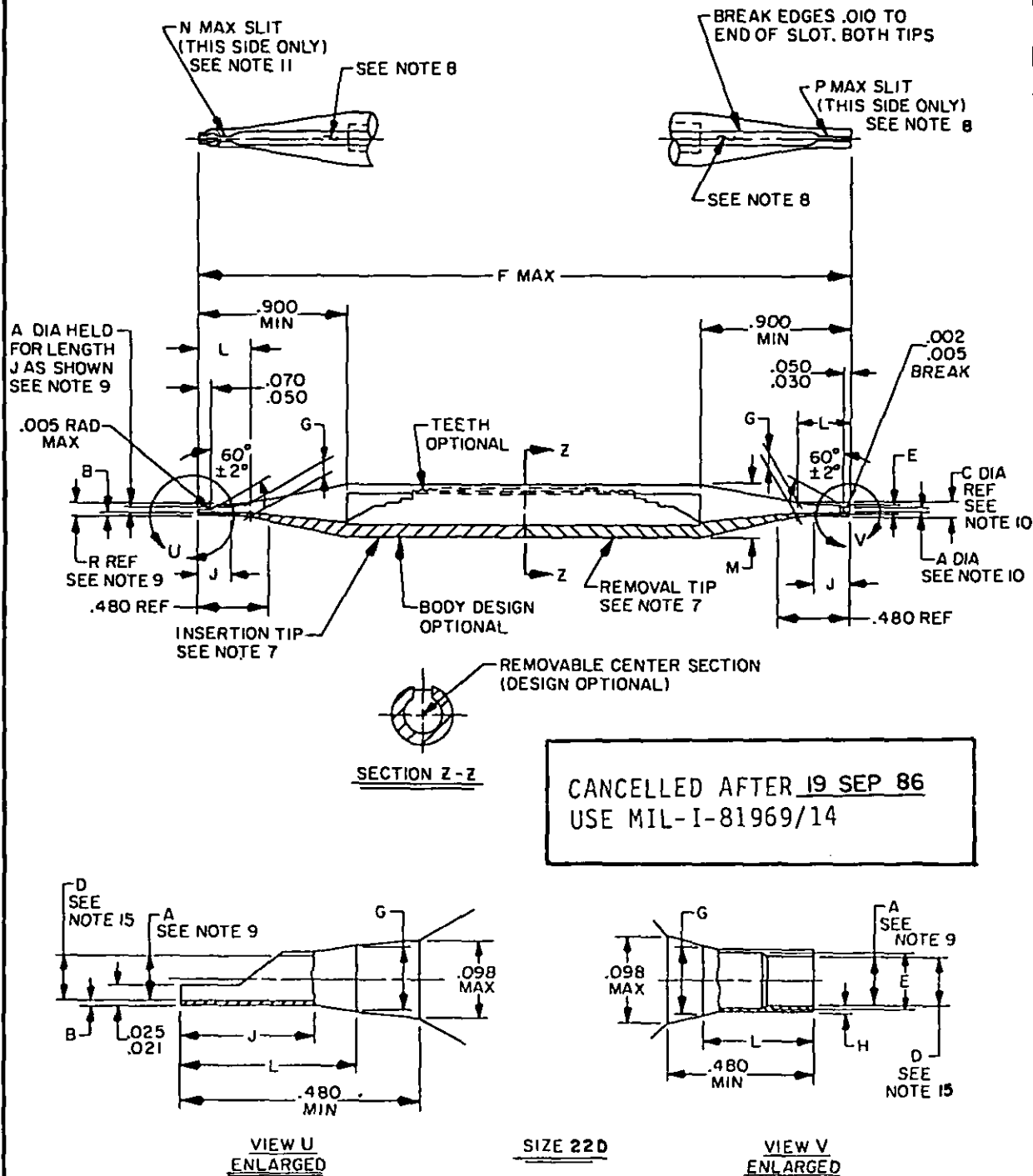


FED. SUP CLASS
5120User activities:
Army -
Navy -
Air Force -Review activities:
Army - CR
Navy - EC
Air Force - 85

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ⓑ ENTIRE STANDARD REVISED

P.A. AF-85	International Interest	TITLE	MILITARY STANDARD
Other Cust Army - CR Navy - AS		TOOL, CONTACT INSERTION-EXTRACTION, ELECTRICAL CONNECTOR	MS27534
Procurement Specification	SUPERSEDES:	PAGE 1	OF 4

DD FORM 672 (Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

5120-B090

AMSC N/A

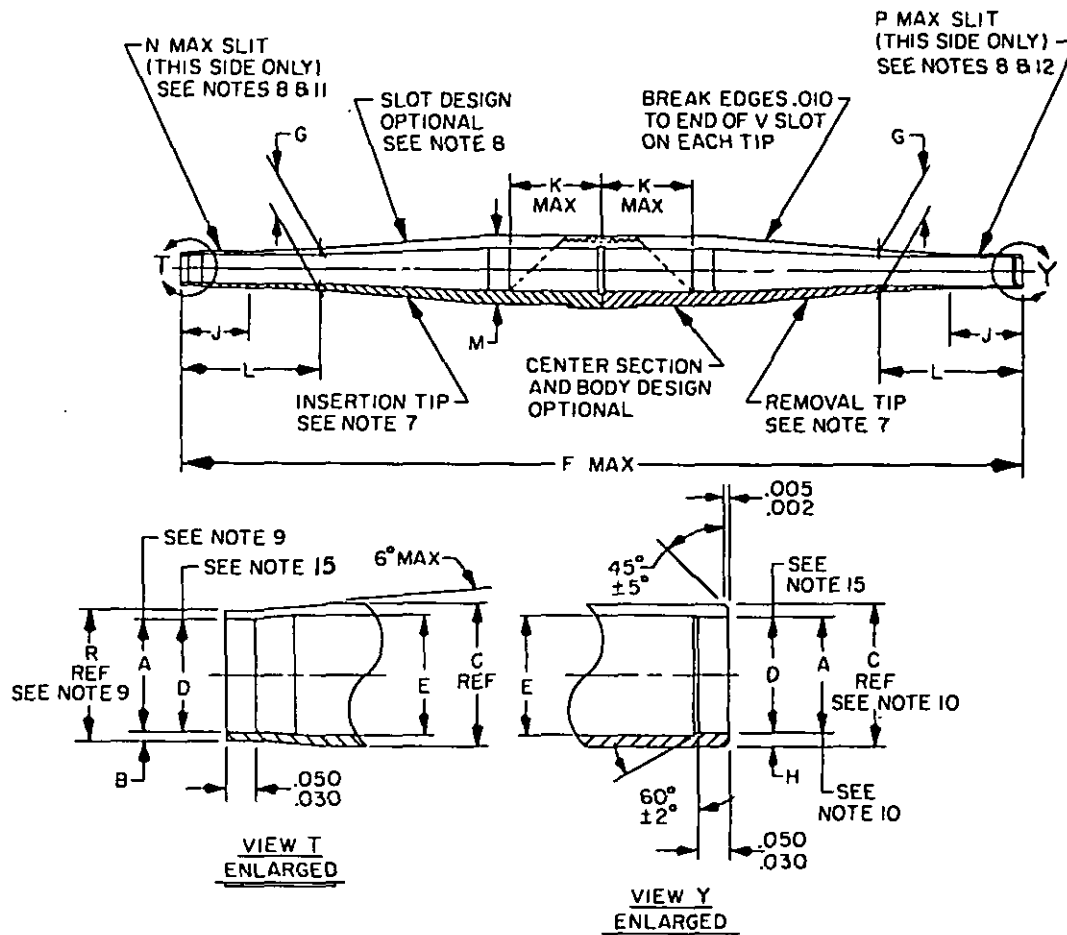
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REVISED ⓑ 19 SEP 86

APPROVED 6 FEB 74

FED. SUP CLASS
5120User activities: Army -
Navy -
Air Force -Review activities: Army - AR
Navy - EC
Air Force - 85

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SIZES 20, 16 & 12REVISED (B) ENTIRE STANDARD REVISED.
APPROVED 6 FEB 74

P.A. AF - 85

International
Informant:

TITLE

TOOL, CONTACT
INSERTION-EXTRACTION,
ELECTRICAL CONNECTOR

MILITARY STANDARD

Other Cust
Army - ER
Navy - AS**MS27534**

Procurement Specification

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5120User activities: Army -
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Part number	Contact size	A dia max	B dia max	C dia max	D	D dia max	E min	F max	G max dia	H	J min	K	L min	M dia max	N max see note 11	P max see note 12	R dia max see note 12
MS27534-22D	22D	.048	.0085 .0075	.0650	.048	.054	.053	4.500	.077	.0085 .0075	.202	--	.31	.290	.009	.009	.0650
MS27534-20	20	.067	.009 .008	.0960	.070	.078	.079	"	.150	.0145 .0135	.310	.505	.760	.290	.009	.009	.0870
MS27534-16	16	.103	.010 .009	.1350	.103	.103	.112	"	.180	.016 .015	.370	.580	.760	.440	.009	.009	.1220
MS27534-12	12	.153	.012 .010	.1890	.151	.151	.160	"	.240	.018 .016	.370	.700	.760	.440	.009	.009	.1770

Color chart (see note 7)		Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
1220	Green	.0005	0.01	.018	0.46	.067	1.70	.103	2.62	.1890	4.80
120	Red	.002	0.05	.021	0.53	.070	1.78	.105	2.67	.202	5.13
	White	.005	0.13	.025	0.64	.077	1.96	.109	2.77	.240	6.10
116	Blue	.0075	0.19	.030	0.76	.078	1.98	.112	2.84	.290	7.37
		.008	0.20	.040	1.02	.079	2.01	.1220	3.10	.310	7.87
		.0085	0.22	.048	1.22	.081	2.06	.135	3.43	.370	9.40
112	Yellow	.009	0.23	.050	1.27	.083	2.11	.142	3.61	.440	11.18
		.010	0.25	.051	1.30	.085	2.16	.150	3.81	.480	12.19
		.012	0.30	.053	1.35	.0870	2.21	.151	3.84	.505	12.83
		.0135	0.34	.054	1.37	.0960	2.44	.153	3.89	.580	14.73
		.0145	0.37	.060	1.52	.097	2.46	.158	4.01	.700	17.78
		.015	0.38	.063	1.60	.098	2.49	.160	4.06	.760	19.30
		.016	0.41	.0650	1.65	.099	2.51	.1770	4.50	.900	22.86
								.180	4.57	4.500	114.30

P.A. AF 85	International interest	TITLE TOOL, CONTACT INSERTION-EXTRACTION, ELECTRICAL CONNECTOR	MILITARY STANDARD
Other Cust: Army-ER Navy-AS			MS27534
Procurement Specification	SUPERSEDES:		PAGE 3 OF 4

REVISED ② ENTIRE STANDARD REVISED.

APPROVED

FED. SUP CLASS
5120

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Material: Acetal Co-polymer.
4. For design feature purposes, this standard takes precedence over acquisition documents referenced herein.
5. Referenced Government documents of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation form a part of this standard to the extent specified herein.
6. Tips must be capable of being separated from center section.
7. Each tool shall be permanently marked with the assembly part number. Vendor markings are permissible. Insertion tip to be color indicated in the color chart; removal tip to be white.
8. Design for slot optional. Slot design must allow easy entry of all applicable wire sizes.
9. Circumferential dimension. Part requirement: tip of tool must be capable of accepting a pin of "A" max diameter after being inserted into a "R" diameter hole.
10. Circumferential dimension. Part requirement: tip of tool must be capable of accepting a pin of "A" max diameter after being inserted in to a "C" diameter hole.
11. "N" max slit is measured with tip of tool in "R" diameter hole.
12. "P" max slit is measured with tip of tool in "C" diameter hole.
13. Tips must be smooth and free from burns and sharp edges.
14. Tools are used to insert and remove contacts from connectors conforming to the following. Wire acceptance ranges are given for information only.

Applicable Military Specification	Contact size	Wire size (OD)
MIL-C-005015 (NAVY)	16	.053 - .103
MS-3450's	12	.085 - .158
MIL-C-24308	22D	.054 max
MIL-C-0026482 (NAVY)	20	.040 - .083
Series 2	16	.053 - .103
	12	.099 - .158
MIL-C-38999	22D	.030 - .060
	20	.040 - .083
	16	.065 - .109
	12	.097 - .142
MIL-STD-1549 Components using MIL-C-39029/22 contacts	22	.030 - .060
	20	.040 - .083
	16	.065 - .109
	12	.097 - .142
MIL-C-0081511 (NAVY)	22	.030 - .054
MIL-C-81703 (NAVY)	20	.040 - .083
Series 2	16	.053 - .103
	12	.099 - .158
MIL-C-83723	20	.040 - .083
	16	.053 - .103
	12	.097 - .158
MIL-C-83733 (USAF)	22D	.030 - .060
	20	.040 - .083
	16	.063 - .103
	12	.081 - .158

15. D diameter represents tool tip I.D. in free state.

P.A. AF-85	International INTENAT	TITLE TOOL, CONTACT INSERTION-EXTRACTION, ELECTRICAL CONNECTOR	MILITARY STANDARD
Other Cust: Army - ER Navy - AS			MS27534
Procurement Specification	SUPERSEDES:		PAGE 4 OF 4

REVISED 6 FEB 74 ENTIRE STANDARD REVISED.

APPROVED 6 FEB 74

User activities: Army -
Navy -
Air Force -Review activities: Army - AR
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