



Pump Kit

3A0980D

EN

This manual contains kit installation instructions only



Kit: 16F047 (X5, X7, LTS 15, LTS 17); 16E846 (Pro LTS 17, Pro LTS 19); 16G227 (240V M5, L10, M5+, L10+, Pro Plus™ A30, Pro Plus™ A45, X5, X7, ASM ESP); 16X519 (240V Pro Plus™ A20, M3+, Project Painter™ Plus)



Important Safety Instructions

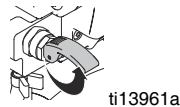
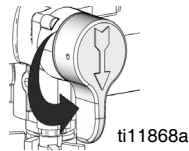
For detailed sprayer information and warnings, see Operation manuals.

Pressure Relief Procedure

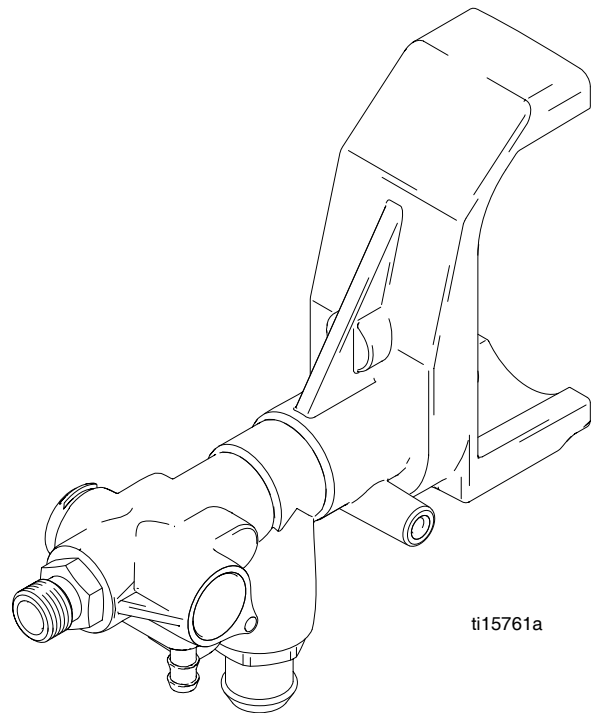
							
<p>To help prevent injection injuries, follow this procedure when you stop spraying and before you service or clean the sprayer, remove parts, or repair leaks.</p>							

1. Turn Power switch OFF. Unplug sprayer.
2. Turn Spray/Prime valve to PRIME to relieve pressure. Turn pressure control knob left (counterclockwise) to minimize pressure.
3. Trigger gun.
4. Put trigger safety in safety ON position.

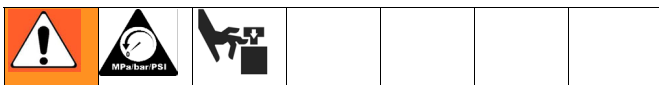
NOTE: Leave Spray/Prime valve in PRIME position until you are ready to spray again.



If you suspect that the spray tip or hose is completely clogged or that pressure has not been fully relieved after following the steps above, VERY SLOWLY loosen the tip guard retaining nut or hose end coupling to relieve pressure gradually. Then loosen it completely. Clear the tip or hose obstruction.



Disassembly



ELECTRIC SHOCK HAZARD MOVING PARTS HAZARD

To reduce risk of serious injury, including electric shock, do not touch moving or electrical parts with fingers or tools while testing repair. Unplug sprayer when power is not required for testing. Install all covers, gaskets, screws, and washers before you operate sprayer.

1. Unplug electrical cord (A) and perform **Pressure Relief Procedure** (see page 1, or Operation manuals).
2. Remove suction hose and drain tubes from pump.
3. Remove front cover screws (B) (T-30 Torx).
4. Remove side shroud screws (C) (T-20 Torx), and remove left shroud (D). Remove underside shroud screw (E) if needed.
5. Loosen screw (F) retaining the green ground wire to the back of the drive assembly and remove the ground wire.
6. Disconnect all leads from control board (G), then remove the power cord.
7. Remove right shroud (H) and front cover (J).
8. Remove fan cover (K) by gently prying adjacent to its narrow retention bars with a flat blade screwdriver to lift them up and over the retention hooks. **NOTE:** prying on the bars themselves can fracture them.
9. Loosen two motor screws (T-20) then pull the motor from the pump/drive assembly. Be careful not to damage the cooling fan.
10. Remove gear cover (L). Remove the two screws (M) at the bottom of the pump/drive assembly then remove the pump/drive assembly.
11. Place the pump/drive assembly in a vise with the jaws clamping on the flat sides at the bottom of the pump.
12. Open the latch at the bottom of the setting indicator (N), then remove it from the pressure control.
13. Turn the knob on pressure control (P) counterclockwise to expose the wrench flats, then remove the assembly from the pump.
14. With a small hammer and punch, remove the pin retaining the handle on the drain valve (Q), then pull

the handle and cam from the valve. Remove the drain valve from the pump.

15. Use a 1-1/8 in. deep well socket to remove the AutoPrime solenoid (R) from the pump.
16. Remove the remaining two screws (M) holding the drive to the pump, then rotate the drive bracket approximately 90°.
17. Pull the drive assembly and pump piston from the pump. If necessary, tap on the shorter leg of the drive with a plastic hammer to separate the parts.

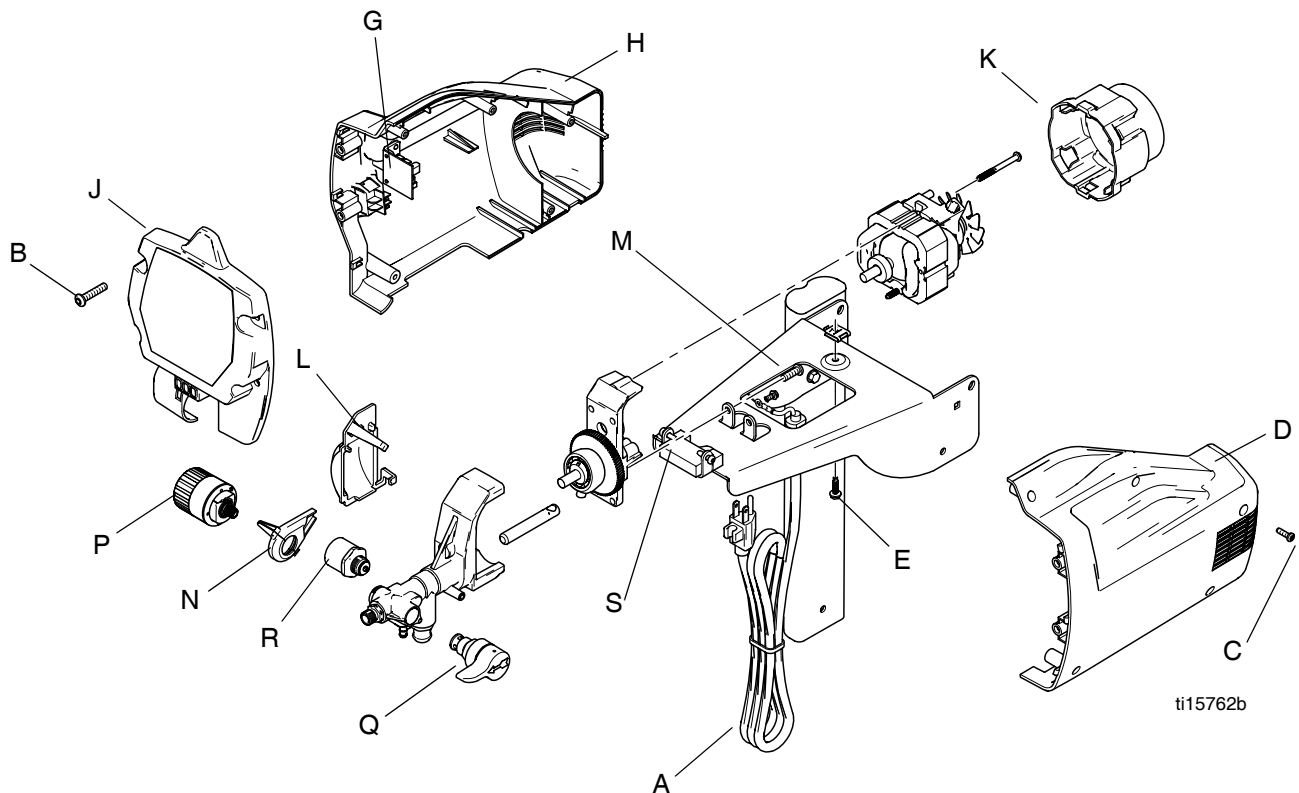
NOTICE

Prying between the pump and drive can damage the drive and lead to failure of equipment.

Assembly

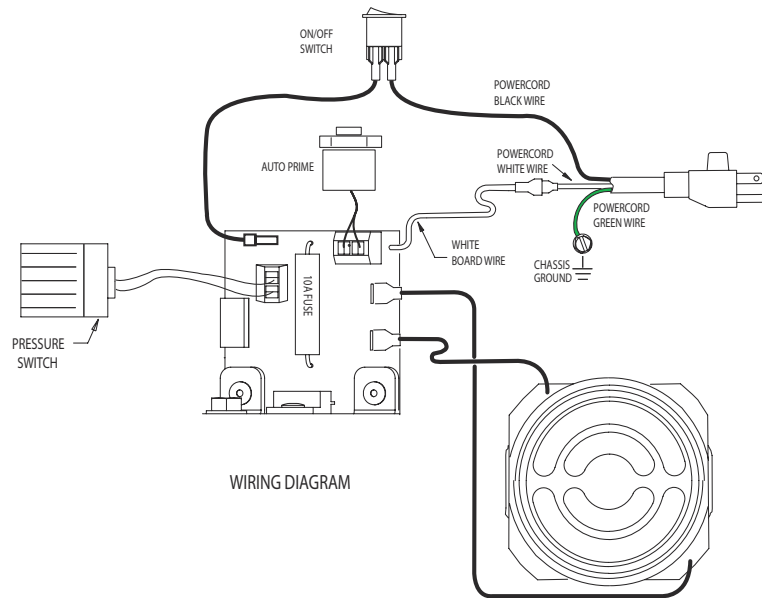
1. Install the AutoPrime solenoid (R) in the new pump. Tighten to 200-220 in-lb.
2. Verify that the o-ring on the threads of pressure control (P) is in place, then apply 1-2 drops of thread sealant (included in kit) to the threads. Assemble pressure control to pump. Tighten to 140-160 in-lb.
3. Apply white thread sealant (included in kit) to threads of drain valve (Q) and tighten into pump to 140-160 in-lb. Install cam and handle onto valve, aligning the hole in the handle to the hole in the stem of the valve. With a small hammer and punch, drive the pin flush with the handle surface.
4. Apply a thin coat of oil to the pump piston and the small bronze bushing in the pump.
5. Verify that a small amount of grease has been applied to the drive pocket in the pump piston.
6. Rotate the drive gear to bring the stud towards the pump, then insert the stud into the piston pocket. Align the drive shaft with the pump bushing, then push the drive into the pump, rotating the gear to draw the drive inward. Press the drive and pump fully together. If necessary, tap on the bottom of the drive with a plastic hammer to seat the piston in the pump.
7. Insert two screws (M) at the top of the drive. Tighten to 80-90 in-lb.
8. Assemble the motor to the drive with its thermal overload switch on the pressure control side of the sprayer. Tighten the screws to 26-32 in-lb. **NOTE:** The gear is internally lubricated; no grease is necessary.

9. Route the motor leads through the ports in the fan cover (K), then snap the cover onto the motor.
10. Place foam pad (S) on frame.
11. Place the pump/drive/motor assembly on the sprayer frame, then install the two screws (M) at the bottom of the drive. Tighten to 80-90 in-lb. Replace gear cover (L).
12. Route the pressure control harness through the setting indicator (N) then install the indicator around the pressure control and snap together. Pass the harness through the front cover (J), aligning the indicator with the opening in front cover as they are positioned loosely on the pump.
13. Assembly right shroud (H) to the front cover with 2 screws (B) and tighten to 26-32 in-lb.
14. Route the power cord and motor leads between the motor leads between the motor and the right shroud (H) then connect all leads to control board (G). Press strain relief on power cord (A) into the recess in the right shroud (H).
15. Align the hole at the bottom of the right shroud (H) with the holes in the pump and sprayer frame. Verify no electrical leads are pinched between the shroud and motor, then install one side screw (C). Tighten to 20-25 in-lb. Install screws (B) through the front cover and tighten to 26-32 in-lb.
16. Install left shroud (D) to shroud (H) and the front cover. Verify no electrical leads are pinched between the shroud halves then install side shroud screws (C) (T-20); tighten to 20-25 in-lb. Install screws (B) through the front cover and tighten to 26-32 in-lb.
17. Replace the suction and drain hoses on the pump, and secure with their clamps.



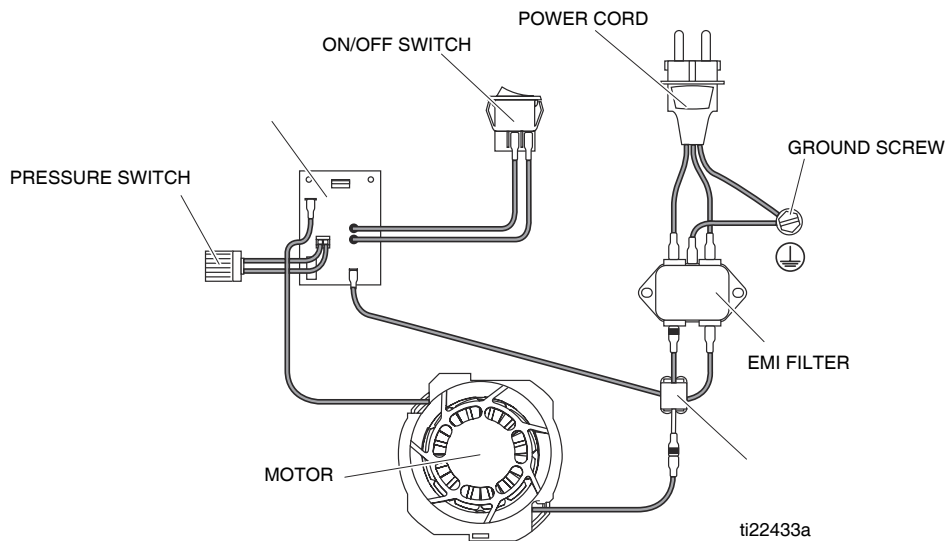
Wiring Diagram

120V Sprayers



WIRING DIAGRAM

240V Sprayers



Graco Information

For the latest information about Graco products, visit www.graco.com.

TO PLACE AN ORDER, contact your Graco distributor or call 1-800-690-2894 to identify the nearest distributor.

All written and visual data contained in this document reflects the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.

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

Original instructions. This manual contains English. MM 3A0980

Graco Headquarters: Minneapolis
International Offices: Belgium, China, Japan, Korea

GRACO INC. AND SUBSIDIARIES P.O. BOX 1441 MINNEAPOLIS, MN 55440-1441

Copyright 2010, Graco Inc. All Graco manufacturing locations are registered to ISO 9001

www.graco.com

Revised November 2013