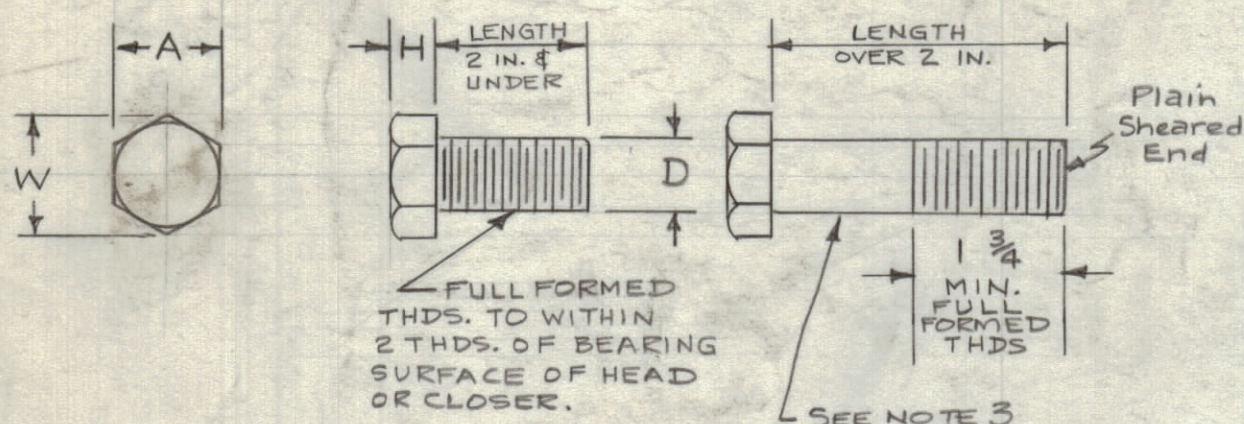


CHART No. 1

SCREW, MACHINE, HEX. HEAD, PLAIN, TRIMMED HEAD, SINGLE CHAMFERED. SIZES 2 Thru 12



NOM. SCREW SIZE	D BASIC DIA. OF SCREW	STANDARD TRIMMED HEAD		H HEIGHT OF HEAD	
		A		W	
		MAX	MIN	MIN	MAX
2	0.0860	0.125	0.120	0.134	0.050
3	0.0990	0.187	0.181	0.202	0.055
4	0.1120	0.187	0.181	0.202	0.060
5	0.1250	0.187	0.181	0.202	0.070
6	0.1380	0.250	0.244	0.272	0.093
8	0.1640	0.250	0.244	0.272	0.110
10	0.1900	0.312	0.305	0.340	0.120
12	0.2160	0.312	0.305	0.340	0.155

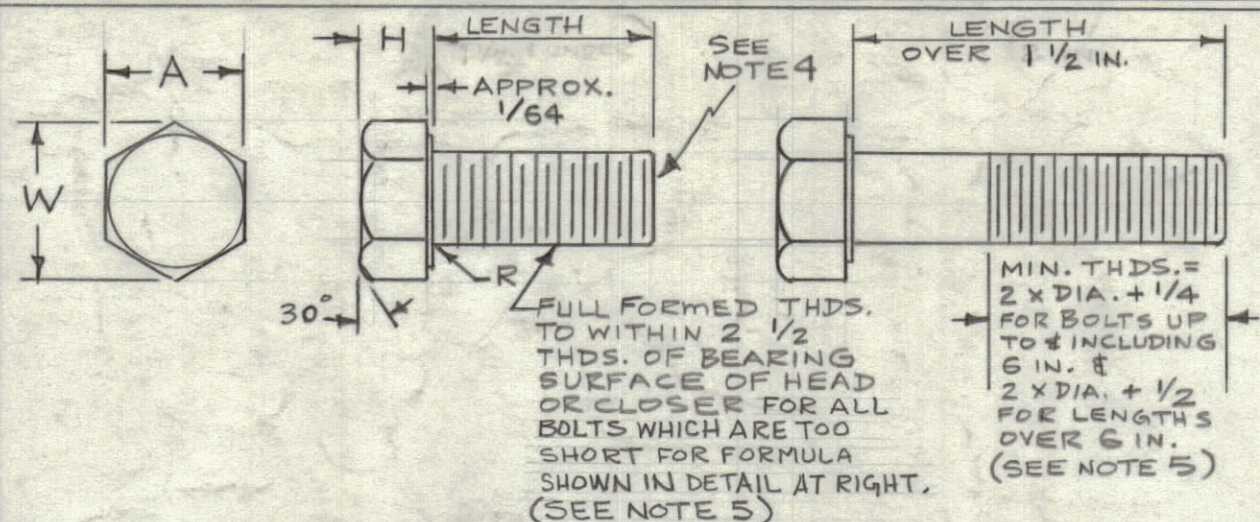
NOTES:

- All dimensions in inches.
- Tolerance on Screw Lengths:

Screw Length	Tolerance
Up to & Incl. 1 in.	-1/32
Over 1 in. to & Incl. 2 in.	-1/16
Over 2 in.	-3/32
- Diameter of Unthreaded Body: Shall not be less than the min. pitch dia. of the thread nor more than the basic major dia.

CHART No. 2

BOLT, MACHINE, HEX. HEAD, FINISHED, SINGLE CHAMFERED, WASHER FACED. SIZES 1/4 Thru 1"



NOMINAL SIZE OR BASIC MAJOR DIAMETER OF THREAD	BODY DIA. MIN. (Max. Equal to Nom. Size)	HEAD DIMENSIONS						R RADIUS OF FILLET		
		A		W		H		MIN	MAX	
		MAX (BASIC)	MIN	MAX	MIN	NOM	MAX			
1/4	0.2500	0.4375	0.428	0.505	0.488	5/32	0.163	0.150	0.009	0.023
5/16	0.3125	0.5000	0.489	0.577	0.557	13/64	0.211	0.195	0.009	0.023
3/8	0.3750	0.5625	0.551	0.650	0.628	15/64	0.243	0.226	0.009	0.023
7/16	0.4375	0.6250	0.612	0.722	0.698	9/32	0.291	0.272	0.009	0.023
1/2	0.5000	0.6875	0.673	0.800	0.775	5/16	0.323	0.302	0.009	0.023
9/16	0.5625	0.7500	0.736	0.866	0.840	5/16	0.323	0.302	0.009	0.023
5/8	0.6250	0.8125	0.798	0.938	0.910	23/64	0.371	0.348	0.021	0.041
3/4	0.7500	0.8750	0.861	1.000	0.975	25/64	0.403	0.378	0.021	0.041
7/8	0.8750	0.9375	0.922	1.083	1.051	25/64	0.403	0.378	0.021	0.041
1	1.0000	1.0625	1.047	1.200	1.167	33/64	0.467	0.431	0.021	0.041

NOTES:

- All dimensions in inches.
- Dimension A, MIN - In sizes 1/4 to 1 in. a tolerance of minus 0.050 D. may be used when the product is hot made.
- Tolerance on bolt lengths:

Bolt Dia	Bolt Length	Tolerance
Up to & Incl. 3/4 in.	Up to & Incl. 1 in.	-1/32
	Over 1 in. to & Incl. 2 in.	-1/16
	Over 2 in. to & Incl. 6 in.	-3/32
	Over 6 in.	-3/16
Over 3/4 in.	Up to & Incl. 1 in.	-1/16
	Over 1 in. to & Incl. 2 in.	-1/8
	Over 2 in.	-3/16
- Point shall be flat & chamfered from approx. 1/64 in. below the minor dia., the length of point to be from 1/2 to 1 1/2 threads.
- The thread length tolerance shall be +3/16 in. or 2 1/2 threads, whichever is greater. On Products too short for min. thread lengths, the distance from the bearing surface of the head to the first complete thread shall not exceed the length of 2 1/2 threads for sizes up to & incl. 1 in. dia.

REVISIONS

ZONE	SYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD	APPD
ALL	#	SCHH Series Extracted from Std. "SC" 1 size Dwg. & Completely Revised & Redrawn.	8/28/62		16	16	16
G4	A	THREAD NOTE CLARIFIED (CHART 2) ON THD TO HEAD; ON THREAD TO HEAD (CHART 2) LENGTH WAS 1-1/2 & UNDER	10-26-62	7553			
A7		ON IMPORTANT NOTE DEVIATION INFORMATION DELETED					
D2C1		SUFFIX "F" NOTE ADDED;					
	B	REMOVED DASHES FROM DIMS. FOR CLARIFICATION	9/21/63	10092			

CHART No. 3 THREAD SIZES & CODES

ALL THREADS SHALL BE CLASS 2A

THREAD SIZE	TMC THREAD CODE	THREAD SERIES	THREAD SIZE	TMC THREAD CODE	THREAD SERIES	THREAD SIZE	TMC THREAD CODE	THREAD SERIES
2-56	0256	UNC	10-24	1024	UNC	1/2-13	5013	UNC
2-64	0264	UNF	10-32	1032	UNF	1/2-20	5020	UNF
3-48	0348	UNC	12-24	1224	UNC	9/16-12	5612	UNC
3-56	0356	UNF	12-28	1228	UNF	9/16-18	5618	UNF
4-40	0440	UNC	1/4-20	2520	UNC	5/8-11	6211	UNC
4-48	0448	UNF	1/4-28	2528	UNF	5/8-18	6218	UNF
5-40	0540	UNC	5/16-18	3118	UNC	3/4-10	7510	UNC
5-44	0544	UNF	5/16-24	3124	UNF	3/4-16	7516	UNF
6-32	0632	UNC	3/8-16	3716	UNC	7/8-9	8709	UNC
6-40	0640	UNF	3/8-24	3724	UNF	7/8-14	8714	UNF
8-32	0832	UNC	7/16-14	4314	UNC	1-8	108	UNC
8-36	0836	UNF	7/16-20	4320	UNF	1-12	112	UNF

CHART No. 4 MATERIALS

TMC CODE	MATERIAL
B	BRASS, COMM. 1/2 HARD
S	STEEL, PLAIN
S	STAINLESS STEEL TYPE 18-8
N	NAVAL BRONZE USE ONLY FOR SPECIAL APPLIC.

CHART No. 5 FINISHES

TMC CODE	FINISH	TMC SPEC.
N	BRIGHT NICKEL	S135
S	PASSIVATE FOR STAINLESS STEEL ONLY	S104
P	SILVER PLATE	S245
R	NO FINISH	

SUFFIX "F" NOTE: The suffix "F" shall be used only for special application bolts and screws when it is essential to have full formed threads to the bearing surface of the head (within standard tolerance) when the length of the bolt or screw would not normally be supplied with same (see Chart 1 and 2 thread length information).

EXAMPLES: (1) TMC No. SCHH1032BN40 is a 10-32 thread screw by 2 1/2 inches long, and, referring to Chart 1, would normally be threaded 1-3/4 inches minimum. If it is absolutely necessary to have full threads to head, the TMC No. shall be indicated as SCHH1032BN40F. (2) TMC No. SCHH2520BN20 is a 1/4-20 thread by 1-1/4 inches long, and, referring to Chart 2, would normally be threaded 2 X diameter plus 1/4 inch (ie, 3/4 inches) leaving 1/2 inch unthreaded area. If it is absolutely necessary to have full threads to head, the TMC No. shall be indicated as SCHH2520BN20F.

TMC PART NO. TO BE IN THE FOLLOWING FORM:

SCHH 2520 B N 16 F

BASIC DWG. & PART NO.	THREAD SIZE CODE DESIRED	MATERIAL CODE DESIRED	FINISH CODE DESIRED	LENGTH CODE DESIRED IN 1/16ths OF AN INCH	USE ONLY FOR SPECIAL APPLICATION SEE SUFFIX "F" NOTE ABOVE
	SEE CHART 3	SEE CHART 4	SEE CHART 5		

EXAMPLES: SCHH1032BN8 = SCREW, HEX. HD., 10-32 UNF THD., BRASS, NICKEL PLATE, 1 1/2 INCH LG.
 SCHH5020SS16 = BOLT, HEX HD, 1/2-20 UNF THD, STAINLESS STEEL, 1 INCH LG.

REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL

MATERIAL	FINISH	TITLE	DATE	FINAL APPROVAL	DATE
SEE CHART 4	SEE CHART 5	SCREW, MACHINE, HEX. HEAD AND BOLT, MACHINE, HEX. HEAD	8-14-62		8-28-62

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES	ELECT. DES.	MECH. DES.	DATE	SHEET	REV. LTR.

THIS DOCUMENT HAS BEEN PURCHASED BY THE GOVERNMENT AND MAY BE REPRODUCED AND USED IN CONNECTION WITH ANY GOVERNMENT PROCUREMENT OR MAINTENANCE OPERATION

IMPORTANT:

WITH THE EXCEPTION OF CERTAIN DEVIATIONS IN THREAD LENGTHS ALL SPECIFICATIONS, TOLERANCES, ETC. SHALL BE IN ACCORDANCE WITH AMERICAN STD. B18.2-1960 (Bolts) & B18.6-1947 (Screws).

STANDARD DRAWING

Q'TY./UNIT	MODEL USED ON	ASSY. NO.
NTS	B	

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NOTES