Operation, Parts, Repair



FieldLazer[™] ES100

For application of water-based field striping materials. For professional use only. Not approved for use in explosive atmospheres or hazardous (classified) locations.

ES100 Models: 25U542, 25U543, 25U544

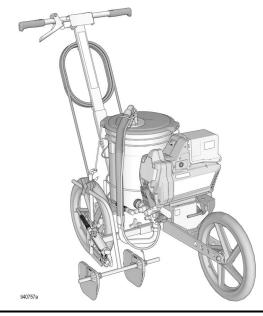
1750 psi (12.1 MPa, 121 bar) maximum working pressure.



Important Safety Instructions

Read all warnings and instructions in this manual and all related manuals before using the equipment. Be familiar with the controls and the proper usage of the equipment. Save these instructions.

Related Manuals:			
312830 Gun (SG2)			
3A3172 Pump			



Use only genuine Graco replacement parts. The use of non-Graco replacement parts may void warranty.



PROVEN QUALITY. LEADING TECHNOLOGY.

Contents

Contents

Models 3
Warnings
Component Identification7
FieldLazer Setup8
Battery Installation and Removal11
Pressure Relief Procedure 12
Operation 13
Flush Storage Fluid
Fill Pump
Fill Gun and Hose16
How to Spray 17
Spray Tip Installation17
Spray
Stencil Spraying
Spray Tip Selection
Clear Tip Clog
Cleanup
Cleaning InstaClean [™] Fluid Filter
Clean the Gun
Storage
Quick Reference
Maintenance
Airless Hoses
Spray Tips
Pump Repair
Troubleshooting
Parts
Wiring Diagrams43
Technical Specifications
California Proposition 65
Graco Standard Warranty
Graco Information

Models

	Model	Region	Model #	Battery Voltage VDC	Charger Voltage VAC
	ES100	USA/CA	25U542	60	120
C€25 [ff[ES100	emea/uk	25U543	54	230
	ES100	ANZ/AP	25U544	54	230

The FieldLazer ES100 is compatible with the following DEWALT FLEXVOLT 54V and 60V batteries:

- DCB606 60V/2ah (20V/6ah)
- DCB546 54V/2ah (18V/6ah)
- DCB609 60V/3ah (20V/9ah)
- DCB547 54V/3ah (18V/9 ah)
- DCB548 54V/4ah (18V/12ah)
- DCB612 60V/4ah (20V/12ah)

Related DEWALT Manuals

Manual	Description	Region
N463494	DEWALT DCB118 Fast Charger Manual	USA/CA
N463510 N463511	DEWALT DCB118-QW Fast Charger Manual (Part 1 and 2)	EMEA
N501136	DEWALT DCB118-XE Fast Charger Manual	ANZ/AP

Warnings

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
SKIN INJECTION HAZARD High-pressure spray is able to inject toxins into the body and cause serious injury that can result in amputation. In the event that injection occurs, get immediate surgical treatment.
 Do not aim the gun at, or spray any person or animal. Keep hands and other body parts away from the discharge. For example, do not try to stop leaks with any part of the body. Always use the spray tip guard. Do not spray without spray tip guard in place. Use Graco spray tips. Use caution when cleaning and changing spray tips. In the case where the spray tip clogs while spraying, follow the Pressure Relief Procedure for turning off the unit and relieving the pressure before removing the spray tip to clean. Equipment maintains pressure after power is shut off. Do not leave the equipment energized or under pressure while unattended. Follow the Pressure Relief Procedure when the equipment is unattended or not in use, and before servicing, cleaning, or removing parts. Check hoses and parts for signs of damage. Replace any damaged hoses or parts. This system is capable of producing 1750 psi (121 bar, 12.1 MPa). Use Graco parts or accessories that are rated a minimum of 1750 psi (121 bar, 12.1 MPa).
 Always engage the trigger lock when not spraying. Verify the trigger lock is functioning properly. Verify that all connections are secure before operating the unit. Know how to stop the unit and bleed pressure quickly. Be thoroughly familiar with the controls.
FIRE AND EXPLOSION HAZARD Flammable fumes, such as solvent and paint fumes, in work area can ignite or explode. To help prevent fire and explosion:
 Do not spray or clean with flammable materials. Use water-based materials only. Use equipment only in well-ventilated area. Keep work area free of debris, including solvent, rags and gasoline. Keep a working fire extinguisher in the work area.

Warnings

	<u>M</u> WARNING					
	EQUIPMENT MISUSE HAZARD					
	Misuse can cause death or serious injury.					
MPa/bar/PSL	 Always wear appropriate gloves, eye protection, and a respirator or mask when spraying. Do not operate or spray near children. Keep children away from equipment at all times. Do not overreach or stand on an unstable support. Keep effective footing and balance at all times. Chan alort and unstable what you are doing. 					
	 Stay alert and watch what you are doing. Do not operate the unit when fatigued or under the influence of drugs or alcohol. 					
	 Do not kink or over-bend the hose. 					
	 Do not expose the hose to temperatures or to pressures in excess of those specified by Graco. 					
	• Do not use the hose as a strength member to pull or lift the equipment.					
	• Do not spray with a hose shorter than 25 feet.					
	• Always replace cracked, broken or missing parts immediately with genuine Graco parts, see Parts , see page 36.					
	• Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards.					
	Use only in dry locations. Do not expose to water or rain.					
	• Use in well-lit areas.					
	 Make sure all equipment is rated and approved for the environment in which you are using it. 					
	Do not operate or clean sprayer with the battery shield open. PRESSURIZED ALUMINUM PARTS HAZARD					
	Use of fluids that are incompatible with aluminum in pressurized equipment can cause serious chemical reaction and equipment rupture. Failure to follow this warning can result in death, serious injury, or property damage.					
	 solvents or fluids containing such solvents. Do not use chlorine bleach. 					
	 Many other fluids may contain chemicals that can react with aluminum. Contact your material supplier for compatibility. 					
	BATTERY AND CHARGER COMPATIBILITY HAZARD					
<u>/!</u> \	 Only use DEWALT brand 54V Max or 60V Max batteries and battery chargers with this tool. 					
	 READ ALL INSTRUCTIONS included with this tool regarding the safety and usage of DEWALT batteries and battery chargers. Do not wash or spray down battery. 					
	• Do not clean the battery with anything other than a cloth moistened with water.					
	MOVING PARTS HAZARD					
	Moving parts can pinch, cut, or amputate fingers and other body parts.					
	Keep clear of moving parts.					
	• Do not operate equipment with protective guards or covers removed.					
the a / DBF / PDI	• Equipment can start without warning. Before checking, moving, or servicing equipment, follow the Pressure Relief Procedure and disconnect all power sources.					

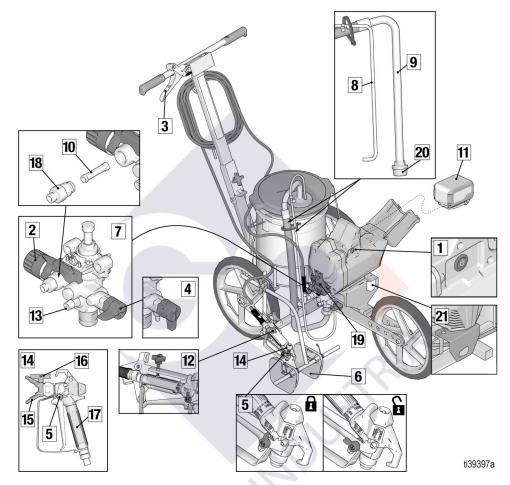
Warnings

WARNING				
TOXIC FLUID OR FUMES HAZARD				
Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.				
• Read Safety Data Sheets (SDSs) to know the specific hazards of the fluids you are using.				
 Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines. 				
PERSONAL PROTECTIVE EQUIPMENT				
Wear appropriate protective equipment when in the work area to help prevent serious injury, including eye injury, hearing loss, inhalation of toxic fumes, and burns. Protective equipment includes but is not limited to:				
 Protective eyewear, and hearing protection. Respirators, protective clothing, and gloves as recommended by the fluid and solvent manufacturer. 				



Component Identification

Component Identification



1	Striper Power Switch
2	Pressure Control
3	Spray Gun Control Lever
4	Prime Valve
5	Spray Gun Trigger Lock
6	Spray Shield
7	Pump
8	Drain Tube
9	Suction Tube
10	Instaclean [™] Fluid Filter (inside fluid outlet fitting)
11	Battery

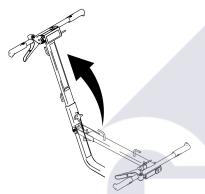
12	Gun Retainer Knob
13	Push Prime Button
14	Airless Spray Gun
15	Tip Guard
16	Reversible Spray Tip
17	Gun Fluid Filter (optional, located in handle)
18	Fluid Outlet Fitting
19	Easy Access Door
20	Inlet Strainer
21	Pump and Inlet Valve Removal Tool

FieldLazer Setup

FieldLazer Setup

When unpacking FieldLazer for the first time or after long term storage perform setup procedure.

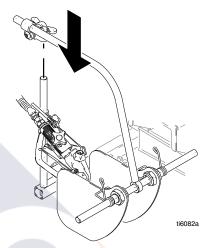
1. Remove FieldLazer from box. Unfold handle.



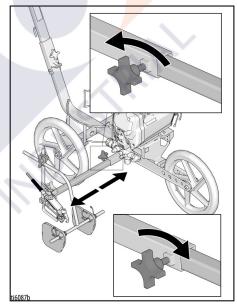
2. Tighten knob and secure handle in place.



3. Assemble shields to striper.

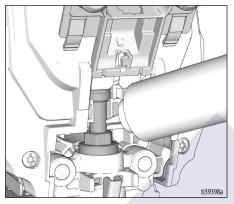


4. Loosen knob and slide spray gun outside of wheel. Tighten knob.

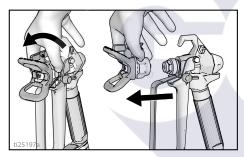


FieldLazer Setup

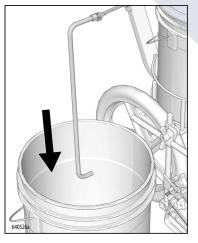
5. Fill wet cup with TSL to extend pump life.



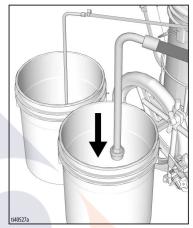
6. Ensure tip guard and SwitchTip are removed. Do not lose seal.



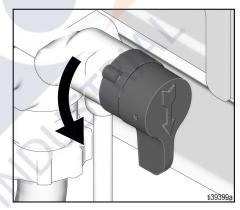
7. Place drain tube in waste pail.



- 8. When unpacking FieldLazer for the first time, remove packaging materials from inlet strainer. After long term storage check inlet strainer for clogs and debris.
- 9. Place suction tube in water pail.

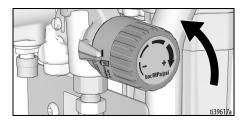


10. Turn prime valve down.



11. Turn Pressure Control Knob all the way left (counter-clockwise) to minimum pressure.

FieldLazer Setup



Strain the Paint

Previously opened paint may contain dried paint or other debris. To avoid priming problems and spray tip clogs it is recommended to strain the paint before using. Paint strainers are available where paint is sold. Stretch a paint strainer over a clean pail and pour the paint through the strainer to capture any dried paint and debris before spraying.



Battery Installation and Removal

Battery Installation and Removal

Always start with a fully charged battery. Do not splash or immerse battery or charger in water. See battery and charger information shipped with the FieldLazer.

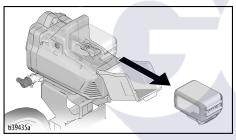




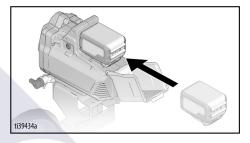
Replace and charge battery only in a well-ventilated area and away from flammable or combustible materials, including paints and solvents.

Remove and install battery into the FieldLazer as follows:

1. Open battery cover and remove the used battery, if in place.



2. Install battery by aligning the battery pack with the rails inside the FieldLazer and sliding it in until the battery pack is firmly seated. Ensure that it does not disengage. Close battery cover.



NOTICE

DO NOT operate unit with battery cover open as overspray and water could damage the battery.

Pressure Relief Procedure

Pressure Relief Procedure

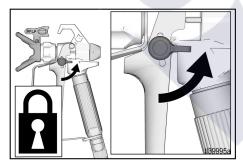


Follow the Pressure Relief Procedure whenever you see this symbol.

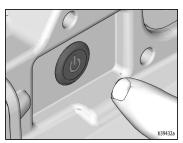


This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection or splashed fluid, follow the **Pressure Relief Procedure** whenever FieldLazer is stopped and before FieldLazer is cleaned or checked, and before equipment is serviced.

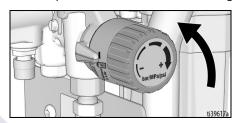
1. Engage the trigger lock. Always engage the trigger lock when FieldLazer is stopped to prevent the gun from being triggered accidentally.



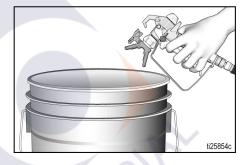
2. Turn ON/OFF switch to the **OFF** position. Power button is illuminated when power is OFF.



3. Turn pressure control to lowest setting.



 Hold the gun firmly to a pail, point gun into pail. Disengage the trigger lock and trigger the gun to relieve pressure.



- 5. Engage the trigger lock.
- 6. Put drain tube into a pail and place Prime/Spray valve in PRIME position (drain) to relieve pressure.
- 7. If you suspect the spray tip or hose is clogged or that pressure has not been fully relieved:
 - a. VERY SLOWLY loosen the spray tip guard retaining nut or the hose end coupling to relieve pressure gradually.
 - b. Loosen the nut or coupling completely.
 - c. Clear airless hose or spray tip obstruction.



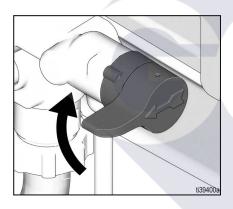
Operation



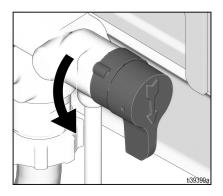
Prime/Spray Valve

The Prime/Spray Valve uses a lever that is flipped between the PRIME and SPRAY position.

SPRAY Position



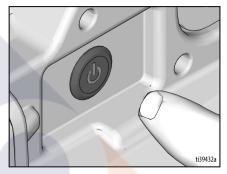
PRIME Position



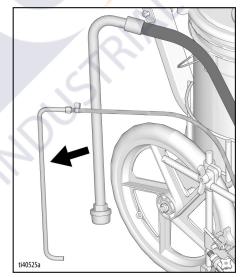
Flush Storage Fluid

This FieldLazer arrives from the factory with a small amount of test material in the system. It is important that you flush this material from the sprayer before using it for the first time.

- 1. Perform **Pressure Relief Procedure**, page 12.
- 2. Make certain ON/OFF switch is **OFF**. Power button is not illuminated when OFF.

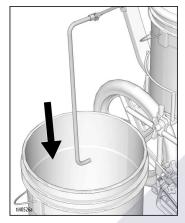


a. Separate drain tube (smaller) from suction tube (larger).

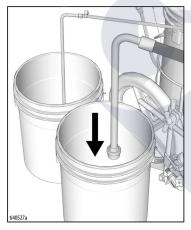


Operation

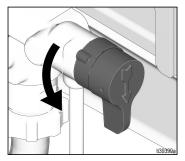
b. Place drain tube in waste pail.



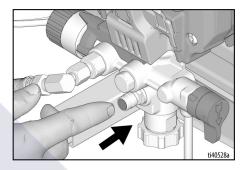
c. Submerge suction tube in a grounded pail partially filled with water or flushing fluid.



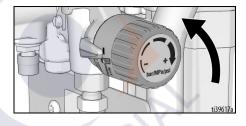
3. Place Prime/Spray valve in PRIME position.



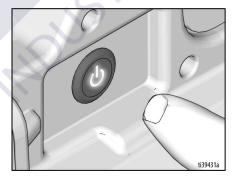
- 4. Install battery. See **Battery Installation** and **Removal**, page 11.
- 5. Press PushPrime button twice to loosen inlet ball.



6. Align setting indicator with low setting on Pressure Control Knob.

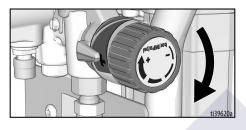


7. Turn ON/OFF switch to **ON** position. Power button is illuminated when ON.

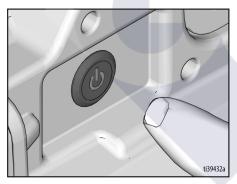




 Increase pressure 1/2 turn to start motor. Allow paint or other material to circulate through FieldLazer until material flows out the drain tube.



- When FieldLazer starts pumping, flushing fluid and air bubbles will be purged from system. Allow fluid to flow out of drain tube into waste pail for 30 to 60 seconds.
- 10. Turn ON/OFF switch to **OFF** position. Power button is not illuminated when OFF.



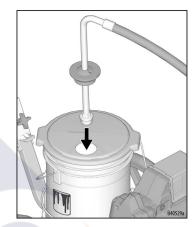


High-pressure spray is able to inject toxins into the body and cause serious bodily injury. Do not stop leaks with hand or rag.

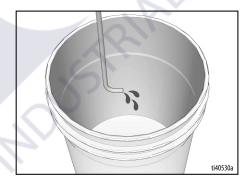
11. Inspect for leaks. If leaks occur, perform **Pressure Relief Procedure**, page 12, then tighten all fittings. If there are no leaks continue with the next step.

Fill Pump

1. Move suction tube to paint pail and submerge suction tube in paint.



- Press ON/OFF switch to ON position. Button is illuminated when power is ON.
- 3. Wait to see paint coming out of the drain tube.



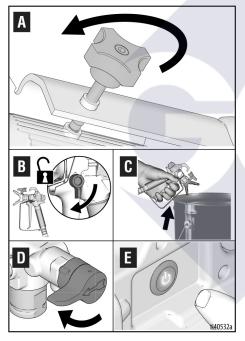
 Press ON/OFF switch to **OFF** position. Button is illuminated when power is OFF.

> **NOTE:** Some fluids may prime faster if the ON/OFF switch is momentarily turned off so the pump can slow and stop. Turn ON/OFF switch on and off several times if necessary.

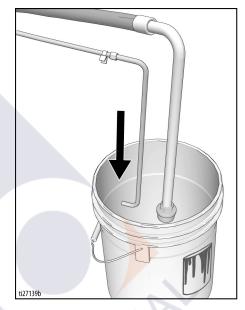
Operation

Fill Gun and Hose

- 1. Hold gun against waste pail. Point gun into waste pail.
 - a. Loosen gun retainer knob and remove spray gun from holder.
 - b. Disengage trigger lock.
 - c. Pull and hold gun trigger.
 - d. Turn Prime/Spray valve to SPRAY position.
 - e. Press ON/OFF switch to **ON** position. Button is illuminated when power is ON.



- 2. Trigger gun into waste pail until only paint comes out of the gun.
- 3. Release trigger. Engage trigger lock.
- 4. Transfer drain tube to paint pail.



NOTE: When motor stops FieldLazer is ready to paint. If motor continues to run FieldLazer is not properly primed, repeat **Fill Pump** and **Fill Gun and Hose**.

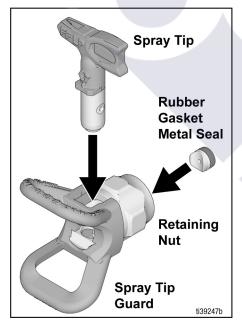
Spray Tip Installation



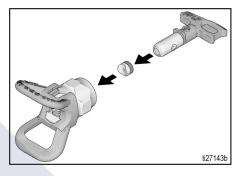
To avoid serious injury from skin injection, do not put your hand in front of the Spray Tip when installing or removing the Spray Tip or Spray Tip Guard.

To prevent spray tip leaks make certain spray tip and tip guard are installed properly.

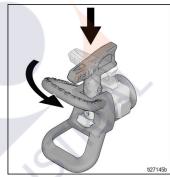
- 1. Perform **Pressure Relief Procedure**, page 12.
- 2. Engage trigger lock.
- 3. Loosen gun retaining knob and remove spray gun from holder.
- 4. Verify spray tip and tip guard parts are assembled in the order shown.



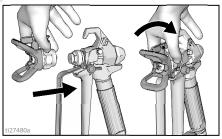
a. Use spray tip to align gasket and seal in the tip guard.



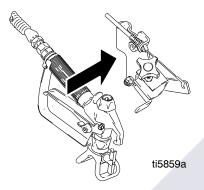
Spray tip must be pushed all the way into the tip guard. Turn spray tip to push down.



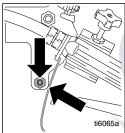
- c. Turn the arrow shaped handle on the spray tip forward to the spray position.
- 5. Screw spray tip assembly onto the gun and tighten.



6. Return spray gun to holder.



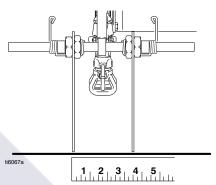
7. Place trigger guard in front of nut on gun holder. Tighten knob.



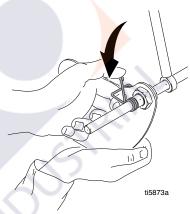


Spray

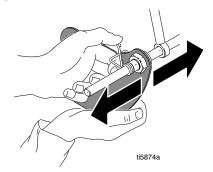
1. Adjust spray shields for desired width.



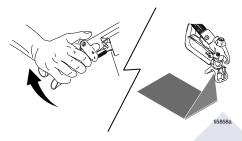
2. Grasp shield with one hand and squeeze spring arms with the other hand.



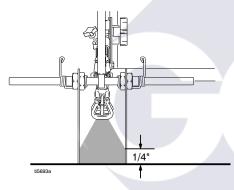
3. Slide shield to desired position and release spring.



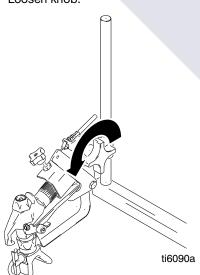
4. Squeeze spray gun control and push striper forward to spray a test stripe.



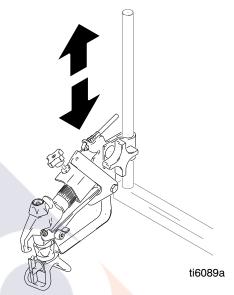
5. Adjust gun height so paint spray strikes shields 1/4 in. from bottom of shields.



6. Loosen knob.



7. Slide spray gun up or down.



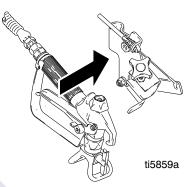
8. Spray a test stripe before spraying the actual field.

Stencil Spraying

1. Loosen gun retainer knob.

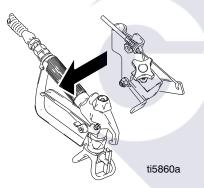


4. Return gun to holder.

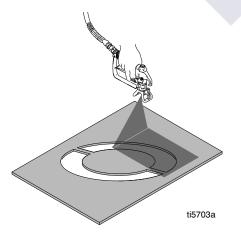


5. Tighten gun retainer knob.

2. Remove gun from holder.



- ti5863a
- 3. Trigger spray gun over stencil pattern.



Spray Tip Selection

Selecting Tip Size

Spray tips come in a variety of hole sizes for spraying a range of fluids. Your FieldLazer includes a tip for use in most paint spraying applications.

Hints:

- As you spray, the tip wears and enlarges. Starting with a tip hole size smaller than the maximum will allow you to spray within the rated flow capacity of the sprayer.
- Use larger tip hole sizes with thicker coatings and smaller tip hole sizes with thinner coatings.
- Tips wear with use and need periodic replacement.
- Tip hole size controls flow rate the amount of paint that comes out of the gun.

Fan Width

Fan width is the size of the stripe pattern, which determines the area covered with each stroke.

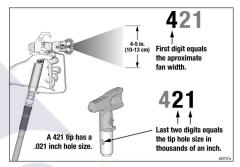
Hints:

- Select a fan width best suited to the surface being sprayed.
- Wider fans allow provide better coverage on broad, open surfaces.
- Narrower fans provide better control on small, confined surfaces.

Understanding Tip Number

The last three digits of tip number (i.e.: LL5421) contain information about hole size and fan width on surface when gun is held 6 in. (15.2 cm) from surface being sprayed.

Rac5 tips are measured at 6 in. (15.2 cm) from surface.



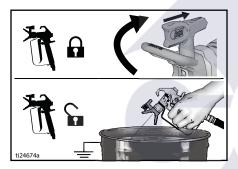
Clear Tip Clog

In the event that particles or debris clog the spray tip, this sprayer is designed with a reversible spray tip that quickly and easily clears the particles without disassembling the sprayer.

See **Strain the Paint**, page 10 for additional information.

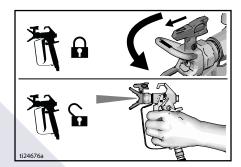
 Release trigger. Engage trigger lock. Rotate spray tip to unclog position. Disengage trigger lock. Trigger gun at waste area to clear clog.

Unclog



2. Engage trigger lock. Rotate spray tip back to spray position. Disengage trigger lock and continue spraying.

Spray

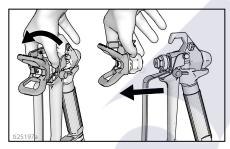




Cleanup

Cleaning the FieldLazer after each use results in a trouble free start-up the next time the sprayer is used.

- 1. Perform **Pressure Relief Procedure**, page 12.
- 2. Remove tip guard and spray tip, see **Spray Tip Installation**, page 17.



3. Remove suction tube and drain tube from paint, wipe excess paint off outside.



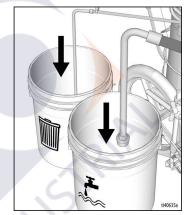
4. Separate drain tube (smaller) from suction tube (larger).



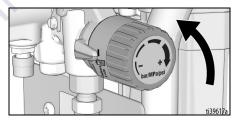
5. Place empty waste and water pails side by side.



6. Place suction tube in water and drain tube in waste pail.

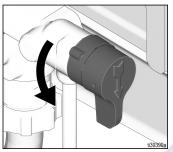


7. Turn Pressure Control Knob to the Prime/Clean setting (the lowest setting at which the pump will run).



Cleanup

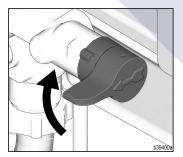
8. Place Prime/Spray valve in PRIME position.



- 9. Press ON/OFF switch to power **ON**. Button is illuminated when ON.
- 10. Flush until approximately 1/3 of the water is emptied from the pail or the fluid is clear.
- 11. Press ON/OFF switch to power **OFF**. Button is not illuminated when OFF.

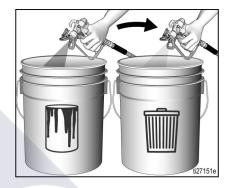
NOTE: Step 12 is for returning paint in airless paint hose to paint pail. One 50 ft (15 m) hose holds approximately 1 quart (1 liter) of paint.

- 12. To recover paint in hose:
 - a. Hold gun firmly
 - b. Point gun into paint pail.
 - c. Disengage trigger lock.
 - d. Pull and hold gun trigger.
 - e. Place Prime/Spray valve in SPRAY position.

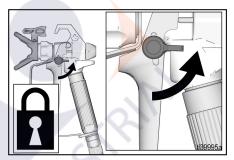


- f. Press ON/OFF switch to power **ON**. Button is illuminated when ON.
- g. Continue to hold gun trigger until you see paint diluted with water starting to come out of gun.

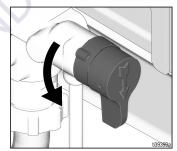
 While continuing to trigger gun, quickly move gun to redirect spray into a waste pail. Continue triggering gun into waste pail until flushing fluid dispensed from gun is relatively clear.



14. Stop triggering gun. Engage the trigger lock.

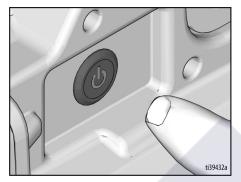


15. Place Prime/Spray valve in PRIME position.





16. Press ON/OFF switch to power **OFF**. Button is not illuminated when OFF.



- 17. Clean filters. See **Cleaning InstaClean**[™] **Fluid Filter**, page 26.
- Clean the gun, see Clean the Gun, page 26. Reference separate gun manual for additional information.
- Fill unit with Pump Armor[™] fluid to leave a protective coating to prevent freezing or corrosion.

- 20. Remove battery, see **Battery Installation** and **Removal**, page 11.
- 21. Wipe sprayer, hose, and gun with a rag soaked in water.



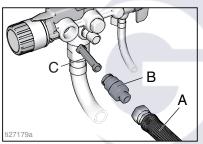
Cleanup

Cleaning InstaClean[™] Fluid Filter

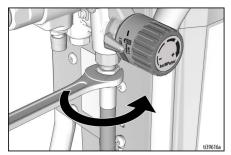
(Optional)

The InstaClean Fluid Filter prevents particles from entering paint hose. After each use, remove and clean it to ensure peak performance.

- 1. Perform **Pressure Relief Procedure**, page 12, and remove battery, see **Battery Installation and Removal**, page 11.
- 2. Disconnect airless spray hose (A) from sprayer.
- 3. Unscrew outlet fitting (B).
- 4. Remove InstaClean Fluid Filter (C).

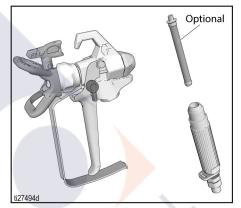


- Check InstaClean Fluid Filter (C) for debris. If needed, clean filter with water or flushing solvent and a soft brush.
 - a. Install closed (square) end of InstaClean Fluid Filter (C) in sprayer.
 - b. Screw outlet fitting (B) into sprayer.
- Tighten outlet fitting and reconnect hose (A) to sprayer. Use wrench to tighten securely.

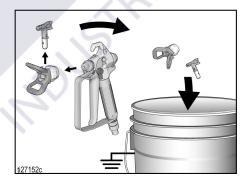


Clean the Gun

- 1. Perform **Pressure Relief Procedure**, page 12, and remove battery, see **Battery Installation and Removal**, page 11.
- 2. If optional gun filter is installed, clean gun fluid filter with water or flushing fluid and a brush every time you flush the system. Replace gun filter if damaged.



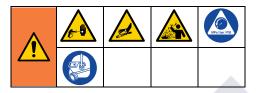
3. Remove spray tip and tip guard assembly and clean with water or flushing fluid and a brush.



4. Wipe paint off outside of gun using a soft cloth moistened with water or flushing fluid.

Storage

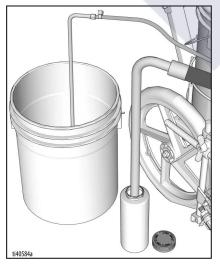
With proper storage, the FieldLazer will be ready to use the next time it is needed.



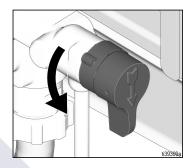
Always circulate Pump Armor storage fluid through system after cleaning. Water left in sprayer will corrode and damage pump.

Follow Cleanup, page 23, and Cleaning InstaClean[™] Fluid Filter, page 26.

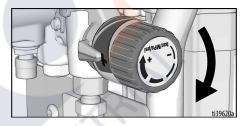
- Before storing FieldLazer make sure all water is drained out of sprayer and hoses.
- Do not allow water to freeze in FieldLazer or hose.
- Do not store FieldLazer under pressure.
- Store FieldLazer indoors.
- 1. Perform **Pressure Relief Procedure**, page 12.
- 2. Place suction tube in Pump Armor fluid bottle and drain tube in waste pail.



3. Place Prime/Spray valve in PRIME position.



- 4. Press ON/OFF switch to **ON** position. Button is illuminated when ON.
- 5. Turn pressure control knob clockwise until the pump turns on.



- When storage fluid comes out of drain tube (5-10 seconds) turn ON/OFF switch to OFF position.
- 7. Place Prime/Spray valve in SPRAY position to keep storage fluid in FieldLazer during storage. If Pump Armor is run through the hose and gun, relieve pressure by triggering the gun prior to storage.
- 8. Secure a plastic bag around suction and drain tube to catch any drips.
- 9. Remove battery, see **Battery Installa**tion and Removal, page 11.

Storage

Quick Reference

and spray gun. To select function, align symb pressure control knob with setting indicator, p 12. 3 Sprayer gun control 4 Prime valve 4 Prime valve 5 Gun trigger lock 6 Spray shield 7 ProChange TM pump 7 ProChange TM pump 8 Drain tube 9 Fluid intake (suction) tube 10 InstaClean TM fluid filter 9 Fluid intake (suction) tube 11 Battery 12 Gun retainer knob 13 PushPrime button 14 Airless spray gun 15 Gun trigger lock 8 Drain tube 9 Fluid intake (suction) tube 10 InstaClean TM fluid filter 9 Fluid intake (suction) tube 11 Battery 12 Gun retainer knob 13 PushPrime button 14 Airless spray gun 15 Tip guard 16 Reversible spray tip 17 Gun fluid filter (optional)	Ref	Name	Description	
(counter-clockwise) fluid pressure in pump, hr and spray gun. To select function, align symb pressure control knob with setting indicator, p 12. 3 Sprayer gun control Trigger located on sprayer handle that remote operates gun trigger. 4 Prime valve In PRIME position directs fluid to drain tub In SPRAY position directs pressurized fluid paint hose. 5 Gun trigger lock Prevents accidental triggering of spray gun. 6 Spray shield Adjustable spray shields to control line width. 7 ProXChange TM pump Pumps and pressurizes fluid and delivers it to hose. 8 Drain tube Drains fluid finter • Filters fluid coming out of pump to reduce plugging and improve finish. 10 InstaClean TM fluid filter • Filters fluid coming out of pump to reduce plugging and improve finish. 11 Battery Provides power to the sprayer (see page 3 fo patible batteries). 12 Gun retainer knob Retains gun in gun holder on sprayer frame. 13 PushPrime button Taps the inlet ball when pushed to loosen it. 14 Airless spray gun Dispenses fluid. 15 Tip guard Reduces risk of fluid injection injury. 16 Reversible spray tip • Atomizes fluid entering spray gun to reduce tip of size.	1	Striper power switch	Turns sprayer ON and OFF.	
4 Prime valve In PRIME position directs fluid to drain tuk 4 Prime valve In SPRAY position directs pressurized fluid paint hose. 5 Gun trigger lock Prevents accidental triggering of spray gun. 6 Spray shield Adjustable spray shields to control line width. 7 ProXChange TM pump Pumps and pressurizes fluid and delivers it to hose. 8 Drain tube Drains fluid in system during priming and presserielief. 9 Fluid intake (suction) tube Draws fluid from paint pail into pump. 10 InstaClean TM fluid filter Provides power to the sprayer (see page 3 for patible batteries). 11 Battery Provides goure to the sprayer (see page 3 for patible batteries). 12 Gun retainer knob Retains gun in gun holder on sprayer frame. 13 PushPrime button Taps the inlet ball when pushed to loosen it. 14 Airless spray gun Dispenses fluid flow according to h size. 16 Reversible spray tip Atomizes fluid entering spray gun to reduce tip c sizes. Reverse position unclogs plugged tips wit disassembly. 17 Gun fluid filter (optional) Filters fluid entering spray gun to reduce tip c sizes. Reverese position unclogs plugged tips wit disassembly.<td>-</td><td></td><td>(counter-clockwise) fluid pressure in pump, hose, and spray gun. To select function, align symbol on pressure control knob with setting indicator, page 12.</td>	-		(counter-clockwise) fluid pressure in pump, hose, and spray gun. To select function, align symbol on pressure control knob with setting indicator, page 12.	
 In SPRAY position directs pressurized fluid paint hose. Automatically relieves system pressure in pressure situations. Gun trigger lock Prevents accidental triggering of spray gun. Adjustable spray shields to control line width. ProXChangeTM pump Pumps and pressurizes fluid and delivers it to hose. Drain tube Fluid intake (suction) tube Draws fluid form paint pail into pump. InstaCleanTM fluid filter Filters fluid coming out of pump to reduce plugging and improve finish. Self cleans only during pressure relief. Battery Provides power to the sprayer (see page 3 fo pathetics). Gun retainer knob Retains gun in gun holder on sprayer frame. PushPrime button Taps the inlet ball when pushed to loosen it. Airless spray gun Dispenses fluid. Filters fluid entering sprayed, forms spray term and controls fluid flow according to h size. Reversible spray tip Atomizes fluid entering spray gun to reduce tip c hsize. Reverse position unclogs plugged tips wit disassembly. Gun fluid filter (optional) Filters fluid entering spray gun to reduce tip c hwile sliding door away from the pump inlet. 	3		operates gun trigger.	
6 Spray shield Adjustable spray shields to control line width. 7 ProXChange TM pump Pumps and pressurizes fluid and delivers it to hose. 8 Drain tube Drains fluid in system during priming and pressere relief. 9 Fluid intake (suction) tube Draws fluid from paint pail into pump. 10 InstaClean TM fluid filter • Filters fluid coming out of pump to reduce plugging and improve finish. 11 Battery • Self cleans only during pressure relief. 11 Battery Provides power to the sprayer (see page 3 for patible batteries). 12 Gun retainer knob Retains gun in gun holder on sprayer frame. 13 PushPrime button Taps the inlet ball when pushed to loosen it. 14 Airless spray gun Dispenses fluid. 15 Tip guard Reduces risk of fluid injection injury. 16 Reversible spray tip • Atomizes fluid being sprayed, forms spray tern and controls fluid flow according to h size. 17 Gun fluid filter (optional) Filters fluid entering spray gun to reduce tip c 18 Fluid outlet fitting Threaded connection for airless hose. 19 Easy access door Easy Access Door permits quick access to th while sliding door away from	4	Prime valve	 In SPRAY position directs pressurized fluid to paint hose. Automatically relieves system pressure in over- 	
7 ProXChange [™] pump Pumps and pressurizes fluid and delivers it to hose. 8 Drain tube Drains fluid in system during priming and pressurizes fluid intake (suction) tube 9 Fluid intake (suction) tube Draws fluid from paint pail into pump. 10 InstaClean [™] fluid filter • Filters fluid coming out of pump to reduce plugging and improve finish. 11 Battery Provides power to the sprayer (see page 3 for patible batteries). 12 Gun retainer knob Retains gun in gun holder on sprayer frame. 13 PushPrime button Taps the inlet ball when pushed to loosen it. 14 Airless spray gun Dispenses fluid. 15 Tip guard Reduces risk of fluid injection injury. 16 Reversible spray tip • Atomizes fluid being sprayed, forms spray term and controls fluid flow according to h size. 17 Gun fluid filter (optional) Filters fluid entering spray gun to reduce tip c 18 Fluid outlet fitting Threaded connection for airless hose. 19 Easy access door Easy Access Door permits quick access to th pump. Open pump door by pulling out on the while sliding door away from the pump inlet.	5	Gun trigger lock	Prevents accidental triggering of spray gun.	
Nose.8Drain tubeDrains fluid in system during priming and presserelief.9Fluid intake (suction) tubeDraws fluid from paint pail into pump.10InstaClean TM fluid filter• Filters fluid coming out of pump to reduce plugging and improve finish. • Self cleans only during pressure relief.11BatteryProvides power to the sprayer (see page 3 for patible batteries).12Gun retainer knobRetains gun in gun holder on sprayer frame.13PushPrime buttonTaps the inlet ball when pushed to loosen it.14Airless spray gunDispenses fluid.15Tip guardReduces risk of fluid injection injury.16Reversible spray tip• Atomizes fluid being sprayed, forms spray term and controls fluid flow according to h size. • Reverse position unclogs plugged tips wit disassembly.17Gun fluid filter (optional)Filters fluid entering spray gun to reduce tip c 1819Easy access doorEasy Access Door permits quick access to th pump. Open pump door by pulling out on the while sliding door away from the pump inlet.	6	Spray shield	Adjustable spray shields to control line width.	
9Fluid intake (suction) tubeDraws fluid from paint pail into pump.10InstaClean [™] fluid filter• Filters fluid coming out of pump to reduce plugging and improve finish. • Self cleans only during pressure relief.11BatteryProvides power to the sprayer (see page 3 for patible batteries).12Gun retainer knobRetains gun in gun holder on sprayer frame.13PushPrime buttonTaps the inlet ball when pushed to loosen it.14Airless spray gunDispenses fluid.15Tip guardReduces risk of fluid injection injury.16Reversible spray tip• Atomizes fluid being sprayed, forms spray tern and controls fluid flow according to h size. • Reverse position unclogs plugged tips wit disassembly.17Gun fluid filter (optional)Filters fluid entering spray gun to reduce tip c Threaded connection for airless hose.19Easy access doorEasy Access Door permits quick access to th pump. Open pump door by pulling out on the while sliding door away from the pump inlet.	7	ProXChange [™] pump	Pumps and pressurizes fluid and delivers it to paint hose.	
10InstaClean fluid filter• Filters fluid coming out of pump to reduce plugging and improve finish. • Self cleans only during pressure relief.11BatteryProvides power to the sprayer (see page 3 for patible batteries).12Gun retainer knobRetains gun in gun holder on sprayer frame.13PushPrime buttonTaps the inlet ball when pushed to loosen it.14Airless spray gunDispenses fluid.15Tip guardReduces risk of fluid injection injury.16Reversible spray tip• Atomizes fluid being sprayed, forms spray tern and controls fluid flow according to h size. • Reverse position unclogs plugged tips wit disassembly.17Gun fluid filter (optional)Filters fluid entering spray gun to reduce tip c tasy access door18Fluid outlet fittingThreaded connection for airless hose.19Easy access doorEasy Access Door permits quick access to th pump. Open pump door by pulling out on the while sliding door away from the pump inlet.	3	Drain tube	Drains fluid in system during priming and pressure relief.	
plugging and improve finish. Self cleans only during pressure relief.11BatteryProvides power to the sprayer (see page 3 for patible batteries).12Gun retainer knobRetains gun in gun holder on sprayer frame.13PushPrime buttonTaps the inlet ball when pushed to loosen it.14Airless spray gunDispenses fluid.15Tip guardReduces risk of fluid injection injury.16Reversible spray tip• Atomizes fluid being sprayed, forms spray tern and controls fluid flow according to h size. • Reverse position unclogs plugged tips wit disassembly.17Gun fluid filter (optional)Filters fluid entering spray gun to reduce tip c18Fluid outlet fittingThreaded connection for airless hose.19Easy access doorEasy Access Door permits quick access to th pump. Open pump door by pulling out on the while sliding door away from the pump inlet.	-			
12Gun retainer knobRetains gun in gun holder on sprayer frame.13PushPrime buttonTaps the inlet ball when pushed to loosen it.14Airless spray gunDispenses fluid.15Tip guardReduces risk of fluid injection injury.16Reversible spray tip• Atomizes fluid being sprayed, forms spray tern and controls fluid flow according to h size. • Reverse position unclogs plugged tips wit disassembly.17Gun fluid filter (optional)Filters fluid entering spray gun to reduce tip c18Fluid outlet fittingThreaded connection for airless hose.19Easy access doorEasy Access Door permits quick access to th pump. Open pump door by pulling out on the while sliding door away from the pump inlet.	10	InstaClean [™] fluid filter	plugging and improve finish.	
13PushPrime buttonTaps the inlet ball when pushed to loosen it.14Airless spray gunDispenses fluid.15Tip guardReduces risk of fluid injection injury.16Reversible spray tip• Atomizes fluid being sprayed, forms spray tern and controls fluid flow according to h size.17Gun fluid filter (optional)Filters fluid entering spray gun to reduce tip c18Fluid outlet fittingThreaded connection for airless hose.19Easy access doorEasy Access Door permits quick access to th pump. Open pump door by pulling out on the while sliding door away from the pump inlet.	11	Battery	Provides power to the sprayer (see page 3 for compatible batteries).	
14 Airless spray gun Dispenses fluid. 15 Tip guard Reduces risk of fluid injection injury. 16 Reversible spray tip • Atomizes fluid being sprayed, forms spray tern and controls fluid flow according to h size. 17 Gun fluid filter (optional) Filters fluid entering spray gun to reduce tip c 18 Fluid outlet fitting Threaded connection for airless hose. 19 Easy access door Easy Access Door permits quick access to th pump. Open pump door by pulling out on the while sliding door away from the pump inlet.	12	Gun retainer knob	Retains gun in gun holder on sprayer frame.	
15 Tip guard Reduces risk of fluid injection injury. 16 Reversible spray tip Atomizes fluid being sprayed, forms spray tern and controls fluid flow according to h size. Reverse position unclogs plugged tips wit disassembly. 17 Gun fluid filter (optional) Filters fluid entering spray gun to reduce tip c 18 Fluid outlet fitting Threaded connection for airless hose. 19 Easy access door Easy Access Door permits quick access to th pump. Open pump door by pulling out on the while sliding door away from the pump inlet.	13	PushPrime button	Taps the inlet ball when pushed to loosen it.	
 Reversible spray tip Atomizes fluid being sprayed, forms spray tern and controls fluid flow according to h size. Reverse position unclogs plugged tips wit disassembly. Gun fluid filter (optional) Filters fluid entering spray gun to reduce tip c Fluid outlet fitting Easy access door Easy Access Door permits quick access to th pump. Open pump door by pulling out on the while sliding door away from the pump inlet. 	14	Airless spray gun	Dispenses fluid.	
tern and controls fluid flow according to h size. Reverse position unclogs plugged tips wit disassembly. 17 Gun fluid filter (optional) Fluid outlet fitting Filters fluid entering spray gun to reduce tip c 18 Fluid outlet fitting 19 Easy access door Easy access door Easy Access Door permits quick access to th pump. Open pump door by pulling out on the while sliding door away from the pump inlet.	15			
18 Fluid outlet fitting Threaded connection for airless hose. 19 Easy access door Easy Access Door permits quick access to th pump. Open pump door by pulling out on the while sliding door away from the pump inlet.	16	Reversible spray tip	 tern and controls fluid flow according to hole size. Reverse position unclogs plugged tips without 	
19Easy access doorEasy Access Door permits quick access to th pump. Open pump door by pulling out on the while sliding door away from the pump inlet.	17	Gun fluid filter (optional)	Filters fluid entering spray gun to reduce tip clogs.	
pump. Open pump door by pulling out on the while sliding door away from the pump inlet.	18	Fluid outlet fitting	Threaded connection for airless hose.	
20 Inlet strainer Prevents debris from entering pump.	20	Inlet strainer	Prevents debris from entering pump.	

Maintenance

Routine maintenance is important to ensure proper operation of your striper.



Activity	Interval
Inspect/clean InstaClean filter, fluid inlet strainer, and gun filter.	Daily, or each time you spray
Inspect motor shroud openings for blockage.	Daily, or each time you spray

NOTICE

Protect the internal drive parts of this sprayer from water. Openings in shroud allow cooling of mechanical parts and electronics inside. If water gets into these openings, the sprayer could malfunction or be permanently damaged.

Airless Hoses

Check hose for damage every time you spray. Do not attempt to repair hose if hose jacket or fittings are damaged. Do not use hoses shorter than 25 ft (7.6 m). Wrench tighten, using two wrenches.

Spray Tips

- Always clean tips with compatible cleaning fluid and brush after spraying.
- Tips may require replacement after 15 gallons (57 liters) or they may last through 60 gallons (227 liters) depending on abrasiveness of paint.

Pump Repair

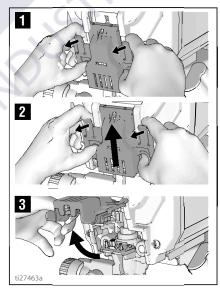
When pump packings wear, paint will begin to leak down outside of pump.

 Purchase a pump repair kit and install according to instructions provided with kit, before your next job. See Pump Removal, page 29 and Pump Installation, page 31, or consult a Graco authorized retailer, distributor, or service center.

Pump Removal

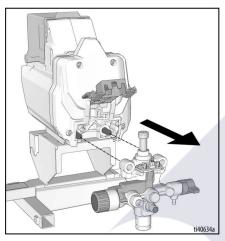
Always perform **Pressure Relief Procedure**, page 12, and remove battery, see **Battery Installation and Removal**, page 11, before starting any pump repairs.

- 1. Pull tabs on sides of the easy access door pump towards you while pushing the entire door away from the inlet end of the pump.
- 2. Lift the door so that it swivels out of the way.



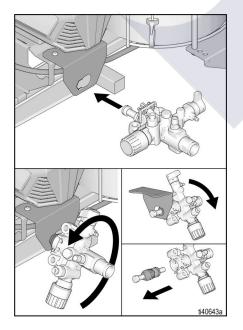
Maintenance

3. Slide pump assembly off the mounting pins.



ProXChange Removal Tool

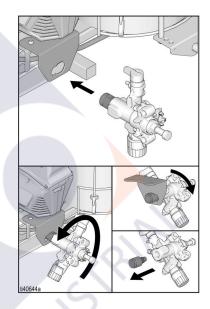
An integrated tool is included in the frame to remove the ProXChange packing assembly. See pump repair manual for complete repair instructions.



Inlet Valve Removal

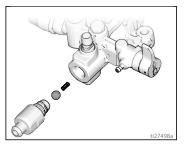
An integrated tool is included in the frame to remove the inlet valve assembly from the pump. If you suspect that the inlet valve is clogged or stuck, remove the valve assembly and clean or replace.

- 1. Remove suction tube or hopper from sprayer.
- 2. Insert pump inlet into frame and loosen the inlet valve. Remove inlet valve.



NOTICE

Do not lose the ball and spring inside the inlet valve assembly. It may fall out when the inlet valve is removed. Pump will not prime without the ball and spring.

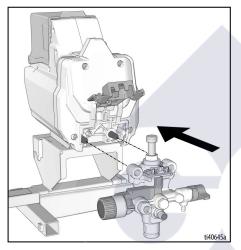


Maintenance

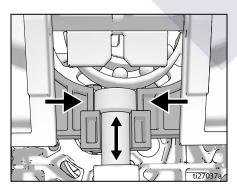
3. Clean any debris and dried paint from the cavity and replace the ball and spring. Tighten inlet valve to pump using integrated tool on the frame.

Pump Installation

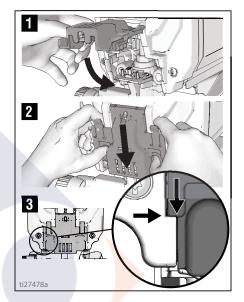
1. Slide pump assembly onto the mounting pins.



2. Move pump displacement rod up or down until cap is level with the opening in the yoke.



 Swing easy access door pump door closed while pushing the entire door towards the inlet end of the pump.



NOTE: Door must be fully closed and latched before sprayer will operate.



- 1. Follow **Pressure Relief Procedure**, page 12, before checking or repairing.
- 2. Solutions at the beginning of each problem listed are the most common. Start at the beginning and continue down the list to find a solution.
- 3. Check everything in this Troubleshooting Table before you bring the sprayer to an authorized service center.

Problem	Cause	Solution
Motor does not run: (verify battery is correctly installed	Easy access door not fully closed.	Verify that easy access door is closed and latched. See page 31.
and fully charged, and power switch is on)	Pressure control knob is set at zero pressure.	Turn pressure control knob clockwise to increase pressure setting.
	Pump is seized. (Paint has hardened in pump or	Turn ON/OFF switch off and remove battery.
	water is frozen in pump).	If frozen do NOT try to start sprayer until it is completely thawed or it may damage the motor, control board and/or drive train.
		Place sp <mark>raye</mark> r in warm area for several hours.
		If not froz <mark>en, ch</mark> eck for hardened paint in pump. If paint has hardened in pump. See Pump Removal , page 29.
		If motor does not turn with pump repaired, consult a Graco authorized retailer, distributor, or service center.
	Motor or control is damaged.	Consult a Graco authorized retailer, distributor, or service center.
	Battery has insufficient charge.	Charge battery.
	Battery is defective.	Replace battery.

Problem	Cause	Solution
FieldLazer runs, but pump does not prime or looses prime while in use.	Inlet valve check ball is stuck.	Press PushPrime button to dislodge the ball allowing pump to prime properly.
(Pump cycles but does not pump paint or build pressure).	Prime/Spray Valve is in SPRAY position.	Turn Prime/Spray Valve down to PRIME position until paint exits drain tube. The pump is now primed.
	Pump was not primed with flushing fluid. (Thick fluids may not prime if not	Remove suction tube from paint. Prime pump with oil or water-based flushing fluid. See
	initially primed with flushing fluid.)	page 13.
	Debris in paint.	Strain the paint. See page 10.
	Thick or "sticky" paint.	Some fluids may prime faster if the ON/OFF switch is momentarily turned off so the pump can slow and stop. Turn ON/OFF switch on and off several times if necessary.
	Inlet strainer is clogged or suction tube is not immersed in paint.	Clean debris off inlet strainer and make sure suction tube is immersed in paint.
	Inlet valve check ball or seat is dirty.	Remove inlet fitting. Clean or replace ball and seat. See page 30.
	Suction tube is leaking.	Inspect suction tube connection for cracks or vacuum leaks.
	Outlet valve check ball is stuck.	Unscrew outlet valve, remove, and clean assembly.
		See Pump Repair , page 29. Then reprime pump.
		Remove inlet and/or outlet valves and clean, replace and reprime. See Fill Pump , page 15.
		Make certain to not lose the ball and spring of the inlet valve assembly or the sprayer will not function. See Inlet Valve Removal , page 30.
		Make certain the outlet ball moves free in the housing before replacing.
		H330/a
	Prime/Spray Valve is worn or obstructed with debris.	Take sprayer to Graco authorized service center.

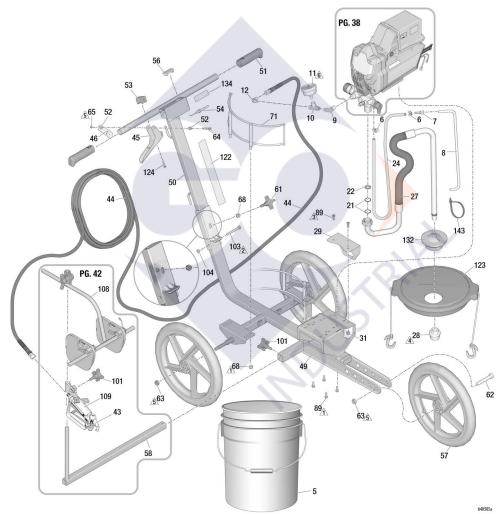
Problem	Cause	Solution		
Pump is primed, but can not achieve good spray pattern.	Spray tip may be partially clogged.	Clear spray tip clog. See, Clea Tip Clog, page 22.		
	Reversible spray tip is in UNCLOG position.	Rotate arrow-shaped handle on spray tip so it points forward to SPRAY position. See page 17.		
	Debris in paint.	Strain the paint. See page 10.		
	Pressure is set too low.	Align pressure control knob setting indicator to desired spray setting. See page 17.		
	InstaClean fluid filter is clogged.	Clean or replace InstaClean fluid filter. See page 26.		
	Spray gun fluid filter is clogged.	Clean or replace gun fluid filter. See page 26.		
	Spray tip selected is too large for capability of sprayer.	Replace tip. See page Spray Tip Installation , page 17.		
	Spray tip is worn beyond the capability of sprayer.	Replace tip. See Spray Tip Installation, page 17.		
	Spray tip gasket and seal worn or missing.	Replace gasket and seal. See page 17.		
	Inlet strainer is clogged or suction tube is not immersed in paint.	Clean debris off inlet strainer and make sure suction tube is immersed in paint.		
	Battery has insufficient charge for tip support.	Charge battery or reduce tip size.		
	Inlet pump valve or outlet pump valve is worn or clogged with	Check for worn or contaminated inlet valve or outlet valve.		
	debris.	- Prime s <mark>praye</mark> r with paint.		
		- Trigger gun momentarily.		
		 When trigger is released, pump should cycle momentarily and stop. 		
		 If pump continues to cycle, pump valves may be worn or contaminated with debris. 		
		- Clean or replace valves with appropriate kits. See page 41.		
	Bumpy turf.	Use spray shields.		
	Cold weather.	Warm paint or thin with water.		
	Material is too thick.	Thin material. Follow manufacturer's recommendations.		
	Airless hose is too long (if extra section was added).	Remove section of airless hose.		
Spray gun stopped spraying while trigger is pulled.	Spray tip is clogged.	Clear spray tip clog. See, Clear Tip Clog , page 22.		
	Sprayer lost prime.	See troubleshooting section "Sprayer runs, but pump does not prime or looses prime while in use" on page 32.		
When paint is sprayed, coverage	Material is being applied too thick.	Move gun faster.		
is excessive.		Choose a spray tip with smaller hole size.		
		Choose spray tip with wider fan.		
		Make sure gun is far enough from surface.		

Problem	Cause	Solution		
When paint is sprayed, coverage is inadequate.	Material is being applied too thin.	Move gun slower. Choose spray tip with larger hole size.		
		Choose spray tip with narrower fan.		
		Make sure gun is close enough to surface.		
Fan pattern varies dramatically while spraying.	Pressure control switch is worn and causing excessive pressure variation.	Take sprayer to Graco authorized service center.		
Cannot trigger spray gun.	Spray gun trigger lock is engaged.	Rotate trigger lock to disengage trigger lock. See page 8.		
Paint is coming out of pressure control.	Pressure control is worn.	Take sprayer to Graco authorized service center.		
Paint is leaking through drain tube.	Sprayer is over pressurizing.	Take sprayer to Graco authorized service center.		
Paint leaks down outside of pump.	Pump packings are worn.	Replace pump packings with new ProXChange module. See page 29.		
Motor is hot and runs intermittently. Motor automatically shuts off due to	Vent holes in enclosure are plugged or sprayer is covered.	Keep vent holes clear of obstructions and overspray and keep sprayer open to air.		
excessive heat. Damage can occur if cause is not corrected.	Battery has insufficient charge.	Charge battery.		
occur il cause is not corrected.	Motor needs to be replaced.	Take FieldLazer to Graco authorized retailer, distributor, or servic <mark>e cen</mark> ter.		
FiedLazer makes no sound when pressure control is ON and	ON/OFF switch light blinks two times when pressure control is	Replace battery with charged battery.		
ON/OFF switch is ON (illuminated).	ON. Indicates incorrect voltage.	Battery has reached end of life. Replace battery.		
		Motor damaged, replace motor assembly.		
	ON/OFF switch light blinks three times when pressure control is	Allow battery to cool down or warm up to room temperature.		
	ON. Indicates battery temperature is too hot or too cold.			
	ON/OFF switch light blinks four times when pressure control is ON. Indicates locked rotor condition.	Replace pump and/or motor assembly.		
	ON/OFF switch light blinks five times when pressure control is ON. Indicates motor temperature is too hot.	Allow motor to cool down to room temperature.		
ON/OFF switch does not illuminate when pressed.	Indicates battery is not installed, has insufficient charge, or is damaged.	Install battery correctly, ensure battery is fully charged, or replace battery.		
	Control board is damaged.	Replace control board.		

FieldLazer ES100 Parts

FieldLazer ES100 Parts

Ref	. Torque	Ref.	Torque	Ref.	Torque
\mathbb{A}	90-110 in-lb (10.2-12.4 N∙m)	3	40-50 in-Ib (4.5-5.6 N∙m)	ß	Tighten nut, back off 1/4 - 3/8 to allow free rotation
2	115-135 in-lb (13-15.3 N∙m)		Hand tighten	Â	180-220 in-lb (20.3-24.9 N∙m)



FieldLazer ES100 Parts List

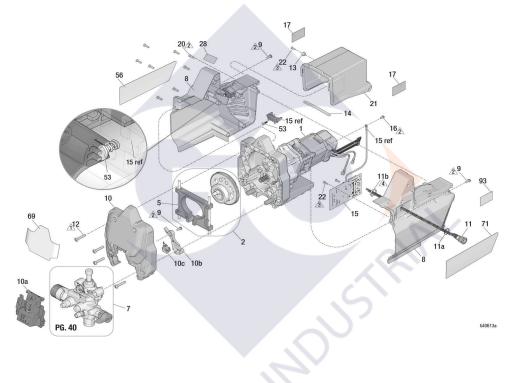
FieldLazer ES100 Parts List

Ref.	Part	Description	Qty.	Ref.	Part	Description	Qty.
5	115077	PAIL, plastic	1	50	15F645	HANDLE, field marker	1
6	115489	CLAMP, drain tube	2	51	116139	GRIP, handle	2
7	19D359		1	52	111017	BEARING, flange	2
8	20A922		1	53	198896	BLOCK, mounting (mach)	1
		6, 7, 24		54	119534		1
9	155541	FITTING, swivel, 90°,	1	56	19D422	COVER, plug, panel switch	า 1
		models 25U543, 25U544		57	119528	TIRE, semi-pneumatic	3
10	119783	FITTING, tee, swivel,	1	61	108471	KNOB, pronged	1
		models 25U543, 25U544		62	101147	SCREW, cap, hex hd	1
11	113641	GAUGE, pressure, fluid,	1	63	119547	NUT, hex, lock, nylon, thir	n 3
		models 25U543, 25U544		64	116941	SCREW, shoulder, socket	1
12	110249	ADAPTER, male, elbow,	1			hd	
		90°, models 25U543, 25U544		65	129476	NUT, lock	1
21	117559	O-RING	2	68	101566	NUT, lock	5
21	115099	WASHER, hose	2	71	15E955	- ,	2
22	15R392		1	82	238049	FLUID, TSL, 4oz	1
24 27			1	89	260212	SCREW, mach, slt hex hd	6
21	20A921	KIT, hose, suction, includes 21, 22, 28	-	101	111145		1
28	276897	KIT, strainer, 7/8 - 1/4 UNF	: 1	103	113664	· · · · ·	1
29	19D490		4	104	112746	NUT, hex	1
31	102040	NUT, lock, hex	2	122	15F238		1
44	240793	HOSE, coupled. 1/4 in. X	1			handle	
44	240733	25 ft.	1	123	24U241		1
45	245676	HANDLE	1	124	128803	SCREW, 10-24 x 1.5 in.,	1
46	198895	PLATE, lever, pivot	i i	100	070700	taptite, phil	
49	15F646	FRAME, field marker	i	132	278723	GASKET, pail	1
40	101 040	r i s avie, noid maritor		134		LABEL, identification	1

ES100 Airless Sprayer Module Parts

ES100 Airless Sprayer Module Parts

Ref.	Torque	Ref.	Torque	Ref.	Torque
\triangle	110-120 in-lb (12-14 N∙m)	4	35-45 in-lb (4-5 N∙m)		
\triangle	30-35 in-lb (2.4-4 N∙m)	5	23-27 in-lb (2.6-3 N∙m)		
$\widehat{\mathbb{A}}$	8-10 in-lb (0.9-1.1 N∙m)	\bigcirc	80-90 in-lb (9-10.2 N∙m)		



ES100 Airless Sprayer Module Parts List

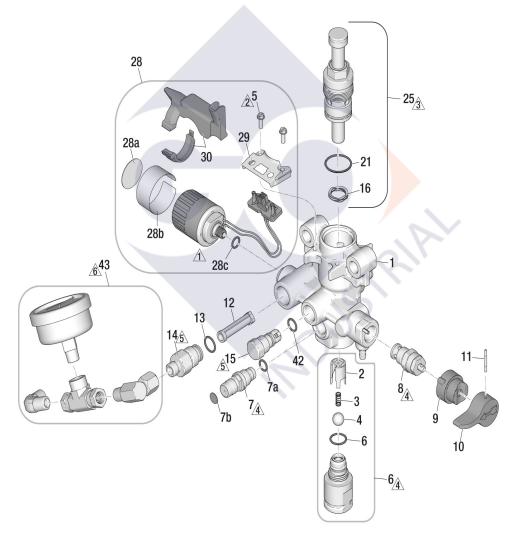
ES100 Airless Sprayer Module Parts List

Ref.	Part	Description	Qty.	Ref.	Part	Description	Qty.
1*	20A066	, ,	1	45	19D357		1
2		KIT, gear and yoke,	1	53 56 ▲	20A052	SPRING, pin, assembly LABEL, warning	1 1
	17J869	includes 5 Models: 25U542 NA,		50	19D435		I
	110000	25U544 ANZ			19D437		
	17J863	Model: 25U543 EMEA			19D439	Model 25U544	
5	17J864	KIT, yoke	1	57▲		CARD, medical alert (not	1
7	20A883	KIT, pump, displacement	1		17A134	shown) Model 25U544	
8	20A920	KIT, shield, motor, includes 9, 20, 28, 70, 71, 93			222385	EN, ES, FR, model 250543, 250542	
9	118444	SCREW, mach, hwhd 10-24 x 0.5 in.	2	58		BATTERY, DEWALT (not shown)	1
10	17J866	KIT, cover, frt, <i>includ</i> es 9, 10a, 10b, 10c, 12	1		20A162	NA/CÁ, 60V, 6ah, model 25U542	
10a 10b	17F233 17F262		1 1		20A163	EMEA, 54V, 6ah, model 25U543	
10c 11	128551 20A336	CABLE, PC, jumper SWITCH, ON/OFF	1		20A164	25U544	
11a 11b		O-RING, power switch NUT, power switch	1		20A756	60V, 9ah, USA/CA, model 25 <mark>U5</mark> 42	
12	115478	SCREW, mach, Torx, pan	4		20A757	54V <mark>, 9</mark> ah, EMEA/UK, mod <mark>el 25</mark> U543	
13 14	20A010 19D421		1 1		20A758	54V, <mark>9ah,</mark> ANZ, model 25U <mark>544</mark>	
15		KIT, control, <i>includes 18,</i> 52	i	59		CHARGER, fast, DEWALT (not shown)	· 1
	20A919	Models: 25U542 NA, 25U544 ANZ			20A166	EMEA, 54V, model 25U543	
16	20B396 115498		1		20A165	NA/CA, 60V, model 25U542	
17	20A309	whd	2		20A167	ANZ/AP, 54V, model 25U544	
20	115477	SCREW, mach, torx, pan	8	69 71	19D347	, -	1
		hd.		93	19D348 17P925	LABEL, right LABEL, A+, models	1 1
21	20A980	KIT, cover, battery, includes 13, 14, 17, 22	1	30	17P924	25U543, 25U544	
22	119236	SCREW, mach, torx pan hd	3	111		ADAPTER, UK power,	1
28	16D576		1			model 25U543 (not shown)
34	128795	SCREW, hwh, thread forming	4		eplacemen ailable at i	t safety labels, tags, and card	ls are
41	17J444	STRAP. carry (not shown)	1	av	anabie al I	iu cust.	

Pump Assembly Parts

Pump Assembly Parts

Ref.	Torque	Ref.	Torque	Ref.	Torque
Λ	140-160 in-lb (15.8-18 N∙m)	4	222-280 in-lb (25-31.6 N•m)		
2	270-330 in-lb (30.5-37.3 N•m)	ß	320-380 in-lb (36.2-43 N∙m)		
3	30-35 in-lb (3.4-4 N∙m)	\bigcirc	180-220 in-lb (20.3-24.9 N•m)		



ti40614a

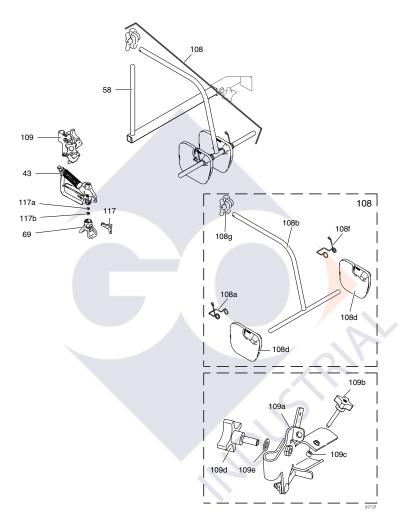
Pump Assembly Parts List

Pump Assembly Parts List

Ref.	Part	Description	Qty.	Ref.	Part	Description	Qty.
1	17G447	HOUSING, pump	1	14	24Y327	KIT, repair outlet,	1
2	17D364	GUIDE, ball	1			includes 12, 13	
3	128336	SPRING, compression	1	15	17J880	KIT, outlet valve repair	1
4	105445	BALL, 0.5 in.	1			includes 42	
5	117501	SCREW, mach, slot HWH	2	16	128323	SPRING, valve	1
6	17J877	KIT, inlet housing,	1	21	16D531	PACKING, O-ring	1
		includes 2, 3, 4, 6a		25	24Y472	KIT, repair, piston pump,	1
6a	124582	PACKING, O-ring	1			includes 16, 21	
7	17J878	KIT, PushPrime, includes	1	28	20A884	KIT, pressure control,	1
		7a, 7b				includes 5, 28a, 28b, 28c,	
7a	16P303	PACKING, O-ring	1			29, 30	
7b	17K420	LABEL, PushPrime	1	28a	15A464	LABEL, control	1
8	235014	KIT, valve, drain, includes	1	28b	19Y865	LABEL, control	1
		9, 10, 11		28c	106555	O-ring	1
9	224807	BASE, valve	1	29	17F227	BRACKET, electrical	1
10	187625	HANDLE, valve, drain	1			connector	
11	111600	PIN, grooved	1	30	17F229	KIT, shield, wire	1
12	288747	KIT, filter (Not installed on	1	42	122486	PACKING, O-ring	1
		all models.)		43	19D357	MODULE, assembly,	1
13	120776	PACKING, O-ring	1			pressure gauge, models 25U543, 25U544	
						200040,200044	

Sprayer Shield Parts and List

Sprayer Shield Parts and List

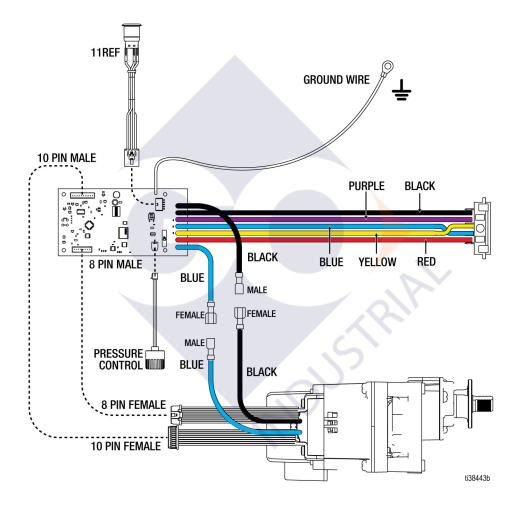


Ref.	Part	Description	Qty.
43	243011	GUN, spray, SG2, includes optional filter 288749	1
58	287453	BRACKET, support, extension	1
69	243161	GUARD, RAC 5	1
108	249081	KIT, spray shield, <i>include</i> s 108a - 108h	1
108a	15F142	GUIDE, wire, right shield	1
108b	287494	BAR, guide shield	1
108c	16U231	SHIELD, guide	2
108f	15F143	GUIDE, wire, left shield	1
108g	287566	KIT, clamp	1

Ref.	Part	Description	Qty.
109	287529	KIT, gun holder	1
109a	1	GUN HOLDER	1
109b	119619	KNOB	1
109c	: 119666	PAD, swivel	1
109c	111145	KKOB, pronged	1
109e	112914	WASHER, plain	1
117	LL5421	TIP, spray RAC 5, striping, includes 117a, 117b	1
117a	i 115524	GASKET	1
117b	195558	SEAT, cylinder	1

Wiring Diagrams

Wiring Diagrams



Technical Specifications

Technical Specifications

	US	Metric	
Sprayer	03	Wetric	
Maximum fluid working pressure	1750 psi	12.1 MPa, 121 bar	
Maximum Delivery	1750 psi	12.1 WFa, 121 Dai	
25U542 (NA), 25U544 (ANZ)	0.30 GPM	1.1 LPM	
250542 (NA), 250544 (ANZ) 250543 (EMEA)	0.30 GPM	0.53 LPM	
Maximum Tip Size	0.14 GPM	0.55 LFIVI	
25U542 (NA), 25U544 (ANZ)	0.021 in.	0.533 mm	
25U542 (INA), 25U544 (AINZ) 25U543 (EMEA)	0.021 in.	0.432 mm	
()	1/4 in.	1/4 in.	
Fluid Outlet npsm		.,	
Power Requirements Dimensions	See page 3 lor p	ower requirements.	
	48 in.	121 cm	
Height			
Length	24 in.	61 cm	
Width	24 in.	61 cm	
Weight (with battery)	80 lb.	36.32 kg	
Storage temperature range +*	–30° to 160°F	-35° to 71°C	
Operating temperature range ✓	40° to 115°F	4° to 46°C	
Noise			
Sound pressure		dBa**	
Sound power	93	dBa**	
Vibration, per ISO 5349			
Left-hand	<98in/s?2	<2.5m/s?2	
Right-hand	<98in/s?2	<2.5m/s?2	
Materials of Construction			
Wetted materials on all models	Stainless steel, brass, leather, u polyethylene (UHMWPE), carbi polypropylene, fluoroelastomer	de, nylon, aluminum, PVC	
Notes			

** Sound pressure measured 3 feet (1 meter) from equipment. Sound power measured per ISO-9614.

When pump is stored with non-freezing fluid. Pump damage will occur if water or latex paint freezes in pump.

Damage to plastic parts may result if impact occurs in low temperature conditions.

✓ Changes in paint viscosity at very low or very high temperatures can affect sprayer performance.

Technical Specifications

California Proposition 65

CALIFORNIA RESIDENTS

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



Graco Standard Warranty

Graco Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED

BY GRACO. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

FOR GRACO CANADA CUSTOMERS

The Parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés, à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

Graco Information

Graco Information

For the latest information about Graco products, visit www.graco.com. For patent information, see www.graco.com/patents.

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.

Original instructions. This manual contains English. MM 3A9002

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

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

Copyright 2021, Graco Inc. All Graco manufacturing locations are registered to ISO 9001.

www.graco.com Revision C, September 2022