



Installation Guide

RSTOY6

For 2016-2023 Toyota Tacoma, 2020-2021 Toyota Tundra, 2020-2021 4 Runner, 2018-2022 C-HR, 2014-2019 Highlander (Gas and Hybrid), 2020-2022 Sequoia, 2016-2018 Land Cruiser

* For automatic transmission vehicles with PUSH-TO-START ignition only
You may view a high-resolution color version of this guide online at <http://install.kleinn.com/RSTOY6> or by scanning this QR code.



-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.

-This is a pre-wired kit and all the required connections have been made within the harness.

-Installation in 2016-2019 Tacoma, 2018-2019 C-HR, 2014-2019 Highlander (Gas and Hybrid) and 2016-2018 Land Cruiser is plug and play.

-The 2020 Tacoma, 2020 Tundra, 2020-2021 4 Runner, 2020-2022 C-HR and 2020-2022 Sequoia each require two wire connections that will be detailed later in this guide.

-We have already loaded the correct software into the remote start module. You will need to pair the module to your key when the installation is complete.

Overview

There are 5 basic steps to this remote start installation. We're going to address each of these:

- Prepare the vehicle
- Make your plug-in and wiring connections
- Pair the remote start to the vehicle
- Test the system
- Button it up!

Tip #1 – Where Everything Goes

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.

Prepare the Vehicle

The bulk of the installation takes place right under the dash on the driver's side. You will need to remove the plastic from around the steering column and the panel under the dash to access the plugs needed for this installation.

To begin, remove the plastic from around the steering column. Set the parking brake and without pressing the foot brake press the push to start button twice to turn the ignition on.

Turn the steering wheel to the right to access a screw facing you if you are sitting in the driver's seat and remove the screw. There is a screw on each side of the steering wheel. Turn the steering wheel to the left to access the screw on the other side and remove the screw.

Use a plastic pry tool to separate the top and bottom half of the steering column cover so you do not damage your plastic panels. You can adjust the steering wheel all the way out and up to gain better access. Pull the bottom cover down to separate the two halves. Turn the ignition off by pressing the push to start button one time. The steering lock connector is now accessible at underside of the steering column (Location 1 in the image below).

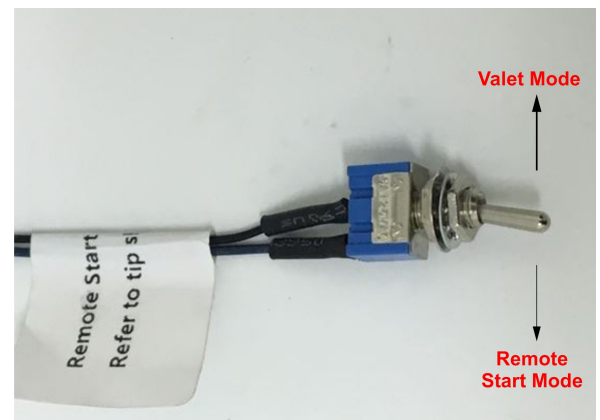
Next, remove the side dash panel and lower dash panel. Use your plastic pry tool and remove the side access door of the dash. It should be held on by a few clips. Once the side panel is off make sure there are not any screws holding the lower dash panel on. Next look under the dash to see if there are any screws to remove. Most vehicles do not have any screws - the front lower dash is secured by plastic clips. Gently pull the lower plastic panel and it will come unclipped. You will now see the ECU on the left side of the dash (location 2 in the image below).



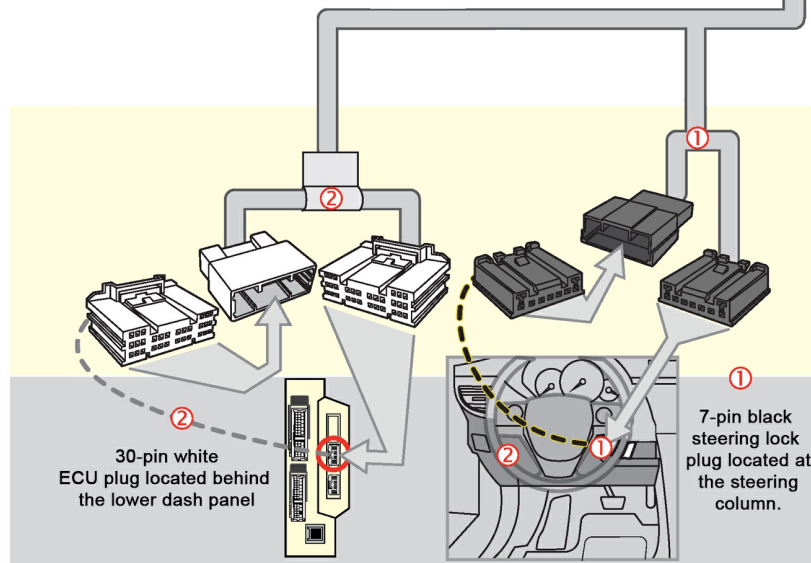
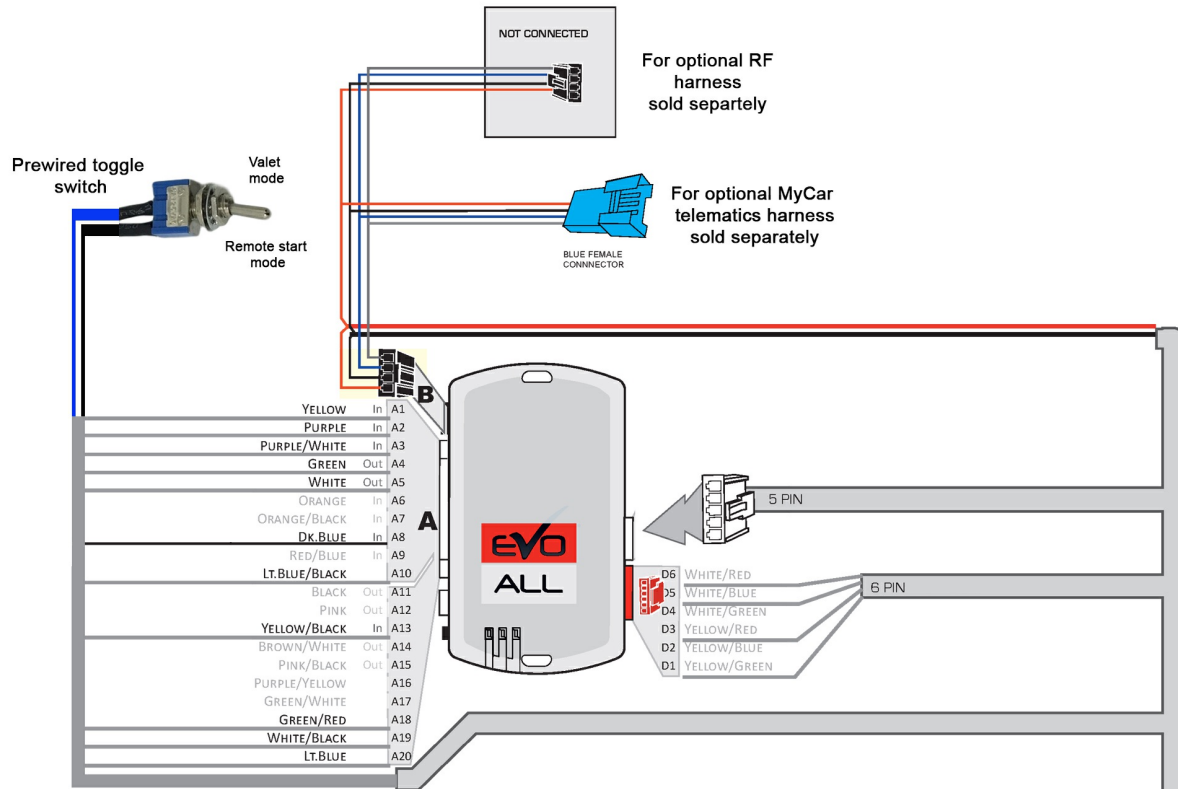
- The ECU and Steering Lock connections are plug-in connections required for all covered vehicles.
- The 2020 Tacoma requires two additional connections at the Telematics Module behind the glove box (location 3)
- The 2020 Tundra requires two additional connections at the Telematics Module behind the driver's side dash (Location 4).

Tip #2 – The Toggle Switch

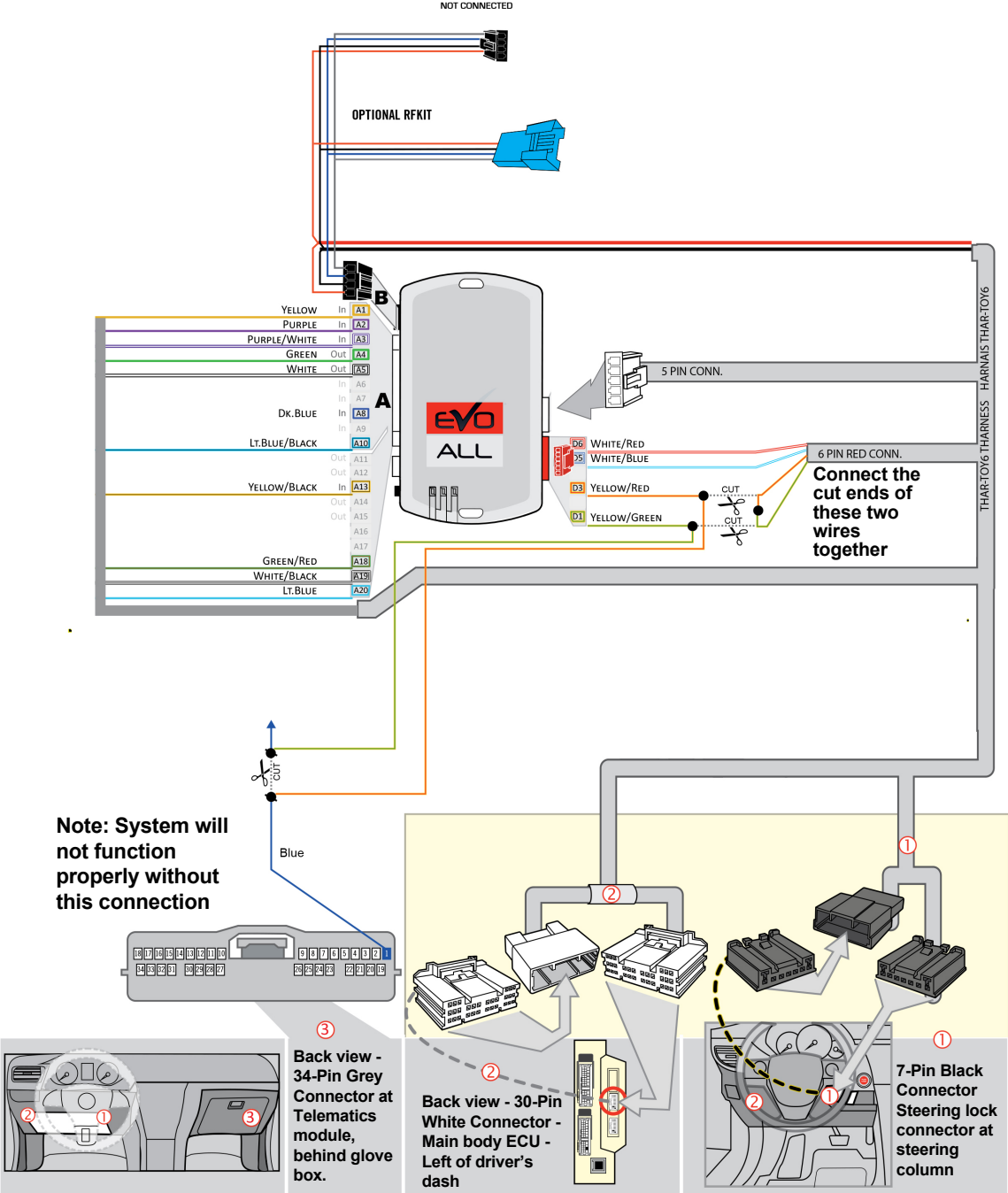
This kit has a built-in toggle switch which, when needed, acts as a safety feature that can disable the remote start from activating. This is a great asset which allows you to perform any engine maintenance safely while working under the hood by simply flipping the toggle switch in the other direction. If your system appears not to be working, simply check the switch as it may have been turned off.



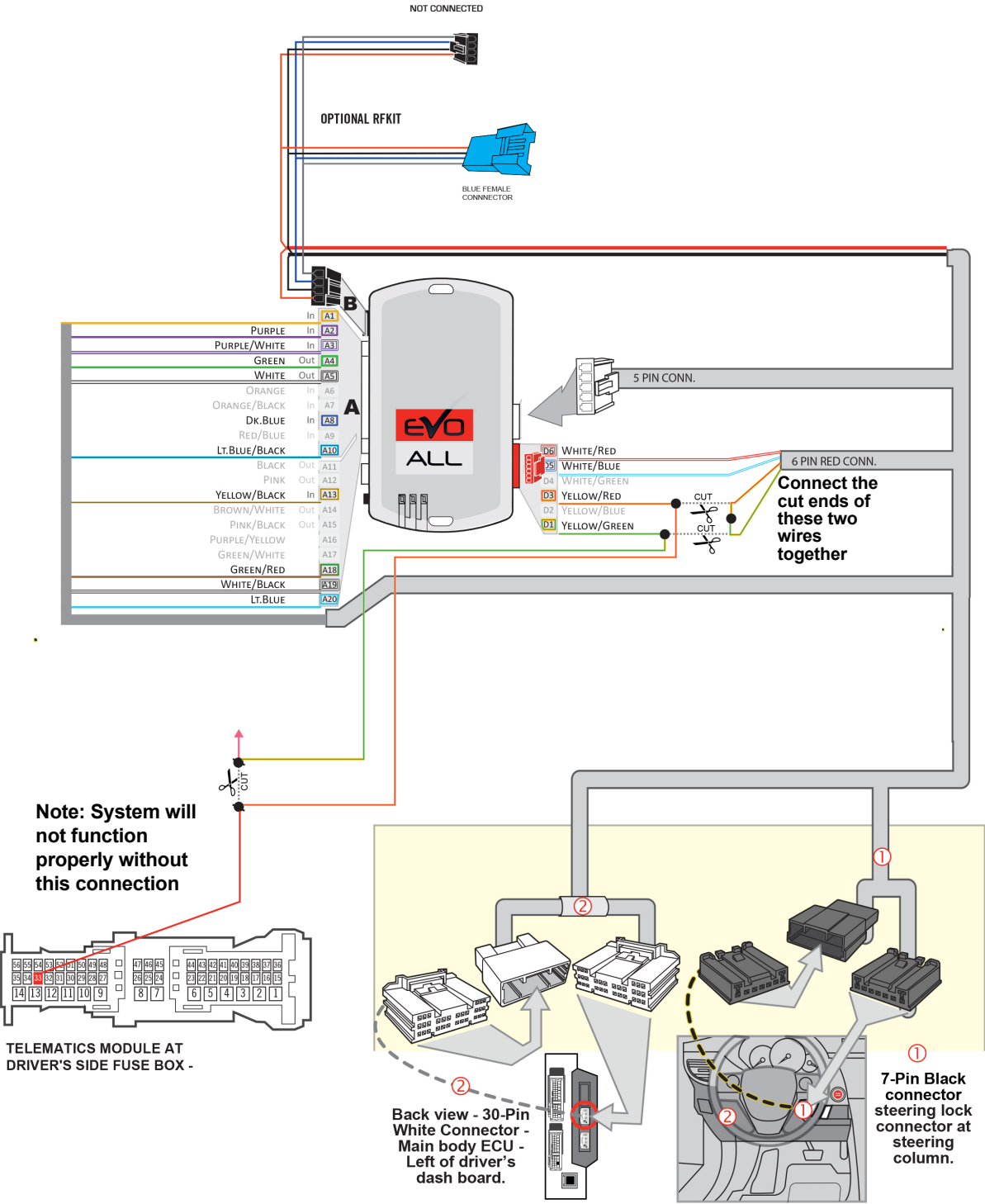
System Wiring Overview - 2016 to 2019 Tacoma, 2018-2019 C-HR, 2020-2022 Sequoia, 2014-2019 Highlander (Gas and Hybrid) and 2016-2018 Land Cruiser



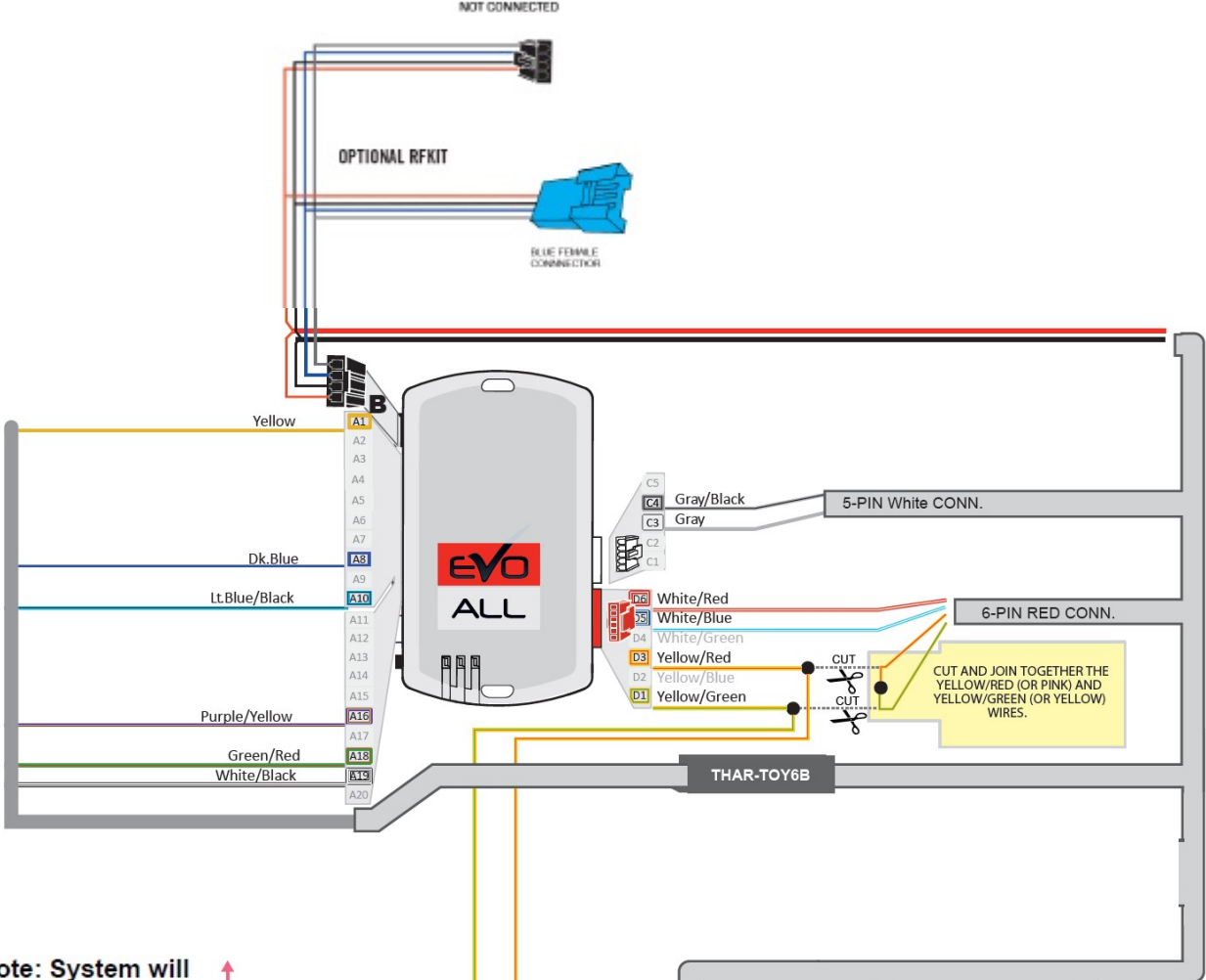
System Wiring Overview - 2020 Tacoma



System Wiring Overview - 2020 Tundra

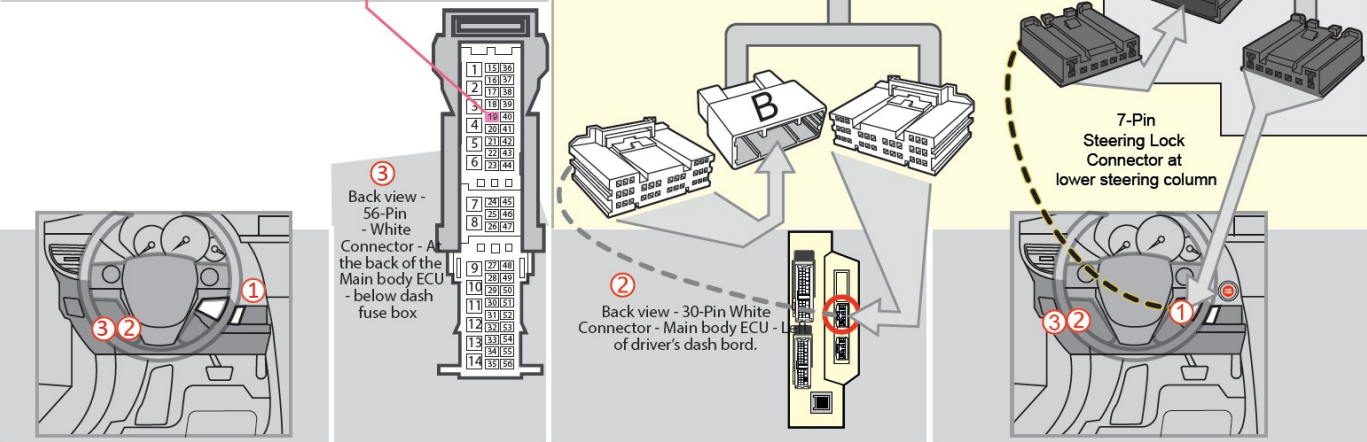


System Wiring Overview - 2020-2021 4 Runner

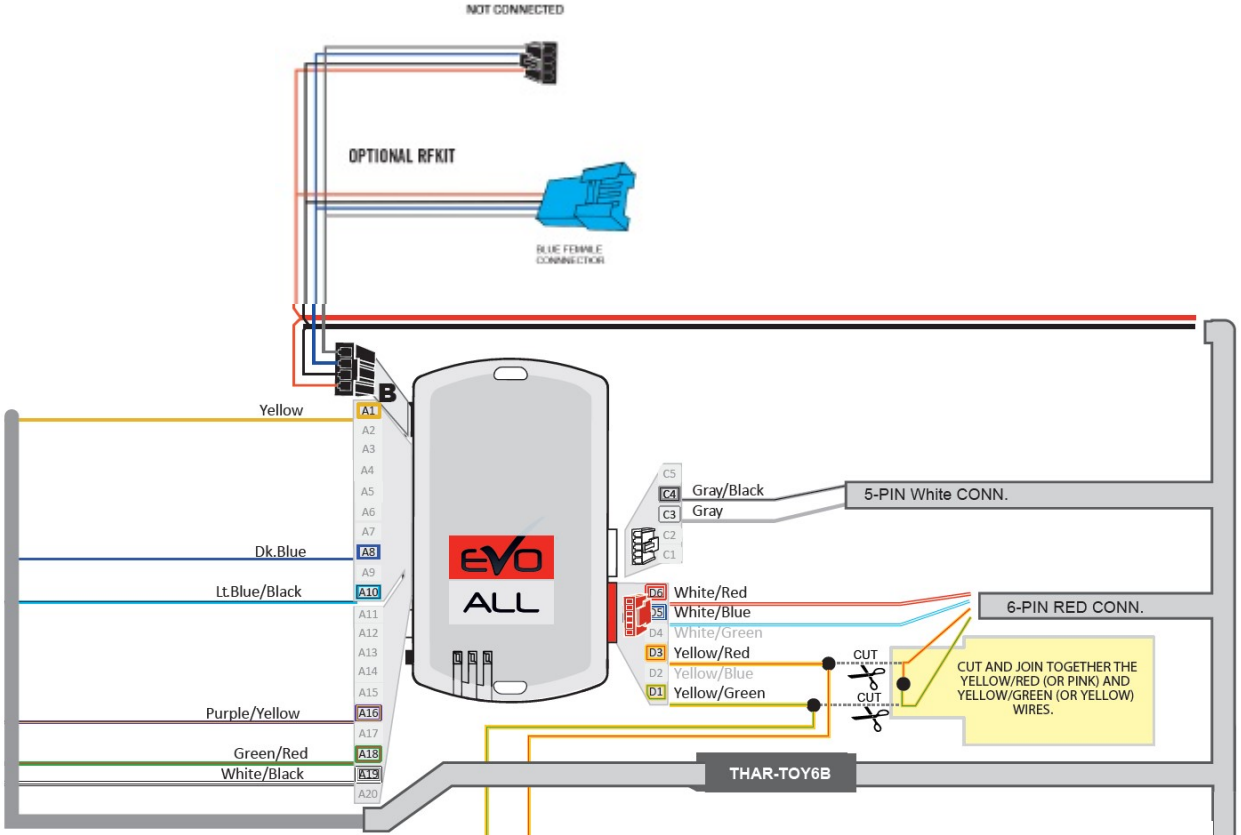


Note: System will not function properly without this connection

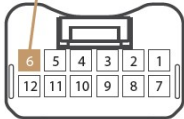
4RUNNER	(+)TELEMATICS 12V Pink
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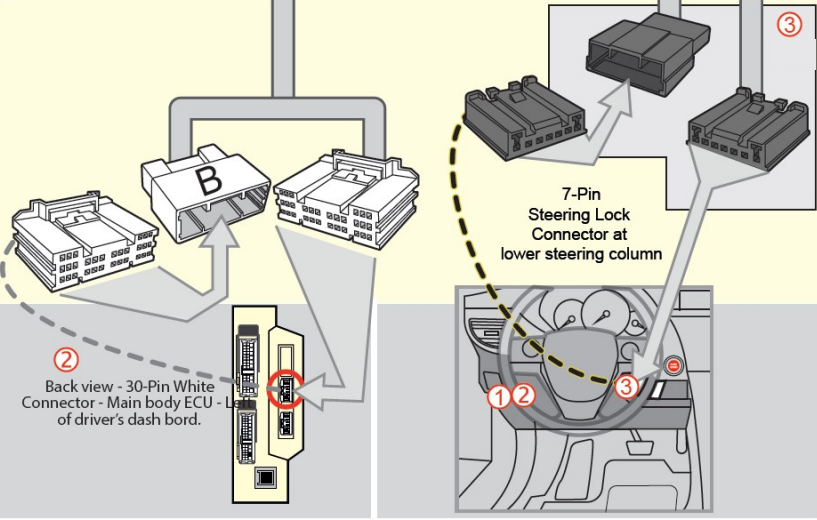
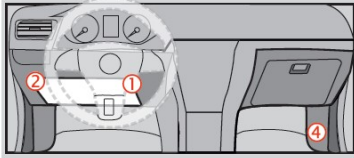
System Wiring Overview - 2020-2022 C-HR



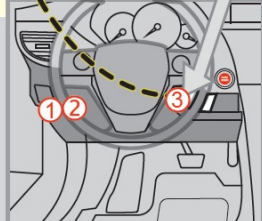
Note: System will not function properly without this connection



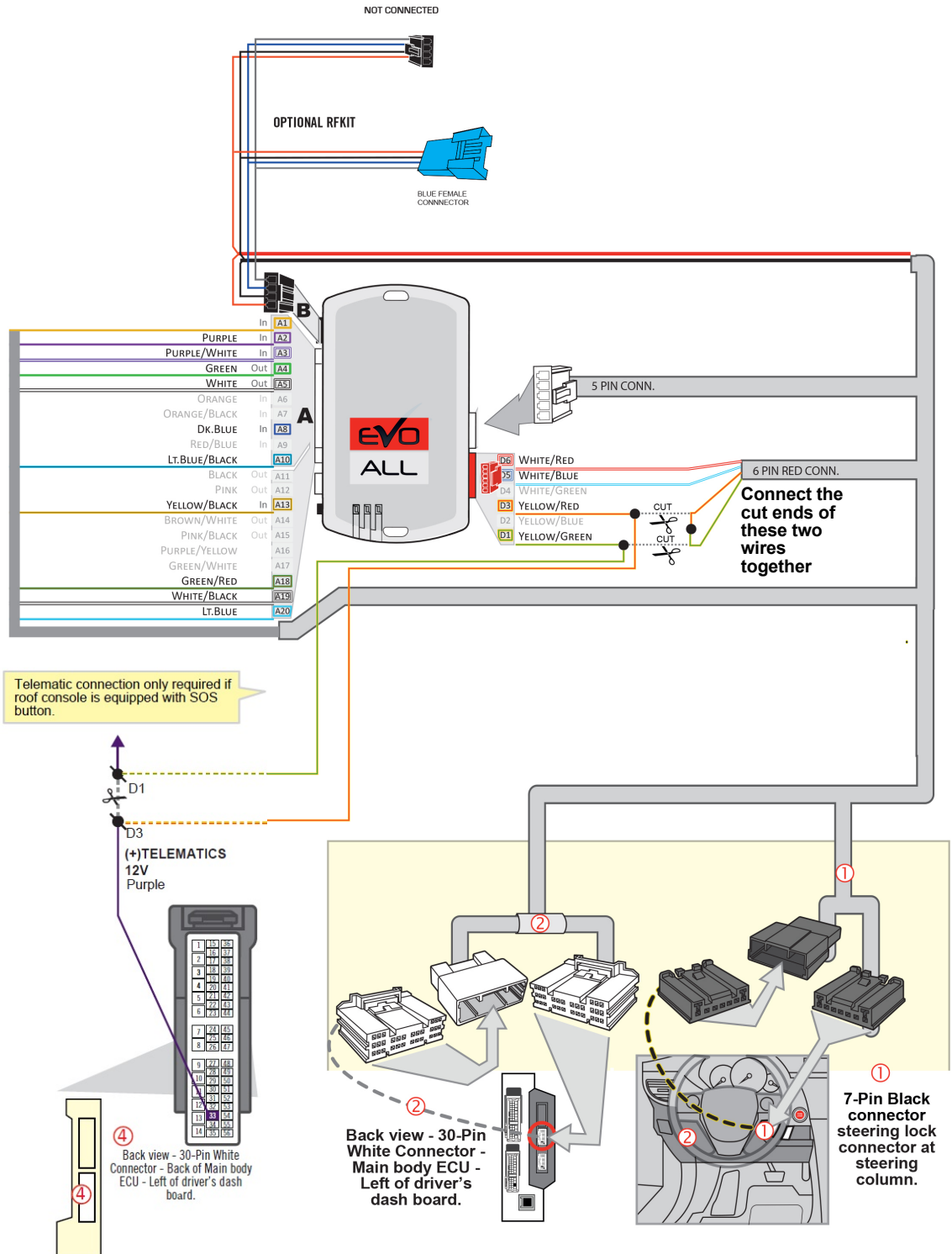
④ Back view White 12-pin Connector At passenger kick panel



② Back view - 30-Pin White Connector - Main body ECU - L of driver's dash board.

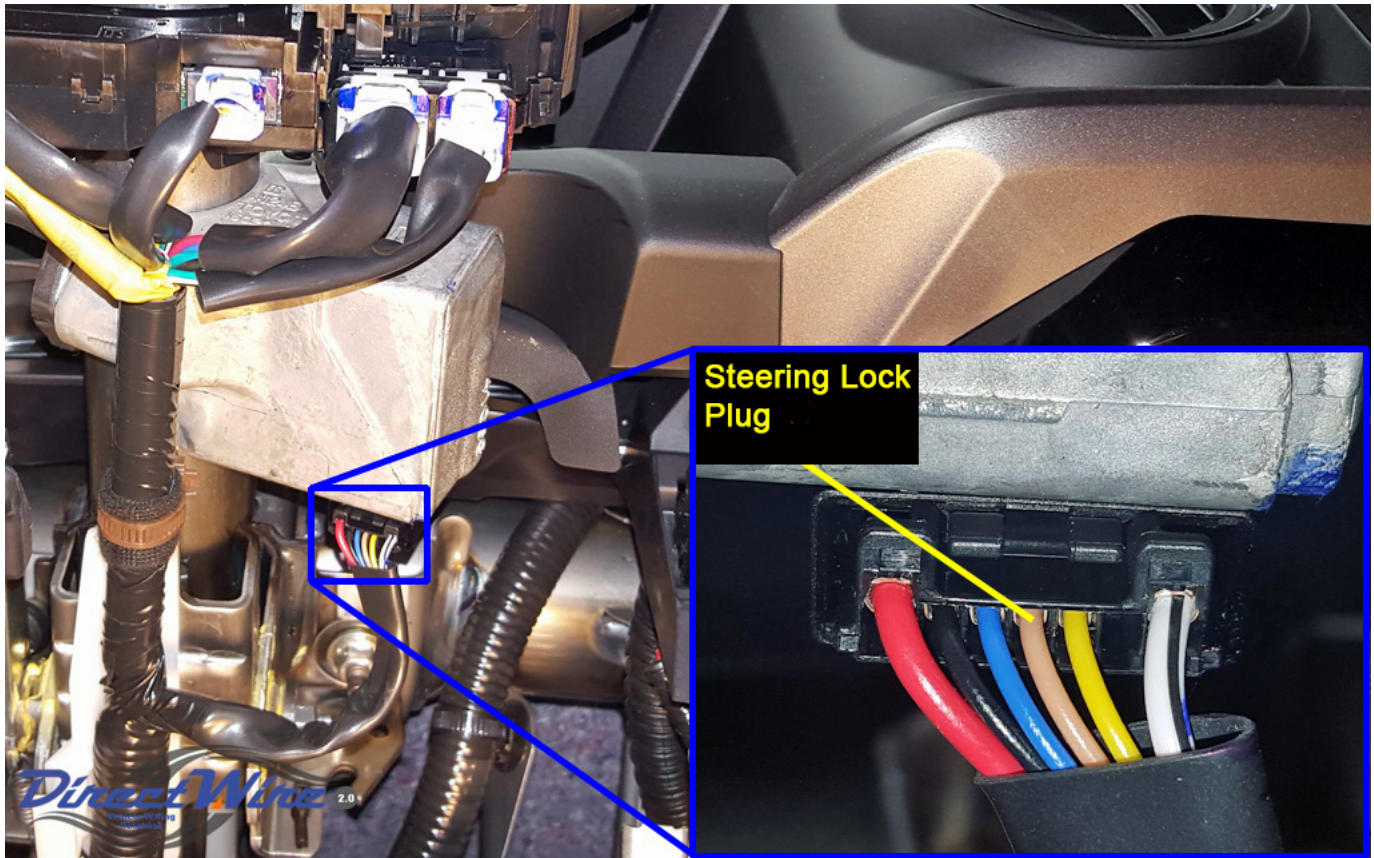


System Wiring Overview - 2020-2022 Sequoia



Connecting The T-Harness

1. Locate the Steering Lock Connector on the underside of the steering column. Remove the OEM plug from the socket and replace it with the identical plug in the T-harness assembly. Insert the OEM plug in to the female receptacle on the T-harness.



2. Locate the main ECU - behind the dash on the left side. Release the locking tab on the plug in the center position, then remove it and plug it in to the matching receptacle in the T-harness. Insert the male connector from the T-harness in to the vacated center position on the ECU. Note that depending on how the specific vehicle is equipped, the upper and/or lower receptacles on the ECU may have plugs in them. Leave them alone - the only plug relevant to this installation is the one in the center position.

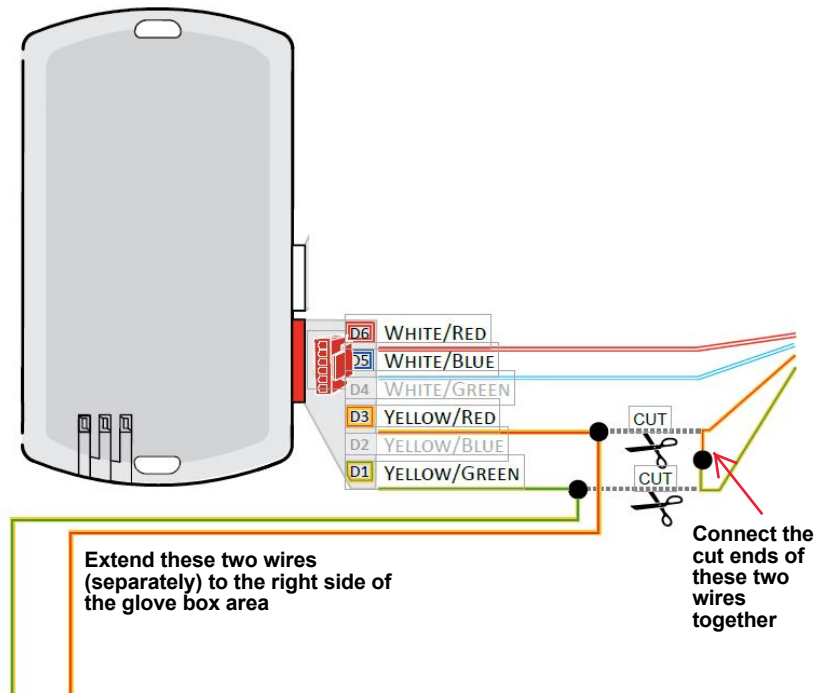
For 2016-2019 Tacoma, installation is now complete. Proceed to programming instructions on Page 9.

2020 Tacoma ONLY - Additional Connections

1. Locate the Red 6-pin plug in the remote start T-Harness. Cut the Yellow/Red AND the Yellow/Green wires about half way between the red plug and where the wires enter the loom.

2. Join the two 'halves' of the wires that go in to the T-Harness loom together.

3. Extend each of the wires on the plug side separately with enough wire to reach the far side of the glove box. Route the wires behind the center console and to the glove box area.



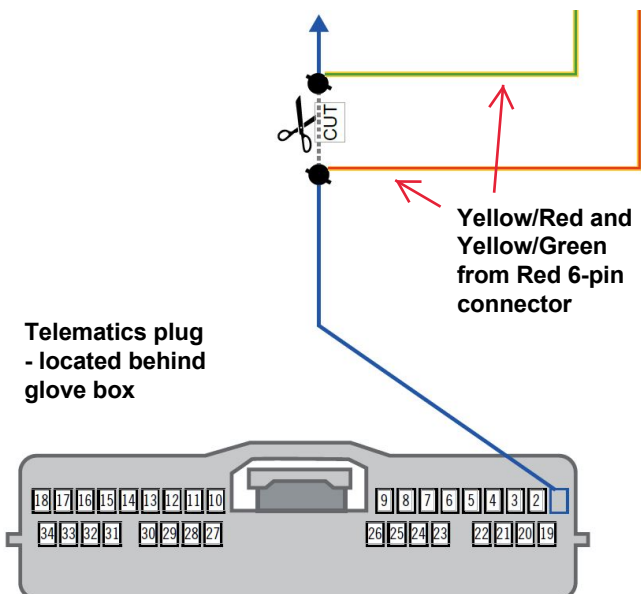
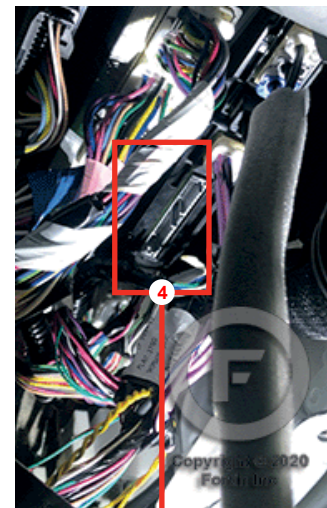
4. Now remove the glove box and locate the Telematics Module as shown here.

There is a Blue wire in pin position 1 on the Telematics plug. That wire needs to be cut. You will need to connect wires on to both sides of the cut, so locate your cut with as much slack wire as possible on both sides.

5. Butt connect or solder the extension of the Yellow/Red wire to the side of the Blue wire that goes to the Telematics plug.

6. Butt connect or solder the extension of the Yellow/Green wire to the side of the Blue wire that goes into the vehicle wiring.

7. Proceed to programming. See Page 15.

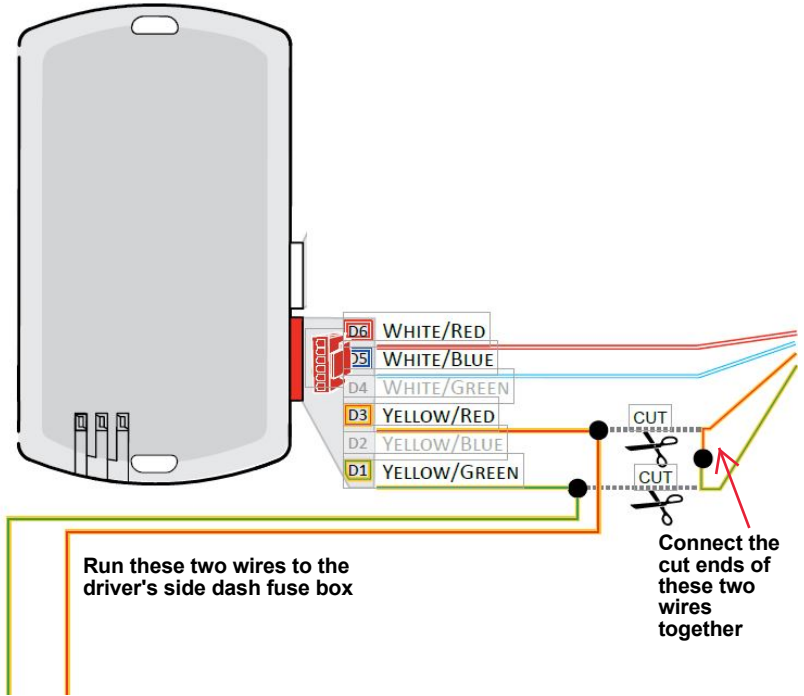


2020 Tundra ONLY - Additional Connections

1. Locate the Red 6-pin plug in the remote start T-Harness. Cut the Yellow/Red AND the Yellow/Green wires about half way between the red plug and where the wires enter the loom.

2. Join the two 'halves' of the wires that go in to the T-Harness loom together.

3. Extend each of the wires on the plug side separately with enough wire to reach the dash fuse box. Route the wires dash fuse box area.



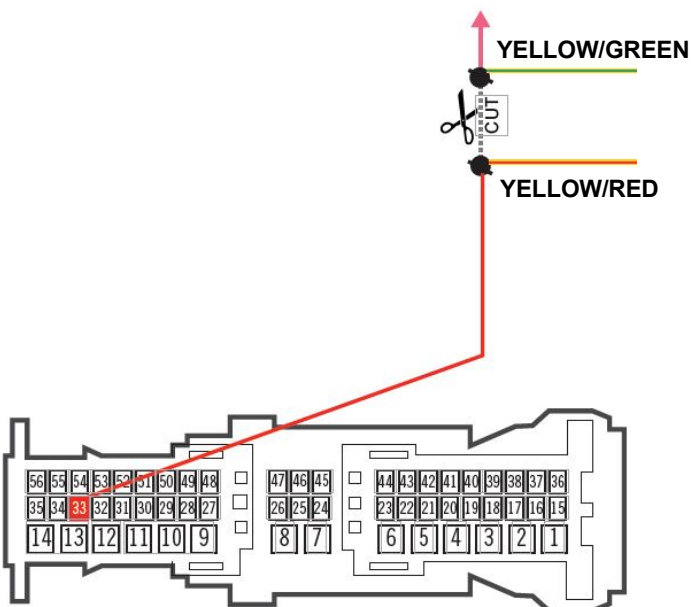
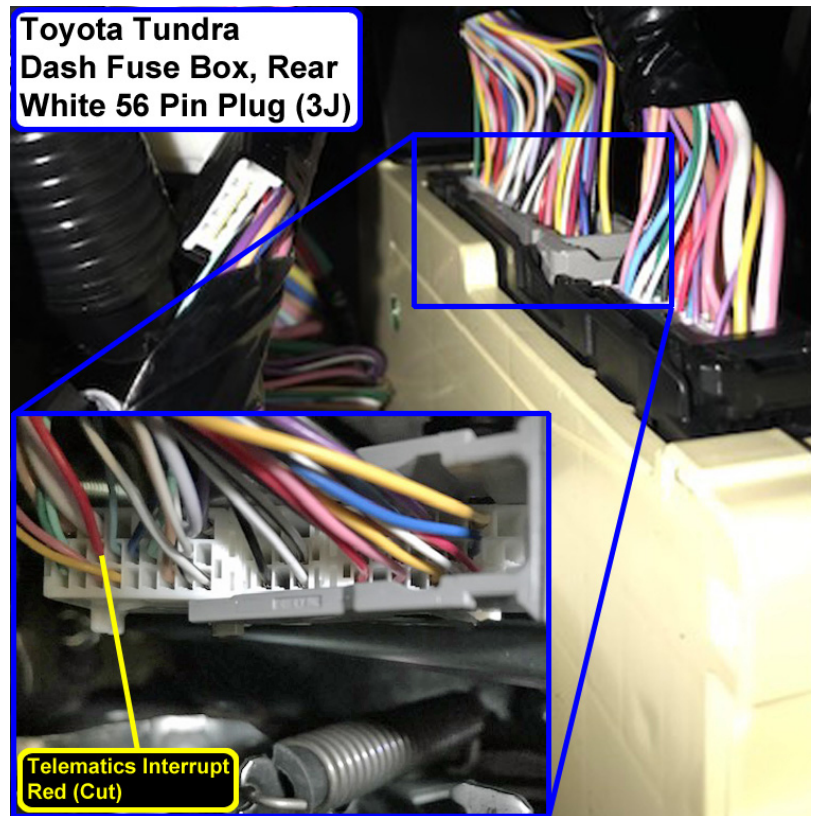
4. Locate the driver's side fuse box under the left side of the dash and the white 56-pin plug shown here.

5. There is a Red wire in pin position 33. That wire needs to be cut. You will need to connect wires on to both sides of the cut, so locate your cut with as much slack wire as possible on both sides.

6. Butt connect or solder the Yellow/Red wire to the side of the Red wire that goes to the Telematics plug.

7. Butt connect or solder the Yellow/Green wire to the side of the Red wire that goes into the vehicle wiring.

Proceed to programming. See Page 15.

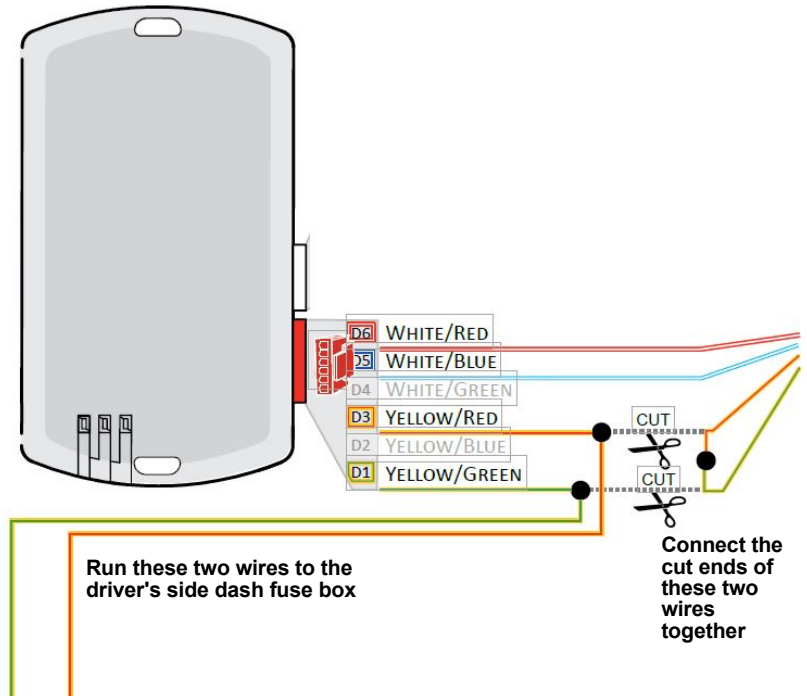


2020-2021 4 Runner ONLY - Additional Connections

1. Locate the Red 6-pin plug in the remote start T-Harness. Cut the Yellow/Red AND the Yellow/Green wires about half way between the red plug and where the wires enter the loom.

2. Join the two 'halves' of the wires that go in to the T-Harness loom together.

3. Extend each of the wires on the plug side separately with enough wire to reach the dash fuse box. Route the wires dash fuse box area.



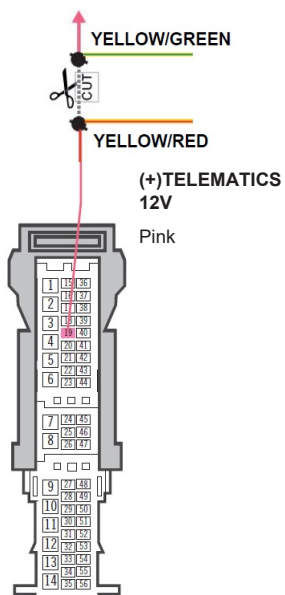
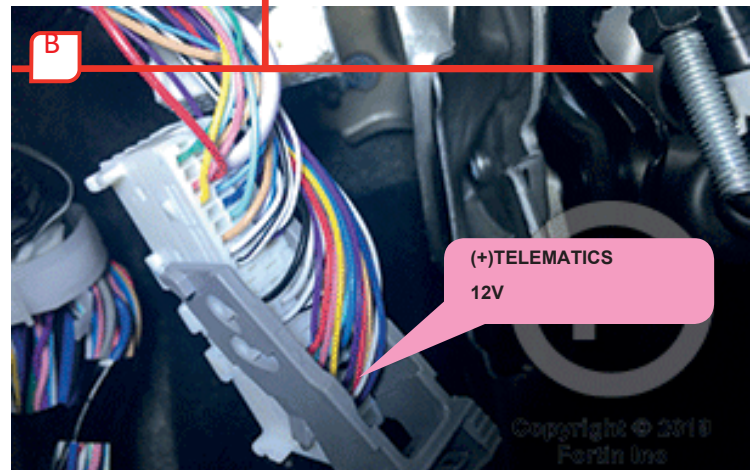
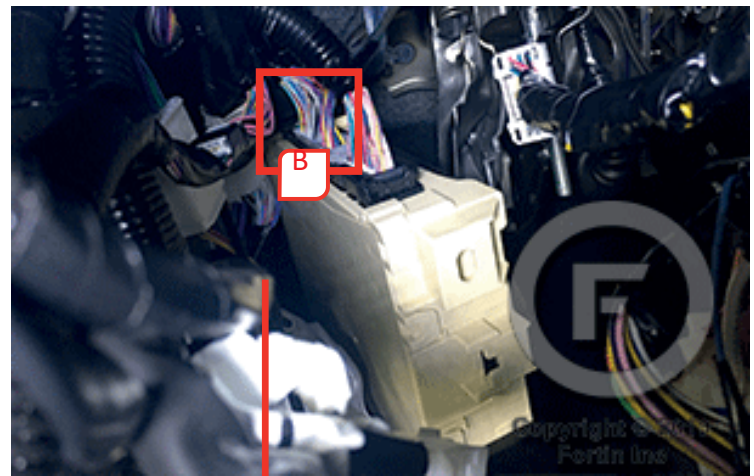
4. Locate the driver's side fuse box under the left side of the dash and the white 56-pin plug shown here.

5. There is a Pink wire in pin position 19. That wire needs to be cut. You will need to connect wires on to both sides of the cut, so locate your cut with as much slack wire as possible on both sides.

6. Butt connect or solder the Yellow/Red wire to the side of the Pink wire that goes to the Telematics plug.

7. Butt connect or solder the Yellow/Green wire to the side of the Pink wire that goes into the vehicle wiring.

Proceed to programming. See Page 15.

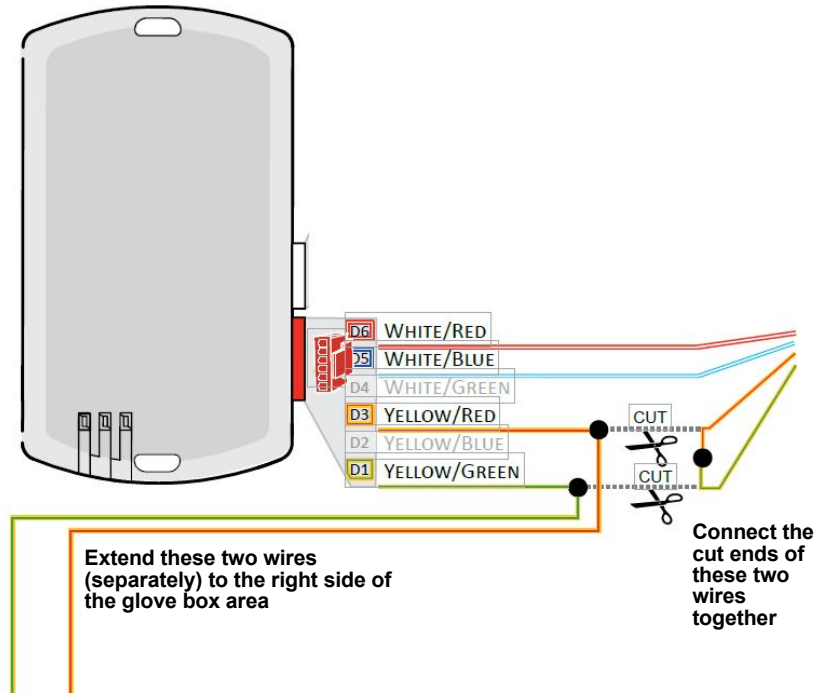


2020 -2022 C-HR ONLY - Additional Connections

1. Locate the Red 6-pin plug in the remote start T-Harness. Cut the Yellow/Red AND the Yellow/Green wires about half way between the red plug and where the wires enter the loom.

2. Join the two 'halves' of the wires that go in to the T-Harness loom together.

3. Extend each of the wires on the plug side separately with enough wire to reach the passenger kick panel. Route the wires behind the center console and to the passenger kick panel.



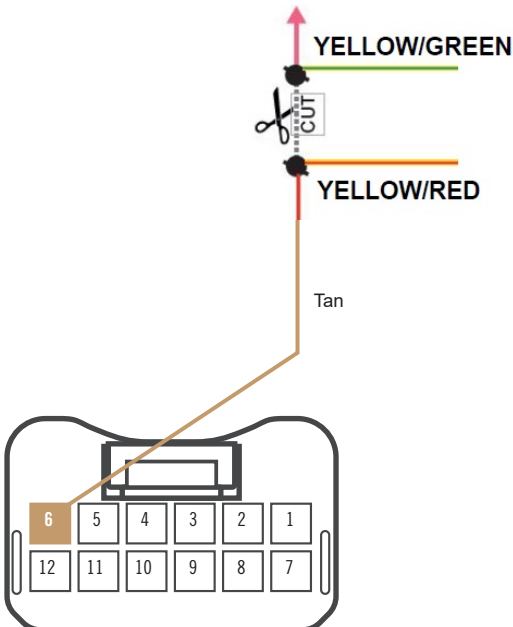
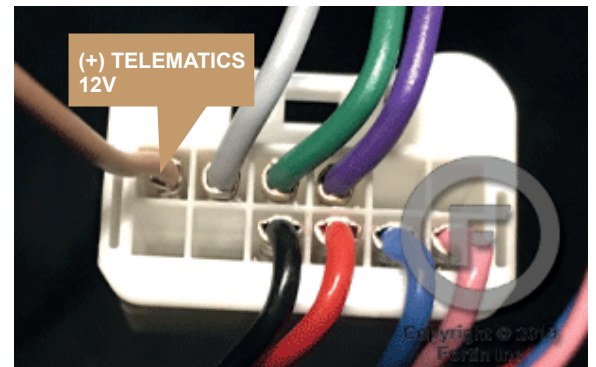
4. Now remove the passenger kick panel and locate the Telematics Module as shown here.

There is a Tan wire in pin position 6 on the Telematics plug. That wire needs to be cut. You will need to connect wires on to both sides of the cut, so locate your cut with as much slack wire as possible on both sides.

5. Butt connect or solder the extension of the Yellow/Red wire to the side of the Tan wire that goes to the Telematics plug.

6. Butt connect or solder the extension of the Yellow/Green wire to the side of the Tan wire that goes into the vehicle wiring.

7. Proceed to programming. See Page 15.

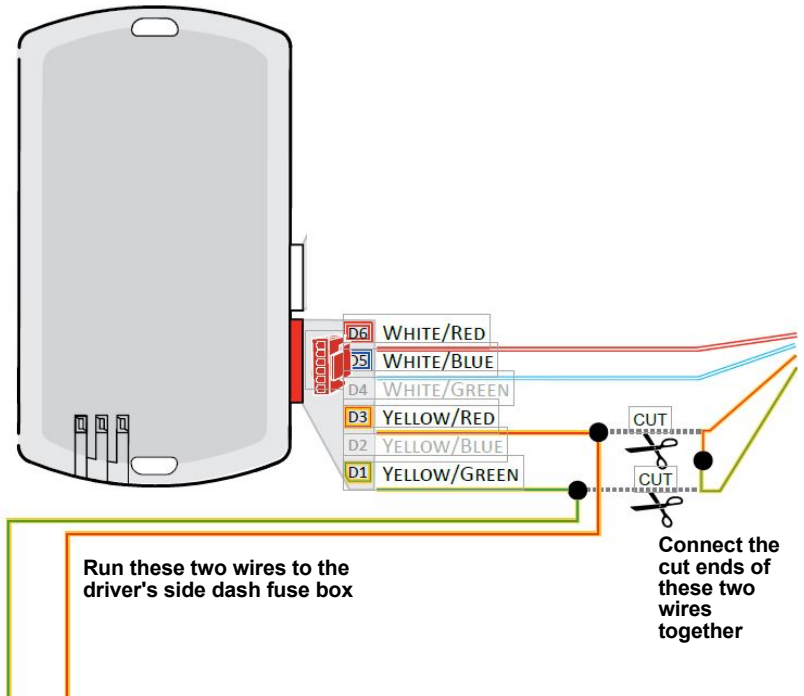


2020-2022 Sequoia ONLY - Additional Connections

1. Locate the Red 6-pin plug in the remote start T-Harness. Cut the Yellow/Red AND the Yellow/Green wires about half way between the red plug and where the wires enter the loom.

2. Join the two 'halves' of the wires that go in to the T-Harness loom together.

3. Extend each of the wires on the plug side separately with enough wire to reach the rear of the dash fuse box. Route the wires to the rear of the dash fuse box.

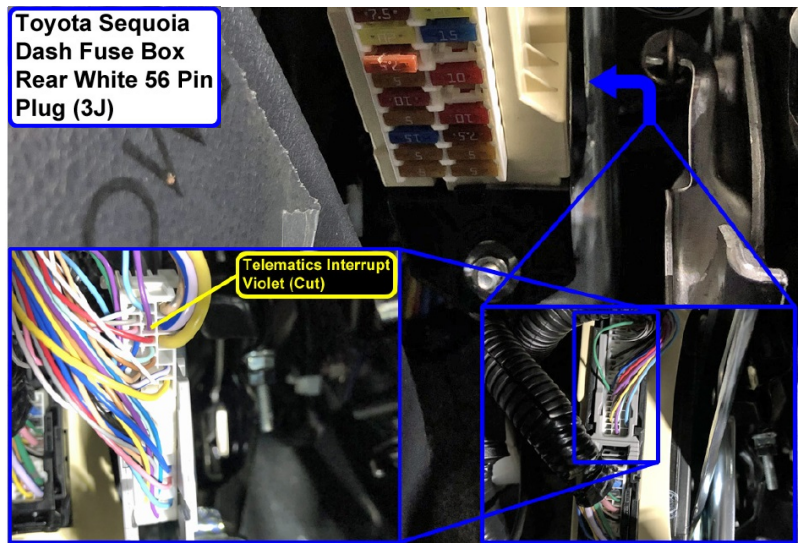


4. Locate the driver's side fuse box under the left side of the dash and the white 56-pin plug shown here.

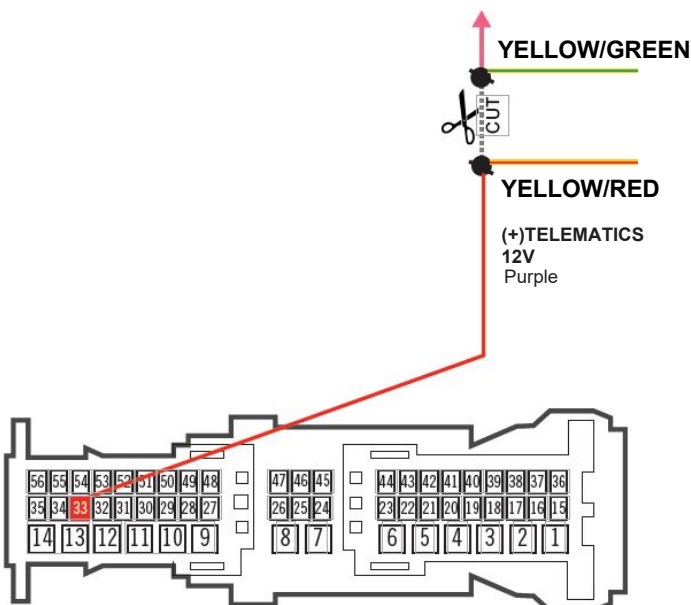
5. There is a Violet wire in pin position 33. That wire needs to be cut. You will need to connect wires on to both sides of the cut, so locate your cut with as much slack wire as possible on both sides.

6. Butt connect or solder the Yellow/Red wire to the side of the Violet wire that goes to the Telematics plug.

7. Butt connect or solder the Yellow/Green wire to the side of the Purple wire that goes into the vehicle wiring.



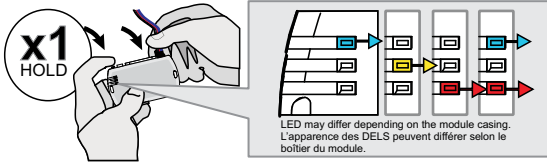
Proceed to programming. See Page 15.



Programming and Operation

The last step of the installation process is pairing the remote start module to the vehicle. Start by disconnecting all the plugs from the remote start.

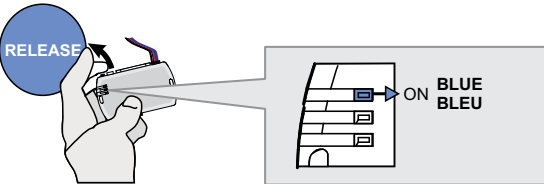
1



Press and hold the programming button:
Connect the 4-PIN Data-link harness (Black connector).

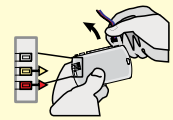
↳ The Blue, Red, Yellow and Blue & Red LEDs will alternatively illuminate.

2

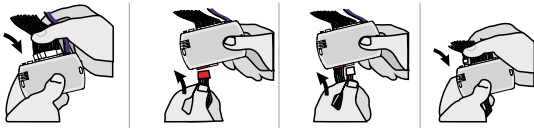


Release the programming button when the LED is BLUE.

If the LED is not solid BLUE disconnect the 4-Pin connector (Data-Link) and go back to step 1.

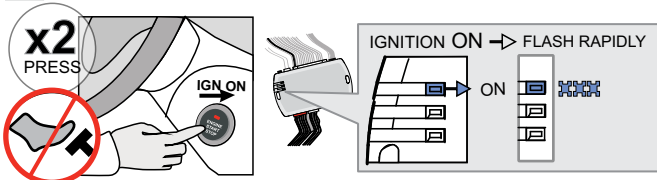


3



Insert the required remaining connectors.

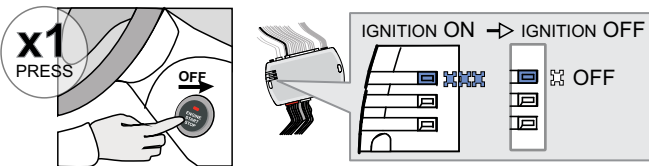
4



Do not press the brake pedal.
Press the Push-to-Start button twice to turn on the ignition.

↳ Wait for the BLUE LED will flash rapidly and constantly.

5



Press the Push-to-Start button once to turn off the ignition.

↳ The BLUE LED will turn off. **Programming is complete**

<p>All doors must be closed.</p> <p>Remote start the vehicle.</p>	<p>Unlock the doors with the OEM remote</p>	<p>The module will shut down the vehicle as soon as the driver's door is opened.</p>	<p>Enter the vehicle with the Smart-Key.</p>	<p>Press the brake pedal.</p>	<p>Press the Push-to-Start button to start the vehicle.</p>	<p>The vehicle can now be put in to gear and driven.</p>
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Technical Support and Troubleshooting

Issue: When attempting top program, the red LED turns on and nothing else happens

Solution: Do a master reset of the remote start module.

- Unplug the remote start module completely.
- Hold the button down and plug in the 4-pin plug. The LED lights will cycle colors.
- Let go on RED. You will not need to plug anything in.
- Press and hold the button down. The LED lights will start to alternate colors.
- Let go of the button and unplug the EVO.
- Reset complete.

Issue: Module programs but vehicle does not start

Solution #1: Verify the hood is completely closed and latched. It is easy to accidentally trigger the hood release when removing the dash panel.

Solution #2: Make sure the toggle switch is in the "Run" position and not the "Valet" position. See Page 2.

Issue: The plugs in the vehicle do not match the plugs in the installation harness.

Solution #1: Make sure the vehicle has the push-to-start ignition. This kit does not work in vehicles with key-start ignition.

Solution #2: A common mistake is using the incorrect plug at the main ECU. The correct plug is the one in the middle position.

Issue: The truck shuts down as soon as a door is opened.

Solution: This is normal operation. Because Toyota push-to-start trucks can be driven without a key present after they've been started, this is an important security feature.

Issue: Remote start does not activate, blue LED on remote start module flashes 3 times

Solution: 3 blue flashes indicates a problem with the connection at the telematics module (does not apply to 2016-19 Tacoma). Make sure the appropriate wire at the telematics module has been cut and the connections from both side of the wire to the Yellow/Red and the Yellow/Green wires is solid.

Should you need installation or troubleshooting assistance, contact Kleinn Technical Support at (520) 579-1531.