

# Installation guide for Compustar alarm add-on to SKSNG907 & SKSNG907RV

How to add Compustar alarm to SKSNG907 or SKSNG907RV for 2019-2020 Sprinter

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## INTRODUCTION

**The SKSNG907 & SKSNG907RV SmartKey Starter® remote start and alarm module is compatible with Compustar alarms for full aftermarket alarm integration.**

*Note: if adding CM7000, the OEM key fob will no longer remote start the vehicle and an external remote and/or Drone must be added for remote start. OEM fob will still arm and disarm the alarm.*

### Compatible Compustar systems:

- CM7000
- CM7200 (in alarm / RS mode)

### Alarm connections:

- RS232 (with RX and TX wires opposite on each end)
- Power and ground (from low current harness) - connected to SKSNG907 / SKSNG907RV T-harness
- Ignition (to fuse box)
- Siren
- Hood pin
- Alarm accessories (DAS sensor, Drone, RF remotes, RPS touch, sensors, etc)

### Alarm programming:

*Note: if the alarm was purchased from Mid City Engineering, it will already be programmed to work with the SmartKey Starter®*

- Option 2-10 must be set to #4 (advanced tachless / no connection).
- Run time- when remote start is activated through the alarm (RF remotes, Drone, etc), the run time set on the Compustar alarm will determine how long the van runs *unless* the SmartKey Starter® timer is set for less time than the Compustar module. The default run time setting for the SKSNG907 & SKSNG907RV is 1 hour. SKS run time can be changed using the instrument cluster menu. [Instructions for menu operation here](#)

Compustar alarms purchased from Mid City Engineering will be programmed for 45 minute run time.

If remote start is activated through the OEM key fob or the analog trigger, the run time will be determined by the value set on the SmartKey Starter®

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*Note: if adding an external alarm, Compustar Drone / external remotes should be used for remote start activation. The OEM key fob remote start activation when using an external alarm is not supported at this time. The OEM remote will arm and disarm the alarm.*

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## **PARTS:**

- [SKSNG907](#) (1)
  - [SKSNG907RV](#) (1)
  - [CM7000](#) (1)
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## Step 1 — Alarm programming



- CM7000 / CM7200 must be programmed for advanced tachless / no connection (2-10 option 4 on the programming table)
- ⓘ If the alarm was purchased from Mid City Engineering, it will already be programmed to work with the SmartKey Starter®
- Program desired run time for Compustar module. If alarm was purchased from Mid City Engineering, the alarm run time will be set for 45 minutes.
- ⓘ When remote start is activated through the alarm (RF remotes, Drone, etc), the run time set on the Compustar alarm will determine how long the van runs *unless* the SmartKey Starter® timer is set for less time than the Compustar module.
- ✦ The default run time setting for the SKSNG907 & SKSNG907RV is 1 hour. SKS run time can be changed using the instrument cluster menu. [Instructions for menu operation here](#)

## Step 2 — Change alarm to automatic transmission mode



**⚠ This step is for automatic transmission vehicles only**

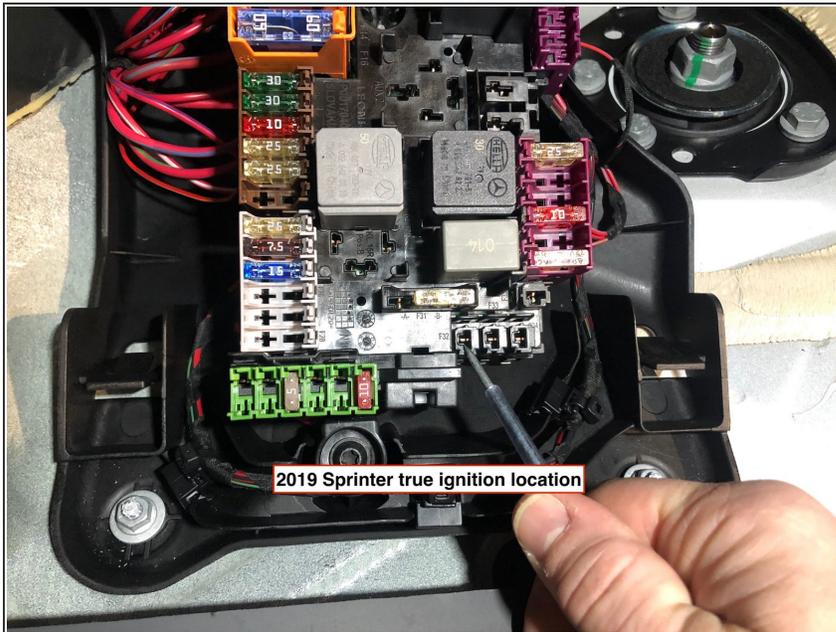
- For automatic transmission vehicles, the green loop inside the small access panel on the CM7000 must be cut

### Step 3 — Connect power and ground for the Compustar alarm



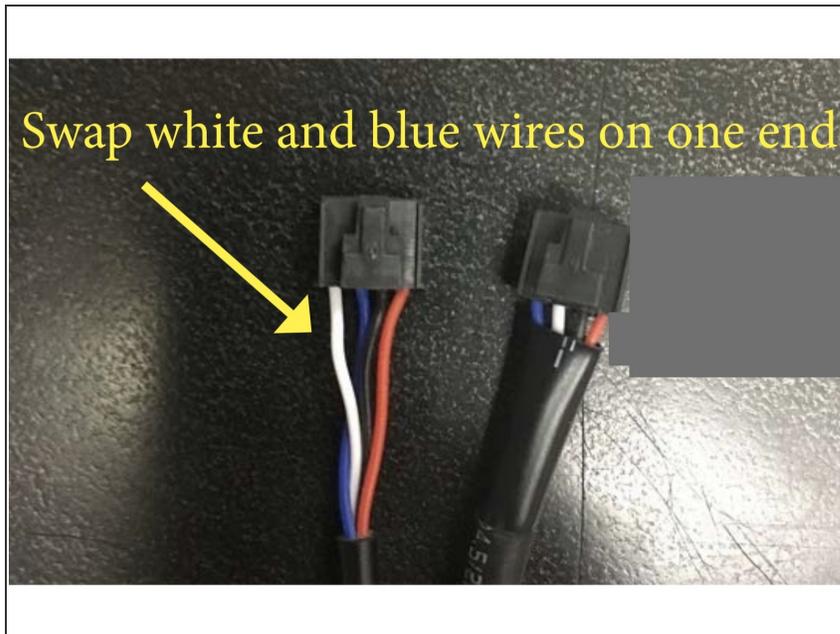
- ❗ Power and ground from the low current harness on the Compustar alarm can be connected at the SKS T-harness. Use the side of the T-harness connected to the module labeled **SmartKey Starter**
- Connect constant power wire from alarm to red wire on T-harness (see picture)
- Connect ground wire from alarm to black wire on T-harness (see picture)
- ★ Be sure to solder and insulate all connections

## Step 4 — Ignition connection for alarm



- Connect the green ignition wire from the the alarm to ignition power source. A diode should be used with the stripe facing the alarm.
- ⓘ If alarm was purchased from Mid City Engineering, there will be a diode in the alarm box.
- Ignition source can be found at fuse box on passenger side under the floor (under the emergency kit). See picture for fuse location. A spade terminal can be used to secure ignition wire to fuse location.

## Step 5 — Reverse RX and TX wires on RS232 cable on one side



- ❗ An RS232 cable is used to connect the Compustar alarm to the SmartKey Starter®. The RX and TX wires (white and blue) must be opposite on each end. Most cables will need to have the RX and TX wires reversed on one end of the cable.
- ★ If the Compustar alarm was purchased from Mid City Engineering, the RS232 cable is provided in the alarm box. The wires are likely already reverse. Please compare the cable you have to this picture to confirm the wire orientation.
  - Using a pick tool, carefully de-pin the white and blue wires on one end of the cable.
  - Re-pin the white and blue wires so that they are in opposite order of the other plug on the cable.
  - Reference picture to be sure cable is pinned correctly.

## Step 6 — RS232 Connection



- Connect one end of the RS232 cable into the black port labeled **Drone** on the module labeled **SmartKey Starter®**
- Connect the remaining end of the RS232 cable into the black port on the Compustar alarm

## Step 7 — Hood pin connection



- Connect hood pin from Compustar alarm using instructions included with the alarm.

## Step 8 — Siren connection



- Connect and mount siren per instructions included with Compustar alarm
- ⓘ The red wire from the siren gets connected to the siren output on the Compustar alarm (brown wire, larger harness). The black wire for the siren connects to chassis ground.

## Step 9 — Sensor connections



- Connect DAS sensor included with Compustar alarm into Compustar alarm module per instructions included with alarm.
- Connect extra sensors (optional)

## Step 10 — Optional: Alarm accessories



- Connect any accessories being used to alarm (Drone, RF remotes, RPS touch, etc).
- ☑ When using external alarm, remote start activation should be done through either Drone or RF remotes. OEM fob remote start activation is not supported with the use of an external alarm at this time. The OEM remote **will** arm and disarm the alarm.

## Step 11 — Test alarm



- Test alarm operations
- Securely mount all modules, sensors, antennas, and other accessories.