Operation, Repair



500 Spray Guns (Airlessco)

3A4133B

For the application of architectural paints and coatings.

Model: 17N201

3600 psi (25 MPa, 248 bar) Maximum Fluid Working Pressure



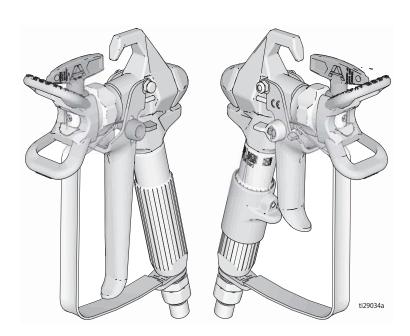
Important Safety Instructions

Read all warnings and instructions in this manual. Refer to your sprayer instruction manual for Pressure Relief, priming and spray instructions. Save these instructions.



Important Medical Information

Keep the wallet-sized medical alert card provided with this gun with the operator at all times. The card contains important treatment information for the physician should a skin injection injury occur. Additional cards are available at no charge.





Warnings

Warnings

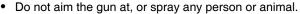
The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbols refer to procedure-specific risks. When these symbols appear in the body of this manual or on warning labels, refer 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.

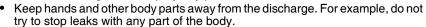
↑WARNING



SKIN INJECTION HAZARD

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







- Always use the nozzle tip guard. Do not spray without nozzle tip guard in place.
- Use Airlessco nozzle tips.



Use caution when cleaning and changing nozzle tips. In the case where the nozzle tip clogs while spraying, follow the Pressure Relief Procedure for turning off the unit and relieving the pressure before removing the nozzle tip to clean.
 Equipment maintains pressure after power is shut 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 3600 psi. Use Airlessco replacement parts or accessories that are rated a minimum of 3600 psi.
- Always engage the trigger lock when not spraying. Verify the trigger lock is functioning properly.
- Verify that all connections are secure before operating the unit.
- Know how to stop the unit and bleed pressure quickly. Be thoroughly familiar with the controls.

WARNING



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:

Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric



Use equipment only in well ventilated area.



- 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.



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 over-bend the hose.
- Do not expose the hose to temperatures or to pressures in excess of those specified by Airlessco.
- 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.
- 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.

Warnings

WARNING



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.



PERSONAL PROTECTIVE EQUIPMENT

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

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

CALIFORNIA PROPOSITION 65

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

Setup

Pressure Relief Procedure

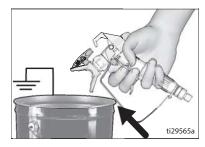


Follow the Pressure Relief Procedure whenever you see this symbol.



This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection or splashed fluid, follow the **Pressure Relief Procedure** whenever sprayer is stopped and before sprayer is cleaned or checked, and before equipment is serviced.

- 1. Turn sprayer OFF.
- Engage the trigger lock. Always engage the trigger lock when sprayer is stopped to prevent the gun from being triggered accidentally.
- 3. Turn pressure control knob to lowest setting.
- Put drain tube into a waste pail and turn Prime/Spray valve in PRIME position (drain) to relieve pressure.
- 5. Hold the gun firmly to a pail. Point gun into pail. Disengage the trigger lock and trigger the 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:

- VERY SLOWLY loosen the tip guard retaining nut or the hose end coupling to relieve pressure gradually.
- b. Loosen the nut or coupling completely.
- Clear airless hose or spray tip obstruction. See Clear Tip Clog, page 8.

Gun Trigger Lock

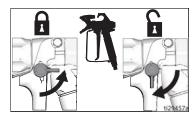








To prevent injury when the gun is not in use, always engage the gun's trigger lock if unit is being shut down or left unattended.



Two or Four Finger Trigger Conversion

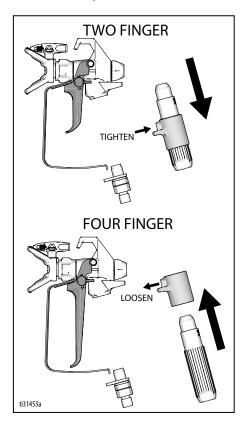
This gun easily converts from a 4-finger trigger to a 2-finger trigger. Choose the trigger that feels and works the best for you.

To change the trigger:

- 1. Lift trigger guard out of the guard retainer.
- 2. Swing trigger guard out of the way.
- 3. Remove trigger stud from fluid housing by removing lock nut.
- 4. Remove trigger.
- 5. Slide the other trigger into position on fluid housing.
- 6. Align holes in trigger with hole in fluid housing.
- 7. Insert trigger stud through trigger and fluid housing.
- 8. Install and tighten lock nut.

Setup

- 9. Attach two or four finger trigger.
 - a. Two-finger trigger:
 - Unscrew gun handle from gun.
 - Slide two-finger trigger rest onto handle.
 - Tighten set screw to hold two-finger trigger rest in place as shown.
 - Reattach handle to gun. Tighten securely.



- b. Four-finger trigger:
- Unscrew gun handle from gun.
- Loosen set screw that holds two-finger trigger rest in place.
- Slide two-finger trigger rest off of the handle.
- Reattach handle to gun. Tighten securely.
- Attach trigger guard to the guard retainer.

Connect Gun to Sprayer

Make sure sprayer is turned off and unplugged from power source. Refer to your sprayer instruction manual for priming and spray instructions.

- Attach supply hose to sprayer fluid outlet.
- Attach other end of supply hose to gun swivel. Use two wrenches (one on the swivel and one on the hose), to tighten all connections securely.
- 3. Refer to sprayer instruction manual for priming instructions.

Install Tip and Tip Guard on Gun







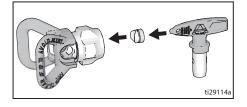




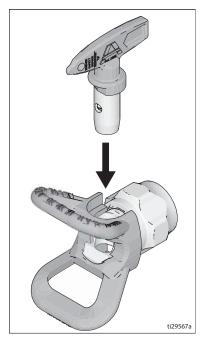
To avoid serious injury from skin injection do not put your hand in front of the spray tip when installing or removing the spray tip and tip guard.

To prevent spray tip leaks make certain spray tip and tip guard are installed properly.

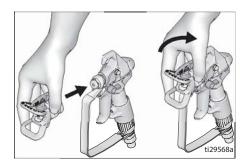
- 1. Perform **Pressure Relief Procedure**, page 5.
- 2. Engage trigger lock.
- Verify spray tip and tip guard parts are assembled in the order shown.
 - a. Use spray tip to align gasket and seal in the tip guard.



b. Spray tip must be pushed all the way into the tip guard. Turn spray tip to push down.



- Turn the arrow shaped handle on the spray tip forward to the spray position.
- 4. Screw spray tip and tip guard assembly onto the gun and tighten.



Operation

Operation







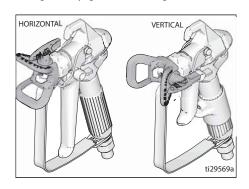


Spray

- Disengage trigger lock.
- Be sure the arrow shaped tip faces forward (spray).
- Hold gun perpendicular and approximately 12-inches (30 cm) from surface.
 Move gun first, then pull gun trigger to spray a test pattern.
- Slowly increase pump pressure until coverage is uniform and even (see sprayer instruction manual for additional information).

Align Spray

- Perform Pressure Relief Procedure, page 5.
- 2. Loosen tip guard retaining nut.
- 3. Align tip guard horizontally to spray a horizontal pattern.
- 4. Align tip guard vertically to spray a vertical pattern.
- Tighten tip guard retaining nut.



Clear Tip Clog

In the event that particles or debris clog the spray tip, this sprayer is designed with a reversible spray tip that quickly and easily clears the particles without disassembling the sprayer.

 Engage trigger lock. Rotate spray tip to unclog position. Disengage trigger lock. Trigger gun at waste area to clear clog.

UNCLOG



NOTE: If spray tip is difficult to rotate when turning to the unclog position, perform **Pressure Relief Procedure**, page 5, then turn Prime/Spray valve to spray position and repeat step 1.

 Engage trigger lock. Rotate spray tip back to spray position. Disengage trigger lock and continue spraying.

SPRAY



Cleanup

Flush gun and clean paint off the outside after each work shift. Store in a dry location. Refer to your sprayer manual for flushing instructions.

NOTICE

To prevent damage to gun parts, do not leave the gun or any parts, except the tip, in water or cleaning solvents. Your gun is **NOT** compatible with harsh cleaners, such as cleaning solvents that contain methylene chloride.

Maintenance











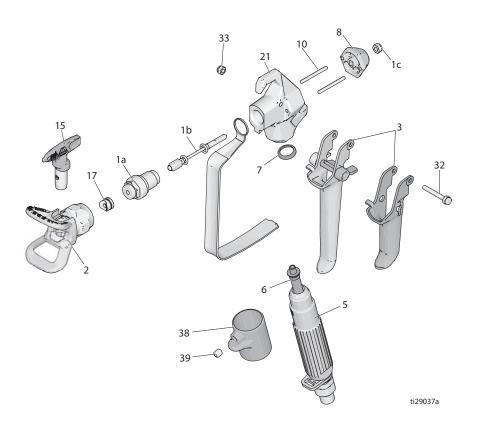
To avoid injury always read all warnings in this manual and the sprayer manual, before performing any maintenance on the gun.

Clean/Replace Filter

- 1. Perform Pressure Relief Procedure, page 5, and engage trigger lock.
- Disconnect fluid hose from gun at swivel.
- 3. Disconnect trigger guard from guard retainer.
- 4. Unscrew handle from gun.
- 5. Remove filter through top of handle.
- 6. Clean filter. Use a soft brush to loosen and remove excess debris.
- 7. Insert clean filter into handle.
- 8. Reattach handle to gun. Tighten securely.
- Reconnect trigger guard to guard retainer.

Parts

Parts



Ref.	Part	Description	Qty.	Ref.	Part	Description	Qty.
1	288817	DIFFUSER/SEATKIT	Γ1	15	ARV517	TIP, reversible, 517	1
		(includes 1a, 1b, 1c)		17	858029	SEAL, w/ o-ring	1
1a		SEAT, valve	1	21	17M269	HOUSING, fluid	1
1b		NEEDLE	1			(includes 7)	
1c		NUT, lock	1	32	177538	STUD, trigger	1
2	855052	REV-GUARD, tip	1	33	105334	NUT, lock, hex	1
3	255126	TRIGGER, 4 finger	1	38	15K101	GUARD, 2 finger (with	1
	255127	TRIGGER, 2 finger	1			2 finger trigger only)	
4	195495	GUARD, trigger	1	39	100002	SCREW, set (with 2	
5	17M532	HANDLE, gun	1			finger trigger only)	
6	17P312	FILTER, mesh 50	1	40▲	222385	CARD, medical alert	
	17P313	FILTER, mesh 100	1			(not shown)	
7	179733	SEAL, sleeve	1			Warning labels, tags a	and
8	195395	CAP, end	1	caro	ls are availa	able at no cost.	
10	115484	PIN, actuator	2				

Repair







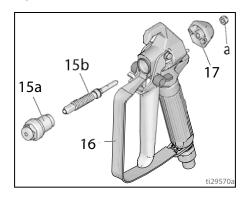


To avoid injury always read all warnings in this manual and the sprayer manual, before performing any repairs on the gun.

Clean/Replace Filter

- Perform Pressure Relief Procedure, page 5. Engage trigger lock.
- 2. Disconnect hose.
- Disconnect trigger guard from guard retainer.
- 4. Unscrew handle from gun.
- 5. Remove filter through top of handle.
- 6. Clean filter using a soft brush.
- 7. Insert clean filter into handle.
- 8. Reattach handle to gun. Tighten securely.
- 9. Reconnect trigger guard to guard retainer.

Replace Needle



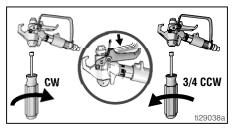
- Perform Pressure Relief Procedure, page 5. Engage trigger lock.
- 2. Disconnect hose. Remove tip and guard.
- Disengage trigger lock.
- Squeeze trigger while unscrewing diffuser/seat.
- 5. Remove locknut and end cap.
- 6. Tap out needle using a plastic hammer.

- 7. Use a soft brush to clean internal passages of gun.
- Grease o-rings of new needle using a non-silicon grease.
- 9. Guide new needle into front of gun.
- 10. Install end cap and locknut, loosely.
- For needle housing, apply medium strength (blue) thread sealant to threads.
- Squeeze trigger while installing needle housing. Torque to 26-32 ft-lb (35-43 N·m).
- 13. Perform Needle Adjustment.

Needle Adjustment

- Perform Pressure Relief Procedure, page 5. Engage trigger lock.
- 2. Remove tip and guard. Disconnect hose.
- 3. Engage trigger lock.
- Hold gun with nozzle pointing up. Turn locknut clockwise until you see and feel trigger raise slightly.
- Turn locknut 3/4 turn counterclockwise. When properly adjusted, trigger will move freely.

NOTE: When needle is properly adjusted, trigger will move freely.



- Connect hose. Install tip guard. Prime sprayer.
- Trigger gun into pail until fluid flows from gun.
- 8. Release trigger. Fluid flow should stop immediately.
- Engage trigger lock. Try to trigger gun. No fluid should flow.
- 10. If the gun fails either test, repeat steps 1-9.

Technical Data

Technical Data

500 Spray Guns			
	US	Metric	
Maximum fluid working pressure	3600 psi	25 MPa, 248 bar	
Fluid orifice size	0.125 in.	3.18 mm	
Weight	22 oz.	163 g	
Inlet	1/4 npsm swivel		
Maximum material temperature	120°F	49°C	
Wetted parts	Stainless steel, polyurethane, nylon, aluminum, tungsten carbide, solvent resistant elastomer, brass		
Noise Level*			
Sound power	87 dBa		
Sound pressure	78 dBa		

 $^{^{\}star}$ Measured at 3.1 ft (1 m) while spraying water-based paint, specific gravity 1.36, through a 517 tip at 3000 psi (20.7 MPa, 207 bar) per ISO 3744.

Notes

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Airlessco Standard Warranty

Airlessco Standard Warranty

Airlessco warrants all equipment referenced in this document which is manufactured by Airlessco 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 Airlessco, Airlessco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Airlessco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Airlessco's written recommendations.

This warranty does not cover, and Airlessco 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-Airlessco component parts. Nor shall Airlessco be liable for malfunction, damage or wear caused by the incompatibility of Airlessco equipment with structures, accessories, equipment or materials not supplied by Airlessco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Airlessco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Airlessco distributor for verification of the claimed defect. If the claimed defect is verified, Airlessco 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.

Airlessco'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.

AIRLESSCO 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 Airlessco. These items sold, but not manufactured by Airlessco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Airlessco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Airlessco be liable for indirect, incidental, special or consequential damages resulting from Airlessco 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 Airlessco, or otherwise.

FOR AIRLESSCO 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.

Airlessco Information

For the latest information about AIRLESSCO products, visit www.airlessco.com. For patent information, see www.graco.com/patents.

TO PLACE AN ORDER OR FOR SERVICE, contact your Airlessco distributor, or call 1–800–223-8213 to identify the nearest distributor.

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

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

Original Instructions. This manual contains English. MM 3A4133

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