

GMax™ II

3900, 5900, 5900HD, 7900

Airless Sprayers

Korean patent: 10-0647761

310893 rev. J




- For Portable Airless Spraying of Architectural Coatings and Paints -

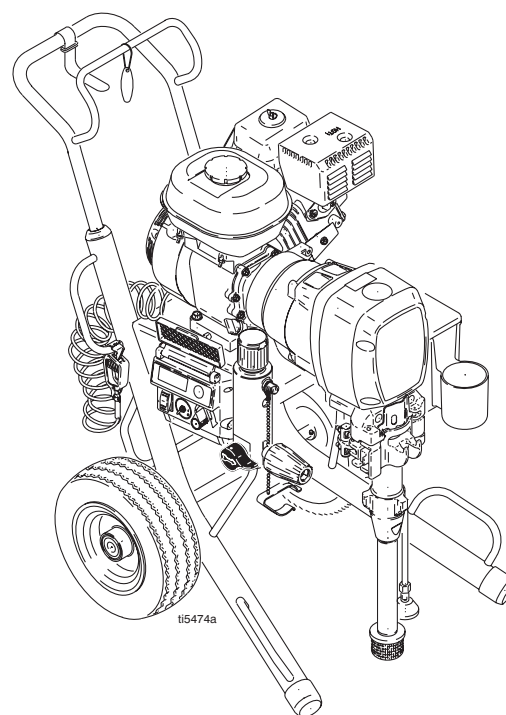
3300 psi (22.8 MPa, 228 bar) Maximum Working Pressure



Important Safety Instructions

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

			
GMax II 3900			
248683		✓	
248684	✓		
248685		✓	
248686	✓		✓
249335	✓		✓
GMax II 5900			
248687		✓	
248688	✓		
248689		✓	✓
248690	✓		✓
249336	✓		✓
GMax II 5900HD			
248698	✓		
248699	✓		✓
GMax II 7900			
248700		✓	
248701	✓		
248702		✓	✓
248703	✓		✓
249337	✓		✓



Related Manuals



310892



309639



310894



309640

PROVEN QUALITY. LEADING TECHNOLOGY.

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Manual Conventions



WARNING



Hazard Symbol

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

CAUTION: a potentially hazardous situation which, if not avoided, may result in property damage or destruction of equipment.






Note












Additional helpful information.

Warning


The following are general warnings related to the setup, use, maintenance and repair of this equipment. Additional, more specific, warnings may be found throughout the text of this manual, where applicable.




 WARNING	
	<p>FIRE AND EXPLOSION HAZARD</p> <p>Flammable fumes, such as solvent and paint fumes, in work area can ignite or explode. To help prevent fire and explosion:</p> <ul style="list-style-type: none"> • Use equipment only in well ventilated area. • Do not fill fuel tank while engine is running or hot; shut off engine and let it cool. Fuel is flammable and can ignite or explode if spilled on hot surface. • When flammable liquid is sprayed or used for flushing or cleaning, keep 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 work area free of debris, including solvent, rags and gasoline. • Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present. • Ground equipment and conductive objects in work area. See Grounding instructions. • Use only grounded hoses. • Hold gun firmly to side of grounded pail when triggering into pail. • If there is static sparking or you feel a shock, stop operation immediately. Do not use equipment until you identify and correct the problem.
	<p>SKIN INJECTION HAZARD</p> <p>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.</p> <ul style="list-style-type: none"> • Do not point 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 tip guard and trigger guard installed. • Engage trigger lock when not spraying. • Follow Pressure Relief Procedure in this manual, when you stop spraying and before cleaning, checking, or servicing equipment.
	<p>PRESSURIZED EQUIPMENT HAZARD</p> <p>Fluid from the gun/dispense valve, leaks, or ruptured components can splash in the eyes or on skin and cause serious injury.</p> <ul style="list-style-type: none"> • Follow Pressure Relief Procedure in this manual, when you stop spraying and before cleaning, checking, or servicing equipment. • Tighten all fluid connections before operating the equipment. • Check hoses, tubes, and couplings daily. Replace worn or damaged parts immediately.
	<p>MOVING PARTS HAZARD</p> <p>Moving parts can pinch or amputate fingers and other body parts.</p> <ul style="list-style-type: none"> • 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 equipment, follow the Pressure Relief Procedure in this manual. Disconnect power or air supply.

 WARNING	
	<p>EQUIPMENT MISUSE HAZARD</p> <p>Misuse can cause death or serious injury.</p> <ul style="list-style-type: none"> 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. Check equipment daily. Repair or replace worn or damaged parts immediately. Do not alter or modify equipment. Do not install a shut-off device between filter outlet and gun. Use equipment only for its intended purpose. Call your Graco distributor for information. Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces. Do not use hoses to pull equipment. Keep children and animals away from work area. Comply with all applicable safety regulations.
	<p>PRESSURIZED ALUMINUM PARTS HAZARD</p> <p>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 serious chemical reaction and equipment rupture, and result in death, serious injury, and property damage.</p>
	<p>SUCTION HAZARD</p> <p>Never place hands near the pump fluid inlet when pump is operating or pressurized. Powerful suction could cause serious injury.</p>
	<p>CARBON MONOXIDE HAZARD</p> <p>Exhaust contains poisonous carbon monoxide, which is colorless and odorless. Breathing carbon monoxide can cause death. Do not operate in an enclosed area.</p>
	<p>TOXIC FLUID OR FUMES HAZARD</p> <p>Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.</p> <ul style="list-style-type: none"> Read MSDS's 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.
	<p>BURN HAZARD</p> <p>Equipment surfaces and fluid that's heated can become very hot during operation. To avoid severe burns, do not touch hot fluid or equipment. Wait until equipment/fluid has cooled completely.</p>
	<p>PERSONAL PROTECTIVE EQUIPMENT</p> <p>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 equipment includes but is not limited to:</p> <ul style="list-style-type: none"> Protective eyewear Clothing and respirator as recommended by the fluid and solvent manufacturer Gloves Hearing protection
	<p>RECOIL HAZARD</p> <p>Brace yourself; gun may recoil when triggered and cause you to fall, which could cause serious injury.</p>

Maintenance

Pressure Relief Procedure


WARNING

Read Injection Hazard, page 3; Burn Hazard, page 4

1. Lock gun trigger safety.
2. Turn engine ON/OFF switch to OFF.
3. Move pump 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 that all hose fittings are secure.

DAILY: Check gun safety for proper operation.

DAILY: Check pressure drain valve for proper operation.

DAILY: Check and fill the gas tank.

DAILY: 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 and pump corrosion.

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

Replacement elements can be purchased from your local HONDA dealer.

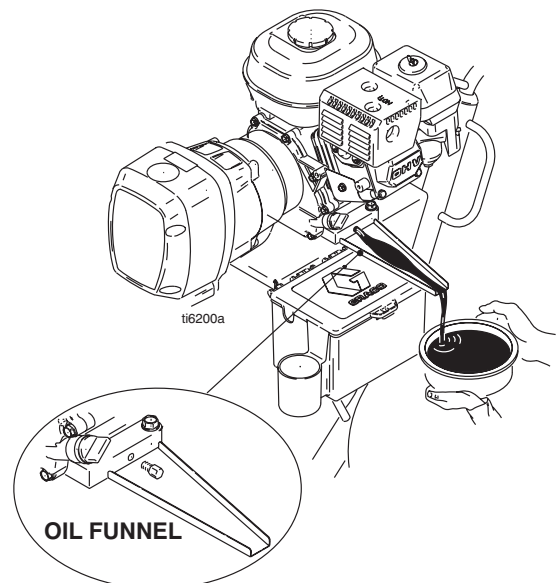
AFTER EACH 100 HOURS OF OPERATION:

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.

Premium Sprayers Engine Oil Funnel:

Use the supplied engine oil funnel when draining oil.



The diagram illustrates the process of draining engine oil. A hand is shown pouring oil from the engine's oil pan into a funnel. The funnel is labeled 'OIL FUNNEL' and 'ti6200a'. An inset shows a close-up of the funnel's internal structure, which includes a TSL (Tight Seal Lubricant) nut.

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Troubleshooting

Problem	Cause	Solution
E=XX is displayed	Fault condition exists	Determine fault correction from table, page 15
Engine will not start	Engine switch is OFF	Turn engine switch ON
	Engine is out of gasoline	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 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 3 to 4 times. Clean or replace spark plug. Start engine. Keep sprayer upright to avoid oil seepage
False tripping of WatchDog system. EMPTY is displayed. Pump does not run.	Operating conditions out of WatchDog parameters Pump output is low, page 7.	Turn pressure down. Contact Graco Technical Assistance to adjust WatchDog parameters. Operate without WatchDog active; Manual 310892.
Engine operates, but displacement pump does not operate	Error code displayed	Reference Pressure Control repair, page 15
	Pump switch is OFF	Turn pump switch ON
	Pressure setting too low	Turn pressure adjusting knob clockwise to increase pressure.
	Fluid filter (56) is dirty	Clean filter. Page 28.
	Tip or tip filter is clogged	Clean tip or tip filter. Manual 309639.
	Displacement pump piston rod is stuck due to dried paint	Repair pump. Manual 310894.
	Connecting rod is worn or damaged	Replace connecting rod. Page 8.
	Drive housing is worn or damaged	Replace drive housing. Page 9.
	Electrical power is not energizing clutch field	Check wiring connections. Page 12. Reference Digital Display Messages . Page 15. Reference wiring diagram. Page 29. With pump switch ON and pressure turned to MAXIMUM, use a test light to check for power between clutch test points on control board. Remove clutch wires from control board and measure resistance across clutch coil. At 70° F, the resistance must be between 1.2 +0.2Ω; if not, replace pinion housing. Have pressure control checked by authorized Graco dealer
	Clutch is worn, damaged, or incorrectly positioned	Adjust or replace clutch. Page 10.
	Pinion assembly is worn or damaged	Repair or replace pinion assembly. Page 10.

Problem	Cause	Solution
Pump output is low	Strainer (82) is clogged	Clean strainer.
	Piston ball is not seating	Service piston ball. Manual 310894.
	Piston packings are worn or damaged	Replace packings. Manual 310894.
	O-ring in pump is worn or damaged	Replace o-ring. Manual 310894.
	Intake valve ball is not seating properly	Clean intake valve. Manual 310894.
	Intake valve ball is packed with material	Clean intake valve. Manual 310894.
	Engine speed is too low	Increase throttle setting. Manual 310892.
	Clutch is worn or damaged	Adjust or replace clutch. Page 10.
	Pressure setting is too low	Increase pressure. Manual 310892.
	Fluid filter (56), tip filter or tip is clogged or dirty	Clean filter. Manual 310892 or 309639.
	Large pressure drop in hose with heavy materials	Use larger diameter hose and/or reduce overall length of hose. Use of more than 100 ft of 1/4 in. hose significantly reduces performance of sprayer. Use 3/8 in. hose for optimum performance (50 ft minimum).
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 310894.
	Displacement rod is worn or damaged	Replace rod. Manual 310894.
Fluid is spitting from gun	Air in pump or hose	Check and tighten all fluid connections. Rep- rime pump. Manual 310892.
	Tip is partially clogged	Clear tip. Manual 309639.
	Fluid supply is low or empty	Refill fluid supply. Prime pump. Manual 310892. 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 310894.
	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 310892.
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 3300 engine rpm at no load.
	Worn engine governor	Replace or service engine governor
Gallon counter not working	Bad sensor, broken or disconnected wire. Displaced or missing magnet.	Check connections. Replace sensor or wire. Reposition or replace magnet.
No display, sprayer operates	Display damaged or has bad connection	Check connections. Replace display.

Bearing Housing and Connecting Rod

NOTE: The item numbers referenced are for the 5900 Hi-Boy models. The 3900, 7900 and all Lo-Boy models may have different item numbers. Use the 5900 Hi-Boy item number and part to find the corresponding alternate part and item number.

Removal

WARNING

Read Injection Hazard, page 3; Burn Hazard, page 4

1. Relieve pressure; page 5.
2. FIG. 1. Remove four screws (45) and front cover (44)
3. Remove pump. Refer to **Displacement Pump, Removal**, page 16.
4. Remove four screws (41) and washers (42) from bearing housing (40).
5. Pull connecting rod (43) and lightly tap lower rear of bearing housing with plastic mallet to loosen from drive housing (33). Pull bearing housing and connecting rod assembly off drive housing.
6. Inspect crank (B) and connecting rod (43) for excessive wear and replace parts as needed.

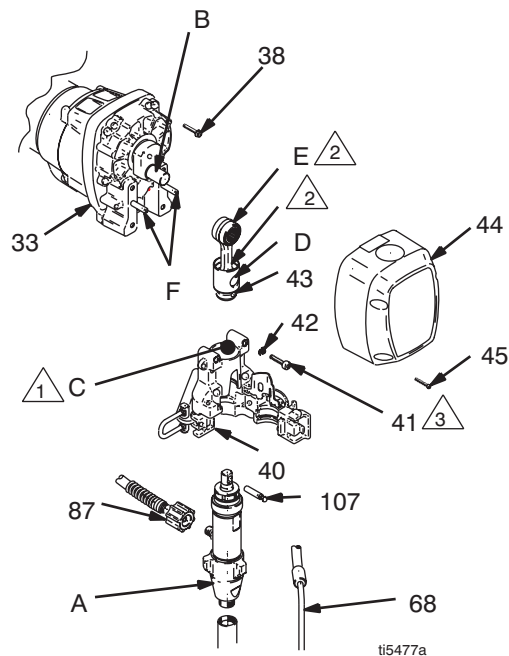
Installation

1. Evenly lubricate inside of bronze bearing (C) in bearing housing (40) with high-quality motor oil. Liberally pack top roller bearing (E), lower bearing (D) inside connecting rod (43) with bearing grease.
2. Assemble connecting rod (43) to bearing housing (40). Rotate connecting rod to lowest position.
3. Clean mating surfaces of bearing and drive housings.
4. Align connecting rod with crank (B) and carefully align locating pins (F) in drive housing (33) with holes in bearing housing (40). Push bearing housing onto drive housing or tap into place with plastic mallet.

CAUTION

DO NOT use bearing housing screws (41) to align or seat bearing housing with drive housing. Align these parts with locating pins, to avoid premature bearing wear.

5. Install screws (41) and washers (42) in bearing housing.
6. Install pump. Refer to **Displacement Pump, Installation**, page 14.




- Oil
- Pack with bearing grease 114819
- GMax II 3900: Torque to 200 in-lb (22.6 N.m)
GMax II 5900: Torque to 25 ft-lb (34 N.m)
GMax II 7900: Torque to 40 ft-lb (54 N.m)

FIG. 1

Drive Housing

Removal

WARNING



Read Injection Hazard, page 3; Burn Hazard, page 4

1. Relieve pressure; page 5.
2. Remove bearing housing. Refer to **Bearing Housing and Connecting Rod, Removal**, page 8.

CAUTION

Premium models: Gallon counter sensor is connected to control board in pressure control. Pulling on the sensor wires could cause damage.

3. Premium sprayers: Remove two screws (108) and gallon counter sensor (39).

CAUTION

Thrust washers may stick to grease inside of drive housing. Do not lose or misplace.

4. Remove six screws (38).
5. Lightly tap around drive housing (33) to loosen drive housing. Pull drive housing straight off pinion housing. Be prepared to support combination gear (32) which may also come out.

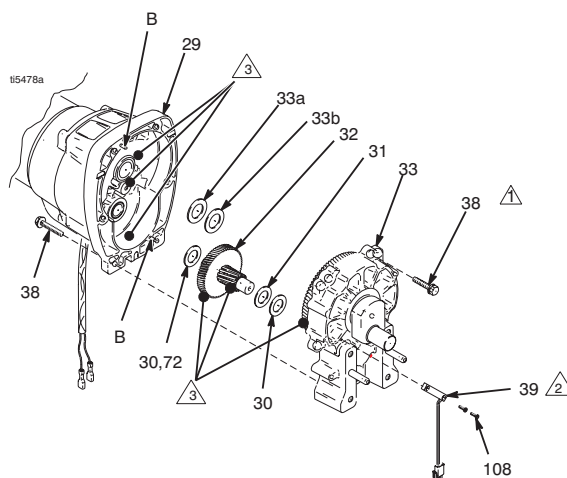
Installation

1. FIG. 2. Apply all grease supplied with replacement gear cluster to gear teeth and to areas called out by note 3.
2. FIG. 3. Ensure thrust washers (30, 31; 5900/7900) (30, 31, 72; 3900) are on combination gear (32) and washers (Fig. 2; 33a, 33b) are on crankshaft of drive housing (33) as shown.
3. Clean mating surfaces of pinion and drive housings.
4. Align gears and push new drive housing straight onto pinion housing (29) and locating pins (B).
5. Install six screws (38).
6. Install gallon counter sensor (39) with two screws (108).
7. Install bearing housing. Refer to **Bearing Housing and Connecting Rod, Installation**, page 8.

CAUTION

DO NOT use drive housing screws (38) to align or seat drive housing with pinion housing. Align these parts with locating pins, to avoid premature bearing wear.

8. Install screws (38) in drive housing. Torque evenly to note 3 value in FIG. 2.
9. Install pump. Refer to **Displacement Pump, Installation**, page 14.



- △ GMax II 3900: Torque to 140 ±10 in-lb (15.8 ±1.1 N.m)
 GMax II 5900: Torque to 200 ±10 in-lb (22.6 ±1.1 N.m)
 GMax II 7900: Torque to 200 ±10 in-lb (22.6 ±1.1 N.m)
- △ Gallon counter sensor
- △ Pack with grease 114819

FIG. 2

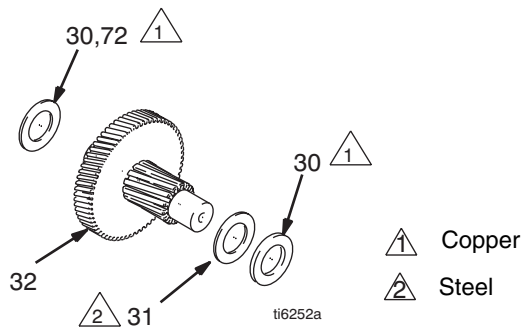


FIG. 3

Pinion Assembly/Clutch Armature/Clamp

Pinion Assembly/Clutch Armature Removal

Pinion Assembly

If pinion assembly (29) is not removed from clutch housing (19), do 1. through 3. Otherwise, start at 4.

WARNING

Read Injection Hazard, page 3; Burn Hazard, page 4

1. Remove drive housing; page 9.
2. FIG. 4. Disconnect clutch cable connectors from inside of pressure control.
 - a. FIG. 14. Remove two screws (71) and swing down cover (130a).
 - b. Disconnect engine leads from board to engine.
 - c. Remove strain reliefs 130r and 123.
3. FIG. 4. Remove four screws (36) and pinion assembly (29).

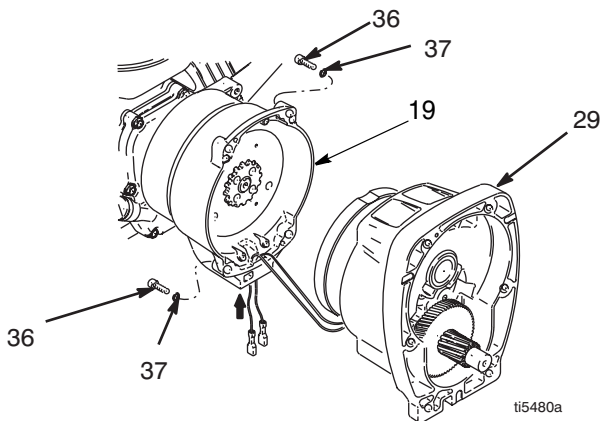


FIG. 4

4. FIG. 5. Place pinion assembly (29) on bench with rotor side up.
5. Remove four screws (28) and lock washers (24). Install two screws in threaded holes (E) in rotor. Alternately tighten screws until rotor comes off.

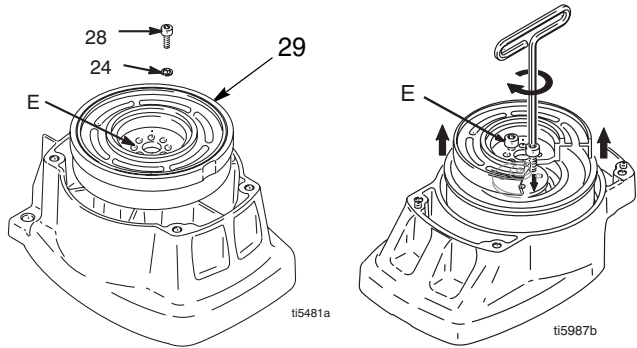


FIG. 5

6. FIG. 6. Remove retaining ring (29b).
7. Turn pinion assembly over and tap pinion shaft (29a) out with plastic mallet.

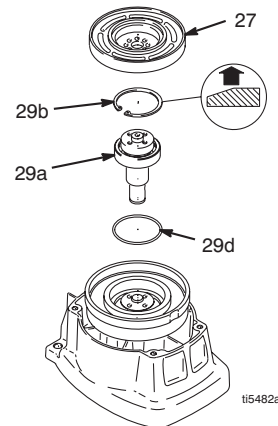


FIG. 6

Clutch Armature

8. FIG. 7. Use an impact wrench or wedge something between clutch armature (25) and clutch housing to hold engine shaft during removal.
9. Remove four screws (23) and lock washers (24).
10. Remove armature.

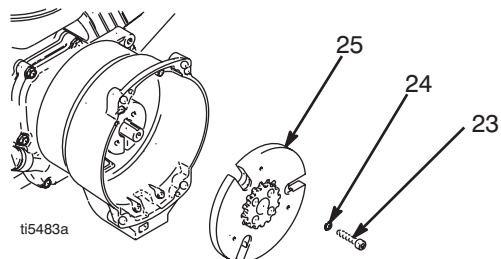


FIG. 7

Installation

Clutch Armature

1. FIG. 8. Lay two stacks of two dimes on smooth bench surface.
2. Lay armature (25) on two stacks of dimes.
3. Press center of hub (26) down to bench surface.

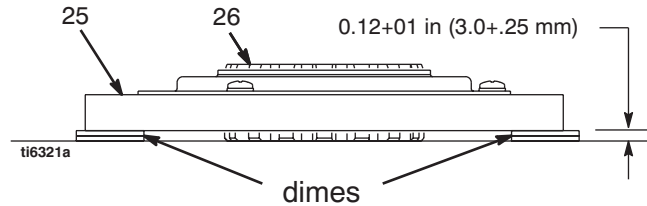


FIG. 8

Clamp Removal

1. Do **Engine Removal**.

WARNING



Gasoline can spill and cause a fire or explosion if engine is tipped on side.

2. Drain gasoline from tank according to Honda manual.
3. FIG. 9. Tip engine on side so gas tank is down and air cleaner is up.
4. FIG. 10. Loosen two screws (24) on clamp (22),
5. Push screwdriver into slot in clamp (22) and remove clamp.

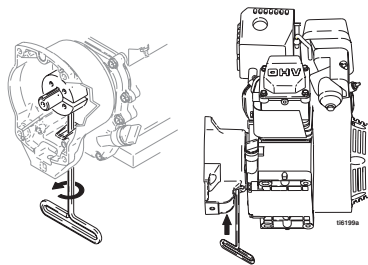


FIG. 9


Clamp Installation


1. FIG. 10. Install engine shaft key (18)
2. Tap clamp (22) onto engine shaft (A). Maintain dimension shown note 2. Chamfer must face engine.
3. Check dimension: Place rigid, straight steel bar (B) across face of clutch housing (19). Use accurate measuring device to measure distance between bar and face of clamp. Adjust clamp as necessary. Torque two screws (24) to 125 ±10 in-lb (14 ±1.1 N·m)


4. Install armature (25) on engine drive shaft.
5. Install four screws (23) and lock washers (24) with torque of 125 in-lb.

Pinion Assembly

6. FIG. 6. Check o-ring (29d) and replace if missing or damaged.
7. Tap pinion shaft (29a) in with plastic mallet.
8. Install retaining ring (29b) with beveled side facing up.
9. FIG. 5. Place pinion assembly on bench with rotor side up.
10. Apply Loctite® to screws. Install four screws (28) and lock washers (24). Alternately torque screws to 125 in-lb until rotor is secure. Use threaded holes to hold rotor.
11. FIG. 4. Install pinion assembly (29) with four screws (36) and washers (37).
12. FIG. 14. Connect clutch cable connectors to inside of pressure control.

 Face of clutch housing

 1.550 ± .010 in. (39.37 ± .25 mm) - GMax 3900
2.612 ± .010 in. (66.34 ± .25 mm) - GMax 5900 & 7900

 Torque to 125 ±10 in-lb (14 ±1.1 N·m)

 Chamfer this side

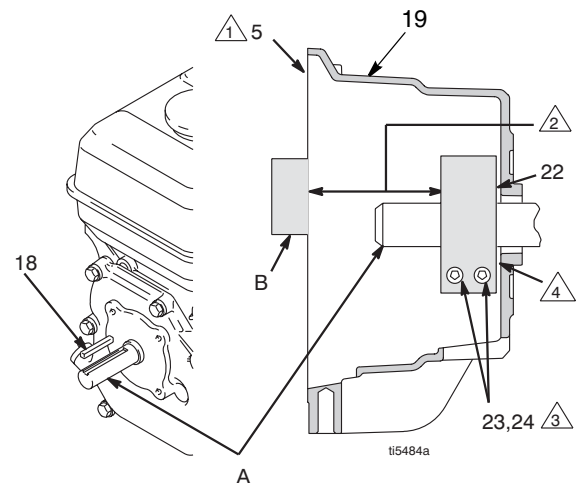


FIG. 10

Clutch Housing

Removal

1. FIG. 11. Remove four screws (20) and lock washers (21) which hold clutch housing (19) to engine.
2. Remove screw (35) from under mounting plate (D).
3. Pull off clutch housing (19).

Installation

1. FIG. 11. Push on clutch housing (19).
2. Install four capscrews (20) and lock washers (21) and secure clutch housing (19) to engine. Torque to 200 in-lb (22.6 N·m).
3. Install screw (35) from beneath mounting plate (D). Torque to 26 ft-lb (35.2 N·m).

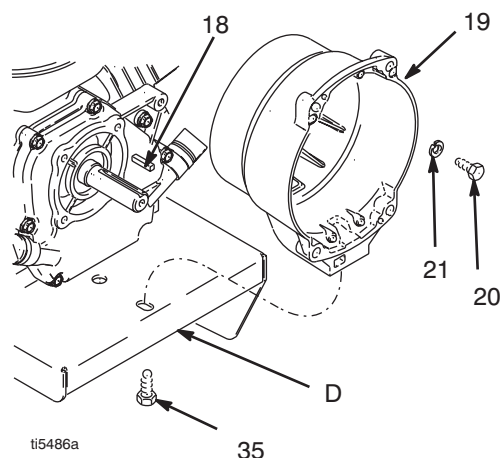


FIG. 11

Engine

Removal

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

1. Remove **Pinion Assembly/Clutch Armature/Clamp** and **Clutch Housing**, as instructed on pages 9, 10 and 11.
2. FIG. 12. Disconnect all necessary wiring.
3. FIG. 13. Remove two locknuts (17) and screws (16) from base of engine.
4. Lift engine carefully and place on work bench.

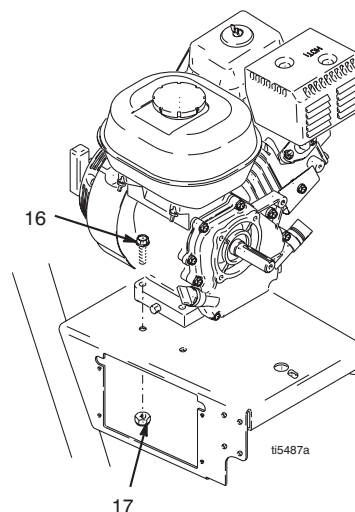


FIG. 13

Installation

1. Lift engine carefully and place on cart.
2. FIG. 13. Install two screws (16) in base of engine and secure with locknuts (17). Torque to 26 ft-lb (22.6 N·m).
3. FIG. 12. Connect all necessary wiring.
4. Install **Pinion Assembly/Clutch Armature/Clamp** and **Clutch Housing**, as instructed on pages 9 and 10 and 11.

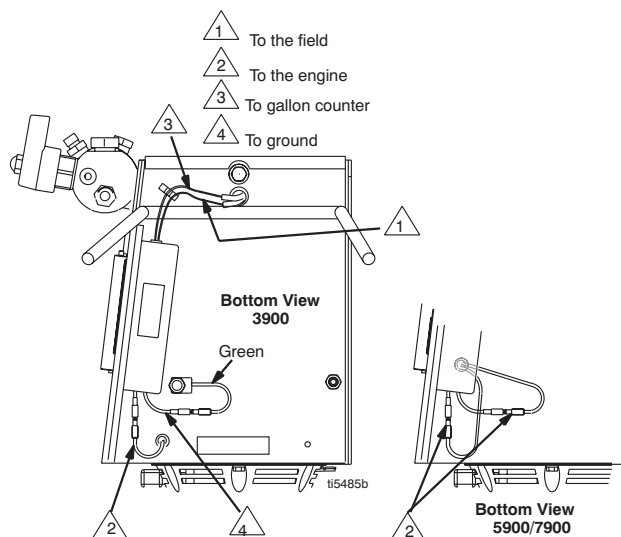


FIG. 12

Pressure Control

Pump ON/OFF Switch

Removal

WARNING



Read Injection Hazard, page 3; Burn Hazard, page 4

1. FIG. 14. Remove two screws (71) and swing down cover (130a).
2. Disconnect pump ON/OFF switch (130f) connector from control board.
3. Press in on two retaining tabs on each side of pump ON/OFF switch (130f) and remove switch from cover.

Installation

1. Install new pump ON/OFF switch (130f) so tabs of switch snap into place on inside of cover.
2. Connect pump ON/OFF switch connector to control board.
3. Swing up cover (130a) and secure with two screws (71).

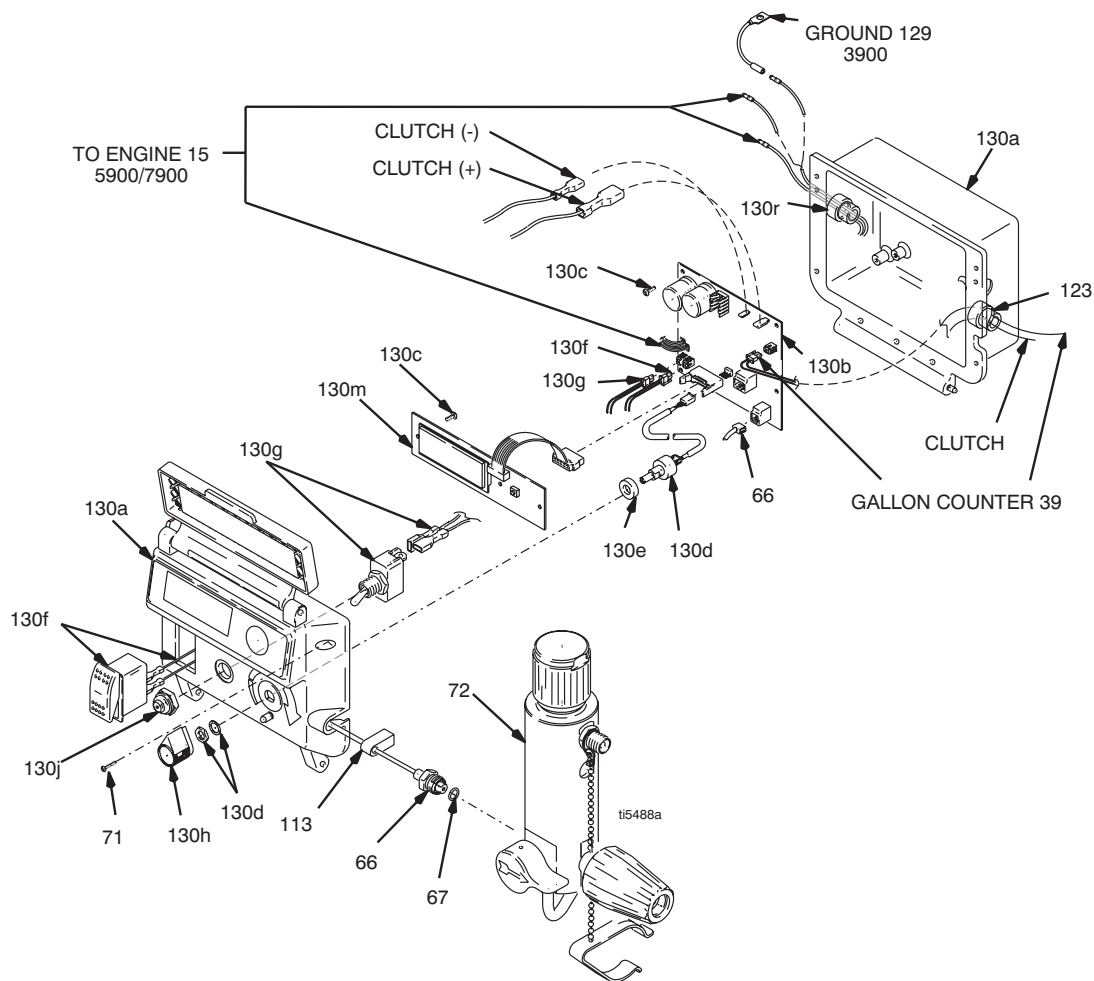


FIG. 14

Control Board

Removal

WARNING



Read Injection Hazard, page 3; Burn Hazard, page 4

- FIG. 14. Remove two screws (71) and swing down cover (130a)
- Remove strain relief bushings (130r and 123).
- Disconnect at control board (130b):
 - Lead from potentiometer (130d)
 - Lead from transducer (66)
 - Lead from WatchDog switch (130g)
 - Lead from pump ON/OFF switch (130f)
 - Lead from gallon counter sensor (39)

- Display connector (130m)
 - Engine, ground and clutch wires
- Remove four screws (130c) and control board (130b).

Installation

- FIG. 14. Install control board (130b) with four screws (130c).
- Connect engine wires to control board (130b).
- Connect at control board (130b):
 - Ground and clutch wires
 - Display connector (130m)
 - Lead from gallon counter sensor (39)
 - Lead from pump ON/OFF switch (130f)
 - Lead from WatchDog switch (130g)
 - Lead from transducer (66)
 - Lead from potentiometer (130d)
- Install new strain relief bushings (123 and 130r).
- Swing up cover (130a) and secure with two screws (71).

Pressure Control Transducer

Removal

WARNING



Read Injection Hazard, page 3; Burn Hazard, page 4

- FIG. 14. Remove two screws (71) and swing down cover (130a)
- Disconnect transducer (66) lead from control board (130b).
- Pull transducer connector through rubber grommet (113).
- Remove pressure control transducer (66) and o-ring (67) from filter housing (72).

Installation

- FIG. 14. Install o-ring (67) and pressure control transducer (66) in filter housing (72). Torque to 35 - 45 ft-lb.
- Install transducer connector and rubber grommet in control housing.
- Connect transducer (66) lead to control board (130b).
- Swing up cover (130a) and secure with two screws (71).

Pressure Adjust Potentiometer

Removal

WARNING




Read Injection Hazard, page 3; Burn Hazard, page 4



- FIG. 14. Remove two screws (71) and swing down cover (130a)
- Disconnect potentiometer (130d) lead from control board (130b).
- Loosen set screws on potentiometer knob (130h) and remove knob, shaft nut, lock washer and potentiometer (130d).
- Remove shaft spacer (130e) from potentiometer.

Installation

- Install shaft spacer (130e) on potentiometer (130d).
- FIG. 14. Install potentiometer, shaft nut, lock washer and potentiometer knob (130h).
 - Turn potentiometer shaft clockwise to internal stop. Assemble potentiometer knob (130h) to strike pin on cover (130a).
 - After adjustment of step a., tighten both set screws in knob 1/4 to 3/8 turn after contact with shaft.
- Connect potentiometer lead to control board (130b).
- Swing up cover (130a) and secure with two screws (71).








Digital Display Messages


WARNING

Relieve pressure before repair, page 5.

- Digital messages are not available on all sprayers
- Blinking LED total count equals digital error code i.e., two blinks is the same as E=02

DISPLAY*	SPRAYER OPERATION	INDICATION	ACTION
No Display	Sprayer may be pressurized	Loss of power or display not connected	Check power source. Relieve pressure before repair or disassembly. Verify display is connected.
 ti6314a	Sprayer may be pressurized	Pressure less than 200 psi (14 bar, 1.4 MPa)	Increase pressure as needed
 ti6315a	Sprayer is pressurized. Power is applied. (Pressure varies with tip size and pressure control setting.)	Normal operation	Spray
 ti6316a	Sprayer stops. Engine is running.	Exceeded pressure limit	<ol style="list-style-type: none"> 1. Check fluid path for clogs, such as clogged filter 2. Open prime valve and gun if running AutoClean 3. Use Graco paint hose, 1/4 in. x 50 ft minimum. Smaller hose or metal braid hose may result in pressure spikes. 4. Replace transducer if fluid path is not clogged and proper hose is used.
 ti6317a	Sprayer stops. Engine is running.	Pressure transducer faulty, bad connection or broken wire	<ol style="list-style-type: none"> 1. Check transducer connection 2. Disconnect and reconnect transducer plug to ensure good connection with control board socket 3. Open prime valve. Replace sprayer transducer with known good transducer and run sprayer. Replace transducer if sprayer runs or control board if sprayer does not run.
 ti6318a	Sprayer stops. Engine is running.	High clutch current	<ol style="list-style-type: none"> 1. Check wiring connections. 2. Measure: 1.2 +0.2Ω (GMax II 3900); 1.7 +0.2Ω (GMax II 5900/ 7900) across clutch field at 70°F 3. Replace clutch field assembly
 ti6243a	Sprayer stops. Engine is running.	Loss of paint to pump or severe pressure loss	<ol style="list-style-type: none"> 1. Check for empty paint condition, clogged inlet strainer, failed pump or severe leak 2. Reduce pressure and turn pump switch OFF and ON to restart pump 3. WatchDog function can be deactivated by turning WatchDog switch OFF
 ti6320a	Sprayer stops. Engine is running.	Pressure greater than 2000 psi (138 bar, 14 MPa) while in Flush Timer Mode	<ol style="list-style-type: none"> 1. Open prime valve and gun 2. Verify no flow obstructions or clogged filter

* Error codes also appear on control board as a blinking red LED. LED is an alternate to digital messages.

1. Remove two screws (71) and swing down cover (130).
2. Start engine. Blink count is the same as error code(E=0X).

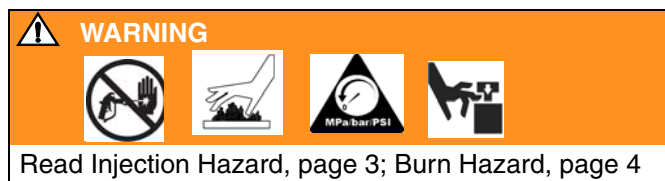
After a fault, follow these steps to restart sprayer:

1. Correct fault condition
2. Turn sprayer OFF
3. Turn sprayer ON

Displacement Pump

Removal

1. Flush pump.
2. Stop pump with piston rod in its lowest position.



3. Do Pressure Relief, page 5.
4. Separate drain hose from sprayer

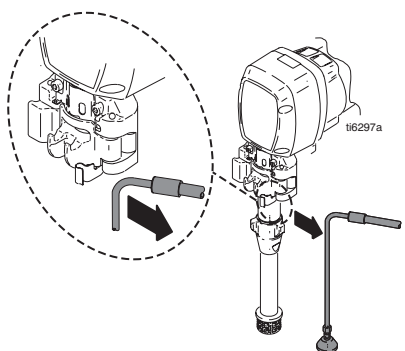


FIG. 15

5. Disconnect paint hose from pump.

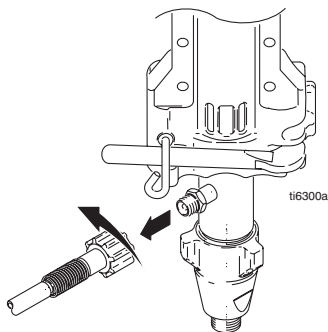


FIG. 16

6. Raise latch lock. Push latch open.

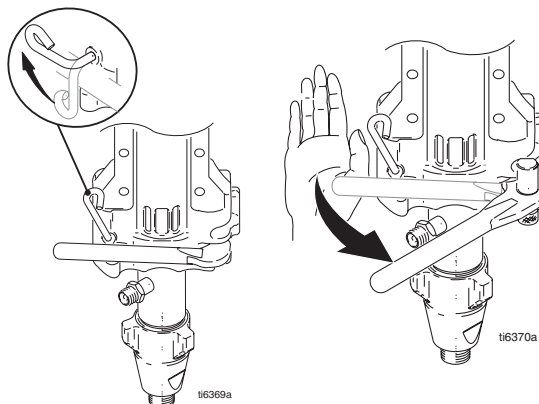


FIG. 17

7. FIG. 18. Ratchet open pump door.
 - a. Ratchet pump door forward.

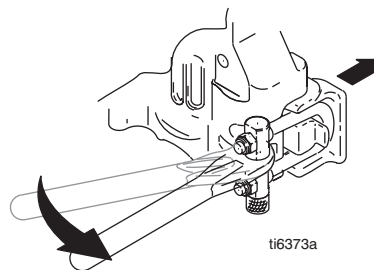


FIG. 18

- b. Twist latch u-bolt out of pump door recess.
- c. Place u-bolt on pump door outer edge.
- d. If pump door is stuck, do steps e., f. and 8., otherwise go to step 9.

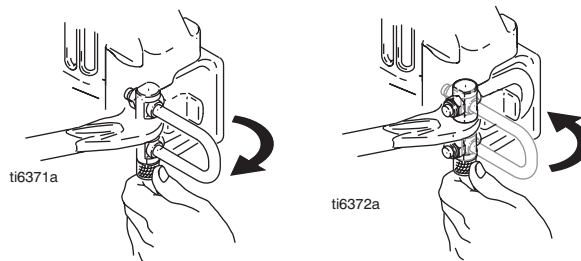


FIG. 19

- e. Twist latch u-bolt back from pump door outer edge
- f. Place u-bolt on pump door protrusion

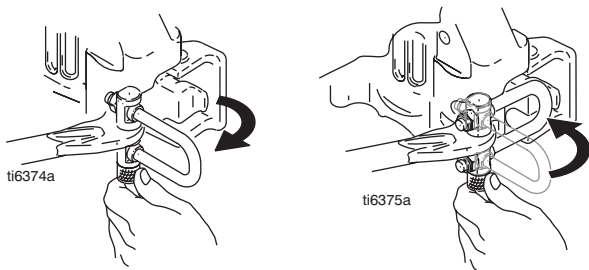


FIG. 20

8. Ratchet pump door forward.

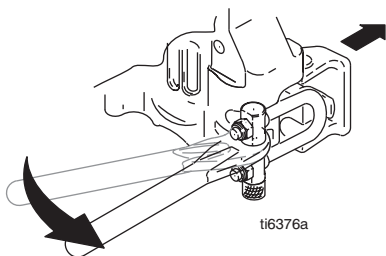


FIG. 21

9. Open pump door.

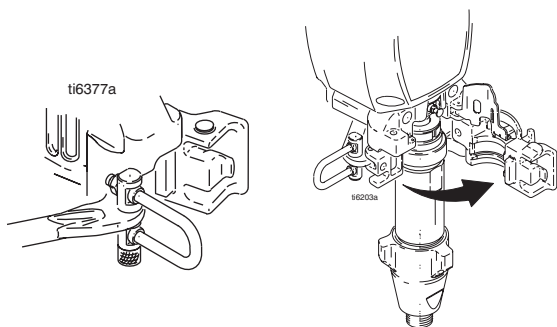


FIG. 22

10. FIG. 23. Pull out pump pin and place in pin holder

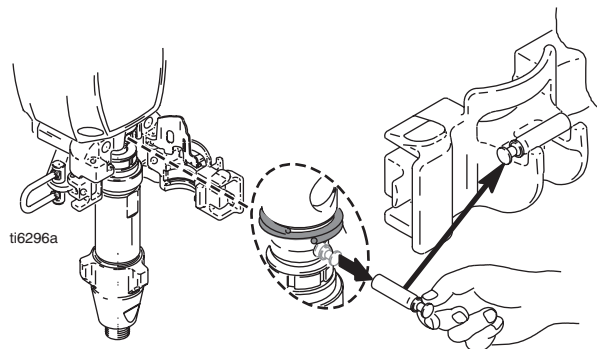


FIG. 23

Installation

1. FIG. 24. Adjust piston rod with pin holder to pull out piston rod. Tap piston rod on hard surface to push in piston rod.
2. Push pump collar flush with bearing housing ledge to be able to close pump door.

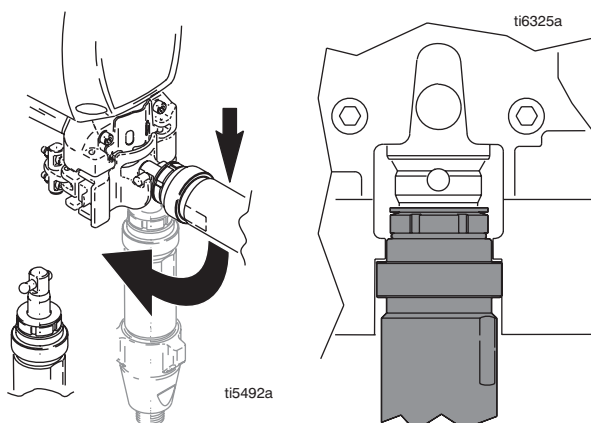


FIG. 24

3. FIG. 25. Slide pump into connecting rod. Push pump pin until it is fully retained.
Note: Pin will snap into position.

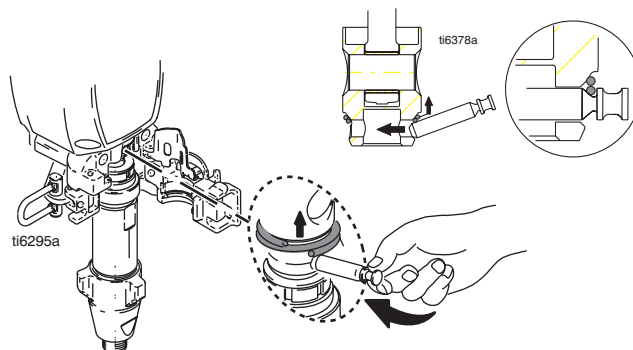
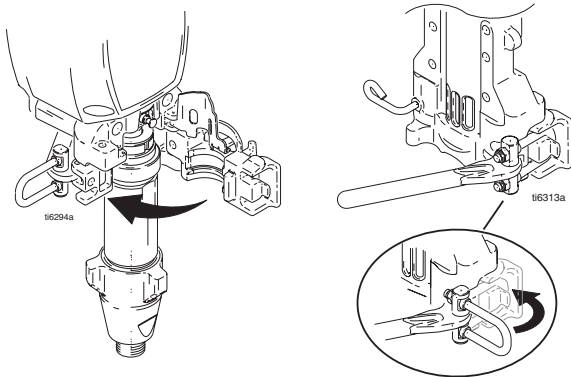


FIG. 25

4. FIG. 26. Close pump door and rotate latch into position. Do not tighten latch.



5. FIG. 26. Rotate pump to align with paint hose. Connect paint hose and hand tighten to 70 in-lb

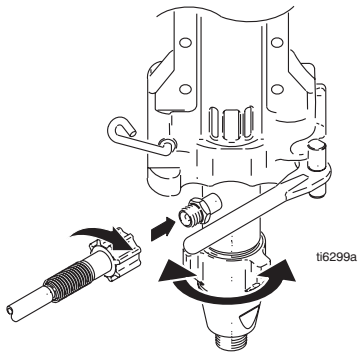


FIG. 26

6. FIG. 27. Tighten latch and rotate latch lock into locked position.

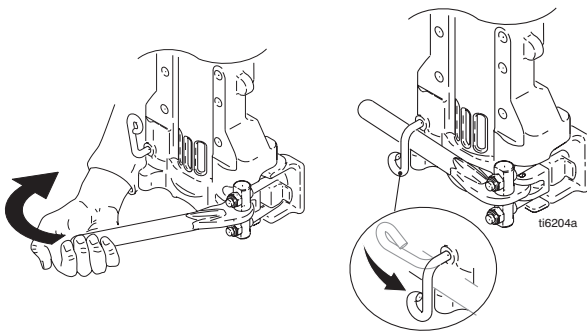


FIG. 27

7. FIG. 28. Attach drain hose to sprayer.

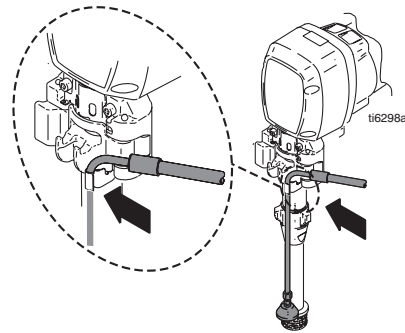


FIG. 28

8. FIG. 29. Fill pump with Graco TSL until fluid flows onto top of seal.

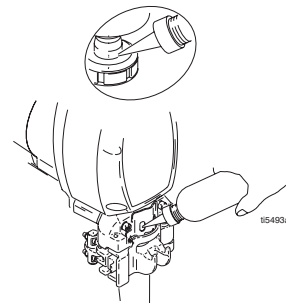


FIG. 29



A series of horizontal lines for writing or drawing, consisting of 20 lines.

Ref 10

DETAIL A

9

5

6

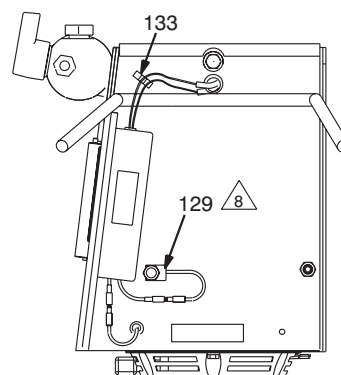
7

8

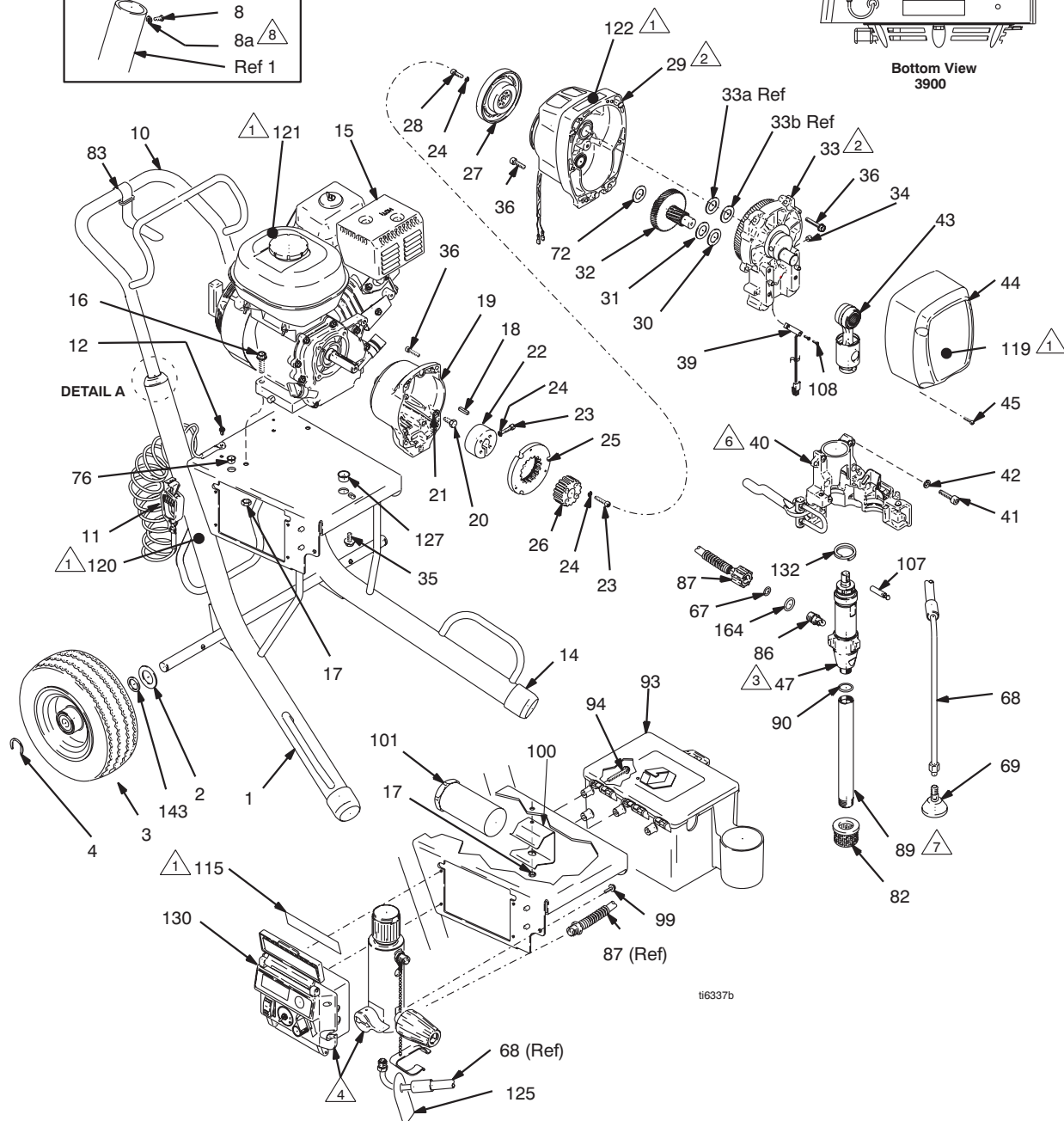
8a

Ref 1

- | | |
|---|---|
| 1 | Label |
| 2 | See page 26 for parts. |
| 3 | See manual 310894 for parts. |
| 4 | See page 28 for parts. |
| 6 | See page 30 for parts. |
| 7 | Used on High boys see page 27 for Low boy |
| 8 | use on 3900 only. |



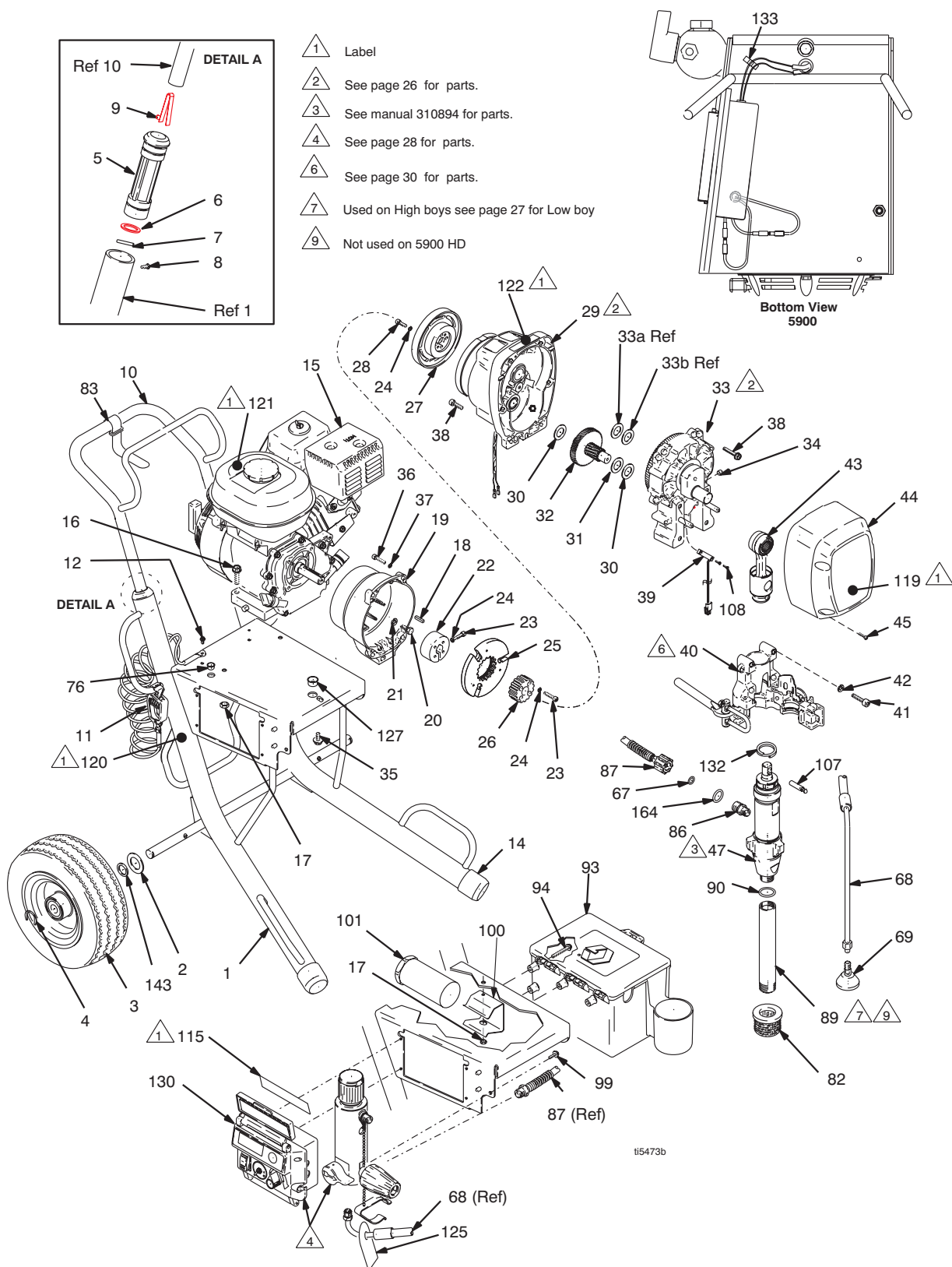
Bottom View
3900



GMax II 3900 Parts List

Ref	Part	Description	Qty	Ref	Part	Description	Qty
1	287411	FRAME, cart (3900)	1	93*	287253	TOOL BOX, includes 94	1
2	156306	WASHER, flat	2	94*	118852	SCREW, machine, hex washer hd	3
3	119420	WHEEL, pneumatic (3900)	2	99	113161	SCREW, flange, hex hd	3
4	15E891	CLIP, retaining	2	100	15E736	BRACKET, holder, manual	1
5	192027	SLEEVE, cart (3900)	2	101	119510	HOLDER, manual	1
6	183350	WASHER	2	107	15F109	PIN, pump (3900)	1
7	108068	PIN, spring straight	2	108*	114528	SCREW, MACH, PHILLIPS, PNHD	2
8	109032	SCREW, mach, pnh	4	115	15E854	LABEL, identification	1
8a	100020	WASHER, lock	4	119	15E851	LABEL, identification	1
9	112827	BUTTON, snap	2	120▲	15F638	LABEL, danger, English	1
10	245245	HANDLE, cart	1	121▲	194126	LABEL, warning	1
11	237686	WIRE, ground assembly w/ clamp	1	122	290228	LABEL, caution	1
12	112798	SCREW, thread forming, hex hd	1	125▲	195119	LABEL, warning	1
14	15C871	CAP, leg	2	127	119569	BUSHING, strain relief	1
15	108879	ENGINE, gas, 4.0 hp, (3900)	1	129	119579	CONDUCTOR, ground	1
16	110837	SCREW, flange, hex	2	130		BOX, control	1
17	110838	NUT, lock	2	*	287648	Premium	1
18	183401	KEY, parallel	1		287649	Standard	1
19	15E535	HOUSING, clutch, mach (3900)	1	132	119676	SPRING, RETAINING (3900)	1
20	108842	SCREW, cap, hex hd	4	133	114687	CLIP, RETAINER	1
21	100214	WASHER, lock	4	134*	15F354	FUNNEL, OIL (shown on page 5)	1
22	193680	COLLAR, shaft	1	143	116038	WASHER, wave spring	2
23†	108803	SCREW, hex, socket head	6	164	119790	O-RING	1
24†	105510	WASHER, lock, spring (hi-collar)	10	▲	<i>Replacement Danger and Warning labels, tags, and cards are available at no cost.</i>		
25†		ARMATURE, clutch, 4in. (3900)	1	*	Premium sprayers only		
26†		HUB, armature	1	†	Included in Clutch Replacement Kit 241109		
27†		ROTOR, clutch, 4 in. (3900)	1				
28†	101682	SCREW, cap, sch	4				
29	287463	HOUSING, pinion, (3900)	1				
30	114672	WASHER, thrust (brass)	1				
31	114699	WASHER, thrust (steel)	1				
32	287653	GEAR, combination (3900)	1				
33	287467	HOUSING, drive (3900)	1				
34*	116618	MAGNET	1				
35	112395	SCREW, cap, flnghd	1				
36	119426	SCREW, hex washer hd (3900)	10				
39*	119562	SWITCH, reed w/connector	1				
40	287522	HOUSING, bearing (3900)	1				
41	113467	SCREW, cap, socket hd	4				
42	104008	WASHER, lock spring	4				
43	287471	ROD, connecting (3900)	1				
44	287521	COVER, front, includes 45 (3900)	1				
45	118444	SCREW, mach hex wash hd	4				
47	287512	PUMP, displacement, (3900)	1				
		includes 86, 89, 90					
67	111457	O-RING	1				
68	244240	HOSE, coupled, includes 69	1				
69	241920	DEFLECTOR, threaded	1				
72	15F250	WASHER, thrust (3900)	1				
76	114678	BUSHING, strain relief	1				
82	189920	STRAINER, (1-11 1/2 npsm)	1				
83	114271	STRAP, retaining	1				
84	238049	FLUID, TSL, 4 oz (not shown)	1				
86	15E802	FITTING, pump, quick disconnect	1				
87	287419	HOSE, coupled	1				
89	15E807	TUBE, INTAKE (3900)	1				
90	118494	O-RING	1				

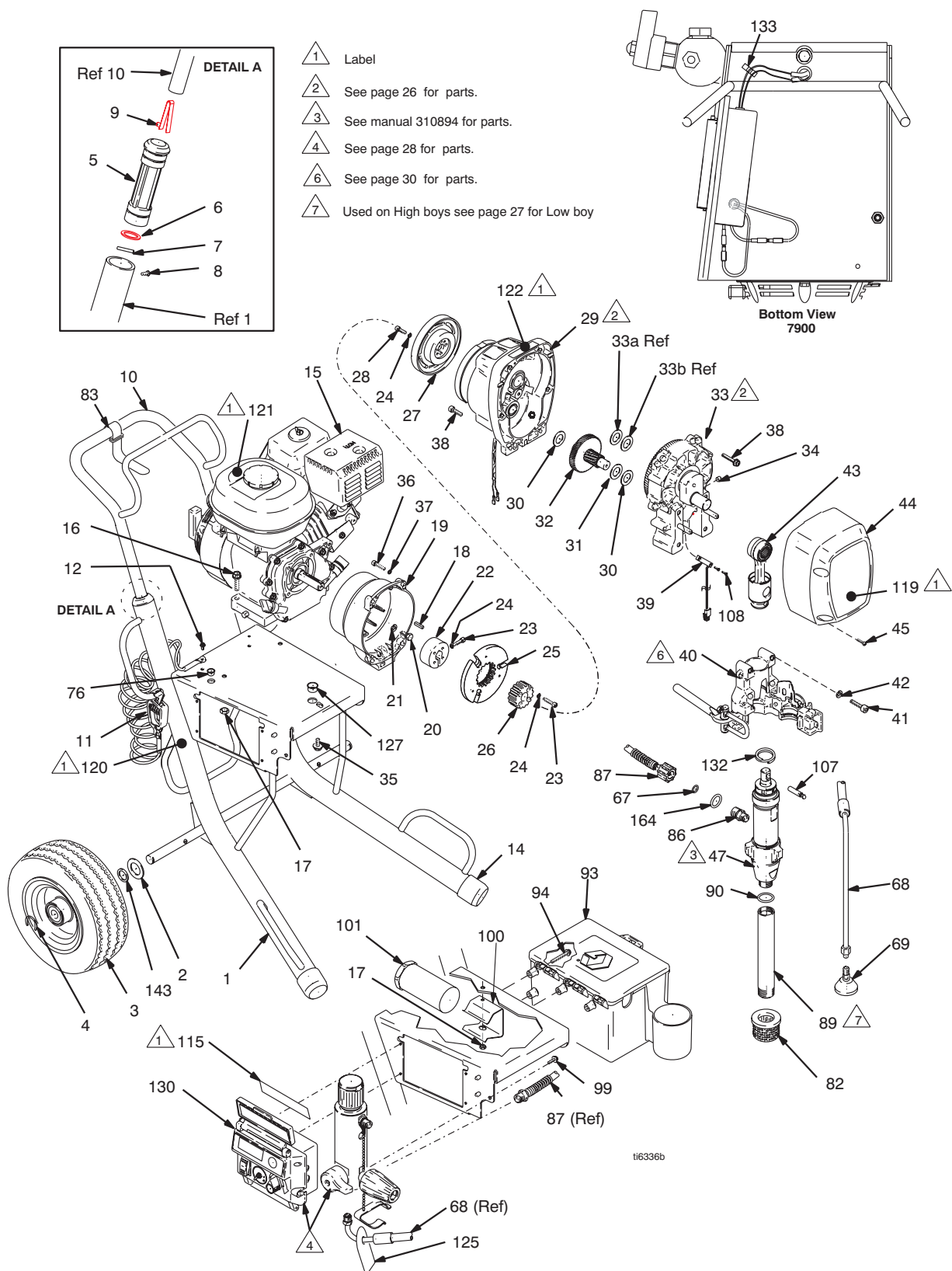
GMax II 5900/5900HD Parts Drawing



GMax II 5900/5900HD Parts List

Ref	Part	Description	Qty	Ref	Part	Description	Qty
1	287370	FRAME, cart (5900/7900)	1	47		PUMP, displacement	
2	156306	WASHER, flat	2	287513		(5900), includes 86, 89, 90	1
3	119509	WHEEL, pneumatic (5900/7900)	2	287579		(5900HD), includes 86	1
4	15E891	CLIP, retaining	2	67	111457	O-RING	1
5	187604	SLEEVE, cart (5900/7900)	2	68	244240	HOSE, coupled, includes 69	1
6	183350	WASHER	2	69	241920	DEFLECTOR, threaded	1
7	108068	PIN, spring straight	2	76	114678	BUSHING, strain relief	1
8	108795	SCREW, mach, pnh	5	82	189920	STRAINER, (1-11 1/2 npsm)	1
9	112827	BUTTON, snap	2	83	114271	STRAP, retaining	1
10	245245	HANDLE, cart	1	84	238049	FLUID, TSL, 4 oz (not shown)	1
11	237686	WIRE, ground assembly w/ clamp	1	86	15E802	FITTING, pump, quick disconnect	1
12	112798	SCREW, thread forming, hex hd	1	87	287419	HOSE, coupled	1
14	276974	CAP, leg	2	89	15E806	TUBE, INTAKE	1
15	114530	ENGINE, gas, 5.5 hp, (5900)	1	90	118494	O-RING	1
16	110837	SCREW, flange, hex	2	93*	287253	TOOL BOX, includes 94	1
17	110838	NUT, lock	2	94*	118852	SCREW, machine, hex washer hd	3
18	183401	KEY, parallel	1	99	113161	SCREW, flange, hex hd	3
19	15E277	HOUSING, clutch, mach (5900/7900)	1	100	15E736	BRACKET, holder, manual	1
20	108842	SCREW, cap, hex hd	4	101	119510	HOLDER, manual	1
21	100214	WASHER, lock	4	107	15F110	PIN, pump (5900)	1
22	193680	COLLAR, shaft	1	108*	114528	SCREW, MACH, PHILLIPS, PNHD	2
23†	108803	SCREW, hex, socket head	6	115	15E854	LABEL, identification	1
24†	105510	WASHER, lock, spring (hi-collar)	10	119		LABEL, identification	
25†		ARMATURE, clutch, 5 in. (5900/7900)	1		15E852	(5900)	1
26†		HUB, armature	1		15E980	(5900HD)	1
27†		ROTOR, clutch, 5 in. (5900/7900)	1	120▲	15F638	LABEL, warning	1
28†	101682	SCREW, cap, sch	4	121▲	194126	LABEL, warning	1
29	287465	HOUSING, pinion, 5900	1	122	290228	LABEL, caution	1
30	114672	WASHER, thrust (brass)	2	125▲	195119	LABEL, warning	1
31	114699	WASHER, thrust (steel)	1	127	119569	BUSHING, strain relief	1
32	287460	GEAR, combination (5900)	1	130		BOX, control	1
33	287469	HOUSING, drive (5900)	1	*	287648	Premium	1
34*	116618	MAGNET	1		287649	Standard	1
35	112395	SCREW, cap, flnghd	1	132	119778	SPRING, RETAINING (5900)	1
36	102962	SCREW, cap sch (5900/7900)	4	133	114687	CLIP, RETAINER	1
37	104008	WASHER, lock, spring (5900/7900)	4	134*	15F354	FUNNEL, OIL (shown on page 5)	1
38	15C753	SCREW, mach hex hd (5900/7900)	6	143	116038	WASHER, wave spring	2
39*	119562	SWITCH, reed w/connector	1	164	119790	O-RING	1
40	287523	HOUSING, bearing (5900)	1	▲	<i>Replacement Danger and Warning labels, tags, and cards are available at no cost.</i>		
41	114666	SCREW, cap, socket hd	4	*	Premium sprayers only		
42	106115	WASHER, lock spring (hi-collar)	4	†	Included in Clutch Replacement Kit 241113		
43	287472	ROD, connecting (5900)	1				
44	287511	COVER, front, (5900), includes 45	1				
45	118444	SCREW, mach hex wash hd	4				

GMax II 7900 Parts Drawing



GMax II 7900 Parts List

Ref	Part	Description	Qty	Ref	Part	Description	Qty
1	287370	FRAME, cart (5900/7900)	1	44	287520	COVER, front, (7900), includes 45	1
2	156306	WASHER, flat	2	45	118444	SCREW, mach hex wash hd	4
3	119509	WHEEL, pneumatic (5900/7900)	2	47	249122	PUMP, displacement (7900), includes 86, 89, 90	1
4	15E891	CLIP, retaining	2	67	111457	O-RING	1
5	187604	SLEEVE, cart (5900/7900)	2	68	244240	HOSE, coupled, includes 69	1
6	183350	WASHER	2	69	241920	DEFLECTOR, threaded	1
7	108068	PIN, spring straight	2	76	114678	BUSHING, strain relief	1
8	108795	SCREW, mach, pnh	5	82	189920	STRAINER, (1-11 1/2 npsm)	1
9	112827	BUTTON, snap	2	83	114271	STRAP, retaining	1
10	245245	HANDLE, cart	1	84	238049	FLUID, TSL, 4 oz (not shown)	1
11	237686	WIRE, ground assembly w/ clamp	1	86	15E802	FITTING, pump, quick disconnect	1
12	112798	SCREW, thread forming, hex hd	1	87	287419	HOSE, coupled	1
14	276974	CAP, leg	2	89	248215	TUBE, INTAKE	1
15	116080	ENGINE, gas, 6.5 hp, (7900)	1	90	118494	O-RING	1
16	110837	SCREW, flange, hex	2	93	287253	TOOL BOX, includes 94	1
17	110838	NUT, lock	2	94	118852	SCREW, machine, hex washer hd	3
18	183401	KEY, parallel	1	99	113161	SCREW, flange, hex hd	3
19	15E277	HOUSING, clutch, mach (5900/7900)	1	100	15E736	BRACKET, holder, manual	1
20	108842	SCREW, cap, hex hd	4	101	119510	HOLDER, manual	1
21	100214	WASHER, lock	4	107	15F097	PIN, pump (7900)	1
22	193680	COLLAR, shaft	1	108*	114528	SCREW, MACH, PHILLIPS, PNHD	2
23†	108803	SCREW, hex, socket head	6	115	15E854	LABEL, identification	1
24†	105510	WASHER, lock, spring (hi-collar)	10	119	15E853	LABEL, identification	1
25†		ARMATURE, clutch, 5 in. (5900/7900)	1	120▲	15F638	LABEL, danger, English	1
26†		HUB, armature	1	121▲	194126	LABEL, warning	1
27†		ROTOR, clutch, 5 in. (5900/7900)	1	122	290228	LABEL, caution	1
28†	101682	SCREW, cap, sch	4	125▲	195119	LABEL, warning	1
29	287466	HOUSING, pinion, 7900	1	127	119569	BUSHING, strain relief	1
30	114672	WASHER, thrust (brass)	2	130		BOX, control	
31	114699	WASHER, thrust (steel)	1	*	287648	Premium	1
32	287459	GEAR, combination (7900)	1		287649	Standard	1
33	287470	HOUSING, drive (7900)	1	132	119677	SPRING, RETAINING (7900)	1
34*	116618	MAGNET	1	133	114687	CLIP, RETAINER	1
35	112395	SCREW, cap, flnghd	1	134*	15F354	FUNNEL, OIL (shown on page 5)	1
36	102962	SCREW, cap sch (5900/7900)	4	143	116038	WASHER, wave spring	2
37	104008	WASHER, lock, spring (5900/7900)	4	164	119790	O-RING	1
38	15C753	SCREW, mach hex hd(5900/7900)	6				
39*	119562	SWITCH, reed w/connector	1	▲	<i>Replacement Danger and Warning labels, tags, and cards are available at no cost.</i>		
40	287524	HOUSING, bearing (7900)	1	*	Premium sprayers only		
41	112599	SCREW, cap, socket hd	4	†	Included in Clutch Replacement Kit 241113		
42	112600	WASHER, lock spring (hi-collar)	4				
43	287473	ROD, connecting (7900)	1				

Parts Drawing and List - Pinion Housing, Drive Housing

GMax II 3900: 287463

GMax II 5900: 287465

GMax II 7900: 287466

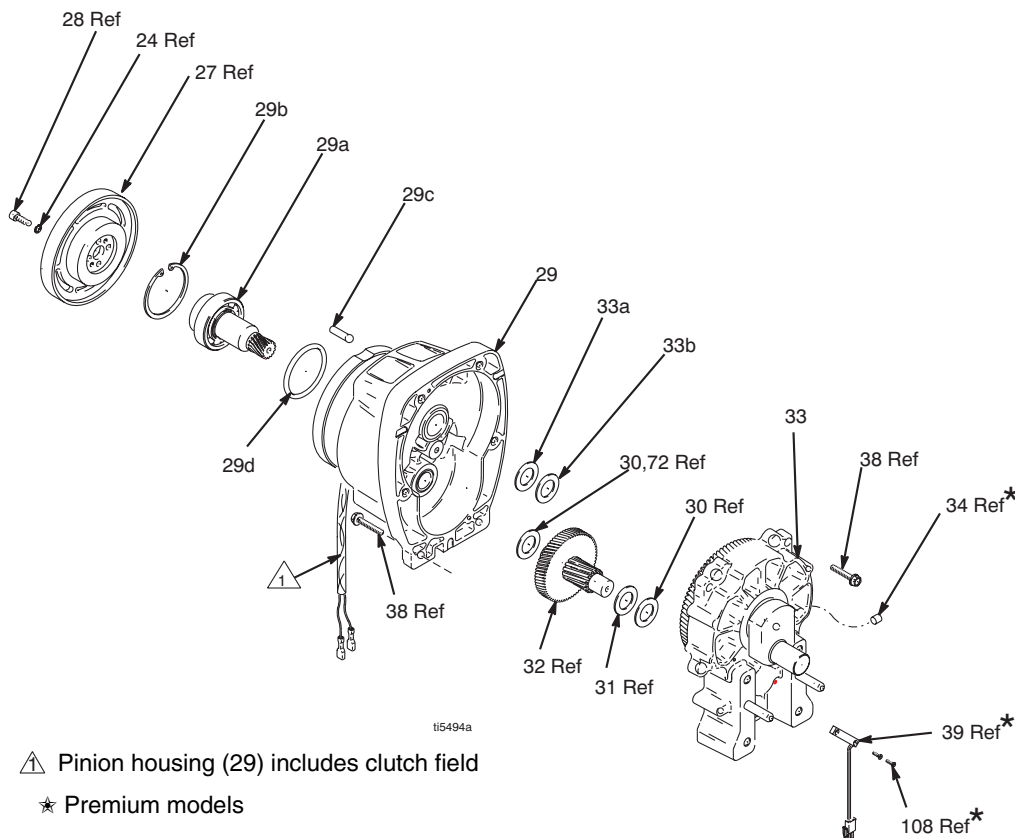
GMax II 3900: 287467

GMax II 5900: 287469

GMax II 7900: 287470

Ref	Part	Description	Qty
29		KIT, repair, field	
	287474	3900	1
	287476	5900	1
	287477	7900	1
29a		GEAR, driving, first	
	287525	3900	1
	241114	5900/7900	1
29b		RING, retaining, large	
	113094	3900	1
	112770	5900/7900	1
29c	105489	PIN, dowel	2
29d		O-RING	
	165295	3900	1
	114683	5900/7900	1
33a		WASHER, thrust, steel	
	116191	3900	1
	116192	5900/7900	1

Ref	Part	Description	Qty
33		DRIVE HOUSING	1
33a		WASHER, thrust, steel	
	116191	3900	1
	116192	5900/7900	1
33b		WASHER, thrust, brass	
	107089	3900	1
	194173	5900/7900	1



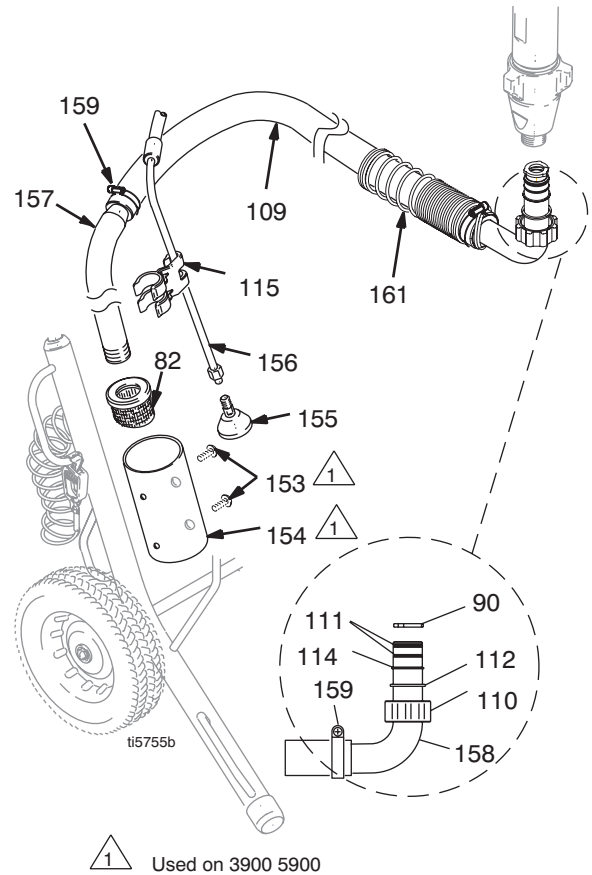
LoBoy Suction Set Kits

(Kits include suction set and drain hose)

GMax II 3900/5900 Kit: 287631

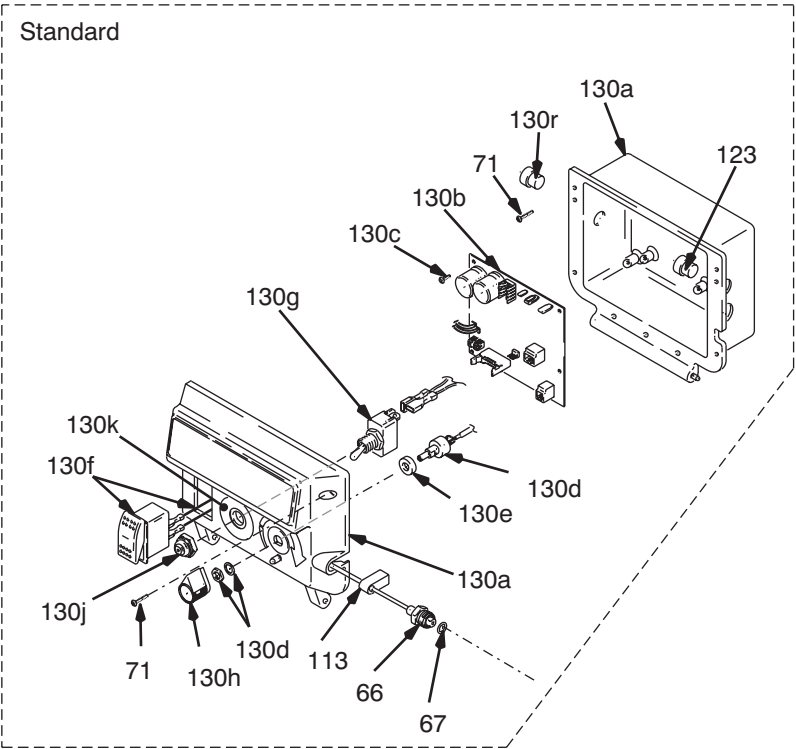
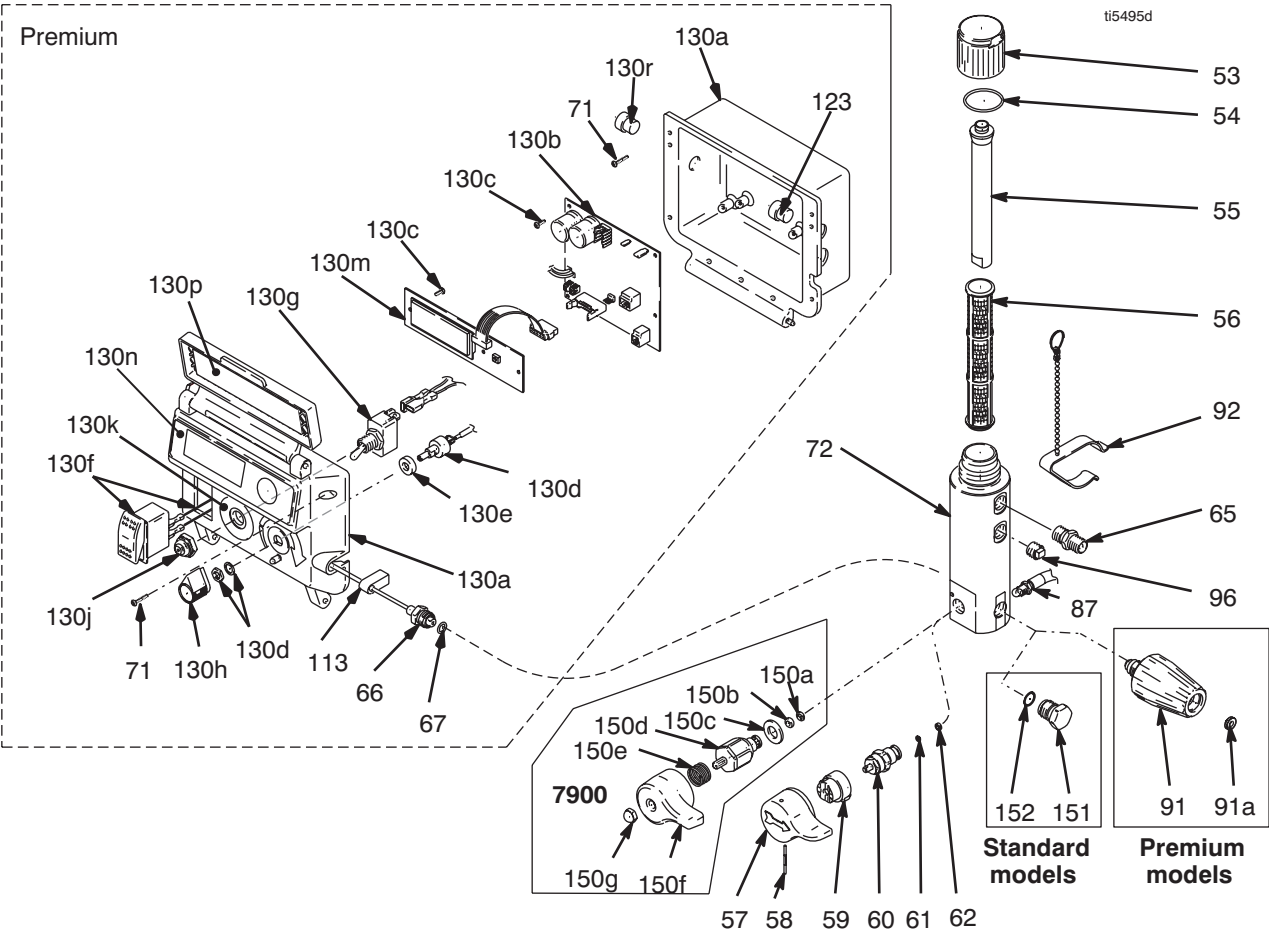
GMax II 7900 Kit: 287541

Ref	Part	Description	Qty
82	189920	STRAINER, 1-11 1/2 npsm	1
90		O-RING	
	115099	3900/5900	1
	119566	7900	1
109		HOSE, suction	
	288038	3900/5900, includes 82, 110, 111, 112, 114,	1
	288039	7900	1
110	15C980	NUT, jam	1
111	15H854	O-RING	2
112	15C981	WASHER, suction, swivel	1
114	118505	RING, retaining, external	1
115		CLIP, drain line	
	15D000	3900/5900	1
	196723	7900	1
153		SCREW	
	108795	3900/5900	2
	NONE	7900	
154		TUBE	
	15E952	3900/5900	1
	NONE	7900	
155	241920	DEFLECTOR	1
156		HOSE, drain, includes 155	
	287654	3900/5900	1
	246331	7900	1
157		TUBE, suction	
	15F149	3900/5900	1
	15F171	7900	1
158	15F909	TUBE, angle	1
159	120330	CLAMP, hose	2
160		HOSE, suction	
	15H393	3900/5900	1
	15H787	7900	1
161	176450	GUARD, hose	1



Pressure Control and Filter Parts Drawing

All Models

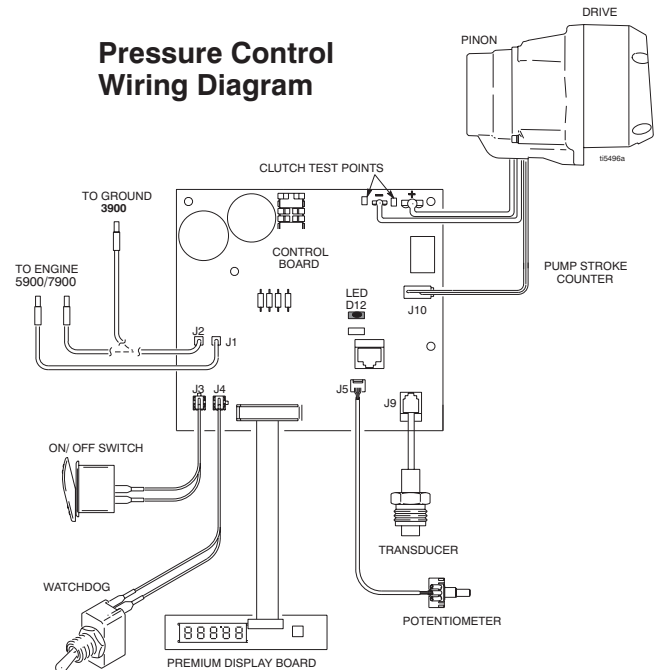


Pressure Control and Filter Parts List

REF	PART	DESCRIPTION	QTY	REF	PART	DESCRIPTION	QTY
		Filter Replacement Kit		150c†◆	114797	GASKET	1
	287510	3900/5900		150d†◆		VALVE ASSEMBLY	1
	287517	7900		150e†◆	114708	SPRING, compression	1
53★†	15C765	CAP, filter	1	150f†◆	15G563	HANDLE, valve	1
54★†	117285	O-RING	1	150g†◆	116424	NUT, cap, hex, hd	1
55★†	15C766	TUBE, diffusion	1	151	248314	PLUG, (Standard) includes 152	1
56★†	244067	FILTER, fluid	1	152	15D541	O-RING, Standard)	1
57★	15C780	HANDLE	1	160*	287648	CONTROL, premium, complete	1
58★	15C972	PIN, grooved	1			(includes 130b-130r)	
59★	224807	BASE, valve	1	161	287649	CONTROL, standard, complete	1
60★‡	235014	VALVE, drain, replacement kit	1			(includes 130b-130r)	
61★‡	15E022	SEAT, valve	1	★		Included in Filter Replacement Kit 287510	
62★‡	111699	GASKET, seat, valve	1	†		Included in Filter Replacement Kit 287517	
65		ADAPTER		‡		Included in Drain Valve Replacement Kit 235014	
★	164672	(3900/5900)	1	◆		Included in Drain Valve Replacement Kit 245103	
†	162485	(7900)	1	*		Premium models only	
66★†	243222	TRANSDUCER, pressure conti	1				
67★†	111457	O-RING	1				
71	116585	SCREW, mach, pnh, sems	6				
72*†	15E284	HOUSING, filter	1				
87	287419	HOSE, coupled	1				
91*	287293	VALVE, auto clean, includes 91a	1				
91a*	115524	GASKET	1				
92*	244346	KIT, repair, clamp, trigger	1				
96★†	104813	PLUG, pipe	1				
113	15E925	GASKET, TRANSDUCER	1				
123	119545	BUSHING, strain, relief	1				
130		CONTROL BOX					
130a*	249583	BOX, premium	1				
130a	249584	BOX, standard	1				
130b	287516	CONTROL, board	1				
130c	117317	SCREW, pan head	4				
130d	241443	POTENTIOMETER	1				
130e	198650	SPACER, shaft	1				
130f	116752	SWITCH, rocker	1				
130g	119541	SWITCH, toggle	1				
130h	116167	KNOB, potentiometer	1				
130j	195428	BOOT, toggle	1				
130k	15E857	LABEL, identification	1				
130m*	287515	DISPLAY, LCD, GMAX	1				
130n*	15E855	LABEL	1				
130p*	15E858	LABEL, identification	1				
130r	119545	BUSHING, strain relief	1				
150	245103	DRAIN VALVE (7900)					
150a†◆	193710	SEAL, valve	1				
150b†◆	193709	SEAT, valve	1				

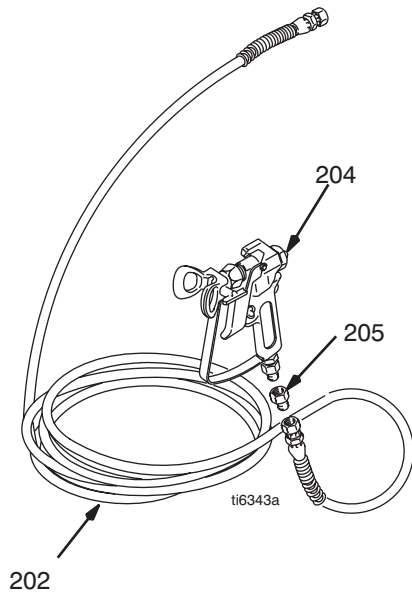
The diagram illustrates the electrical connections for a pressure control system. Key components include:

- Pump:** Labeled 'DRIVE' and 'PINON', with a 'PUMP STROKE COUNTER' attached.
- Control Board:** Features 'CLUTCH TEST POINTS', a 'TO GROUND 3900' connection, and a 'TO ENGINE 5900/7900' connection.
- Transducer:** Connected to the control board via a cable with connectors J5 and J9.
- Potentiometer:** Connected to the control board via a cable with connector J10.
- Display Board:** Labeled 'PREMIUM DISPLAY BOARD', showing a digital readout (88888) and connected to the control board via a cable with connectors J3 and J4.
- Switches:** An 'ON/OFF SWITCH' and a 'WATCHDOG' switch are shown.
- LED D12:** A light-emitting diode connected to the control board.



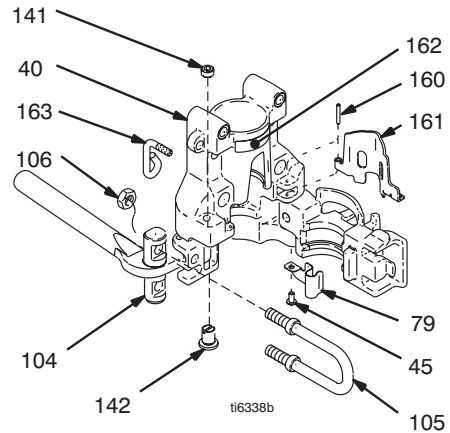
Parts - Sprayers, RAC™ X Tip, Gun & Hose

Premium Models include items 202 to 204 or 205



Ref	Part	Description	Qty
202	240794	HOSE, grounded, nylon; 1/4 in. ID; cpld 1/4 npsm(fbe); 50 ft (15 m); spring guards both ends; 3300 psi (228 bar, 22.8 MPa) (3900/5900)	1
	240797	HOSE, grounded, nylon; 3/8 in. ID; cpld 1/4 npsm(fbe); 50 ft (15 m); spring guards both ends; 3300 psi (228 bar, 22.8 MPa) (5900HD/7900)	1
204	246220	CONTRACTOR II SPRAY GUN Includes RAC X 517-size SwitchTip and HandTite Guard. See 309639 for parts. (3900/5900/7900)	1
	241705	TEXTURE SPRAY GUN Includes GHD527 SwitchTip and Guard. See 308491 for parts. (5900HD)	1
205	159841	BUSHING, 3/8 x 1/4 in. (5900HD/7900)	1

Ref 40: Bearing Housing



Ref	Part	Description	Qty
40		HOUSING, bearing	1
45	118444	SCREW, mach hex wash hd	1
79	15E975	CLIP, spring	1
104		PIN, housing, bearing	
	15E779	3900	1
	15E625	5900/7900	1
105		LATCH, housing, bearing	
	15E765	3900	1
	15E687	5900/7900	1
106		NUT, lock hex	
	102040	3900	1
	111040	5900/7900	1
141	15F503	SCREW, set, socket hd	1
142	15F498	SCREW, adjustment	1
160		PIN	
	101579	3900/7900	1
	119284	5900	1
161		SHIELD	
	15F384	3900	1
	15F386	5900	1
	15F383	7900	1
162	187436	LABEL, torque	1
163	15F116	LATCH	1

Technical Data

Honda GX120 Engine	
ANSI Power Rating @ 3600 rpm	4.0 Horsepower (3.0 kW)
Honda GX160 Engine	
ANSI Power Rating @ 3600 rpm	5.5 Horsepower (4.1 kW)
Honda GX 200 Engine	
ANSI Power Rating @ 3600 rpm	6.5 Horsepower (4.8 kW)
Maximum working pressure	
	3300 psi (228 bar, 22.8 MPa)
Noise Level	
Sound power	105 dBa per ISO 3744
Sound pressure	96 dBa measured at 3.1 feet (1 m)
Maximum delivery rating	
3900	1.25 gpm (4.73 liter/min)
5900/5900HD	1.60 gpm (6.06 liter/min)
7900	2.20 gpm (8.33 liter/min)
Maximum tip size	
3900	1 gun with 0.036 in. tip 2 guns with 0.023 in. tip 3 guns with 0.018 in. tip
5900/5900HD	1 gun with 0.043 in. tip 2 guns with 0.029 in. tip 3 guns with 0.023 in. tip 4 guns with 0.019 in. tip
7900	1 gun with 0.048 in. tip 2 guns with 0.035 in. tip 3 guns with 0.027 in. tip 4 guns with 0.023 in. tip
Inlet paint strainer	12 mesh (893 micron) stainless steel screen, reusable
Outlet paint filter	60 mesh (250 micron) stainless steel screen, reusable
Pump inlet size	1-5/16-12 UN-2A
Fluid outlet size: 3900/5900	¼ npsm from fluid filter
Fluid outlet size: 7900	3/8 npsm from fluid filter
Wetted parts	zinc-plated carbon steel, PTFE, nylon, polyurethane, UHMW polyethylene, fluoroelastomer, acetal, leather, aluminum, tung- sten carbide, nickel- and zinc-plated carbon steel, stainless steel, chrome plating

Dimensions

Sprayer (no hose and gun)	Weight lb (kg)	Height in. (cm)	Width in. (cm)	Length in. (cm)
3900	109 (50)	31.5 (80.0)	22.25 (56.5)	32.0 (81.3)
5900	139 (64)	32.25 (81.9)	24.5 (62.2)	32.25 (81.9)
7900	146 (67)	32.25 (81.9)	24.5 (62.2)	33.0 (83.8)

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.

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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ADDITIONAL WARRANTY COVERAGE

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

TO PLACE AN ORDER, contact your Graco distributor, or call **1-800-690-2894** to identify the nearest distributor.

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MM 310893

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