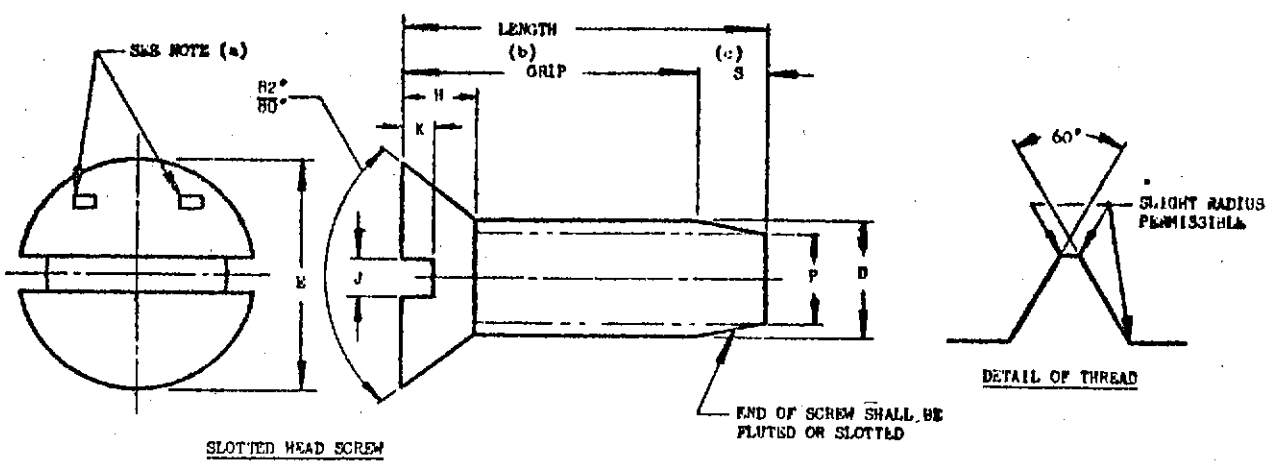
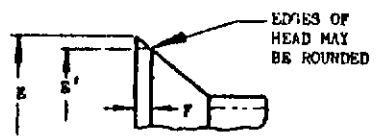


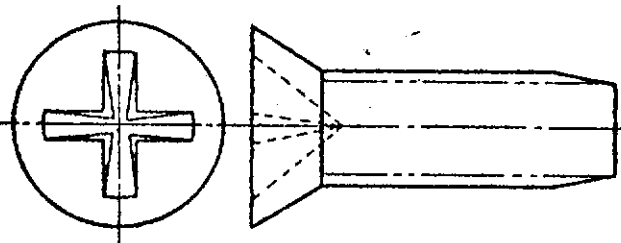
This drawing was prepared by the Air Force and Navy Departments in the Air Force and Navy specifications as indicated. This drawing is intended to be used for the design of screws and tapping screws for the design of aircraft and other aircraft components. It is not intended to be used for the design of screws and tapping screws for other than aircraft components. The design of aircraft components is the responsibility of the designer. The design of aircraft components is the responsibility of the designer. The design of aircraft components is the responsibility of the designer.



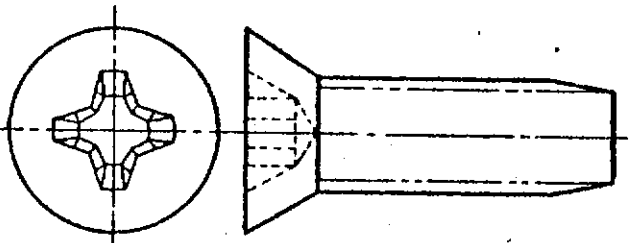
SLOTTED HEAD SCREW



DETAIL VIEW OF HEAD



RECESSED HEAD SCREW



RECESSED HEAD SCREW

THIS TYPE OF RECESS CONSISTS OF TWO INTERSECTING SLOTS WITH PARALLEL SIDES CONVERGING TO A SHARP APEX AT BOTTOM OF RECESS.

THIS TYPE OF RECESS HAS A LARGE CENTER OPENING, TAPERED WINGS, AND BLUNT BOTTOM, WITH ALL EDGES RELIEVED OR ROUNDED.

DIMENSIONING AND GAGING OF THE ABOVE TYPES OF RECESS SHALL BE IN ACCORDANCE WITH THE 1950 SUPPLEMENT TO HANDBOOK H-28 SCREW THREADS FOR FEDERAL SERVICES 1944.

SIZE	D MAX DIA	E DIA		E' DIA	F MAX	H		J		K		P DIA	
		MAX SHARP	MIN SHARP	ABSOLUTE MIN WITH MAX F		MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
NO. 4-40	.112	.225	.207	.200	.016	.067	.055	.039	.031	.030	.020	.086	.077
NO. 6-32	.138	.279	.257	.249	.019	.083	.069	.048	.039	.038	.024	.106	.095
NO. 8-32	.164	.332	.308	.300	.022	.100	.084	.054	.045	.045	.029	.132	.121
NO. 10-24	.190	.385	.359	.348	.025	.116	.098	.060	.050	.053	.034	.147	.133
1/4-20	.250	.507	.477	.462	.031	.153	.131	.075	.064	.070	.046	.198	.181

INACTIVE FOR DESIGN AFTER 7 JUNE 1950. NO SUPERSEDING STANDARD.

FOR DEFINITION AND APPLICATION OF DRAWING STATUS NOTES, SEE AIAA PAMPHLET NO. 337.

⑤ REVISED TO ADD INACTIVATION NOTES TO SHEETS 1 AND 2 FOR CLARIFICATION OF PROCUREMENT STATUS.

PROCUREMENT SPECIFICATION
MIL-B-6033

AIR FORCE-NAVY AERONAUTICAL STANDARD
SCREW, TAPPING, THREAD CUTTING, 82-
DEGREE FLAT HEAD, MACHINE SCREW THD

AN506
SHEET 1 OF 1

NOTICE—When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government operation, the United States Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have furnished, furnished, or in any way supplied, the said drawings, specifications, or other data is not to be interpreted by implication or otherwise as in any way constituting the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

NOTE—This drawing was approved by joint action of the Air Force and Navy Departments as the Air Force-Navy standard for the product. This drawing supersedes all previous standard drawings for the same product and shall become effective from the date of approval. It is recommended that users of this drawing be kept advised of any changes, and that they be kept advised of the latest date of approval.

- (a) MARKING FOR CORROSION-RESISTANT STEEL SCREWS. ONLY ONE DASH NEED BE VISIBLE. POSITION OPTIONAL. NO MARKING REQUIRED ON HEADS OF NO. 4 SCREWS.
- (b) THE GRIP LENGTH IS MEASURED FROM THE TOP OF THE HEAD TO THE END OF THE FULL-THREADED PORTION OF THE SHANK. THE MINIMUM GRIP DIMENSIONS SHOWN IN THE DASH NUMBER TABLE ARE FOR DESIGN PURPOSES ONLY AND ARE NOT AN INSPECTION REQUIREMENT.
- (c) SCREWS HAVING A LENGTH OF 8 PITCHES OR LESS WILL HAVE A TAPER LENGTH, S, OF 2-1/2 TO 3-1/2 TIMES THE PITCH DISTANCE. LONGER LENGTHS WILL HAVE A TAPER LENGTH, S, OF 3-1/2 TO 4-1/2 TIMES THE PITCH DISTANCE.

① MATERIAL: CARBON STEEL, CASE HARDENED, OR CORROSION-RESISTANT STEEL, TYPE 410, HARDENED.

① FINISH: CARBON STEEL, CADMIUM PLATE, SPECIFICATION QQ-P-416, TYPE I, CLASS C. CORROSION-RESISTANT STEEL, NONE.

ADD C BEFORE FIRST DASH NUMBER FOR CORROSION-RESISTANT STEEL SCREWS.

ADD R BETWEEN FIRST AND SECOND DASH NUMBERS FOR RECESSED HEAD SCREWS. CORROSION-RESISTANT STEEL RECESSED HEAD SCREWS NOT COVERED BY THIS DRAWING.

① EXAMPLES OF PART NUMBERS:

AN506-4-4 = NO. 4-40, CARBON STEEL, SLOTTED HEAD SCREW, 4/16 IN LENGTH.

AN506-4R4 = NO. 4-40, CARBON STEEL, RECESSED HEAD SCREW, 4/16 IN LENGTH.

AN506C4-4 = NO. 4-40, CORROSION-RESISTANT STEEL, SLOTTED HEAD SCREW, 4/16 IN LENGTH.

TAPERED THREADS HAVE UNFINISHED CRESTS.

MAJOR DIAMETERS OF COMPLETE THREADS CONFORM TO NC-2, AND NF-2 TOLERANCES.

THREADS MUST EXTEND TO WITHIN ONE FULL THREAD OF THE HEAD ON SCREW LENGTHS UP TO 3 DIAMETERS. UP TO 8 DIAMETERS, THREADS MUST EXTEND UP TO WITHIN TWO THREADS OF THE HEAD. ON LONGER LENGTHS, UNLESS OTHERWISE SPECIFIED, THE LENGTH OF THE THREAD IS OPTIONAL WITH THE PRODUCER BUT MUST NOT BE LESS THAN 6 DIAMETERS.

SCREW MANUFACTURER'S DESIGNATIONS MAY BE INCLUDED ON THE SCREWS.

SCREWS SHALL BE FREE OF ALL LOOSE OR HANGING BURRS OR SLIVERS WHICH MIGHT BECOME DISLODGED UNDER USAGE.

DIMENSIONS IN INCHES.

FOR INSTALLATION AND LIMITATIONS FOR USAGE, SEE DRAWINGS AND10087 AND AND10326.

**INACTIVE FOR DESIGN AFTER 7 JUNE 1950.
NO SUPERSEDING STANDARD**

FOR DEFINITION AND APPLICATION OF DRAWING STATUS NOTES, SEE ANA BULLETIN NO. 337.

PROCUREMENT
SPECIFICATION
MIL-S-6033

AIR FORCE-NAVY AERONAUTICAL STANDARD

SCREW, TAPPING, THREAD CUTTING, 82-DEGREE FLAT HEAD,
MACHINE SCREW THREAD

AN506
SHEET 3

10 JAN 52