Instructions





AutoPrime Replacement Kit for SR[™] 7, Project Painter[™] 7, X5, X7, LTS 15, LTS 17, ProX7, ProX9, Pro LTS 17, Pro LTS 19, Pro Plus[™] A60, and L30+

312291E

- This manual contains Kit installation instructions only -

AutoPrime Replacement Kit: 289107

3000 psi (21 MPa, 207 bar)



Important Safety Instructions

Read all warnings and instructions in this manual. Save these instructions. For detailed sprayer information and warnings, see Operation manual included with Magnum sprayers.

Pressure Relief Procedure







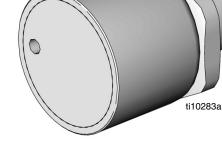
To help prevent injection injuries, follow this procedure when you stop spraying and before you service or clean the sprayer, remove parts, or repair leaks.

Project Painter 7:

- 1. Turn AllControl to OFF. Unplug sprayer.
- 2. Trigger gun.
- 3. Put trigger safety in safety ON position.

NOTE: Leave AllControl in OFF position until you are ready to spray again.





SR7, X5, X7, LTS 15, LTS 17, ProX7, ProX9, Pro LTS 17, Pro LTS 19, Pro Plus A60 and L30+:

- 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.



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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.

CAUTION

When repairing or cleaning the pump, never submerge the pump in water or allow fluid to enter the pressure control.

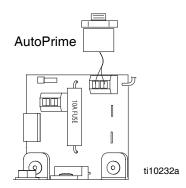
Project Painter 7 AutoPrime Replacement

Disassembly

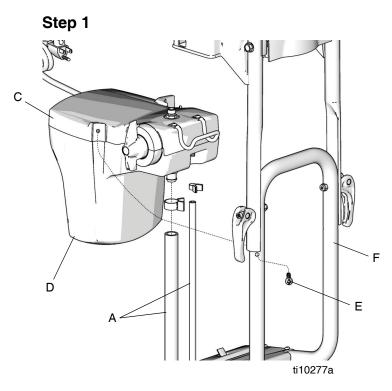
- 1. Unplug electrical cord.
- Relieve Pressure by following the procedure described on page 1, or see the Operation manual.
- 3. Remove all hoses (A). Remove 2 screws (E) (T-30 torx) holding unit to frame (F).
- Remove and save 4 screws (B) (T-20 torx) from enclosure (D). Separate enclosure (D) from cover (C).
- Unplug the AutoPrime wire connector (H) from the control board (I). Take note of the wire routing so new wires are routed the same way.
- 6. Remove AutoPrime (G) from pump housing (J) and discard.

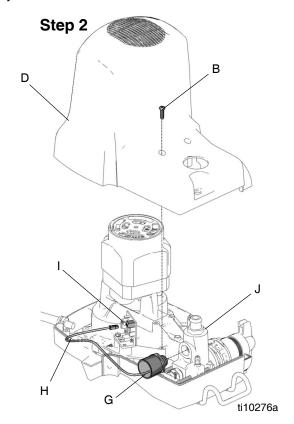
Assembly

- 1. Insert new AutoPrime (G) in pump housing (J). Torque to 200 to 240 in-lb (22.6 to 27.1 N•m).
- 2. Reattach AutoPrime control wire connector (H) to control board (I), making sure wires are routed correctly. (Disassembly, step 5).



- Reassemble motor enclosure (D) to housing cover (C) with screws (B). Torque to 25 to 35 in-lb (2.8 to 4.0 N•m).
- 4. Reconnect unit to frame (F) using 2 screws (E). Torque to 70 to 80 in-lb (7.9 to 9.0 N•m).
- 5. Reconnect all hoses (A).
- 6. Apply new AllControl labels.





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ProX7, ProX9, Pro LTS 17, Pro LTS 19, Pro Plus A60, L30+, and SR7 AutoPrime Replacement

Disassembly

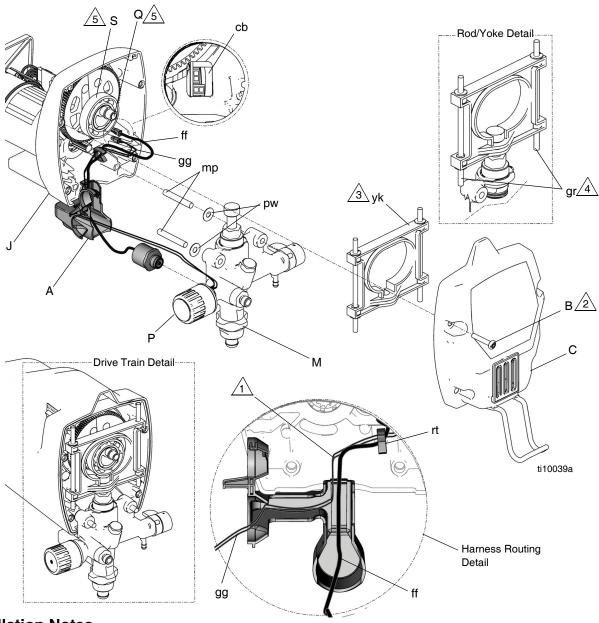
- 1. Unplug electrical cord, and **Relieve Pressure** (see cover or Operations manual).
- 2. Remove the 4 cover screws (B) (T-30 torx) and front cover (C).
- 3. Remove yoke (yk) and guide rods (gr).
- Disconnect pressure control (P) and AutoPrime (A) harness from control board connectors (cb) at back of drive housing. Using fingernail or tip of small, flat-blade screwdriver, press tab on right side of connector to release.
- 5. Remove AutoPrime cover (A) (ProX, Pro LTS, Pro Plus A60, and L30+ units only) by releasing tab located under pressure control knob.
- 6. Remove pump (M) from drive housing (J).
- 7. Place pump (M) on workbench or in vise.
- 8. Remove AutoPrime (A) from pump.

Installation

- Read all Installation Notes on page 4 or 5.
- 1. Screw new AutoPrime (A) into pump (M), and torque to 200 to 240 in-lb (22.6 to 27.1 N•m). **Do not overtighten, or damage could occur.**
- Route pressure control and AutoPrime wires (ff and gg) as shown in harness routing detail on page 4 or
 Connect to control board connector (cb) at back of drive housing (J) (connect with tab to the right).
- 3. Install AutoPrime cover (A) (ProX, Pro Plus A60, and L30+ units only).
- 4. Install pump (M) on mounting pins (mp). Make sure the plastic washers (pw) are between the drive housing (J) and the pump (M).
- 5. Install yoke (yk) with rod cap in slot of yoke, as shown in **Rod/Yoke Detail** on page 4 or 5.
- 6. Check final assembly against **Drive Train Detail** on page 4 or 5.
- 7. Install front cover (C) and cover screws (B). Torque to 110 to 120 in-lb (12.4 to 13.6 N•m).

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ProX7, ProX9, Pro LTS 17, Pro LTS 19, Pro Plus A60, and L30+ Sprayers



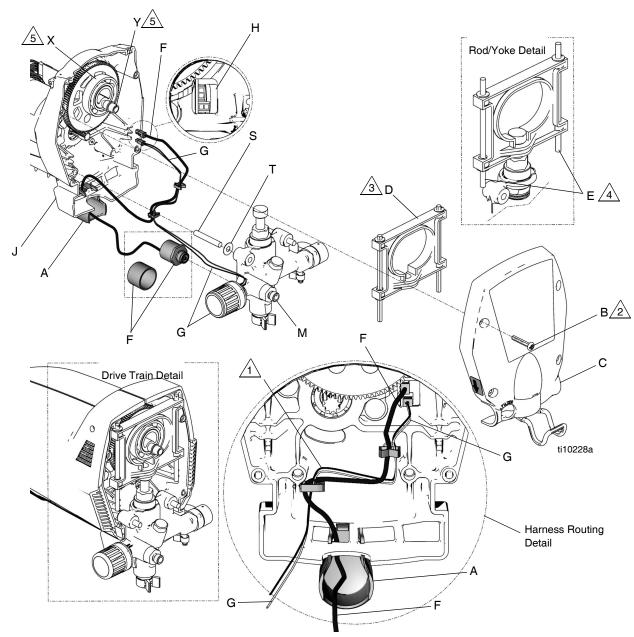
Installation Notes

To prevent misalignment, assemble sprayer tipped onto back of enclosure.

- Take care not to pinch harness between pump and any part of drive housing or between front cover and drive housing.
- For best cover alignment, tighten lower two cover screws first, then top two. Torque screws to 110 to 120 in-lb (12.4 to 13.6 N•m).
- For yoke installation, eccentric bearing on gear must touch top of pump rod. Turn gear to move eccentric bearing to proper height.
- $\frac{4}{4}$ If yoke guide rods drop out of position during assembly, damage will occur when cover if tightened. Always check position of guide rods before tightening cover.
- Apply light coat of oil.

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SR7 Sprayers



Installation Notes

To prevent misalignment, assemble sprayer tipped onto back of enclosure.

1 Take care not to pinch harness between pump and any part of drive housing or between front cover and drive housing.

For best cover alignment, tighten lower two cover screws first, then top two. Torque screws to 110 to 120 in-lb (12.4 to 13.6 N•m).

For yoke installation, eccentric bearing on gear must touch top of pump rod. Turn gear to move eccentric bearing to proper height.

If yoke guide rods drop out of position during assembly, damage will occur when cover if tightened. Always check position of guide rods before tightening cover.

 $\frac{\sqrt{5}}{}$ Apply light coat of oil.

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X5, X7, LTS 15, and LTS 17 AutoPrime Replacement

Disassembly

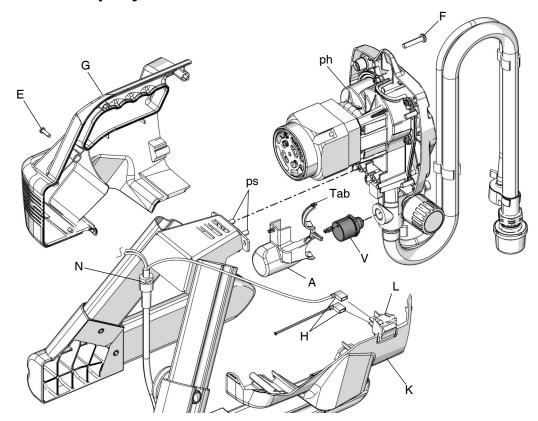
- Unplug electrical cord and Relieve Pressure (see page 1 or Operation manual 312001 or 313034).
- 2. **X7 and LTS 17 Only:** Remove underside shroud mounting screw (D).
- 3. Remove 4 side shroud screws (E) (T-20 Torx).
- 4. Remove 4 front cover screws (F) (T-30 Torx).
- 5. Remove right shroud (G).
- Disconnect power cord connectors (H) from ON/OFF switch (L).
- 7. Remove left shroud (K).
- 8. Remove 2 pump housing mounting screws (ps). Be sure to support pump housing (ph).
- 9. Remove pump housing (ph). **X7 and LTS 17 Only:** Pull power cord (N) through opening in pump housing mounting bracket (pb).
- 10. Disconnect AutoPrime harness from control board connectors (cb). Take note of wire routing; new wire will be re-routed the same way. Use fingernail or tip of small flat-blade screwdriver to press tab on right side of connector to release.
- 11. Remove AutoPrime cover (A) by releasing tab located under pressure control knob.
- Turn AutoPrime (V) counter-clockwise to unthread and remove.

Assembly

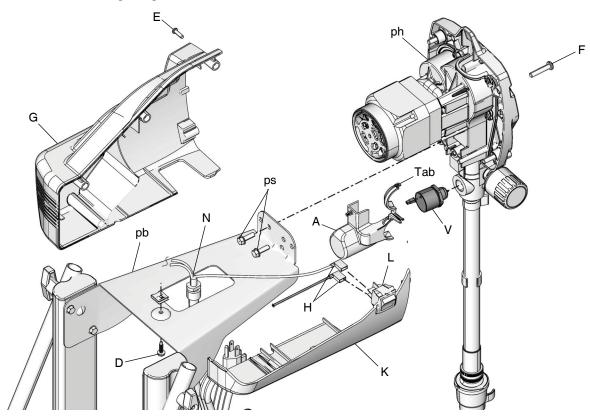
- Read all Installation Notes.
- Screw new AutoPrime (V) into pump housing (ph) and torque to 200 to 240 in-lb (22.6 to 27.1 N•m).
 Do not over tighten; damage could occur.
- 2. Route AutoPrime (V) harness as shown in harness routing detail. Connect to control board connector (cb). Connect with tab to the right.
- 3. Install AutoPrime cover (A).
- Install pump housing (ph) and 2 pump housing mounting screws (ps) onto pump housing mounting bracket (pb). Torque to 110 to 120 in-lb (12.4 to 13.6 N•m).
- Reattach power cord connectors (H) to ON/OFF switch (L).
- 6. Install left side shroud (K).
- 7. **X7 and LTS 17 Only:** Route power cord (N) through opening in pump housing mounting bracket (pb).
- 8. Install power cord (N) into recess on left shroud (K).
- 9. Install right shroud (G).
- 10. Install 4 side shroud screws (E) (T-20 Torx). Torque to 20 to 25 in-lb (2.3 to 2.8 N•m).
- 11. Install 4 front cover screws (F) (T-30 Torx). Torque to 26 to 32 in-lb (2.9 to 3.6 N•m).
- 12. **X7 and LTS 17 Only:** Install underside shroud mounting screw (D). Torque to 25 to 35 in-lb (2.8 to 3.9 N•m).

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X5 and LTS 15 Sprayers

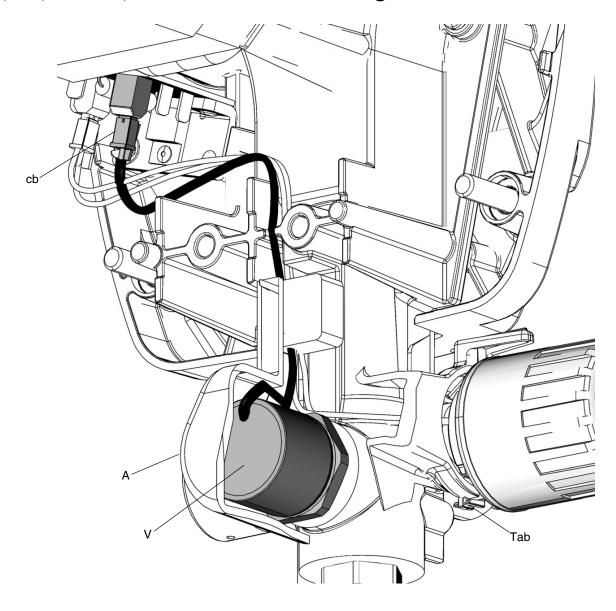


X7 and LTS 17 Sprayers



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X5, X7, LTS 15, and LTS 17 Wire Routing



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 312291

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

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

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