

NOTES:

- WELDING SHALL BE IN ACCORDANCE WITH S9074-AR-GIB-010/278, 1 AUG 95.
- FOR ALL CLASS P-1 WELDS, RECORDKEEPING SHALL MEET THE REQUIREMENTS OF S9074-AR-GIB-010/278, CLASS P-1. JOINT IDENTIFICATION MAPPING DRAWINGS ARE REQUIRED.
- RUN PIPING GENERALLY AS SHOWN.
- BENDS IN PIPING SHALL BE USED WHENEVER FEASIBLE TO MINIMIZE NUMBER OF JOINTS. PIPING SHALL NORMALLY BE BENT TO A RADIUS NOT LESS THAN 5 PIPE DIAMETERS WHERE NECESSARY DUE TO SPACE LIMITATIONS.
- COOLING WATER PIPING OUTSIDE THE RECOMPRESSION CHAMBER ONLY SHALL BE INSULATED AND LAGGED AS NECESSARY IN ACCORDANCE WITH MIL-STD-769. ALL OTHER PIPING ON THIS DRAWING SHALL NOT BE INSULATED OR LAGGED. THE COOLANT MIXTURE SHALL BE 50% PROPYLENE GLYCOL AND 50% WATER.
- LABEL PLATES SHALL BE ENGRAVED PLASTIC. THE FOLLOWING COLOR CODES APPLY:
OXYGEN SYSTEMS: GREEN WITH WHITE LETTERS
AIR SYSTEMS: BLACK WITH WHITE LETTERS
MIXED-GAS SYSTEMS: BUFF WITH WHITE LETTERS
- PIPE HANGERS AND HANGER SUPPORTS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH STANDARD COMMERCIAL PRACTICES. THE TYPE, SIZE, METHOD OF ATTACHMENT AND SPACING SHALL BE DETERMINED BY INSTALLING ACTIVITY.
- GLOBE VALVES SHALL BE INSTALLED SO THE FLOW IS IN THE DIRECTION INDICATED BY THE FLOW ARROW WITH THE PRESSURE UNDER THE DISK WHEN THE VALVE IS IN THE CLOSED POSITION.
- ALL DIVERS LIFE SUPPORT SYSTEMS GAS PIPING WHICH LOSES CLEANLINESS SHALL BE CLEANED AND MAINTAINED CLEAN IN ACCORDANCE WITH A NAVSEA APPROVED CLEANING PROCEDURE FOR DIVING LIFE SUPPORT SYSTEMS.
- ALL PIPING IS TO BE MARKED IN ACCORDANCE WITH MILITARY STANDARD 101, U.S. NAVY DIVING MANUAL VOLUME I (NAVSEA 0994-LP-001-9010), AND NAVSEA INSTRUCTION 315.1. WELDED OR BRAZED PIPING JOINTS AND JOINT IDENTIFICATION NUMBERS SHALL NOT BE PAINTED. COLOR CODE AS FOLLOWS:
OXYGEN SYSTEM: GREEN WITH WHITE LETTERS
AIR SUPPLY: BLACK WITH WHITE LETTERS
AIR AND OXYGEN EXHAUST: SILVER WITH BLACK LETTERS
MIXED-GAS SYSTEM: BUFF WITH WHITE LETTERS
- ALL RE-ENTRY INTO THE SYSTEM WILL BE DONE IN ACCORDANCE WITH APPROVED RE-ENTRY CONTROL PROCEDURES.
- PROVIDE HANGER SUPPORTS FOR ALL PIPING FROM BRACKETS MOUNTED TO CHAMBER. HOTWORK ON THE CHAMBER HULL IS STRICTLY PROHIBITED.
- THREAD SEALANTS USED SHALL BE THOSE THAT ARE APPROVED FOR OXYGEN AND DIVERS AIR SYSTEMS.
- ALL O-RINGS FOR PIPING JOINTS IN OXYGEN PIPING SHALL BE PER MIL-R-83248, TYPE I, CLASS 1.
- CHAMBER PIPING CONNECTS TO SHIPS PIPING AT THIS POINT, SEE DWG 7371360.
- THIS DRAWING TO BE USED IN CONJUNCTION WITH DRAWING 7371363.
- LIKE OR COMMERCIALY PROVIDED MATERIAL SHALL, AS A MINIMUM, MEET OR EXCEED THE MATERIAL REQUIREMENTS NOTED ON THE DRAWINGS AND BE IN COMPLIANCE WITH APPLICABLE MIL-STDs AND MIL-SPECS.
- CERTIFICATE OF COMPLIANCE WILL BE PROVIDED IN A TRACEABLE AND AUDITABLE MANNER AS OBJECTIVE QUALITY EVIDENCE CERTIFYING SPECIFIC LIKE OR COMMERCIALY PROVIDED MATERIAL MEETS OR EXCEEDS THE APPLICABLE MIL-STDs OR MIL-SPECS CALLED OUT IN THE DRAWING.
- ALL FASTENERS TO BE 300 SERIES STAINLESS STEEL AND SIZED TO FIT.
- OXYGEN AND HELIUM-OXYGEN SUPPLY PIPING SHALL BE HYDROSTATICALLY TESTED, CLEANED, AND TIGHTNESS TESTED AS FOLLOWS:

HYDROSTATIC TESTING:
OXYGEN AND HELIUM-OXYGEN LP SUPPLY PIPING TEST TO 375 PSI (TEST PRESSURE)
OXYGEN AND HELIUM-OXYGEN EXHAUST PIPING TEST TO 150 PSI (TEST PRESSURE)

- (CONT)
TIGHTNESS TESTING:
A PRESSURE DROP (SYSTEM TIGHTNESS) TEST SHALL BE PERFORMED AFTER ASSEMBLY. SEE INDIVIDUAL ASSEMBLY DRAWINGS FOR SPECIFICATIONS. 100% HELIUM OR A HELIUM-OXYGEN MIXTURE WHERE OXYGEN IS NOT GREATER THAN 16% WITH THE HELIUM IAW MIL-P-27407 TYPE I, GRADE B AND THE OXYGEN IAW IAW MIL-O-27210 TYPE I, SHALL BE USED AS THE TEST GAS. A TEST PLAN SHALL BE PROVIDED TO AND APPROVED BY THE CONTRACTING AUTHORITY PRIOR TO TESTING. VENDOR SHALL SUPPLY TEST VERIFICATION AND "CERTIFICATE OF CONFORMANCE" THAT TEST WAS CONDUCTED AND HARDWARE SUCCESSFULLY PASSED.

CLEANING PROCEDURES:
CLEAN TO THE REQUIREMENTS OF MIL-STD-1330 PER NAVSEA APPROVED CLEANING PROCEDURES

CHILL WATER WORKING PRESSURE:
CHILL WATER PRESSURE 25 PSIG
CHILL WATER SYSTEM TEST PRESSURE 110 PSIG
- AIR, EXHAUST, AND COOLING WATER PIPING SHALL BE HYDROSTATICALLY TESTED, CLEANED, AND TIGHTNESS TESTED AS FOLLOWS:

HYDROSTATIC TESTING:
LP AIR SUPPLY PIPING TEST TO 375 PSI (TEST PRESSURE)
INSTRUMENTATION PIPING FOR O2 AND CO2 ANALYZERS AND BIBS EXHAUST BACKPRESSURE REGULATOR PIPING TEST TO 150 PSI (TEST PRESSURE)

EXHAUST PIPING TEST TO 150 PSI (TEST PRESSURE)
COOLING WATER PIPING TEST TO 150 PSI (TEST PRESSURE)

CLEANING PROCEDURES:
CLEAN TO THE REQUIREMENTS OF MIL-STD-1622 PER NAVSEA APPROVED CLEANING PROCEDURES

TIGHTNESS TESTING:
TIGHTNESS TESTS SHALL BE PERFORMED USING AIR OR DRY, OIL-FREE NITROGEN. AIR SUPPLY PIPING UPSTREAM OF INNER LOCK AND OUTER LOCK CUT-OFF VALVES TEST TO 250 PSI FOR 6 HOURS. MAXIMUM ALLOWED LEAKAGE IS 5 PERCENT. AIR EXHAUST PIPING TEST TO 100 PSI FOR 6 HOURS. MAXIMUM ALLOWED LEAKAGE IS 5 PERCENT. OXYGEN EXHAUST PIPING TEST TO 100 PSI FOR 24 HOURS. NO LEAKAGE IS ALLOWED. INSTRUMENTATION PIPING FOR O2 AND CO2 ANALYZERS AND BIBS EXHAUST BACKPRESSURE REGULATOR PIPING TEST TO 100 PSI FOR 1 HOUR. NO LEAKAGE IS ALLOWED.
- AFTER ASSEMBLY THE CHAMBER SHALL BE CLEANED PER NAVSEA APPROVED CLEANING PROCEDURES. PRODCURES MUST BE APPROVED PRIOR TO ANY CLEANING OR TESTING.
- AFTER ASSEMBLY THE CHAMBER MUST BE TESTED FOR ATMOSPHERIC CONTAMINANTS INCLUDING OFFGASSING OF PAINT USED IN THE CHAMBER INTERIOR.
- PRESSURE TEST CHAMBER IN ACCORDANCE WITH THE U.S. NAVY DIVING MANUAL.
- SEE VICTORIA MACHINE WORKS (VMW) DRAWING NUMBER 916604-400 FOR INFORMATION REGARDING CHAMBER MANUFACTURE.
- VMW CHAMBER WITH SERIAL NUMBER B133-3 IS ABOARD YDT 17. VMW CHAMBER WITH SERIAL NUMBER B133-2 IS ABOARD YDT 18.
- SEE SHEET 20 FOR ELECTRICAL SYSTEM NOTES AND LIST OF MATERIALS. SEE SHEETS 21 THROUGH 23 FOR ELECTRICAL SYSTEM SCHEMATICS AND DETAILS.

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SHEET REVISION STATUS													REVISIONS																		
24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	SHEET NO.	ZONE	LTR	DESCRIPTION	DATE	APPROVED		
-	-	-	-	B	-	-	-	B	-	-	-	A	B	B	A	A	A	B	-	B	C	C	D	1			ORIGINAL INPUT FROM HIGHSTAR DWGS AND CHHI DWG 98037-400				
																										A		REVISED PER RN-R0011	12/6/00	MJB (S)	
																										B		REVISED PER RN-R0012 AND RN-R0014	5/1/01	MJB (S)	
																										11 B/3	C	UPDATED CHAMBER VIEWPORT/PENETRATOR DATA	02/29/08		
																											30	C	REVISED PER N68836-07-C-0068-P00002 HIGH PRESSURE AIR COMPRESSOR INSTALLATION	7/24/08	RMW
																											D	REVISED PER SCA DRAWING INSPECTION AND AIG 04-07 SAB NUT REPLACEMENT		RMW	

28. SPECIFICATIONS OF EXHAUST FLOW LIMITING VALVE (FLOW FUSE), ITEM NUMBER EX-22:
1.25 INCH ELV KENYON STANDARD EXHAUST LINE VALVE
CHAMBER FREE VOLUME: 230 CUBIC FEET
MAXIMUM ASCENT RATE: 66-68 FT/MIN
MINIMUM DEPTH FOR MAXIMUM CHAMBER ASCENT RATE: 30 FEET OF SEA WATER ENVIRONMENT (ATMOSPHERE): AIR
MAXIMUM VALVE WORKING PRESSURE: 100 PSI
LINE SIZE: 2 INCH
SIZE AND TYPE OF THREADS: 1.25 INCH NPT (MALE)

29. FIND NUMBER F-120 IS IDENTICAL TO, AND INTERCHANGEABLE WITH F-180. FIND NUMBER F-124 IS IDENTICAL TO, AND INTERCHANGEABLE WITH F-181.

30. DRAWING REVISION AUTHORIZATION APPROVAL BY DIRECTION OF LETTER; 3150 SER 00C35/3143, 24 JULY 2008.

31. VALVE, V-30 IS NO LONGER STOCKED OR AVAILABLE BY OEM. BODY SEALS FOR VALVE, V-30 HAVE BEEN FABRICATED BY CONTRACTOR (DP ENTERPRISES) FROM VIRGIN PTFE MATERIAL AS PER DIMENSIONAL MEASUREMENTS DERIVED FROM ORIGINAL OEM INTACT BODY SEAL, (SEE SHEET 16).

32. GAS UTILIZED FOR CLEANLINESS TESTING (BOMB SAMPLE) OF HE02 SYSTEMS SHALL BE 100% HELIUM OR NITROGEN. GAS UTILIZED FOR CLEANLINESS TESTING (BOMB SAMPLE) OF O2 SYSTEMS SHALL BE 100% NITROGEN.

REFER TO SHEETS 2, 3, 4, AND 20 FOR DETAILED PARTS LISTS

QTY REQD	UM	CAGE CODE	DRAWING OR SPECIFICATION NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL	FIND NO.
PARTS LIST OR (SEE SEPARATE PARTS LIST)							
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. TOLERANCES ARE: DECIMAL FRACTIONS .X = ±.050 ± .XX = ±.015 ± .XXX = ±.005 ±			COASTAL SYSTEMS STATION DAHLGREN DIVISION PANAMA CITY, FL 32407 PROJECT YDT 17 & 18 DATE 02/22/00 DRAWN PAW ENGR/DSON HIGHSTAR/CHHI(S) 6/19/00 CHECKED WL (S) 10/4/00 APPROVED MJB (S) 10/11/00 APPROVED FOR CSS DATE 10/11/00 MWH (S) APPROVED FOR NAVSEA DATE 10/11/00 RDK (S)		DEPARTMENT OF THE NAVY NAVAL SEA SYSTEMS COMMAND WASHINGTON D.C. 20362 YDT 17 & 18 RECOMPRESSION CHAMBER ASSEMBLY SIZE D CAGE CODE 53711 592 DWG NO. 7371361 REV D SCALE UNLESS NOTED NONE SHEET 1 OF 24		

7371357	7371357	YDT 17 & 18
NEXT ASSY	USED ON	
APPLICATION		
THIS DRAWING HAS BEEN COMPUTER GENERATED USING CAD. DO NOT MAKE MANUAL CHANGES. INTERPRET DWG IN ACCORDANCE WITH MIL-STD-100 DO NOT SCALE DRAWING		