



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

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) COMNAVSEASYS COM 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)  
COMREGSUPGRU Mayport, FL (N4)

## 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 #4 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-5	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	A/C	Critical	Non-Critical
HAC-9	A/C #1 PURGE OUTLET	A/C	A/C	Critical	Non-Critical
HAW-1	PORT BRAKE CYLINDER SUPPLY		ANCHOR WINDLASS	Critical	Critical
HAW-2	PORT BRAKE CYLINDER RETURN		ANCHOR WINDLASS	Critical	Critical
HAW-3	PORT MOTOR SUPPLY		ANCHOR WINDLASS	Critical	Critical
HAW-4	PORT MOTOR RETURN		ANCHOR WINDLASS	Critical	Critical
HAW-5	STBD BRAKE CYLINDER SUPPLY		ANCHOR WINDLASS	Critical	Critical
HAW-6	STBD BRAKE CYLINDER RETURN		ANCHOR WINDLASS	Critical	Critical
HAW-7	STBD MOTOR SUPPLY		ANCHOR WINDLASS	Critical	Critical
HAW-8	STBD MOTOR RETURN		ANCHOR WINDLASS	Critical	Critical
HAW-9	XFER PUMP SUCTION		ANCHOR WINDLASS	Critical	Critical
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	CWS	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	CWS	Critical	Non-Critical	Synthetic Rubber
HCWS.79	MT22 EC SUPPLY	CWS	Critical	Non-Critical	Synthetic Rubber
HCWS.8	MT21 COMP (1)	CWS	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 SUCTION	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	PRARIE AIR SUPPLY TO OD BOX	CRP	Critical	Non-Critical	Synthetic Rubber
HCRP-22	PRARIE AIR SUPPLY TO OD BOX	CRP	Critical	Non-Critical	Synthetic Rubber
H-EWS-1	SLQ-32 HD-1054 CHILLED WATER RETURN	EWS	Critical	Non-Critical	Synthetic Rubber
H-EWS-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
HFCSS-1	AIR CONT ASSEMBLY UNIT 70 DRY AIR OUTLET	FCS	Critical	Non-Critical	Synthetic Rubber
HFCSS-2	AIR CONT ASSEMBLY UNIT 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

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

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-90	GTM 1A CO2 CYLINDER DISCHARGE PRIMARY #3 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
HPA-10	HPAC #2 S/W INLET	H/P AIR	Critical	Non-Critical	Synthetic Rubber
HPA-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

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

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
HLPAC-16	#1 LPAC S/W INLET	L/P AIR	Critical	Non-Critical	Synthetic Rubber
HLPAC-17	#1 LPAC S/W OUTLET	L/P AIR	Critical	Non-Critical	Synthetic Rubber
HLPAC-25	#2 LPAC AIR OUTLET	L/P AIR	Critical	Non-Critical	Synthetic Rubber
HLPAC-40	#2 LPAC S/W INLET	L/P AIR	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
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
HPPWP-4	S/W INLET TO COMPRESSED MELTDOWN UNIT	PWP	Critical	Non-Critical	Synthetic Rubber
HPPWP-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	MOWABLE 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	S/EWATER	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
HSMR-40	SQS HD-1074 FM HEX #2 OVERFLOW VENT	SONAR	Critical	Non-Critical	Synthetic Rubber
HSMR-41	SQS HD-1074 L/P AIR TO EXPANSION TANK	SONAR	Critical	Non-Critical	Synthetic Rubber
HSNR-45	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	SPS49	Critical	Non-Critical	Synthetic Rubber
HSPS-10	HD-1076 S/W SUPPLY	SPS49	Critical	Non-Critical	Synthetic Rubber
HSPS-9	HD-1076 S/W OVERBOARD	SPS49	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-551	HD-115 COOLER S/W SUPPLY	SPY	Critical	Non-Critical	Synthetic Rubber
HSPY-552	HD-115 COOLER S/W SUPPLY	SPY	Critical	Non-Critical	Synthetic Rubber
HGTG-35	SSGTG #3 GEN L/O SUMP DRAIN	SSGTG	Critical	Critical	Synthetic Rubber
HGTG-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 HEATER 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	1TON 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	THS OVERHEAD CRANE HOSE ASSEMBLY AFT	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 (RT)	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
HUWS-36	TORPEDO DOOR ASSEMBLY AIR LIFT (LT)	UWS		Critical	Non-Critical
HUWS-36	TORPEDO DOOR ASSEMBLY AIR LIFT (LT)	UWS		Critical	Non-Critical
HUWS-37	TORPEDO DOOR ASSEMBLY AIR LIFT (RT)	UWS		Critical	Non-Critical
HUWS-38	TORPEDO DOOR ASSEMBLY AIR LIFT (RT)	UWS		Critical	Non-Critical
HUWS-39	TORPEDO DOOR ASSEMBLY AIR LIFT (RT)	UWS		Critical	Non-Critical
HUWS-40	TORPEDO DOOR ASSEMBLY AIR LIFT (RT)	UWS		Critical	Non-Critical
HUWS-45	TORPEDO DOOR DOGGING ASSEMBLY	UWS		Critical	Non-Critical
HUWS-46	TORPEDO DOOR DOGGING ASSEMBLY	UWS		Critical	Non-Critical
HUWS-47	TORPEDO DOOR DOGGING ASSEMBLY	UWS		Critical	Non-Critical
HUWS-48	TORPEDO DOOR DOGGING ASSEMBLY	UWS		Critical	Non-Critical
HUWS-49	TORPEDO DOOR LATCH ASSEMBLY (LT)	UWS		Critical	Non-Critical
HUWS-50	TORPEDO DOOR LATCH ASSEMBLY (RT)	UWS		Critical	Non-Critical
HUWS-51	TORPEDO DOOR LATCH ASSEMBLY (RT)	UWS		Critical	Non-Critical
HUWS-52	TORPEDO DOOR LATCH ASSEMBLY (LT)	UWS		Critical	Non-Critical
HVLS-100	DELUGE MODULE 5 CELL 5	VLS		Critical	Critical
HVLS-101	DELUGE MODULE 6 CELL 1	VLS		Critical	Critical

## 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

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

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

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

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

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

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