



| SPS PART NUMBER | THREAD UNJF-3A | ØA ±.005 | ØB               | C MIN | ØD +.000 - .015 | E MIN | H ±.010 | ØJ +.010 - .030 | Ø ±.010 | R            | T REF | U REF | W              | X    | Y     |
|-----------------|----------------|----------|------------------|-------|-----------------|-------|---------|-----------------|---------|--------------|-------|-------|----------------|------|-------|
| 73815-3         | .1900-32       | .345     | .1895<br>.1885   | .277  | .250            | .092  | .196    | .125            | .064    | .041<br>.031 | .353  | .04   | .251<br>.243   | .005 | .0045 |
| 73815-4         | .2500-28       | .433     | .2495<br>.2485   | .347  | .312            | .135  | .234    | .180            | .069    | .041<br>.031 | .431  | .04   | .313<br>.304   | .005 | .0045 |
| 73815-5         | .3125-24       | .526     | .3120<br>.3110   | .419  | .375            | .162  | .276    | .215            | .082    | .041<br>.031 | .500  | .05   | .376<br>.367   | .006 | .0045 |
| 73815-6         | .3750-24       | .644     | .3745<br>.3735   | .491  | .437            | .197  | .322    | .260            | .091    | .057<br>.047 | .583  | .05   | .439<br>.430   | .008 | .0045 |
| 73815-7         | .4375-20       | .745     | .4370<br>.4360   | .561  | .500            | .228  | .355    | .320            | .099    | .057<br>.047 | .665  | .06   | .502<br>.492   | .009 | .0045 |
| 73815-8         | .5000-20       | .823     | .4995<br>.4985   | .631  | .562            | .254  | .401    | .380            | .123    | .057<br>.047 | .789  | .06   | .564<br>.553   | .010 | .0060 |
| 73815-9         | .5625-18       | .933     | .5615<br>.5605   | .703  | .625            | .287  | .444    | .440            | .133    | .057<br>.047 | .859  | .07   | .627<br>.616   | .011 | .0060 |
| 73815-10        | .6250-18       | 1.045    | .6240<br>.6230   | .775  | .687            | .327  | .494    | .500            | .150    | .073<br>.063 | .901  | .07   | .690<br>.679   | .012 | .0060 |
| 73815-12        | .7500-16       | 1.225    | .7490<br>.7480   | .917  | .812            | .380  | .566    | .570            | .178    | .073<br>.063 | 1.050 | .08   | .814<br>.803   | .015 | .0060 |
| 73815-14        | .8750-14       | 1.405    | .8740<br>.8730   | 1.059 | .937            | .438  | .633    | .650            | .212    | .073<br>.063 | 1.216 | .09   | .940<br>.928   | .018 | .0090 |
| 73815-16        | 1.0000-12      | 1.585    | .9990<br>.9980   | 1.200 | 1.062           | .493  | .712    | .740            | .240    | .073<br>.063 | 1.399 | .10   | 1.064<br>.1052 | .020 | .0090 |
| 73815-18        | 1.1250-12      | 1.770    | 1.1240<br>1.1225 | 1.414 | 1.250           | .556  | .795    | .840            | .308    | .073<br>.063 | 1.562 | .10   | 1.252<br>1.239 | .022 | .0090 |
| 73815-20        | 1.2500-12      | 1.979    | 1.2490<br>1.2475 | 1.484 | 1.312           | .636  | .906    | .950            | .340    | .089<br>.077 | 1.712 | .10   | 1.314<br>1.301 | .025 | .0090 |
| 73815-22        | 1.3750-12      | 2.164    | 1.3740<br>1.3725 | 1.628 | 1.437           | .698  | .962    | 1.070           | .346    | .089<br>.077 | 2.281 | .10   | 1.440<br>1.427 | .028 | .0120 |
| 73815-24        | 1.5000-12      | 2.350    | 1.4990<br>1.4975 | 1.842 | 1.625           | .750  | 1.040   | 1.200           | .408    | .089<br>.077 | 2.468 | .10   | 1.627<br>1.614 | .030 | .0120 |

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| TOLERANCES ±.010 AND ±2'                         | <b>SPS</b><br>TECHNOLOGIES  | FSCM NO. 56878                | STANDARDS AND SPECIFICATIONS<br>SPS-B-640<br>APPENDIX 6.17 |
| SURFACE ROUGHNESS 125/<br>UNLESS OTHERWISE NOTED |   | CUSTODIAN:<br>JENKINTOWN, PA. | PART NUMBER: <b>73815 - [ ]</b>                            |
| DRAWN: STEVE FOSTER DATE: 11/28/90               | TITLE<br>BOLT, 12 POINT, TENSION, LIGHTWEIGHT<br>260 KSI MINIMUM TENSILE STRENGTH | SHEET 1 OF 2 PROJECT 9665     |  |
| APPROVED: L KLINE DATE: 11/30/90                 |   |                               |  |
| APPROVED: TAR                                    |   |                               |  |

1. MATERIAL: ALLOY STEEL PER AMS 6487.
2. HEAT TREATMENT: 260 KSI MINIMUM ULTIMATE TENSILE STRENGTH. RC 51-54.
3. FINISH: DIFFUSED NICKEL CADMIUM PLATE PER AMS 2416 WITH CHROMATE TREATMENT FOR 900°F APPLICATION OR VACUUM CADMIUM PLATE PER MIL-C-8837, TYPE II, CLASS 2, FOR 450°F APPLICATION ALUMINUM COATING, CERAMIC BONDED PER AMS 2506.
4. MAGNETIC PARTICLE INSPECTION PER MIL-STD-1949. ACCEPTANCE CRITERIA PER SPS-I-650.
5. SURFACE TEXTURE: ANSI B46.1 UNLESS OTHERWISE SPECIFIED THE SURFACE TEXTURE SHALL NOT EXCEED 125 MICROINCHES.
6. REQUIREMENTS: HEADS TO BE FORGED  
LIGHTENING HOLE IN HEAD MAY BE FORGED OR DRILLED  
THREADS TO BE ROLLED AFTER HEAT TREATMENT  
HEAD TO SHANK FILLET TO BE COLD WORKED
7. PART NUMBER: 73815 G - 7 - 20 = .4375-20 UNJF-3A BOLT, 1.250 GRIP, 1.915 LONG WITH VACUUM CADMIUM PLATE
  - = GRIP LENGTH IN SIXTEENTHS
  - = NOMINAL DIAMETER IN SIXTEENTHS
  - "G" = VACUUM CADMIUM PLATE
  - "W" = ALUMINUM COATING
  - BASIC PART NUMBER - USE THE BASIC PART NUMBER TO DENOTE DIFFUSED NICKEL CADMIUM PLATE
8. THESE BOLTS ARE DESIGNED TO BE USED WITH A HARD STEEL WASHER UNDER HEAD AND ALSO UNDER MATING NUT 69678
9. BREAK ALL SHARP EDGES .003 - .015 X 45°
10. REFERENCE DIMENSIONS ARE FOR DESIGN PURPOSES ONLY AND ARE NOT INSPECTION REQUIREMENTS.
11. CHAMFER "U" REF X 45° APPROX PLUS INCOMPLETE THREADS NOT TO EXCEED TWO PITCHES.
12. DIMENSIONS ARE INCHES.