

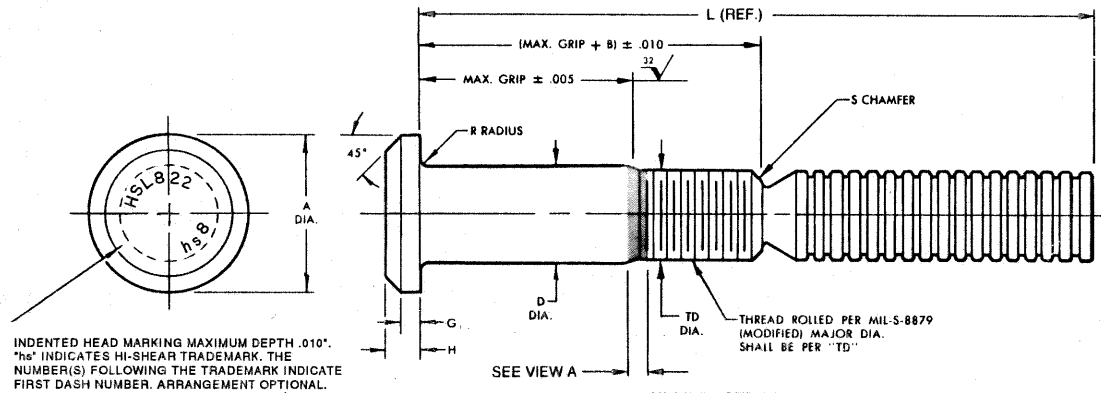
hi-shear
CORPORATION

2600 Skypark Drive
Torrance, California 90509 U.S.A.
Telephone (310) 326-8110
FAX (310) 784-4144

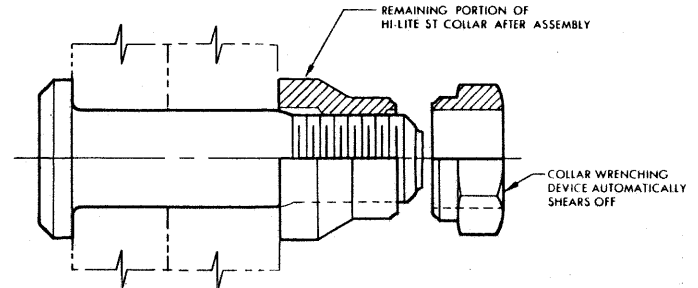
CAGE = Commercial And Government Entity

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. 01.B88
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)
St-CHAMOND GRANAT S.A. France (Licensee - EEC Countries)
TOKYO SCREW COMPANY, Japan (Licensee - Japan)
941103



SEE VIEW A
HI-LITE® ST™ PIN



HI-LITE® ST™ PIN AND COLLAR AFTER ASSEMBLY

FIRST DASH NO.	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
5	5/32	.322 .306	.312	.1635 .1625	.1595 .1570	.030	.065 .055	.025 .015	1/32" x 45°	8-32UNJC-3A Modified	5,280	2,940
6	3/16	.377 .357	.325	.1895 .1885	.1840 .1810	.035	.074 .064	.025 .015	1/32" x 45°	10-32UNJF-3A Modified	7,060	4,350
8	1/4	.440 .415	.395	.2495 .2485	.2440 .2410	.045	.090 .080	.025 .015	1/32" x 45°	1/4-28UNJF-3A Modified	12,260	7,750
10	5/16	.505 .472	.500	.3120 .3110	.3060 .3020	.055	.112 .102	.030 .020	3/64" x 45°	5/16-24UNJF-3A Modified	19,160	12,300
12	3/8	.600 .530	.545	.3745 .3735	.3680 .3640	.075	.140 .130	.030 .020	3/64" x 45°	3/8-24UNJF-3A Modified	27,600	19,100
14	7/16	.676 .592	.635	.4370 .4360	.4310 .4260	.095	.160 .150	.030 .020	3/64" x 45°	7/16-20UNJF-3A Modified	37,500	25,800
16	1/2	.770 .717	.685	.4995 .4985	.4930 .4880	.095	.188 .178	.030 .020	3/64" x 45°	1/2-20UNJF-3A Modified	49,100	34,300

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

GENERAL NOTES:

- Concentricity: "A" to "D" diameter within .010 FIR.
- Dimensions to be met after finish.
- Surface texture per ANSI B46.1.
- Hole preparation per NAS618.
- Lead radius must be tangent to "D" diameter at max grip.
- Use HSL832 for oversize replacement.
- Shorter or longer grips than those listed may be available as specials.

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
EXAMPLES:**

Pin Part Number Only
HSL822DL-8-8

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

MATERIAL:

Nickel Base Alloy per AMS5662.

HEAT TREAT:

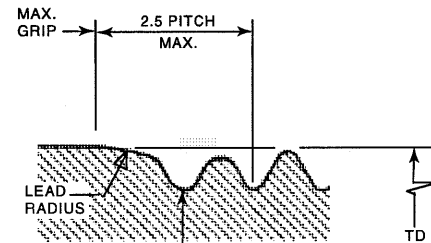
125,000 psi shear minimum.

FINISH:

HSL822DL-(-) = Kalgard FA or EM620C solid film lube per MIL-L-46010, Type I and cetyl alcohol lube per Hi-Shear Spec. 305.
HSL822AP-(-) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
HSL822TB-(-) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.

SPECIFICATION:

Hi-Lite Product Specification 380-2.



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 foreign patents pending. "Hi-Lite" is a registered trademark and "Hi-Lite ST" is a trademark of Hi-Shear Corporation.	
DRAWN J.F.Obispo	DATE 8-8-95
APPROVED J.Rausch	DATE 8-9-95
REVISION ①	DATE J.F.Obispo 10-16-96
TITLE HI-LITE® ST™ PIN PROTRUDING TENSION HEAD BREAK STEM, INTERFERENCE FIT NICKEL BASE ALLOY (INCONEL 718) 1/16" GRIP VARIATION DRAWING NUMBER HSL822 Sheet 1 of 2	

HSL822

STD/HSL

hi-shear
 CORPORATION

 2600 Skypark Drive
 Torrance, California 90509 U.S.A.
 Telephone (310) 326-8110
 FAX (310) 784-4144

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)
 St-CHAMOND GRANAT S.A. France (Licensee - EEC Countries)
 TOKYO SCREW COMPANY, Japan (Licensee - Japan)

941103

TABLE 1

SECOND DASH NO.	L REF. 7						
	-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

DRAWING NUMBER

HSL822

Sheet 2 of 2

HSL822