Accessory: GPSI-3900 Temperature Sensor

Link: https://help.gpsinsight.com/installation-guide/gpsi-3900-temperature-sensor/ Last Updated: January 3rd, 2019

If adding to an existing installation, please contact Technical Support to ensure the feature is enabled.

The installation kit contains the temperature sensor, one p-clamp, two heat-shrink butt connectors, two standard butt connectors, two grommets, eight 8-in. (20 cm) cable ties with screw holes, twelve 8-in. (20 cm) cable ties, nine self-tapping screws, and one 18-ft. cable extension.

Additional tools and parts you may need include electrical tape, insulated wire crimper, wire stripper, 20 Ga wire or larger, extension ladder, cordless drill, extended length 5/16 (8 mm) drill bit, heat gun, heat-shrink butt connectors, cable ties, and split loom.

Installation Steps

The following steps provide an overview of the installation process:

1. Install preparation.
2. Mounting.
3. Wire Connections.

1. Install preparation.

1. Inside of the trailer, locate an area on the left that is ~1 ft. (30 cm) down from the ceiling and ~1 ft. (30 cm) from the wall. Verify nothing in this area will be damaged when drilling the hole for the temperature sensor.

Copyright ©2026 GPS Insight

2. Identify a cable route from the temperature sensor location to the GPSI-3900. The cable placement should not prevent the use or removal of asset panels and should not leave the cable open to damage.

2. Mounting.

1. Locate the cordless drill, extended length 5/16 (8 mm) drill bit, temperature sensor, two grommets, one self-tapping screw, and the p-clamp.

    A. Drill a hole in the area identified in Step 1 – Install Preparation, and clear away any metal burs that could damage the cable.

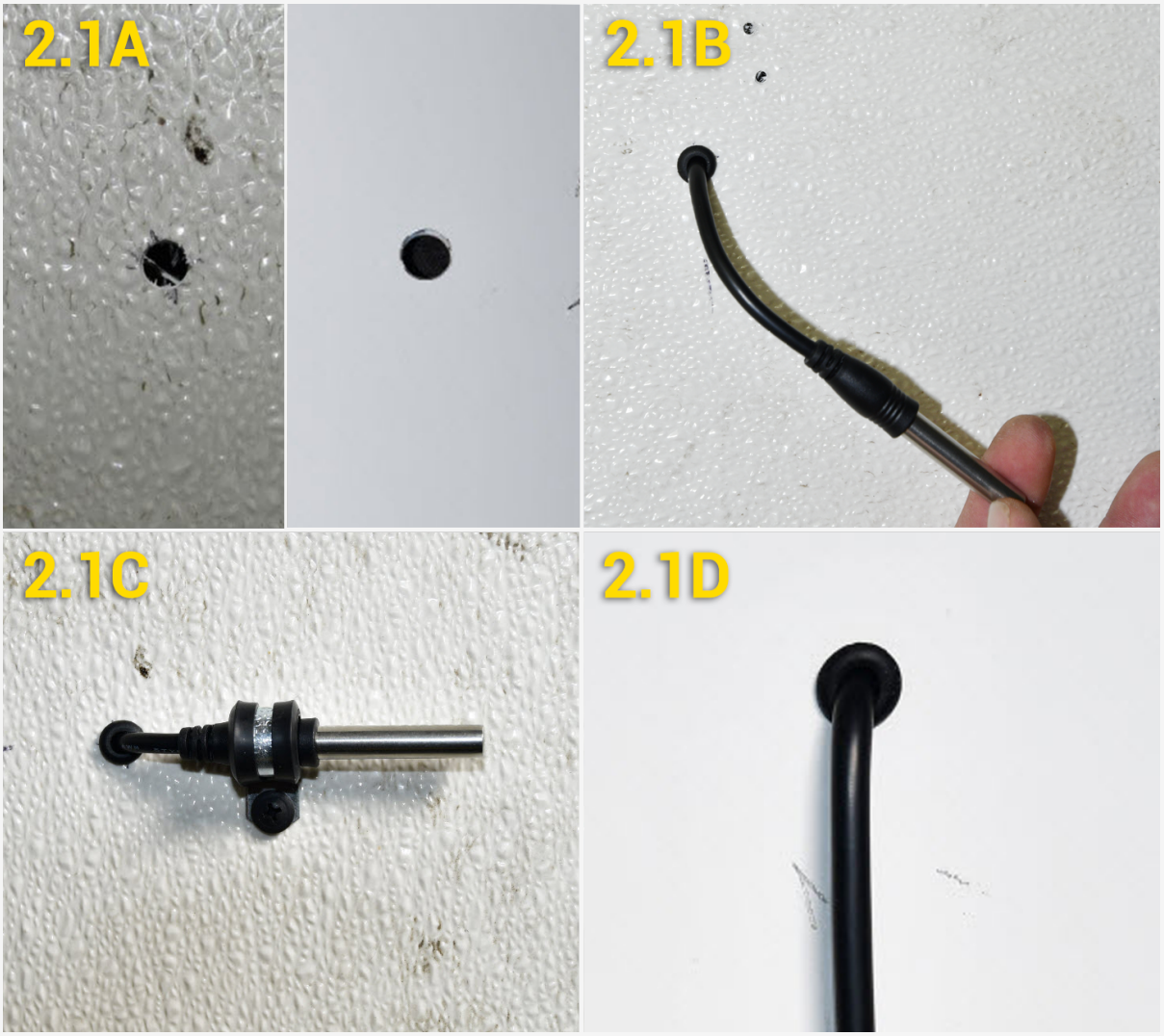
    B. Slide a grommet over the temperature sensor cable, and from the inside of the trailer, feed the temperature sensor cable through the hole, and slide the grommet in place.

    C. Place the p-clamp over the plastic portion of the sensor, and hold the sensor horizontal to

Copyright ©2026 GPS Insight

the ground as you screw the p-clamp in place.

D. Slide the second grommet over the cable and into place.



2. Using cable ties, secure the temperature sensor cable every 1 1/2 ft. as you route the cable from outside to inside the cab, and behind the dashboard cluster.

3. Wire Connections.

1. Locate the wire strippers, insulated crimper, two heat-shrink butt connectors, two standard butt connectors, cable extension wire, the GPSI-3900 Harness, and a heat gun.

Copyright ©2026 GPS Insight

- **Temperature Sensor**

A. Tape off the red wire. Remove 1/2 in. (12 mm) of insulation from the blue, black and white wires. Twist the wire strands for the white wire. Fray the wire strands of the blue and black wires before twisting them together.

B. Remove 1/2 in. (12 mm) of insulation from both cable extension wires. Twist the ends of all wires. Using heat-shrink butt connectors, connect the temperature sensor black and blue wires to the extension cable black wire, then the white wire to white wire. Apply heat to the butt connectors after crimping.

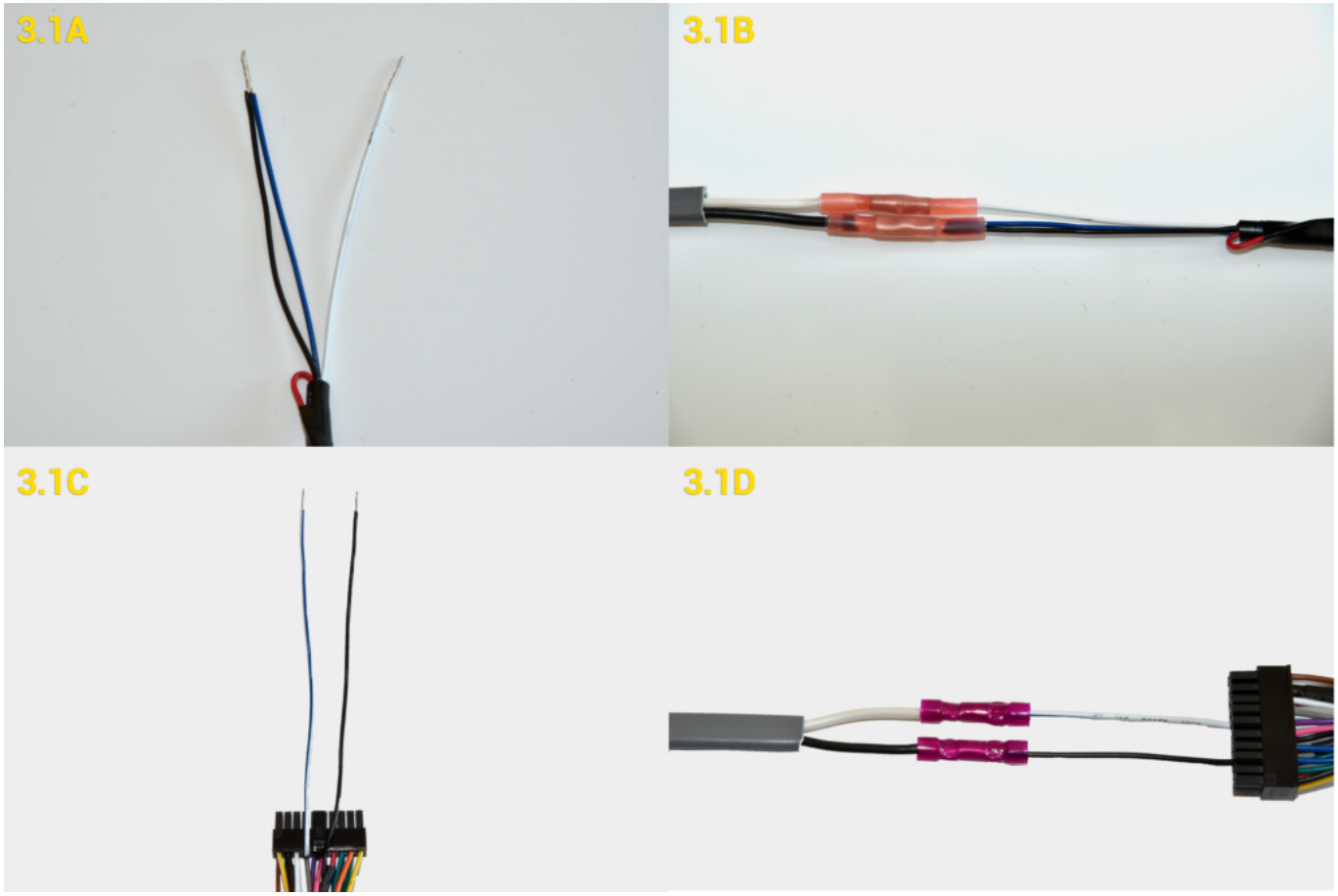
GPSI-3900 Harness

A. Remove 1/2 in. (12 mm) of installation from the white with blue stripe wire (Pin 17) and black wire (Pin 16) before twisting the wire strands of each.

B. Using standard butt connects, connect the GPSI-3900 black wire (Pin 16) with the Temperature Sensor Extensions black wire and white wire to the GPSI-3900 Harness white with blue stripe wire (Pin 17).

Copyright ©2026 GPS Insight

Accessory: GPSI-3900 Temperature Sensor



Note. Heat must be applied to every heat-shrink butt connector to ensure there's a water-tight seal. When applying heat, glue will seep from the butt connector; do not overheat the connection as this can cause damage to the wire or surrounding wires.

Locate the electrical tape and tape off all unused wires.

Copyright ©2026 GPS Insight