

Table of Contents

Warnings and Cautions	2	Displacement Pump	15
Component Identification and Function	3	Parts	
Maintenance	4	GMax 3900 & GMax 5900 Hi-Boy Sprayers	16
Troubleshooting	5	Pinion Assembly	18
Repair		GMax 3900 & GMax 5900 Lo-Boy Sprayers	20
Bearing Housing & Connecting Rod	7	Pressure Control	22
Drive Housing	8	Complete Sprayers	24
Pinion Assembly/Rotor/Field/Shaft/Clutch	9	Dimensions	25
Clamp	10	Technical Data	25
Clutch Housing	11	Graco Phone Number	25
Engine	11	Graco Warranty	26
Pressure Control	13		

Warnings and Cautions

Warning Symbol



This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions.

Caution Symbol



This symbol alerts you to the possibility of damage to or destruction of equipment if you do not follow the instructions.

WARNING	
<p>Fire and explosion can occur when spraying or flushing flammable fluid in an area where air circulation is poor and flammable vapors can be ignited by an open flame or sparks.</p> <p>To help prevent a fire and explosion:</p> <ul style="list-style-type: none"> ●Use outdoors or in an extremely well ventilated area. ●Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in pressurized aluminum equipment. Such use could result in a chemical reaction, with the possibility of explosion. ●Remove, extinguish or unplug all ignition sources; tape wall switch. Do not smoke in spray area. ●Never fill fuel tank while the engine is running or hot. ●Ground Sprayer, object being sprayed, paint and solvent pails. ●Hold gun firmly to side of a grounded pail when triggering into pail. ●Use only conductive airless paint hose. ●Never run engine in inclosed area. 	
<p>Fluid injection is a serious injury! If high pressure fluid pierces your skin, the injury might look like "just a cut". But it is a serious wound! Get immediate medical attention.</p> <p>To help prevent injection, always:</p> <ul style="list-style-type: none"> ●Engage trigger safety latch when not spraying. ●Point gun away from yourself or anyone else. ●Relieve pressure before checking or repairing any leak. ●Relieve pressure when you turn off the sprayer or stop spraying. ●Do not use components rated less than system <i>Maximum Working Pressure</i> <p>Never allow children to use this unit. If you are injured using this equipment, get immediate medical treatment.</p>	

Component Identification and Function

202 Main hose
 203 Whip end hose
 204 Contractor gun with RAC 5
 DripLess tip guard and 517 size SwitchTip

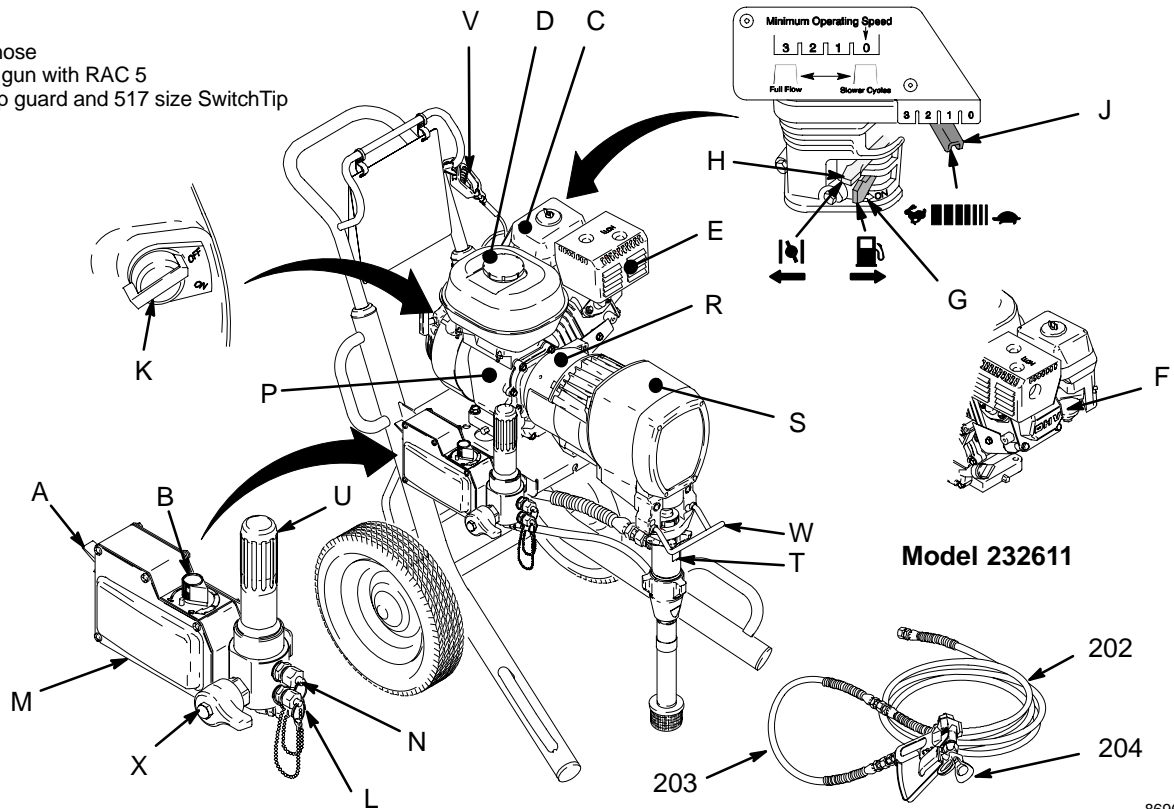


Fig. 1

8696B

A	Pressure Control Switch	ON/OFF, enables/disables clutch function and pressure control
B	Pressure Adjusting Knob	Controls fluid outlet pressure
C	Air Cleaner*	Filters air entering the carburetor
D	Fuel Tank*	Uses 86 octane unleaded gasoline
E	Muffler*	Reduces noise of internal combustion
F	Spark Plug Cable*	Routes electrical current to spark plug
G	Fuel Shutoff Lever*	On/off lever to regulate fuel flow from gasoline tank to carburetor
H	Choke*	Enriches air/gasoline mixture for cold starting
J	Throttle Lever*	Adjusts engine speed for large or small orifice spray tips
K	Engine Switch*	Enables/disables engine operation
L	Secondary Fluid Outlet	Second hose and spray gun is connected here
M	Pressure Control	Controls clutch cycling to maintain fluid pressure.
N	Primary Fluid Outlet	Hose and spray gun is connected here
P	Engine*	4-cycle gasoline engine
R	Clutch Housing	Transfers power from engine to drive assembly
S	Drive Housing	Transfers power from clutch to displacement pump
T	Displacement Pump	Provides fluid to be sprayed through spray gun
U	Fluid Filter	Filters fluid between source and spray gun
V	Grounding Clamp and Wire	Grounds sprayer system
W	Pail Hanger	Provides a hanger for paint pail
X	Pressure Drain Valve	Relieves fluid pressure when open
*	For more detailed explanations of these controls, refer to the Honda Engines Owner's Manual; supplied	

Maintenance

WARNING



INJECTION HAZARD

The system pressure must be manually relieved to prevent the system from starting or spraying accidentally. Fluid under high pressure can be injected through the skin and cause serious injury. To reduce the risk of an injury from injection, splashing fluid, or moving parts, follow the **Pressure Relief Procedure** whenever you:

- are instructed to relieve the pressure,
- stop spraying,
- check or service any of the system equipment,
- or install or clean the spray tip.

Pressure Relief Procedure

1. Lock gun trigger safety.
2. Turn engine ON/OFF switch to OFF.
3. Move pressure control switch to OFF and turn pressure control knob fully counterclockwise.
4. Unlock trigger safety. Hold metal part of gun firmly to side of grounded metal pail, and trigger gun to relieve pressure.
5. Lock gun trigger safety.
6. Open pressure drain valve. Leave valve open until ready to spray again.

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

CAUTION

For detailed engine maintenance and specifications, refer to separate Honda Engines Owner's Manual, supplied.

DAILY: Check engine oil level and fill as necessary.

DAILY: Check hose for wear and damage.

DAILY: Check gun safety for proper operation.

DAILY: Check pressure drain valve for proper operation.

DAILY: Check and fill the gas tank.

AFTER THE FIRST 20 HOURS OF OPERATION:

Drain engine oil and refill with clean oil. Reference Honda Engines Owner's Manual for correct oil viscosity.

WEEKLY: Remove air filter cover and clean element. Replace element, if necessary. If operating in an unusually dusty environment: check filter daily and replace, if necessary.

Repack connecting rod (22) top needle bearing after every pump change.

Replacement elements can be purchased from your local HONDA dealer.

WEEKLY: Check level of TSL in displacement pump packing nut. Fill nut, if necessary. Keep TSL in nut to help prevent fluid buildup on piston rod and premature wear of packings.

AFTER EACH 100 HOURS OF OPERATION:

Change engine oil. Reference Honda Engines Owner's Manual for correct oil viscosity.

SPARK PLUG: Use only BPR6ES (NGK) or W20EPR-U (NIPPONDENSO) plug. Gap plug to 0.028 to 0.031 in. (0.7 to 0.8 mm). Use spark plug wrench when installing and removing plug.

Troubleshooting

WARNING



INJECTION HAZARD

To reduce risk of serious injury, including fluid injection or splashing in eyes or on skin, or injury from moving parts, always follow **Pressure Relief Procedure Warning**, page 4, before checking, adjusting, cleaning or shutting down sprayer.

Check everything in chart before disassembling sprayer.


PROBLEM	CAUSE	SOLUTION
Engine won't start	Engine switch is OFF	Turn engine switch ON
	Engine is out of gas	Refill gas tank. Honda Engines Owner's Manual.
	Engine oil level is low	Try to start engine. Replenish oil, if necessary. Honda Engines Owner's Manual.
	Spark plug cable is disconnected or damaged	Connect spark plug cable or replace spark plug
	Cold engine	Use choke
	Fuel shutoff lever is OFF	Move lever to ON position
	Oil is seeping into combustion chamber	Remove spark plug. Pull starter rope 3 or 4 times. Clean or replace spark plug. Try to start engine. Keep sprayer upright to avoid oil seepage.
Engine operates, but displacement pump does not operate	Pressure control switch is OFF	Turn pressure control switch ON.
	Pressure setting is too low	Turn pressure adjusting knob clockwise to increase pressure.
	Fluid filter (318) is dirty	Clean filter. Page 22.
	Tip or tip filter is clogged	Clean tip or tip filter. Manual 309091.
	Displacement pump piston rod is stuck due to dried paint	Repair pump. Manual 308798.
	Connecting rod is worn or damaged	Replace connecting rod. Page 7.
	Drive housing is worn or damaged	Replace drive housing. Page 8.
	Electrical power is not energizing clutch field	Check wiring connections. Page 11. Reference control board diagnostics. Page 14. With pressure control switch ON and pressure turned to MAXIMUM, use a test light to check for power between clutch terminals on control board. Remove black clutch wires from control board and measure resistance across wires. At 70° F, the resistance must be between 1.2 ±0.2Ω (GMax3900); 1.7 ±0.2Ω (GMax 5900); if not, replace pinion housing. Have pressure control checked by authorized Graco dealer.
	Clutch is worn, damaged, or incorrectly positioned	Replace clutch. Page 9.
Pinion assembly is worn or damaged	Repair or replace pinion assembly. Page 9.	

PROBLEM	CAUSE	SOLUTION
Pump output is low	Strainer (31) is clogged	Clean strainer. Sprayer 232627 strainer is for use in paint only.
	Piston ball (25) is not seating	Service piston ball. Manual 308798.
	Piston packings are worn or damaged	Replace packings. Manual 308798.
	O-ring (227) in displacement pump is worn or damaged	Replace o-ring. Manual 308798.
	Intake valve ball is not seating properly	Clean intake valve. Manual 308798.
	Intake valve ball is packed with material	Clean intake valve. Manual 308798. Do not leave 232627 sprayer under pressure for more than 5 minutes when spraying texture and not actively spraying.
	Engine speed is too low	Increase throttle setting. Manual 308867.
	Clutch is worn or damaged	Replace clutch. Page 9.
	Pressure setting is too low	Increase pressure. Manual 308867.
	Fluid filter (318), tip filter or tip is clogged or dirty	Clean filter. Manual 308867 or 309091.
Excessive paint leakage into throat packing nut	Throat packing nut is loose	Remove throat packing nut spacer. Tighten throat packing nut just enough to stop leakage.
	Throat packings are worn or damaged	Replace packings. Manual 308798.
	Displacement rod is worn or damaged	Replace rod. Manual 308798.
Fluid is spitting from gun	Air in pump or hose	Check and tighten all fluid connections. Reprime pump. Manual 308867.
	Tip is partially clogged	Clear tip. Manual 309091.
	Fluid supply is low or empty	Refill fluid supply. Prime pump. Manual 308867. Check fluid supply often to prevent running pump dry.
Pump is difficult to prime	Air in pump or hose	Check and tighten all fluid connections. Reduce engine speed and cycle pump as slowly as possible during priming.
	Intake valve is leaking	Clean intake valve. Be sure ball seat is not nicked or worn and that ball seats well. Reassemble valve.
	Pump packings are worn	Replace pump packings. Manual 308798.
	Paint is too thick	Thin the paint according to the supplier's recommendations
	Engine speed is too high	Decrease throttle setting before priming pump. Manual 308867.
Clutch squeaks each time clutch engages	Clutch surfaces are not matched to each other when new and may cause noise	Clutch surfaces need to wear into each other. Noise will dissipate after a day of run time.
High engine speed at no load	Misadjusted throttle setting	Reset throttle to 3600–3800 engine rpm at no load
	Worn engine governor	Replace or service engine governor

Bearing Housing and Connecting Rod

NOTE: The item numbers referenced are for the Hi-Boy models. The Lo-Boy models may have different item numbers. Use the Hi-Boy item number and part to find the corresponding Lo-Boy part and item number.

Removal

-  Relieve pressure; page 4.
- Fig. 3. Remove screws (14) and front cover (23).
- For Hi-Boy models;** remove spring clip (32) and drain hose (54). Unscrew suction tube (30) from pump, hold wrench on pump intake valve (A) to keep pump from loosening. **For Lo-Boy models;** unscrew swivel union (30aa) from pump.
- Disconnect pump outlet hose (33) from displacement pump outlet nipple (62).
- Fig. 2. Use screwdriver to push up retaining spring (26) at top of pump. Push out pin (29).

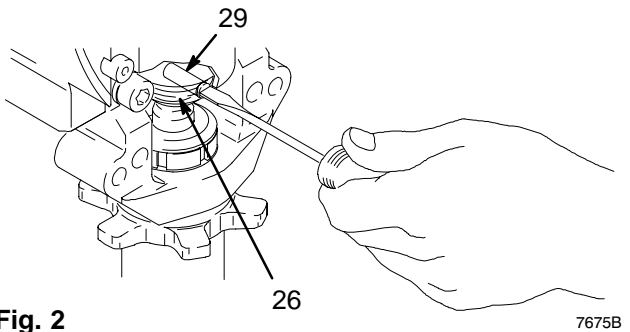


Fig. 2

7675B

- Fig. 3. Loosen retaining nut (34). Unscrew and remove displacement pump (28).
- Remove four screws (13) and lockwashers (12) from bearing housing (21).
- Pull connecting rod (22) and lightly tap lower rear of bearing housing (21) with plastic mallet to loosen from drive housing (20). Pull bearing housing and connecting rod assembly (22) off drive housing.
- Inspect crank (B) for excessive wear and replace parts as needed.

Installation

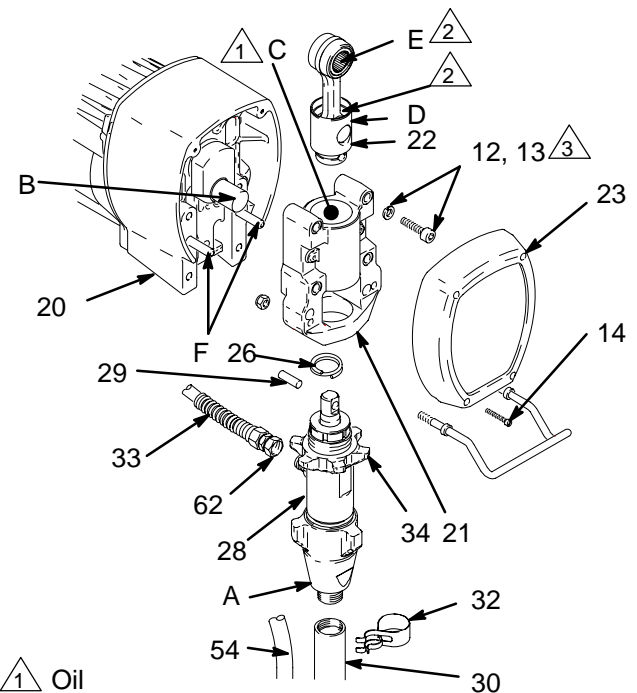
- Evenly lubricate inside of bronze bearing (C) in bearing housing (21) with high-quality motor oil. Liberally pack top roller bearing (E), lower bearing (D) inside connecting rod assembly (22) with bearing grease.

- Assemble connecting rod (22) and bearing housing (21).
- Clean mating surfaces of bearing and drive housings.
- Align connecting rod with crank (B) and carefully align locating pins (F) in drive housing (20) with holes in bearing housing (21). Push bearing housing onto drive housing or tap into place with plastic mallet.

CAUTION

DO NOT use bearing housing screws (13) to align or seat bearing housing with drive housing. Align these parts with locating pins (F), to avoid premature bearing wear.

- Install screws (13) and lockwashers (12) on bearing housing. Torque evenly to note 3 value in Fig. 3.
- Refer to Displacement Pump, Installation, page 15.



1 Oil

2 Pack with bearing grease 114819

3 GMax 3900: Torque to 200 in-lb (22.6 N·m)
GMax 5900: Torque to 25 ft-lb (34 N·m)



Fig. 3

Model 232610 shown

8697A

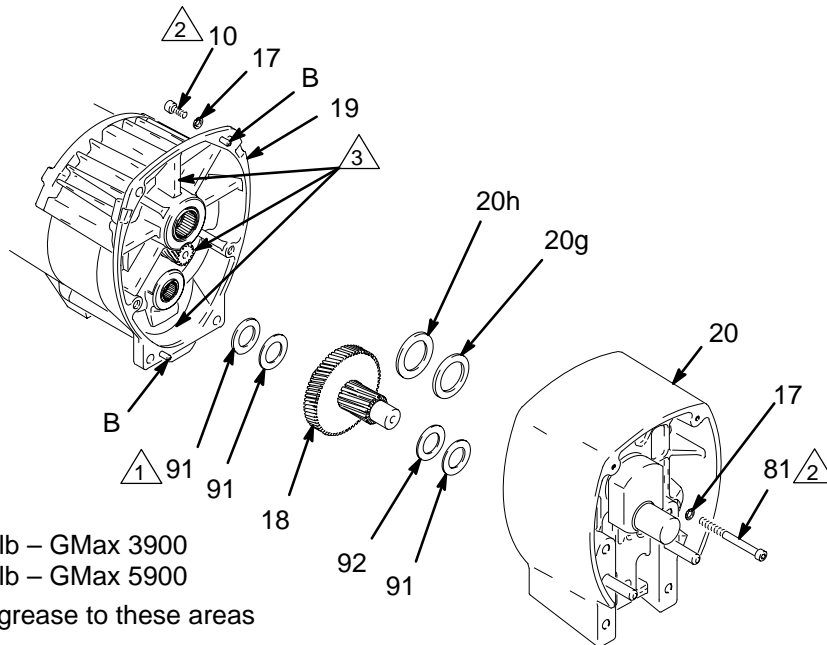
Drive Housing


Removal


1.   Relieve pressure; page 4.
2. Fig. 4. Remove bearing housing. Do 1. through 8. of **Bearing Housing and Connecting Rod** procedure on page 7.
3. Remove two screws (81) and lockwashers (17).
4. Remove four screws (10) and lockwashers (17) from pinion housing (19).
5. Lightly tap around drive housing (20) to loosen drive housing. Pull drive housing straight off pinion housing. Be prepared to support gear cluster (18), which may also come out.

Installation

1. Liberally apply bearing grease (supplied with replacement gear cluster) to gear cluster (18) and to areas called out by note 3. Use full 0.62 pint (0.29 liter) of grease for GMax 3900 and 0.68 pint (0.32 liter) of grease for GMax 5900.
2. Place bronze colored washer (20g) on shaft protruding from large shaft of drive housing (20).
Note: If replacing a washer with pin holes with a washer without pin holes, remove guide pins from housing. Place silver colored washer (20h) on pinion housing. Align gears and push new drive housing straight onto pinion housing and locating pins (B).
3. Install four screws (10) and lockwashers (17) from pinion housing (19).
4. Install two screws (81) and lockwashers (17).
5. Fig. 3. Install bearing housing. Do 1. through 6. of **Bearing Housing and Connecting Rod** procedure on page 7.



 GMax 3900 only

 Torque to 125 in-lb – GMax 3900
Torque to 200 in-lb – GMax 5900


 Apply remaining grease to these areas


Fig. 4

TI0178A

Pinion Assembly/Rotor/Field/Shaft/Clutch

Removal

If pinion assembly (19) is not removed from clutch housing (5), do 1. through 4. Otherwise, start at 5.

1.  Relieve pressure; page 4.
2. Disconnect field cable (X) from pressure control.

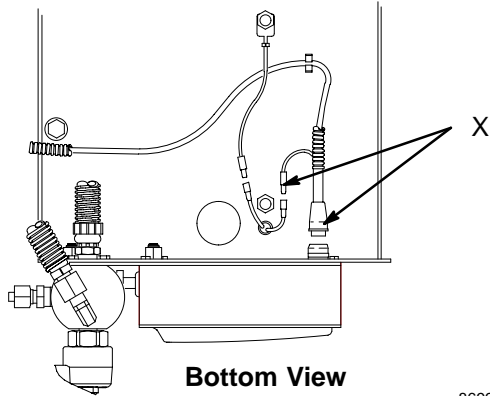


Fig. 5 8699A

3. Fig. 6. Remove five screws (10) and lockwashers (17) and pinion assembly (19).

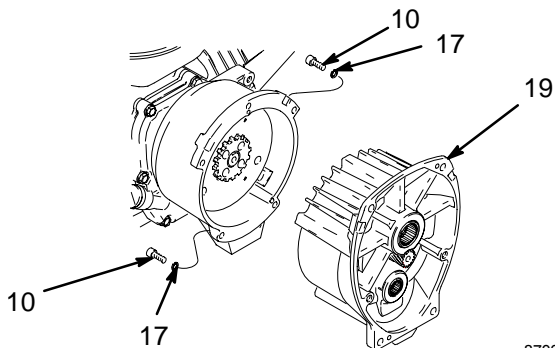


Fig. 6 8700A

4. Fig. 7. Place pinion assembly (19) on bench with rotor side up.
5. Remove four screws (72) and lockwashers (17). Install two screws in threaded holes (E) in rotor. Alternately tighten screws until rotor comes off.

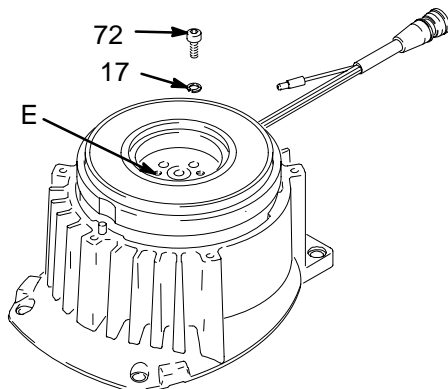


Fig. 7 8701A

6. Fig. 8. Remove retaining ring (19e).
7. Tap pinion shaft (19d) out with plastic mallet.

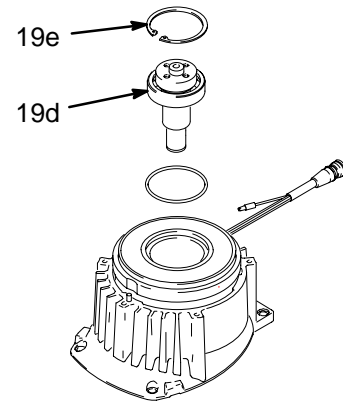


Fig. 8 8703A

8. Fig.9. Use an impact wrench or wedge something between armature (4a) and clutch housing to hold engine shaft during removal.
9. Remove four screws (16) and lockwashers (17).
10. Remove armature (4a).

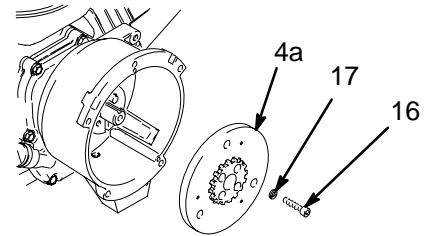


Fig. 9 8704A

Pinion Assembly/Rotor/Field/Shaft/Clutch

Installation

1. Fig. 10. Lay two stacks of two dimes on smooth bench surface.
2. Lay armature (4a) on two stacks of dimes.
3. Press center of clutch down on bench surface.

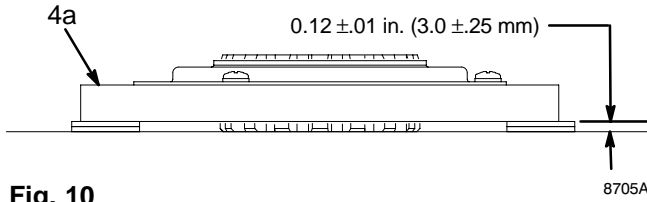


Fig. 10

4. Install armature (4a) on engine drive shaft.
5. Install four screws (16) and lockwashers (17) with torque of 125 in-lb.

6. Fig. 8. Tap pinion shaft (A) in with plastic mallet.
7. Install retaining ring (Z) with beveled side facing field (Y).
8. Fig. 7. Place pinion assembly on bench with rotor side up.
9. Apply locktite to screws. Install four screws (16) and lockwashers (17). Alternately torque screws to 125 in-lb until rotor is secure. Use threaded holes to hold rotor.
10. Fig. 6. Install pinion assembly (19) with five screws (10) and lockwashers (17).
11. Fig. 5. Connect field cable (X) to pressure control.

Clamp

Removal

1. Fig. 11. Loosen two screws (16) on clamp (8),
2. Push screwdriver into slot in clamp (8) and remove clamp.

Installation

1. Fig. 11. Install engine shaft key (7).
2. Tap clamp (8) on engine shaft (A) with plastic mallet.
3. Press clamp (8) onto engine shaft (A). Maintain dimension shown note 2 in Fig. 11. Chamfer must face engine.

Check dimension: Place rigid, straight steel bar (B) across face of clutch housing (5). Use accurate measuring device to measure distance between bar and face of clamp. Adjust clamp as necessary. Torque two screws (16) to 125 ± 10 in-lb (14 ± 1.1 N·m).

- 1 Face of clutch housing
- 2 1.550 ± 0.010 in. (39.37 ± 0.25 mm); GMax 3900
 1.812 ± 0.010 in. (46.02 ± 0.25 mm); GMax 5900
- 3 Torque to 125 ± 10 in-lb (14 ± 1.1 N·m)
- 4 Chamfer this side

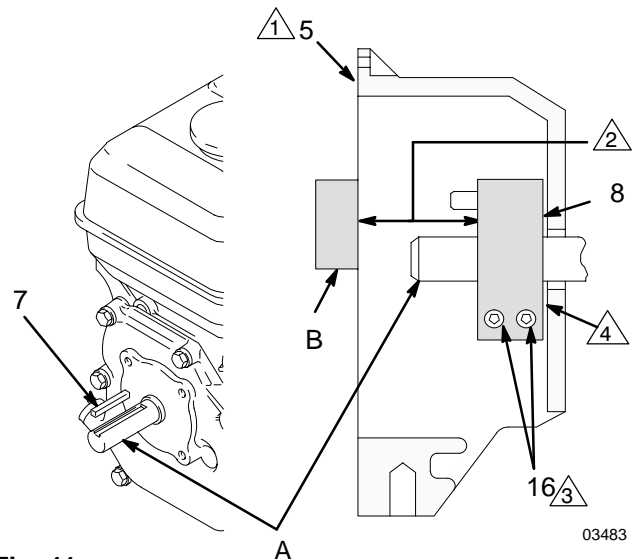


Fig. 11

Clutch Housing

Removal

1. Fig. 12. Remove four capscrews (75) and lockwashers (77) which hold clutch housing (5) to engine.
2. Remove screw (15) from under mounting plate (D).
3. Remove engine key (7).
4. Pull off clutch housing (5).

Installation

1. Fig. 12. Push on clutch housing (5).
2. Install four capscrews (75) and lockwashers (77) and secure clutch housing (5) to engine. Torque to 200 in-lb (22.6 N•m).
3. Install capscrew (15) from beneath mounting plate (D). Torque to 26 ft-lb (35.2 N•m).

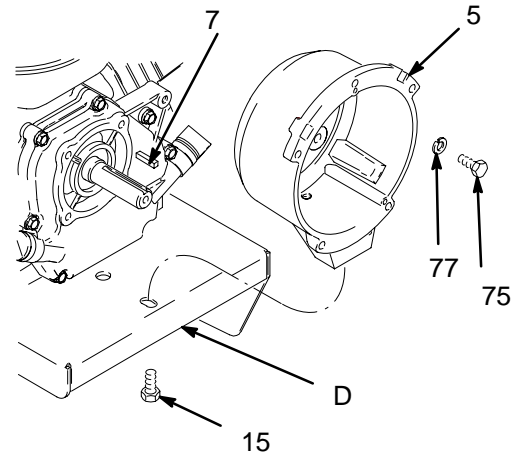


Fig. 12

8708A

Engine

Removal

1. Remove **Pinion Assembly/Rotor/Field/Pinion/Clutch, Clamp and Clutch Housing**, as instructed on pages 9, 10 and 11.
2. Fig. 13. Disconnect all necessary wiring.
3. Fig. 14. Remove two locknuts (71) and screws (70) from base of engine.
4. Lift engine carefully and place on work bench.

NOTE: All service to the engine must be performed by an authorized HONDA dealer.

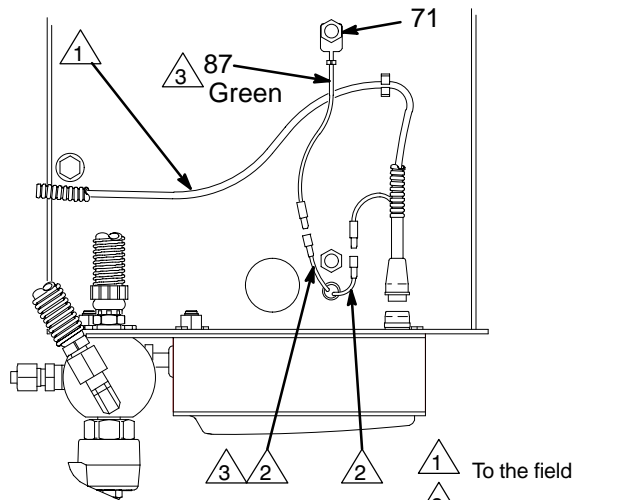


Fig. 13

8709A

- △ 1 To the field
- △ 2 To the engine
- △ 3 GMax 5900s only

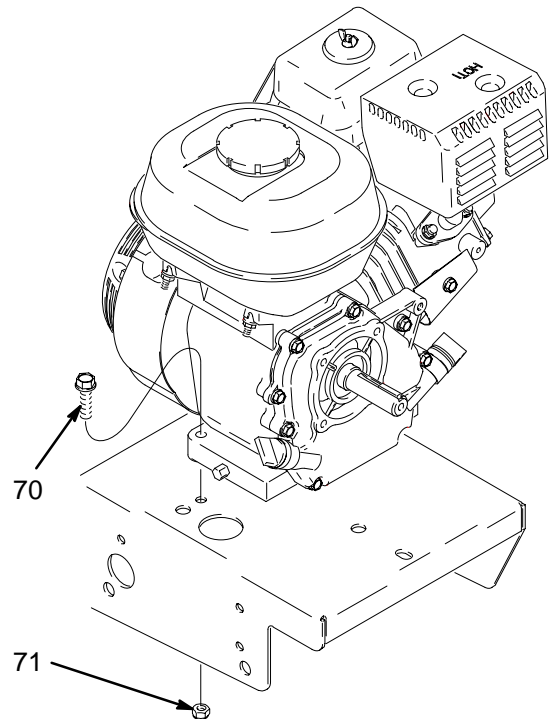


Fig. 14


8710A

Installation

1. Lift engine carefully and place on cart.
2. Fig. 14. Install two screws (70) in base of engine and secure with locknuts (71). Torque to 200 in-lb (22.6 N•m).
3. Fig. 13. Connect all necessary wiring.
4. Install **Pinion Assembly/Rotor/Field/Pinion/Clutch, Clamp and Clutch Housing**, as instructed on pages 9 and 10 and 11.

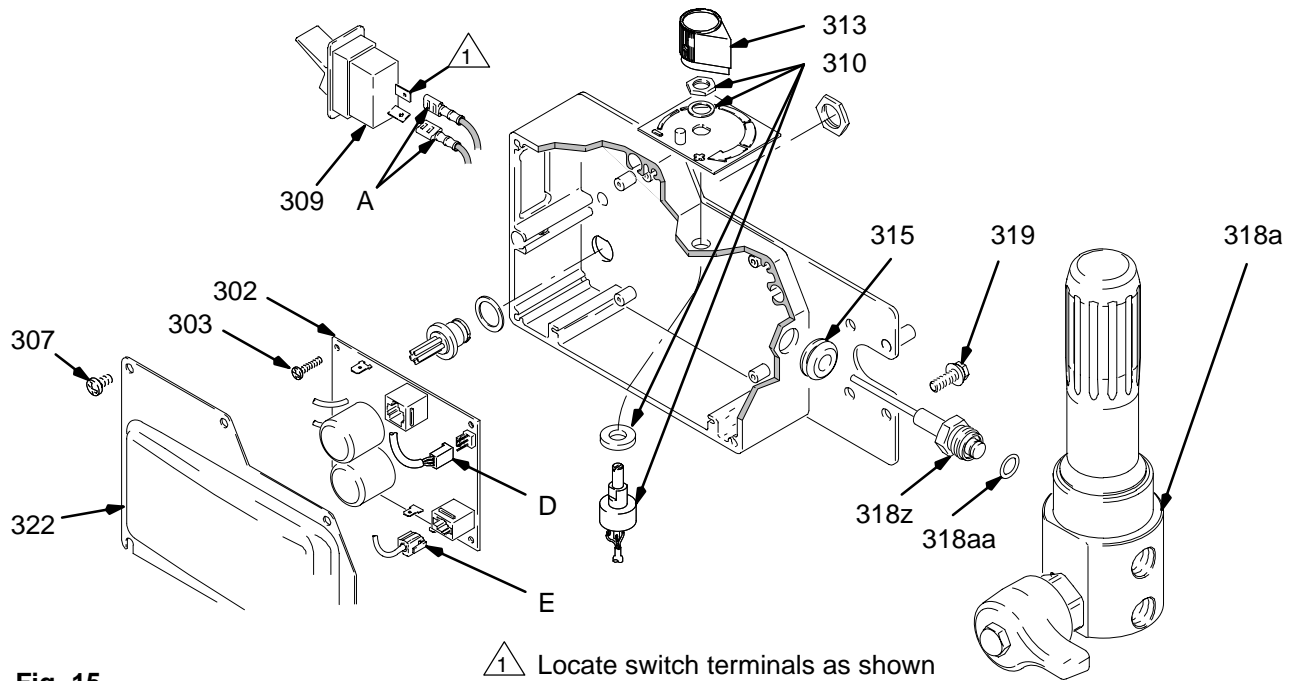
On/Off Switch

Removal

1.  Relieve pressure; page 4.
2. Fig. 15. Remove five screws (307) and cover (322).
3. Disconnect two wires (A) from ON/OFF switch (309).
4. Press in on two retaining tabs on each side of ON/OFF switch (309) and remove switch.

Installation

1. Install new ON/OFF switch (309) so tabs of switch snap into place on inside of pressure control housing.
2. Connect two wires (A) to ON/OFF switch.
3. Install pressure control cover (322) with five screws (307).




8711A

Fig. 15

Pressure Control

Control Board

Removal

-  Relieve pressure; page 4.
- Fig. 15. Remove five screws (307) and cover (322).
- Fig. 22. Disconnect at control board (302):
 - Four clutch leads: two violet and two black.
 - Lead (D) from potentiometer.
 - Lead (E) from transducer.
 - Two red leads (A) to ON/OFF switch (309).
- Fig. 15. Remove five screws (303), green ground wire and control board (302).


Installation

When installing replacement control board, follow instructions with control board to set model type.

- Fig. 15. Install green ground wire and control board (302) with five screws (303).
- Fig. 22. Connect to control board (302):
 - Two red leads (A) to ON/OFF switch (309).
 - Lead (E) to transducer.
 - Lead (D) to potentiometer.
 - Four clutch leads: two violet and two black.
- Fig. 15. Install cover (322) with five screws (307).

Pressure Control Transducer

Removal

-  Relieve pressure; page 4.
- Fig. 15. Remove five screws (307) and cover (322).
- Disconnect lead (E) from control board (302).
- Remove three screws (319) and fluid filter (318) from control plate (301). Carefully pull transducer connector through rubber grommet (315).


- Remove pressure control transducer (318z) and packing o-ring (318aa) from filter housing (318a).

Installation

- Fig. 15. Install packing o-ring (318aa) and pressure control transducer (318z) in filter housing (318a). Torque to 30–35 ft-lb.
- Carefully feed transducer connector through rubber grommet (315). Install fluid filter (318) on control plate (301) with three screws (319).
- Connect lead (E) to motor control board (302).
- Install cover (322) with five screws (307).

Pressure Adjust Potentiometer

Removal

-  Relieve pressure; page 4.
- Fig. 15. Remove five screws (307) and cover (322).
- Disconnect lead (D) from control board (302).
- Loosen set screws on potentiometer knob (313) and remove knob, shaft nut, lockwasher (310) and pressure adjust potentiometer (310).
- Remove seal (311) from potentiometer (310).

Installation

- Install seal (311) on potentiometer (310).
- Fig. 15. Install pressure adjust potentiometer (310), shaft nut, lockwasher (310) and potentiometer knob (313).
 - Turn potentiometer shaft (310) clockwise to internal stop. Assemble potentiometer knob (313) to strike pin on plate (312).
 - After adjustment of step a., tighten both set screws in knob 1/4 to 3/8 turn after contact with shaft.
- Connect lead (D) to control board (302).
- Install cover (322) with five screws (307).

Pressure Control

Control Board Diagnostics

1. Fig. 15. Remove five screws (307) and cover (322).
2. Start sprayer.
3. Turn ON/OFF switch ON.
4. Observe LED operation and reference following table:

LED BLINKS	SPRAYER OPERATION	INDICATES	WHAT TO DO
Two times repeatedly	Sprayer shuts down and LED continues to blink two times repeatedly	Run away pressure. Pressure greater than 4500 psi (310 bar, 31 MPa).	<ol style="list-style-type: none"> 1. Check pressure transducer connection at control board 2. Replace pressure transducer 3. Replace control board
Three times repeatedly	Sprayer shuts down and LED continues to blink three times repeatedly	Pressure transducer is faulty or missing	<ol style="list-style-type: none"> 1. Check pressure transducer connection at control board 2. Replace pressure transducer 3. Replace control board
Four times repeatedly	Sprayer shuts down and LED continues to blink four times repeatedly	Generator voltage is low	<ol style="list-style-type: none"> 1. Increase engine throttle 2. Check wiring connections 3. Service Honda engine alternator
Five times repeatedly	Sprayer shuts down and LED continues to blink five times repeatedly	High clutch current	<ol style="list-style-type: none"> 1. Check clutch 5-pin bulkhead connector. Clean contacts. 2. Measure $1.2 \pm 0.2\Omega$ (GMax 3900); $1.7 \pm 0.2\Omega$ (GMax 5900) across clutch field at 70°F 3. Replace clutch field assembly
Six times repeatedly	Sprayer shuts down and LED continues to blink six times repeatedly	High clutch temperature	<ol style="list-style-type: none"> 1. If clutch is new, let sprayer cool down and then restart 2. Inspect clutch. Replace clutch if there is excessive wear. 3. Remove pump pin, separate pinion housing from clutch housing. Rotate rotor clockwise to check for excessive drag.

Displacement Pump

Removal

1. Flush pump.

2.  Relieve pressure; page 4.

3. Fig. 16. Cycle pump with piston rod (222) in its lowest position.

4. Fig. 16. Remove suction tube (33) and hose (33).

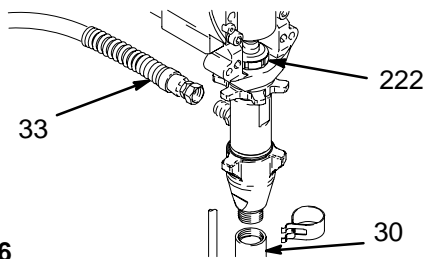


Fig. 16 7672B

Repair

See manual 308798 for pump repair instructions.

Installation

WARNING

If pin works loose, parts could break off due to force of pumping action. Parts could project through the air and result in serious injury or property damage. Make sure pin and retaining spring are properly installed.

CAUTION

If the pump locknut loosens during operation, the threads of the bearing housing will be damaged. Make sure locknut is properly tightened.

1. Fig. 19. Pull piston rod out 1.5 in. Screw in pump until holes in bearing cross link and piston rod align.

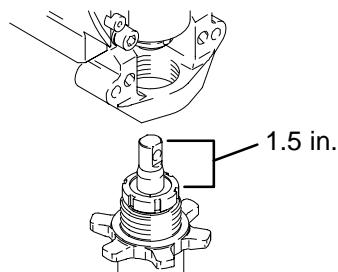


Fig. 19 7676B

5. Fig. 17. Use screwdriver: push retaining spring up and push out pin (29).

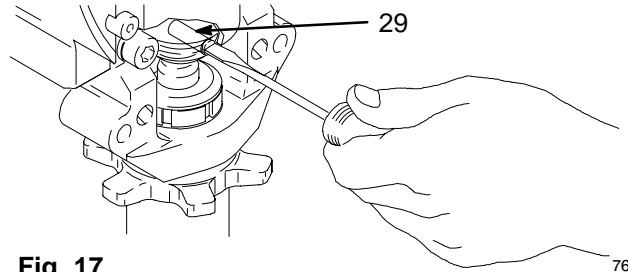


Fig. 17 7675B

6. Fig. 18. Loosen locknut by hitting firmly with a 20 oz (maximum) hammer. Unscrew pump.

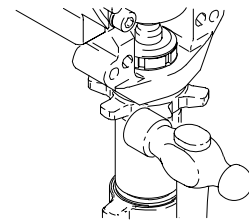


Fig. 18 7673B

2. Fig. 17. Push pin (29) into hole. And push retaining spring into groove all the way around connecting rod.

Fig. 20. Screw jam nut down onto pump until nut stops. Screw pump up into bearing housing until it is stopped by jam nut. Back off pump and jam nut to align pump outlet to back. Tighten jam nut by hand, then tap 1/8 to 1/4 turn with a 20 oz (maximum) hammer to approximately 75 \square 5 ft-lb (102 N-m).

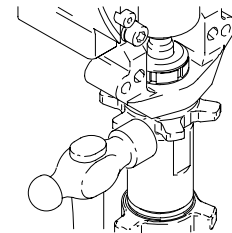


Fig. 20 7673B

- Fig. 21. Fill packing nut with Graco TSL until fluid flows onto the top of seal.

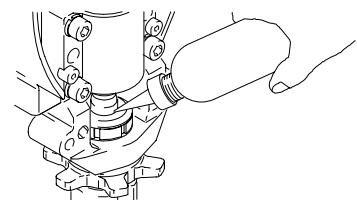
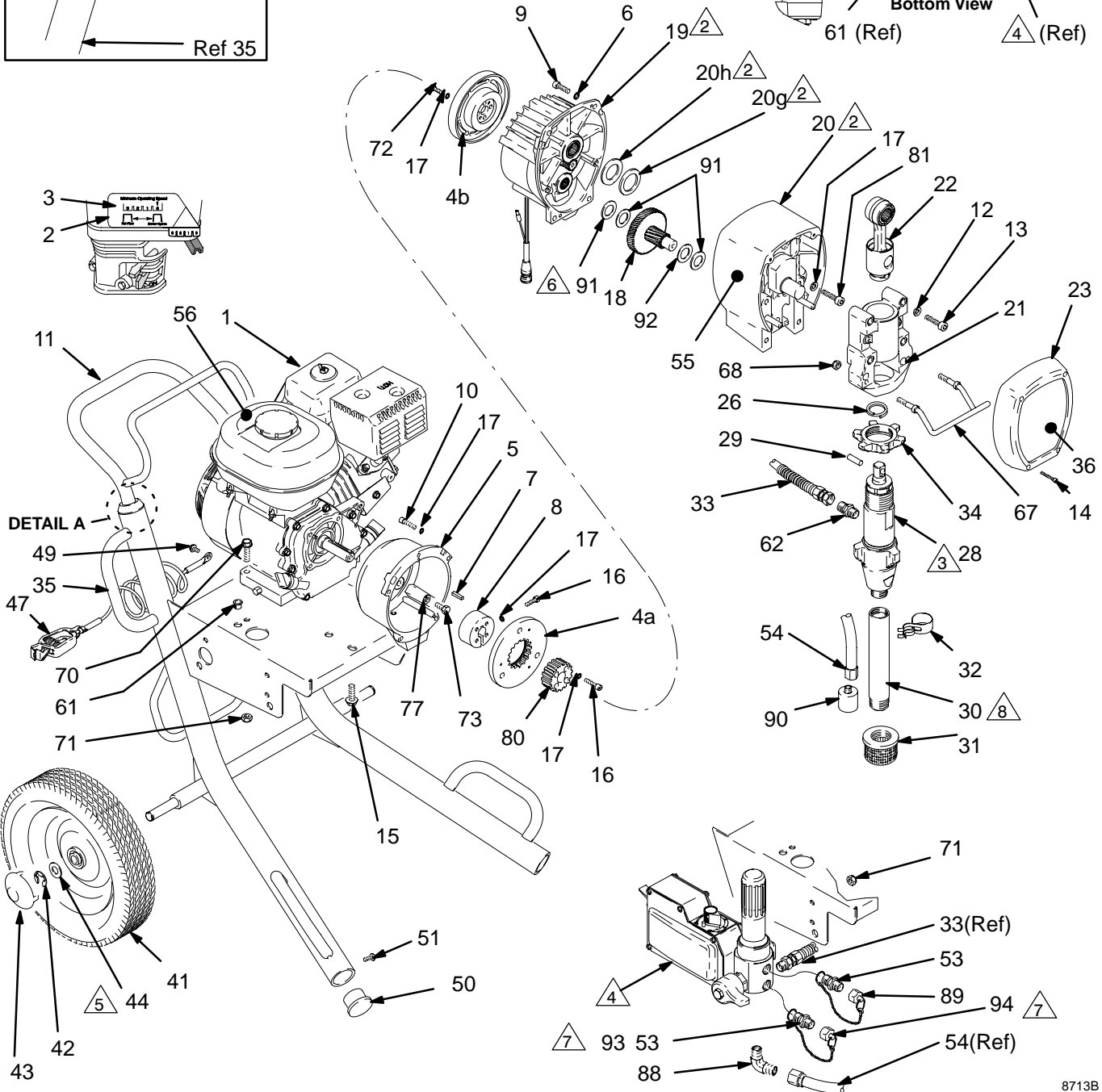
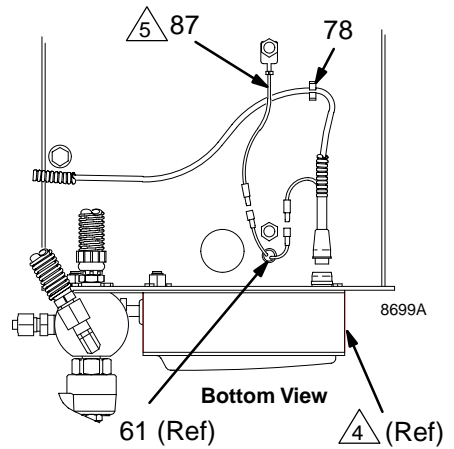
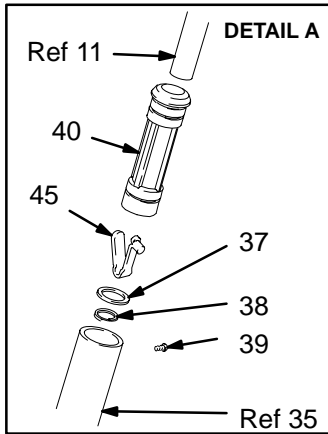


Fig. 21 7677B

Parts Drawing – GMax 3900, 5900, 5900HD Hi-Boy Sprayers

Models 232610, 232620 and 232627

- 1 Label
- 2 See page 18 for the parts.
- 3 See manual 308798 for the parts.
- 4 See page 22 for the parts.
- 5 Used on GMax 5900, 5900HD
- 6 Used on GMax 3900
- 7 93 and 94 used on GMax 5900HD
- 8 Used on GMax 3900, 5900



Parts List – GMax 3900, 5900, 5900HD Hi-Boy Sprayers

Models 232610, 232620 and 232627*

Ref No.	Part No.	Description	Qty	Ref No.	Part No.	Description	Qty
1		ENGINE		31		STRAINER	
	108879	GMax 3900	1		181072	GMax 3900	1
	114530	GMax 5900, 5900HD	1		189920	GMax 5900, 5900HD	1
2	113084	RIVET, blind	2	32		CLIP, spring	
3	192014	PLATE, indicator	1		194194	GMax 3900, 5900	1
4		CLUTCH ASSEMBLY , includes 4a, 4b, 16, 17, 80			194525	GMax 5900HD	1
	241109	GMax 3900	1	33	240795	HOSE, coupled	1
	241113	GMax 5900, 5900HD	1	34		NUT, retaining	
4a		.ARMATURE, clutch, 4 in., GMax 3900	1		192723	GMax 3900	1
		.ARMATURE, clutch, 5 in., GMax 5900, 5900HD	1		193031	GMax 5900, 5900HD	1
4b		.ROTOR		35		CART FRAME	
		4 in., GMax 3900	1		240696	GMax 3900	1
		5 in., GMax 5900, 5900HD	1		240726	GMax 5900, 5900HD	1
5		CLUTCH HOUSING		36	193698	LABEL, identification, GMax 3900	1
	193540	GMax 3900	1		193683	LABEL, identification, GMax 5900	1
	193531	GMax 5900, 5900HD	1	37	183350	WASHER, plain	2
6		LOCKWASHER, spring, 1/4 in.		38	110243	RING, retaining	2
	105510	GMax 3900	4	39	108795	SCREW, mch, pn hd, 10–32 x 5/16 in.	4
	104008	GMax 5900, 5900HD	4	40		SLEEVE	
7	183401	KEY, parallel	1		192027	GMax 3900	2
8	193680	CLAMP	1		191084	GMax 5900, 5900HD	2
9		CAPSCREW, socket head, 1/4–20 x 3/4 in.		41		WHEEL, semi-pneumatic	
	100644	GMax 3900	4		106062	GMax 3900	2
	101864	GMax 5900, 5900HD	4		179811	GMax 5900, 5900HD	2
10	100644	CAPSCREW, socket head, 1/4–20 x 3/4 in.	5	42	101242	RING, retaining	2
11	239998	CART HANDLE & HOSE RACK	1	43	104811	HUBCAP	2
12	106115	LOCKWASHER, spring, 3/8 in.	4	44	154636	WASHER, GMax 5900, 5900HD only	2
13		CAPSCREW, socket head, GMax 3900; 3/8–16 x 1.5 in.	4	45	112827	BUTTON, snap	2
	107210	GMax 5900, 5900HD; 3/8–16 x 2.25 in.	4	47	237686	GROUNDING CLAMP & WIRE	1
14	114418	SCREW, self-tap, fil hd, 8–32 x 1 in.	4	49	112798	SCREW, hex washer hd., No. 8 x 3/8 in	1
15	113802	SCREW, flange, hex hd, 3/8–16 x 5/8 in.	1	50	193700	PLUG, tubing; GMax 3900	2
16	108803	CAPSCREW, sch, 1/4–2 x 1 in.	6		193682	CAP, end; GMax 5900, 5900HD	2
17		LOCKWASHER, spring, 1/4 in.		51	114984	SCREW, mch, pn hd; GMax 3900 only	2
	105510	GMax 3900	17	53	164672	ADAPTER	2
	105510	GMax 5900, 5900HD	11	54	194178	HOSE, drain	1
18		GEAR COMBINATION		55▲	194125	LABEL, danger	1
	241439	GMax 3900	1	56▲	194126	LABEL, warning	1
	241440	GMax 5900, 5900HD	1	61	114678	BUSHING, strain relief	1
19		PINION ASSEMBLY ; Parts, page 18		62	183461	NIPPLE, GMax 3900	1
	241108	GMax 3900	1		162485	NIPPLE, GMax 5900, 5900HD	1
	241112	GMax 5900, 5900HD	1	67	192719	HANGER, pail	1
20		DRIVE HOUSING ; Parts, page 18		68	112746	LOCKNUT, 5/16–18	2
	241007	GMax 3900	1	70	110837	SCREW, flng, hex hd, 5/16–18 x 1–1/2 in.	2
	241011	GMax 5900, 5900HD	1	71	110838	LOCKNUT, heavy hex, 5/16–18	6
21		BEARING HOUSING ; includes 67 and 68		72	101682	SCREW, cap, sch	4
	240523	GMax 3900	1	73		SCREW, cap, sch	4
	241015	GMax 5900, 5900HD	1		109031	GMax 3900	4
22		CONNECTING ROD			108842	GMax 5900, 5900HD	4
	241008	GMax 3900	1	77		WASHER, lock, spring	
	241012	GMax 5900, 5900HD	1		104008	GMax 3900	4
23		COVER, HOUSING, DRIVE			100214	GMax 5900, 5900HD	4
	179899	GMax 3900	1	78	114687	CLIP, retainer	1
	241308	GMax 5900, 5900HD	1	80		HUB, armature	1
26		SPRING, retaining		81		SCREW	
	176817	GMax 3900	1		107218	GMax 3900	2
	183169	GMax 5900, 5900HD	1		114686	GMax 5900	2
28		DISPLACEMENT PUMP ; Manual 308798		82	206994	THROAT SEAL LIQUID; not shown	1
	239923	GMax 3900	1	87	240997	CONDUCTOR, ground	1
	240291	GMax 5900	1	88	110249	ADAPTER, male elbow, 90°	1
	240800	GMax 5900HD	1	89	240131	PLUG, packless	1
29		PIN, straight		90	241718	DEFLECTOR	1
	176818	GMax 3900	1	91	114672	WASHER, GMax 3900 (3); 5900, 5900HD	(2)
	183210	GMax 5900, 5900HD	1	92	114699	WASHER	1
30		TUBE, intake		93**	162485	ADAPTER	1
	192641	GMax 3900	1	94**	240987	PLUG, packless, 3/8 in.	1
	193097	GMax 5900	1				

▲ *Danger & Warning labels, tags, and cards are free*
 * *Models 233005 through 233007 include Pressure Gauge Kit 241339*
 ** *5900HD only*

Parts List & Drawing – Pinion Assembly

Ref No. 19 and 20

Ref No. 19: Pinion Housing Assembly 241108 for GMax 3900; Pinion Housing Assembly 241112 for GMax 5900

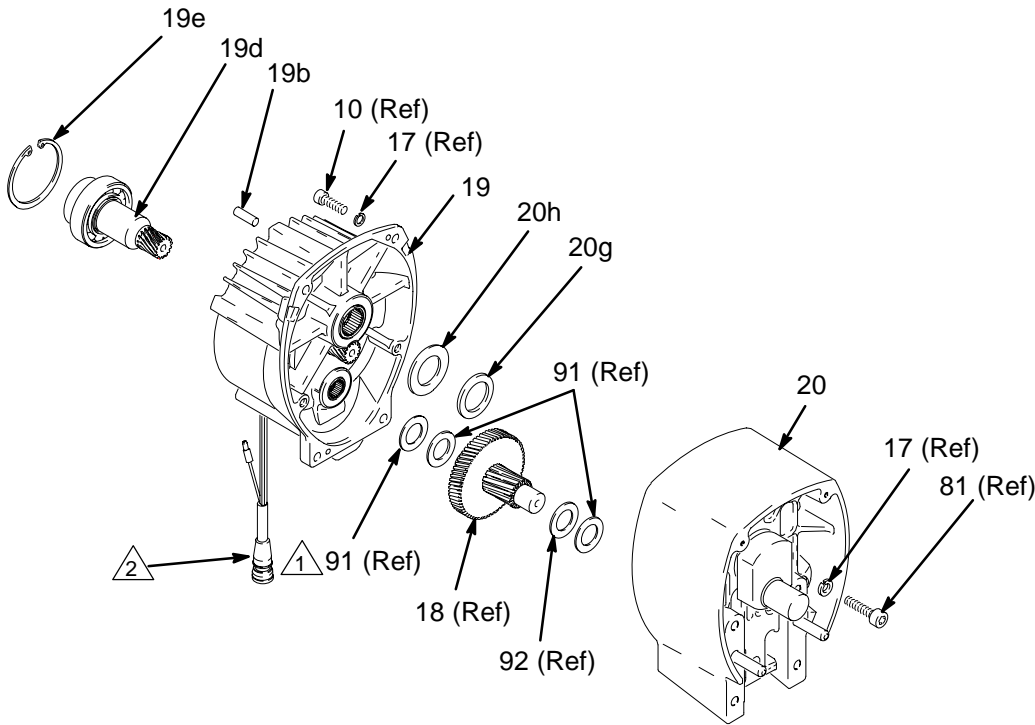
Ref No. 20: Drive Housing Assembly 241007 for GMax 3900; Drive Housing Assembly 241011 for GMax 5900

Ref No.	Part No.	Description	Qty
19		PINION HOUSING	1
19b	105489	PIN	2
19d*		PINION SHAFT	
	241110	GMax 3900	1
	241114	GMax 5900, 5900HD	1
19e*		RETAINING RING, large	
	113094	GMax 3900	1
	112770	GMax 5900, 5900HD	1

Ref No.	Part No.	Description	Qty
20		DRIVE HOUSING	1
20g*		WASHER	
	107089	GMax 3900	1
	194173	GMax 5900, 5900HD	1
20h*		WASHER	
	194411	GMax 3900	1
	194172	GMax 5900, 5900HD	1

*Must be ordered separately..

*Must be ordered separately..



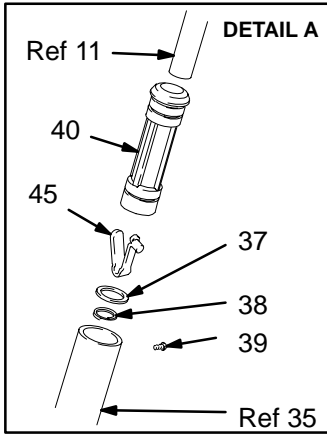
△ 1 Only used on GMax 3900, Models 232610 and 232612

△ 2 Pinion housing assembly (19) includes clutch field and connector

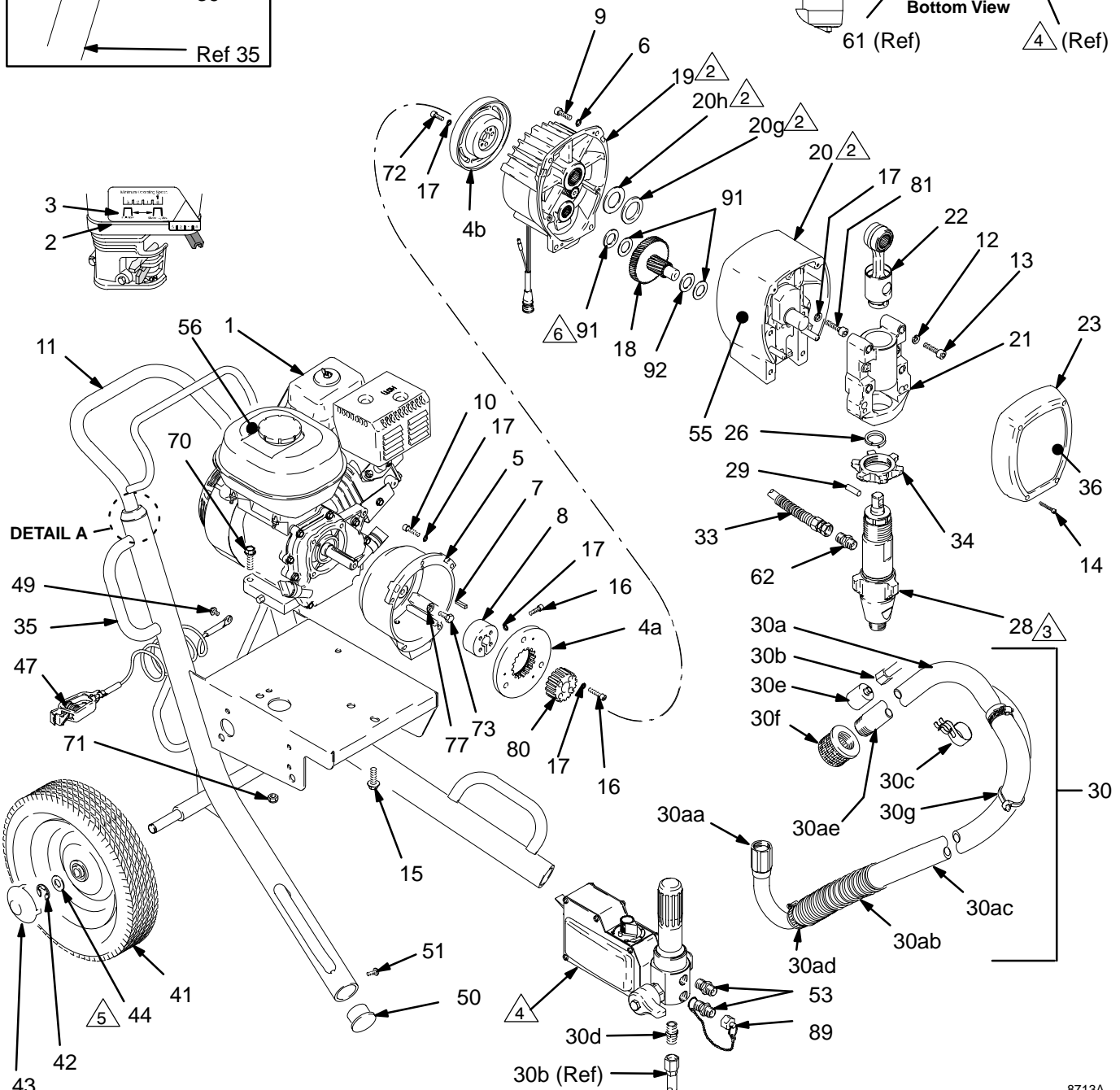
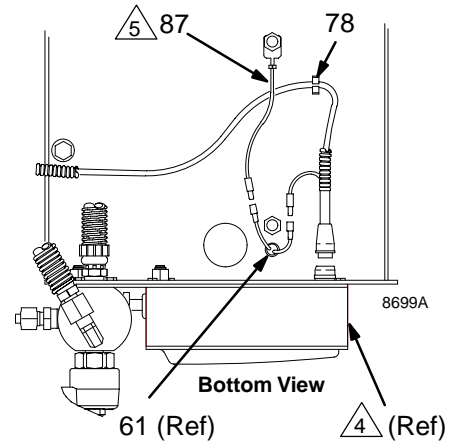
TI0177A

Parts Drawing – GMax 3900 and GMax 5900 Lo-Boy Sprayers

Models 232612 and 232622



- 1 Label
- 2 See page 18 for the parts.
- 3 See manual 308798 for the parts.
- 4 See page 22 for the parts.
- 5 Used on GMax 5900, only
- 6 Used on GMax 3900, only



8713A

Parts List – GMax 3900 and GMax 5900 Lo-Boy Sprayers

Models 232612 and 232622

Ref No.	Part No.	Description	Qty	Ref No.	Part No.	Description	Qty
1		ENGINE		30ab	176450	..GUARD, hose	1
	108879	GMax 3900	1	30ac	194306	..HOSE, fluid	1
	114530	GMax 5900	1	30ad	101818	..CLAMP, hose	2
2	113084	RIVET, blind	2	30ae	170957	..TUBE, suction	1
3	192014	PLATE, indicator	1	30b	194180	..HOSE, drain	1
4		CLUTCH ASSEMBLY , includes 4a, 4b, 16, 17, 80		30c	194194	..CLIP, spring	1
	241109	GMax 3900	1	30d	162453	..NIPPLE	1
	241113	GMax 5900	1	30e	241718	..DEFLECTOR	1
4a		..ARMATURE, clutch, 4 in., GMax 3900	1	30f	187147	..STRAINER	1
		..ARMATURE, clutch, 5 in., GMax 5900	1	30g	144958	..STRAP, tie	1
				33	240795	HOSE, coupled	1
4b		..ROTOR		34		NUT, retaining	
		4 in., GMax 3900	1		192723	GMax 3900	1
		5 in., GMax 5900	1		193031	GMax 5900	1
5		CLUTCH HOUSING		35		CART FRAME	
	193540	GMax 3900	1		240728	GMax 3900	1
	193531	GMax 5900	1		240727	GMax 5900	1
6		LOCKWASHER, spring, 1/4 in.		36	193698	LABEL, identification, GMax 3900	1
	105510	GMax 3900	1		193683	LABEL, identification, GMax 5900	1
	104008	GMax 5900	1	37	183350	WASHER, plain	2
7	183401	KEY, parallel	1	38	110243	RING, retaining	2
8	193680	COLLAR, shaft	1	39	108795	SCREW, mch, pn hd, 10-32 x 5/16 in.	4
9		CAPSCREW, socket head, 1/4-20 x 3/4 in.		40		SLEEVE	
	100644	GMax 3900	4		192027	GMax 3900	2
	101864	GMax 5900	4		191084	GMax 5900	2
10	100644	CAPSCREW, socket head, 1/4-20 x 3/4 in.	5	41		WHEEL, semi-pneumatic	
11	239998	CART HANDLE & HOSE RACK	1		106062	GMax 3900	2
12	106115	LOCKWASHER, spring, 3/8 in.	4		179811	GMax 5900	2
13		CAPSCREW, socket head,		42	101242	RING, retaining	2
	107210	GMax 3900; 3/8-16 x 1.5 in.	4	43	104811	HUBCAP	2
	114666	GMax 5900; 3/8-16 x 2.25 in.	4	44	154636	WASHER, GMax 5900 only	2
14	114418	SCREW, self-tap, fil hd, 8-32 x 1 in.	4	45	112827	BUTTON, snap	2
15	113802	SCREW, flange, hex hd., 3/8-16 x 5/8 in.	1	46	108068	PIN, spring, straight, 3/16 x 1-1/4 in.	2
16	108803	CAPSCREW, sch, 1/4-2 x 1 in.	6	47	237686	GROUNDING CLAMP & WIRE	1
17		LOCKWASHER, spring, 1/4 in.		49	112798	SCREW, hex washer hd, No. 8 x 3/8 in.	1
	105510	GMax 3900	17	50	193700	PLUG, tubing; GMax 3900	2
	105510	GMax 5900	11		193682	CAP, end; GMax 5900	2
18		GEAR COMBINATION		51	114984	SCREW	2
	241439	GMax 3900	1	52	100020	WASHER, GMax 3900 only	4
	241440	GMax 5900	1	53	164672	ADAPTER	2
19		PINION ASSEMBLY ; Parts, page 18		55▲	194125	LABEL, danger	1
	241108	GMax 3900	1	56▲	194126	LABEL, warning	1
	241112	GMax 5900	1	61	114678	BUSHING, strain relief	1
20		DRIVE HOUSING		62		NIPPLE, 3/8-18 npsm(m) x 1/4 npt(m)	
	241007	GMax 3900	1		183461	GMax 3900	1
	241011	GMax 5900	1		162485	GMax 5900	1
21		BEARING HOUSING		70	110837	SCREW, flng, hex hd, 5/16-18 x 1-1/2 in.	2
	240523	GMax 3900	1	71	110838	LOCKNUT, heavy hex, 5/16-18	6
	241015	GMax 5900	1	72	101682	SCREW, cap, sch	4
22		CONNECTING ROD		73		SCREW, cap, sch	4
	241008	GMax 3900	1		109031	GMax 3900	4
	241012	GMax 5900	1		108842	GMax 5900	4
23		COVER, HOUSING, DRIVE		77		WASHER, lock, spring	
	179899	GMax 3900	1		104008	GMax 3900	4
	241308	GMax 5900	1		100214	GMax 5900	4
26		SPRING, retaining		78	114687	CLIP, retainer	1
	176817	GMax 3900	1	80		HUB, armature	1
	183169	GMax 5900	1	81		SCREW	
28		DISPLACEMENT PUMP , Manual 308798			107218	GMax 3900	2
	239923	GMax 3900	1		114686	GMax 5900	2
	240291	GMax 5900	1	82	206994	THROAT SEAL LIQUID; not shown	1
29		PIN, straight		87	240997	CONDUCTOR, ground	1
	176818	GMax 3900	1	89	240131	PLUG, packless	1
	183210	GMax 5900	1	91		Washer	
30	241287	ASSEMBLY, tube, suction			114672	GMax 3900	3
30a	241124	..TUBE, suction, 5 gallon (20 liter) includes 30aa through 30ae	1		114672	GMax 5900	2
30aa	240513	..SWIVEL, tube, inlet	1	92	114699	WASHER	1

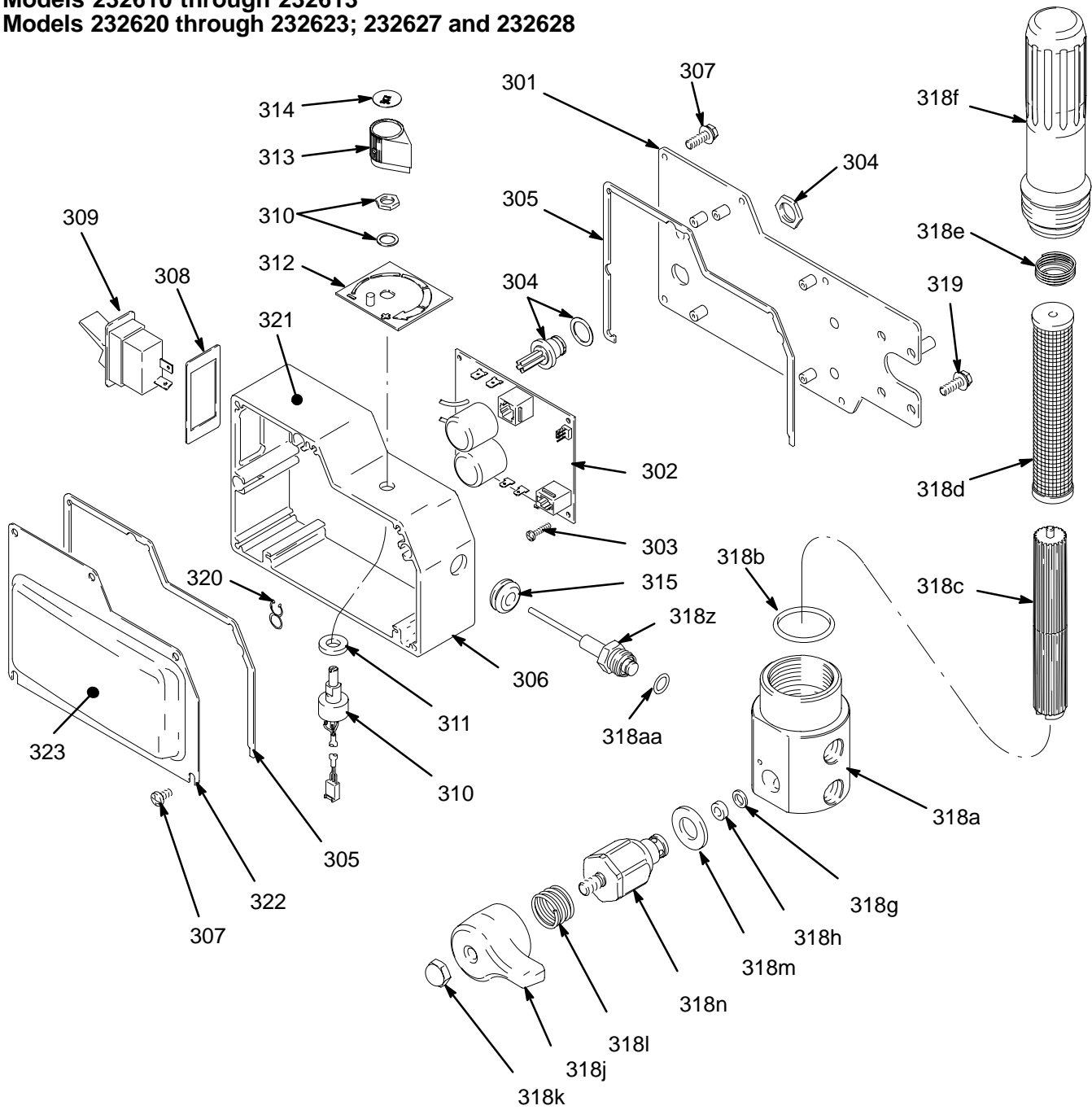
▲ Danger & Warning labels, tags, and cards are free.

Parts Drawing – Sprayer

GMax 3900 and 5900 Sprayers

Models 232610 through 232613

Models 232620 through 232623; 232627 and 232628



8716A

Parts List – Sprayer

Models 232610 through 232613; 232620 through 232623; 232627 and 232628

REF NO.	PART NO.	DESCRIPTION	QTY	REF NO.	PART NO.	DESCRIPTION	QTY
301	193653	PLATE, control	1	318f	192706	BOWL, filter	1
302	241093	BOARD, PC	1	318g	193710	SEAL, valve	1
303	111839	SCREW, mch pan, 6–32 x 1/2 in.	5	318h	193709	SEAT, valve	1
304	240776	HARNESS, wiring.	1	318j	194102	HANDLE, valve	1
305	193497	GASKET, control	2	318k	114688	NUT, cap, hex hd	1
306	193652	HOUSING, control box	1	318l	114708	SPRING, compression	1
307	114631	SCREW, mch, pan hd	10	318m	114797	GASKET	1
308	193052	PLATE, instruction	1	318n	245103*	VALVE	1
309	114277	SWITCH, rocker, (spst)	1	318z	240314	TRANSDUCER, pressure control	1
310	241443	POTENTIOMETER, pressure control	1			includes 318aa	
311	193657	GASKET, potentiometer	1	318aa	111457	O-RING	1
312	193654	PLATE, instruction	1	319	110997	SCREW, flange, hex	3
313	114273	KNOB, potentiometer	1	320	114532	TIE, wire, twist	1
314	193072	LABEL, control	1	321▲	189246	LABEL, warning	1
315	114629	GROMMET, transducer	1	322	241444	COVER, pressure control	1
318		FILTER, fluid	1	323	193684	LABEL, identification	1
318a	193651	HOUSING, filter	1				
318b	104361	O-RING	1				
318c	186075	SUPPORT, filter	1				
318d	167025	STRAINER, mesh, 60	1				
318e	171941	SPRING, compression	1				

* Drain valve replacement kit 245103 includes 318g through 318n
 ▲ Replacement warning labels may be ordered free of charge

Pressure Control Wiring Diagram

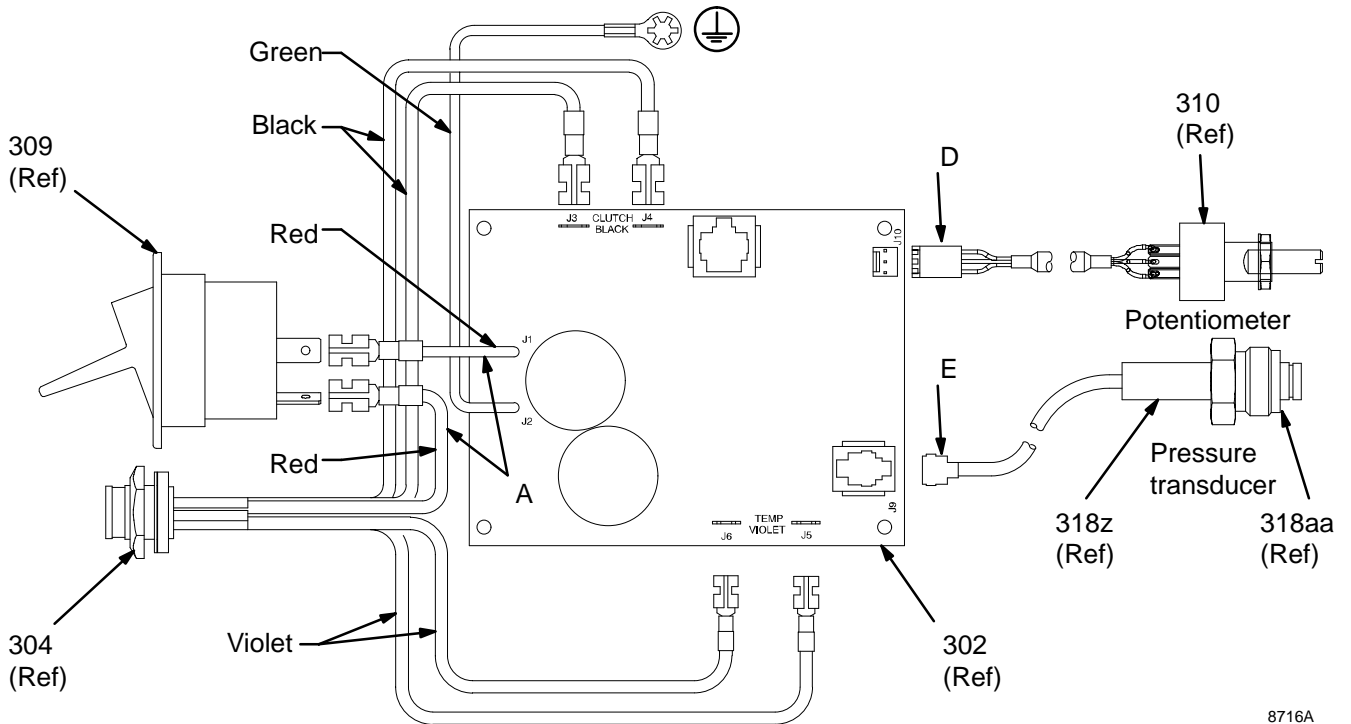


Fig. 22

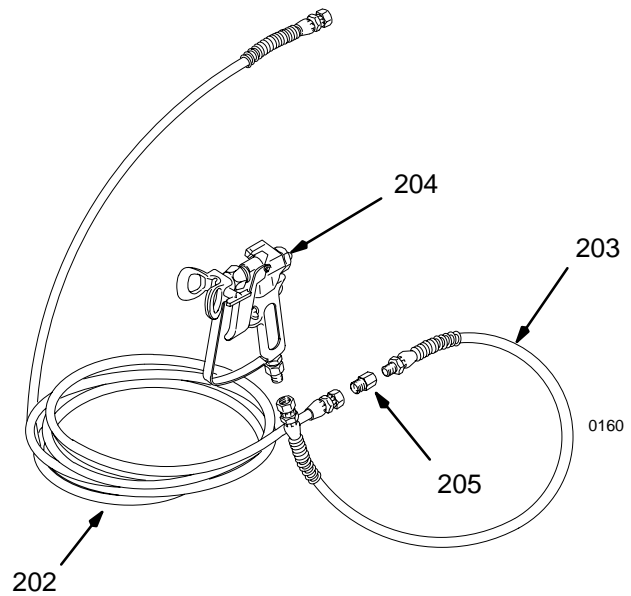
8716A

Parts List & Drawing – Complete Sprayers

Models 232611, 232613, 232621, 232623, 232628

GMax 3900, 5900, 5900HD Airless Paint Sprayers
Includes items 201 to 204

Ref No.	Part No.	Description	Qty	Ref No.	Part No.	Description	Qty
201	232611	GM3900 Hi-Boy Sprayer See parts list on page 16	1	205	159841*	BUSHING, 3/8 X 14 IN.	1
	232621	GM5900 Hi-Boy Sprayer See parts list on page 16	1	* 5900HD only			
	232628	GM5900HD Hi-Boy Sprayer See parts list on page 16	1				
	232613	GM3900 Lo-Boy Sprayer See parts list on page 21	1				
	232623	GM5900 Lo-Boy Sprayer See parts list on page 21	1				
202	240794	HOSE, grounded, nylon; 1/4 in. ID; cpld 1/4 npsm(fbe); 50 foot (15 m); spring guards both ends 3300 psi (227 bar, 27.7 MPa)	1				
	240797*	HOSE, grounded, nylon; 3/8 in. ID; cpld 1/4 npsm(fbe); 50 foot (15 m); spring guards both ends 3300 psi (227 bar, 27.7 MPa)	1				
203	238358	HOSE, grounded, nylon; 3/16 in. ID; cpld 1/4 npsm(m) x 1/4 npsm(f) swivel; 3 foot (0.9 m); spring guards both ends	1				
	241735*	HOSE, grounded, nylon; 1/4 in. ID; cpld 1/4 npsm(m) x 1/4 npsm(f) swivel; 3 foot (0.9 m); spring guards both ends	1				
204	220955	CONTRACTOR SPRAY GUN Includes RAC 5™ 517–size SwitchTip™ and HandTite™ Guard See 309091 for parts	1				
	241705*	TEXTURE SPRAY GUN Includes GHD527 Heavy Duty SwitchTip and Guard See 308491 for parts	1				



Accessories

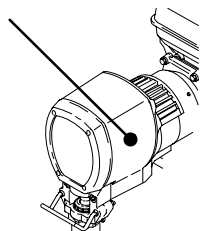
DANGER LABELS

An English language DANGER label is on your sprayer. If you have painters who do not read English, order one of the following labels to apply to your sprayer. The drawing shows the best placement of these labels for good visibility.

Order the labels from your Graco distributor.

Apply other language here

French	194931
Spanish	194932
German	194933
Greek	194934
Korean	194935
English	194125



03497A

Displacement Pump Repair Kits

Packing repair kits.

GMax 3900 239928

GMax 5900, 5900HD 240248

Technical Data

Honda GX120 Engine

Power Rating @ 3700 rpm	
ANSI	4.0 Horsepower
DIN 6270B/DIN 6271	
NA	2.1 Kw – 2.8 Ps
NB	2.6 Kw – 3.6 Ps

Honda GX160 Engine

Power Rating @ 3700 rpm	
ANSI	5.5 Horsepower
DIN 6270B/DIN 6271	
NA	2.9 Kw – 4.0 Ps
NB	3.6 Kw – 4.9 Ps

Maximum working pressure 3300 psi
(227 bar, 22.7 MPa)

Noise Level

Sound power	105 dBA
	per ISO 3744
Sound pressure	96 dBA
	measured at 3.1 feet (1 m)

Cycles/gallon (liter)

GMax3900	182 (48)
GMax5900, 5900HD	93 (25)

Maximum delivery rating

GMax3900	1.15 gpm (4.4 liter/min)
GMax5900, 5900HD	1.5 gpm (5.7 liter/min)

Maximum tip size

GMax3900	1 gun with 0.034 in. tip
	2 guns with 0.024 in. tip
	3 guns with 0.017 in. tip
GMax5900, 5900HD	1 gun with 0.041 in. tip
	2 guns with 0.028 in. tip
	3 guns with 0.022 in. tip
	4 guns with 0.019 in. tip

Inlet paint strainer 16 mesh (1190 micron)
stainless steel screen, reusable

Outlet paint filter 60 mesh (250 micron)
stainless steel screen, reusable

Pump inlet size 3/4 in. npt (m)

Fluid outlet size 1/4 npsm from fluid filter

Wetted parts zinc-plated carbon steel,
PTFE, Nylon, polyurethane, UHMW polyethylene,
Viton®, Delrin®, leather, aluminum, tungsten car-
bide, nickel-plated carbon steel, stainless steel,
chrome plating

NOTE: Delrin® and Viton® are trademarks of the DuPont Company.

Dimensions

GMax 3900

Model 232610, 233005

Hi-Boy without hose or gun

Weight (dry, without packaging)	110 lb (49.9 kg)
Height	40 in. (101.6 cm)
Length	37 in. (94 cm)
Width	22 in. (55.9 cm)

Model 232612

Lo-Boy Cart without hose or gun

Weight (dry, without packaging)	110 lb (49.9 kg)
Height	40 in. (101.6 cm)
Length	37 in. (94 cm)
Width	22 in. (55.9 cm)

GMax 5900, 5900HD

Model 232620, 232627, 233006 and 233007

Hi-Boy without hose or gun

Weight (dry, without packaging)	150 lb (68 kg)
Height	41 in. (104.1 cm)
Length	39 in. (99.1 cm)
Width	22 in. (55.9 cm)

Model 232622

Lo-Boy without hose or gun

Weight (dry, without packaging)	150 lb (68 kg)
Height	41 in. (104.1 cm)
Length	39 in. (99.1 cm)
Width	22 in. (55.9 cm)

Graco Phone Number

TO PLACE AN ORDER, contact your Graco distributor, or call this number to identify the distributor closest to you:
1-800-690-2894 Toll Free

Graco Warranty

Graco warrants all equipment manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Graco distributor 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.

ADDITIONAL WARRANTY COVERAGE

Graco does provide extended warranty and wear warranty for products described in the "Graco Contractor Equipment Warranty Program".

*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.*

Sales Offices: Minneapolis, Detroit
International Offices: Belgium, Korea, Hong Kong, Japan

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

<http://www.graco.com>

PRINTED IN USA 308868 January 1999, Revised 4/2001