OPERATION MANUAL

MANUAL NUMBER X011699 | REVISION F | ENGLISH (US)

Electric Airless Sprayers

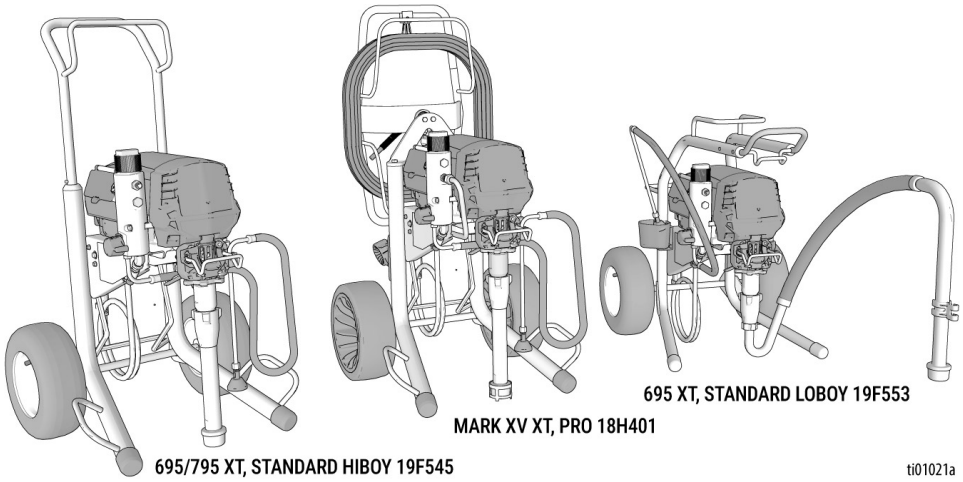
For portable airless spraying of architectural paints and coatings. For professional use only.

Not approved for use in explosive atmospheres or hazardous (classified) locations.

Important Safety Instructions

Read all warnings and instructions in this manual, in related manuals, and on the sprayer before using the equipment. Be familiar with the proper control and usage of the equipment. Save these instructions.

graco.com/contact



MOVING MATERIALS THAT MATTER

CONTENTS

Models and Agency Approvals 3
Related Manuals 10
Translated Manuals 11
Safety Symbols 12
Warnings 13
Technical Specifications 17
Component Identification 21
Grounding 30
Setup 32
Spray Tip Installation 35
Operation 37
Pressure Relief Procedure 37
Trigger Lock 39
Startup 39
Performance Modes 42
Amp Switch 42
Spray 43
Clear Spray Tip Clog 44
Cleanup 45
Flush Hose and Gun 46
Digital Display 47
Operation Main Menu 48
Selecting Performance Modes 49
TurboClean 49
Watchdog 50
Stored Data Display 50
Knob Calibration 51
Transducer Calibration 52
BlueLink® App 52
Replacing BlueLink Battery 52
Maintenance 54
End of Product Life 55
Troubleshooting 56
Mechanical/Fluid Flow 56
Electrical 60
Error Code Messages 61
Amplifi Troubleshooting 62
Control Board 63
Motor 63
Repair 64
Removing the Shroud 64
Replacing the Shroud 65
Removing the Potentiometer 65
Installing the Potentiometer 66
Electric Airless Sprayers Parts 68
Labels 108
Electrical Schematic 111
California Proposition 65 119

MODELS AND AGENCY APPROVALS

Part numbers reflect distinct features and characteristics of the Electric Airless Sprayers.

STANDARD MODELS

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

Table 1-1: 100–120 V

MODEL NUMBER	MODEL	VAC	APPROVAL MARK
20B963	695 XT	100–120 V	
19F728	695 XT		UKCA CE
19F732	795 XT		
19F740	Mark V XT		

Table 1-2: 110–120 V

MODEL NUMBER	MODEL	VAC	APPROVAL MARK
19F545	695 XT	110–120 V	ETL C US LISTED Intertek
826295	Ultimate 695 XT		
19F710	795 XT		
826298	Ultimate 795 XT		
19F549	Mark IV XT		
19F546	1095 XT		
826300	Ultimate 1095 XT		
19F550	Mark V XT		

Table 1-3: 220–240 V

MODEL NUMBER	MODEL	VAC	APPROVAL MARK
19F727	695 XT	220–240 V	
19F731	795 XT		
19F735	1095 XT		
19F739	Mark V XT		
19F743	Mark VII XT		
18H403	Mark XV XT		
18H404			
19F712	695 XT		
19F715	795 XT		
19F720	1095 XT		
19F723	Mark V XT		
18H412	Mark XV XT		

Table 1-4: 100–120 V and 220-240 V

MODEL NUMBER	MODEL	VAC	APPROVAL MARK
18H400	Mark XV XT	Dual Voltage 100-120 V 220–240 V	
18H407			

PROCONTRACTOR MODELS

Table 1-5: 100–120 V

MODEL NUMBER	MODEL	VAC	APPROVAL MARK
20B964	695 XT	100–120 V	
20B965	1095 XT		
19F725	Mark V XT		
19F730	695 XT 795 XT Mark V XT		
19F734			
19F742			

Table 1-6: 110–120 V

MODEL NUMBER	MODEL	VAC	APPROVAL MARK
19F547	695 XT	110–120 V	
826297	Ultimate 695 XT		
19F711	795 XT		
826299	Ultimate 795 XT		
19F551	Mark IV XT		
19F548	1095 XT		
826301	Ultimate 1095 XT		
19F552	Mark V XT		

Table 1-7: 220–240 V

MODEL NUMBER	MODEL	VAC	APPROVAL MARK
19F729	695 XT	220–240 V	
20B951	795 XT		
20B953	1095 XT		
19F733	Mark V XT		
20B955	Mark VII XT		
19F736	695 XT		
20B959	795 XT		
19F741	1095 XT		
19F744	Mark V XT		
20B961	Mark VII XT		
18H405	Mark XV XT		
18H406			
19F714	695 XT		
19F717	795 XT		
19F721	1095 XT		
19F724	Mark V XT		
18H413	Mark XV XT		

Table 1-8: 100–120 V and 220–240 V

MODEL NUMBER	MODEL	VAC	APPROVAL MARK
18H401	Mark XV XT	Dual Voltage 100-120 V 220–240 V	RC ETL CM C US LISTED Intertek
18H408			CE UK CA

LOBOY MODELS

Table 1-9: 110–120 V

MODEL NUMBER	MODEL	VAC	APPROVAL MARK
19F553	695 XT	110–120 V	C ETL LISTED US Intertek
826296	Ultimate 695 XT		

Table 1-10: 220–240 V

MODEL NUMBER	MODEL	VAC	APPROVAL MARK
19F713	695 XT	220–240 V	

HP MODELS

Maximum Working Pressure: 6750 psi (465 bar, 46.5 MPa)

Table 1-11: 220–240 V

MODEL NUMBER	MODEL	VAC	APPROVAL MARK
18H409	Mark HP XT Bare	220–240 V	CE
18H415	Mark HP XT 50 ft		
18H416	Mark HP XT 150 ft		
18H419	Mark HP XT Bare		
18H420	Mark HP XT 50 ft		
18H421	Mark HP XT 150 ft		

Table 1-12: 110–120 V and 220–240 V

MODEL NUMBER	MODEL	VAC	APPROVAL MARK
18H402	Mark HP XT Bare	Dual Voltage 100-120 V 220–240 V	RC ETL C US LISTED Intertek
18H410	Mark HP XT 50 ft		
18H411	Mark HP XT 150 ft		
2015642	Mark HP XT 150 ft Hopper		CE UKCA
18H422	Mark HP XT Bare		
18H423	Mark HP XT 50 ft		
18H424	Mark HP XT 150 ft		

RELATED MANUALS

Additional documents are available to support the operation, repair, and maintenance of the Electric Airless Sprayers. Find English manuals and any available translations at www.graco.com

Table 2-1: Related Manuals for Electric Airless Sprayers Operation Manual X011699

ENGLISH MANUAL	DESCRIPTION
3A6285	Contractor PC Spray Guns, Operation, Parts, Repair
311254	Silver Plus, Silver Plus HP, and Flex Plus™ Airless Spray Guns, Instructions
308491	Texture Airless Spray Gun, Instructions, Parts
3A9391	Displacement Pump, Repair, Parts
3A9347	QuickReel®, Installation, Parts
X054673	Displacement Pump, Repair, Parts (HP Model)
312145	XTR 706 Gun Manual (HP Model)
3B0111	Smart Display XT™

TRANSLATED MANUALS

Additional language documents are available to support all regions where the Electric Airless Sprayers are sold. Find any available translations at www.graco.com

Table 2-2: Translations for Electric Airless Sprayers Operation Manual

LANGUAGE	MANUAL NUMBER
Bulgarian	X011699BG
Chinese	X011699ZH
Croatian	X011699HR
Czech	X011699CS
Danish	X011699DA
Dutch	X011699NL
English	X011699EN
Estonian	X011699ET
Finnish	X011699FI
French	X011699FR
German	X011699DE
Greek	X011699EL
Japanese	X011699JA
Korean	X011699KO
Latvian	X011699LV
Lithuanian	X011699LT
Norwegian	X011699NO
Polish	X011699PL
Portuguese	X011699PT
Romanian	X011699RO
Slovakian	X011699SK
Slovenian	X011699SL
Spanish	X011699ES
Swedish	X011699SV
Turkish	X011699TR
Italian	X011699IT

SAFETY SYMBOLS

The following safety symbols appear throughout this manual and on warning labels. Read the table below to understand what each symbol means.

SYMBOL	MEANING
	Electric Shock Hazard
	Equipment Misuse Hazard
	Fire and Explosion Hazard
	Moving Parts Hazard
	Moving Parts Hazard
	Skin Injection Hazard
	Skin Injection Hazard
	Splash Hazard
	Toxic Fluid or Fumes Hazard

SYMBOL	MEANING
	Do Not Place Hands or Other Body Parts Near Fluid Outlet
	Do Not Put Hand in Front of Spray Tip
	Do Not Stop Leaks with Hand, Body, Glove or Rag
	Eliminate Ignition Sources
	Follow Pressure Relief Procedure
	Ground Equipment
	Read Manual
	Wear Personal Protective Equipment



Safety Alert Symbol

This symbol indicates: Attention! Become Alert! Look for this symbol throughout the manual to indicate important safety messages.

WARNINGS

The following warnings apply throughout this manual. Read, understand, and follow the warnings before using this equipment. Failure to follow these warnings can result in serious injury.

⚠ WARNING



FIRE AND EXPLOSION HAZARD

Flammable fumes, such as solvent and paint fumes, **in work area** can ignite or explode. To help prevent fire and explosion:

- Do not spray flammable or combustible materials near an open flame or sources of ignition such as cigarettes, motors, and electrical equipment.
- 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 and grounded high-pressure airless paint sprayer hoses.
- Verify that all containers and collection systems are grounded to prevent static discharge. Do not use pail liners unless they are anti-static or conductive.
- 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.
- Sprayer generates sparks. Keep pump assembly in a well-ventilated area at least 20 feet (6.1 m) from the spray area when spraying, flushing, cleaning, or servicing. Do not spray pump assembly.
- Do not smoke in the spray area or spray where sparks or flame is present.
- Do not operate light switches, engines, or similar spark producing products in the spray area.
- Do not plug or unplug power cords when flammable fumes are present.
- **Stop operation immediately** if static sparking occurs or you feel a shock. Do not use equipment until you identify and correct the problem.
- 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 Safety Data Sheets (SDSs) and container labels provided with the paints and solvents. Follow the paint and solvent manufacturer's safety instructions.
- Keep a working fire extinguisher in the work area.

⚠ WARNING



SKIN INJECTION HAZARD

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

- Do not aim the gun at, or spray, any person or animal.
- Keep hands and other body parts away from the discharge. For example, do not try to stop leaks with any part of the body.
- Always use the spray tip guard. Do not spray without spray tip guard in place.
- Use Graco spray tips.
- Use caution when cleaning and changing spray tips. In the case where the spray tip clogs while spraying, follow the **Pressure Relief Procedure** for turning off the unit and relieving the pressure before removing the spray tip to clean.
- Equipment maintains pressure after power is turned off. Do not leave the equipment energized or under pressure while unattended. Follow the **Pressure Relief Procedure** when the equipment is unattended or not in use, and before servicing, cleaning, or removing parts.
- Check hoses and parts for signs of damage. Replace any damaged hoses or parts.
- This system is capable of producing 3300 psi (228 bar, 22.8 MPa) or 6750 psi (465 bar, 46.5 MPa) depending on model. Use Graco parts or accessories that are rated a minimum of 3300 psi (228 bar, 22.8 MPa) or 6750 psi (465 bar, 46.5 MPa) depending on model.
- 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.

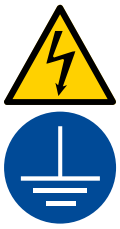


EQUIPMENT MISUSE HAZARD

Misuse can cause death or serious injury.

- Always wear appropriate gloves, eye protection, and a respirator or mask when painting.
- Do not operate or spray near children. Keep children away from equipment at all times.
- Do not overreach or stand on an unstable support. Keep effective footing and balance at all times.
- Stay alert and watch what you are doing.
- Do not operate the unit when fatigued or under the influence of drugs or alcohol.
- Do not kink or overbend the hose.
- Route hoses, fluid lines, cords, and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.
- Do not expose the hose to temperatures or to pressures in excess of those specified by Graco.
- Do not use the hose as a strength member to pull or lift the equipment.
- Do not spray with a hose shorter than 25 feet (7.6 m).
- 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.

⚠ WARNING



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.
- Wait five minutes after disconnecting power cord before servicing.
- Only use an authorized service center to replace a damaged power cord.



PRESSURIZED ALUMINUM PARTS HAZARD

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

- Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents.
- Do not use chlorine bleach.
- Many other fluids may contain chemicals that can react with aluminum. Contact your material supplier for compatibility.



MOVING PARTS HAZARD

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

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



TOXIC FLUID OR FUMES HAZARD

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

- Read Safety Data Sheets (SDSs) to know the specific hazards of the fluids you are using.
- Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.

⚠ WARNING



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. 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.

TECHNICAL SPECIFICATIONS

The table provides important information related to the Electric Airless Sprayers, including product attributes, measurements, and performance characteristics that support the use of the equipment.

Table 5-1: Technical Specifications for Electric Airless Sprayers

	US	METRIC
Sprayer		
Maximum fluid working pressure (all units except Mark HP)	3300 psi	228 bar, 22.8 MPa
Maximum fluid working pressure (Mark HP)	6750 psi	465 bar, 46.5 MPa
Maximum Delivery		
695 XT	1.05 gpm	4.0 lpm
795 XT/Mark IV XT	1.2 gpm	4.5 lpm
1095	1.3 gpm	4.9 lpm
Mark V XT	1.5 gpm	5.6 lpm (110 V) / 4.6 lpm (230 V) / 4.7 lpm (220 V)
Mark VII	NA	6.4 lpm
Mark XV	2.8 gpm	10.6 lpm
Mark HP	1.5 gpm	5.7 lpm
Maximum Tip Size		
695 XT	0.031	
795 XT	0.033	
1095 XT	0.037	
Mark IV XT	0.033	
Mark V XT		
110–120 V Models	0.039	
220–240 V Models	0.035	
Mark VII XT	0.041	
Mark XV	0.053	
Mark HP	0.041	
Fluid Outlet NPSM		
695 XT, 795 XT, 1095 XT	1/4 in.	

	US	METRIC
Mark IV XT, Mark V XT	3/8 in.	
Mark VII XT, Mark XV, Mark HP	1/2 in.	
Power Requirements		
Generator Minimum	5000 W	
695 XT	100–120 VAC, 15 A, 50–60 Hz	220–240 VAC, 10 A, 50-60 Hz
795 XT, Mark IV XT, 1095 XT, Mark V XT	100–120 VAC, 20 A, 50–60 Hz	220–240 VAC, 10 A, 50-60 Hz
Mark VII XT	N/A	220–240 VAC, 16 A, 50-60 Hz
Mark XV, Mark HP	100–120 VAC, 20 A, 50-60 Hz 220–240 VAC, 15 A, 50-60 Hz	220–240 VAC, 15 A, 50-60 Hz
Ambient Rating	32–108° F (0–42° C)	
Sprayer Dimensions		
Lo-Boy		
Height	28 in.	71.1 cm
Length (Handle Retracted)	29.5 in.	74.9 cm
Length (Handle Extended)	35 in.	88.9 cm
Width	22.3 in.	56.6 cm
Weight (sprayer, hose, gun)	90 lb	41 kg
Standard, 695 XT/795 XT/Mark IV XT		
Height (Handle Retracted)	30.5 in.	77.5 cm
Height (Handle Extended)	40.2 in.	102.1 cm
Length	25.3 in.	64.3 cm
Width	22.3 in.	56.6 cm
695/795 Weight (sprayer, hose, gun)	93 lb	42 kg
Mark IV Weight (sprayer, hose, gun)	103 lb	47 kg
Standard, 1095 XT/Mark V XT/Mark VII XT, Mark XV, Mark HP		
Height (Handle Retracted)	30.5 in.	77.5 cm
Height (Handle Extended)	40.2 in.	102.1 cm
Length	25.9 in.	65.8 cm

	US	METRIC
Width	24.4 in.	62.0 cm
1095 Weight (sprayer, hose, gun)	112 lb	51 kg
Mark V Weight (sprayer, hose, gun)	122 lb	55 kg
Mark VII Weight (sprayer, hose, gun)	126 lb	57 kg
Mark XV Weight (sprayer, hose, gun)	145 lb	65 kg
Mark HP Weight (sprayer, hose, gun)	160 lb	73 kg
ProContractor™, 695 XT/795 XT/Mark IV XT		
Height (Quick Reel Handle Vertical)	41.3 in.	104.9 cm
Length	27.5 in.	69.9 cm
Width (Quick Reel Handle Vertical)	22.6 in.	57.4 cm
Width (Quick Reel Handle Horizontal)	25.5 in.	64.8 cm
695/795 Weight (sprayer, hose, gun)	112 lb	51 kg
Mark IV Weight (sprayer, hose, gun)	122 lb	55 kg
ProContractor, 1095 XT/Mark V XT/ Mark VII XT, XV		
Height (Quick Reel Handle Vertical)	41.5 in.	105.4 cm
Length	28 in.	71.1 cm
Width (Quick Reel Handle Vertical)	24.2 in.	61.5 cm
Width (Quick Reel Handle Horizontal)	25.5 in.	64.8 cm
1095 Weight (sprayer, hose, gun)	129 lb	59 kg
Mark V Weight (sprayer, hose, gun)	140 lb	64 kg
Mark VII Weight (sprayer, hose, gun)	147 lb	67 kg
Mark XV Weight (sprayer, hose, gun)	164 lb	74 kg
All Sprayers		
Materials of Construction		
Wetted materials	Zinc- and nickel-plated carbon steel, nylon, stainless steel, PTFE, Acetal, leather, UHMWPE, aluminum, tungsten carbide, polyethylene, fluoroelastomer, urethane	
Noise ** (dBa) @ 3300 psi (22.8 Mpa, 228 bar)		
Sound Pressure		

	US	METRIC
695 XT/795 XT/Mark IV XT	63 dBa	
1095 XT/Mark V XT/Mark VII XT, XV, HP	79 dBa	
Sound Power		
695 XT/795 XT/Mark IV XT	77 LwA	
1095 XT/Mark V XT/Mark VII XT, XV, HP	89 LwA	
*** Sound pressure measured 3 feet (1 meter) from equipment.* *** Sound power measured per ISO-9614.* *All trademarks or registered trademarks are the property of their respective owners.*		

COMPONENT IDENTIFICATION

The diagram highlights the controls and features on the Electric Airless Sprayers that are used during typical operation.

STANDARD MODELS

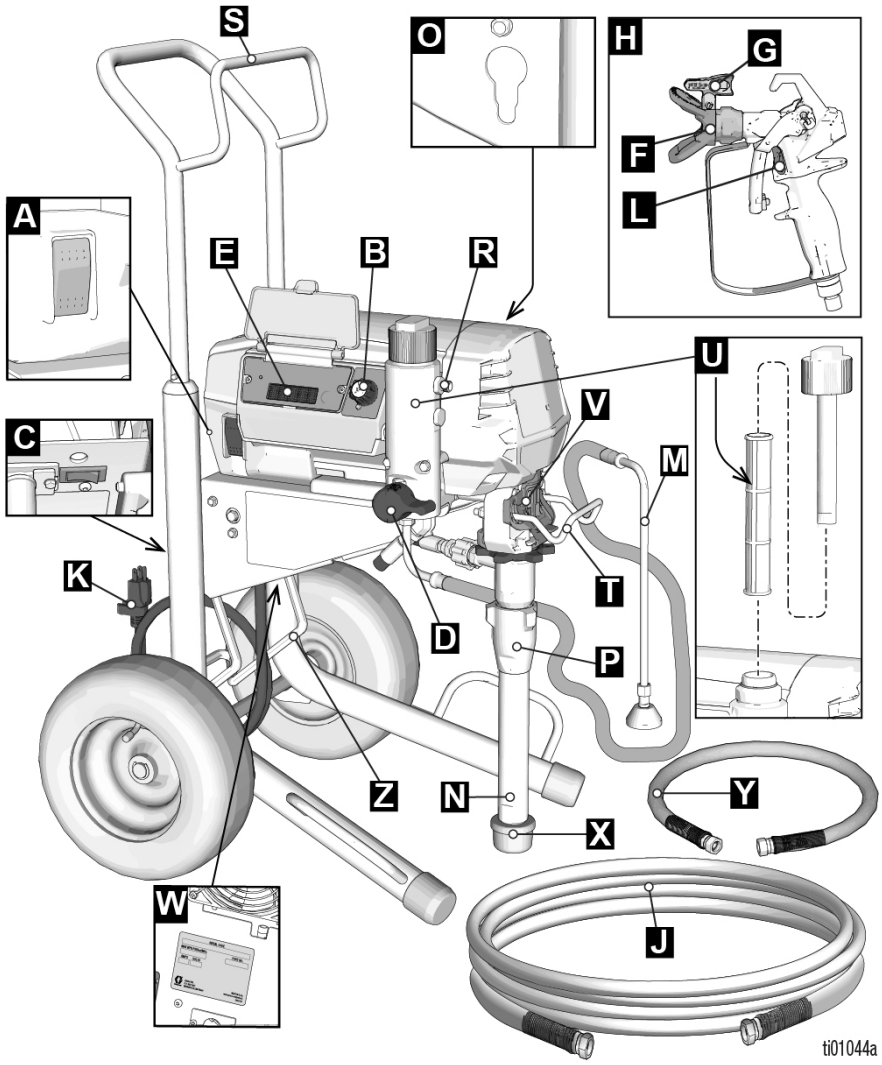


Figure 6-1: Components for Standard Models

KEY FOR STANDARD MODELS	
A	ON/OFF Switch
B	Pressure Control
C	Amp Switch (if equipped)
D	Prime Valve
E	Controls and Display (see detailed image, **Controls and Display**)
F	Tip Guard
G	Spray Tip
H	Gun
J	Airless Hose
K	Power Cord
L	Trigger Lock
M	Drain Tube
N	Suction Tube
O	Pump Rod Pull Feature
P	Pump
R	Fluid Outlet
S	Cord/Hose Wrap
T	Pail Hanger
U	Filter
V	Finger Guard / TSL Fill Port
W	Serial Label
X	Inlet Strainer
Y	Whip Hose (Mark models only)
Z	Kickstand

HP MODELS

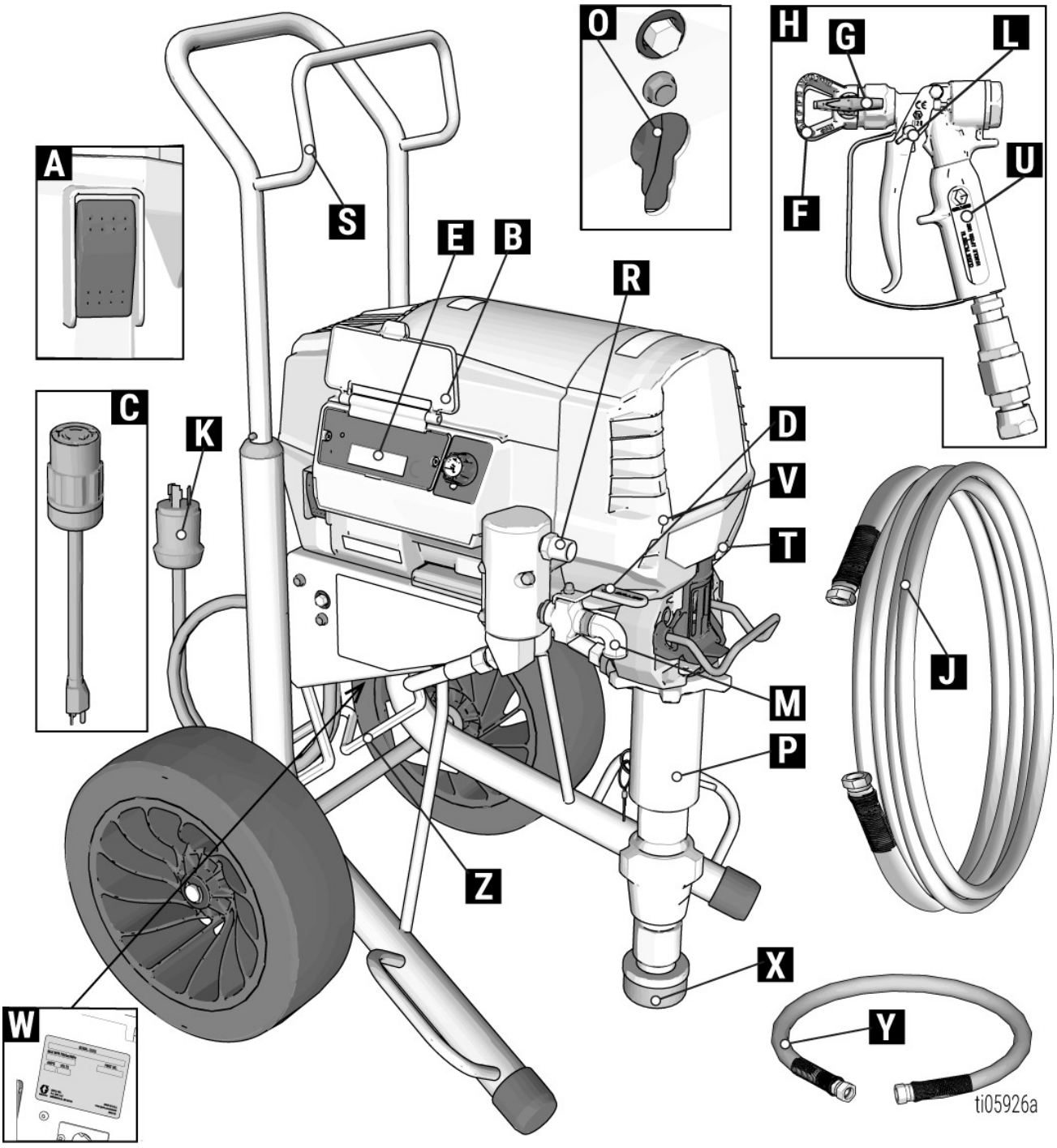


Figure 6-2: Components for HP Models

KEY FOR HP MODELS	
A	ON/OFF Switch
B	Pressure Control
C	120V Adapter Cord (NA and Japan only)
D	Pressure Relief Valve
E	Controls and Display (see detailed image, **Controls and Display**)
F	Tip Guard
G	Spray Tip
H	Gun
J	Airless Hose
K	Power Cord
L	Trigger Lock
M	Drain Tube
N	Suction Tube
O	Pump Rod Pull Feature
P	Pump
R	Fluid Outlet
S	Cord/Hose Wrap
T	Pail Hanger
U	Filter
V	Finger Guard / TSL Fill Port
W	Serial Label
X	Inlet Strainer
Y	Whip Hose (Mark models only)
Z	Kickstand

PROCONTRACTOR MODELS

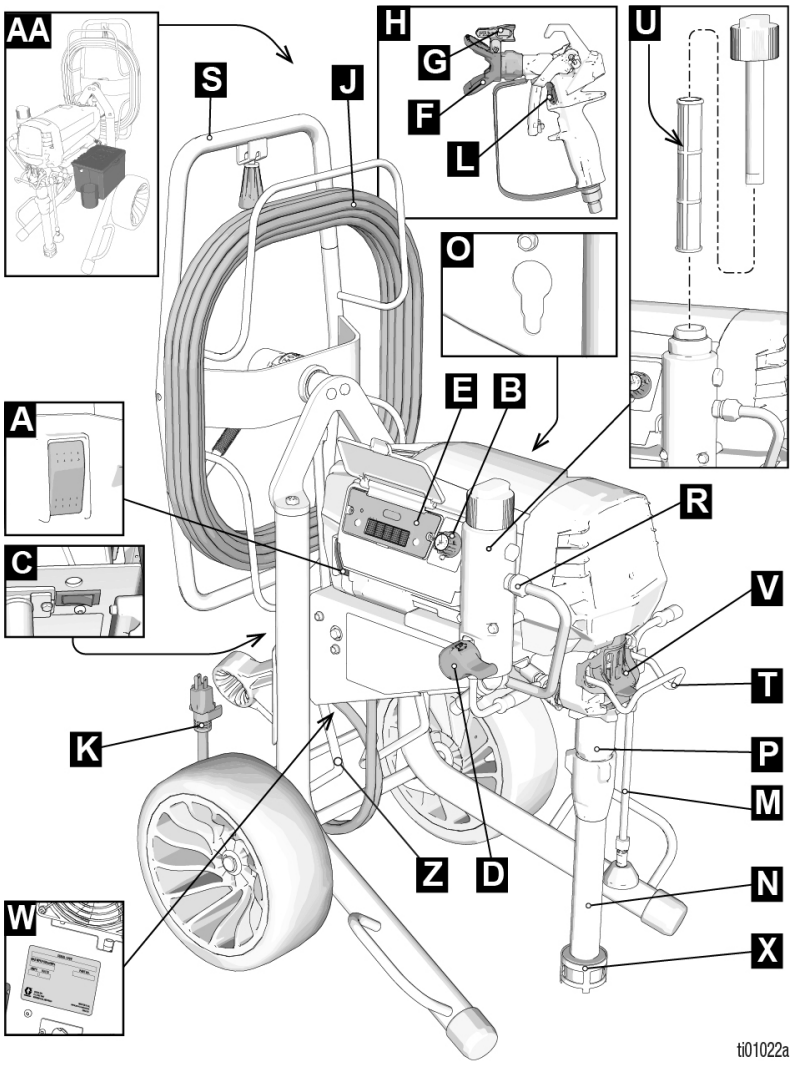


Figure 6-3: Components for ProContractor Models

KEY FOR PROCONTRACTOR MODELS	
A	ON/OFF Switch
B	Pressure Control
C	Amp Switch (if equipped)
D	Prime Valve
E	Controls and Display (see detailed image, **Controls and Display**)
F	Tip Guard
G	Spray Tip
H	Gun
J	Airless Hose
K	Power Cord
L	Trigger Lock
M	Drain Tube
N	Suction Tube
O	Pump Rod Pull Feature
P	Pump
R	Fluid Outlet
S	Hose Reel
T	Pail Hanger
U	Filter
V	Finger Guard / TSL Fill Port
W	Serial Label
X	Inlet Strainer
Z	Kickstand
AA	Tool Box (EMEA and UK models only)

LOBOY MODELS

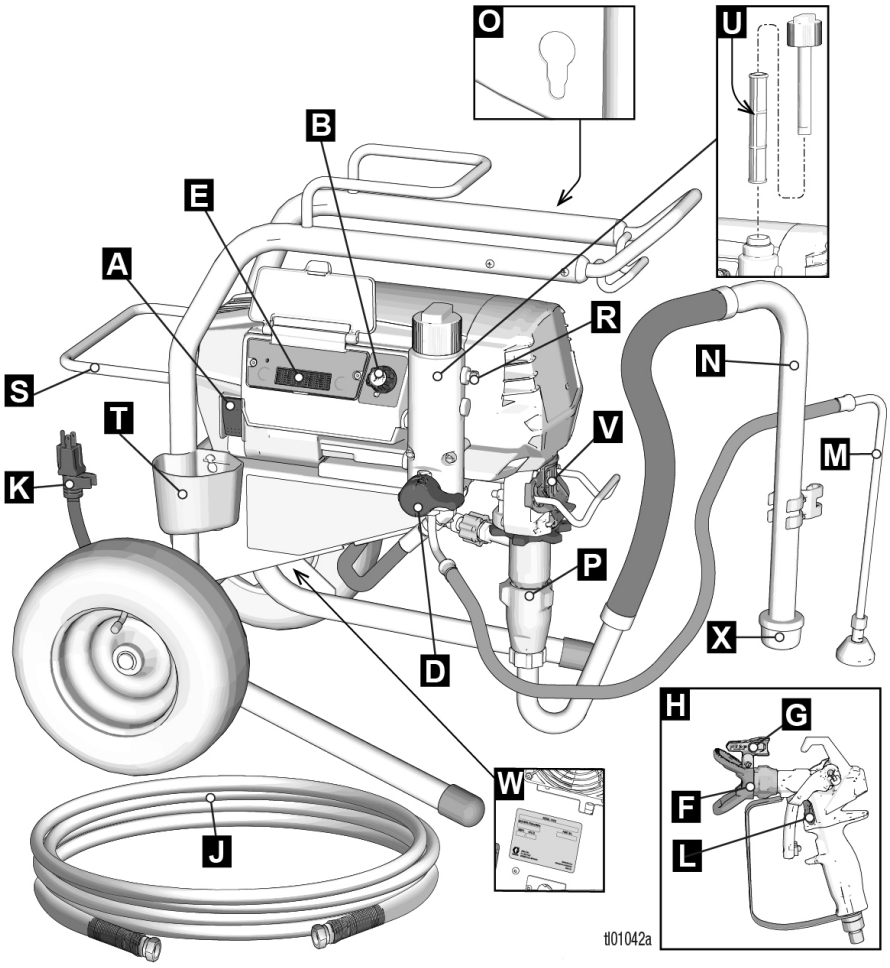


Figure 6-4: Components for LoBoy Models

KEY FOR LOBOY MODELS	
A	ON/OFF Switch
B	Pressure Control
D	Prime Valve
E	Controls and Display (see detailed image, **Controls and Display**)
F	Tip Guard
G	Spray Tip
H	Gun
J	Airless Hose
K	Power Cord
L	Trigger Lock
M	Drain Tube
N	Suction Tube
O	Pump Rod Pull Feature
P	Pump
R	Fluid Outlet
S	Cord/Hose Wrap
T	Drip Cup
U	Filter
V	Finger Guard / TSL Fill Port
W	Serial Label
X	Inlet Strainer

CONTROLS AND DISPLAY

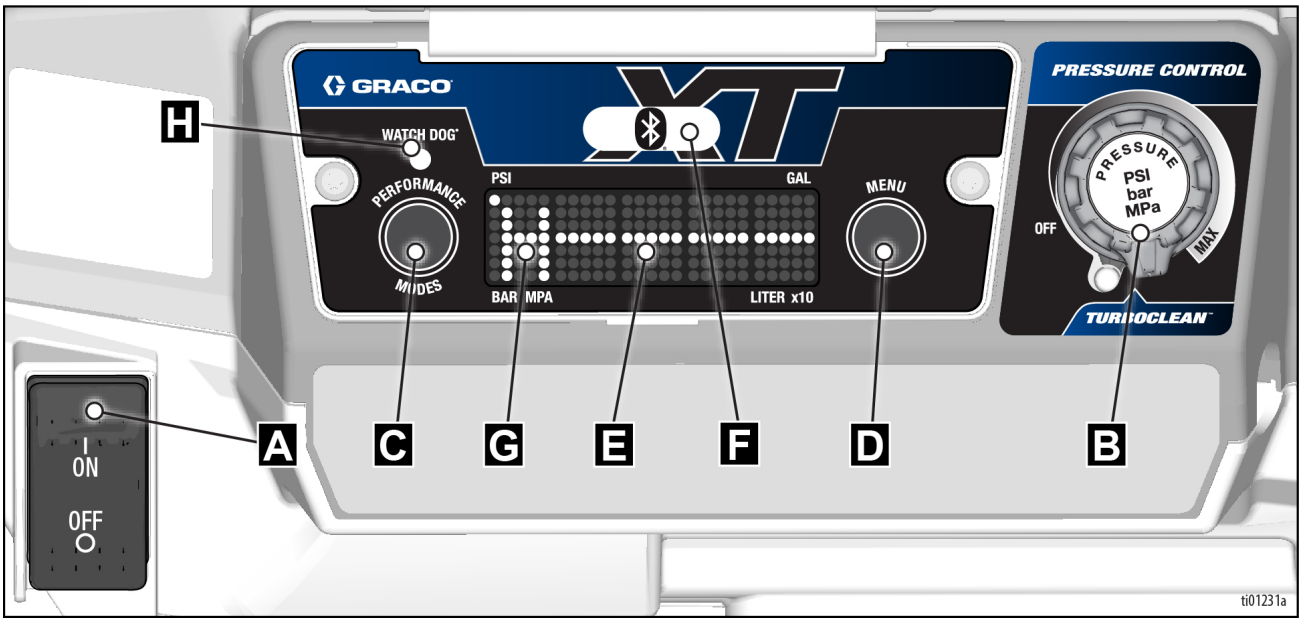
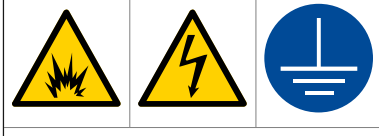


Figure 6-5: Componets for Controls and Display

KEY FOR CONTROLS AND DISPLAY	
A	ON/OFF Switch
B	Pressure Control
C	Performance Mode Button
D	Menu Button
E	LED Display
F	BlueLink Indicator Light (if applicable)
G	Performance Mode Indicator
H	Watchdog™ Indicator Light

Ground the Electric Airless Sprayers to help ensure proper operation.

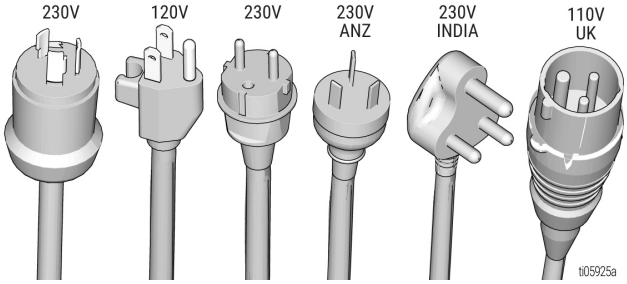
⚠ WARNING



The equipment must be grounded to reduce the risk of static sparking. Electric or static sparking can cause fumes to ignite or explode. Grounding provides an escape wire for the electric current. To avoid static sparking and electric shock:

- Only connect the sprayer to an outlet having the same configuration as the plug.
- Do not modify the plug provided. If it does not fit the outlet, have the proper outlet installed by a qualified electrician.
- Do not use a 3-to-2 adapter with this sprayer.

This sprayer is equipped with a cord having a grounding wire with an appropriate grounding plug. This sprayer is for use on a nominal 120 V circuit and has a grounding plug similar to the plug installed in the figure below. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and regulations.



Check with a qualified electrician or serviceman when the grounding instructions are not completely understood, or when in doubt as to whether the sprayer is properly grounded.

⚠ WARNING



Improper installation of the grounding plug is able to result in a risk of electric shock. When repairing or replacing the cord or plug, do not connect the grounding wire to either power terminal. The wire with insulation having an outer surface that is green with or without yellow stripes is the grounding wire.

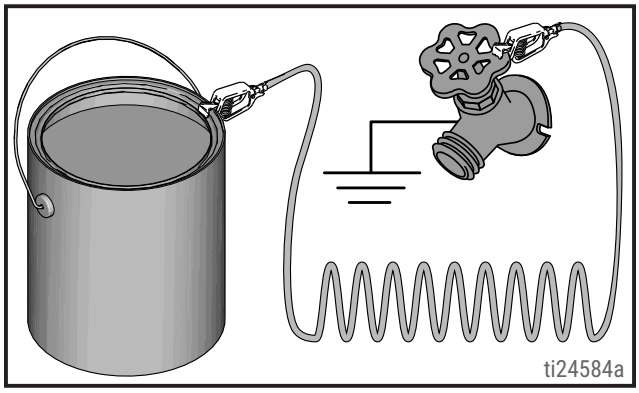
Always use a metal pail for oil-based materials when sprayer is flushed or pressure is relieved.

Follow local code. Use only conductive metal pails placed on a grounded surface such as concrete.

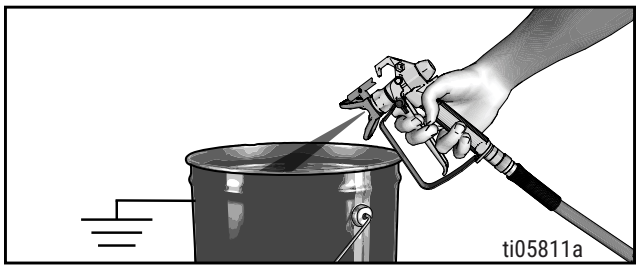
Do not place pail on a non-conductive surface such as paper or cardboard, which interrupts grounding continuity.



Always ground a metal pail: Connect a ground wire to the pail. Clamp one end to the pail and the other end to a true earth ground such as a water pipe.



To maintain ground continuity when sprayer is flushed or pressure is relieved: Hold metal part of gun firmly to the side of a grounded metal pail, then trigger the gun.



EXTENSION CORDS

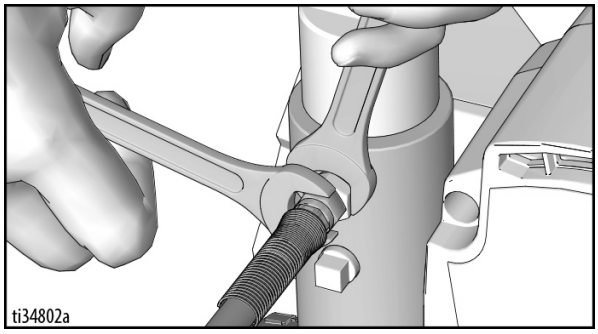
- Use only a 3-wire extension cord that has a grounding plug and a grounding receptable that accepts the plug on the product.
- Make sure the extension cord is not damaged.
- If an extension cord is necessary, use 12 AWG (2.5 mm^2) minimum to carry the current that the sprayer draws. An undersized cord results in a drop in line voltage and loss of power and overheating.

When using the equipment for the first time or after long-term storage, follow the steps to prepare the Electric Airless Sprayers for operation.

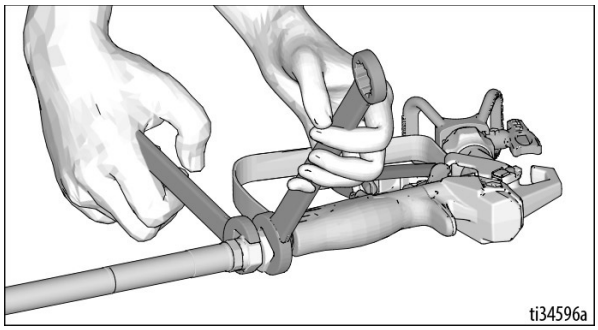


When unpacking sprayer for the first time or after long-term storage, perform setup procedure. The first time you perform setup, remove the shipping plug from the fluid outlet. Sprayer is equipped with Pump Armor™ in the system.

1. Connect Graco airless hose to fluid outlet. Use two wrenches to tighten securely.

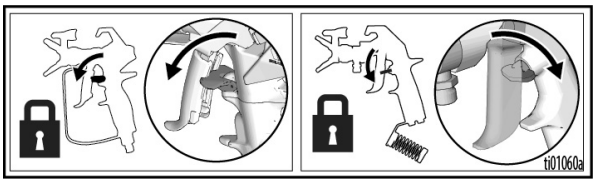


2. Connect other end of hose to gun.



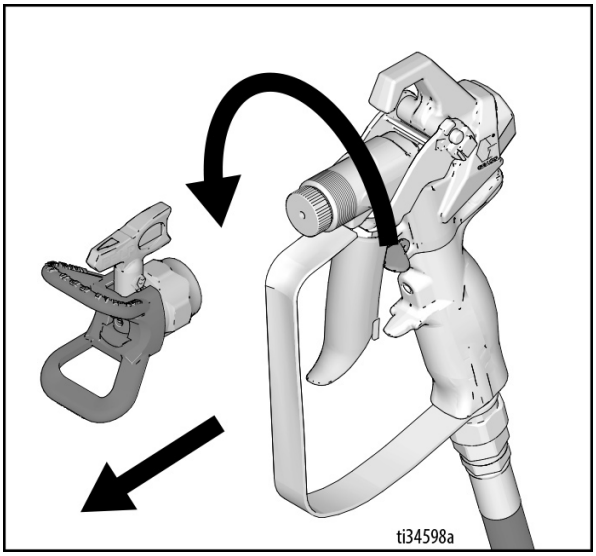
3. Use two wrenches to tighten securely.

4. Engage trigger lock.

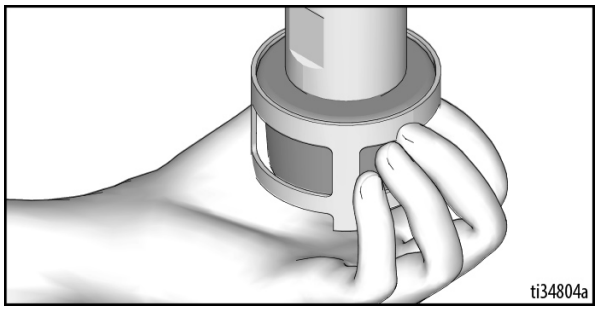


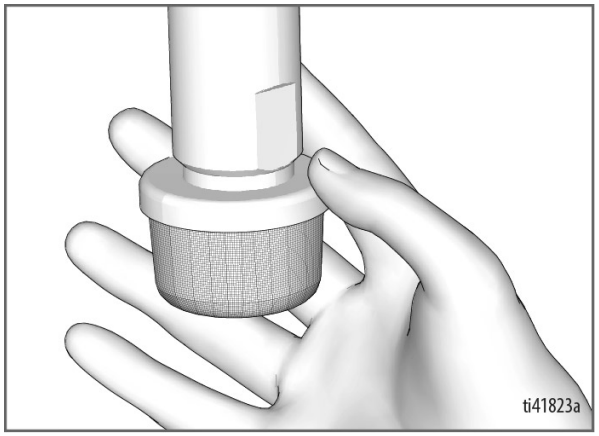


5. Remove tip guard.

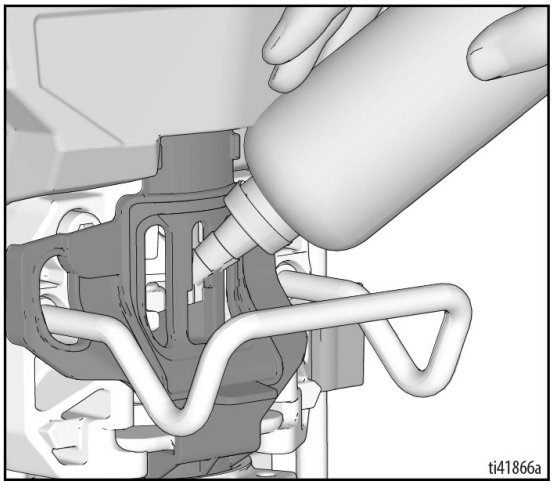


6. When unpacking sprayer for the first time remove packaging materials from inlet strainer. After long-term storage check inlet strainer for clogs and debris.

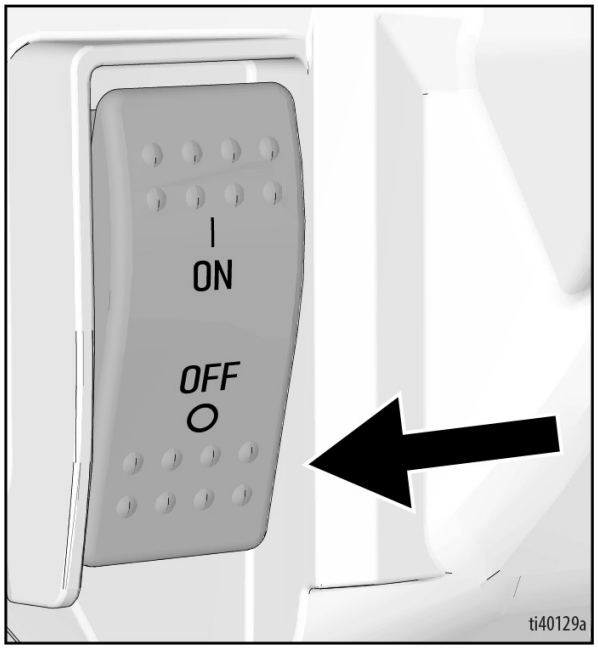




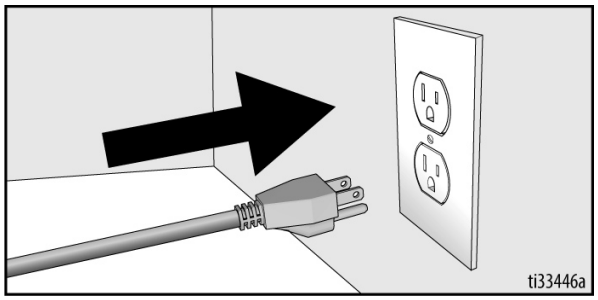
7. Fill TSL fill port with TSL to prevent premature packing wear. Do this daily or each time you spray.
   a. Place the TSL bottle nozzle into the top center opening in the grill at the front of the sprayer.
   b. Squeeze bottle to dispense enough TSL to fill the space between the pump rod and packing nut seal.



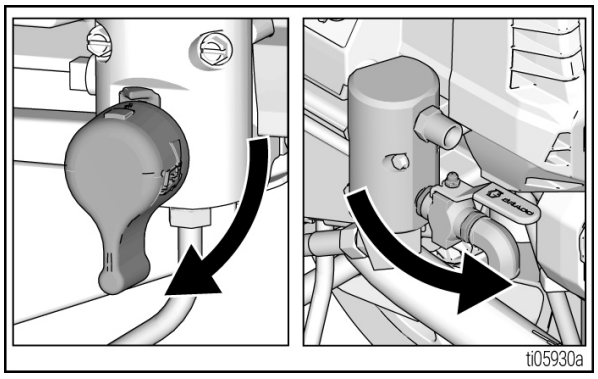
8. Make certain ON/OFF switch is **OFF** and the pressure control is in the **OFF** position.



9. Plug power supply cord into a properly grounded electrical outlet.



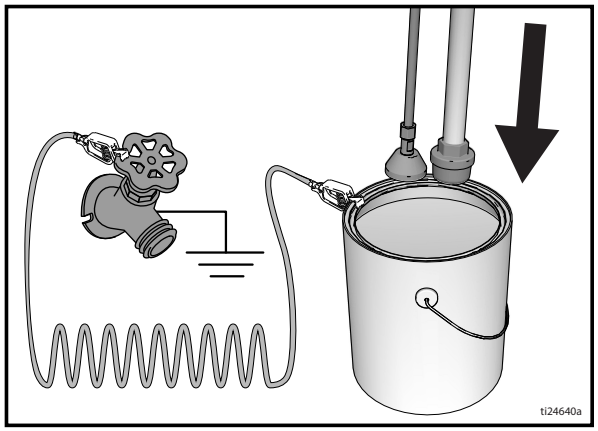
10. Turn prime valve to the Prime position.



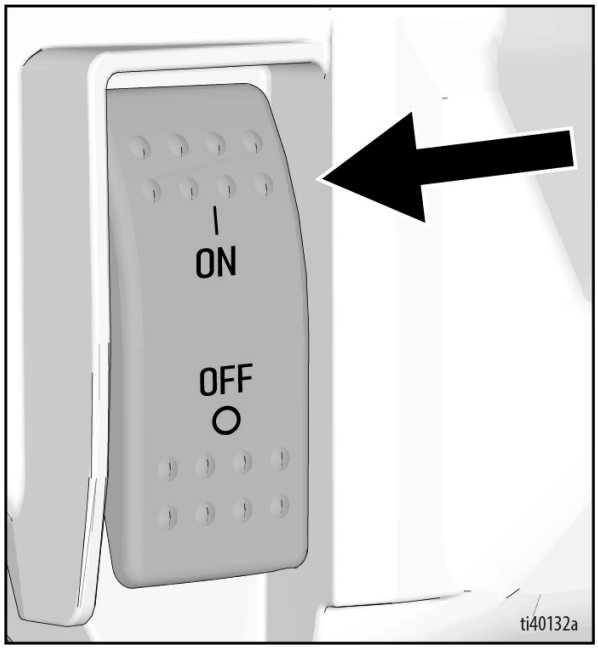
11. Place suction tube with drain tube in grounded metal pail partially filled with flushing fluid. See **Grounding**.

NOTE:

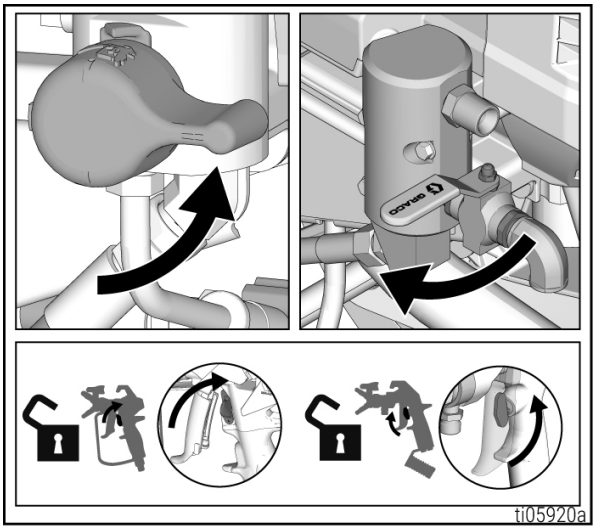
Check flushing fluid for compatibility with material that is to be sprayed. A secondary flush with a compatible fluid may be necessary. Use water for latex paint or mineral spirits for oil-based paint.



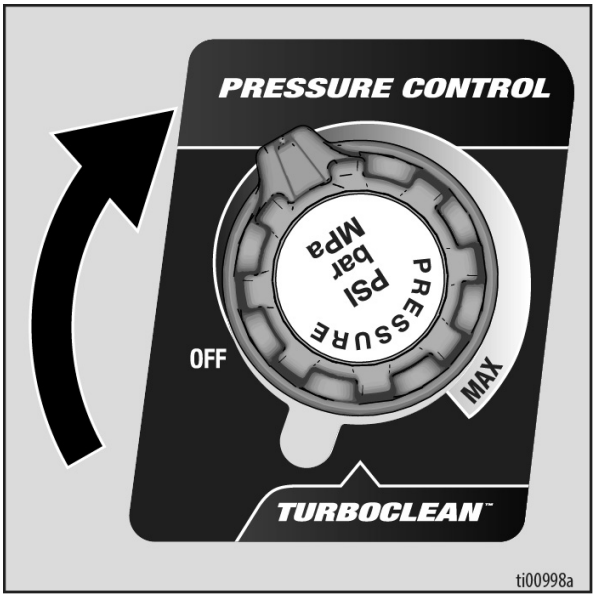
12. Turn ON/OFF switch to **ON** position.



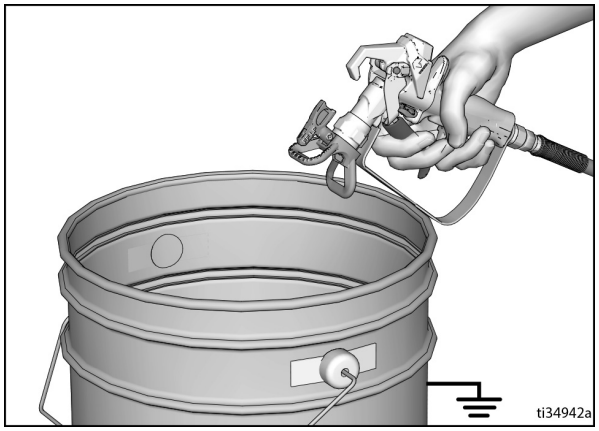
13. Turn prime valve to the SPRAY position. Disengage trigger lock.



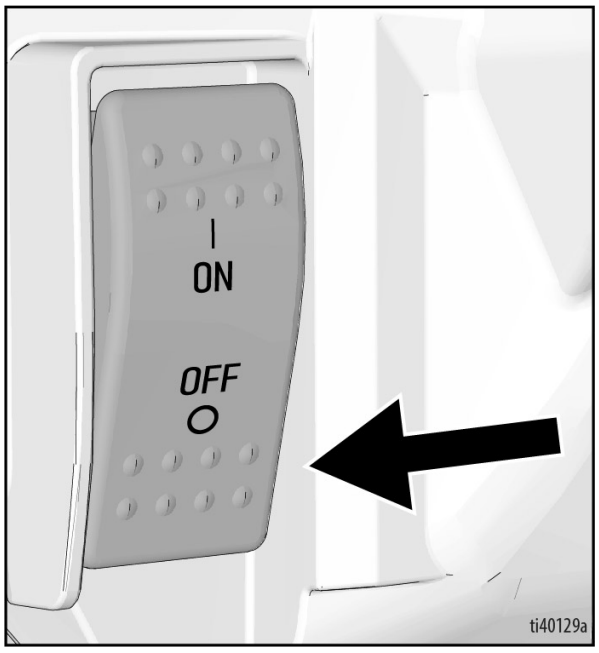
14. Turn pressure control up until sprayer begins to run.



15. Hold a metal part of the spray gun firmly to a grounded metal pail. Trigger gun and flush for 1 minute.



16. Turn ON/OFF switch to **OFF** position.



17. Engage trigger lock.
18. Sprayer is now ready for startup.

SPRAY TIP INSTALLATION

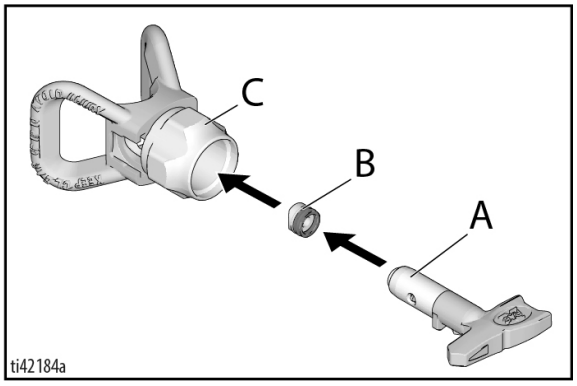
Properly install and remove a spray tip onto the Electric Airless Sprayers.

⚠ WARNING

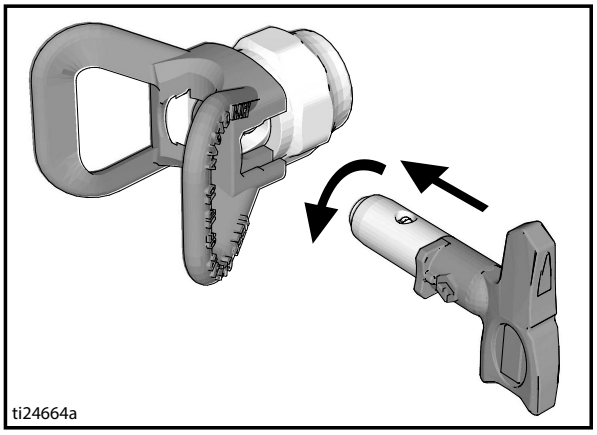


To avoid serious injury from skin injection do not put your hand in front of the spray tip when installing or removing the spray tip and tip guard.

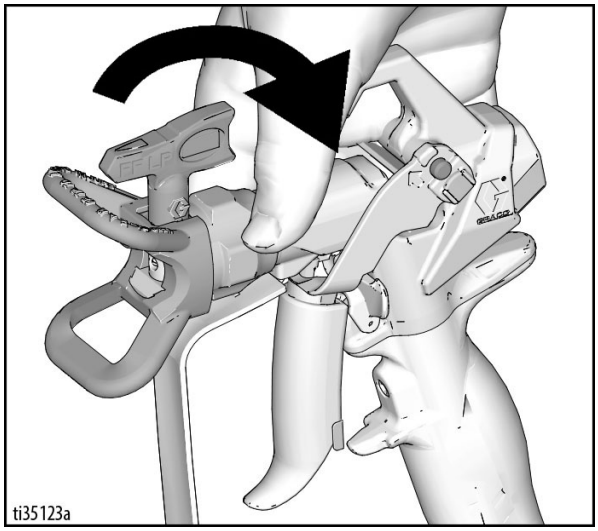
1. Perform **Pressure Relief Procedure**
2. Use spray tip (A) to insert OneSeal™ (B) into tip guard (C).



3. Insert Spray Tip.



4. Screw assembly onto gun. Tighten.



The instructions provide guidance on how to properly use the Electic Airless Sprayers.

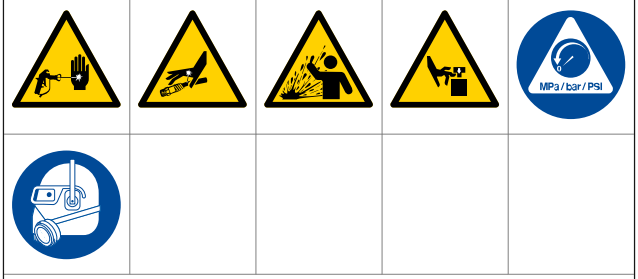
PRESSURE RELIEF PROCEDURE

To help avoid injury, relieve pressure on the Electric Airless Sprayers when operation is stopped, and before cleaning, checking, or servicing the equipment.



Follow the Pressure Relief Procedure whenever you see this symbol.

⚠ WARNING

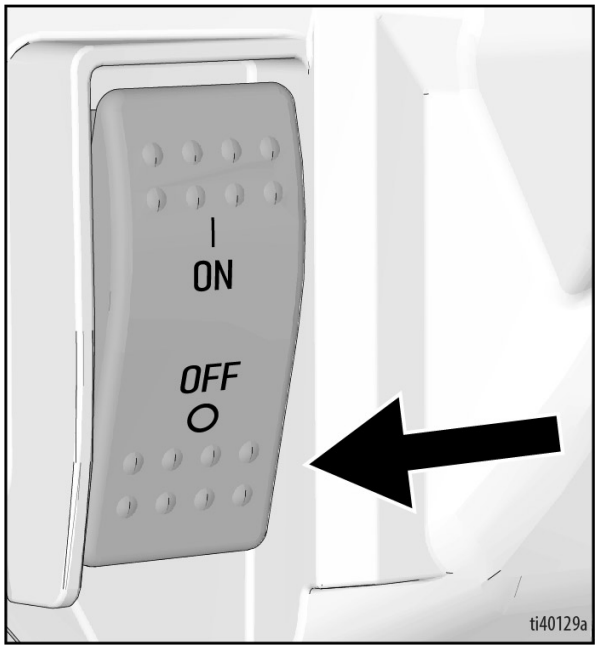


This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashed fluid and moving parts, follow the **Pressure Relief Procedure** whenever you stop spraying and before cleaning, checking, or servicing the equipment.

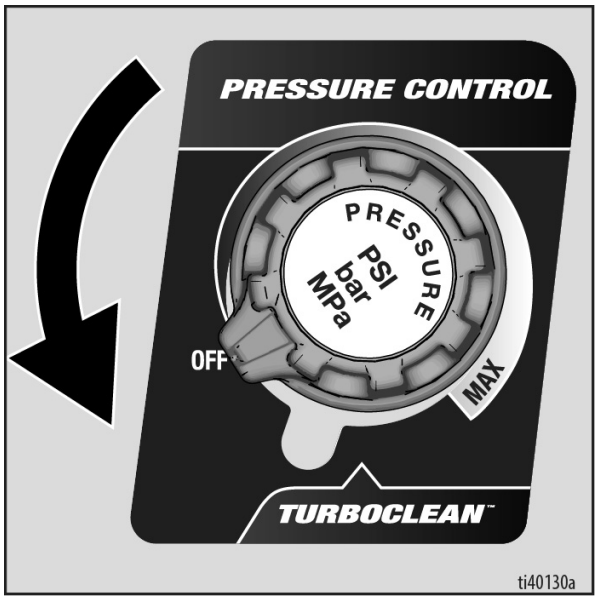
1. Engage the trigger lock.



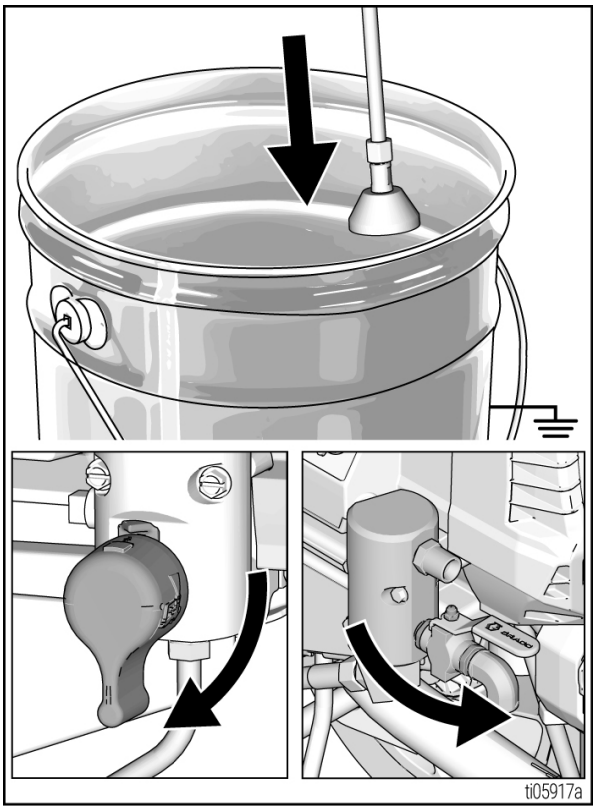
2. Turn ON/OFF switch to the **OFF** position.



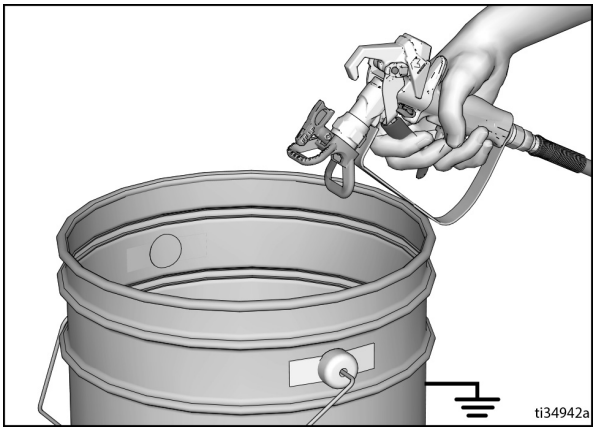
3. Turn pressure control to the **OFF** position.



4. Put drain tube in a pail and turn prime valve to the PRIME position to relieve pressure. Leave prime valve in the PRIME position until you are ready to spray again.



5. Hold a metal part of the spray gun firmly to a grounded metal pail. Point spray gun into pail. Disengage the trigger lock and trigger the spray gun to relieve pressure.

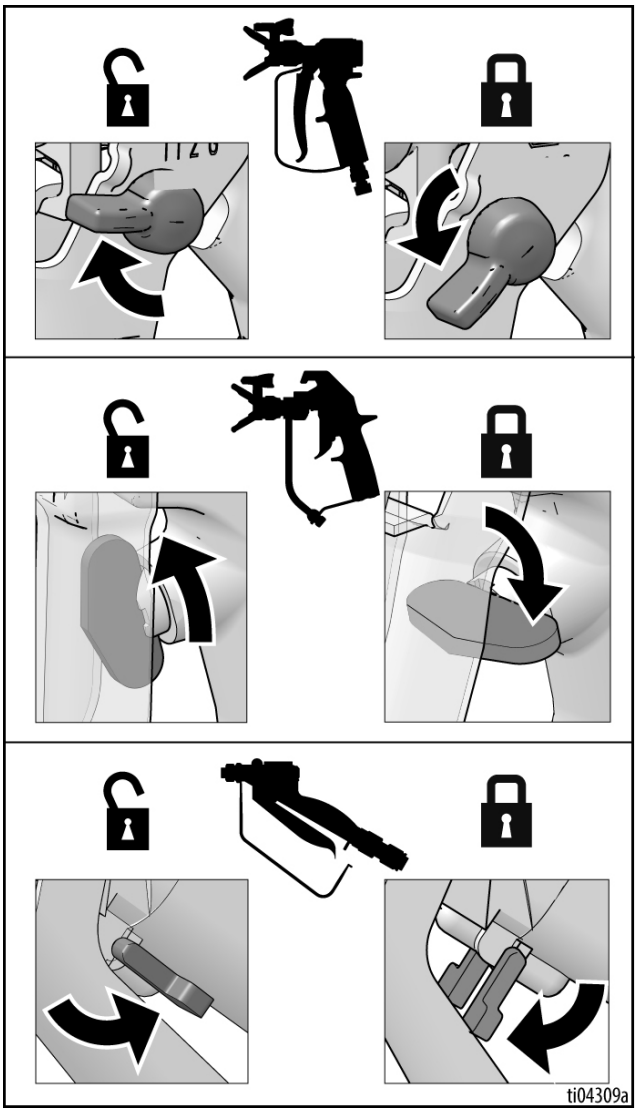


6. Engage the Trigger Lock.

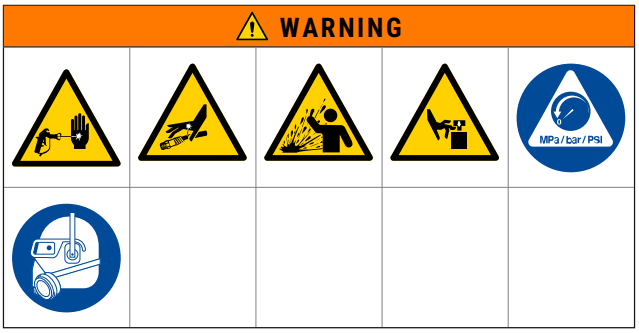
7. If you suspect the spray tip or hose is clogged or that pressure has not been fully relieved:
   a. Using a wrench, VERY SLOWLY loosen the tip guard retaining nut or the hose end coupling to relieve pressure gradually.
   b. Using a wrench, loosen the nut or coupling completely.
   c. Clear hose or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

TRIGGER LOCK

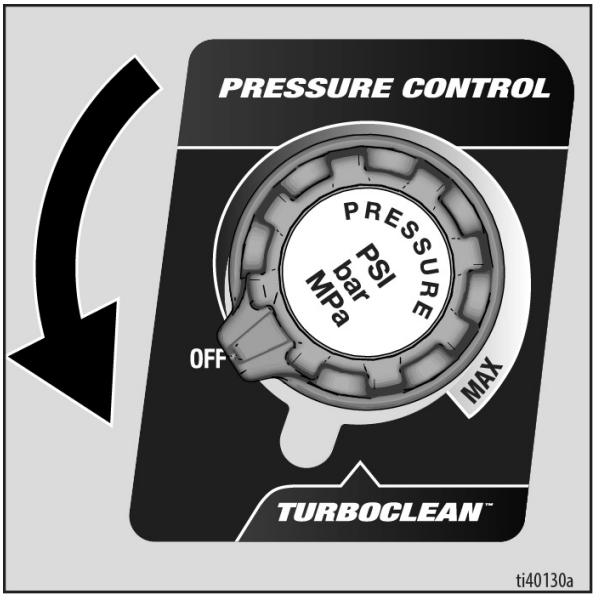
Always engage the trigger lock on the Electric Airless Sprayers when spraying is stopped to prevent the gun from being triggered accidentally by hand or if dropped or bumped.



STARTUP

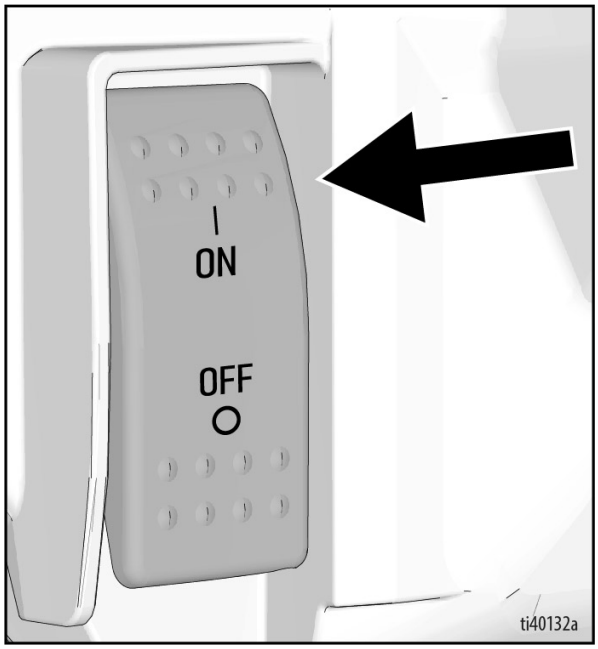


1. Perform **Pressure Relief Procedure**
2. Remove spray tip and tip guard.
3. Turn pressure control **OFF**.

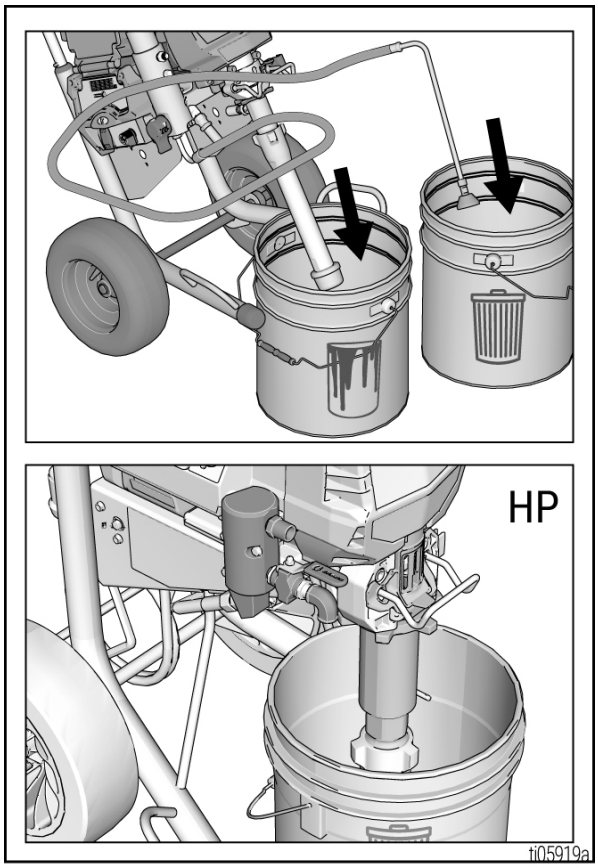


4. Turn the prime valve down.

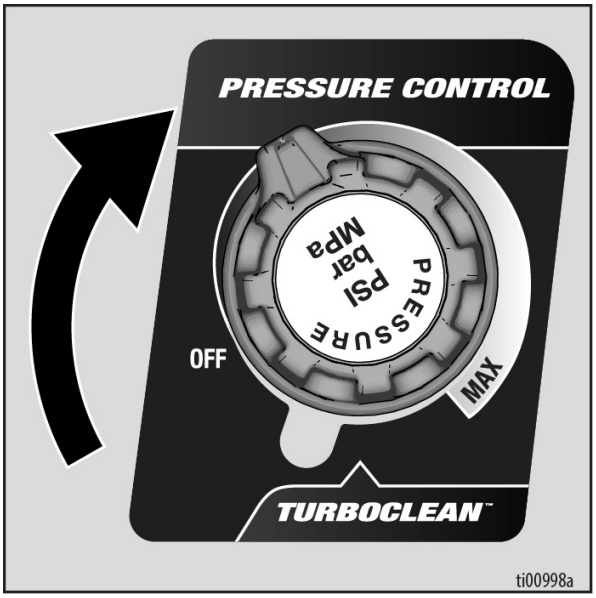
5. Turn ON/OFF switch to **ON** position.



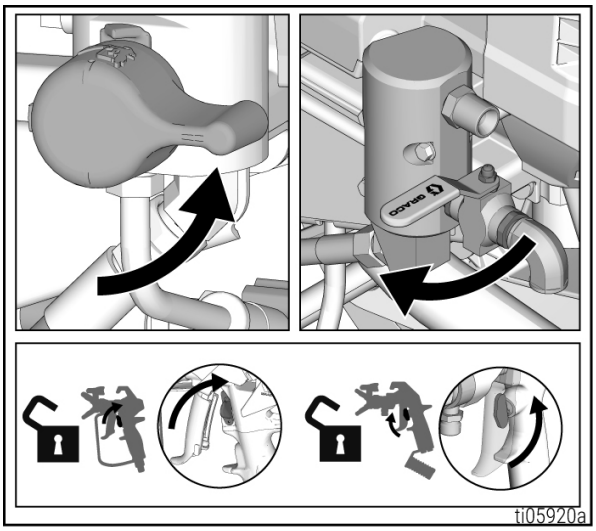
6. Place suction tube in paint pail. Place drain tube in waste pail. For HP units, place waste pail under the Prime Valve.



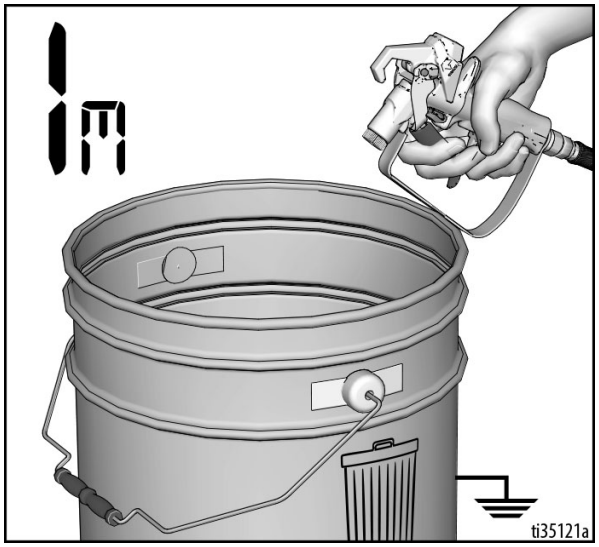
7. Turn pressure control to 10 o'clock position. Allow paint to circulate through drain tube for 15 seconds.



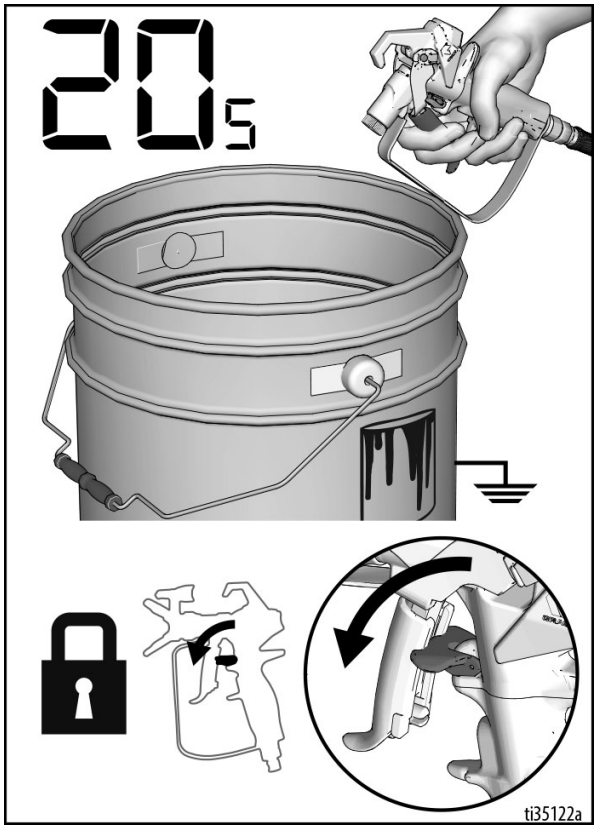
8. Turn prime valve to the SPRAY position. Disengage trigger lock.



9. Hold a metal part of the spray gun against grounded metal waste pail. Trigger gun until paint appears.



10. Move gun to paint pail and trigger for 20 seconds. Release trigger and allow sprayer to build pressure. Engage trigger lock.



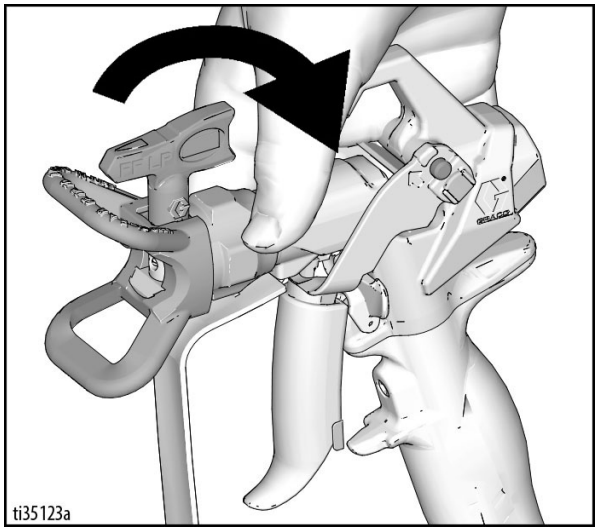
⚠ WARNING



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

11. Inspect airless hose connections for leaks. If leaks occur, perform **Pressure Relief Procedure**, then tighten all fittings and repeat Startup procedure. If there are no leaks continue with the next step.

12. Follow **Spray Tip Installation**. For gun assembly instructions, see separate gun manual.



PERFORMANCE MODES

Most sprayer models are equipped with two performance modes. The HP model is equipped with only one. Units that are equipped with two performance modes are listed below:

LP (Low Pressure) Mode (L): 50-2,000 psi. This mode is best used with Low Pressure Switch Tips (FFLP, LP, and WRLP).

HP (High Pressure) Mode (H): 600-3,300 psi. This mode is best used with any Switch Tip.

To select or change the performance mode, see **TurboClean™**.

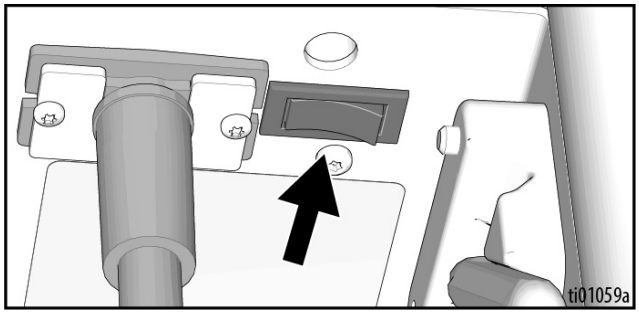
AMP SWITCH

The 230 V Mark VII units contain an amp switch to switch the model from 10 to 16 amps.

The 100–120 V 795, 1095, Mark IV, and Mark V units contain an amp switch to switch the model from 15 to 20 amps.

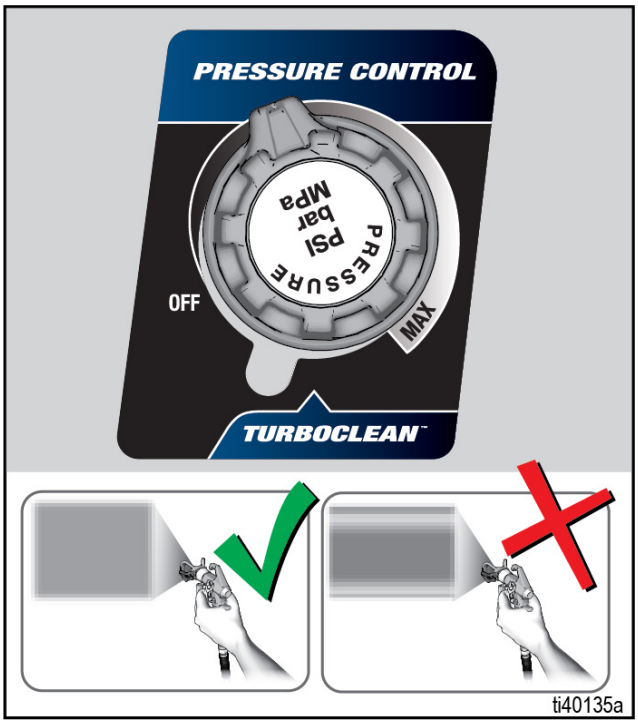
The Mark XV and Mark HP allows 15 or 20 amp selection at 110–120V and allows 10 or 15 amp selection at 230 V.

To swtich the amps, select the option in the Smart Menu Control, see **Digital Display**.



SPRAY

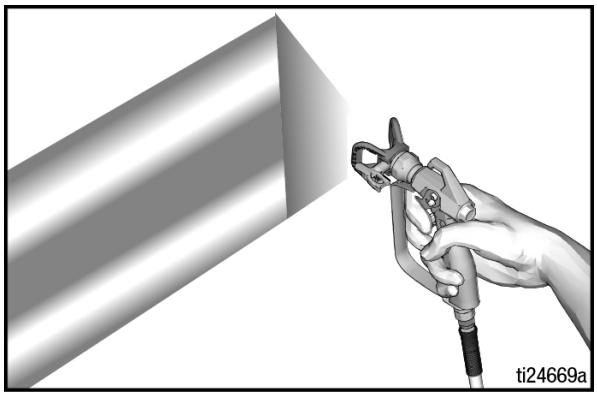
When RAC X™ Low Pressure Switch Tips (FFLP, LP and WRLP) are used, spraying pressure can be lowered. Spraying at a lower pressure results in less overspray and reduces spray tip wear. Adjust the sprayer pressure to minimize overspray.



Spraying with atomized, evenly distributed fan pattern

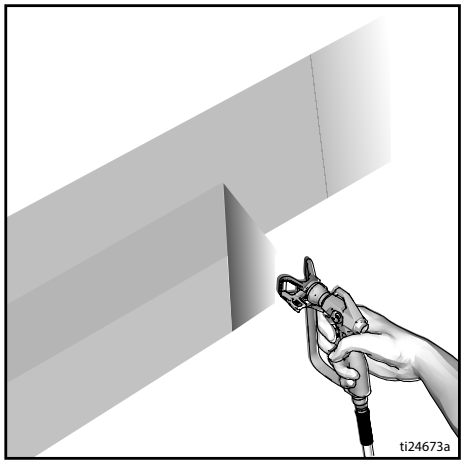
Spraying with tails

1. Spray test pattern. Adjust pressure to eliminate heavy edges.



2. Use smaller tip size if pressure adjustment cannot eliminate heavy edges.

3. Hold gun perpendicular, 10–12 in. (25–30 cm) from surface. Spray back and forth; overlap by 50 percent.



4. Trigger gun after moving. Release trigger before stopping. For additional spraying information, see separate gun manual. See **Related Manuals**.

CLEAR SPRAY TIP CLOG

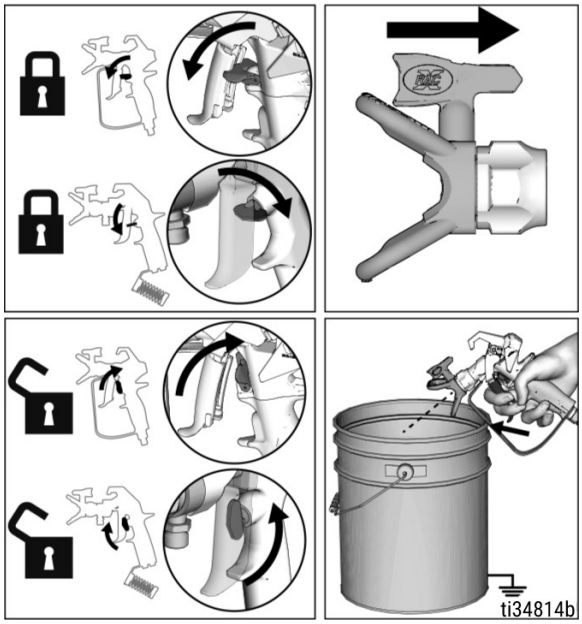
⚠ WARNING



To avoid injury from skin injection, never point gun at your hand or into a rag!

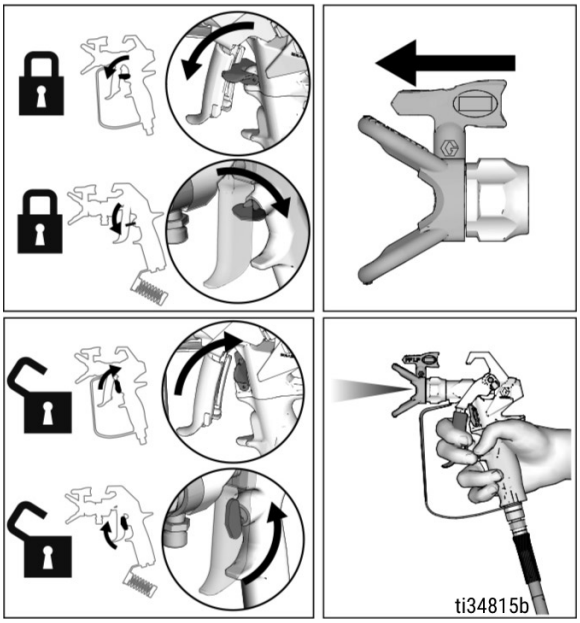
1. Release trigger. Engage trigger lock. Rotate Spray Tip. Disengage trigger lock. Trigger gun at waste area to clear clog.

UNCLOG

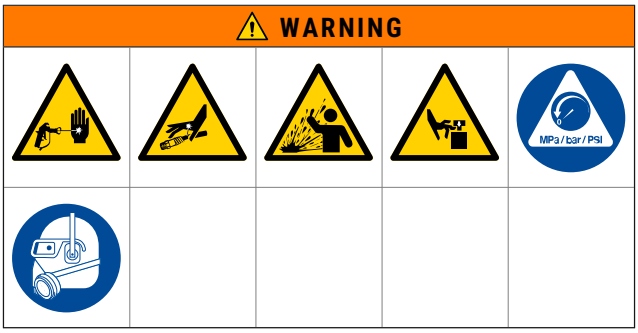


2. Engage trigger lock. Return Spray Tip to original position. Disengage trigger lock and continue spraying.

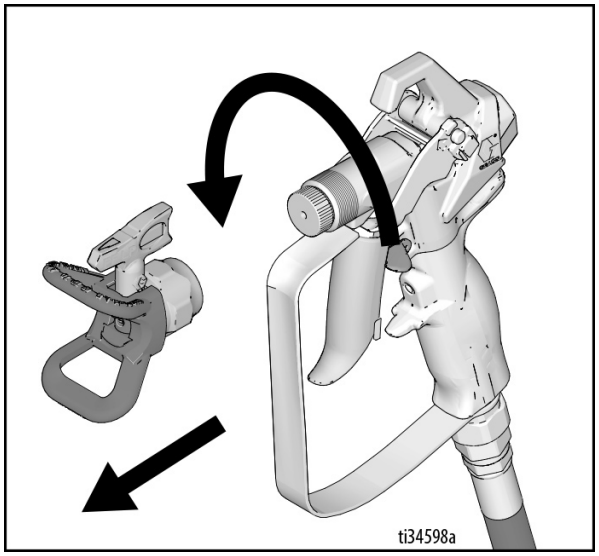
SPRAY



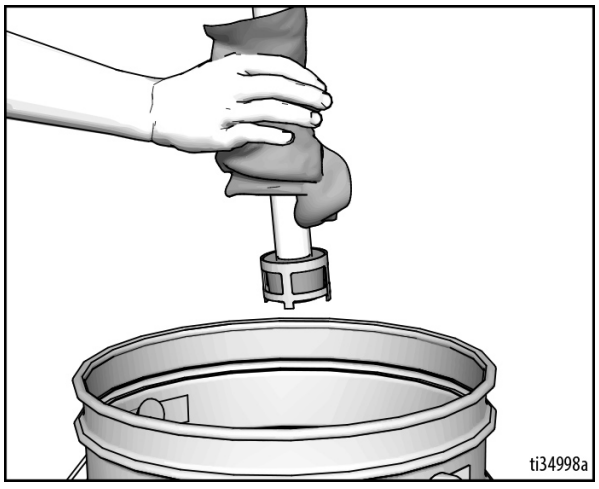
CLEANUP



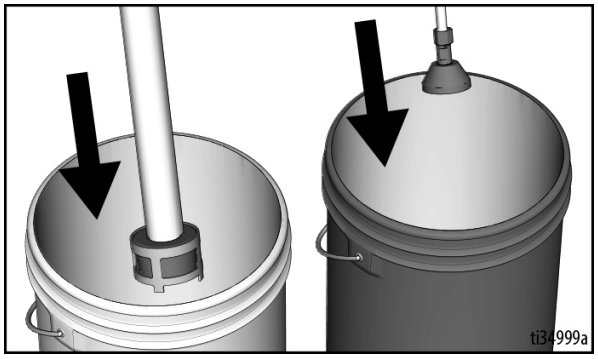
1. Perform **Pressure Relief Procedure**
2. Remove tip guard and Spray Tip. For additional information, see separate gun manual. See **Related Manuals**.



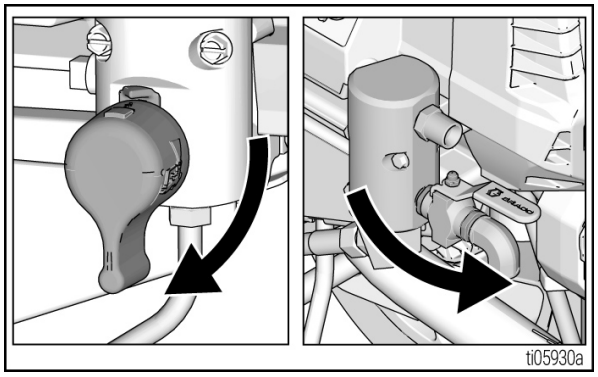
3. Remove suction tube and drain tube from paint and wipe excess paint off outside.



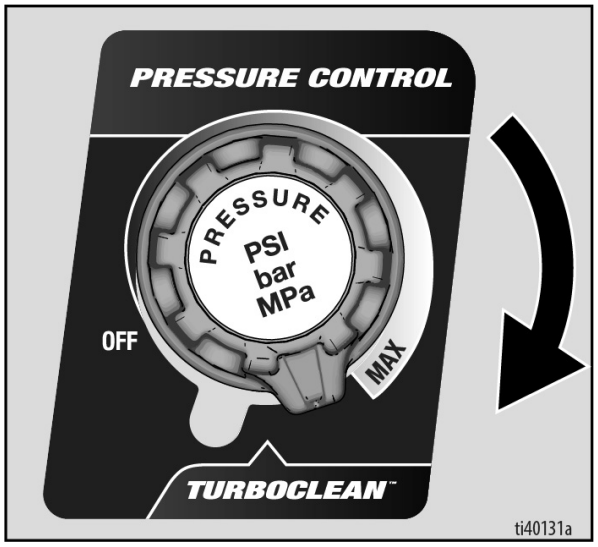
4. Place suction tube in flushing fluid. Use water for water-based paint and mineral spirits for oil-based paint. Place drain tube in waste pail.



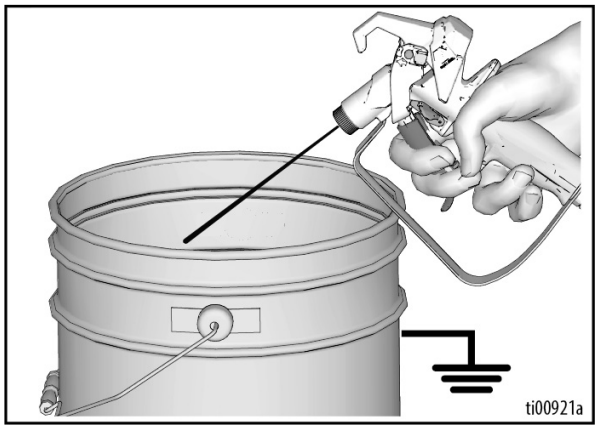
5. To pump, turn prime valve to PRIME position.



6. Turn pressure control to TurboClean.



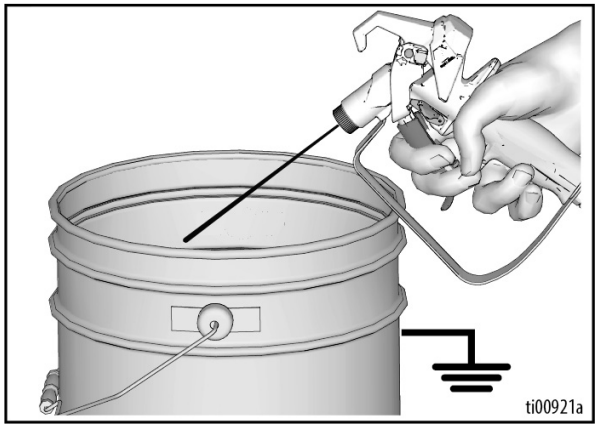
7. Trigger gun until the pump runs steady and flushing fluid appears clear in the waste pail.



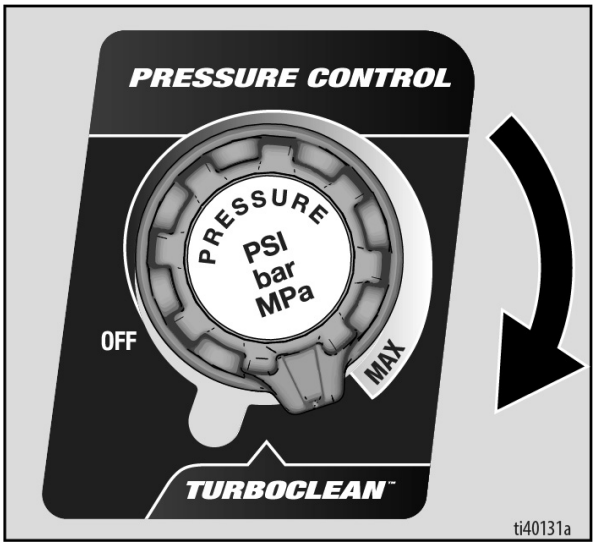
8. Turn pressure control to OFF position.

FLUSH HOSE AND GUN

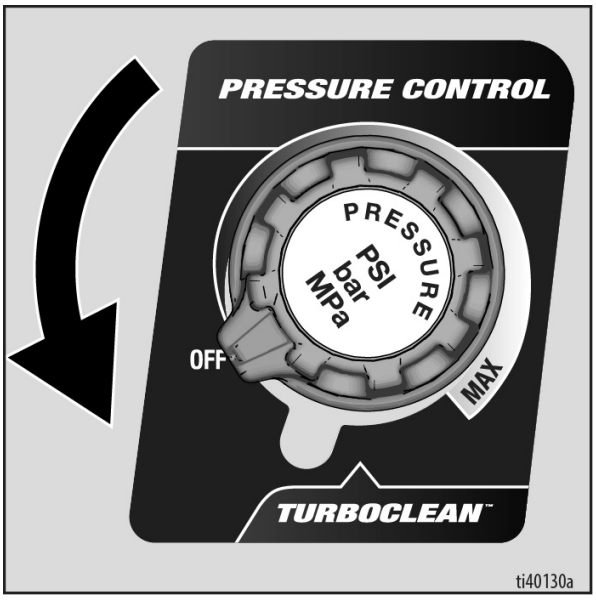
1. To flush airless hose and spray gun, turn prime valve horizontal.
2. Hold a metal part of the spray gun against waste pail. Disengage trigger lock.



3. Trigger gun and turn pressure control to TurboClean.

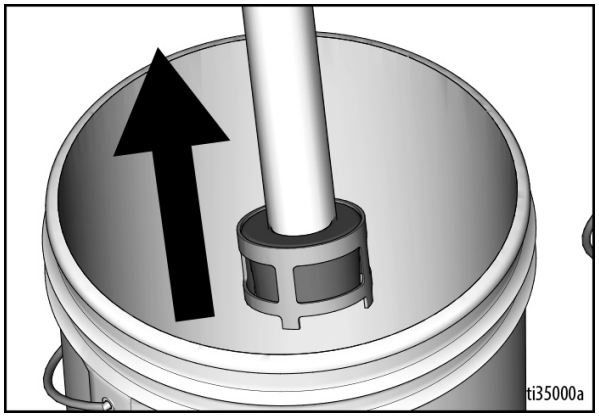


4. Operate until the pump runs steady and flushing fluid appears clear.
5. Turn pressure control to OFF.

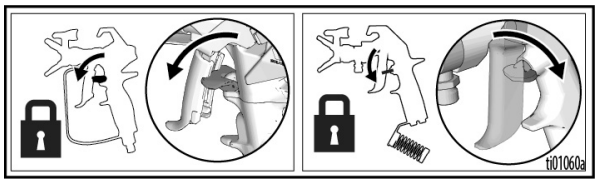


6. Stop triggering gun.

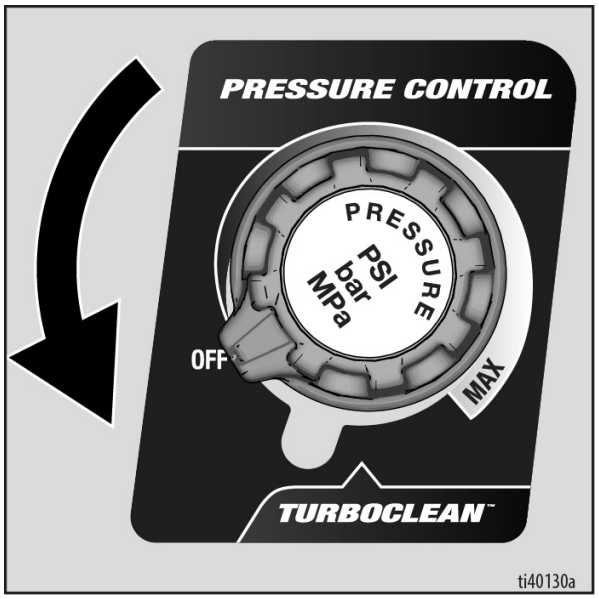
7. Raise suction tube above flushing fluid.



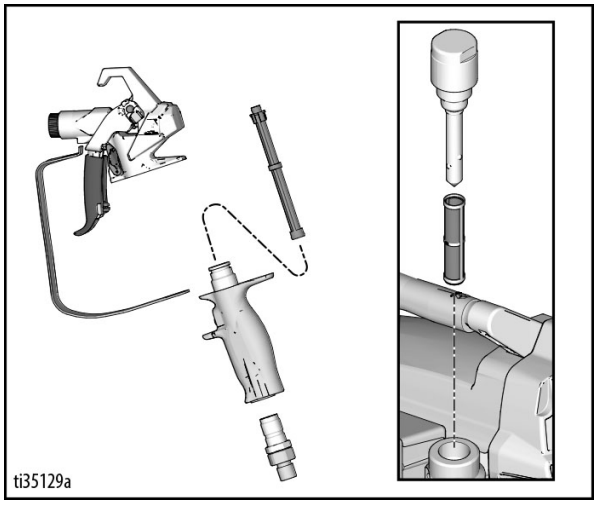
8. While triggering gun into flushing pail, turn pressure control to TurboClean to purge fluid from hose.
9. Engage trigger lock.



10. Perform the **Pressure Relief Procedure**.
11. Turn pressure control knob to OFF and turn ON/OFF switch to **OFF** position. Disconnect power to sprayer.



12. Remove Spray Tip and Spray Tip Guard from Spray Gun.
13. Remove filter from gun and sprayer if installed. Clean and inspect. Install filter. See separate gun manual. See **Related Manuals**.



14. If flushing with water, flush again with Pump Armor™ to leave a protective coating to prevent freezing or corrosion.
15. Wipe sprayer, hose, and gun with a rag soaked in water or mineral spirits.

DIGITAL DISPLAY

All models are equipped with a digital display. This section explains how to use this feature.

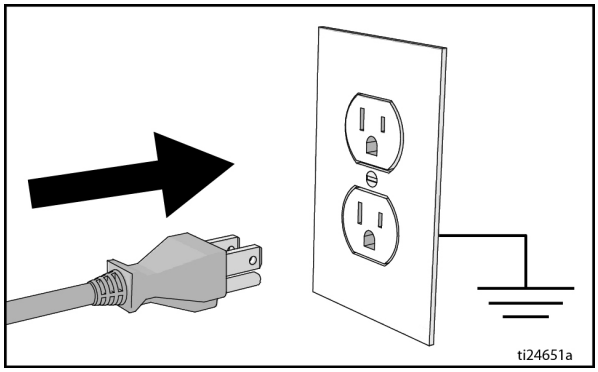
⚠ WARNING

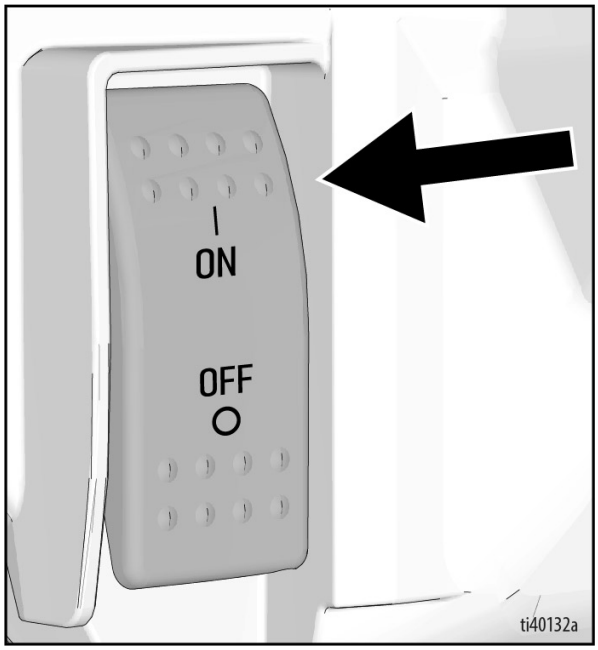


OPERATION MAIN MENU

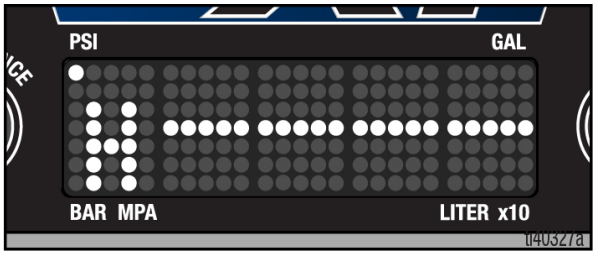
A short press of the menu button moves to the next display. Press and hold menu button to change units or reset data.

1. Perform the **Pressure Relief Procedure**.
2. Turn ON/OFF switch to **OFF** position.
3. Plug sprayer into grounded outlet. Turn ON/OFF switch to **ON** position.





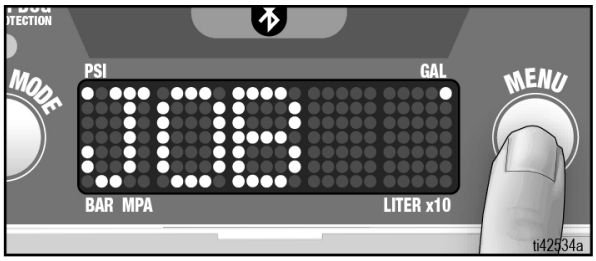
4. To change pressure units (psi, bar, or MPa), press and hold menu button until the desired units appear (approximately 10 seconds). Selection of bar or MPa changes gallons to Liters x10.
5. Pressure display appears. Dashes appear when pressure is less than 50 psi (3 bar, 0.3 MPa).



6. Short press menu button to move to Job Gallons (or Liters x 10).

NOTE:

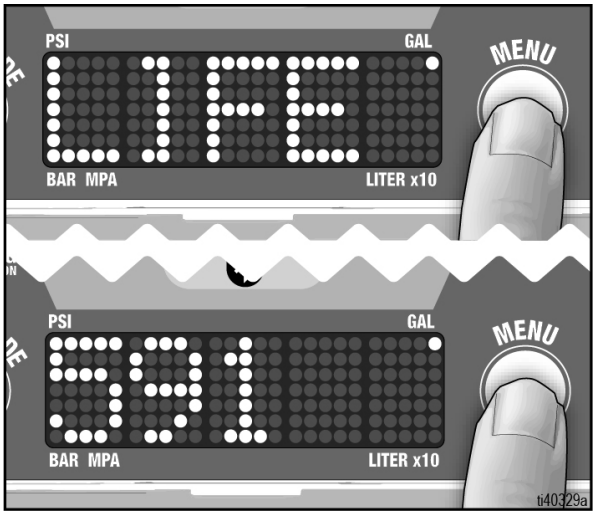
JOB displays briefly, then the number of gallons sprayed.



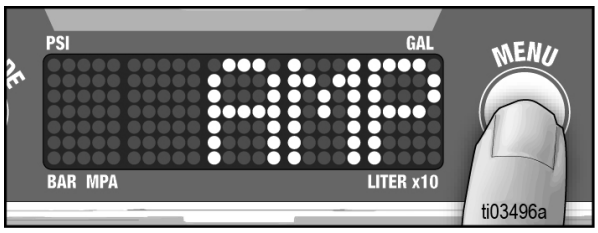
7. Press and hold menu button to reset to zero, or short press button to move to Lifetime Gallons (or Liters x10).

NOTE:

LIFE displays briefly, then the number of gallons sprayed above 600 psi (41 bar, 4.1MPa).



8. Short press menu button to move to Amp Switch.



NOTE:

AMP SWITCH displays briefly, then the amp switch setting.

9. Press and hold menu button to toggle amp switch setting.



NOTE:

Steps 10 and 11 apply to ProContractor models only.

10. Short press menu button to move to Pair Spray Gun. Screen will not scroll "Pair Spray Gun".

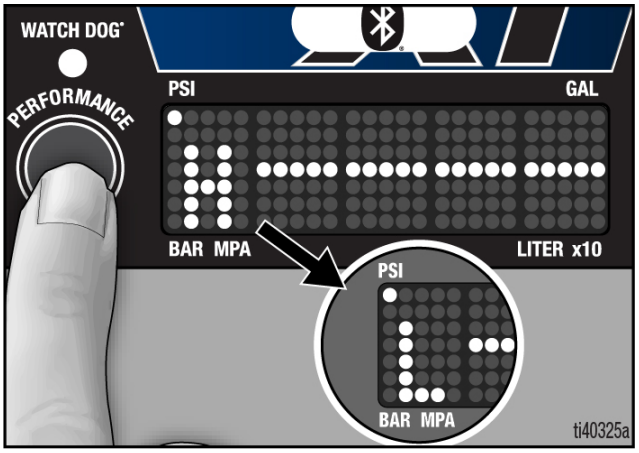


11. Short press menu button to return to pressure display screen.

SELECTING PERFORMANCE MODES

This Unit has two performance modes. To select a mode, press the Performance Mode button on the left side of the display. The mode will scroll across the display as either High Pressure or Low Pressure. This mode is indicated on the left side of the display as H or L.

For an explanation of performance modes, see **Performance Modes**.



TURBOCLEAN

Unit is equipped with TurboClean cleaning mode. To enable, turn pressure control knob to TurboClean setting. When entering TurboClean, there will be a notable detent when turning the pressure control knob to the TurboClean setting and CLEAN will flash on the display.



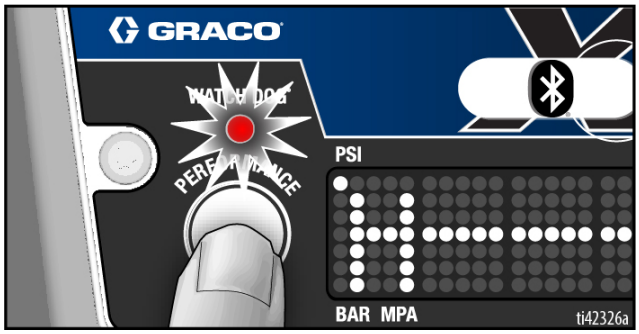
NOTE:

TurboClean is only used for cleaning fluids. When in TurboClean, the sprayer will not spray paint or other materials.

WATCHDOG

The Watchdog™ Pump Protection System automatically shuts down the pump when material runs out or if the suction tube is damaged.

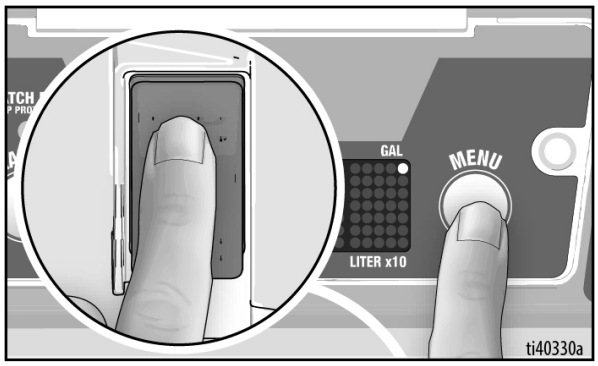
To enable Watchdog, press and hold the Performance Mode button until Watchdog LED is illuminated. Press and hold the Performance Mode button to disable Watchdog.



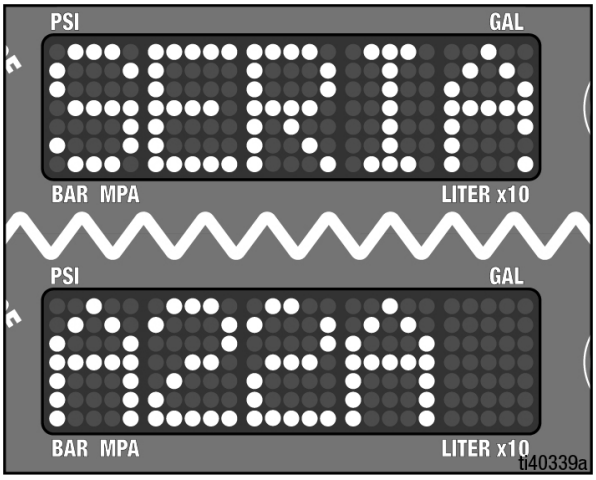
There are three Watchdog sensitivity settings: Low, Medium, and High. To change sensitivity setting, enter stored data in the display and navigate to Watchdog. Press and hold menu button to toggle Watchdog.

STORED DATA DISPLAY

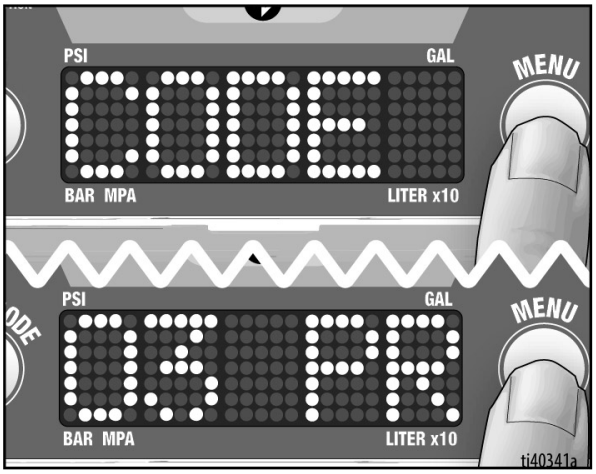
1. Perform **Pressure Relief Procedure**.
2. Press and hold menu button while turning ON/OFF switch to **ON** position.



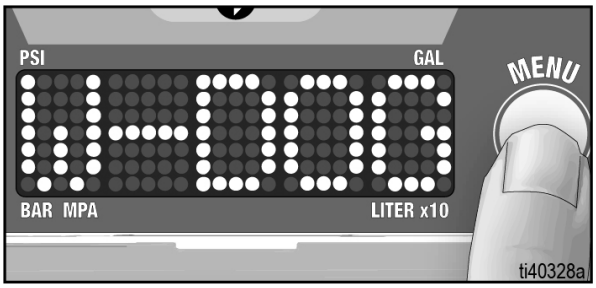
3. Serial code will scroll across display.



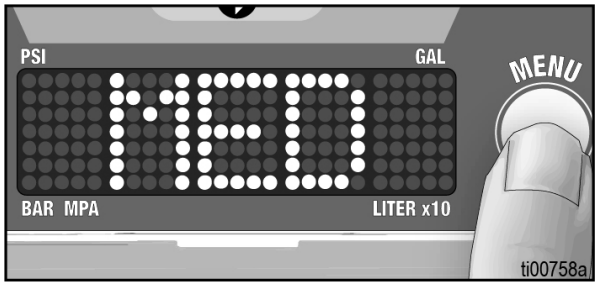
4. Short press menu button and the total motor run hours is displayed.
5. Short press menu button and the last error code is displayed: e.g., **E=03**. Press and hold menu button to clear error code to zero.



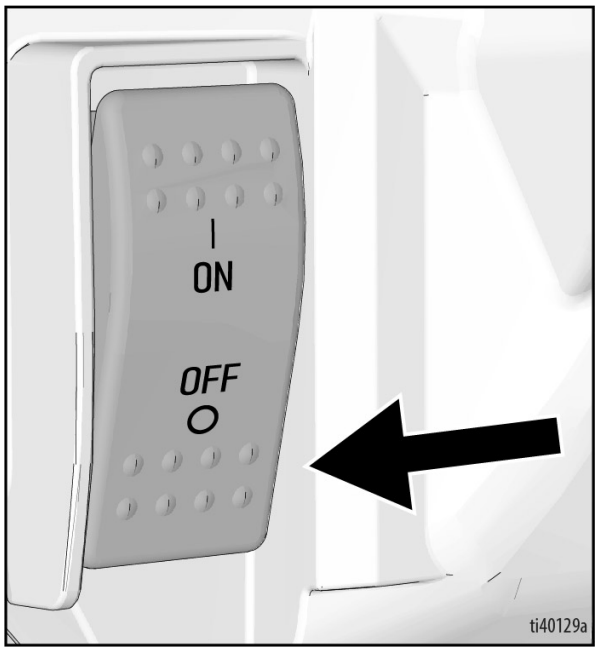
6. Short press to move to Watchdog.



7. Press and hold menu button to change Watchdog sensitivity setting (High, Medium, Low). Default is set to Medium.



8. Short press menu button to move software Rev.
9. Short press menu button to move to Sprayer ID.
10. Short press menu button to move to **Knob Calibration** and **Transducer Calibration**
11. Turn ON/OFF switch to **OFF** position to exit Stored Data.



KNOB CALIBRATION

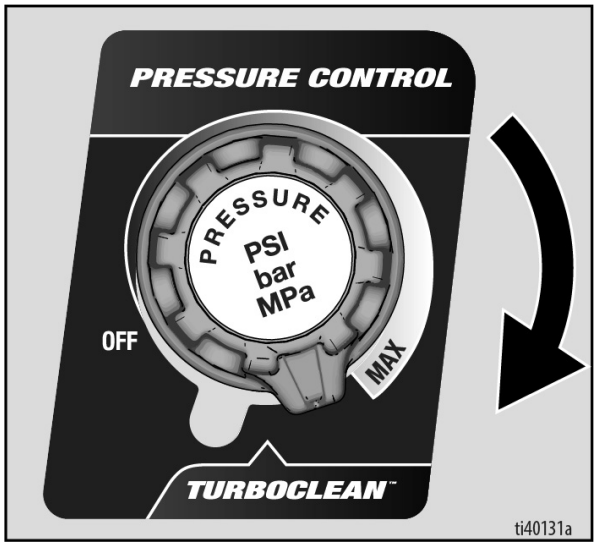
NOTE:

Perform Knob calibration whenever a new pressure control (potentiometer) is installed or the control board is replaced.

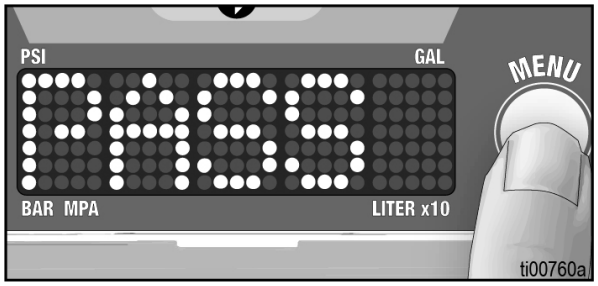
1. To perform knob calibration, enter secondary menu by holding menu button while powering sprayer.
2. Use menu button to navigate to knob calibration screen.



3. Set potentiometer to max spray position, just before TurboClean.



4. Hold menu button until display shows PASS.



5. Turn potentiometer knob back to **OFF** position before restarting and reusing the sprayer.

TRANSDUCER CALIBRATION

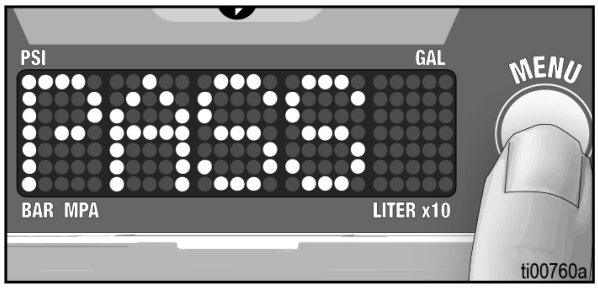
NOTE:

Perform transducer calibration whenever a new transducer is installed or the control board is replaced.

1. Perform **Pressure Relief Procedure**.
2. To perform transducer calibration, enter secondary menu by holding menu button while powering sprayer.
3. Use menu button to navigate to 0 (zero) calibration screen.



4. Make sure dump valve is open and that there is no pressure in sprayer.
5. Press and hold menu button until display shows PASS.



BLUELINK® APP

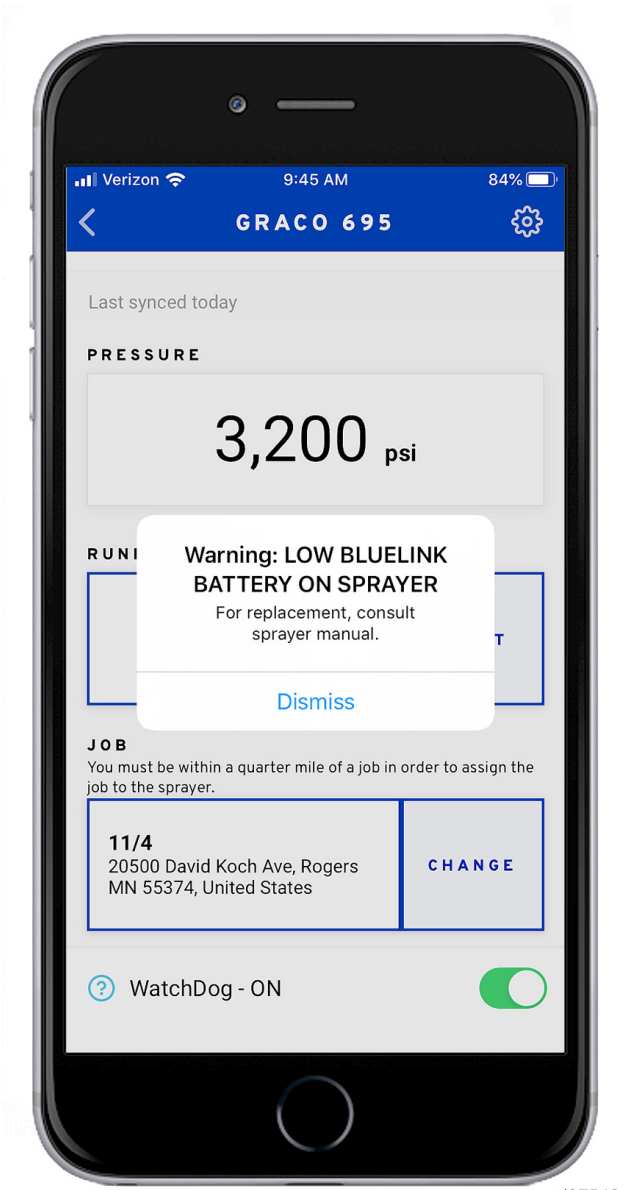
Units equipped with BlueLink have a BlueLink indicator light on the display. See **Controls and Display**.

Download the Graco BlueLink app from the Apple App Store, Google Play, or other available application stores to connect to the paint sprayer via Bluetooth®.

The BlueLink app allows you to access sprayer information, settings, statistics, and provides access to useful features such as Watchdog™, improved maintenance tracking, sprayer tracking, and job tracking. Find the Graco BlueLink App and instructions for using it at www.graco.com.

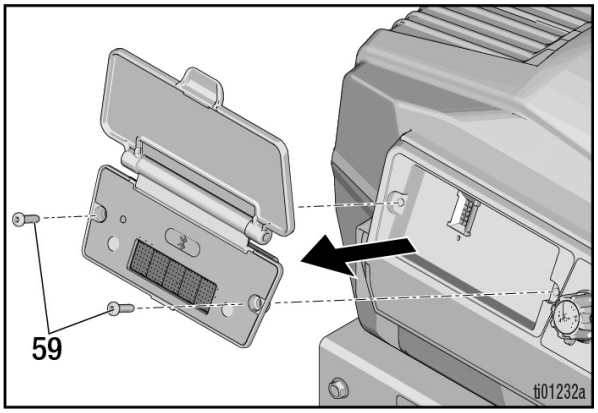
REPLACING BLUELINK BATTERY

A small, built-in battery is located in the display providing power for the sprayer to sync to the BlueLink app. If the following message is displayed, the battery will need to be replaced. Follow these steps to replace the battery.

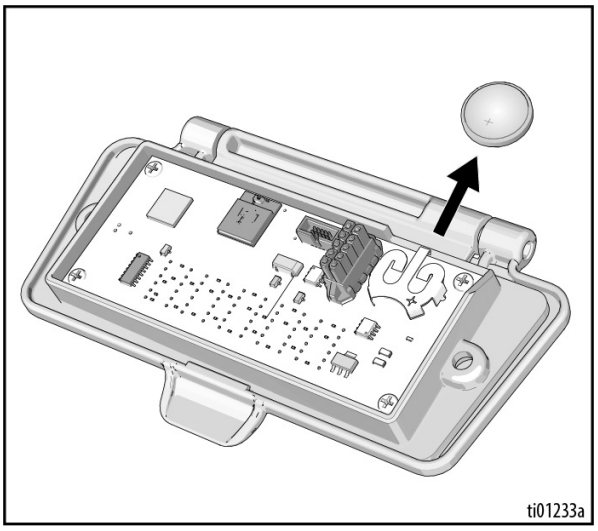


1. Turn sprayer **OFF** and unplug the power cord.

2. Using T20 torx tool, remove two screws and remove display board.



3. Slide battery out of the holder.
4. Replace battery with a new CR2032 battery.



5. Reinstall display board screws. Torque to 12–16 in-lb.

Follow the service schedule to keep the Electric Airless Sprayers in good condition for optimal use.

Routine sprayer maintenance is important to ensure proper operation. Performing these routine actions will ensure the sprayer remains operational and helps prevent future trouble. Maintenance can be scheduled and tracked via the Graco BlueLink app.

⚠ WARNING



1. Perform the **Pressure Relief Procedure** before performing maintenance.

ACTIVITY	INTERVAL
Inspect/clean sprayer filter, fluid inlet strainer, and gun filter.	Daily or each time you spray
Inspect motor shield vents for blockage.	Daily or each time you spray
Fill TSL by adding through TSL fill port.	Daily or each time you spray
Check sprayer stall. With sprayer gun NOT triggered, sprayer motor should stall and not restart until gun is triggered again. If sprayer starts again with gun NOT triggered, inspect pump for internal/external leaks and check prime valve for leaks.	Every 100 gallons (1000 liters)
Throat packing adjustment When pump packing begins to leak after extended use, tighten packing nut down until leakage stops or lessens. This allows approximately 100 gallons of additional operation before a repacking is required. Packing nut can be tightened without removing o-ring.	As necessary based on usage

END OF PRODUCT LIFE

At the end of the product's useful life, dismantle and recycle it in a responsible manner.

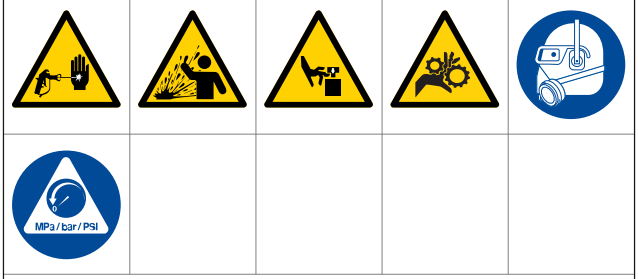
- Perform the **Pressure Relief Procedure**.
- Drain and dispose of fluids according to applicable regulations. Refer to the material manufacturer's Safety Data Sheet.
- Remove motors, batteries, circuit boards, LCDs (liquid crystal displays), and other electronic components. Recycle according to applicable regulations.
- Do not dispose of batteries or electronic components with household or commercial waste. 
- Deliver remaining product to a recycling facility.

TROUBLESHOOTING

When problems occur, use the table to identify potential causes and solutions to repair the Electric Airless Sprayers.

MECHANICAL/FLUID FLOW

⚠ WARNING



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

Keep clear of moving parts during troubleshooting procedures.

1. Follow **Pressure Relief Procedure** before checking or repairing.
2. Check all possible problems and causes before disassembling the unit.

PROBLEM	CAUSE	SOLUTION
Pump output is low	Spray tip worn.	Replace tip. See separate gun or tip manual. See **Related Manuals**.
	Spray tip clogged.	Clear tip. See **Clear Spray Tip Clog**.
	Paint supply is low.	Refill and reprime pump.
	Intake strainer clogged.	Remove and clean, then reinstall. If problem persists, strain the paint.
	Intake valve ball and piston ball are not seating properly.	Remove intake valve and clean. Check balls and seats for nicks; replace if necessary. See pump manual. See **Related Manuals**. Strain paint before using to remove particles that could clog pump.
	Fluid filter or tip filter is clogged or dirty.	Remove and clean, then reinstall.
	Prime valve leaking.	Repair prime valve.
	Pump does not continue to stroke when gun trigger is released. (Prime valve not leaking.)	Service pump. See pump manual. See **Related Manuals**.
	Leaking around throat packing nut which may indicate worn or damaged packings.	Tighten packing nut/wet-cup. Replace packings. See pump manual. See **Related Manuals**. Also check piston valve seat for hardened paint or nicks and replace if necessary.
Pump output is low	Low stall pressure. Pressure setting is too low.	Change spray mode to High Pressure. Turn pressure knob fully clockwise. Make sure pressure control knob is properly installed to allow full clockwise position. Perform **Knob Calibration**. If problem persists, replace pressure transducer.
	Pump rod damage.	Repair pump. See pump manual. See **Related Manuals**.
	Piston packings are worn or damaged.	Replace packings. See pump manual. See **Related Manuals**.
	O-ring in pump is worn or damaged.	Replace o-ring. See pump manual. See **Related Manuals**.
	Intake valve ball is packed with material.	Clean intake valve. See pump manual. See **Related Manuals**.

PROBLEM	CAUSE	SOLUTION
Pump output is low	Large pressure drop in hose with heavy materials.	Reduce overall length of hose. Use larger diameter hose.
	Check extension cord for correct size.	See **Extension Cords**.
	Connecting rod assembly damaged.	Replace connecting rod assembly.
	Amp switch is on low setting.	Switch to a 16A or 20A setting.
Motor does not run	Error code on the display.	Determine fault correction from electrical.
	Motor cables damaged or loose connections.	Reconnect or replace if necessary.
	Potentiometer wire damaged or loose connections.	Reconnect or replace if necessary.
	Problem with the control boards, see **Electrical**.	Replace power cord or control board.
Motor runs but pump does not stroke	Connecting rod assembly damaged.	Replace connecting rod assembly.
Excessive paint leakage into throat packing nut	Throat packing nut is loose.	Remove throat packing nut spacer. Tighten throat packing nut just enough to stop leakage.
	Throat packings are worn or damaged.	Replace packings.
	Displacement rod is worn or damaged.	Replace rod.
Fluid is spitting from gun	Air in pump or hose.	Cycle pump as slowly as possible during priming. Purge paint through gun by following **Startup**.
	Spray tip is partially clogged.	Clear tip. See **Clear Spray Tip Clog**.
	Fluid supply is low or empty.	Refill fluid supply. Prime pump. Check fluid supply often to prevent running pump dry.
Pump is difficult to prime	Clog in prime valve.	Remove prime valve, check for clogs, replace.
	Air in pump or hose.	Check and tighten all fluid connections. Cycle pump as slowly as possible during priming.

PROBLEM	CAUSE	SOLUTION
Pump is difficult to prime	Intake valve is leaking.	Clean intake valve. Be sure ball seat is not nicked or worn and that ball seats well. Reassemble valve.
	Pump packings are worn.	Replace pump packings. See pump manual.
	Paint is too thick.	Thin the paint according to supplier recommendations.
Pump loses prime	Leak in suction tube.	Replace suction tube.
	Debris stuck in inlet ball.	Remove foot valve and clean with appropriate cleaning solution.

ELECTRICAL

⚠ WARNING



To avoid injury from electrical shock when covers are removed, wait 5 minutes after disconnecting power cord for stored electricity to dissipate.

Symptom: Sprayer does not run, stops running, or will not shut off.

1. Perform **Pressure Relief Procedure**.
2. Unplug sprayer and turn the ON/OFF switch to **OFF**.
3. Wait 30 seconds, then plug power supply cord into a properly grounded electrical outlet. Switch back **ON** again (this ensures sprayer is in normal run mode).
4. Turn pressure control knob clockwise one-half turn.
5. Error code will be shown on display.

⚠ WARNING



To avoid serious injury from electrical shock and moving parts, do not remove interior motor cover or touch electrical components.

ERROR CODE MESSAGES

CODE	MESSAGE	ACTION
02	Code 02 - High pressure detected	Relieve pressure. Check for clogs in filters and hoses. Use minimum of 50 ft. (15 m) of Graco hose. Check transducer.
03	Code 03 - Pressure transducer not detected	Turn sprayer **OFF** and unplug the sprayer. Remove shroud. Check transducer cable and connection to control board. Check transducer.
04	Code 04 - Multiple incoming voltage surges detected	Turn sprayer **OFF** and unplug the sprayer. Locate good voltage supply to prevent damage to electronics.
05	Code 05 - Motor not spinning due to high mechanical load	Turn sprayer **OFF** and unplug the sprayer. Attempt to spin motor. See **Control Board**. Motor should spin freely. If motor does not spin easily, remove pump and re-check by spinning motor again. If motor spins easily, check control board.
06	Code 06 - Motor thermal protection enabled	Keep sprayer plugged in and allow time to cool. This may take up to an hour. Check vents in bottom and top of sprayer for blockage. If applicable, check fan connector and wiring, fan should be running. Unplug sprayer and check to make sure the motor spins freely. See **Control Board**.
08	Code 08 - Incoming voltage too low for sprayer operation	Turn sprayer **OFF** and unplug the sprayer. Locate good voltage supply to prevent damage to electronics.
09	Code 09 - Communication to encoder failed	Turn sprayer **OFF** and unplug the sprayer and wait 5 minutes. Remove shroud. Check cables and connections. Check motor. See **Control Board**.
10	Code 10 - Control board thermal protection enabled	Keep sprayer plugged in and allow time to cool. This may take up to an hour. Check vents in bottom and top of sprayer for blockage. If applicable, check fan connector and wiring, fan should be running. Unplug sprayer and check to make sure the motor spins freely.
11	Code 11 - Start up voltage check	Unplug the sprayer and try a different electrical circuit.
12	Code 12 -Excessive current protection enabled	Cycle power **ON** and **OFF**. If problem persists, check motor. See **Control Board**.
13	Code 13 - High voltage	Unplug the sprayer and try a different electrical circuit.
14	Code 14 - Pump diving	Check pump for obstruction or debris.
15	Code 15 - Motor not spinning, no motor current detected	Turn sprayer **OFF** and unplug the sprayer and wait 5 minutes. Remove shroud. Check cables and connections. Check control board. Check motor. See **Control Board**.

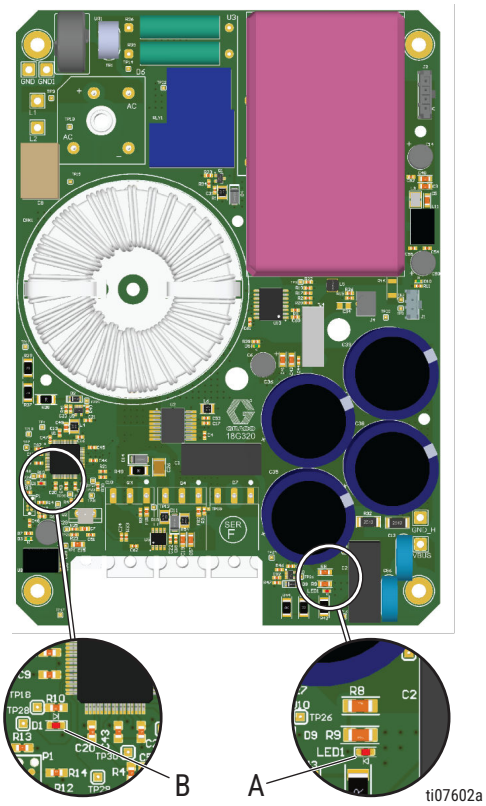
CODE	MESSAGE	ACTION
16	Code 16 - High temperature	Control board thermal protection enabled. Turn sprayer **OFF** and allow to cool before restarting. It may take as long as an hour for the unit to fully cool. Ensure vents are clean prior to restarting.
17	Code 17 - Control board plugged into wrong voltage Mark XV and Mark HP ONLY: Amplifi control not working.	Turn sprayer **OFF** and unplug the sprayer, Locate good voltage supply to prevent damage to electronic. See **Control Board**. Check cable between amplifi board and control board. Ensure both ends are connected. Replace amplifi board if error continues.

AMPLIFI TROUBLESHOOTING

MARK XV AND MARK HP ONLY

Bus Voltage LED (A) and Controller LED (B) should both be on ON for a correctly functioning Amplifi board.

1. No BUS Voltage LED (A): This signifies no power coming into the Amplifi board. Check incoming cables for loose connections. If this does not resolve the issue, replace the Amplifi board.
2. Bus Voltage LED (A) is ON, but Controller LED (B) is OFF. Replace Amplifi board.
3. One blink of Controller LED (B): Incoming voltage is too low. Check power supply.
4. Two blinks of Controller LED (B): Incoming voltage is too high. Check power supply.
5. Three, four, five, or six blinks of Controller LED (B): Amplifi board problem. Replace Amplifi board.



CONTROL BOARD

⚠ WARNING



To avoid injury from electrical shock and moving parts, do not remove interior motor cover or touch electrical components.

Symptom: Sprayer does not run or stop running.

1. Check voltage supply to the board.
   a. With multimeter, measure the AC voltage from the end of the power cord (L1in and L2in, see **Electrical Schematic**). AC voltage should read 100-127 VAC or 220-240 VAC, depending on location.
   b. If voltage is low or not present, check power supply from wall. If power supply from wall is good, unplug from wall and allow 5 minutes for voltage to drain from board.
   c. Check wiring, power cord, or connectors for damage.
2. Check for physical damage.

MOTOR

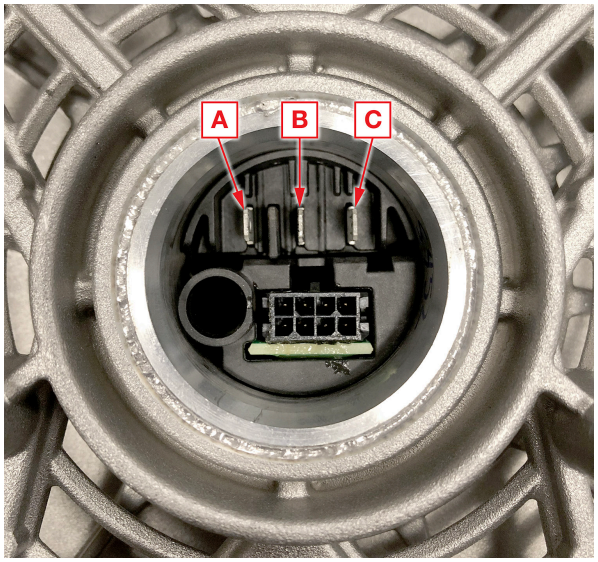
⚠ WARNING



To avoid injury from electrical shock when covers are removed, wait 5 minutes after disconnecting power cord for stored electricity to dissipate.

Symptom: Unit does not run, runs rough, or is noisy.

1. Perform the **Pressure Relief Procedure**.
2. Turn sprayer **OFF** and unplug the power cord.
3. Remove the top sprayer shroud.
4. Remove pump.
5. Remove the control board.
6. Motor should spin freely with no binding or excessive cogging. If motor binds or requires excessive force to spin, replace motor.
7. With multimeter, measure the resistance between the following phases:
   a. A to B
   b. B to C
   c. A to C



8. Resistance values should be equal. If resistance values are significantly different from one another (>0.5 Ω), replace motor.
9. Install pump.
10. Install control board.
11. Install top sprayer shroud.

When replacing parts, follow the instructions to restore the components on the Electric Airless Sprayers.

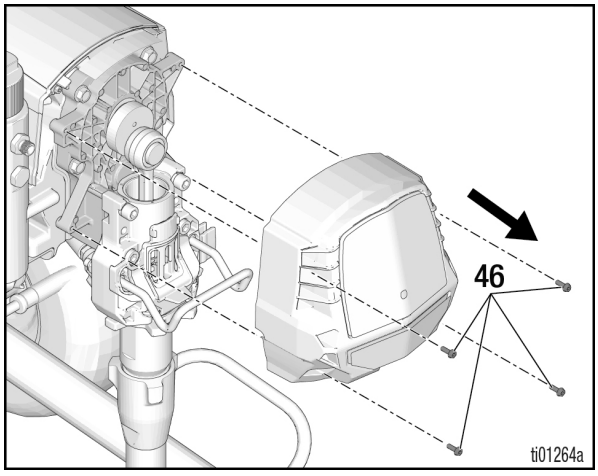
REMOVING THE SHROUD

⚠ WARNING

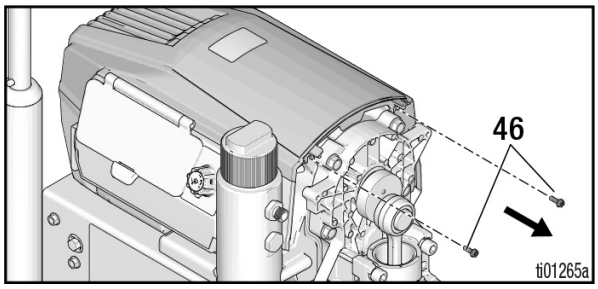


To avoid injury from electrical shock and moving parts, do not remove interior motor cover and wait 5 minutes after disconnecting power cord for stored electricity to dissipate.

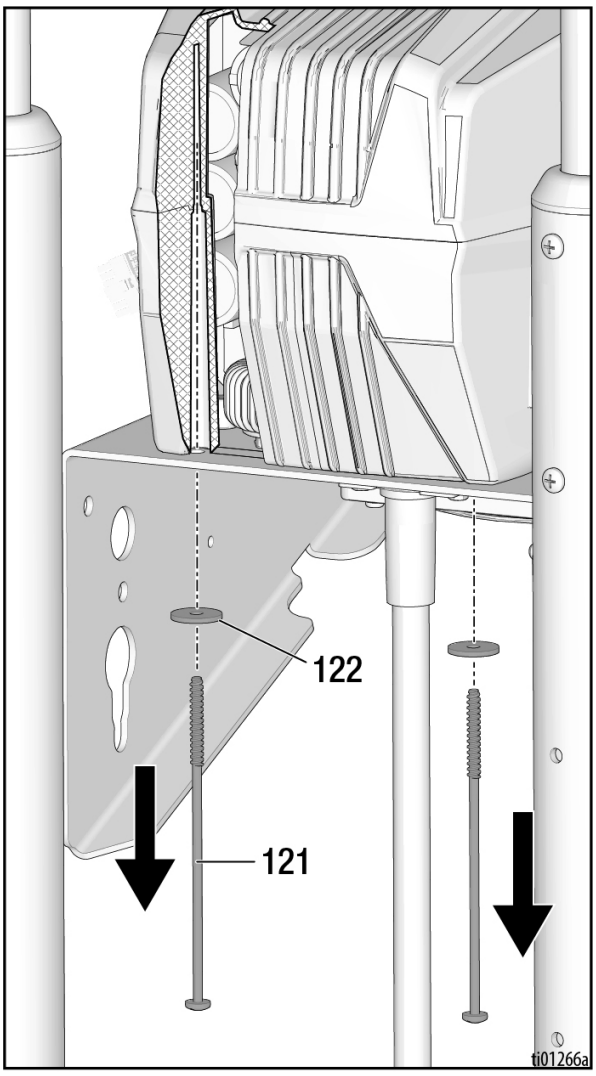
1. Perform the **Pressure Relief Procedure**.
2. Turn sprayer **OFF** and unplug the power cord.
3. Using a 1/4 in. socket, remove four screws retaining front cover.



4. Using a 1/4 in. socket, remove two front screws.

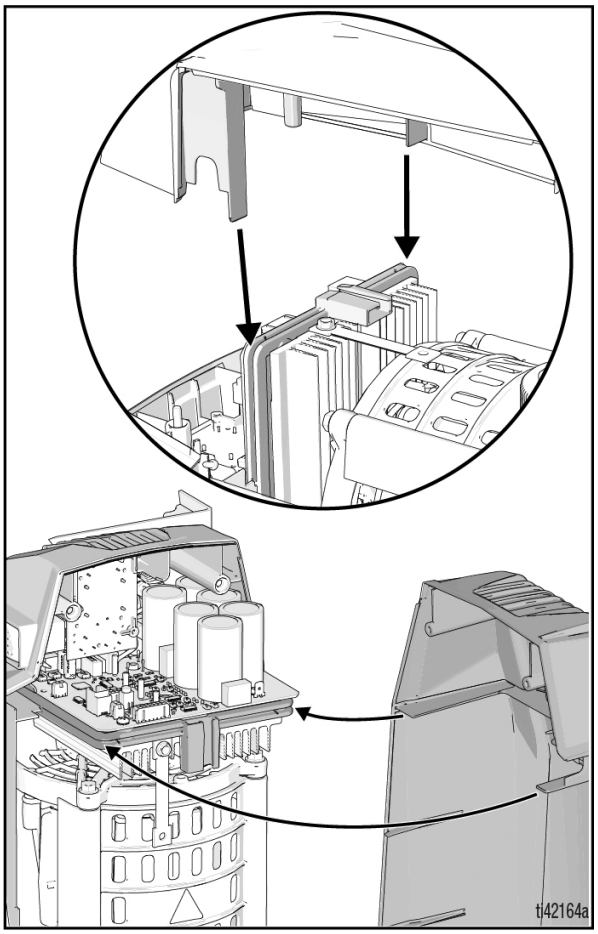


5. Using a T20 tool, remove two Torx T20 screws. Remove top shroud.



REPLACING THE SHROUD

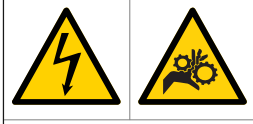
1. Ensure tabs on inside top of shroud align with grooves on the control board channel. The top shroud tabs must slide into the control board grooves. Side edges should align to bottom shroud in the side grooves.



2. Push gently down on top of the shroud and using a T20 tool, tighten two Torx T20 screws to 12–16 in.-lb.
3. Using a 1/4 in. socket, tighten two front screws to 20–25 in-lb.
4. Align front cover and using a 1/4 in. socket, tighten front screws to 20–25 in-lb.

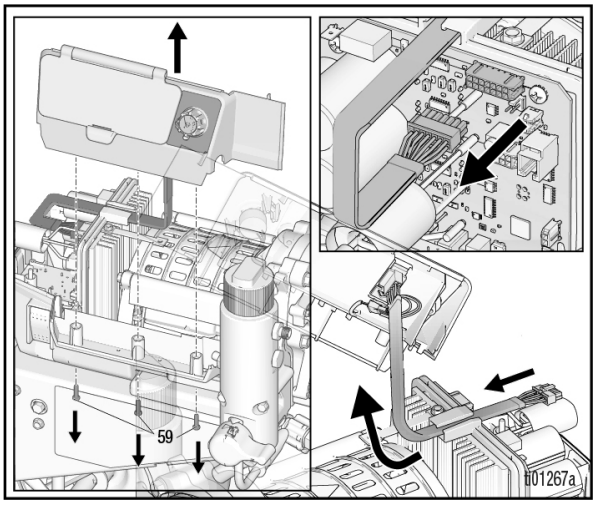
REMOVING THE POTENTIOMETER

⚠ WARNING

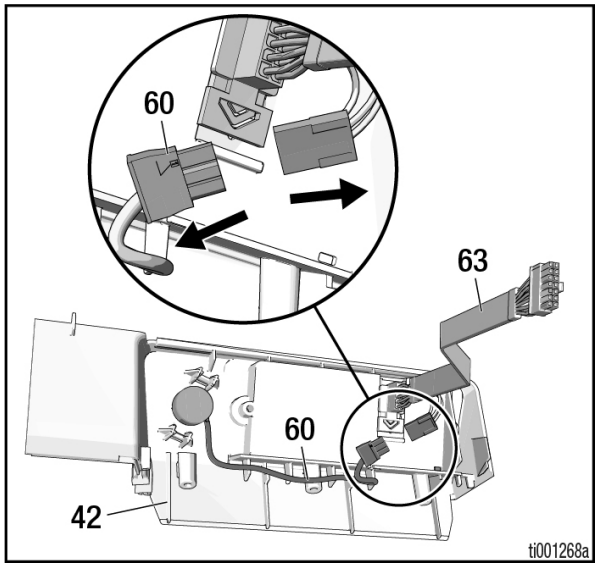


To avoid injury from electrical shock and moving parts, do not remove interior motor cover and wait 5 minutes after disconnecting power cord for stored electricity to dissipate.

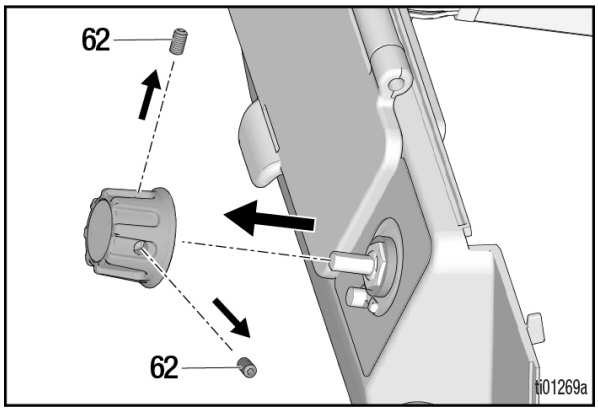
1. Remove shroud. See **Remove Shroud**.
2. Using a T20 tool, remove three Torx T20 screws holding display.
3. Remove side shroud at control board by disconnecting the display harness.



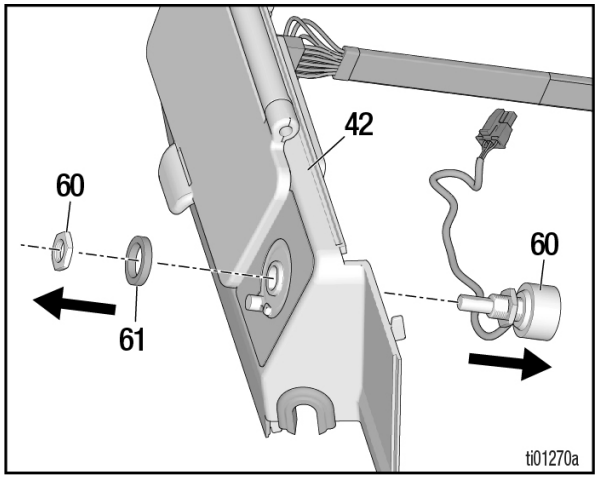
4. Disconnect potentiometer cable connector.



5. Remove potentiometer knob by backing out the two remaining set screws with a 5/64 inch hex key.

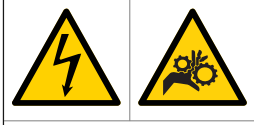


6. Using a 1/2 in. socket, remove potentiometer by unscrewing retaining nut from display.



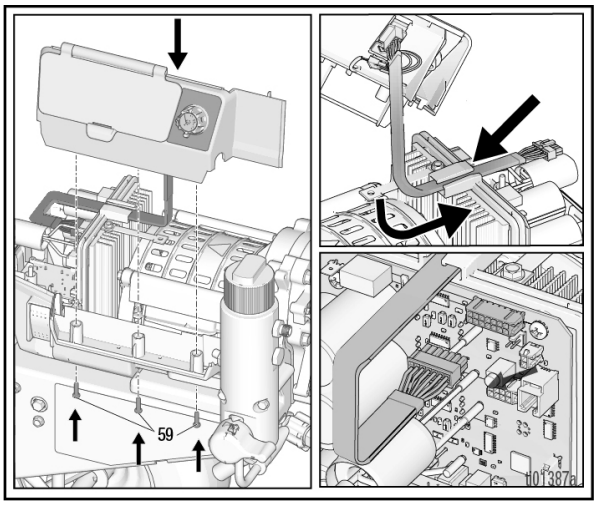
INSTALLING THE POTENTIOMETER

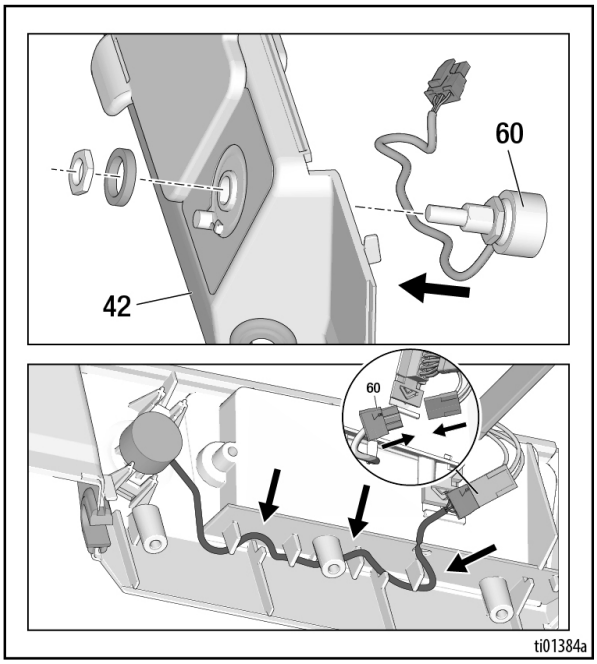
⚠ WARNING



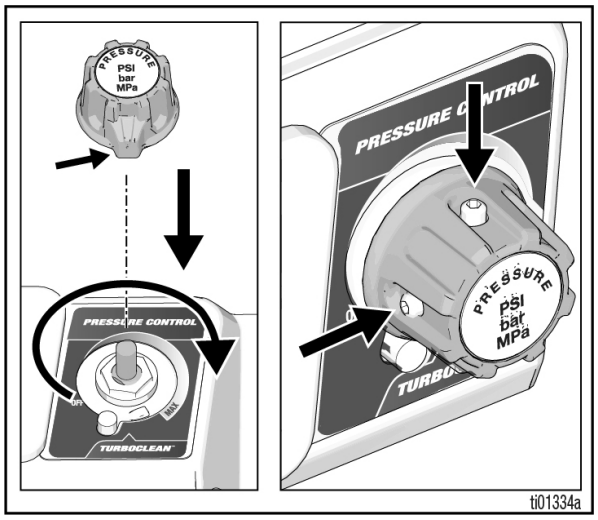
To avoid injury from electrical shock and moving parts, do not remove interior motor cover and wait 5 minutes after disconnecting power cord for stored electricity to dissipate.

1. Reassemble potentiometer by sliding it into place on the side shroud. Make sure that the wires are orientated down. Torque potentiometer retaining nut to 8–10 in-lb Route the potentiometer wire in bottom of side shroud and connect to display harness.





2. Rotate potentiometer shaft clockwise until it stops, then assemble gasket and knob with indicator pointed straight down (TurboClean position). Apply downward force to knob and tighten both set screws to create light drag on gasket. Torque set screws to 10–15 in-lb.



3. Reassemble side shroud to bottom shroud. Torque screws to 12–16 in-lb Reconnect display harness to control board. Make sure to route display harness through locating feature on top side of control board.
4. Reassemble and replace shroud. See **Replace Shroud**.
5. Calibrate knob. See **Knob Calibration**.

The parts illustration and list shows the components of the Electric Airless Sprayers and their connections that are required for assembly, repair, and maintenance.

695 XT LO-BOY PARTS

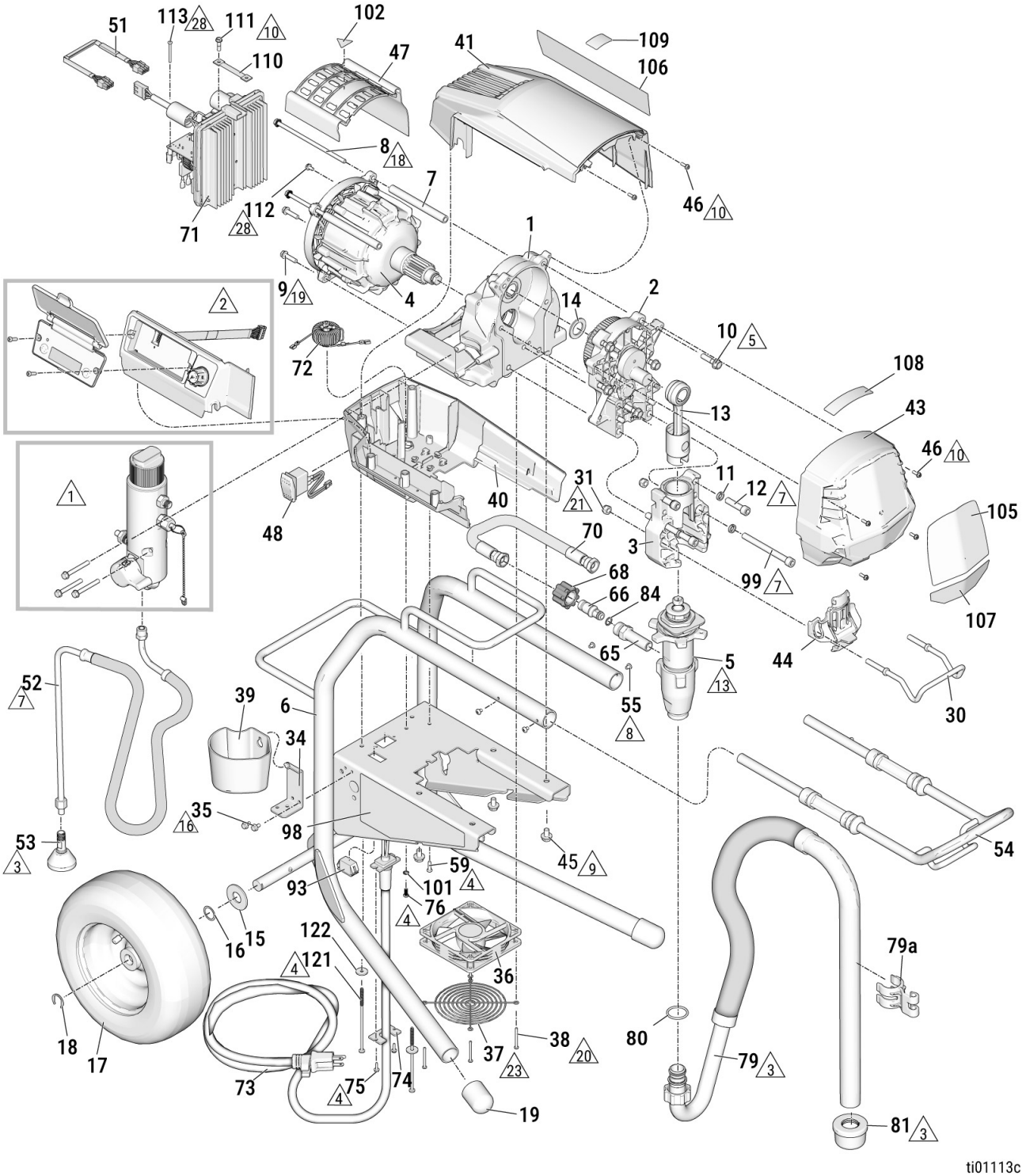


Figure 14-1: 695 XT Lo-Boy Parts Diagram

Table 14-1: 695 XT Lo-Boy Parts List

REF.	PART	DESCRIPTION	QTY.
1	2003292	CHASSIS, *includes 45*	1
2	2003289	HOUSING, *includes 10, 14*	1
3	2003294	HOUSING, bearing, *includes 11, 12, 30, 31, 32, 33, 44, 99*	1
4	2003298	MOTOR, *includes 7, 8, 9, 47, 102*	1
5	2001548	PUMP, displacement, *includes 65, 80*	1
6	20B190	FRAME, XT, 695 Lo-Boy	1
7	19B587	SPACER, tie rod, motor	2
8	19C928	SCREW, cap	2
9	119426	SCREW, mach., hex washer hd.	2
10	15C753	SCREW, mach., hex wash hd.	5
11	106115	WASHER, lock	4
12	17E788	SCREW, cap, 3/8 x 1.5	2
13	19D814	ROD, connecting, XT	1
14	116191	WASHER, thrust	1
15	156306	WASHER, flat	2
16	116038	WASHER, wave spring	2
17	119420	WHEEL, pneumatic	2
18	15E891	CLIP, retaining	2
19	19D306	CAP, leg	2
30	16C457	HANGER, pail	1
31	111040	NUT, lock, insert, nylon	2
34	15F952	BRACKET, drain cup	1
35	114423	SCREW, hex hd.	2
36	19D923	FAN, 12V	1
37	19D924	GUARD, fan	1
38	117683	SCREW, mach, phil pan hd.	4
39	276975	CUP, drain	1
40	2003286	SHIELD, motor, bottom, *includes 48, 59*	1
41	2003283	SHIELD, motor, top, *includes 46, 59*	1
43	2003281	COVER, front, *includes 46*	1
44	20B130	COVER, pump rod	1
45	111801	SCREW, cap, hex hd.	4
46	2001659	SCREW, mach, slot hex wash hd.	6
47	19D292	COVER, motor	1
48	116752	SWITCH, rocker	1
51	19B596	HARNESS, encoder	1
52	20B648	HOSE, drain, XT, Lo-Boy	1
53	241920	DEFLECTOR, threaded	1
54	19D794	HANDLE, Lo-Boy, assy	1
55	109032	SCREW, mach.	1
59	19D307	SCREW, mach., torx pan hd.	1
65	20B230	FITTING, pump	1
66	16X833	FITTING, quick disconnect	1
68	120583	NUT, hand	1
70	2003296	HOSE, coupled, *includes 66, 68, 84*	1
71		BOARD, control	1
	2003254	100-120VAC	
	2003255	220-240VAC	
72		CHOKE, ground, *includes 76, 101*	1
	2003268	North America, Japan, Taiwan	
	2003269	Rest of World	

REF.	PART	DESCRIPTION	QTY.
73	See Power Cord Parts Diagram and List	CORD, power, *includes 74, 75*	1
74	20B466	RETAINER, power cord	1
75	2003004	SCREW, mach., slot, hex wash hd.	2
76	2003504	SCREW, mach., serrated hex hd.	1
79	24A437	HOSE, Lo-Boy, sub-assembly, *includes 81*	1
79a	15D000	CLIP, drain line	1
80	118494	PACKING, O-Ring	1
81	189920	KIT, strainer	1
84	107505	PACKING, O-Ring	1
91	See Spray Gun and Hose Parts Diagram and List	HOSE	1
98 ▲	See Labels	LABEL, safety, warning	1
99	20B730	SCREW, cap, sch., 3/8 x 4.0, SST	2
101	100718	WASHER	1
102 ▲	2001766	LABEL, safety, warning, moving parts	1
105	See Labels	LABEL, brand, front	1
106	See Labels	LABEL, brand, side	1
107	See Labels	LABEL, brand, Xtreme Torque	1
108	See Labels	LABEL, brand, QR, XT	1
109	16D576	LABEL, brand, Made in USA	1
110	2002717	HARNESS, ground, braided (230VAC models only)	1

REF.	PART	DESCRIPTION	QTY.
111	119791	SCREW, mach., hex wash hd. (230VAC models only)	1
112	114391	SCREW, grounding (230VAC models only)	1
113	119236	SCREW (230VAC models only)	2
121	2005199	SCREW, #10, 5 in.	2
122	120339	WASHER, flat	2

695 XT, 795 XT, MARK IV STANDARD HI-BOY PARTS

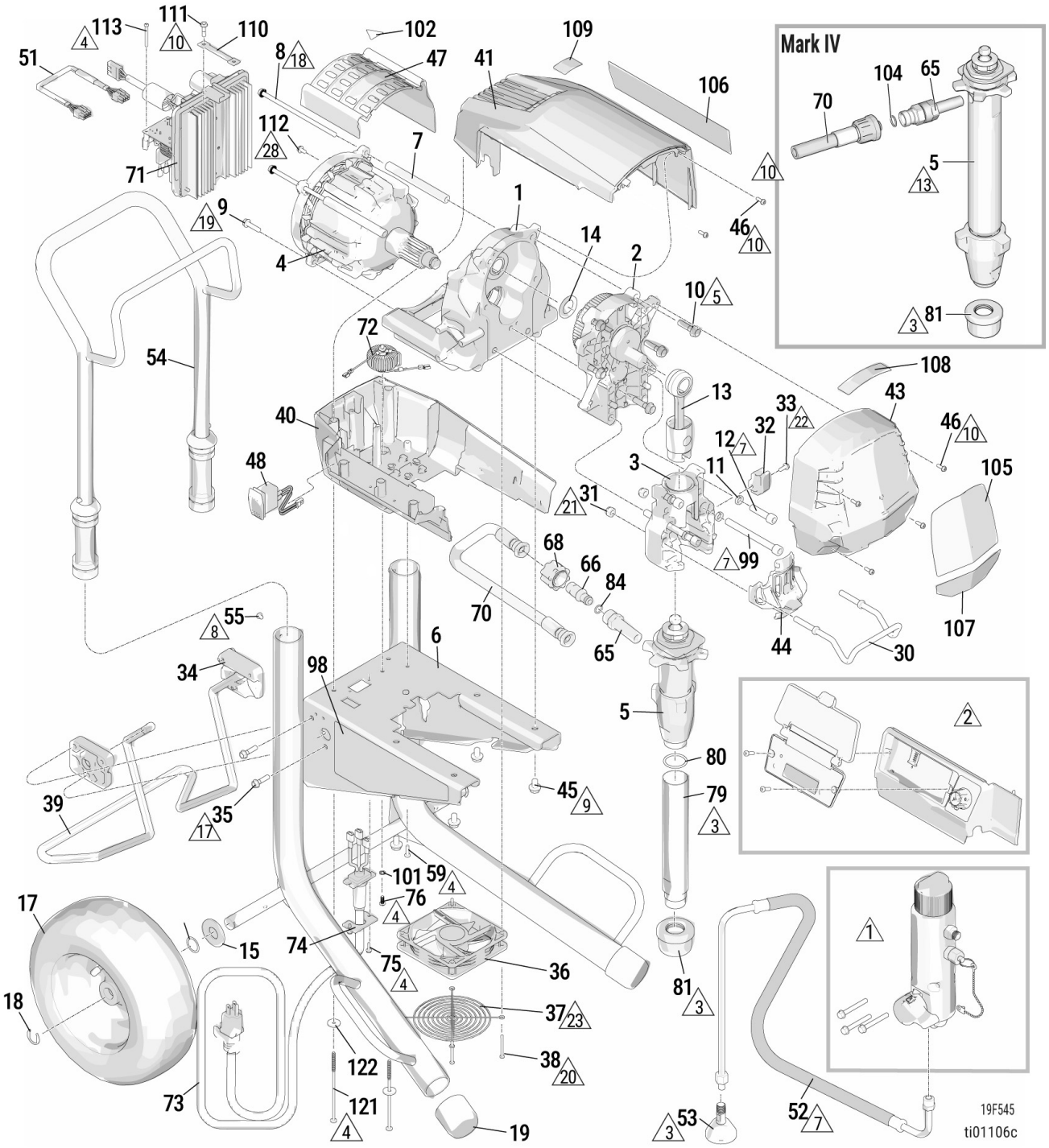


Figure 14-2: 695 XT, 795 XT, Mark IV Standard Hi-Boy Parts Diagram

Table 14-2: 695 XT, 795 XT, Mark IV Standard Hi-Boy Parts List

REF.	PART	DESCRIPTION	QTY.
1	2003292	CHASSIS, *includes 45*	1
2		HOUSING, drive, *includes 10, 14*	1
	2003289	Model 695	
	2003290	Models 795/Mark IV	
3	2003294	HOUSING, bearing, *includes 11, 12, 30, 31, 32, 33, 44, 99*	1
4		MOTOR, *includes 7, 8, 9, 47, 102*	1
	2003298	Model 695	
	2003299	Models 795	
	2005784	Mark IV	
5		PUMP, displacement	1
	2001548	Model 695/795, *includes 65, 80*	
	2001552	Model Mark IV, *includes 65*	
6	19D663	FRAME, XT, 695/795/Mark IV	1
7	19B587	SPACER, tie rod, motor	2
8	19C928	SCREW, cap	2
9	119426	SCREW, mach., hex washer hd.	2
10	15C753	SCREW, mach., hex wash hd.	5
11	106115	WASHER, lock	4
12	17E788	SCREW, cap, 3/8 x 1.5	2
13	19D814	ROD, connecting, XT	1
14	116191	WASHER, thrust	1
15	156306	WASHER, flat	2
16	116038	WASHER, wave spring	2
17	119420	WHEEL, pneumatic	2
18	15E891	CLIP, retaining	2
19	276974	CAP, leg	2
30	16C457	HANGER, pail	1
31	111040	NUT, lock, insert, nylon	2
32	16X203	CLIP, drain line	1
33	118444	SCREW, mach., slot hex wash hd.	1
34	15C982	CAM, cart	2
35	114531	SCREW, mach., hex washer hd.	4
36	19D923	FAN, 12V	1
37	19D924	GUARD, fan	1
38	117683	SCREW, mach., phil pan hd.	4
39	19D921	SUPPORT, kickstand, universal, XT	1
40	2003286	SHIELD, motor, bottom, *includes 48, 59*	1
41	2003283	SHIELD, motor, top, *includes 46, 59*	1
43	2003281	COVER, front, *includes 46*	1
44	20B130	COVER, pump rod	1
45	111801	SCREW, cap, hex hd.	4
46	2001659	SCREW, mach, slot hex wash hd.	6
47	19D292	COVER, motor	1
48	116752	SWITCH, rocker	1
51	19B596	HARNESS, encoder	1
52	20B342	HOSE, drain, XT	1
53	241920	DEFLECTOR, threaded	1
54	24A250	HANDLE, assy	1
55	109032	SCREW, mach.	4

REF.	PART	DESCRIPTION	QTY.
59	19D307	SCREW, mach., torx pan hd.	1
65		FITTING, pump	1
	20B230	Models 695/795	
	2004023	Model Mark IV	
66	16X833	FITTING, quick disconnect (models 695/795 only)	1
68	120583	NUT, hand (models 695/795 only)	1
70		HOSE, coupled	1
	2003296	Models 695/795, *includes 66, 68, 84*	
	2003297	Model Mark IV, *includes 104*	
71		BOARD, control	1
	2003256	110VAC (UK)	
	2003254	100-120VAC	
	2003255	220-240VAC	
72		CHOKE, ground, *includes 76, 101*	1
	2003268	North America, Japan, Taiwan	
	2003269	Rest of world	
73	See Spray Gun and Hose Parts Diagram and List	CORD, power, *includes 74, 75*	1
74	20B466	RETAINER, power cord	1
75	2003004	SCREW, mach., torx., self-tapping	2
76	2003504	SCREW, mach., serrated hex hd.	1
79	19D828	TUBE, intake, XT (models 695/795 only)	1

REF.	PART	DESCRIPTION	QTY.
80	118494	PACKING, O-Ring (models 695/795 only)	1
81	189920	KIT, strainer	1
84	107505	PACKING, O-Ring	1
91	See Spray Gun and Hose Parts Diagram and List	HOSE	1
97	See Power Cord Parts Diagram and List	HOSE, whip, Mark IV only	1
98 ▲	See Labels	LABEL, safety, warning	1
99	20B730	SCREW, cap, sch., 3/8 x 4.0 SST	2
101	100718	WASHER	1
102 ▲	2001766	LABEL, safety, warning, moving parts	1
104	102982	O-ring	1
105	See Labels	LABEL, brand, front	1
106	See Labels	LABEL, brand, side	1
107	See Labels	LABEL, brand, Xtreme Torque	1
108	See Labels	LABEL, brand, QR, XT	1
109	16D576	LABEL, brand, Made in USA	1
110	2002717	HARNESS, ground, braided (230VAC and 110 UK)	1
111	119791	SCREW, mach., hex wash hd. (230VAC and 110 UK)	1
112	114391	SCREW, grounding (230VAC and 110 UK)	1
113	119236	SCREW (230VAC, 110 UK models only)	2
121	2005199	SCREW, #10, 5 in.	2

REF.	PART	DESCRIPTION	QTY.
122	120339	WASHER, flat	2

1095 XT, MARK V, MARK VII STANDARD HI-BOY PARTS

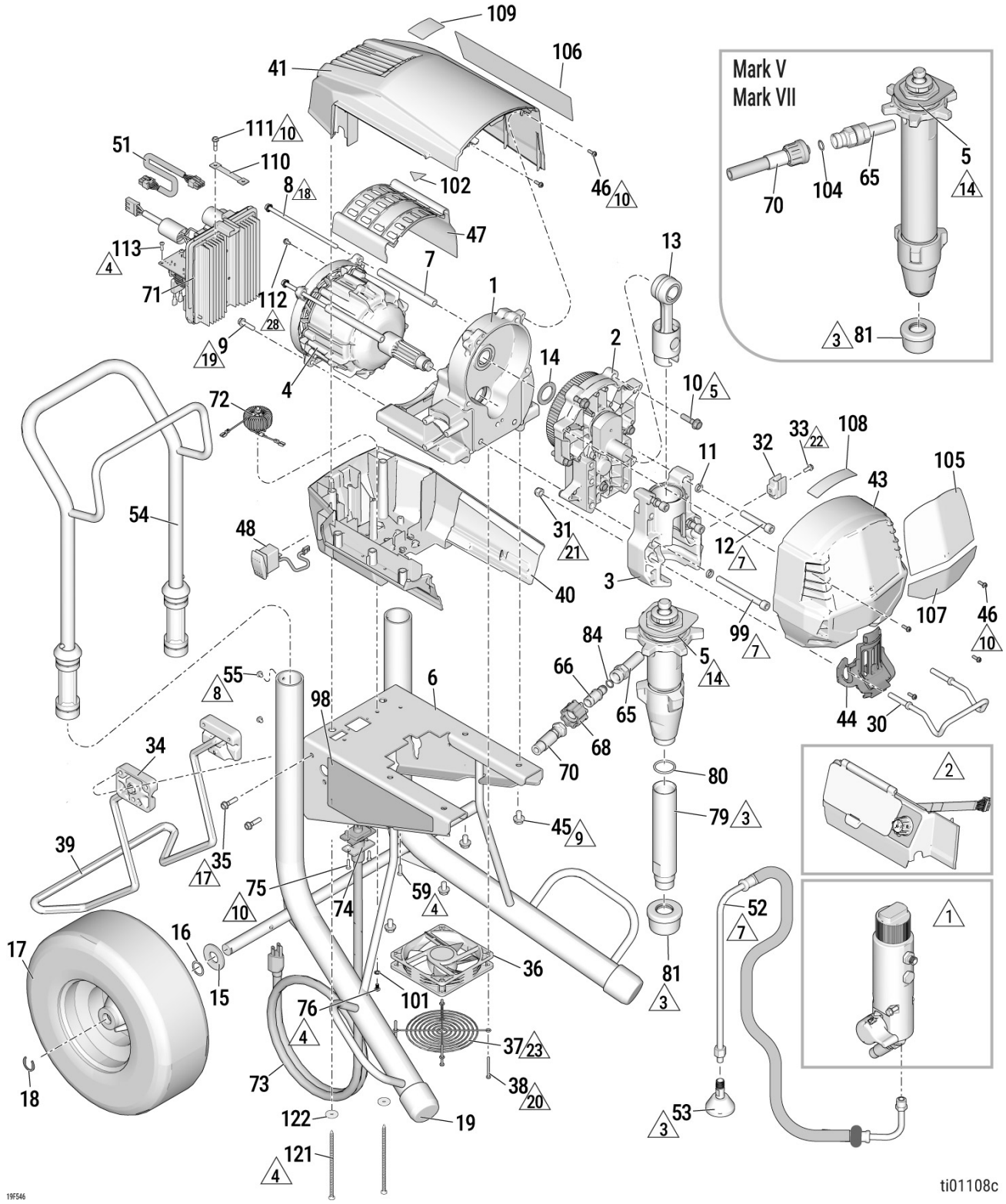


Figure 14-3: 1095 XT, Mark V, Mark VII Standard Hi-Boy Parts Diagram

Table 14-3: 1095 XT, Mark V, Mark VII Standard Hi-Boy Parts List

REF.	PART	DESCRIPTION	QTY.
1	2003293	CHASSIS, *includes 45*	1
2	2003291	HOUSING, drive, *includes 10, 14*	1
3	2003295	HOUSING, bearing, *includes 11, 12, 30, 31, 32, 33, 44, 99*	1
4		MOTOR, *includes 7, 8, 9, 47, 102*	1
	2003300	Model 1095	
	2003301	Mark V	
	2003302	Mark VII (EMEA)	
5		PUMP, displacement	1
	2001550	Model 1095, *includes 65, 80*	
	2001554	Model Mark V, *includes 65*	
	2001556	Model Mark VII, *includes 65*	
6	19D664	FRAME, XT, 1095/Mark V/ Mark VII	1
7	19B587	SPACER, tie rod, motor	2
8	19C928	SCREW, cap	2
9	119426	SCREW, mach., hex washer hd.	2
10	15C753	SCREW, mach., hex wash hd.	5
11	106115	WASHER, lock	4
12	17E789	SCREW, cap, 3/8 x 2,25	2
13	24V085	ROD, connecting	1
14	116192	WASHER, thrust	1
15	156306	WASHER, flat	2
16	116038	WASHER, wave spring	2
17	119509	WHEEL, pneumatic	2
18	15E891	CLIP, retaining	2
19	276974	CAP, leg	2
30	16C457	HANGER, pail	1
31	111040	NUT, lock, insert, nylon	2
32	16X203	CLIP, drain line	1
33	118444	SCREW, mach., slot hex wash hd.	1
34	15C982	CAM, cart	2
35	114531	SCREW, mach., hex washer hd.	4
36	19D923	FAN, 12V	1
37	19D924	GUARD, fan	1
38	117683	SCREW, pan head	4
39	19D921	SUPPORT, kickstand, universal, XT	1
40	2003287	SHIELD, motor, bottom, *includes 48, 59*	1
41	2003284	SHIELD, motor, top, *includes 46, 59*	1
43	2003282	COVER, front, *includes 46*	1
44	20B131	COVER, pump rod	1
45	111801	SCREW, cap, hex hd.	4
46	2001659	SCREW, mach, slot hex wash hd.	6
47	19D292	COVER, motor	1
48	116752	SWITCH, rocker	1
51	19B596	HARNESS, encoder	1
52	20B342	HOSE, drain, XT	1
53	241920	DEFLECTOR, threaded	1
54	24A250	HANDLE, assy	1
55	109032	SCREW, mach.	4

REF.	PART	DESCRIPTION	QTY.
59	19D307	SCREW, mach., torx pan hd.	2
65		FITTING, pump	1
	20B230	Model 1095	
	2004023	Models Mark V/Mark VII	
66	16X833	FITTING, quick disconnect (Model 1095 only)	1
68	120583	NUT, hand (Model 1095 only)	1
70		HOSE, coupled	1
	2003296	Model 1095, *includes 66, 68, 84*	
	2003297	Models Mark V/Mark VII, *includes 104*	
71		BOARD, control	1
	2003256	110VAC (UK)	
	2003254	100-120VAC	
	2003255	220-240VAC	
72		CHOKE, ground, *includes 76, 101*	1
	2003268	North America, Japan, Taiwan	
	2003269	Rest of world	
73	See Power Cord Parts Diagram and List	CORD, power, *includes 74, 75*	1
74	20B466	RETAINER, power cord	1
75	2003004	SCREW, mach., torx., self-tapping	2
76	2003504	SCREW, mach., serrated hex hd.	1
79	19F477	TUBE, intake (Model 1095 only)	1

REF.	PART	DESCRIPTION	QTY.
80	118494	PACKING, O-Ring (Model 1095 only)	1
81	189920	STRAINER	1
84	107505	PACKING, O-Ring	1
91	See Spray Gun and Hose Parts Diagram and List	HOSE	1
97	See Power Cord Parts Diagram and List	HOSE, whip	1
98▲	See Labels	LABEL, safety, warning	1
99	20B730	SCREW, cap, SCH, 3/8 x 4.0 SST	2
101	100718	WASHER	1
102▲	2001766	LABEL, safety, warning, moving parts	1
104	102982	O-ring	1
105	See Labels	LABEL, brand, front	1
106	See Labels	LABEL, brand, side	1
107	See Labels	LABEL, brand, Xtreme torque	1
108	See Labels	LABEL, brand, QR, XT	1
109	16D576	LABEL, brand, Made in USA	1
110	2002717	HARNESS, grounded, braided (230VAC and 110 UK models only)	1
111	119791	SCREW, mach., hex wash hd. (230VAC and 110 UK models only)	1
112	114391	SCREW, grounding (230VAC and 110 UK models only)	1
113	119236	SCREW (230VAC, 110 UK models only)	2

REF.	PART	DESCRIPTION	QTY.
121	2005199	SCREW, #10, 5 in.	2

REF.	PART	DESCRIPTION	QTY.
122	120339	WASHER, flat	2

MARK XV STANDARD

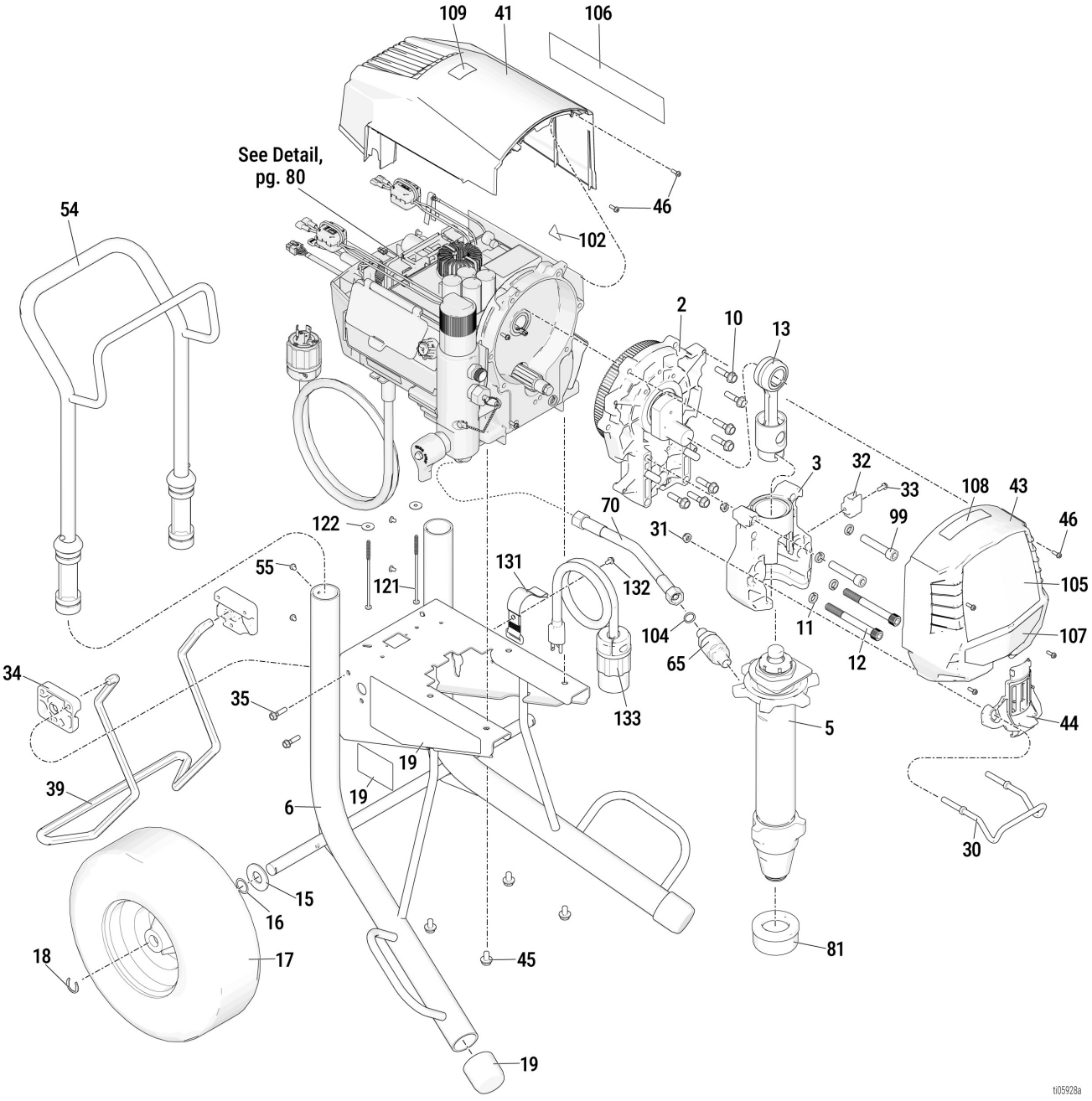


Figure 14-4: Mark XV Standard Parts Diagram

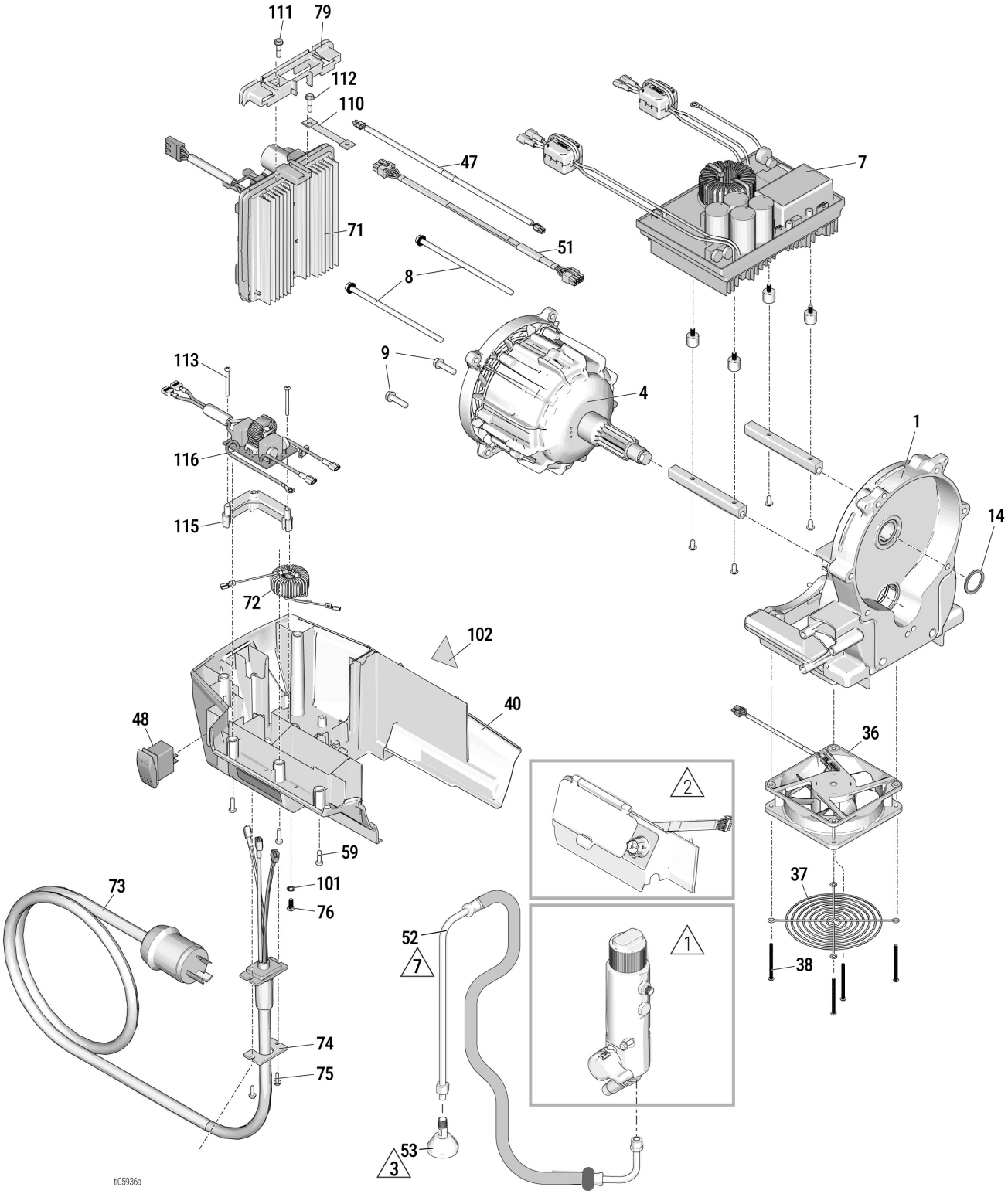


Figure 14-5: Enlarged Housing and Motor Diagram

Table 14-4: Mark XV Standard Parts List

REF.	PART	DESCRIPTION	QTY.
1	2015797	CHASSIS, *includes 45*	1
2	2015798	HOUSING, drive, *includes 10, 14*	1
3	2015799	HOUSING, bearing, *includes 11, 12, 30, 31, 32, 33, 44, 99*	1
4	2014411	MOTOR, *includes 7, 8, 9, 47, 102*	1
5	2015686	PUMP, displacement	1
6	19D664	FRAME, XT, 1095/Mark V/ Mark VII	1
7	2015800	BOARD, amplifi	1
8	19C928	SCREW, cap	2
9	119426	SCREW, mach., hex washer hd.	2
10	15C753	SCREW, mach., hex wash hd.	5
11	106115	WASHER, lock	4
12	17E789	SCREW, cap, 3/8 x 2,25	2
13	2015801	ROD, connecting	1
14	15E767	WASHER, thrust	1
15	116192	WASHER, flat	2
16	116038	WASHER, wave spring	2
17	119509	WHEEL, pneumatic	2
18	15E891	CLIP, retaining	2
19	276974	CAP, leg	2
30	16C457	HANGER, pail	1
31	111040	NUT, lock, insert, nylon	2
32	16X203	CLIP, drain line	1
33	118444	SCREW, mach., slot hex wash hd.	1
34	15C982	CAM, cart	2
35	114531	SCREW, mach., hex washer hd.	4
36	2011960	FAN, 12V	1
37	19D924	GUARD, fan	1
38	117683	SCREW, pan head	4
39	19D921	SUPPORT, kickstand, universal, XT	1
40	2015807	SHIELD, motor, bottom, *includes 48, 59*	1
41	2015808	SHIELD, motor, top, *includes 46, 59*	1
43	2015809	COVER, front, *includes 46*	1
44	2011760	COVER, pump rod	1
45	111801	SCREW, cap, hex hd.	4
46	2001659	SCREW, mach, slot hex wash hd.	6
47	2012691	CABLE, amplifi	1
48	116752	SWITCH, rocker	1
51	19B596	HARNESS, encoder	1
52	20B342	HOSE, drain, XT	1
53	241920	DEFLECTOR, threaded	1
54	24A250	HANDLE, assy	1
55	109032	SCREW, mach.	4
59	19D307	SCREW, mach., torx pan hd.	2
65	2004023	FITTING, pump, Models Mark V/Mark VII	1
70	2003297	HOSE, coupled	1
71	2015813	BOARD, control	1
72		CHOKE, ground, *includes 76, 101*	1
	2003268	North America, Japan, Taiwan	

REF.	PART	DESCRIPTION	QTY.
	2003269	Rest of world	
73	See Power Cords	CORD, power, *includes 74, 75*	1
74	20B466	RETAINER, power cord	1
75	2003004	SCREW, mach., torx., self-tapping	2
76	2003504	SCREW, mach., serrated hex hd.	1
79	20B133	DIVIDER, control	1
81	189920	STRAINER	1
91	See Gun and Hose	HOSE	1
97	See Gun and Hose	HOSE, whip	1
98▲	See Labels	LABEL, safety, warning	1
99	20B730	SCREW, cap, SCH, 3/8 x 4.0 SST	2
101	100718	WASHER	1
102 ▲	2001766	LABEL, safety, warning, moving parts	1
104	102982	O-ring	1
105	See Labels	LABEL, brand, front	1
106	See Labels	LABEL, brand, side	1
107	See Labels	LABEL, brand, Xtreme torque	1
108	See Labels	LABEL, brand, QR, XT	1
109	16D576	LABEL, brand, Made in USA	1
110	2002717	HARNESS, grounded, braided (230VAC and 110 UK models only)	1
111	119791	SCREW, mach., hex wash hd. (230VAC and 110 UK models only)	1

REF.	PART	DESCRIPTION	QTY.
112	114391	SCREW, grounding (230VAC and 110 UK models only)	1
113	119236	SCREW (230VAC, 110 UK models only)	2
121	2005199	SCREW, #10, 5 in.	2
122	120339	WASHER, flat	2

MARK XV PROCONTRACTOR

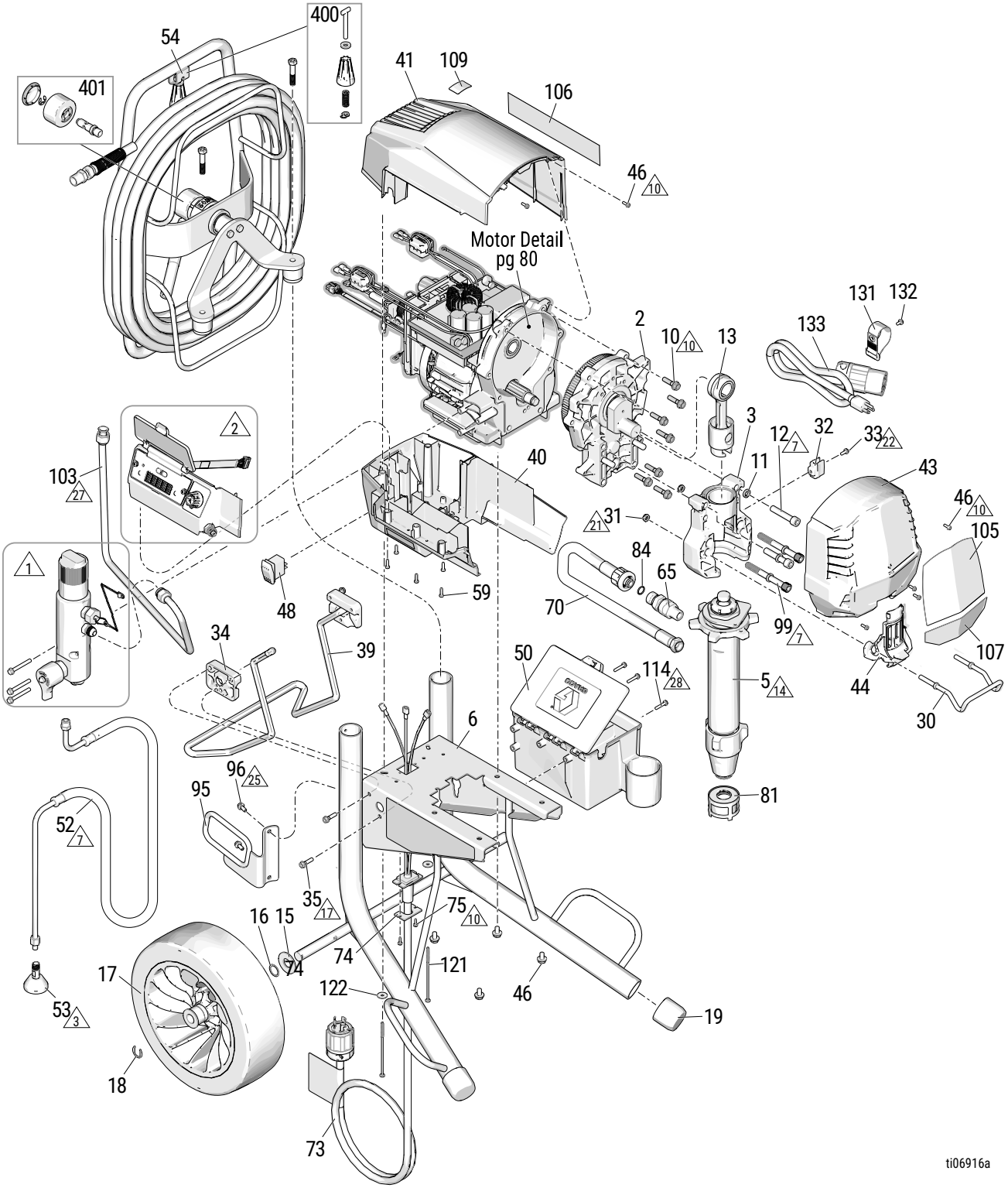


Figure 14-6: Mark XV ProContractor Parts Diagram

Table 14-5: Mark XV ProContractor Parts List

REF.	PART	DESCRIPTION	QTY.
1	2015797	CHASSIS, *includes 45*	1
2	2015798	HOUSING, drive, *includes 10, 14*	1
3	2015799	HOUSING, bearing, *includes 11, 12, 30, 31, 32, 33, 44, 99*	1
4	2014411	MOTOR, *includes 7, 8, 9, 47, 102*	1
5	2015686	PUMP, displacement	1
6	19D664	FRAME, XT, 1095/Mark V/ Mark VII	1
7	2015800	BOARD, amplifi	1
8	19C928	SCREW, cap	2
9	119426	SCREW, mach., hex washer hd.	2
10	15C753	SCREW, mach., hex wash hd.	5
11	106115	WASHER, lock	4
12	17E789	SCREW, cap, 3/8 x 2,25	2
13	2015801	ROD, connecting	1
14	15E767	WASHER, thrust	1
15	116192	WASHER, flat	2
16	116038	WASHER, wave spring	2
17	17E687	TIRE	2
18	15E891	CLIP, retaining	2
19	276974	CAP, leg	2
30	16C457	HANGER, pail	1
31	111040	NUT, lock, insert, nylon	2
32	16X203	CLIP, drain line	1
33	118444	SCREW, mach., slot hex wash hd.	1
34	15C982	CAM, cart	2
35	114531	SCREW, mach., hex washer hd.	4
36	2011960	FAN, 12V	1
37	19D924	GUARD, fan	1
38	117683	SCREW, pan head	4
39	19D921	SUPPORT, kickstand, universal, XT	1
40	2015807	SHIELD, motor, bottom, *includes 48, 59*	1
41	2015808	SHIELD, motor, top, *includes 46, 59*	1
43	2015809	COVER, front, *includes 46*	1
44	2011760	COVER, pump rod	1
45	111801	SCREW, cap, hex hd.	4
46	2001659	SCREW, mach, slot hex wash hd.	6
47	2012691	CABLE, amplifi	1
48	116752	SWITCH, rocker	1
51	19B596	HARNESS, encoder	1
52	20B342	HOSE, drain, XT	1
53	241920	DEFLECTOR, threaded	1
54	25V146	REEL, hose	1
55	109032	SCREW, mach.	4
59	19D307	SCREW, mach., torx pan hd.	2
65	2004023	FITTING, pump, Models Mark V/Mark VII	1
70	2003297	HOSE, coupled	1
71	2015813	BOARD, control	1
72		CHOKE, ground, *includes 76, 101*	1
	2003268	North America, Japan, Taiwan	

REF.	PART	DESCRIPTION	QTY.
	2003269	Rest of world	
73	See Power Cords	CORD, power, *includes 74, 75*	1
74	20B466	RETAINER, power cord	1
75	2003004	SCREW, mach., torx., self-tapping	2
76	2003504	SCREW, mach., serrated hex hd.	1
79	20B133	DIVIDER, control	1
81	189920	STRAINER	1
91	See Gun and Hose	HOSE	1
97	See Gun and Hose	HOSE, whip	1
98▲	See Labels	LABEL, safety, warning	1
99	20B730	SCREW, cap, SCH, 3/8 x 4.0 SST	2
101	100718	WASHER	1
102▲	2001766	LABEL, safety, warning, moving parts	1
103	2002230	TUBE, formed	1
104	102982	O-ring	1

REF.	PART	DESCRIPTION	QTY.
105	See Labels	LABEL, brand, front	1
106	See Labels	LABEL, brand, side	1
107	See Labels	LABEL, brand, Xtreme torque	1
108	See Labels	LABEL, brand, QR, XT	1
109	16D576	LABEL, brand, Made in USA	1
110	2002717	HARNESS, grounded, braided (230VAC and 110 UK models only)	1
111	119791	SCREW, mach., hex wash hd. (230VAC and 110 UK models only)	1
112	114391	SCREW, grounding (230VAC and 110 UK models only)	1
113	119236	SCREW (230VAC, 110 UK models only)	2
121	2005199	SCREW, #10, 5 in.	2
122	120339	WASHER, flat	2
400	2009285	KIT, handle	1
401	2009287	KIT, hose reel swivel	1

MARK HP

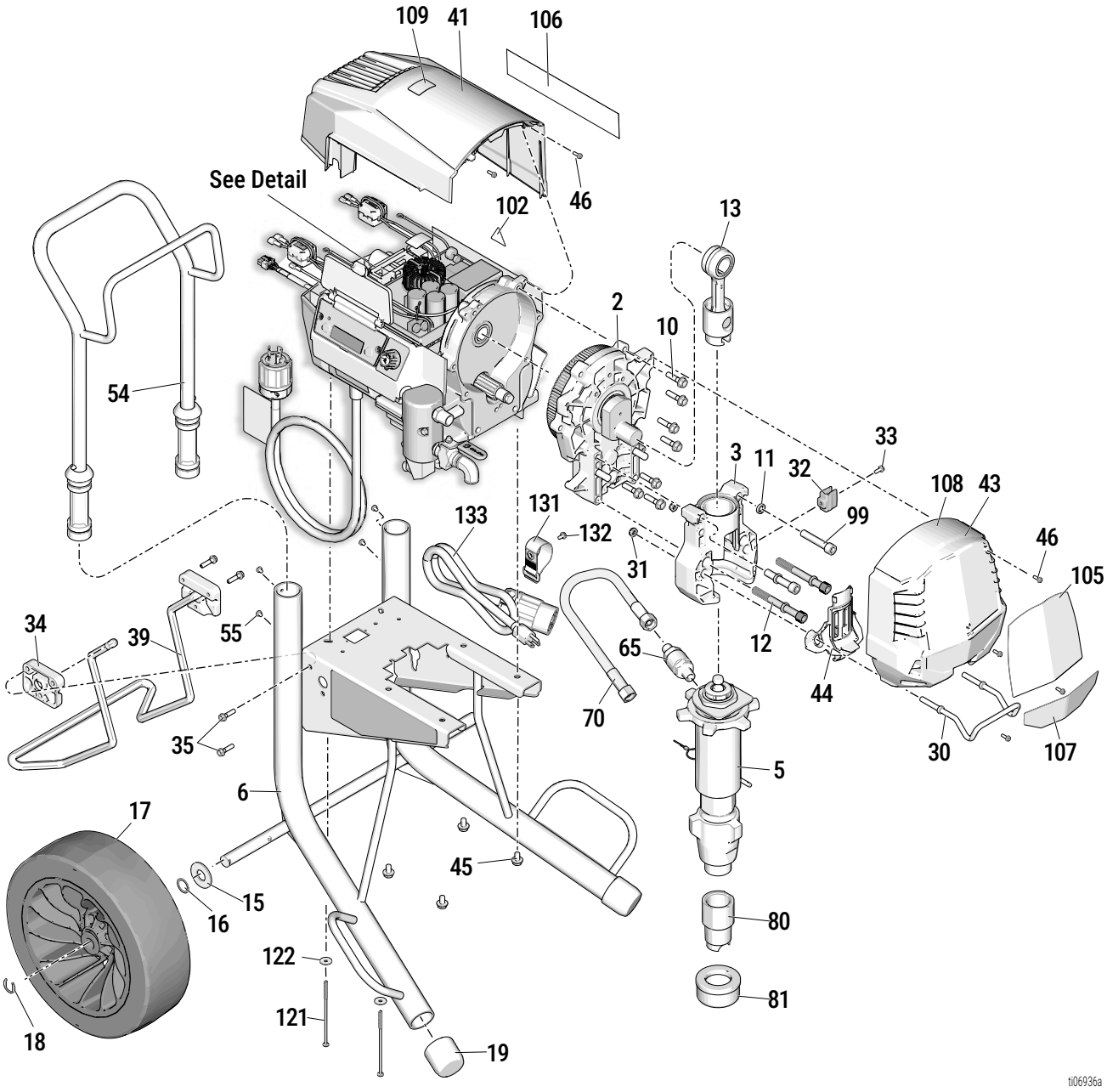


Figure 14-7: Mark HP Parts Diagram

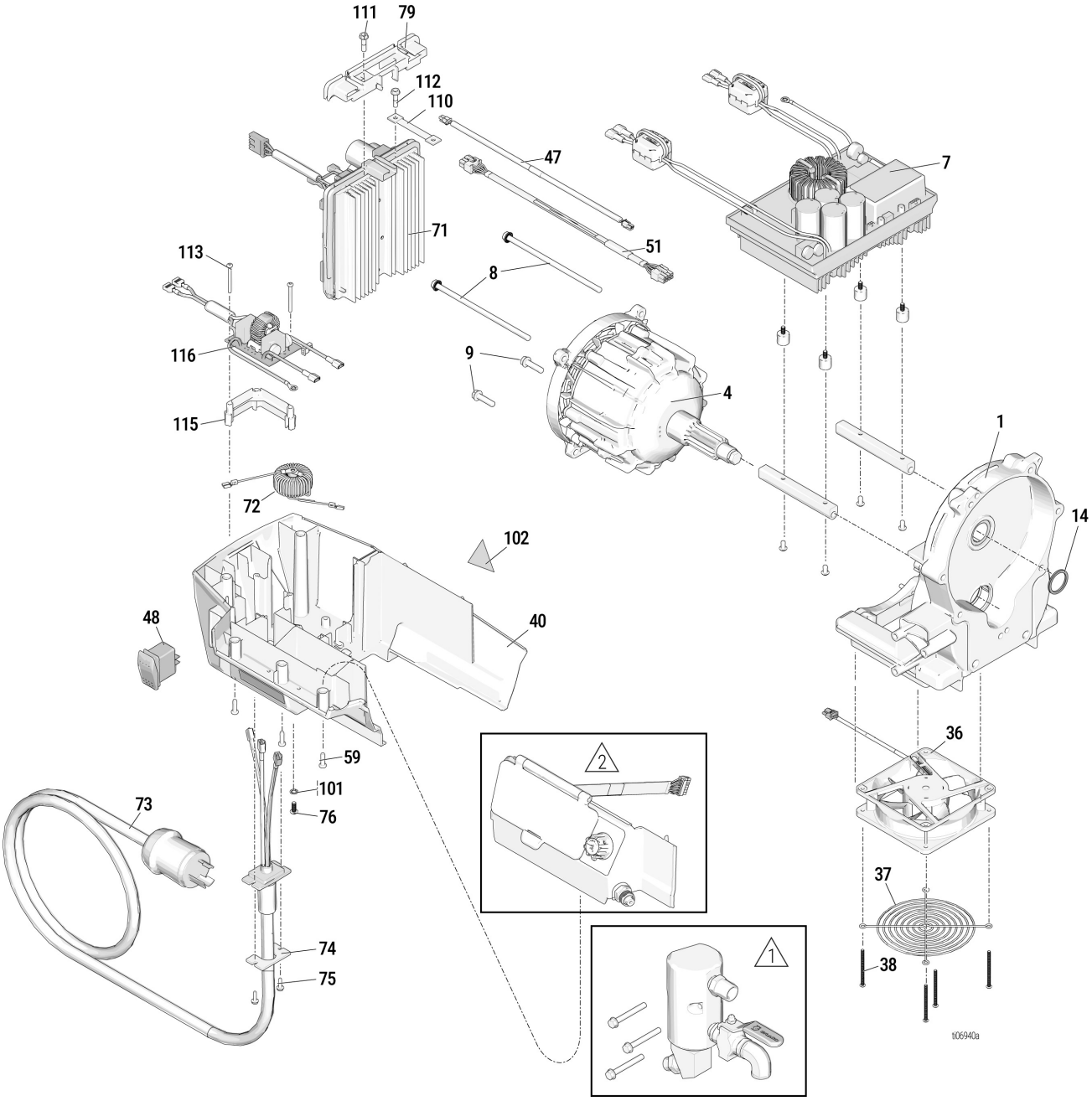


Figure 14-8: Enlarged Housing and Motor Diagram

Table 14-6: Mark HP Parts List

REF.	PART	DESCRIPTION	QTY.
1	2015797	CHASSIS, *includes 45*	1
2	2015798	HOUSING, drive, *includes 10, 14*	1
3	2015799	HOUSING, bearing, *includes 11, 12, 30, 31, 32, 33, 44, 99*	1
4	2014411	MOTOR, *includes 7, 8, 9, 47, 102*	1
5	2015703	PUMP, displacement	1
6	19D664	FRAME, XT, 1095/Mark V/ Mark VII	1
7	2015800	BOARD, amplifi	1
8	19C928	SCREW, cap	2
9	119426	SCREW, mach., hex washer hd.	2
10	15C753	SCREW, mach., hex wash hd.	5
11	106115	WASHER, lock	4
12	17E789	SCREW, cap, 3/8 x 2,25	2
13	2015815	ROD, connecting	1
14	15E767	WASHER, thrust	1
15	116192	WASHER, flat	2
16	116038	WASHER, wave spring	2
17	17E687	TIRE	2
18	15E891	CLIP, retaining	2
19	276974	CAP, leg	2
30	16C457	HANGER, pail	1
31	111040	NUT, lock, insert, nylon	2
32	16X203	CLIP, drain line	1
33	118444	SCREW, mach., slot hex wash hd.	1
34	15C982	CAM, cart	2
35	114531	SCREW, mach., hex washer hd.	4
36	2011960	FAN, 12V	1
37	19D924	GUARD, fan	1
38	117683	SCREW, pan head	4
39	19D921	SUPPORT, kickstand, universal, XT	1
40	2015807	SHIELD, motor, bottom, *includes 48, 59*	1
41	2015808	SHIELD, motor, top, *includes 46, 59*	1
43	2015809	COVER, front, *includes 46*	1
44	2011760	COVER, pump rod	1
45	111801	SCREW, cap, hex hd.	4
46	2001659	SCREW, mach, slot hex wash hd.	6
47	2012691	CABLE, amplifi	1
48	116752	SWITCH, rocker	1
51	19B596	HARNESS, encoder	1
54	24A250	HANDLE, assy	1
55	109032	SCREW, mach.	4
59	19D307	SCREW, mach., torx pan hd.	2
65	2015814	VALVE, check	1
70	H73802	HOSE, coupled	1
71	2015813	BOARD, control	1
72		CHOKE, ground, *includes 76, 101*	1
	2003268	North America, Japan, Taiwan	
	2003269	Rest of world	
73	See Power Cords	CORD, power, *includes 74, 75*	1

REF.	PART	DESCRIPTION	QTY.
74	20B466	RETAINER, power cord	1
75	2003004	SCREW, mach., torx., self-tapping	2
76	2003504	SCREW, mach., serrated hex hd.	1
79	20B133	DIVIDER, control	1
80	17S992	TUBE, inlet	1
81	237840	STRAINER	1
91	See Gun and Hose	HOSE	1
97	See Gun and Hose	HOSE, whip	1
98▲	See Labels	LABEL, safety, warning	1
99	20B730	SCREW, cap, SCH, 3/8 x 4.0 SST	2
101	100718	WASHER	1
102 ▲	2001766	LABEL, safety, warning, moving parts	1
105	See Labels	LABEL, brand, front	1
106	See Labels	LABEL, brand, side	1
107	See Labels	LABEL, brand, Xtreme torque	1
108	See Labels	LABEL, brand, QR, XT	1
109	16D576	LABEL, brand, Made in USA	1
110	2002717	HARNESS, grounded, braided (230VAC and 110 UK models only)	1
111	119791	SCREW, mach., hex wash hd. (230VAC and 110 UK models only)	1
112	114391	SCREW, grounding (230VAC and 110 UK models only)	1
113	119236	SCREW (230VAC, 110 UK models only)	2

REF.	PART	DESCRIPTION	QTY.
121	2005199	SCREW, #10, 5 in.	2
122	120339	WASHER, flat	2

695 XT, 795 XT, MARK IV PRO HI-BOY PARTS

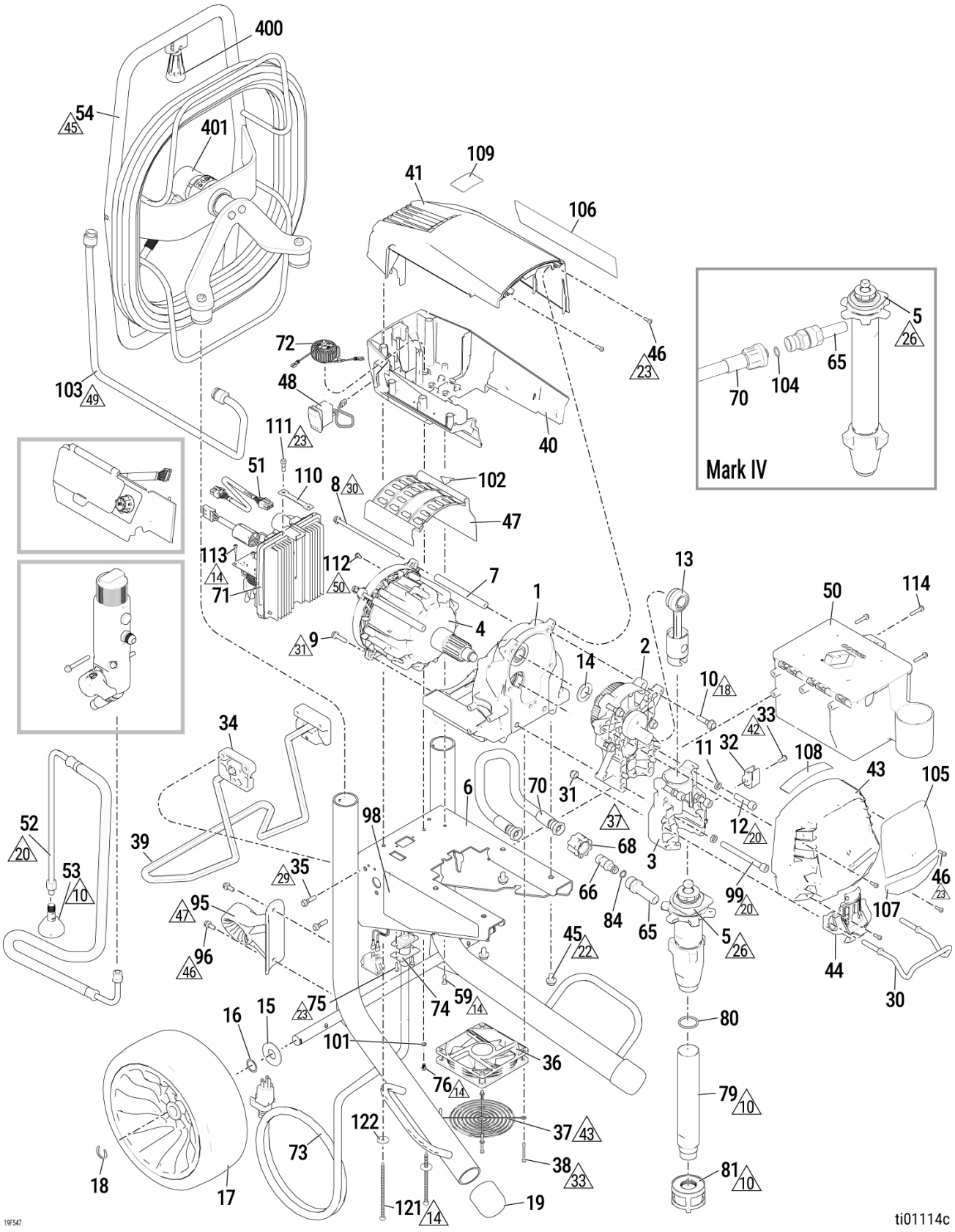


Figure 14-9: 695 XT, 795 XT, Mark IV Pro Hi-Boy Parts Diagram

Table 14-7: 695 XT, 795 XT, Mark IV Pro Hi-Boy Parts List

REF.	PART	DESCRIPTION	QTY.
1	2003292	CHASSIS, *includes 45*	1
2		HOUSING, drive, *includes 10, 14*	1
	2003289	Model 695	
	2003290	Models 795/Mark IV	
3	2003294	HOUSING, bearing, *includes 11, 12, 30, 31, 32, 33, 44, 99*	1
4		MOTOR, *includes 7, 8, 9, 47, 102*	1
	2003298	Model 695	
	2003299	Models 795	
	2005784	Mark IV	
5		PUMP, displacement	1
	2001549	Model 695/795, *includes 65, 80*	
	2001553	Model Mark IV, *includes 65*	
6	19D663	FRAME, XT, 695/795/Mark IV	1
7	19B587	SPACER, tie rod, motor	2
8	19C928	SCREW, cap	2
9	119426	SCREW, mach., hex washer hd.	2
10	15C753	SCREW, mach., hex wash hd.	5
11	106115	WASHER, lock	4
12	17E788	SCREW, cap, 3/8 x 1.5	2
13	19D814	ROD, connecting, XT	1
14	116191	WASHER, thrust	1
15	156306	WASHER, flat	2
16	116038	WASHER, wave spring	2
17	20B198	TIRE, polyurethane, black	2
18	15E891	CLIP, retaining	2
19	276974	CAP, leg	2
30	16C457	HANGER, pail	1
31	111040	NUT, lock, insert, nylon	2
32	16X203	CLIP, drain line	1
33	118444	SCREW, mach., slot hex wash hd.	1
34	15C982	CAM, cart	2
35	114531	SCREW, mach., hex washer hd.	4
36	19D923	FAN, 12V	1
37	19D924	GUARD, fan	1
38	117683	SCREW, mach., hex washer hd.	4
39	19D921	SUPPORT, kickstand, universal, XT	1
40	2003286	SHIELD, motor, bottom, *includes 48, 59*	1
41	2003283	SHIELD, motor, top, *includes 46, 59*	1
43	2003281	COVER, front, *includes 46*	1
44	20B130	COVER, pump rod	1
45	111801	SCREW, cap, hex hd.	4
46	2001659	SCREW, mach, slot hex wash hd.	6
47	19D292	COVER, motor	1
48	116752	SWITCH, rocker	1
50	287253	KIT, tool box, EMEA and UK models, *includes 114*	1
51	19B596	HARNESS, encoder	1
52	20B342	HOSE, drain, XT	1
53	241920	DEFLECTOR, threaded	1

REF.	PART	DESCRIPTION	QTY.
54	25V145	REEL, hose, XT, *includes 77, 84, 95, 96, 103*	1
59	19D307	SCREW, mach., torx pan hd.	1
65		FITTING, pump	1
	20B230	Models 695/795	
	2004023	Model Mark IV	
66	16X833	FITTING, quick disconnect (Models 695/795 only)	1
68	120583	NUT, hand (Models 695/795 only)	1
70		HOSE, coupled	1
	2003296	Models 695/795, *includes 66, 68, 84*	
	2003297	Model Mark IV, *includes 104*	
71		BOARD, control	1
	2003256	110VAC (UK)	
	2003254	100-120VAC	
	2003255	220-240VAC	
72		CHOKE, ground, *includes 76, 101*	1
	2003268	North America, Japan, Taiwan	
	2003269	Rest of world	
73	See Power Cord Parts Diagram and List	CORD, power, *includes 74, 75*	1
74	20B466	RETAINER, power cord	1
75	2003004	SCREW, mach., torx., self-tapping	2
76	2003504	SCREW, mach., serrated hex hd.	1

REF.	PART	DESCRIPTION	QTY.
79	19D828	TUBE, intake, XT (Models 695/795 only)	1
80	118494	PACKING, O-Ring (Models 695/795 only)	1
81	15V573	STRAINER	1
84	107505	PACKING, O-Ring	1
91	See Spray Gun and Hose Parts Diagram and List	HOSE	1
95	19D922	GUIDE, hose, XT, Pro	1
96	117633	SCREW, slot, hex wash hd.	2
98 ▲	See Labels	LABEL, safety, warning	1
99	20B730	SCREW, cap, SCH, 3/8 x 4.0 SST	2
101	100718	WASHER	1
102 ▲	2001766	LABEL, safety, warning, moving parts	1
103	2002230	TUBE, formed, XT	1
104	102982	O-ring	1
105	See Labels	LABEL, brand, front	1
106	See Labels	LABEL, brand, side	1
107	See Labels	LABEL, brand, Xtreme torque	1
108	See Labels	LABEL, brand, QR, XT	1
109	16D576	LABEL, brand, Made in USA	1
110	2002717	HARNESS, grounded, braided (230VAC and 110 UK models only)	1
111	119791	SCREW, mach., hex wash hd. (230VAC and 110 UK models only)	1

REF.	PART	DESCRIPTION	QTY.
112	114391	SCREW, grounding (230VAC and 110 UK models only)	1
113	119236	SCREW (230VAC, 110 UK models only)	2
114	118852	SCREW	3
121	2005199	SCREW, #10, 5 in.	2
122	120339	WASHER, flat	2

1095 XT, MARK V, MARK VII, PRO HI-BOY PARTS

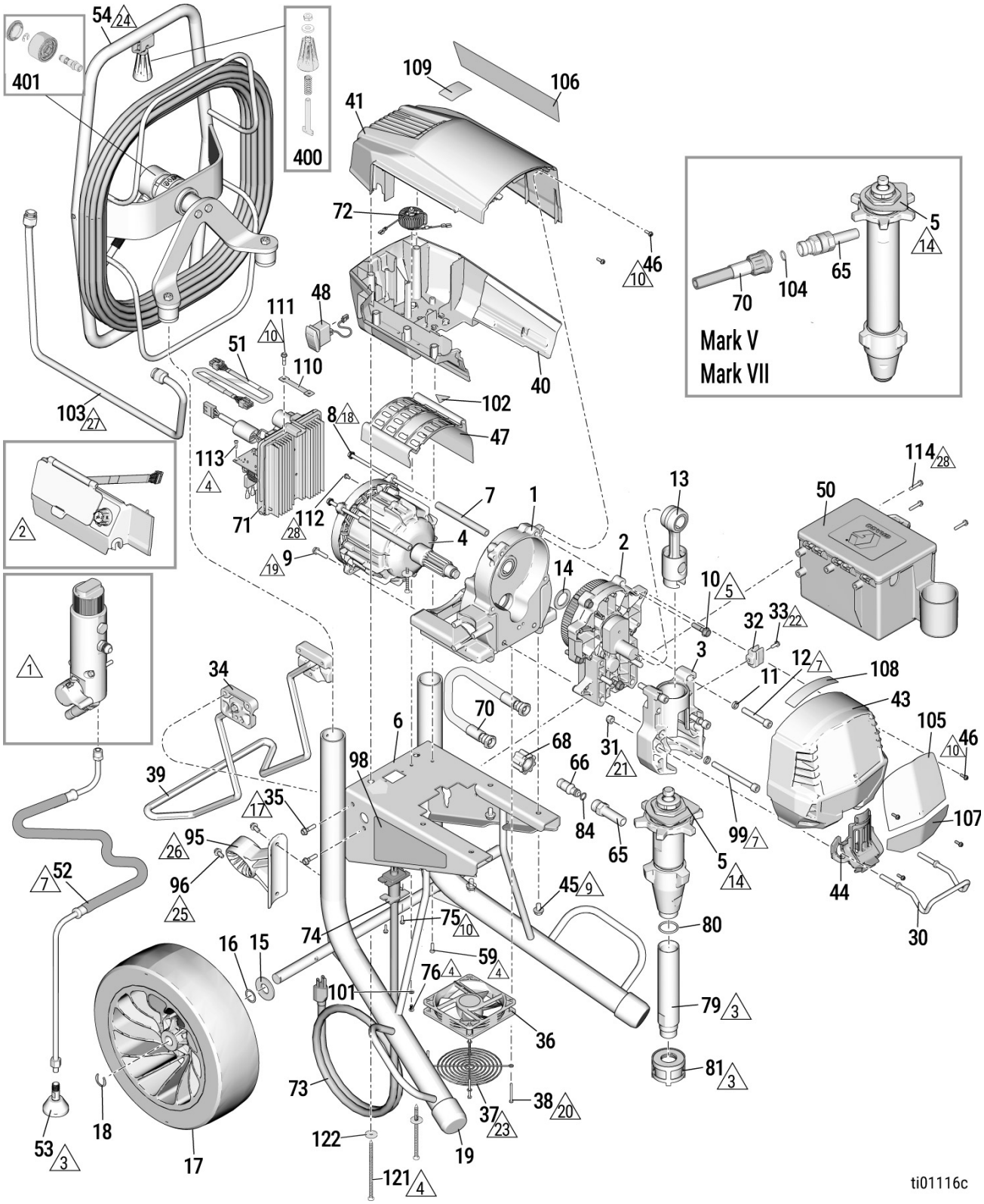


Figure 14-10: 1095 XT, Mark V, Mark VII, Pro Hi-Boy Parts Diagram

Table 14-8: 1095 XT, Mark V, Mark VII, Pro Hi-Boy Parts List

REF.	PART	DESCRIPTION	QTY.
1	2003293	CHASSIS, *includes 45*	1
2	2003291	HOUSING, drive, *includes 10, 14*	1
3	2003295	HOUSING, bearing, *includes 11, 12, 30, 31, 32, 33, 44, 99*	1
4		MOTOR, *includes 7, 8, 9, 47, 102*	1
	2003300	Models 1095	
	2003301	Mark V	
	2003302	Mark VII (EMEA)	
5		PUMP, displacement	1
	2001551	Model 1095, *includes 65, 80*	
	2001555	Model Mark V, *includes 65*	
	2001557	Model Mark VII, *includes 65*	
6	19D664	FRAME, XT, 1095/Mark V/ Mark VII	1
7	19B587	SPACER, tie rod, motor	2
8	19C928	SCREW, cap	2
9	119426	SCREW, mach., hex washer hd.	2
10	15C753	SCREW, mach., hex wash hd.	5
11	106115	WASHER, lock	4
12	17E789	SCREW, cap, 3/8 x 2.25	2
13	24V085	ROD, connecting	1
14	116192	WASHER, thrust	1
15	156306	WASHER, flat	2
16	116038	WASHER, wave spring	2
17	17E687	TIRE, polyurethane, black, 13 in.	2
18	15E891	CLIP, retaining	2
19	276974	CAP, leg	2
30	16C457	HANGER, pail	1
31	111040	NUT, lock, insert, nylon	2
32	16X203	CLIP, drain line	1
33	118444	SCREW, mach., slot hex wash hd.	1
34	15C982	CAM, cart	2
35	114531	SCREW, mach., hex washer hd.	4
36	19D923	FAN, 12V	1
37	19D924	GUARD, fan	1
38	117683	SCREW, mach., hex washer hd.	4
39	19D921	SUPPORT, kickstart, universal, XT	1
40	2003287	SHIELD, motor, bottom, *includes 48, 59*	1
41	2003284	SHIELD, motor, top, *includes 46, 59*	1
43	2003282	COVER, front, *includes 46*	1
44	20B131	COVER, pump rod	1
45	111801	SCREW, cap, hex hd.	4
46	2001659	SCREW, mach, slot hex wash hd.	6
47	19D292	COVER, motor	1
48	116752	SWITCH, rocker	1
50	287253	KIT, tool box (EMEA and UK models only), *includes 114*	
51	19B596	HARNESS, encoder	1
52	20B342	HOSE, drain, XT	1
53	241920	DEFLECTOR, threaded	1

REF.	PART	DESCRIPTION	QTY.
54		REEL, hose, XT, *includes 77, 84, 95, 96, 103, 400*	1
	25V145	Models 1095/Mark V	
	25V146	Model Mark VII	
59	19D307	SCREW, mach., torx pan hd.	2
65		FITTING, pump	1
	20B230	Model 1095	
	2004023	Models Mark V/Mark VII	
66	16X833	FITTING, quick disconnect (Model 1095 only)	1
68	120583	NUT, hand (Model 1095 only)	1
70		HOSE, coupled	1
	2003296	Model 1095, *includes 66, 68, 84*	
	2003297	Models Mark V/Mark VII, *includes 104*	
71		BOARD, control	1
	2003256	110VAC (UK)	
	2003254	100-120VAC	
	2003255	220-240VAC	
72		CHOKE, ground, *includes 76, 101*	1
	2003268	North America, Japan, Taiwan	
	2003269	Rest of world	
73	See Power Cords Parts Diagram and List	CORD, power, *includes 74, 75*	1
74	20B466	RETAINER, power cord	1
75	2003004	SCREW, mach., torx., self-tapping	2

REF.	PART	DESCRIPTION	QTY.
76	2003504	SCREW, mach., serrated hex hd.	1
79	19F477	TUBE, intake, XT (Model 1095 only)	1
80	118494	PACKING, O-Ring (Model 1095 only)	1
81	15V573	STRAINER	1
84	107505	PACKING, O-Ring	1
91	See Spray Gun and Hose Parts Diagram and List	HOSE	
95		GUIDE, hose, XT, Pro	1
	19D922	1095 and Mark V	
	2002139	Mark VII	
96	117633	SCREW, slot, hex wash hd.	2
98 ▲	See Labels	LABEL, safety, warning	1
99	20B730	SCREW, cap, SCH, 3/8 x 4.0 SST	2
101	100718	WASHER	1
102 ▲	2001766	LABEL, safety, warning, moving parts	1
103	2002230	TUBE, formed, XT	1
104	102982	O-ring	1
105	See Labels	LABEL, brand, front	1
106	See Labels	LABEL, brand, side	1
107	See Labels	LABEL, brand, Xtreme torque	1
108	See Labels	LABEL, brand, QR, XT	1
109	16D576	LABEL, brand, made in USA	1
110	2002717	HARNESS, grounded, braided (230VAC and 110UK models only)	1

REF.	PART	DESCRIPTION	QTY.
111	119791	SCREW, mach., hex wash hd. (230VAC and 110 UK models only)	1
112	114391	SCREW, grounding (230VAC and 110 UK models only)	1
113	119236	SCREW (230 VAC, 110 UK models only)	2
114	118852	SCREW	3
121	2005199	SCREW, #10, 5 in.	2
122	120339	WASHER, flat	2
400	2009285	KIT, handle	1
401	2009287	KIT, hose reel swivel	1

FILTER PARTS

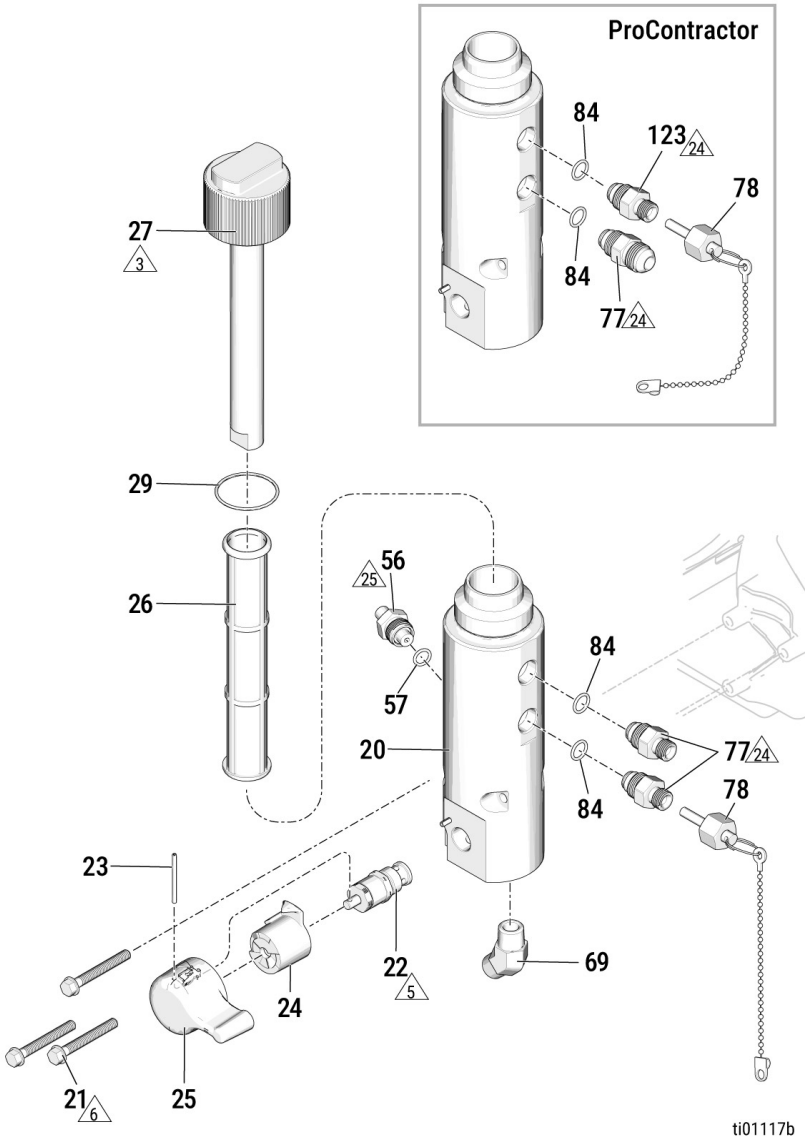


Figure 14-11: Filter Parts Diagram

Table 14-9: Filter Parts List

REF.	PART	DESCRIPTION	QTY.
20	19D919	BASE, filter, XT	1
21	120091	SCREW	3
22	24B156	VALVE, prime, heavy duty	1
23	15C972	PIN, spring	1
24	24A382	BASE, valve, heavy duty	1
25	24E234	HANDLE, prime valve, heavy duty	1
26		KIT, filter, mesh	1
	244067	60 mesh (original equipment)	
	244068	100 mesh	
	244069	200 mesh	
	244071	30 mesh	
27	2003271	TUBE, diffusion, *includes 29*	1
		CAP, filter	1
29	117285	PACKING, O-ring	1
56	2003348	TRANSDUCER, pressure control, *includes 57 and part no. 19C988 (see Digital Display Parts Diagram and List)*	
57	111457	PACKING, O-ring	1
69		FITTING, elbow, 3/8 npt	1
	20B233	Models 695/795/1095	
	122533	Models Mark IV/Mark V/ Mark VII	
77		ADAPTER, nipple, *includes 84*	
	2003277	Models 695/795/1095 Standard and Lo-Boy	2
	2003278	Models Mark IV/Mark V Standard	2
	2003279	Model Mark VII, Mark XV Standard	2
	2003280	Model ProContractor (all models)	1
78		PLUG, packless	1
	2005275	1/4 in., Models 695, 795, 1095	
	2005276	3/8 in., Models Mark IV, Mark V	
	2005277	1/2 in., Models Mark VII, Mark XV	
84	107505	PACKING, O-ring	2
123		KIT, outlet, fluid filter	1
	2003277	Models 695/795/1095 ProContractor	
	2003278	Models Mark IV, Mark V ProContractor	
	2003279	Models Mark VII, Mark XV ProContractor	

MARK HP FILTER PARTS

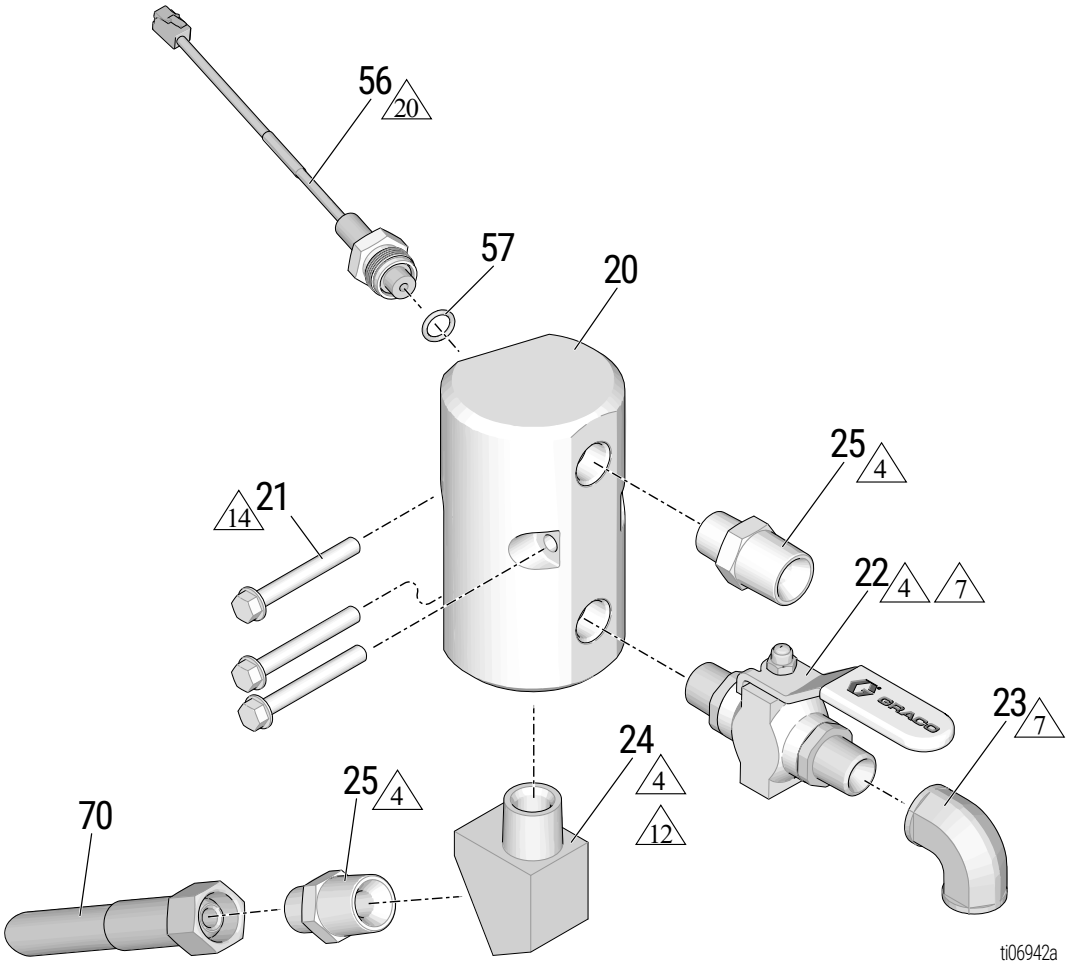


Figure 14-12: Mark HP Filter Parts Diagram

Table 14-10: Filter Parts List

REF.	PART	DESCRIPTION	QTY.
20	2011579	BASE, filter, HP	1
21	120091	SCREW	3
22	237304	VALVE, ball	1
23	165472	ELBOW, pipe, 90 degree	1
24	15M987	FITTING, elbow, 60 degree	1
25	159239	FITTING, nipple, pipe	2
56	2003348	TRANSDUCER, Mark HP, *includes part no. 19C988 (see Digital Display Parts Diagram and List)*	

DIGITAL DISPLAY PARTS

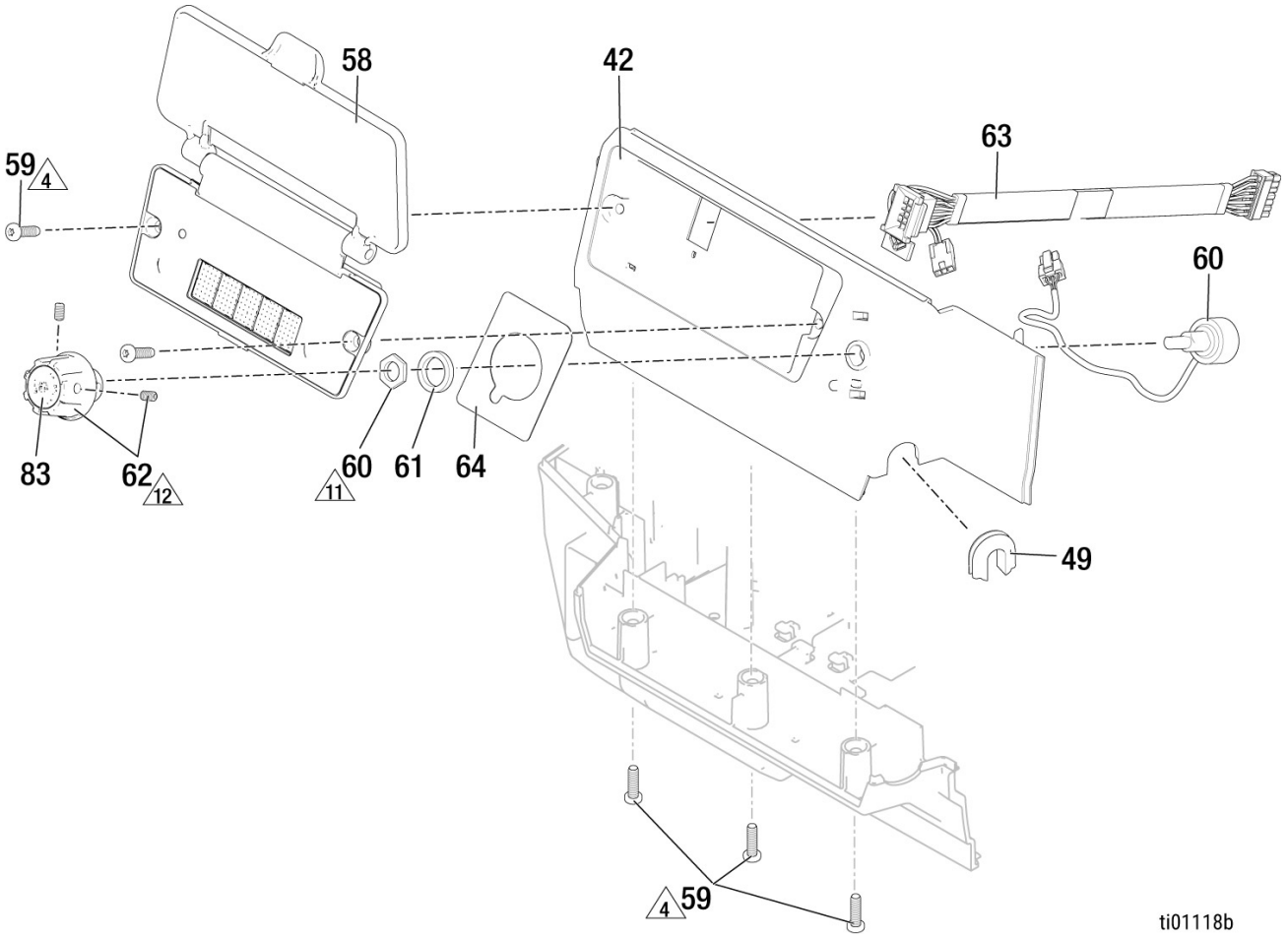


Figure 14-13: Digital Display Parts Diagram

Table 14-11: Digital Display Parts List

REF.	PART	DESCRIPTION	QTY.
42		SHIELD, motor, side, *includes 49, 59, 64*	1
	2003288	695, 795, 1095, Mark IV, Mark V, Mark VII	
	2015817	Mark XV, Mark HP	
49	19C988	GROMMET, transducer	1
58		MODULE, display, *includes 59*	1
	20B432	ProContractor/Bluelink, Smart Control XT	
	20B431	Display only, Smart Control	
59	19D307	SCREW, mach., torx pan hd.	5
60	2003350	POTENTIOMETER, assy	1
61	15C973	GASKET	1
62	19C986	KNOB, potentiometer	1
63	19C527	HARNESS, display	1
64	19C998	LABEL, brand, control	1
83	19D678	LABEL, control	1

SPRAY GUN AND HOSE PARTS

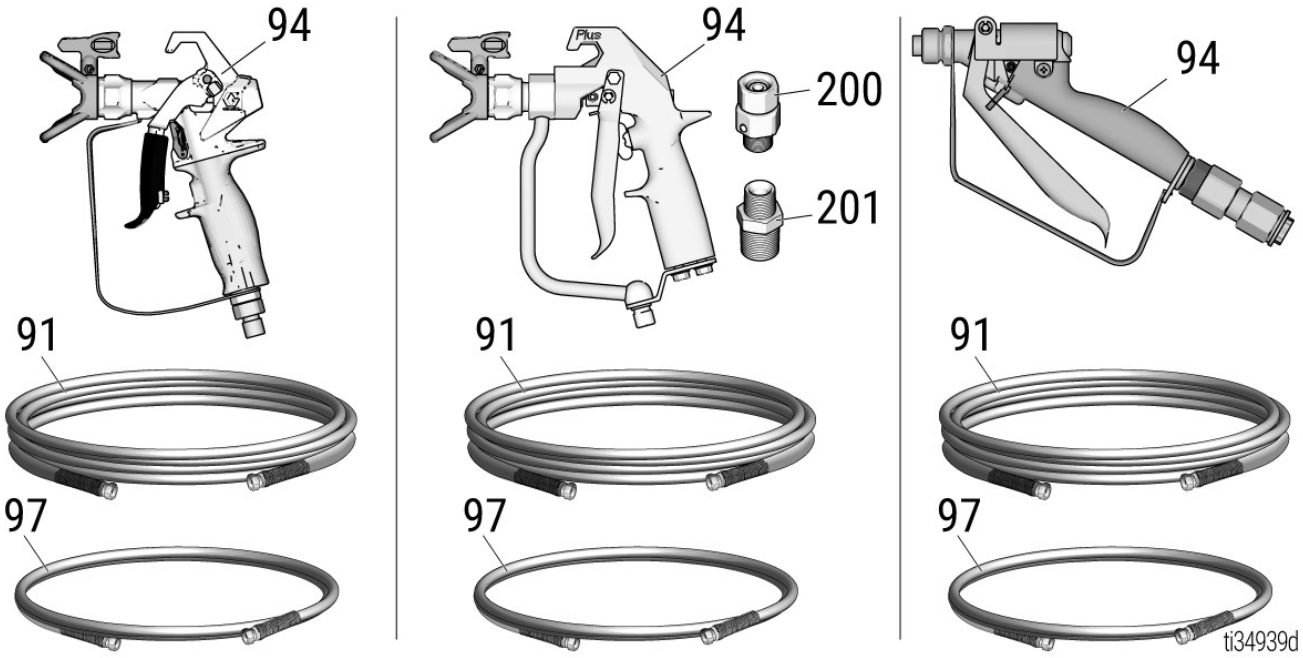


Figure 14-14: Spray Gun and Hose Parts Diagram

Table 14-12: Spray Gun and Hose Parts List

REF.	PART	DESCRIPTION	QTY.
91		HOSE, coupled	1
	240794	695/795/1095 XT, 1/4 in. x 50 ft.	
	826079	695/795/1095 Ultimate, 1/4 in. x 50 ft	
	245225	Mark IV/Mark V, 3/8 in. x 50 ft	
	278499	Mark VII, Mark XV, 1/2 in. x 50 ft	
94		SPRAY GUN	1
	17Y043	695/795/1095 XT, North America, EMEA	
	17Y044	695/795/1095 XT, Asia	
	826252	695/795/1095 Ultimate	
	241705	Mark V, North America and ANZ, KO	
	289605	Mark V/Mark VII, EMEA and UK	
	246468	Mark IV	
	245820	Mark VII, Mark XV	
97		HOSE, whip	1
	241735	Mark IV/Mark V, 1/4 in. x 3 ft	
	191239	Mark VII, Mark XV, 3/8 in. x 11 ft	
200	189018	SWIVEL, Mark V/Mark VII, Mark XV	1
201		BUSHING	1
	159841	Mark IV/Mark V/Mark VII	
	159239	Mark VII, Mark XV	

POWER CORD PARTS

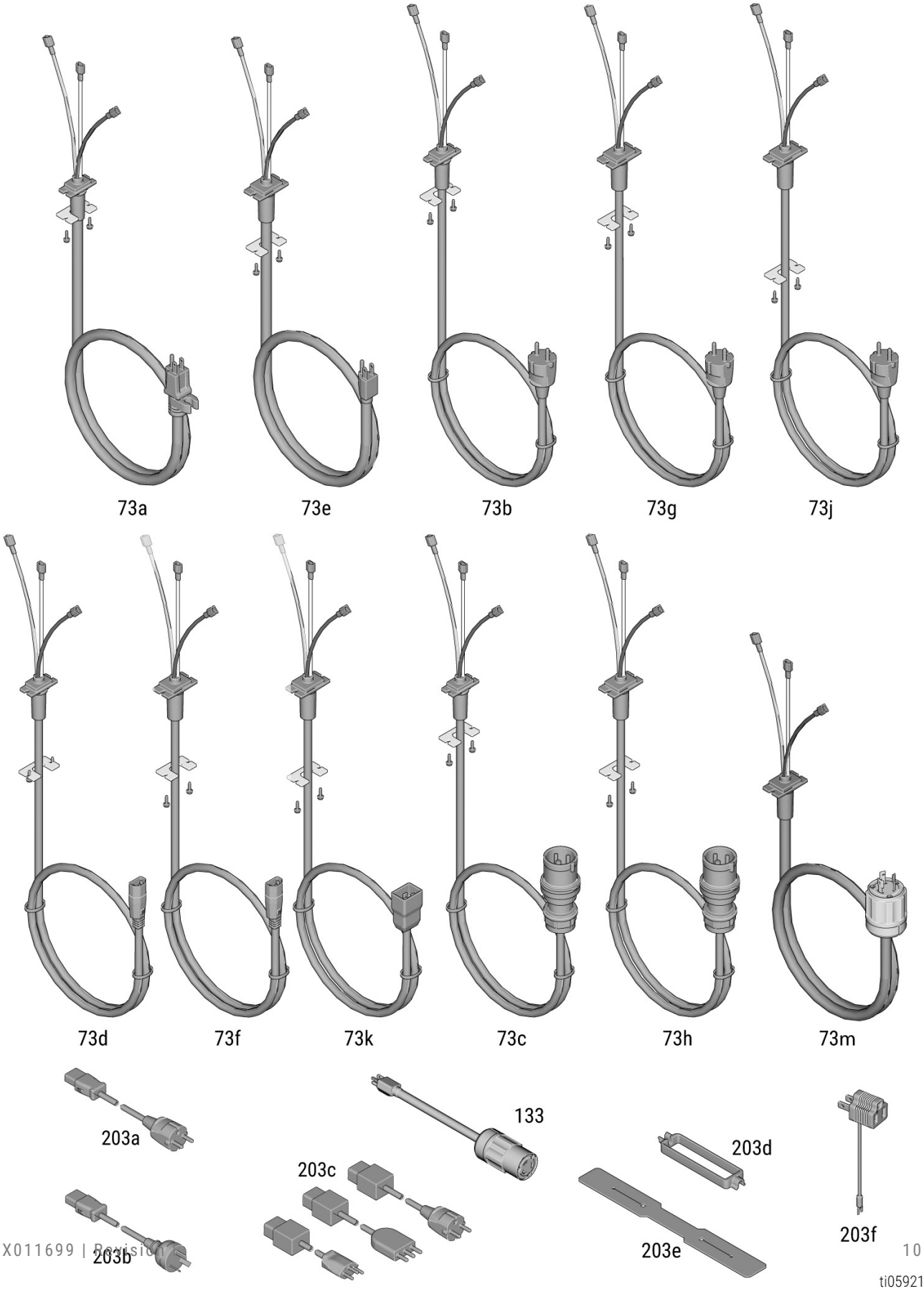


Figure 14-15: Power Cord Parts Diagram

Table 14-13: Power Cord Parts List

REF.	PART	DESCRIPTION	QTY.
		CORD, power	1
73a	2003257	Part No.: 19F545, 19F547. 19F553, 20B963, 20B964, 826295, 826297, 826296, 19F710, 826298, 19F711,, 826299, 19F549, 19F551	
73b	2003259	Part No: 19F727, 19F729, 19F731, 19F733, 18H403, 18H405, 18H409, 18H415, 18H416	
73c	2003266	Part No: 19F728, 19F730, 19F732, 19F734	
73d	2003262	Part No: 19F714, 20B951, 19F713, 20B953, 19F717, 19F712, 19F715	
73e	2003258	Part No: 19F546, 826300, 19F548, 826301, 20B965, 19F550, 19F552, 19F725	
73f	2003263	Part No: 19F720, 20B955, 19F721, 19F723, 19F724, 20B959, 18H421, 18H404, 18H406, 18H412, 18H413, 18H419, 18H420	
73g	2003260	Part No: 19F735, 19F736, 19F739, 19F741	
73h	2003267	Part No: 19F740, 19F742, 18H407, 18H408, 18H422, 18H423, 18H424	
73J	2003261	Part No: 19F743, 19F744	
73K	2003264	Part No: 20B961	
73M	2014523	Part No: 18H400, 18H401, 18H402, 18H410, 18H411, 2015642	
133	2015811	ADAPTER, cord (18H400, 18H401, 18H402, 18H410, 18H411 only)	1
203a	242001	CEE 10 amp (Part No: 19F714, 20B951, 19F713, 20B953, 19F717, 19F720, 20B955, 19F721, 19F723, 20B959, 19F724)	
203b	242005	ANZ, 10 amp (Part No: 19F714, 19F713, 19F717, 19F720, 19F721, 19F723, 19F724, 19F712, 19F715)	
203c	287121	Italy, Denmark, Switzerland, 10 amp (Part No: 20B951, 20B953, 20B955, 20B959, 18H404, 18H406)	
	253103	CEE, Italy, Switzerland, 16 amp (Part No: 20B961)	
		RETAINER, Cord	1
203d	195551	Part No: 19F714, 20B951, 19F713, 20B953, 19F717, 19F720, 20B955, 19F721, 19F723, 20B959, 19F724, 19F712, 19F715	
203e	121249	Part No: 20B961	
203f	244285	Part No. 20B963, 20B964, 20B965, 19F725	

TORQUE SPECIFICATIONS

1	See Filter Parts
2	See Digital Display Parts
3	Hand Tighten
4	12–16 in-lb (1.4–1.8 N·m)
5	190–210 in-lb (21.5–23.7 N·m)
6	100–120 in-lb (11.3–13.6 N·m)
7	25–30 ft-lb (33.9–40.7 N·m)
8	22–28 in-lb (2.5–3.2 N·m)
9	12–14 ft-lb (16.3–19.0 N·m)
10	20–25 in-lb (2.3–2.89 N·m)
11	8–10 in-lb (0.9–1.1 N·m)
12	10–15 in-lb (1.1–1.7 N·m)
13	70–80 ft-lb (95–108.5 N·m)
14	105–115 ft-lb (142.8–156.4 N·m)
15	35–45 ft-lb (47.5–61.0 N·m)
16	40–45 in-lb (4.5–5.2 N·m)
17	130–150 in-lb (14.7–17.0 N·m)
18	70–75 in-lb (7.9–8.5 N·m)
19	140–160 in-lb (15.8–18 N·m)
20	6–8 in-lb (0.7–0.9 N·m)
21	85–95 in-lb (9.6–10.7 N·m)
22	30–40 in-lb (3.4–4.5 N·m)
23	Assemble guard so it does not touch fan hub.
24	40–50 ft-lb (54.4–68.0 N·m)
25	40–50 in-lb (4.5–5. 6 N·m)
26	Orient with arrow up.
27	38–42 ft-lb (51.7–57.1 N·m)
28	28–30 in-lb (3.4–4.0 N·m)

LABELS

SPRAYER MODEL NUMBER	MEDICAL LABEL ▲	REF. 98 WARNING LABEL ▲	REF. 105 FRONT LABEL	REF. 106 SIDE LABEL	REF. 107 XT LABEL	REF. 108 QR LABEL
18H400	179960	2015293	2015296	2015295	2002410	19D677
18H401						
18H402		2015294	2015297			
18H410						
18H411						
18H422						
18H423						
18H424						
2015642						
18H403		2015293	2015296			
18H404						
18H405						
18H406						
18H407						
18H408						
18H409		2015294	2015297			
18H415						
18H416						
18H412	17A134	2015293	2015296			
18H413						
18H419		2015294	2015297			
18H420						
18H421						
19F545	179960	18D884	2002271	2002280	2002289	2002410
19F547						2002411
19F553						2002410
19F710			2002271	202281		
19F711						2002411

SPRAYER MODEL NUMBER	MEDICAL LABEL ▲	REF. 98 WARNING LABEL ▲	REF. 105 FRONT LABEL	REF. 106 SIDE LABEL	REF. 107 XT LABEL	REF. 108 QR LABEL
826295	179960	18D884	2002277	2002286	2002289	2004238
826297				2002280		2004239
826296						2004238
826298			2002278	2002287		
826299						2004239
19F546			2002273	2002282	2002290	2002410
826300			2002279	2002288		2004238
19F548			2002273	2002282		2002411
826301			2002279	2002288		2004239
19F549			2002274	2002283	2002289	2002410
19F551						2002411
19F552			2002275	2002284		
19F727		16G596	2002271	2002280		2002410
19F728						
19F729						2002411
19F730						
20B951						
20B953			2002272	2002281		
19F731						2002410
19F732						
19F733						2002411
19F734						
20B955			2002273	2002282	2002290	
19F735						2002410
19F736						2002411
19F739			2002275	2002284		2002410
20B959						2002411

SPRAYER MODEL NUMBER	MEDICAL LABEL ▲	REF. 98 WARNING LABEL ▲	REF. 105 FRONT LABEL	REF. 106 SIDE LABEL	REF. 107 XT LABEL	REF. 108 QR LABEL
19F740	179960	16G596	2002275	2002284	2002290	2002410
19F741						2002411
19F742						
19F743			2002276	2002285		2002410
19F744						2002411
20B961						
19F720	17A134	18D885	2002273	2002282		2002410
19F714			2002271	2002280	2002289	2002411
19F712						2002410
19F715						
19F713						
19F717			2002272	2002281		2002411
19F721			2002273	2002282	2002290	
19F550		18D884	2002275	2002284		2002410
19F723		18D885				
19F724						2002411
19F725	26A998	2003469				
20B963			2002271	2002280	2002289	2002410
20B964						2002411
20B965			2002273	2002282	2002290	

▲ *Replacement safety labels, tags, and cards are available at no cost.*

ELECTRICAL SCHEMATIC

The wiring diagram illustrates the electronic connections that are useful for troubleshooting and repairing the electrical components of the Electric Airless Sprayers.

100-120 V

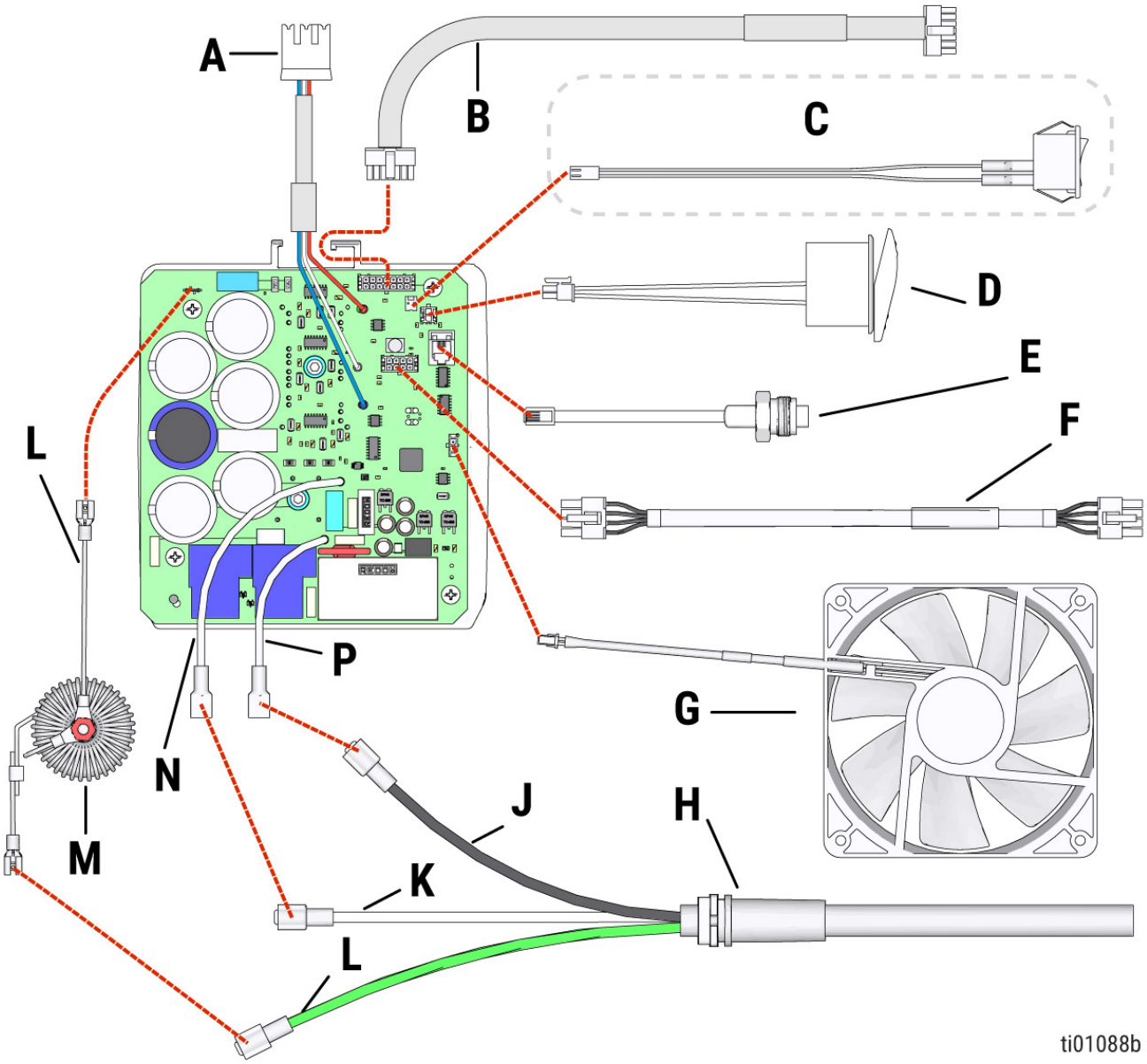


Figure 16-1: Wiring Diagram for 110-120 V

KEY	
A	Motor Harness
B	Display Harness
C	Amp Switch & Harness (select models only)
D	Power Switch
E	Transducer
F	Encoder Harness
G	Fan
H	Power Cord
J	Black
K	White
L	Green
M	Filter Coil
N	White (L2)
P	Black (L1)

110 V UK

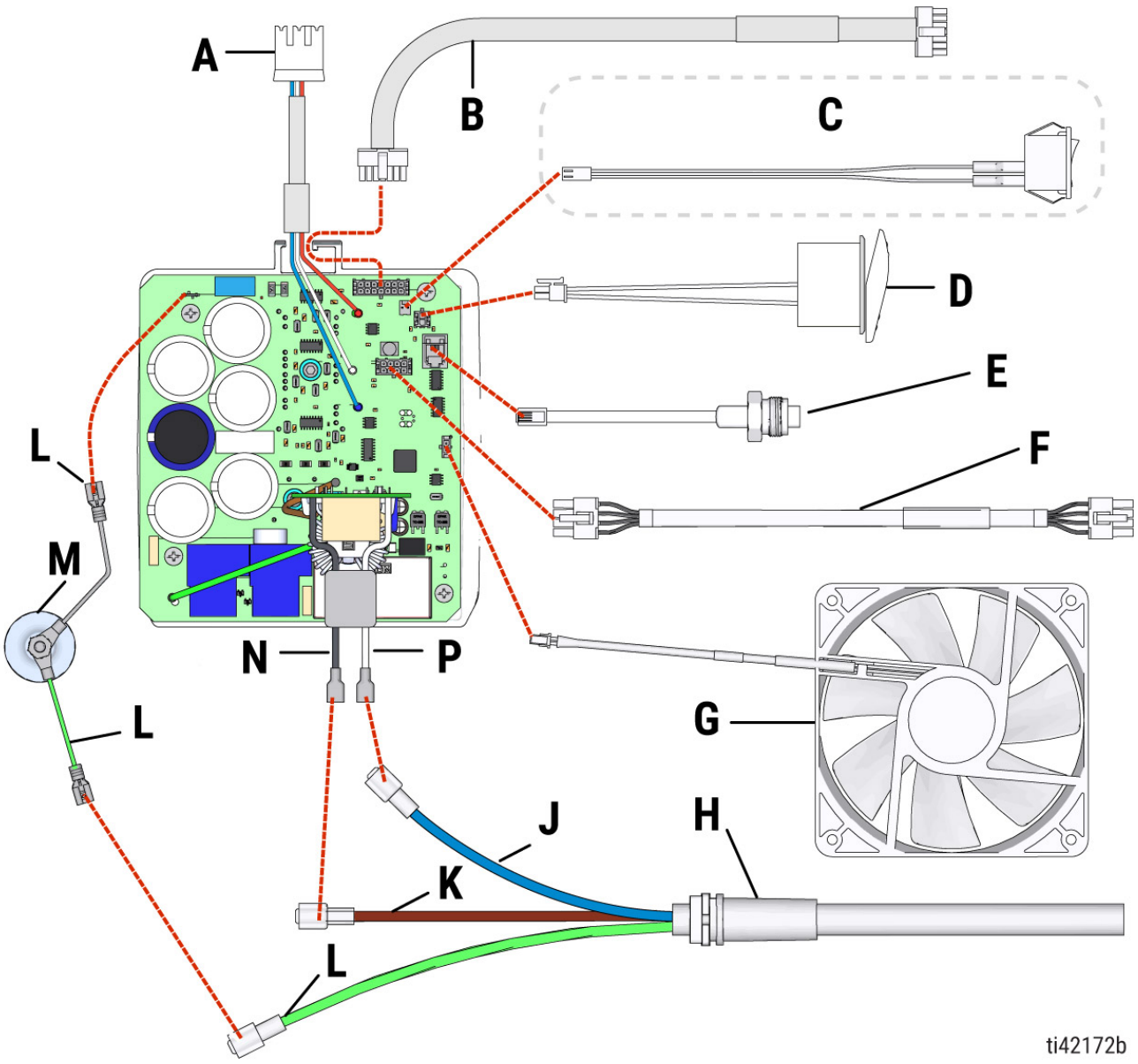


Figure 16-2: Wiring Diagram for 110 V UK

KEY	
A	Motor Harness
B	Display Harness
C	Amp Switch & Harness (select models only)
D	Power Switch
E	Transducer
F	Encoder Harness
G	Fan
H	Power Cord
J	Blue
K	Brown
L	Green
M	Ground Post
N	Black (L1)
P	White (L2)

220-240 V

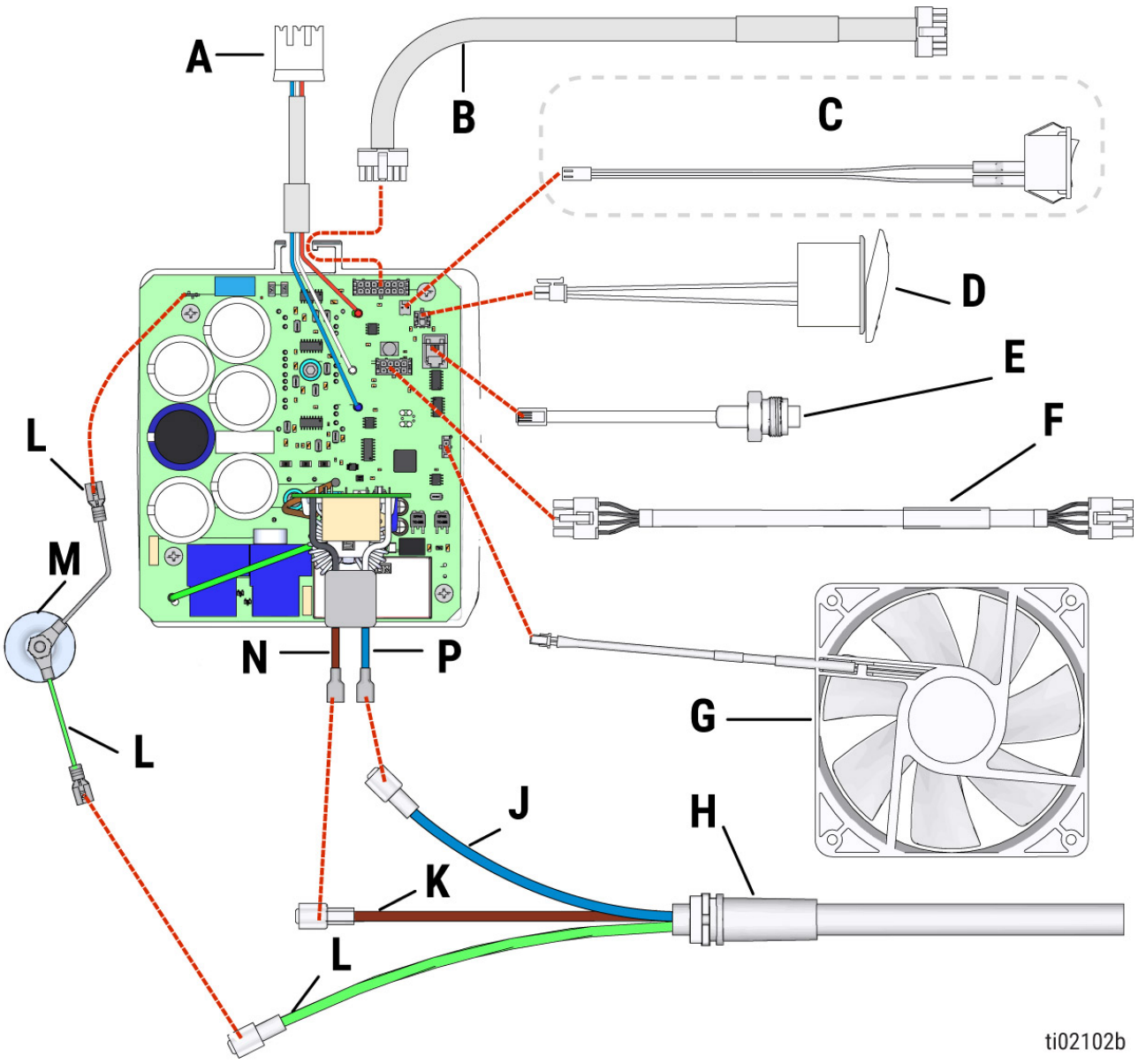


Figure 16-3: Wiring Diagram for 220-240 V

KEY	
A	Motor Harness
B	Display Harness
C	Amp Switch & Harness (select models only)
D	Power Switch
E	Transducer
F	Encoder Harness
G	Fan
H	Power Cord
J	Blue
K	Brown
L	Green
M	Ground Post
N	Brown (L1)
P	Blue (L2)

MARK XV AND MARK HP UNITS, ALL VOLTAGES

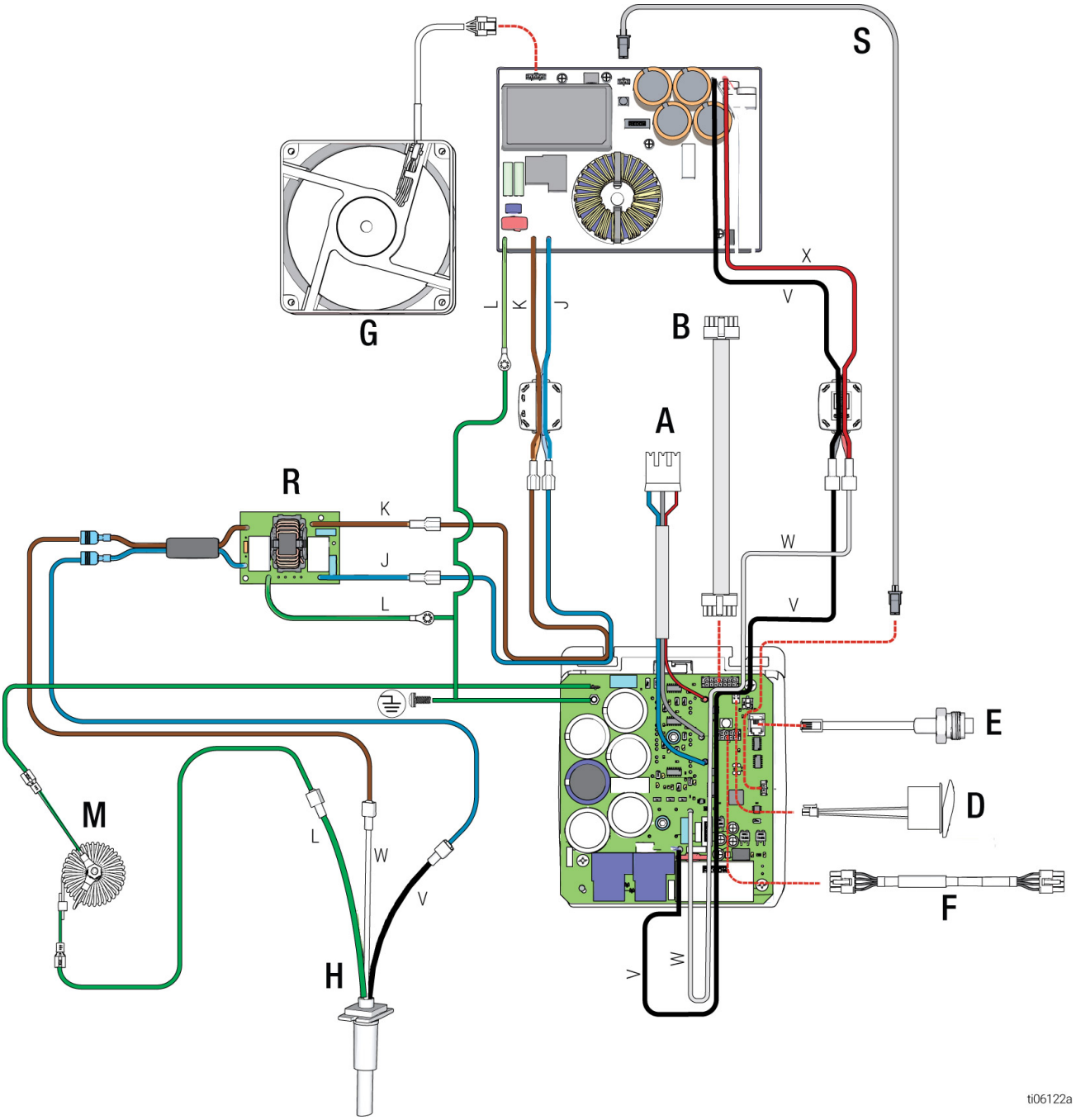


Figure 16-4: Wiring Diagram for Mark XV and Mark HP Units

KEY	
A	Motor Harness
B	Display Harness
D	Power Switch
E	Transducer
F	Encoder Harness
G	Fan
H	Power Cord
J	Blue
K	Brown
L	Green
M	Ground Post or Filter Coil
R	Filter Board
S	PWM Harness
W	White
X	Red
V	Black

CALIFORNIA PROPOSITION 65

CALIFORNIA RESIDENTS

⚠**WARNING** Cancer and reproductive harm — www.P65warnings.ca.gov.

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.

GRACO INC. AND SUBSIDIARIES I P.O. BOX 1441 I MINNEAPOLIS MN 55440-1441 I USA

Graco Headquarters: Minneapolis, MN USA | International Offices: Australia, Belgium, China, Japan, Korea | Toll Free Phone Number: 1-800-690-2894 (Contractor Division) and 1-800-328-0211 (Industrial Division) | For patent information, see graco.com/patents

©2026 Graco Inc. All written and visual data in this document are based on the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice. All Graco manufacturing locations maintain ISO 9001:2015 certifications, each certified by accredited certification bodies. Revision F.