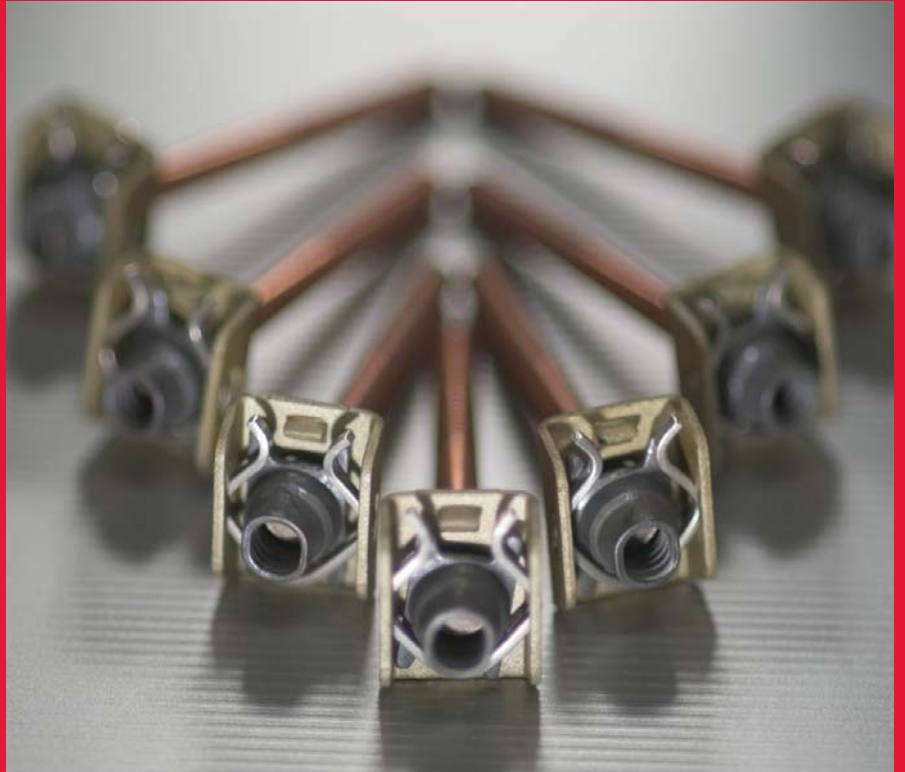


CHERRY® RIVETLESS NUT PLATE

U.S. PATENT 7,059,816



**A COST EFFECTIVE REPLACEMENT FOR STANDARD RIVETED
NUT PLATES THAT MEETS NASM25027 REQUIREMENTS**



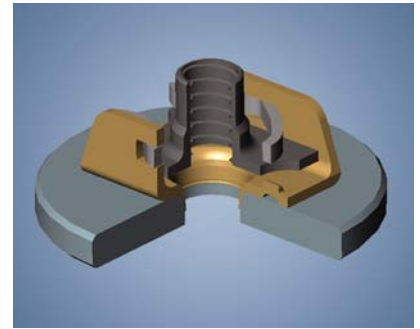
CHERRY®
AEROSPACE
SPS Fastener Division, a PCC Company

CHERRY® RIVETLESS NUT PLATE

FEATURES AND BENEFITS

- Lightweight, compact design
- Extended grip range
- Installation requires a single, as-drilled hole: no counterbore, countersink or chamfer needed
- Eliminates the need for 2 additional rivets and holes
- No flaring required
- Meets or exceeds the requirements of NASM25027*
- Installs on inclined & curved surfaces
- Improves the fatigue life of aluminum structure compared to riveted nut plates
- Uses standard Cherry® tooling
- Floating nut design
- Replaceable nut element
- Fast, reliable installation with lower installed cost
- Reduced maintenance cost

*0.062" and longer grips



Cross Section of Installation

CHERRY® RIVETLESS NUT PLATE FOR ALUMINUM STRUCTURES

STANDARD – CNP03

- Ideal for standard applications in aluminum structure



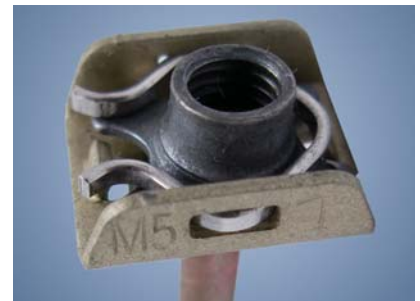
SEALING – CNP05

- Ideal for fuel tanks and wet wings



METRIC – CNP15

- Ideal for U.S. and European metric fastener programs



LIGHTWEIGHT – CNP14

- Ideal for weight-critical applications



LOW CLEARANCE – CNP06

- Selected for use in areas with higher load resistance.



HIGH CLEARANCE – CNP16

- Ideal for applications with a higher alignment tolerance.

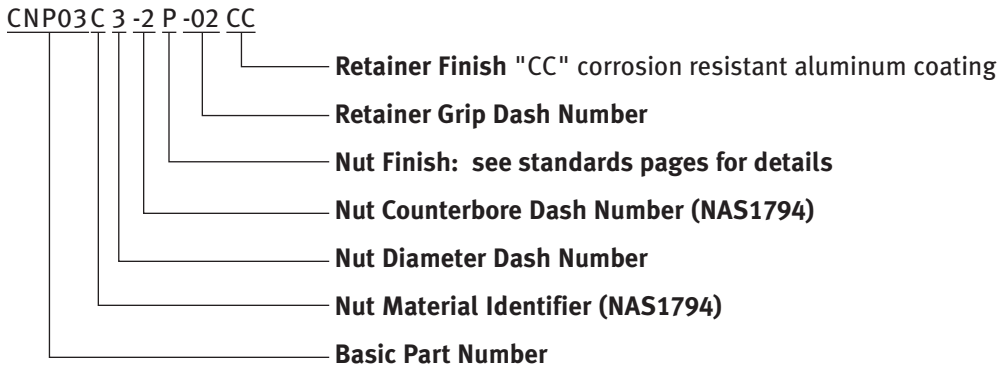


CHERRY® RIVETLESS NUT PLATE

Designed to replace standard riveted nut plates, the Cherry rivetless nut plate features a retainer that does not require flaring to meet NASM25027 torque-out and push-out requirements. The unique design eliminates the need for two additional rivets and rivet holes, as well as reaming, counterboring and countersinking steps.

PART NUMBER EXAMPLE

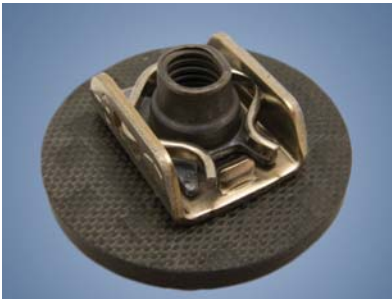
Cherry Rivetless Nut Plate, .062 inch minimum grip, corrosion resistant aluminum coating with .1900-32UNJF-3B thread, CRES nut, with silver plating per AMS 2410, without dry film lubricant.



CHERRY® RIVETLESS NUT PLATE FOR NON-ALUMINUM STRUCTURES

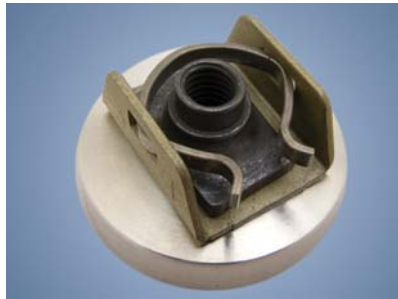
COMPOSITE

- Ideal for use in composite structures
- See CNP53 standards pages.



HARD ALLOYS (TITANIUM, STEEL)

- Ideal for use in Titanium and other harder alloys
- Contact Cherry® for release date



PARTIAL LIST OF CURRENT USERS

Airbus
Boeing
Agusta
Ball Aerospace
European Aeronautic Defense and Space (EADS)
Flight Safety International

Hamilton Sundstrand
Lear Jet
Lockheed Martin
Pratt and Whitney
Raytheon
Rolls-Royce

CHERRY® RIVETLESS NUT PLATE

COMMON CHERRY® RIVETLESS NUT PLATE INSTALLATION TOOLING

G750A HAND RIVETER

The Cherry® G750A hand hydraulic riveting tool provides the versatility of a pneumatic-hydraulic riveter but with the lightweight, high pull strength ratio desirability not found in other hand riveters.

G704B POWER RIVETER

The Cherry® G704B lightweight, pneumatic-hydraulic tool is an efficient tool for installing Cherry® rivetless nut plates. Its durable, all metal housing makes this extremely robust tool ideal for use in a rugged shop environment.



RIVETLESS NUTPLATE TOOL SELECTION CHART

Base P/N	Nut Size	Thread	Nut Float	Power Tool	Manual Tool	Pulling Head P/N
CNP01	3/16"	.1900-32 UNJF-3B	.024"	G704B	G750A & 750A-088 adapter	H704-249NP
CNP02	1/4"	.2500-28 UNJF-3B	.060"	G704B	G750A & 750A-088 adapter	H704-343NP
CNP03	8-32	.1640-32 UNJC-3B	.054" (min)	G704B	G750A & 750A-088 adapter	H704-249NP
CNP03	3/16"	.1900-32 UNJF-3B	.030"	G704B	G750A & 750A-088 adapter	H704-249NP
CNP03	1/4"	.2500-28 UNJF-3B	.030"	G704B	G750A & 750A-088 adapter	H704-311NP
CNP04	5/16"	.3125-24 UNJF-3B	.060"	G84, G84-LS	None	H84C-404NP
CNP05	3/16"	.1900-32 UNJF-3B	.030"	G704B	G750A & 750A-088 adapter	H704-249NP
CNP06	3/16"	.1900-32 UNJF-3B	.002"-.007"	G704B	G750A & 750A-088 adapter	H704-223NP
CNP11	3/16"	.1900-32 UNJF-3B	.060"	G704B	G750A & 750A-088 adapter	H704-280NP
CNP11	1/4"	.2500-28 UNJF-3B	.060"	G704B	G750A & 750A-088 adapter	H704-343NP
CNP14	3/16"	.1900-32 UNJF-3B	.030"	G704B	G750A & 750A-088 adapter	H704-249NP
CNP14	1/4"	.2500-28 UNJF-3B	.030"	G704B	G750A & 750A-088 adapter	H704-311NP
CNP15	5mm	MJ5X0.8-4H6H	.5mm (.020")	G704B	G750A & 750A-088 adapter	H704-249NP
CNP16	3/16"	.1900-32 UNJF-3B	.120"	G704B	G750A & 750A-088 adapter	H704-343NP
CNP16	1/4"	.2500-28 UNJF-3B	.120"	G84, G84-LS	None	H84C-404NP
CNP19	5/16"	.3125-18 UNC-2B	.060"	G84, G84-LS	None	H84C-404NP
CNP20	3/16"	.1900-32 UNJF-3B	.060"	G704B	G750A & 750A-088 adapter	H704-295NP
CNP20	1/4"	.2500-28 UNJF-3B	.060"	G704B	G750A & 750A-088 adapter	H704-358NP
CNP53	3/16"	.1900-32 UNJF-3B	.030"	G704B	G750A & 750A-088 adapter	H704-275NP

1 U.S. Patent 7,059,816

The Cherry Rivetless Nutplate product line is growing. For the most current information, please contact Cherry Aerospace Technical Service at 714.850.6022.



H704-() () NP PULLING HEAD



CHERRY®
AEROSPACE
SPS Fastener Division, a PCC Company

1224 East Warner Avenue, Santa Ana, CA 92705
voice: 714-545-5511 • fax: 714-850-6093
www.cherryaerospace.com

©2008 CHERRY AEROSPACE
SUPPLIERS FEDERAL ID CODE 11815

Cherry® is a trademark of Cherry Aerospace.
CA-1030 Rev. A, Date: 4-16-08 CR#: 07-1161