MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

SUBJECT: Initial Drafts of: MIL-DTL-3992, MS39325, MS39322, MS39133, MS39135, MS39136, and MS39137

These initial drafts for these subject documents, are now available for viewing and downloading from the DLA Land and Maritime-VA Web site:


Major changes to these documents include Harmonize MS sheets plating requirements to dtl3992  Add new Zinc plating that is hexavalent chromium free. Add new material corrosion resistant steel. Add cadmium plating, which is allowed in the hose assembly document MS39325.

Concurrence or comments are required at this Center within 30 days from the date of this letter. Late comments will be held for the next coordination of the document. Comments from military departments must be identified as either "Essential" or "Suggested". Essential comments must be justified with supporting data. Military review activities should forward comments to their custodians of this office, as applicable, in sufficient time to allow for consolidating the department reply. Lack of response to this draft will be construed as concurrence.

If these documents are of interest to you, please provide your comments or suggested changes. The point of contact for this document is Mr. William Carpenter, phone number 614-692-0573, facsimile transmission, 614-692-6939, e-mail William.F.Carpenter@dla.mil, or may be mailed via the US Postal Service to DLA LAND AND MARITIME, ATTN: VAI (Attention: William Carpenter), P.O. Box 3990, Columbus, OH 43218-3990.

Sincerely,

/ SIGNED /

ABDONASSER M. ABDOUNI
Chief,
Interconnection Branch

cc: FMDD (James Anderson)
FMDC (Steven Curtin)
VQC - Michael Adams
DETAIL SPECIFICATION SHEET

ADAPTER BODY, AUTOMOTIVE AIR BRAKE

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet.

<table>
<thead>
<tr>
<th>Inches</th>
<th>mm</th>
<th>Inches</th>
<th>mm</th>
<th>Inches</th>
<th>mm</th>
<th>Inches</th>
<th>mm</th>
<th>Inches</th>
<th>mm</th>
<th>Inches</th>
<th>mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>.003</td>
<td>0.08</td>
<td>.020</td>
<td>0.51</td>
<td>.250</td>
<td>6.35</td>
<td>.50</td>
<td>12.7</td>
<td>.875</td>
<td>22.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>.005</td>
<td>0.13</td>
<td>.03</td>
<td>0.8</td>
<td>.281</td>
<td>7.14</td>
<td>.66</td>
<td>16.8</td>
<td>.890</td>
<td>20.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>.006</td>
<td>0.15</td>
<td>.05</td>
<td>1.3</td>
<td>.375</td>
<td>9.53</td>
<td>.69</td>
<td>17.5</td>
<td>.9687</td>
<td>25.062</td>
<td></td>
<td></td>
</tr>
<tr>
<td>.010</td>
<td>0.25</td>
<td>.12</td>
<td>3.1</td>
<td>.41</td>
<td>10.4</td>
<td>.796</td>
<td>20.22</td>
<td>.97</td>
<td>24.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

See notes at end of figure.

FIGURE 1. Adapter body.
NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Remove all burrs and slivers.
4. Tolerances unless otherwise specified for three place ±.005 inch (0.13 mm), two place decimals ±.02 inch (0.5 mm), and angles ±2°.
5. PTF Dryseal threads shall be in accordance with FED-STD-H28/8 and ANSI-B1.20.3. Note: Male PTF (Short Dryseal) are identical to male NPTF threads except that the thread lengths have been shortened by one full thread from the small end of the taper.

FIGURE 1. Adapter body - Continued.

<table>
<thead>
<tr>
<th>MS dash number</th>
<th>A Thread (NPTF short)</th>
<th>B inches (mm)</th>
<th>C inches (mm)</th>
<th>D inches (mm)</th>
<th>E inches (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-A-1</td>
<td>1/4</td>
<td>2.12 (53.85)</td>
<td>.56 (14.22)</td>
<td>.53 (13.46)</td>
<td>.30 (7.62)</td>
</tr>
<tr>
<td>-A-2</td>
<td>1/2</td>
<td>2.31 (58.67)</td>
<td>.75 (19.05)</td>
<td>.88 (22.35)</td>
<td>.49 (12.45)</td>
</tr>
</tbody>
</table>

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Remove all burrs and slivers.
4. Tolerances unless otherwise specified for three place ±.005 inch (0.13 mm), two place decimals ±.02 inch (0.5 mm), and angles ±2°.
5. NPTF Dryseal threads shall be in accordance with FED-STD-H28/8 and ANSI-B1.20.3. Note: Male PTF (Short Dryseal) are identical to male NPTF threads except that the thread lengths have been shortened by one full thread from the small end of the taper.

FIGURE 2. Alternate design adapter body.
REQUIREMENTS:

Adapters shall be as specified on figures 1 and 2 and in table I.

The adapters specified herein are a component of the adapter, straight pipe to hose, automotive air brake hose MS39133.

Material:

- Brass formed rod, tempered, half-hard brass in accordance with ASTM B16/B16M.
- Steel bar in accordance with ASTM A108.
- Corrosion resistant steel bars alloys UNS S30300, UNS S30400, UNS S30403, UNS S32100, or UNS 35500.

Material/finish shall be in accordance with table I.

<table>
<thead>
<tr>
<th>Material/finish designator</th>
<th>Material/finish</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Stainless steel</td>
<td>No additional finish. Passivation in accordance with SAE AMS2700, type 6 or 7.</td>
</tr>
<tr>
<td>B</td>
<td>Brass</td>
<td>No additional finish</td>
</tr>
<tr>
<td>C</td>
<td>Steel</td>
<td>Cadmium plated in accordance with SAE AMS-QQ-P-416, type II, class 2 or SAE AMS-C-81562, type II, class 2. 1/ 2/</td>
</tr>
<tr>
<td>R</td>
<td>Steel</td>
<td>Zinc plating with colorless passivate in accordance with ASTM B633, type V, Fe/Zn 5</td>
</tr>
<tr>
<td>S</td>
<td>Steel</td>
<td>Zinc plated in accordance with ASTM B633, type II, Fe/Zn 5 1/</td>
</tr>
</tbody>
</table>

1/ These finishes have a chromate conversion coating or chromic acid rinse, which includes hexavalent chromium, and are not recommended.
2/ Cadmium is prohibited from use in NAVSEA-owned shipboard systems in accordance with the requirements of T9070-AL-DPC-020/077-2, unless otherwise approved by NAVSEA.

All plating’s shall be capable of meeting 96-hour salt spray test in accordance with ASTM B117. The fittings shall show no evidence of red corrosion after 96 hours of salt spray. Air passages, other openings, and internal threads shall not be subject to the plating thickness requirement and may have bare areas provided they are protected with a light film of oil.
Part or Identifying Number (PIN): Standard adapter body, the PIN consists of, the specification “MS” sheet number, a dash, number for pipe end size, and dash and a letter for material designator.

PIN example: MS39137-1-B indicates an adapter body 1/4 NPTF short threads to .9687 - 20 UNS-2A threads, brass body.

PIN: Alternate adapter body, the PIN consists of the letters “MS”, the specification sheet number, a dash, the letter A for alternate body design, a dash, a number for pipe end size, a dash and a letter for material designator.

PIN example: MS39137-A-1-S indicates an adapter body with alternate design 1/4 NPTF short threads to .9687-20 UNS-2A threads steel body.

Class I and II ozone depleting substances (ODS) shall not be used in MS39137 or any referenced procedures.

Referenced documents shall be of the issue in effect on date of invitations for bid.

Cadmium is prohibited from use in NAVSEA-owned shipboard systems in accordance with the requirements of T9070-AL-DPC-020/077-2, unless otherwise approved by NAVSEA.

In the event of a conflict between the text of this specification sheet and the references cited herein, the text of this specification sheet shall take precedence.

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue, due to the extent of the changes.
Referenced documents. This document references the following:

- FED-STD-H28/2  ASTMB117
- FED-STD-H28/8  ASTMB633
- MS39133        SAEAMS-C-81562
- ANSI-B1.20.3   SAEAMS-QQ-P-416
- ASME-B1.1      SAEAMS2700
- ASTM A108      T9070-AL-DPC-020/077-2
- ASTM B16/B16M
- ASTM B633

CONCLUDING MATERIAL

Custodians:  Preparing activity:
Army - AT     DLA - CC
Navy - SH
Air Force - 71
DLA - CC

Review activities:
Army - AR, EA
Navy - MC, SA

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at https://assist.dla.mil.