NUT PLATE INSTALLATION SEQUENCE

NOTICE: ALL DIMENSIONS ARE IN INCHES AND APPLY AFTER FINISH AND BEFORE LUBRICATION UNLESS OTHERWISE SPECIFIED.

WARNING: FASTENERS MAY NOT PERFORM PROPERLY IF ALTERED FROM THE MANUFACTURER’S AS-SHIPPED CONDITION OR INSTALLED IN CONDITIONS OTHER THAN SPECIFIED HEREIN.

PROCUREMENT SPECIFICATION:
NASM25027 ³

CHERRY® RIVETLESS NUT-PLATE
0.060 INCH BOLT CLEARANCE

Part No.

0

Insert Assembly, Pull Mandrel

Installed Nut Plate

Minimum Grip

Structure

Prepare Hole

Installation Tooling

NUT ELEMENT (REPLACEABLE)

1 GRIP IDENTIFICATION

2 SIZE DESIGNATION (OPTIONAL)

3 MANUFACTURER'S IDENTIFICATION

4 NUT RETAINER

5 MANDREL (DISPOSABLE)

6 RETAINING CLIP

7 INSTALLATION TOOLING

2

9 RETAINER

8 FLOATING NUT ELEMENT

A

B

D

E

F

L

0.060 INCH BOLT CLEARANCE

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### TABLE I: ASSEMBLY DIMENSIONS

<table>
<thead>
<tr>
<th>NUT DESIGNATION</th>
<th>NUT ELEMENT – NAS1794</th>
<th>C'BORE DASH NO.</th>
<th>L MIN</th>
<th>A MAX</th>
<th>B MAX</th>
<th>C REF</th>
<th>D REF</th>
<th>E MAX</th>
<th>Z MIN</th>
<th>INSTALLATION HOLE SIZE</th>
<th>RETAINING CLIP</th>
</tr>
</thead>
<tbody>
<tr>
<td>-4</td>
<td>.2500-28 UNJF-3B</td>
<td>-2</td>
<td>.135</td>
<td>.740</td>
<td>.595</td>
<td>1.375</td>
<td>.265</td>
<td>.365</td>
<td>.310</td>
<td>.343/.347</td>
<td>NAS1795-4</td>
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</table>

### TABLE II: RETAINER GRIP SELECTION

<table>
<thead>
<tr>
<th>RETAINER GRIP DASH NO.</th>
<th>MINIMUM GRIP</th>
<th>F REF</th>
<th>MAXIMUM GRIP</th>
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<tbody>
<tr>
<td>-03</td>
<td>.125</td>
<td>.120</td>
<td>BASED ON CUSTOMER APPLICATION.</td>
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<td>CONSULT CHERRY FOR OPTIONS.</td>
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### TABLE III: MECHANICAL PROPERTIES

<table>
<thead>
<tr>
<th>NUT DESIGNATION</th>
<th>RETAINER GRIP DASH NO.</th>
<th>NUT ELEMENT PER NAS1794</th>
<th>AXIAL TENSILE STRENGTH OF ALLOY STEEL AND CRES AT ROOM TEMPERATURE (lbf, MIN)</th>
<th>ASSEMBLY MECHANICAL PROPERTIES (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-4</td>
<td>-03</td>
<td>5060</td>
<td>100</td>
<td>125</td>
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### TABLE IV: MATERIAL AND FINISH

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<th>FINISH CODE</th>
<th>FINISH</th>
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</thead>
<tbody>
<tr>
<td>C</td>
<td>A286 CRES PER AMS 5525, AMS 5732, OR AMS 5737</td>
<td>- - -</td>
<td>PASSIVATE PER AMS 2700 AND DRY FILM LUBE PER NASM25027</td>
<td>A286 CRES PER AMS 5525</td>
<td>- -</td>
<td>PASSIVATE PER AMS 2700 AND DRY FILM LUBE PER PWA-36545-3</td>
<td>-</td>
<td>PASSIVATE PER AMS 2700</td>
<td>PASSIVATE PER AMS 2700</td>
<td>A286 CRES PER AMS 5731</td>
<td>PASSIVATE PER AMS 2700</td>
<td>PASSIVATE PER AMS 2700</td>
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<td></td>
<td></td>
<td>EV</td>
<td>PASSIVATE PER AMS 2700 AND DRY FILM LUBRICANT PER PWA-36545-3</td>
<td></td>
<td>GCC</td>
<td>ALUM. COAT PER NAS 4006</td>
<td>CC</td>
<td>ALUM. COAT PER NAS 4006</td>
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<td></td>
<td>GCC</td>
<td>ALUM. COAT PER NAS 4006</td>
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<tr>
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<td>GCC⑪</td>
<td>ALUM. COAT PER NAS 4006</td>
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<td>CC</td>
<td>ALUM. COAT PER NAS 4006</td>
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<td></td>
<td>GCC⑪</td>
<td>ALUM. COAT PER NAS 4006</td>
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<td></td>
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<td>GCC⑪</td>
<td>ALUM. COAT PER NAS 4006</td>
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NOTES:

① FASTENER GRIP IDENTIFICATION STAMPED ON RETAINER. RETAINERS WITHOUT GRIP IDENTIFICATION MAY BE USED UNTIL STOCK IS DEPLETED.

② FASTENER SIZE DESIGNATION STAMPED ON RETAINER, OPTIONAL.

③ ASSEMBLY TORQUE-OUT AND PUSH-OUT PER PWA-384. VALUES APPLY TO ASSEMBLIES INSTALLED IN THE RECOMMENDED HOLE SIZE IN 2024-T3, 7075-T73, OR AN EQUIVALENT STRENGTH ALUMINUM ALLOY.

④ MATERIAL DESIGNATION REFERS TO CHEMICAL COMPOSITION ONLY.

⑤ “Z” IS THE MINIMUM I.D. OF NUT RETAINER AFTER INSTALLATION.

⑥ THREADS IN ACCORDANCE WITH SAE AS 8879 BEFORE THREAD LOCK AND LUBRICATION.

⑦ USE CHERRY® INSTALLATION TOOL, ADAPTER, AND PULLING HEAD AS SHOWN BELOW, OR CONSULT CHERRY AEROSPACE LLC FOR OTHER INSTALLATION TOOLING OPTIONS.

<table>
<thead>
<tr>
<th>NUT DESIGNATION</th>
<th>INSTALLATION TOOL</th>
<th>PULLING HEAD</th>
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<tbody>
<tr>
<td>-4</td>
<td>G704B</td>
<td>H704-343NP</td>
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<td>G800</td>
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⑧ FLOAT OF NUT ELEMENT OF ASSEMBLY SHALL NOT BE LESS THAN .030 INCH RADially FROM CENTERED POSITION. NUT ELEMENT SHALL BE CAPABLE OF ENGAGEMENT WITH BOLT IN THE MAXIMUM MISALIGNED POSITION.

⑨ RETAINER BASE CONFIGURATION OPTIONAL WITHIN THE LIMITS OF DIMENSIONS “A” AND “B”.

⑩ OPTIONAL: LUBE MAY BE APPLIED TO THE MANDREL FOR PERFORMANCE.

⑪ FINISH CODES WITH THE PREFIX “G” INDICATE REACH COMPLIANT COATING.
EXAMPLE OF CHERRY PART NUMBER:

CNP02 C 4 -2 EV -03 CC

- RETAINER FINISH CODE
- RETAINER GRIP DASH NUMBER
- NUT FINISH CODE
- NUT COUNTERBORE DASH NUMBER
- NUT DESIGNATION
- NUT MATERIAL CODE
- BASIC PART NUMBER
<table>
<thead>
<tr>
<th>REV LTR</th>
<th>DATE</th>
<th>DCR NUMBER</th>
<th>REVISION DESCRIPTION</th>
<th>COMP. BY</th>
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<tbody>
<tr>
<td>AA</td>
<td>5-28-15</td>
<td>14-1305</td>
<td>• ADDED REACH COMPLIANT COATING GCC</td>
<td>CL</td>
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<td>• ADDED NOTE 11</td>
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<td></td>
<td>• GENERAL CLEANUP AND STANDARDIZATION</td>
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