

HI-LITE®ST™ PIN AND COLLAR AFTER ASSEMBLY

HI-LITE®ST™ PIN

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

TABLE 1

FIRST DASH NO.	PIN NOM DIA	A DIA	B REF	D DIA BEFORE FINISH	TD DIA	G REF	H	K MAX	R RAD	S CHAMFER REF	THREAD	DOUBLE SHEAR POUNDS	TENSION POUNDS MINIMUM
5	5/32	.322 .306	.312	.1640 .1635	.1595 .1570	.030	.065 .055	.013	.025 .015	1/32" x 37°	8-32UNJF-3A Modified	4,600 4,010	2,180
6	3/16	.377 .357	.325	.1895 .1890	.1840 .1810	.035	.074 .064	.016	.025 .015	1/32" x 37°	10-32UNJF-3A Modified	6,200 5,380	3,180
8	1/4	.440 .415	.395	.2495 .2490	.2440 .2410	.045	.090 .080	.021	.025 .015	1/32" x 37°	1/4-28UNJF-3A Modified	10,600 9,300	5,820
10	5/16	.505 .472	.500	.3120 .3115	.3060 .3020	.055	.112 .102	.026	.030 .020	3/64" x 37°	5/16-24UNJF-3A Modified	16,600 14,600	9,200
12	3/8	.600 .530	.545	.3745 .3740	.3680 .3640	.075	.140 .130	.030	.030 .020	3/64" x 37°	3/8-24UNJF-3A Modified	23,900 21,000	14,000
14	7/16	.676 .592	.635	.4370 .4365	.4310 .4260	.095	.160 .150	.035	.030 .020	3/64" x 37°	7/16-20UNJF-3A Modified	32,500 28,600	18,900
16	1/2	.770 .717	.685	.4995 .4990	.4930 .4880	.095	.188 .178	.039	.030 .020	3/64" x 37°	1/2-20UNJF-3A Modified	42,400 37,300	25,500

GENERAL NOTES:

- Concentricity: "A" to "D" diameter within .010 FIM.
- Dimensions to be met after finish, except as noted.
- Surface texture per ANSI B46.1.
- Hole preparation per NAS618.
- Lead radius must be tangent to "D" diameter within "K" distance and be continuous within this area.
- "D" diameter may increase by .0005" after application of solid film lube and .001" after application of aluminum coating.
- Use HSL628 for oversize replacement.
- Shorter or longer grips than those listed may be available as specials.
- Pin tails for "L" coded part shall be painted with white. See Table 3, Sheet 2 for "L" dimensions.

MATERIAL:

6AL-4V titanium alloy per AMS4928 or AMS4967.

HEAT TREAT:

95,000 psi shear minimum.

FINISH:

HSL528DL(-)(-) = Kalgard FA or EM620C solid film lube per AS5272, Type I, and cetyl alcohol lube per Hi-Shear Spec. 305. [9]  
 HSL528AP(-)(-) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305. [9]

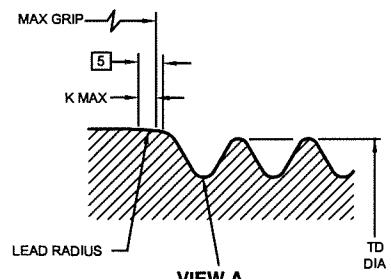
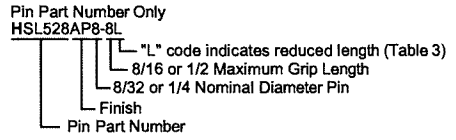
SPECIFICATION:

Hi-Lite Product Specification 380-2.

CODE:

First dash number indicates nominal diameter in 1/32nds. Second dash number indicates maximum grip in 1/16ths. See "Finish" note for explanation of code letters. "L" after second dash number indicates "L" reduced length, see Table 3.

HOW TO ORDER EXAMPLE:



VIEW A  
 HI-LITE THREAD TRANSITION AREA. THIS AREA OF SPECIAL CONFIGURATION AND COLD WORKING TO MEET PHYSICAL REQUIREMENTS. SEE SPECIFICATION FOR INSPECTION.

U.S. Patents 4,326,825; 4,485,510 and 4,957,401. Other U.S. and international patents pending. "Hi-Lite" and "HST" are registered trademarks and "Hi-Lite ST" is a trademark of Hi-Shear Corporation.	
DRAWN J.F.Obispo	DATE 11-27-91
APPROVED DAW	DATE 12-9-91
REVISION 8	DATE 9-2-2008
TITLE <b>HI-LITE® ST™ PIN</b> PROTRUDING TENSION HEAD BREAK STEM, SPECIAL THREAD TITANIUM 1/16" GRIP VARIATION DRAWING NUMBER <b>HSL528</b>	

HSL528

FOR HSL528( )-( ) ONLY  
 TABLE 2

SECOND DASH NUMBER	L (REF) 8						
	-5 DIA.	-6 DIA.	-8 DIA.	-10 DIA.	-12 DIA.	-14 DIA.	-16 DIA.
1	-	-	-	-	-	-	-
2	.875	1.000	1.000	-	-	-	-
3	1.000	1.125	1.125	1.250	-	-	-
4	1.125	1.250	1.250	1.375	1.375	-	-
5	1.250	1.375	1.375	1.500	1.500	1.625	-
6	1.375	1.500	1.500	1.625	1.625	1.750	1.750
7	1.500	1.625	1.625	1.750	1.750	1.875	1.875
8	1.625	1.750	1.750	1.875	1.875	2.000	2.000
9	1.750	1.875	1.875	2.000	2.000	2.125	2.125
10	1.875	2.000	2.000	2.125	2.125	2.250	2.250
11	2.000	2.125	2.125	2.250	2.250	2.375	2.375
12	2.125	2.250	2.250	2.375	2.375	2.500	2.500
13	2.250	2.375	2.375	2.500	2.500	2.625	2.625
14	2.375	2.500	2.500	2.625	2.625	2.750	2.750
15	2.500	2.625	2.625	2.750	2.750	2.875	2.875
16	2.625	2.750	2.750	2.875	2.875	3.000	3.000
17	2.750	2.875	2.875	3.000	3.000	3.125	3.125
18	2.875	3.000	3.000	3.125	3.125	3.250	3.250
19	3.000	3.125	3.125	3.250	3.250	3.375	3.375
20	3.125	3.250	3.250	3.375	3.375	3.500	3.500
21	-	3.375	3.375	3.500	3.500	3.625	3.625
22	-	3.500	3.500	3.625	3.625	3.750	3.750
23	-	3.625	3.625	3.750	3.750	3.875	3.875
24	-	3.750	3.750	3.875	3.875	4.000	4.000
25	-	-	-	4.000	4.000	4.125	4.125
26	-	-	-	4.125	4.125	4.250	4.250
27	-	-	-	4.250	4.250	4.375	4.375
28	-	-	-	4.375	4.375	4.500	4.500
29	-	-	-	-	4.500	4.625	4.625
30	-	-	-	-	4.625	4.750	4.750
31	-	-	-	-	4.750	4.875	4.875
32	-	-	-	-	4.875	5.000	5.000
33	-	-	-	-	5.000	5.125	5.125
34	-	-	-	-	5.125	5.250	5.250
35	-	-	-	-	5.250	5.375	5.375
36	-	-	-	-	5.375	5.500	5.500
37	-	-	-	-	5.500	5.625	5.625
38	-	-	-	-	5.625	5.750	5.750
39	-	-	-	-	5.750	5.875	5.875
40	-	-	-	-	5.875	6.000	6.000
41	-	-	-	-	6.000	6.125	6.125
42	-	-	-	-	6.125	6.250	6.250
43	-	-	-	-	6.250	6.375	6.375
44	-	-	-	-	6.375	6.500	6.500

FOR HSL528( )-( )L ONLY  
 TABLE 3

SECOND DASH NUMBER	L (REF) 8						
	-5 DIA.	-6 DIA.	-8 DIA.	-10 DIA.	-12 DIA.	-14 DIA.	-16 DIA.
1	-	-	-	-	-	-	-
2	.563	.675	.605	-	-	-	-
3	.688	.800	.730	.750	-	-	-
4	.813	.925	.855	.875	.830	-	-
5	.938	1.050	.980	1.000	.955	.990	-
6	1.063	1.175	1.105	1.125	1.080	1.115	1.065
7	1.188	1.300	1.230	1.250	1.205	1.240	1.190
8	1.313	1.425	1.355	1.375	1.330	1.365	1.315
9	1.438	1.550	1.480	1.500	1.455	1.490	1.440
10	1.563	1.675	1.605	1.625	1.580	1.615	1.565
11	1.688	1.800	1.730	1.750	1.705	1.740	1.690
12	1.813	1.925	1.855	1.875	1.830	1.865	1.815
13	1.938	2.050	1.980	2.000	1.955	1.990	1.940
14	2.063	2.175	2.105	2.125	2.080	2.115	2.065
15	2.188	2.300	2.230	2.250	2.205	2.240	2.190
16	2.313	2.425	2.355	2.375	2.330	2.365	2.315
17	2.438	2.550	2.480	2.500	2.455	2.490	2.440
18	2.563	2.675	2.605	2.625	2.580	2.615	2.565
19	2.688	2.800	2.730	2.750	2.705	2.740	2.690
20	2.813	2.925	2.855	2.875	2.830	2.865	2.815
21	-	3.050	2.980	3.000	2.955	2.990	2.940
22	-	3.175	3.105	3.125	3.080	3.115	3.065
23	-	3.300	3.230	3.250	3.205	3.240	3.190
24	-	3.425	3.355	3.375	3.330	3.365	3.315
25	-	-	-	3.500	3.455	3.490	3.440
26	-	-	-	3.625	3.580	3.615	3.565
27	-	-	-	3.750	3.705	3.740	3.690
28	-	-	-	3.875	3.830	3.865	3.815
29	-	-	-	-	-	3.990	3.940
30	-	-	-	-	-	4.115	4.065
31	-	-	-	-	-	4.240	4.190
32	-	-	-	-	-	4.365	4.315

HSL528