

# SMARThatch® Installation Quickstart


## 1 Install SMARThatch Sensor

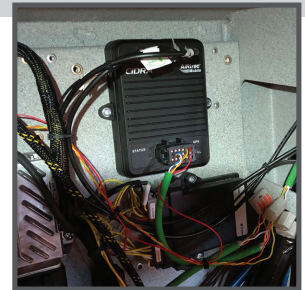
- A. Remove the drum access hatch.
- B. Pre-install the lower center hatch bolt to help hold the **SMARThatch** during installation.
- C. Using gasket or sealant as needed, install the **SMARThatch sensor** with the “Charge Direction” label pointing in the charging direction of the drum.



## 2 Install Wireless Communications Module

- A. Record the serial number on the back of the **modem**. This will be used later to identify the truck on the internet.
- B. The **modem** can be mounted wherever is most convenient, however it should be as close to the fuse panel (or other power source) as possible. This is usually the central connection point for the **display**, **receiver module**, and power wiring.
- C. The **cellular/GPS antenna** needs to be attached to a window using the supplied double-sided adhesive pad. One side is labeled to show which side points outwards; make sure the 3 cables will reach the **modem**.
- D. Attach the telematics cable and antenna cables to the **modem**. Be sure the antenna SMA connectors are tight.

-  The **receiver** and **modem** must provide separation of at least 10” from all persons and must not be co-located with any other antenna or transmitter in accordance with FCC’s multi-transmitter policy.



## 3 Install Receiver Module

- A. The **receiver module** links to the **SMARThatch sensor** wirelessly and sends information to the rest of the system. It should be installed on the back of the cab, outside, as close as possible to a clear line-of-sight to the **SMARThatch**. Attach the cable connector to the **receiver** and route the cable into the cab near the **modem** or wherever power is connected.



## 4 Install SMARThatch Display

- A. The **SMARThatch display** can be flush mounted on an available panel in the cab or using the supplied bracket. Position the bracket where convenient (See the full manual for a mounting template). Attach the cable connector to the back of the **display** and route the cable into the cab near the **modem** or wherever power is connected.



# SMARThatch® Installation Quickstart

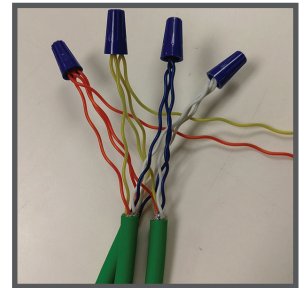
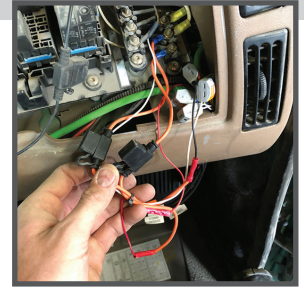
## 5 Battery Charger

- A. Mount the **battery charger** somewhere convenient to the driver. It uses a standard cigarette lighter connector or can be hard wired to an ignition source. The system is supplied with 2 batteries, so that one can always be charged and ready.



## 6 Wiring

- A. Route the cables for the **display, modem, and receiver** to a central location, preferably near a fuse panel or other power source. Cut each cable to the appropriate length and strip off about 4" of the green jacket and metallic shielding. Using wire nuts or other splices, connect all three blue wires together. Repeat for the white wires, yellow wires, and orange wires.
- B. Connect the yellow wires to chassis ground with a length of 16-20 gauge insulated wire.
- C. Connect the orange wires to an ignition controlled (switched) +12 volt source with a length of 16-20 gauge insulated wire. Note: include either an inline or existing fuse (10 amp) for this connection.
- D. Connect the single red wire from the **modem** to a constant (battery) +12 volt source. Note: include either an inline or existing fuse (10 amp) for this connection.

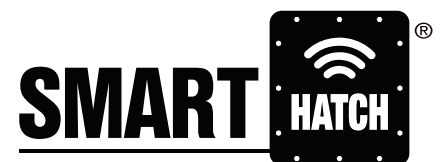


## 7 Pairing Sensor with Receiver (one-time only)

- A. Each **SMARThatch sensor** needs to be paired to its associated **receiver module**.
- B. Gently install a **battery** into the **SMARThatch sensor**. The sensor should emit a sound for a second and then shut off.
- C. With the ignition in the "On" or "Accessory" position, press the square yellow button next to the **SMARThatch battery** for 3 seconds, and then within 30 seconds, press the button on the **receiver module**. Both lights should start blinking when pressed, and turn off with a long blink when successfully paired.



\* See **manual 21798-01-xx** for complete **SMARThatch** installation, operation, & support instructions.



# SMARThatch® Installation Quickstart

## Optional Equipment

### 1 Install Hydraulic Pressure Sensor

- A. Make sure the hydraulic pressure system is de-energized.
- B. Install the supplied hydraulic pressure sensor either directly to the hydraulic motor or using the supplied “T.”  
Note: lube the pressure sensor o-ring to avoid tearing.
- C. Connect supplied wire harness to the pressure sensor and route the cable into the cab near the **SMARThatch modem** and other power connections.
- D. Connect the pressure sensor wiring harness to switched +12V power and the **receiver** analog input. Connect the **receiver** analog ground to chassis ground. Use the **receiver** white/black twisted pair as shown in the attached wiring schematic.



### 2 Install Water Meter

- A. Make sure the water line feeding into the drum is drained.
- B. Cut out a section of the water feed line large enough to fit the supplied water meter and fittings or remove the old water meter.
- C. Install the supplied 1” NPT to 1” barb fittings into the water meter. When threading into the water meter use Teflon tape and turn 1 turn past hand tight. Avoid over-tightening the fittings which could cause damage to the water meter.
- D. Install water meter using the supplied hose clamps and secure the water meter to the truck frame as required. Pay attention to the flow direction marked on the water meter.
- E. Connect the supplied wire harness to the water meter and route the cable into the cab near the **SMARThatch modem** and other power connections.
- F. Connect the water meter wiring harness to switched +12V power, ground, and the **receiver** analog input as shown in the attached wiring schematic.



# SMARThatch® Installation Quickstart

## Wiring Diagram

