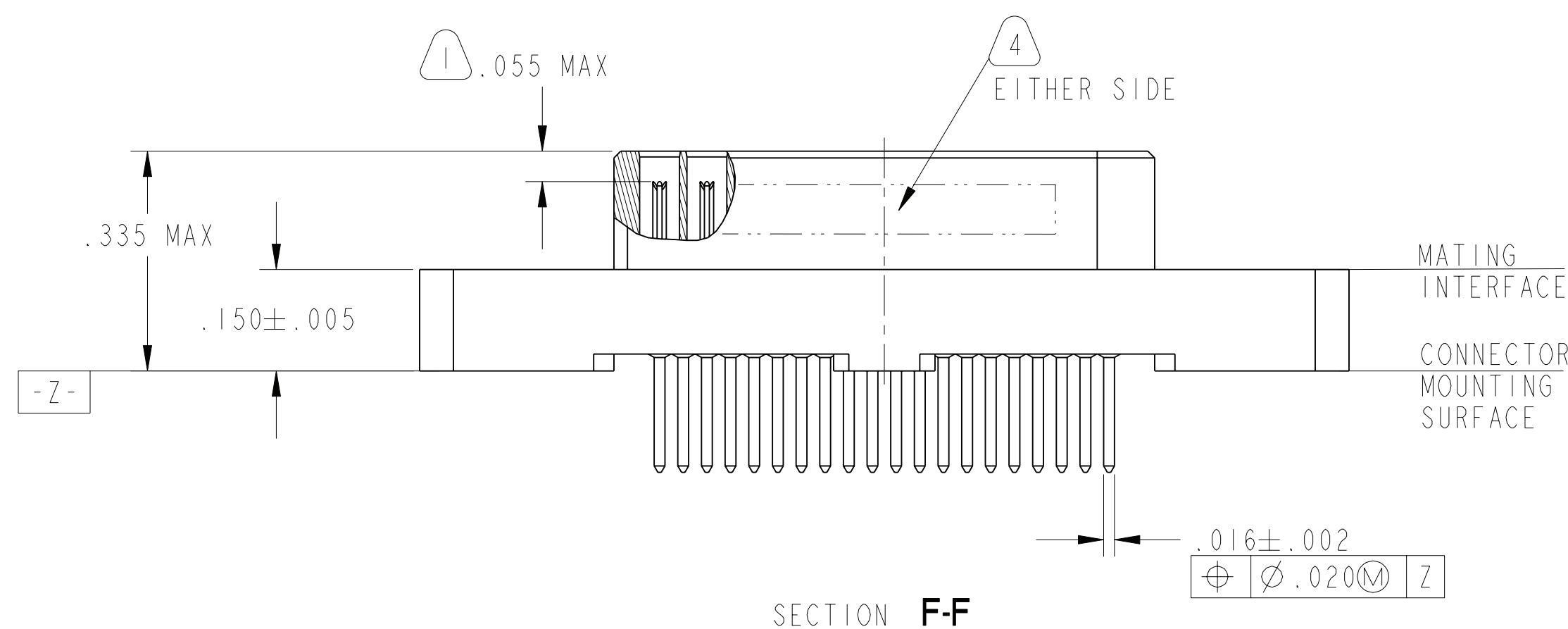
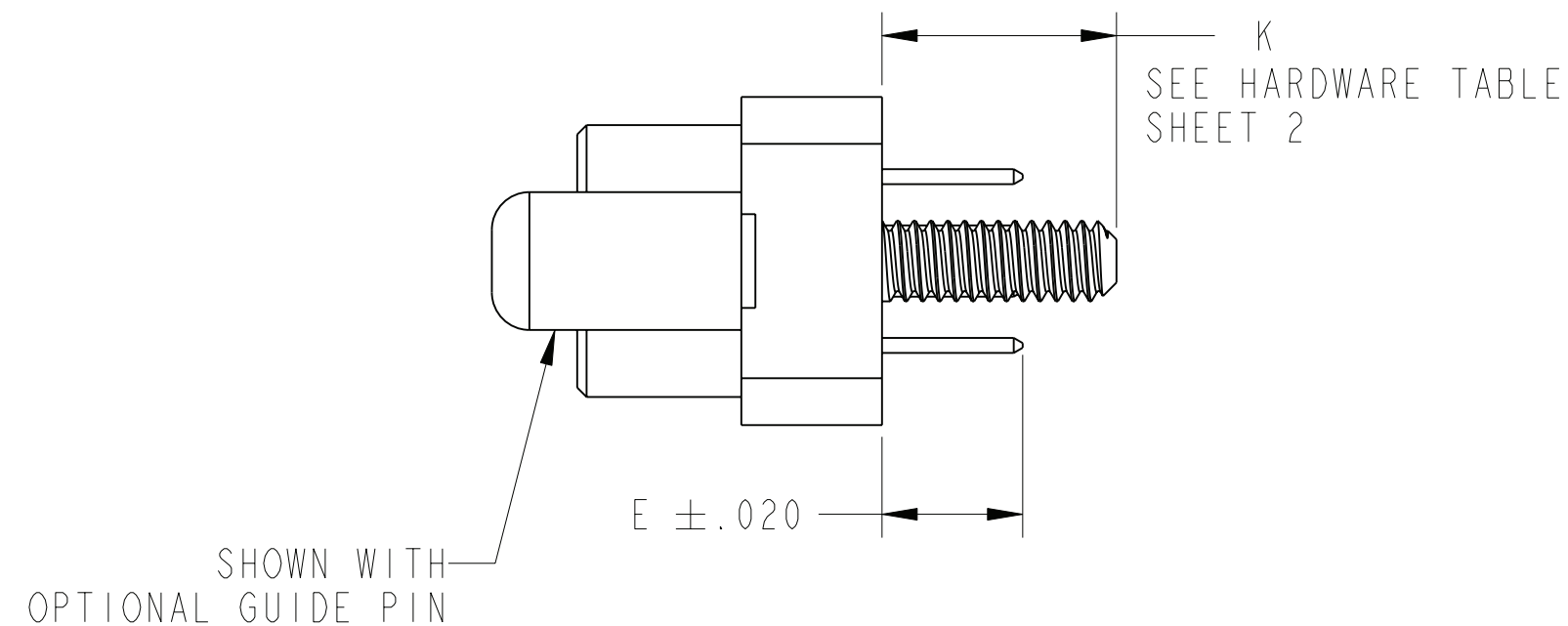
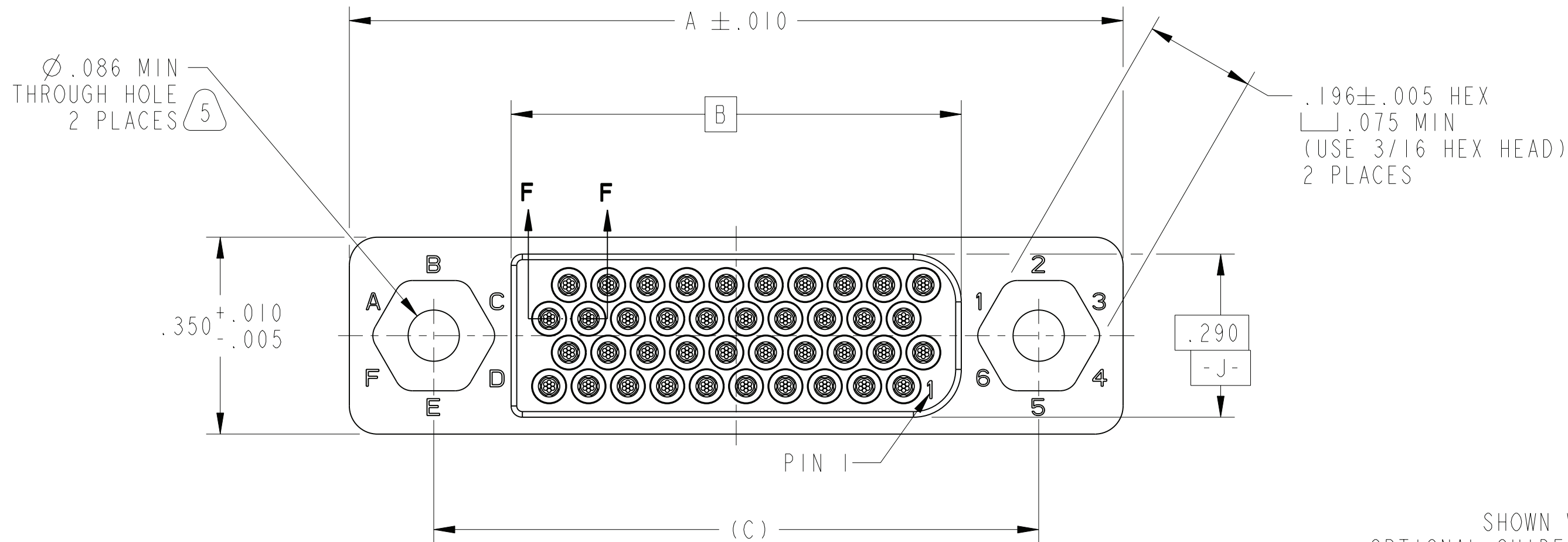


C		SHEET 1 OF 5		HDB-M4-XXXXXXX	
REVISIONS					
LTR	DESCRIPTION			DATE	
A	INITIAL RELEASE			08/08/2007	
B	CL(11) SEE CHANGE NOTICE ECNA4197-0000			12/14/2007 DM	
C	CL(11) SEE CHANGE NOTICE ECN: A7953-0000			08/05/2009 D. MORSE	



NOTES:

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N/A NEXT ASSEMBLY

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

UNLESS OTHERWISE SPECIFIED SPECIFICATIONS 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

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

POS	QTY	PART NUMBER	DESCRIPTION	NOTE
MADE FROM MHDB-M4-XXXXXXX				
PARTS LIST				
APPROVALS				
PREPARED BY	DMORSE		DATE	
ENGINEER IN CHARGE	BCHUBB		13-Jul-07	
DESIGN MANAGER	EHICKEY			
DESIGN ACTIVITY GROUP	BLP			
THIRD ANGLE PROJECTION				
SIZE	CAGE CODE	DOCUMENT NO.	REV.	
C	77820	HDB-M4-XXXXXXX	C	
SCALE: 2.0		REF. N/A	SHEET 1 OF 5	

AMPHENOL CORPORATION 40-60 DELAWARE AVENUE SIDNEY, N.Y. 13858 4 ROW MOTHER BOARD CONNECTOR HDB3 SERIES

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 DIMENSIONS				
	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

NOTES:

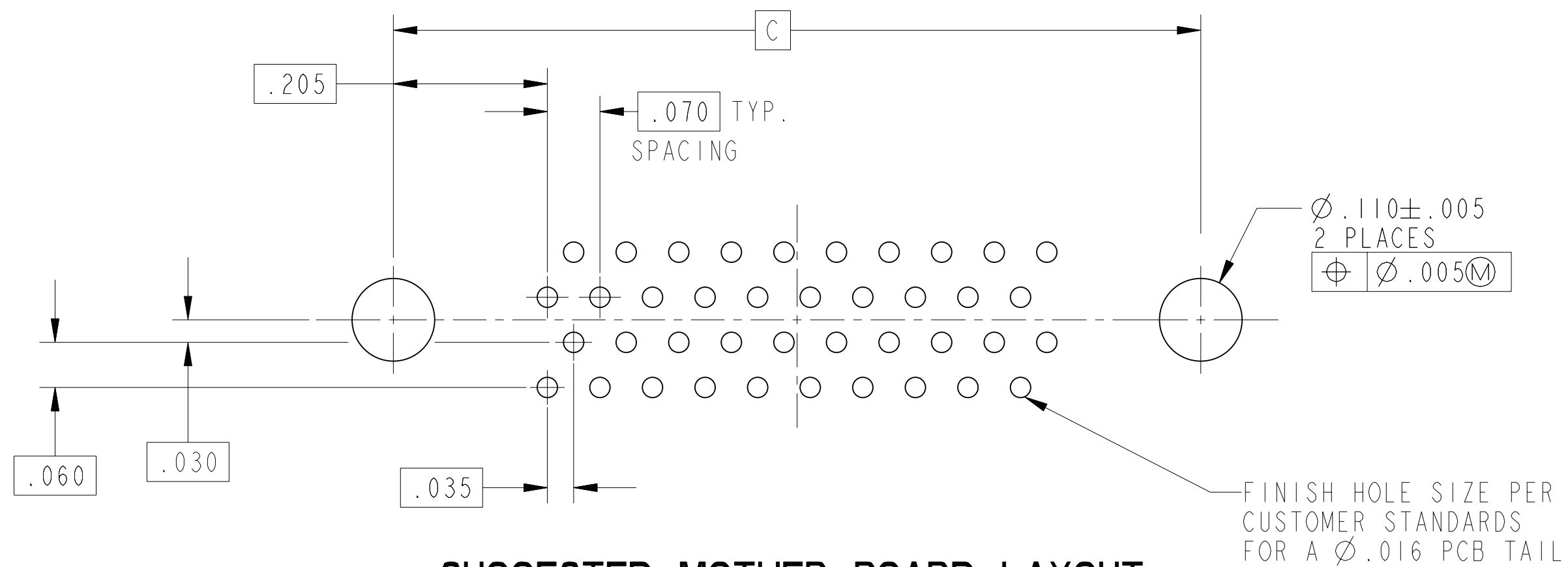
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SIZE C	CAGE CODE 77820	DOCUMENT NO. HDB-M4-XXXXXXXXX	REV. C
SCALE: 5.0		REF: N/A	SHEET 2 OF 5

HDB-M4-XXXXXXXX

SHEET 3 OF 5

REV. C



SUGGESTED MOTHER BOARD LAYOUT

SCALE 6.000

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FORMAT: C-U-E-I

RELEASE STATE Released

REGION C

VERSION 2

SHEET 3 OF 5

HDB-M4-XXXXXXXX

HDB-M4-XXXXXXXX

SHEET 4 OF 5

REV. C

B

A

- 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:

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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

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

RELEASE STATE Released

REVISION C

REGION 2

SHEET 4 OF 5

HDB-M4-XXXXXXXX

FORMAT: C-U-E-I

HDB-M4-XXXXXXX

SHEET 5 OF 5

REV. C

C

B

A

D

C

2

C

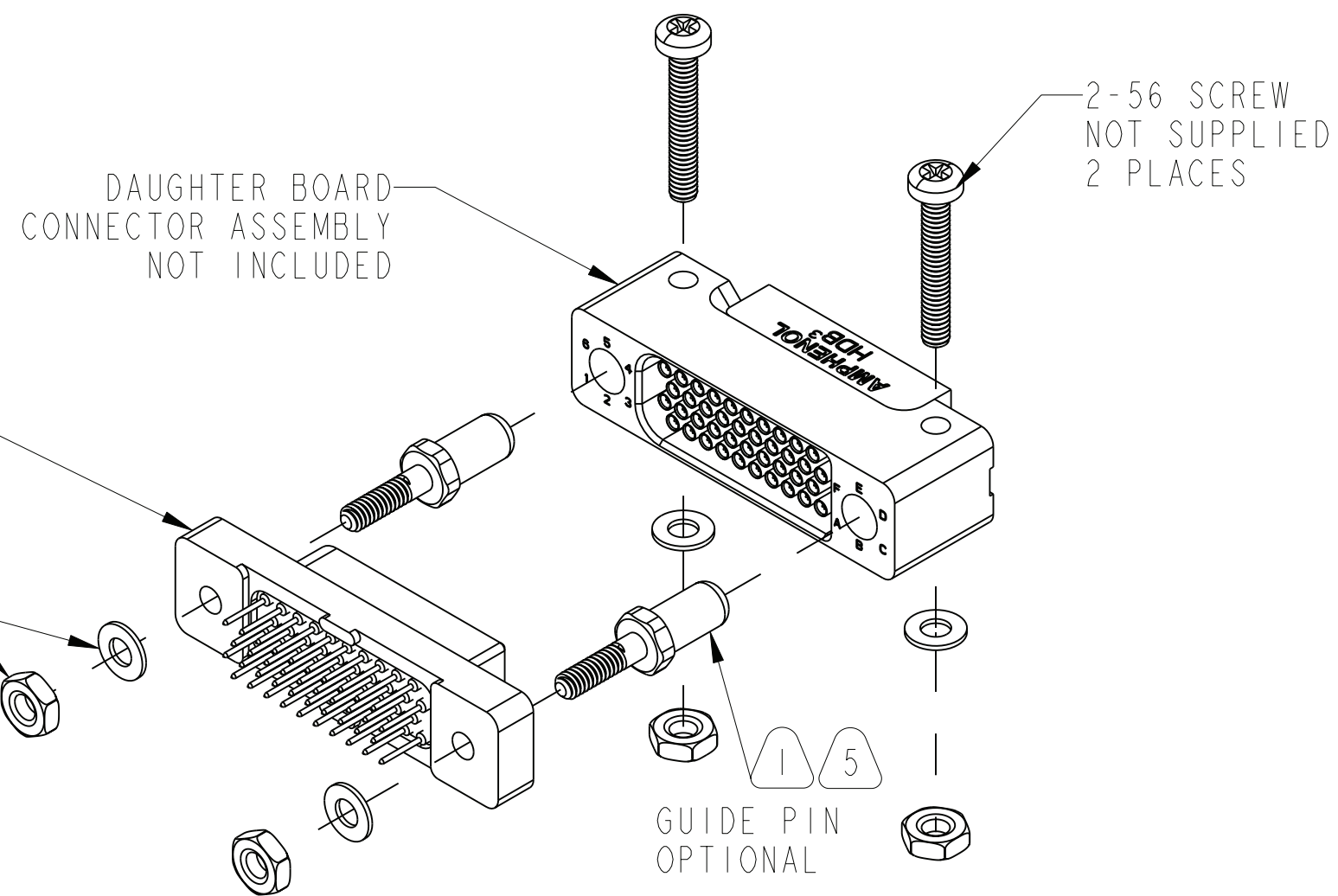
Released

REV. C

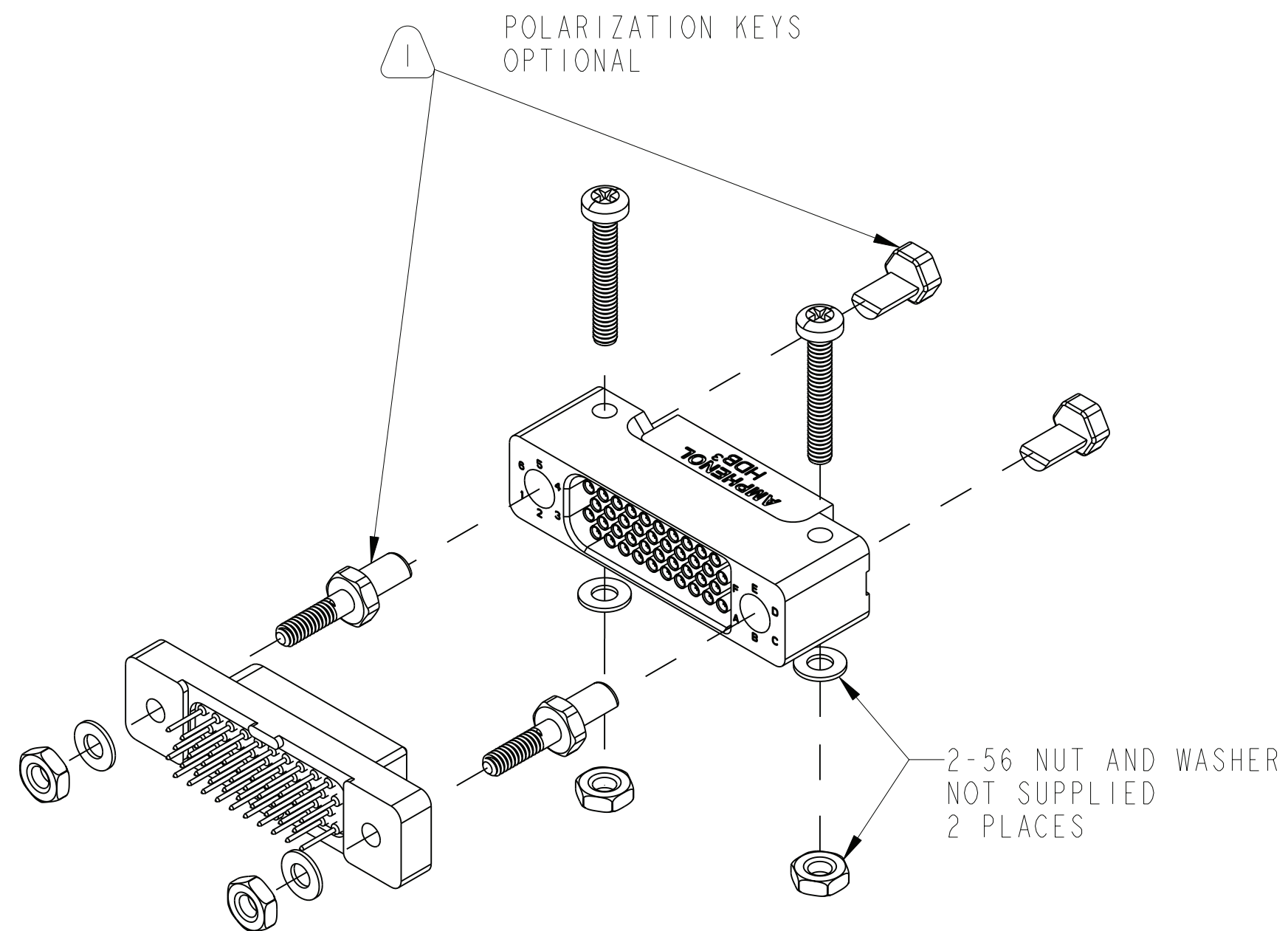
SHEET 5 OF 5

HDB-M4-XXXXXXX

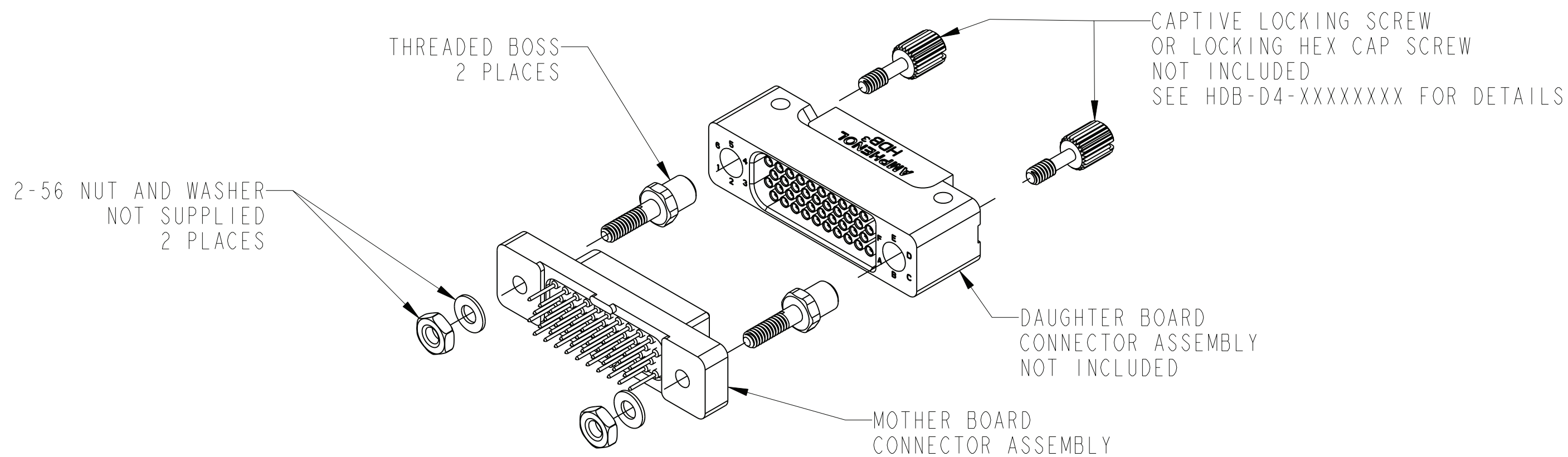
REV. C



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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