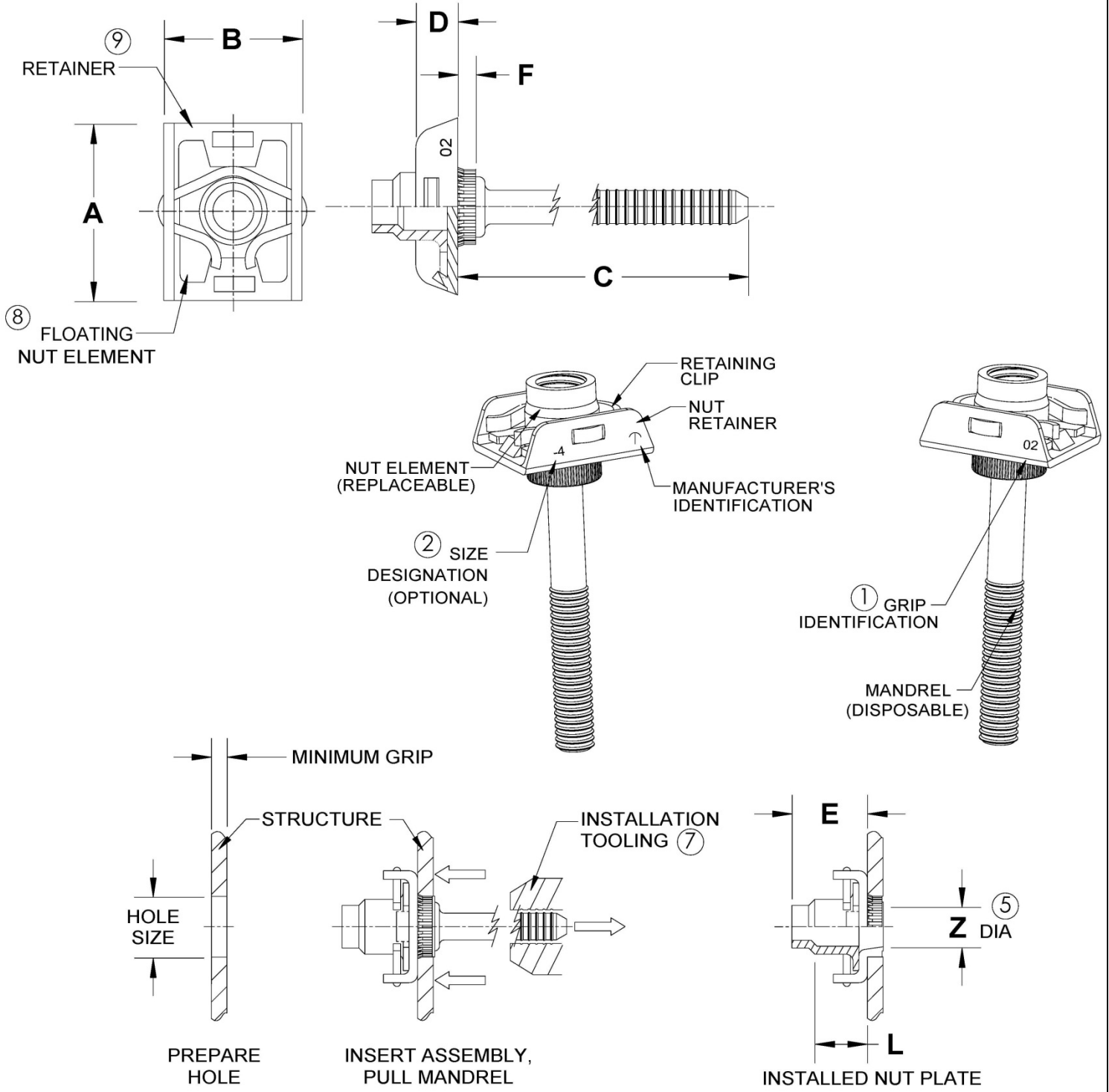




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NUT PLATE INSTALLATION SEQUENCE

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 (13)

CHERRY® RIVETLESS NUT-PLATE
0.030 INCH BOLT CLEARANCE (11)

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TABLE I: ASSEMBLY DIMENSIONS

NUT DESIGNATION	NUT ELEMENT – NAS1794			A MAX	B MAX	C REF		D REF	E MAX	Z MIN ⑤	INSTALLATION HOLE SIZE	RETAINING CLIP
	THREAD SIZE ⑥	C'BORE DASH NO.	L MIN			STD	SHORT ⑫					
-3	.1900-32 UNJF-3B	-1	.076	.595	.490	1.450	1.100	.245	.258	.218	.249-.253	NAS1795-3
		-2	.135						.320			
		-3	.198						.383			
		-4	.260						.446			
		-5	.323						.508			
-4	.2500-28 UNJF-3B	-1	.071	.740	.595	1.375	1.100	.265	.303	.280	.311-.315	NAS1795-4
		-2	.135						.365			
		-3	.198						.427			
		-4	.260						.489			
		-5	.323						.551			
-08 ⑪	.1640-32 UNJC-3B	-1	.074	.595	.490	1.450	1.100	.245	.260	.218	.249-.253	NAS1795-3
		-2	.135						.320			
		-3	.198						.383			
		-4	.260						.446			
		-5	.323						.508			

TABLE II: RETAINER GRIP SELECTION

RETAINER GRIP DASH NO.	MINIMUM GRIP	NUT DESIGNATION			MAXIMUM GRIP
		F REF			
		-08	-3	-4	
-01	.040	.032	.032	---	BASED ON CUSTOMER APPLICATION. CONSULT CHERRY FOR OPTIONS.
-02	.062	.055	.055	.057	
-03	.125	.110	.110	---	

TABLE III: MECHANICAL PROPERTIES

NUT DESIGNATION	RETAINER GRIP DASH NO.	NUT ELEMENT PER NAS1794		ASSEMBLY MECHANICAL PROPERTIES ③	
		AXIAL TENSILE STRENGTH OF ALLOY STEEL AND CRES AT ROOM TEMPERATURE (lbf, MIN)		TORQUE-OUT (in-lbf, MIN)	PUSH-OUT (lbf, MIN)
-3	-01	2825		40	75
	-02 & LONGER			60	100
-4	ALL GRIPS	5060		100	125
-08	-01	2000		40	75
	-02 & LONGER			45	80

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TABLE IV: MATERIAL AND FINISH ④

NUT				RETAINER			MANDREL		RETAINING CLIP			
MATERIAL CODE	MATERIAL	FINISH CODE	FINISH	MATERIAL	FINISH CODE	FINISH	MATERIAL	FINISH ⑭	MATERIAL	FINISH		
C	A286 CRES PER AMS 5525, AMS 5732, OR AMS 5737	---	PASSIVATE PER AMS 2700 AND DRY FILM LUBE PER NASM25027	A286 CRES PER AMS 5525	---	PASSIVATE PER AMS 2700	A286 CRES PER AMS 5731	PASSIVATE PER AMS 2700	XM-28 PER ASTM-A-313	PASSIVATE PER AMS 2700		
			CC		ALUM. COAT PER NAS 4006							
		CF	COPPER-FREE NUT PER ABS 2120		GCC ⑮	ALUM. COAT PER NAS 4006 CLASS NC					---	PASSIVATE PER AMS 2700
			CC		ALUM. COAT PER NAS 4006	CC					ALUM. COAT PER NAS 4006	
		EV	PASSIVATE PER AMS 2700 AND DRY FILM LUBRICATION PER PWA-36545-3		GCC ⑮	ALUM. COAT PER NAS 4006 CLASS NC					---	PASSIVATE PER AMS 2700
			CC		ALUM. COAT PER NAS 4006	CC					ALUM. COAT PER NAS 4006	
		N ⑬	NON-CRIMPED, ALUMINUM COATED PER NAS 4006		GCC ⑮	ALUM. COAT PER NAS 4006 CLASS NC					---	PASSIVATE PER AMS 2700
			SILVER PLATE PER AMS 2410 .0002 MIN THICKNESS		CC	ALUM. COAT PER NAS 4006					---	PASSIVATE PER AMS 2700
		P	IVD COATING (EXCEPT THREADED AREA) PER MIL-DTL-83488, TYPE II, CL 1		GCC ⑮	ALUM. COAT PER NAS 4006 CLASS NC					---	PASSIVATE PER AMS 2700
			CC		ALUM. COAT PER NAS 4006	---					PASSIVATE PER AMS 2700	
V	IVD COATING (EXCEPT THREADED AREA) PER MIL-DTL-83488, TYPE II, CL 3 (SUPPLEMENTAL: MIL-DTL-5541 CL 1A, TYPE II)	V	IVD COATING PER MIL-DTL-83488, TYPE II, CL 1	---	PASSIVATE PER AMS 2700							
	GV ⑮	IVD COATING PER MIL-DTL-83488, TYPE II, CL 3 (SUPPLEMENTAL: MIL-DTL-5541 CL 1A, TYPE II)	GV ⑮	IVD COATING PER MIL-DTL-83488, TYPE II, CL 3 (SUPPLEMENTAL: MIL-DTL-5541 CL 1A, TYPE II)								
A	ALLOY OR CARBON STEEL, HEAT TREATED	---	CAD. PLATE PER AMS-QQ-P-416 CL 1 OR 2 AND DRY FILM LUBE PER NASM25027	---	PASSIVATE PER AMS 2700							
			CC	ALUM. COAT PER NAS 4006								
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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 TORQUE-OUT AND PUSH-OUT VALUES APPLY TO ASSEMBLIES INSTALLED IN THE RECOMMENDED HOLE SIZE IN 2024-T3, 7075-T73, OR AN EQUIVALENT STRENGTH ALUMINUM ALLOY. -01 RETAINER GRIP TORQUE-OUT AND PUSH-OUT VALUES TO BE TABULATED IN MECHANICAL PROPERTIES TABLE. TEST PER NASM25027.
- ④ MATERIAL DESIGNATION REFERS TO CHEMICAL COMPOSITION ONLY.
- ⑤ "Z" IS THE EXPECTED INTERNAL DIAMETER OF THE RETAINER AFTER INSTALLATION; UP TO .005" SMALLER MEASUREMENT IS ACCEPTABLE.
- 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.

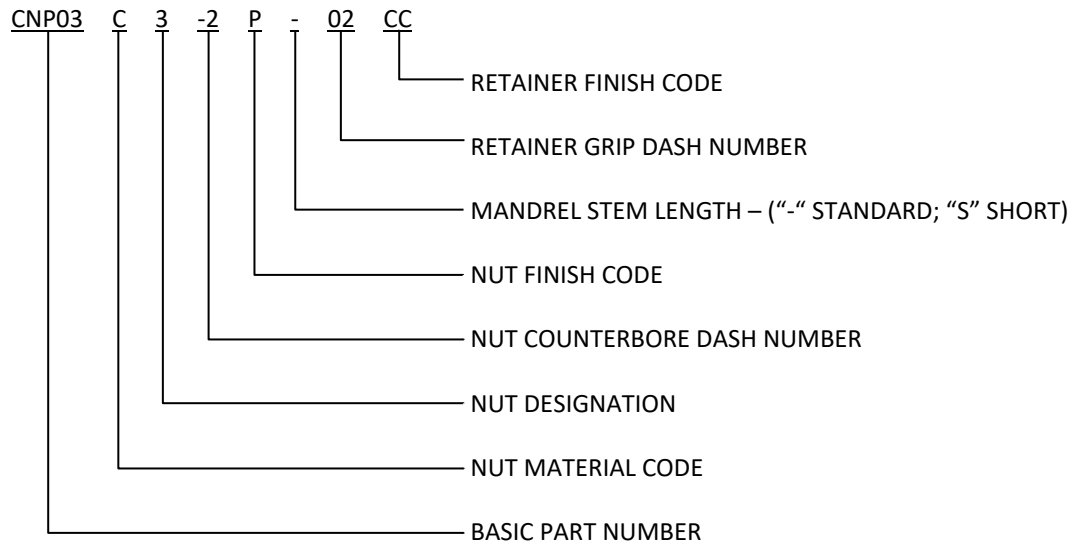
NUT DESIGNATION	INSTALLATION TOOL	PULLING HEAD
-3	G704B	H704-249NP
	G800	
-4	G704B	H704-311NP
	G800	
-08	G704B	H704-249NP
	G800	

- ⑧ FLOAT OF NUT ELEMENT OF ASSEMBLY SHALL NOT BE LESS THAN .015 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" & "B".
- 10. IN MINIMUM GRIP INSTALLATIONS, ANY BURRS WHICH EXTEND BEYOND THE BACK SIDE OF THE STRUCTURE MAY BE REMOVED BY DEBURRING.
- ⑪ -08 HAS A BOLT CLEARANCE OF .054 INCH MINIMUM.
- ⑫ SHORT MANDREL OPTION IS ONLY AVAILABLE FOR -01 AND -02 GRIP LENGTHS FOR -08 AND -3 DIAMETERS. FOR THE -4 DIAMETER, SHORT MANDRELS ARE AVAILABLE FOR -02 GRIP ONLY.
- ⑬ "N" CODE PARTS HAVE FREE-RUNNING NUT ELEMENT (WITHOUT CRIMP) WHICH MEETS ONLY AXIAL TENSILE PERFORMANCE OF NASM25027.
- ⑭ OPTIONAL: LUBE MAY BE APPLIED TO THE MANDREL FOR PERFORMANCE.
- ⑮ FINISH CODES WITH THE PREFIX "G" INDICATE REACH COMPLIANT COATING.

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EXAMPLE OF CHERRY PART NUMBER:



APPROVED MANUFACTURERS

CHERRY AEROSPACE, SANTA ANA, CA, CAGE CODE 11815

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