

X3T9.2/87-62

AMP

CORPORATE PRODUCT APPROVALS

RD. BOX 3000, HARRISBURG, PENNSYLVANIA 17105-3000 • PHONE 717-564-0100 TWX 510-557-4110

April 20, 1987

Gene Milligan
Magnetic Peripherals, Inc.
OKM 150
P.O. Box 12313
Oklahoma City, OK 73157

*Presented by Gene Milligan
at 4/27/87 meeting*

Dear Gene:

Listed below are all the items that were involved in up-dating the ANSI X3.91M-1982 Storage Module Interface standard. As you will notice, a better dressing-up of the drawings now exists as well as better defining hole dimensions for hardware jackscrew guides and pin sockets. I believe also that these drawings as revised, better represent a more generic approach to the SMD Industry.

- a₂ deleted (not critical)
- a₃ became A2 (correction) (no difference; 1.687 O.K.)
- a₄ became A3
- a₅ became A4
- a₆ became A5
- a₇ deleted (not critical)
- a₈ became A14
- a₉ became A19
- a₁₀ became A7
- a₁₁ became A6 (changed by .002)
- a₁₂ became A13 (changed by .002)
- a₁₃ became A12
- a₁₅ became A6
- a₁₆ became A7
- a₁₇ became A10
- a₁₈ became A11
- a₁₉ deleted (same as A7)
- a₂₀ same as A1
- a₂₁ deleted (same as A2)

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Page Two

- a₂₂ same as A5
- a₂₃ same as A3
- a₂₄ same as A4
- a₂₅ same as A2
- a₂₆ same as A29
- a₂₇ same as A30
- a₂₈ same as A31
- a₂₉ deleted (replaced by A26 by adding in male and female socket same as B drawing)
- a₃₀ became A27 (changed old A30 - error)
- a₃₁ added in polarizing pin and socket
- b₁ deleted (hole to outside edge)
- b₂ became B1
- b₃ became B6
- b₄ became B5 (changed to .001)
- b₅ deleted (to the edge)
- b₆ became B4 (.019 difference - error)
- b₇ became B3 (changed by .001)
- b₈ became B2
- b₉ deleted (calling out depth of hole in guide hardware)
- b₁₀ became B14 (B9 and B10 in old document revised)
- b₁₁ became B10
- b₁₂ deleted (same as B9)
- b₁₃ became B8
- b₁₄ became B7
- b₁₅ became B11
- b₁₆ became B14
- b₁₇ became B7
- b₁₈ became B8
- b₁₉ became B10
- b₂₀ became B16
- b₂₁ became B15
- b₂₂ became B12 (changed to .002)
- b₂₃ became B1

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Page Three

- b₂₄ deleted (outside edge)
- b₂₅ became B2
- b₂₆ became B5 (changed to .001)
- b₂₇ became B3 (changed to .001)
- b₂₈ became B4 (old drawing should have been B6)
- b₂₉ deleted (outside of block)
- b₃₀ became B6
- b₃₁ became B19
- b₃₂ became B20
- b₃₃ became B21
- b₃₄ deleted (replaced by B23; added B22 dia.)
- b₃₅ deleted (replaced by B27)
- b₃₆ became B30 (added in B29 min. thread depth)

Sincerely,

AMP Incorporated

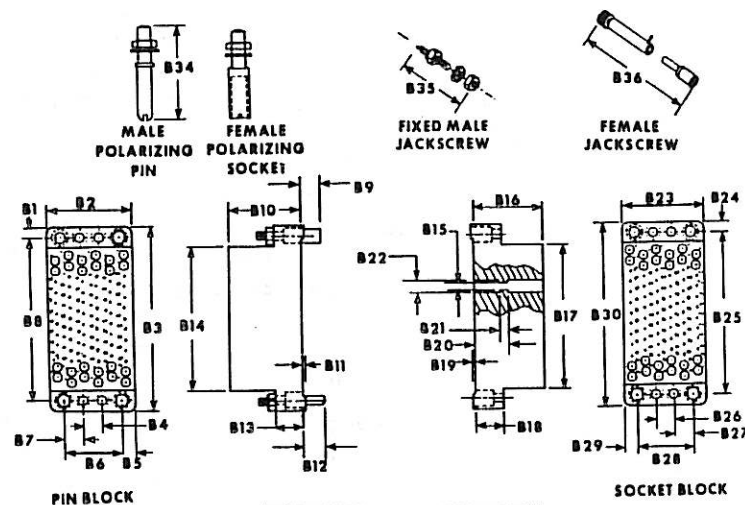
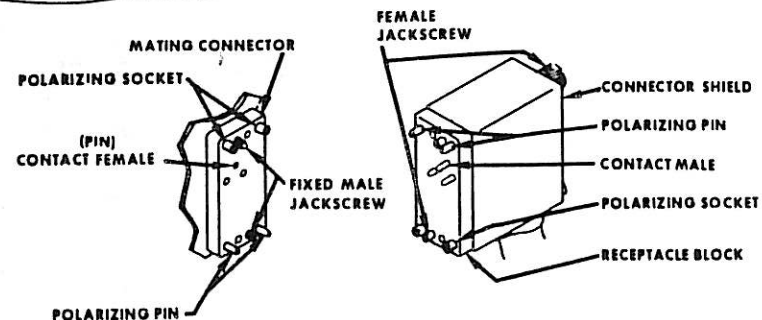
Charles Brill

Charles Brill
Manager, Computer Standards

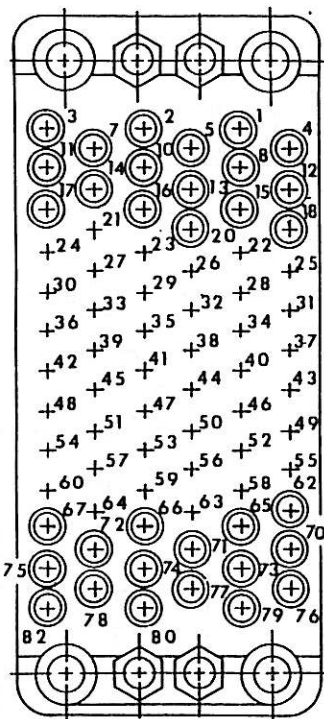
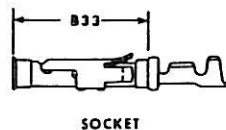
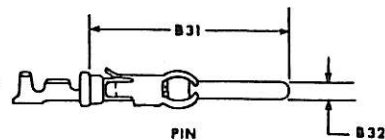
CB/bbk/m

AMERICAN NATIONAL STANDARD X3.91M-1982

WHAT BRILL BASED NEW
FIGURES ON, INSTEAD OF
MANUSCRIPT



AMERICAN NATIONAL STANDARD X3.91M-1982



Dimensions	Inches	Millimeters
b ₁	0.156	3.96
b ₂	1.110	28.19
b ₃	2.595	65.91
b ₄	0.235	5.97
b ₅	0.172	4.37
b ₆	0.785	19.93
b ₇	0.265	6.73
b ₈	2.281	57.94
b ₉	0.915	23.24
b ₁₀	0.157	3.99
b ₁₁	0.011*	0.28*
b ₁₂	0.192	4.88
b ₁₃	0.365	9.27
b ₁₄	1.983	50.37
b ₁₅	0.115	2.92
b ₁₆	0.915	23.24
b ₁₇	1.983	50.37
b ₁₈	0.365	9.27
b ₁₉	0.011*	0.28*
b ₂₀	0.554	14.07
b ₂₁	0.054	1.37
b ₂₂	0.129	3.28
b ₂₃	1.110	28.19
b ₂₄	0.156	3.96
b ₂₅	2.281	57.94
b ₂₆	0.235	5.97
b ₂₇	0.265	6.73
b ₂₈	0.766	19.46
b ₂₉	0.172	4.37
b ₃₀	2.595	65.91
b ₃₁	0.797	20.24
b ₃₂	0.062†	1.57†
b ₃₃	0.529	13.44
b ₃₄	0.830	21.08
b ₃₅	0.815	20.70
b ₃₆	2.305	58.55

*Typical
†Diameter

NOTE: Circuit identification for pin block. Socket block identification is mirror image.

Fig. 3 - Continued

NOTE CHANGES
IN THESE COLUMNS
IN BRILL'S NEW
FIGURES
(SEE COVER LETTER)

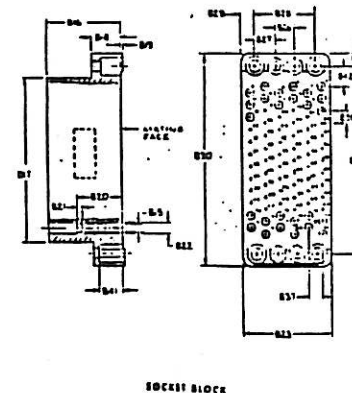
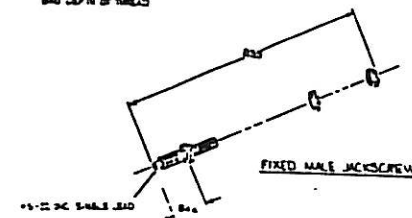
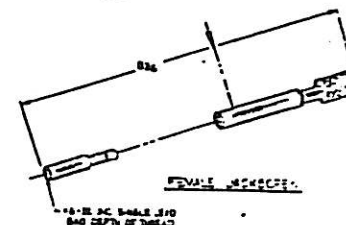
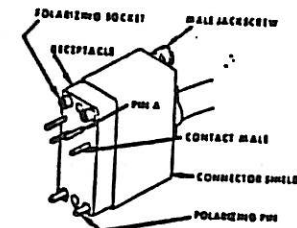
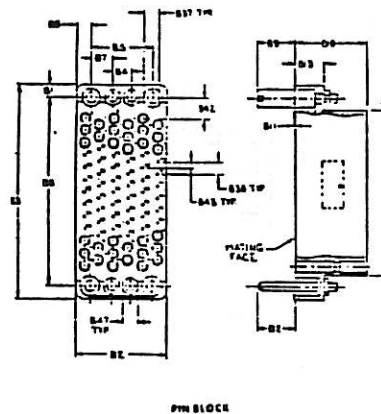
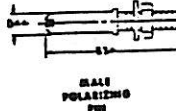
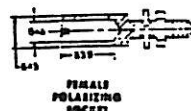
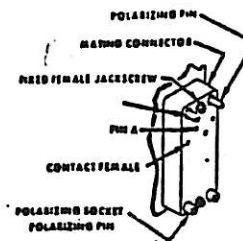
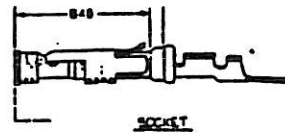
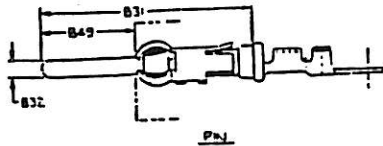


Fig. 3
CONTROL Round Cable Connectors

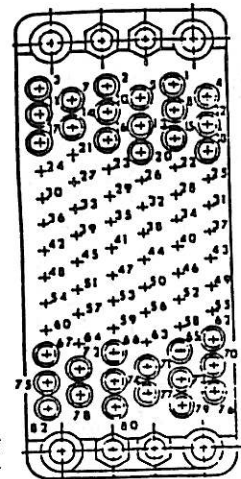
1987
MANUSCRIPT
ART

COMPARE
WITH
BRILL'S
FIGURES



MANUSCRIPT

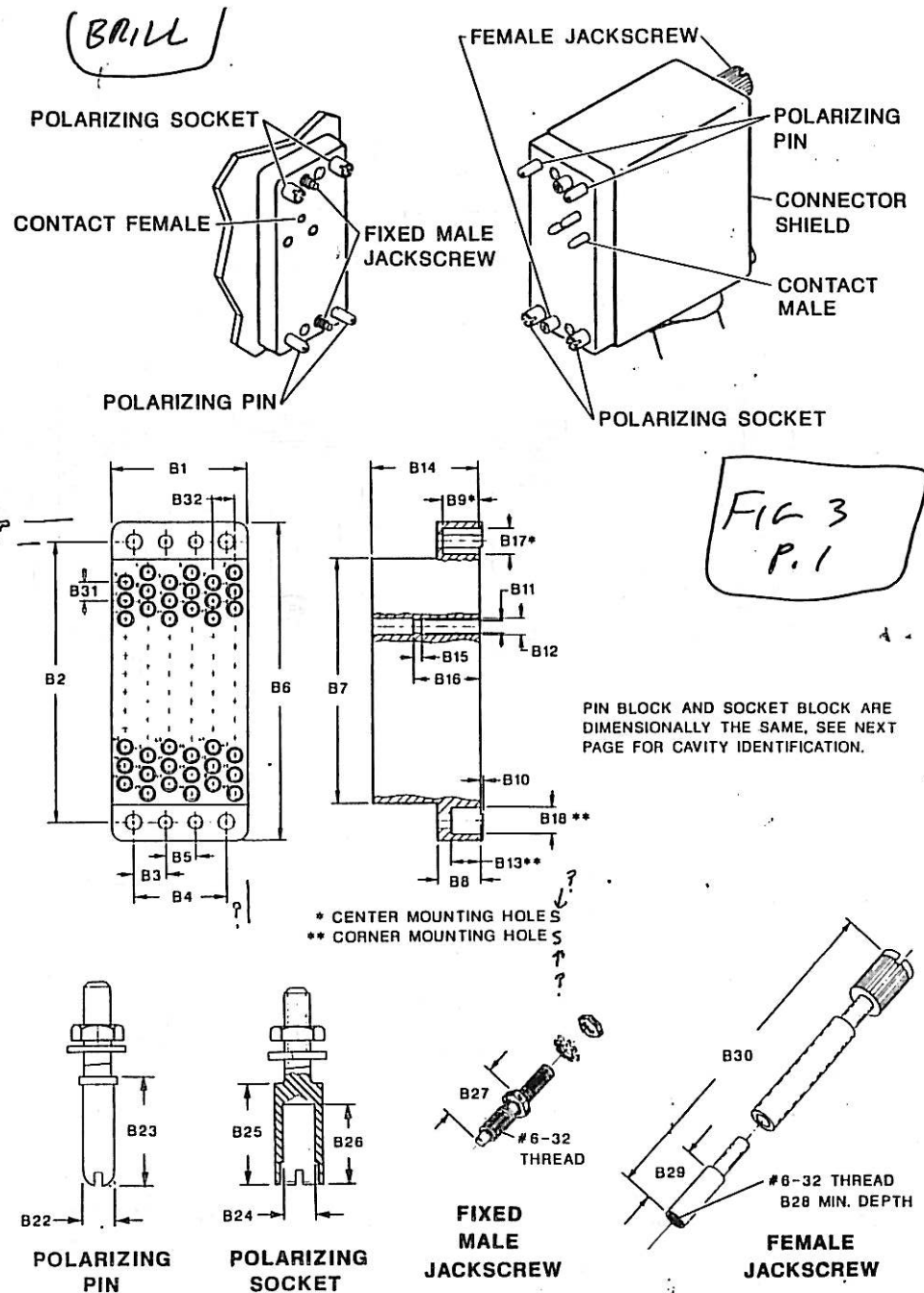
Dimensions	Inches	Millimeters
b1	0.156	3.96
b2	1.110	28.19
b3	2.595	65.91
b4	0.235	5.97
b5	0.172	4.37
b6	0.785	19.93
b7	0.265	6.73
b8	2.281	57.94
b9	0.915	23.24
b10	0.157	3.99
b11	0.011*	0.28°
b12	0.192	4.88
b13	0.365	9.27
b14	1.983	50.37
b15	0.115	2.92
b16	0.915	23.24
b17	1.983	50.37
b18	0.365	9.27
b19	0.011*	0.28°
b20	0.554	14.07
b21	0.054	1.37
b22	0.129	3.28
b23	1.110	28.19
b24	0.156	3.96
b25	2.281	57.94
b26	0.235	5.97
b27	0.265	6.73
b28	0.765	19.46
b29	0.172	4.37
b30	2.595	65.91
b31	0.797	20.24
b32	0.062*	1.57*
b33	0.529	13.44
b34	0.830	21.08
b35	0.815	20.70
b36	2.305	58.55
b37	0.180	4.57
b38	0.150	3.83
b39	0.330	8.38
b40	0.312	7.92
b41	0.250	6.35
b42	0.241	6.12
b43	0.075	1.90
b44	0.130 max.	3.30
b45	0.203 max.	5.13
b46	0.141	3.58
b47	0.195	4.95
b48	0.270	6.86
b49	0.260/0.210	6.60/5.33



COMPARE
TABLE
WITH BRILL'S
TABLE

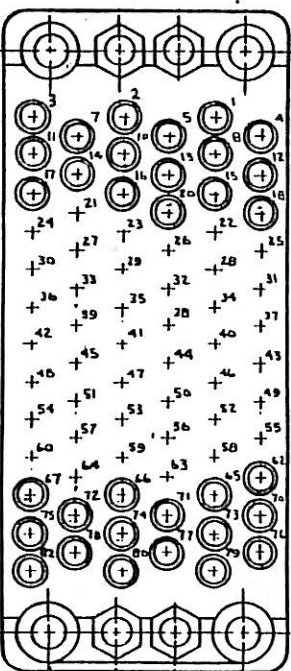
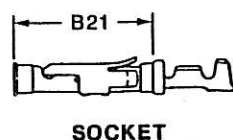
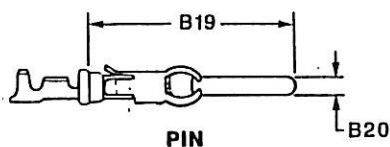
*Typical
Diameter

Fig. 3 - Continued



BRILL

FIG-3
P. 2



NOTE: Circuit identification for pin block.
Socket block Identification is mirror image.

DIMENSIONS	INCHES	MILLIMETERS
B1	1.110	28.19
B2	2.281	57.94
B3	.266	6.75
B4	.766-?	19.45 -?
B5	.234	5.94
B6	2.595?	65.91?
B7	1.983	50.37
B8	.365	9.27
B9	.300	7.62
B10	.011*	0.28*
B11	.115	2.92
B12	.131	3.33
B13	.250	6.35
B14	.915	23.24
B15	.054	1.37
B16	.554	14.07
B17	.195	4.95
B18	.234†	5.94†
B19	.797	20.24
B20	.062†	1.57†
B21	.529	13.44
B22	.130 Max.†	3.30 Max.†
B23	.440	11.17
B24	.133†	3.38†
B25	.405	10.29
B26	.330	8.38
B27	.465	11.81
B28	.312	7.92
B29	.485	12.32
B30	2.305	58.55
B31	.150*	3.81*
B32	.180*	4.57*

*Typical
†Diameter

AMERICAN NATIONAL STANDARD X3.91M-1982

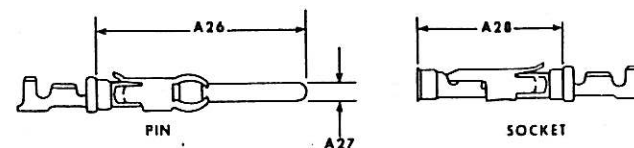
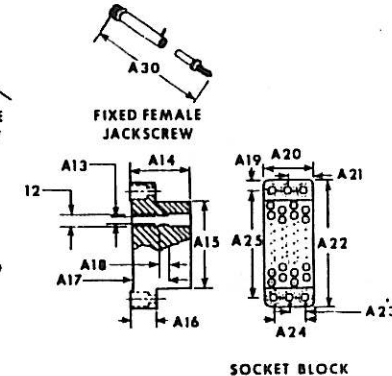
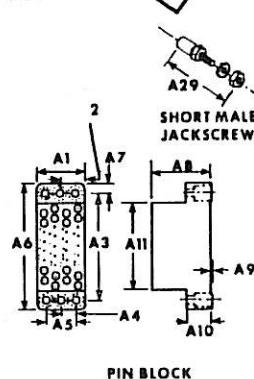
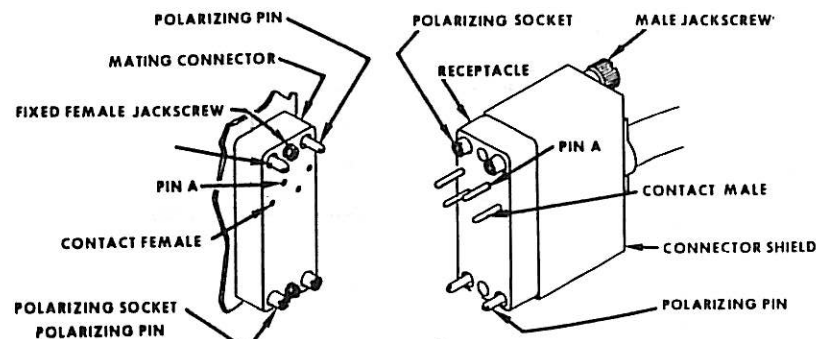
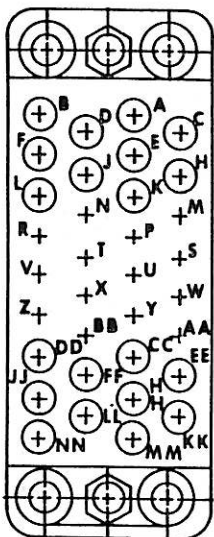


Fig. 6
READ/WRITE Round Cable Connectors



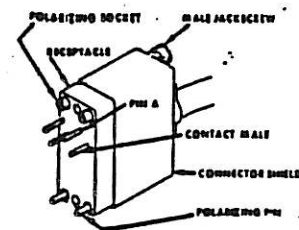
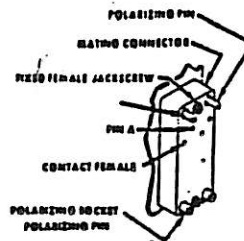
NOTE: Cavity identification for pin block.
Socket block identification is mirror image.

Dimensions	Inches	Millimeters
a ₁	0.750	19.05
a ₂	0.375	9.53
a ₃	1.687	42.85
a ₄	0.234	5.94
a ₅	0.468	11.89
a ₆	2.000	50.80
a ₇	0.157	3.99
a ₈	0.915	23.24
a ₉	0.011*	0.28*
a ₁₀	0.365	9.27
a ₁₁	1.409	35.79
a ₁₂	0.129	3.28
a ₁₃	0.115	2.92
a ₁₄	0.915	23.24
a ₁₅	1.409	35.79
a ₁₆	0.365	9.27
a ₁₇	0.554	14.07
a ₁₈	0.054	1.37
a ₁₉	0.157	3.99
a ₂₀	0.750	19.05
a ₂₁	0.375	9.53
a ₂₂	2.000	50.80
a ₂₃	0.234	5.94
a ₂₄	0.468	11.89
a ₂₅	1.687	42.85
a ₂₆	0.797	20.24
a ₂₇	0.062†	1.57†
a ₂₈	0.529	13.44
a ₂₉	1.643	41.73
a ₃₀	0.837	21.26

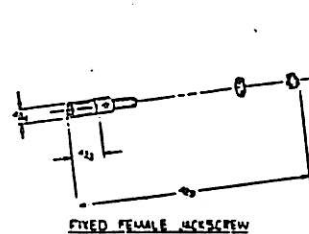
*Typical
†Diameter

Fig. 6 – Continued

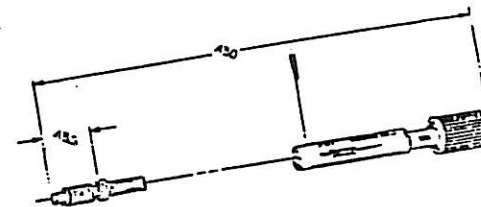
NOTE CHANGES IN
THESE COLUMNS IN
BRILL'S NEW
FIGURES
(see cover letter)



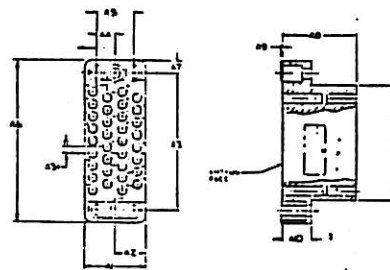
MANUSCRIPT



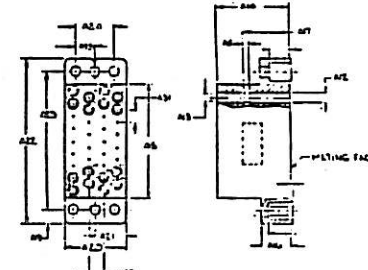
FIXED FEMALE JACKSCREW



NAME JACKSON, REW



FIN BLOCK



SECRET BLOCK

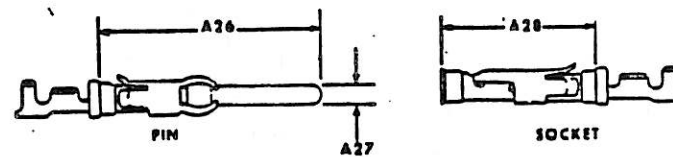
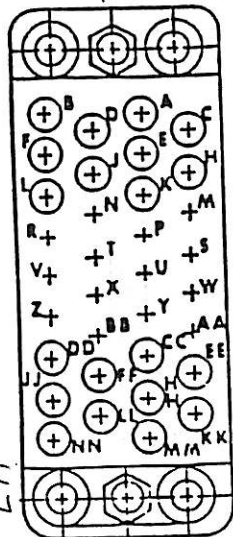


Fig. 6
READ/WRITE Round Cable Connector

MANUSCRIPT

COMPARE
TABLE



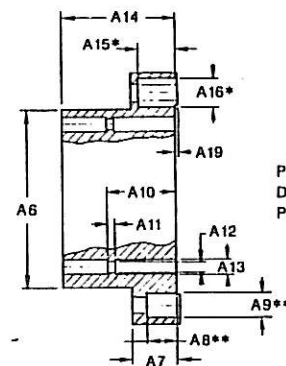
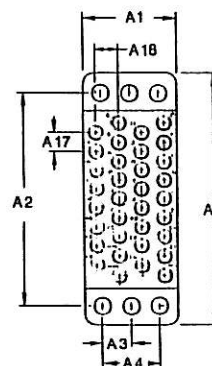
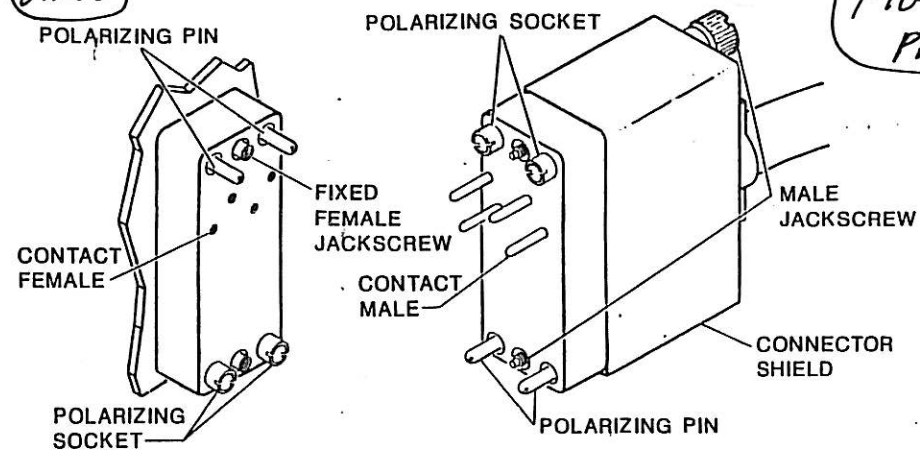
Dimensions	Inches	Millimeters
a1	0.750	19.05
a2	0.375	9.53
a3	1.687	42.85
a4	0.234	5.94
a5	0.468	11.89
a6	2.000	50.80
a7	0.157	3.99
a8	0.915	23.24
a9	0.011*	0.28*
a10	0.365	9.27
a11	1.409	35.79
a12	0.129	3.28
a13	0.115	2.92
a14	0.915	23.24
a15	1.409	35.79
a16	0.365	9.27
a17	0.554	14.07
a18	0.054	1.37
a19	0.157	3.99
a20	0.750	19.05
a21	0.375	9.53
a22	2.000	50.80
a23	0.234	5.94
a24	0.468	11.89
a25	1.687	42.85
a26	0.797	20.24
a27	0.062*	1.57*
a28	0.529	13.44
a29	1.643	41.73
a30	0.837	21.26
a31	0.150	3.83
a32	0.160	4.07
a33	0.312	7.92
a34	0.187	4.75
a35	0.243	6.17
a36	0.400	10.16

*Typical
†Diameter

Fig. 6 - Continued

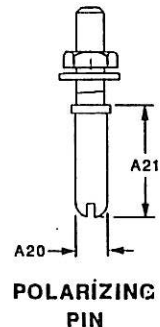
35

(BRILL)

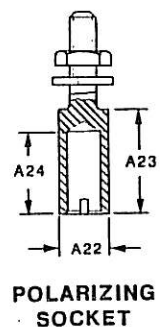


PIN BLOCK AND SOCKET BLOCK ARE
DIMENSIONALLY THE SAME, SEE NEXT
PAGE FOR CAVITY IDENTIFICATION.

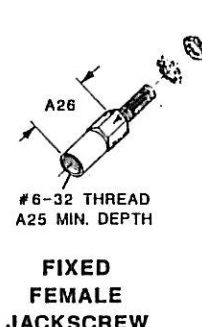
* CENTER MOUNTING HOLE
** CORNER MOUNTING HOLE



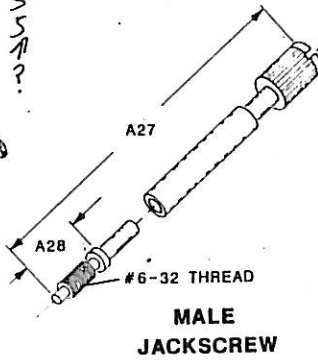
POLARIZING
PIN



POLARIZING
SOCKET



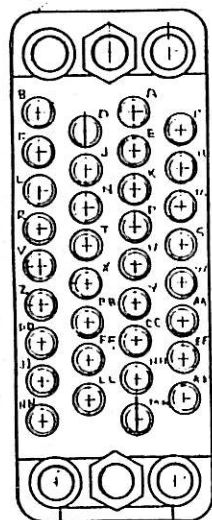
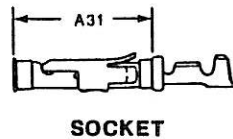
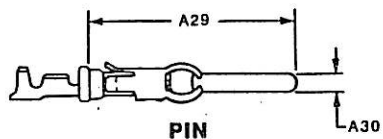
FIXED
FEMALE
JACKSCREW



MALE
JACKSCREW

BRILL

FIG-6
A.2



DIMENSIONS	INCHES	MILLIMETERS
A1	.750	19.05
A2	1.686 ~ ?	42.85
A3	.234	5.94
A4	.468	11.89
A5	2.000	50.80
A6	1.411	35.84
A7	.365	9.27
A8	.250	6.35
A9	.218†	5.54†
A10	.554	14.07
A11	.054	1.37
A12	.115	2.92
A13	.131	3.33
A14	.915	23.24
A15	.300	7.62
A16	.195	4.95
A17	.150*	3.81*
A18	.180*	4.57*
A19	.011*	.28*
A20	.130Max.†	3.30Max.†
A21	.440	11.17
A22	.141†	3.58
A23	.405	10.29
A24	.330	8.38
A25	.312	7.92
A26	.485	12.32
A27	2.285	58.04
A28	.465	11.81
A29	.797	20.24
A30	.062†	1.57
A31	.529	13.44

* Typical
† Diameter

NOTE: Circuit identification for pin block.
Socket block identification is mirror image.

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