Technical Bulletin

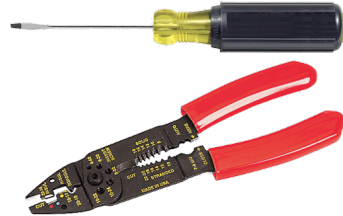# Single Lift Arm Sensor Relay Wiring Instructions

About This Document

This document is intended for installers and integrators of FleetMind Solutions' DVR (Trek) Mobile platform. It provides important installation notes and wiring instructions to assist you with installation of the single lift arm sensor relay.

Required Tools and Equipment

To perform the steps in this procedure, you will need the following tools and material:

- Slotted head screwdriver

- Wire strippers or cutting pliers

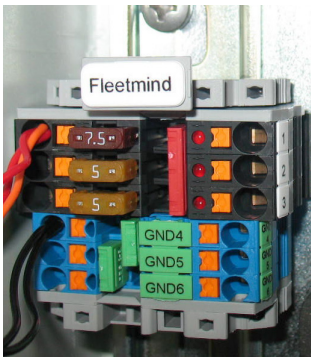- Lift Sensor adapter cable (P/N 926-0126-00.00)

- Generic I/O cable (P/N 926-0123-00.01

- Lift sensor relay (P/N 450-5006, LEGACY# 144-045.01)

- FLeetMind terminal block assembly (P/N: 440-5125, LEGACY # 1440022-03)

Estimated Time to Complete

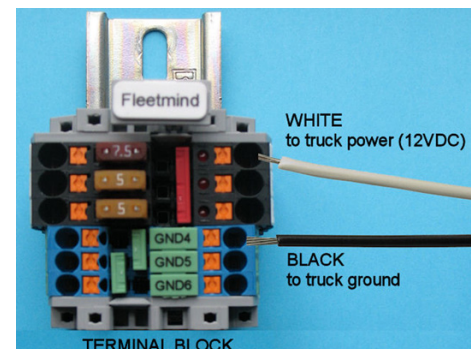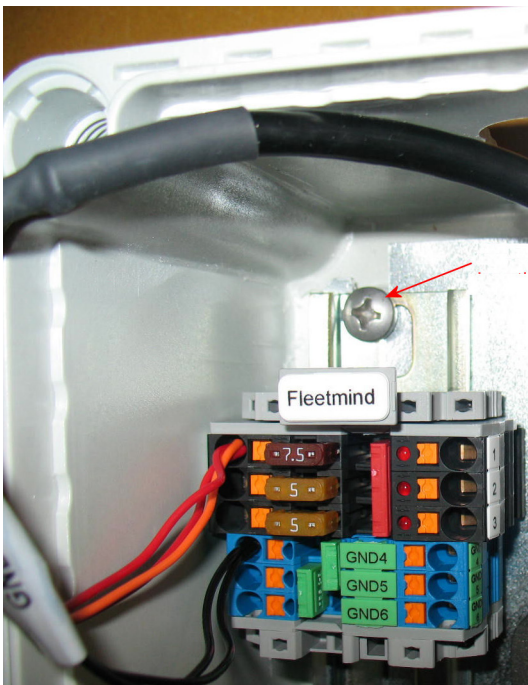Ths procedure can be completed in less than 20 minutes.

Safety Instructions

⚠️**IMPORTANT**: Failure to follow the instructions in this document may result in personal injury and cause equipment damage.

1. Read these safety instructions carefully.

2. All cautions and warnings on the equipment should be noted.

3. Electrical power to the equipment must be disconnected before attempting to disconnect or connect cabling to the components.
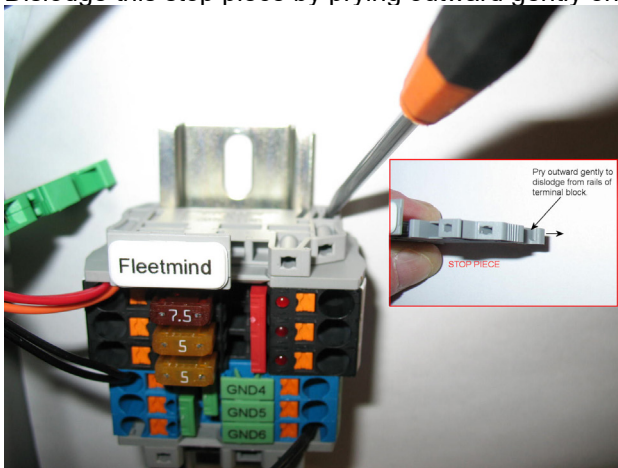
Preparation

1. Disconnect 12V truck power from the terminal block.

2. Using a Phillips head screwdriver, remove the (1 or 2) screw(s) that secure the terminal block to the metal base plate on the bottom of the Fibox enclosure.
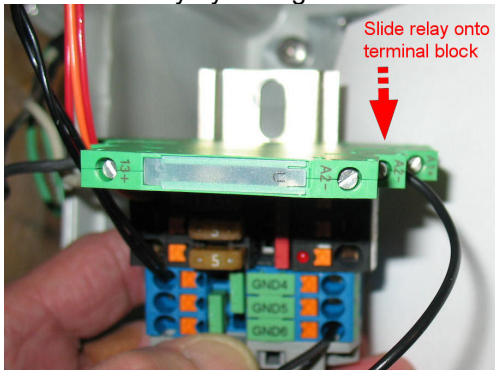   Set the terminal block and screw(s) aside for later mounting.

3. Mounted at the upper end of the terminal block is a stop piece, which prevents components on the block from sliding around.
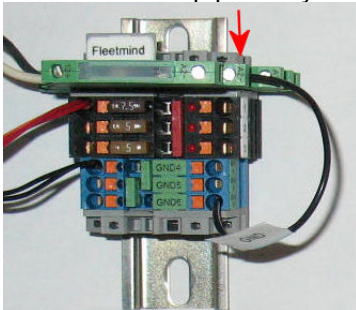   Dislodge this stop piece by prying outward gently on the tab, as shown in the following figure.

⚠ The stop piece may be mounted in the orientation opposite to that shown, i.e., with the tab on the left side. When reinstalling the stop piece, it is recommended to mount it in the orientation shown to facilitate future access, if required.

4. Mount the relay by sliding it onto the rails of the terminal block.
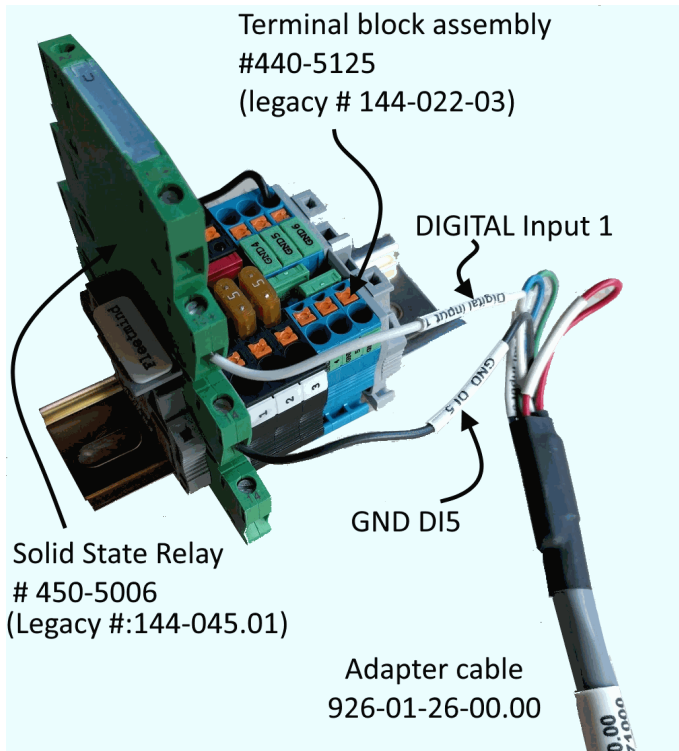

5. Reinstall the stop piece by snapping it into place on the rails of the terminal block.
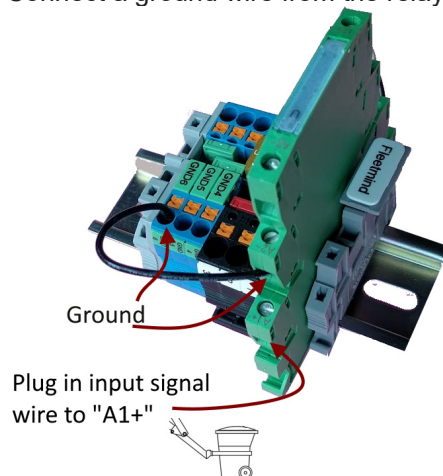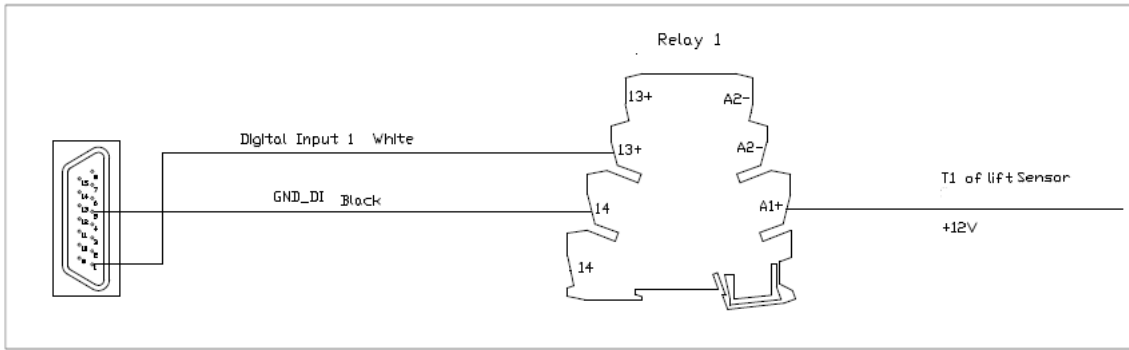
Wiring

1. Locate the lift sensor adapter cable and, if required, bare approximately 1/4 inch of the GND DI5 (black) and Digital Input 1 (white) wires.

2. Connect the GND DI5 wire to the ground terminal (14) on the lift sensor relay.

3. Connect the Digital Input 1 wire to the DI terminal (13+) on the relay.

Terminal block assembly
#440-5125
(legacy # 144-022-03)

DIGITAL Input 1

GND DI5

Solid State Relay
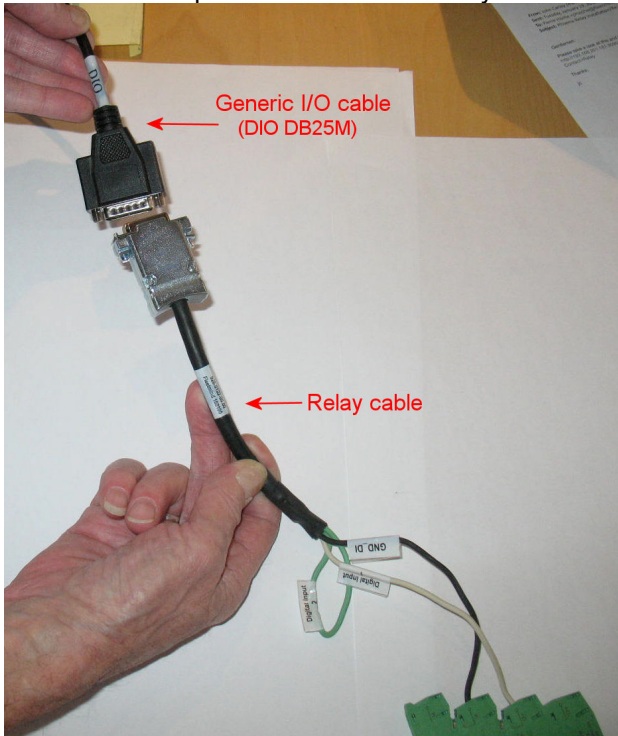# 450-5006
(Legacy #:144-045.01)

Adapter cable
926-01-26-00.00

4. Connect a ground wire from the relay to the terminal block, as shown in the following figure.

Ground

Plug in input signal
wire to "A1+"

5. Connect the input signal wire from your lift sensor to the A1+ terminal on the relay.

Relay 1

Digital Input 1 White

GND_DI Black

13+ A2−

13+ A2−

14 A1+

14

T1 of lift Sensor

+12V

6. Connect the 25-pin connector of the relay cable to the DIO (DB25M) connector on the Generic I/O cable.

Generic I/O cable
(DIO DB25M)

Relay cable

7. Connect the Mini D ribbon connector of the Generic I/O cable to the Generic I/O port on the rear panel of the DVR.

Mini D ribbon connector of
Generic I/O cable

Connect to Generic I/O port