## <u>NAVSEA</u> STANDARD ITEM

FY-19

<u>ITEM NO: 009-68</u> <u>DATE: **01 OCT 2017**</u> CATEGORY: II

### 1. SCOPE:

1.1 Title: Bolted Bonnet Valve; repair

### 2. REFERENCES:

- 2.1 S9086-CJ-STM-010/CH-075, Fasteners
- 2.2 T9074-AS-GIB-010/271, Requirements for Nondestructive Testing Methods
- 2.3 MIL-STD-2035, Nondestructive Testing Acceptance Criteria
- 2.4 S9253-AD-MMM-010, Maintenance Manual for Valves, Traps, and Orifices (Non-Nuclear), User's Guide and General Information

## 3. REQUIREMENTS:

- 3.1 Matchmark each valve part.
- (V) "INSPECT PARTS FOR DEFECTS"
- $3.2\,$  Disassemble, clean free of foreign matter (including paint), and inspect each part for defects.
- 3.2.1 The removal of body-bound studs only to determine the condition of threads is not required.
- (I) or (V) "TORQUE TEST" (See 4.3)
- 3.2.2 Torque test each body-bound stud in accordance with Section  $075-8.6.3.2\,\text{(d)}$  of 2.1.
- (I) "LIQUID PENETRANT INSPECT"
- 3.2.3 Accomplish liquid penetrant inspection of each seat (including back seat), disc, or gate in accordance with 2.2.
- 3.2.3.1 Acceptance criteria shall be in accordance with Paragraph 7 of 2.3, except hairline cracks in hard-faced areas of seats and

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discs or gate are acceptable provided the valve does not show evidence of leakage.

- 3.3 Repair each valve as follows:
- 3.3.1 Straighten stem to within 0.002-inch total indicator reading. Polish stem to a 32 Root-Mean-Square finish in way of packing surface and remove raised edges and foreign matter.
  - 3.3.2 Chase and tap each exposed threaded area.
  - 3.3.3 Clean and spot-in bonnet to body gasket each mating surface.
- 3.3.4 Machine, grind, or lap and spot-in gate or discs to each seat (including back seat) to obtain a 360-degree continuous contact.

### (V) "INSPECT CONTACT"

- 3.3.4.1 Inspect contact using blueing method.
- 3.3.4.2 Transfer line for gate valve shall not exceed 3/16 inch in width and shall appear within the lower 75 percent of the gate seating surface.
- 3.3.4.3 Transfer line for globe valve shall not exceed 1/16 inch in width.

### (I)(G) "VERIFY LEVEL I PARTS"

- 3.4 Assemble valve, installing new **each** gasket **and each fastener** in accordance with the manufacturer's specification **or instruction**.
- 3.4.1 Pack feedwater, condensate, and steam valves with valve stem packing conforming to MIL-P-24503/24583 combination in accordance with Chapter 6 of 2.4.
- 3.4.2 Pack valves of systems other than feedwater, condensate, or steam with valve stem packing conforming to MIL-P-24396, Type B.

# 4. NOTES:

- 4.1 Operational test of valve will be specified in Work Item.
- 4.2 Repair of valve operating gear will be specified in Work Item.
- 4.3 The paragraph referencing this note is considered an (I) if the valve is Level I. If the valve is not Level I, the paragraph is considered a (V).

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