Instructions-Parts

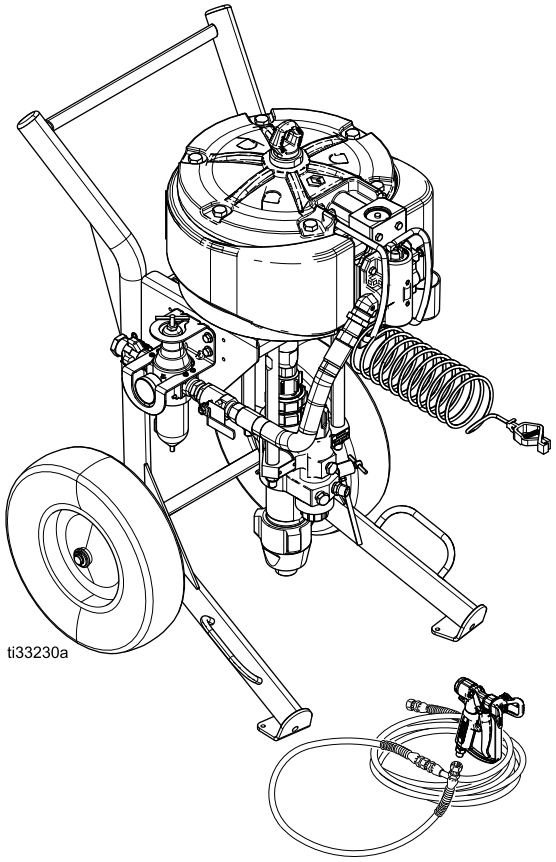
King™ Sprayer and Wall Mount Packages (XL10K Air Motor)

334645D
EN

High performance, high pressure spray packages for applying protective coatings. For professional use only.

Important Safety Instructions
Read all warnings and instructions in this manual and in related manuals. Save these instructions.

See Models on page 6 for maximum working pressures.



ti33230a

PROVEN QUALITY. LEADING TECHNOLOGY.

Contents

Related Manuals

Manual	Description
334644	Xtreme XL Air Motor, Instructions-Parts
3A0293	Air Controls, Instructions-Parts
311825	Dura-Flo™ Lowers, Instructions-parts
311762	Xtreme® Lowers, Instructions-Parts
311164	NXT® Xtreme Packages, Instructions-Parts

Warnings

The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbols refer to procedure-specific risks. When these symbols appear in the body of this manual or on warning labels, refer back to these Warnings. Product-specific hazard symbols and warnings not covered in this section may appear throughout the body of this manual where applicable.

WARNING

FIRE AND EXPLOSION HAZARD

Flammable fumes, such as solvent and paint fumes, in **work area** can ignite or explode. Paint or solvent flowing through the equipment can cause static sparking. To help prevent fire and explosion:

- Use equipment only in well ventilated area.
- Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static sparking).
- Ground all equipment in the work area. See **Grounding instructions**.
- Never spray or flush solvent at high pressure.
- Keep work area free of debris, including solvent, rags and gasoline.
- Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present.
- Use only grounded hoses.
- Hold gun firmly to side of grounded pail when triggering into pail. Do not use pail liners unless they are anti-static or conductive.
- **Stop operation immediately** if static sparking occurs or you feel a shock**.** Do not use equipment until you identify and correct the problem.
- Keep a working fire extinguisher in the work area.

WARNING





SKIN INJECTION HAZARD

High-pressure fluid from gun, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. **Get immediate surgical treatment.**

- Do not spray without tip guard and trigger guard installed.
- Engage trigger lock when not spraying.
- Do not point gun at anyone or at any part of the body.
- Do not put your hand over the spray tip.
- Do not stop or deflect leaks with your hand, body, glove, or rag.
- Follow the **Pressure Relief Procedure** when you stop spraying and before cleaning, checking, or servicing equipment.
- Tighten all fluid connections before operating the equipment.
- Check hoses and couplings daily. Replace worn or damaged parts immediately.


EQUIPMENT MISUSE HAZARD

Misuse can cause death or serious injury.

- Do not operate the unit when fatigued or under the influence of drugs or alcohol.
- Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See **Technical Data** in all equipment manuals.
- Use fluids and solvents that are compatible with equipment wetted parts. See **Technical Data** in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS from distributor or retailer.
- Do not leave the work area while equipment is energized or under pressure.
- Turn off all equipment and follow the **Pressure Relief Procedure** when equipment is not in use.
- Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only.
- Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards.
- Make sure all equipment is rated and approved for the environment in which you are using it.
- Use equipment only for its intended purpose. Call your distributor for information.
- Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.
- Do not kink or over bend hoses or use hoses to pull equipment.
- Keep children and animals away from work area.
- Comply with all applicable safety regulations.

WARNING

MOVING PARTS HAZARD

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

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

TOXIC FLUID OR FUMES HAZARD

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

- Read MSDSs to know the specific hazards of the fluids you are using.
- Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.

PERSONAL PROTECTIVE EQUIPMENT

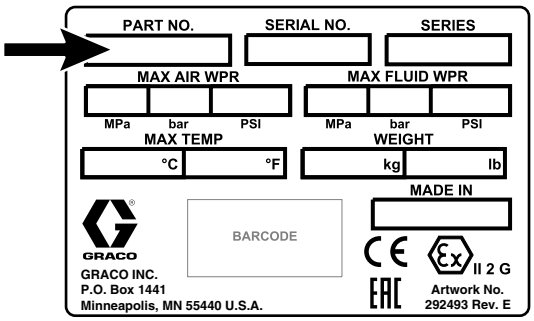
Wear appropriate protective equipment when in the work area to help prevent serious injury, including eye injury, hearing loss, inhalation of toxic fumes, and burns. Protective equipment includes but is not limited to:

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

Sprayer Packages

Air Motor Part Matrix

Check your sprayer or wall mount package's identification plate (ID) on the side of the shelf mounting bracket for the 6 digit part number of your package. Use the following matrix to define the construction of your package, based on the six digits. For example, Sprayer Part Number **K 70 F G 1** represents the King brand (**K**), pressure ratio (**70** :1), Xtreme lower with a built-in filter on a heavy duty cart (**H**), and complete package (gun, hose, and pump filter included) (**1**). To order replacement parts, see Parts, page 22.



ti25703b

Approvals:

CE II 2 G h 230° C (T2)

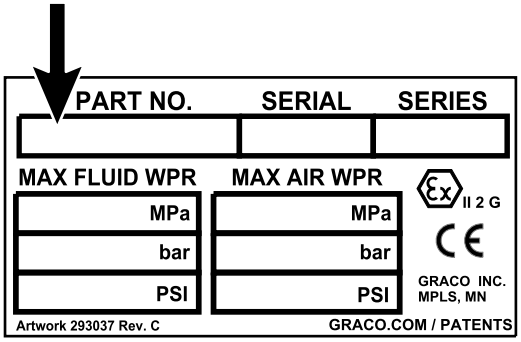
K	70		F		H		1	
First Digit Sprayer	**Package Pressure**		**Lower Type**		**Fifth Digit Mounting**		**Sixth Digit Option 0–9**	
K	30*	XL 3400/220cc	F	Std Filter	H	Heavy Duty Cart	0	Bare Package with Air Controls and Siphon Kit, No Hose and Gun
	40*	XL 3400/180cc	N	Std Non-Filter	L	Lightweight Cart	1	Std Complete Unit with Air Kit, Siphon Kit, and Hose/Gun Kit
	45*	XL 6500/290cc	M	Max-Life with Filter	W	Wall Mount	2	Std Complete Unit with Air Kit, Siphon Kit, and Hose/Gun Kit, and Lubricator
	50*	XL 6500/250cc						
	60*	XL6500/220cc						
	70*	XL 6500/180cc						
	90*	XL 6500/145cc						
	47	XL 10000/430cc DF						
	71	XL 10000/290cc						
	82	XL 10000/250cc						

* *These systems are covered in manual 3A5422.*

Pump Packages

Check the identification plate (ID) on your pump package (attached to the black motor shroud) for the 6-digit part number of your pump package. For example, Pump Part Number **P 70 H C 2** represents the pump (**P**), pressure ratio (**70**:1), carbon steel construction (**C**), and built-in filter (**2**).

To order replacement parts, see Pump Package Parts.



ti25704a

Approvals:

II 2 G h 230° C (T2)

P	70		H		C		2	
First Digit Pump	**Package Pressure**		**Motor Type**		**Lower Type**		**Filter Option**	
P	30*	XL 3400/220cc	F	High Performance	C	Carbon Steel	1	No Filter in Lower
	40*	XL 3400/180cc			M	Max Life	2	Built-in Filter in Lower (Max Life only offered with built-in filter)
	45*	XL 6500/290cc						
	50*	XL 6500/250cc						
	60*	XL6500/220cc						
	70*	XL 6500/180cc						
	90*	XL 6500/145cc						
	47	XL 10000/430cc DF						
	71	XL 10000/290cc						
	82	XL 10000/250cc						

** These systems are covered in manual 3A5422.*

Component Identification - Cart Mount

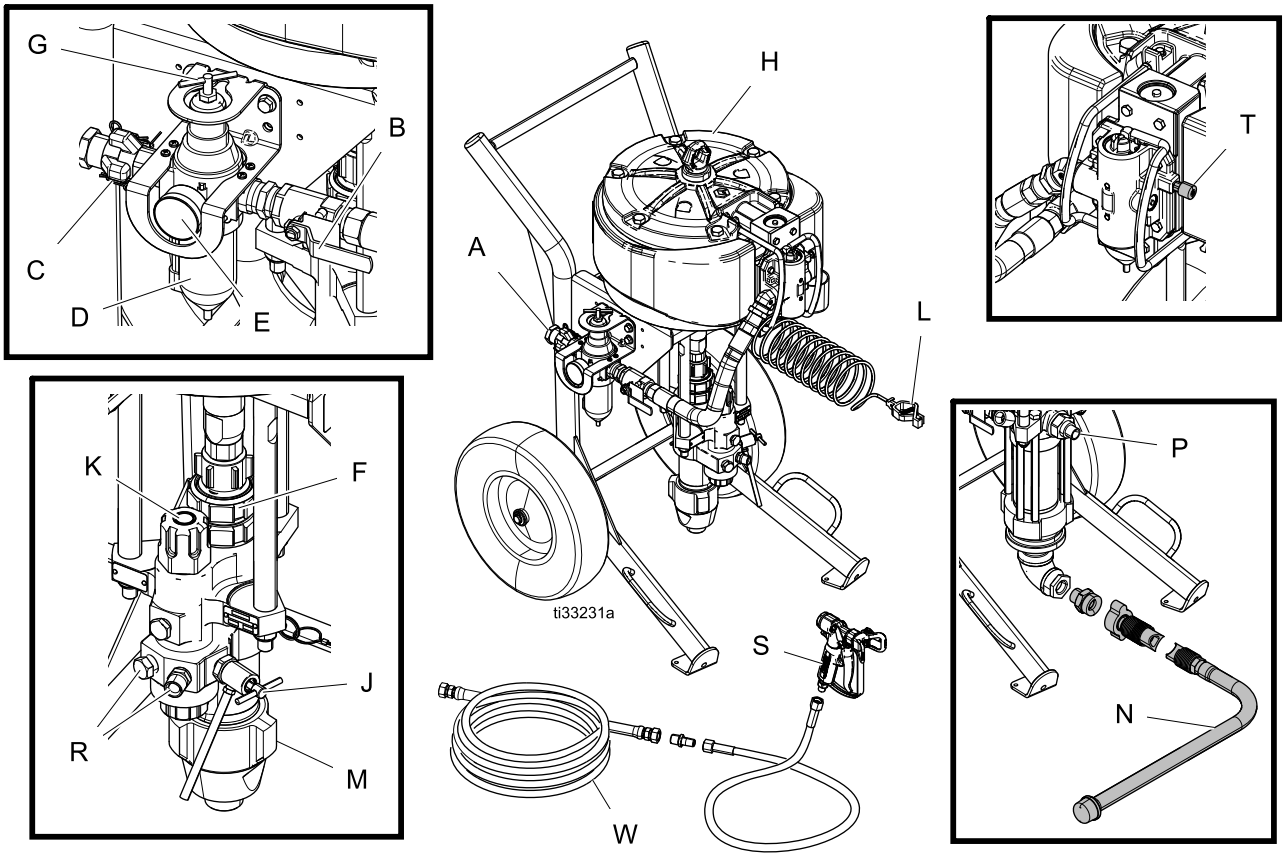


Figure 1 Airless Sprayer

Key:

A	Air Inlet, 1 in npt(f) on claw fitting	L	Grounding Wire (required)
B	Bleed Type Master Air Valve (required)	M	Pump
C	Air Pressure Relief Valve	N	Suction Hose and Tube (if equipped)
D	Air Filter / Water Separator	P	Pump Fluid Outlet
E	Air Pressure Gauge	R	Optional Fluid Outlet, for second spray gun
F	Packing Nut	S	Spray Gun
G	Air Regulator Adjustment	T	De-Ice Control (Bleed Air)
H	Air Motor	U	Hopper (if equipped)
J	Fluid Drain/Purge Valve (required)	W	Fluid Hose
K	Fluid Filter (if equipped)		

Component Identification - Wall Mount

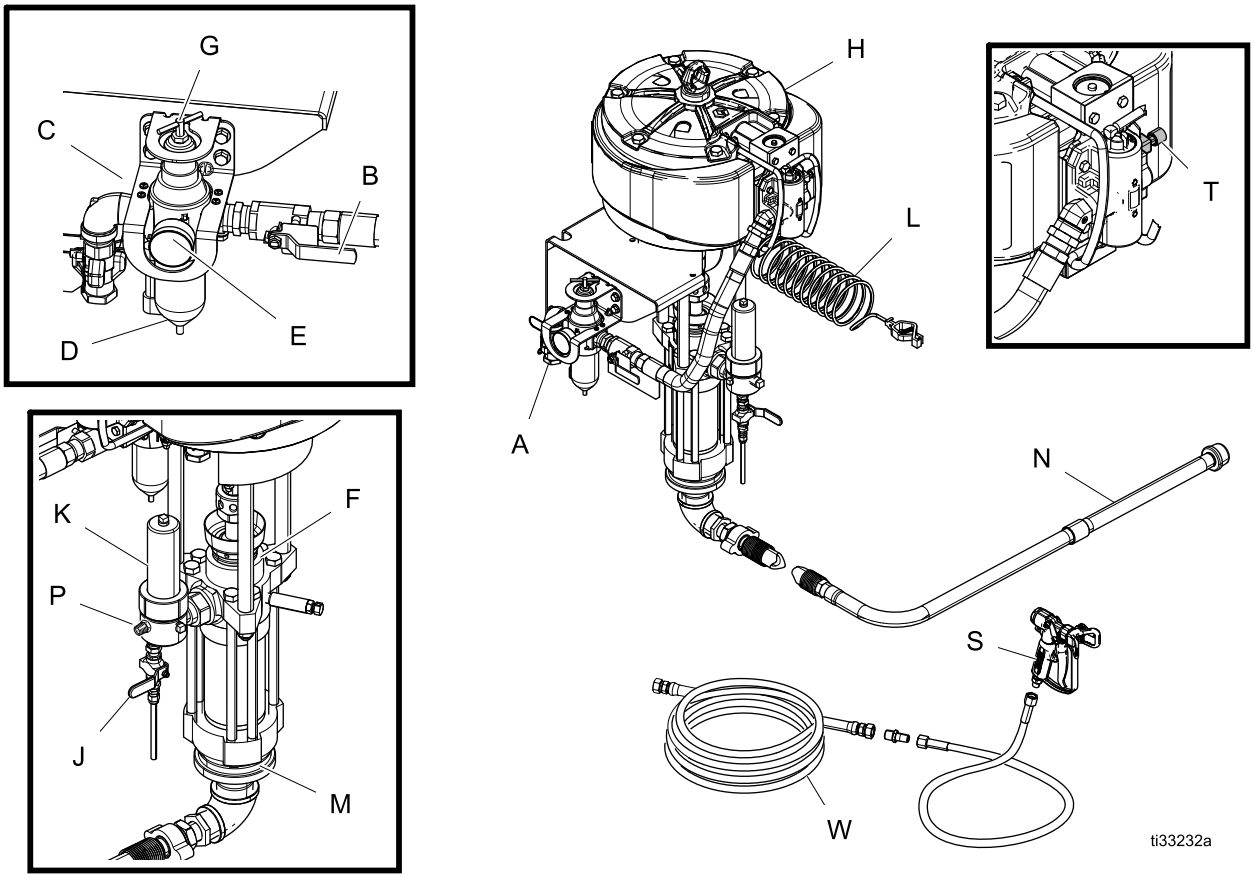


Figure 2 Airless Sprayer

Key:

A	Air Inlet, 1 in npt(f) on claw fitting	K	Fluid Filter (if equipped)
B	Bleed Type Master Air Valve (required)	L	Grounding Wire (required)
C	Air Pressure Relief Valve	M	Pump
D	Air Filter / Water Spearator	N	Suction Hose and Tube
E	Air Pressure Gauge	P	Fluid Outlet
F	Packing Nut	S	Spray Gun
G	Air Regulator Adjustment	T	De-Ice Control (Bleed Air)
H	Air Motor	W	Fluid Hose
J	Fluid Drain/Purge Valve (required)		

System Components

NOTE: * Required system components.

* Bleed Type Master Air Valve (B)

Trapped air can cause the pump to cycle unexpectedly, which could result in serious injury from splashing or moving parts.

- Be sure the valve is easily accessible from the pump and located downstream from the air regulator.
- Required in your system to relieve air trapped between it and the air motor when the valve is closed.

— Open the valve to supply air to the motor.

— Close the valve to shut off air to the motor, and bleed any trapped air from the motor.

* Air Pressure Relief Valve (C)

Automatically opens to relieve air pressure if supplied pressure exceeds preset limit.

* Air Filter (D)

Removes harmful dirt from compressed air supply. A minimum 40 micron filter is used.

Air Regulator Adjustment (G)

Adjusts air pressure to the motor and fluid outlet pressure of pump. Locate it close to the pump. Read air pressure on gauge (E).

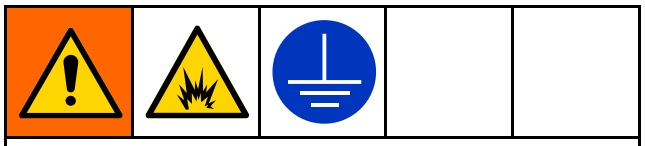
* Fluid Drain/Purge Valve (J)

Open valve to relieve pressure and when flushing or priming pump. Close valve when spraying.

De-Ice Contol (T)

Turn bleed air knob (open) to reduce icing.

Grounding

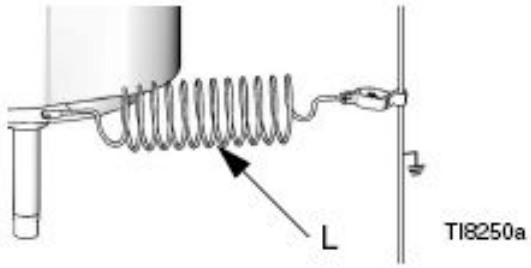


The equipment must be grounded to reduce the risk of static sparking. Static sparking can cause fumes to ignite or explode. Grounding provides an escape wire for the electric current.

Tools Required:

- Grounding wires and clamps for pails
- Two 5 gal. (19 liter) metal pails

1. Connect the ground wire (244524) (L) to the ground stud on the air motor.



2. Connect the other end of the ground wire to a true earth ground.
3. Ground the object being sprayed, fluid supply container, and all other equipment in the work area. Follow your local code. Use only electrically conductive air and fluid hoses.
4. Ground all solvent pails. Use only metal pails, which are conductive, placed on a grounded surface. Do not place pail on a non-conductive surface, such as paper or cardboard, which interrupts grounding continuity.

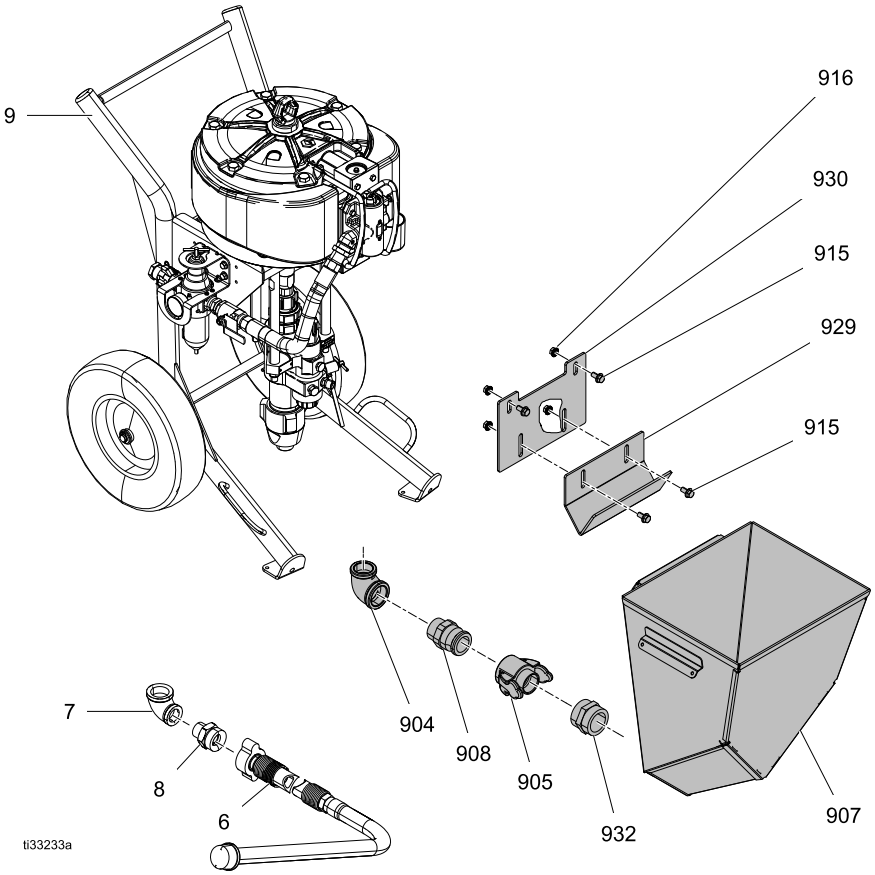
Install Wall Mount Assembly

NOTE: Before mounting any pump assembly to the wall always follow the Pressure Relief Procedure, page 13.

1. Ensure the wall is strong enough to support the weight of the pump assembly and accessories, fluid, hoses, and stress caused during pump operation.
2. Drill four 7/16 in. (11 mm) holes using bracket as a template. Use any of the three mounting hole groupings in the bracket. See Dimensions, page 31.
3. Bolt bracket securely to wall using bolts and washers designed to hold in the wall's construction.
4. Attach pump assembly to mounting bracket (201).
5. Connect air and fluid hoses. Refer to Setup, page 12.

Install Hopper Assembly

1. If necessary remove suction hose.
   a. Disconnect suction hose (6).
   b. Disconnect fitting (7) and quick disconnect adapter (8) from the pump.
2. Attach bracket (930) to the cart (9) with nuts (916) and screws (915).
3. Loosely attach bracket (929) to bracket (930) with nuts (916) and screws (915).
4. Install elbow (904) and fitting (908) on the pump.
5. Install fitting (932) and fitting (905) on hopper (907).
6. Connect fitting (905) to fitting (908). Adjust bracket (929) height to fit under the lip on the back of the hopper (907). Tighten nuts (916).



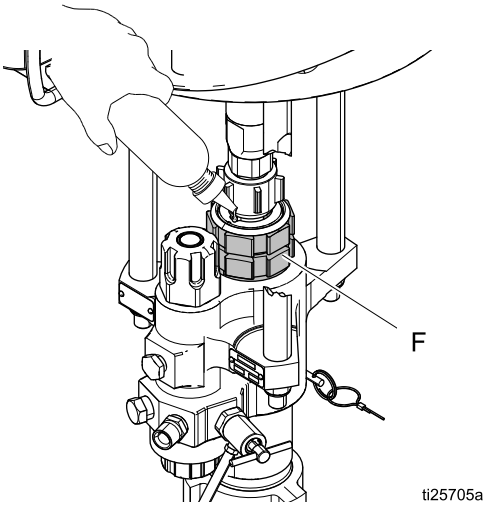
Setup

To avoid tip over, ensure cart is on a flat and level surface. Failure to do so could result in injury or equipment damage.

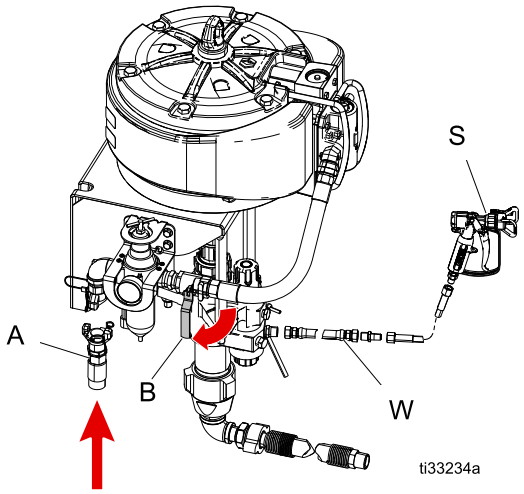
Tools Required:

- Two adjustable wrenches
- Non-sparking hammer or plastic mallet
- Torque wrench

1. Ground sprayer. See Grounding, page 10.
2. Check packing nut (F). Fill with Throat Seal Liquid (TSL). Torque to 25-30 ft-lb (34-41 N•m).



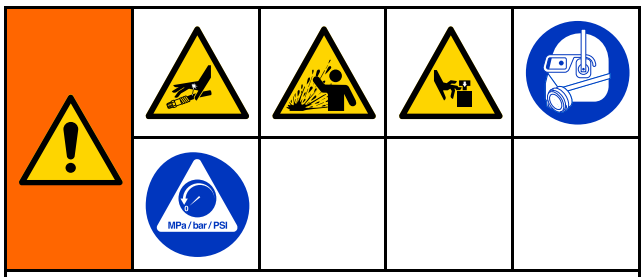
3. Attach electrically conductive fluid hose to pump outlet and tighten.
4. Attach electrically conductive fluid hose (and air hose if using an AA gun) to gun and tighten. Check that all pressure connections are tight.
5. Close bleed type master air valve (B). Connect air supply hose to 1 in npt(f) air inlet (A).



6. Flush and prime before using. See Flush, page 14, and Prime, page 16.

Pressure Relief Procedure

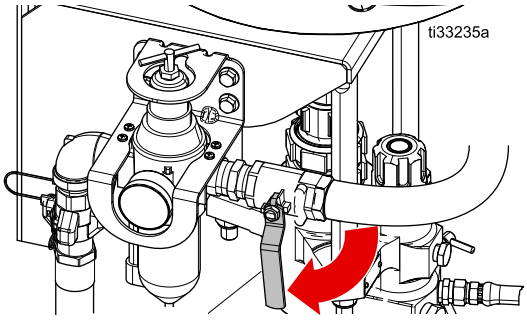
Follow the Pressure Relief Procedure whenever you see this symbol.



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

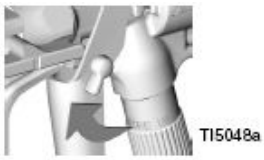
1. Engage gun trigger lock.

2. Close bleed type master air valve (B).



3. Disengage gun trigger lock.

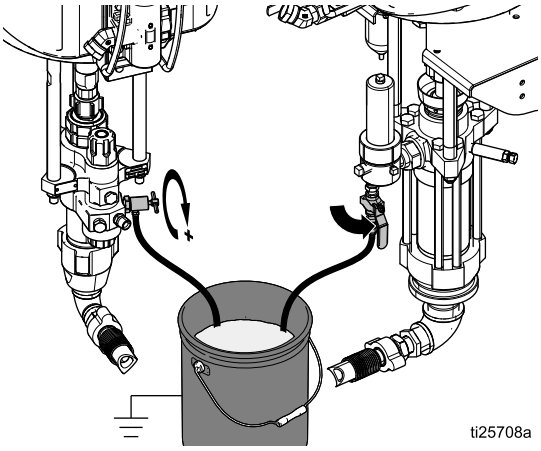
   NOTE: If using an AA gun, turn gun air regulator counter-clockwise to relieve pressure.



4. Hold gun firmly against a grounded metal pail. Trigger the gun until pressure is relieved.

5. Engage trigger lock.

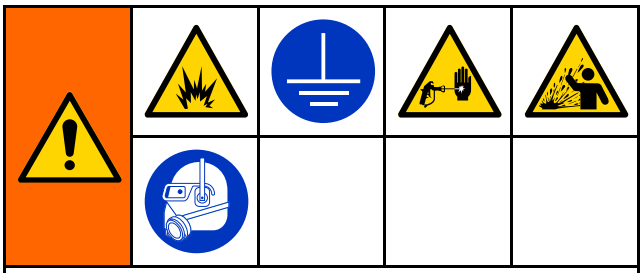
6. Drain fluid. To drain fluid, slowly open all fluid drain valves, including drain/purge valve (J), in system into a waste pail. If there is a return tube, open return line ball valve. Close valve after fluid is drained.



Left: Xtreme Lower	Right: Dura-Flo Lower

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

Flush



To avoid fire and explosion, always ground equipment and waste container. To avoid static sparking and injury from splashing, always flush at lower possible pressure.

Flush the pump:

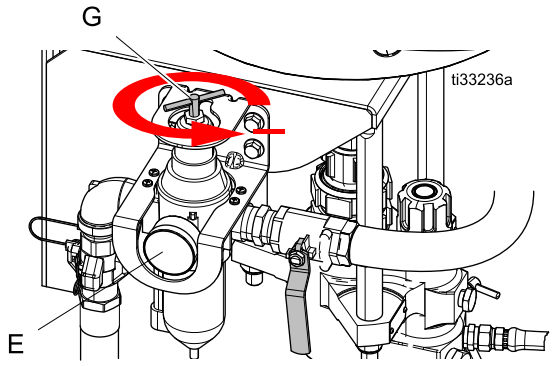
- Before first use
- When changing colors or fluids
- Before repairing equipment
- Before fluid dries or settles out in a dormant pump (check the pot life of catalyzed fluids)
- At the end of the day
- Before storing the pump

Flush at the lowest pressure possible. Flush with a fluid that is compatible with the fluid you are pumping and with the wetted parts in your system. Check with your fluid manufacturer or supplier for recommended flushing fluids and flushing frequency.

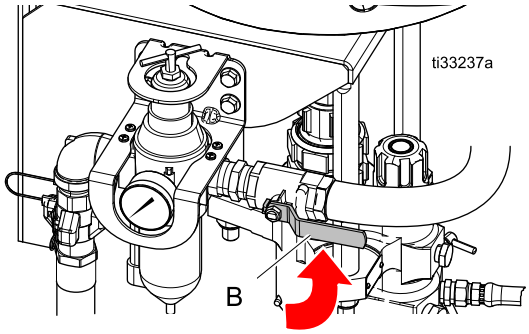
1. Follow Pressure Relief Procedure, page 13.
2. Remove tip and tip guard from gun.
3. If desired, remove fluid filter. Reinstall filter cap after removing fluid filter.
4. Place suction tube in a compatible solvent.

NOTE: Do not stretch hose tight. Let the hose hang to assist fluid flow into the pump.

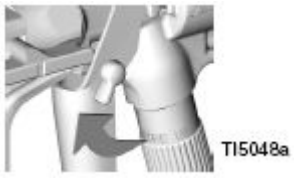
5. Turn regulator adjustment knob (G) counterclockwise until it stops, and gauge (E) reads zero.



6. Open bleed type master valve (B).



7. Flush hose and gun:
   a. Disengage gun trigger lock. Hold the gun against a grounded metal pail.



b. Trigger gun, slowly open regulator adjustment knob (G) until pump beings to cycle and a steady stream comes from gun. Trigger gun for 10-15 seconds.

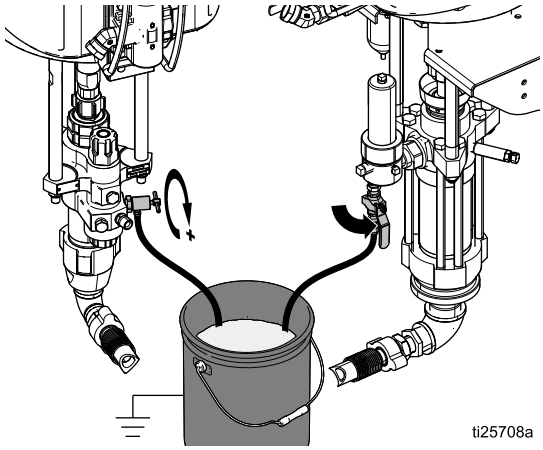
NOTE: If using an AA gun, increase air pressure by turning gun regulator clockwise.

c. After solvent is running clean, turn the regulator adjustment knob (G) counter clockwise until it stops and the gauge reads zero. The pump will stop. Once the material stops flowing, release the trigger and engage the trigger lock. Stop the pump with the rod buried in the pump.

d. Close the bleed type master air valve.

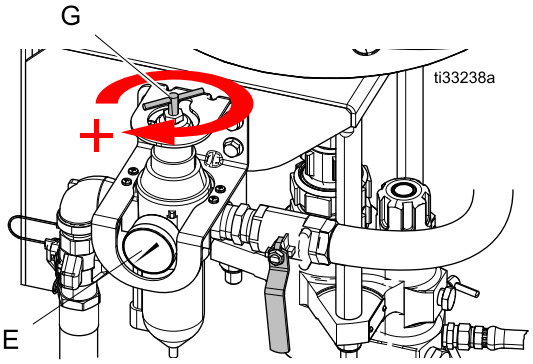
8. If flushing through drain/purge valve:

a. Place drain tube in a grounded waste pail. Open drain/purge valve (J) slightly by rotating counterclockwise.

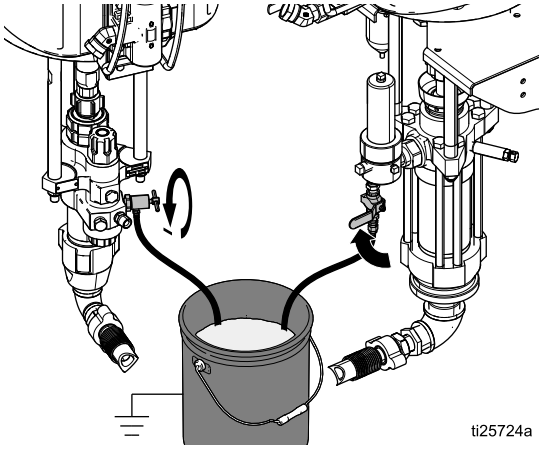


Left: Xtreme Lower	Right: Dura-Flo Lower

b. Start the pump by rotating the air regulator adjustment knob (G) clockwise until pump begins to move.



c. When clean solvent flows from drain tube close drain/purge valve (J) by rotating clockwise. Pump will stall.



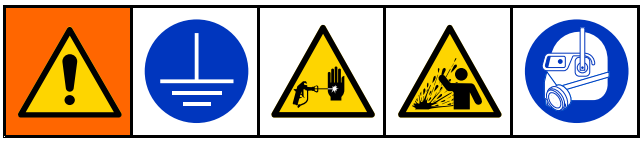
Left: Xtreme Lower	Right: Dura-Flo Lower

d. Stop the pump with the rod buried in the pump.

e. Follow Pressure Relief Procedure, page 13. Leave solvent in and store sprayer.

9. Remove fluid filter and soak in solvent. Replace filter cap.

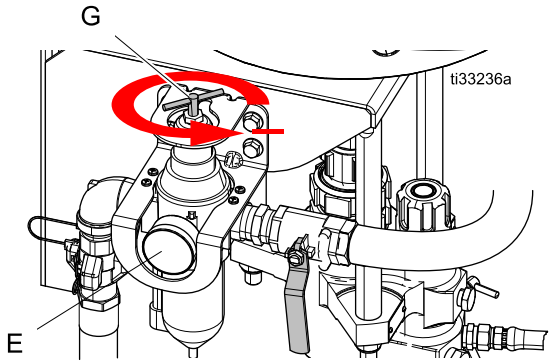
Prime



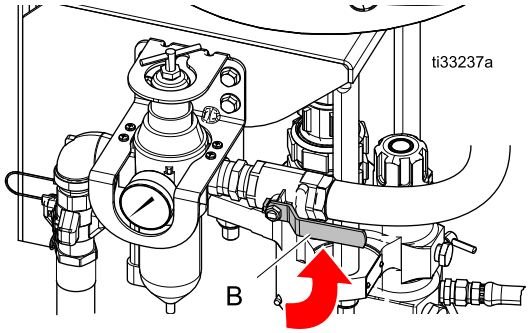
1. Follow Pressure Relief Procedure, page 13.
2. Lock gun trigger. Remove tip and tip guard from gun.
3. Place suction tube in the material that will be sprayed.

NOTE: Do not stretch hose tight let it hang to assist fluid flow into the pump.

4. Turn regulator adjustment knob (G) counterclockwise until it stops, and gauge (E) reads zero.



5. Open bleed type master valve (B).



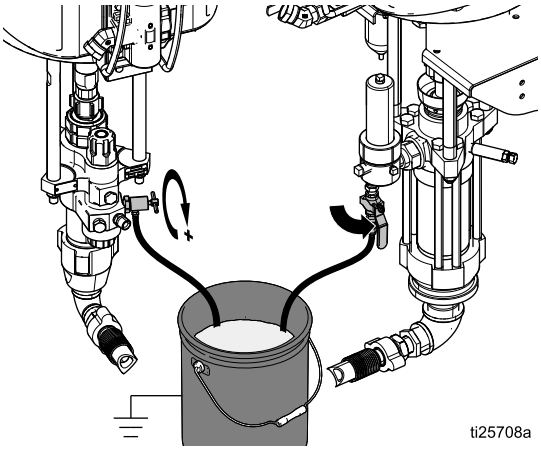
6. Prime through drain valve if necessary.

NOTE: Usually 1K high viscosity materials.

NOTICE

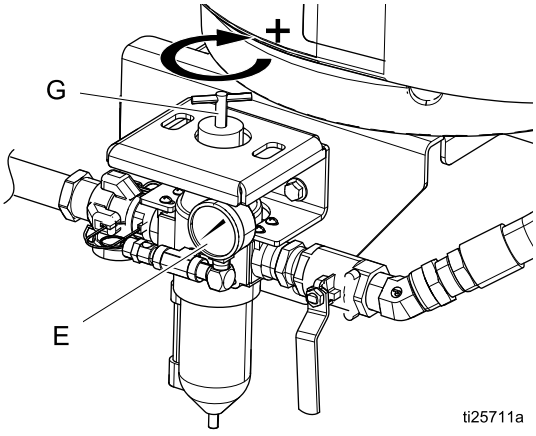
Do not prime pump through drain/purge valve using two component materials. Mixed two-component materials will harden in valve and result in clogging.

a. Place drain tube in a grounded waste pail. Open drain/purge valve (J) slightly by rotating counterclockwise.



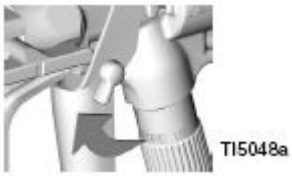
Left: Xtreme Lower	Right: Dura-Flo Lower

b. Start the pump by rotating the air regulator adjustment knob (G) clockwise until pump begins to move.



7. Prime hose and gun:

   a. Disengage gun trigger lock. Hold the gun against a grounded metal pail.



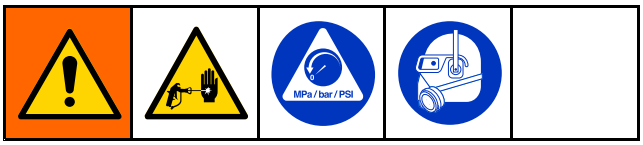
   b. Trigger gun, slowly open regulator adjustment knob (G) until pump beings to cycle and a steady stream comes from gun. Trigger gun for 10-15 seconds.

   NOTE: If using an AA gun, increase air pressure by turning gun regulator clockwise.

   c. Engage trigger lock.

8. The equipment is now ready to spray; go to Spray, page 18.

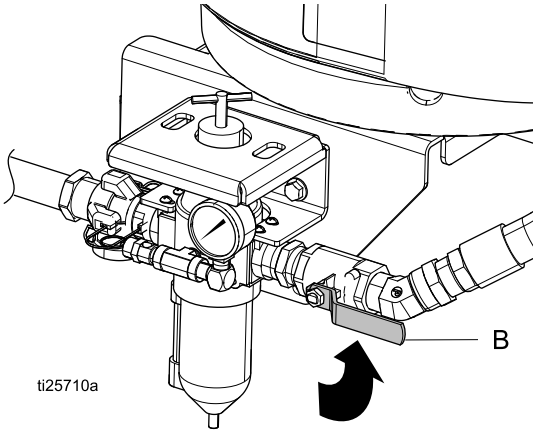
Spray



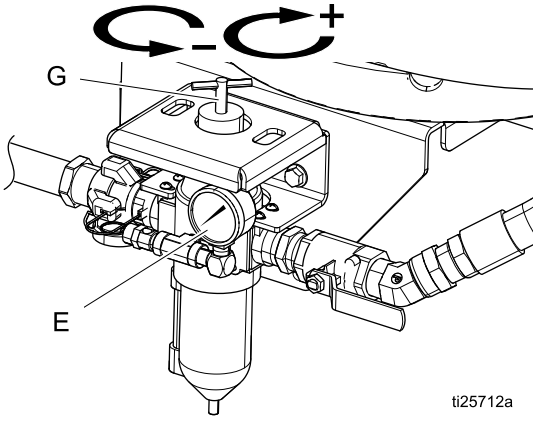
NOTICE

Do not allow pump to run dry. It will quickly accelerate to a high speed causing damage.

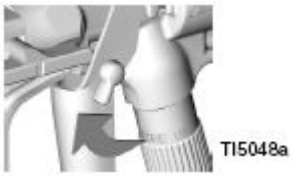
1. Prime. See Prime, page 16.
2. Follow Pressure Relief Procedure, page 13.
3. Install tip and tip guard on gun.
4. Open bleed type master air valve (B).



5. Turn regulator adjustment knob (G) until gauge (E) reads desired pressure. Turn clockwise to increase pressure, counterclockwise to decrease pressure.



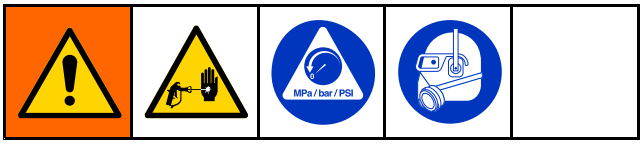
6. Disengage gun trigger lock.



7. Spray a test pattern. Read fluid manufacturer's recommendations. Adjust pressure as necessary. If using an AA gun, increase gun air pressure while testing spray pattern.

8. Flush when done spraying. See Flush, page 14.
9. Follow Pressure Relief Procedure, page 13.

Shutdown



NOTICE

Never leave water or water-base fluid in pump over night. If you are pumping water-base fluid, flush with water first, then with a rust inhibitor, such as mineral spirits. Relieve pressure, but leave rust inhibitor in pump to protect parts from corrosion.

Follow Pressure Relief Procedure, page 13.

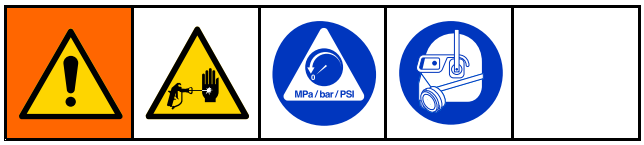
Always flush the pump before the fluid dries on the displacement pump rod. See Flush, page 14.

Maintenance

Preventative Maintenance Schedule

The operating conditions of your particular system determine how often maintenance is required. Establish a preventive maintenance schedule by recording when and what kind of maintenance is needed, and then determine a regular schedule for checking your system.

Daily Maintenance



NOTE: For over night shutdown, stop pump at bottom of its stroke to prevent fluid from drying on exposed displacement rod and damaging throat packings. Follow Pressure Relief Procedure, page 13.

1. Flush. See Flush, page 14.
2. Relieve pressure. See Pressure Relief Procedure, page 13.
3. Check packing nut (S). Adjust packings and replace TSL as necessary. Torque to 25-30 ft-lb (34-41 N•m).
4. Drain water from air filter.
5. Clean suction tube using a compatible solvent. It is recommended that you clean the outside of the sprayer using a cloth and compatible solvent.
6. Check hoses, tubes, and couplings. Tighten all fluid connections before each use.
7. Clean fluid line filter.

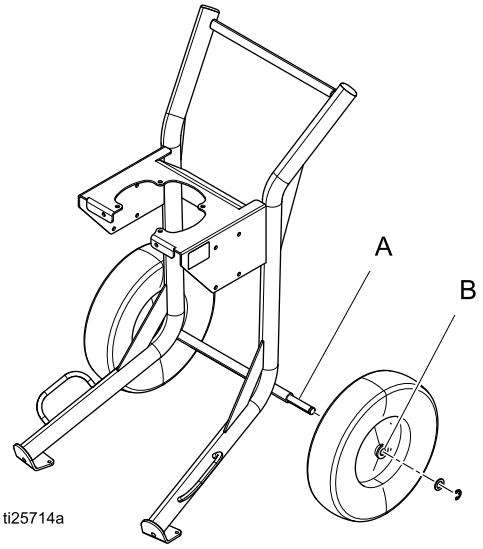
Corrosion Protection

Always flush the pump before the fluid dries on the displacement rod. Never leave water or water-based fluid in the pump overnight. First, flush with water or a compatible solvent, then with mineral spirits. Relieve the pressure, but leave the mineral spirits in the pump to protect the parts from corrosion.

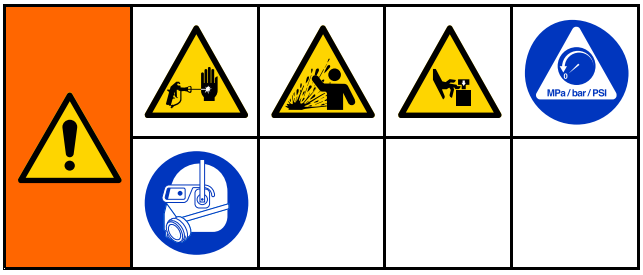
Cart Maintenance

Periodically lubricate the axle between points A and B with lightweight oil.

Keep the cart clean by wiping up spills daily, using a compatible solvent



Troubleshooting



1. Follow Pressure Relief Procedure, page 13.
2. Check all possible causes and problems before disassembling pump.
3. See air motor manual for air motor specific troubleshooting

* To determine if fluid hose or gun is obstructed, follow Pressure Relief Procedure, page 13. Disconnect fluid hose and place a container at pump fluid outlet to catch any fluid. Turn on air power just enough to start pump. If pump starts, the obstruction is in fluid hose or gun.

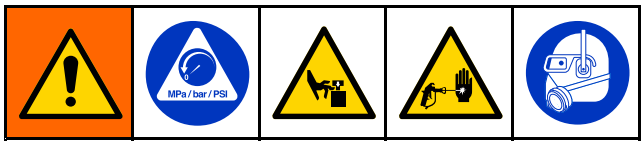
Problem	Cause	Solution
Does not operate.	Valve closed or clogged.	Clear air line; increase air supply. Check that valves are open.
	Fluid hose or gun obstructed.	Clean hose or gun.*
	Dried fluid on displacement rod.	Clean rod; always stop pump at bottom of stroke; keep wet-cup filled with compatible solvent.
	Air motor parts dirty, worn, or damaged.	Clean or repair air motor. See motor manual.
Output low on both strokes.	Air line restricted or air supply inadequate. Valves closed or clogged.	Clear air line; increase air supply. Check that valves are open.
	Fluid hose/gun obstructed; hose ID too small.	Clear hose or gun*; use hose with larger ID.
	Air motor icing.	Open De-Ice control.
Output low on down stroke.	Open or worn intake valve.	Clear or service intake valve.
	High viscosity fluid.	Adjust intake spacers.
Output low on upstroke.	Open or worn piston valve or packings.	Clear piston valve; replace packings.
Erratic accelerated speed.	Fluid supply exhausted, clogged suction.	Refill supply and prime pump. Clean suction tube.
	High viscosity fluid.	Reduce viscosity; adjust intake spacers.
	Open or worn piston valve or packings.	Clear piston valve; replace packings.
	Open or worn intake valve.	Clear or service intake valve.
Runs sluggishly.	Possible icing.	Stop pump. Open De-Ice control.
Cycles or fails to hold pressure at stall.	Worn check valves or seals.	Service lower. See Remove Lower, page 21, and Xtreme Lowers manual (311762).
Air bubbles in fluid.	Loose suction line.	Tighten. Use compatible liquid thread sealant or PTFE tape on connections.
Poor finish or irregular spray pattern.	Incorrect fluid pressure at gun.	See gun manual; read fluid manufacturer's recommendations.
	Fluid is too thin or too thick.	Adjust fluid viscosity; read fluid manufacturer's recommendations.

Remove Lower

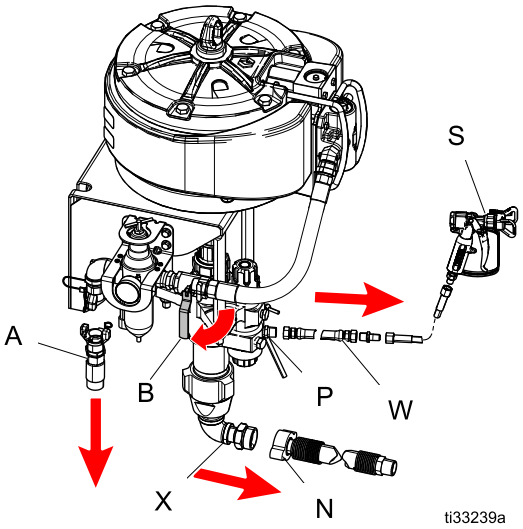
Required Tools

- Set of adjustable wrenches
- Torque wrench
- Rubber mallet
- Thread lubricant
- Anti-seize lubricant 222955
- Loctite® 2760™ or equivalent

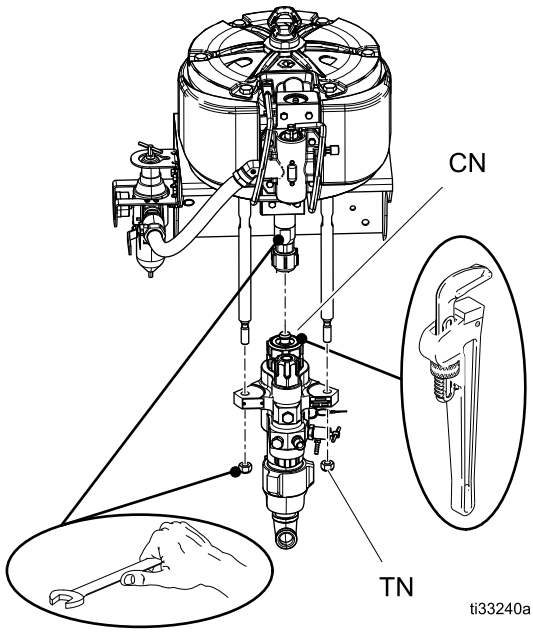
Disconnect and Reconnect Lower



1. Flush pump; see Flush, page 14. Stop pump at bottom of its stroke. Follow Pressure Relief Procedure, page 13.
2. Disconnect air hose.
3. Disconnect fluid hose (W). Hold fluid outlet fitting (P) with a wrench to keep it from loosening while you disconnect suction hose (N).
4. Note the relative position of lower's fluid outlet (P) to inlet (X) of motor for easier reassembly alignment. If motor does not require service, leave it attached to its mounting.



5. Hold the flats of the air motor piston rod with a wrench. Use another wrench to loosen the coupling nut (CN).

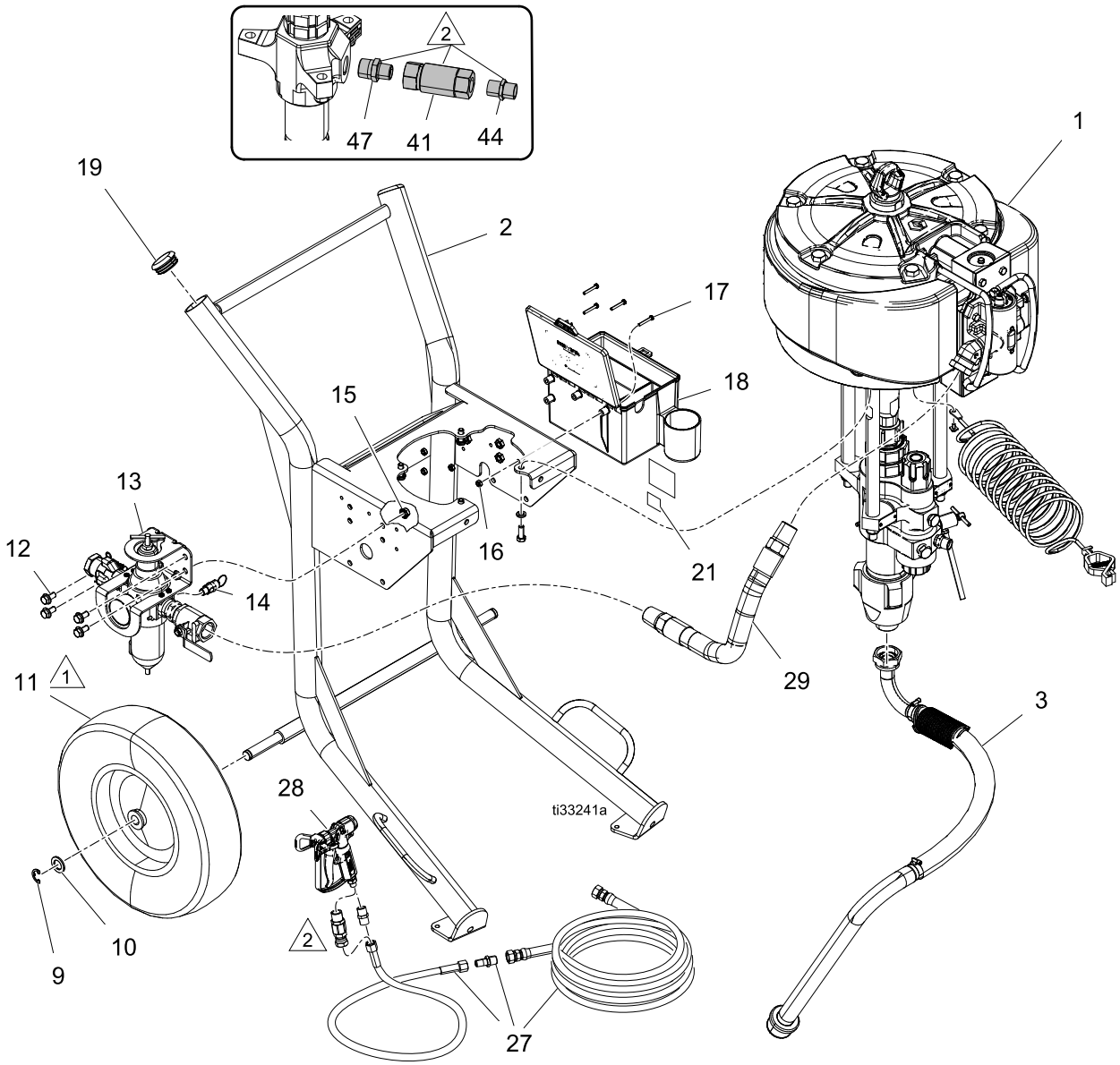


6. Remove the tie rod nuts (TN).
7. Remove lower. Refer to the Lower manual to service lower. To service motor, refer to separate motor manual.
8. Reconnect lower by following disconnect steps in reverse order.

   NOTE: Torque nuts (308) to 50-60 ft-lb (68-81 N•m).

Parts

King Sprayer with Xtreme Lower Cart Packages

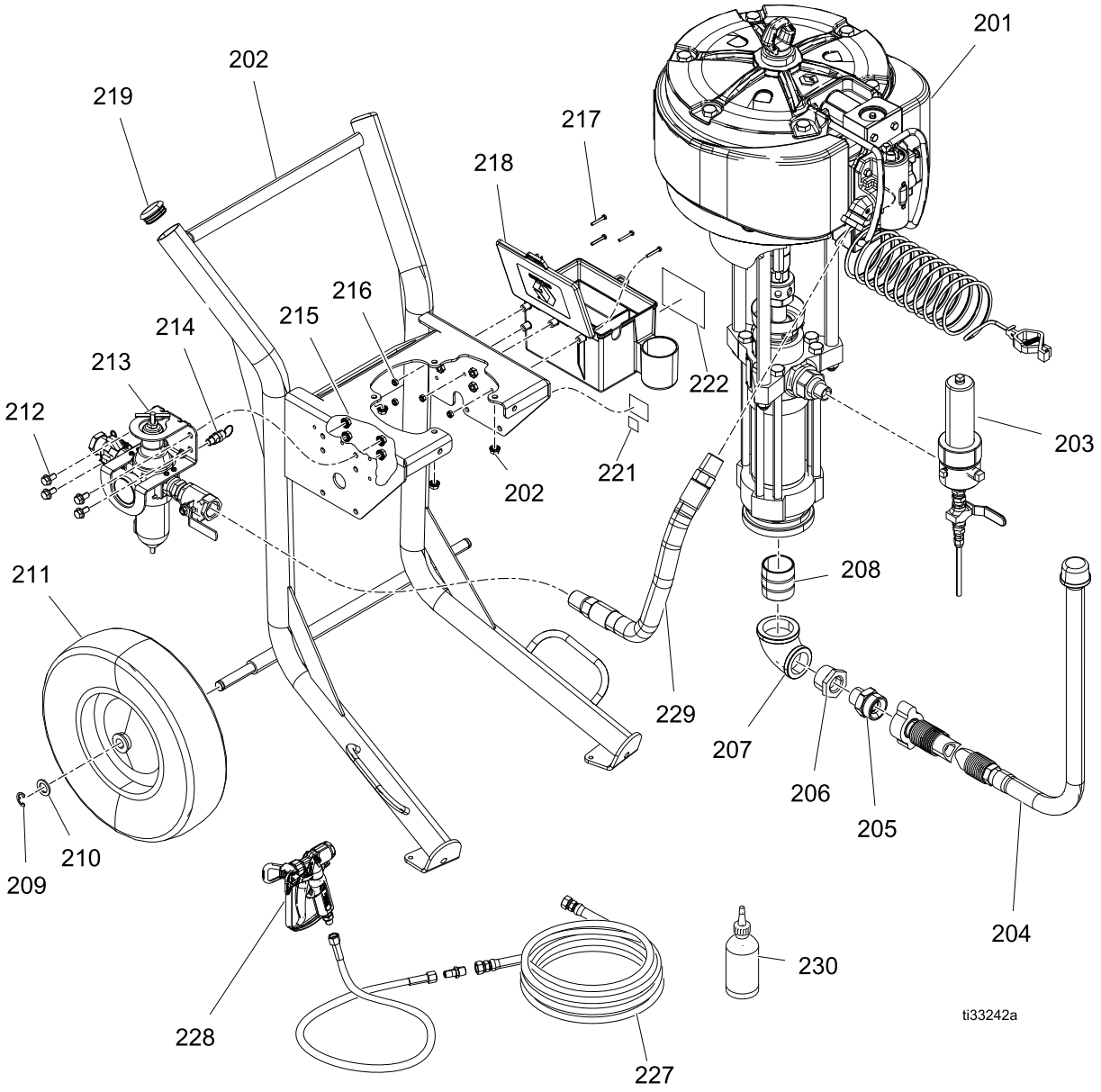


1. **Apply grease to cart axles before assembling wheels.**
2. **For heavy fluid packages 24X593 and 24X594 only.**
3. **Apply anaerobic pipe sealant to all non-swiveling pipe threads.**

King Packages with Xtreme Lower

Ref	Part	Description	Qty.
1	- - - -	See Pumps, page 28.	1
2	24Z852	CART, heavy duty, painted	1
3	25D515	HOSE, suction, 5 gallon to 1–1/4 npt	1
9	113436	RING, retaining	2
10	154628	WASHER	2
11	113362	WHEEL, semi-pneumatic	2
12	112395	SCREW, cap, flange hd	4
13		MODULE, air controls, 1 in. npt	1
	17U994	STANDARD AIR CONTROLS, K71**0, K71**1, K82**0, K82**1	
	25D532	AIR CONTROLS WITH LUBRICATOR, K71**2, K82**2	
14		SAFETY VALVE	1
	113498	110 psi, K71 modules	
	16M190	95 psi, K82 models	
15	112958	NUT, hex, flanged	4
16	114231	NUT, lock, hex (standard)	4
17	115248	SCREW, cap, hex hd	4
18	25D498	TOOLBOX, color, black	1
19	113361	CAP, tube, round	2
21	15Y118	LABEL, made in USA	1
22	17V650	LABEL, toolbox, King sprayer	1
27	24T756	HOSE, set, Xtreme, 7250 psi	1
28	XTR704	GUN, XTR7, 1 in., 4 fng, GHDRAC	1
29	278770	HOSE, coupled	1

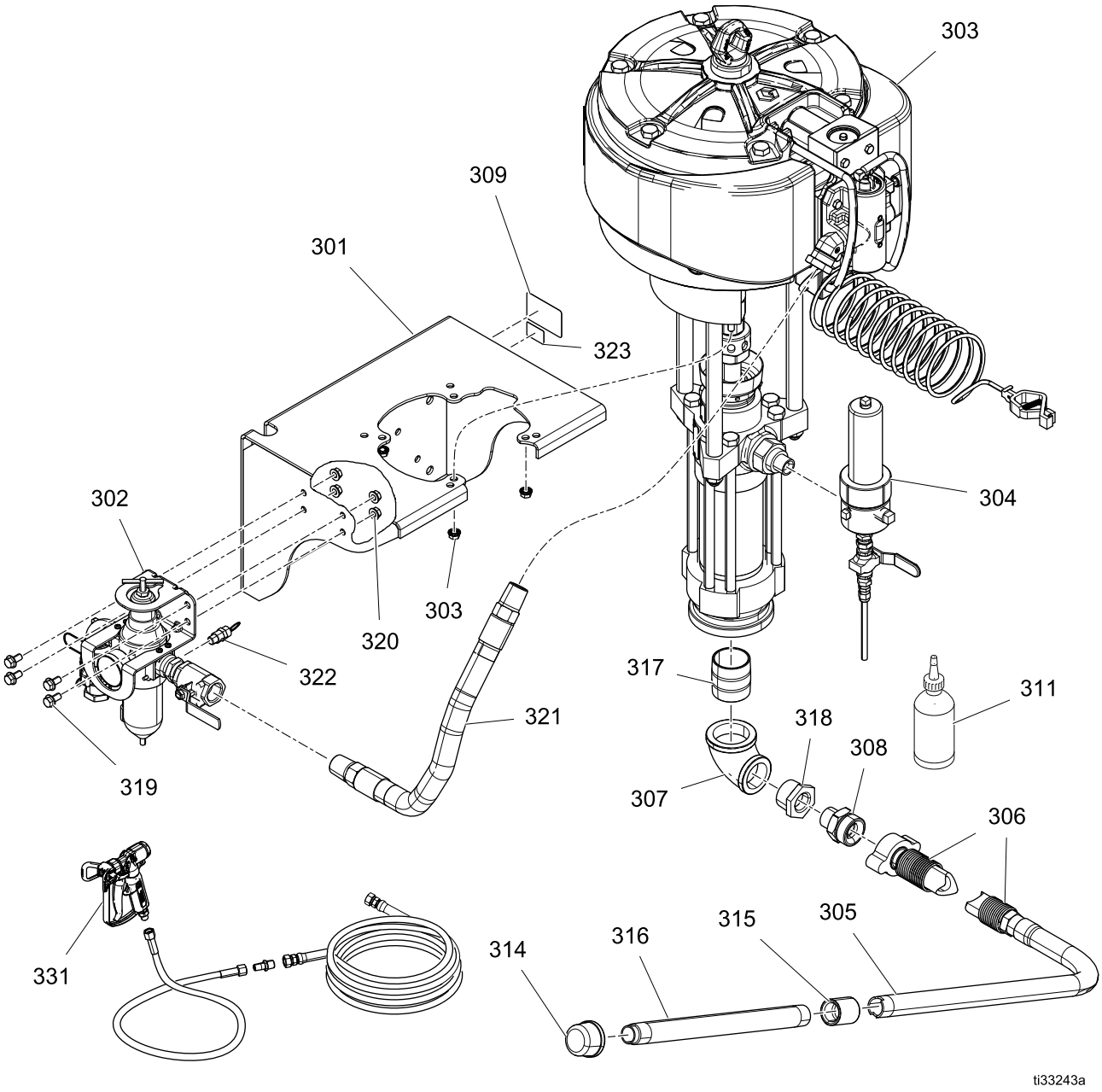
Dura-Flo Cart Packages



Dura-Flo Cart Package Parts

Ref	Part	Description	Qty.
201	- - - -	See Pumps, page 28.	1
202	24Z852	CART, heavy duty, painted	1
203	238620	FILTER, paint	1
204	24T757	HOSE, with siphon, Xtreme	1
205	116402	ADAPTER, quick connect	1
206	121239	BUSHING, 1.5 x 1 npt reducer, sst	1
207	120291	PIPE, elbow, female	1
208	124945	FITTING, nipple, 2 in. npt 2.5 lng, mm, blk	1
209	113436	RING, retaining	2
210	154628	WASHER	2
211	113362	WHEEL, semi-pneumatic	2
212	112395	SCREW, cap, flange hd	4
213		AIR CONTROLS	1
	17U994	STANDARD AIR CONTROLS, K47FH0 and K47FH1	
	25D532	AIR CONTROLS with lubricant, K47FH2	
214	16M190	VALVE, safety, 110 psi	1
215	112958	NUT, hex, flanged	4
216	114231	VALVE, safety, 95 psi	4
217	115248	SCREW, cap, hex hd	4
218	25D498	TOOLBOX, color, black	1
219	113361	CAP, tube, round	2
221	15Y118	LABEL, Made in USA	1
222	17V650	LABEL, toolbox, King sprayer	1
227	24T755	HOSE, set, Xtreme, 5600 psi	1
228	XTR504	GUN, XTR5, 1 in. hnd, 4 fng, XHDRAC	1
229	128093	HOSE, coupled	1
230	206994	FLUID, TSL 8 oz bottle	1
236	159239	FITTING, nipple, pipe, rdcg	1

Wall Mount Packages



1. Apply stainless steel pipe sealant to all non-swiveling pipe threads.

Wall Mount Package Parts

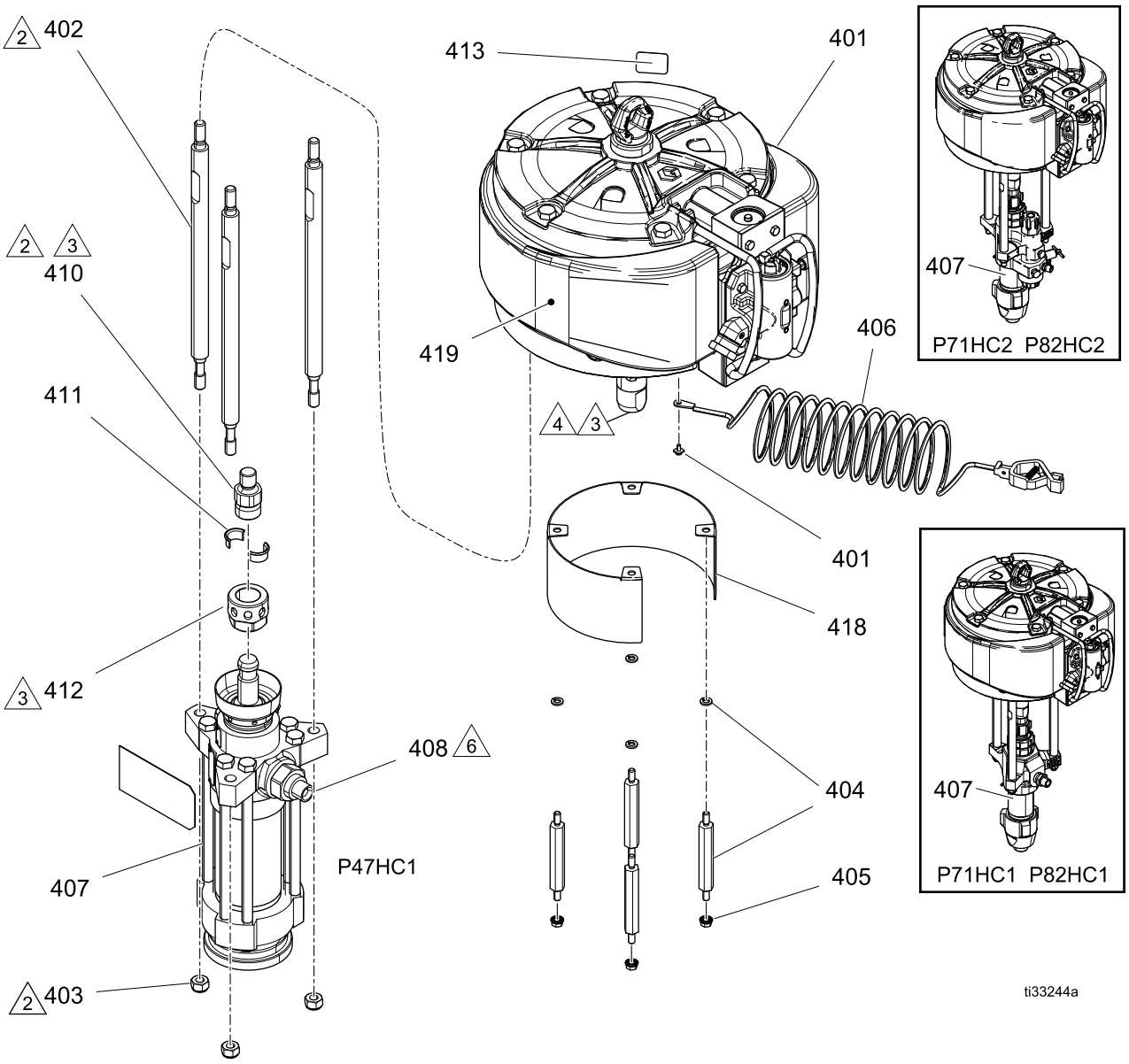
Ref	Part	Description	Qty.
301	24X180	BRACKET, wall, XL, painted	1
302	25D650	MODULE, air, wall, mount, 1 in.	1
303		PUMP, Xtreme	1
	P47HC1	XL10K/430DF, nf	
	P71HC2	XL10K/290, bf	
	P82HC2	XL10K/250, bf	
304	238620	FILTER, paint (K47 models only)	1
305	197682	TUBE, section	1
306	247302	HOSE, suction, 1 in. npt x quick connect	1
307		PIPE, elbow, female	1
	120291	K47 packages	
	116401	K71 and K82 packages	
308	116402	ADAPTER, quick connect	1
309	190774	BLANK, label, kit	1
311	206994	FLUID, TSL, 8 oz bottle	1
314	187147	STRAINER, inlet	1
315	114967	COUPLING, pipe, 1 in.	1
316	195151	TUBE, intake	1
317	124945	FITTING, nipple, 2 in. npt lng, mm, blk	1
318	121239	BUSHING, 1.5 x 1 npt reducer, sst	1
319	112395	SCREW, cap, flange hd	4
320	112958	NUT, hex, flanged	4
321		HOSE, coupled	1
	128093	K47 packages	
	278770	K71 and K82 packages	
322		VALVE, safety, 110 psi	1
	113498	110 psi, K71 packages	
	16M190	95 psi, K47 and K82 packings	
323	15Y118	LABEL, Made in USA	1
330		HOSE SET, Xtreme	1
	24T755	5600 psi, K47 packages	
	24T756	7250 psi, K71 and K82 packages	
331		XTR504 GUN	1
	XTR504	XTR5, 1 in. handle, K47 packages	
	XTR704	XTR7, 1 in. handle, K71 and K82 packages	

Pumps

		Sprayer Description and Quantity											
		No Hose and Gun				Hose and Gun				Hose and Gun, with Lubricator on Air Controls			
		No Filter on Lower		With Filter on Lower		No Filter on Lower		With Filter on Lower		No Filter on Lower		With Filter on Lower	
Part and Description		K71NH0	K82NH0	K71FH0	K82FH0	K71NH1	K82NH1	K71FH1	K82FH1	K71NH2	K82NH2	K71FH2	K82FH2
P71HC1	* PUMP, Xtreme, XL, 290	1				1				1			
P71HC2				1				1				1	
P82HC1	* PUMP, Xtreme, XL, 250		1				1				1		
P82HC2					1				1				1

* See Pump Package Parts, page 32.

Pump Package Parts



1 Torque to 95–105 ft-lb (129–142 N•m).

2 Torque to 230–250 ft-lb (312–340 N•m).

3 Apply anaerobic pipe sealant.

4 Apply stainless steel pipe sealant to all non-swiveling pipe threads.

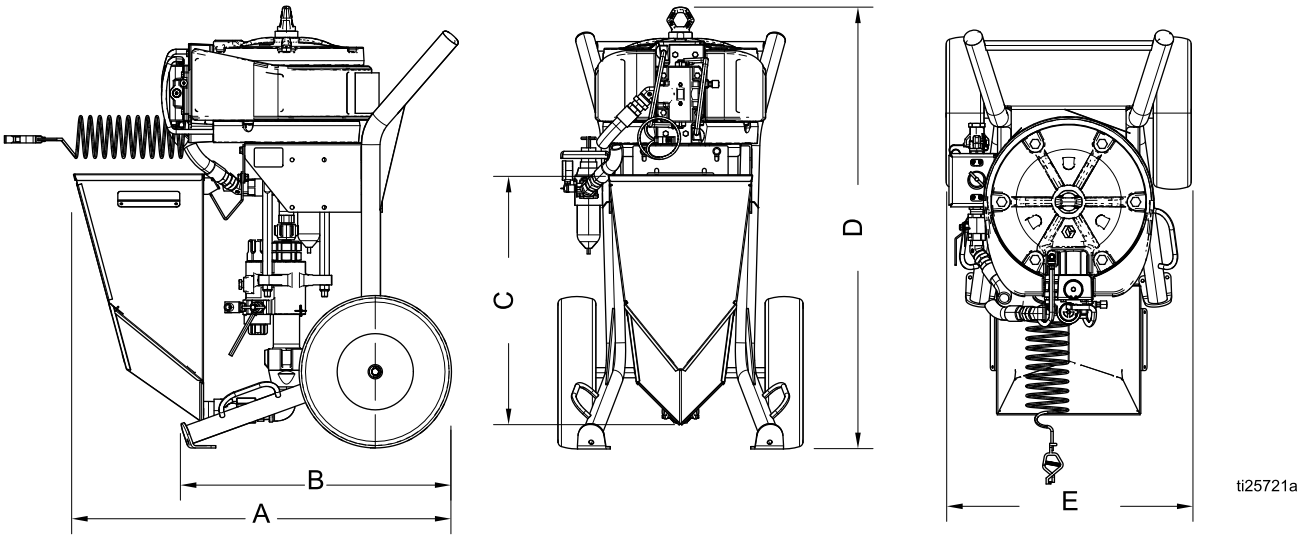
Pump Package Parts

Ref	Part	Description	Pump Part Number					
			Qty.	P47HC1	P71HC1	P71HC2	P82HC1	P82HC2
401	24X856	MOTOR, air, 13 in.	1	•	•	•	•	•
402	184382	ROD, tie	3	•	•	•	•	•
403	15U606	NUT, lock, M16 x 2	3	•	•	•	•	•
404	120465	SPACER, mounting, threaded	4	•				
405	112958	NUT, hex, flanged	4	•				
406	244524	WIRE, ground assembly with clamp	1	•	•	•	•	•
407		LOWER, pump	1					
	24W644	DuraFlo, 3/4		•				
	L25HC1	Xtreme, 250 HP, no filter					•	
	L25HC2	Xtreme, 250 HP, with filter						•
	L29HC1	Xtreme, 290 HP, no filter			•			
	L29HC2	Xtreme, 290 HP, with filter				•		
410		ADAPTER, rod	1					
	184582	P47 packages		•				
	184583	P71 and P82 packages			•	•	•	•
411		COLLAR, coupling	2					
	184130	P47 packages		•				
	184129	P71 and P82 packages			•	•	•	•
412		NUT, coupling	1					
	184096	P47 packages		•				
	184098	P71 and P82 packages			•	•	•	•
413	15H117	LABEL, identification	1	•	•	•	•	•
418	15K296	SPACER, painted	1	•				
419		LABEL, King	1					
	17U827	XL45–430		•				
	17U828	XL70–290			•	•		
	17U829	XL80–250					•	•
421	112887	TOOL, wrench, spanner	1	•				

Replacement Warning labels, signs, tags, and cards are available at no cost.

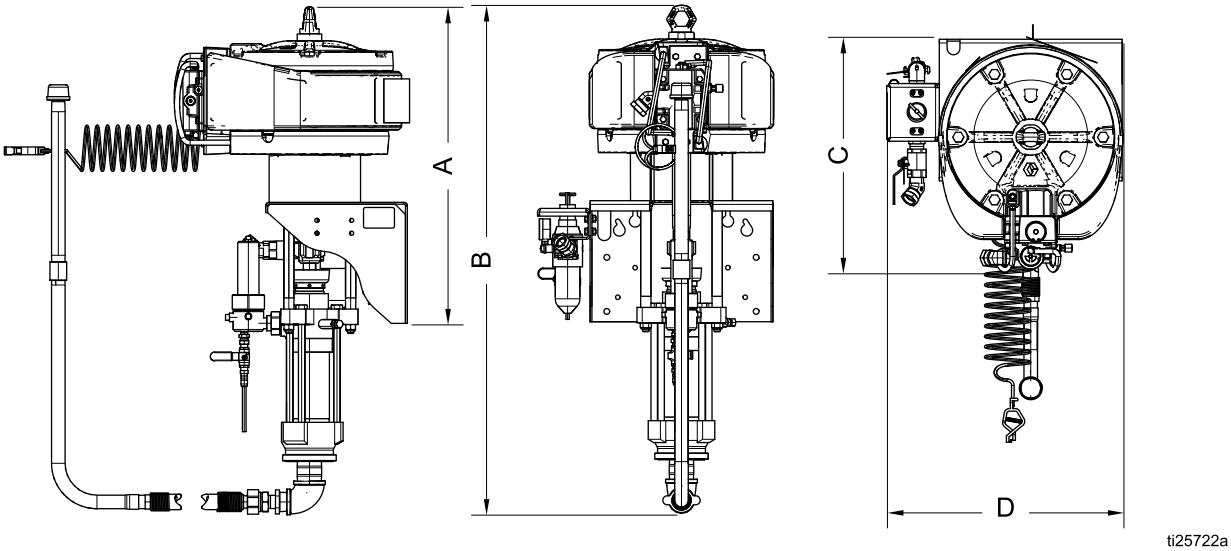
Dimensions

Sprayer Cart Packages



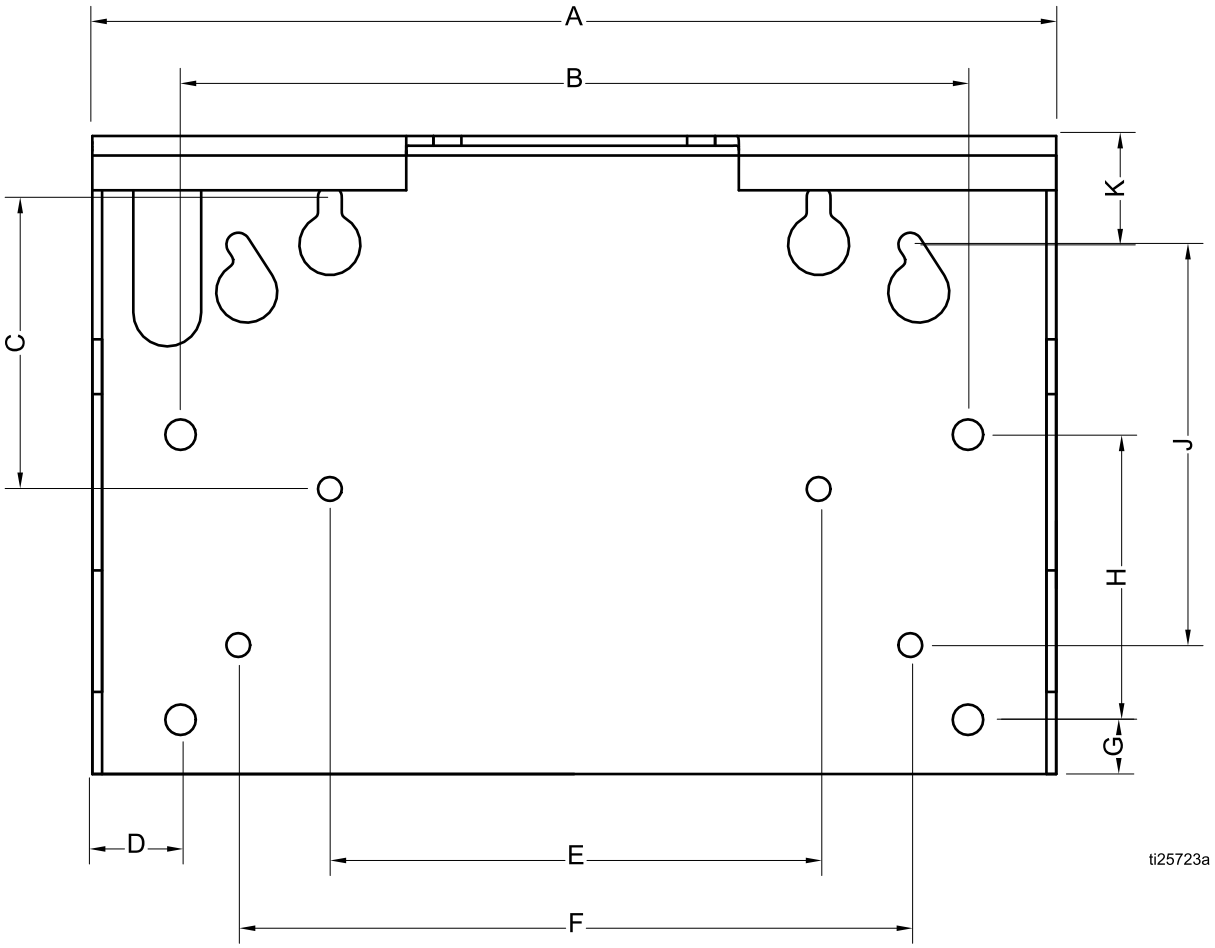
Mount	A	B	C	D	E
Dura-Flo	40.75 in (1035.05 mm)	28.5 in (723.9 mm)	26.25 in (666.75 mm)	46.25 in (1174.75 mm)	25.75 in (654.05 mm)
Xtreme	40.75 in (1035.05 mm)	28.5 in (723.9 mm)	26.25 in (666.75 mm)	51 in (1295.4 mm)	25.75 in (654.05 mm)

Wall Mount and Pump Packages



Mount	A	B	C	D
Dura-Flo	30.75 in (781.05 mm)	49.25 in (1250.95 mm)	22 in (558.8 mm)	23 in (584.2 mm)
Xtreme	26.25 in (666.75 mm)	43.5 in (1104.9 mm)	22 in (558.8 mm)	23 in (584.2 mm)

Wall Mount Bracket Mounting Hole Diagram



1	1/2 in (12.7 mm) diameter holes for mounting to stand
2	7/16 in (11 mm) diameter holes for mounting to wall
A	17.8 in (450.9 mm)
B	14.5 in (368.3 mm)
C	5.4 in (136.5 mm)
D	1.6 in (41.4 mm)
E	9 in (228.6 mm)
F	12.4 in (314.3 mm)
G	1 in (25.4 mm)
H	5.3 in (133.4 mm)
J	7.4 in (187.3 mm)
K	2 in (50.8 mm)

Performance Charts

Calculate Fluid Outlet Pressure

To calculate fluid outlet pressure (psi/MPa/bar) at a specific fluid flow (gpm/lpm) and operating air pressure (psi/MPa/bar), use the following instructions and pump data charts.

1. Locate desired flow along bottom of chart.
2. Follow vertical line up to intersection with selected fluid outlet pressure curve. Follow left to scale to read fluid outlet pressure.

Calculate Pump Air Flow/Consumption

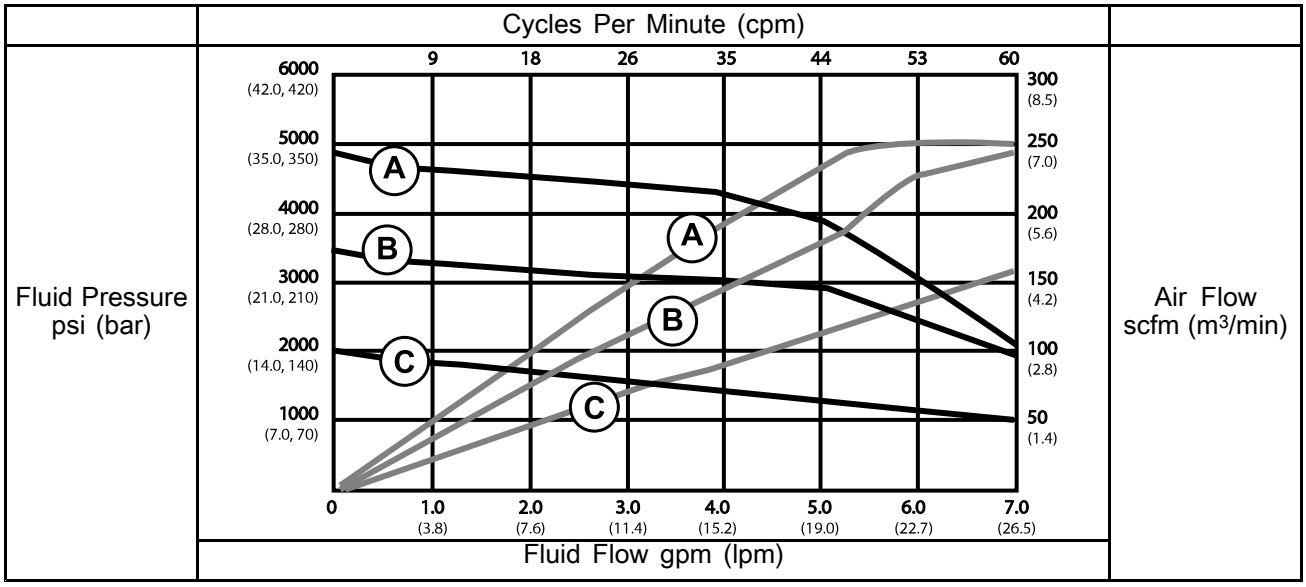
To calculate pump air flow/consumption (scfm or m^3/min) at a specific fluid flow (gpm/lpm) and air pressure (psi/Mpa/bar), use the following instructions and pump data charts.

1. Locate desired flow along bottom of chart.
2. Follow vertical line up to intersection with selected fluid outlet pressure curve. Follow right to scale to read air flow consumption.

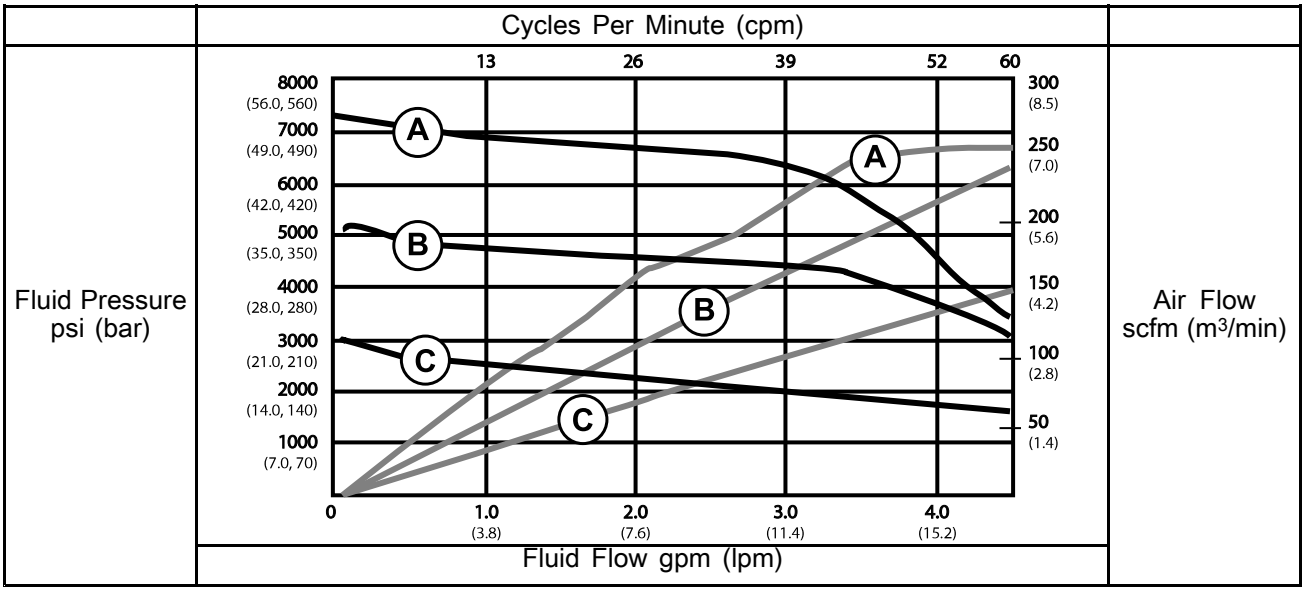
Key: Air Pressure

A	100 psi (0.7 MPa, 7 bar)
B	70 psi (480 kPa, 4.8 bar)
C	40 psi (280 kPa, 2.8 bar)

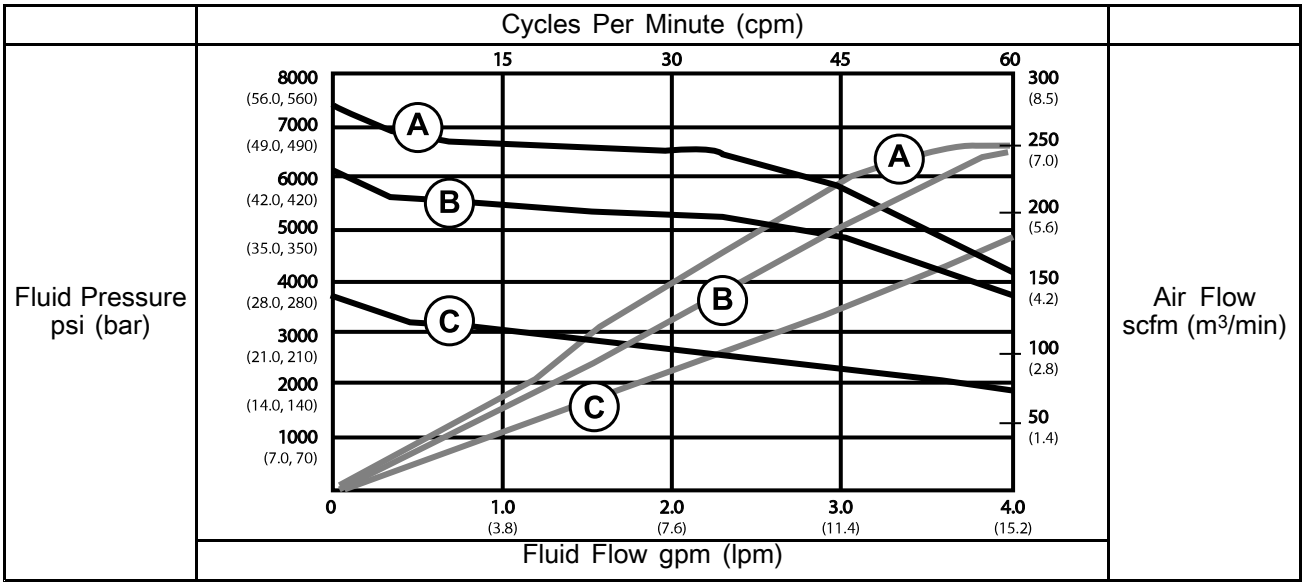
45:1



70:1


Cycles Per Minute (cpm)
13
26
39
52
60
8000 (56.0, 560)
7000 (49.0, 490)
6000 (42.0, 420)
5000 (35.0, 350)
4000 (28.0, 280)
3000 (21.0, 210)
2000 (14.0, 140)
1000 (7.0, 70)
300 (8.5)
250 (7.0)
200 (5.6)
150 (4.2)
100 (2.8)
50 (1.4)
A
B
C
0
1.0 (3.8)
2.0 (7.6)
3.0 (11.4)
4.0 (15.2)
Fluid Pressure psi (bar)
Air Flow scfm (m³/min)
Fluid Flow gpm (lpm)

80:1


Cycles Per Minute (cpm)
15
30
45
60
8000 (56.0, 560)
7000 (49.0, 490)
6000 (42.0, 420)
5000 (35.0, 350)
4000 (28.0, 280)
3000 (21.0, 210)
2000 (14.0, 140)
1000 (7.0, 70)
300 (8.5)
250 (7.0)
200 (5.6)
150 (4.2)
100 (2.8)
50 (1.4)
A
B
C
0
1.0 (3.8)
2.0 (7.6)
3.0 (11.4)
4.0 (15.2)
Fluid Pressure psi (bar)
Air Flow scfm (m³/min)
Fluid Flow gpm (lpm)

Technical Specifications

Xtreme XL Spray Packages		
	U.S.	**Metric**
Maximum air inlet pressure to sprayer	150 psi	1 MPa, 10.3 bar
Stroke length (nominal)	4.75 in.	
Maximum pump speed (Do not exceed maximum recommended speed of fluid pump, to prevent premature pump wear)	60 cycles per minute	
Sound Data	See XL Motor manual for sound data.	
Air Inlet Size	1 in. npt(f)	
Wetted Parts	Carbon steel; ally steel; 304, 440 and 17–4 PH grades of stainless steel; zinc and nickel plating; ductile iron; tungsten carbide; PTFE; leather	
Fluid Inlet Size		
All Xtreme Lower Pumps	1 1/4 npt(m)	
Dura-Flo Lower Pumps	2 in. npt(f)	
Fluid Outlet Size (Number of Outlets)		
Xtreme Lower Pumps With Built-In Filters (2)	1/2 in. npt(f)	
Xtreme Lower Pumps Without Filters (1)	1 in. npt(f)	
Dura-Flo Lower Pumps (1)	3/4 npt(m)	
Maximum Air Operating Pressure		
K47	100 psi	0.7 MPa, 7 bar
K71	100 psi	0.7 MPa, 7 bar
K82	88 psi	0.6 MPa, 6.1 bar
Maximum Fluid Working Pressure		
K47	4500 psi	31 MPa, 310 bar
K71	7100 psi	48.9 MPa, 489 bar
K82	7250 psi	50 MPa, 500 bar
Weight		
K71, K82	340 lbs.	154.2 kg
K47	341 lbs.	154.7 kg

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 Information

For the latest information about Graco products, visit www.graco.com.

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

To place an order, contact your Graco Distributor or call to identify the nearest distributor.

Phone: 612-623-6921 **or Toll Free:** 1-800-328-0211 **Fax:** 612-378-3505

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

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

Original Instructions. This manual contains English. MM 334645

Graco Headquarters: Minneapolis

International Offices: Belgium, China, Japan, Korea

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

www.graco.com

Revision D, March 2018