



**AIR CAPS, FLUID ORIFICES AND NEEDLES AVAILABLE FOR THE FE-Line LCFM SPRAY GUN**

AIR CAPS	APPROXIMATE CFM	AVAILABLE FLUID NOZZLES TIPS	NEEDLES / marking on needle
21-1090 (LCFM)	6	31-0205 0.5mm (.020")	40-1801 (1801)
21-1091 (LCFM)	8	31-0208 0.8mm (.022")	
21-1092 (LCFM)	8	31-0210 1.0mm (.040")	
21-1093	10	31-0212 1.2mm (.046")	
21-1094	13	31-0213 1.3mm (.052")	
		31-0214 1.4mm (.055")	
		31-0215 1.5mm (.059")	
		31-0216 1.6mm (.063")	
		31-0217 1.7mm (.070")	

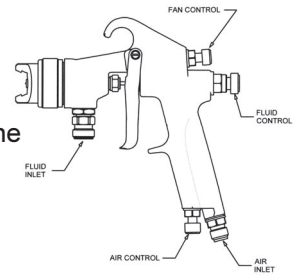
\*LCFM indicates low cubic feet / min air consumption

Standard set-up for FE-Line LCFM is 1.3 x 21-1090 unless specified otherwise

# Operation and Maintenance Instructions for *FE-Line LCFM* Spray Guns

## Operation

1. Connect air supply hose at handle of gun.
2. Connect a pressurized fluid supply to the gun fluid inlet.
3. Fluid flow can be controlled using the fluid control knob, this restricts flow by limiting needle travel. It is best to control fluid flow by proper selection of fluid orifice size and use the fluid control knob to “fine tune flow rate”.
4. Fan width can be adjusted using the fan control knob. Turning the knob clockwise narrows the fan.



## Maintenance

**IMPORTANT!** Routine cleaning and maintenance is essential to insure proper gun operation. Several states prohibit spraying solvent into the atmosphere and require the use of covered gun cleaner.

1. If a gun cleaner is being used, connect and clean the gun in the gun cleaner according to the manufactures instructions.
2. If a gun cleaner is not being used:
  - Remove air cap and clean separately using clean solvent.
  - Connect a pressurized solvent supply to the fluid inlet, trigger the gun allowing solvent to flow thru the gun until clean.

## NOTE:

- **Gun disassembly is not recommended for normal cleaning and maintenance.**
- **Not recommended to soak entire spray gun in solvent.**

## Gun disassembly and reassembly instructions:

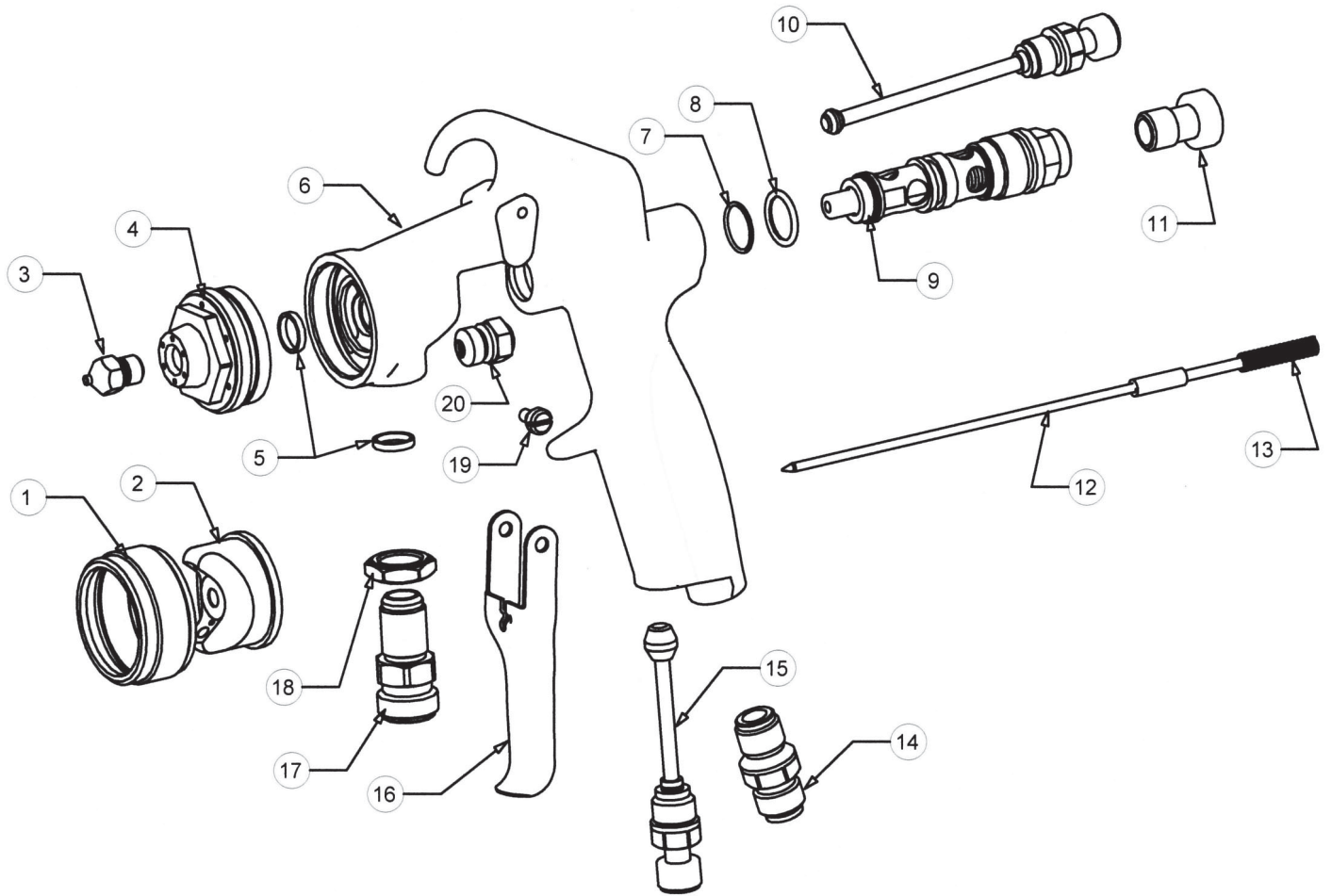
- **Have repair kit # 10-140 available before gun disassembly.**

## Disassembly

1. Remove the trigger by removing both trigger screws (19).
2. Remove fluid control knob (11).
3. Remove needle return spring (13) and needle (12).
4. Remove air valve assembly (9) using a 9/16" wrench.
5. Using a 7/16" wrench remove the needle seal cartridge (20).
6. Using a 13 mm wrench remove the side port control (10).
7. Using a 13 mm wrench remove the air control (15).
8. Using a 11/16" wrench loosen locknut (18), using a 5/8" wrench remove fluid inlet (17).
9. Remove air cap (2) and ring (1), remove fluid tip (3) using a 3/8" wrench.
10. Using a 1" wrench remove head insert (4).

## Reassembly

1. Install a new o-rings (7) and (8) on air valve assembly, lightly lubricate o-rings with vasoline and reinstall air valve (9) into gun body.
2. Install new seal (5) in gun body (6). Reinstall and tighten head insert (4) and fluid tip (3).
3. Install new seal (5) in gun body (6). Reinstall and tighten fluid inlet (17). Tighten locknut (18) after fluid inlet has been tightened.
4. Remove the shipping pin from a new needle seal cartridge. Install new needle seal cartridge (20).
5. Reinstall side port control (10), air control (15).
6. Reinstall needle (12), needle return spring (13) and fluid control knob (11).
7. Reinstall air cap.



ITEM NO.	PART NO.	DESCRIPTION	ITEM NO.	PART NO.	DESCRIPTION
1	21-1001	Air Cap Ring*	11	60-1312	Fluid Control Knob
2	See Air Cap Chart	Air Cap*	12	See Air Cap Chart	Needle*
3	See Air Cap Chart	Fluid Tip*	13	60-211	Needle Return Spring**
4	60-36	Head Insert	14	60-104	Air Inlet Fitting
5	60-137	Seal**	15	60-1319	Air Control
6	60-1301BL	Gun Handle	16	60-2111	Trigger
7	98-5125	O-Ring**	17	60-132	Fluid Inlet
8	98-5225	O-Ring**	18	60-128	Locknut
9	60-1320	Air Valve Assembly	19	60-1315	Trigger Pivot Screw (2)
10	60-1317	Side Port Control	20	60-1329	Needle Seal Cartridge**

\*See air cap selection chart on pages 1 & 4

\*\*Indicates part included in repair kit # 10-140

# FLUID NOZZLE / AIR CAP SELECTION CHARTS

## *FE-Line LCFM* - Pressure Feed Spray Guns

MATERIAL TYPE	FLUID ORIFICE x AIR CAP	MAXIMUM PATTERN WIDTH	CFM
<b>Very Thin</b> less than 16 sec. Zahn #2 inks , dyes, solvents, stains	0.5, 0.8 mm x 1090 (LCFM)	10	6
	0.5, 0.8 mm x 1091 (LCFM)	11	8
	0.5, 0.8 mm x 1092 (LCFM)	12	8
<b>Thin</b> 16 to 20 sec. Zahn #2 lacquers, enamels, primers, sealers	1.0, 1.2 mm x 1091 (LCFM)	11	8
	1.0, 1.2 mm x 1092 (LCFM)	12	8
	1.0, 1.2 mm x 1093	12	10
<b>Medium</b> 21 to 30 sec. Zahn #2 automotive base coat enamels, primers epoxies, urethanes automotive clear coat	1.3, 1.4, 1.5 mm x 1090 (LCFM)	10	6
	1.3, 1.4, 1.5 mm x 1091 (LCFM)	11	8
	1.3, 1.4, 1.5 mm x 1092 (LCFM)	12	8
	1.3, 1.4, 1.5 mm x 1093	12	10
	1.3, 1.4, 1.5 mm x 1094	13	13
<b>Heavy</b> over 30 sec. Zahn #2 heavy body primers high solid enamels high solid automotive coatings adhesives	1.6, 1.7 mm x 1094	13	13

\*LCFM indicates air caps that require low cubic feet per minute air volume and can generally be operated with a 1 1/2 horsepower compressor.