

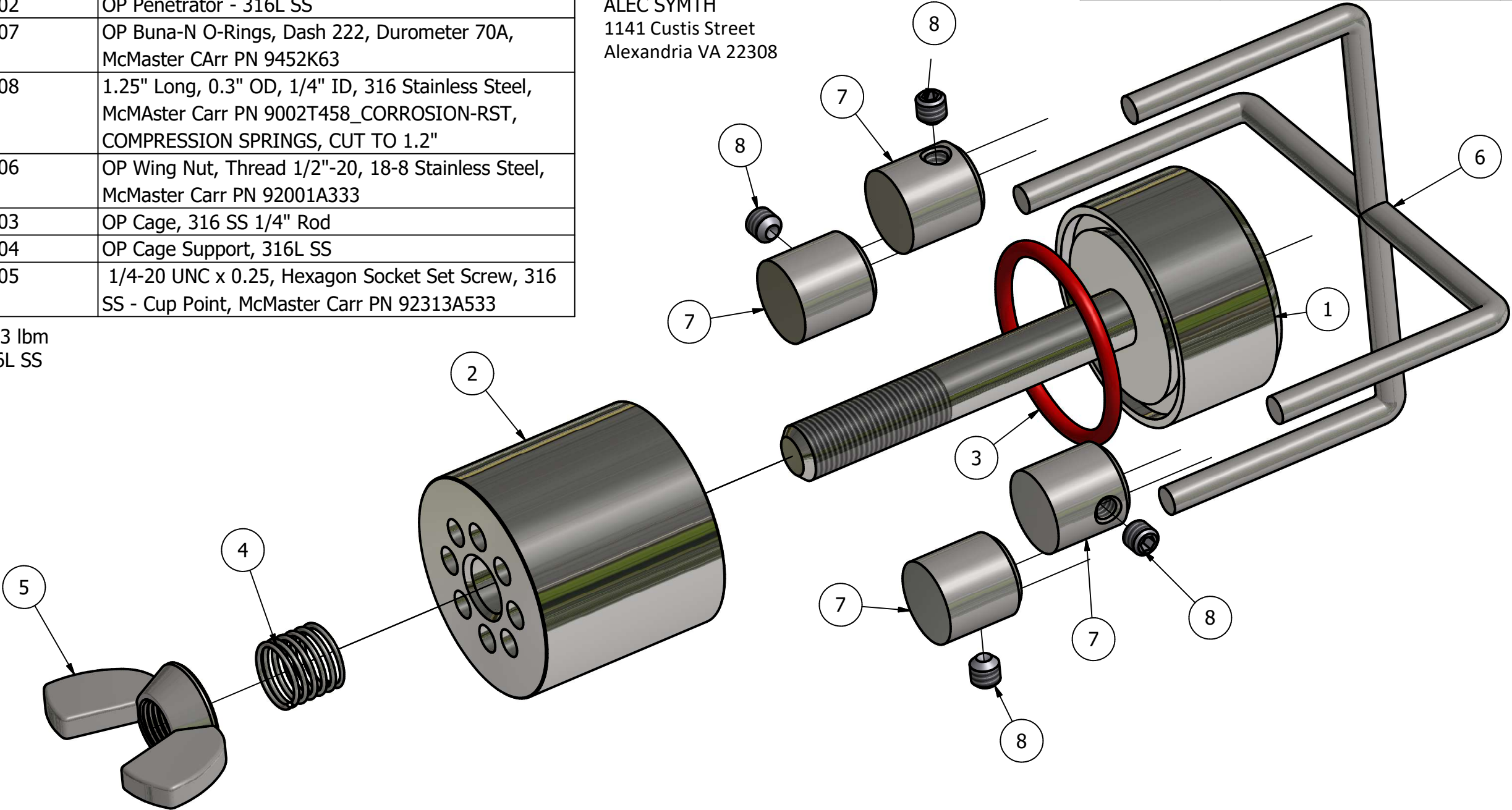
PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	OP-01	Overpressure Cap - 316 SS
2	1	OP-02	OP Penetrator - 316L SS
3	1	OP-07	OP Buna-N O-Rings, Dash 222, Durometer 70A, McMaster CArr PN 9452K63
4	1	OP-08	1.25" Long, 0.3" OD, 1/4" ID, 316 Stainless Steel, McMaster Carr PN 9002T458_CORROSION-RST, COMPRESSION SPRINGS, CUT TO 1.2"
5	1	OP-06	OP Wing Nut, Thread 1/2"-20, 18-8 Stainless Steel, McMaster Carr PN 92001A333
6	1	OP-03	OP Cage, 316 SS 1/4" Rod
7	4	OP-04	OP Cage Support, 316L SS
8	4	OP-05	1/4-20 UNC x 0.25, Hexagon Socket Set Screw, 316 SS - Cup Point, McMaster Carr PN 92313A533

OP VALVE WAS DESIGNED AND FABRICATED BY ALEC SYMTH

ALEC SYMTH
1141 Custis Street
Alexandria VA 22308

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	1	Initial	11/24/2020	CLR
	2	ADDED NOTES	11/28/2020	CLR

WEIGHT 1.333 lbm
MATERIAL 316L SS



NOTES:

- 1) PURPOSE IS TO VENT CABIN PRESSURE WHEN PRESSURE EXCEEDS AMBIENT PRESSURE BY CRACKING PRESSURE
- 2) THE OP VALVE SHOULD BE ASSEMBLED AS HIGH AS POSSIBLE
- 3) THE HULL PENETRATOR IS MADE OF 316L STAINLESS STEEL
- 4) THE CRACKING PRESSURE DEPENDS ON COMPRESSION OF SPRING OP-08 AND POSITION OF WINGNUT
- 5) VISUAL INSPECTION THAT THE O-RING IS LANDED IN O-RING GROVE IS RECOMMENDED PRIOR TO SUBMERGING
- 6) O RING GLAND GROVE HAS AN INNER DOVEFACE TO KEEP THE GLAND FROM INADVERTENTLY BECOMING DISLODGED
- 7) GLAND SEAT IS DEEPER THAN NORMAL BECAUSE THE VALVE IS DESIGNED TO SEAT WITH MINIMAL DIFFERENTIAL PRESSURE
- 8) GAGE SUPPORTS, 7 SHOULD BE GROUNDED AND WELDED TO HATCH. MATCH CURVATURE OF HATCH
- 9) MAXIMUM OPERATING PRESSURE TBT, CRACKING PRESSURE TBT
- 10) DO NOT INSTALL THE OP VALVE IN AN INVERTED POSITION

DRAWN ALEC SYMTH	11/24/2020	ALEC SYMTH		
CHECKED CLR	11/24/2020			
QA		TITLE		
MFG AS	11/24/2020	OP Valve		
APPROVED AS	11/24/2020			
		SIZE B	DWG NO OP Valve Assembly	REV 1
		SCALE	SHEET 1 OF 1	