

312879E

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# T-Max Applicator

For portable spraying of water-based materials. Can be used for application of solvent-based materials only when solvent compatible seals are installed and solvent compatible, conductive hoses are used. For professional use only.

Not approved for use in European explosive atmosphere locations.

### Models 256383, 17Z054

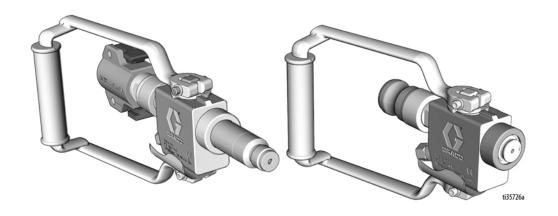
1000 psi (6.9 MPa, 69 bar) Maximum Fluid Working Pressure 250 psi (1.7 MPa, 17 bar) Maximum Air Working Pressure



#### **Important Safety Instructions**

Read all warnings and instructions in this manual and in the T-Max operation manual before using the equipment. Save these instructions.

Related Manuals:				
3A6748	T-Max Operation, Repair, 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).



- 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.

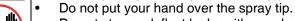


#### **SKIN INJECTION HAZARD**

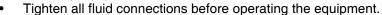
High-pressure fluid from gun, hose leaks, or ruptured components will pierce skin. This may look like just a cut, but it is a serious injury that can result in amputation. Get immediate surgical treatment.



- Do not spray without tip guard installed.
- Do not point gun at anyone or at any part of the body.



- 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.



Check hoses and couplings daily. Replace worn or damaged parts immediately.



# **<b>△WARNING**



#### **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 Specifications** in all equipment manuals.
- Use fluids and solvents that are compatible with equipment wetted parts. See **Technical Specifications** in all equipment manuals. Read fluid and solvent manufacturer's warnings. For complete information about your material, request Safety Data Sheets (SDSs) 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.



#### 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. 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.

### **Pressure Relief Procedure**



Follow the Pressure Relief Procedure whenever you see this symbol.





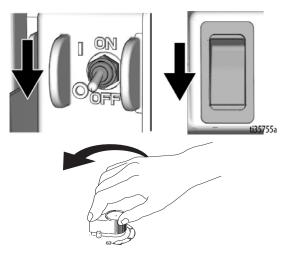






This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashing fluid and moving parts, follow the Pressure Relief Procedure when you stop spraying and before cleaning, checking, or servicing the equipment.

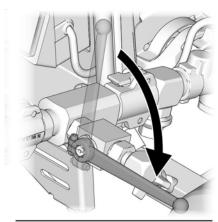
1. Turn on/off switch OFF and turn pressure control knob fully counterclockwise to OFF.

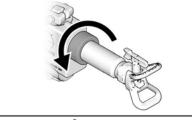


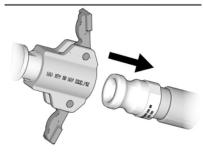
2. Point applicator into hopper. Turn applicator ON.

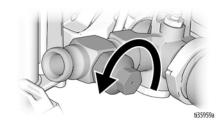


- 3. If you suspect the spray tip or hose is clogged or that pressure has not been fully relieved:
  - a. If installed, turn prime valve down to prime position.
  - b. VERY SLOWLY loosen the retaining ring (10), hose end coupling (43), or pressure relief valve on the sprayer to relieve pressure gradually.









- c. Loosen the nut or coupling completely.
- d. Clear the obstruction in the hose or tip.

**NOTE**: If pressure relief valve was used to relieve pressure, be sure to disassemble and clean thoroughly.

# Flush the Equipment (Solvent-Based Materials)











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

- Flush before changing materials, before fluid can dry or cure in the equipment, at the end of the day, before storing, and before repairing equipment.
- Flush with a fluid that is compatible with the fluid being dispensed and the equipment wetted parts.
- Flush at the lowest pressure possible. Check connectors for leaks and tighten as necessary.
- Do not leave the applicator or any parts in water or cleaning solvents.
- 1. Follow Pressure Relief Procedure, page 4.
- 2. Remove the spray tip and guard by loosening retaining ring (10).
- Hold a metal part of the gun firmly to a grounded metal pail. Trigger the gun until clean solvent dispenses.
- 4. Store in a dry location.

### Setup











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

### **Airless Spray Setup**

### **Connect Applicator to Sprayer**

- 1. Attach supply hose to sprayer fluid outlet.
- 2. Attach other end of supply hose to applicator swivel (17).
- Refer to sprayer instruction manual for priming instructions.

#### **Install Applicator Tip and Guard**

1. If equipment has recently been operated, perform **Pressure Relief Procedure**, page 4.











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.

- 2. Using a pencil or similar object, insert seal (20) into back of guard (18).
- 3. Install guard (18) onto end of applicator (9).
- 4. Insert tip (19) in guard (18). Tighten retaining nut.

### **Air Spray Setup**

### Connect Applicator to Sprayer

- 1. Attach supply hose to sprayer fluid outlet.
- 2. Attach other end of supply hose to applicator swivel (17).
- 3. Install air hose to applicator check valve (8).
- Refer to sprayer instruction manual for priming instructions.

#### **Install Applicator Air Nozzle**

- 1. If equipment has recently been operated, perform **Pressure Relief Procedure**, page 4.
- 2. Install air nozzle (27; 37d-37g) and retainer (10).
- 3. Replace retainer with Fine Finish Kit (40) for finer finishes.

### **Operation**









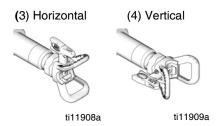


### **Airless Spray**

- 1. Be sure the arrow shaped tip (19) faces forward (spray).
- 2. Hold applicator perpendicular and approximately 40 in. (1 m) from surface. Move applicator first, then open applicator to spray a test pattern.
- 3. Slowly increase pump pressure until coverage is uniform and even (see sprayer instruction manual for additional information).

### **Aligning Spray**

- 1. Perform **Pressure Relief Procedure**, page 4.
- 2. Loosen guard retaining nut.
- 3. Align guard (18) horizontally to spray a horizontal pattern.
- 4. Align guard (18) vertically to spray a vertical pattern.

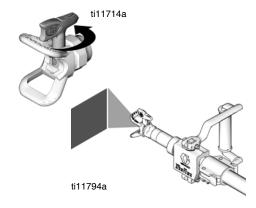


#### **Clear Tip Clog**

To avoid tip clogs:

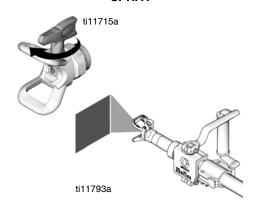
- When the applicator is not in use for extended periods of time, keep the tip "wet" and perform Pressure Relief Procedure, page 4.
- Keep tip clean and free of material.
- 1. Rotate SwitchTip to unclog position. Aim applicator at floor and turn applicator ON. When clog clears, turn applicator OFF.

#### UNCLOG



2. Rotate SwitchTip back to spray position. Turn applicator ON. Spray test pattern.

#### **SPRAY**



### **Air Spray**

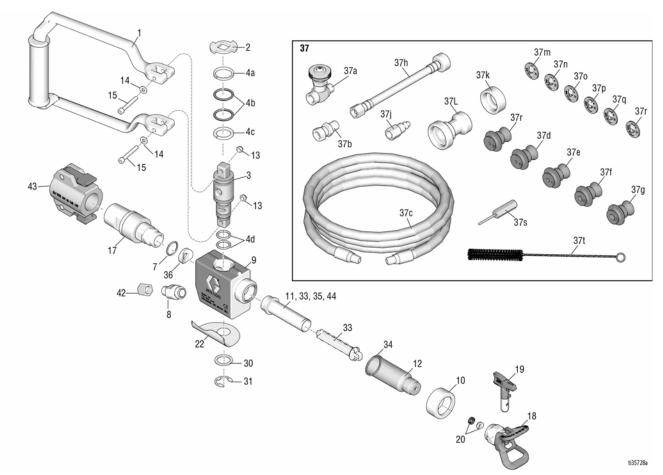
- 1. Set material flow (see sprayer instruction manual for additional information).
- 2. Spray test pattern
- 3. Turn air knob on and adjust, and/or select another air nozzle, for desired pattern.

**NOTE**: Air continues to flow when handle is in off position to keep material out of air passages.

### Cleanup

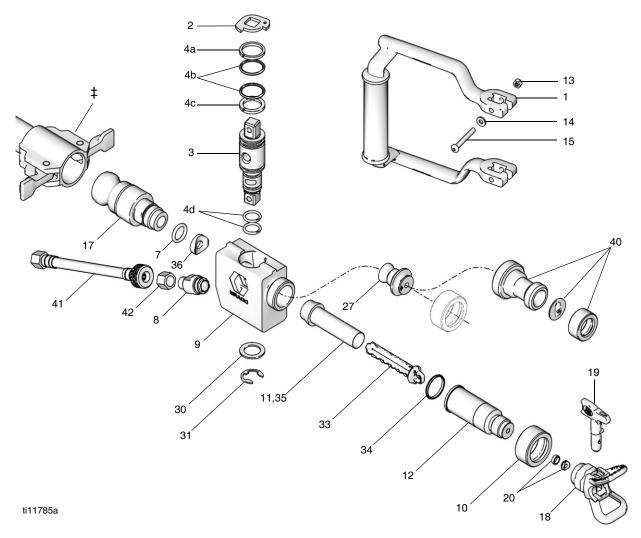
Flush applicator after each work shift and store in a dry location. Do not leave the applicator or any parts in water or cleaning solvents.

### **Parts 17Z054**



Ref	Part	Description	Qty	Ref	Part	Description	Qty
1	289921	HANDLE, valve, includes 2, 13, 14, 15	1	35	289923	FILTER, screen, texture, 30 mesh,	1
2*	15T848	PLATE, stop, valve	1			includes 33	
3*	289916	SPOOL, valve	1	36*	289917	SEAT, spool, valve, includes 7	1
4*	289918	KIT, o-ring and bearing	1	37	17Z185	KIT, accessories, air assist	1
4a		BEARING, upper	1	37a	112779	VALVE, needle	1
4b		O-RING, fluid	2	37b	156823	FITTING, union, swivel	1
4c		BEARING, lower	1	37c	15C899	HOSE, cpld, air, 9.5mm x 15m	1
4d		O-RING, air	2	37d	248524	NOZZLE, 4mm	1
7	124796	O-RING	1	37e	248525	NOZZLE, 6mm	1
8	289919	KIT, check valve	1	37f	248526	NOZZLE, 8mm	1
9	15T827	HOUSING, valve	1	37g	248527	NOZZLE, 10mm	1
10	15T326	RING, retaining, nozzle	1	37h	15U027	HOSE, air, cpld	1
11	289922	FILTER, screen, texture, 18 mesh,	1	37i	169967	FITTING, line air	1
		includes 33		37j	17Y924	NUT, retaining	1
12	15D727	ADAPTER, GHD RAC	1	37k	17 <b>Z</b> 274	ADAPTER, housing	1
13	107110	LOCKNUT	2	37I	24S114	TIP, disk, spray, W4, hardened	1
14	108193	WASHER, plain	2		24S115	TIP, disk, spray, W6, hardened	1
15	514237	SCREW, cap sch 10-32 x 1 1/2	2	37n	24S116	TIP, disk, spray, W8, hardened	1
17	17Y920	SWIVEL, assy, texture heavy	1	37o	24S117	TIP, disk, spray, W10, hardened	1
18	246215	GUARD, RAC X	1	37p	24S118	TIP, disk, spray, W12, hardened	1
19	HDA651	TIP, spray, RAC X (651)	1	37q	24S119	TIP, disk, spray, WXL, hardened	1
20	246453	KIT, gasket and seat (5 sets)	1	37r	248888	NOZZLE, 3 mm	1
22	15U034	TAG, Tmax handle function	1	42	15U368	NUT, cap	1
30*†	121548	WASHER, plain	1	43	289874	COUPLER, female	1
	121549	RING, retaining, E-ring	1	44	15X791	PLUG, air passage	1
33	277789	SUPPORT, filter	2				
34	15U687	SEAL, adapter, filter, texture	1	* Incl	luded in Sp	ool Repair Kit 289916	
		, ,,,	-	† Inc	luded in Ó	ring and Bearing Kit 289918	

## **Parts 256383**



1 2* 3* 4* 4a 4b 4c 4d 7 8 9 10 11	Part 289921 15T848 289916 289918 111027 289919 15T827 15T326 289922 15D727 107110 108193	Description  HANDLE, valve, includes 2, 13, 14, 15 PLATE, stop, valve SPOOL, valve KIT, o-ring and bearing BEARING, upper O-RING, fluid BEARING, lower O-RING, air O-RING KIT, check valve HOUSING, valve RING, retaining, nozzle FILTER, screen, texture, 18 mesh, includes 33 ADAPTER, GHD RAC LOCKNUT WASHER, plain	Qty 1 1 1 1 1 2 1 1 1 1 1 2 1 2 1 1 2	18 19 20 27 30*† 31*† 33 34 35 36* 40 41 42 * Incl † Incl	luded in Ó-		Qty  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
_					ring and Bearing Kit 289918		
17	289920	SWIVEL, assy, texture heavy	1				

### Spool Valve Repair

Before performing any maintenance on applicator, read all warnings on front cover of this manual and performd **Pressure Relief Procedure**, page 4.

#### **Spool Valve Removal**

**NOTE:** Spool (3) and/or seat (36) may be rotated 180° for extended life if they are not worn through completely.

- 1. Remove swivel (17), o-ring (7) and seat (36).
- Remove nut (13), screw (15), washer (14) and handle (1). Remove plate (2), clip (31) and washer (30).
- 3. Remove spool (3) from housing (9).

#### **Spool Valve Installation**

- 1. Apply grease (supplied with Kits 289916 and 289918) to spool, o-rings and bearings and inside of housing.
- 2. Assemble o-rings and bearings onto spool. Align bearing (4a, 4c) gaps away from ports in housing.
- 3. Install spool in housing. Secure with washer (30), and clip (31).
- Install plate (2) onto spool (note location of orientation hole). Install handle with screw, washer and nut.
- 5. Apply grease to o-ring (7). Install seat (36), o-ring (7) and swivel (17).

### **Technical Data**

Maximum fluid working pressure 1000 psi (6.9 MPa, 69 bar)
Maximum air working pressure 250 psi (1.7 MPa, 17 bar)

Air Requirements 30 scfm (0.84 m3/min) Maximum
Fluid Inlet Size 1 in.(m) cam and groove (Graco HP)

Air Inlet Size 1/4 npsm(m)

Wetted Parts Aluminum, stainless steel, PE, POM, polyurethane, nitrile, nylon, PVC, tungsten carbide

 Weight †
 2.9 lb (1,3 kg)

 Height
 5.8 in. (14,7 cm)

 Width
 7.0 in. (17,8 cm)

 Length †
 12.7 in. (32,3 cm)

Sound Data without Air (applicator

only):

Sound Pressure Level 84dB(A)\*
Sound Power Level 83dB(A)\*

Sound Data with Air (applicator only):

Sound Pressure Level 118dB(A)\*
Sound Power Level 118dB(A)\*

† Airless configuration

<sup>\*</sup> Spraying simulated acoustical texture under typical conditions as specified by the material manufacturer.

### **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.

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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.

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### **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 1-800-690-2894 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.

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

Original instructions. This manual contains English. MM 312879

Graco Headquarters: Minneapolis International Offices: Belgium, China, Japan, Korea

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