O.D.

FOR PROCUREMENT AND DRAWING REQUIREMENTS FOR NEW DESIGN SEE MIL-S-13572 AND MIL-STD-29.

Wire, Steel, Music, in accordance with ASTM A228. WIRE, STEEL, CORROSION-RESISTING; in accordance with ASTM A580 AND ASTM A313. MATERIAL:

PROTECTIVE COATING: Cadmium plating in accordance with QQ-P-416, Type II, Class 2. Zinc coating in accordance with ASTM B633, TYPE II, Fe/Zn5. Passivation treatment in accordance with QQ-P-35. (0)

ENDS: Squared and ground.

DIRECTION OF HELIX: Optional

Outside diameter "O.D." .120 to .240 $^{\pm}$.005, .300 to .500 $^{\pm}$.008, .550 to .850 $^{\pm}$.015. Ends to be square within 3° with axis. (Grade B of procurement specification.) Spring rate "R" $^{\pm}$ 10%.
Wire diameter "d" in accordance with material specifications. Deflection "F" $^{\pm}$ 10%. TOLERANCES:

DIMENSIONS: All dimensions are in inches unless otherwise specified.

PART NUMBER: The MS part number consists of the MS number, plus the dash number. Example: MS24585-1

NOTES:

Free length "L", active coils "N", and deflection per coil "f" are for reference use only. Load "P" must be attained at a compressed length determined by subtracting deflection "F" (with tolerance) from the free length "L". For corrosion-resisting steel multiply "P" by .833.
 Spring values shown are for music wire and are based on a service life of 50,000 cycles at .50 stress range. To determine safe working deflection under other operating conditions, or when corrosion-resisting steel is used, multiply "P" by the appropriate factor shown in Table I. P₁ = load at assembled length and P₂ = final load.
 To determine load "P" at any deflection other than "P" multiply the proposed deflection by the rate "R".
 When steel, corrosion-resisting is used the value for rate "R" must be corrected by multiplying "R" by .833.
 Music wire springs are not recommended for applications where temperature exceeds 250°F. Corrosion-resisting steel springs are not recommended for applications where temperature, exceeds 500°F.
 Referenced documents shall be of the issue in effect on date of invitations for bid.

Referenced documents shall be of the issue in effect on date of invitations for bid. For design feature purposes, this standard takes precedence over procurement documents referenced herein.

Table I - CORRECTION FACTOR FOR STRESS RANGE LIFE CYCLES AND SPRING MATERIAL

MATERIAL	P 2 - P 1	CYCLES										
MATERIAL MUSIC WIRE CORROSION RESISTING STEEL	P 2	5,000.	10,000	50,000	100,000	Infinite						
	. 25	1.28	1.23	1,11	1.06	.95						
MUSIC WIRE CORROSION RESISTING	. 50	1.23	1.16	1.00	93	.76	7					
	.75	1.21	1.12	. 93	.84	.65	٦.					
	1.00	1.17	1.08	.86	.77	. 55	٦					
	. 25	.92	.90	.63	18,	.77]					
	. 50	.85	.84	.76	.72	.63	٦,					
RESISTING	.75	.85	.50	.68	.63	.51	٦					
	1.00	.63	.76	.61	. 55	.41	1					
-				(D) DEN	OTES CHAN	IGES						

1	P.A. AD	Laws	
1	Other Cust	SPRINGS, HELICAL, COMPRESSION:	MILITARY STANDARD
*****	99 99	FOR LOADS BELOW 20 POUNDS	MS 24585
1	PROCUREMENT SPECIFICATION MIL-S-13572	SUPERSEDES: FAAX2	SHEET 1 OF 9

DD . 672-1

PREVIOUS EDITIONS OF THIS PORM AND BORDS ETA.

5360-0023

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REVIENER:

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AMSC/NA

5360 Steel P 2 f R 5 Cadmium Plated Zinc Coated Corresion Resisting Uncoated Outside Dia. Def1. Def1. Active Load Salid Spring Rate Dia. Per Coil Length Coils Length Dash No Dash No. Dash No. Dash No. Lb. Мах Lb/in 1001 .25 .31 .38 .44 .50 123456 4.50 6.25 7.75 9.25 .095 .131 .163 19.3 14.0 11.3 9.5 8.3 7.3 .104 1002 C2 C3 C4 C5 C6 .132 .156 .180 1003 **(a)** .194 .220 .252 1005 .016 10.50 .0210 1.837 .200 X 1006 , 224 Z. C7 C8 C9 C10 C11 7 8 9 1007 .62 6.6 5.8 13.25 .278 244 1008 .69 .272 .296 .130 .157 7 g 1009 1010 . 75 . 25 . 31 16.50 5.25 6.75 .346 5.3 28.2 21.9 17.9 2010 8j 1011 1012 2011 2012 .117 ČĪ2 . 38 8.25 .184 , AT, ME, 82, (L, MC, AS 13 14 15 16 1013 2013 C13 .211 .238 .270 .288 15.2 13.1 11.4 10.6 9.3 169 C13 C14 C15 C16 C17 C18 1014 1015 1016 1017 2014 2015 11.25 13.00 14.00 16.00 17.50 .120 .018 . 50 .195 .0173 2.564 . 56 ന 2016 .242 .276 .62 ^{\$}.q 17 18 I THRU 2017 .324 1018 2018 REVIEWER: AN USER: ER,(302 351 8.5 19 20 1019 C19 71.10 53.3 41.5 36.4 31.1 28.2 . 25 . 31 5.25 .159 .198 .242 .269 .063 1020 1021 1022 1023 C20 C21 .084 21 22 23 24 . 38 9.00 SHEETS C22 .44 10.25 12.00 13.25 .123 .144 .159 .50 C23 C24 .022 .0120 4.461 .308 1024 C25 C26 C27 C28 C29 C30 1025 1026 1027 1028 25 26 27 28 29 30 15.00 17.00 18.50 20.00 2.50 .62 .374 .418 .451 .484 24.9 22.0 20.2 18.7 8.9 .69 .75 .204 .222 .240 .141 .167 SEE 2029 2030 1029 1030 . 31 3.00 .080 7.5 CHANGES C31 C32 C33 C34 C35 31 32 33 34 35 1031 2031 .38 5.9 4.9 4.2 3.7 3.4 3.1 . 211 .092 1032 1033 1034 1035 2032 2033 2034 2035 4.50 5.25 6.00 .253 .104 .016 .50 .0563 1.254 .337 .62 .69 6.50 .136 36 1036 2036 C36 .407 FOR 37 36 1037 2037 C37 C38 8.00 2.75 3.25 4.00 2.8 13.5 11.4 9.3 7.8 6.7 .450 .160 .085 .094 1038 39 40 1039 C39 .31 .154 .190 .225 C40 C41 C42 .108 41 42 1041 .44 . 121 1042 .018 . 50 .0475 5.50 1.760 .261 military standard has been approved by the Department of Defense is mandatory for use by all Departments and Agencies of the transit of Defense. Selection for all new engineering and design ications and for repetitive use shall be made from this document. 43 44 45 C43 C44 C45 C46 C47 1043 6.50 7.25 8.00 9.00 . 56 . 308 5.7 1044 1045 .62 .344 .166 .180 5.1 .69 .380 46 47 48 1046 198 1047 1048 2047 .160 . 110 2048 29.6 C48 . 31 3.75 .132 .126 23.7 49 C49 C50 C51 C52 C53 C54 1049 2049 .158 .185 .220 .264 50 51 52 .143 19.8 1050 1051 2050 2051 5.25 6.25 7.50 8.50 .44 .159 .181 .209 .231 16.9 14.2 11.9 10.5 9.6 .022 .50 .0352 3.134 1052 2052 0 .56 53 54 1053 2053 . 299 2054 1054 REVISED . 69 9.25 .325 C55 C56 C57 C58 55 56 57 58 59 1055 2055 2056 .75 10.25 .269 .297 .361 8.7 1056 .087 .107 7.7 57.8 1057 .31 .38 .44 4.00 .156 47.0 37.5 31.2 1059 C59 5.00 .134 60 1060 1959 C60 . 208 61 62 63 64 1061 C61 .026 . 50 7.00 .0266 5.032 .188 26.8 23.5 20.9 18.8 1062 1063 C62 C63 ž .56 .62 .260 .286 .312 8.00 .214 1064 C64 .69 .75 .81 10.00 11.00 12.00 .268 APPROVED 31 65 1065 C6.5 .338 17.0 .295 66 - See Note (2). 5- - See Note (5). 3 TITLE AR MILITARY STANDARD Other Cust **(**0) SPRING, HELICAL, COMPRESSION: 05 99 MS24585 FOR LOADS BELOW 20 POUNDS PROCUREMENT SPECIFICATION MIL-S-13572 SUPERSEDES: SHEET 2

Table II - DIMENSIONS AND CHARACTERISTICS

FED. SUP CLASS

(D)

PREVIOUS EDITIONS OF THE PORM ARE BESOLETE

DD , 1981, 672-1

FED. SUP CLASS (D) Table II - Continued 5360 Steel P 3 0 D d 1. N f r R 5 Cadmium Plated Zinc Corresion Resisting Uncoated Coated Free Active Coils Defl. Load Def1 Spring Rate Lb/in Outside Salid Dia. Dia. Length Per Length Dash No. Dash No. Dash No Dash No. Coil Lb Max. 5.032 14.4 1067 C67 .026 13.00 0268 345 390 4.00 5.00 6.25 7.50 .192 .224 .264 68 69 1068 C68 C69 .31 22.7 97.0 77.5 2068 0 2069 .091 70 71 72 C70 C71 C72 1070 2070 2071 .44 .114 .50 .304 64.9 58.9 1072 2072 8.25 328 .150 1073 1074 1075 C73 C74 C75 C76 73 74 75 76 2073 .180 032 . 62 .0182 .172 .186 .214 .237 51.3 47.5 9.50 8,833 368 .69 .75 .81 10.25 11.75 13.00 .392 .440 .450 2074 2075 41.3 37.3 1076 2076 77 78 .88 14.50 15.50 .264 .529 33.5 2077 C77 AV, AT, ME, 82, ER, GL, MC, AS 1078 2078 C78 1079 1080 C79 C80 C51 79 2079 .300 .194 .592 29.4 2.75 3.50 4.00 12.3 9.7 8.5 7.5 6.8 .38 .44 .50 8ō 1081 L THYO .121 .132 .143 81 .247 .282 82 1052 C82 C83 4.50 83 1083 .318 1084 C84 022 .62 .0706 2.394 .353 .69 .75 .81 1085 1086 C85 C86 C87 6.2 5.6 5.50 .388 .165 9 6.00 6.50 3.00 86 87 .423 1087 1088 .458 .165 .193 5,2 23.3 19.9 17.4 187 2088 13E1 **C88** 88 1089 2089 C89 .44 3.50 143 90 1090 2090 C90 . 50 4.00 .221 156 14.7 12.7 11.1 10.0 9.3 9.4 91 92 1091 1092 C91 C92 C93 C94 .56 .62 4.75 W 2091 2092026 .0552 3.846 .303 .345 .386 .414 195 6.25 7.00 7.50 93 1093 1094 2093 2094 .69 . 214 .75 .81 .234 . . 95 1095 2095 C95 96 1096 2096 C96 88 266 63.8 53.8 43.2 36.8 31.9 2.75 3.25 4.00 97 98 1097 C97 C98 .31 .38 1098 .128 .168 99 1099 C99 .44 1100 100 C100 .50 .187 .216 .246 .216 L: 101 1101 C101 . 56 'n .032 .0394 1102 C102 .62 6.25 6.892 .264 28.0 1103 C103 C104 C105 C106 103 . 69 .276 25.0 21.9 7.00 .288 104 105 106 1104 1105 . 240 . 75 8.00 .315 .344 .374 .403 .320 20.0 16.4 17.1 15.9 .81 .88 8.75 1106 .368 .392 107 1107 C107 94 10.25 1108 C108 .00 1.00 433 416 military standard has been approved by the Department of Defense is mandatory for use by all Departments and Agencies of the rement of Defense. Selection for all new engineering and design leations and for repetitive use shall be made from this document. C109 C110 C111 C112 C113 127.1 101.5 64.4 72.3 63.2 56.4 1109 1110 1111 1112 1113 109 2109 . 31 .190 .215 3.00 087 110 111 112 113 .38 3.75 4.50 5.25 2110 2111 .109 .131 .247 2112 2113 6.00 . 56 .304 6.75 .62 .196 .332 C115 C116 C117 C118 C119 115 2115 .69 7.50 . 218 . 361 50.7 116 117 1116 1117 2116 2117 .75 .81 8.25 9.00 359 418 46.1 42.2 .240 .038 .0291 11.06 262 118 119 2116 2119 1118 .88 10.00 .291 .456 35.0 1119 11.00 REVISED 94 .320 .494 34.6 32.3 120 1120 2120 C120 1.00 C121 C122 C123 C124 C125 1121 1122 2121 1.12 13.25 . 385 . 579 28.7 122 123 124 125 126 .429 25.8 23.4 21.4 2122 2123 1.25 14.75 16.25 .636 1123 1124 .693 2124 .38 516 084 .750 .231 .273 1959 171.3 134.5 1126 .107 JOC 1127 1128 1129 1130 1131 127 128 C127 C128 . 50 .125 .304 6.00 6.75 7.50 8.50 9.25 100.6 69.4 80.4 70.9 65.1 .143 .161 .179 .042 . 56 .0239 .336 14.39 C129 C130 129 APPROVED 31 1.30 .69 .399 C131 . 203 . 221 .441 132 2 - See Note (2). 5 - See Note (5). P.A. TITLE AR MILITARY STANDARD Other Cust SPRING, HELICAL, COMPRESSION: (0)os MS24585 FOR LOADS BELOW 20 POUNDS 99 and i Depar

DD (1984), 672-1 (Coordinated)

SUPERSEDES:

PAAX2

PROCUREMENT SPECIFICATION HIL-S-13572

.0S, YD, 15, M1

Defense

public release, distribution

Approved for

DISTRIBUTION STATEMENT A.

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SHEET 3

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DD 100m 672-1

Dasn No.	Dash No.	vash No.	Dash No.	 _	 	ļ	<u> </u>	Coil	Lb.		Max.	Lb/in	1
133 134 135 136 137 138	1133 1134 1135 1136 1137 1138		C133 C134 C135 C136 C137 C138	. 240	.042	.88 .94 1.00 1.12 1.25 1.38	10.00 11.00 11.75 13.25 14.75 16.50	.0239	14.39	.239 .263 .281 .317 .352 .394	.504 .546 .577 .640 .703	60.2 54.7 51.2 45.4 40.9 36.5	
139 140 141 142 143 144	1139 1140 1141 1142 1143 1144	2140 2141 2142 2143 2144	C139 C140 C141 C142 C143 C144		.022	1.50 .50 .56 .62 .69 .75	18.50 2.50 2.75 3.25 3.50 4.00	.1181	1.931	.442 .295 .325 .383 .413 .472	.561 .099 .104 .115 .121	32.5 6.6 5.9 5.0 4.7 4.1	6 0
145 146 147 148 149	1145 1146 1147 1148 1149	2145 2146	C145 C146 C147 C148 C149			.81 .88 .44				.501 .531 .234 .281	.137	3.8 3.6 13.3 11.1	SITHRU
150 151 152 153 154 155 156	1150 1151 1152 1153 1154 1155 1156			:	.026		3.75 4.25 4.50 5.00 5.50 6.00 6.50	.0937	3.122	.351 .398 .422	.162 .169	7.8 7.4 6.7 6.1 5.5	SEE.SHEETS
157 156 159 160 161 162	1157 1158 1159 1160 1161 1162	2157 2158 2159 2160 2161 2162	C157 C158 C159 C160 C161 C162		.032	.44 .50 .56 .62 .69	3.00 3.50 4.00 4.50 5.00 5.50	.0684	5.593	.205 .237 .274 .308 .342 .376	.160 .176 .192 .208 .224	27.3 23.6 20.4 18.2 16.3 14.9	FOR CHANGES
163 164 165 166 167	1163 1164 1165 1166 1167	2163 2164 2165 2166	C163 C164 C165 C166 C167	.300		.81 .88 .94 1,00	6.00 6.50 7.25 7.75 2.50			.410 .445 .496 .530	.256 .272 .296 .312	13.6 12.6 11.3 10.6	FOR
169 170 171 172 173 174	1169 1170 1171 1172 1173 1174		C169 C170 C171 C172 C173 C174		.038	.50 .56 .62	3.75 4.50 5.00 5.75 6.25	.0519	9.043	.195 .233 .259 .298 .324		46.4 38.8 34.9 30.3 27.9	
175 176 177 178 179 180	1175 1176 1177 1178 1179 1180		C175 C176 C177 C178 C179 C180			.88 .94 1.00 1.12 1.25 1.38	7.50 8.00 8.50 9.50 10.50 11.50			.389 .415 .441 .493 .545	.361 .380 .399 .437 .475	23.2 21.8 20.5 18.3 16.6 15.1	
191 182 193 164 185 186	L	2182 2183 2184 2185 2186				1.50 .38 .44 .50 .56 .62	12.50 2.50 3.00 3.75 4.50 5.25			.648 .109 .130 .167 .196 .229	.551 .189 .210 .241 .273 .304	13.9 105.3 90.8 70.7 60.2 51.6	REVISED (D)
187 188 189 190 191 192	1187 1188 1189 1190 1191 1192	2187 2188 2189 2190 2191 2192	C187 C188 C189 C190 C191 C192		.042	.69 .75 .81 .88 .94 1.00	6.00 6.50 7.25 8.00 8.50 9.00	.0436	11.81	.262 .283 .316 .349 .370	.336 .357 .388 .420 .441 .462	45.1 41.7 37.4 33.8 31.9 30.1	1959 REVI
193 194 195 196 197 198	1193 1194 1195 1196 1197 1195	2193 2194 2195 2196	C193 C194 C195 C196 C197 C198		.045	1.12 1.25 1.38 1.50	10.00 11.25 12.50 13.75 2.50	.0384	14.26	.436 .490 .545 .599	.504 .556 .609 .661 .202	27.1 24.1 21.7 19.7 148.5	JULY
- Se	e Note (2)				-					.163	. 2.30	114,1	APPROVED 31
Other Curt		TITLE	SPRING,	HELICAL,	COMPI	RESSION	;		MI	LITAR	Y STA	NDARD	
	9								MS	24	585		
MIL	-S-13572	SUPERSE	DES: FAA	X 2					SHEET	4	OF		
	133 134 135 136 137 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 164 185 189 190 191 191 192 193 194 195 196 197 198 PROCUREMENT MIL	133 134 135 136 137 139 139 140 139 140 141 141 142 143 144 144 145 146 147 148 148 149 150 151 152 1152 153 154 1155 155 156 157 1157 155 156 1156 157 1157 1	133	133	133	133	133	1131	1133	1133	133	1313	133

Table II - Continued

L

Free

Length

N

Active Coils

d

Wire Dia.

0.0.

Outside Dia.

Steel

Zinc Coated

Dash No.

Corresion

Dash No.

Cadmium Plated

Dash No.

Uncoated

Dash No.

FED. SUP CLASS

5360

Spring Rate Lb/in

Н

Solid Length Max.

(D)

F

Defl.

P 3-

Load

Lb.

f

Defl. Per Coil

Reviewer: AV.AT. ME, 82.05, YD. 15.MI User: ER. GL. MC. AS This military standard has been approved by the Department of Defense and is mandatory 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. DISTRIBUTION STATEMENT A. Approved for public release distribution is unlimited

					•						<u> </u>	53	60	ŀ
		St			0.D.	d	L	N	f	P 3-	P	н	R S	
	Uncoated Dash No.	Cadmium Plated Dash No.	Zinc Coated Dash No.	Corrosion Resisting Dash No.	Outside Dia.	Wire Dia.	Free Length	Active Coils	Defl. Per Coil	Load	Defl.	Solid Length Max.	Spring Rate Lb/in	
9	199 200 201 202 203 204	1199 1200 1201 1202 1203 1204		C199 C200 C201 C202 C203 C204			.50 .56 .62 .69 .75	4.00 4.75 5.50 6.00 6.75 7.25			.154 .182 .211 .230 .259 .278	.270 .304 .337 .360 .394 .416	92.6 78.3 67.6 62.0 55.0 51.3	
	205 206 207 208 209 210	1205 1206 1207 1208 1209 1210		C205 C206 C207 C208 C209 C210	. 300	.045	.68 .94 1.00 1.12 1.25 1.38	8.00 8.75 9.25 10.25 11.50 12.75	.0384	14.26	.307 .336 .355 .394 .441 .490	.450 .484 .506 .551 .607	46.4 42.4 40.2 36.2 32.3 29.1	
	211 212 213 214 215 216	1211 1212 1213 1214 1215 1216	2212 2213 2214 2215 2216	C211 C212 C213 C214 C215 C216		.022	1,50 .50 .62 .69 .75 .81	14,00 2.00 2.25 2.50 2.75 3.00	.1782	1.622	.538 .356 .401 .445 .490 .535	.720 .088 .093 .099 .104 .110	26.5 4.5 4.0 3.6 3.3 3.0	THRU 9
	217 218 219	1217 1218 1219	2217 2218 2219	C217 C218 C219 C220 C221 C222			.88 .94 1.00	3.25 3.50 3.75 2.00			.579 .624 .668 .285	.115 .121 .126	2.8 2.6 2.4	TS
	220 221 222	1220 1221 1222					. 50 . 56 . 62	2.25 2.50			.285 .321 .356	.104 .110 .117	2.4 9.2 8.2 7.4	SHEE
	223 224 225 226 227 228	1223 1224 1225 1226 1227 1228		C223 C224 C225 C226 C227 C228		-026	.69 .75 .81 .68 .94	2.75 3.00 3.25 3.75 4.00 4.50	.1425	2.621	.392 .427 .463 .534 .570 .641	.123 .130 .136 .149 .156 .169	6.7 6.1 5.7 4.9 4.6 4.1	ES SEE
	229 230 231 232 233 234	1229 1230 1231 1232 1233 1234	2230 2231 2232 2233 2234	C229 C230 C231 C232 C233 C234			1.12 .50 .56 .62 .69 .75	4.75 2.50 2.75 3.00 3.50 3.75			.263 .290 .316 .369 .395	.175 .144 .152 .160 .176 .184	3.9 17.9 16.3 14.9 12.8 11.9	CHANG
if.	235 236 237 238 239 240	1235 1236 1237 1238 1239 1240	2235 2236 2237 2238 2239 2240	C235 C236 C237 C238 C239 C240	.360	.032	.81 .88 .94 1.00 1.12 1.38	4.00 4.50 4.75 5.25 6.00 7.50	.1054	4,718	.422 .474 .501 .553 .632 .790	.192 .208 .216 .232 .256 .304	11.2 9.9 9.4 8.5 7.5 6.0	FOR
this document.	241 242 243 244 245 246	1241 1242 1243 1244 1245 1246	2241	C241 C242 C243 C244 C245 C246			1.50 .44 .50 .56 .62 .69	8.25 2.50 2.75 3.25 3.75 4.25	· <u>-</u>		.869 .204 .224 .265 .306 .346	.328 .171 .180 .199 .218	5,4 37,4 34,1 26,6 24,9 22,1	
made Irom	247 248 249 250 251 252	1247 1248 1249 1250 1251 1252		C247 C248 C249 C250 C251 C252		.038	.75 .81 .88 .94 1.00	4.50 5.00 5.50 6.00 6.25 7.25	.0815	7.631	.367 .407 .448 .489 .509	.247 .266 .285 .304 .313 .351	20.8 18.7 17.0 15.6 15.0 12.9	REVISED 🔘
snait oc	253 254 255 256 257	1253 1254 1255 1256 1257		C253 C254 C255 C256 C257			1.25 1.38 1.50	8.00 9.00 9.75 2.50		 	.652 .733 .795 .172	.380 .418 .446	11.7 10.4 9.6 58.1	
ctitive use	258 259 260 261 262	1258 1259 1260 1261 1262		C258 C259 C260 C261 C262		.042	.50 .56 .62 .69 .75	3.00 3.50 3.75 4.25 4.75 5.25	.0691	10.00	.207 .242 .259 .294 .328 .363	.210 .231 .241 .262 .283 .304	48.3 41.3 38.6 34.0 30.5 27.5 25.2	31 JULY 1959
ing tor rep	263 264 3 - See	1263 1264 . Note (2).	. \5/- Se	C263 C264.	ļ		94	5.75 6.25			.397 .432	.325 .346	25.2 23.1	APPROVED 31

Table II - Continued

FED. SUP CLASS

5360

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	P.A. AR Other Cust OS	SPRING, HELICAL, COMPRESSION:	MILITARY STANDARD
icati	99	FOR LOADS BELOW 20 POUNDS	MS24585
	PROCUREMENT SPECIFICATION NIL-S-13572	SUPERSEDES: FAAX2	SHEET 5 OF

DD , 100 1, 672-1 (Coordin

This military standard has been approved by the Department of Defense and is mandatory 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.

Reviewer: AV,AT,ME,82,05,YD,IS,M1 User: ER,GL,MC,AS

					Table	11 -	Continue	d			(D)	FED. SUF 536		
		Ste	····	_	O.D.	ď	L	N	f	P 3-	F	Н	R 5	
	Uncoated	Cadmium Plated	Zinc Coated	Corrosion Resisting	Outside Dia.	Wire Dia.	Free Length	Active Coils	Defl. Per	Load	Defl.	Solid Length	Spring Rate	
	Dash No.	Dash No.	Dash No.	Dash No.					Coil	Lb.		Max.	Lb/in	
	265 266 267 268 269 270	1265 1266 1267 1268 1269 1270	2270	C265 C266 C267 C268 C269 C270		.042	1.00 1.12 1.25 1.38 1.50	6.75 7.75 8.50 9.25 10.00	.0691	10.00	.466 .535 .587 .639 .691	.367 .409 .441 .472 .504	21.5 18.7 17.0 15.6 14.5	
70, IS, M1	271 272 273 274 275 276	1271 1272 1273 1274 1275 1276	2271 2272 2273 2274 2275 2276	C271 C272 C273 C274 C275 C276	.360	.045	.50 .56 .62 .69 .75	3.00 3.50 4.00 4.50 5.00 5.50	.0614	12.09	.184 .215 .246 .276 .307 .338	,225 .247 .270 .292 .315 .337	65.7 56.2 49.1 43.8 39.4 35.8	
AV,AT,ME,82,05,YD, IS,M1 ER,GL,MC,AS	277 278 279 280 281 282	1277 1278 1279 1280 1281 1282	2277 2278 2279 2280 2281 2282	C277 C278 C279 C280 C281 C282			.88 .94 1.00 1.12 1.25 1.38	6.00 6.50 7.00 8.00 9.00 10.00			.368 .399 .430 .491 .552 .614	.360 .382 .405 .450 .495 .540	32.8 30.3 28.1 24.6 21.9 19.7	I THRU 9
Reviewer: AV, User: ER,G	283 284 285 286 287 288	1283 1284 1285 1286 1287 1288	2283 2284 2285 2286 2287 2288	C283 C284 C285 C286 C287 C288			1.50 .62 .69 .75 .81 .88	11.00 2.50 2.75 3.00 3.25 3.50			.675 .344 .379 .413 .448 .482	.585 .171 .150 .190 .199 .209	17.9 17.9 16.3 14.9 13.8 12.8	SHEETS
æ.	269 290 291 292 293 294	1269 1290 1291 1292 1293 1294	2289 2290 2291 2292 2293 2294	C289 C290 C291 C292 C293 C294		.038	.94 1.00 1.12 1.25 1.38 1.50	3.75 4.00 4.75 5.25 5.75 6.50	.1378	6.167	.517 .551 .654 .723 .792 '.696	.218 .228 .256 .275 .294 .323	11.20 11.20 9.4 8.5 7.8 6.9	ES 9
	295 296 297 298 299 300	1295 1296 1297 1298 1299 1300		C295 C296 C297 C298 C299 C300		.042	.62 .69 .75 .81 .86	2.50 3.00 3.25 3.50 4.00 4.25	.1183	8,136	.296 .354 .384 .414 .473 .503	.189 .210 .220 .231 .252 .262	27.5 23.0 21.2 19.6 17.2 16.2	FOR CHANG
	301 302 303 304 305 306	1301 1302 1303 1304 1305 1306	2306	C301 C302 C303 C304 C305 C306	.450		1.00 1.12 1.25 1.38 1.50	4.50 5.00 5.75 6.50 7.25 2.50			.532 .591 .680 .769 .858	.273 .294 .325 .357 .388	15.3 13.7 12.0 10.6 9.5	
a of the ng and design this document.	307 308 309 310 311 312	1307 1308 1309 1310 1311 1312	2307 2308 2309 2310 2311 2312	C307 C308 C309 C310 C311 C312		.045	.62 .69 .75 .81 .88	2.75 3.25 3.50 3.75 4.25 4.50	.1057	9.785	.291 .343 .370 .396 .449 .476	.214 .236 .247 .259 .281	33.6 28.5 26.4 24.7 21.7	
encie neeri from	313 314 315 316 317 318	1313 1314 1315 1316 1317 1318	2313 2314 2315 2316 2317	C313 C314 C315 C316 C317 C318			1.00 1.12 1.25 1.38 1.50	4.75 5.50 6.00 6.75 7.50		•	.502 .581 .634 .713 .793	.304 .337 .360 .394 .427	19.5 16.8 15.4 13.7 12.3	REVISED()
Departments and Ag on for all new engi use shall be made	319 320 321 322 323 324	1319 1320 1321 1322 1323 1324		C319 C320 C321 C322 C323 C324		.055	.56 .62 .69 .75 .81	2.75 3.25 3.75 4.00 4.25 4.75	.0764	17.02	.210 .248 .286 .306 .325 .363	.261 .289 .316 .330 .344 .371	81.0 68.6 59.5 55.6 52.4 46.9	1959 REVIS
se by all Selecti epetitive	325 326 327 328 329 330	1325 1326 1327 1328 1329 1330		C325 C326 C327 C328 C329 C330		:	.94 1.00 1.12 1.25 1.38 1.50	5.25 5.75 6.50 7.25 8.00 8.75			.401 .439 .497 .554 .611	.399 .426 .467 .509 .550	42.4 38.8 34.2 30.7 27.8 25.5	31 JULY
f Defense.	3 Se	e Note (2)	. 15 Se	e Nate (5).										APPROVED
of De	P.A. A Other Cust		TITLE						,-	MI	LITAR	Y STA	NDARD	\dashv
is mandar rement of ications	9	y O		SPRING FOR L	OADS B	AL, CO ELOW	MPRESIO 20 POU	NDS		MS	24	585		ヿ

DD FORM 672-1 (Coordinated)

SUPERSEDES:

FAAX2

PROCUREMENT SPECIFICATION MIL-S-13572

PREVIOUS EDITIONS OF THIS FRAM ARE DESCLETE.

SHEET

OF

P 32 R 5 Steel O.D. d N ſ L Cadmium Plated Zinc Corresion Spring Rate Uncoated Coated Resisting Defl. Free Load Defl Solid Dia. Dia. Length Coils Per Length Lb/in Dash No Dash No Dash No Dash No. Coil Lb. Max. C331 C332 C333 C334 C335 2.00 2.25 2.50 2.75 3.00 3.25 .351 .395 .439 .483 .527 15.9 14.1 12.7 11.5 10.6 9.8 1331 .152 .161 .171 .180 332 333 334 335 1332 1333 1334 1335 .69 .75 .81 0 .88 .190 336 1336 C336 .038 .1757 5.575 Ξ 337 1337 1338 3.50 3.75 4.25 4.75 C337 1.00 .614 . 209 .05.70,1S,I 338 C338 C339 1.12 1.25 1.38 .659 .747 .834 8.5 7.5 6.7 .218 1339 339 340 C340 C341 .256 1341 5.25 2.00 .922 1342 C342 342 .168 .82. AS C343 C344 C345 C346 C347 C348 2.25 2.50 2.75 3.00 3.25 3.50 343 344 1343 1344 21.6 ത 7, AT, 4E, .69 .75 .81 .378 .189 19.4 _ 1345 1346 1347 345 17.6 416 ₫ 16.1 346 .454 .210 347 エ .042 .1513 7.336 = 348 1348 . 94 . 529 , 231 3.75 4.25 4.75 5.25 Liewer: User: 12.9 11.4 10.2 9.2 8.4 349 1349 1.00 1.12 1.25 1.38 C349 C350 .567 1350 1351 1352 1353 350 .262 .643 .719 . W 351 352 C351 C352 SHE .794 .304 ջ C353 C354 353 5.75 2.00 .870 .271 .325 354 1354 2354 - 500 32. ш 29.1 26.2 23.8 21.8 18.7 17.4 C355 C356 C357 C358 C359 C360 2.25 2.50 2.75 3.00 3.50 3.75 355 1355 2355 .62 . 305 ш 356 357 1356 1357 2356 2357 .69 S .339 .373 .407 .475 .202 .214 .225 .247 .259 .75 .81 S 1358 2358 CHANGE 359 1359 .045 .88 .1358 8.870 1360 2360 .94 . 509 4.00 4.50 5.00 5.50 6.00 .270 .292 .315 .337 16.3 14.5 13.1 11.9 361 1361 2361 C361 .543 .611 .679 .747 1.00 C362 C363 C364 C365 362 363 364 365 1.12 1.25 1.38 1362 1363 2362 2363 1364 1365 2364 2365 α .50 .198 .360 366 1366 C366 2.25 2.75 3.00 3.25 3.75 69.1 56.7 51.9 367 368 1367 C367 C368 C369 C370 C371 .62 .69 .75 .261 .275 .289 .272 1368 1369 369 370 .322 47.9 1371 1372 .055 .0990 15.42 .371 .316 41.6 372 C372 4.00 is military standard has been approved by the Department of Defense is mandatory for use by all Departments and Agencies of the ritement of Defense. Selection for all new engineering and design leations and for repetitive use shall be made from this document. 373 374 1373 C373 . 94 4.50 .445 34.6 1374 1375 1376 1.00 1.12 1.25 1.36 C374 C375 C376 C377 .470 .520 .594 .643 32.8 29.6 25.9 24.0 4.75 5.25 .371 375 376 6.00 .440 1378 378 C378 718 .509 th unfamiliad 2379 2380 379 1379 C379 2.00 11.6 .435 .152 380 1380 C380 2.30 2.50 .500 .543 .587 .163 .171 .179 10.1 .81 2381 2382 381 382 1381 1382 C381 C382 .88 REVISED(() 2.70 8.6 5.0 ŁP. 383 1383 C383 .038 1.00 .2174 5.043 .630 .717 . 186 384 2384 C384 3.30 .201 385 2385 2386 2387 C385 C386 C387 C388 3 60 4.00 4.40 2.00 6.4 5.8 5.3 23.9 21.2 19.1 1385 1.25 . 783 . 213 386 387 .550 1386 .870 .228 Approved for public release. 1387 1388 1.50 .62 956 .243 .180 358 2388 389 1389 1390 2389 2390 C389 .69 2.25 .381 .191 1959 390 2.70 2.95 3.20 3.40 3.85 2391 2392 2393 .81 .88 .94 17.7 16.2 14.9 14.0 391 1391 C391 . 211 .045 .1694 8.091 .457 APPROVED 31 JULY 392 393 394 395 C392 C393 C394 .223 1392 1393 .500 1394 1395 2394 2395 1.00 .576 12.4 C395 1.12 .652 .737 . 263 . 286 396 1396 2396 C396 STATEMENT 2 - See Note (2). 5 - See Note (5). P.A. TITLE MILITARY STANDARD AR Other Cust 0 SPRING, HELICAL, COMPRESSION: 05 MS24585 99 FOR LOADS BELOW 20 POUNDS SUPERSEDES: PROCUREMENT SPECIFICATION SHEET 7 ÓF FAAX2 MIL-S-13572

Table II - Continued

FED. SUP CLASS

5360

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DD . FORH 672-1 (Conditioned)

PREYIOUS ESITIONS OF THE FORM ARE OSSIGLETS.

DISTRIBUTION STATEMENT A. Approved for public release, distribution is unlimited

DD . FORM 672-1

					Table	11 _ (Continued	!	 		0	FED. SUP 536		
		Ste Cadmium	Zinc	Corrosion	0.0.	d	L	N	f	P.3	F	Н	R 5] i
	Uncoated Dash No.	Plated Dash No.	Coated Dash No.	Resisting Dash No.	Outside Dia.	Wire Dia.	Free Length	Active Coils	Defl. Per Coil	Load Lb.	Defl.	Solid Length Max.	Spring Rate Lb/in	
9	397 398 399 400 401 402	1397 1398 1399 1400 1401 1402	2397 2398	C397 C398 C399 C400 C401 C402		.045	1.3E 1.50 .56 .62 .69	4.80 5.30 2.00 2.25 2.65 2.90	.1694	8.091	.813 .898 .248 .279 .329 .360	.306 .329 .220 .234 .256 .269	9.9 9.0 56.6 50.3 42.7 39.0	-
_	403 404 405 406 407 408	1403 1404 1405 1406 1407 1408		C403 C404 C405 C406 C407 C408		.055	.81 .88 .94 1.00 1.12 1.25	3.20 3.50 3.80 4.10 4.60 5.20	.1241	14.05	.397 .434 .471 .509 .571 .645	.286 .302 .319 .335 .363 .396	35.4 32.4 29.8 27.6 24.6 21.8	
AV.AT.ME. R2.0S.YD,1S.MI ER.GL.MC.AS	409 410 411 412 413 414	1409 1410 1411 1412 1413 1414	2411 2412 2413 2414	C409 C410 C411 C412 C413 C414	.550		1.38 1.50 .56 .62 .69 .75	5.80 6.40 2.20 2.50 2.90 3.20			.720 .794 .220 .250 .290 .320	.429 .462 .265 .283 .309 .328	19.5 17.7 92.4 81.3 70.1 63.5	6
Reviewer: AV User: ER,	415 416 417 418 419 420	1415 1416 1417 1418 1419 1420	2415 2416 2417 2418 2419 2420	C415 C416 C417 C418 C419 C420		.063	.61 .88 .94 1.00 1.12 1.25	3.50 3.80 4.20 4.50 5.10 5.70	.1002	20.33	.350 .380 .420 .450 .511	.346 .365 .391 .409 .447 .485	58.1 53.5 48.4 45.2 39.8 35.60	S I THRU
ď.	421 422 423 424 425	1421 1422 1423	2421 2422	C421 C422 C423 C424			1.38 1.50	6.40 7.00 2.00			.641 .701	.529	31.7 29.0	EET
	426	1424 1425 1426		C425 C426		.042	.94 1.00 1.12	2.10 2.30 2.60	.2751	5.714	.578 .633 .715	.168 ,172 .181 .193	9.9 9.0 8.0	EE SH
	427 428 429 430 431 432	1427 1428 1429 1430 1431 1432	2430 2431 2432	C427 C428 C429 C430 C431 C432			1.25 1.38 1.50 .58 .94 1.00	2.90 3.20 3.50 2.10 2.30 2.50			.798 .880 .963 .521	.206 .218 .231 .184 .193	7.2 6.5 5.9 13.2 12.1	CHANGES S
	433 434 - 435 436 437	1433 1434 1435 1436 1437	2433 2434 2435 2436	C433 C434 C435 C436		.045	1.12 1.25 1.38 1.50	2.80 3.10 3.50 3.80 2.10	.2481	6.894	.620 .695 .769 .868 .943	.202 .216 .229 .247 .261	9.9 9.0 7.9 7.3	FCR
tment of Defense ies of the ring and design a this document.	438 439 440 441 442 443 444	1438 1439 1440 1441 1442 1443 1444		C437 C438 C439 C440 C441 C442 C443 C444	.650	.055	.81 .94 1.00 1.12 1.25 1.38	2.30 2.60 2.80 3.00 3.40 3.80 4.30	.1843	12.01	.424 .479 .516 .553 .627 .700	.225 .236 .253 .264 .275 .297 .319 .346	31.00 28.3 25.1 23.3 21.7 19.2 17.2 15.2	
the Departed Agency, enginee	445 446 447 448 449 450	1445 1446 1447 1448 1449 1450	2446 2447 2448 2449 2450	C445 C446 C447 C448 C449 C450		.063	1.50 .69 .75 .81 .88	4.70 2.15 2.40 2.65 2.90 3.10	.1499	17.36	.866 .322 .360 .397 .435	.368 .261 .277 .293 .309 .321	13.9 53.9 48.2 43.7 39.9 37.3	REVISED()
n approved by the long transfer and long for all new e use shall be a	451 452 453 454 455 456	1451 1452 1453 1454 1455 1456	2451 2452 2453 2454 2455	C451 C452 C453 C454 C455 C456			1.00 1.12 1.25 1.38 1.50	3.40 3.80 4.30 4.80 5.30			.\$10 .\$70 .644 .719 .794	.340 .365 .397 .428 .460	34.0 30.5(D 27.0(D 24.1 21.9 5.2	
has beel se by all Select	457 458 459 460 461 462	1457 1458 1459 1460 1461 1462	2461 2462	C457 C458 C459 C460 C461 C462	.700	.042	1.12 1.25 1.38 1.50	2.20 2.50 2.80 3.10 2.10 2.40	.3248	5.323	.714 .812 .909 1.001	.176 .189 .202 .214 .184	7.50 6.6 5.9 5.3 10.4 9.1	<u>ال</u> ا
andar for fense for		Note (2).	5 Se	Note (5).		<u> </u>		· · · · ·						APPROVED
<u>ੂ</u> ਨੂੰ ਨੂੰ ਵ	P.A. A.R Other Cust OR		TITLE							MII	ITAR	Y STAP	DARD	\dashv
# # E &	iliti Musicusi OʻS			SPRING, H								585		\dashv
Thi and bep app		SPECIFICATION S-13572	N SUPERSE	DES: FAAI	K2					SHEET		OF		

PREVIOUS EXITIONS OF THIS FORM ARE MESOLETE.

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		St Cadmium	eel linc	Corresion	0.D.	d	L	,	1	l r 3	' '	H	K J	-
	Uncoated Pash No.	Plated Dash No.	Coated Pash No.	Resisting Dash No.	Outside Dia.	Wire Dia,	Free Length	Active Coils	Defl. Per Coil	load lb.	Defl.	Sclid Length Hax.	Sprin Rate Lb/in	•
	463 464 465 466 467 469	1463 1464 1465 1466 1467 1468	2463 2464 2465	C463 C464 C465 C466 C467 C469		.045	1.25 1.35 1.50 .61 .65	2.70 3.00 3.30 2.00 2.20 2.40	.2932	6.420	.792 .540 .967 .437 .481 .524	.211 .225 .235 .220 .231 .242	5.1 7.3 6,6 25.6 23.2 21.3	!
(1)	469 470 471 472 473 474	1469 1470 1471 1472 1473 1474	2474	C469 C470 C471 C472 C473 C474		.055		2.60 3.00 3.30 3.70 4,10	.2185	11.19	.565 .655 .721 .604 .696	.253 .275 .291 .313 .335	19.7 17.1 15.5 13.6 12.5 43.2	
	475 476 477 478 479 480	1475 1476 1477 147E 1479 1480	2475 2476 2477 2478 2479 2460	C475 C476 C477 C478 C479 C460	.700	.063	.51 .65 .94 1.00 1.12 1.25	2.30 2.50 2.70 2.90 3.30 3.70	.1783	16.17	.410 .446 .451 .517 .558	.270 .263 .296 .309 .334	39.4 36.3 33.6 31.3 27.5 24.5	C
	451 452 453 464 485 466	1481 1482 1463 1464 1485 1496	2461 2462	C4E1 C4E2 C4E3 C4E4 C4E5 C4B6			1.38 1.50 .69 .75 .81	4.20 4.60 2.00 2.20 2.40	:		.749 .520 .326 .359	.391 .416 .268 .281 .295	21.6 19.7 59.5 54.1 49.6	-
	457 458 489 490 491 492	1487 1488 1489 1490 1491 1492		C497 C488 C469 C490 C491 C492		.067	.88 .94 1:00 1.12 1.25 1.38 1.50	2.60 2.90 3.10 3.50 4.00 4.40 4.90	.1630	19.41	.424 .473 .505 .570 .652 .717	.306 .328 .342 .368 .402 .429	45.80 41.0 3F.4 34.10 29.8 27.1 24.1	2
	493 494 495 496 497 496	1493 1494 1495 1496 1497 1498	2493 2494 2495 2496 2497 2498	C493 C494 C495 C496 C497 C498		.055	.88 .94 1.00 1.12 1.25 1.38	2.00 2.10 2.30 2.60 2.90 3.30	. 2559	10.47	.512 .537 .568 .665 .742 .644	.220 .225 .236 .253 .269 .291	20.4 19.5 17.8 17.8 15.7 14.1 12.4	֡֝֟֝֟֝֟֝֟֝֟֝֟֝֟֝֟֝֟֟֝֟֟֝֟֟֝֟֟֝֟֟֓֓֟֟֝֟֟֝֟
And the standard has been approved by the Department of Defense datery for use by all Departments and Agencies of the cone of Defense. Selection for all me engineering and design as and for repetitive use shall be made from this document.	409 500 501 502 503 504	1499 1500 1501 1502 1503 1504	2499 2500 2501 2502 2503 2504	C499 C500 C501 C502 C503 C504	.750	.063,	1.50 .61 .88 .94 1.00	3,60 2,00 2,20 2,40 2,60 2,90	.2094	15.13	.921 .419 .461 .502 .544	.308 .252 .265 .277 .290 .305	36.1 32.6 30.1 27.8 24.9	
	505 506 507 506 509 510	1505 1506 1507 1508 1509 1510	2505 2506 2507	C505 C506 C507 C508 C509 C510			1.25 1.38 1.50 .75 .81	3.30 3.70 4.10 1.90 2.10 2.30			.691 .774 .E55 .364 .402	.334 .359 .364 .261 .275	21.9 19.5 17.6 49.9 45.2 41.3	
	511 512 513 514 515 516	1511 1512 1513 1514 1515 1516		C511 C512 C513 C514 C515 C516		.067	.94 1.00 1.12 1.25 1.35 1.50	2.50 2.70 3.10 3.50 3.90 4,30	.1915	15.17	.479 .517 .594 .670 .747	.301 .315 .342 .368 .395	37.9 35.1 30.6 27.1 24.3 22.1	
	517 516 519 · 520 521 522	1517 1516 1519 1520 1521 1522		C517 C518 C519 C520 C521 C522	.£50	.063	1.00 1.12 1.25 1.36 1.50	1.90 2.20 2.50 2.50 3.00	. 2973	13.42	.564 .654 .743 .632 .692	.246 .265 .283 .302 .315	23.6 20.5 16.1 16.1 15.0	
	523 524 525 526 527	1523 1524 1525 1526 1527		C523 C524 C525 C526 C527			1.00 1.12 1.25 1.3E 1.50	2.10 2.40 2.80 3.10 3.40	.2561	16.10	.535 .615 .717 .794 .571	275	29.9 26.2 22.3 20.3 16.5	
		Note (2).	∜- See	Note (5).										
	A AR		TITLE	SPRING, H	FLICA: 4	เบทอะ	E SGIVII.	<u> </u>	<u> </u>	MIL	ITARY	STAN	DARD	
		(FOR LOAD	•			i 			245	85		
List F	ROCUREMENT S MIL-S	PECIFICATION 5-13572	SUPERSED	ES: FAAL	2					SHEET	9	OF		