T1-Titanium

Non-HVLP Spray Gun

SHARPE

THE SPRAY GUN PEOPLE

FOR PRODUCT INFORMATION CALL:

1-800-742-7731

Important Safety Instructions
Read all warnings and instructions in this manual.
Save these instructions.

Maximum Fluid and Air Inlet Pressure:100 psi (0.7 MPa, 7 bar)

CE Ex II 2 G

Gun Part No.	Needle/Nozzle Size	Air Consumption (CFM)	Recommended Usage
5430	1.2 mm	11*	Pressure feed production
5435	1.8 mm	13.8*	Medium solids, colors and clears

***** At 50 psi (345 kPa, 3.4 bar)

SHARPE MANUFACTURING COMPANY • P.O. BOX 1441, MINNEAPOLIS, MN 55440-1441
1-800-742-7731, www.sharpe1.com
310584D, 4/2006

⚠ WARNING

FIRE AND EXPLOSION HAZARD

Flammable fumes, such as solvent and paint fumes, in work area can ignite or explode. To help prevent fire and explosion:

- Use equipment only in well ventilated area.
- Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static arc).
- Keep work area free of debris, including solvent, rags and gasoline.
- Do not plug or unplug power cords or turn lights on or off when flammable fumes are present.
- Ground equipment and conductive objects in work area.
- If there is static sparking or you feel a shock, **stop operation immediately.** Do not use equipment until you identify and correct the problem.

EQUIPMENT MISUSE HAZARD

Misuse can cause death or serious injury.

- Do not exceed the maximum working pressure or temperature rating of the lowest rated system component. See **Technical Data** in all equipment manuals.
- Use fluids and solvents that are compatible with equipment wetted parts. See **Technical Data** in all equipment manuals. Read fluid and solvent manufacturer's warnings.
- Check equipment daily. Repair or replace worn or damaged parts immediately.
- Do not alter or modify equipment.
- Use equipment only for its intended purpose. Call your Graco distributor for information.
- Route hoses and cables away from traffic areas, sharp edges, moving parts, and hot surfaces.
- Do not use hoses to pull equipment.
- Keep children and animals away from work area.
- 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 MSDS's to know the specific hazards of the fluids you are using.
- Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.

PERSONAL PROTECTIVE EQUIPMENT

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

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

PRESSURIZED EQUIPMENT HAZARD

Fluid from the gun/dispense valve, leaks, or ruptured components can splash in the eyes or on skin and cause serious injury.

- Follow **Pressure Relief Procedure** in this manual, when you stop spraying and before cleaning, checking, or servicing equipment.
- Tighten all fluid connections before operating the equipment.
- Check hoses, tubes, and couplings daily. Replace worn or damaged parts immediately.

3 Year Limited Warranty

Sharpe warrants this product to the original user against defective material or workmanship for a period of 1 year from the date of purchase.

Sharpe reserves the right to determine whether the part or parts failed because of defective material, workmanship, or other causes. Failures caused by accident, alteration, or misuse are not covered by this warranty.

Sharpe, at its discretion, will repair or replace products covered under this warranty free of charge. Repairs or replacements of products covered under this warranty are warranted for the remainder of the original warranty period.

Sharpe or its authorized service representatives must perform all warranty repairs. Any repair to the product by unauthorized service representatives voids this warranty. The rights under this warranty are limited to the original user and may not be transferred to subsequent owners.

This warranty is in lieu of all other warranties, expressed or implied, including warranties of merchantability and fitness for a particular purpose. Some states do not allow the exclusion or limitations of incidental or consequential damages, so the above limitations may not apply to you.

Setup

- Check that your shop air provides adequate air flow.
- Use a minimum 5/16 in. ID air supply hose.
- Set air and fluid pressure regulator according to paint manufacturer's recommendation for conventional equipment. Do not exceed 100 psi (0.7 MPa, 7 bar).
- Make sure no air restrictions, such as low-volume cheater-valves, obstruct the air flow. If an air adjusting valve is desired, use a SHARPE Air Adjusting Valve 24AAV (part no. 2210), 36AAV-HOV (part no. 3310) or HOV (part no. U04410).
- Install a shutoff valve (not supplied) downstream of the air regulator to shut off gun air.
- Install a shutoff valve (not supplied) on the fluid supply line to shut off fluid to the gun.
- Install an inline air filter (not supplied) to clean and dry the air supply to the gun.

1. Connect a clean, dry, filtered air supply to gun air inlet (9).
2. Connect fluid supply line to the gun fluid inlet (38).

If this is first time using the equipment, flush the spray gun.

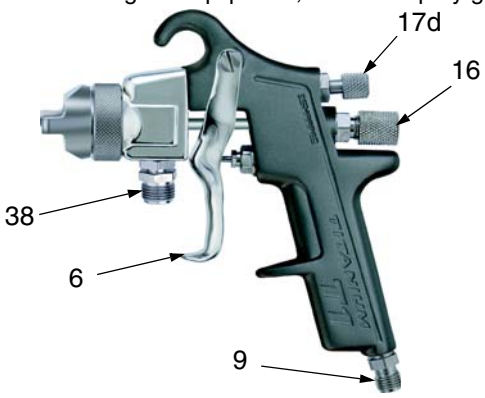


FIG. 1

3.

Operation

Pressure Relief Procedure

WARNING

Follow **Pressure Relief Procedure** when you stop spraying and before cleaning, checking, or servicing equipment. Read warnings, page 2.

1. Turn off gun air and fluid supply.
2. Trigger the gun to relieve pressure.

Flushing

WARNING

Read warnings, page 2.

Flush before using the equipment, before changing colors, and when you are done spraying. Use solvent that is compatible with gun wetted parts and fluid that will be sprayed. Flush at lowest possible pressure.

Refer to **Compliant Cleaning Methods**, page 4, to comply with air quality laws if applicable.

1. Follow **Pressure Relief Procedure**.
2. Connect a solvent supply line to the gun fluid inlet (38).
3. Spray into grounded metal waste container until equipment is clean.
4. Follow **Pressure Relief Procedure**.

Spraying

CAUTION

Excessive atomizing air pressure can increase over-spray, reduce transfer efficiency, result in a poor quality finish from dry spray.

1. Connect the fluid supply line to the gun fluid inlet (38).
2. Turn on shop air to gun and set atomizing pressure with the gun fully triggered.
3. Adjust the pattern size and shape with the spray width adjustment knob (17d). Turn knob clockwise to reduce pattern size and counterclockwise to increase it.

See **Troubleshooting** guide if you experience an irregular pattern.

4. Fluid control knob (16) is factory set for maximum needle trigger travel and material flow. To decrease needle/trigger travel and decrease fluid flow, turn the knob clockwise.
5. Adjust fluid pressure regulator until desired fluid flow rate is reached.

Cleaning and Maintenance

WARNING

Follow **Pressure Relief Procedure** when you stop spraying and before cleaning, checking, or servicing equipment. Read warnings, page 2.

CAUTION

- Do not submerge gun in solvent. Solvent dissolves lubricant, dries out packings, and may clog air passages.
- Do not use metal tools to clean air cap holes as this may scratch them and distort the spray pattern.
- Use a compatible solvent.
- Gun can be cleaned in a gun washer.

Clean fluid and air line filters as directed by the manufacturer.

Volatile Organic Compounds (VOC) Regulation

In certain states, spraying solvents that release VOC's into the atmosphere when cleaning a spray gun is prohibited. To comply with these air quality laws you must use a cleaning method that prevents the escape of VOC vapors into the atmosphere. See **Compliant Cleaning Methods** below.

Compliant Cleaning Methods

- Place spray gun in a gun washer that completely encloses the gun and components during cleaning, rinsing, and draining.
- Spray solvent through the spray gun into a closed gun cleaning station.

Cleaning Gun

Refer to **Compliant Cleaning Methods** to comply with air quality laws if applicable.

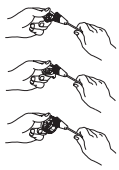
1. Follow **Flushing** procedure, page 3.
2. Use a rag moistened in solvent to wipe outside of gun.
3. Blow dry gun inside and out. Lubricate gun - see **Spray Gun Maintenance**.

Cleaning Nozzle and Air Cap

CAUTION

- Trigger gun and use nozzle removal tool 41160 whenever you tighten or remove nozzle to avoid damaging needle seat and nozzle.
- Do not use metal tools to clean air cap holes as this may scratch them and distort the spray pattern.

To clean the air cap and nozzle, remove and soak them in a compatible cleaning solution. Clean them and front of gun with a soft-bristle brush dipped into compatible solvent. Do not use a wire brush or metal tools. To clean out air cap holes, use a soft implement, such as a toothpick.



Spray Gun Maintenance

- Frequently lubricate the gun moving parts with a drop of non-silicone oil (part no. 8255). See FIG. 2.
- Do not disassemble the spray gun if you are having a spray pattern problem. Check **Troubleshooting**, page 5, for information on how to correct the problem.
- Check for fluid leakage. Tighten fittings or replace equipment as needed.

Gun Accessory Tools

Part No. 41155: Packing Nut Removal Tool
Part No. 41160: 1/2 in. Nozzle Removal Tool

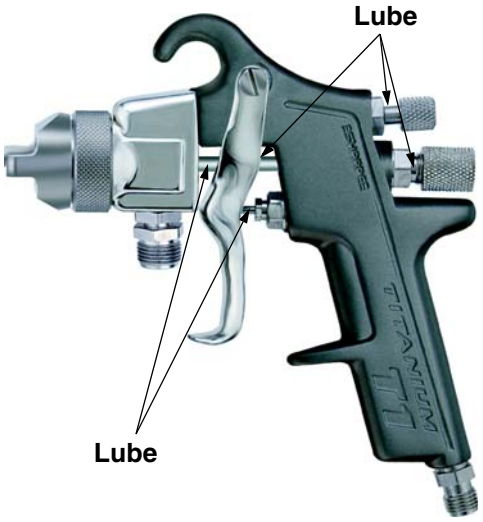
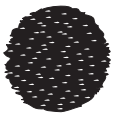


FIG. 2

Troubleshooting

WARNING

Follow **Pressure Relief Procedure**, page 3, before troubleshooting or servicing. Read warnings, page 2.

Problem	Cause	Solution
 **Right**	Normal pattern	No action necessary
 **Wrong** Heavy top or bottom pattern	Dirty or damaged air cap or fluid nozzle.	Rotate air cap 180°. *If pattern follows air cap,* problem is in air cap. Clean and inspect. See page 4. If pattern is not corrected, replace air cap. *If pattern does not follow the air cap,* the problem is with the fluid nozzle. Clean and inspect the nozzle. See page 4. If the pattern is not corrected, replace nozzle.
 **Wrong** Split pattern	Pressure too high for viscosity of material being sprayed.	a. Reduce air pressure and increase fluid pressure. b. Increase material viscosity c. Correct pattern by narrowing fan size with spray width adjustment knob.
 **Wrong**	Dirty or distorted air horn holes.	Rotate air cap 180°. *If pattern follows air cap,* problem is in air cap. Clean and inspect. See page 4. If pattern is not corrected, replace air cap.
Will not spray.	Fluid adjustment knob (16) turned too far clockwise.	Adjust knob (16) to the counterclockwise.
 **Wrong** Heavy pattern or orange peel	a. Fluid pressure too high for viscosity of material being sprayed. b. Air pressure too low. c. Gun held too close to surface.	a. Reduce fluid pressure. b. Increase air pressure. c. Hold gun about 6-8 inches (150-200 mm) from surface.

Technical Data

Maximum Air and Fluid Inlet Pressure: 100 psi (0.7 MPa, 7 bar)

Air Consumption:

- **Part No. 5430:** 11 CFM at 50 psi (345 kPa, 3.4 bar)
- **Part No. 5435:** 13.8 CFM at 50 psi (345 kPa, 3.4 bar)

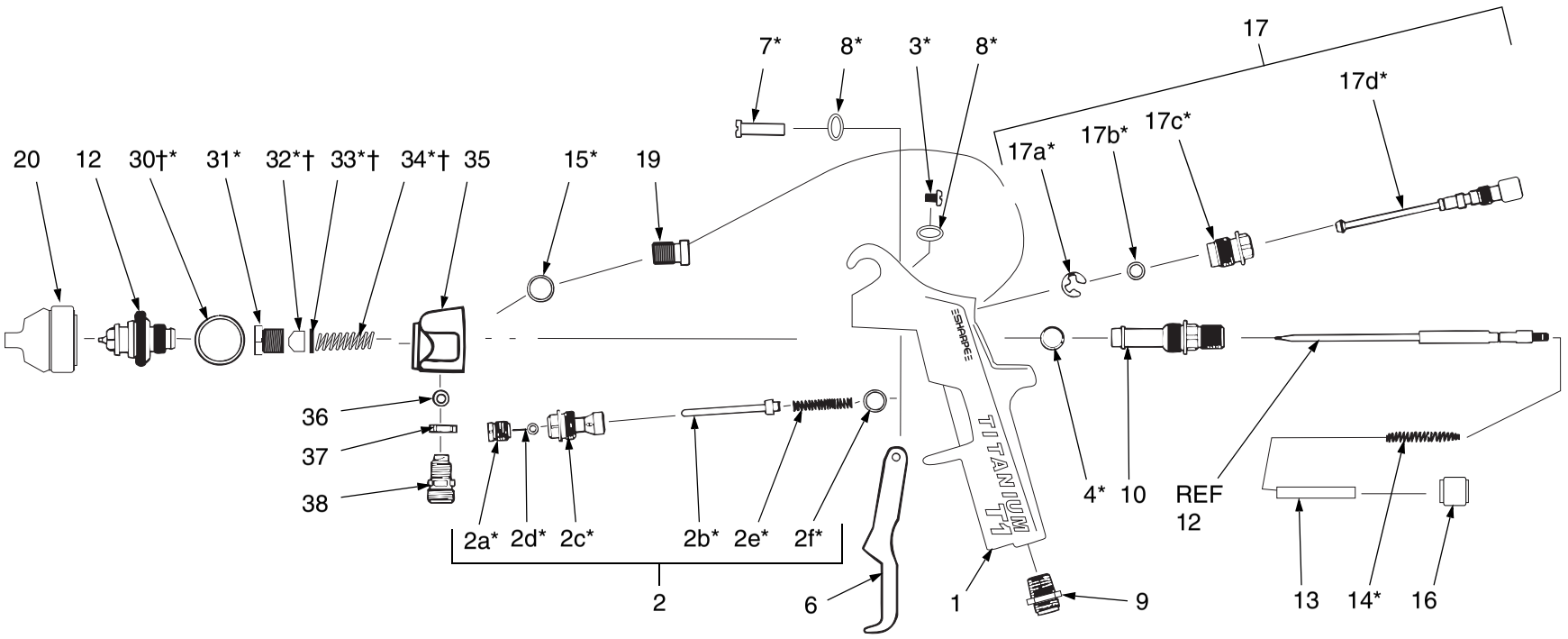
Wetted Parts: stainless steel, carbon steel, aluminum, PTFE, low density polyethylene

Weight: 1 lb. 3 oz. (0.54 kg)

Spray Gun

- 1/4 npsm (R1/4-19) air inlet
- 3/8 npsm (R3/8-19) fluid inlet

Parts

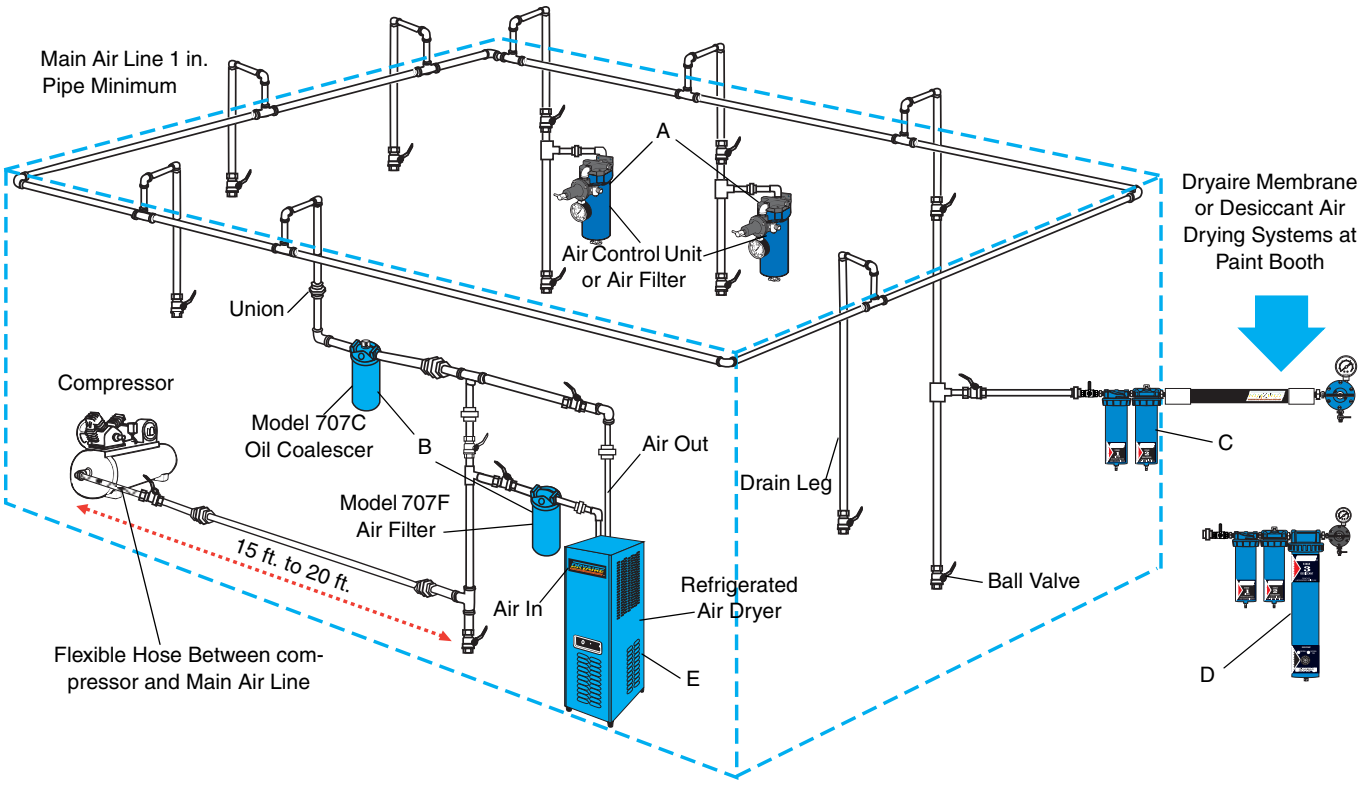


Ref. No.	Part No.	Description	Qty.
1	41141	Gun Handle	1
2	41120	Air Valve Assembly; Includes 2a-2f	1
2a*	26032	• Packing Nut	1
2b*	25066	• Air Valve	1
2c	34948	• Housing	1
2d*	16162	• Packing	
2e*	16167	• Air Valve Spring	1
2f*	16163	• Gasket	1
3*	34962	Trigger Screw	1
4*	16163	Gasket	1
6	34959	Trigger	1
7*	26044	Trigger Shaft	1
8*	34960	Spring Washer	2
9	26055	Air Inlet Fitting	1
10	41139	Fluid Control Bushing	1
12	118769	Needle/Nozzle Set, 0.045 mm; *Part No. 5430 only*	1
	118770	Needle/Nozzle Set; *Part No. 5435 only*	1
13	41129	Needle Sleeve	1
14*	41134	Needle Spring	1
15*	10326	Gasket	1
16	41146	Fluid Control Knob	1

Ref. No.	Part No.	Description	Qty.
17	41122	Width Control Assembly; Includes 17a-17d	1
17a*	16175	• Retaining Ring	1
17b*	38120	• O-Ring	1
17c	26066	• Body	1
17d	41148	• Control Valve/Knob	1
19	16153	Screw; 7/16-27 UNS	1
20	41009	Air Cap; *Part No. 5430 only*	1
	41010	Air Cap; *Part No. 5435 only*	1
30*	38001	Nozzle Gasket	1
31*†	41130	Packing Nut	1
32*†	41124	Fluid Needle Packing	1
33*†	41126	Washer	1
34*†	41128	Fluid Needle Spring	1
35	41143	Gun Head	1
36	27058	Fluid Inlet Gasket	1
37	27076	Fluid Inlet Lock Nut	1
38	27075	Fluid Inlet Fitting	1

* *Parts included in Repair Kit 41165*

† *Parts included in Repair Kit 41132. Also includes Packing Nut Removal Tool 41155.*



Ref. Letter	Description	Model No.
A	Sharpe 606	U06710
	Sharpe 606A	U06720
	Sharpe 606B	6730
	Sharpe 880A	6950
	Sharpe F88	8130
B	707C	6930
	707F	6920
	707FC	6910
C	Dryaire Membrane	6770
D	Dryaire Desiccant	6760
E	Refrigerated Air Dryer	
	25CFM	6880
	35CFM	6885
	50CFM	6890
	75CFM	6895