

LineLazer[™] 130HS Airless Line Stripers

3A3392C

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)

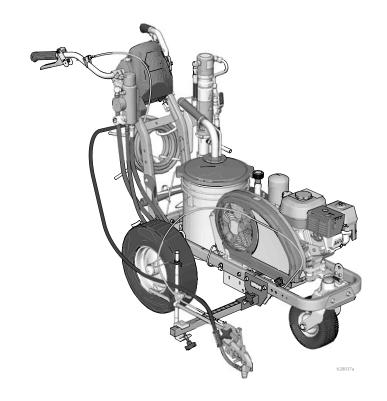


Important Safety Instructions

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.

LineLazer 130HS				
Model:	Standard 1 Manual Gun	Standard 2 Manual Guns		
17H447	~			
17H448		~		

Related Manuals:	
3A3391	Parts
311254	Gun
311845	Pump



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



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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 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.
- 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.
- Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static arc).



- 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 pres-
- Use only grounded hoses.
- Hold gun firmly to side of grounded pail when triggering into pail. Do not use pail liners unless they are antistatic 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.



SKIN INJECTION HAZARD

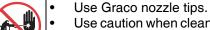
High-pressure spray is able to inject toxins into the body and cause serious bodily injury. In the event that injection occurs, get immediate surgical treatment.



- 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 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



CARBON MONOXIDE HAZARD

Exhaust contains poisonous carbon monoxide, which is colorless and odorless. Breathing carbon monoxide can cause death.

Do not operate in an enclosed area.



EQUIPMENT MISUSE HAZARD

Misuse can cause death or serious injury.

- 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.



PRESSURIZED ALUMINUM PARTS HAZARD

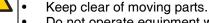
Use of fluids that are incompatible with aluminum in pressurized equipment can cause serious chemical reaction and equipment rupture. Failure to follow this warning can result in death, serious injury, or property damage.

- 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.



MOVING PARTS HAZARD

Moving parts can pinch, cut or amputate fingers and other body 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.



ENTANGLEMENT HAZARD

Rotating parts can cause serious injury

- Keep clear of moving parts.
- Do not operate equipment with protective guards or covers removed.
- Do not wear loose clothing, jewelry or long hair while operating equipment.
- Equipment can start without warning. Before checking, moving, or servicing equipment, follow the Pressure Relief Procedure and disconnect all power sources.

△WARNING



TOXIC FLUID OR FUMES HAZARD

Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.

- 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.



BURN HAZARD

Equipment surfaces and fluid that's heated can become very hot during operation. To avoid severe burns:

• 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:

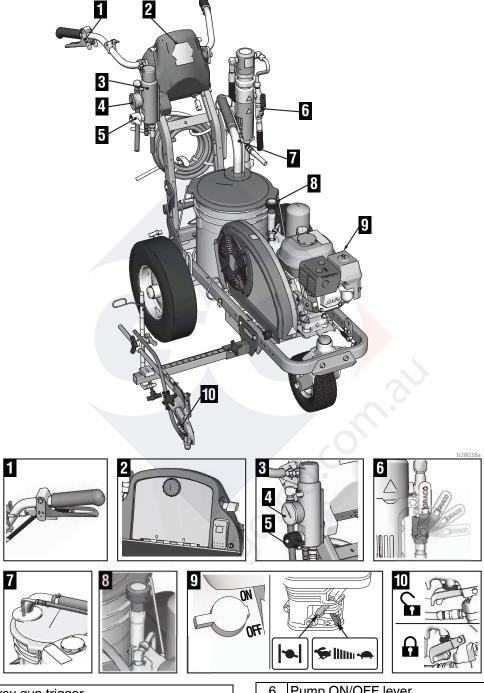
- Protective eyewear, and hearing protection.
- Respirators, protective clothing, and gloves as recommended by the fluid and solvent manufacturer.

Tip Selection

177006a	in. (cm)	in. (cm)	in. (cm)	in. (cm)	11275098	1027.510a	1127 605.8
LL5213*	2 (5)				✓		
LL5215*	2 (5)					~	
LL5217		4 (10)				V	
LL5219		4 (10)					✓
LL5315		4 (10)			>		
LL5317		4 (10)			~		
LL5319		4 (10)				~	
LL5321		4 (10)				V	
LL5323		4 (10)				V	
LL5325		4 (10)					~
LL5327		4 (10)					~
LL5329		4 (10)					~
LL5331		4 (10)					~
LL5333		4 (10)					~
LL5335		4 (10)				70-	~
LL5355		4 (10)				0.	~
LL5417			6 (15)		~		
LL5419			6 (15)				
LL5421			6 (15)				
LL5423			6 (15)		70,	~	
LL5425			6 (15)			~	
LL5427			6 (15)	70		V	
LL5429			6 (15)	5		V	
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.

Component Identification (LL 130HS)



1	Manual spray gun trigger
2	Storage box
3	Filter
4	Pressure gauge
5	Prime/Pressure relief valve

6	Pump ON/OFF lever
7	Drain and siphon tubes
8	Pressure control
9	Engine ON/OFF switch
10	Trigger safety

Grounding Procedure (For Flammable Flushing Fluids Only)

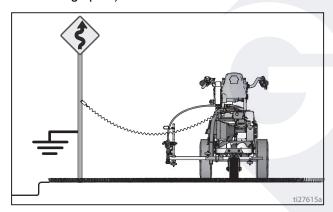






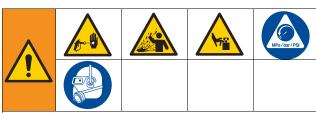
This equipment must be grounded to reduce the risk of static sparking. Static sparking can cause fumes to ignite or explode. Grounding provides an escape wire for the electric current.

- 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).



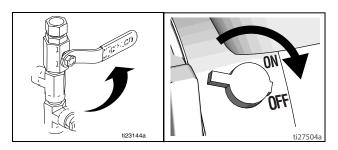
3. Disconnect grounding clamp after flushing is complete.

Pressure Relief Procedure

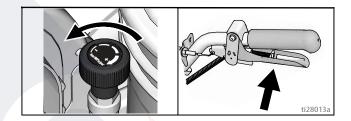


This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashing fluid and moving parts, follow the Pressure Relief Procedure when you stop dispensing and before cleaning, checking, or servicing the equipment.

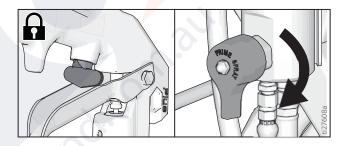
- Perform Grounding Procedure if using flammable materials.
- 2. Set pump switch to **OFF**. Turn engine **OFF**.



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

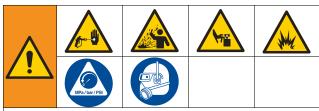


4. Engage all gun trigger locks. Turn prime valve down.



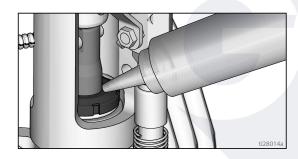
- 5. If you suspect the spray tip or hose is clogged or that pressure has not been fully relieved:
 - very slowly loosen the tip guard retaining nut or the hose end coupling to relieve pressure gradually.
 - b. Loosen the nut or coupling completely.
 - c. Clear the obstruction in the hose or tip.

Setup/Startup

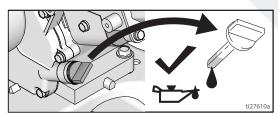


This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashing fluid and moving parts, follow the Pressure Relief Procedure when you stop spraying and before cleaning, checking, or servicing the equipment.

- 1. Perform Pressure Relief Procedure, page 8.
- Perform Grounding Procedure (For Flammable Flushing Fluids Only), page 8 if using flammable materials.
- 3. Fill throat packing nut with Throat Seal Liquid (TSL) to decrease packing wear.

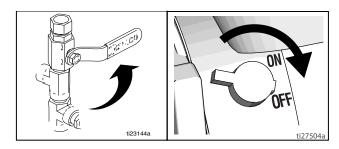


4. Check engine oil level. Add SAE 10W-30 (summer) or 5W-30 (winter). See engine manual.

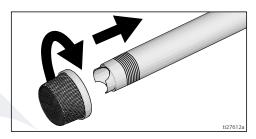


5. Fill fuel tank.

6. Set pump switch to OFF.



7. If removed, install strainer.

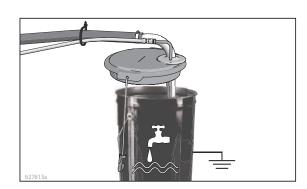


8. Turn prime valve down. Turn pressure control counterclockwise to lowest pressure.



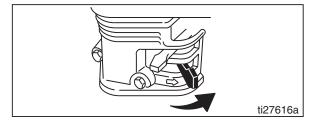
NOTE: Minimum hose size allowable for proper sprayer operation is 3/8 in. x 22 ft for LL130Hs.

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:

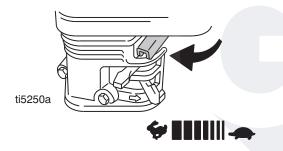
a. Move fuel valve to open.



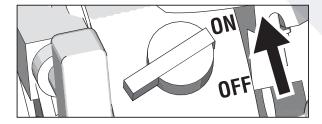
b. Move choke to closed.



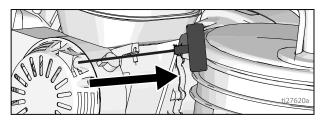
c. Set throttle to fast.



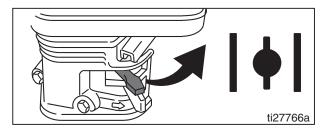
d. Set engine switch to ON.



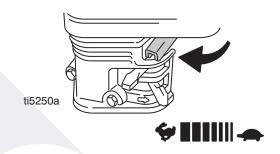
e. Pull starter cord.



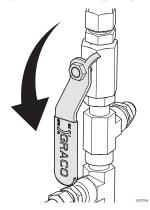
11. After engine starts, move choke to open.



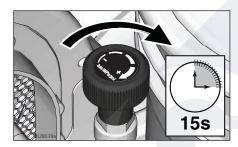
12. Set throttle to desired setting.



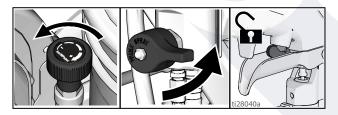
13. Set pump switch to **ON** (pump is now active).



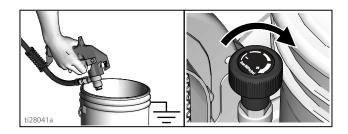
14. Increase pressure control enough to start pump. Allow fluid to circulate for 15 seconds.



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



 Hold all guns against a grounded metal flushing pail.
Trigger guns and increase fluid pressure slowly until pumps run smoothly.





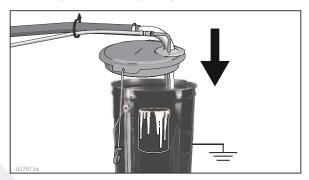






High-pressure spray is able to inject toxins into the body and cause serious bodily injury. Do not stop leaks with hand or rag.

- 17. 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.
- 18. Place siphon tube in paint pails.

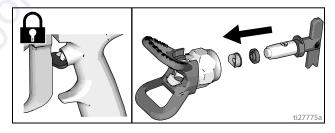


19. Trigger all guns again into a flushing fluid pail until paint appears. Assemble tips and guards.

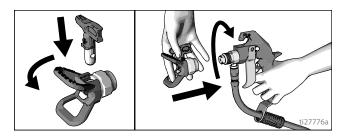


SwitchTip and Guard Assembly

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



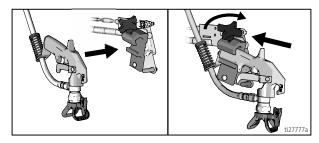
Insert SwitchTip in tip bore and firmly thread assembly onto gun.



Gun Placement

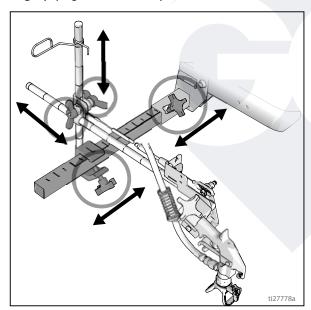
Install Guns

1. Insert guns into gun holder. Tighten clamps.

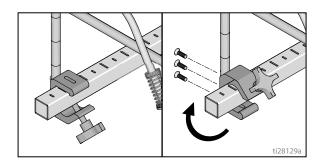


Position Gun

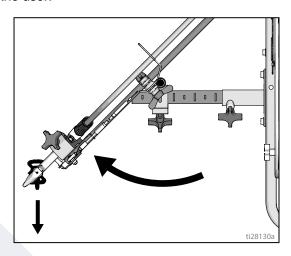
 Position gun: up/down, forward/reverse, left/right.
See Change Gun Position (Front and Back), page 14 and Change Gun Position (Left and Right), page 15 for examples.



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

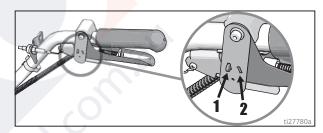


Another option can be to swing the gun out at an angle and rotate the tip guard. This results in better visibility for the user.



Select Guns

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



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



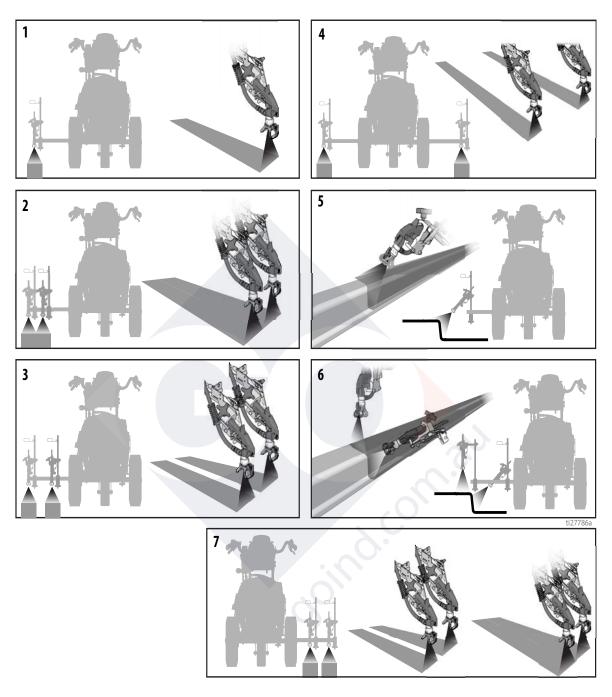
b. Both guns simultaneously: Adjust both gun selector plates to the same position.



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



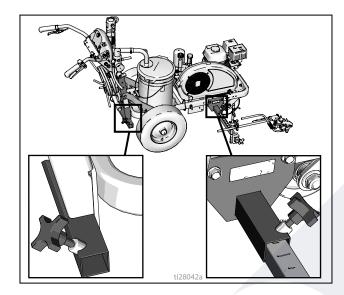
Gun Positions Chart



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

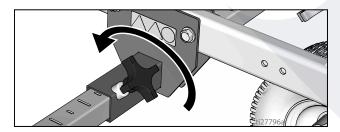
Gun Arm Mounts

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

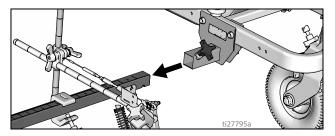


Change Gun Position (Front and Back)

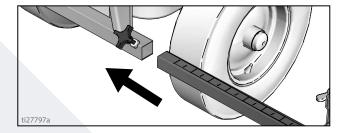
1. Loosen gun arm knob and remove from gun arm mounting slot.



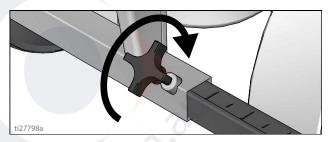
2. Slide gun arm assembly (including gun and hoses) out from gun arm mounting slot.



Slide gun arm assembly into desired gun arm mounting slot.



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



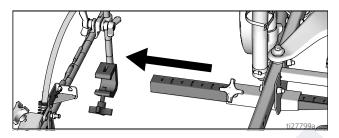
NOTICE

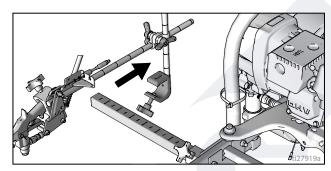
Make sure all hoses, cables, and wires are properly routed through brackets and do NOT rub on tire. Contact with tire will result in damaged hoses, cables, and wires.

Change Gun Position (Left and Right)

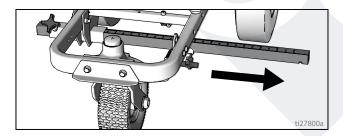
Removal

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



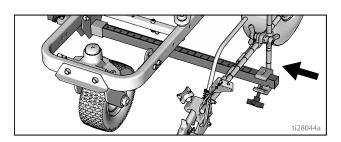


2. Extend mounting bar on opposite side of the machine.



Installation

1. Install vertical gun mount onto gun bar.

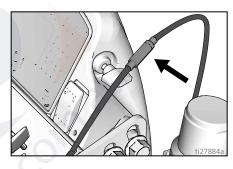


NOTE: Make sure all hoses, cables, and wires are properly routed through brackets.

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.

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

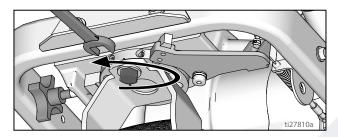


- 2. Loosen or tighten adjuster until desired result is achieved. **NOTE:** More thread exposed means less gap between gun trigger and trigger plate.
- 3. Use wrench to tighten locking nut on the adjuster.

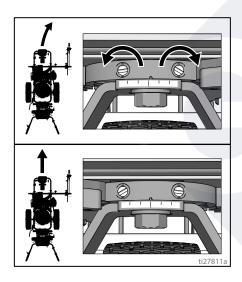
Straight Line Adjustment

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:

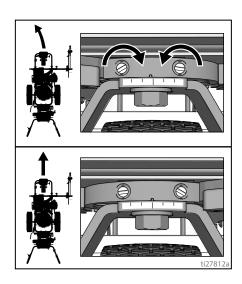
Loosen bolt on the front wheel bracket.



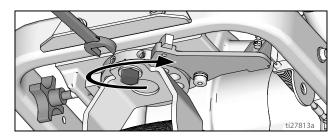
2. If striper arcs to the right, loosen left set screw and tighten right set screw for fine tune adjustment.



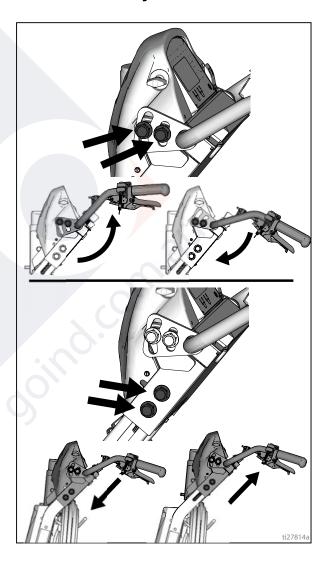
3. If striper arcs to the left, loosen right set screw and tighten left set screw.



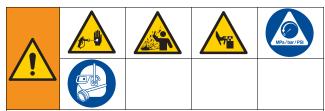
4. Roll the striper. Repeat steps 2 and 3 until striper rolls straight. Tighten bolt on wheel alignment plate to lock the new wheel setting.



Handle Bar Adjustment



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. Perform Pressure Relief Procedure, page 8.
- 2. Remove guard and SwitchTip from all guns.



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



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



- 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 16 (see page 10) 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.



- 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.