



ALH SYSTEMS LTD

**LARGE DIAMETER
MAINSPRAY INJECTION**

**OPERATOR INSTRUCTIONS
& PARTS LIST**

ISSUE DATE - 23/03/2016

LARGE DIAMETER MAINSPRAY INJECTION - USER INSTRUCTIONS

(THIS INSTRUCTION ASSUMES INJECTION NIPPLE IS FITTED TO THE JOINT)

(THIS EQUIPMENT IS DESIGNED FOR 3 BAR WORKING - THIS PRESSURE
MUST NOT BE EXCEEDED)

INSTRUCTIONS (REFER TO SKETCH).

1. PREPARE MAINSPRAY. 3 LITRES OF MAINSPRAY (PRODUCT CODE A2997) CONTAINED IN 5 LITRE SCREW TOPPED CONTAINER **(1)**. REMOVE SACHET, TAPED TO CONTAINER, CUT OPEN AND POUR INTO CONTAINER. REPLACE CONTAINER CAP AND SHAKE CONTAINER TO MIX.
2. **OPEN PRESSURE RELEASE VALVE (2) ON SIDE OF PRESSURE POT TO RELEASE PRESURE INSIDE POT.**
3. SWING LOCKING DISCS **(3)** TO LEAVE CLEAR OF LID. REMOVE LID **(4)** (SOME RESISTANCE WILL BE FELT DUE TO 'O' RING 'STICK' BETWEEN LID**(4)** AND TOP FLANGE).
4. REMOVE CONTAINER CAP AND PLACE CONTAINER **(1)** INSIDE PRESURE POT LEAVING NECK IN LINE WITH ADJACENT '**V**' STAMPED ON POT FLANGE.
5. REPLACE PRESSURE POT LID **(4)** ENSURING SEALANT SUCTION TUBE **(5)** ENTERS CONTAINER **(1)** OUTLET.
6. SWING LOCKING DISCS **(3)** SO THAT THE LID **(4)** IS CAPTIVE. CLOSE PRESSURE RELEASE VALVE **(2)** AND SEALANT SUCTION TUBE **(5)** VALVE.
7. CONNECT HAND PUMP **(6)** TO LID VIA QUICK CONNECTOR (PCL) **(7)**. NOTE NON-RETURN VALVE **(8)** FITTED BELOW CONNECTOR TO PREVENT LOSS OF PRESSURE WHEN PUMP IS ON RETURN STROKE.
8. CONNECT SEALANT DELIVERY TUBE **(9)** END TO PRESSURE POT, THEN CONNECT OTHER END TO NIPPLE ON JOINT TO BE TREATED ALLOWING LEAKING GAS (IF ANY) TO 'CHARGE' POT AND LINE
9. LIFT PRESSURE POT ASSEMBLY ONTO SPRING BALANCE **(10)** ON SUPPORT FRAME **(11)** AND NOTE WEIGHT READING. NOTE - NUMBER **1** ON BALANCE SCALE DENOTES **1 kg** or **1000 grms.**



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10. THE PRESSURE POT IS PRESSURISED USING THE HAND PUMP **(6)**. **MAX PRESSURE 3 BAR (45 PSI)**. NOTE - PRESSURE POT IS FITTED WITH PRESSURE RELEASE SAFETY VALVE **(12)** WHICH WILL RELIEVE AT 4 BAR.
11. PRESSURISE TO JUST ABOVE MAINS PRESSURE, CHECKING PRESSURE GAUGE ON POT **(13)**, OPEN VALVE ON SEALANT SUCTION TUBE AND CHECK FOR MOVEMENT ON SPRING BALANCE SCALE. FLOW RATE SHOULD TAKE IN THE REGION OF 20-30 MINUTES.
NOTE - TO CHECK MAINS PRESSURE. CONNECT SEALANT DELIVERY TUBE TO INJECTION NIPPLE AND ALLOW POT TO PRESSURISE. MAINS PRESSURE CAN BE CHECKED ON PRESSURE POT GAUGE.
12. IDEALLY, SEALANT SHOULD FLOW AT APPROX. 1000 grms (1 litre) / 10 MINUTES. IF THE FLOW IS SLOW OR THERE IS NO FLOW APPARENT INCREASE PRESSURE USING HAND PUMP **(6)**.
13. DURING THE INJECTION PROCESS LEAK DETECTION FLUID CAN BE USED TO CHECK LEAKAGE RATE.

SEALANT QUANTITIES - GUIDELINE ONLY

PIPE SIZE	3 - 6	8 - 10	12 - 14	16 - 18	24+
SEALANT QTY (grms)	500	1000	1500	2500	3000

CLEANING

ALL EQUIPMENT MUST BE THOROUGHLY CLEANED AFTER USE. REPLACE SEALANT CONTAINER WITH CONTAINER CONTAINING WATER. AFTER DISCONNECTING SEALANT DELIVERY TUBE FROM JOINT, PRESSURISE THE POT, OPEN THE SEALANT SUCTION TUBE VALVE AND WASH OUT EQUIPMENT COLLECTING ALL WASHINGS IN AN EMPTY SEALANT CONTAINER.

RETURN ALL EMPTY SEALANT CONTAINERS, AND ALL THOSE CONTAINING WASHINGS, TO DEPOT.



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MAINTENANCE SCHEDULE

THIS IS A PRESSURISED VESSEL AND FAILURE TO MAINTAIN TO A HIGH STANDARD CAN RESULT IN FAILURE OF COMPONENT PARTS AND THUS PRESENT A DANGER TO OPERATIVES.

IT MUST ONLY BE USED WITH THE HAND PUMP PROVIDED AND **NEVER** WITH ANY OTHER SUPPLY. E.G. COMPRESSOR OR PRESSURISED BOTTLE.

DAILY CHECKS -

1. CHECK THAT ALL LOCKING DISCS (3) ROTATE FREELY AND THAT LOCKING DISCS RETAINING BOLTS ARE SECURE IN THE POT LID (4) (THE BOLTS ARE FIXED USING BOLT RETAINING ADHESIVE).
2. CHECK CONDITION OF 'O' RING ON LID (4).
3. CHECK FUNCTION OF PRESSURE RELEASE VALVE (2) ON SIDE OF POT.
4. CHECK VALIDITY OF PRESSURE GAUGE READING. THIS CAN BE DONE USING THE GAUGE ON THE HAND PUMP. NOTE: THIS BE DONE ON THE DOWNWARD STROKE OF THE PUMP ONLY AS THE NON-RETURN VALVE PREVENTS RELEASE OF PRESSURE TO THE PUMP ON THE UPWARD STROKE.

WEEKLY CHECKS -

1. PRESSURISE TO 4 BAR TO CHECK FUNCTION OF PRESSURE RELIEF VALVE

ANNUAL CHECKS - FULL SERVICE. (THIS CAN BE CARRIED OUT BY ALH SYSTEMS)

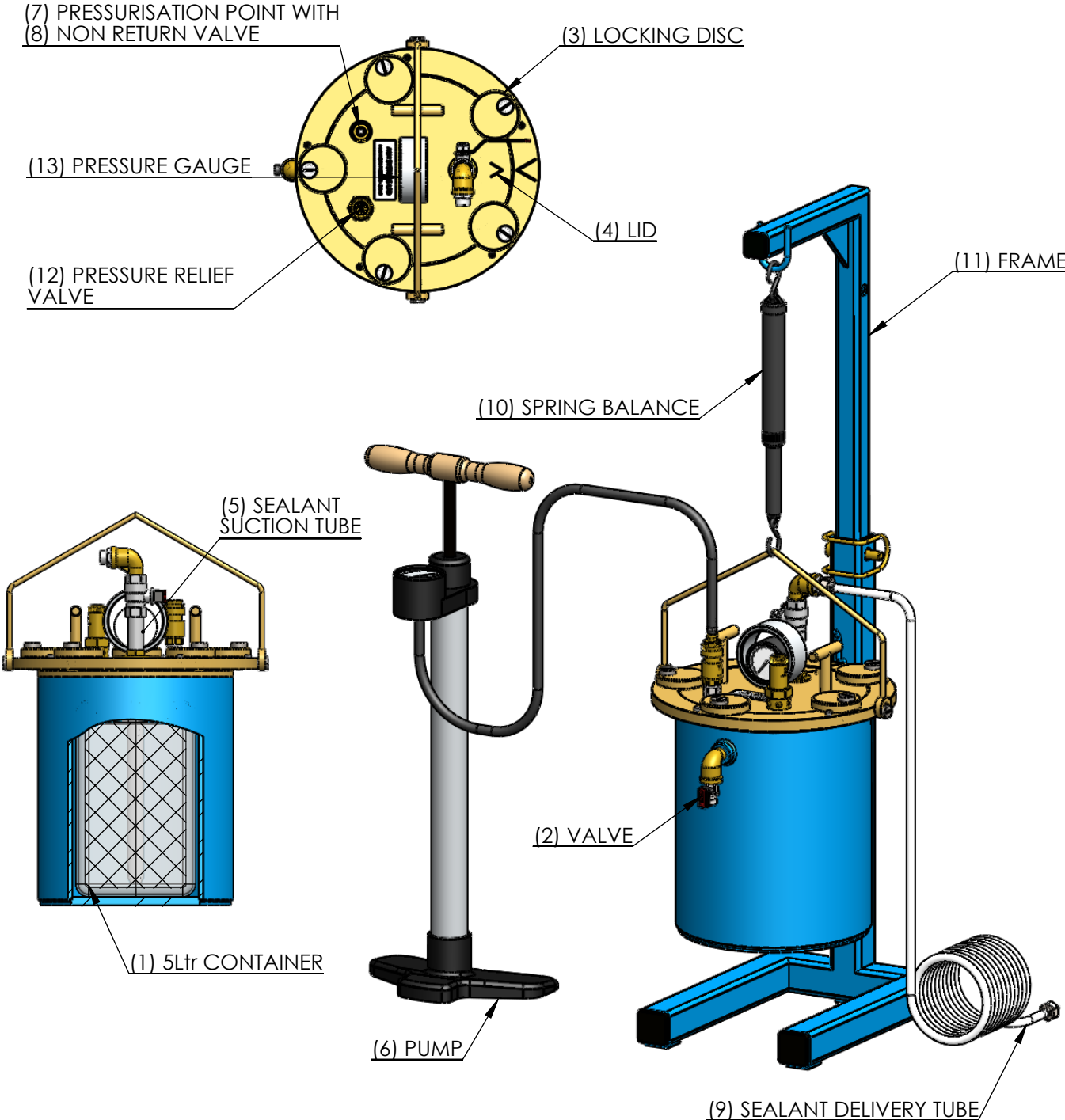
2. REPLACE LID 'O' RING
3. REPLACE PRESSURE GAUGE
4. REPLACE LOCKING DISC RETAINING BOLTS
5. REPLACE BALL VALVE
6. REPLACE ELBOW ON THE SUCTION LINE
7. REPLACE PRESSURE RELEASE VALVE ON SIDE OF POT
8. REPLACE RELIEF VALVE



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LARGE DIAMETER MAINSPRAY INJECTION PRESSURE POT ARRANGEMENT

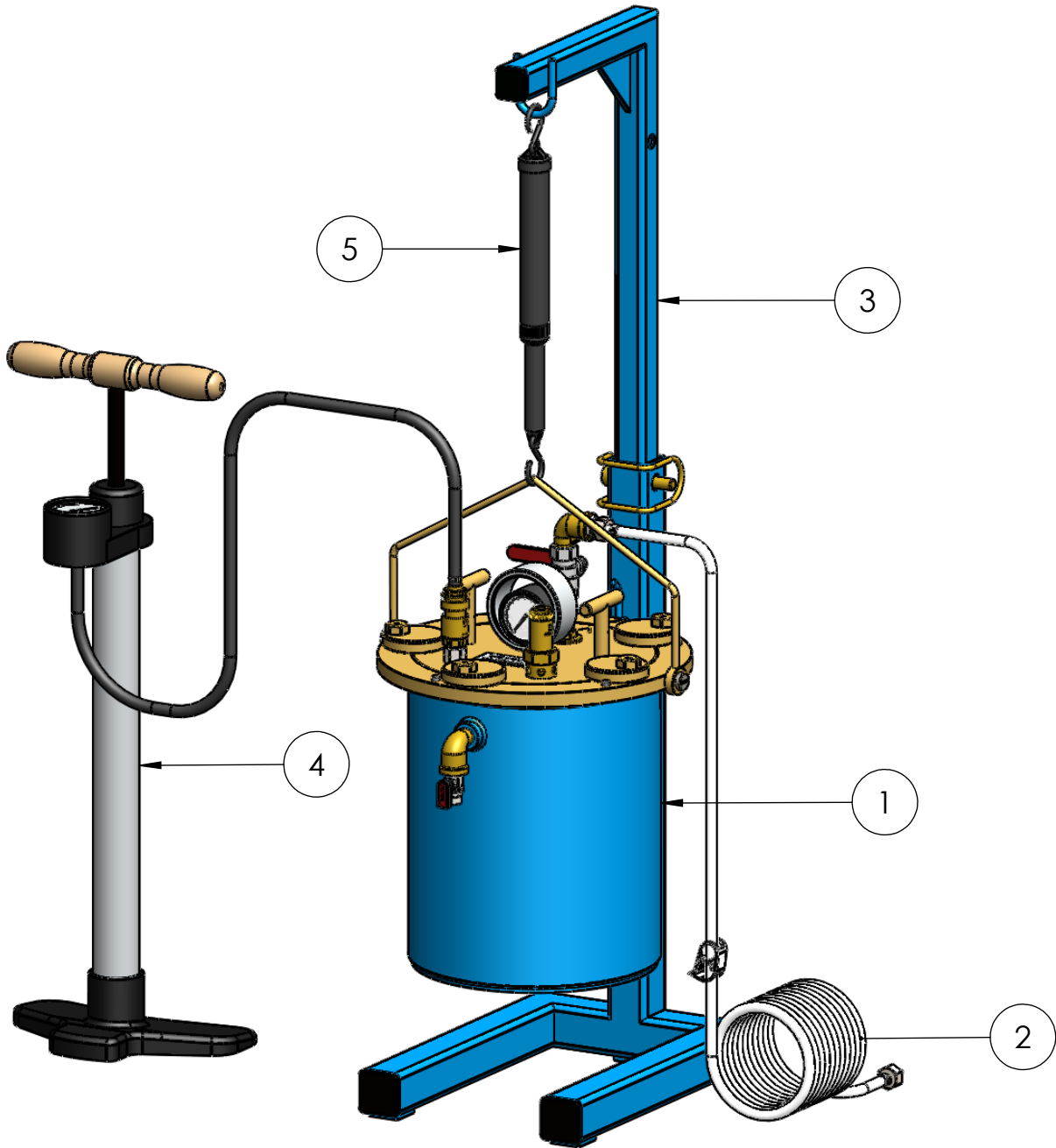


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PARTS LIST

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	154-9001	PRESSURE POT ASSEMBLY	1
2	154-9004	MAINSPRAY INJECTION HOSE ASSEMBLY	1
3	154-9005	PRESSURE POT STAND ASSEMBLY	1
4	154-9006	PRESSURE POT PUMP	1
5	M4226	SPRING BALANCE	1

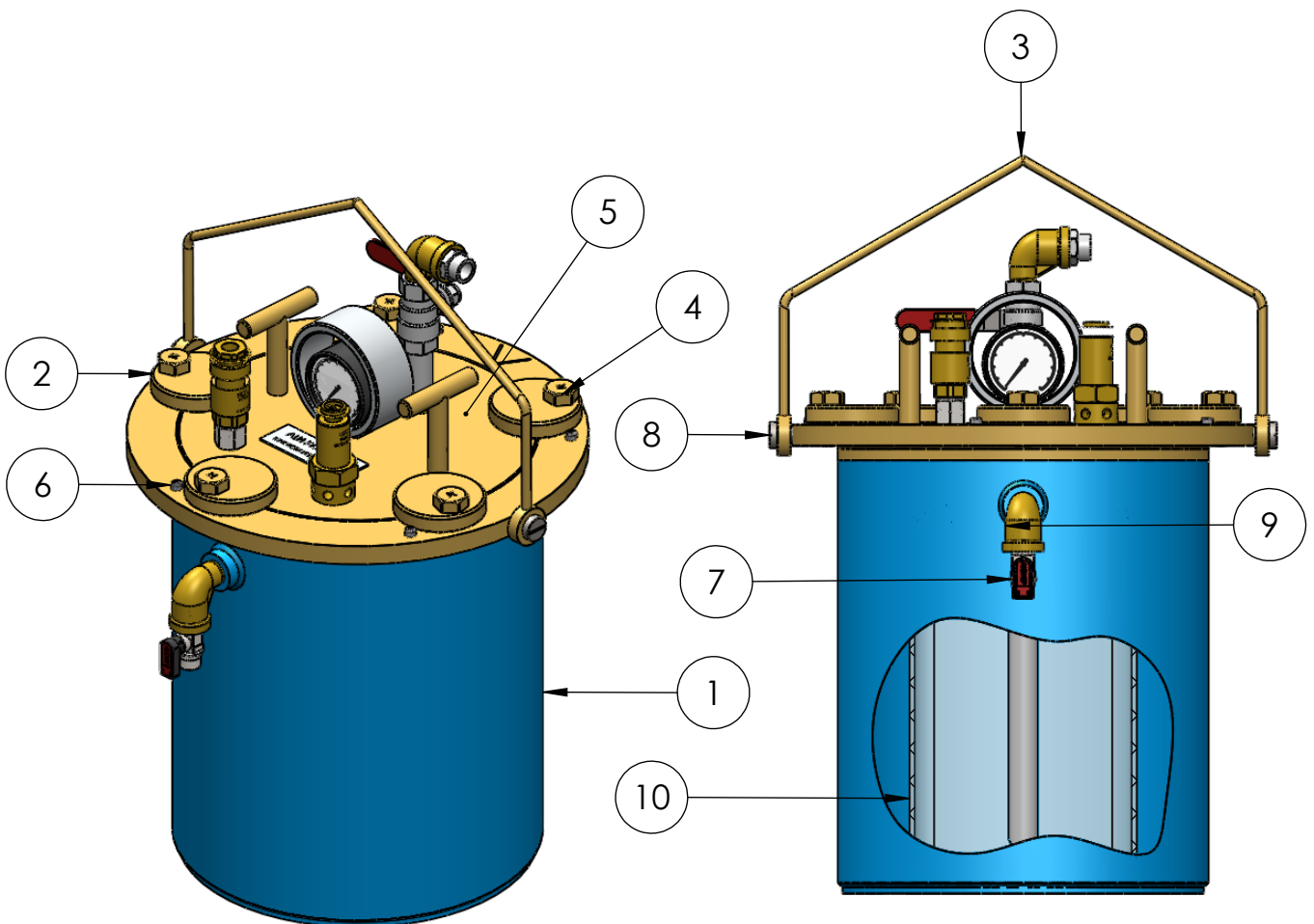


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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	154-0001	LARGE DIAMETER MAINSPRAY INJECTION PRESSURE POT	1
2	154-0003	LID LOCKING DISC	5
3	154-0004	HANDLE FOR PRESSURE POT	1
4	154-0012	BOLTS FOR PRESSURE POT LID	5
5	154-9002	PRESSURE POT LID ASSEMBLY	1
6	S0004	CAP HEAD BOLT	5
7	M3098	BALL VALVE	1
8	M4224	SHOULDER SCREW	2
9	M4233	EQUAL ELBOW	1
10	G6000	5Ltr CONTAINER	1

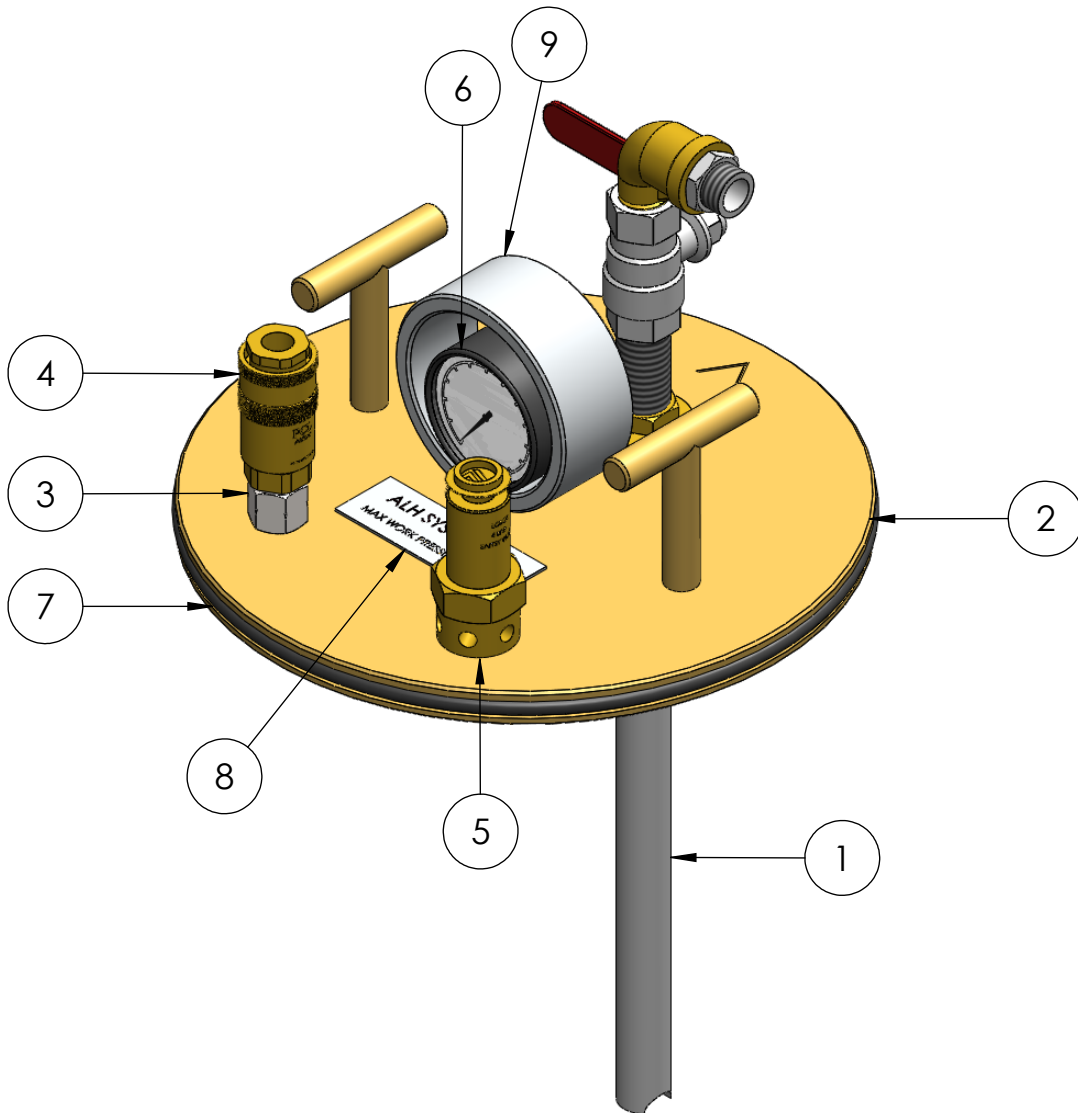


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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	154-9003	PRESSURE POT SUCTION TUBE ASSY	1
2	154-0002	PRESSURE POT LID	1
3	M2007	NON RETURN VALVE	1
4	M4232	COUPLING	1
5	M9285	SAFETY VALVE	1
6	M4234	PRESSURE GAUGE	1
7	M4225	O RING	1
8	154-0007	PRESSURE POT LABEL	1
9	154-0009	GAUGE PROTECTOR	1

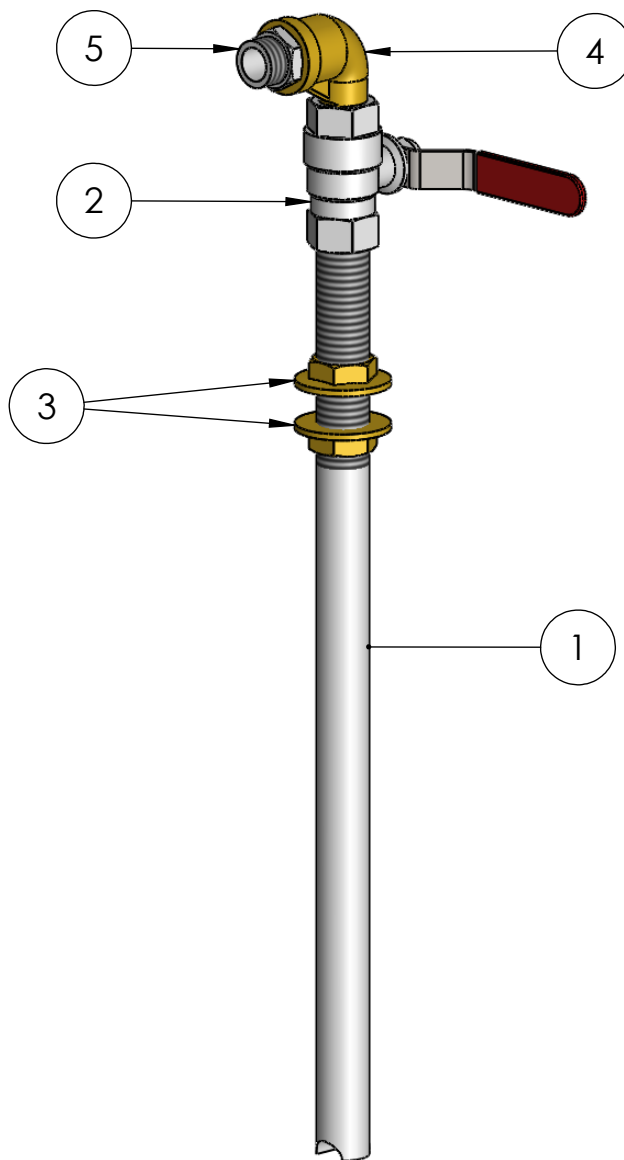


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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	154-0006	PRESSURE POT SUCTION TUBE	1
2	P0522	BALL VALVE	1
3	M4217	FLANGED NUT	2
4	F0160	EQUAL ELBOW	1
5	M4243	EQUAL ADAPTOR	1



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