

FIGURE 1

ASSEMBLY DIAGRAM

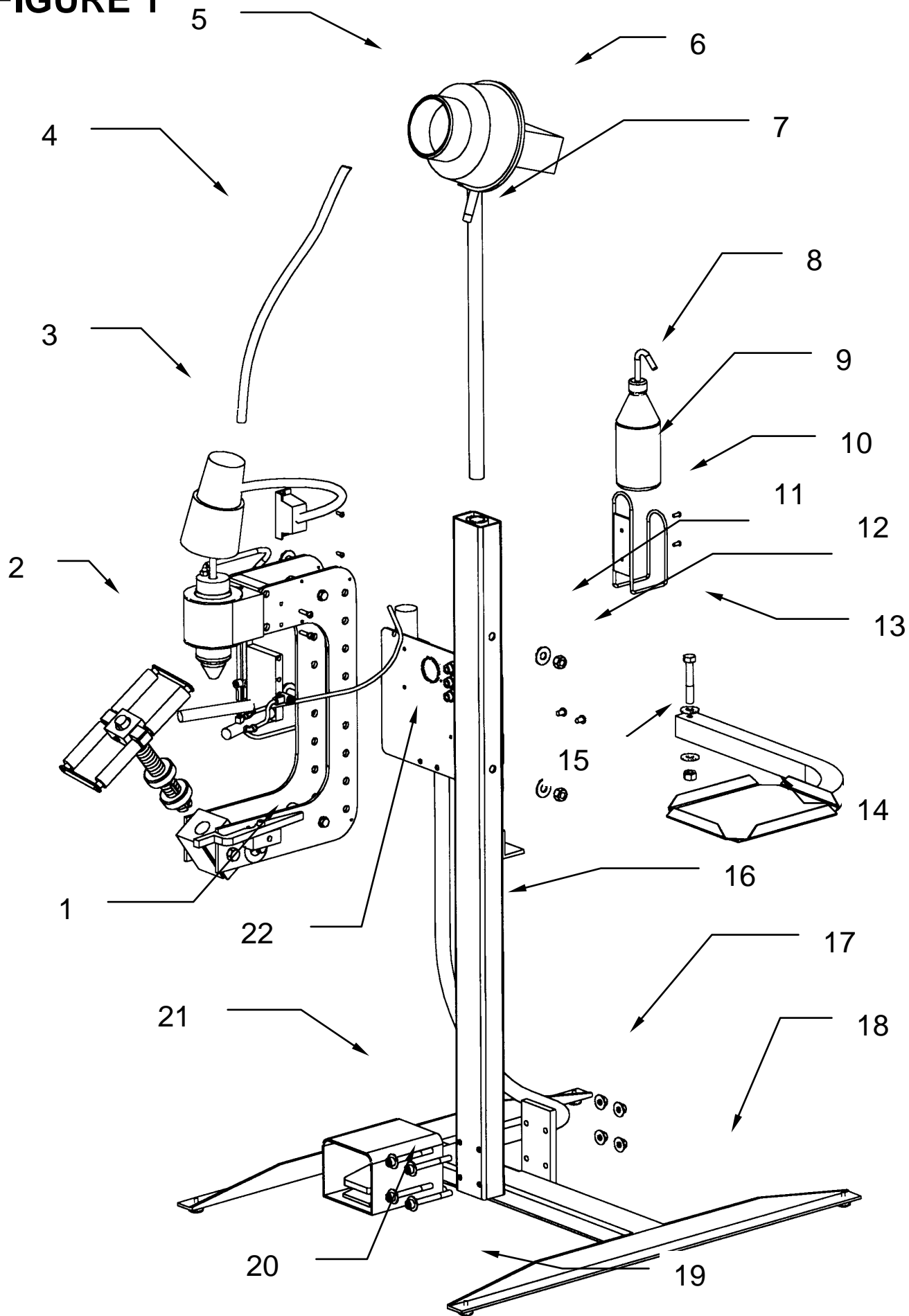


FIGURE 1 SATSIM ASSEMBLY BREAKDOWN

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	MFG 400101	C-Frame ASSY.
2	1	MFG 400106	Roller ASSY.
3	1	MFG 600112	Lamp ASSY.
4	1	STP 0161	Feed Hose 9mm
5	1	STE BWFP-9A	Feeder 9mm
6	1	STP 0177-110	Motor
7	1	MFG 100146	Feeder Post
8	1	MFG 200074	Water Bottle
9	1	MFG 200075	Bottle Holder
10	2	MFG 200104	10 – 24 Screws
11	2	MFG 200016	½ - 13 Nut
12	4	MFG 200015	¼ - 20 Screws
13	1	MFG 200106	½ - 13 x 3" HHCS
14	1	MFG 400026	Tray ASSY.
15	1	MFG 200105	½ - 13 Washer
16	1	MFG 100005	Main Post
17	4	MFG 200018	3/8 – 16 Nut
18	1	MFG 400104	SATSIM Base
19	4	MFG 200103	Floor Levelers
20	4	MFG 200007	3/8 – 16 x 3" SHCS
21	1	MFG 300152	Foot Valve
22	1	MFG 400100	Pneumatic ASSY.

FIGURE 2

OPERATING DIAGRAM

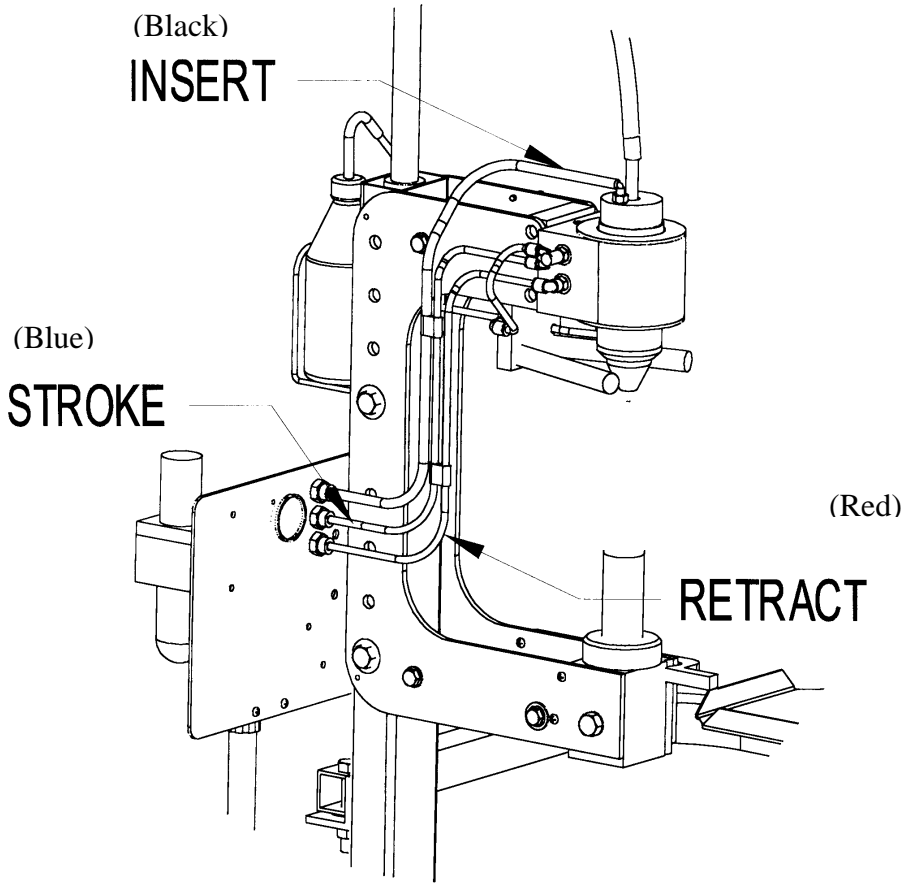


FIGURE 3

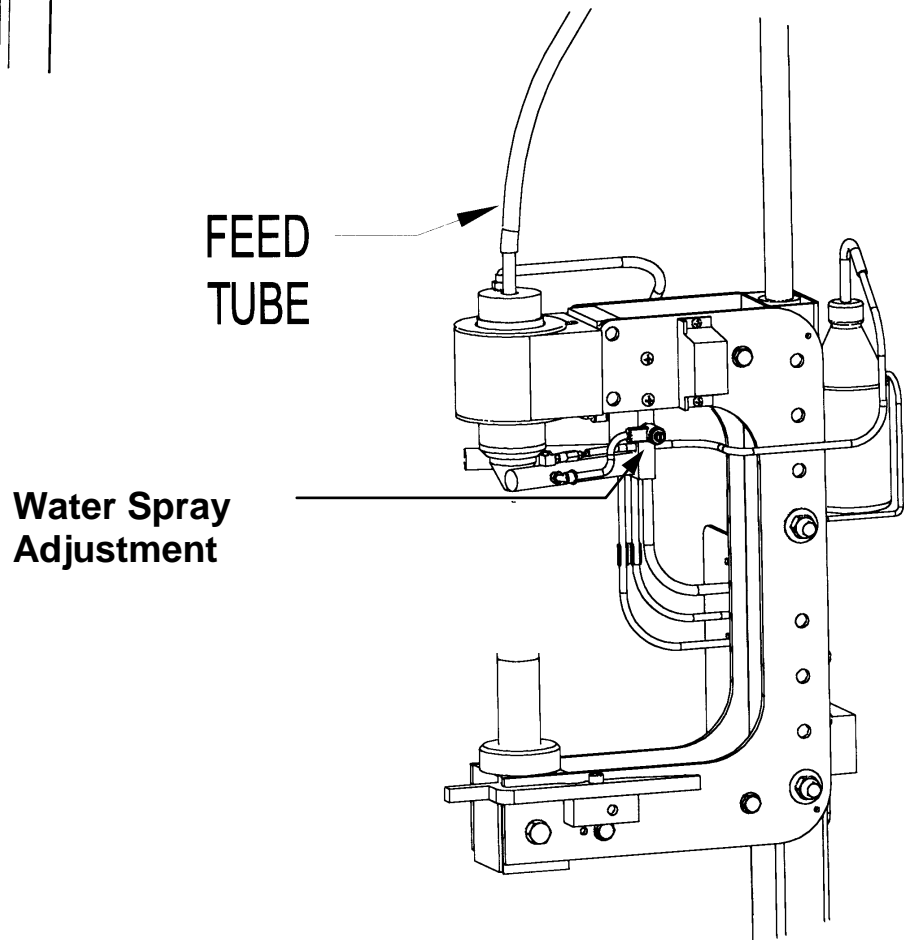


FIGURE 4 HEAD & SPRAY GUIDE ASSEMBLY BREAKDOWN

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	MFG 100105	Guide Support Plate
2	2	MFG 200015	1/4-20 x 1/2" Screw
3	1	MFG 300122	Flow Control
4	1	MFG 300134	Check Valve and Fitting
5	1	MFG 300120	M5 x 6 Elbow
6	1	MFG 100101	Right Guide w/Water Spray
7	1	MFG 100104	Left Guide
8	2	MFG 200082	5/16 x 1" Hex Socket Cap Screw
9	1	STP 0136	O-Ring
10	1	MFG 100138	Feed Tube 9mm
10	1	MFG 100140	Feed Tube 8mm
11	1	STP 0383	Piston Cup
12	1	STP 0129	Piston
13	3	STP 0126	Inserting Finger
14	1	STP 0092	Piston Cup
15	1	STP 0135	Steel Ring
16	1	STP 0088	O-Ring
17	1	STP 0131	Tapered Cone
18	1	STP 0134	Compression Spring
19	1	STP 0132-09	Head 9mm
19	1	STP 0132-08	Head 8mm
20	3	STP 0127	Metering Lever
21	3	STP 0084	External Finger
22	1	STP 0087	O-Ring
23	1	STP 0133	Ring Nut
24	8	MFG 200014	10-24 x 1/2 Socket Head Screws
25	2	MFG 100143	Head Washer
26	2	MFG 200059	O-Ring
27	3	MFG 200061	O-Ring
28	1	MFG 100103	Lower Bearing
29	1	MFG 102003	Insertion Tool
30	1	MFG 300096	1/8-8 Elbow Fitting
31	1	MFG 102001	Cylinder Housing
32	1	MFG 100144	Upper Bearing
33	1	MFG 200090	Wiper Seal
34	2	MFG 200012	3/8 x 1" Socket Head Cap Screws
35	4	MFG 200001	1/2 x 5/8 Socket Head Shoulder Scr
36	1	MFG 102002	Guide Support Plate
37	1	MFG 300100	1/8-6 Y Fitting
38	1	MFG 300099	1/8-6 Elbow

HEAD & SPRAY GUIDE ASSEMBLY

FIGURE 4

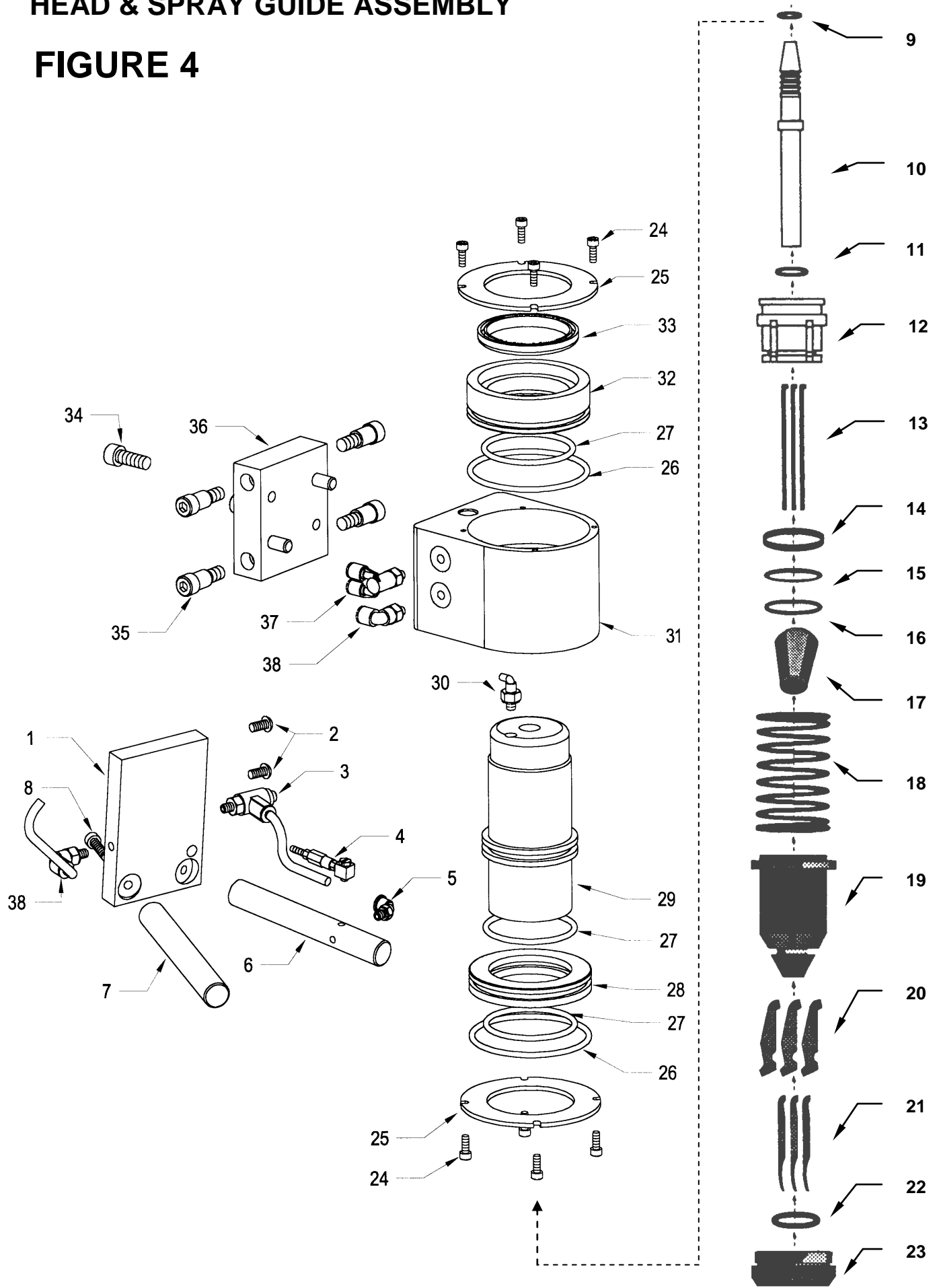


FIGURE 5 C-FRAME ASSEMBLY BREAKDOWN

ITEM	QUANTITY	PART No.	DESCRIPTION
1	1	MFG 103000	Frame LH Steel
2	1	MFG 102000	Frame RH Steel
3	3	MFG 102008	Spacer C-Frame
4	7	MFG 200019	Washer 3/8"
5	7	MFG 200092	3/8 x 1 1/4 " HHCS
6	4	MFG 200024	Washer 1/2"
7	2	MFG 200016	1/2" Nut
8	1	MFG 200079	3/8 x 1" Socket Head Shoulder Screw
9	1	MFG 200084	Spring
10	1	MFG 100115	Locking Lever
11	1	MFG 100114	Mounting Block, Locking Lever
12	4	MFG 200002	1/4"-20 x 1/2" Screws
13	2	MFG 102010	Shoulder Bolts, machined
14	2	MFG 102013	Plastic Bushings
15	2	MFG 100113	Thrust Washers
16	1	MFG 100116	Swivel Block
17	2	MFG 102009	Stop Rod
18	1	MFG 200015	1/4-20 x 1/2 Phillips
19	2	MFG 200013	1/2-13 x 4 1/2" HHCS

FIGURE 5

C-FRAME ASSEMBLY

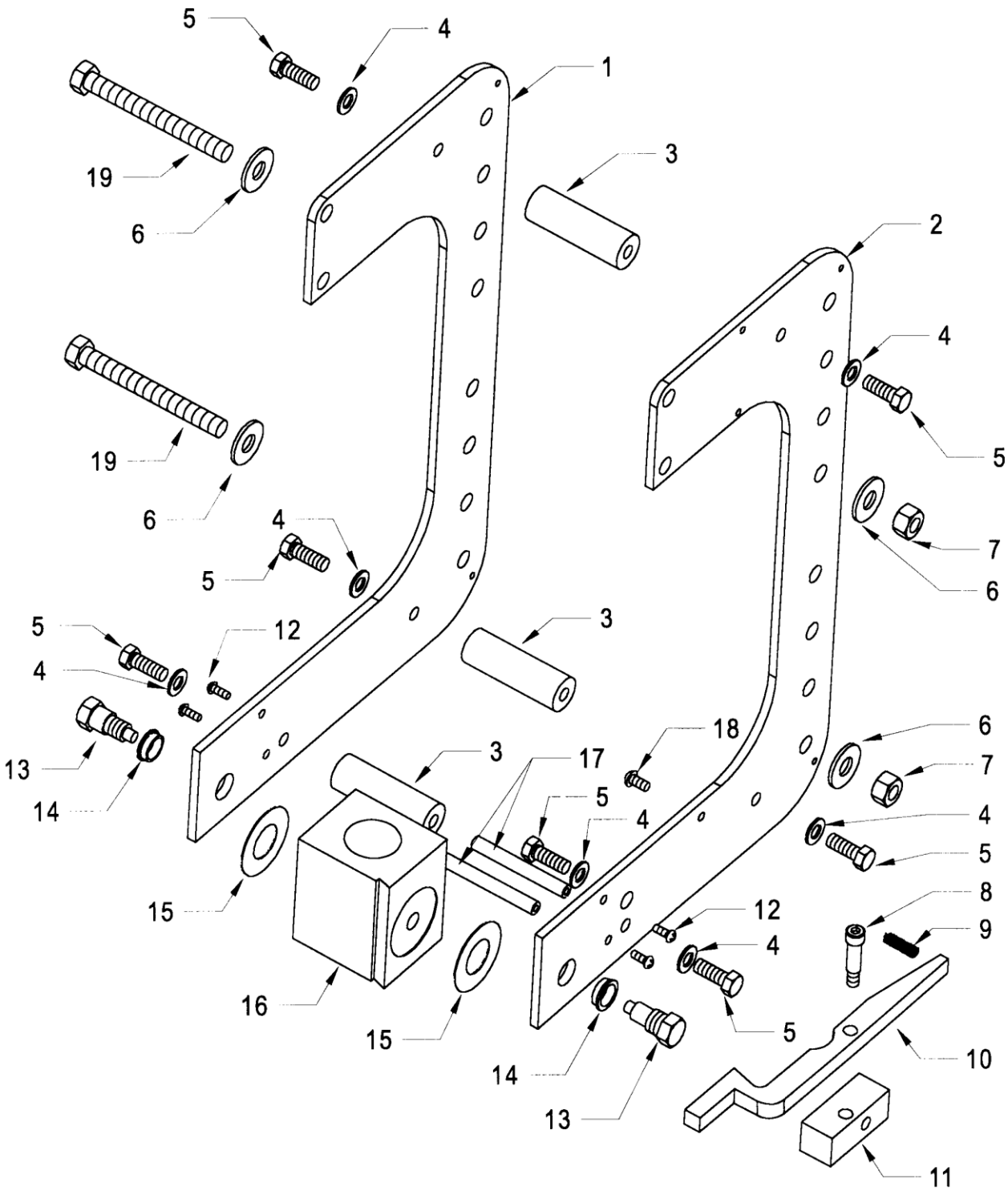


FIGURE 6 MANDREL ASSEMBLY BREAKDOWN

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	MFG 100118	Elevating Rod Threaded
2	2	MFG 100131	Elevating Nut
3	4	MFG 200015	1/4-20 x 1/2" Screws
4	2	MFG 100147	Bracket
5	4	MFG 100148	Roller
6	2	MFG 100145	Swivel Blocks
7	1	MFG 100146	Center Block
8	1	MFG 100150	3/8" Machined Bolt
9	2	MFG 100149	Rod

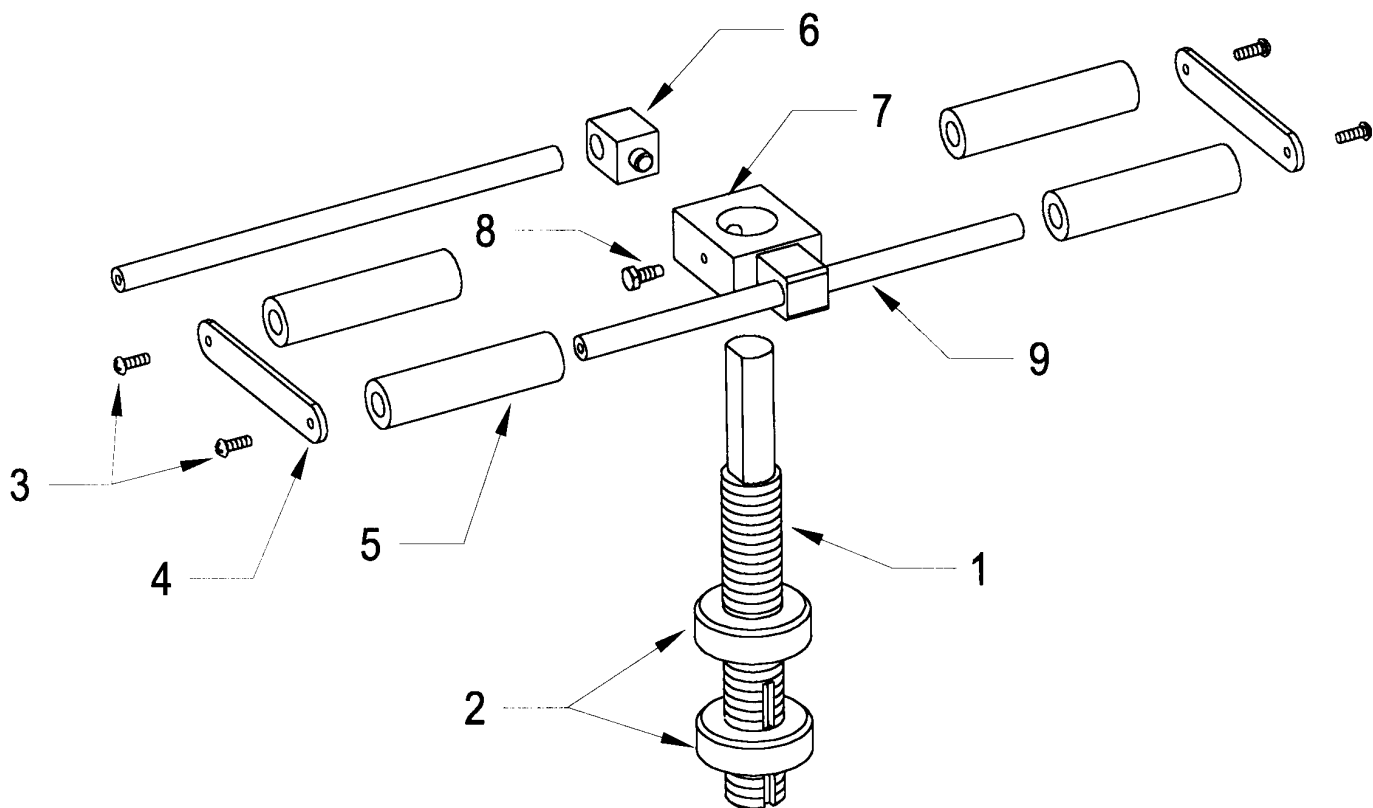


FIGURE 6

FIGURE 7 PNEUMATIC ASSEMBLY BREAKDOWN

ITEM	QUANTITY	PART NUMBER	DESCRIPTION
1	1	MFG 300116	Conduit Bracket
2	1	MFG 300113	Conduit
3	1	MFG 300115	Bracket Nut
4	1	MFG 300154	Control Valve
5	1	MFG 300112	Muffler
6	1	MFG 300111	Pressure Gauge
7	1	MFG 300078	Oiler
8	1	MFG 300077	Filter/Regulator

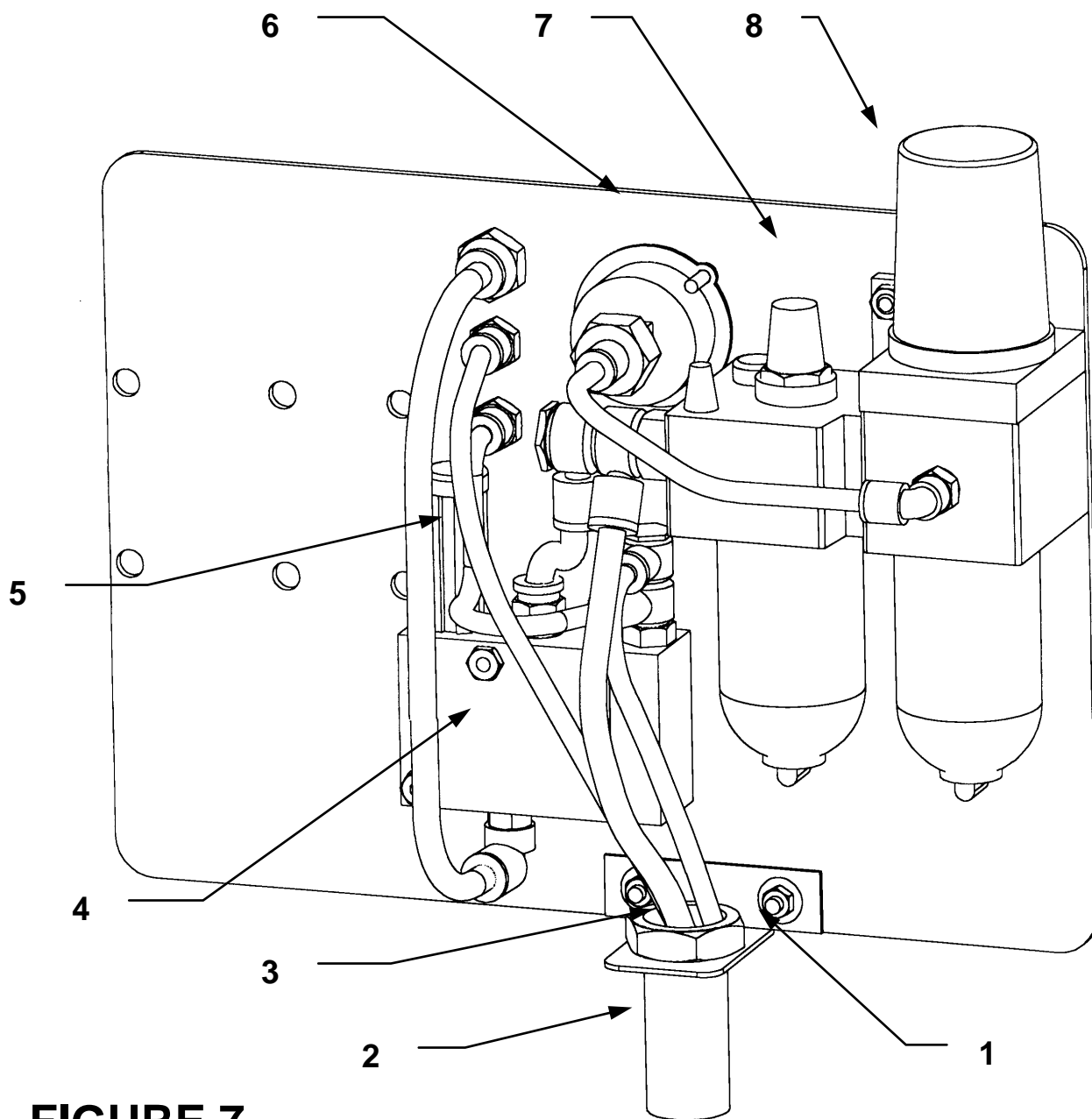


FIGURE 7