

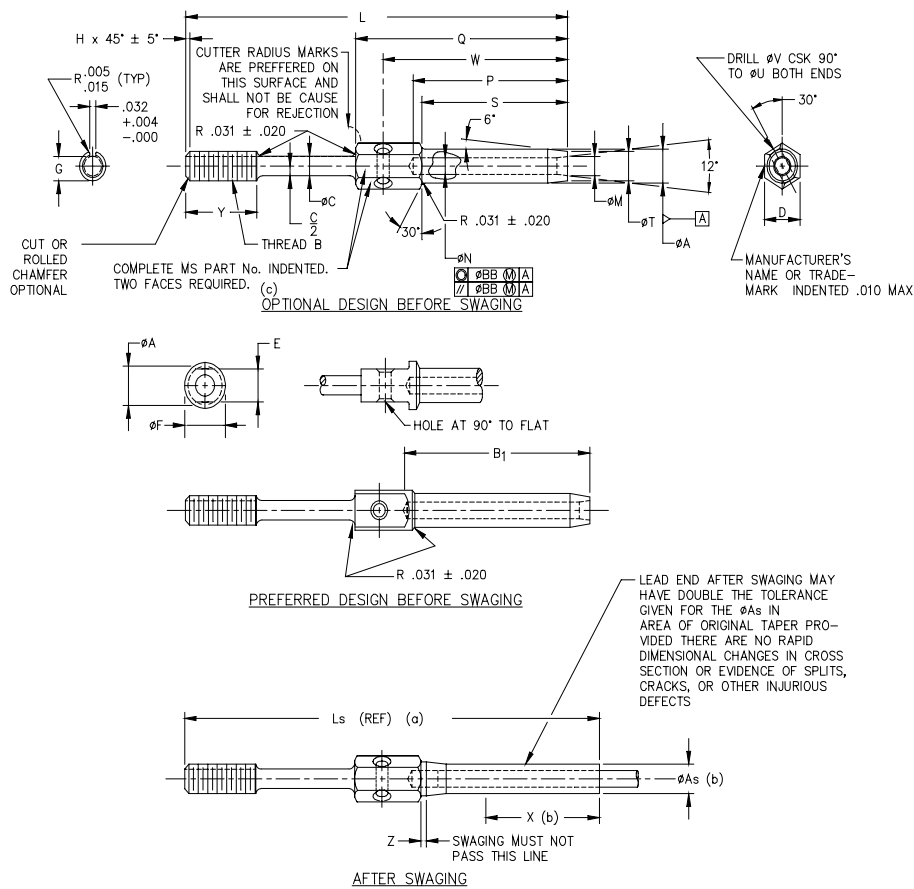
MS21260M  
 5 November 2001  
 SUPERSEDING  
 MS21260L  
 10 January 2001

DETAIL SPECIFICATION SHEET

TERMINAL, WIRE ROPE, SWAGING STUD

This specification sheet 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 and the issue of MIL-DTL-781 and QPL-781 listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation.



- NOTES: (a) Reference dimensions are for design purposes only and are not an inspection requirement.  
 (b) Swaged terminals shall conform to ' $\phi As$ ' for length X.  
 (c) For terminal sizes -2 through -5, use basic part number only, example: MS21260.

FIGURE 1. Terminal, wire rope, swaging stud.

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TABLE I. Dash numbers and dimensions.

| Dash number |           | Wire rope diameter |         | Minimum breaking strength lb <sub>1</sub> / | Thread B<br>UN-3A<br>UNF-3A | ØA    |              | ØAs          |                |
|-------------|-----------|--------------------|---------|---|-----------------------------|-------|--------------|--------------|----------------|
|             |           | Nominal reference  | Minimum |   |                             |       |              |              |                |
| RH thread   | LH thread |                    |         |   |                             |       |              |              |                |
| L2RH        | L2LH      | 1/16               | .062    | 480   | .1380 (# 6)-40              | .160  | +000<br>-005 | .138         | +000<br>-005   |
| S2RH        | S2LH      |                    |         |   |                             |       |              |              |                |
| L3RH        | L3LH      |                    |         |   |                             |       |              |              |                |
| S3RH        | S3LH      | 3/32               | .093    | 920   | .1900 (#10)-32              | .218  |              | .190         |                |
| L4RH        | L4LH      |                    |         |   |                             |       |              |              |                |
| S4RH        | S4LH      | 1/8                | .125    | 2000  | .2500 (1/4)-28              | .250  |              | .219         |                |
| L5RH        | L5LH      |                    |         |   |                             |       |              |              |                |
| S5RH        | S5LH      |                    |         |   |                             |       |              |              |                |
| L6RH        | L6LH      | 5/32               | .156    | 2800  |                             | .297  |              | .250         |                |
| S6RH        | S6LH      |                    |         |   |                             |       |              |              |                |
| -7RH        | -7LH      | 3/16               | .187    | 4200  | .3125 (5/16)-24             | .359  | .313         |              |                |
| -8RH        | -8LH      |                    |         |   |                             |       |              |              |                |
| -9RH        | -9LH      | 7/32               | .218    | 5600  | .3750 (3/8)-24              | .427  | .375         | +000<br>-007 |                |
| -10RH       | -10LH     | 1/4                | .250    | 7000  |                             |       |              |              | .494           |
| -12RH       | -12LH     | 9/32               | .281    | 8000  | .4375 (7/16)-20             | .563  | .500         | +000<br>-008 |                |
| -14RH       | -14LH     | 5/16               | .312    | 9800  |                             |       |              |              | .5000 (1/2)-20 |
| -16RH       | -16LH     | 3/8                | .375    | 14400                                       | .6250 (5/8)-18              | .781  | .563         | +000<br>-009 |                |
| -18RH       | -18LH     | 7/16               | .437    | 17600                                       |                             |       |              |              | .6250 (5/8)-18 |
| -20RH       | -20LH     | 1/2                | .500    | 22800                                       | .7500 (3/4)-16              | .984  | .688         | +000<br>-010 |                |
| -24RH       | -24LH     | 9/16               | .562    | 28500                                       |                             |       |              |              | .7500 (3/4)-16 |
| -28RH       | -28LH     | 5/8                | .625    | 35000                                       | .8750 (7/8)-14              | 1.109 | .875         | +000<br>-012 |                |
| -32RH       | -32LH     | 1                  | 1.000   | 85400                                       |                             |       |              |              | .8750 (7/8)-14 |
| -24RH       | -24LH     | 3/4                | .750    | 49600                                       | 1.0000 (1)-12               | 1.359 | 1.000        | +000<br>-010 |                |
| -28RH       | -28LH     | 7/8                | .875    | 66500                                       | 1.1250 (1 1/8)-12           | 1.593 | 1.437        |              |                |
| -32RH       | -32LH     | 1                  | 1.000   | 85400                                       | 1.2500 (1 1/4)-12           | 1.812 | 1.625        |              |                |

1/ To achieve the minimum breaking strength, for the terminal test only, a galvanized carbon steel wire rope shall be used.

TABLE I. Dash numbers and dimensions - Continued.

| Dash number |       | B <sub>1</sub> |       | ØC<br>+006<br>-000 | D     | E<br>+000<br>-010 | ØF     | G       |         | H       |         |
|-------------|-------|----------------|-------|--------------------|-------|-------------------|--------|---------|---------|---------|---------|
|             |       |                |       |                    |       |                   |        | Maximum | Minimum | Maximum | Minimum |
| L2RH        | L2LH  | 1.042          |       | .092               | .188  | .156              | .188   | .1139   | .1094   | .031    | .015    |
| S2RH        | S2LH  |                |       |                    |       |                   |        |         |         |         |         |
| L3RH        | L3LH  |                |       |                    |       |                   |        |         |         |         |         |
| S3RH        | S3LH  | 1.261          |       | .133               | .250  | .187              | .250   | .1638   | .1568   | .047    |         |
| L4RH        | L4LH  |                |       |                    |       |                   |        |         |         |         |         |
| S4RH        | S4LH  | 1.511          |       | .195               | .313  | .250              | .313   | .2224   | .2152   | .047    |         |
| L5RH        | L5LH  |                |       |                    |       |                   |        |         |         |         |         |
| S5RH        | S5LH  |                |       |                    |       |                   |        |         |         |         |         |
| L6RH        | L6LH  | 1.761          |       | .245               | .375  | .312              | .375   | .2830   | .2754   | .047    |         |
| S6RH        | S6LH  |                |       |                    |       |                   |        |         |         |         |         |
| -7RH        | -7LH  | 2.261          | ±.063 | .306               | .438  | .375              | .438   | .3454   | .3378   | .047    |         |
| -8RH        | -8LH  | 2.511          |       |                    |       |                   |        |         |         |         |         |
| -9RH        | -9LH  | 2.761          |       |                    |       |                   |        |         |         |         |         |
| -10RH       | -10LH | 3.011          |       |                    |       |                   |        |         |         |         |         |
| -12RH       | -12LH | 3.511          |       |                    |       |                   |        |         |         |         |         |
| -14RH       | -14LH | 4.011          |       |                    |       |                   |        |         |         |         |         |
| -16RH       | -16LH | 4.698          |       |                    |       |                   |        |         |         |         |         |
| -18RH       | -18LH | 5.011          |       |                    |       |                   |        |         |         |         |         |
| -20RH       | -20LH | 5.511          |       |                    |       |                   |        |         |         |         |         |
| -24RH       | -24LH | 6.511          |       |                    |       |                   |        |         |         |         |         |
| -28RH       | -28LH | 7.166          | .406  | .688               | .625  | .688              | .4678  | .4597   | .063    | .031    |         |
| -32RH       | -32LH | 8.229          |       |                    |       |                   |        |         |         |         |         |
| -14RH       | -14LH | 4.011          | .538  | .812               | .750  | .812              | .5909  | .5826   | .063    | .031    |         |
| -16RH       | -16LH | 4.698          |       |                    |       |                   |        |         |         |         |         |
| -18RH       | -18LH | 5.011          | .654  | 1.000              | .875  | 1.000             | .7137  | .7050   | .078    | .048    |         |
| -20RH       | -20LH | 5.511          |       |                    |       |                   |        |         |         |         |         |
| -24RH       | -24LH | 6.511          | .768  | 1.125              | 1.000 | 1.125             | .8558  | .8266   | .078    | .048    |         |
| -28RH       | -28LH | 7.166          |       |                    |       |                   |        |         |         |         |         |
| -32RH       | -32LH | 8.229          | 1.002 | 1.625              | 1.438 | 1.625             | 1.0819 | 1.0772  | .094    | .062    |         |
| -24RH       | -24LH | 6.511          |       |                    |       |                   |        |         |         |         |         |
| -28RH       | -28LH | 7.166          | 1.128 | 1.875              | 1.625 | 1.812             | 1.2069 | 1.1972  | .094    | .062    |         |
| -32RH       | -32LH | 8.229          |       |                    |       |                   |        |         |         |         |         |

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TABLE I. Dash numbers and dimensions - Continued.

| Dash number | L<br>±.063 | Ls<br>reference | ØM    |                | ØN    |                | P     |                | Q<br>+.031<br>-.016 | S<br>+.062<br>-.000 | ØT   |                |
|-------------|------------|-----------------|-------|----------------|-------|----------------|-------|----------------|---------------------|---------------------|------|----------------|
|             |            |                 |       |                |       |                |       |                |                     |                     |      |                |
| L2          | 3.491      | 3.67            | .090  | +.010<br>-.000 | .078  | +.005<br>-.000 | 1.042 | +.031<br>-.000 | 1.319               | .969                | .138 | +.000<br>-.005 |
| S2          | 2.616      | 2.79            |       |                |       |                |       |                |                     |                     |      |                |
| L3          | 3.738      | 3.86            | .119  |                | .109  |                | 1.261 |                | 1.581               | 1.188               | .190 |                |
| S3          | 2.863      | 2.98            |       |                |       |                |       |                |                     |                     |      |                |
| L4          | 4.020      | 4.28            | .154  |                | .141  |                | 1.511 |                | 1.863               | 1.438               | .219 |                |
| S4          | 3.145      | 3.40            |       |                |       |                |       |                |                     |                     |      |                |
| L5          | 4.314      | 4.66            | .188  |                | .172  |                | 1.761 |                | 2.157               | 1.688               | .250 |                |
| S5          | 3.439      | 3.78            |       |                |       |                |       |                |                     |                     |      |                |
| L6          | 4.612      | 4.78            | .223  |                | .203  |                | 2.011 |                | 2.455               | 1.938               | .313 |                |
| S6          | 3.737      | 3.90            |       |                |       |                |       |                |                     |                     |      |                |
| -7          | 4.914      | 5.21            | .257  | .234           | 2.261 | 2.757          | 2.188 | .375           | +.000               |                     |      |                |
| -8          | 5.218      | 5.52            | .291  | .265           | 2.511 | 3.061          | 2.438 | .438           | -.007               |                     |      |                |
| -9          | 5.542      | 5.90            | .326  | .297           | 2.761 | 3.385          | 2.688 | .500           | +.000<br>-.008      |                     |      |                |
| -10         | 5.875      | 6.30            | .360  | .328           | 3.011 | 3.718          | 2.938 | .563           |                     |                     |      |                |
| -12         | 6.608      | 7.01            | .430  | .390           | 3.511 | 4.281          | 3.438 | .625           |                     |                     |      |                |
| -14         | 7.468      | 7.94            | .514  | .468           | 4.011 | 4.812          | 3.938 | .688           | +.000               |                     |      |                |
| -16         | 8.718      | 9.28            | .584  | .531           | 4.698 | 5.562          | 4.625 | .750           |                     |                     |      |                |
| -18         | 9.188      | 9.78            | .653  | .594           | 5.011 | 6.000          | 4.938 | .875           | -.009               |                     |      |                |
| -20         | 10.469     | 11.16           | .722  | .656           | 5.511 | 6.750          | 5.438 | 1.000          | +.000<br>-.010      |                     |      |                |
| -24         | 12.188     | 12.76           | .860  | .781           | 6.511 | 7.938          | 6.438 | 1.250          | +.000<br>-.012      |                     |      |                |
| -28         | 12.851     | 13.61           | 1.013 | .921           | 7.166 | 8.601          | 7.094 | 1.437          |                     |                     |      |                |
| -32         | 14.624     | 15.53           | 1.151 | 1.046          | 8.229 | 9.844          | 8.156 | 1.625          |                     |                     |      |                |

TABLE I. Dash numbers and dimensions - Continued.

| Dash number | ØU<br>reference | ØV<br>±.005 | W<br>±.016 | X       | Y<br>±.047<br>2/ | Z                  | ØBB               |
|-------------|-----------------|-------------|------------|---------|------------------|--------------------|-------------------|
|             |                 |             |            | Minimum |                  | Minimum            |                   |
| L2          | .094            | .063        | 1.174      | .70     | .375             | .03                | 008<br>(.016 FIM) |
| S2          |                 |             |            |         |                  |                    |                   |
| L3          |                 |             |            |         |                  |                    |                   |
| S3          | .125            | .098        | 1.411      | .80     | .500             |                    |                   |
| L4          |                 |             |            |         |                  |                    |                   |
| S4          |                 |             |            |         |                  |                    |                   |
| L5          |                 |             |            |         |                  |                    |                   |
| S5          |                 |             |            |         |                  |                    |                   |
| L6          |                 |             |            |         |                  |                    |                   |
| S6          |                 |             |            |         |                  |                    |                   |
| -7          |                 |             |            |         |                  |                    |                   |
| -8          |                 |             |            |         |                  |                    |                   |
| -9          |                 |             |            |         |                  |                    |                   |
| -10         |                 |             |            |         |                  |                    |                   |
| -12         |                 |             |            |         |                  |                    |                   |
| -14         |                 |             |            |         |                  |                    |                   |
| -16         | .188            | .125        | 5.093      | 4.31    | 1.250            |                    |                   |
| -18         |                 |             |            |         |                  |                    |                   |
| -20         |                 |             |            |         |                  |                    |                   |
| -24         |                 |             |            |         |                  |                    |                   |
| -28         |                 |             |            |         |                  |                    |                   |
| -32         |                 |             |            |         |                  |                    |                   |
| -32         |                 |             |            |         |                  |                    |                   |
| -16         | .188            | .125        | 5.468      | 4.51    | 1.500            | .010<br>(.020 FIM) |                   |
| -18         |                 |             |            |         |                  |                    |                   |
| -20         |                 |             |            |         |                  |                    |                   |
| -24         |                 |             |            |         |                  |                    |                   |
| -28         |                 |             |            |         |                  |                    |                   |
| -32         |                 |             |            |         |                  |                    |                   |
| -32         |                 |             |            |         |                  |                    |                   |
| -20         | .188            | .125        | 6.093      | 5.04    | 1.750            | .015<br>(.030 FIM) |                   |
| -24         |                 |             |            |         |                  |                    |                   |
| -28         |                 |             |            |         |                  |                    |                   |
| -32         |                 |             |            |         |                  |                    |                   |
| -32         |                 |             |            |         |                  |                    |                   |
| -32         |                 |             |            |         |                  |                    |                   |
| -32         |                 |             |            |         |                  |                    |                   |
| -28         | .188            | .125        | 7.188      | 5.80    | 2.000            | .020<br>(.040 FIM) |                   |
| -32         |                 |             |            |         |                  |                    |                   |
| -32         |                 |             |            |         |                  |                    |                   |
| -32         |                 |             |            |         |                  |                    |                   |
| -32         |                 |             |            |         |                  |                    |                   |
| -32         |                 |             |            |         |                  |                    |                   |
| -32         |                 |             |            |         |                  |                    |                   |

2/ Includes last full thread engagement.

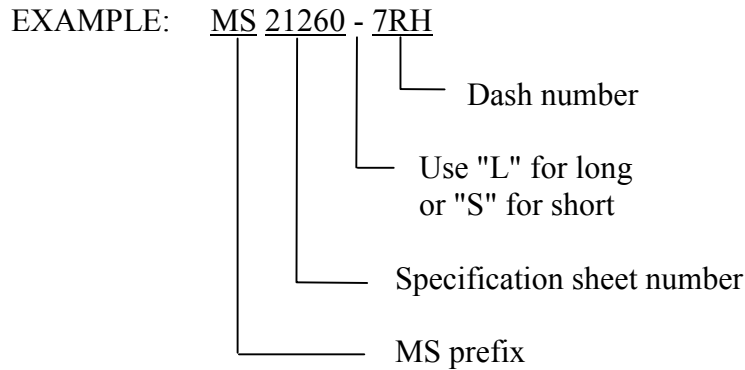
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REQUIREMENTS:

1. Material: Material shall be in accordance with MIL-DTL-781
2. Finish: Finish shall be in accordance with MIL-DTL-781.
3. Threads: Threads shall be in accordance with FED-STD-H28/20.
4. Swage: Swage shall be in accordance with MIL-DTL-6117.
5. Tolerances: Unless otherwise specified, tolerances: decimals  $\pm .010$ , angles  $\pm 3^\circ$ .

NOTES:

\* 1. The part or identifying number (PIN) consists of the letters MS, the specification sheet  
 \* number and a dash number taken from table I. An "L" in lieu of dash indicates long; an "S" in  
 \* lieu of a dash indicates short. The two letters following the dash number or letters "L" or "R"  
 \* indicates direction of thread (left or right hand).



MS21260L2RH Indicates - Terminal, .1380 (#6)-40 right hand thread, long.  
 MS21260-7RH Indicates- Terminal, .3750 (3/8)-24 right hand thread.

2. Dimensions are in inches.
- \* 3. Remove burrs and sharp edges. (See MIL-DTL-781.)
4. Interpret drawing in accordance with ASME Y14.5M.
5. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence.
6. Unless otherwise specified, issues of reference documents are those in effect at the time of solicitation.
7. Interchangeability relationship: MS21260 parts can universally replace the canceled AN669 and NAS650 parts identified by the same dash number; but the canceled

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AN669 and NAS650 parts cannot replace the superseding MS21260 parts. MS21260 corrosion resistant steel parts can universally replace the canceled carbon and alloy steel parts identified by the same dash number.

8. Carbon and alloy steel parts are inactive for new design.

CHANGES FROM PREVIOUS ISSUE: The margins of this specification sheet are marked with asterisks to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the previous issue.

Custodians:

Army - AR  
Navy - AS  
Air Force - 99

Preparing activity:

DLA - GS5

(Project 1560-0011)

Reviewers:

Army - CR4  
Navy - MC  
Air Force - 71