



OPERATING INSTRUCTION

AIRLESS PAINT SPRAYER · GROG F5

3300 psi (22.8 MPa, 228 bar) · MAXIMUM WORKING PRESSURE
QF5 · Gasoline version | DF5 · Brushless-motor version



GROG F5 AIRLESS SPRAYING MACHINE

For portable airless spraying of architectural coatings and paints.

3300 psi (22.8 MPa, 228 bar) Maximum Working Pressure. Read all warnings and instructions before operating.

The GROG F5 is a portable, high-pressure airless sprayer built for professional application of primers, latex, enamels and architectural coatings. It is available in two drive configurations that share the same gearbox, pump body and spray package:

Version	Drive	Description
QF5	Gasoline engine	Petrol-powered unit for sites without mains power. Convertible to electric motor drive.
DF5	Brushless electric motor	Mains-powered unit with electronic pressure controller and Premium Digital Display.

Specification	GROG F5
Maximum working pressure	3300 psi (22.8 MPa, 228 bar)
Application	Architectural coatings and paints
Drive options	Gasoline engine (QF5) / brushless motor (DF5)
Included accessories	Spray gun, SwitchTip & guard, high-pressure hose, whip hose, suction/drain set, manual

MANUAL CONVENTIONS

	WARNING A potentially hazardous situation which, if not avoided, could result in death or serious injury. Warnings in the instructions usually include a symbol indicating the hazard. Read the general Warnings section for additional safety information.
	CAUTION A potentially hazardous situation which, if not avoided, may result in property damage or destruction of equipment.
	NOTE Additional helpful information.

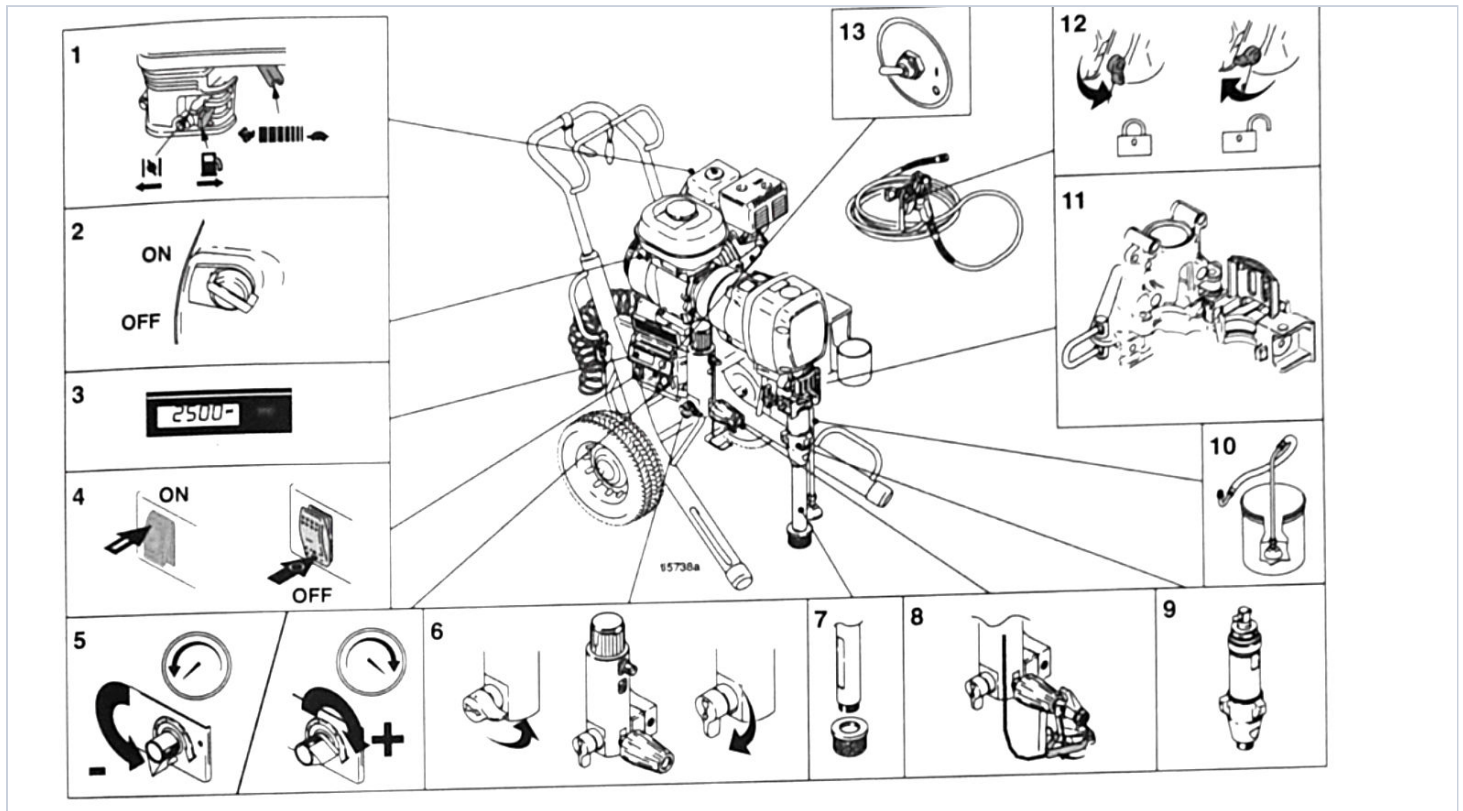
The following warnings include general safety information for this equipment. Further product-specific warnings may be included in the text where applicable.

⚠ WARNING	
⚠	FIRE AND EXPLOSION HAZARD Flammable fumes, such as solvent and paint fumes, in the work area can ignite or explode. To help prevent fire and explosion: • Use equipment only in a well-ventilated area. • Do not fill the fuel tank while the engine is running or hot; shut off the engine and let it cool. Fuel is flammable and can ignite or explode if spilled on a hot surface. • When flammable liquid is sprayed or used for flushing or cleaning, keep the sprayer at least 20 feet (6 m) away from explosive vapors. • Eliminate all ignition sources such as pilot lights, cigarettes, portable electric lamps and plastic drop cloths (potential static arc). • Keep the work area free of debris, including solvent, rags and gasoline. • Do not plug or unplug power cords, or turn power or lights on or off, when flammable fumes are present. • Ground the equipment and conductive objects in the work area. Use only grounded hoses. • Hold the gun to the side of a grounded pail when triggering into the pail. • If there is static sparking or you feel a shock, stop operation immediately. Do not use the equipment until the problem is identified and corrected.
⚠	INJECTION HAZARD High-pressure fluid from the gun, hose leaks or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. Get immediate surgical treatment. • Do not point the gun at anyone or at any part of the body. • Do not put your hand over the spray tip. • Do not stop or deflect leaks with your hand, body, glove or rag. • Do not spray without the tip guard and trigger guard installed. • Engage the trigger lock when not spraying. • Follow the Pressure Relief Procedure in this manual when you stop spraying and before cleaning, checking or servicing.
⚠	PRESSURIZED EQUIPMENT HAZARD Fluid from the gun/dispense valve, leaks or ruptured components can splash in the eyes or on skin and cause serious injury. • Follow the Pressure Relief Procedure when you stop spraying and before cleaning, checking or servicing. • Tighten all fluid connections before operating. • Check hoses, tubes and couplings daily. Replace worn or damaged parts immediately.
⚠	ELECTRIC SHOCK HAZARD Improper grounding, setup or usage of the system can cause electric shock. • Turn off and disconnect the power cord before servicing. • Use only grounded electrical outlets. • Use only 3-wire extension cords. • Ensure ground prongs are intact on the sprayer and extension cords.
⚠	MOVING PARTS HAZARD Moving parts can pinch or amputate fingers and other body parts. • Keep clear of moving parts. • Do not operate equipment with protective guards or covers removed. • Pressurized equipment can start without warning. Before checking, moving or servicing, follow the Pressure Relief Procedure and disconnect the power supply.

⚠ WARNING

⚠	EQUIPMENT MISUSE HAZARD Misuse can cause death or serious injury. • Do not exceed the maximum working pressure or temperature rating of the lowest-rated system component. • Use fluids and solvents that are compatible with the equipment wetted parts. Read the fluid and solvent manufacturer's warnings. • Check equipment daily. Repair or replace worn or damaged parts immediately. • Do not alter or modify the equipment. For professional use only. • Use the equipment only for its intended purpose. Call your distributor for information. • Route hoses and cables away from traffic areas, sharp edges, moving parts and hot surfaces. • Do not use hoses to pull the equipment. Comply with all applicable safety regulations.
⚠	PRESSURIZED ALUMINUM PARTS HAZARD Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in pressurized aluminum equipment. Such use can cause a serious chemical reaction and equipment rupture, and result in death, serious injury and property damage.
⚠	SUCTION HAZARD Never place hands near the pump fluid inlet when the pump is operating or pressurized. Powerful suction could cause serious injury.
⚠	CARBON MONOXIDE HAZARD (QF5) Exhaust contains poisonous carbon monoxide, which is colorless and odorless. Breathing carbon monoxide can cause death. Do not operate in an enclosed area.
⚠	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 MSDSs to know the specific hazards of the fluids you are using, and store/dispose of hazardous fluid according to applicable guidelines.
⚠	BURN HAZARD Equipment surfaces and heated fluid can become very hot during operation. To avoid severe burns, do not touch hot fluid or equipment. Wait until equipment/fluid has cooled completely.
⚠	PERSONAL PROTECTIVE EQUIPMENT You must wear appropriate protective equipment when operating, servicing or when in the operating area of the equipment, to help protect you from serious injury, including eye injury, inhalation of toxic fumes, burns and hearing loss. This includes but is not limited to protective eyewear; clothing and respirator as recommended by the fluid and solvent manufacturer; gloves and hearing protection.
⚠	RECOIL HAZARD Brace yourself; the gun may recoil when triggered and cause you to fall, which could cause serious injury.

GROG F5 COMPONENT IDENTIFICATION

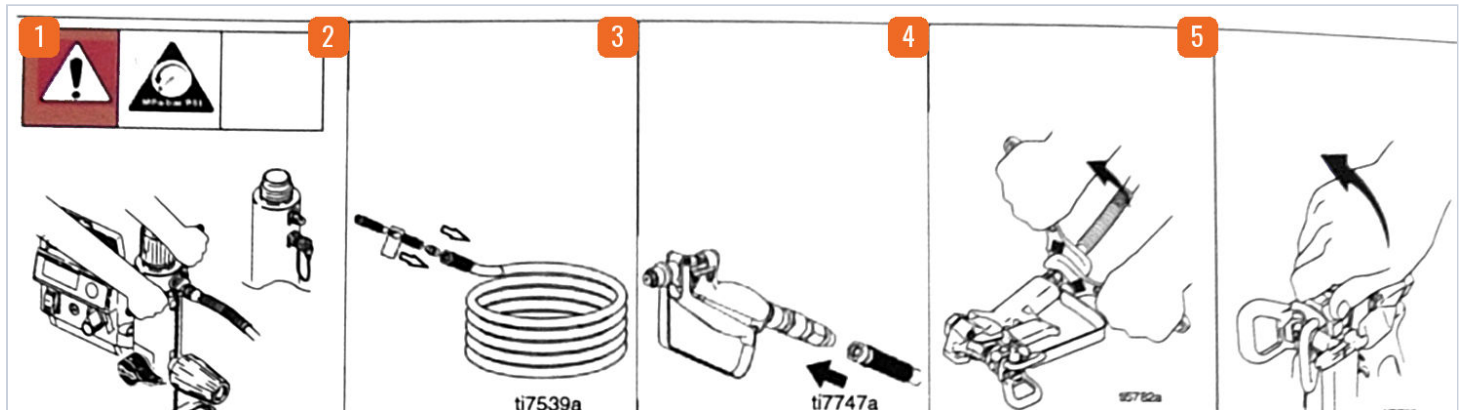


GROG F5 sprayer – component locations (numbers correspond to the table below).

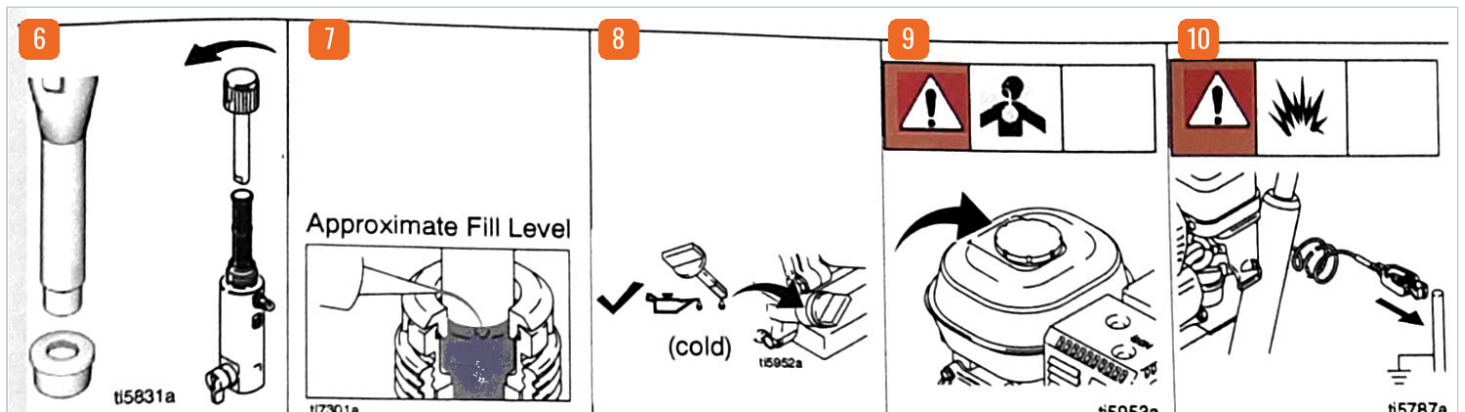
#	Component	Function
1	Engine controls	Fuel valve, choke and throttle for the QF5 gasoline engine.
2	Engine ON/OFF switch	Starts and stops the engine (QF5).
3	Premium Digital Display	Shows pressure, job/lifetime volume and diagnostics (DF5 / Premium).
4	Pump On/Off switch	Engages and disengages the pump / clutch.
5	Pressure control	Adjusts fluid pressure for different applications.
6	Prime valve & filter	Directs fluid to the prime tube or the hose; manifold fluid filter reduces tip clogs.
7	Suction tube & inlet filter	Draws fluid from the pail; inlet filter protects the pump.
8	Premium AutoClean ₂	Assisted flush/clean function (not available on all models).
9	Pump	Displacement pump (piston rod & V-packings inside).
10	Drain hose	Drains fluid during priming and pressure relief.
11	ProConnect	Quick pump changeover system.
12	Trigger lock	Locks the gun trigger to prevent accidental spraying.
13	WatchDog switch	Automatically stops the pump when the material pail is empty.

GROG F5 SETUP

1. Connect the approved high-pressure hose to the sprayer. Tighten securely.
2. Install the adapter and 3.6 m whip hose to the other end of the 15 m airless hose.
3. Install the whip hose to the fluid inlet of the spray gun.
4. Tighten securely.
5. Remove the tip guard.
6. Remove the inlet strainer and filter bowl screen when spraying plaster materials.
7. Fill the throat packing nut with TSL to prevent premature packing wear. Do this each time you spray.
8. **(QF5)** Check the engine oil level. Add SAE 10W-30 (summer) or 5W-20 (winter) if necessary.
9. **(QF5)** Fill the fuel tank.
10. Attach the sprayer grounding clamp to earth ground.



Steps 1–5 – hose, whip hose and gun connection.



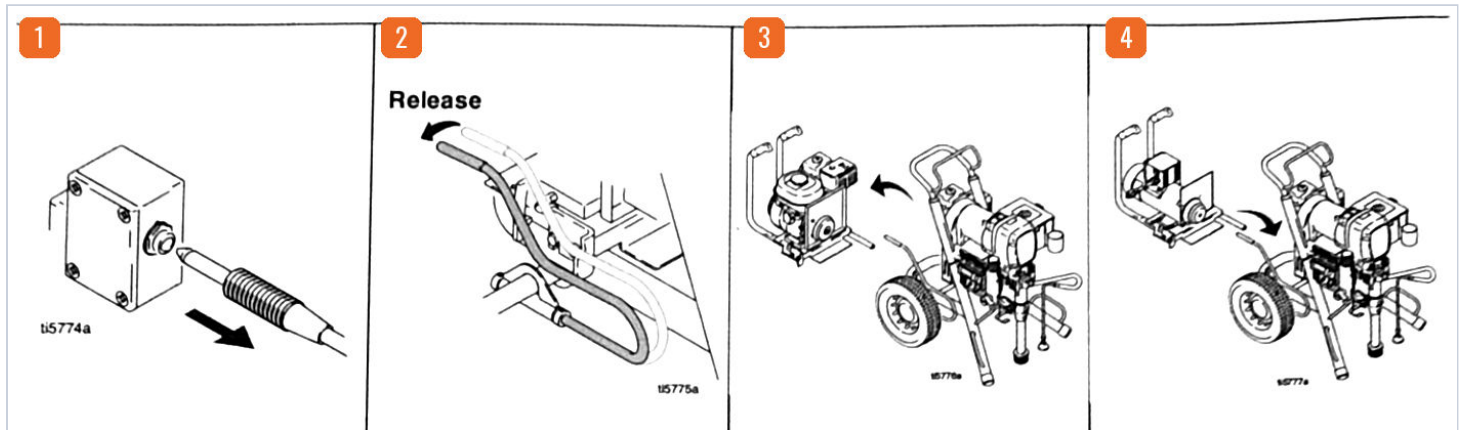
Steps 6–10 – strainer, throat packing (TSL), engine oil, fuel and grounding.

CONVERTIBLE DRIVE (QF5 ↔ DF5)

The GROG F5 gearbox and pump body are common to both drive versions, so the gasoline engine (QF5) and the brushless motor (DF5) can be interchanged on the same frame.

Change Engine to Motor

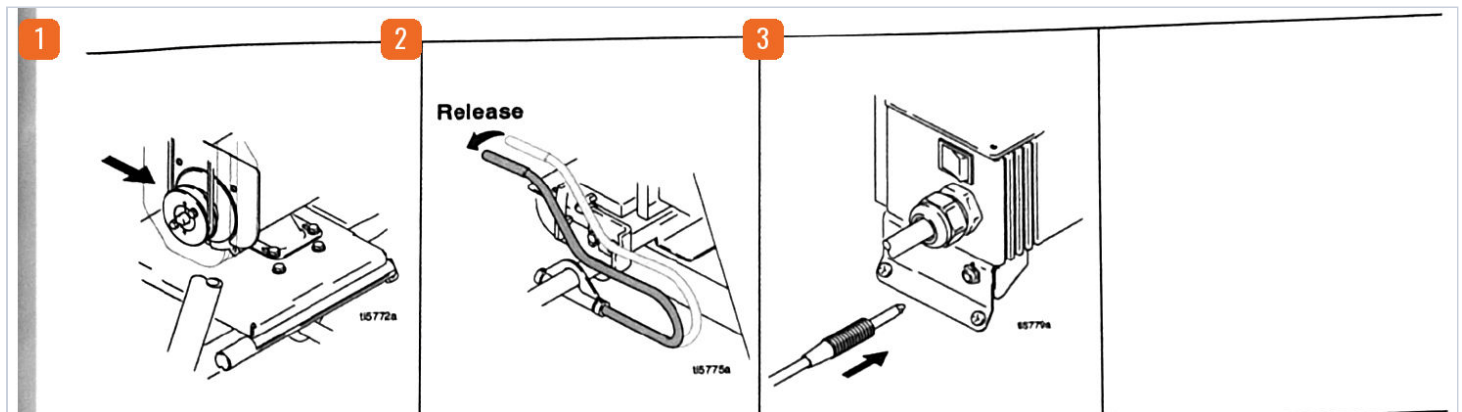
1. Disconnect the engine power cord.
2. Release the tension bar.
3. Remove the engine; tilt and slide back.
4. Install the motor; drop in and push forward.



Change Engine to Motor – steps 1–4.

Change Motor to Engine

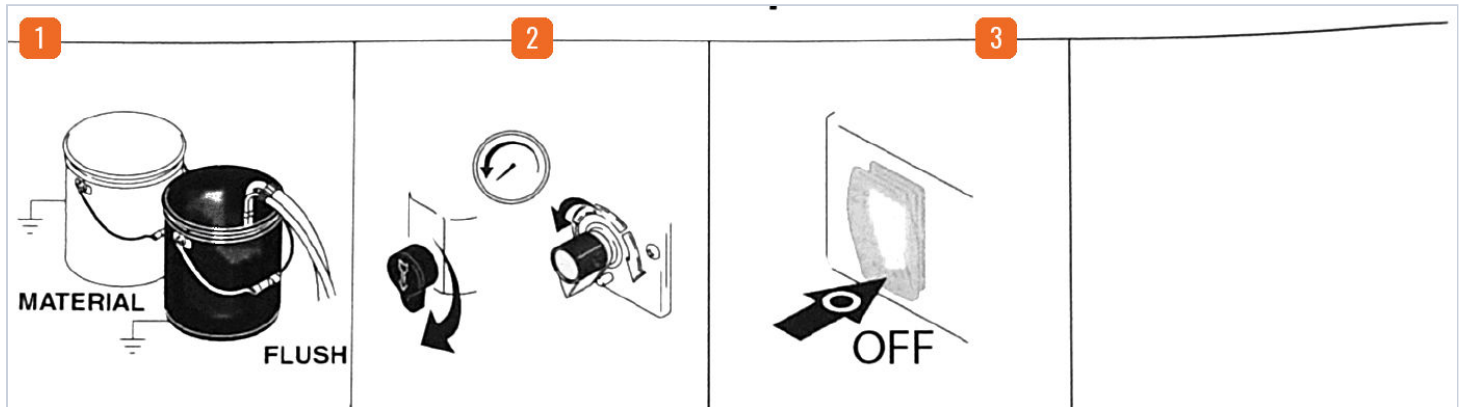
1. Look through the side vent holes and ensure the drive belt is in the motor pulley.
2. Secure the motor with the tension bar.
3. Plug in the pressure control power cord.



Change Motor to Engine – steps 1–3.

GROG F5 STARTUP

1. Place the suction tube and drain tube in a grounded metal pail partially filled with flushing fluid. Attach the ground wire to the pail and to earth ground.
2. Turn the prime valve down. Turn the pressure control counterclockwise to the lowest pressure.
3. Set the pump switch OFF.



Startup – steps 1-3.

START THE ENGINE (QF5)

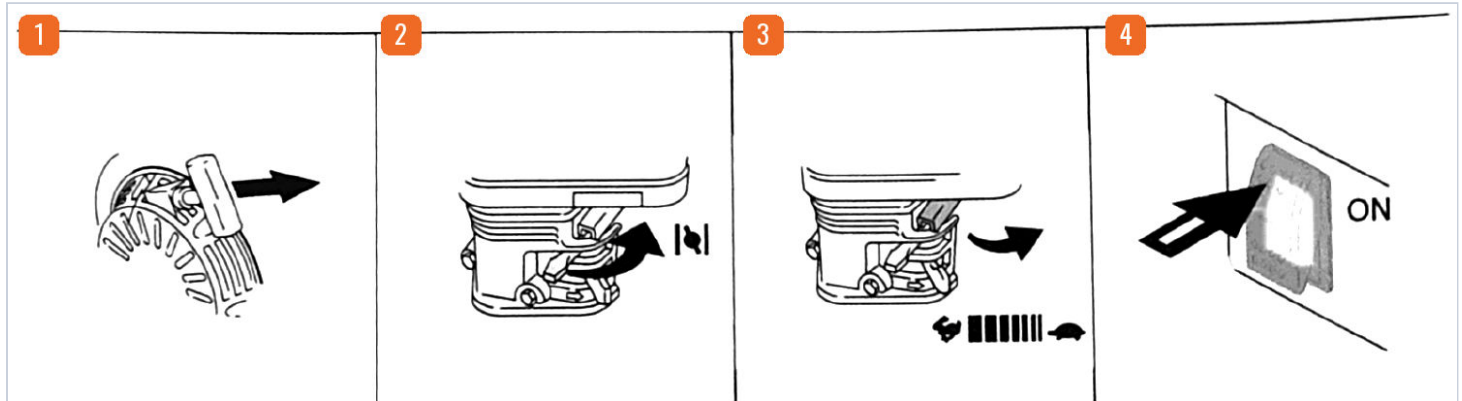
1. Move the fuel valve to open.
2. Move the choke to closed.
3. Set the throttle to fast.
4. Set the engine switch to ON.



Start the Engine – steps 1-4 (fuel valve, choke, throttle, engine switch).

RUN THE ENGINE & PRIME

1. Pull the starter rope.
2. After the engine starts, move the choke to open.
3. Set the throttle to the desired setting.
4. Set the pump switch ON — the pump/clutch is now active.

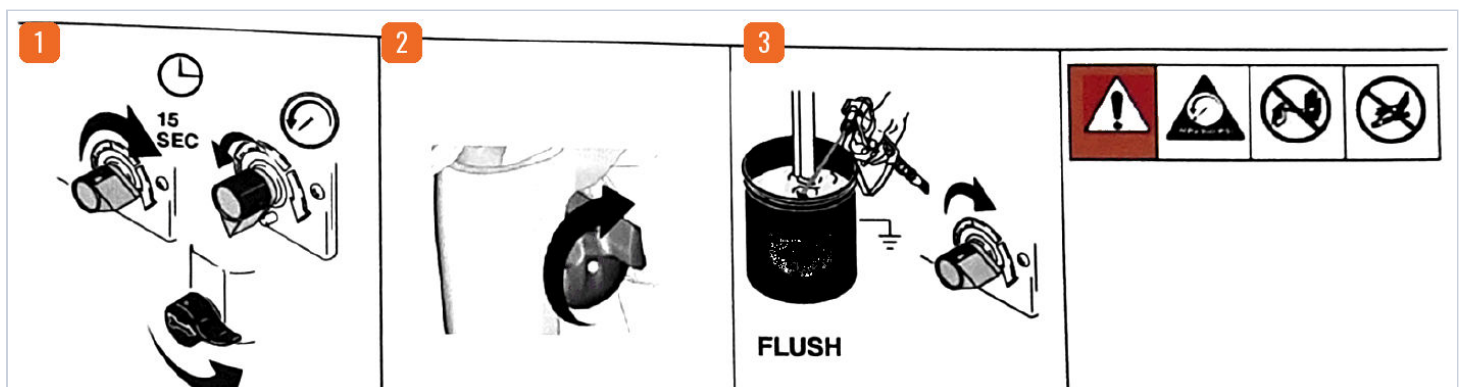


Run the Engine & Prime — steps 1–4 (pull starter, open choke, set throttle, pump switch ON).

CIRCULATE & FLUSH

1. Increase pressure enough to start the pump stroking and allow fluid to circulate for 15 seconds; turn the pressure down and turn the prime valve horizontal.
2. Take the spray gun trigger safety OFF.
3. Hold the gun against a grounded metal flushing pail. Trigger the gun and increase fluid pressure slowly until the pump runs smoothly.

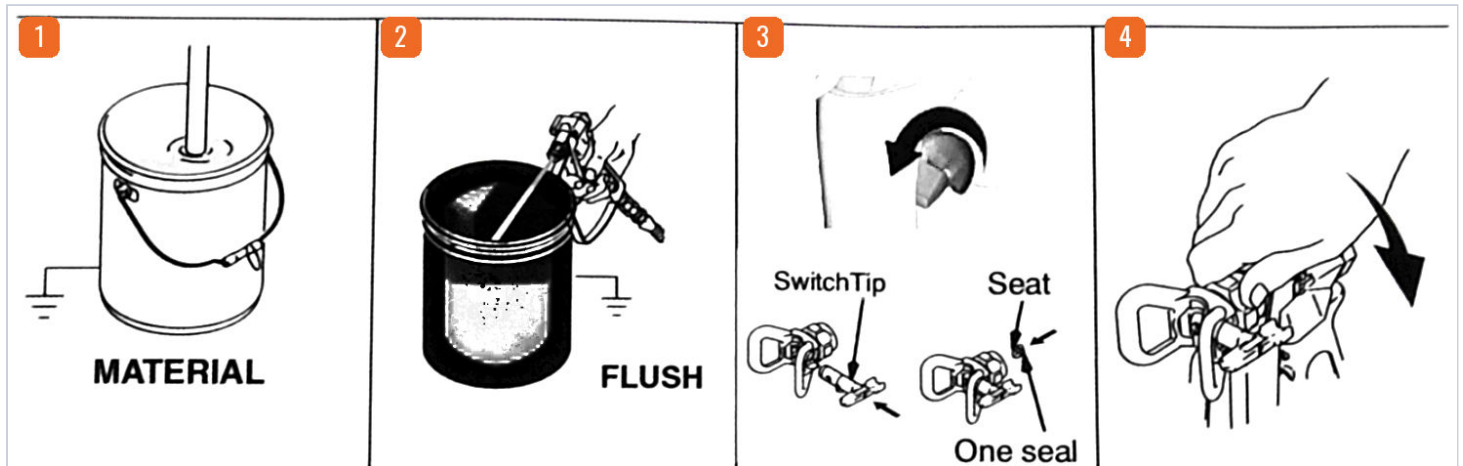
Check for leaks. Do not stop leaks with your hand or a rag! If leaks occur, turn the sprayer OFF and perform the **Pressure Relief Procedure**. Tighten leaky fittings and repeat the Startup steps.



Circulate & Flush — steps 1–3 (circulate, trigger safety off, flush against grounded pail).

INSTALL THE SWITCHTIP & GUARD

1. Place the siphon tube in the material pail.
2. Trigger the gun again into the flushing fluid pail until material appears.
3. Put the trigger safety ON. Insert the SwitchTip, seat and OneSeal.
4. Screw the assembly onto the gun. Hand tighten.



Install the SwitchTip & Guard – steps 1–4.

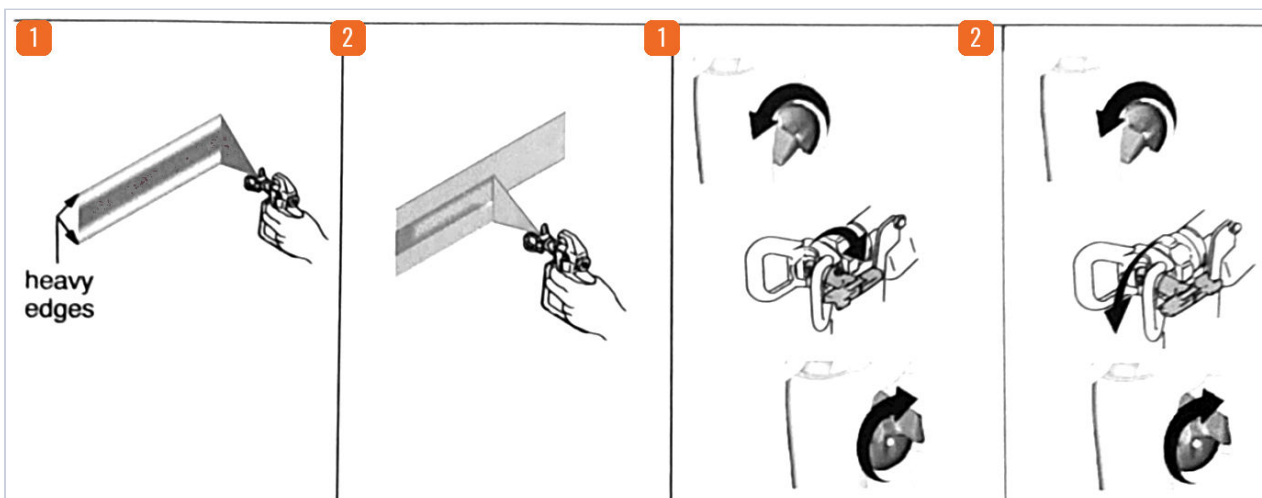
SPRAYING & CLEARING TIP CLOGS

Spraying Technique

1. Spray a test pattern. Adjust pressure to eliminate heavy edges; use a smaller tip size if needed.
2. Hold the gun perpendicular, 10–12 in. (25–30 cm) from the surface. Overlap each stroke by 50%.

Clearing Tip Clogs

1. Release the trigger, safety ON. Rotate the SwitchTip, safety OFF and trigger to clear the clog.
2. Safety ON, return the SwitchTip, safety OFF and continue spraying.



Spraying technique (1–2, left) and Clearing Tip Clogs (1–2, right).

MAIN MENU (PREMIUM DIGITAL DISPLAY)

Close the cover when spraying to protect the display.

1. Do startup steps 1–3.
2. Start the engine (or motor). The sprayer model momentarily displays, e.g. **GROG F5**. The pressure display then appears. Dashes appear when pressure is less than 200 psi (14 bar, 1.4 MPa).

Note: Information other than pressure cannot be accessed if the system pressure is greater than 200 psi (14 bar, 1.4 MPa) or if the pump switch is ON.

DIGITAL TRACKING SYSTEM™ (DTS)

3. Short-press the DTS button to move to Job Gallons (or Liters × 10). JOB displays briefly, then the number of gallons sprayed above 800 psi (55 bar, 5.5 MPa).
4. Press and hold to reset to zero, or short-press to move to Lifetime Gallons. LIFE displays briefly, then the number of gallons sprayed above 800 psi.
5. Short-press to move to AutoClean₂ Timer operation. **Note:** if the pump is started in timer mode, the timer counts down to zero and shuts the pump OFF — use for flushing only.
6. Short-press to return to Pressure.

WATCHDOG™ PROTECTION SYSTEM

The pump stops automatically when the material pail is empty.

1. Do **Startup**.
2. Turn the WatchDog switch ON — **WD ON** displays. **EMPTY** displays/flashs and the pump stops when the protection system detects an empty material pail.
3. Turn the WatchDog switch OFF. Add material or reprime the sprayer. Turn the pump switch OFF and ON to reset the protection system. Turn the WatchDog switch back ON to continue monitoring.

Change Display Units

Pressure / Volume: Press and hold (8 seconds) the DTS button to change pressure units (psi, bar, MPa). Volume units follow the pressure units (GAL, LTR×10). Continue to press the DTS button to cycle from psi to bar to MPa. Release the DTS button to select the units.

SECONDARY MENU — STORED DATA & WATCHDOG MODES

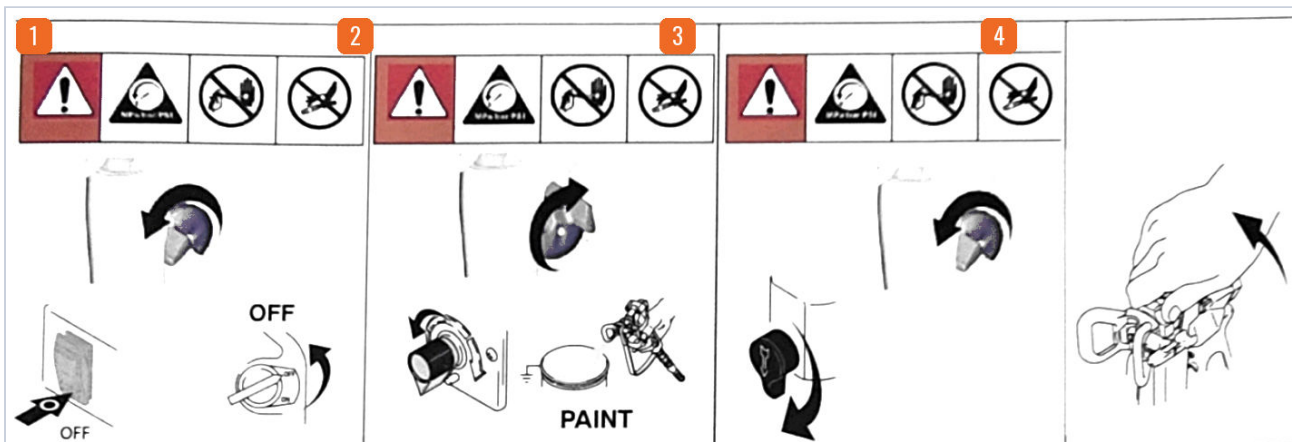
1. Do Startup steps 1–3. Pressure must be at zero.
2. Start the engine. The pressure display appears.
3. Press and hold the DTS button and turn the pump switch ON. The sprayer model momentarily displays, e.g. **GROG F5**. SERIAL NUM scrolls through the display and a 3- to 5-digit serial number displays.
4. Short-press the DTS button and the date code displays.
5. Short-press and the part number displays.
6. Short-press and the engine hours display.
7. Short-press — LAST ERROR scrolls through the display followed by the stored error message and error code. This information cycles repeatedly until cleared.
8. Press and hold the DTS button until CLEAR ERROR / NO ERROR CODE scrolls through the display, then error code E=00 displays.
9. Short-press again to move to WatchDog mode. You may now short-press and do step 10, or long-press and do step 11.
10. Short-press again and SOFTWARE REV scrolls through the display followed by the revision level, e.g. 02.
11. Press and hold (8 seconds) to move to the WatchDog Trigger % menu. WatchDog can be set to trigger at 30, 40, 50 or 60% of the current sprayer pressure setting. Release when the desired % is displayed. Default is 50%.
12. Short-press the DTS button and the software revision displays.
13. Short-press to return to step 3. Turn the pump switch OFF at any time to exit stored-data mode.

Display	Meaning
JOB	Gallons (or Liters×10) sprayed above 800 psi for the current job.
LIFE	Lifetime gallons sprayed above 800 psi.
WD ON / EMPTY	WatchDog active / empty pail detected — pump stopped.
SERIAL NUM	Unit serial number.
E-00	No stored error code.

PRESSURE RELIEF PROCEDURE

1. Lock the gun trigger safety. Set the pump switch OFF. Turn the engine OFF.
2. Unlock the gun trigger safety. Turn pressure to the lowest setting. Trigger the gun into a pail to relieve pressure.
3. Lock the gun trigger safety. Turn the prime valve down.
4. Remove the guard and SwitchTip.

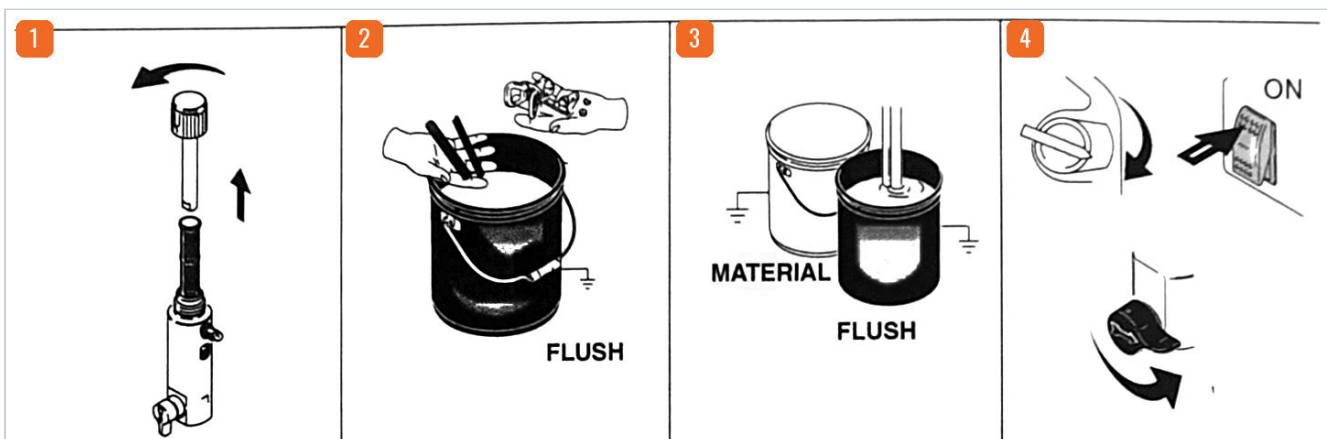
If you suspect the spray tip or hose is clogged, or that pressure has not been fully relieved, **VERY SLOWLY** loosen the tip guard retaining nut or hose end coupling to relieve pressure gradually, then clear the obstruction.



Pressure Relief Procedure – steps 1–4.

FLUSHING — STEPS 1–4

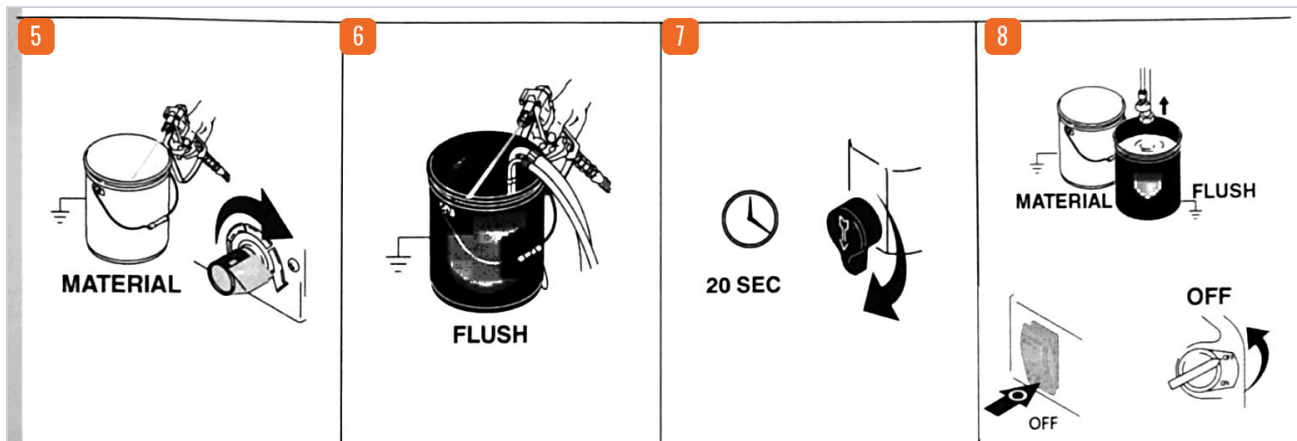
1. Unscrew the bowl, remove the filter. Assemble without the filter. Clean the filter.
2. Clean the filter, guard and SwitchTip in flushing fluid.
3. Remove the siphon tube set from the material and place it in flushing fluid (water for water-base, solvent for oil-base).
4. Turn the engine ON and start it. Set the pump switch ON. Turn the prime valve horizontal.



Flushing – steps 1–4.

FLUSHING — STEPS 5-8

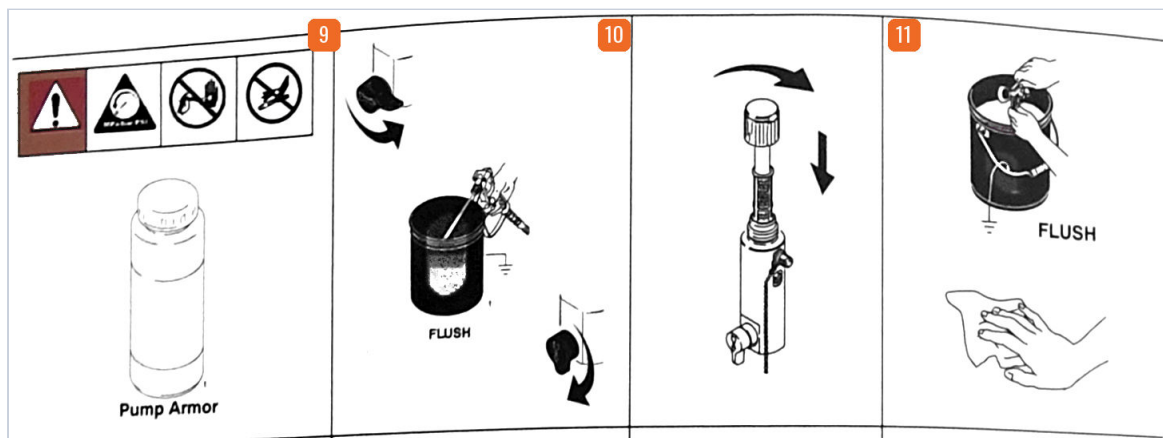
5. Hold the gun against the material pail. Take the trigger safety OFF. Turn the pressure up until the motor begins to drive the pump. Trigger until flushing fluid appears.
6. Move the gun to the flushing pail and trigger to thoroughly flush the system. Release the trigger and put the safety ON.
7. Turn the prime valve down and circulate flushing fluid for ~20 seconds to clean the drain tube.
8. Raise the siphon tube above the flushing fluid and run the sprayer 15–30 seconds to drain. Turn the pump switch OFF, then the engine OFF.



Flushing – steps 5-8.

FLUSHING — STEPS 9-11

9. Close the prime valve. Trigger the gun into the flushing pail to purge the hose. Open the prime valve.
10. Install the filter into the filter bowl. Make sure the plastic center tube is tightened securely. Hand-tighten the bowl and gun handle.
11. Clean the tip, guard and gasket with a soft bristle brush. Assemble and attach loosely onto the gun. Wipe the sprayer, hose and gun with a rag soaked in water or mineral spirits.



Flushing – steps 9-11 and Pump Armor protection.

GROG STANDARD WARRANTY

GROG warrants all equipment referenced in this document which is manufactured by GROG and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. For a period of twelve (12) months from the date of sale, GROG will repair or replace any part of the equipment determined by GROG to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with GROG's written recommendations.

This warranty does not cover, and GROG 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-GROG component parts. Nor shall GROG be liable for malfunction, damage or wear caused by the incompatibility of GROG equipment with structures, accessories, equipment or materials not supplied by GROG.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized GROG distributor for verification of the claimed defect. If the claimed defect is verified, GROG will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid.

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.

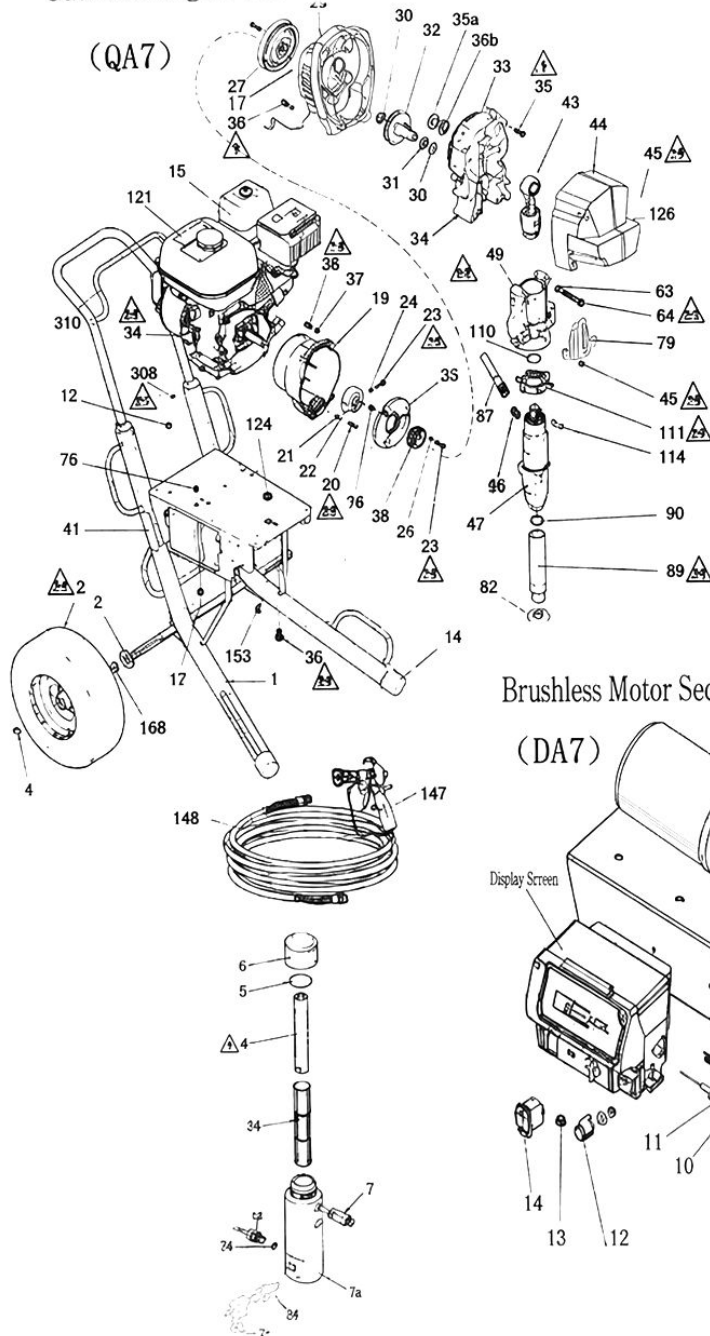
GROG's sole obligation and the buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential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

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

GROG F5 SPRAYER — EXPLODED VIEW

Grammy ray - A7

Gasoline Engine Section



Exploded parts view for the GROG F5 airless sprayer – Gasoline Engine Section (QF5), Brushless Motor Section (DF5) and Pump Assembly. Both versions share the same gearbox and pump body. Numbered callouts identify individual service parts; quote the item number and the GROG F5 model when ordering spares.