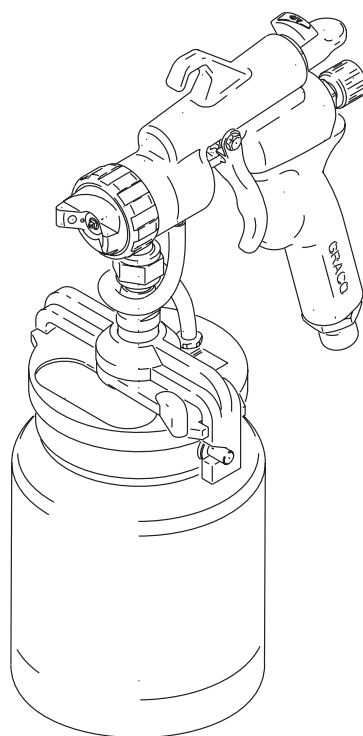


# HVLP-Turbine Gun

US Patent Pending

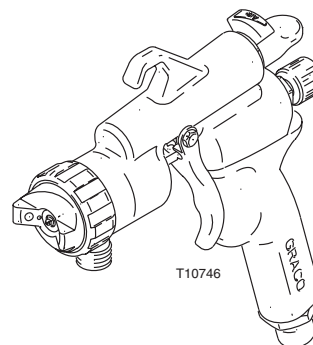
309205L

*10 psi (0.07 MPa, 7 bar) Maximum Inlet Air Pressure*  
*50 psi (0.35 MPa, 3.5 bar) Maximum Inlet Fluid Pressure*



### Cup Feed

Includes 1-quart (1 liter) cup  
**Model 244113**, without fluid set  
**Model 244117**, with #3 fluid set  
**Model 248854**, with Hi Production air cap



T10746

**Remote Pressure Feed**  
**Model 244115**, without fluid set  
**Model 244118**, with #3 fluid set



### Important Safety Instructions

Read all warnings and instructions in this manual.  
Save these instructions.


PROVEN QUALITY. LEADING TECHNOLOGY.

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## Manual Conventions

The following are general Warnings related to the safe setup, use, maintenance and repair of this equipment. Additional, more specific warnings may be found throughout the text of this manual where applicable.

 <b>WARNING</b>
This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions.

<b>CAUTION</b>
Alerts you to the possibility of damage or destruction of equipment if you do not follow the instructions.

# Warnings

	<b>WARNINGS</b>
	<p><b>FIRE AND EXPLOSION HAZARD</b></p> <p>Flammable fumes, such as solvent and paint fumes, in <b>work area</b> can ignite or explode. To help prevent fire and explosion:</p> <ul style="list-style-type: none"> <li>• Use equipment only in well ventilated area.</li> <li>• When flammable liquid is sprayed or used for flushing or cleaning, keep sprayer at least 20 feet (6 m) away from explosive vapors.</li> <li>• Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static arc).</li> <li>• Keep work area free of debris, including solvent, rags and gasoline.</li> <li>• Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present.</li> <li>• Ground all equipment in work area. See <b>Grounding</b> instructions.</li> <li>• If there is static sparking or you feel a shock, <b>stop operation immediately</b>. Do not use equipment until you identify and correct the problem.</li> <li>• Keep a fire extinguisher in the work area.</li> </ul>
	<p><b>EQUIPMENT MISUSE HAZARD</b></p> <p>Misuse can cause death or serious injury.</p> <ul style="list-style-type: none"> <li>• Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See <b>Technical Data</b> in all equipment manuals.</li> <li>• Use fluids and solvents that are compatible with equipment wetted parts. See <b>Technical Data</b> in all equipment manuals. Read fluid and solvent manufacturer's warnings.</li> <li>• Check equipment daily. Repair or replace worn or damaged parts immediately.</li> <li>• Do not alter or modify equipment.</li> <li>• For professional use only.</li> <li>• Use equipment only for its intended purpose. Call your Graco distributor for information.</li> <li>• Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.</li> <li>• Do not kink or over bend hoses or use hoses to pull equipment.</li> <li>• Comply with all applicable safety regulations.</li> </ul>
	<p><b>TOXIC FLUID OR FUMES HAZARD</b></p> <p>Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.</p> <ul style="list-style-type: none"> <li>• Read MSDS's to know the specific hazards of the fluids you are using.</li> <li>• Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.</li> </ul>
	<p><b>PRESSURIZED ALUMINUM PARTS HAZARD</b></p> <p>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.</p>
	<p><b>PERSONAL PROTECTIVE EQUIPMENT</b></p> <p>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 equipment includes but is not limited to:</p> <ul style="list-style-type: none"> <li>• Protective eyewear</li> <li>• Clothing and respirator as recommended by the fluid and solvent manufacturer</li> <li>• Gloves</li> <li>• Hearing protection</li> </ul>

# Introduction

## Features

The graco HVLP-Turbine gun features a quick-change fluid set, EasyGlide™ trigger and easy-access controls. One air cap fits all six fluid sets.

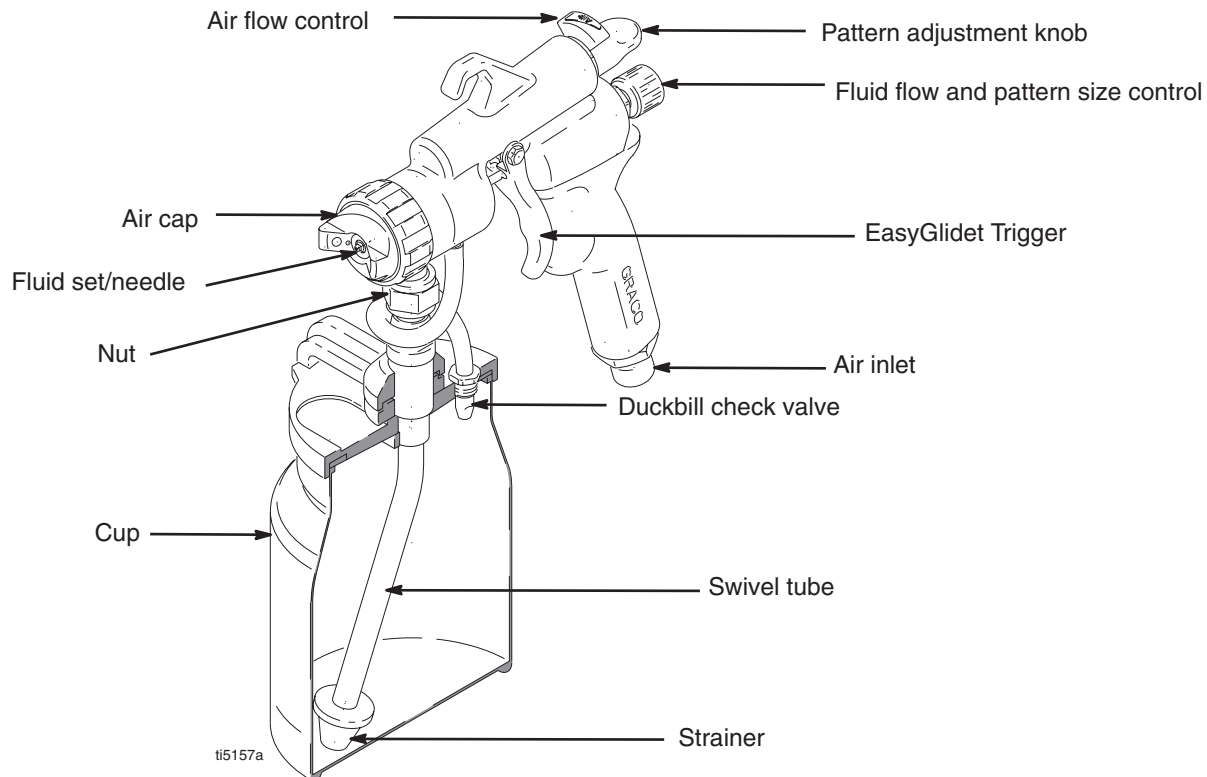


FIG. 1

## General Operating Instructions

- 1 Setup gun:
  - a. Adjust fluid supply (page 5).
  - b. Establish correct airflow (page 5).
  - c. Select spray pattern and shape (page 6).
  - d. Select fluid set (page 7).
- 2 Prepare fluid and surface (page 9).
- 3 Connect gun to fluid and air supplies (page 9).
- 4 Fill cup or remote pressure pot with fluid you will be spraying (page 10).
- 5 Spray (page 12).
- 6 Clean gun following the cleanup instructions (page 14).

# Setup

## Fluid Flow

- 1 To obtain maximum fluid flow, turn fluid adjustment knob (21) counterclockwise until trigger (10) moves freely. Fig. 2.

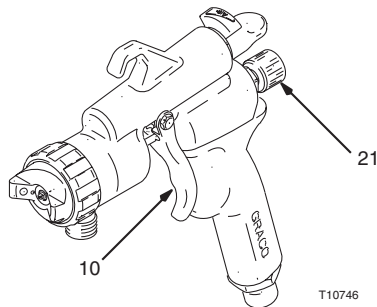


FIG. 2

- 2 For remote pressure pot, hold gun parallel to floor and adjust fluid pressure at 8-10 inch (2093 to 254 mm) fluid stream. Fig. 3.

For 2-quart remote pressure pot: Set at 4 to 6 psi (0.28 to 0.42 bar).

For 2-1/2 gallon remote pressure pot: Set at 8 to 10 psi (0.56 to 0.70 bar).

Note: Heavier fluids or longer fluid hoses require greater pressures.

### WARNING

Over-pressurizing the accessory remote pressure pot can cause serious injury. To reduce the risk, never exceed 50 psi (0.35 MPa, 3.5 bar) Maximum Inlet Fluid Pressure.

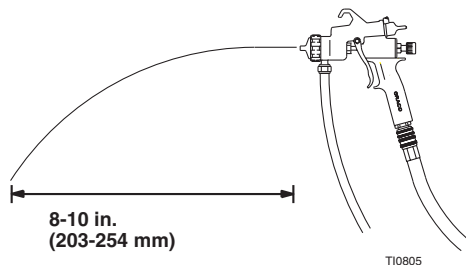


FIG. 3

- 3 If further gun fluid adjustment is needed, turn fluid adjustment knob (21) clockwise to reduce volume of fluid output. Fig. 4.

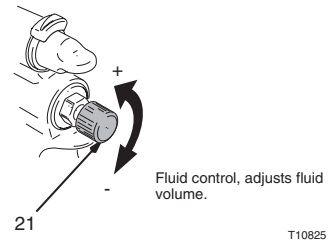


FIG. 4

### CAUTION

Restricting the trigger and fluid needle travel by continuously spraying with fluid adjustment knob closed (turned clockwise), will cause accelerated abrasive wear on fluid needle and wear on trigger.

## Air Flow

- 4 Test spray pattern and atomization while holding gun about 6 to 8 inches (150 to 200 mm) from test piece.
- 5 Air Control Valve (B) on end of gun, controls both atomizing air and pressure in spray gun cup. Adjust air control valve as needed. Fig. 5.

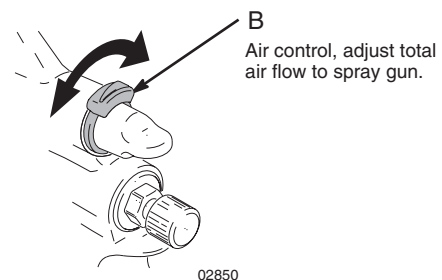


FIG. 5

**NOTES:**

- Control over-spray mist by using only as much air as necessary to spray fluid. Lighter fluids require less air.
- If atomization is still unacceptable, fluids may be thinned further or a different fluid set may be required. Refer to page 8 to determine fluid set or page 9 to prepare fluid.

**Spray Pattern Direction and Shape**

The spray pattern and direction are determined by the pattern selection knob (A) fluid adjustment knob (21) and air cap (15) positions. Fig. 6.

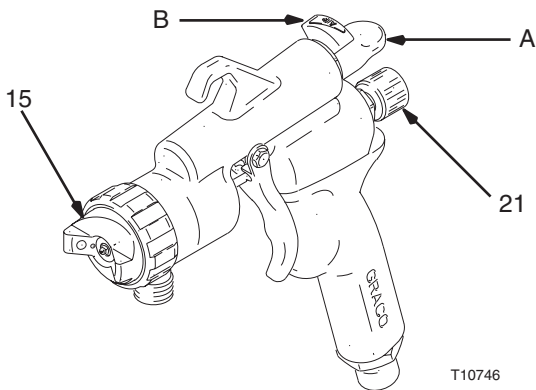


FIG. 6

**Selecting the Pattern Shape**

The Pattern Selection Knob (A) determines the shape of the spray pattern. To create a round spray pattern set the pattern selection knob (A) to RND. To create a fan pattern, set the pattern selection knob (A) to FAN. Fig. 7.

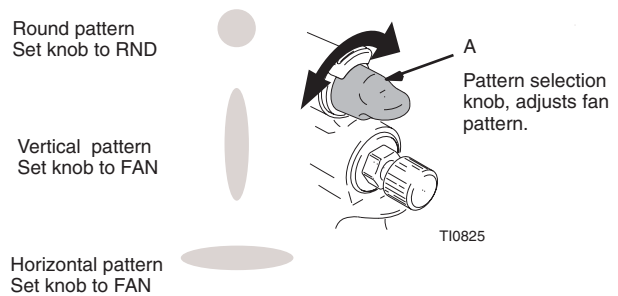


FIG. 7

**Adjusting the Pattern**

Change the pattern by adjusting the fluid knob (21) and pattern selection knob (A).

**Note:** Reducing fluid flow rate or turning air knob to RND will reduce pattern width. Using **air cap 244227** will create a highly productive, wider pattern. Fig. 8.

The air control (B) controls the TOTAL air to the pattern and gun. Fig. 6.

As the fluid flow rate is reduced, the pattern becomes smaller.

Using too much air will cause overspray.

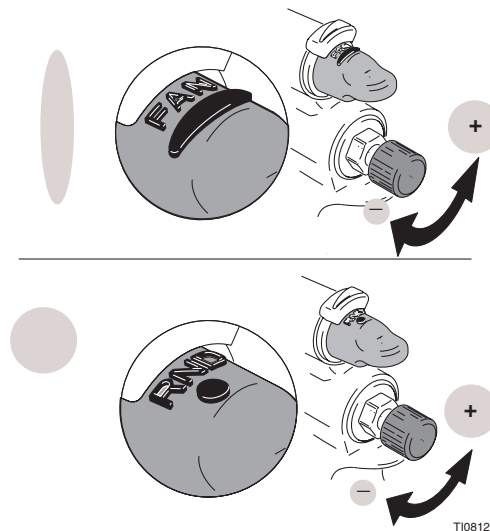


FIG. 8

## Selecting Fluid Sets

The Turbine Spray Gun includes a #3 fluid set, Part No. 244124. Grooves at the end of fluid needle indicate the size of fluid set.

Fluid sets include a nozzle (14a) o-ring (4) and needle assembly (14b). Fig 9.

**Note:** To order other replacement parts for gun, see parts drawing and list for gun model on page 22.

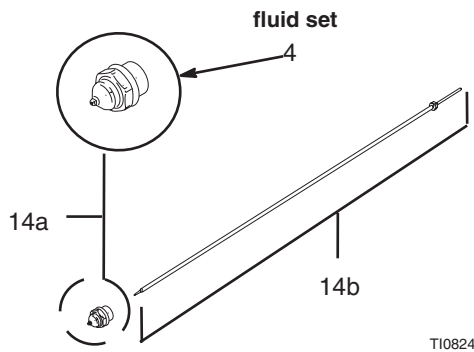


FIG. 9



### WARNING

Do not exceed gun's 50 psi (0.35 MPa, 3.5 bar) Maximum Fluid Inlet Fluid Pressure and 10 psi (0.07 MPa, 0.7 bar) Maximum Inlet Air Pressure. Higher pressures can cause parts to rupture and result in serious injury or property damage.

Turbine spray gun fluid sets range in size to provide different fluid flow rates. Selection charts on page 8 show recommended combinations based on fluid viscosities, flow rates, and usage.

As a general guideline, use fluid nozzle that will give required flow with needle fully triggered at lowest fluid pressure.

For low flow rates or light viscosity fluid, select smaller nozzle sizes.

For high flow rates or high viscosity fluid, select larger nozzle sizes.

Graco offers six different fluid sets:

Fluid Set	Part Number	Orifice Size (inch)
#2	244123	0.032
#3	244124	0.051
#4	244125	0.071
#5	244126	0.087
#6	244127	0.098
#7	244128	0.115

## Contractor Fluid Set Chart

Use this chart to determine Fluid Set for specific contractor applications. Fig. 10.

Material / Fluid Set Selection Guide						
Material	Fluid Set #2	Fluid Set #3	Fluid Set #4	Fluid Set #5	Fluid Set #6	Turbine Unit
Dye Ink Non-Wiping Stain	████████					2500
Automotive Finish Lacquer Stain Enamel Epoxy Urethane Varnish Primer	████████	████████	████████	████████		3800
Industrial Finishes Latex Multi-Spec Butyrate Nitrate Dope Oil Wall Paint				████████	████████	4900

197053 NOTE: Read gun manual for paint reduction recommendations.

FIG. 10

## Installing Fluid Set

### CAUTION

Trigger gun whenever you tighten or remove nozzle. This keeps needle seat away from nozzle seating surface and prevents the seat from being scratched.

Complete spray guns are available with a #3 fluid set. To install other fluid sets, perform the following steps. Fig. 11.

- 1 Use your hand to loosen and remove the air cap retaining ring (13) and air cap housing (15).
- 2 While triggering gun, use your hand to loosen and remove nozzle (14a) from gun.
- 3 Use your hand to loosen and remove fluid knob assembly (21) and compression spring (23) from back of gun and remove old needle.

- 4 Insert needle assembly (14b) into the back of gun. Replace nozzle (14a) air cap housing (15) and air cap retaining ring and tighten by hand.

Note: O-ring (4) should always be on the nozzle.

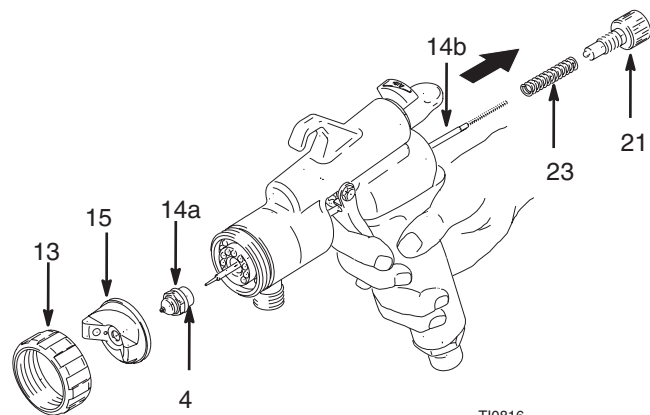


FIG. 11

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## Preparing to Spray

### Paint Reduction - Industrial or Domestic Coatings

Reduce and catalyze all paint to manufacturers's specifications. If not reductions are given, first thoroughly mix fluid to be sprayed. Gradually mix in reducer, testing fluid for correct spraying consistency.

Test consistency, remove stir stick from thinned paint. Consistency is right when first drops from stir stick are about one second apart.

### Prepare the Surface

To achieve proper adhesion, make sure the surface to be sprayed is completely clean.

## Turbine Spray Unit

(for more information see manual 309241)

### Connect Fluid and Air Supply

#### Notes:

- The HVLP Cart/Compressor provides the air supply for the remote pressure pot.
  - Circled letters in Fig. 12 indicate hose line connections.
- 1 Connect gun air supply hose (A) between turbine air outlet (B) and gun air inlet (C). DO NOT use wrench to tighten connections; hand tighten only. Fig. 12.
  - 2 If using a spray gun cup (D): Connect cup to gun fluid inlet (E).

If using accessory remote pressure pots (F): Connect fluid supply hose (G) between remote pressure pot fluid outlet (H) and gun fluid inlet (E), or connect pressure pot air hose (J) between pressure pot air regulator inlet (K) and the cart compressor air outlet (L).

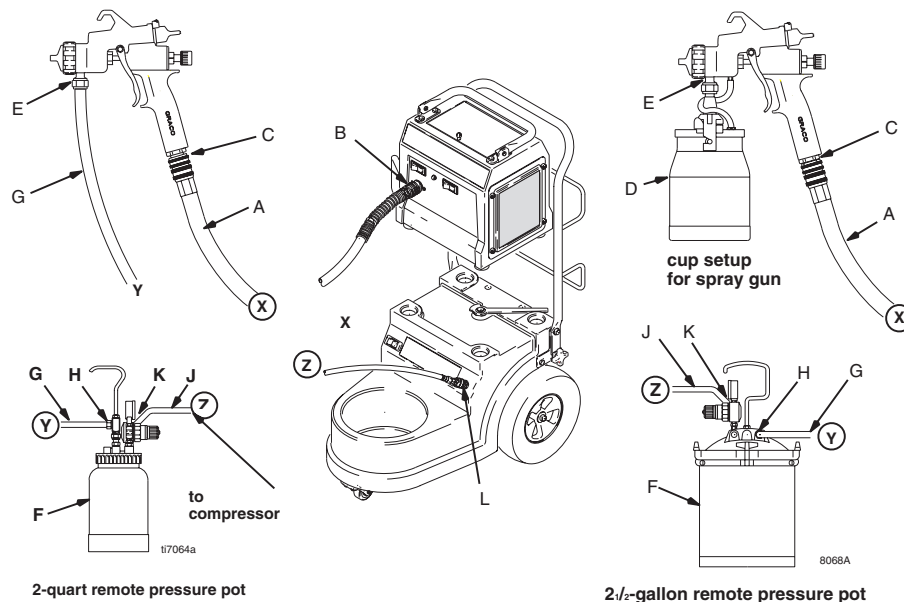


FIG. 12

## Pressure Relief Procedure

### WARNING

The accessory remote pressure pot remains pressurized until pressure is manually relieved. To reduce the risk of serious injury from pressurized fluid or accidental spray from gun, always **relieve pressure** in the pressure pot before loosening or removing the cover, if the fluid nozzle clogs and before cleaning, checking or servicing equipment..

Relieve remote pressure pot as follows: FIG. 13.

- 1 Turn off air supply to pressure pot.
- 2 2-1/2 gallon remote pressure pot: Pull pressure relief valve ring (206c) until pressure is completely relieved.

2 quart remove pressure pot: Turn pressure relief knob. Wait until pressure is completely relieved before removing cover. Close knob.

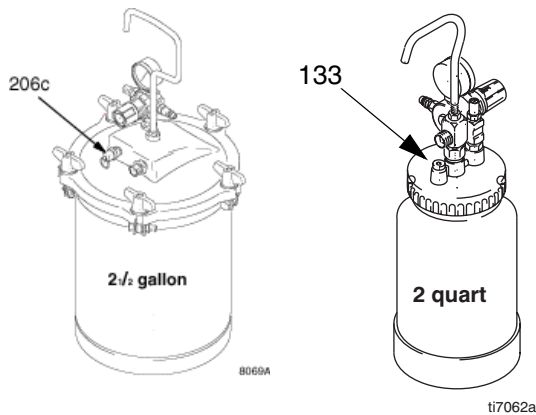


FIG. 13

## Fill Cup or Remote Pressure Pot

### Spray Gun Cup

### WARNING

The spray gun cup is pressurized by the gun's air supply. To reduce the risk of serious injury from pressurized fluid or accidental spray from gun, always turn off the air supply to the gun before removing the spray gun cup.

Fill cup 3/4 full to keep air pressure tube clean. Install cover. Latch the under-cup cover (H) to secure it to cup. FIG. 14.

**Note:** Strainer may be removed for high viscosity applications which may plug strainer.

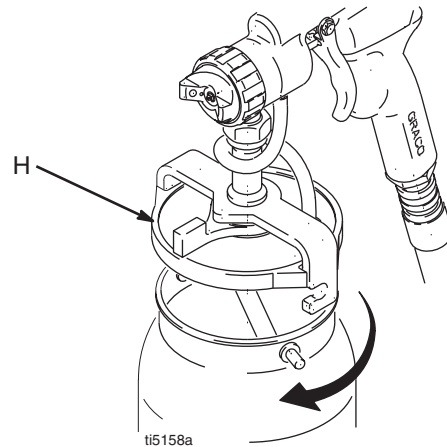


FIG. 14

## Accessory Remote Pressure Pot

- 1 Follow Pressure Relief Procedure, page 10.
- 2 Remove pressure pot cover and fill. Secure cover.

**Note:** 2-quart remote pressure pot only: Lightly coat cover threads with petroleum jelly.

### CAUTION

If the 2-quart remote pressure pot is accidentally tipped over or held at too great of an angle, fluid may leak into air regulator and cause damage. Take precautions to avoid this. If fluid does get into regulator, clean immediately.

### CAUTION

Do not tighten pressure pot cover more than hand-tight. Excessive tightening may damage cover gasket.

# Spraying Techniques

## WARNING

- Use additional air hose if necessary to ensure that the turbine is operated in a clean, dry, well ventilated area.
- Never place turbine inside a spray booth! Use this equipment outdoors or in extremely well ventilated areas.
- Do not point gun at anyone or any part of the body.

## General Spraying Techniques

- Select proper fluid set. To determine correct fluid set see charts on page 8.
- When fluid is first applied, start with fluid valve and maximum air and the knob set to the FAN spray pattern position. Then adjust as needed. See Fig. 8 for pattern size adjustment.
- Keep gun perpendicular to surface and maintain consistent distance of approximately 6 to 8 inches (150 to 200 mm) from object being sprayed. Fig. 15.
- Always have spray gun in motion before triggering. Move spray gun across workplace in straight, smooth, stroke, maintaining speed and distance. Release trigger at end of stroke.
- To obtain an even finish, overlap previous strokes by 50%.
- Apply full, wet coat whenever possible.

## Automotive Spraying Techniques

- When blending spots, work from outside in.
- Two, 20-foot (6.1 m) hoses are recommended when applying automotive finish coats. Additional hose allows air to cool for better flow.

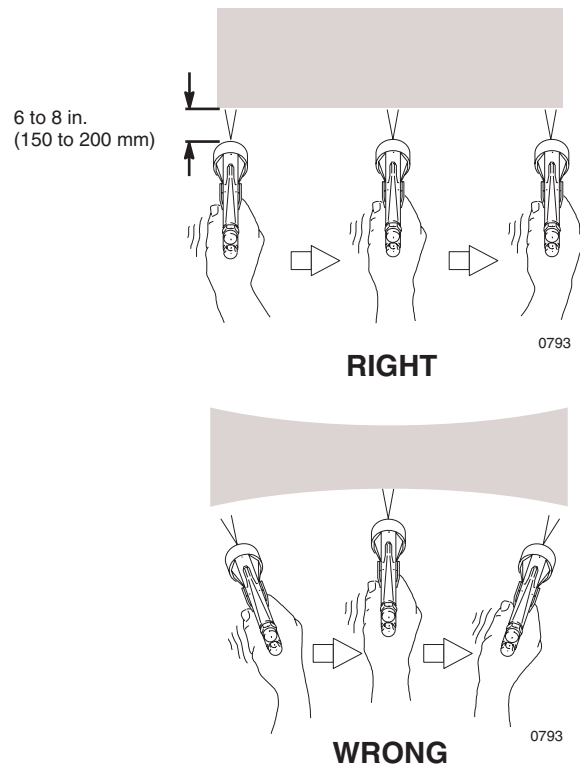
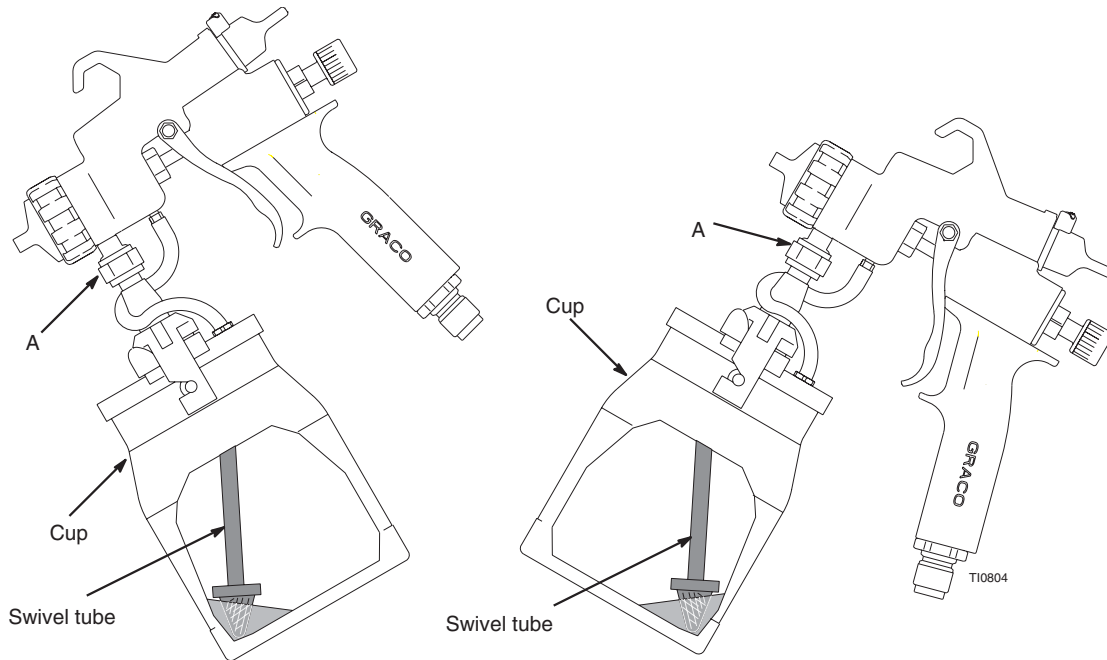


FIG. 15

## Swivel Tube Adjustment

The adjustable swivel tube allows the HVLP-Turbine Gun to be held in any position while spraying. Fig. 16.



Swivel tube positioned for spraying DOWN

Swivel tube positioned for spraying UP

FIG. 16

## Converting the HVLP Turbine Cup Feed Gun to Pressure Feed

(Parts 22).

- 1 Using a pliers, remove air pressure tube (30b) from air stem (31).
- 2 Hold adapter fitting (28) with wrench. Remove cup assembly.

To adjust the position of the tube in the cup:

- 1 Loose nut (A) with a wrench.
- 2 Rotate cup to the desired spray position.
- 3 Retighten nut (A) with a wrench.

- 3 Remove air stem (31) from gun body (1).

- 4 Apply medium strength thread locker to set screw (36) and assemble into gun body (1).

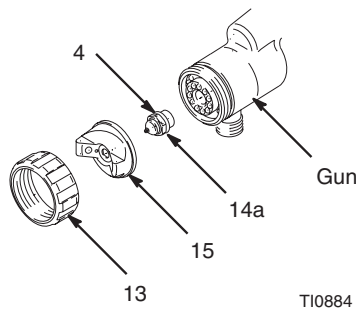
**Note:** To convert from pressure feed cup to cup feed, reverse these instructions.

# Maintenance

## Cleaning Spray Gun

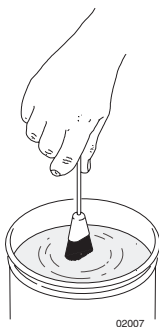
- 1 Clean gun and cup by hand with compatible solvent or place them in gun washer with trigger held open; cycle washer as necessary to clean gun.
- 2 Remove air cap retaining ring (13), air cap (15), nozzle (14a) and o-ring (4). Fig. 17.
- 3 Trigger gun while using your hand to remove fluid nozzle (14a). Fig. 17.

<b>CAUTION</b>
Trigger gun whenever you tighten or remove nozzle. This keeps needle seat away from nozzle seating surface and prevents seat from being scratched.



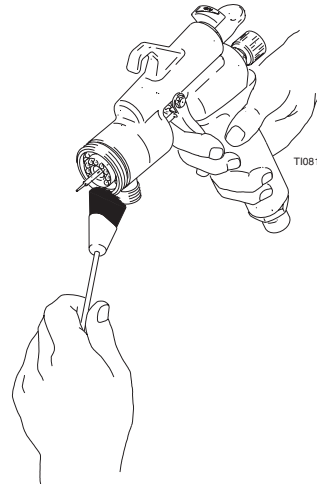
**FIG. 17**

- 4 Clean air cap retaining ring, air cap, and fluid nozzle with water or solvent.
- 5 Dip end of a soft-bristle brush into a compatible solvent. Do not continuously soak brush's bristles with solvent and do not use a wire brush. Fig. 18.



**FIG. 18**

- 6 With gun pointed down, clean front of gun using a soft-bristle brush and solvent. Fig. 19.

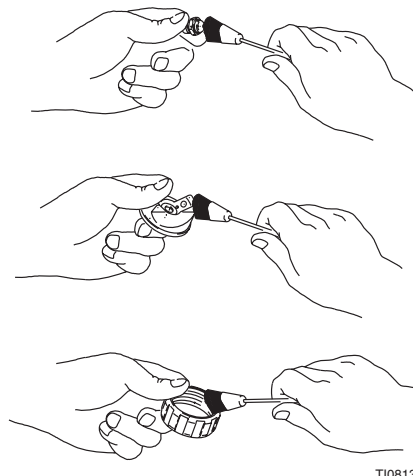


**FIG. 19**

- 7 Scrub air cap retaining ring, air cap, and fluid nozzle with soft-bristle brush.

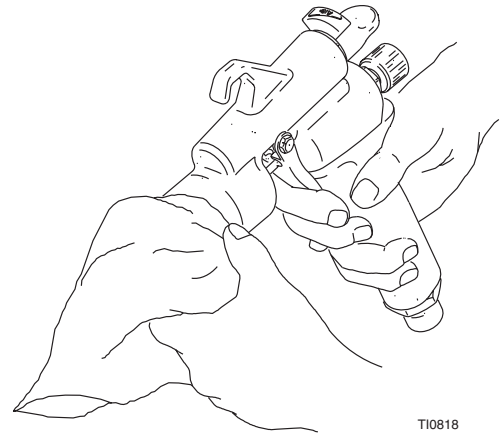
To clean out air cap holes, use a soft implement such as a toothpick, to avoid damaging critical surfaces.

Clean air cap and fluid nozzle daily. Some applications may require more frequent cleaning. Do not soak air cap retaining ring in solvent for prolonged periods of time. Fig. 20.



**FIG. 20**

- 8 Trigger gun while hand tightening fluid nozzle (14a).
- 9 Install air cap (15) and retaining ring (13).
- 10 Dampen a soft cloth with solvent. Wring out the excess. Point gun down and wipe off outside of gun. Fig. 21.



T10818

FIG. 21

- 11 Lubricate gun after cleaning it as instructed on page 17.

**CAUTION**

Solvent left in gun air passages could result in a poor quality paint finish. Do not use any cleaning method that may allow solvent into gun air passages.

**Do not point gun up while cleaning it.**



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**Do not wipe gun with a cloth soaked in solvent; ring out excess.**



02027

**Do not immerse gun in solvent.**



07041A

**This may scratch them. Do not use metal tools to clean air cap holes.**

**Scratches can distort spray pattern.**



02055

## Flushing Spray Gun Using a Remote Pressure Pot

### NOTES:

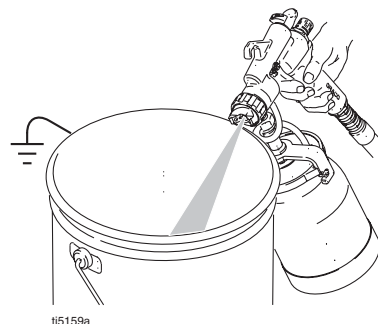
- Check for any fluid leaks from gun and fluid hoses. Tighten fittings or replace equipment as needed.
- Flush gun before you change colors and when you are finished spraying.

CAUTION
Clean all parts with a solvent compatible with fluid being sprayed and compatible with the spray gun and cup or accessory remote pressure pot wetted parts. See Technical Data, page 24.

- 1 Turn off air supply to gun.
- 2 Follow **Pressure Relief Procedure**, page 10.
- 3 Fill pressure pot with water or a compatible solvent.
- 4 Flush spray gun using compressor air only. Point gun down into container and flush until solvent runs clear.
- 5 Relieve pressure pot pressure, page 11.
- 6 Disconnect air and fluid hoses from gun.
- 7 Clean and lubricate gun. *Cleaning Spray Gun*, page 14.

## Flushing Spray Gun and Cup

- 1 Turn off air supply to gun.
- 2 Unlatch cup cover and remove cover from cup.
- 3 Turn pattern selection knob (A) to RND to create a round pattern. Turn air control valve (B) half open to reduce solvent mist.
- 4 Fill empty cup with about 1-1/2 inches (38 mm) of compatible solvent. Reinstall cup. Be sure cover is secure.
- 5 Turn on air to gun.
- 6 Hold gun firmly to side of grounded pail and trigger into pail until solvent runs clean. Fig. 22.



**FIG. 22**

- 7 Turn off air to gun.
- 8 Disconnect air supply and remove cup from gun. Clean and lubricate gun. *Cleaning Spray Gun*, page 14 and *Lubricating Spray Gun*, page 17.

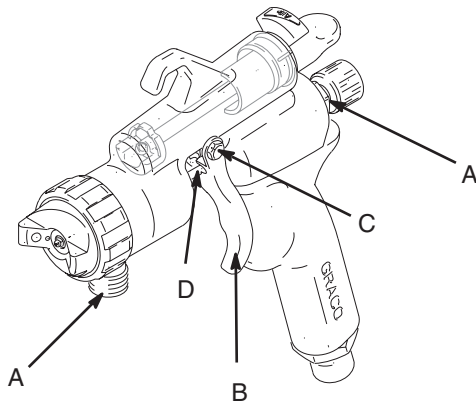


# Service

## Lubricating Spray Gun

After cleaning or servicing gun, lubricate parts indicated in Fig. 23, with silicone-free spray gun lubricant or similar material.

- All threaded areas (A)
- Trigger screws (B)
- Trigger axle (C)
- Fluid needle assembly (D) (see #16, Parts, page 22).



T10883

FIG. 23

## Replacing Needle

- 1 Relieve pressure, page 10.

CAUTION
Trigger gun whenever you tighten or remove nozzle. This keeps needle seat away from nozzle seating surface and prevents seat from being scratched.

- 2 Remove fluid adjustment knob (21) and fluid spring (23).
- 3 Pull fluid needle assembly (16) out of back of gun.
- 4 Check fluid needle (16) for damage or excessive wear. Replace needle if necessary.
- 5 Insert fluid needle assembly (16) in back of gun.
- 6 Tighten packing screw (8). The needle (16) must move freely.

**Note:** To ensure proper alignment of parts, follow next steps in order they are given.

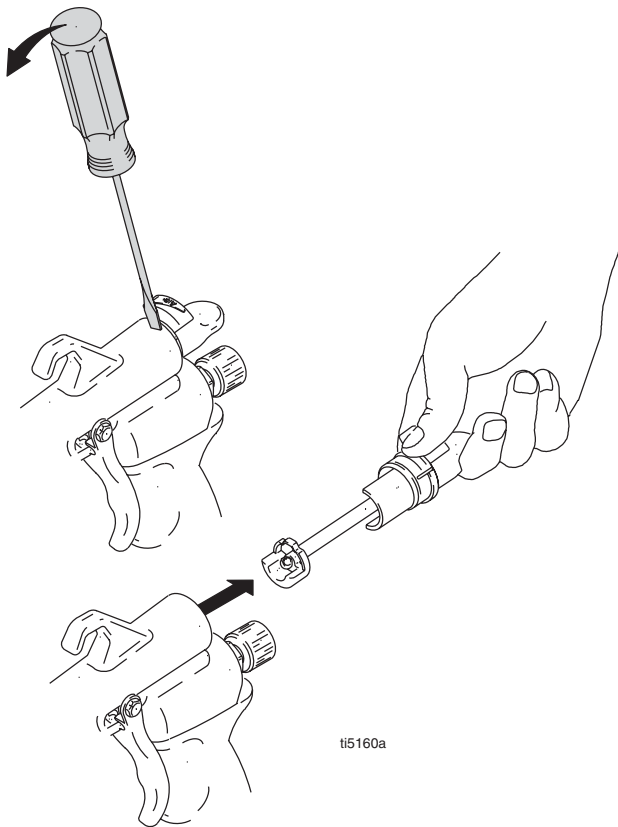
- 7 Lubricate and install fluid needle (16).
- 8 Lubricate fluid adjustment knob threads (21) and install fluid spring (23) and adjustment knob.
- 9 Trigger gun to test needle movement. If needle does not return after trigger is released or is slow in returning, loosen packing screw (8) slightly until needle returns freely.
- 10 Make sure gun fluid packings are sealing properly by spraying solvent at low pressure before fully pressurizing gun with fluid to be sprayed.

If fluid packings leak, tighten packing screw (8) slightly and retest until packings and needle seal completely.

## Replacing Air Valve (Kit 243840)

The air valve (25) cannot be repaired. If it is damaged, the entire piece must be replaced. To remove air valve:

- 1 Using a screwdriver, gently push valve back out about 0.25 in.
- 2 Gently pull it out of the back of the gun.
- 3 Insert new air valve.
- 4 Twist counter-clockwise, approximately one-half turn) until it is securely seated in back of gun. Fig. 24.



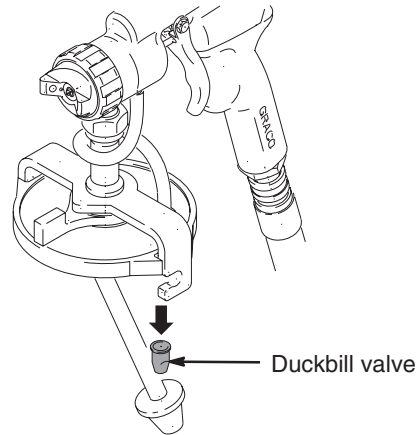
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FIG. 24

## Replacing Duckbill Valve (Kit 244135)

If the duckbill valve is worn or broken, replace it with a new one immediately. To replace the duckbill valve:

- 1 Lift cover away from cup.
- 2 Using a screwdriver, slightly pull worn duckbill valve and o-ring out of lid.
- 3 Put o-ring on new duckbill valve.
- 4 Press new duckbill valve and o-ring on the lid. Fig. 25.



TI0810

FIG. 25

## Replacing Cup Gasket (Kit 240625)

If the gasket is worn or swelled, replace it with a new one immediately. To replace the cup gasket:

- 1 Lift cover away from cup.
- 2 Remove worn gasket.
- 3 Press new gasket into lid slot. Fig. 26.

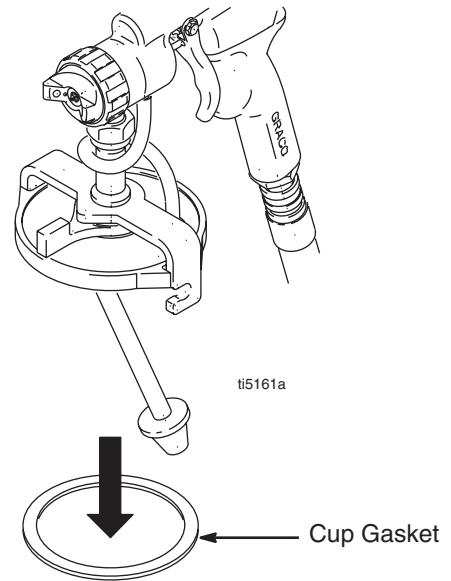


FIG. 26

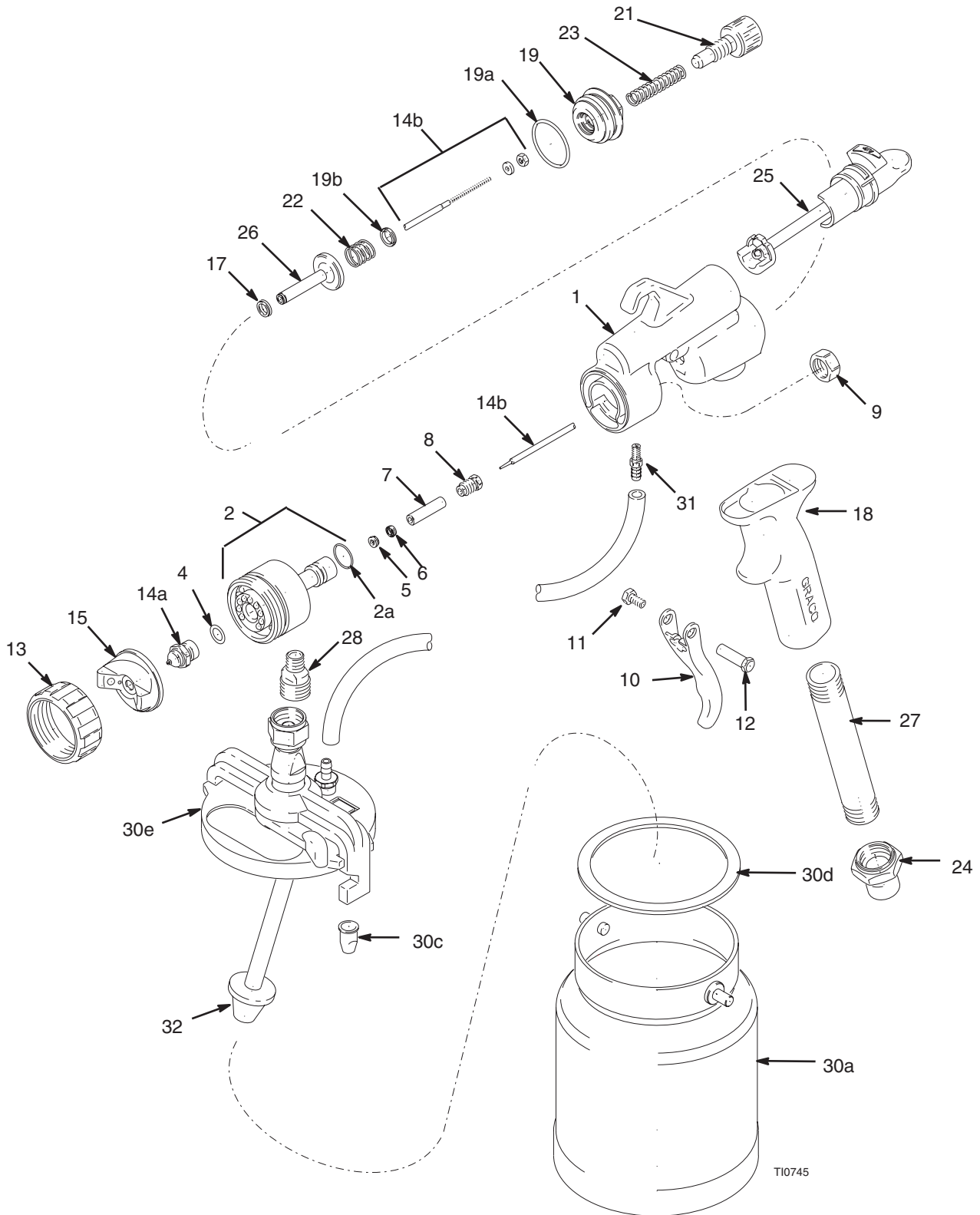
# Troubleshooting

## Spray Finish Problems

Problem	Cause	Solution
Orange peel finish - Paint surface not smooth	Paint droplets too large	<ul style="list-style-type: none"> <li>• Maintain proper spraying distance, page 12.</li> <li>• Keep turbine air filters clean to allow full air flow.</li> <li>• Do not use an air hose that is too long to provide sufficient atomization pressure.</li> <li>• If droplets are still too large, reduce fluid.</li> </ul>
	Paint droplets drying too fast to properly flow out of gun	Keep object being sprayed out of direct sunlight. When spraying in warmer temperatures, use a slower evaporating solvent or a retarder.
	Cold weather spraying	Keep fluid and object being sprayed as close to room temperature as possible. When spraying on a cold surface, most paints will become too thick to flow properly.
Blushing - clear coatings appear milky	Moisture condensation is trapped in lacquer when spraying in hot, humid conditions	<ul style="list-style-type: none"> <li>• Allow turbine to warm up a few minutes before spraying.</li> <li>• Store lacquer off concrete floors, at room temperature.</li> <li>• Apply lighter coats and allow for proper drying time.</li> <li>• Use a slower evaporating solvent or retarder.</li> <li>• Do not spray in windy conditions.</li> </ul>
Fish eyes - small pools on painted surface that will not fill	Silicone contamination from lubricants, grease, polish, or waxes on the surface being sprayed	Clean all parts with a cleaning solvent; use a solvent rag and a clean rag to wipe with. Replace rags as needed. If problem persists, use a fish eye eliminator.
Runs and sags	Applying too much paint per pass for the drying conditions	<ul style="list-style-type: none"> <li>• Move gun faster or decrease fluid flow.</li> <li>• Maintain proper spraying distance, page 12.</li> <li>• Reduce amount of thinner or use a faster drying thinner.</li> </ul>
Solvent pops or bubbles	Sprayed surface drying before solvent gas can be released	<ul style="list-style-type: none"> <li>• Apply fluid in lighter coats to allow for proper evaporation.</li> <li>• Use the recommended thinners.</li> <li>• Follow the solutions for Orange Peel Finish, Paint Droplets Too Large in this Troubleshooting Table.</li> </ul>

Problem	Cause	Solution
No or slow fluid flow, intermittent spray, or fluttering spray	Wrong size fluid set being used or o-ring on nozzle missing	Select proper fluid set for fluid being sprayed, page 8. Or put an o-ring on nozzle.
	Gun fluid nozzle blocked by dried paint or damaged	Clean or replace fluid nozzle.
	Cup or pressure pot cover not tight enough or gasket damaged	Tighten cover or replace gasket.
	Cup or pressure pot fluid tube blocked by dried paint or damaged	Clean or replace fluid tube.
	Air flow to cup blocked	To check, remove cup (leave cover connected). Trigger gun and check air flow out of duckbill valve. If air is not flowing freely, clean or replace duckbill valve.
	Needle packings not properly adjusted. <b>Note:</b> Fluid loss through packings affects fluid pressure and causes a fluid leak from gun body.	Clean gun body with solvent and brush provided. Adjust needle packings.
Fluid leaks at fluid nozzle after trigger is released	Plugged inlet strainer	Replace strainer if plugged or remove strainer if material is high viscous.
Poor spray pattern	Needle not seating in fluid nozzle	Check for a loose fluid nozzle or a bent nozzle or needle; tighten nozzle or replace parts as needed.
Poor spray pattern	Air cap horn hole and/or fluid nozzle plugged	Soak air cap and/or fluid nozzle in solvent. Clean air cap horn holes with non-metallic item to avoid permanently damaging them. Page 14.

# Parts



T10745

# Parts

Ref No.	Part No.	Description	Qty	Ref No.	Part No.	Description	Qty
1	244426	BODY, gun	1	22	114069	SPRING, compression	1
2	244429	HOUSING, nozzle	1	23	114072	SPRING, compression	1
2a	112085	PACKING, o-ring	1	24	196464	COUPLER, male	1
4	113137	PACKING, o-ring	1	25	243840	VALVE, air fan	1
5	188494	SPREADER, u-cup	1	26	243842	VALVE, air	1
6	188495	PACKING, u-cup	1	27	196463	TUBE, handle	1
7	196438	SPACER, packing	1	28	196468	FITTING, adapter	1
8	192352	SCREW, packing	1	30†	244130	KIT, CUP UNDER	1
9	192348	NUT, hex; 1/2-20 UNF	1	30a†	244132	CUP, 1-quart	1
10	196439	TRIGGER	1	30b†	244133	KIT, air tube, 5-pack (not shown)	1
11	203953	SCREW, cap, hex head	1	30c†	244135	VALVE, duckbill	1
12	192272	PIN, pivot	1	30d†	240265	GASKET, cup	1
13	196415	RING, retaining, air cap	1	30e†	243714	LID, assembly	1
14*	244124	FLUID SET	1	31†	M70394	STEM, air	1
14a*		NOZZLE, fluid	1	32	193218	STRAINER	1
14b*		NEEDLE ASSY	1	33	M70613	BRUSH, cleaning (not shown)	1
15#	244226	HOUSING, air cap	1	34	070303	LUBRICANT, grease (not shown)	1
17	188493	PACKING, u-cup, gun	1	35	197448	TOOL, wrench (not shown)	1
18	196462	HANDLE, gun	1	36	M71149	SCREW, set	1
19	244428	HOUSING, valve, fluid	1				
19a	110066	PACKING, o-ring	1				
19b	110453	PACKING, u-cup	1				
21	196649	KNOB, fluid control	1				

\* Not included on models 244113 or 244115

† Not included on models 244115 or 244118

# Part Number 244227 is used with 248854 gun.

## Technical Data

Maximum inlet fluid pressure	50 psi (0.35 MPa, 3.5 bar)
Maximum inlet air pressure	10 psi (0.07 MPa, 0.7 bar)
Air inlet	Quick-disconnect
Fluid inlet	3/8 nps
Sound levels per ISO 3744	
Sound power level	less than 65.0 dB(A)
Sound pressure level	less than 65.0 dB(A)
Wetted parts	
Bare spray gun	stainless steel, aluminum
Spray gun cups	aluminum, polyethylene
2-quart accessory remote pressure pot	aluminum, polyethylene
2-1/2 gallon accessory remote pressure pot	steel with solvent-resistant finish, EPDM gasket (standard)





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MM 309205

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www.graco.com  
Printed in USA 309205  
011/2005 Rev 11/2005