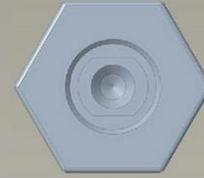
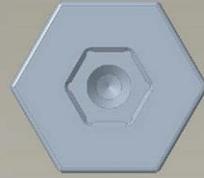


SMALL QUICK CAN COMPONENTS

LARGE QUICK CAN COMPONENTS

HFIR PAC CAN COMPONENTS

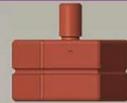
TORQUE NUTS



CAN SPACERS



QUICK CAN CU LIDS



PAC CAN AL LIDS

IN GASKETS

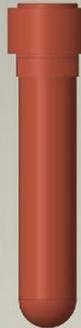


CU GASKETS

SMALL AL QUICK CANS



LARGE CU QUICK CANS



PAC CANS

SMALL CU QUICK CANS



X.X+0.1
X.XX+0.01
X.XXX+0.005
ANG.+0.5

8

7

6

5

4

3

2

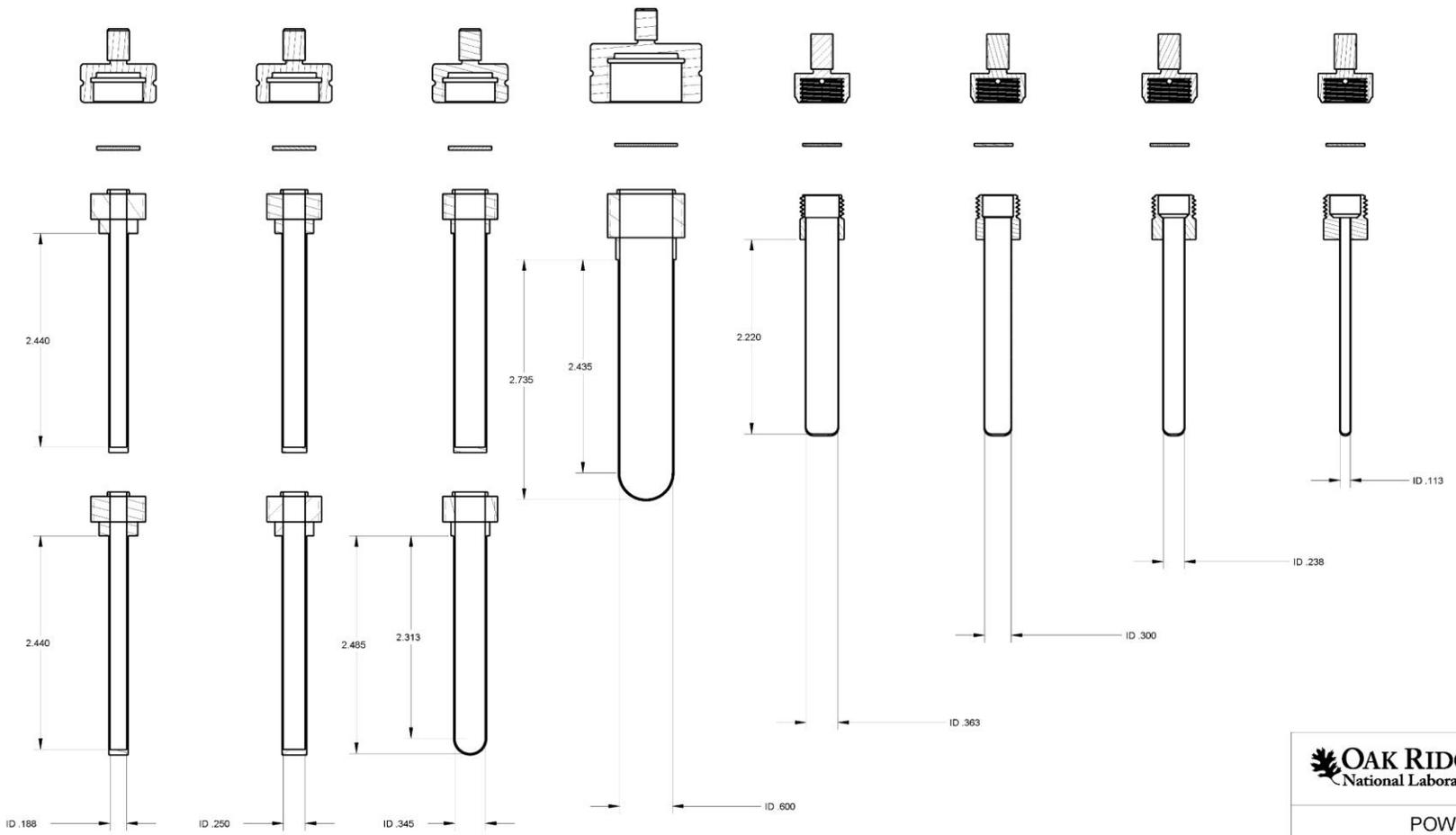
1

D

<p>SMALL QUICK CAN LIDS 110 COPPER STEM HEIGHT: 0.400" STEM THREAD: 1/4" - 28</p>	<p>LARGE QUICK CAN LIDS 110 COPPER STEM HEIGHT: 0.400" STEM THREAD: 1/4" - 28</p>	<p>HFIR PAC CAN LIDS 6061 T-6 AL STEM HEIGHT: 0.400" STEM THREAD: 1/4" - 28</p>
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D

C



C

B

B

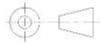
A

A

OAK RIDGE National Laboratory | HIGH FLUX ISOTOPE REACTOR | SPALLATION NEUTRON SOURCE

**POWDER CANS
 X-SECTIONS
 DIMENSIONS**

DRAWING NUMBER		POWDERCANS		REV
SIZE	SCALE	WEIGHT	SHEET	
D	3:2	1 LB	1 of 1	



8

7

6

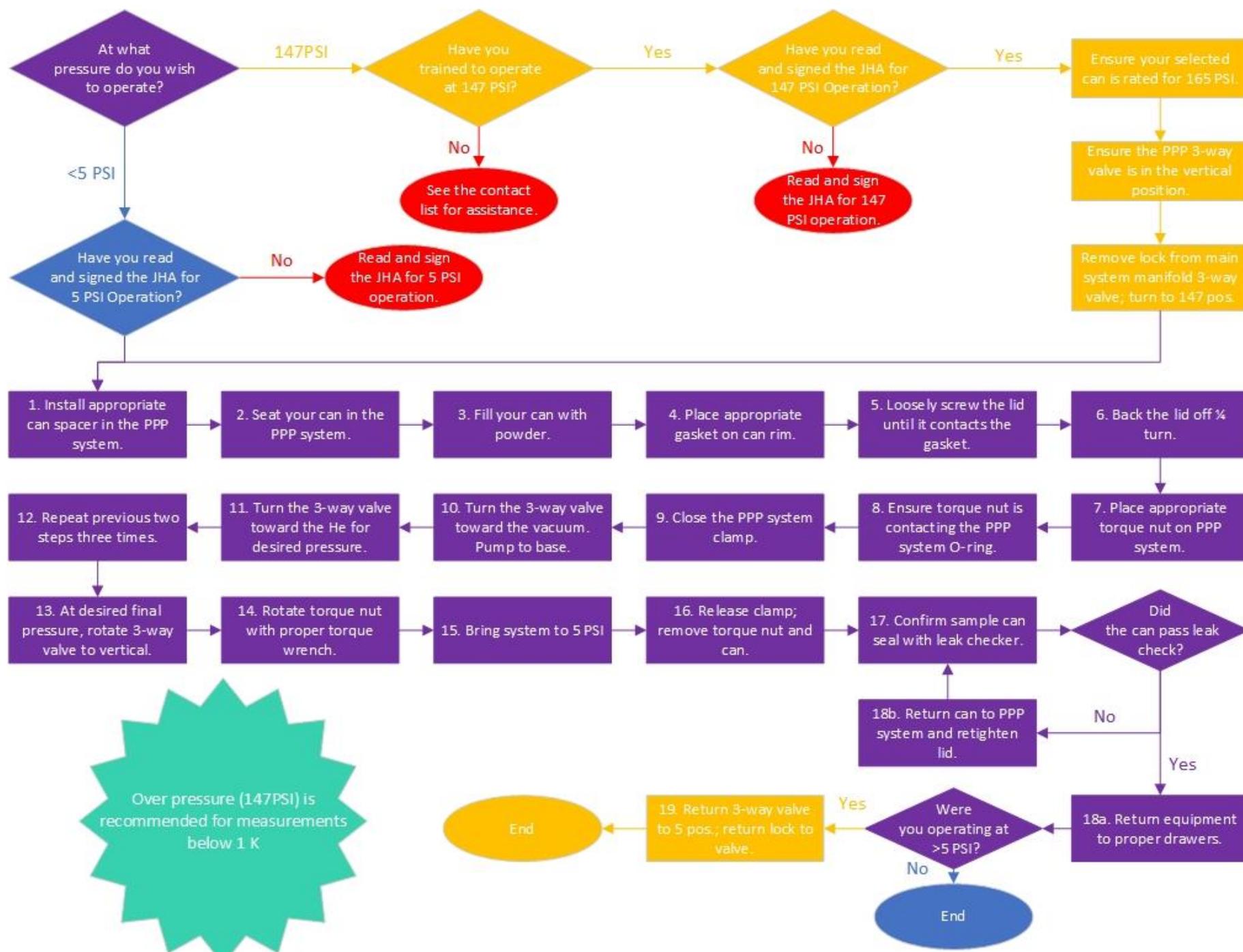
5

4

3

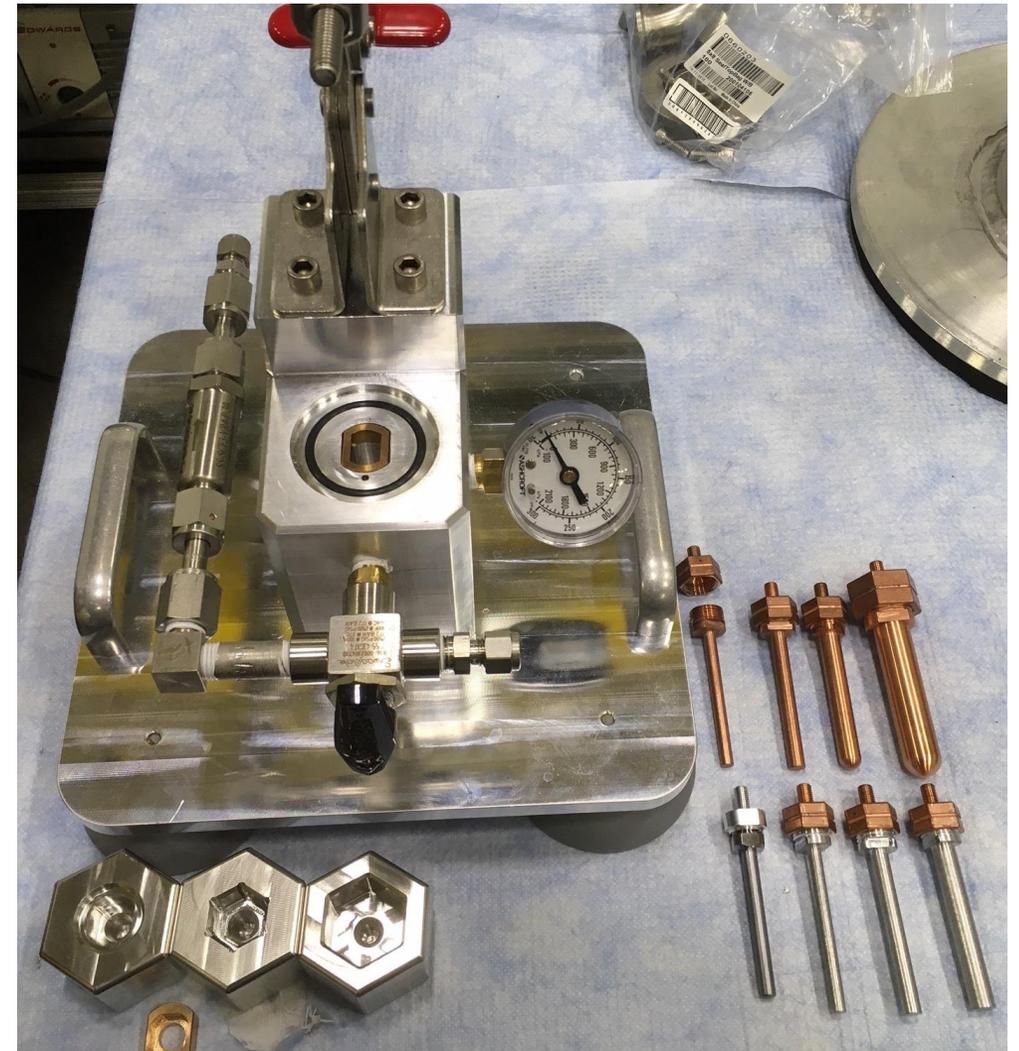
2

1



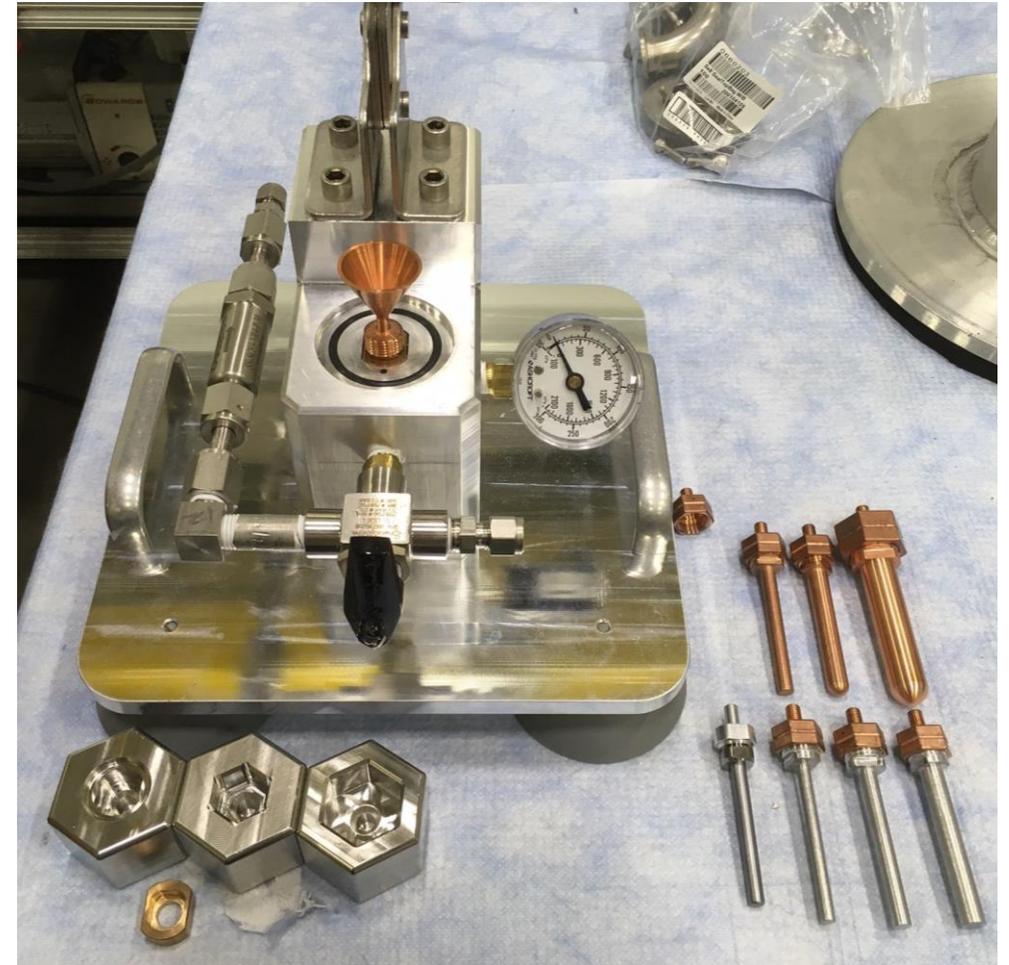
INITIAL SETUP

- CHOOSE YOUR CAN
 - USE THE DIMENSIONS SEEN ABOVE TO SELECT THE PROPER VOLUME OF CAN FOR THE VOLUME OF SAMPLE
- CHOOSE YOUR SPACER, GASKET, LID, AND TORQUE NUT TO MATCH THE CAN
- TEST FIT THE LID TO CAN, LID TO TORQUE NUT AND CAN TO SPACER
- CLEAN ALL PARTS TO THE STANDARD OF YOUR LABORATORY (THOROUGHLY)



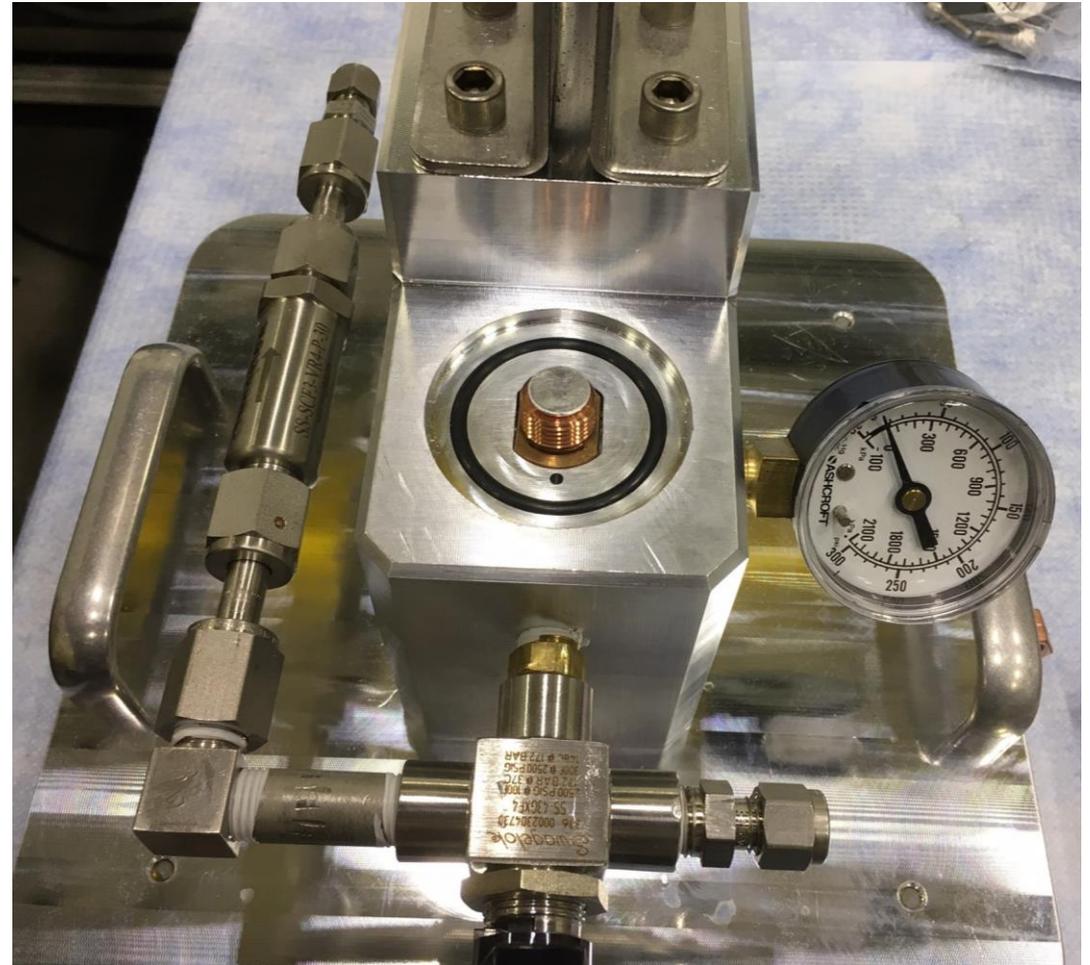
FILL THE CAN

- INSTALL THE APPROPRIATE SPACER IN THE PUMP/PURGE/PRESSURE BLOCK
- INSERT THE CAN INTO THE CHAMBER ALIGNING IT WITH THE SPACER
 - THE CANS FIT EASILY; DO NOT FORCE A CAN INTO A SPACER
 - THE LARGE CANS REQUIRE NO SPACER
- USE A FUNNEL TO ENSURE ALL POWDER ENTERS THE CAN
- PACK THE POWDER
- REMOVE THE FUNNEL AND CLEAN THE TOP OF THE CAN



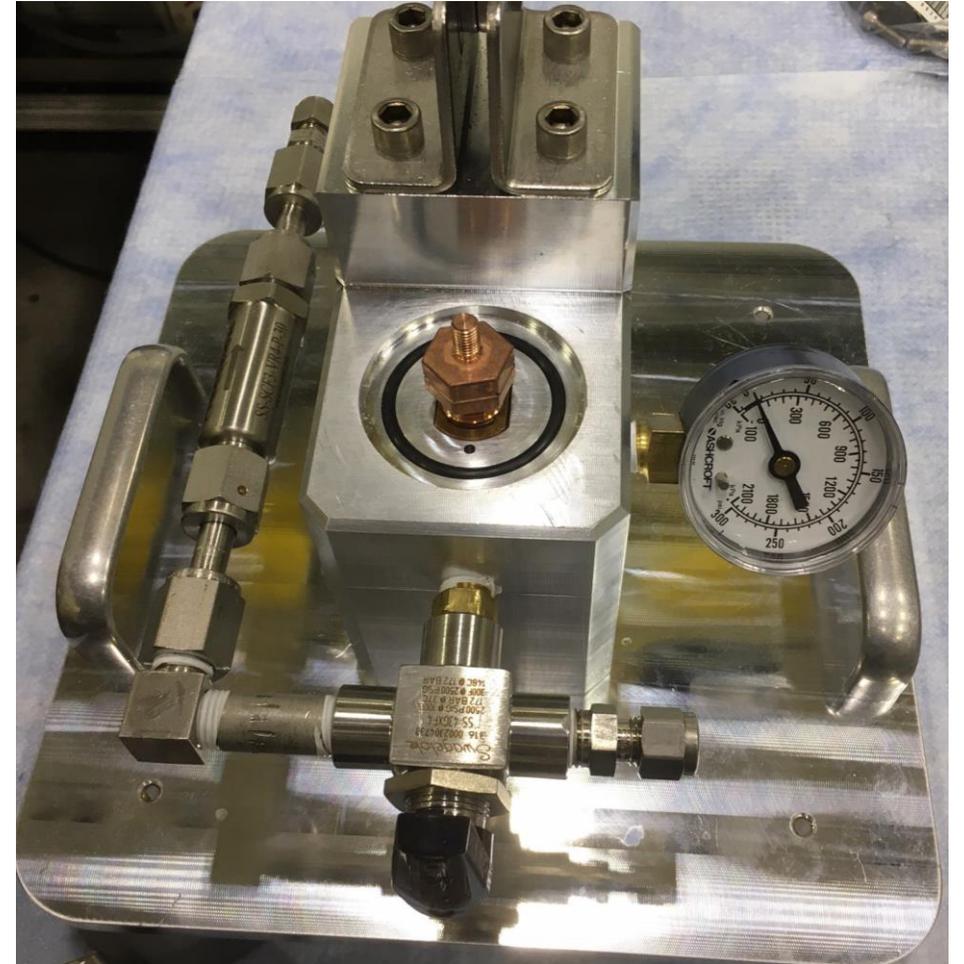
INSTALL THE GASKET

- ENSURE THE TOP OF THE CAN IS FREE OF POWDER OR DEBRIS
- CENTER THE APPROPRIATE GASKET ON THE TOP OF THE CAN
 - YOU MAY FIND IT EASIER TO ADD A VERY SMALL DAB OF VACUUM GREASE TO THE TOP SIDE OF THE GASKET AND ADHERING IT TO THE INSIDE TOP OF YOUR LID THEN SCEWING THE ENTIRE LID DOWN



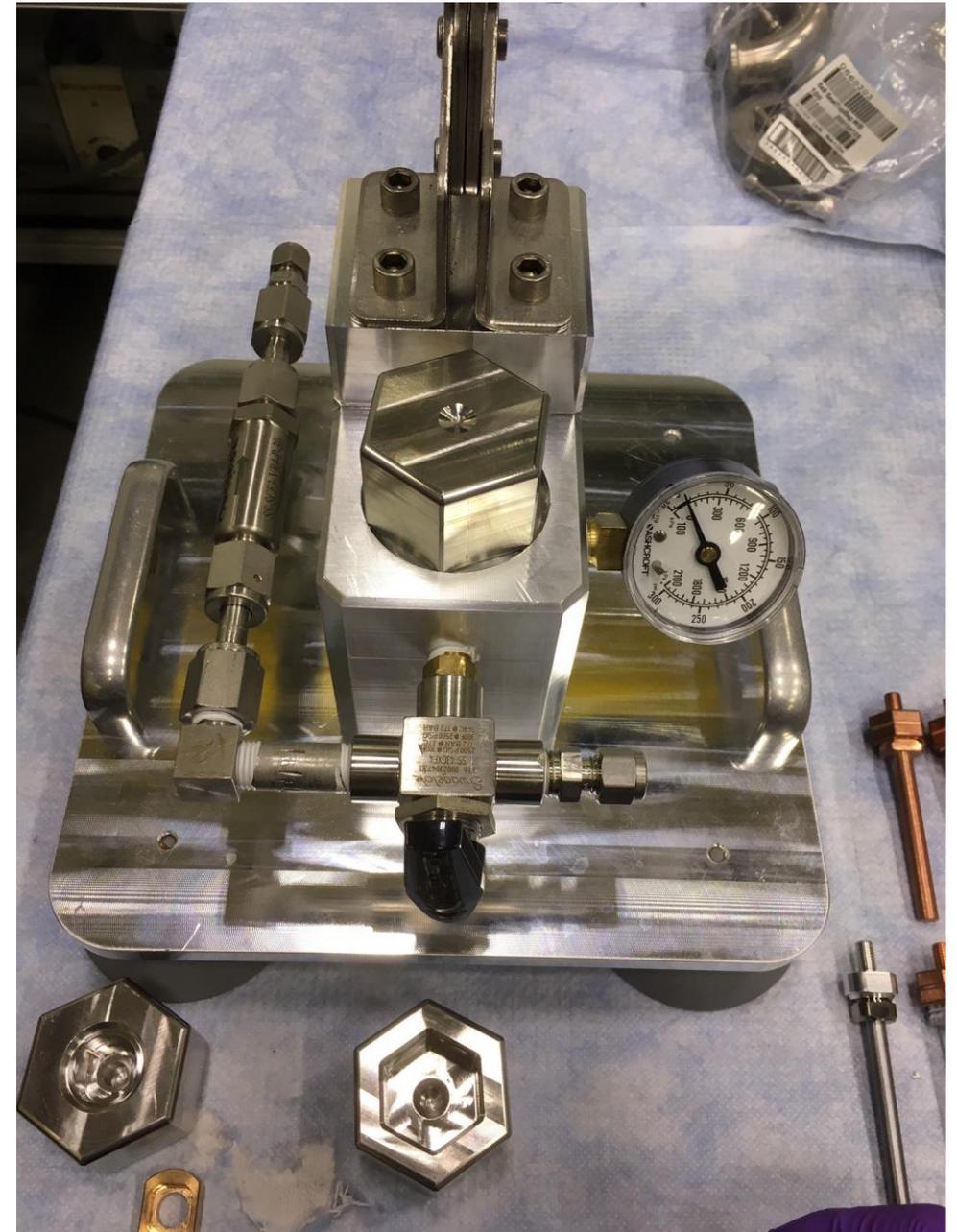
INSTALL THE LID

- CAREFULLY, THREAD THE LID DOWN UNTIL YOU FEEL THE LID/GASKET/CAN MAKE CONTACT
- UNSCREW THE LID 1/8 TO 1/4 TURN
 - THE LID MUST BE LOOSE ENOUGH TO ALLOW THE GAS TO ENTER THE CAN UNDER THE GASKET
 - THE LID MUST BE TIGHT ENOUGH TO ALLOW THE CLAMP TO CLOSE OVER THE TORQUE NUT
 - IT HELPS WITH TORQUE NUT INSTALLATION IF ONE OF THE POINTS OF THE LID IS UN LINE WITH YOUR VIEW



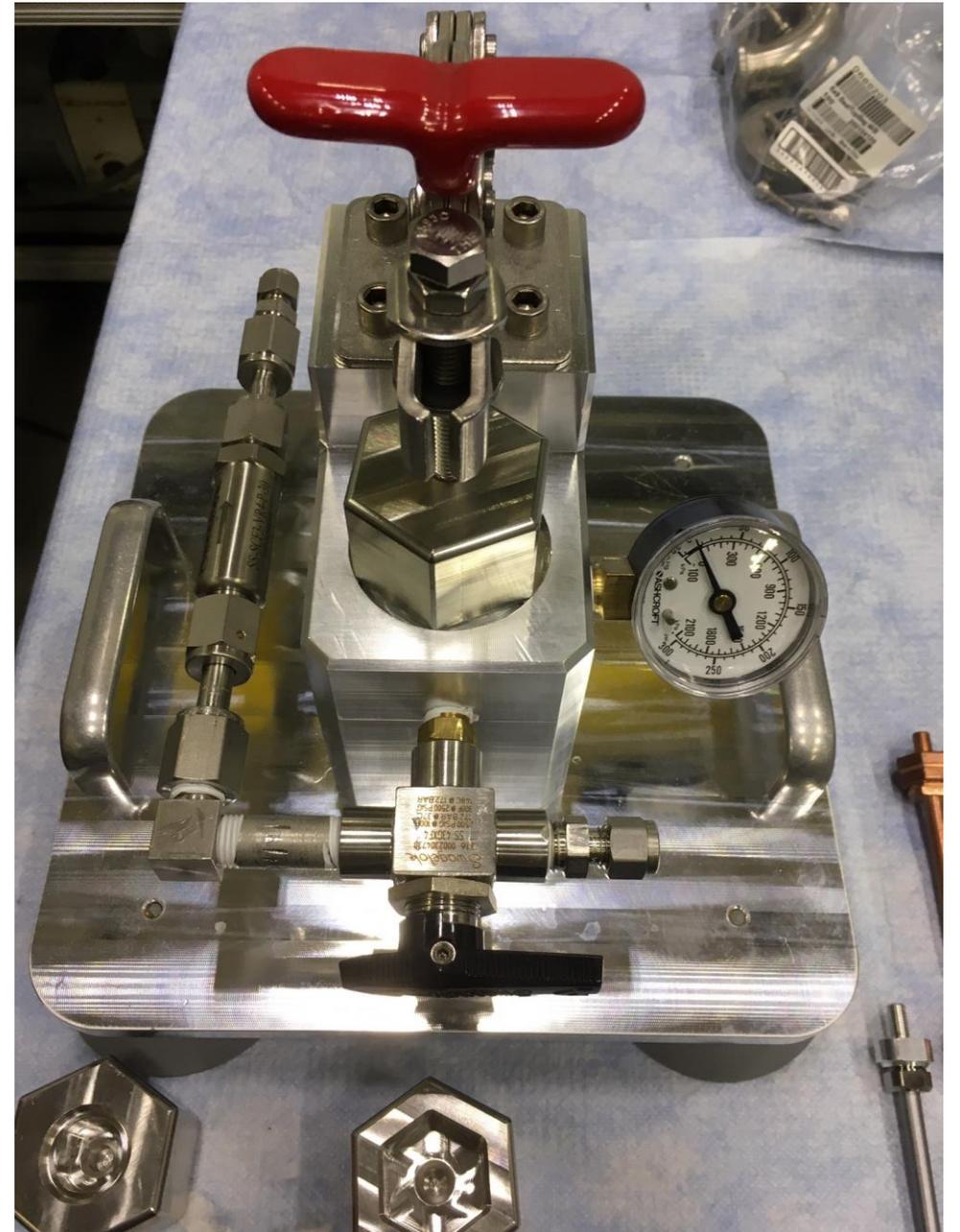
INSTALL THE TORQUE NUT

- ENSURE THE SEALING FACE OF THE TORQUE NUT IS CLEAN AND FREE OF DEBRIS
- ENSURE THE O-RING IS CLEAN AND FREE OF DEBRIS
- PLACE THE TORQUE NUT OVER THE LID
- CLOSE THE CLAMP
 - IF THE CLAMP WILL NOT CAM DOWN, DO NOT FORCE IT – IT IS POSSIBLE THE CAN IS UNSCREWED TOO FAR OR SOMETHING IS MISALIGNED



PUMP THE SYSTEM

- TURN THE VALVE CLOCKWISE TO THE VACUUM
- WAIT 5-10 MINUTES TO ENSURE MOST OF THE AIR IS REMOVED



PURGE THE SYSTEM

- TURN THE VALVE COUNTERCLOCKWISE TO THE HE SUPPLY
- TURN THE VALVE UNTIL IT IS POINTING DOWNWARD TO STOP THE INCREASING THE PRESSURE
 - LOW PRESSURE OPERATION SHOULD STOP AUTOMATICALLY AT <5 PSI
 - HIGH PRESSURE SHOULD STOP AT <165 PSI



PUMP/PURGE THE SYSTEM

- REPEAT THE PUMP/PURGE FOR 3 CYCLES



TORQUE THE LID

- LOW PRESSURE CANS SHOULD BE TORQUED TO 150 IN LBS
- HIGH PRESSURE CANS SHOULD BE TORQUED TO 220 IN LBS



SS-430XF4
172 BAR @ 37C
172 BAR @ 37C
300F @ 2500 PSIG
148C @ 172 BAR

RETURN CHAMBER TO 1 ATMOSPHERE

- USING THE VACUUM AND/OR HE SUPPLY, ADJUST THE PRESSURE IN THE CHAMBER TO 1 ATMOSPHERE
- DO NOT ATTEMPT TO OPEN THE CLAMP IF THE PRESSURE IS >1 ATM!



REMOVE THE CAN

- OPEN THE CLAMP
 - IF THE CLAMP SEEMS STUCK, CHECK THAT THE PRESSURE IS AT 1 ATM
- REMOVE THE TORQUE NUT
 - IF THE CAN COMES OUT WITH THE TORQUE NUT, WIGGLING A SMALL HEX WRENCH IN ONE OF THE RELIEF HOLES SHOULD POP IT LOOSE
- REMOVE THE CAN
- LEAK CHECK

