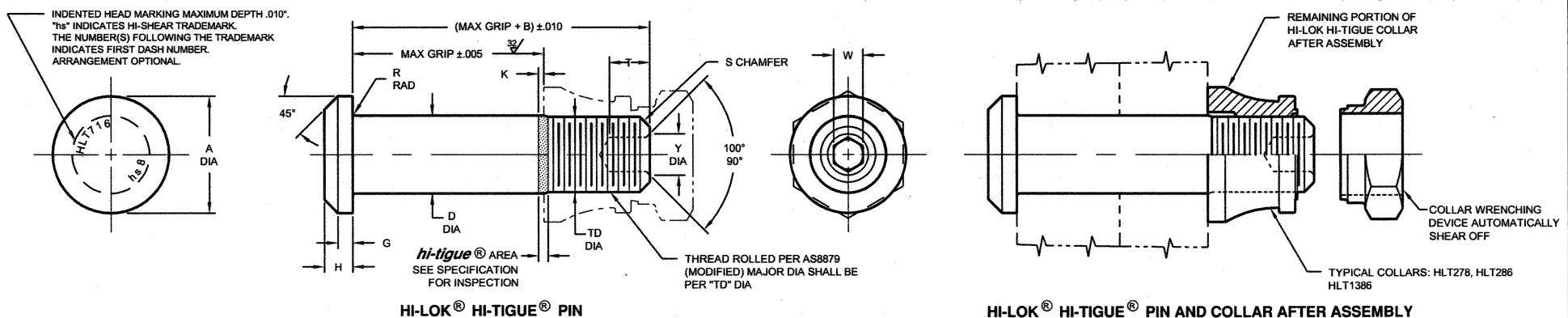


# STANDARDS COMMITTEE FOR HI-LOK® HI-TIGUE® PRODUCTS

2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509 U.S.A.

HI-SHEAR CORPORATION, U.S.A. (Patent Holder) CAGE No. 73197 a LISI AEROSPACE Company	BLANC AERO INDUSTRIES UK LIMITED (Licensee) CAGE No. 0LB68 a LISI AEROSPACE Company
AIR INDUSTRIES CO., INC., U.S.A. (Licensee - U.S.A & Canada) CAGE No. 06725	HUCK S.A. France (Licensee - ECC Countries)
HUCK INTERNATIONAL, INC., U.S.A. (Licensee) CAGE No. 07928	BLANC AERO S.A. France (Licensee - ECC Countries)
SPS TECHNOLOGIES, U.S.A. (Licensee) CAGE No. 56878	a LISI AEROSPACE Company
FAIRCHILD Aerospace Fastener Division (Licensee) CAGE No. 92215	TOKYO SCREW COMPANY, Japan (Licensee - Japan)
WEST COAST AEROSPACE INC., U.S.A. (Licensee) CAGE No. 60516 (Pins & Steel Collars)	



HI-LOK® HI-TIGUE® PIN

HI-LOK® HI-TIGUE® PIN AND COLLAR AFTER ASSEMBLY

FIRST DASH NO.	PIN NOM DIA	A DIA	B REF	D DIA		TD DIA.	G REF	H	K REF	R RAD	S CHAMFER REF	THREAD	SOCKET			DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
				WITHOUT PLATING S.F.L. OR COATING	WITH PLATING S.F.L. OR COATING								W HEX	T DEPTH	Y DIA		
5				NOTE: USE HLT622-6(-)													
6	7/32	.390 .370	.360	.2182 .2177	.2182 .2172	.1840 .1810	.035	.074 .064	.016	.025 .015	1/32" x 45°	10-32UNJF-3A Modified	.0806 .0791	.100 .080	.119 .104	9,400	4,350
8	9/32	.460 .435	.435	.2807 .2802	.2807 .2797	.2440 .2410	.045	.090 .080	.021	.025 .015	1/32" x 45°	1/4-28UNJF-3A Modified	.0967 .0947	.110 .090	.142 .122	15,500	7,750
10	11/32	.520 .490	.545	.3432 .3427	.3432 .3422	.3060 .3020	.055	.112 .102	.026	.030 .020	3/64" x 45°	5/16-24UNJF-3A Modified	.1295 .1270	.130 .110	.180 .160	23,200	12,300
12	13/32	.620 .585	.590	.4057 .4052	.4057 .4047	.3680 .3640	.075	.140 .130	.030	.030 .020	3/64" x 45°	3/8-24UNJF-3A Modified	.1617 .1582	.160 .140	.217 .197	32,400	19,100
14	15/32	.695 .660	.690	.4682 .4677	.4682 .4672	.4310 .4260	.095	.160 .150	.035	.030 .020	3/64" x 45°	7/16-20UNJF-3A Modified	.1930 .1895	.190 .170	.253 .233	43,100	25,800
16	17/32	.790 .755	.740	.5307 .5302	.5307 .5297	.4930 .4880	.095	.188 .178	.039	.030 .020	3/64" x 45°	1/2-20UNJF-3A Modified	.2242 .2207	.220 .200	.289 .269	55,400	34,300
18	19/32	.900 .865	.825	.5927 .5922	.5927 .5917	.5550 .5500	.125	.210 .200	.039	.040 .025	1/16" x 45°	9/16-18UNJF-3A Modified	.2555 .2520	.260 .240	.326 .306	69,200	43,500
20	21/32	.970 .935	.890	.6552 .6547	.6552 .6542	.6180 .6120	.175	.265 .255	.044	.040 .025	1/16" x 45°	5/8-18UNJF-3A Modified	.2555 .2520	.260 .240	.326 .306	84,500	54,600
24	25/32	1.185 1.145	1.115	.7802 .7797	.7802 .7792	.7430 .7370	.200	.335 .320	.044	.045 .030	1/16" x 45°	3/4-16UNJF-3A Modified	.3185 .3150	.330 .300	.398 .378	120,000	79,200

SEE COLLAR STANDARDS FOR COLLAR STRENGTHS. LOWER STRENGTH (PIN OR COLLAR) DETERMINES SYSTEM STRENGTH.

**GENERAL NOTES:**

1. Concentricity: "A" to "D" diameter within .010 FIM.
2. Dimensions to be met after finish.
3. Surface texture per ANSI B46.1.
4. Hole preparation per NAS618.
5. Oversize replacement for HLT422 and HLT622.

**MATERIAL:**

Nickel base alloy per AMS5662.

**HEAT TREAT:**

125,000 psi shear minimum (210,000 psi tensile minimum).

**FINISH:**

- HLT716(-)(-) = Passivate per Hi-Shear Spec. 258, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT716AP(-)(-) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT716DL(-)(-) = Solid film lube per AS5272, Type I, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT716PB(-)(-) = Cadmium plate per AMS-QQ-P-416, Type II, Class 2, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT716SC(-)(-) = Grit blast top of head, passivate per Hi-Shear Spec. 258, with color green on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT716FB(-)(-) = Grit blast top of head, passivate per Hi-Shear Spec. 258, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT716SE(-)(-) = Hi-Kote 2 solid film per Hi-Shear Spec. 292, with color green on thread end and cetyl alcohol lube per Hi-Shear Spec. 305.

**SPECIFICATION CODE:**

- ① HLT716SD(-)(-) = Grit blast top of head, passivate per Hi-Shear Spec 258, with color yellow on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- ① HLT716SG(-)(-) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292, with color yellow on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT716TB(-)(-) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT716MA(-)(-) = Solid film lube per Kal-Gard RA.
- HLT716GL(-)(-) = Passivate per Hi-Shear Spec. 258. Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294 on threads only (no overspray is allowed on the shank) color code white on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.

**HOW TO ORDER EXAMPLE:**

Hi-Lok Hi-Tigue Product Specification 342.  
First dash number indicates nominal diameter in 1/32nds of the pin which HLT716 oversize pin replaces.  
Second dash number indicates maximum grip in 1/16ths. See Finish note for explanation of code letters.  
Pin Part Number Only  
HLT716-8-8  
└ 8/16 or 1/2 Maximum Grip Length  
└ Replaces 8/32 or 1/4 Nominal Diameter Pin  
└ Pin Part Number

"Hi-Lok" and "HL" are internationally registered trademark of Hi-Shear Corporation.			
DRAWN	DATE	TITLE	
D.P.S.	6-2-83	<b>HI-LOK® HI-TIGUE® PIN</b>	
APPROVED	DATE	PROTRUDING TENSION HEAD NICKEL BASE ALLOY (INCONEL 718) 1/16" GRIP VARIATION, 1/32" OVERSIZE	
R.Ting	6-6-83	DRAWING NUMBER	
REVISION	DATE	<b>HLT716</b>	
①	4-17-07		

HLT716