# Repair



# Interior Texture Sprayers RTX 900 & RTX 1250

311772C

## For Water-Based Materials Only

Models: 254974 and 254975

70 psi (0.49 MPa, 4.9 bar) Maximum Fluid Working Pressure



#### **Important Safety Instructions**

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

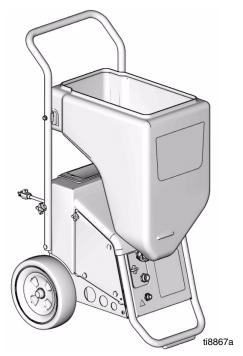
#### **Related Manuals**



311777



311768



Model 254975 Shown

PROVEN QUALITY. LEADING TECHNOLOGY.



# **Warnings**

The following are general warnings related to the setup, use, grounding, maintenance and repair of this equipment. Additional, more specific warnings may be found throughout the body of this manual where applicable. Symbols appearing in the body of the manual refer to these general warnings. When these symbols appear through the manual, refer back to these pages for a description of the specific hazard.



#### Warnings



#### Fire and Explosion Hazard

Improper grounding, poor ventilation, open flames or sparks can cause a hazardous condition and result in fire or explosion and serious injury.

- The system is for use with water-based materials only. Only use fluids compatible with the
  equipment. Refer to Technical Data of all equipment manuals. Read fluid and solvent manufacturers
  warnings.
- Ground all equipment in the work area. See Grounding and Electrical Requirements, page 6.
- If there is any static sparking or you feel an electric shock while using this equipment, stop spraying immediately. Do not use the equipment until you identify and correct the problem.
- Keep work area free of debris, including solvent, rags and gasoline.
- Comply with all applicable state and national fire, electrical and safety regulations.
- Keep a fire extinguisher in the work area.



#### **Equipment Misuse Hazard**

Equipment misuse can cause equipment to rupture, malfunction, or start unexpectedly and cause serious injury.

- Before operating this equipment, read all manuals, tags, and labels, including material labels and instructions.
- Do not expose system to rain. Always store system indoors.
- Do not alter or modify equipment.
- · Do not spray cementitious materials.
- Do not exceed maximum working pressure of lowest rated component in your system.
- Check equipment daily. Repair or replace worn or damaged parts immediately.
- To reduce risk of serious injury, including electric shock and splashing fluid in eyes, follow Pressure Relief Procedure on page 6 before servicing the unit.
- Do not kink or over bend hoses or use hoses to pull equipment.
- Route hoses away from traffic areas, sharp edges, moving parts and hot surfaces. Do not expose Graco hoses to temperatures above 130° F (55° C) or below -35° F (-37° C).
- Air hoses at the compressor end, can get very hot! Allow sprayer to cool down 15 minutes before removing air hose.
- Store hazardous fluid in an approved container. Dispose of hazardous fluid according to all local, state and national guidelines.
- Never directly inhale compressed air. Compressed air may contain toxic vapors.



#### Warnings



#### **Electric Shock Hazard**

To reduce the risk of electric shock:



- Be sure sprayer is adequately grounded through electrical outlet, page 6.
- Use only 3-wire, extension cords.
- Make sure ground prongs are intact on sprayer and extension cords.
- Do not operate with cover removed.
- Turn off sprayer. Follow **Pressure Relief Procedure**, **page 6**, and unplug unit, before removing any parts.



#### **Pressurized Equipment Hazard**

Fluid from gun, leaks or ruptured components can splash in the eyes or on skin and cause serious injury.



- Follow **Pressure Relief Procedure**, **page 6** when you stop spraying and before cleaning, checking or servicing.
- Do not point spray gun at anyone; put hand, fingers or rag over nozzle, or stop or deflect leaks with your hand, body, glove, or rag.
- · Wear protective clothing, gloves, and eyewear.



#### **Cleaning Solvent Hazard with Plastic Parts**

Use only compatible water-based solvents to clean plastic structural or pressure-containing parts. Many solvents can degrade plastic parts to the point where they could fail. Such failure could cause serious injury or property damage. See Technical Data on page 33 of this instruction manual and in all other equipment manuals. Read fluid and solvent manufacturer's warnings.



#### **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. Wait until equipment/fluid has cooled completely.

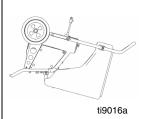


#### **Personal Protective Equipment**

You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect you from serious injury, including eye injury, inhalation of toxic fumes, burns, and hearing loss. This equipment includes but is not limited to:

- · Protective evewear
- · Clothing and respirator as recommended by the fluid and solvent manufacturer
- Gloves
- · Hearing Protection

#### CAUTION



Water or material remaining in unit when temperatures are below freezing can damage motor and/or delay pump startup.

To insure water and material are completely drained out of unit:

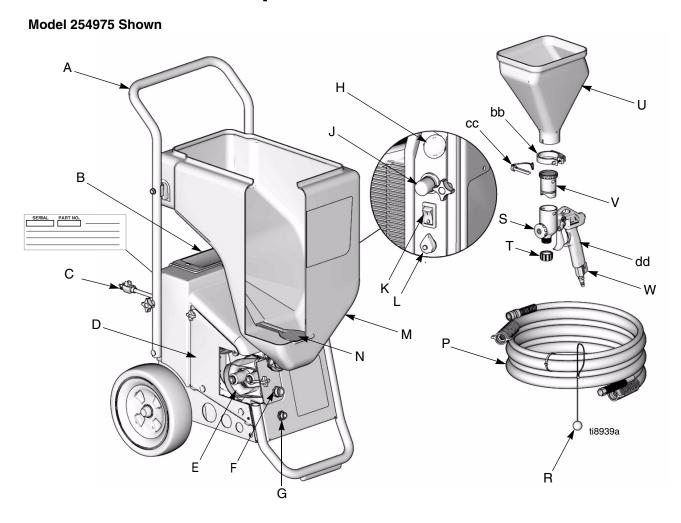
- 1. Remove material line from sprayer.
- 2. Tip sprayer up as shown.

Before adding material or starting unit in cold weather, run warm water through pump.



Before adding material to hopper, install burp guard. When only a small amount of material remains in the hopper, the burp guard prevents material from shooting out when the unit is turned off. This material could splash in the operator's eyes or on skin, or into the air.

# **Component Identification**



Item	Component	Item	Component
Α	Handle	N	Burp Guard
В	Toolbox	Р	Material/Air Hose
С	Power Cord (120V, 25 ft)	Q	Accessories Bag
D	Side Pump Access Panel (RTX 1250 Only)	R	Material Thickness Gauge
Е	RotoFlex <sup>™</sup> II Pump (inside)	S	Nozzle (4 Total)
F	Pump Hose Outlet	Т	Hose Plug
G	Air Hose Outlet	U	Touch-Up Hopper (3/4 gallon)
Н	Material Flow Gauge	V	Gun Plug
J	Material Flow Control	W	Air Control
K	ON/OFF Switch	bb	Hopper Clamp
L	Selector Switch (Hopper Gun/Sprayer)	СС	Gun Plug Clip
М	Material Hopper - 10 gallon, RTX 900 Material Hopper - 12 gallon, RTX 1250	dd	Hopper Gun

#### **Pressure Relief Procedure**

To reduce risk of injury, follow this procedure whenever you see this symbol throughout this manual, Also, perform this procedure whenever you:



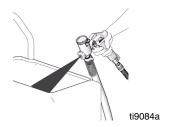
- · Stop spraying
- · Check or repair any part of this system
- · Install or clean spray nozzle



1. Turn Power Switch OFF.



2. Trigger gun into material hopper.



3. Open gun air valve.



# Grounding and Electrical Requirements

This sprayer must be grounded. Grounding reduces the risk of electrical shock by providing an escape wire for the electrical current. The sprayer cord includes a grounding wire with an appropriate grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Check with a qualified electrician or if grounding instructions are not completely understood, or if in doubt as to whether the product is properly grounded. Do not modify plug provided; if it will not fit the outlet, have proper outlet installed by a qualified electrician.



#### 120V AC Systems

 This equipment requires a 120V AC, 60 Hz, 15A circuit with a grounding receptacle. Do not use an adapter with this product.

#### **Extension Cords**

- Use only an extension cord with an undamaged, 3-prong plug.
- For 25 to 50 ft (7.6 to 15.2 m) cords, use 3-wire, 14
   AWG (1.5 mm<sup>2</sup>) minimum.
- For up to 100 ft. (30.48 m) cord, use 3-wire, 12 AWG (2.5 mm<sup>2</sup>) minimum.

#### **Auxiliary Air Compressor**

Do not use an auxiliary air compressor with this spray system.

#### **Generator Requirements**

3500 W (3.5 KW) minimum.

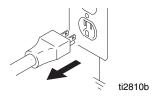
#### Hose Size and Length

The system comes with a hose set consisting of a 3/4 in. ID x 25 ft (25 mm x 7.6 m) material hose and a 3/8 in-ID air hose.

## **Shroud Removal**

## **Disassembly**

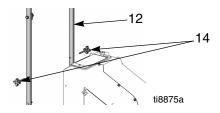
- 1. Relieve Pressure, page 6.
- 2. Unplug sprayer from outlet.



3. Loosen bottom hopper fitting by hand and pull hopper up and off from handle.



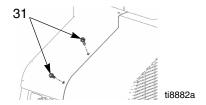
4. Loosen and remove 2 knobs (14) on sprayer handle (12).



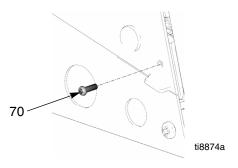
- 5. Spread handle bars apart and pull up to remove from sprayer.
- 6. Loosen screws (30) and screw (31) from toolbox and remove toolbox (2) from sprayer.



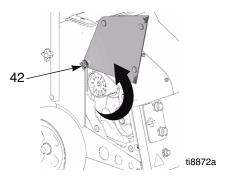
7. Loosen screws (31) on shroud.



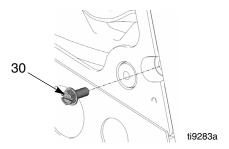
8. Loosen and remove screw (70) from lower right corner of side access panel (RTX1250) only.



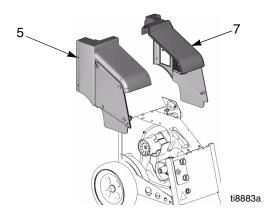
9. Loosen knob (42) on side access panel and swing open door.



10. Use screwdriver to remove second screw (30).

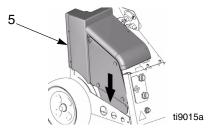


11. Remove two shroud halves (5 and 7) from sprayer.

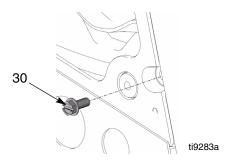


## Reassembly

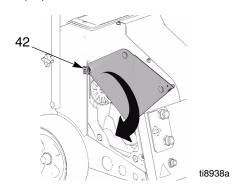
1. Angle left shroud half (5) into base and push down into place. Then replace right shroud half (7).



2. Replace and tighten second screw (30).



3. Swing access door down (RTX 1250) and tighten knob (42).



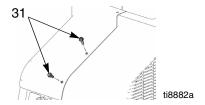
4. Tighten screw (70) into lower right corner of side access plate.



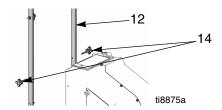
5. Replace toolbox (2) and tighten screws (30) and screw (31).



6. Tighten screws (31) on shroud.



- 7. Spread handle bars apart and slide handle down into place.
- 8. Tighten 2 knobs (14) on sprayer handle (12).

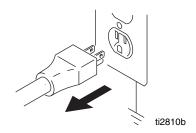


9. Replace hopper and tighten hopper fitting by hand until snug.

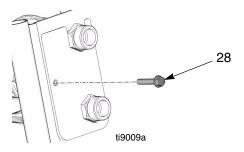
# RotoFlex™ II Pump (RTX 900)

#### **Disassemble**

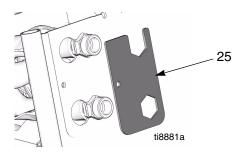
- 1. Relieve Pressure, page 6.
- 2. Unplug sprayer from outlet.



- 3. Remove Shroud, page 7.
- 4. Loosen and remove screw (28) on hose bracket.



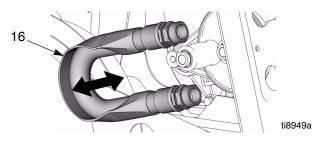
5. Remove hose bracket (25).



Slide pump fittings over and push through keyhole slots.

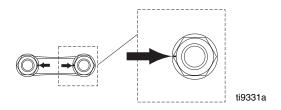


7. Grab pump hose (16) from side of unit and remove pump hose by hand.

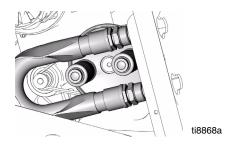


#### Reassemble

1. Bend hose (16) so colored dots on hose fittings face each other.



2. Slide new pump hose (16) over rollers. Move pump rollers by hand until or flip power switch to rotate rollers until they are positioned correctly with pump hose.

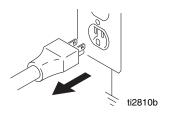


- 3. Feed pump fittings through front access panel keyhole slots and slide into place.
- 4. Replace hose bracket (25) to lock pump hose fittings into place.
- 5. Replace hose bracket (25) and tighten screw (28).
- 6. Replace Shroud, page 7.
- 7. Break in new pump by adding 1 cup of water to pump and running dry for 3 minutes.

# RotoFlex™ II Pump (RTX 1250)

#### **Disassemble**

- 1. Relieve Pressure, page 6.
- 2. Unplug sprayer from outlet.



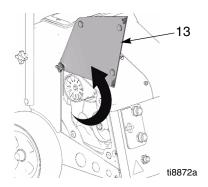
3. Loosen knob (42) on side access panel.



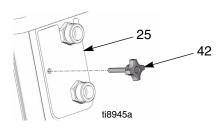
4. Remove screw (70) from side access panel.



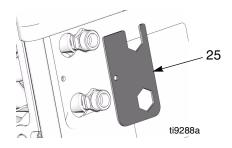
5. Pull access panel (13) out to release 3 fastening tabs and flip up to expose side access to pump.



6. Loosen and remove knob (42) on hose bracket (25).



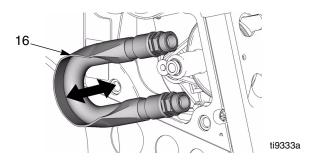
7. Remove hose bracket (25).



8. Slide pump fittings over and through keyhole slots.

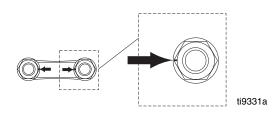


9. Grab pump hose (16) from side access panel and remove pump hose from unit.

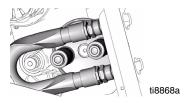


#### Reassemble

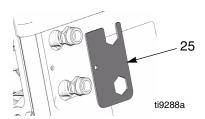
1. Bend hose (16) so colored dots on hose fittings face each other.



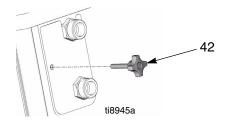
2. Slide new pump hose (16) in from side access panel. Move pump rollers by hand until or flip power switch to rotate rollers until they are positioned correctly with pump hose.



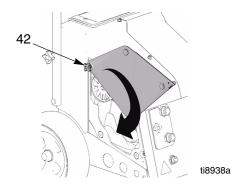
3. Replace hose bracket (25) to lock pump hose into place.



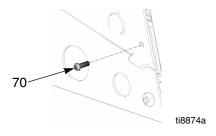
4. Tighten hose bracket knob (42).



5. Flip side access panel (13) down and tighten knob (42).



6. Replace and tighten screw (70) from side access panel.



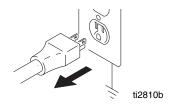
7. Break in new pump by adding 1 cup of water to pump and running dry for 3 minutes.

# Compressor

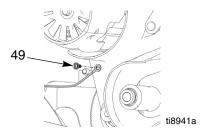
Use Compressor Repair Kit, 288612.

# **Disassembly**

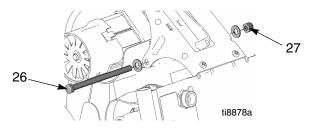
- 1. Relieve Pressure, page 6.
- 2. Unplug sprayer from outlet.



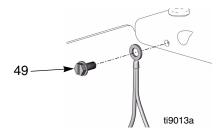
- 3. Remove Shroud, page 7.
- 4. Remove **RotoFlex<sup>™</sup> II Pump** hose; page 9 or 10.
- Unscrew and remove grounding screw (49) from compressor.



6. Use 9/16 in. socket and wrench to remove pivot bolt (26) and nut (27).



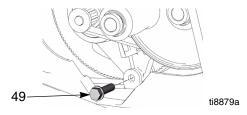
7. Unscrew and remove second 1/2 in. grounding screw (49) from bracket (21).



8. Remove 4 screws (29) and lift bracket (21) off of compressor.



9. Remove shoulder bolt (49) holding pump roller in place.

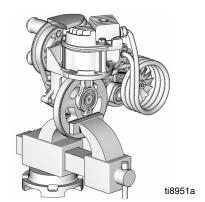


10. Use a wrench to push down on push-to-connect fittings and pull out all nylon hoses.



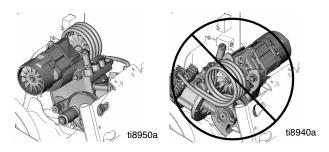
- 11. Disconnect all electrical wire connectors, see **Wiring Diagram**, page 27.
- 12. Thoroughly clean inside housing, removing dust and debris.

To service the compressor, remove it from the sprayer body and place it a vice. Tighten the vice onto the main pulley to hold the compressor in place while servicing.

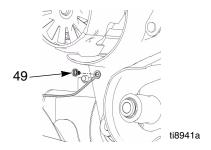


## Reassembly

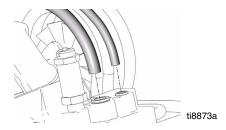
1. Carefully position compressor back into sprayer body. Make sure piston head facing front of sprayer.



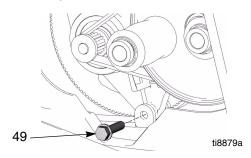
2. Replace and tighten grounding screw (49).



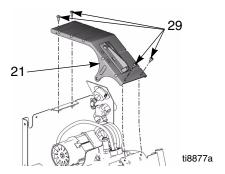
3. Reattach air lines to compressor.



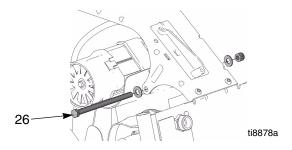
- 4. Reattach 2 wires to compressor see **Wiring Diagram**, page 27.
- 5. Replace air cylinder and tighten shoulder bolt (49) to lock into place.



6. Replace bracket (21) and tighten 4 screws (29).



- 7. Replace grounding screw (49) and tighten onto bracket (21).
- 8. Replace pivot bolt (26) and nut. Use 9/16 in. socket and wrench to tighten into place. Tighten screw until spring washers are flattened.



9. Replace and tighten second grounding screw (49) to bracket (21).



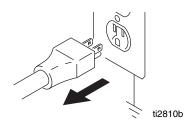
- 10. Replace RotoFlex<sup>™</sup> II Pump hose; page 9 or 10.
- 11. Replace **Shroud**, page 7.

# Piston/Cylinder

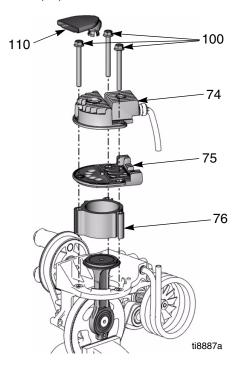
Use Piston/Cylinder Repair Kit 288609.

## **Disassembly**

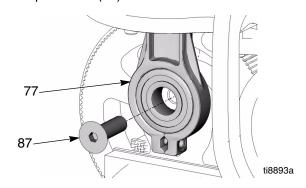
- 1. Relieve Pressure, page 6.
- 2. Unplug sprayer from outlet.



- 3. Remove Shroud, page 7.
- 4. Remove **RotoFlex<sup>™</sup> II Pump** hose; page 9 or 10.
- 5. Remove Compressor, page 12.
- 6. Remove muffler (110) from head (74) by pulling straight out by hand.
- 7. Use 1/2 in. socket to remove three bolts (100) from head (74).



- 8. Use flat-blade screwdriver to pry head (74) from top of valve plate (75) and cylinder (76) from bottom of valve plate (75).
- 9. Use 7/32 in. allen wrench to remove hex screw (87) from piston rod (77).



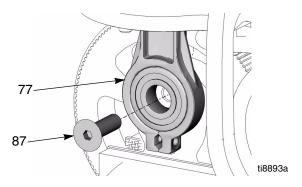
#### Reassembly

#### **CAUTION**

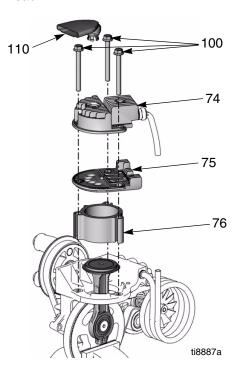
Piston and cylinder come packaged together. Do NOT let piston and cylinder come apart. If they do, make sure you drop the piston down through the top of the cylinder and tilt the piston as you pull it through the cylinder. Do NOT push the piston up from the bottom. You could easily damage the piston gasket.



 Replace piston (77) and cylinder (76) and use 7/32 in. allen wrench to tighten hex screw (87) into piston rod.



2. Replace valve plate (75) with ribs facing up toward head.



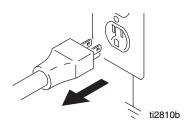
- 3. Replace three bolts (100) and use 1/2 in. socket to tighten into head (74). Torque all three bolts to 75 in-lb, then torque all bolts again to 210 in-lb.
- 4. Position muffler (110) as seen below and press onto head (74) until it snaps into place.
- 5. Replace Compressor, page 12.
- 6. Replace RotoFlex<sup>™</sup> II Pump hose; page 9 or 10.
- 7. Replace **Shroud**, page 7.

## **Valve Plate**

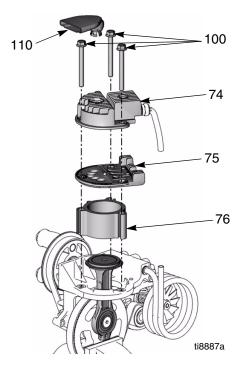
Use Valve Plate Repair Kit 288610.

## **Disassembly**

- 1. Relieve Pressure, page 6.
- 2. Unplug sprayer from outlet.



- 3. Remove Shroud, page 7.
- 4. Remove **RotoFlex<sup>™</sup> II Pump** hose; page 9 or 10.
- 5. Remove Compressor, page 12.
- 6. Remove muffler (110) from head (74) by pulling straight out by hand.
- 7. Use 1/2 in. socket to loosen and remove three bolts (100) from head (74).



8. Use flat-blade screwdriver to pry head (74) from top of valve plate (75) and cylinder (76) from bottom of valve plate (75).

## Reassembly

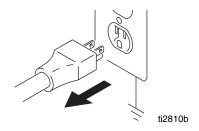
- 1. Replace valve plate (75) with ribs facing up toward ribs on head (74).
- 2. Replace three bolts (100) and use 1/2 in. socket to tighten into head (74). Torque all three bolts to 75 in-lb, then torque all bolts again to 210 in-lb.
- 3. Replace Compressor, page 12.
- 4. Replace **RotoFlex<sup>™</sup> II Pump** hose; page 9 or 10.
- 5. Replace **Shroud**, page 7.

# **Motor**

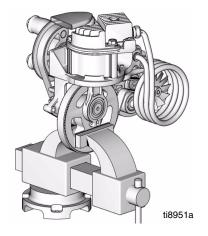
Use Motor Repair Kit 288613.

## **Disassembly**

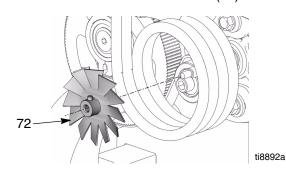
- 1. Relieve Pressure, page 6.
- 2. Unplug sprayer from outlet.



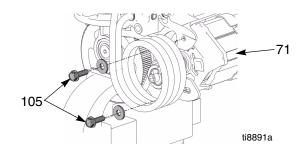
- 3. Remove **Shroud**, page 7.
- Remove RotoFlex<sup>™</sup> II Pump hose; page 9 or 10.
- 5. Remove Compressor, page 12.
- 6. Remove compressor from sprayer body and place it in a vice. Tighten the vice onto the main pulley to hold the compressor in place while servicing motor.



7. Loosen set screw and remove fan (72).



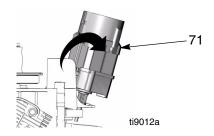
8. Use a box end wrench to loosen and remove two mounting bolts (105) on motor (71).



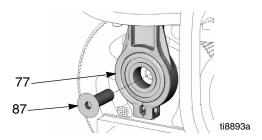
#### **CAUTION**

Be careful not to bend or damage the cooling tube when removing it from the motor.

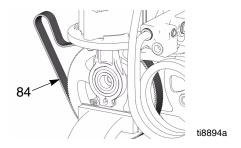
9. Angle motor (71) and slide motor pulley through compressor belt to remove motor from compressor.



- Compressor belt (84) should be replaced every time motor is replaced.
- 10. Use 7/32 in. allen wrench to remove hex screw (87) from piston rod (77).

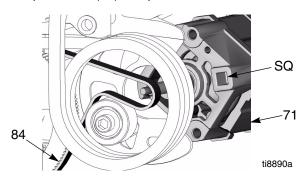


11. Remove compressor belt (84).

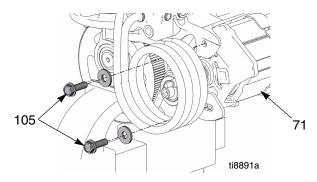


## Reassembly

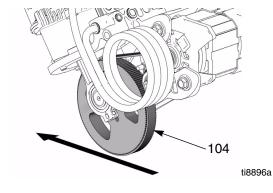
1. Angle motor pulley through compressor belt (84) and pull motor (71) into position.



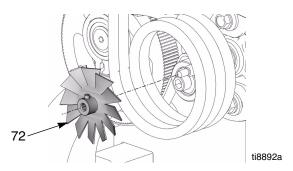
- When replacing motor (71), make sure the square-shaped hole (SQ) is facing toward the outside of the compressor. This hole will be used to torque the mounting bolts.
- 2. Tighten two mounting bolts (105) on motor (71) until snug, then back 1/8 of a turn.



- Insert torque wrench into square hole (SQ) on motor and tighten bolts to 130-150 in-lb (this may require two people; one to torque while the other tightens mounting bolts). Tighten motor bolts (105).
- 4. Take compressor out of vice and rotate pump pulley (104) one full revolution to seat the belt properly.



- 5. Place compressor back into vice and torque bolts as described in steps 2 and 3.
- 6. Replace fan (72) and tighten set screw.



- 7. Replace Compressor; page 12.
- 8. Replace RotoFlex<sup>™</sup> II Pump hose; page 9 or 10.
- 9. Replace Shroud, page 7.

# **Cooling Tube**

Use Cooler Repair Kit 288614.



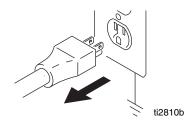




The cooling tube is extremely hot and can cause serious burns. Allow unit to completely cool before servicing the cooling tube.

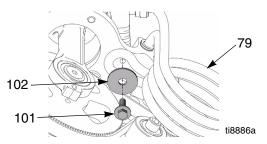
## **Disassembly**

- 1. Relieve Pressure, page 6.
- 2. Unplug sprayer from outlet.



- 3. Remove **Shroud**, page 7.
- 4. Remove **RotoFlex<sup>™</sup> II Pump** hose; page 9 or 10.
- 5. Remove **Compressor**, page 12.

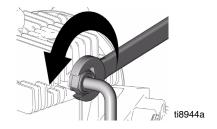
6. Use 3/8 in. socket to remove screw (101) and washer (102) under cooling tube (79).



7. Use wrench to push against fitting (86) and carefully pull cooling tube (79) out.



8. Use 5/8 in. wrench to unscrew cooling tube fitting.

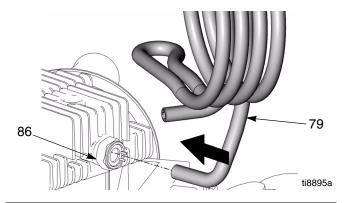


#### Reassembly

1. Insert new cooling tube fitting and use 5/8 in. wrench to tighten.



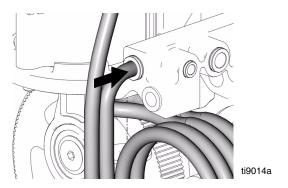
2. Insert cooling tube (79) and push into new fitting (86). Make sure tube is fully seated.



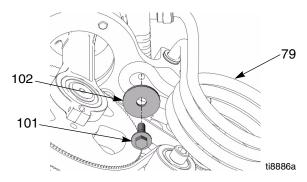
#### **CAUTION**

When replacing cooling tube, make sure coil is facing up when you push the tubing into the fitting. If you push from any other angle you could bend or damage the tube.

3. Rotate cooling tube around and insert free end into push-to-connect fitting. Make sure tube is fully inserted.



4. Replace screw (101) and washer (102) under cooling tube (79) and use 3/8 in. socket to tighten.



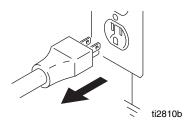
- 5. Replace Compressor; page 12.
- 6. Replace **RotoFlex<sup>™</sup> II Pump** hose; page 9 or 10.
- 7. Replace **Shroud**, page 7.

# **Idler**

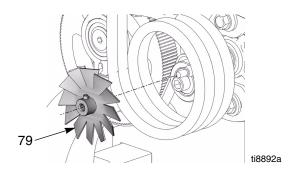
Use Idler Repair Kit 288611.

#### **Disassembly**

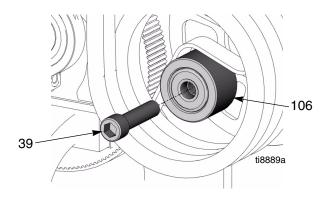
- 1. Relieve Pressure, page 6.
- 2. Unplug sprayer from outlet.



- 3. Remove **Shroud**, page 7.
- 4. Remove **RotoFlex<sup>™</sup> II Pump** hose; page 9 or 10.
- 5. Remove Compressor, page 12.
- 6. Remove compressor belt, page 17.
- 7. Loosen set screw and remove fan (79).



8. Loosen screw (39) and remove Idler (106).



Every time you replace the Idler you should also replace the compressor belt, page 17.

## Reassembly

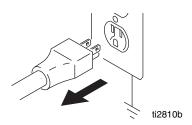
- 1. Install new compressor belt, page 17.
- 2. Replace new Idler (106) and tighten screw (39).
- 3. Replace fan (79) and tighten set screw.
- 4. Replace Compressor, page 12.
- 5. Replace **RotoFlex<sup>™</sup> II Pump** hose; page 9 or 10.
- 6. Replace **Shroud**, page 7.

# **Roller Pulley/Belt**

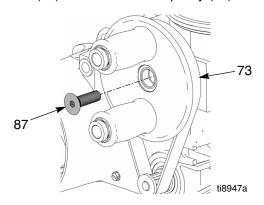
Use Roller Pulley Repair Kit 288616.

## **Disassembly**

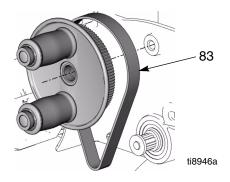
- 1. Relieve Pressure, page 6.
- 2. Unplug sprayer from outlet.



- 3. Remove Shroud, page 7.
- 4. Remove **RotoFlex<sup>™</sup> II Pump** hose; page 9 or 10.
- 5. Remove Compressor, page 12.
- 6. Use 7/32 in. allen wrench to loosen roller mounting bolt (87) and remove roller pulley (73).



7. Remove belt (83) and discard.



Every time you replace the roller pulley, you should also replace the belt.

## Reassembly

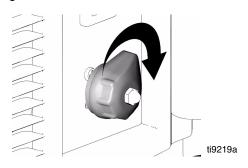
- 1. Install new compressor belt (83).
- 2. Loop belt over roller pulley and align roller with bolt hole.
- 3. Use 7/32 in. allen wrench to tighten bolt (87) to 20  $\pm$  2 ft-lb.
- 4. Replace Compressor, page 12.
- Replace RotoFlex<sup>™</sup> II Pump hose; page 9 or 10.
- 6. Replace Shroud, page 7.

# **Selector Switch Knob**

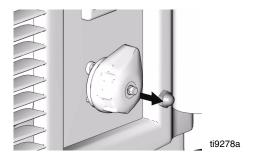
Use Knob Repair Kit 288756.

#### **Disassembly**

 Turn selector switch knob clockwise as far as it will go.



2. Use wrench to remove nut from knob.



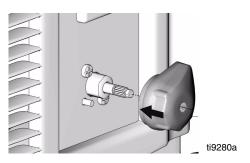
3. Pull knob straight off from sprayer.



Once knob has been removed, don't move the exposed spline. If it is moved, use your fingers to turn it clockwise as far as it will go for a tight fit prior to reassembly of knob. This will properly align knob to spline.

## **Assembly**

1. Position new knob to point right (approximately 45° from vertical) and slide it onto exposed spline.



2. Apply Locktite (1 drop or small amount) to knob nut and tighten with wrench.



# **Regulator Valve**

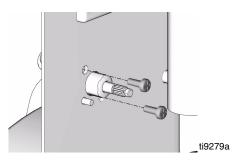
Use Regulator Repair Kit 288757.

## **Disassembly**

- 1. Remove Knob, page 23.
- 2. Remove **Shroud**, page 7.
- 3. Use wrench to push against fitting (86) and carefully pull cooling tube (79) out.



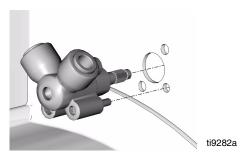
4. Use phillips screwdriver to remove two screws.



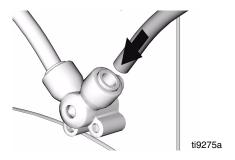
5. Remove old regulator valve.

## **Assembly**

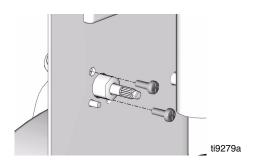
1. Replace new regulator valve and feed through 3 holes on side of sprayer.



2. Reattach two air lines.



Replace two screws and tighten with phillips screwdriver.



- 4. Replace **Knob**, page 23.
- 5. Replace Shroud, page 7.

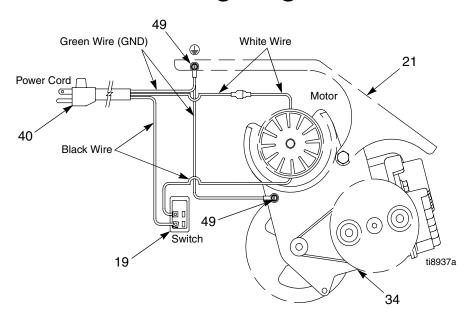
# **Troubleshooting**



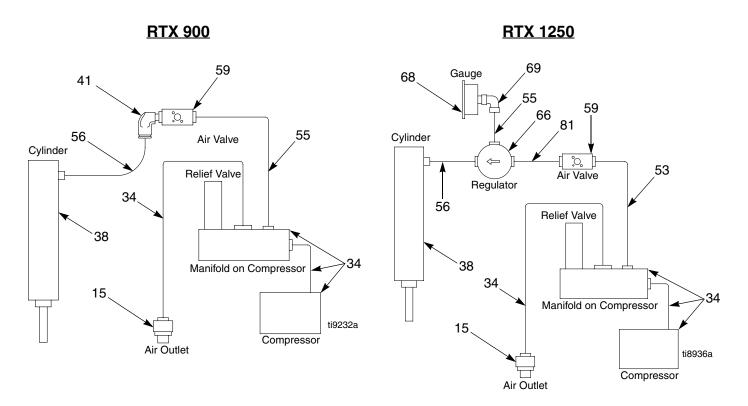
Problem	Cause	Solution
Sprayer won't run	Power switch not on	Turn switch on.
Pump won't pump material  Material runs out of bottom of sprayer	No power at wall outlet	Check outlet by plugging in another appliance. If appliance does not work, try another outlet.
	Wrong size generator	Use a 3500 watt or larger generator. Refer to Generator Requirements, page 6.
	Breaker tripped	Reset breaker.
Pump won't pump material	Air lock	Open air valve on gun.
	Selector switch in wrong position	Move selector switch to correct position for application.
	Mix too thick	Add water to thin material. Use Material Thickness Gauge.
	Loose fittings	Check and retighten all fittings.
	Plugged gun	<b>Relieve Pressure</b> , page 6. Remove gun from hose. Clean gun.
	Pump hose worn out	Replace hose. Recommended hose replacement - once every year.
	Pump cold	Move pump to warm room and allow it to warm up or run hot water through sprayer.
Material runs out of bottom of sprayer	Pump hose worn out	Replace hose.
	Loose fittings	Check and retighten all fittings.
No air from compressor	Gun air valve closed	Open gun air valve.
	Low voltage	Check extension cord length and gauge. Replace if different than recommended. Refer to Grounding and Electrical Requirements, page 6.
	Gun needle plugged	Clean needle and retry.
	Worn compressor	Replace compressor. Contact a qualified Graco Service Center.
	Lines not connected	Check all quick disconnect connections to gun and hoses.
	Damaged hose	Replace hose.

Problem	Cause	Solution
Speed of application slow or slower	Material too thick	Thin material.
	Nozzle too small	Change nozzles to a larger size. See Operation manual 311768.
	Too much air being used.	Partially close gun air valve to reduce air flow.
	Pump hose worn	Replace hose.
	Plugged or dirty gun	Relieve Pressure, page 6. Clean gun.
	Kinked hose	Unkink hose.
	Gun adjustment set too low	Increase flow adjustment with flow adjustment nut.
	Too many items on same circuit	Unplug other items from circuit.
	Extension cord too long or wrong gauge	Use a different extension cord. Refer to Grounding and Electric Requirements, page 6.
Intermittent flow/sputtering	Hopper connection not tight	Check gasket. Tighten connection.
	Debris in system	Clean system.
Quick disconnect does not stay connected.	Dirty or corroded fitting	Clean thoroughly. Soak in oil. Apply a few drops of light oil.
Gun will not shut off	Worn nozzle or needle.	Relieve Pressure, page 6. Replace worn parts.
	Debris in needle passage	Relieve Pressure, page 6. Clean.
Fluid leaking at Flow Adjustment Nut	Damaged seal.	Relieve Pressure, page 6. Replace seal.
Fluid leaking out of either plug	Missing or damaged o-rings	Relieve Pressure, page 6. Replace o-rings.
	Gun damaged	Replace gun.
Needle adjustment won't adjust	Dirty threads	Clean threads.
	Nozzle not on gun	Put nozzle on gun.

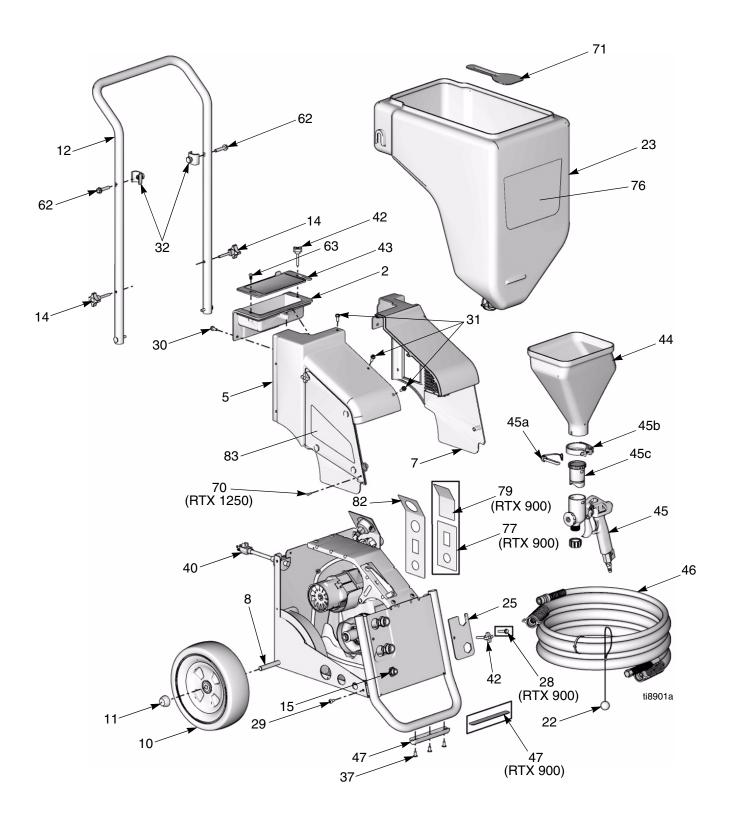
# **Wiring Diagram**



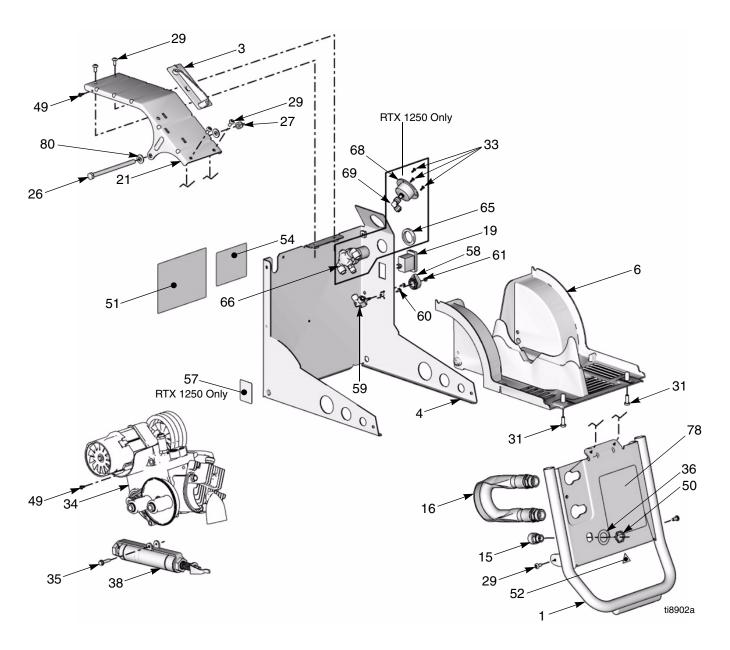
# **Air Diagram**



**Parts**Models 254974 and 254975



**Parts**Models 254974 and 254975



# **Parts**

#### Models 254974

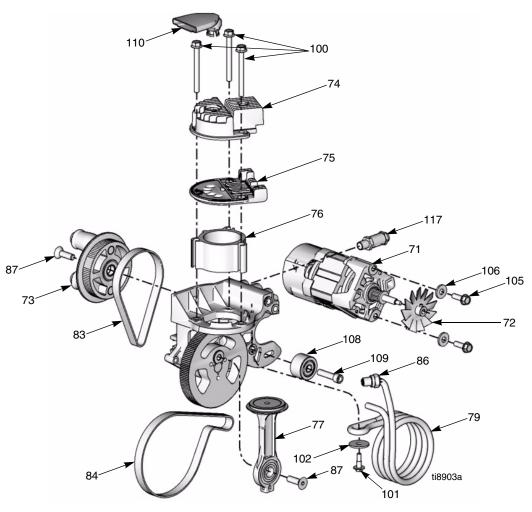
ı	Ref.	Part	Description	Qty.	Ref.	Part	Description	Qty.
	1	288386	PLATE, front, RTX	1	44	276906	HOPPER, texture, .75 gal	1
	2	15J600	TOOLBOX	1	45	288628	GUN, spray, texture, w/ hopper	1
	3	15H069		1	45a	287967	PIN, gun clip	1
	4	288384	FRAME, back, RTX (painted)	1	45b	234188	CLAMP	1
	5	288350		1			PLUG, gun	1
(	6	277319		1	46	15B344	HOSE	1
	7	288351	COVER, shroud; RTX 900	1	47		PAD, non-slip, foot	1
8	8	15J670	AXLE	1	48	103473		1
	10	115095	WHEEL, 9 in.	2	49	115498	· · · · · · · · · · · · · · · · · · ·	2
	11	112612	CAP, hub	2	50	104227		1
	12	288314	HANDLE	1		15H841		1
	14	15H641	KNOB	2	52▲		LABEL, caution	1
	15	288336	FITTING, bulkhead, assembly	1	53		TUBE, air	1
	16	288623	HOSE, coupled	1			LABEL, instruction	1
	19	120660	SWITCH	1	55		TUBE, air, .250	1
2	21	15H910	BRACKET, pump, RTX	1	56		TUBE, air, .250	1
2	22	15C090	GAUGE, thickness, fluid	1	58		KIT, repair, knob	1
2	23	288093	HOPPER	1	59	288757	•	1
2	25	288515	PLATE, support, RTX (painted)	1			(includes 59, 60)	
2	26	105240	SCREW, cap hex hd	1	60	120744	SCREW, mach, pnh	2
2	27	113981	NUT, lock, high tensile	1	61	120637	· ·	1
	28	120444	SCREW	1	62	15C753	SCREW, machine, hex	2
	29		SCREW, torx, tri lob	6			washer head	
	30	117633	SCREW, slot hex wash hd	2	63	111831		1
	31	120771	SCREW, mach, pnh	5	71		GUARD, burp	1
	32		HANGER	2	76		LABEL, hopper, RTX 900	1
	34	288856	COMPRESSOR, pump assembly	1	77		LABEL, control, RTX 900	1
	35	120236	SCREW, shoulder	1	78		LABEL, front, RTX 900	1
	36	120731	WASHER, flat	1	79		LABEL, shroud, RTX 900	1
	38	288119	CYLINDER, RTX	1	80	120215	WASHER, belleville	2
	40	15J758	CORD, power	1				
	41	113318	FITTING, elbow, plug-in	1	$\triangle A$	dditional v	varning labels are available at no cost	
	42	15J862	KNOB, 1/4-20, 4 prong	1				
4	43	15D561	COVER, tool tray	1				

# **Parts**

#### Models 254975

Ref	Part	Description	Qty	Ref	Part	Description	Qty
1	288386	PLATE, front, RTX	1	45b	234188	CLAMP	1
2		TOOLBOX	1	45c	15B167	PLUG, gun	1
3		SUPPORT, hopper, RTX	1	46	15B344		1
4		FRAME, back, RTX (painted)	1	48	103473	STRAP, tie, wire	1
5		COVER, shroud	1	47	15K049	ISOLATOR, foot	1
6		SHIELD, bottom	1	49		SCREW, mach, slot hex wash hd	2
7		COVER, shroud (painted)	1	50		NUT, lock	1
8		AXLE, RTX 1250"	1			LABEL, warning	1
10		WHEEL, 10	2	52▲	15K616	LABEL, caution	1
11	112612	CAP, hub	2	53		TUBE, air	1
12	288314	HANDLE, RTX (painted)	1	54		LABEL, instruction	1
14	15H641	KNOB	2	55		TUBE, air, .250 OD	1
15	288336	FITTING, bulkhead, assembly	1	56		TUBE, air, .250 OD	1
16	288623	HOSE, coupled	1			LABEL, warning	1
19	120660	SWITCH	1	58		KIT, repair, knob (includes 58, 61)	1
21	15H910	BRACKET, pump, RTX	1	59	288757	KIT, repair, regulator	1
22	15C090	GAUGE, thickness, fluid	1			(includes 59, 60)	
23	288265	HOPPER	1	60		SCREW, mach, pnh	2
25	288515	PLATE, support, RTX (painted)	1	61		NUT, acorn	1
26	105240	SCREW, cap hex hd	1	62		SCREW, machine, hex washer head	2
27	113981	NUT, lock, high tensile	1	63		SCREW, cap, skt, button hd	1
29		SCREW, torx, tri lob	6	65		NUT, regulator	1
30	117633	SCREW, slot hex wash hd	3	66		REGULATOR, air, 1/8 in. npt	1
31	120771	SCREW	5	68		GAUGE, pressure	1
32		HANGER	2	69		FITTING, elbow	1
33		SCREW, mach, phillips, pan hd	3	70		SCREW, mach, pnh	1
34	288651	COMPRESSOR, pump assembly	1	71		GUARD, burp	1
35	120236	SCREW, shoulder	1	76		LABEL, hopper, RTX1250	1
36	120731	WASHER, flat	1	78		LABEL, front, RTX 1250	1
37	120411	RIVET, blind	3	80		WASHER	2
38	288119	CYLINDER, RTX	1	81		TUBE, air, .250 OD	1
40	15J758	CORD, power	1	82		LABEL, control, RTX1250	1
42	15J862	KNOB, 1/4-20, 4 prong	3	83	15K364	LABEL, side panel, RTX1250	1
43	15D561	COVER, tool tray	1				
44	276906	HOPPER, texture, .75 gal	1				
45	288628	GUN, spray, texture, w/hopper	1	$\triangle A$	dditional v	varning labels available at no cost.	
45a	287967		1				

# **Parts**Compressor 288856 & 288651



-	Part 288856 288651	<b>Description</b> KIT, repair, compressor, complete (includes all items) RTX 900 KIT, repair, compressor, complete	Qty.	<b>Ref.</b> 79	Part 288614 120234	<b>Description</b> KIT, repair, cooler (includes 79, 86) BELT	<b>Qty.</b> 1
	288612	(includes all items) RTX 1250 KIT, repair, compressor, rebuild (includes 100, 74, 86, 75, 76, 77, 87)		84 86 87 95	120233 120245 120204 120593	BELT FITTING SCREW, mach, hex flat head SCREW, mach, torx pan hd	1 1 2 3
71	288613	KIT, repair, motor, universal, 120v (includes 71, 84, 105, 106)	1	100 101 102	120229 118890 120659	SCREW, hex flange SCREW, shoulder WASHER, flat	3 1 1
	120466 288616	FAN, repair, motor KIT, repair, pulley, w/rollers (includes 73, 83, 87)	1	105 106	260215 100023	SCREW, hex hd WASHER, flat	2
	288746 288610	KIT, repair, head, compressor (includes 74, 75) KIT, repair, plate, valve	1	108 109 110	288611 104272 15H940	KIT, repair, idler (includes 108, 84) SCREW, cap, sch FITTING	1
76	288609	CYLINDER, compressor KIT, repair, piston/cylinder (includes 75, 76, 77, 87)	1	117	120257 120617	VALVE, pressure relief RTX 900 Models (compressor 288856) RTX 1250 Models (compressor 288651)	ı

#### **Technical Data**

Main unit power requirements
Maximum fluid working pressure
Maximum air working pressure
Compressor specifications
Compressor air displacement
Generator required
Electric Motor
Power Cord

Material hopper capacity

Maximum delivery with texture

**Dimensions: RTX 900** 

Length Width Height

Weight (includes hose and gun)

**Dimensions: RTX 1250** 

Length Width Height

Weight (includes hose and gun)

Wetted parts Sound data

Sound pressure level\*
Sound power level\*\*
Storage Temperature Range
Operating Temperature Range
Gun:

Maximum Working Pressure Air Maximum Working Pressure CFM Rating Weight

\* Measured while spraying at 1 m

\*\* Measured per ISO-3744

120 Vac, 60 Hz, 15A, 1 phase

70 psi, (4.9 bar) 50 psi, (3.5 bar)

Universal motor thermally protected, oil-less

4.0 scfm at 45 psi 3500W minimum

Universal AC 14 Amp 1.5 Hp 16 AWG, 3-wire, 25 ft Model 254974: 8 gallons Model 254975: 10 gallons Gun material hopper: 3/4 gallon

RTX 900 - 0.9 gpm (3.4 lpm) RTX 1250 - 1.25 gpm (4.7 lpm)

23 in. (584 mm) with handle

18 in. (456 mm) 40 in. (1016 mm)

60 lb (27.2 kg)

24 in. (609 mm) with handle

20 in. (508 mm) 41 in. (1041 mm)

65 lb (29.5 kg)

brass, aluminum, plastic

83.2 dB(A) 97.5 dB(A)

35°F - 160°F (1.6°C - 71°C) 40°F - 115°F (4°C - 46°C)

70 psi (4.9 bar) 100 psi (6.895 bar) 3.5 - 11 CFM 1.1 lb (500 g)

# **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 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.

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 by an authorized Graco distributor to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

#### **Graco Information**

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

All written and visual data contained in this document reflects the latest product information available at the time of publication.

Graco reserves the right to make changes at any time without notice.

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