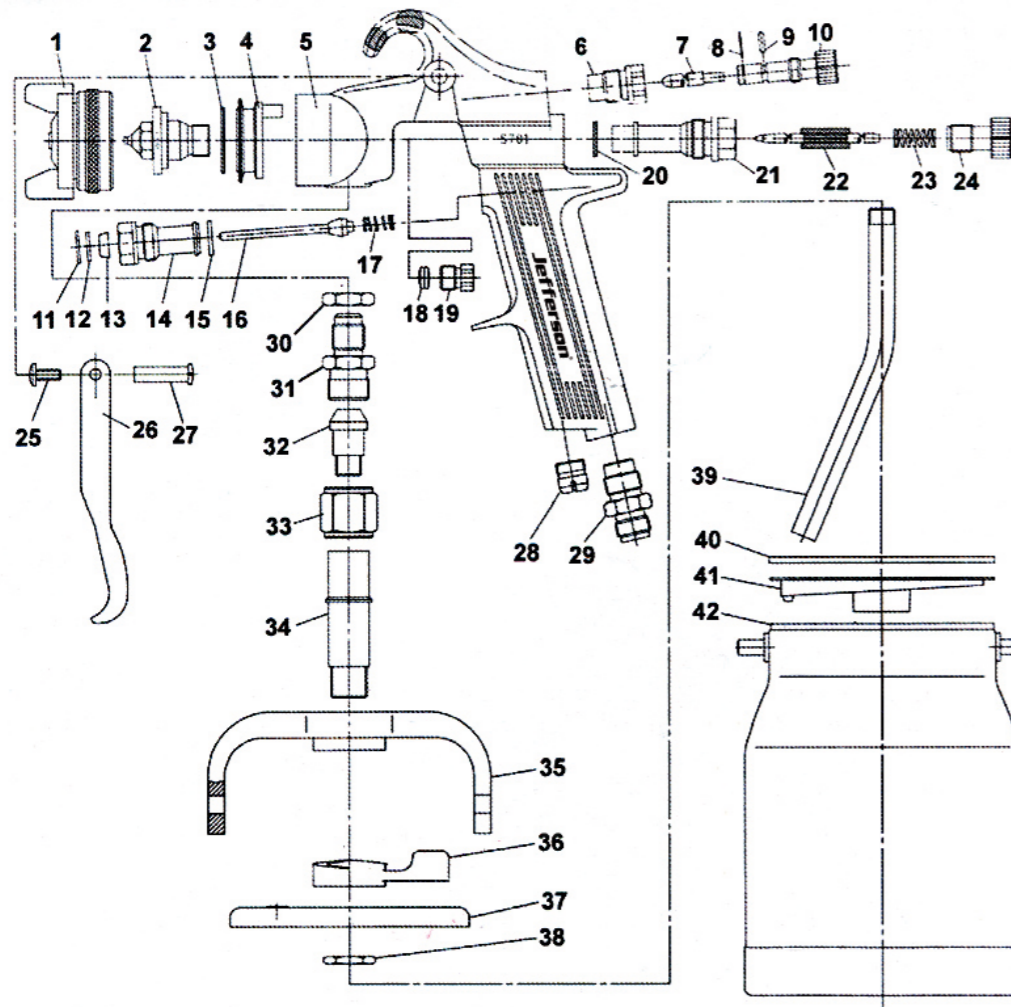


# JEFA050

# Jefferson®

PROFESSIONAL TOOLS & EQUIPMENT

# PROFESSIONAL SUCTION FEED SPRAY GUN



**IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS AND CAUTIONS. USE THIS PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.**

## 1. SAFETY INSTRUCTIONS

Familiarise yourself with the application, limitations and potential hazards specific to the spray gun.

**WARNING!** Disconnect the spray gun from the air supply before changing accessories, servicing or performing any maintenance.

- Maintain the spray gun in good condition (use an authorised service agent).
- Replace or repair damaged parts. Use authorised parts only. Unauthorised parts may be dangerous and will invalidate the warranty.
- Keep the spray gun clean for best and safest performance.
- Ensure that the compressed air system can supply the spray gun air consumption.
- Wear approved safety respiratory protection and safety eye goggles.
- If spraying isocyanate based finisher, wear approved respirator/clean air breathing apparatus and cover exposed skin with latex gloves and an impervious hooded coverall.
- Removing ill-fitting clothing. Remove ties, watches, rings and other loose jewellery and tie back long hair.
- Locate the spray gun in a suitable work area. Keep area clean and tidy and free from unrelated materials and ensure that there is adequate ventilation and lighting.
- Keep children and authorised persons away from the work area.
- When not in use, ensure that the air supply is turned off.
- Avoid unintentional operation of spray gun.
- The spray gun has been treated with an anticorrosive agent at the factory and must be flushed out thoroughly with thinner before use.
- When not in use, disconnect the spray gun from the air supply, clean thoroughly and store safely.
- **DO NOT** point spray gun at yourself, other persons or animals.
- **DO NOT** direct air from the air hose yourself, other persons or animals.
- **DO NOT** carry the spray gun by the hose, or yank the hose from the air supply.
- **DO NOT** exceed the maximum air pressure of 70 Psi.
- **DO NOT** use the spray gun for any purpose other than that for which it is designed.
- **DO NOT** allow untrained persons to operate the spray gun.
- **DO NOT** get the spray wet or use in damp or wet locations or in areas where there is condensation.
- **DO NOT** operate the spray gun if any parts are missing or damaged as this may cause failure and/or personal injury.

## 2. INTRODUCTION & SPECIFICATION

### 2.1 DESCRIPTION

Spray gun suitable for applying finishing coats. Supplied with cam action suction pot. Superbly balanced gun.

### 2.2 SPECIFICATION

Set-up	1.8mm
Air pressure range	30-70psi
Air consumption	7-12cfm

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	A050.V3-01	AIR CAP	22	A050.V3-22	NEEDLE SET
2	A050.V3-02	FLUID NOZZLE	23	A050.V3-23	NEEDLE SPRING
3	A050.V3-03	GASKET	24	A050.V3-24	NEEDLE ADJUSTMENT SCREW
4	A050.V3-04	AIR DIVERSION	25	A050.V3-25	TRIGGER BEARING SCREW
5	A050.V3-05	SPRAY GUN BODY	26	A050.V3-26	TRIGGER
6	A050.V3-06	PACKING	27	A050.V3-27	TRIGGER BEARING STUD
7	A050.V3-07	PATTERN ADJUSTMENT VALVE	28	A050.V3-28	AIRPROOF SCREW
8	A050.V3-08	STOP RING	29	A050.V3-29	AIR SCREW
9	A050.V3-09	O-RING	30	A050.V3-30	LOCKNUT
10	A050.V3-10	ADJUSTMENT SCREW	31	A050.V3-31	JOINT
11	A050.V3-11	STOP RING	32	A050.V3-32	FLUID JOINT
12	A050.V3-12	GASKET	33	A050.V3-33	CONNECTOR SCREW CAP
13	A050.V3-13	AIRPROOF PIECE	34	A050.V3-34	CONNECTOR GUIDE
14	A050.V3-14	AIR VALVE PACKING SCREW	35	A050.V3-35	PAINT CUP BRACKET
15	A050.V3-15	GASKET, PLASTIC	36	A050.V3-36	PAINT CUP TRIGGER
16	A050.V3-16	AIR VALVE POLE	37	A050.V3-37	PAINT CUP COVER
17	A050.V3-17	AIR VALVE SPRING	38	A050.V3-38	FLUID POLE SCREW
18	A050.V3-18	NEEDLE PACKING	39	A050.V3-39	FLUID POLE
19	A050.V3-19	NEEDLE PACKING SCREW	40	A050.V3-40	PAINT CUP GASKET
20	A050.V3-20	NEEDLE SLEEVE	41	A050.V3-41	BLOWHOLE COVER
21	A050.V3-21	NEEDLE SLEEVE PACKING	42	A050.V3-42	PAINT CUP

Jefferson Tools, Herons Way, Chester Business Park, Chester CH49 QR

Tel. +44 (0)1244 646 048 sales@jeffersonstools.com  
Fax. +44 (0)1244 893 101 www.jeffersonstools.com

# JEFA050

### 3. Air Supply

#### 3.1. Air Supply

Recommend hook-up is shown in Fig. 1.

3.1.1. Ensure spray gun air valve (or trigger) is in the off position before connecting to the air supply

3.1.2. You will require an air pressure of 30-70 psi, and an air flow according to specification.

3.1.3. **WARNING!** Ensure the air supply is clean and does not exceed 70 psi while operating the spray gun. Too high an air pressure and/or unclean air will shorten the product life due to excessive wear, and may be dangerous causing damage and/or personal injury.

3.1.4. Drain the air tank daily. Water in the air line will ruin the paint finish and damage the spray gun.

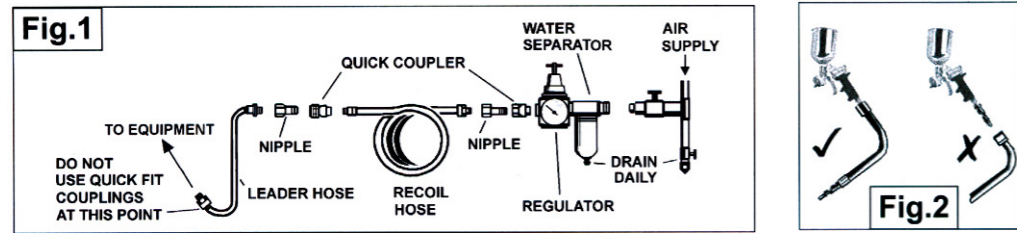
3.1.5. Clean air inlet filter weekly.

3.1.6. Line pressure should be increased to compensate for unusually long air hoses (over 8 metres). The minimum hose diameter should be 1/4" I.D. and fittings must have the same inside dimensions.

3.1.7. Keep hose away from heat, oil and sharp edges. Check hose for wear, and make certain that all connections are secure.

#### 3.2. Couplings

Vibration may cause failure if a quick change coupling is connected directly to the spray gun. To overcome this, connect a leader hose to the spray gun. A quick change coupling may then be used to connect the leader hose to the air line recoil hose. (Fig. 1 & 2)



### 4. Instructions

4.1. For best results, the gun should be held perpendicular to the surface being sprayed and moved parallel to it. Start the stroke before squeezing the trigger and release the trigger before finishing the stroke. This will enable accurate control of the gun and material (Fig. 3B).

4.2. Spray from a distance of about 6 to 10 inches depending on the material and the atomizing pressure. The material deposited should always be even and wet. Each stroke must overlap the preceding stroke to obtain a uniform finish. To reduce over-spray and obtain maximum efficiency, spray with the lowest possible atomizing air pressure.

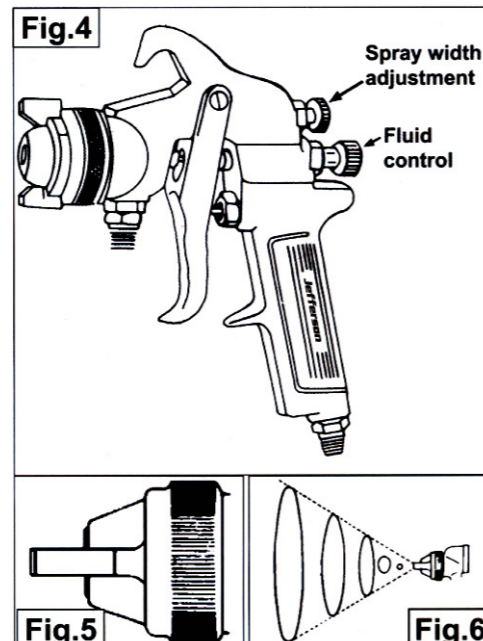
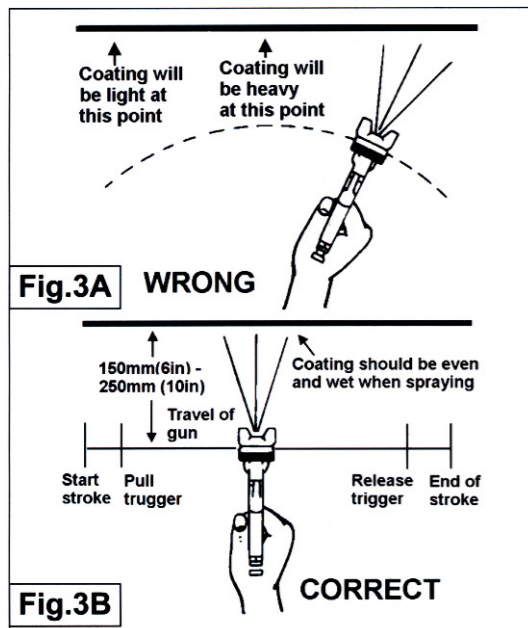
4.3. Controlling the fan spray and the fluid.

(a) Use the fluid control knob (Fig. 4) to adjust the amount of paint flow. Turning it clockwise will decrease flow and anticlockwise will increase flow.

(b) The spray width is controlled by the spray width adjustment knob; turn clockwise for a round pattern and anticlockwise for a fan pattern. Note: as width of spray is increased, more paint must be allowed through the gun to obtain the same coverage in the increased area.

(c) Turn the air nozzle to achieve a horizontal or vertical fan spray. Lock the nozzle with the retaining ring.

The spray pattern of the gun is variable from the round to flat with all patterns in between. In normal operation, the wings on the nozzle are horizontal (Fig. 5). This provides a vertical fan-shaped pattern which gives maximum, uniform and even coverage when moving the gun back & forth, parallel to the work surface (Fig. 6).



### 5. Cleaning and Maintenance

**For optimum performance it is very important to ensure the spray gun is correctly cleaned after each use.**

Disconnect from the air supply before attempting any cleaning or maintenance.

#### 5.1. Cleaning the gun

5.1.1. Immerse the front end of the gun only in solvent, until the solvent just covers the fluid connection.

5.1.2. Do not immerse the entire gun in solvent. This will cause lubricants to dissolve and packing to dry out. Dirty solvent may also clog the narrow passages in the gun.

5.1.3. Use a bristle brush and solvent to wash off accumulated paint.

5.1.4. Wipe the outside of the gun with a dampened solvent rag.

5.1.5. When finished spraying, flush the gun through with clean solvent.

5.1.6. If required, clean the nozzles by soaking them in solvent to dissolve any dried material and then use a brush. Blow them clean with air. Handle all nozzles carefully and do not make any alterations in the gun. (except as in 5.1.8. below)

5.1.7. If there is a need to probe the holes in the nozzles, ensure a tool that is softer than brass is utilised, under no circumstances use a metal tool, as the slightest amount of damage will adversely affect the spray gun pattern.

5.1.8. Adjust the fluid needle valve so that when the gun is triggered, air flow occurs before fluid flow.

#### 5.2. Maintenance

Take care when re-assembling. Screw parts hand tight to avoid cross-threading. If a part cannot easily be turned by hand, check that it is the correct part, or unscrew it, realign and retry. DO NOT use excessive force when re-assembling.

5.2.1. When changing the nozzle size, ensure the complete nozzle set is fitted. This consists of air cap, fluid nozzle and paint needle. Insert the fluid nozzle before paint needle.

### 6. Problem Solving

A faulty spray is usually caused by improper cleaning or dried material around the fluid nozzle tip or in the air nozzle. If cleaning is required, remove these parts and soak them in solvent. This will soften the dried material which can then be removed with a brush or a cloth. These parts are carefully machined and any damage to them will cause a faulty spray. If either the air nozzle or fluid nozzle are damaged, they must be replaced before a perfect spray can be obtained.

PROBLEM	POSSIBLE CAUSES	SOLUTION
	Dried material in a side port restricts passage of air. Greater flow of air from the clean side port forces a fan pattern in the direction of the clogged side.	Dissolve material in the side
	Dried material around the outside of the fluid nozzle tip restricts the passage of atomizing air at one point through the centre opening of the air nozzle and results in the pattern shown. This pattern can also be caused by a loose air nozzle.	Remove the air nozzle and wipe off fluid tip using a rag dampened with solvent. Tighten the air nozzle.
	Material too thin or atomization air pressure too high.	Regulate material viscosity or reduce air pressure.
	Not enough paint in bottle. Nozzle set / seating dirty, damaged or loosely installed.	Refill bottle. Remove the fluid nozzle, clean the back of the nozzle seat using a cloth dampened with thinner. Refit the nozzle and secure it tightly against the body. If necessary replace nozzle set.
	Atomized air flowing through the paint channel to the bottle. The paint nozzle is not sufficiently tight. Air nozzle is not completely screwed on.	Tighten, clean or replace parts accordingly.