

Electric Turf Striper

332119A
EN

- For turf striping applications only -



IMPORTANT SAFETY INSTRUCTIONS

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

All Models:

Maximum Working Pressure 1200 psi (8.3 MPa, 83 bar)

Model	Charger Voltage
24N950	120V
24R023	240V
24R370	240V
24R371	120V/240V



WARNING



FIRE AND EXPLOSION HAZARD

Solvent and paint fumes can ignite or explode.

- Use only water-based materials.
- Do not spray or flush with flammable materials.



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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



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 material dispenser 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.
- Do not leave the unit energized or under pressure while unattended. When the unit is not in use, turn off the unit and follow the **Pressure Relief Procedure**.
- Check hoses and parts for signs of damage. Replace any damaged hoses or parts.
- This system is capable of producing 1200 psi (8.3 MPa, 83 bar). Use Graco replacement parts or accessories that are rated a minimum of 1200 psi (8.3 MPa, 83 bar).
- 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.



EQUIPMENT MISUSE HAZARD

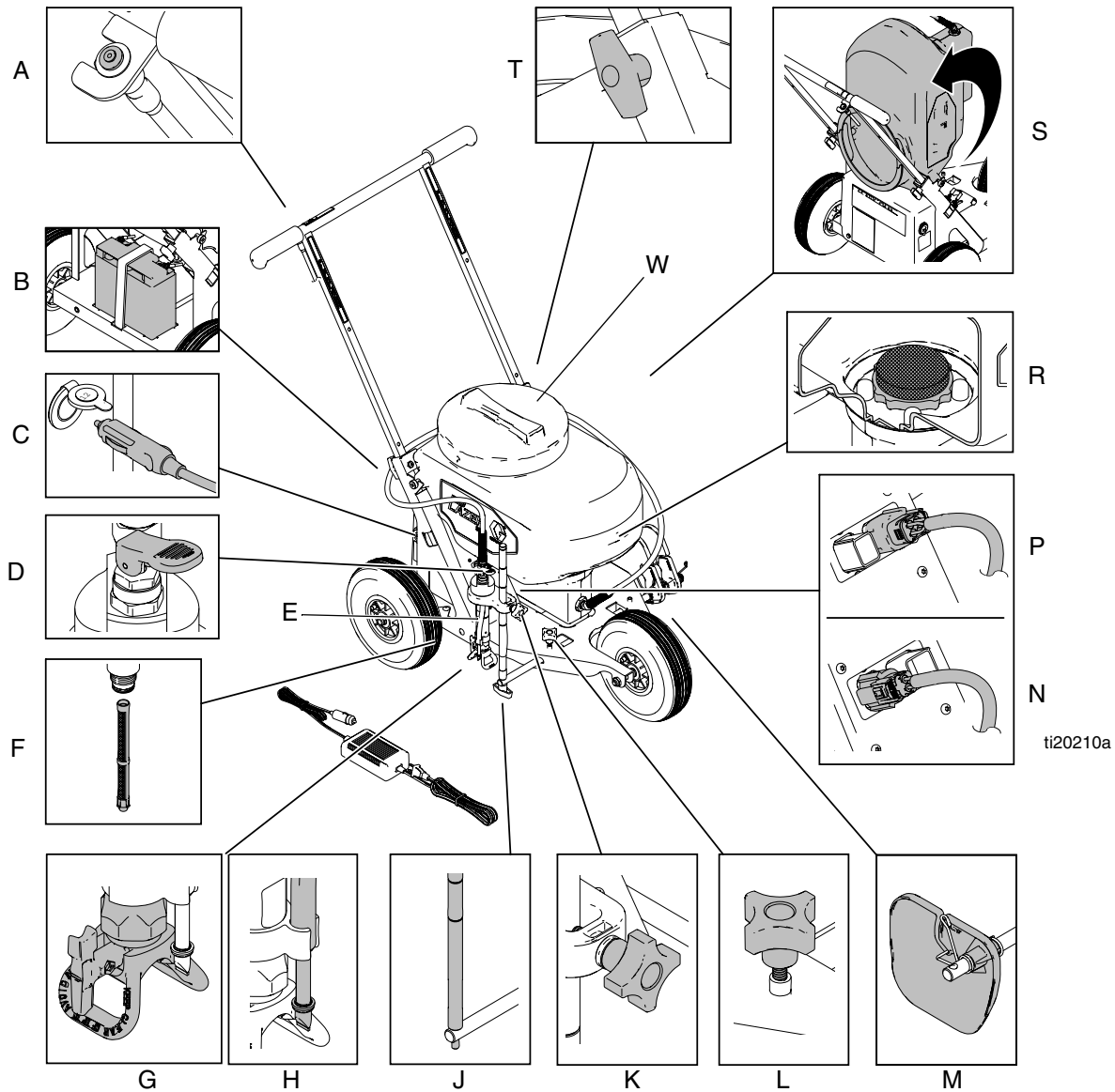
Misuse can cause death or serious injury.

- 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 MSDS 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.

! WARNING

	BATTERY HAZARD The battery may leak, explode, cause burns, or cause an explosion if mishandled. • Only use the battery type specified for use with the equipment. See Technical Data. • Do not short circuit battery terminals. Only use tools with insulated handles. Do not lay tools or metal parts on top of battery. • Do not dispose of battery in fire or heat above 50 °C (122 °F). The battery is capable of exploding. • Follow local ordinances and/or regulations for disposal. • Do not open or mutilate the battery. Released electrolyte has been known to be harmful to the skin and eyes and to be toxic. • Charge only with Graco approved charger as listed in this manual.
   	CHARGER ELECTRIC SHOCK, FIRE AND EXPLOSION HAZARD Improper setup or usage can cause electric shock, fire, and explosion. • Use only in dry locations. Do not expose to water or rain. For indoor use only. • Use only with 12V DC lead acid rechargeable battery. • Do not use a charger that is cracked or damaged. • If the supply cord is damaged, replace the charger. • Disconnect the charger from the outlet before cleaning. • Do not disassemble the charger.
	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. • Many other fluids may contain chemicals that can react with aluminum. Contact your material supplier for compatibility.
	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 MSDSs 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.
	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.

Component Identification



A	Spray Button
B	Battery Shroud (battery inside)
C	Battery Charger Connection Port
D	Prime/Spray Valve
E	Material Dispenser
F	Filter
G	Spray Tip and Guard
H	Prime Hose
J	Height Adjustment Mount

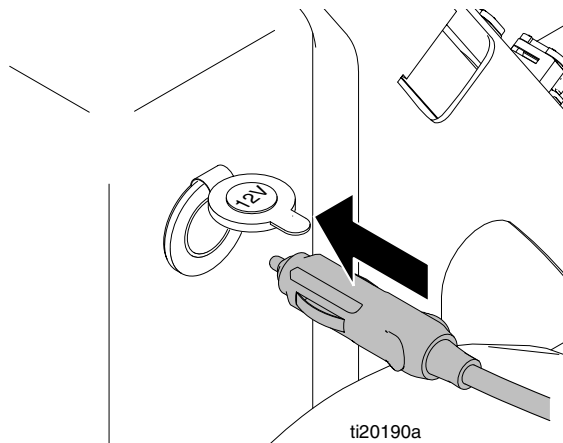
K	Tip Height Adjustment Knob
L	Spray Arm Adjustment Knob
M	Spray Shields
N	Motor Plug
P	Spray Button Plug
R	Paint Hopper Screen
S	Tilt-N-Pour Paint Hopper
T	Adjustable Handlebar Knob
W	Paint Hopper Lid

Charging the Battery

			
Battery charger is for indoor use only. Do not expose charger to rain or snow. Charge battery with Graco-approved charger.			

1. Place striper in a dry, well-ventilated area away from flammable or combustible materials, including paints and solvents.

2. Plug charger into an electrical outlet and plug 12V charger jack into stripping machine.

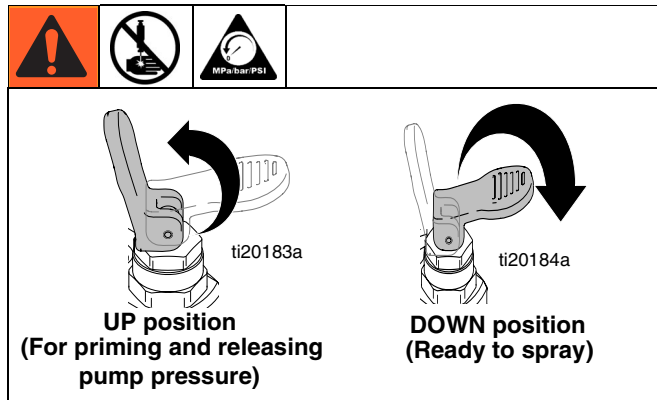


Charger Indicator Lights

Appearance	Description
GREEN	Power is on but charger is not plugged into receptacle.
RED	Charger is connected to receptacle and charging.
GREEN	Charging is complete (charger is in float mode and will maintain full charge).
NOTE: It is acceptable to leave charger connected to the striper without risk of overcharging battery. Charge times will vary from 0 - 14 hours depending on level of discharge.	

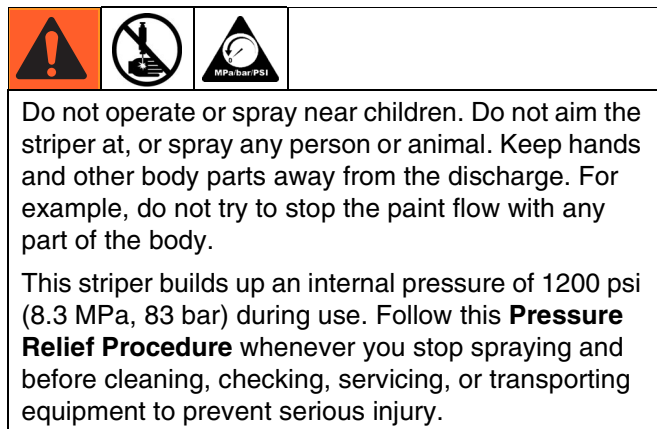
Common Procedures

Prime/Spray Valve

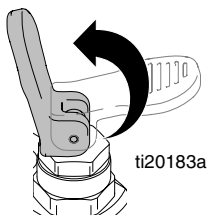


Follow the **Pressure Relief Procedure** whenever you see this symbol.

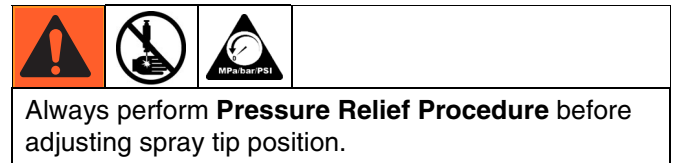
Pressure Relief Procedure



1. Put prime/spray valve UP to release pressure.

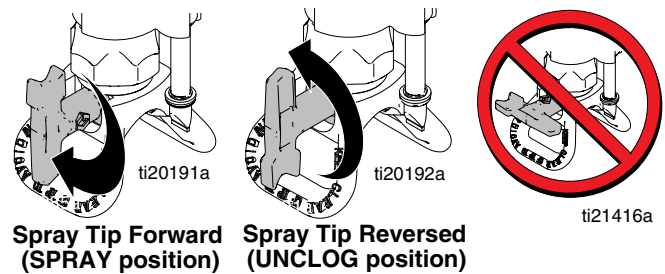


Reversible Spray Tip



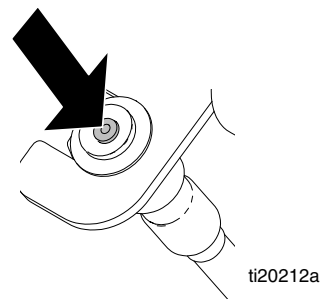
In the event that particles or debris clog the spray tip, this striper is designed with a reversible spray tip that can be used to quickly and easily clear the particles and resume spraying as quickly as possible.

- Always point the reversible spray tip down when spraying.
- When particles or debris get caught in the tip, it can be reversed to quickly clean the tip.
- Only operate striper with spray tip in forward or reversed position.



Spraying

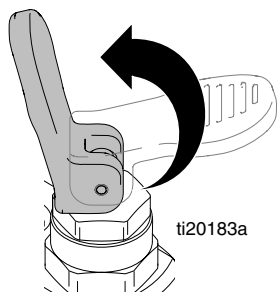
Press spray button to spray. Spray will continue until spray button is pressed again to stop.



Install Spray Tip/Guard Assembly (if not installed)

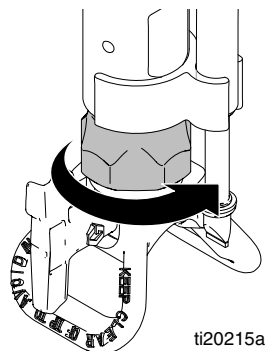
			
Perform the Pressure Relief Procedure before installing spray tip/guard assembly.			

1. Put prime/spray valve UP to release pressure.

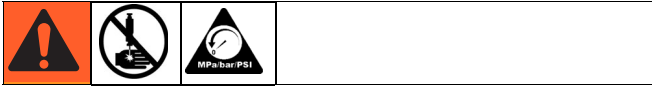


			
Do NOT place hands in front of tip.			

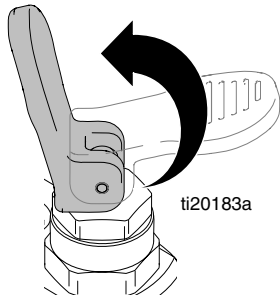
2. Screw spray/tip guard assembly onto striper. Tighten retaining nut until completely engaged with striper. Do not overtighten nut.



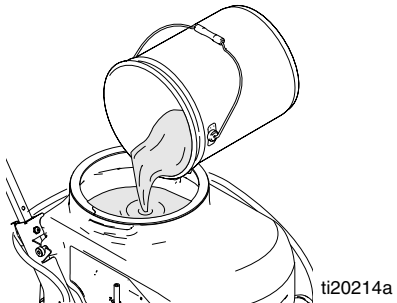
Starting a New Job



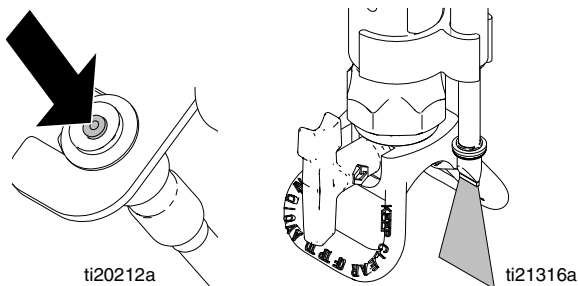
1. Perform **Pressure Relief Procedure**, page 7.



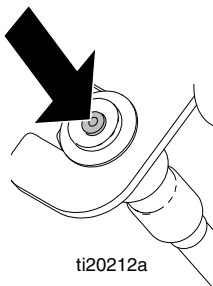
2. Pour material into material hopper.



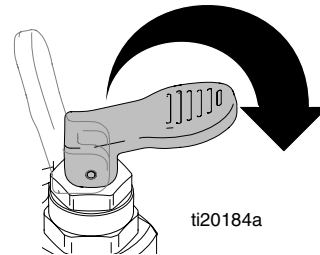
3. To fill striper with fluid, press spray button and allow striper to run until material flows through prime hose.



4. Stop striper by pressing spray button.

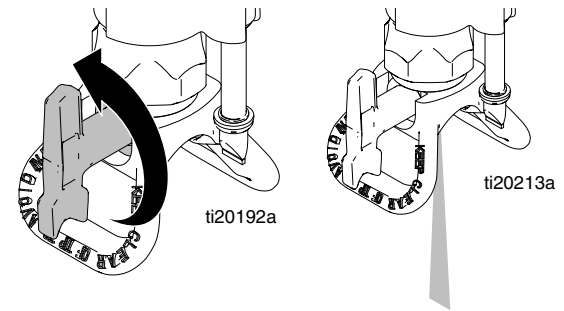


5. Put prime/spray valve in DOWN position.

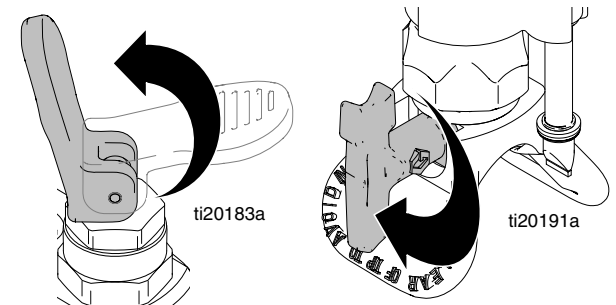


6. Reverse spray tip to UNCLOG position, spray for two seconds and then stop.

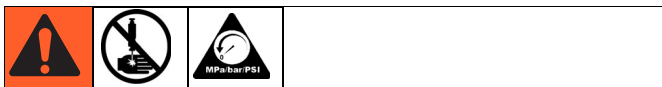
NOTE: Failure to perform this operation could result in poor spray pattern.



7. Put prime/spray valve UP to release pressure. Then rotate spray tip back to spray position.

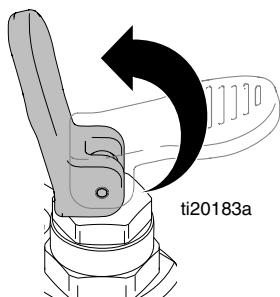


Adjusting Line Width

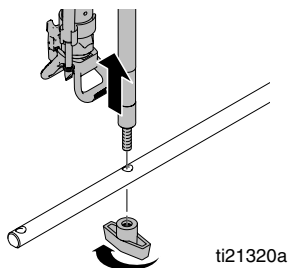


With Shields

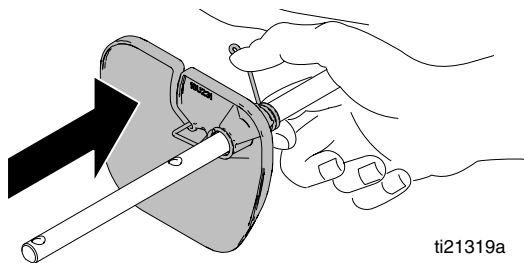
1. Perform **Pressure Relief Procedure**, page 7.



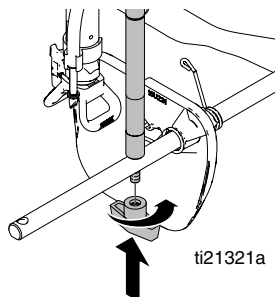
2. Remove vertical material dispenser arm assembly.



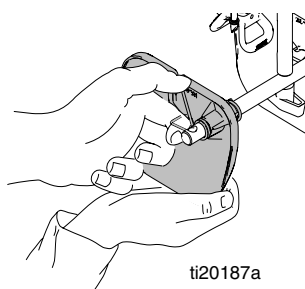
3. Install inner spray shield assembly by collapsing spring and sliding shield into horizontal D-bar.



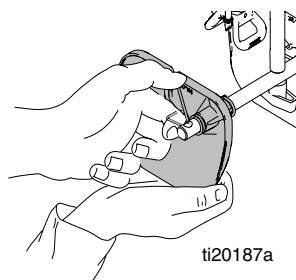
4. Install vertical material dispenser arm assembly.



5. Install outer spray shield assembly by collapsing spring and sliding shield into horizontal D-bar.

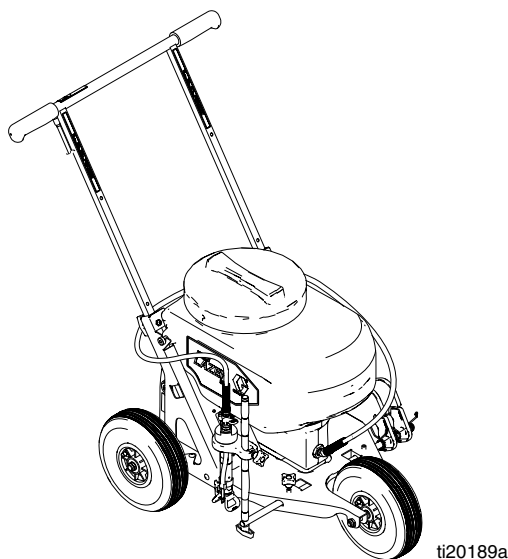


6. Adjust as shown. Spray tip should be centered between shields. Spray pattern should touch shields just above the bottom of the shields.



Without Shields

1. Perform **Pressure Relief Procedure**, page 7.
2. Move vertical material dispenser bar holder to outside position.



3. Adjust height of tip to adjust line width (raising tip height will create wider lines).

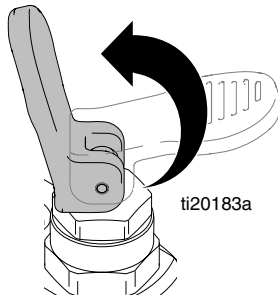
NOTE: Different tip sizes are available for lines greater than 6 in. (15 cm) wide. Use Graco part number LL5417 for wider lines.

Filter Removal / Cleaning

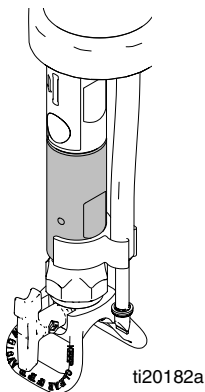


Always perform **Pressure Relief Procedure** before removing filter.

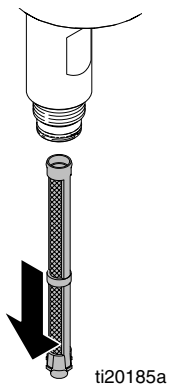
1. Perform **Pressure Relief Procedure**, page 7.



2. Unscrew and remove filter housing.



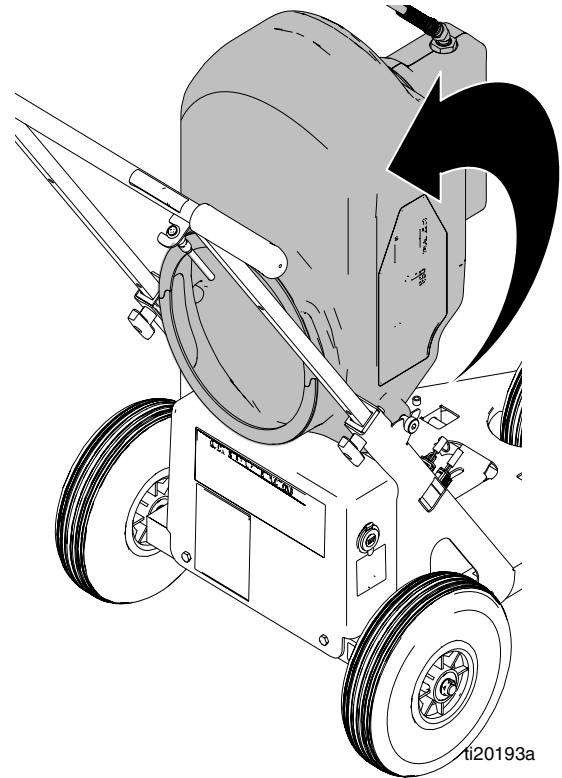
3. Pull out filter.



4. Clean filter with water. Replace filter if damaged or unable to clean.
5. Reinstall filter.
6. Install and tighten filter housing.

Emptying the Hopper

1. Place striping machine near the material container.
2. Remove hopper lid.
3. Grab front of hopper and slowly lift. Material will pour back into the material container.



Shutdown and Cleaning

NOTICE

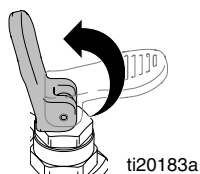
Failure to properly clean striper after each use will result in hardened materials, damage to the striper, and the warranty will no longer be valid. Do not store solvents in striper. Always flush with Graco Pump Armor prior to storage.

Flushing Striper

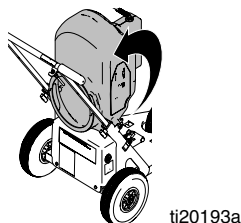


Use only water-based materials. Do not use materials which state "FLAMMABLE" on the packaging. For more information about your material, request MSDS from distributor or retailer.

1. Move prime/spray valve UP to release pressure.



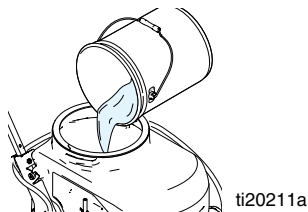
2. Empty the hopper.



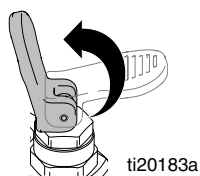
3. Clean inside of hopper with water. Tilt hopper back and spray inside with water.

4. Remove hopper screen and clean.

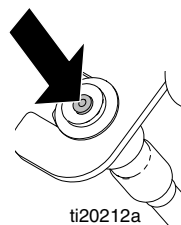
5. Fill hopper with 1/2 gallon (2 L) water.



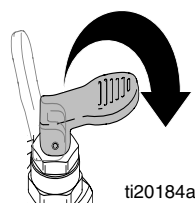
6. Put prime/spray valve UP to clean prime hose.



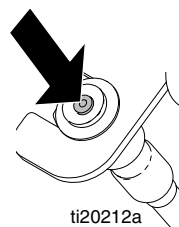
7. Push spray button to pump water through prime hose.



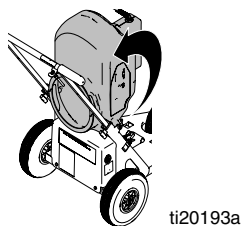
8. Put prime/spray valve DOWN to spray position.



9. Push spray button to spray water through tip.

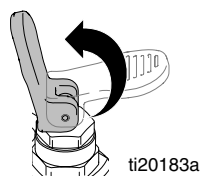


10. Empty hopper.



11. Repeat steps 5-10 until water runs clear.

12. Put prime/spray valve UP to release pressure.



Optional:

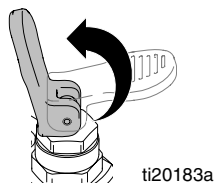
- Disconnect power connector and tip height adjuster
- Remove paint hopper from unit
- Clean out paint hopper at a sink. This may be done while hopper is on the striper or in a sink. To remove hopper, disconnect power connector and material dispenser.

Unclogging Spray Tip/Guard Assembly

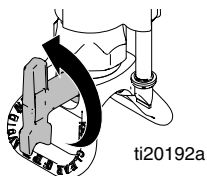


Always perform **Pressure Relief Procedure** before unclogging spray tip/guard assembly.

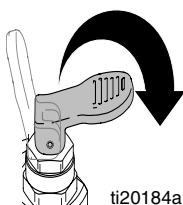
1. Perform **Pressure Relief Procedure**, page 7.



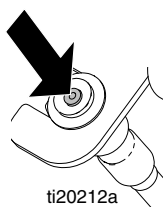
2. Reverse spray tip to **UNCLOG** position.



3. Put prime/spray valve **DOWN** to spray position.

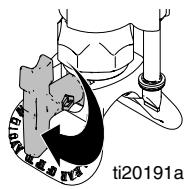
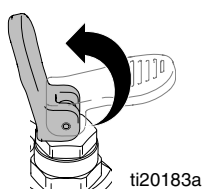


4. Push spray button to start striper and clear clog.

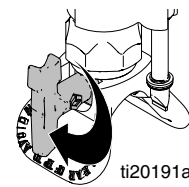
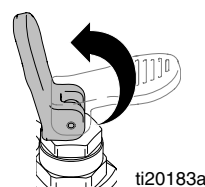


5. Push spray button again to stop striper.

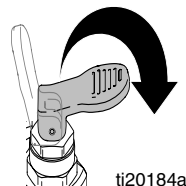
6. Perform **Pressure Relief Procedure**, page 7.



7. Rotate spray tip back to **SPRAY** position.

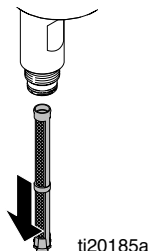


8. Put prime/spray valve **DOWN** to spray position.



9. Push prime/spray valve

10. If spray tip is still clogged, you may have to repeat steps 1 - 7 and rotate the spray tip from **SPRAY** to **UNCLOG** several times. Repeat step 1 to release pressure, remove and clean spray tip filter, or replace with new spray tip/guard assembly.



NOTE: Spray tip filter assembly is reverse-threaded:
Turn left (or counter-clockwise) to install.
Turn right (or clockwise) to remove.

NOTICE

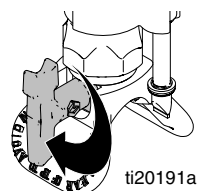
Make sure spray tip filter is completely screwed into the spray/tip guard assembly to avoid damage to the filter. Do not use a damaged filter or poor striper performance may result.

11. If material still fails to be sprayed, perform **Pressure Relief Procedure**, page 7.

12. **Remove Filter** and clean, page 11.

13. Replace filter if damaged or unable to clean.

14. When obstruction is cleared, engage trigger lock and rotate spray tip back to **SPRAY** position.



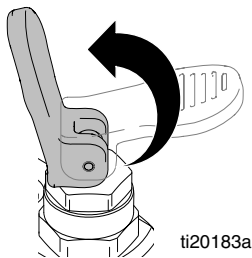
Storage



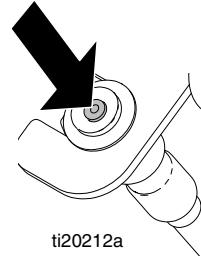
NOTICE

Failure to store striper with Pump Armor will result in operational problems the next time you spray. Always circulate Pump Armor through the striper after cleaning. **Water left in the striper will corrode and damage the pump.**

1. Lift prime/spray valve UP to the prime position.



2. Pour a small amount of Pump Armor into bottom of hopper.
3. Push spray button to pump the material. Stop when Pump Armor flows through the prime hose.



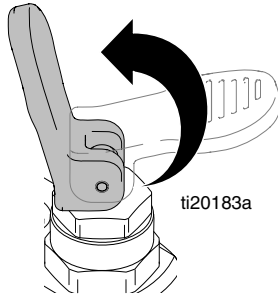
4. Plug charger into striper. See **Charging the Battery**, page 6. Charge to full charge and disconnect.
5. Store striper indoors in a cool, dry place. Never store striper with material in the hopper.

Repair

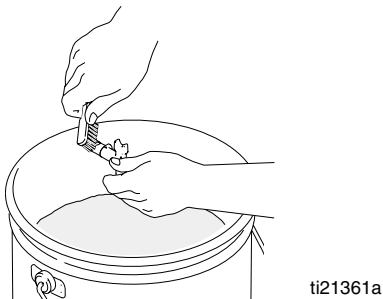
Tip Removal/Cleaning



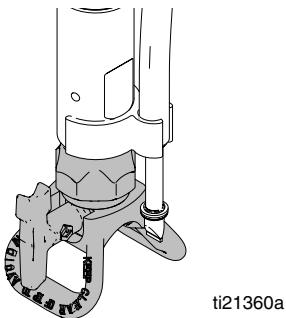
1. Perform **Pressure Relief Procedure**, page 7.



2. Rotate tip 1/4 turn and remove.
3. Wash tip in sink under running water. Use a brush or pick to remove excess or dried material.



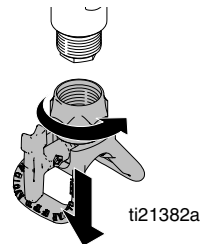
4. Use a pressurized air hose to blow out any remaining material from tip. **NOTE:** You should be able to clearly see through the tip hole when cleaned.
5. Re-install tip and position to spray as shown below.



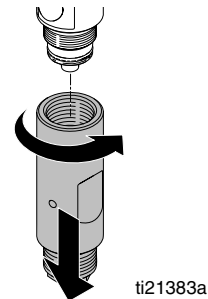
Cleanshot Removal/Cleaning



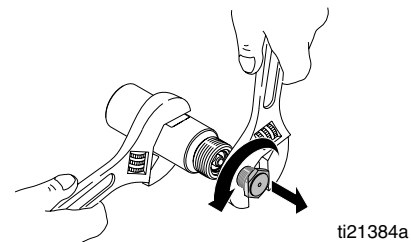
1. Perform **Pressure Relief Procedure**, page 7.
2. Remove material dispenser from striper.
3. Remove tip guard.



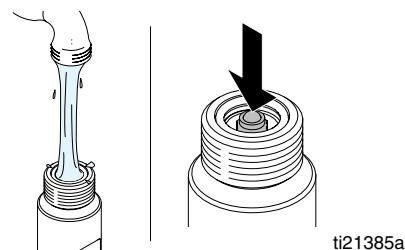
4. Remove Cleanshot assembly.



5. Use two wrenches to remove needle seat.



6. Hold cleanshot over running water and clean. Work poppet valve in and out to free valve from excess or hardened material.

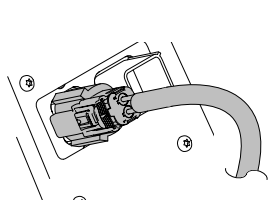


Fuse Replacement

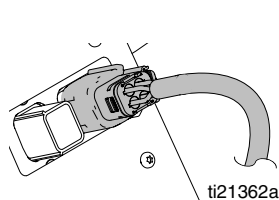


Removal

1. Disconnect motor plug and power plug.

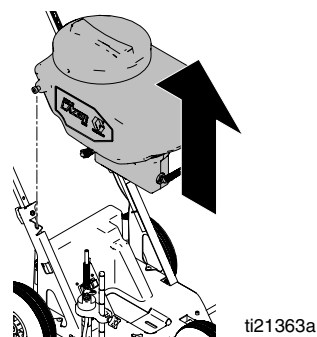


Motor Plug



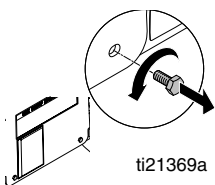
Spray Button Plug

2. Remove spray dispenser and hopper.

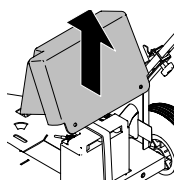
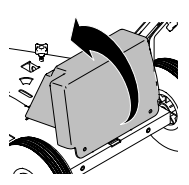


ti21363a

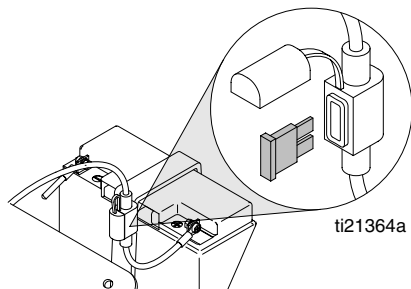
3. Use wrench to remove two bolts and remove battery shroud.



ti21369a



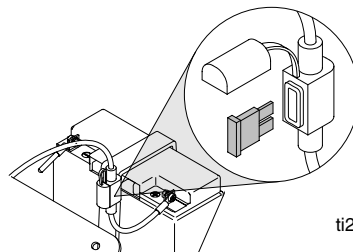
4. Open fuse case and remove old fuse.



ti21364a

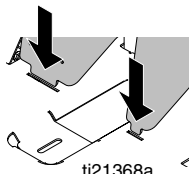
Installation

1. Insert a new standard 30 A fuse into fuse case.

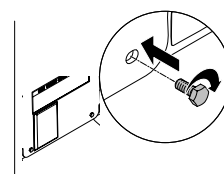
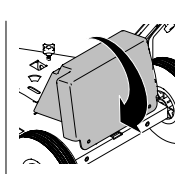


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2. Place front tabs of battery shroud into slots, then pivot back of shroud down. Use wrench to tighten two bolts and secure shroud into place.



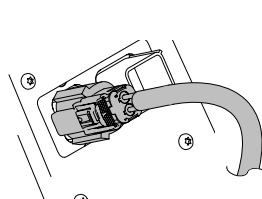
ti21368a



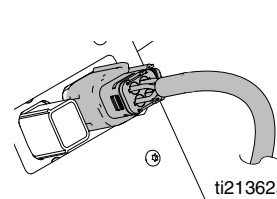
NOTICE

When installing the battery shroud, wires can get pinched between the shroud and frame and become damaged. To avoid damage, make sure all wires are kept in front of the battery when installing the shroud.

3. Install hopper and spray dispenser.
4. Connect power plug and motor plug.

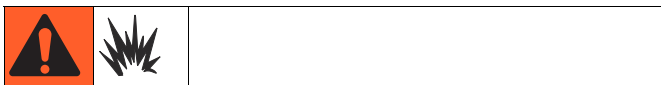


Motor Plug



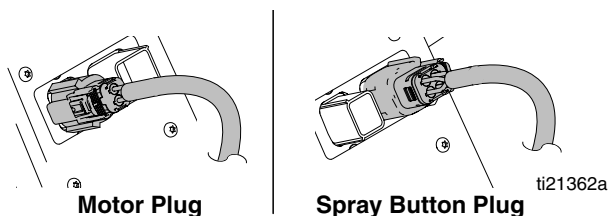
Spray Button Plug

Battery Replacement

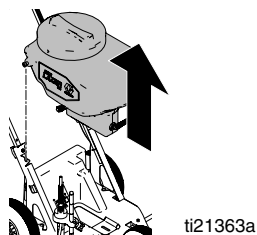


Removal

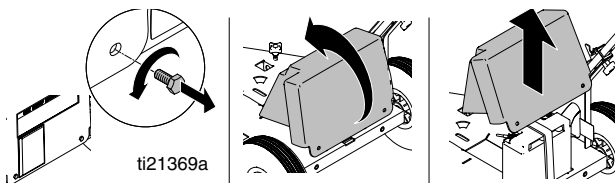
1. Disconnect motor plug and power plug.



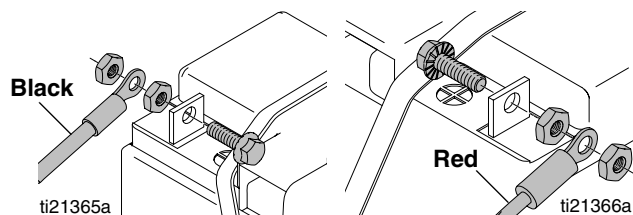
2. Remove spray dispenser and hopper.



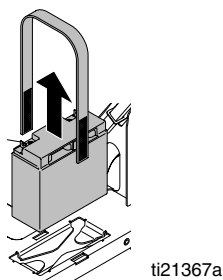
3. Use wrench to remove two bolts and remove battery shroud.



4. Use two wrenches to remove serrated nut on negative (black) battery post. Then use wrenches to remove serrated nut on positive (red) battery post.

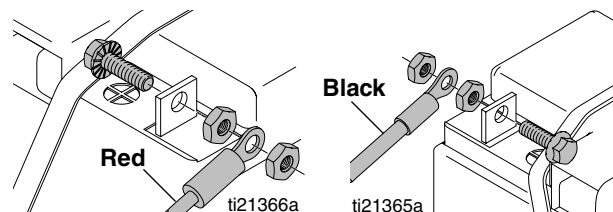


5. Clip plastic tie straps and undo velcro strap from battery. Remove battery.

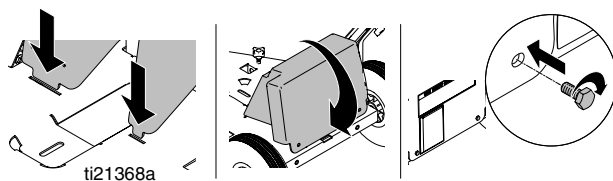


Installation

1. Install new battery. Tighten velcro strap around battery to secure into place. Replace plastic tie straps around battery to firmly hold in place.
2. Use two wrenches to attach serrated nut to positive (red) battery post. Then use wrenches to attach serrated nut to negative (black) battery post.



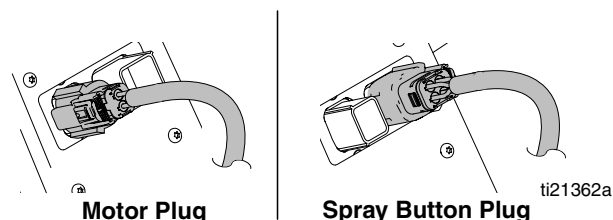
3. Place front tabs of battery shroud into slots, then pivot back of shroud down. Use wrench to tighten two bolts and secure shroud into place.



NOTICE

When installing the battery shroud, wires can get pinched between the shroud and frame and become damaged. To avoid damage, make sure all wires are kept in front of the battery when installing the shroud.

4. Replace hopper and spray dispenser.
5. Connect power plug and motor plug.

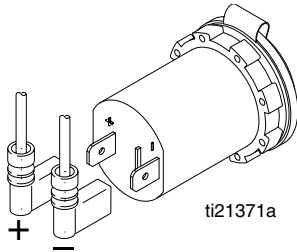


Board Replacement

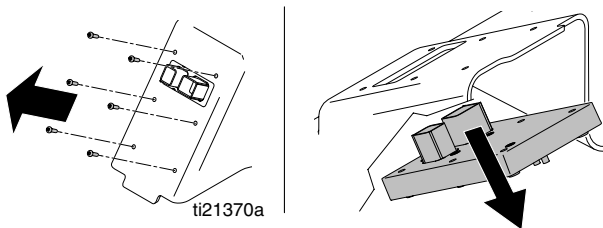


Removal

1. Remove **Battery**, page 17.
2. Disconnect two wires from 12V charger jack.

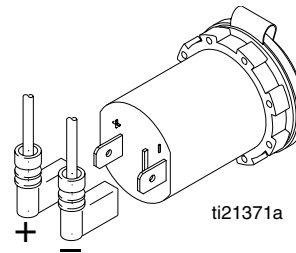


3. Remove six torx screws from board. Remove board from striper.



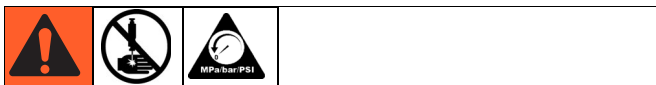
Installation

1. Install new board into striper. Tighten six torx screws into board.
2. Connect negative wire (black) to outer connector of charger jack. Connect positive wire (red) to inner connector of charger jack.



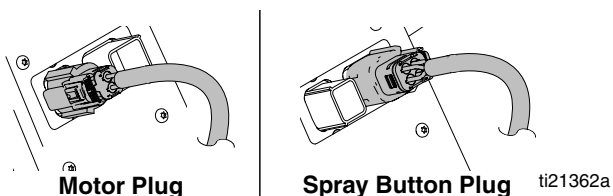
3. Install **Battery**, page 17.

Pump/Motor Removal

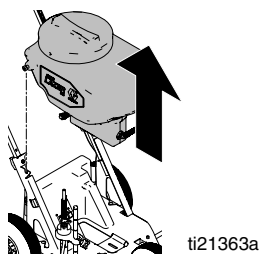


Removal

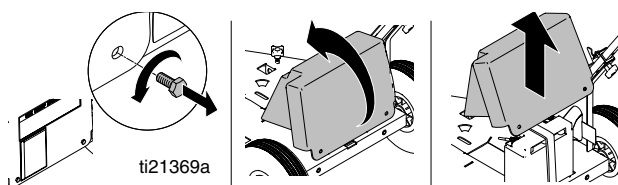
1. Perform **Pressure Relief Procedure**, page 7.
2. Disconnect motor plug and power plug.



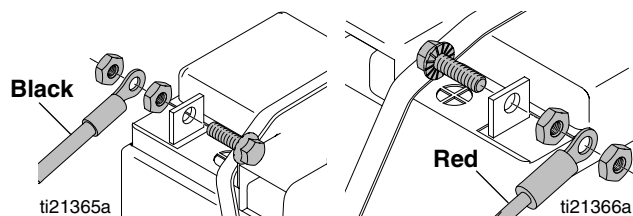
3. Remove spray dispenser and hopper.



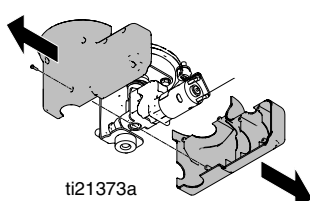
4. Use wrench to remove two bolts and remove battery shroud.



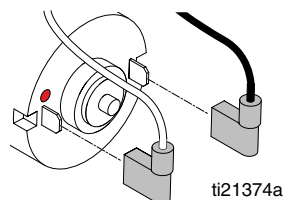
5. Use two wrenches to remove serrated nut on negative (black) battery post. Then use wrenches to remove serrated nut on positive (red) battery post.



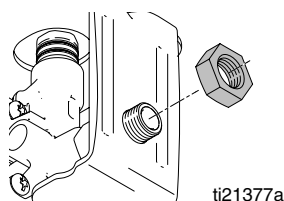
6. Remove six torx screws on motor shroud. Remove motor shroud.



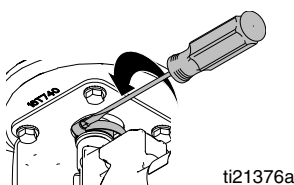
7. Disconnect motor wires and remove power cord.



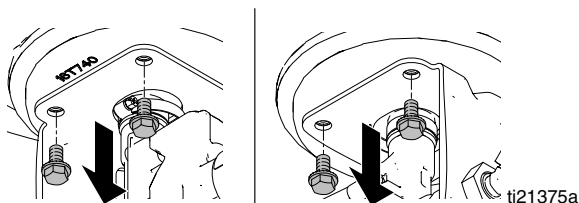
8. Use wrench to loosen bulkhead and disconnect hose.



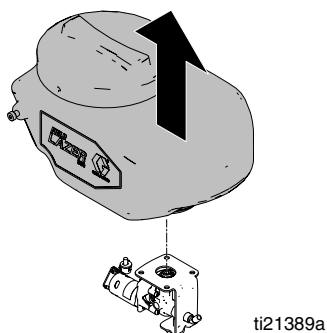
9. Loosen hose clamp below hopper.



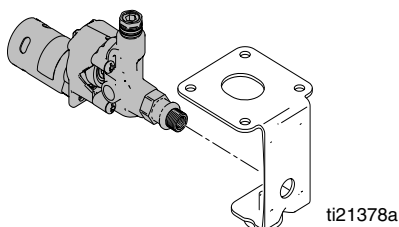
10. Remove four screws from hopper bracket.



11. Remove hopper from Pump/Motor assembly.

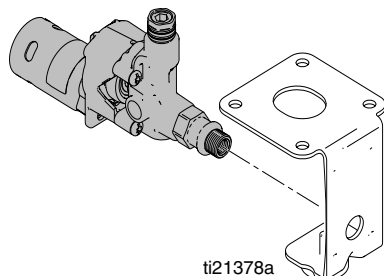


12. Remove Pump/Motor assembly.

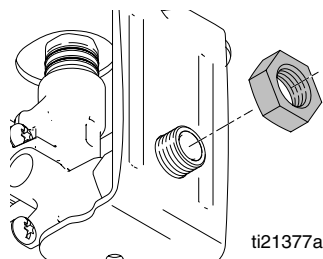


Installation

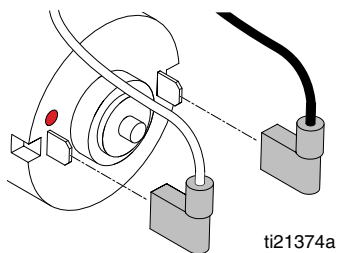
1. Install new Pump/Motor assembly.



2. Install hopper into Pump/Motor assembly.
3. Install hopper bracket and tighten four screws.
4. Replace and tighten hose clamp below hopper.
5. Reconnect hose and tighten bulkhead.

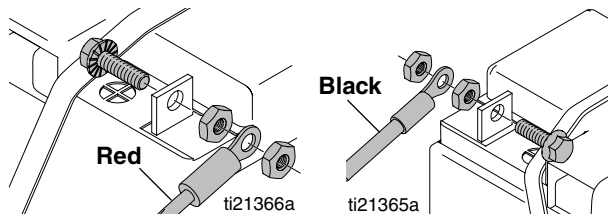


6. Replace power cord and connect motor wires. Connect white wire to post with red indicator mark. Connect black wire to outside post.

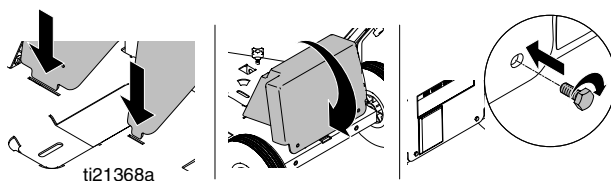


7. Replace motor shroud and tighten six torx screws.

8. Use two wrenches to attach serrated nut to positive (red) battery post. Then use wrenches to attach serrated nut to negative (black) battery post.



9. Place front tabs of battery shroud into slots, then pivot back of shroud down. Use wrench to tighten two bolts and secure shroud into place.

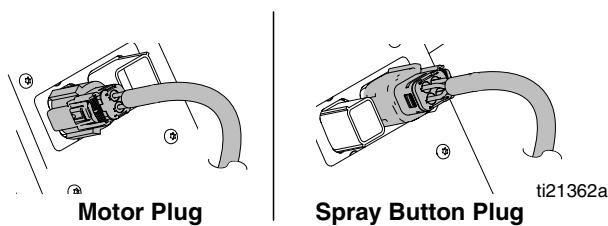


NOTICE

When installing the battery shroud, wires can get pinched between the shroud and frame and become damaged. To avoid damage, make sure all wires are kept in front of the battery when installing the shroud.

10. Replace hopper and spray dispenser.

11. Connect power plug and motor plug.



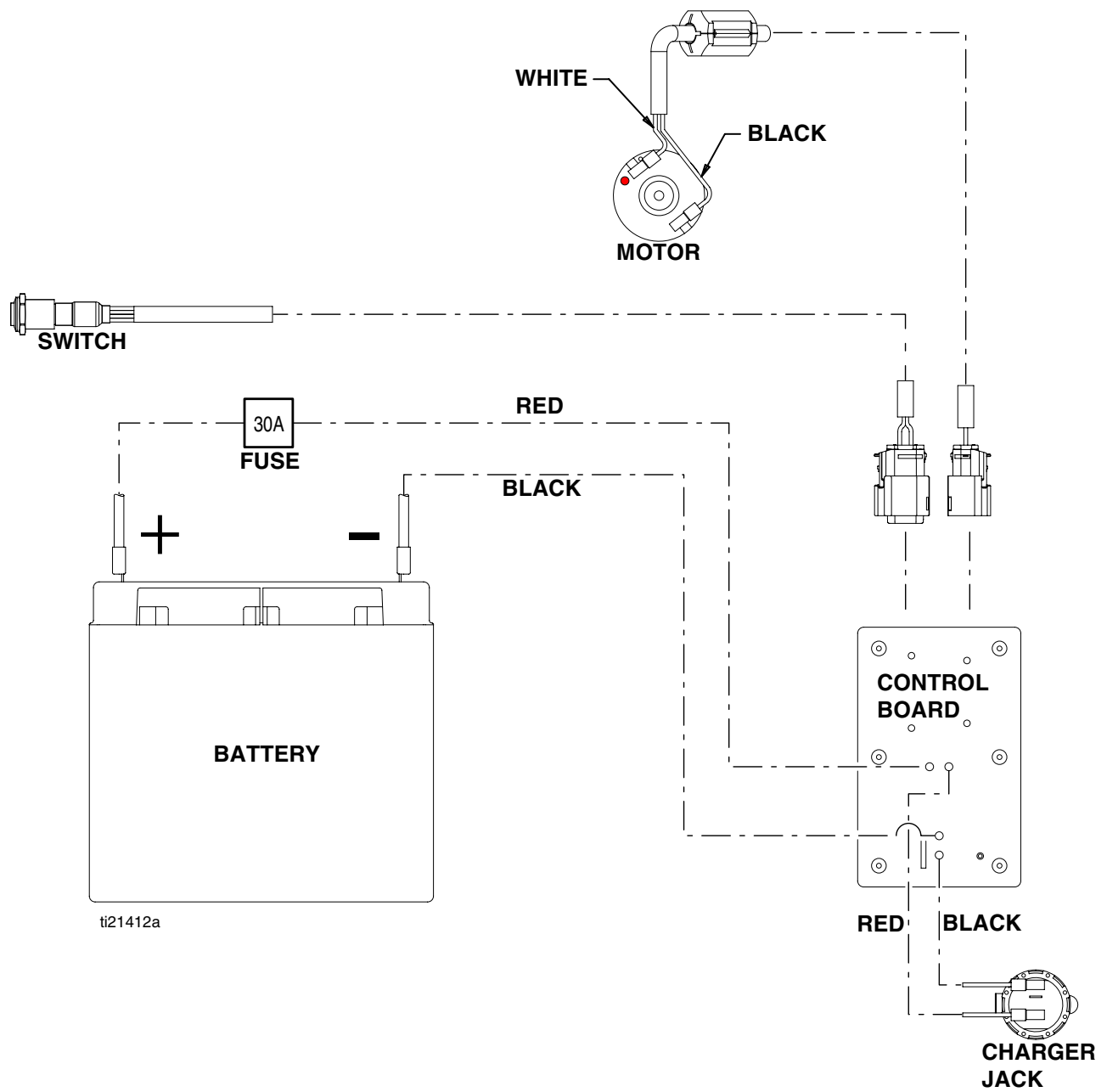
Troubleshooting

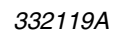


Problem	Cause	Solution
Pump/motor runs but material is not being sprayed	Striper is not primed	Prime striper. See Starting a New Job , page 9.
	Material dispenser tip is plugged	Clean material dispenser tip by reverse spraying. See Reversible Spray Tip , page 7.
	Material dispenser tip and/or filter is plugged	Clean material dispenser tip by reverse spraying and clean filter. See Unclogging Spray Tip/Guard Assembly , page 13. If tip does not clean by using Reversible Spray Tip procedure, remove tip and clean using a cleaning wire pick, water and pressurized air or water (compressed air or nozzle jetted city water). If tip cannot be cleaned, replace tip. See Tip Removal/Cleaning , page 15.
	Paint hopper is empty	Fill paint hopper with spray material.
	Cleanshot has foreign particles in passageway	See Cleanshot Removal/Cleaning , page 15.
	Striper inlet ball check valve has foreign material in passageway	Remove foreign material in the striper inlet ball check valve. See Cleanshot Removal/Cleaning , page 15.
Pump/motor does not run.	Battery is discharged	Connect battery charger and recharge battery. See Charging the Battery , page 6.
	Motor plug is disconnected	Connect motor plug to motor receptacle on battery shroud. See Starting a New Job , page 9.
	Spray plug is disconnected	Connect spray plug to striper receptacle on battery shroud. See Starting a New Job , page 9.
	Battery fuse has faulted resulting in an open circuit (blown fuse)	Remove battery shroud and replace fuse. See Fuse Replacement , page 16.
	Wires to battery have become loose, disconnected or damaged	Tighten wire connection or reconnect. See Battery Replacement , page 17.
	Striper fluid path is plugged between pump and prime valve	Perform Pressure Relief Procedure , page 7. If pressure cannot be relieved as evidenced by material flowing out of prime hose, STOP and contact Graco Technical Support or bring striper to Graco distributor for repair. NOTE: Red light on spray button will be flashing for this problem and cause.
	Pump/motor is damaged	Remove pump/motor for repair. See Pump/Motor Removal , page 19. Contact Graco Technical Support or bring striper to Graco distributor for repair.

Problem	Cause	Solution
Pump/motor runs but red light on spray button is on	Battery has been discharged to the level that it is notifying user that battery is low.	Recharge battery. Connect battery charger and recharge battery. See Charging the Battery , page 6. NOTE: When red light first comes on, user has approximately 15 minutes of striper run time left.
Spray pattern width is decreasing	Incorrect material dispenser holder height position.	Readjust material dispenser holder until desired width is achieved. See Adjusting Line Width , page 10.
	Material dispenser tip is wearing out.	Replace tip. See Tip Removal/Cleaning , page 15.
	Material is too dense and/or too viscous.	Readjust material dispenser holder until desired width is achieved. See Adjusting Line Width , page 10. Dilute material as required.
	Pump/motor is not operating at specified RPM.	Check spray pattern with water only. If spray pattern is good, dilute material as required. If spray pattern is not good with water, contact Graco Technical Support or bring striper to Graco distributor for repair.
Pump/motor randomly stops; full spray pattern cannot be achieved	Material needs to be strained to remove solids.	Use a paint sock to filter material as it is being poured into paint hopper.
Material continues to flow out of tip after stopping spray	Foreign material in Cleanshot.	Remove Cleanshot and clean. See Cleanshot Removal/Cleaning , page 15.
	Cleanshot is damaged.	Contact Graco Technical Support or bring striper to Graco distributor for repair.
Battery did not fully charge	Battery charger was disconnected too early (charging was interrupted before completing charge).	Disconnect charger from striper. Disconnect charger from power outlet and allow charger to remain unpowered for 5 - 10 minutes. See Charging the Battery , page 6.
	Battery is damaged or at the end of the recharge life cycle.	Replace battery. See Battery Replacement , page 17.
	Charger is damaged.	Replace charger. Contact Graco distributor for correct replacement.

Wiring Diagram

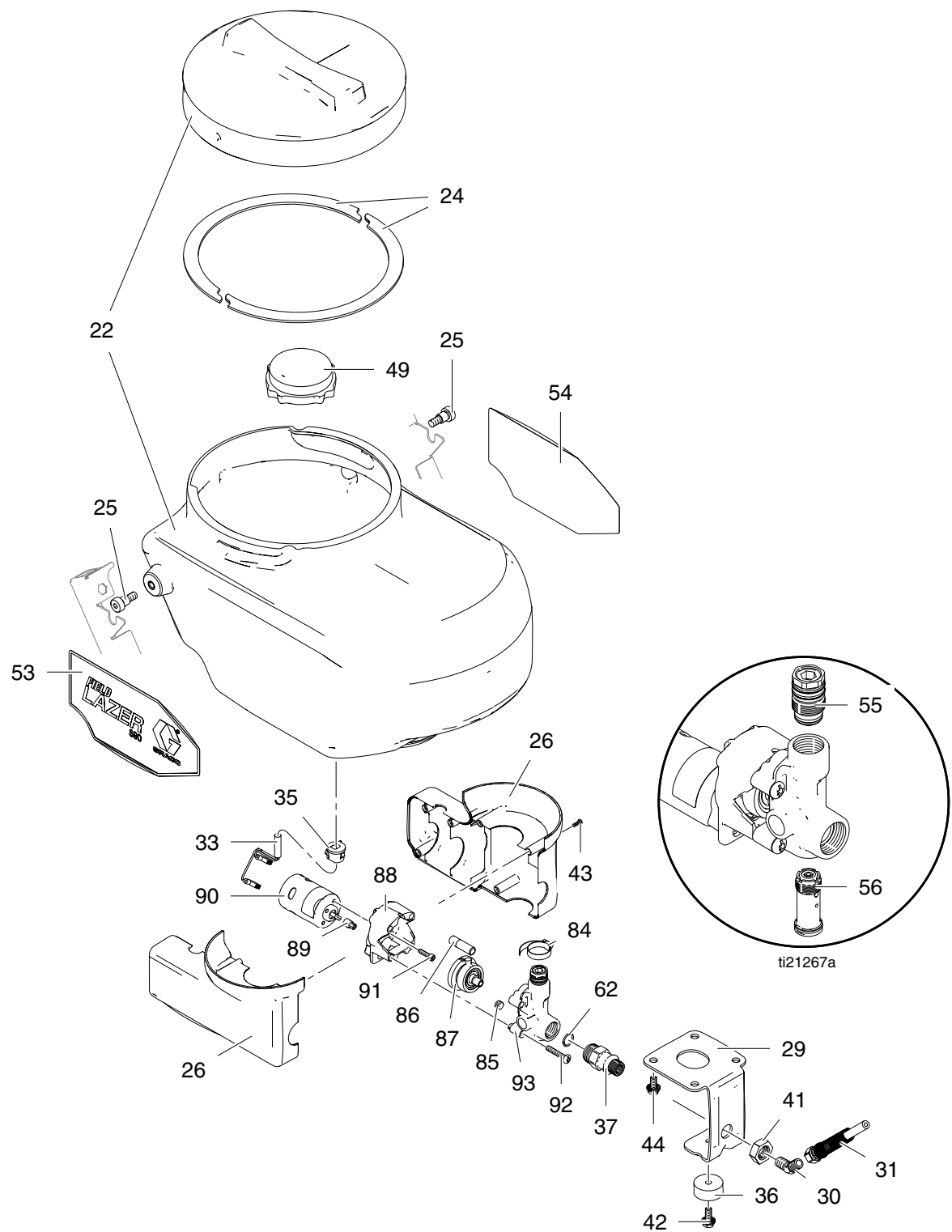




Parts List

Ref.	Part	Description	Qty.	Ref.	Part	Description	Qty.
1	16U476	FRAME, stamped, S90	1	32	16U160	BATTERY, 18 ah, sealed	1
2	16U478	BRACKET, frame, right	1	33	16U707	HARNESS, motor wire	1
3	16U477	BRACKET, frame, left	1	39	119547	NUT, hex, lock, nylon, thin	3
4	24R069	BAR, handle, weldment	1	40	100270	SCREW, cap, hex hd	2
5	16U580	AXLE, rear, S90	1	43	119236	SCREW, mach, torx pan hd	6
6	126946	BOLT, cap, hex head	1	45	111570	BOLT, carriage	6
7	195367	SPACER	4	46	115942	NUT, hex, flange head	6
8	126947	TIRE, 10 inch, pneumatic	3	48	24R664	KIT, handle bar fastener	1
9	24R882	KIT, shroud, battery (includes 96, 97a, 97b, 98, 102)	1	49	115480	KNOB, to handle	1
10	16U229	BAR, support	1	52	16U680	LABEL, brand, S90, handle, upright	2
11	16U230	BAR, adjustment, height	1	96	16V158	LABEL, 12V battery charge	1
13	15D862	NUT, hand	1	▲97a	16V162	LABEL, warning, iso, multiple	1
14†	16U231	SHIELD, spray, guide, plastic	2	▲97b	16V507	LABEL, warning, iso, Europe	1
15	15F142	GUIDE, wire, right shield	1	98	16V161	LABEL, quick start instructions	1
16	15F143	GUIDE, wire, left shield	1	99	16V157	LABEL, indicator light	1
17	126951	JACK, charger, 12 volt	1	102	16D576	LABEL, Made in USA w/global comp	1
18a	126948	CHARGER, 120V ac, USA	1	103a	124783	PLUG, converter, Asia/Aus	1
18b	16V456	KIT, charger, S90, 240V, Euro	1	103b	124507	PLUG, converter, UK	1
18c	16V458	KIT, charger, S90, 240V, UK (includes 103b)	1	109	108774	STRAP, tie, wire	1
18d	16V447	KIT, charger, S90, 240V, Asia/Aus (includes 103a)	1	110	113505	BATTERY, terminal nut	4
19	24R792	KIT, board, control, S90 (includes 43)	1	111	125857	BATTERY, terminal bolt	2
20	127052	KNOB, T-handle	1	113	16V701	BOOT, replacement	1
21	126949	STRAP, battery	1	† 24P894 KIT, spray shield, S90 (includes 14, 15, 16)			
27	114659	GRIP, handle	2	▲ Replacement Warning and Safety labels are available at no cost.			
28	24P924	SWITCH, pushbutton	1				

Parts

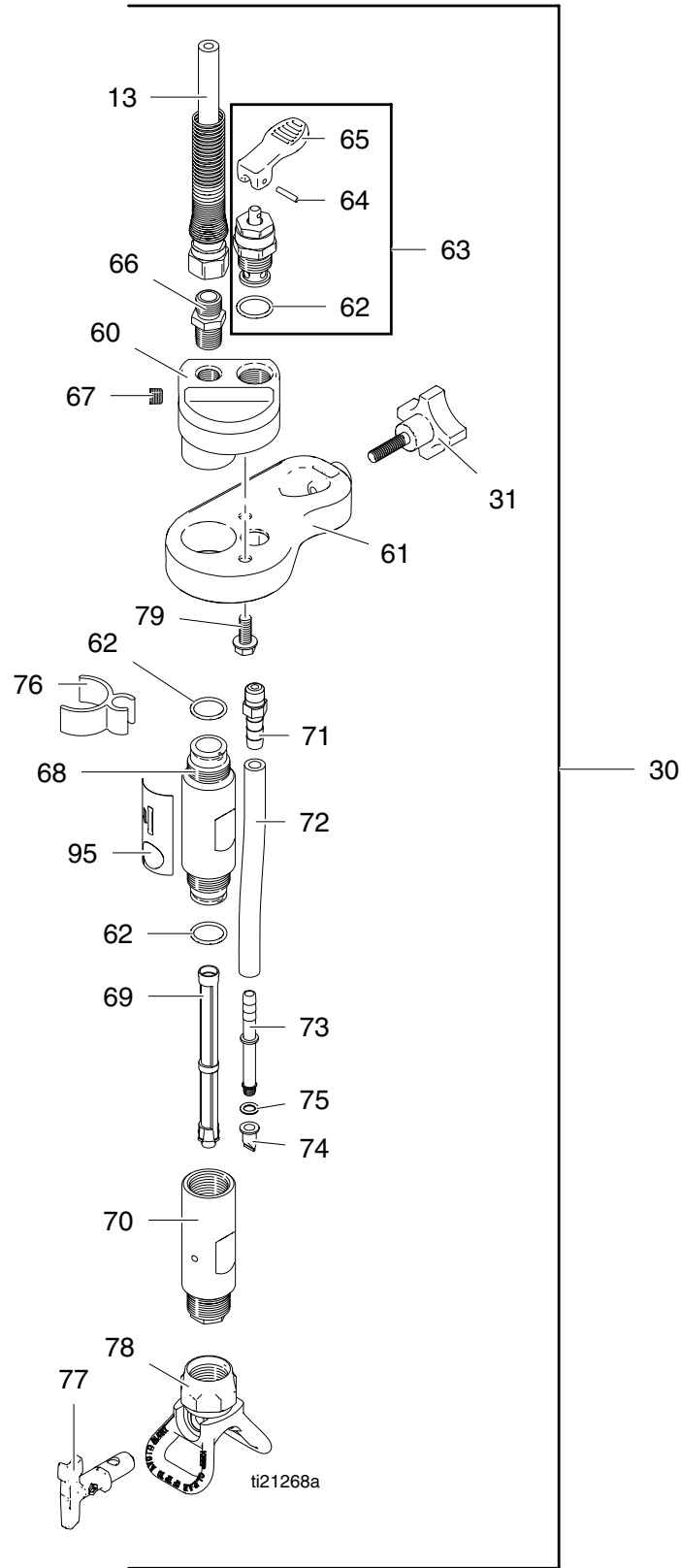


Parts List

Ref.	Part	Description	Qty.	Ref.	Part	Description	Qty.
22‡	24R795	KIT, hopper, S90 (includes 24, 25, 53, 54)	1	84	117464	CLAMP, hose, micro 1.75 max dia.	1
24	16U373	SEAL, lid, hopper	2	85	104765	PLUG, pipe headless	1
25	126108	SCREW, shoulder, socket head	2	86	16U606	ROD, primary piston, S90	1
26	24R883	KIT, cover, S90 pump (includes 43)	1	87		RECIPROCATOR, assy, DC, G2	1
29	16T186	BRACKET, pump	1	88		HOUSING, drive, machining	1
30	126954	FITTING, elbow, 45 deg, 1/4 npt	1	89		GEAR, pinion	1
31	277183	HOSE, cpld, 3/16 in. x 6 ft, 3300 wp	1	90	24R787	KIT, motor, DC, S90 (includes 89)	1
33	16U707	HARNESS, motor wire	1	91	108326	SCREW	2
35	126955	BUSHING, strain relief	1	92	115478	SCREW, mach, torx/slt pan hd	4
36	113817	BUMPER	1		24R172	KIT, complete pump, ASM (includes 85-90, 92, 93)	
37	16T185	FITTING, pump adapter	1		24R786	KIT, pump housing only, S90 (includes 85, 86)	
41	100071	NUT, hex	1		16U603	KIT, complete housing (includes 55, 56)	
42	117791	SCREW, cap, tri lobe	1				
43	119236	SCREW, mach, torx pan hd	6				
44	111800	SCREW, cap, hex hd	4				
49	16U370	FILTER, hopper	1				
53	16U679	LABEL, brand, S90, hopper, lside	1				
54	16U677	LABEL, brand, S90, hopper, rside	1				
55	16T184	VALVE, outlet, ball check	1				
56	16U602	HOUSING, inlet assembly	1				
62	109576	PACKING, o-ring	1				

‡ Lid Kit 24R820 is available (includes 24)

Parts



Parts List

Ref.	Part	Description	Qty.	Ref.	Part	Description	Qty.
13	277183	HOSE, cpld, 3/16 in. x 6 ft, 3300 wp	1	68	16T160	TUBE, filter	1
30	24P124	KIT, holder, tip (includes 31-79)	1	69	287033	FILTER, 100 mesh	1
31	15D862	NUT, hand	1	70	24P969	VALVE, cleanshot, turf	1
60	16T159	MANIFOLD, filter	1	71	103875	ADAPTER, hose, barb	1
61	16U255	HOLDER, tip	1	72	16U667	TUBE, drain	1
62	109576	PACKING, o-ring	3	73	16C645	TUBE, drain	1
63	24R790	KIT, valve, prime, S90 (includes 62-65)	1	74	196467	VALVE	1
64	119956	PIN, straight	1	75	104893	PACKING, o-ring	1
65		HANDLE, drain valve	1	76	195400	CLIP, spring	1
66	162453	FITTING, (1/4 npsm x 1/4 npt)	1	77	LL5315	TIP, spray, RAC 5, striping	1
67	103147	PLUG, pipe	1	78	243161	GUARD, RAC IV / 5	1
				79	112774	SCREW, mach, sltd hex wash hd	2

Technical Data

	U.S.	Metric
Maximum working pressure	1200 psi	8.3 MPa, 83 bar
Weight	60 lb	27.2 kg
Dimensions:		
Length	13.75 in.	34.9 cm
Width	5.25 in.	13.3 cm
Height	10.25 in.	26.0 cm
Storage temperature range ♦❖	33° to 120° F	1° to 48° C
Operating temperature range ✓	33° to 120° F	1° to 48° C
Sound pressure level	73.2 dBa† sound pressure level 84.2 dBa† sound power level	73.2 dBa† sound pressure level 84.2 dBa† sound power level
Vibration level acceleration	Less than 5.5 feet/s ² ††	Less than 1.7 m/s ² ††
Charger:		
Charging time	6 hours to 80%, 6 to 14 to 100%	6 hours to 80%, 6 to 14 to 100%
Power source	120 VAC	120 VAC
Battery (Sealed Lead Acid):		
Voltage (DC)	12 V Maximum	12 V Maximum
Capacity	18 Ah, 43.2 Wh	18 Ah, 43.2 Wh

♦ Pump damage will occur if fluid freezes in pump.

❖ Damage to plastic parts may result if impact occurs in low temperature conditions.

✓ Changes in paint viscosity at very low or very high temperatures can affect striper performance.

† per ISO 9614-2 measured at 3.3 feet (1m)

†† per ISO 5349, no load condition

Notes

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Graco Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

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