

	NAME	DATE
DRAWN/ENG.	JAKE MALLET	2004
UNITS	inches	
TOLERANCES	+/- .01	
MATERIAL	Aluminum	
FINISH	None	

COMMENTS	QUANTITY	x 1
All Pipe Taps are 1/8 NPT as Indicated		

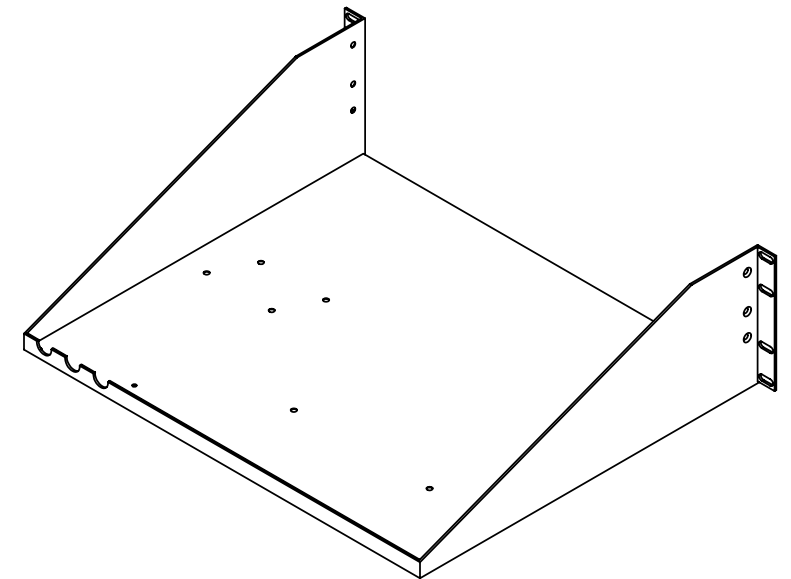
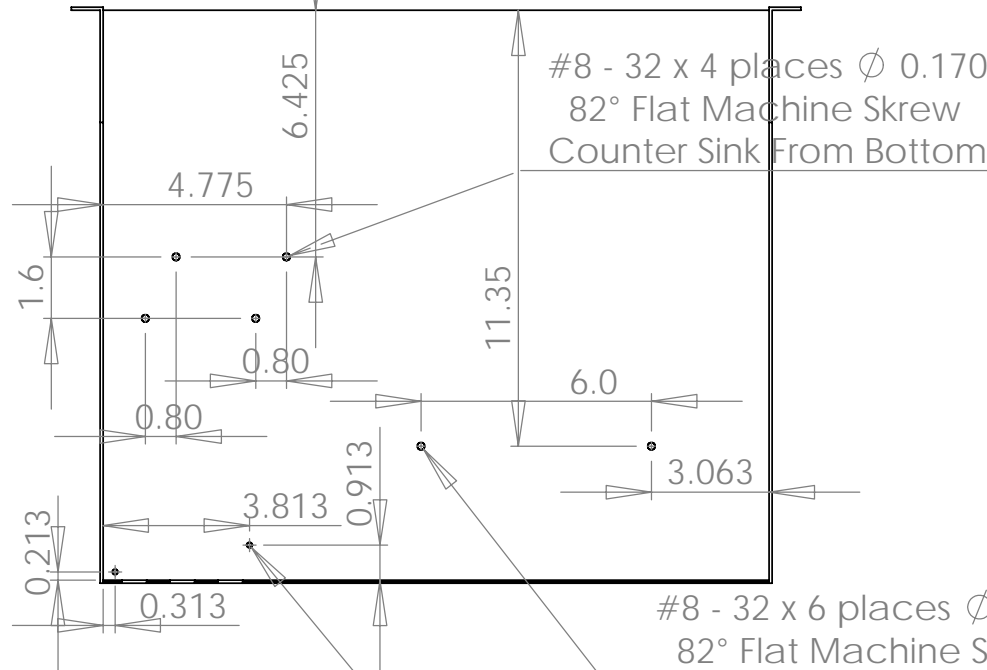
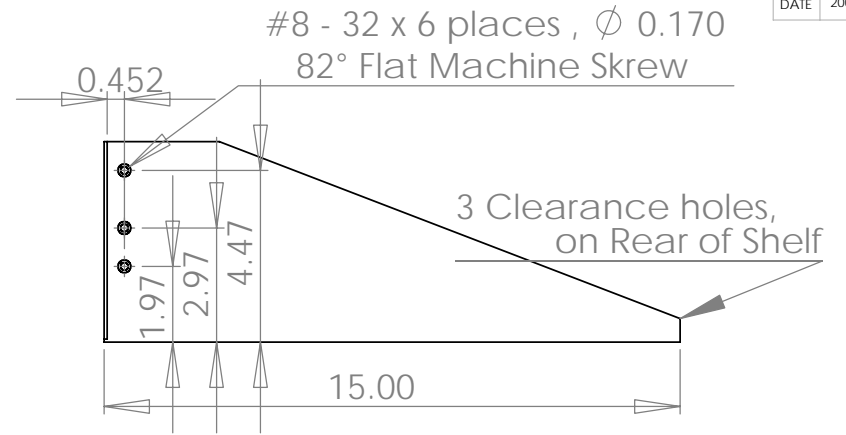
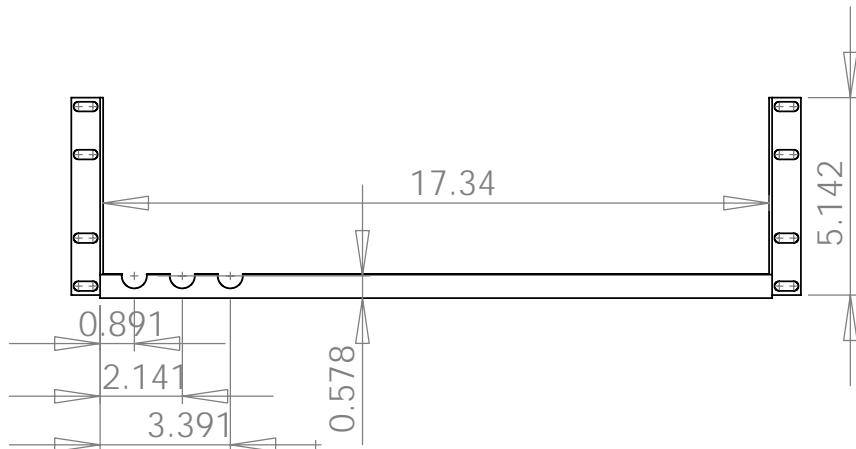
NOAA - CMDL

TITLE:
Al. Flow Manifold Block For CNC

SIZE	DWG. NO.	REV
A		

SCALE: 1:1

SHEET 1 OF 1



#8 - 32 x 4 places ϕ 0.170
82° Flat Machine Skrew
Counter Sink From Bottom

#8 - 32 x 6 places ϕ 0.170
82° Flat Machine Skrew
Counter Sink From Bottom

#6 - 32 x 2 places ϕ 0.144
82° Flat Machine Skrew
Counter Sink From Bottom

	NAME	DATE
DRAWN/ENG.	JAKE MALLET	2004
UNITS	inches	
TOLERANCES	+/- .01	
MATERIAL	Steel	
FINISH	None	
COMMENTS	QUANTITY	x 1

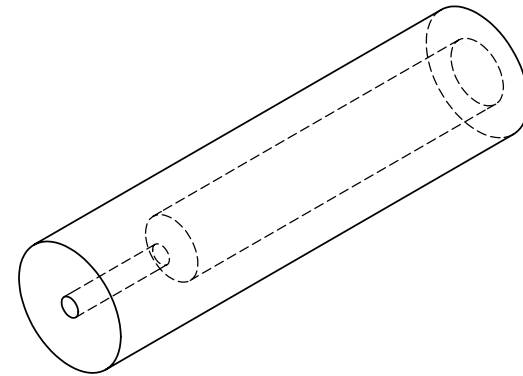
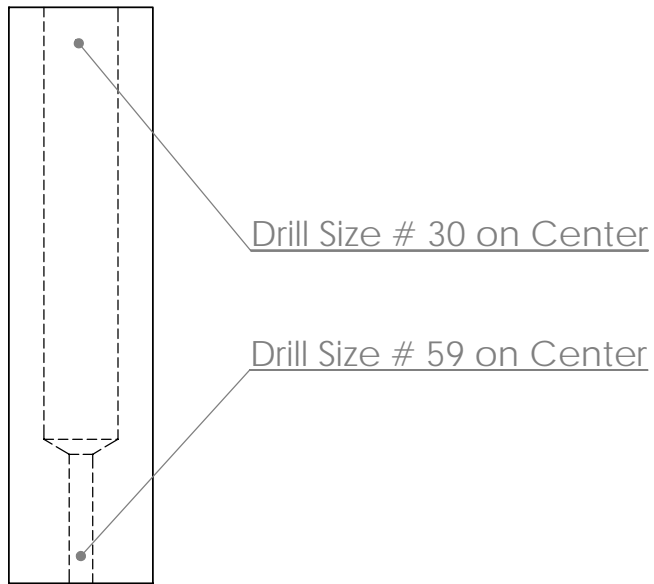
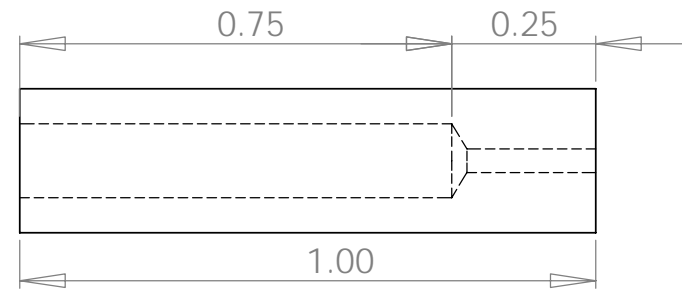
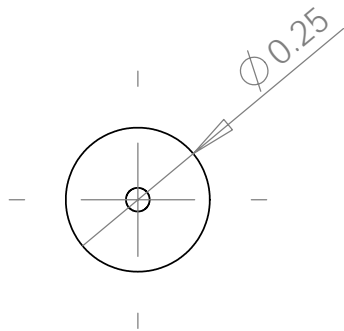
Hammond Rack Shelf RASU190515BK1
for Custom Mod.



TITLE:
**Hammond Rack
For CNC Box**

SIZE	DWG. NO.	REV
A		

SCALE: 1:5 SHEET 1 OF 1



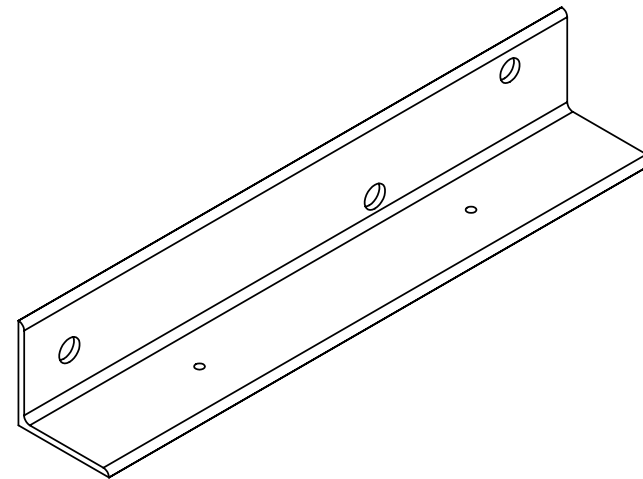
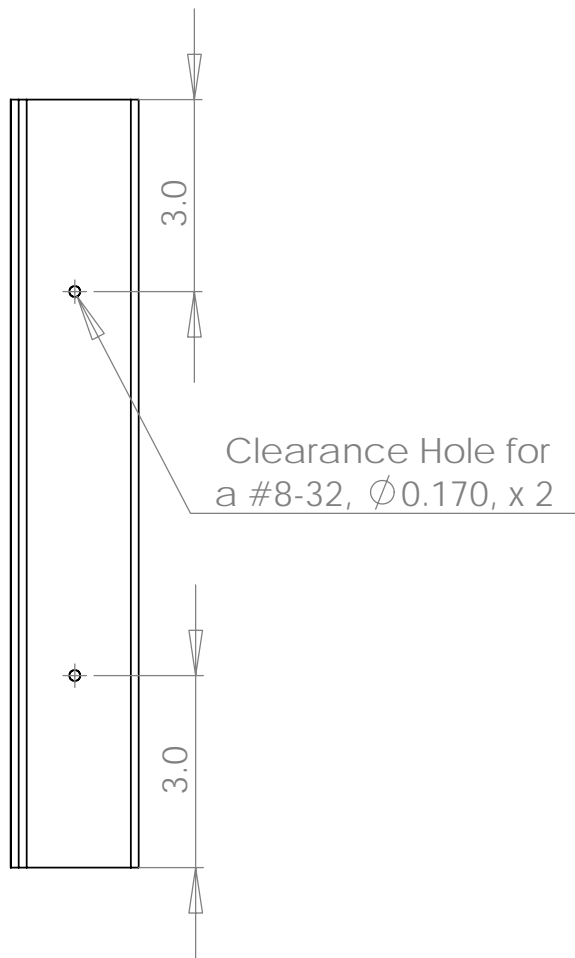
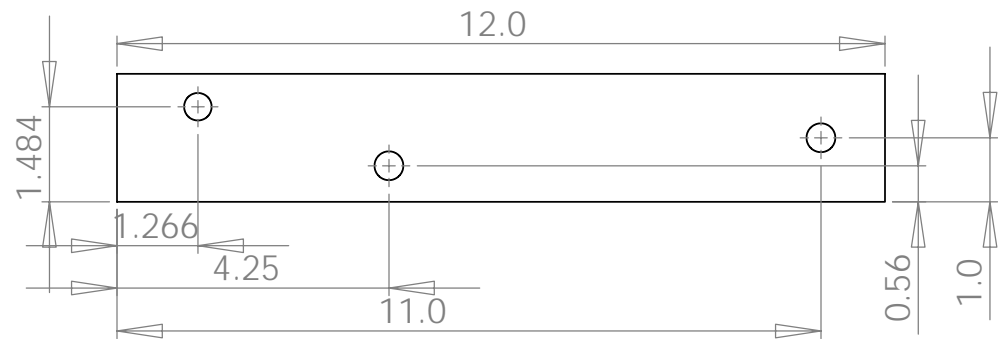
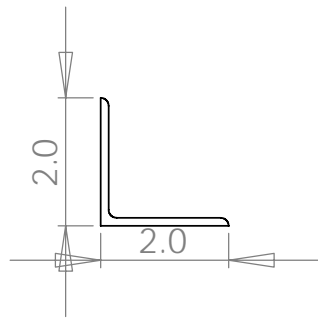
	NAME	DATE
DRAWN/ENG.	JAKE MALLET	2004
UNITS	inches	
TOLERANCES	+/- .005	
MATERIAL	1/4" Brass Rod Stock	
FINISH	None	

COMMENTS	QUANTITY	x 1
Critical Orifice w/ # 59 and #30 Drill Holes		



TITLE:
**Critical Orifice
For CN Count.**

SIZE	DWG. NO.	REV
A		
SCALE: 3:1		SHEET 1 OF 1



	NAME	DATE
DRAWN/ENG.	JAKE MALLET	2004
UNITS	inches	
TOLERANCES	+/- .01	
MATERIAL	2" x 2" Angle Al.	
FINISH	None	

COMMENTS	QUANTITY	x 1
Aluminum Size - 2" x 2" x 12"		



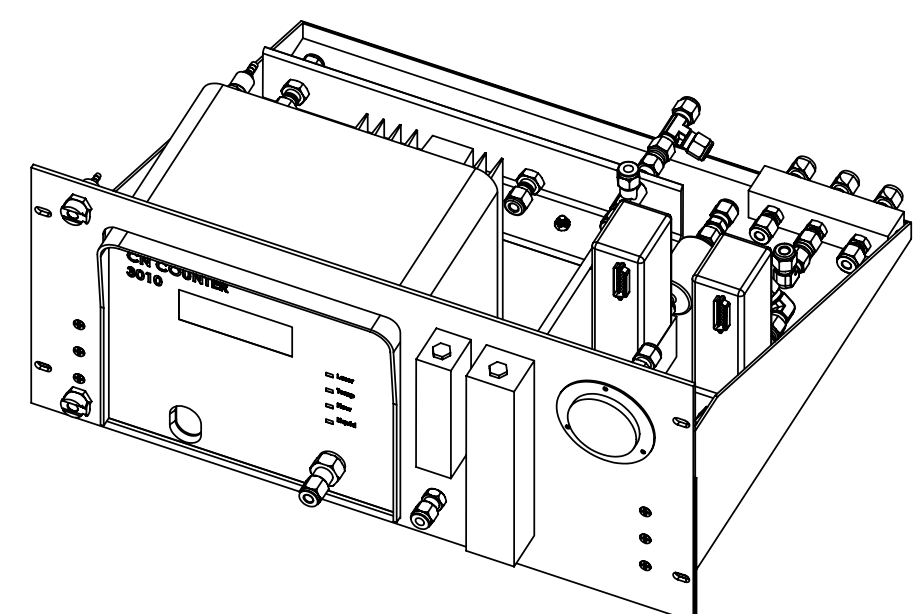
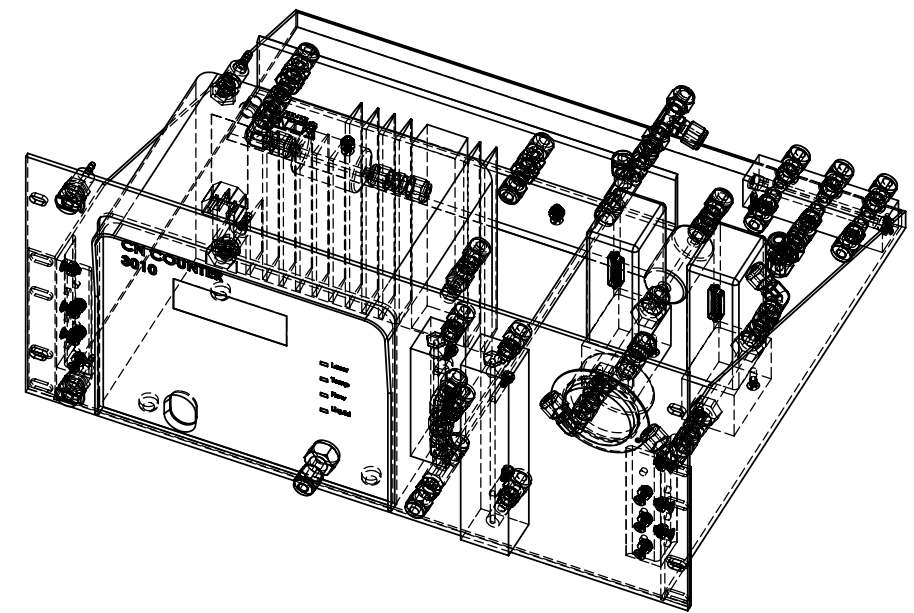
NOAA - CMDL



TITLE:
**Al. Angle Mount.
Bracket**

SIZE	DWG. NO.	REV
A		

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	HAMMOND Rack Shelf RASU190515BK1	CN Box Mod. to Shelf are Req.
2	1	CN Box Front Mounting Plate	
3	1	CN Counter - 3010	TSI - Condensation Particle Counter
4	1	Flow Meter VFA	
5	1	Flow Meter VFB	
6	1	2in Vacuum Gauge - Grainger 1X547	
7	1	Brooks Mass Flow Sensor 5860E - (10 SLPM)	With Swagelok 1/4in Tube to Male ISO - SS-400-1-6-ST
8	1	Brooks Mass Flow Sensor 5860E - (2 SLPM)	With Swagelok 1/4in Tube to Male ISO - SS-400-1-6-ST
9	2	Cole-Parmer Quick Connect - 06360-10	
10	2	Cole-Parmer Hose Barb, Valved,M,1_8 - 06360-40	
11	2	Parker Finite Filter - 100PSIG Grd. 4	Part No.: IDN-4G x 10
12	1	1 x 1 x 4 in Al. Flow Manifold Block	
13	2	1_8 NPT Socket head Plug	
14	1	Critical Orifice w # 59 and 30 Drill Holes	Customized from 1_4in x 1in Brass Rod Stock
15	1	2x2x12 Aluminum angle bracket	
16	1	Perma Sheath Flow tube - Dryer Model MD-110-12S	PERMA PURE INC.
17	1	Swagelok Female Connector - B-400-7-2 1_4Tubing	Female Connector (Tapered Thread) - Fractional
18	10	Swagelok Male Connector - B-400-1-2 1_4Tubing	Male Connector (Tapered Thread) - Fractional
19	2	Swagelok Bulkhead Union - SS-400-61 1_4Tubing	Bulkhead Union - Fractional
20	1	Swagelok Union Tee - SS-400-3 1_4Tubing	Union Tee - Fractional
21	5	Swagelok Union Elbow - B-400-9 1_4Tubing	Union Elbow - Fractional
22	1	Swagelok Union Elbow - SS-400-9 1_4Tubing	Union Elbow - Fractional
23	3	Swagelok Port Connector - B-401-PC 1_4Tubing	Port Connector - Fractional
24	3	Swagelok Port Connector - SS-401-PC 1_4Tubing	Port Connector - Fractional
25	3	Swagelok Union - SS-400-6 1_4Tubing	Union - Fractional
26	2	#6 - 32 x .5 - 82deg flat head machine skrew	
27	14	#8 - 32 x .5 - 82deg flat head machine skrew	
28	14	Machine Skrew Nut - #8 - 32	
29	4	#8 - 32 x .25 - 82deg flat head machine skrew	
30	4	Socket Cap #10 - 32 x .375 Machine Skrew	
31	2	1x1x4in aluminum angle Al	



DRAWN/ENG.	NAME: JAKE MALLETT	DATE: 2004
UNITS	Inches	
TOLERANCES	+/- -Dist x.xx +/- -Angular	
MATERIALS:	MAT. FINISH:	QTY.
N/A	N/A	x 1
N/A	N/A	x 1
N/A	N/A	x 1
N/A	N/A	x 1
COMMENTS: Ref. for Bill of materials		

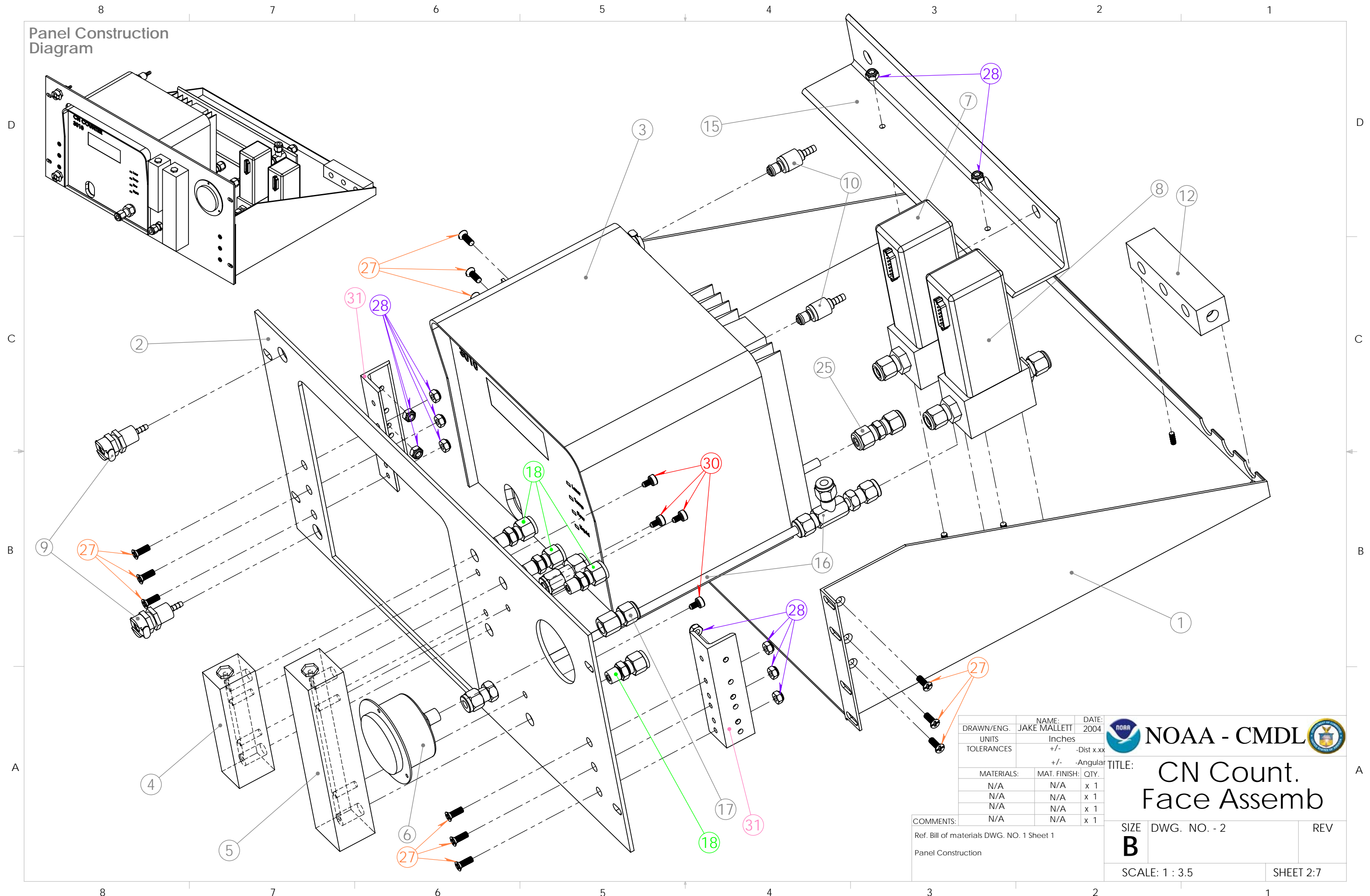
NOAA - CMDL

TITLE: **CNC Bill Of Materials**

SIZE: **B** DWG. NO. - 1 REV

SCALE: 1 : 6 SHEET 1:7

Panel Construction Diagram



NAME:	JAKE MALLET	DATE:	2004
DRAWN/ENG.		UNITS	Inches
TOLERANCES	+/-	-Dist x.xx	+/-
		-Angular	
MATERIALS:	MAT. FINISH:	QTY.	
N/A	N/A	x 1	
N/A	N/A	x 1	
N/A	N/A	x 1	
N/A	N/A	x 1	



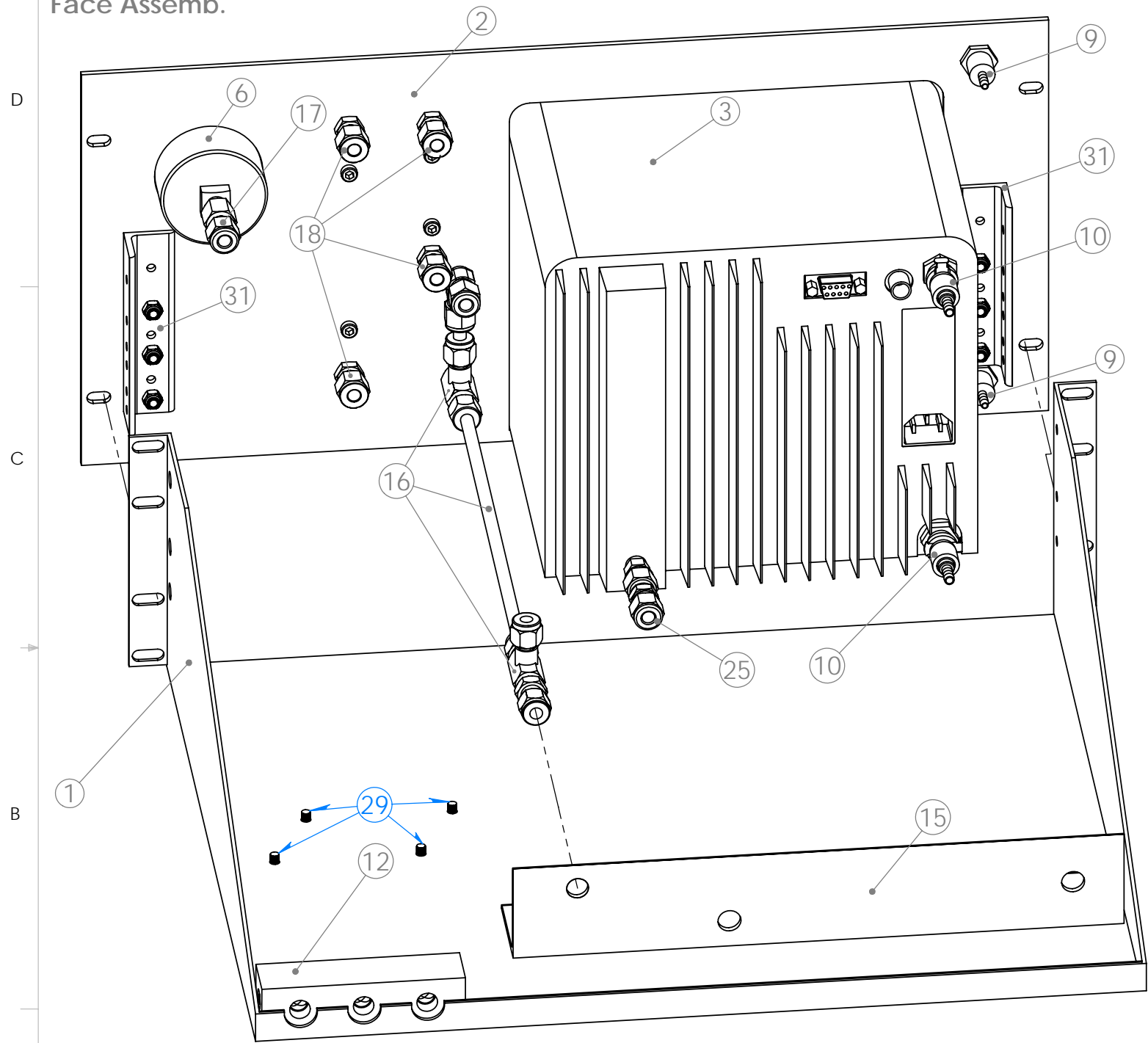
TITLE: CN Count. Face Assemb

COMMENTS:
Ref. Bill of materials DWG. NO. 1 Sheet 1
Panel Construction

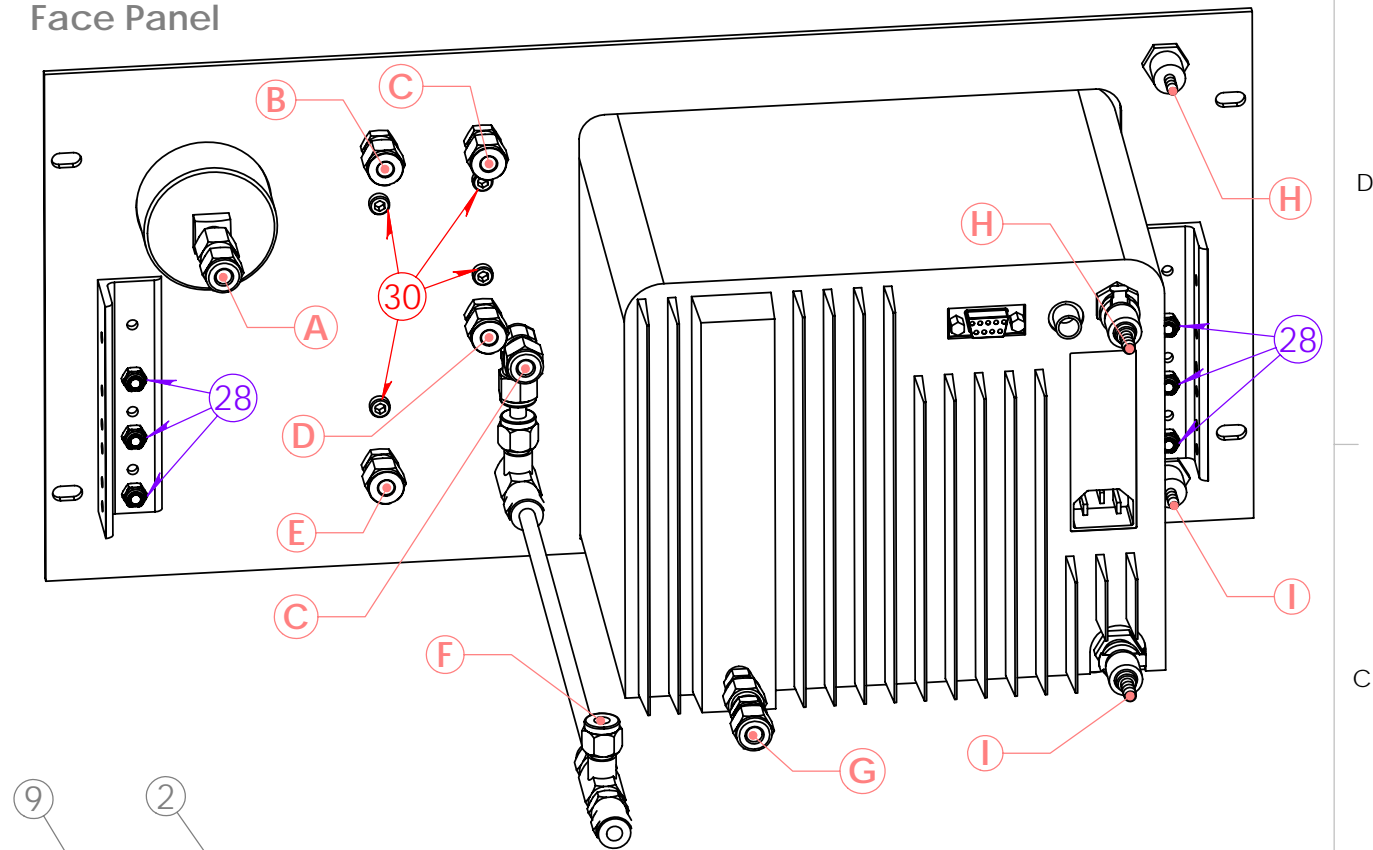
SIZE	DWG. NO. - 2	REV
B		

SCALE: 1 : 3.5 SHEET 2:7

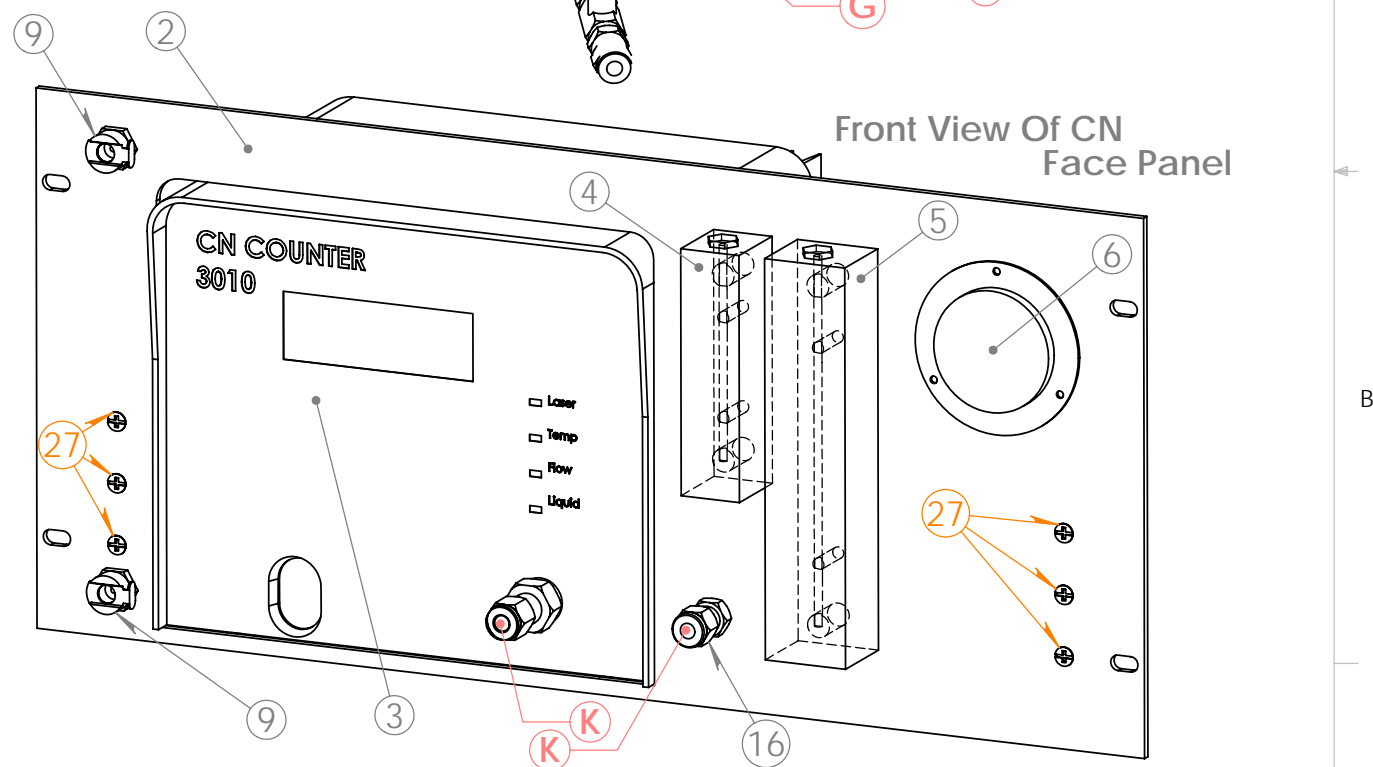
Back View Of CN Face Assemb.



Back View Of CN Face Panel



Front View Of CN Face Panel



REF.	CONNECTION DESCRIPTION	Hose Clamp Req.
A,B,C,D,E,F,G,J,L,M	1/4" Plastic Tubing [Regular Flexible]	N
H,I	1/4" Plastic Tubing [Cole-Palmer 6424 -66]	N
K	1/4" Black Flexible Conductive Plastic Tubing	N

NAME:	JAKE MALLETT	DATE:	2004
DRAWN/ENG.:		UNITS:	Inches
TOLERANCES:	+/-	-Dist x.xx	
	+/-	-Angular	
MATERIALS:	MAT. FINISH:	QTY.	
N/A	N/A	x 1	
N/A	N/A	x 1	
N/A	N/A	x 1	
N/A	N/A	x 1	

COMMENTS:
Ref. Bill of materials DWG. NO. 1 Sheet 1



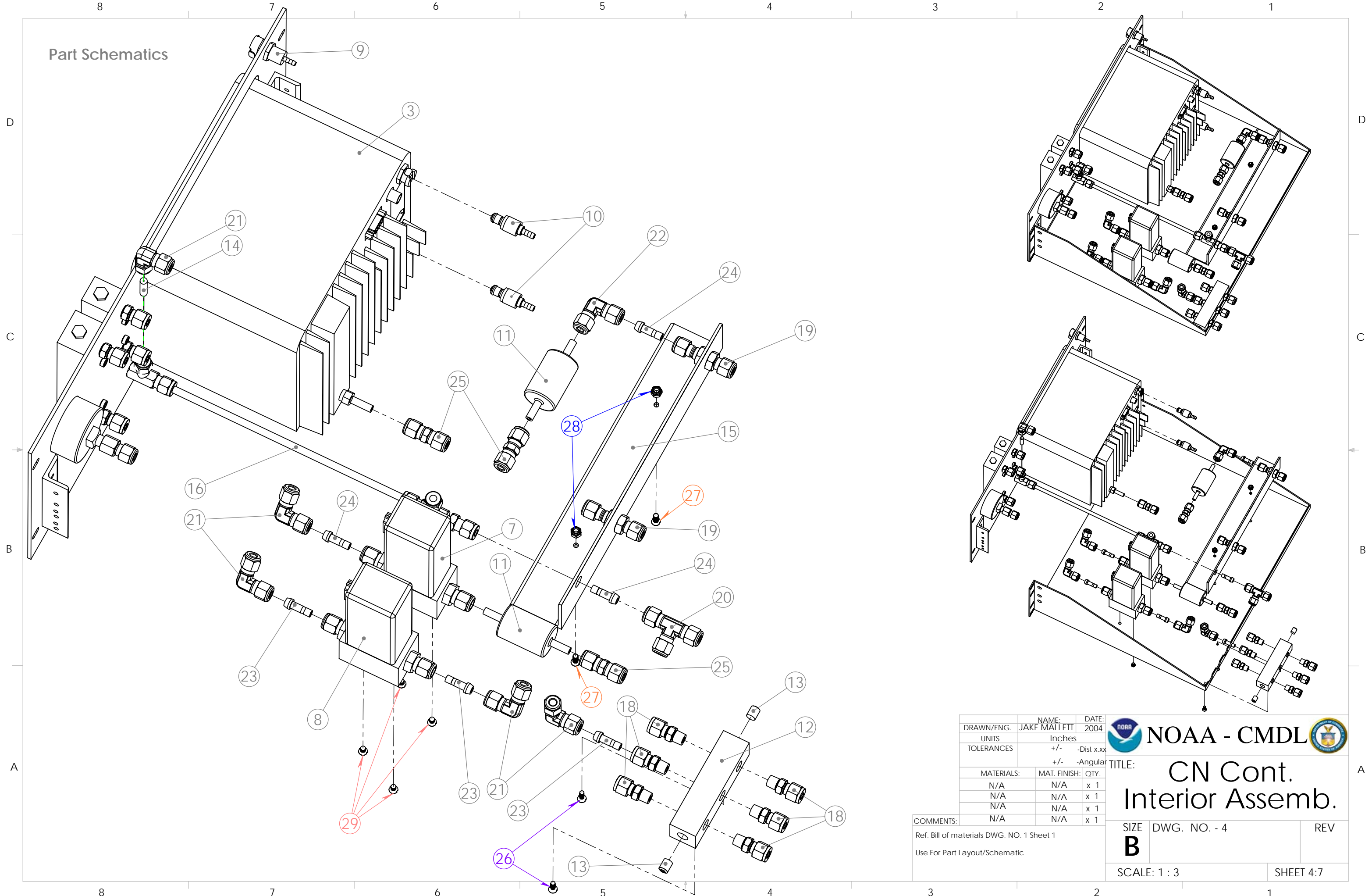
TITLE: **CN Cont. Assemb.**

SIZE: **B** DWG. NO. - 3 REV

SCALE: 1 : 3

SHEET 3:7

Part Schematics



NAME:	JAKE MALLETT	
DATE:	2004	
UNITS:	Inches	
TOLERANCES:	+/-	-Dist x.xx
	+/-	-Angular
MATERIALS:	MAT. FINISH:	QTY.
N/A	N/A	x 1
N/A	N/A	x 1
N/A	N/A	x 1
N/A	N/A	x 1



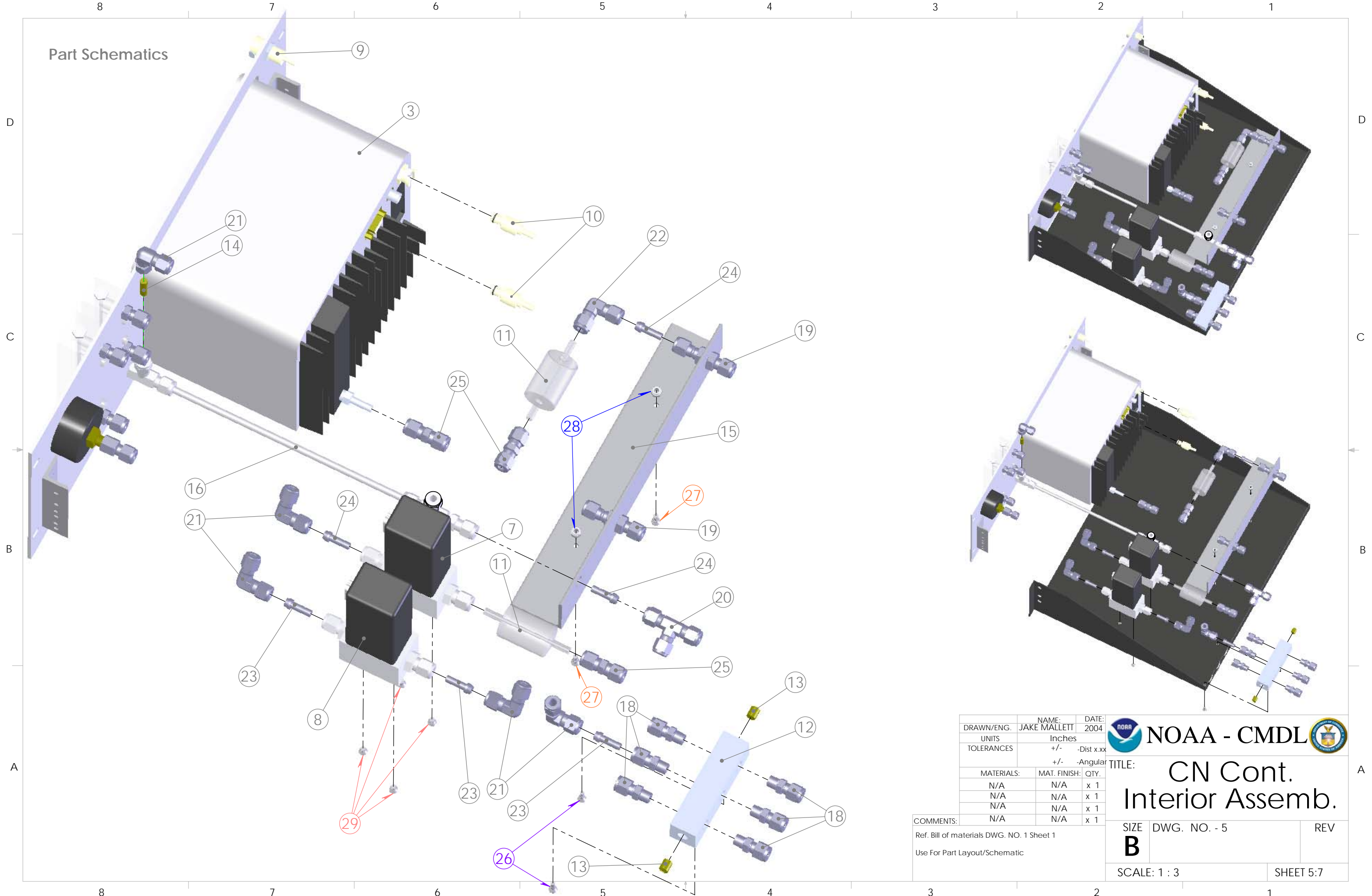
TITLE: **CN Cont. Interior Assemb.**

COMMENTS:
Ref. Bill of materials DWG. NO. 1 Sheet 1
Use For Part Layout/Schematic

SIZE **B** DWG. NO. - 4 REV

SCALE: 1 : 3 SHEET 4:7

Part Schematics



NAME:	DATE:
JAKE MALLET	2004
UNITS	Inches
TOLERANCES	+/- -Dist x.xx +/- -Angular
MATERIALS:	MAT. FINISH: QTY.
N/A	N/A x 1
N/A	N/A x 1
N/A	N/A x 1
N/A	N/A x 1



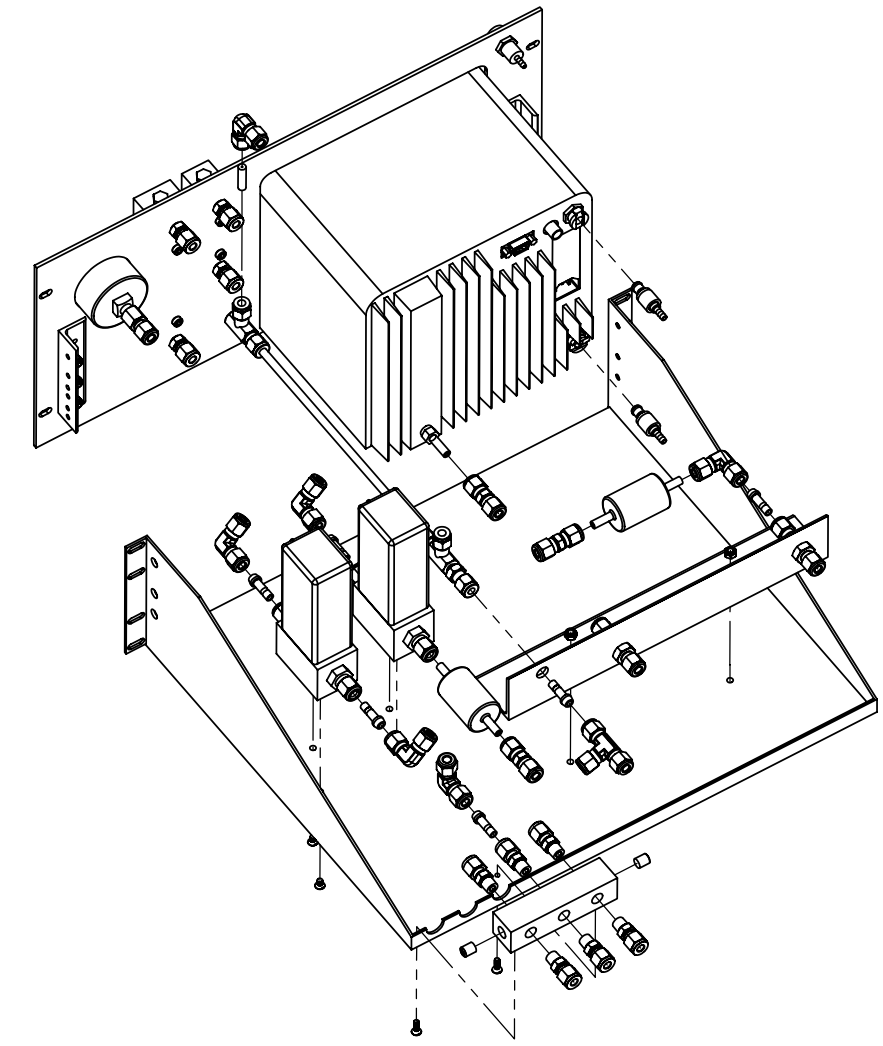
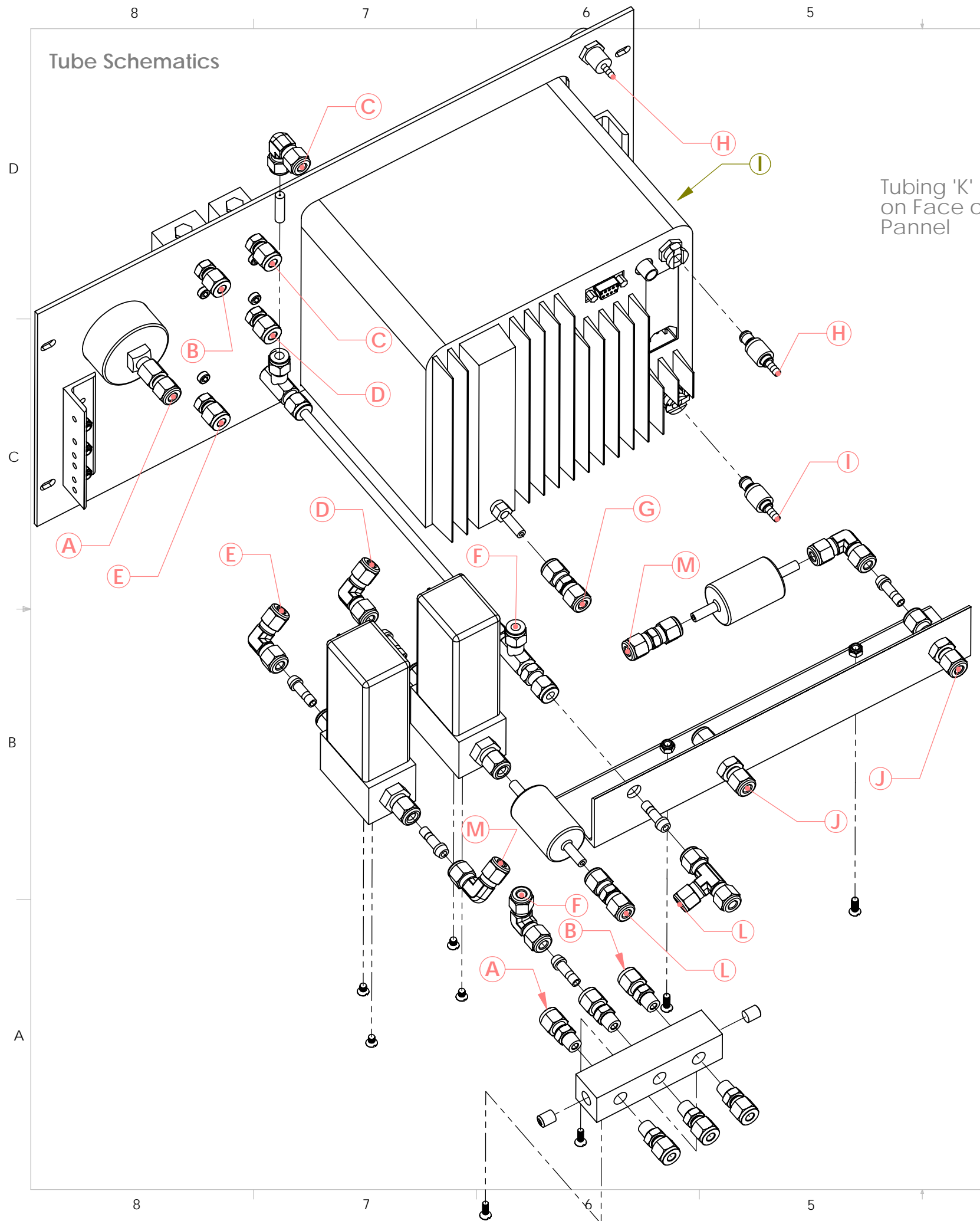
TITLE: **CN Cont. Interior Assemb.**

COMMENTS:
Ref. Bill of materials DWG. NO. 1 Sheet 1
Use For Part Layout/Schematic

SIZE DWG. NO. - 5 REV

SCALE: 1 : 3 SHEET 5:7

Tube Schematics



REF.	CONNECTION DESCRIPTION	Hose Clamp Req.
A,B,C,D,E,F,G,J,L,M	1/4" Plastic Tubing [Regular Flexible]	N
H,I	1/4" Plastic Tubing [Cole-Palmer 6424 -66]	N
K	1/4" Black Flexible Conductive Plastic Tubing	N

NAME:	JAKE MALLET	DATE:	2004
DRAWN/ENG.	JAKE MALLET	UNITS	Inches
TOLERANCES	+/-	-Dist x.xx	+/-
		-Angular	+/-
MATERIALS:	N/A	MAT. FINISH:	N/A
	N/A	QTY.	x 1
	N/A		x 1
	N/A		x 1
	N/A		x 1



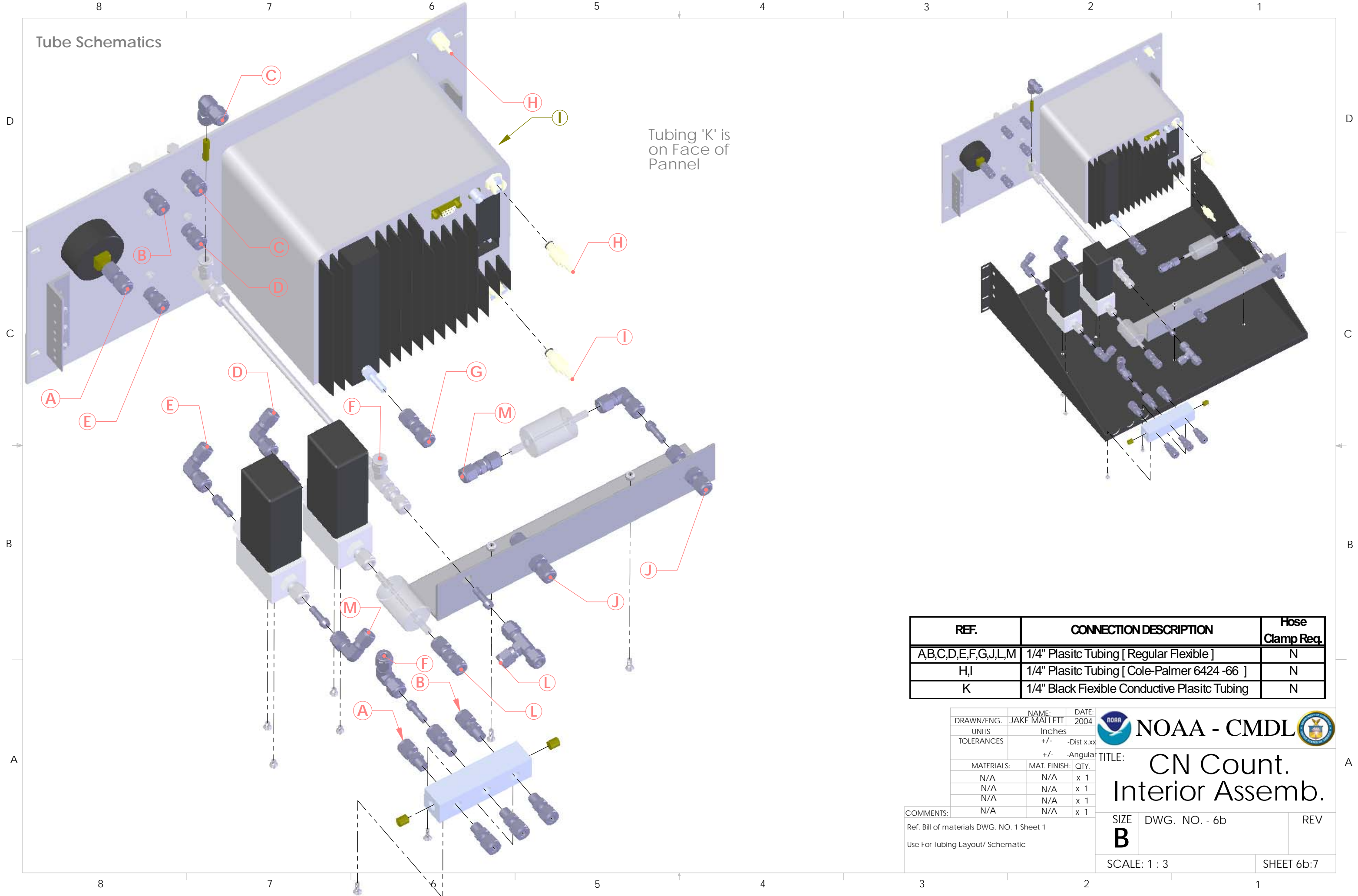
TITLE: CN Count. Interior Assemb.

COMMENTS:
Ref. Bill of materials DWG. NO. 1 Sheet 1
Use For Tubing Layout/ Schematic

SIZE DWG. NO. - 6 REV

SCALE: 1 : 3 SHEET 6:7

Tube Schematics



REF.	CONNECTION DESCRIPTION	Hose Clamp Req.
A,B,C,D,E,F,G,J,L,M	1/4" Plasic Tubing [Regular Flexible]	N
H,I	1/4" Plasic Tubing [Cole-Palmer 6424 -66]	N
K	1/4" Black Flexible Conductive Plasic Tubing	N

NAME:	JAKE MALLET	DATE:	2004
DRAWN/ENG.:	JAKE MALLET	UNITS:	Inches
TOLERANCES:	+/-	-Dist x.xx	+/-
		-Angular	+/-
MATERIALS:	N/A	MAT. FINISH:	N/A
	N/A	QTY.:	x 1
	N/A		x 1
	N/A		x 1
	N/A		x 1



TITLE: CN Count. Interior Assemb.

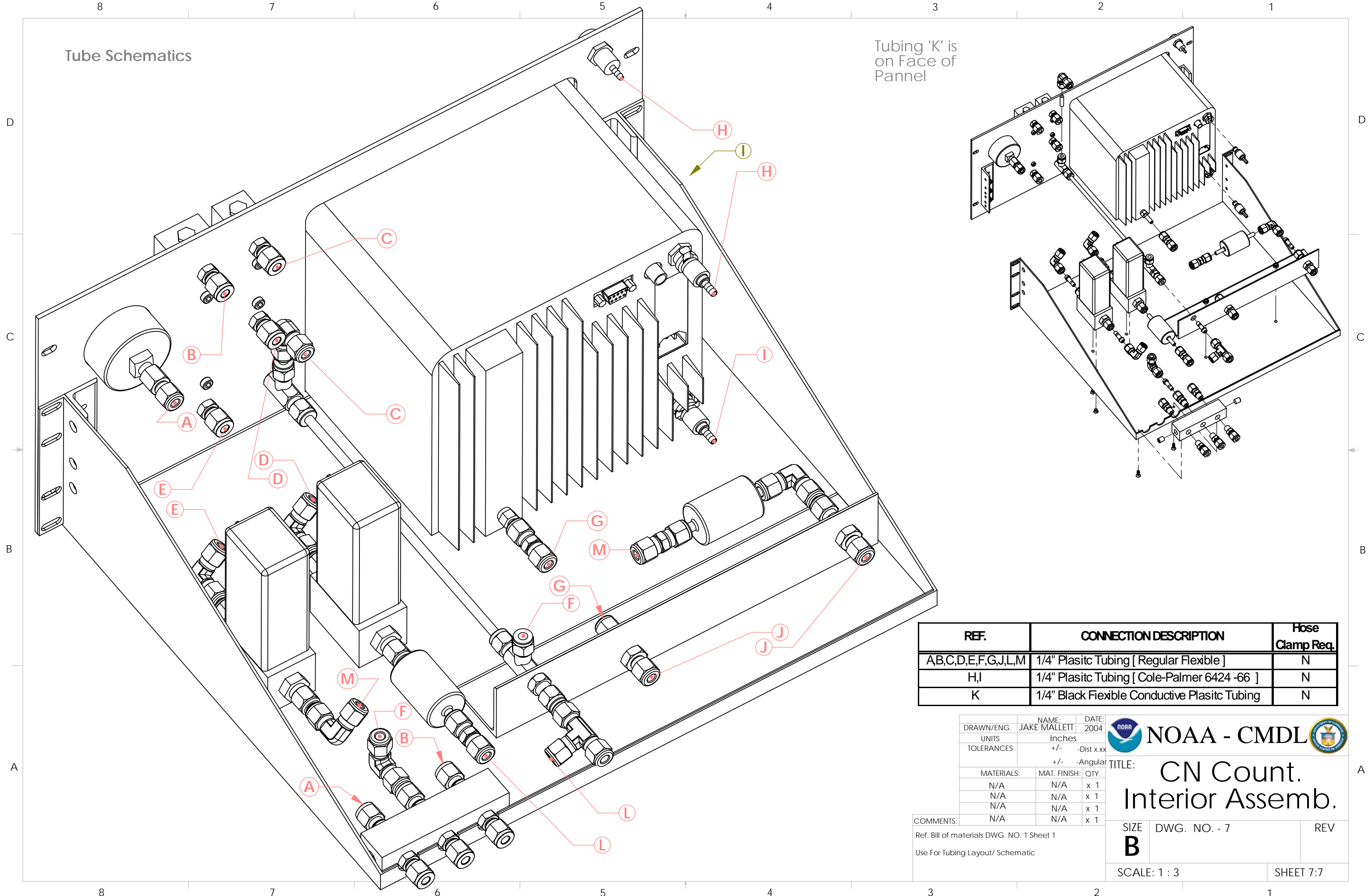
COMMENTS:
Ref. Bill of materials DWG. NO. 1 Sheet 1
Use For Tubing Layout/ Schematic

SIZE: B
DWG. NO. - 6b
REV

SCALE: 1 : 3
SHEET 6b:7

Tube Schematics

Tubing 'K' is on Face of Panel



REF.	CONNECTION DESCRIPTION	Hose Clamp Req.
A,B,C,D,E,F,G,J,L,M	1/4" Plastic Tubing [Regular Flexible]	N
H,I	1/4" Plastic Tubing [Cole-Palmer 6424 -66]	N
K	1/4" Black Flexible Conductive Plastic Tubing	N

NAME:	JAKE MALLETT	DATE:	2004
UNITS:	Inches		
TOLERANCES:	+/- -Dist x.xx		
	+/- -Angular		
MATERIALS:	MAT. FINISH:	QTY.	
N/A	N/A	x 1	
N/A	N/A	x 1	
N/A	N/A	x 1	
N/A	N/A	x 1	

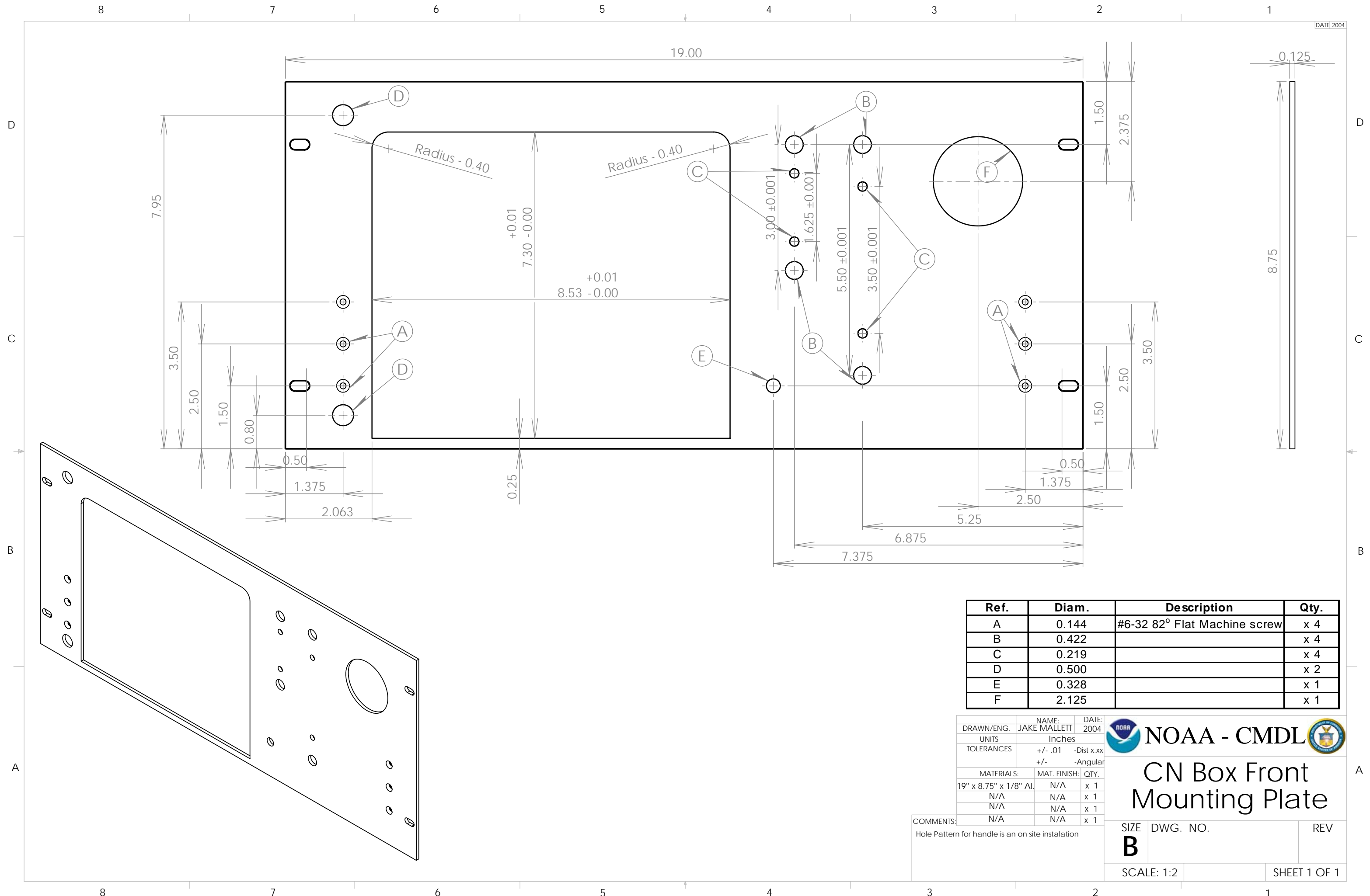


TITLE: CN Count. Interior Assemb.

COMMENTS:
Ref. Bill of materials DWG. NO. 1 Sheet 1
Use For Tubing Layout/ Schematic

SIZE DWG. NO. - 7 REV

SCALE: 1 : 3 SHEET 7:7



Ref.	Diam.	Description	Qty.
A	0.144	#6-32 82° Flat Machine screw	x 4
B	0.422		x 4
C	0.219		x 4
D	0.500		x 2
E	0.328		x 1
F	2.125		x 1

DRAWN/ENG.	NAME:	DATE:
JAKE MALLETT	JAKE MALLETT	2004
UNITS	Inches	
TOLERANCES	+/- .01 -Dist x.xx +/- -Angular	
MATERIALS:	MAT. FINISH:	QTY.
19" x 8.75" x 1/8" Al.	N/A	x 1
N/A	N/A	x 1
N/A	N/A	x 1
N/A	N/A	x 1

COMMENTS:
Hole Pattern for handle is an on site installation



CN Box Front Mounting Plate

SIZE	DWG. NO.	REV
B		
SCALE: 1:2		SHEET 1 OF 1