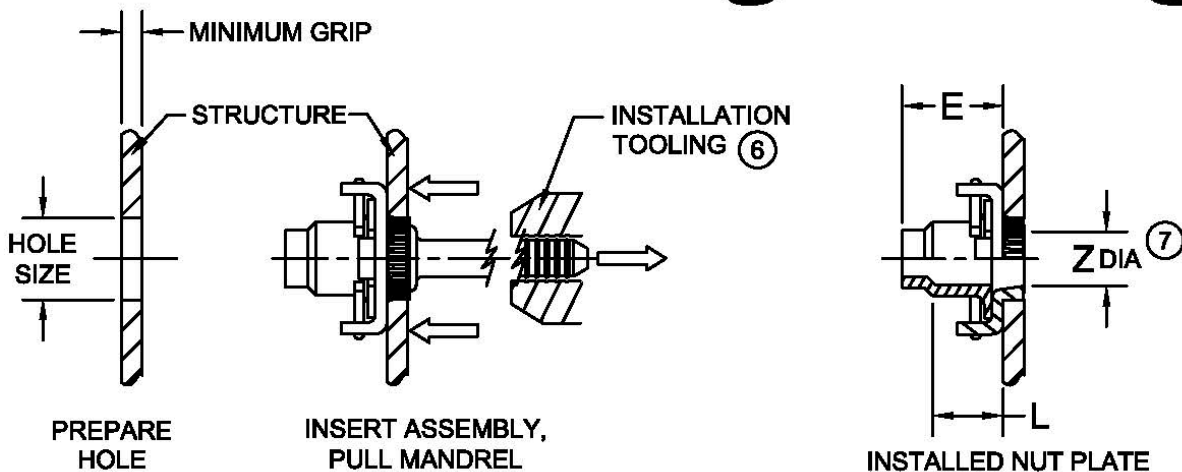
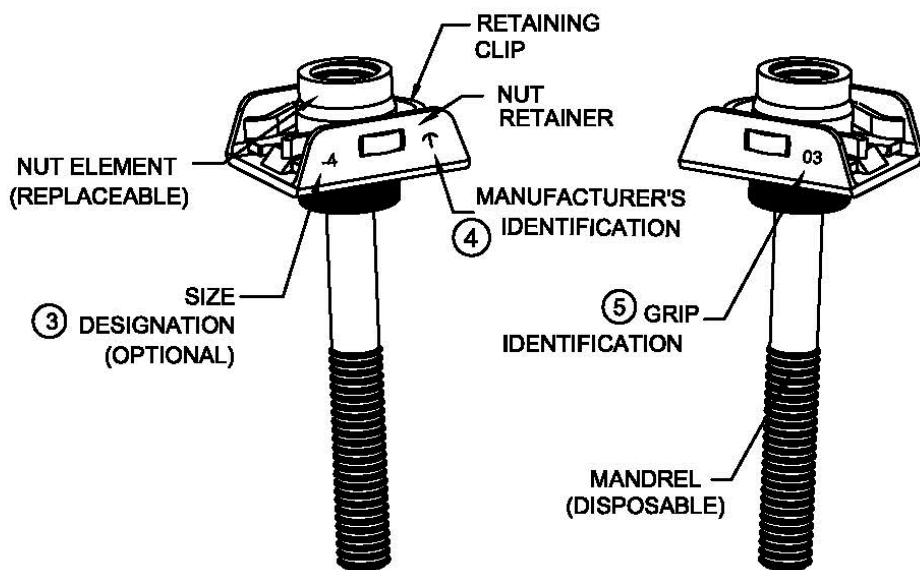
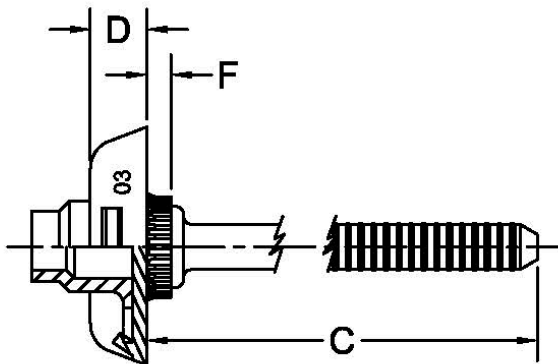
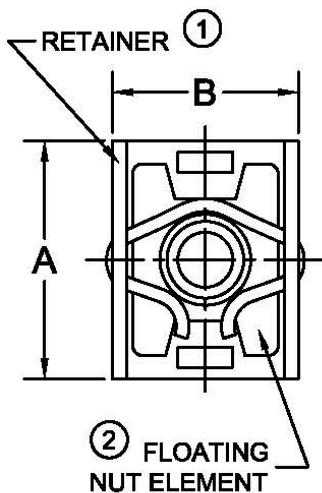




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NUT PLATE INSTALLATION SEQUENCE

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

CHERRY® RIVETLESS NUT-PLATE
0.060 INCH BOLT CLEARANCE ⑬

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TABLE I: ASSEMBLY DIMENSIONS

NUT DESIGNATION	NUT ELEMENT			A MAX	B MAX	C REF		D REF	E MAX	Z ⑦	INSTALLATION HOLE SIZE	RETAINING CLIP
	THREAD SIZE ⑧	C'BORE DASH NO.	L MIN			STD	SHORT ⑪					
-08 ⑬	.1640-32 UNJC-3B	-1	.074	.595	.490	1.450	1.100	.245	.260	.248	.284 .280	NAS1795-3
		-2	.135						.320			
		-3	.198						.383			
		-4	.260						.446			
		-5	.323						.508			
-3	.1900-32 UNJF-3B	-1	.076	.595	.490	1.450	1.100	.245	.258	.248	.284 .280	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	N/A	.265	.303	.310	.347 .343	NAS1795-4
		-2	.135						.365			
		-3	.198						.427			
		-4	.260						.489			
		-5	.323						.551			

TABLE II: RETAINER GRIP SELECTION

RETAINER GRIP DASH NO.	MINIMUM GRIP	F REF			MAXIMUM GRIP
		-08	-3	-4	
-01 ⑨ ⑫	.040	.032	.032	---	BASED ON CUSTOMER APPLICATION. CONSULT CHERRY FOR OPTIONS.
-1.5 ⑤ ⑫	.055	.047	.047	---	
-02	.070	.060	.060	---	
-2.5	.090	.080	.080	---	
-03	.125	.110	.110	.120	

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TABLE III: MECHANICAL PROPERTIES

NUT DESIGNATION	RETAINER GRIP DASH NO.	NUT ELEMENT PER NAS 1794		ASSEMBLY MECHANICAL PROPERTIES ⑨	
		AXIAL TENSILE STRENGTH OF ALLOY STEEL AND CRES AT ROOM TEMPERATURE (lbf, MIN)		TORQUE-OUT (in-lbf, MIN)	PUSH-OUT (lbf, MIN)
-08	-01	2000		40	75
	-1.5 & LONGER			45	80
-3	-01	2825		40	75
	-1.5 & LONGER			60	100
-4	ALL GRIPS	5060		100	125

TABLE IV: MATERIAL AND FINISH ⑩

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 NASM 25027 AND NAS 1794	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					
			GCC ⑭		ALUM. COAT PER NAS 4006 CLASS NC					
		CF	COPPER-FREE NUT PER ABS2120 PASSIVATE PER AMS 2700 AND DRY FILM LUBE PER NASM 25027 AND NAS 1794		---	PASSIVATE PER AMS 2700				
			CC		ALUM. COAT PER NAS 4006					
			GCC ⑭		ALUM. COAT PER NAS 4006 CLASS NC					
		EV	PASSIVATE PER AMS 2700 EVERLUBE® ESNALUBE 382		---	PASSIVATE PER AMS 2700				
					CC	ALUM. COAT PER NAS 4006				
					GCC ⑭	ALUM. COAT PER NAS 4006 CLASS NC				

(cont.)

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TABLE IV: MATERIAL AND FINISH (cont.) ⑩

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	P	SILVER PLATE PER AMS 2410 .0002 MIN THICKNESS PER NAS 1794	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				
					GCC ⑭	ALUM. COAT PER NAS 4006 CLASS NC				
		---	PASSIVATE PER AMS 2700							
		V	IVD COAT (EXCEPT THREADED AREA) PER MIL-DTL-83488, TYPE II, CLASS 2 (SUPPLEMENTAL: MIL-C-5541, CL 1A & CL 3)		V	IVD COAT PER MIL-DTL-83488, TYPE II, CLASS 2; (SUPPLEMENTAL: MIL-C-5541, CL 1A & CL 3)				
		GV ⑭	IVD ALUMINUM COAT PER MIL-DTL-83488, CLASS 3, TYPE II (SUPPLEMENTAL: MIL-DTL-5541, CL 1A, TYPE II)		GV ⑭	IVD ALUMINUM COAT PER MIL-DTL-83488, CLASS 3, TYPE II (SUPPLEMENTAL: MIL-DTL-5541, CL 1A, TYPE II)				

NUT				RETAINER			MANDREL		RETAINING CLIP	
MATERIAL CODE	MATERIAL	FINISH CODE	FINISH	MATERIAL	FINISH CODE	FINISH	MATERIAL	FINISH ⑭	MATERIAL	FINISH
A	ALLOY OR CARBON STEEL, HEAT TREATED	NO CODE	CAD PLATE PER AMS-QQ-P-416, CLASS 1 OR 2 AND DRY FILM LUBE PER NASM 25027	A286 CRES PER AMS 5525	NO CODE	PASSIVATE PER AMS 2700	A286 CRES PER AMS 5731	PASSIVATE PER AMS 2700	XM-28 PER ASTM-A-313	PASSIVATE PER AMS 2700
					CC	CORROSION RESISTANT ALUMINUM COATING				

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NOTES:

- ① RETAINER BASE CONFIGURATION OPTIONAL WITHIN THE LIMITS OF DIMENSIONS “A” AND “B”.
- ② FLOAT OF NUT ELEMENT OF ASSEMBLY SHALL NOT BE LESS THAN .002 INCH RADIALLY FROM CENTERED POSITION. NUT ELEMENT SHALL BE CAPABLE OF ENGAGEMENT WITH BOLT IN THE MAXIMUM MISALIGNED POSITION.
- ③ FASTENER DIAMETER IDENTIFICATION STAMPED ON RETAINER, OPTIONAL.
- ④ MANUFACTURER’S IDENTIFICATION LETTER “T” STAMPED ON RETAINER.
- ⑤ FASTENER GRIP IDENTIFICATION STAMPED ON RETAINER. -1.5 GRIP DASH NUMBER TO BE IDENTIFIED AS “15”.
- ⑥ USE CHERRY® INSTALLATION TOOL, ADAPTER, AND PULLING HEAD AS SHOWN IN TABLE BELOW, OR CONSULT CHERRY AEROSPACE FOR OTHER INSTALLATION TOOLING OPTIONS.

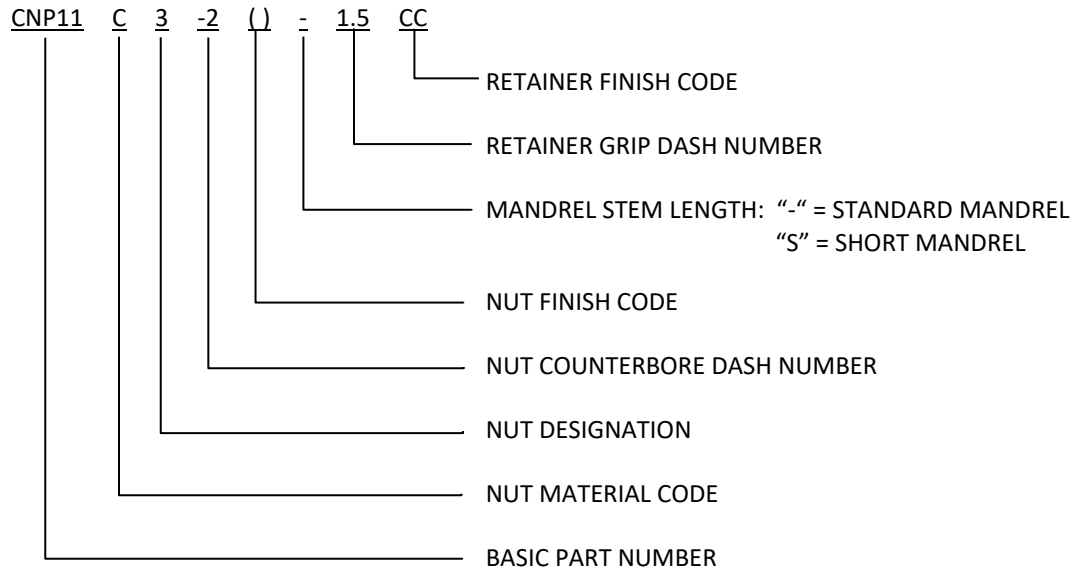
NUT DESIGNATION	INSTALLATION TOOL	PULLING HEAD
		STANDARD AND SHORT LENGTH MANDREL
-08	G704B	H704-280NP
	G800	
-3	G704B	H704-280NP
	G800	
-4	G704B	H704-343NP
	G800	

- ⑦ "Z" IS THE EXPECTED INTERNAL DIAMETER OF THE RETAINER AFTER INSTALLATION; UP TO .005" SMALLER MEASUREMENT IS ACCEPTABLE.
- ⑧ THREADS IN ACCORDANCE WITH SAE AS8879 BEFORE THREAD LOCK AND LUBRICATION.
- ⑨ 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. -8 DIAMETER -01 GRIP, AND -3 DIAMETER -01 GRIP TORQUE-OUT AND PUSH-OUT VALUES TO BE AS TABULATED IN MECHANICAL PROPERTIES TABLE. TEST PER NASM25027.
- ⑩ MATERIAL DESIGNATION REFERS TO CHEMICAL COMPOSITION ONLY PER APPROPRIATE SPECIFICATION.
- ⑪ SHORT MANDREL OPTION FOR -08 AND -3 DIAMETERS SIZES IS ONLY AVAILABLE FOR -01 AND -1.5 GRIP LENGTHS.
- ⑫ IN MINIMUM GRIP INSTALLATIONS, ANY BURRS WHICH EXTEND BEYOND THE BACK SIDE OF THE STRUCTURE MAY BE REMOVED BY DEBURRING.
- ⑬ SIZE -08 HAS A BOLT CLEARANCE OF .084 INCH MINIMUM.
- ⑭ OPTIONAL: LUBE MAY BE APPLIED TO MANDREL FOR PERFORMANCE.
- ⑮ FINISH CODES WITH THE PREFIX “G” INDICATE REACH COMPLIANT COATING.

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EXAMPLE OF CHERRY PART NUMBER:



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