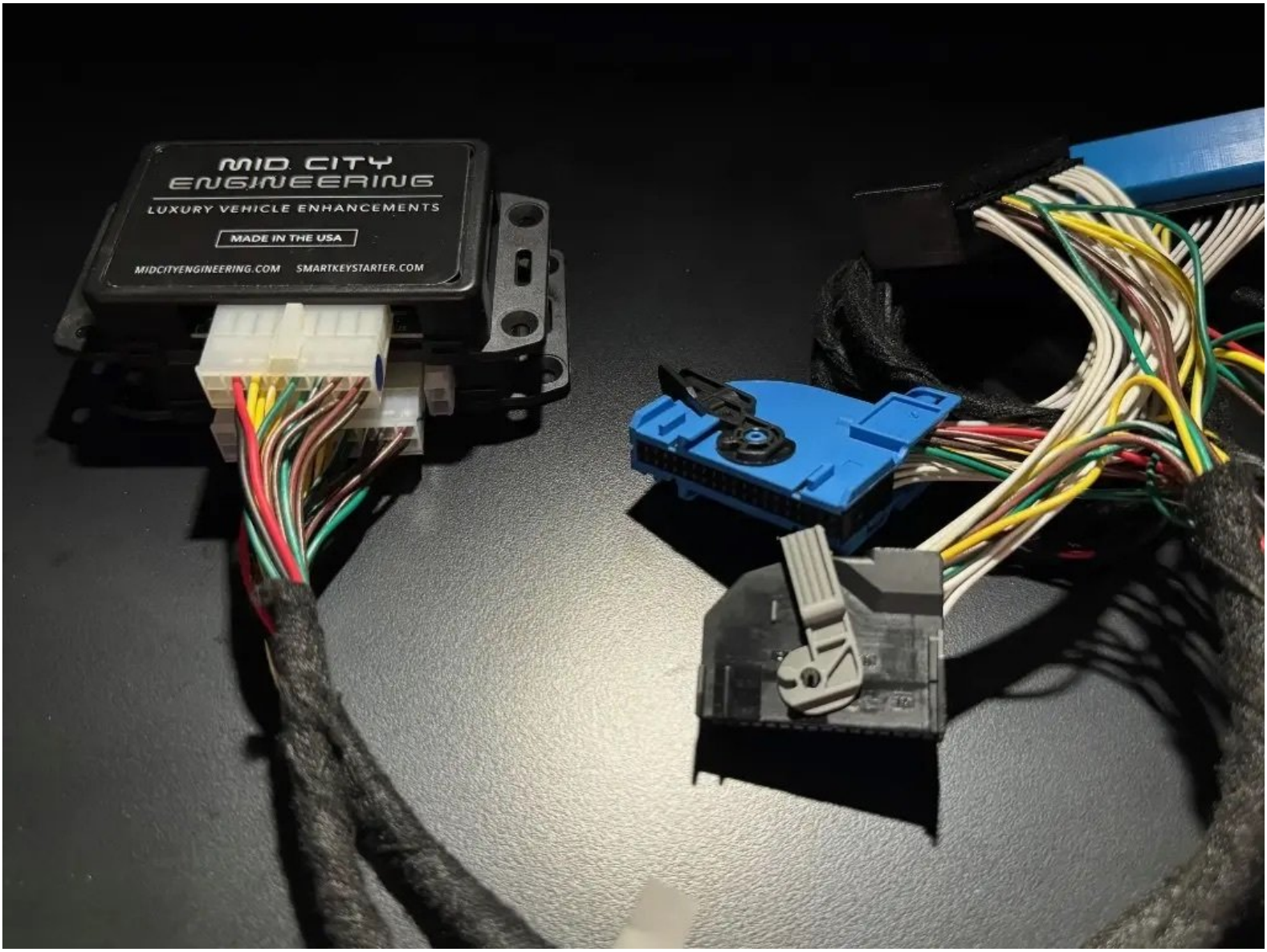
SKSNG213 and SKSNG167 SmartKey Starter® Installation Manual

SKSNG213 and SKSNG167 SmartKey Starter® Installation Manual

Written By: Mid City Support



INTRODUCTION

The SKSNG167 and SKSNG213 are remote start and alarm interfaces for push to start/Keyless Go vehicles

Out of the box the remote start will working using the OEM key fob (1X press of the panic button or Lock-Unlock-Lock, if no panic button on key)

Vehicle Compatibility:

SKSNG167:

- A Class 2020-2023
- CLA 2020-2024
- GLA 2021-2024
- GLB 2020-2024
- GLE 2020-2024 (No-48V)

**Not compatible with hybrid vehicles or 48V ignition*

SKSNG213:

- C Class 2019-2021
- CLS 2020-2023
- E Class 2017-2023G
- Wagon 2019-2024
- GLC 2020-2022
- S Class 2018-2020

**Not compatible with hybrid vehicles*

The SKSNG167 and SKSNG213 are compatible with the following add-ons:

- Any current Compustar Drone Smart Phone Control (X1, X2, LTE, MAX, XC)
- Compustar DAS II digital sensor for shock, tilt, glass break, and tow sensing (uses OEM horn for alarm)
- Compustar RF antenna and remotes **(NON-AM remotes only, AM remotes NOT compatible)**
- Directed Smart Start
- Compustar external remote start + alarm brain (eg, CM900, CMX)
- Compustar KeyLocker
- Compustar KP2 touch pad(KeyLocker or Compustar CM module required)

The installation to the vehicle involves the following:

- T-harness connection EIS / EZS (electronic ignition switch) module
- T-harness connection PCM / CPC module
- Keyless Go jumper harness **(only required for SKSNG213)**
- Key box installation **(extra key required for installation)**
- Optional accessories and add-ons

There is no flashing required for this installation, but options settings can be programmed using the instrument cluster menu. See user's manual (link below) for options settings. Please go through menu to make sure settings such as run time are set to preferred setting.

Click Here for User's Manual

DO NOT MOUNT THE MODULE NEAR ANY HEAT SOURCES IN THE VEHICLE. SPECIFIC LOCATIONS TO AVOID ARE THE HEATER CORE ANDTHE TRANSMISSION TUNNEL

See end of guide for troubleshooting error codes

PARTS:

- SKSNG167 (1)
- SKSNG213 (1)

Step 1 — Access EIS module

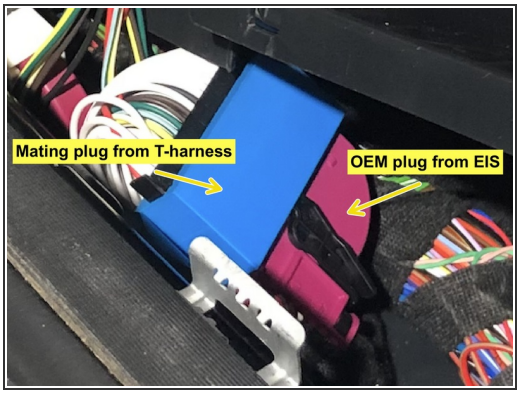




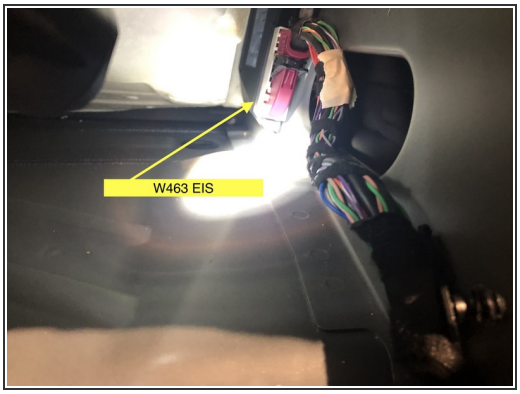


- Locate EIS module and harness:
  - W213 E Class: EIS located on driver side, along door sill. Magenta plug.
  - W205/X205 C Class/GLC: Under passenger seat, black plug.
  - W463 G Wagon: Under carpet at front of driver seat
  - W167 GLE/GLS: Under front driver side floor next to transmission hump (to the right of the pedals). Magenta plug.
  - W222 S Class: Under center ashtray. Remove radio console to remove ashtray
  - CLA, GLA and GLB: Behind the HVAC controls, accessible from the passenger side. Click here for pictures.

Step 2 — EIS T-harness connection



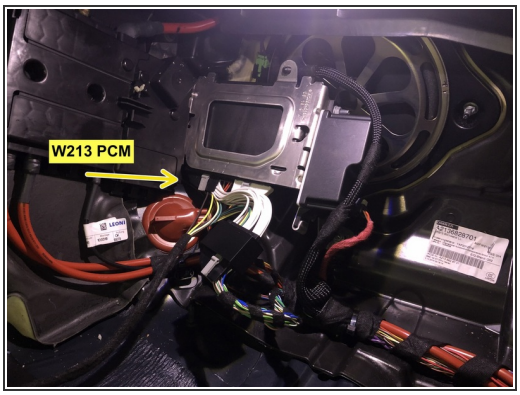




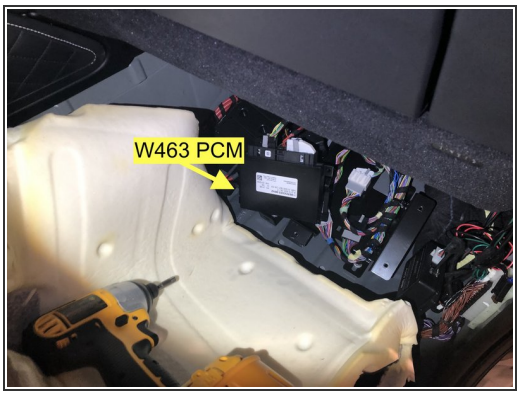
- Unlatch and unplug EIS harness from OEM module and connect to blue mating plug on SKSNG213 T-harness
  - W205/X205 C Class/GLC: Black plug
  - W213/W463 E Class/G Wagen: Magenta plug
  - W167: Center transmission hump, driver side, to the right of the pedals
  - W222 S Class: Under center ashtray. Remove radio console to remove ashtray
- Plug blue or magenta plug from T-harness into EIS module

⚠ Make sure that all connections are seated properly and latched

Step 3 — Access PCM module

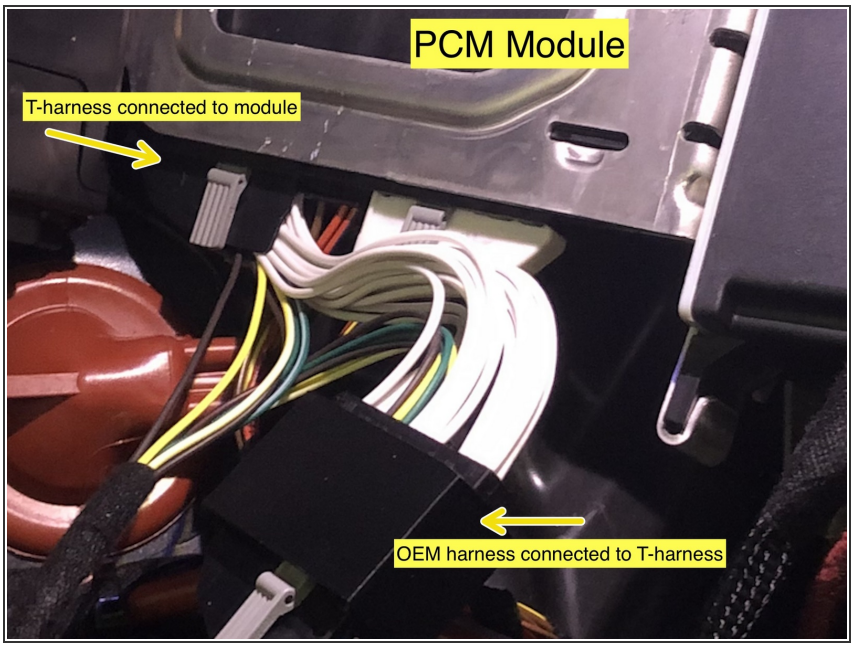






- Locate PCM module harness
  - W213 E Class: Black 32-pin plug under passenger floor footwell, below kick
  - W205 C Class/X205 GLC: Black 32-pin plug under passenger floor, below kick
  - W167 GLE/GLS: Passenger kick
  - W222 S Class: Under passenger floor
  - W463 G Wagon: Under passenger floor
  - CLA, GLA and GLB: Driver side, right of the pedals next to transmission tunnel. Click here for pictures.

Step 4 — Connect PCM T-harness



- Unlatch and unplug black 32-pin OEM plug from PCM module and connect to black mating plug on T-harness
- Plug in and latch 32-pin black connector from T-harness into PCM module

⚠ Make sure that all connections are seated properly and latched

The PCM side of the T-harness has a breakaway connector that be disconnected to allow for running harness to passenger side.

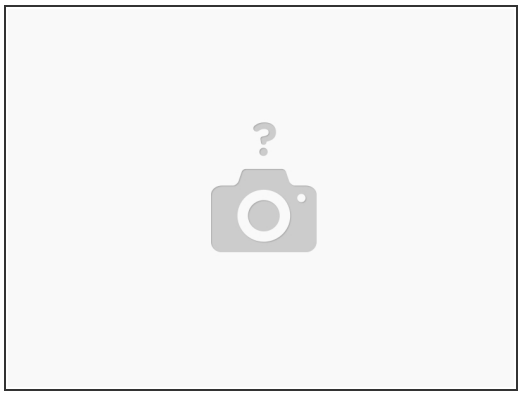
Step 5 — Connect breakaway plug from PCM T-harness



Run section of harness from PCM side of the T-harness through dash area and to the EIS side of the T-harness

- Connect break away connector

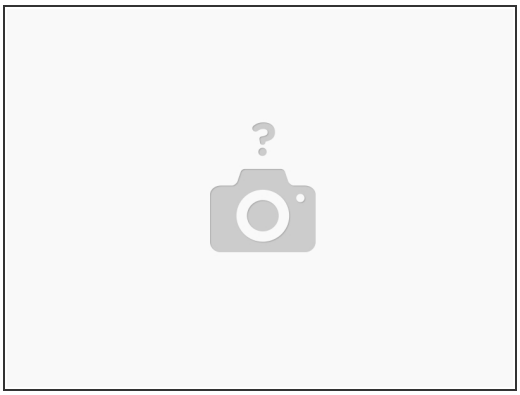
Step 6 — Plug in modules and start vehicle



- Plug 20-pin plug from EIS T-harness into 20-pin plug on module labeled **SmartKey Starter®**
- Plug 16-pin module from PCM T-harness into 16-pin plug on module labeled **SKSPCM**

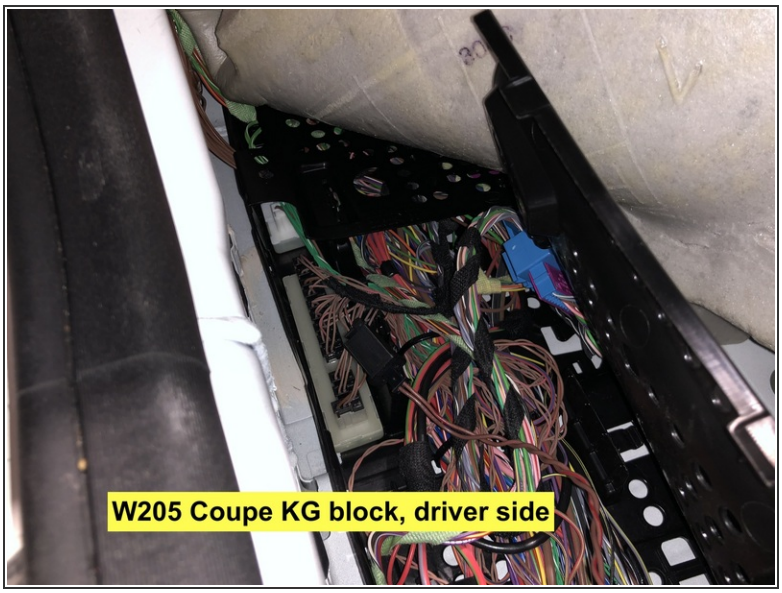
☑ Once all connections are secured, start vehicle manually and test operation

Step 7 — Connect key box



- An extra key is used for this installation and installed with the SmartKey Starter®
- Remove back cover and battery from key
- Insert battery emulator from inside of the key box into key with text on emulator saying **BACK OF KEY** facing the side of the key with no buttons.
- Place key in box with buttons facing out
  - **For SKSNG167:** Inside the key box there is a U shaped bracket. Place bracket over the **unlock** button on the key by sliding into slots on side of key so that the bracket is holding down the unlock button
  - **For SKSNG213:** Do NOT use the bracket to hold down the unlock button
- Close lid on key box and secure with 4 provided screws
- Plug 2-pin white plug from key box into 2-pin white port labeled **KEY** on module labeled **SmartKey Starter®**

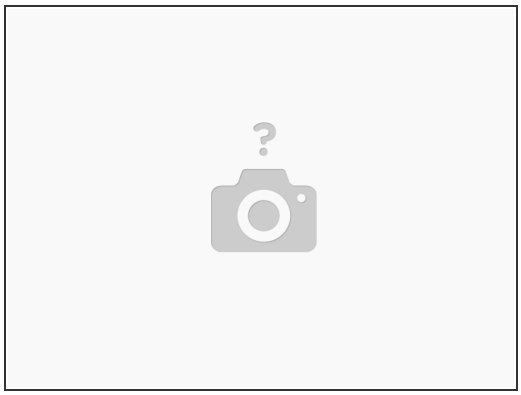
Step 8 — Locate CAN distribution block for KG harness connection (N/A For G WAGON or W167 GLE/GLS)





- Locate CAN distribution block with brown and brown/red wires.
  - W213 E Class: Underneath passenger floor
  - W205 C Class Sedan: Under passenger floor, along door sill.
    - ⓘ Note MY2021 Sedan may be under driver side floor
  - W205 Coupe: Under drive side floor, along door sill
  - X205 GLC 2020-2022: Keyless Go harness must be connected directly to the OEM Keyless Go module (does not connect to CAN distribution block). The Keyless Go module is in the driver side of the cargo area. Click here for detailed Keyless Go harness instructions for the 2020-2022 GLC
  - W222 S Class: Underneath floor behind passenger seat
  - ⚠ W463 G Wagon and W167 GLE/GLS: DO NOT make this connection for the G Wagon. Move to step 10

Step 9 — KG finder test (N/A for W463 G WAGON or W167 GLS/GLE)

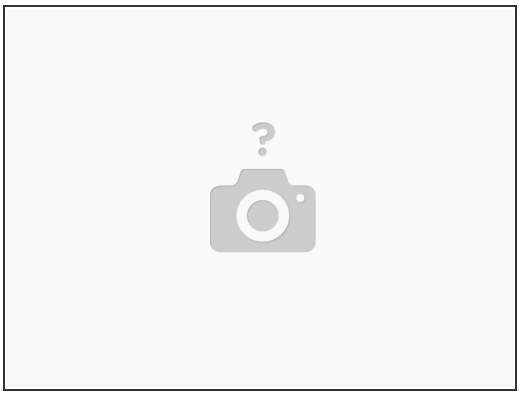


- One of the pairs of wires in the distribution block is for the Keyless Go (KG module). A short test is used to locate the correct set. Once the pair of wires is located, that connector is removed from the block and connected to the provided KG harness
- Press push to start button (once) 1X to go into ACC
- The yellow light on the SmartKey Starter® module will begin to flash
- Unplug one of the OEM plugs from the distribution block and observe LED for at least twenty (20) seconds. If yellow LED continues to flash and/or ALL LEDs turn off, reconnect plug to black and unplug the next plug. One of the plugs, when removed, will cause ONLY the LED on the module to stop flashing.
- Connect the OEM plug from the test into the provided KG harness. Green LED on module should begin to flash, indicating the correct KG connection (with vehicle in ACC)

⚠ G Wagon and GLE/GLS: DO NOT make this connection for the G Wagon or W167. Move to step 10

⚠ Make sure all connections and fully seated and secure. Once connections are made, start vehicle and test operation before moving to next step.

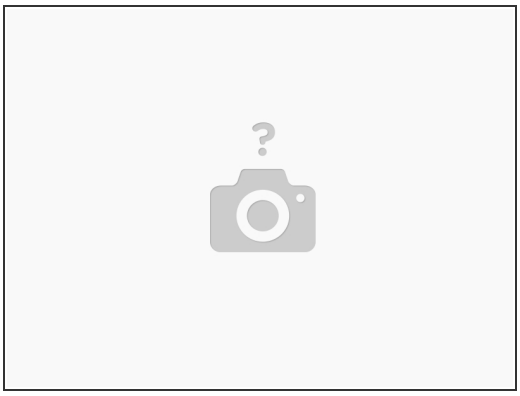
Step 10 — Test remote start



⚠ Make sure that vehicle is in a safe place to start and that hood is closed

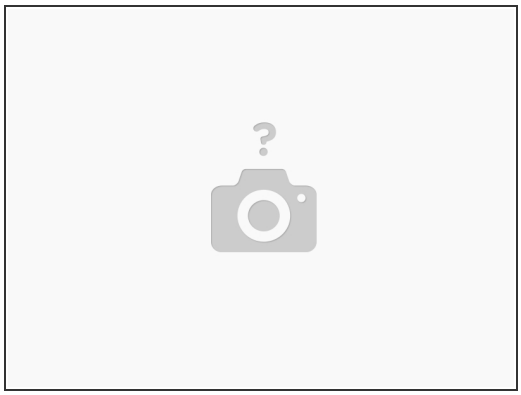
- Test remote start by pressing and releasing the PANIC button on the OEM key fob one time (1X). Vehicle should remote start.
  - ⓘ If the OEM key does not have a panic button, use a LOCK-UNLOCK-LOCK sequence to activate the remote start.
- Vehicle can be shut down using either the panic button or LOCK-UNLOCK-LOCK

Step 11 — Test key takeover



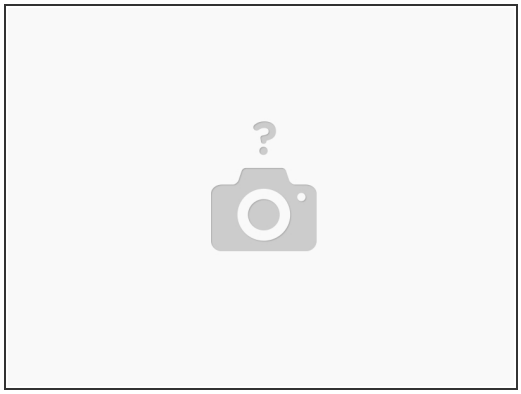
- While vehicle is remotely started, with key on your person press the brake and the push to start button at the same time. Engine will shutdown and restart. After restart, the vehicle can be shifted into gear.

Step 12 — Test hood pin shutdown



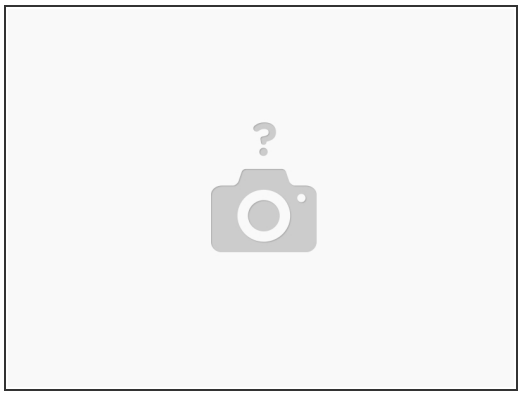
- Open vehicle hood
- Attempt a remote start by pressing and releasing the panic button once (1X). Vehicle should not remote start and the parking lights will flash seven (7X)

Step 13 — Test Keyless Go



- Remote start vehicle
- While vehicle is running under remote start, make sure that you can lock and unlock the door using the outside door handle (Keyless Go) with the key on your person.

Step 14 — OPTIONAL: Accessory and upgrade connections (Drone, Smart Start, DAS II, etc

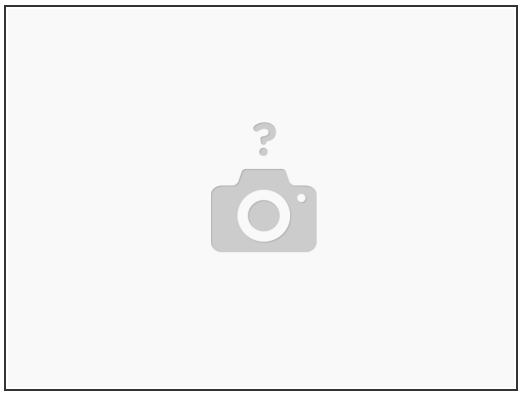


- **Compustar Drone:** Connect to the **GRAY** 4-Pin port labeled **DRONE** on the SmartKey Starter module.
- **Directed Smart Start:** Connect 4 Pin D2D cable from Smart Start to white 4-pin port labeled **D2D** on the SmartKey Starter module. Cut and insulate blue and green data wires (leaving only black and red for power and ground.
  - Connect 3-Pin ESP plug from Smart Start to 3-Pin white plug on SmartKey Starter labeled **Smart Start**. ***Do not ground gray wire from Smart Start.***
- **Compustar DAS II sensor:** Connect to 4-Pin **RED** port labeled **SENSOR** on the SmartKey Starter module
- **Compustar RF remotes:** Connect Compustar antenna to 4-pin **BLUE** port on the SmartKey Starter module labeled **4PANT**

  ⚠ **AM remotes are NOT supported**

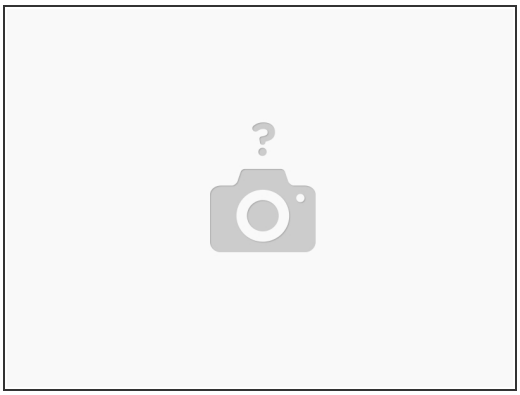
  - **Compustar remote programming:** Cycle key from off to ignition 5X- parking lights will flash 1X after the 5th cycle. After the 5th cycle, press the button on the antenna (if antenna has a button) and press LOCK on each Compustar remote. Parking lights will flash when each remote is paired. Parking lights will flash 2X when exiting programming

Step 15 — OPTIONAL: Accessory and upgrade connections continued



- **Directed RF remotes:** to add Directed remotes, a Directed XL202 RF to data converter must be used. Connect the XL202 to the 4 pin white plug labeled **D2D** on the SmartKey Starter module. Connect Directed RF antenna to XL202 and follow XL202 programming instructions
- **Compustar Alarm/Remote start module:** an external alarm can be added using a Compustar Alarm/RS module (CM900, CMX, etc). To connect alarm use a RS232 cable. Plug one end of RS232 cable into **BLACK** port on CM7000 and other end of RS232 cable into **GRAY** 4 pin port labeled **DRONE** on SmartKey Starter module
  - RS232 cable must have **blue and white (RX and TX) wires reversed** on one end of the cable. For example, if blue wire is in the outside pin position on one connector, it must be in the inside pin on the other side of the cable.
  - Connect power, ground, and ignition wire from low current harness of Compustar CM. Constant power and ground can be wired to the SmartKey Starter T-harness
  - Connect all accessories into Compustar CM
- **Compustar KeyLocker and KP2:** A KP2 Compustar touchpad can be connected using either a Compustar CM or a KeyLocker module. Connect KeyLocker to **GRAY** port labeled **DRONE**

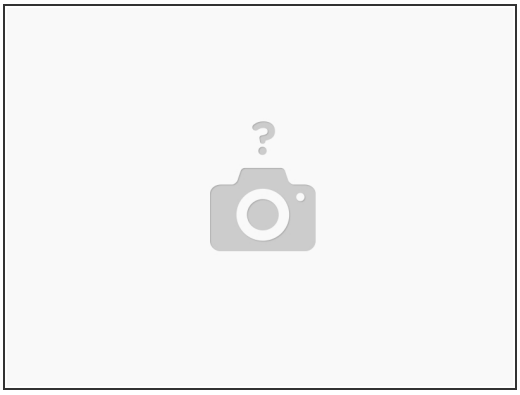
Step 16 — Mount modules and re-assemble



- Mount SmartKey Starter module and key box in secure location using zip ties
- Mount SKSPCM module in secure location using zip ties

⚠ Make sure that all modules and harnessing are mounted away from any heat sources or moving parts

Step 17 — Apply OBD sticker



⚠ The provided warning sticker must be installed in this location or your SmartKey Starter® warranty will be voided

☐ Install provided warning sticker on intermediate panel covering OBD II plug access. The purpose of the sticker is to inform anyone working on the vehicle that the vehicle is equipped with a remote starter. Remote starter should be turned off (valet mode) any time the vehicle is being serviced or any undergoing any diagnostic tests.

Troubleshooting:

If vehicle receives the command, but fails to remote start, the parking lights will flash a # of times. The number of parking light flashes corresponds to an error code. To troubleshoot no remote start count the number of parking light flashes.

Note: after a brief pause, the error code may be followed by a shutdown sequence of 3X flashes after the initial code

Error codes:

4 Flashes: Valet mode. The remote start is in valet mode (remote start off). Click here for valet mode instructions using the instrument cluster menu.

5 Flashes: PCM error. Check connections at PCM module

6 Flashes: Brake depressed. The vehicle sees that the brake is depressed. If the brake pedal is not pressed down, it is possible that the brake switch is out of alignment. Check brake switch above brake pedal. If brake switch is out of alignment, you may see brake lights on all the time when the vehicle is started.

7 Flashes: Hood open. The remote start will not work if the hood is open or latch is not fully closed.

8 Flashes: RPM overrev. Vehicle sees that RPM is too high.

9 Flashes: Not seeing the key or the button push.

Make sure that the push to start button is in the ignition.

Press the unlock button on the OEM key fob and then try to remote start- if it remote starts, check that the Keyless Go harness connections are done properly.

Sit inside the vehicle with the key on your person and attempt to remote start. If the remote start works with a working key inside the vehicle, there is an issue with the key in the box or the connection to the key in the box.

10 Flashes: Communication error. Check connections and power cycle module.