

MIL-STD-242H(NAVY), PART 12  
 NOTICE 1  
 18 November 1986

MILITARY STANDARD  
 ELECTRONIC EQUIPMENT PARTS  
 SELECTED STANDARDS  
 HARDWARE AND INSULATORS

To all holders of MIL-STD-242H(NAVY), PART 12:

1. The following pages of MIL-STD-242H(NAVY), PART 12 have been revised and supersede the pages listed:

NEW PAGES	DATE	SUPERSEDED PAGES	DATE
201.5		PRINTED WITHOUT CHANGE	18 JULY 1984
201.6		201.6	
301.9		PRINTED WITHOUT CHANGE	18 JULY 1984
301.10		301.10	
301.25		301.25	
301.26		PRINTED WITHOUT CHANGE	18 JULY 1984
351.3		PRINTED WITHOUT CHANGE	18 JULY 1984
351.4		351.4	
401.1		PRINTED WITHOUT CHANGE	18 JULY 1984
401.2		401.2	
411.1		411.1	
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451.1		PRINTED WITHOUT CHANGE	18 JULY 1984
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563.5		PRINTED WITHOUT CHANGE	18 JULY 1984
563.6		563.6	
563.7		563.7	
563.8		563.8	

FSC 59GP

Distribution statement A. approved for public release; distribution is unlimited.

MIL-STD-242H(Navy), PART 12

NOTICE 1

18 November 1986

# MILITARY STANDARD

## ELECTRONIC EQUIPMENT PARTS SELECTED STANDARDS

HARDWARE AND INSULATORS



FSC 59GP

AMSC N/A

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MIL-STD-242H(NAVY), PART 12  
NOTICE 1

NEW PAGES	DATE	SUPERSEDED PAGES	DATE
563.9		563.9	
563.10		PRINTED WITHOUT CHANGE	18 JULY 1984
563.11		PRINTED WITHOUT CHANGE	18 JULY 1984
563.12		563.12	
611.9		PRINTED WITHOUT CHANGE	18 JULY 1984
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611.20		611.20	
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651.1		PRINTED WITHOUT CHANGE	18 JULY 1984
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901.19		PRINTED WITHOUT CHANGE	18 JULY 1984
901.20		901.20	

2. Retain this notice and insert before table of contents.

3. Holders of MIL-STD-242H(NAVY), PART 12, will verify that page changes and additions indicated above have been entered. This notice page will be retained as a check sheet this issuance, together with appended pages, is a separate publication. Each notice is to be retained by stocking points until the military standard is completely revised or cancelled.

Review activities:  
Navy - AS, OS, SH, ES

Preparing activity:  
Navy - EC

User activity:

(Project Number 59GP-N062)

MIL-STD-242H(NAVY) PART 12  
18 July 1984

INSULATORS, STANDOFF (STYLES 10, 11, 12, 13, AND 14)

MIL-I-23264/2

TABLE I. TYPE DESIGNATION AND DIMENSIONS. (CONT.)

TYPE DESIGNATOR	DIMENSIONS	
	D	L
NL422B12-008	.750	1.000
NL422W12-008		
NL422B12-010		1.250
NL422W12-010		
NL422B12-012		1.500
NL422W12-012		
NL422B12-016		2.000
NL422W12-016		
NL422B12-020		2.500
NL422W12-020		
NL422B12-024		3.000
NL422W12-024		
NL422B12-032		4.000
NL422W12-032		
NL422B13-012	1.000	1.500
NL422W13-012		
NL422B13-016		2.000
NL422W13-016		
NL422B13-020		2.500
NL422W13-020		
NL422B13-024		3.000
NL422W13-024		
NL422B13-032		4.000
NL422W13-032		
NL422B14-008	SEE FIGURE 1B.	1.000
NL422W14-008		
NL422B14-010		1.250
NL422W14-010		
NL422B14-012		1.500
NL422W14-012		
NL422B14-016		2.000
NL422W14-016		
NL422B14-020		2.500
NL422W14-020		
NL422B14-024		3.000
NL422W14-024		
NL422B14-032		4.000
NL422W14-032		
NL422B14-040		5.000
NL422W14-040		
NL422B14-048		6.000
NL422W14-048		

## MIL-STD-242H(NAVY), PART 12

## INSULATORS, STANDOFF (STYLES 19 AND 20)

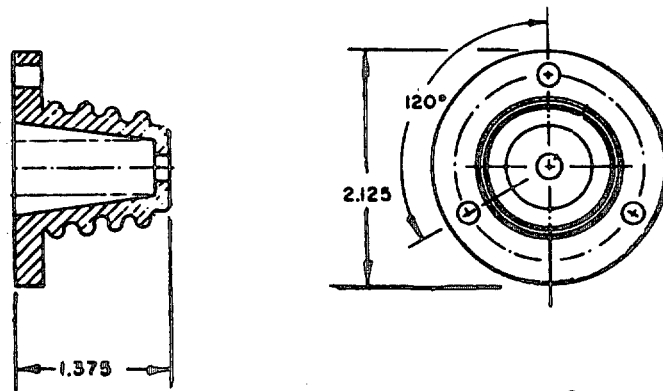
MIL-I-23264/3

FIGURE 1A. STYLE 19

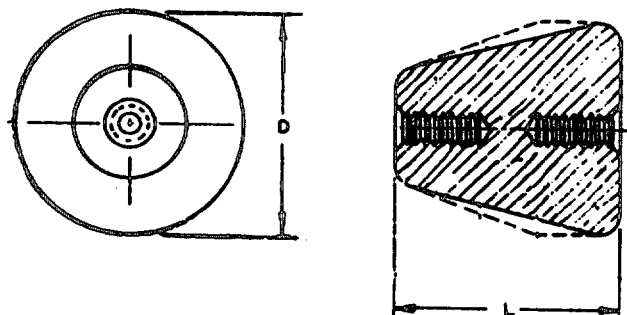


FIGURE 1B. STYLE 20

TABLE I. TYPE DESIGNATION AND DIMENSIONS.

TYPE DESIGNATOR	DIMENSIONS	
	D	L
NL422B19-011 NL422W19-011	SEE FIGURE 1A.	
NL422B20-008 NL422W20-008	1.000	1.000
NL422B20-012 NL422W20-012		1.500
NL422B20-016 NL422W20-016		2.000

## MIL-STD-242H(NAVY) PART 12

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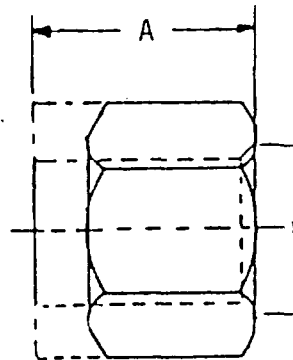
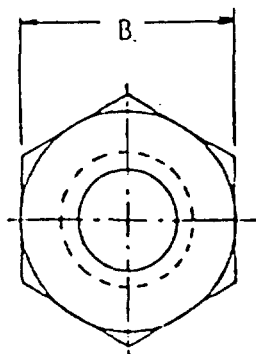
NUT, SELF-LOCKING, HEXAGON, REGULAR HEIGHT, 800°F, 125 KSI Ft<sub>u</sub>MS21046

TABLE I. DIMENSIONS AND CHARACTERISTICS

PART NO. M21046	THREAD @ SIZE __UNJ_-3B	DIMENSIONS			AXIAL STRENGTH LBS-MIN
		A MAX	B MAX	D	
C04	4-40	.157	.251	.136	750
C06	6-32	.188	.313	.161	1130
C08	8-32	.250	.345	.188	1720
C3	10-32	.250	.376	.210	2460
C4	1/4-28	.328	.439	.273	4580
C5	5/16-24	.360	.502	.336	7390
C6	3/8-24	.469	.564	.398	11450
C7	7/16-20	.469	.690	.467	15450
C8	1/2-20	.610	.752	.531	21110
C9	9/16-18	.704	.877	.594	26810
C10	5/8-18	.766	.940	.656	34130
C12	3/4-16	.891	1.064	.787	50020
C14	7/8-14	1.016	1.252	.918	68440
C16	1-12	1.141	1.440	1.044	92180
C18	1 1/8-12	1.266	1.627	1.171	116700
C20	1 1/4-12	1.454	1.815	1.295	147940

@ PART NO. WITH "0" IN DASH NO. MEANS UNJC (04, 06, 08), OTHERS MEAN UNJF.

## MIL-STD-242H(NAVY), PART 12

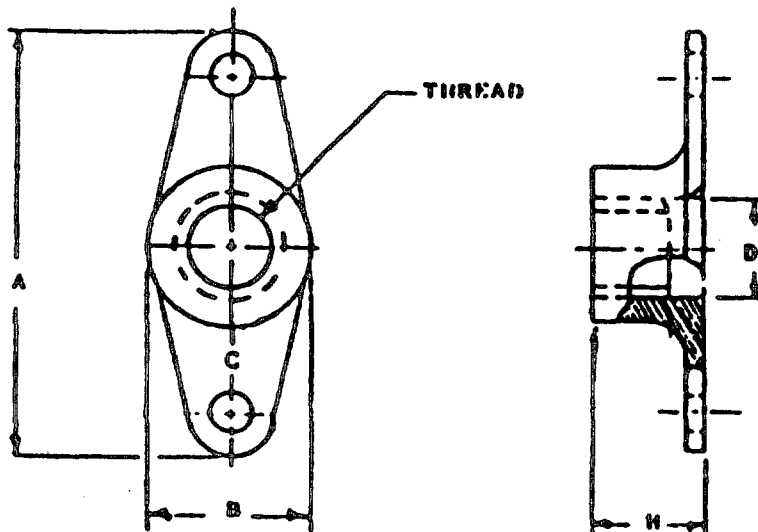
NUT, SELF-LOCKING, PLATE, TWO LUG, LOW HEIGHT, STEEL, 450 F, 125 KSI Ft<sub>u</sub>MS21047

TABLE I. DIMENSIONS AND CHARACTERISTICS

PART NO. MS21047 PLAIN HOLES FILM LUBRICATED		THREAD @ SIZE UNJ -3B	DIMENSIONS				AXIAL STRENGTH LBS-MIN
DRY	NON-DRY		A MAX	B DIA MAX	D DIA MIN	H MAX	
L04	-04	.1120-40	.948	.260	--	.143	750
L06	-06	.1380-32	.948	.265	--	.171	1130
L08	-08	.1640-32	.948	.297	.168	.250	1720
L3	-3	.1900-32	.948	.328	.194	.250	2460
L4	-4	.2500-28	1.260	.414	.254	.281	4580
L5	-5	.3175-24	1.292	.505	.317	.328	7390
L6	-6	.3750-24	1.292	.614	.379	.344	11450

FOR COUNTERSUNK OR DIMPLED HOLES ADD "K" AFTER PART DASH NUMBER.  
 COUNTERSUNK OR DIMPLED HOLES NOT AVAILABLE IN -6K, -7K, L6K, OR L7K PART NO.  
 @ PART NO. WITH "0" IN DASH NO. MEANS UNJC (04, 06, 08), OTHERS MEAN UNJF.

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## MIL-STD-242H(NAVY), PART 12

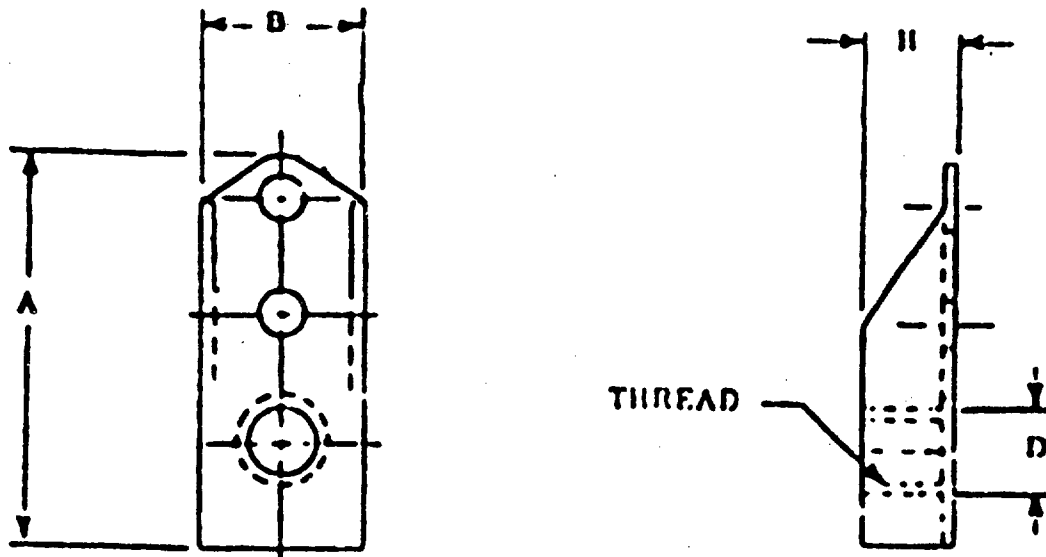
NUT, SELF-LOCKING, PLATE, ONE LUG, FLOATING, LOW HEIGHT, CRES, 450 F AND 800 F, 125 KSI Ft<sub>u</sub>MS21062

TABLE I. DIMENSIONS AND CHARACTERISTICS

PART NO. MS21062 PLAIN HOLES FILM LUBRICATED		THREAD @ SIZE UNJ -3B	DIMENSIONS				AXIAL STRENGTH LBS-MIN
450° F DRY	800° F NON-DRY		A MAX	B MAX	D DIA MIN	H MAX	
L04	-04	.1120-40	1.051	.422	--	.175	750
L06	-06	.1380-32	1.051	.422	--	.203	1130
L08	-08	.1640-32	1.051	.422	.168	.250	1720
L3	-3	.1900-32	1.051	.422	.194	.250	2460
L4	-4	.2500-28	1.306	.531	.254	.281	4580
L5	-5	.3125-24	1.396	.641	.317	.328	7390

FOR COUNTERSUNK OR DIMPLED HOLES ADD "K" AFTER PART DASH NUMBER.

COUNTERSUNK OR DIMPLED HOLES NOT AVAILABLE IN L6K OR -6K.

FOR WELDING PROJECTIONS ADD "W" AFTER PART DASH NUMBER.

@ PART NO. WITH "0" IN DASH NO. MEANS UNJC (04, 06, 08), OTHERS MEAN UNJF.

301.25

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MIL-STD-242H(NAVY), PART 12  
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NUT, SELF-LOCK, PLATE, TWO LUG, REDUCED RIVET  
SPACE, LOW HT., STEEL, 450°F, 125 KSI Ft<sub>u</sub>

MS21069

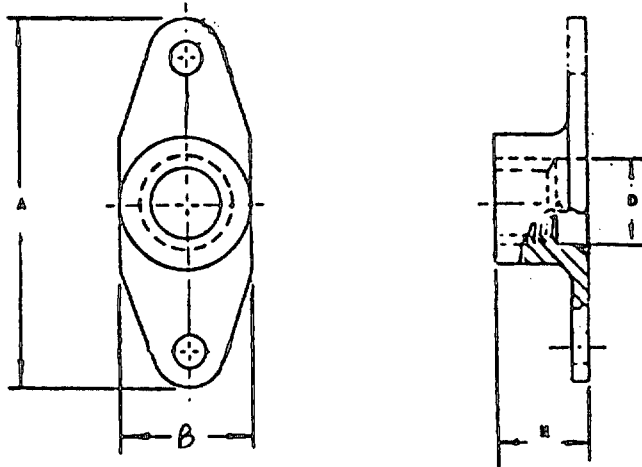


TABLE I. DIMENSIONS AND CHARACTERISTICS

PART NO. MS21069		THREAD @ SIZE UNJ -3B	DIMENSIONS				AXIAL STRENGTH LBS-MIN
PLAIN HOLES FILM LUBRICATED			A	B	D	H	
DRY	NON-DRY		MAX	MAX	DIA MIN	MAX	
L04	-04	4-40	.630	.260	--	.143	750
L06	-06	6-32	.661	.265	--	.171	1130
L08	-08	8-32	.692	.297	.168	.250	1720
L3	-3	10-32	.724	.328	.194	.250	2460
L4	-4	1/4-28	.786	.414	.254	.281	4580
L5	-5	5/16-24	1.006	.505	.317	.328	7390
L6	-6	3/8-24	1.116	.614	.379	.344	11450

FOR COUNTERSUNK OR DIMPLED HOLES ADD "K" AFTER PART DASH NUMBER.  
COUNTERSUNK OR DIMPLED HOLES NOT AVAILABLE IN -6K OR L6K PART NO.  
@ PART NO. WITH "0" IN DASH NO. MEANS UNJC (04, 06, 08), OTHERS MEAN JF.

## MIL-STD-242H(NAVY) PART 12

18 July 1984

FASTENER, BLIND, HIGH STRENGTH, FULL TYPE, POSITIVE  
MECHANICAL LOCK, 100 FLUSH HEAD, CORROSION RESISTING STEEL, 95 KSI Fsu

MS21140

TABLE II. GRIP TABULATIONS

5/32 DIA (-05)			3/16 DIA (-06)			1/4 DIA (-08)		
GRIP DASH NO.	GRIP RANGE MAX	C MAX	GRIP DASH NO.	GRIP RANGE MAX	C MAX	GRIP DASH NO.	GRIP RANGE MAX	C MAX
-0502	.157	.404	-0602	.157	.457	-0803	.220	.586
-0503	.220	.466	-0603	.220	.511	-0804	.282	.648
-0504	.282	.529	-0604	.282	.574	-0805	.345	.710
-0505	.345	.592	-0605	.345	.636	-0806	.407	.773
-0506	.407	.654	-0606	.407	.699	-0807	.470	.836
-0507	.470	.716	-0607	.470	.761	-0808	.532	.898
-0508	.532	.779	-0608	.532	.824	-0809	.595	.960
-0509	.595	.842	-0609	.595	.886	-0810	.657	1.023
-0510	.657	.904	-0610	.657	.949	-0811	.720	1.086
-0511	.720	.966	-0611	.720	1.011	-0812	.782	1.148
-0512	.782	1.029	-0612	.782	1.074	-0813	.845	1.210
-0513	.845	1.092	-0613	.845	1.136	-0814	.907	1.273
-0514	.907	1.154	-0614	.907	1.199	-0815	.970	1.336
-0515	.970	1.216	-0615	.970	1.261	-0816	1.032	1.398
-0516	1.032	1.279	-0616	1.032	1.324	-0817	1.095	1.460
			-0617	1.095	1.386	-0818	1.157	1.523
			-0618	1.157	1.449	-0819	1.220	1.586
			-0619	1.220	1.511	-0820	1.282	1.648
			-0620	1.282	1.574	-0821	1.345	1.710
						-0822	1.407	1.773
						-0823	1.470	1.836
						-0824	1.532	1.898

## MIL-STD-242H(NAVY), PART 12

FASTENER, BLIND, HIGH STRENGTH, FULL TYPE, POSITIVE  
MECHANICAL LOCK, 100 FLUSH HEAD, CORROSION RESISTING STEEL, 95 KSI Fsu

MS21140

TABLE II. GRIP TABULATIONS (CONT.)

5/16 DIA (-10)			3/8 DIA (-12)		
GRIP DASH NO.	GRIP RANGE MAX	C MAX	GRIP DASH NO.	GRIP RANGE MAX	C MAX
-1004	.282	.713	-1204	.282	.790
-1005	.345	.775	-1205	.345	.853
-1006	.407	.838	-1206	.407	.915
-1007	.470	.900	-1207	.470	.977
-1008	.532	.963	-1208	.532	1.040
-1009	.595	1.025	-1209	.595	1.103
-1010	.657	1.088	-1210	.657	1.165
-1011	.720	1.150	-1211	.720	1.227
-1012	.782	1.213	-1212	.782	1.290
-1013	.845	1.275	-1213	.845	1.353
-1014	.907	1.338	-1214	.907	1.415
-1015	.970	1.400	-1215	.970	1.477
-1016	1.032	1.463	-1216	1.032	1.540
-1017	1.095	1.525	-1217	1.095	1.603
-1018	1.157	1.588	-1218	1.157	1.665
-1019	1.220	1.650	-1219	1.220	1.727
-1020	1.282	1.713	-1220	1.282	1.790
-1021	1.345	1.775	-1221	1.345	1.853
-1022	1.407	1.838	-1222	1.407	1.915
-1023	1.470	1.900	-1223	1.470	1.977
-1024	1.532	1.963	-1224	1.532	2.040
-1025	1.595	2.025	-1225	1.595	2.103
-1026	1.657	2.088	-1226	1.657	2.165
-1027	1.720	2.150	-1227	1.720	2.227
-1028	1.782	2.213	-1228	1.782	2.290
			-1229	1.845	2.353
			-1230	1.907	2.415
			-1231	1.970	2.477
			-1232	2.032	2.540

351.4

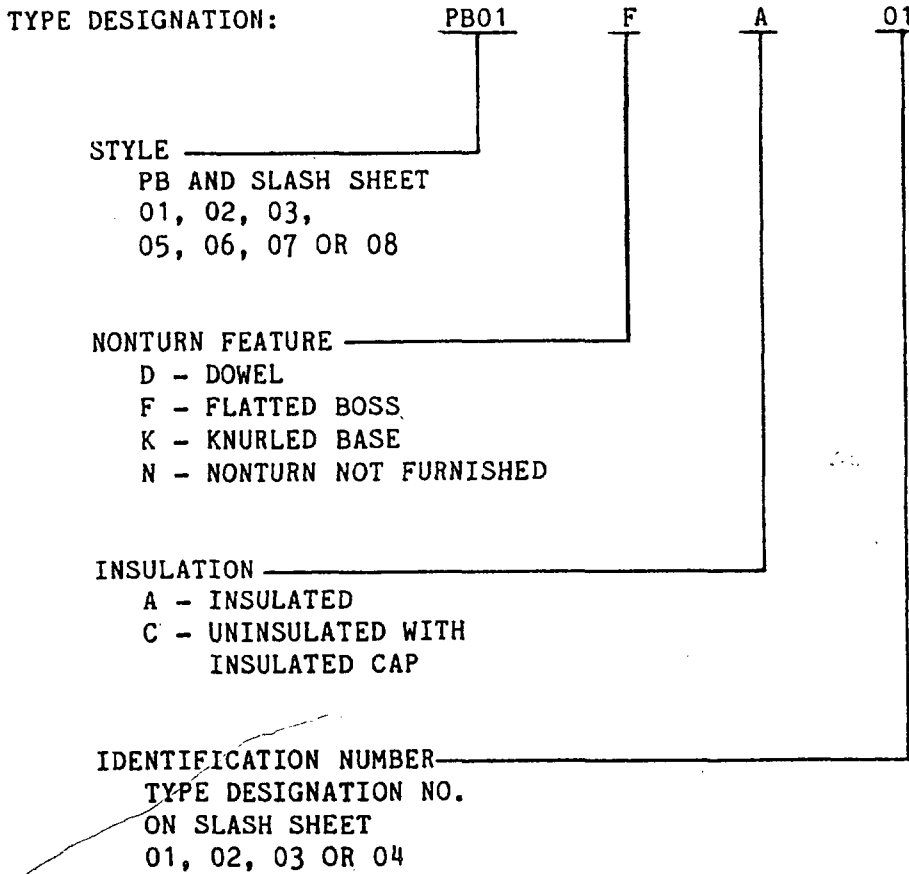
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MIL-STD-242H(NAVY) PART 12  
18 July 1984

POSTS, BINDING, ELECTRICAL (INSULATED AND UNINSULATED)

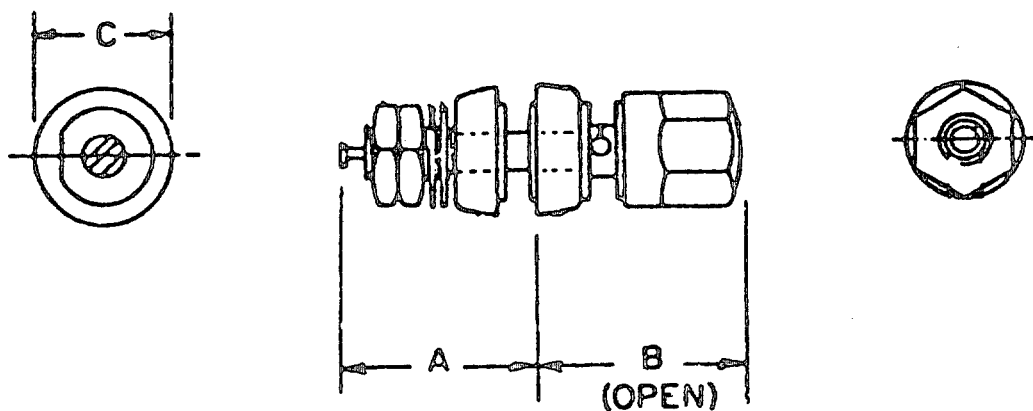
MIL-P-55149

SCOPE: THIS SECTION COVERS THE GENERAL REQUIREMENTS FOR INSULATED BINDING POSTS AND UNINSULATED BINDING POSTS WITH INSULATED AND UNINSULATED CAPS.



## MIL-STD-242H(NAVY), PART 12

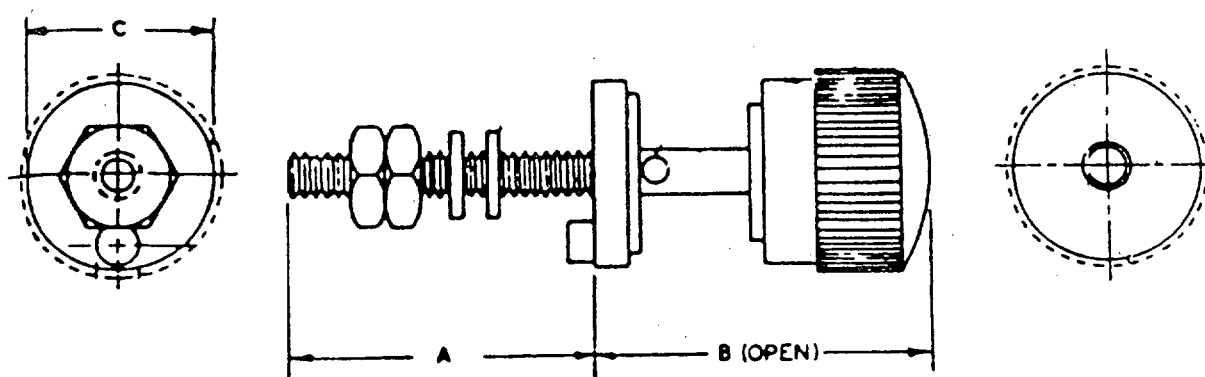
POSTS, BINDING, ELECTRICAL (INSULATED), TYPES PB01FA01 TO PB01FA04

MIL-P-55149/1

TYPE DESIGNATION	INSULATION COLOR	DIMENSIONS		
		A	B-MAX	C
PB01FA01	RED	0.690	1.035	0.500
PB01FA02	BLACK	0.690	1.035	0.500
PB01FA03	RED	0.910	1.187	0.640
PB01FA04	BLACK	0.910	1.187	0.640

## MIL-STD-242H(NAVY), PART 12

POSTS, BINDING, ELECTRICAL (UNINSULATED), TYPES PB02DC01 AND PB02DC02

MIL-P-55149/2

TYPE DESIGNATION	INSULATION COLOR	DIMENSIONS		
		A	B	C
PB02DC01	RED	1.125	1.250	0.687
PB02DC02	BLACK	1.125	1.250	0.687

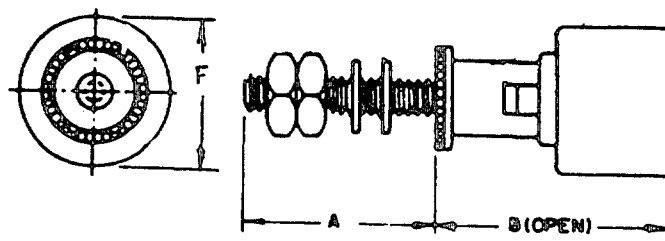
411.1

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## MIL-STD-242H(NAVY), PART 12

POSTS, BINDING, ELECTRICAL (UNINSULATED), TYPES PB03KC01 AND PB03KC02

MIL-P-55149/3

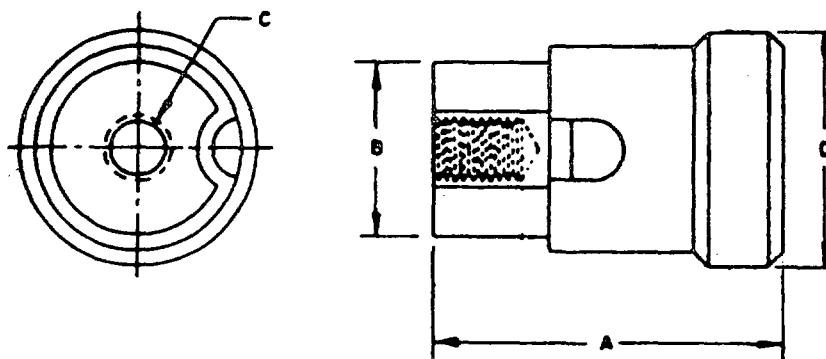
TYPE DESIGNATION	INSULATION COLOR	DIMENSIONS		
		A	B	F
PB03KC01	BLACK	0.562	0.734	0.500
PB03KC02	BLACK	0.812	0.172	0.625

411:2

MIL-STD-242H(NAVY), PART 12

POSTS, BINDING, ELECTRICAL (UNINSULATED), TYPE PB05NC01

MIL-P-55149/5



TYPE DESIGNATION	INSULATION COLOR	DIMENSIONS			
		A MAX	B	C	D
PB05NC01	BLACK	0.750	0.375	6-32 UNC-2B	0.500

411.3

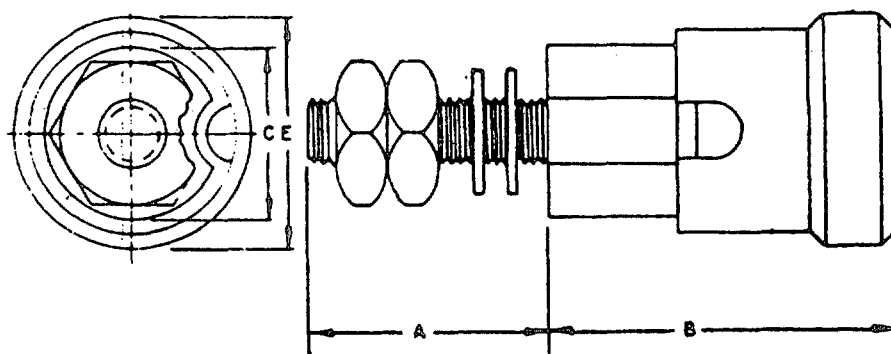
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## MIL-STD-242H(NAVY) PART 12

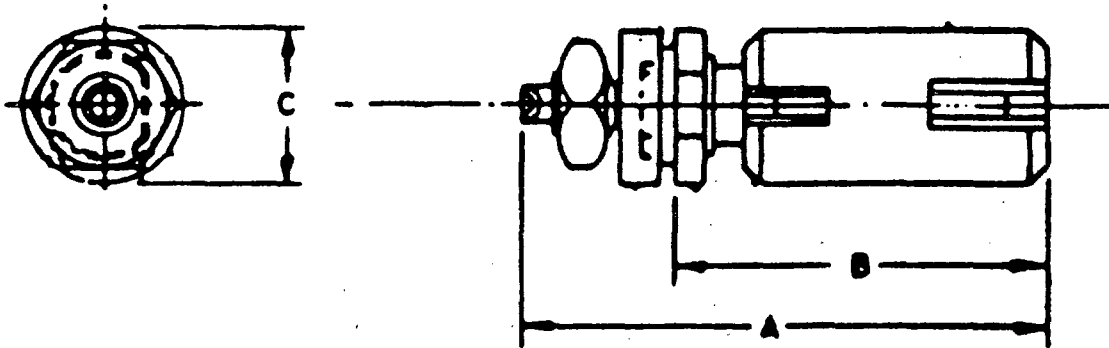
POSTS, BINDING, ELECTRICAL (UNINSULATED), TYPE PB06NC01

MIL-P-55149/6

TYPE DESIGNATION	INSULATION COLOR	DIMENSIONS			
		A	B MAX	C	E
PB06NC01	BLACK	0.500	0.750	.375	0.500

## MIL-STD-242H(NAVY), PART 12

POSTS, BINDING, ELECTRICAL (INSULATED), TYPE PB07FA01

MIL-P-55149/7

TYPE DESIGNATION	INSULATION COLOR	DIMENSIONS (MAX)		
		A	B	C
PB07FA01	OLIVE DRAB	1.612	1.072	.400

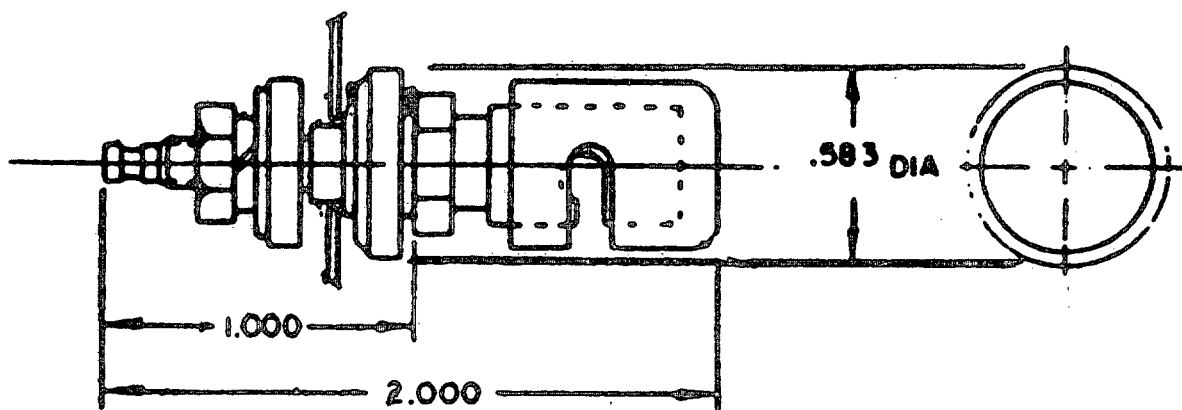
421.1

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## MIL-STD-242H(NAVY), PART 12

POSTS, BINDING, ELECTRICAL WATERPROOF (INSULATED), TYPES PB08NA01 AND PB08NA02

MIL-P-55149/8

TYPE DESIGNATION	CAP COLOR	TYPE DESIGNATION	CAP COLOR
PB08NA01	BLACK	PB08NA02	RED

421.2

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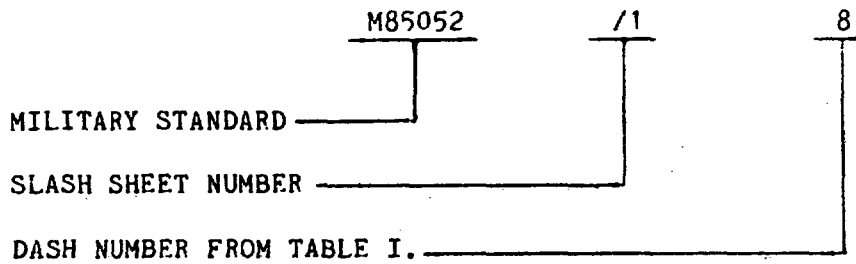
MIL-STD-242H(NAVY) PART 12  
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CLAMP, LOOP, CUSHION

MIL-C-85052

SCOPE: THIS SECTION COVERS TUBE SUPPORT LOOP CLAMPS. THESE CLAMPS ARE INTENDED FOR USE IN GENERAL CLAMPING OF FLUID AND ELECTRICAL AND RIGID TUBING. THE CLAMPS MAY BE USED WITHIN THE CUSHION TEMPERATURE 250°F OR 500°F.

PART NUMBER EXAMPLE: M85052/1-8



## MIL-STD-242H(NAVY), PART 12

CLAMP, LOOP, TUBE-17-7 PH CRES, 275 F, FUEL AND PETROLEUM BASED HYDRAULIC FLUID RESISTANT

MIL-C-85052/1

TABLE I SEE PAGE 451.2

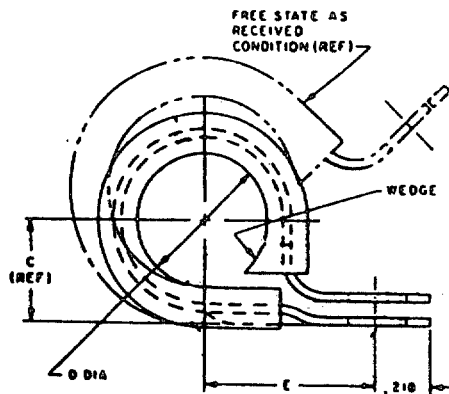
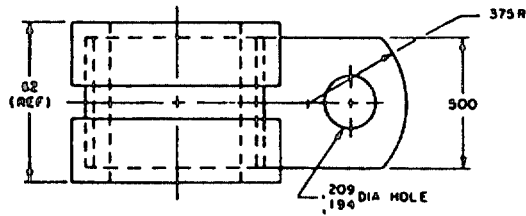


TABLE I. DIMENSIONS AND CHARACTERISTICS

PART NO. MIL-C-85052/_-	DIMENSIONS			PART NO. MIL-C-85052/_-	DIMENSIONS		
	C	D	E		C	D	E
2	.192	.125	.468				
3	.224	.188	.499	14	.580	.875	.898
4	.255	.250	.530	15	.611	.938	.929
5	.286	.312	.561	16	.642	1.000	.960
6	.318	.375	.592	17	.681	1.062	1.001
7	.349	.438	.624	18	.712	1.125	1.032
8	.380	.500	.655	19	.744	1.188	1.064
9	.423	.562	.741	20	.775	1.250	1.095
10	.454	.625	.772	21	.806	1.312	1.126
11	.486	.688	.804	22	.838	1.375	1.158
12	.517	.750	.835	23	.869	1.438	1.189
13	.548	.812	.866	24	.900	1.500	1.220

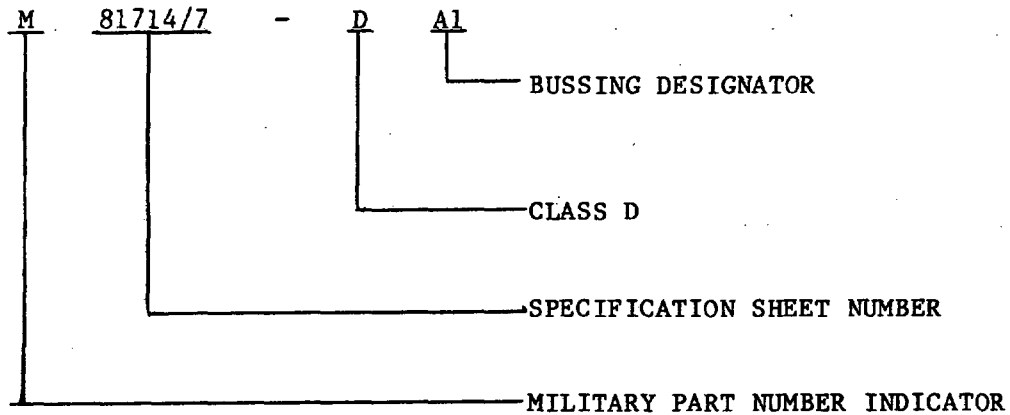
## MIL-STD-242H(NAVY), PART 12

## TERMINAL JUNCTION SYSTEM

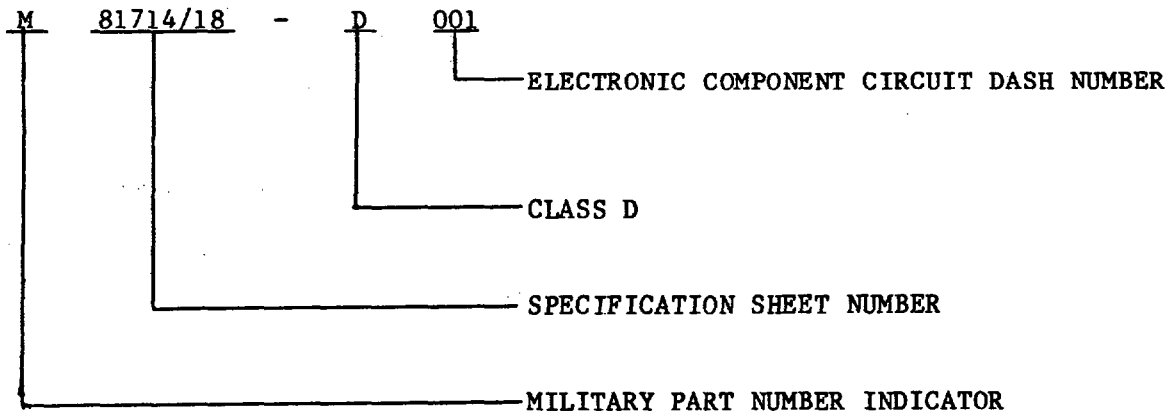
MIL-T-81714

SCOPE: THIS SECTION COVERS THE COMPONENTS WHICH ARE USED FOR INTERCONNECTION OF WIRING IN TERMINAL JUNCTION SYSTEMS. THE COMPONENTS MAKING UP THE SYSTEM AND COVERED BY THIS SECTION INCLUDE FEEDBACK AND FEEDTHRU TYPES TERMINAL JUNCTION MODULES, TRACKS FOR MODULES, AND REMOVABLE CONTACT WIRE SPLICES.

## BUSSING BLOCKS



## ELECTONIC BLOCKS



541.1

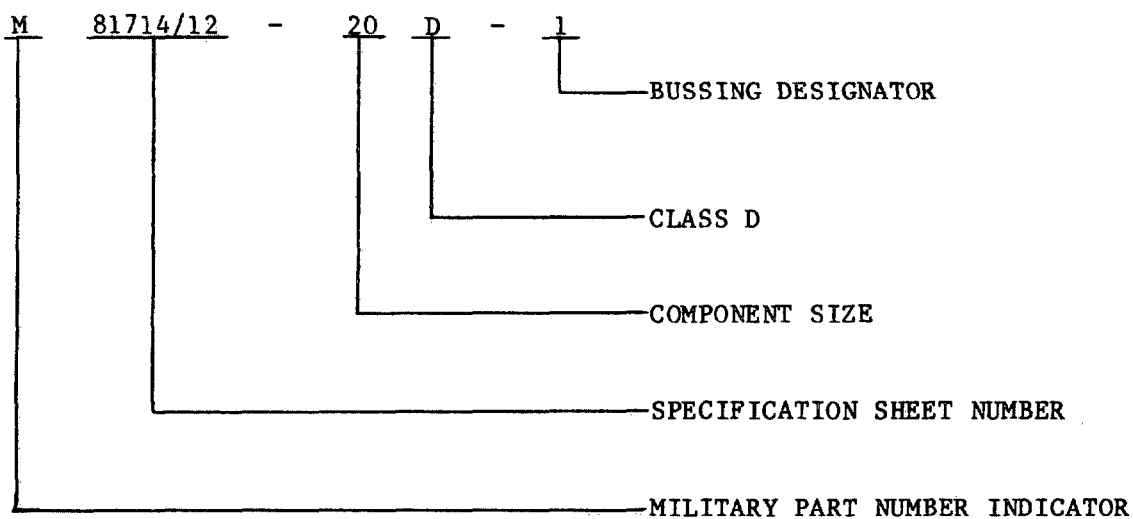
SUPERSEDES PAGE 541.1 OF 18 JULY 1984

MIL-STD-242H(NAVY), PART 12

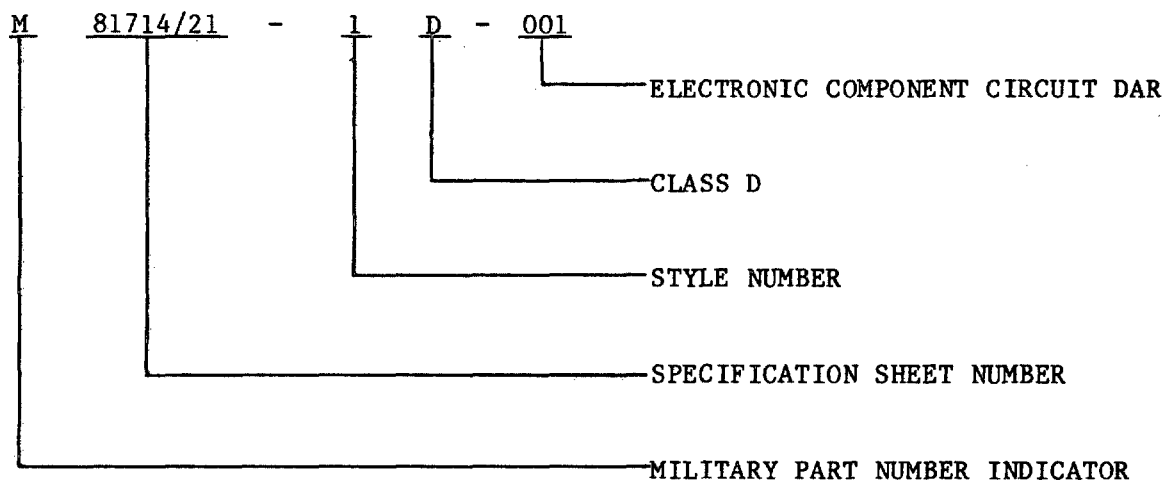
TERMINAL JUNCTION SYSTEM

MIL-T-81714

WIRE IN-LINE JUNCTIONS



ELECTRONIC IN-LINE JUNCTIONS



541.1A

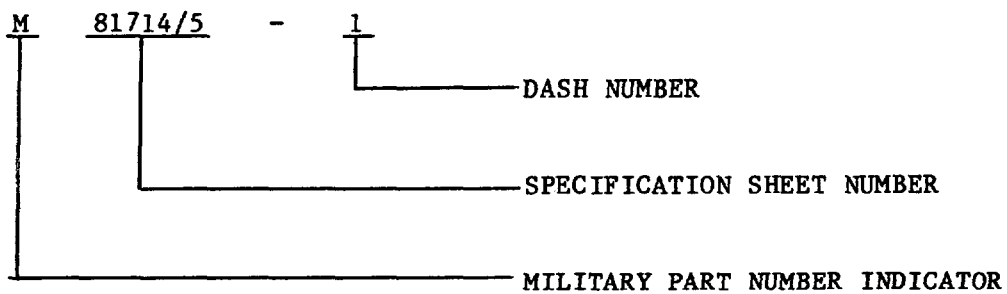
SUPERSEDES PAGE 541.1 OF 18 JULY 1984

MIL-STD-242H(NAVY), PART 12

TERMINAL JUNCTION SYSTEM

MIL-T-81714

RACKS AND BRACKETS



541.1B

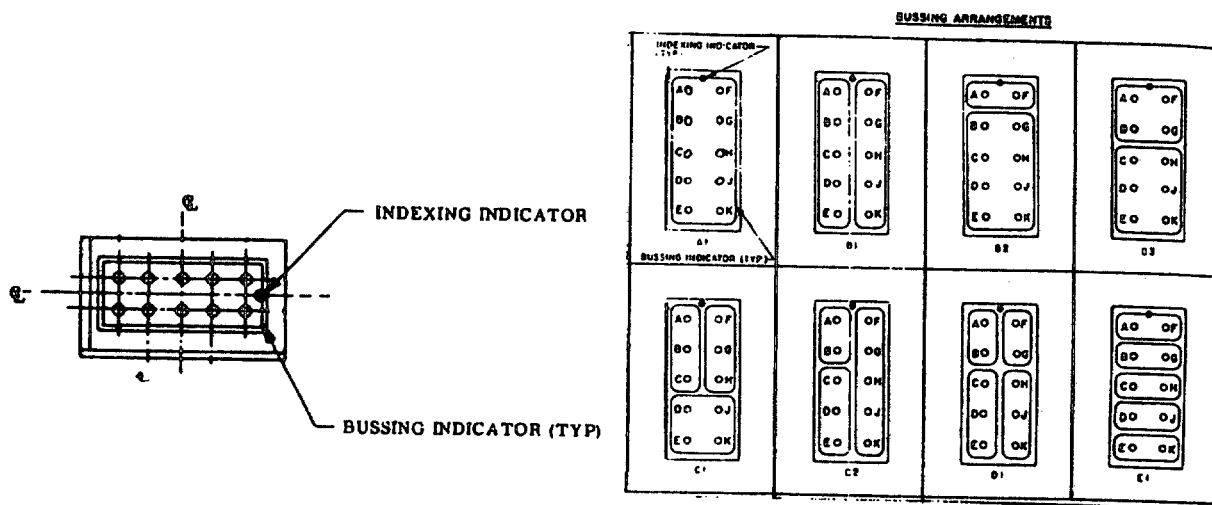
SUPERSEDES PAGE 541.1 OF 18 JULY 1984



MIL-STD-242H(NAVY), PART 12

TERMINAL JUNCTION SYSTEM  
MODULES, FEEDBACK TYPE, SIZE 22

MIL-T-81714/1



MODULE BLOCK

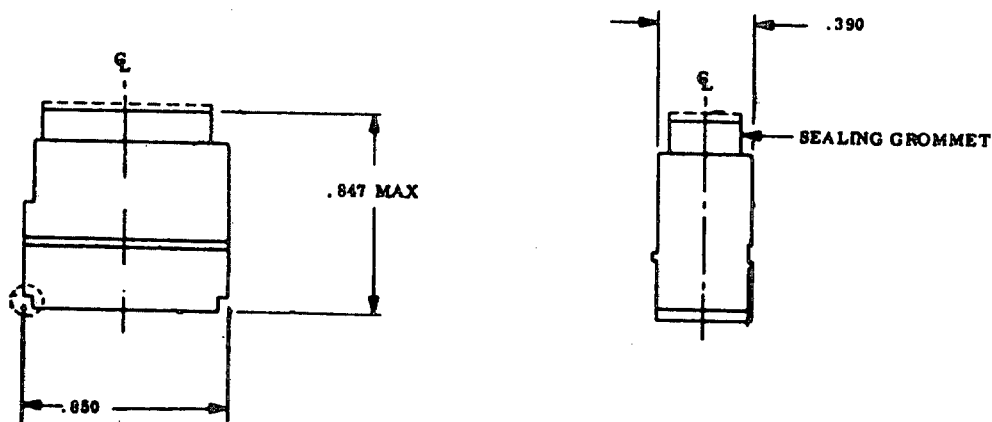


TABLE I.

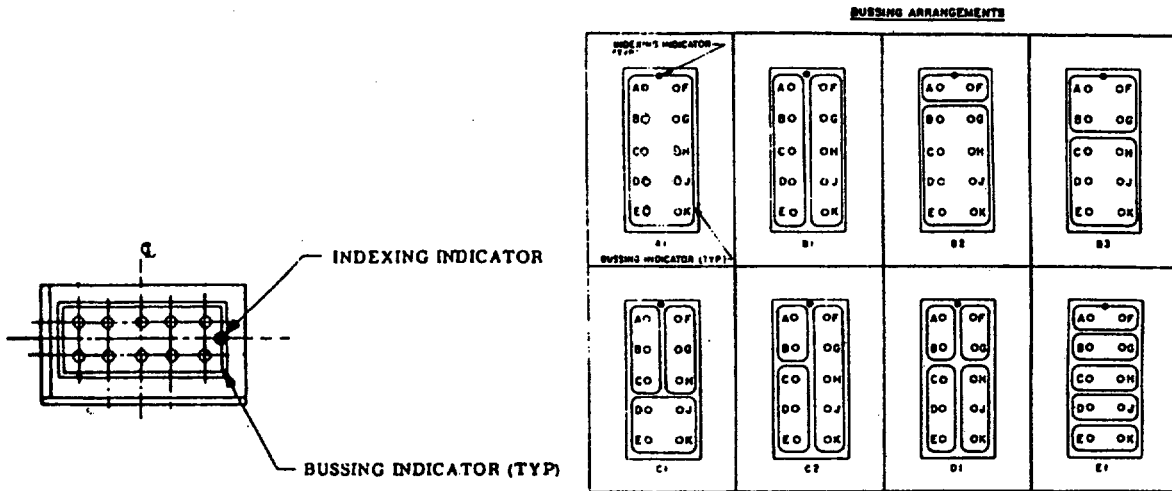
PART NUMBER	CONSISTS OF MODULE BLOCK AND	
	CONTACTS PART NUMBER	SEALING PLUGS PART NUMBER
M81714/1-D**	M39029/1-100	MS27488-20

\*\*BUSSING ARRANGEMENT

MIL-STD-242H(NAVY), PART 12

TERMINAL JUNCTION SYSTEM  
MODULES, FEEDBACK TYPE, SIZE 20

MIL-T-81714/2



MODULE BLOCK

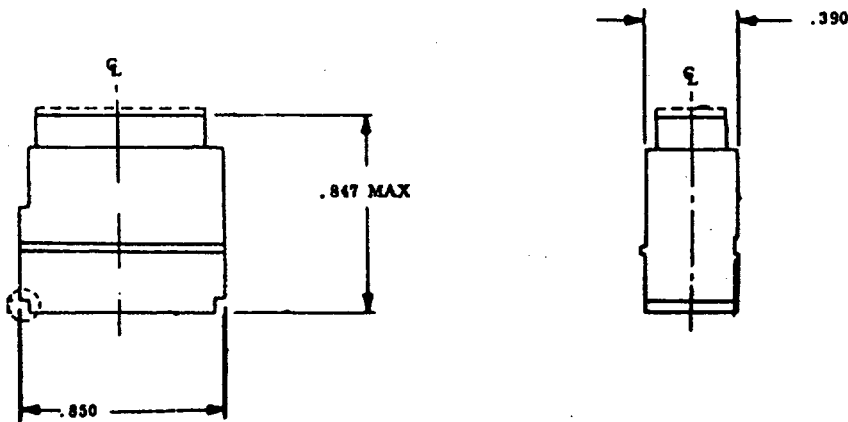


TABLE I.

PART NUMBER	CONSISTS OF MODULE BLOCK AND	
	CONTACTS PART NUMBER	SEALING PLUGS PART NUMBER
M81714/2-D**	M39029/1-101	MS27488-20

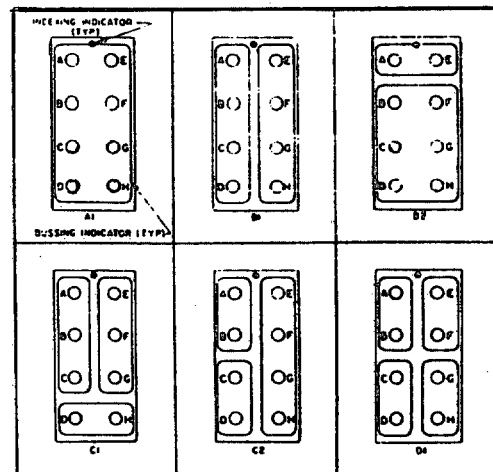
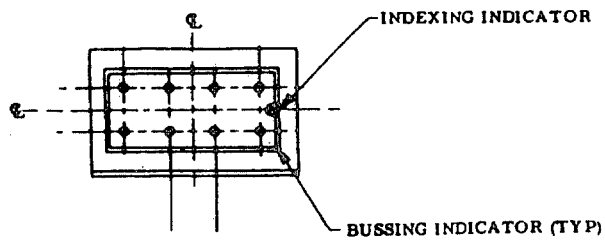
\*\*BUSSING ARRANGEMENT

MIL-STD-242H(NAVY), PART 12

TERMINAL JUNCTION SYSTEM  
MODULES, FEEDBACK TYPE, SIZE 16

MIL-T-81714/3

**BUSSING ARRANGEMENTS**



MODULE BLOCK

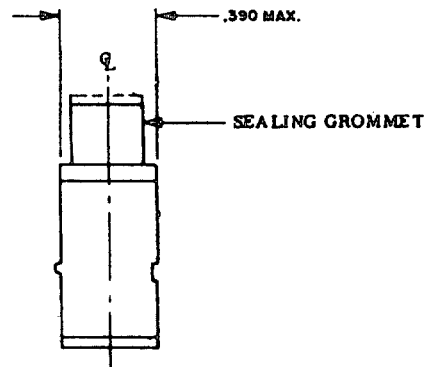
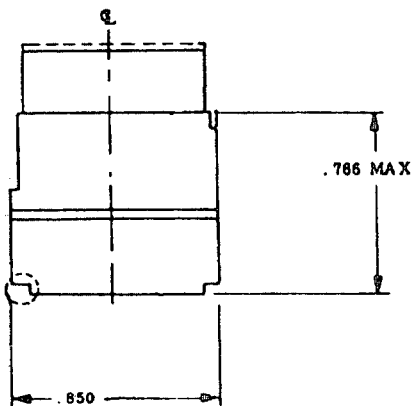


TABLE I. PART NUMBER

PART NUMBER	CONSISTS OF MODULE BLOCK AND	
	CONTACTS PART NUMBER	SEALING PLUG PART NUMBER
M81714/3-D**	M39029/1-102	MS27488-16

\*\*BUSSING ARRANGEMENT

MIL-STD-242H(NAVY), PART 12

TERMINAL JUNCTION SYSTEM  
MODULES, FEEDBACK TYPE, SIZE 12

MIL-T-81714/4

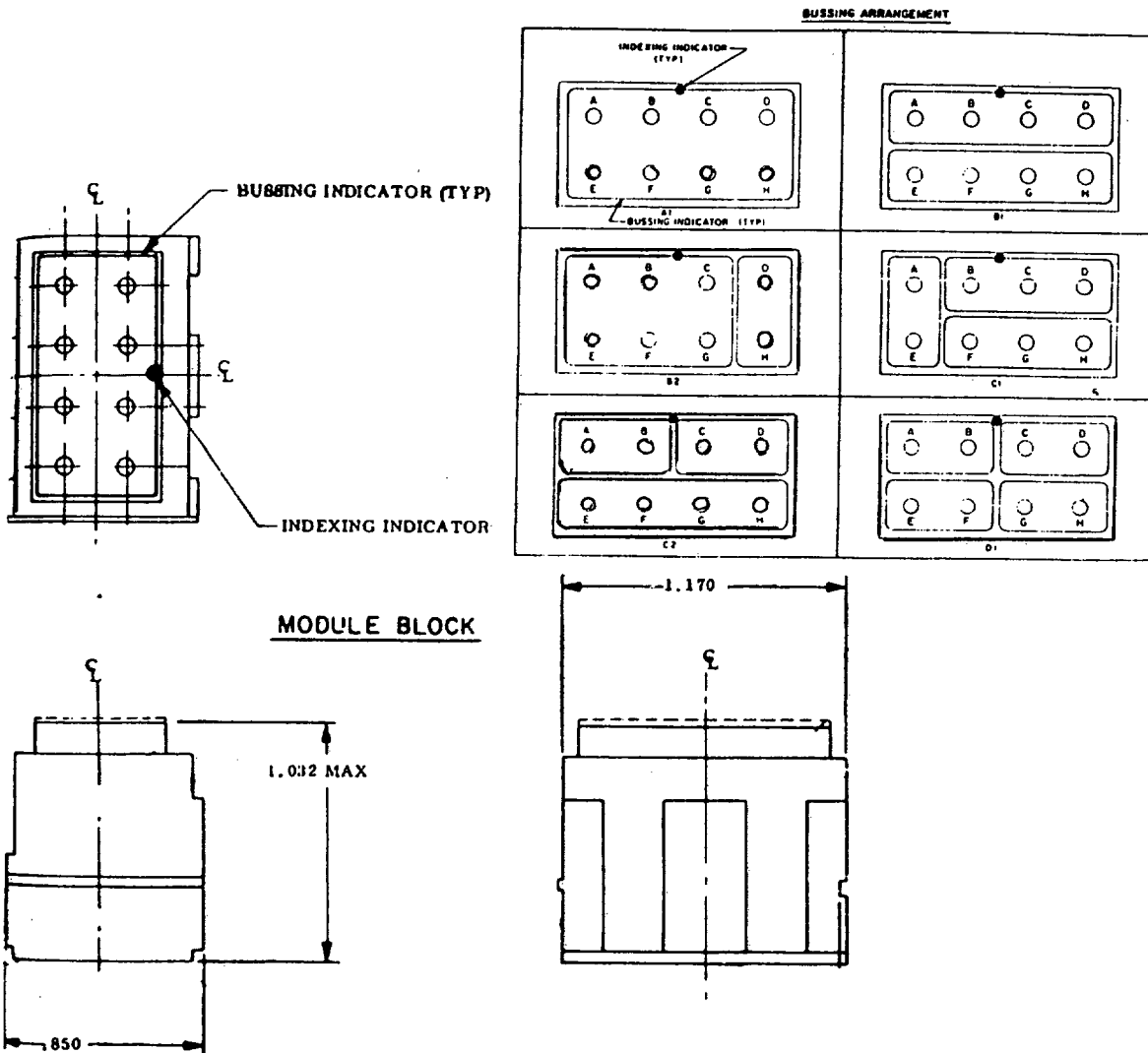


TABLE I. PART NUMBER

PART NUMBER	CONSISTS OF MODULE BLOCK AND	
	CONTACTS PART NUMBER	SEALING PLUGS PART NUMBER
M81714/4-D**	M39029/1-103	MS27488-12

\*\*BUSSING ARRANGEMENT

MIL-STD-242H(NAVY), PART 12

TERMINAL JUNCTION SYSTEM  
MODULES, FEEDTHRU TYPE, SIZE 22

MIL-T-81714/6

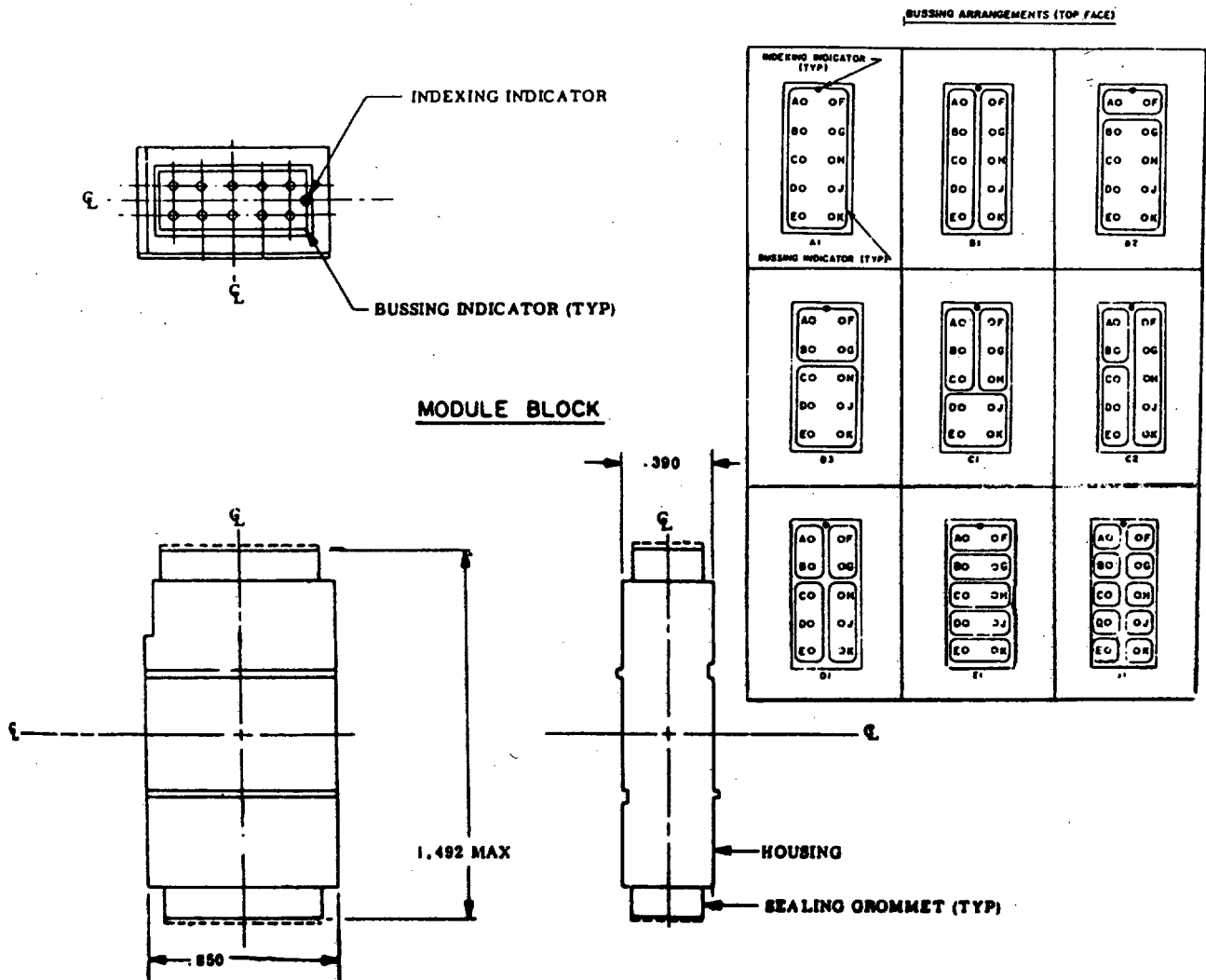


TABLE I.

PART NUMBER	CONSISTS OF MODULE BLOCK AND	
	CONTACTS PART NUMBER	SEALING PLUGS PART NUMBER
M81714/6-D**	M39029/1-100	MS27488-20

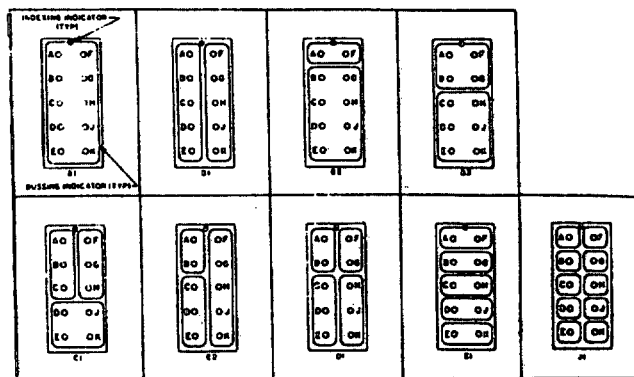
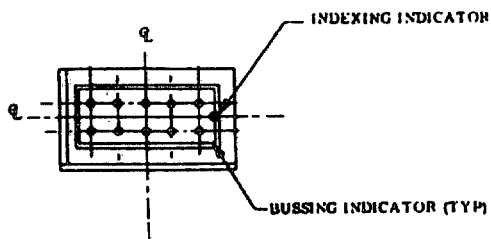
\*\*BUSSING ARRANGEMENT

MIL-STD-242H(NAVY), PART 12

TERMINAL JUNCTION SYSTEM  
MODULES, FEEDTHRU TYPE, SIZE 20

MIL-T-81714/7

BUSSING ARRANGEMENTS



MODULE BLOCK

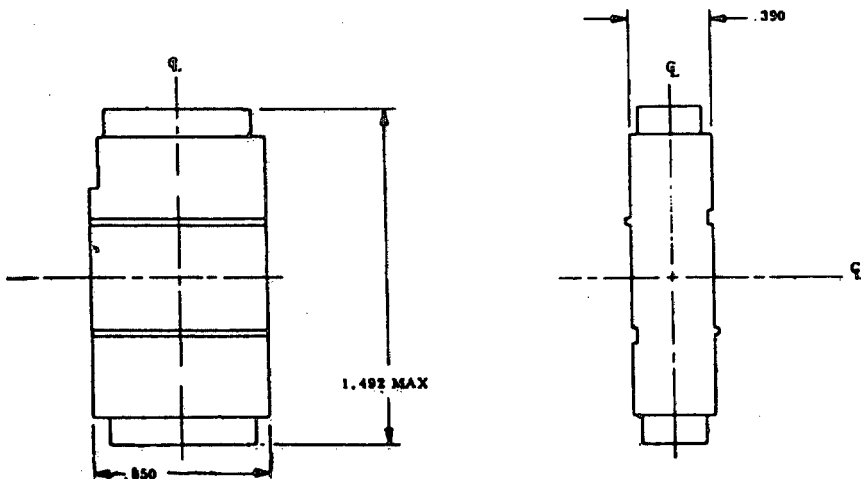


TABLE I. PART NUMBER

PART NUMBER	CONSISTS OF MODULE BLOCK AND		INSERTION/ EXTRACTION TOOL PART NUMBER
	CONTACTS PART NUMBER	SEALING PLUGS PART NUMBER	
M81714/7-D**	M39029/1-101	MS27488-20	M81969/14-20 OR M81969/8-06

\*\* BUSSING ARRANGEMENT

MIL-STD-242H(NAVY), PART 12

TERMINAL JUNCTION SYSTEM  
MODULES, FEEDTHRU TYPE, SIZE 16

MIL-T-81714/8

BUSSING ARRANGEMENT

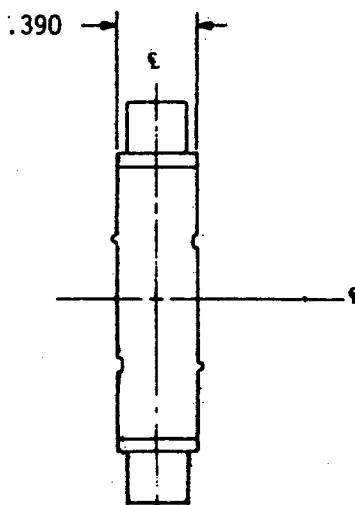
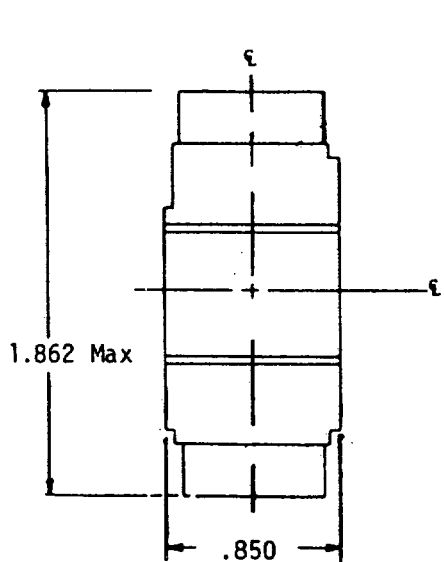
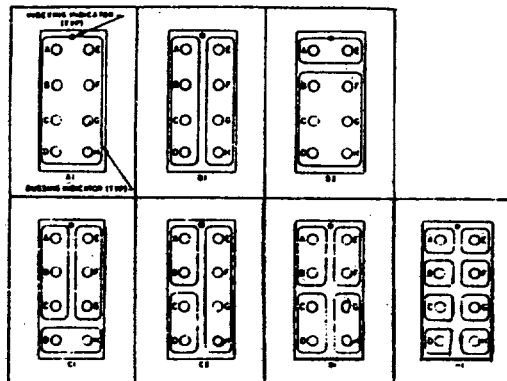
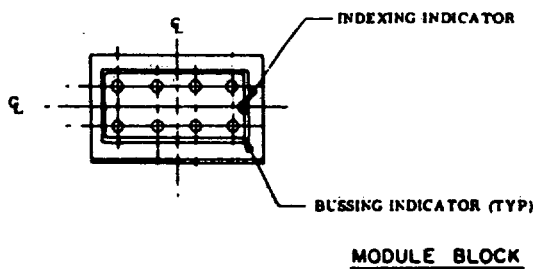


TABLE I. PART NUMBER

PART NUMBER	CONSISTS OF MODULE BLOCK AND		INSERTION/ EXTRACTION TOOL PART NUMBER
	CONTACTS PART NUMBER	SEALING PLUGS PART NUMBER	
M81714/8-D**	M39029/1-102	MS27488-16	M81969/14-03 OR M81969/8-08

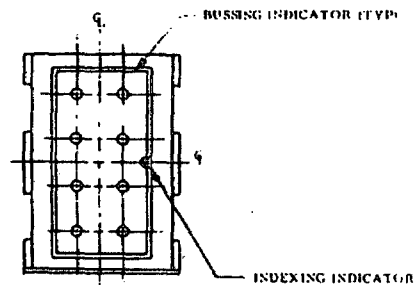
\*\*BUSSING ARRANGEMENT

MIL-STD-242H(NAVY), PART 12

TERMINAL JUNCTION SYSTEM  
MODULES, FEEDTHRU TYPE, SIZE 12

MIL-T-81714/9

BUSSING ARRANGEMENTS (TOP FACE)



MODULE BLOCK

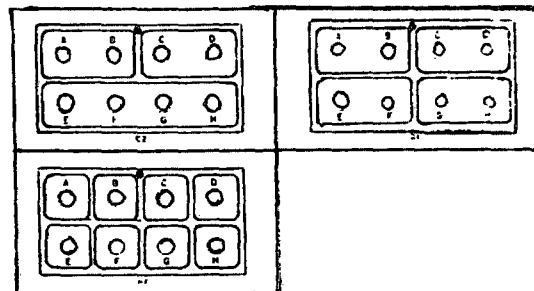
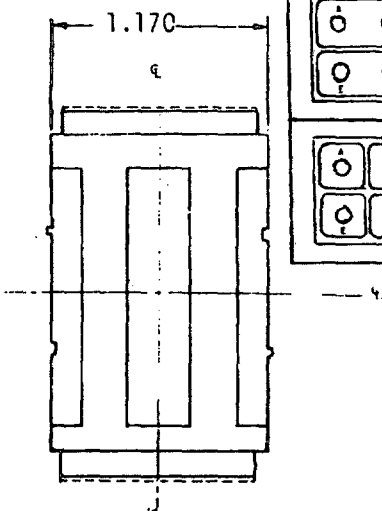
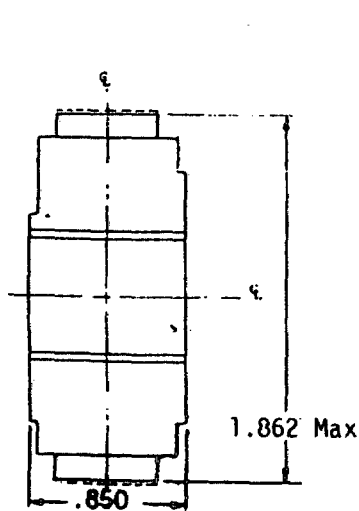
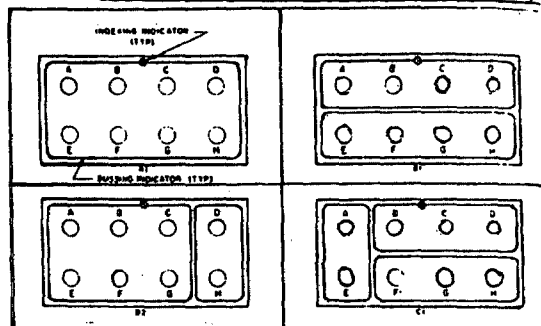


TABLE I. PART NUMBER

PART NUMBER	CONSISTS OF MODULE BLOCK AND		INSERTION/ EXTRACTION TOOL PART NUMBER
	CONTACTS PART NUMBER	SEALING PLUGS PART NUMBER	
M81714/9-D**	M39029/1-103	MS27488-12	M81969/14-04 OR M81969/8-10

\*\*BUSSING ARRANGEMENT



## MIL-STD-242H(NAVY), PART 12

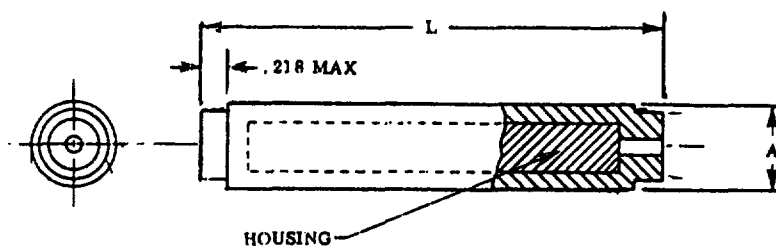
TERMINAL JUNCTION SYSTEM  
SPLICE, SINGLEMIL-T-81714/11SINGLE SPLICE BODY

TABLE I. IN-LINE JUNCTION

PART NUMBER	SPLICE CONSISTS OF		INSTALLING REMOVAL TOOL	
	BODY			CONTACTS
	A DIA	L MAX		PART NUMBER
M81714/11-22D	.250	1.552	M39029/1-100	M81969/14-02
M81714/11-20D	.250	1.552	M39029/1-101	M81969/14-02
M81714/11-16D	.281	1.922	M39029/1-102	M81969/14-03
M81714/11-12D	.344	1.922	M39029/1-103	M81969/14-04

549.1

SUPERSEDED PAGE 549.1 OF 18 JULY 1984

## MIL-STD-242H(NAVY), PART 12

TERMINALS, LUG AND SPLICES, CONDUCTOR, CRIMP STYLE, COPPER  
 INSULATED, RECTANGULAR TONGUE,  
 FOR THIN WALL WIRE, TYPE II CLASS I  
 FOR 105°C TOTAL CONDUCTOR TEMPERATURE

## MIL-T-7928/2

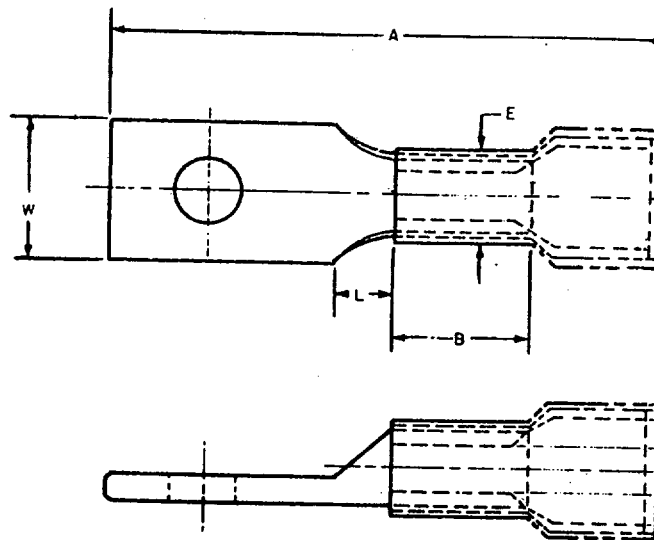


TABLE I. PART NO., DIMENSIONS, COLOR

PART NO. M7928/2-	WIRE SIZE	DIMENSIONS						INSUL. SLEEVE COLOR	WIRE SIZE COLOR
		STUD SIZE	A MAX.	B MIN.	E DIA	L MAX	W		
1	22	4 (.112)	.842	.156	.215 .190	.125	.237	RED	GREEN
2		4 (.112)	1.061			.156			
3		5 (.125)	.905			.125	.277		
4		6 (.138)	1.061			.156	.237		
5		6 (.138)	1.155			.250	.302		
6		8 (.164)	1.405			.281	.390		
7		8 (.164)							
8	20	4 (.112)	.842	.156	.215 .190	.125	.237	RED	RED
9		4 (.112)	1.061			.156			
10		5 (.125)	.905			.125	.277		
11		6 (.138)	1.061			.156	.237		
12		6 (.138)	1.155			.250	.302		
13		8 (.164)	1.405			.281	.390		
14		8 (.164)							

## MIL-STD-242H(NAVY), PART 12

TERMINALS, LUG AND SPLICES, CONDUCTOR, CRIMP STYLE, COPPER  
 INSULATED, RECTANGULAR TONGUE,  
 FOR THIN WALL WIRE, TYPE II CLASS I  
 FOR 105°C TOTAL CONDUCTOR TEMPERATURE

MIL-T-7928/2

TABLE I. PART NO., DIMENSIONS, COLOR

PART NO. M7928/2-	WIRE. SIZE	STUD SIZE	DIMENSIONS					INSUL. SLEEVE COLOR	WIRE SIZE COLOR
			A MAX.	B MIN.	E DIA	L MAX	W		
15	18	4 (.112)	.842	.156	.215 .190	.125 .156	.237 .277	RED	WHITE
16		4 (.112)	1.061						
17		5 (.125)	.905						
18		6 (.138)	1.061						
19		6 (.138)	1.155						
20		8 (.164)							
21		8 (.164)	1.405						
22		16	4 (.112)						
23	4 (.112)		1.061						
24	5 (.125)		.905						
25	6 (.138)		1.061						
26	6 (.138)		1.155						
27	8 (.164)								
28	8 (.164)		1.405						
29	14		4 (.112)	.842	.156	.240 .210	.125 .156	.237 .277	BLUE
30		4 (.112)	1.061						
31		5 (.125)	.905						
32		6 (.138)	1.061						
33		6 (.138)	1.155						
34		8 (.164)							
35		8 (.164)	1.405						
36		12	4 (.112)	1.062					
37	4 (.112)		1.281						
38	5 (.125)		1.124						
39	6 (.138)		1.281						
40	6 (.138)		1.359						
41	8 (.164)								
42	8 (.164)		1.609						
43	10		4 (.112)	1.062	.234	.300 .275	.125 .156	.237 .277	YELLOW
44		4 (.112)	1.281						
45		5 (.125)	1.124						
46		6 (.138)	1.281						
47		6 (.138)	1.359						
48		8 (.164)							
49		8 (.164)	1.609						

## MIL-STD-242H(NAVY), PART 12

TERMINAL, LUG, CRIMP STYLE, COPPER, INSULATED, RECTANGULAR TONGUE, TYPE I, CLASS 1  
FOR 105° C TOTAL CONDUCTOR TEMPERATURE

MS17143

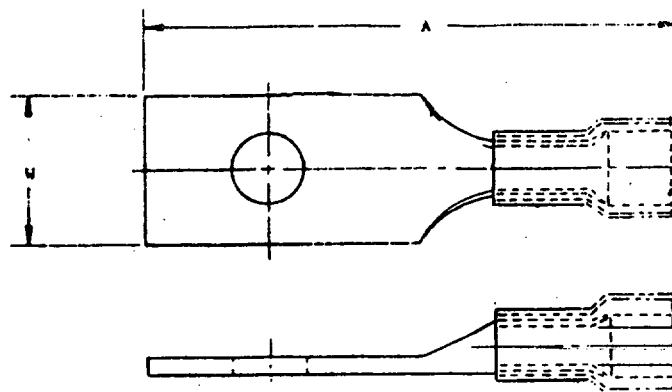


TABLE I. TYPE DESIGNATOR AND CHARACTERISTICS.

PART NUMBER MS17143-	WIRE SIZE AWG	STUD SIZE (DEC)	DIMENSIONS		INSULATION SLEEVE COLOR
			A(MAX)	W(MAX)	
1	22-18	.164	1.359	.390	RED
2	16-14		1.531		BLUE
3	12-10		1.109		YELLOW
4	22-18	.138	1.109	.302	RED
5	16-14		1.281		BLUE
6	12-10		1.109		YELLOW
7	22-18	.164	1.109	.277	RED
8	16-14		1.281		BLUE
9	12-10		.859		YELLOW
10	22-18	.125	1.046	.237	RED
11	16-14		1.015		BLUE
12	12-10		1.015		YELLOW
13	22-18	.138	1.203	.237	RED
14	16-14		1.015		BLUE
15	12-10		1.203		YELLOW
16	22-18	.112	.796	.237	RED
17	16-14		1.203		BLUE
18	12-10		.984		YELLOW
19	22-18	.112	1.203	.237	RED
20	16-14		.796		BLUE
21	12-10		.984		YELLOW

563.7

SUPERSEDES PAGE 563.7 OF 18 JULY 1984

## MIL-STD-242H(NAVY), PART 12

TERMINAL, LUG, CRIMP STYLE, COPPER, UNINSULATED, RING TONGUE, TYPE I, CLASS 1  
FOR 175° C TOTAL CONDUCTOR TEMPERATURE

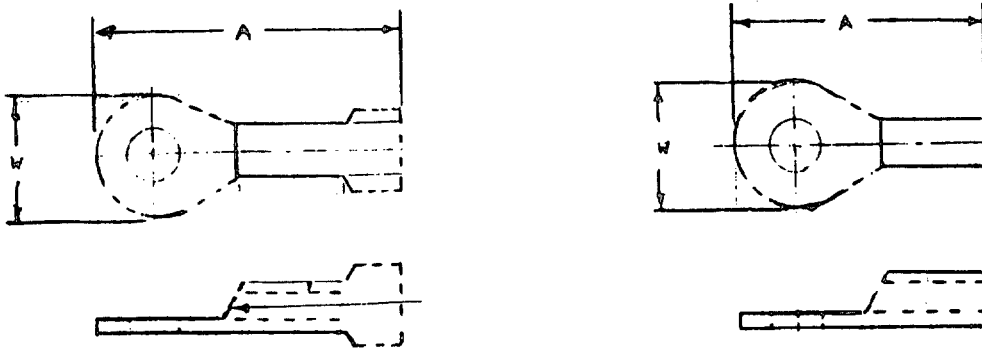
MS20659

TABLE I. TYPE DESIGNATOR AND CHARACTERISTICS.

PART NUMBER MS20659-	WIRE SIZE AWG	STUD SIZE (DEC)	DIMENSIONS	
			A(MAX)	W(MAX)
167	22-18	.086	.890	.260
138		.112		
101		.138		
102		.190	.986	.320
161		.312	1.187	.540
125		.375	1.308	
162		.500	1.530	.733
139	16-14	.112	.947	.266
103		.138	.955	.327
126		.947	.266	
104		.190	.955	.327
163		.312	1.249	.540
127		.375	1.290	
164	12-10	.500	1.593	.733
165		.138	.955	.317
105		.190	.969	.391
106		.312	1.156	.547
128		.375	1.172	.598
166		.500	1.718	.733
140	8	.164	1.150	.429
107		.190		

563.8

SUPERSEDES PAGE 563.8 OF 18 JULY 1984

## MIL-STD-242H(NAVY), PART 12

TERMINAL, LUG, CRIMP STYLE, COPPER, UNINSULATED, RING TONGUE, TYPE I, CLASS 1  
FOR 175° C TOTAL CONDUCTOR TEMPERATURE

MS20659

TABLE I. TYPE DESIGNATOR AND CHARACTERISTICS. (CONT.)

PART NUMBER MS20659-	WIRE SIZE AWG	STUD SIZE (DEC)	DIMENSIONS	
			A(MAX)	W(MAX)
141	8	.250	1.219	.478
108		.312	1.297	.590
129		.375		
142		.500	1.545	.833
130	6	.190	1.312	.503
109		.250		
131		.312	1.437	.623
110		.375		
143	4	.500	1.676	.833
144		.190	1.400	.628
111		.250		
132		.312	1.489	.648
112		.375		
145		.500	1.721	.833

563.9

SUPERSEDES PAGE 563.9 OF 18 JULY 1984

## MIL-STD-242H(NAVY) PART 12

TERMINAL, LUG, UNINSULATED, RECTANGULAR TONGUE, CRIMP STYLE, COPPER, TYPE I, CLASS 1  
FOR 175 C TOTAL CONDUCTOR TEMPERATURE

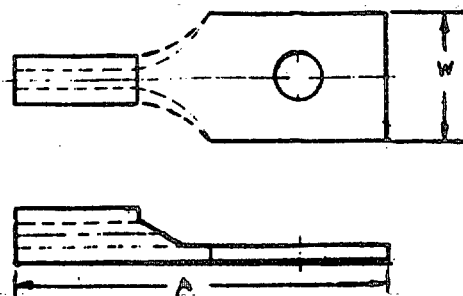
MS21004

TABLE I. TYPE DESIGNATOR AND CHARACTERISTICS.

PART NUMBER MS21004-	WIRE SIZE AWG	STUD SIZE (DEC)	DIMENSIONS	
			A(MAX)	W(MAX)
22	22-18	.086	.759	.182
1		.112	.826	.237
2		.125	.858	.277
3		.164	1.040	.302
4		.138		.302
5		.112	.980	.237
6		.138		.237
7	16-14	.164	1.290	.390
8		.112	.889	.237
9		.125	.921	.277
10		.164	1.075	.302
11		.138		.302
12		.112	1.043	.237
13		.138		.237
14	12-10	.164	1.294	.390
15		.112	1.014	.237
16		.125	1.146	.277
17		.164	1.200	.302
18		.138		.302
19		.112	1.168	.237
20		.138		.237
21		.164	1.419	.390

## MIL-STD-242H(NAVY) PART 12

18 July 1984

TERMINAL, LUG, CRIMP STYLE, COPPER, INSULATED, RING TONGUE, BELL-MOUTHED,  
TYPE II, CLASS 1, FOR 105°C TOTAL CONDUCTOR TEMPERATURE

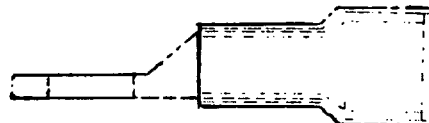
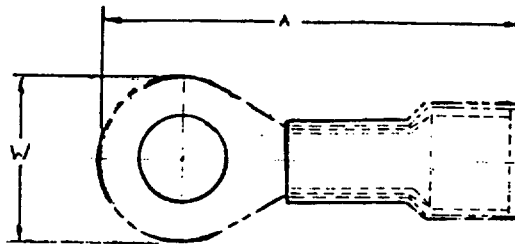
MS25036

TABLE I. TYPE DESIGNATOR AND CHARACTERISTICS.

PART NUMBER MS25036-	WIRE SIZE AWG	STUD SIZE (DEC)	DIMENSIONS		INSULATION SLEEVE COLOR
			A(MAX)	W(MAX)	
143	26-24	.086	.740	.210	YELLOW
144		.112	.755	.260	
145		.138	.855	.330	
146		.164	.865		
147		.190			
159	22-18	.086	.755	.230	RED
148		.112	.865	.260	
101		.138			
102		.164	.910	.320	
149			1.090	.473	
103					
150		.250	1.320	.540	
104		.3125			
105		.375			
151		.500	.774	.720	
152	.112				
106	.138	.910	.317		
107	.164				
153					
108	.190	.915	.473		
154	.250	1.085			



## MIL-STD-242H(NAVY), PART 12

TERMINAL, LUG, CRIMP STYLE, COPPER, INSULATED, RING TONGUE, BELL-MOUTHED  
TYPE II, CLASS 1, FOR 105°C TOTAL CONDUCTOR TEMPERATURE

MS25036

TABLE I. TYPE DESIGNATOR AND CHARACTERISTICS (CONT.).

PART NUMBER MS25036-	WIRE SIZE AWG	STUD SIZE (DEC)	DIMENSIONS		INSULATION SLEEVE COLOR
			A(MAX)	W(MAX)	
109	16-14	.3125	1.085	.473	BLUE
110		.375	1.225	.540	
155		.500	1.320	.720	
111	12-10	.138	1.120	.380	YELLOW
156		.164			
157		.250	1.322	.536	
112		.190			
113		.3125			
114	8	.375	1.414	.598	RED
158		.500		.720	
115		.190	1.402	.429	
116		.250	1.466	.478	
117	6	.250	1.544	.590	BLUE
118		.375			
119		.190	1.599	.503	
120		.250			
121		.3125	1.762	.623	
122	4	.375			YELLOW
123		.250	1.812	.570	
124		.3125	1.879	.648	
125		.375			
126	1	.250	2.069	.783	RED
127		.375			
128		.500	2.269	.804	
129		.250	2.150	.783	
130		.375			
131	0	.500	2.370	.887	CLEAR TO WHITE
132		.250	2.401	.853	
133		.375			
134	00	.500	2.525	.903	YELLOW
135		.3125	2.750	.956	
136	000	.375			RED
137		.500			
138		.375	3.000	1.053	
139	0000	.500			BLUE
140		.375	3.330	1.148	
141		.500			

## MIL-STD-242H(NAVY) PART 12

18 July 1984

SCREW, CAP, HEXAGON HEAD (FINISHED HEXAGON BOLT), STEEL, CORROSION RESISTING, PASSIVATED, UNC-2A

MS35307

TABLE I. PART NUMBERS AND CHARACTERISTICS (CONT.)

PART NUMBER MS35307	L	NOMINAL SIZE	THREADS PER INCH	DIMENSIONS (MAX)			TENSILE STRENGTH MIN
				D	F	H	
-361	1.125	3/8	16UNC-2A	.3750	.5625	.2430	6200
-362	1.250						
-363	1.375						
-364	1.500						
-365	1.750						
-366	2.000						
-367	2.250						
-368	2.500						
-369	2.750						
-370	3.000						
-371	3.250						
-372	3.500						
-373	3.750						
-374	4.000						
-375	4.250						
-376	4.500						
-377	4.750						
-378	5.000						
-379	.438	7/16	14UNC-2A	.4375	.6250	.2910	8500
-380	.500						
-381	.562						
-382	.625						
-383	.750						
-384	.875						
-385	1.000						
-386	1.125						
-387	1.250						
-388	1.375						
-389	1.500						
-390	1.750						
-391	2.000						
-392	2.250						
-393	2.500						
-394	2.750						
-395	3.000						
-396	3.250						
-397	3.500						
-398	3.750						
-399	4.000						
-400	4.250						
-401	4.500						
-402	4.750						
-403	5.000						

## MIL-STD-242H(NAVY), PART 12

SCREW, CAP, HEXAGON HEAD (FINISHED HEXAGON BOLT), STEEL, CORROSION RESISTING, PASSIVATED, UNC-2A

MS35307

TABLE I. PART NUMBERS AND CHARACTERISTICS (CONT.)

PART NUMBER MS35307	L	NOMINAL SIZE	THREADS PER INCH	DIMENSIONS (MAX)			TENSILE STRENGTH MIN						
				D	F	H							
-404	.500	1/2	13UNC-2A	.5000	.7500	.3210	11300						
-405	.562												
-406	.625												
-407	.750												
-408	.875												
-409	1.000												
-410	1.125												
-411	1.250												
-412	1.375												
-413	1.500												
-414	1.750												
-415	2.000												
-416	2.250												
-417	2.500												
-418	2.750												
-419	3.000												
-420	3.250												
-421	3.500												
-422	3.750												
-423	4.000												
-424	4.250												
-425	4.500												
-426	4.750												
-427	5.000												
-428	5.500												
-429	6.000												
-430	.562							9/16	12UNC-2A	.5625	.8125	.3710	14500
-431	.625												
-432	.750												
-433	.875												
-434	1.000												
-435	1.125												
-436	1.250												
-437	1.375												
-438	1.500												
-439	1.750												
-440	2.000												
-441	2.250												
-442	2.500												
-443	2.750												
-444	3.000												

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## MIL-STD-242H(NAVY) PART 12

SCREW, MACHINE, PAN-HEAD, CROSS-RECESSED, CORROSION RESISTING STEEL, UNF-2A

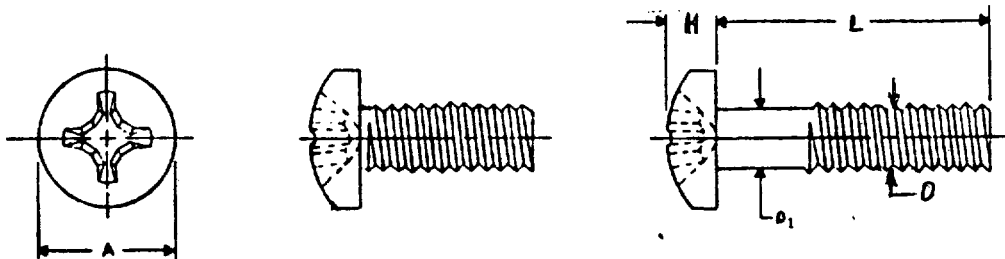
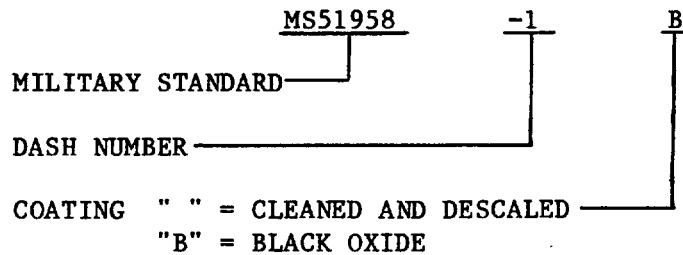
MS51958PART NUMBER EXAMPLE: MS51958-1B

TABLE I. PART NUMBERS AND CHARACTERISTICS

PART NUMBER MS51958	L	D NOMINAL SIZE	THREADS PER INCH	DIMENSIONS (MAX)			TENSILE STRENGTH MIN
				D1	A	H	
-120	1/8	.060	80UNF-2A	.0600	.116	.044	140
-121	3/16						
-122	1/4						
-123	5/16						
-124	3/8						
-125	7/16						
-126	1/2						
-1	1/8	.086	64UNF-2A	.0860	.167	.062	310
-2	3/16						
-3	1/4						
-4	5/16						
-5	3/8						
-6	7/16						
-7	1/2						
-8	5/8						
-9	3/4						

## MIL-STD-242H(NAVY), PART 12

SCREW, MACHINE, PAN-HEAD, CROSS-RECESSED, CORROSION RESISTING STEEL, UNF-2A

MS51958

TABLE I. PART NUMBERS AND CHARACTERISTICS (CONT.)

PART NUMBER MS51958	L	D NOMINAL SIZE	THREADS PER INCH	DIMENSIONS (MAX)			TENSILE STRENGTH MIN
				D1	A	H	
-11	1/8	.112	48UNF-2A	.1120	.219	.080	530
-12	3/16						
-13	1/4						
-14	5/16						
-15	3/8						
-16	7/16						
-17	1/2						
-18	5/8						
-19	3/4						
-20	7/8						
-21	1						
-24	1/8	.138	40UNF-2A	.1380	.270	.097	810
-25	3/16						
-26	1/4						
-27	5/16						
-28	3/8						
-29	7/16						
-30	1/2						
-31	5/8						
-32	3/4						
-33	7/8						
-34	1						
-35	1-1/4						
-36	1-1/2						
-37	1-3/4						
-38	2						
-39	1/8	.164	36UNF-2A	.1640	.322	.115	1180
-40	3/16						
-41	1/4						
-42	5/16						
-43	3/8						
-44	7/16						
-45	1/2						
-46	5/8						
-47	3/4						
-48	7/8						
-49	1						

## MIL-STD-242H(NAVY), PART 12

SCREW, MACHINE-FLAT COUNTERSUNK HEAD, 82 , CROSS-RECESSED CORROSION RESISTING STEEL, UNC-2A

MS51959

TABLE I. PART NUMBERS AND CHARACTERISTICS (CONT.)

PART NUMBER MS51959	L	D NOMINAL SIZE	THREADS PER INCH	DIMENSIONS (MAX)			TENSILE STRENGTH MIN
				D1	A	H	
-51 -52 -53 -57	1-1/2 1-3/4 2 3	.164	32UNC-2A	.1640	.332	.100	1120
-59 -60 -61 -62 -63 -64 -65 -66 -67 -68 -69 -70 -71 -72 -73	1/4 5/16 3/8 7/16 1/2 5/8 3/4 7/8 1 1-1/4 1-1/2 1-3/4 2 2-1/4 2-1/2	.190	24UNC-2A	.1900	.385	.116	1400
-76 -77 -78 -79 -80 -81 -82 -83 -84 -85 -86 -87 -88 -89	5/16 3/8 7/16 1/2 5/8 3/4 7/8 1 1-1/4 1-1/2 1-3/4 2 2-1/4 2-1/2	.250	20UNC-2A	.2500	.507	.153	2540

611.25

SUPERSEDES PAGE 611.25 OF JULY 1984

## MIL-STD-242H(NAVY) PART 12

18 July 1984

SCREW, MACHINE-FLAT COUNTERSUNK HEAD, 82, CROSS-RECESSED CORROSION RESISTING STEEL, UNC

MS51959

TABLE I. PART NUMBERS AND CHARACTERISTICS (CONT.)

PART NUMBER MS51959	L	D NOMINAL SIZE	THREADS PER INCH	DIMENSIONS (MAX)			TENSILE STRENGTH MIN
				D1	A	H	
-92	3/8	.3125	18UNC-2A	.3125	.635	.191	4190
-93	7/16						
-94	1/2						
-95	5/8						
-96	3/4						
-97	7/8						
-98	1						
-99	1-1/4						
-100	1-1/2						
-101	1-3/4						
-102	2						
-103	2-1/4						
-104	2-1/2						
-107	1/2						
-108	5/8						
-109	3/4						
-110	7/8						
-111	1						
-112	1-1/4						
-113	1-1/2						
-114	1-3/4						
-115	2						
-116	2-1/4						
-117	2-1/2						
-118	2-3/4						
-119	3						

MIL-STD-242H(NAVY) PART 12

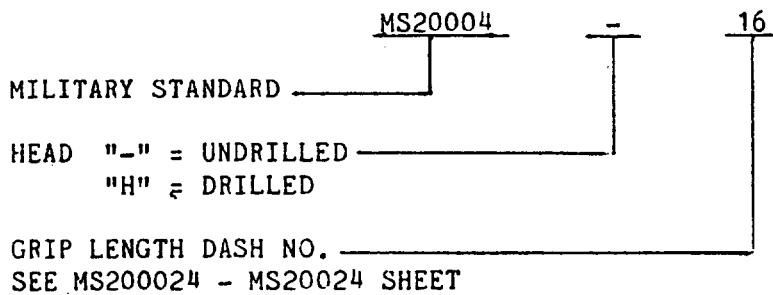
18 July 1984

BOLT, INTERNAL WRENCHING, 160 KSI Ft<sub>u</sub>

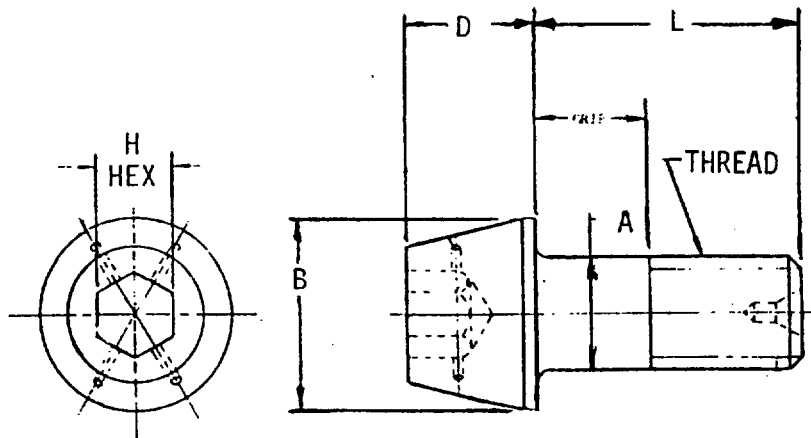
MIL-B-7838

SCOPE: THIS SECTION COVERS INTERNAL WRENCHING BOLTS INTENDED FOR USE IN APPLICATIONS REQUIRING 160 KSI (THOUSANDS POUNDS PER SQUARE INCH TENSILE STRENGTH, 96,000 PSI SHEAR STRENGTH, OR HIGH FATIGUE STRENGTH, OR COMBINATIONS THEREOF.

PART NUMBER EXAMPLE: MS20004-16



MS20004 THRU MS20024



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5)



## MIL-STD-242H(NAVY), PART 12

BOLT, INTERNAL WRENCHING, 160 KSI Ft<sub>u</sub> AND 96 KSI F<sub>su</sub>MS20004 THRU MS20024

TABLE I. DIMENSIONS AND CHARACTERISTICS

PART NO. MS200 --	THREAD PER MIL-S-7742 UNF-3A	DIMENSIONS				ULTIMATE TENSILE STRENGTH LBS-MIN
		B DIA MAX	A DIA MAX	D DIA MAX	H HEX	
04	1/4-28	.438	.2492	.250	.1900	6190
05	5/16-24	.531	.3117	.312	.2210	9820
06	3/8-24	.649	.3742	.375	.3150	15200
07	7/16-20	.750	.4367	.438	.3150	20600
08	1/2-20	.828	.4991	.500	.3785	27400
09	9/16-18	.938	.5616	.562	.4410	34800
10	5/80-18	1.050	.6240	.625	.5035	43600
12	3/4-16	1.230	.7488	.750	.5660	63200
14	7/8-14	1.438	.8737	.875	.6295	86100
16	1 -14NS-3A	1.625	.9985	1.000	.7547	112000
18	1-1/8-12	1.875	1.124	1.125	.7547	114000
20	1-1/4-12	2.125	1.249	1.250	1.005	144000
22	1-3/8-12	2.313	1.374	1.375	1.131	180000
24	1-1/2-12	2.500	1.499	1.500	1.256	263000

TABLE II. DASH NO., GRIP RANGE

PART NO. RANGE MS200 --	DASH NO. GRIP RANGE
04 - 08	16 - 96
09 - 17	16 - 112
18	18 - 128
20	20 - 128
22	22 - 128
24	24 - 128

SEE MS20004 - MS20024 SHEET FOR SPECIFIC LENGTH VS. GRIP SIZE AND PART NO.

## MIL-STD-242H(NAVY), PART 12

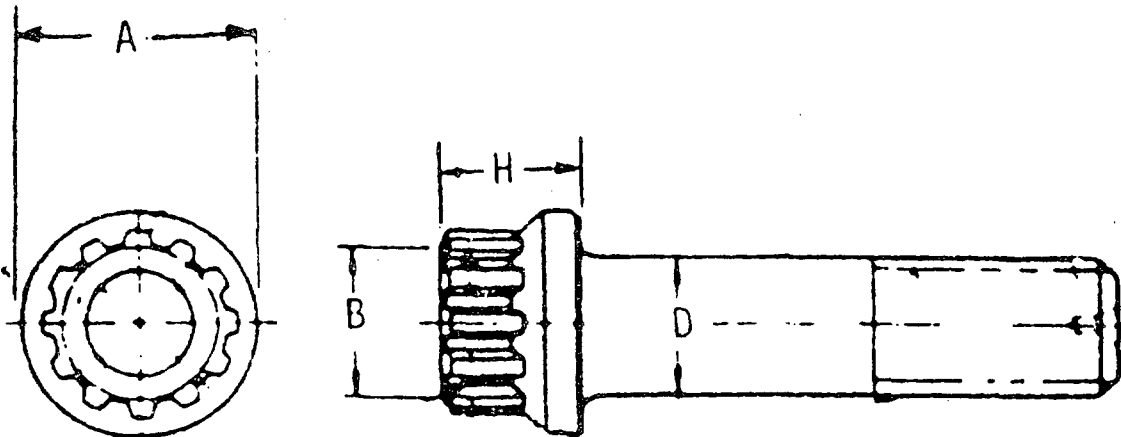
BOLT, TENSION, FLANGED STEEL, 450°F, EXTERNAL WRENCHING, SPLINE DRIVE, 180 KSI Ft<sub>u</sub>MS21134

TABLE I. DIMENSIONS

PART NO.	NOMINAL SIZE	THREAD PER MIL-S-8879 UNJF-3A	DIMENSIONS				ULTIMATE TENSILE STRENGTH LBS-MIN	DOUBLE SHEAR STRENGTH LBS-MIN
			A DIA MAX	B DIA MAX	D DIA MAX	H		
MS21134-03	NO. 10	.1900-32	.359	.188	.1895	.205	3910	6100
04	1/4	.2500-28	.470	.250	.2495	.250	6980	10600
05	5/16	.3125-24	.585	.375	.3130	.312	11100	16600
06	3/8	.3750-24	.701	.438	.3745	.337	17100	23900
07	7/16	.4375-20	.817	.500	.4370	.393	23200	32500
08	1/2	.5000-20	.932	.562	.4995	.450	30900	42400
09	9/16	.5625-18	1.047	.625	.5615	.505	39200	53700
10	5/8	.6250-18	1.163	.688	.6240	.562	49100	66300
12	3/4	.7500-16	1.394	.812	.7490	.600	71000	96400
14	7/8	.8750-14	1.625	.938	.8740	.700	97000	129900
16	1	1.0000-12	1.856	1.062	.9990	.800	126000	169800
18	1-1/8	1.1250-12	2.067	1.250	1.1240	.900	162000	214700
20	1-1/4	1.2500-12	2.318	1.375	1.2490	1.000	202000	265100

## MIL-STD-242H(NAVY), PART 12

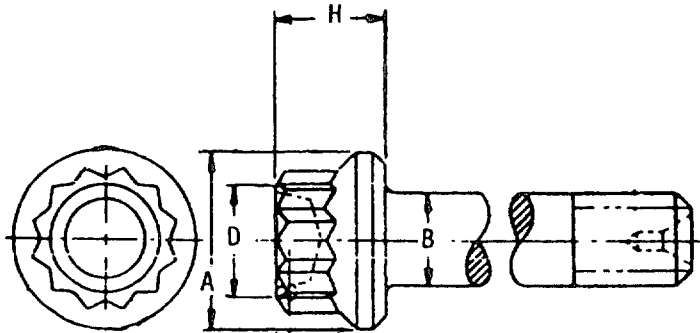
BOLT, TENSION, STEEL, 450° F, EXTERNAL WRENCHING FLANGED, 12 POINT, 180 KSI Ft<sub>u</sub>MS21250

TABLE I. DIMENSIONS

PART NO. MS21250-	THREAD PER MIL-S-8879 UNJF-3A	DIMENSIONS				ULTIMATE TENSILE STRENGTH LBS-MIN	DOUBLE SHEAR STRENGTH LBS-MIN
		A DIA MAX	B DIA MAX	D DIA MAX	H		
04	.2500-28	.438 .428	.2495 .2485	.312 .297	.300	6980	10600
05	.3125-24	.531 .521	.3120 .3110	.375 .360	.348	11100	16600
06	.3750-24	.649 .639	.3745 .3735	.437 .422	.388	17100	23900
07	.4375-20	.750 .740	.4370 .4360	.500 .485	.435	23200	32500
08	.5000-20	.828 .818	.4995 .4985	.562 .547	.504	30900	42400
09	.5625-18	.938 .928	.5615 .5605	.625 .610	.557	39200	53700
10	.6250-18	1.050 1.040	.6240 .6230	.687 .672	.618	49000	66300
12	.7500-16	1.230 1.220	.7490 .7480	.812 .797	.711	71100	95400
14	.8750-14	1.438 1.428	.8740 .8730	.937 .922	.808	97100	129900
16	1.0000-12	1.625 1.615	.9990 .9980	1.062 1.047	.923	126000	169600
18	1.1250-12	1.875 1.865	1.1240 1.1225	1.250 1.235	1.051	162000	214700
20	1.2500-12	2.125 2.115	1.2490 1.2475	1.312 1.297	1.155	202000	265100
22	1.3750-12	2.313 2.303	1.3740 1.3725	1.437 1.422	1.266	247000	320700
24	1.5000-12	2.500 2.490	1.4990 1.4975	1.625 1.610	1.434	296000	381700

## MIL-STD-242H(NAVY), PART 12

WASHER, FLAT - METAL, ROUND, GENERAL PURPOSE

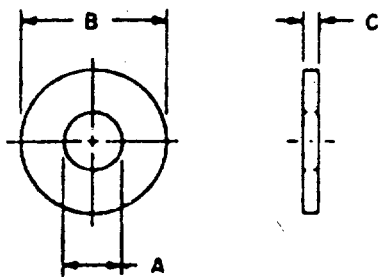
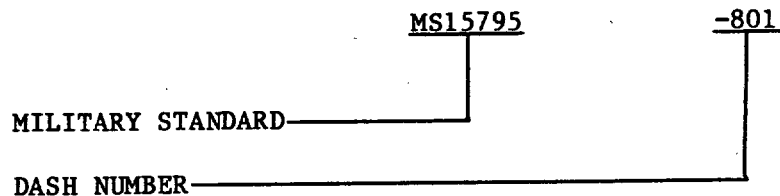
MS15795PART NUMBER: MS15795-801

TABLE I. PART NUMBERS AND CHARACTERISTICS.

PART NUMBER MS15795-	DIMENSIONS		
	A	B	C MAX
801	.078	.188	.025
802	.094	.250	.025
806	.156	.375	.065
841	.188	.438	.065
842	.219	.500	.065
809	.250	.562	.080
810	.281	.625	.080
811	.312	.734	.080
812	.344	.688	.080
813	.375	.875	.104
814	.406	.812	.080
815	.438	1.000	.104
816	.469	.922	.080
817	.500	1.250	.104

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## MIL-STD-242H(NAVY), PART 12

## WASHER, FLAT - METAL, ROUND, GENERAL PURPOSE

MS15795

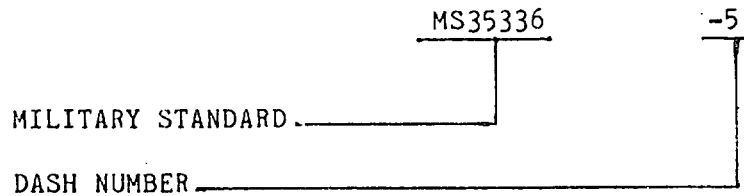
TABLE I. PART NUMBERS AND CHARACTERISTICS (CONT.)

PART NUMBER MS15795-	DIMENSIONS		
	A	B	C MAX
818	.531	1.062	.121
819	.562	1.375	.132
820	.656	1.469	.121
821	.688	1.750	.160
822	.812	1.469	.160
823	.812	2.000	.177
824	.938	1.750	.160
825	.938	2.250	.192
826	1.062	2.000	.160
827	1.062	2.500	.192
828	1.250	2.750	.192
829	1.375	3.000	.192
830	1.500	3.250	.213
831	1.625	3.500	.213
832	1.750	3.750	.213
833	1.875	4.000	.213
835	2.125	4.500	.213
836	2.375	4.750	.248
837	2.625	5.000	.280
838	2.875	5.250	.310
839	3.125	5.500	.327

MIL-STD-242H(NAVY), PART 12

18 July 1984

WASHER, LOCK-COUNTERSUNK, 80"-82", EXTERNAL TOOTH

MS35336PART NUMBER: MS35336-5

ACCEPTABLE DESIGNS

TABLE I. PART NUMBERS AND CHARACTERISTICS

PART NUMBER MS35336- PASSIVATED	NOMINAL SIZE NO.		DIMENSIONS (MAX)	
			D	C
5	4	.112	.065	.019
11	6	.138	.092	.021
17	8	.164	.105	.021
23	10	.190	.099	.025
29	1/4	.250	.128	.025
35	5/16	.312	.192	.028
41	3/8	.375	.255	.034
47	7/16	.438	.270	.045
53	1/2	.500	.304	.045

821.5

## MIL-STD-242H(NAVY), PART 12

## WASHER, LOCK-SPRING, HELICAL, REGULAR (MEDIUM) SERIES

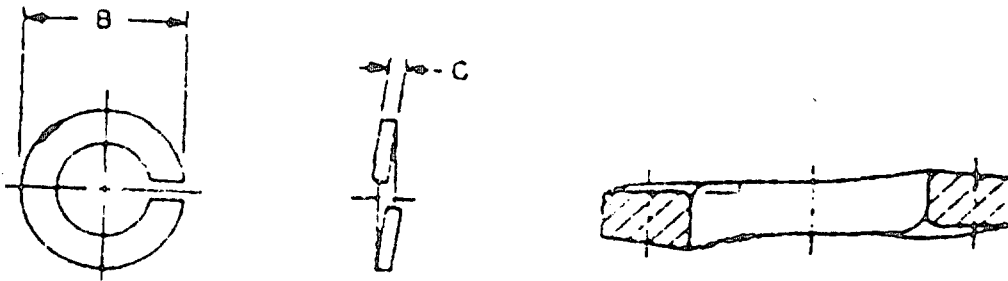
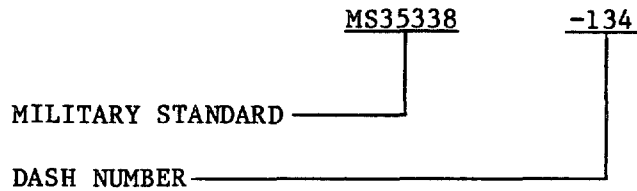
MS35338PART NUMBER: MS35338-134

TABLE I. PART NUMBERS AND CHARACTERISTICS

PART NUMBER MS35338-	NOMINAL SIZE		DIMENSIONS	
	NO.		B MAX	C MIN
134	2	.086	.172	.020
135	4	.112	.209	.025
136	6	.138	.250	.031
137	8	.164	.293	.040
138	10	.190	.334	.047
139	1/4	.250	.489	.062
140	5/16	.312	.586	.078
141	3/8	.375	.683	.094
142	7/16	.438	.779	.109
143	1/2	.500	.873	.125
144	9/16	.562	.971	.141
145	5/8	.625	1.079	.156
146	3/4	.750	1.271	.188
147	7/8	.875	1.464	.219
148	1	1.000	1.661	.250
149	1-1/8	1.125	1.853	.281
150	1-1/4	1.250	2.045	.312
151	1-3/8	1.375	2.239	.344
152	1-1/2	1.500	2.430	.375

## MIL-STD-242H(NAVY), PART 12

## WASHER, LOCK-HELICAL, SPRING, HI-COLLAR

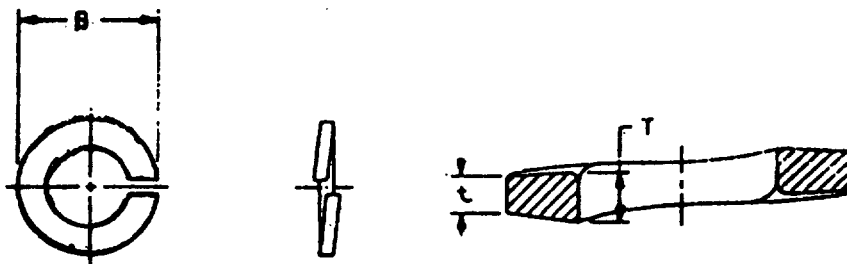
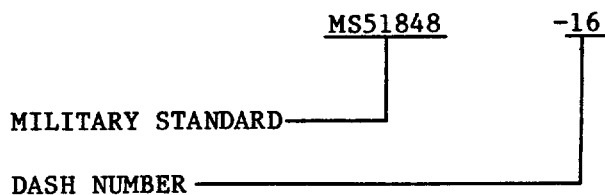
MS51848PART NUMBER: MS51848-16

TABLE I. PART NUMBERS AND CHARACTERISTICS

PART NUMBER MS51848-	NOMINAL SIZE		DIMENSIONS	
			B MAX	T AVG MIN
41	NO. 0	.0600	.092	.016
43	2	.0860	.135	.020
45	4	.1120	.173	.022
47	6	.1380	.216	.030
48	8	.1640	.267	.047
49	10	.1900	.294	.047
50	1/4	.2500	.365	.078
51	5/16	.3120	.460	.093
52	3/8	.3750	.553	.125
53	7/16	.4380	.647	.140
54	1/2	.5000	.737	.172
55	5/8	.6250	.923	.203
16	3/4	.7500	1.111	.218
17	7/8	.8750	1.296	.234
18	1	1.0000	1.483	.250



## MIL-STD-242H(NAVY), PART 12

BEARING, PLAIN, SELF-ALIGNING, SELF-LUBRICATING, LOW SPEED, WIDE, CHAMFERED OUTER RING

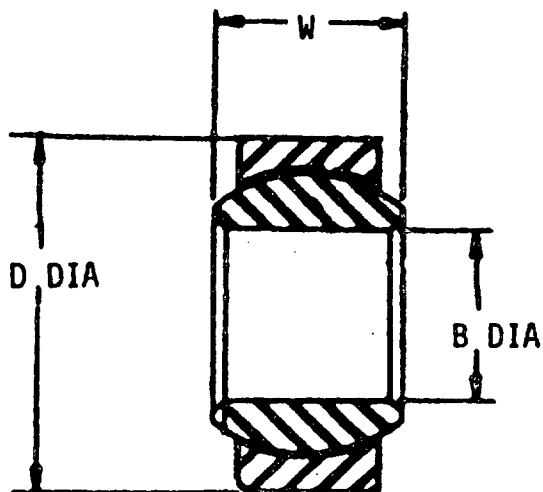
MS14102

TABLE I. DIMENSIONS AND CHARACTERISTICS

PART NO. MS14102-	DIMENSIONS			STATIC LIMIT LOAD		OSCIL- LATING LOAD LB
	B	D	W	RADIAL	AXIAL	
				LB	LB	
3	.1900	.6250	.437	2500	1770	4900
4	.2500	.6250	.437	5500	1770	4900
5	.3125	.6875	.437	9400	1640	6050
6	.3750	.8125	.500	13700	2630	8310
7	.4375	.9375	.562	20700	3650	11750
8	.5000	1.0000	.625	21400	4970	14950
9	.5625	1.1250	.687	26600	5370	18100
10	.6250	1.1875	.750	29000	6130	20250
12	.7500	1.3750	.875	37000	7730	26200
14	.8750	1.6250	.875	65200	10800	33600
16	1.0000	2.1250	1.375	104000	19300	56250

853.3

## MIL-STD-242H(NAVY), PART 12

BEARING, PLAIN, SELF-ALIGNING, SELF-LUBRICATING, LOW SPEED, WIDE, GROOVED OUTER RING

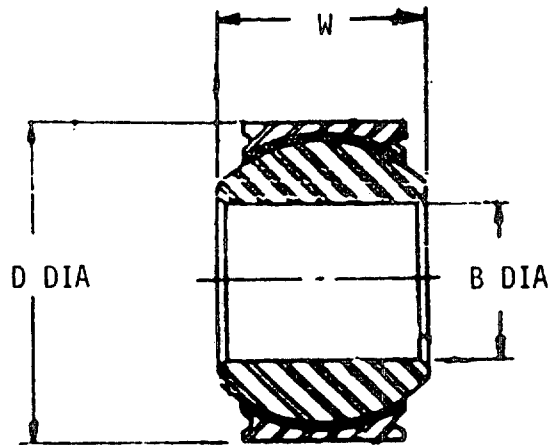
MS14103

TABLE I. DIMENSIONS AND CHARACTERISTICS

PART NO. MS14103-	DIMENSIONS			STATIC LIMIT LOAD		OSCIL- LATING LOAD LB
	B	D	W	RADIAL	AXIAL	
				LB	LB	
3	.1900	.6250	.437	2500	1770	4900
4	.2500	.6250	.437	5500	1770	4900
5	.3125	.6875	.437	9400	1640	6050
6	.3750	.8125	.500	13700	2630	8310
7	.4375	.9375	.562	20700	3650	11750
7A	.4375	.9062	.562	19700	3650	11750
8	.5000	1.0000	.625	21400	4970	14950
9	.5625	1.1250	.687	26600	5370	18100
10	.6250	1.1875	.750	29000	6130	20250
12	.7500	1.3750	.875	37000	7730	26200
14	.8750	1.6250	.875	65200	10800	33600
16	1.0000	2.1250	1.375	104000	19300	56250

MM14104-E

MIL-STD-242H(NAVY), PART 12

BEARING, PLAIN, SELF-ALIGNING, SELF-LUBRICATING, LOW SPEED, NARROW, CHAMFERED OUTER RING

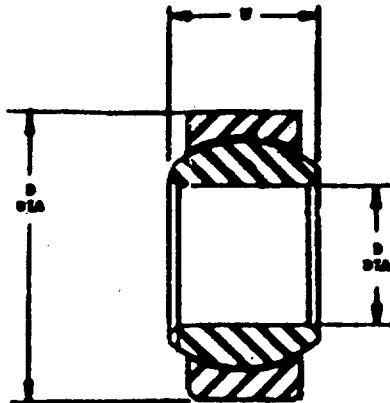
MS14104

TABLE I. DIMENSIONS AND CHARACTERISTICS

PART NO. MS14104-	DIMENSIONS			STATIC LIMIT LOAD		OSCIL- LATING LOAD LB
	B	D	W	RADIAL	AXIAL	
				LB	LB	
3	.1900	.5625	.281	3975	150	1500
4	.2500	.6562	.343	6040	430	3320
5	.3125	.7500	.375	8750	700	5460
6	.3750	.8125	.406	10540	1100	6600
7	.4375	.9062	.437	13200	1400	8050
8	.5000	1.0000	.500	17900	2100	10400
9	.5625	1.0937	.562	23200	3680	13000
10	.6250	1.1875	.625	30500	4720	16450
12	.7500	1.4375	.750	46400	6750	23600
14	.8750	1.5625	.875	62200	9350	30250
16	1.0000	1.7500	1.000	82200	12160	38000

853.5

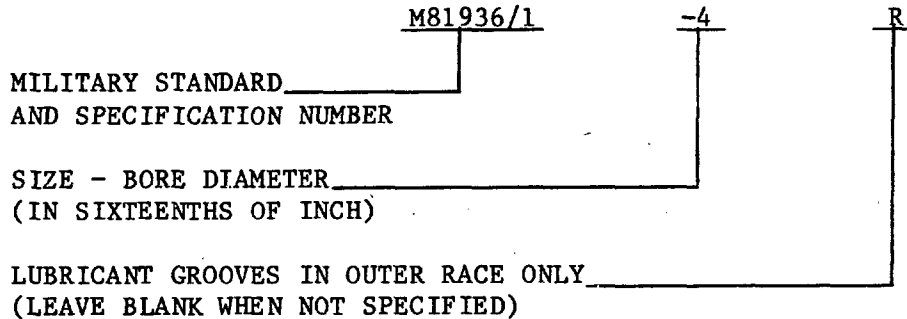
SUPERSEDES PAGE 853.5 OF 18 JULY 1984

## MIL-STD-242H(NAVY), PART 12

BEARINGS, PLAIN, SELF-ALIGNING (BeCu BALL, CRES RACE)

MIL-B-81936

SCOPE: THIS SECTION COVERS AIRFRAME PLAIN SPHERICAL BEARINGS UTILIZING A BERYLLIUM-COPPER BALL AND CORROSION RESISTANT STEEL OUTER RACE FOR USE BETWEEN  $-65^{\circ}\text{F}$  AND  $+350^{\circ}\text{F}$ . THESE BEARINGS ARE INTENDED FOR USE IN AIRFRAME POWER-ACTUATED SYSTEMS DEVELOPING HIGH OSCILLATORY LOADS WHERE MODERATE FRICTION IS NOT OBJECTIONABLE AND WHERE RELUBRICATION PROVISIONS ARE AVAILABLE.

PART NUMBER EXAMPLE: M81936/1-4R

857.1

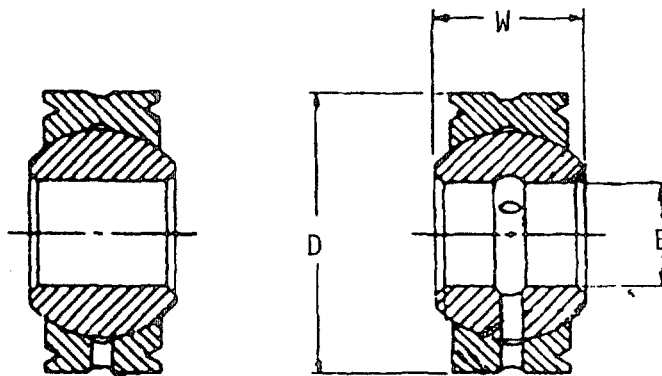
SUPERSEDES PAGE 857.1 OF 18 JULY 1984

65

MIL-STD-242H(NAVY) PART 12  
18 July 1984

BEARING, PLAIN, SELF-ALIGNING, BeCu BALL, CRES RACE (WITH STACKING GROOVE)

MIL-B-81936/1



M81936/1( )R

M81936/1( )

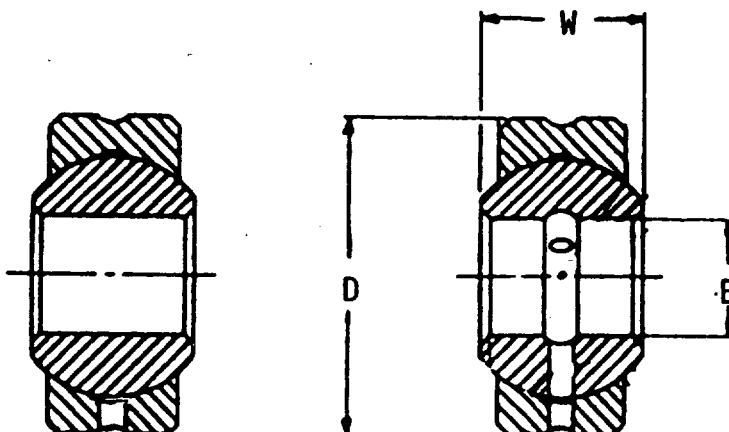
TABLE I. DIMENSIONS AND CHARACTERISTICS

PART NO. #	DIMENSIONS			BALL DIA. MAX	STATIC LIMIT LOAD	
	B	D DIA.	W		RADIAL LB	AXIAL LB
M81936/1-						
4	.2500	.6562	.343	.501	6330	1930
5	.3125	.7500	.375	.563	8460	2450
6	.3750	.8125	.406	.657	11400	3090
7	.4375	.9062	.437	.719	14800	3740
8	.5000	1.0000	.500	.814	20400	4860
9	.5625	1.0937	.562	.876	26700	6100
10	.6250	1.1875	.625	.969	33100	8080
12	.7500	1.4375	.750	1.188	50000	11440
13	.8125	1.5625	.812	1.282	59000	13800
14	.8750	1.6562	.875	1.376	70300	16160
16	1.0000	1.8750	1.000	1.563	77700	20850
18	1.1250	2.1250	1.125	1.751	121500	26740
20	1.2500	2.3125	1.250	1.938	152000	33065
22	1.3750	2.5625	1.375	2.157	186000	40120
24	1.5000	2.8125	1.500	2.345	224000	47820

\* LUBE GROOVES AND OIL HOLES IN BALL AND RACE.  
ADD "R" WHEN LUBE GROOVES AND OIL HOLES IN RACE ONLY.

## MIL-STD-242H(NAVY), PART 12

BEARING, PLAIN, SELF-ALIGNING, BeCu BALL, CRES RACE

MIL-B-81936/2

M81936/2( )R

M81936/2( )

TABLE I. DIMENSIONS AND CHARACTERISTICS

PART NO. *	DIMENSIONS			BALL DIA. MAX	STATIC LIMIT LOAD	
	B	D DIA.	W		RADIAL	AXIAL
					LB	LB
M81936/2-						
4	.2500	.6562	.343	.501	6330	1930
5	.3125	.7500	.375	.562	8460	2450
6	.3750	.8125	.406	.656	11400	3090
7	.4375	.9062	.437	.718	14800	3740
8	.5000	1.0000	.500	.813	20400	4860
9	.5625	1.0937	.562	.875	26700	6100
10	.6250	1.1875	.625	.968	33100	8080
12	.7500	1.4375	.750	1.187	50000	11440
13	.8125	1.5625	.812	1.281	59000	13800
14	.8750	1.6562	.875	1.375	70300	16160
16	1.0000	1.8750	1.000	1.562	77700	20850
18	1.1250	2.1250	1.125	1.750	121500	26740
20	1.2500	2.3125	1.250	1.937	152000	33065
22	1.3750	2.5625	1.375	2.156	186000	40120
24	1.5000	2.8125	1.500	2.344	224000	47820

\* LUBE GROOVES AND OIL HOLES IN BALL AND RACE.  
ADD "R" WHEN LUBE GROOVES AND OIL HOLES IN RACE ONLY.

## MIL-STD-242H(NAVY), PART 12

MIL-K-3926 MS91528TABLE A. STYLE CODES

A	BAR WITH WHITE LINE
B	DIAL SKIRTED BAR WITH WHITE LINE AND WHITE ARROW
C	ROUND WITH WHITE DOT
D	SKIRTED ROUND
E	SKIRTED ROUND WITH WHITE DOT
F	ROUND DIAL SKIRT WITH WHITE ARROW
G	ROUND DIAL SKIRT, NO ARROW
H	ROUND DIAL SKIRT WITH SLOT
I	ROUND WITH FLUORESCENT DOT
J	SKIRTED ROUND FLUORESCENT DOT
K	SKIRTED POINTER
L	BAR WITH WHITE LINE
M	DIAL SKIRTED BAR WITH WHITE LINE
N	ROUND
O	ROUND DIAL SKIRT WITH BLACKLIGHTED WHITE ARROW
P	PLAIN POINTER
Q	ROUND DIAL SKIRT WITH FLUORESCENT ARROW
R	DIAL SKIRTED BAR WITH WHITE LINE AND SLOT
S	SPINNER
T	PLAIN POINTER WITH WHITE LINE
U	SKIRTED POINTER WITH WHITE LINE
V	DIAL SKIRTED BAR WITH SHITE LINE AND TRANSLUCENT ARROW
W	BAR WITH FLUORESCENT LINE
X	DIAL SKIRTED BAR WITH FLUORESCENT LINE AND FLUORESCENT ARROW
Y	DIAL SKIRTED BAR WITH FLUORESCENT LINE AND SLOT
Z	DIAL SKIRTED BAR WITH FLUORESCENT LINE AND TRANSLUCENT ARROW
AA	ROUND KNOB LOCK POINTER WITH WHITE LINE
AB	DIAL SKIRTED BAR WITH PHOSPHORESCENT LINE AND PHOSPHORESCENT ARROW
AC	DIAL SKIRTED BAR WITH PHOSPHORESCENT LINE AND SLOT
AD	DIAL SKIRTED BAR WITH PHOSPHORESCENT LINE AND TRANSLUCENT ARROW
BB	ROUND KNOB LOCK POINTER WITH FLORESCENT LINE
GG	ROUND BAR WITH WHITE LINE
HH	ROUND BAR RING SKIRTED WITH WHITE LINE
II	ROUND BAR DIAL SKIRTED WITH WHITE LINE
JJ	ROUND BAR WITH FLUORESCENT LINE
KK	ROUND BAR RING SKIRTED WITH FLUORESCENT LINE
LL	ROUND BAR DIAL SKIRTED WITH FLUORESCENT LINE
MM	ROUND WITH PHOSPHORESCENT DOT
NN	SKIRTED ROUND PHOSPHORESCENT DOT
OO	ROUND DIAL SKIRT WITH PHOSPHORESCENT ARROW
PP	ROUND BAR RING SKIRTED WITH PHOSPHORESCENT LINE
QQ	ROUND KNOB LOCK POINTER WITH PHOSPHORESCENT LINE
RR	PLAIN POINTER WITH PHOSPHORESCENT LINE
SC	SPINNER SLIP-CLUTCH WITH WHITE DOT
SE	SPINNER SLIP-CLUTCH WITH PHOSPHORESCENT DOT
SS	ROUND BAR WITH PHOSPHORESCENT LINE

MIL-K-3926 MS91528

TABLE A. STYLE CODES (CONT.)

TT	PLAIN POINTER WITH FLUORESCENT LINE
UU	SKIRTED POINTER WITH FLUORESCENT LINE
VV	ROUND BAR DIAL SKIRTED WITH PHOSPHORESCENT LINE
WW	SKIRTED POINTER WITH PHOSPHORESCENT LINE
XX	BAR WITH PHOSPHORESCENT LINE
YY	DIAL SKIRTED BAR WITH PHOSPHORESCENT LINE
ZZ	DIAL SKIRTED BAR WITH FLUORESCENT LINE

TABLE B. SHAFT HOLE DIAMETER CODES

CODE	DESCRIPTION
1	1/8 IN. ROUND
2	1/4 IN. ROUND
3	1/8 IN. D FLAT
4	1/4 IN. D FLAT

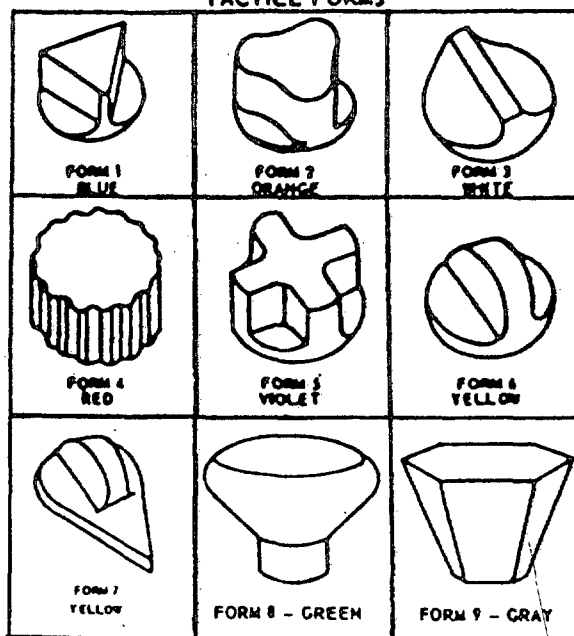
TABLE C. COLOR CODES

CODE	COLOR
B	BLACK
G	GRAY
R	RED

TABLE D. TACTILE FORM CODES

CODE	TACTICLE FORM
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

TACTILE FORMS



901.4



MIL-STD-242H(NAVY) PART 12

18 JULY 1984

KNOBS-CONTROL, PLASTIC (ROUND, CONCENTRIC, POINTER, SPINNER, SPINNER  
SLIP-CLUTCH, BAR, TACTILE, KNOB LOCK POINTER, SLIP-CLUTCH, AND KNOB LOCKS)

MIL-K-3926

SPINNER KNOBS

MS91528

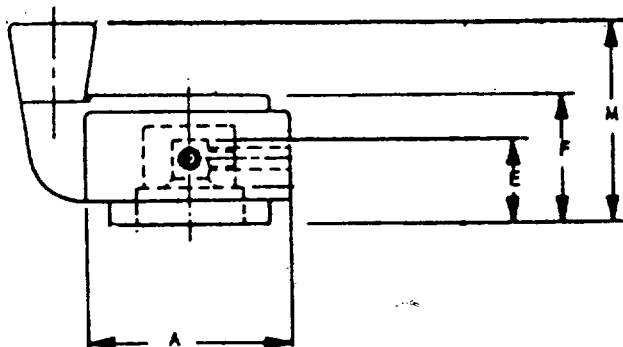
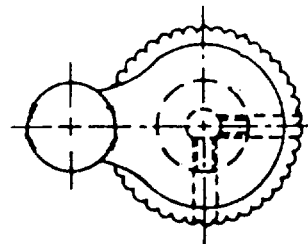
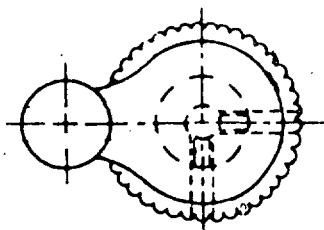


TABLE I. PART NUMBER AND DIMENSIONS

MS91528-SERIES	DIMENSIONS			
	A	E(MIN)	F	M
3	1.250	.605	.850	1.350
4	1.750	.740	1.070	1.758
5	2.250	.740	1.095	1.782

STYLE: S  
SHAFT HOLE DIA: 2, 4  
COLOR: B, G, R

SEE TABLES A, B, C.

MIL-STD-242H(NAVY), PART 12

KNOBS-CONTROL, PLASTIC (ROUND, CONCENTRIC, POINTER, SPINNER, SPINNER SLIP-CLUTCH, BAR, TACTILE, KNOB LOCK POINTER, SLIP-CLUTCH, AND KNOB LOCKS)

MIL-K-3926

SPINNER SLIP CLUTCH KNOBS

MS91528

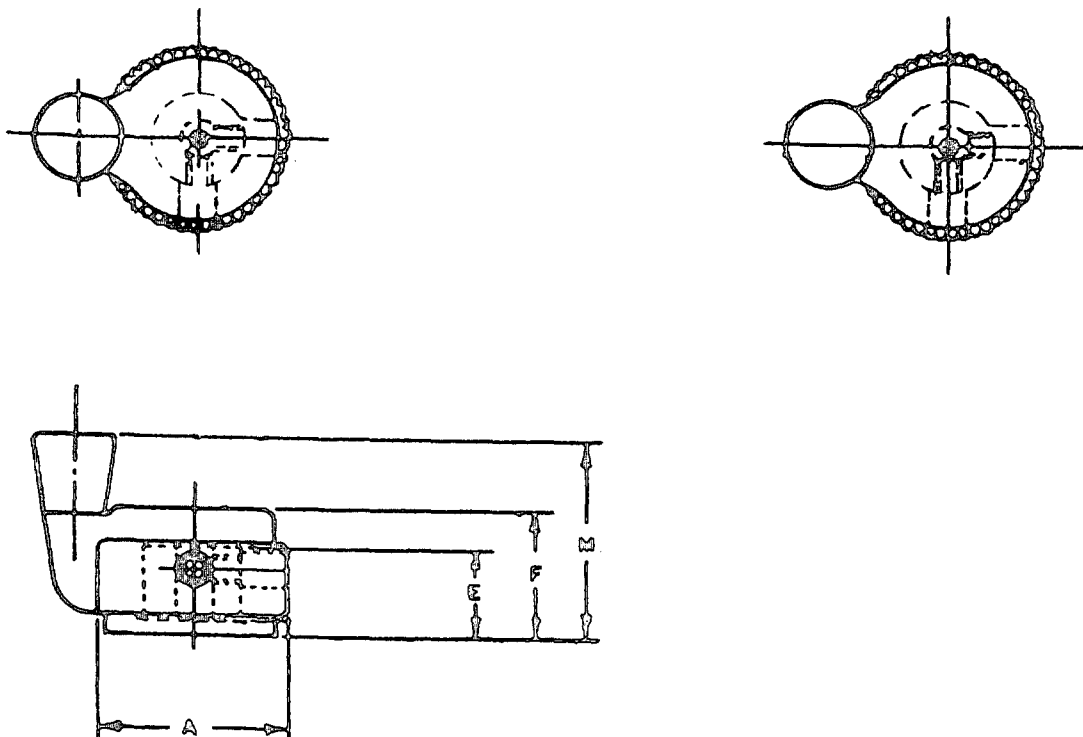


TABLE I. PART NUMBER AND DIMENSIONS

MS91528-SERIES	DIMENSIONS			
	A	E(MIN)	F	M
3	1.250	.600	1.040	1.520
4	1.750	.740	1.070	1.758
5	2.250	.740	1.095	1.782

STYLE: SC, SD, SE  
 SHAFT HOLE DIA: 2, 4  
 COLOR: B, G, R

SEE TABLES A, B, C.

901.20

SUPERSEDES PAGE 901.20 OF 18 JULY 1984

**STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL***(See Instructions – Reverse Side)*

1. DOCUMENT NUMBER

2. DOCUMENT TITLE

3a. NAME OF SUBMITTING ORGANIZATION

4. TYPE OF ORGANIZATION *(Mark one)* VENDOR USER MANUFACTURER OTHER *(Specify):* \_\_\_\_\_b. ADDRESS *(Street, City, State, ZIP Code)*

## 5. PROBLEM AREAS

a. Paragraph Number and Wording:

b. Recommended Wording:

c. Reason/Rationale for Recommendation:

## 6. REMARKS

7a. NAME OF SUBMITTER *(Last, First, MI)* – Optionalb. WORK TELEPHONE NUMBER *(Include Area Code)* – Optionalc. MAILING ADDRESS *(Street, City, State, ZIP Code)* – Optional8. DATE OF SUBMISSION *(YYMMDD)*

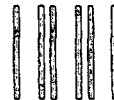
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