

HI-LITE®ST™ PIN AND COLLAR AFTER ASSEMBLY

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

HI-LITE®ST™ PIN

TABLE 1

FIRST DASH NO.	PIN NOM DIA	A DIA	A1 DIA	B REF	D DIA BEFORE FINISH	D1 DIA MAX	F	TD DIA	H	K MAX	M DIA FLAT	R RAD	Z MAX	S CHAMFER REF	THREAD	DOUBLE SHEAR POUNDS	TENSION POUNDS MINIMUM	
5	5/32							NOTE: USE HSL527-6(-)										
6	13/64	.3016 .2966	.294 .282	.325	.2026 .2021	.198	.005	.1840 .1810	.0415 .0394	.016	.155 .135	.030 .020	.015	1/32" x 37°	10-32UNJF-3A Modified	7,100 6,130	2,000	
8	17/64	.3948 .3898	.387 .375	.395	.2651 .2646	.260	.006	.2440 .2410	.0544 .0523	.021	.200 .180	.030 .020	.015	1/32" x 37°	1/4-28UNJF-3A Modified	12,050 10,490	3,700	
10	21/64	.4739 .4689	.466 .454	.500	.3276 .3271	.322	.007	.3060 .3020	.0614 .0593	.026	.265 .245	.040 .030	.015	3/64" x 37°	5/16-24UNJF-3A Modified	18,500 16,000	5,000	
12	25/64	.5604 .5554	.553 .541	.545	.3901 .3896	.384	.008	.3680 .3640	.0714 .0693	.030	.325 .300	.040 .030	.015	3/64" x 37°	3/8-24UNJF-3A Modified	26,100 22,700	7,200	
14	29/64	.6680 .6620	.660 .636	.635	.4526 .4521	.447	.009	.4310 .4260	.0904 .0879	.035	.380 .355	.050 .040	.022	3/64" x 37°	7/16-20UNJF-3A Modified	35,100 30,600	10,000	
16	33/64	.7540 .7480	.746 .722	.685	.5151 .5146	.509	.010	.4930 .4880	.1002 .0977	.039	.445 .415	.050 .040	.022	3/64" x 37°	1/2-20UNJF-3A Modified	45,500 39,600	13,500	

GENERAL NOTES:

- Head edge out of roundness shall not exceed "F".
- Concentricity: Conical surface of head to "D" diameter within .005 FIM.
- "H" is dimensioned from maximum "D" diameter.
- Dimensions to be met after finish, except as noted.
- Surface texture per ANSI B46.1.
- Hole preparation per NAS618.
- Flat permissible within "M" diameter.
- Curved or flat edge manufacturer's option.
- "D" diameter may increase by .0005" after application of solid film lube and .001" after application of aluminum coating.
- Lead radius must be tangent to "D" diameter within "K" distance and be continuous within this area.
- Use HSL727 for oversize replacement.
- Shorter or longer grips than those listed may be available as specials.

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

HEAT TREAT: 95,000 psi shear minimum.

FINISH: HSL627DL(-)(-) = Kalgard FA or EM620C solid film lube per AS5272, Type I, and cetyl alcohol lube per Hi-Shear Spec. 305.

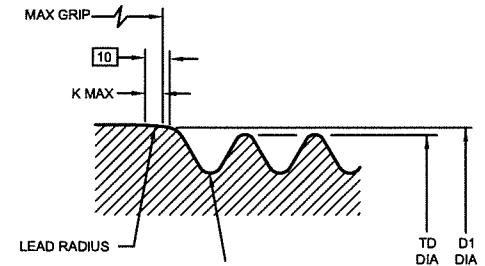
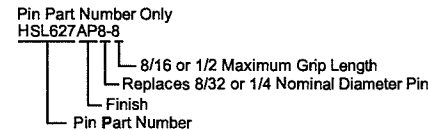
HSL627AP(-)(-) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.

SPECIFICATION: Hi-Lite Product Specification 380-2.

CODE:

First dash number indicates nominal diameter in 1/32nds of the pin which HSL627 oversize pin replaces.
Second dash number indicates maximum grip in 1/16ths.
See "Finish" note for explanation of code letters.

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.

HSL627

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 7-29-92
APPROVED DAW	DATE 7-30-92
REVISION 4	DATE 9-2-2008
TITLE HI-LITE® ST™ PIN 100° FLUSH SHEAR CROWN HEAD BREAK STEM, SPECIAL THREAD TITANIUM 1/16" GRIP VARIATION, 1/64" OVERSIZE DRAWING NUMBER HSL627	

TABLE 2

SECOND DASH NUMBER	L (REF) 12					
	-6 DIA.	-8 DIA.	-10 DIA.	-12 DIA.	-14 DIA.	-16 DIA.
1	-	-	-	-	-	-
2	.955	.940	-	-	-	-
3	1.080	1.065	1.185	-	-	-
4	1.205	1.190	1.310	1.300	-	-
5	1.330	1.315	1.435	1.425	1.530	-
6	1.455	1.440	1.560	1.550	1.655	1.645
7	1.580	1.565	1.685	1.675	1.780	1.770
8	1.705	1.690	1.810	1.800	1.905	1.895
9	1.830	1.815	1.935	1.925	2.030	2.020
10	1.955	1.940	2.060	2.050	2.155	2.145
11	2.080	2.065	2.185	2.175	2.280	2.270
12	2.205	2.190	2.310	2.300	2.405	2.395
13	2.330	2.315	2.435	2.425	2.530	2.520
14	2.455	2.440	2.560	2.550	2.655	2.645
15	2.580	2.565	2.685	2.675	2.780	2.770
16	2.705	2.690	2.810	2.800	2.905	2.895
17	2.830	2.815	2.935	2.925	3.030	3.020
18	2.955	2.940	3.060	3.050	3.155	3.145
19	3.080	3.065	3.185	3.175	3.280	3.270
20	3.205	3.190	3.310	3.300	3.405	3.395
21	3.330	3.315	3.435	3.425	3.530	3.520
22	3.455	3.440	3.560	3.550	3.655	3.645
23	3.580	3.565	3.685	3.675	3.780	3.770
24	3.705	3.690	3.810	3.800	3.905	3.895
25	-	-	3.935	3.925	4.030	4.020
26	-	-	4.060	4.050	4.155	4.145
27	-	-	4.185	4.175	4.280	4.270
28	-	-	4.310	4.300	4.405	4.395
29	-	-	-	-	4.530	4.520
30	-	-	-	-	4.655	4.645
31	-	-	-	-	4.780	4.770
32	-	-	-	-	4.905	4.895

HSL627