

TripTek Installation Guide

Series 2500

02/01/03

Overview

TripTek is a trip computer designed for motorhomes that have an electronic diesel engine. Receiving data from the electronic engine computer and other sources, the system collects, analyzes, and saves vehicle data in memory; it then displays trip, temperature, directional and tire information on the rear vision monitor.

Components

Before starting, verify that you have all items listed below. If you are missing any of the following, check with the dealer who sold you the unit.

1. TripTek computer
2. Keypad assembly & hardware (nuts)
3. Wire harness
4. Video cable
5. Wiring hardware
6. Operator's manual
7. Temperature sensors and compass w/ harness (Optional)
8. Tire pressure sensing system (Optional)

Starting Instructions

Locate J1708 Data Link

Depending on the coach manufacturer, the J1708 public data link from the engine ECM may or may not be run to the dash area. If you are unsure about the data line identity, contact the coach manufacturer for help. The data lines should be a twisted pair of wires. For further information, see page 3, Connect J1708 DataLink.

Keypad

Choosing a Location

The keypad should be accessible and convenient for operation without the need for visual contact. This will assist the operator in utilizing the system with minimal impact on driver safety. It is also important that the surface is flat because the keypad can be damaged if distorted.

Drilling the holes

After you have chosen the location, check behind that area of the console for any obstructions such as brackets or cables. If none are found, mark the location of the holes on the console surface, using the template in Appendix C. Drill all holes, using a 9/64" drill for the four studs and a 9/32" drill for the slotted hole.

Route the keypad cable through the slotted hole and to the location chosen for the computer, then insert the four studs of the keypad into the drilled holes. If there is any interference that could possibly distort or damage the keypad, remove it and make any changes required to remedy the problem.

From the back of the console, place the nuts on the threaded studs and tighten. The keypad rubber cover that is between the keypad and console should not be compressed or show any distortion. **DO NOT OVER TIGHTEN!**

Temperature Sensors and Compass (Optional)

Refer to Compass and Temperature Installation Manual

Tire Monitor System (Optional)

Refer to Tire Monitor System Installation and Troubleshooting manual

Wire Harness (Standard) - Computer

Refer to wiring detail in Appendix A (Dwg. C-02-99002). The wire harness is supplied with the TripTek computer.

If your coach has been pre-wired for the TripTek computer, locate the plug provided by the manufacturer to plug into the TripTek harness. You may need to contact the manufacturer for the location of these plugs.

If your coach has not been pre wired, continue with the installation below.

Connect the Ground

Locate the **BLACK** wire in the wire harness and connect it to the same grounding point that is used for the rear vision system (black wire on Panasonic system). **THIS IS VERY IMPORTANT!**

Connect to Reverse

Install or verify a relay is in the Reverse line circuit – Ref. Dwg. C-02-99002

Locate the **ORANGE** wire in the wire harness and connect this wire to the reverse signal wire to the rear vision system, monitor side of relay (purple/white wire on Panasonic system). Only connect this wire if you are planning on using the optional tire pressure system.

Locate the **GREEN** wire in the wire harness and connect this wire to the reverse signal wire on the transmission side of the relay.

Connect J1708 DataLink

Finding the link.

The J1708 Public Data Link may or may not have it's own connector under the dash. This is **NOT** the six or nine pin round engine diagnostics connector. If this connector cannot be found, locate the six or nine pin round engine diagnostics connector. Reach around behind it and locate the twisted pair of wires that go into it. Track those wires back into the dash. Use Scotch-Loc splices or similar to splice the **BLUE (+)** and **WHITE (-)** twisted pair from the TripTek into it. Make sure you have the polarity correct.

Connect to Generator Hour Meter Signal

Locate the **YELLOW** wire in the harness and connect it to the generator hour meter positive line.

Connect to Buzzer Relay (Only for optional tire pressure system)

Locate the **BLUE** wire in the harness and connect it to the in dash warning buzzer relay.

Connect to Chassis Power

Locate the **WHITE/RED** wire and run it to the chassis fuse panel. It may require additional wire. Find an open fusible connection to the panel and connect this wire. This wire must have unswitched power. For Panasonic system connect wire to yellow wire (Panasonic memory power).

Locate the **WHITE** wire in the harness and run it to a source that has switched power that is only on when the ignition is on.

Install Computer

Locate a space under the dash to install the computer. Fasten to a flat surface utilizing flanges on unit.

Ground Computer Enclosure

Connect BLACK wire attached to computer enclosure to chassis ground. For Panasonic system, connect to camera converter box. Ref. Dwg. C-02-99002

Connect Keypad

Route cable from keypad location to computer and plug into computer enclosure marked KEYPAD.

Interconnect Backup Camera

Disconnect backup camera cable at the monitor. Connect backup camera cable to one end of supplied video harness and the other end to rear vision monitor. Then connect colored RCA jacks from video harness to TripTek computer enclosure. If there are two camera ports on the rear vision monitor make sure you utilize the same connection as before.

For Panasonic system, disconnect backup camera cable (RCA) from converter and reconnect into TripTek computer enclosure marked CAMERA. Take video cable that came with system and connect from enclosure marked MONITOR to where cable was removed.

Connect Wire Harness

Take wire harness (noted above) and connect to computer enclosure marked DATA.

Fuse

Insert (1 Amp) fuse for chassis power (reference chassis power above).

Start Up

If there are any problems in the following start up process, refer to Appendix B Troubleshooting.

Turn the ignition key to the ON position, making sure the monitor is also turned on. An initialization screen should come up first on the monitor. After 10 seconds it should turn off and the CHECKLIST screen should come up.

Sequence through the screens by pressing the view key and try all keys according to the operator's manual. Also, while a data screen is displayed, put coach in reverse – the data should turn off and the rear picture should be displayed.

Start the engine and check for proper operation of the display. If the display responds to the running engine by displaying engine data, finish the installation. If the display does not work correctly, refer to Appendix B Troubleshooting.

Appendix B Troubleshooting

1. Picture does not come up on monitor.

Check all connections of video cable – from camera cable to monitor.

2. No data screens are displayed on the monitor.

Check the data link connection and verify that you are getting 12 volts switched and unswitched power.
Check camera and monitor connections and verify they are correct.

3. The TODAY screen does not come up and the initialization screen stays on the monitor.

Check the data link connection and verify the positive and negative are connected properly.

Checking output voltage of data link from engine:

Positive DataLink	4-5 VDC
Negative DataLink	0-1 VDC

4. When the ignition is turned on the initialization screen always comes up resetting the first three screens to zero.

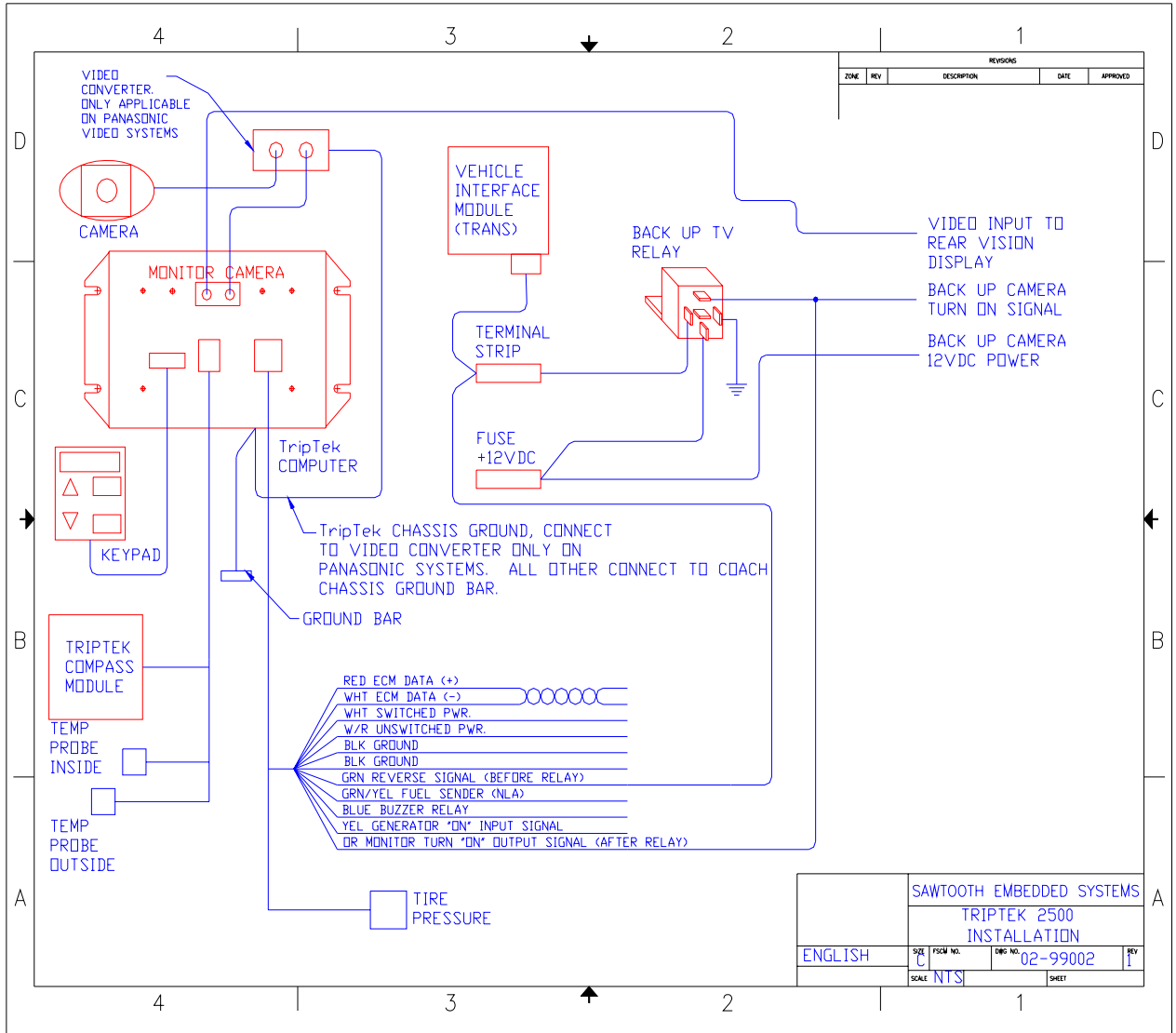
Power to system is connected to ignition (switched). Change to unswitched power.

5. Keys are not functioning properly on keypad.

Check that keypad connector is plugged in securely.

6. The data on the screen has a jitter.

Check all ground connections and they are grounded properly.



Drawing 02-99002, Installation Schematic