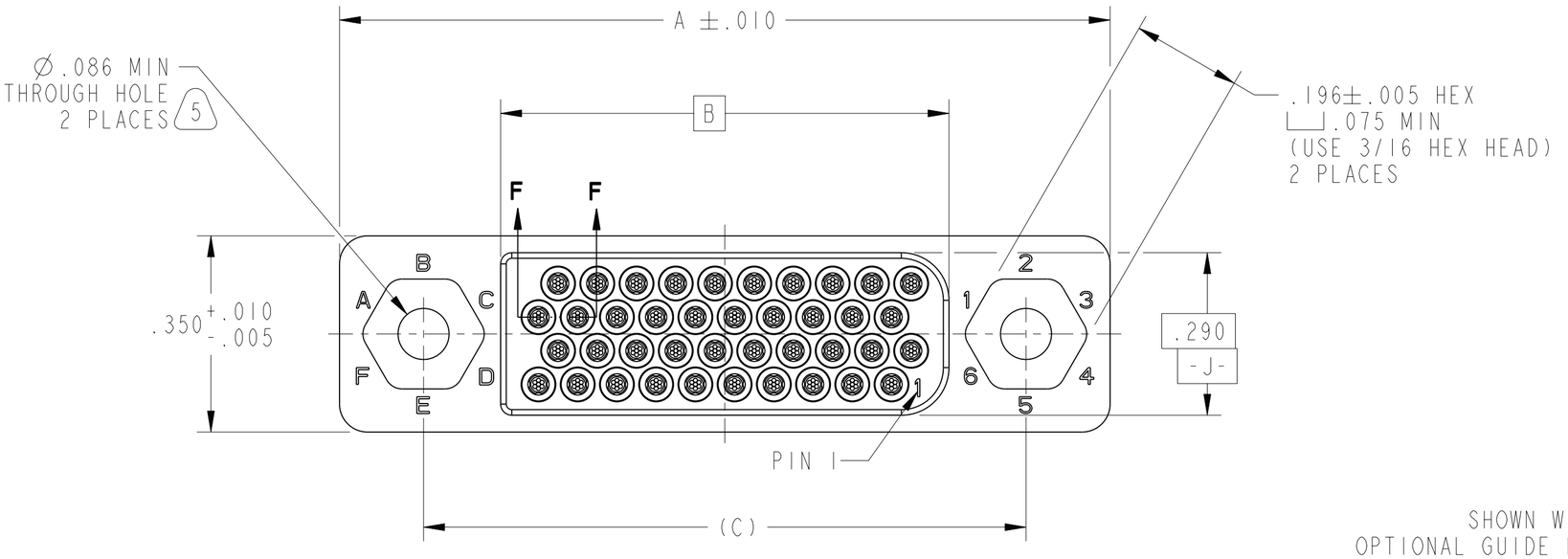
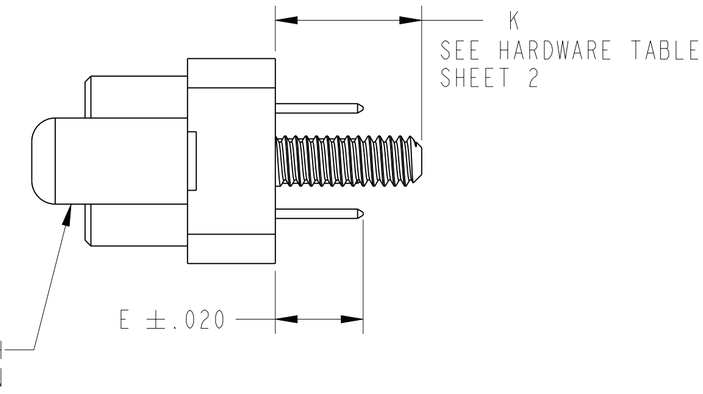
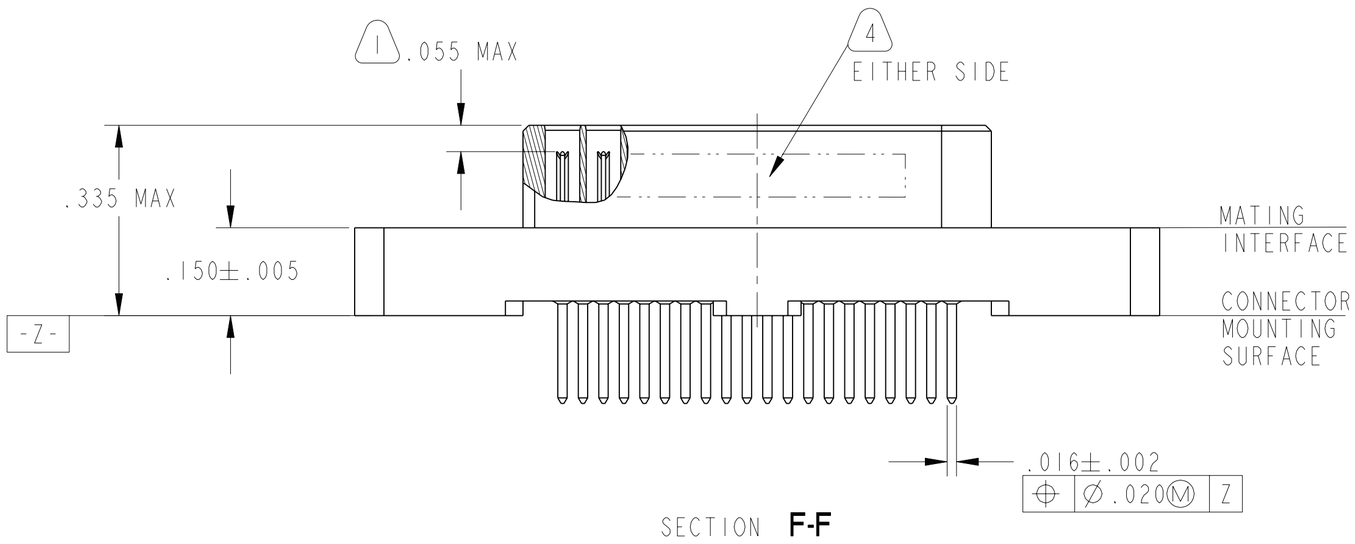
REV.	SHEET 1 OF 5	DOCUMENT NO. HDB-M4-XXXXXXXX

REVISIONS

LTR	DESCRIPTION	DATE
A	INITIAL RELEASE	08/08/2007
B	CL(11) SEE CHANGE NOTICE ECNA4197-0000	12/14/2007 DM
C	CL(11) SEE CHANGE NOTICE ECN: A7953-0000	08/05/2009 D. MORSE







SECTION **F-F**

NOTES:

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N/A
NEXT ASSEMBLY

PRO/ENGINEER INFORMATION
Pro/e Model Used:
HDB-MX-XXXXXXX_MSGERINS.ASSEM
Drawing Name:
HDB-M4-XXXXXXX

UNLESS OTHERWISE SPECIFIED
LINEAR DIMENSIONS ARE IN INCHES
TOLERANCES:
.XXXX = ±.0005 ANGLES= ±2°
.XXX = ±.010
.XX = ±.03
.X = ±.1
DIM.& TOL. PER ASME Y14.5M;
DRM PER MIL-DTL-31000;
OTHER Amphenol Stds. PER 9-3800
LEGENDS:
=FLAG NOTE CALL OUT
REFERENCE ONLY

SPECIFICATIONS
MATERIAL SPEC.
N/A
PROCESS SPEC.
9-3895
9-3856-5

MADE FROM MHDB-M4-XXXXXXX

POS	QTY	PART NUMBER	DESCRIPTION	NOTE

PARTS LIST

APPROVALS		DATE
PREPARED BY	DMORSE	13-Jul-07
ENGINEER IN CHARGE	BCHUBB	
DESIGN MANAGER	EHICKEY	
DESIGN ACTIVITY GROUP	BLP	

THIRD ANGLE PROJECTION

AMPHENOL CORPORATION
40-60 DELAWARE AVENUE
SIDNEY, N.Y. 13838

4 ROW
MOTHER BOARD CONNECTOR
HDB3 SERIES

SIZE	CAGE CODE	DOCUMENT NO.	REV.
C	77820	HDB-M4-XXXXXXXX	C

SCALE: 8.0 | REF. N/A | SHEET 1 OF 5

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HDB-M4-XXX X XX X X

EXAMPLE: HDB-M4-040 M 22 2 X

CONTACT TERMINATION FINISH	
2	GOLD PLATED IN ACCORDANCE WITH MIL-G-45204, TYPE II, .000030 MIN THICK GOLD OVER .000050 MIN THICK NICKEL
5	TIN PLATED IN ACCORDANCE WITH ASTM B545, .00010 MIN THICK MATTE TIN OVER .00010 MIN THICK NICKEL. (6)
6	TIN-LEAD PLATED IN ACCORDANCE WITH SAE-AMS-P-81728, .00010 MIN THICK TIN-LEAD OVER .00010 MIN THICK COPPER.

HARDWARE (SUPPLIED UNASSEMBLED)		
	TYPE	STICKOUT (DIM. K)
X	NO HARDWARE	N/A
G	POLARIZATION KEY (QTY 2)	.250
H	POLARIZATION KEY (QTY 2)	.500
J	POLARIZATION KEY (QTY 2)	.750
T	GUIDE PIN (QTY 2)	.250
U	GUIDE PIN (QTY 2)	.500
V	GUIDE PIN (QTY 2)	.750
W	GUIDE PIN (QTY 2)	.200
A	THREADED BOSS	.200
B	THREADED BOSS	.250
C	THREADED BOSS	.500
D	THREADED BOSS	.750

TERMINATION		
	TYPE	STICKOUT (DIM E)
~~20~~	~~PCB, STRAIGHT, .016 DIA.~~	~~.060~~
~~21~~	~~PCB, STRAIGHT, .016 DIA.~~	~~.090~~
22	PCB, STRAIGHT, .016 DIA.	.120
23	PCB, STRAIGHT, .016 DIA.	.150
24	PCB, STRAIGHT, .016 DIA.	.180
25	PCB, STRAIGHT, .016 DIA.	.210
26	PCB, STRAIGHT, .016 DIA.	.240
27	PCB, STRAIGHT, .016 DIA.	.270
28	PCB, STRAIGHT, .016 DIA.	.300
29	PCB, STRAIGHT, .016 DIA.	.360
30	PCB, STRAIGHT, .016 DIA.	.420

REMOVED
ECN:A7953-0000

BRUSH WIRE PLATING (CONTACT INTERFACE)	
M	0.000050 Au MIN THK OVER NICKEL
C	0.000020 Au MIN THK OVER NICKEL

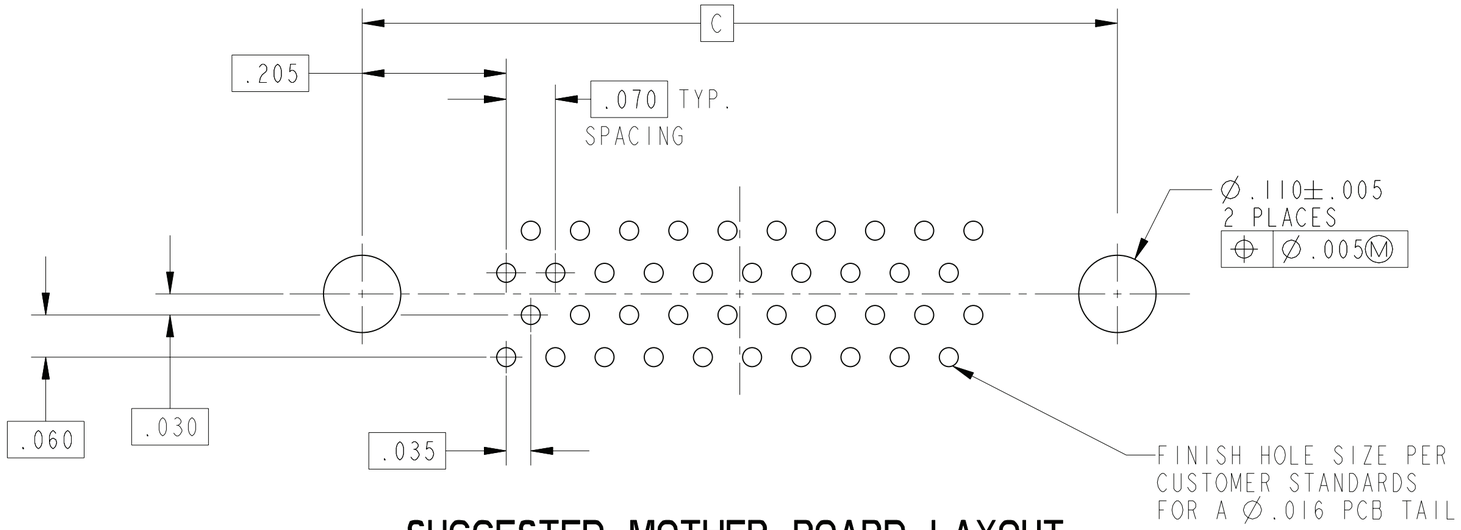
CONNECTOR DMENSIONS				
	NUMBER OF CONTACTS	DIMENSION A	DIMENSION B	DIMENSION C
040	40	1.375	.800	1.075
060	60	1.725	1.150	1.425
080	80	2.075	1.500	1.775
120	120	2.775	2.200	2.475
160	160	3.475	2.900	3.175

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SUGGESTED MOTHER BOARD LAYOUT

SCALE 6.000

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SIZE	CAGE CODE	DOCUMENT NO.	REV.
C	77820	HDB-M4-XXXXXXXX	C
SCALE: 5.0	REF: N/A	SHEET 3 OF 5	

HDB-M4-XXXXXXXX | SHEET 3 OF 5 | REV. C

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7. CONTACT ASSEMBLIES ARE NON-REPLACEABLE.

6. RoHS COMPLIANT FOR TERMINATION FINISH TIN PLATE OVER NICKEL.

5. WHEN NOT USING OPTIONAL GUIDE PIN OR POLARIZATION KEYS USE A 2-56 HEX HEAD SCREW FOR MOUNTING. (NOT SUPPLIED)

4. INK STAMP "AMPHENOL" 77820, PART NUMBER AND DATE CODE ON INDICATED SURFACE PER 9-3856-5. DATE CODE PER 9-3895, CHARACTERS TO BE .062 ±.020 HIGH.

3. FOR MATING DAUGHTER CONNECTOR ASSEMBLY SEE DRAWING HDB-D4-XXXXXXXX.

2. INDICATED DIMENSION IS TO POINT OF MINIMUM ELECTRICAL ENGAGEMENT.

1. POLARIZATION KEYS, GUIDE PINS AND THREADED BOSS ARE OPTIONAL. WHEN USING, A QUANTITY OF 2 ARE REQUIRED PER CONNECTOR. (WHEN USING KEYS, MATING CONNECTOR MUST ALSO USE KEYS.)

NOTES:

REPLACEMENT HARDWARE

HW ID	TYPE	STICKOUT (DIM K)	PART NUMBER
G	POLARIZATION KEY (QTY. 2)	.250	HDB-508803-001
H	POLARIZATION KEY(QTY. 2)	.500	HDB-508803-002
J	POLARIZATION KEY (QTY. 2)	.750	HDB-508803-003
T	GUIDE PIN (QTY. 2)	.250	HDB-508802-001
U	GUIDE PIN (QTY. 2)	.500	HDB-508802-002
V	GUIDE PIN (QTY. 2)	.750	HDB-508802-003
W	GUIDE PIN (QTY. 2)	.200	HDB-508802-004
A	THREADED BOSS (QTY. 2)	.200	HDB-508808-000
B	THREADED BOSS (QTY. 2)	.250	HDB-508808-001
C	THREADED BOSS (QTY. 2)	.500	HDB-508808-002
D	THREADED BOSS (QTY. 2)	.750	HDB-508808-003

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SIZE	CAGE CODE	DOCUMENT NO.	REV.
C	77820	HDB-M4-XXXXXXXX	C
SCALE: 1.0	REF: N/A	SHEET 4 OF 5	

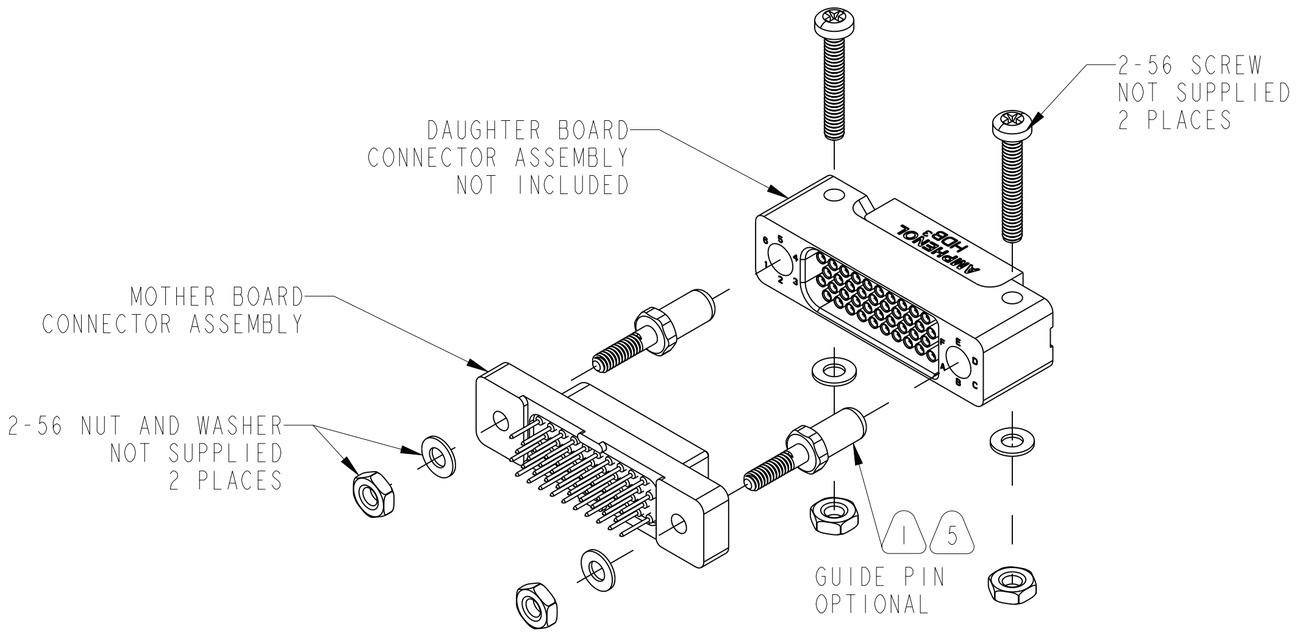
HDB-M4-XXXXXXXX | SHEET 4 OF 5 | REV. C

HDB-M4-XXXXXXXX | SHEET 4 OF 5 | REV. C

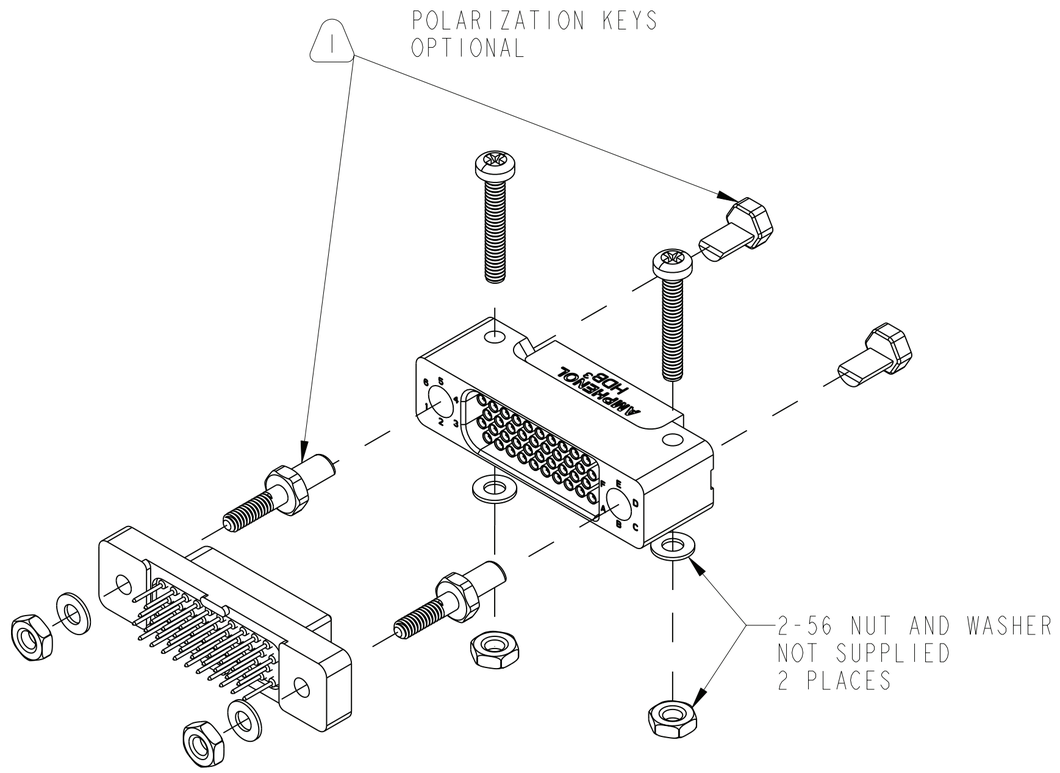
REVISION C | VERSION 2 | RELEASE STATE Released

FORMAT: C-U.E-1

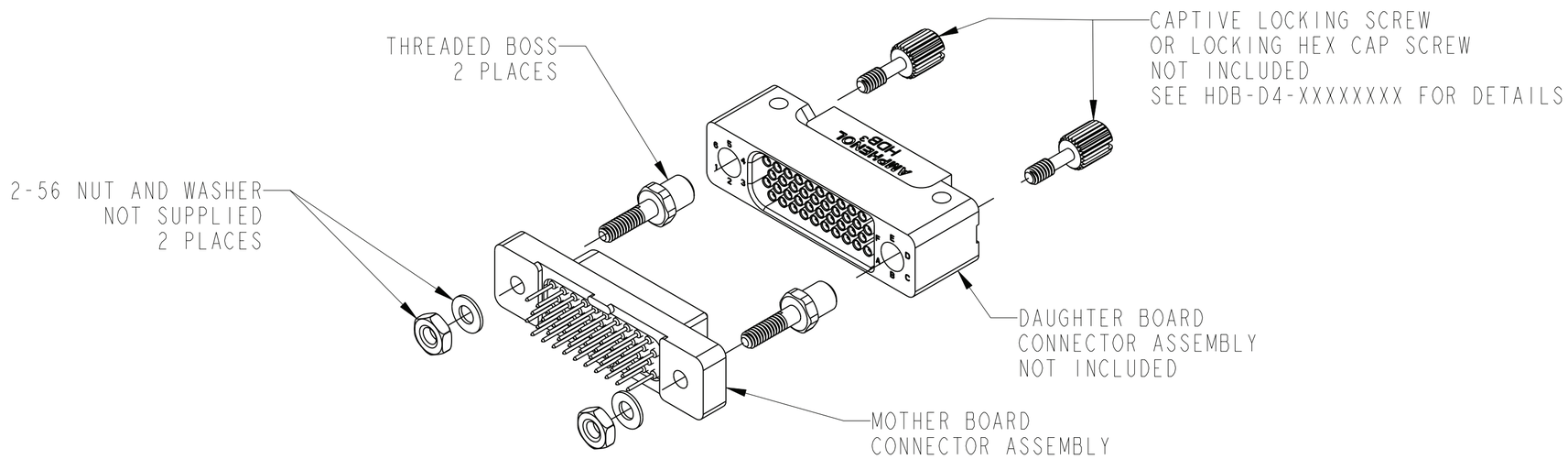
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EXPLODED ISOMETRIC VIEW
SHOWN WITH OPTIONAL
GUIDE PIN



EXPLODED ISOMETRIC VIEW
SHOWN WITH OPTIONAL KEYING



EXPLODED ISOMETRIC VIEW
SHOWN WITH OPTIONAL
THREADED BOSS

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DOCUMENT NO.	SHEET	REV.
HDB-M4-XXXXXXXX	SHEET 5 OF 5	C

SIZE	CAGE CODE	DOCUMENT NO.	REV.
C	77820	HDB-M4-XXXXXXXX	C
SCALE: 2.0	REF: N/A	SHEET 5 OF 5	

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VERSION 2 | REVISION C | RELEASE STATE Released

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