Installation Guide

2019-2024 RAM 2500/3500 & Select 300 / 300C / Charger / Challenger Push-to-Start Models

Kleinn SKU # - RSRAM73

Years	RAM (Push-to-Start)														
2019-2024	2500	19	20	21	22	23	24								
2019-2024	3500	19	20	21	22	23	24								
2019-2024	4500	19	20	21	22	23	24								
2019-2024	5500	19	20	21	22	23	24								
Years	**DODGE (Push-to-Start)**														
2019-2023	Challenger	19	20	21	22	23									
2019-2021	Charger	19	20	21											
Years	**Chrysler (Push-to-Start)**														
2019-2023	300 / 300C	19	20	21	22	23									

Introduction:

Automatic transmission vehicles manufactured for sale in the US and Canada.Only

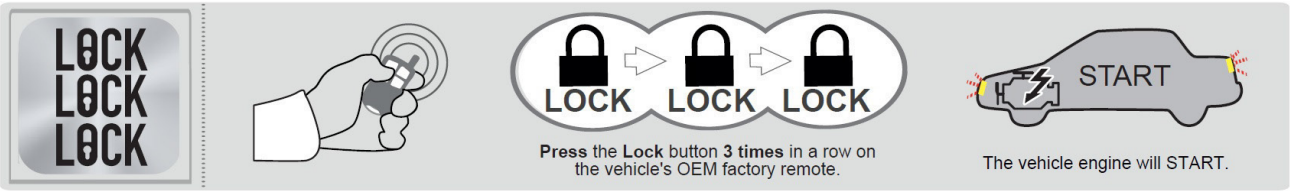
- This is a pre-wired plug and play kit and all the required connections have been made within the harness.
- We have already loaded the correct firmware into the remote start module. You will need to pair the module to your vehicle when the installation is complete. Programming Instructions begin at Step 3.
- This remote start will monitor the vehicle lock circuit and use the pulses generated by pressing lock 3 times on your OEM remote to start the vehicle.

Disclaimer:

Neither the manufacturer nor the distributor of these components are responsible for damages of any kind either indirectly or directly caused by the components, except for the replacement of the components in case of manufacturing defects. This guide is subject to change without notice. Refresh your browser cache or use different browser (Edge, Chrome, Firefox, etc.) to view the latest update.

Remote Start Activation:

Remote Starter Activation: Press Lock>Lock>Lock on your OEM remote to start the vehicle. (If your Ram is not equipped with keyless entry or for increased activation range, you can upgrade to the Kleinn RFKIT, RFKIT2W, RFKIT4, or MOBILE2W Smart Phone kits)



Check out our extended range RF Remote or Smartphone Control upgrade kits

Click Here for Upgrade Options

- **Firmware pre-loaded:** As part of the service Kleinn provides, we have pre-flashed the compatible firmware version and options into your **HCX** module for you so you are ready to begin the installation in the vehicle. You will need to program the module to the vehicle when the installation



Parts Required:

- Idatalink HCX Module Pre-Flashed (RSA CH12) Firmware
- T-Harness HCX-CH12A-CH12B-USBC

Overview

There are 5 basic steps to this remote start installation:

Step1: Preparation

Step 2: Ram Truck Connections

Step 3: Charger **/** 300 / 300C Connections

Step 4: Challenger Connections

Step 5: Programming

Step 1: Preparation

This remote start kit is a **PLUG & PLAY INSTALLATION TYPE** utilizing custom T-Harnesses which eliminate the "wire-to-wire" connections typically required. The physical attachment of this product will require only plug-in connections unless RAP shutdown or Keyless Entry control from RF remotes or Smartphone upgrade kits are desired. Simply plug the T-Harness into the vehicle, then program the module and the remote starter will be ready for use.

- Any vehicle panels required to gain access to the needed plugs outlined in this Tip Sheet will need to be removed. The bulk of the installation typically takes place in the driver's side under dash area. You may need to access the passenger side under dash area for some vehicles. Refer to the Wire Diagram for the locations that need to be accessed in the vehicle. Remember the order that you remove the panels.

- Wait to mount the remote start component(s) in the vehicle until after you have completed the wiring and have tested the system. Keep in mind where you plan to mount the component(s) when routing your wires to avoid having to unplug after programming. The component(s) can be mounted to a rigid wire bundle under the dash using zip ties. Look for an open and convenient location in the vehicle that will fit the component(s). Pay attention to moving parts like the pedals, e-brake and steering column. Be sure to route your wiring away from those areas. It is best to route your wires along with the vehicles factory wires, as this is typically a safe location and it keeps the install neat.

- If your T-harness has loose wires with no plugs at the end they will not be needed for standard installation in this application. Tape up any extra wires or tuck them away with the T-harness and isolate them so they are not in the way. Adding options may require additional wiring connections.

Download Weblink KLON Programming Software

We have preloaded the firmware and settings to allow the first step of programming in the vehicle but this type of anti-theft system requires a final “KLON” programming process that can only be done after the installation is complete and the Remote Start has read your key code during the programming step. You will need to download, install, and save this program to your PC to do this. You will need a Windows or MAC computer with internet access and a USB port. Download it in preparation for KLON steps shown after Step 3 is complete.

Click Here for Weblink Software

Login with this username: **flash@mypushcart.com**

Use this password: **MPCflash2025!**

RAM PUSH TO START TRUCKS CONNECTION LOCATION



How to Make Wire to Wire Connections

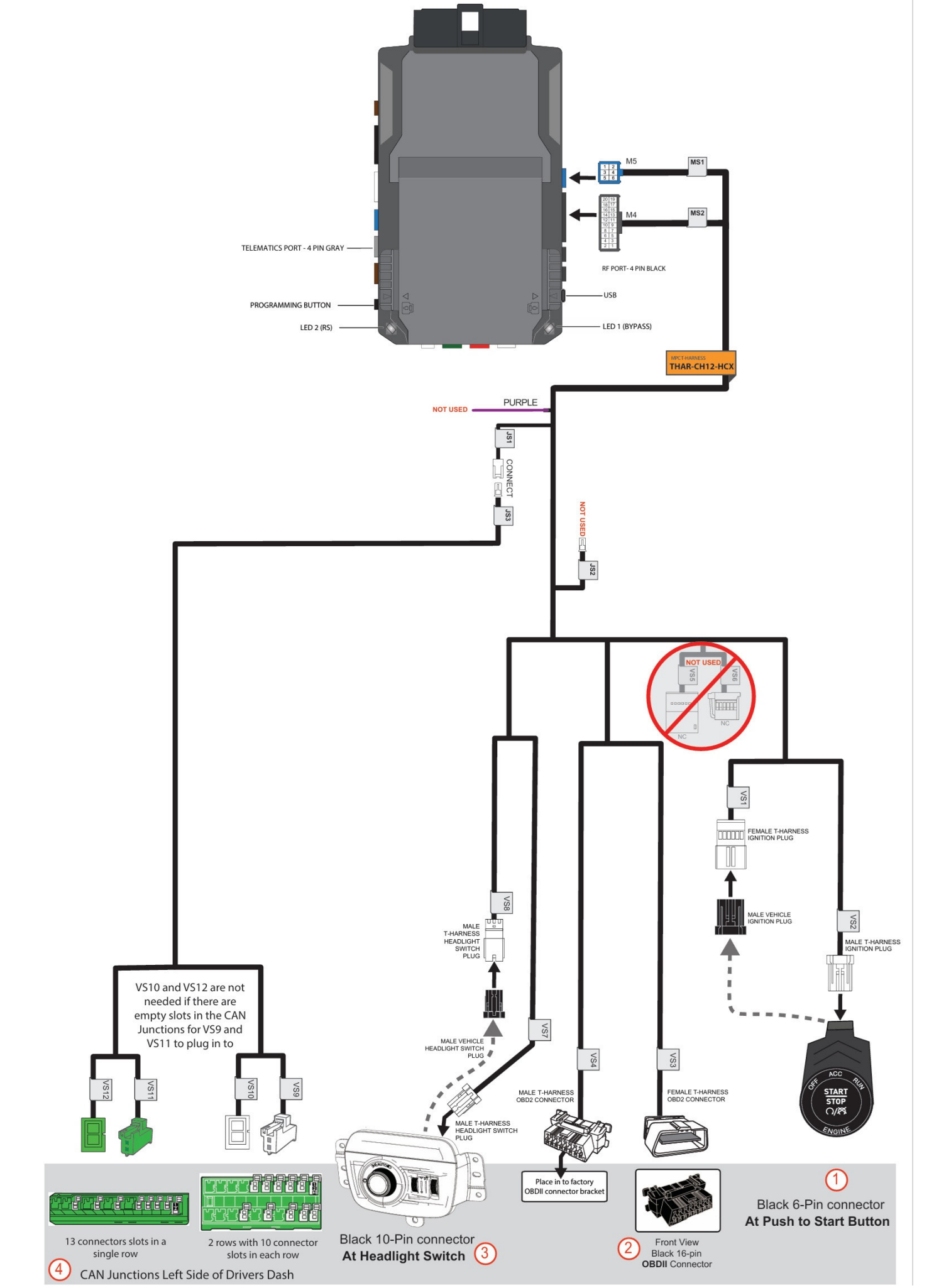
Strip - Poke - Wrap and Tape method is the best wire connection that you can make. You MUST use this method for any data wire connection(s). T-Taps should never be used on data connections. If required for your installation, data connections may be labeled: CAN HIGH, CAN LOW, IMMO, IMI, IMO, RX, TX, or Passlock. Do not solder unless you know how to do it really well.

Click here for directions on how to Strip/Poke/Wrap/Tape the wires

The recommended Strip - Poke - Wrap and Tape method shown above is the most reliable for remote start installations. Your kit may include T-Tap connectors that can make your connections easier, and still perform reliably when used correctly.

Click here for directions on how to use a T-Tap

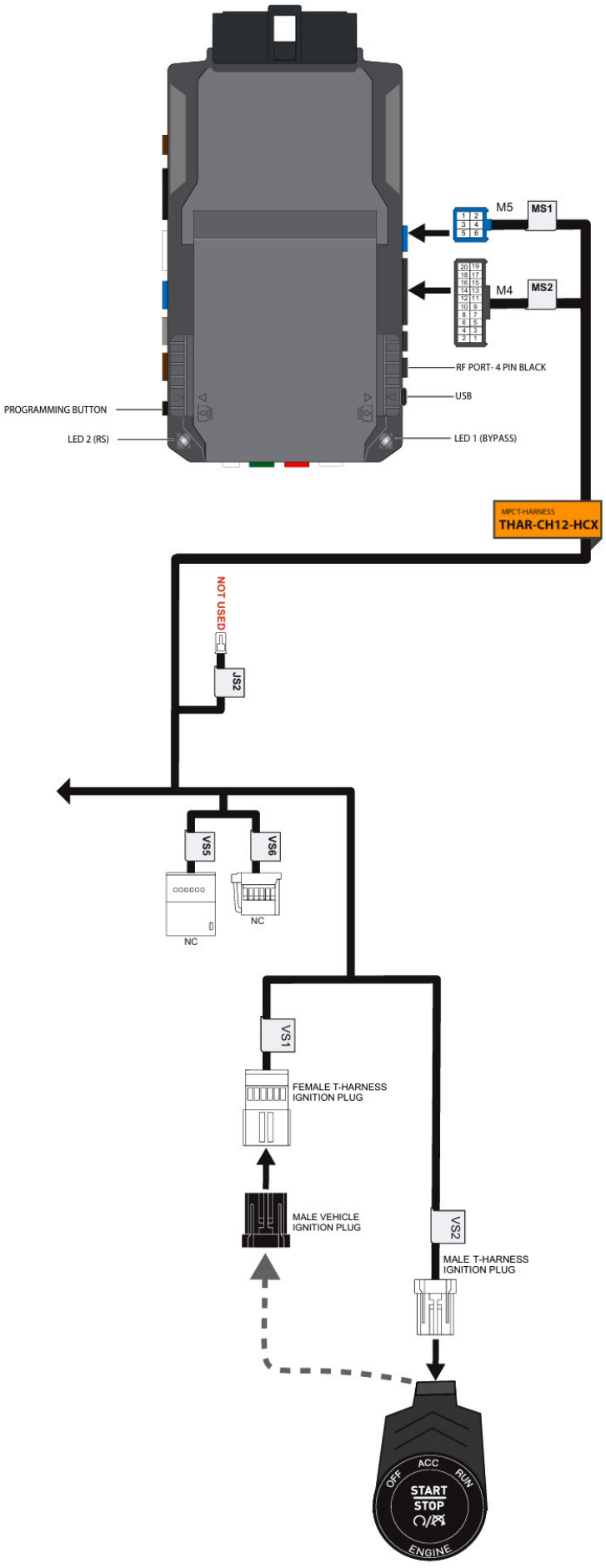
Step 2: RAM Truck Wiring Diagram



Step 2.1: RAM Truck Ignition T-Harness Connection

1. Locate the Black 6-pin connector at the back of the Push to Start button. (see photos)

2. Unplug the #1 Black factory 6-pin connector from the back of PTS button and plug it in to the the female VS1 16-pin plug from the T-Harness. Plug in the male VS2 16-pin plug from the T-Harness into the back of factory PTS button. Make sure it snaps into place.



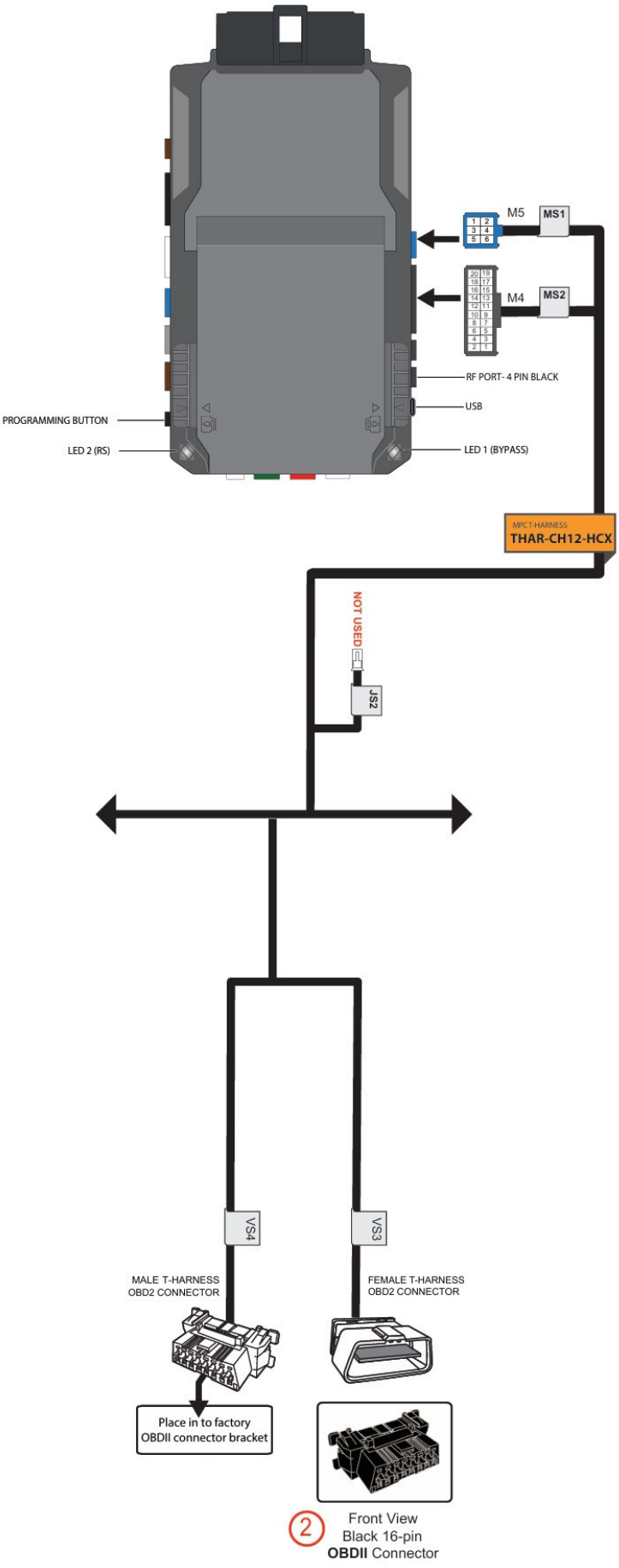


① At Push to Start Button



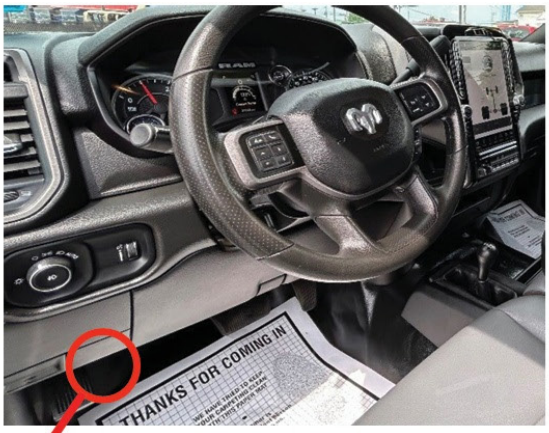


STEP 2.2: RAM Truck OBD II T-Harness Connection



1. Locate the Black 16-pin OBD2 port at the lower left bottom of the Dash panel. (see photos)

2. Remove the factory OBD2 connector from the factory bracket. Plug it in to the the female VS3 16-pin plug from the T-Harness. Place in the male VS4 16-pin plug from the T-Harness into factory bracket.



2 **At OBD2 Port**

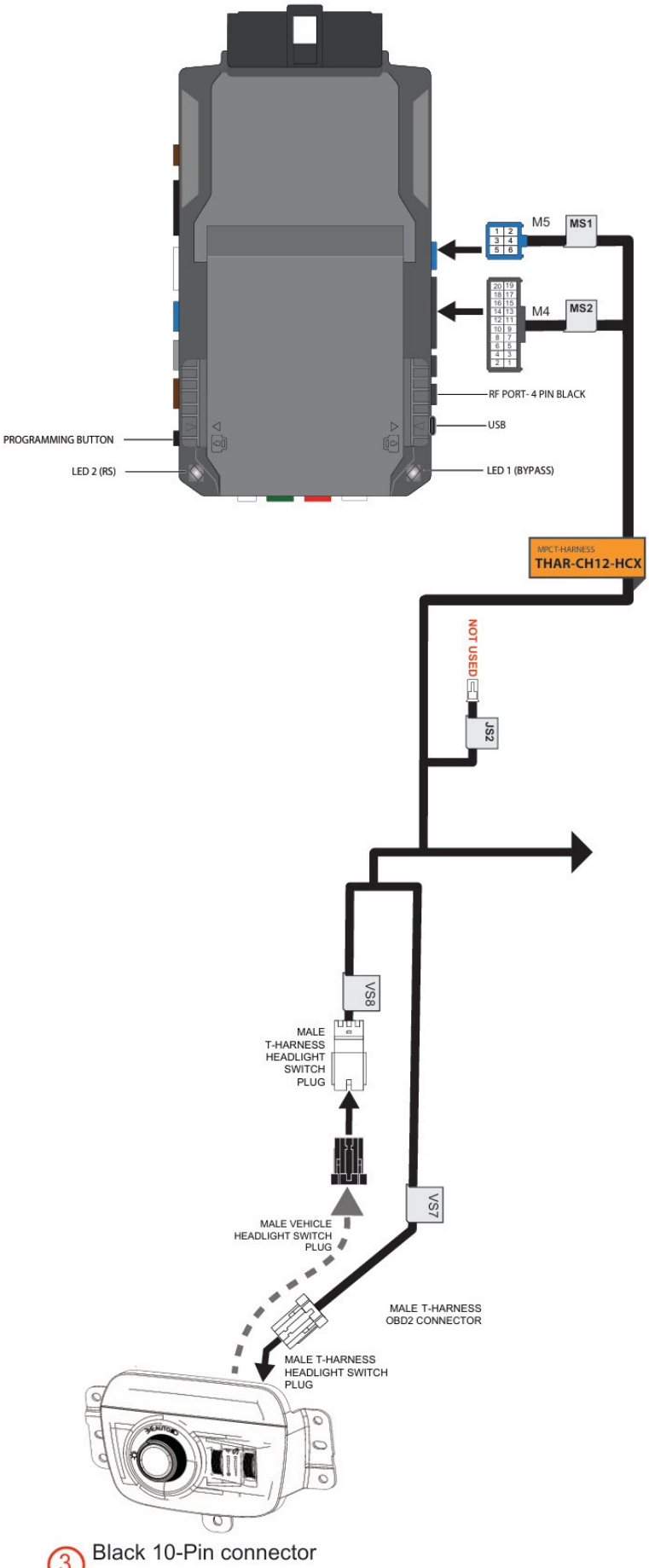




STEP 2.3: RAM Truck Parking Light T-harness Connection

1. Locate the Black 10-pin connector at the back of the Headlight switch. (see photos)

2. Remove the factory 10-pin connector from the Headlight switch. Plug it in to the the female VS8 10-pin plug from the T-Harness. Place in the male VS7 10-pin plug from the T-Harness into factory Headlight switch.



③ Black 10-Pin connector
At Headlight Switch



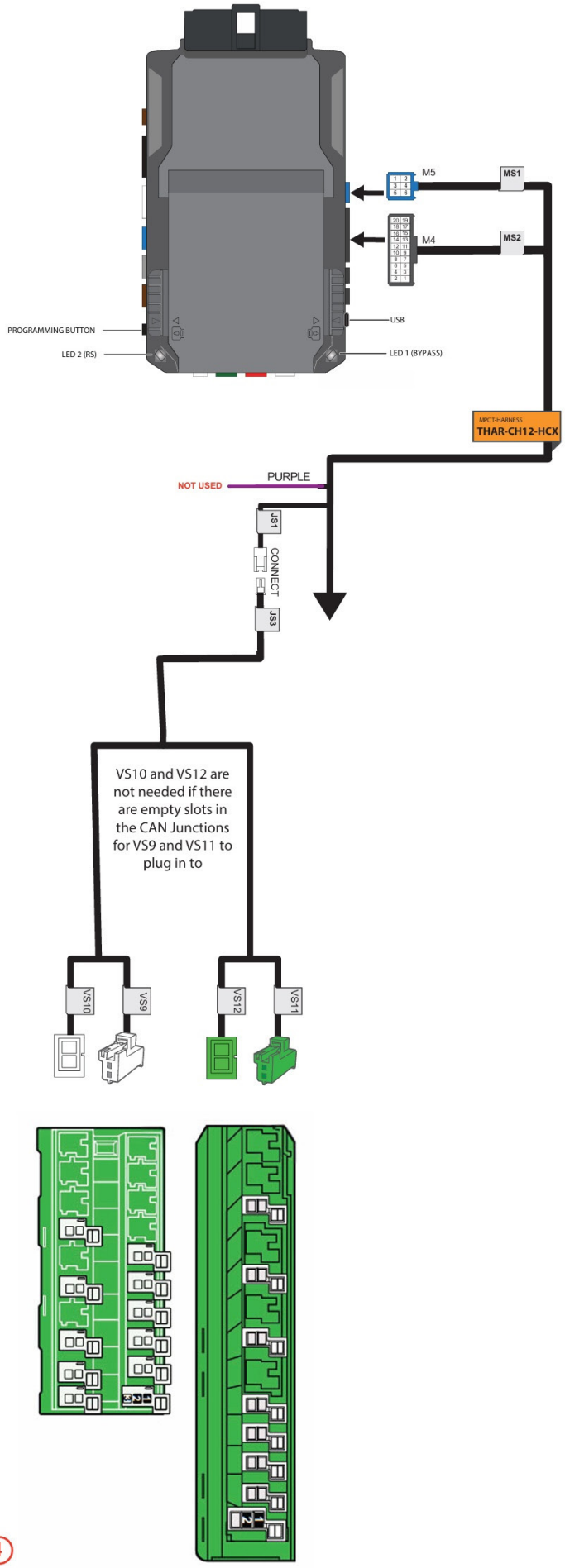
③ **At Headlight Switch**





Step 2.4: RAM CAN Bus T-Harness Connection

CONNECTING THE T-HARNESS



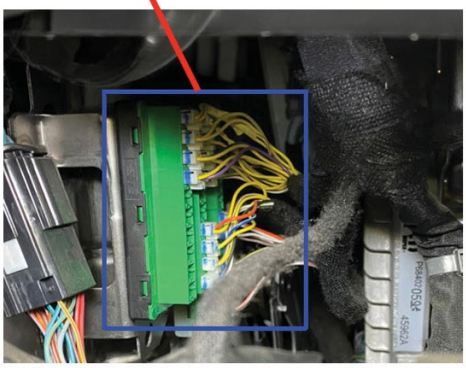
Locate the 2 CAN Junction blocks on the left end of the dash behind the headlight switch, one will 2 rows of 10 connectors and the other will have 1 row of 13 connectors.

If there are empty slots on the CAN Junction block with 2 rows of connectors, simply plug in the VS9 connector to any empty slot and leave VS10 disconnected

If all the slots on the 2 row CAN Junction block are taken, unplug any 2 pin connector and plug it into VS10 and then plug in VS9 to the slot it was unplugged from.

Repeat the steps above for the CAN Junction block with a single row of connectors using connectors VS11 and VS12.



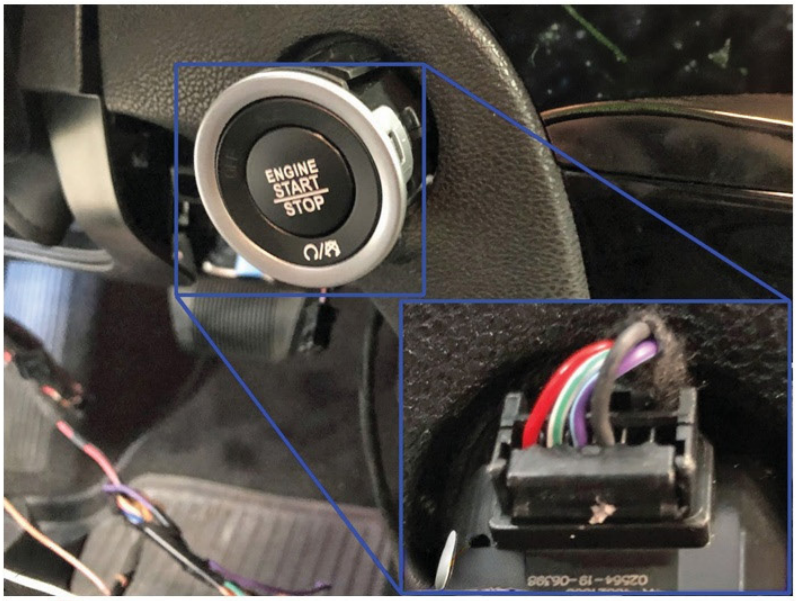




Dodge Charger / Chrysler 300 / 300C Wire Location



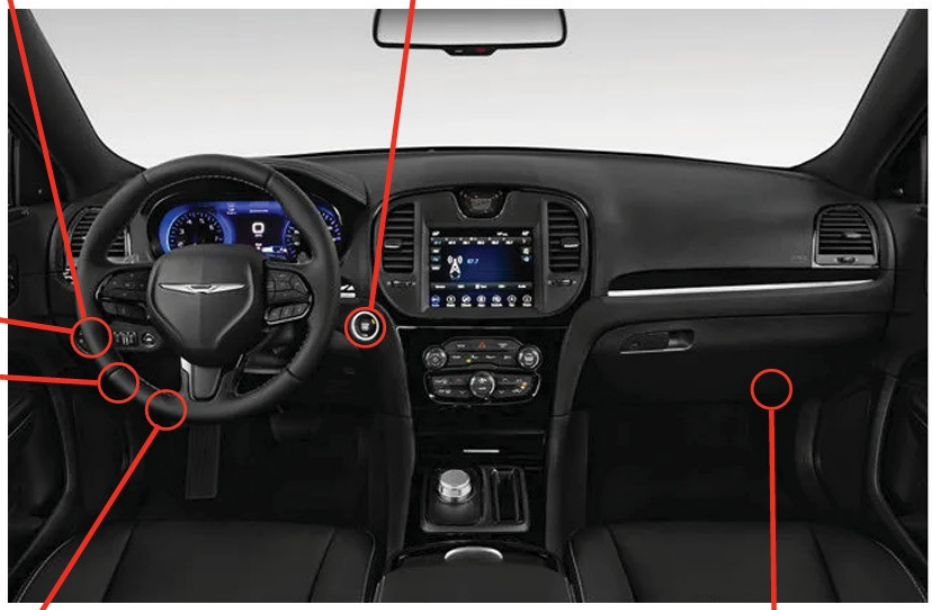
1 HEADLIGHT SWITCH



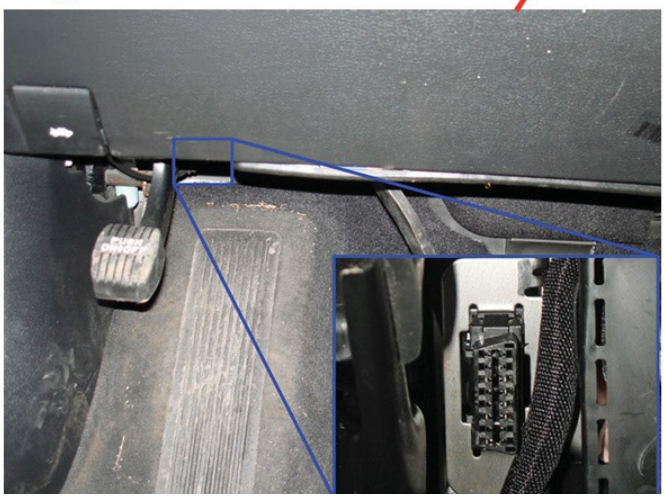
4 PUSH TO START BUTTON



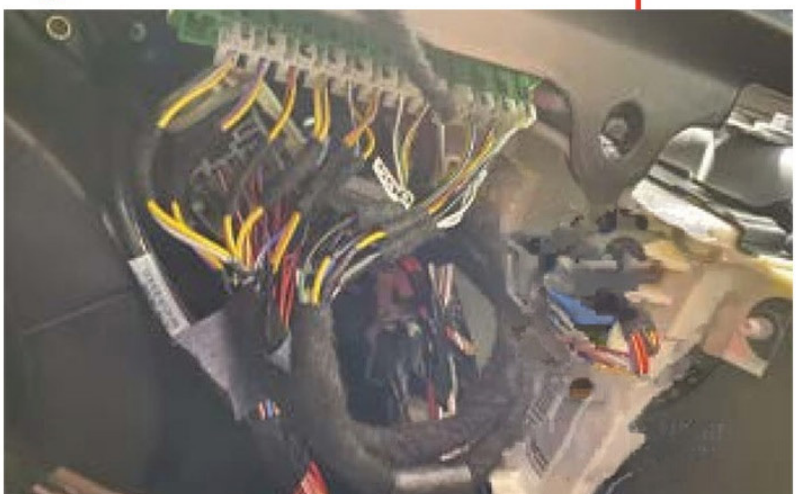
2 VS11 CAN JUNCTION



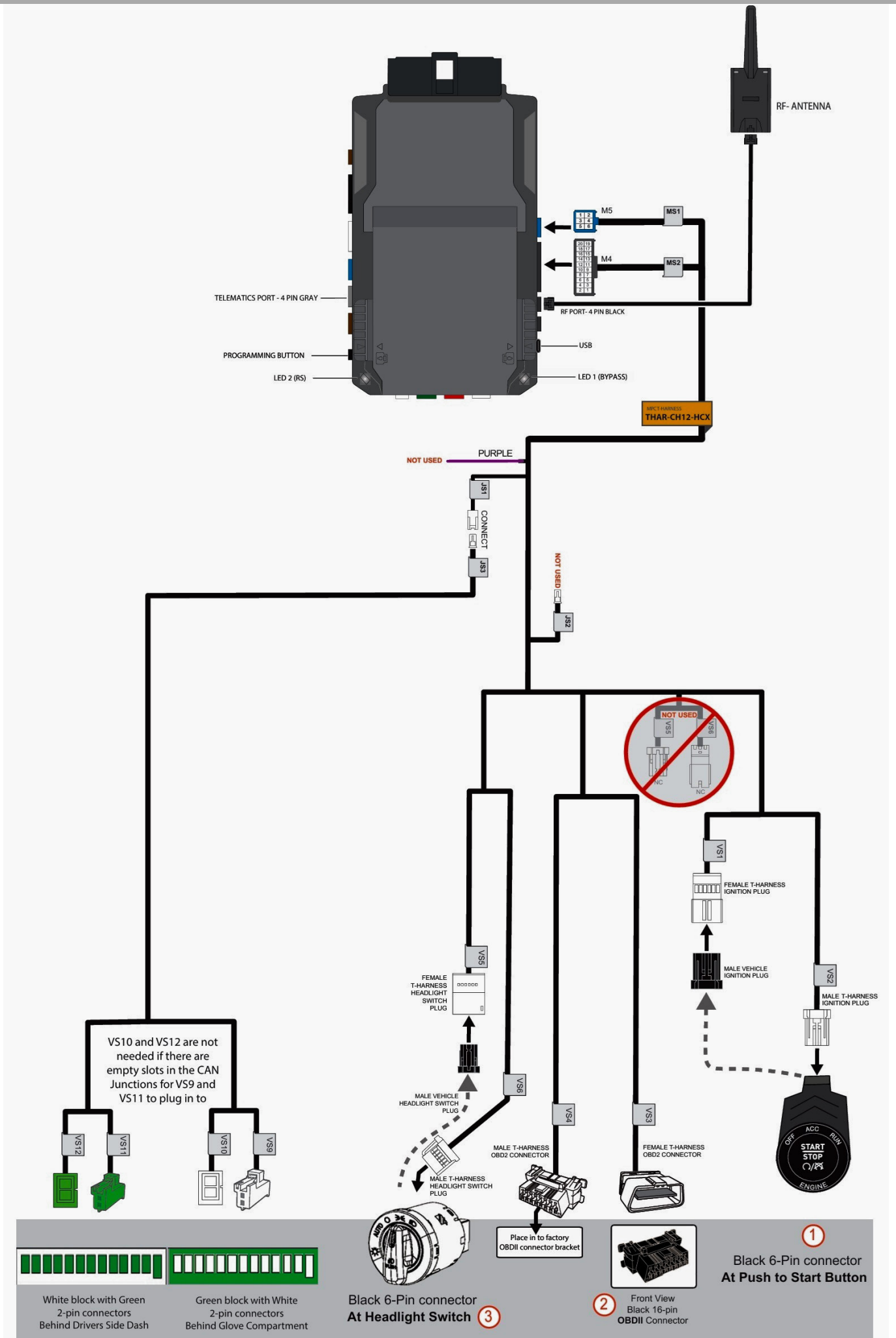
3 OBD2 CONNECTOR



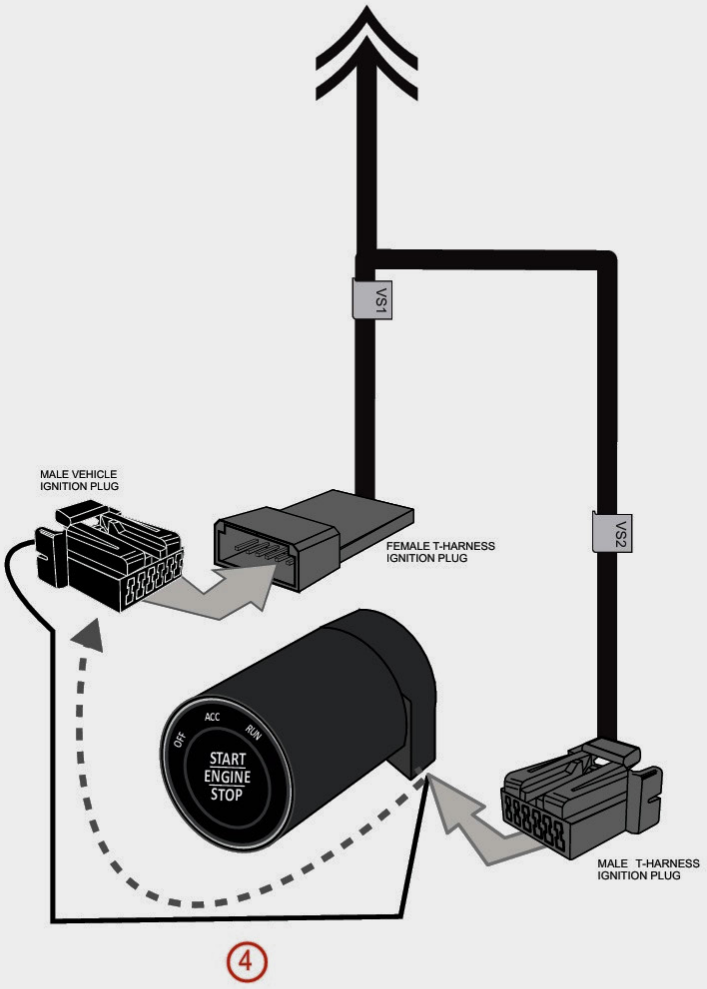
5 VS9 CAN JUNCTION



Step 3: Dodge Charger / Chrysler 300 / 300c Wire Diagram



Step 3.1: Chrysler 300 / 300C Ignition T-Harness Connection

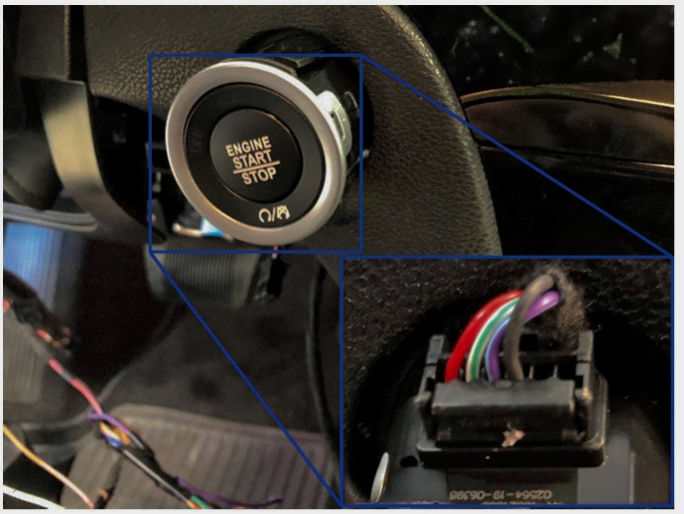


4

Black 6-Pin connector,
At Push to Start Button

1. With the knee bolster removed, reach behind the Push to Start button and unplug the Black 6-pin connector from the back of the Push to Start button. Plug in the male 6-pin Black VS2 plug from the T-Harness into the female 6-pin Push to Start button. Plug the female 6-pin VS1 connector from the T-Harness into the Factory 6-pin male connector. Make sure it snaps into place.

Alternatively you can depress the spring tabs on the button assembly to remove the Push to Start button from the dash for easier access.



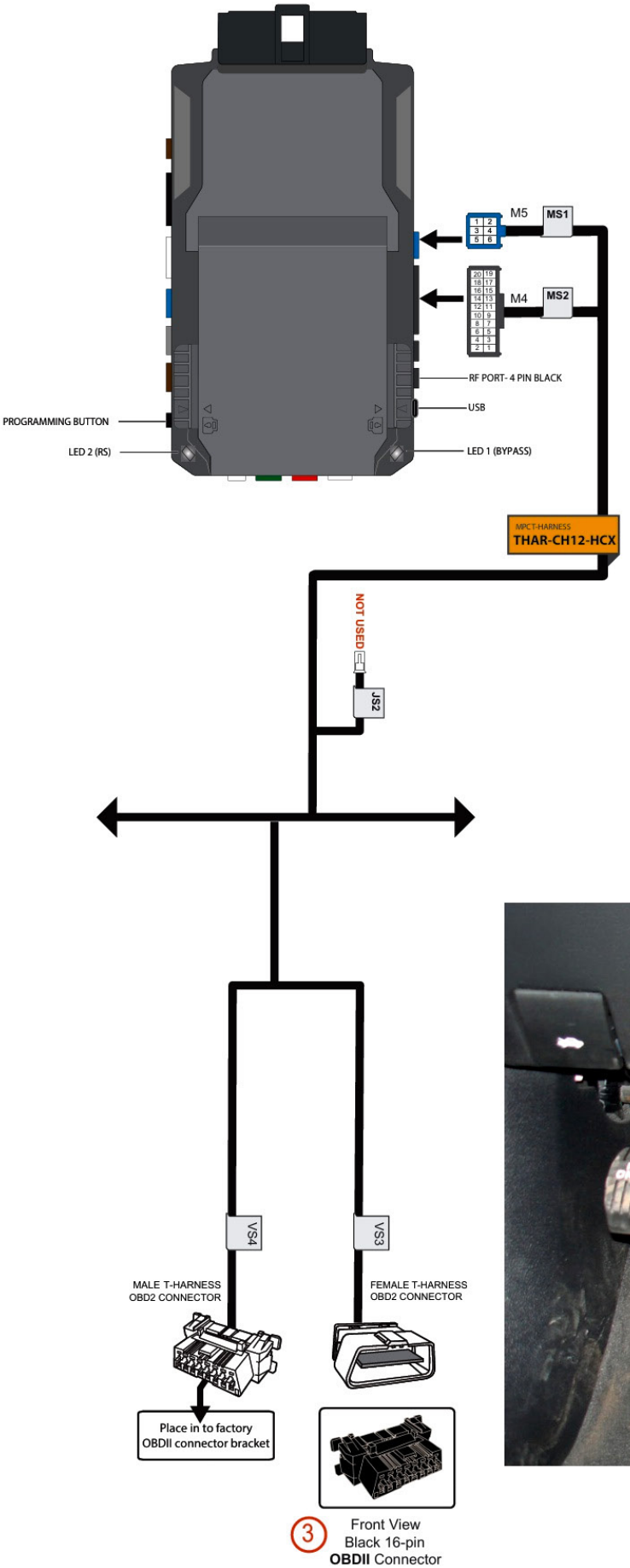


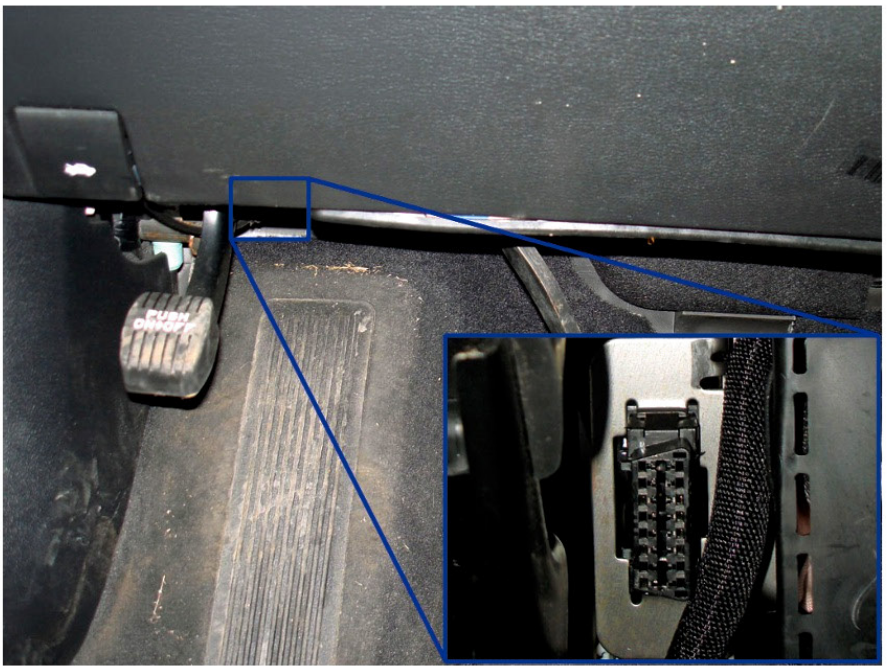


Step 3.2: Dodge Charger / Chrysler 300 / 300C OBD II T-Harness Connection

Locate the Black 16-pin OBD2 port below the lower left bottom of the Dash panel.

Remove the factory OBD2 connector from the factory bracket. Plug it in to the the female VS3 16-pin plug from the T-Harness. Place in the male VS4 16-pin plug from the T-Harness into factory bracket.





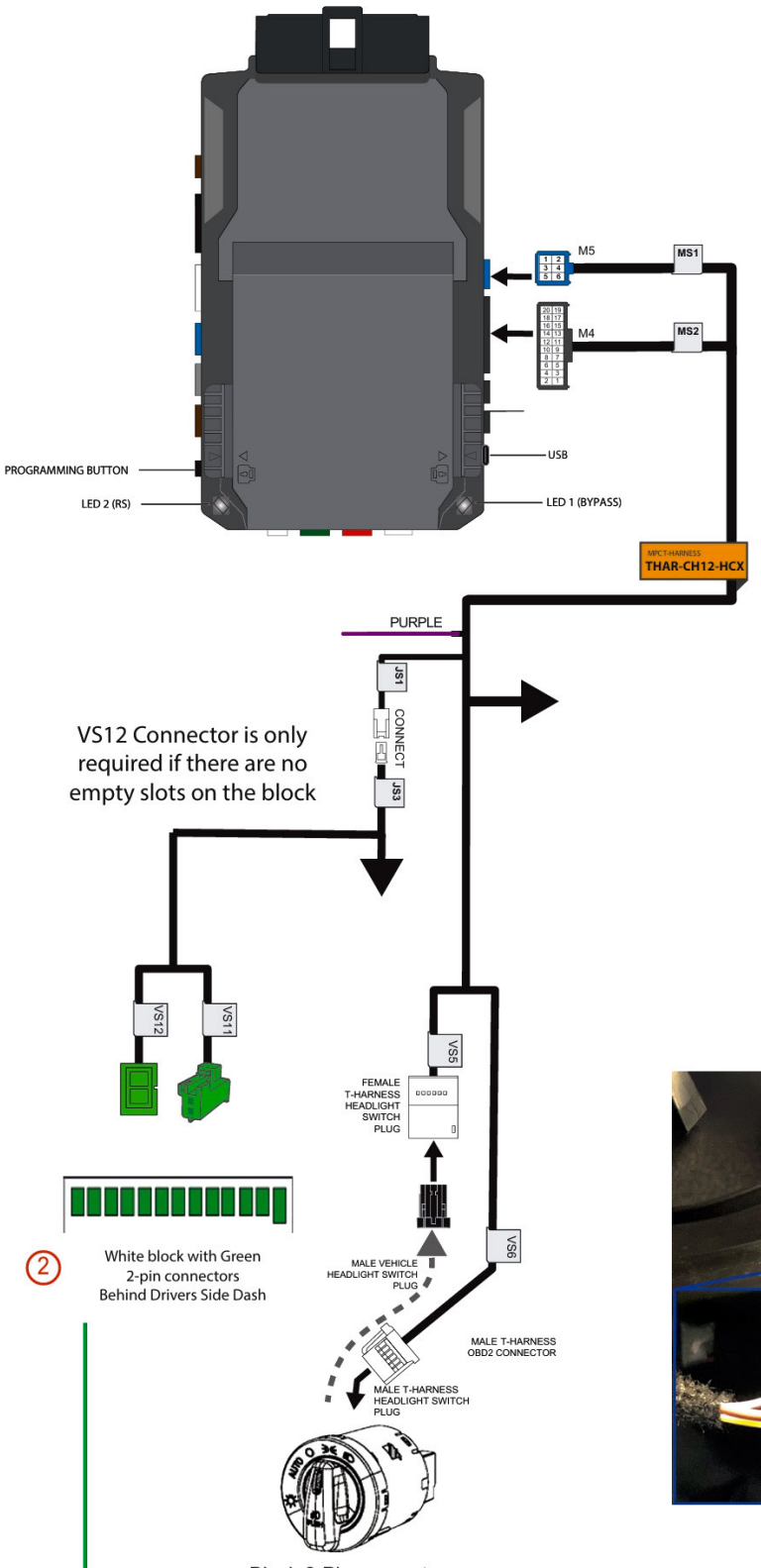
Step 3.3: Charger / Chrysler 300 / 300C CAN Bus Connection #1 VS11 & Pk Light

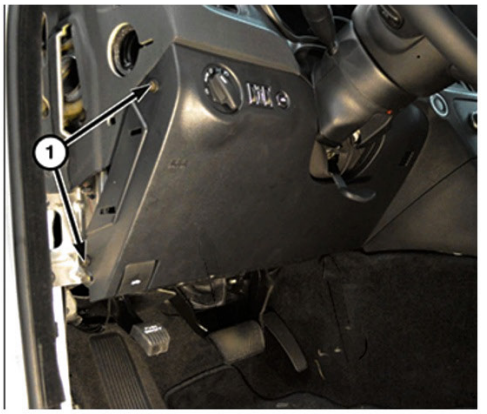
Both the Headlight Switch connector and the VS11 CAN Junction Block are located on the backside of the Drivers Knee Bolster which can be removed fairly easily.

Remove the Drivers Dash Endcape to reveal two screws, after removing the screws the Knee Bolster will drop down with the aid of a panel removal tool.

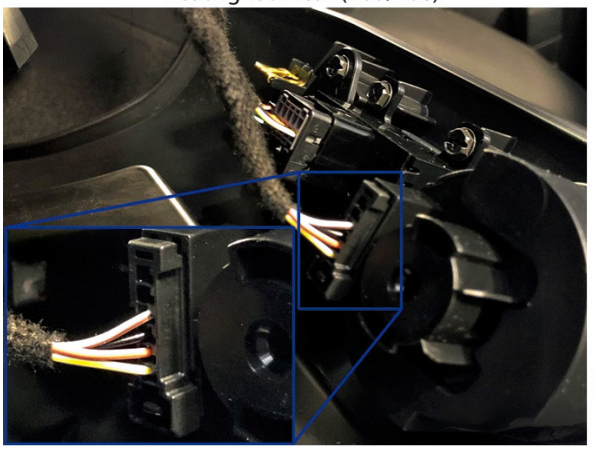
Disconnect the 6 pin Headlight Switch connector and plug the vehicle harness connector into the VS5 connector. Plug VS6 into the Headlight Switch.

Plug the VS11 connector into any open slot on the White CAN Junction block. If there are no open slots on the block then unplug any 2-pin connector and plugit into VS12, plug VS11 into the spot the original connector was removed from.

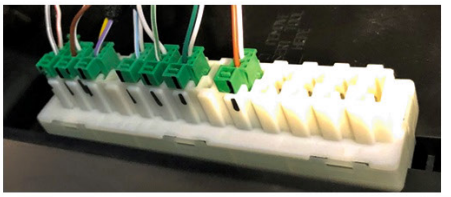




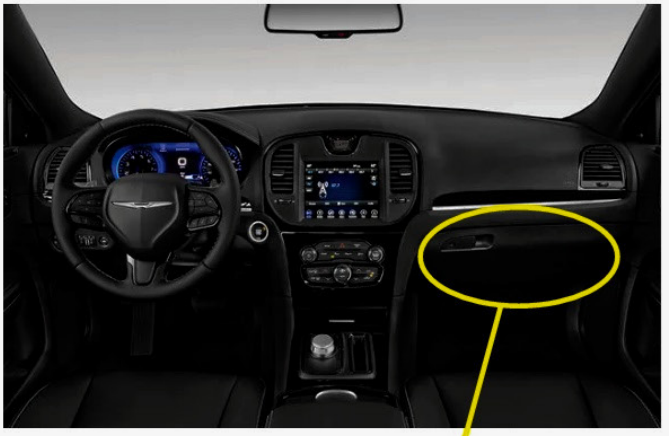
Headlight Switch (VS5/VS6)



VS11 CAN Junction



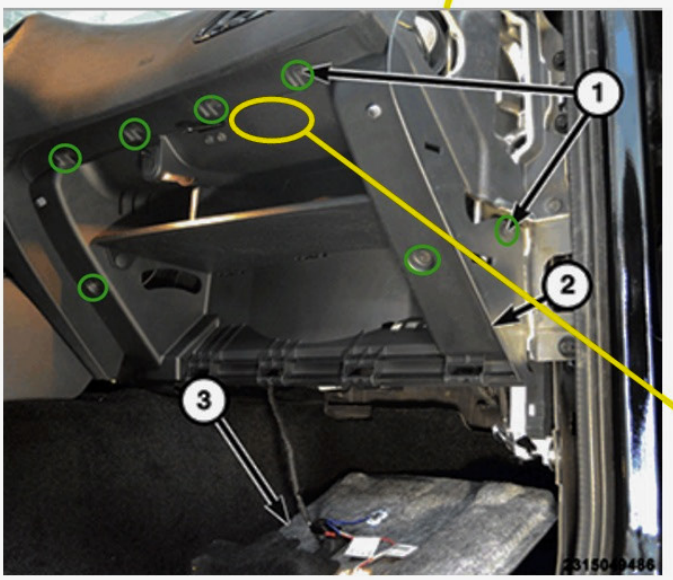
Step 3.4: Charger / Chrysler 300 / 300C CAN Bus Connection #2 VS9



The Green VS9 CAN Junction with White connectors is behind the top of the glove compartment on the passenger side.

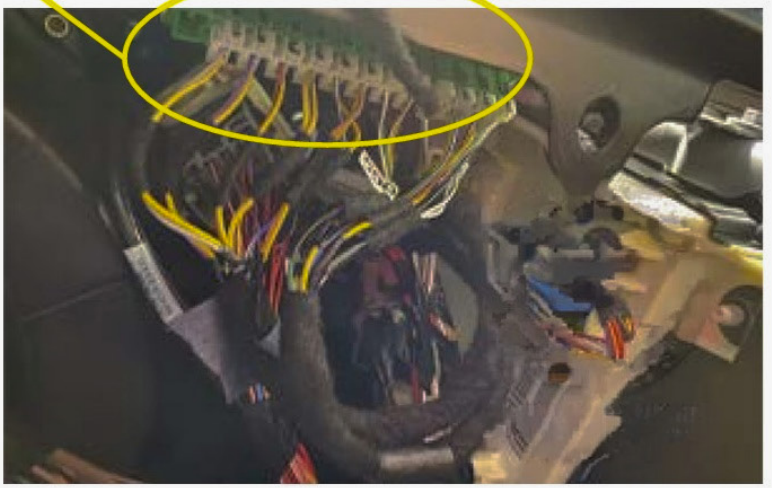
To remove the glove compartment, first remove the passenger dash endcap with the aid of a removal tool. Remove the glove box door by releasing the detent cable on the right side, then pressing in on the back corners of the box to allow it to open all the way. The box can then be pulled outward off the hinging point and placed to the side.

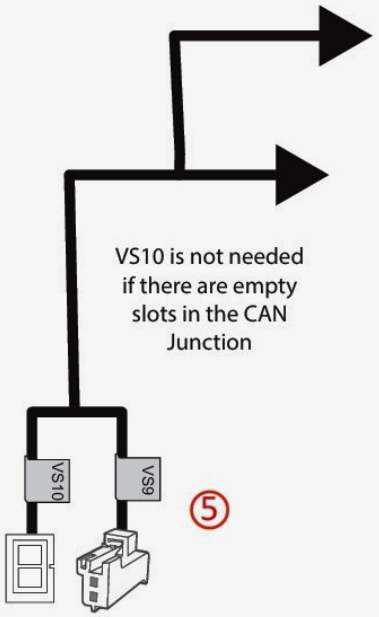
Remove 6 screws from around the outside of the glove box opening and a 7th screw on the side where the endcap panel was removed. Assist the side of the box over the locking tabs on the right side and then pull the box outward and place it aside.

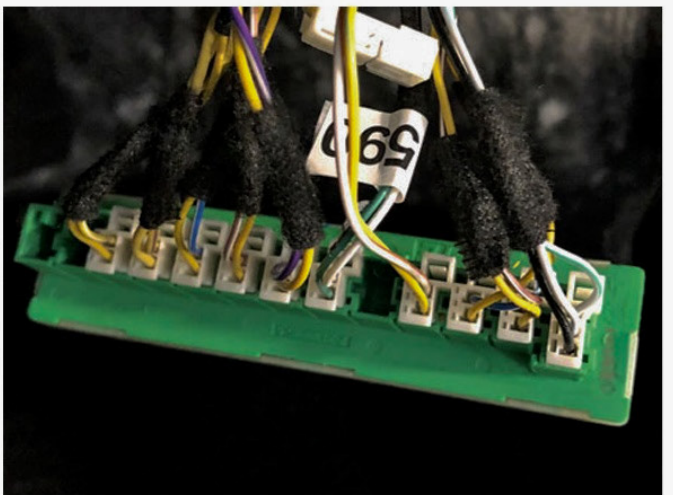


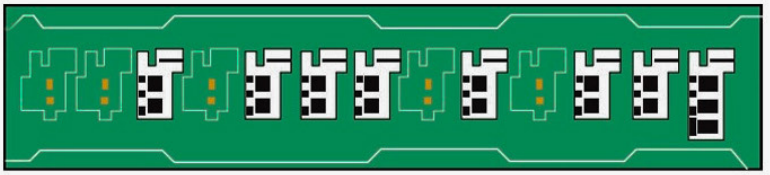
Plug the VS9 connector into any open slot available on the CAN Junction Block.

If all of the spots on the CAN Junction Block are already taken, unplug any of the 2-pin connectors and plug it into VS10 from the remote start harness, then plug VS9 into the position the original connector was removed from.





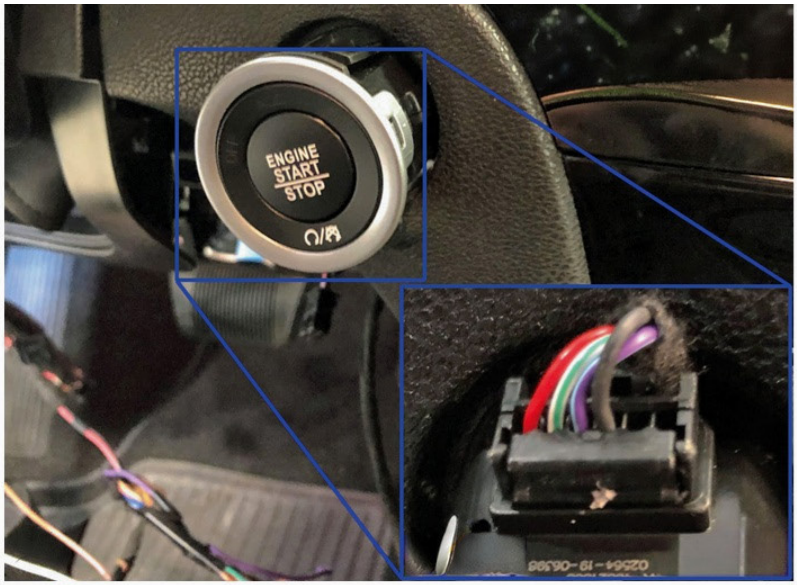




Dodge Challenger Connection Locations



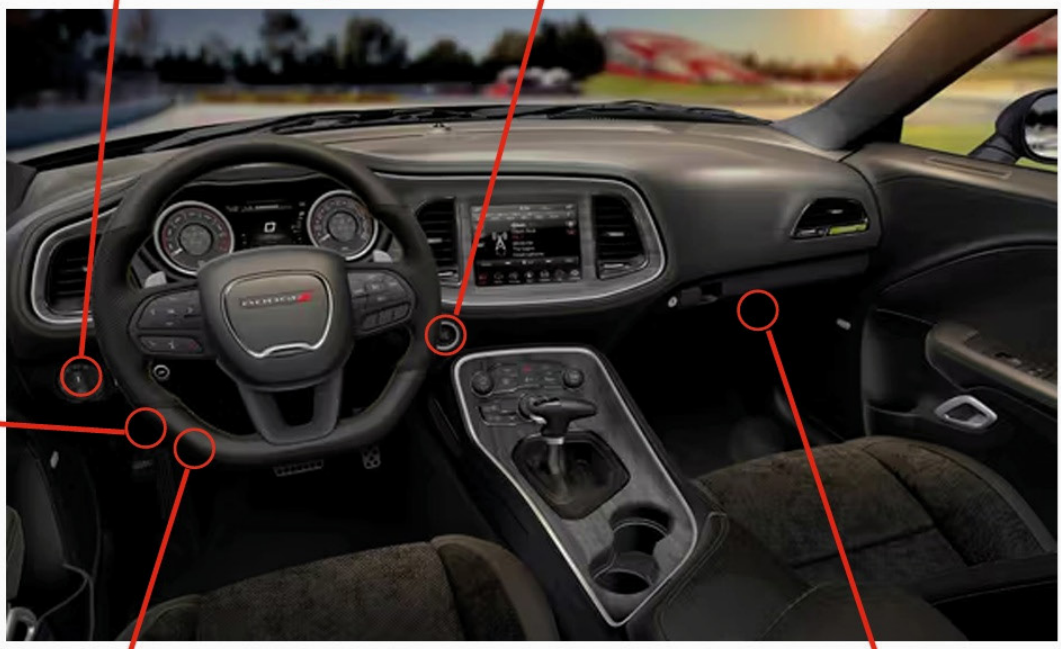
① HEADLIGHT SWITCH



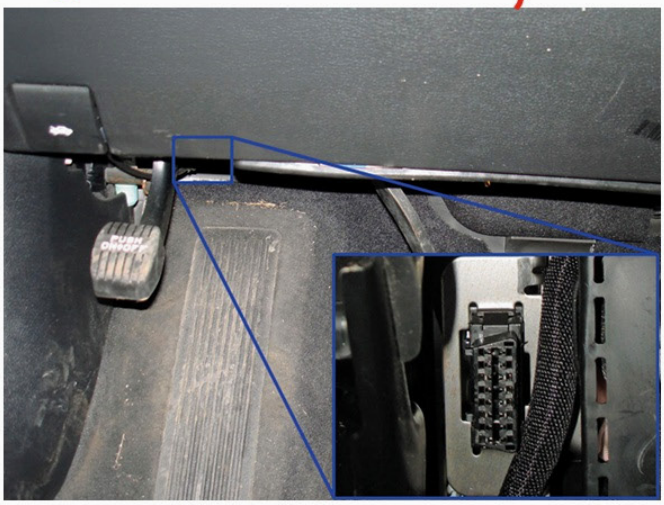
④ PUSH TO START BUTTON



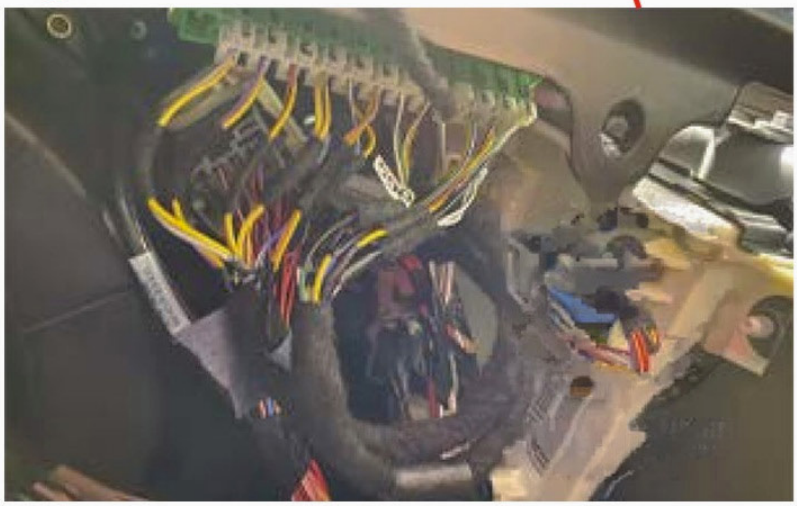
② VS11 CAN JUNCTION



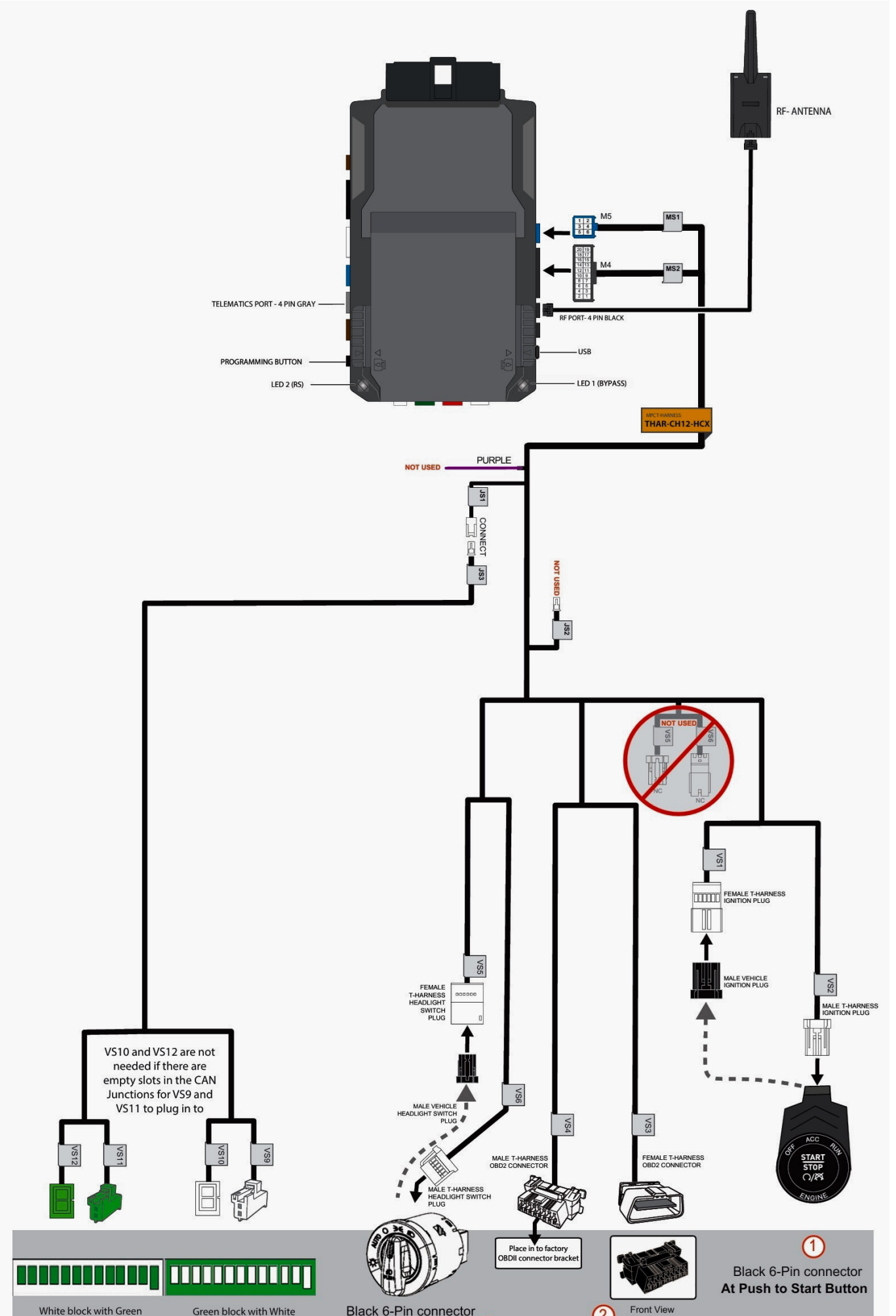
③ OBD2 CONNECTOR



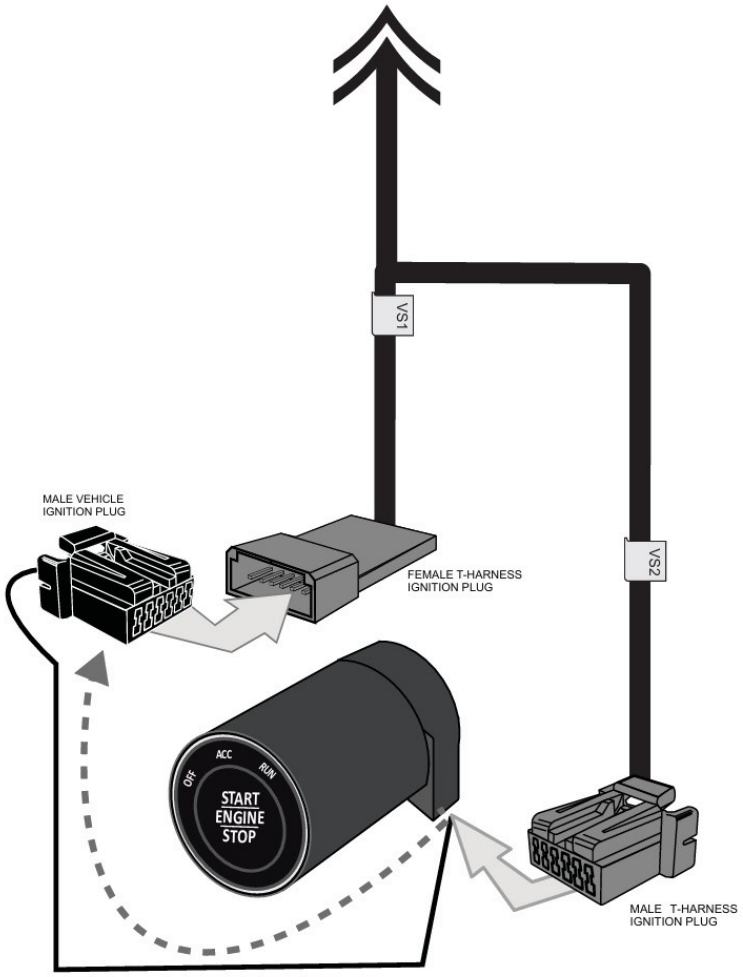
⑤ VS9 CAN JUNCTION



Step 4: Dodge Challenger Wire Diagram



Step 4.1: Challenger Ignition T-Harness Connection

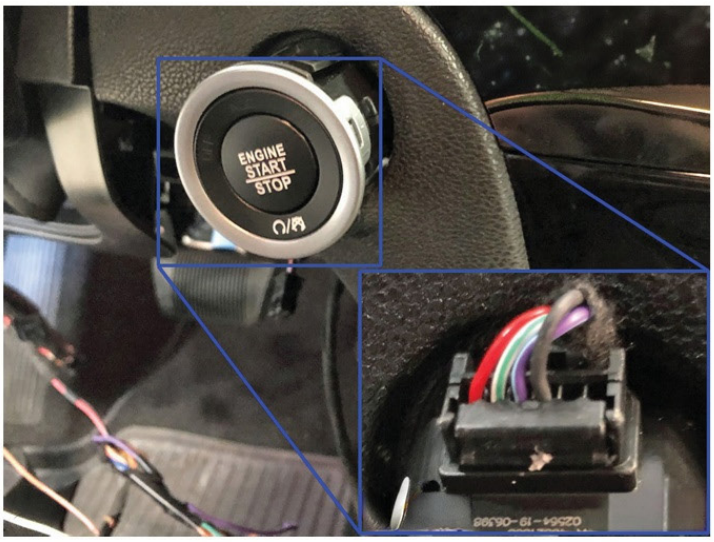


4

Black 6-Pin connector,
At Push to Start Button

1. With the knee bolster removed, reach behind the Push to Start button and unplug the Black 6-pin connector from the back of the Push to Start button. Plug in the male 6-pin Black VS2 plug from the T-Harness into the female 6-pin Push to Start button. Plug the female 6-pin VS1 connector from the T-Harness into the Factory 6-pin male connector. Make sure it snaps into place.

Alternatively you can depress the spring tabs on the button assembly to remove the Push to Start button from the dash for easier access.



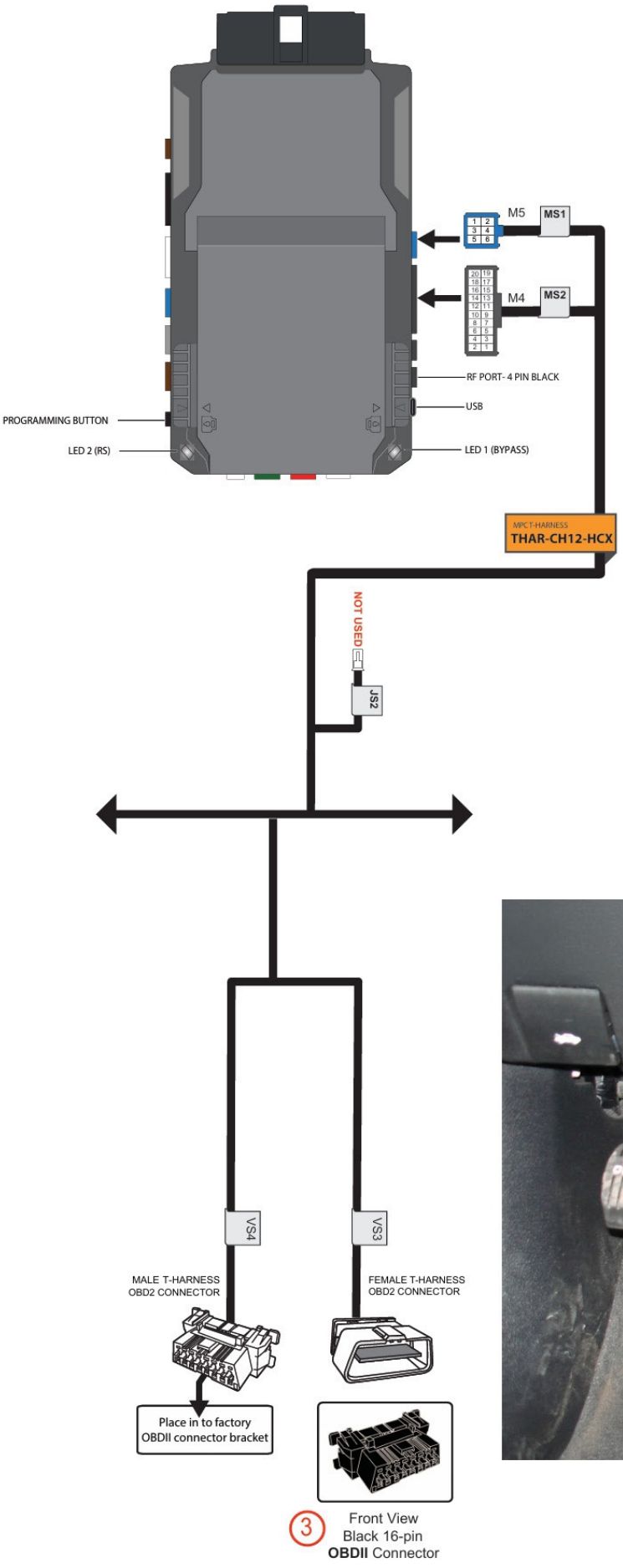


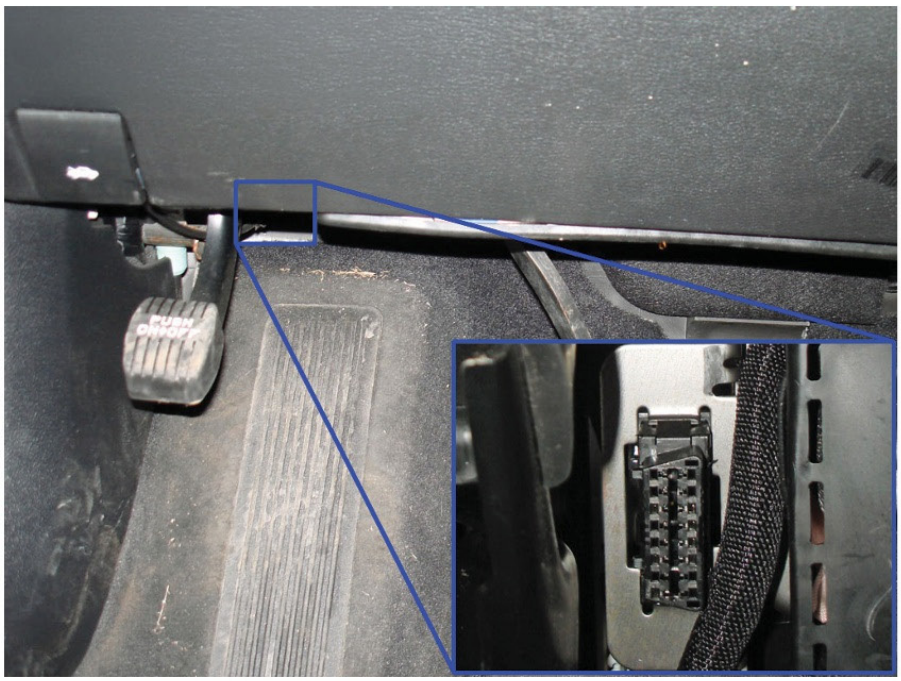


Step 4.2: Challenger OBD II T-Harness Connection

Locate the Black 16-pin OBD2 port below the lower left bottom of the Dash panel.

Remove the factory OBD2 connector from the factory bracket. Plug it in to the the female VS3 16-pin plug from the T-Harness. Place in the male VS4 16-pin plug from the T-Harness into factory bracket.





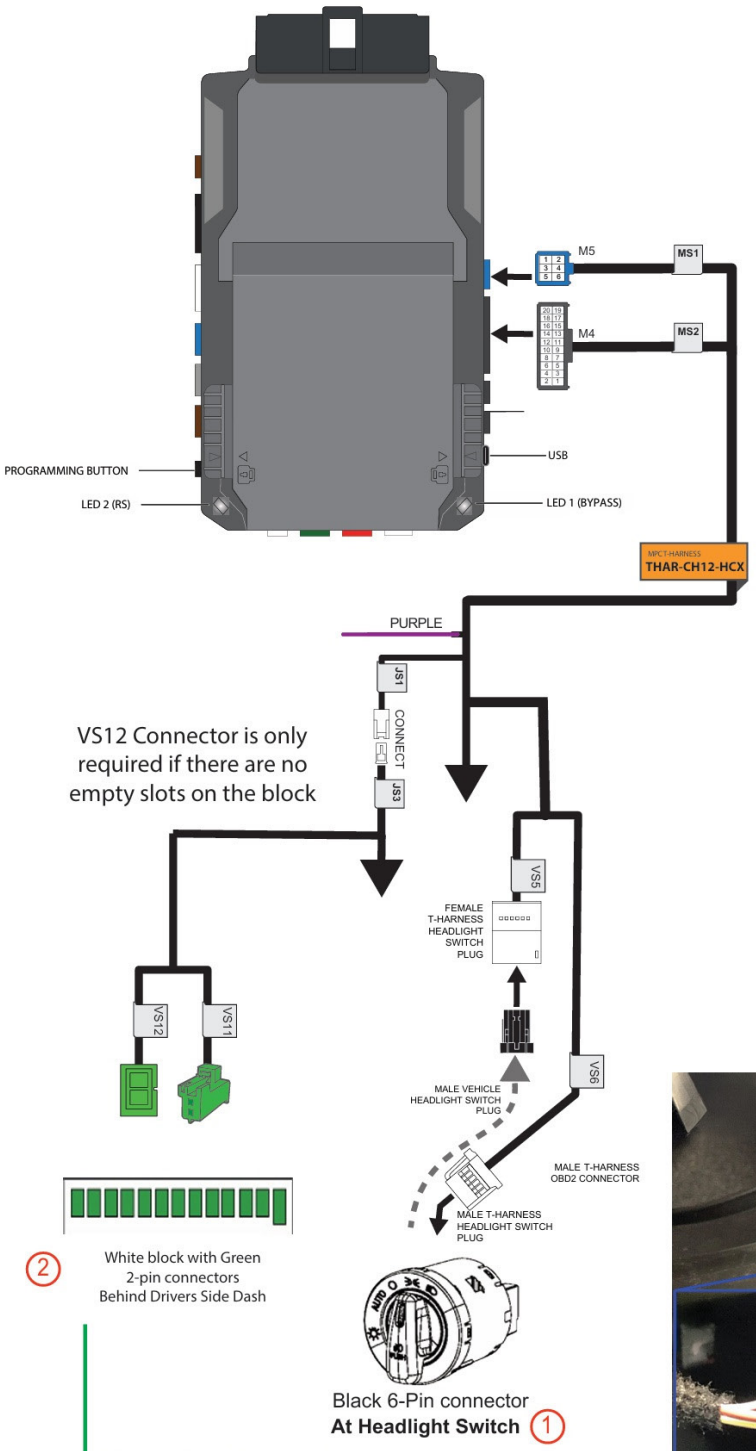
Step 4.3: Challenger CAN Bus Connection #1 & Pk Light Connection

The Drivers Knee Bolster can be removed fairly easily to give easier access to the connections on the Drivers Side of the car.

Remove the Drivers Dash Endcape to reveal two screws, after removing the screws the Knee Bolster will drop down with the aid of a panel removal tool.

Disconnect the 6 pin Headlight Switch connector and plug the vehicle harness connector into the VS5 connector. Plug VS6 into the Headlight Switch.

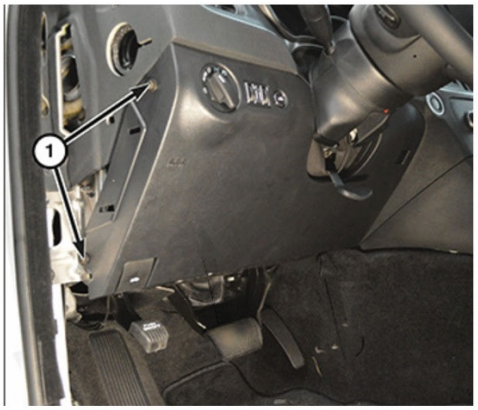
Plug the VS11 connector into any open slot on the White CAN Junction block. If there are no open slots on the block then unplug any 2-pin connector and plugit into VS12, plug VS11 into the spot the original connector was removed from.



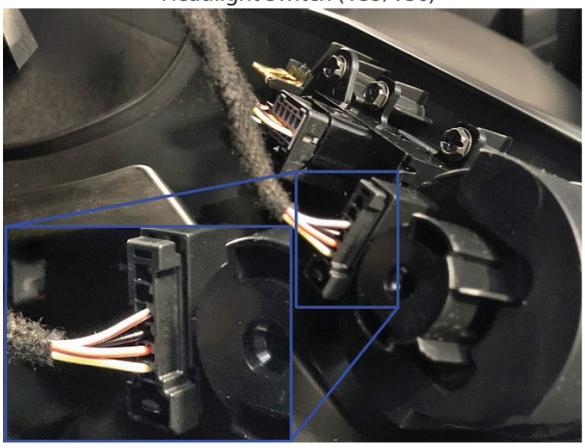
VS12 Connector is only required if there are no empty slots on the block

2 White block with Green 2-pin connectors Behind Drivers Side Dash

Black 6-Pin connector **At Headlight Switch** 1

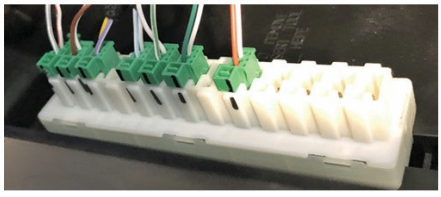


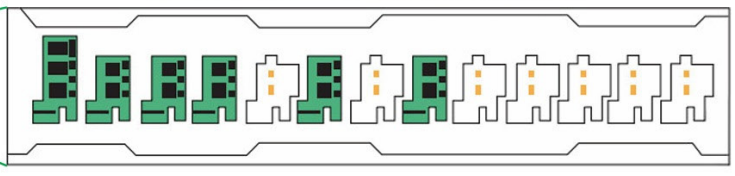
Headlight Switch (VS5/VS6)





VS11 CAN Junction





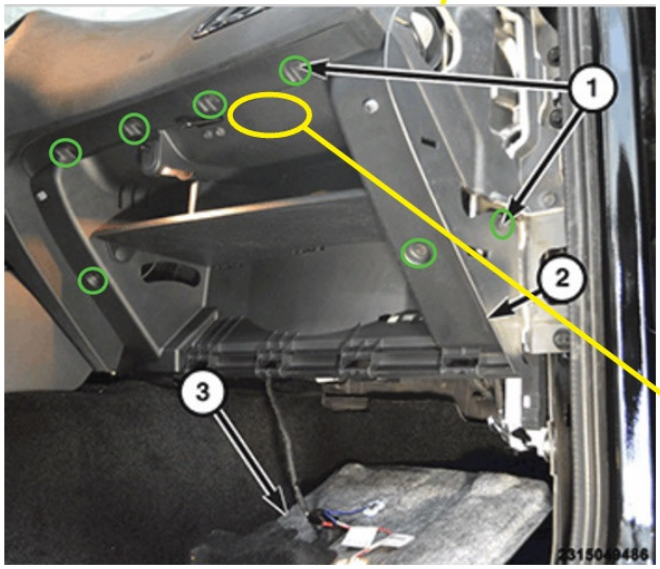
Step 4.4: Challenger CAN Bus Connection #2



The Green VS9 CAN Junction with White connectors is behind the top of the glove compartment on the passenger side.

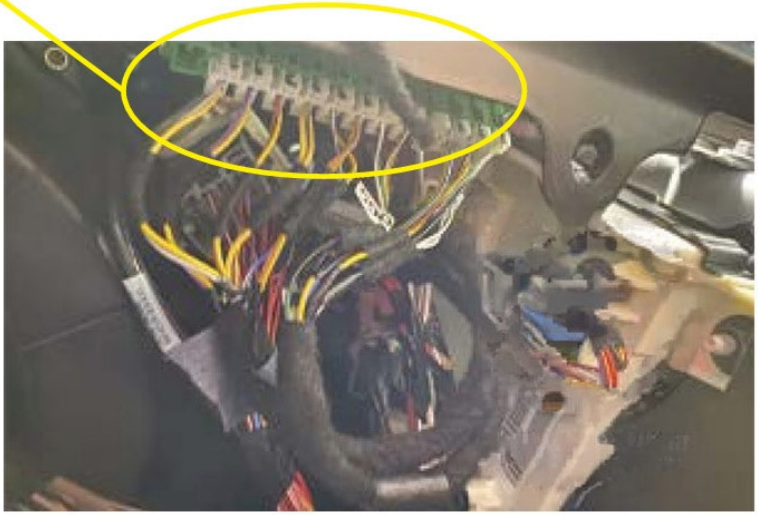
To remove the glove compartment, first remove the passenger dash endcap with the aid of a removal tool. Remove the glove box door by releasing the detent cable on the right side, then pressing in on the back corners of the box to allow it to open all the way. The box can then be pulled outward off the hinging point and placed to the side.

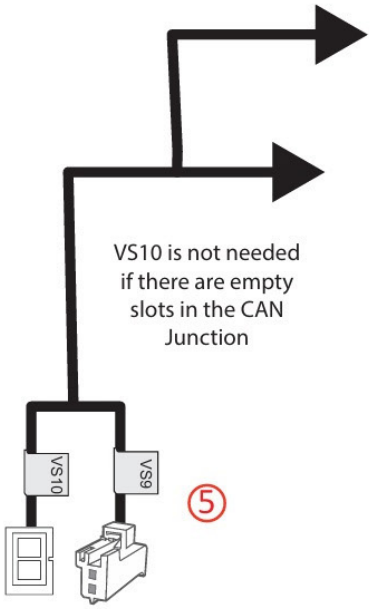
Remove 6 screws from around the outside of the glove box opening and a 7th screw on the side where the endcap panel was removed. Assist the side of the box over the locking tabs on the right side and then pull the box outward and place it aside.

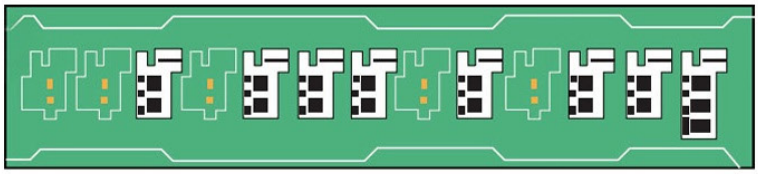


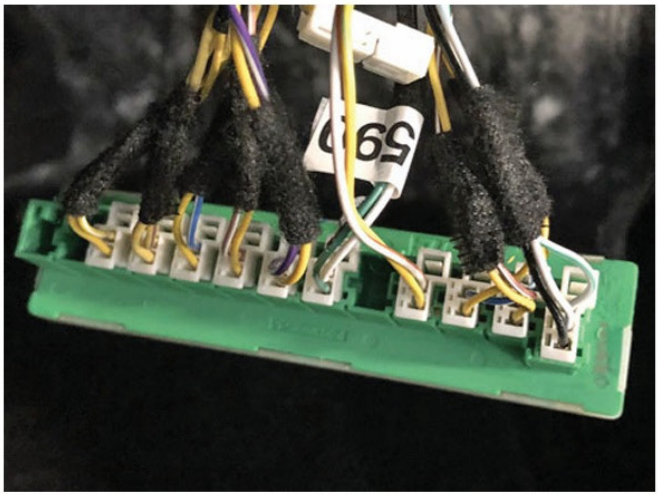
Plug the VS9 connector into any open slot available on the CAN Junction Block.

If all of the spots on the CAN Junction Block are already taken, unplug any of the 2-pin connectors and plug it into VS10 from the remote start harness, then plug VS9 into the position the original connector was removed from.









Step 5: Program the Module

Your Remote Start module now needs to be paired to your vehicle. Before starting the programming sequence, make sure that all of the connectors are plugged into the module. Instructions for programming the Remote Start are below. Here are two important tips to help you avoid common mistakes:

- Follow the programming instructions for the LED1 and LED2 descriptions to monitor flashes.



MODULE PROGRAMMING PROCEDURE - 1 OF 1

01 
Close driver door. Re-open drivers door to wake up data bus.

02 
Press Unlock on OEM remote. If the vehicle is not equipped with an OEM remote, press and hold the module programming button until the LED flashes GREEN/RED (this takes approximately 10 seconds).

03 
Wait, LED 1 will flash GREEN once [1x]. If LED 1 does not flash GREEN, repeat step 2.



04 

Press Start/Stop button 1x to set ignition to ON position.

05 
Wait,if LED 1 turns solid RED proceed to step 6. If LED 1 flashes GREEN rapidly, proceed to step 10.

06 

Press Start/Stop button 1x to set ignition to OFF position.

07 
Repeat steps 4 to 6, eight times [8x].

08 

Press Start/Stop button 1x to set ignition to ON position.

09 
Wait, LED 1 will flash rapidly.

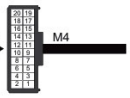


10 

Press Start/Stop button 1x to set ignition to OFF position.

11 
WARNING: Unplug module from vehicle. Disconnect power last when disconnecting module from vehicle.

Disconnect M4 20-pin connector last.



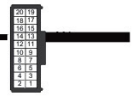
12 
Connect module to computer with USB cable and proceed with KLON extended programming.



NOTE: See download and programming in KLON steps below. Continue to Step 13 once KLON programming is completed.

13 
Connect power first when reconnecting module to vehicle.

Connect M4 20-pin connector first.



14 

Press Start/Stop button 1x to set ignition to ON position.

15 
Wait, LED 1 will turn solid GREEN for 2 seconds.

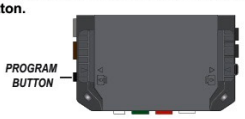


16 

START vehicle for 15 seconds.

17 
Press and hold the brake pedal.

18 
Press and release the module's programming button.

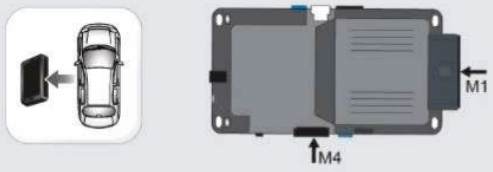


19 
Release the brake pedal.

20 
Wait, LED 2 will flash GREEN.



21 
Module Programming Procedure completed.



WARNING: Disconnect power last when disconnecting module from vehicle.

Disconnect all connectors first, then the M4 20-pin.
Or the M1 8-Pin (Main-Harness).

Click Here for Weblink Software

Login with this User Name: **flash@mypushcart.com**

Use This Password: **MPCFlash2025**!



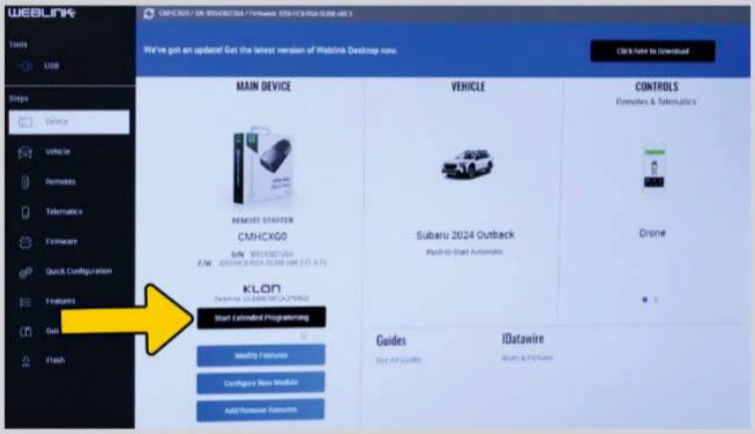
KLON

Download WEBLINK updater Program
You will need to download this program to do the KLON. It requires a Windows pc or MAC with USB
weblinkupdater.com/weblinkdesktop/en





Install and Login in to WEBLINK Updater. Select Weblink RS Flash remote Starter.



Once the device loads, select Start Extended Programming.



Select Continue Extended Programming.



Wait while KLON program processes.



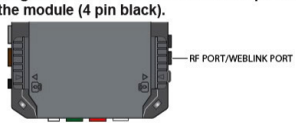
Once Flash is Completed Sucessfully, select OK.



Programming Optional RF Remote Upgrade Kits RFKIT1-2W-4

>> 

Plug the antenna into the RF/Weblink port of the module (4 pin black).



01 

WARNING: Complete the module programming procedure and tach programming procedure before programming the remotes. A maximum of four [4x] aftermarket remotes per system.

02 

Set ignition to ON position.

03 

Press and release the antenna button, then press and hold the antenna button. The antenna's LEDs will turn ON solid.

04 

Parking Light will flash once [1x]. The HCX brain will click [1x].

05 

While holding the antenna button, press once [1x] on the START button of each aftermarket remote

06 

The antenna's LEDs will flash once [1x] for each successful pairing.

07 

Release the antenna button. The antenna's LEDs will turn OFF.

08 

Set ignition to OFF position.

09 

Remote Programming Procedure completed.

Finishing 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 contacts.

- 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. Be careful not to zip tie near your connections as it may create a bad connection.
- Replace any interior vehicle panels that were removed to gain access to the needed wires, in reverse order that they were removed.
- Test the system as you reinstall the panels in your vehicle to make sure you do not pull something loose or pinch a wire. Be careful not to run a screw through a wire or pinch a wire while reinstalling panels.
- If your test was unsuccessful, go back and re-check your wiring and programming. Make sure the connections are tight with no bent pins or pulled wires and follow the programming steps again closely.

Vehicle Take Over Procedure

This system will run for 15 minutes then turn off. If you approach the vehicle while it is still running, unlock the doors, enter the vehicle and close the door, within 45 seconds, press the brake pedal and hold it down for 3 seconds, you will hear a click from the remote starter turning off and you can drive away.

01 

All vehicle doors must be closed and locked prior to remote start sequence.

02 

Press the Lock button 3 times on the vehicles OEM factory remote.

03 

The vehicle engine will start.

04 

Time rescriction. Complete Step 5 to Step 8 within 45 seconds.

05 

Press Unlock on OEM remote.

06 

Open driver door and enter vehicle.

07 

Close driver door.

08 

Press and release BRAKE pedal.

09 

The vehicle can now be put in to gear and driven..

>> 

failure to follow procedure will result in no take over and vehicle engine will shutdown.

If you have any installation questions or problems, you can create a support ticket for help at:

install.kleinn.com/support

Kleinn Automotive Accessories

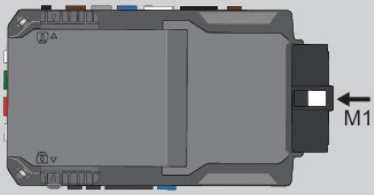
520-579-1531

Copyright 2026 Kleinn Automotive Accessories

DIESEL DELAY SETTING FOR DIESEL ONLY PART 1

***This setting is an option to delay start on Diesel Trucks.**





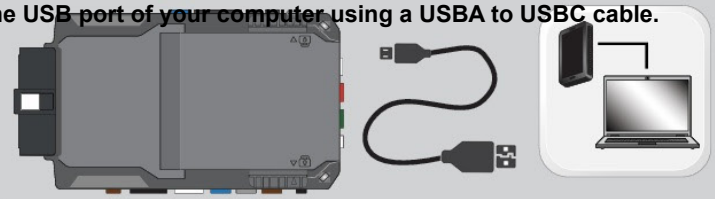
Warning: Disconnect the power connector last when unplugging from the vehicle. Unplug all the connectors first then unplug the M1 8-Pin Main Wiring Harness and bring to your PC or Laptop.

Click Here for WEBLINK Software

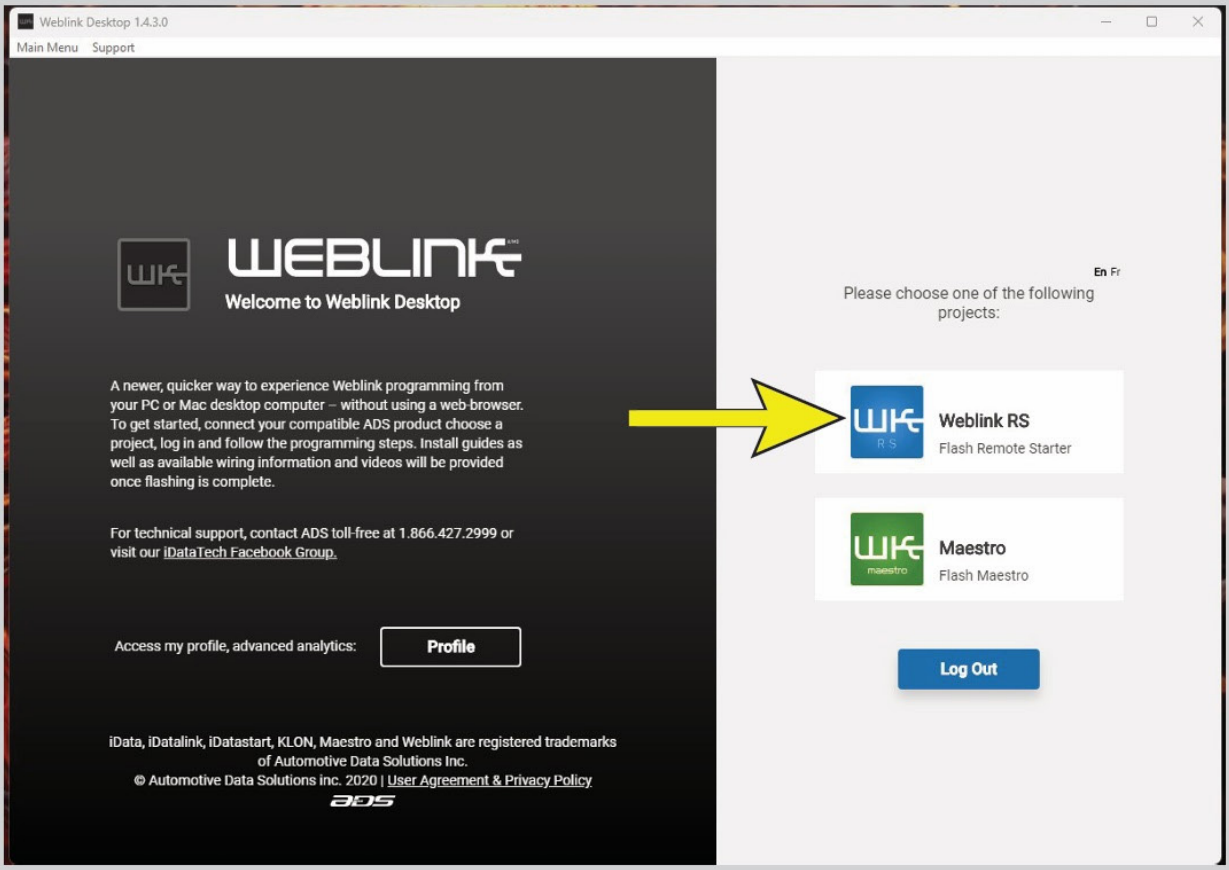
Login with this User Name: **flash@mypushcart.com** **Download WEBLINK updater program then**

Use Tl **o your Windows or MAC computer. Plug the module into**

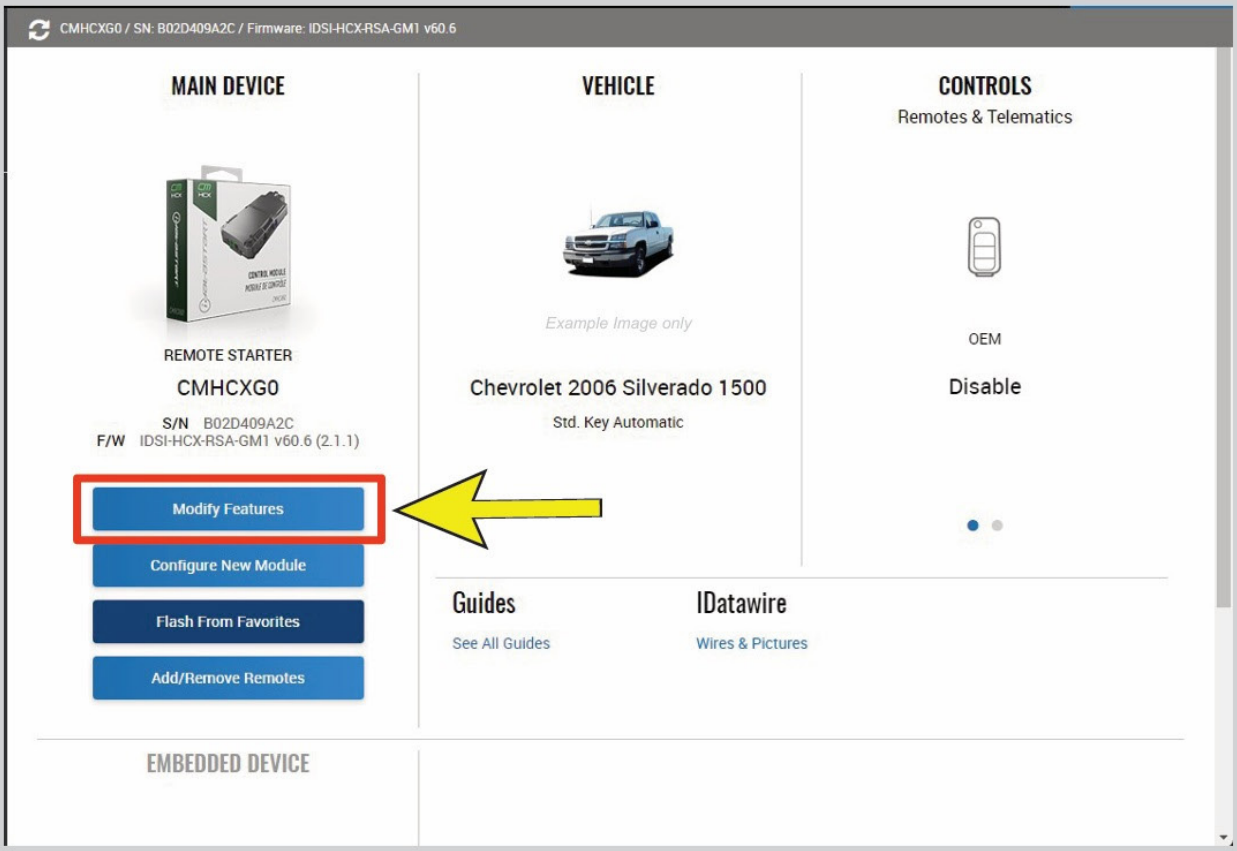
the USB port of your computer using a USBA to USBC cable.



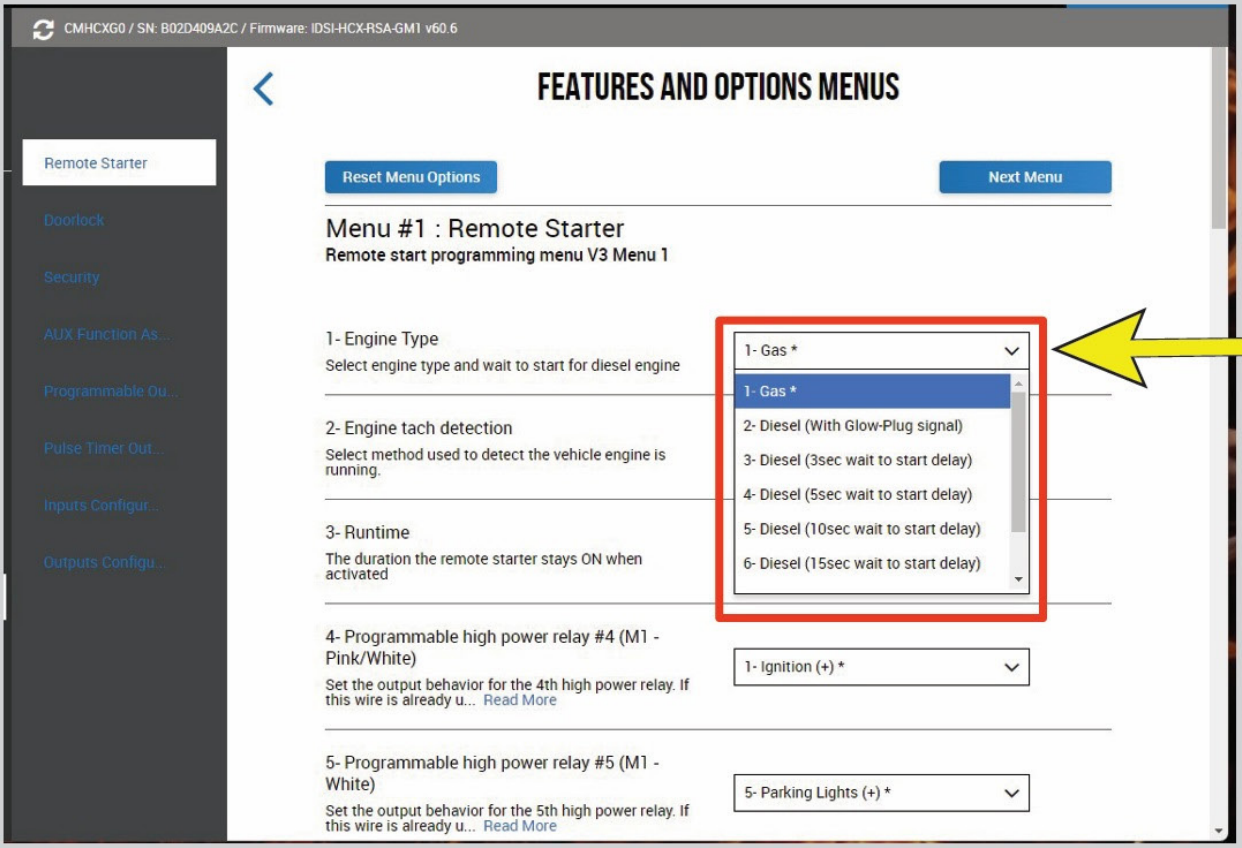
weblinkupdater.com/weblinkdesktop/en



Install and Login in to WEBLINK Updater. Select Weblink RS Flash remote Starter.



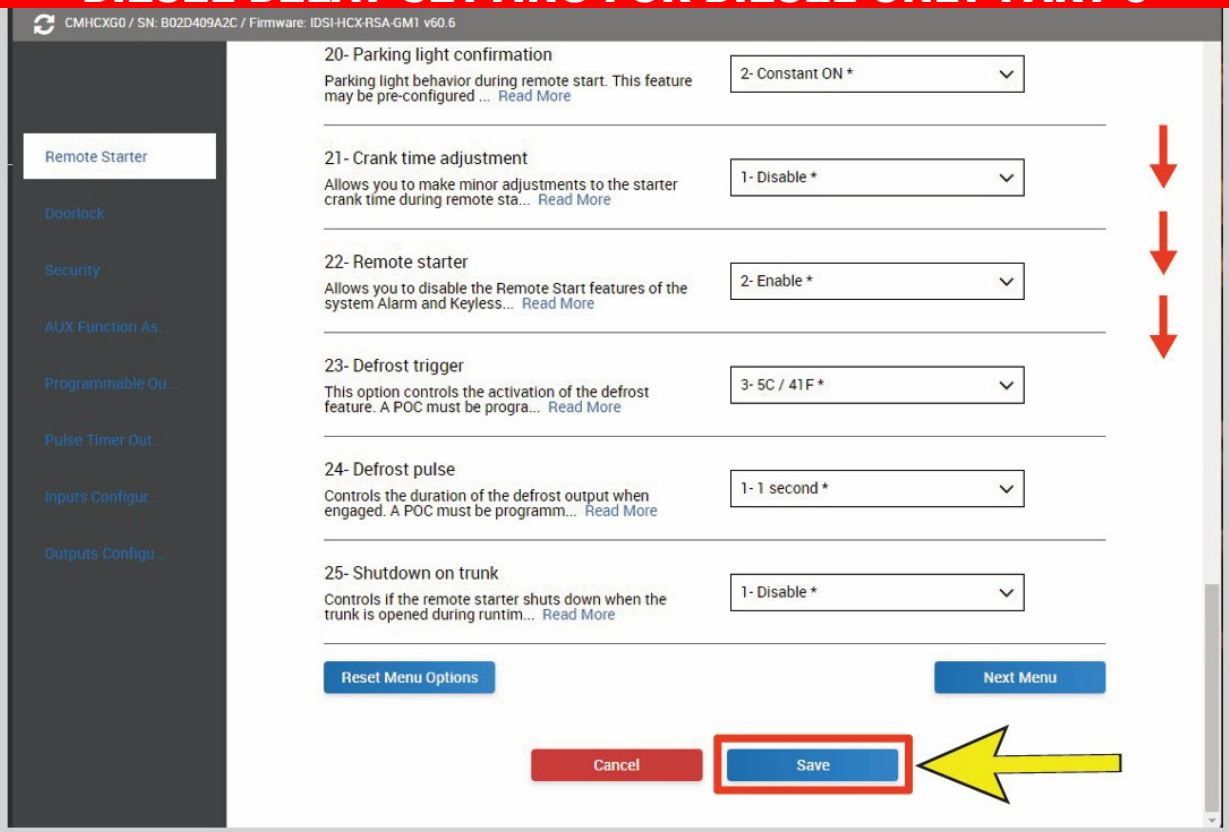
Once the device loads, select Modify Features.



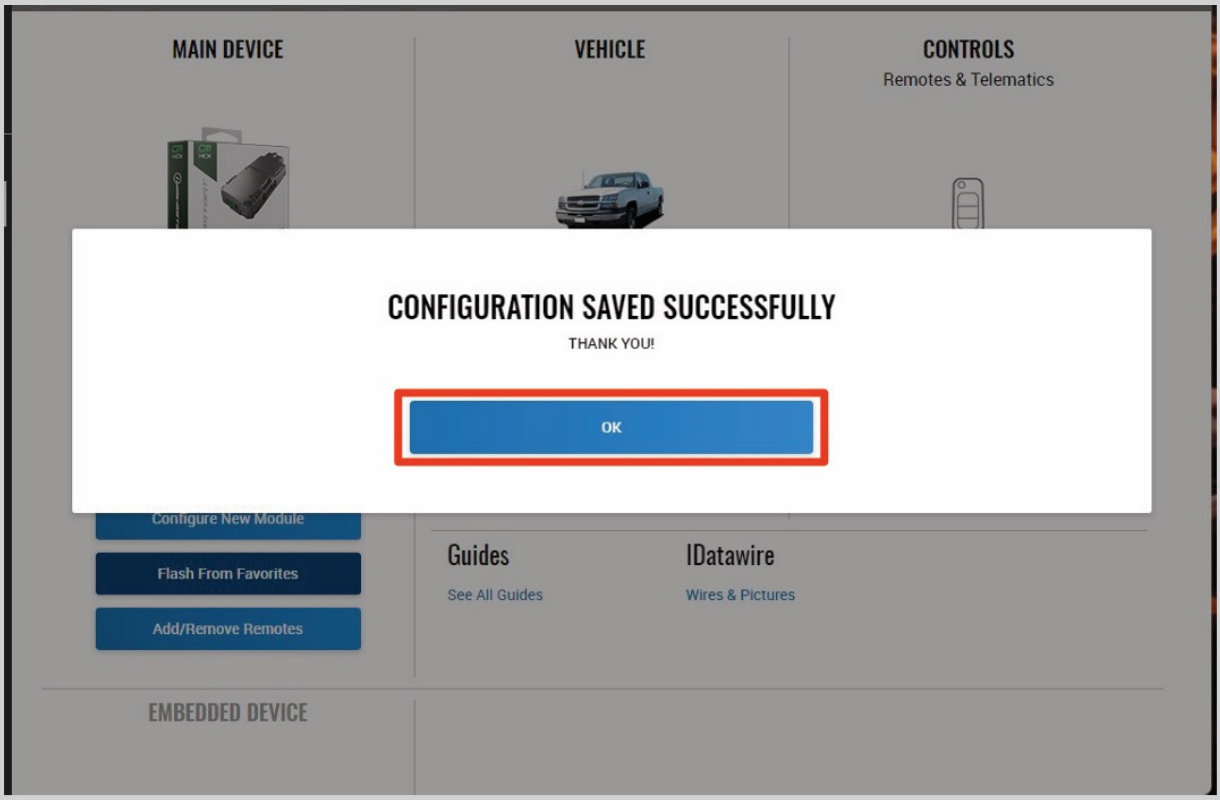
Select 1-Enigine Type drop down menu. Select your desired Diesel delay option.

Option #2 Diesel (with Glow-Plug Signal) reads the signal over data and will crank as soon as the Wait-to-Start light shuts off. Options #3 to #8 are preset Wait-to-Start times.

DIESEL DELAY SETTING FOR DIESEL ONLY PART 3

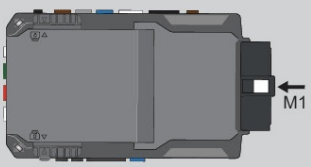


Scroll to the bottom of the page and select Save..



Once Configuration is Saved Sucessfully, select OK.

When programming is complete take the module back to vehicle. Connect the M1 8-Pin (Main-Harness).
Then the rest of the connectors.
After all connections have been made, continue with testing the remote start.





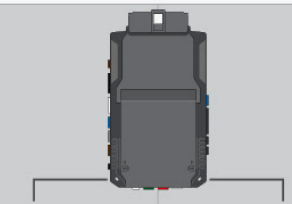
Install back in to the Vehicle

Troubleshooting Charts

When the system receives an activation command and you hear clicks from the HCX remote start module brain but the vehicle fails to start, Parking lights flash and HCX brain will click 3x times followed by a number of flashes and clicks for the diagnostics code. The second number of flashes/clicks corresponds to a remote start diagnostic error code. This will tell you why the remote starter is failing to start. The codes are as follows:

REMOTE STARTER ERROR CODES: NOTES	PARKING LIGHT FLASHES	DIAGNOSTIC
I WARNING: The following applies only when the parking lights are connected and supported by the system. II After a remote starter failure, the parking lights will flash three [3x] times followed by the error code. See table.	3 + 1	Tach is not programmed OR engine is already running.
	3 + 2	Key is in ignition ON position.
	3 + 3	Door is open.
	3 + 4	Trunk is open.
	3 + 5	Foot brake is ON.
	3 + 6	Hood is open.
	3 + 7	Loop is not cut.
	3 + 8	Vehicle failed to remote start.
	3 + 9	Vehicle movement detected (VSS).
	3 + 10	System is in Valet Mode.
	3 + 11	CAN communication failure
	3 + 12	RS not synchronized. Start vehicle with OEM key for 15 sec before trying a new RS sequence.
	3 + 13	Bypass problem.
	3 + 14	Idle mode or takeover is not available on this vehicle.
	3 + 15	Overheat protection.

REMOTE STARTER SHUTDOWN ERROR CODES: NOTES	PARKING LIGHT FLASHES	DIAGNOSTIC
I WARNING: The following applies only when the parking lights are connected and supported by the system. II If the engine shuts down after a remote starter sequence use the query command from a compatible aftermarket remote to display the shutdown error code. The parking lights will flash four [4x] times followed by the error code. See table.	4 + 1	Engine tach signal was lost.
	4 + 2	Emergency brake signal was lost.
	4 + 3	Foot brake ON detected.
	4 + 4	Hood open detected.
	4 + 5	Tach over rev detected.
	4 + 6	Glow plug timeout error.
	4 + 7	Vehicle movement detected (VSS).
	4 + 8	Check engine light ON.
	4 + 9	Low fuel level.
	4 + 10	Open door detected.
	4 + 11	CAN communication failure during RS sequence.
	4 + 12	RS not synchronized. Start vehicle with OEM key for 15 sec before trying a new RS sequence.
	4 + 13	Bypass problem.
	4 + 14	Idle mode or takeover is not available on this vehicle.
	4 + 15	Overheat protection.

MODULE STATUS DURING:	 LED 2*	LED 1**	LED STATUS	DIAGNOSTIC
REMOTE START SEQUENCE	●		Flashing rapid RED	Remote start shutdown sequence.
	●		Flashing slow RED	Remote start shutdown error code. Contact technical support.
	●		Solid RED	Remote start crank delay.
	●		Flashing rapid GREEN	Remote start cycle in progress. Working correctly.
	●		1 GREEN flash	Remote start initiated successfully.
	●		3 GREEN flashes	Idle mode cycle in progress.
	●		4 GREEN flashes	Turbo mode cycle in progress.
		●	Flashing GREEN	Remote start cycle in progress. Displays vehicle platform during runtime.
		●	Rapid GREEN flashing	Secure takeover initiated. Waiting to complete takeover after brake press.
TRANSMITTER PROGRAMMING	●		Solid RED	Remote programming in progress, waiting for remote pairing.
	●		1 GREEN flash	Remote programmed.
	●		4 RED flashes	Shutdown remote starter before attempting remote programming.
	●		5 RED flashes	Engine must be off before attempting remote programming.
	●		6 RED flashes	System must be unlocked/disarmed before attempting remote programming.
	●		7 RED flashes	Module must be learned to the vehicle before attempting remote programming.

* LED 2 (RS) displays generic diagnostic codes specific to the remote start module. Orange LED flashes may appear red.
** LED 1 (Bypass) displays diagnostic codes specific to the firmware loaded on the module.
Visit the programming diagnostics page for more information.