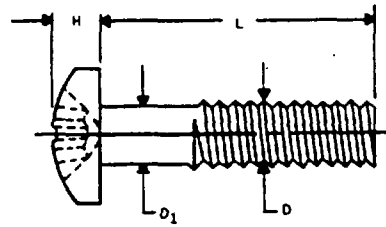
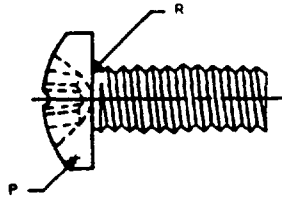
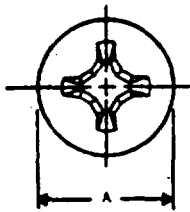


FED. SUP CLASS  
5305



D NOMINAL SIZE			.060	.086	.112	.138	.164	
THREADS PER INCH			80UNF	64UNF	48UNF	40UNF	36UNF	
D1 BODY DIAMETER			MAX MIN	.0600 .0495	.0860 .0753	.1120 .0954	.1380 .1184	.1640 .1424
A HEAD DIAMETER			MAX MIN	.116 .104	.167 .155	.219 .205	.270 .256	.322 .306
H HEAD HEIGHT			MAX MIN	.044 .036	.062 .053	.080 .070	.097 .087	.115 .105
P HEAD RADIUS			MIN	.005	.010	.010	.015	.015
R FILLET RADIUS			MAX	.009	.013	.017	.021	.025
DRIVER SIZE				0	1	1	2	2
** MINIMUM TENSILE STRENGTH LOAD LBS.				140	310	530	810	1,180
L LENGTH TOLERANCE			DASH NUMBER	DASH NUMBER	DASH NUMBER	DASH NUMBER	DASH NUMBER	
THREADED TO WITHIN A DISTANCE OF NOT LESS THAN 2 THREADS OF THE BEARING SURFACE OF THE HEAD	1/8		120	1	11	24	39	
	3/16		121	2	12	25	40	
	1/4		122	3	13	26	41	
	5/16		123	4	14	27	42	
	3/8	+0	124	5	15	28	43	
	7/16	-1/32	125	6	16	29	44	
	1/2		126	7	17	30	45	
	5/8			8	18	31	46	
	3/4			9	19	32	47	
	7/8			10*	20	33	48	
	1				21	34	49	
	1-1/4				22*	35	50	
1-1/2	+0			23*	36	51		
1 3/4	-1/16				37	52		
2					38	53		
MINIMUM COMPLETE THREAD LENGTH OF 1-3/4	2-1/4	+0					54*	
	2-1/2	-3/32					55*	
	2-3/4						56*	
	3						57*	

\* INDICATES MANUFACTURER'S NON-STOCK PRODUCTION ITEMS.  
\*\* BASED ON 80,000 PSI MINIMUM TENSILE STRENGTH. LOAD POUNDS ARE CALCULATED BY THE STRESS AREAS INDICATED IN FED-STD-H28.

REQUIREMENTS:-

- MATERIAL:** STEEL, CORROSION-RESISTING, 300 SERIES AS SPECIFIED IN QQ-S-763 AND FED-STD-66, COMPOSITION 304 OR 316 OR EQUAL TO OR INTERCHANGEABLE WITH 16:18 OR 18:8 CHROMIUM-NICKEL ALLOY STEEL.
- PROTECTIVE COATING OR TREATMENT:** CLEANED AND DESCALED IN ACCORDANCE WITH ASTM A380-78. BLACK OXIDE COATING IN ACCORDANCE WITH PROCUREMENT SPECIFICATION (WHEN BLACK OXIDE COATING IS REQUIRED, THE DASH NUMBER SHALL BE FOLLOWED BY A "B").
- MAGNETIC PERMEABILITY:** THE SCREW SHALL MEET THE MAGNETIC PERMEABILITY REQUIREMENTS OF THE PROCUREMENT SPECIFICATION.
- THREADS:** THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/2.
- RECESS:** THE RECESS SHALL BE IN ACCORDANCE WITH MS9006.
- PART NUMBER:** THE MS PART NUMBER CONSISTS OF THE MS NUMBER PLUS THE DASH NUMBER AND CODE LETTER IF APPLICABLE (SEE REQ. 2).  
EXAMPLE: MS51958-45; CLEANED AND DESCALED.  
MS51958-45B; BLACK OXIDE COATED.

NOTES:-

- DIMENSIONS:** ALL DIMENSIONS ARE IN INCHES.
- REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BIDS, OR REQUEST FOR PROPOSAL EXCEPT THAT REFERENCED ADOPTED INDUSTRY DOCUMENTS SHALL GIVE THE DATE OF THE ISSUE ADOPTED.
- FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.

ENTIRE STANDARD REVISED

P. A. AR Other Code AS 99	INTERNATIONAL INTEREST	TITLE SCREW, MACHINE PAN-HEAD, CROSS-RECESSED, CORROSION RESISTING STEEL, UNF-2A	MILITARY STANDARD MS 51958
PROCUREMENT SPECIFICATION FF-S-92		SUPERSEDES: MS35217, MS35234 AND IN PART: MS35357, MS35359 THRU MS35362, MS35364 THRU MS35366, AND 20 AND AND 26.	PAGE 1 OF 4

User activities:  
ARMY-AR  
NAVY-NC

Revised by:  
ARMY - AT, AV, EA, MI  
AIR FORCE - B2  
DLA - IS  
NSA - NS

This military standard is approved 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, when applicable.

APPROVED 12 DEC 63  
REVISED A 16 DEC 1968  
B 2 APR 1971  
C 11 FEB 83

FED. SUP CLASS  
5305

User Activities:  
ARMY-AR  
NAVY-NC

ARMY - AT, AV, EA, MI  
AIR FORCE - B2  
DLA - IS  
NSA - NS

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D	NOMINAL SIZE		.190	.250	.3125	.375
	THREADS PER INCH		32UNF	28UNF	24UNF	24UNF
D <sub>1</sub>	BODY DIAMETER	MAX	.1900	.2500	.3125	.3750
		MIN	.1858	.2225	.2806	.3430
A	HEAD DIAMETER	MAX	.375	.492	.615	.740
		MIN	.357	.473	.594	.716
H	HEAD HEIGHT	MAX	.133	.175	.218	.261
		MIN	.122	.162	.203	.244
P	HEAD RADII	MIN	.020	.035	.040	.040
R	FILLET RADIUS	MAX	.029	.038	.047	.056
	DRIVER SIZE		2	3	4	4
**	MINIMUM TENSILE STRENGTH LOAD LBS.		1,000	2,930	4,640	7,020
L	LENGTH	TOLERANCE	DASH NUMBER	DASH NUMBER	DASH NUMBER	DASH NUMBER
THREADED TO WITHIN A DISTANCE OF NOT LESS THAN 2 THREADS OF THE BEARING SURFACE OF THE HEAD	1/8	+0	56*	76	92	
	3/16		59			
	1/4		60			
	5/16		61			
	3/8		62			
	7/16		63			
	1/2	64	77	93		
	5/8	65	78	94	107	
	3/4	66	79	95	108	
	7/8	67	80	96	109	
	1	68	81	97	110	
	1-1/4	+0	69	82	98	111
	1-1/2	-1/16	70	83	99	112
	1-3/4		71	84	100	113
2		72	85	101	114	
MINIMUM COMPLETE THREAD LENGTH OF 1-3/4		73	86	102	115	
		74*	87	103	116	
		75*	88	104	117	
			89	105*	118	
			90*	106*	119	
			91*			

\* Indicates manufacturer's non-stock production items.  
\*\* Based on 80,000 PSI minimum tensile strength. Load pounds are calculated by the stress areas indicated in FED-STD-428

NOTE: For Applicable Requirements and Notes, See page 1.

APPROVED 12 DEC 63  
REVISED FOR CHANGES SEE PAGES 1, 2, 3 AND 4

P. A. AR Other Code AS 99	INTERNATIONAL INTEREST	TITLE SCREW, MACHINE-PAN HEAD, CROSS RECESSED, CORROSION RESISTING STEEL, UNF-2A	MILITARY STANDARD MS 51958
PROCUREMENT SPECIFICATION		SUPERSEDES: MS35217, MS35234 AND IN PART: MS35357, MS35399 THRU MS35362, MS35364 THRU MS35366, AN520 AND AN526.	PAGE 2 OF 4

INTERCHANGEABILITY TABLE

FED. SUP. CLASS.  
5305

The screws covered by the dash numbers given in MS35217, MS35234, AN520 in part and AN526 in part, are cancelled/ inactivated after the dates indicated on the documents. Use the dash numbers given in the preceding sheets. The cancelled screws cannot always replace the new screws and should be used until existing stocks are depleted. Use only the new screws for design and replacement. Replacement shall be in accordance with this table.

CROSS REFERENCE OF PART NUMBERS

CANCELLED				NEW
MS35234	MS35217	AN520	AN526	MS51958
DASH NUMBER				DASH NUMBER
1	1	COR2 thru C1R8	CO-2 thru C1-8	No Replacement
2	2	C2R5	C2-3	1
3	3	C2R4	C2-4	2
4	4	C2R6	C2-5	3
5	5	C2R6	C2-6	4
6	6	C2R7	C2-7	5
7	7	C2R8	C2-8	6
8	8	C2R10	C2-10	7
9	9	C2R12	C2-12	8
10				9
11	10	CR5 thru CR12	C3-3 thru C3-12	10
12	11	C4R5	C4-3	No Replacement
13	12	C4R4	C4-4	11
14	13	C4R5	C4-5	12
15	14	C4R6	C4-6	13
16	15	C4R7	C4-7	14
17	16	C4R8	C4-8	15
18	17	C4R10	C4-10	16
19	18	C4R12	C4-12	17
20	19	C4R14	C4-14	18
21	20	C4R16	C4-16	19
		C4R18	C4-18	20
22		C4R20	C4-20	21
		C4R22	C4-22	No Replacement
23		C4R24	C4-24	22
		C4R26	C4-26	No Replacement
		C4R28	C4-28	No Replacement
24	21	CS4 thru CSR28	C5-4 thru C5-28	No Replacement
25	22			23
26	23	CSR4	C6-4	24
27	24	CSR5	C6-5	25
28	25	CSR6	C6-6	26
29	26	CSR7	C6-7	27
30	27	CSR8	C6-8	28
			C64OR4	C640-4
			C64OR5	C640-5
			C64OR6	C640-6
			C64OR7	C640-7
			C64OR8	C640-8
			C64OR9	C640-9
31	28	CSR10	C6-10	No Replacement
32	29	CSR12	C6-12	29
33	30	CSR14	C6-14	30
34	31	CSR16	C6-16	31
		CSR18	C6-18	32
		CSR20	C6-20	33
		CSR22	C6-22	34
		CSR24	C6-24	No Replacement
		CSR26	C6-26	35
		CSR28	C6-28	No Replacement
35	32	CSR30	C6-30	36
36	33	CSR32	C6-32	No Replacement
37	34	CSR36	C6-36	37
38	35	CSR40	C6-40	No Replacement
			C64OR10	C640-10
			C64OR12	C640-12
			C64OR14	C640-14
			C64OR16	C640-16
			C64OR18	C640-18
			C64OR20	C640-20
			C64OR22	C640-22
			C64OR24	C640-24
			C64OR26	C640-26
			C64OR28	C640-28
			C64OR30	C640-30
			C64OR32	C640-32
			C64OR36	C640-36
			C64OR40	C640-40
			C64OR44	C640-44
			C64OR48	C640-48
39	36			No Replacement
40	37			39
41	38	CSR4	C8-4	40
42	39	CSR5	C8-5	41
43	40	CSR6	C8-6	42
44	41	CSR7	C8-7	43
45	42	CSR8	C8-8	44
			C836R4	C836-4
			C836R5	C836-5
			C836R6	C836-6
			C836R7	C836-7
			C836R8	C836-8
			C836R9	C836-9
46	43	CSR10	C8-10	No Replacement
47	44	CSR12	C8-12	45
48	45	CSR14	C8-14	46
49	46	CSR16	C8-16	47
		CSR18	C8-18	48
		CSR20	C8-20	49
		CSR22	C8-22	No Replacement
50	47	CSR24	C8-24	50
		CSR26	C8-26	No Replacement
51	48			51
			C836R24	C836-24
			C836R26	C836-26

(CONTINUED ON PAGE 4)

User activities:  
ARMY-WE  
NAVY-NC

Review activities:  
ARMY - AT, AV, EA, MI  
DLA - IS  
NSA - NS

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APPROVED 12 DEC 63  
REVISED  
FOR CHANGES SEE PAGES 1, 2, 3 AND 4

P. A. AR	INTERNATIONAL INTEREST	TITLE	MILITARY STANDARD
Other Cost AS 99		SCREW, MACHINE PAN HEAD CROSS RECESSED, CORROSION RESISTING STEEL, UNF 2A	MS 51958
PROCUREMENT SPECIFICATION FF-S 92	SUPERSEDES: MS35217, MS35234 and in part: MS35357, MS35359 thru MS35362, MS35364 thru MS35366, AN520 and AN526.		PAGE 3 OF 4

INTERCHANGEABILITY TABLE (Continued)						FED. SUP CLASS 5305
CROSS REFERENCE OF PART NUMBERS						
CANCELLED						NEW
MS35234	MS35217	ANS20	ANS25	ANS25	MS51958	
DASH NUMBER				DASH NUMBER		
52		C8R28	C8-28	C836R28	C836-28	52
53		C8R30	C8-30	C836R30	C836-30	No Replacement
54		C8R32	C8-32	C836R32	C836-32	53
55		C8R36	C8-36	C836R36	C836-36	54
56		C8R40	C8-40	C836R40	C836-40	55
57		C8R44	C8-44	C836R44	C836-44	56
58		C8R48	C8-48	C836R48	C836-48	57
59	51	C10R4	C10-4	C1032R4	C1032-4	58
60	52	C10R5	C10-5	C1032R5	C1032-5	59
61	53	C10R6	C10-6	C1032R6	C1032-6	60
62	54	C10R7	C10-7	C1032R7	C1032-7	61
63	55	C10R8	C10-8	C1032R8	C1032-8	62
				C1032R9	C1032-9	63
64	56	C10R10	C10-10	C1032R10	C1032-10	No Replacement
65	57	C10R12	C10-12	C1032R12	C1032-12	64
66	58	C10R14	C10-14	C1032R14	C1032-14	65
67	59	C10R16	C10-16	C1032R16	C1032-16	66
		C10R18	C10-18	C1032R18	C1032-18	67
68	60	C10R20	C10-20	C1032R20	C1032-20	No Replacement
		C10R22	C10-22	C1032R22	C1032-22	68
69	61	C10R24	C10-24	C1032R24	C1032-24	No Replacement
		C10R26	C10-26	C1032R26	C1032-26	69
70	62	C10R28	C10-28	C1032R28	C1032-28	No Replacement
		C10R30	C10-30	C1032R30	C1032-30	70
71	63	C10R32	C10-32	C1032R32	C1032-32	No Replacement
72	64	C10R36	C10-36	C1032R36	C1032-36	71
73	65	C10R40	C10-40	C1032R40	C1032-40	72
74		C10R44	C10-44	C1032R44	C1032-44	73
75		C10R48	C10-48	C1032R48	C1032-48	74
76	66					75
77	67	C416R6	C416-6	C428R6	C428-6	76
78	68	C416R7	C416-7	C428R7	C428-7	77
79	69	C416R8	C416-8	C428R8	C428-8	78
				C428R9	C428-9	79
80	70	C416R10	C416-10	C428R10	C428-10	No Replacement
81	71	C416R12	C416-12	C428R12	C428-12	80
82	72	C416R14	C416-14	C428R14	C428-14	81
83	73	C416R16	C416-16	C428R16	C428-16	82
		C416R18	C416-18	C428R18	C428-18	83
84	74	C416R20	C416-20	C428R20	C428-20	No Replacement
		C416R22	C416-22	C428R22	C428-22	84
85	75	C416R24	C416-24	C428R24	C428-24	No Replacement
		C416R26	C416-26	C428R26	C428-26	85
86	76	C416R28	C416-28	C428R28	C428-28	No Replacement
		C416R30	C416-30	C428R30	C428-30	86
87	77	C416R32	C416-32	C428R32	C428-32	No Replacement
88	78	C416R36	C416-36	C428R36	C428-36	87
89	79	C416R40	C416-40	C428R40	C428-40	88
90		C416R44	C416-44	C428R44	C428-44	89
91		C416R48	C416-48	C428R48	C428-48	90
92	80					91
93	81					92
94	82					93
95	83					94
96	84					95
97	85					96
98	86					97
99	87					98
100	88					99
101	89					100
102	90					101
103	91					102
104	92					103
105						104
106						105
107	93					106
108	94					107
109	95					108
110	96					109
111	97					110
112	98					111
113	99					112
114	100					113
115	101					114
116	102					115
117	103					116
118	104					117
119	105					118
						119

User activities:  
ARMY-NE  
NAVY-NC

Review activities:  
ARMY - AT, AV, EA, MI  
DLA - IS  
NSA - NS

This utility standard is approved 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, when applicable:

REVISION C FOR CHANGES SEE PAGES 1, 2, 3 and 4

APPROVED 12 DEC 63

P. A. AR Other Cont AS 99	INTERNATIONAL INTEREST	TITLE SCREW, MACHINE-PAN HEAD, CROSS RECESSED, CORROSION RESISTING STEEL, UNF-2A	MILITARY STANDARD <b>MS 51958</b>
PROCUREMENT SPECIFICATION FF-5-92	SUPERSEDES: MS35217, MS35234 AND IN PART: MS35557, MS35559 THRU MS35562, MS35562, MS35564 THRU MS35566, ANS20 AND ANS25		PAGE 4 OF 4