

PARTS MANUAL FOR
PEMSERTER[®] SERIES 2000[™] PRESS
MODEL 2006
FASTENER INSTALLATION PRESS

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English Version
Revision 3/99

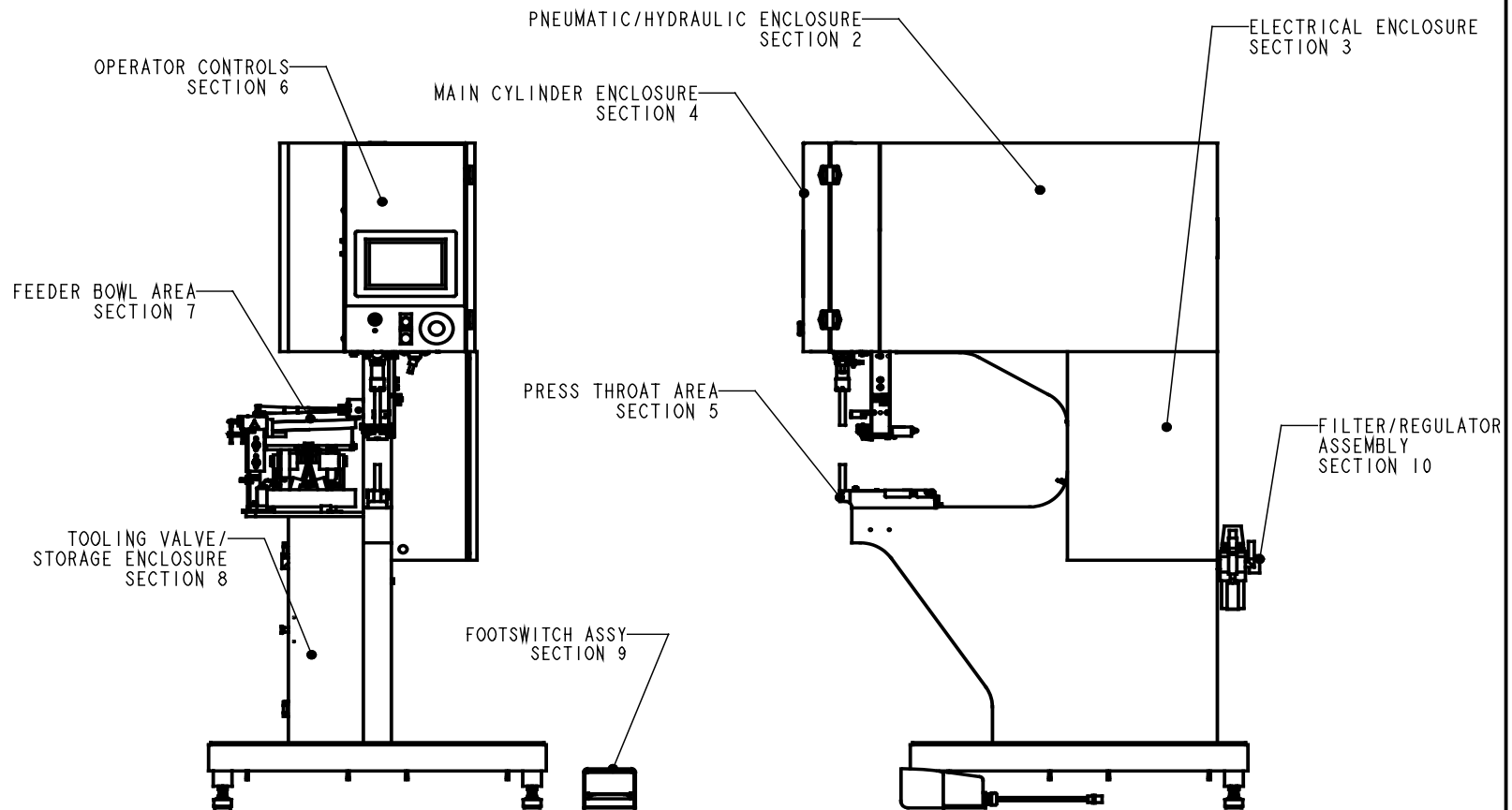
SERIES 2006 PARTS MANUAL TABLE OF CONTENTS

SECTION 1 - MAIN PRESS ASSEMBLY	PAGE
1.1 GENERAL IDENTIFICATION DRAWING	1
SECTION 2 - HYDRAULIC/PNEUMATIC ENCLOSURE	3
2.1 AIR/OIL TANK ASSEMBLY	
2.2 RAM VALVE REGULATOR ASSEMBLY	
SECTION 3 - ELECTRICAL ENCLOSURE	8
3.1 ELECTRICAL OMRON PANEL ASSEMBLY	
SECTION 4 - MAIN CYLINDER ENCLOSURE	11
4.1 DISTRIBUTION BOX ASSEMBLY	
4.2 SAFETY HOUSING ASSEMBLY	
4.3 LIGHTSTREAM COLLAR ASSEMBLY	
SECTION 5 - PRESS THROAT AREA	16
5.1 SLIDE & GRIPPER ASSEMBLY	
5.2 ANVIL HOLDER ASSEMBLY	
SECTION 6 - OPERATOR CONTROLS	21
6.1 GENERAL IDENTIFICATION DRAWING	
SECTION 7 - FEEDER BOWL AREA	23
7.1 SHUTTLE SUPPORT ASSEMBLY	
SECTION 8 - TOOLING VALVE/STORAGE ENCLOSURE	27
8.1 8-STATION VALVE MANIFOLD	
8.2 PRESSURE RESERVOIR ASSEMBLY	
SECTION 9 - FOOTSWITCH ASSEMBLY	31
9.1 FOOTSWITCH ASSEMBLY	
SECTION 10 - FILTER/REGULATOR ASSEMBLY	33
SECTION 11 - GENERAL SPARE PARTS	35

SECTION 1

MAIN PRESS ASSEMBLY

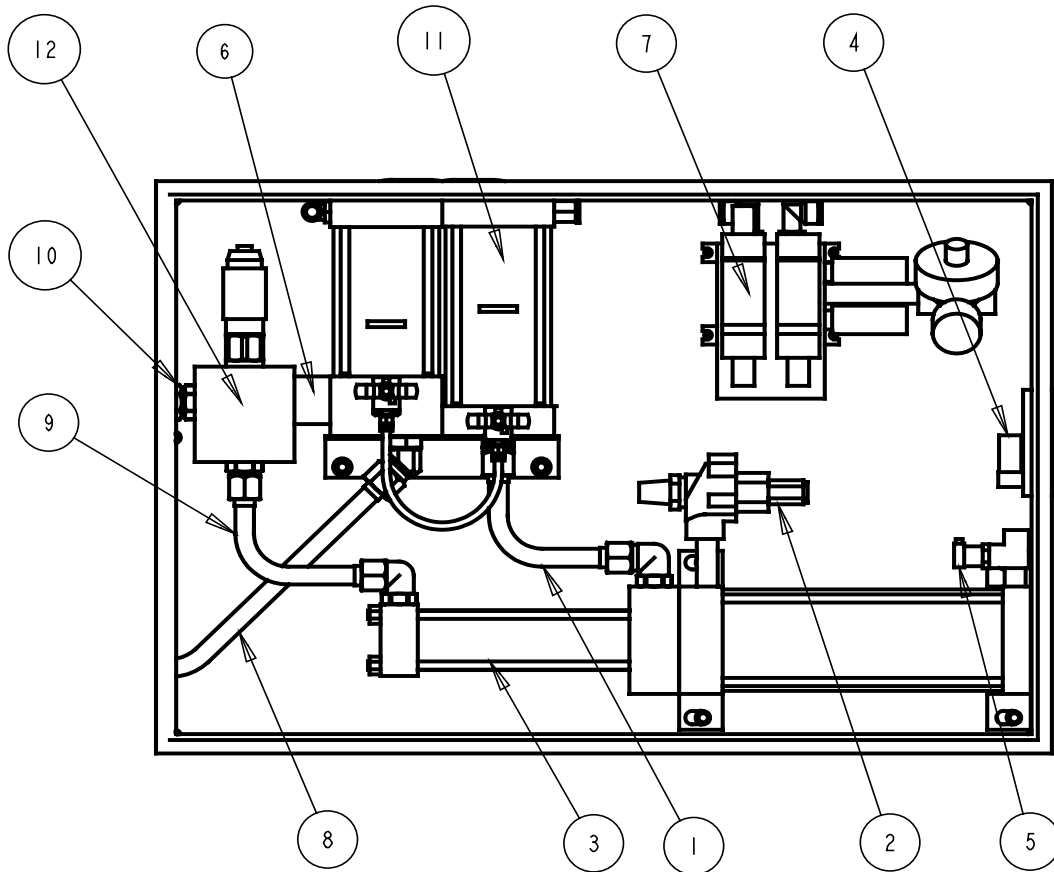
SERIES 2000 PARTS MANUAL - MAIN PRESS ASSEMBLY
PEM PART NO. 8002006



SECTION 2

HYDRAULIC/PNEUMATIC ENCLOSURE

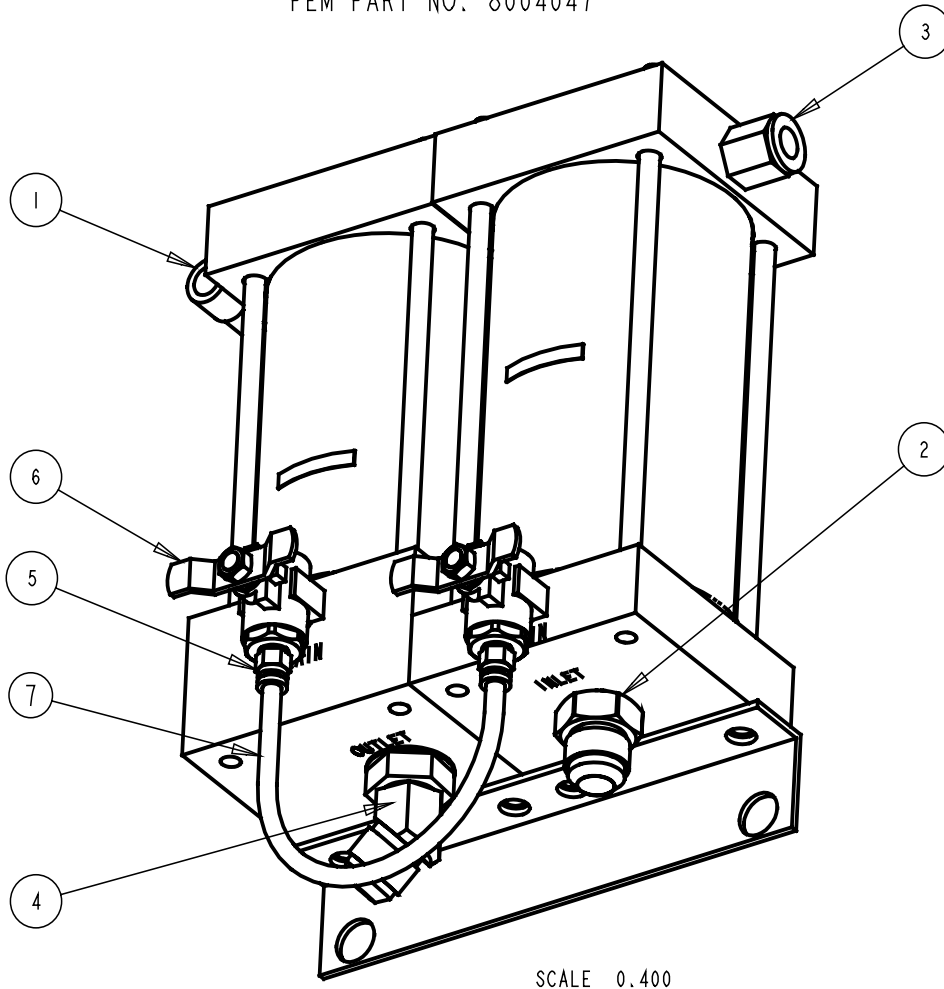
SECTION 2 HYDRAULIC/PNEUMATIC ENCLOSURE



ASSEMBLY NUMBER 8004062 CONSISTS OF:
 PART NUMBER 8003503 VALVE CARTRIDGE, VICKERS-13 QTY 1
 PART NUMBER 8004061 BODY, VALVE CAVITY, VICKERS EPV-16A

BILL OF MATERIAL			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	8001177	TUBING ASSEMBLY, TANKS / BOOSTER	1
2	8001573	EXHAUST VALVE KIT	1
3	8002082	BOOSTER CYLINDER	1
4	8003189	ELECTRONIC AIR PRESSURE REGULATOR	1
5	8003230	AIR PRESSURE SENSOR	1
6	8003503	VALVE CARTRIDGE, VICKERS-13	1
7	8003516	RAM VALVE ASSEMBLY W/ PILOTED REGULATOR	1
8	8003527	TUBING ASSEMBLY, TANKS/MAIN CYLINDER	1
9	8004041	TUBING ASSEMBLY, BOOSTER / SAFETY	1
10	8004042	TUBING ASSEMBLY, SAFETY / CYLINDER	1
11	8004047	AIR/OIL TANK ASSEMBLY, SERIES 2006	1
12	8004062	VALVE ASSY, CARTRIDGE & BODY, VICKERS-13	1

FIGURE 2.1
 SERIES 2000 AIR/OIL TANKS ASSEMBLY
 PEM PART NO. 8004047



BILL OF MATERIAL

ITEM	PART NUMBER	DESCRIPTION	QTY
1	8000225	FITTING, ELBOW, 1/2 NPT TO 1/2 TUBE	1
2	8000226	FITTING, STRAIGHT, SAE-12 TO 3/4 IN 37 DEG. FLARE TUBING	1
3	8000295	FITTING, STRAIGHT, 1/2 MALE NPT TO 1/2 TUBE	1
4	8000297	FITTING, 45 DEG, SAE-12 TO 3/4, 37 DEG FLARE TUBING	1
5	8003245	FITTING 1/4 NPT TO 1/4 TUBE	2
6	8004124	BALL VALVE, 90 DEGREE FLOW, MALE-FEMALE	2
7	980039010	TUBING, 1/4 IN OD, POLYURETHANE, CLEAR	7.5"

FIGURE 2.2
SERIES 2006 - RAM VALVE ASSEMBLY
PEM PART NO. 8003515

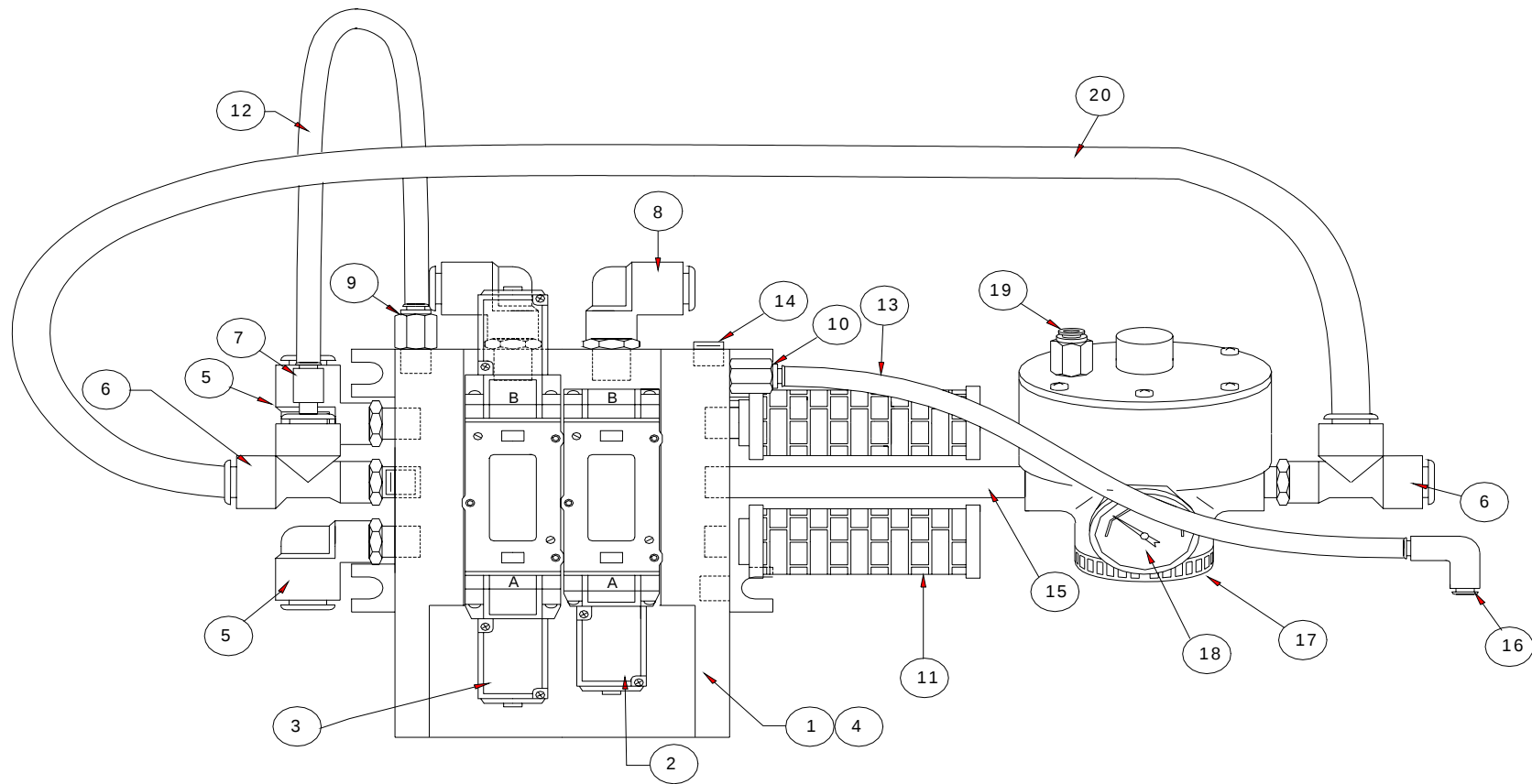


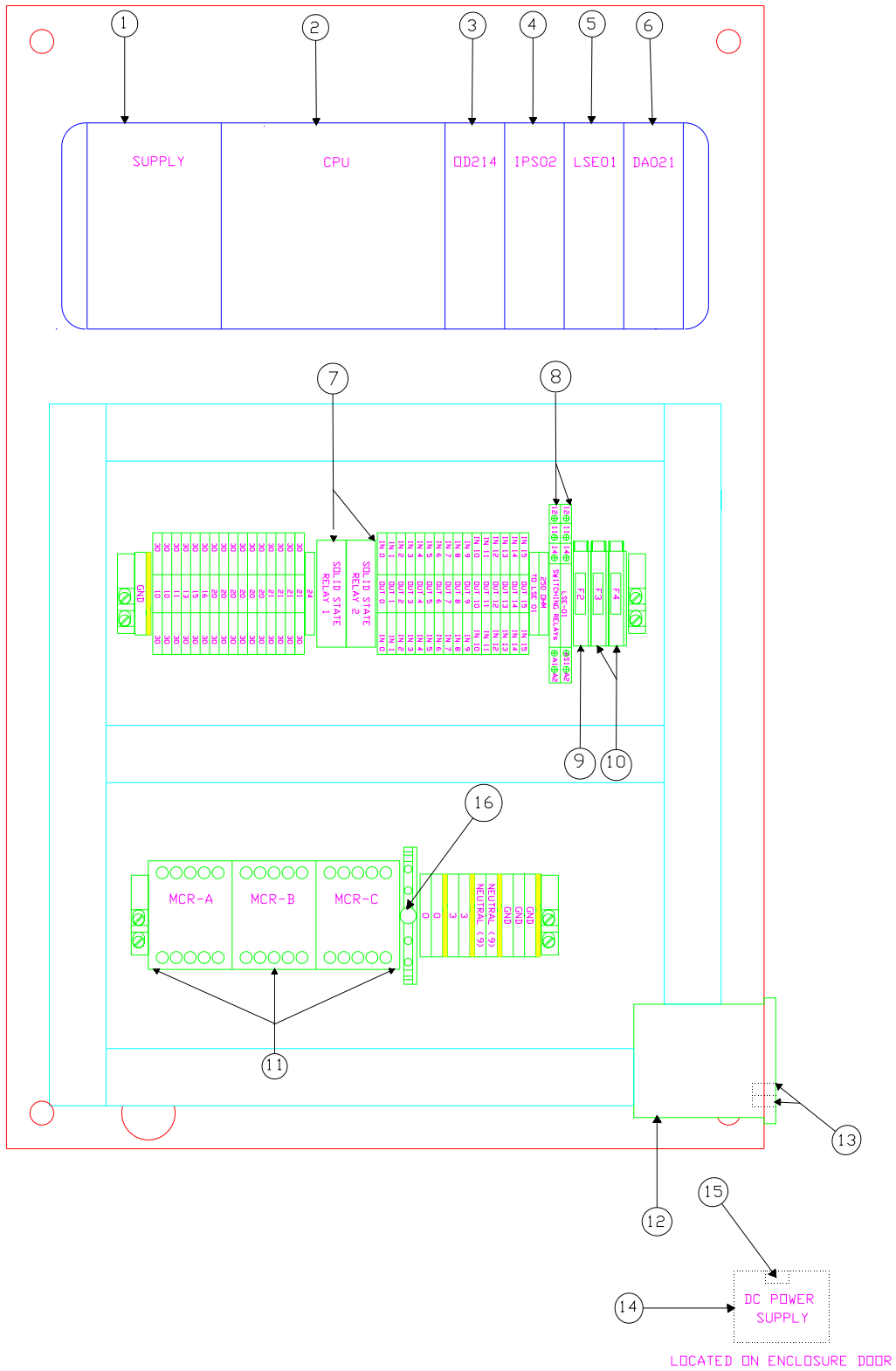
FIGURE 2.2 (CONT)
 SERIES 2006 - RAM VALVE ASSEMBLY
 PEM PART NO. 8003515

BILL OF MATERIAL			
ITEM	PART #	DESCRIPTION	QTY.
1	8001395	2- STATION MANIFOLD	1
2	8002228	VALVE- 2 POSITION- (BOOSTER)	1
3	8002229	VALVE-3 POSITION- (RAM)	1
4	8004142	BLOCKING DISC	3
5	8004085	ELBOW FITTING 1/2 NPTx1/2 DIA. TUBE	2
6	8004086	MALE RUN "T" 1/2 DIA. TUBE x 1/2 NPT	2
7	8004087	REDUCER 1/2 x 5/16 DIA.	1
8	8004088	ELBOW 3/8 NPTx1/2 DIA. TUBE	4
9	8004089	STRAIGHT FITTING 1/8 NPT X 5/16 DIA.	1
10	8002340	STRAIGHT FITTING 1/8 NPT X 1/2 DIA.	1
11	8001624	MUFFLER 1/2 NPT	2
12	8004090	TUBE- POLY. 5/16 DIA.	8"
13	8000310	TUBE- POLY 1/4 DIA.	10"
14	9800391692	STL. FLUSH PLUG- 1/8 NPT	2
15	9800391987	NIPPLE 4- 1/2 LNG.x 1/2 NPT	1
16	8003225	UNION ELBOW 1/4 DIA.	1
17	8003190	AIR PILOTED REGULATOR	1
18	8004069	GAUGE (4M x 1/4" NPT.)	1
19	8004092	STRAIGHT 5/32 DIA.x 1/4 PT	1
20	8000253	TUBE POLYURETHANE, 1/2" O.D., BLACK	24"

SECTION 3

ELECTRICAL ENCLOSURE

SECTION 3 ELECTRICAL ENCLOSURE



SECTION 3
ELECTRICAL ENCLOSURE
(CONT)

BILL OF MATERIAL			
ITEM	PART NO.	DESCRIPTION	QTY
16	8003052	CAPACITOR	1
15	8004080	BLADE FUSE 7.5 AMPS	1
14	8003513	DC POWER SUPPLY (240V)	1
	8003514	DC POWER SUPPLY (120V)	1
13	8003548	FUSE 5 X 20 IEC 60127	2
12	8003524	POWER ENTRY MODULE	1
11	8000156	MAIN CONTROL RELAY (240V)	3
	8000156	MAIN CONTROL RELAY (120V)	1
10	8004140	BUSS FUSE AGC 2	2
9	8004079	BUSS FUSE AGC 3/4	1
8	8003295	RELAY SINGLE POLE DOUBLE THROW	2
7	8001159	SOLID STATE RELAY	2
6	8000854	ANALOG OUTPUT CARD	1
5	8000853	ANALOG INPUT CARD	1
4	8000855	ANALOG POWER SUPPLY	1
3	8000852	OUTPUT CARD	1
2	8000850	CPU	1
1	8000851	POWER SUPPLY	1

SECTION 4

MAIN CYLINDER ENCLOSURE

SECTION 4
 SERIES 2000 PARTS MANUAL - MAIN CYLINDER ENLCOSURE
 GENERAL VIEW

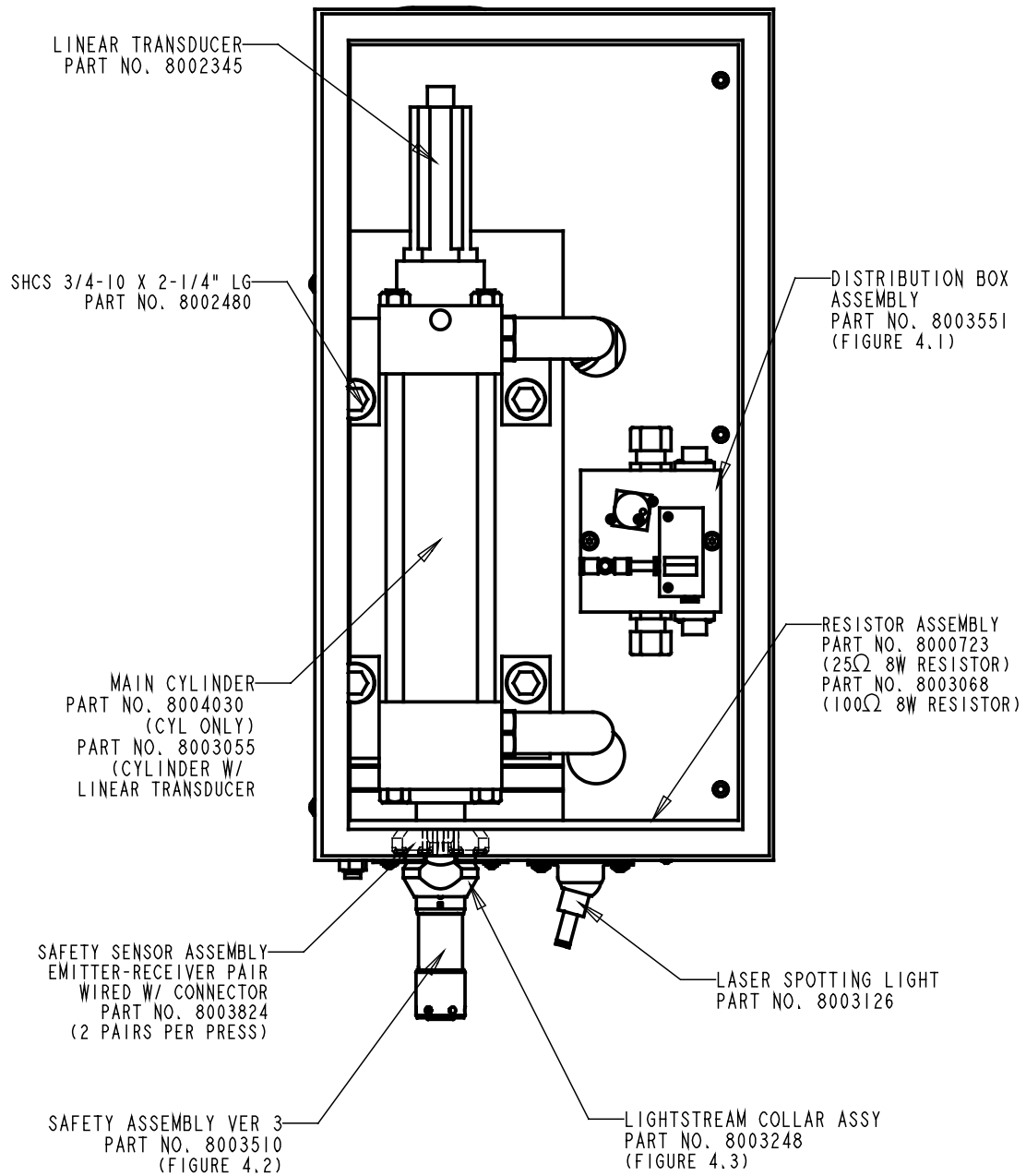
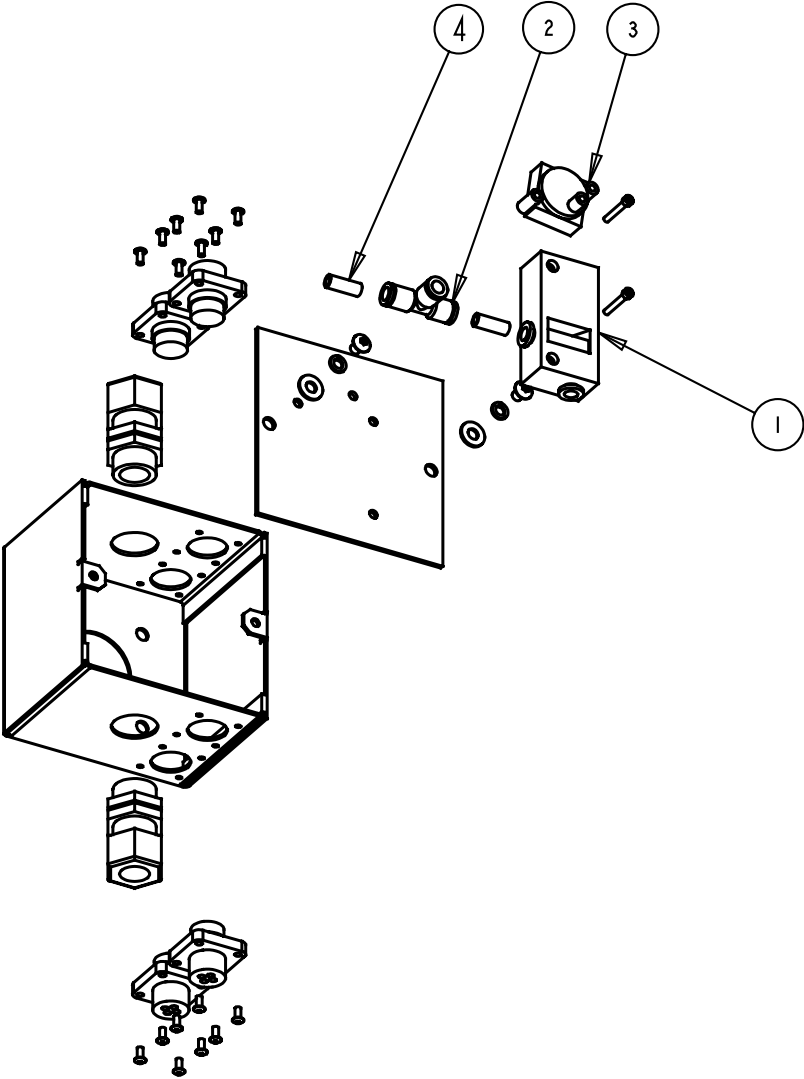
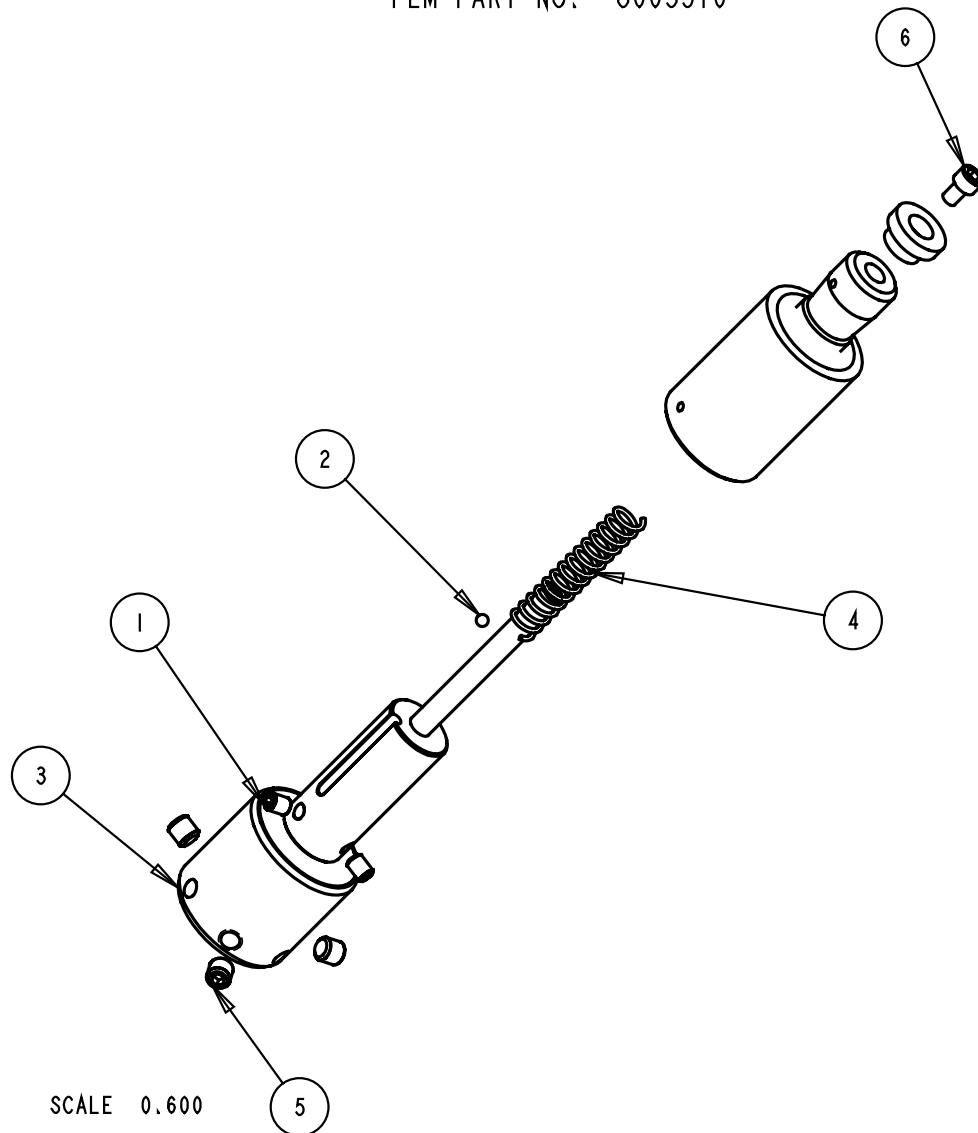


FIGURE 4.1
 SERIES 2000 DISTRIBUTION BOX ASSEMBLY
 PEM PART NO. 8003551



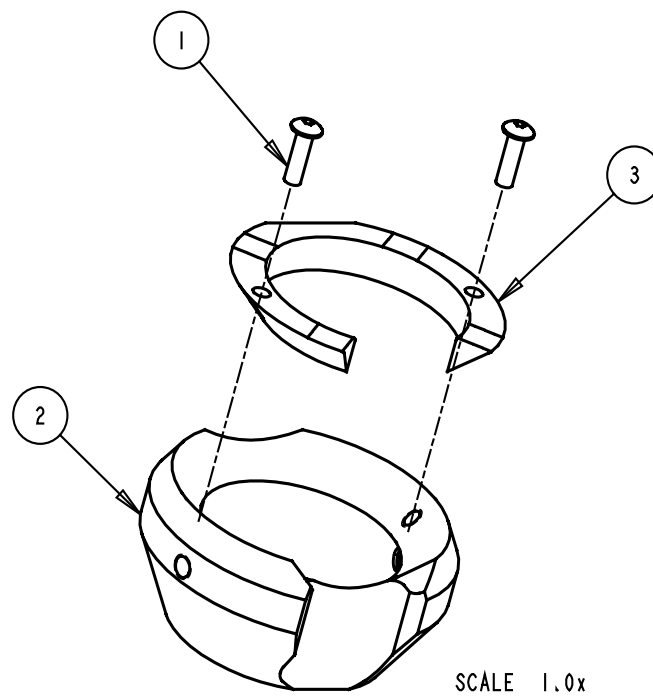
BILL OF MATERIAL			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	8001400	VACUUM ASPIRATOR, 1/4 TUBE X 1/4 TUBE	1
2	8002165	TEE, UNION, 1/4 TUBING	1
3	9800391619	VACUUM SWITCH 10 HG ADJUSTABLE	1
4	8000310	TUBING, 1/4" O.D. (QTY FT)	1.3

FIGURE 4.2
 SERIES 2000 - SAFETY HOUSING ASSEMBLY VER. 3
 PEM PART NO. 8003510



BILL OF MATERIAL			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	8002083	SSS #10-32 X 1/4", KNURLED CUP POINT	2
2	8002100	BALL BEARING, 1/8" DIA.	1
3	8003509	SAFETY AREA EXPANDING COLLAR	1
4	8003552	SPRING, SAFETY HOUSING VER. 3	1
5	980039430	SSS 1/4-20 X 1/4	3
6	980039744	SHCS #8-32 X 1/4 LG	1

FIGURE 4.3
 SERIES 2000 LIGHTSTREAM COLLAR ASSEMBLY
 PEM PART NO. 8003248



BILL OF MATERIAL			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	8000688	BHCS #4-40 X 3/8 LG	2
2	8003023	LIGHTSTREAM COLLAR	1
3	8003251	REFLECTIVE COLLAR COVER	1

SECTION 5

PRESS THROAT AREA

SECTION 5
SERIES 2000 PRESS THROAT AREA
GENERAL VIEW

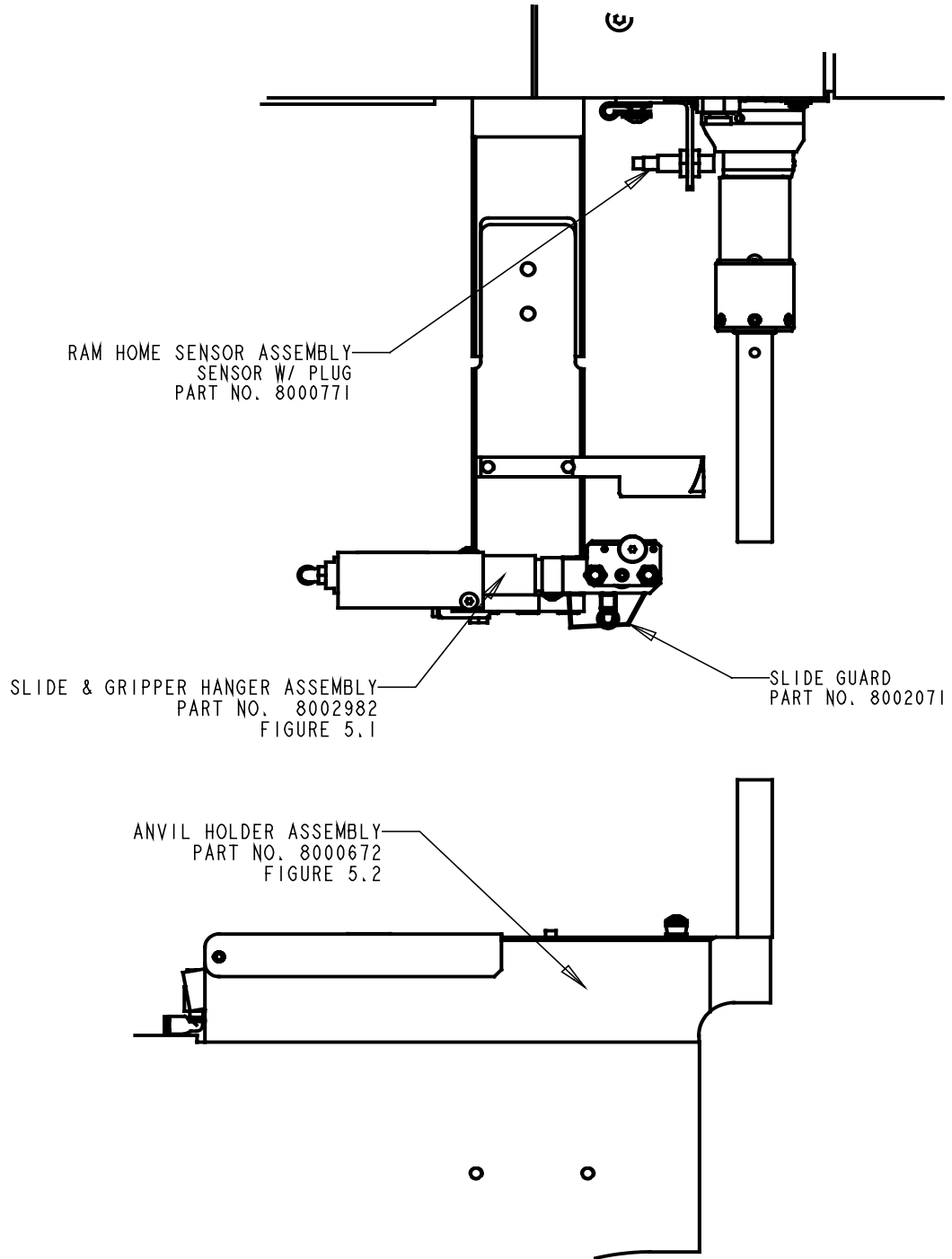
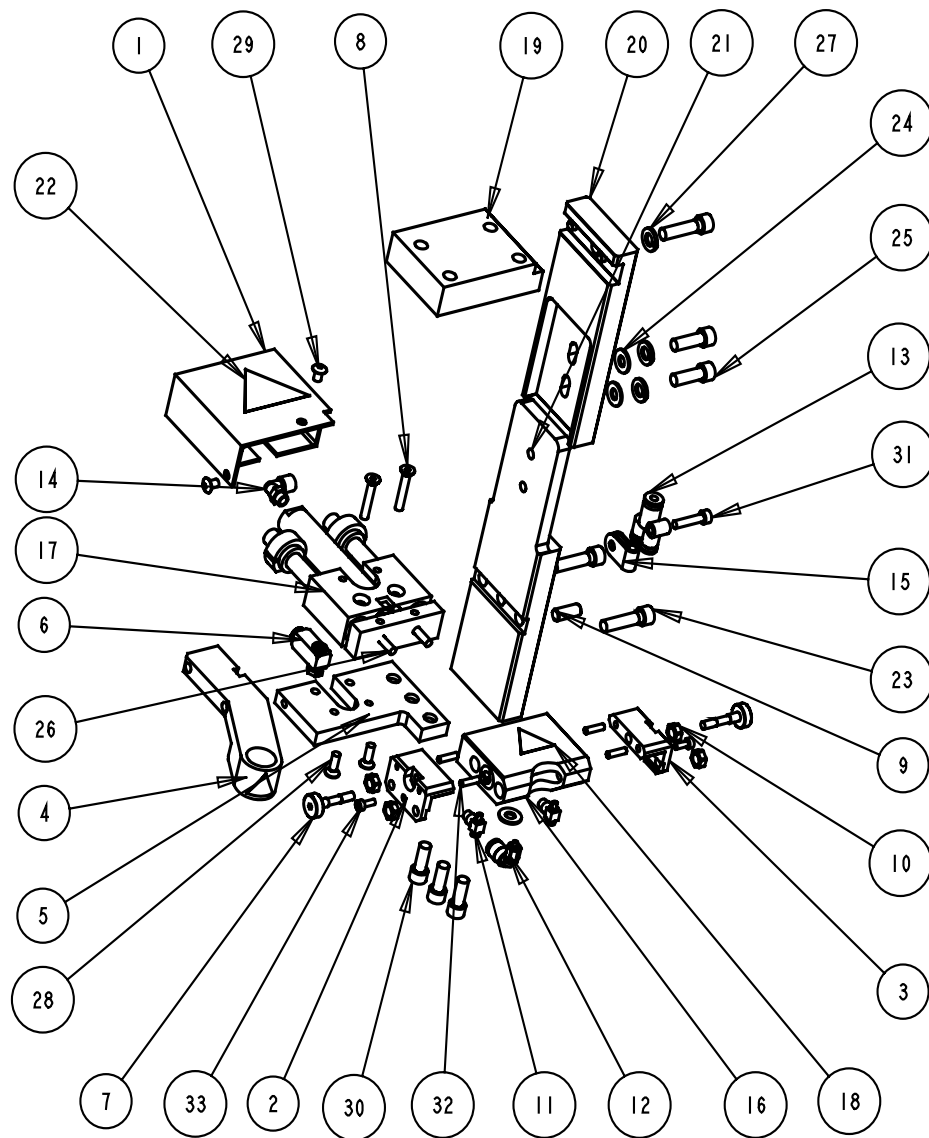


FIGURE 5.1
PEMSERTER SERIES 2000 SLIDE & GRIPPER HANGER ASSEMBLY
PEM PART NO. 8002982

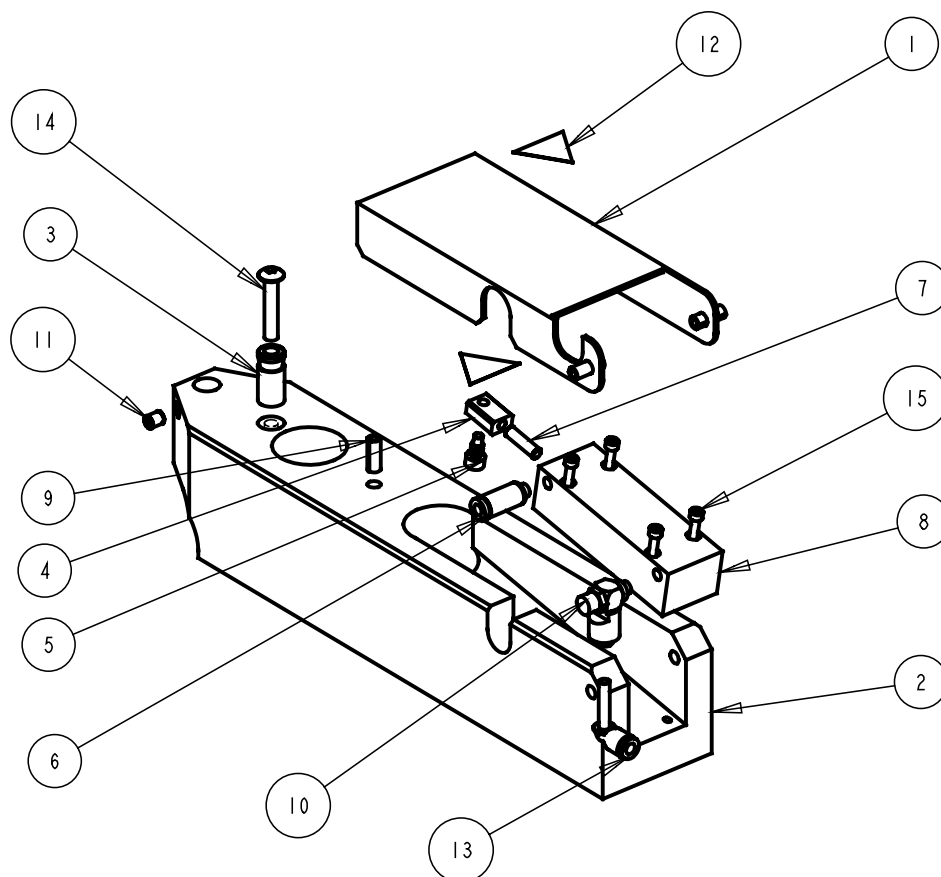


SCALE 0.300

FIGURE 5.1 (CONT)
 SERIES 2000 SLIDE & GRIPPER HANGER ASSEMBLY
 PEM PART NO. 8002982

BILL OF MATERIAL			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	8000041	SHIELD, SERIES 2000 SLIDE	1
2	8000065	2000 GRIPPER TOOLING JAW BRACKET LH	1
3	8000066	2000 GRIPPER TOOLING JAW BRACKET RH	1
4	8000075	STUD TUBE HANGER	1
5	8000083	SLIDE SUPPORT PLATE	1
6	8000312	FITTING, BANJO, 5/32 TUBE TO #10-32 THREAD	1
7	8000374	CAPTIVATED THUMB SCREW	2
8	8000461	FHCS #8-32 X 1 IN LG	2
9	8000686	DOWEL PIN, 1/4 DIA X 5/8 LG	1
10	8000690	NUT NYLOCK #8-32	4
11	8000692	FITTING, BANJO M3, 3MM TUBING	2
12	8001517	MALE ELBOW, 4MM TUBE TO M3 THREAD	1
13	8001680	FITTING 'Y' CONNECTOR	1
14	8001681	FITTING, MALE ELBOW 5/32" O.D. 10-32	1
15	8001804	CLAMP, NYLON LOOP	1
16	8002140	CUSTOM GRIPPER VER. 2 (COMPACT AIR)	1
17	8002141	MODIFIED LINEAR SLIDE VER. 2, 2000	1
18	8002943	LABEL, PINCH POINT, SMALL	2
19	8002979	HANGER CEILING PLATE	1
20	8002980	HANGER TOP DROP PLATE	1
21	8002981	HANGER BOTTOM DROP PLATE	1
22	8003053	LABEL, PINCH POINT, LARGE	1
23	980039076	SHCS 1/4-20 X 1" LG	3
24	980039133	WASHER, FLAT PLATED, #10	3
25	980039169	SHCS 1/4-20 X 3/4" LG	2
26	980039407	SHCS #8-32 X 1/2 LG	2
27	980039476	WASHER, LOCK PLATED, 1/4	3
28	980039836	FHCS #8-32 X 1/2 LG	2
29	980039840	BHCS #8-32 X 1/4 LG	2
30	9800391262	SHCS 1/4-20 X 5/8" LG	3
31	9800391281	SHCS #8-32 X 3/4 LG	1
32	9800391993	DOWEL PIN, 1/8 DIA X 1/2 LG	4
33	9800392094	SHCS M3 X 8MM STN STL	2

FIGURE 5.2
 SERIES 2000 ANVIL HOLDER ASSEMBLY
 PEM PART NO. 8000672

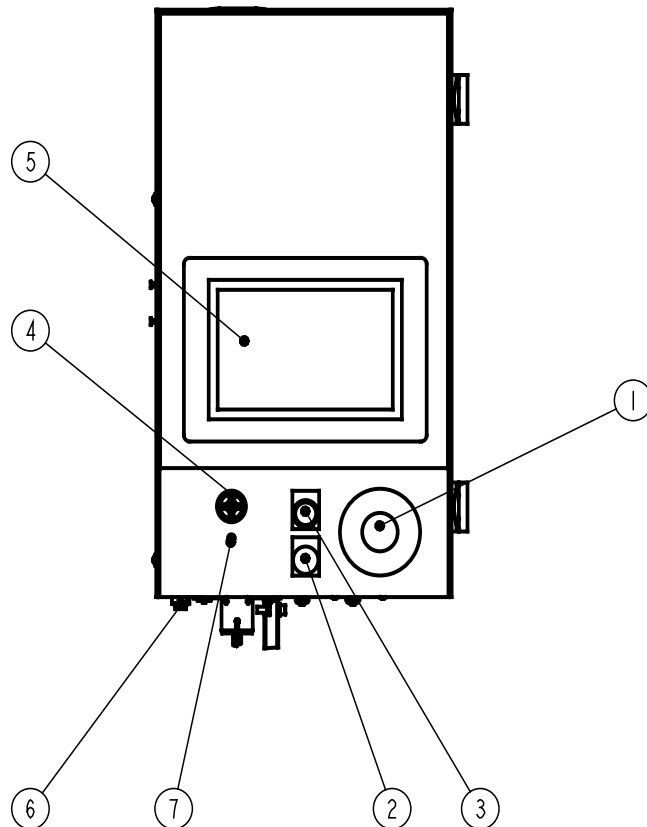


BILL OF MATERIAL			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	8000042	ANVIL HOLDER COVER	1
2	8000112	UNIVERSAL ANVIL HOLDER	1
3	8000117	ANVIL HOLDER LOCATING PIN	1
4	8000139	ANVIL HOLDER AIR CLY. CLEVIS	1
5	8000257	CLEVIS LOCATING PIN	1
6	8000313	STR. FIT., 5/32 TUBE TO #10-32 THREAD	1
7	8000459	SSS #8-32 UNC-2A X 5/8 LG	1
8	8000467	BOTTOM FEED PUSH CYLINDER	1
9	8000828	ROLL PIN 1/4 DIA. x 1/2 LONG	3
10	8001586	VALVE, SPEED CONTROL, 10-32 X 5-32 TUBING	1
11	8002083	SSS #10-32 X 1/4", KNURLED CUP POINT	1
12	8002943	LABEL, PINCH POINT, SMALL	2
13	8003753	FITTING, ELBOW, 5/32 TUBE	1
14	9800391431	BHCS 10-32 X 1 LG	1
15	9800393014	SHCS #4-40 X 3/4 LG	4

SECTION 6

OPERATOR CONTROLS

SECTION 6
 SERIES 2000 OPERATOR CONTROLS
 GENERAL VIEW

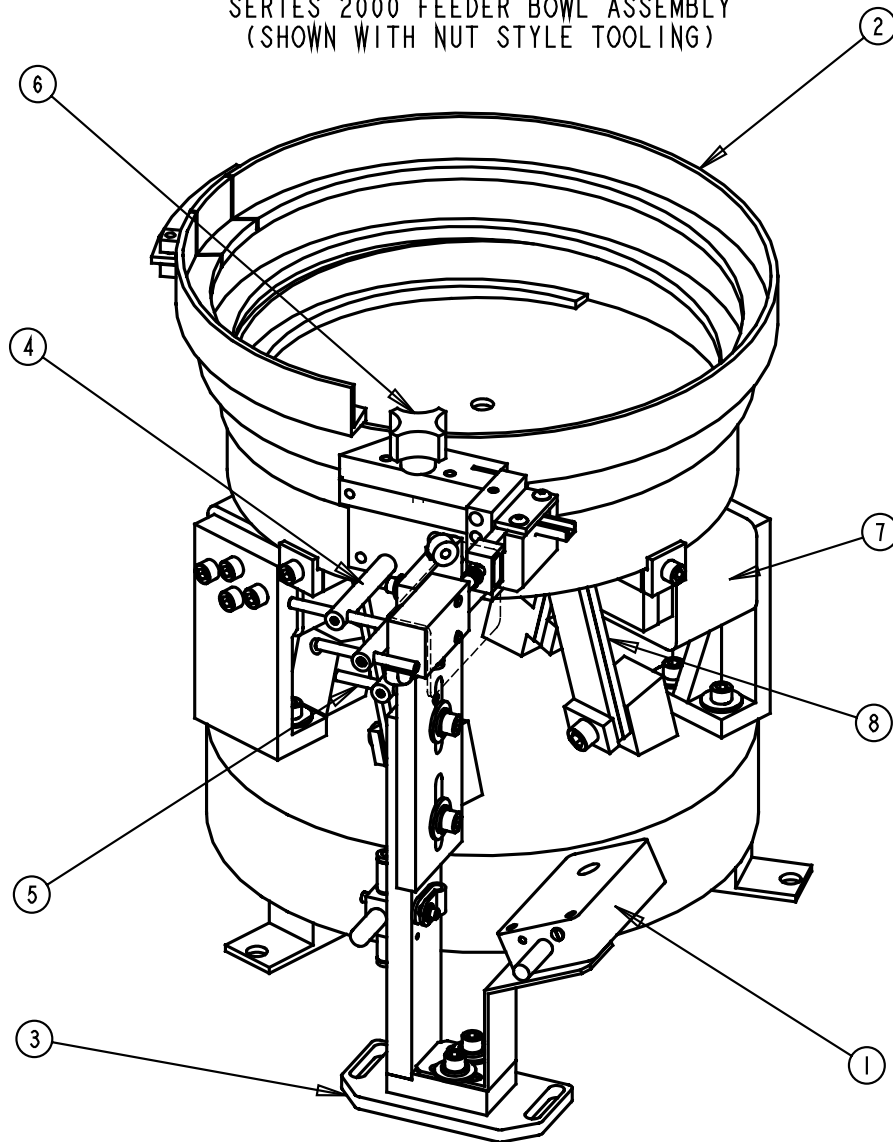


BILL OF MATERIAL			
ITEM	PART NO.	DESCRIPTION	QTY
1	8000160	E-STOP BUTTON	1
	8000166	RED LED	1
2	8000161	ILLUMINATING GREEN ON SWITCH	1
	8003974	GREEN LED	1
3	8000471	ILLUMINATING RED OFF SWITCH	1
	8000166	RED LED	1
4	8000174	AUDIBLE BEEPER	1
5	8000856	TOUCH SCREEN	1
6	8002178	CONNECTOR, BULKHEAD, 1/4" TUBING	1
7	8003833	INDICATOR LED 24 VDC (SPOTTING LIGHT ON)	1

SECTION 7

FEEDER BOWL AREA

SECTION 7
 SERIES 2000 FEEDER BOWL ASSEMBLY
 (SHOWN WITH NUT STYLE TOOLING)



BILL OF MATERIAL

ITEM	PART NO.	DESCRIPTION	QTY
1	8000191 OR 8002494	STUD-IN-TUBE SENSOR ASSEMBLY-15mm DIAMETER OR STUD-IN-TUBE SENSOR ASSEMBLY-25mm DIAMETER-OPTIONAL	1
2	8000293 8000301	FEEDER BOWL 230V FEEDER BOWL 120V	1
3	8000597	SHUTTLE SUPPORT ASSEMBLY	1
4	8000634	"T" HANDLE SMALL	1
5	8000635	"T" HANDLE LARGE	1
6	8000684	RETAINING KNOB	1
7	8001571 8001572	FEEDER BOWL MAGNET 230V FEEDER BOWL MAGNET 120V	1

FIGURE 7.1
 SERIES 2000 SHUTTLE SUPPORT ASSEMBLY
 PEM PART NO. 8000597
 (SHOWN WITH STUD-IN-TUBE SENSOR)

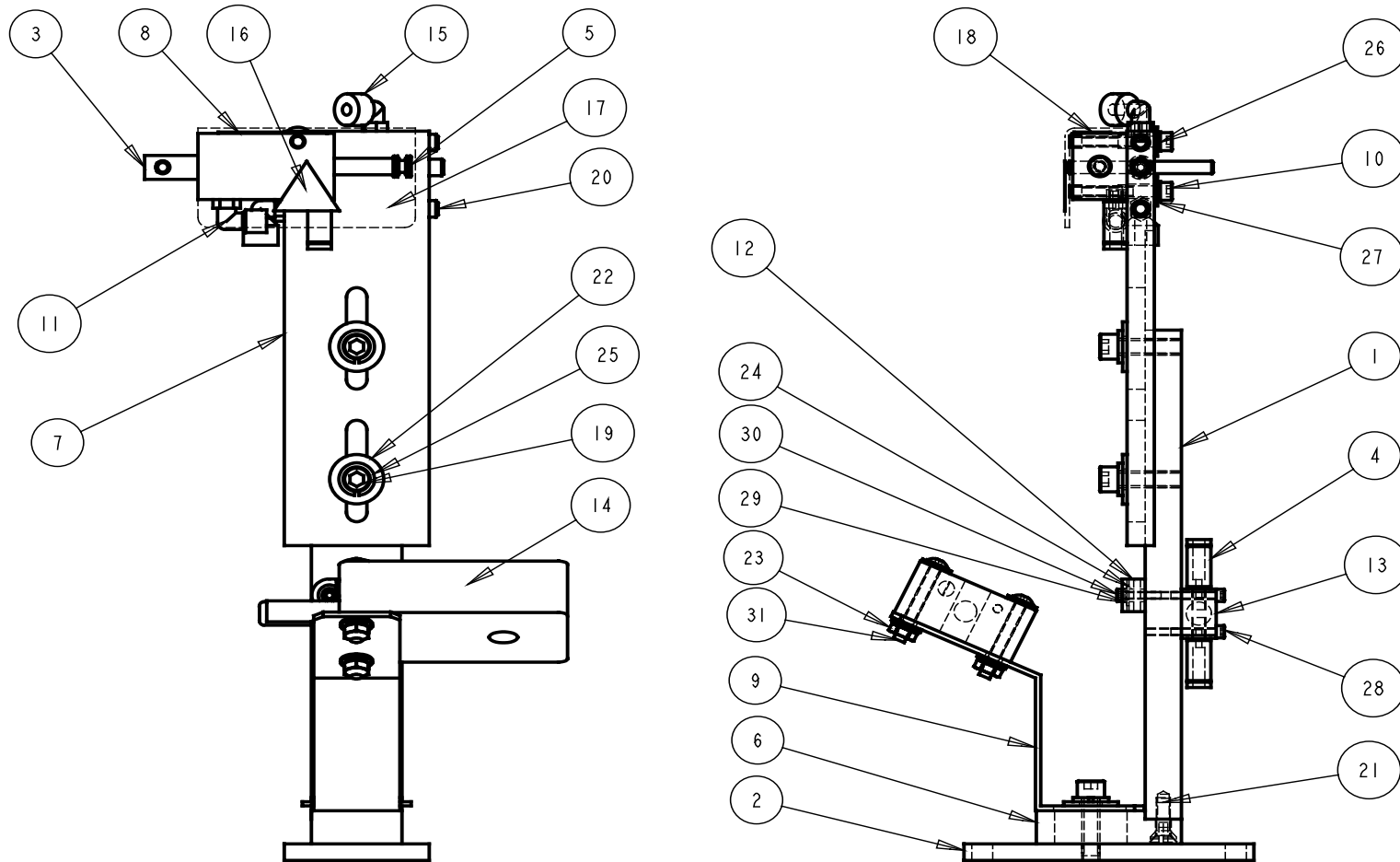


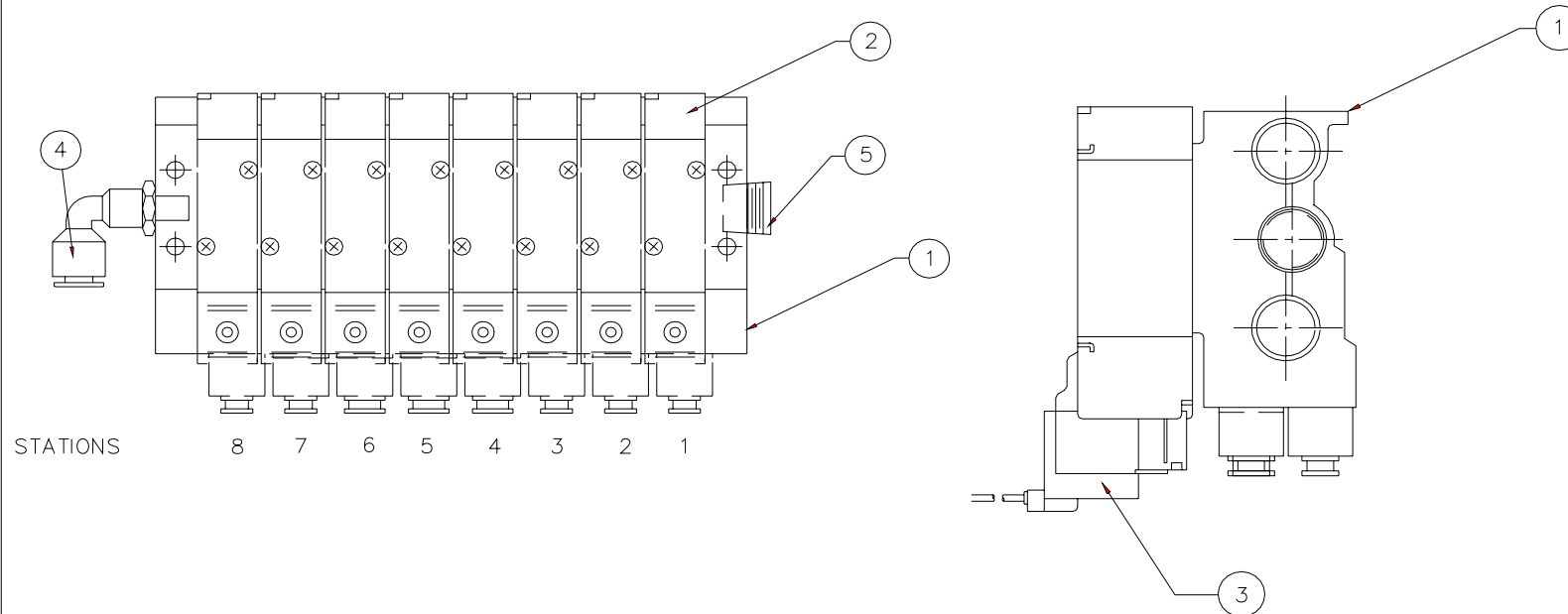
FIGURE 7.1
 SERIES 2000 SHUTTLE SUPPORT ASSEMBLY
 PEM PART NO. 8000597
 (SHOWN WITH STUD-IN-TUBE SENSOR)

BILL OF MATERIAL			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	8000053	SHUTTLE SUPPORT UPRIGHT	1
2	8000076	SHUTTLE SUPPORT ADJUSTMENT PLATE	1
3	8000099	CAPTIVATED T-HANDLE	1
4	8000313	STR. FIT., 5/32 TUBE TO #10-32 THREAD	3
5	8000498	SHUTTLE COUPLER	1
6	8000596	SHUTTLE SUPPORT BASE	1
7	8000601	SHUTTLE SUPPORT BRACKET	1
8	8000680	AIR CYLINDER, SHUTTLE SUPPORT	1
9	8000806	MOUNTING BRACKET, RING SENSOR	1
10	8001575	SHCS #8-32 X 1 1/4 LG	2
11	8001681	FITTING, MALE ELBOW 5/32" O.D. 10-32	1
12	8001804	CLAMP, NYLON LOOP	1
13	8002072	FITTING, FLOW CONTROL, 5/32	1
14	8002253	STUD-IN-TUBE SENSOR, 15mm	1
15	8002910	FITTING, MALE ELBOW 1/4" O.D. 10-32	2
16	8002943	LABEL, PINCH POINT, SMALL	1
17	8002951	SHUTTLE GUARD	1
18	8002952	DOUBLE SIDED TAPE	1
19	8003208	SHCS 1/4-20 X 7/8" LG	4
20	8003258	HOLLOW LOCATING PIN 1/4 DIA x 1/2 LONG	2
21	980039069	FHCS #10-32 X 5/8 LG	3
22	980039245	WASHER, FLAT PLATED, 1/4	4
23	980039251	HEX NUT PLATED, #8-32	2
24	980039445	WASHER, FLAT PLATED, #4	1
25	980039476	WASHER, LOCK PLATED, 1/4	4
26	980039804	WASHER, LOCK PLATED, #8	4
27	980039837	WASHER, FLAT PLATED, #8	6
28	980039905	SHCS #4-40 X 5/8 LG	2
29	9800391019	WASHER, LOCK PLATED, #4	1
30	9800391026	SHCS #4-40 X 1/2 LG	1
31	9800393022	BHCS #8-32 X 1-1/4 LG	2

SECTION 8

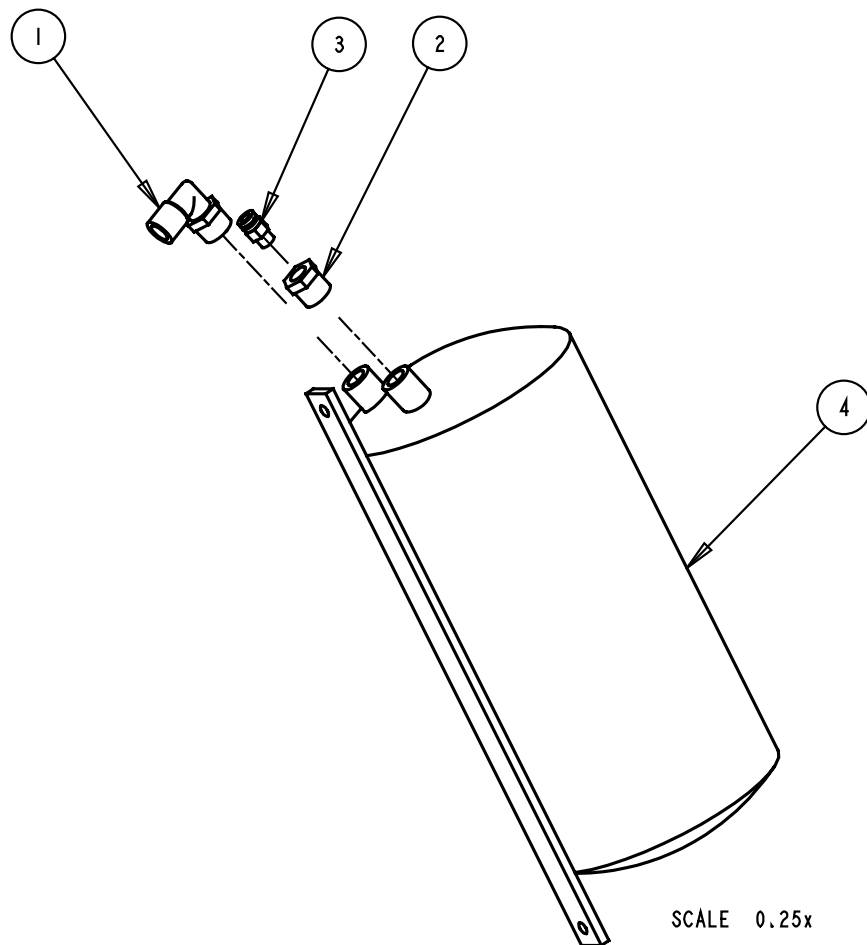
TOOLING VALVE ENCLOSURE

FIGURE 8.1
 SERIES 2000 – 8-STATION MANIFOLD ASSEMBLY – VER 3
 PEM PART NO. 8003054



BILL OF MATERIAL			
ITEM	PEM PART NUMBER	DESCRIPTION	QTY
1	8004095	8-STATION MANIFOLD FOR .26 CV VALVES	1
2	8003211	VALVE – 4-WAY, 2-POSITION .26 CV	8
3	8004074	CONNECTOR WITH 48" LEADS	8
4	8004096	ELBOW 1/4 PT X 1/4 DIA TUBE	1
5	8004097	BRASS PLUG 1/4" NPT.	1

FIGURE 8.2
 SERIES 2000 PRESSURE RESERVOIR TANK ASSEMBLY
 PEM PART NO. 8003129

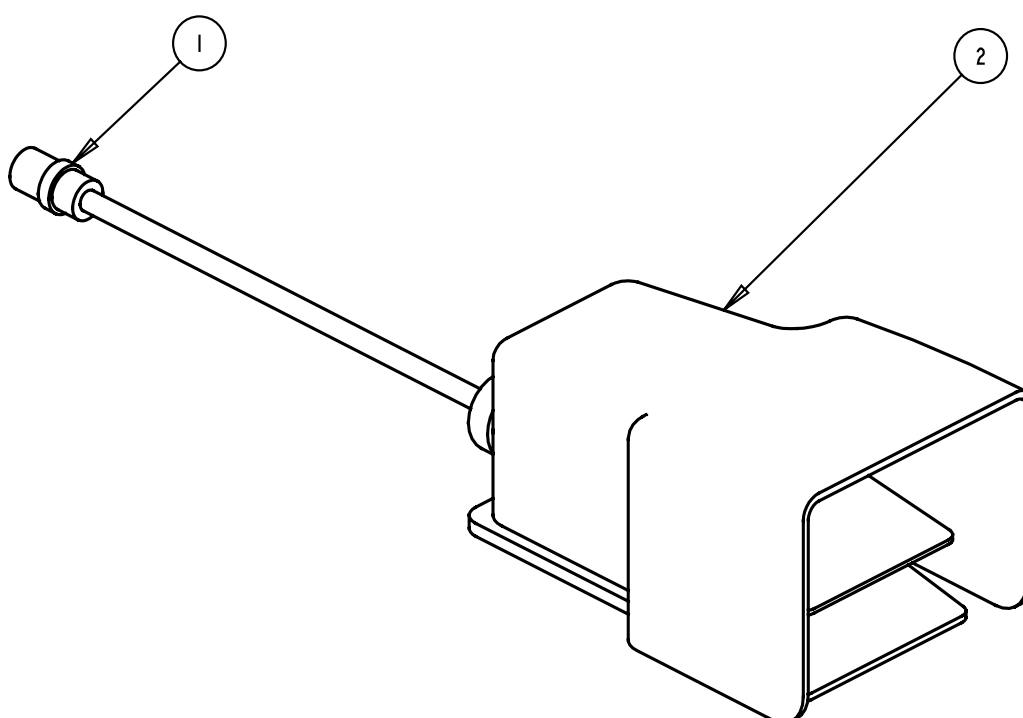


BILL OF MATERIAL			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	8000225	FITTING ELBOW, 1/2 NPT TO 1/2 TUBE	1
2	8003244	REDUCER, 1/2 NPT MALE W/ 1/4 NPT FEMALE	1
3	8003245	FITTING 1/4 NPT TO 1/4 TUBE	1
4	8003246	AIR PRESSURE RESERVOIR TANK, 3 LITER	1

SECTION 9

FOOTSWITCH ASSEMBLY

SECTION 9
 SERIES 2000 FOOTSWITCH ASSEMBLY
 PEM PART NO. 881920036

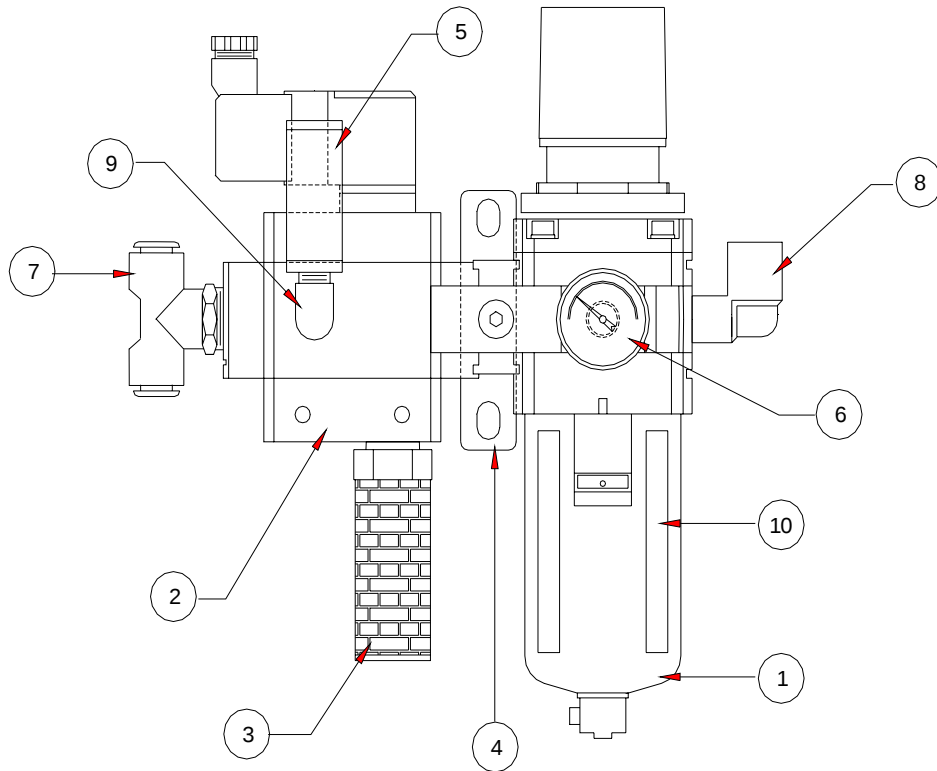


BILL OF MATERIAL			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	980039192	MALE AMPHENOL	1
2	980720053	FOOTSWITCH, ELECTRIC	1

SECTION 10

FILTER/REGULATOR ASSEMBLY

SECTION 10
SERIES 2000 - FILTER/REGULATOR ASSEMBLY
PEM PART NO. 8001397



BILL OF MATERIAL			
ITEM	PEM PART #	DESCRIPTION	QTY
1	8004070	FILTER / REGULATOR	1
2	8004071	SOFT - START DUMP VALVE	1
3	8001624	MUFFLER	1
4	8004072	T-BRACKET	1
5	8004073	PRESSURE SWITCH	1
6	980039521	GAUGE	1
7	8004098	BRANCH TEE 1/2" DIA.x 1/2" NPT.	1
8	8004099	STREET ELBOW 1/2" NPT.	1
9	8004121	STREET ELBOW 1/8" NPT.	1
10	8001670	FILTER ELEMENT	1

SECTION 11

GENERAL SPARE PARTS

SECTION 11 SPARE PARTS

PART DESCRIPTION	PEM PART NUMBER	QTY	FIGURE NO. IN PARTS MANUAL
Auto Transmission Fluid-Dextron II	980 039 225	1 Gal.	N/A
CARTRIDGE VALVE, SAFETY	8 003 503	1	Figure 2
VALVE, BOOSTER	8 003 210	1	Figure 2.2
VALVE, MAIN CYLINDER	8 003 209	1	Figure 2.2
SENSOR, SAFETY	8 003 065	1	Figure 4
VALVE, 4 WAY 2 POSITION	8 003 211	1	Figure 8.1
AIR CYL. (SHUTTLE)	8 000 680	1	Figure 2.1
AIR CYL. (PUSHER)	8 000 467	1	Figure 5.2
GRIPPER	8 002 140	1	Figure 5.1
LINEAR SLIDE	8 002 141	1	Figure 5.1
FUSE KIT	8004145	1	Fuses in Figure 3
CPU	8 000 850	1	Figure 3
POWER SUPPLY RACK	8 000 851	1	Figure 3
ANALOG OUTPUT	8 000 854	1	Figure 3
ANALOG LVDT INPUT	8 000 853	1	Figure 3
SIXTEEN (16) POINT DC OUTPUT MODULE	8 000 852	1	Figure 3
POWER SUPPLY, 24V, 84W	8 003 513	1	Figure 3
ELECTRONIC PILOT REGULATOR	8 003 189	1	Figure 2.0
FILTER ELEMENT	8001670	1	Figure 10

TUBING FOR THE PEMSERTER® SERIES 2000™ PRESS:

PART NUMBER	DESCRIPTION
8000253	TUBING 1/2" DIA POLYURETHANE, BLACK
8000310	TUBING 1/4" DIA POLYURETHANE, BLACK
8000311	TUBING 5/32" DIA POLYURETHANE, BLACK
8000454	TUBING 1/8" DIA POLYURETHANE, BLACK
8004090	TUBING 5/16" DIA POLYURETHANE, BLACK
980039010	TUBING 1/4" DIA POLYURETHANE, CLEAR

AVAILABLE OPTIONS FOR THE PEMSERTER® SERIES 2000™ PRESS:

PART NUMBER	DESCRIPTION
8002494	25mm DIA STUD-IN-TUBE SENSOR
8002937	SWEEPER ASSEMBLY FOR FEEDER BOWL

REPAIR KITS FOR THE PEMSERTER® SERIES 2000™ PRESS MODEL 2006:

PART NUMBER	DESCRIPTION
8003241	MAIN CYLINDER SEAL KIT
8003243	BOOSTER SEAL KIT
8004229	O-RING SEAL VICKERS CARTRIDGE/BODY
8003243	O-RING SEAL MAIN CYLINDER
8003231	O-RING SEAL HYDRAULIC FITTINGS

FILTERS FOR THE PEMSERTER® SERIES 2000™ PRESS MODEL 2006

PART NUMBER	DESCRIPTION
8001670	FILTER REGULATOR ELEMENT (FIGURE 10)
8003139	FILTER ELECTRONIC REGULATOR (FIGURE 2)