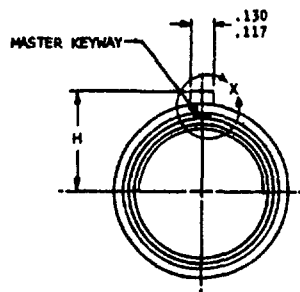
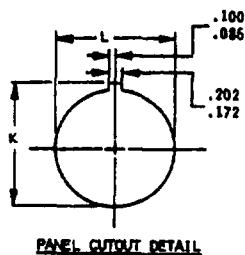
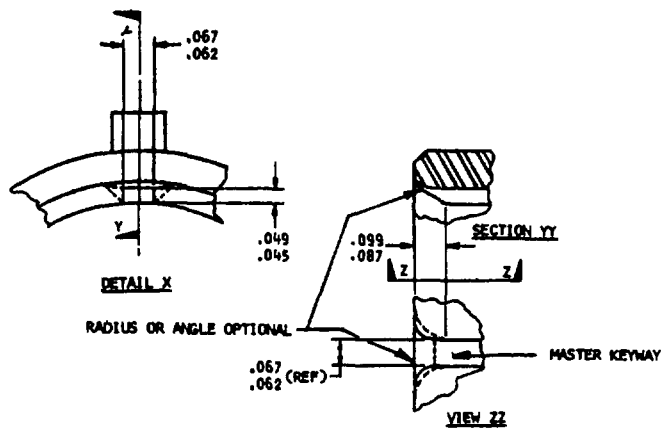
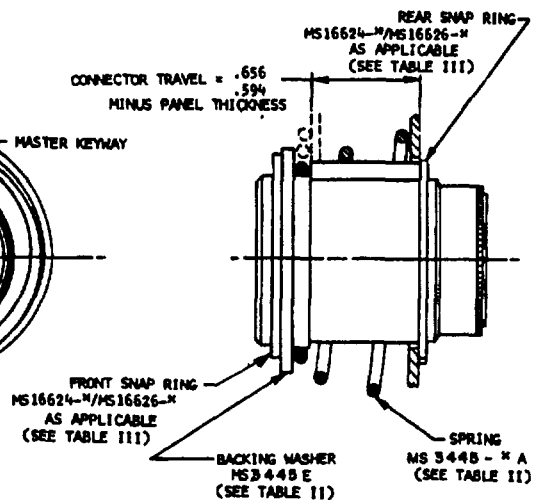
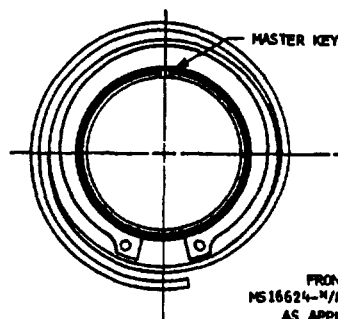


FED SUP CLASS  
5935FIGURE 1  
CONNECTOR VIEW

PANEL CUTOUT DETAIL

FIGURE 11  
CONNECTOR ASSEMBLY  
VIEW

EXAMPLE OF PART NO. **MS3445** 19 - 20 S Y

MS NUMBER	CLASS	SIZE	INSERT ARRANGEMENT	CONTACT STYLE	ALTERNATE INSERT POSITION
MS3445		19 - 20	S	Y	

PA NAVY-AS	International Interest	TITLE	MILITARY STANDARD
Other Cust		CONNECTOR, PLUG, ELECTRIC, CRIMP TYPE, RACK AND PANEL, SERIES 2 (CLASS E)	MS 3445(NAVY)
Procurement Specification	SUPERSEDES:		SHEET 1 OF 5
MIL-C-81703			

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FED SUP CLASS  
5935TABLE I  
CONNECTOR AND PANEL  
CUTOUT DIMENSIONS

SHELL SIZE DASH NO	A DIA. OVER FRONT OF SHELL	B I D SHELL	C DIA INSERT SEAL (SOC INS ONLY)	D DIA OF INSERT (SOC INS ONLY)	E POINT OF SPRING CONTACT	F MAX DIA REAR	G DIA OVER REAR OF SHELL	H DIM FROM $\downarrow$ TO TOP OF KEY
-3	641/ 628	454/ 446	380/ .362	354/ 334	138 MAX MEASURE WITH SQUARE NOSE PIN HAVING BASIC DIAMETER OF MATING CONTACT	625	615/ 595	442/ 422
-7	797/ 784	589/ 581	496/ .478	470/ 450		702	760/ 740	504/ 484
-12	920/ 907	723/ 715	.636/ .618	610/ 590		828	867/ 847	567/ 547
-19	1.048/ 1 035	862/ 854	776/ .756	750/ 726		953	1 010/ 990	639/ 619
-27	1 189/ 1 176	1 017/ 1 009	931/ 911	905/ .880		1 102	1 150/ 1 130	709/ 689
-37	1 356/ 1 343	1 139/ 1 131	1 053/ 1.038	1 027/ 1.003		1 266	1 322/ 1 302	796/ 776

SHELL SIZE DASH NO	K	L
-3	858/ 828	.686/ .656
-7	999/ 969	.827/ 797
-12	1.124/ 1 094	.968/ .938
-19	1 249/ 1 219	1.077/ 1.047
-27	1 390/ 1 360	1.218/ 1 188
-37	1 546/ 1 516	1.390/ 1.360

SHELL SIZE DASH NO	WEIGHT MAX (LBS)			
	CLASS E		CLASS F	
	PIN INSERT	SOC INSERT	PIN INSERT	SOC INSERT
-3				
-7				
-12	WEIGHTS WILL BE SUPPLIED IN LATER REVISION			
-19				
-27				
-37				

WEIGHT LISTED IS FOR CONNECTOR WITH SNAP RINGS, BACKING WASHER, SPRING,  
AND MAX DENSITY INSERT ARRANGEMENT LESS CONTACTS.

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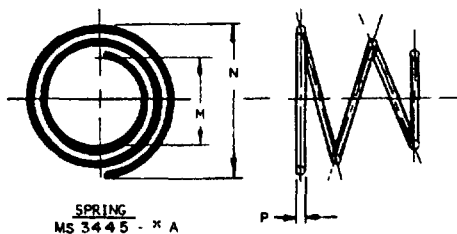
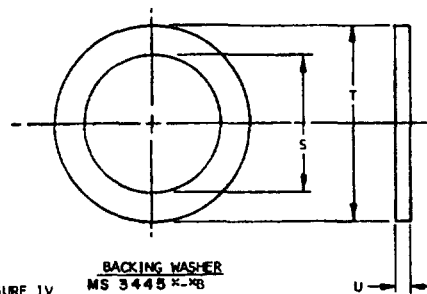
P A NAVY- AS Other Cust	International Interest	TITLE CONNECTOR, PLUG, ELECTRIC, CRIMP TYPE, RACK AND PANEL, SERIES 2 (CLASS E)	MILITARY STANDARD
			MS 3445(NAVY)
Procurement Specification MIL-C-81703		SUPERSEDES:	SHEET 2

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FED SUP CLASS  
5935FIGURE III  
SPRING DETAILFIGURE IV  
BACKING WASHER

SPRING MATERIAL STEEL  
FINISH BLACK OXIDE PER MIL-C-13924, CLASS 1  
CONSTRUCTION SPRING MUST BE MADE SO COILS WILL COLLAPSE WITHIN EACH OTHER AT A SOLID HEIGHT EQUAL TO THE WIRE DIAMETER

TABLE II  
SPRING AND BACKING  
WASHER DIMENSIONS

SHELL SIZE DASH NO	A -- SPRING								B -- BACKING WASHER		
	M MIN	N MAX	P	APPROX FREE LENGTH	TOTAL TURNS (REF)	SPG FORCE AT "R" HEIGHT (LBS MIN)	R ± 0°0	SPG FORCE AT P + 020 HEIGHT (LBS MAX)	S	T	U
-3	645	1 220	071/ 059	800	3	8	220	18	660/ 649	.891/ .869	070/ 050
-7	775	1 350	073/ 064	1 250	3	10	230	18	815/ 804	1.172/ 1.150	110/ 090
-12	905	1 565	097/ 085	938	2 1/3	21	250	30	932/ 921	1.263/ 1.241	091/ 071
-19	1 025	1 705	097/ 085	1 875	2 1/2	27	250	45	1 060/ 1 049	1.391/ 1.369	081/ 061
-27	1 175	1 855	101/ 089	1 625	2 5/8	28	260	46	1 198/ 1 190	1.529/ 1.507	072/ 052
-37	1 345	2 105	126/ 114	1 250	2 1/2	28	280	48	1 367/ 1 357	1.816/ 1.794	060/ 040
-61	1 675	2 835	141/ 129	2.250	2 1/2	54	295	77	1 685/ 1.674	2.150/ 2.118	.072/ .052

EXAMPLE OF PART NO MS 3445 - 3 A  
MS NUMBER SIZE SPRING

EXAMPLE OF PART NO MS 3445 X - 3 B  
MS NUMBER CLASS SIZE WASHER  
E= CAD PLATE  
L= NICKEL PLATE

TABLE III  
SNAP RING  
PART NUMBERS

SHELL SIZE DASH NO	FRONT SNAP RING	REAR SNAP RING	
-3	MS16624-4062	MS16626-4059	EXCEPT WITH BLACK OXIDE FINISH PER MIL-C-13924, CLASS 1
-7	MS16624-4078	MS16624-4075	EXCEPT WITH BLACK OXIDE FINISH PER MIL-C-13924, CLASS 1
-12	MS16626-4093	MS16624-4087	EXCEPT WITH BLACK OXIDE FINISH PER MIL-C-13924, CLASS 1
-19	MS16624-4106	MS16624-4100	EXCEPT WITH BLACK OXIDE FINISH PER MIL-C-13924, CLASS 1
-27	MS16624-4118	MS16624-4112	EXCEPT WITH BLACK OXIDE FINISH PER MIL-C-13924, CLASS 1
-37	MS16624-4137	MS16624-4131	EXCEPT WITH BLACK OXIDE FINISH PER MIL-C-13924, CLASS 1
-61	MS16624-4168	MS16624-4162	EXCEPT WITH BLACK OXIDE FINISH PER MIL-C-13924, CLASS 1

P A NAVY-AS  Other Cust	International Interest	TITLE  CONNECTOR, PLUG, ELECTRIC, CRIMP TYPE, RACK AND PANEL, SERIES 2 (CLASS E )	MILITARY STANDARD
			MS3445(NAVY)
Procurement Specification MIL-C-81703		SUPERSEDES:	SHEET 3

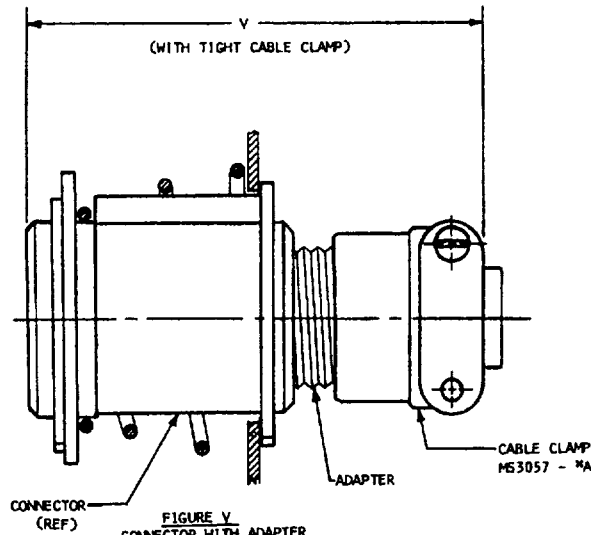
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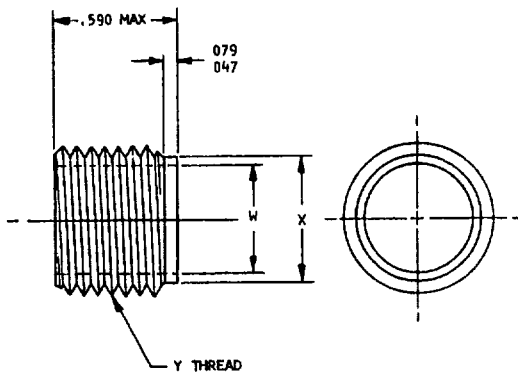
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FED SUP CLASS  
5935FIGURE V  
CONNECTOR WITH ADAPTER  
AND CABLE CLAMPTABLE IV  
ADAPTER AND CABLE  
CLAMP INFORMATION

SHELL SIZE DASH NO.	V LENGTH MAX	ADAPTER PART NUMBER	CABLE CLAMP PART NUMBER
-3	2 234	MS3445-3C	MS3057-3A
-7	2 234	MS3445-7C	MS3057-4A
-12	2 297	MS3445-12C	MS3057-6A
-19	2 359	MS3445-19C	MS3057-8A
-27	2 359	MS3445-27C	MS3057-10A
-37	2 359	MS3445-37C	MS3057-12A

TABLE V  
ADAPTER  
DIMENSIONS

SHELL SIZE DASH NO.	C -- ADAPTER		
	W I D	X	Y THREAD
-3	401/ 389	451/ 444	1/2-28 UNEF-2A
-7	506/ 494	572/ 565	5/8-24 UNEF-2A
-12	.651/ 639	688/ 681	3/4-20 UNEF-2A
-19	.781/ 769	813/ 806	7/8-20 UNEF-2A
-27	888/ 882	938/ 931	1-20 UNEF-2A
-37	1 052/ 1 040	1 118/ 1 111	1 3/16-18 UNEF-2A

FIGURE VI  
ADAPTER DETAILEXAMPLE OF PART NO. MS 3445 - 12 C  
MS NUMBER                      SIZE                      ADAPTERTHIS ADAPTER IS INTENDED FOR USE WITH CLASS E CONNECTORS, WITH  
CABLE CLAMP.

APPROVED 21 July 1971 REVISED

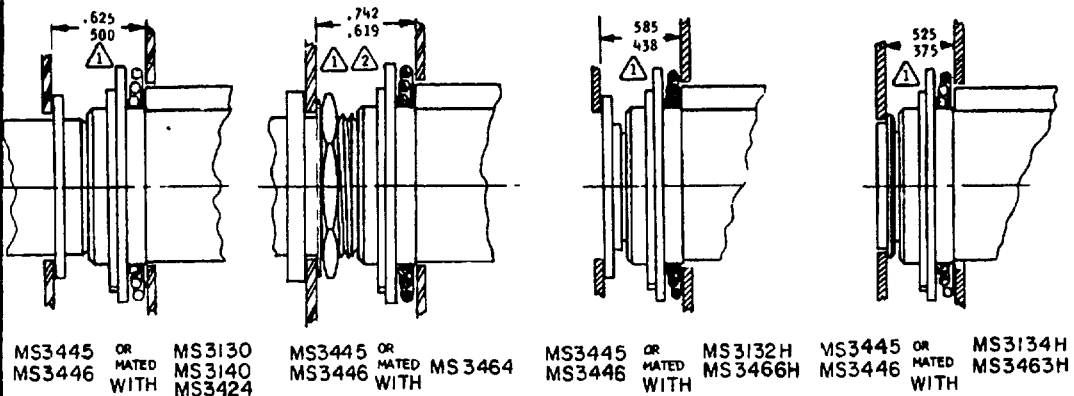
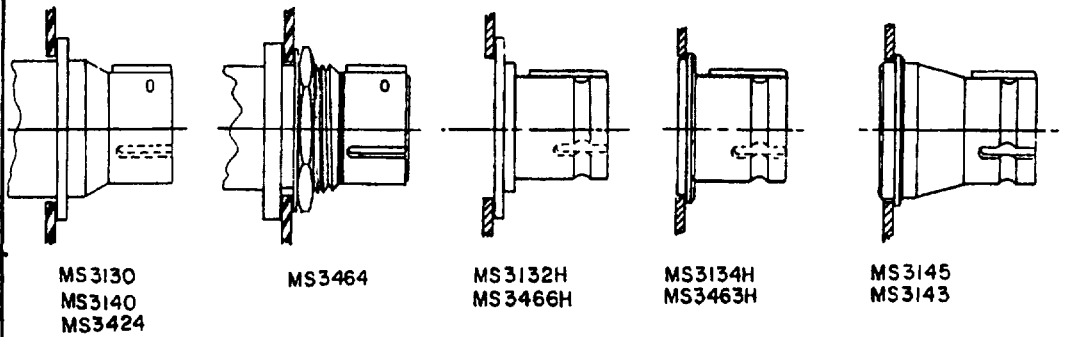
P A. NAVY-AS	International Interest	TITLE CONNECTOR, PLUG, ELECTRIC, CRIMP TYPE, RACK AND PANEL, SERIES 2 (CLASS E)	MILITARY STANDARD
Other Cust			MS 3445(NAVY)
Procurement Specification MIL-C-81703		SUPERSEDES	SHEET 4

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5935

△ PANEL SEPARATION FOR DESIGN PURPOSES, IN HIGH VIBRATION AND/OR OTHER ADVERSE ENVIRONMENT APPLICATIONS, PANEL SEPARATION SHALL BE AS CLOSE TO THE MINIMUM ALLOWABLE DIMENSION AS FEASIBLE  
(MAX PANEL DEFLECTION .016 INCLUDED IN THIS DIMENSION)  
△ DIMENSION SHOWN IS TO BACK OF PANEL FOR ACTUAL PANEL SEPARATION, THE PANEL THICKNESS ON RECEPTACLE SIDE MUST BE SUBTRACTED FROM THE DIMENSION SHOWN.

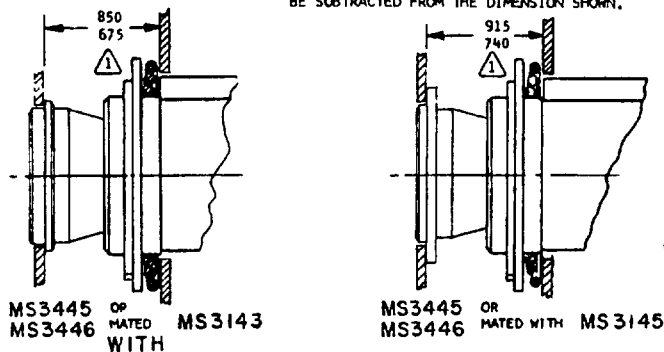
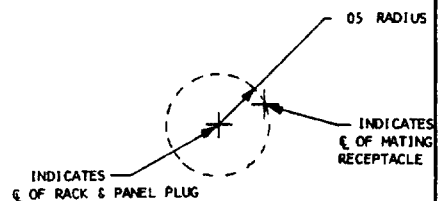


FIGURE VI  
MATING INFORMATION



RACK & PANEL INSTALLATION SHALL BE DESIGNED TO MAINTAIN CONNECTOR ALIGNMENT WITHIN .05 IN. AS SHOWN ABOVE.

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P A NAVY-AS Other Cust	International Interest	TITLE CONNECTOR, PLUG, ELECTRIC, CRIMP TYPE, RACK AND PANEL, SERIES 2 (CLASS E)	MILITARY STANDARD MS3445(NAVY)
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