# TYPICAL INSTALLATION

## FASTENER IDENTIFICATION
HEAD MARKING DEPRESSED .010 INCH MAX.
(POSITION OPTIONAL)

## MANUFACTURER'S IDENTIFICATION
MONOGRAM = N
VOI-SHAN = VS

## MANUFACTURER'S TINNED ALUMINUM PLATE No.

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>A HEX FLATS</th>
<th>C MAX.</th>
<th>D MAX.</th>
<th>E DIA.</th>
<th>F FLATS</th>
<th>G MAX.</th>
<th>H MAX.</th>
<th>J DIA.</th>
<th>K MAX.</th>
<th>N MIN.</th>
<th>R RAD.</th>
<th>BREAK-OFF LIMITS</th>
<th>PREVAILING TENSILE STRENGTH</th>
<th>DOUBLE SHEAR STRENGTH</th>
<th>TENSILE STRENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLT1087-05(-)</td>
<td>.250/1.025</td>
<td>.285/1.315</td>
<td>.3150/1.690</td>
<td>.3750/2.000</td>
<td>.3775/2.085</td>
<td>.3750/2.085</td>
<td>.3150/1.690</td>
<td>.250/1.025</td>
<td>.257/1.007</td>
<td>.272/1.080</td>
<td>.020/0.010</td>
<td>1.0</td>
<td>3150</td>
<td>900</td>
<td></td>
</tr>
<tr>
<td>PLT1087-06(-)</td>
<td>.212/1.0</td>
<td>.230/1.075</td>
<td>.2555/1.550</td>
<td>.3025/1.800</td>
<td>.3055/1.835</td>
<td>.3025/1.800</td>
<td>.2555/1.550</td>
<td>.212/1.0</td>
<td>.227/1.095</td>
<td>.240/1.150</td>
<td>.025/0.015</td>
<td>1.5</td>
<td>4600</td>
<td>1400</td>
<td></td>
</tr>
<tr>
<td>PLT1087-08(-)</td>
<td>.175/1.0</td>
<td>.200/1.075</td>
<td>.2305/1.565</td>
<td>.2835/1.810</td>
<td>.2835/1.810</td>
<td>.2305/1.565</td>
<td>.200/1.075</td>
<td>.175/1.0</td>
<td>.188/1.145</td>
<td>.200/1.169</td>
<td>.025/0.015</td>
<td>2.5</td>
<td>7900</td>
<td>2100</td>
<td></td>
</tr>
<tr>
<td>PLT1087-10(-)</td>
<td>.143/1.0</td>
<td>.160/1.135</td>
<td>.1845/1.170</td>
<td>.2310/1.315</td>
<td>.2310/1.315</td>
<td>.1845/1.170</td>
<td>.160/1.135</td>
<td>.143/1.0</td>
<td>.156/1.135</td>
<td>.160/1.135</td>
<td>.025/0.015</td>
<td>3.5</td>
<td>11350</td>
<td>3600</td>
<td></td>
</tr>
<tr>
<td>PLT1087-12(-)</td>
<td>.113/1.0</td>
<td>.130/1.135</td>
<td>.1545/1.170</td>
<td>.2015/1.315</td>
<td>.2015/1.315</td>
<td>.1545/1.170</td>
<td>.130/1.135</td>
<td>.113/1.0</td>
<td>.126/1.135</td>
<td>.130/1.135</td>
<td>.025/0.015</td>
<td>4.0</td>
<td>16450</td>
<td>5600</td>
<td></td>
</tr>
</tbody>
</table>

## MANUFACTURER'S TINNED ALUMINUM PLATE No.

### SECOND DASH NUMBER

<table>
<thead>
<tr>
<th>SECOND DASH NUMBER</th>
<th>G GRIP</th>
<th>GRIP RANGE</th>
<th>L REF. PLT1087</th>
<th>G GRIP</th>
<th>GRIP RANGE</th>
<th>L REF. PLT1087</th>
</tr>
</thead>
<tbody>
<tr>
<td>05 (-)</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-01 ( )</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-01 ( )</td>
</tr>
<tr>
<td>06 (-)</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-02 ( )</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-02 ( )</td>
</tr>
<tr>
<td>08 (-)</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-03 ( )</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-03 ( )</td>
</tr>
<tr>
<td>09 (-)</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-04 ( )</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-04 ( )</td>
</tr>
<tr>
<td>10 (-)</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-05 ( )</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-05 ( )</td>
</tr>
<tr>
<td>12 (-)</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-06 ( )</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-06 ( )</td>
</tr>
<tr>
<td>13 (-)</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-07 ( )</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-07 ( )</td>
</tr>
<tr>
<td>14 (-)</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-08 ( )</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-08 ( )</td>
</tr>
<tr>
<td>15 (-)</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-09 ( )</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-09 ( )</td>
</tr>
<tr>
<td>16 (-)</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-10 ( )</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-10 ( )</td>
</tr>
<tr>
<td>17 (-)</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-11 ( )</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-11 ( )</td>
</tr>
<tr>
<td>19 (-)</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-12 ( )</td>
<td>MAX.</td>
<td>MIN.</td>
<td>-12 ( )</td>
</tr>
</tbody>
</table>

## BREAK-OFF LIMITS
MEASURED FROM SKIN SURFACE

**G** TOLERANCE: FOR -05 AND -06 SIZES +0.030/-.010; FOR -08 & -10 SIZES +0.040/-.010; FOR -12 SIZES +0.050/-.010.

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# VISU-LOK, FASTENER, BLIND INTERIALLY THREADED, EXTERNAL SLEEVE TITANIUM HEXAGONAL PROTRUDING HEAD, SELF LOCKING 75 KSI SHEAR, GROUND SHANK

## MANUFACTURER'S TINNED ALUMINUM PLATE No.

**DRAWING NO:** PLT1087 (-) (-) (-)

**DRAWN BY:** B. GEE

**DRAWN DATE:** 01/08/14

**CHECKED DATE:** 01/08/14

**MANUFACTURER:** MONOGRAM AEROSPACE FASSTENERS

**ADDRESS:** 3423 South Garfield Avenue Commerce, California 90040 (213) 727-4763 FAX (213) 727-1029

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**TITLE:** VISU-LOK, FASTENER, BLIND INTERIALLY THREADED, EXTERNAL SLEEVE TITANIUM HEXAGONAL PROTRUDING HEAD, SELF LOCKING 75 KSI SHEAR, GROUND SHANK

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PROCUREMENT SPEC: ESCBB-9, EXCEPT AS SPECIFIED HEREIN.

MATERIAL:

NUT, & SCREW: 6AL-4V TITANIUM PER AMS4928 OR AMS4967.
SLEEVE: 303 OR 304 CORROSION RESISTANT STEEL PER AMS5639 OR AMS5641 OR A-286 PER AMS5731, AMS5732 OR AMS5737.

HEAT TREAT:

NUT & SCREW: HEAT TREAT PER AMS-H-81200. MAX HYDROGEN 125 PPM.
SLEEVE: AS REQUIRED FOR PERFORMANCE.

FINISH:

"-" NUT & SCREW: NONE. (SEE ESCBB-4 FOR SPECIAL LUBRICANTS AND FINISHES).
SLEEVE: PASSIVATE PER AMS2700.

"L" NUT: ALUMINUM COAT PER NAS4006.
SLEEVE: PASSIVATE PER AMS2700 AND ALUMINUM COAT PER NAS4006.
SCREW: NONE.

LUBRICANT:

NUT: DRY FILM LUBRICANT PER AS5272 TYPE I OR EVERLUBE 812 PER MIL-PRF-81329. CETYL ALCOHOL PER AS87132, OPTIONAL.
SCREW & SLEEVE: DRY FILM LUBE PER AS5272 TYPE I OR EVERLUBE 812 PER MIL-PRF-81329, PARAFFIN WAX AND/OR CETYL ALCOHOL PER AS87132 MAY BE APPLIED AS REQUIRED FOR PERFORMANCE.

PART CODE & EXAMPLE:

PLT1087 ( ) - 08 - 08

- GRIP LENGTHS IN 1/16THS OF AN INCH.
- NOMINAL BODY DIAMETER AS TABULATED.
- DESIGNATES SPECIAL FINISH CODE, SEE ESCBB-4.
- BASIC PART NUMBER, SELF LOCKING BLIND FASTENER.

GENERAL NOTES:

1. OUTSIDE DIAMETER OF HEAD OF SCREW AND OUTSIDE DIAMETER OF SLEEVE SHALL NOT BE GREATER THAN MAXIMUM "E" DIAMETER.
2. CONCENTRICITY OF "A" HEX FLATS TO "D" DIAMETER SHALL BE WITHIN 0.005" T.I.R., EXCEPT OVER INDENTATIONS.
3. REMOVE ALL LOOSE OR HANGING BURRS.
5. DIMENSIONS IN INCHES AND APPLY AFTER FINISH BUT PRIOR TO LUBE UNLESS OTHERWISE SPECIFIED.
6. DISTORTION OF "D" DIAMETER SHALL NOT PREVENT INSERTION OF THE FASTENER INTO A RING GAUGE OF LENGTH EQUAL TO ONE DIAMETER AND DIAMETER EQUAL TO "D" MAX + .001". FORCE FOR INSERTION SHALL NOT EXCEED FIVE (5) POUNDS. HEAD MARKINGS ON NUT DEPRESSED .010" MAXIMUM.
7. HALF-GRIP SIZES MAY BE ORDERED BY ADDING (.5) TO THE GRIP DASH NUMBERS.

EXAMPLE: PLT1087-06-4.5 INDICATES A NOMINAL GRIP LENGTH OF 4.5 SIXTEENTHS = 0.281". THE GRIP RANGE FOR THESE HALF-GRIP SIZES WILL BE NOMINAL GRIP +.031"/-.030". EXCEPT: THE GRIP RANGE FOR -.5 GRIP SHALL BE MAX GRIP = 0.125", MIN GRIP = 0.078".
8. THE BASIC "G" DIMENSION WILL BE NOMINAL GRIP +.031" AND THE OVERALL SCREW LENGTH "L" DIMENSION MAY VARY AT MANUFACTURER'S OPTION.

9. THESE PARTS HAVE A CLOSE TOLERANCE (.0005 INCHES) GROUND SHANK AND ARE INTENDED FOR UP TO .0035 INCH DIFFERENTIAL INTERFERENCE FIT APPLICATIONS.
10. STANDARD FINISHES AND LUBRICANTS ARE SHOWN ABOVE. REFER TO SPECIFICATION ESCBB-4 FOR SPECIAL FINISHES AND/OR LUBRICANTS, IF REQUIRED.
11. STANDARD GRIP LENGTHS ARE SHOWN AS TABULATED, SHORTER OR LONGER GRIPS THAN THOSE LISTED MAY BE AVAILABLE AS SPECIALS. ON GRIP LENGTHS SHORTER THAN THOSE LISTED, THE BREAKOFF AND PREVAILING TORQUES DO NOT APPLY.
12. MAXIMUM "D" DIAMETER MAY BE INCREASED BY .002" TO ALLOW FOR ALUMINUM COATING APPLICATION.