

**MIL-STD-1669 Insert Arrangements Table
 and Alternate Positions**

INSERT ARRANGEMENTS					
Shell Size Designator	Insert Arrangement Dash Number	Contact Size and Quantity			Service Rating
		20	16	12	
8	8-2	2			I
	8-3	3			I
	8-4	4			I
	8-33	3			I
	8-98	3			I
10	10-6	6			I
	10-98	6			I
12	12-3		3		II
	12-8	8			I
	12-10	10			I
14	14-4			4	I
	14-5		5		II
	14-9	5		4	I
	14-12	8	4		I
	14-15	14	1		I
	14-18	18			I
	14-19	19			I
	14-22	1		4	I
16	16-8		8		II
	16-14	8		6	I
	16-23	22	1		I
	16-26	26			I
	16-99	21	2		I
18	18-8			8	I
	18-11		11		II
	18-30	29	1		I
	18-32	32			I
	18-85	5		8	I
20	20-16		16		II
	20-24	24			I
	20-27	27			I
	20-39	37	2		I
	20-41	41			I
	20-90	3		12	I
22	22-12			12	I
	22-19			19	I
	22-21		21		II
	22-32	32			I
	22-34	34			I
	22-41	27	14		I
	22-55	55			I
	22-95	26		6	I
24	24-19			19	II
	24-27	11		16	I
	24-31		31		I
	24-61	61			I

ALTERNATE POSITIONS				
Shell Size / Insert Arrangement				
	A°			
	W	X	Y	Z
8-2	58	122	-	-
8-3	60	210	-	-
8-4	45	-	-	-
8-33	90	-	-	-
8-98	-	-	-	-
10-6	90	-	-	-
10-98	90	180	240	270
12-3	-	-	180	-
12-8	90	112	203	292
12-10	60	155	270	295
14-4	45	-	-	-
14-5	40	92	184	273
14-9	15	90	180	240
14-12	43	90	-	-
14-15	17	110	155	234
14-18	15	90	180	270
14-19	30	165	315	-
14-22	45	-	-	-
16-8	54	152	180	331
16-14	25	78	180	240
16-23	158	270	-	-
16-26	60	-	275	338
16-99	66	156	223	340
18-8	180	-	-	-
18-11	62	119	241	340
18-30	180	193	285	350
18-32	85	138	222	265
18-85	45	90	180	240
20-16	238	318	333	347
20-24	70	145	215	290
20-27	72	144	216	288
20-39	63	144	252	333
20-41	45	126	225	-
20-90	18	60	240	270
22-12	-	-	-	-
22-19	15	90	225	308
22-21	16	135	175	349
22-32	72	145	215	288
22-34	62	142	218	298
22-41	39	135	264	-
22-55	30	142	226	314
22-95	26	180	266	-
24-19	30	165	315	-
24-27	45	110	140	225
24-31	90	225	255	-
24-61	90	180	270	324