

**hi-shear**  
CORPORATION

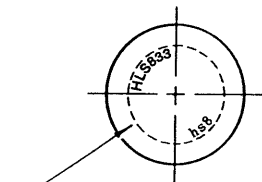
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"CAGE" # And Government Entity

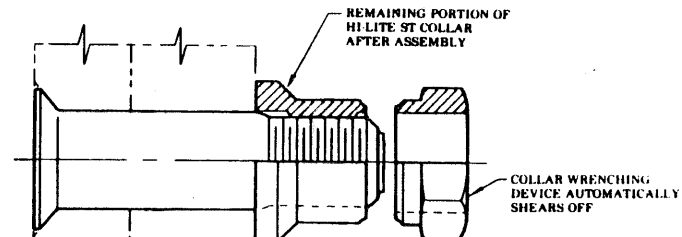
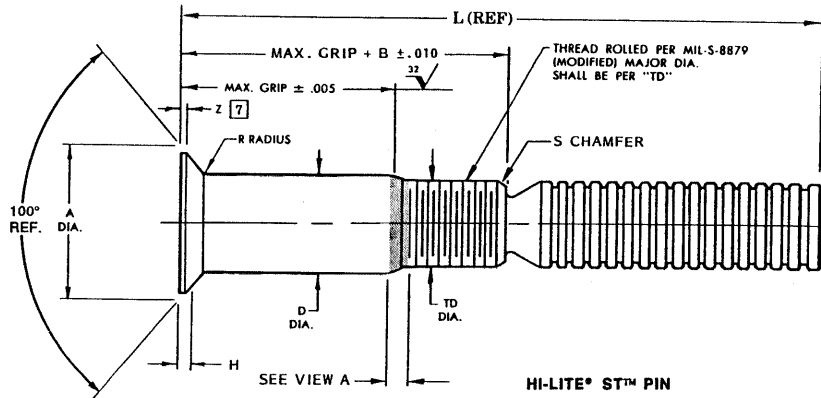
HI-SHEAR CORPORATION, U.S.A. (Patent Holder) CAGE No. 73197  
Division of Hi-Shear Industries, Inc., U.S.A.  
AIR INDUSTRIES CO., INC. (Licensee - U.S. & Canada) CAGE No. 06725  
SPS TECHNOLOGIES, U.S.A. (Licensee) CAGE No. 56878  
HI-SHEAR FASTENERS EUROPE LTD., U.K. (Licensee) CAGE No. 0LB68  
Division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

943103



INDENTED HEAD MARKING DEPTH .010".  
"hs" indicates HI-SHEAR trademark.  
The number(s) following the "hs" indicate  
first dash number. Arrangement optional.

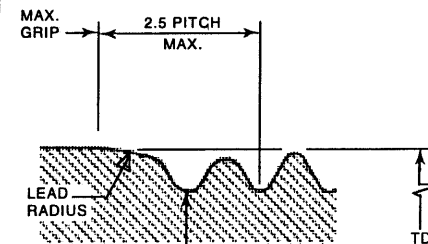


HI-LITE® ST™ PIN

HI-LITE® ST™ PIN AND COLLAR AFTER ASSEMBLY

FIRST DASH NO.	NOM. DIA.	A DIA.	B REF.	D DIA.	TD DIA.	F	H	R RAD.	Z MAX.	S CHAMFER REF.	THREAD	DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
USE HSL823DL-6													
5													
6	3/16	.3813 .3765	.325	.2026 .2016	.1840 .1810	.005	.0750 .0730	.030 .020	.015	1/32" x 45°	10-32UNJF-3A Modified	8,100	4,350
8	1/4	.5066 .5018	.395	.2651 .2641	.2440 .2410	.006	.1013 .0993	.030 .020	.015	1/32" x 45°	1/4-28UNJF-3A Modified	13,800	7,750
10	5/16	.6335 .6287	.500	.3276 .3266	.3060 .3020	.007	.1283 .1263	.040 .030	.015	3/64" x 45°	5/16-24UNJF-3A Modified	21,100	12,300
12	3/8	.7604 .7556	.545	.3901 .3891	.3680 .3640	.008	.1553 .1533	.040 .030	.015	3/64" x 45°	3/8-24UNJF-3A Modified	30,000	19,100
14	7/16	.8884 .8812	.635	.4526 .4516	.4310 .4260	.009	.1828 .1798	.050 .040	.022	3/64" x 45°	7/16-20UNJF-3A Modified	40,300	25,800
16	1/2	1.0139 1.0068	.685	.5151 .5141	.4930 .4880	.010	.2093 .2063	.050 .040	.022	3/64" x 45°	1/2-20UNJF-3A Modified	52,500	34,300

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:

- 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.
- Surface texture per ANSI B46.1.
- Hole preparation per NAS618.
- Curved or flat edge manufacturer's option.
- Use HSL843 for oversize replacement.
- Lead radius must be tangent to 'D' diameter at max grip.
- Shorter or longer grips than those listed may be available as specials.

CODE: First dash number indicates nominal diameter in 1/32nds of the pin which HSL833 oversize pin replaces. Second dash number indicates maximum grip in 1/16ths. See Finish note for explanation of code letters.

HOW TO ORDER  
EXAMPLE:

HSL833DL-8-8

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

MATERIAL: Nickel Base Alloy per AMS 5662.

HEAT TREAT: 125,000 psi shear minimum.

FINISH: ② HSL833AP-(-)(-) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.  
HSL833DL-(-)(-) = Kalgard FA or EM620C solid film lube per MIL-L-46010, Type I, and cetyl alcohol lube per Hi-Shear Spec. 305.

SPECIFICATION: ② 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	TITLE
E.BEELES	3/28/94	HI-LITE® ST™ PIN
APPROVED	DATE	100° FLUSH MS24694 TENSION HEAD BREAK STEM - INTERFERENCE FIT NICKEL BASE ALLOY (INCONEL 718) 1/16" GRIP VARIATION - 1/64" OVS
E.E.B.	3-28-94	
REVISION	DATE	DRAWING NUMBER
②	J.F.Obispo 10-16-96	HSL833

Sheet 1 of 2

10

SECOND DASH NO.	L REFERENCE						
		-6	-8	-10	-12	-14	-16
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		----	----	----	4.425	4.530	4.520
30		----	----	----	4.550	4.655	4.645
31		----	----	----	4.675	4.780	4.770
32		----	----	----	4.800	4.905	4.895
33		----	----	----	4.925	----	----

DRAWING NUMBER

**HSL833**

SHEET 2 OF 2

HSL833