ IGNITION SWITCH, (WHITE, 8-PIN PLUG), PIN 1	BLUE/YELLOW (+) @ IGNITION SWITCH, (8-PIN PLUG), PIN 4	RED/WHITE (+) @ IGNITION SWITCH HARNESS	BLUE/BLACK (+) @ IGNITION SWITCH HARNESS	GREEN (+) @ IGNITION SWITCH, (8-PIN PLUG), PIN 4
gray accessory @6pin	WHITE (+) @ IGNITION SWITCH, (WHITE, 8-PIN PLUG), PIN 2	WHITE/GREEN (+) @ IGNITION SWITCH, (8-PIN PLUG), PIN 3	WHITE/GREEN (+) @ IGNITION SWITCH HARNESS	BLACK (+) @ IGNITION SWITCH HARNESS	BROWN or GRAY (+) @ IGNITION SWITCH, (8-PIN PLUG), PIN 3
brown starter @6pin	BLACK (+) (X2) Common wire! @ IGNITION SWITCH, (WHITE, 8-PIN PLUG), PIN 7	GREEN/BLCK (+) @ IGNITION SWITCH, (8-PIN PLUG), PIN 8	BLACK/WHITE (+) @ IGNITION SWITCH HARNESS	BLACK/WHITE (+) @ IGNITION SWITCH HARNESS	BLUE (+) @ IGNITION SWITCH, (8-PIN PLUG), PIN 8
black ground @12pin	ground - solid metal of vehicle	ground - solid metal of vehicle	ground - solid metal of vehicle	ground - solid metal of vehicle	ground - solid metal of vehicle
purple brake @12pin	GREEN to PURPLE (+) @ BRAKE SWITCH or DASH FUSE BOX, WHITE, 30-PIN PLUG(A), PIN 12	GREEN/YELLOW (+) @ BRAKE Switch or FUSE BOX, (LEFT Side, 16-PIN PLUG), PIN 16	GREEN/ORANGE (+) @ SWITCH ABOVE BRAKE PEDAL	GREEN/WHITE (+) @ SWITCH ABOVE BRAKE PEDAL	BLUE (+) @ BRAKE SWITCH or FUSE BOX, (BOTTOM, 12-PIN PLUG) PIN 3
gray hood @12pin	Connect to hood pin supplied with kit	Connect to hood pin supplied with kit	Connect to hood pin supplied with kit	Connect to hood pin supplied with kit	Connect to hood pin supplied with kit
yellow/black GWR @12pin	blue (-) when running @ 7-pin plug of KOALL	blue (-) when running @ 7-pin plug of KOALL	blue (-) when running @ 7-pin plug of KOALL	blue (-) when running @ 7-pin plug of KOALL	blue (-) when running @ 7-pin plug of KOALL
red/black park light select @12pin	constant 12v - can connect to one of the red wires in 6-pin of remote starter	constant 12v - can connect to one of the red wires in 6-pin of remote starter	ground - solid metal of vehicle	constant 12v - can connect to one of the red wires in 6-pin of remote starter	constant 12v - can connect to one of the red wires in 6-pin of remote starter
white park light out @12pin	GREEN (+) @ DASH FUSE BOX, (WHITE, 30-PIN PLUG(A), PIN 29	GREEN (+) @ FUSE BOX, (LEFT Side, 16-PIN PLUG), PIN 13	ORANGE (-) @ HAZARD SWITCH OR 10-PIN PLUG AT DRIVERS FUSEBOX	GREEN (+) @ ECU (ATTACHED TO THE BACK OF THE FUSEBOX IN THE DRIVERS KICK PANEL), 30-Pin Plug, Pin 28	LT. GREEN (+) @ FUSE BOX, (BOTTOM, 12-PIN PLUG) PIN 8
green lock @3pin	BROWN to LT. GREEN (-), @ DRIVERS KICK PANEL, (WHITE, 20-PIN PLUG), PIN 5	BLUE to BLUE/WHITE (-), (TEST with PASSENGER Switch), @ PASSENGER KICK PANEL or FUSE BOX, (REAR, 16-PIN PLUG) PIN 5	RED/BLACK or PURPLE/RED (-) @ ECU, INSIDE DRIVERS DOOR: TEST WITH KEY IN DRIVER DOOR	BLUE/WHITE (-) IN 42-PIN PLUG DRIVERS SIDE BOTTOM OF FUSEBOX	PURPLE (-), (TEST with PASSENGER Switch) @ FUSE BOX, (TOP, RIGHT, 12-PIN PLUG) PIN 3
blue unlock/disarm @3pin	GREEN to YELLOW (-) (Double Pulse) @ DRIVERS KICK PANEL, (WHITE, 20-PIN PLUG), PIN 8: TEST WITH KEY IN DRIVER DOOR	GREEN (-), (NO double pulse required) in PASSENGER KICK PANEL or BECU, (30-PIN PLUG) PIN 22	BLACK/GREEN (-) @ ECU, INSIDE DRIVERS DOOR (No double pulse required): TEST WITH KEY IN DRIVER DOOR	GREEN/BLACK (-), @ 42-PIN PLUG, BOTTOM of FUSEBOX: TEST WITH KEY IN THE PASSENGER DOOR- 2 pulse not required!	GRAY (-) (Double Pulse) @ POWER WINDOW MASTER SWITCH, (20-PIN PLUG) PIN 14: TEST WITH KEY IN DRIVER DOOR
brown trunk pop @12pin	YELLOW (-), @ DRIVERS KICK PANEL, Harness to REAR of Vehicle: TEST this wire while Opening the Hatch with the Handle	n/a	PURPLE (-) @ 22-PIN PLUG, IN DRIVERS KICK PANEL	n/a	RED (+) @ IGNITION SWITCH, (8-PIN PLUG), PIN 7

NOTES:

- **1) – Parking lights:** Some vehicles will call for a ‘+’ polarity connection to the parking light circuit and some will call for a ‘-’ connection. The red/black wire on the remote start is used to select the polarity of the remote start’s parking light output. If your vehicle’s parking light wire is shown with a ‘+’ on your wiring chart, connect the red/black wire to a constant +12v power source (you can tap it right on to one of the large red power input wires on the remote start’s 6-pin harness). If your vehicle’s parking light wire is shown with a ‘-’ on your wiring chart, connect the red/black wire to ground. The white wire in the remote start 12-pin harness is the actual parking light output wire. After you’ve properly selected its polarity using the red/black wire, connect the white wire to the parking light wire in your vehicle, as indicated on your wiring chart.
- **2) Hood Pin: The grey wire in the 12-pin plug** 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!
- **3) Tach: RED/WHITE in 12-pin plug.** 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 Programming Option #1 to the ‘tach’ setting (see page 15 in the installer’s manual). 2) Program the tach circuit as shown on page 13 of the installation manual.

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

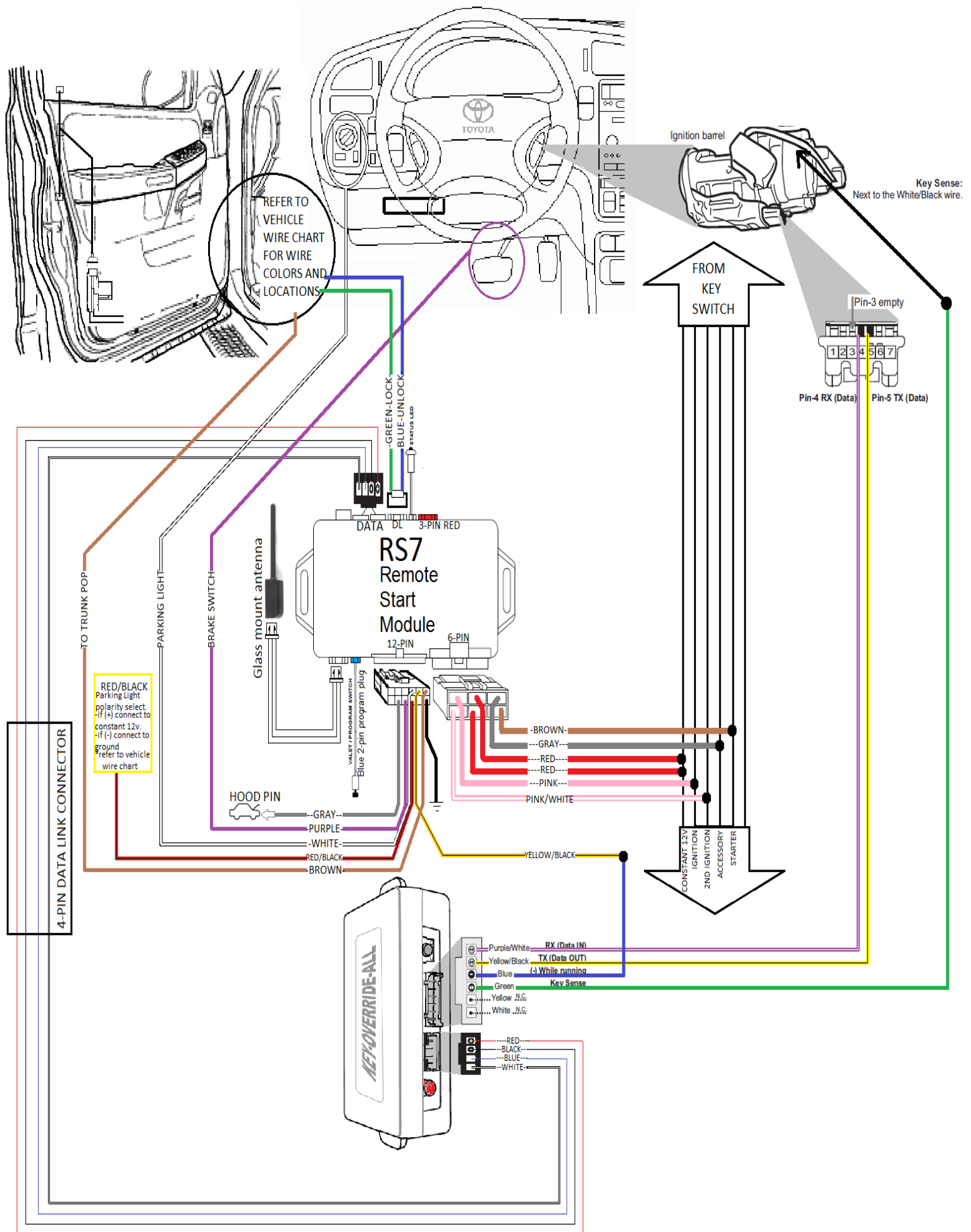
-Before proceeding, plug the antenna, programming button, and LED into the remote start. For tips on where to install these, see Installer's Tip #1 .

Key-Override-All module wiring connections:

The following table shows you what wire from the KOALL bypass module need to be connected, and what they connect to. Any wires NOT listed in the table are NOT USED. The column on the right is the module wire, and the column on the left is what it will connect to. There are only 4 wire-to-wire connections that need to be made from the KOALL + a 4-pin data link connection.

KOALL Wire:		Connect to:
Blue		yellow/black “GWR” wire in the remote start’s 12-pin harness
Green		Vehicle key sense wire (color will vary). This will exit the ignition barrel from a separate location from the pats plug or the main ignition harness, and will be found next to a white/black wire. This wire will show ground when the key is inserted into the key switch.
Purple/White		Vehicle “RX” @ 7-pin PATS connector of key cylinder, pin-4 Important: DO NOT use tap connectors on the RX/TX wires. Either wire wrap or solder and tape connections.
Yellow/Black		Vehicle “TX” @ 7-pin PATS connector of key cylinder, pin-5 Important: DO NOT use tap connectors on the RX/TX wires. Either wire wrap or solder and tape connections.
4-pin data link connector		4 pin data port of remote starter (plugs in)

The diagram on the following page will illustrate all of your needed connections. As always, it is the responsibility of the installer to verify all vehicle wiring with a meter prior to making any connections:



Step 2 - Programming:

RS7 remote starter programming:

Once you have successfully made your connections, you will need to change two options in the RS7 programming menu for proper operation. We will be showing you what options need to be changed, what they need to be changed to, and how to make the changes:

OPTIONS TO CHANGE:

Option #3: Door Lock Pulse – change to value 3 “double unlock”. Not needed for all vehicles, check vehicle wire chart to see if your vehicle requires a double pulse unlock. Unlock is required to disarm factory alarm.

Option #10: Unlock before remote start (to disarm OEM alarm) – change to value 1 “ON”. This will unlock the doors of the vehicle before remote start to disarm factory alarm. The doors will automatically re-lock after remote start to keep the vehicle secure.

➤ Use the procedure below to make any programming option changes using your vehicles key, the vehicle’s brake pedal, and the valet programming button.

1. Turn Ignition Key to the ON position. Do not start vehicle.
2. Press the Program / Valet button 5 times. Wait for the unit to flash the lights and/or horn honk 5 times.
⇒The unit will also click 5 times.
3. Push the valet program button the number of times that corresponds to the option number desired.
⇒You must get a light flash and/or honk and/or click from unit after each button press. If the system did not flash the lights and/or honk and/or click, then it did not register your press. Press carefully and do not lose count.
4. **For RS7:** When you reach the desired option #, to change the option: Press button #1 **Lock**, #2 **Unlock**, #3 **Trunk**, #4 **Start**.
⇒The unit will also click the corresponding number of times.
5. When finished, turn Ignition OFF, and check for changed features.



If you wish to change any options to customize the functionality of the remote starter, a matrix of all programmable features and their options are on the following page:

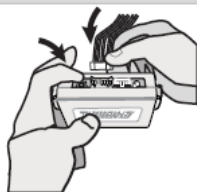
OPTION PROGRAMMING TABLE

Option #	Option Description	TX Button #1 (Lock)	TX Button #2 (Unlock) <i>Default Value</i>	TX Button #3 (Trunk)	TX Button #4 (Start)
1	Engine Monitoring	Tach	<i>*Tachless*</i>		Hybrid
2	Autolock with RPM / Ignition	ON	<i>*OFF*</i>		
3	Door Lock Pulse	3 Seconds	<i>*0.50 Seconds*</i>	Double Unlock	"Wake Up" pulse with Unlock
4	14 Ga. Pink/white Wire Selection	ACC	<i>*IGN*</i>	START	
5	Data Port Protocol	ADS iDataLink - OFA Series	<i>*Fortin - EVO / SL Series*</i>		
6	Remote Start Button Selection	Double Button Press	<i>*½ Second Press*</i>	Press 2 seconds & release	
7	Horn Chirps on Remote Start	ON	<i>*OFF*</i>		
8	Lock with Remote Start / Abort	OFF	<i>*Lock after Remote Start*</i>	Lock after Remote Start and Arm OEM Alarm with Abort	Lock / Arm OEM Alarm with Abort
9	Brown wire function	Dome Light	<i>*Trunk pop*</i>	Double Press Trunk	Press and Hold 2 seconds
10	Unlock before Remote Start (to Disarm OEM Alarm)	ON	<i>*OFF*</i>		
11	Transmission Type	Manual Transmission with Remote Control	<i>*OFF*</i>	Manual Transmission set with Hand Brake	Manual Transmission with auto shut down after door closed
12	Idle Down Timer	10 Minutes	<i>*20 Minutes*</i>	30 Minutes	Infinity Run
13	Horn Chirp Confirmation	1 Press	<i>*2 Press*</i>		
14	Unlock with Trunk Pop	Unlock/Trunk Pop	<i>*Trunk Pop only*</i>		
15	30 Sec. Park Lights with Unlock	OFF	<i>*ON*</i>		
16	Horn Pulse (Chirp)	15 milliseconds	<i>*20 milliseconds*</i>	40 milliseconds	
17	OEM Interface Green input wire (RS-00) thru wire & data	3 pulse = Remote Start with OEM Remote	<i>*1 Pulse*</i>		
18	Minimum Starter Cranking Time	(-) 0.1 Seconds	<i>*0.8 Seconds*</i>	(+) 0.1 Seconds	(+) 0.4 Seconds
19	Diesel Glow Plug Delay	10 Seconds	<i>*Monitor Glow Plug*</i>	15 Seconds	20 Seconds
20	Remote Start Engine Run Time	10 Minutes	<i>*20 Minutes*</i>	30 Minutes	5 Minutes
21	Smart Tachless Voltage Adjustment 79-100%	-1%	<i>*Set to 93% default*</i>	+1%	
22	Turbo Timer Mode	1 Minute	<i>*OFF*</i>	3 Minutes	5 Minutes
23	Unlock on Start Button after Remote Start (for 1 button remote)	Momentary press = Unlock 2 Sec. press = Abort Start	<i>*OFF*</i>		
24	Orange/white wire Selection	IGN	<i>*ACC*</i>	AUX 2	
25	Orange Wire Selection	AUX 2	<i>*OEM Arm*</i>		
26	14 Ga. Gray Wire Selection	IGN	<i>*ACC*</i>	START	
27	Remote Valet Mode Selection (Valet Pushbutton unaffected)	OFF	<i>*4 Second Press*</i>	Double Press	
28	1-Way or 2-Way System	2-Way (FM only)	1-Way (AM only)		
29	1 or 2 VEH Mode	2 VEH Mode AM and FM systems	1 VEH Mode AM only	In 1 VEH Mode, the Red and Blue LED on Remote Control operate the same vehicle	
30	Smart Phone baud rate	9600 (MS-3)	115200		
31	Reset Options to Default (*)	Reset Options 1 thru 27 (2 Flashes)			

1



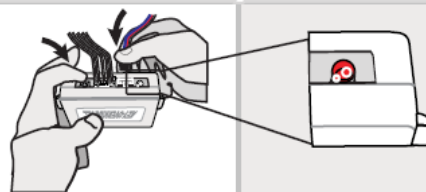
Press and hold the programming button:



Insert connector 2. (6-pin)

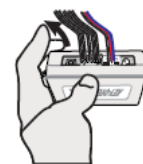


Insert connector 3. (4-pin - if required)



Insert the 4-pin (Data-Link) connector.

The RED LED will turn ON.



Release the programming button.

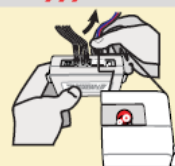
2



Insert one functional key in to the ignition barrel. Do not turn the key.



The RED LED will flash ten (10x) times.



If the LED is solid RED disconnect the 4-pin connector (Data-Link) and go back to step 1.

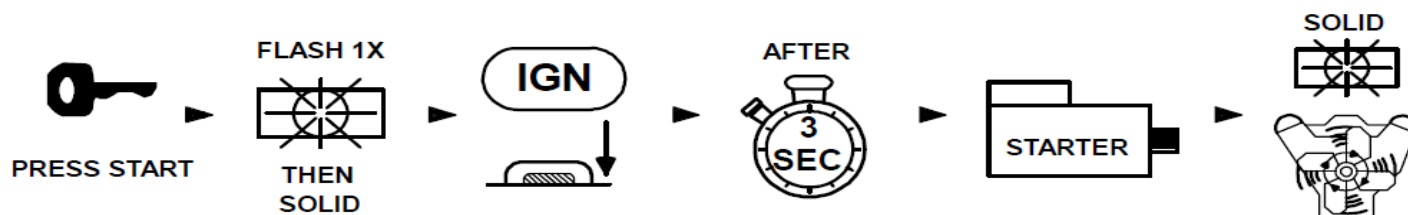


The module is now programmed.

Step 3- Test the system and close it up:

Once all wiring and programming is done, you should test the system to make sure everything is working properly before you close up the installation.

- With the key removed from the ignition, press the button on the included 1-button remote for ½ second and release (default) to activate the remote starter.
 - The parking lights & gauges should power up and in a moment, the vehicle should start.



- Make sure the vehicle stays running, and that the climate controls are working.
 - Engine will remain running for the programmed run time or until the brake pedal is pressed. If needed, the engine can be turned off with remote by pressing the remote button again.
- Press the 'lock' and 'unlock' buttons on your remote and confirm that the door locks are operating properly.
- If your test was unsuccessful, go back and re-check your wiring and programming.
 - Once you've completed testing the system, it's time to close it up.

Close it up

-After confirming that everything works properly, cap off or tape the ends of any wires you're not using to avoid grounding or other contact. Now gather up all the wiring and neatly bundle it together using zip ties or electrical tape to prevent the wires from interfering with any of the moving parts under the dash. Find a secure place to put the remote start module and use zip ties to secure it. Replace any interior vehicle panels that were removed to gain access to the needed wires, in reverse order that they were removed.

REMOTE STARTER FUNCTIONNALITY



Remote start the vehicle.



Unlock door with remote or key and enter the vehicle.



Insert the key into key switch and turn the key to the on/run position



You may now press the brake to shift into gear and drive the vehicle.

Installer's Tips:

Tip #1 – Where Everything Goes

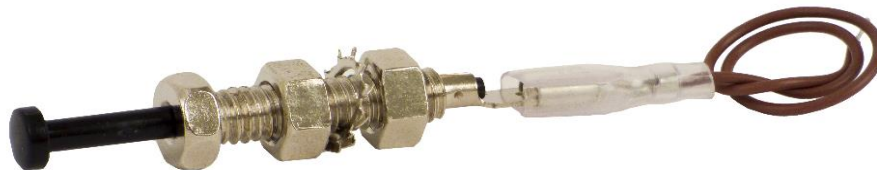
1. *Remote start module* – the wiring for the module is done under the dash on the driver's side, so you'll want to install the module in that general area. Before you start wiring, look for a location where there's some open space that will fit the module. Pay attention to moving parts like the pedals, 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.



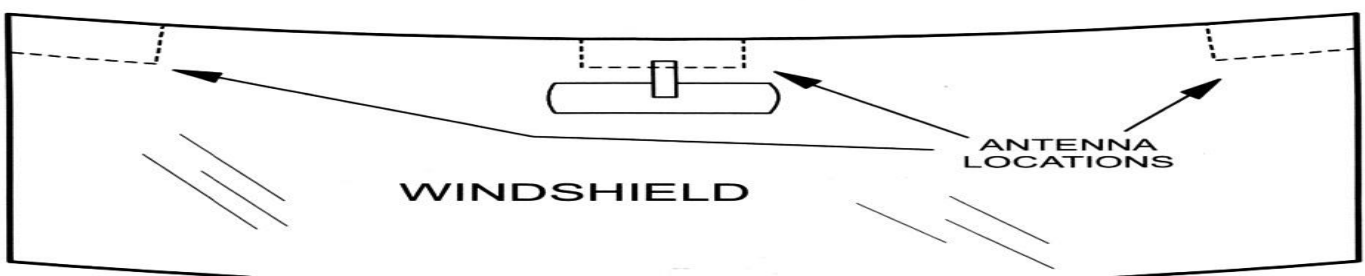
4. *Status LED* – Requires a ¼" hole. Not required for normal operation but can be helpful for troubleshooting. Can be mounted anywhere you like – or unplugged and not used once the installation is completed.



5. *Hood Pin Switch* – An important safety component! Requires a 3/8" hole. Find a metal 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.



6. *Antenna* – The antenna mast sticks to the inside of windshield in a top corner or behind the rearview mirror. Tuck the wire into the headliner and route down "A" pillar to under dash area where the remote starter mounts.



Tip #2 – How to make your wiring connections

It's very important that all your wiring connections be solid and secure. You will need to make a butt splice connection for any wires that are not tap-on style. Most connections simply "tap on" with no need to cut any wires in half. Here are the different ways to make tap on style connections:

Method 1 – Solder and tape

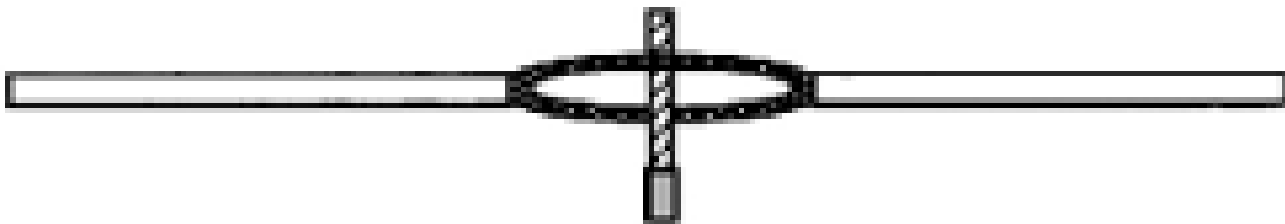
This is the method preferred by the best professional installers. It makes for the most reliable connections, but it is also the most difficult to do. Sometimes there isn't enough room in the wiring harness to safely solder a wire without damaging adjacent wires, but if you have the soldering skills, 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:



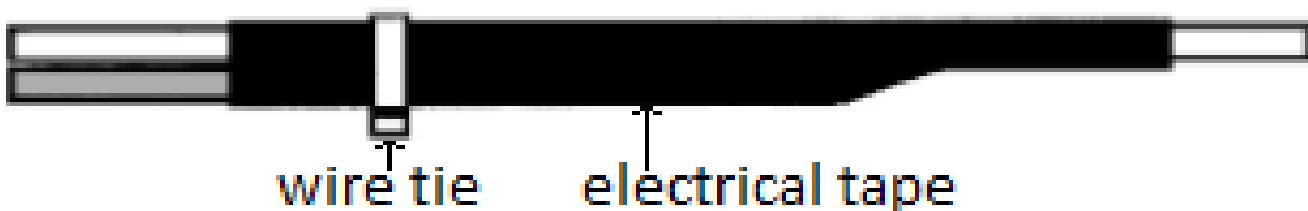
Pass the wire from the remote start through the opening:



Wrap the remote start wire around both sides of the car wire, then twist back around itself:



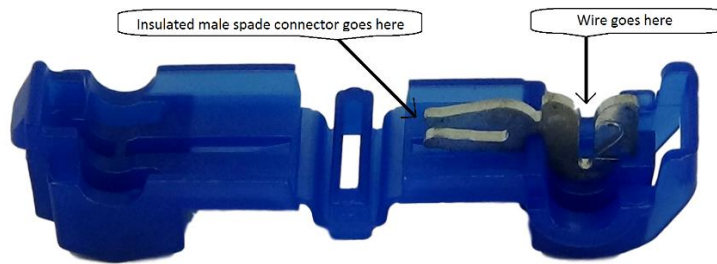
Use electrical tape to wrap the connection and secure the wires together. A wire tie will help prevent the tape from unraveling.



Method #3 – “T-Taps”

***Important!: DO NOT use T-taps for any data wire connections.**

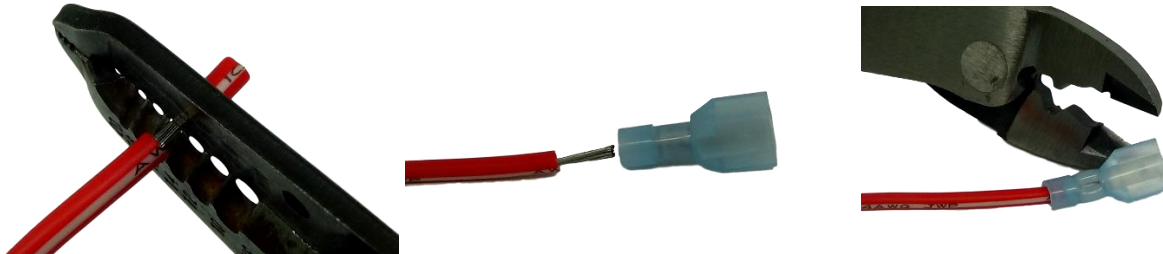
T-taps are plastic clips that are clamped onto a wire in the vehicle to create an electrical receptacle. A spade connector can then be plugged into the T-tap for a fast and easy insulated connection. T-taps are color coded for wire gauge size. Red T-taps are for small wires, blue for medium size, and yellow for the larger wires typically found at your key switch.



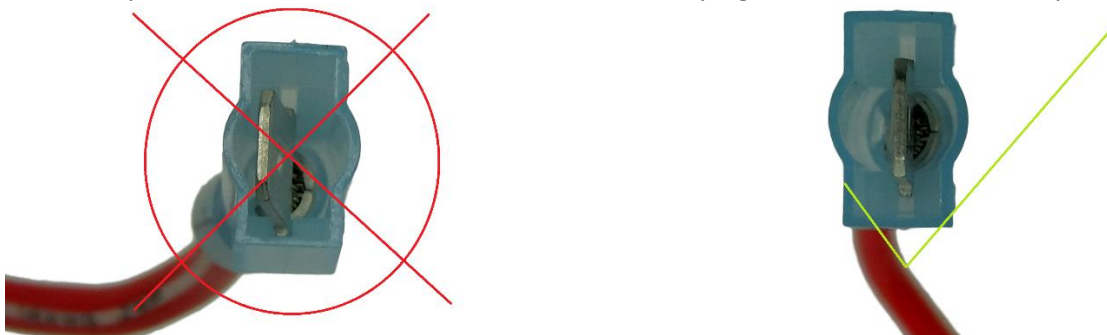
Use a pair of pliers to squeeze the T-tap onto the wire in your car. Make sure the locking tab is secure:



Strip about 1/4 inch of insulation off the end of the remote start wire to be connected, and crimp the male spade on:



If the spade connector bends off to the side when crimping, bend it back into center position:



Plug the spade connector into the T-tap. Make sure metal goes in hole, and spade is all the way seated into position:

