

## FINCH II Display Configuration

### Topics

Overview

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### Overview

The FINCH II Display is highly **configurable** to suit most TD100 system applications. New features may also be added with a firmware update.

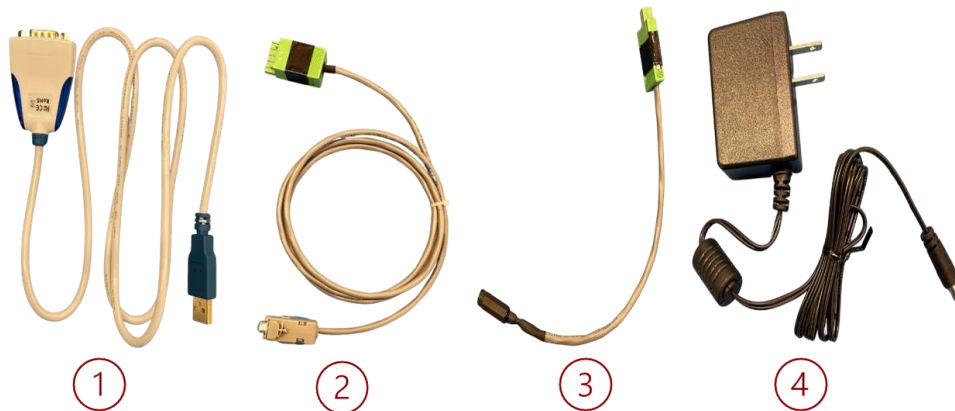
The FINCH II configuration is set at the factory for the most **common** tank truck and trailer installations. This configuration may be **customized** to suit a specialized application without returning it to the factory.

The same for firmware updating for new features. That may be done in the **field** as well. All that's required is a computer with SensorLink installed, a programming kit and an **Internet connection** for downloading a new firmware file.

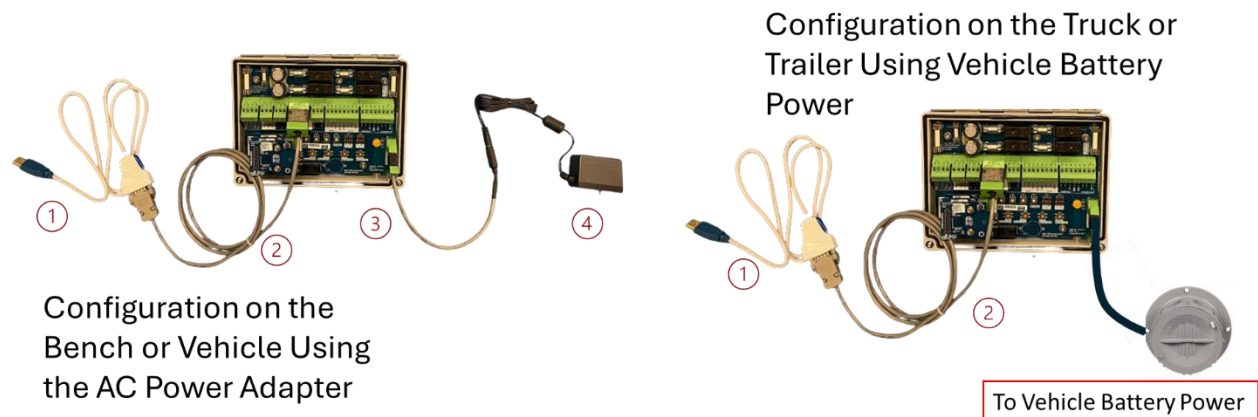
Configuring and updating the FINCH II Display is done through the FINCH II using either an AC power adapter **OR** vehicle battery power.

Shown are the programming kit components used for the FINCH II Display.

1. USB to RS232 Converter
2. RS232 Cable
3. Power Cable
4. AC Power Adapter

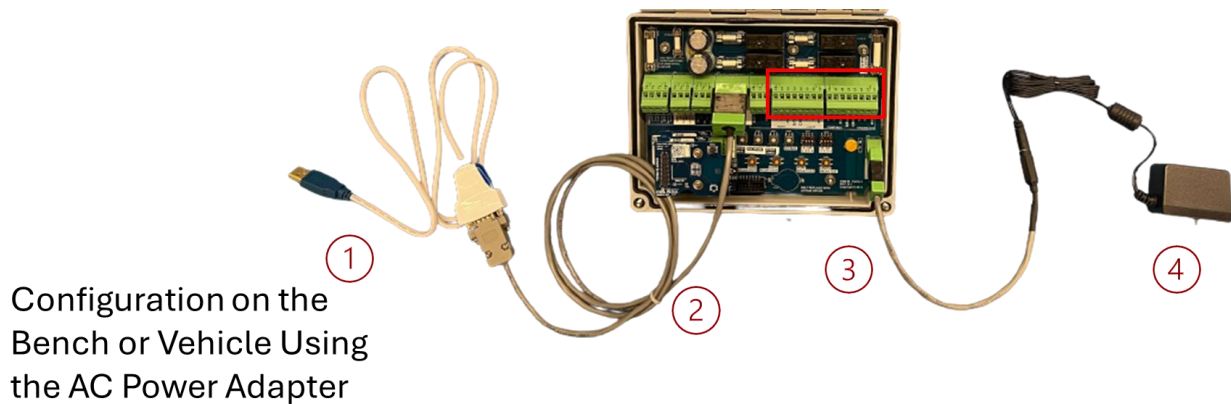


The FINCH II configuration and updating connection details are shown for AC power **or** vehicle battery power.



**Caution when using the AC Power Adapter for configuration and firmware updates.**

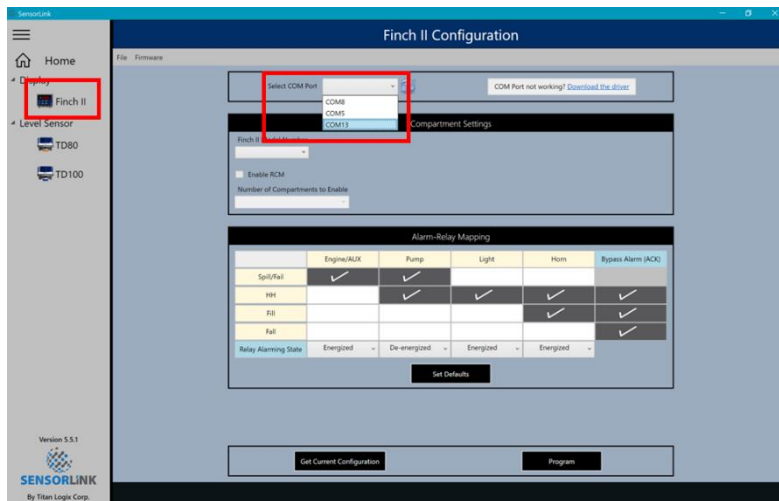
**Disconnect** all devices **connected** to the **Pump** Relay, **Horn** Relay, **Light** Relay and **Engine** Relay to prevent **damage** to the AC Power Adapter.



## Topic 1.1 FINCH II Display Configuration

### Preparation

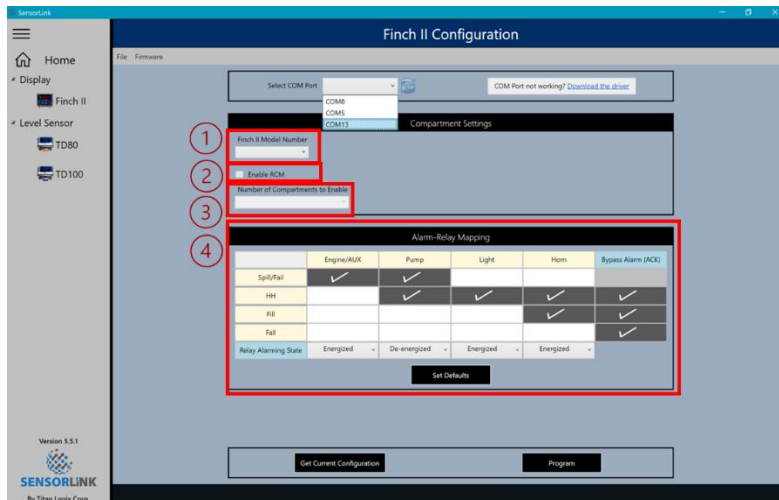
1. Once the programming kit is **connected** to the FINCH II Display and power is turned on, launch **SensorLink**. SensorLink may **prompt** you to **update** the app. **Accept** the update.
2. On the left side of the screen, select **Finch II**. Then Select the **COM Port** that is connected to the USB to RS232 Adapter. This is selected in the same way as when programming the TD100 Transmitter.



## Configuration Settings

The **configuration** settings are:

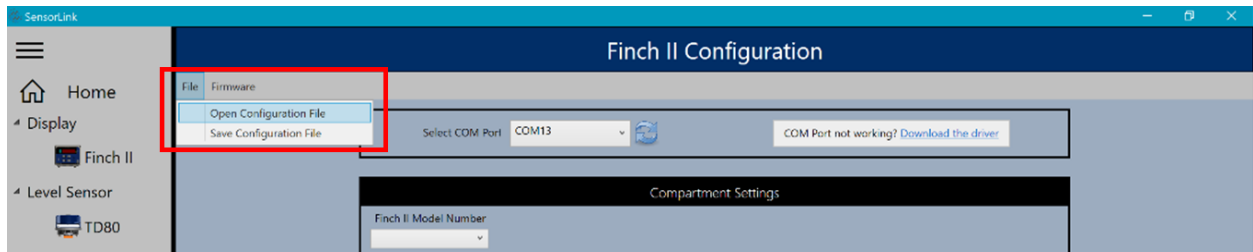
1. Finch II Model Number
2. Enable RCM
3. Number of Compartments to Enable
4. Alarm Relay Mapping



Note: Settings 1, 2 and 3 are **only** required when configuring the **FINCH II-6W** Display. They **may** be left blank for the FINCH II and FINCH II-W displays.

## Configuration Setting Options

You may **Open** a **previously** prepared configuration file and also **Save** the settings as a file for later use. This is useful for configuring a **fleet** of vehicles or for when the display has been **replaced**.

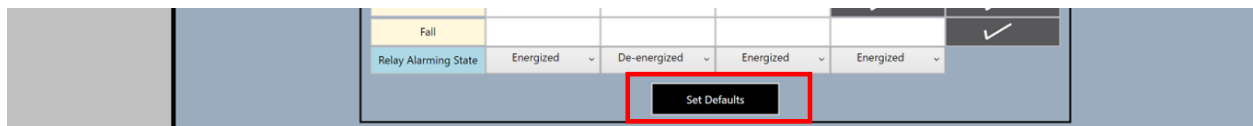


You may also get the **current** settings from the FINCH II Display to save as a file for later use.

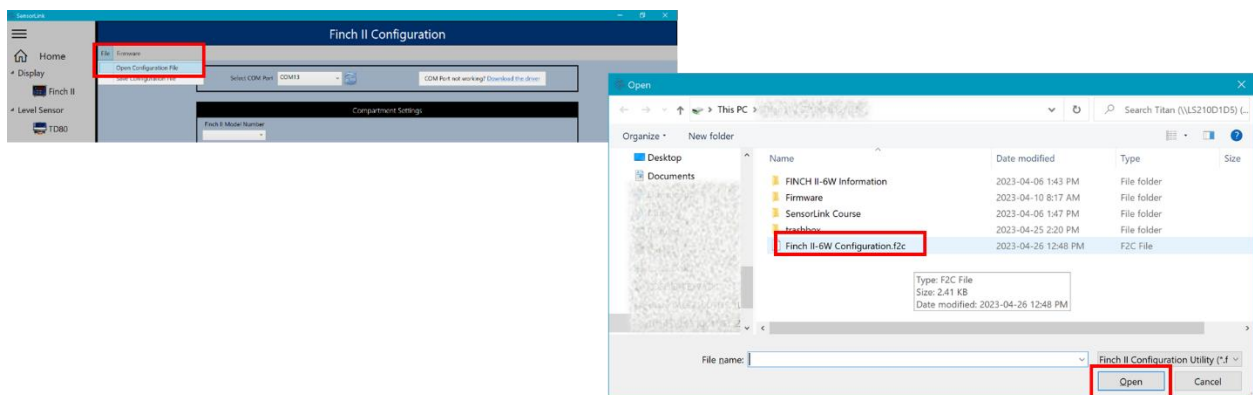
To get the **current** FINCH II Display configuration, Click the **Get Current Configuration** button.



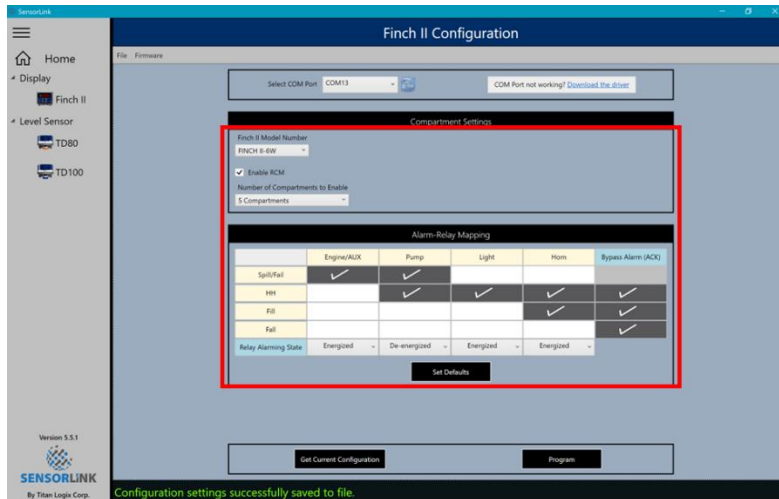
To **set** the FINCH II Display configuration back to the **factory default** settings, Click the Set Defaults button.



To Open a **previously** prepared configuration file, Click **File** at the top of the screen and then click **Open Configuration File** and select the file.

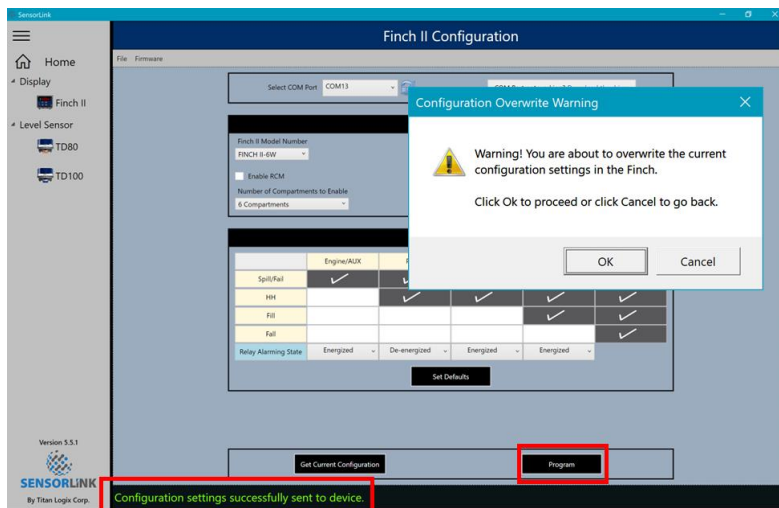


Configuration **settings** are always able to be entered or modified **manually**.



## Configuration Programming

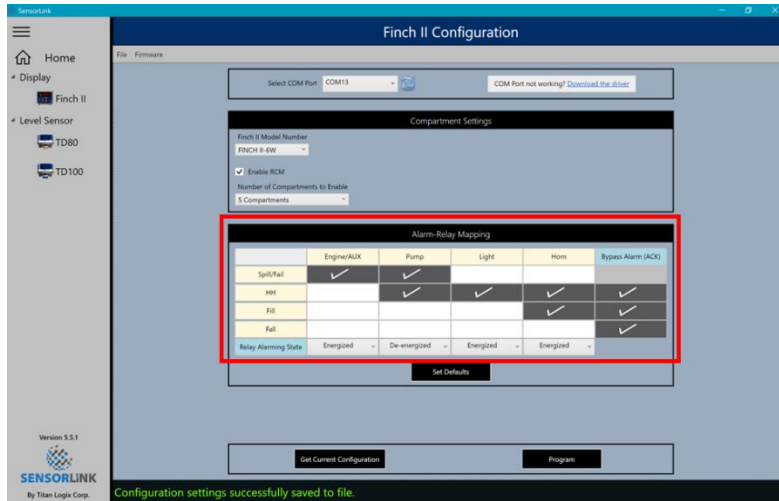
1. Once the configuration has been set, click the **Program** button. This process is similar to programming the TD100 Transmitter.
2. A window will pop up reminding you that the FINCH II configuration will be overwritten by continuing.
3. A **message** is shown indicating programming success or failure.
4. Once the configuration has been completed, you may **disconnect** the programming kit.



## Topic 1.2 What The Relay Mapping is Actually Doing

1. The **Alarm Relay Mapping** configures the **Engine, Pump, Light** and **Horn** relays to respond to specific TD100 and FINCH II Alarms and Alerts.

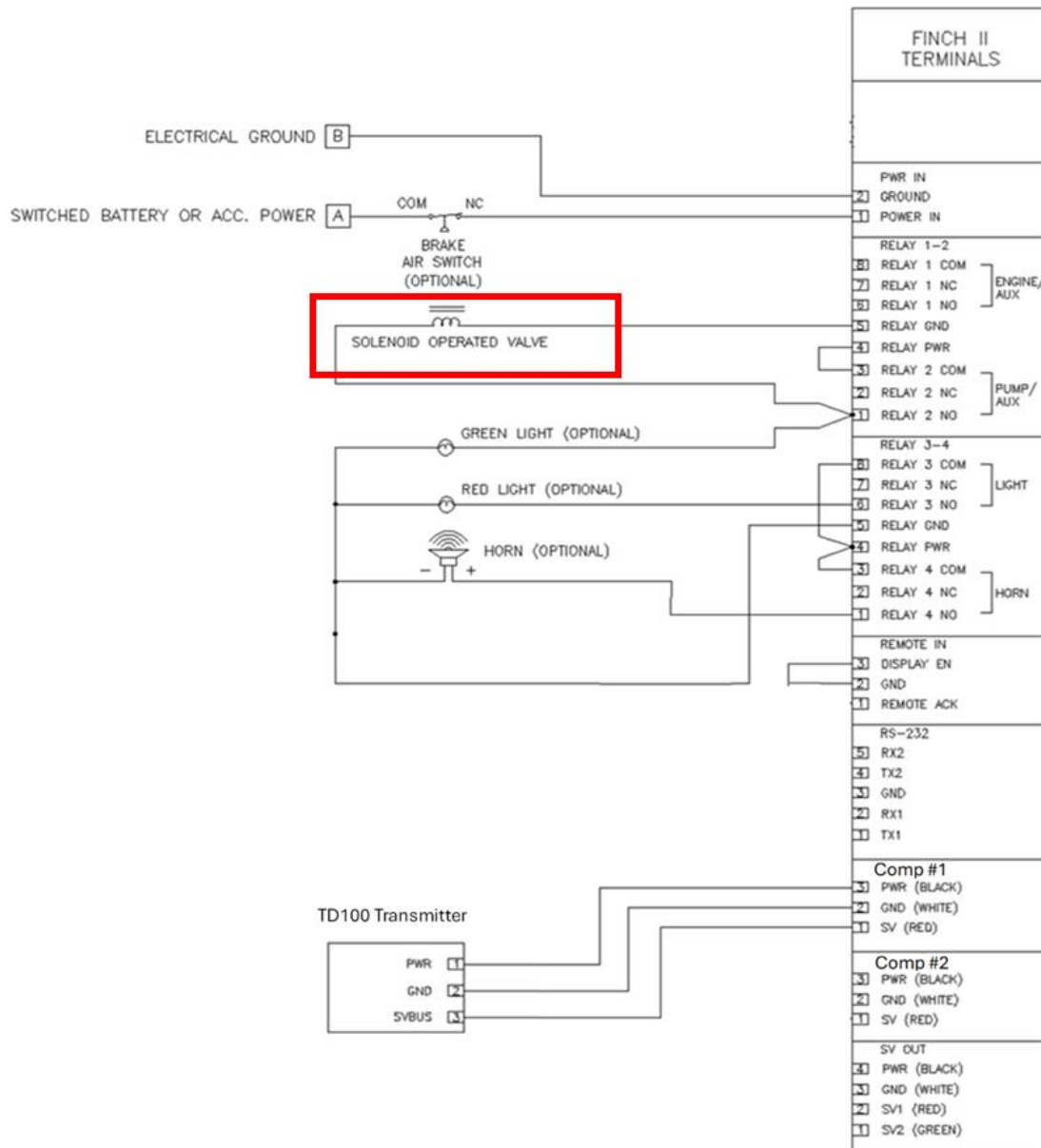
2. Each FINCH II relay is **independently** configured for system alarms and alerts.
3. Some relays are **safety-related** and are responsible for controlling the Overfill and Spill prevention system.
4. Other relays **alert** the driver for approaching Fill and Fall tank levels.



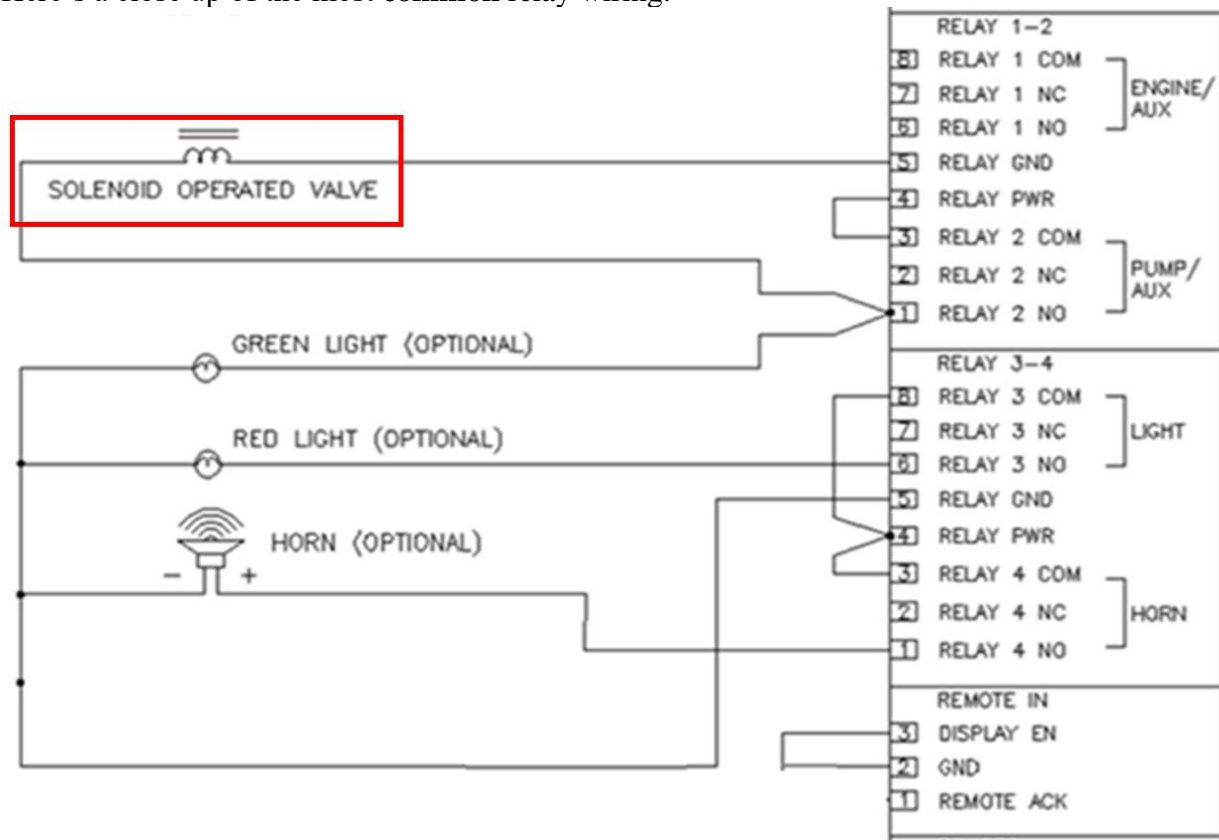
## Pump or Loading Valve Control for Overfill and Spill Prevention

Shown is the most **common** relay wiring for Spill prevention and uses the factory default settings. No configuration is required for this system.

**Optional** components that may be installed depending on customer requirements are included.



Here's a close up of the most **common** relay wiring.





## Engine Kill for Overfill and Spill Prevention

Occasionally, an **older** truck needs to be upgraded for Overfill and Spill prevention. Usually, the loading pump is driven by a **shaft-coupled PTO**.

The easiest method to prevent a spill while loading is to **kill** the engine on an alarm. Kill the engine, the **PTO** stops rotating and the pump **stops** pumping.

