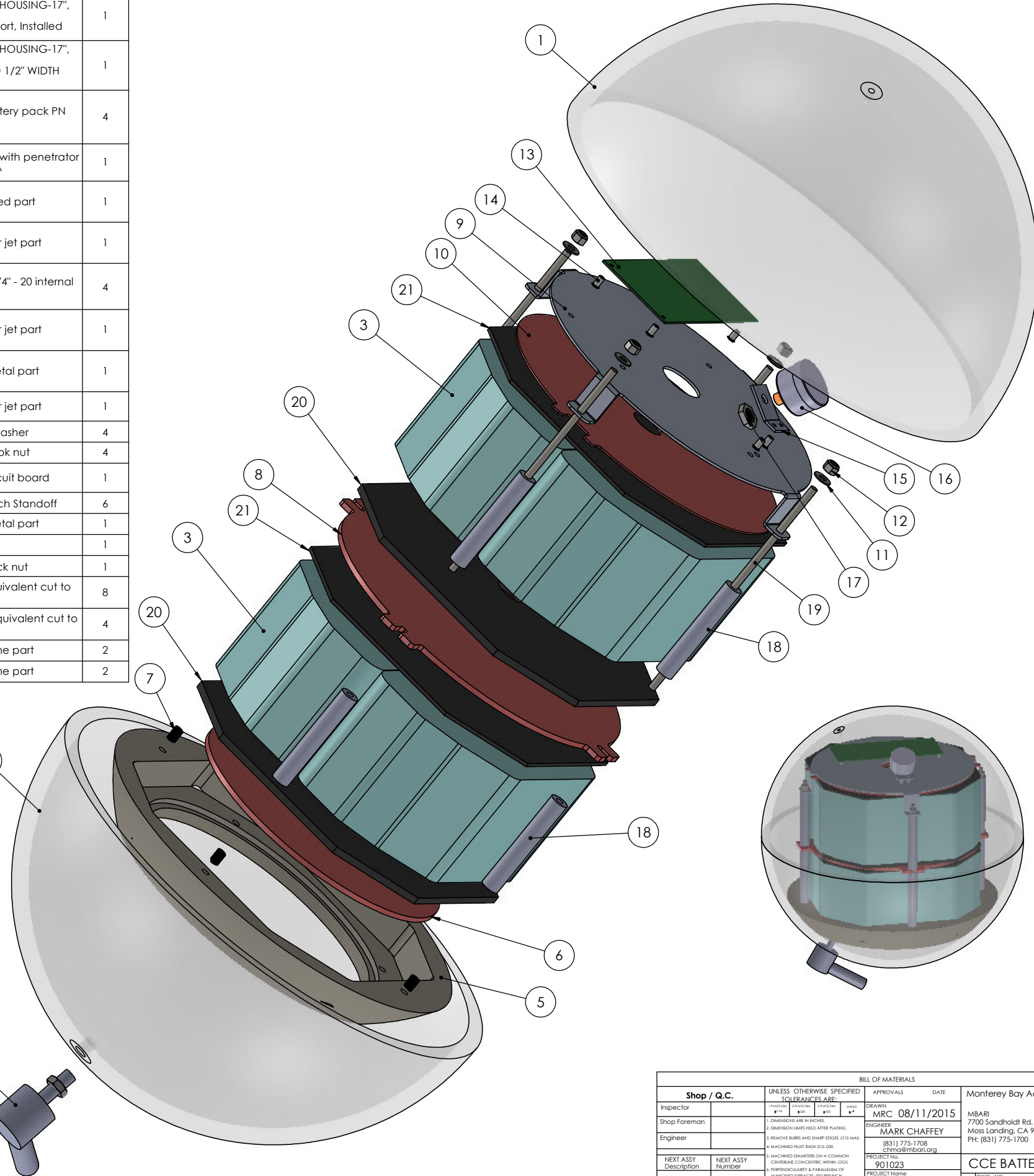


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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BenthosGlassHemisphere_Bottom	2040-17H; GLASS INSTRUMENT HOUSING-17", with 204-VPT, Titanium Vacuum port, Installed	1
2	BenthosGlassHemisphere_Top	2040-17H; GLASS INSTRUMENT HOUSING-17", with 204-DHO; HOLE DRILLING TO 1/2" WIDTH GROUND FLAT	1
3	ElectroChemBatPack_3PD1489	Electrochem 28 cell 4S7P battery pack PN 3PD1489	4
4	SeaconPenetrator_FAWM-8-PENT-RA	MBARI PN 10021142-01-B cable with penetrator FAWM-8-PENT-RA	1
5	11021186-01-A_BatteryMountBaseFrame	MBARI custom machined part	1
6	11021186-02-A_BatteryMountBasePlate	MBARI custom FRP water jet part	1
7	96246A208	McMaster Helicoil insert with 1/4" - 20 internal thread	4
8	11021186-03-A_BatteryMountMidPlate	MBARI custom FRP water jet part	1
9	11021186-04-B_BatteryMountUpperFrame	MBARI custom sheet metal part	1
10	11021186-06-B_BatteryFRPInsulator	MBARI custom FRP water jet part	1
11	90107A029	McMaster # 1/4 flat washer	4
12	90715A125	McMaster #1/4-20 nylok nut	4
13	11021186-07-A_BatteryPCB	MBARI custom printed circuit board	1
14	93090A240	McMaster #6-32x0.375 Clinch Standoff	6
15	11021186-08-A_BatteryGaugeMount	MBARI custom sheet metal part	1
16	3935K21_VacuumGauge	McMaster part	1
17	4429K121	McMaster 1/8" NPT lock nut	1
18	8749K62_x3.750	McMaster part 8749K62 or equivalent cut to 3.750 inches	8
19	93250A058_0.25-20x8.75ThreadedRod	McMaster part 93250A058 or equivalent cut to 8.75 inches	4
20	11021186-05-B_Battery0.250RubberPad	MBARI custom neoprene part	2
21	11021186-09-A_Battery0.125RubberPad	MBARI custom neoprene part	2

NOTES:

1. PROTECT GLASS SPHERE EDGES WITH TUBING DURING ASSEMBLY.
2. BASE FRAME IS BONDED INTO THE GLASS SPHERE USING 3M 5200 FAST CURE ADHESIVE. USE JIG DURING ASSEMBLY TO ENSURE CORRECT POSITIONING. CLEARANCES ARE VERY TIGHT SO CORRECT POSITIONING IS ESSENTIAL.
3. ASSEMBLE BATTERY STACK IN SEQUENCE USING CARE TO NOT APPLY MORE CLAMP FORCE THEN NECESSARY TO HOLD BATTERIES IN POSITION. USE ADDITIONAL NEOPRENE PADS AS FILLER IF NECESSARY.
4. CINCH HEAVY DUTY TIE-WRAP AROUND EACH BATTERY LAYER TO HOLD TOGETHER (NOT SHOWN).
5. SEAL AND VACUUM COMPLETED ASSEMBLY TO -10 INCHES OF Hg (~-5PSI)+ CONFIRM HOLDS VACUUM.



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	08/11/15	MRC
B	MODIFIED TO MATCH BATTERY ACTUAL	08/13/15	MRC

BILL OF MATERIALS									
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:			APPROVALS DATE		Monterey Bay Aquarium Research Institute		
Inspector		FINISHES	STRAIGHTENING	DRILLING	WELDING	DRAWN MRC 08/11/2015	MBARI		
Shop Foreman		1. DIMENSIONS ARE IN INCHES.				ENGINEER MARK CHAFFEY	7700 Sandhill Rd.		
Engineer		2. DIMENSION LINES HELD AFTER PLATING.				(831) 775-1708 chmair@mbari.org	Moss Landing, CA 95039		
		3. REMOVE BURRS AND SHARP EDGES: D15 MAX.					PH: (831) 775-1700		
		4. MACHINED PLUG RIDE D15-D20.							
		5. MACHINED DIMETERS ON A COMMON CYLINDRICAL CONCENTRIC WITHIN .005.				PROJECT NO. 910123	CCE BATTERY ASSEMBLY		
NEXT Assy Description	NEXT Assy Number	6. PERPENDICULARITY A PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.				PROJECT NUMBER CORD. CYN. EXPR.	SIZE C	DWG. NO. 11021186-00-B-DWG	REV. B
APPLICATION		DO NOT SCALE DRAWING				WEIGHT	SCALE	CAD FILE	SHEET 1 OF