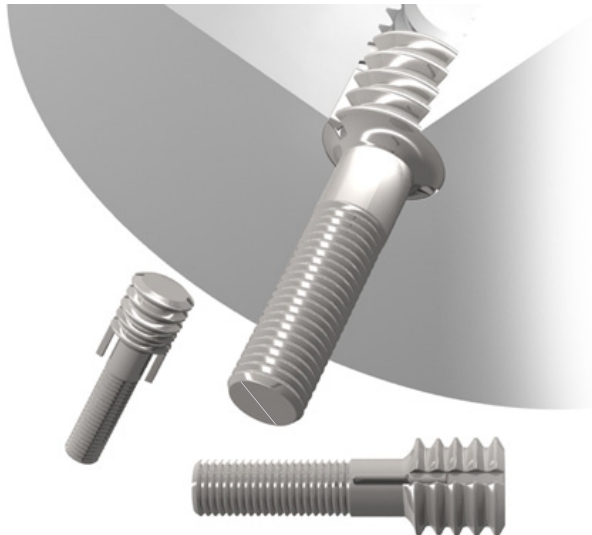


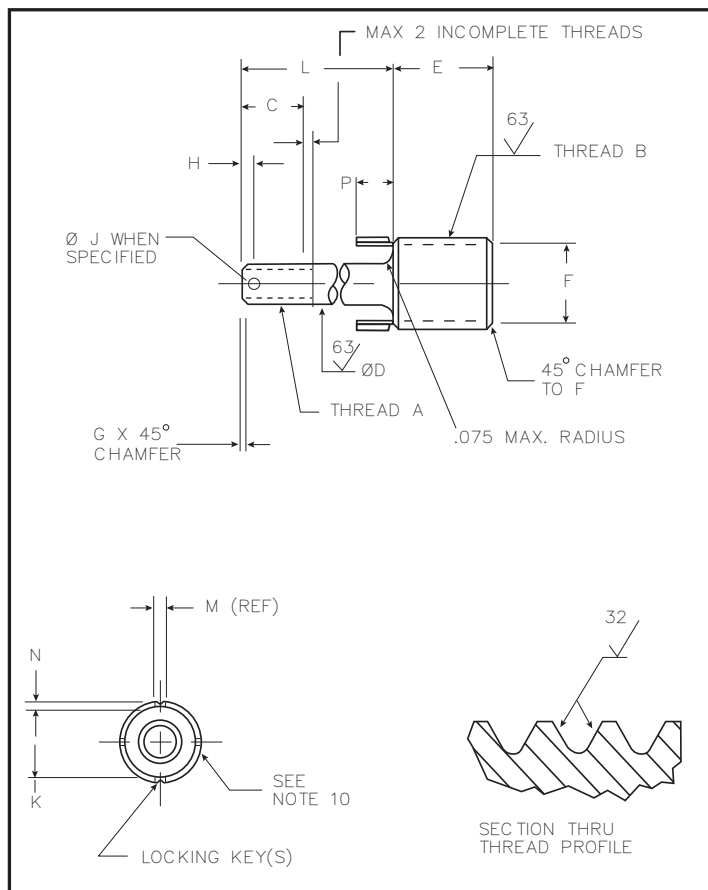


## NOTES

- 1) MATERIAL: STUD: AMS5731, AMS5734 or AMS5737 A-286 CRES.  
LOCKING KEYS: QQ-S-763 420 CRES.
- 2) HEAT TREAT: STUD: 140K.S.I. MINIMUM TENSILE STRENGTH.  
LOCKING KEYS: 48HRC MINIMUM.
- 3) SURFACE TREATMENT : PASSIVATE PER QQ-P-35C OR  
AMS-QQ-P-35.
- 4) SURFACE ROUGHNESS: IN ACCORDANCE WITH ANSI B46.1.
- 5) THREADS: NUT END PER MIL-S-8879.  
STUD END PER H-28 EXCEPT MINOR DIAMETERS  
MODIFIED AS SPECIFIED HEREIN.
- 6) NO HANGING BURRS OR SLIVERS ALLOWED WHICH MIGHT  
BECOME DISLODGED DURING USE.
- 7) INSTALL IN ACCORDANCE WITH MS51835.
- 8) PERFORMANCE PER MIL-I-45915.
- 9) GRIP DIAMETER CONCENTRIC WITH STUD END THREAD  
PITCH DIAMETER WITHIN .006 T. I. R..
- 10) SUPPLIED WITH 2 OR 4 LOCKING KEYS AS NECESSARY  
TO FRACTURE NUT END APPROXIMATELY AT MINOR THREAD  
DIAMETER DURING ROTATIONAL RESISTANCE TEST.
- 11) DASH MARK ON NUT END IDENTIFIES MATERIAL: A-286.
- 12) DIMENSIONS ARE REFERENCE FOR INSTALLATION  
PURPOSE ONLY.
- 13) PART NUMBER EXAMPLE:

RA2002-01 06

LENGTH NUMBER FROM TABLE III.  
THREAD CODE NUMBER FROM TABLE I OR II.  
DRAWING NUMBER.



## TITLE

**STUD, KEYLOCKED LIGHT WEIGHT,  
A286 CRES, PASSIVATED, 420 CRES KEYS**

|                                  |                                                      |              |                  |
|----------------------------------|------------------------------------------------------|--------------|------------------|
| CAGE<br>CODE<br><br><b>63EM5</b> | DWG NO.<br><b>RA2002</b><br><br>REV: NC SHEET 1 of 3 | Drawn by:    | Date: 01-17-2011 |
|                                  |                                                      | Approved by: | Date: 1/17/11    |



TABLE I – COARSE THREAD NUT END

| THREAD<br>CODE<br>NUMBER |       | A<br>NUT END | B STUD END THD<br>MOD MINOR DIA |              | C*    | D            | E     | F<br>DIA | G            | H     | J     | K     | KEY<br>DIMENSIONS |       |       |
|--------------------------|-------|--------------|---------------------------------|--------------|-------|--------------|-------|----------|--------------|-------|-------|-------|-------------------|-------|-------|
|                          |       | THREAD       | THREAD                          | MINOR        |       |              |       |          |              |       |       |       | M                 | N     | P     |
| PLAIN                    | DRILL | UNJC-3A      | UNC-2A                          | DIA          | ±.030 | DIA          | ±.015 | ±.010    |              | ±.020 | ±.010 | ±.004 | REF               | ±.004 | ±.015 |
| 01                       | 11    | .190-24      | .3125-18                        | .256<br>.249 | .410  | .189<br>.185 | .312  | .250     | .060<br>.030 | .141  | .070  | .220  | .068              | .040  | .160  |
| 02                       | 12    | .250-20      | .375-16                         | .320<br>.312 | .470  | .249<br>.245 | .375  | .310     | .060<br>.030 | .156  | .076  | .284  | .068              | .040  | .190  |
| 03                       | 13    | .3125-18     | .4375-14                        | .383<br>.375 | .530  | .312<br>.308 | .437  | .375     | .060<br>.030 | .172  | .076  | .345  | .068              | .040  | .190  |
| 04                       | 14    | .375-16      | .500-13                         | .440<br>.432 | .640  | .374<br>.370 | .500  | .430     | .060<br>.030 | .172  | .106  | .407  | .068              | .040  | .190  |
| 05                       | 15    | .4375-14     | .5625-12                        | .503<br>.495 | .660  | .437<br>.433 | .562  | .495     | .060<br>.030 | .172  | .106  | .469  | .068              | .040  | .190  |
| 06                       | 16    | .500-13      | .625-11                         | .565<br>.551 | .780  | .499<br>.495 | .625  | .550     | .060<br>.030 | .172  | .106  | .532  | .068              | .040  | .190  |

\*THIS DIMENSION DOES NOT APPLY TO DASH NUMBER IN TABLE III ABOVE THE HEAVY LINES

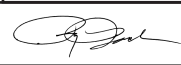
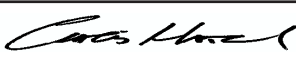
TABLE II – FINE THREAD NUT END

| THREAD<br>CODE<br>NUMBER |       | A<br>NUT END | B STUD END THD<br>MOD MINOR DIA |              | C*    | D            | E     | F<br>DIA | G            | H     | J<br>DIA | K     | KEY<br>DIMENSIONS |       |       |
|--------------------------|-------|--------------|---------------------------------|--------------|-------|--------------|-------|----------|--------------|-------|----------|-------|-------------------|-------|-------|
|                          |       | THREAD       | THREAD                          | MINOR        |       |              |       |          |              |       |          |       | M                 | N     | P     |
| PLAIN                    | DRILL | UNJF-3A      | UNC-2A                          | DIA          | ±.030 | DIA          | ±.015 | ±.010    |              | ±.020 | ±.010    | ±.004 | REF               | ±.004 | ±.015 |
| 21                       | 31    | .190-32      | .3125-18                        | .256<br>.249 | .410  | .189<br>.185 | .312  | .250     | .060<br>.030 | .141  | .070     | .220  | .068              | .040  | .160  |
| 22                       | 32    | .250-28      | .375-16                         | .320<br>.312 | .470  | .249<br>.245 | .375  | .310     | .060<br>.030 | .156  | .076     | .284  | .068              | .040  | .190  |
| 23                       | 33    | .3125-24     | .4375-14                        | .383<br>.375 | .530  | .312<br>.308 | .437  | .375     | .060<br>.030 | .172  | .076     | .345  | .068              | .040  | .190  |
| 24                       | 34    | .375-24      | .500-13                         | .440<br>.432 | .640  | .374<br>.370 | .500  | .430     | .060<br>.030 | .172  | .106     | .407  | .068              | .040  | .190  |
| 25                       | 35    | .4375-20     | .5625-12                        | .503<br>.495 | .660  | .437<br>.433 | .562  | .495     | .060<br>.030 | .172  | .106     | .469  | .068              | .040  | .190  |
| 26                       | 36    | .500-20      | .625-11                         | .565<br>.551 | .780  | .499<br>.495 | .625  | .550     | .060<br>.030 | .172  | .106     | .532  | .068              | .040  | .190  |

\*THIS DIMENSION DOES NOT APPLY TO DASH NUMBER IN TABLE III ABOVE THE HEAVY LINES

TITLE

**STUD, KEYLOCKED LIGHT WEIGHT,  
A286 CRES, PASSIVATED, 420 CRES KEYS**

|              |                          |                                                                                                   |                  |
|--------------|--------------------------|---------------------------------------------------------------------------------------------------|------------------|
| CAGE<br>CODE | DWG NO.<br><b>RA2002</b> | Drawn by:    | Date: 01-17-2011 |
|              |                          | Approved by:  | Date: 1/17/11    |

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TABLE III - LENGTHS

| L<br>NUT END<br>+-.030 | LENGTH NUMBER    |      |       |      |       |      |
|------------------------|------------------|------|-------|------|-------|------|
|                        | NOMINAL DIAMETER |      |       |      |       |      |
|                        | .190             | .250 | .3125 | .375 | .4375 | .500 |
| .375                   | 06               | 06   | 06    | 06   | 06    | 06   |
| .438                   | 07               | 07   | 07    | 07   | 07    | 07   |
| .500                   | 08               | 08   | 08    | 08   | 08    | 08   |
| .562                   | 09               | 09   | 09    | 09   | 09    | 09   |
| .625                   | 10               | 10   | 10    | 10   | 10    | 10   |
| .688                   | 11               | 11   | 11    | 11   | 11    | 11   |
| .750                   | 12               | 12   | 12    | 12   | 12    | 12   |
| .812                   | 13               | 13   | 13    | 13   | 13    | 13   |
| .875                   | 14               | 14   | 14    | 14   | 14    | 14   |
| .938                   | 15               | 15   | 15    | 15   | 15    | 15   |
| 1.00                   | 16               | 16   | 16    | 16   | 16    | 16   |
| 1.062                  | 17               | 17   | 17    | 17   | 17    | 17   |
| 1.125                  | 18               | 18   | 18    | 18   | 18    | 18   |
| 1.188                  | 19               | 19   | 19    | 19   | 19    | 19   |
| 1.250                  | 20               | 20   | 20    | 20   | 20    | 20   |
| 1.313                  | 21               | 21   | 21    | 21   | 21    | 21   |
| 1.375                  | 22               | 22   | 22    | 22   | 22    | 22   |
| 1.438                  | 23               | 23   | 23    | 23   | 23    | 23   |
| 1.500                  | 24               | 24   | 24    | 24   | 24    | 24   |
| 1.562                  | 25               | 25   | 25    | 25   | 25    | 25   |
| 1.625                  | 26               | 26   | 26    | 26   | 26    | 26   |
| 1.688                  | 27               | 27   | 27    | 27   | 27    | 27   |
| 1.750                  | 28               | 28   | 28    | 28   | 28    | 28   |
| 1.812                  | 29               | 29   | 29    | 29   | 29    | 29   |
| 1.875                  | 30               | 30   | 30    | 30   | 30    | 30   |
| 1.938                  | 31               | 31   | 31    | 31   | 31    | 31   |
| 2.000                  | 32               | 32   | 32    | 32   | 32    | 32   |
| 2.125                  | 34               | 34   | 34    | 34   | 34    | 34   |
| 2.250                  | 36               | 36   | 36    | 36   | 36    | 36   |
| 2.375                  | 38               | 38   | 38    | 38   | 38    | 38   |
| 2.500                  | 40               | 40   | 40    | 40   | 40    | 40   |
| 2.625                  | 42               | 42   | 42    | 42   | 42    | 42   |
| 2.750                  | 44               | 44   | 44    | 44   | 44    | 44   |
| 2.875                  | 46               | 46   | 46    | 46   | 46    | 46   |
| 3.000                  | 48               | 48   | 48    | 48   | 48    | 48   |
| 3.125                  | 50               | 50   | 50    | 50   | 50    | 50   |
| 3.250                  | 52               | 52   | 52    | 52   | 52    | 52   |
| 3.375                  | 54               | 54   | 54    | 54   | 54    | 54   |
| 3.500                  | 56               | 56   | 56    | 56   | 56    | 56   |
| 3.625                  | 58               | 58   | 58    | 58   | 58    | 58   |
| 3.750                  | 60               | 60   | 60    | 60   | 60    | 60   |
| 3.875                  | 62               | 62   | 62    | 62   | 62    | 62   |
| 4.000                  | 64               | 64   | 64    | 64   | 64    | 64   |

DASH NUMBERED PARTS ABOVE THE HEAVY LINE ARE THREADED TO THE STUD END  
(SEE TABLE 1)

THE MAXIMUM DISTANCE FROM THE STUD END TO THE FIRST FULL THREAD  
SHALL BE EQUAL TO THE SUM OF THE MAXIMUM FILLET RADIUS AND A MAXIMUM OF  
TWO INCOMPLETE THREADS.

INCOMPLETE THREADS SHALL NOT ENTER FILLET AREA

TITLE

**STUD, KEYLOCKED LIGHT WEIGHT,  
A286 CRES, PASSIVATED, 420 CRES KEYS**

CAGE  
CODE

DWG NO.  
**RA2002**

Drawn by:

Date: 01-17-2011

**63EM5**

REV: NC SHEET 3 of 3

Approved by:

Date:

1/17/11