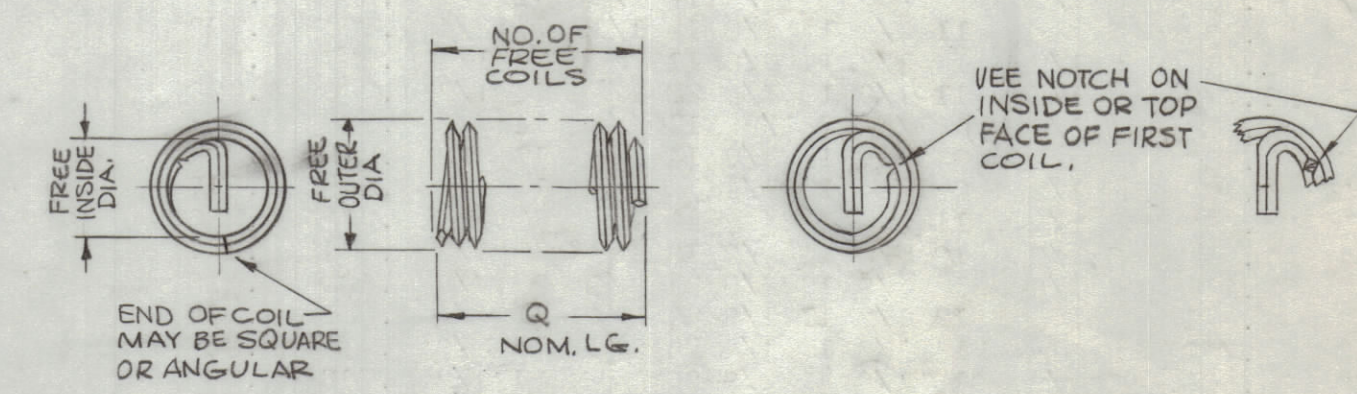
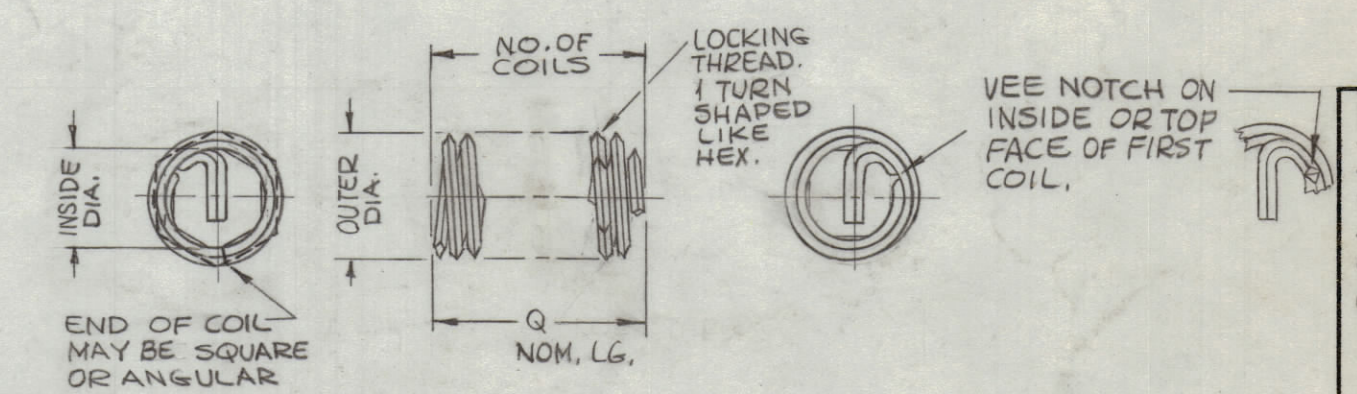


NOMINAL THREAD SIZE AND LENGTHS NOT LISTED ARE SPECIAL	HELI-COIL INSERT PREFIX PART NO. FOR COMPLETE NUMBERING ORDERING SEE FOOT-NOTE BELOW	NOMINAL LENGTH "Q"					ALL DIMENSIONS IN CHART ARE FOR STANDARD (TYPE S) FREE RUNNING INSERTS.													
		EQUAL TO MINIMUM FULL THREAD LENGTH. ASSEMBLED INSERT LENGTH EQUALS NOMINAL LENGTH LESS 1/2 PITCH. TO DETERMINE HOLE DEPTH OR FLANGE THICKNESS (SEE TMC P/N EXP. FOR LENGTH-CODE.)					FREE OUTSIDE DIA.		FREE NO. OF COILS ± 1/4 TURN SEE NOTE						FREE INSIDE DIA.					
		DIA X 1	DIA X 1 1/2	DIA X 2	DIA X 2 1/2	DIA X 3	MIN.	MAX.	1 DIA.	DIA. 1 1/2	2 DIA.	2 1/2 DIA.	3 DIA.	MIN.	MAX.					
4-40	1185-04	.112	.168	.224	.280	.336	.144	.159	2 3/4	4 3/4	6 3/4	8 7/8	10 7/8	.085	.106					
6-32	1185-06	.138	.207	.276	.345	.414	.178	.193	2 3/4	4 3/4	6 7/8	8 7/8	10 7/8	.105	.129					
8-32	1185-2	.164	.246	.328	.410	.492	.205	.220	3 1/2	6	8 3/8	10 3/4	13 1/4	.132	.156					
10-24	1185-3	.190	.285	.380	.475	.570	.244	.259	2 7/8	5	7 1/8	9 1/4	11 3/8	.149	.172					
12-24	1185-1	.216	.324	.432	.540	.648	.270	.285	3 1/2	6	8 3/8	10 5/8	13 1/8	.175	.198					
1/4-20	1185-4	1/4	3/8	1/2	5/8	3/4	.310	.330	3 3/8	5 3/4	8	10 3/8	12 3/4	.202	.226					
5/16-18	1185-5	5/16	15/32	5/8	25/32	15/16	.380	.400	4	6 5/8	9 1/4	11 7/8	14 5/8	.260	.284					
3/8-16	1185-6	3/8	9/16	3/4	15/16	1 1/8	.452	.472	4 3/8	7 1/4	10	12 7/8	15 3/4	.317	.341					
7/16-14	1185-7	7/16	21/32	7/8	1 3/32	1 5/16	.526	.551	4 1/2	7 3/8	10 1/4	13 1/8	16 1/8	.371	.401					
1/2-13	1185-8	1/2	3/4	1	1 1/4	1 1/2	.597	.622	4 7/8	7 7/8	11	14 1/8	17 1/8	.430	.468					
9/16-12	1185-9	9/16	27/32	1 1/8	1 13/32	1 11/16	.669	.694	5 1/8	8 1/4	11 1/2	14 3/4	17 7/8	.489	.519					
5/8-11	1185-10	5/8	15/16	1 1/4	1 9/16	1 7/8	.742	.767	5 1/4	8 1/2	11 3/4	15	18 3/8	.545	.583					
3/4-10	1185-12	3/4	1 1/8	1 1/2	1 7/8	2 1/4	.881	.906	5 7/8	9 3/8	13	16 1/2	20 1/8	.664	.703					
7/8-9	1185-14	7/8	1 5/16	1 3/4	2 3/16	2 5/8	1.022	1.052	6 1/4	10	13 3/4	17 1/2	21 1/4	.781	.825					
1-8	1185-16	1	1 1/2	2	2 1/2	3	1.166	1.196	6 3/8	10 1/8	14	17 3/4	21 5/8	.895	.939					
1 1/8-7	1185-18	1 1/8	1 11/16	2 1/4	2 13/16	3 3/8	1.315	1.355	6 1/8	9 7/8	13 5/8	17 1/2	21 1/4	1.006	1.060					
1 1/4-7	1185-20	1 1/4	1 7/8	2 1/2	3 1/8	3 3/4	1.443	1.483	7	11 1/4	15 3/8	19 1/2	23 3/4	1.134	1.188					
1 3/8-6	1185-22	1 3/8	2 1/16	2 3/4	3 7/16	4 1/8	1.598	1.643	6 1/2	10 1/2	14 3/8	18 3/8	22 1/4	1.237	1.299					
1 1/2-6	1185-24	1 1/2	2 1/4	3	3 3/4	4 1/2	1.727	1.772	7 1/4	11 1/2	15 7/8	20 1/8	24 1/2	1.366	1.428					
10-32	1191-3	.190	.285	.380	.475	.570	.236	.256	4 1/8	6 7/8	9 1/2	12 1/4	14 7/8	.173	.197					
1/4-28	1191-4	1/4	3/8	1/2	5/8	3/4	.306	.326	5	8 1/4	11 3/8	14 1/2	17 5/8	.233	.257					
5/16-24	1191-5	5/16	15/32	5/8	25/32	15/16	.380	.400	5 1/2	8 7/8	12 1/4	15 5/8	19	.295	.318					
3/8-24	1191-6	3/8	9/16	3/4	15/16	1 1/8	.448	.468	6 7/8	11	15	19 1/8	23 1/8	.363	.386					
7/16-20	1191-7	7/16	21/32	7/8	1 3/32	1 5/16	.524	.549	6 5/8	10 5/8	14 5/8	18 1/2	22 1/2	.421	.451					
1/2-20	1191-8	1/2	3/4	1	1 1/4	1 1/2	.592	.617	7 7/8	12 3/8	16 7/8	21 3/8	25 7/8	.489	.518					
9/16-18	1191-9	9/16	27/32	1 1/8	1 13/32	1 11/16	.666	.691	8	12 1/2	17 1/8	21 3/4	26 1/4	.551	.580					
5/8-18	1191-10	5/8	15/16	1 1/4	1 9/16	1 7/8	.733	.758	9	14 1/8	19 1/4	24 1/4	29 3/8	.618	.647					
3/4-16	1191-12	3/4	1 1/8	1 1/2	1 7/8	2 1/4	.876	.901	9 3/4	15 1/8	20 5/8	26	31 1/2	.746	.775					
7/8-14	1191-14	7/8	1 5/16	1 3/4	2 3/16	2 5/8	1.021	1.051	9 7/8	15 1/2	21 1/8	26 5/8	32 1/4	.871	.906					
1-12	1191-161	1	1 1/2	2	2 1/2	3	1.169	1.199	9 1/2	14 7/8	20 7/8	25 3/8	31 1/4	.999	1.034					
1 1/8-12	1191-18	1 1/8	1 11/16	2 1/4	2 13/16	3 3/8	1.304	1.334	11 1/8	17 1/4	23 3/8	29 1/2	35 3/4	1.129	1.164					
1 1/4-12	1191-20	1 1/4	1 7/8	2 1/2	3 1/8	3 3/4	1.439	1.469	12 1/2	19 3/8	26 1/4	33	39 7/8	1.264	1.299					
1 3/8-12	1191-22	1 3/8	2 1/16	2 3/4	3 7/16	4 1/8	1.575	1.610	13 3/4	21 3/8	28 7/8	36 1/2	44	1.400	1.440					
1 1/2-12	1191-24	1 1/2	2 1/4	3	3 3/4	4 1/2	1.710	1.745	15 1/4	23 1/2	31 5/8	39 7/8	48 1/8	1.535	1.575					

REVISIONS							
ZONE	SYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD	APPD
	X	EXPERIMENTAL RELEASE	10-19-64	X	SRG		
	Ø	ORIGINAL RELEASE FOR PRODUCTION	10-27-64	Ø	JL		
	A	DWG UPDATED & CLARIFIED	11-23-67	17709	RME		

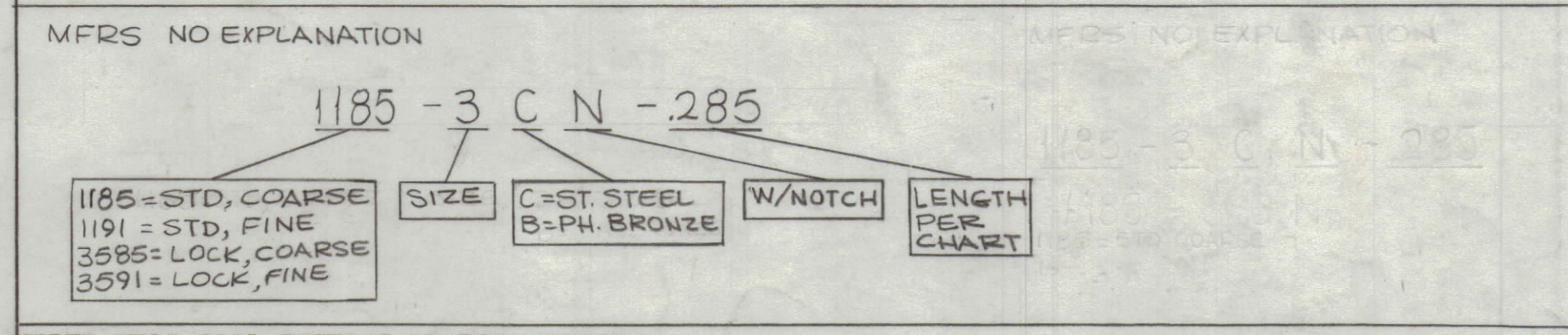
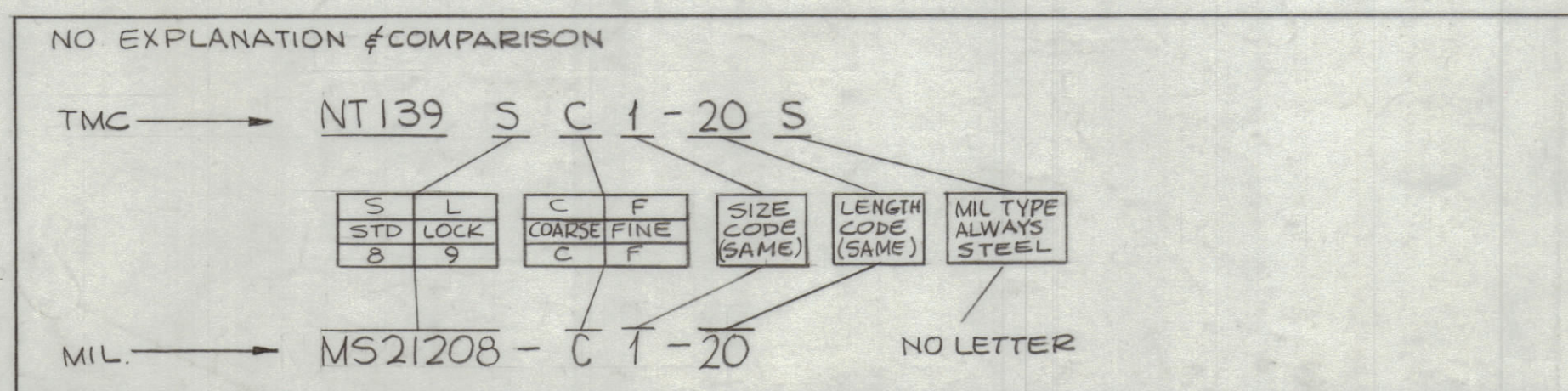


TYPE "S" - STANDARD PROVIDES FREE-RUNNING THREAD



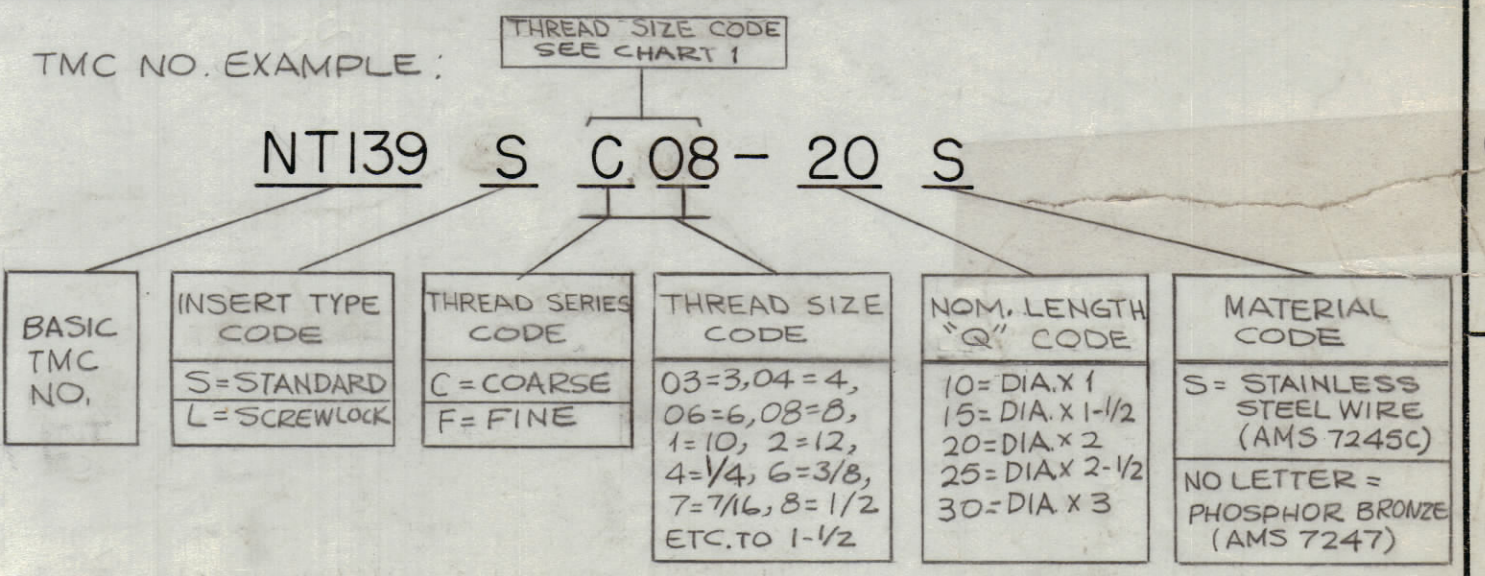
TYPE "L" - SCREWLOCK PROVIDES POSITIVE LOCKING THREAD

CHART I		
THREAD SIZE CODE		
TMC SERIES & SIZE CODE	MFRS SIZE CODE	THREAD SIZE
C04	04*N	4-40
C06	06*N	6-32
C08	2*N	8-32
C1	3*N	10-24
C2	1*N	12-24
C4	4*N	1/4-20
C5	5*N	5/16-18
C6	6*N	3/8-16
C7	7*N	7/16-14
C8	8*N	1/2-13
C9	9*N	9/16-12
C10	10*N	5/8-11
C12	12*N	3/4-10
C14	14*N	7/8-9
C16	16*N	1-8
C18	18*N	1 1/8-7
C20	20*N	1 1/4-7
C22	22*N	1 3/8-6
C24	24*N	1 1/2-6
F1	3*N	10-32
F4	4*N	1/4-28
F5	5*N	5/16-24
F6	6*N	3/8-24
F7	7*N	7/16-20
F8	8*N	1/2-20
F9	9*N	9/16-18
F10	10*N	5/8-18
F12	12*N	3/4-16
F14	14*N	7/8-14
F16	161*N	1-12
F18	18*N	1 1/8-12
F20	20*N	1 1/4-12
F22	22*N	1 3/8-12
F24	24*N	1 1/2-12



ORDER HELI-COIL INSERTS BY PART NUMBERS: SELECT PREFIX NUMBER FROM COLUMN 2; ADD "C" FOR STAINLESS STEEL OR "B" FOR PHOSPHOR BRONZE; NEXT ADD "N" FOR NOTCHED TANG. (UNNOTCHED INSERTS FURNISHED ONLY ON SPECIAL ORDER.) THEN ADD LENGTH OF INSERT, TAKEN FROM COLUMN 3, 4, 5, 6, OR 7. EXAMPLE: WHEN YOU ORDER 1185-5CN X 15/32 "1185-5" IS FOR SIZE 5/16-18; "C" FOR STAINLESS STEEL; "N" FOR NOTCHED; "15/32" FOR A LENGTH OF 1 1/2 DIAMETERS.

NOTE: NUMBER OF FREE COILS TO BE COUNTED AND ASSEMBLED LENGTH OF INSERTS TO BE MEASURED AS FOLLOWS: COARSE THREADS, 90 DEGREES FROM TANG ON SIZES UNDER 3/4, AND 180 DEGREES ON SIZES 3/4 AND LARGER; FINE THREADS, 90 DEGREES FROM TANG ON ALL SIZES.



REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
	L. LABEL		LIST OF MATERIAL	
	MATERIAL		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
	FINISH		TITLE	INSERT, SCREW THREAD
	SCALE	MODEL USED ON	ASS'Y. NO.	
		C	S401-331	
			UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES	
			DECIMALS: .X ± .05, .XX ± .01, .XXX ± .005	
			FRACTIONS: ± 1/64 ANGLES: ± 0° 30'	
			TOLERANCES	
			DRAWN: SRG, DATE: 10-19-64, CHECKED: @, DATE: 10-26-64, ELECT. DES., MECH. DES., DATE: 10/20/64, SHEET	
			FINAL APPROVAL: RME, DATE: 10-26-64, TITLE: NT139, REV. LTR.: A	