

STANDARD PHRASEOLOGY

SECTION G

1. This section of standard phraseology is for general use in piping disciplines.

Hydrostatically test _____, using _____ at _____ PSIG for a minimum of ____ minutes. Allowable leakage: None.

G1

NOTE: USE ASTM F993, OR 810-5596087, SUPSHIP PORTSMOUTH STANDARD DRAWING VALVE LOCKING DEVICE (FOR CABLE LOCKING DEVICES, BUTTERFLY VALVES, AND LOCKED POSITION INDICATORS).

Install new locking devices on each valve listed in _____ in accordance with 2.____.

G2

NOTE: USE IN REPAIR OR SHIPALT WORK ITEMS FOR CLEANING NEW AND MODIFIED LEVEL II (AS DEFINED IN GSO SECTION 505j2) PIPING SYSTEMS WHICH DO NOT REQUIRE SPECIAL CLEANING REQUIREMENTS. REFER TO NOTE 1 IN GSO SECTION 505J2 FOR SYSTEMS REQUIRING SPECIAL CLEANING REQUIREMENTS.

Isolate **each** component subject to damage and clean the new and modified _____ piping system to a cleanliness level that results in the internal surfaces being visually free of grease, oil, flux, scale, dirt, loose particles, and other contamination foreign to the base metal. Tap water residues on metals and light superficial rust on carbon steel surfaces, caused by a short time exposure to the atmosphere, are permitted. Light dust on cleaned surfaces is not objectionable, provided that the quantity and size of the particle does not adversely affect system operation.

G3a

NOTE: USE FOR CLEANING NEW AND MODIFIED LEVEL III PIPING SYSTEMS.

Isolate **each** component subject to damage and clean the new and modified _____ piping system to a cleanliness level that results in the internal system surfaces being cleaned free of contamination and remaining residue on the surface does not interfere with the operation of or damage system components.

G3b

Restore **each** piping flange mating surfaces exposed by disassembly of piping system. Repair by removing high spots, burrs, abrasions, and foreign matter, where removal can be accomplished by hand tools. Maintain phonographic finish on flanges that have it.

G4

Ensure the copper-nickel piping **is** MIL-T-16420, Type ____, Class ____, ____-inch wall thickness. |

G5a

Ensure the carbon steel piping **is** MIL-P-24691. |

G5b

Ensure the copper piping **is** MIL-T-24107, ____-inch wall thickness. |

G5c

Purge, evacuate, and dehydrate _____ in accordance with 2.____. Charge with refrigerant _____ in accordance with 2.____.

G6

NOTE: FOR USE WITH 810-4714432, FOR PIPING HANGERS.

NNSY Standard Drawing, Std Pipe Hangers Fabrication Dets & Instl Instr
(Non-Nuc Constr)

G7

Empty and clean _____, including piping associated with this Work Item.

G8

Align the piping to each _____. Piping shall be supported independently and shall not impose a strain.

G9a

Align the piping to each _____. Piping shall be supported independently and shall not impose a strain on the equipment.

G9b

NOTE: FOR REFERENCE USE 804-1385781, HANGERS, PIPE, FOR SURFACE SHIPS.

Install **each** new hanger on new piping in accordance with 2.____.

G10a

Install **each** new hanger to support the piping and prevent vibration in accordance with 2.____.

G10b

Accomplish **each** test in accordance with General Notes _____ of 2.____.

G12

MIL-STD-777, Schedule of Piping, Valves, Fittings, and Associated Piping Components for Naval Surface Ships

G14a

802-5959353, MIL-STD-777D Modified for DDG-51 Class, Schedule of Piping, Valves, Fittings, and Associated Piping Components

G14b

NOTE: FOR REFERENCE USE MIL-STD-777, SCHEDULE OF PIPING, VALVES, FITTINGS, AND ASSOCIATED PIPING COMPONENTS (G14a). |

FOR REFERENCE USE 802-5959353, MIL-STD-777D MODIFIED FOR DDG-51 CLASS, SCHEDULE OF PIPING, VALVES, FITTINGS, AND ASSOCIATED PIPING COMPONENTS (G14b). |

Ensure new materials conform to 2.____, including Category and Group _____. |

G15

NOTE: ALLOWS PLANNER USE OF OTHER NAVSEA-APPROVED GASKETS AND FASTENERS NOT COVERED IN MIL-STD-777.

FOR BUTTERFLY VALVES INSTALLED IN FIREMAIN AND SALTWATER SYSTEMS, USE GASKET MATERIAL CONFORMING TO MIL-DTL-24696, TYPE II (FOR DDG-51 CLASS ONLY).

Install each valve, installing new gaskets conforming to _____ and new fasteners conforming to _____.

G16

NOTE: FOR REFERENCE USE MIL-STD-777, SCHEDULE OF PIPING, VALVES, FITTINGS, AND ASSOCIATED PIPING COMPONENTS FOR NAVAL SURFACE SHIPS (G14a).

FOR REFERENCE USE 802-5959353, MIL-STD-777D MODIFIED FOR DDG-51 CLASS, SCHEDULE OF PIPING, VALVES, FITTINGS, AND ASSOCIATED PIPING COMPONENTS (G14b). |

Install each valve, installing new gaskets and fasteners conforming to 2.____, including Category and Group _____.

G17

Accomplish an operational test of the new and disturbed piping at _____ PSIG. Allowable external leakage: None.

G22

Accomplish an operational test of each newly installed valve at _____ PSIG.

G23a

Cycle each valve from full closed to full open to full closed 4 times. Allowable external leakage: None.

G23b

NOTE: FOR REFERENCE USE S9086-RK-STM-010/CH-505, PIPING SYSTEMS.

Measure and record alignment of each expansion joint piping flange in accordance with Paragraphs 505-3.3.1 through 3.3.6.5 of 2.____.

G24a

Submit one legible copy, in hard copy or approved transferrable media, of a report listing measurements taken to the SUPERVISOR.

G24b

Nitrogen pressure test each brazed and mechanical joint at ____ PSIG for a minimum of 15 minutes.

G25a

Inspect each brazed and mechanical joint, using a soap bubble method.
Allowable leakage: None.

G25b

Machine each seat and disc to remove hardfacing.

G26a

Weld build-up each seat and disc.

G26b

Accomplish the requirements of 009-12 of 2.1, including Table One, Column C, Lines One through 9.

G26c

Machine each seat and disc to ____.

G26d

Accomplish nondestructive testing in accordance with Line ____.

G26e

Machine each seal ring seating area to remove stainless steel inlay.

G27a

Weld build-up each seal ring seating area.

G27b

Accomplish the requirements of 009-12 of 2.1, including Table One, Column H, Lines One through 9.

G27c

Machine each seal ring seating area to _____.

G27d

Accomplish nondestructive testing in accordance with Line _____.

G27e

NOTE: FOR REFERENCE USE MIL-STD-777, SCHEDULE OF PIPING, VALVES, FITTINGS, AND ASSOCIATED PIPING COMPONENTS FOR NAVAL SURFACE SHIPS (G14a).

FOR REFERENCE USE 802-5959353, MIL-STD-777D MODIFIED FOR DDG-51 CLASS, SCHEDULE OF PIPING, VALVES, FITTINGS, AND ASSOCIATED PIPING COMPONENTS (G14b). |

Install **each** new _____ valve in place of those removed in 3.____. New materials shall conform to 2.____, including Category and Group _____.

G28a

Shop test and set each relief valve prior to installation.

G28b

Ensure the test medium **is** _____.

G28c

Ensure seat tightness is _____.

G28d

Ensure lifting pressure **is** _____.

G28e

Install wire and leadlock seals and attach a metal tag to each valve stamped with the following information ***after setting each relief valve:***

Ship name and hull number

Valve number or identification

Date valve tested and set

Name of repair facility

G28f