PMSCP – Panel Mount Standard Control Panel

Overview:

The Panel Mount Standard Control Panel (PMSCP) serves as a panel mount control panel for any of the *WATERAX* vehicle mounted pumps. The PMSCP features an intuitive launch sequence that makes field operation of a vehicle mount system easy to master and swift to execute. The panel quickly and easily connects to the pump electrically through an 8-pin Molex MX150L connector (gasoline units) or a 14-pin Delphi GT150 connector (diesel units). The *WATERAX* FastWire system provides all the necessary components for a simple plug-and-play installation. This document outlines the proper installation method, the replacement parts and the operations of the PMSCP series.
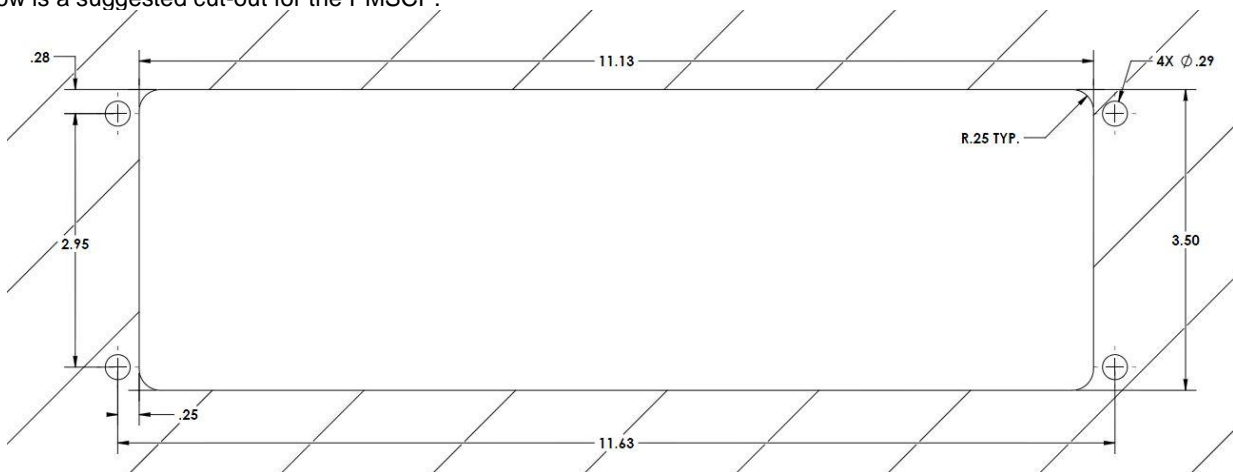
Kit Components:

The PMSCP comes equipped with a backlit power (ON/OFF) push button, a backlit low pressure protection push button (available only on PMSCP-LPP and PMSCP-DIESEL), an engine start push button, a push/pull engine choke (gas units only) and a Vernier throttle. An electric primer switch or a push/pull priming cable can be installed in the primer slot; these components come with their respective kits: EPRIMERKIT or C-7594 Remote Exhaust Primer Kit. The PMSCP's display includes a 2.5" dial liquid filled pressure gauge, and a low oil alert LED. The PMSCP-DIESEL has an additional water temperature alert LED.

This image illustrates the PMSCP-DIESEL configuration. Various configurations are available, consult product guide for more details. Electric primer switch comes with the EPRIMERKIT and is shown for representation purposes only..
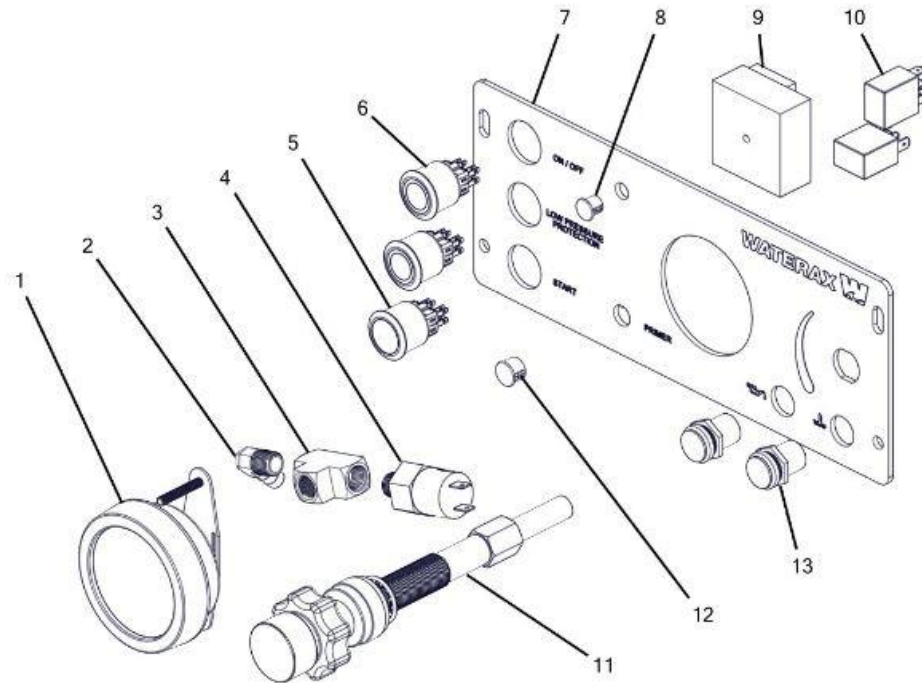
Installation:

The PMSCP comes with four mounting holes for installation. Four ¼" or M6 Screws can be used to mount the PMSCP. Below is a suggested cut-out for the PMSCP.

Parts Breakdown:

ID	ITEM NO	DESCRIPTION	PMSCP QTY	PMSCP-LPP QTY	PMSCP-DIESEL QTY
1	701190	2-1/2" GAUGE LIQUID FILLED PANEL MOUNT	1	1	1
2	800710	PART-331 ELBOW BRB 3/8 TO MNPT 1/4,BR	1	1	1
3	800748	PART-373 TEE 1/4 NPT FEM BRASS	1	1	1
4	800890	PART-526 LOW PRESSURE CUTOUT SWITCH 7PSI	--	1	1
5	801142	SWITCH PUSH BUTTON 1" S/S MOM DPST 2A 36V	1	1	1
6	801141	SWITCH PUSH BUTTON 1" S/S GREEN LED 4PST 2A 12V	--	2	2
7	701189	PMSCP FRAME	1	1	1
8	800433	PART-524 PLASTIC PLUG 0.375" HOLE, BK	--	--	1
9	801237	TIMER DELAY ON MAKE TYPE, Q1T	--	--	1
10	801236	RELAY 5 POSITION SPDT 12V	--	--	2
11	800673	PART-454 VERNIER THROTTLE CABLE (3100)	1	1	1
12	800403	PART-525 PLUG, PLASTIC, LOCK, 1/2" HOLE, BLACK	1	1	1
13	800900	PART-377 LED PNL MT 11/16" 12V WT RED	1	1	2
--	700614	B-6365-11 PLUG 1/4" NPT, BRASS	1	--	--
--	801175	PLUG, RIGID PLASTIC, LOCKING, 1" HOLE, BLACK	1	--	--
--	801141	SWITCH PUSH BUTTON 1" S/S GREEN LED 4PST 2A 12V	1	--	--
--	800745	PART-356 CHOKE CABLE; 6' (1.8m)	1	1	--
--	800305	FAST-538 LOCKWASHER 3/8 SPLIT SS	1	1	--
--	801176	PLUG, RIGID PLASTIC, LOCKING, 11/16" HOLE, BLACK	1	1	--
--	800932	PART-496 PLUG HOUSING 8,MX150L	1	1	--
--	700775	A-7720 BRACKET VERNIER THROTTLE CABLE	1	1	1
--	801215	CONNECTOR MALE DELPHI GT150 14 PIN KIT	--	--	1

Operation:

PMSCP & PMSCP-LPP

The following control panel operational steps are performed after the pump has been primed, fuel has reached the engine and proper electric connection has been made available to the panel through the 8-pin or 14-pin connector):

1. Push the ON/OFF button to power the panel; the LED ring will light up indicating that there is power.
2. If the unit does not come with an exhaust primer, prime the pump first before starting the engine.
3. Push and hold the Engine Start button (if engine is cold, pull on the choke knob while pressing the start button). Engine will start and pressure will build in the discharge line. If pressure gauge does not show any positive pressure, pump may not be fully primed; re-prime the pump. Note: if the unit comes with an exhaust primer, the pump should be primed directly after starting the engine. Pressure will build in the discharge when pump has been fully primed with the exhaust primer.
4. Once started, disengage the choke control (if used) and adjust the engine throttle and discharge valve until the desired pump performance is obtained
5. Push the LOW PRESSURE PROTECTION button to activate the protection; the LED ring will light up indicating that the pump is protected.
6. To shut down the pump, press the ON/OFF button; the LED ring will turn off indicating that there is no more power.
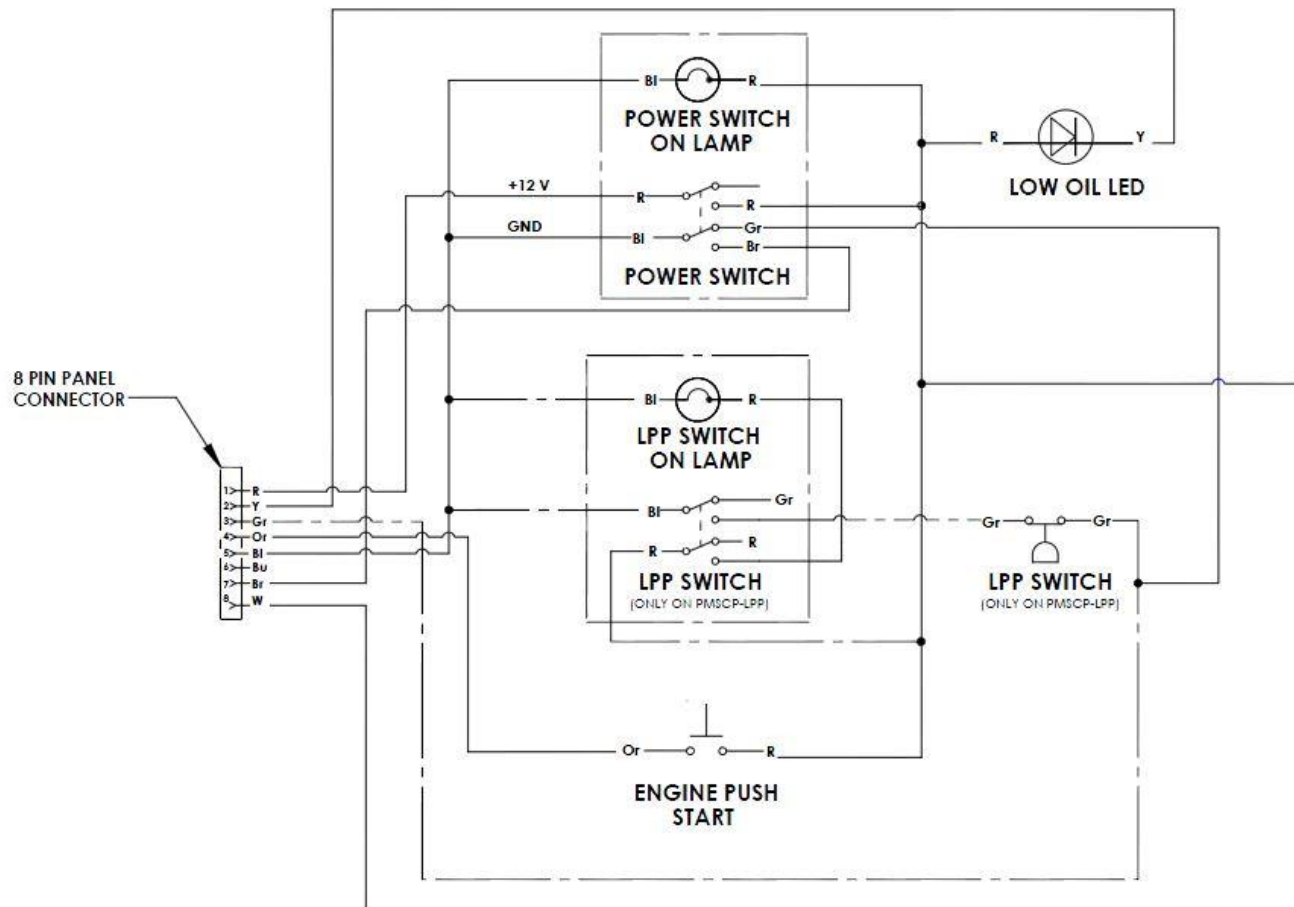
PMSCP-DIESEL

1. Push the ON/OFF button to power the panel; the LED ring will light up indicating that there is power.
2. Prime the pump first before starting the engine.
3. The glow plugs will automatically heat up for 10 seconds. During the 10 second warm-up period, the start button will be inactive and the engine will not be able to start. Once the 10 seconds have elapsed, the Low Oil Indicator light will turn on, indicating that the engine is ready to start.
4. Push and hold the Engine Start button. If engine is still too cold to start, repeat operations 1 and 3.
   Engine will start and pressure will build in the discharge line. If pressure gauge does not show any positive pressure, pump may not be fully primed; re-prime the pump.
5. Once started, adjust the engine throttle and discharge valve until the desired pump performance is obtained.
6. Push the LOW PRESSURE PROTECTION button to activate the protection; the LED ring will light up indicating that the pump is protected.
7. To shut down the pump, press the ON/OFF button; the LED ring will turn off indicating that there is no more power.

Wiring Schematics:
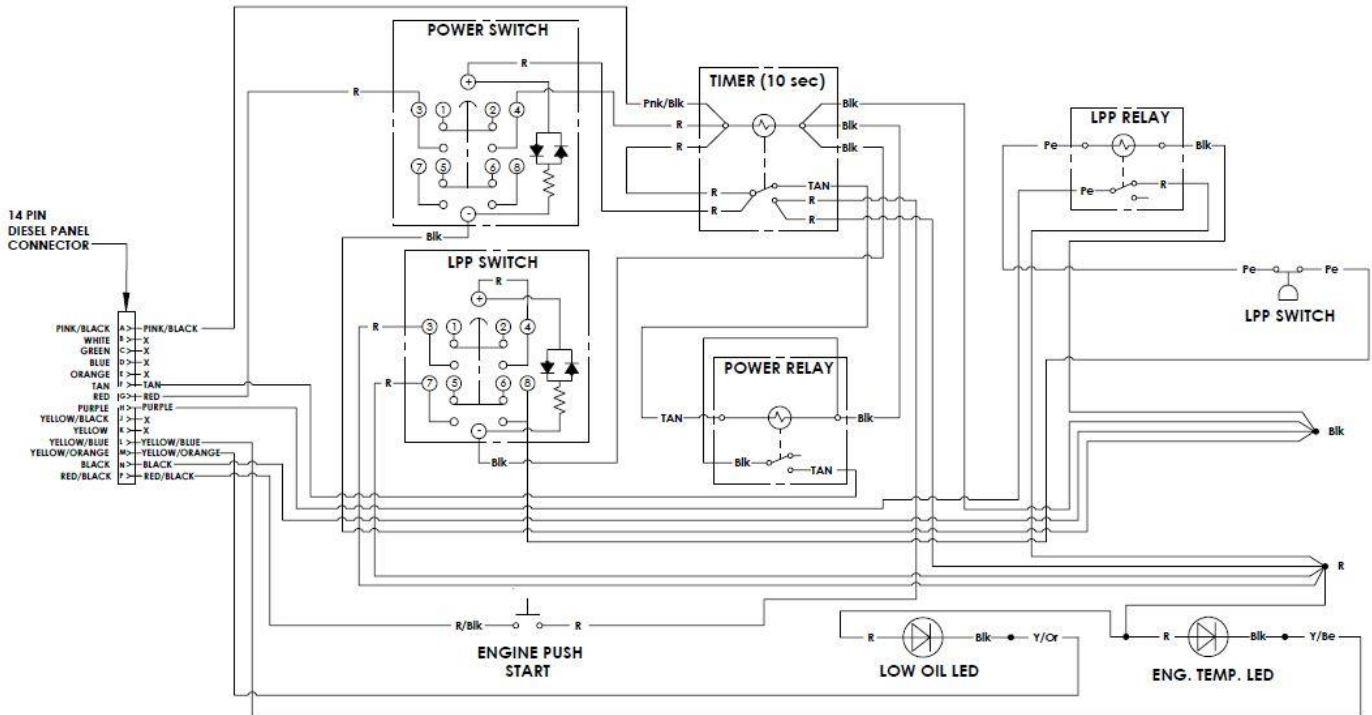
PMSCP & PMSCP-LPP

PMSCP-DIESEL

Warranty, Service and Support:

Product and service documentation such as tech notes, data sheets, manuals and information on the limited warranty provided on products manufactured by *WATERAX* can be found on our Web site at: www.waterax.com.

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