DEPARTMENT OF THE NAVY
NAVAL SEA SYSTEMS COMMAND
1333 ISAAC HULL AVE SE
WASHINGTON NAVY YARD DC 20376-0001

IN REPLY TO
9234
Ser 05L3/302
9 Oct 2001

From: Commander, Naval Sea Systems Command
To: Distribution

Subj: FLEXIBLE RUBBER HOSE LIST MODIFICATIONS

Ref: (a) NAVSEA S6430-AE-TED-10, Technical Directive for Piping Devices and Flexible Hose Assembles dtd 15 July 1996 including: ACN's 1/A, 2/A/3/A

Encl: (1) Naval surface Warfare Center Carderock Division ltr Ser 9234/011 dtd 22 May 2001

1. Reference (a) provides the criteria for determining hose critically, inspection requirements, and hose replacement frequency. Reference (a) also specifies that hoses classified as "Critical" shall be replaced every 12 years and "Non-critical" hose as having no periodic replacement limit and are allowed to remain in service until they fail the annual visual inspection or fail in service.
2. Enclosure (1) lists all the "Critical" to "Non-critical" Hose List for the CG-47 class ships.
3. It is requested that NSWC Philadelphia update the hose list programs and distribute to all the individual ships.
4. The NAVSEA point of contact is Lloyd Nilsen, code 05L32, phone 202-781-3641 and NSWC Philadelphia POC is AL Pappalrado, code 9234, phone 215-897-7242.

L. K. Dowgewicz

Distribution:
COMNAVSURFLANT
COMNAVSURFPAC
NSWC-SSES
COMREGSUPPGRU Mayport FL (N4)

Subj: FLEXIBLE RUBBER HOSE LIST MODIFICATIONS

Blind Copy to:
SEA 05L3
05L32
PMS 400
400F3
400F5

DEPARTMENT OF THE NAVY
NAVAL SURFACE WARFARE CENTER
CARDEROCK DIVISION

NAVAL SHIP SYSTEMS
ENGINEERING STATION
PHILADELPHIA, PA 19112-5083

IN REPLY REFER TO

9542
Ser 9234/011
22 MAY 2001

From: Commander, Carderock Division, Naval Surface Warfare Center,
Philadelphia, PA 19112-5083
To: Commander, Naval Sea Systems Command (Code 05L3)

Subj: FLEXIBLE RUBBER HOSE CHANGE TO PERIODIC MAINTENANCE

Ref: (a) NAVSEA ltr Ser 03134/443 of 19 Dec 1997
(b) NAVSEA S6430-AE-TED-010-Technical Directive for Piping Devices and Flex Hose Assemblies
(c) TELCON btwn CNSL Port Engineer (Mr. Mike McGaw)/NSWCCD-SSES Code 9234 (AL Pappalardo) of 11 Jan 01

Encl: (1) Existing and Newly proposed periodicity Flex Hose Spreadsheet for a Typical CG-47 Class Ship

1. By reference (a), ACN 3A (NSDSA Control Number A48048) was issued to modify the criteria for determining the criticality and to extend the replacement requirements, stated in reference (b), to twelve years for critical applications. No periodic replacement is required for Condition Based Maintenance (CBM) hoses unless assemblies fail visual inspection or in service.

2. As also stated in reference (a), hose lists are to be forwarded to Carderock Division, Naval Surface Warfare Center (NSWCCD-SSES) Code 9234 for review and to develop a list of critical flex hose assemblies prior to forwarding the list to Commander, Naval Sea Systems Command (NAVSEA) 03 for approval.

3. As requested during reference (c), and the result of an upcoming availability on USS HUE CITY (CG-66), NSWCCD-SSES Code 9234 was asked to review the existing hose list from the Flex Hose Management Program installed on CG-47 Class Ships. This was to determine if the critical hose list could be revised to save funding while ensuring safety. Enclosure (1) provides a list of existing critical hose assemblies and recommended changes (new periodicity) for use on all CG-47 Class Ships. Upon approval all applicable Programs will be updated and distributed to each ship.

4. The NSWCCD-SSES points of contact are A. Pappalardo and D. Luciani, Code 9234, Commercial (215) 897-7242/7875 or DSN 443-7242/7875.

Thomas O Perry

T.A. PERRY
By Direction

Copy to:
NAVSEA Washington, DC (Code 03N)
NAVSHIPYD Puget Sound, WA (Code 260.5 LCM)
CONAVSURFLANT Norfolk, VA (N434A11, N431A3)
COMREGSUPPGRU Mayport, FL (N4)
PEO Theater Combatants Washington, DC (PMS-400F3, PMS-400F5)

Encl (1)

EXISTING/RECOMMENDED PERIODICITY (TYPICAL CG-47 CLASS SHIP)

HOSE NUMBER	EQUIP DESCRIPTION	SYSTEM	OLD PERIODICITY	NEW PERIODICITY	EQUIPMENT DESCRIPTION	HOSE NUMBER
HAC-1	A/C #1 CHILLED WATER INLET	A/C	144	144	A/C #1 CHILLED WATER INLET	HAC-1
HAC-10	A/C #1 S/W INLET	A/C	144	144	A/C #1 S/W INLET	HAC-10
HAC-11	A/C #1 S/W OUTLET	A/C	144	144	A/C #1 S/W OUTLET	HAC-11
HAC-12	A/C #2 CHILLED WATER INLET	A/C	144	144	A/C #2 CHILLED WATER INLET	HAC-12
HAC-13	A/C #2 CHILLED WATER OUTLET	A/C	144	144	A/C #2 CHILLED WATER OUTLET	HAC-13
HAC-14	A/C #2 CHILLED WATER PUMP DISCHARGE	A/C	144	144	A/C #2 CHILLED WATER PUMP DISCHARGE	HAC-14
HAC-15	A/C #2 CHILLED WATER PUMP SUCTION	A/C	144	144	A/C #2 CHILLED WATER PUMP SUCTION	HAC-15
HAC-16	A/C #2 L/P AIR	A/C	144	144	A/C #2 L/P AIR	HAC-16
HAC-17	A/C #2 OIL COOLER INLET	A/C	144	144	A/C #2 OIL COOLER INLET	HAC-17
HAC-18	A/C #2 OIL COOLER OUTLET	A/C	144	144	A/C #2 OIL COOLER OUTLET	HAC-18
HAC-19	A/C #2 PURGE INLET	A/C	144		A/C #2 PURGE INLET	HAC-19
HAC-2	A/C #1 CHILLED WATER OUTLET	A/C	144	144	A/C #1 CHILLED WATER OUTLET	HAC-2
HAC-20	A/C #2 PURGE OUTLET	A/C	144		A/C #2 PURGE OUTLET	HAC-20
HAC-21	A/C #2 S/W INLET	A/C	144	144	A/C #2 S/W INLET	HAC-21
HAC-22	A/C #2 S/W OUTLET	A/C	144	144	A/C #2 S/W OUTLET	HAC-22
HAC-23	A/C #3 CHILLED WATER INLET	A/C	144	144	A/C #3 CHILLED WATER INLET	HAC-23
HAC-24	A/C #3 CHILLED WATER OUTLET	A/C	144	144	A/C #3 CHILLED WATER OUTLET	HAC-24
HAC-25	A/C #3 CHILLED WATER PUMP DISCHARGE	A/C	144	144	A/C #3 CHILLED WATER PUMP DISCHARGE	HAC-25
HAC-26	A/C #3 CHILLED WATER PUMP SUCTION	A/C	144	144	A/C #3 CHILLED WATER PUMP SUCTION	HAC-26
HAC-27	A/C #3 L/P AIR	A/C	144	144	A/C #3 L/P AIR	HAC-27
HAC-28	A/C #3 OIL COOLER INLET	A/C	144	144	A/C #3 OIL COOLER INLET	HAC-28
HAC-29	A/C #3 OIL COOLER OUTLET	A/C	144	144	A/C #3 OIL COOLER OUTLET	HAC-29
HAC-3	A/C #1 CHILLED WATER PUMP DISCHARGE	A/C	144	144	A/C #1 CHILLED WATER PUMP DISCHARGE	HAC-3

(ENCLOSURE 1)

HAC-30	A/C #3 PURGE INLET	A/C	144		A/C #3 PURGE INLET	HAC-30
HAC-31	A/C #3 PURGE OUTLET	A/C	144		A/C #3 PURGE OUTLET	HAC-31
HAC-32	A/C #3 S/W INLET	A/C	144	144	A/C #3 S/W INLET	HAC-32
HAC-33	A/C #3 S/W OUTLET	A/C	144	144	A/C #3 S/W OUTLET	HAC-33
HAC-34	A/C #4 CHILLED WATER INLET	A/C	144	144	A/C #4 CHILLED WATER INLET	HAC-34
HAC-35	A/C #4 CHILLED WATER OUTLET	A/C	144	144	A/C #4 CHILLED WATER OUTLET	HAC-35
HAC-36	A/C #4 CHILLED WATER PUMP DISCHARGE	A/C	144	144	A/C #4 CHILLED WATER PUMP DISCHARGE	HAC-36
HAC-37	A/C #4 CHILLED WATER PUMP SUCTION	A/C	144	144	A/C #4 CHILLED WATER PUMP SUCTION	HAC-37
HAC-38	A/C #4 L/P AIR	A/C	144	144	A/C #4 L/P AIR	HAC-38
HAC-39	A/C #4 OIL COOLER INLET	A/C	144	144	A/C #4 OIL COOLER INLET	HAC-39
HAC-4	A/C #1 CHILLED WATER PUMP SUCTION	A/C	144	144	A/C #1 CHILLED WATER PUMP SUCTION	HAC-4
HAC-40	A/C #4 OIL COOLER OUTLET	A/C	144	144	A/C #4 OIL COOLER OUTLET	HAC-40
HAC-41	A/C #4 PURGE INLET	A/C	144		A/C #4 PURGE INLET	HAC-41
HAC-42	A/C #4 PURGE OUTLET	A/C	144		A/C #4 PURGE OUTLET	HAC-42
HAC-43	A/C #4 S/W INLET	A/C	144	144	A/C #4 S/W INLET	HAC-43
HAC-44	A/C #4 S/W OUTLET	A/C	144	144	A/C #4 S/W OUTLET	HAC-44
HAC-5	A/C #1 L/P AIR	A/C	144	144	A/C #1 L/P AIR	HAC-5
HAC-6	A/C #1 OIL COOLER INLET	A/C	144	144	A/C #1 OIL COOLER INLET	HAC-6
HAC-7	A/C #1 OIL COOLER OUTLET	A/C	144	144	A/C #1 OIL COOLER OUTLET	HAC-7
HAC-8	A/C #1 PURGE INLET	A/C	144		A/C #1 PURGE INLET	HAC-8
HAC-9	A/C #1 PURGE OUTLET	A/C	144		A/C #1 PURGE OUTLET	HAC-9
HAW-1	PORT	ANCHOR WINDLASS	144	144	PORT	HAW-1
HAW-2	PORT	ANCHOR WINDLASS	144	144	PORT	HAW-2
HAW-3	PORT	ANCHOR WINDLASS	144	144	PORT	HAW-3

HAW-4	PORT	ANCHOR WINDLASS	144	144	PORT	HAW-4
HAW-5	STBD	ANCHOR WINDLASS	144	144	STBD	HAW-5
HAW-6	STBD	ANCHOR WINDLASS	144	144	STBD	HAW-6
HAW-7	STBD	ANCHOR WINDLASS	144	144	STBD	HAW-7
HAW-8	STBD	ANCHOR WINDLASS	144	144	STBD	HAW-8
HAW-9	SUCTION	ANCHOR WINDLASS	144	144	SUCTION	HAW-9
HCD-5	HD-1077 COOLER MAKE-UP FEED	C&D	144		HD-1077 COOLER MAKE-UP FEED	HCD-5
HCD-6	HD-1077 COOLER S/W OVERBOARD	C&D	144		HD-1077 COOLER S/W OVERBOARD	HCD-6
HCD-7	HD-1077 COOLER S/W SUCTION	C&D	144		HD-1077 COOLER S/W SUCTION	HCD-7
HCHT-1	CHT PUMP #1 DISCHARGE	CHT	144	144	CHT PUMP #1 DISCHARGE	HCHT-1
HCHT-10	CHT PUMP #4 DISCHARGE	CHT	144	144	CHT PUMP #4 DISCHARGE	HCHT-10
HCHT-11	CHT PUMP #4 SUCTION	CHT	144	144	CHT PUMP #4 SUCTION	HCHT-11
HCHT-12	CHT PUMP #4 VENT	CHT	144	144	CHT PUMP #4 VENT	HCHT-12
HCHT-13	CHT PUMP #5 DISCHARGE	CHT	144	144	CHT PUMP #5 DISCHARGE	HCHT-13
HCHT-14	CHT PUMP #5 SUCTION	CHT	144	144	CHT PUMP #5 SUCTION	HCHT-14
HCHT-15	CHT PUMP #5 VENT	CHT	144	144	CHT PUMP #5 VENT	HCHT-15
HCHT-16	CHT PUMP #6 DISCHARGE	CHT	144	144	CHT PUMP #6 DISCHARGE	HCHT-16
HCHT-17	CHT PUMP #6 SUCTION	CHT	144	144	CHT PUMP #6 SUCTION	HCHT-17
HCHT-18	CHT PUMP #6 VENT	CHT	144	144	CHT PUMP #6 VENT	HCHT-18
HCHT-2	CHT PUMP #1 SUCTION	CHT	144	144	CHT PUMP #1 SUCTION	HCHT-2
HCHT-3	CHT PUMP #1 VENT	CHT	144	144	CHT PUMP #1 VENT	HCHT-3
HCHT-4	CHT PUMP #2 DISCHARGE	CHT	144	144	CHT PUMP #2 DISCHARGE	HCHT-4
HCHT-5	CHT PUMP #2 SUCTION	CHT	144	144	CHT PUMP #2 SUCTION	HCHT-5
HCHT-6	CHT PUMP #2 VENT	CHT	144	144	CHT PUMP #2 VENT	HCHT-6

HCHT-7	CHT PUMP #3 DISCHARGE	CHT	144	144	CHT PUMP #3 DISCHARGE	HCHT-7
HCHT-8	CHT PUMP #3 SUCTION	CHT	144	144	CHT PUMP #3 SUCTION	HCHT-8
HCHT-9	CHT PUMP #3 VENT	CHT	144	144	CHT PUMP #3 VENT	HCHT-9
HCRP-1	CRP ATTACHED PUMP SUCTION	CRP	144	144	CRP ATTACHED PUMP SUCTION	HCRP-1
HCRP-10	EMERGENCY HAND PUMP	CRP	144	144	EMERGENCY HAND PUMP	HCRP-10
HCRP-11	HOPM POWER OIL SUPPLY	CRP	144	144	HOPM POWER OIL SUPPLY	HCRP-11
HCRP-12	HYDRAULIC CONTROL OIL FROM OD BOX TO SUMP	CRP	144	144	HYDRAULIC CONTROL OIL FROM OD BOX TO SUMP	HCRP-12
HCRP-13	HYDRAULIC CONTROL OIL FROM HOPM TO OD BOX	CRP	144	144	HYDRAULIC CONTROL OIL FROM HOPM TO OD BOX	HCRP-13
HCRP-14	HYDRAULIC CONTROL OIL FROM HOPM TO OD BOX	CRP	144	144	HYDRAULIC CONTROL OIL FROM HOPM TO OD BOX	HCRP-14
HCRP-15	HYDRAULIC CONTROL OIL FROM OD BOX TO SUMP	CRP	144	144	HYDRAULIC CONTROL OIL FROM OD BOX TO SUMP	HCRP-15
HCRP-16	HYDRAULIC OIL FROM OD BOX TO HEAD TANK	CRP	144	144	HYDRAULIC OIL FROM OD BOX TO HEAD TANK	HCRP-16
HCRP-17	HYDRAULIC OIL FROM OD BOX TO HEAD TANK	CRP	144	144	HYDRAULIC OIL FROM OD BOX TO HEAD TANK	HCRP-17
HCRP-18	OD BOX AFT SEAL DRAIN	CRP	144	144	OD BOX AFT SEAL DRAIN	HCRP-18
HCRP-19	OD BOX AFT SEAL DRAIN	CRP	144	144	OD BOX AFT SEAL DRAIN	HCRP-19
HCRP-2	CRP ATTACHED PUMP SUCTION	CRP	144	144	CRP ATTACHED PUMP SUCTION	HCRP-2
HCRP-20	OD BOX FWD SEAL DRAIN	CRP	144	144	OD BOX FWD SEAL DRAIN	HCRP-20
HCRP-21	OD BOX FWD SEAL DRAIN	CRP	144	144	OD BOX FWD SEAL DRAIN	HCRP-21
HCRP-22	PRAIRIE AIR SUPPLY TO OD BOX	CRP	144	144	PRAIRIE AIR SUPPLY TO OD BOX	HCRP-22
HCRP-23	PRAIRIE AIR SUPPLY TO OD BOX	CRP	144	144	PRAIRIE AIR SUPPLY TO OD BOX	HCRP-23
HCRP-3	CRP MOTOR DRIVEN PUMP SUCTION	CRP	144	144	CRP MOTOR DRIVEN PUMP SUCTION	HCRP-3
HCRP-4	CRP MOTOR DRIVEN PUMP SUCTON	CRP	144	144	CRP MOTOR DRIVEN PUMP SUCTON	HCRP-4
HCRP-5	CRP OD BOX POWER OIL RETURN	CRP	144	144	CRP OD BOX POWER OIL RETURN	HCRP-5
HCRP-6	CRP OD BOX POWER OIL RETURN	CRP	144	144	CRP OD BOX POWER OIL RETURN	HCRP-6
HCRP-7	EMERGENCY HAND PUMP	CRP	144	144	EMERGENCY HAND PUMP	HCRP-7

HCRP-8	EMERGENCY HAND PUMP	CRP	144	144	EMERGENCY HAND PUMP	HCRP-8
HCRP-9	EMERGENCY HAND PUMP	CRP	144	144	EMERGENCY HAND PUMP	HCRP-9
HCSS-105	1STCA MK9 CHILLED WATER RETURN	CSSE	144		1STCA MK9 CHILLED WATER RETURN	HCSS-105
HCSS-106	1STCA MK9 CHILLED WATER SUPPLY	CSSE	144		1STCA MK9 CHILLED WATER SUPPLY	HCSS-106
HCSS-219	1STCB MK9 CHILLED WATER RETURN	CSSE	144		1STCB MK9 CHILLED WATER RETURN	HCSS-219
HCSS-220	1STCB MK9 CHILLED WATER SUPPLY	CSSE	144		1STCB MK9 CHILLED WATER SUPPLY	HCSS-220
HCSS-333	2STCA MK9 CHILLED WATER RETURN	CSSE	144		2STCA MK9 CHILLED WATER RETURN	HCSS-333
HCSS-334	2STCA MK9 CHILLED WATER SUPPLY	CSSE	144		2STCA MK9 CHILLED WATER SUPPLY	HCSS-334
HCSS-447	2STCB MK9 CHILLED WATER RETURN	CSSE	144		2STCB MK9 CHILLED WATER RETURN	HCSS-447
HCSS-448	2STCB MK9 CHILLED WATER SUPPLY	CSSE	144		2STCB MK9 CHILLED WATER SUPPLY	HCSS-448
HCWS-17	MT21 EC RETURN	CIWS	144	144	MT21 EC RETURN	HCWS-17
HCWS-18	MT21 EC SUPPLY	CIWS	144	144	MT21 EC SUPPLY	HCWS-18
HCWS-76	MT22 EC RETURN	CIWS	144	144	MT22 EC RETURN	HCWS-76
HCWS-77	MT22 EC SUPPLY	CIWS	144	144	MT22 EC SUPPLY	HCWS-77
HDIS-1	#1 BRINE PUMP DISCHARGE	DISTILLING PLANT	144		#1 BRINE PUMP DISCHARGE	HDIS-1
HDIS-10	#2 BRINE PUMP GLAND SEAL SUPPLY	DISTILLING PLANT	144		#2 BRINE PUMP GLAND SEAL SUPPLY	HDIS-10
HDIS-11	#2 BRINE PUMP GLAND SEAL SUPPLY	DISTILLING PLANT	144		#2 BRINE PUMP GLAND SEAL SUPPLY	HDIS-11
HDIS-12	#2 CONDENSATE PUMP DISCHARGE	DISTILLING PLANT	144		#2 CONDENSATE PUMP DISCHARGE	HDIS-12
HDIS-13	#2 CONDENSATE PUMP SEAL SUPPLY	DISTILLING PLANT	144		#2 CONDENSATE PUMP SEAL SUPPLY	HDIS-13
HDIS-14	#2 CONDENSATE PUMP SUCTION	DISTILLING PLANT	144		#2 CONDENSATE PUMP SUCTION	HDIS-14
HDIS-15	#2 DISTILLATE PUMP DISCHARGE	DISTILLING PLANT	144		#2 DISTILLATE PUMP DISCHARGE	HDIS-15
HDIS-16	#2 DISTILLATE PUMP SEAL SUPPLY	DISTILLING PLANT	144		#2 DISTILLATE PUMP SEAL SUPPLY	HDIS-16
HDIS-17	#2 DISTILLATE PUMP SUCTION	DISTILLING PLANT	144		#2 DISTILLATE PUMP SUCTION	HDIS-17
HDIS-18	FEED PUMP #1 DISCHARGE	DISTILLING PLANT	144		FEED PUMP #1 DISCHARGE	HDIS-18

HDIS-19	FEED PUMP #1 SUCTION	DISTILLING PLANT	144		FEED PUMP #1 SUCTION	HDIS-19
HDIS-2	#1 BRINE PUMP GLAND SEAL SUPPLY	DISTILLING PLANT	144		#1 BRINE PUMP GLAND SEAL SUPPLY	HDIS-2
HDIS-20	FEED PUMP #2 DISCHARGE	DISTILLING PLANT	144		FEED PUMP #2 DISCHARGE	HDIS-20
HDIS-21	FEED PUMP #2 SUCTION	DISTILLING PLANT	144		FEED PUMP #2 SUCTION	HDIS-21
HDIS-3	#1 CONDENSATE PUMP DISCHARGE	DISTILLING PLANT	144		#1 CONDENSATE PUMP DISCHARGE	HDIS-3
HDIS-4	#1 CONDENSATE PUMP SEAL SUPPLY	DISTILLING PLANT	144		#1 CONDENSATE PUMP SEAL SUPPLY	HDIS-4
HDIS-5	#1 CONDENSATE PUMP SUCTION	DISTILLING PLANT	144		#1 CONDENSATE PUMP SUCTION	HDIS-5
HDIS-6	#1 DISTILLATE PUMP DISCHARGE	DISTILLING PLANT	144		#1 DISTILLATE PUMP DISCHARGE	HDIS-6
HDIS-7	#1 DISTILLATE PUMP SEAL SUPPLY	DISTILLING PLANT	144		#1 DISTILLATE PUMP SEAL SUPPLY	HDIS-7
HDIS-8	#1 DISTILLATE PUMP SUCTION	DISTILLING PLANT	144		#1 DISTILLATE PUMP SUCTION	HDIS-8
HDIS-9	#2 BRINE PUMP DISCHARGE	DISTILLING PLANT	144		#2 BRINE PUMP DISCHARGE	HDIS-9
HFEX-100	MAGAZINE SPRINKLER GROUP 5 PORT TORPEDO MAGAZINE	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 5 PORT TORPEDO MAGAZINE	HFEX-100
HFEX-101	MAGAZINE SPRINKLER GROUP 7 SMALL ARMS MAGAZINE	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 7 SMALL ARMS MAGAZINE	HFEX-101
HFEX-102	MAGAZINE SPRINKLER GROUP 7 SMALL ARMS MAGAZINE	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 7 SMALL ARMS MAGAZINE	HFEX-102
HFEX-103	MAGAZINE SPRINKLER GROUP 9 MT51 LOADER DRUM	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 9 MT51 LOADER DRUM	HFEX-103
HFEX-104	MAGAZINE SPRINKLER GROUP 9 MT51 LOADER DRUM	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 9 MT51 LOADER DRUM	HFEX-104
HFEX-75	MAGAZINE SPRINKLER GROUP 6 MT51 PROJECTILE MAGAZINE	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 6 MT51 PROJECTILE MAGAZINE	HFEX-75
HFEX-76	MAGAZINE SPRINKLER GROUP 6 MT51 PROJECTILE MAGAZINE	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 6 MT51 PROJECTILE MAGAZINE	HFEX-76
HFEX-77	MAGAZINE SPRINKLER GROUP 8 MT52 PROJECTILE MAGAZINE	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 8 MT52 PROJECTILE MAGAZINE	HFEX-77
HFEX-78	MAG SPRINKLER GROUP 8 MT52 PROJECTILE MAGAZINE	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 8 MT52 PROJECTILE MAGAZINE	HFEX-78
HFEX-79	MAGAZINE SPRINKLER GROUP 10 MT52 LOADER DRUM	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 10 MT52 LOADER DRUM	HFEX-79
HFEX-80	MAGAZINE SPRINKLER GROUP 10 MT52 LOADER DRUM	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 10 MT52 LOADER DRUM	HFEX-80
HFEX-81	MAGAZINE SPRINKLER GROUP 11 MT51 AMMO STAGING	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 11 MT51 AMMO STAGING	HFEX-81
HFEX-82	MAGAZINE SPRINKLER GROUP 11 MT51 AMMO STAGING	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 11 MT51 AMMO STAGING	HFEX-82

HFEX-83	MAGAZINE SPRINKLER GROUP 11 MT51 AMMO STAGING	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 11 MT51 AMMO STAGING	HFEX-83
HFEX-84	MAGAZINE SPRINKLER GROUP 11 MT51 AMMO STAGING	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 11 MT51 AMMO STAGING	HFEX-84
HFEX-85	MAGAZINE SPRINKLER GROUP 12 MT52 AMMO STAGING	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 12 MT52 AMMO STAGING	HFEX-85
HFEX-86	MAGAZINE SPRINKLER GROUP 12 MT52 AMMO STAGING	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 12 MT52 AMMO STAGING	HFEX-86
HFEX-87	MAGAZINE SPRINKLER GROUP 15 50 CAL MAGAZINE	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 15 50 CAL MAGAZINE	HFEX-87
HFEX-88	MAGAZINE SPRINKLER GROUP 15 50 CAL MAGAZINE	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 15 50 CAL MAGAZINE	HFEX-88
HFEX-89	MAGAZINE SPRINKLER GROUP 16 MARINE MARKER MAGAZINE	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 16 MARINE MARKER MAGAZINE	HFEX-89
HFEX-90	MAGAZINE SPRINKLER GROUP 16 MARINE MARKER MAGAZINE	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 16 MARINE MARKER MAGAZINE	HFEX-90
HFEX-91	MAGAZINE SPRINKLER GROUP 18 MK41 VLS FWD	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 18 MK41 VLS FWD	HFEX-91
HFEX-92	MAGAZINE SPRINKLER GROUP 18 MK41 VLS FWD	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 18 MK41 VLS FWD	HFEX-92
HFEX-93	MAGAZINE SPRINKLER GROUP 19 MK41 VLS AFT	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 19 MK41 VLS AFT	HFEX-93
HFEX-94	MAGAZINE SPRINKLER GROUP 19 MK41 VLS AFT	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 19 MK41 VLS AFT	HFEX-94
HFEX-95	MAGAZINE SPRINKLER GROUP 22 SMALL ARMS MAGAZINE	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 22 SMALL ARMS MAGAZINE	HFEX-95
HFEX-96	MAGAZINE SPRINKLER GROUP 22 SMALL ARMS MAGAZINE	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 22 SMALL ARMS MAGAZINE	HFEX-96
HFEX-97	MAGAZINE SPRINKLER GROUP 4 STBD TORPEDO MAGAZINE	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 4 STBD TORPEDO MAGAZINE	HFEX-97
HFEX-98	MAGAZINE SPRINKLER GROUP 4 STBD TORPEDO MAGAZINE	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 4 STBD TORPEDO MAGAZINE	HFEX-98
HFEX-99	MAGAZINE SPRINKLER GROUP 5 PORT TORPEDO MAGAZINE	FIRE EXTINGUISH	144	144	MAGAZINE SPRINKLER GROUP 5 PORT TORPEDO MAGAZINE	HFEX-99
HFM-1	FIRE PUMP #1 DISCHARGE	FIREMAIN	144	144	FIRE PUMP #1 DISCHARGE	HFM-1
HFM-10	FIRE PUMP #4 DISCHARGE	FIREMAIN	144	144	FIRE PUMP #4 DISCHARGE	HFM-10
HFM-11	FIRE PUMP #4 SUCTION	FIREMAIN	144	144	FIRE PUMP #4 SUCTION	HFM-11
HFM-13	FIRE PUMP #5 DISCHARGE	FIREMAIN	144	144	FIRE PUMP #5 DISCHARGE	HFM-13
HFM-14	FIRE PUMP #5 SUCTION	FIREMAIN	144	144	FIRE PUMP #5 SUCTION	HFM-14
HFM-16	FIRE PUMP #6 DISCHARGE	FIREMAIN	144	144	FIRE PUMP #6 DISCHARGE	HFM-16
HFM-17	FIRE PUMP #6 SUCTION	FIREMAIN	144	144	FIRE PUMP #6 SUCTION	HFM-17

HFM-2	FIRE PUMP #1 SUCTION	FIREMAIN	144	144	FIRE PUMP #1 SUCTION	HFM-2
HFM-4	FIRE PUMP #2 DISCHARGE	FIREMAIN	144	144	FIRE PUMP #2 DISCHARGE	HFM-4
HFM-5	FIRE PUMP #2 SUCTION	FIREMAIN	144	144	FIRE PUMP #2 SUCTION	HFM-5
HFM-7	FIRE PUMP #3 DISCHARGE	FIREMAIN	144	144	FIRE PUMP #3 DISCHARGE	HFM-7
HFM-8	FIRE PUMP #3 SUCTION	FIREMAIN	144	144	FIRE PUMP #3 SUCTION	HFM-8
HFO-1	F/O PUMP #1A DISCHARGE	F/O	144	144	F/O PUMP #1A DISCHARGE	HFO-1
HFO-11	F/O PURIFIER #1 F/O INLET	F/O	144	144	F/O PURIFIER #1 F/O INLET	HFO-11
HFO-12	F/O PURIFIER #1 F/O OUTLET	F/O	144	144	F/O PURIFIER #1 F/O OUTLET	HFO-12
HFO-13	F/O PURIFIER #1 FEEDWATER	F/O	144		F/O PURIFIER #1 FEEDWATER	HFO-13
HFO-14	F/O PURIFIER #1 L/P AIR	F/O	144	144	F/O PURIFIER #1 L/P AIR	HFO-14
HFO-19	F/O PURIFIER #2 F/O INLET	F/O	144	144	F/O PURIFIER #2 F/O INLET	HFO-19
HFO-2	F/O PUMP #1A SUCTION	F/O	144	144	F/O PUMP #1A SUCTION	HFO-2
HFO-20	F/O PURIFIER #2 F/O OUTLET	F/O	144	144	F/O PURIFIER #2 F/O OUTLET	HFO-20
HFO-21	F/O PURIFIER #2 FEEDWATER	F/O	144		F/O PURIFIER #2 FEEDWATER	HFO-21
HFO-22	F/O PURIFIER #2 L/P AIR	F/O	144	144	F/O PURIFIER #2 L/P AIR	HFO-22
HFO-25	F/O XFER PUMP #1 DISCHARGE	F/O	144	144	F/O XFER PUMP #1 DISCHARGE	HFO-25
HFO-26	F/O XFER PUMP #1 SUCTION	F/O	144	144	F/O XFER PUMP #1 SUCTION	HFO-26
HFO-27	F/O XFER PUMP #2 DISCHARGE	F/O	144	144	F/O XFER PUMP #2 DISCHARGE	HFO-27
HFO-28	F/O XFER PUMP #2 SUCTION	F/O	144	144	F/O XFER PUMP #2 SUCTION	HFO-28
HFO-3	F/O PUMP #1B DISCHARGE	F/O	144	144	F/O PUMP #1B DISCHARGE	HFO-3
HFO-4	F/O PUMP #1B SUCTION	F/O	144	144	F/O PUMP #1B SUCTION	HFO-4
HFO-5	F/O PUMP #2A DISCHARGE	F/O	144	144	F/O PUMP #2A DISCHARGE	HFO-5
HFO-6	F/O PUMP #2A SUCTION	F/O	144	144	F/O PUMP #2A SUCTION	HFO-6
HFO-7	F/O PUMP #2B DISCHARGE	F/O	144	144	F/O PUMP #2B DISCHARGE	HFO-7

HFO-8	F/O PUMP #2B SUCTION	F/O	144	144	F/O PUMP #2B SUCTION	HFO-8
HFW-13	FRESH WATER PUMP #1 DISCHARGE	FRESH WATER	144		FRESH WATER PUMP #1 DISCHARGE	HFW-13
HFW-14	FRESH WATER PUMP #1 SUCTION	FRESH WATER	144		FRESH WATER PUMP #1 SUCTION	HFW-14
HFW-15	FRESH WATER PUMP #2 DISCHARGE	FRESH WATER	144		FRESH WATER PUMP #2 DISCHARGE	HFW-15
HFW-16	FRESH WATER PUMP #2 SUCTION	FRESH WATER	144		FRESH WATER PUMP #2 SUCTION	HFW-16
HGTG-1	SSGTG #1 F/O SUPPLY TO MODULE	SSGTG	144	144	SSGTG #1 F/O SUPPLY TO MODULE	HGTG-1
HGTG-11	SSGTG #1 S/W COOLING PUMP DISCHARGE	SSGTG	144	144	SSGTG #1 S/W COOLING PUMP DISCHARGE	HGTG-11
HGTG-12	SSGTG #1 S/W COOLING PUMP SUCTION	SSGTG	144	144	SSGTG #1 S/W COOLING PUMP SUCTION	HGTG-12
HGTG-14	SSGTG #1 TURBINE L/O COOLER INLET	SSGTG	144	144	SSGTG #1 TURBINE L/O COOLER INLET	HGTG-14
HGTG-15	SSGTG #1 TURBINE L/O COOLER OUTLET	SSGTG	144	144	SSGTG #1 TURBINE L/O COOLER OUTLET	HGTG-15
HGTG-16	SSGTG #1 TURBINE/GEAR L/O SUMP DRAIN	SSGTG	144	144	SSGTG #1 TURBINE/GEAR L/O SUMP DRAIN	HGTG-16
HGTG-17	SSGTG #1 WATER WASH TO MODULE	SSGTG	144	144	SSGTG #1 WATER WASH TO MODULE	HGTG-17
HGTG-18	SSGTG #2 F/O SUPPLY TO MODULE	SSGTG	144	144	SSGTG #2 F/O SUPPLY TO MODULE	HGTG-18
HGTG-2	SSGTG #1 GEN AIR COOLER S/W INLET	SSGTG	144	144	SSGTG #1 GEN AIR COOLER S/W INLET	HGTG-2
HGTG-20	SSGTG #2 GEN AIR COOLER S/W INLET	SSGTG	144	144	SSGTG #2 GEN AIR COOLER S/W INLET	HGTG-20
HGTG-21	SSGTG #2 GEN AIR COOLER S/W OUTLET	SSGTG	144	144	SSGTG #2 GEN AIR COOLER S/W OUTLET	HGTG-21
HGTG-22	SSGTG #2 GEN L/O COOLER S/W INLET	SSGTG	144	144	SSGTG #2 GEN L/O COOLER S/W INLET	HGTG-22
HGTG-23	SSGTG #2 GEN L/O COOLER S/W OUTLET	SSGTG	144	144	SSGTG #2 GEN L/O COOLER S/W OUTLET	HGTG-23
HGTG-24	SSGTG #2 GEN L/O SAMPLE DRAIN	SSGTG	144	144	SSGTG #2 GEN L/O SAMPLE DRAIN	HGTG-24
HGTG-25	SSGTG #2 GEN L/O SUMP AND DRAIN	SSGTG	144	144	SSGTG #2 GEN L/O SUMP AND DRAIN	HGTG-25
HGTG-27	SSGTG #2 L/O SAMPLE DRAIN	SSGTG	144	144	SSGTG #2 L/O SAMPLE DRAIN	HGTG-27
HGTG-28	SSGTG #2 S/W COOLING PUMP DISCHARGE	SSGTG	144	144	SSGTG #2 S/W COOLING PUMP DISCHARGE	HGTG-28
HGTG-29	SSGTG #2 S/W COOLING PUMP SUCTION	SSGTG	144	144	SSGTG #2 S/W COOLING PUMP SUCTION	HGTG-29
HGTG-3	SSGTG #1 GEN AIR COOLER S/W OUTLET	SSGTG	144	144	SSGTG #1 GEN AIR COOLER S/W OUTLET	HGTG-3

HGTG-31	SSGTG #2 TURBINE L/O COOLER INLET	SSGTG	144	144	SSGTG #2 TURBINE L/O COOLER INLET	HGTG-31
HGTG-32	SSGTG #2 TURBINE L/O COOLER OUTLET	SSGTG	144	144	SSGTG #2 TURBINE L/O COOLER OUTLET	HGTG-32
HGTG-33	SSGTG #2 TURBINE/GEAR L/O SUMP DRAIN	SSGTG	144	144	SSGTG #2 TURBINE/GEAR L/O SUMP DRAIN	HGTG-33
HGTG-34	SSGTG #2 WATER WASH TO MODULE	SSGTG	144	144	SSGTG #2 WATER WASH TO MODULE	HGTG-34
HGTG-35	SSGTG #3 F/O SUPPLY TO MODULE	SSGTG	144	144	SSGTG #3 F/O SUPPLY TO MODULE	HGTG-35
HGTG-38	SSGTG #3 GEN AIR COOLER S/W INLET	SSGTG	144	144	SSGTG #3 GEN AIR COOLER S/W INLET	HGTG-38
HGTG-39	SSGTG #3 GEN AIR COOLER S/W OUTLET	SSGTG	144	144	SSGTG #3 GEN AIR COOLER S/W OUTLET	HGTG-39
HGTG-4	SSGTG #1 GEN L/O COOLER S/W INLET	SSGTG	144	144	SSGTG #1 GEN L/O COOLER S/W INLET	HGTG-4
HGTG-40	SSGTG #3 GEN L/O COOLER S/W INLET	SSGTG	144	144	SSGTG #3 GEN L/O COOLER S/W INLET	HGTG-40
HGTG-41	SSGTG #3 GEN L/O COOLER S/W OUTLET	SSGTG	144	144	SSGTG #3 GEN L/O COOLER S/W OUTLET	HGTG-41
HGTG-43	SSGTG #3 GEN L/O SAMPLE DRAIN	SSGTG	144	144	SSGTG #3 GEN L/O SAMPLE DRAIN	HGTG-43
HGTG-45	SSGTG #3 S/W COOLING PUMP DISCHARGE	SSGTG	144	144	SSGTG #3 S/W COOLING PUMP DISCHARGE	HGTG-45
HGTG-46	SSGTG #3 S/W COOLING PUMP SUCTION	SSGTG	144	144	SSGTG #3 S/W COOLING PUMP SUCTION	HGTG-46
HGTG-48	SSGTG #3 TURBINE L/O COOLER INLET	SSGTG	144	144	SSGTG #3 TURBINE L/O COOLER INLET	HGTG-48
HGTG-49	SSGTG #3 TURBINE L/O COOLER OUTLET	SSGTG	144	144	SSGTG #3 TURBINE L/O COOLER OUTLET	HGTG-49
HGTG-5	SSGTG #1 GEN L/O COOLER S/W OUTLET	SSGTG	144	144	SSGTG #1 GEN L/O COOLER S/W OUTLET	HGTG-5
HGTG-50	SSGTG #3 TURBINE/GEAR L/O SUMP DRAIN	SSGTG	144	144	SSGTG #3 TURBINE/GEAR L/O SUMP DRAIN	HGTG-50
HGTG-51	SSGTG #3 WATER WASH TO MODULE	SSGTG	144	144	SSGTG #3 WATER WASH TO MODULE	HGTG-51
HGTG-6	SSGTG #1 GEN L/O SUMP AND DRAIN	SSGTG	144	144	SSGTG #1 GEN L/O SUMP AND DRAIN	HGTG-6
HGTG-8	SSGTG #1 L/O SAMPLE DRAIN	SSGTG	144	144	SSGTG #1 L/O SAMPLE DRAIN	HGTG-8
HGTG-9	SSGTG #1 MODULE FLOOR DRAIN PORT	SSGTG	144		SSGTG #1 MODULE FLOOR DRAIN PORT	HGTG-9
HGTM-12	GTM 1A VENT DAMPER ACT AIR INLET	MAIN PROP	144	144	GTM 1A VENT DAMPER ACT AIR INLET	HGTM-12
HGTM-13	GTM 1A WATER WASH TO MODULE	MAIN PROP	144	144	GTM 1A WATER WASH TO MODULE	HGTM-13
HGTM-14	GTM 1B F/O DRAIN FROM MODULE	MAIN PROP	144	144	GTM 1B F/O DRAIN FROM MODULE	HGTM-14

HGTM-15	GTM 1B F/O INLET	MAIN PROP	144	144	GTM 1B F/O INLET	HGTM-15
HGTM-16	GTM 1B F/O MANIFOLD SHROUD DRAIN	MAIN PROP	144	144	GTM 1B F/O MANIFOLD SHROUD DRAIN	HGTM-16
HGTM-2	GTM 1A F/O INLET	MAIN PROP	144	144	GTM 1A F/O INLET	HGTM-2
HGTM-25	GTM 1B VENT DAMPER ACT AIR INLET	MAIN PROP	144	144	GTM 1B VENT DAMPER ACT AIR INLET	HGTM-25
HGTM-26	GTM 1B WATER WASH TO MODULE	MAIN PROP	144	144	GTM 1B WATER WASH TO MODULE	HGTM-26
HGTM-27	GTM 2A F/O DRAIN FROM MODULE	MAIN PROP	144	144	GTM 2A F/O DRAIN FROM MODULE	HGTM-27
HGTM-28	GTM 2A F/O INLET	MAIN PROP	144	144	GTM 2A F/O INLET	HGTM-28
HGTM-29	GTM 2A F/O MANIFOLD SHROUD DRAIN	MAIN PROP	144	144	GTM 2A F/O MANIFOLD SHROUD DRAIN	HGTM-29
HGTM-3	GTM 1A F/O MANIFOLD SHROUD DRAIN	MAIN PROP	144	144	GTM 1A F/O MANIFOLD SHROUD DRAIN	HGTM-3
HGTM-40	GTM 2A VENT DAMPER ACT AIR INLET	MAIN PROP	144	144	GTM 2A VENT DAMPER ACT AIR INLET	HGTM-40
HGTM-41	GTM 2A WATER WASH TO MODULE	MAIN PROP	144	144	GTM 2A WATER WASH TO MODULE	HGTM-41
HGTM-42	GTM 2B F/O DRAIN FROM MODULE	MAIN PROP	144	144	GTM 2B F/O DRAIN FROM MODULE	HGTM-42
HGTM-43	GTM 2B F/O INLET	MAIN PROP	144	144	GTM 2B F/O INLET	HGTM-43
HGTM-44	GTM 2B F/O MANIFOLD SHROUD DRAIN	MAIN PROP	144	144	GTM 2B F/O MANIFOLD SHROUD DRAIN	HGTM-44
HGTM-55	GTM 2B VENT DAMPER ACT AIR INLET	MAIN PROP	144	144	GTM 2B VENT DAMPER ACT AIR INLET	HGTM-55
HGTM-56	GTM 2B WATER WASH TO MODULE	MAIN PROP	144	144	GTM 2B WATER WASH TO MODULE	HGTM-56
HHPA-3	HPAC #1 S/W INLET	H/P AIR	144		HPAC #1 S/W INLET	HHPA-3
HHPA-4	HPAC #1 S/W OUTLET	H/P AIR	144		HPAC #1 S/W OUTLET	HHPA-4
HHPA-6	HPAC #2 S/W INLET	H/P AIR	144		HPAC #2 S/W INLET	HHPA-6
HHPA-7	HPAC #2 S/W OUTLET	H/P AIR	144		HPAC #2 S/W OUTLET	HHPA-7
HLO-1	ATTACHED L/O PUMP DISCHARGE	L/O	144	144	ATTACHED L/O PUMP DISCHARGE	HLO-1
HLO-10	L/O PURIFIER #1 L/O TO HEATER	L/O	144	144	L/O PURIFIER #1 L/O TO HEATER	HLO-10
HLO-11	L/O PURIFIER #1 L/O TRANSFER OUTLET	L/O	144	144	L/O PURIFIER #1 L/O TRANSFER OUTLET	HLO-11
HLO-12	L/O PURIFIER #1 L/P AIR	L/O	144	144	L/O PURIFIER #1 L/P AIR	HLO-12

HLO-13	L/O PURIFIER #1 OIL OUTLET	L/O	144	144	L/O PURIFIER #1 OIL OUTLET	HLO-13
HLO-15	L/O PURIFIER #2 FEED BY-PASS TO MRG SUMP	L/O	144	144	L/O PURIFIER #2 FEED BY-PASS TO MRG SUMP	HLO-15
HLO-17	L/O PURIFIER #2 L/O FROM HEATER	L/O	144	144	L/O PURIFIER #2 L/O FROM HEATER	HLO-17
HLO-18	L/O PURIFIER #2 L/O INLET TO FEED PUMP	L/O	144	144	L/O PURIFIER #2 L/O INLET TO FEED PUMP	HLO-18
HLO-19	L/O PURIFIER #2 L/O TO HEATER	L/O	144	144	L/O PURIFIER #2 L/O TO HEATER	HLO-19
HLO-2	ATTACHED L/O PUMP DISCHARGE	L/O	144	144	ATTACHED L/O PUMP DISCHARGE	HLO-2
HLO-20	L/O PURIFIER #2 L/O TRANSFER OUTLET	L/O	144	144	L/O PURIFIER #2 L/O TRANSFER OUTLET	HLO-20
HLO-21	L/O PURIFIER #2 L/P AIR	L/O	144	144	L/O PURIFIER #2 L/P AIR	HLO-21
HLO-22	L/O PURIFIER #2 OIL OUTLET	L/O	144	144	L/O PURIFIER #2 OIL OUTLET	HLO-22
HLO-23	L/O SERVICE PUMP #1A DISCHARGE	L/O	144	144	L/O SERVICE PUMP #1A DISCHARGE	HLO-23
HLO-24	L/O SERVICE PUMP #1A SUCTION	L/O	144	144	L/O SERVICE PUMP #1A SUCTION	HLO-24
HLO-25	L/O SERVICE PUMP #1B DISCHARGE	L/O	144	144	L/O SERVICE PUMP #1B DISCHARGE	HLO-25
HLO-26	L/O SERVICE PUMP #1B SUCTION	L/O	144	144	L/O SERVICE PUMP #1B SUCTION	HLO-26
HLO-27	L/O SERVICE PUMP #2A DISCHARGE	L/O	144	144	L/O SERVICE PUMP #2A DISCHARGE	HLO-27
HLO-28	L/O SERVICE PUMP #2A SUCTION	L/O	144	144	L/O SERVICE PUMP #2A SUCTION	HLO-28
HLO-29	L/O SERVICE PUMP #2B DISCHARGE	L/O	144	144	L/O SERVICE PUMP #2B DISCHARGE	HLO-29
HLO-3	ATTACHED L/O PUMP SUCTION	L/O	144	144	ATTACHED L/O PUMP SUCTION	HLO-3
HLO-30	L/O SERVICE PUMP #2B SUCTION	L/O	144	144	L/O SERVICE PUMP #2B SUCTION	HLO-30
HLO-4	ATTACHED L/O PUMP SUCTION	L/O	144	144	ATTACHED L/O PUMP SUCTION	HLO-4
HLO-6	L/O PURIFIER #1 FEED BY-PASS TO MRG SUMP	L/O	144	144	L/O PURIFIER #1 FEED BY-PASS TO MRG SUMP	HLO-6
HLO-8	L/O PURIFIER #1 L/O FROM HEATER	L/O	144	144	L/O PURIFIER #1 L/O FROM HEATER	HLO-8
HLO-9	L/O PURIFIER #1 L/O INLET TO FEED PUMP	L/O	144	144	L/O PURIFIER #1 L/O INLET TO FEED PUMP	HLO-9
HLPA-1	LPAC #1 AIR OUTLET	L/P AIR	144	144	LPAC #1 AIR OUTLET	HLPA-1
HLPA-10	LPAC #2 S/W OUTLET	L/P AIR	144		LPAC #2 S/W OUTLET	HLPA-10

HLPA-11	LPAC #3 AIR OUTLET	L/P AIR	144	144	LPAC #3 AIR OUTLET	HLPA-11
HLPA-14	LPAC #3 S/W INLET	L/P AIR	144		LPAC #3 S/W INLET	HLPA-14
HLPA-15	LPAC #3 S/W OUTLET	L/P AIR	144		LPAC #3 S/W OUTLET	HLPA-15
HLPA-4	LPAC #1 S/W INLET	L/P AIR	144		LPAC #1 S/W INLET	HLPA-4
HLPA-5	LPAC #1 S/W OUTLET	L/P AIR	144		LPAC #1 S/W OUTLET	HLPA-5
HLPA-6	LPAC #2 AIR OUTLET	L/P AIR	144	144	LPAC #2 AIR OUTLET	HLPA-6
HLPA-9	LPAC #2 S/W INLET	L/P AIR	144		LPAC #2 S/W INLET	HLPA-9
HMRG-1	DEHUMIDIFIER OUTLET	MRG	144	144	DEHUMIDIFIER OUTLET	HMRG-1
HMRG-10	MRG CASING DRAIN	MRG	144	144	MRG CASING DRAIN	HMRG-10
HMRG-11	MRG CASING DRAIN	MRG	144	144	MRG CASING DRAIN	HMRG-11
HMRG-12	MRG L/O SENSING LINE	MRG	144	144	MRG L/O SENSING LINE	HMRG-12
HMRG-13	MRG L/O SENSING LINE	MRG	144	144	MRG L/O SENSING LINE	HMRG-13
HMRG-17	VENT FOG PRECIPITATOR OUTLET	MRG	144	144	VENT FOG PRECIPITATOR OUTLET	HMRG-17
HMRG-18	VENT FOG PRECIPITATOR OUTLET	MRG	144	144	VENT FOG PRECIPITATOR OUTLET	HMRG-18
HMRG-19	VITAL AIR TO MRG BRAKE A	MRG	144	144	VITAL AIR TO MRG BRAKE A	HMRG-19
HMRG-2	DEHUMIDIFIER OUTLET	MRG	144	144	DEHUMIDIFIER OUTLET	HMRG-2
HMRG-20	VITAL AIR TO MRG BRAKE A	MRG	144	144	VITAL AIR TO MRG BRAKE A	HMRG-20
HMRG-21	VITAL AIR TO MRG BRAKE B	MRG	144	144	VITAL AIR TO MRG BRAKE B	HMRG-21
HMRG-22	VITAL AIR TO MRG BRAKE B	MRG	144	144	VITAL AIR TO MRG BRAKE B	HMRG-22
HMRG-3	L/O SUPPLY TO MRG	MRG	144	144	L/O SUPPLY TO MRG	HMRG-3
HMRG-4	L/O SUPPLY TO MRG	MRG	144	144	L/O SUPPLY TO MRG	HMRG-4
HMRG-5	MAIN L/O SUMP TANK VENT	MRG	144	144	MAIN L/O SUMP TANK VENT	HMRG-5
HMRG-6	MRG BOOT DRAIN A	MRG	144	144	MRG BOOT DRAIN A	HMRG-6
HMRG-7	MRG BOOT DRAIN A	MRG	144	144	MRG BOOT DRAIN A	HMRG-7

HMRG-8	MRG BOOT DRAIN B	MRG	144	144	MRG BOOT DRAIN B	HMRG-8
HMRG-9	MRG BOOT DRAIN B	MRG	144	144	MRG BOOT DRAIN B	HMRG-9
HRAS-1	DRAIN TRANSVERSE WINCH VALVE	RAST	144	144	DRAIN TRANSVERSE WINCH VALVE	HRAS-1
HRAS-10	PRESSURE STBD TRANSVERSE WINCH BRAKE	RAST	144	144	PRESSURE STBD TRANSVERSE WINCH BRAKE	HRAS-10
HRAS-11	PRESSURE STBD TRANSVERSE WINCH BRAKE	RAST	144	144	PRESSURE STBD TRANSVERSE WINCH BRAKE	HRAS-11
HRAS-12	PRESSURE TAIL GUIDE WINCH	RAST	144	144	PRESSURE TAIL GUIDE WINCH	HRAS-12
HRAS-13	PRESSURE TO TRANSVERSE WINCH VALVE	RAST	144	144	PRESSURE TO TRANSVERSE WINCH VALVE	HRAS-13
HRAS-14	RETURN FROM HYDRAULIC OIL COOLER	RAST	144	144	RETURN FROM HYDRAULIC OIL COOLER	HRAS-14
HRAS-15	RETURN FROM TRANSVERSE WINCH VALVE	RAST	144	144	RETURN FROM TRANSVERSE WINCH VALVE	HRAS-15
HRAS-16	STBD CASE DRAIN TAIL GUIDE WINCH BRAKE	RAST	144	144	STBD CASE DRAIN TAIL GUIDE WINCH BRAKE	HRAS-16
HRAS-17	STBD CASE DRAIN TAIL GUIDE WINCH BRAKE	RAST	144	144	STBD CASE DRAIN TAIL GUIDE WINCH BRAKE	HRAS-17
HRAS-18	SUPPLY TO HYDRAULIC OIL COOLER	RAST	144	144	SUPPLY TO HYDRAULIC OIL COOLER	HRAS-18
HRAS-19	SUPPLY TO TRANSVERSE WINCH VALVE	RAST	144	144	SUPPLY TO TRANSVERSE WINCH VALVE	HRAS-19
HRAS-20	TAIL GUIDE WINCH RETURN	RAST	144	144	TAIL GUIDE WINCH RETURN	HRAS-20
HRAS-4	HPU BOOSTER	RAST	144	144	HPU BOOSTER	HRAS-4
HRAS-5	MOVEABLE SHEAVE ASSEMBLY DRAIN	RAST	144	144	MOVEABLE SHEAVE ASSEMBLY DRAIN	HRAS-5
HRAS-6	PORT CASE DRAIN TAIL GUIDE WINCH BRAKE	RAST	144	144	PORT CASE DRAIN TAIL GUIDE WINCH BRAKE	HRAS-6
HRAS-7	PORT CASE DRAIN TAIL GUIDE WINCH BRAKE	RAST	144	144	PORT CASE DRAIN TAIL GUIDE WINCH BRAKE	HRAS-7
HRAS-8	PRESSURE PORT TRANSVERSE WINCH BRAKE	RAST	144	144	PRESSURE PORT TRANSVERSE WINCH BRAKE	HRAS-8
HRAS-9	PRESSURE PORT TRANSVERSE WINCH BRAKE	RAST	144	144	PRESSURE PORT TRANSVERSE WINCH BRAKE	HRAS-9
HREF-1	COND UNIT #1 R-12 HOT GAS	REFRIGERATION	144	144	COND UNIT #1 R-12 HOT GAS	HREF-1
HREF-10	COND UNIT #2 S/W OUTLET	REFRIGERATION	144	144	COND UNIT #2 S/W OUTLET	HREF-10
HREF-2	COND UNIT #1 R-12 MAKE-UP	REFRIGERATION	144	144	COND UNIT #1 R-12 MAKE-UP	HREF-2
HREF-3	COND UNIT #1 R-12 SUPPLY	REFRIGERATION	144	144	COND UNIT #1 R-12 SUPPLY	HREF-3

HREF-4	COND UNIT #1 S/W INLET	REFRIGERATION	144	144	COND UNIT #1 S/W INLET	HREF-4
HREF-5	COND UNIT #1 S/W OUTLET	REFRIGERATION	144	144	COND UNIT #1 S/W OUTLET	HREF-5
HREF-6	COND UNIT #2 R-12 HOT GAS	REFRIGERATION	144	144	COND UNIT #2 R-12 HOT GAS	HREF-6
HREF-7	COND UNIT #2 R-12 MAKE-UP	REFRIGERATION	144	144	COND UNIT #2 R-12 MAKE-UP	HREF-7
HREF-8	COND UNIT #2 R-12 SUPPLY	REFRIGERATION	144	144	COND UNIT #2 R-12 SUPPLY	HREF-8
HREF-9	COND UNIT #2 S/W INLET	REFRIGERATION	144	144	COND UNIT #2 S/W INLET	HREF-9
HSNR-23	HD-1074 CHILLED WATER RETURN	SONAR	144		HD-1074 CHILLED WATER RETURN	HSNR-23
HSNR-24	HD-1074 CHILLED WATER SUPPLY	SONAR	144		HD-1074 CHILLED WATER SUPPLY	HSNR-24
HSNR-33	HD-1074 S/W SUPPLY	SONAR	144	144	HD-1074 S/W SUPPLY	HSNR-33
HSPS-8	SPS-49 HD-1076 S/W SUPPLY	SPS-49	144	144	SPS-49 HD-1076 S/W SUPPLY	HSPS-8
HSPY-1	ANTENNA T01 CHILLED WATER RETURN	SPY	144		ANTENNA T01 CHILLED WATER RETURN	HSPY-1
HSPY-2	ANTENNA T01 CHILLED WATER SUPPLY	SPY	144		ANTENNA T01 CHILLED WATER SUPPLY	HSPY-2
HSPY-3	ANTENNA T02 CHILLED WATER RETURN	SPY	144		ANTENNA T02 CHILLED WATER RETURN	HSPY-3
HSPY-4	ANTENNA T02 CHILLED WATER SUPPLY	SPY	144		ANTENNA T02 CHILLED WATER SUPPLY	HSPY-4
HSPY-5	ANTENNA T03 CHILLED WATER RETURN	SPY	144		ANTENNA T03 CHILLED WATER RETURN	HSPY-5
HSPY-552	HD-1014 COOLER S/W SUPPLY	SPY	144	144	HD-1014 COOLER S/W SUPPLY	HSPY-552
HSPY-553	HD-1014A COOLER D/W MAKE-UP FEED	SPY	144		HD-1014A COOLER D/W MAKE-UP FEED	HSPY-553
HSPY-554	HD-1014A COOLER D/W MAKE-UP TANK	SPY	144		HD-1014A COOLER D/W MAKE-UP TANK	HSPY-554
HSPY-557	HD-1014A COOLER S/W INLET	SPY	144	144	HD-1014A COOLER S/W INLET	HSPY-557
HSPY-558	HD-1014A COOLER S/W OVERBOARD	SPY	144		HD-1014A COOLER S/W OVERBOARD	HSPY-558
HSPY-6	ANTENNA T03 CHILLED WATER SUPPLY	SPY	144		ANTENNA T03 CHILLED WATER SUPPLY	HSPY-6
HSPY-7	ANTENNA T04 CHILLED WATER RETURN	SPY	144		ANTENNA T04 CHILLED WATER RETURN	HSPY-7
HSPY-8	ANTENNA T04 CHILLED WATER SUPPLY	SPY	144		ANTENNA T04 CHILLED WATER SUPPLY	HSPY-8
HSTR-1	1A ACCUMULATOR INLET	STEERING	144	144	1A ACCUMULATOR INLET	HSTR-1

HSTR-10	1B MAIN PUMP INLET	STEERING	144	144	1B MAIN PUMP INLET	HSTR-10
HSTR-11	1B MANIFOLD RELIEF	STEERING	144	144	1B MANIFOLD RELIEF	HSTR-11
HSTR-12	1B OIL COOLER INLET	STEERING	144	144	1B OIL COOLER INLET	HSTR-12
HSTR-13	2A ACCUMULATOR INLET	STEERING	144	144	2A ACCUMULATOR INLET	HSTR-13
HSTR-14	2A MAIN PUMP DISCHARGE PORT	STEERING	144	144	2A MAIN PUMP DISCHARGE PORT	HSTR-14
HSTR-15	2A MAIN PUMP DISCHARGE STBD	STEERING	144	144	2A MAIN PUMP DISCHARGE STBD	HSTR-15
HSTR-16	2A MAIN PUMP INLET	STEERING	144	144	2A MAIN PUMP INLET	HSTR-16
HSTR-17	2A MANIFOLD RELIEF	STEERING	144	144	2A MANIFOLD RELIEF	HSTR-17
HSTR-18	2A OIL COOLER INLET	STEERING	144	144	2A OIL COOLER INLET	HSTR-18
HSTR-19	2B ACCUMULATOR INLET	STEERING	144	144	2B ACCUMULATOR INLET	HSTR-19
HSTR-2	1A MAIN PUMP DISCHARGE PORT	STEERING	144	144	1A MAIN PUMP DISCHARGE PORT	HSTR-2
HSTR-20	2B MAIN PUMP DISCHARGE PORT	STEERING	144	144	2B MAIN PUMP DISCHARGE PORT	HSTR-20
HSTR-21	2B MAIN PUMP DISCHARGE STBD	STEERING	144	144	2B MAIN PUMP DISCHARGE STBD	HSTR-21
HSTR-22	2B MAIN PUMP INLET	STEERING	144	144	2B MAIN PUMP INLET	HSTR-22
HSTR-23	2B MANIFOLD RELIEF	STEERING	144	144	2B MANIFOLD RELIEF	HSTR-23
HSTR-24	2B OIL COOLER INLET	STEERING	144	144	2B OIL COOLER INLET	HSTR-24
HSTR-3	1A MAIN PUMP DISCHARGE STBD	STEERING	144	144	1A MAIN PUMP DISCHARGE STBD	HSTR-3
HSTR-4	1A MAIN PUMP INLET	STEERING	144	144	1A MAIN PUMP INLET	HSTR-4
HSTR-5	1A MANIFOLD RELIEF	STEERING	144	144	1A MANIFOLD RELIEF	HSTR-5
HSTR-6	1A OIL COOLER INLET	STEERING	144	144	1A OIL COOLER INLET	HSTR-6
HSTR-7	1B ACCUMULATOR INLET	STEERING	144	144	1B ACCUMULATOR INLET	HSTR-7
HSTR-8	1B MAIN PUMP DISCHARGE PORT	STEERING	144	144	1B MAIN PUMP DISCHARGE PORT	HSTR-8
HSTR-9	1B MAIN PUMP DISCHARGE STBD	STEERING	144	144	1B MAIN PUMP DISCHARGE STBD	HSTR-9
HSW-1	#1 AEGIS COOLING WATER PUMP DISCHARGE	SEAWATER	144	144	#1 AEGIS COOLING WATER PUMP DISCHARGE	HSW-1

HSW-10	S/W PUMP #2 DISCHARGE	SEAWATER	144	144	S/W PUMP #2 DISCHARGE	HSW-10
HSW-11	S/W PUMP #2 SUCTION	SEAWATER	144	144	S/W PUMP #2 SUCTION	HSW-11
HSW-13	S/W PUMP #3 DISCHARGE	SEAWATER	144	144	S/W PUMP #3 DISCHARGE	HSW-13
HSW-14	S/W PUMP #3 SUCTION	SEAWATER	144	144	S/W PUMP #3 SUCTION	HSW-14
HSW-2	#1 AEGIS COOLING WATER PUMP SUCTION	SEAWATER	144	144	#1 AEGIS COOLING WATER PUMP SUCTION	HSW-2
HSW-4	#2 AEGIS COOLING WATER PUMP DISCHARGE	SEAWATER	144	144	#2 AEGIS COOLING WATER PUMP DISCHARGE	HSW-4
HSW-5	#2 AEGIS COOLING WATER PUMP SUCTION	SEAWATER	144	144	#2 AEGIS COOLING WATER PUMP SUCTION	HSW-5
HSW-7	S/W PUMP #1 DISCHARGE	SEAWATER	144	144	S/W PUMP #1 DISCHARGE	HSW-7
HSW-8	S/W PUMP #1 SUCTION	SEAWATER	144	144	S/W PUMP #1 SUCTION	HSW-8
HTSS-9	WINCH UNIT 1 HAND PUMP	TSS	144	144	WINCH UNIT 1 HAND PUMP	HTSS-9
HUWS-1	H/P AIR CHARGING HOSE	UWS	144		H/P AIR CHARGING HOSE	HUWS-1
HUWS-10	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	HUWS-10
HUWS-11	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	HUWS-11
HUWS-12	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	HUWS-12
HUWS-13	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	HUWS-13
HUWS-14	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	HUWS-14
HUWS-15	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	HUWS-15
HUWS-16	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	HUWS-16
HUWS-17	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	HUWS-17
HUWS-18	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	HUWS-18
HUWS-19	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	HUWS-19
HUWS-2	H/P AIR CHARGING HOSE	UWS	144		H/P AIR CHARGING HOSE	HUWS-2
HUWS-20	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	HUWS-20
HUWS-21	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	HUWS-21

HUWS-22	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	HUWS-22
HUWS-23	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	HUWS-23
HUWS-24	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	HUWS-24
HUWS-25	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	HUWS-25
HUWS-26	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	HUWS-26
HUWS-27	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	HUWS-27
HUWS-28	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	HUWS-28
HUWS-29	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	HUWS-29
HUWS-3	THS AIR DRIVE HOSE AFT	UWS	144	144	THS AIR DRIVE HOSE AFT	HUWS-3
HUWS-30	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	HUWS-30
HUWS-31	THS OVERHEAD CRANE TRAVERSE AFT	UWS	144	144	THS OVERHEAD CRANE TRAVERSE AFT	HUWS-31
HUWS-32	THS OVERHEAD CRANE TRAVERSE AFT	UWS	144	144	THS OVERHEAD CRANE TRAVERSE AFT	HUWS-32
HUWS-33	THS OVERHEAD CRANE TRAVERSE FWD	UWS	144	144	THS OVERHEAD CRANE TRAVERSE FWD	HUWS-33
HUWS-34	THS OVERHEAD CRANE TRAVERSE FWD	UWS	144	144	THS OVERHEAD CRANE TRAVERSE FWD	HUWS-34
HUWS-35	TORPEDO DOOR ASSEMBLY AIR LIFT (LT)	UWS	144	144	TORPEDO DOOR ASSEMBLY AIR LIFT (LT)	HUWS-35
HUWS-36	TORPEDO DOOR ASSEMBLY AIR LIFT (LT)	UWS	144	144	TORPEDO DOOR ASSEMBLY AIR LIFT (LT)	HUWS-36
HUWS-37	TORPEDO DOOR ASSEMBLY AIR LIFT (LT)	UWS	144	144	TORPEDO DOOR ASSEMBLY AIR LIFT (LT)	HUWS-37
HUWS-38	TORPEDO DOOR ASSEMBLY AIR LIFT (LT)	UWS	144	144	TORPEDO DOOR ASSEMBLY AIR LIFT (LT)	HUWS-38
HUWS-39	TORPEDO DOOR ASSEMBLY AIR LIFT (RT)	UWS	144	144	TORPEDO DOOR ASSEMBLY AIR LIFT (RT)	HUWS-39
HUWS-4	THS AIR DRIVE HOSE AFT	UWS	144	144	THS AIR DRIVE HOSE AFT	HUWS-4
HUWS-40	TORPEDO DOOR ASSEMBLY AIR LIFT (RT)	UWS	144	144	TORPEDO DOOR ASSEMBLY AIR LIFT (RT)	HUWS-40
HUWS-41	TORPEDO DOOR ASSEMBLY AIR LIFT (RT)	UWS	144	144	TORPEDO DOOR ASSEMBLY AIR LIFT (RT)	HUWS-41
HUWS-42	TORPEDO DOOR ASSEMBLY AIR LIFT (RT)	UWS	144	144	TORPEDO DOOR ASSEMBLY AIR LIFT (RT)	HUWS-42
HUWS-44	TORPEDO DOOR ASSEMBLY HYDRAULIC LIFT (LT)	UWS	144	144	TORPEDO DOOR ASSEMBLY HYDRAULIC LIFT (LT)	HUWS-44

HUWS-47	TORPEDO DOOR DOGGING ASSEMBLY	UWS	144	144	TORPEDO DOOR DOGGING ASSEMBLY	HUWS-47
HUWS-48	TORPEDO DOOR DOGGING ASSEMBLY	UWS	144	144	TORPEDO DOOR DOGGING ASSEMBLY	HUWS-48
HUWS-49	TORPEDO DOOR DOGGING ASSEMBLY	UWS	144	144	TORPEDO DOOR DOGGING ASSEMBLY	HUWS-49
HUWS-5	THS AIR DRIVE HOSE FWD	UWS	144	144	THS AIR DRIVE HOSE FWD	HUWS-5
HUWS-50	TORPEDO DOOR DOGGING ASSEMBLY	UWS	144	144	TORPEDO DOOR DOGGING ASSEMBLY	HUWS-50
HUWS-51	TORPEDO DOOR LATCH ASSEMBLY (LT)	UWS	144	144	TORPEDO DOOR LATCH ASSEMBLY (LT)	HUWS-51
HUWS-52	TORPEDO DOOR LATCH ASSEMBLY (LT)	UWS	144	144	TORPEDO DOOR LATCH ASSEMBLY (LT)	HUWS-52
HUWS-53	TORPEDO DOOR LATCH ASSEMBLY (RT)	UWS	144	144	TORPEDO DOOR LATCH ASSEMBLY (RT)	HUWS-53
HUWS-54	TORPEDO DOOR LATCH ASSEMBLY (RT)	UWS	144	144	TORPEDO DOOR LATCH ASSEMBLY (RT)	HUWS-54
HUWS-55	TORPEDO DOOR LATCH ASSEMBLY (RT)	UWS	144	144	TORPEDO DOOR LATCH ASSEMBLY (RT)	HUWS-55
HUWS-56	TORPEDO STRIKEDOWN BOOM MANIFOLD RETURN	UWS	144	144	TORPEDO STRIKEDOWN BOOM MANIFOLD RETURN	HUWS-56
HUWS-57	TORPEDO STRIKEDOWN BOOM MANIFOLD SUPPLY	UWS	144	144	TORPEDO STRIKEDOWN BOOM MANIFOLD SUPPLY	HUWS-57
HUWS-58	TORPEDO STRIKEDOWN BOOM RETURN	UWS	144	144	TORPEDO STRIKEDOWN BOOM RETURN	HUWS-58
HUWS-59	TORPEDO STRIKEDOWN BOOM SUPPLY	UWS	144	144	TORPEDO STRIKEDOWN BOOM SUPPLY	HUWS-59
HUWS-6	THS AIR DRIVE HOSE FWD	UWS	144	144	THS AIR DRIVE HOSE FWD	HUWS-6
HUWS-60	TORPEDO STRIKEDOWN BOOM TILT (LT)	UWS	144	144	TORPEDO STRIKEDOWN BOOM TILT (LT)	HUWS-60
HUWS-61	TORPEDO STRIKEDOWN BOOM TILT (RT)	UWS	144	144	TORPEDO STRIKEDOWN BOOM TILT (RT)	HUWS-61
HUWS-62	TORPEDO STRIKEDOWN FILTER TO MANIFOLD	UWS	144	144	TORPEDO STRIKEDOWN FILTER TO MANIFOLD	HUWS-62
HUWS-63	TORPEDO STRIKEDOWN FILTER TO PUMP	UWS	144	144	TORPEDO STRIKEDOWN FILTER TO PUMP	HUWS-63
HUWS-64	TORPEDO STRIKEDOWN FILTER TO RESERVOIR	UWS	144	144	TORPEDO STRIKEDOWN FILTER TO RESERVOIR	HUWS-64
HUWS-65	TORPEDO STRIKEDOWN HATCH CLOSE (LT)	UWS	144	144	TORPEDO STRIKEDOWN HATCH CLOSE (LT)	HUWS-65
HUWS-66	TORPEDO STRIKEDOWN HATCH CLOSE (RT)	UWS	144	144	TORPEDO STRIKEDOWN HATCH CLOSE (RT)	HUWS-66
HUWS-67	TORPEDO STRIKEDOWN HATCH DOGGING	UWS	144	144	TORPEDO STRIKEDOWN HATCH DOGGING	HUWS-67
HUWS-68	TORPEDO STRIKEDOWN HATCH DOGGING	UWS	144	144	TORPEDO STRIKEDOWN HATCH DOGGING	HUWS-68

HUWS-69	TORPEDO STRIKEDOWN HATCH MANIFOLD RETURN	UWS	144	144	TORPEDO STRIKEDOWN HATCH MANIFOLD RETURN	HUWS-69
HUWS-7	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	HUWS-7
HUWS-70	TORPEDO STRIKEDOWN HATCH MANIFOLD SUPPLY	UWS	144	144	TORPEDO STRIKEDOWN HATCH MANIFOLD SUPPLY	HUWS-70
HUWS-71	TORPEDO STRIKEDOWN HATCH OPEN (LT)	UWS	144	144	TORPEDO STRIKEDOWN HATCH OPEN (LT)	HUWS-71
HUWS-72	TORPEDO STRIKEDOWN HATCH OPEN (RT)	UWS	144	144	TORPEDO STRIKEDOWN HATCH OPEN (RT)	HUWS-72
HUWS-73	TORPEDO STRIKEDOWN INNER BOOM (LT)	UWS	144	144	TORPEDO STRIKEDOWN INNER BOOM (LT)	HUWS-73
HUWS-74	TORPEDO STRIKEDOWN INNER BOOM (RT)	UWS	144	144	TORPEDO STRIKEDOWN INNER BOOM (RT)	HUWS-74
HUWS-75	TORPEDO STRIKEDOWN MANIFOLD FLOW RESTRICTOR	UWS	144	144	TORPEDO STRIKEDOWN MANIFOLD FLOW RESTRICTOR	HUWS-75
HUWS-76	TORPEDO STRIKEDOWN MANIFOLD TO DECK	UWS	144	144	TORPEDO STRIKEDOWN MANIFOLD TO DECK	HUWS-76
HUWS-77	TORPEDO STRIKEDOWN OUTER BOOM (LT)	UWS	144	144	TORPEDO STRIKEDOWN OUTER BOOM (LT)	HUWS-77
HUWS-78	TORPEDO STRIKEDOWN OUTER BOOM (RT)	UWS	144	144	TORPEDO STRIKEDOWN OUTER BOOM (RT)	HUWS-78
HUWS-79	TORPEDO STRIKEDOWN POST DRAIN	UWS	144	144	TORPEDO STRIKEDOWN POST DRAIN	HUWS-79
HUWS-8	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	HUWS-8
HUWS-80	TORPEDO STRIKEDOWN POST TO OVERHEAD	UWS	144	144	TORPEDO STRIKEDOWN POST TO OVERHEAD	HUWS-80
HUWS-81	TORPEDO STRIKEDOWN PUMP CASE DRAIN	UWS	144	144	TORPEDO STRIKEDOWN PUMP CASE DRAIN	HUWS-81
HUWS-82	TORPEDO STRIKEDOWN PUMP SUPPLY	UWS	144	144	TORPEDO STRIKEDOWN PUMP SUPPLY	HUWS-82
HUWS-83	TORPEDO STRIKEDOWN RESERVOIR TO FILTER	UWS	144	144	TORPEDO STRIKEDOWN RESERVOIR TO FILTER	HUWS-83
HUWS-84	TORPEDO STRIKEDOWN VALVE TO MANIFOLD	UWS	144	144	TORPEDO STRIKEDOWN VALVE TO MANIFOLD	HUWS-84
HUWS-9	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	144	144	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	HUWS-9
HVLS-100	DELUGE MODULE 6 CELL 1	VLS	144	144	DELUGE MODULE 6 CELL 1	HVLS-100
HVLS-101	DELUGE MODULE 6 CELL 2	VLS	144	144	DELUGE MODULE 6 CELL 2	HVLS-101
HVLS-102	DELUGE MODULE 6 CELL 2	VLS	144	144	DELUGE MODULE 6 CELL 2	HVLS-102
HVLS-103	DELUGE MODULE 6 CELL 3	VLS	144	144	DELUGE MODULE 6 CELL 3	HVLS-103
HVLS-104	DELUGE MODULE 6 CELL 3	VLS	144	144	DELUGE MODULE 6 CELL 3	HVLS-104

HVLS-105	DELUGE MODULE 6 CELL 4	VLS	144	144	DELUGE MODULE 6 CELL 4	HVLS-105
HVLS-106	DELUGE MODULE 6 CELL 4	VLS	144	144	DELUGE MODULE 6 CELL 4	HVLS-106
HVLS-107	DELUGE MODULE 6 CELL 5	VLS	144	144	DELUGE MODULE 6 CELL 5	HVLS-107
HVLS-108	DELUGE MODULE 6 CELL 5	VLS	144	144	DELUGE MODULE 6 CELL 5	HVLS-108
HVLS-109	DELUGE MODULE 6 CELL 6	VLS	144	144	DELUGE MODULE 6 CELL 6	HVLS-109
HVLS-110	DELUGE MODULE 6 CELL 6	VLS	144	144	DELUGE MODULE 6 CELL 6	HVLS-110
HVLS-111	DELUGE MODULE 6 CELL7	VLS	144	144	DELUGE MODULE 6 CELL7	HVLS-111
HVLS-112	DELUGE MODULE 6 CELL 7	VLS	144	144	DELUGE MODULE 6 CELL 7	HVLS-112
HVLS-113	DELUGE MODULE 6 CELL 8	VLS	144	144	DELUGE MODULE 6 CELL 8	HVLS-113
HVLS-114	DELUGE MODULE 6 CELL 8	VLS	144	144	DELUGE MODULE 6 CELL 8	HVLS-114
HVLS-115	DELUGE MODULE 7 CELL 1	VLS	144	144	DELUGE MODULE 7 CELL 1	HVLS-115
HVLS-116	DELUGE MODULE 7 CELL 1	VLS	144	144	DELUGE MODULE 7 CELL 1	HVLS-116
HVLS-117	DELUGE MODULE 7 CELL 2	VLS	144	144	DELUGE MODULE 7 CELL 2	HVLS-117
HVLS-118	DELUGE MODULE 7 CELL 2	VLS	144	144	DELUGE MODULE 7 CELL 2	HVLS-118
HVLS-119	DELUGE MODULE 7 CELL 3	VLS	144	144	DELUGE MODULE 7 CELL 3	HVLS-119
HVLS-120	DELUGE MODULE 7 CELL 3	VLS	144	144	DELUGE MODULE 7 CELL 3	HVLS-120
HVLS-121	DELUGE MODULE 7 CELL 4	VLS	144	144	DELUGE MODULE 7 CELL 4	HVLS-121
HVLS-122	DELUGE MODULE 7 CELL 4	VLS	144	144	DELUGE MODULE 7 CELL 4	HVLS-122
HVLS-123	DELUGE MODULE 7 CELL 5	VLS	144	144	DELUGE MODULE 7 CELL 5	HVLS-123
HVLS-124	DELUGE MODULE 7 CELL 5	VLS	144	144	DELUGE MODULE 7 CELL 5	HVLS-124
HVLS-125	DELUGE MODULE 7 CELL 6	VLS	144	144	DELUGE MODULE 7 CELL 6	HVLS-125
HVLS-126	DELUGE MODULE 7 CELL 6	VLS	144	144	DELUGE MODULE 7 CELL 6	HVLS-126
HVLS-127	DELUGE MODULE 7 CELL 7	VLS	144	144	DELUGE MODULE 7 CELL 7	HVLS-127
HVLS-128	DELUGE MODULE 7 CELL 7	VLS	144	144	DELUGE MODULE 7 CELL 7	HVLS-128

HVLS-129	DELUGE MODULE 7 CELL 8	VLS	144	144	DELUGE MODULE 7 CELL 8	HVLS-129
HVLS-130	DELUGE MODULE 7 CELL 8	VLS	144	144	DELUGE MODULE 7 CELL 8	HVLS-130
HVLS-131	DELUGE MODULE 8 CELL 1	VLS	144	144	DELUGE MODULE 8 CELL 1	HVLS-131
HVLS-132	DELUGE MODULE 8 CELL 1	VLS	144	144	DELUGE MODULE 8 CELL 1	HVLS-132
HVLS-133	DELUGE MODULE 8 CELL 2	VLS	144	144	DELUGE MODULE 8 CELL 2	HVLS-133
HVLS-134	DELUGE MODULE 8 CELL 2	VLS	144	144	DELUGE MODULE 8 CELL 2	HVLS-134
HVLS-135	DELUGE MODULE 8 CELL 3	VLS	144	144	DELUGE MODULE 8 CELL 3	HVLS-135
HVLS-136	DELUGE MODULE 8 CELL 3	VLS	144	144	DELUGE MODULE 8 CELL 3	HVLS-136
HVLS-137	DELUGE MODULE 8 CELL 4	VLS	144	144	DELUGE MODULE 8 CELL 4	HVLS-137
HVLS-138	DELUGE MODULE 8 CELL 4	VLS	144	144	DELUGE MODULE 8 CELL 4	HVLS-138
HVLS-139	DELUGE MODULE 8 CELL 5	VLS	144	144	DELUGE MODULE 8 CELL 5	HVLS-139
HVLS-140	DELUGE MODULE 8 CELL 5	VLS	144	144	DELUGE MODULE 8 CELL 5	HVLS-140
HVLS-141	DELUGE MODULE 8 CELL6	VLS	144	144	DELUGE MODULE 8 CELL6	HVLS-141
HVLS-142	DELUGE MODULE 8 CELL 6	VLS	144	144	DELUGE MODULE 8 CELL 6	HVLS-142
HVLS-143	DELUGE MODULE 8 CELL 7	VLS	144	144	DELUGE MODULE 8 CELL 7	HVLS-143
HVLS-144	DELUGE MODULE 8 CELL 7	VLS	144	144	DELUGE MODULE 8 CELL 7	HVLS-144
HVLS-145	DELUGE MODULE 8 CELL 8	VLS	144	144	DELUGE MODULE 8 CELL 8	HVLS-145
HVLS-146	DELUGE MODULE 8 CELL 8	VLS	144	144	DELUGE MODULE 8 CELL 8	HVLS-146
HVLS-151	F/M DELUGE SUPPLY	VLS	144	144	F/M DELUGE SUPPLY	HVLS-151
HVLS-152	F/M DELUGE SUPPLY	VLS	144	144	F/M DELUGE SUPPLY	HVLS-152
HVLS-154	H/P AIR CHARGING HOSE	VLS	144	144	H/P AIR CHARGING HOSE	HVLS-154
HVLS-25	DELUGE MODULE 1 CELL 1	VLS	144	144	DELUGE MODULE 1 CELL 1	HVLS-25
HVLS-26	DELUGE MODULE 1 CELL 1	VLS	144	144	DELUGE MODULE 1 CELL 1	HVLS-26
HVLS-27	DELUGE MODULE 1 CELL 2	VLS	144	144	DELUGE MODULE 1 CELL 2	HVLS-27

HVLS-28	DELUGE MODULE 1 CELL 2	VLS	144	144	DELUGE MODULE 1 CELL 2	HVLS-28
HVLS-29	DELUGE MODULE 1 CELL 3	VLS	144	144	DELUGE MODULE 1 CELL 3	HVLS-29
HVLS-30	DELUGE MODULE 1 CELL 3	VLS	144	144	DELUGE MODULE 1 CELL 3	HVLS-30
HVLS-31	DELUGE MODULE 1 CELL 4	VLS	144	144	DELUGE MODULE 1 CELL 4	HVLS-31
HVLS-32	DELUGE MODULE 1 CELL 4	VLS	144	144	DELUGE MODULE 1 CELL 4	HVLS-32
HVLS-33	DELUGE MODULE 1 CELL 5	VLS	144	144	DELUGE MODULE 1 CELL 5	HVLS-33
HVLS-34	DELUGE MODULE 1 CELL 5	VLS	144	144	DELUGE MODULE 1 CELL 5	HVLS-34
HVLS-35	DELUGE MODULE 1 CELL 6	VLS	144	144	DELUGE MODULE 1 CELL 6	HVLS-35
HVLS-36	DELUGE MODULE 1 CELL 6	VLS	144	144	DELUGE MODULE 1 CELL 6	HVLS-36
HVLS-37	DELUGE MODULE 1 CELL 7	VLS	144	144	DELUGE MODULE 1 CELL 7	HVLS-37
HVLS-38	DELUGE MODULE 1 CELL 7	VLS	144	144	DELUGE MODULE 1 CELL 7	HVLS-38
HVLS-39	DELUGE MODULE 1 CELL 8	VLS	144	144	DELUGE MODULE 1 CELL 8	HVLS-39
HVLS-40	DELUGE MODULE 1 CELL 8	VLS	144	144	DELUGE MODULE 1 CELL 8	HVLS-40
HVLS-41	DELUGE MODULE 2 CELL 1	VLS	144	144	DELUGE MODULE 2 CELL 1	HVLS-41
HVLS-42	DELUGE MODULE 2 CELL 1	VLS	144	144	DELUGE MODULE 2 CELL 1	HVLS-42
HVLS-43	DELUGE MODULE 2 CELL 2	VLS	144	144	DELUGE MODULE 2 CELL 2	HVLS-43
HVLS-44	DELUGE MODULE 2 CELL 2	VLS	144	144	DELUGE MODULE 2 CELL 2	HVLS-44
HVLS-45	DELUGE MODULE 2 CELL 3	VLS	144	144	DELUGE MODULE 2 CELL 3	HVLS-45
HVLS-46	DELUGE MODULE 2 CELL 3	VLS	144	144	DELUGE MODULE 2 CELL 3	HVLS-46
HVLS-47	DELUGE MODULE 2 CELL 4	VLS	144	144	DELUGE MODULE 2 CELL 4	HVLS-47
HVLS-48	DELUGE MODULE 2 CELL 4	VLS	144	144	DELUGE MODULE 2 CELL 4	HVLS-48
HVLS-49	DELUGE MODULE 2 CELL 5	VLS	144	144	DELUGE MODULE 2 CELL 5	HVLS-49
HVLS-50	DELUGE MODULE 2 CELL 5	VLS	144	144	DELUGE MODULE 2 CELL 5	HVLS-50
HVLS-51	DELUGE MODULE 2 CELL 6	VLS	144	144	DELUGE MODULE 2 CELL 6	HVLS-51

HVLS-52	DELUGE MODULE 2 CELL 6	VLS	144	144	DELUGE MODULE 2 CELL 6	HVLS-52
HVLS-53	DELUGE MODULE 2 CELL 7	VLS	144	144	DELUGE MODULE 2 CELL 7	HVLS-53
HVLS-54	DELUGE MODULE 2 CELL 7	VLS	144	144	DELUGE MODULE 2 CELL 7	HVLS-54
HVLS-55	DELUGE MODULE 2 CELL 8	VLS	144	144	DELUGE MODULE 2 CELL 8	HVLS-55
HVLS-56	DELUGE MODULE 2 CELL 8	VLS	144	144	DELUGE MODULE 2 CELL 8	HVLS-56
HVLS-57	DELUGE MODULE 3 CELL 1	VLS	144	144	DELUGE MODULE 3 CELL 1	HVLS-57
HVLS-58	DELUGE MODULE 3 CELL 1	VLS	144	144	DELUGE MODULE 3 CELL 1	HVLS-58
HVLS-59	DELUGE MODULE 3 CELL 2	VLS	144	144	DELUGE MODULE 3 CELL 2	HVLS-59
HVLS-60	DELUGE MODULE 3 CELL 2	VLS	144	144	DELUGE MODULE 3 CELL 2	HVLS-60
HVLS-61	DELUGE MODULE 3 CELL 3	VLS	144	144	DELUGE MODULE 3 CELL 3	HVLS-61
HVLS-62	DELUGE MODULE 3 CELL 3	VLS	144	144	DELUGE MODULE 3 CELL 3	HVLS-62
HVLS-63	DELUGE MODULE 3 CELL 4	VLS	144	144	DELUGE MODULE 3 CELL 4	HVLS-63
HVLS-64	DELUGE MODULE 3 CELL 4	VLS	144	144	DELUGE MODULE 3 CELL 4	HVLS-64
HVLS-65	DELUGE MODULE 3 CELL 5	VLS	144	144	DELUGE MODULE 3 CELL 5	HVLS-65
HVLS-66	DELUGE MODULE 3 CELL 5	VLS	144	144	DELUGE MODULE 3 CELL 5	HVLS-66
HVLS-67	DELUGE MODULE 3 CELL 6	VLS	144	144	DELUGE MODULE 3 CELL 6	HVLS-67
HVLS-68	DELUGE MODULE 3 CELL 6	VLS	144	144	DELUGE MODULE 3 CELL 6	HVLS-68
HVLS-69	DELUGE MODULE 3 CELL 7	VLS	144	144	DELUGE MODULE 3 CELL 7	HVLS-69
HVLS-70	DELUGE MODULE 3 CELL 7	VLS	144	144	DELUGE MODULE 3 CELL 7	HVLS-70
HVLS-71	DELUGE MODULE 3 CELL 8	VLS	144	144	DELUGE MODULE 3 CELL 8	HVLS-71
HVLS-72	DELUGE MODULE 3 CELL 8	VLS	144	144	DELUGE MODULE 3 CELL 8	HVLS-72
HVLS-73	DELUGE MODULE 4 CELL 1	VLS	144	144	DELUGE MODULE 4 CELL 1	HVLS-73
HVLS-74	DELUGE MODULE 4 CELL 1	VLS	144	144	DELUGE MODULE 4 CELL 1	HVLS-74
HVLS-75	DELUGE MODULE 4 CELL 2	VLS	144	144	DELUGE MODULE 4 CELL 2	HVLS-75

HVLS-76	DELUGE MODULE 4 CELL 2	VLS	144	144	DELUGE MODULE 4 CELL 2	HVLS-76
HVLS-77	DELUGE MODULE 4 CELL 3	VLS	144	144	DELUGE MODULE 4 CELL 3	HVLS-77
HVLS-78	DELUGE MODULE 4 CELL 3	VLS	144	144	DELUGE MODULE 4 CELL 3	HVLS-78
HVLS-79	DELUGE MODULE 4 CELL 4	VLS	144	144	DELUGE MODULE 4 CELL 4	HVLS-79
HVLS-80	DELUGE MODULE 4 CELL 4	VLS	144	144	DELUGE MODULE 4 CELL 4	HVLS-80
HVLS-81	DELUGE MODULE 4 CELL 5	VLS	144	144	DELUGE MODULE 4 CELL 5	HVLS-81
HVLS-82	DELUGE MODULE 4 CELL 5	VLS	144	144	DELUGE MODULE 4 CELL 5	HVLS-82
HVLS-83	DELUGE MODULE 4 CELL 6	VLS	144	144	DELUGE MODULE 4 CELL 6	HVLS-83
HVLS-84	DELUGE MODULE 4 CELL 6	VLS	144	144	DELUGE MODULE 4 CELL 6	HVLS-84
HVLS-85	DELUGE MODULE 4 CELL 7	VLS	144	144	DELUGE MODULE 4 CELL 7	HVLS-85
HVLS-86	DELUGE MODULE 4 CELL 7	VLS	144	144	DELUGE MODULE 4 CELL 7	HVLS-86
HVLS-87	DELUGE MODULE 4 CELL 8	VLS	144	144	DELUGE MODULE 4 CELL 8	HVLS-87
HVLS-88	DELUGE MODULE 4 CELL 8	VLS	144	144	DELUGE MODULE 4 CELL 8	HVLS-88
HVLS-89	DELUGE MODULE 5 CELL 1	VLS	144	144	DELUGE MODULE 5 CELL 1	HVLS-89
HVLS-90	DELUGE MODULE 5 CELL 1	VLS	144	144	DELUGE MODULE 5 CELL 1	HVLS-90
HVLS-91	DELUGE MODULE 5 CELL 2	VLS	144	144	DELUGE MODULE 5 CELL 2	HVLS-91
HVLS-92	DELUGE MODULE 5 CELL 2	VLS	144	144	DELUGE MODULE 5 CELL 2	HVLS-92
HVLS-93	DELUGE MODULE 5 CELL 3	VLS	144	144	DELUGE MODULE 5 CELL 3	HVLS-93
HVLS-94	DELUGE MODULE 5 CELL 3	VLS	144	144	DELUGE MODULE 5 CELL 3	HVLS-94
HVLS-95	DELUGE MODULE 5 CELL 4	VLS	144	144	DELUGE MODULE 5 CELL 4	HVLS-95
HVLS-96	DELUGE MODULE 5 CELL 4	VLS	144	144	DELUGE MODULE 5 CELL 4	HVLS-96
HVLS-97	DELUGE MODULE 5 CELL 5	VLS	144	144	DELUGE MODULE 5 CELL 5	HVLS-97
HVLS-98	DELUGE MODULE 5 CELL 5	VLS	144	144	DELUGE MODULE 5 CELL 5	HVLS-98
HVLS-99	DELUGE MODULE 6 CELL 1	VLS	144	144	DELUGE MODULE 6 CELL 1	HVLS-99

HWHB-1	#1 FEEDWATER BOOSTER PUMP DISCHARGE	WHB	144	#1 FEEDWATER BOOSTER PUMP DISCHARGE	HWHB-1
HWHB-10	#3 FEEDWATER PUMP SUCTION	WHB	144	#3 FEEDWATER PUMP SUCTION	HWHB-10
HWHB-2	#1 FEEDWATER BOOSTER PUMP SUCTION	WHB	144	#1 FEEDWATER BOOSTER PUMP SUCTION	HWHB-2
HWHB-3	#1 FEEDWATER PUMP DISCHARGE	WHB	144	#1 FEEDWATER PUMP DISCHARGE	HWHB-3
HWHB-4	#1 FEEDWATER PUMP SUCTION	WHB	144	#1 FEEDWATER PUMP SUCTION	HWHB-4
HWHB-5	#2 FEEDWATER BOOSTER PUMP DISCHARGE	WHB	144	#2 FEEDWATER BOOSTER PUMP DISCHARGE	HWHB-5
HWHB-6	#2 FEEDWATER BOOSTER PUMP SUCTION	WHB	144	#2 FEEDWATER BOOSTER PUMP SUCTION	HWHB-6
HWHB-7	#2 FEEDWATER PUMP DISCHARGE	WHB	144	#2 FEEDWATER PUMP DISCHARGE	HWHB-7
HWHB-8	#2 FEEDWATER PUMP SUCTION	WHB	144	#2 FEEDWATER PUMP SUCTION	HWHB-8
HWHB-9	#3 FEEDWATER PUMP DISCHARGE	WHB	144	#3 FEEDWATER PUMP DISCHARGE	HWHB-9