

Hydraulic Power Supply 307550 rev.E



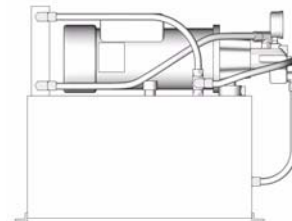
Important Safety Instructions

Read all warnings and instructions in this manual.
Save these instructions.

Part No. 106522

3 hp (2.24 kW)
60 Hz, 230V 1 phase

800 psi (5.6 MPa, 56 bar) Maximum Working Pressure



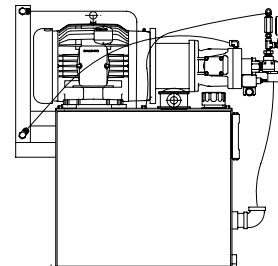
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Delivers 5 gpm (19 lpm) of fluid power at 800 psi (5.6 MPa, 56 bar).
Can operate a 226989 Foam-Cat™ 400 sprayer or a Reactor™ H-50 proportioner at a maximum flow rate of 30 lb/min (13.5 kg/min) and a stall pressure of 1300 psi (9.1 MPa, 91 bar).

Part No. 118430

7.5 hp (5.5 kW)
Can be setup to run at either 60 Hz, 230V, 3 phase or 50 Hz, 380V, 3 phase

1200 psi (8.2 MPa, 82 bar) Maximum Working Pressure



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Delivers 10 gpm (38 lpm) of fluid power at 1200 psi (8.2 MPa, 82 bar).
Can operate a Reactor™ H-50 proportioner at a maximum flow rate of 50 lb/min (22.7 kg/min) and a stall pressure of 1950 psi (13.4 MPa, 134 bar), or a Reactor™ H-XP3 proportioner at a maximum flow rate of 3.6 gpm (13.6 lpm) and a stall pressure of 3000 psi (20.7 MPa, 207 bar).

PROVEN QUALITY. LEADING TECHNOLOGY.



 WARNING	
	SKIN INJECTION HAZARD High-pressure fluid from 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 “blow back” fluid; this is not an air spray system. • Follow Pressure Relief Procedure, page 5, when you stop spraying and before cleaning, checking, or servicing equipment. • Use lowest possible pressure when flushing, priming, or troubleshooting. • Engage safety lock when not spraying. • Tighten all fluid connections before operating the equipment. • Check hoses, tubes, and couplings daily. Replace worn or damaged parts immediately. High pressure hose cannot be recoupled; replace the entire hose.
	ELECTRIC SHOCK HAZARD Improper grounding, setup, or usage of the system can cause electric shock. • Turn off and disconnect power at main switch before disconnecting any cables and before servicing equipment. • All electrical wiring must be done by a qualified electrician and comply with all local codes and regulations. • Connect only to grounded power source.
	EQUIPMENT MISUSE HAZARD Misuse can cause serious injury or death. • For professional use only. • Use equipment only for its intended purpose. Call your Graco distributor for information. • Read manuals, warnings, tags, and labels before operating equipment. Follow instructions. • Check equipment daily. Repair or replace worn or damaged parts immediately. • Do not alter or modify equipment. Use only Graco parts and accessories. • Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See Technical Data in all equipment manuals. • Use fluids and solvents that are compatible with equipment wetted parts. See Technical Data in all equipment manuals. Read fluid and solvent manufacturer’s warnings. • Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces. • Do not use hoses to pull equipment. • Comply with all applicable safety regulations.

Installation

 Reference letters in parentheses in the text refer to the callouts in the illustrations.

1. Bolt hydraulic power supply to floor in desired location. See **Accessories** and **Mounting Hole Diagram**, page 8.
2. Connect hydraulic supply hose (S) between proportioning pump motor (A) and hydraulic power supply outlet (B). See FIG. 1.
3. Connect hydraulic return hose (R) between proportioning pump motor (A) and hydraulic power supply inlet (C).
4. Remove cap (D) and fill reservoir with Graco hydraulic oil. See FIG. 1 or FIG. 2, and page 9.
5. Remove cap (E) and fill hydraulic power supply pump case with hydraulic oil.

Wiring



Electrical wiring must be done by a qualified electrician to avoid electric shock or other serious injury. Be sure your installation complies with all National, State and Local safety and fire codes.

1. Wire power cord (not included) from motor (F) to electric motor starter (G). Starter comes in Type 1 general purpose enclosure.
2. Install overload heater elements supplied with motor starter. For model 118430, use overload no. W58 for 230Vac, 3 phase 60 Hz, or no. W53 for 380Vac, 3 phase 50 Hz. For model 106522, use no. W57. See FIG. 3.
3. Wire electrical service to starter. See FIG. 4, FIG. 5, and also refer to wiring information on motor instruction plate.

Grounding



Hydraulic power supply must be grounded per all National, State and Local codes, to dissipate static electricity.

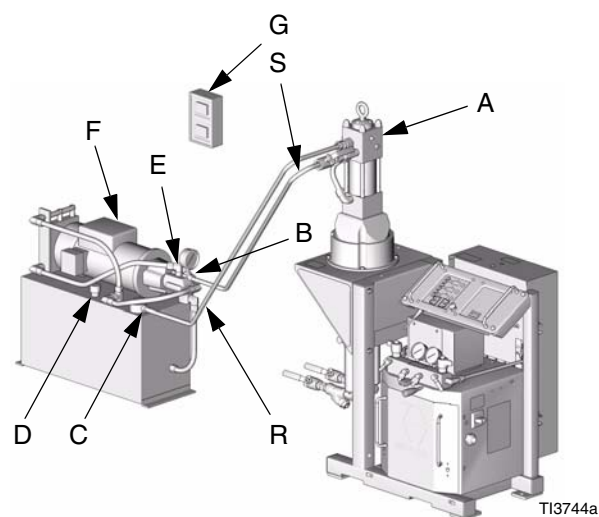


FIG. 1. Typical Installation (Model 106522 Shown)

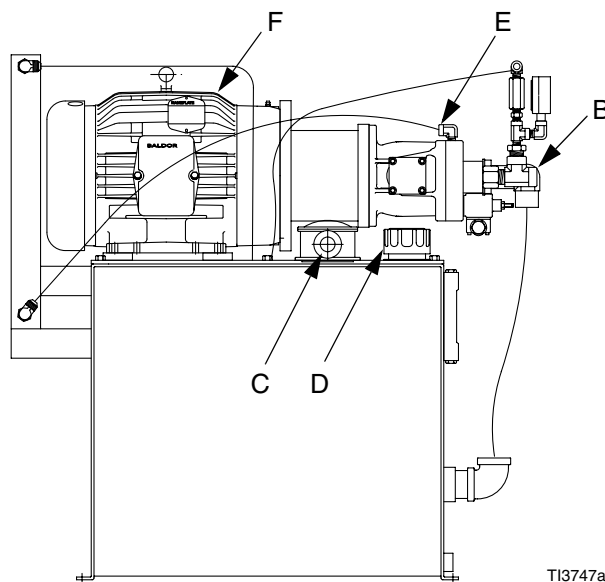


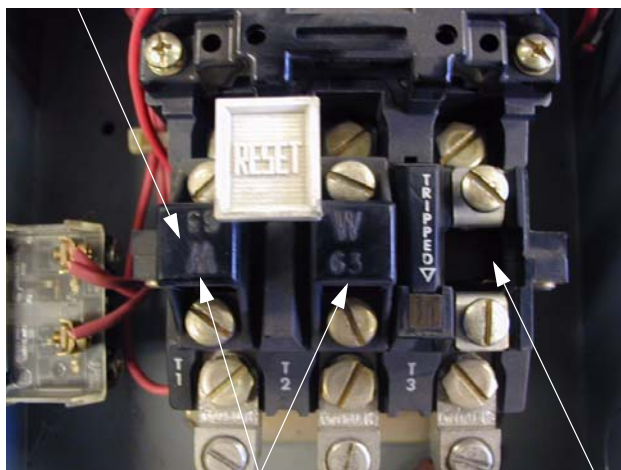
FIG. 2. Fill with Hydraulic Oil (Model 118430 Shown)



See step 2 under **Wiring** on page 3 for correct element to use with your power requirements.

FIG. 3. Overload Heater Element

Overload rating
printed on face



Overloads
installed

Overload not
installed

FIG. 4. Motor Starter

Motor Connection Diagram, nominal voltage 230V, 60 Hz



Motor Connection Diagram, nominal voltage 380V, 50 Hz

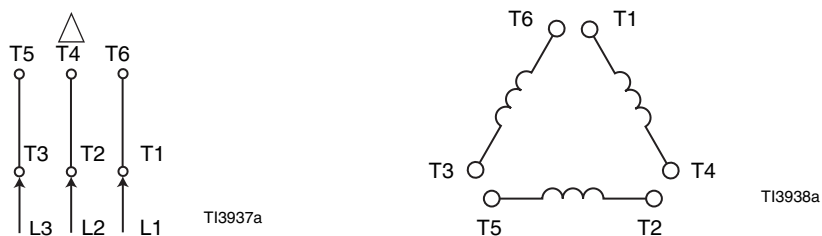


FIG. 5. Motor Connection Diagrams

Operation

Pressure Relief Procedure

WARNING

Read warnings, page 2. Relieve pressure before cleaning or repairing equipment.

1. Turn motor off at starter box.
2. Relieve pressure of the proportioning pump, per the proportioning pump instructions.

First Time Startup

1. Open intake valve (H) of each proportioning pump. See FIG. 6. Do not supply fluid to the pumps yet.
2. Place waste container under each pressure relief valve (J) to catch test fluid left in heaters and pumps, then open all drain valves.

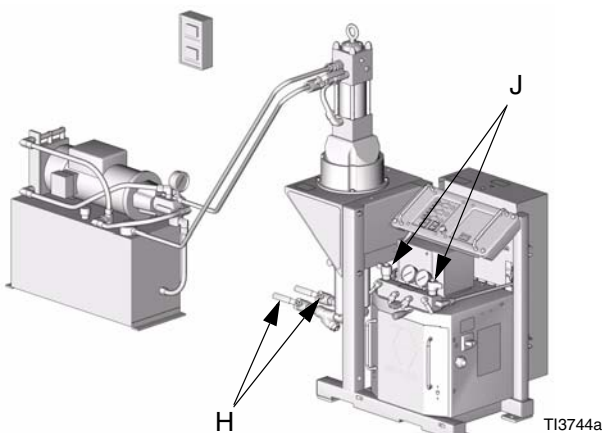


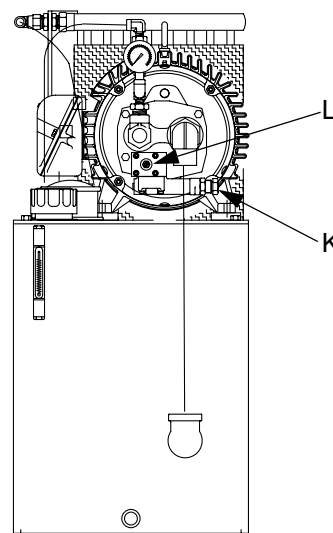
FIG. 6. Intake Valves and Pressure Relief Valves

3. Turn pressure control knob (K) counterclockwise to minimum setting. See FIG. 7.

CAUTION

Do not remove knob (K) to avoid leaking oil and misaligning screw.

4. Check rotation of hydraulic power supply pump on reservoir. Arrow on pump indicates correct rotation. Turn electric motor starter (G) on and off quickly. If pump rotates in wrong direction, have qualified electrician change wiring. See wiring information on motor instruction plate.
5. Turn electric motor starter (G) on and off several times to prime hydraulic power supply pump.



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FIG. 7. Pressure Control Knob

6. With hydraulic power supply pump primed, run proportioning pump at 10 to 20 cycles per minute for 2 minutes to purge air from system.

 To control speed of proportioning pump, turn hydraulic power supply pressure control knob (K) clockwise to increase pressure and counterclockwise to decrease pressure.

CAUTION

Do not exceed maximum working pressure or maximum flow rate of hydraulic power supply. Motor will draw too much amperage and damage equipment.

 Set screw (L, FIG. 7) is factory set for maximum flow of 10 gpm (38 lpm). There is no need to adjust this set screw. When running at less than 10 gpm (38 lpm), the pump automatically compensates and supplies only the fluid you need.

7. Close drain valves (J).
8. Check hydraulic oil level to ensure it is in safe zone on dipstick. Add more hydraulic oil if necessary.

Daily Startup

1. Check oil level. Add oil if necessary.
2. Turn on electric motor starter (G).

Pressure Adjustments

When proportioner is loaded with material and has reached spray temperature, use adjustment knob (K, FIG. 7) to set desired spray pressure.

Maintenance



WARNING



Before doing any maintenance, shut off power to electric motor to avoid electric shock.

Keep electric motor and oil cooler free of dirt and dust to avoid overheating motor and/or hydraulic oil.

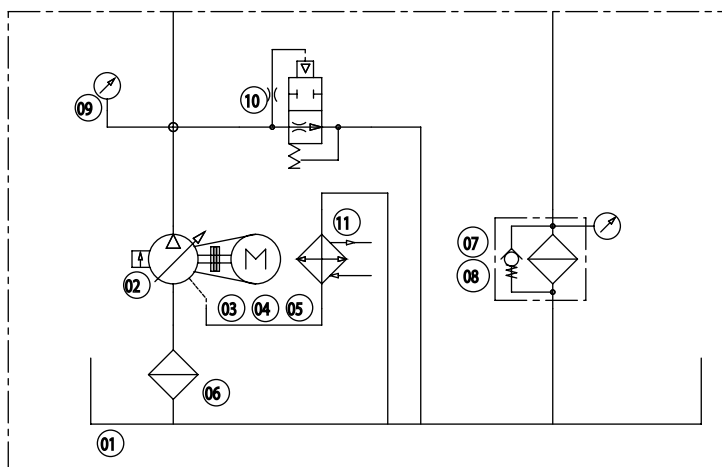
Motor Starter

Check electric motor starter (G) contact points for wear or dirt every 12 months. Clean or repair as necessary.

if electric motor stops due to overload, stop spraying, engage spray gun piston safety lock, and allow motor to cool. Avoid problem again by reducing hydraulic pressure and/or using a smaller spray nozzle. Then press Manual Reset button on electric motor to restart.

Filters

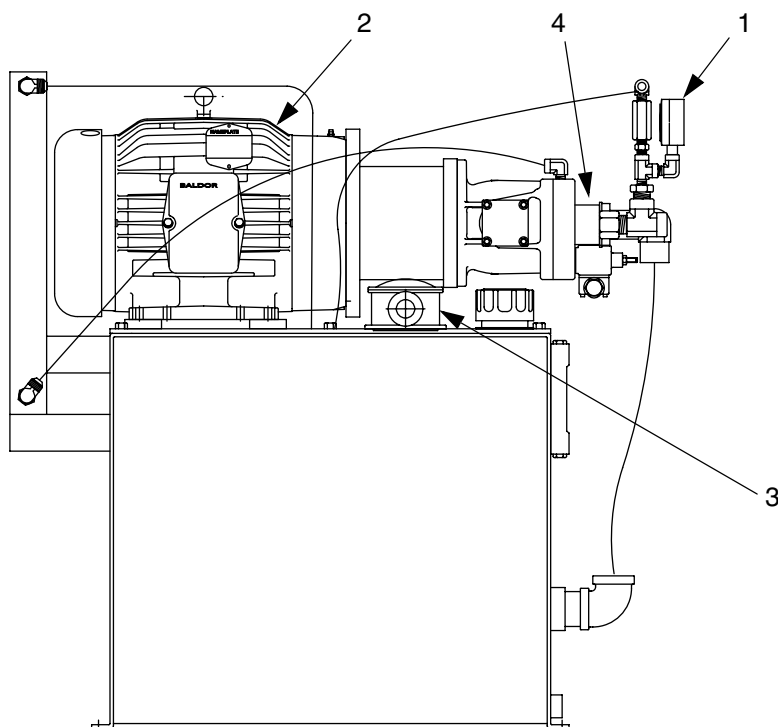
Change return line filter element (3), which becomes clogged with manufacturing residue, after first 40 hours of operation. Then change oil and return line filter after each 1000 hours of operation, or at least once a year.



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FIG. 8. Hydraulic Power Supply Fluid Diagram

Parts



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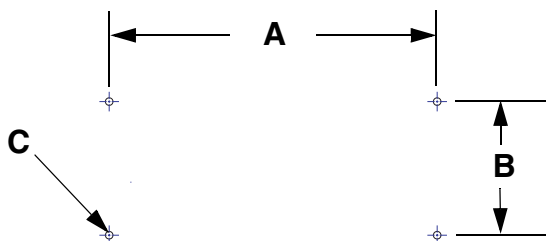
Ref. No.	Description	Qty
1	GAUGE, pressure	1
2	MOTOR, electric	1
3	ELEMENT, filter, return	1
4	PUMP, hydraulic power supply	1

Dimensions

Height	Model 106522: 23.5 in. (597 mm) Model 118430: 37 in. (940 mm)
Length	Model 106522: 31.75 in. (806 mm) Model 118430: 38 in. (965 mm)
Width	Model 106522: 13.5 in. (343 mm) Model 118430: 17 in. (432 mm)

Mounting Hole Diagram

A	Model 106522: 23.5 in. (597 mm) Model 118430: 25.25 in. (641 mm)
B	Model 106522: 8.5 in. (216 mm) Model 118430: 15.0 in. (381 mm)
C (diameter)	Model 106522: 0.340 in. (8.6 mm) Model 118430: 0.5 in. (12.7 mm)



Accessories

Hydraulic Fluid

207428 1 gal. (3.8 liters)

169236 5 gal. (19 liters)

Technical Data

Category	Part No. 106522 Power Supply	Part No. 118430 Power Supply
Power Rating	3 hp (2.24 kW)	7.5 hp (5.5 kW)
Maximum Flow	5 gpm (19 lpm)	10 gpm (38 lpm)
Maximum Working Pressure	800 psi (5.6 MPa, 56 bar)	1200 psi (8.2 MPa, 82 bar)
Tank Capacity	12 gal. (45 liters)	30 gal. (113 liters)
Pressure Outlet Size	1/2 npt(f)	-12 37° JIC male
Pressure Hose Size	None	3/4 in. (19 mm) ID x 6 ft (1.8 m)
Return Port Size	1 in. npt(f)	-16 37° JIC male
Return Hose Size	None	1 in. (25 mm) ID x 6 ft (1.8 m)
Pump Type	Pressure compensated piston pump, adjustable pressure	Pressure compensated piston pump, adjustable pressure
Pump Model	Vickers PVB6-RS4-21-CM-11	Vickers PVQ32-B2R-SE1S-21-C14D-12
Electric Motor	Baldor CL3619TM	Emerson ELT7E2DC. For more information, see e-LineMotors.com.
Motor Type	TEFC	TEFC
Frame	NEMA J184T	213 TC
Mount	C-FACE	C-FACE
Voltage	230V, 1 phase, 60 Hz	208-230V, 3 phase, 60 Hz or 380V, 3 phase, 50 Hz
Full Load Amps	13.2 at 230V	18 at 230V 11.3 at 380V
Service Factor	1.0	1.3 at 230V, 60 Hz 1.1 at 380V, 50 Hz
Duty	Continuous at 104°F (40°C)	Continuous at 104°F (40°C)
RPM	1740 at 60 Hz	1750 at 60 Hz 1430 at 50 Hz
Motor Approvals	CSA, UL listed	CE, CSA, DOE, UL recognized
Motor Starter	A-B 609-BAX	A-B 609-BAW
Starter Heater	A-B W-57	A-B W-58 for 230V, 3 phase, 60Hz A-B W-53 for 380V, 3 phase, 50Hz
Starter Approvals	CE, CSA, UL 508 (listed)	CE, CSA, UL 508 (listed)
Spare Filter Element	Western Filter ET101N1C05	Donaldson P171531
Weight	195 lb (88 kg) empty	345 lb (157 kg) empty
Supplied components	Suction strainer, return filter, pressure gauge, air bleed valve, case drain cooler, sight gauge or dipstick	Suction strainer, return filter, pressure gauge, air bleed valve, case drain cooler, sight gauge or dipstick
Package Approvals	None	CE marked. Ref. Declaration 199117.
Sound Level		79 dB(A)
Environment	Non-hazardous atmosphere. 40-120°F (40-49°C). No rain or dripping water.	Non-hazardous atmosphere. 40-120°F (40-49°C). No rain or dripping water.
Recommended Hydraulic Oil (not included)	Graco Part No. 169236, 5 gal. (19 liters), ISO V6 #46 ASTM #215	Graco Part No. 169236, 5 gal. (19 liters), ISO V6 #46 ASTM #215

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.

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