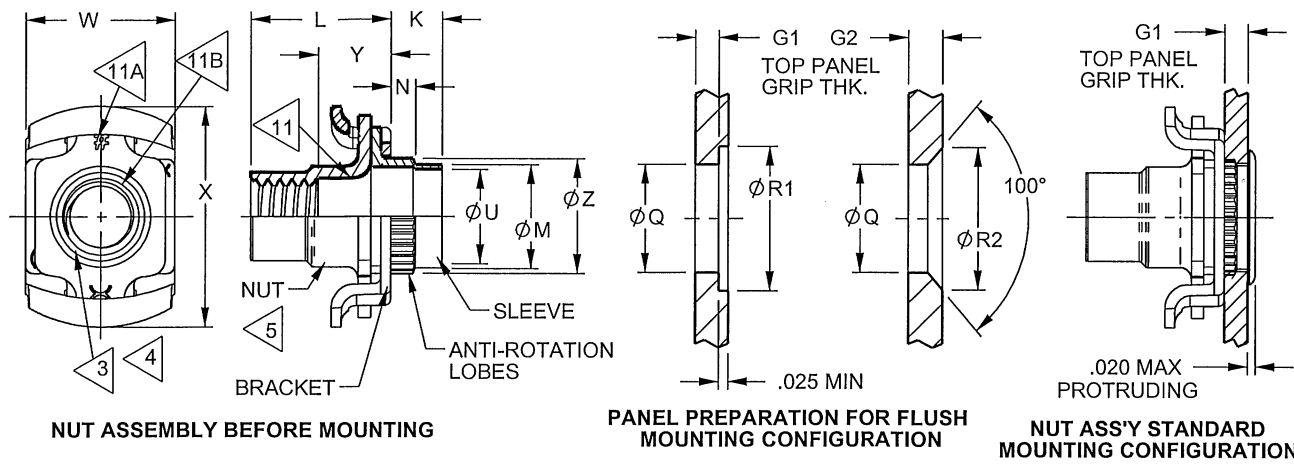


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REV **F**
S-2297
 DRAWING NO.



THREAD SIZE CODE	Ø M	Ø Q	2	Ø R1	Ø R2	Ø U	W	X	Z
	+0.000 -0.006	+0.004 -0.001		+0.020 -0.000	±0.005	+0.005 -0.002			
4, 4F, 6, 6F, M3, M3.5	.217	.218	SOFT	.312	.307	.194	.290	.407	.231
8, 8F, 10, 10C, 10F, M4, M5	.270	.272	HARD	.375	.370	.245	.390	.564	.299
12, 12C, 12F, M6	.335	.339		.515	.437	.307	.450	.648	.365

PART NUMBER CALLOUT

FGD 6010 () - () - () - ()

NUT HEIGHT CODE	L (DIMENSIONS APPLY AFTER INSTALLATION)			(Y) THREAD RELIEF		
	4, 4F, M3, 6, 6F, M3.5	8, 8F, M4, 10, 10C, 10F, M5	12, 12C, 12F, M6	4, 4F, M3, 6, 6F, M3.5	8, 8F, M4, 10, 10C, 10F, M5	12, 12C, 12F, M6
1	.193	.233	.303	.062	.068	.082
2	.254	.295	.366	.112	.128	.135
3	.317	.357	.428	.177	.190	.197
4	.380	.420	.490	.242	.252	.260

MODEL
 SERIES

GRIP CODE	G1	G2	K	N	GRIP CODE	G1	G2	K	N
AA	N/A	.055-.073	.073	.028-.037	M	.376-.405	.414-.444	.440	.053-.075
A	.031-.062	.074-.106	.099		N	.406-.436	.445-.475	.471	
B	.063-.094	.107-.133	.130		P	.437-.467	.476-.506	.502	
C	.095-.125	.134-.165	.161		R	.468-.498	.507-.537	.533	
D	.126-.156	.166-.196	.192		S	.499-.529	.538-.568	.564	
E	.157-.187	.197-.227	.223	T	.530-.560	.569-.599	.595		
F	.188-.218	.228-.258	.254	V	.561-.591	.600-.630	.626		
G	.219-.250	.259-.289	.285	W	.592-.622	.631-.661	.657		
H	.251-.281	.290-.320	.316	X	.623-.653	.662-.692	.688		
J	.282-.312	.321-.351	.347	Y	.654-.684	.693-.723	.719		
K	.313-.343	.352-.382	.378	Z	.685-.715	.724-.754	.750		
L	.344-.375	.383-.413	.409	ZZ	.716-.746	.755-.785	.781		

THREAD SIZE CODE	THREAD SIZE PER SAE-AS-8879	LEAD	THREAD SIZE CODE	THREAD SIZE PER SAE-AS-8879	LEAD	THREAD SIZE CODE	THREAD SIZE PER ASME B1.21M	LEAD
4	.112-40 UNJC-3B	SINGLE	4F	.112-40 UNJC-3B	DOUBLE	M3	MJ3 x 0.5-4H6H	METRIC
6	.138-32 UNJC-3B		6F	.138-32 UNJC-3B		M3.5	MJ3.5 x 0.6-4H6H	
8	.164-32 UNJC-3B		8F	.164-32 UNJC-3B	QUAD	M4	MJ4 x 0.7-4H6H	
10	.190-32 UNJF-3B		10F	.190-32 UNJF-3B		M5	MJ5 x 0.8-4H6H	
12	.250-28 UNJF-3B		SINGLE (COARSE)	12F	.250-28 UNJF-3B	M6	MJ6 x 1.0-4H6H	
10C	.190-24 UNJC-3B							
12C	.250-20 UNJC-3B							

CODE	NUT TYPE
L	LOCKING
NL	NON-LOCKING

THIS DRAWING, THE STRUCTURAL DESIGN DISCLOSED THEREIN, THE TECHNICAL DATA AND ENGINEERING SERVICE REPRESENTED THEREBY ARE THE EXCLUSIVE PROPERTY OF HUCK INTERNATIONAL, INC.

F	DCN 5748	09-24-07
REV	DESCRIPTION/EC NO.	DATE

UNLESS OTHERWISE SPECIFIED
 ALL DIMENSIONS IN INCHES
 TOLERANCE UNLESS OTHERWISE NOTED:
 .X = ±.05 ANGLES ±0.5°
 .XX = ±.02
 .XXX = ±.015

Alcoa Fastening Systems
 AEROSPACE FASTENER DIVISION
 3724 EAST COLUMBIA STREET
 TUCSON, ARIZONA 85714
 PHONE 520 519-7400
 FAX 520 519-7427
 www.alcoafasteners.com

TITLE		NUT PLATE, RIVETLESS, VARIABLE NUT HEIGHT, ALL SIZES, FLOATING (450°)	
DATE	06/01/2005	PART NUMBER	FGD6010()
DRAWN	JLS	DRAWING NO.	S-2297
CHECK	<i>[Signature]</i>	CAGE CODE	0HDW7
APPROVE		REV	F
SCALE: 2:1		SHEET 1 OF 2	

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REV **F**
 DRAWING NO. **S-2297**

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MATERIAL:

NUT: 1050 CARBON STEEL PER AMS 5085, OR ALLOY STEEL PER MIL-S-6758 OR AMS 6348, AMS 6351 (4130). HEAT TREAT TO 160 KSI MIN ULTIMATE TENSILE STRENGTH, HRC 45 MAX

BRACKET: 1050 CARBON STEEL PER AMS 5085 OR ASTM-A-682, HEAT TREAT TO HRC 40-50

SLEEVE: 304 CRES PER AMS 5639 OR AMS-QQ-S-763 OR 305 CRES PER AMS 5514

FINISH CODE:

BRACKET, SLEEVE & NUT: CAD PLATE PER AMS QQ-P-416, TYPE I I, CLASS 2

NUT: DRI-FILM LUBE PER MIL-PRF-46010

NOTES:

- 1 ▷ "AA" GRIP RECOMMENDED PANEL PREPARATION:
 SIZES 4, 4F, 6, 6F, M3 & M3.5 C'SINK: "Ø R2" DIMENSION IS .275
 SIZE 8, 8F, 10, 10C, 10F, M4 & M5 C'SINK: "Ø Q" DIMENSION IS .276/.281; "Ø R2" DIMENSION IS .343
 SIZE 12, 12C, 12F, M6: NOT RECOMMENDED FOR LESS THAN .060 PANEL THICKNESS
- 2 ▷ SOFT: DIMENSIONS FOR SOFT ALUMINUM ALLOYS AND PLASTICS
 HARD: DIMENSIONS FOR HARD ALUMINUM ALLOYS AND STEEL
- 3 ▷ A MINIMUM OF TWO THREADS ARE DEFORMED TO PRODUCE SELF-LOCKING ACTION PER NASM25027 WHEN LOCKING FEATURE IS DESIRED.
- 4 ▷ NUT ELEMENT HAS .060 TOTAL RADIAL FLOAT FOR GRIP LENGTHS "AA" THRU "C" AND .046 MINIMUM FOR GRIP LENGTHS GREATER THAN "C".
- 5 ▷ FOR NUT ELEMENT REPLACEMENT PART NUMBER, SEE DRAWING S-0877.
- 6 ▷ NUT ELEMENT REMOVAL TOOL AVAILABLE, PART NUMBER RB6527.
- 7 ▷ FOR GRIP CODE F THRU P, THE Ø "U" MINIMUM MAY BE .224 AS REQUIRED FOR MANUFACTURING. SIZE .190-32 UNJF-3B ONLY.
- 8 ▷ FOR HIGH VOLUME INSTALLATION RATES, ALTERNATIVE POWER TOOLING IS AVAILABLE: CONTACT ALCOA FASTENING SYSTEMS SALES DEPT.
- 9 ▷ THREADS ARE CUT FOR THREAD SIZE CODES: 8, 8F, M4, 10, 10C, 10F, M5, 12, 12C, 12F AND M6.
- 10 ▷ TOOLING TYPE:
 "N" DESIGNATES COUNTERBORE
 "S" DESIGNATES COUNTERSINK
- 11 ▷ COUNTERBORE DEPTH FOR NUT ELEMENT DESIGNATION:

CODE	OPTION A (STAMPING)	11A	OPTION B (COLOR CODE)	11B
1		NONE		LIGHT BLUE
2		2		WHITE
3		3		PINK
4		4		FLUORESCENT ORANGE


HAND INSTALLATION TOOL SELECTION TABLE : () INDICATES THREAD SIZE CODE
 COMPLETE HAND TOOL ASSEMBLY INCLUDES:

NOSE PIECE, PULLER & HANDLE NOSE PIECE 10 PULLER HANDLE ASS'Y
 COUNTERBORE COUNTERSINK COUNTERBORE COUNTERSINK
 DCBT8600-() DCST8600L-() DCBN86130-() DCSN86130-() DTP86230-() TA7533

F	DCN 5748	09-24-07
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TITLE NUT PLATE, RIVETLESS, VARIABLE NUT HEIGHT, ALL SIZES, FLOAT ING (450°)			
DATE 06/01/2005	PART NUMBER FGD6010()		
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