

XP™ and XP-hf™ PressureTrak Kit

3A3320J

EN

Monitors pressures to provide ratio assurance on XP and XP-hf plural-component sprayers in hazardous or non-hazardous locations. For professional use only.

17G807: N3400 PressureTrak Kit

17G808: N6500 PressureTrak Kit

25C452: XP-hf PressureTrak Kit

26C426: XL3400 PressureTrak Kit

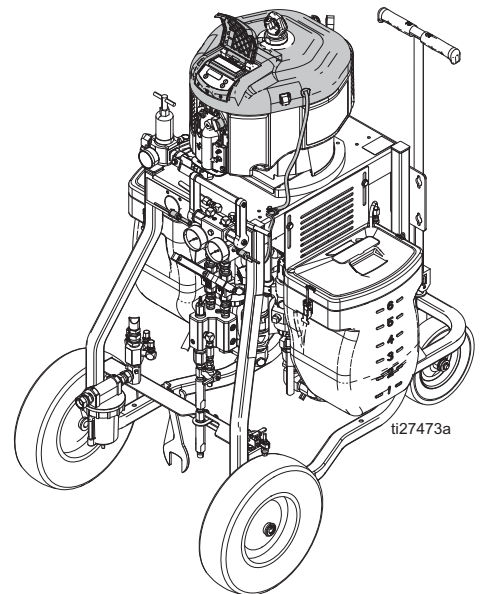
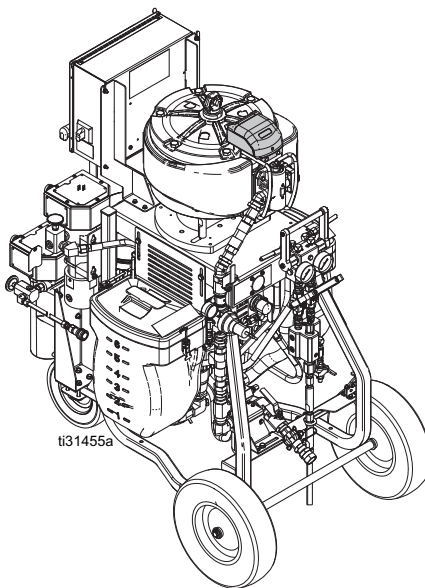
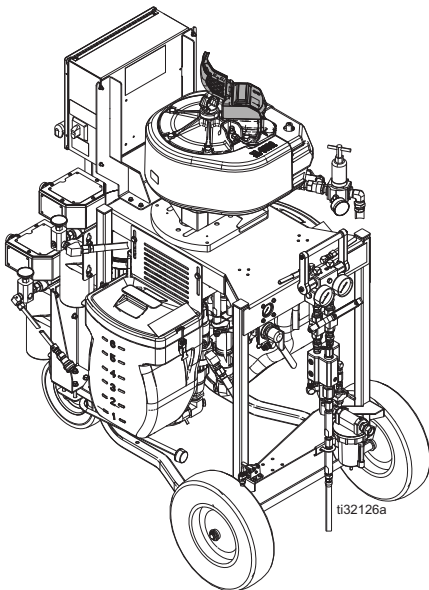
26C427: XL6500 PressureTrak Kit

See page 2 for Agency Approvals.



Important Safety Instructions

Read all warnings and instructions in this manual and the XP-hf sprayer operation manual. Save these instructions.






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Related Manuals








Manual in English	Description
3A3320	PressureTrak Manual, Instructions and Parts
3A0420	XP Sprayer, Instructions and Parts
3A4381	XP-hf Proportioner, Instructions and Parts
334644	XL 10000 Air Motor, Instructions and Parts
3A5423	XL6500 and 3400 Air Motor, Instructions and Parts

Agency Approvals

Model	Agency Approval
17N936*	   <p>9902471 Class I, Div. 1, Group D T3A</p> <p>2575</p> <p>Ex ia IIA T3 Ga ITS13ATEX27862X</p>
17G807	
17G808	
18C025**	
* 17N936 is the agency approved PressureTrak included in kits 25C452.	
** 18C025 is the agency approved PressureTrak included in kits 26C426 and 26C427	

Warnings

The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbols refer to procedure-specific risks. When these symbols appear in the body of this manual or on warning labels, refer back to these Warnings. Product-specific hazard symbols and warnings not covered in this section may appear throughout the body of this manual where applicable.

 WARNING	
 	<p>SPECIAL CONDITIONS FOR SAFE USE</p> <p>Equipment must comply with the following conditions to avoid a hazardous condition which can cause fire or explosion.</p> <ul style="list-style-type: none"> • All label and marketing material must be cleaned with a damp cloth (or equivalent). • The electronic monitoring system is required to be grounded. See Grounding instructions in your pump operation manual.
   	<p>FIRE AND EXPLOSION HAZARD</p> <p>Flammable fumes, such as solvent and paint fumes, in work area can ignite or explode. Paint or solvent flowing through the equipment can cause static sparking. To help prevent fire and explosion:</p> <ul style="list-style-type: none"> • Use equipment only in well-ventilated area. • Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static sparking). • Ground all equipment in the work area. See Grounding instructions in your pump operation manual. • Never spray or flush solvent at high pressure. • Keep work area free of debris, including solvent, rags and gasoline. • Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present. • Use only grounded hoses. • Hold gun firmly to side of grounded pail when triggering into pail. Do not use pail liners unless they are anti-static or conductive. • Stop operation immediately if static sparking occurs or you feel a shock. Do not use equipment until you identify and correct the problem. • Keep a working fire extinguisher in the work area.

Overview

The purpose of the XP PressureTrak is to shut down the sprayer if abnormal pressure conditions are detected in order to prevent spraying material that is not mixed on ratio.

Two pressure transducers read the A and B fluid pressures in the outlet manifold and send the readings back to the XP PressureTrak.

The XP PressureTrak monitors the difference between the A and B fluid pressures, alerting the user when an imbalance is detected. An imbalance may be due to a plug, leak, or running out of fluid.

When an imbalance is detected, the electric solenoid disables the air motor, an alarm is displayed on the screen, and the LED on the front of the display flashes. For more error code information see **Alarms, Deviations, and Advisories** page 17.

The following alarms can occur:

- Differential Pressure (B>A)
- Differential Pressure (A>B)
- Pressure A High
- Pressure B High
- Electric Solenoid Disconnected
- Pressure A Disconnected
- Pressure B Disconnected
- Low Battery
- Blown Fuse

Operating Window

Below Minimum Spray Pressure

The air motor is allowed to automatically operate in Circulation Mode any time the fluid pressures are below the minimum spray pressure. This allows for loading the system and circulating the fluids without alarms or shutdowns.

Above Minimum Spray Pressure

When the XP PressureTrak detects the fluid pressures above the minimum spray pressure for 30 seconds, and the pressures are balanced within the pre-set limits, it will automatically start pressure monitoring. If the XP PressureTrak does not see balanced pressures within 30 seconds of going above the minimum spray pressure it will detect the fault and disable the air motor. The default minimum spray pressure is 2000 psi (14 MPa, 138 bar). Enter Setup Mode to change the minimum spray pressure as necessary (see **Setup Mode Details**, page 28).

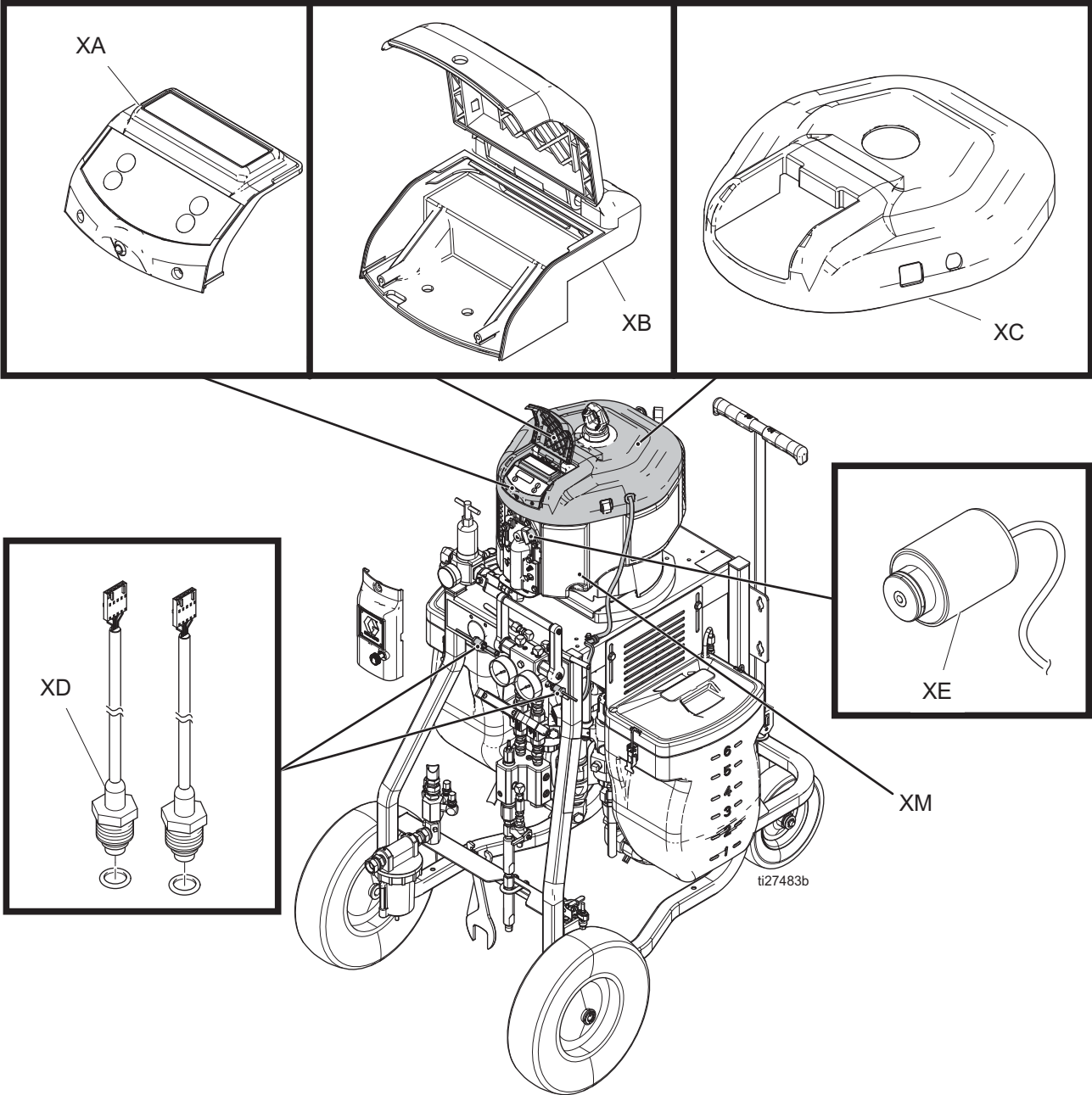
Maximum Spray Pressure

The XP PressureTrak will alarm and shutdown if it detects either A or B fluid pressures above the maximum working pressure (see table below). Enter Setup Mode to reduce the maximum allowable pressure set point (see **Setup Mode Details**, page 28).

Model	Maximum Spray Pressure
17G807	7250 psi (500 Bar, 50 MPa)
17G808	
25C452	7500 psi (517 Bar, 51.7 MPa)
26C426	
26C427	

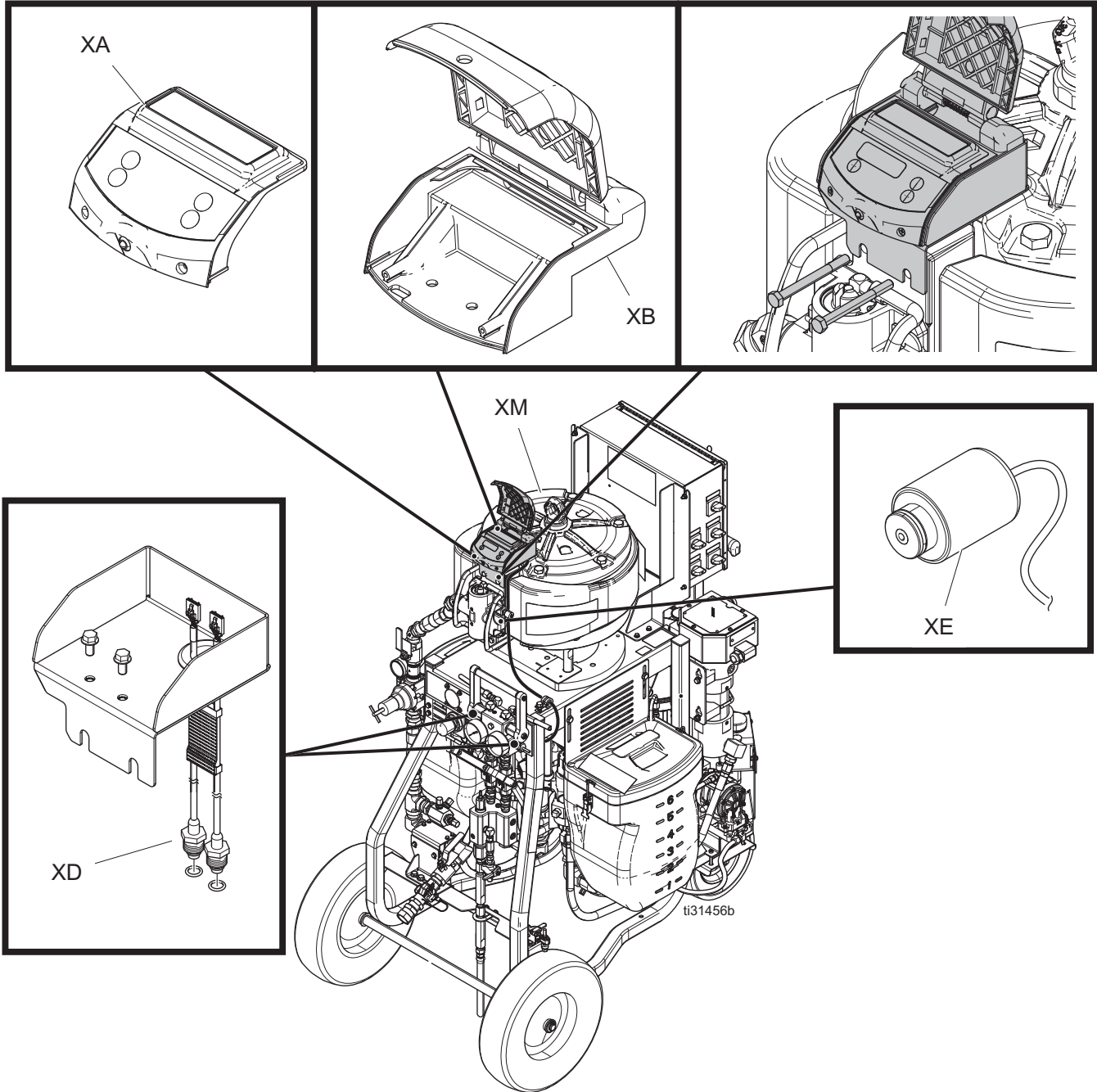
Component Identification

XP Proportioner (Model 571100 Shown)



Ref.	Description
XA	Module
XB	Housing
XC	Cover
XD	Pressure Sensors
XE	Solenoid
XM	Air Motor

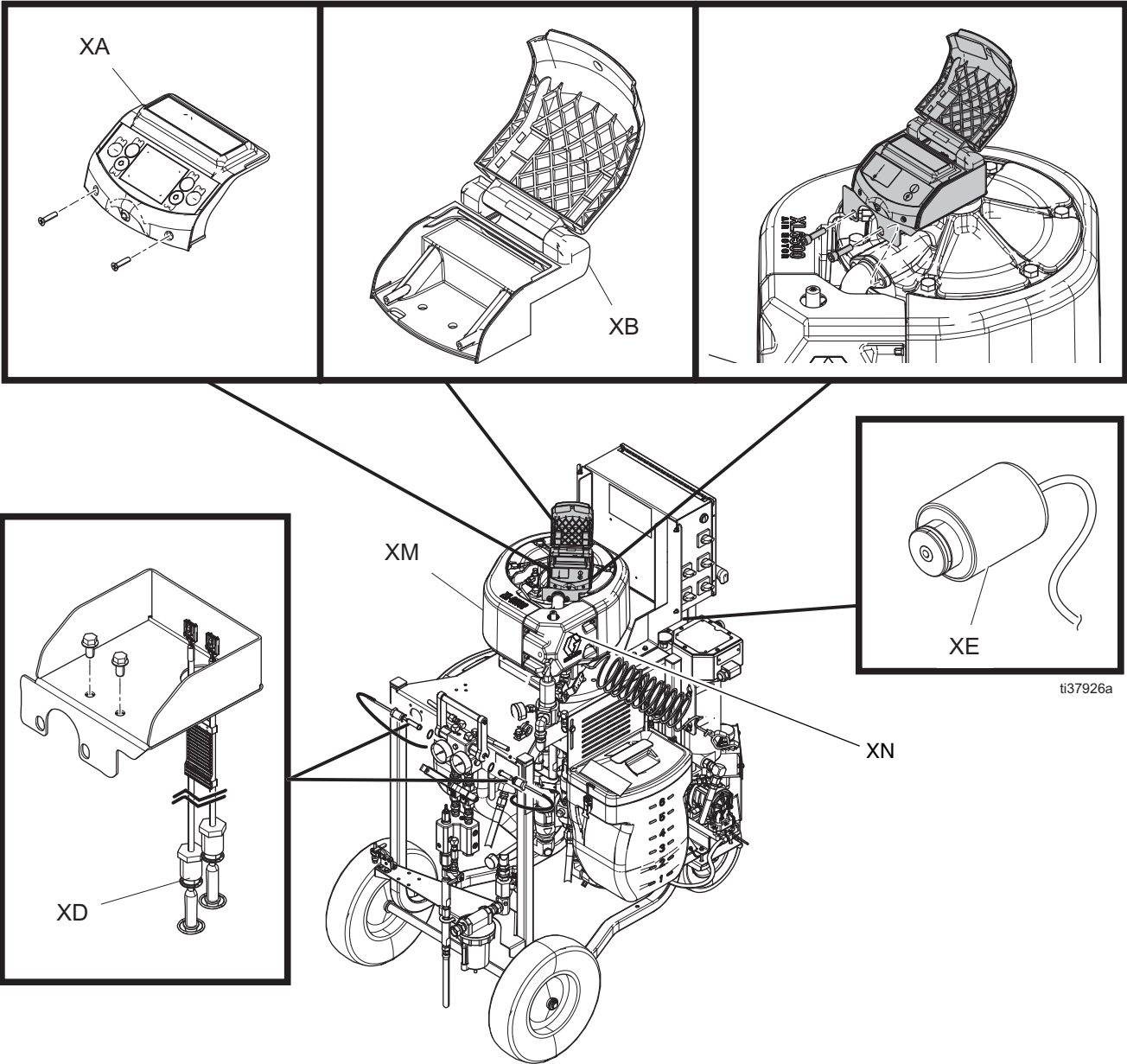
XP-hf Proportioner (Model 572407 Shown)



Ref. Description

- XA Module
- XB Housing
- XD Pressure Sensors
- XE Solenoid
- XM Air Motor

XP Sprayer





Ref. Description

- XA Module
- XB Housing
- XD Pressure Sensors
- XE Solenoid
- XM Air Motor
- XN Cover

User Interface









Table 1: LCM Button Functions

Button	Function
Arrows Up/Down 	Navigate up or down within a screen or to a new screen.
Soft Keys 	Soft keys activate the mode or action represented by the icon next to each soft key. See Table 2 for soft key icons and actions. Top Soft Key: Edit data, accept edited data, or move right within a selected field. Bottom Soft Key: Enter a screen, exit a screen, or cancel edited data.

NOTICE

To prevent damage to soft key buttons, do not press the buttons with sharp objects such as pens, plastic cards, or fingernails.

Table 2: Display Soft Key Icons

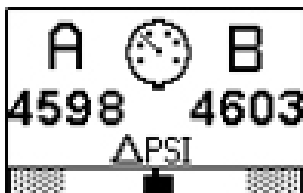
Icon	Function
	In screens that have editable fields, press to access the fields and make changes.
	In screens that have editable fields, press to exit edit mode.
	In screens that have editable fields, press to make data selections or to enter changes.
	In screens that have editable fields, press to move to the right while in a field.
	Cancel a selection or edited data. Returns to the original data.
	Clear entire error log.

NOTE: The display will turn OFF after one minute of inactivity to save battery life. The PressureTrak will continue to monitor the pressures. Press any key to wake the XP PressureTrak display.

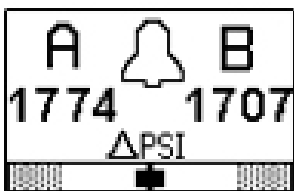
Display Screens

Table 3: Display Screens, identifies components shown on the Spray Mode Active, Circulation Mode Active, Alarm Active, and Deviation Active Run screens. For more information see **Appendix B: Run Screen Details**, page 31.

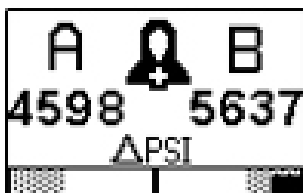
Spray Mode Active Screen



Circulation Mode Active Screen



Alarm Active Screen



Deviation Active Screen



Table 3: Display Screens

Icon	Function
	Actual spray pressures.
	Differential pressure alarm bar graph and pressure units.
	Indicates that you are in spray mode.
	Indicates that you are in circulation mode.
	Indicates that there is an active alarm.
	Indicates that there is an active deviation.

Installation

Installation for XP System with NXT Motor



To reduce the risk of skin injection and shock, shut down the XP Sprayer before installing your XP PressureTrak. Follow the **Shutdown** and **Pressure Relief** procedures in the XP Sprayer operation manual.

The procedures in this section are specific to each component of the XP PressureTrak. For sprayer installation instructions, refer to the sprayer operation manual.

1. Perform **Pressure Relief Procedure**. See your XP Sprayer manual.
2. Remove the existing NXT air motor cover and front (D) of the motor cover.
3. Remove the insert from the solenoid hole (F).
4. Install the solenoid (XE). Use the retainer (G) and two bolts (H) to secure the solenoid.

NOTE: The holes in the casting may not have threads, but the screws are thread-forming.

5. Pass the pressure sensor (4a and 4b) through slot (K) and the solenoid (XE) through slot (J) in the housing (XB) and secure the housing to the air motor with two bolts (6).

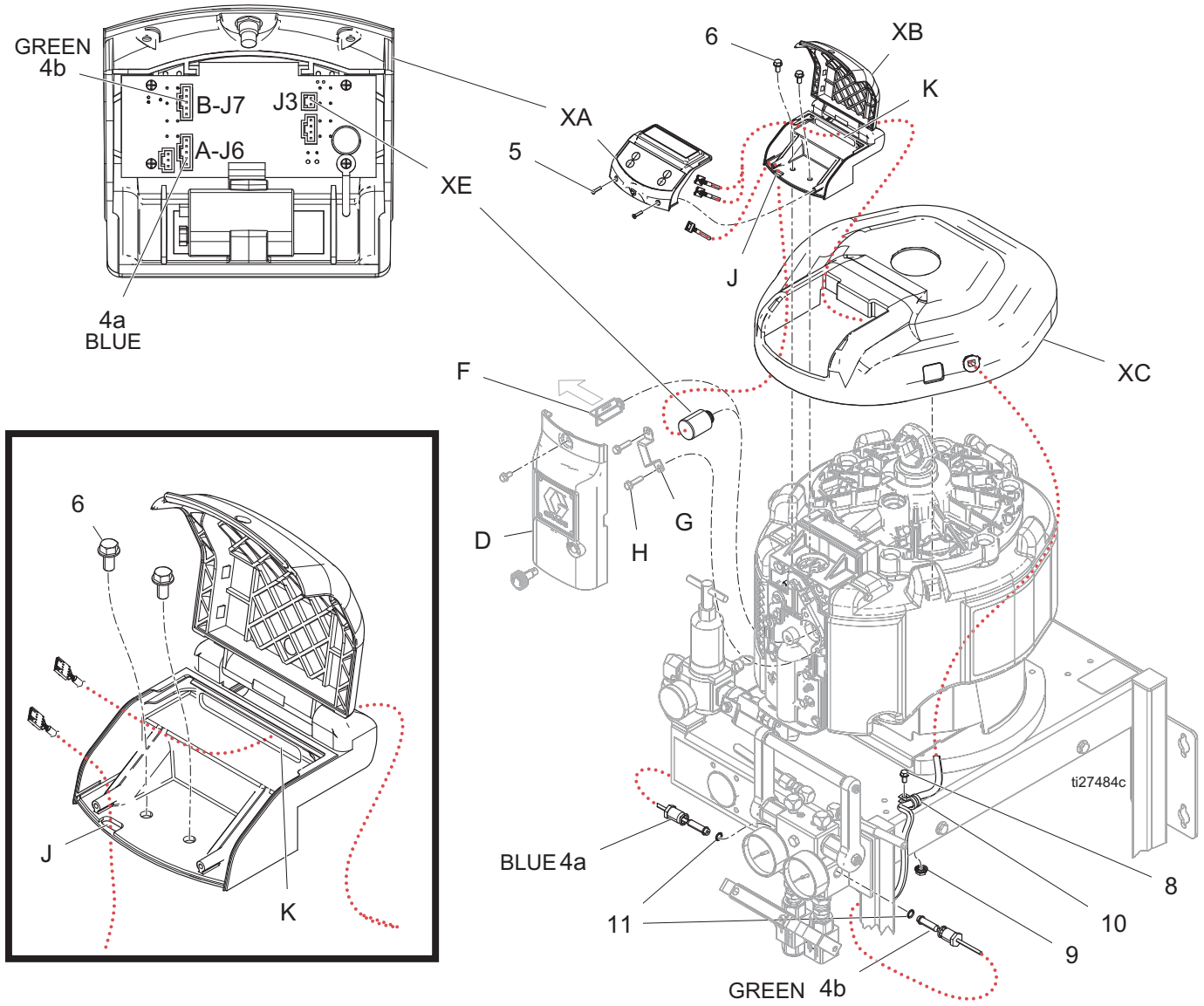
6. Reinstall the front (D) and install the XP PressureTrak cover (3).

7. Connect the pressure sensor cables to the connectors on the circuit board.





NOTE: Be sure to match the color codes (connect the blue cord to J6, circuit board labeled A and green cord to J7, circuit board labeled B). Connect the solenoid to J3, then connect the battery to the battery terminals.

8. Slide the module (XA) into the channel of the housing (XB) and secure with two screws (5).
9. Insert o-ring (11) on pressure sensor (4a). Lubricate o-ring and install into the A side (blue) of the manifold. Torque sensor nut to 40-50 in-lb (54-67 N•m). Insert o-ring (11) on pressure sensor (4b). Lubricate o-ring and install into the B side (green) of the manifold. Torque sensor nut to 40-50 in-lb (54-67 N•m).
10. Install the pressure sensor harness (XD) through clamp (10) and secure to the frame with screw (8) and nut (9).

XP System with NXT Motor



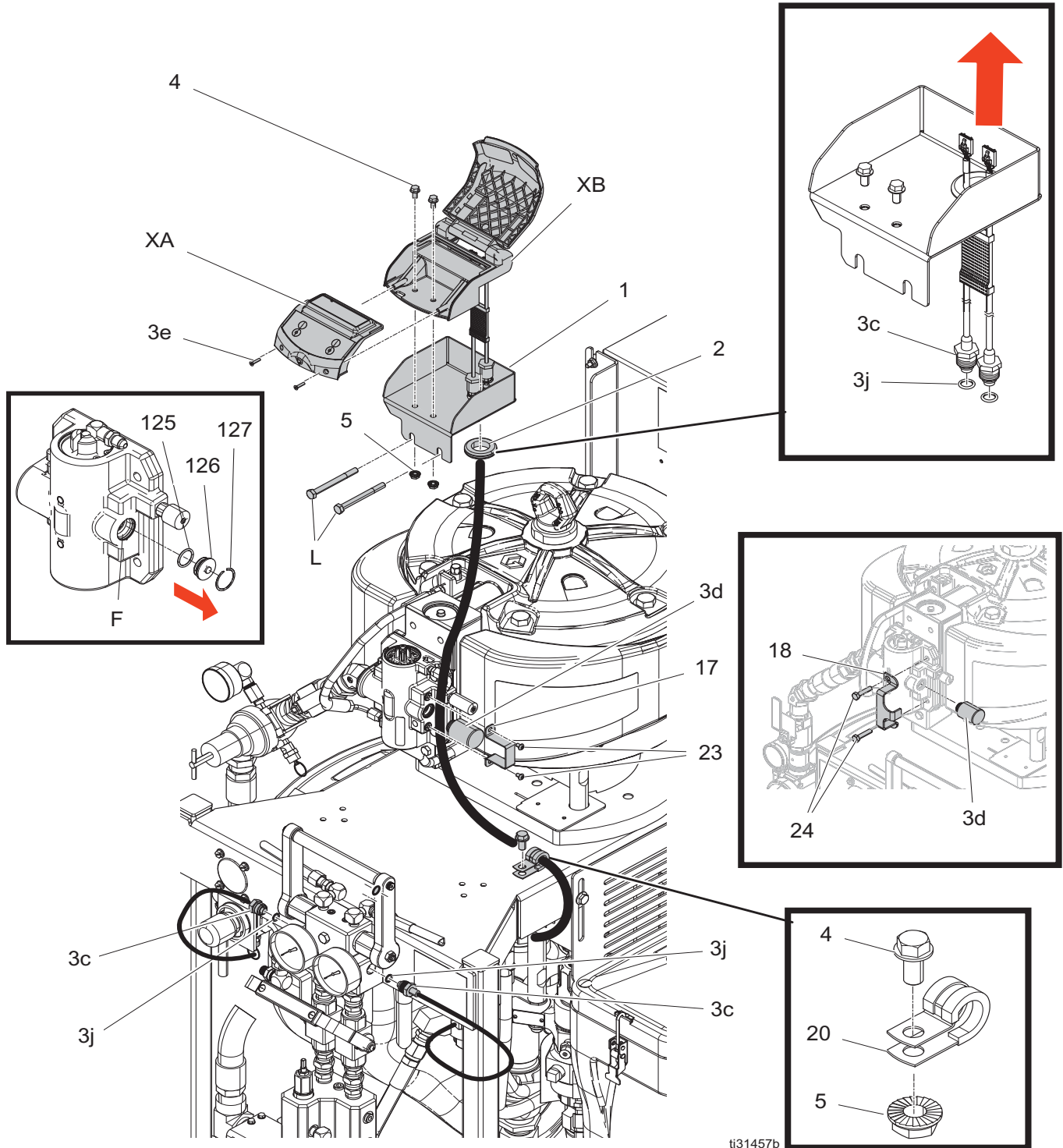
Installation for XP-hf System with XL 10000 Air Motor

			
<p>To reduce the risk of skin injection and shock, shut down the XP Sprayer before installing your XP PressureTrak. Follow the Shutdown and Pressure Relief procedures in the XP Sprayer operation manual.</p>			





The procedures in this section are specific to each component of the XP PressureTrak. For sprayer installation instructions, refer to your sprayer operation manual.

1. Perform **Pressure Relief Procedure**. See your XP-hf Proportioner manual.
2. Remove the two top bolts (L) on the XL motor manifold. Use the bolts to install the XP-hf module bracket and PressureTrak.
3. Remove the plug (126) and O-ring (125) by removing the retaining ring (127).
4. Remove two screws (23) from the XL 10000 air motor valve near the solenoid hole. If screws (23) are not present, remove the two right side bolts (24) from the XL 10000 air motor valve.
5. Install solenoid (3d) into the solenoid hole.
6. Bolt down the solenoid bracket (17) with mounting screws (23), or solenoid bracket (18) with bolts (24), depending on the air valve.
7. Insert o-ring (3j) on pressure sensor (3c). Lubricate o-ring and install into the A side (blue) of the manifold. Torque sensor nut to 40-50 in-lb (54-67 N•m). Insert o-ring (3j) on pressure sensor (3c). Lubricate o-ring and install into the B side (green) of the manifold. Torque sensor nut to 40-50 in-lb (54-67 N•m).
8. Install the pressure sensor harness (XD) through clamp (20) and secure to the frame with screw (4).
9. Remove screws (3e) to slide out module (XA).
10. Connect the battery to the battery terminals.
11. Slide the module (XA) into the channel of the housing (XB) and secure with two screws (3e).

XP-hf System with XL 10000 Air Motor



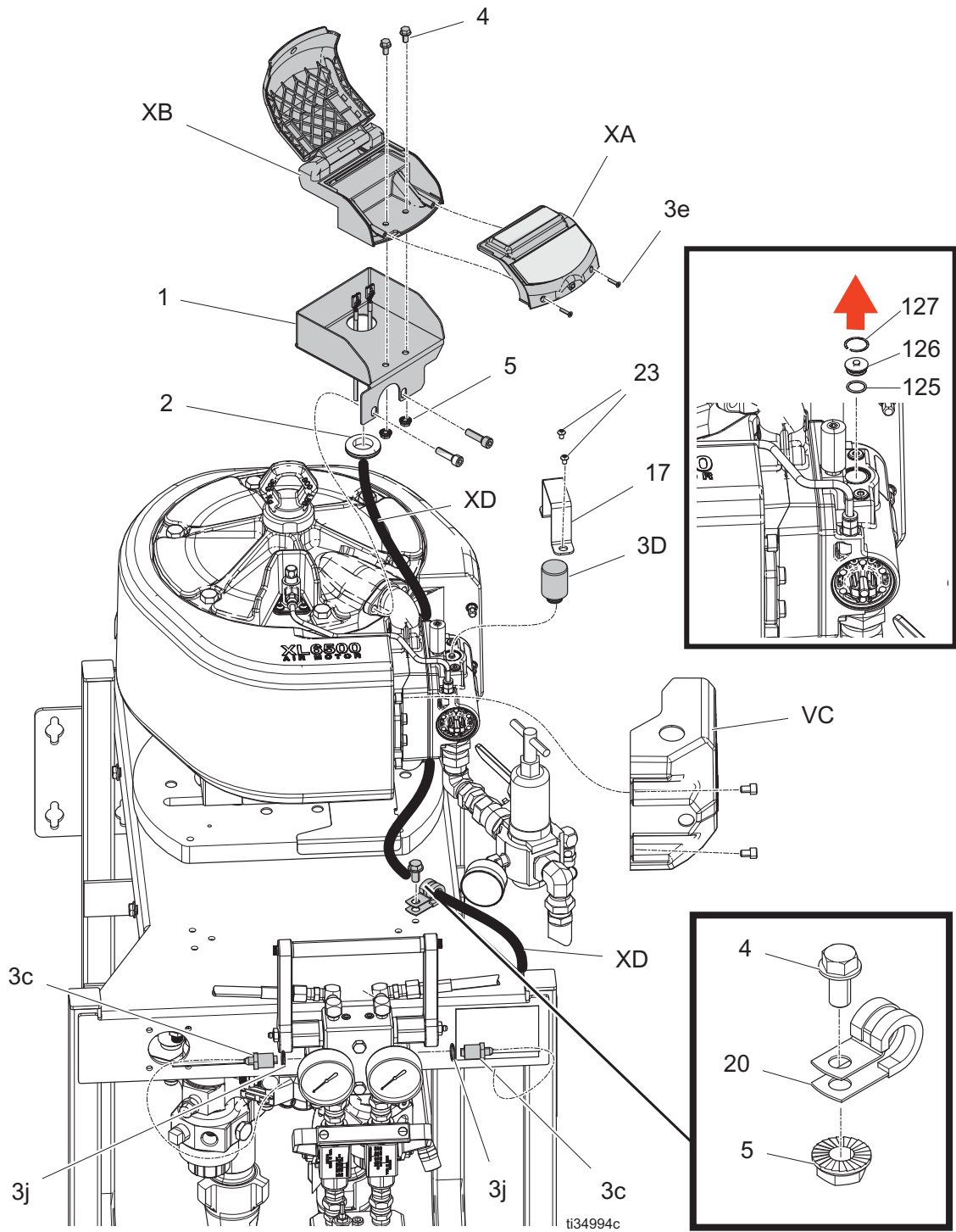
Installation for XP System with XL Air Motor

				
<p>To reduce the risk of skin injection and shock, shut down the XP Sprayer before installing your XP PressureTrak. Follow the Shutdown and Pressure Relief procedures in the XP Sprayer operation manual.</p>				

The procedures in this section are specific to each component of the XP PressureTrak. For sprayer installation instructions, refer to your sprayer operation manual.

1. Perform **Pressure Relief Procedure**. See your XP Operation manual.
2. Remove the air valve cover (VC).
3. Remove the top exhaust manifold bolts, then use the bolts to attach the module bracket and PressureTrak.
4. Remove the plug (126) and the o-ring (125) by removing the retaining ring (127).
5. Attach the solenoid (3d) and bracket (17) to the air valve and tighten screws (23).
6. Insert o-ring (3j) on the presser sensor (3c). Lubricate the o-ring and install it into the A side (blue) of the manifold. Torque the sensor nut to 40-50 in-lb (54-67 N•m). Insert o-ring (3j) on the presser sensor (3c). Lubricate the o-ring and install it into the B side (green) of the manifold. Torque the sensor nut to 40-50 in-lb (54-67 N•m).
7. Install the pressure sensor harness (XD) through clamp (20) and secure to the frame with screw (4) and nut (5).
8. Remove screws (3e) to slide out the PressureTrak module (XA).
9. Connect the battery to the battery terminals.
10. Slide the PressureTrak module (XA) into the channel of the housing (XB) and secure with two screws (3e).
11. Replace the original air valve cover with the new air valve cover (VC)

XP System with XL Air Motor



Operation

Startup

1. Refer to your XP sprayer operation manual for sprayer startup instructions.

NOTE: The XP PressureTrak modifies XP sprayers. However, the operation procedures from the XP sprayer operation manual still apply.

2. Press any key to wake the XP PressureTrak. The display will turn off in one minute to save battery life, but will continue to monitor the pressures.

NOTE: To enter into Setup, press and hold any button for three seconds.

Shutdown


Refer to your XP sprayer operation manual for sprayer shutdown instructions. The XP PressureTrak will enter a hibernation mode to save battery life.

Setup

1. To enter into Setup, press and hold any button for three seconds.
2. Set the system parameters before spraying. These can be changed as necessary (see **Setup Mode Details**, page 28).




Alarms, Deviations, and Advisories

There are three types of errors that can occur: Alarms, Deviations, and Advisories. Errors are indicated by the flashing red LED as well as on the display.




Alarms, indicated by , require immediate attention; therefore, the XP PressureTrak disables the air motor and the alarm screen automatically displays.



Deviations, indicated by , require attention, but not immediately.

Advisories, indicated by , do not require attention. Therefore, if a deviation or advisory occur, the system continues running and  or  is displayed on the run screen.


The following table shows the status of the front LED for Alarms and Advisories.


Front LED	Description
OFF	System is powered up and monitoring pressure.
OFF	In Circulation Mode or Manual Bypass Mode. 
OFF	A deviation exists. 
Red Flash	An alarm exists and the system shuts down. 

Clear Alarms

1. Turn the air valve to OFF.
2. Reduce the air pressure regulator to minimum.
3. Wait for the air pressure to drop.
4. **XL air motors only:** Press the manual shuttle override button on your air motor air valve. Refer to

your air motor manual. XL3400 and XL6500 air motors have a hole in the cover (VC) to access the air valve.

5. Clear the cause of the error.
6. Press .

NOTE: If the system has air pressure when  is pressed, the screen will display how to reset the system and clear an alarm. See FIG. 1 or FIG. 2, or FIG. 3. Press the lower arrow key to stop the demonstration sequence and return to the alarm screen.

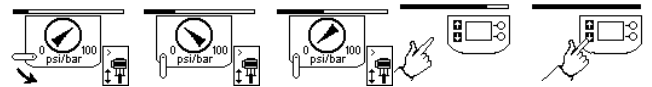


FIG. 1: NXT Air Motor PressureTrak Sequence

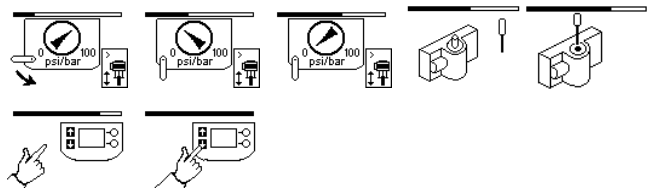


FIG. 2: XL10000 (XP-HF) Air Motor PressureTrak Sequence

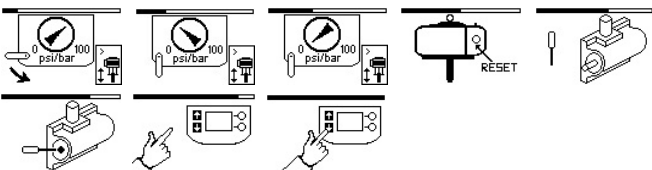


FIG. 3: XL3400 (XP35) and XL6500 (XP50 / 70) PressureTrak Sequence

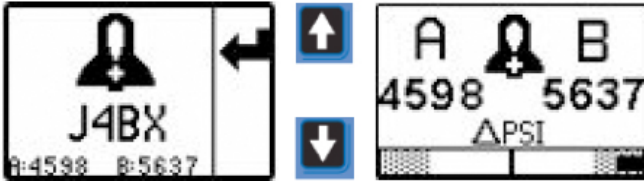
7. Turn the air valve to ON.
8. Increase the pressure to achieve the best pattern.

NOTE: When trying to clear an error and the screen displays the “X”, the unit did not retract the solenoid and is in an 8 second delay period before an attempt can be tried to retract the solenoid. Verify air pressure has dropped.

View Current Alarms

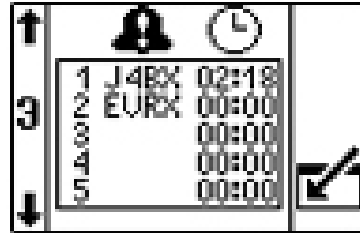
To toggle the screens between the Alarm Information screen and the Run Alarm Active screen,

press  or .









View Error Log

Setup Screen 3 is the error log screen. It displays the most recent error on the top of the list with the past 20 errors below it. This screen displays a list of advisory or alarm error codes and the time the error occurred since the unit went to spray mode. The timer will restart when the pressure falls and unit enters into circulation mode, or when the timer rolls over 23:59.






Error Codes

NOTE: If the solenoid repeatedly struggles to extend after an alarm triggers or retract when the Clear Alarms sequence is followed (see FIG. 1 and FIG. 2, page 17), check the fuse resistance. If resistance is greater than 6 ohms, replace the fuse. If resistance is less than 6 ohms, replace the solenoid. See **Replace the PressureTrak Module Battery or Fuse**, page 23, to check the fuse resistance.

Code	Icon	Code Name	LED Status	Cause	Solution
Alarms					
J4AX		Differential Pressure (A>B)	Flashing Red	Ran out of B side material.	Refill hopper or change drum.
				Cavitating B side pump.	Warm material or add feed pressure.
				B material leaking.	Follow pump troubleshooting in XP70 Sprayer manual.
				No mix manifold B side restriction.	Add restriction to B side on mix manifold to balance pressures.
				A side hose is too small.	Change to larger hose size.
				Too much B side offset in control setup.	Adjust B side offset in setup screens if B normally runs at a higher pressure than A. See Setup Screen 2 , page 29.
				Improper configuration.	Adjust setpoints on setup screens. See Setup Mode Details , page 28.
J4BX		Differential Pressure (B>A)	Flashing Red	Ran out of A side material.	Refill hopper or change drum.
				Cavitating A side pump.	Warm material or add feed pressure.
				A material leaking.	Follow pump troubleshooting in XP70 Sprayer manual.
				Too much restriction on mix manifold B side restriction.	Reduce restriction to B side mix manifold.
				*B side hose is too small.	Change to larger diameter hose size.
				*No B side offset in control setup.	Adjust B side offset in setup screens if B normally runs at a higher pressure than A. See Setup Screen 2 , page 29.
				Improper configuration	Adjust setpoints on setup screens. See Setup Mode Details , page 28.
P6AX		Pressure A Disconnected	Flashing Red	Broken cable.	Replace transducer.
				Disconnected cable.	Connect cable
P6BX		Pressure B Disconnected	Flashing Red	Broken cable.	Replace transducer.
				Disconnected cable.	Connect cable.
WJPX		Air Solenoid Disconnected	Flashing Red	Broken cable.	Replace cable.
				Disconnected cable.	Connect cable.
				Damaged solenoid.	Replace solenoid.
P4AX		Pressure A High	Flashing Red	A pressure exceeding maximum working pressure at setpoint.	Reduce air pressure to motor or adjust setpoint.





* Remote mix manifold applications only.

Code	Icon	Code Name	LED Status	Cause	Solution
Alarms					
P4BX		Pressure B High	Flashing Red	A pressure exceeding maximum working pressure setpoint.	Reduce air pressure to motor or adjust setpoint. Open down stream valve.
				Too much restriction on mix manifold B side restriction.	Reduce restriction to B side on mix manifold.
				Blockage in B line downstream.	Reduce downstream restriction. Clean mix manifold.
BATT		Low Battery	Flashing Red	Battery is low. NOTE: If the battery is less than 8.5 volts, this alarm is shown. If the battery is less than 8.3 volts this alarm is shown and the solenoid pin is extended to stop the pump.	See Repair , page 23.
FUSE		Blown Fuse	Flashing Red	Fuse is blown.	See Repair , page 23 for information on how to check the fuse.
				Fuse not seated in fuse holder.	Place fuse in fuse holder.
				Bent pins on the fuse.	Straighten pins on the fuse, install back into fuse holder.

Code	Icon	Code Name	LED Status	Cause	Solution
		System Pressurized	Flashing Red	<p>The PressureTrak controller detected air pressure when trying to clear an alarm.</p> <p>NOTE: The images in the code and icon columns will display on your screen. These screens demonstrate how to properly clear an alarm. Press the lower left arrow to stop the demonstration sequence and return to the alarm screen.</p>	<p>Shut off air pressure and wait for air pressure to drop.</p> <p>NOTE: XL air motors only: Press the valve pin fully into the valve. Press to follow remaining prompts to clear the alarm. See Clear Alarms, page 17.</p>
❖		System Pressurized (after system depressurization)	Flashing Red	Check fuse resistance. If resistance is less than 6 ohms, replace the solenoid.	Check fuse resistance. If resistance is greater than 6 ohms, replace the fuse. See Replace the PressureTrak Module Battery or Fuse , page 23.
❖				Faulty solenoid due to wear.	Replace solenoid.
◆					
◆					
◆					

❖ Only the XL air motors will show the air valve reset images if the air pressure is not turned down.



◆ XL3400 and XL6500 air motors will show the air valve underneath the cover.

Code	Icon	Code Name	LED Status	Cause	Solution
Deviations					
J3AX		Differential Pressure (A>B)	OFF	Ran out of B Side B material.	Refill hopper or change drum.
				Cavitating B side pump.	Warm material or add feed pressure.
				B material leaking.	Follow pump troubleshooting in XP70 Sprayer manual.
				No mix manifold B side restriction.	Add restriction to B side on mix manifold to balance pressures.
				A side hose is too small.	Change to larger hose size.
J3BX		Differential Pressure (B>A)	OFF	Ran out of A side material.	Refill hopper or change drum.
				Cavitating A side pump.	Warm material or add feed pressure.
				A material leaking.	Follow pump troubleshooting in XP70 Sprayer manual.
				Too much restriction on mix manifold B side restriction.	Reduce restriction to B side on mix manifold.
				*B side hose too small.	Change to a larger hose size.
				*No B side offset in control setup.	Add B side offset in setup screen.
Events and Advisories					
EERX		Under Minimum Spray Pressure, Circulation, Loading	OFF	Under minimum spray pressure.	Normal for circulation mode.
EVRX		Entered into spray mode	OFF	Pressure went above minimum spray limit.	Normal for spray mode.

* Remote mix manifold applications only.

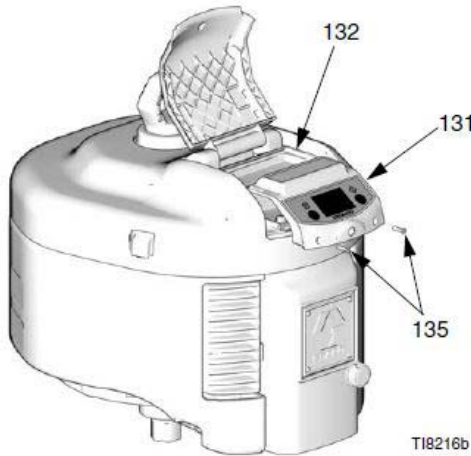
Repair

Replace the PressureTrak Module Battery or Fuse

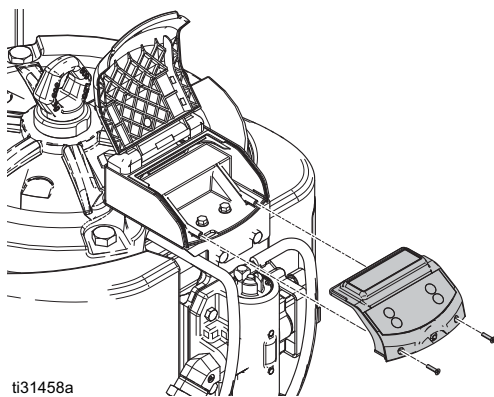
				
The battery and fuse must be replaced in a non-hazardous location.				

1. Remove the two screws (135). Carefully slide the PressureTrak module (131) out of the housing (132).

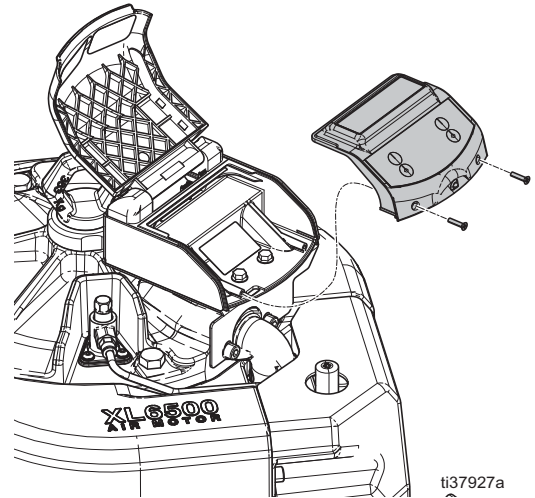
NXT Air Motor





XL10000 (XP-HF) Air Motor





XL3400 and XL6500 Air Motor



2. Disconnect the electric solenoid (7) and pressure sensor cables (4) from the module board.
3. Take the PressureTrak module (131) to a non-hazardous location

				
Use only the following approved replacement batteries. Use of an unapproved battery will void the Graco warranty, as well as Intertek and Ex approvals.				
<ul style="list-style-type: none"> • Ultralife® brand lithium U9VL • Duracell® brand alkaline MN1604 • Energizer® brand alkaline 522 • Varta® brand alkaline 4922. 				

4. **To replace the battery**, disconnect the used battery and replace with an approved battery.

				
Use only a Graco-approved replacement fuse (12) Graco part number 24V216				

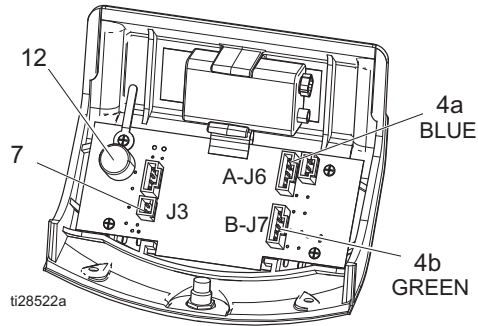
5. Checking the fuse (12) resistance:

- a. Remove the fuse from the circuit board.
- b. Use an ohm meter to measure the resistance of the fuse.

NOTE: Less than 6 ohms means the fuse is good. 6 ohms or more means the fuse must be replaced.

6. To replace the fuse (12):

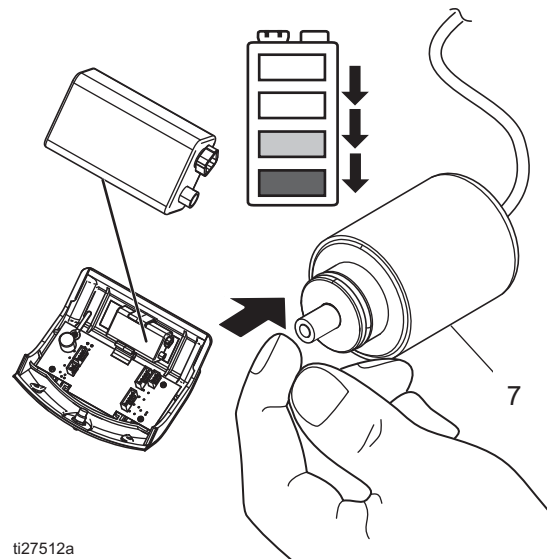
- a. Pull the fuse away from the board.
- b. Replace with a new fuse (12).



Retract a Solenoid With a Dead Battery

First replace the battery and clear the error (this will retract the pin). If no replacement battery is available, complete the following steps to retract the solenoid.

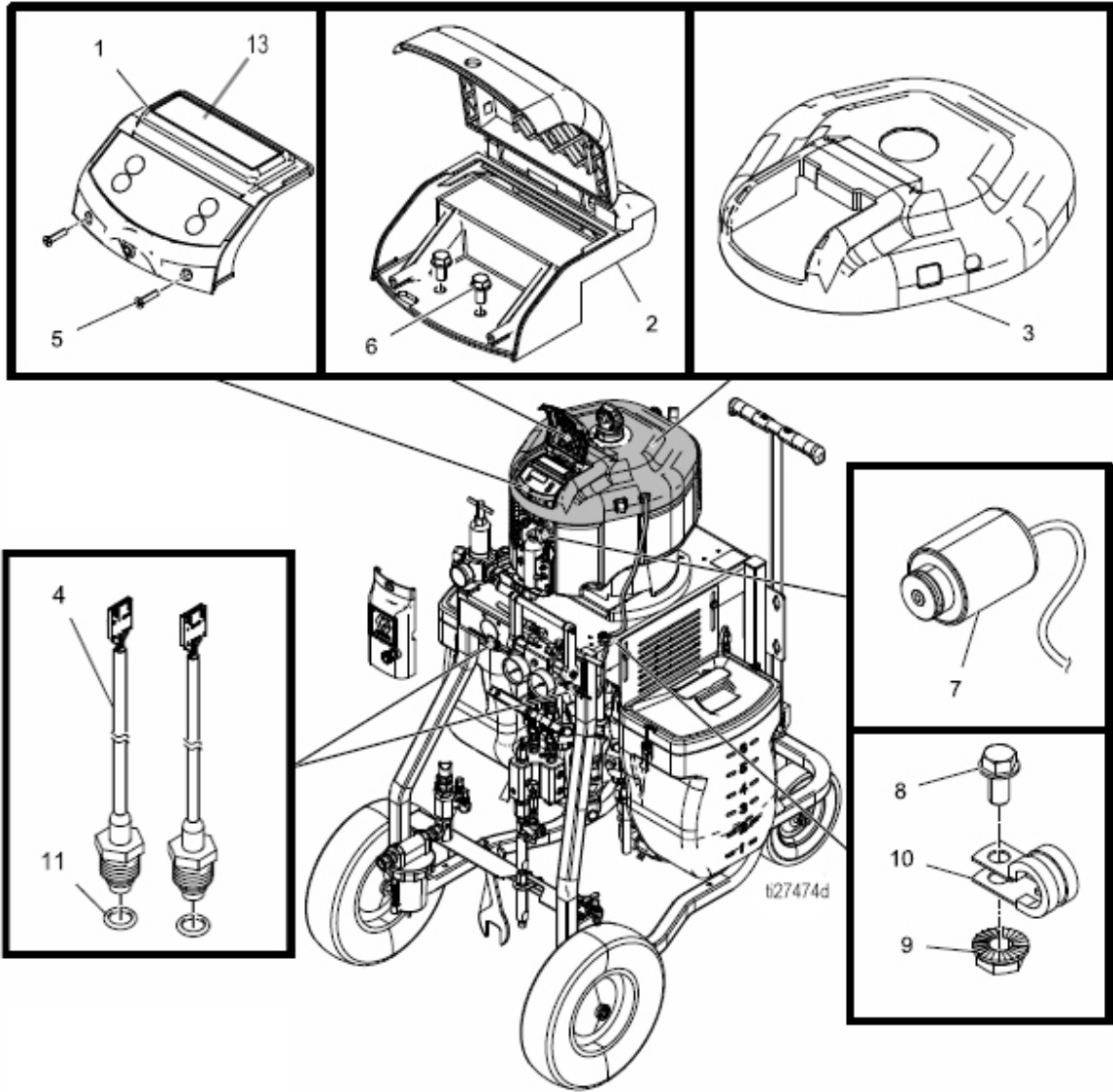
1. Remove cover (3), front (D), and retainer (G).
2. Push pin back into solenoid (7).
3. Reinstall solenoid (7), retainer (G), front (D), and cover (3).



NOTE: For more detail on parts orientation, see **Installation**, page 10.

Parts

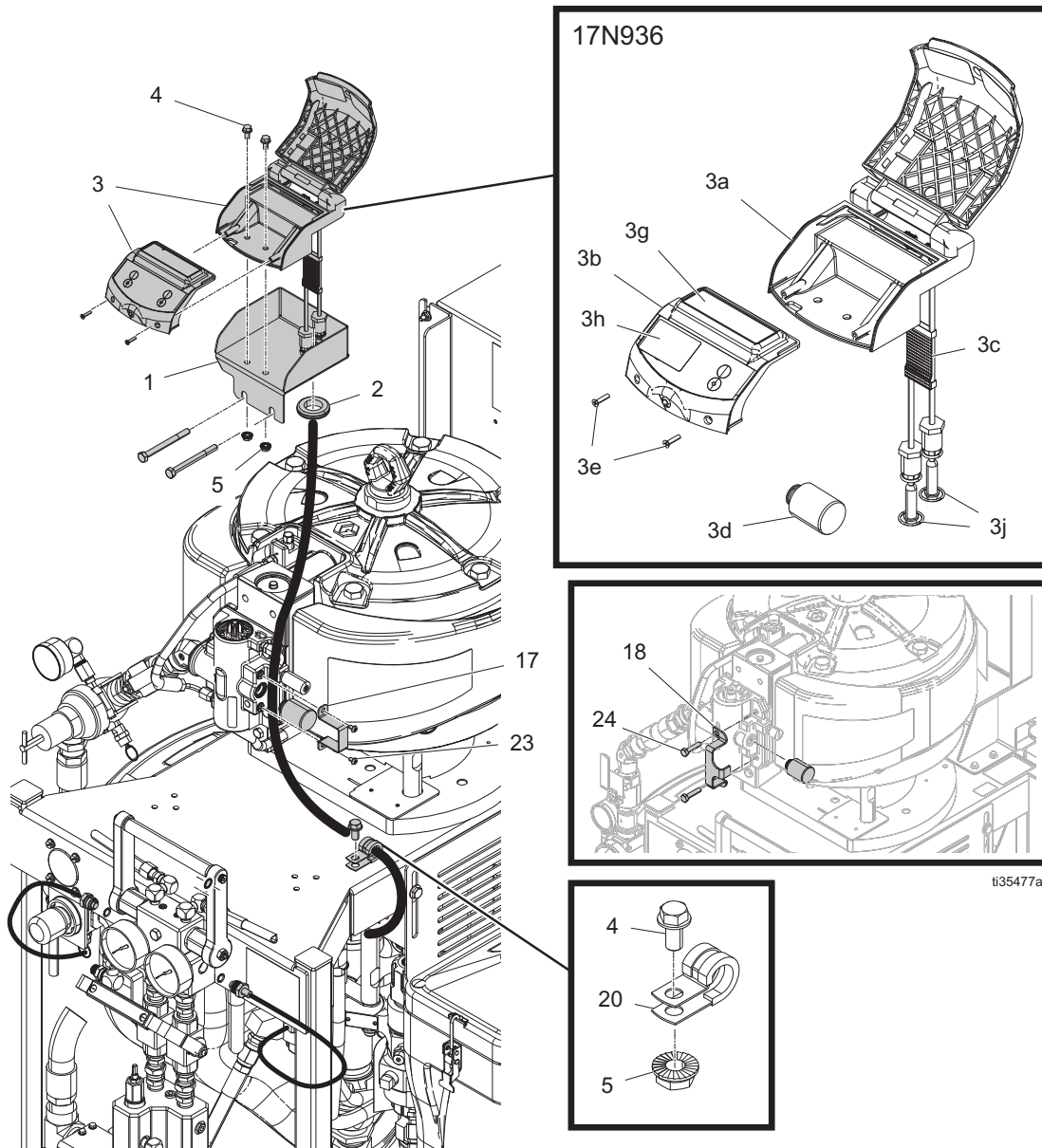
Kits 17G807 and 17G808



Ref. Part	Description	Qty.	Ref. Part	Description	Qty.
1	24Y281 MODULE, hazardous location pressure monitor	1	8	----- SCREW, flanged, hex head	1
2	24Y932 HOUSING, PressureTrak, machined	1	9	----- NUT, hex, flange head	1
3	17G839 COVER, PressureTrak, NXT3400	1	10	----- CLAMP, cable	1
	17G840 COVER, PressureTrak, NXT6500	1	11	----- PACKING, o-ring	2
4	17G837 SENSOR, PressureTrak, assembly	1	12	24V216 KIT, repair, fuse assembly	1
5	----- SCREW, high-low, flat head #6 x 0.625	2	13▲	15F716 LABEL, warning	1
6	----- SCREW, thread forming	2	14	NXT405 KIT, membrane shield	1
7	NXT403 SOLENOID, locking, DC	1			

▲ Replacement Danger and Warning labels are available at no cost.

Kit 25C452

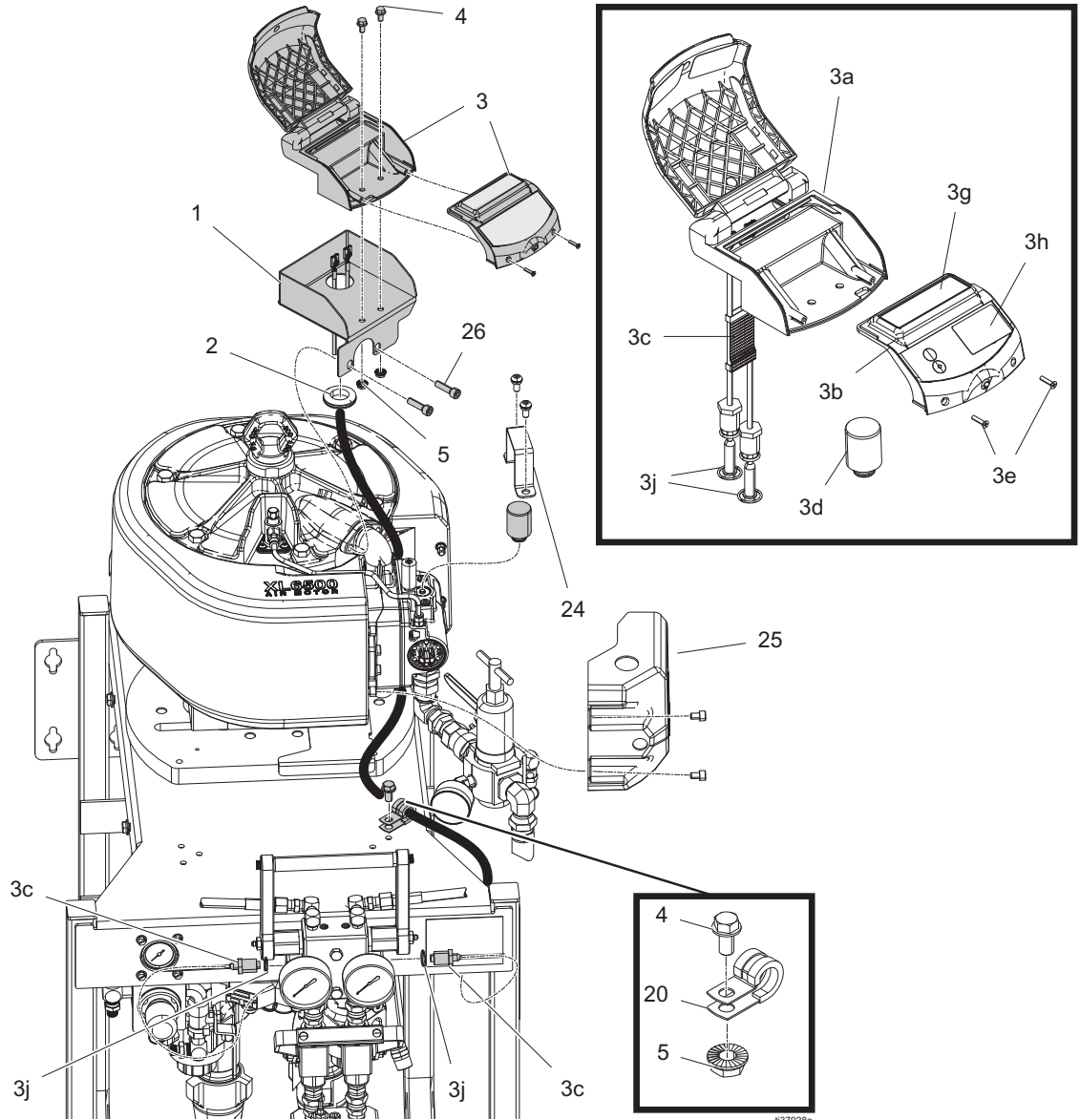


Ref.	Part	Description	Qty.
1	17P845	BRACKET, XP-hf	1
2	16C251	GROMMET	1
3	17N936	MONITOR, PressureTrak (includes 3a-3j)	1
3a	24Y932	HOUSING	1
3b	24Z940	MODULE	1
3c	17R447	SENSOR, PressureTrak, assembly	2
3d	15F477	SOLENOID, locking, DC	1
3e	-----	SCREW, high-low, flat head #6 x 0.625	2
3f	24V216	KIT, repair, fuse assembly (not shown)	1
3g▲	15F716	LABEL, warning	1
3h	NXT405	KIT, membrane shield (pack of 20)	1

Ref.	Part	Description	Qty.
3j	-----	PACKING, o-ring	2
4	-----	SCREW	2
5	-----	NUT, hex, flange head	2
17	17R738	BRACKET, XL motor, solenoid	1
18	17P748	BRACKET, XP-hf, solenoid	1
20	-----	CLAMP, cable	1

▲ Replacement Danger and Warning labels are available at no cost.

Kits 26C426 and 26C427



Ref.	Part	Description	Qty.	Ref.	Part	Description	Qty.
1	17Y036	MONITOR, pressuretrak, xp50/70, xl65	1	3f	24V216	KIT, repair, fuse assembly (not shown)	1
	26C418	BRACKET, pressure trak, xp, painted	1	3g	15F716	LABEL, warning	1
	17Y035	MONITOR, pressuretrak, xp35, xl3400	1	3h	NXT405	KIT, membrane shield (pack of 20)	1
	26C424	BRACKET, pressure trak, xp, 34, paint	1	3j	-----	PACKING, o-ring	1
2	16C251	GROMMET	1	4	-----	SCREW, flange, hex hd	3
3	18C025	MONITOR, pressuretrak	1	5	-----	NUT, hex, flange head	2
3a	24Y932	HOUSING	1	20	128769	CLAMP, cable	1
3b	25B393	MODULE	1	24	17R738	BRACKET, solenoid, xl motor	1
3c	17R447	SENSOR, PressureTrak, assembly	1	25	18C022	COVER, air valve, pressure track	1
3d	15F477	SOLENOID, locking, DC	1	26	127463	SCREW, cap, socket head	2
3e	-----	SCREW, high-low, flat head #6 x 0.625	1	▲ Replacement Danger and Warning labels are available at no cost.			

Appendix A: User Setup Display

Setup Mode Details

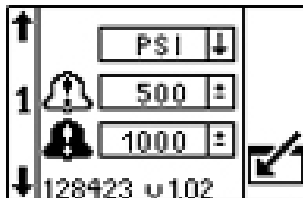
Set the system parameters before spraying. These can be changed as necessary. Press and hold any of the four keys on the User Interface Display for three seconds and the XP PressureTrak will enter into the Setup Mode.

Setup mode screens enable the user to view or modify system configuration data. The user can set:

- Units of pressure
- Differential pressure deviation value
- Differential pressure alarm value
- High pressure limit value
- Minimum spray pressure value
- Normal B pressure offset value

Setup Screen 1

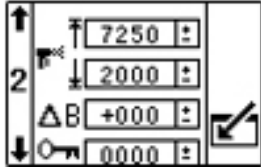
Setup Screen 1 enables the user to set units of measurement that will display on other screens, pressure warning and pressure alarm. Additionally, this screen displays the software number and version. Refer to the following table for more information.



Icon	Function
	<p>Deviation Pressure</p> <p>Adjust the differential pressure deviation setpoint.</p> <p><i>Default: 400 psi (2.75 MPa, 27.5 Bar)</i></p> <p><i>Range: 0-2000 psi (13.8 MPa, 138 Bar)</i></p>
	<p>Alarm Pressure</p> <p>Adjust the differential pressure alarm setpoint.</p> <p>This is the main setting that determines how far apart the A and B pressures can be before shutting down the machine. If the machine shuts down too easily, increase this to a higher setpoint.</p> <p><i>Default: 600 psi (4.13 MPa, 41.3 Bar)</i></p> <p><i>Range: 0-2000 psi (13.8 MPa, 138 Bar)</i></p>

Setup Screen 2

Setup Screen 2 enables the user to set the high spray pressure alarm limit value, minimum spray pressure value, and B pressure offset. refer to the following table for more information.



Icon	Function
	<p>High Pressure Limit</p> <p>Adjust the high pressure limit.</p> <p>NXT Air Motors:</p> <p><i>Default: 7250 psi (50 MPa, 500 Bar)</i></p> <p><i>Range: 0-7250 psi (50 MPa, 500 Bar)</i></p> <p>XL Air Motors:</p> <p><i>Default: 7500 psi (51.7 MPa, 517 Bar)</i></p> <p><i>Range: 0-7500 psi (51.7 MPa, 517 Bar) maximum</i></p>
	<p>Minimum Spray Pressure Limit</p> <p>Adjust the lower spray pressure limit.</p> <p><i>Default: 2000 psi (13.8 MPa, 138 Bar)</i></p>
	<p>B Side Pressure Offset</p> <p><i>Default: 0 psi (0 MPa, 0 Bar)</i></p> <p><i>Range: -999 - +999 psi (-9.9 - +9.9 MPa, -99.9 - 99.9 Bar) maximum</i></p> <p>Only used for remote mix manifold applications where there is a normal difference in pressure between A and B. Remote mix manifold applications should first be balanced with proper house sizing and adjusting the mix manifold B restrictor. See manual 3A0590.</p> <p><i>Use this if the differential alarm bar graph on the Spray Screen is off to one side under normal spray conditions.</i></p>
	<p>Password</p> <p>The setup screens can be protected by a password to restrict their accessibility. To set the password, see Set Password, page 30. To deactivate the password, enter 0000.</p> <p><i>Default: 0000 (not active)</i></p> <p><i>Range: 0-9999</i></p>

Setup Screen 3

Setup Screen 3 enables the user to scroll through all errors and clear the entire error log. The error log will display the most recent error on the top of the list. Refer to the following table for more information.

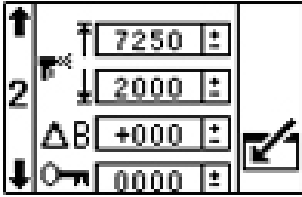










Icon	Function
	<p>Error Number</p> <p>The first column lists the error number. Once the system has more than the maximum errors allowed, then the oldest error will be over-written.</p> <p><i>Maximum: 20</i></p>
	<p>Error Code</p> <p>The second column lists the error codes (see Error Codes, page 19).</p> <p><i>Maximum: 20</i></p>
	<p>Time</p> <p>The third column shows the time that the error occurred since the unit was last powered on. The time will always start at 0:00 when the system is powered up. This time will be logged as code ELCX.</p> <p><i>Format: Hours: Minutes</i></p> <p><i>Maximum: 23:59</i></p>
	<p>Reset</p> <p>Press the Reset icon to clear the entire error log.</p>

Set Password

NOTE: When the password is “0000” the setup screens can be accessed without entering a password.

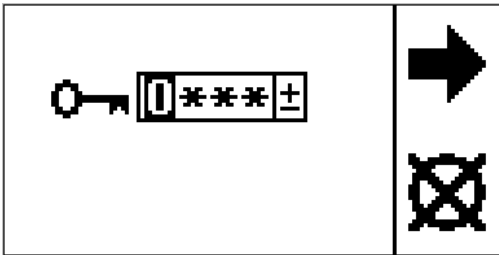
1. Navigate to Setup Screen 2.



2. Press  to access fields to make changes.
3. Press  to navigate to the password field.
Press  to edit data.
4. Press  and  to increment or decrement to the desired digits of the password.
5. Press  to accept the password or press  to cancel.
6. Press  to exit edit mode.

NOTE: The password screen is shown when the setup screens are accessed and the password function has been enabled by changing the “0000” password.

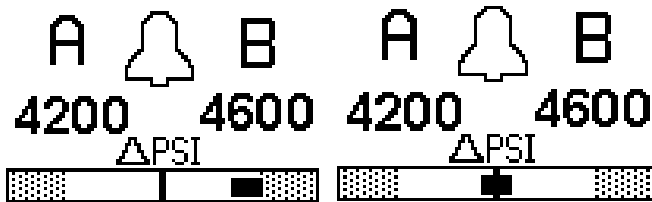
NOTE: If you set and forget the password, please contact Graco Technical Assistance for a default password.



Appendix B: Run Screen Details

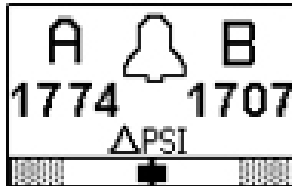
The graph on the bottom of the display shows the magnitude of the differential pressure in relation to the deviation and alarm setpoints. If the moving bar is in the center, clear area of the graph (the pressures are within tolerance). If the moving bar is in the dotted area of the graph, the pressures are in the deviation setpoint. If the moving bar moves to either end of the graph, the pressures are in the alarm setpoint and the PressureTrak Monitor will alarm.

NOTE: Under normal spray conditions, if the moving bar is not centered, use the B Side Pressure Offset to center the bar. See **Setup Screen 2**, page 29.



Circulation Mode

This is the display screen that appears after the power up screen. A and B pressure are shown. In Circulation Mode, all alarms are disabled except for the Air Solenoid disconnected High Pressure A, and High Pressure B alarms.

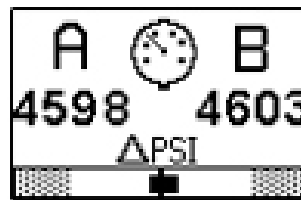


Icon	System Status
	Indicates that you are in Circulation Mode and the fluid pressure is below the Lower Spray Pressure Limit. All alarms are disabled except for Air Solenoid Detection, High Pressure A, and High Pressure B alarms.

Spray Mode Active

This is the display screen that appears during spray mode. A and B pressure are shown.

When the pressure first gets above the lower spray pressure limit, the user has 30 seconds to balance the system differential pressure so it is less than the differential pressure deviation and alarms limits. Then the system will automatically go into Spray mode and start monitoring all alarms and deviations.



Icon	System Status
	Indicates that you are in spray mode, at least one of the pumps has pressure greater than the lower spray pressure limit, and the differential pressure is less than the differential pressure deviation setpoint.

Alarm Active

This is the display screen that appears during an active alarm. A and B pressures shown are the current pressures of the system. The information screen captures the pressure at the time of the alarm. To toggle between the Alarm Active screen and the Alarm Information screen, press either the or .

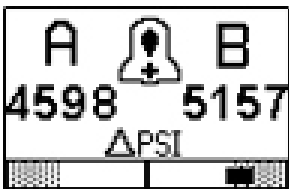



Refer to the following table for more information.

Icon	System Status
	Indicates that there is an active alarm.

Deviation Active

This is the display screen that appears during an active deviation. A and B pressure are shown. Refer to the following table for more information.



Icon	System Status
	Indicates that there is an active deviation.


Information Screen

The information screen is displayed when an alarm is active. It shows the active alarm code and the A and B pressure conditions at the time of the alarm, if applicable.

To toggle between the Alarm Active screen and the Alarm Information screen, press:



The red LED will flash when an alarm is present. Refer to the following table for more information.

Icon	System Status
	Indicates that there is an active alarm. The red light on the front LED will be flashing and the system is disabled.
J4BX	Alarm Active Code (see Error Codes , page 19).

NOTE: To clear the alarm, see **Clear Alarms**, page 17.

Manual Bypass Mode

If the user needs to spray with one of the above errors active, set the Lower Spray Pressure Limit equal to the High Pressure Alarm Limit to enter Manual Bypass Mode. Only use Manual Bypass Mode for emergency operation. The XP PressureTrak no longer monitors the pressures and will not shut off the sprayer.

Accessories

Part	Description
NXT405	Membrane Shield Kit (20 shields included) Removable clear shield to protect the membrane switch from daily wear.

Technical Specifications

PressureTrak Kits		
	US	Metric
Fluid Pressure Range		
NXT Air Motors	200–7250 psi	1.4–50 MPa, 13.8–500 Bar
XL Air Motors	200–7500 psi	1.4–51.7 MPa, 13.8–517 Bar
Notes		
All trademarks or registered trademarks are the property of their respective owners.		

California Proposition 65

CALIFORNIA RESIDENTS

 **WARNING:** Cancer and reproductive harm – www.P65warnings.ca.gov.

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For patent information, see www.graco.com/patents.

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Original instructions. This manual contains English. MM 3A3320

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