DEPARTMENT OF THE NAVY
NAVAL SURFACE WARFARE CENTER
CARDEROCK DIVISION

NAVAL SHIP SYSTEMS
ENGINEERING STATION
PHILADELPHIA, PA 19112-5083

IN REPLY REFER TO
9503
Ser 9234/067
OCT 14 2003

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) COMNAVSEASYSCOM LTR Serial 03134/443 of 19 Dec 1997
(b) NAVSEA S6430-AE-TED-010-Technical Directive for Piping Devices and Flex Hose Assemblies
(c) Phoncon CNSL CNSL N434A11 (Mr. Alan Federovich)/NSWCCD-SSES Code 9234 (AL Pappalardo) of 04/24/03.

Encl: (1) 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 requirement s, stated in reference (b), to twelve years for critical applications. No periodic replacement is required for Non-Critical hose assemblies 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 to develop a list of critical flex hose assemblies prior to forwarding the list to Commander, Naval Sea Systems Command (NAVSEA) 05 for approval.

3. As requested during reference (c) Code 9234 was asked to review the existing hose list from the Flex Management Program installed on the CG-47 Class Ships to determine if the Critical Hose List can be updated in an effort to save dollars but still ensure safety standards are met. Enclosure (1) provides a list of existing designated critical hose assemblies and recommended changes (new designation) for use on all CG-47 ClassShips. Upon approval all applicable Programs will be updated and distributed to each ship.

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

T. A. PERRY
By direction

Copy to:
NAVSEA Washington, DC (Code 03N)
CONAVSURFLANT Norfolk, VA (N434A11, N431A3)
COMREGSUPPGRU Mayport, FL (N4)

ENCLOSURE (1)

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HAC-1	A/C #1 CHILLED WATER INLET	A/C	Critical	Non-Critical	Synthetic Rubber
HAC-10	A/C #1 S/W INLET	A/C	Critical	Non-Critical	Synthetic Rubber
HAC-11	A/C #1 S/W OUTLET	A/C	Critical	Non-Critical	Synthetic Rubber
HAC-12	A/C #2 CHILLED WATER INLET	A/C	Critical	Non-Critical	Synthetic Rubber
HAC-13	A/C #2 CHILLED WATER OUTLET	A/C	Critical	Non-Critical	Synthetic Rubber
HAC-14	A/C #2 CHILLED WATER PUMP DISCHARGE	A/C	Critical	Non-Critical	Synthetic Rubber
HAC-15	A/C #2 CHILLED WATER PUMP SUCTION	A/C	Critical	Non-Critical	Synthetic Rubber
HAC-17	A/C #2 OIL COOLER INLET	A/C	Critical	Non-Critical	Synthetic Rubber
HAC-18	A/C #2 OIL COOLER OUTLET	A/C	Critical	Non-Critical	Synthetic Rubber
HAC-19	A/C #2 PURGE INLET	A/C	Critical	Non-Critical	Synthetic Rubber
HAC-2	A/C #1 CHILLED WATER OUTLET	A/C	Critical	Non-Critical	Synthetic Rubber
HAC-20	A/C #2 PURGE OUTLET	A/C	Critical	Non-Critical	Synthetic Rubber
HAC-21	A/C #2 S/W INLET	A/C	Critical	Non-Critical	Synthetic Rubber
HAC-22	A/C #2 S/W OUTLET	A/C	Critical	Non-Critical	Synthetic Rubber
HAC-23	A/C #3 CHILLED WATER INLET	A/C	Critical	Non-Critical	Synthetic Rubber
HAC-24	A/C #3 CHILLED WATER OUTLET	A/C	Critical	Non-Critical	Synthetic Rubber
HAC-25	A/C #3 CHILLED WATER PUMP DISCHARGE	A/C	Critical	Non-Critical	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HAC-26	A/C #3 CHILLED WATER PUMP SUCTION	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAC-3	A/C #1 CHILLED WATER PUMP DISCHARGE	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAC-30	A/C #3 PURGE INLET	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAC-31	A/C #3 PURGE OUTLET	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAC-32	A/C #3 S/W INLET	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAC-33	A/C #3 S/W OUTLET	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAC-34	A/C #4 CHILLED WATER INLET	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAC-35	A/C #4 CHILLED WATER OUTLET	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAC-36	A/C #4 CHILLED WATER PUMP DISCHARGE	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAC-37	A/C #4 CHILLED WATER PUMP SUCTION	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAC-4	A/C #1 CHILLED WATER PUMP SUCTION	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAC-41	A/C #4 PURGE INLET	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAC-42	A/C #4 PURGE OUTLET	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAC-43	A/C #4 S/W INLET	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAC-44	A/C #4 S/W OUTLET	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAC-6	A/C #1 OIL COOLER INLET	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAC-7	A/C #1 OIL COOLER OUTLET	A/C	**Critical**	**Non-Critical**	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HAC-8	A/C #1 PURGE INLET	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAC-9	A/C #1 PURGE OUTLET	A/C	**Critical**	**Non-Critical**	Synthetic Rubber
HAW-1	PORT BRAKE CYLINDER SUPPLY	ANCHOR WINDLASS	**Critical**	**Critical**	Synthetic Rubber
HAW-2	PORT BRAKE CYLINDER RETURN	ANCHOR WINDLASS	**Critical**	**Critical**	Synthetic Rubber
HAW-3	PORT MOTOR SUPPLY	ANCHOR WINDLASS	**Critical**	**Critical**	Synthetic Rubber
HAW-4	PORT MOTOR RETURN	ANCHOR WINDLASS	**Critical**	**Critical**	Synthetic Rubber
HAW-5	STBD BRAKE CYLINDER SUPPLY	ANCHOR WINDLASS	**Critical**	**Critical**	Synthetic Rubber
HAW-6	STBD BRAKE CYLINDER RETURN	ANCHOR WINDLASS	**Critical**	**Critical**	Synthetic Rubber
HAW-7	STBD MOTOR SUPPLY	ANCHOR WINDLASS	**Critical**	**Critical**	Synthetic Rubber
HAW-8	STBD MOTOR RETURN	ANCHOR WINDLASS	**Critical**	**Critical**	Synthetic Rubber
HAW-9	XFER PUMP SUCTION	ANCHOR WINDLASS	**Critical**	**Critical**	Synthetic Rubber
HCD-3	HD-1077 COOLER CHILLED WATER RETURN PORT	C&D	**Critical**	**Non-Critical**	Synthetic Rubber
HCD-4	HD-1077 COOLER CHILLED WATER RETURN STBD	C&D	**Critical**	**Non-Critical**	Synthetic Rubber
HCD-5	HD-1077 COOLER CHILLED WATER SUPPLY PORT	C&D	**Critical**	**Non-Critical**	Synthetic Rubber
HCD-6	HD-1077 COOLER CHILLED WATER SUPPLY STBD	C&D	**Critical**	**Non-Critical**	Synthetic Rubber
HCD-9	HD-1077 COOLER L/P AIR	C&D	**Critical**	**Non-Critical**	Synthetic Rubber
HCWS-17	MT21 EC RETURN	CIWS	**Critical**	**Non-Critical**	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HCWS-18	MT21 EC SUPPLY	CIWS	**Critical**	**Non-Critical**	Synthetic Rubber
HCWS-79	MT22 EC SUPPLY	CIWS	**Critical**	**Non-Critical**	Synthetic Rubber
HCWS-8	MT21 COMP (I)	CIWS	**Critical**	**Non-Critical**	Synthetic Rubber
HFEX-100	MAGAZINE SPRINKLER GROUP 5 PORT TORPEDO MAGAZINE	Critical	**Critical**	**Critical**	Synthetic Rubber
HFEX-101	MAGAZINE SPRINKLER GROUP 7 SMALL ARMS MAGAZINE	Critical	**Critical**	**Critical**	Synthetic Rubber
HFEX-102	MAGAZINE SPRINKLER GROUP 7 SMALL ARMS MAGAZINE	Critical	**Critical**	**Critical**	Synthetic Rubber
HFEX-103	MAGAZINE SPRINKLER GROUP 9 MT51 LOADER DRUM	Critical	**Critical**	**Critical**	Synthetic Rubber
HFEX-104	MAGAZINE SPRINKLER GROUP 9 MT51 LOADER DRUM	Critical	**Critical**	**Critical**	Synthetic Rubber
HCRP-11	HYDRAULIC CONTROL OIL FROM HOPM TO OD BOX	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-12	HYDRAULIC CONTROL OIL FROM HOPM TO OD BOX	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-13	HYDRAULIC OIL FROM OD BOX TO HEAD TANK	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-14	HYDRAULIC OIL FROM OD BOX TO HEAD TANK	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-15	HYDRAULIC OIL RETURN FROM OD BOX TO SUMP	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-16	HYDRAULIC OIL RETURN FROM OD BOX TO SUMP	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-17	OD BOX AFT SEAL DRAIN	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-18	OD BOX AFT SEAL DRAIN	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-19	OD BOX FWD SEAL DRAIN	CRP	**Critical**	**Critical**	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HCRP-2	CRP ATTACHED PUMP SUCTION	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-20	OD BOX FWD SEAL DRAIN	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-23	CRP OD BOX POWER OIL RETURN	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-24	CRP OD BOX POWER OIL RETURN	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-25	HOPM POWER OIL SUPPLY	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-26	HOPM POWER OIL SUPPLY	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-3	CRP MOTOR DRIVEN PUMP SUCTION	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-4	CRP MOTOR DRIVEN PUMP SUCTON	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-5	CRP OD BOX MANUAL DRAIN	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-6	CRP OD BOX MANUAL DRAIN	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-7	EMERGENCY HAND PUMP	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-8	EMERGENCY HAND PUMP	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-9	EMERGENCY HAND PUMP	CRP	**Critical**	**Critical**	Synthetic Rubber
HCRP-21	PRAIRIE AIR SUPPLY TO OD BOX	CRP	**Critical**	**Non-Critical**	Synthetic Rubber
HCRP-22	PRAIRIE AIR SUPPLY TO OD BOX	CRP	**Critical**	**Non-Critical**	Synthetic Rubber
HEWS-1	SLQ-32 HD-1054 CHILLED WATER RETURN	EWS	**Critical**	**Non-Critical**	Synthetic Rubber
HEWS-3	SLQ-32 HD-1054 L/P AIR CHARGING	EWS	**Critical**	**Non-Critical**	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HFO-1	F/O PUMP #1A DISCHARGE	F/O	Critical	Critical	Synthetic Rubber
HFO-11	F/O PURIFIER #1 F/O INLET	F/O	Critical	Critical	Synthetic Rubber
HFO-12	F/O PURIFIER #1 F/O OUTLET	F/O	Critical	Critical	Synthetic Rubber
HFO-19	F/O PURIFIER #2 F/O INLET	F/O	Critical	Critical	Synthetic Rubber
HFO-2	F/O PUMP #1A SUCTION	F/O	Critical	Critical	Synthetic Rubber
HFO-20	F/O PURIFIER #2 F/O OUTLET	F/O	Critical	Critical	Synthetic Rubber
HFO-25	F/O XFER PUMP #1 DISCHARGE	F/O	Critical	Critical	Synthetic Rubber
HFO-26	F/O XFER PUMP #1 SUCTION	F/O	Critical	Critical	Synthetic Rubber
HFO-27	F/O XFER PUMP #2 DISCHARGE	F/O	Critical	Critical	Synthetic Rubber
HFO-28	F/O XFER PUMP #2 SUCTION	F/O	Critical	Critical	Synthetic Rubber
HFO-3	F/O PUMP #1B DISCHARGE	F/O	Critical	Critical	Synthetic Rubber
HFO-4	F/O PUMP #1B SUCTION	F/O	Critical	Critical	Synthetic Rubber
HFO-5	F/O PUMP #2A DISCHARGE	F/O	Critical	Critical	Synthetic Rubber
HFO-6	F/O PUMP #2A SUCTION	F/O	Critical	Critical	Synthetic Rubber
HFO-7	F/O PUMP #2B DISCHARGE	F/O	Critical	Critical	Synthetic Rubber
HFO-8	F/O PUMP #2B SUCTION	F/O	Critical	Critical	Synthetic Rubber
HFO-13	F/O PURIFIER #1 FEEDWATER	F/O	Critical	Non-Critical	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HFO-14	F/O PURIFIER #1 L/P AIR	F/O	**Critical**	**Non-Critical**	Synthetic Rubber
HFO-21	F/O PURIFIER #2 FEEDWATER	F/O	**Critical**	**Non-Critical**	Synthetic Rubber
HFO-22	F/O PURIFIER #2 L/P AIR	F/O	**Critical**	**Non-Critical**	Synthetic Rubber
HFCS-1	AIR CONT ASSEMBLY UNT-70 DRY AIR OUTLET	FCS	**Critical**	**Non-Critical**	Synthetic Rubber
HFCS-2	AIR CONT ASSEMBLY UNT-70 L/P AIR SUPPLY	FCS	**Critical**	**Non-Critical**	Synthetic Rubber
HFEX-75	MAGAZINE SPRINKLER GROUP 6 MT51 PROJECTILE MAGAZINE	FIRE EXTINGUISH	**Critical**	**Critical**	Synthetic Rubber
HFEX-76	MAGAZINE SPRINKLER GROUP 6 MT51 PROJECTILE MAGAZINE	FIRE EXTINGUISH	**Critical**	**Critical**	Synthetic Rubber
HFEX-77	MAGAZINE SPRINKLER GROUP 8 MT52 PROJECTILE MAGAZINE	FIRE EXTINGUISH	**Critical**	**Critical**	Synthetic Rubber
HFEX-78	MAGAZINE SPRINKLER GROUP 8 MT52 PROJECTILE MAGAZINE	FIRE EXTINGUISH	**Critical**	**Critical**	Synthetic Rubber
HFEX-79	MAGAZINE SPRINKLER GROUP 10 MT52 LOADER DRUM	FIRE EXTINGUISH	**Critical**	**Critical**	Synthetic Rubber
HFEX-80	MAGAZINE SPRINKLER GROUP 10 MT52 LOADER DRUM	FIRE EXTINGUISH	**Critical**	**Critical**	Synthetic Rubber
HFEX-81	MAGAZINE SPRINKLER GROUP 11 MT51 AMMO STAGING	FIRE EXTINGUISH	**Critical**	**Critical**	Synthetic Rubber
HFEX-82	MAGAZINE SPRINKLER GROUP 11 MT51 AMMO STAGING	FIRE EXTINGUISH	**Critical**	**Critical**	Synthetic Rubber
HFEX-83	MAGAZINE SPRINKLER GROUP 11 MT51 AMMO STAGING	FIRE EXTINGUISH	**Critical**	**Critical**	Synthetic Rubber
HFEX-84	MAGAZINE SPRINKLER GROUP 11 MT51 AMMO STAGING	FIRE EXTINGUISH	**Critical**	**Critical**	Synthetic Rubber
HFEX-85	MAGAZINE SPRINKLER GROUP 12 MT52 AMMO STAGING	FIRE EXTINGUISH	**Critical**	**Critical**	Synthetic Rubber
HFEX-86	MAGAZINE SPRINKLER GROUP 12 MT52 AMMO STAGING	FIRE EXTINGUISH	**Critical**	**Critical**	Synthetic Rubber

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HFEX-87	MAGAZINE SPRINKLER GROUP 15 50 CAL MAGAZINE	FIRE EXTINGUISH	Critical	Critical	Synthetic Rubber
HFEX-88	MAGAZINE SPRINKLER GROUP 15 50 CAL MAGAZINE	FIRE EXTINGUISH	Critical	Critical	Synthetic Rubber
HFEX-89	MAGAZINE SPRINKLER GROUP 16 MARINE MARKER MAGAZINE	FIRE EXTINGUISH	Critical	Critical	Synthetic Rubber
HFEX-9	GTM 1A CO2 CYLINDER DISCHARGE PRIMARY #3	FIRE EXTINGUISH	Critical	Critical	Synthetic Rubber
HFEX-90	MAGAZINE SPRINKLER GROUP 16 MARINE MARKER MAGAZINE	FIRE EXTINGUISH	Critical	Critical	Synthetic Rubber
HFEX-91	MAGAZINE SPRINKLER GROUP 18 MK41 VLS FWD	FIRE EXTINGUISH	Critical	Critical	Synthetic Rubber
HFEX-92	MAGAZINE SPRINKLER GROUP 18 MK41 VLS FWD	FIRE EXTINGUISH	Critical	Critical	Synthetic Rubber
HFEX-93	MAGAZINE SPRINKLER GROUP 19 MK41 VLS AFT	FIRE EXTINGUISH	Critical	Critical	Synthetic Rubber
HFEX-94	MAGAZINE SPRINKLER GROUP 19 MK41 VLS AFT	FIRE EXTINGUISH	Critical	Critical	Synthetic Rubber
HFEX-95	MAGAZINE SPRINKLER GROUP 20 SMALL ARMS MAGAZINE	FIRE EXTINGUISH	Critical	Critical	Synthetic Rubber
HFEX-96	MAGAZINE SPRINKLER GROUP 20 SMALL ARMS MAGAZINE	FIRE EXTINGUISH	Critical	Critical	Synthetic Rubber
HFEX-97	MAGAZINE SPRINKLER GROUP 4 STBD TORPEDO MAGAZINE	FIRE EXTINGUISH	Critical	Critical	Synthetic Rubber
HFEX-98	MAGAZINE SPRINKLER GROUP 4 STBD TORPEDO MAGAZINE	FIRE EXTINGUISH	Critical	Critical	Synthetic Rubber
HFEX-99	MAGAZINE SPRINKLER GROUP 5 PORT TORPEDO MAGAZINE	FIRE EXTINGUISH	Critical	Critical	Synthetic Rubber
HFM-1	FIRE PUMP #1 DISCHARGE	FIREMAIN	Critical	Non-Critical	Synthetic Rubber
HFM-10	FIRE PUMP #4 DISCHARGE	FIREMAIN	Critical	Non-Critical	Synthetic Rubber
HFM-11	FIRE PUMP #4 SUCTION	FIREMAIN	Critical	Non-Critical	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HFM-13	FIRE PUMP #5 DISCHARGE	FIREMAIN	**Critical**	**Non-Critical**	Synthetic Rubber
HFM-14	FIRE PUMP #5 SUCTION	FIREMAIN	**Critical**	**Non-Critical**	Synthetic Rubber
HFM-16	FIRE PUMP #6 DISCHARGE	FIREMAIN	**Critical**	**Non-Critical**	Synthetic Rubber
HFM-17	FIRE PUMP #6 SUCTION	FIREMAIN	**Critical**	**Non-Critical**	Synthetic Rubber
HFM-2	FIRE PUMP #1 SUCTION	FIREMAIN	**Critical**	**Non-Critical**	Synthetic Rubber
HFM-4	FIRE PUMP #2 DISCHARGE	FIREMAIN	**Critical**	**Non-Critical**	Synthetic Rubber
HFM-5	FIRE PUMP #2 SUCTION	FIREMAIN	**Critical**	**Non-Critical**	Synthetic Rubber
HFM-7	FIRE PUMP #3 DISCHARGE	FIREMAIN	**Critical**	**Non-Critical**	Synthetic Rubber
HFM-8	FIRE PUMP #3 SUCTION	FIREMAIN	**Critical**	**Non-Critical**	Synthetic Rubber
HHPA-10	HPAC #2 S/W INLET	H/P AIR	**Critical**	**Non-Critical**	Synthetic Rubber
HHPA-11	HPAC #2 S/W OUTLET	H/P AIR	**Critical**	**Non-Critical**	Synthetic Rubber
HHPA-5	HPAC #1 S/W INLET	H/P AIR	**Critical**	**Non-Critical**	Synthetic Rubber
HHPA-6	HPAC #1 S/W OUTLET	H/P AIR	**Critical**	**Non-Critical**	Synthetic Rubber
HLO-1	ATTACHED L/O PUMP DISCHARGE	L/O	**Critical**	**Critical**	Synthetic Rubber
HLO-10	L/O PURIFIER #1 L/O TO HEATER	L/O	**Critical**	**Critical**	Synthetic Rubber
HLO-11	L/O PURIFIER #1 L/O TRANSFER OUTLET	L/O	**Critical**	**Critical**	Synthetic Rubber
HLO-13	L/O PURIFIER #1 OIL OUTLET	L/O	**Critical**	**Critical**	Synthetic Rubber

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HLO-15	L/O PURIFIER #2 FEED BY-PASS TO MRG SUMP	L/O	Critical	Critical	Synthetic Rubber
HLO-17	L/O PURIFIER #2 L/O FROM HEATER	L/O	Critical	Critical	Synthetic Rubber
HLO-18	L/O PURIFIER #2 L/O INLET TO FEED PUMP	L/O	Critical	Critical	Synthetic Rubber
HLO-19	L/O PURIFIER #2 L/O TO HEATER	L/O	Critical	Critical	Synthetic Rubber
HLO-2	ATTACHED L/O PUMP DISCHARGE	L/O	Critical	Critical	Synthetic Rubber
HLO-20	L/O PURIFIER #2 L/O TRANSFER OUTLET	L/O	Critical	Critical	Synthetic Rubber
HLO-22	L/O PURIFIER #2 OIL OUTLET	L/O	Critical	Critical	Synthetic Rubber
HLO-23	L/O SERVICE PUMP #1A DISCHARGE	L/O	Critical	Critical	Synthetic Rubber
HLO-24	L/O SERVICE PUMP #1A SUCTION	L/O	Critical	Critical	Synthetic Rubber
HLO-25	L/O SERVICE PUMP #1B DISCHARGE	L/O	Critical	Critical	Synthetic Rubber
HLO-26	L/O SERVICE PUMP #1B SUCTION	L/O	Critical	Critical	Synthetic Rubber
HLO-27	L/O SERVICE PUMP #2A DISCHARGE	L/O	Critical	Critical	Synthetic Rubber
HLO-28	L/O SERVICE PUMP #2A SUCTION	L/O	Critical	Critical	Synthetic Rubber
HLO-29	L/O SERVICE PUMP #2B DISCHARGE	L/O	Critical	Critical	Synthetic Rubber
HLO-3	ATTACHED L/O PUMP SUCTION	L/O	Critical	Critical	Synthetic Rubber
HLO-30	L/O SERVICE PUMP #2B SUCTION	L/O	Critical	Critical	Synthetic Rubber
HLO-31	L/O SERVICE PUMP #2B PRIME LINE MECHANICAL SEAL INLET	L/O	Critical	Critical	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HLO-32	L/O SERVICE PUMP #2B PRIME LINE MECHANICAL SEAL OUTLET	L/O	**Critical**	**Critical**	Synthetic Rubber
HLO-33	L/O SERVICE PUMP #2A PRIME LINE MECHANICAL SEAL OUTLET	L/O	**Critical**	**Critical**	Synthetic Rubber
HLO-34	L/O SERVICE PUMP #2A PRIME LINE MECHANICAL SEAL INLET	L/O	**Critical**	**Critical**	Synthetic Rubber
HLO-35	L/O SERVICE PUMP #1A PRIME LINE MECHANICAL SEAL INLET	L/O	**Critical**	**Critical**	Synthetic Rubber
HLO-36	L/O SERVICE PUMP #1A PRIME LINE MECHANICAL SEAL OUTLET	L/O	**Critical**	**Critical**	Synthetic Rubber
HLO-37	L/O SERVICE PUMP #1B PRIME LINE MECHANICAL SEAL INLET	L/O	**Critical**	**Critical**	Synthetic Rubber
HLO-38	L/O SERVICE PUMP #1B PRIME LINE MECHANICAL SEAL OUTLET	L/O	**Critical**	**Critical**	Synthetic Rubber
HLO-4	ATTACHED L/O PUMP SUCTION	L/O	**Critical**	**Critical**	Synthetic Rubber
HLO-6	L/O PURIFIER #1 FEED BY-PASS TO MRG SUMP	L/O	**Critical**	**Critical**	Synthetic Rubber
HLO-8	L/O PURIFIER #1 L/O FROM HEATER	L/O	**Critical**	**Critical**	Synthetic Rubber
HLO-9	L/O PURIFIER #1 L/O INLET TO FEED PUMP	L/O	**Critical**	**Critical**	Synthetic Rubber
HLO-12	L/O PURIFIER #1 L/P AIR	L/O	**Critical**	**Non-Critical**	Synthetic Rubber
HLO-21	L/O PURIFIER #2 L/P AIR	L/O	**Critical**	**Non-Critical**	Synthetic Rubber
HLPA-16	#1 LPAC S/W INLET	L/P AIR	**Critical**	**Non-Critical**	Synthetic Rubber
HLPA-17	#1 LPAC S/W OUTLET	L/P AIR	**Critical**	**Non-Critical**	Synthetic Rubber
HLPA-25	#2 LPAC AIR OUTLET	L/P AIR	**Critical**	**Non-Critical**	Synthetic Rubber
HLPA-40	#2 LPAC S/W INLET	L/P AIR	**Critical**	**Non-Critical**	Synthetic Rubber

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HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HLPA-41	#2 LPAC S/W OUTLET	L/P AIR	**Critical**	**Non-Critical**	Synthetic Rubber
HLPA-50	#3 LPAC AIR OUTLET	L/P AIR	**Critical**	**Non-Critical**	Synthetic Rubber
HLPA-64	#3 LPAC S/W INLET	L/P AIR	**Critical**	**Non-Critical**	Synthetic Rubber
HLPA-65	#3 LPAC S/W OUTLET	L/P AIR	**Critical**	**Non-Critical**	Synthetic Rubber
HLPA-73	PORT SHAFT SEAL INFLATION HOSE	L/P AIR	**Critical**	**Non-Critical**	Synthetic Rubber
HLPA-74	STBD SHAFT SEAL INFLATION HOSE	L/P AIR	**Critical**	**Non-Critical**	Synthetic Rubber
HLDY-13	WASHER #2 L/P AIR	LAUNDRY	**Critical**	**Non-Critical**	Synthetic Rubber
HLDY-8	WASHER #1 L/P AIR	LAUNDRY	**Critical**	**Non-Critical**	Synthetic Rubber
HGTM-1	GTM 1A F/O DRAIN FROM MODULE	MAIN PROP	**Critical**	**Critical**	Synthetic Rubber
HGTM-14	GTM 1B F/O DRAIN FROM MODULE	MAIN PROP	**Critical**	**Critical**	Synthetic Rubber
HGTM-15	GTM 1B F/O INLET	MAIN PROP	**Critical**	**Critical**	Synthetic Rubber
HGTM-16	GTM 1B F/O MANIFOLD SHROUD DRAIN	MAIN PROP	**Critical**	**Critical**	Synthetic Rubber
HGTM-2	GTM 1A F/O INLET	MAIN PROP	**Critical**	**Critical**	Synthetic Rubber
HGTM-28	GTM 2A F/O INLET	MAIN PROP	**Critical**	**Critical**	Synthetic Rubber
HGTM-29	GTM 2A F/O MANIFOLD SHROUD DRAIN	MAIN PROP	**Critical**	**Critical**	Synthetic Rubber
HGTM-3	GTM 1A F/O MANIFOLD SHROUD DRAIN	MAIN PROP	**Critical**	**Critical**	Synthetic Rubber
HGTM-42	GTM 2B F/O DRAIN FROM MODULE	MAIN PROP	**Critical**	**Critical**	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HGTM-43	GTM 2B F/O INLET	MAIN PROP	Critical	Critical	Synthetic Rubber
HGTM-44	GTM 2B F/O MANIFOLD SHROUD DRAIN	MAIN PROP	Critical	Critical	Synthetic Rubber
HGTM-12	GTM 1A VENT DAMPER ACT AIR INLET	MAIN PROP	Critical	Non-Critical	Synthetic Rubber
HGTM-13	GTM 1A WATER WASH TO MODULE	MAIN PROP	Critical	Non-Critical	Synthetic Rubber
HGTM-25	GTM 1B VENT DAMPER ACT AIR INLET	MAIN PROP	Critical	Non-Critical	Synthetic Rubber
HGTM-26	GTM 1B WATER WASH TO MODULE	MAIN PROP	Critical	Non-Critical	Synthetic Rubber
HGTM-40	GTM 2A VENT DAMPER ACT AIR INLET	MAIN PROP	Critical	Non-Critical	Synthetic Rubber
HGTM-41	GTM 2A WATER WASH TO MODULE	MAIN PROP	Critical	Non-Critical	Synthetic Rubber
HGTM-55	GTM 2B VENT DAMPER ACT AIR INLET	MAIN PROP	Critical	Non-Critical	Synthetic Rubber
HGTM-56	GTM 2B WATER WASH TO MODULE	MAIN PROP	Critical	Non-Critical	Synthetic Rubber
HMRG-12	MRG L/O SENSING LINE	MRG	Critical	Critical	Synthetic Rubber
HMRG-13	MRG L/O SENSING LINE	MRG	Critical	Critical	Synthetic Rubber
HMRG-17	VENT FOG PRECIPITATOR OUTLET	MRG	Critical	Critical	Synthetic Rubber
HMRG-18	VENT FOG PRECIPITATOR OUTLET	MRG	Critical	Critical	Synthetic Rubber
HMRG-3	L/O SUPPLY TO MRG	MRG	Critical	Critical	Synthetic Rubber
HMRG-4	L/O SUPPLY TO MRG	MRG	Critical	Critical	Synthetic Rubber
HMRG-6	MRG BOOT DRAIN A	MRG	Critical	Critical	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HMRG-7	MRG BOOT DRAIN A	MRG	**Critical**	**Critical**	Synthetic Rubber
HMRG-8	MRG BOOT DRAIN B	MRG	**Critical**	**Critical**	Synthetic Rubber
HMRG-9	MRG BOOT DRAIN B	MRG	**Critical**	**Critical**	Synthetic Rubber
HMRG-1	DEHUMIDIFIER OUTLET	MRG	**Critical**	**Non-Critical**	Synthetic Rubber
HMRG-2	DEHUMIDIFIER OUTLET	MRG	**Critical**	**Non-Critical**	Synthetic Rubber
HMRG-19	VITAL AIR TO MRG BRAKE A	MRG	**Critical**	**Non-Critical**	Synthetic Rubber
HMRG-20	VITAL AIR TO MRG BRAKE A	MRG	**Critical**	**Non-Critical**	Synthetic Rubber
HMRG-21	VITAL AIR TO MRG BRAKE B	MRG	**Critical**	**Non-Critical**	Synthetic Rubber
HMRG-22	VITAL AIR TO MRG BRAKE B	MRG	**Critical**	**Non-Critical**	Synthetic Rubber
HPS-1	PULPER SEAL FLUSH	PULPER	**Critical**	**Non-Critical**	Synthetic Rubber
HPS-2	PULPER OUTLET	PULPER	**Critical**	**Non-Critical**	Synthetic Rubber
HPS-3	PULPER S/W INLET	PULPER	**Critical**	**Non-Critical**	Synthetic Rubber
HPWP-4	S/W INLET TO COMPRESSED MELTDOWN UNIT	PWP	**Critical**	**Non-Critical**	Synthetic Rubber
HPWP-5	S/W OUTLET TO COMPRESSED MELTDOWN UNIT	PWP	**Critical**	**Non-Critical**	Synthetic Rubber
HRAS-1	DRAIN TRANSVERSE WINCH VALVE	RAST	**Critical**	**Critical**	Synthetic Rubber
HRAS-10	PRESSURE STBD TRANSVERSE WINCH BRAKE	RAST	**Critical**	**Critical**	Synthetic Rubber
HRAS-11	PRESSURE STBD TRANSVERSE WINCH BRAKE	RAST	**Critical**	**Critical**	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HRAS-12	PRESSURE TAIL GUIDE WINCH	RAST	**Critical**	**Critical**	Synthetic Rubber
HRAS-13	PRESSURE TO TRANSVERSE WINCH VALVE	RAST	**Critical**	**Critical**	Synthetic Rubber
HRAS-14	RETURN FROM HYDRAULIC OIL COOLER	RAST	**Critical**	**Critical**	Synthetic Rubber
HRAS-15	RETURN FROM TRANSVERSE WINCH VALVE	RAST	**Critical**	**Critical**	Synthetic Rubber
HRAS-16	STBD CASE DRAIN TAIL-GUIDE RETURN	RAST	**Critical**	**Critical**	Synthetic Rubber
HRAS-17	STBD CASE DRAIN TAIL-GUIDE WINCH SUPPLY	RAST	**Critical**	**Critical**	Synthetic Rubber
HRAS-18	SUPPLY TO HYDRAULIC OIL COOLER	RAST	**Critical**	**Critical**	Synthetic Rubber
HRAS-19	SUPPLY TO TRANSVERSE WINCH	RAST	**Critical**	**Critical**	Synthetic Rubber
HRAS-4	HPU BOOSTER	RAST	**Critical**	**Critical**	Synthetic Rubber
HRAS-5	MOVEABLE SHEAVE ASSEMBLY DRAIN	RAST	**Critical**	**Critical**	Synthetic Rubber
HRAS-6	PORT CASE DRAIN TAIL GUIDE WINCH SUPPLY	RAST	**Critical**	**Critical**	Synthetic Rubber
HRAS-7	PORT CASE DRAIN TAIL-GUIDE WINCH RETURN	RAST	**Critical**	**Critical**	Synthetic Rubber
HRAS-8	PRESSURE PORT TRANSVERSE WINCH BRAKE	RAST	**Critical**	**Critical**	Synthetic Rubber
HRAS-9	PRESSURE PORT TRANSVERSE WINCH BRAKE	RAST	**Critical**	**Critical**	Synthetic Rubber
HREF-1	COND UNIT #1 R-12 HOT GAS	REFRIGERATION	**Critical**	**Critical**	Synthetic Rubber
HREF-2	COND UNIT #1 R-12 COMPRESSOR SUCTION	REFRIGERATION	**Critical**	**Critical**	Synthetic Rubber
HREF-3	COND UNIT #1 R-12 SUPPLY	REFRIGERATION	**Critical**	**Critical**	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HREF-6	COND UNIT #2 R-12 HOT GAS	REFRIGERATION	**Critical**	**Critical**	Synthetic Rubber
HREF-7	COND UNIT #2 R-12 COMPRESSOR SUCTION	REFRIGERATION	**Critical**	**Critical**	Synthetic Rubber
HREF-8	COND UNIT #2 R-12 SUPPLY	REFRIGERATION	**Critical**	**Critical**	Synthetic Rubber
HREF-10	COND UNIT #2 S/W OUTLET	REFRIGERATION	**Critical**	**Non-Critical**	Synthetic Rubber
HREF-4	COND UNIT #1 S/W INLET	REFRIGERATION	**Critical**	**Non-Critical**	Synthetic Rubber
HREF-5	COND UNIT #1 S/W OUTLET	REFRIGERATION	**Critical**	**Non-Critical**	Synthetic Rubber
HREF-9	COND UNIT #2 S/W INLET	REFRIGERATION	**Critical**	**Non-Critical**	Synthetic Rubber
HRO-10	RO #2 FILTER DISCHARGE	REVERSE OSMOSIS	**Critical**	**Critical**	Synthetic Rubber
HRO-12	RO #2 PUMP DISCHARGE	REVERSE OSMOSIS	**Critical**	**Critical**	Synthetic Rubber
HRO-19	RO DEMINERALIZER DISCHARGE	REVERSE OSMOSIS	**Critical**	**Critical**	Synthetic Rubber
HRO-2	RO #1 FILTER DISCHARGE	REVERSE OSMOSIS	**Critical**	**Critical**	Synthetic Rubber
HRO-4	RO #1 PUMP OUTLET	REVERSE OSMOSIS	**Critical**	**Critical**	Synthetic Rubber
HRO-8	RO #1 SKID H/P ASSEMBLY	REVERSE OSMOSIS	**Critical**	**Critical**	Synthetic Rubber
HRO-1	RO #1 BRINE OVERBOARD	REVERSE OSMOSIS	**Critical**	**Non-Critical**	Synthetic Rubber
HRO-11	RO #2 PERMEATE DISCHARGE	REVERSE OSMOSIS	**Critical**	**Non-Critical**	Synthetic Rubber
HRO-13	RO #2 PUMP SUCTION	REVERSE OSMOSIS	**Critical**	**Non-Critical**	Synthetic Rubber
HRO-14	RO #2 RECIRC DISCHARGE	REVERSE OSMOSIS	**Critical**	**Non-Critical**	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HRO-15	RO #2 RECIRC INLET	REVERSE OSMOSIS	**Critical**	**Non-Critical**	Synthetic Rubber
HRO-16	RO #2 SKID H/P ASSEMBLY	REVERSE OSMOSIS	**Critical**	**Non-Critical**	Synthetic Rubber
HRO-17	RO #1 PERMEATE OVBD	REVERSE OSMOSIS	**Critical**	**Non-Critical**	Synthetic Rubber
HRO-18	RO #2 PERMEATE OVBD	REVERSE OSMOSIS	**Critical**	**Non-Critical**	Synthetic Rubber
HRO-20	RO DEMINERALIZER SUCTION	REVERSE OSMOSIS	**Critical**	**Non-Critical**	Synthetic Rubber
HRO-3	RO #1 PERMEATE DISCHARGE	REVERSE OSMOSIS	**Critical**	**Non-Critical**	Synthetic Rubber
HRO-5	RO #1 PUMP SUCTION	REVERSE OSMOSIS	**Critical**	**Non-Critical**	Synthetic Rubber
HRO-6	RO #1 RECIRC DISCHARGE	REVERSE OSMOSIS	**Critical**	**Non-Critical**	Synthetic Rubber
HRO-7	RO #1 RECIRC INLET	REVERSE OSMOSIS	**Critical**	**Non-Critical**	Synthetic Rubber
HRO-9	RO #2 BRINE OVERBOARD	REVERSE OSMOSIS	**Critical**	**Non-Critical**	Synthetic Rubber
HSW-1	#1 AEGIS COOLING WATER PUMP DISCHARGE	SEAWATER	**Critical**	**Non-Critical**	Synthetic Rubber
HSW-10	S/W PUMP #2 DISCHARGE	SEAWATER	**Critical**	**Non-Critical**	Synthetic Rubber
HSW-11	S/W PUMP #2 SUCTION	SEAWATER	**Critical**	**Non-Critical**	Synthetic Rubber
HSW-13	S/W PUMP #3 DISCHARGE	SEAWATER	**Critical**	**Non-Critical**	Synthetic Rubber
HSW-14	S/W PUMP #3 SUCTION	SEAWATER	**Critical**	**Non-Critical**	Synthetic Rubber
HSW-2	#1 AEGIS COOLING WATER PUMP SUCTION	SEAWATER	**Critical**	**Non-Critical**	Synthetic Rubber
HSW-4	#2 AEGIS COOLING WATER PUMP DISCHARGE	SEAWATER	**Critical**	**Non-Critical**	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HSW-5	#2 AEGIS COOLING WATER PUMP SUCTION	SEAWATER	**Critical**	**Non-Critical**	Synthetic Rubber
HSW-7	S/W PUMP #1 DISCHARGE	SEAWATER	**Critical**	**Non-Critical**	Synthetic Rubber
HSW-8	S/W PUMP #1 SUCTION	SEAWATER	**Critical**	**Non-Critical**	Synthetic Rubber
HSNR-40	SQS HD-1074 FM HEX #2 OVERFLOW VENT	SONAR	**Critical**	**Non-Critical**	Synthetic Rubber
HSNR-41	SQS HD-1074 L/P AIR TO EXPANSION TANK	SONAR	**Critical**	**Non-Critical**	Synthetic Rubber
HSNR-46	SQS HD-1074 S/W HEX #2 OVERFLOW DRAIN	SONAR	**Critical**	**Non-Critical**	Synthetic Rubber
HSNR-47	SQS HD-1074 S/W OVERBOARD	SONAR	**Critical**	**Non-Critical**	Synthetic Rubber
HSNR-48	SQS HD-1074 S/W SUPPLY	SONAR	**Critical**	**Non-Critical**	Synthetic Rubber
HSPS-1	HD-1076 AIR CHARGING HOSE	SPS-49	**Critical**	**Non-Critical**	Synthetic Rubber
HSPS-10	HD-1076 S/W SUPPLY	SPS-49	**Critical**	**Non-Critical**	Synthetic Rubber
HSPS-9	HD-1076 S/W OVERBOARD	SPS-49	**Critical**	**Non-Critical**	Synthetic Rubber
HSPY-549	HD-1155 COOLER MAKE-UP FEED	SPY	**Critical**	**Non-Critical**	Synthetic Rubber
HSPY-555	HD-1155 COOLER L/P AIR EXPANSION TANK	SPY	**Critical**	**Non-Critical**	Synthetic Rubber
HSPY-556	HD-1155 COOLER L/P AIR EXPANSION TANK	SPY	**Critical**	**Non-Critical**	Synthetic Rubber
HSPY-557	HD-1155 COOLER L/P AIR MAKE-UP TANK	SPY	**Critical**	**Non-Critical**	Synthetic Rubber
HSPY-558	HD-1155 COOLER L/P AIR TO MAKE-UP	SPY	**Critical**	**Non-Critical**	Synthetic Rubber
HSPY-559	HD-1155 COOLER S/W OVERBOARD	SPY	**Critical**	**Non-Critical**	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HSPY-561	HD-1155 COOLER S/W SUPPLY	SPY	**Critical**	**Non-Critical**	Synthetic Rubber
HSPY-562	HD-1155 COOLER S/W SUPPLY	SPY	**Critical**	**Non-Critical**	Synthetic Rubber
HGTG-35	SSGTG #3 GEN L/O SUMP DRAIN	SSGTG	**Critical**	**Critical**	Synthetic Rubber
HSTG-15	SSGTG #1 TURBINE/GEAR L/O SUMP DRAIN	SSGTG	**Critical**	**Critical**	Synthetic Rubber
HSTG-18	SSGTG #2 F/O SUPPLY TO MODULE	SSGTG	**Critical**	**Critical**	Synthetic Rubber
HSTG-2	SSGTG #1 F/O SUPPLY TO MODULE	SSGTG	**Critical**	**Critical**	Synthetic Rubber
HSTG-24	SSGTG #2 GEN L/O SAMPLE/DRAIN	SSGTG	**Critical**	**Critical**	Synthetic Rubber
HSTG-26	SSGTG #2 GEN L/O DRAIN	SSGTG	**Critical**	**Critical**	Synthetic Rubber
HSTG-27	SSGTG #2 TURBINE L/O SAMPLE DRAIN	SSGTG	**Critical**	**Critical**	Synthetic Rubber
HSTG-33	SSGTG #2 TURBINE L/O SUMP DRAIN	SSGTG	**Critical**	**Critical**	Synthetic Rubber
HSTG-36	SSGTG #3 F/O SUPPLY TO MODULE	SSGTG	**Critical**	**Critical**	Synthetic Rubber
HSTG-45	SSGTG #3 TURBINE L/O COOLER INLET	SSGTG	**Critical**	**Critical**	Synthetic Rubber
HSTG-46	SSGTG #3 TURBINE L/O COOLER OUTLET	SSGTG	**Critical**	**Critical**	Synthetic Rubber
HSTG-47	SSGTG #3 TURBINE/GEAR L/O SUMP DRAIN	SSGTG	**Critical**	**Critical**	Synthetic Rubber
HSTG-7	SSGTG #1 GEN L/O SUMP AND DRAIN	SSGTG	**Critical**	**Critical**	Synthetic Rubber
HSTG-9	SSGTG #1 GEN L/O SAMPLE DRAIN	SSGTG	**Critical**	**Critical**	Synthetic Rubber
HSTG-1	SSGTG #2 HEADER FLOOR DRAIN	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HSTG-10	SSGTG #1 S/W COOLING PUMP DISCHARGE	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-11	SSGTG #1 S/W COOLING PUMP SUCTION	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-16	SSGTG #1 WATER WASH TO MODULE	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-17	SSGTG #2 HEADER FLOOR DRAIN	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-19	SSGTG #3 HEADER FLOOR DRAIN	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-20	SSGTG #2 GEN AIR COOLER S/W INLET	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-21	SSGTG #2 GEN AIR COOLER S/W OUTLET	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-22	SSGTG #2 GEN L/O COOLER S/W INLET	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-23	SSGTG #2 GEN L/O COOLER S/W OUTLET	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-28	SSGTG #2 S/W COOLING PUMP DISCHARGE	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-29	SSGTG #2 S/W COOLING PUMP SUCTION	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-3	SSGTG #1 GEN AIR COOLER S/W INLET	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-34	SSGTG #2 WATER WASH TO MODULE	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-37	SSGTG #3 GEN AIR COOLER S/W INLET	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-38	SSGTG #3 GEN AIR COOLER S/W OUTLET	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-39	SSGTG #3 GEN L/O COOLER S/W INLET	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-4	SSGTG #1 GEN AIR COOLER S/W OUTLET	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HSTG-40	SSGTG #3 GEN L/O COOLER S/W OUTLET	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-42	SSGTG #3 S/W COOLING PUMP DISCHARGE	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-43	SSGTG #3 S/W COOLING PUMP SUCTION	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-48	SSGTG #3 WATER WASH TO MODULE	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-49	SSGTG #1 HEADER FLOOR DRAIN	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-5	SSGTG #1 GEN L/O COOLER S/W INLET	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-50	SSGTG #1 HEADER FLOOR DRAIN	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-51	SSGTG #3 HEADER FLOOR DRAIN	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTG-6	SSGTG #1 GEN L/O COOLER S/W OUTLET	SSGTG	**Critical**	**Non-Critical**	Synthetic Rubber
HSTR-1	1A ACCUMULATOR INLET	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-10	1B MAIN PUMP INLET	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-11	1B SERVO RELIEF	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-12	1B OIL COOLER INLET	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-13	2A ACCUMULATOR INLET	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-14	2A MAIN PUMP DISCHARGE PORT	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-15	2A MAIN PUMP DISCHARGE STBD	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-16	2A MAIN PUMP INLET	STEERING	**Critical**	**Critical**	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HSTR-17	2A SERVO RELIEF	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-18	2A OIL COOLER INLET	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-19	2B ACCUMULATOR INLET	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-2	1A MAIN PUMP DISCHARGE PORT	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-20	2B MAIN PUMP DISCHARGE PORT	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-21	2B MAIN PUMP DISCHARGE STBD	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-22	2B MAIN PUMP INLET	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-23	2B SERVO RELIEF	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-24	2B OIL COOLER INLET	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-3	1A MAIN PUMP DISCHARGE STBD	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-4	1A MAIN PUMP INLET	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-5	1A SERVO RELIEF	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-6	1A OIL COOLER INLET	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-7	1B ACCUMULATOR INLET	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-8	1B MAIN PUMP DISCHARGE PORT	STEERING	**Critical**	**Critical**	Synthetic Rubber
HSTR-9	1B MAIN PUMP DISCHARGE STBD	STEERING	**Critical**	**Critical**	Synthetic Rubber
HUWS-91	1 TON HOIST AIR	TORPEDO HANDLING	**Critical**	**Critical**	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HUWS-92	1 TON HOIST AIR	TORPEDO HANDLING	Critical	Critical	Synthetic Rubber
HUWS-93	1 TON HOIST AIR	TORPEDO HANDLING	Critical	Critical	Synthetic Rubber
HUWS-94	1 TON HOIST AIR	TORPEDO HANDLING	Critical	Critical	Synthetic Rubber
HUWS-95	1 TON HOIST AIR	TORPEDO HANDLING	Critical	Critical	Synthetic Rubber
HUWS-96	1 TON HOIST AIR	TORPEDO HANDLING	Critical	Critical	Synthetic Rubber
HUWS-1	THS AIR DRIVE HOSE AFT	UWS	Critical	Critical	Synthetic Rubber
HUWS-10	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	Critical	Critical	Synthetic Rubber
HUWS-11	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	Critical	Critical	Synthetic Rubber
HUWS-12	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	Critical	Critical	Synthetic Rubber
HUWS-13	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	Critical	Critical	Synthetic Rubber
HUWS-14	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	Critical	Critical	Synthetic Rubber
HUWS-15	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	Critical	Critical	Synthetic Rubber
HUWS-16	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	Critical	Critical	Synthetic Rubber
HUWS-17	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	Critical	Critical	Synthetic Rubber
HUWS-18	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	Critical	Critical	Synthetic Rubber
HUWS-19	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	Critical	Critical	Synthetic Rubber
HUWS-2	THS AIR DRIVE HOSE AFT	UWS	Critical	Critical	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HUWS-20	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	Critical	Critical	Synthetic Rubber
HUWS-21	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	Critical	Critical	Synthetic Rubber
HUWS-22	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	Critical	Critical	Synthetic Rubber
HUWS-23	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	Critical	Critical	Synthetic Rubber
HUWS-24	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	Critical	Critical	Synthetic Rubber
HUWS-25	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	Critical	Critical	Synthetic Rubber
HUWS-26	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	Critical	Critical	Synthetic Rubber
HUWS-27	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	Critical	Critical	Synthetic Rubber
HUWS-28	THS OVERHEAD CRANE HOSE ASSEMBLY FWD	UWS	Critical	Critical	Synthetic Rubber
HUWS-29	THS OVERHEAD CRANE TRAVERSE AFT	UWS	Critical	Critical	Synthetic Rubber
HUWS-3	THS AIR DRIVE HOSE FWD	UWS	Critical	Critical	Synthetic Rubber
HUWS-30	THS OVERHEAD CRANE TRAVERSE AFT	UWS	Critical	Critical	Synthetic Rubber
HUWS-31	THS OVERHEAD CRANE TRAVERSE FWD	UWS	Critical	Critical	Synthetic Rubber
HUWS-32	THS OVERHEAD CRANE TRAVERSE FWD	UWS	Critical	Critical	Synthetic Rubber
HUWS-4	THS AIR DRIVE HOSE FWD	UWS	Critical	Critical	Synthetic Rubber
HUWS-5	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	Critical	Critical	Synthetic Rubber
HUWS-53	TORPEDO STRIKEDOWN BOOM MANIFOLD RETURN	UWS	Critical	Critical	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HUWS-54	TORPEDO STRIKEDOWN BOOM MANIFOLD SUPPLY	UWS	Critical	Critical	Synthetic Rubber
HUWS-55	TORPEDO STRIKEDOWN BOOM RETURN	UWS	Critical	Critical	Synthetic Rubber
HUWS-56	TORPEDO STRIKEDOWN BOOM SUPPLY	UWS	Critical	Critical	Synthetic Rubber
HUWS-57	TORPEDO STRIKEDOWN BOOM TILT (LT)	UWS	Critical	Critical	Synthetic Rubber
HUWS-58	TORPEDO STRIKEDOWN BOOM TILT (RT)	UWS	Critical	Critical	Synthetic Rubber
HUWS-59	TORPEDO STRIKEDOWN FILTER TO MANIFOLD	UWS	Critical	Critical	Synthetic Rubber
HUWS-6	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	Critical	Critical	Synthetic Rubber
HUWS-60	TORPEDO STRIKEDOWN FILTER TO PUMP	UWS	Critical	Critical	Synthetic Rubber
HUWS-61	TORPEDO STRIKEDOWN FILTER TO RESERVOIR	UWS	Critical	Critical	Synthetic Rubber
HUWS-62	TORPEDO STRIKEDOWN HATCH CLOSE RETURN	UWS	Critical	Critical	Synthetic Rubber
HUWS-63	TORPEDO STRIKEDOWN HATCH CLOSE SUPPLY	UWS	Critical	Critical	Synthetic Rubber
HUWS-64	TORPEDO STRIKEDOWN HATCH DOGGING	UWS	Critical	Critical	Synthetic Rubber
HUWS-65	TORPEDO STRIKEDOWN HATCH DOGGING	UWS	Critical	Critical	Synthetic Rubber
HUWS-66	TORPEDO STRIKEDOWN HATCH MANIFOLD RETURN	UWS	Critical	Critical	Synthetic Rubber
HUWS-67	TORPEDO STRIKEDOWN HATCH MANIFOLD SUPPLY	UWS	Critical	Critical	Synthetic Rubber
HUWS-68	TORPEDO STRIKEDOWN HATCH OPEN (LT)	UWS	Critical	Critical	Synthetic Rubber
HUWS-69	TORPEDO STRIKEDOWN HATCH OPEN (RT)	UWS	Critical	Critical	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HUWS-7	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	**Critical**	**Critical**	Synthetic Rubber
HUWS-70	TORPEDO STRIKEDOWN INNER BOOM (LT)	UWS	**Critical**	**Critical**	Synthetic Rubber
HUWS-71	TORPEDO STRIKEDOWN INNER BOOM (RT)	UWS	**Critical**	**Critical**	Synthetic Rubber
HUWS-72	TORPEDO STRIKEDOWN MANIFOLD FLOW RESTRICTER	UWS	**Critical**	**Critical**	Synthetic Rubber
HUWS-73	TORPEDO STRIKEDOWN MANIFOLD TO DECK	UWS	**Critical**	**Critical**	Synthetic Rubber
HUWS-74	TORPEDO STRIKEDOWN OUTER BOOM (LT)	UWS	**Critical**	**Critical**	Synthetic Rubber
HUWS-75	TORPEDO STRIKEDOWN OUTER BOOM (RT)	UWS	**Critical**	**Critical**	Synthetic Rubber
HUWS-76	TORPEDO STRIKEDOWN POST DRAIN	UWS	**Critical**	**Critical**	Synthetic Rubber
HUWS-77	TORPEDO STRIKEDOWN POST TO OVERHEAD	UWS	**Critical**	**Critical**	Synthetic Rubber
HUWS-78	TORPEDO STRIKEDOWN PUMP CASE DRAIN	UWS	**Critical**	**Critical**	Synthetic Rubber
HUWS-79	TORPEDO STRIKEDOWN PUMP SUPPLY	UWS	**Critical**	**Critical**	Synthetic Rubber
HUWS-8	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	**Critical**	**Critical**	Synthetic Rubber
HUWS-80	TORPEDO STRIKEDOWN RESERVOIR TO FILTER	UWS	**Critical**	**Critical**	Synthetic Rubber
HUWS-81	TORPEDO STRIKEDOWN VALVE TO MANIFOLD	UWS	**Critical**	**Critical**	Synthetic Rubber
HUWS-9	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	UWS	**Critical**	**Critical**	Synthetic Rubber
HUWS-33	TORPEDO DOOR ASSEMBLY AIR LIFT (LT)	UWS	**Critical**	**Non-Critical**	Synthetic Rubber
HUWS-34	TORPEDO DOOR ASSEMBLY AIR LIFT (LT)	UWS	**Critical**	**Non-Critical**	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HUWS-35	TORPEDO DOOR ASSEMBLY AIR LIFT (LT)	UWS	**Critical**	**Non-Critical**	Synthetic Rubber
HUWS-36	TORPEDO DOOR ASSEMBLY AIR LIFT (LT)	UWS	**Critical**	**Non-Critical**	Synthetic Rubber
HUWS-36	TORPEDO DOOR ASSEMBLY AIR LIFT (LT)	UWS	**Critical**	**Non-Critical**	Synthetic Rubber
HUWS-37	TORPEDO DOOR ASSEMBLY AIR LIFT (RT)	UWS	**Critical**	**Non-Critical**	Synthetic Rubber
HUWS-38	TORPEDO DOOR ASSEMBLY AIR LIFT (RT)	UWS	**Critical**	**Non-Critical**	Synthetic Rubber
HUWS-39	TORPEDO DOOR ASSEMBLY AIR LIFT (RT)	UWS	**Critical**	**Non-Critical**	Synthetic Rubber
HUWS-40	TORPEDO DOOR ASSEMBLY AIR LIFT (RT)	UWS	**Critical**	**Non-Critical**	Synthetic Rubber
HUWS-45	TORPEDO DOOR DOGGING ASSEMBLY	UWS	**Critical**	**Non-Critical**	Synthetic Rubber
HUWS-46	TORPEDO DOOR DOGGING ASSEMBLY	UWS	**Critical**	**Non-Critical**	Synthetic Rubber
HUWS-47	TORPEDO DOOR DOGGING ASSEMBLY	UWS	**Critical**	**Non-Critical**	Synthetic Rubber
HUWS-48	TORPEDO DOOR DOGGING ASSEMBLY	UWS	**Critical**	**Non-Critical**	Synthetic Rubber
HUWS-49	TORPEDO DOOR LATCH ASSEMBLY (LT)	UWS	**Critical**	**Non-Critical**	Synthetic Rubber
HUWS-50	TORPEDO DOOR LATCH ASSEMBLY (RT)	UWS	**Critical**	**Non-Critical**	Synthetic Rubber
HUWS-51	TORPEDO DOOR LATCH ASSEMBLY (RT)	UWS	**Critical**	**Non-Critical**	Synthetic Rubber
HUWS-52	TORPEDO DOOR LATCH ASSEMBLY (LT)	UWS	**Critical**	**Non-Critical**	Synthetic Rubber
HVLS-100	DELUGE MODULE 5 CELL 5	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-101	DELUGE MODULE 6 CELL 1	VLS	**Critical**	**Critical**	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HVLS-102	DELUGE MODULE 6 CELL 1	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-103	DELUGE MODULE 6 CELL 2	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-104	DELUGE MODULE 6 CELL 2	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-105	DELUGE MODULE 6 CELL 3	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-106	DELUGE MODULE 6 CELL 3	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-107	DELUGE MODULE 6 CELL 4	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-108	DELUGE MODULE 6 CELL 4	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-109	DELUGE MODULE 6 CELL 5	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-110	DELUGE MODULE 6 CELL 5	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-111	DELUGE MODULE 6 CELL 6	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-112	DELUGE MODULE 6 CELL 6	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-113	DELUGE MODULE 6 CELL 7	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-114	DELUGE MODULE 6 CELL 7	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-115	DELUGE MODULE 6 CELL 8	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-116	DELUGE MODULE 6 CELL 8	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-117	DELUGE MODULE 7 CELL 1	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-118	DELUGE MODULE 7 CELL 1	VLS	**Critical**	**Critical**	Synthetic Rubber

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HVLS-119	DELUGE MODULE 7 CELL 2	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-120	DELUGE MODULE 7 CELL 2	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-121	DELUGE MODULE 7 CELL 3	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-122	DELUGE MODULE 7 CELL 3	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-123	DELUGE MODULE 7 CELL 4	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-124	DELUGE MODULE 7 CELL 4	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-125	DELUGE MODULE 7 CELL 5	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-126	DELUGE MODULE 7 CELL 5	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-127	DELUGE MODULE 7 CELL 6	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-128	DELUGE MODULE 7 CELL 6	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-129	DELUGE MODULE 7 CELL 7	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-130	DELUGE MODULE 7 CELL 7	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-131	DELUGE MODULE 7 CELL 8	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-132	DELUGE MODULE 7 CELL 8	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-133	DELUGE MODULE 8 CELL 1	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-134	DELUGE MODULE 8 CELL 1	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-135	DELUGE MODULE 8 CELL 2	VLS	**Critical**	**Critical**	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HVLS-136	DELUGE MODULE 8 CELL 2	VLS	Critical	Critical	Synthetic Rubber
HVLS-137	DELUGE MODULE 8 CELL 3	VLS	Critical	Critical	Synthetic Rubber
HVLS-138	DELUGE MODULE 8 CELL 3	VLS	Critical	Critical	Synthetic Rubber
HVLS-139	DELUGE MODULE 8 CELL 4	VLS	Critical	Critical	Synthetic Rubber
HVLS-14	CRANE WINCH (LOWER)	VLS	Critical	Critical	Synthetic Rubber
HVLS-140	DELUGE MODULE 8 CELL 8	VLS	Critical	Critical	Synthetic Rubber
HVLS-141	DELUGE MODULE 8 CELL 4	VLS	Critical	Critical	Synthetic Rubber
HVLS-143	DELUGE MODULE 8 CELL 5	VLS	Critical	Critical	Synthetic Rubber
HVLS-145	DELUGE MODULE 8 CELL 5	VLS	Critical	Critical	Synthetic Rubber
HVLS-147	DELUGE MODULE 8 CELL 6	VLS	Critical	Critical	Synthetic Rubber
HVLS-149	DELUGE MODULE 8 CELL 6	VLS	Critical	Critical	Synthetic Rubber
HVLS-15	CRANE WINCH (LOWER)	VLS	Critical	Critical	Synthetic Rubber
HVLS-151	DELUGE MODULE 8 CELL 7	VLS	Critical	Critical	Synthetic Rubber
HVLS-158	DELUGE MODULE 8 CELL 7	VLS	Critical	Critical	Synthetic Rubber
HVLS-162	DELUGE MODULE 8 CELL 8	VLS	Critical	Critical	Synthetic Rubber
HVLS-24	DELUGE	VLS	Critical	Critical	Synthetic Rubber
HVLS-25	DELUGE	VLS	Critical	Critical	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HVLS-27	DELUGE MODULE 4 CELL 7	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-28	DELUGE MODULE 1 CELL 8	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-29	DELUGE MODULE 1 CELL 1	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-30	DELUGE MODULE 1 CELL 1	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-31	DELUGE MODULE 1 CELL 2	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-32	DELUGE MODULE 1 CELL 2	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-33	DELUGE MODULE 1 CELL 3	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-34	DELUGE MODULE 1 CELL 3	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-35	DELUGE MODULE 1 CELL 4	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-36	DELUGE MODULE 1 CELL 4	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-37	DELUGE MODULE 1 CELL 5	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-38	DELUGE MODULE 1 CELL 5	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-39	DELUGE MODULE 1 CELL 6	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-40	DELUGE MODULE 1 CELL 6	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-41	DELUGE MODULE 1 CELL 7	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-42	DELUGE MODULE 1 CELL 7	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-43	DELUGE MODULE 1 CELL 8	VLS	**Critical**	**Critical**	Synthetic Rubber

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HVLS-44	DELUGE MODULE 2 CELL 1	VLS	Critical	Critical	Synthetic Rubber
HVLS-45	DELUGE MODULE 2 CELL 1	VLS	Critical	Critical	Synthetic Rubber
HVLS-46	DELUGE MODULE 2 CELL 2	VLS	Critical	Critical	Synthetic Rubber
HVLS-47	DELUGE MODULE 2 CELL 2	VLS	Critical	Critical	Synthetic Rubber
HVLS-48	DELUGE MODULE 2 CELL 3	VLS	Critical	Critical	Synthetic Rubber
HVLS-49	DELUGE MODULE 2 CELL 3	VLS	Critical	Critical	Synthetic Rubber
HVLS-50	DELUGE MODULE 2 CELL 4	VLS	Critical	Critical	Synthetic Rubber
HVLS-51	DELUGE MODULE 2 CELL 4	VLS	Critical	Critical	Synthetic Rubber
HVLS-52	DELUGE MODULE 2 CELL 5	VLS	Critical	Critical	Synthetic Rubber
HVLS-53	DELUGE MODULE 2 CELL 5	VLS	Critical	Critical	Synthetic Rubber
HVLS-54	DELUGE MODULE 2 CELL 6	VLS	Critical	Critical	Synthetic Rubber
HVLS-55	DELUGE MODULE 2 CELL 6	VLS	Critical	Critical	Synthetic Rubber
HVLS-56	DELUGE MODULE 2 CELL 7	VLS	Critical	Critical	Synthetic Rubber
HVLS-57	DELUGE MODULE 2 CELL 7	VLS	Critical	Critical	Synthetic Rubber
HVLS-58	DELUGE MODULE 2 CELL 8	VLS	Critical	Critical	Synthetic Rubber
HVLS-59	DELUGE MODULE 2 CELL 8	VLS	Critical	Critical	Synthetic Rubber
HVLS-60	DELUGE MODULE 3 CELL 1	VLS	Critical	Critical	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HVLS-61	DELUGE MODULE 3 CELL 1	VLS	Critical	Critical	Synthetic Rubber
HVLS-62	DELUGE MODULE 3 CELL 2	VLS	Critical	Critical	Synthetic Rubber
HVLS-63	DELUGE MODULE 3 CELL 2	VLS	Critical	Critical	Synthetic Rubber
HVLS-64	DELUGE MODULE 3 CELL 3	VLS	Critical	Critical	Synthetic Rubber
HVLS-65	DELUGE MODULE 3 CELL 3	VLS	Critical	Critical	Synthetic Rubber
HVLS-66	DELUGE MODULE 3 CELL 4	VLS	Critical	Critical	Synthetic Rubber
HVLS-67	DELUGE MODULE 3 CELL 4	VLS	Critical	Critical	Synthetic Rubber
HVLS-68	DELUGE MODULE 3 CELL 5	VLS	Critical	Critical	Synthetic Rubber
HVLS-69	DELUGE MODULE 3 CELL 5	VLS	Critical	Critical	Synthetic Rubber
HVLS-70	DELUGE MODULE 3 CELL 6	VLS	Critical	Critical	Synthetic Rubber
HVLS-71	DELUGE MODULE 3 CELL 6	VLS	Critical	Critical	Synthetic Rubber
HVLS-72	DELUGE MODULE 3 CELL 7	VLS	Critical	Critical	Synthetic Rubber
HVLS-73	DELUGE MODULE 3 CELL 7	VLS	Critical	Critical	Synthetic Rubber
HVLS-74	DELUGE MODULE 3 CELL 8	VLS	Critical	Critical	Synthetic Rubber
HVLS-75	DELUGE MODULE 3 CELL 8	VLS	Critical	Critical	Synthetic Rubber
HVLS-76	DELUGE MODULE 4 CELL 1	VLS	Critical	Critical	Synthetic Rubber
HVLS-77	DELUGE MODULE 4 CELL 1	VLS	Critical	Critical	Synthetic Rubber

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HVLS-78	DELUGE MODULE 4 CELL 2	VLS	Critical	Critical	Synthetic Rubber
HVLS-79	DELUGE MODULE 4 CELL 2	VLS	Critical	Critical	Synthetic Rubber
HVLS-80	DELUGE MODULE 4 CELL 3	VLS	Critical	Critical	Synthetic Rubber
HVLS-81	DELUGE MODULE 4 CELL 3	VLS	Critical	Critical	Synthetic Rubber
HVLS-82	DELUGE MODULE 4 CELL 4	VLS	Critical	Critical	Synthetic Rubber
HVLS-83	DELUGE MODULE 4 CELL 4	VLS	Critical	Critical	Synthetic Rubber
HVLS-84	DELUGE MODULE 4 CELL 5	VLS	Critical	Critical	Synthetic Rubber
HVLS-85	DELUGE MODULE 4 CELL 5	VLS	Critical	Critical	Synthetic Rubber
HVLS-86	DELUGE MODULE 4 CELL 6	VLS	Critical	Critical	Synthetic Rubber
HVLS-87	DELUGE MODULE 4 CELL 6	VLS	Critical	Critical	Synthetic Rubber
HVLS-88	DELUGE MODULE 4 CELL 7	VLS	Critical	Critical	Synthetic Rubber
HVLS-89	DELUGE MODULE 4 CELL 8	VLS	Critical	Critical	Synthetic Rubber
HVLS-90	DELUGE MODULE 4 CELL 8	VLS	Critical	Critical	Synthetic Rubber
HVLS-91	DELUGE MODULE 5 CELL 1	VLS	Critical	Critical	Synthetic Rubber
HVLS-92	DELUGE MODULE 5 CELL 1	VLS	Critical	Critical	Synthetic Rubber
HVLS-93	DELUGE MODULE 5 CELL 2	VLS	Critical	Critical	Synthetic Rubber
HVLS-94	DELUGE MODULE 5 CELL 2	VLS	Critical	Critical	Synthetic Rubber

Typical CG-47 Class Revised Critical/Non-Critical Flex Hose Designations

HOSE NUMBER	EQUIPMENT DESCRIPTION	SYSTEM	OLD DESIGNATION	NEW DESIGNATION	TYPE
HVLS-95	DELUGE MODULE 5 CELL 3	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-96	DELUGE MODULE 5 CELL 3	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-97	DELUGE MODULE 5 CELL 4	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-98	DELUGE MODULE 5 CELL 4	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-99	DELUGE MODULE 5 CELL 5	VLS	**Critical**	**Critical**	Synthetic Rubber
HVLS-146	FRESH WATER DELUGE TANK FILL	VLS	**Critical**	**Non-Critical**	Synthetic Rubber