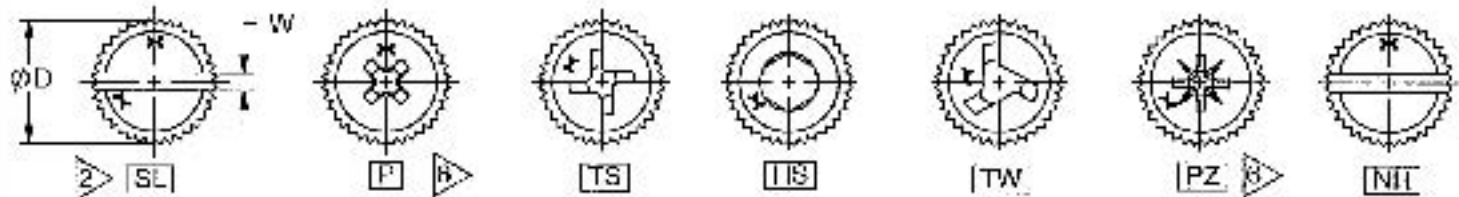
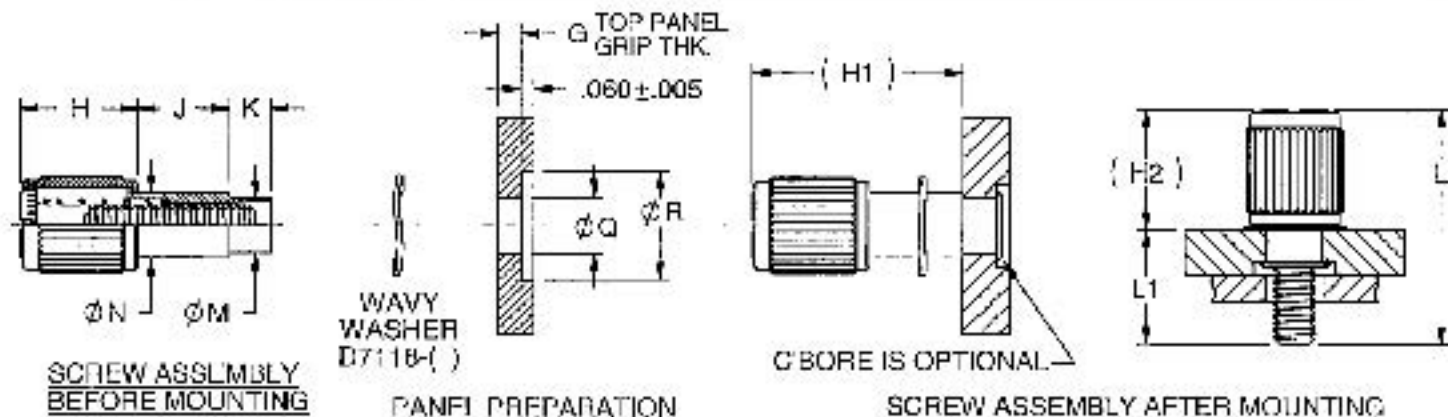


REV E

S-0666

DRAWING NO.



THREAD SIZE CODE	Ø D	H		H1		J		Ø M +0.06	Ø N +0.05	Ø Q +0.04 -0.01	Ø R	W	RECESS SIZE				
		H3	P, PZ SL, TR, TW, NR	H3	P, PZ SL, TR, TW, NR	H3	P, PZ SL, TR, TW, NR						P, PZ	TW	TS	H3	
4, 4F, M3	.325	.444	.374	.72	.651	.468	.398	.285	.177	.208	.187	.281	.040	4	2	2	3/32
5, 5F, M3.5	.356	.440	.379	.730	.660	.484	.414	.280	.202	.241	.209	.312	.044	4	3	4	7/64
6, 6F, M4	.420	.500	.480	.96	.891	.593	.523	.385	.215	.288	.221	.343	.049	6	4	6	9/32
10, 10C, 10F, M5	.451	.699	.529	1.038	968	.63	.561	.427	.250	.297	.257	.375	.055	8	5	8	5/32
12, 12C, 12F, M6	.531	.804	.534	1.041	971	.626	.556	.426	.313	.371	.323	.437	.069	10	5	10	3/16

PART NUMBER CALLOUT

DRBWW () 7500 () () () ()

MODEL

SERIES

LENGTH CODE	4, 4F, M3		5, 5F, M3.5		6, 6F, M4		10, 10C, 10F, M5		12, 12C, 12F, M6	
	L +0.025 -0.015	L1	L -0.025 -0.015	L1	L +0.025 -0.015	L1	L +0.025 -0.015	L1	L +0.025 -0.015	L1
1	.639	.241	.650	.238	.695	.162	.832	.271	.745	.189
2	.734	.368	.775	.361	.810	.287	.957	.306	.870	.314
3	.839	.491	.900	.488	.936	.412	1.082	.321	.986	.449
4	1.014	.615	1.025	.611	1.060	.537	1.207	.348	1.120	.584
5	1.139	.741	1.150	.738	1.185	.662	1.332	.371	1.245	.699
6	1.264	.866	1.275	.861	1.310	.787	1.457	.396	1.370	.814
7	1.389	.991	1.400	.988	1.435	.912	1.582	1.021	1.495	.939

THREAD SIZE CODE	THREAD SIZE	HEAD	T-HEAD SIZE CODE	T-HEAD SIZE	HEAD	GRIP CODE	G (TOP PANEL GRIP THICKNESS)	K (K CODE)	
4	112-40 UNC-3A	SINGLE	8F	164-32 UNC-3A	CLWD	A	.031-.062	125	
5	128-32 UNC-3A		10F	190-12 UNF-3A		B	.063-.125	187	
6	164-32 UNC-3A		12F	202-24 UNF-3A		C	.126-.187	250	
10	180-24 UNF-3A		M3	M3 x 0.5-4H6		METRIC	D	.188-.260	312
12	250-24 UNF-3A		M3.5	M3.5 x 0.6-4H6			E	.251-.312	375
10C	180-24 UNC-3A	SINGLE (DOWNDR)	M4	M4 x 0.7-4H6	F		.313-.375	437	
12C	250-24 UNC-3A		M5	M5 x 0.8-4H6					
4F	112-40 UNC-3A	DOUBLE	M6	M6 x 1.0-4H6					
10F	180-24 UNC-3A								

MATERIAL CODE	WAVY WASHER MATERIAL
2	SPRING STEEL
3	17-7 PH
4	SPRING STEEL

RECESS CODE	DRIVING RECESS AND SPECIFICATION	RECESS CODE	DRIVING RECESS AND SPECIFICATION
	SLOT RECESS PER ANSI B18.6.3	PZ	RECESS PER TYPE "A" ANSI B10.6.3
HS	HEX SOCKET RECESS PER ANSI B10.6	TS	RECESS PER NASM 33761
NF	NO RECESS	TW	RECESS PER NAS 4000
P	CROSS RECESS PER NASM 9006		

F: DCN 3-97 04-22-05
REV: DESCRIPTION REC NO. DATE

UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS IN INCHES

TOLERANCE UNLESS OTHERWISE
NOTED:

X = ±.03 ANGLES 10.5°
XX = ±.02
XXX = .015



Alcoa Fastening
Systems

AEROSPACE FASTENER DIVISION
3724 EAST COLUMBIA STREET
TUCSON, ARIZONA 85714
PHONE 520 519-7100
FAX 520 519-7427
www.alcoafasteners.com

TITLE

TURN-LOC, HIGH PROFILE,
OPTIONAL RECESS, ALL
SIZES, SELF-LOCKING

DATE: 04/22/2005

PART NO.

DRBWW () 7500

DRAWN: JIS

DRAWING NO.

S-0666

CHECKED: [Signature]

GAGE CODE:

0HDW7

REV

E

SCALE: 1:1 SHEET 1 OF 2

ORIGINAL
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REV E
 S-0666
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GRP CODE	AVAILABILITY TABLE																																			
	4, 9, MJ							6, 9F, MJS							9, 9F, MA							10, 10G, 10F, MS							12, 12G, 12F, ME							
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	
A	C							O								O	O						O	O							O	O				
B									O								O							O	O						O	O				
C		O							O								O	O						O	O						O	O				
D		O							O								O							O	O						O	O				
E																	O	O						O	O						O	O				
F																	O	O						O	O						O	O				

ASSEMBLY NOT AVAILABLE
 FULLY RETRACTABLE ASSEMBLIES
 FULLY RETRACTABLE ASSEMBLIES - SEE NOTE 5
 ASSEMBLY NOT FULLY RETRACTABLE (STUD WILL PROTRUDE BELOW TOP PANEL)

MATERIAL

STJD: HS, NR, P, PZ, & SLOT RECESSES
 ALL SIZES - 302 CRES PER ASTM-A-408 OR AMS 5636

 STJD: TS AND TW RECESSES
 ALL SIZES - A-286 CRES PER AMS 5737, HEAT TREAT TO 180 KSI MIN. ULTIMATE TENSILE STRENGTH

 KNOB & SLEEVE: 6061 ALUMINUM ALLOY PER AMS QQ-A-225/8, OR AMS 4117, OR EQUIVALENT

 SPRING: 302 CRES PER ASTM-A-313 OR AMS 5638 OR EQUIVALENT

 WAVY WASHER:
 CODE:
 2 & 4: SPRING STEEL PER AMS-QQ-S-700 OR EQUIVALENT
 3: CRES PER AMS 5528, AMS 5529 OR EQUIVALENT

FINISH

STUD & SPRING: PASSIVATE PER AMS QQ-P-35

 KNOB & SLEEVE: ANODIZE PER MIL-A-8625, TYPE II, CLASS I

 WAVY WASHER:
 CODE:
 2: CAD PLATE PER AMS QQ-P-416, TYPE I, CLASS 2
 3: PASSIVATE PER AMS QQ-P-35
 4: CAD PLATE PER AMS QQ-P-416, TYPE II, CLASS 2

NOTES:

- 1. I FTFRS AT THE END OF PART NUMBER DESIGNATE SPECIAL ASSEMBLIES:
 DL - ASSEMBLIES WITH DRI LUBE THREADS PER MIL-PRF-46010
 PL - ASSEMBLIES WITH PATCH LOCK PER MIL-DTL-16240
- 2. NO CODE REQUIRED FOR SLOTTED HEADS.
- 3. WHEN USING THE HEX SOCKET CONFIGURATION, ADD .070 TO "L" LENGTH.
- 4. FOR LONGER LENGTHS, ADD .125 INCREMENTS PER LENGTH CODE.
- 5. -3A THREADS PER ASME B1.1. "M" THREADS PER ASME B1.13M.
- 6. RECESS IS ONE SIZE SMALLER THAN NOMINAL SIZE REQUIRED FOR 100° FI AT HEAD.
- 7. COMPONENTS ARE FINISHED PRIOR TO THE ASSEMBLY PROCESS. DISCOLORATION OF THE BLACK ANODIZE MAY OCCUR ON THE CRIMPED PORTION OF THE KNOB DURING ASSEMBLY. A HIGH-ADHESION BLACK PAINT IS PERMITTED FOR TOUCH UP AFTER ASSEMBLY.
- 8. ONLY USE ARBOR PRESS TOOL FOR INSTALLATION.

INSTALLATION TOOLS: () INDICATES THREAD SIZE CODE
 ARBOR PRESS TOOL HW7600 (), REMOVAL ADAPTER TOOL FNI7505 (), NOSE PIECE HN7513 (),
 PULLER HP7523 (), HANDLE ASSEMBLY TA7533
 COMPLETE HAND TOOL ASSEMBLY: H8803 () INCLUDES NOSE PIECE, PULLER & HANDLE

E	DCN 3197	04-22-05	 Alcoa Fastening Systems	TITLE TURN-LOC, HIGH PROFILE, OPTIONAL RECESS, ALL SIZES, SELF-LOCKING	
	HLV	DESCRIPTION/REV NO.		DATE	DATE: 04/22/2005 DRAWN: JLS CHECKED: <i>[Signature]</i>
UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS IN INCHES TOLERANCE UNLESS OTHERWISE NOTED: X = ±.05 ANGLES ±0.5° XX = ±.02 XXX = ±.010			AEROSPACE FASTENER DIVISION 3724 EAST COLUMBIA STREET TUCSON, ARIZONA 85714 PHONE 520 519-7400 FAX 520 519-7427 www.alcoafasteners.com	SCALE: 1:1 SHEET 2 OF 2	