FEDERAL SUPPLY CLASS
5307

RATIONALE

ADD OPTION FOR FINISH REQUIREMENTS.

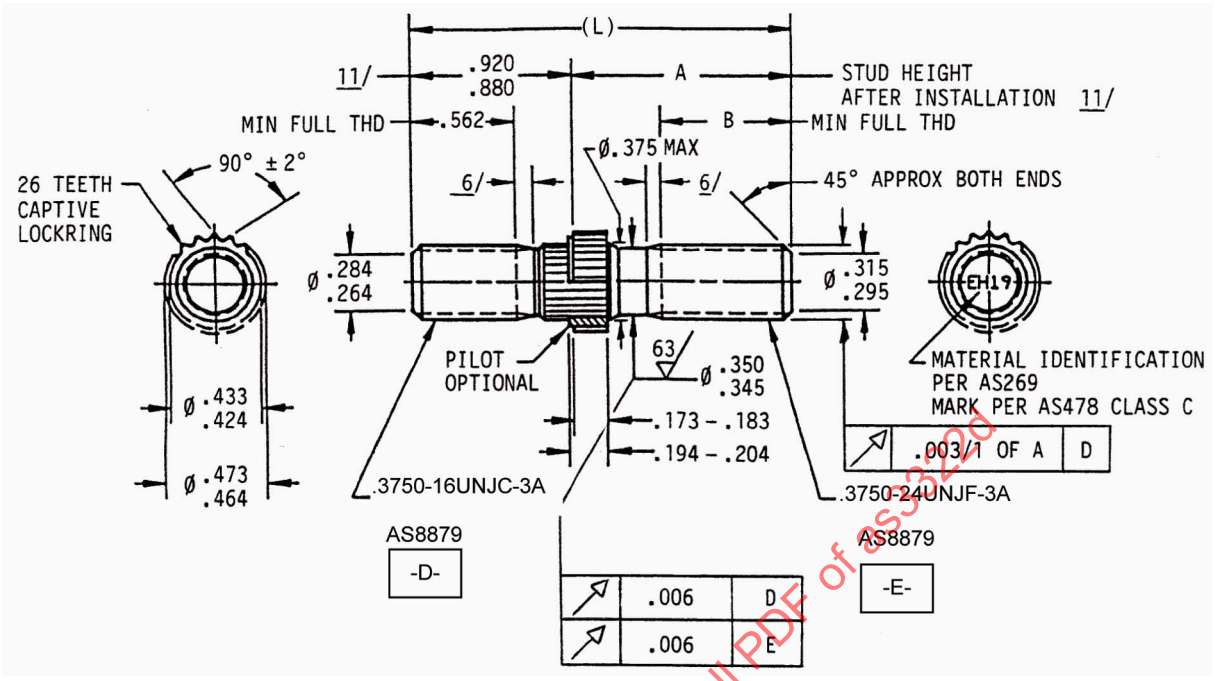


FIGURE 1 - STUD

NOTES:

1. MATERIAL: STUD - CORROSION AND HEAT RESISTANT STEEL, AMS5731, AMS5732, AMS5734 AND AMS5737. (UNS S66286)
   LOCKRING - CRES, AMS5640. (UNS S30300)

2. HEAT TREATMENT: STUD - SOLUTION AND PRECIPITATION HEAT TREATED. SEE PROCUREMENT SPECIFICATION.

3. HARDNESS: 24-37 HRC, 247-344 HB, OR 260-363 HV.

4. FINISH: STUD AND LOCKRING - CLEAN (PASSIVATE) PER PROCUREMENT SPECIFICATION OR PASSIVATE PER AMS2700, METHOD 1, CLASS 4.

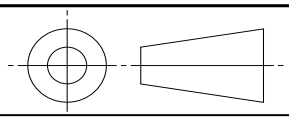
5. FLUORESCENT PENETRANT INSPECTION: ASTM E 1417, EXCEPT LOCKRING. ACCEPTANCE CRITERIA PER AS7482.

/6/ 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 AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASTM INTERNATIONAL IS AMERICAN SOCIETY FOR TESTING AND MATERIALS
NASM IS NATIONAL AEROSPACE STANDARD

SAE values your input. To provide feedback on this Technical Report, please visit
http://www.sae.org/technical/standards/AS3322D

THIRD ANGLE PROJECTION



ISSUED 1979-09 REAFFIRMED 2001-11 REVISED 2010-06

CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: AS7482

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

STUD - STRAIGHT, RING LOCKED,
CRES AMS 5731
.375-16UNJC X .375-24UNJF

TO PLACE A DOCUMENT ORDER: **Tel: 877-606-7323 (inside USA and Canada)** **Tel: +1 724-776-4970 (outside USA)**
Fax: 724-776-0790 **Email: CustomerService@sae.org** **SAE WEB ADDRESS: http://www.sae.org**

7. PERFORMANCE REQUIREMENTS WHEN INSTALLED PER NOTE 15:

   a. STUD SHALL HAVE A MINIMUM RESISTANCE TO PULLOUT OF 12,228 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 240 LBFxIN. TEST PROCEDURE PER NASM45909 AS APPLICABLE.

8. SURFACE TEXTURE: SYMBOLS PER ANSI Y14.36; REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 µin Ra, EXCEPT SERRATIONS TO BE 250 µin Ra, AND THREAD FLANKS AND ROOT TO BE 32 µin Ra.

9. BREAK EDGES .003 TO .015, EXCEPT LOCKRING. NO BREAK EDGE ALLOWED ON ENTRY OF LOCKRING.

10. DIMENSIONING AND TOLERANCING: ASME Y14.5M-1982M (ASME PUBLICATION).

/11/ LOCKRING INTERNAL SERRATIONS TO HAVE FREE MOVEMENT ALONG STUD AXIS. DIMENSIONS APPLY WHEN LOCKRING IS AGAINST STOP TOWARD 0.3750-24 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 (|) 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 AS3322, REVISION B MAY BE USED TO DEPLETION.