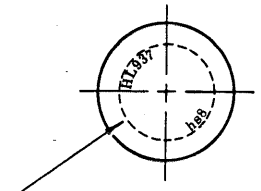
STANDARDS COMMITTEE FOR HI-LOK® PRODUCTS

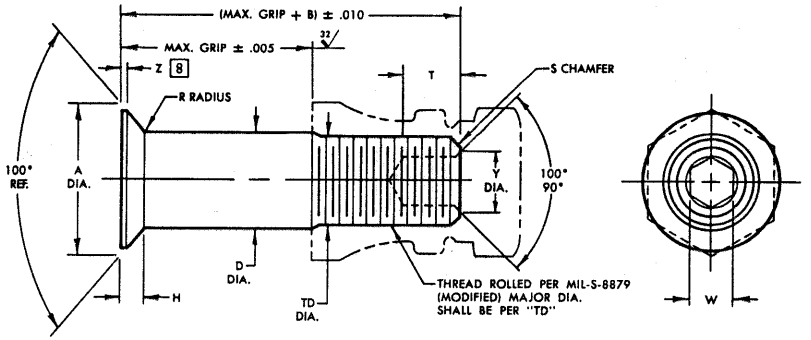
2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509

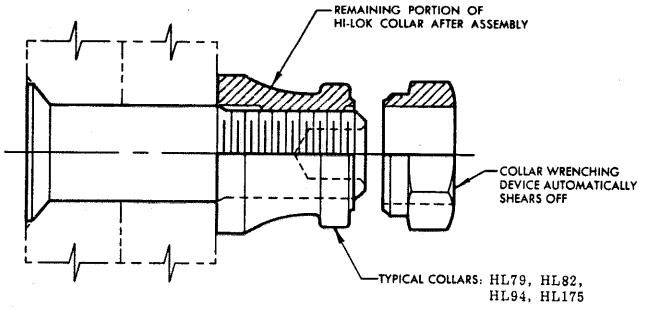
HI-SHEAR CORPORATION, U.S.A. _____ (Patent Holder) ___ U.S. Federal Code I.D. No. 73197
Division of HI-Shear Industries Inc., U.S.A.
AIRCRAFT FASTENERS (Forged Parts) LTD., U.K. ___ (Licensee)
Division of HI-Shear Industries Inc., U.S.A.
VOI-SHAN, Division of VSI Corp., U.S.A. _____ (Licensee) ___ U.S. Federal Code I.D. No. 92215
SPS TECHNOLOGIES, U.S.A. _____ (Licensee) ___ U.S. Federal Code I.D. No. 56878

ST. CHAMOND-GRANAT, S.A. France_____ (Licensee—EEC Countries)
KANAX-WERKE, Germany_____ (Licensee—EEC Countries)
Rudolph Kellerman GmbH & Co.
SIMMONDS, S.A. France _____ (Licensee—EEC Countries—Collars)
TOKYO SCREW COMPANY, Japan_____ (Licensee—Japan)
WEST COAST AEROSPACE INC., U.S.A. ___ (Licensee—Oversize Pins & Steel Collars)
U.S. Federal Code I.D. No. 60516



INDENTED HEAD MARKING MAXIMUM DEPTH .010". Manufacturer's trademark per Hi-Shear Spec. 363. The number(s) following the trademark indicate first dash number. Arrangement optional.





HI-LOK PIN [1] [8] HI-LOK PIN AND COLLAR AFTER ASSEMBLY

FIRST DASH NO.	NOM. DIA.	A DIA.	B REF.	D DIA. WITHOUT PLATING OR COATING	D DIA. WITH PLATING OR COATING	TD DIA.	F	H	R RAD.	Z MAX.	S CHAMFER REF.	THREAD	SOCKET W HEX.	SOCKET T DEPTH	SOCKET Y DIA.	DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
–5				NOTE: Use HL701-6													
–6	13/64	.3016 .2966	.325	.2026 .2021	.2026 .2016	.1840 .1810	.005	.0415 .0394	.030 .020	.015	1/32" x 45°	10-32UNJF-3A Modified	.0806 .0791	.100 .080	.119 .104	8,100	2,600
–8	17/64	.3948 .3898	.395	.2651 .2646	.2651 .2641	.2440 .2410	.006	.0544 .0523	.030 .020	.015	1/32" x 45°	1/4-28UNJF-3A Modified	.0967 .0947	.110 .090	.142 .122	13,800	4,400
–10	21/64	.4739 .4689	.500	.3276 .3271	.3276 .3266	.3060 .3020	.007	.0614 .0593	.040 .030	.015	3/64" x 45°	5/16-24UNJF-3A Modified	.1295 .1270	.130 .110	.180 .160	21,100	7,000
–12	25/64	.5604 .5554	.545	.3901 .3896	.3901 .3891	.3680 .3640	.008	.0714 .0694	.040 .030	.015	3/64" x 45°	3/8-24UNJF-3A Modified	.1617 .1582	.160 .140	.217 .197	30,000	10,000
–14	29/64	.6680 .6620	.635	.4526 .4521	.4526 .4516	.4310 .4260	.009	.0904 .0879	.050 .040	.022	3/64" x 45°	7/16-20UNJF-3A Modified	.1930 .1895	.190 .170	.253 .233	40,300	13,500
–16	33/64	①.7540 .7480	.685	.5151 .5146	.5151 .5141	.4930 .4880	.010	.1002 .0977	.050 .040	.022	3/64" x 45°	1/2-20UNJF-3A Modified	.2242 .2207	.220 .200	.289 .269	52,200	18,000

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

GENERAL NOTES:
1. Head edge out of roundness shall not exceed "F".
2. Concentricity: Conical surface of head to "D" diameter within .005 FIR.
3. "H" is dimensioned from maximum "D" diameter.
4. Dimensions to be met after finish.
5. Surface texture per ANSI B46.1.
6. Hole preparation per NAS618.
7. Use HL947 for oversize replacement.
8. Curved or flat edge manufacturer's option.

MATERIAL: Nickel base alloy per AMS5662.

① HEAT TREAT: 125,000 psi shear minimum (220,000 psi tension minimum).

① FINISH:
HL937-( )-( ) = Passivate per Hi-Shear Spec. 258, and cetyl alcohol lube per Hi-Shear Spec. 305.
HL937AP-( )-( ) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
HL937JT-( )-( ) = Passivate per Hi-Shear Spec. 258, with light blue identification on top of head, and cetyl alcohol lube per Hi-Shear Spec. 305.
HL937PB-( )-( ) = Cadmium plate per QQ-P-416, Type II, Class 2, and cetyl alcohol lube per Hi-Shear Spec. 305.

SPECIFICATION: Hi-Lite Product Specification 342.

CODE: First dash number indicates nominal diameter in 1/32nds of the pin which HL937 oversize pin replaces. 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
HL937AP-8-8
- 8/16 or 1/2 Maximum Grip Length
- Replaces 8/32 or 1/4 Nominal Diameter Pin
- Pin Part Number with Hi-Kote 1

Pin and Collar Assembly Part Number Combination
HL937AP79-8-8
- Size and Grip Length, See Above Example
- Collar Part Number
- Pin Part Number

DRAWN	DATE	hi-lok® PIN
D. P. S.	2-3-87	100° FLUSH SHEAR HEAD NICKEL BASE ALLOY (INCONEL 718) 1/16" GRIP VARIATION–1/64" OVERSIZE
APPROVED	DATE	
JG Wilcox	2-4-87	
REVISION	DATE	DRAWING NUMBER
①	D. P. S. 4-9-87	HL937

HL937