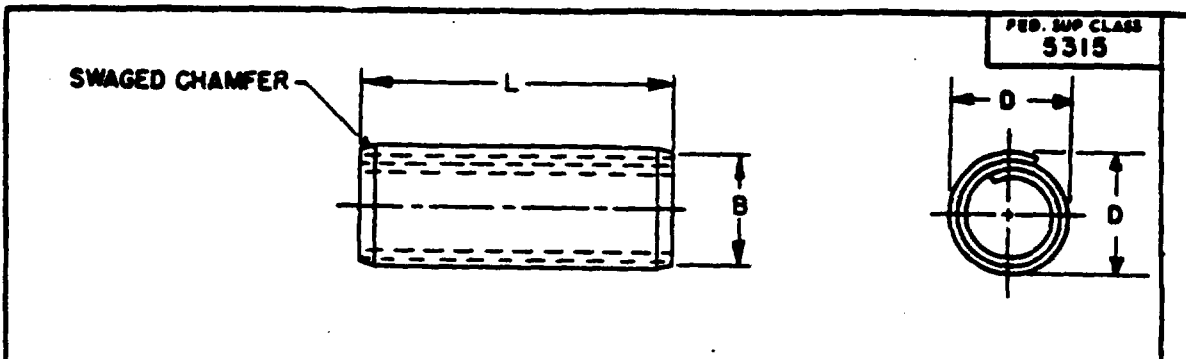


REVISION: BY, IS, NI, MI, MA, NSA, SS  
 USER: AT, EL, GL, MC, ME, SM



FED. SUP CLASS  
5315

TABLE I

NOMINAL DIAMETER	D DIA ACTUAL (FREE) STATE		B CHAMFER DIAMETER MAX	MINIMUM DOUBLE SHEAR STRENGTH POUNDS			RECOMMENDED HOLE SIZE	
	MAX	MIN		CRES 410 THRU 420 CARBON STEEL 1070 THRU 1095	ALLOY STEEL 6150	CRES 302	MAX	MIN
1/32	.035	.033	.029	75 *		60	.032	.031
.039	.044	.041	.037	120 *		100	.040	.039
3/64	.052	.049	.045	170 *		140	.048	.046
.052	.057	.054	.050	230 *		190	.053	.051
1/16	.072	.067	.059	300		250	.065	.061
5/64	.088	.083	.075	475		400	.081	.077
3/32	.105	.099	.091	700		550	.097	.093
7/64	.120	.114	.106	950		750	.112	.108
1/8	.138	.131	.121	1250		1000	.129	.124
5/32	.171	.163	.152	1925		1550	.169	.155
3/16	.205	.196	.182	2800		2250	.192	.185
7/32	.238	.228	.214	3800		3000	.224	.217
1/4	.271	.260	.243	5000		4000	.256	.247
5/16	.337	.324	.304	7700		6200	.319	.308
3/8	.403	.388	.366	11200		9000	.383	.370
7/16	.469	.452	.427	15200		13000	.446	.431
1/2	.535	.516	.488	20000		16000	.510	.493
5/8	.661	.642	.613		31000		.635	.618
3/4	.787	.768	.738		45000		.760	.743

\* CRES 410 thru 420 only.

NOTES:

- MATERIAL:** Steel, Carbon, per Federal Standard No. 66, steel numbers 1070 thru 1095. Steel, Alloy, per Federal Standard No. 66, steel number 6150. Steel, Corrosion Resisting, per Federal Standard No. 66, steel numbers 302 or 410 thru 420.
- PROTECTIVE COATING:** Steel, Carbon, cadmium plated per QQ-P-416, Type II, Class 1. Steel, Carbon and Alloy, phosphate coated in accordance with MIL-P-16232, Type 2, Class 2. Steel Corrosion Resisting, passivated per QQ-P-35.
- HARDNESS:** Steel, Carbon, Rockwell C46-53. Steel, Alloy, Rockwell C43-51. Steel, Corrosion Resisting (410 thru 420); Rockwell C46-55. Steel, Corrosion Resisting (302); work hardened.
- EDGES:** All sharp edges shall be broken.
- DIMENSIONS:** All dimensions are in inches.
- TOLERANCES:** Length L: All diameters thru 3/8":  
 ±.010" for lengths thru 2"  
 ±.015" for lengths over 2" thru 3"  
 ±.025 for lengths over 3"  
 All diameters larger than 3/8"  
 ±.025 for all lengths
- PART NUMBER:** The MS part number consists of the MS number plus the dash number. Example: MS51923-37
- For design feature purposes, this standard takes precedence over procurement documents referenced herein.
- Referenced documents shall be of the issue in effect on the date of invitations for bid.
- For functional limitations on usage of spring pins, see MS33547.
- Patent number 2737843, patented 13 March 1956. The Government has a royalty free license under this patent for the benefit of manufacturers of this item either for the Government or for use in equipment to be delivered to the Government.

© ENTIRE STANDARD REVISED

This military standard 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.

APPROVED 3 MARCH 1962 REVISED 11 JUNE 1962 © 23 MAY 1969

P.A. VC Other Cont 82	TITLE PIN, SPRING - TUBULAR, COILED, STANDARD DUTY	MILITARY STANDARD MS51923
PROCURING SPECIFICATION MIL-P-10971	REFERENCES BFS14 and BFS14.1	WEIGHT 1 2 4

DD FORM 872-1 (Continued)

FORWARDED COPIES OF THIS FORM AND CHECKLIST

TABLE II

LENGTH L	CARBON STEEL 1070 - 1095		CRS		LENGTH L	CARBON STEEL 1070 - 1095		CRS		LENGTH L	CARBON STEEL 1070 - 1095		CRS	
	CADMIUM	PHOS	302	410 THRU 420		CADMIUM	PHOS	302	410 THRU 420		CADMIUM	PHOS	302	410 THRU 420
1/32 NOMINAL DIAMETER					5/64 NOMINAL DIAMETER					3/16 NOMINAL DIAMETER				
1/8			111	166	1/4	228	270	312	434	1/2	210	252	294	475
3/16			112	167	5/16	229	271	313	435	9/16	211	253	295	476
1/4			113	168	3/8	230	272	314	436	5/8	212	254	296	477
5/16			114	169	7/16	231	273	315	437	3/4	213	255	297	478
3/8			115	170	1/2	232	274	316	438	7/8	214	256	298	479
7/16			116	171	9/16	233	275	317	439	1	215	257	299	480
1/2			117	172	5/8	234	276	318	440	7/32 NOMINAL DIAMETER				
9/16			118	173	3/4	235	277	319	441	1/2	315	363	395	481
5/8			119	174	7/8	235	277	319	441	9/16	316	364	396	482
.039 NOMINAL DIAMETER					3/32 NOMINAL DIAMETER					1/4 NOMINAL DIAMETER				
1/8			120	175	1/4	47	102	157	442	1/2	216	258	300	486
3/16			121	176	5/16	48	103	158	443	9/16	217	259	301	489
1/4			122	177	3/8	49	104	159	444	5/8	218	260	302	490
5/16			123	178	7/16	50	105	160	445	3/4	219	261	303	491
3/8			124	179	1/2	51	106	161	446	7/8	220	262	304	492
7/16			125	180	9/16	52	107	162	447	1	221	263	305	493
1/2			126	181	5/8	53	108	163	448	1-1/8	222	264	306	494
9/16			127	182	3/4	54	109	164	449	5/16 NOMINAL DIAMETER				
5/8			128	183	7/8	55	110	165	450	3/4	341	371	401	495
3/64 NOMINAL DIAMETER					7/64 NOMINAL DIAMETER					13/16 NOMINAL DIAMETER				
1/8			129	184	3/8	236	278	320	452	7/8	342	372	402	496
3/16			130	185	7/16	237	279	321	453	1	343	373	403	497
1/4			131	186	1/2	238	280	322	454	15/16	344	374	404	498
5/16			132	187	9/16	239	281	323	455	1	345	375	405	499
3/8			133	188	5/8	240	282	324	456	1-1/8	346	376	406	500
7/16			134	189	3/4	241	283	325	457	1-1/4	347	377	407	501
1/2			135	190	7/8	242	284	326	458	3/8 NOMINAL DIAMETER				
9/16			136	191	15/16	243	285	327	459	3/4	221	265	307	502
5/8			137	192	1	244	286	328	460	1	224	268	308	503
.052 NOMINAL DIAMETER					1/8 NOMINAL DIAMETER					1-1/4 NOMINAL DIAMETER				
1/8			138	193	3/8	202	244	286	460	1-1/4	225	267	309	504
3/16			139	194	7/16	203	245	287	461	1-3/4	226	268	310	505
1/4			140	195	1/2	204	246	288	462	2	227	269	311	506
5/16			141	196	9/16	205	247	289	463	7/16 NOMINAL DIAMETER				
3/8			142	197	5/8	206	248	290	464	1	348	377	406	507
7/16			143	198	3/4	207	249	291	465	1-1/4	349	379	409	508
1/2			144	199	7/8	208	250	292	466	1-1/2	350	380	410	509
9/16			145	200	15/16	209	251	293	467	1-3/4	351	381	411	510
5/8			146	201	1	210	252	294	468	2	352	382	412	511
1/16 NOMINAL DIAMETER					3/32 NOMINAL DIAMETER					1/2 NOMINAL DIAMETER				
3/16	37	92	147	424	7/16	328	358	388	468	1-1/4	353	383	413	512
1/4	38	93	148	425	1/2	329	359	389	469	1-1/2	354	384	414	513
5/16	39	94	149	426	9/16	330	360	390	470	1-3/4	355	385	415	514
3/8	40	95	150	427	5/8	331	361	391	471	2	356	386	416	515
7/16	41	96	151	428	3/4	332	362	392	472	2-1/4	357	387	417	516
1/2	42	97	152	429	7/8	333	363	393	473					
9/16	43	98	153	430	15/16	334	364	394	474					
5/8	44	99	154	431										
11/16	45	100	155	432										
3/4	46	101	156	433										

REVISION: AV, IS, HI, MU, NSA, OS  
 USER: AT, EL, GL, HC, ME, SH  
 This military standard 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.

APPROVED 3 MARCH 1962 REVISED (A) 11 JUNE 1962 (B) 25 MAR 1965 (C) FOR CHANGES SEE SHEET 1

P.A. VC Other Cont 02	TITLE PIN, SPRING - TUBULAR, COILED, STANDARD DUTY	MILITARY STANDARD MS51923
PRECEDENT DOCUMENT MIL-P-10971	SPONSORING M534 and M534.1	SHEET 2 OF

FED. SUP CLASS  
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TABLE II - CONTINUED

LENGTH L	ALLOY STEEL 6150	
	PHOSPHATE	
	DASH NUMBER	
	5/8 NOMINAL DIAMETER	3/4 NOMINAL DIAMETER
2	534	568
2-1/4	535	569
2-1/2	536	570
2-3/4	537	571
3	538	572
3-1/4	539	573
3-1/2	540	574
3-3/4	541	575
4	542	576
4-1/4	543	577
4-1/2	544	578
4-3/4	545	579
5	546	580
5-1/4	547	581
5-1/2	548	582
5-3/4	549	583
6	550	584

TABLE III. SUPERSEDED. The following are not manufactured or are not authorized for new design.

LENGTH L	CARBON STEEL ** 1070 - 1095		LENGTH L	CARBON STEEL ** 1070 - 1095	
	CADMIUM	PHOSPHATE		CADMIUM	PHOSPHATE
	DASH NUMBER			DASH NUMBER	
1/32 NOMINAL DIAMETER			3/64 NOMINAL DIAMETER		
1/8	1	56	1/8	19	74
3/16	2	57	3/16	20	75
1/4	3	58	1/4	21	76
5/16	4	59	5/16	22	77
3/8	5	60	3/8	23	78
7/16	6	61	7/16	24	79
1/2	7	62	1/2	25	80
9/16	8	63	9/16	26	81
5/8	9	64	5/8	27	82
.039 NOMINAL DIAMETER			.052 NOMINAL DIAMETER		
1/8	10	65	1/8	28	83
3/16	11	66	3/16	29	84
1/4	12	67	1/4	30	85
5/16	13	68	5/16	31	86
3/8	14	69	3/8	32	87
7/16	15	70	7/16	33	88
1/2	16	71	1/2	34	89
9/16	17	72	9/16	35	90
5/8	18	73	5/8	36	91

\*\* Not manufactured.

This military standard 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, IS, MI, MU, MSA, BS  
USER: AT, EL, GL, MC, ME, SH

APPROVED 3 MARCH 1962 REVISED 11 JUNE 1962 25 MAR 1965 FOR CHANGES SEE SHEET 1

P.A. MC Other Code 02	TITLE PIN, SPRING - TUBULAR, COILED, STANDARD DUTY	MILITARY STANDARD MS51923
PROCUREMENT SPECIFICATION NIL-P-10971	SUPERSEDES BFS14 and BFS14.1	SHEET 3 OF

DD FORM 672-1

PREVIOUS EDITIONS OF THIS STANDARD ARE OBSOLETE.

FED SUP CLASS  
5315

TABLE IV. SUPERSEDED. The following are not manufactured or are not authorized for new design.  
(CONTINUED)

LENGTH L	ALLOY STEEL *** 6150	
	CADMIUM	
	DASH NUMBER	
	5/8 NOMINAL DIAMETER	3/4 NOMINAL DIAMETER
2	517	551
2-1/4	518	552
2-1/2	519	553
2-3/4	520	554
3	521	555
3-1/4	522	556
3-1/2	523	557
3-3/4	524	558
4	525	559
4-1/4	526	560
4-1/2	527	561
4-3/4	528	562
5	529	563
5-1/4	530	564
5-1/2	531	565
5-3/4	532	566
6	533	567

REVIEWER: AV, IS, MI, MU, NSA, OS  
USER: AS, EL, GL, MC, ME, SM

TABLE IV - INTERCHANGEABILITY

The following pins covered by dash numbers given in MSS1923(WC), Revision B, are inactivated or not manufactured after 23 MAY 1969 and are not to be used for new design. For new design and replacement, the following is recommended.

SUPERSEDED	RECOMMENDED REPLACEMENTS	SUPERSEDED	RECOMMENDED REPLACEMENTS	SUPERSEDED	RECOMMENDED REPLACEMENTS	SUPERSEDED	RECOMMENDED REPLACEMENTS
MSS1923(WC)	MSS1923	MSS1923(WC)	MSS1923	MSS1923(WC)	MSS1923	MSS1923(WC)	MSS1923
DASH NUMBER		DASH NUMBER		DASH NUMBER		DASH NUMBER	
1	111 166	28	138 193	74	129 184	526	543
2	112 167	29	139 194	75	130 185	527	544
3	113 168	30	140 195	76	131 186	528	545
4	114 169	31	141 196	77	132 187	529	546
5	115 170	32	142 197	78	133 188	530	547
6	116 171	33	143 198	79	134 189	531	548
7	117 172	34	144 199	80	135 190	532	549
8	118 173	35	145 200	81	136 191	533	550
9	119 174	36	146 201	82	137 192	534	551
10	120 175	37	147 202	83	138 193	535	552
11	121 176	38	148 203	84	139 194	536	553
12	122 177	39	149 204	85	140 195	537	554
13	123 178	40	150 205	86	141 196	538	555
14	124 179	41	151 206	87	142 197	539	556
15	125 180	42	152 207	88	143 198	540	557
16	126 181	43	153 208	89	144 199	541	558
17	127 182	44	154 209	90	145 200	542	559
18	128 183	45	155 210	91	146 201	543	560
19	129 184	46	156 211	92	147 202	544	561
20	130 185	47	157 212	93	148 203	545	562
21	131 186	48	158 213	94	149 204	546	563
22	132 187	49	159 214	95	150 205	547	564
23	133 188	50	160 215	96	151 206	548	565
24	134 189	51	161 216	97	152 207	549	566
25	135 190	52	162 217	98	153 208	550	567
26	136 191	53	163 218	99	154 209	551	568
27	137 192	54	164 219	100	155 210	552	569

\*\*\* Inactivated. Do not use for new design.

This military standard is mandatory for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design application and for repetitive use shall be made from this document.

APPROVED 3 MARCH 1962 REVISED (A) 11 JUNE 1962 (B) 25 MAR 1965 (C) FOR CHANGES SEE SHEET 1

PK VC  
Other Cont 92

TITLE  
PIN, SPRING - TUBULAR, COILED, STANDARD DUTY

MILITARY STANDARD  
MS51923

DEPARTMENT SPECIFICATION  
MIL-P-10971

SUPERSEDED  
MS51924 and MS51924.1

SHEET 4 OF

DD FORM 672-1