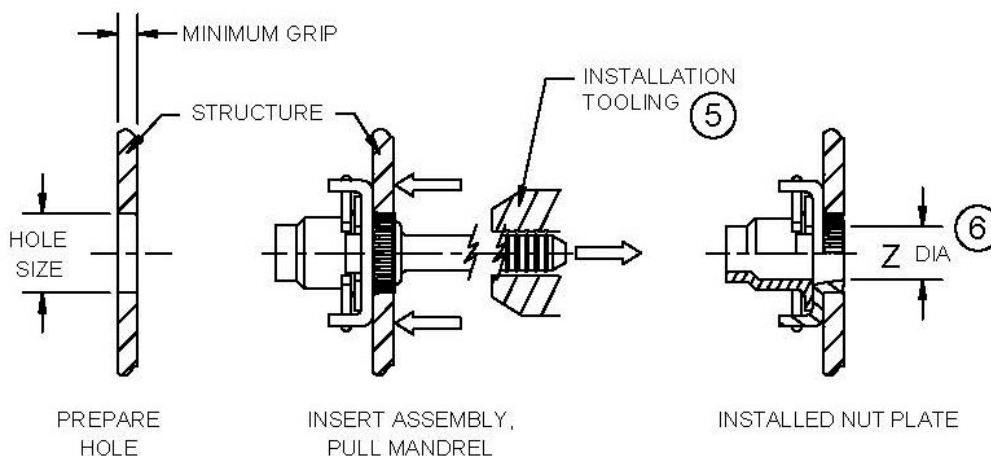
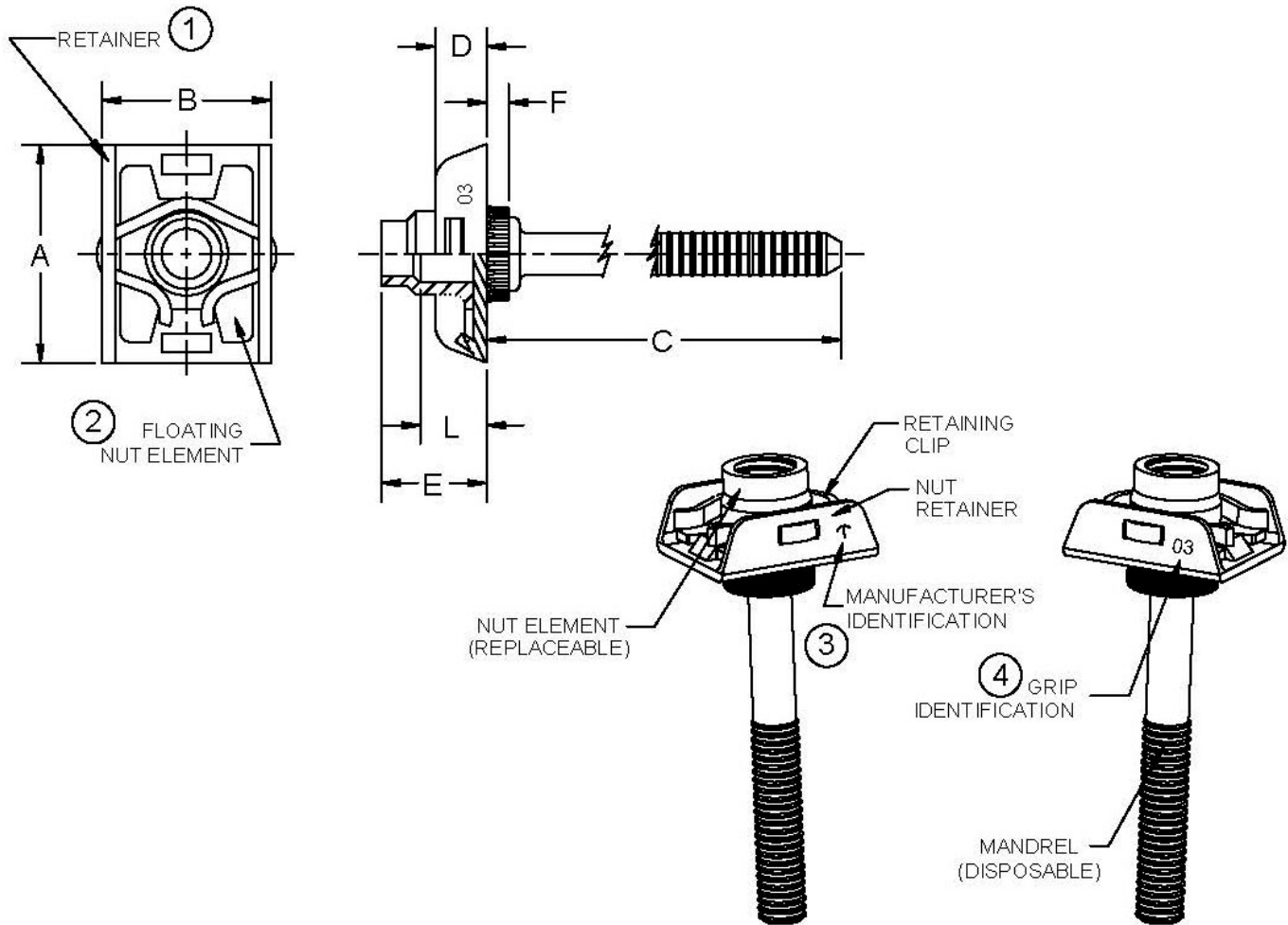




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NUT PLATE INSTALLATION SEQUENCE

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 OVERSIZED, 0.060 INCH BOLT CLEARANCE REPLACEABLE NUT	SHEET 1 OF 6		PART NUMBER
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TABLE I: ASSEMBLY DIMENSIONS

NUT DESIGNATION	NUT ELEMENT			A MAX	B MAX	C REF		D REF	E MAX	Z ⑥	INSTALLATION HOLE SIZE	RETAINING CLIP
	THREAD SIZE ⑦	C'BORE DASH NO.	L MIN			STD	SHORT ⑩					
-3	.1900-32 UNJF-3B	-1	.076	.595	.500	1.450	1.100	.245	.263	.248	.299 .295	NAS1795-3
		-2	.135						.325			
		-3	.198						.388			
		-4	.260						.451			
		-5	.323						.513			
-4	.2500-28 UNJF-3B	-1	.071	.740	.600	1.375	---	.265	.308	.310	.362 .358	NAS1795-4
		-2	.135						.370			
		-3	.198						.432			
		-4	.260						.494			
		-5	.323						.556			

TABLE II: RETAINER GRIP SELECTION

RETAINER GRIP DASH NO.	MINIMUM GRIP	F REF		MAXIMUM GRIP
		-3	-4	
-01 ⑧ ⑪	.040	.032	---	BASED ON CUSTOMER APPLICATION. CONSULT CHERRY FOR OPTIONS.
-1.5 ④ ⑪	.055	.047	---	
-03	.125	---	.120	

TABLE III: MECHANICAL PROPERTIES

NUT DESIGNATION	RETAINER GRIP DASH NO.	NUT ELEMENT PER NAS1794		ASSEMBLY MECHANICAL PROPERTIES ⑧	
		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
	-1.5 & LONGER			60	100
-4	-03	5060		100	125

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TABLE IV: MATERIAL AND FINISH ⑨

NUT				RETAINER			MANDREL		RETAINING CLIP	
MATERIAL CODE	MATERIAL	FINISH CODE	FINISH	MATERIAL	FINISH CODE	FINISH	MATERIAL	FINISH ⑫	MATERIAL	FINISH
C	A286 CRES PER AMS 5525, AMS 5732, OR AMS 5737	---	PASSIVATE PER AMS 2700 AND DRY FILM LUBE PER NASM25027 AND NAS1794	A286 CRES PER AMS 5525	---	PASSIVATE PER AMS2700	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 AMS2700				
					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 AMS2700				
					CC	ALUM. COAT PER NAS 4006				
					GCC ⑭	ALUM. COAT PER NAS 4006 CLASS NC				
		P	SILVER PLATE PER AMS2410 .0002 MIN THICKNESS PER NAS1794		---	PASSIVATE PER AMS2700				
					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.) ⑨

NUT				RETAINER			MANDREL		RETAINING CLIP	
MATERIAL CODE	MATERIAL	FINISH CODE	FINISH	MATERIAL	FINISH CODE	FINISH	MATERIAL	FINISH ⑫	MATERIAL	FINISH
C	A286 CRES PER AMS 5525, AMS 5732, OR AMS 5737	V	IVD COAT (EXCEPT THREADED AREA) PER MIL-DTL-83488, TYPE II, CLASS 1		---	PASSIVATE PER AMS2700	A286 CRES PER AMS 5731	PASSIVATE PER AMS 2700	XM-28 PER ASTM-A-313	PASSIVATE PER AMS 2700
					V	CORROSION RESISTANT ALUMINUM PER MIL-DTL-83488				
		GV ⑭	IVD ALUMINUM COAT PER MIL-DTL-83488, CLASS 3, TYPE II (SUPPLEMENTAL: MIL-DTL-5541, CL 1A, TYPE II)		---	PASSIVATE PER AMS2700				
					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 ⑫	MATERIAL	FINISH
A	ALLOY OR CARBON STEEL, HEAT TREATED	---	CAD PLATE PER AMS-QQ-P-416, CLASS 1 OR 2 AND DRY FILM LUBE PER NASM25027	A286 CRES PER AMS 5525	NO CODE	PASSIVATE PER AMS2700	A286 CRES PER AMS5731	PASSIVATE PER AMS 2700	XM-28 PER ASTM-A-313	PASSIVATE PER AMS 2700
					CC	CORROSION RESISTANT ALUMINUM COATING PER NASM4006				

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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 .030 INCH RADIALLY FROM CENTERED POSITION. NUT ELEMENT SHALL BE CAPABLE OF ENGAGEMENT WITH BOLT IN THE MAXIMUM MISALIGNED POSITION.
- ③ MANUFACTURER'S IDENTIFICATION LETTER "T" STAMPED ON RETAINER.
- ③ FASTENER DIAMETER IDENTIFICATION STAMPED ON RETAINER, OPTIONAL.
- ④ FASTENER GRIP IDENTIFICATION STAMPED ON RETAINER. -1.5 GRIP DASH NUMBER TO BE IDENTIFIED AS "15".
- ⑤ USE CHERRY® INSTALLATION TOOL, ADAPTER, AND PULLING HEAD AS SHOWN IN TABLE BELOW, OR CONSULT CHERRY AEROSPACE FOR OTHER INSTALLATION TOOLING OPTIONS.

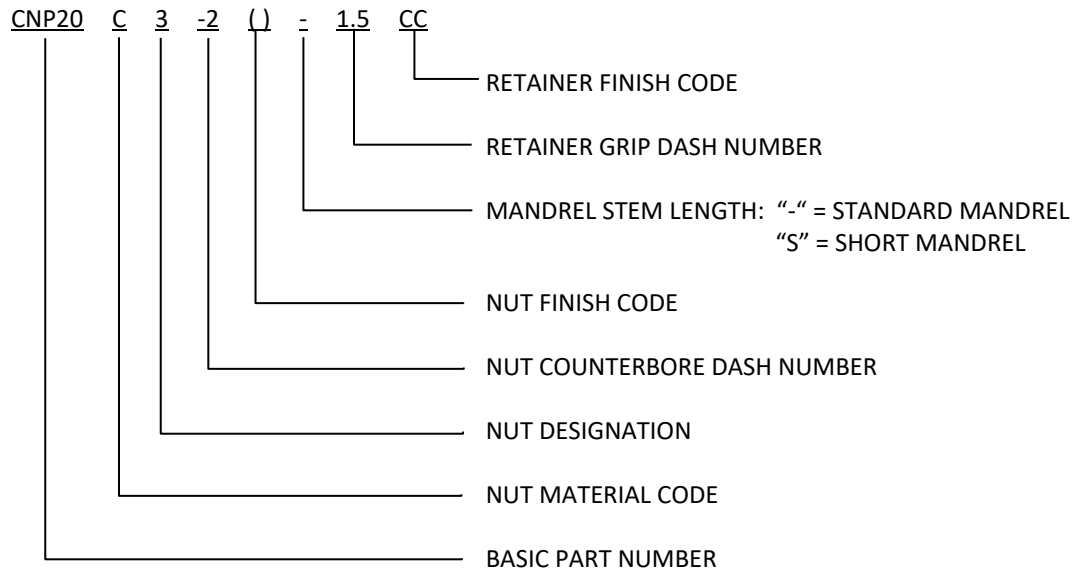
NUT DESIGNATION	INSTALLATION TOOL	PULLING HEAD
		STANDARD AND SHORT LENGTH MANDREL
-3	G704B	H704-295NP
	G800	
-4	G704B	H704-358NP
	G800	

- ⑥ "Z" IS THE EXPECTED INTERNAL DIAMETER OF THE RETAINER AFTER INSTALLATION; UP TO .005" SMALLER MEASUREMENT IS ACCEPTABLE.
- ⑦ THREADS IN ACCORDANCE WITH SAE AS8879 BEFORE THREAD LOCK AND LUBRICATION.
- ⑧ 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. -3 DIAMETER -01 GRIP TORQUE-OUT AND PUSH-OUT VALUES TO BE AS TABULATED IN MECHANICAL PROPERTIES TABLE. TEST PER NASM25027.
- ⑨ MATERIAL DESIGNATION REFERS TO CHEMICAL COMPOSITION ONLY PER APPROPRIATE SPECIFICATION.
- ⑩ SHORT MANDREL OPTION IS ONLY AVAILABLE FOR -03 DIAMETERS.
- ⑪ IN MINIMUM GRIP INSTALLATIONS, ANY BURRS WHICH EXTEND BEYOND THE BACK SIDE OF THE STRUCTURE MAY BE REMOVED BY DEBURRING.
- ⑫ DRY FILM LUBE TO BE ADDED AT MANUFACTURER'S OPTION.
- ⑬ OPTIONAL: LUBE MAY BE APPLIED TO MANDREL FOR PERFORMANCE.
- ⑭ FINISH CODES WITH THE PREFIX "G" INDICATE REACH COMPLIANT COATING.

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EXAMPLE OF CHERRY PART NUMBER:



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STANDARDS PAGE REVISION LOG

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