

302-121

PROFESSIONAL AIRLESS SPRAYER

MAXIMUM WORKING PRESSURE 3300PSI 227BAR 22.7 MPa

VOLTS	CYCLES	AMPS	PHASE
110V	50/60	13	SINGLE
220V	50/60	7	SINGLE

Patents pending



FOR THE APPLICATION OF ARCHITECTURAL PAINTS AND COATINGS



!! SAFETY AND OPERATING INSTRUCTIONS INSIDE !! Read all warnings and safe operating information inside. SAVE THIS MANUAL FOR FUTURE REFERENCE

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602-834	T11 HI-CART COMPLETE 110V
602-844	T11 HI-CART COMPLETE 220V
602-853	T11 HI-CART COMPLETE UK
602-855	T11 HI-CART COMPLETE CANADA



602-836	T11 HI-CART COMPLETE 110V
602-846	T11 HI-CART COMPLETE 220V
602-859	T11 HI-CART COMPLETE UK
602-857	T11 HI-CART COMPLETE CANADA



501-155	T380 AIRLESS SPRAY GUN
200-517	T93R AIRLESS TIP
200-999	T93R AIRLESS GUARD
400-114	50' ¼" AIRLESS HOSE

WEEE Compliance



Statement

The mark shown to the right is in compliance with the Waste Electrical and Electronic Equipment Directive 2002/96/EC (WEEE). The mark indicates the requirement NOT to dispose of the equipment as unsorted municipal waste, but use the return and collection systems according to local law. Users should contact their supplier and check the terms and conditions of the purchase contract. When purchased directly from TriTech Industries, or a TriTech Industries Distributor you may contact technical support for disposal arrangements.

RoHS Compliance Statement

TriTech Industries products are designed to meet Reduction of Hazardous Substance Directive 2011/65/EU 8June2011, the product manufactured by TriTech Industries do not contain materials that exceed thresholds for cadmium, mercury, hexavalent chromium, Polybrominated diphenyl ethers (PBDEs) or other regulated substances.

Safety Compliance Statement

Tritech Industries product are certified meeting UL 1450 Issued: 2010/05/05 Ed: 4 Rev: 2013/11/01 Motor-Operated Air Compressors, Vacuum Pumps, & Painting Equipment and CSA C22.2#68 Issued: 2009/09/01 Ed: 7 Motor-Operated Appliances (Household and Commercial)-General Instruction No 1 : 2010/02/01 - General Instruction No. 2: 2010/09/28. TriTech Industries products are designed to conform to EN 55014-1 *Issue:2006/12/01 Electromagnetic compatibility Requirements for electric tools and similar apparatus,* EN 55014-*2Issued:2001/12/01 EMC - Requirements for Electric Tools and Similar Apparatus, and European Union* Low Voltage Directive (LVD) 2006/95/EC

WARNINGS AND START UP PROCEEDURE

WARNINGS

Below are general warnings related to the use and maintenance, safe grounding and repair of the TriTech airless paint sprayers. Additional warnings are found throughout this manual where applicable. Symbols appearing in the manual refer to these warnings. Refer back to these pages for the symbol's description of the specific hazard.

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:

• Use equipment only in well ventilated area.

• Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths which may present a potential static arc.

• Sprayer generates sparks. When flammable liquid is used in or near the sprayer or for flushing or cleaning, keep sprayer at least 20 feet (6 m) away from explosive vapors.

- Keep work area free of debris, including solvent, rags and gasoline.
- Do not plug or unplug power cords or turn lights on or off when flammable fumes are present.
- Ground equipment and conductive objects in work area. Refer to the Grounding instructions.

• If there is static sparking or you feel a shock, stop use immediately. Do not use equipment until you identify and correct the problem.

• Keep a fire extinguisher in the work area.

ELECTRIC SHOCK HAZARD

Improper grounding, setup, or usage of the system can cause electric shock.

- Turn off unit and unplug power cord before servicing equipment.
- Use only 3-wire extension cords and plug into only grounded electrical outlets.
- Ensure ground prongs are intact on sprayer's power cord and extension cords.
- CAUTION: To reduce the risk of electrical shock, do not expose to rain. Store indoors.

SKIN INJECTION HAZARD

High-pressure fluid from tip, 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 point gun at anyone or at any part of the body.
- Do not put your hand over the spray tip. Use only spray tip specified by TriTech.
- Do not stop or deflect leaks with your hand or body, glove, or rag.
- Engage trigger lock when not spraying.

• Follow Pressure Relief Procedure in this manual, when you stop spraying and before cleaning, checking or servicing equipment.

EQUIPMENT MISUSE HAZARD

IMPORTANT SAFETY INSTRUCTIONS

Misuse can cause death or serious injury.

• Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. Read Technical Data in all equipment manuals. Use only spray tip specified by TriTech.

• Use fluids and solvents that are compatible with equipment wetted parts. Read Technical Data in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request MSDS from your coatings supplier TriLube MSDS are supplied with this unit.

• Check equipment daily. Repair or replace worn or damaged parts immediately with genuine TriTech replacement parts only. Use only spray tip specified by TriTech.

• Do not alter or modify equipment.

• Use equipment only for its intended purpose. Call TriTech customer service or your TriTech distributor for information.

• Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces. If the spray hose is required to be replaced, replace with identical hose supplied with the sprayer.

- Do not kink or over bend hoses. Do not use the hose as a strength member to pull or lift the equipment.
- Comply with all applicable safety regulations.
- Keep children and animals away from work area.

• Do not operate the unit when fatigued or under the influence of alcohol or drugs. Stay alert and watch what you are doing.

• Know how to stop the unit and bleed pressure quickly. Be familiar with controls.

• Do not overreach or stand on an unstable support. Keep effective footing and balance at all times.

A PRESSURIZED ALUMINUM PARTS HAZARD

Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in pressurized aluminum equipment. Such use can cause serious chemical reaction and equipment rupture, and result in death, serious injury, and property damage.

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 all MSDS's 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

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

- Protective eye wear
- Clothing and respirator as recommended by the fluid and solvent manufacturer
- Gloves
- Hearing protection

GROUNDING:

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

• The sprayer power cord includes a grounding wire with an appropriate grounding contact.

• The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

• Do not modify plug. If it will not fit in outlet have grounded outlet installed by a qualified electrician. Do not use an adapter.

Use only the correct pressure rated airless hose with static ground to reduce the risk of static discharge or injection.

POWER REQUIREMENTS

- 110V units required 100-120VAC 50/60Hz. 13A, 1 phase
- 220V units require 220-240 VAC, 50/60Hz, 7A, 1 phase

EXTENSION CORDS

• Use an extension cord with ground contact only. Should an extension cord be necessary use a 3 wire, 12 AWG (2.5mm2) minimum. Do not exceed 300 ft 100 meters

PAILS

• Solvent and oil based fluids: follow local code. Use only conductive metal pails, place on a grounded surface such as concrete.

• Do not place pail on a nonconductive surface such as paper or cardboard which interrupt grounding continuity.

• To maintain grounding continuity when flushing or relieving pressure: hold metal part of the spray gun with the airless tip removed firmly to side of the grounded metal pail. Then trigger gun.

START UP

Throughout these instructions Model # T-5 and T-7 and the instructions for the T360 Airless spray gun are shown in all illustrations.

1. Connect TriTech airless hose to sprayer. Tighten securely.

- 2. Connect other end of the hose to gun.
- 3. Tighten securely.

4. Remove tip guard.

5. Check inlet strainer for clogs and debris.

6. Fill upper retainer with TriLube to prevent premature packing wear. Do this each time you spray.

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

8. Turn pressure relief valve down.

9. Place siphon tube set in grounded metal container partially filled with flushing fluid. Use mineral spirits to flush storage oil.

10. Turn pressure control to lowest pressure. Turn pressure relief valve down.

11. Turn power ON.

12. Increase pressure to start motor and allow fluid to circulate through pressure relief tube for 15 seconds; then turn pressure down.

13. Turn pressure relief valve horizontal. Take spray gun trigger safety OFF.

14. Hold gun against grounded metal container. Trigger gun and increase fluid pressure to half way. Flush 1 minute. Inspect for leaks. If a leak occurs follow the pressure relief procedure then tighten fitting were leak occurred. Do not attempt to stop leaks with hand or rag! Repeat Start-up 1-5 again. If no leaks, proceed.15. Place siphon tube in paint pail.

16. Trigger gun again into metal container until paint appears. Move gun to paint pail and trigger for 20 seconds. Set the safety to ON position. Assemble tip and guard. (See following section).

TIP AND GUARD ASSEMBLY

1. Insert metal seal and "black bellow" seal assembly by placing seals on the end of T93R Contractor tip and insert through guard. Line up seals by turning tip.

2. Insert Tip

3. Screw assembly onto gun. Tighten.

SPRAYING

1. Spray test pattern. Start with pressure turned to its lowest setting, then gradually increase pressure until you achieve a consistent spray pattern without heavy edges. Use smaller tip size if pressure adjustment cannot eliminate heavy edges.

2. Hold gun perpendicular 10-12 inches in of front surface. Spray back and forth overlapping by 20%. To prevent heavy spots, start moving the gun before pulling the trigger. When spraying, after releasing trigger continue to move gun.

CLEARING CLOGGED TIP
a) Release trigger, put safety ON.
b) Rotate T93R Tip.
c) Take safety OFF
d) Trigger gun to clear clog. Never point gun at your hand or in a rag!
RETRUN TO SPRAY
a) Put Safety ON.

b) Return Tip to spray position.

c) Take safety OFF and continue spraying.

CLEAN UP

1. Turn power OFF and unplug sprayer.

2. Turn pressure to lowest setting. Trigger gun to relieve pressure.

3. Put pressure relief tube in pail. Turn pressure relief valve down.

4. Remove guard and T93R tip. Clean tip with soft bristle brush. DO NOT STORE IN WATER.

5. Remove siphon tube set from paint and place in flushing fluid. Use water for water base paint and mineral spirits for oil base paint.

6. Plug in sprayer. Turn power ON. Return Pressure relief valve to its horizontal position.

7. Hold gun against paint pail. Take trigger safety OFF. Trigger gun and increase pressure until flushing fluid appears.

8. Move gun to flushing pail, hold gun against pail. Trigger gun to thoroughly flush system. Release trigger and put trigger safety ON.

9. Turn pressure relief valve down and allow flushing fluid to circulate for 1 to 2 minutes to clean drain tube.

10. Raise siphon tube above flushing fluid and run sprayer for 15 to 30 seconds to drain fluid. Turn power off.

11. Close pressure relief valve. Trigger gun into flushing pail to purge fluid from hose.

12. Turn pressure relief valve down to insure there is no pressure in the unit. Then retrun pressure relief valve to its horizontal position. Do not store with pressure relief valve down.

13. Remove filter from gun and sprayer, if installed. Clean and inspect. Reinstall filters.

14. If flushing with water, flush again with mineral spirits or TriTech Pump Cleaner to leave a protective coating to prevent freezing or corrosion.

15. Unplug power cord from outlet and wipe sprayer, hose and gun with rag soaked in water or mineral spirits.

Pressure Relief Procedure

The sprayer's pressure must be manually relieved to prevent sprayer from starting or spraying accidentally. Fluid under high pressure can be injected through skin and cause serious injury. To reduce risk of injury from injection, splashing fluid, or moving parts,

Follow the Pressure Relief Procedure whenever you:

• are instructed to relieve pressure

- stop spraying
- check or service any system equipment
- install or clean spray tip

PROCEDURE

1. Turn pressure control knob counterclockwise to stop.

2. Turn sprayer off.

3. Do not unplug power supply cord.

4. Hold metal part of gun firmly to grounded metal container. Trigger gun to relieve pressure.

5. Lock gun safety latch.

6. Open pressure relief valve. Leave pressure relief valve open until ready to spray again.

NOTE: Do not store unit for extended periods of time with the Pressure Relief Valve open. Store the unit in the spray position.

NOTE: If suspected that spray tip or hose is completely clogged, or that pressure has not been fully relieved after following steps above,

SLOWLY loosen tip guard or hose end coupling to relieve pressure gradually, and then loosen completely. Clear tip or hose obstruction.

PROBLEM	WHAT TO CHECK		REMEDY		
Motor will not turn on.	1.	1. Unit not plugged in.		1. Plug unit in.	
	2.	Pressure set too low	2.	Increase pressure	
	3.	Circuit breaker open	3.	Check breaker and reset if	
				needed.	
			1.	Check o-ring and tighten	
				siphon hose	
	1. Inlet tube is loose		2.	Check inlet screen clean or	
				replace	
Unit will not prime	2.	2. Inlet screen clogged		Remove siphon hose assy and	
	⊃. ⊿			move inlet ball with pencil.	
	4.	Outlet ball stuck	4.	Remove siphon hose and foot	
				valve and use pencil to move	
				outlet ball.	
	1.	Inlet ball or seat obstructed or	1.	Clean or replace if needed	
		chipped	2.	Clean or replace if needed	
Pump builds pressure but will	2.	Outlet ball or seat obstructed or	3.	Replace Prime Valve if	
not shut off		chipped		coating leaks while under	
	3.	Prime valve leaks.		pressure.	
	1.	Inspect upper packing.	1.	Replace if needed	
Paint leaking front wet cup		beer abber baen			
5 5 5 5 5 5 5 5 5 5	1.	Spray tip worn	1.	Inspect tip by checking fan	
	2.	Lower or Upper ball worn		pattern width. If worn	
	3.	Prime valve worn		replace	
	-		2.	Inspect lower and upper ball	
Pump output is low				for damage. Replace if	
				damaged or worn.	
			3.	If prime valve leaks while	
			_	spraying clean or replace.	
NOTE: Before performing	any insp	ection or repair follow the pressure reli	ief nrocedi	ure Never attempt to do any	
service or repair while the	e unit is n	lugged in or under pressure.	iei proceu		

ELECTRICAL SHOCK WARNING

To reduce risk of serious injury, including electric shock, do not touch moving or electrical parts with fingers or tools while testing repair. Shut off and unplug sprayer when inspection is complete. Install all covers, guards, gaskets, screws and washers before operating sprayer.

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	EC-DECLAR	ATION OF CONFORMITY
Model	T4, T5, T7,T9,T11	
Part Number		
599-800,599-802,	599-804,599-804,599-	-806,599-810,599-812,599-814,599-816,
600-800, 600-801 810,600-811,600- 831,600-832,600- 842,600-843,600-	,600-802,600-803,600 812,600-813,600-814, 833,600-834,600-835, 844,600-845,600-846,	-804,600-805,600-806,600-807,600- ,600-815,600-816,600-817,600-830,600- ,600-836,600-837,600-840,600-841,600- ,600-847,600-850,600-851,600-852,
600-853		
602-804,602-806,	602-814,602-816, 602	2-834,602-836,602-844,602-846
Complies with th	e EC Directives:	2006/42/EC Machinery Directive
Standards Used:		ISO 1200, ISO 3744
Approved by:		
Dan Hosley		
Dan Hosley		
Vice President of Sal	es & Marketing	
Manufactured by:		January 14, 2014
TriTech Industries In	с.	
610 Rahway Avenue		
Union, NJ 07083U.S	А.	302-119B

EXTENSION CORD VOLTAGE DROP						
120V	15 AMP	100'	200'	300'		
14 AWG		110.6	101.2	91.8		
12 AWG		114.1	108.1	102.2		
10 AWG		116.3	112.5	108.8		
LI NE LO	SS 1/4" HOSE	STANDARD LA	TEX PAINT			
HORIZONTAL	AT PUMP		AT TIP			
50'	3300PSI	227 BAR	3150	217 BAR		
100'	3300PSI	227 BAR	3100	213 BAR		
150'	3300PSI	227 BAR	3050	210 BAR		
200'	3300PSI	227 BAR	3000	207 BAR		
250'	3300PSI	227 BAR	2950	203 BAR		
300'	3300PSI	227 BAR	2900	199 BAR		
VERTICLE						
50'	3200	220 BAR	3135	216 BAR		
100'	3200	220 BAR	3070	211 BAR		
150'	3200	220 BAR	3005	209 BAR		
200'	3200	220 BAR	2940	202 BAR		
250'	3200	220 BAR	2875	198 BAR		
300'	3200	220 BAR	2810	193 BAR		

Pressure Relief Procedure

The sprayer's pressure must be manually relieved to prevent sprayer from starting or spraying accidentally.

Fluid under high pressure can be injected through skin and cause serious injury. To reduce risk of injury from injection, splashing fluid, or moving parts,

Follow the Pressure Relief Procedure whenever you:

- are instructed to relieve pressure
- stop spraying
- check or service any system equipment
- install or clean spray tip

Turn pressure control knob counterclockwise to stop.

- 2. Turn sprayer off.
- 3. Unplug power supply cord.
- 4. Hold metal part of gun firmly to grounded metal container. Trigger gun to relieve pressure.
- 5. Lock gun safety latch.
- 6. Open prime valve. Leave prime valve open until ready to spray again.

NOTE: Do not store unit for extended periods of time with the Pressure relief valve open. Store the unit in the spray position.

NOTE: If suspected that spray tip or hose is completely clogged, or that pressure has not been fully relieved after following steps above,

SLOWLY loosen tip guard or hose end coupling to relieve pressure gradually, and then loosen completely. Clear tip or hose obstruction.

PAINT/FILTER MANIFOLD SERVICE AND REPAIR

T9 UNITS ONLY

REPACKING PAINT/FILTER MANIFOLD

Follow pressure relief procedure before attempting to service or repair unit.

- Remove suction set by unthreading nut item # 85, see frame and siphon tube then pull downwards the inlet adaptor from intake housing # 20. Remove return hose #90 from pump/filter manifold. Remove suction set from unit.
- 2. Remove filter bowl #1 and filter and spring support #3 and 4. Inspect and clean or replace filter screen #3.
- 3. Remove intake valve housing #20.
- 4. Remove Piston guide #24 by inserting a ¼" slotted screwdriver in the gap between the upper side of the intake valve housing and the piston guide. Gently pry upwards until piston guide is free from intake valve housing.

- 5. Carefully inspect ball #17 and seat #18. If worn replace. Note seat #18 can be flipped over to the other side if worn or damaged. If repacking the unit is necessary always make sure to replace ball #17 and gaskets 22 and 21.
- Insert ¼ Hex key into piston valve assembly # 16 and turn counter clockwise to remove piston valve # 15. Inspect upper ball #13 and carbide seat of piston valve #15. Replace if worn or damaged. Make sure to always replace upper ball #13 and o-ring #14 if repacking unit.
- To remove the pump/filter manifold housing use a 5/16" Hex wrench in the 2 mounting bolts #25. Then unthread transducer #30 from the back of paint/filter manifold.
- 8. Remove crank housing cover plate # 55 diagram "B".
- 9. Insert a slotted screwdriver between crank housing # 53, see diagram "B" and fluid manifold # 9 gently pry downwards until a gap can be seen between # 9 and #53. Then slide pump/filter manifold # 9 from unit.
- 10. Using a 1" open end or adjustable wrench to remove upper retainer #6.
- 11. Remove piston rod # 12 by pushing downward with your hand.
- 12. Inspect upper and lower packings #8 and #11 in place. Do not remove packings to inspect. Remove only if you intend to replace them.
- 13. When replacing packings make sure to fill the inside of the packings with "packing grease" supplied in repair kit 602-475. Also apply grease on o-ring on the outside of the packing to make insertion easier.
- 14. Remove upper packing from shipping tool. Insert upper packing in to the top of pump/filter manifold #9. Packing can only go in one direction.
- 15. Remove lower packing from shipping tool. Insert lower packing #11 in the bottom of the pump/filter manifold. Packing can only go in one direction.
- 16. Thread upper retainer #6 after replacing upper guide #7. Leave hand tight until piston is installed.
- 17. Insert upper ball #13 into piston #12 while holding piston upside down.
- 18. Thread piston valve #15 into piston. Make sure to replace o-ring #14.
- 19. Using connecting rod item #56 (see diagram "B") to hold piston use a ¼" hex wrench to tighten piston valve firmly into piston.
- 20. Replace o-rings #23, 22 and 21 below seat in intake valve and on Piston Guide. Insert lower ball and seat #'s 17 and 18 and firmly push piston guide into intake valve housing #20.
- 21. Slide piston # 12 into intake valve housing assembly. Insert piston through lower packing until it stops. Then thread intake valve assembly into pump/filter manifold. The intake valve housing assembly will push piston through packings correctly. Once intake valve housing is threaded all the way use needle nose pliers on the slots of the top of the piston to align slots front to back.
- 22. Using a 1" open end wrench or adjustable wrench tighten upper retainer # 6 firmly.
- 23. If connecting rod is not in the down position plug unit in and cycle unit to get connecting rod into down position.
- 24. With piston slots aligned slide pump/filter manifold onto connecting rod #56 Diagram "B". Push pump/filter manifold towards crank housing # 53 to line up dowel pins then thread mounting bolts #25 through pump filter manifold and thread into crank housing #53. Tighten firmly with5/16" Hex wrench.
- 25. Reattach transducer #30 to the back of pump/filer manifold.

- 26. Reinstall crankshaft cover plate #55 with 4 screws #40. See diagram "B".
- 27. Reattach suction set.
- 28. Pour Trilube through slot in cover plate #55, diagram "B".

REPLACE BY-PASS VALVE

- 1. To replace the pressure relief valve #27 knock pin #29 through black handle #28.
- 2. Remove black plastic handle and cap with indexing pin which exposes pressure relief valve.
- 3. Using a 3/4" open end unthread by pressure relief valve. Inspect. Replace if worn.

REPLACE FILTER

- 1. To replace the paint filter remove filter bowl #1 from fluid manifold by unthreading counter clockwise.
- 2. Remove filter #3 and spring support #4. Most times filter can just be cleaned but if damaged replace.

REPLACE TRANSDUCER

- To replace transducer hold wire tube of #31 with plyers and unthread transducer housing #30 from pump/filter manifold.
- 2. Remove mounting screws # 25.
- 3. Remove 4 screws for crank housing cover plate # 55.
- 4. With a flat blade screwdriver pry pump/filter manifold downward till it clears locating pins and slide forward but do not remove.
- 5. Remove 4 screws #40 and Control box cover plate #70.
- 6. Unplug transducer from circuit board. See diagram "B".
- 7. Guide transducer wire out of control box.
- 8. To replace guide replacement transducer through grommet #91 and reconnect to circuit board.
- 9. Thread transducer into pump/filter housing.
- 10. Replacement of transducer requires no calibration of pressure control. To ensure new transducer functions properly follow Start up procedure.