### Repair and Parts





Visit our website; http://MAGNUMLTS.Graco.com

# LTS 15, LTS 17, ProLTS 17 and ProLTS 19 Airless Sprayers

313036M

ΕN

- For portable spray applications of architectural paints and coatings -

Models 257060, 257065, 257070, 257080, 24N906, 24N808

3000 psi (21 MPa, 207 bar) Maximum Working Pressure

See page 2 for model and series information including dispense rate, recommended hose length, guns, and maximum working pressure.



LTS 15 & LTS 17 Models ONLY: Use water-based or mineral spirit-type materials only. Do not use materials having flash points lower than 70° F (21° C). This includes, but is not limited to, acetone, xylene, toluene, or naptha. For more information about your material, request MSDS from distributor or retailer.



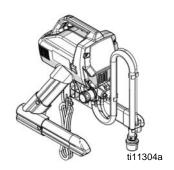
### IMPORTANT SAFETY INSTRUCTIONS.

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

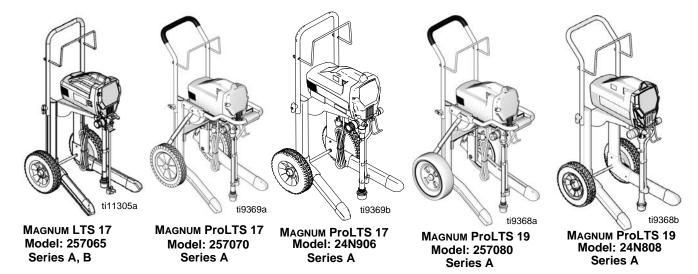
#### **Related Manual**



313034



MAGNUM LTS 15 Model: 257060 Series A, B, C





# **Specifications**

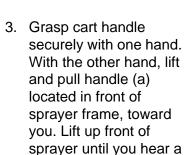
This equipment is not intended for use with flammable or combustible materials used in places such as cabinet shops or other "factory", or fixed locations. If you intend to use this equipment in this type of application, you must comply with NFPA 33 and OSHA requirements for the use of flammable and combustible materials.

		Dispense Rate	Hose Length and	Gun	Maximum Working Pressure		
Model Name	Series	gpm (lpm)	Diameter	Model	PSI	MPa	bar
MAGNUM LTS 15	A, B, C	0.27 gpm (1.02 lpm)	1/4 in. x 25 ft (6.4 mm x 7.5 m)	SG2	3000	21	207
MAGNUM LTS 17	A, B	0.31 gpm (1.17 lpm)	1/4 in. x 25 ft (6.4 mm x 7.5 m)	SG2	3000	21	207
MAGNUM ProLTS 17	А	0.34 gpm (1.29 lpm)	1/4 in. X 50 ft (6.4 mm x 15 m)	SG3	3000	21	207
MAGNUM ProLTS 19	А	0.38 gpm (1.44 lpm)	1/4 in. X 50 ft (6.4 mm x 15 m)	SG3	3000	21	207

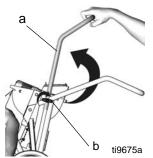
# **Getting Started**

# Fold-n-Store<sup>™</sup> Cart (ProLTS Sprayers Only)

- 1. Unfold Fold-n-Store handle (a) and align as shown.
- 2. Tighten wingnuts (b).

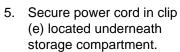


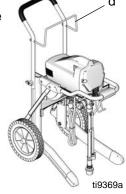
click and the cart is locked in place.

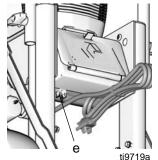




 Install hose rack (d) to frame handle. Install lock nuts. Tighten securely.







### **Warnings**

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

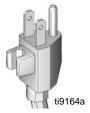
# **AWARNING**



#### GROUNDING

This product must be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a cord having 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.

- Improper installation of the grounding plug is able to result in a risk of electric shock.
- When repair or replacement of the cord or plug is required, do not connect the grounding wire to either flat blade terminal.
- The wire with insulation having an outer surface that is green with or without yellow stripes is the grounding wire.
- Check with a qualified electrician or serviceman when the grounding instructions are not completely understood, or when in doubt as to whether the product is properly grounded.
- Do not modify the plug provided; if it does not fit the outlet, have the proper outlet installed by a quali fied electrician.
- This product is for use on a nominal 120V circuit and has a grounding plug similar to the plug illustrated in the figure below.



- Only connect the product to an outlet having the same configuration as the plug.
- Do not use an adapter with this product.

#### **Extension Cords:**

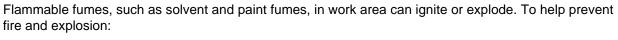
- Use only a 3-wire extension cord that has a 3-blade grounding plug and a 3-slot receptacle that accepts the plug on the product.
- Make sure your extension cord is not damaged. If an extension cord is necessary, use 12 AWG (2.5 mm²) minimum to carry the current that the product draws.

An undersized cord results in a drop in line voltage and loss of power and overheating.

# **AWARNING**



#### FIRE AND EXPLOSION HAZARD

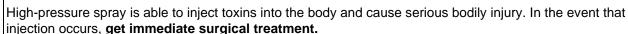




- Do not spray flammable or combustible materials near an open flame or sources of ignition such as cigarettes, motors, and electrical equipment. **For LTS 15 and LTS 17 models:** only use water-based or mineral spirit-type materials with a flash point greater than 70° F (21° C).
- Paint or solvent flowing through the equipment is able to result in static electricity. Static electricity
  creates a risk of fire or explosion in the presence of paint or solvent fumes. All parts of the spray
  system, including the pump, hose assembly, spray gun, and objects in and around the spray area
  shall be properly grounded to protect against static discharge and sparks. Use Graco conductive or
  grounded high-pressure airless paint sprayer hoses.
- Verify that all containers and collection systems are grounded to prevent static discharge.
- Connect to a grounded outlet and use grounded extensions cords. Do not use a 3-to-2 adapter.
- Do not use a paint or a solvent containing halogenated hydrocarbons.
- Keep spray area well-ventilated. Keep a good supply of fresh air moving through the area. Keep pump assembly in a well ventilated area. Do not spray pump assembly.
- Do not smoke in the spray area.
- Do not operate light switches, engines, or similar spark producing products in the spray area.
- Keep area clean and free of paint or solvent containers, rags, and other flammable materials.
- Know the contents of the paints and solvents being sprayed. Read all Material Safety Data Sheets (MSDS) and container labels provided with the paints and solvents. Follow the paint and solvents manufacturer's safety instructions.
- Fire extinguisher equipment shall be present and working.
- Sprayer generates sparks. When flammable liquid is used in or near the sprayer or for flushing or cleaning, keep sprayer at least 20 feet (6 m) away from explosive vapors.

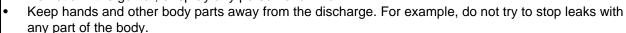


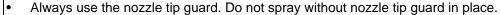
#### SKIN INJECTION HAZARD





Do not aim the gun at, or spray any person or animal.





- 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** for turning off the unit.
- Check hoses and parts for signs of damage. Replace any damaged hoses or parts.
- This system is capable of producing 3000 psi. Use Graco replacement parts or accessories that are rated a minimum of 3000 psi.
- Always engage the trigger lock when not spraying. Verify the trigger lock is functioning properly.
- Verify that all connections are secure before operating the unit.
- Know how to stop the unit and bleed pressure quickly. Be thoroughly familiar with the controls.

# **WARNING**



#### **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 (If applicable.)
- 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 manufac turer'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.



#### **ELECTRIC SHOCK HAZARD**

This equipment must be grounded. Improper grounding, setup, or usage of the system can cause electric shock.



- Turn off and disconnect power cord before servicing equipment.
- Connect only to grounded electrical outlets.
- Use only 3-wire extension cords.
- Ensure ground prongs are intact on power and extension cords.
- Do not expose to rain. Store indoors.



### 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.



#### **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.



#### **MOVING PARTS HAZARD**

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



- Keep clear of moving parts.
- Do not operate equipment with protective guards or covers removed.
- Pressurized equipment can start without warning. Before checking, moving, or servicing equipment, follow the **Pressure Relief Procedure** and disconnect all power sources.

# **AWARNING**



### **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 swal lowed.

- 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

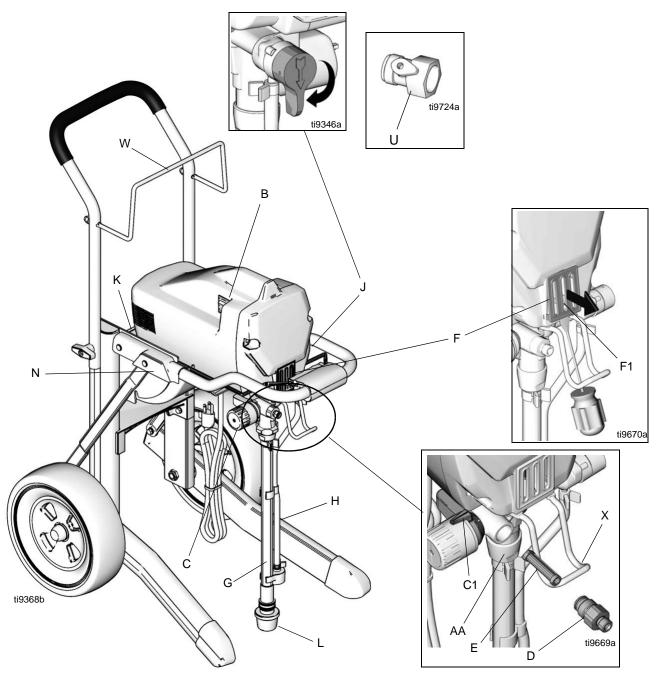
#### **CALIFORNIA PROPOSITION 65**

The engine exhaust from this product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. Wash hands after handling.

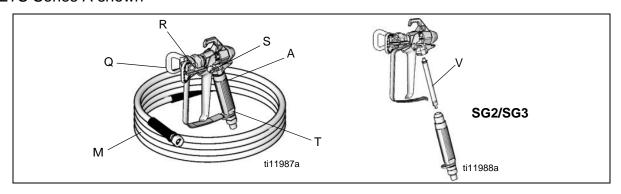
Notes	

# **Component Identification**

Α	Airless spray gun	Sprays fluid.				
В	Power switch	Turns sprayer ON and OFF.				
С	Pressure control knob	Increases (clockwise) and decreases (counter-clockwise) fluid pres sure in pump, hose, and spray gun.				
C1	Setting Indicator	To select function, align symbol on pressure control knob with set ting indicator, page 11.				
D	Pump fluid outlet fitting	Threaded connection for paint hose.				
E	InstaClean <sup>™</sup> fluid filter (ProLTS Sprayers Only)	Filters fluid coming out of pump to reduce tip plugging and improve finish.				
		Self cleans only during pressure relief.				
F	Power-Piston <sup>™</sup> Pump (behind Easy Access door, not shown) (ProLTS Sprayers Only)	Pumps and pressurizes fluid and delivers it to paint hose.				
F1	Easy Access <sup>™</sup> door (ProLTS Sprayers Only)	Easy Access door permits quick access to outlet valve. To remove door, insert flat blade of screwdriver into slot on the bottom of the door (as shown on page 8).				
G	Suction tube	Draws fluid from paint pail into pump.				
Н	Prime tube (with diffuser)	Drains fluid in system during priming and pressure relief.				
		In PRIME position (pointing down) directs fluid to prime tube.				
J Prime/Spray	Prime/Spray valve	<ul> <li>In SPRAY position (pointing forward) directs pressurized fluid to paint hose.</li> </ul>				
		Automatically relieves system pressure in overpressure situations.				
K	Storage compartment (ProLTS 257070,257080 Sprayers Only)	Provides onboard storage for spray tips and/or tools.				
L	Inlet screen	Prevents debris from entering pump.				
М	Paint hose	Transports high-pressure fluid from pump to spray gun.				
N	Fold-n-Store <sup>™</sup> Cart (ProLTS 257070,257080 Sprayers Only)	Folding cart frame for hanging on wall.				
Q	Tip guard	Reduces risk of fluid injection injury.				
R	Reversible spray tip	Atomizes fluid being sprayed, forms spray pattern and controls fluid flow according to hole size.				
		Reverse unclogs plugged tips without disassembly.				
S	Gun trigger safety lever (page 11)	Prevents accidental triggering of spray gun.				
T	Gun fluid inlet fitting	Threaded connection for paint hose.				
U	Power Flush attachment	Connects garden hose to suction tube for power flushing water-base fluids.				
V	Gun fluid filter	Filters fluid entering spray gun to reduce tip clogs.				
W	Hose wrap Rack (LTS 17, ProLTS 17, and ProLTS 19 Only)	Stows paint hose.				
Х	Pail hanger (LTS 17, ProLTS 17, and ProLTS 19 Only)	For transporting pail by its handle.				
AA	QuickAccess <sup>™</sup> Inlet (ProLTS 19 257080 Only)	Permits quick access to inlet valve to clear debris.				



ProLTS Series A shown



### Installation

# **Grounding and Electric Requirements**



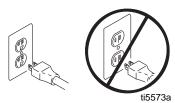




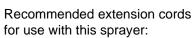


**Sprayer** must be grounded. Grounding reduces the risk of static and electric shock by providing an escape wire for electrical current due to static build up or in the event of a short circuit.

- This sprayer requires a 120 Vac, 60 Hz, 15A circuit with a grounding receptacle.
- Never use an outlet that is not grounded or an adapter.



- Do not use the sprayer if the electrical cord has a damaged ground prong.
- Only use an extension cord with an undamaged 3-prong plug.



- 50 ft (15.0 m) 14 AWG (2.1 mm<sup>2</sup>)
- 100 ft (30.0 m) 12 AWG (3.3 mm<sup>2</sup>)

**Spray gun:** ground through connection to a properly grounded fluid hose and pump.

**NOTE:** Smaller gauge or longer extension cords may reduce sprayer performance.

Fluid supply container: follow local code.

**Solvent pails used when flushing:** follow local code. Use only conductive metal pails, placed on a grounded surface such as concrete. Do not place the pail on a nonconductive surface, such as paper or cardboard, which interrupts grounding continuity.

<u>Grounding the metal pail</u>: connect a ground wire to the pail by clamping one end to pail and other end to ground such as a water pipe.

Maintaining grounding continuity when flushing or relieving pressure: hold metal part of the spray gun firmly to the side of a grounded metal pail, then trigger the gun.



### **Thermal Overload**

Motor has a thermal overload switch to shut itself down if overheated. If unit overheats, allow approximately 45 minutes for unit to cool. Once cool, switch will close and unit will restart.



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To reduce risk of injury from motor starting unexpectedly when it cools, always turn power switch OFF if motor shuts down.

### **Operation**

See Operation manual 312001 for basic information on sprayer set-up, flushing, and storage.



### **Trigger Lock**

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





### **Pressure Relief Procedure**

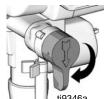
Follow this **Pressure Relief Procedure** whenever you stop spraying and before cleaning, checking, servicing, or transporting equipment.



Turn power switch OFF and unplug power cord.



Turn Prime/Spray valve to PRIME to relieve pressure.



 Hold gun firmly to side of pail.
 Trigger the gun to relieve pres sure.



11

Engage trigger lock.

**NOTE:** Leave Prime/Spray valve in the PRIME position until you are ready to spray again.

If you suspect the spray tip or hose is clogged or that pressure has not been fully relieved after following the steps above, VERY SLOWLY loosen tip guard retaining nut or hose end coupling to relieve pressure gradually, then loosen completely. Clear hose or tip obstruction. Read Unclogging Spray Tip instructions in the Sprayer or Gun Operation manual.

### **Pressure Control Knob Settings**



**NOTE:** To select function, align symbol on pressure control knob with setting indicator on sprayer.

### **General Repair Information**











Flammable materials spilled on hot, bare, motor could cause fire or explosion. To reduce risk of burns, fire or explosion, do not operate sprayer with cover removed.

To reduce risk of serious injury, including electric shock:

- Do not touch moving or electric pars with fingers or tools while testing repair.
- Unplug sprayer when power is not required for testing.
- Install all covers, gaskets, screws and washers before you operate sprayer.
- Keep all screws, nuts, washers, gaskets, and elec trical fittings removed during repair procedures.
   These parts usually are not provided with replace ment kits.
- · Test repairs after problems are corrected.
- If sprayer does not operate properly, review repair procedure to verify you did it correctly. See Basic Troubleshooting, page 13 and Advanced Trou bleshooting, page 18.
- Overspray may build up in the air passages.
   Remove any overspray and residue from air pas sages and openings in the enclosures whenever you service sprayer.
- Do not operate the sprayer without the cover in place. Replace if damaged. Covers direct cooling air around motor to prevent overheating

### **NOTICE**

- Do not run sprayer dry for more than 30 seconds.
   Doing so could damage pump packings.
- Protect the internal drive parts of this sprayer from water. Openings in the cover allow for air cooling of the mechanical parts and electronics inside. If water gets in these openings, the sprayer could malfunc tion or be permanently damaged.
- Prevent pump corrosion and damage from freezing. Never leave water or water-base paint in sprayer when its not in use in cold weather. Freezing fluids can seriously damage sprayer. Store sprayer with Pump Armor to protect sprayer during storage.

# **Basic Troubleshooting**



Check everything in this Basic Troubleshooting table before you bring the sprayer to a Graco/MAGNUM authorized service center.

Problem	Cause	Solution
Power switch is on and sprayer is plugged in, but motor does not run,	Pressure is set at zero pressure.	Turn pressure control knob clock wise to increase pressure setting.
and pump does not cycle.	Electric outlet is not providing power.	Check that lighted plug on sprayer is lit (this indicates electric power at outlet).
		Reset building circuit breaker or replace fuse.
	Extension cord is damaged.	Replace extension cord. Read Grounding and Electric Require ments, page 10.
	Sprayer electric cord is damaged.	Check for broken insulation or wires. Replace electric cord if dam aged.
	Motor or control is damaged.	Take sprayer to Graco/MAGNUM authorized service center.

Problem	Cause	Solution
Pump does not prime.	Prime/Spray Valve is in SPRAY position.	Turn Prime/Spray Valve to PRIME position (pointing down).
	Inlet screen is clogged or suction tube is not immersed.	Clean debris off inlet screen and make sure suction tube is immersed in fluid.
	Pump was not primed with flushing fluid.	Remove suction tube from paint. Prime pump with water or sol vent-based flushing fluid, see Oper ation manual 313034.
	Inlet valve check ball is stuck.	Remove suction tube and place a pencil into the inlet section to dis lodge the ball, allowing pump to prime properly. Or, Power Flush sprayer, see Operation manual 313034.
		AutoPrime may need replacement. Turn power switch ON and listen for "tap" in pump. If you do not hear "tap", AutoPrime is damaged. Take sprayer to Graco/MAGNUM autho rized service center.
	Inlet valve check ball or seat is dirty.	Remove inlet fitting. Clean or replace ball and seat.
	Outlet valve check ball is stuck.	ProLTS 17 and ProLTS 19: Insert screw driver in slot and remove Easy-Access door, page 8. Unscrew outlet valve with a 3/4 in. socket. Remove and clean assem bly.
		LTS 15 and LTS 17: Remove outlet fitting and clean outlet check ball.
	Suction tube is leaking, allowing air to enter.	Check suction tube for cracks and cuts. Make sure suction tube clamp is on hose. Replace suction tube if cracked or damaged.
	Pump valves are worn.	Check for worn pump valves.  a. Prime sprayer with paint b. Trigger gun momentarily. When trigger is released, pump should cycle momen tarily and stop. If pump con tinues to cycle, pump valves may be worn.
	Paint is very thick or tacky.	Thin material per manufacturer recommendations.
		Momentarily turn power switch OFF to allow pump to slow and stop. Repeat as necessary.

Problem	Cause	Solution	
Pump cycles but does not build up pressure.	Prime/Spray valve in PRIME posi tion (pointing down).	Turn Prime/Spray valve to SPRAY position (pointing forward).	
	Pump is not primed.	Prime pump, see Operation manual 313034.	
	Inlet screen is clogged or suction tube is not immersed.	Clean debris off inlet screen and make sure suction tube is immersed in fluid.	
	Suction tube is leaking, allowing air to enter.	Check suction tube for cracks and cuts. Make sure suction tube clamp is on hose. Replace suction tube if cracked or damaged.	
	Prime/Spray Valve is worn or obstructed with debris.	Take sprayer to Graco/MAGNUM authorized service center.	
	Pump check ball is stuck.	Read <b>Pump does not prime</b> sec tion in Troubleshooting, page 14.	
Pump cycles, but paint only dribbles or spurts when spray gun is trig gered.	Pressure is set too low.	Slowly turn pressure control knob clockwise to increase pressure set ting which will turn motor on to build pressure.	
	Spray tip is clogged.	Unclog spray tip, see Operation manual 313034.	
	InstaClean fluid filter is clogged. (ProLTS 17 and ProLTS 19 Only)	Clean or replace InstaClean fluid fil ter, see Operation manual 313034.	
	Spray gun fluid filter is clogged.	Clean or replace gun fluid filter, see Operation manual 313034.	
	Spray tip is too large or worn.	Replace tip.	

Problem	Cause	Solution		
Pressure is set at maximum but cannot achieve a good spray pattern.	Spray tip is clogged.	Unclog spray tip, see Operation manual 313034.		
	Reversible spray tip is in UNCLOG position.	Rotate arrow-shaped handle on spray tip so it points forward on gun.		
	Spray tip is too large for sprayer.	Select smaller spray tip.		
	Spray tip is worn beyond capability of sprayer.	Replace spray tip.		
	Extension cord is too long or not heavy enough gauge.	Replace extension cord. See  Grounding and Electrical  Requirements, page 10.		
	Spray gun fluid filter is clogged.	Clean or replace spray gun fluid filter, see Operation manual 313034.		
	InstaClean fluid filter is clogged. (ProLTS 17 and ProLTS 19 Only)	Clean or replace InstaClean fluid filter, see Operation manual 313034.		
	Inlet screen is clogged.	Clean debris off inlet screen.		
	Pump valves are worn.	Check for worn pump valves. a. Prime sprayer with paint		
		b. Trigger gun momentarily. When trigger is released, pump should cycle momen tarily and stop. If pump con tinues to cycle, pump valves may be worn.		
	Material is too thick.	Thin material.		
	Hose is too long (if extra section is added).	Remove extra section of hose.		
Spray gun stopped spraying. Pump is not cycling.	Spray tip is clogged.	Unclog spray tip, see Operation manual 313034.		
When paint is sprayed, it runs down	Coat is going on too thick.	Move gun faster.		
the wall or sags.		Choose a tip with smaller hole size.		
		Choose tip with wider fan.		
		Make sure gun is far enough from surface.		
When paint is sprayed, coverage is	Coat is going on too thin.	Move gun slower.		
inadequate.		Choose tip with larger hole size.		
		Choose tip with narrower fan.		
		Make sure gun is close enough to surface.		
Fan pattern varies dramatically while spraying.	Pressure control switch is worn and causing excessive pressure	Take sprayer to Graco/MAGNUM authorized service center.		
OR	variation.			
Sprayer does not turn on promptly when resuming spraying.				
Cannot trigger spray gun.	Spray gun trigger lock is locked.	Rotate trigger safety lever to unlock trigger lock, page 11.		
Paint is coming out of pressure control switch.	Pressure control switch is worn.	Take sprayer to Graco/MAGNUM authorized service center.		

Problem	Cause	Solution
Prime/Spray valve actuates automatically relieving pressure through prime tube.	System is over pressurizing.	Take sprayer to Graco/MAGNUM authorized service center.
Paint leaks down outside of pump.	Pump packings are worn.	Take sprayer to Graco/MAGNUM authorized service center.
Motor is hot and runs intermittently.  Motor automatically shuts off due to excessive heat. Damage can occur if	Vent holes in enclosure are plugged or sprayer is covered.	Keep vent holes clear of obstructions and overspray and keep sprayer open to air.
cause is not corrected. See <b>Thermal Overload</b> , page 10.	Extension cord is too long or not a heavy enough gauge.	Replace extension cord. Read  Grounding and Electrical  Requirements, page 10.
	Unregulated electrical generator being used has excessive voltage.	Use electrical generator with a proper voltage regulator. Sprayer requires 120VAC, 60 Hz, 1500-Watt generator.

# **Advanced Troubleshooting**



See **Basic Troubleshooting** first, page 13 for problems that are more easily remedied.

### **General Problem: Motor Does Not Operate**

Specific Problem	Cause	Solution
Power switch is on and sprayer is plugged in; pump does not cycle.	See Basic Troubleshoot ing, page 13.	
Basic mechanical problems.	Paint is frozen or hardened in	Unplug sprayer from electrical outlet.
	pump.	If paint is frozen in sprayer:
		Do NOT try to start sprayer until completely thawed or you may damage the motor, control board, and/or drivetrain.
		Turn power switch OFF.
		2. Place sprayer in warm area for several hours.
		3. Plug sprayer in.
		Turn power switch ON and flush sprayer with water or mineral spirits.
		a. Turn on sprayer.
		b. Turn prime valve to PRIME position.
		If paint hardened in sprayer:
		ProLTS 17 and ProLTS 19: Replace pump packings. See List of Kits, page 28.
		LTS 15 and LTS 17: Replace complete pump. See List of Kits, page 28.
		Remove all residue from inlet and outlet valves.
	Gears are damaged.	Remove motor enclosure and rotate motor fan to check for bad gears. If gears bind or slip, remove pump cover and replace failed gears. See <b>List of Kits</b> , page 28.
	ProLTS 17 and ProLTS 19: Yoke is broken because	Repair or replace using <b>Gear/Yoke Kit</b> . See <b>List</b> of <b>Kits</b> , page 28.
	pump is locked up due to dried paint or worn packings.	Replace pump packings on ProLTS 17 and Pro LTS 19 sprayers. See <b>List of Kits</b> , page 28.

Specific Problem	Cause	Solution
Basic electrical problems.	Motor overheated.	Allow motor to cool for 45 minutes. Retry.
	Electrical outlet is damaged.	Reset building circuit breaker or replace fuse. Try another outlet.
		Check electric supply with volt meter. Meter must read 85 to 130V AC. If voltage is too high, do not plug sprayer in until outlet is corrected.
	Control board leads are improperly fastened, improp	Replace any loose terminals. Make sure all leads and harnesses are firmly connected.
	erly mated, or corroded.	ProLTS 17 and ProLTS 19: Check pressure control harness connection on front side of drive housing.
		Clean control board terminals. Securely recon nect leads.
	Motor brushes are worn.	Check length of BOTH brushes (brushes do not wear evenly on both sides of the motor). Brush length must be 0.25 in. (6.4mm). If brushes are worn replace motor using <b>Motor Kit</b> , page 28.
	Motor armature commutator damaged.	Check for burn spots, gouges and extreme roughness. If damaged or if shorts are evident, replace motor using <b>Motor Kit</b> , page 28.
	Fuse is blown.	Find cause for blown fuse before replacing. Turn the motor fan to check for a locked gear or pump. Use a continuity meter to check for a short to ground caused by a pinched wire.
		ProLTS 17 and ProLTS 19: Replace the fuse with correct fuse kit. See List of Kits, page 28.
		LTS 15 and LTS 17: The fuse is not replaceable. Replace control board. See List of Kits, page 28.
	Motor armature shorting.	Check for shorts. See <b>Motor Diagnostics</b> , page 25. If shorts are evident, replace motor using <b>Motor Kit</b> , page 28.
	Motor armature open circuit.	Check motor leads for continuity. If open circuit, check brushes. Use Motor Kit to replace motor. See <b>List of Kits</b> , page 28.
	Control board damaged.  CAUTION: Do not perform	See Control Board Diagnostics, page 27. Replace control board if damaged using Control Board Kit, page 28.
	control board diagnostics until you have determined the armature is good. A damaged armature can burn out a good control board.	F-19-

Specific Problem	Cause		Solution	
Sprayer Wiring Problems	Sprayer power cord dam	Ur	nplug sprayer power cord.	
NOTE: Remove enclosure mounting screws and pull	aged.		Disconnect black power cord wire at power switch.	
enclosure away from drive		Unplug in-line connection white cord wire.		
housing. Take care not to pull on leads from electrical cord		Plu	ug in power cord.	
and power switch.			est voltage between black and white wires of ower cord. Meter must read 85 to 130V AC.	
		Re	eplace power cord if no voltage.	
	Sprayer power switch dam	1.	Unplug sprayer power cord.	
	aged.	2.	Disconnect black control board wire at power switch.	
		3.	Unplug in-line connection white cord wire.	
		4.	Plug in power cord.	
		5.	Turn power switch ON.	
		6.	Test voltage between open terminal of power switch and white power cord wire. Meter must read 85 to 130V AC.	
		7.	Replace power switch if no voltage.	
	Motor thermal overload cutoff	1.	Unplug sprayer power cord.	
	switch.	2.	Remove motor harness from control card.	
	WARNING: See Startup Hazard After Thermal Over	3.	Check for continuity between yellow leads or motor harness ( <b>Pro LTS 19 only</b> ).	
	load on page 10.	4.	If thermal relief switch is open (no continuity) allow motor to cool.	
		5.	If switch remains open after motor cools, replace motor using <b>Motor Kit</b> , page 28.	
		6.	If thermal relief switch closes after motor cools, find correct cause of overheating.	

## **General Problem: Circuit Breaker is Tripping**

Specific Problem	Cause	Solution
Building circuit breaker opens as soon as sprayer is turned on.	Sprayer electrical wiring is pinched or insulation is dam aged.	Repair or replace any damaged wiring or termi nals. Securely reconnect wires.
NOTE: Remove enclosure	Wires between pressure con trol switch and control board are pinched.	
mounting screws and pull enclosure away from drive housing. Take care not to pull	Motor armature is shorting.	Check for shorts. See <b>Motor Diagnostics</b> , page 25. If shorts are evident, replace motor using <b>Motor Kit</b> , page 28.
on leads from electrical cord and power switch.	Control board is damaged.  CAUTION: Do not perform control board diagnostics until you have determined the armature is good. A bad motor armature can burn out a good motor control board.	See Control Board Diagnostics, page 27. Replace control board if damaged using Control Board Kit, page 28.
Building circuit breaker opens	Sprayer power cord dam	Unplug sprayer power cord.
as soon as sprayer is plugged into outlet and sprayer is NOT turned on.	aged.	Disconnect black power cord wire at power switch.
		Unplug in-line connection white cord wire.
NOTE: Remove enclosure		Plug in power cord.
mounting screws and pull enclosure away from drive		Test voltage between black and white wires of power cord. Meter must read 85 to 130V AC.
housing. Take care not to pull on leads from electrical cord		Replace power cord if no voltage.
and power switch.	Sprayer power switch dam	Unplug sprayer power cord.
	aged.	<ol><li>Disconnect black control board wire at power switch.</li></ol>
		3. Unplug in-line connection white cord wire.
		4. Plug in power cord.
		5. Turn power switch ON.
		<ol><li>Test voltage between open terminal of power switch and white power cord wire. Meter must read 85 to 130V AC.</li></ol>
		7. Replace power switch if no voltage.
	Also see Basic Electrical Probl	ems, and Sprayer Wiring Problems, pages 19 - 20.

## **General Problem: Erratic Motor Operation**

Specific Problem	Cause	Solution			
Sprayer quits after running for 5 to 10 minutes	Building circuit is overloaded.	Remove other loads from building circuit or find another circuit that has less load. See <b>Ground ing and Electric Requirements</b> , page 10.  Try another outlet. Check electric supply with volt meter. Meter must read 85 to 130V AC. If voltage is too high, do not use outlet until corrected.			
	Electrical outlet supplying wrong voltage.				
	Also see Basic Electrical Problems and Sprayer Wiring Problems, pages 19 - 20.				
	Motor is overheating.  Warning: See <b>Thermal Over</b>	After motor cools, operate sprayer and deter mine if motor stops when trigger on gun is released. If sprayer runs continuously, replace			
	load, page 10.	Pressure Control. See List of Kits, page 28.			
		Relieve pressure and remove motor enclosure. Turn motor fan by hand to check for binding gears or seized pump. See <b>List of Kits</b> , page 28.			

# **General Problem: Low or Fluctuating Output**

Specific Problem	Cause	Solution
Pump cycles, but output is low or surging.	See Basic Troubleshooting, page 13.	
	Worn or obstructed inlet and	Check for worn pump valves as follows:
	outlet valves.	Prime sprayer with paint. Turn the Prime/Spray valve to SPRAY position. Turn pressure control fully clockwise.
		Trigger spray gun briefly.
		When spray gun trigger is released pump should cycle momentarily and stop.
		If pump continues to cycle, pump valves may be worn or obstructed.
		For replacement inlet and outlet valve kits, see <b>List</b> of <b>Kits</b> , page 28.
	Prime/Spray valve is leaking out drain line when Prime/Spray valve is in SPRAY position.	Check Prime/Spray valve for debris trapped on seat and for worn parts. Torque to 130-180 in-lb (15.8-18.1 N•m). Replace if parts are worn using <b>Prime/Spray Valve Kit</b> , page 28.
	Voltage from electrical outlet is too low. Low voltages reduce sprayer performance.	Check voltage of outlet. Meter must read 85 to 130V AC.
	Extension cord is too long or	Replace extension cord.
	not heavy enough gauge.	See <b>Grounding and Electrical Requirements</b> , page 10.
	Leads from motor or pressure switch to control board are damaged, loose, pinched, or overheated.	Be sure terminals are centered and firmly con nected. Inspect for pinched wiring and wiring insu lation and terminals for signs of overheating. Replace any loose terminals or damaged wiring. Securely reconnect terminals.
	Motor brushes are worn.	Check length of BOTH brushes (brushes do not wear evenly on both sides of the motor). Brush length must be 0.25 in. (6.4mm). If brushes are worn replace motor using <b>Motor Kit</b> , page 28.
	Motor brush springs are bro ken.	If springs are broken, replace motor using <b>Motor Kit</b> , page 28.
	Motor brushes are binding in brush holders.	Clean brush holders. Remove carbon dust with small cleaning brush.
	Motor stops before sprayer reaches correct pressure (stall pressure is too low).	Replace pressure control using <b>Pressure Control Switch Kit</b> , page 28.
	Control board is damaged.	See Control Board Diagnostics, page 27. If dam
	<b>CAUTION:</b> Do not perform con trol board diagnostics until you have determined the armature is good. A damaged armature can burn out a good control board.	aged, replace control board using <b>Control Board Kit</b> , page 28.

Specific Problem	Cause	Solution
Motor runs and pump cycles, but pressure does not build	Intake valve or outlet valve is not seating properly.	Remove and clean inlet valves and outlet valves. Replace if necessary. See <b>List of Kits</b> , page 28.
up.	Pump packings are worn or damaged.	Check for leaking around pump.  ProLTS 17 and ProLTS 19: Replace pump packings. See List of Kits, page 28.
		LTS 15 and LTS 17: Replace complete pump. See List of Kits, page 28.

# **General Problem: Excessive Pressure Build Up**

Specific Problem	Cause	Solution	
Prime/Spray Valve actuates automatically, relieving pressure through drain tube.	Pressure control switch has pinched wires, or switch is worn.	Replace pressure control switch using <b>Pressur Control Switch Kit</b> , page 28.	
	Water or paint entered pressure control switch or shorted control board.	Use <b>Pressure Control Switch Kit</b> , to replace switch. See <b>List of Kits</b> , page 28.	
	Control board failed.	See Control Board Diagnostics, page 27. Replace damaged control board using Control Board Kit, page 28.	

## **Motor Diagnostics (LTS 15 and LTS 17)**



If Motor Diagnostics reveal a damaged motor or if motor brushes are shorter than 1/4 in. (6.4 mm) replace the motor using **Motor Kit**, page 28.

### Setup

- 1. Unplug power cord and Relieve Pressure, page 11.
- Remove enclosure and disconnect two black motor leads to control board (see Wiring Diagram, page 49).
- Remove motor fan cover by gently prying up on retention tabs on sides of motor. Motor shaft should spin easily when turning fan. If motor shaft does not turn easily, there is a problem with pump, gears, or motor (see **Troubleshooting**, page 13).
- Inspect motor windings for evidence of overheating. If windings appear burnt and motor smells, replace motor.

- Use Ohmmeter to measure resistance across two black motor leads. Resistance of motor should fall within range of 1.5 to 4.5 ohms. If motor falls outside resistance range or is open circuit, replace motor.
- 6. Use Ohmmeter to measure resistance of motor leads to motor laminations. If resistance is not open circuit, replace motor.
- Inspect length of both brushes by looking at brush torsion spring. If spring is not bottomed out in slot for brush spring, brush length is acceptable. If brushes are worn out, replace motor.

# **Motor Diagnostics (ProLTS 17 and ProLTS 19)**



Check for electrical continuity in motor armature, windings and brush as follows:

If Motor Diagnostics reveal a damaged motor or if motor brushes are shorter than 1/4 in. (6.4 mm) or if the motor shaft cannot turn, replace the motor using **Motor Kit**, page 28.

#### Setup

- 1. Relieve Pressure, page 11.
- 2. Unplug electric cord.
- Remove enclosure and disconnect motor leads from control card.
- 4. Remove fan brace.
- 5. Remove four screws and front cover.
- 6. Remove yoke and guide rods.
- 7. Remove gear.

#### **Armature Short Circuit Spin Test**

Quickly turn motor fan by hand. There should not be electrical shorts and fan should coast two or three revolutions before stopping. If fan does not spin freely, armature is shorted. Replace motor using **Motor Kit**, page 28.

# Armature, Brushes and Motor Wiring Open Circuit Test (Continuity)

- Connect red and black motor leads together with test lead.
- 2. Turn motor fan by hand, about two revolutions per second.
- 3. If there is an uneven resistance or no resistance, replace motor using **Motor Kit**, page 28.

### **Pressure Control Switch Diagnostics**

### LTS 15, LTS 17, ProLTS 17 and ProLTS 19

If pressure control switch diagnostics reveal a damaged pressure control, replace it with the correct **Pressure Control Switch Kit**, see page 28. LTS 15 and LTS 17 sprayers have different pressure control kits because stall pressure is preset at the factory.

- 1. Unplug power cord and Relieve Pressure, page 11.
- If paint is leaking from pressure control switch between pressure control knob and base, replace pressure control switch.
- ProLTS 17 and ProLTS 19: Remove front cover, yoke, and pins. Disconnect pressure control switch connector from control board.
  - LTS 15 and LTS 17: Remove enclosure and dis connect pressure control switch connector from control board. Use finger to support control board when removing pressure control switch connector.
- 4. Use ohmmeter to check for no continuity between sprayer ground and both pressure control terminals

- in connector. If either pressure control switch lead is shorted to ground, pressure control switch wires have been pinched to ground during assembly and pressure control switch needs to be replaced.
- Use Ohmmeter to measure across two terminals in pressure control connector. No continuity or open circuit should exist when pressure control knob is at lowest pressure setting (full counter-clockwise).
   Replace pressure control switch if continuity exists.
- Using ohmmeter to measure across two terminals in pressure control connector. Continuity or closed cir cuit should exist when pressure control knob is set at maximum pressure (full clockwise). Replace pressure control switch if no continuity exists.

# **Control Board Diagnostics (ProLTS 17 and ProLTS 19)**

**NOTE:** Check for motor problems before replacing control board. A damaged motor may burn out a good control card.

Check for a damaged control board or pressure control switch as follows:



- 1. Relieve Pressure, page 11.
- 2. Unplug electrical cord.
- 3. Remove four cover screws and front cover. Remove motor enclosure.
- 4. Remove yoke and guide rods.
- 5. Remove gear.
- 6. Remove pressure control harness from control board. Using tip of small, flat blade screwdriver, press tab on right side connector to release.

7. Attach harness from a pressure control switch you know is functioning correctly to control board.

**NOTE:** Pressure control switch does not have to be installed in pump.

- 8. Turn pressure control adjustment knob (C) +to max imum pressure setting.
- 9. Plug electrical cord into 120VAC receptacle.
- 10. Turn power switch (B) ON.
  - If motor runs, replace pressure switch.
     Pressure Control Switch Kit, page 28.
  - If motor does not run, replace control board repeat test. Control Board Kit, page 28.

# **Control Board Diagnostics (LTS 15 and LTS 17)**

**NOTE:** Check for motor problems before replacing control board. A damaged motor may burn out a good control card.



- Unplug electrical cord and Relieve Pressure, page 11.
- Remove enclosure and check all control board con nectors for proper installation (see Wiring Diagram, page 49).
- Check fuse on control board. If fuse is blown, deter mine the cause before replacing control board (see Advanced Troubleshooting, page 18).

### **Pump Diagnostics**

#### **NOTICE**

When repairing or cleaning the pump, never submerge pump in water or allow fluid to enter pressure control.

When pump packings wear, paint begins to leak down the outside of the pump. At the first sign of leakage, replace the pump or additional damage to the drive train could occur.

- LTS 15 and LTS 17: Replace pump using Pump Replacement (Complete). See List of Kits, page 28.
  - ProLTS 17 and ProLTS 19: Replace pump using Pump Repair kit. See List of Kits, page 28.
- 2. If there is no paint leakage, see **Advanced Trou bleshooting**, page 18. Pump may not be defective.

# **List of Kits (Series A)**

Kit Number	Models	Kit Description
289107	All	AutoPrime
16E829	LTS 15, LTS 17	Control Board
288705	ProLTS 17	Control Board
288900	ProLTS 19	Control Board
244035	All	Drain Tube Diffuser
16E830	LTS 15	Enclosure (includes labels and screws)
16E831	LTS 17	Enclosure (includes labels and screws)
288695	ProLTS 17, ProLTS 19	Enclosure (includes labels and screws)
287770	ProLTS 17, ProLTS 19	Fan Replacement
257001	ProLTS 17, ProLTS 19	Filter Kit (InstaClean <sup>™</sup> )
16E833	LTS 15, LTS 17	Front Cover
288692	ProLTS 17, ProLTS 19	Front Cover
119276	ProLTS 17	Fuse
119277	ProLTS 19	Fuse
289102	ProLTS 17, ProLTS 19	Gear/Yoke
247339	LTS 15, LTS 17	Hose 1/4 in. x 25 ft
247340	ProLTS 17, ProLTS 19	Hose 1/4 in. x 50 ft
257002	All	Inlet Strainer
256212	ProLTS 17, ProLTS 19	Lacquer Conversion Kit
16E837	LTS 15	Leg, Left
262012	LTS 17	Leg, Left
16E836	LTS 15	Leg, Right
262014	LTS 17	Leg, Right
289104	ProLTS 17, ProLTS 19	Motor
16E842	LTS 15	Power Cord (includes warning label)
16E843	LTS 17	Power Cord (includes warning label)
244266	LTS 15	Pressure Control Switch
244267	LTS 17, ProLTS 17, ProLTS 19	Pressure Control Switch
235014	All	Prime/Spray Valve
16E844	LTS 15, LTS 17	Pump Inlet Valve
288700	ProLTS 17	Pump Inlet Valve
288699	ProLTS 19	Pump Inlet Valve
16E845	LTS 15, LTS 17	Pump Outlet Valve
243094	ProLTS 17, ProLTS 19	Pump Outlet Valve
288818	ProLTS 17, ProLTS 19	Pump Repair Kit
16F047	LTS 15, LTS 17	Pump Replacement
288703	ProLTS 17	Pump Replacement (Complete)
288702	ProLTS 19	Pump Replacement (Complete)
243011	LTS 15, LTS 17	Spray Gun
243012	ProLTS 17, ProLTS 19	Spray Gun
197607	LTS 15	Suction Tube
16E847	LTS 17	Suction Tube
15K617	ProLTS 17, ProLTS 19	Suction Tube
288709	ProLTS 17, ProLTS 19	Tool Box
16E838	LTS 15, LTS 17	Motor (Cinderson)
16F392	LTS 15, LTS 17	Motor (Johnson)
16E835	LTS 15, LTS 17	Gear and Drive (for Cinderson motor)
16E778	LTS 15, LTS 17	Gear and Drive (for Johnson motor)
16E846	LTS 15, LTS 17	Pump Replacement (Complete)
	1 '	1 ' ' '

# List of Kits (Series B, C)

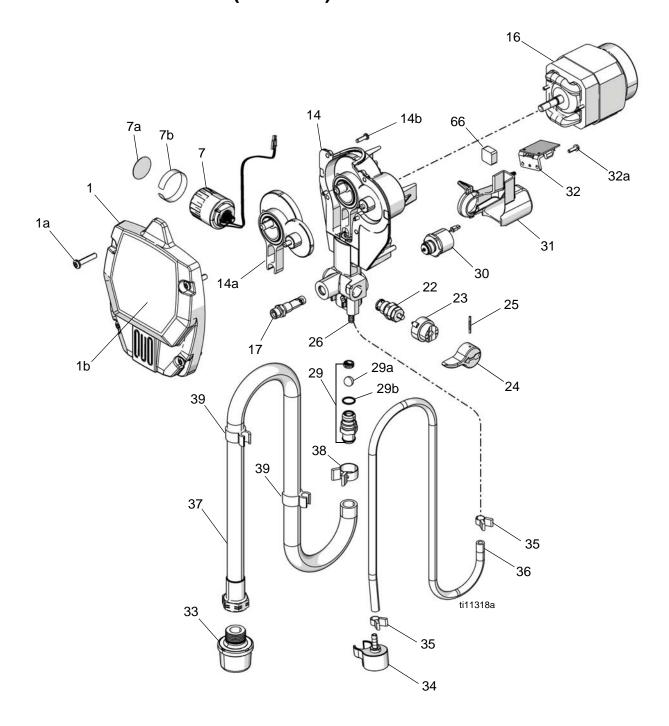
Kit Number	Models	Kit Description
289107	All	AutoPrime
16E829	LTS 15, LTS 17	Control Board
244035	All	Drain Tube Diffuser
16E830	LTS 15	Enclosure (includes labels and screws)
16E831	LTS 17	Enclosure (includes labels and screws)
16E833	LTS 15, LTS 17	Front Cover
247339	LTS 15, LTS 17	Hose 1/4 in. x 25 ft
257002	All	Inlet Strainer
24K633	LTS 15 (Series A, B, C)	Leg, Left
262012	LTS 17	Leg, Left
24K632	LTS 15 (Series A, B, C)	Leg, Right
262014	LTS 17	Leg, Right
16E842	LTS 15 (Series A, B, C)	Power Cord (includes warning label)
16E843	LTS 17	Power Cord (includes warning label)
244266	LTS 15	Pressure Control Switch
244267	LTS 17	Pressure Control Switch
235014	All	Prime/Spray Valve
16E844	LTS 15, LTS 17	Pump Inlet Valve
16E845	LTS 15, LTS 17	Pump Outlet Valve
16F047	LTS 15, LTS 17	Pump Replacement
243011	LTS 15, LTS 17	Spray Gun
197607	LTS 15	Suction Tube
16E847	LTS 17	Suction Tube
16E838	LTS 15, LTS 17	Motor (Cinderson)
16F392	LTS 15, LTS 17	Motor (Johnson)
16E835	LTS 15, LTS 17	Gear and Drive (for Cinderson motor)
16E778	LTS 15, LTS 17	Gear and Drive (for Johnson motor)
16E846	LTS 15, LTS 17	Pump Replacement (Complete)

### **Parts**

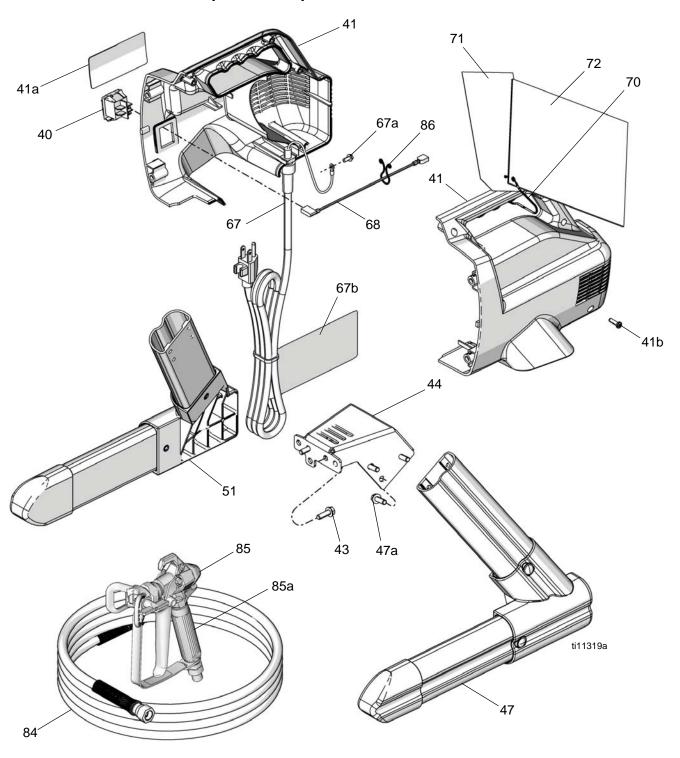
# LTS 15 Model 257060 (Series A)

Ref	Part	Description	Qty	Ref	Part	Description	Qty
1	289682	KIT, housing cover, includes 1a, 1b	1	41	289680	KIT, enclosure, LTS 15, includes 1a, 41a, 41b	1
1a	120724	SCREW	4	41a <b>▲</b>	15E072	LABEL, identification	1
1b <b>▲</b>		LABEL, Magnum LTS 15, front	1	41b	115477	SCREW, mach, torx, pan hd	4
7		KIT, pressure control, includes 7a,	1	43	260212	SCREW, hex washer hd, thd form	2
		7b		44	15R543	BRACKET, motor	1
7a <b>▲</b>	15A464	LABEL, control	1	47	24K633	KIT, left leg, LTS 15, includes 2	1
7b <b>▲</b>	15K530	LABEL	1			screws, 47a, 47b	
14	289650	KIT, pump, includes 14a, 14b	1	47a		SCREW, hex washer hd, thd form	
14a	289209	KIT, gear	1	47b		NUT, lock, hex	4
14b	115477	SCREW, mach, torx, pan hd	4	51	24K632	KIT, right leg, LTS 15,	1
16	289915	KIT, motor	1			includes 2 screws, 47a	
17	289878	KIT, outlet valve, LTS 15 and LTS	1	66		FOAM, pump drain	1
		17		67	16E843	KIT, power cord, LTS 15/LTS 17,	1
22	235014	KIT, drain valve	1			includes 67a, 67b	4
23	224807	BASE, valve	1	67a		SCREW, grounding	1
24	187625	HANDLE, valve, drain	1	67b <b>▲</b>		LABEL, Magnum, warning	1
25	111600	PIN, grooved	1	68		WIRE, jumper	1
26	196574	FITTING, drain	1	70		CLIP, spring	1
29	288701	KIT, pump, inlet valve, includes	1	71▲	198547	, 3,	1
		29a, 29b		72▲	15K551	, , ,	1
29a	105445	•	1	70 4	4514550	English	1
29b	115719	O-RING	1	72a <b>▲</b>	15K552	GUIDE, Magnum quick guide,	
30		KIT, solenoid	1	0.4	0.47000	Spanish (not shown)	1
31		COVER, solenoid	1	84 05		HOSE, cpld, 14 in. x 25 ft	1
32		KIT, control board, includes 32a	1	85 05-	243011	, , , ,	1
32a		SCREW, mach, slot hex wash hd	1	85a	288749	, <b>G</b>	1
33		KIT, strainer	1	86		RETAINER, wire	1
34	244035	DEFLECTOR, barbed	1	91		VALVE, shutoff (not shown)	1
35	115489	•	2	92	244168	FLUID, pump armor, 8 oz (not shown)	'
36		TUBE, drain	1	93▲	179960	,	. 1
37		TUBE, suction	1	93	179900	CARD, medical wallet (not shown)	•
38	116295	CLAMP, tube	1	▲ Repla	acement V	/arning labels, tags and cards are availa	ble
39	195400	CLIP, spring	2	at no co		5 5 5 5 5 5 5 5 5 5 6 6 6 6 6 6 6 6 6	
40	118899	SWITCH, rocker, spdt	1				

# LTS 15 Model 257060 (Series A)



# LTS 15 Model 257060 (Series A)

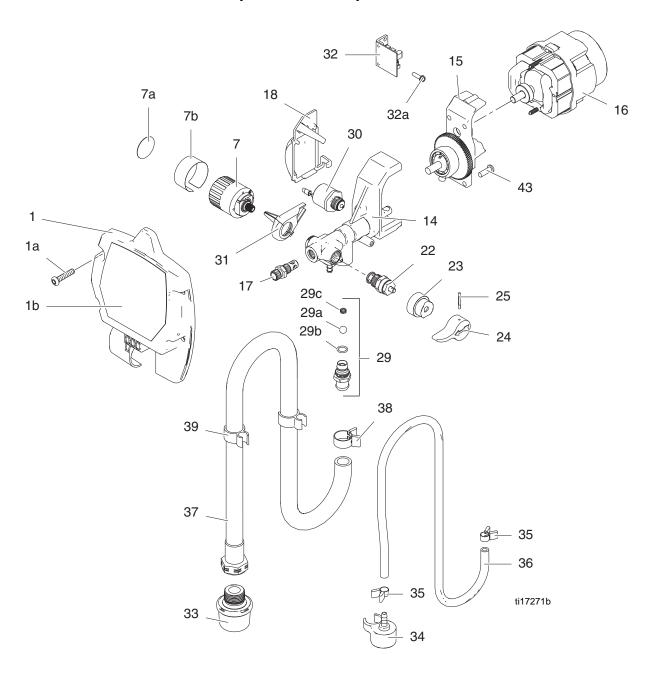


## **Parts**

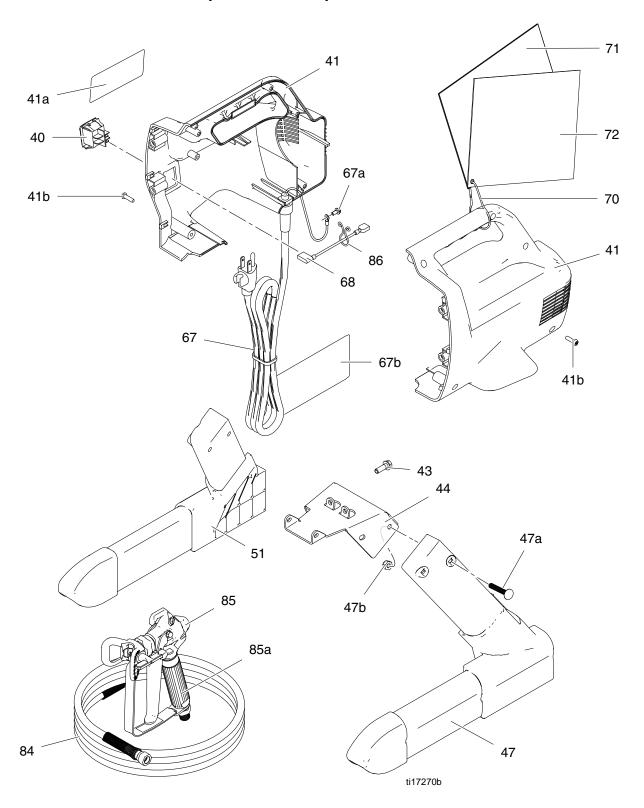
# LTS 15 Model 257060 (Series B, C)

Ref	Part	Description	Qty	Ref	Part	Description	Qty
1	16E833	KIT, housing cover, includes 1a,	1	40	118899	SWITCH, rocker, spdt	1
		1b		41	16E830	KIT, enclosure, LTS 15, includes	1
1a	120724	SCREW	4			1a, 41a, 41b	
1b <b>▲</b>	15U408	LABEL, Magnum LTS 15, front	1	41a <b>▲</b>		LABEL, warning	1
7	244266	KIT, pressure control, includes 7a,	1	41b		SCREW, mach, torx, pan hd	7
		7b		43		SCREW, buttonhead	4
7a <b>▲</b>	15A464	LABEL, control	1	44		BRACKET, motor	1
7b <b>▲</b>	15K530	LABEL	1	47	24K633	KIT, left leg, LTS 15, includes 2	1
14*	16F047	KIT, pump (includes 17, 29, 29a,	1			screws, 47a, 47b	
		29c, 32a qty 2,43)		47a		SCREW, hex washer hd, thd form	4
15	16E835	KIT, gear/drive (for Cinderson	1	47b	102040	NUT, lock, hex	4
		motor)		51	24K632	KIT, right leg, LTS 15,	1
	16E778	KIT, gear/drive (for Johnson	1			includes 2 screws, 47a	
		motor)		67	16E842	KIT, power cord, LTS 15, includes	1
16		KIT, motor (for Cinderson motor)	1			67a, 67b	
		KIT, motor (for Johnson motor)	1	67a		SCREW, grounding	1
17	16E845	KIT, outlet valve, LTS 15 and LTS	1	67b <b>▲</b>		LABEL, Magnum, warning	1
		17		68		WIRE, jumper	1
18		Cover, Gear	1	70		CLIP, spring	1
22		KIT, drain valve	1	71▲	198547	TAG, hang, instructional	1
23		BASE, valve	1	72▲	15K551	, , ,	1
24		HANDLE, valve, drain	1			English	
25	111600	, 3	1	72a <b>▲</b>	15K552	GUIDE, Magnum quick guide,	1
29		KIT, inlet valve, includes 29a, 29c	1			Spanish (not shown)	
29a	124249	BALL, intake	1	84		HOSE, cpld, 1/4 in. x 25 ft	1
29b	103338	O-RING	1	85	243011		1
29c	123849	SPRING, inlet	1	85a	243084		1
30	289107	KIT, solenoid	1			60m/100m	
31	15Y296	COVER, solenoid	1	00	404400	(not shown)	4
32	16E829	KIT, control board, includes 32a	1	86		RETAINER, wire	1
32a	115477	SCREW, mach, torx, panhead	6	91		VALVE, shutoff (not shown)	1
33	257002	KIT, strainer	1	92	244168		1
34	244035	DEFLECTOR, barbed	1		4=0000	shown)	4
35	115489	CLAMP, drain tube	2	93▲	179960	CARD, medical wallet (not shown)	1
36	195084	TUBE, drain	1	▲ Ponl	ocomont M	arning labels, tags and cards are availab	do
37	197607	TUBE, suction	1	at no co		arriiriy labels, tays ariu carus die avallab	110
38	116295	CLAMP, tube	1				
39		CLIP, spring	2			air, Pump. Complete is available. (It includ 14, 25, 29 and 30)	les

# LTS 15 Model 257060 (Series B, C)



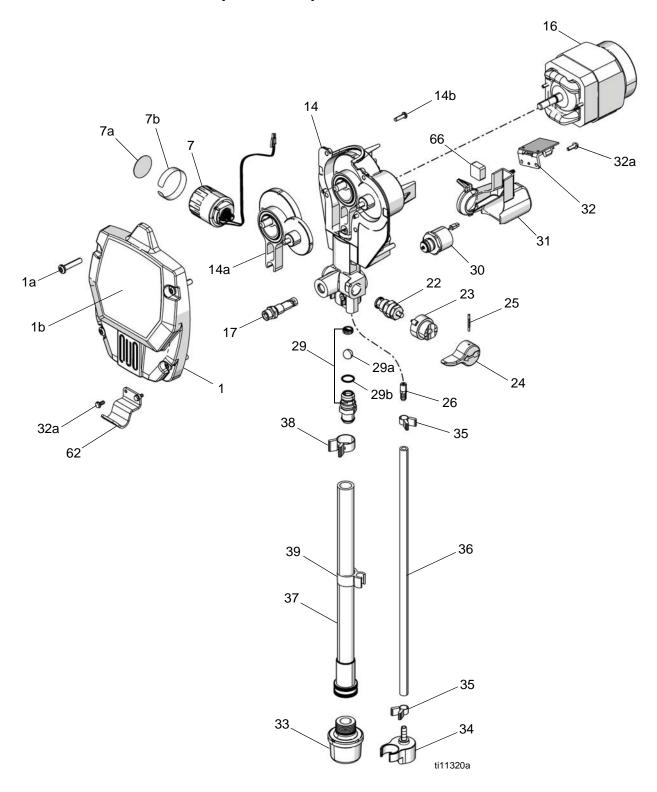
# LTS 15 Model 257060 (Series B, C)



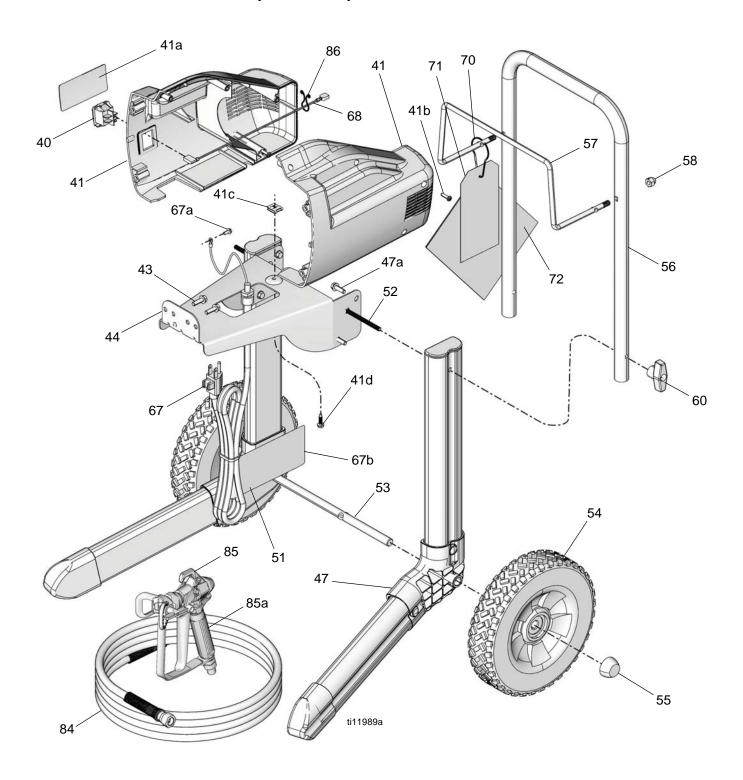
# LTS 17 Model 257065 (Series A)

Ref	Part	Description	Qty	Ref	Part	Description	Qty
1	289682	KIT, housing cover, includes 1a,	1	43	260212	SCREW, hex washer hd, thd form	2
		1b		44	15R587	SHELF, motor	1
1a	120724	SCREW	4	47	262012	KIT, left leg, LTS 17, includes 2	1
1b <b>▲</b>	15U409	LABEL, Magnum LTS 17, front	1			screws 47a	
7	244267	KIT, pressure control, includes 7a,	1	47a		SCREW, hex washer hd, thd form	4
		7b		51	262014	KIT, right leg, LTS 17, includes 2	1
7a <b>▲</b>		LABEL, control	1	50	400700	screws 47a	2
7b <b>▲</b>		LABEL	1	52		SCREW, carriage	1
14	289650		1	53		AXLE, cart	2
14a		KIT, gear	1	54		WHEEL, 9 in.	2
14b		SCREW, mach, torx pan hd	4	55		CAP, hub	1
16	289915		1	56		HANDLE, cart	1
17	289878	KIT, outlet, valve	1	57		RACK, hose	· <del>-</del>
22	235014	•	1	58		NUT, hex, acorn, 5/16 - 18 nickel	2
23	224807	•	1	60	115480	•	2
24		HANDLE, valve, drain	1	62		HANGER, pail	1
25		PIN, grooved	1	66		FOAM, pump drain	1
26	196574	FITTING, drain	1	67	16E843	KIT, power cord, LTS 15/LTS 17,	1
29	288701	KIT, pump, inlet valve, includes	1			includes 67a, 67b	4
		29a, 29b		67a		SCREW, grounding	1
29a	105445	BALL, intake	1	67b <b>▲</b>		LABEL, Magnum, warning	1
29b	115719	O-RING	1	68		WIRE, jumper	1
30	289107	KIT, solenoid	1	70		CLIP, spring	1
31	15R549	COVER, solenoid	1	71▲		TAG, hang, instructional	1
32	288706	KIT, control board, includes 32a	1	72▲	15K551		1
32a	115492	SCREW, mach, slot hex wash hd	3		4-140	English	4
33	243082	KIT, strainer	1	/2a▲	15K552	GUIDE, Magnum quick guide,	1
34	244035	DEFLECTOR, barbed	1	0.4	0.47000	Spanish (not shown)	1
35	115489	CLAMP, drain tube	2	84		HOSE, cpld, 1/4 in. x 25 ft	1
36	195108	TUBE, drain	1	85	243011		1
37	15T122	TUBE, suction	1	85a	243084		'
38	116295	CLAMP, tube	1	06	10110	60M/100M	1
39	195400	CLIP, spring	1	86		RETAINER, wire	1
40	118899	SWITCH, rocker, spdt	1	91		VALVE, shutoff (not shown)	1
41	289681	KIT, enclosure, LTS 17, includes 1a, 41a, 41b, 41c, 41d	1	92		FLUID, pump armor, 8 oz (not shown)	
41a <b>▲</b>	15E072	LABEL, identification	1	93▲	179960	CARD, medical wallet (not shown)	1
41b	115477		4	A Post	noomont M	arning labels, tags and cards are availal	hlo
41c	121481	NUT, U-type, tinnerman	1	at no co		arriing labels, lags and Cards are avallar	Л <del>С</del>
41d	120093	• • •	1	31770 00			

# LTS 17 Model 257065 (Series A)



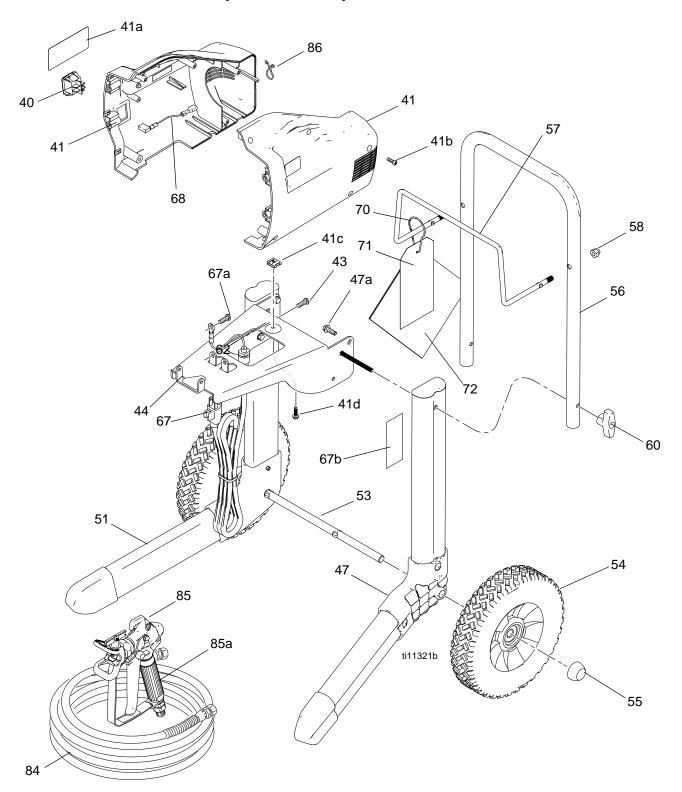
# LTS 17 Model 257065 (Series A)



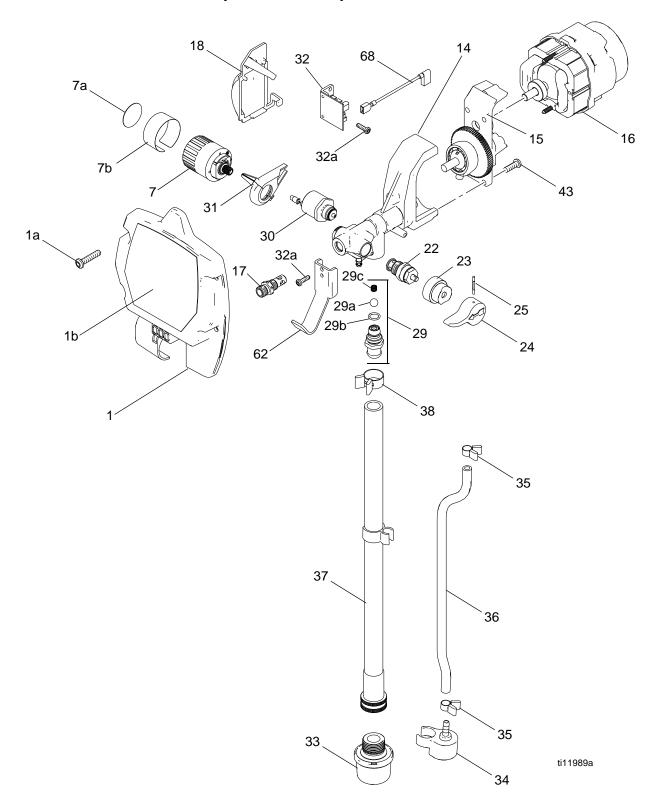
# LTS 17 Model 257065 (Series B, C)

Ref	Part I	Description	Qty	Ref		Description	Qty
1	16E833	KIT, housing cover, includes 1a,	1	41c	121481	NUT, U-type, tinnerman	1
		1b		41d	120093	SCREW, self drilling	1
1a	120724	SCREW	4	43	112689	SCREW, buttonhead	4
1b <b>▲</b>	15U409	LABEL, Magnum LTS 17, front	1	44	16D683	FRAME, LTS 17	1
7	244267	KIT, pressure control, includes 7a, 7b	1	47	262012	KIT, left leg, LTS 17, includes 2 screws 47a	1
7a <b>▲</b>	15A464	LABEL, control	1	47a	260212	SCREW, hex washer hd, thd form	4
7b <b>▲</b>	15K530	LABEL	1	51	262014	KIT, right leg, LTS 17, includes 2	1
14*	16F047		1	52	120788	screws 47a SCREW, carriage	2
1 =	165025	29c, 32a qty 2, 43	1	53		AXLE, cart	1
15	16E835	KIT, gear/drive (for Cinderson motor)		54		WHEEL, 9 in.	2
	165770	,	1	55		CAP, hub	2
	100110	KIT, gear/drive (for Johnson motor)	•	56			1
16	165939	KIT, motor (Cinderson)	1			HANDLE, cart	1
10		KIT, motor (Johnson)	1	57		RACK, hose	2
17		KIT, motor (30m/son) KIT, outlet, valve	1	58 60		NUT, hex, acorn, 5/16 - 18 nickel	2
18		Cover, Gear	1	60	115480	•	1
22		KIT, drain valve	1	62		HANGER, pail	1
23		BASE, valve	1	67	100843	KIT, power cord, LTS 17, includes	
23 24		HANDLE, valve, drain	1	67a	115/00	67a, 67b SCREW, grounding	1
		PIN, grooved	1	67b <b>▲</b>			1
25		KIT, pump, inlet valve, includes	1	68		LABEL, Magnum, warning	1
29	100044	29a, 29b, 29c	•	70		WIRE, jumper	1
29a	124249		1			CLIP, spring	1
29b	103338	O-RING	1	71▲ 72▲	196547 15K551	TAG, hang, instructional GUIDE, Magnum quick guide,	1
29c		SPRING, inlet	1	12	150051	English	•
30		KIT, solenoid	1	722▲	15K552	GUIDE, Magnum quick guide,	1
31		COVER, solenoid	1	12a <b>=</b>	1011002	Spanish (not shown)	-
32		KIT, control board, includes 32a	1	84	247339	HOSE, cpld, 1/4 in. x 25 ft	1
32a	115477		3	85	243011		1
33		KIT, strainer	1	85a	243084	KIT, gun filter, SG2/SG3,	1
34	244035	DEFLECTOR, barbed	1	ooa	243004	60M/100M	-
35		CLAMP, drain tube	2			(not shown)	
		TUBE, drain	1	86	121423	RETAINER, wire	1
36 37		TUBE, suction	1	91		VALVE, shutoff (not shown)	1
38	116295	CLAMP, tube	1	92		FLUID, pump armor, 8 oz (not	1
		•	1	<b>0</b> -		shown)	
39 40	195400 118899	CLIP, spring SWITCH, rocker, spdt	1	93▲	179960	CARD, medical wallet (not shown)	1
41		KIT, enclosure, LTS 17, includes	1	-	_	,	
41	10001	1a, 41a, 41b, 41c, 41d	'	-		/arning labels, tags and cards are availa	ble
41a <b></b>	15E072	LABEL, warning	1	at no co	ost.		
41a <b>4</b>		SCREW, mach, torx pan hd	7	* 16E0	16 Kit Don	air Dumn complete is sucilable (14 leal)	dos
710	113411	OOKEW, mach, tolk pair no	•			air, Pump complete is available. (It Inclu 29 and 30.)	ues

# LTS 17 Model 257065 (Series B, C)



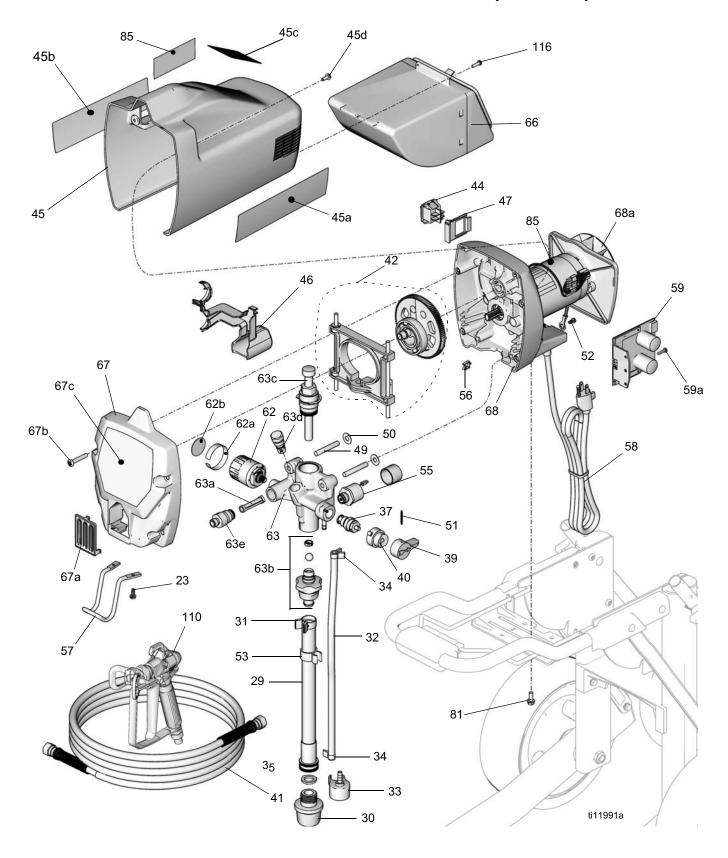
# LTS 17 Model 257065 (Series B, C)



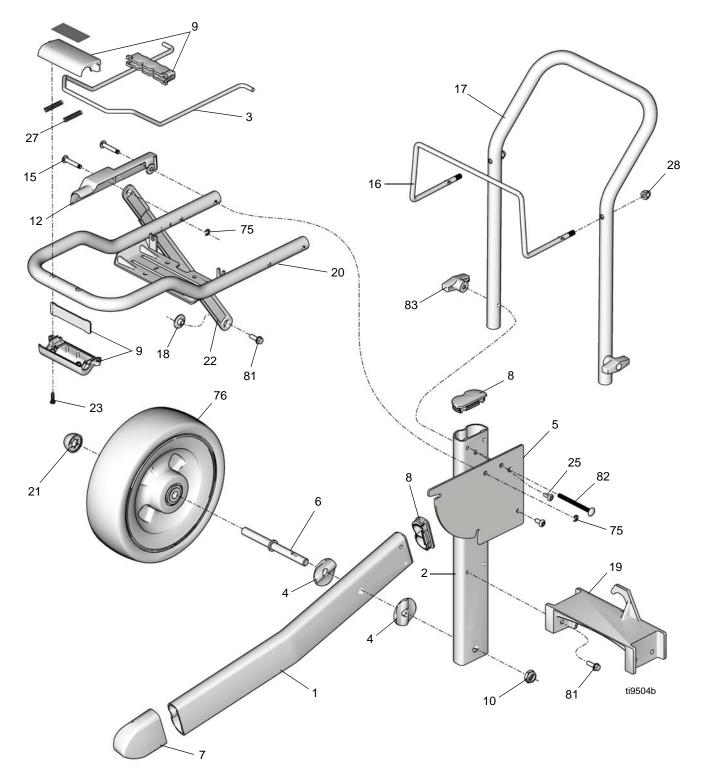
# ProLTS 17, ProLTS 19 Models 257070, 257080 (Series A)

Dof	Dort	Description	041	Ref	Part	Description	Qty
		Description	Qty			•	-
1	15J632		2 2	52 53		SCREW, ground, 8-32 x .375 in. taptite SPRING CLIP	1
2		SUPPORT, frame					1
3		PULL ROD	1	55 56		KIT, solenoid	1
4		SPACER, frame	4	56		WIRE CLIP	1
5		BRACKET	2	57 50		PAIL HOOK	1
6		AXLE PIN	2	58		POWER CORD, lighted	1
7		TUBE CAP	2	59		KIT, control, ProLTS 17	1
8		TUBE CAP	4	<b>50</b> -		KIT, control, ProLTS 19	1
9		ACTUATOR	1	59a		SCREW	1
10		NUT, hex, lock, nylon, 1/2-13 in.	2	62	244267	KIT, pressure control, includes 62a,	'
12		COVER, side	1	60a A	4EVE20	62b	1
15	15J941		4		15K530		1
16		HOSE RACK	1		15A464		1
17		CART HANDLE	1	63	288703	KIT, pump, (complete) ProLTS 17,	'
18		SPACER, linkage	2			includes 37, 39, 40, 51, 63a, 63b, 63c, 63d	
19		BRACE, center	1		288702		1
20		BRACKET, frame	1		200702	includes 37, 39, 40, 51, 63a, 63b, 63c,	•
21	112612	HUB CAP	2			63d	
22		BAR, linkage	2	63a	257001		1
23	115477	SCREW, mach, 8-16 x 5/8 in. plastite	4	63b		KIT, pump inlet module, ProLTS 17	1
25	117630	SCREW, torx, 1/4-20 x .50 in. taptite	4	000		KIT, pump inlet module, ProLTS 19	1
27	120688	SPRING, compression	2	63c		KIT, packing repair	1
28	120689	NUT, hex, acorn, 5/16-18	2	63d		KIT, pump outlet valve	1
29	15K617	SUCTION TUBE, includes 35	1	66		KIT, tool box	1
30	288716	KIT, Strainer	1	67		KIT, housing cover, includes 67a, 67b,	1
31	116295	TUBE CLAMP	1	01	200032	67c	•
32	195108	DRAIN TUBE	1	67a	15.1809	COVER, pump outlet	1
33	244035	DEFLECTOR	1	67b		SCREW, mach, 1/4 x 20 x 1.375 in.	4
34	115489	DRAIN TUBE CLAMP	2	075	110470	taptite	
35	115099	WASHER	1	67c <b>▲</b>	15U410	LABEL, front, ProLTS 17	1
37	235014	KIT, drain valve	1	0.0_		LABEL, front, ProLTS 19	1
38	115648	SHUTOFF VALVE (not shown)	1	68		KIT, motor, includes 68a	1
39	187625	DRAIN VALVE HANDLE	1	68a		KIT, fan	1
40	224807	BASE, valve	1	75		RING, retaining, ext.	6
41	247340	HOSE, cpld,1/4 in. x 50 ft	1	76		WHEEL,10 inch, ProLTS 17	2
42	289102	KIT, gear and yoke	1	. 0		WHEEL,10 inch, ProLTS 19	2
43	244168	FLUID, pump armor, 8 oz (not shown)	1	81		SCREW, hw hd, thd form 1/4-20 x .75	10
44	118899	ROCKER SWITCH	1	0.	200212	in.	
45	288695	KIT, Motor Shield, includes 45a, 45b,	1	82	120788	SCREW, carriage, 1/4-20 x 3 in.	2
		45c, 45d		83		T-HANDLE KNOB	2
45a <b>▲</b>	15K521	LABEL, warning skin injection	1	85▲		SERIAL LABEL	2
45b <b>▲</b>	15K522	LABEL, warning fire explosion	1	88 <b>A</b>	198547	HANG TAG, instructional (not shown)	1
45c <b>▲</b>	15K520	LABEL, warning elec shock	1	92▲		SIGN, warning (not shown)	1
45d	118444	SCREW, mach, hwhd 10-24 x .5 in.	2	93▲		QUICK GUIDE, English (not shown)	1
46		SOLENOID COVER	1	JU <b>A</b>		QUICK GUIDE, Spanish (not shown)	1
47		SWITCH BRACKET	1	110		SPRAY GUN, SG3	1
49	194507	DOWEL PIN, 5/16	2	116		SCREW, plastite	4
50		WASHER	2			·	
51		PIN, grooved	1	-		Warning labels, tags, and cards are availab	ie
		-		at n	o cost.		

#### ProLTS 17, ProLTS 19 Models 257070, 257080 (Series A)



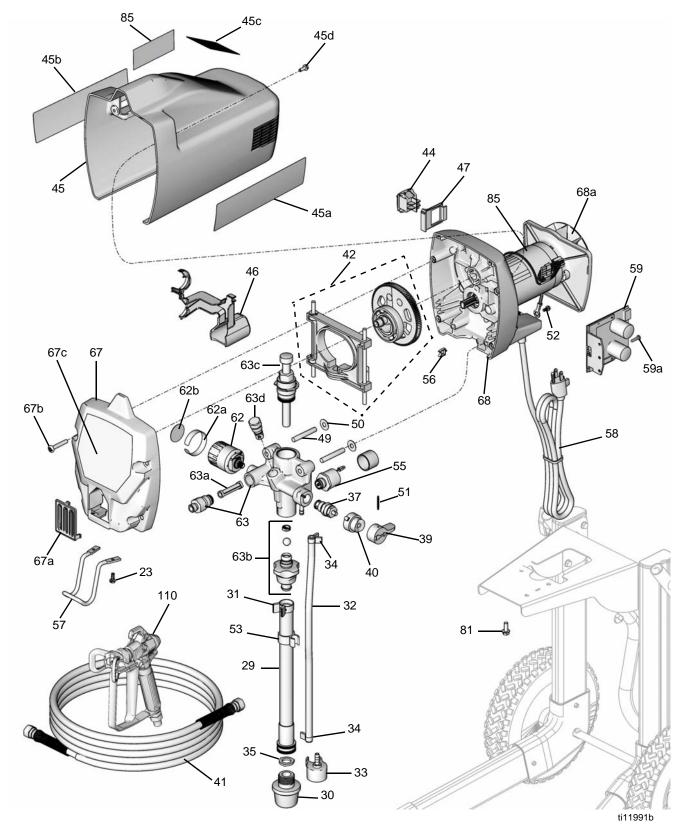
# ProLTS 17, ProLTS 19, Models 257070, 257080 (Series A)



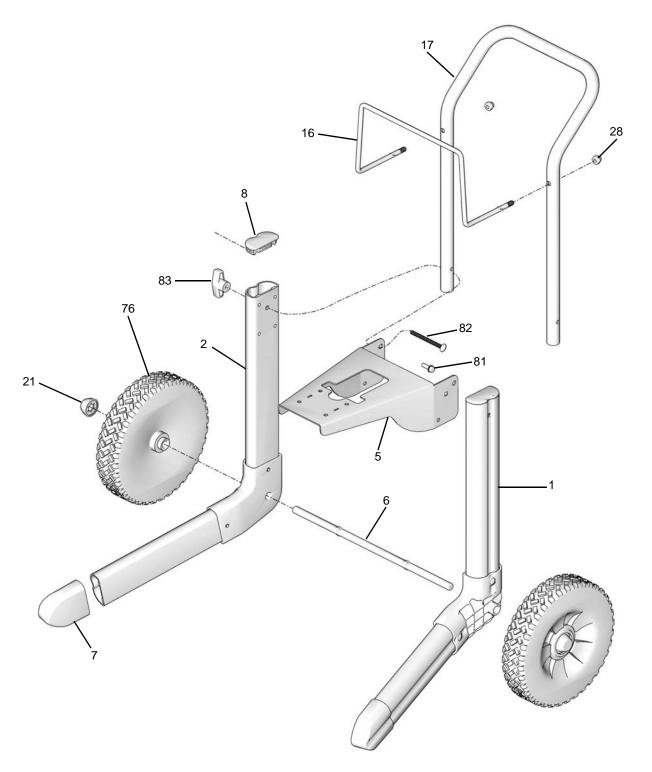
# **ProLTS 17, ProLTS 19 Models 24N906, 24N808 (Series A)**

Ref	Part	Description	Qty	Ref	Part	Description	Qty
1	262012	KIT, left leg, includes 7, 8	1	55	289107	KIT, solenoid	1
2	262014	KIT, right leg, includes 7, 8	2	56	119275	WIRE CLIP	1
5	16F372	BRACKET	2	57	15J790	PAIL HOOK	1
6	15R602	AXLE	2	58	15J952	POWER CORD, lighted	1
7	15J695	TUBE CAP	2	59	288705	KIT, control	1
8	15J699	TUBE CAP	2	59a	115477	SCREW	1
16		HOSE RACK	1	62	244267	•	1
17		CART HANDLE	1	620 1	1 <i>EVE</i> 20	62a, 62b	1
19	15J985	BRACE, center	1	62a <b>▲</b> 62b <b>▲</b>	15K530 15A464		1
21		HUB CAP	2				1
23	115477	SCREW, mach, 8-16 x 5/8 in. plas tite	4	63	288702	KIT, pump (complete), includes 37, 39, 40, 51, 63a, 63b, 63c, 63d	
25	117630	SCREW, torx, 1/4-20 x .50 in. tap	4	63a	257001	KIT, filter	1
		tite		63b	288699	KIT, pump inlet module	1
28	120689	NUT, hex, acorn, 5/16-18	2	63c	288818	KIT, packing repair	1
29	15K617	SUCTION TUBE, includes 35	1	63d	243094	KIT, pump outlet valve	1
30	288716	KIT, Strainer	1	63e	195947	ADAPTER, filter	1
31	116295	TUBE CLAMP	1	67	288692	KIT, housing cover, includes 67a,	1
32	195108	DRAIN TUBE	1			67b, 67c	
33	244035	DEFLECTOR	1	67a	15J809	• • •	1
34	115489	DRAIN TUBE CLAMP	2	67b	115478	SCREW, mach, 1/4 x 20 x 1.375 in.	4
35	115099	WASHER	1		. = 1 1	taptite	4
37	235014	KIT, drain valve	1	67c		LABEL, front (ProLTS 17)	1
38	115648	SHUTOFF VALVE (not shown)	1		15U411	,	4
39	187625	DRAIN VALVE HANDLE	1	68	289104	KIT, motor, includes 68a	1
40	224807	BASE, valve	1	68a	287770	KIT, fan	1
41	247340	HOSE, cpld,1/4 in. x 50 ft	1	76	115095	WHEEL,10 inch	2 10
42	289102	KIT, gear and yoke	1	81	260212		10
43	244168	FLUID, pump armor, 8 oz (not shown)	1	82	120788	.75 in. SCREW, carriage, 1/4-20 x 3 in.	2
44	118899	ROCKER SWITCH	1	83	115480	T-HANDLE KNOB	2
45	288695	KIT, Motor Shield, includes 45a,	1	85		SERIAL LABEL	2
		45b, 45c, 45d		88▲	198547	•	1
45a <b>▲</b>	15K521	LABEL, warning skin injection	1	02 4	170060	shown) SIGN, warning (not shown)	1
45b <b>▲</b>		LABEL, warning fire explosion	1	92▲ 93▲		_ ·	1
45c <b>▲</b>		LABEL, warning elec shock	1	93	15K551	QUICK GUIDE, English (not shown)	•
45d	118444	SCREW, mach, hwhd 10-24 x .5 in.			15K552	•	1
46	15J802	SOLENOID COVER	1		1011002	shown)	
47	15J803	SWITCH BRACKET	1	110	243012	•	1
49	194507	DOWEL PIN, 5/16	2	116	121939		3
50	196001	WASHER	2				
51	111600	PIN, grooved	1	▲ Rei	olacement	Warning labels, tags and cards are a	avail
52	115498	SCREW, ground, 8-32 x .375 in. taptite	1		t no cost.	J am 1 1, mgc ama can ac an c	
53	195400	SPRING CLIP	1				

#### ProLTS 17, ProLTS 19, Models 24N906, 24N808 (Series A)



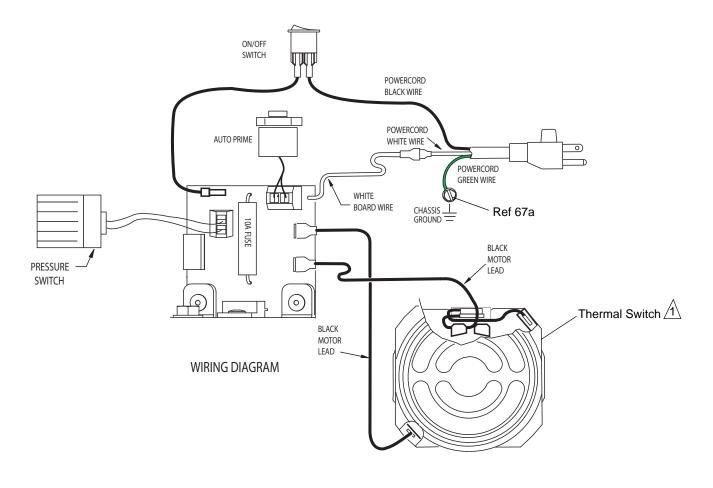
# **ProLTS 17, ProLTS 19 Models 24N906, 24N808 (Series A)**



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# **Wiring Diagrams**

#### LTS 15, LTS 17 Models 257060, 257065 (Series A)

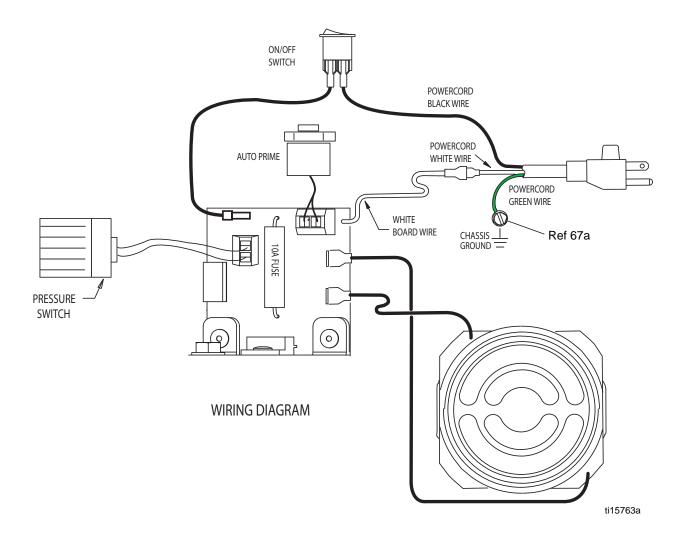


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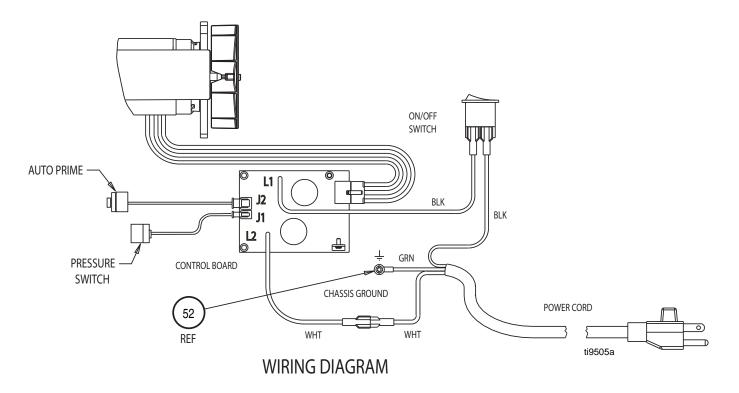
When assembling motor to pump housing, make sure Thermal Switch is positioned on top as shown above.

# **Wiring Diagrams**

#### LTS 15, LTS 17 Models 257060 (Series B, C), 257065 (Series B)



# ProLTS 17 Models 257070, 24N906 Series A ProLTS 19 Models 257080, 24N808 Series A



#### **Technical Data**

	MAGNUM	MAGNUM		
	LTS 15	LTS 17		
Working pressure range	0-3000 psi	0-3000 psi		
	(0-21 MPa, 0-207 bar)	(0-21 MPa, 0-207 bar)		
Electric motor	9.0A	9.0A		
On a rational house an account	(open frame, universal)	(open frame, universal)		
Operating horsepower	·	5/8		
Maximum delivery (with tip)	0.27 gpm (1.02 lpm)	0.31 gpm (1.17 lpm)		
Paint hose	1/4 in. x 25 ft	1/4 in. x 25 ft		
Marian and the barbarata	(6.4 mm x 7.5 m)	(6.4 mm x 7.5 m)		
Maximum tip hole size	0.015 in. (0.38 mm)	0.017 in. (0.43 mm)		
Weight, sprayer only	13.3 lb (6.0 kg)	23.3 lb (10.6 kg)		
Weight, sprayer, hose & gun	16.5 lb (7.5 kg)	26.5 lb (12.0 kg)		
Dimensions (Upright):				
Length	14.5 in. (36.8 cm)	19.3 in. (49.0 cm)		
Width	12.4 in. (31.5 cm)	15.3 in. (38.9 cm)		
Height	17.9 in. (45.5 cm)	37.0 in. (94.0 cm)		
Dimensions (Folded Handle):				
Length	N/A	19.3 in. (49.0 cm)		
Width	N/A	15.3 in. (38.9 cm)		
Height	N/A	29.2 in. (74.2 cm)		
Power cord	18 AWG, 3-wire, 6 ft (1.8 m)			
Fluid inlet fitting	3/4 in. internal thread (standard garden hose thread)			
Fluid outlet fitting	1/4 NPSM external thread			
Inlet screen (on suction tube)	35 mesh (450 micron)			
Wetted parts, pump & hose	stainless steel, brass, leather, ultra-high molecular weight polyethylene (UHMWPE), carbide, nylon, aluminum, PVC, polypropylene, fluroelastomer			
Wetted parts, gun	aluminum, brass, carbide, nylon, plated steel, stainless steel, UHMWPE, zinc			
Generator requirement	1500 Watt minimum			
Electrical power requirement	120 Vac, 60 Hz, 15A, 1 phase			
Storage temperature range ◆◆	-30° to 160°F (-35° to 71°C)			
Operating temperature range 🗸	40° to 115°F (4° to 46°C)			

- ♦ When pump is stored with non-freezing fluid. Pump damage will occur if water or latex paint 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 sprayer performance.

	Magnum (257070) ProLTS 17 (Series A)	Magnum (24N906) ProLTS 17 (Series A)			
Working pressure range	0-3000 psi (0-21 MPa, 0-207 bar)	0-3000 psi (0-21 MPa, 0-207 bar)			
Electric motor	5.8A (open frame, permanent magnet DC)	5.8A (open frame, permanent magnet DC)			
Operating horsepower	3/4	3/4			
Maximum delivery (with tip)	0.34 gpm (1.29 lpm)	0.34 gpm (1.29 lpm)			
Paint hose	1/4 in. x 50 ft (6.4 mm x 15 m)	1/4 in. x 50 ft (6.4 mm x 15 m)			
Maximum tip hole size	0.017 in. (0.43 mm)	0.017 in. (0.43 mm)			
Weight, sprayer only	43 lb (20 kg)	33 lb (15 kg)			
Weight, sprayer, hose & gun	46 lb (21 kg)	36 lb (16 kg)			
Dimensions (Upright):					
Length	23.75 in. (60.32 cm)	21.25 in. (54 cm)			
Width	17.5 in. (44.45 cm)	15.25 in. (39 cm)			
Height	36.5 in. (92.71 cm)	36.75 in. (93 cm)			
Dimensions (Folded Handle):					
Length	23.25 in. (59.05 cm)	21.25 in. (54 cm)			
Width	17.5 in. (44.45 cm)	15.25 in. (39 cm)			
Height	22.00 in. (55.88 cm)	30 in. (76 cm)			
Power cord	16 AWG, 3-wire, 6 ft (1.8 m)				
Fluid inlet fitting	3/4 in. internal thread (standard garden hose thread)				
Fluid outlet fitting	1/4 NPSM ex	ternal thread			
Inlet screen (on suction tube)	35 mesh (450 micron)				
Wetted parts, pump & hose	polyethylene (UHMWPE), ca	stainless steel, brass, leather, ultra-high molecular weight polyethylene (UHMWPE), carbide, nylon, aluminum, PVC, polypropylene, fluroelastomer			
Wetted parts, gun	aluminum, brass, carbide, nylon, plated steel, stainless steel, UHMWPE, zinc				
Generator requirement	1500 Wat	1500 Watt minimum			
Electrical power requirement	120 Vac, 60 H	120 Vac, 60 Hz, 15A, 1 phase			
Storage temperature range ◆❖	-30° to 160°F	-30° to 160°F (-35° to 71°C)			
Operating temperature range ✔	40° to 115°F	(4° to 46°C)			

	Magnum (257080) ProLTS 19 (Series A)	Magnum (24N808) ProLTS 19 (Series A)			
Working pressure range	0-3000 psi (0-21 MPa, 0-207 bar)	0-3000 psi (0-21 MPa, 0-207 bar)			
Electric motor	9.4A (open frame, permanent magnet DC)	9.4A (open frame, permanent magnet DC)			
Operating horsepower	7/8	7/8			
Maximum delivery (with tip)	0.38 gpm (1.44 lpm)	0.38 gpm (1.44 lpm)			
Paint hose	1/4 in. x 50 ft (6.4 mm x 15 m)	1/4 in. x 50 ft (6.4 mm x 15 m)			
Maximum tip hole size	0.019 in. (0.48 mm)	0.019 in. (0.48 mm)			
Weight, sprayer only	43 lb (20 kg)	33 lb (15 kg)			
Weight, sprayer, hose & gun	46 lb (21 kg)	36 lb (16 kg)			
Dimensions (Upright):					
Length	23.75 in. (60.32 cm)	21.25 in. (54 cm)			
Width	19.25 in. (48.89 cm)	15.25 in. (39 cm)			
Height	36.5 in. (92.71 cm)	36.75 in. (93 cm)			
Dimensions (Folded Handle):					
Length	23.25 in. (59.05 cm)	21.25 in. (54 cm)			
Width	19.25 in. (48.89 cm)	15.25 in. (39 cm)			
Height	22.00 in. (55.88 cm)	30 in. (76 cm)			
Power cord	16 AWG, 3-wire, 6 ft (1.8 m)				
Fluid inlet fitting	3/4 in. internal thread (standard garden hose thread)				
Fluid outlet fitting	1/4 NPSM ex	ternal thread			
Inlet screen (on suction tube)	35 mesh (450 micron)				
Wetted parts, pump & hose	stainless steel, brass, leather, ultra-high molecular weight polyethylene (UHMWPE), carbide, nylon, aluminum, PVC, polypropylene, fluroelastomer				
Wetted parts, gun	aluminum, brass, carbide, nylon, plated steel, stainless steel, UHMWPE, zinc				
Generator requirement	1500 Watt	minimum			
Electrical power requirement	120 Vac, 60 Hz	z, 15A, 1 phase			
Storage temperature range ◆❖	-30° to 160°F	(-35° to 71°C)			
Operating temperature range ✓	40° to 115°F	(4° to 46°C)			

#### **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.

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.

#### FOR GRACO CANADA CUSTOMERS

The Parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English.

Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés, à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

TO PLACE AN ORDER or to identify the nearest Graco/Magnum distributor, contact us at 1-888-541-9788

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For patent information, see www.graco.com/patents.

Original instructions. This manual contains English. MM 313036

Graco Headquarters: Minneapolis International Offices: Belgium, China, Japan, Korea

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