

INCH-POUND

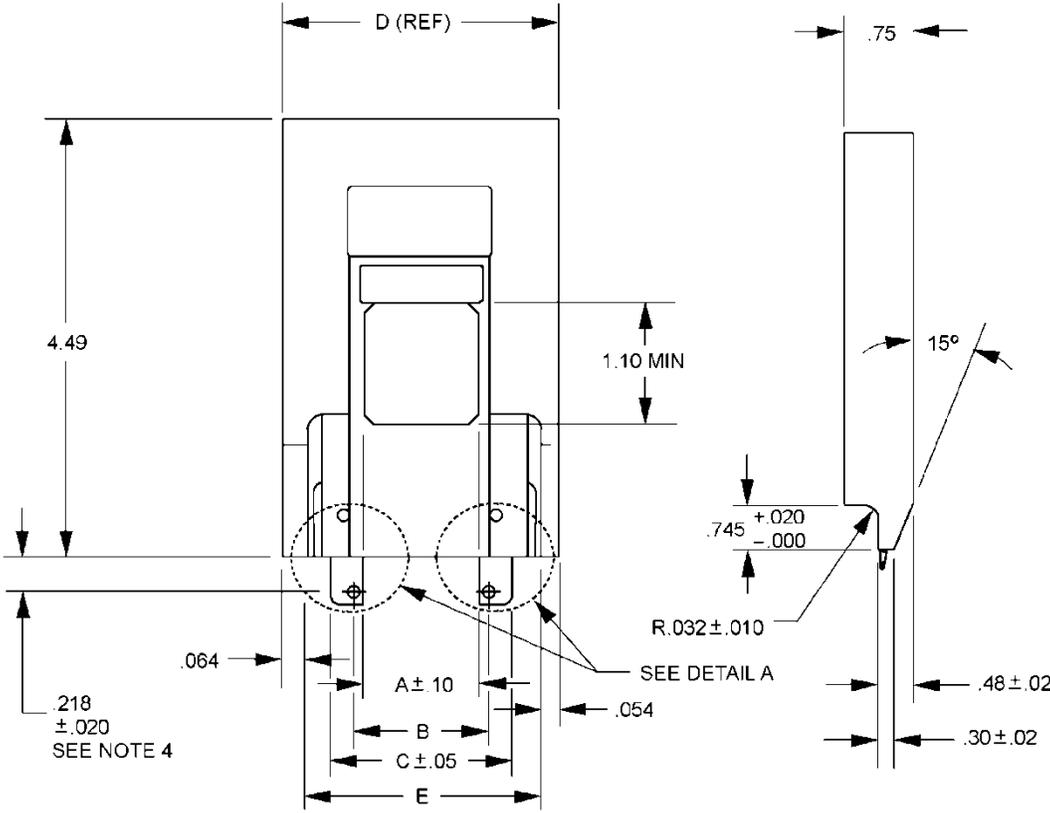
MIL-DTL-28754/54C  
 4 November 2015  
 SUPERSEDING  
 MIL-C-28754/54B  
 23 March 1994

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRICAL, MODULAR, EXTRACTOR,  
 MODULE, SINGLE AND DOUBLE SPAN, STYLES I AND II

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-C-28754.



| Dimensions | Single span -01 | Double span -02 |
|------------|-----------------|-----------------|
| A          | 1.75            | 4.75            |
| B          | 1.890           | 4.890           |
| C          | 2.27            | 5.27            |
| D (REF)    | 3.12            | 6.12            |
| E          | 2.96            | 5.96            |

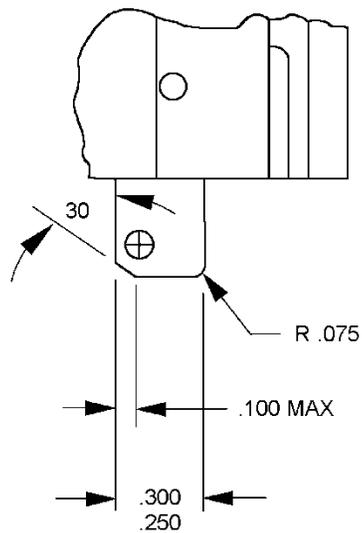
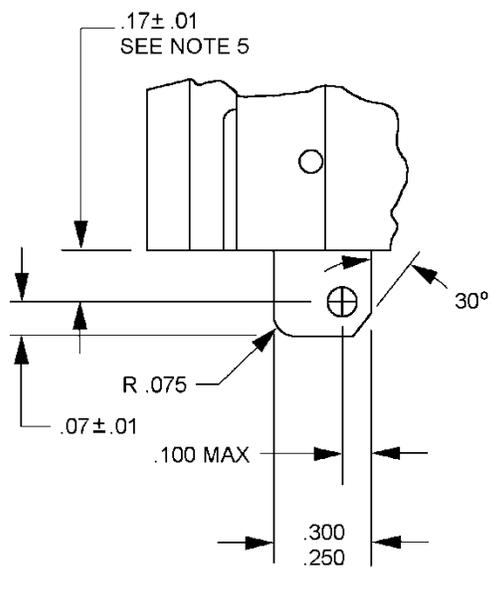
\*FIGURE 1. Module extractor (type 1A).

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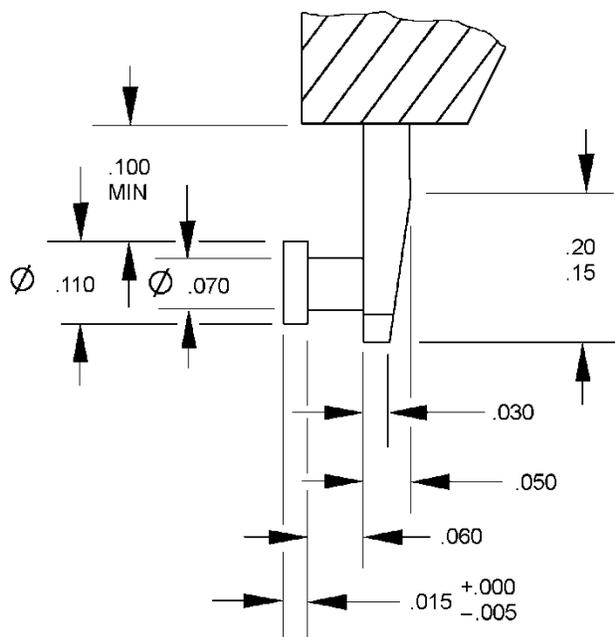
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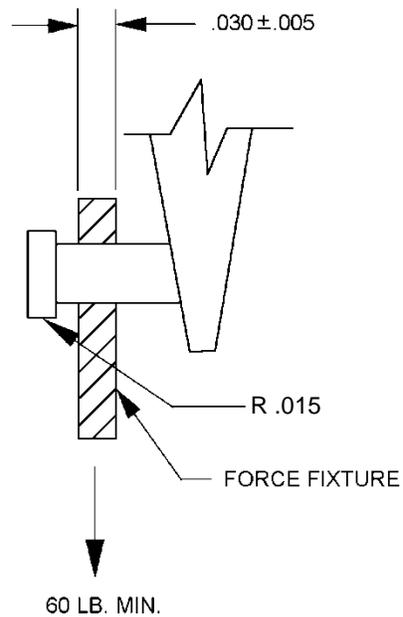
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DETAIL A



VIEW B - B



\*FIGURE 1. Module extractor (type 1A) – Continued.

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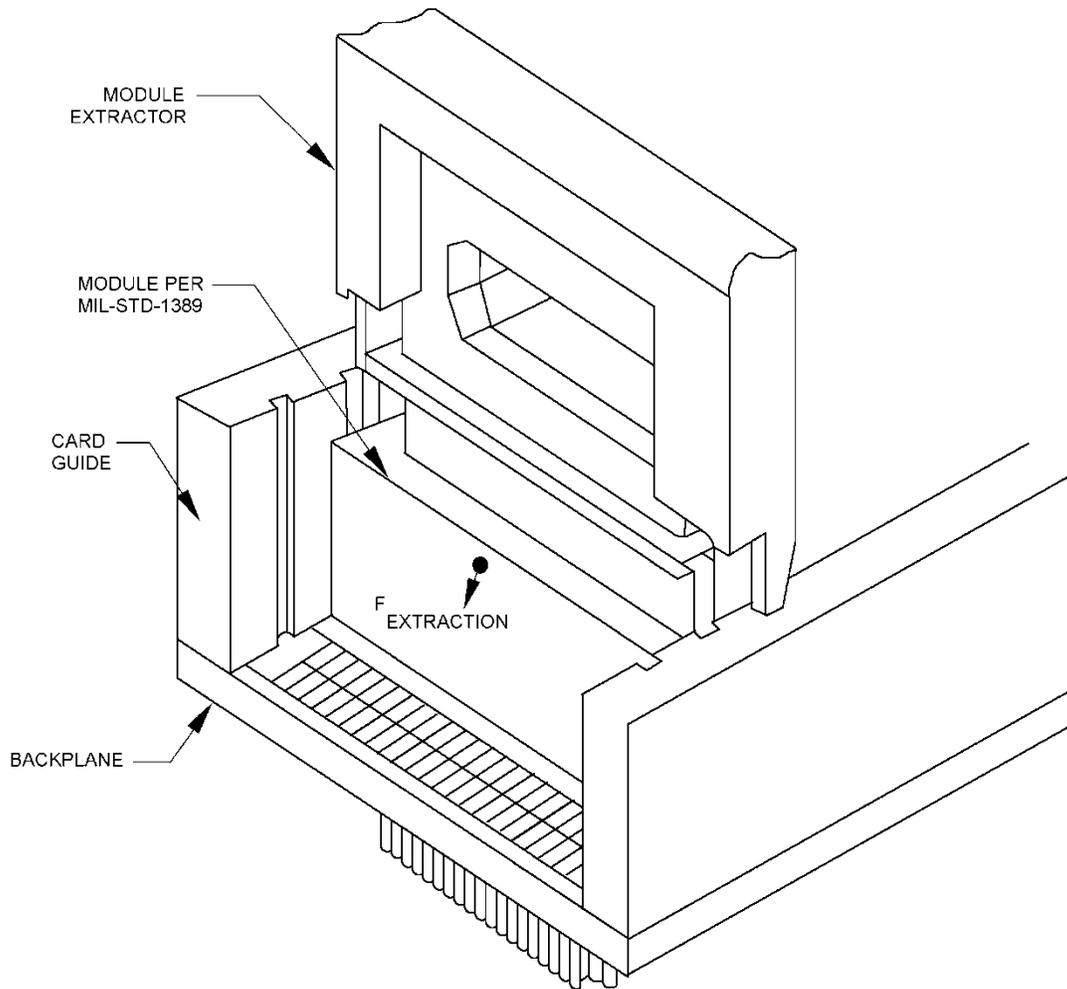
| Inches | mm   | Inches | mm   | Inches | mm    | Inches | mm    |
|--------|------|--------|------|--------|-------|--------|-------|
| .005   | .13  | .070   | 1.78 | .75    | 19.1  | 4.75   | 120.7 |
| .010   | .25  | .100   | 2.54 | 1.10   | 27.9  | 4.89   | 124.2 |
| .015   | .38  | .150   | 3.81 | 1.75   | 44.5  | 5.27   | 133.9 |
| .025   | .64  | .17    | 4.3  | 1.890  | 48.01 | 5.96   | 151.4 |
| .030   | .76  | .20    | 5.1  | 2.27   | 57.7  | 6.12   | 155.5 |
| .05    | 1.3  | .250   | 6.35 | 3.12   | 79.3  |        |       |
| .060   | 1.52 | .300   | 7.62 | 4.49   | 114.1 |        |       |

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only and are based upon 1.00 inch = 25.4 mm.
3. Unless otherwise specified, tolerances are plus or minus .010 inch (.3 mm) on three place decimals, and plus or minus .03 inch (.8 mm) on two place decimals.
4. Measured from extractor housing foot to center of extractor pins.
5. Measured from lower end of extractor handle assembly to center of extractor pins.

\*FIGURE 1. Module extractor (type 1A) – Continued.

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$F_{EXTRACTION} = 60 \text{ LB NOMINAL}$

\*FIGURE 2. Typical durability fixture.

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REQUIREMENTS:

Dimensions and configurations: See figure 1.

Material:

Body: Polycarbonate, gray.

\*Springs: Stainless steel.

\*Extractor pins: 303 stainless steel in accordance with ASTM A581/A581M.

Plate: 304 stainless steel in accordance with ASTM A240/A240M.

Marking: Part or Identifying Number (PIN) to be molded in or supplied as raised marking in .12 inch (approximate) high characters. The date code in accordance with MIL-STD-1285 shall be applied using ink in accordance with A-A-56032 using gothic characters .06 inch high.

\*Extraction travel: .75 inches minimum. Extractor shall return to the extended position by means of one or more springs.

Structural integrity: Individual Module extractor pins and plate shall withstand a 60 pound load applied in accordance with figure 1. There shall be no evidence of damage or deterioration that will affect its normal operation.

Durability: The extractor shall meet the following durability requirements:

- (a) The extractor shall meet all dimensional requirements and there shall be no evidence of damage or deterioration that will affect its normal operation after 500 extraction cycles in an appropriate fixture similar to figure 2 that provides a  $30 \pm 2$  pound force per module extractor pin.
- (b) The module configuration shall be in accordance with MIL-STD-1389.

Corrosion: The extractor shall show no evidence of corrosion, blistering, or deterioration, indicative of poor plating when exposed to test method 101 of MIL-STD-202, test condition B. The corrosion test shall be done on a sample not submitted to the durability test.

PIN: M28754/54- (dash number from table I).

TABLE I. Dash numbers.

| Dash no | Span   |
|---------|--------|
| 01      | Single |
| 02      | Double |

Operation: Operating instructions shall be packed with each extractor.

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First article testing: Two samples shall be subjected to visual and mechanical examination (including marking and extraction travel), structural integrity durability and corrosion tests.

Changes from previous issue. The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the previous issue.

Referenced documents. In addition to MIL-C-28754, this document references the following:

A-A-56032  
MIL-STD-202  
MIL-STD-1285  
MIL-STD-1389  
ASTM A240/A240M  
ASTM A581/A581M

CONCLUDING MATERIAL

Custodians:  
Army – CR  
Navy – AS  
Air Force – 85  
DLA - CC

Preparing activity:  
DLA - CC  
  
(Project 5935-2015-203)

Review activities:  
Army – AR, MI  
Navy – MC  
Air Force – 99

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