

## LineLazer™ IV 3900, 5900 Auto-Layout™ System Airless Line Stripers

312195K

EN

***For application of line striping materials. For professional use only. Not for use in explosive atmospheres.***

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



### **Important Safety Instructions**

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

See page 2 for model information.



**312190**



**309055**



**310643**



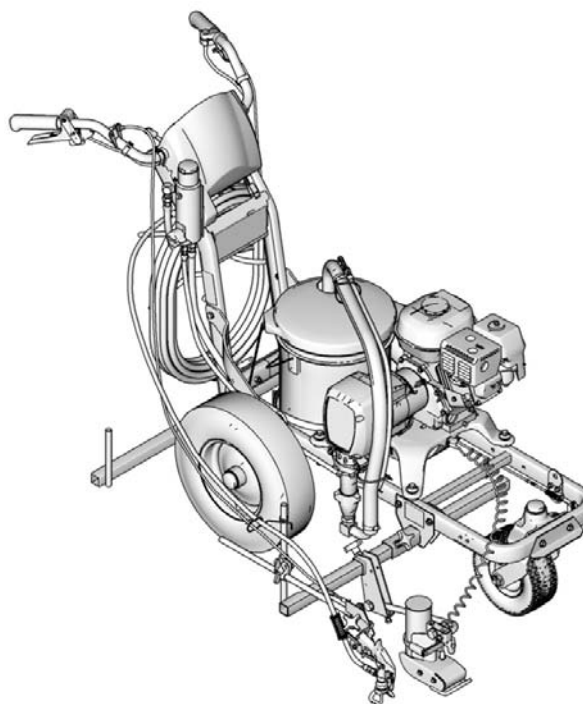
**312345**



**311254**



**312307**



ti10233a




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# Models

## 3900 Line Stripers

				
253920	✓		✓	
253953		✓	✓	
255151	✓			✓
255152		✓		✓







## 5900 Line Stripers

				
253921	✓		✓	
253954		✓	✓	
255153	✓			✓
255154		✓		✓








Manual	Language
312195	English
312196	French
312197	Spanish
312198	Dutch
312199	German
312200	Italian
312201	Turkish
312202	Greek
312203	Croatian
312204	Portuguese
312205	Danish
312206	Finnish
312207	Swedish
312208	Norwegian
312209	Russian
312210	Estonian
312211	Latvian
312212	Lithuanian
312213	Polish
312214	Hungarian
312215	Czech
312216	Slovakian
312217	Slovenian
312218	Romanian
312219	Bulgarian

# Warnings


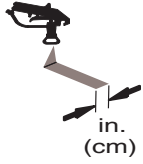
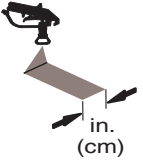
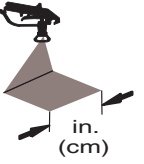
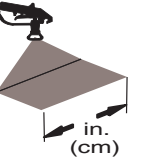
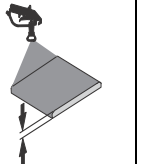
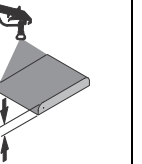
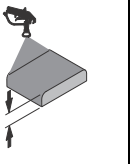
The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbol refers to procedure-specific risk. Refer back to these warnings. Additional, product-specific warnings may be found throughout the body of this manual where applicable.

 <b>WARNING</b>	
	<p><b>FIRE AND EXPLOSION HAZARD</b></p> <p>Flammable fumes, such as solvent and paint fumes, in <b>work area</b> can ignite or explode. To help prevent fire and explosion:</p> <ul style="list-style-type: none"> <li>• Use equipment only in well ventilated area.</li> <li>• 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.</li> <li>• Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static arc).</li> <li>• Keep work area free of debris, including solvent, rags and gasoline.</li> <li>• Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present.</li> <li>• Ground all equipment in the work area. See <b>Grounding</b> instructions.</li> <li>• Use only grounded hoses.</li> <li>• Hold gun firmly to side of grounded pail when triggering into pail.</li> <li>• If there is static sparking or you feel a shock, <b>stop operation immediately</b>. Do not use equipment until you identify and correct the problem.</li> <li>• Keep a working fire extinguisher in the work area.</li> </ul>
	<p><b>CARBON MONOXIDE HAZARD</b></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><b>SKIN INJECTION HAZARD</b></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. <b>Get immediate surgical treatment.</b></p> <ul style="list-style-type: none"> <li>• Do not point gun at anyone or at any part of the body.</li> <li>• Do not put your hand over the spray tip.</li> <li>• Do not stop or deflect leaks with your hand, body, glove, or rag.</li> <li>• Do not spray without tip guard and trigger guard installed.</li> <li>• Engage trigger lock when not spraying.</li> <li>• Follow <b>Pressure Relief Procedure</b> in this manual, when you stop spraying and before cleaning, checking, or servicing equipment.</li> </ul>
	<p><b>PRESSURIZED EQUIPMENT HAZARD</b></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"> <li>• Follow <b>Pressure Relief Procedure</b> in this manual, when you stop spraying and before cleaning, checking, or servicing equipment.</li> <li>• Tighten all fluid connections before operating the equipment.</li> <li>• Check hoses, tubes, and couplings daily. Replace worn or damaged parts immediately.</li> </ul>
	<p><b>PRESSURIZED ALUMINUM PARTS HAZARD</b></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>


**WARNING**

	<p><b>EQUIPMENT MISUSE HAZARD</b></p> <p>Misuse can cause death or serious injury.</p> <ul style="list-style-type: none"> <li>• Do not operate the unit when fatigued or under the influence of drugs or alcohol.</li> <li>• Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See <b>Technical Data</b> in all equipment manuals.</li> <li>• Use fluids and solvents that are compatible with equipment wetted parts. See <b>Technical Data</b> in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS forms from distributor or retailer.</li> <li>• Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only.</li> <li>• Do not alter or modify equipment.</li> <li>• Use equipment only for its intended purpose. Call your distributor for information.</li> <li>• Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.</li> <li>• Do not kink or over bend hoses or use hoses to pull equipment.</li> <li>• Keep children and animals away from work area.</li> <li>• Comply with all applicable safety regulations.</li> </ul>
	<p><b>BURN HAZARD</b></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><b>MOVING PARTS HAZARD</b></p> <p>Moving parts can pinch or amputate fingers and other body parts.</p> <ul style="list-style-type: none"> <li>• Keep clear of moving parts.</li> <li>• Do not operate equipment with protective guards or covers removed.</li> <li>• Pressurized equipment can start without warning. Before checking, moving, or servicing equipment, follow the <b>Pressure Relief Procedure</b> in this manual. Disconnect power or air supply.</li> </ul>
 	<p><b>TOXIC FLUID OR FUMES HAZARD</b></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"> <li>• Read MSDS's to know the specific hazards of the fluids you are using.</li> <li>• Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.</li> <li>• Always wear impervious gloves when spraying or cleaning equipment.</li> </ul>
	<p><b>PERSONAL PROTECTIVE EQUIPMENT</b></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"> <li>• Protective eyewear</li> <li>• Clothing and respirator as recommended by the fluid and solvent manufacturer</li> <li>• Gloves</li> <li>• Hearing protection</li> </ul>
	<p><b>RECOIL HAZARD</b></p> <p>Gun may recoil when triggered. If you are not standing securely, you could fall and be seriously injured.</p>

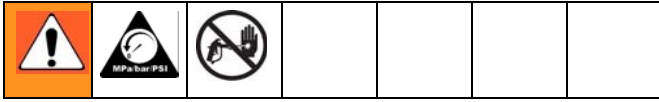
# Tip Selection

							
LL5213*	2 (5)				✓		
LL5215*	2 (5)					✓	
LL5217		4 (10)				✓	
LL5219		4 (10)					✓
LL5315*		4 (10)			✓		
LL5317		4 (10)			✓		
LL5319		4 (10)				✓	
LL5321		4 (10)				✓	
LL5323		4 (10)				✓	
LL5325		4 (10)					✓
LL5327		4 (10)					✓
LL5329		4 (10)					✓
LL5331		4 (10)					✓
LL5333		4 (10)					✓
LL5335		4 (10)					✓
LL5355		4 (10)					✓
LL5417			6 (15)		✓		
LL5419			6 (15)		✓		
LL5421			6 (15)		✓		
LL5423			6 (15)			✓	
LL5425			6 (15)			✓	
LL5427			6 (15)			✓	
LL5429			6 (15)			✓	
LL5431			6 (15)				✓
LL5435			6 (15)				✓
LL5621				12 (30)	✓		
LL5623				12 (30)	✓		
LL5625				12 (30)	✓		
LL5627				12 (30)	✓		
LL5629				12 (30)	✓		
LL5631				12 (30)		✓	
LL5635				12 (30)		✓	
LL5639				12 (30)			✓

\* Use 100 mesh filter to reduce tip clogs.

# Maintenance

## Pressure Relief Procedure



1. Engage trigger lock.
2. Turn engine ON/OFF switch to OFF.
3. Move pump switch to OFF and turn pressure control knob fully counterclockwise.
4. Disengage the trigger lock.
5. Hold a metal part of the gun firmly to a grounded metal pail. Trigger the gun to relieve pressure.
6. Engage the trigger lock.
7. Open pressure drain valve. Leave valve open until you are ready to spray again.
8. If you suspect the spray tip or hose is 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. Clear hose or tip obstruction.

## Trigger Lock

Always engage the trigger lock when you stop spraying to prevent the gun from being triggered accidentally by hand or if dropped or bumped.

## Periodic Maintenance

**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.

**DAILY:** Verify calibration.

**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.

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.

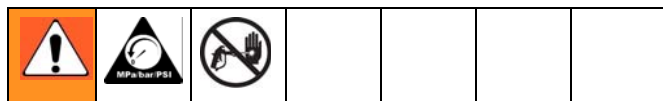
**SPARK PLUG:** Use only BPR6ES (NGK) or W20EPR-U (NIPPONDENSO) plug. Gap plug to 0.028 to 0.031 in. (0.7 to 0.8 mm). Use spark plug wrench when installing and removing plug.

## Caster Wheel

(See letter call-outs in **Parts, LineLazer IV Swivel Wheel Assembly 240719** drawing on page 28.)

1. Once each year, tighten nut (127) under dust cap (142) until spring washer bottoms out. then back off the nut 1/2 to 3/4 turn.
2. Once each year, tighten nut (127) on screw (131) until it begins to compress spring washer. Then tighten the nut an additional 1/4 turn.
3. Once each month, grease the wheel bearing (F).
4. Check pin (55) for wear. If pin is worn out, there will be play in the caster wheel. Reverse or replace the pin as needed.
5. Check caster wheel alignment as necessary. To align: loosen screw (145), align wheel and tighten screw.

# Troubleshooting



Problem	Cause	Solution
E=XX is displayed.	Fault condition exists.	Determine fault correction from table, page 20.
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 3 to 4 times. Clean or replace spark plug. Start engine. Keep sprayer upright to avoid oil seepage.
Engine operates, but displacement pump does not operate.	Error code displayed?	Reference pressure control repair. Page 20.
	Pump switch is OFF.	Turn pump switch ON.
	Pressure setting is too low.	Turn pressure adjusting knob clockwise to increase pressure.
	Fluid filter (11) is dirty.	Clean filter. Page 32.
	Tip or tip filter is clogged.	Clean tip or tip filter. See spray gun manual.
	Displacement pump piston rod is stuck due to dried paint.	Repair pump. See pump manual.
	Connecting rod is worn or damaged.	Replace connecting rod. Page 11.
	Drive housing is worn or damaged.	Replace drive housing. Page 12.
	Electrical power is not energizing clutch field.	Check wiring connections. Page 16.  Reference pressure control repair. Page 17.  Reference wiring diagram. Page 34.  With pump switch ON and pressure turned to MAXIMUM, use a test light to check for power between clutch test points on control board.  Disconnect clutch wires from control board and measure resistance across clutch coil. At 70° F, the resistance must be between 1.2 +0.2 ohms (LineLazer IV 3900); 1.7 +0.2 ohms (LineLazer IV 5900); if not, replace pinion housing.  Have pressure control checked by authorized Graco dealer.
	Clutch is worn, damaged, or incorrectly positioned.	Replace clutch. Page 13.
Pinion assembly is worn or damaged.	Repair or replace pinion assembly. Page 12.	

<b>Problem</b>	<b>Cause</b>	<b>Solution</b>
Pump output is low.	Strainer (34f) is clogged.	Clean strainer.
	Piston ball is not seating.	Service piston ball. See pump manual.
	Piston packings are worn or damaged.	Replace packings. See pump manual.
	O-ring in pump is worn or damaged.	Replace o-ring. See pump manual.
	Intake valve ball is not seating properly.	Clean intake valve. See pump manual.
	Intake valve ball is packed with material.	Clean intake valve. See pump manual.
	Engine speed is too low.	Increase throttle setting. See operation manual.
	Clutch is worn or damaged.	Replace clutch. Page 13.
	Pressure setting is too low.	Increase pressure. See operation manual.
	Fluid filter (11), tip filter or tip is clogged or dirty.	Clean filter. See operation or spray gun manual.
	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. See pump manual.
	Displacement rod is worn or damaged.	Replace rod. See pump manual.
Fluid is spitting from gun.	Air in pump or hose.	Check and tighten all fluid connections. Reprime pump. See operation manual.
	Tip is partially clogged.	Clear tip. See spray gun manual.
	Fluid supply is low or empty.	Refill fluid supply. Prime pump. See operation manual. 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. See pump manual.
	Paint is too thick.	Thin the paint according to the supplier's recommendations.
	Engine speed is too high.	Decrease throttle setting before priming pump. See operation manual.



Problem	Cause	Solution
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 engine rpm at no load.
	Worn engine governor.	Replace or service engine governor.
Gallon counter not working.	Broken or disconnected wire.	Check wires and connections. Replace broken wires.
	Bad sensor.	Replace sensor.
	Missing magnet.	Reposition or replace magnet.
Sprayer operates, but display does not.	Bad connection between control board and display.	Remove display and reconnect.
	Display damaged.	Replace display.
Distance counter not operating properly.	Trigger sensor not set correctly.	See "Spray icon does not show on display when fluid is sprayed".
	Bad wiring connections.	Check connector, and reconnect.
	Gear teeth missing or damaged.	Replace distance gear/wheel.
	Wire cracked or broken.	Replace sensor.
Mils not calculating.	Distance sensor.	See "Distance counter not operating properly".
	Trigger sensor.	See "Spray icon does not show on display when fluid is sprayed".
	Gallon counter.	See "Gallon counter not working".
	Bad or damaged control board.	Replace control board.
Fluid spray starts after spray icon is shown on display.	Interrupter (164, page 31)	Turn screw (126, page 31) counterclockwise until spray icon synchronizes with fluid spray.
Spray icon does not show on display when fluid is sprayed.	Loose connector.	Check connector and reconnect.
	Interrupter (164, page 31) is improperly positioned.	Turn screw (126, page 31) counterclockwise until spray icon synchronizes with fluid spray.
	Reed switch assembly (166, page 31) is damaged.	Replace reed switch assembly (166, page 31).
	Magnet on assembly (166, page 31) is missing.	Replace reed switch assembly (166, page 31).
	Cut or sliced wire.	Replace distance sensor harness (66, page 25).
	Control board is damaged.	Replace control board.
Spray icon is always shown on display.	Interrupter (164, page 31) is improperly positioned.	Turn screw (126, page 31) clockwise until spray icon is synchronized with fluid spray.
	Reed switch assembly (166, page 31) is damaged.	Replace reed switch assembly (166, page 31).
No dots or poor dots with ghosting	No dots.	Solenoid cartridge bar is too far away from aerosol marking can spray tip. Do <b>Auto-Layout Can Actuator Adjustment</b> .
	Poor dots or dots with ghosting.	Solenoid cartridge bar is too close to aerosol marking can spray tip. Do <b>Auto-Layout Can Actuator Adjustment</b> .
	Engine speed too slow	Engine speed must be greater than 2600 rpm.
	Aerosol can malfunctioning	Check that can sprays. Replace if not.
	Solenoid module malfunctioning	Replace solenoid module.

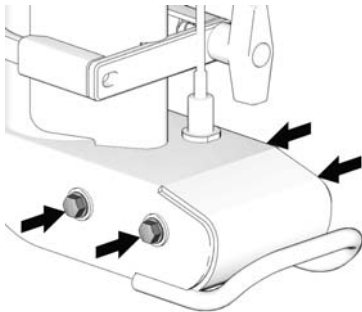
# Auto-Layout Can Actuator Adjustment

## Adjustments

The can actuator is set at the factory. If the dot size is not as desired, do the coarse and/or fine adjustments.

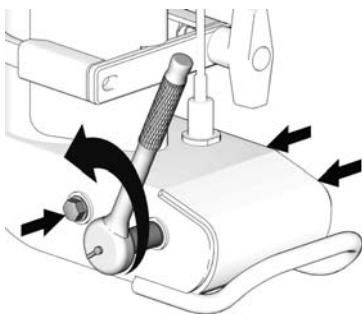
### Coarse Adjustment

- 1 Locate four screws on side of holder base.

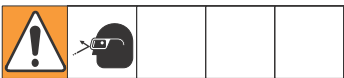


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- 2 Loosen screws to allow holder base to move freely.

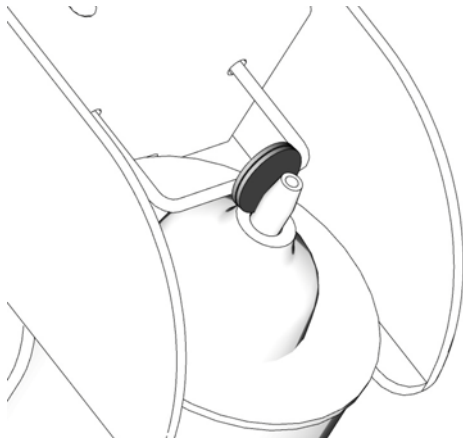


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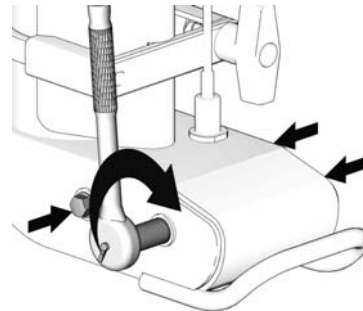
Do not aim aerosol can at your face.

- 3 Move holder base until solenoid cartridge bar is approximately 0.10 in. (thickness of two dimes) from spray tip.



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- 4 Carefully tighten screws. Verify gap.

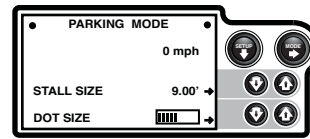


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### Fine Adjustment

If coarse adjustment did not achieve desired dot size, proceed as follows:

- 1 Start striper and move to **PARKING MODE** display.



ti9919a

- 2 Set **DOT SIZE** setting to smallest size (least amount of bars on display). Press arrow keys to increase/decrease size.
- 3 Do **Coarse Adjustment** steps 1 and 2. Move holder base until a dot size of approximately a dime is achieved. Tighten screws on holder base.



Good Dot

ti10379a



Poor Dot with Ghosting

ti10380a

Note: Dot size consistency can vary due to weather changes and differences in aerosol marking can brands.

# Bearing Housing and Connecting Rod

## Removal



1. Relieve pressure, page 6.
2. FIG. 2. Remove screws (187) and front cover (83).
3. Unscrew suction tube (34) from pump, hold wrench on pump intake valve (A) to keep pump from loosening.
4. Disconnect pump outlet hose (100) from displacement pump outlet nipple (60).
5. FIG. 1. Use screwdriver to push up retaining spring (236) at top of pump. Push out pin (235).

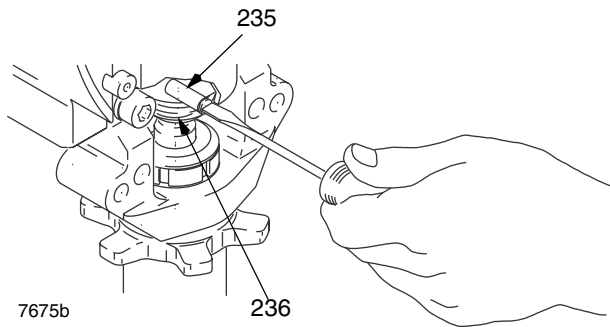


FIG. 1

6. FIG. 2. Loosen retaining nut (84). Unscrew and remove displacement pump (21).
7. Remove four screws (183) and lockwashers (188) from bearing housing (22).
8. Pull connecting rod (26) and lightly tap lower rear of bearing housing (22) with plastic mallet to loosen from drive housing (24). Pull bearing housing and connecting rod assembly (26) off drive housing.
9. Inspect crank (B) for excessive wear and replace parts as needed.

## Installation

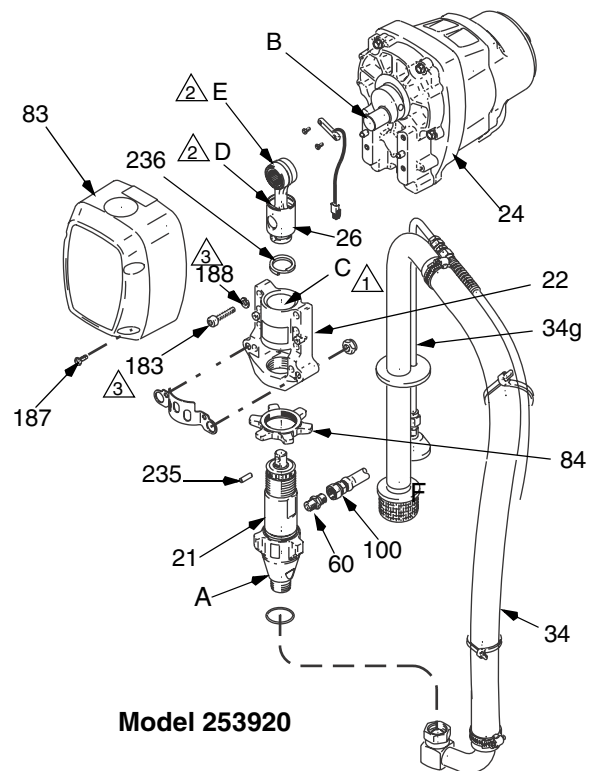
1. Evenly lubricate inside of bronze bearing (C) in bearing housing (22) with high-quality motor oil. Liberally pack top roller bearing (E), lower bearing (D) inside connecting rod assembly (26) with bearing grease.

2. Assemble connecting rod (26) and bearing housing (22).
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 (24) with holes in bearing housing (22). Push bearing housing onto drive housing or tap into place with plastic mallet.

### CAUTION

Do not use bearing housing screws (183) to align or seat bearing housing with drive housing. Align these parts with locating pins (F), to avoid premature bearing wear.

5. Install screws (183) and lockwashers (188) on bearing housing. Torque evenly to note 3 value in FIG. 2.
6. Install pump. Refer to **Displacement Pump, Installation**, page 21.



Model 253920

- ① Oil.
- ② Pack with bearing grease 114819.
- ③ LineLazer IV 3900: Torque to 200 in-lb (22.6 N•m).  
LineLazer IV 5900: Torque to 200 in-lb (22.6 N•m).

FIG. 2

T16395A

# Drive Housing

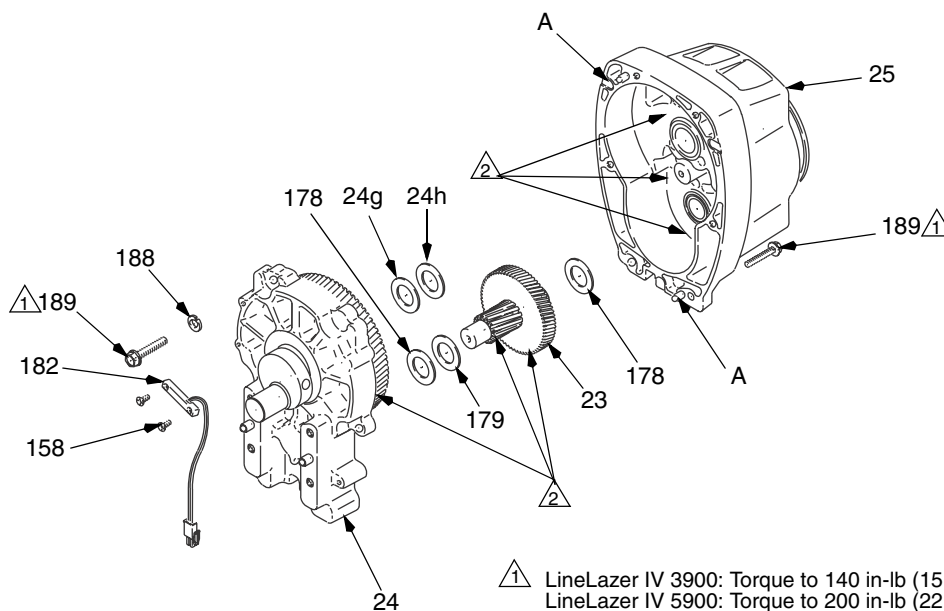
## Removal



1. Relieve pressure, page 6.
2. FIG. 3. Remove bearing housing. Do **Bearing Housing and Connecting Rod** procedure on page 11.
3. Remove two screws (158) and reed switch (182).
4. Remove six screws (189) from pinion housing (25).
5. Lightly tap around drive housing (24) to loosen drive housing. Pull drive housing straight off pinion housing. Be prepared to support gear cluster (23), which may also come out.

## Installation

1. Liberally apply bearing grease (supplied with replacement gear cluster) to gear cluster (23) and to areas called out by note 2.
2. Place bronze colored washer (24g) on shaft protruding from large shaft of drive housing (24). Place silver colored washer (24h) on pinion housing. Clean mating surfaces of pinion and drive housings. Align gears and push new drive housing straight onto pinion housing and locating pins (A).
3. Install six screws (189). Torque evenly to note 1 value in FIG. 3.
4. Install reed switch (182) with two screws (158).
5. Install bearing housing. Do steps 1 through 6 of **Bearing Housing and Connecting Rod** procedure on page 11.



1 LineLazer IV 3900: Torque to 140 in-lb (15.8 N•m).  
LineLazer IV 5900: Torque to 200 in-lb (22.6 N•m).

2 Apply remaining grease to these areas.

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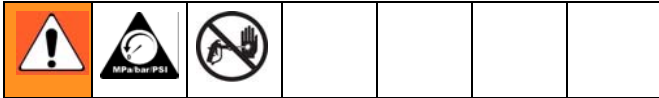
FIG. 3

# Pinion Assembly/Clutch Armature/Clamp

## Pinion Assembly/Clutch Armature Removal

### Pinion Assembly

If pinion assembly (25) is not removed from clutch housing (85), do steps 1 through 3. Otherwise, start at 4.



1. Remove drive housing, page 12.
2. FIG. 12. Remove junction box (226).
3. FIG. 11. Disconnect pump stroke sensor and clutch cables.
4. FIG. 4. Remove four screws (189) and lockwashers (188) and pinion assembly (25).

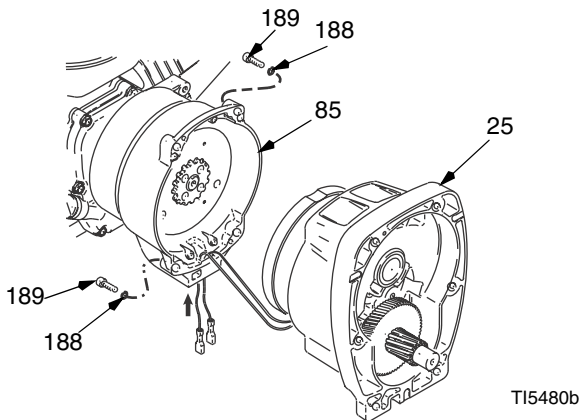


FIG. 4

5. FIG. 5. Place pinion assembly (25) on bench with rotor side up.
6. Remove four screws (175) and lockwashers (172). Install two screws in threaded holes (E) in rotor. Alternately tighten screws until rotor comes off.

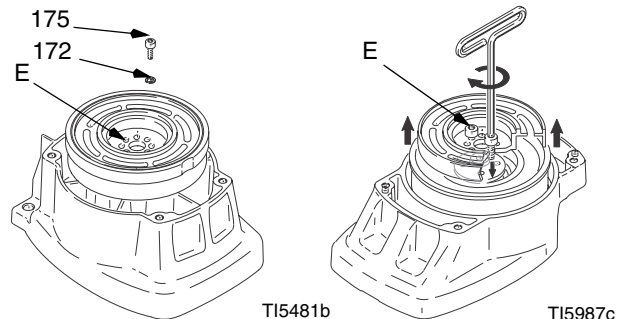


FIG. 5

7. FIG. 6. Remove retaining ring (25e).
8. Tap pinion shaft (25d) out with plastic mallet.

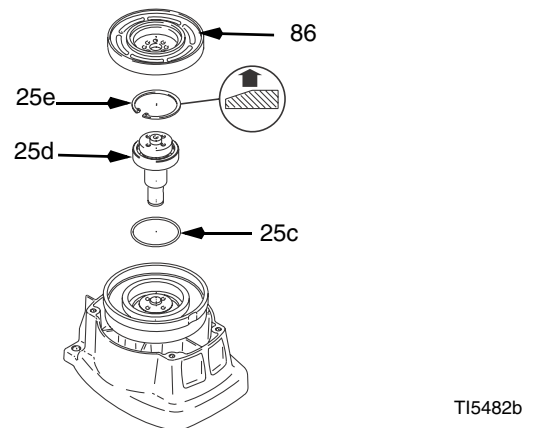


FIG. 6

### Clutch Armature

9. FIG. 7. Use an impact wrench or wedge something between armature (87) and clutch housing to hold engine shaft during removal.
10. Remove four screws (175) and lockwashers (172).
11. Remove armature (87).

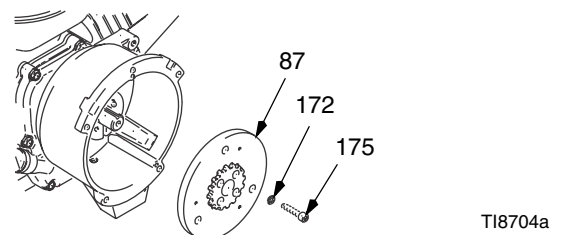


FIG. 7

## Installation

### Clutch Armature

1. FIG. 8. Lay two stacks of two dimes on smooth bench surface.
2. Lay armature (87) on two stacks of dimes.
3. Press center of clutch down on bench surface.

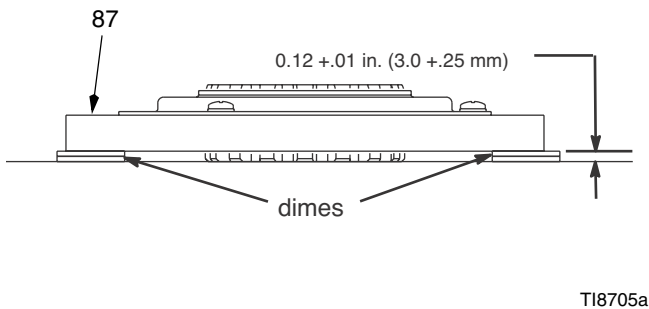


FIG. 8

4. Install armature (87) on engine drive shaft.
5. FIG. 7. Install four screws (175) and lockwashers (172) with torque of 125 in-lb.

### Pinion Assembly

6. FIG. 6. Check o-ring (25c) and replace if missing or damaged.
7. Tap pinion shaft (25d) in with plastic mallet.
8. Install retaining ring (25e) with beveled side facing up.
9. FIG. 5. Place pinion assembly on bench with rotor side up.
10. Apply thread sealant to screws. Install four screws (175) and lockwashers (172). Alternately torque screws to 125 in-lb until rotor is secure. Use threaded holes to hold rotor.
11. FIG. 4. Install pinion assembly (25) with five screws (189) and lockwashers (188).
12. FIG. 11. Connect pump stroke sensor and clutch cables.
13. FIG. 12. Install junction box (226).

## Clamp

### Removal

1. Do Engine Removal.
2. Drain gasoline from tank according to Honda manual.
3. Tip engine on side so gas tank is down and air cleaner is up.
4. FIG. 9. Loosen two screws (175) on clamp (82),
5. Push screwdriver into slot in clamp (82) and remove clamp.

### Installation

1. FIG. 9. Install engine shaft key (88).
2. Tap clamp (82) on engine shaft (A) with plastic mallet. Maintain dimension shown note 2. Chamfer must face engine.
3. 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 (175) to 125 +10 in-lb (14 +1.1 N•m).

- ⚠ 1 Face of clutch housing.
- ⚠ 2 LineLazer IV 3900: 2.55 +/- .010 in. (64.77 +/- 0.25 mm).  
LineLazer IV 5900: 2.61 +/- .010 in. (66.29 +/- 0.25 mm)
- ⚠ 3 Torque to 125 +/- 10 in-lb (14 +/- 1.1 N•m).
- ⚠ 4 Chamfer this side.

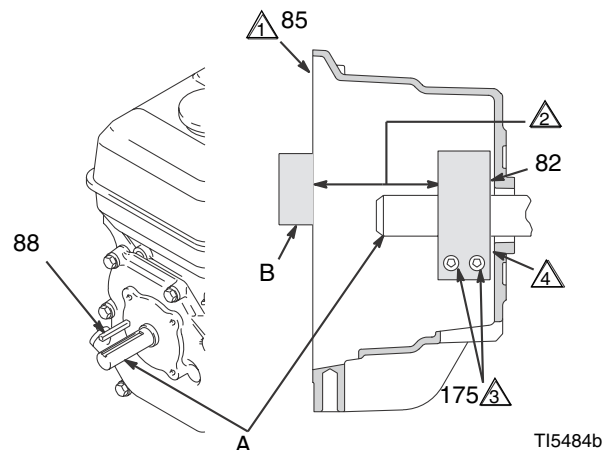


FIG. 9

# Clutch Housing

## Removal

1. FIG. 10. Remove four cap screws (186) and lock washers (188) which hold clutch housing (85) to engine.
2. Remove screw (177) from under mounting plate (96).
3. Pull off clutch housing (85).

## Installation

1. FIG. 10. Push on clutch housing (85).
2. Install four cap screws (186) and lock washers (188) and secure clutch housing (85) to engine. Torque to 180 in-lb (20.3 N•m).
3. Install capscrew (177) from beneath mounting plate (96). Torque to 20 ft-lb (27.1 N•m).

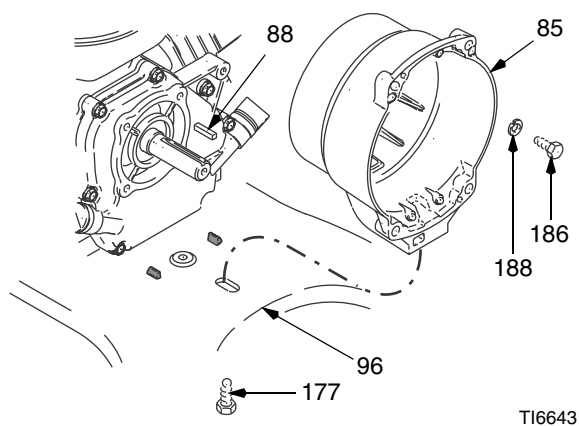



FIG. 10

# Engine

## Removal

1. Remove **Pinion Assembly/Clutch Armature/Clamp** and **Clutch Housing**. See pages 13 - 15.
2. FIG. 12. Remove junction box (226).
3. FIG. 11. Disconnect all necessary wiring.
4. FIG. 12. Remove screw (177). Remove two screws (117), locknuts (118), and ground conductor (223, 260) from base of engine (185).
5. Lift engine carefully and place on work bench.

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

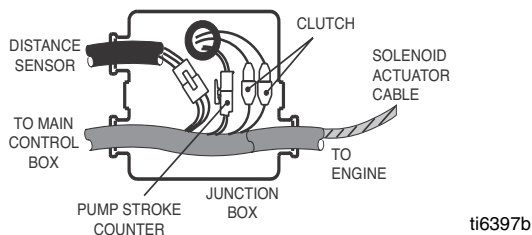
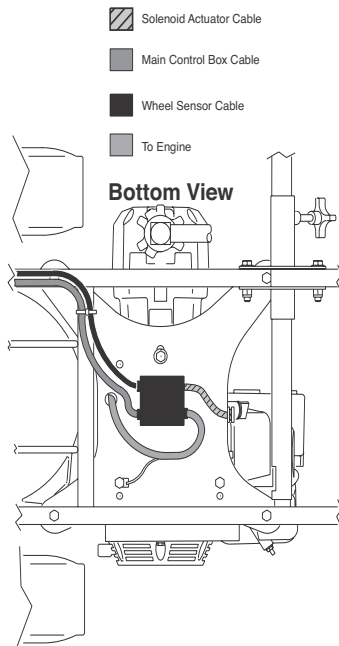


FIG. 11

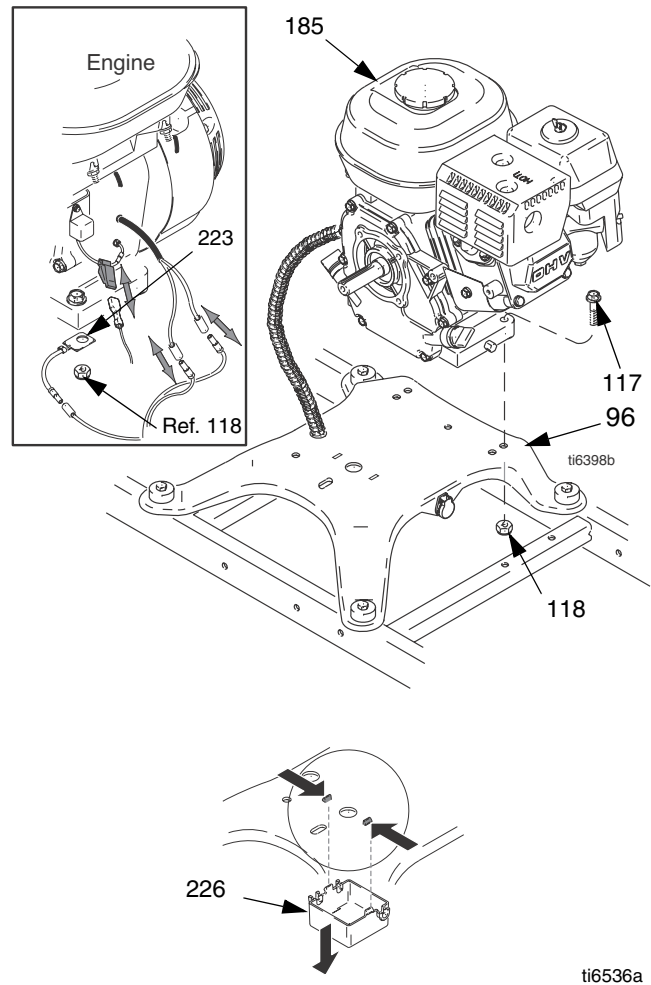


FIG. 12

## Installation

1. FIG. 12. Lift engine carefully and place on engine mount plate (96).
2. Install two screws (117) and ground conductor (223, 260) in base of engine and secure with locknuts (118). Torque to 20 ft-lb (27.1 N•m).
3. FIG. 11. Connect all necessary wiring.
4. Install **Pinion Assembly/Clutch Armature/Clamp** and **Clutch Housing**. See pages 13 - 15.

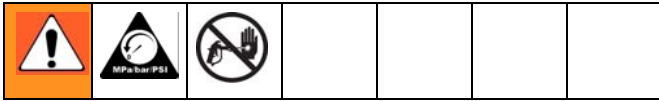


# Pressure Control

## On/Off Switch

Note: A complete wiring diagram is on page 34.

### Removal



1. Relieve pressure, page 6.
2. FIG. 13. Remove two screws (125) and cover (31).
3. Remove three screws (125) from control plate (15a). Slide control plate out to access ON/OFF switch (15g).

4. Press locking tab on ON/OFF switch connector (B) and disconnect from control board.
5. Press in on two retaining tabs on each side of ON/OFF switch and remove switch.

### Installation

1. Install ON/OFF switch (15g) so tabs of switch snap into place on inside of pressure control housing.
2. Connect ON/OFF switch connector (B) to J3 on control board.
3. Slide control plate (15a) back to original position and secure with three screws (125).
4. Install cover (31) with two screws (125).

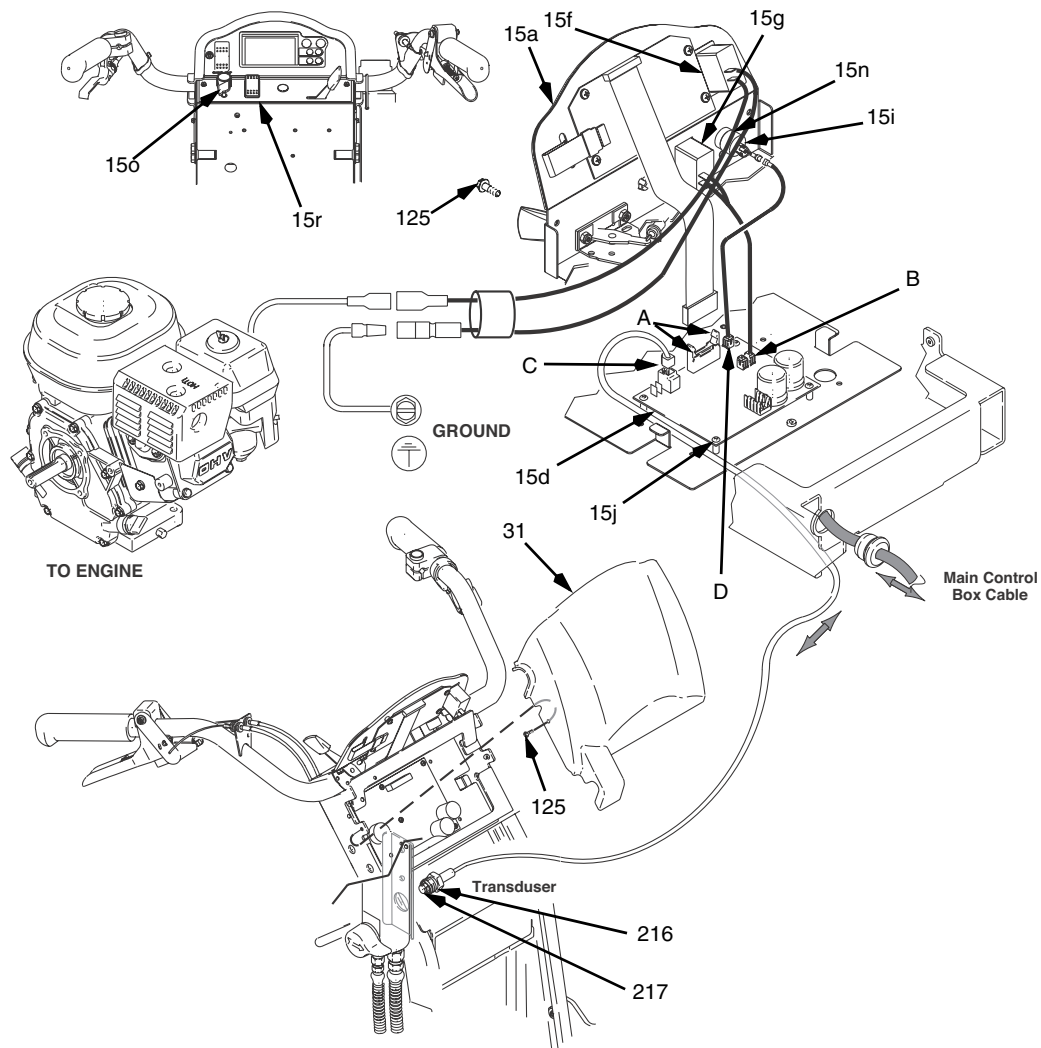
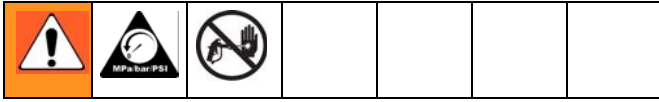


FIG. 13

T16408b

## Control Board

### Removal



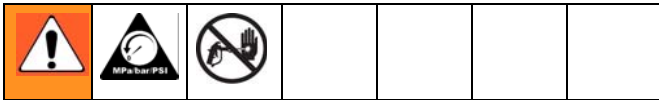
1. Relieve pressure, page 6.
2. FIG. 13. Remove two screws (125) and control cover (31). Pull display connector wings open on control board and pull display connector out.
3. FIG. 13 and FIG. 21. Note on a paper lead connections to the control board. Disconnect leads from control board (15d).
4. FIG. 13. Remove five screws (15j) from control board (15d).

### Installation

1. FIG. 13. Install control board (15d) with five screws (15j).
2. FIG. 13 and FIG. 21. Refer to note on lead connections to the control board. Connect leads to control board (15d).
3. FIG. 13. Push display connector into control board close display connector wings on control board. Install control cover (31) with two screws (125).

## Pressure Control Transducer

### Removal



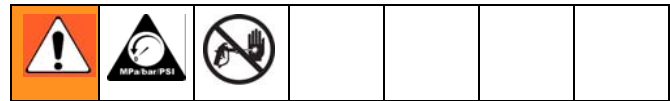
1. Relieve pressure, page 6.
2. FIG. 13. Remove two screws (125) and control cover (31).
3. Disconnect transducer lead (C) from control board (15d).
4. Remove pressure control transducer (216) and o-ring (217) from filter manifold (40).

### Installation

1. FIG. 13. Install o-ring (217) and pressure control transducer (216) in filter manifold (40). Torque to 35-45 ft-lb.
2. Connect transducer lead (C) to control board (15d).
3. Install control cover (31) with two screws (125).

## Pressure Adjust Potentiometer

### Removal



1. Relieve pressure, page 6.
2. FIG. 13. Remove two screws (125) and control cover (31).
3. Disconnect lead (D) from control board (15d).
4. Loosen set screws on potentiometer knob (15o) and remove knob, shaft nut, lockwasher and pressure adjust potentiometer (15i).
5. Remove seal (15n) from potentiometer (15i).

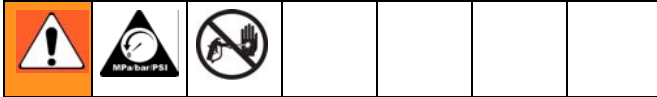
### Installation

1. Install seal (15n) on potentiometer (15i).
2. FIG. 13. Install pressure adjust potentiometer (15i), shaft nut, lockwasher and potentiometer knob (15o).
  - a. Turn potentiometer shaft (15i) clockwise to internal stop. Assemble potentiometer knob (15o) to strike pin on plate (15r).
  - b. After adjustment of step a, tighten both set screws in knob 1/4 to 3/8 turn after contact with shaft.
3. Connect lead (D) to control board (15d).
4. Install control cover (31) with two screws (125).

## Engine Stop Switch

Note: A complete wiring diagram is on page 34.

### Removal



1. Relieve pressure, page 6.
2. FIG. 13. Remove two screws (125) and cover (31).
3. Remove two spade connectors from ENGINE STOP switch (15f).

4. Press in on two retaining tabs on each side of ENGINE STOP switch and remove switch.

### Installation

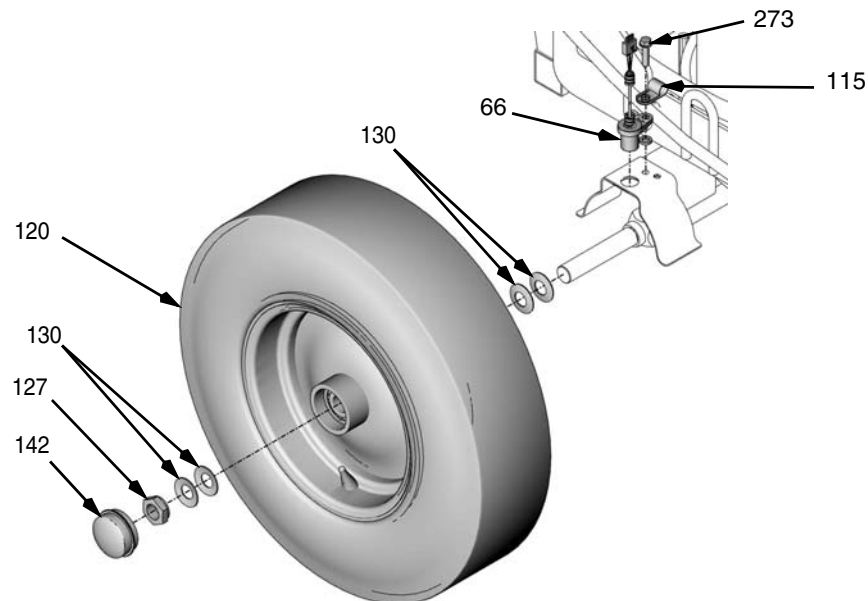
1. Install ENGINE STOP switch (15f) so tabs of switch snap into place on inside of pressure control housing.
2. Install cover (31) with two screws (125).

## Trigger Sensor Adjustment

Refer to **Troubleshooting** for trigger sensor adjustment, and see operation manual.

## Distance Sensor Replacement

1. Remove wheel (120) from LineLazer.
2. Remove screw (273), wire clamp (115) and distance sensor (66).
3. Install new distance sensor (66) with wire clamp (115) and screw (273).
4. Install wheel (120) on LineLazer.

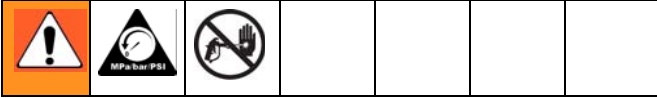


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FIG. 14

# Control Board Diagnostics

## Digital Display Messages



Relieve pressure before repair; page 6. No display does not mean that sprayer is not pressurized.

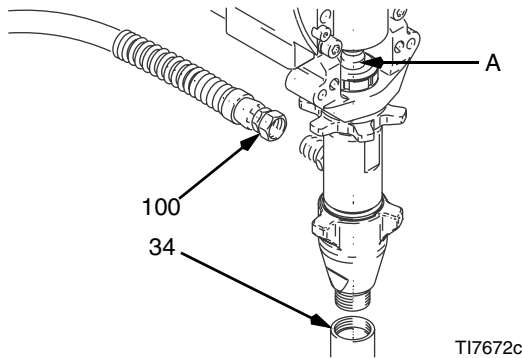
Display	Sprayer Operation	Indication	Action
<b>No Display</b>	Sprayer may be pressurized.	Loss of power or display not connected.	Check power source. Relieve pressure before repair or disassembly. Verify display is connected.
 ti6314a	Sprayer may be pressurized.	Pressure less than 200 psi (14 bar, 1.4 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.	Remove any filter clogs or flow obstructions.
 ti6317a	Sprayer stops. Engine is running.	Pressure transducer faulty, bad connection or broken wire.	Check transducer connections and wire. Replace transducer or control board, if necessary.
 ti6318a	Sprayer stops. Engine is running.	High clutch current.	<ol style="list-style-type: none"> <li>1. Check clutch connections. Clean contacts.</li> <li>2. Measure 1.2 +0.2 Ohms (LineLazer IV 3900); 1.7 +0.2 Ohms (LineLazer IV 5900) across clutch field at 70°F.</li> <li>3. Replace clutch field assembly.</li> </ol>

### After a fault, follow these steps to restart sprayer:

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

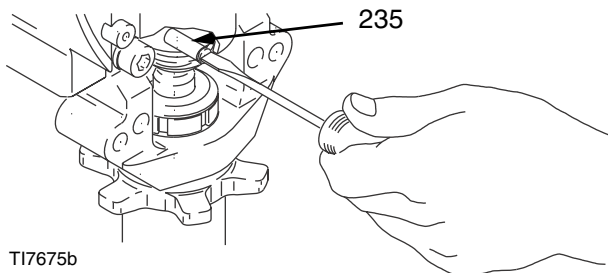
# Displacement Pump Removal

1. Flush pump.
2. Relieve pressure, page 6.
3. FIG. 15. Cycle pump piston rod (A) to lowest position.
4. FIG. 15. Remove suction tube (34) and hose (100).



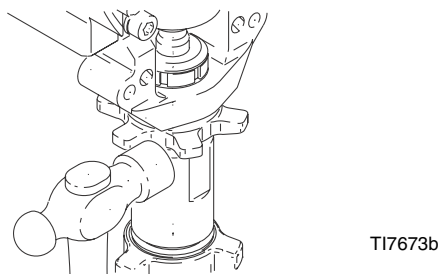
**FIG. 15**

5. FIG. 16. Use screwdriver: push retaining spring up and push out pin (235).



**FIG. 16**

6. FIG. 17. Loosen locknut by hitting firmly with a 20 oz (maximum) hammer. Unscrew pump.



**FIG. 17**

7. See manual 310643 for pump repair instructions.

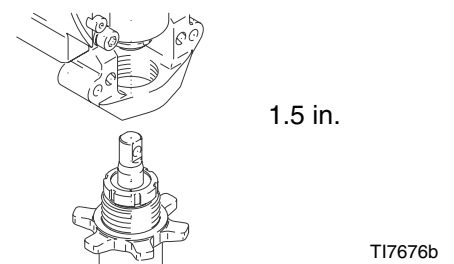
# Installation

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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.

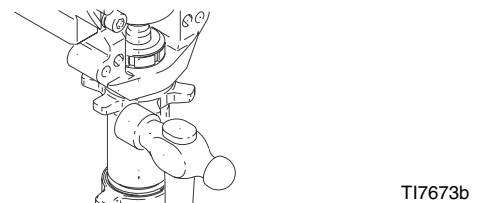
<b>CAUTION</b>
If the pump locknut loosens during operation, the threads of the bearing housing will be damaged. Make sure locknut is properly tightened.

1. FIG. 18. Pull piston rod out 1.5 in. Screw in pump until holes in bearing cross link and piston rod align.



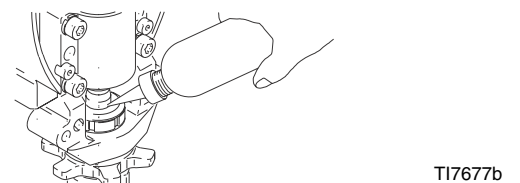
**FIG. 18**

2. FIG. 16. Push pin (235) into hole. Push retaining spring into groove around connecting rod.
3. FIG. 19. Screw jam nut onto pump until nut stops. Screw pump into bearing housing until stopped by jam nut. Back off pump and jam nut to align pump outlet to back. Hand tighten jam nut; then tap 1/8 - 1/4 turn with a 20 oz hammer to approximately 75 +/- 5 ft-lb (102 N•m).



**FIG. 19**

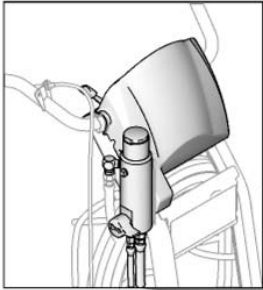
4. FIG. 20. Fill packing nut with Graco TSL until fluid flows onto the top of seal.



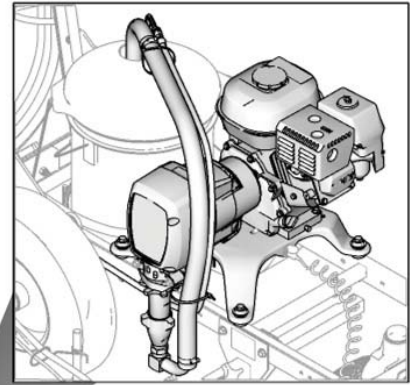
**FIG. 20**

# Parts

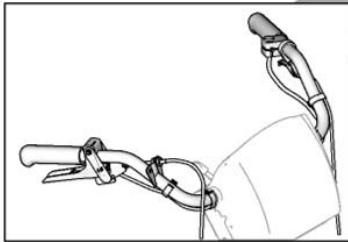
## LineLazer IV



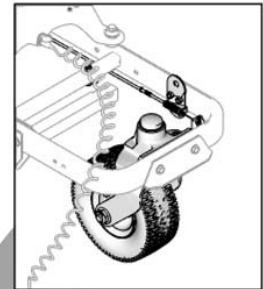
Page 32



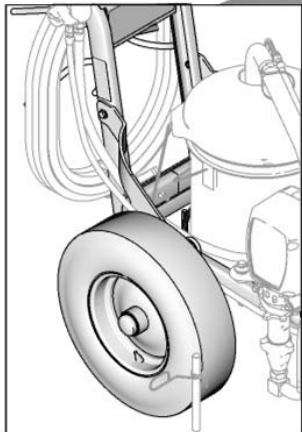
Page 26



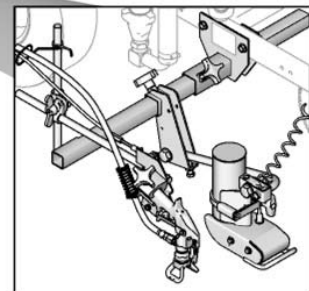
Page 30



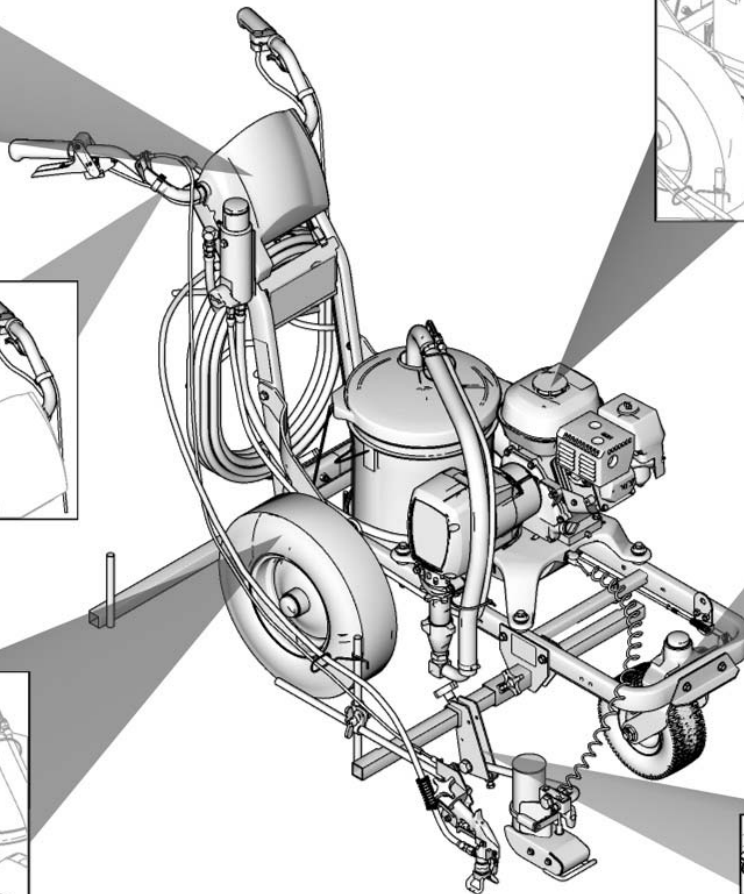
Page 28



Page 24



Page 31



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# Parts - Drive and Pinion Housing Assemblies

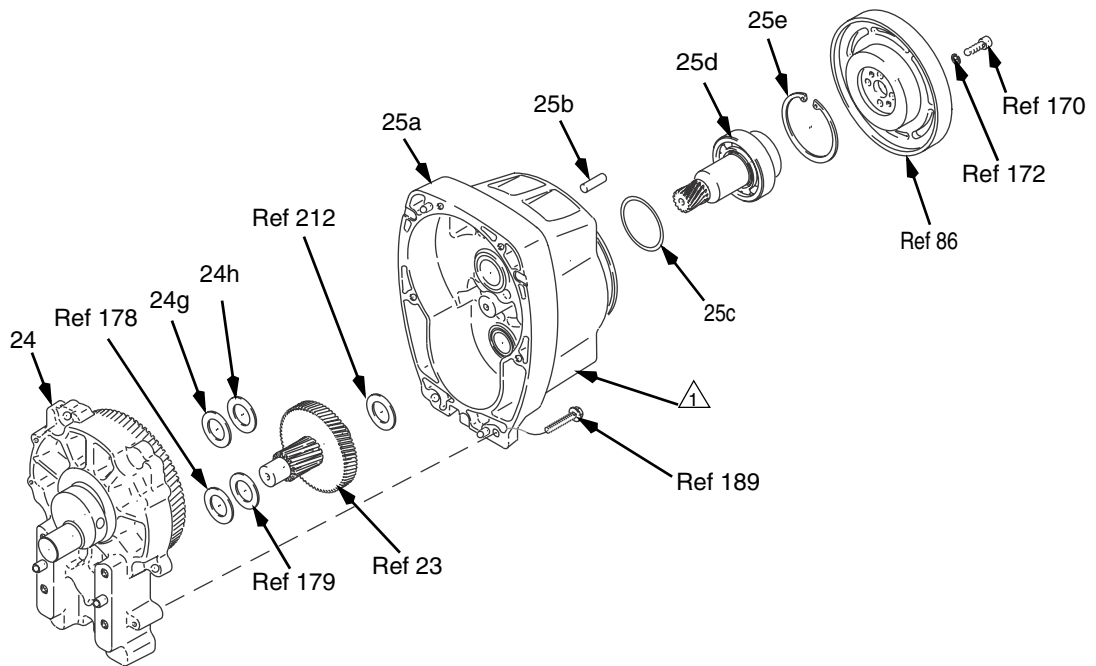
## Ref No. 24 and 25

**Ref No. 24:** Drive Housing Assembly 287467 for LineLazer IV 3900; Drive Housing Assembly 287469 for LineLazer IV 5900

**Ref No. 25:** Pinion Housing Assembly 287463 for LineLazer IV 3900; Pinion Housing Assembly 287465 for LineLazer IV 5900

Ref	Part	Description	Qty
24	287467	HOUSING, drive (3900)	1
	287469	HOUSING, drive (5900)	1
24g		WASHER	
	107089	LineLazer IV 3900	1
	194173	LineLazer IV 5900	1
24h		WASHER	
	116191	LineLazer IV 3900	1
	116192	LineLazer IV 5900	1
25	287463	HOUSING, pinion (3900)	1
	287465	HOUSING, pinion (5900)	1
25a		KIT, repair, coil	
	287474	LineLazer IV 3900	1
	287476	LineLazer IV 5900	1
25b	105489	PIN	2
25c		O-RING	
	165295	LineLazer IV 3900	1
	114683	LineLazer IV 5900	1
25d*		PINION SHAFT	
	241110	LineLazer IV 3900	1
	241114	LineLazer IV 5900	1
25e*		RETAINING RING, large	
	113094	LineLazer IV 3900	1
	112770	LineLazer IV 5900	1

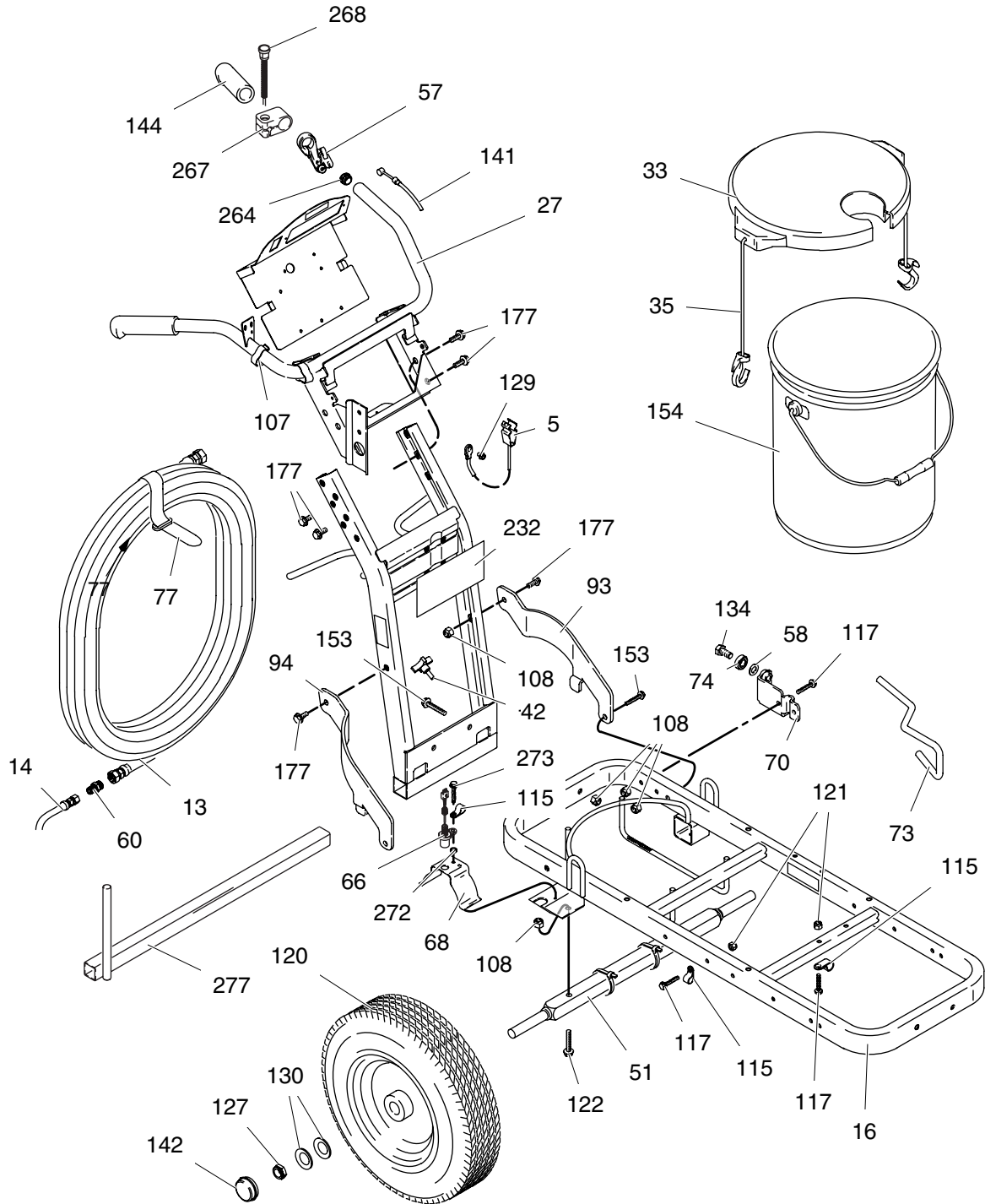
\*Must be ordered separately.



△ Pinion housing assembly (25) includes clutch field and connector.

T16407c

# LineLazer IV Auto-Layout System



T114597A



## LineLazer IV Auto-Layout System

Ref	Part	Description	Qty	Ref	Part	Description	Qty
5	237686	WIRE, ground assembly w/ clamp	1	117	110837	SCREW, flange, hex	10
13	245225	HOSE, cpld, 3/8 in. x 50	1	120	255162	WHEEL, pneumatic	2
14	245798	HOSE, cpld, 1/4 in. x 7	1	121	111040	NUT, lock, insert, nylock, 5/16	6
16	287623	FRAME, linestriper (painted)	1	122	111194	SCREW, cap flang hd	2
27	287417	HANDLE	1	127	112405	NUT, lock	4
28	287622	SUPPORT, handle (painted)	1	129	112798	SCREW, thread forming, hex hd	1
33	287590	COVER, pail , includes 35	1	130	119563	WASHER, spring	4
35	119771	STRAP, cover	1	134	113961	SCREW, cap, hex hd	1
42	108471	KNOB	1	141	241445	CABLE, swivel wheel	1
51	193405	AXLE	1	142	114648	CAP, dust	3
57	194310	LEVER, actuator	1	144	114659	GRIP, handle	2
58	195134	SPACER, ball, guide	1	153	114982	SCREW, cap, flng hd	8
60	196176	ADAPTER, nipple	2	154	115077	PAIL, plastic	1
66	15K357	SENSOR, distance	1	158	114528	SCREW, mach, phillips, pnhd	2
68	15J088	SHIELD, distance sensor	1	177	112395	SCREW, cap, flng hd	5
70	198891	BRACKET, mounting	1	181	116618	MAGNET	1
73	198930	ROD, brake	1	182	119562	SWITCH, reed w/connector	1
74	198931	BEARING	1	220	15F638	LABEL, GMAX warning fire & skin	2
77	114271	STRAP, retaining	1	232	15K633	LABEL, LineLazer IV front	1
93	15F577	BRACE, left (painted)	1	264	120151	PLUG, tube	1
94	15F576	BRACE, right (painted)	1	267	15K162	BLOCK	1
107	178342	CLIP, spring	4	268	15K283	SWITCH, push button	1
108	101566	NUT, lock	16	272	15K452	SPACER, round, .500 O.D.	1
109	102478	STRAP, wiring tie (not shown)	4	273	260212	SCREW, hex washer hd, thd form	1
115	108868	CLAMP, wire	3	277	15M133	CALIBRATION BAR	1



## LineLazer IV Auto-Layout System

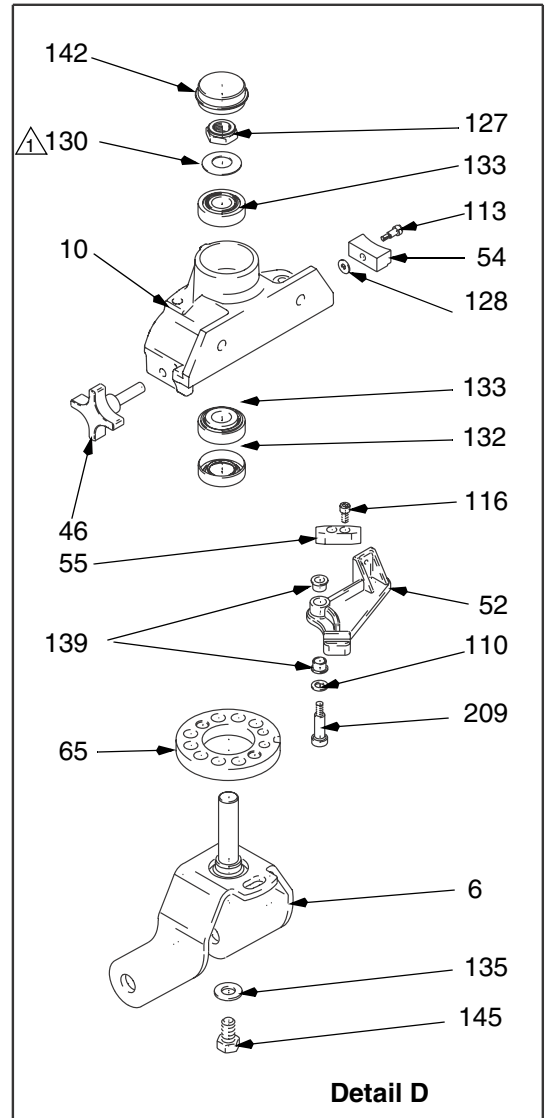
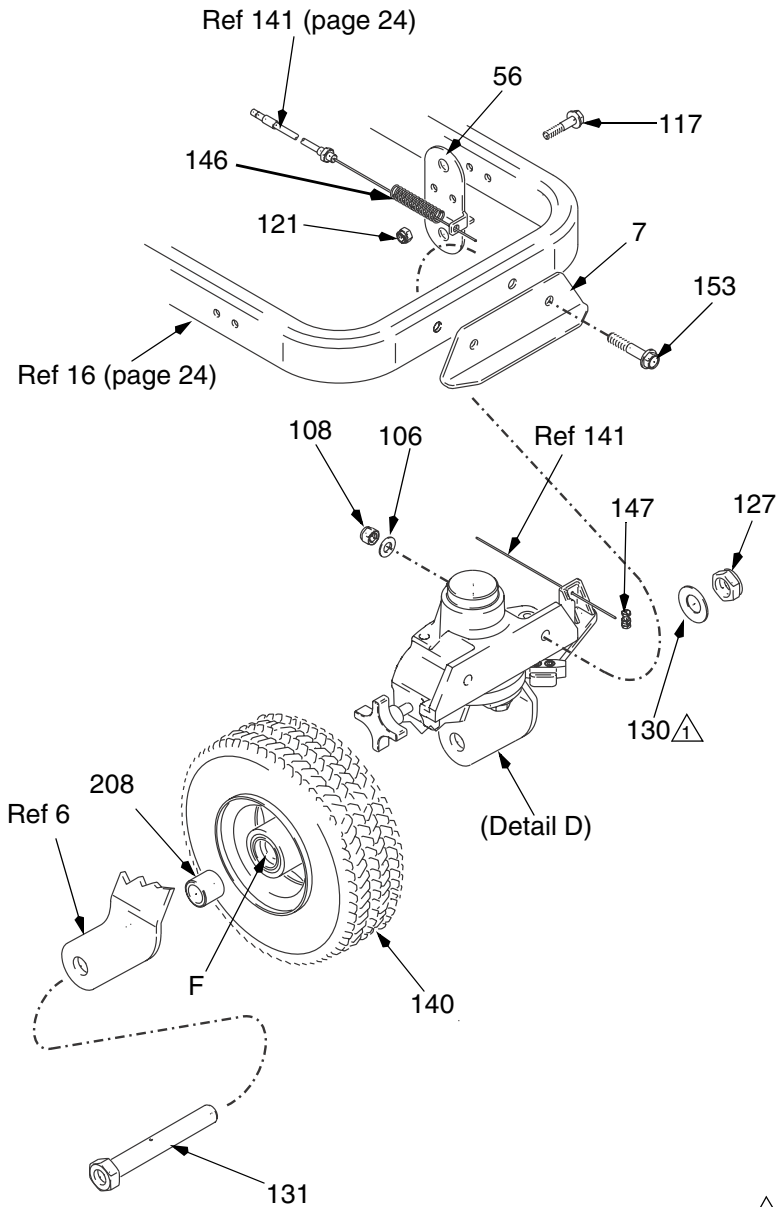
Ref	Part	Description	Qty	Ref	Part	Description	Qty
21	277069	PUMP, displacement, (3900)	1	186	108842	SCREW, cap, hex hd	4
	277070	PUMP, displacement, (5900)	1	187	118444	SCREW, mach, slot hex wash hd	4
22	287714	HOUSING, bearing (3900)	1	188	100214	WASHER,(3900)	10
	287715	HOUSING, bearing (5900)	1		106115	WASHER, (5900)	10
23	287653	GEAR, combination, (3900)	1	189	119426	SCREW, mach, hex washer hd, (3900)	12
	287460	GEAR, combination, (5900)	1		15C753	SCREW, mach, hex washer hd, (5900)	6
26	287719	ROD, connecting (3900), includes 236a	1	190	15F947	SHIELD, magnetic	1
	287720	ROD, connecting (5900), includes 236b	1	212	15F250	WASHER, thrust, (3900)	1
34	245730	HOSE, drain, includes 34a thru 34n	1		114672	WASHER, thrust, (5900)	1
34a	15F149	TUBE, suction	1	223	119579	CONDUCTOR, ground	1
34b	185381	HOSE	1	226	15F369	BOX	1
34c	110194	SWIVEL, 180°	1	233	15K636	LABEL, linelazer iv front, (3900)	1
34d	101818	CLAMP, hose	2		15K637	LABEL, linelazer iv front, (5900)	1
34e	15F513	GASKET, pail	1	234▲	194126	LABEL, warning	1
34f	181072	STRAINER	1	235	15F855	PIN, pump, (3900)	1
34g	245731	TUBE, drain (includes 34h)	1		15F856	PIN, pump, (5900)	1
34h		DEFLECTOR, threaded	1	236	119676	SPRING, retaining, (3900)	1
34j	245798	HOSE, coupled, 1/4 in. x 7 ft	1		119778	SPRING, retaining, (5900)	1
34k	114958	STRAP, tie	2	247	290228	LABEL, caution	1
34m	196180	BUSHING	1	248	114629	GROMMET, transducer	1
34n▲	195119	LABEL, warning (not shown)	1	249	119569	BUSHING, strain relief	1
59	119695	DAMPENER, engine mount	4	258	15C762	SHIELD, pump rod	1
60	196176	ADAPTER, nipple	1	259	110996	NUT, hex, flange head	2
81†		HUB, armature	1	260	240997	CONDUCTOR, ground (5900)	1
82	193680	COLLAR, shaft	1	261	120761	COVER, jack	1
83	287521	COVER, front, (3900)	1				
	287511	COVER, front, (5900)	1				
84	192723	NUT, retaining, (3900)	1				
84	193031	NUT, retaining, (5900)	1				
85	15E535	HOUSING, clutch, machine, (3900)	1				
85	15E277	HOUSING, clutch, mach (5900)	1				
86†		ROTOR, clutch, 4, (3900)	1				
		ROTOR, clutch, 5, (5900)	1				
87†		ARMATURE, clutch, 4 in., (3900)	1				
		ARMATURE, clutch, 5 in., (5900)	1				
88	183401	KEY, parallel	1				
96	15F583	PLATE, engine mount	1				
100	245797	HOSE, cpld, 3/8 in.X 3	1				
108	101566	NUT, lock	16				
114	108851	WASHER, plain	4				
117	110837	SCREW, flange, hex	10				
118	110838	NUT, lock	2				
158	114528	SCREW, mach, phillips, pnhd	2				
170†	101682	SCREW, cap, sch	4				
172†	105510	WASHER, lock, spring (hi-collar)	10				
174	113743	SCREW, cap, hex hd	4				
175	108803	SCREW, hex, socket head	6				
177	112395	SCREW, cap, flng hd	5				
178	114672	WASHER, thrust	1				
179	114699	WASHER, thrust	2				
181	116618	MAGNET	1				
182	119562	SWITCH, reed w/connector	1				
183	113467	SCREW, cap, socket hd, (3900)	4				
	114666	SCREW, cap, socket hd, (5900)	4				
185	108879	ENGINE, gasoline, 4.0 HP, (3900)	1				
	114530	ENGINE, gasoline, 5.5 HP, (5900)	1				

▲ Replacement warning labels may be ordered free of charge

† Included in Clutch Repair Kit 241109 (3900) and 241113 (5900)

# LineLazer IV Swivel Wheel Assembly 240719

Models 253920 and 253921



▲ Install washers (130) concave surface to inside.

T16404b

**LineLazer IV Swivel Wheel Assembly 240719**

Ref	Part	Description	Qty
6	240942	SHAFT, fork	1
7	240991	BRACKET, caster, front	1
10*	15G952	BRACKET	1
46	181818	KNOB	1
52	193528	ARM, detent	1
54	193661	JAW	1
55	193662	STOP, wedge	1
56	15F910	BRACKET, cable	1
65	198606	DISK, adjuster	1
106	100731	WASHER	2
108	101566	NUT, lock	16
110	15J603	WASHER	1
113	108483	SCREW, shoulder, sch	1
116	110754	SCREW, cap	2
117	110837	SCREW, flange, hex	10
121	111040	NUT, lock, insert, nylock, 5/16	6
127	112405	NUT, lock	4
128	112776	WASHER	1
130	119563	SPRING, belleville	2
131	113471	SCREW, cap, hex hd	1
132*	113484	SEAL	1
133*	113485	BEARING	2
135	113962	WASHER	1
139	114548	BEARING, bronze	2
140	114549	WHEEL, pneumatic	1
141	241445	CABLE	1
142	114648	CAP, dust	3
145	114681	SCREW	1
146	114682	SPRING, compression	1
147	114802	STOP, wire	1
153	114982	SCREW, cap, flng hd	8
208	193658	SPACER, seal	2
209*	120476	BOLT	1

\* Included In Bracket Repair Kit 240940



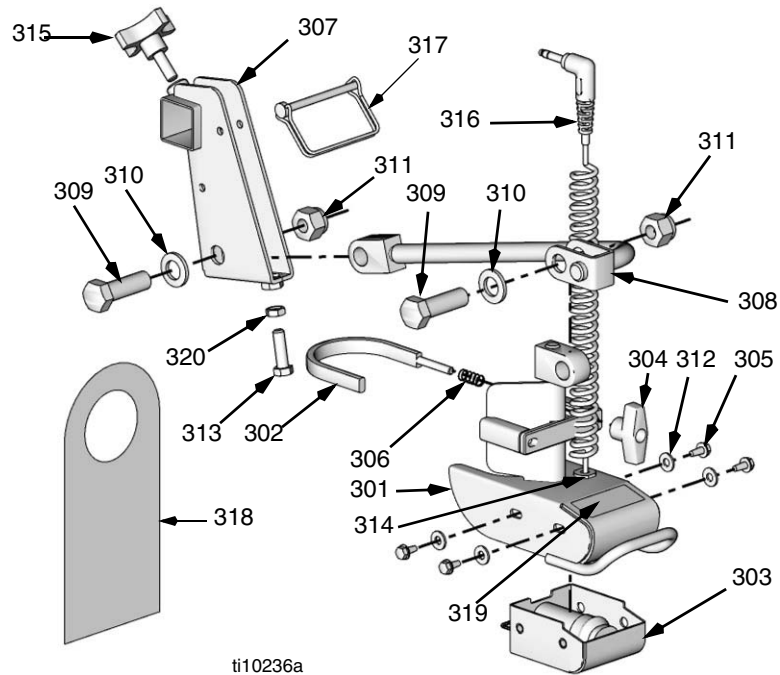
## LineLazer IV Auto-Layout System

Ref	Part	Description	Qty	Ref	Part	Description	Qty
1	224052	BRACKET, support gun	1	105	119648	SCREW, mch, trs hd, cross recess	1
4	248157	GUN, flex, basic	1	108	101566	NUT, lock	16
8	287570	HOLDER ASSEMBLY, gun	1	112	111145	KNOB, pronged	1
8a	287569	HOLDER, gun	1	119	111017	BEARING, flange	2
8b	102040	NUT, lock	4	126*	112381	SCREW, mach, pan head	1
8c	15F214	LEVER, actuator	1	136	287566	KIT, clamp, (includes 136a)	1
8d	15F209	STUD, pull, trigger	1	136a	114028	NUT, winged	1
8e	15F210	STUD, pivot	1	153	114982	SCREW, cap, flng hd	8
8f	15F211	STUD, cable	1	160	116941	SCREW, shoulder, socket head	1
17*	245733	KIT, trigger handle repair (includes 17. 89, 126, 164, 165)	1	161	287696	CABLE, gun, includes 227	1
				162	116969	NUT, lock	1
44	15F212	ARM, holder, gun	1	163	116973	SCREW, #10 taptite phil	1
47	15F213	BRACKET, cable	1	164*	117268	BRACKET, interrupter	1
49	188135	GUIDE, cable	1	165	117269	SPRING	1
71	198895	PLATE, lever, pivot	2	166	287699	SENSOR, trigger	1
72	198896	BLOCK, mounting (mach)	1	219▲	15F637	LABEL, warning skin inject	1
89*	15A644	LABEL, trigger	1	227	15F624	NUT, cable, gun (knurled)	2
95	15K198	BRACKET, gun arm	1				
104	119647	SCREW, cap, socket, filhd	2				

\* Included in Trigger Repair Kit 245733

▲ Replacement warning labels may be ordered free of charge

## Paint Can Holder Assembly 255346



ti10236a

Ref	Part	Description	Qty	Ref	Part	Description	Qty
301	15K757	HOLDER, paint can, base (painted)	1	312	110755	WASHER, plain	4
302	15K570	CLAMP, paint can	1	313	100004	SCREW, cap, hex hd	1
303	255347	CARTRIDGE, solenoid	1	314	120879	BUSHING, strain relief	1
304	120865	KNOB, T-handle	1	315	111145	KNOB, pronged	1
305	101501	SCREW, mach., slot hex wash hd	4	316	15K103	CORD, power, solenoid	1
306	117155	SPRING, compression	1	317	113696	PIN, ball coupler	1
307	15K567	CLAMP	1	318	15M216	TAG, chalk can	1
308	15K568	ARM, pivot	1	319	15M220	LABEL, Auto Layout System	1
309	100428	SCREW, cap hex hd	2	320	260188	NUT, jam	1
310	120856	WASHER, Belleville	2				
311	101712	NUT, lock	2				





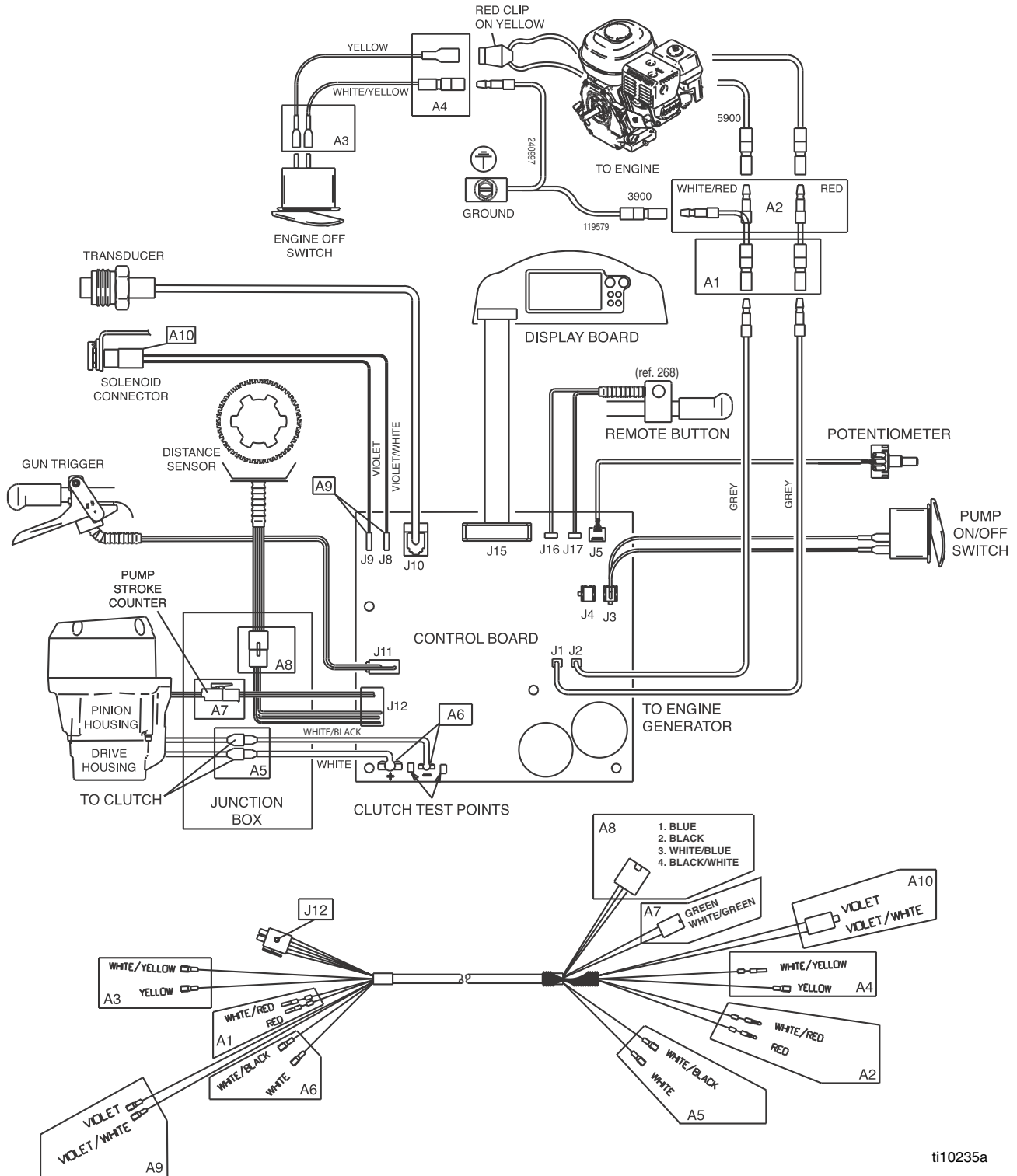
## LineLazer IV Auto-Layout System

Ref	Part	Description	Qty
2*	245103	VALVE, drain	1
2a	193709	SEAT, valve	1
2b	193710	SEAT, valve	1
2c	116424	NUT, cap	1
2d	114708	SPRING	1
11*	244067	FILTER, fluid	1
13	245225	HOSE, 3/8 in. x 50 ft	1
15	289264	KIT, switch, panel, includes 15a, 15r, 15s, 15w	1
15a		PLATE, control	1
15b	289265	BOARD, display, includes 15c	1
15c	15M509	GASKET, board	1
15d	289135	CONTROL, board, includes 15k	1
15f	114954	SWITCH, rocker	1
15g	116752	SWITCH, rocker	1
15k	111839	SCREW, mach, pnh, sems	6
15m	120743	SCREW, mach, pan head, sems	4
15n	109466	NUT, lock, hex hd	2
15o	116167	KNOB,potentiometer	1
15r		SWITCH, membrane	1
15s		LABEL, control, bottom	1
15t	287692	CONTROL, throttle	1
15u	119736	CLAMP, cable	1
15w	15F777	GASKET, control	1
15x	15F776	GASKET, throttle	1
29	196179	FITTING, elbow, street	2
31	15F589	COVER, control	1
37*	15C766	TUBE, diffuser	1
38*	15G563	HANDLE	1
40*	15H561	MANIFOLD, filter, 3/8 npt	1
41*	287285	KIT, repair, filter cap, includes 37, 167	1
62	196178	ADAPTER, nipple	2
64	196181	FITTING, nipple	1
76	104813	PLUG, pipe	1
97	15K102	HARNESS, wiring	1
103	116719	SCREW, 8/32, hex washer hd	1
123	15F814	GASKET,handle	2
124*	111457	O-RING	1
125	117501	SCREW, set, sch	5
167*	117285	O-RING	1
190	115999	RING, retaining	1
191	176754	GLAND, packing, male	1
225	15A464	LABEL, control	1
259*	287172	TRANSDUCER, pressure control includes 124	1
262	111801	SCREW, cap, hex	2
268	198650	SPACER,shaft	1
269	256219	POTENTIOMETER	1
271	111348	BUSHING, relief, strain	1

▲ Replacement warning labels may be ordered free of charge

\* Included in Filter Repair Kit 288100

# Auto-Layout System Wiring Diagram



ti10235a

FIG. 21

# Technical Data

## Honda GX120 Engine (3900)

Power Rating @ 3600 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 (5900)

Power Rating @ 3600 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 (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)

### \*Vibration Level

LineLazer IV 3900

Left hand . . . . . 1.81 m/sec<sup>2</sup>

Right hand . . . . . 1.45 m/sec<sup>2</sup>

LineLazer IV 5900

Left hand . . . . . 2.05 m/sec<sup>2</sup>

Right hand . . . . . 1.70 m/sec<sup>2</sup>

\* Vibration measured per ISO 5349 based on 8 hour daily exposure

### Maximum delivery

LineLazer IV 3900 . . . . . 1.15 gpm (4.4 liter/min)

LineLazer IV 5900 . . . . . 1.5 gpm (5.7 liter/min)

### Maximum tip size

LineLazer IV 3900 . . . . . 1 gun with 0.034 in. tip

2 guns with 0.024 in. tip

LineLazer IV 5900 . . . . . 1 gun with 0.041 in. tip

2 guns with 0.028 in. tip

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

Outlet paint strainer . . . . . 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 . . . . . nickel-plated carbon steel, PTFE, Nylon, polyurethane, UHMW polyethylene, fluoroelastomer, acetal, leather, tungsten carbide, stainless steel, chrome plating

# Dimensions

## LineLazer IV 3900 Auto-Layout System

### Model 253920, 255151 Striper

Weight (dry, without packaging) . . . . . 212 lb (96 kg)  
Height. . . . . 40 in. (101.6 cm)  
Length . . . . . 65 in. (165.1 cm)  
Width . . . . . 32 in. (81.3 cm)

### Model 253953, 255152 Striper with 2nd Gun Kit

Weight (dry, without packaging) . . . . . 222 lb (101 kg)  
Height. . . . . 40 in. (101.6 cm)  
Length . . . . . 65 in. (165.1 cm)  
Width . . . . . 32 in. (81.3 cm)

## LineLazer IV 5900 Auto-Layout System

### Model 253921, 255153 Striper

Weight (dry, without packaging) . . . . . 232 lb (105 kg)  
Height. . . . . 40 in. (101.6 cm)  
Length . . . . . 65 in. (165.1 cm)  
Width . . . . . 32 in. (81.3 cm)

### Model 253954, 255154 Striper with 2nd Gun Kit

Weight (dry, without packaging) . . . . . 242 lb (110 kg)  
Height. . . . . 40 in. (101.6 cm)  
Length . . . . . 65 in. (165.1 cm)  
Width . . . . . 32 in. (81.3 cm)



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Original instructions. This manual contains English. MM 312195

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Revised April 2013