

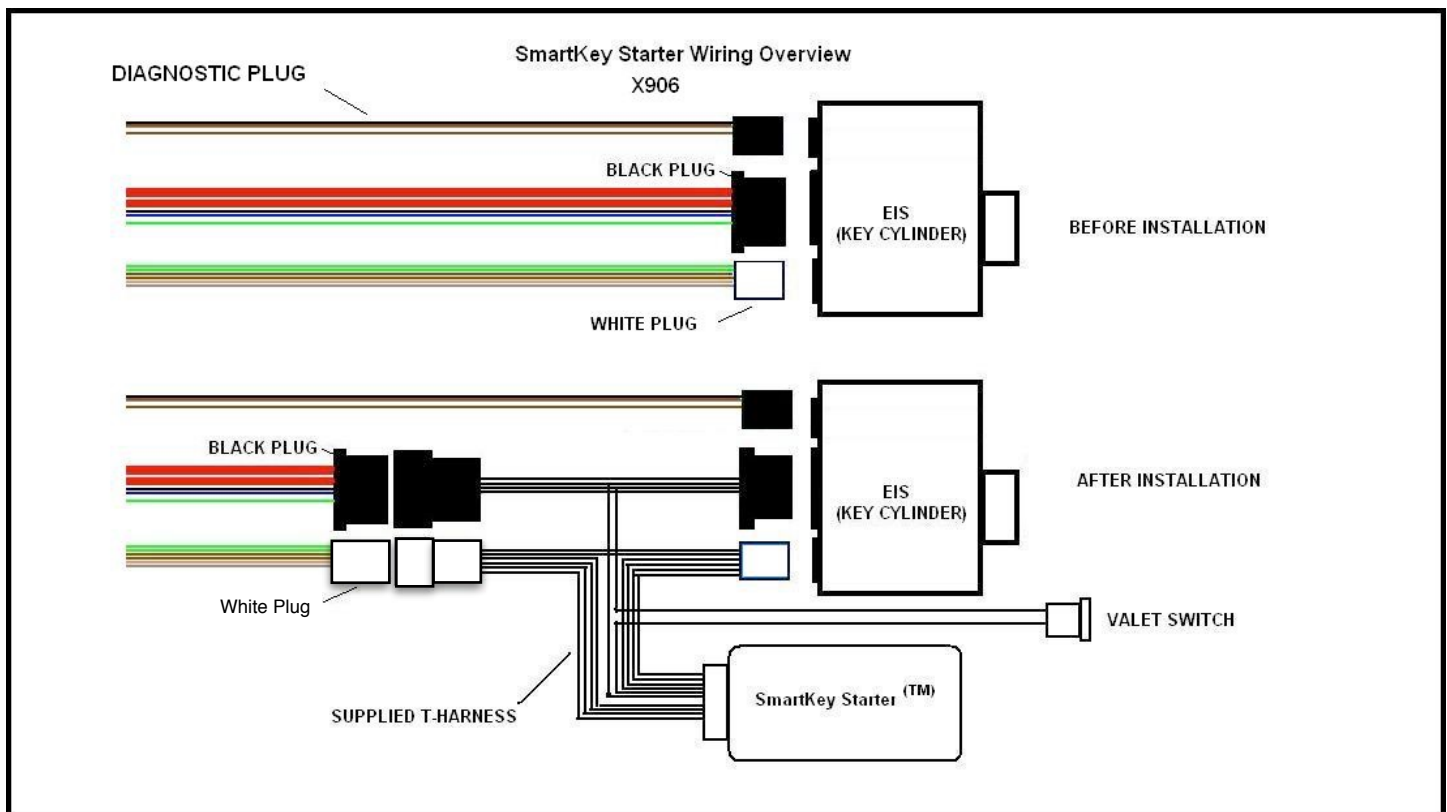
# Smartkey Starter® Installation Instructions

## Mercedes Benz Sprinter 2007-2016

### Tools and Parts you will need

- T-25 driver
- EIS removal tool
- Drill
- 3/4" drill bit or Unibit

The Smartkey Starter® is designed as a direct plug in interface to the rear of the Mercedes Benz key cylinder. Please read this manual in its entirety prior to installation as there is a specific order of operation that needs to be followed.



Installation Diagram

## Installation

1. Remove (3) T-25 from the Driver's under dash panel.
2. Pull the smaller left panel to release the upper clips and set aside.
3. Pull the larger panel to release the upper clips and set aside.
4. Using the EIS tool, unscrew the retaining ring for the ignition cylinder and set aside.
5. Reach up from the under dash and pull down the EIS module to access the wiring on the rear.
6. Remove the white (8) pin plug and the black (5) pin plug from the rear of the EIS.
7. Plug the T-harness in to the EIS and the factory wiring. (see diagram above)
8. Program your remote(s) or connect the data cable from an alarm/remote start system. (see alarm connection section)
9. Start the vehicle and let it run for **at least** 30 seconds so the Smartkey Starter® can sync to the vehicle.
10. Test the remote start operation.
11. Set the parking light option to be controlled by the starter (on) or not (off). There is an internal modification that needs to be done. The default is (on). (see alarm connection section)
12. Reinstall the EIS and screw on the retaining ring.
13. Reinstall the under dash panels and the (3) T-25 screws that hold them in.
14. Drill a hole and mount the Valet switch in an easily accessible location.

## Hood Pinswitch

The Mercedes Sprinter does not come with a factory hood pin. One can easily be added and tied into the Smartkey Starter®. This should be done for your customer's safety and is highly recommended. This connection is not required if an alarm controller is used. The hood pin can be directly connected to the alarm controller without the relay described below.

1. Mount the hood pin and confirm its operation.
2. Route the hood pin wire through the firewall to the under dash area.
3. Locate the brake pedal switch. Using a relay, the hood pin will be tied to the brake in order for the remote start to shut down when needed.
4. Connect the hood pin wire to terminal 85 on the relay.
5. Connect the brake wire to terminal 30
6. Connect the ignition wire (from the brake switch supply) to terminal 86 and 87.

Using this connection, if the hood is opened and the ignition is on, the brake switch will be activated and will not allow a remote start situation.



Remove (3) T-25



Remove left dash panel



Remove main dash panel



Remove EIS ring



EIS Ring Removed



EIS connected at bottom of dash



T-harness installed

## Alarm Connection

The SKS906C Smartkey Starter® for Mercedes Benz Sprinter can be controlled directly from a CM7000 Compustar Remote start/alarm combo controller. The SKS906D Smartkey Starter® for Mercedes Benz Sprinter can be controlled directly from a D2D compatible Directed Electronics alarm/remote start combo (i.e. Viper, Python, etc).

### A. Data connection - Compustar

-A 4pin RS232 cable that would normally be used to connect an ADS Idatalink bypass module to a Compustar controller is needed. The cable needs to be modified. On that specific cable, the colors are Blue, White, Black, Red. The Blue and White need to be reversed so the polarity is opposite. This can be done by removing the pins at one end and installing them in the opposite order. After the modification, the wiring should be White, Blue, Black, Red at one end and Blue, White, Black, Red at the other end. This cable will connect from the black port on the SKS906C to the black port on the CM7000. If you are using a Drone in conjunction, it will connect to the gray port on the CM7000.

**Note: Cut the power (red wire) on the RS232 cable**

Pictures for alarm connections (data, power, ground, ignition) can be found in Sprinter (07-18) manual folder or at this link:  
<https://tinyurl.com/snl4pj6>

## Alarm Connection - DEI

### A. Data connection

-A 4 pin D2D cable is required for connection between the SKS906D. The cable can be connected directly at both modules without modification. If you are also connecting a SmartStart, that should be connected directly to the DEI controller, NOT connected to the Smartkey Starter®.

**Note: Cut the power (red wire) on the D2D cable**

-Signals being sent over data from the Smartkey Starter® to the alarm controller

- start
- door trigger
- trunk trigger
- lock
- unlock
- brake
- trunk release (side and rear door unlock only)

### B. Analog connections

-The ignition wire from the alarm system needs to be connected to the key side of the T-harness. The green wire on the T-harness is the ignition wire. A diode needs to be connected inline to the ignition wire. The stripe should face the alarm brain.

-If you choose to utilize the light flash output from the alarm brain, the light output from the Smartkey Starter® needs to be turned off. There is an internal modification that needs to be done. (See pictures below) If the light flash is set to off, the parking light output from the alarm controller should be used if external light flash confirmation is desired.

-Power (main module power, not the relay input power. If the relay input power is the only power input to the alarm/remote start unit, the fuses should be changed to 10a maximum) and Ground need to be connected from the alarm controller. These should be connected to the power and ground in the Smartkey Starter® harness. Connecting power and ground elsewhere in the vehicle can result in data communication errors between the Smartkey Starter® and the alarm/remote start brain.

-A hood pin should be installed for remote start safety as well as alarm protection.

### C. Programming

The alarm controller needs to be set for tachless engine monitoring. Everything pertaining to the remote start operation is handled by the Smartkey Starter®.

**Pictures for alarm connections (data, power, ground, ignition) can be found in Sprinter (07-18) manual folder or at this link:**

**<https://tinyurl.com/snl4pj6>**

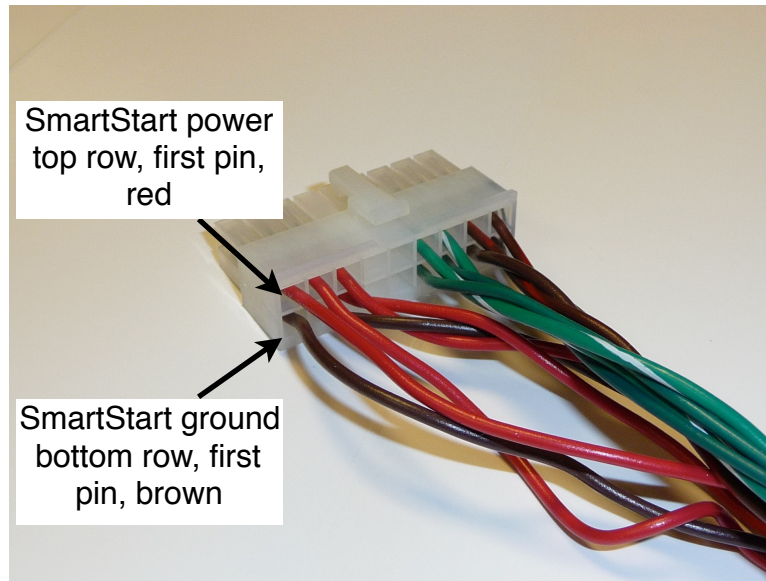


## DEI Connection Instructions - XL202 + extended range remote and SmartStart

Each DEI compatible Smartkey Starter® is equipped with a (4) pin and a (3) pin connector at the end.

The (4) pin connector is designed to accept a D2D cable from an XL202 RF translator module to provide the ability for adding long range remotes and 2 way capability to the Smartkey Starter®. There is no programming required for the module. The remotes need to be programmed to the XL202 which should have instructions provided with it.

The (3) pin connector is designed to accept the ESP cable that comes with the Directed SmartStart module (DSM200/250 and DSM300/350). The cable can be plugged directly in to the port. The power and ground must be connected (soldered and taped) to the Smartkey Starter® harness. Please see the below diagram.



## Compustar Programming Instructions - antenna and extended range remote

To program any compatible Compustar remote control, complete the above basic installation steps and verify standard operation. Install antenna and cable and connect to the appropriate blue port (4p or 6p) on the SKS906C module.

Insert the key in the ignition switch and cycle it (5) five times from off to accessory (only one click in the clockwise direction) and back to off.

The lights will flash once. Press lock or button 1 on the remote control and the lights will flash to confirm programming. Up to (4) Compustar remotes can be programmed to one unit. If you are using a 2 way remote, program that one first.

Once all remotes have been programmed, wait for a single light flash confirmation signifying the module has exited programming mode.

Verify the operation of the new remote.

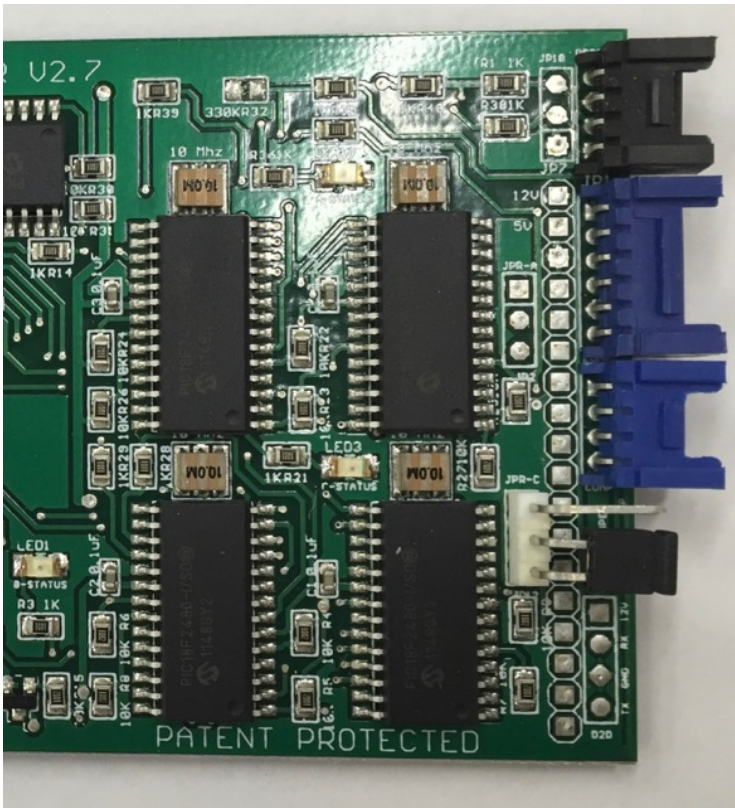


**DO NOT USE BLUE PORT FOR DRONE CONNECTION.  
DRONE DATA CABLE MUST PLUG INTO BLACK PORT MARKED RS232.**

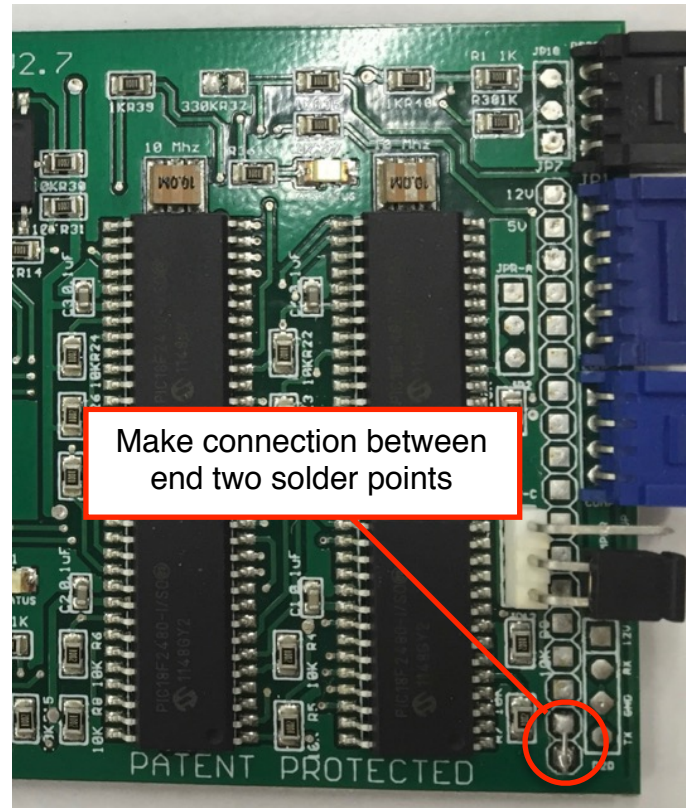
## Compustar Drone Connection

Connect the Black data cable from the Drone to the Black Drone port on the Smartkey Starter®

## Light Flash Modification



Standard light flash



No light flash