

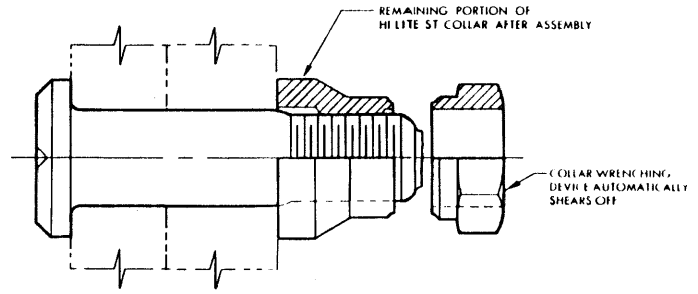
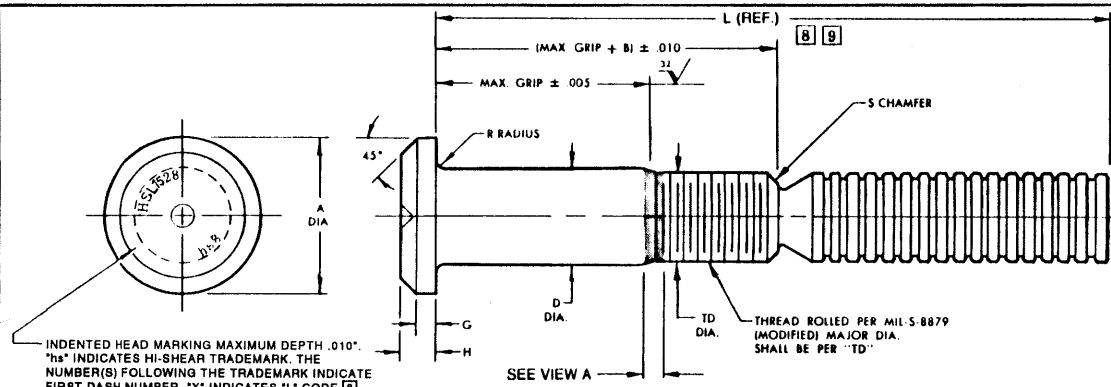
**hi-shear**  
CORPORATION

2600 Skypark Drive  
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\*CAGE\* = Commercial and Government Entity

HI-SHEAR CORPORATION, U.S.A. (Patent Holder) CAGE No. 73197  
Division of Hi-Shear Industries, Inc., U.S.A.  
AIR INDUSTRIES CO., INC. (Licensee - U.S. & Canada) CAGE No. 06725  
SPS TECHNOLOGIES, U.S.A. (Licensee) CAGE No. 56878  
HI-SHEAR FASTENERS EUROPE LTD., U.K. (Licensee) CAGE No. 0LB68  
Division of Hi-Shear Industries, Inc., U.S.A.

HUCK INTERNATIONAL GmbH & Co. Germany (Licensee - EEC Countries)  
SIMMONDS S.A. France (Licensee - EEC Countries - Collars)  
SI-CHAMOND GRANAT S.A. France (Licensee - EEC Countries)  
TOKYO SCREW COMPANY, Japan (Licensee - Japan)  
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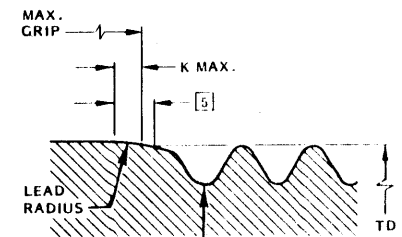
INDENTED HEAD MARKING MAXIMUM DEPTH .010".  
"hs" INDICATES HI-SHEAR TRADEMARK. THE NUMBER(S) FOLLOWING THE TRADEMARK INDICATE FIRST DASH NUMBER. "X" INDICATES "L" CODE ARRANGEMENT. OPTIONAL INDENTATION IS .050-.060 DIAMETER x .020-.030 DEPTH.

HI-LITE® ST™ PIN

HI-LITE® ST™ PIN AND COLLAR AFTER ASSEMBLY

FIRST DASH NO.	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	.1694 .1690	.1595 .1570	.030	.065 .055	.013	.025 .015	1/32" x 37°	8-32UNJC-3A Modified	4,600 4,010	2,180
6	3/16	.377 .357	.325	.1954 .1950	.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	.2554 .2550	.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	.3179 .3175	.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	.3804 .3800	.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	.4429 .4425	.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	.5054 .5050	.4930 .4880	.095	.188 .178	.039	.030 .020	3/64" x 37°	1/2-20UNJF-3A Modified	42,400 37,300	25,500

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



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

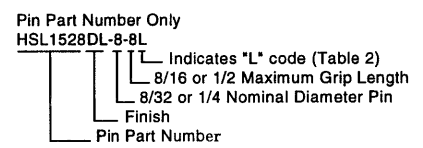
GENERAL NOTES:

1. Concentricity: "A" to "D" diameter within .010 FIR.
2. Dimensions to be met after finish, except as noted.
3. Surface texture per ANSI B46.1.
4. Hole preparation per NAS618.
5. Lead radius must be tangent to "D" diameter within "K" distance and be continuous within this area.
6. "D" diameter may increase by .001 after application of finish.
7. Use HSL628 for oversize replacement.
8. Shorter or longer grips than those listed may be available as specials.
9. "L" dimension for "L" code, see Table 2 of Sheet 2. Color white on pintail.

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 2.

HOW TO ORDER EXAMPLES:



MATERIAL:

6Al-4V titanium alloy per Spec. AMS4928 or AMS4967.

HEAT TREAT:

95,000 psi shear minimum.

FINISH:

HSL1528DL-( )-( ) = Kalgard FA or EM620C solid film lube per MIL-L-46010, Type I and cetyl alcohol lube per Hi-Shear Spec. 305. [9]  
HSL1528AP-( )-( ) = 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.

U.S. Patents 4,326,825; 4,485,510 and 4,957,401. Other U.S. and foreign patents pending. "Hi-Lite" is a registered trademark and "Hi-Lite ST" is a trademark of Hi-Shear Corporation.	
DRAWN DATE J.F.Obispo 4-11-95	TITLE <b>HI-LITE® ST™ PIN</b> PROTRUDING TENSION HEAD TITANIUM SPECIAL THREAD AND SHANK 1/16" GRIP VARIATION
APPROVED DATE J.Rausch 2-14-96	DRAWING NUMBER <b>HSL1528</b> Sheet 1 of 2
REVISION DATE ① J.F.Obispo 3-19-96	

HSL1528



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HSL1528-( )-( )  
TABLE 1

SECOND DASH NO.	L REF. [8]						
	-5	-6	-8	-10	-12	-14	-16
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

HSL1528-( )-( )L  
TABLE 2

SECOND DASH NO.	L REF. [8]						
	-5	-6	-8	-10	-12	-14	-16
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

DRAWING NUMBER

HSL1528

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