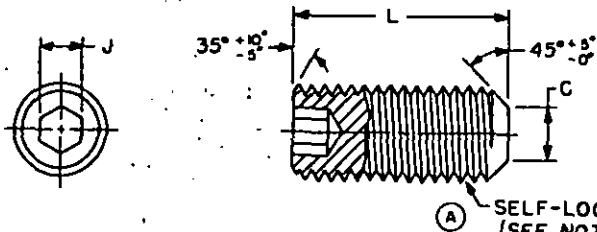


FED. SUP CLASS  
5305



(A) SELF-LOCKING ELEMENT  
(SEE NOTE 6)

TABLE I

| NOMINAL SIZE                    | .060                 | .086         | .112         | .138         | .164         | .190         | .250         | .3125        | .375         | .500         |           |       |           |       |           |
|---------------------------------|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|-------|-----------|-------|-----------|
| THREADS PER INCH (UNF-3A)       | 80                   | 64           | 48           | 40           | 36           | 32           | 28           | 24           | 24           | 20           |           |       |           |       |           |
| J SOCKET WIDTH ACROSS FLATS NOM | .028                 | .035         | .050         | .062         | .078         | .094         | .125         | .156         | .188         | .250         |           |       |           |       |           |
| C POINT DIAMETER                | MAX .031<br>MIN .027 | .047<br>.039 | .061<br>.051 | .074<br>.064 | .087<br>.076 | .102<br>.088 | .132<br>.118 | .172<br>.156 | .212<br>.194 | .291<br>.270 |           |       |           |       |           |
| DASH NUMBER                     |                      |              |              |              |              |              |              |              |              |              |           |       |           |       |           |
| L LENGTH                        | TOL                  | DASH NUMBER  |              |              |              |              |              |              |              |              |           |       |           |       |           |
|                                 |                      | PLAIN        | PLAIN        | PLAIN        | PLAIN        | PLAIN        | PLAIN        | PLAIN        | SELF LOCK    | PLAIN        | SELF LOCK | PLAIN | SELF LOCK | PLAIN | SELF LOCK |
| .062                            | ±.010                | 1*           |              |              |              |              |              |              |              |              |           |       |           |       |           |
| .125                            |                      |              | 7*           | 16*          | 25*          | 35*          |              | 110*         |              |              |           |       |           |       |           |
| .188                            |                      |              | 8*           | 17*          | 26*          | 36*          | 48*          | 111*         |              | 121*         |           |       |           |       |           |
| .250                            |                      |              | 9*           | 18*          | 27*          | 37*          | 49*          | 112*         | 60*          | 122*         | 73*       | 134   |           |       |           |
| .312                            |                      |              |              | 19*          | 28*          | 38*          | 50*          | 113          | 61*          | 123*         | 74*       | 135   | 86*       |       | 98*       |
| .375                            | ±.020                |              |              | 29*          | 39*          | 51*          | 114          | 62*          | 124          | 75*          | 136       | 87*   | 146       | 99*   | 156       |
| .438                            |                      |              |              |              |              |              | 115*         | 63*          | 125*         |              |           |       |           |       |           |
| .500                            |                      |              |              |              |              | 40*          | 52*          | 116          | 64*          | 126          | 76*       | 137   | 88*       | 147   | 100*      |
| .562                            |                      |              |              |              |              | 41*          | 53*          | 117*         | 65*          | 127*         | 77*       | 138   | 89*       | 148   | 101*      |
| .625                            |                      |              |              |              |              | 42*          | 54*          | 118          | 66*          | 128          | 78*       | 139   | 90*       | 149   | 102*      |
| .750                            |                      | ±.031        |              |              |              |              |              | 119          | 67*          | 129          | 79*       | 140   | 91*       | 150   | 103*      |
| .875                            |                      |              |              |              |              |              |              |              |              | 130          | 80*       | 141   | 92*       | 151   | 104*      |
| 1.000                           |                      |              |              |              |              |              |              |              |              | 131          |           | 142   |           | 152   |           |
| 1.250                           |                      |              |              |              |              |              |              |              |              | 132          |           | 143   |           | 153   |           |
| 1.500                           |                      |              |              |              |              |              |              |              |              |              |           | 144   |           | 154   |           |
| 1.750                           |                      |              |              |              |              |              |              |              |              | 145          |           | 155   |           |       |           |
| 2.000                           |                      |              |              |              |              |              |              |              |              |              |           |       |           | 165   |           |
| 2.500                           |                      |              |              |              |              |              |              |              |              |              |           |       |           | 166   |           |
| 3.000                           |                      |              |              |              |              |              |              |              |              |              |           |       |           | 167   |           |

REVISION: AV, IS, MI, NU  
1 SER: AT, GL, MC, WE, OS, SH, YD

This military standard is mandatory for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document.

(A) \* Inactive for new design after 29 DEC 1972.

NOTES:

- MATERIAL:** Alloy steel in accordance with procurement specification, having a Rockwell Hardness of C45-53.
- PROTECTIVE COATING:** Cadmium plated in accordance with procurement specification.
- THREADS:** The threads shall be in accordance with MIL-S-7742.
- DIMENSIONS:** All dimensions are in inches, unless otherwise specified.
- PART NUMBER:** The MS part number consists of the MS number, plus the dash number. Example: MS51966-48.
- SELF-LOCKING ELEMENT:**
  - The self-locking element shall be in accordance with MIL-F-18240.
  - For design and usage limitations, see MS15981.
  - Location of effective locking area shall be in accordance with MS15981.
  - Maximum ring gage diameter that locking region of setscrew must pass thru freely or with finger pressure shall be the nominal size plus 0.010.
  - MIL-F-18240 doesn't establish torque requirements for lengths above the dashed line. Only a positive indication of torque is required.
- Referenced documents shall be of the issue in effect on date of invitations for bid.
- For design feature purposes, this standard takes precedence over procurement documents referenced herein.

(A) For changes see sheets 1 and 2.

APPROVED 29 JAN 1964 REVISED (A) 29 DEC 1972

|                                       |   |                                      |
|---------------------------------------|---|--------------------------------------|
| P.A. WC<br>Other Cost AS<br>82        | TITLE<br>SETScrew - HEXAGON SOCKET, FLAT POINT,<br>ALLOY STEEL, CADMIUM PLATED, UNF-3A,<br>PLAIN AND SELF-LOCKING (A) | MILITARY STANDARD:<br><b>MS51966</b> |
| PROCUREMENT SPECIFICATION<br>FF-S-200 | SUPERSEDES: MS51026, MS51028 and in part MS18065, BCT12.6,<br>BCT12.7, BCT12.13, BCT12.15, BCUX1, BCUX3 and BCUX4.5   | SHEET 1 OF 2                         |

DD FORM 672-1 (Continued)

REQUIREMENTS OF THE FORM AND COMPLETE.

FED. SUP CLASS  
5305

INTERCHANGEABILITY

Screws covered by the dash numbers given in MS51026 and MS51028 are cancelled after 29 January 1964 and superseded by the screws covered on MS51966 having the same dash numbers. Cancelled screws may be used until existing stocks are depleted. Use only MS51966 screws for new design.

Screws covered by the dash numbers given in MS18065 in part are cancelled. Cancelled screws may be used until existing stocks are depleted. Use only the superseding screws for new design. Replacement shall be in accordance with Table II.

(A) TABLE II

| CANCELLED   | SUPERSEDING | CANCELLED   | SUPERSEDING | CANCELLED   | SUPERSEDING | CANCELLED   | SUPERSEDING |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| MS18065     | MS51966     | MS18065     | MS51966     | MS18065     | MS51966     | MS18065     | MS51966     |
| DASH NUMBER |             | DASH NUMBER |             | DASH NUMBER |             | DASH NUMBER |             |
| 4           | 110         | 32          | 125         | 64          | 140         | 82          | 154         |
| 8           | 111         | 37          | 126         | 70          | 141         | 85          | 155         |
| 13          | 112         | 45          | 127         | 74          | 142         | 92          | 156         |
| 19          | 113         | 50          | 128         | 78          | 143         | 40          | 157         |
| 25          | 114         | 57          | 129         | 81          | 144         | 53          | 158         |
| 31          | 115         | 63          | 130         | 84          | 145         | 60          | 159         |
| 36          | 116         | 69          | 131         | 91          | 146         | 66          | 160         |
| 44          | 117         | 73          | 132         | 39          | 147         | 72          | 161         |
| 49          | 118         | 77          | 133         | 52          | 148         | 76          | 162         |
| 56          | 119         | 15          | 134         | 59          | 149         | 80          | 163         |
| 68          | 120         | 21          | 135         | 65          | 150         | 83          | 164         |
| 9           | 121         | 27          | 136         | 71          | 151         | 86          | 165         |
| 14          | 122         | 38          | 137         | 75          | 152         | 87          | 166         |
| 20          | 123         | 51          | 138         | 79          | 153         | 88          | 167         |
| 26          | 124         | 58          | 139         |             |             |             |             |

REVIEWER: AV, IS, MI, MU, NE, OS, SH, YD  
USER: AT, GL

This military standard is mandatory for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document.

APPROVED 29 JAN 1964 REVISED (A) FOR CHANGES SEE SHEETS 1 AND 2.

|                                       |   |                              |
|---------------------------------------|---|------------------------------|
| P.A. VC<br>Other Case AS<br>82        | TITLE<br>SETSCREW-HEXAGON SOCKET, FLAT POINT,<br>ALLOY STEEL, CADMIUM PLATED, UNF-3A,<br>PLAIN AND SELF-LOCKING (A) | MILITARY STANDARD<br>MS51966 |
| PROCUREMENT SPECIFICATION<br>FF-S-200 | SUPERSEDES MS51026, MS51028 and in part MS18065, BCT12.6,<br>BCT12.7, BCT12.11, BCT12.15, BCUX1, BCUX3 and BCUX4.5  | SHEET 2 OF 2                 |

## SPECIFICATION ANALYSIS SHEET

Form Approved  
Budget Bureau No. 22-R255

**INSTRUCTIONS:** This sheet is to be filled out by personnel, either Government or contractor, involved in the use of the specification in procurement of products for ultimate use by the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to preparing activity. Comments and suggestions submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or serve to amend contractual requirements.

SPECIFICATION

ORGANIZATION

CITY AND STATE

CONTRACT NUMBER

MATERIAL PROCURED UNDER A

 DIRECT GOVERNMENT CONTRACT       SUBCONTRACT

1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?

A. GIVE PARAGRAPH NUMBER AND WORDING.

B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES

2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID

3. IS THE SPECIFICATION RESTRICTIVE?

YES       NO (If "yes", in what way?)

4. REMARKS (Attach any pertinent data which may be of use in improving this specification. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity)

SUBMITTED BY (Printed or typed name and activity - Optional)

DATE

DD FORM 1426

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