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Quick Installation Reference for FE Petro STP-SCI Smart Controllers on Regular Unleaded at Murphy USA Fuel Centers



For complete installation and safety details, consult the Installation Guide provided with each product. This document is not a substitute for the full installation and safety details provided with the products presented in this quick installation reference according to the specifications of Murphy USA.

Regular Unleaded Master-Slave Product Wiring and Set-up:

- Mount and Wire Controllers according to Figure 1
- Attach input power supply, output STP wiring, and RS-485 communication wiring to STP-SCI Master and STP-SCI Slave Smart Controller per installation manual
- Attach dispenser signals 1-8 to STP-DHI Dispenser Hook Isolation box per installation manual
- Remove factory installed wire from L2 of STP-SCI Master to STP-DHI input power and make connection to separate 120V input power for STP-DHI as noted in Figure 1
- Jumper Hook signals from STP-SCI Master to STP-SCI Slave as shown in Figure 1

NOTE: When wired according to Figure 1, the STP-DHI and one STP-SCI unit will continue to operate even when the other STP-SCI unit is de-energized. When a STP-SCI is de-energized, the Hook signals will remain energized in both STP-SCI units when the STP-DHI is energized and any dispenser signal 1-8 is present.

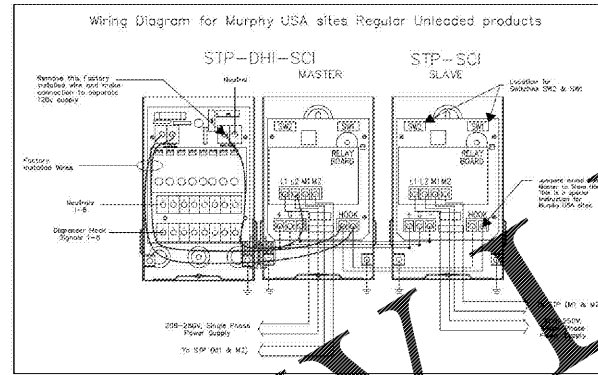


Figure 1 (continued on Page 2)

NOTE: This quick reference is for STP-SCI Smart Controllers with rev 1.1 or newer software. In software rev 1.4 and prior, Alternating Circuit functioned the same as Master-Slave Alternating Circuit configuration described above.

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Quick Installation Reference for FE Petro STP-SCI Smart Controllers on Premium and Diesel at Murphy USA Fuel Centers



For complete installation and safety details, consult the Installation Guide provided with each product. This document is not a substitute for the full installation and safety details provided with the products presented in this quick installation reference according to the specifications of Murphy USA.

Premium (Diesel if applicable) Standalone Product Wiring and Set-up:

- Mount and Wire Controllers according to Figure 1
- Attach input power supply and output STP wiring to STP-SCI Smart Controller per installation manual
- Attach dispenser signals 1-8 and input power neutral to STP-DHI Dispenser Hook Isolation box per installation manual

NOTE: When wired according to Figure 1, STP-SCI will stop operating when either STP-DHI or STP-SCI are de-energized. When a STP-SCI is de-energized, the Hook signal will remain energized when the STP-DHI is energized and any dispenser signal 1-8 is present.

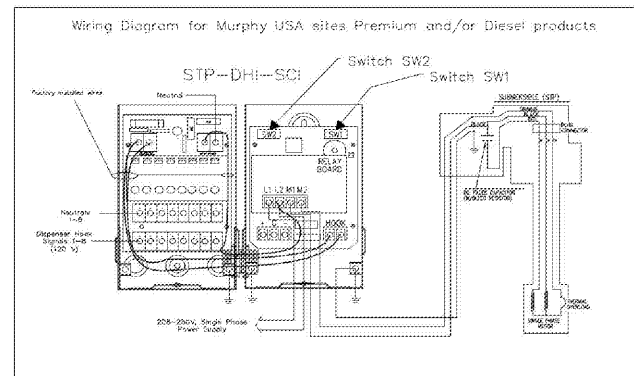


Figure 1

(continued on Page 2)

NOTE: This quick reference is for STP-SCI Smart Controllers with rev 1.1 or newer software.

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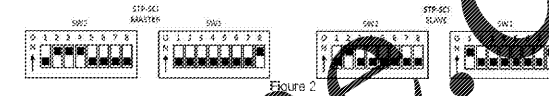
Quick Installation Reference for FE Petro STP-SCI Smart Controllers on Regular Unleaded at Murphy USA Fuel Centers



(continued from Page 1)

- Set configuration switches SW1 and SW2 in the STP-SCI Master and STP-SCI Slave controller according to Figure 2.
- See Figure 1 for location of configuration switches

NOTE: When configured as shown, the Lead pump will alternate and both pumps will run during busy times (Master-Slave Alternating Circuit). Additionally, the STP-SCI will automatically reset Underload fault on the other STP-SCI at next call for a Slave.



- Energize input power supply to Regular Unleaded STP-SCI Master, and STP-SCI Slave
- Verify solid green light on front of all three controllers
- Verify yellow communication light on each STP-SCI each controller (Master will flash fast and Slave will flash slowly)
- Red light will be flashing/beeping 8 times to signal STP-SCI is Uncalibrated (push Reset Button to silence). STP-SCI Smart Controllers must be calibrated before use

NOTE: Prior to calibration, SW1 Pole #7 can be turned ON to enable Bypass Mode to purge lines. Bypass Mode allows STP-SCI operation for 10 minutes with Overload fault detection only (pushing the STP-SCI Reset Button will enable another 10 minutes).

- Close ball valves at discharge of both regular Unleaded Master and Slave STPs. No Regular Unleaded product flow can occur during calibration of these Smart Controllers.
- On STP-SCI Master and STP-SCI Slave controllers, push and hold Reset Button for about 10 seconds until all STP-SCI (Red, Green, Yellow) lights are blinking in sequence, then release the Reset Button
- With both controller lights blinking, go to a dispenser and select the Regular Unleaded product to provide a hook signal to the STP-DHI. Once blinking for calibration, a Hook signal must be applied or the STP-SCI calibration process will abort.
- Calibration is complete (within 20 seconds) when red light turns off on both controllers. Green light will continue to flash on both controllers until Hook signal is de-energized, at which time the green light will turn solid on both. Yellow lights will continue to flash on both controllers as described above.
- Any issues with calibration process, consult the STP-SCI Installation Guide or call FE Petro Technical Support at 800-225-9787 or 800-984-6266.

NOTE: This quick reference is for STP-SCI Smart Controllers with rev 1.1 or newer software. In software rev 1.4 and prior, Alternating Circuit functioned the same as Master-Slave Alternating Circuit configuration described above.

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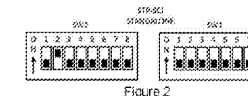
Quick Installation Reference for FE Petro STP-SCI Smart Controllers on Premium and Diesel at Murphy USA Fuel Centers



(continued from Page 1)

- Set configuration switches SW1 and SW2 in the STP-SCI Smart Controller according to Figure 2.
- See Figure 1 for location of configuration switches

NOTE: When configured as shown, the STP-SCI will automatically reset Underload fault on next Hook signal.



- Energize input power supply to Premium STP-DHI and STP-SCI (Diesel if applicable)
- Verify solid green light on front of all three controllers
- Yellow light on STP-SCI will remain off since it is not communicating with another controller
- Red light will be flashing/beeping 8 times to signal STP-SCI is Uncalibrated (push Reset Button to silence). STP-SCI Smart Controllers must be calibrated before use

NOTE: Prior to calibration, SW1 Pole #7 can be turned ON to enable Bypass Mode to purge lines. Bypass Mode allows STP-SCI operation for 10 minutes with Overload fault detection only (pushing the STP-SCI Reset Button will enable another 10 minutes).

- Close ball valves at discharge of Premium (Diesel if applicable) STP. No Premium (Diesel if applicable) product flow can occur during calibration of these Smart Controllers.
- On Premium (Diesel if applicable) STP-SCI controller, push and hold Reset Button for about 10 seconds until all STP-SCI (Red, Green, Yellow) lights are blinking in sequence, then release the Reset Button
- With Smart Controller lights blinking, go to a dispenser and select the Premium (Diesel if applicable) product to provide a hook signal to the STP-DHI. Once blinking for calibration, a Hook signal must be applied or the STP-SCI calibration process will abort.
- Calibration is complete (within 20 seconds) when red and yellow lights turn off on Smart Controller. Green light will continue to flash on both controllers until Hook signal is de-energized, at which time the green light will turn solid on both.
- Any issues with calibration process, consult the STP-SCI Installation Guide or call FE Petro Technical Support at 800-225-9787 or 800-984-6266.

NOTE: This quick reference is for STP-SCI Smart Controllers with rev 1.1 or newer software.

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TURBINE PUMP INSTALLATION REFERENCE
SUBMERSIBLE TURBINE PUMP (STP) SMART CONTROLLER (SCI)

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