

LineLazer™ V 3900, 5900 Airless Line Stripers

Standard Series and High Production (HP) Auto Series

3A3388J
EN

For the application of line striping materials.

For professional use only.

For outdoor use only.

Not for use in explosive atmospheres or hazardous locations.

Maximum Operating Pressure: 3300 psi (22.8 MPa, 228 bar)



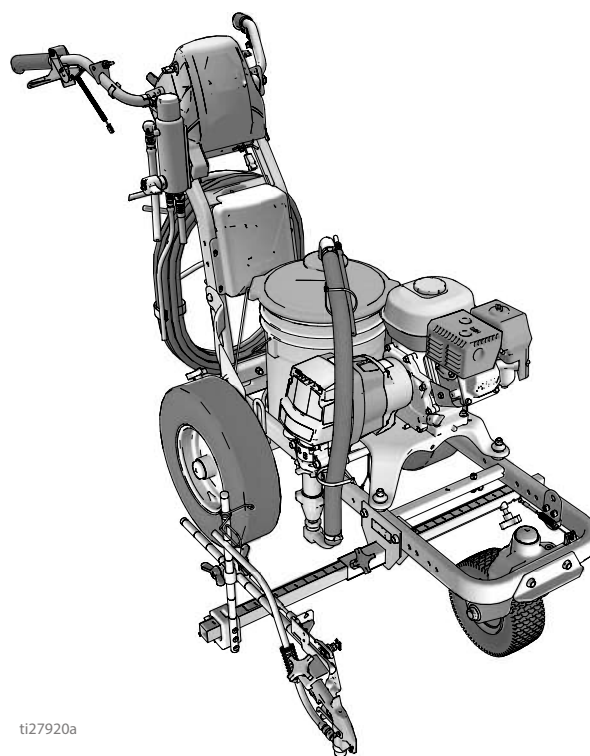
Important Safety Instructions

Read all warnings and instructions in this manual and in related manuals.

Be familiar with the controls and the proper usage of the equipment.

Save these instructions.

Related Manuals:	
3A3389	Parts
311254	Gun
309277	Pump
3A3428	Auto-Layout Applications Methods



ti27920a

*Use only genuine Graco replacement parts.
The use of non-Graco replacement parts may void warranty.*

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Models

LineLazer V 3900						
Model:	Series	Standard 1 Manual Gun	Standard 2 Manual Guns	HP Auto 1 Auto Gun	HP Auto 1 Auto Gun 1 Manual Gun	HP Auto 2 Auto Guns
17H449	B	CE				
25P330	A	CE				
17H450	B		CE			
17K577	B			CE		
25P332	A			CE		
17H451	B			with laser		
17K638	B				CE	
17H452	B				with laser	
17K579	B					CE
25P333	A					CE
17H453	B					with laser

* All auto guns can be actuated manually.

Models

LineLazer V 5900						
Model:	Series:	Standard 1 Manual Gun	Standard 2 Manual Guns	HP Auto 1 Auto Gun	HP Auto 1 Auto Gun 1 Manual Gun	HP Auto 2 Auto Guns
17H454	B	CE				
17H455	B		CE			
17K580	B			CE		
17H456	B			with laser		
17K636	B				CE	
17H457	B				with laser	
17K581	B					CE
17H458	B					with laser


* All auto guns can be actuated manually.

Important Grounding Information

The following information is intended to help you understand when to use the grounding wire and clamp provided with your striper. It is required when flushing or cleaning with flammable materials.

Please read the information on the material container label to determine if it is flammable. Ask for a Safety Data Sheet (SDS) from your supplier. The container label and SDS will explain the contents of the material and the specific precautions related to it.

Flushing and clean-up materials generally fit into one of the following **3 basic types**:

Grounding Wire and Clamp Required?	Type of Flushing or Cleaning Material
Yes 	FLAMMABLE: This type of material contains flammable solvents such as xylene, toluene, naphtha, MEK, lacquer thinner, acetone, denatured alcohol, and turpentine. The container label should indicate that this material is FLAMMABLE. Use flammable materials outdoors or in a well-ventilated area with a flow of fresh air. Follow Grounding Instructions , page 15, when using this type of material.
No	OIL-BASED: The container label should indicate that the material is COMBUSTIBLE and can be cleaned up with mineral spirits or non-flammable paint thinner.
No	WATER: The container label of the material being sprayed should indicate that it can be cleaned with soap and water.

NOTE: When using the spray gun by hand, static build up and static shocks can occur. If you cannot position the striper on a grounded surface and connect the grounding wire and clamp to a metal post, try the following to help reduce the risk of static build up:

- Stand on a true grounded surface when spraying, such as grass
- Try wearing a different type of shoes

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 symbols refer to procedure-specific risks. When these symbols appear in the body of this manual or on warning labels, refer back to these Warnings. Product-specific hazard symbols and warnings not covered in this section may appear throughout the body of this manual where applicable.

WARNING



FIRE AND EXPLOSION HAZARD

Flammable fumes, such as solvent, gasoline, and paint fumes, in **work area** can ignite or explode. Paint or solvent flowing through the equipment can cause static sparking. To help prevent fire and explosion:



- Use equipment only in well-ventilated area.
- Eliminate all ignition sources, such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static sparking).
- Ground all equipment in the work area. See **Grounding** instructions.
- Never spray or flush solvent at high pressure.
- 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.
- Use only grounded hoses.
- Hold gun firmly to side of grounded pail when triggering into pail. Do not use pail liners unless they are anti-static or conductive.
- **Stop operation immediately** if static sparking occurs or you feel a shock. Do not use equipment until you identify and correct the problem.
- Keep a working fire extinguisher in the work area.

Gasoline vapors can ignite or explode. To help prevent fire and explosion:

- Do not fill fuel tank or remove fuel tank cap while engine is running or hot; turn off engine and let it cool. Fuel is flammable and can ignite or explode if spilled on or near a hot surface.
- Do not overfill fuel tank. Clean up spilled fuel and move equipment from fueling location before starting the engine.
- Do not fill fuel tank indoors. Only refuel equipment when it is located on the ground.










SKIN INJECTION HAZARD








High-pressure spray is able to inject toxins into the body and cause serious bodily injury. In the event that injection occurs, **get immediate surgical treatment**.







- Do not aim the gun at, or spray any person or animal.
- Keep hands and other body parts away from the discharge. For example, do not try to stop leaks with any part of the body.
- Always use the nozzle tip guard. Do not spray without nozzle tip guard in place.
- Use Graco nozzle tips.
- Use caution when cleaning and changing nozzle tips. In the case where the nozzle tip clogs while spraying, follow the **Pressure Relief Procedure** for turning off the unit and relieving the pressure before removing the nozzle tip to clean.
- Equipment maintains pressure after power is shut off. Do not leave the equipment energized or under pressure while unattended. Follow the **Pressure Relief Procedure** when the equipment is unattended or not in use, and before servicing, cleaning, or removing parts.
- Check hoses and parts for signs of damage. Replace any damaged hoses or parts.
- This system is capable of producing 3300 psi. Use Graco replacement parts or accessories that are rated a minimum of 3300 psi.
- Always engage the trigger lock when not spraying. Verify the trigger lock is functioning properly.
- Verify that all connections are secure before operating the unit.
- Know how to stop the unit and bleed pressure quickly. Be thoroughly familiar with the controls.

WARNING


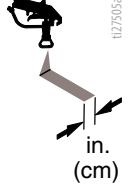
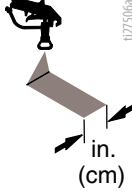
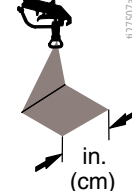
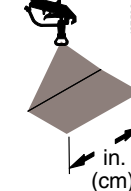
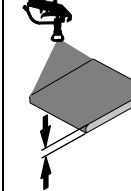
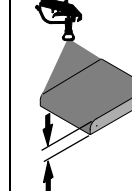
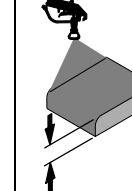
	<p>CARBON MONOXIDE HAZARD</p> <p>Exhaust contains poisonous carbon monoxide, which is colorless and odorless. Breathing carbon monoxide can cause death.</p> <ul style="list-style-type: none"> Do not operate in an enclosed area.
 	<p>EQUIPMENT MISUSE HAZARD</p> <p>Misuse can cause death or serious injury.</p> <ul style="list-style-type: none"> Do not operate the unit when fatigued or under the influence of drugs or alcohol. 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. For complete information about your material, request Safety Data Sheet (SDS) from distributor or retailer. Do not leave the work area while equipment is energized or under pressure. Turn off all equipment and follow the Pressure Relief Procedure when equipment is not in use. Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only. Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards. Make sure all equipment is rated and approved for the environment in which you are using it. Use equipment only for its intended purpose. Call your distributor for information. Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces. Do not kink or over bend hoses or 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>Use of fluids that are incompatible with aluminum in pressurized equipment can cause serious chemical reaction and equipment rupture. Failure to follow this warning can result in death, serious injury, or property damage.</p> <ul style="list-style-type: none"> Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents. Do not use chlorine bleach. Many other fluids may contain chemicals that can react with aluminum. Contact your material supplier for compatibility.
 	<p>MOVING PARTS HAZARD</p> <p>Moving parts can pinch, cut 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 and disconnect all power sources.
	<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 Safety Data Sheet (SDS) 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.

 WARNING	
	BURN HAZARD Equipment surfaces and fluid that's heated can become very hot during operation. To avoid severe burns: <ul style="list-style-type: none"> Do not touch hot fluid or equipment.
	PERSONAL PROTECTIVE EQUIPMENT Wear appropriate protective equipment when in the work area to help prevent serious injury, including eye injury, hearing loss, inhalation of toxic fumes, and burns. This protective equipment includes but is not limited to: <ul style="list-style-type: none"> Protective eyewear, and hearing protection. Respirators, protective clothing, and gloves as recommended by the fluid and solvent manufacturer.
  	BATTERY HAZARD The battery may leak, explode, cause burns, or cause an explosion if mishandled. Contents of an open battery can cause severe irritation and/or chemical burns. If on skin, wash with soap and water. If in eyes, flush with water for at least 15 minutes and get immediate medical attention. <ul style="list-style-type: none"> Only use the battery type specified for use with the equipment. See Technical Data. Replace battery only in well-ventilated area and away from flammable or combustible materials, including paints and solvents. Do not dispose of battery in fire or heat above 50°C (122°F). The battery is capable of exploding. Do not throw into fire. Do not expose battery to water or rain. Do not disassemble, crush, or penetrate the battery. Do not use or charge a battery that is cracked or damaged. Follow local ordinances and/or regulations for disposal.
	ELECTRIC SHOCK HAZARD Hazardous voltage is present in control box while engine is running. <ul style="list-style-type: none"> Turn off engine before servicing equipment.

Important Laser Information for Units with Laser Option

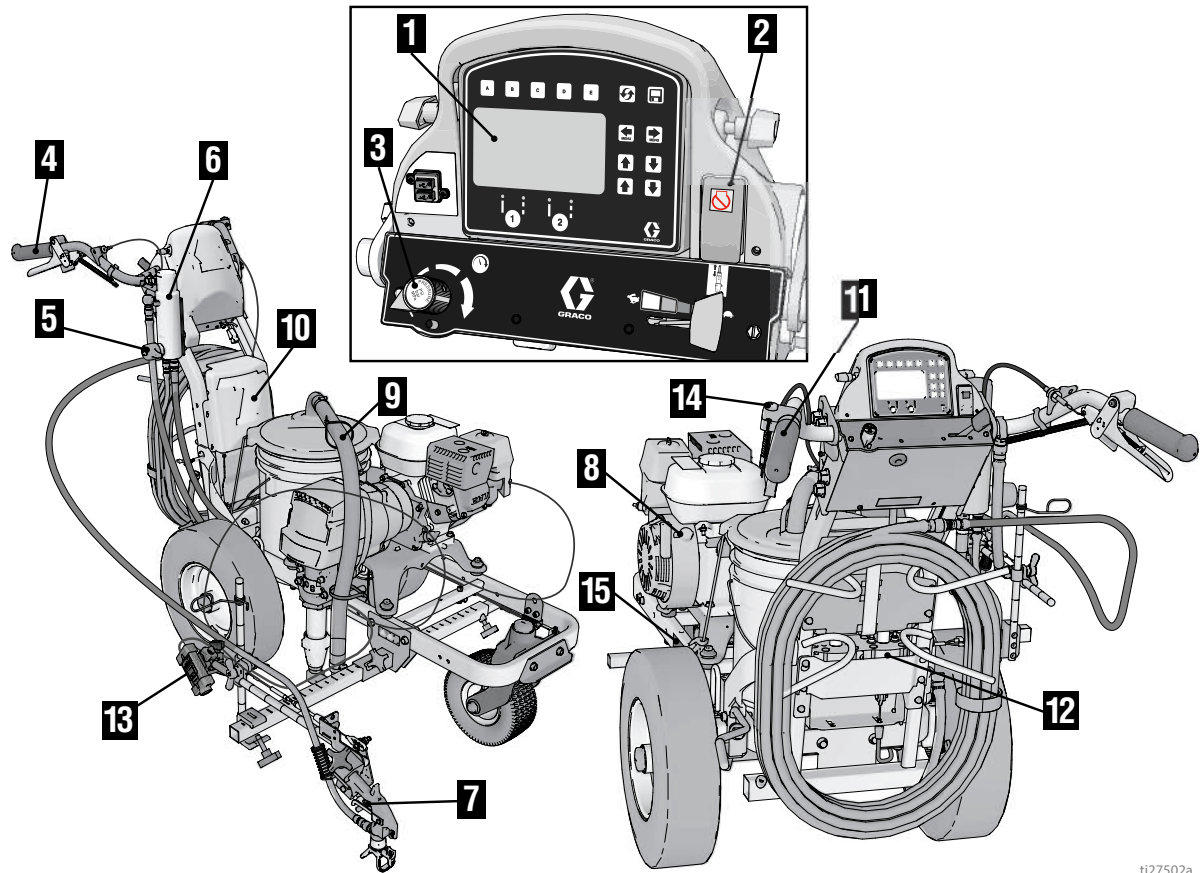
 WARNING	
	<p>LASER LIGHT HAZARD: AVOID DIRECT EYE CONTACT</p> <p>Eye exposure to Class IIIa/3R levels of laser light can potentially present an eye (retinal) injury hazard, including spot blindness or other retinal injury. To avoid direct eye exposure:</p> <ul style="list-style-type: none"> • Never look directly in to a laser beam or point the beam into the eyes of others, even at long distances. • Never shine the laser at mirror like surfaces which can cause specular reflections of the beam. • Always set the laser at a height and angle that prevents the beam from shining into people's eyes. • Immediately terminate laser emissions if personnel, animals or reflective objects approach the beam. • Always turn off laser when unattended. • Do not remove any warning labels from the laser. • Only properly trained laser operators are to use this product. • Never allow beams to be aimed toward traffic, vehicles, or heavy equipment. Even when not damaging at long distances, the high brightness of lasers can distract or disrupt vehicle operations. • Never point a laser at an aircraft or law enforcement personnel. This is considered a felony in most locations, with the possibility of jail time, heavy fines or both. • Do not disassemble laser product. Return to factory for all service procedures. • Laser must be turned OFF when cleaning the lens, so as not to create unwanted laser refraction.
	<p>LASER RADIATION HAZARD</p> <p>Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.</p> <ul style="list-style-type: none"> • Do not attempt to open or disassemble the laser housing under any circumstances. Doing so may cause exposure to potentially hazardous levels of laser radiation. • No serviceable parts within. Unit is factory sealed.
	<p>FIRE AND EXPLOSION HAZARD</p> <p>Connecting directly to a generator source can create a short or sparking under certain conditions.</p> <ul style="list-style-type: none"> • Only connect GL1700 to a dedicated 12 volt DC battery source.

Tip Selection

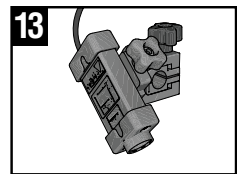
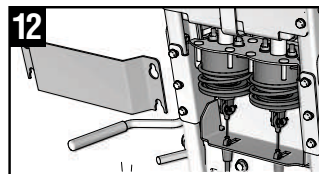
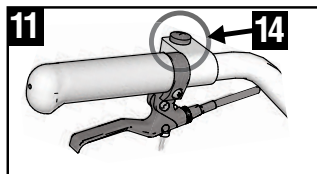
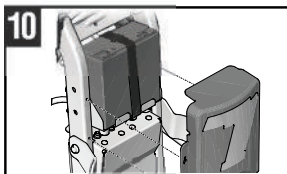
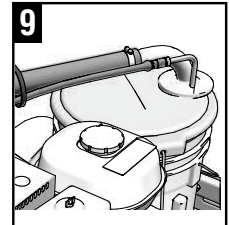
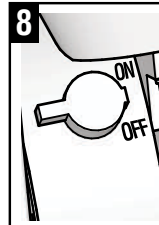
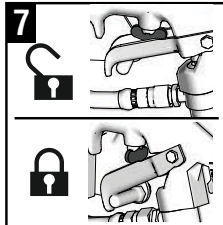
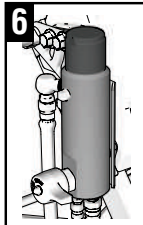
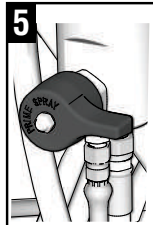
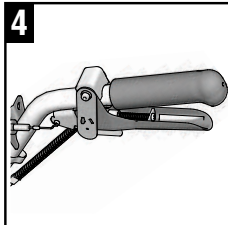
							
LL5213*	2 (5)						
LL5215*	2 (5)						
LL5217		4 (10)					
LL5219		4 (10)					
LL5315		4 (10)					
LL5317		4 (10)					
LL5319		4 (10)					
LL5321		4 (10)					
LL5323		4 (10)					
LL5325		4 (10)					
LL5327		4 (10)					
LL5329		4 (10)					
LL5331		4 (10)					
LL5333		4 (10)					
LL5335		4 (10)					
LL5355		4 (10)					
LL5417			6 (15)				
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LL5621				12 (30)			
LL5623				12 (30)			
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LL5627				12 (30)			
LL5629				12 (30)			
LL5631				12 (30)			
LL5635				12 (30)			
LL5639				12 (30)			

*Use 100 mesh filter to reduce tip clogs.

Component Identification (LLV 3900/5900)



ti27502a



1	Display
2	Pump ON/OFF switch & Engine Stop switch
3	Pressure control
4	Manual spray gun trigger
5	Prime/Pressure relief valve
6	Filter
7	Trigger safety
8	Engine ON/OFF switch

9	Drain and siphon tubes
*10	12 volt battery
11	Turn control
*12	Gun actuators
*13	Layout laser
*14	Auto spray gun control button
15	Identification label

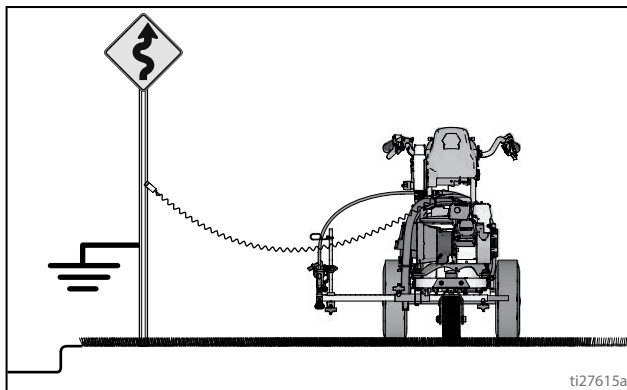
* HP Auto Series only.

Grounding Procedure (For Flammable Flushing Fluids Only)



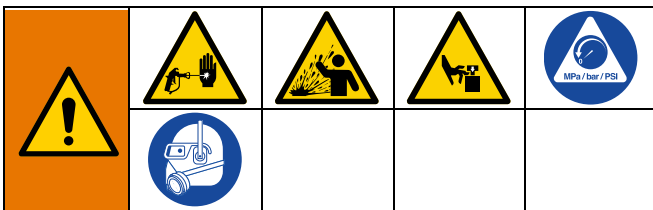
This equipment must be grounded to reduce the risk of static sparking. Static sparking can cause fumes to ignite or explode. Grounding provides an escape wire for the electric current.

1. Position striper so that the tires are not on pavement.
2. Striper is shipped with a grounding clamp. Grounding clamp must attach to grounded object (e.g. metal sign post).



3. Disconnect grounding clamp after flushing is complete.

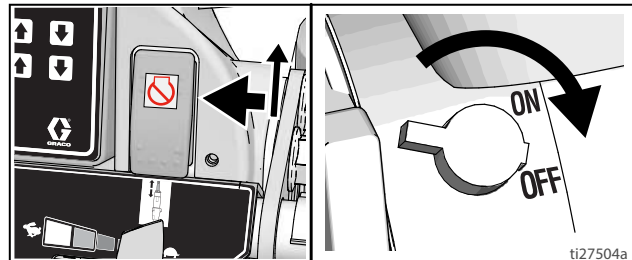
Pressure Relief Procedure



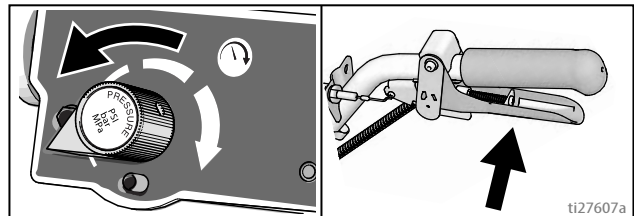
This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashing fluid and moving parts, follow the Pressure Relief Procedure when you stop dispensing and before cleaning, checking, or servicing the equipment.

1. Perform **Grounding Procedure** if using flammable materials.

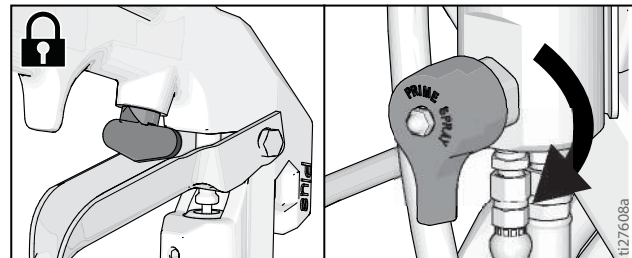
2. Set pump switch to **OFF**. Turn engine **OFF**.



3. Turn pressure control to lowest setting. Trigger all guns to relieve pressure.










4. Engage all gun trigger locks. Turn prime valve down.



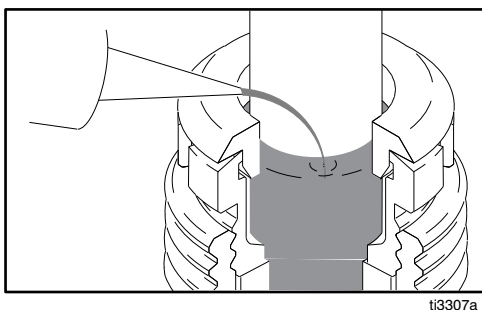
5. If you suspect the spray tip or hose is clogged or that pressure has not been fully relieved:
 - a. **VERY SLOWLY** loosen the tip guard retaining nut or the hose end coupling to relieve pressure gradually.
 - b. Loosen the nut or coupling completely.
 - c. Clear the obstruction in the hose or tip.

Setup/Startup

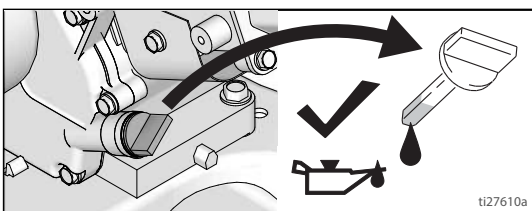
				
				

This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashing fluid and moving parts, follow the Pressure Relief Procedure when you stop spraying and before cleaning, checking, or servicing the equipment.

1. Perform **Pressure Relief Procedure**, page 12.
2. Perform **Grounding Procedure (For Flammable Flushing Fluids Only)**, page 12, if using flammable materials.
3. Fill throat packing nut with Throat Seal Liquid (TSL) to decrease packing wear.

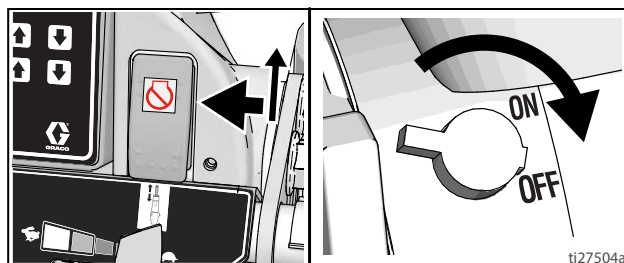


4. Check engine oil level. Add SAE 10W-30 (summer) or 5W-30 (winter). See engine manual.

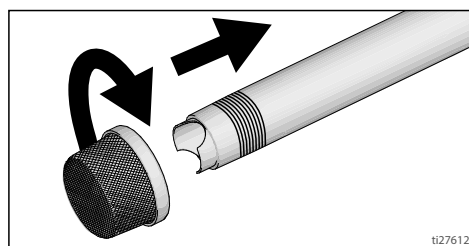


5. Allow engine to cool. Remove the cap and fill the fuel tank. Securely tighten the cap.

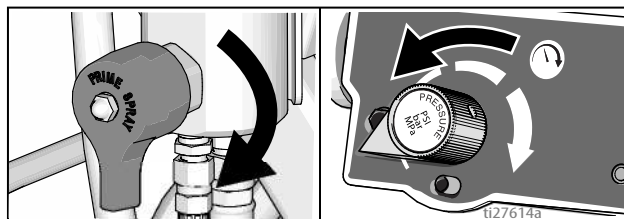
6. Set pump switch to **OFF**. Turn engine off.



7. If removed, install strainer.

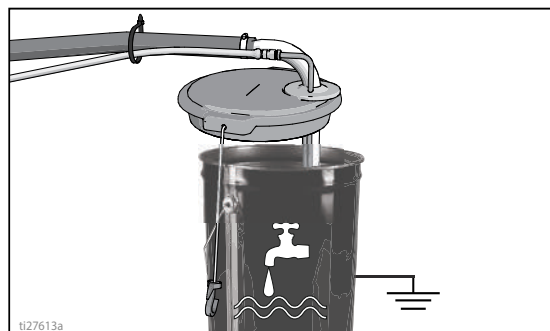


8. Turn prime valve down. Turn pressure control counterclockwise to lowest pressure.



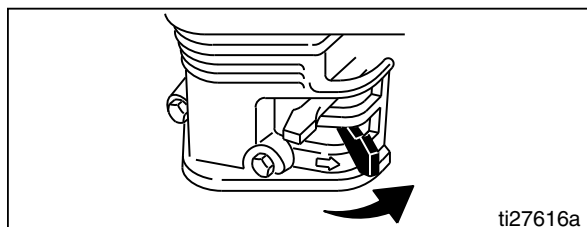
NOTE: Minimum hose size allowable for proper sprayer operation is 3/8 in. x 50 ft for LL3900/5900.

9. Place siphon tube set in grounded metal pail partially filled with flushing fluid. Attach ground wire to true earth ground. Use water to flush water-base paint and mineral spirits to flush oil-base paint and storage oil.

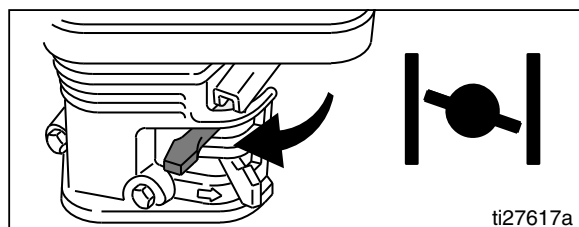


10. Start engine:

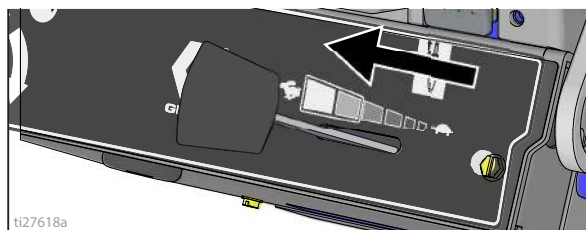
- a. Move fuel valve to open.



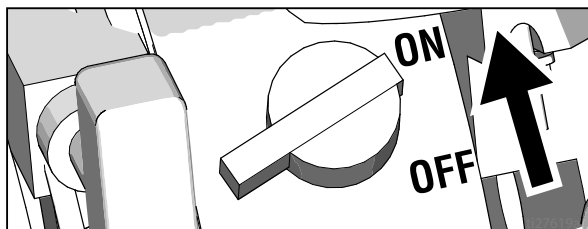
- b. Move choke to closed.



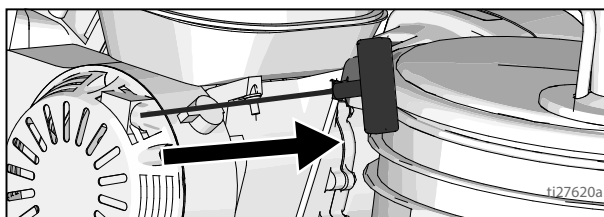
- c. Set throttle to fast.



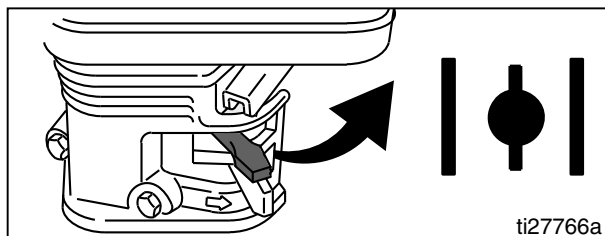
- d. Set engine switch to ON.



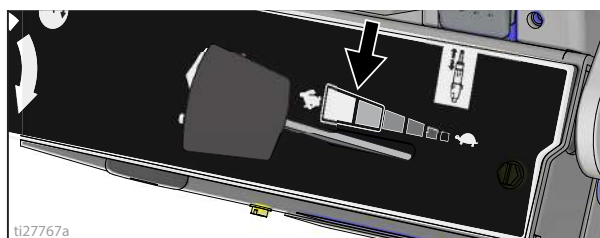
- e. Pull starter cord.



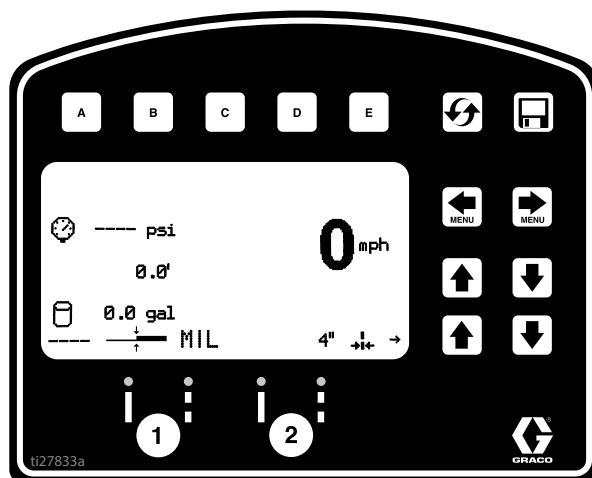
11. After engine starts, move choke to open.



12. Set throttle to desired setting.



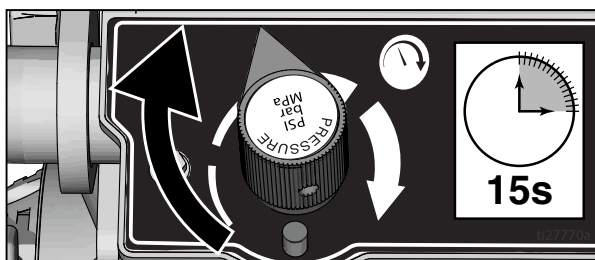
13. Digital display is functional after engine starts.



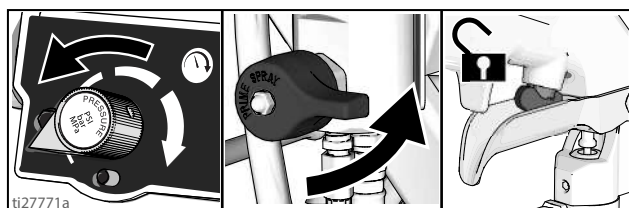
14. Set pump switch to **ON** (pump is now active).



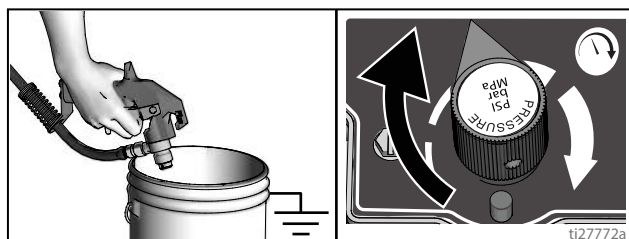
15. Increase pressure control enough to start pump. Allow fluid to circulate for 15 seconds.



16. Turn pressure down, turn prime valve horizontal. Disengage gun trigger lock.



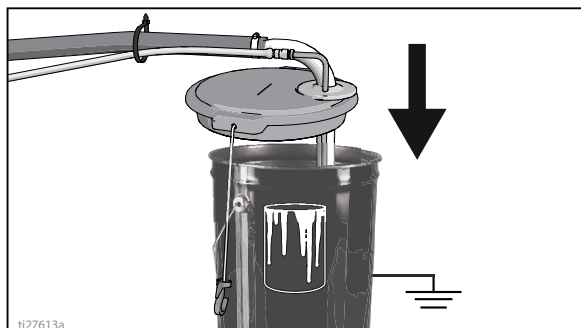
17. Hold all guns against a grounded metal flushing pail. Trigger guns and increase fluid pressure slowly until pump runs smoothly.



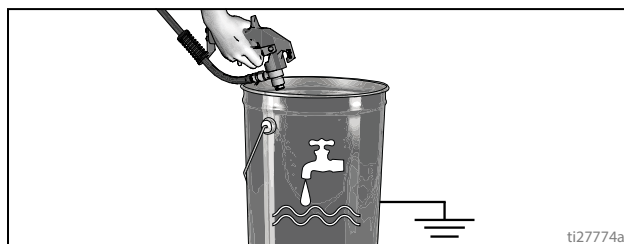
<p>High-pressure spray is able to inject toxins into the body and cause serious bodily injury. Do not stop leaks with hand or rag.</p>			

18. Inspect fittings for leaks. If leaks occur, turn sprayer OFF immediately. Perform **Pressure Relief Procedure**. Tighten leaky fittings. Repeat **Setup/Startup**, steps 1 - 17. If no leaks, continue to trigger gun until system is thoroughly flushed. Proceed to step 18.

19. Place siphon tube in paint pails.

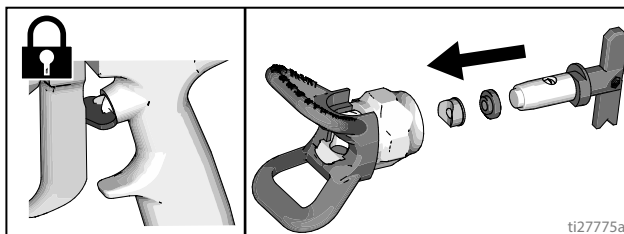


20. Trigger all guns again into a flushing fluid pail until paint appears. Assemble tips and guards.

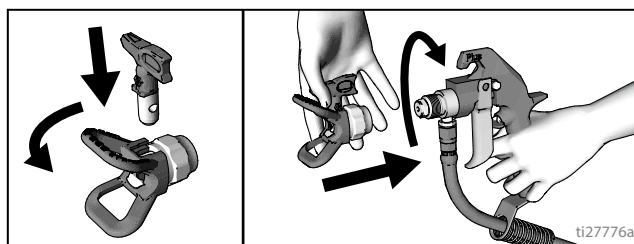


SwitchTip and Guard Assembly

1. Engage trigger lock. Use end of SwitchTip to press OneSeal into tip guard, with curve matching tip bore.



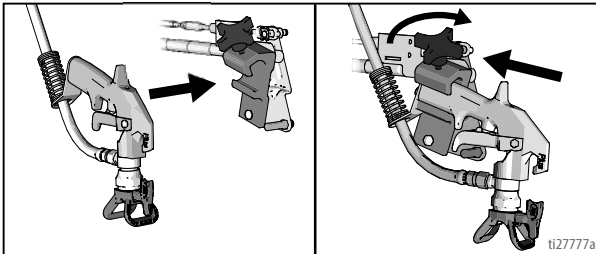
2. Insert SwitchTip in tip bore and firmly thread assembly onto gun.



Gun Placement

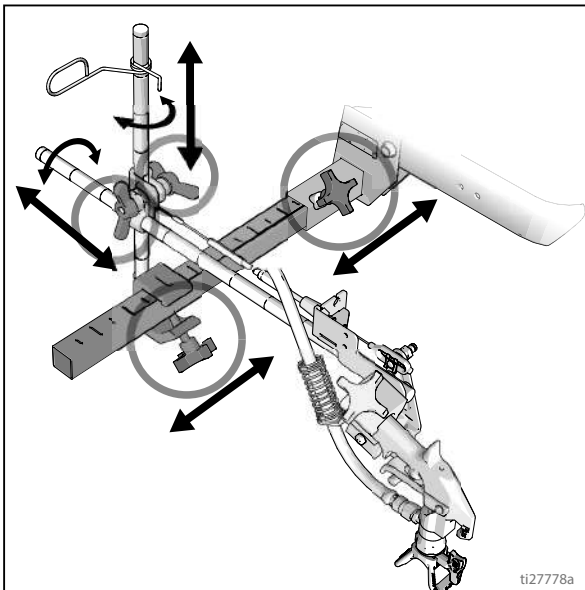
Install Guns

1. Insert guns into gun holder. Tighten clamps.

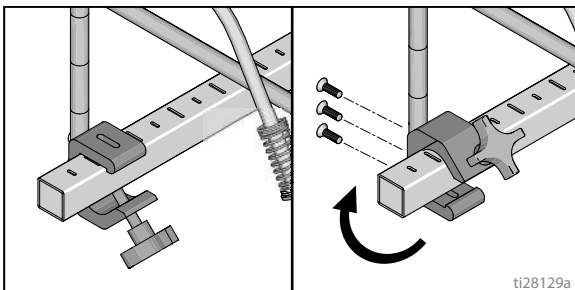


Position Gun

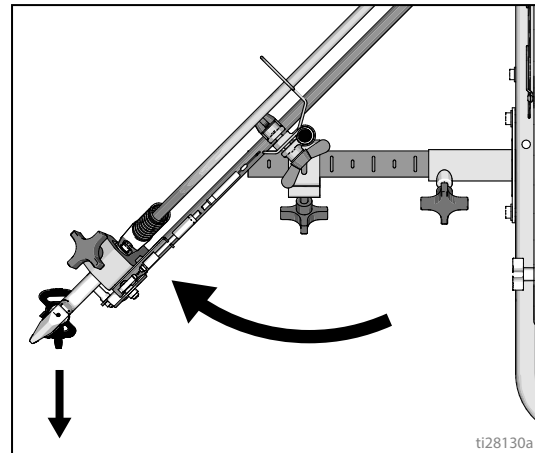
2. Position gun: up/down, forward/reverse, left/right. See **Gun Positions Chart**, page 18 for examples.



NOTE: When striping above a curb, the mounting clamp can be rotated for clearance.

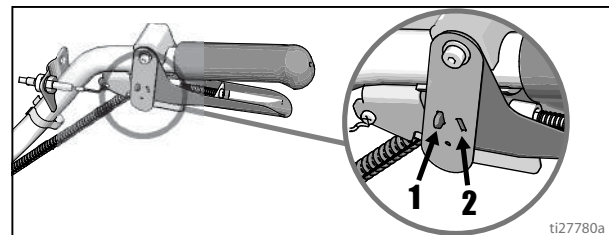


Another option can be to swing the gun out at an angle and rotate the tip guard. This results in better visibility for the user.

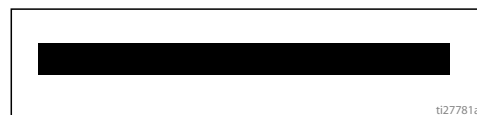


Select Guns (Standard Series)

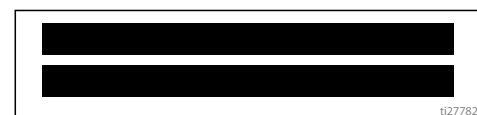
3. Connect gun cables to left or right gun selector plates.



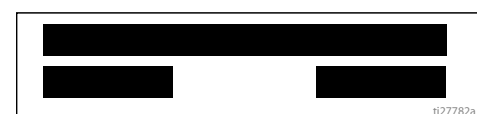
- a. One gun: Disconnect one gun selector plate from trigger.



- b. Both guns simultaneously: Adjust both gun selector plates to the same position.

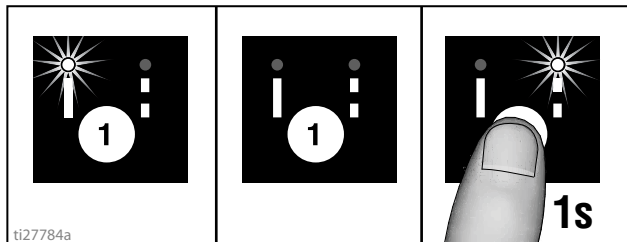


- c. Solid-skip and skip-solid: Adjust solid-line gun to position 1 and skip-line to position 2.

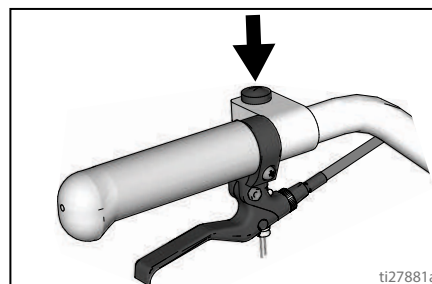


Select Auto Guns (HP Auto Series)

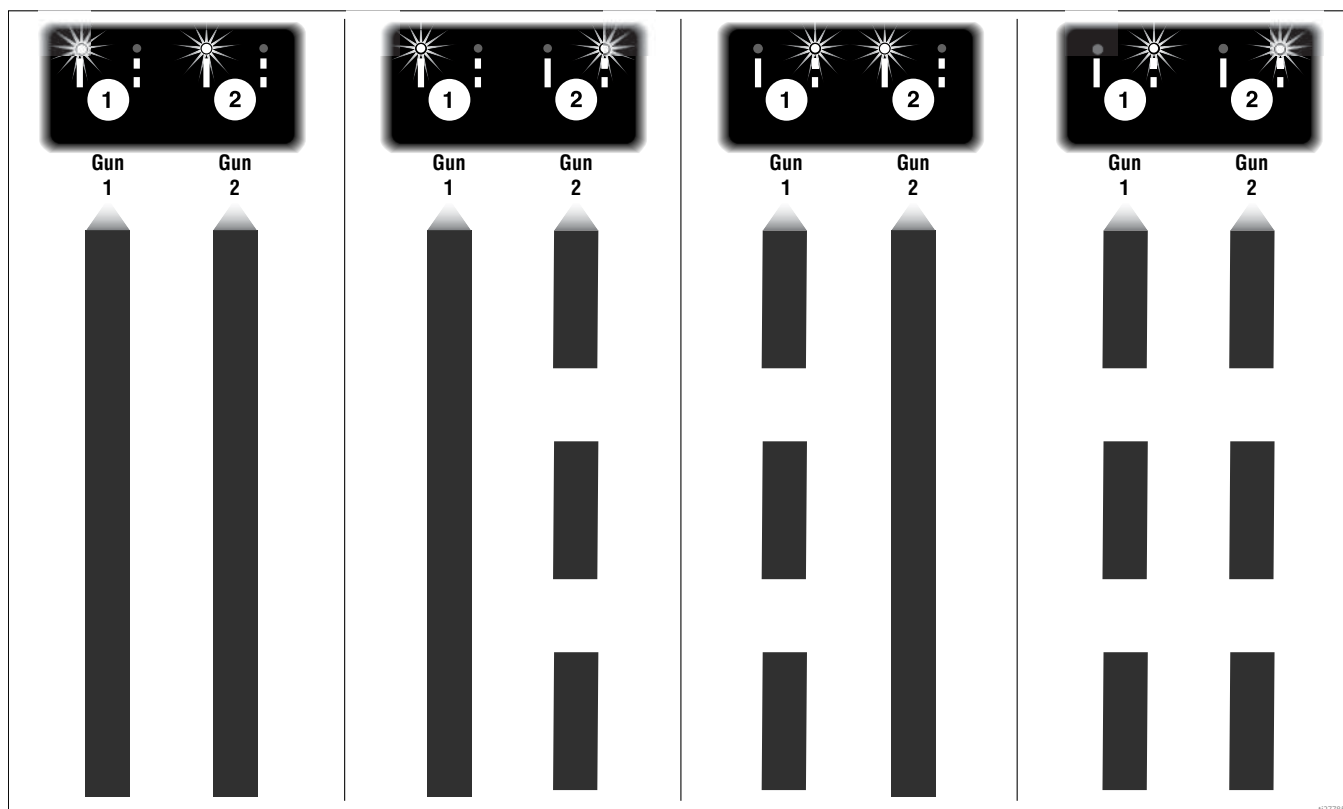
1. Use the gun selector buttons to determine which guns are active. Each gun selector has 3 settings: continuous line, OFF and programmed line pattern.



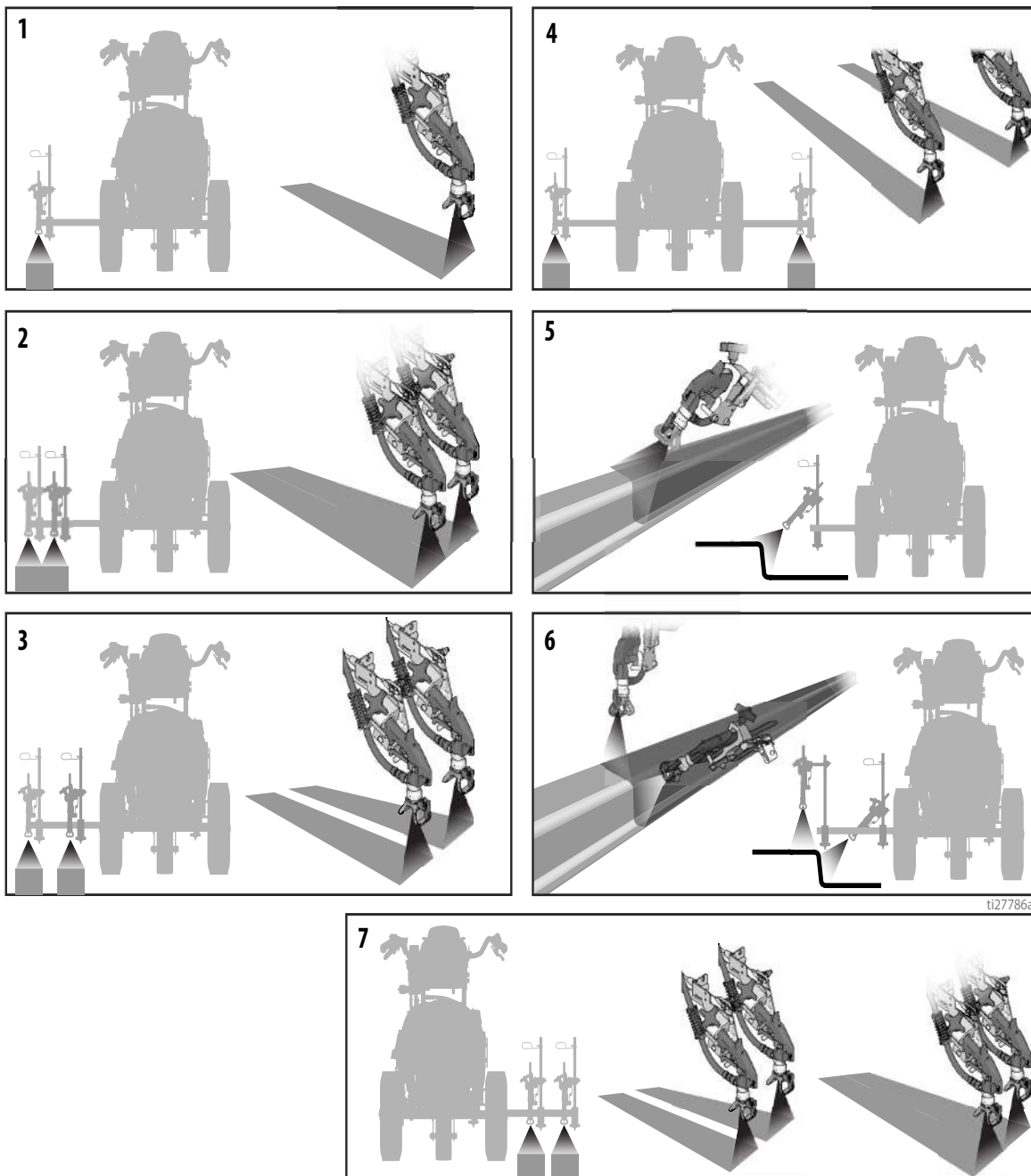
2. Use the gun trigger control to actuate auto guns.



4 Examples:



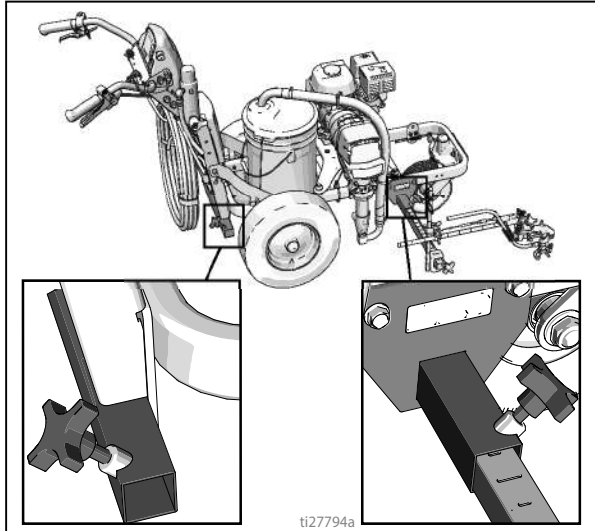
Gun Positions Chart



1	One line
2	One line up to 24 in. (61cm) wide
3	Two lines
4	One line or two lines to spray around obstacles
5	One gun curb
6	Two gun curb
7	Two lines or one line up to 24 in. (61 cm) wide

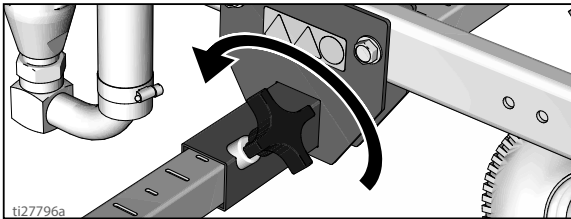
Gun Arm Mounts

This unit is equipped with front and rear gun arm mounts.

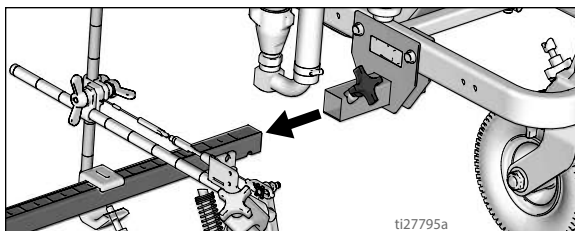


Change Gun Position (Front and Back)

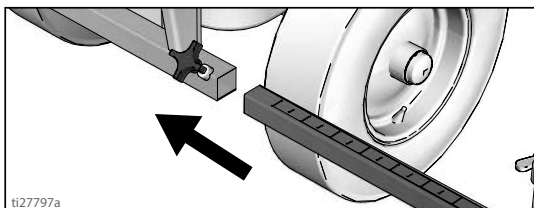
1. Loosen gun arm knob and remove from gun arm mounting slot.



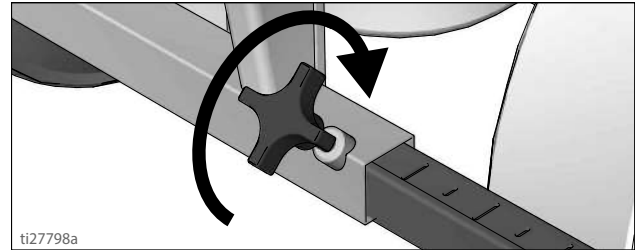
2. Slide gun arm assembly (including gun and hoses) out from gun arm mounting slot.



3. Slide gun arm assembly into desired gun arm mounting slot.



4. Tighten gun arm knob into gun arm mounting slot.



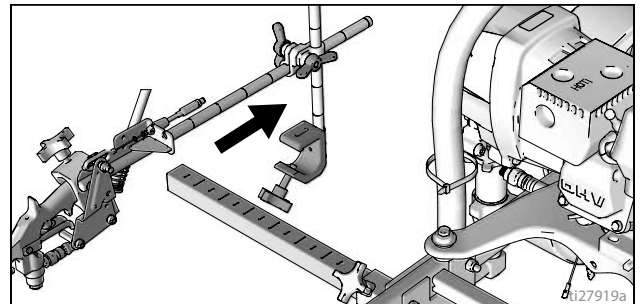
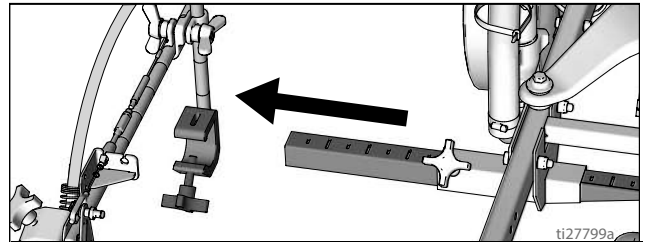
NOTICE

Make sure all hoses, cables, and wires are properly routed through brackets and do NOT rub on tire. Contact with tire will result in damaged hoses, cables, and wires.

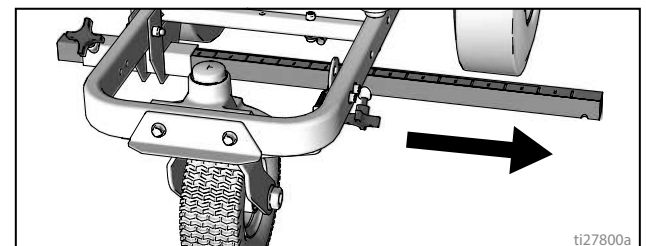
Change Gun Position (Left and Right)

Removal

1. Loosen vertical gun arm knob on gun arm mounting bar and remove.

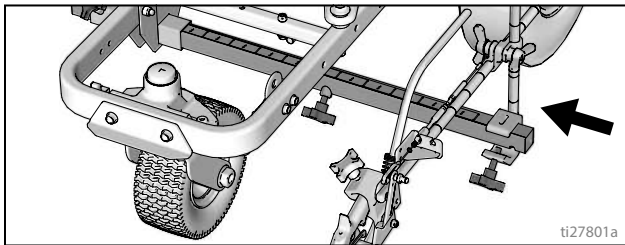


2. Extend mounting bar on opposite side of the machine.



Installation

1. Install vertical gun mount onto gun bar.

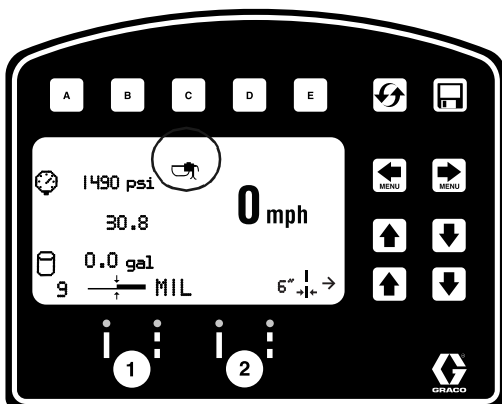


NOTE: Make sure all hoses, cables, and wires are properly routed through brackets.

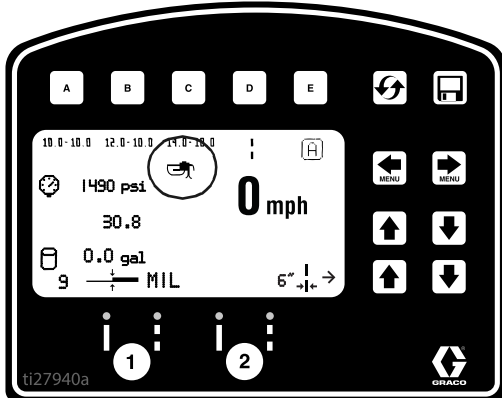
Trigger Sensor Adjustment

1. Start striper engine. Engage trigger. Spray icon should appear simultaneously with start of fluid spray.

Standard Series

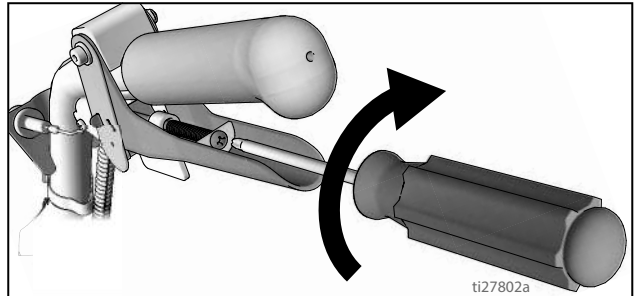


HP Auto Series



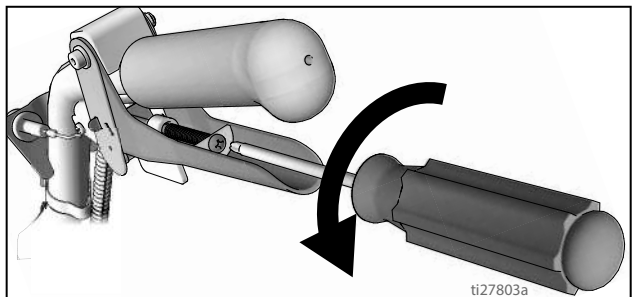
No fluid spray

2. Turn screw in handle clockwise if spray icon appears before fluid spray starts.

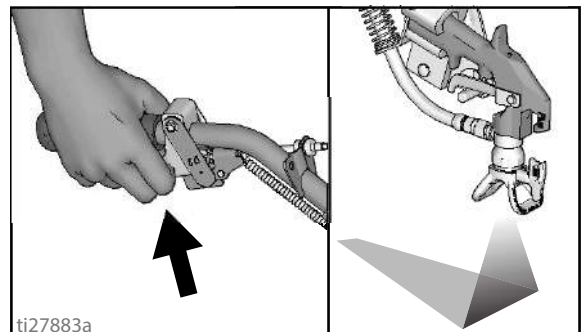


No spray icon

3. Turn screw in handle counterclockwise if fluid spray starts before spray icon appears.

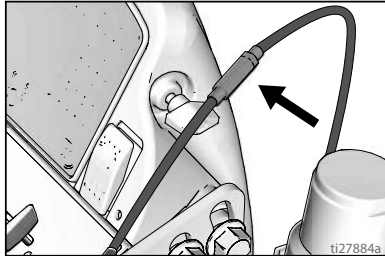


4. Continue adjusting screw in handle until timing of spray icon and fluid spray are synchronized. Adjustment of the gun cables might be necessary.

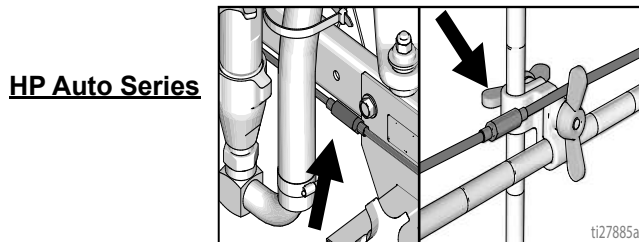


Gun Cable Adjustment

Adjusting the gun cable will increase or decrease the gap between the trigger plate and the gun trigger. To adjust trigger gap, perform the steps below.

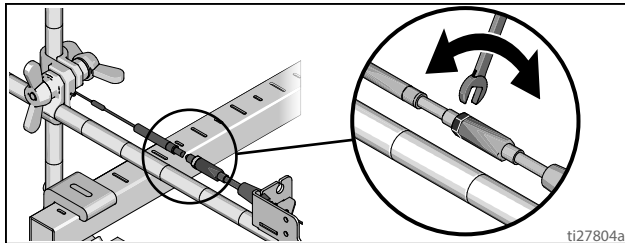


Standard Series



HP Auto Series

1. Use wrench to loosen locking nut on cable adjuster.

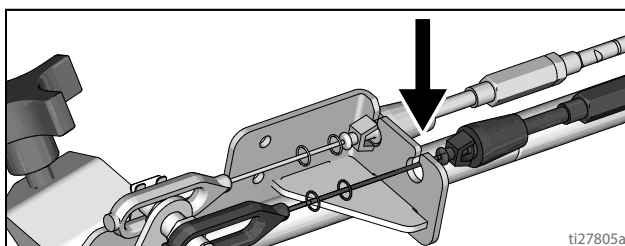


2. Loosen or tighten adjuster until desired result is achieved. **NOTE:** More thread exposed means less gap between gun trigger and trigger plate.
3. Use wrench to tighten locking nut on the adjuster.

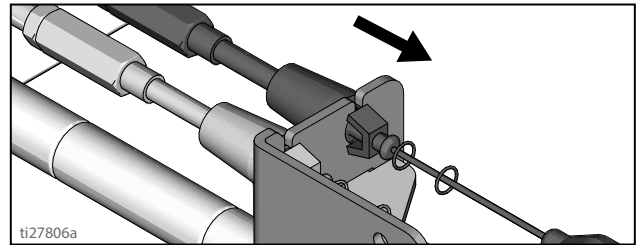
Adding Gun Cable (HP Auto Series)

The HP Auto Series can be equipped with two gun actuators. Each gun actuator is capable of operating one cable.

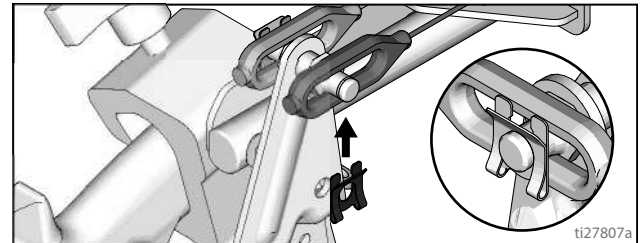
1. Select cable end with adjuster.
2. Install exposed cable through cable bracket slot.



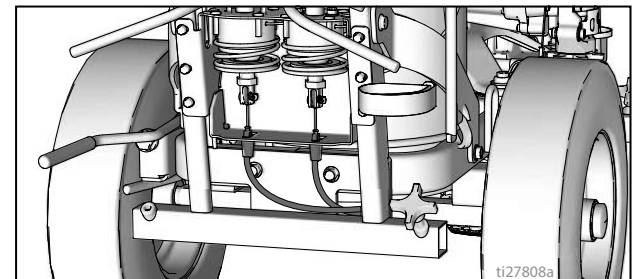
3. Insert plastic cable retainer into cable bracket hole.



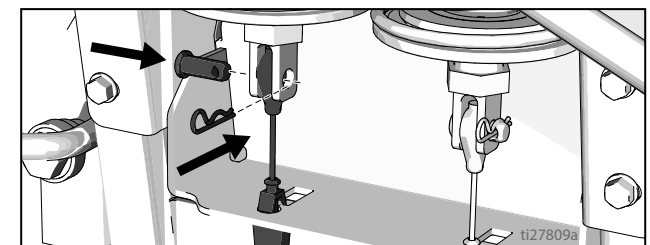
4. Install cable end onto trigger plate pin and install clip.



5. Route cable around unit and up through cable holes behind hose mount.



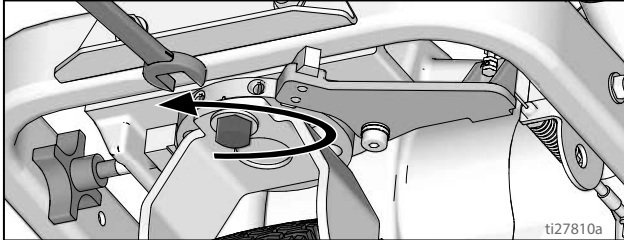
6. Route cable end loop through rectangular hole in bracket and insert plastic cable retainer into the actuator bracket. Install cable end onto actuator rod and install pin.



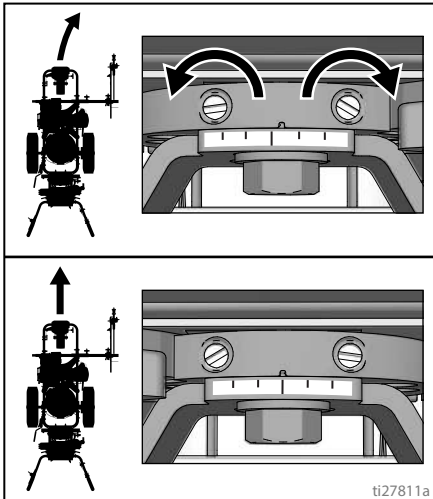
Straight Line Adjustment

The front wheel is set to center the unit and allow the operator to form straight lines. Over time, the wheel may become misaligned and will need to be readjusted. To re-center the front wheel, perform the following steps:

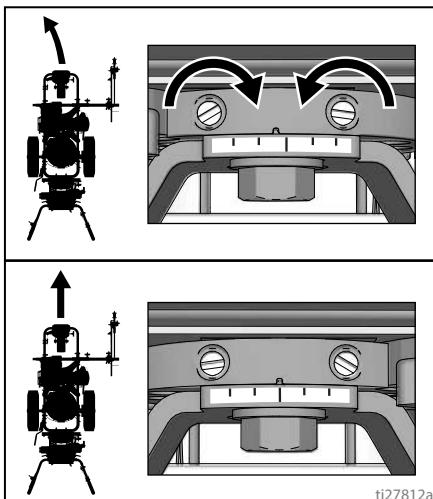
1. Loosen bolt on the front wheel bracket.



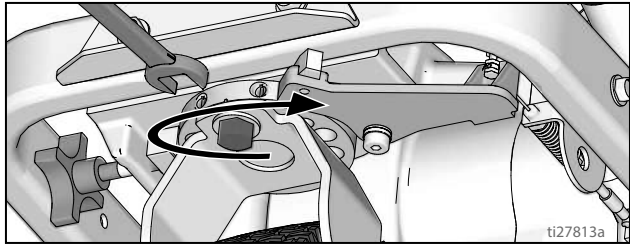
2. If striper arcs to the right, loosen left set screw and tighten right set screw for fine tune adjustment.



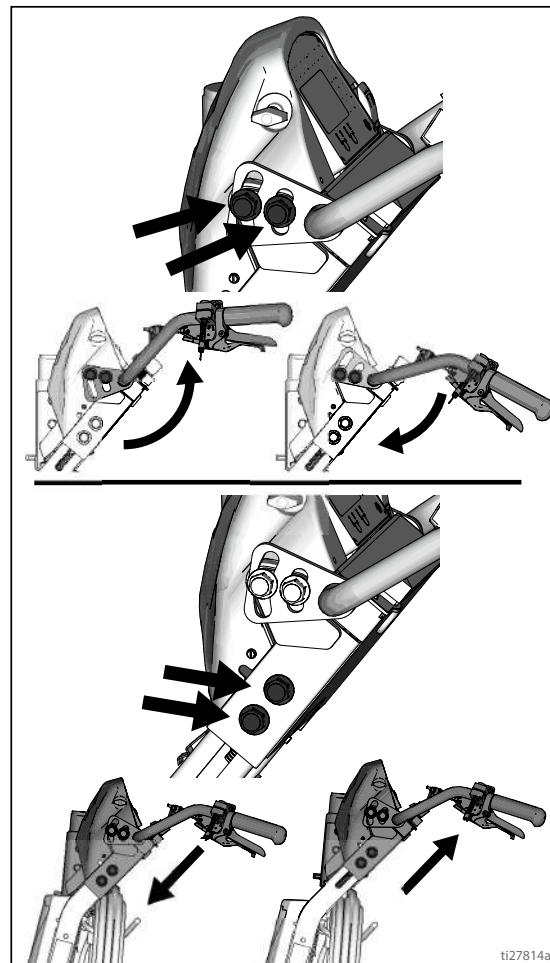
3. If striper arcs to the left, loosen right set screw and tighten left set screw.



4. Roll the striper. Repeat steps 2 and 3 until striper rolls straight. Tighten bolt on wheel alignment plate to lock the new wheel setting.



Handle Bar Adjustment

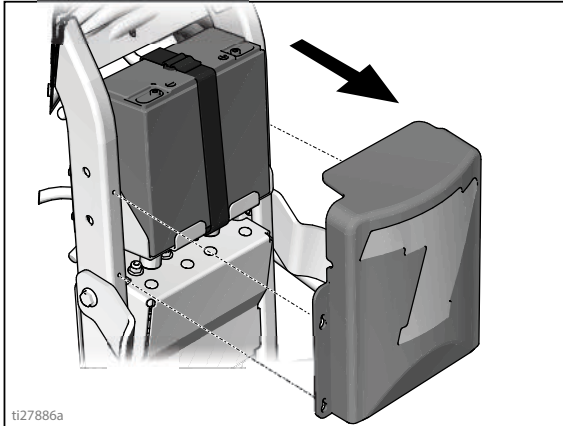


Dot Laser (if applicable)

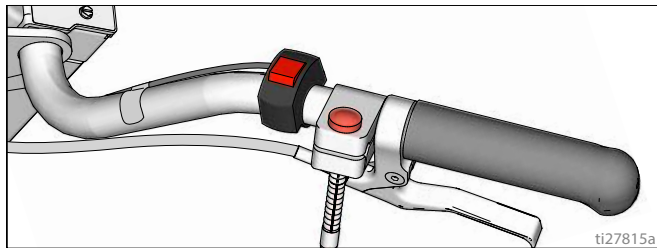


LASER LIGHT HAZARD. Avoid direct eye contact.

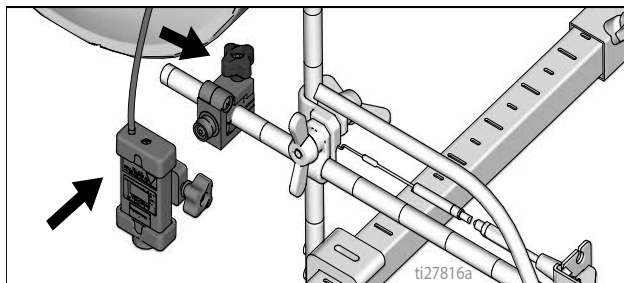
1. Remove battery cover.



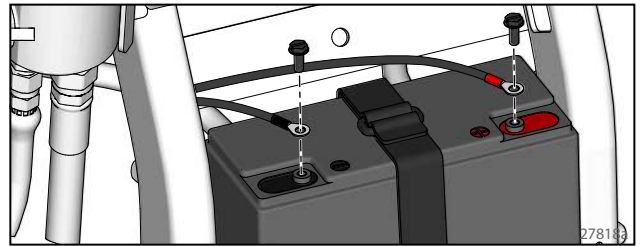
2. Attach ON/OFF switch to desired location on the handle bar.



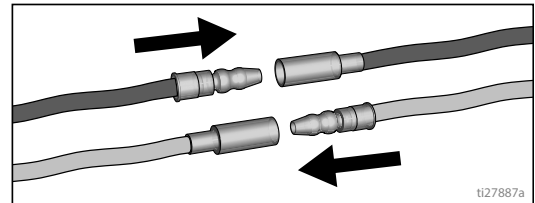
3. Attach laser to desired location on the gun arm.



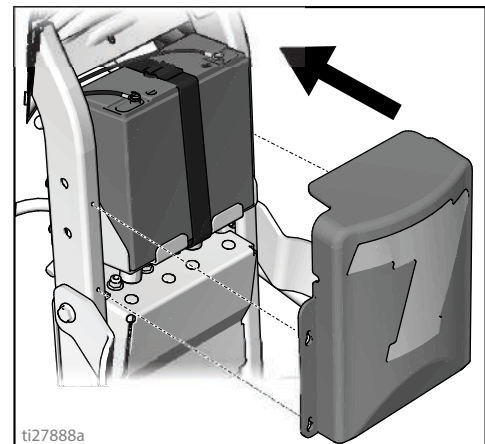
4. Route wires from the switch to the battery and connect to the (+) and (-) terminals.



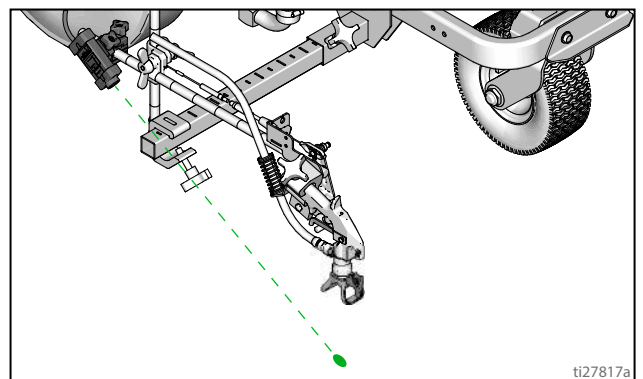
5. Connect the switch leads to the wire harness.



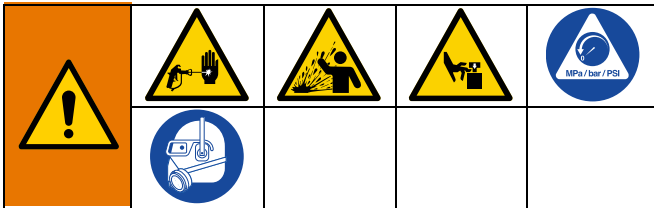
6. Reattach battery cover.



7. Turn on laser and position dot underneath gun head.

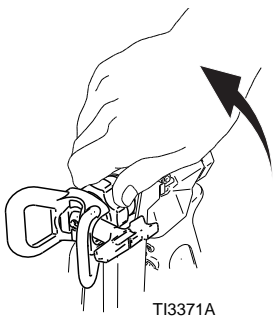


Cleanup



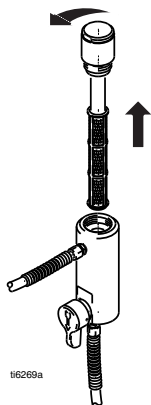
This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashing fluid and moving parts, follow the Pressure Relief Procedure when you stop dispensing and before cleaning, checking, or servicing the equipment.

1. Turn off fuel supply. Perform **Pressure Relief Procedure**, page 12.
2. Remove guard and SwitchTip from all guns.



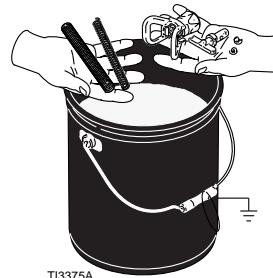
TI3371A

3. Unscrew cap, remove filter. Assemble without filter.



ti6269a

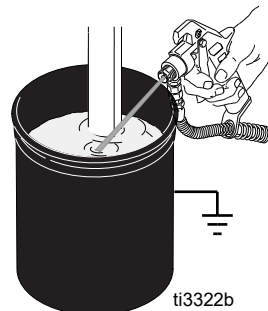
4. Clean filter, guard and SwitchTip in flushing fluid.



TI3375A

FLUSH

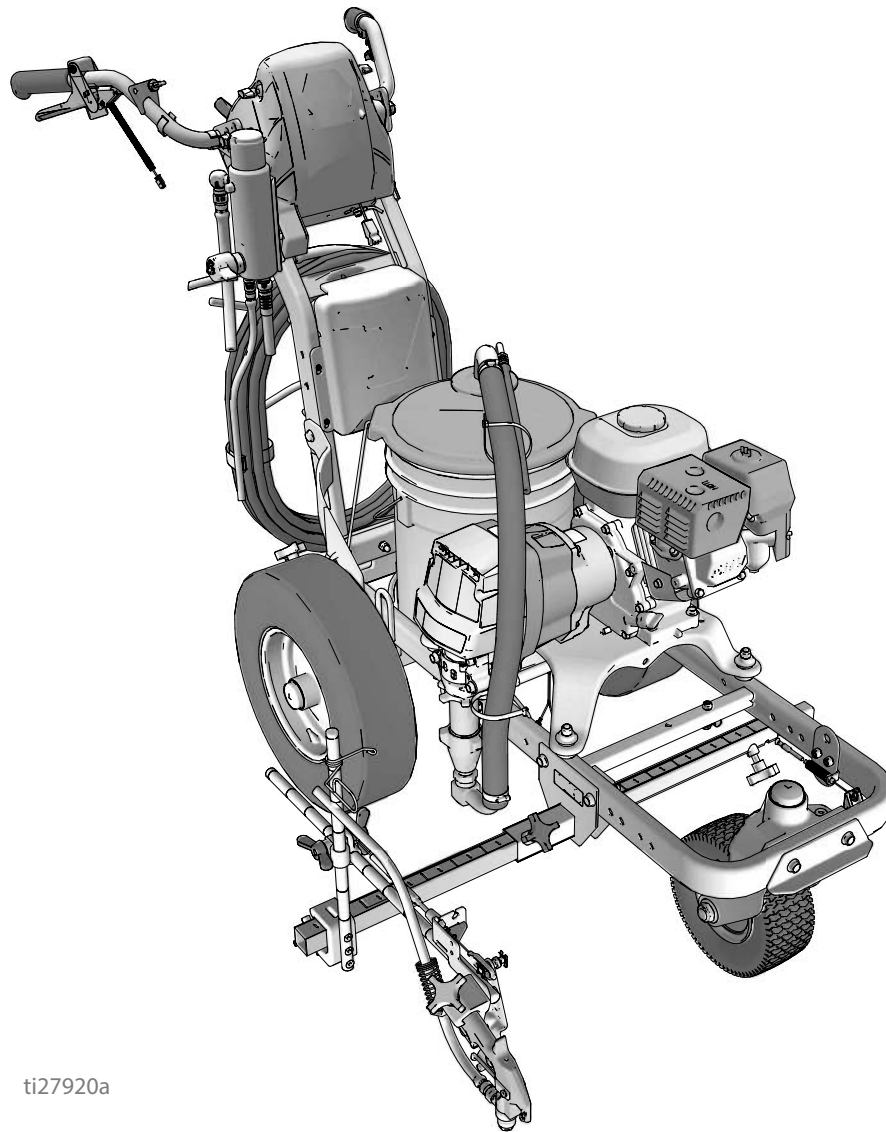
5. Place siphon tube set in grounded metal pail partially filled with flushing fluid. Attach ground wire to true earth ground. Perform Startup steps 10 - 17 (see page 14) to flush out paint in sprayer. Use water to flush water-base paint and mineral spirits solvent (also called white spirit) to flush oil-base paint.
6. Hold gun against paint bucket and pull trigger until water or solvent appears.



ti3322b

7. Move gun to solvent or water bucket. Hold gun against bucket and pull trigger until the system is thoroughly flushed.
8. Fill pump with Pump Armor and reassemble filter, guard and SwitchTip.
9. Each time you spray and store, fill throat packing nut with TSL to decrease packing wear.

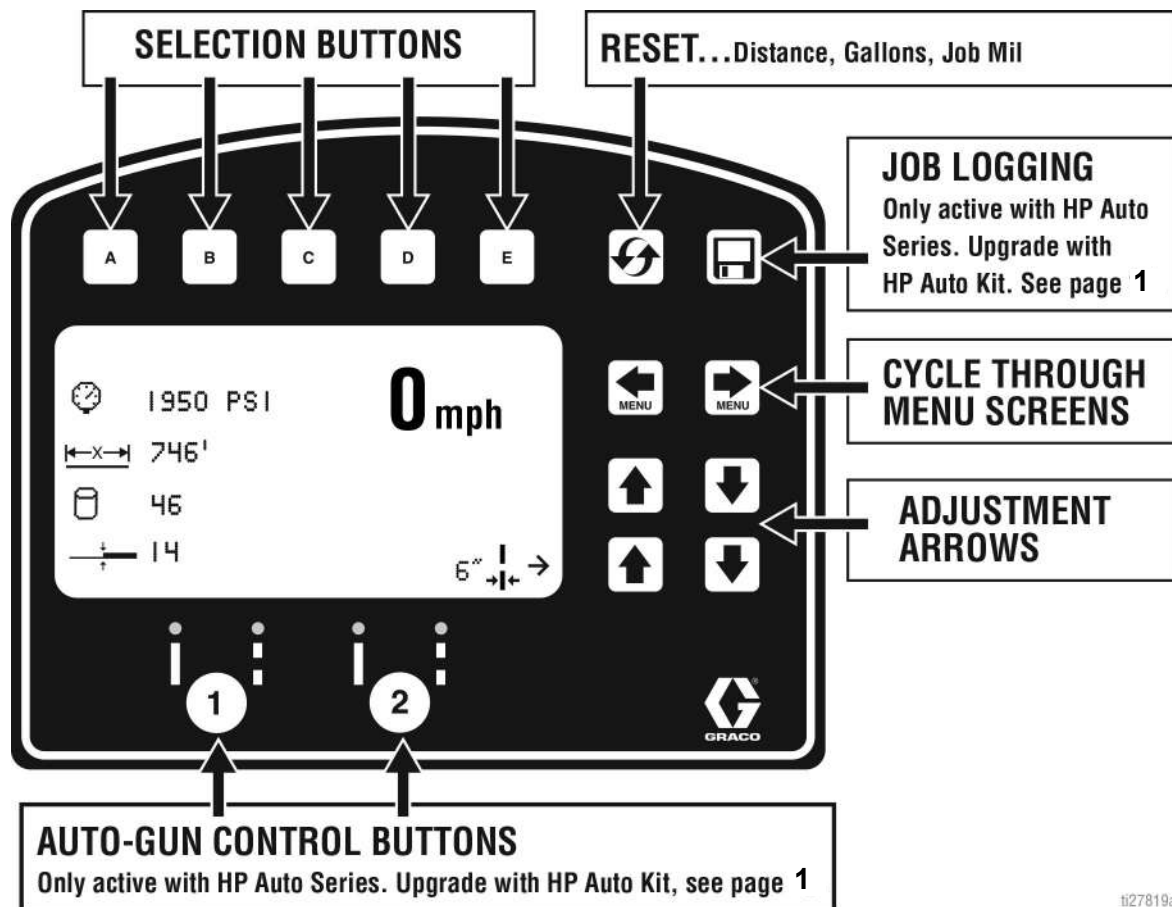
Standard Series



ti27920a

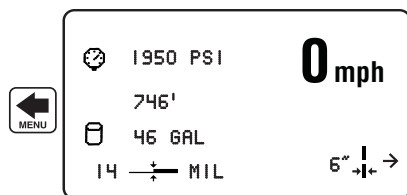
LineLazer V LiveLook Display

Standard Series



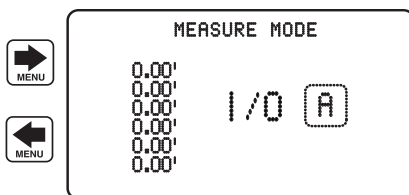
ti27819a

STRIPING SCREEN



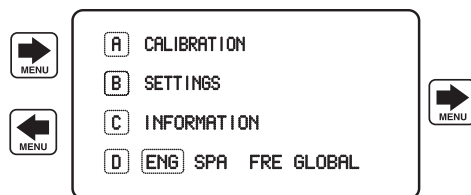
- Displays:
 - Distance of sprayed line
 - Gallons Pumped
 - Job Mil and Live Mil
 - Speed
 - Pressure
 - Input Line Width

MEASURE MODE



- Take up to 6 measurements by pressing the **A** button to start the measurement and pressing it again to end the measurement.

SETTING/INFO



- Settings and information can be accessed from this screen.
- For accurate distance calculations, the machine must be calibrated. Press **A** to calibrate the machine. Use a distance of at least 25 feet or more.

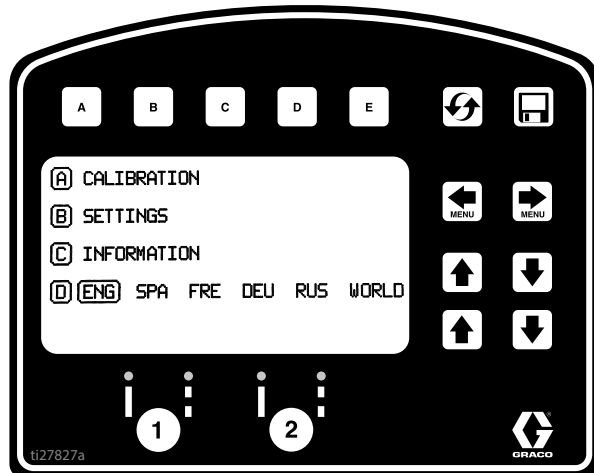
ti27820a

Initial Setup (Standard Series)

The initial setup prepares the striper for operation based on a number of user entered parameters. Language selections and the units of measure selections can be set before you start or changed later.

Language

From Setup/Information select appropriate language by pressing **D** until the language is outlined.



ENG = English

SPA = Spanish

FRE = French

DEU = German

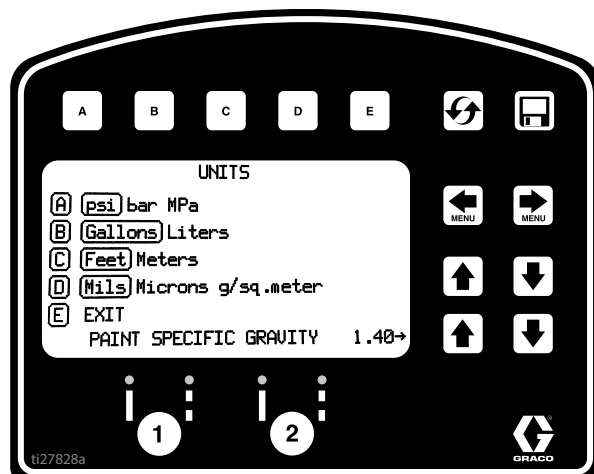
RUS = Russian

WORLD = Symbols see **Data Logging**, page 48.

NOTE: Language can be changed later.

Units

Press **B** to enter settings and then **B** again to enter units. Select appropriate units of measure.



US Units

Pressure = psi

Volume = gallons

Distance = feet

Line Thickness = mil

SI Units

Pressure = bar (MPa available)

Volume = liters

Distance = meters

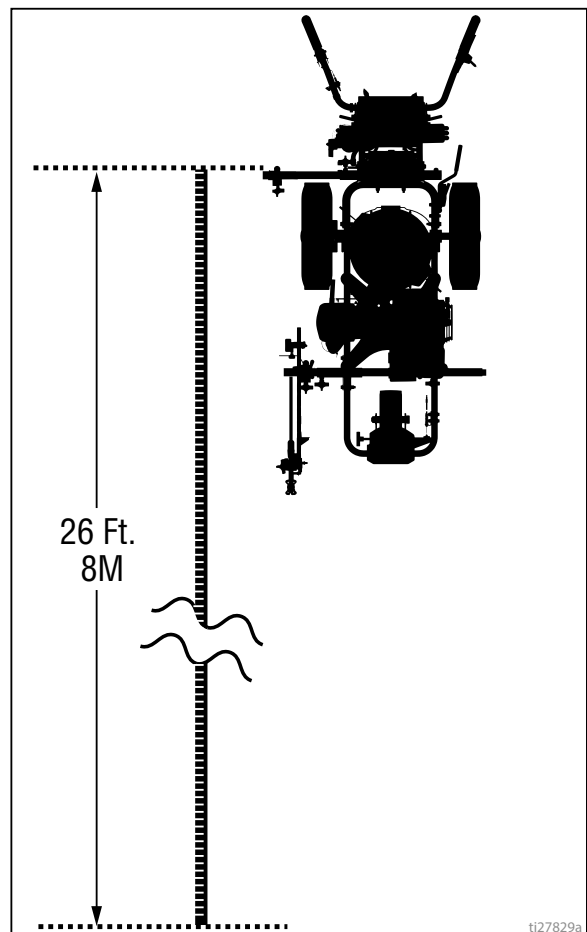
Line thickness = micron (g/m² available)

Paint Specific Gravity = Use UP and DOWN arrows to set specific gravity. Required to determine paint thickness.

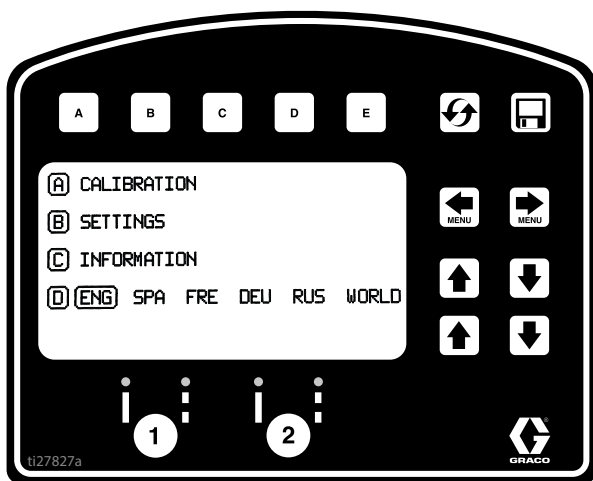
NOTE: All units can be changed individually at any time.


Calibration

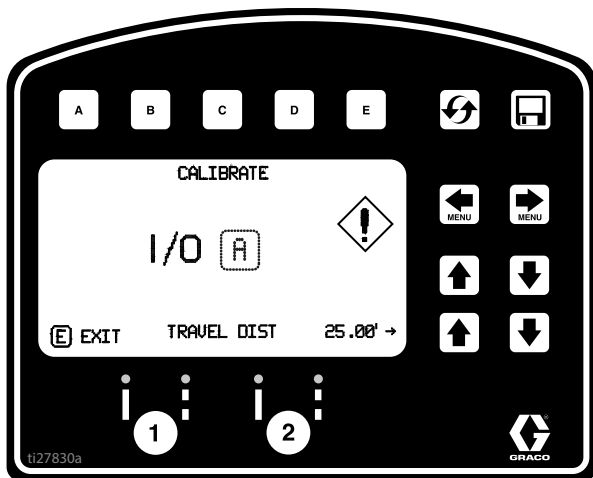
1. Check rear tire pressure 55 ± 5 psi (379 ± 34 kpa) and fill if necessary.
2. Extend steel tape to distance greater than 26 ft. (8m).



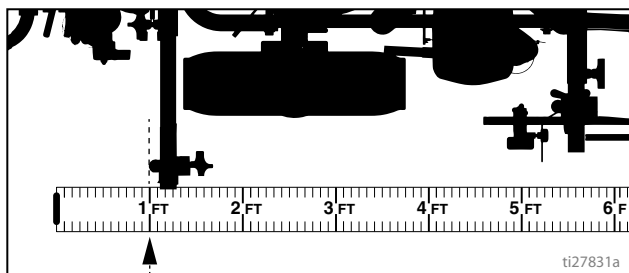
3. Press   to select Setup/Information.




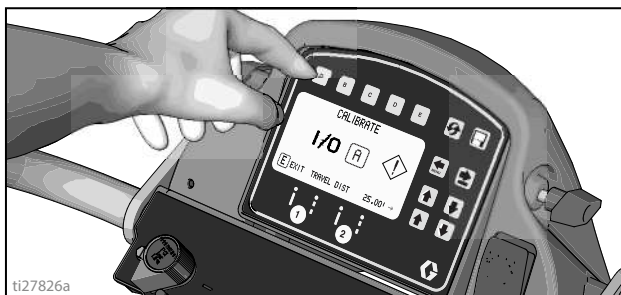
4. Press  for Calibration. Set TRAVEL DIST to 25 ft (7.6m) or longer. Longer distances ensure better accuracy, depending on conditions.



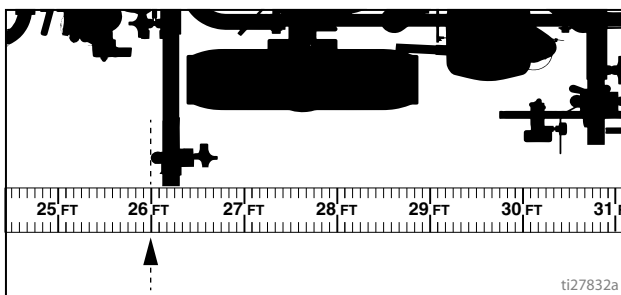
5. Align part of the unit with 1 foot (30.5cm) on steel tape.




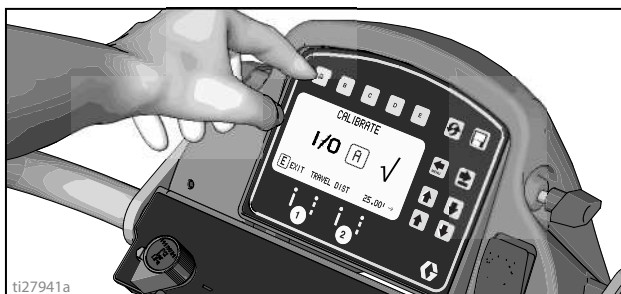
6. Push  to start calibration.





7. Move striper forward. Keep unit aligned with steel tape.
8. Stop when chosen part of unit aligns with 26-ft (8m), or distance entered, on steel tape (25-ft./ 7.6m distance).



9. Push  to complete calibration.

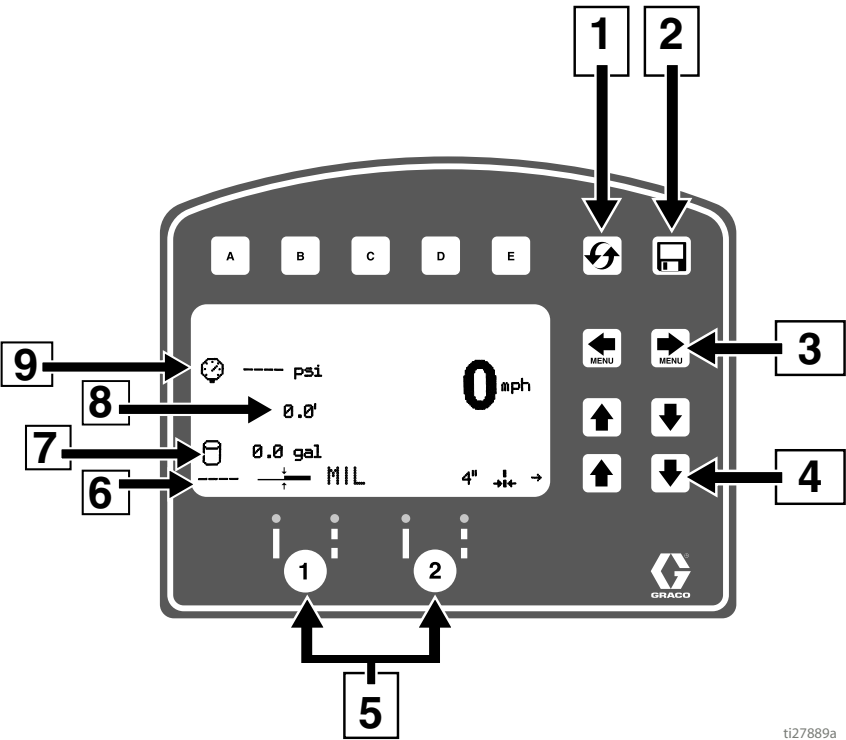


- Calibration is not complete when the exclamation symbol  is displayed.
- Calibration is finished when the check mark symbol  is displayed.

10. Calibration is now complete.

Go to **Measure Mode (Standard Series)**, page 30, and verify accuracy by measuring the tape.

Striping Mode (Standard Series)



ti27889a

Ref.	Description
1	Resets Distance, Gallons, Mils
*2	Job logging
3	Scroll between menu screens
4	Line width adjustment buttons
*5	Auto gun buttons
6	MIL thickness. While spraying "Instant MIL avg" is displayed. When stopped total "Job MIL avg" is displayed.
7	Total gallons sprayed
8	Total line length sprayed.
9	Pressure

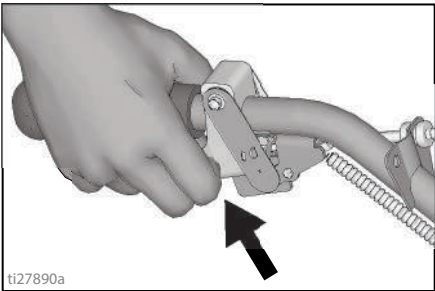
* Not active in Standard Series. Upgrade to HP Auto Series with P/N 17V683.

Operating in Striping Mode

1. Make sure engine is running.
2. Set pump switch to ON.





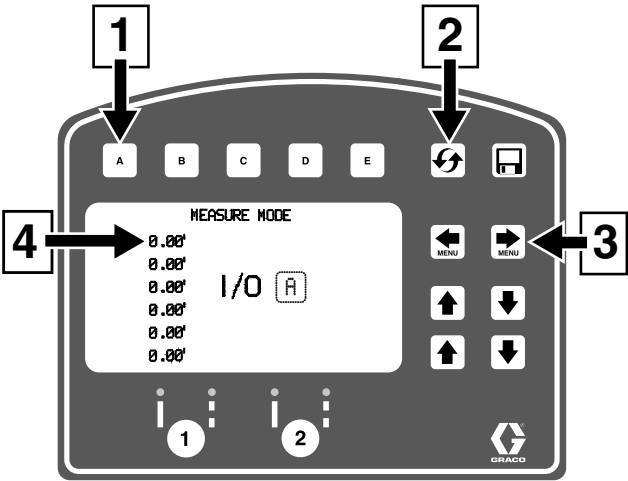
3. Pull trigger to spray.



Measure Mode (Standard Series)


Measure Mode replaces a tape measure to measure distances when laying out an area to be striped.

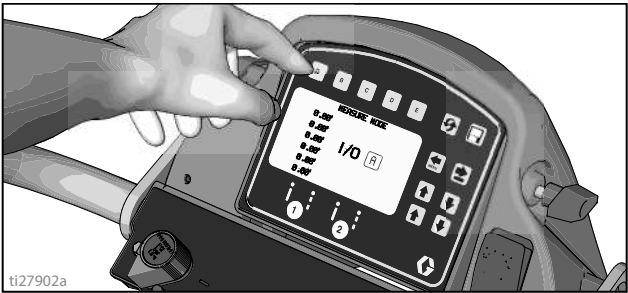
1. Use   to select Measure Mode.




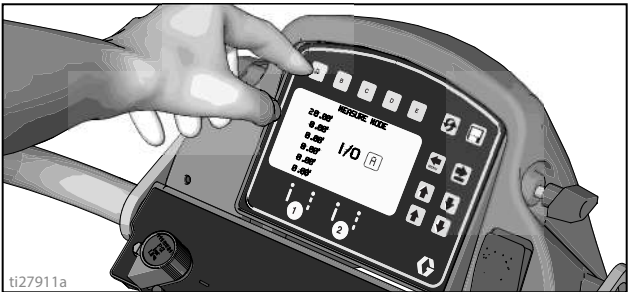
ti27834a

Ref.	Description
1	Press to start measurement, Press to stop measurement
2	Hold to reset values to zero
3	Scroll between main menu screens
4	Last measurement taken



2. Press and release . Move striper forwards or backwards. (Moving backwards is a negative distance.)



3. Press and release  to end measured length. Up to six lengths are viewable.

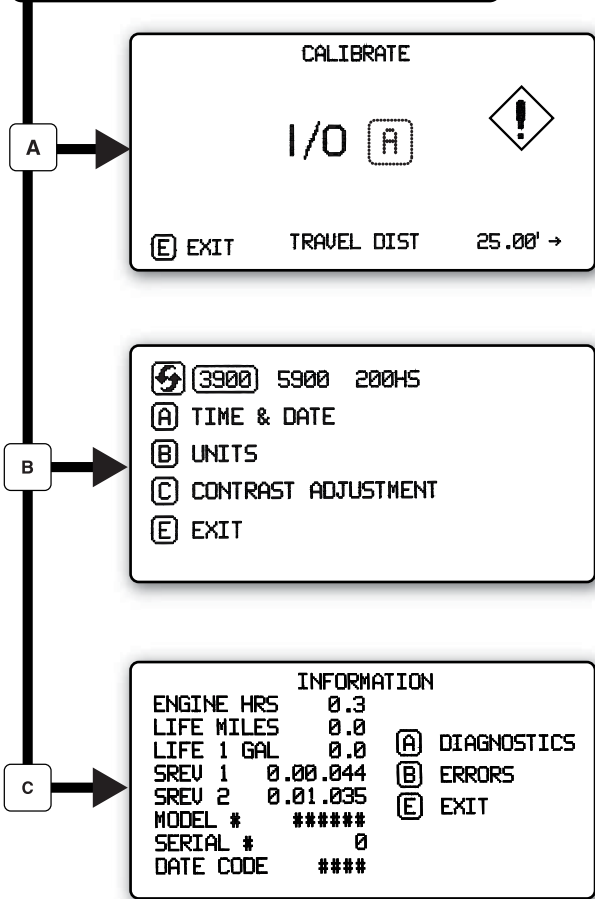


Setup/Information

Use   to select Setup/Information.



Press **D** to select Language.
See **Language**, page 27.






See **Calibration**, page 27.

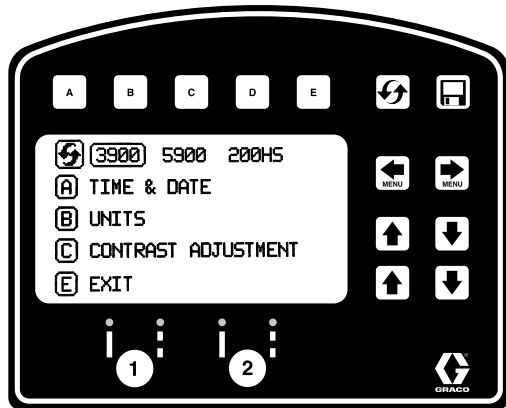
See **Settings**, page 32.


See **Information**, page 33



ti27835a

Settings



Use   to select Setup/Information. Press  to open Settings Menu.

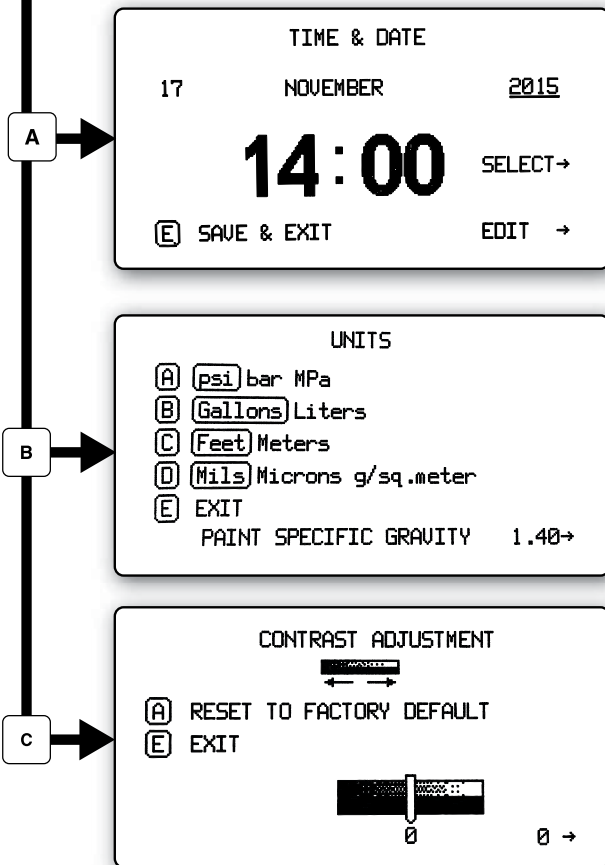


 Chooses the machine type. Necessary for accurate gallon counting.

Use   to set time and date.

Set units with    

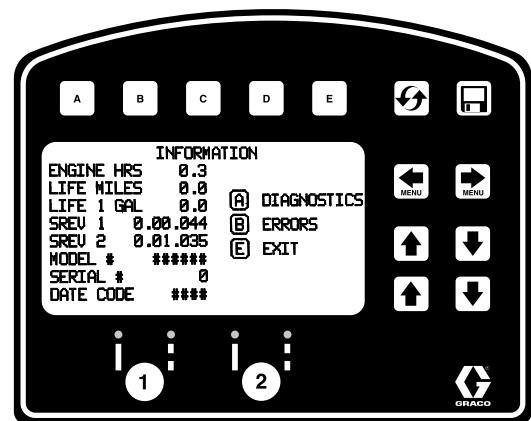
Use   to adjust screen contrast to the desired value.



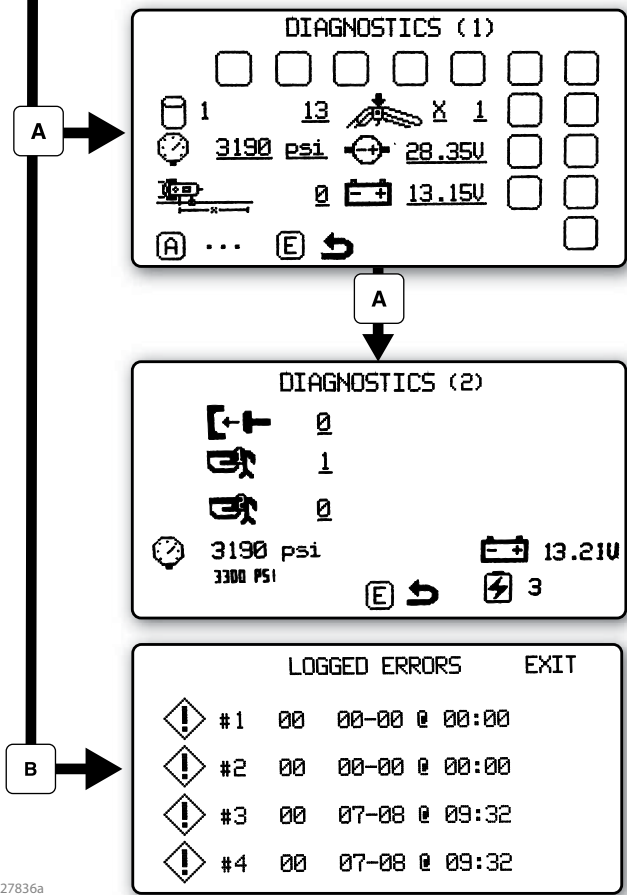
ti27839a

Information

Use to select Setup/Information. Press to open Information Menu.



Displays and logs life data and striper information.



View and test functionality of components.

- Stroke Counter
- Touch Pad Buttons
- Pressure Transducer
- Engine Voltage
- Distance Sensor
- Battery Voltage

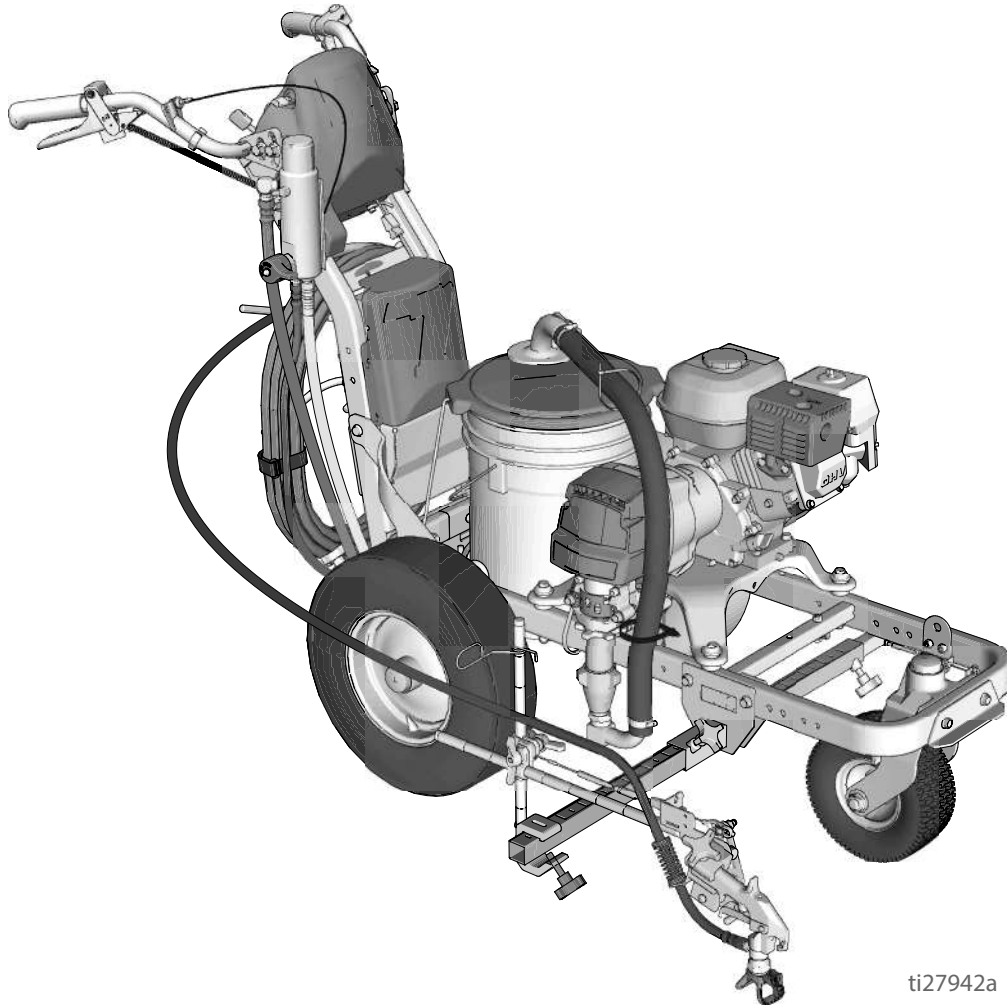
Logs last four error codes that occurred.

- Code Description
- 02 = Over pressure
- 03 = No transducer detected

Reset error codes

ti27836a

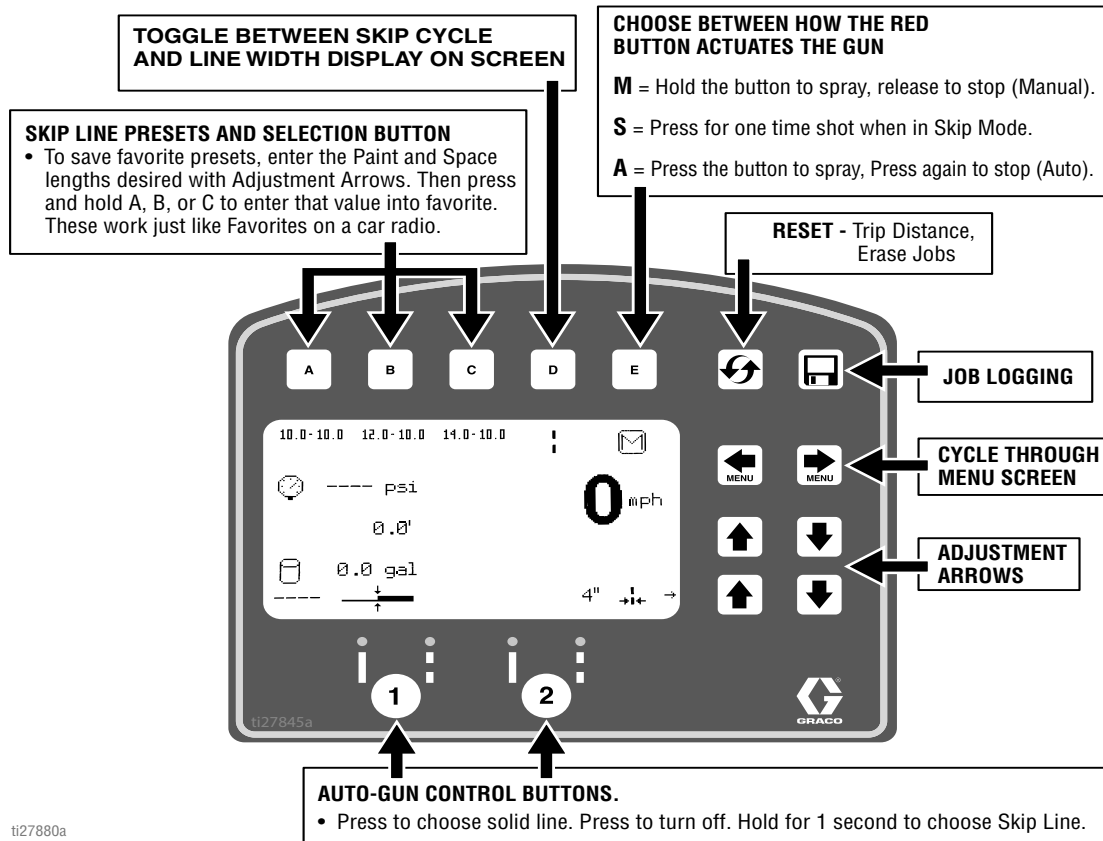
HP Auto Series



ti27942a

LineLazer V LiveLook Display

HP Auto Series



STRIPING SCREEN	MEASURE MODE	LAYOUT MODE	SETTING/INFO
<p>• Main striping screen. Must be in this mode to electronically actuate guns.</p> <p>• Automatic Skip Cycles can be laid from this screen. Choose skip line on the desired gun to fire. Enter the Paint and Space distance wanted and begin spraying.</p> <p>• Press the E Button to choose how the red button actuates the guns.</p> <p>M = Hold to spray, release to stop</p> <p>S = Press for one time shot when in Skip Mode.</p> <p>A = Press to start, press to stop</p>	<p>• Measure Mode. Ability to take up to 6 measurements by pressing the red button to start the measurement and pressing it again to end the measurement.</p> <p>• If an Auto Gun is selected (see below) and the red button is held down, a dot will be dropped every 12" until the red button is released.</p> <p>ti27879a</p>	<p>• Layout Mode. Drop a dot at a chosen distance to layout a parking lot.</p> <p>• Enter stall size, activate an auto gun, press the red button, and roll the machine. To stop dotting, press the red button again. Favorites can be saved just like in the main screen.</p> <p>A STALL CALCULATOR see page 4</p> <p>B ANGLE CALCULATOR see page 4</p>	<p>• Settings and Information can be accessed from this screen.</p> <p>• For accurate distance calculations the machine must be calibrated. Press A to calibrate the machine. Use a distance of at least 25' or more.</p>