

REV.  
E

AS3319

FEDERAL SUPPLY CLASS  
5307

RATIONALE

THIS IS A LIMITED SCOPE REVISION. HARDNESS REQUIREMENT IN DRAWING NOTE 3 IS CLARIFIED TO APPLY TO THE STUD ONLY.

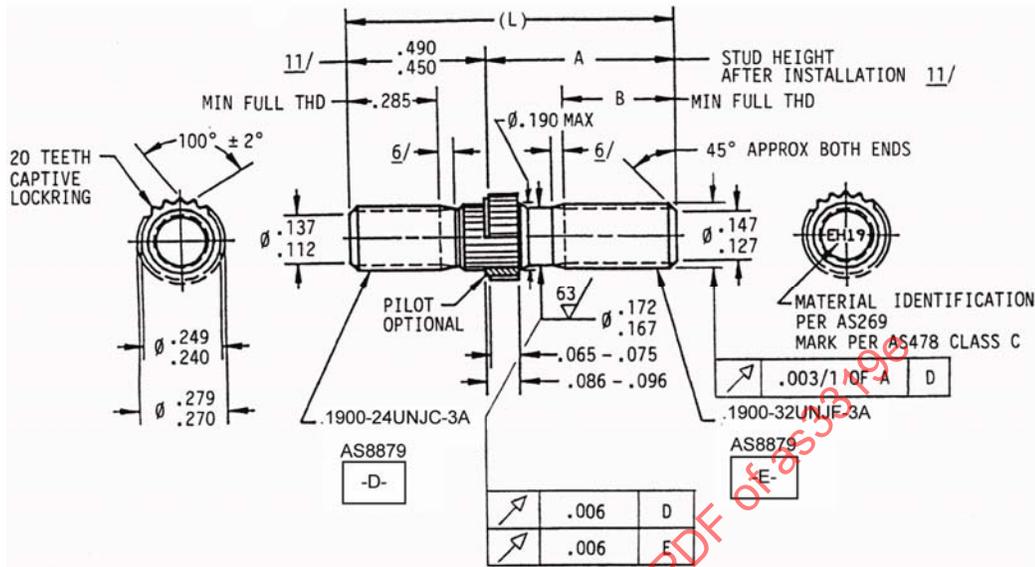


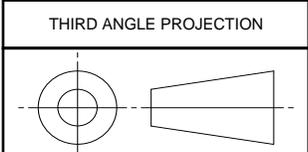
FIGURE 1 - STUD

NOTES:

- MATERIAL: STUD - CORROSION AND HEAT RESISTANT STEEL, AMS5731, AMS5732, AMS5734, AND AMS5737. (UNS S66286)  
LOCKRING - CRES, AMS5640. (UNS S30300)
- HEAT TREATMENT: STUD - SOLUTION AND PRECIPITATION HEAT TREATED. SEE PROCUREMENT SPECIFICATION.
- HARDNESS: STUD - 24-37 HRC, 247-344 HB, OR 260-363 HV.
- FINISH: STUD AND LOCKRING - CLEAN (PASSIVATE) PER PROCUREMENT SPECIFICATION OR PASSIVATE PER AMS2700, METHOD 1, CLASS 4.
- FLUORESCENT PENETRANT INSPECTION: ASTM E1417, EXCEPT LOCKRING. ACCEPTANCE CRITERIA PER AS7482.
- PROCUREMENT SPECIFICATION: AS7482, EXCEPT STRESS RUPTURE TEST IS WAIVED, AND SPECIAL STUD END THREAD REQUIREMENTS OF AS3062 ARE NOT APPLICABLE. INCOMPLETE LEAD AND RUNOUT THREAD REQUIREMENTS ON BOTH THREADS SHALL BE AS SPECIFIED IN AS3062 FOR BOLTS.

AS AND AMS ARE SAE INTERNATIONAL PUBLICATIONS  
 ASME IS AN AMERICAN SOCIETY OF MECHANICAL ENGINEERS PUBLICATION  
 ASTM IS AN ASTM INTERNATIONAL PUBLICATION  
 NASM IS A NATIONAL AEROSPACE STANDARD PUBLICATION

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CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: AS7482



AEROSPACE STANDARD

STUD - STRAIGHT, RING LOCKED,  
 CRES AMS5731  
 .190-24UNJC X .190-32UNJF

AS3319  
 SHEET 1 OF 3

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ISSUED 1979-09 REAFFIRMED 2001-11 REVISED 2014-07

7. PERFORMANCE REQUIREMENTS WHEN INSTALLED PER NOTE 15:
  - a. STUD SHALL HAVE A MINIMUM RESISTANCE TO PULLOUT OF 2855 LBF BASED ON A MINIMUM PARENT MATERIAL SHEAR STRENGTH OF 25 KSI. TEST PROCEDURE PER NASM45909 AS APPLICABLE.
  - b. STUD SHALL PRODUCE A MINIMUM ROTATIONAL RESISTANCE VALUE OF 60 LBFxIN. TEST PROCEDURE PER NASM45909 AS APPLICABLE.
8. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICROINCHES Ra, EXCEPT SERRATIONS TO BE 250 MICROINCHES Ra, AND THREAD FLANKS AND ROOT TO BE 32 MICROINCHES Ra.
9. BREAK EDGES .003 TO .015, EXCEPT LOCKRING. NO BREAK EDGE ALLOWED ON ENTRY OF LOCK RING.
10. DIMENSIONING AND TOLERANCING: ANSI Y14.5M-1982 (ASME PUBLICATION).
- /11/ LOCKRING INTERNAL SERRATIONS TO HAVE FREE MOVEMENT ALONG STUD AXIS. DIMENSIONS APPLY WHEN LOCKRING IS AGAINST STOP TOWARD 0.1900-32 THREAD.
12. DIMENSIONS IN INCHES.
13. MARK AEROSPACE STANDARD IDENTIFICATION NUMBER AND MANUFACTURER'S IDENTIFICATION ON CONTAINER.
14. DO NOT USE UNASSIGNED AEROSPACE STANDARD IDENTIFICATION NUMBERS.
15. STUD TO BE INSTALLED IN ACCORDANCE WITH AS1561 INTO HOLE PREPARATION PER AS1620.
16. A CHANGE BAR (I) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS DOCUMENT. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT, INCLUDING TECHNICAL REVISIONS. CHANGE BARS AND (R) ARE NOT USED IN ORIGINAL PUBLICATIONS, NOR IN DOCUMENTS THAT CONTAIN EDITORIAL CHANGES ONLY.
17. INVENTORIED PARTS CONFORMING TO AS3319, REVISION B MAY BE USED TO DEPLETION.

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	<b>AEROSPACE STANDARD</b>	<b>AS3319</b> SHEET 2 OF 3	<b>REV.</b> <b>E</b>
	STUD - STRAIGHT, RING LOCKED, CRES AMS5731 .190-24UNJC X .190-32UNJF		