

A M E R I C A N M A R K I N G , I N C .

OWNER'S MANUAL

USM-80600 & USM-80601 PRESSURE RESERVOIRS

INSTALLATION - OPERATION - MAINTENANCE



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IMPORTANT NOTE

UNIVERSAL products are manufactured to exacting standards and every available step has been taken to assure your complete satisfaction. It is most important, however, that the instructions contained in this manual are read and carefully followed for best results. Failure to do so may result in unsatisfactory performance, damage to the equipment and personal injury.

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- LIMITED WARRANTY -

UNIVERSAL Pressure Reservoirs are guaranteed to be free from defects in materials and workmanship for a period of 90 days from the date of purchase. Components found to be defective during this time will be repaired free of charge if returned to the factory. Damage resulting from use of improper inks, improper installation, or operation is not covered under the scope of this warranty. For warranty service please contact our Customer Service Department.

PREFACE

Universal's USM-80600 & USM-80601 Pressure Reservoirs are used to increase the ink supply pressure to the USMR-20AF markers. Higher supply pressure allows more ink to flow into the atomizing air stream in a given time interval. The use of a pressure reservoir enables shorter duration triggering signals to be used and results in a faster reaction time for the marker. The pressure reservoirs are also recommended in applications requiring higher ink volume delivery. For most applications, tank pressure is set to 2-3 psi.

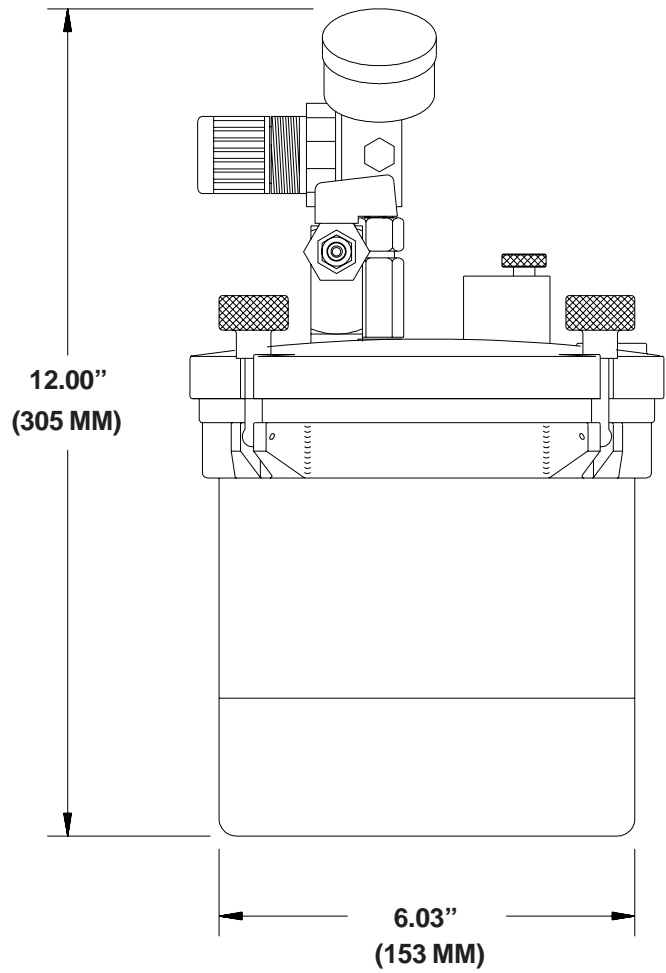
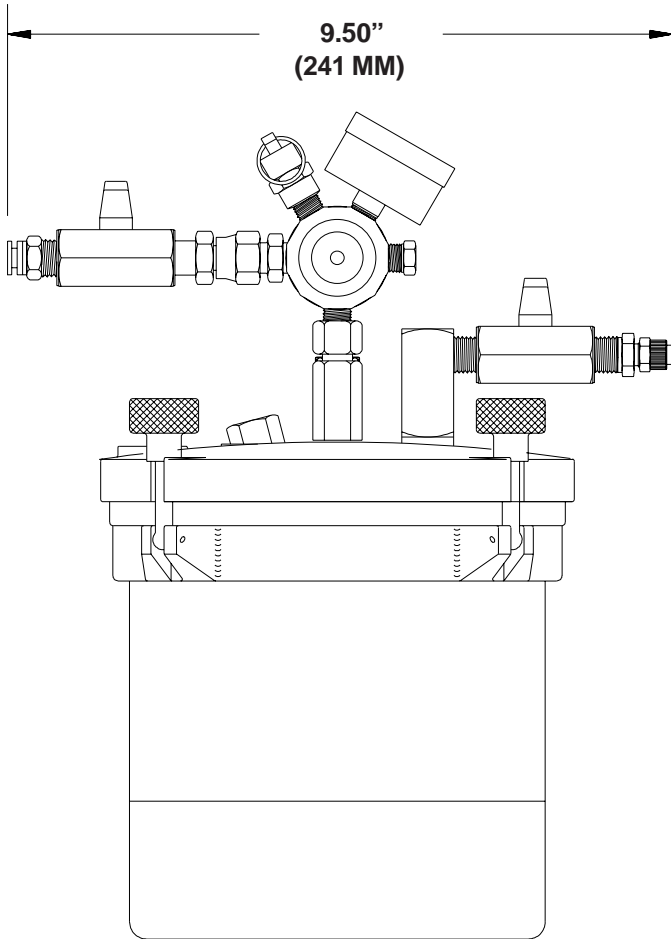
The USM-80600 is a 64oz. capacity unit complete with pressure regulator, gauge and disposable liner. The USM-80601 unit is similar to the USM-80600 but includes a pneumatically operated ink agitation system which keeps pigmented inks in uniform suspension during use. Disposable liners are available for both units.

WARNING

ALL AIR AND FLUID PRESSURE IN THE SYSTEM MUST BE RELIEVED BEFORE SERVICING THE RESERVOIR AND BEFORE THE RESERVOIR IS FILLED OR CLEANED. ATTEMPTING TO SERVICE THE RESERVOIR WHILE PRESSURIZED COULD RESULT IN DAMAGE TO THE COMPONENTS OR PERSONAL INJURY.

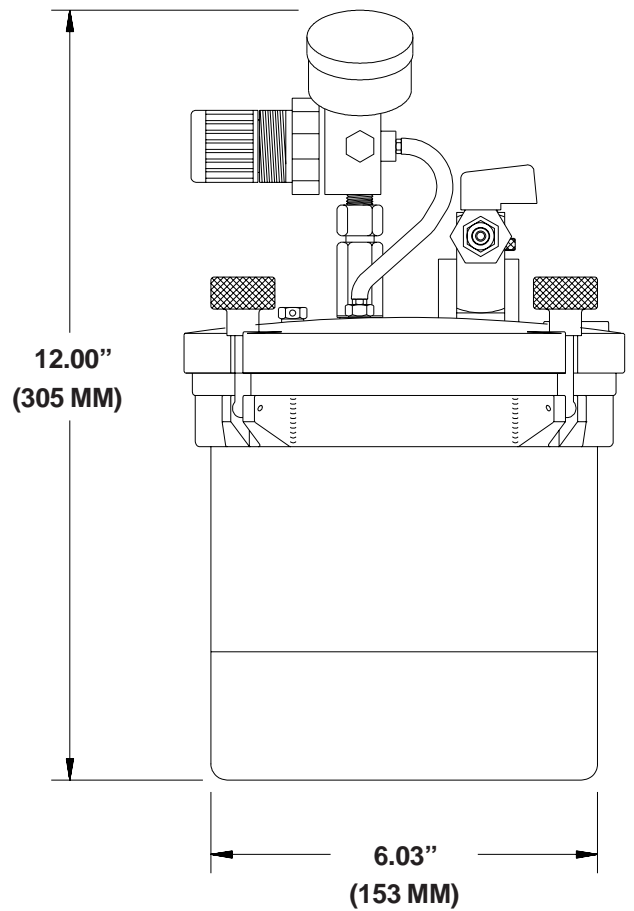
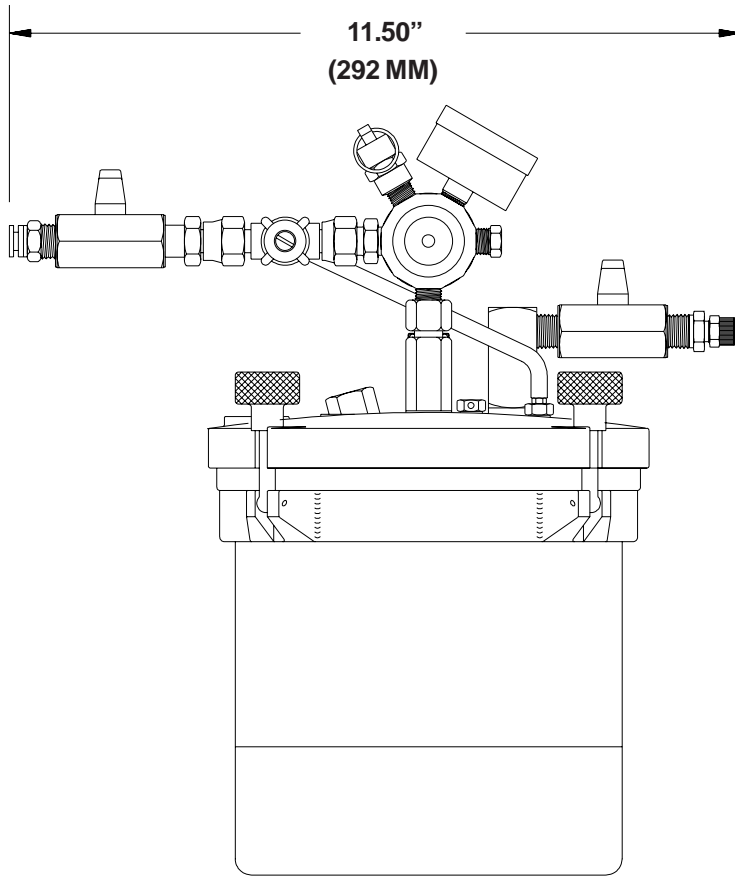
SPECIFICATIONS

USM-80600 - 2 QT. PRESSURE RESERVOIR (STANDARD)
NET WEIGHT: 5 LB. 4OZ. (2.38 KG.)



SPECIFICATIONS

USM-80601 - 2 QT. PRESSURE RESERVOIR (WITH AGITATOR)
NET WEIGHT: 5 LB. 13 OZ. (2.64 KG.)



INSTALLATION

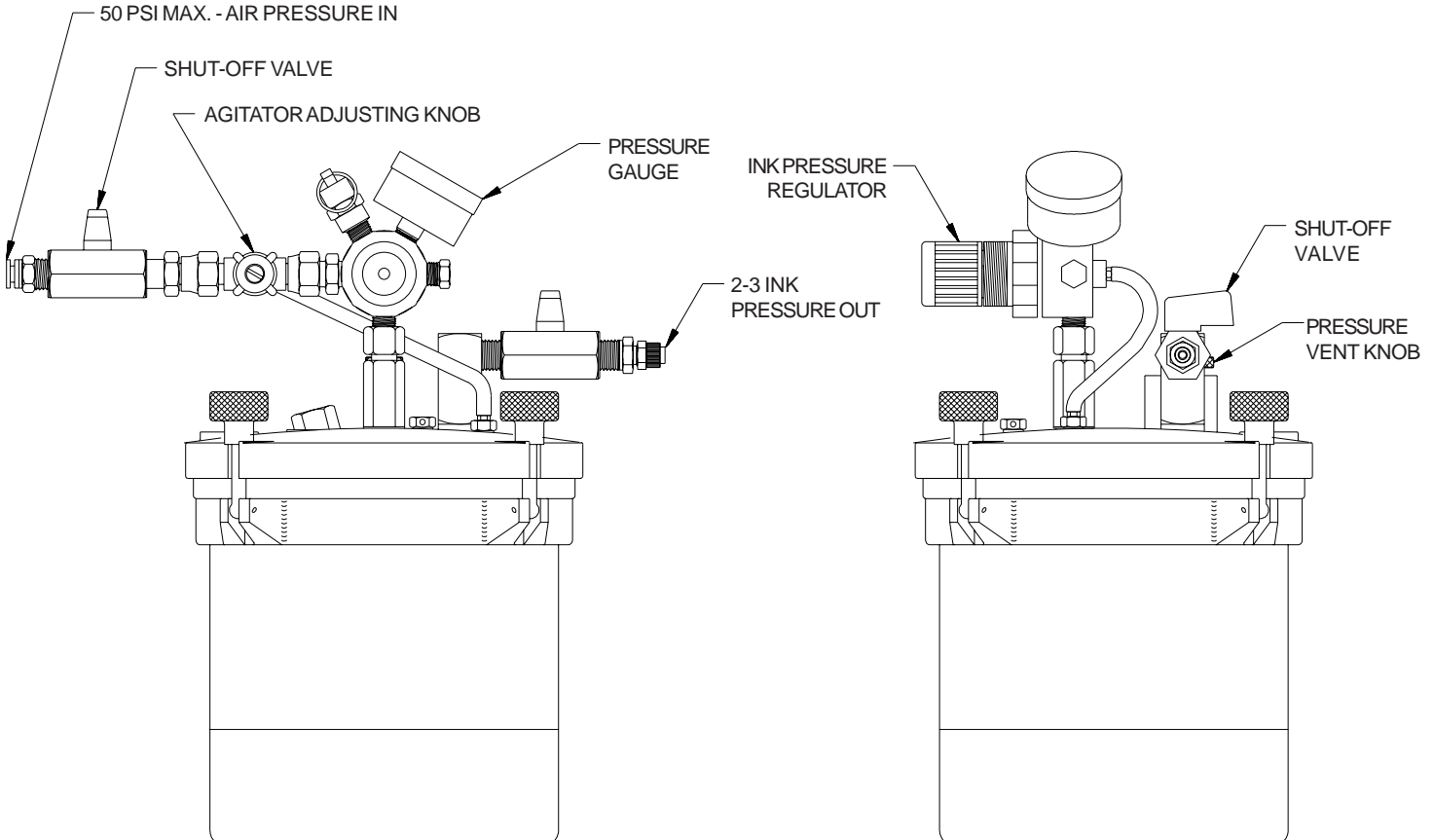
CAUTION: CLOSE THE INK OUTLET VALVE AND PRESSURE VENT KNOB PRIOR TO PRESSURIZING THE RESERVOIR AND MAKING THE 2-3 PSI INK PRESSURE ADJUSTMENT.

AIR IN PRESSURE

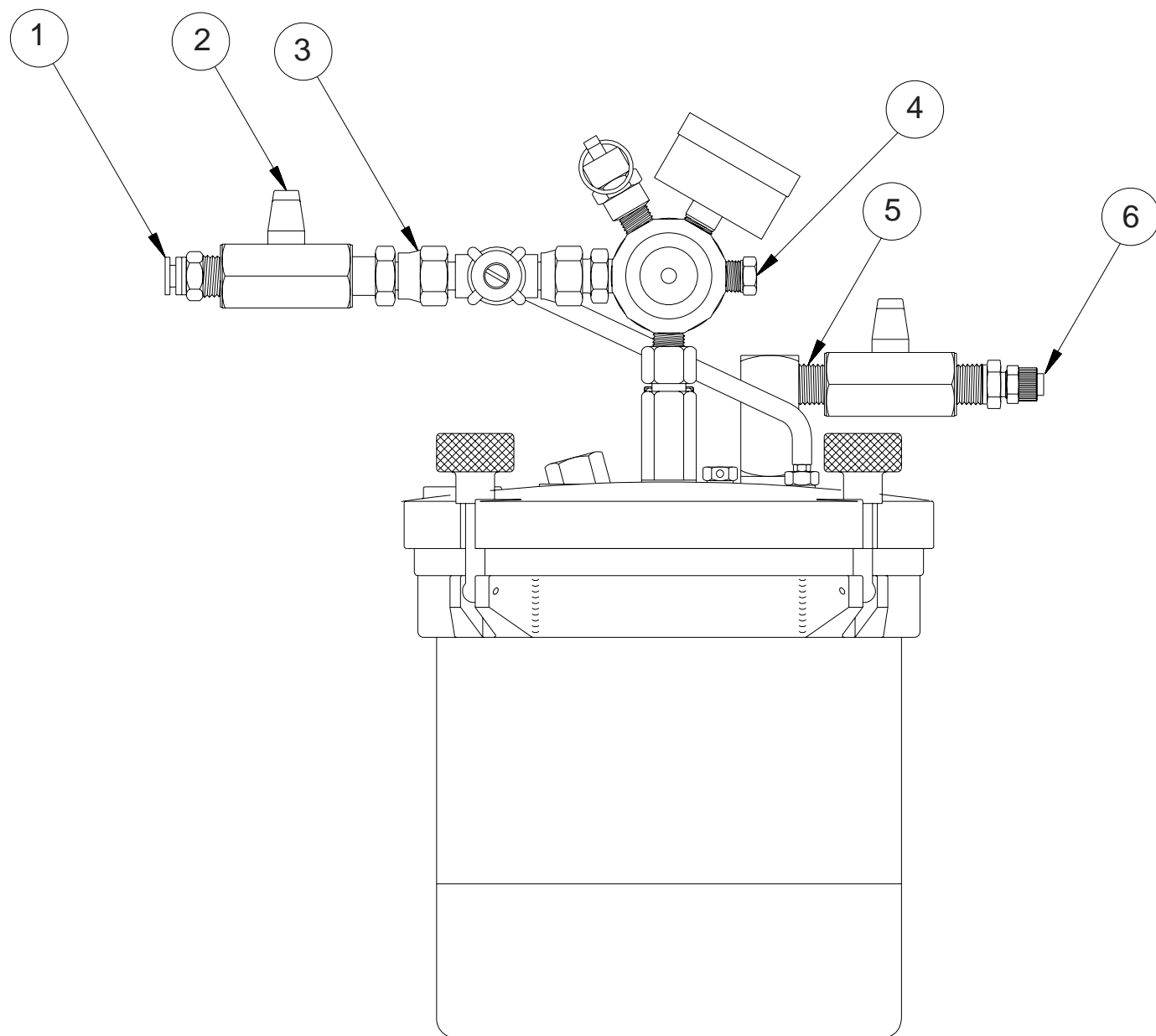
Incoming air should be clean and dry. Air pressure should not exceed 50 PSI. Attach a 1/4" O.D. air supply line to the quick connect fitting on the reservoir.

INK OUT PRESSURE

Attach one end of a 1/4" O.D. polyethelene ink supply line to the compression coupling on the pressure reservoir. The other end should be attached to the liquid inlet compression coupling on the USMR-20/USMR-20AF. Fill the ink reservoir approximately 3/4 of the way from the top. **DO NOT OVERFILL.** Adjust the reservoir pressure to 2-3 PSI by turning the pressure regulator knob.



USM-80601 & USM-80600 PRESSURE RESERVOIR ASSEMBLY & PARTS LIST

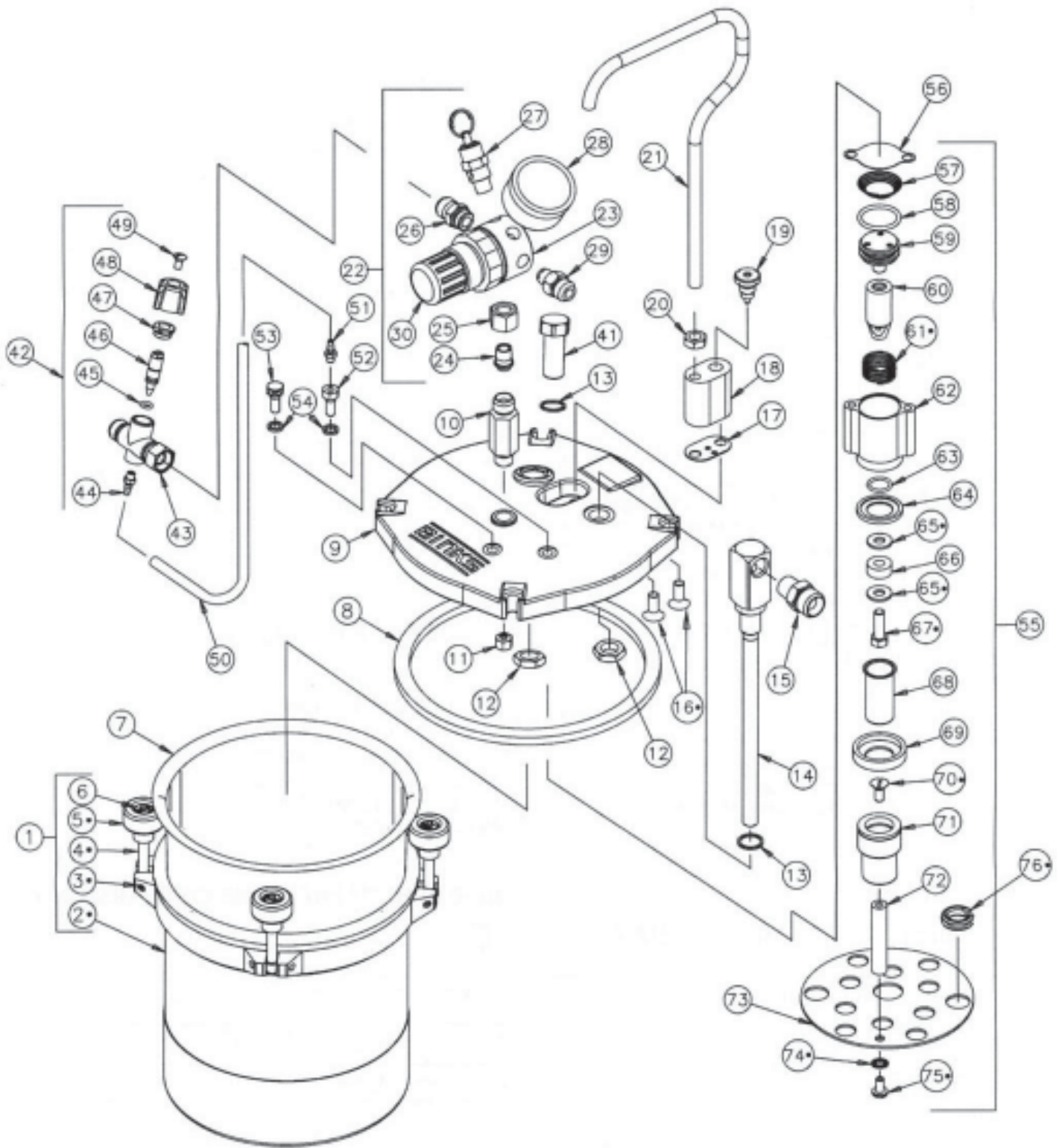


USM-80600 & USM-80601 PRESSURE RESERVOIR			
KEY NO.	PART NUMBER	QTY. REQD.	DESCRIPTION
1	MRM-PC-02	1	MALE CONN, 1/4" NPT X 1/4" O.D. TUBE
2	MRM-PC-24	2	MINI BALL VALVE, 1/4" NPT X 1/4" NPT
3	MRM-PC-22	1	ADAPTER, 1/4" NPT M X 1/4" NPS F
4	MRM-PC-60	1	BRASS PLUG, 1/8" NPT
5	MRM-PC-14	1	BRASS NIPPLE, 1/4" NPT X 1/4" NPT
6	MRM-PC-06	1	MALE COMP, 1/4" NPT M X 1/4" O.D. TUBE

USM-80600 PRESSURE RESERVOIR PARTS LIST

KEY NO.	PART NUMBER	QTY. REQD.	DESCRIPTION
1	USM-80375	1	2 QT. CANISTER ASSEMBLY
2	USM-80376	1	2 QT. CANISTER SUB-ASSEMBLY
3	USM-204870	4	SPIROL PIN
4	USM-80381	4	CANISTER KNOB SWIVEL
5	USM-80380	4	CANISTER KNOB
6	USM-80382	4	RETAINING RING
7	USM-80355	1-12/PK	DISPOSABLE LINERS
8	USM-80392	1	LID GASKET
9	USM-80602	1	COVER MACHINING
10	USM-80606	1	CHECK VALVE ASSEMBLY
11	USM-80610	1	DIFFUSER
12	USM-80389	2	FLUID TUBE NUT
13	USM-80388	2	FLUID TUBE SEAL
14	USM-80613	1	FLUID TUBE ASSEMBLY
15	USM-832484	1	DM NIPPLE, 1/4 NPT X 3/8 NPS
16	USM-206582	2	SCREW
17	USM-80373	1	HANDLE GASKET
18	USM-80604	1	MANIFOLD
19	USM-8012	1	RELIEF VALVE
20	USM-203531	1	JAM NUT, 5/16-18
21	USM-80605	1	HANDLE
22	USM-85449	1	REGULATOR ASSEMBLY (#15 gauge)
23	USM-85436	1	REGULATOR BODY
24	USM-72104	1	TAILPIECE
25	USM-7293	1	SWIVEL NUT, 1/4 NPS
26	USM-54308	1	AIR CONNECTION
27	USM-85243	1	SAFETY VALVE
28	USM-59299	1	GAUGE, 15 PSI
29	USM-7128	1	DM NIPPLE, 1/8 NPT X 1/4 NPS
30	USM-85437	1	REGULATOR KIT, 15 PSI (SOLD ASSEMBLED ONLY) SEE PAGE 13 FOR PARTS LIST
41	USM-80616	1	TOP OUTLET PLUG

USM-80601 PRESSURE RESERVOIR ASSEMBLY



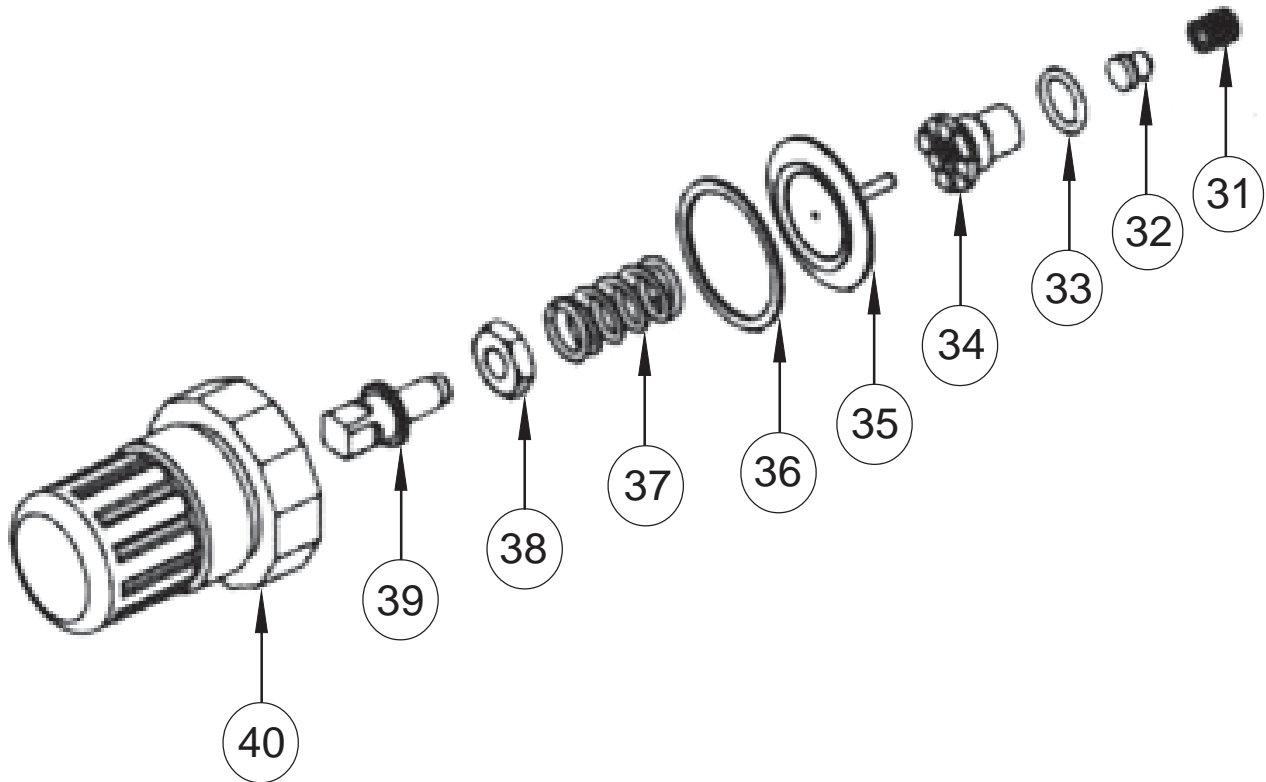
USM-80601 PRESSURE RESERVOIR PARTS LIST

KEY NO.	PART NUMBER	QTY. REQD.	DESCRIPTION
1	USM-80375	1	2 QT. CANISTER ASSEMBLY
2	USM-80376	1	2 QT. CANISTER SUB-ASSEMBLY
3	USM-204870	4	SPIROL PIN
4	USM-80381	4	CANISTER KNOB SWIVEL
5	USM-80380	4	CANISTER KNOB
6	USM-80382	4	RETAINING RING
7	USM-80355	1-12/PK	DISPOSABLE LINERS
8	USM-80392	1	LID GASKET
9	USM-80603	1	COVER MACHINING
10	USM-80606	1	CHECK VALVE ASSEMBLY
11	USM-80610	1	DIFFUSER
12	USM-80389	2	FLUID TUBE NUT
13	USM-80388	2	FLUID TUBE SEAL
14	USM-80613	1	FLUID TUBE ASM
15	USM-832484	1	DM NIPPLE, 1/4 NPT X 3/8 NPS
16	USM-206582	2	SCREW
17	USM-80373	1	HANDLE GASKET
18	USM-80604	1	MANIFOLD
19	USM-8012	1	RELIEF VALVE
20	USM-203531	1	JAM NUT, 5/16-18
21	USM-80605	1	HANDLE
22	USM-85449	1	REGULATOR ASSEMBLY (#15 GAUGE)
23	USM-85436	1	REGULATOR BODY
24	USM-72104	1	TAIL PIECE
25	USM-7293	1	SWIVEL NUT, 1/4 NPS
26	USM-54308	1	AIR CONNECTION
27	USM-85243	1	SAFETY VALVE
28	USM-59299	1	GAUGE, 15 PSI
29	USM-7128	1	DM NIPPLE, 1/8 NPT X 1/4 NPS
30	USM-85437	1	REGULATOR KIT, 15 PSI (SOLD ASSEMBLED ONLY) SEE PAGE 13 FOR PARTS LIST
41	USM-80616	1	TOP OUTLET PLUG
42	USM-82740	1	AIR CONTROL VALVE ASSEMBLY
43	USM-82745	1	VALVE BODY ASSEMBLY
44	USM-81307	1	BARBED CONNECTOR
45	USM-203236	1	O-RING
46	USM-82747	1	STEM
47	USM-7344	1	NUT

USM-80601 PRESSURE RESERVOIR PARTS LIST - CONT'D

KEY NO.	PART NUMBER	QTY. REQD.	DESCRIPTION
48	USM-7346	1	CAP
49	USM-202606	1	SCREW, 8-32 X 3/8" OVAL HD
50	USM-543929	1	TUBE 6-1/2" NYLON
51	USM-81307	1	BARBED CONNECTOR
52	USM-82728	1	INLET FITTING
53	USM-82729	1	EXHAUST FITTING
54	USM-82730	2	GASKET
55	USM-80611	1	SG2 PLUS OSCILLATING AGITATOR ASSEMBLY
56	USM-82727	1	CYLINDER GASKET
57	USM-82720	1	CONICAL SPRING
58	USM-205845	1	O-RING
59	USM-82714	1	PISTON ASSEMBLY
60	USM-82779	1	PISTON ROD
61	USM-82721	1	COMPRESSION SPRING
62	USM-82711	1	CYLINDER ASSEMBLY
63	USM-203753	2	O-RING
64	USM-82776	1	CAN SEAL
65	USM-82777	1	INNER RING
66	USM-82753	1	INNER MAGNET
67	USM-206022	1	SCREW, 1/4-28 X 3/4" HEX HD
68	USM-82775	1	CAN
69	USM-82778	1	CAN RETAINER
70	USM-206023	1	SCREW, 12-24 X 1/2" FLAT HD
71	USM-82770	1	OUTER MAGNET ASSEMBLY
72	USM-80406	1	OSCILLATING AGITATOR POST
73	USM-80615	1	OSCILLATING AGITATOR PLATE
74	USM-202530	1	#10 EXTERNAL STAR WASHER
75	USM-205832	1	SCREW, 10-32 X 3/8" PAN HEAD
76	USM-206790	1	GROMMET

**USM-80600 & USM-80601 ACCESSORIES & KITS
SOLD SEPARATELY**



USM-85437 REGULATOR KIT

KEY NO.	PART NUMBER	QTY. REQD.	DESCRIPTION
31	NOT ASSIGNED	1	VALVE SPRING
32	NOT ASSIGNED	1	VALVE, TEFLON
33	NOT ASSIGNED	1	O-RING
34	NOT ASSIGNED	1	VALVE SEAT
35	NOT ASSIGNED	1	DIAPHRAGM
36	NOT ASSIGNED	1	VALVE SPRING
37	NOT ASSIGNED	1	REGULATING SPRING
38	NOT ASSIGNED	1	NUT
39	NOT ASSIGNED	1	STEM
40	NOT ASSIGNED	1	BONNET

**USM-80600 & USM-80601 ACCESSORIES & KITS
SOLD SEPARATELY**

ACCESSORIES

KEY NO.	PART NUMBER	QTY. REQD.	DESCRIPTION
1	USM-80356	12/PK	CANISTER LINERS
2	USM-73125	1	AIR CONTROLLER (FOR ATOMIZING AIR)
3	USM-HAV500	1	AIR ADJUSTING VALVE
4	USM-HAV501	1	AIR ADJUSTING VALVE W/GAUGE

USM-80617 PRESSURE CUP REPAIR KIT

KEY NO.	PART NUMBER	QTY. REQD.	DESCRIPTION
1	USM-85437	1	REGULATOR KIT, (#10 SPRING)
2	USM-80373	1	HANDLE GASKET
3	USM-80388	2	FLUID TUBE SEAL
4	USM-80392	1	LID GASKET
5	USM-85243	1	SAFETY VALVE

USM-80619 HIGH PRESSURE CONVERSION KIT

KEY NO.	PART NUMBER	QTY. REQD.	DESCRIPTION
1	USM-59369	1	GAUGE, (60 PSI)
2	USM-85438	1	REGULATOR KIT, (#50 SPRING)

USM-80612 OSCILLATING AGITATOR REPAIR KIT

KEY NO.	PART NUMBER	QTY. REQD.	DESCRIPTION
1	USM-2032365	1	O-RING (2-008)
2	USM-82730	2	GASKET
3	USM-82727	1	CYLINDER GASKET
4	USM-82720	1	CONICAL SPRING
5	USM-205845	1	O-RING (2-118 VITON)
6	USM-82721	1	SPRING
7	USM-203753	1	O-RING (2-016 VITON)
8	USM-82776	1	CAN SEAL
9	USM-82775	1	CAN
10	USM-206790	1	GROMMET
11	USM-82714	1	PISTON ASSEMBLY

