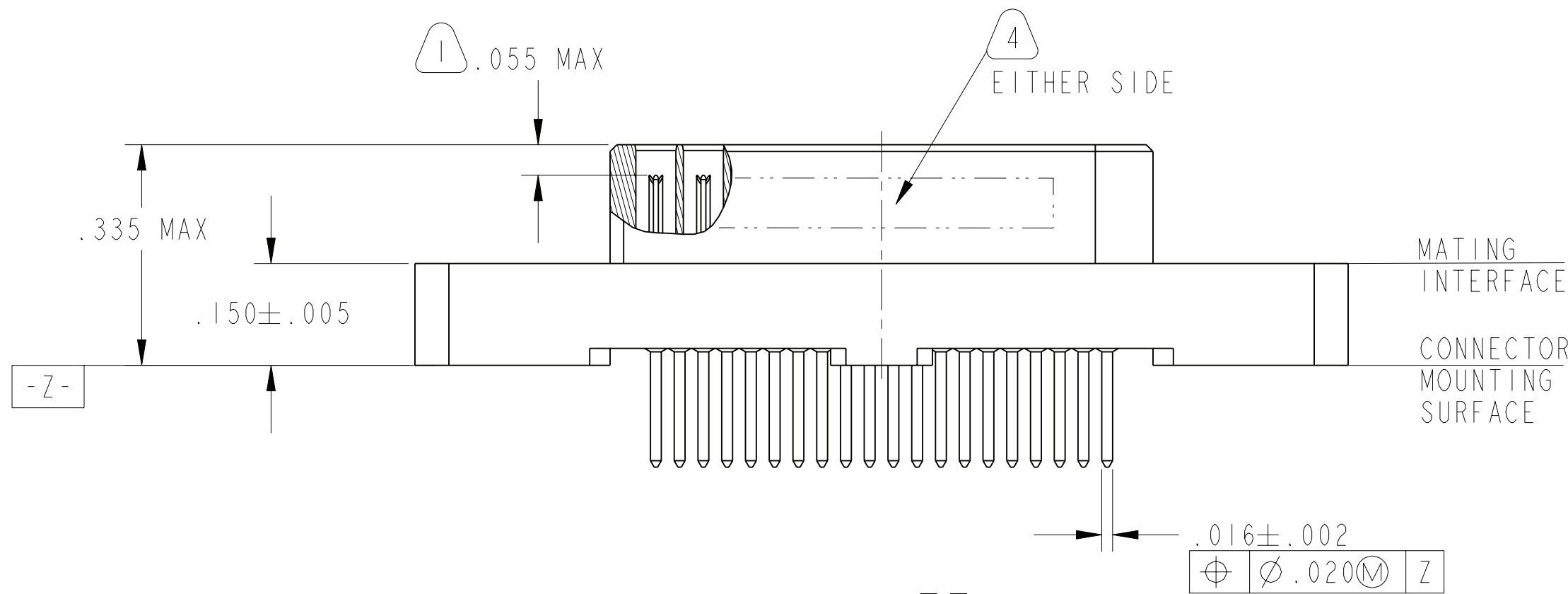
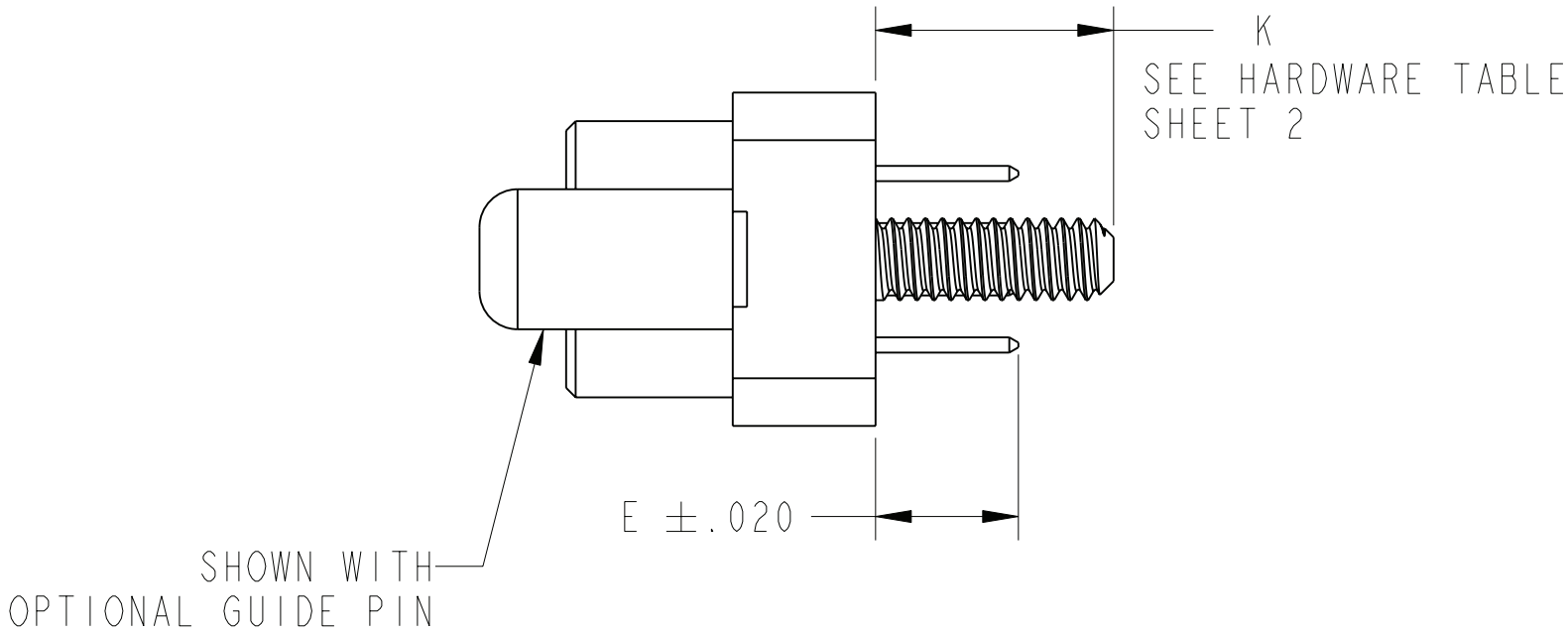
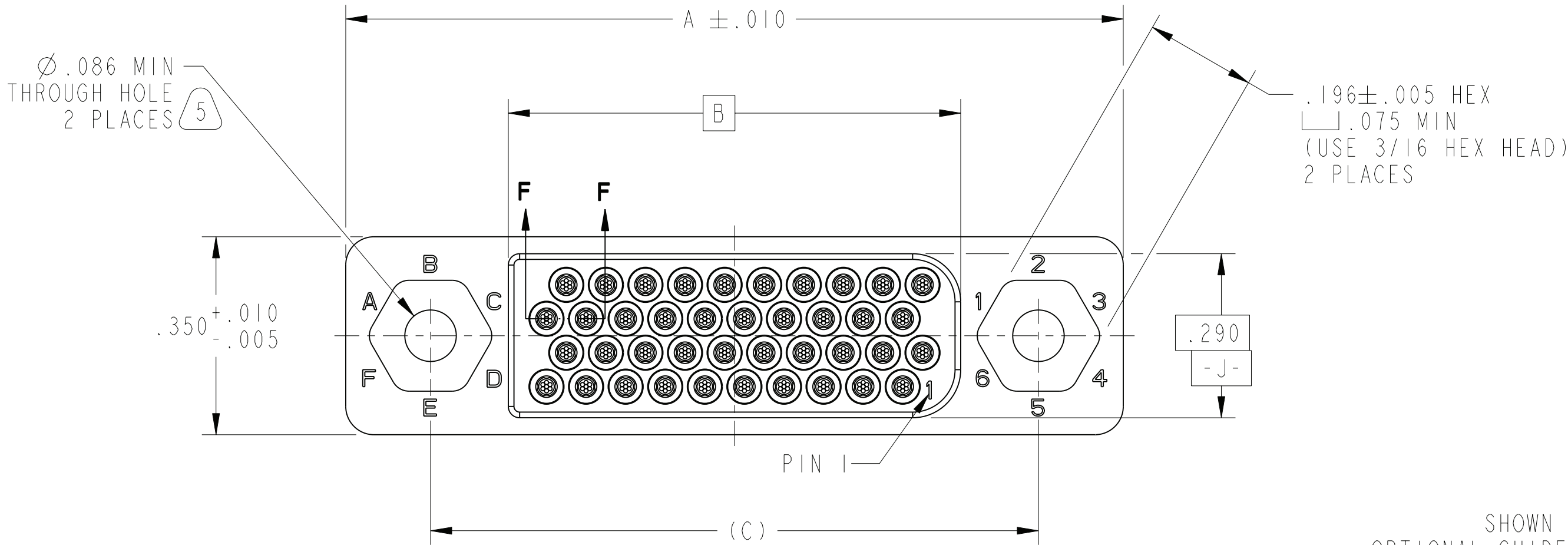


| REV. | LTR | DESCRIPTION                              | DATE                |
|------|-----|------------------------------------------|---------------------|
|      |     |                                          |                     |
| A    |     | INITIAL RELEASE                          | 08/08/2007          |
| 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 |



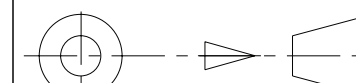
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N/A

NEXT ASSEMBLY

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

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                       |  |                       |           |             |                                                                                                                                                                          |              |      |      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|-----------------------|-----------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------|------|
| UNLESS OTHERWISE SPECIFIED                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | SPECIFICATIONS                                                                        |  | POS                   | QTY       | PART NUMBER |                                                                                                                                                                          | DESCRIPTION  |      | NOTE |
| <div>LINEAR DIMENSIONS ARE IN INCHES</div> <div>TOLERANCES:</div> <div>.XXXX = ±.0005    ANGLES= ±2°</div> <div>.XXX = ±.010</div> <div>.XX = ±.03</div> <div>.X = ±.1</div> <div>-----</div> <div>DIM. &amp; TOL. PER ASME Y14.5M;</div> <div>DRM PER MIL-DTL-31000;</div> <div>OTHER Amphenol Stds. PER 9-3800</div> <div>LEGENDS:</div> <div>-FLAG NOTE CALL OUT</div> <div>REFERENCE ONLY</div> <div></div> |  | MATERIAL SPEC.                                                                        |  | APPROVALS             |           | DATE        | <div>AMPHENOL CORPORATION</div> <div>40-60 DELAWARE AVENUE</div> <div>SIDNEY, N.Y. 13838</div> <div>4 ROW</div> <div>MOTHER BOARD CONNECTOR</div> <div>HDB3 SERIES</div> |              |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | N/A                                                                                   |  | PREPARED BY           |           | DMORSE      |                                                                                                                                                                          |              |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  | PROCESS SPEC.                                                                         |  | ENGINEER IN CHARGE    |           | BCHUBB      |                                                                                                                                                                          |              |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                       |  | DESIGN MANAGER        |           | EHICKEY     |                                                                                                                                                                          |              |      |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                       |  | DESIGN ACTIVITY GROUP |           | BLP         |                                                                                                                                                                          |              |      |      |
| 9-3895                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | THIRD ANGLE PROJECTION                                                                |  | SIZE                  | CAGE CODE |             | DOCUMENT NO.                                                                                                                                                             |              | REV. |      |
| 9-3856-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  | C                     | 77820     |             | HDB-M4-XXXXXXXXX                                                                                                                                                         |              | C    |      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |                                                                                       |  | SCALE: 2.0            |           | REF.<br>N/A |                                                                                                                                                                          | SHEET 1 OF 5 |      |      |

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                          | TIN-LEAD PLATED IN ACCORDANCE WITH SAE-AMS-P-81728, .00010 MIN THICK TIN-LEAD OVER .00010 MIN THICK COPPER                                                                            |

| TERMINATION   |                                     |                     |
|---------------|-------------------------------------|---------------------|
|               | TYPE                                | STICKOUT<br>(DIM E) |
| <del>20</del> | <del>PCB, STRAIGHT, .016 DIA.</del> | <del>.060</del>     |
| <del>21</del> | <del>PCB, STRAIGHT, .016 DIA.</del> | <del>.090</del>     |
| 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

| HARDWARE (SUPPLIED UNASSEMBLED) |                          |                      |
|---------------------------------|--------------------------|----------------------|
|                                 | TYPE                     | STICKOUT<br>(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                 |

| BRUSH WIRE PLATING<br>(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       |

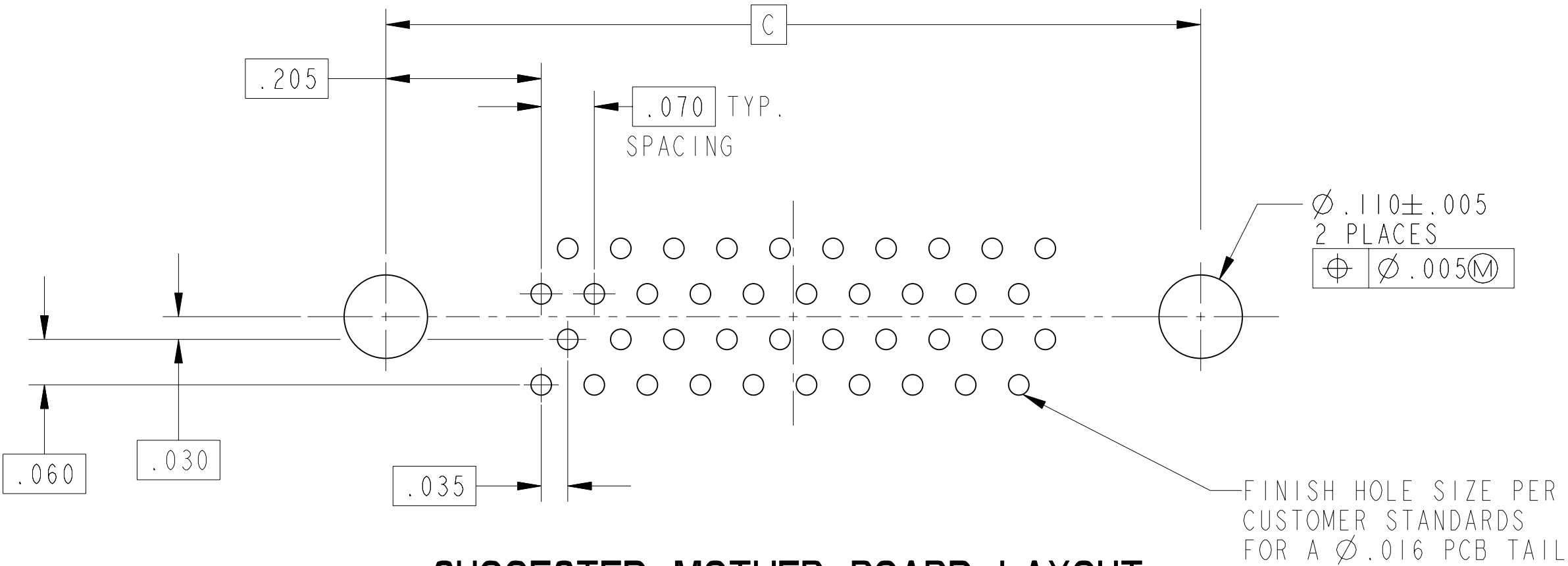
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|                  |                           |                                        |                  |
|------------------|---------------------------|----------------------------------------|------------------|
| SIZE<br><b>C</b> | CAGE CODE<br><b>77820</b> | DOCUMENT NO.<br><b>HDB-M4-XXXXXXXX</b> | REV.<br><b>C</b> |
| SCALE: 5.0       |                           | REF:<br>N/A                            | SHEET 2 OF 5     |

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SUGGESTED MOTHER BOARD LAYOUT

SCALE 6.000

4

3

2

HDB-M4-XXXXXXX

SHEET 4 OF 5

C

REV.

C

DOCUMENT NO.

HDB-M4-XXXXXXX

SHEET 4 OF 5

REV.

C

RELEASE STATE

Released

REVISION

C

VERSION

2

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-XXXXXXX.

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.)

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DOCUMENT NO.

HDB-M4-XXXXXXX

SHEET 4 OF 5

REV.

C

SCALE: 1.0

REF: N/A

SHEET 4 OF 5

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-XXXXXXX

REV.

C

SCALE: 1.0

REF: N/A

SHEET 4 OF 5

DOCUMENT NO.

HDB-M4-XXXXXXX

SHEET 4 OF 5

REV.

C

RELEASE STATE

Released

REVISION

C

VERSION

2

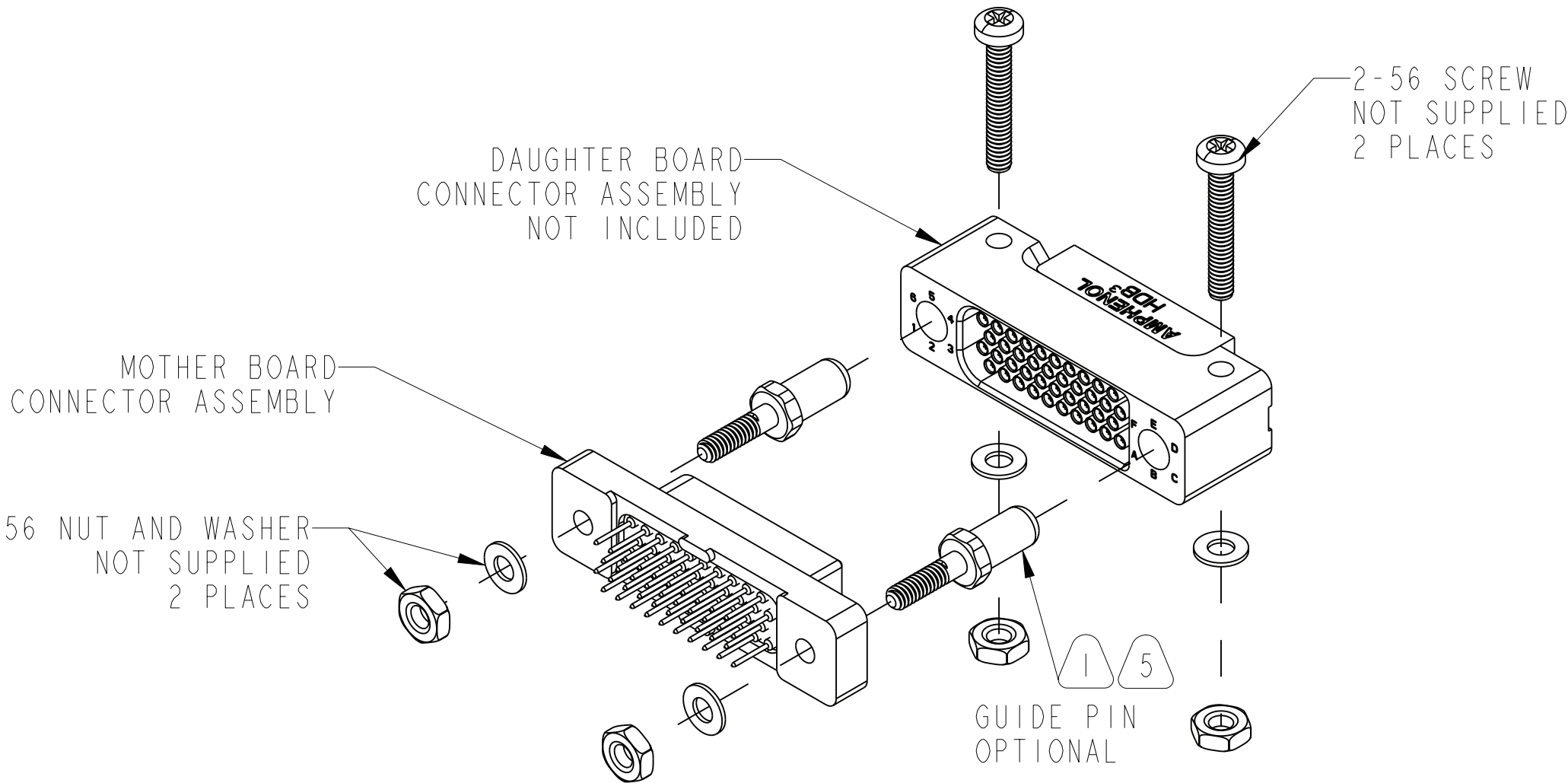
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3

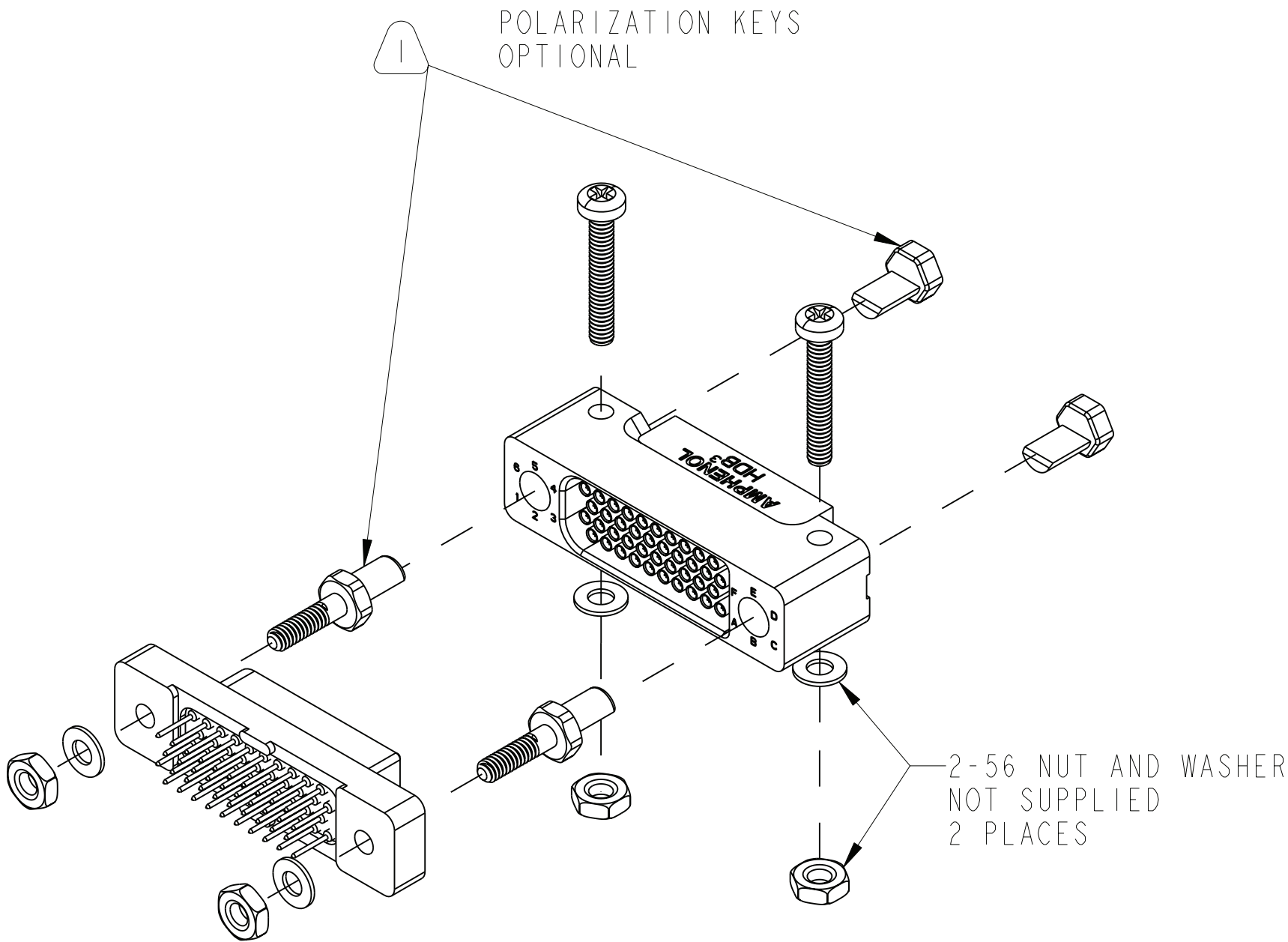
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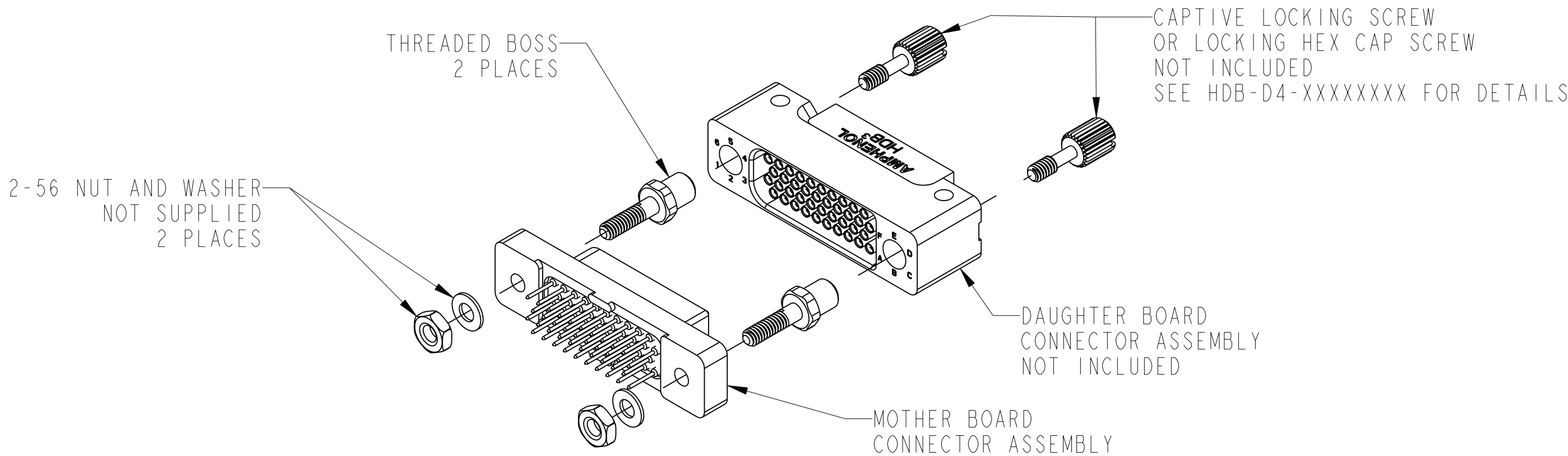
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EXPLODED ISOMETRIC VIEW  
SHOWN WITH OPTIONAL  
GUIDE PIN



EXPLODED ISOMETRIC VIEW  
SHOWN WITH OPTIONAL KEYING



EXPLODED ISOMETRIC VIEW  
SHOWN WITH OPTIONAL  
THREADED BOSS

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