

INCH-POUND

MS18194E
w/AMENDMENT 1
28 October 2013
SUPERSEDING
MS18194E
9 May 2012

DETAIL SPECIFICATION SHEET

JACKSCREWS, ELECTRICAL CONNECTORS MALE AND FEMALE, LONG, TURNABLE

Reinstated after 10 July 2009 and may be used for new and existing designs and acquisitions.

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-DTL-28748.

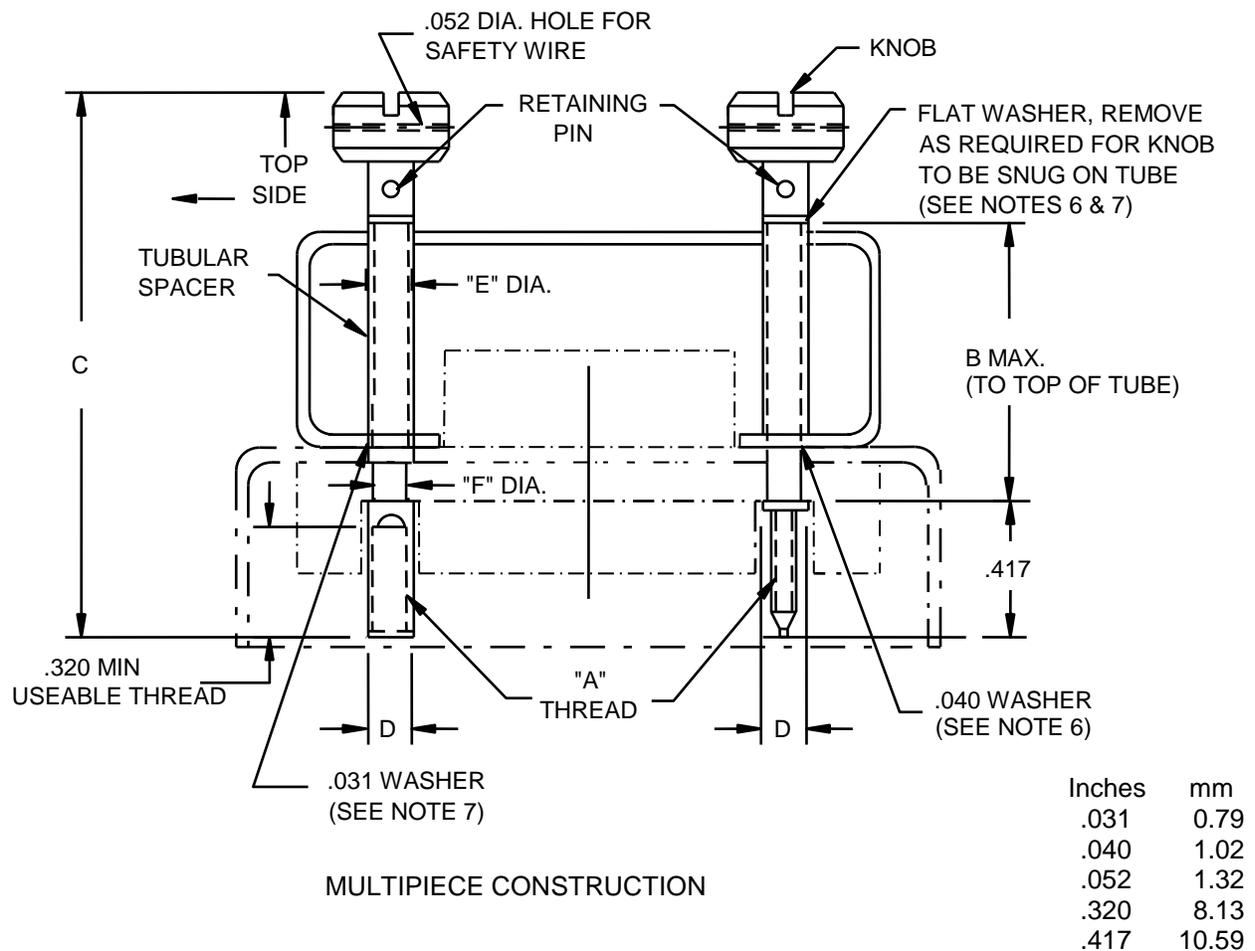


FIGURE 1. Multi-piece turnable jackscrews.

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Multipiece turnable jackscrew designator	Gender	Connector size (Number of contacts)	A Thread class 2	B ± 0.016 (0.41 mm)	C max	D dia max	E dia ± 0.004 (0.10 mm)	F dia ± 0.003
MS18194-1	Male	7, 9, 14, 18, 20, 26, 34, 42, 50, 66, 75	6-32 UNC-2A .138-32 UNC	1.500 (38.10)	2.467 (62.66)	.190 (4.83)	.188 (4.78)	.115 (2.92)
MS18194-2	Female	7, 9, 14, 18, 20, 26, 34, 42, 50, 66, 75	6-32-UNC-2B .138-32 UNC	1.500 (38.10)	2.467 (62.66)	.190 (4.83)	.188 (4.78)	.115 (2.92)
MS18194-3	Male	104	8-32-UNC-2A .164-32 UNC	2.495 (63.37)	3.438 (87.33)	.225 (5.72)	.219 (5.56)	.137 (3.48)
MS18194-4	Female	104	8-32-UNC-2B .164-32 UNC	2.495 (63.37)	3.438 (87.33)	.225 (5.72)	.219 (5.56)	.137 (3.48)

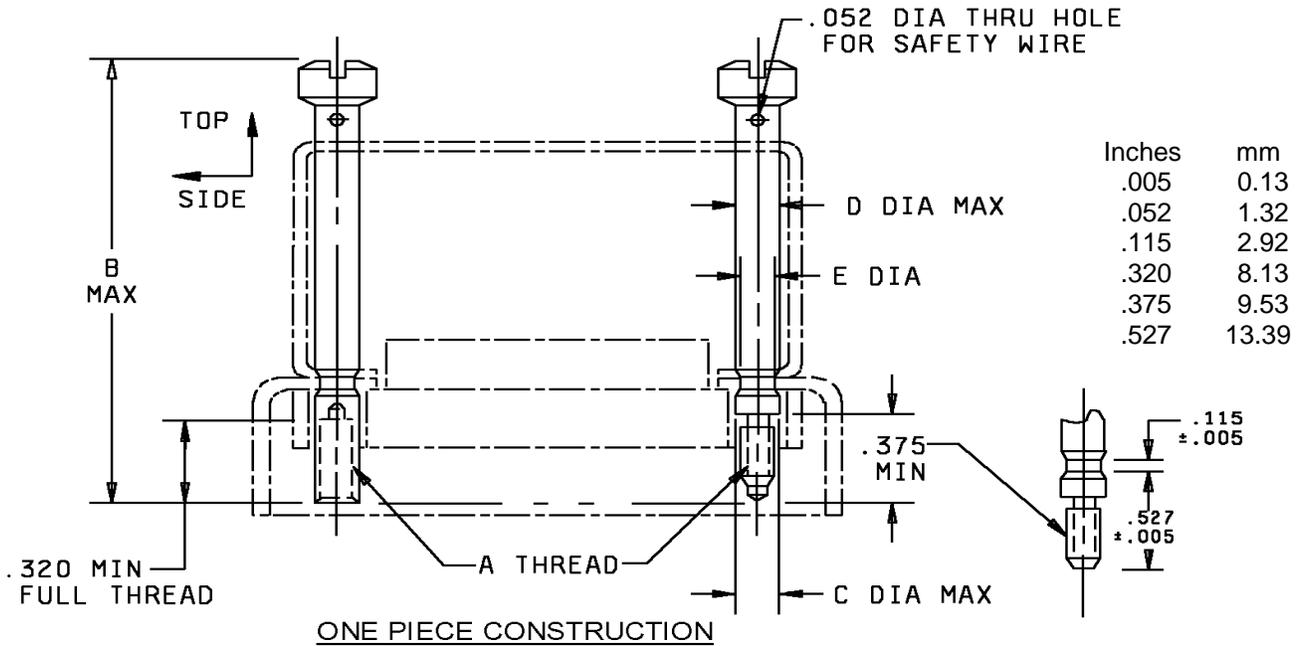
For use with MS18192-1 through -9, MS18193-1 and -2 and MS24133-1 through -4 shields and MS18203-1 through -10 and MS18204-1 through -10 shells.

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are ± 0.016 inch (0.41 mm).
4. Material corrosion resistance steel in accordance with ASTM A276, ASTM A473, ASTM A581/A581M, ASTM A582/A582M, SAE AMS5636, SAE AMS5639, SAE AMS5648, classes 302, 303, 303Se, 304 or 316 except for aluminum alloy knob and tubular, spacer.
5. Finish passivated in accordance with ASTM A967 or SAE AMS2700 except for anodized knob and tubular spacer on multipiece construction.
6. Washer .040 inch thick (1.02 mm) supplied with all sizes, not used with shell.
7. Washer .031 inch thick (0.79 mm) supplied with -1 and -2 is not used with shield sizes 20 and smaller.

FIGURE 1. Multipiece turnable jackscrews – Continued.

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Long turnable jackscrew designator	Gender	Connector size (number of contacts)	A Thread class 2	B max	C dia max	D dia max	E dia ±.002 (0.05 mm)
MS18194-5	Male	34, 42, 50, 66, 75	6-32-UNC-2A .138-32 UNC	2.438 (61.93)	.192 (4.88)	.192 (4.88)	.111 (2.82)
MS18194-6	Female	34, 42, 50, 66, 75	6-32-UNC-2B .138-32 UNC	2.438 (61.93)	.192 (4.88)	.192 (4.88)	.111 (2.82)
MS18194-7	Male	104	8-32-UNC-2A .164-32 UNC	3.282 (83.36)	.225 (5.72)	.225 (5.72)	.140 (3.56)
MS18194-8	Female	104	8-32-UNC-2B .164-32 UNC	3.282 (83.36)	.225 (5.72)	.225 (5.72)	.140 (3.56)

For use with MS18192-10 through -13, MS18193-3 and -4, and MS24133-9 through -12 shields or MS18203-11 through -16 and MS18204-11 through -16 shells.

When MS18203-11 through -16 or MS18204-11 through -16 shells are required to be used with a shield, use MS18192-1 through -9 or MS18193-1 or -2 shield.

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances are ±.016 inch (0.41 mm).
4. Material corrosion resistance steel in accordance with ASTM A276, ASTM A473, ASTM A581/A581M, ASTM A582/A582M, SAE AMS5636, SAE AMS5639, SAE AMS5648, classes 302, 303, 303Se, 304 or 316 except for aluminum alloy knob and tubular, spacer.
5. Finish passivated in accordance with ASTM A967 or SAE AMS2700 except for anodized knob.

FIGURE 2. Long turnable jackscrew one piece construction.

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Multipiece turnable jackscrews. See figure 1.
Long turnable jackscrew one piece construction. See figure 2.

Qualification: Qualified sources for MIL-DTL-28748/1 through MIL-DTL-28748/6 that meet the qualification testing requirements in MIL-DTL-28748 require no further testing for the hardware.

Qualification of hardware only: the hardware shall be installed in a qualified connector and shall be subjected to the tests below in accordance with MIL-DTL-28748. Sample size, if qualifying all hardware configurations, shall be two connector pairs.

Visual and mechanical inspection
Vibration
Shock
Salt spray

Amendment notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. 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.

Referenced documents. In addition to MIL-DTL-28748, this document references the following:

MIL-DTL-28748/1
MIL-DTL-28748/2
MIL-DTL-28748/3
MIL-DTL-28748/4
MIL-DTL-28748/5
MIL-DTL-28748/6
ASTM A276
ASTM A473
ASTM A581/A581M
ASTM A582/A582M
ASTM A967
SAE AMS2700
SAE AMS5636
SAE AMS5639
SAE AMS5648

CONCLUDING MATERIAL

Custodians:
Army - CR
Navy - EC
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

Review activities:
Army - AM, AR, AT, CR4, MI
Navy - AS, MC, OS
Air Force - 99

(Project 5935-2013-210)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.