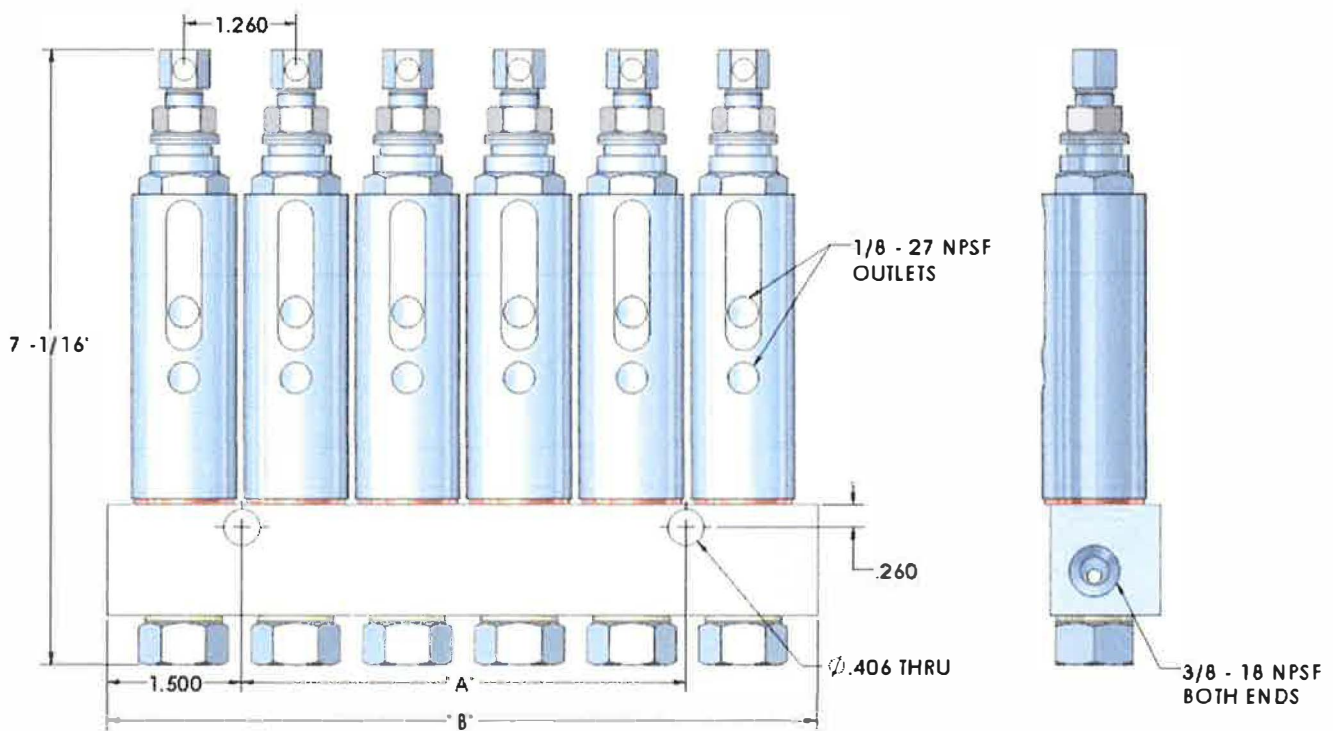


SERVICE INSTRUCTIONS

SAFETY INSTRUCTIONS:

DO NOT EXCEED MAXIMUM WORKING PRESSURE OF INJECTOR SYSTEM. SYSTEMS SHOULD NOT BE IN OPERATION WHILE CONDUCTING ANY ASSEMBLY OR DISASSEMBLY OF COMPONENTS.

MODELS



INJECTOR ASSEMBLY SPECIFICATIONS		
DESCRIPTION	DIMENSIONS	
	"A"	"B"
ONE POINT INJECTION	SINGLE HOLE	2.500"
TWO POINT INJECTION	SINGLE HOLE	3.000"
THREE POINT INJECTION	1.250"	4.250"
FOUR POINT INJECTION	2.500"	5.500"
FIVE POINT INJECTION	3.750"	6.750"
SIX POINT INJECTION	5.000"	8.000"

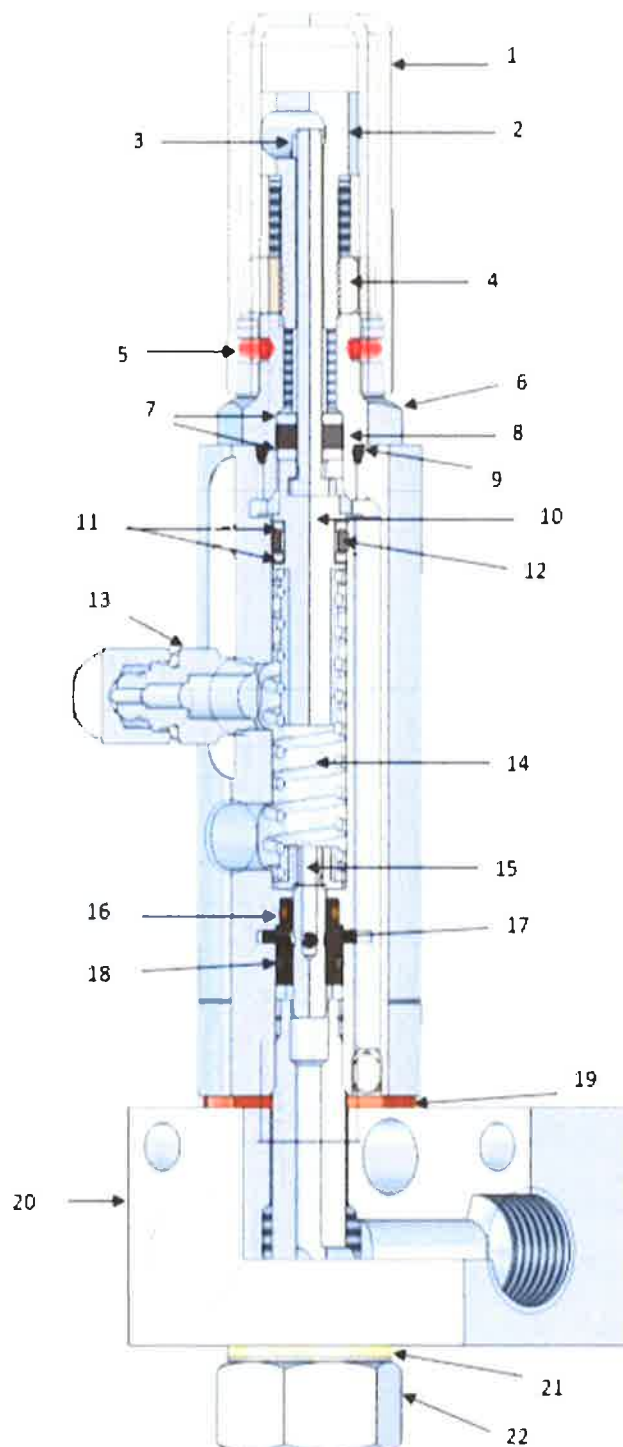
INSTALLATION INSTRUCTIONS:

1. COMPACT SYSTEM TO MINIMIZE FEED LINE LENGTH
 2. INJECTORS ARE ADJUSTABLE AND SHOULD BE PLACED IN EASY AND SAFE SERVECING AREAS.
 3. SECURELY MOUNT INJECTORS TO FLAT SURFACES
 4. PREFILLING OF INJECTOR MANIFOLD ASSEMBLIES, FEED LINES AND INJECTION POINT LINES WILL ELIMINATE UNWANTED FLUID OR AIR IN SYSTEM.
 5. CONNECT SUPPLY LINES TO MANIFOLDS
 6. PRELIMINARY LUBE CYCLES SHOULD BE CONDUCTED WITH INJECTORS AT MAXIMUM OUTPUT. VISUALLY VERIFYING OUTPUT AND CYCLE INDICATOR PINS CYCLE AT FULL STROKE.
 7. ADJUST OUTPUT PER REQUIRED SPECIFICATIONS OF LUBE POINTS. (SEE ADJUSTING OUTPUT VOLUME)
 8. CONNECT OUTPUT FEED LINES TO INJECTION POINTS
-

WARNING

TO PREVENT RUPTURING AND LEAKS DUE TO OVER-PRESSURIZING, ONLY USE LINES AND FITTINGS THAT MEET OR EXCEED THRE PRESSURE RATING OF INJECTORS.

ITEM	DESCRIPTION	QTY
1	INDICATOR COVER	1
2	ADJUSTMENT SCREW	1
3	INDICATOR PIN	1
4	LOCK NUT	1
5	INDICATOR COVER ORING	1
6	ADJUSTMENT HOUSING	1
7	WASHER	2
8	SEAL PACKING	1
9	ADJUSTMENT HOUSING ORING	1
10	PISTON BODY	1
11	BACK UP RING	2
12	QUAD RING	1
13	FILL STUD AND CAP ASSEMBLY	1
14	SPRING	1
15	SLIDE INSERT ASSEMBLY	1
16	SLIDE BUSHING ORING	1
17	SLIDE BUSHING	1
18	SLIDE BUSHING ORING	1
19	COPPER WASHER	1
20	MANIFOLD	1
21	STEEL WASHER	1
22	INLET BOLT	1



DISASSEMBLY/ASSEMBLY INSTRUCTIONS

REASSEMBLY INSTRUCTIONS

STEP 1: Remove piston stop plug from top of injector body. Remove its contents (two washers & 1 gland), piston assembly, spring, and plunger assembly.

STEP 2: Remove adapter bolt from manifold and injector body. Remove injector internal,

REASSEMBLY INSTRUCTIONS

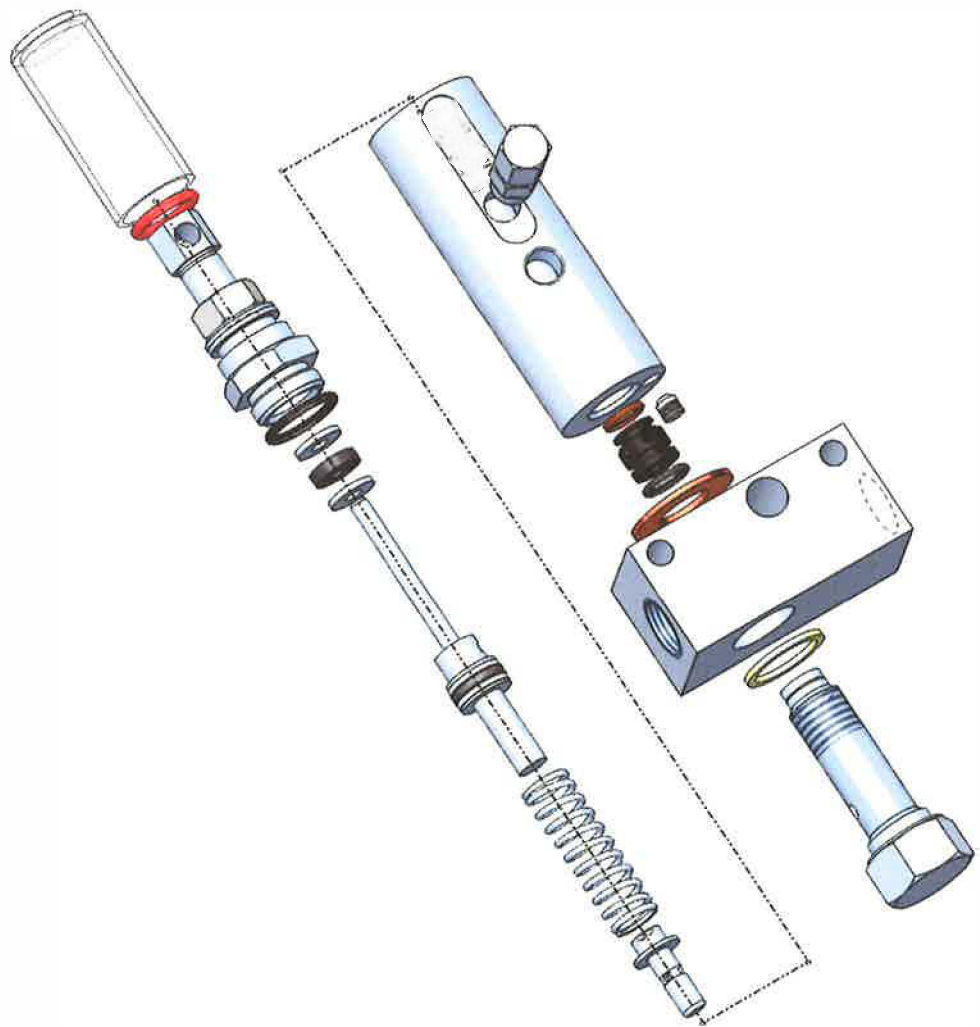
STEP 1: Clean all injector components and inspect for wear. Replace parts and lube O-rings as necessary.

STEP 2: Install plunger assembly and spring into injector body. Install backup rings and quad ring onto piston assembly and guide piston assembly into the spring.

STEP 3: Install O-Ring, gland, & two washers to piston stop plug and install to injector body. Install lock nut and adjustment screw.

STEP 4: Generously lube slide bushing

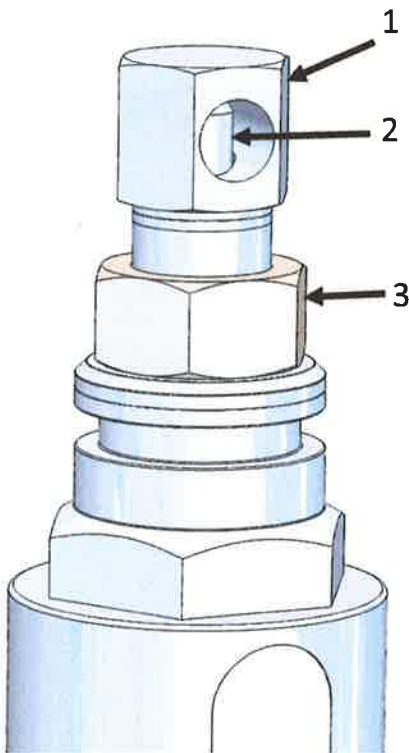
STEP 5: Place carbon steel gasket over adapter bolt and insert



ADJUSTING OUTPUT VOLUME:

1. MAXIMUM OUTPUT : SET ADJUSTMENT SCREW (1) SO IT JUST MAKES CONTACT WITH INDICATOR PIN (2) (FACTORY SETTING)
2. TO REDUCE OUTPUT: LOOSEN LOCK NUT (3), TURN ADJUSTMENT SCREW CLOCKWISE (SEE LSL-1 VOLUME ADJUSTMENT TABLE)

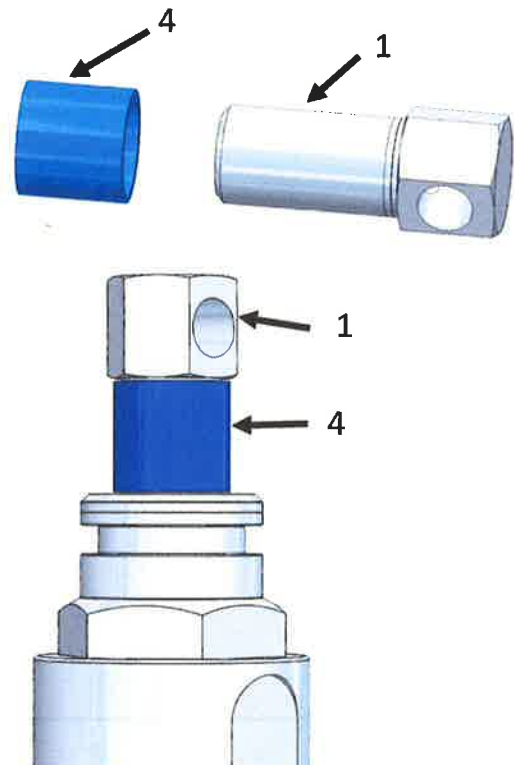
LSL-1 VOLUME ADJUSTMENT TABLE		
DESCRIPTION	ADJUSTMENT TURNS	VOLUME cu. In. / cc
MAX OUTPUT	0	0.080 / 1.31
360° CLOCKWISE TURN	1	0.071 / 1.16
360° CLOCKWISE TURN	2	0.062 / 1.02
360° CLOCKWISE TURN	3	0.053 / 0.87
360° CLOCKWISE TURN	4	0.044 / 0.72
360° CLOCKWISE TURN	5	0.035 / 0.57
360° CLOCKWISE TURN	6	0.026 / 0.43
360° CLOCKWISE TURN	7	0.017 / 0.28
MIN OUTPUT	8	0.008 / 0.13







SPECTRUM ADJUSTMENT SLEEVES

SPECTRUM SLEEVE INSTALL INSTRUCTIONS:

1. REMOVE ADJUSTMENT SCREW (1) AND LOCK NUT (3) . LOCK NUT WILL NOT BE USED.
2. PLACE DESIRED OUTPUT RATIO SPECTRUM SLEEVE (4) OVER ADJUSTMENT SCREW (1)
3. REINSTALL ADJUSTMENT SCREW (1) WITH SPECTRUM SLEEVE (4) ON INJECTOR BODY AND TIGHTEN SECURELY

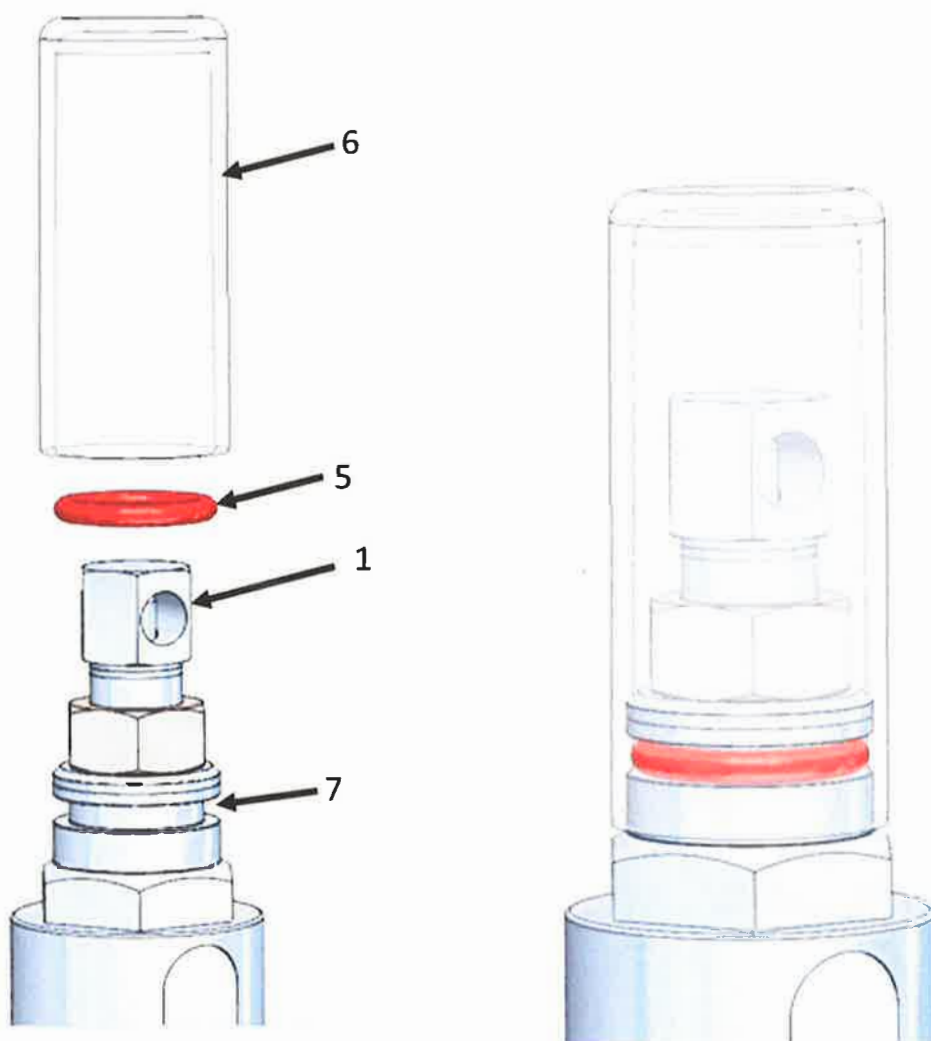


STANDARD PACK: 5 EACH			
MODEL NUMBER (5 PACK)	OUTPUT in3 (cc)	RATIO FROM MAXIMUM OUTPUT	SLEEVE COLOR
N/A	0.015 (0.25)	10%	N/A
	0.030 (0.50)	25%	
	0.045 (0.75)	50%	
	0.060 (1.00)	75%	
	0.075 (1.25)	100%	

INDICATOR COVER

INDICATOR COVER INSTALL INSTRUCTIONS:

1. INSTALL ORING (5) ON TO ADJUSTMENT HOUSING GROOVE.
2. SLIDE INDICATOR VINYL COVER (6) OVER ADJUSTMENT SCREW (1) AND HOUSING FAR ENOUGH TO COVER GROOVE (7) AND MAKE CONTACT WITH FLARED SURFACE. (APPLYING SMALL AMOUNTS OF CLEAR ORING LUBE WILL FACILITATE INSTALL)



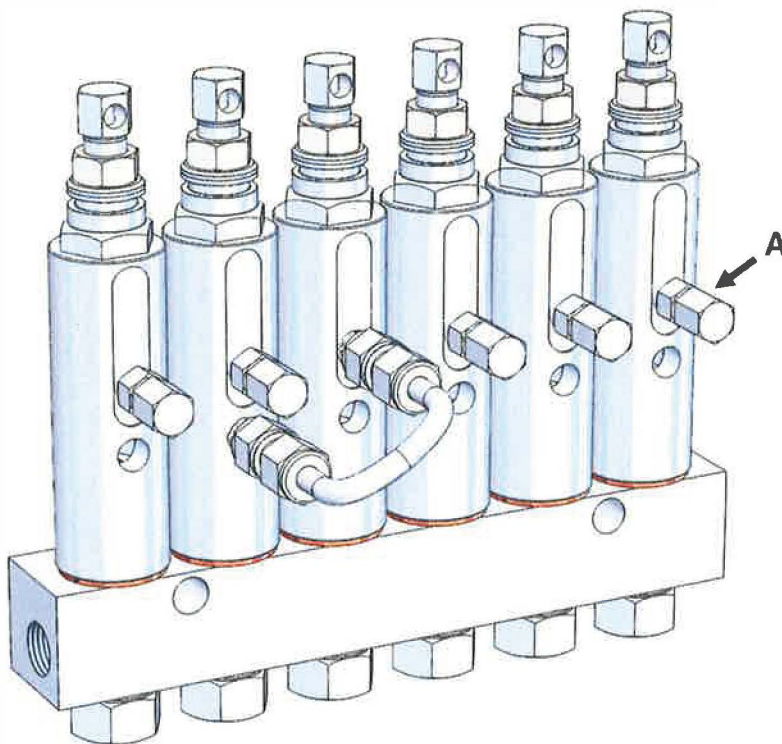
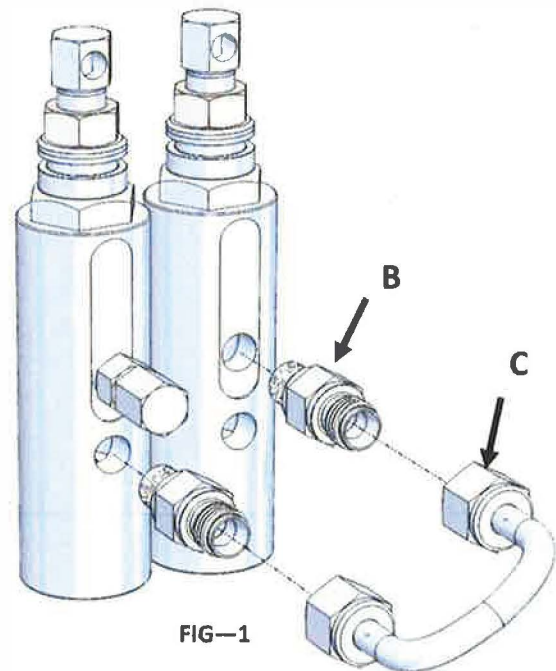
SLS-55646 CROSSPORTING

STEP 1: Remove fill stud (A) from one injector.

STEP 2: Install fittings (B) as shown in FIG-1 using pipe thread sealer

STEP 3: Install tubing (C)

STEP 4: Install outlet tubing/hose



SLS-5CAP SEGMENT PLUG

STEP 1: Place copper washer (A) and cap (B) on open manifold (C) segment.

STEP 2: Place carbon steel washer (D) on inlet bolt (E) and thread into cap (B) through bottom side of manifold.

STEP 3: Holding cap (B) stationary torque inlet bolt (E) to 50-55 ft/lbs

