

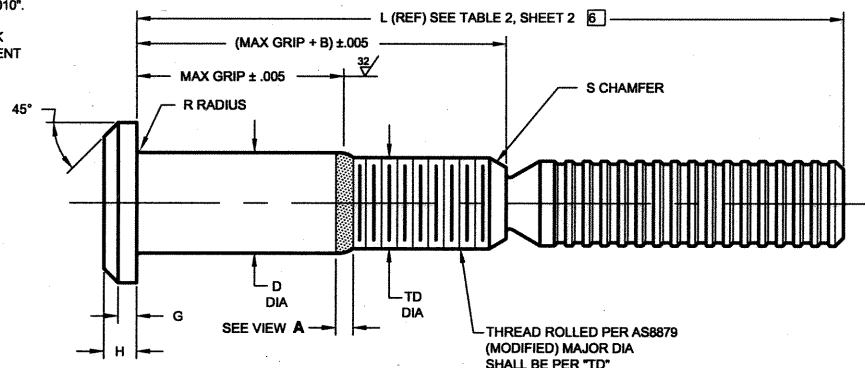
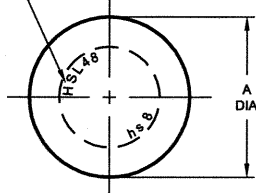
hi-shear
CORPORATION

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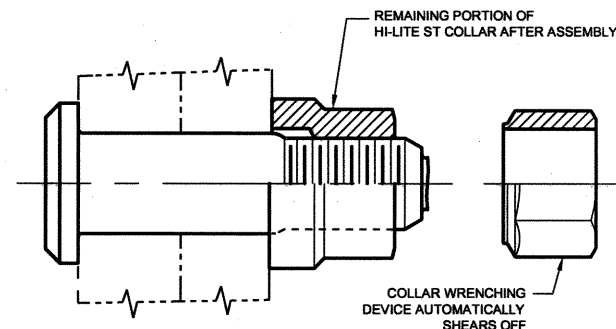
HI-SHEAR CORPORATION, U.S.A. (Patent Holder) CAGE No. 73197
a LI SI AEROSPACE Company
AIR INDUSTRIES CO., INC., U.S.A. (Licensee - U.S.A. & Canada) CAGE No. 06725
SPS TECHNOLOGIES, U.S.A. (Licensee) CAGE No. 56878
FAIRCHILD - SIMMONDS S.A. France (Licensee) CAGE No. 92215

BLANC AERO INDUSTRIES UK LIMITED (Licensee) CAGE No. 0LB68
a LI SI AEROSPACE Company
BLANC AERO S.A. France (Licensee - ECC Countries)
a GFI AEROSPACE Company
TOKYO SCREW COMPANY, Japan (Licensee - Japan)

INDENTED HEAD MARKING MAXIMUM DEPTH .010".
"hs" INDICATES HI-SHEAR TRADEMARK.
THE NUMBER(S) FOLLOWING THE TRADEMARK
INDICATES FIRST DASH NUMBER. ARRANGEMENT
OPTIONAL.



HI-LITE® ST™ PIN



HI-LITE® ST™ PIN AND COLLAR AFTER ASSEMBLY

TABLE 1

FIRST DASH NO.	PIN NOM DIA	A DIA	B REF	D DIA		TD DIA	G REF	H	R RAD	S CHAMFER REF	THREAD	DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
				WITHOUT COATING	WITH COATING								
5	5/32	.322 .306	.312	.1635 .1630	.1635 .1625	.1595 .1570	.030	.065 .055	.025 .015	1/32" x 45°	8-32UNJC-3A Modified	4,010	2,180
6	3/16	.377 .357	.325	.1895 .1890	.1895 .1885	.1840 .1810	.035	.074 .064	.025 .015	1/32" x 45°	10-32UNJF-3A Modified	5,380	3,180
8	1/4	.440 .415	.395	.2495 .2490	.2495 .2485	.2440 .2410	.045	.090 .080	.025 .015	1/32" x 45°	1/4-28UNJF-3A Modified	9,300	5,820
10	5/16	.505 .485	.500	.3120 .3115	.3120 .3110	.3060 .3020	.055	.112 .102	.030 .020	3/64" x 45°	5/16-24UNJF-3A Modified	14,600	9,200
12	3/8	.600 .580	.545	.3745 .3740	.3745 .3735	.3680 .3640	.075	.140 .130	.030 .020	3/64" x 45°	3/8-24UNJF-3A Modified	21,000	14,000
14	7/16	.676 .651	.635	.4370 .4365	.4370 .4360	.4310 .4260	.095	.160 .150	.030 .020	3/64" x 45°	7/16-20UNJF-3A Modified	28,600	18,900
16	1/2	.770 .745	.685	.4995 .4990	.4995 .4985	.4930 .4880	.095	.188 .178	.030 .020	3/64" x 45°	1/2-20UNJF-3A Modified	37,300	25,600

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

THIS AREA OF SPECIAL CONFIGURATION
AND COLD WORKING TO MEET
PHYSICAL REQUIREMENTS



VIEW A

HI-LITE THREAD TRANSITION AREA
SEE SPECIFICATION FOR INSPECTION

GENERAL NOTES:

1. Concentricity: "A" to "D" diameter within .010 FIM.
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 at maximum grip.
6. Shorter or longer grips than those listed may be available as specials.

MATERIAL: A-286 high temperature alloy per AMS5737 or AMS5731.

HEAT TREAT: 160,000 psi tensile minimum (95,000 psi shear minimum) at 70°F.

FINISH: HSL48-() = Passivate per Hi-Shear Spec. 258 and cetyl alcohol lube per Hi-Shear Spec. 305.
HSL48AP-() = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
HSL48AG-() = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, with color code orange on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
HSL48EC-() = Solid film lube Dicronite DL-5 per DOD-L-85645A, Type I. (For LOX compatibility coating).
HSL48ES-() = Solid film lube Tiodize Tiolube 1175 per AS1701, Class VI. (For LOX compatibility coating).

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.

HOW TO ORDER
EXAMPLE:

Pin Part Number Only
HSL48AP8-8

8/16 or 1/2 Maximum Grip Length
8/32 or 1/4 Nominal Diameter Pin
Finish
Pin Part Number

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 9-5-05
APPROVED L. Nguyen	DATE 9-14-05
REVISION ②	DATE j.f.obispo 12-7-05
TITLE HI-LITE® ST™ PIN PROTRUDING TENSION HEAD BREAK STEM, INTERFERENCE FIT A-286 ALLOY STEEL, SPECIAL THREAD 1/16" GRIP VARIATION	
DRAWING NUMBER HSL48	

Sheet 1 of 2

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TABLE 2

SECOND DASH NUMBER	L REF [6]						
	-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	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

HSL48

DRAWING NUMBER
HSL48