

Instructions



Read warnings and instructions.



XTR™ 7 Airless Spray Gun

310743A

For use with Protective Coating Materials

XTR 7, Part No. 248609

Heavy Duty RAC tip guard, no tip

7250 psi (50 MPa, 500 bar) Maximum Working Pressure

XTR 7, Part No. 248610

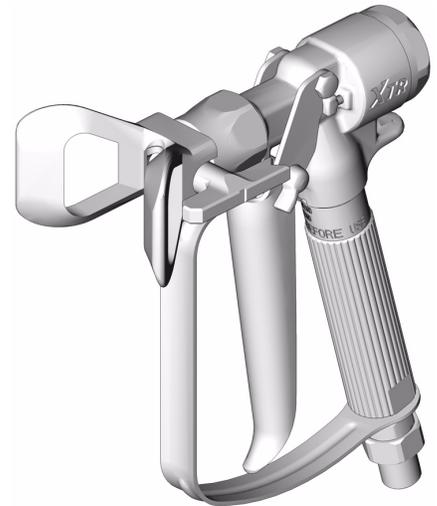
Standard (non-reversing) Dripless™ Tip Guard, 519 Flat Tip

7250 psi (50 MPa, 500 bar) Maximum Working Pressure

XTR 7, Part Nos. 248611, 248612, 248613, 248614

Heavy Duty RAC tip guard, 519 SwitchTip™

7250 psi (50 MPa, 500 bar) Maximum Working Pressure



PROVEN QUALITY. LEADING TECHNOLOGY.

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Manual Conventions

Warning

 WARNING
 
<p>A warning alerts you to possible serious injury or death if you do not follow instructions.</p> <p>Symbols, such as fire and explosion (shown), alert you to a specific hazard and direct you to read the indicated hazard warnings on pages 4-5.</p>

Caution

CAUTION
<p>A caution alerts you to possible equipment damage or destruction if you do not follow instructions.</p>

Note

 A note indicates additional helpful information.


Warning
**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 medical attention.**



- Do not point the gun at anyone or at any part of the body.
- Do not put your hand or fingers over the gun fluid nozzle.
- Do not stop or deflect leaks with your hand, body, glove, or rag.
- Do not “blow back” fluid; this is not an air spray system.
- Follow **Pressure Relief Procedure**, page 10, when you stop spraying and before cleaning, checking, or servicing equipment.
- Use lowest possible pressure when flushing, priming, or troubleshooting.
- Never spray without tip guard and trigger guard installed.
- Engage trigger lock when not spraying.
- Tighten all fluid connections before operating the equipment.
- Check hoses, tubes, and couplings daily. Replace worn or damaged parts immediately. High pressure hose cannot be recoupled; replace the entire hose.

**Fire and Explosion Hazard**

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 and plastic drop cloths (potential static arc).
- Do not plug or unplug power cords or turn lights on or off when flammable fumes are present.
- Keep the work area free of debris, including solvent, rags, and gasoline.
- Ground equipment and conductive objects. See **Grounding**, page 7.
- Hold gun firmly to side of grounded pail when triggering into pail.
- Use only grounded hoses.
- If there is static sparking or you feel a shock, **stop operation immediately**. Do not use equipment until you identify and correct the problem.

**Burn Hazard**

This equipment is used with heated fluid, which can cause equipment surfaces to become very hot. To avoid severe burns:

- Do not touch hot fluid or equipment.
- Allow equipment to cool completely before touching it.
- Wear gloves if fluid temperature exceeds 110° F (43° C).

 **Warning**
**Equipment Misuse Hazard**

Misuse can cause serious injury or death.

- For professional use only.
- Use equipment only for its intended purpose. Call your Graco distributor for information.
- Read manuals, warnings, tags, and labels before operating equipment. Follow instructions.
- Check equipment daily. Repair or replace worn or damaged parts immediately.
- Do not alter or modify equipment. Use only Graco parts and accessories.
- Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See **Repair** in all equipment manuals.
- Use fluids and solvents that are compatible with equipment wetted parts. See **Repair** in all equipment manuals. Read fluid and solvent manufacturer's warnings.
- Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.
- Do not use hoses to pull equipment.
- Comply with all applicable safety regulations.

**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 Material Safety Data Sheet (MSDS) 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 proper 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, and hearing loss. This equipment includes but is not limited to:

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

**Recoil Hazard**

The gun can recoil when triggered at very high pressure. If unprepared, this could force your hand back or cause you to fall and injure yourself. Be sure you have firm footing and hold the gun securely.

System Requirements

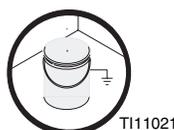
- Install a bleed-type master air valve on a pneumatic pump air supply line to relieve air trapped between this valve and the pump after air regulator is shut off. Trapped air can cause the pump to cycle unexpectedly.
- Install a fluid drain valve between the pump and gun to relieve pressure in displacement pump, hose, and gun. Triggering gun to relieve pressure may not be sufficient. See **Pressure Relief Procedure**, page 10.

Grounding



Check your local electrical code and pump/sprayer manual for detailed grounding instructions.

- **Spray gun:** ground through connection to a grounded fluid hose and pump/sprayer.
- **Fluid hose:** use only grounded hoses.
- **Fluid supply container:** follow local code.
- **Object being sprayed:** follow local code.
- **Solvent flushing pails:** follow local code. Use only conductive metal pails placed on a grounded surface. Do not place pail on a non conductive surface, such as paper or cardboard, which interrupts grounding continuity.



- **To maintain grounding continuity when flushing or relieving pressure:** hold metal part of gun firmly to side of grounded metal pail, then trigger gun.

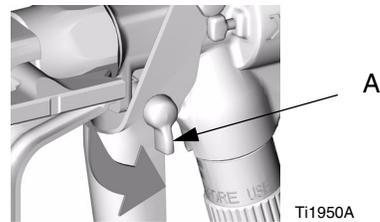


Gun Trigger Safety

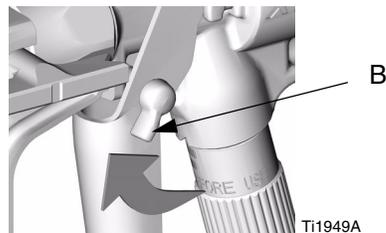


A wallet-sized warning card with important injection treatment information is included with the gun. Additional cards are available at no charge. Provide a card to all operators.

- 1. To engage trigger lock:** turn it to position A. If engaged, gun will not trigger. Engage trigger lock whenever you stop spraying to avoid accidental triggering

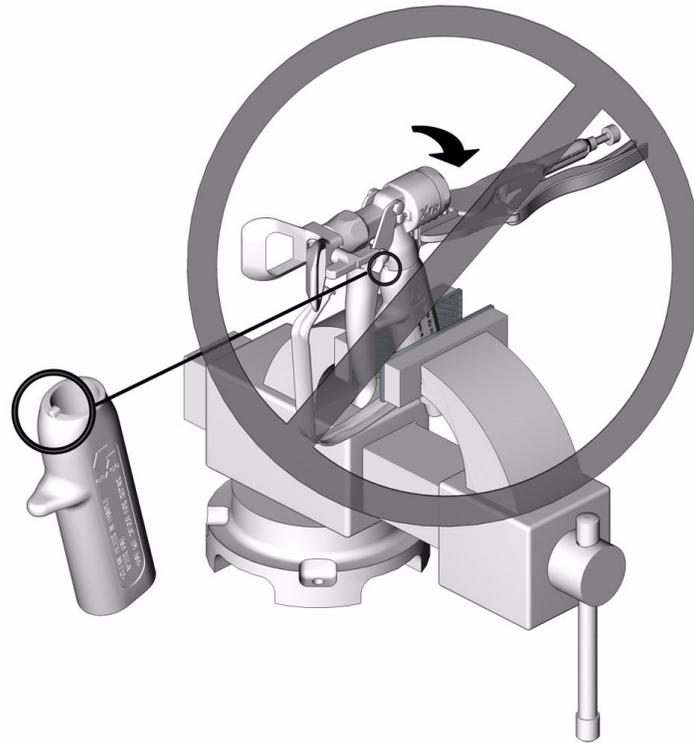


- 2. To disengage trigger lock:** turn it to position B.

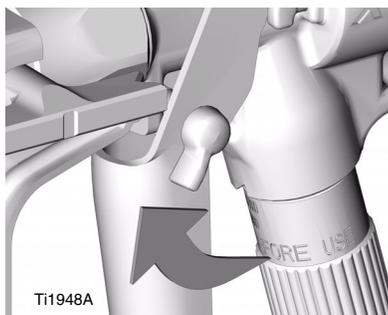


Important

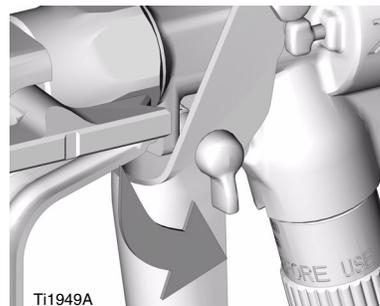
Do not try to unscrew the gun housing from the handle. Do not use a vice grips or place the gun in a vice to separate the gun handle from the head. Separating the gun head from the handle in this way may damage or break off the alignment notch on the gun handle.



Trigger Lock Positions



Unlocked (Disengaged)



Locked (Engaged)

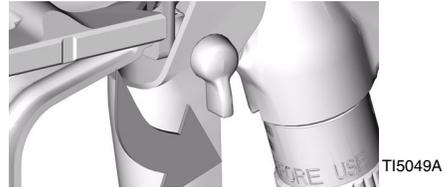
Pressure Relief Procedure

WARNING

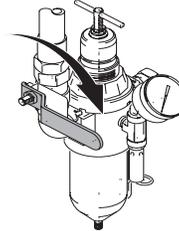


Read warnings, page 3.

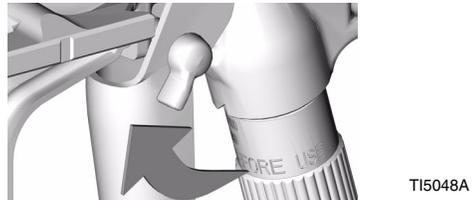
1. Engage trigger lock.



2. Shut off pump.



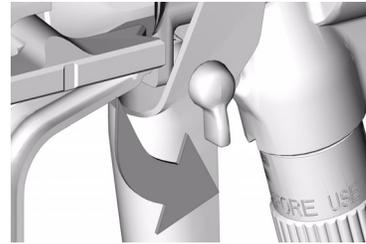
3. Disengage trigger lock.



4. Hold a metal part of the gun firmly to a grounded metal pail. Trigger gun to relieve pressure.



5. Engage trigger lock.



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6. Open drain valve. Leave drain valve open.



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7. If pressure is not fully relieved:

- *Spray tip is clogged*
SwitchTip: Follow procedure on page 16.
Flat Tip: Slowly loosen tip guard retaining nut to relieve pressure. Remove and clear tip.
- *Hose is clogged*
Slowly loosen hose end coupling to relieve pressure. Clean hose obstruction.

Operating Gun

WARNING



Read warnings, page 3.

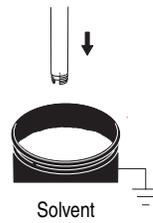


Strain the fluid if it contains particles that could clog the fluid tip.

- 1.** Connect a grounded fluid hose.

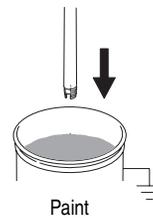


- 2.** Without spray tip, flush pump. Use lowest pressure possible.

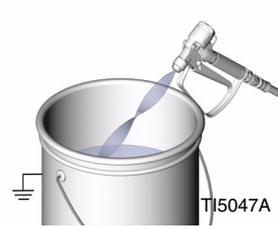


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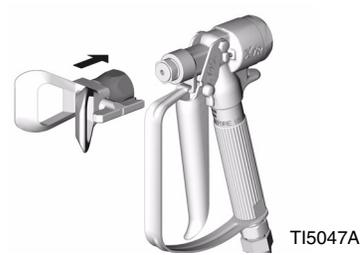
- 3.** Prime.



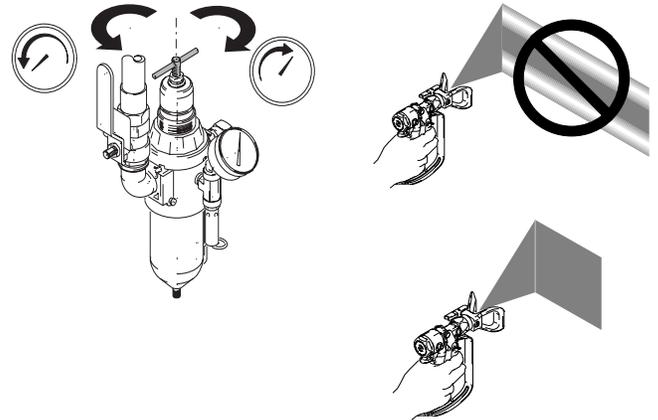
- 4.** Follow **Pressure Relief Procedure**, page 10.



- 5.** Install spray tip and tip guard.



- 6.** Start pump and spray onto test paper.
- Adjust fluid pressure until spray is completely atomized.
 - If adjusting pressure does not give a good spray pattern, follow **Pressure Relief Procedure**, page 10, then try another tip size.



- 7.** Trigger gun full-open or full-close.

Adjusting Spray Pattern

Spray Pattern Size

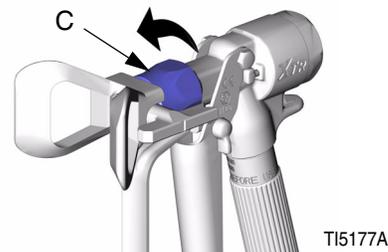
The spray tip orifice and spray angle determine pattern coverage and size. When you need more coverage, use a larger spray tip rather than increasing fluid pressure.

Spray Pattern Direction

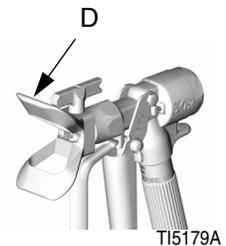
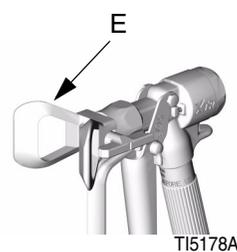
1. Follow **Pressure Relief Procedure**, page 10. Engage trigger lock.



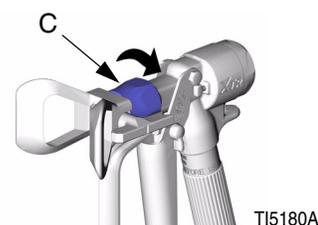
2. Loosen tip guard retaining nut (C).



3. For a vertical pattern, turn tip guard to position E. For a horizontal pattern turn to position D.



4. Tighten nut (C).



Maintenance

Cleaning Spray Tip and Tip Guard

 **WARNING**

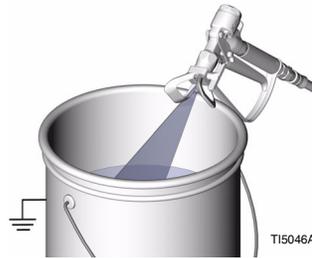
    

Read warnings, page 3.

CAUTION

- To avoid ruining packings, do not soak entire gun in solvent.
- Never hang gun by the tip guard. Damaging tip guard edges causes paint to collect there.

- 1.** Follow **Pressure Relief Procedure**, page 10. Engage trigger lock.



- 2.** Clean spray tip with a solvent-soaked brush.
 - Clean front of tip frequently to reduce fluid buildup.
 - Clean tip and tip guard at end of each work day.

If RAC Spray Tip Clogs

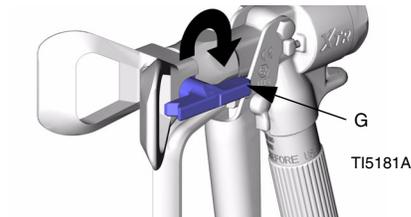


1. If spray tip clogs while spraying, stop spraying immediately.

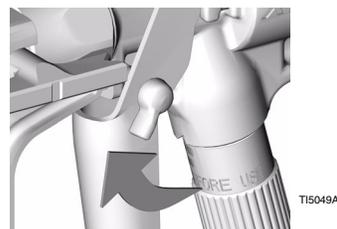
2. Engage trigger lock.



3. Rotate (G) 180° (arrow points back).



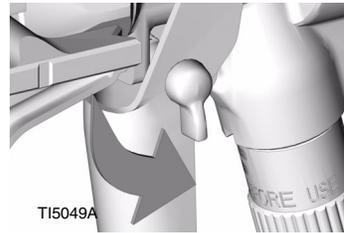
4. Disengage trigger lock.



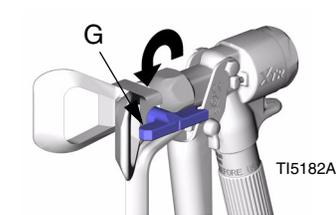
5. To remove clog, trigger gun into a pail or onto the ground.



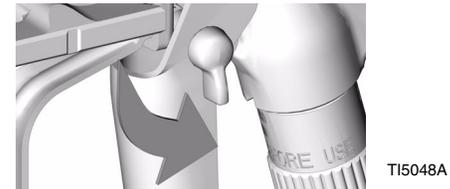
6. Engage trigger lock.



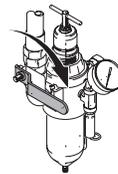
7. Rotate (G) 180° to spraying position (arrow points forward).



8. If tip is still clogged:
 - a. Engage trigger lock.



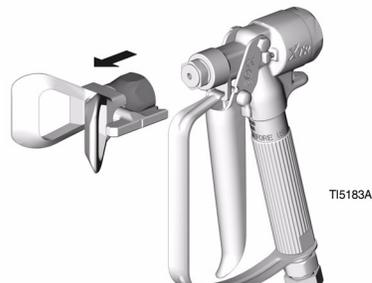
- b. Shut off sprayer and disconnect power source.



- c. Open fluid drain valve to relieve pressure.



- d. Remove and clean GHD RAC spray tip.



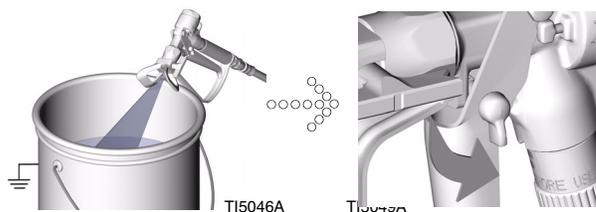
Flushing

WARNING

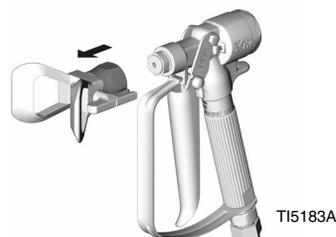
Read warnings, page 3.

Flush pump and gun before fluid can dry in it. If available, use flushing procedure provided in your pump or sprayer manual instead of this procedure.

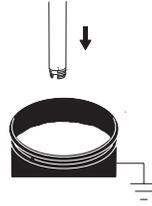
1. Follow **Pressure Relief Procedure**, page 10. Engage trigger lock.



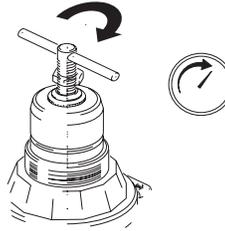
2. Remove tip guard and spray tip. Clean with solvent. See page 15.



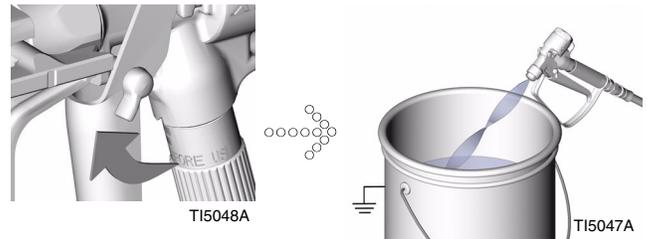
3. Put the pump intake in a grounded pail of compatible solvent.



4. Start pump at its lowest pressure.

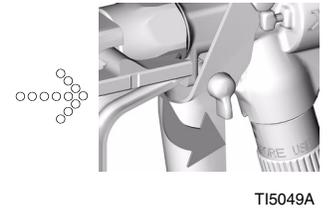
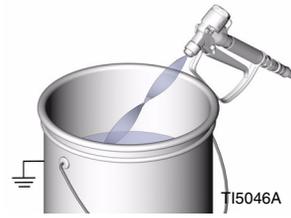


5. Disengage trigger lock, then trigger gun into the paint pail. When solvent appears, release trigger.



6. Trigger gun into solvent pail. Circulate fluid until system is thoroughly flushed.

7. Follow **Pressure Relief Procedure**, page 10.
Engage trigger lock.



Cleaning Filter

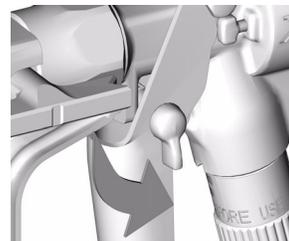
 **WARNING**



Read warnings, page 3.

1. Follow **Pressure Relief Procedure**, page 10.

2. Engage trigger lock.



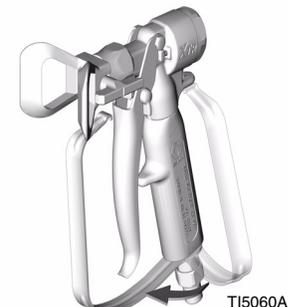
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- 3.** Disconnect trigger guard from gun body beneath dif-fuser by pushing up on guard hook and pulling it out of notch.



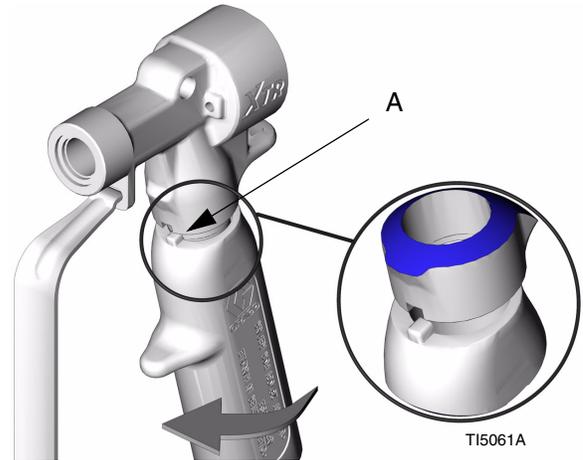
- 4.** The trigger guard beneath the gun handle can then be used as a wrench to loosen the nut.

See *Important note on page 9.*

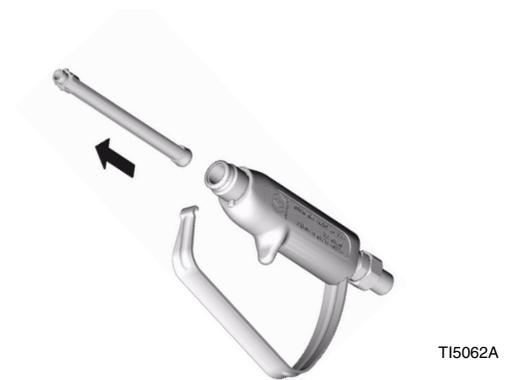


Loosen

- 5.** When alignment notches (A) are no longer engaged, use your hand to twist handle and remove it from gun head.



- 6.** Remove filter.



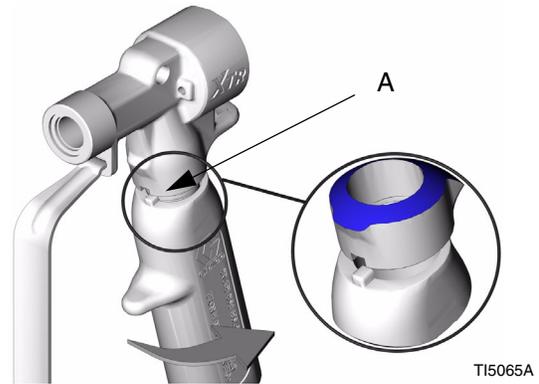
- 7.** Clean filter using a soft brush.



- 8.** Replace filter.



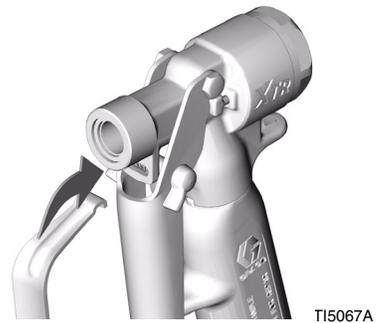
- 9.** Attach handle to gun head by hand twisting handle until notches (A) on the gun head and handle meet and are aligned.



- 10.** Use trigger guard to tighten the nut.



- 11.** Reattach the trigger guard to the gun.



Repair



Repair Kit 248837 is available. Parts included with the kit are marked with *.

Disassembly

⚠ WARNING



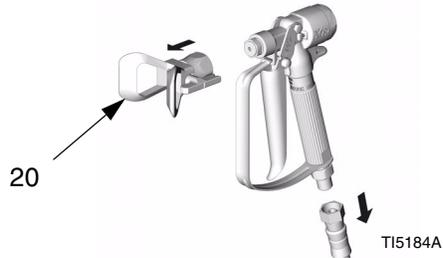

Read warnings, page 3.

Follow **Pressure Relief Procedure**, page 10.

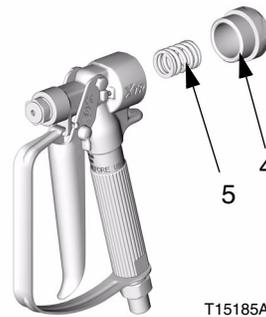
- 1.** Engage trigger lock.



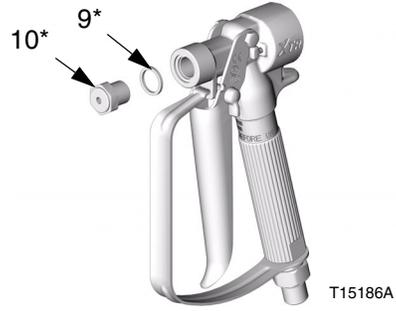
- 2.** Disconnect fluid hose. Remove tip and tip guard (20).



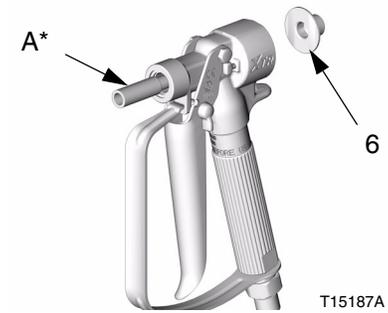
- 3.** Using a wrench, remove the cap (4) with spring (5) (releases spring tension on needle).



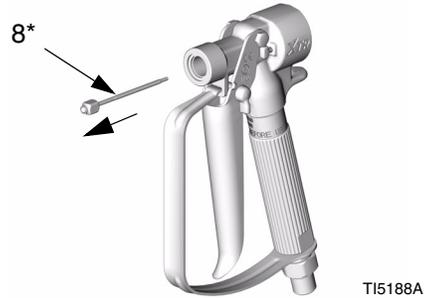
- 4.** Remove the valve seat (10*) and gasket (9*).



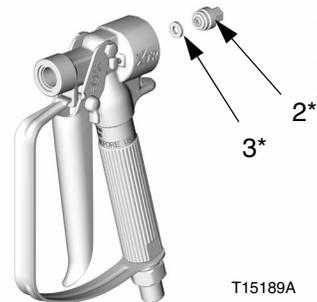
- 5.** Holding the needle with tool (A*) remove the needle retainer (6).



- 6.** Pull the needle (8*) out.



- 7.** Using a socket wrench, remove the seal retainer (2*) from the back of the gun. Use a pick to remove the gasket (3*).



8. Clean and replace parts as needed.

If you need to remove the trigger

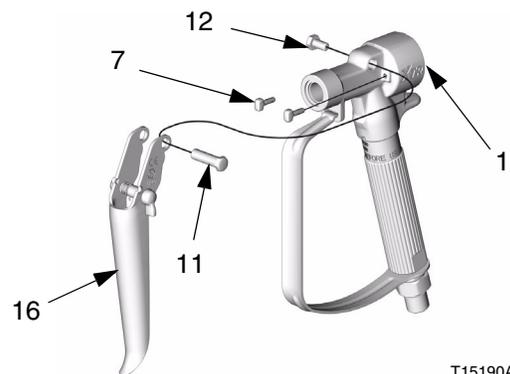
1. Using a wrench, remove screw (12) from the trigger stud (11).



To avoid losing parts, be ready for two actuator pins (7) to fall out of the gun body (1) when the trigger (16) is removed.

2. Slide the trigger stud (11) out of the gun body, and remove the trigger (16).

3. Before installing trigger grease the actuator pins (7) and trigger stud (11).

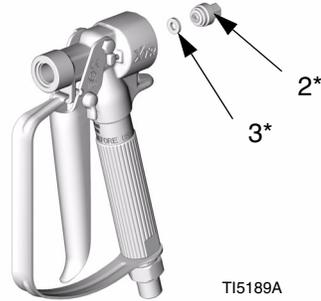


Assembly

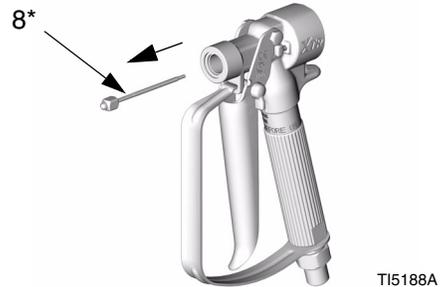


Use clean, petroleum jelly where grease is indicated.

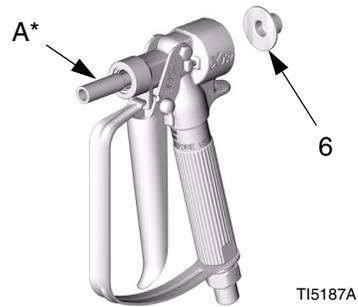
- 1.** Press a new gasket (3*) into the gun body. Lightly grease the seal retainer (2*) and install. Torque to 48-72 in-lbs (5-8 N•M).



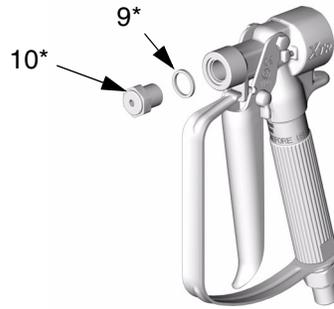
- 2.** Lightly grease and replace the needle (8*). Press the needle through the seal retainer.



- 3.** Apply light-strength Loctite™ to needle threads. Holding the needle with tool (A*), install needle retainer (6). Tighten until it bottoms out.

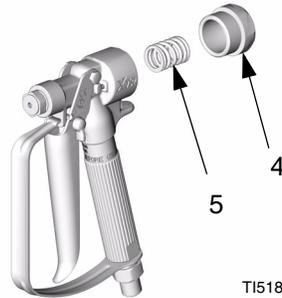


4. Lightly grease valve seat (10*) threads. Squeeze the trigger to retract the needle and install gasket (9*) and valve seat (10*). Torque valve seat to 26-32 ft-lbs (35-43 N•M).



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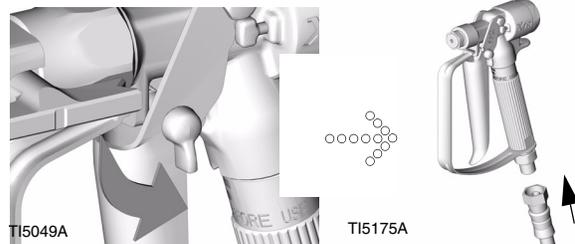
5. Grease and install the spring (5) and cap (4). Tighten the cap to 10-13 ft-lbs (8-10 N•M)



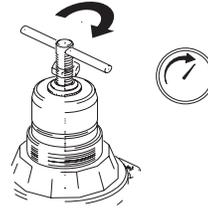
TI5185A

Test Gun Before Using

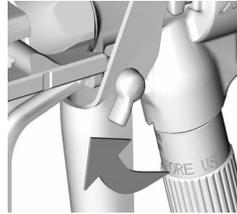
1. Engage trigger lock. Connect fluid hose to gun.



2. Start and prime the pump.



3. Disengage the trigger lock and trigger the gun into a metal waste container.



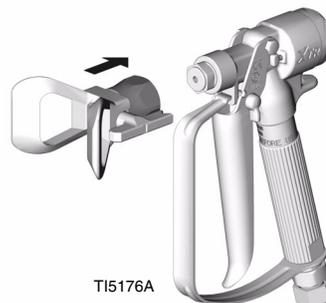
T15048A



T5047A

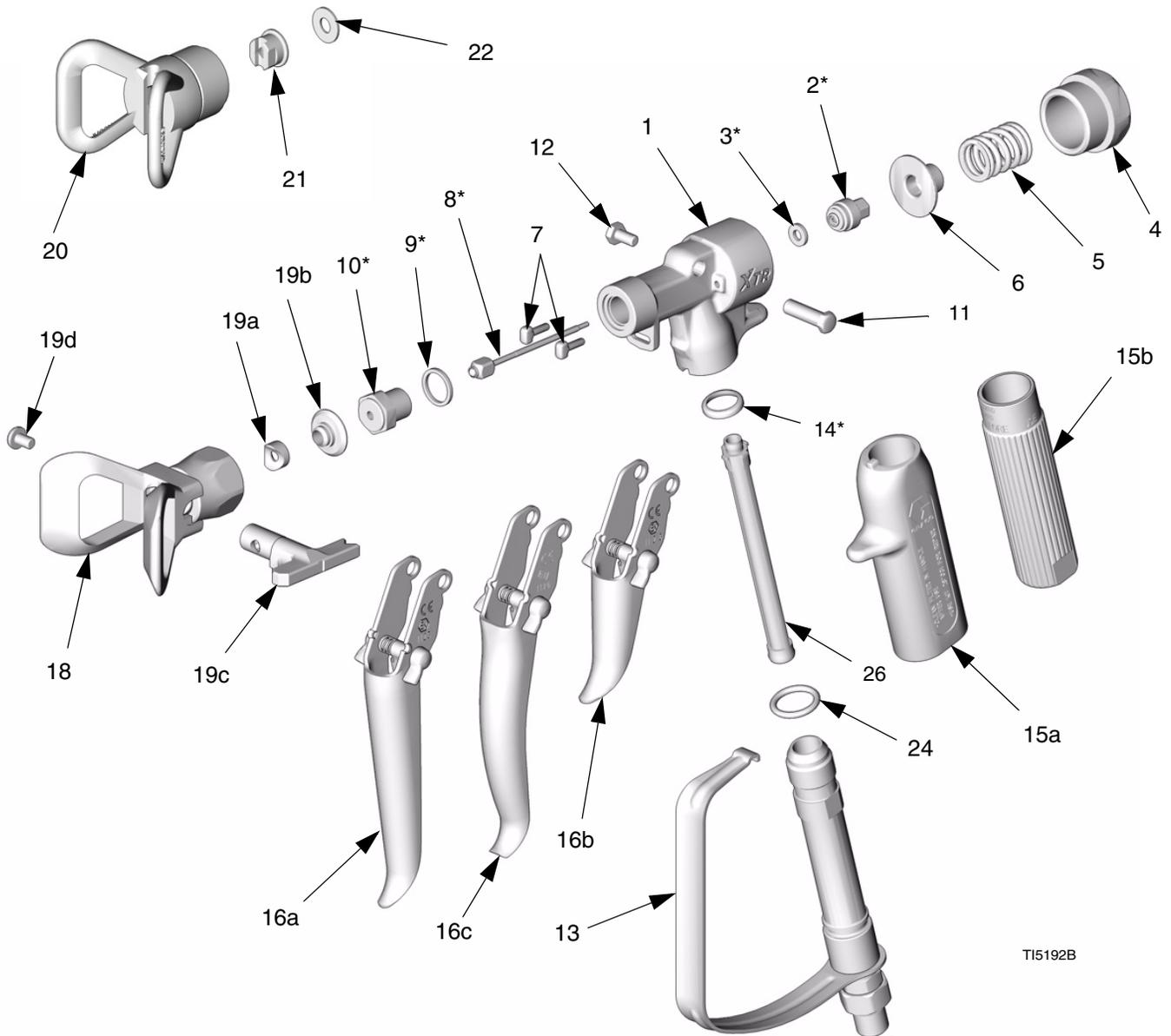
4. Release the trigger; the gun should immediately stop spraying and there should not be any leaks. If there is a problem, follow the Pressure Relief Procedure on page 10. Check through Assembly procedure and correct problem.

5. Install tip and tip guard before regular use.



T15176A

XTR 7 Parts



TI5192B

XTR 7 Parts List

Part Nos. 248609, 248611, 248612, 248613, 248614

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	15E178	BODY, gun	1	16c	287451	TRIGGER (see table below)	1
2*	----	SEAL, retainer assembly	1	18	245994	RETAINER, RAC tip	1
3*	----	GASKET	1	19	GHDxxx	SWITCH, tip 519 size included (includes items 19a - 19d) (see table below)	1
4	15A864	CAP, end	1	19a	----	SEAL, fluid	1
5	117350	SPRING, compression	1	19b	----	GASKET	1
6	15E088	RETAINER, needle	1	19c	----	TIP, spray hd RAC	1
7	15E085	PIN, actuator	2	19d	----	SCREW, mach pn h	1
8*	----	STEM, valve	1	24	15B958	O-RING, packing (included with item 13)	1
9*	156766	GASKET	1	26	287032	FILTER, 60 mesh (included with gun)	1
10*	----	SEAT, valve	1		287033	FILTER, 100 mesh	
11	----	PIN, pivot (included with items 16a, 16b, 16c)	1		287034	FILTER, 60 and 100 mesh combo	
12	----	SCREW, cap hex hd (included with items 16a, 16b, 16c)	1	29▲	222385	WARNING CARD	1
13	248952	HANDLE, tube assembly (includes item 24)	1	34▲	187346	WARNING TAG	1
14*	179733	SEAL, sleeve	1				
15a	276997	HANDLE, gun (see table below)	1				
15b	15E083	HANDLE, gun (see table below)	1				
16a	287449	TRIGGER (see table below)	1				
16b	287450	TRIGGER (see table below)	1				

* Parts included in Repair Kit 248837, purchased separately. Installation tool included.

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

Gun Part No.	Reference Nos.					
	15a	15b	16a	16b	16c	19
248609		✓	✓			
248611	✓				✓	✓
248612	✓			✓		✓
248613		✓	✓			✓
248614		✓		✓		✓

XTR 7 Parts List

Part No. 248610

Ref. No.	Part No.	Description	Qty.	Ref. No.	Part No.	Description	Qty.
1	15E178	BODY, gun	1	16a	287449	TRIGGER	1
2*	----	SEAL, retainer assembly	1	20†	220222	TIP, guard	1
3*	----	GASKET	1	21	163519	SPRAY TIP, flat, 519 size	1
4	15A864	CAP, end	1	22†	166969	TIP, gasket	1
5	117350	SPRING, compression	1	24	15B958	O-RING, packing (included with item 13)	1
6	15E088	RETAINER, needle	1	26	287032	FILTER, 60 mesh (included with gun)	1
7	15E085	PIN, actuator	2		287033	FILTER, 100 mesh	
8*	----	STEM, valve	1		287034	FILTER, 60 and 100 mesh combo	
9*	156766	GASKET	1	29▲	222385	WARNING CARD	1
10*	----	SEAT, valve	1	34▲	187346	WARNING TAG	1
11	----	PIN, pivot (included with item 16a)	1				
12	----	SCREW, cap hex hd (included with item 16a)	1				
13	248952	HANDLE, tube assembly (includes item 24)	1	*	<i>Parts included in Repair Kit 248837, purchased separately. Installation tool included.</i>		
14*	179733	SEAL, sleeve	1	▲	<i>Replacement Danger and Warning labels, tags, and cards are available at no cost.</i>		
15b	15E083	HANDLE, gun	1	†	<i>Parts included in Kit 240251, purchased separately.</i>		

Accessories

Part No. 194744: Packing Repair Tool

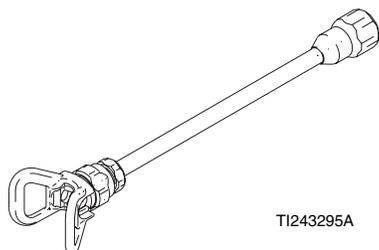
Included in Repair Kit 248837

Front Extension: 7/8-14 UNF-2B (tip guard and tip not included)

Part No. 246294: 10" (0.25 m)

Part No. 246295: 15" (0.4 m)

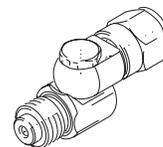
Part No. 246296: 18" (0.5 m)



TI243295A

Part No. 246297: 180° Spray Nozzle

7/8-14 UNC-2B



TI235028

Technical Data

XTR 7

Maximum Working Pressure	7250 psi (50 MPa, 500 bar)
Fluid Orifice	0.090" (2.3 mm)
Fluid Inlet	1/4 npsm(m)
Maximum Fluid Temperature	160°F (71°C)
Sound Pressure	103 dB(A)*
Sound Power	111.6 dB(A)*
Wetted Parts	stainless steel, polyethylene, nylon, polypropylene, acetal, carbide, polyurethane

*Results are maximum readings taken at 6000 psi (41 MPa, 414 bar), with HD427 tip, using water. Sound power level was tested to ISO 3744-1981.

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