FloTech FT555PA/PW Automatic Truck Overfill System Tester

**Optic/5-Wire Systems
Thermistor/2-Wire Systems
Ground Continuity System
Truck ID Module**

10902PA Rev C

**Dixon
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Cincinnati, Ohio**

Table of Contents

Introduction

This Manual describes the features, use, and maintenance of the FT555PA/PW Automatic Truck Overfill System Tester. The FT555PA/PW is compatible with all makes of Optic sensor systems, 2 wire Thermo-Optic systems, and truck onboard monitor systems regardless of manufacture as long as they are compatible with API RP1004: 2003 recommended practice.

FT555PA/PW Testers come in two variations:

- **Option 1 (FT555PA) is for all US markets.**
- **Option 2 (FT555PW) is for all Non-US markets.**

Main Features

The FloTech FT555PA/PW Automatic Truck Overfill System Tester has the following features:

- Automatically test all 4 test functions, Optic/5-wire Sensor, Thermistor/2-wire Sensor, Ground Bolt or Ground Continuity, and TIM number.
- Test all API 5 wire optic sensor systems and report the number of functional / wetted sensors*.
- Test 2 wire Thermo–Optic sensors and report the number of functional / wetted sensors*.
- Monitors up to eight compartments.
- Test Ground Bolts with both forward/reverse continuity check.
- Read Truck ID Modules and report serial number in display
- Perform "WET TEST" to report when sensors are wetted using integrated Alarm.
- Configure auto test to perform all selected tests at once.
- Configure maximum number of compartments.
- Software can be upgraded to include new tests and future expanded testing and troubleshooting capability.

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*   Optic/5-Wire Sensor and Thermistor/2-Wire Sensor tests will only indicate correct number of functional / wetted sensors for systems without an onboard monitor.

FloTech FT555PA/PW Automatic Truck Overfill System Tester
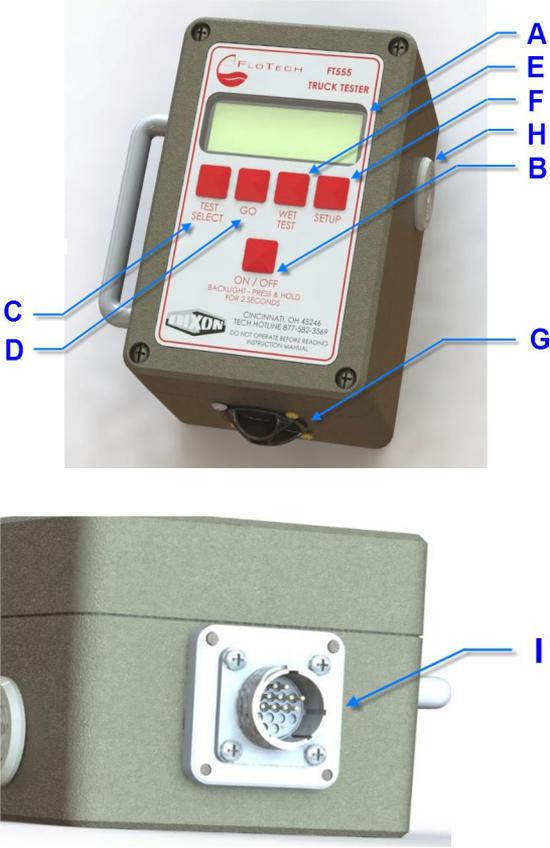
Fig. 1 FT555PA/PW Automatic Truck Tester

Knurled screw placement for THERMISTOR and OPTIC configurations
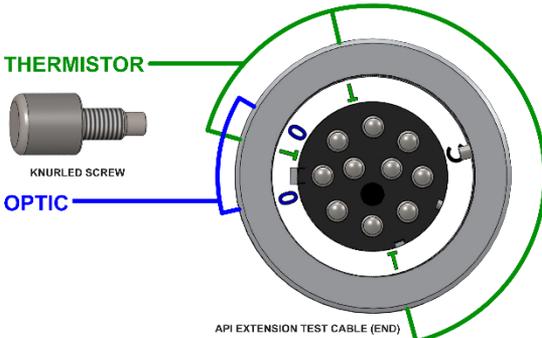
Fig. 2 FT555PA/PW API Connector Setup

FT555PA/PW Indicators

A) LCD SCREEN
The LCD screen is the main display where test selection, test results, and test instructions are displayed. Screen backlight is enabled using the ON/OFF button.

B) ON/OFF BUTTON
Press and release this button to turn the FT555PA/PW Automatic Truck Tester on and off. The unit will automatically turn off after 10 minutes. Press and hold this button for 2 seconds and the backlight will illuminate.

C) TEST SELECT BUTTON
Press and release this button to cycle through the available tests.

D) GO BUTTON
Press and release this button to start the selected test.

E) WET TEST BUTTON
Press and release this button while in the Optic/5-Wire or Thermistor/2-Wire Test mode and the wet test feature will begin. Pressing and releasing any button will stop the wet test.

F) SETUP BUTTON
Press and release this button to enter the set up screens.

G) BATTERY DOOR
Twist to open, hold two D cells, positive points towards battery door (out).

H) ALARM
Audible alarm sounds when FT555PA/PW Automatic Tester is in WET TEST mode and sensor is wetted.

I) API PLUG ADAPTOR SOCKET
Compatible with API extension test cable.

Unpack Unit and Initial Setup

Step 1) When unpacking the FT555PA/PW Automatic Truck Tester, you will find the following:

   a) FT555PA/PW Automatic Truck Tester
   b) Two "D" size batteries
   c) Cable Kit
   - PA style see page 32
   - PW style see page 43
   d) This instruction manual

Step 2) Remove the battery door by turning counter clock wise until door opens. Insert two "D" size batteries with positive battery terminal facing out of the opening. Reinstall battery door by turning clockwise.

DO NOT FORCE BATTERY DOOR OPEN OR CLOSED

Power On/Off

Press and release the ON/OFF button once to turn the tester on. Press and release the button again to turn the tester off. The tester has a display back light for dark conditions. After turning on the tester, press and hold the ON/OFF button for 2 seconds and the back light will turn on. Press and hold again for 2 seconds and the back light will turn off.

This manual will **ONLY** show the English language version of all the screens.

First Time Startup – Display Language Setup

The FT555PA/PW allows the user to select one of the following languages when the tester is turned on for the first time:

- English
- French
- German
- Spanish.

Press and release the ON/OFF button once. The FT555PA/PW will show the screen below:
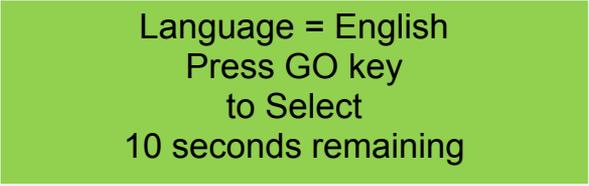
> Language = English
> Press GO key
> to Select
> 10 seconds remaining

The display language setup screen for each display language will be shown for 10 seconds. When the user recognizes the desired display language to be used with the tester, the "GO" key should be pressed and released one time.

The following screen will be displayed:
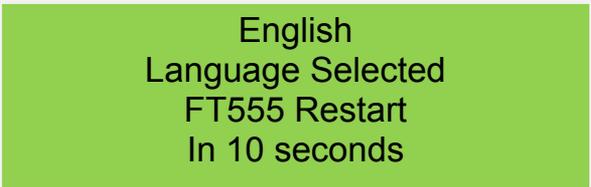
> English
> Language Selected
> FT555 Restart
> In 10 seconds

The remaining 3 languages will show similar screens to allow these display languages to be selected.

Go to section **Initial Startup Screen**

Normal Startup - After Display Language Has Been Setup

Press and release the ON/OFF button once. The FT555PA/PW will show the screen below:

Initial Startup Screen

After the FT555PA/PW starts/restarts, the following screen will be shown in the selected display language.

```
        FT555 Truck Tester

           Version X.XX
    Battery Status ■ ■ ■ ■ ■
```
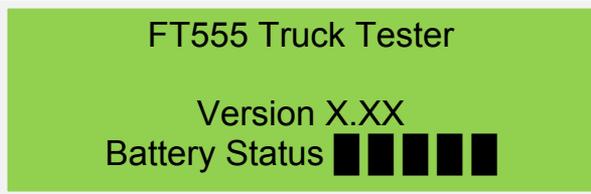
The screen above will be the initial display screen every time the FT555PA/PW Automatic Truck Tester is turned on. This screen shows the firmware version of the FT555PA/PW and the battery health status in bars. 5 bars represent full battery capacity.

If the bars displayed are 2 or less, a warning beep will sound and a warning message (see below) will flash for a few seconds. Batteries should be changed at your next convenience.

```
        FT555 Truck Tester

           Version X.XX
      WARNING: Battery Low
```
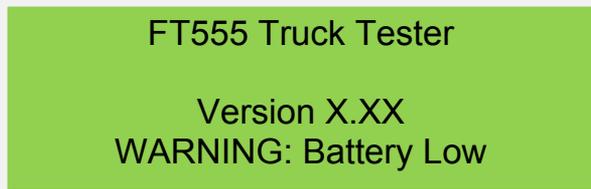
Initial System Setup – one time only

The screen below is shown only at initial system setup. It allows the user to customize the operation of the FT555PA/PW Automatic Truck Tester suit his needs.

```
            Initial System Setup
```

Go to section **Setup Instructions – Initial Startup Only**

Normal Operations

This is main screen during normal operations

```
              Press Key
              Test Select
                  or
                Setup
```

Go to section **Selecting Test Options**

Setup Instructions – Initial Startup Only

If the language selected was English, the FT555PA/PW Automatic Truck Tester allows for the use of 2 different name styles for the sensors to be tested:

- "Optic / Thermistor"
- "5-Wire / 2-Wire"

French and German default to a "5-Wire / 2-Wire" sensor name style

Spanish defaults to an "Optic / Thermistor" sensor name style.
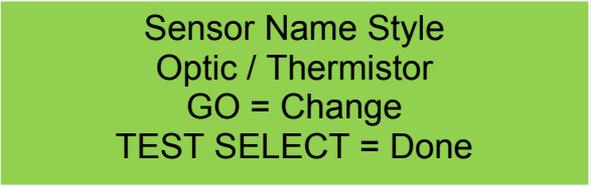
> Sensor Name Style
> Optic / Thermistor
> GO = Change
> TEST SELECT = Done
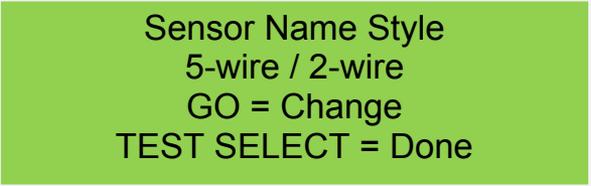
> Sensor Name Style
> 5-wire / 2-wire
> GO = Change
> TEST SELECT = Done

Select the Sensor Name Style to be used.

Press and release the TEST SELECT button to move to the next SETUP screen

Go to section **Setup Instructions – Continued**

Setup Instructions – Normal Operation

At the screen below, press and release the SETUP key to enter the setup mode.

> Press Key
> Test Select
> or
> Setup

Setup Instructions – Continued

Max Optic Comps = #   (English or Spanish)
Max 5-Wire Comps = #   (English, French or German)
Press and release the GO button to toggle between 6, 8 or 9 maximum number of compartments. Generally, the USA has a maximum of 6 compartments signals per one socket and Canada or European regions will have a maximum of 8 or 9. Once the correct number of maximum compartments is displayed, Press and release the TEST SELECT button to move to the next SETUP screen.

> Max Optic Comps = 6
>
> GO = Change
> TEST SELECT = Next

> Max 5-Wire Comps = 6
>
> GO = Change
> TEST SELECT = Next

Max Therm Comps = #   (English or Spanish)
Max 2-Wire Comps = #   (English, French or German)
Press and release the GO button to toggle between 6 and 8 maximum number of compartments. Generally, the USA has a maximum of 6 compartments signals per one socket and Canada or European regions will have a maximum of 8. Once the correct Maximum Compartments count is showing, press and release the TEST SELECT button to move to the next SETUP screen.

> Max Therm Comps = 6
>
> GO = Change
> TEST SELECT = Next

> Max 2-Wire Comps = 6
>
> GO = Change
> TEST SELECT = Next

AutoTest Optic/Therm   (English or Spanish)
AutoTest 5-wire/2-wire   (English, French or German)
Some regions may not have a need to test optic / 5-wire or thermistor / 2-wire type systems as none are found in that region. Example, trailers in California do not have Thermistor sockets so there is no need to perform the Thermistor test. In this case the Optic / 5-wire test would be enabled.

This screen will enable or disable the optic / 5-wire or thermistor / 2-wire tests when performing an automatic test of the trailer overfill system. This configuration is only for the automatic testing mode. All four tests are available in the manual test selection.

If English(Optic/Therm) or Spanish display language selected:

Press and release the "GO" button to choose between "Enable BOTH", "Enable OPTIC" or "Enable THERM". Press and release the "TEST SELECT" button to move to the next screen.
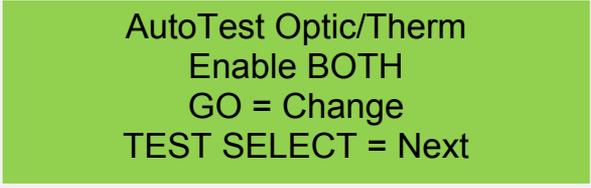
```
AutoTest Optic/Therm
    Enable BOTH
    GO = Change
 TEST SELECT = Next
```

If English(5-wire/2-wire), French or German display language selected:

Press and release the "GO" button to choose between "Enable BOTH", "Enable 5-wire" or "Enable 2-wire". Press and release the "TEST SELECT" button to move to the next screen.
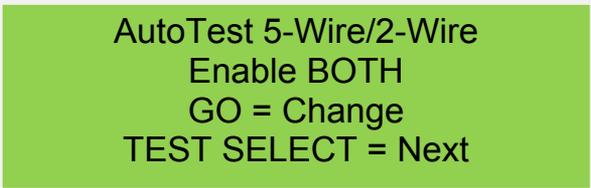
```
AutoTest 5-Wire/2-Wire
    Enable BOTH
    GO = Change
 TEST SELECT = Next
```

Auto Test Ground Continuity System

1. Press and release GO button to select either Ground Bolt or Continuity. Once the selection has been made, press TEST SELECT to move to the next screen. See step 2 for Continuity or step 3 for Ground Bolt.
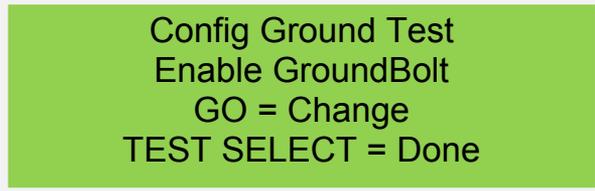
    Config Ground Test
    Enable GroundBolt
    GO = Change
    TEST SELECT = Done

2. **Continuity**
    If you selected Continuity, the screen below will be shown. Press and release the GO button to Enable or Disable the Auto Test function. Press and release the TEST SELECT button to move to the Automatic Test Screen. See Performing Automatic Test Function on page 18
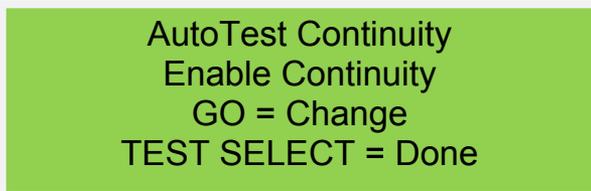
    AutoTest Continuity
    Enable Continuity
    GO = Change
    TEST SELECT = Done

3.

Ground Bolt

If you selected Ground Bolt, the screen below will be shown. Press and release the GO button to Enable or Disable the Auto Test function. Press TEST SELECT to move to the Automatic Test screen. See Performing Automatic Test Function on page 18

```
AutoTest GroundBolt
Enable GroundBolt
GO = Change
TEST SELECT = Next
```
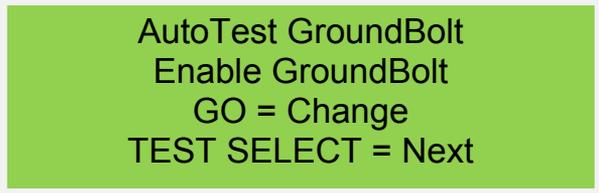
Auto Test Truck ID Module

Press and release the GO button to ENABLE or DISABLE the Truck ID Module test during the automatic testing. Press and release the TEST SELECT button to exit the SETUP mode and return you to the "PRESS KEY/ TEST SELECT" screen.

```
AutoTest TruckIDMod
Enable Truck IDMod
GO = Change
TEST SELECT = Next
```

–
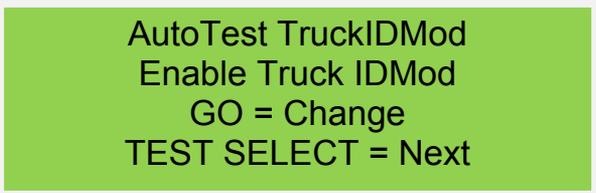
Selecting Test Options

When at the "Press Key" screen, each time the TEST SELECT button is pressed and released, the tester will cycle through each of the five available testing modes:

AUTOMATIC TEST
OPTIC or 5-WIRE TEST
THERMISTOR or 2-WIRE TEST
GROUND BOLT or CONTINUITY TEST
TRUCK ID MODULE TEST

Automatic Test

This test option will automatically test all of the available test options previously enabled in the setup procedure above, and report the findings in a PASS / FAIL screen.

Step 1) Connect API Extension Test Cable
Step 2) Press and release the ON/OFF button to turn on the FT555PA/PW Automatic Truck Tester. When "Press Key" screen appears, press and release TEST SELECT button one time so the "Automatic Test" screen appears.
Step 3) Press and release the GO button to start the test. Follow the prompts listed in the display screen.

Automatic Test

Press GO to Start

Automatic Test
Optic Mode
Connect OPTIC socket
Press GO to Continue

Automatic Test
5-Wire Mode
Connect 5-Wire socket
Press GO to Continue

Step 4) Move the J slot screws to match the J-Slot configuration of the optic/5-wire socket.
Step 5) Connect the tester to the optic/5-wire socket.
Step 6) Press and release GO button to start the test.

Step 7) Once the optic/5-wire portion of the test is complete, disconnect the tester from the optic/5-wire socket.

Step 8) Move the J-Slot Screws to match the configuration of the thermistor/2-wire socket.

Step 9) Connect the tester to the thermistor/2-wire socket. Press and release the GO button to start the thermistor/2-wire portion of the test.

> Automatic Test
> Thermistor Mode
> Connect THERM socket
> Press GO to Continue

> Automatic Test
> 2-Wire Mode
> Connect 2-Wire socket
> Press GO to Continue

The tester will automatically perform the ground bolt and/or pin 9/10 continuity, and/or Truck ID Module tests if these options are activated and enabled in the set up screen.

If the tester encounters a failure during any portion of the automatic test it will halt and display the failure on the display.

When the test is complete, the screen will display the PASS / FAIL status of each test performed.
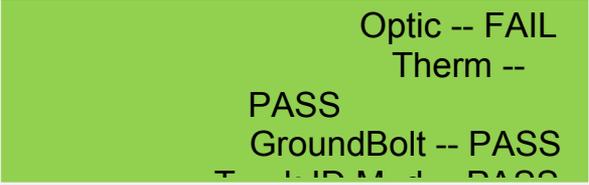
```
                    Optic -- FAIL
                     Therm --
        PASS
        GroundBolt -- PASS
```

```
                  5-Wire -- FAIL
                  2-Wire -- PASS
            GroundBolt -- PASS
          Truck ID Mod -- PASS
```

Step 10) Press and release the TEST SELECT button to move on to a new test. Press and release the GO button to restart the test, or press and release the ON/OFF button to turn the tester off.

Optic/5-Wire Test

The API Optic/5-Wire signal from the trailer mounted sensors or onboard monitor will be tested and report a Pass/ Fail.

OPERATION NOTE:
This test will also report the number of good sensors IF THE SENSORS ARE WIRED DIRECTLY TO THE SOCKET AND NO ONBOARD MONITOR IS USED.   Should your trailer have an onboard monitor the tester will test the Onboard Monitor as if it were a single sensor. The status of sensor connected to an Onboard Monitor does not pass through the monitor to the socket.

Step 1) Connect the API Extension or J560 Extension Test Cable.
Step 2) Move the J-Slot thumb screws to the correct holes to match the type of socket to be connected. Follow the "O" and "T" markings on the plug body. Refer to Figure 2, on page 4.
Step 3) Connect the FT555PA/PW Automatic Truck Tester to the trailer socket.
Step 4) Press and release the ON/OFF button to turn on the FT555PA/PW Automatic Truck Tester. When "Press Key" screen appears, press and release the TEST SELECT button two times so that the Optic/5-Wire Test screen appears.

Step 5) Press and release the GO button to start the test. When the test is complete the screen will display the PASS / FAIL status and a wet/dry status for each of the compartments enabled during the setup. A black square under the number indicates a dry sensor or a dash under the number indicates a wet or missing sensor. If connected to an Onboard Monitor, ONLY dashed lines will show and no black bars.
Step 6) Press and release the TEST SELECT button to move on to a new test. Press and release the GO button to restart the test, or press and release the "ON/OFF" button to turn the tester off.

```
              Optic Test
             Test PASSED
    Compartment  1 2 3 4 5 6
 _  Status       ■ ■ ■ ■ ■ ■
 ■
```

```
              5-Wire Test
             Test PASSED
    Compartment  1 2 3 4 5 6
 _  Status       ■ ■ ■ ■ ■ ■
 ■
```

The screens ABOVE show the optic/5-wire pass condition when connected to sensors. A black square will be shown for each dry working sensor. A dash under the number indicates a wet or missing sensor.

The screens BELOW show the optic/5-wire pass condition when connected to an onboard monitor. When connected to an onboard monitor, optic/5-wire pass condition will show dashes for sensor status. Onboard monitors do not have a diagnostic connection to the rack monitor. They do not pass the number of good sensors through to the rack monitor.

```
              Optic Mode
             Test PASSED
    Compartment  1 2 3 4 5 6
    Status       _ _ _ _ _
```

```
              5-Wire Mode
             Test PASSED
    Compartment  1 2 3 4 5 6
    Status       _ _ _ _ _
```

Thermistor/2-wire Test

The API Thermistor signal from the trailer mounted sensors or onboard monitor will be tested and report a Pass/ Fail.

OPERATION NOTE:
This tester is not compatible with the old style analog "green or silver tipped sensors. These devices require the FT510 tester.

Step 1) Connect API Extension Test Cable
Step 2) Move the J-Slot thumb screws to the correct holes to match the type of socket to be connected. Follow the "O" and "T" markings on the plug body. Refer to Figure 2, on page 6.
Step 3) Connect the FT555PA/PW Automatic Truck Tester to the trailer socket.
Step 4) Press and release the ON/OFF button to turn on the FT555PA/PW Automatic Truck Tester. When "Press Key" screen appears press and release TEST SELECT button three times so the Thermistor/2-Wire Test screen appears.
Step 5) Press and release the "GO" button to start the test. When the test is complete the screen will display the PASS / FAIL status and a wet/dry status for each of the compartments enabled during the setup. A square under the number indicates a dry sensor or a dash under the number indicates a wet or missing sensor. If connected to an Onboard Monitor dashed lines will show and no black bars.
Step 6) Press and release the TEST SELECT button to move on to a new test. Press and release the GO to restart the test, or press and release the ON/OFF button to turn the tester off

```
            Thermistor Mode
              Test PASSED
    Compartment   1  2  3  4  5  6
    Status        _  _  _  _  _
```

```
             2-Wire Mode
              Test PASSED
    Compartment   1  2  3  4  5  6
    Status        _  _  _  _  _
```

.

Ground Bolt Test

The Ground Bolt will be tested using the forward and reverse test to confirm proper operation of the diode inside the ground bolt. The tester will report a Pass/ Fail.

Step 1) Connect API Extension Test Cable
Step 2) Move the J-Slot thumb screws to the correct holes to match the type of socket to be connected. Follow the "O" and "T" markings on the plug body. Refer to Figure 2, on page 6.
Step 3) Connect the FT555PA/PW Automatic Truck Tester to the trailer socket.
Step 4) Press and release the ON/OFF button to turn on the FT555PA/PW Automatic Truck Tester. When "Press Key" screen appears press and release the TEST SELECT button four times so the "Ground Bolt Test" screen appears.
Step 5) Press and release the GO button to start the test. When the test is complete the screen will display the PASS / FAIL status.
Step 6) Press and release the TEST SELECT" button to move on to a new test. Press and release the GO button to restart the test, or press and release the ON/OFF button to turn the tester off.
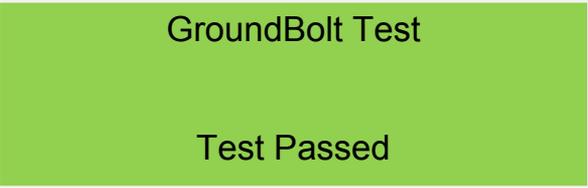
GroundBolt Test

Test Passed

Pin 9/10 Continuity Test

Pins 9 and 10 of the API socket will be tested for continuity and the result of the test will be shown as PASS or FAIL on screen.

Step 1) Move the J-Slot thumb screws to the correct holes to match the type of socket to be connected. Follow the "O" and "T" markings on the plug body.
Step 2) Connect the FT555 Automatic Truck Tester to the trailer socket.
Step 3) Press and release the ON/OFF button to turn on the FT555 Automatic Truck Tester. When "Press Key" screen appears press and release the TEST SELECT button four times so the "Ground Continuity Test" screen appears.
Step 4) Press and release the GO button to start the test. When the test is complete the screen will report either "PASS" or "FAIL".
Step 5) Press and release the TEST SELECT" button to move on to a new test. Press and release the GO button to restart the test, or press and release the ON/OFF button to turn the tester off.
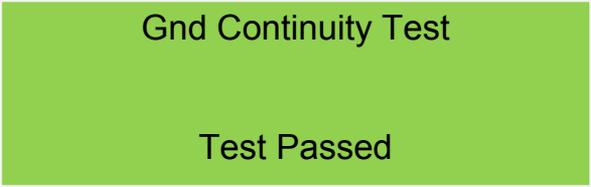
Gnd Continuity Test

Test Passed

Truck ID Module Test

The Truck ID Module will be tested and report the 12 digit serial number stored inside the ID module. If there is no Truck ID Module or the test fails the screen will show "TIM not found"

Step 1) Connect API Extension Test Cable
Step 2) Move the J-Slot thumb screws to the correct holes to match the type of socket to be connected. Follow the "O" and "T" markings on the plug body. Refer to Figure 2, on page 6.
Step 3) Connect the FT555PA/PW Automatic Truck Tester to the trailer socket.
Step 4) Press and release the ON/OFF button to turn on the FT555PA/PW Automatic Truck Tester. When "Press Key" screen appears press and release the TEST SELECT button five times so the "Truck ID Module Test" screen appears.
Step 5) Press and release the GO button to start the test. When the test is complete the screen will report the 12 digit serial number or show "TIM not found".
Step 6) Press and release the TEST SELECT" button to move on to a new test. Press and release the GO to restart the test, or press and release the ON/OFF button to turn the tester off.
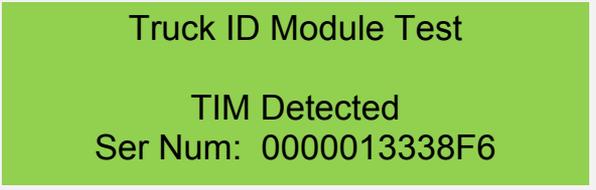
> ### Truck ID Module Test
>
> TIM Detected
> Ser Num: 0000013338F6

Optic/5-Wire Wet Test Thermistor/2-Wire Wet Test

NOTE: THE WET TEST FUNCTION IS INTENDED TO BE USED ON WORKING SYSTEMS. IF THE SYSTEM HAS A PROBLEM IT MUST BE REPAIRED BEFORE USING WET TEST.

Step 1) Connect API Extension Test Cable
Step 2) Move the J-Slot thumb screws to the correct holes to match the type of socket to be connected. Follow the "O" and "T" markings on the plug body for optic and thermistor style sockets, respectively. Refer to Figure 2, on page 6.
Step 3) Connect the FT555PA/PW Automatic Truck Tester to the trailer socket.
Step 4) Press and release the ON/OFF button to turn on the FT555PA/PW Automatic Truck Tester. When "Press Key" screen appears press and release the TEST SELECT button until the "Optic Test"/"5-Wire" or "Thermistor Test"/"2-Wire Test" screen appears, depending on the socket the tester is connected to.
Step 5) Press and release the WET TEST button to begin the wet test.

Optic Wet Test
Test Running
Sensor Wet

5-wire Wet Test
Test Running
Sensor Dry

Thermistor Wet Test
Test Running

Sensor Dry

2-Wire Wet Test
Test Running

Sensor Wet

Step 6) The FT555PA/PW will repeatedly test for the presence of any wet sensors connected to the socket.

Step 7) Dip test a compartment and listen for a number of beeps corresponding to the compartment number that was dipped. The display will also indicate the compartment number of the wet sensor***.**

Step 8) Continue testing each compartment.

Step 9) Stop the wet test by pressing and releasing any key.

Optic Wet Test
No Sensors Found
Check Connections
Cont = GO   Stop=Setup

5-Wire Wet Test
No Sensors Found
Check Connections
Cont = GO   Stop=Setup

```
        Thermistor Wet Test
          No Sensors Found
          Check Connections
Cont = GO            Stop=Setup
```

```
           2-wire Wet Test
          No Sensors Found
          Check Connections
Cont = GO            Stop=Setup
```

NOTE: IF THE TESTER DOES NOT SEE ANY SENSORS OR IS NOT CONNECTED, IT WILL DISPLAY THE ABOVE SCREEN UNTIL IT SEES A SENSOR OR THE TEST IS STOPPED.

* 1. The wet test function will only indicate correct wet compartment number for systems without an onboard monitor.

   2. Systems using an onboard monitor will only show sensor 1 wet when any sensor becomes wet.

FT555PA, Cable Kit Main Features

The FloTech FT555PA has the following capabilities through the API Extension Test Cable:

- Test trailers with API socket connections located in an enclosed cabinet.

- Test trailers with API socket connections located in tight, or hard-to-reach location.

-

The FloTech FT555PA has the following capabilities through the individual component Test Cables:

- Test individual optic/5-wire sensors.

- Test individual optic/5-wire plug and play sensors.

- Test individual thermistor/2-wire sensors.

- Test individual plug and play sensors.

- Test individual GroundBolts, GroundBalls, and GroundWires.

- Test individual Truck Identification Modules.

TRAILER TEST

A) API EXTENSION TEST CABLE

Use this cable to connect the FT555PA/PW to an API socket located in a small space or within a cabinet. By using this extension, the tester is free to sit wherever is convenient for the user. This test cable will allow all testing of your trailer through the installed API Socket.

INDIVIDUAL COMPONENT TEST

B) THERMISTOR/2-WIRE SENSOR TEST CABLE

Use this cable to connect the FT555PA/PW directly to one thermistor/2-wire sensor.

C) TIM UNIT TEST CABLE

Use this cable to connect the FT555PA directly to a truck identification module.

D) GROUND UNIT TEST CABLE

Use this cable to connect the FT555PA/PW directly to a groundbolt, groundball, or ground wire.

E) OPTIC/5-WIRE PLUG AND PLAY TEST CABLE

Use this cable in combination with the optic/5-wire sensor cable to connect to one optic/5-wire plug and play sensor.

F) OPTIC/5-WIRE SENSOR TEST CABLE

Use this cable to connect the FT555PA/PW directly to one or more optic/5-wire sensors.

G) PLUG AND PLAY TEST CABLE

Use this cable to connect the FT555PA/PW directly to one plug and play sensor.

*Tester is incompatible with the following thermistors: Scully SP-BL, SP-BLU, SP-BLH, Civacon Liberty 1510-1600

FT555PA Accessory Cable Kit
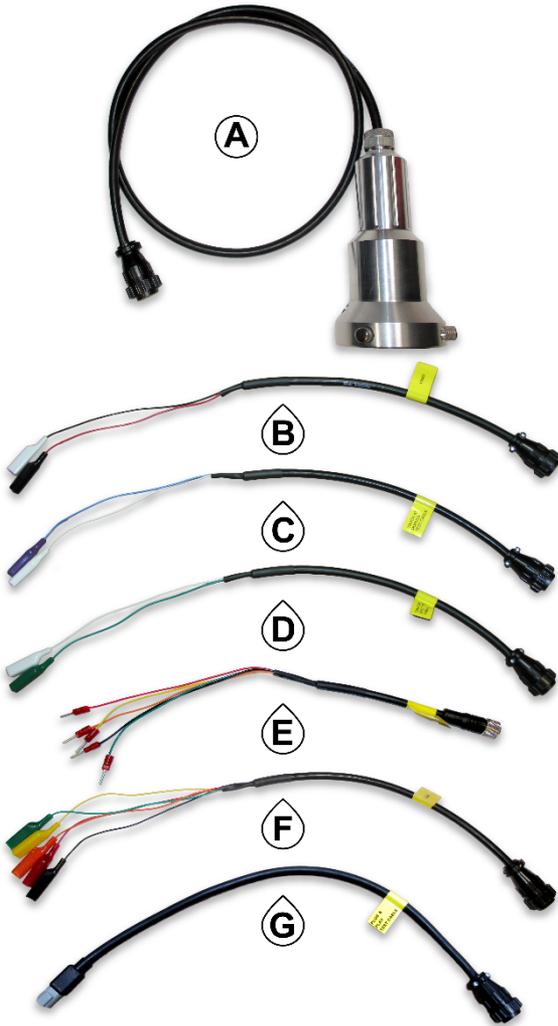
Fig. 1   ACCESSORY KIT CONTENTS

FT555PA, Cable kit User Instructions

Step 1) Choose any of the following cables to use with the FT555PA and reference their page numbers for instructions on use.

Cable Type	Instructions Found on
a) API Extension Test Cable	page 36
b) Thermistor/2-wire Sensor Test Cable	page 38
c) TIM Unit Test Cable	page 39
d) Ground Unit Test Cable	page 40
e) Optic/5-Wire P&P Test Cable	page 41
f) Optic/5-wire Sensor Test Cable	page 42
g) Plug and Play Test Cable	page 37

All test cables are to be connected as shown below
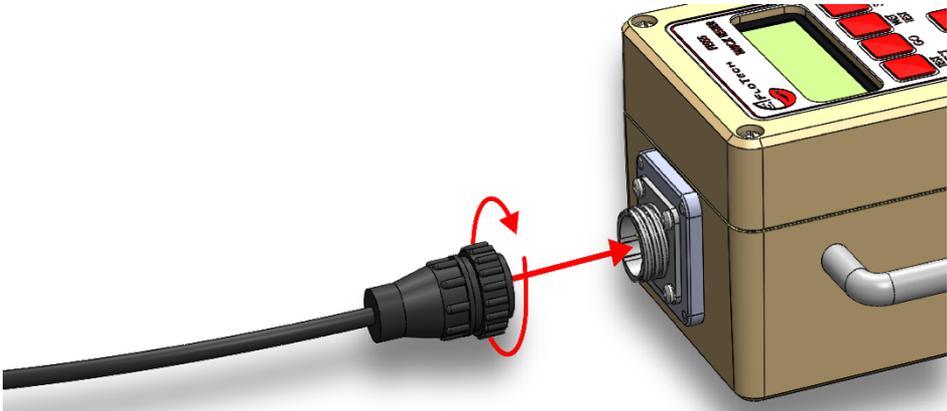
API Extension Test Cable

Step 1) Attach the API extension test cable to the adapter socket using the small circular plastic connection. **Hand tighten only.**

Step 2) Move the 3 J-slot thumb screws on the end of the API extension cable to match the socket it will be attached to. Refer to figure 2, on page 5.

Step 3) Connect the API extension cable to the desired socket.

Step 4) Use FT555PA/PW as normal. Refer to page 18 for information on how to perform each test.

Plug & Play Test Cable

Step 1) Attach the Plug & Play test cable to the adapter socket using the small circular plastic connection. **Hand tighten only.**

Step 2) Connect the Plug & Play test cable to the Plug & Play thermistor sensor.

Step 3) Press and release GO button to perform a single test or WET TEST for continuous testing of the sensor or sensor.

Note: If testing a competitors Plug and Play sensor, please order Dixon Bayco part number: 10688-002 Plug and Play gender test adapter.

Thermistor/2-wire Sensor Test Cable

Step 1) Attach the Thermistor/2-Wire Sensor test cable to the adapter socket using the small circular plastic connection. **Hand tighten only.**

Step 2) Connect both alligator clips to the appropriately colored wires on a thermistor sensor.

    a) **For Black and White sensors**: Connect the white and black alligator clips to the white and black wires of the sensor, respectively. Disregard color of tester cables.

    b) **For Red and Black sensors**: Connect the alligator clips corresponding to the red and black wires on the tester to the respective red and black wires of the sensor. Disregard color of alligator clips.

Step 3) Press and release GO button to perform a single test or WET TEST for continuous testing of the sensor or sensors.

TIM Unit Test Cable

Step 1) Attach the TIM Unit test cable to the adapter socket using the small circular plastic connection. **Hand tighten only.**

Step 2) Connect both alligator clips to the appropriately colored wire on a TIM Unit.

Step 3) Press and release GO button to perform a single test of the TIM Unit.

Ground Unit Test Cable

Step 1) Attach the Ground Unit test cable to the adapter socket using the small circular plastic connection. **Hand tighten only.**

Step 2) Connect both alligator clips to the appropriately colored wires on a GroundBolt/Groundball/GroundWire.

    a) **White alligator clip** should be connected to the body of a Groundball or Groundbolt, or the white wire of a GroundWire.

    b) **Green alligator clip** should be connected to the Green Cathode wire on all ground units.

Step 3) Press and release GO button to perform a single test of the Ground Unit.

Optic/5-Wire Plug and Play Test Cable

Step 1) Attach the optic/5-wire sensor test cable to the adapter socket using the small circular plastic connection. **Hand tighten only.**

Step 2) Connect the included 5 wire plug & play adapter to the plug and play sensor or string of plug and play sensors.

Step 3) Connect each of the 5 alligator clips on the optic sensor test cable to the appropriately colored wires on the 5 wire plug & play adapter as shown below.(**Matching colors**)
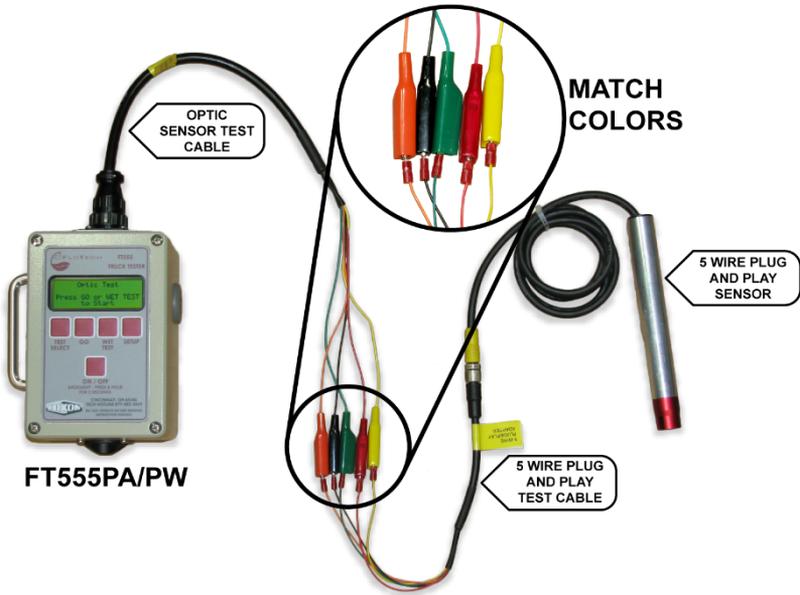
Step 4) Press and release GO button to perform a single test or WET TEST for continuous testing of the sensor.

Optic/5-Wire Sensor Test Cable

Step 1) Attach the optic/5-wire sensor test cable to the adapter socket using the small circular plastic connection. **Hand tighten only.**

Step 2) Connect each of the 5 alligator clips to the appropriately colored wire on an optic sensor or string or sensors. (**Matching colors**)

Step 3) Press and release GO button to perform a single test or WET TEST for continuous testing of the sensor or sensors.

FT555PW, Cable Kit Main Features

The FloTech FT555PW has the following capabilities through the API Extension Test Cable:

- Test trailers with API socket connections located in an enclosed cabinet.

- Test trailers with API socket connections located in tight, or hard-to-reach location.

The FloTech FT555PW has the following capabilities through the individual component Test Cables:

- Test individual optic/5-wire sensors.

- Test individual optic/5-wire plug and play sensors.

- Test individual thermistor/2-wire sensors.

- Test individual plug and play sensors.

- Test individual GroundBolts, GroundBalls, and GroundWires.

- Test continuity between two points.

- Test systems featuring a J560 socket.

TRAILER TEST

A) API EXTENSION TEST CABLE
Use this cable to connect the FT555PA/PW to an API socket located in a small space or within a cabinet. By using this extension, the tester is free to sit wherever is convenient for the user. This test cable will allow all testing of your trailer through the installed API Socket.

INDIVIDUAL COMPONENT TEST

B) THERMISTOR/2-WIRE SENSOR TEST CABLE
Use this cable to connect the FT555PA/PW directly to one thermistor/2-wire sensor.

C) CONTINUITY TEST CABLE
Use this cable to verify that pin 10 of the API socket has continuity to the trailer chassis.

D) GROUND UNIT TEST CABLE
Use this cable to connect the FT555PA/PW directly to a groundbolt, groundball, or ground wire.

E) OPTIC/5 WIRE PLUG AND PLAY ADAPTER
Use this cable in combination with the optic/5-wire sensor cable to connect to one optic/5-wire plug and play sensor.

F) J560 SOCKET TEST CABLE
Use this cable to connect the FT555PW directly to a J560 socket.

G) OPTIC/5-WIRE SENSOR TEST CABLE
Use this cable to connect the FT555PA/PW directly to one or more optic/5-wire sensors.

H) PLUG AND PLAY TEST CABLE
Use this cable to connect the FT555PA/PW directly to one plug and play sensor.
*Tester is incompatible with the following thermistors: Scully SP-BL, SP-BLU, SP-BLH, Civacon Liberty 1510-160

<u>FT555PW Accessory Cable Kit</u>
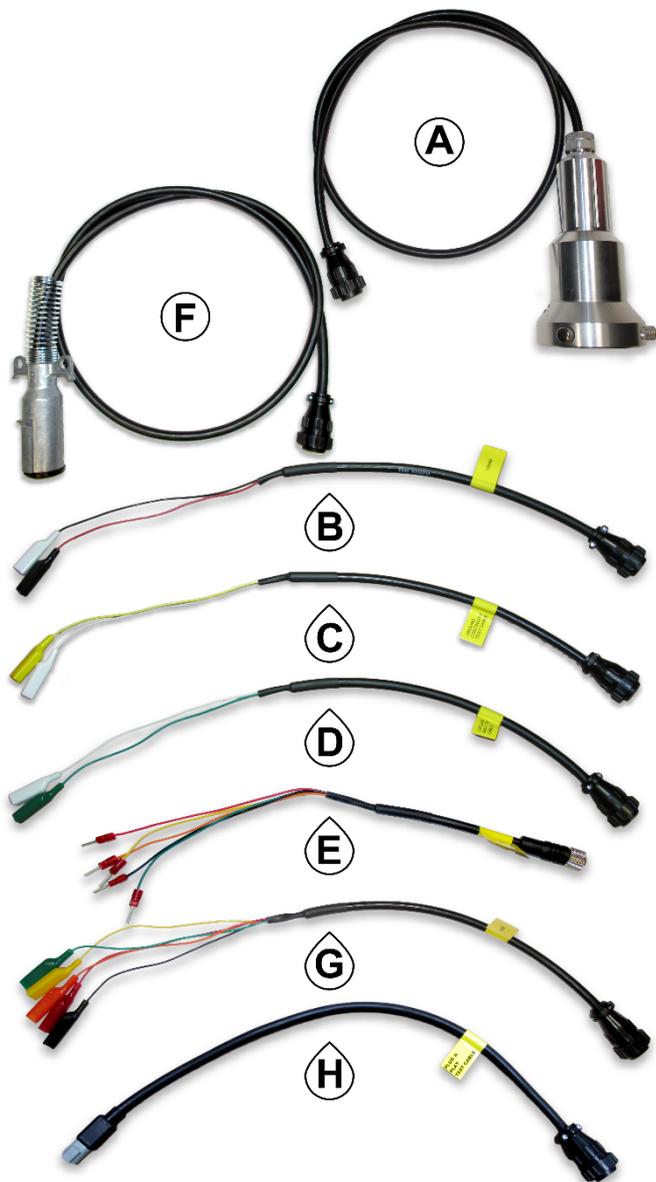
Fig. 2   ACCESSORY KIT CONTENTS

FT555PW, Cable Kit User Instructions

Step 1) Choose any of the following cables to use with the FT555PW and reference their page numbers for instructions on use.

Cable Type	Instructions Found on
a) API Extension Test Cable	page 36
b) Thermistor/2-wire Sensor Test Cable	page 38
c) Continuity Test Cable	page 47
d) Ground Unit Test Cable	page 40
e) Optic/5 Wire P&P Test Cable	page 41
f) J560 Socket Test Cable	page 48
g) Optic/5-wire Sensor Test Cable	page 42
h) Plug and Play Test Cable	page 37

All test cables are to be connected as shown below
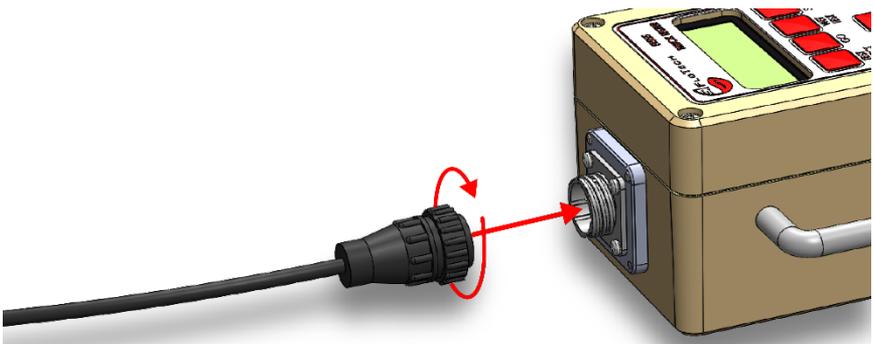
Continuity Test Cable

Step 1) Attach the continuity test cable to the adapter socket using the small circular plastic connection. **Hand tighten only.**

Step 2) Open the trailer socket to expose the wire connections made to the socket pins.

Step 3) Connect the alligator clips to the back of pins 9 and 10.

Step 4) Press GO to perform a single test for pin 9/10 continuity.

J560 Socket Test Cable

Step 1) Attach the J560 Socket test cable to the adapter socket using the small circular plastic connection. **Hand tighten only.**

Step 2) Connect the alligator J560 socket cable to the J560 socket.

Step 3) Press and release test select button to select between optic/5-wire and thermistor/2-wire tests.

Step 4) Press GO to perform a single test.

CAUTION:

The FT555PA/PW is not certified as suitable for use in a Class I Division 1 hazardous location. You should avoid use in explosive or flammable atmospheres.

Troubleshooting:

a) **Should the FT555PA/PW fail to start or shut down during use, check the battery indicator on the welcome screen and or replace the batteries.**

b) **Should the FT555PA/PW appear to freeze, remove the batteries to force the unit to power down. Reinstall the batteries and begin test procedure. By removing the batteries you will force the FT555PA/PW to restart back to the Initial screen.**

<u>Technical Support Hotline</u>
(877) 582-3569

Contact the FloTech Technical Support Hotline for help:
- Troubleshooting overfill systems.
- Verifying defective components
- To request an RGA for defective FloTech products Under warranty.