

REPLACES MIL-STD-131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

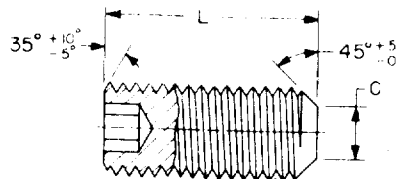
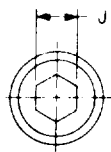
FED. SUP. CLASS
5305

TABLE 1

(B) SELF-LOCKING ELEMENT
(SEE NOTE 7)

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 MIN	.033 .027	.047 .039	.061 .051	.074 .064	.087 .076	.102 .088	.132 .118	.172 .156	.212 .194	.291 .270						
L LENGTH	TOL	DASH NUMBER															
		PLAIN	PLAIN	PLAIN	PLAIN	PLAIN	PLAIN	SELF LOCK	PLAIN	SELF LOCK	PLAIN	SELF LOCK	PLAIN	SELF LOCK	PLAIN	SELF LOCK	
.062	±.010	1*	7*	15*	24*			101*									
.125			8*	16*	24*	33*	46*	102									
.188			9*	17*	25*	34*	47*	103	58*	112	69*	125					
.250					26*	35*	48*	104	59*	113	70*	126	80*				
.312					27*	36*	49*										
.375						37*	50*	105	60*	114	71*	127	81*	137	90*	147	
.438	±.020							106*									
.500						38*	51*	107	61*	115	72*	128	82*	138	91*	148	
.562								108*									
.625						39*	52*	109	62*	116	73*	129	83*	139	92*	149	
.750						40*											
.875								110	63*	117	74*	130	84*	140	93*	150	
1.000	±.031							111									
1.250									64*	118	75*	131	85*	141	94*	151	
1.500										119	76*	132	86*	142	95*	152	
1.750										120	77*	133	87*	143	96*	153	
2.000									121								
2.500									122								
3.000									123								
									124								
										125							
										126							
										127							
										128							
										129							
										130							
										131							
										132							
										133							
										134							
										135							
										136							
2.500	±.031																
3.000																	
					</												

* Inactive for new design after 29 DEC 1972 (B)

(B) For changes see sheets 1 and 2.

P.A. WC Other Cust -2	TITLE SETSCREW-HEXAGON SOCKET, FLAT POINT, CORROSION-RESISTING STEEL, PASSIVATED, UNF-3A, PLAIN AND SELF-LOCKING (B)	MILITARY STANDARD MS51031
PROCUREMENT SPECIFICATION FF-S-200	SUPERSEDES MS51032, MS51050, MS51057 and in part MS18066, BCUX2, 13, BCUX1, BCUX3 and BCUX4, 5	SHEET 1 OF 2

DD FORM 672-1 (Coordinated)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

APPROVED 7 MAY 1958 REVISED (A) 29 JAN 1964 (B) 29 DEC 1972

FED SUP CLASS
5305

NOTES:

1. MATERIAL: Corrosion-Resisting Steel, 300 series, in accordance with procurement specification.
2. PROTECTIVE COATING: Passivated in accordance with QQ-P-35.
3. THREADS: The threads shall be in accordance with MIL-S-7742.
4. MAGNETIC PERMEABILITY: These setscrews have a magnetic permeability of 2.0 max (Air = 1.0) for a field strength of $H = 200$ oersteds, when using a magnetic indicator per MIL-I-17214.
5. DIMENSIONS: All dimensions are in inches, unless otherwise specified.
6. PART NUMBER: The MS part number consists of the Ms number, plus the dash number.
Example: MS51031-102.
7. SELF-LOCKING ELEMENT:
(a) The self-locking element shall be in accordance with MIL-I-18240.
(b) (1) For design and usage limitations, see MS18061.
(2) Location of effective locking area shall be in accordance with MS18061.
(3) Maximum ring gage diameter that is in region of setscrew must pass thru freely or with finger pressure shall be the nominal size plus 0.010.
(4) MIL-I-18240 doesn't establish torque requirement for lengths above the dashed line. Only a positive indication of torque is required.
8. Referenced documents shall be of the issue in effect on date of invitations for bid.
9. For design feature purposes, this standard takes precedence over procurement documents referenced herein.

INTERCHANGEABILITY

Screws covered by the dash numbers given in MS51032 are cancelled after 29 January 1964 and superseded by the screws covered in MS51031 having the same dash numbers. Cancelled screws may be used until existing stocks are depleted. Use only MS51031 screws for new design.

Effective 31 December 1963, MS51056 and MS51057 were cancelled and superseded by MS51031 and MS51032 respectively.

Screws covered by the dash number given in MS18066 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.

TABLE II (B)

CANCELLED	SUPERSEDING	CANCELLED	SUPERSEDING	CANCELLED	SUPERSEDING	CANCELLED	SUPERSEDING
MS18066	MS51031	MS18066	MS51031	MS18066	MS51031	MS18066	MS51031
DASH NUMBER		DASH NUMBER		DASH NUMBER		DASH NUMBER	
4	101	62	136	64	131	82	145
8	102	67	137	70	132	85	146
13	103	48	138	74	133	92	147
19	104	50	139	78	134	40	148
25	105	7	140	81	135	53	149
31	106	63	121	84	136	60	150
36	107	69	122	91	137	66	151
44	108	73	123	94	138	72	152
49	109	77	124	82	139	76	153
56	110	75	125	89	140	80	154
68	111	21	126	65	141	83	155
9	112	27	127	71	142	86	156
14	113	38	128	75	143	87	157
20	114	51	129	79	144	88	158
26	115	58	130				

P.A. NO Other Cust #2	TITLE SETSCREW-HEXAGON SOCKET, FLAT POINT, CORROSION-RESISTING STEEL, PASSIVATED, UNF-3A, PLAIN AND SELF-LOCKING (B)	MILITARY STANDARD MS51031
PROCUREMENT SPECIFICATION FF-S-200	SUPERSEDES MS51032, MS51056, MS51057 and in part MS18066, BCUX2.13, BCUX1, BCUX3 and BCUX4.5.	SHEET 2 OF 2

DD FORM 672-1 (Coordinated)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

APPROVED 7 MAY 1958 REVISED (A) 29 JAN 1964 (B) FOR CHANGES SEE SHEETS 1 AND 2

This military standard is for use by all Departments and Agencies of the Department of Defense. Authorization for new development and design modifications and for repetitive use shall be made in accordance with this document.