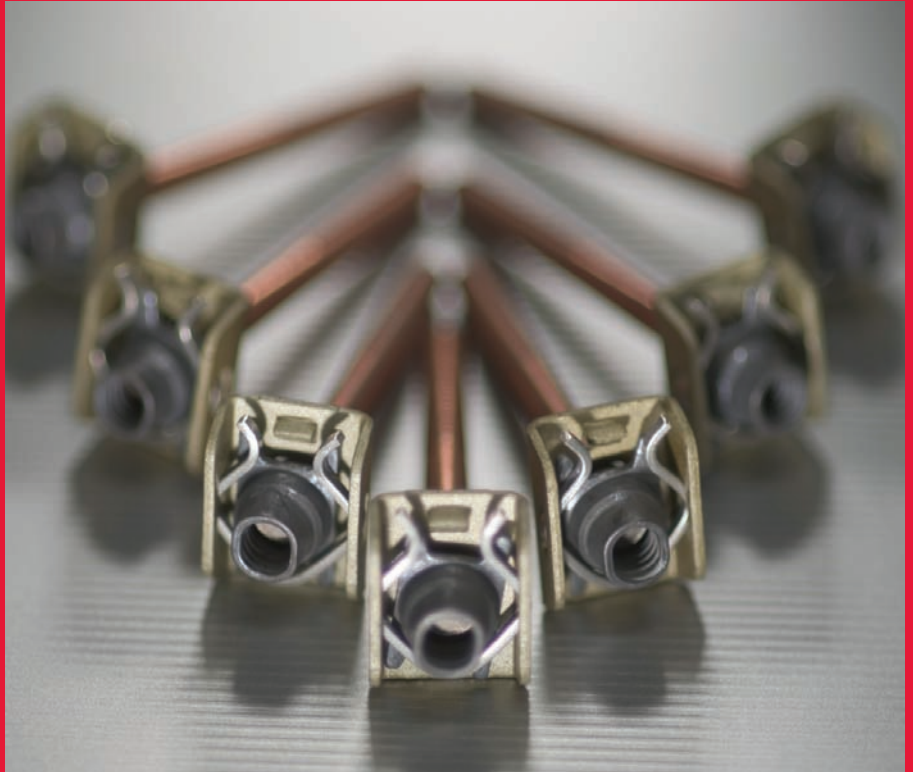


CHERRY® RIVETLESS NUT PLATE

U.S. PATENT 7,059,816



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



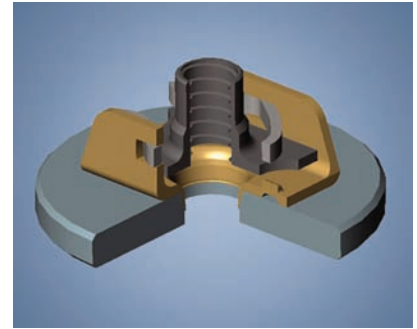
CHERRY®
AEROSPACE
SPS Fastener Division, a PCC Company

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

*Contact Cherry Aerospace for more information



Cross Section of Installation

CHERRY® RIVETLESS NUT PLATE FOR ALUMINUM STRUCTURES

STANDARD CNPO1, CNP03, CNP11

- Ideal for standard applications in aluminum structure



SEALING CNP05

- Ideal for fuel tanks and wet wings



METRIC – CNP15, CNP25

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



LIGHTWEIGHT – CNP14

- Ideal for weight-critical applications



HIGH CLEARANCE – CNP16

- Ideal for applications with a higher alignment tolerance.

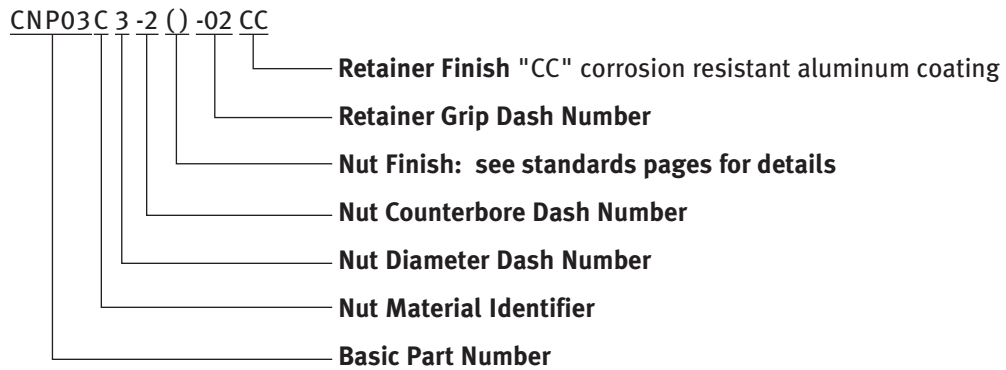


CHERRY® RIVETLESS NUT PLATE

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

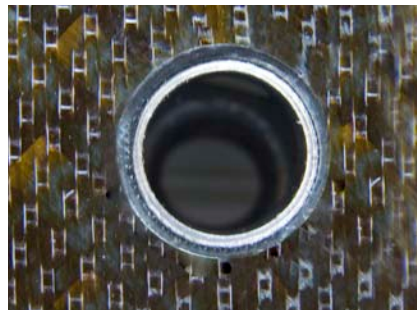
Cherry Rivetless Nut Plate, .062 inch minimum grip, corrosion resistant aluminum coating with .1900-32UNJF-3B thread, CRES nut, with dry film lubricant.



CHERRY® RIVETLESS NUT PLATE FOR COMPOSITE STRUCTURES

COMPOSITE

- Ideal for use in composite structures.
- See CNP51, CNP53 standards pages.
- Expansion Sleeve protects composites.



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 PLATE¹

COMMON CHERRY® RIVETLESS NUT PLATE INSTALLATION TOOLING

G800 HAND RIVETER

The Cherry® G800 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	G800	H704-249NP
CNP02	1/4"	.2500-28 UNJF-3B	.060"	G704B	G800	H704-343NP
CNP03	8-32	.1640-32 UNJC-3B	.054" (min)	G704B	G800	H704-249NP
CNP03	3/16"	.1900-32 UNJF-3B	.030"	G704B	G800	H704-249NP
CNP03	1/4"	.2500-28 UNJF-3B	.030"	G704B	G800	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	G800	H704-249NP
CNP11	3/16"	.1900-32 UNJF-3B	.060"	G704B	G800	H704-280NP
CNP11	1/4"	.2500-28 UNJF-3B	.060"	G704B	G800	H704-343NP
CNP14	3/16"	.1900-32 UNJF-3B	.030"	G704B	G800	H704-249NP
CNP14	1/4"	.2500-28 UNJF-3B	.030"	G704B	G800	H704-311NP
CNP15	4 mm	MJ4x0,7-4H6H	1,5mm (.059")	G704B	G800	H704-249NP
CNP15	5 mm	MJ5x0,8-4H6H	0,5mm (.020")	G704B	G800	H704-249NP
CNP15	6 mm	MJ6x1-4H5H	1,12mm (.044")	G704B	G800	H704-311NP
CNP16	3/16"	.1900-32 UNJF-3B	.120"	G704B	G800	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	G800	H704-295NP
CNP20	1/4"	.2500-28 UNJF-3B	.060"	G704B	G800	H704-358NP
CNP25	8 mm	MJ8x1-4H5H	0.73mm (.029")	G84	N/A	H84C-404NP
CNP51	3/16"	.1900-32 UNJF-3B	.060"	G704B	G800	H704-305NPC
CNP53	3/16"	.1900-32 UNJF-3B	.030"	G704B	G800	H704-275NPC

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

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