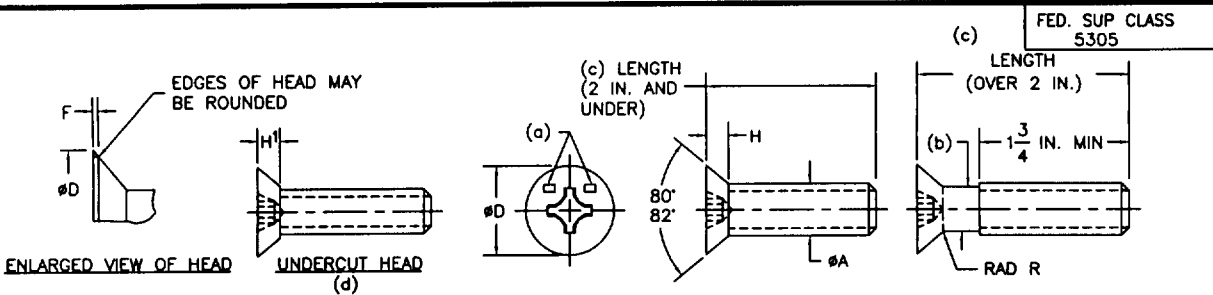


REVIEWER SYMBOLS:
ARMY-MI
AIR FORCE-82

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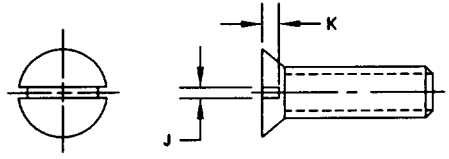
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AMSC N/A



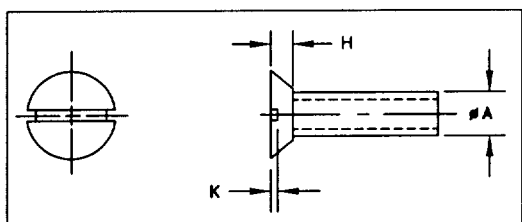
FED. SUP CLASS
5305

CROSS-RECESSED HEAD SCREW (DESIGN I)
(SEE NOTE 7)

THREAD SIZE	ϕA MAX	ϕD			F MAX	H REF		H^1		J		K		R MAX
		MAX SHARP	MIN SHARP	ABSOLUTE MIN WITH MAX F		MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
NO. 2-56 UNC-2A	.086	.172	.156	.150	.014	.051	.040	.036	.028	.031	.023	.023	.015	.035
NO. 3-48 UNC-2A	.099	.199	.181	.175	.015	.059	.048	.041	.034	.035	.027	.027	.017	.040
NO. 4-40 UNC-2A	.112	.225	.207	.200	.016	.067	.055	.047	.039	.039	.031	.030	.020	.050
NO. 5-40 UNC-2A	.125	.252	.232	.225	.018	.075	.062	.053	.043	.043	.035	.034	.022	.050
NO. 6-32 UNC-2A	.138	.279	.257	.249	.019	.083	.069	.058	.048	.048	.039	.038	.024	.060
NO. 8-32 UNC-2A	.164	.332	.308	.300	.022	.100	.084	.070	.059	.054	.045	.045	.029	.060
NO. 10-24 UNC-2A	.190	.385	.359	.348	.025	.116	.098	.081	.069	.060	.050	.053	.034	.085
1/4-20 UNC-2A	.250	.507	.477	.462	.031	.153	.131	.107	.092	.075	.064	.070	.046	.100
5/16-18 UNC-2A	.313	.635	.600	.581	.037	.191	.165	.134	.116	.084	.072	.088	.058	.110
3/8-16 UNC-2A	.375	.762	.722	.700	.043	.230	.200	.161	.140	.094	.081	.106	.070	.125



SLOTTED HEAD SCREW
(SEE NOTE 7)



UNDER CUT DIMENSIONS-SLOTTED HEAD SCREW(d)

SIZE	ϕA		H		K	
	MAX	MIN	MAX	MIN	MAX	MIN
NO. 2-56UNC -2A	.086	.036	.028	.022	.015	
NO. 3-48UNC -2A	.099	.041	.034	.025	.017	
NO. 4-40UNC -2A	.112	.047	.039	.028	.020	
NO. 5-40UNC -2A	.125	.053	.043	.031	.022	
NO. 6-32UNC -2A	.138	.058	.048	.035	.024	
NO. 8-32UNC -2A	.164	.070	.059	.040	.029	
NO. 10-24UNC -2A	.190	.081	.069	.047	.034	
1/4 -20UNC -2A	.250	.107	.092	.061	.046	
5/16-18UNC -2A	.313	.134	.116	.076	.058	
3/8-16UNC -2A	.375	.161	.140	.091	.070	

- (a) SEE REQUIREMENT 10.
- (b) SEE REQUIREMENT 6.
- (c) SEE REQUIREMENT 5.
- (d) SEE REQUIREMENT 7.

THIS STANDARD IS CANCELED LARGELY IN PART - SEE SUPERSESSON TABLES

P.A. DLA-IS	ARMY-AV NAVY-AS AIR FORCE-99	AIR FORCE - NAVY AERONAUTICAL STANDARD SCREW, MACHINE, FLAT HEAD, 82 DEGREE, COARSE THREAD	AN505
PROCUREMENT SPECIFICATION FF-S-92	SUPERSEDES: FORMER AIR FORCE AND NAVY STANDARD ISSUE OF AN505 AND USAF DRAWINGS 42B4937, 42B5702	SHEET 1 OF 7	

APPROVED 15 MAY 43 REVISED 1 15 JUN 50 2 21 FEB 52 3 17 FEB 59 4 30 JUN 94 5 31 MAY 95 6 22 APR 96 7 11 SEP 97

DASH NUMBERS FOR CARBON STEEL SCREWS (e)

L LENGTH	NO. 2-56	NO. 3-48	NO. 4-40	NO. 5-40	NO. 6-32	NO. 8-32	NO. 10-24	1/4-20	5/16-16	3/8-16
3/16	2-3	3-3	4-3(d)	5-3(d)	6-3(d)					
1/4	2-4	3-4	4-4	5-4	6-4	8-4(d)				
5/16	2-5	3-5	4-5	5-5	6-5	8-5	10-5(d)	416-5(d)		
3/8	2-6	3-6	4-6	5-6	6-6	8-6	10-6	416-6(d)		
7/16	2-7	3-7	4-7	5-7	6-7	8-7	10-7	416-7(d)		
1/2	2-8	3-8	4-8	5-8	6-8	8-8	10-8	416-8(d)	516-8(d)	616-8(d)
9/16	2-9	3-9	4-9	5-9	6-9	8-9	10-9	416-9	516-9	616-9(d)
5/8	2-10	3-10	4-10	5-10	6-10	8-10	10-10	416-10	516-10	616-10
11/16	2-11	3-11	4-11	5-11	6-11	8-11	10-11	416-11	516-11	616-11
3/4	2-12	3-12	4-12	5-12	6-12	8-12	10-12	416-12	516-12	616-12
13/16		3-13	4-13	5-13	6-13	8-13	10-13	416-13	516-13	616-13
7/8		3-14	4-14	5-14	6-14	8-14	10-14	416-14	516-14	616-14
15/16		3-15	4-15	5-15	6-15	8-15	10-15	416-15	516-15	616-15
1		3-16	4-16	5-16	6-16	8-16	10-16	416-16	516-16	616-16
1-1/8			4-18	5-18	6-18	8-18	10-18	416-18	516-18	616-18
1-1/4			4-20	5-20	6-20	8-20	10-20	416-20	516-20	616-20
1-3/8			4-22	5-22	6-22	8-22	10-22	416-22	516-22	616-22
1-1/2			4-24	5-24	6-24	8-24	10-24	416-24	516-24	616-24
1-5/8					6-26	8-26	10-26	416-26	516-26	616-26
1-3/4					6-28	8-28	10-28	416-28	516-28	616-28
1-7/8					6-30	8-30	10-30	416-30	516-30	616-30
2					6-32	8-32	10-32	416-32	516-32	616-32
2-1/8					6-34	8-34	10-34	416-34	516-34	616-34
2-1/4					6-36	8-36	10-36	416-36	516-36	616-36
2-3/8					6-38	8-38	10-38	416-38	516-38	616-38
2-1/2					6-40	8-40	10-40	416-40	516-40	616-40
2-5/8					6-42	8-42	10-42	416-42	516-42	616-42
2-3/4					6-44	8-44	10-44	416-44	516-44	616-44
2-7/8					6-46	8-46	10-46	416-46	516-46	616-46
3					6-48	8-48	10-48	416-48	516-48	616-48

RATED STRENGTH IN POUNDS
(FOR REFERENCE PURPOSES ONLY)

SIZE	MINIMUM ULTIMATE TENSILE BREAKING STRENGTH AT ROOT DIA	MINIMUM SINGLE SHEAR STRENGTH AT ROOT DIA
NO. 2-56	170	102
NO. 3-48	225	135
NO. 4-40	275	165
NO. 5-40	370	222
NO. 6-32	410	246
NO. 8-32	660	396
NO. 10-24	800	480
1/4-20	1480	890
5/16-18	2500	1500
3/8-16	3730	2240

ULTIMATE TENSILES BASED ON 55,000 PSI. SHEAR STRENGTHS 60% OF ULTIMATE TENSILES

(d) SEE REQUIREMENT 7.
(e) SEE REQUIREMENT 11.

REQUIREMENTS:

- MATERIAL:**
CARBON STEEL GRADE 1010 (UNS G10100) IN ACCORDANCE WITH ASTM A108, MINIMUM 55,000 UTS OR OTHER CARBON STEELS MEETING THE SAME PHYSICAL REQUIREMENTS.
CORROSION RESISTANT STEEL IN ACCORDANCE WITH QQ-S-763, CLASS 430 (UNS S43000) OR UNS S30430 (CLASS XM-7), ASTM A582, TYPE 303 (UNS S30300) OR TYPE 303S₁₅ (UNS S30323) OR MIL-S-7720, COMPOSITION 302 (UNS S30200) FOR COLD UPSETTING PROCESS.
BRASS IN ACCORDANCE WITH ASTM B16, ASTM B36, ASTM B121, ASTM B134, ASTM B159 OR ASTM B206 WITH A MINIMUM ULTIMATE TENSILE STRENGTH OF 55,000 PSI. ALUMINUM ALLOY 2024 (UNS A92024), IN ACCORDANCE WITH QQ-A-225/3 OR QQ-A-225/6.
- FINISH:**
CARBON STEEL: CADMIUM PLATE IN ACCORDANCE WITH QQ-P-416, TYPE II, CLASS 3.
BRASS: BLACK CHEMICAL FINISH IN ACCORDANCE WITH MIL-F-495 OR CADMIUM PLATE IN ACCORDANCE WITH QQ-P-416, TYPE II, CLASS 3, DEPENDING ON PART NUMBER CODING (SEE REQUIREMENT 11).
CORROSION RESISTANT STEEL: PASSIVATE IN ACCORDANCE WITH QQ-P-35.
ALUMINUM ALLOY: ANODIZE IN ACCORDANCE WITH MIL-A-8625, TYPE I OR II, CLASS 1.
- HEAT TREATMENT:**
ALUMINUM ALLOY: 62,000 PSI MINIMUM ULTIMATE TENSILE STRENGTH, IN ACCORDANCE WITH MIL-H-6088.
- THREADS:**
THREADS SHALL BE CLASS 2A IN ACCORDANCE WITH FED-STD-H28/2. ACCEPTABILITY OF SCREW THREADS SHALL BE IN ACCORDANCE WITH FED-STD-H28/20, SYSTEM 21.
- THREAD LENGTH:**
FOR SCREWS UP TO AND INCLUDING 2 INCHES IN LENGTH, THE COMPLETE THREADS SHALL EXTEND TO WITHIN TWO (2) THREADS OF THE BEARING SURFACE OF THE HEAD, OR CLOSER IF PRACTICABLE. SCREWS OF LONGER LENGTH SHALL HAVE A MINIMUM COMPLETE THREAD OF 1-3/4 INCHES.
- UNTHREADED PORTION:**
THE DIAMETER OF THE UNTHREADED PORTION OF THE SCREW SHALL NOT BE LESS THAN THE MINIMUM PITCH DIAMETER NOR MORE THAN THE MAXIMUM MAJOR DIAMETER OF THE THREAD.
- UNDERCUT HEADS:**
DASH NUMBERS DESIGNATED BY (d) SHALL HAVE UNDERCUT HEADS.
- HEAD DRIVE STYLE:**
CROSS-RECESS: RECESS IN ACCORDANCE WITH MS9006.
SLOTTED HEAD: REFER TO TABLE FOR DIMENSIONS (SEE NOTE 7).

P.A. DLA-IS	AIR FORCE - NAVY AERONAUTICAL STANDARD	AN505
Other Cust ARMY-AV NAVY-AS AIR FORCE-99	SCREW, MACHINE, FLAT HEAD, 82 DEGREE, COARSE THREAD	
PROCUREMENT SPECIFICATION FF-S-92	SUPERSEDES: FORMER AIR FORCE AND NAVY STANDARD ISSUE OF AN505 AND USAF DRAWINGS 42B4937, 42B5702	SHEET 2 OF 7

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

PROJECT NO.: 5305-2169

REVIEWER SYMBOLS:
ARMY-MI
AIR FORCE-82

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AMSC N/A

APPROVED 15 MAY 43 REVISED 4 30 JUN 94 5 31 MAY 95 6 22 APR 96

REVIEWER SYMBOLS:
ARMY-MI
AIR FORCE-82

9. MANUFACTURER IDENTIFICATION:

SCREWS WITH NOMINAL SIZES #10 (.1900) AND LARGER SHALL BE PERMANENTLY MARKED WITH A SYMBOL IDENTIFYING IT'S MANUFACTURER. MARKINGS SHALL BE PLACED ON THE TOP OF HEAD AND INDENTED. METHOD AND SIZE OF MARKINGS SHALL CONFORM TO THE REQUIREMENTS FOR PERMANENT MARKINGS SPECIFIED IN SAE AS478.

10. MATERIAL IDENTIFICATION:

CORROSION RESISTANT STEEL SCREWS WITH NOMINAL SIZES #5 (.1250) AND LARGER SHALL BE PERMANENTLY MARKED WITH ONE DASH ("-"). MARKINGS SHALL BE PLACED ON THE TOP OF HEAD AND INDENTED. METHOD AND SIZE OF MARKINGS SHALL CONFORM TO THE REQUIREMENTS FOR PERMANENT MARKINGS SPECIFIED IN SAE AS478.

11. CODE:

- NO CODE BETWEEN FIRST AND SECOND DASH NUMBER = SLOTTED HEAD SCREW (SEE NOTE 7).
- "R" BETWEEN FIRST AND SECOND DASH NUMBER = CROSS-RECESSED HEAD SCREW.
- NO CODE BEFORE FIRST DASH NUMBER = CARBON STEEL SCREW WITH CADMIUM PLATING.
- "B" BEFORE FIRST DASH NUMBER = BRASS SCREW WITH BLACK CHEMICAL FINISH.
- "PB" BEFORE FIRST DASH NUMBER = BRASS SCREW WITH CADMIUM PLATING.
- "UB" BEFORE FIRST DASH NUMBER = BRASS SCREW WITH NO PLATING OR FINISH.
- "C" BEFORE FIRST DASH NUMBER = CORROSION RESISTANT STEEL SCREW, PASSIVATED.
- "DD" BEFORE FIRST DASH NUMBER = ALUMINUM ALLOY SCREW, ANODIZED.

EXAMPLES:

- AN505-4-8 = SLOTTED HEAD SCREW, CARBON STEEL, CADMIUM PLATED, 4-40 UNC-2A THREAD, 1/2 INCH LONG.
- AN505-4R8 = CROSS-RECESSED HEAD SCREW, CARBON STEEL, CADMIUM PLATED, 4-40 UNC-2A THREAD, 1/2 INCH LONG.
- AN505B4-8 = SLOTTED HEAD SCREW, BRASS, BLACK CHEMICAL FINISH, 4-40 UNC-2A THREAD, 1/2 INCH LONG.
- AN505B4R8 = CROSS RECESSED HEAD SCREW, BRASS, BLACK CHEMICAL FINISH, 4-40 UNC-2A THREAD, 1/2 INCH LONG.
- AN505PB4-8 = SLOTTED HEAD SCREW, BRASS, CADMIUM PLATED, 4-40 UNC-2A THREAD, 1/2 INCH LONG.
- AN505PB4R8 = CROSS-RECESSED HEAD SCREW, BRASS, CADMIUM PLATED, 4-40 UNC-2A THREAD, 1/2 INCH LONG.
- AN505UB4-8 = SLOTTED HEAD SCREW, BRASS, UNFINISHED, 4-40 UNC-2A THREAD, 1/2 INCH LONG.
- AN505UB4R8 = CROSS-RECESSED HEAD SCREW, BRASS, UNFINISHED, 4-40 UNC-2A THREAD, 1/2 INCH LONG.
- AN505C4-8 = SLOTTED HEAD SCREW, CORROSION RESISTANT STEEL, PASSIVATED, 4-40 UNC-2A THREAD, 1/2 INCH LONG.
- AN505C4R8 = CROSS RECESSED HEAD SCREW, CORROSION RESISTANT STEEL, PASSIVATED, 4-40 UNC-2A THREAD, 1/2 INCH LONG.
- AN505DD4-8 = SLOTTED HEAD SCREW, ALUMINUM ALLOY, ANODIZED, 4-40 UNC-2A THREAD, 1/2 INCH LONG.
- AN505DD6R8 = CROSS-RECESSED SCREW, ALUMINUM ALLOY, ANODIZED, 6-32 UNC-2A THREAD, 1/2 INCH LONG.

NOTES:

1. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.
- ⑦ 2. INTERPRET DIMENSIONS AND TOLERANCES IN ACCORDANCE WITH ASME Y14.5M.
3. SCREWS SHALL BE FREE OF ALL LOOSE HANGING BURRS OR SLIVERS WHICH MAY BECOME DISLODGED DURING USAGE.
4. DO NOT USE UNASSIGNED DASH NUMBERS OR CODES.
5. IN CASE OF CONFLICT, THE REQUIREMENTS SPECIFIED HEREIN SHALL TAKE PRECEDENCE OVER THE REQUIREMENTS SPECIFIED IN SPECIFICATION FF-S-92. FOR DIMENSIONS AND TOLERANCES NOT SPECIFIED HEREIN OR FF-S-92, REFER TO ANSI B18.6.3.
6. THESE SCREWS ARE NOT TO BE USED IN THE CONSTRUCTION OF AIRFRAMES OR TO ATTACH EQUIPMENT TO THE AIRFRAME.
- ⑦ 7. CROSS RECESS AND SLOTTED HEAD SCREWS ARE CANCELED. SEE SUPERSESSION TABLE FOR CANCELLED AN505 PART NUMBERS.
USE MS35190 - FOR CARBON STEEL, CADMIUM PLATE, CROSS RECESS AND SLOTTED HEAD SCREWS.
USE MS35198 - FOR BRASS, BLACK OXIDE, CROSS RECESS AND SLOTTED HEAD SCREWS.
USE MS35202 - FOR ALUMINUM ALLOY, CROSS RECESS AND SLOTTED HEAD SCREWS.
USE MS51959 - FOR CORROSION RESISTANT STEEL, CROSS RECESS AND SLOTTED HEAD SCREWS.
- ⑦ 8. NOT ALL LENGTHS ARE COVERED BY THE MS DOCUMENTS ON THE SUPERSESSION TABLES. THE UNREPRESENTED LENGTHS ARE INACTIVE FOR NEW DESIGN. THREAD SIZES NO. 3-48 AND NO. 5-40 ARE INACTIVE FOR NEW DESIGN.

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AMSC N/A

APPROVED 15 MAY 43 REVISED 4 30 JUN 94 ⑤ 31 MAY 95 ⑥ 22 APR 96 ⑦

P.A. DLA-IS	AIR FORCE - NAVY AERONAUTICAL STANDARD	AN505
Other Cust ARMY-AV NAVY-AS AIR FORCE-99	SCREW, MACHINE, FLAT HEAD, 82 DEGREE, COARSE THREAD	
PROCUREMENT SPECIFICATION FF-S-92	SUPERSEDES: FORMER AIR FORCE AND NAVY STANDARD ISSUE OF AN505 AND USAF DRAWINGS 42B4937, 42B5702	SHEET 3 OF 7

INTERCHANGEABILITY TABLE FOR MS35190

SCREWS COVERED BY THE FOLLOWING DASH NUMBERS IN AN505 ARE CANCELED AND SUPERSEDED BY THE MS35190 DASH NUMBERS. USE THE SUPERSEDING DASH NUMBERS AS GIVEN. LENGTHS THAT ARE NOT COVERED BY MS35190 ARE INACTIVE FOR NEW DESIGN AFTER 24 FEB 65.

CANCELED AN505		MS35190	CANCELED AN505		MS35190	CANCELED AN505		MS35190	CANCELED AN505		MS35190
CROSS-RECESS	SLOTTED	DASH NO.	CROSS-RECESS	SLOTTED	DASH NO.	CROSS-RECESS	SLOTTED	DASH NO.	CROSS-RECESS	SLOTTED	DASH NO.
2R3	2-3	210	5R16	5-16	NR	10R5	10-5	268	416R44	416-44	298
2R4	2-4	211	5R18	5-18	NR	10R6	10-6	269	416R46	416-46	NR
2R5	2-5	212	5R20	5-20	NR	10R7	10-7	270	416R48	416-48	299
2R6	2-6	213	5R22	5-22	NR	10R8	10-8	271	516R8	516-8	302
2R7	2-7	214	5R24	5-24	NR	10R9	10-9	NR	516R9	516-9	NR
2R8	2-8	215	6R3	6-3	233	10R10	10-10	272	516R10	516-10	303
2R9	2-9	NR	6R4	6-4	234	10R11	10-11	NR	516R11	516-11	NR
2R10	2-10	216	6R5	6-5	235	10R12	10-12	273	516R12	516-12	304
2R11	2-11	NR	6R6	6-6	236	10R13	10-13	NR	516R13	516-13	NR
2R12	2-12	217	6R7	6-7	237	10R14	10-14	274	516R14	516-14	305
3R3	3-3	NR	6R8	6-8	238	10R15	10-15	NR	516R15	516-15	NR
3R4	3-4	NR	6R9	6-9	NR	10R16	10-16	275	516R16	516-16	306
3R5	3-5	NR	6R10	6-10	239	10R18	10-18	NR	516R18	516-18	NR
3R6	3-6	NR	6R11	6-11	NR	10R20	10-20	276	516R20	516-20	307
3R7	3-7	NR	6R12	6-12	240	10R22	10-22	NR	516R22	516-22	NR
3R8	3-8	NR	6R13	6-13	NR	10R24	10-24	277	516R24	516-24	308
3R9	3-9	NR	6R14	6-14	241	10R26	10-26	NR	516R26	516-26	NR
3R10	3-10	NR	6R15	6-15	NR	10R28	10-28	278	516R28	516-28	309
3R11	3-11	NR	6R16	6-16	242	10R30	10-30	NR	516R30	516-30	NR
3R12	3-12	NR	6R18	6-18	NR	10R32	10-32	279	516R32	516-32	310
3R13	3-13	NR	6R20	6-20	243	10R34	10-34	NR	516R34	516-34	NR
3R14	3-14	NR	6R22	6-22	NR	10R36	10-36	280	516R36	516-36	311
3R15	3-15	NR	6R24	6-24	244	10R38	10-38	NR	516R38	516-38	NR
3R16	3-16	NR	6R26	6-26	NR	10R40	10-40	281	516R40	516-40	312
4R3	4-3	220	6R28	6-28	245	10R42	10-42	NR	516R42	516-42	NR
4R4	4-4	221	6R30	6-30	NR	10R44	10-44	282	516R44	516-44	313
4R5	4-5	222	6R32	6-32	246	10R46	10-46	NR	516R46	516-46	NR
4R6	4-6	223	6R34	6-34	NR	10R48	10-48	283	516R48	516-48	314
4R7	4-7	224	6R36	6-36	NR	416R5	416-5	284	616R8	616-8	315
4R8	4-8	225	6R38	6-38	NR	416R6	416-6	285	616R9	616-9	NR
4R9	4-9	NR	6R40	6-40	NR	416R7	416-7	286	616R10	616-10	316
4R10	4-10	226	6R42	6-42	NR	416R8	416-8	287	616R11	616-11	NR
4R11	4-11	NR	6R44	6-44	NR	416R9	416-9	NR	616R12	616-12	317
4R12	4-12	227	6R46	6-46	NR	416R10	416-10	288	616R13	616-13	NR
4R13	4-13	NR	6R48	6-48	NR	416R11	416-11	NR	616R14	616-14	318
4R14	4-14	228	8R14	8-14	256	416R12	416-12	289	616R15	616-15	NR
4R15	4-15	NR	8R15	8-15	NR	416R13	416-13	NR	616R16	616-16	319
4R16	4-16	229	8R16	8-16	257	416R14	416-14	290	616R18	616-18	NR
4R18	4-18	NR	8R18	8-18	NR	416R15	416-15	NR	616R20	616-20	320
4R20	4-20	230	8R20	8-20	258	416R16	416-16	291	616R22	616-22	NR
4R22	4-22	NR	8R22	8-22	NR	416R18	416-18	NR	616R24	616-24	321
4R24	4-24	231	8R24	8-24	259	416R20	416-20	292	616R26	616-26	NR
5R3	5-3	NR	8R26	8-26	NR	416R22	416-22	NR	616R28	616-28	322
5R4	5-4	NR	8R28	8-28	260	416R24	416-24	293	616R30	616-30	NR
5R5	5-5	NR	8R30	8-30	NR	416R26	416-26	NR	616R32	616-32	323
5R6	5-6	NR	8R32	8-32	261	416R28	416-28	294	616R34	616-34	NR
5R7	5-7	NR	8R34	8-34	NR	416R30	416-30	NR	616R36	616-36	324
5R8	5-8	NR	8R36	8-36	262	416R32	416-32	295	616R38	616-38	NR
5R9	5-9	NR	8R38	8-38	NR	416R34	416-34	NR	616R40	616-40	325
5R10	5-10	NR	8R40	8-40	263	416R36	416-36	296	616R42	616-42	NR
5R11	5-11	NR	8R42	8-42	NR	416R38	416-38	NR	616R44	616-44	326
5R12	5-12	NR	8R44	8-44	264	416R40	416-40	297	616R46	616-46	NR
5R13	5-13	NR	8R46	8-46	NR	416R42	416-42	NR	616R48	616-48	327
5R14	5-14	NR									
5R15	5-15	NR									

NR = NO REPLACEMENT

P.A. DLA-IS

Other Cust
ARMY-AV
NAVY-AS
AIR FORCE-99

AIR FORCE - NAVY AERONAUTICAL STANDARD

SCREW, MACHINE, FLAT HEAD, 82 DEGREE,
COARSE THREAD

AN505

PROCUREMENT SPECIFICATION
FF-S-92

SUPERSEDES: FORMER AIR FORCE AND NAVY STANDARD ISSUE OF
AN505 AND USAF DRAWINGS 42B4937, 42B5702

SHEET 4 OF 7

REVIEWER SYMBOLS:
ARMY-M
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AMSC N/A

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REVISED
APPROVED 15 MAY 43

INTERCHANGEABILITY TABLE FOR MS35202

SCREWS COVERED BY THE FOLLOWING DASH NUMBERS IN AN505 ARE CANCELED AND SUPERSEDED BY THE MS35202 DASH NUMBERS. USE THE SUPERSEDING DASH NUMBERS AS GIVEN. LENGTHS THAT ARE NOT COVERED BY MS35202 ARE INACTIVE FOR NEW DESIGN AFTER 4 MAY 65.

CANCELED AN505		MS35202 DASH NO.	CANCELED AN505		MS35202 DASH NO.	CANCELED AN505		MS35202 DASH NO.
CROSS-RECESS	SLOTTED		CROSS-RECESS	SLOTTED		CROSS-RECESS	SLOTTED	
DD2R3	DD2-3	2	DD8R7	DD8-7	41	DD416R18	DD416-18	NR
DD2R4	DD2-4	3	DD8R8	DD8-8	42	DD416R20	DD416-20	74
DD2R5	DD2-5	4	DD8R9	DD8-9	NR	DD416R22	DD416-22	NR
DD2R6	DD2-6	5	DD8R10	DD8-10	43	DD416R24	DD416-24	75
DD2R7	DD2-7	6	DD8R11	DD8-11	NR	DD416R26	DD416-26	NR
DD2R8	DD2-8	7	DD8R12	DD8-12	44	DD416R28	DD416-28	76
DD2R9	DD2-9	NR	DD8R13	DD8-13	NR	DD416R30	DD416-30	NR
DD2R10	DD2-10	8	DD8R14	DD8-14	45	DD416R32	DD416-32	77
DD2R11	DD2-11	NR	DD8R15	DD8-15	NR	DD416R34	DD416-34	NR
DD2R12	DD2-12	9	DD8R16	DD8-16	46	DD416R36	DD416-36	78
DD3R3	DD3-3	NR	DD8R18	DD8-18	NR	DD416R38	DD416-38	NR
THRU	THRU		DD8R20	DD8-20	47	DD416R40	DD416-40	79
DD3R16	DD3-16		DD8R22	DD8-22	NR	DD416R42	DD416-42	NR
DD4R3	DD4-3		11	DD8R24	DD8-24	48	DD416R44	DD416-44
DD4R4	DD4-4	12	DD8R26	DD8-26	NR	DD416R46	DD416-46	NR
DD4R5	DD4-5	13	DD8R28	DD8-28	49	DD416R48	DD416-48	NR
DD4R6	DD4-6	14	DD8R30	DD8-30	NR	DD516R8	DD516-8	82
DD4R7	DD4-7	15	DD8R32	DD8-32	50	DD516R9	DD516-9	NR
DD4R8	DD4-8	16	DD8R34	DD8-34	NR	DD516R10	DD516-10	83
DD4R9	DD4-9	NR	DD8R36	DD8-36	NR	DD516R11	DD516-11	NR
DD4R10	DD4-10	17	DD8R38	DD8-38	NR	DD516R12	DD516-12	84
DD4R11	DD4-11	NR	DD8R40	DD8-40	NR	DD516R13	DD516-13	NR
DD4R12	DD4-12	18	DD8R42	DD8-42	NR	DD516R14	DD516-14	85
DD4R13	DD4-13	NR	DD8R44	DD8-44	NR	DD516R15	DD516-15	NR
DD4R14	DD4-14	19	DD8R46	DD8-46	NR	DD516R16	DD516-16	86
DD4R15	DD4-15	NR	DD8R48	DD8-48	NR	DD516R18	DD516-18	NR
DD4R16	DD4-16	20	DD10R5	DD10-5	52	DD516R20	DD516-20	87
DD4R18	DD4-18	NR	DD10R6	DD10-6	53	DD516R22	DD516-22	NR
DD4R20	DD4-20	NR	DD10R7	DD10-7	54	DD516R24	DD516-24	88
DD4R22	DD4-22	NR	DD10R8	DD10-8	55	DD516R26	DD516-26	NR
DD4R24	DD4-24	NR	DD10R9	DD10-9	NR	DD516R28	DD516-28	89
DD5R3	DD5-3		DD10R10	DD10-10	56	DD516R30	DD516-30	NR
THRU	THRU	NR	DD10R11	DD10-11	NR	DD516R32	DD516-32	90
DD5R24	DD5-24	22	DD10R12	DD10-12	57	DD516R34	DD516-34	NR
DD6R3	DD6-3		DD10R13	DD10-13	NR	DD516R36	DD516-36	91
DD6R4	DD6-4	23	DD10R14	DD10-14	58	DD516R38	DD516-38	NR
DD6R5	DD6-5	24	DD10R15	DD10-15	NR	DD516R40	DD516-40	92
DD6R6	DD6-6	25	DD10R16	DD10-16	59	DD516R42	DD516-42	NR
DD6R7	DD6-7	26	DD10R18	DD10-18	NR	DD516R44	DD516-44	NR
DD6R8	DD6-8	27	DD10R20	DD10-20	60	DD516R46	DD516-46	NR
DD6R9	DD6-9	NR	DD10R22	DD10-22	NR	DD516R48	DD516-48	NR
DD6R10	DD6-10	28	DD10R24	DD10-24	61	DD616R8	DD616-8	93
DD6R11	DD6-11	NR	DD10R26	DD10-26	NR	DD616R9	DD616-9	NR
DD6R12	DD6-12	29	DD10R28	DD10-28	62	DD616R10	DD616-10	94
DD6R13	DD6-13	NR	DD10R30	DD10-30	NR	DD616R11	DD616-11	NR
DD6R14	DD6-14	30	DD10R32	DD10-32	63	DD616R12	DD616-12	95
DD6R15	DD6-15	NR	DD10R34	DD10-34	NR	DD616R13	DD616-13	NR
DD6R16	DD6-16	31	DD10R36	DD10-36	64	DD616R14	DD616-14	96
DD6R18	DD6-18	NR	DD10R38	DD10-38	NR	DD616R15	DD616-15	NR
DD6R20	DD6-20	32	DD10R40	DD10-40	65	DD616R16	DD616-16	97
DD6R22	DD6-22	NR	DD10R42	DD10-42	NR	DD616R18	DD616-18	NR
DD6R24	DD6-24	33	DD10R44	DD10-44	NR	DD616R20	DD616-20	98
DD6R26	DD6-26	NR	DD10R46	DD10-46	NR	DD616R22	DD616-22	NR
DD6R28	DD6-28	34	DD10R48	DD10-48	NR	DD616R24	DD616-24	99
DD6R30	DD6-30	NR	DD416R5	DD416-5	66	DD616R26	DD616-26	NR
DD6R32	DD6-32	35	DD416R6	DD416-6	67	DD616R28	DD616-28	100
DD6R34	DD6-34	NR	DD416R7	DD416-7	68	DD616R30	DD616-30	NR
DD6R36	DD6-36	NR	DD416R8	DD416-8	69	DD616R32	DD616-32	101
DD6R38	DD6-38	NR	DD416R9	DD416-9	NR	DD616R34	DD616-34	NR
DD6R40	DD6-40	NR	DD416R10	DD416-10	70	DD616R36	DD616-36	102
DD6R42	DD6-42	NR	DD416R11	DD416-11	NR	DD616R38	DD616-38	NR
DD6R44	DD6-44	NR	DD416R12	DD416-12	71	DD616R40	DD616-40	103
DD6R46	DD6-46	NR	DD416R13	DD416-13	NR	DD616R42	DD616-42	NR
DD6R48	DD6-48	NR	DD416R14	DD416-14	72	DD616R44	DD616-44	104
DD8R4	DD8-4	38	DD416R15	DD416-15	NR	DD616R46	DD616-46	NR
DD8R5	DD8-5	39	DD416R16	DD416-16	73	DD616R48	DD616-48	105
DD8R6	DD8-6	40						

NR = NO REPLACEMENT

P.A. DLA-IS
Other Cust
ARMY-AV
NAVY-AS
AIR FORCE-82
PROCUREMENT SPECIFICATION
FF-S-92

AIR FORCE - NAVY AERONAUTICAL STANDARD

SCREW, MACHINE, FLAT HEAD, 82 DEGREE,
COARSE THREAD

AN505

SUPERSEDES: FORMER AIR FORCE AND NAVY STANDARD ISSUE OF AN505 AND USAF DRAWINGS 42B4937, 42B5702

SHEET 6 OF 7

REVIEWER SYMBOLS:
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AMSC N/A

APPROVED 15 MAY 43 REVISED 7

INTERCHANGEABILITY TABLE FOR MS51959

SCREWS COVERED BY THE FOLLOWING DASH NUMBERS IN AN505 ARE CANCELED AND SUPERSEDED BY THE MS51959 DASH NUMBERS. USE THE SUPERSEDED DASH NUMBERS AS GIVEN. LENGTHS THAT ARE NOT COVERED BY MS51959 ARE INACTIVE FOR NEW DESIGN AFTER 17 FEB 59.

CANCELED AN505		MS51959 DASH NO.	CANCELED AN505		MS51959 DASH NO.	CANCELED AN505		MS51959 DASH NO.	CANCELED AN505		MS51959 DASH NO.
CROSS-RECESS	SLOTTED		CROSS-RECESS	SLOTTED		CROSS-RECESS	SLOTTED		CROSS-RECESS	SLOTTED	
C2R3	C2-3	2	C5R18	C5-18	NR	C8R36	C8-36	54	C416R36	C416-36	88
C2R4	C2-4	3	C5R20	C5-20	NR	C8R38	C8-38	NR	C416R38	C416-38	NR
C2R5	C2-5	4	C5R22	C5-22	NR	C8R40	C8-40	55	C416R40	C416-40	89
C2R6	C2-6	5	C5R24	C5-24	NR	C8R42	C8-42	NR	C416R42	C416-42	NR
C2R7	C2-7	6	C6R3	C6-3	25	C8R44	C8-44	56	C416R44	C416-44	90
C2R8	C2-8	7	C6R4	C6-4	26	C8R46	C8-46	NR	C416R46	C416-46	NR
C2R9	C2-9	NR	C6R5	C6-5	27	C8R48	C8-48	57	C416R48	C416-48	91
C2R10	C2-10	8	C6R6	C6-6	28	C10R5	C10-5	60	C516R8	C516-8	94
C2R11	C2-11	NR	C6R7	C6-7	29	C10R6	C10-6	61	C516R9	C516-9	NR
C2R12	C2-12	9	C6R8	C6-8	30	C10R7	C10-7	62	C516R10	C516-10	95
C3R3	C3-3	NR	C6R9	C6-9	NR	C10R8	C10-8	63	C516R11	C516-11	NR
C3R4	C3-4	NR	C6R10	C6-10	31	C10R9	C10-9	NR	C516R12	C516-12	96
C3R5	C3-5	NR	C6R11	C6-11	NR	C10R10	C10-10	64	C516R13	C516-13	NR
C3R6	C3-6	NR	C6R12	C6-12	32	C10R11	C10-11	NR	C516R14	C516-14	97
C3R7	C3-7	NR	C6R13	C6-13	NR	C10R12	C10-12	65	C516R15	C516-15	NR
C3R8	C3-8	NR	C6R14	C6-14	33	C10R13	C10-13	NR	C516R16	C516-16	98
C3R9	C3-9	NR	C6R15	C6-15	NR	C10R14	C10-14	66	C516R18	C516-18	NR
C3R10	C3-10	NR	C6R16	C6-16	34	C10R15	C10-15	NR	C516R20	C516-20	99
C3R11	C3-11	NR	C6R18	C6-18	NR	C10R16	C10-16	67	C516R22	C516-22	NR
C3R12	C3-12	NR	C6R20	C6-20	35	C10R18	C10-18	NR	C516R24	C516-24	100
C3R13	C3-13	NR	C6R22	C6-22	NR	C10R20	C10-20	68	C516R26	C516-26	NR
C3R14	C3-14	NR	C6R24	C6-24	36	C10R22	C10-22	NR	C516R28	C516-28	101
C3R15	C3-15	NR	C6R26	C6-26	NR	C10R24	C10-24	69	C516R30	C516-30	NR
C3R16	C3-16	NR	C6R28	C6-28	37	C10R26	C10-26	NR	C516R32	C516-32	102
C4R3	C4-3	12	C6R30	C6-30	NR	C10R28	C10-28	70	C516R34	C516-34	NR
C4R4	C4-4	13	C6R32	C6-32	38	C10R30	C10-30	NR	C516R36	C516-36	103
C4R5	C4-5	14	C6R34	C6-34	NR	C10R32	C10-32	71	C516R38	C516-38	NR
C4R6	C4-6	15	C6R36	C6-36	NR	C10R34	C10-34	NR	C516R40	C516-40	104
C4R7	C4-7	16	C6R38	C6-38	NR	C10R36	C10-36	72	C516R42	C516-42	NR
C4R8	C4-8	NR	C6R40	C6-40	NR	C10R38	C10-38	NR	C516R44	C516-44	105
C4R9	C4-9	NR	C6R42	C6-42	NR	C10R40	C10-40	73	C516R46	C516-46	NR
C4R10	C4-10	18	C6R44	C6-44	NR	C10R42	C10-42	NR	C516R48	C516-48	106
C4R11	C4-11	NR	C6R46	C6-46	NR	C10R44	C10-44	74	C616R8	C616-8	107
C4R12	C4-12	19	C6R48	C6-48	NR	C10R46	C10-46	NR	C616R9	C616-9	NR
C4R13	C4-13	NR	C8R4	C8-4	41	C10R48	C10-48	75	C616R10	C616-10	108
C4R14	C4-14	20	C8R5	C8-5	42	C416R5	C416-5	76	C616R11	C616-11	NR
C4R15	C4-15	NR	C8R6	C8-6	43	C416R6	C416-6	77	C616R12	C616-12	109
C4R16	C4-16	21	C8R7	C8-7	44	C416R7	C416-7	78	C616R13	C616-13	NR
C4R18	C4-18	NR	C8R8	C8-8	45	C416R8	C416-8	79	C616R14	C616-14	110
C4R20	C4-20	22	C8R9	C8-9	NR	C416R9	C416-9	NR	C616R15	C616-15	NR
C4R22	C4-22	NR	C8R10	C8-10	46	C416R10	C416-10	80	C616R16	C616-16	111
C4R24	C4-24	23	C8R11	C8-11	NR	C416R11	C416-11	NR	C616R18	C616-18	NR
C5R3	C5-3	NR	C8R12	C8-12	47	C416R12	C416-12	81	C616R20	C616-20	112
C5R4	C5-4	NR	C8R13	C8-13	NR	C416R13	C416-13	NR	C616R22	C616-22	NR
C5R5	C5-5	NR	C8R14	C8-14	48	C416R14	C416-14	82	C616R24	C616-24	113
C5R6	C5-6	NR	C8R15	C8-15	NR	C416R15	C416-15	NR	C616R26	C616-26	NR
C5R7	C5-7	NR	C8R16	C8-16	49	C416R16	C416-16	83	C616R28	C616-28	114
C5R8	C5-8	NR	C8R18	C8-18	NR	C416R18	C416-18	NR	C616R30	C616-30	NR
C5R9	C5-9	NR	C8R20	C8-20	50	C416R20	C416-20	84	C616R32	C616-32	115
C5R10	C5-10	NR	C8R22	C8-22	NR	C416R22	C416-22	NR	C616R34	C616-34	NR
C5R11	C5-11	NR	C8R24	C8-24	51	C416R24	C416-24	85	C616R36	C616-36	116
C5R12	C5-12	NR	C8R26	C8-26	NR	C416R26	C416-26	NR	C616R38	C616-38	NR
C5R13	C5-13	NR	C8R28	C8-28	52	C416R28	C416-28	86	C616R40	C616-40	117
C5R14	C5-14	NR	C8R30	C8-30	NR	C416R30	C416-30	NR	C616R42	C616-42	NR
C5R15	C5-15	NR	C8R32	C8-32	53	C416R32	C416-32	87	C616R44	C616-44	118
C5R16	C5-16	NR	C8R34	C8-34	NR	C416R34	C416-34	NR	C616R46	C616-46	NR

NR = NO REPLACEMENT

P.A. DLA-IS
Other Cust
ARMY-AV
NAVY-AS
AIR FORCE-99
PROCUREMENT SPECIFICATION
FF-S-92

AIR FORCE - NAVY AERONAUTICAL STANDARD
SCREW, MACHINE, FLAT HEAD, 82 DEGREE,
COARSE THREAD
SUPERSEDES: FORMER AIR FORCE AND NAVY STANDARD ISSUE OF
AN505 AND USAF DRAWINGS 42B4937, 42B5702

AN505
SHEET 7 OF 7

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ARMY-MI
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AMSC N/A

APPROVED 15 MAY 43 REVISED 7