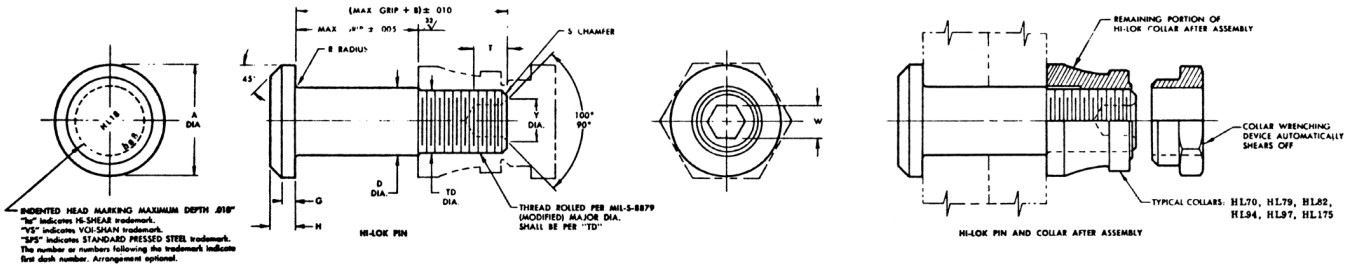
STANDARDS COMMITTEE FOR HI-LOK® PRODUCTS

2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509

(20) 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
LITTON FASTENING SYSTEMS, U.S.A. (Licensee) — U.S. Federal Code I.D. No. 97928
Division of Litton Systems Inc., U.S.A.

ST. CHAMOND-GRAMAT, S.A. France (Licensee — EEC Countries)
KAMAX-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

Fairchild Fasteners



FIRST DASH NO.	NOM. DIA	A DIA.	B REF.	D DIA.	TD DIA.	G REF.	H	R RAD.	S CHAMFER REF.	THREAD	SOCKET W HEX.	SOCKET T DEPTH	SOCKET Y DIA.	DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
-5	5/32	.262 .242	.312	.1635 .1625	.1595 .1570	.020	.047 .037	.025 .015	1/32" x 45°	8-32UNJC-3A Modified	.0801 .0791	.135 .115	[6]	4,010	1,940
-6	3/16	.315 .295	.325	.1895 .1885	.1840 .1810	.025	.055 .045	.025 .015	1/32" x 45°	10-32UNJF-3A Modified	.0806 .0791	.135 .115	.119 .104	5,380	2,500
-8	1/4	.412 .387	.395	.2495 .2485	.2440 .2410	.030	.069 .059	.025 .015	1/32" x 45°	1/4-28UNJF-3A Modified	.0967 .0947	.150 .130	.142 .122	9,300	4,300
-10	5/16	.505 .475	.500	.3120 .3110	.3060 .3020	.035	.078 .068	.030 .020	3/64" x 45°	5/16-24UNJF-3A Modified	.1295 .1270	.170 .150	.180 .160	14,600	6,300
-12	3/8	.600 .565	.545	.3745 .3735	.3680 .3640	.040	.088 .078	.030 .020	3/64" x 45°	3/8-24UNJF-3A Modified	.1617 .1582	.200 .180	.217 .197	21,000	8,700
-14	7/16	.676 .641	.635	.4370 .4360	.4310 .4260	.045	.105 .093	.030 .020	3/64" x 45°	7/16-20UNJF-3A Modified	.1930 .1895	.230 .210	.253 .233	28,600	12,100
-16	1/2	.770 .735	.685	.4995 .4985	.4930 .4880	.050	.115 .103	.030 .020	3/64" x 45°	1/2-20UNJF-3A Modified	.2242 .2207	.260 .240	.289 .269	37,300	15,300
-18	9/16	.864 .829	.770	.5615 .5605	.5550 .5500	.055	.127 .112	.040 .025	1/16" x 45°	9/16-18UNJF-3A Modified	.2555 .2520	.290 .270	.326 .306	47,200	19,000
-20	5/8	.953 .918	.825	.6240 .6230	.6180 .6120	.060	.137 .122	.040 .025	1/16" x 45°	5/8-18UNJF-3A Modified	.2555 .2520	.330 .305	.326 .306	58,300	23,000
-24	3/4	1.108 1.066	1.050	.7490 .7480	.7430 .7370	.070	.151 .136	.045 .030	1/16" x 45°	3/4-16UNJF-3A Modified	.3185 .3150	.395 .365	.398 .378	83,900	30,700
-28	7/8	1.285 1.241	1.210	.8740 .8730	.8680 .8610	.090	.187 .172	.050 .035	5/64" x 45°	7/8-14UNJF-3A Modified	.3820 .3780	.455 .425	.471 .451	114,000	45,000
-32	1	1.468 1.424	1.390	.9990 .9980	.9930 .9860	.110	.218 .203	.060 .045	5/64" x 45°	1-12UNJF-3A Modified	.5100 .5040	.580 .550	.618 .598	149,000	60,900

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

GENERAL NOTES:
1. Concentricity: "A" to "D" diameter within .010 FIR.
(20) 2. Dimensions to be met after finish.
3. Surface texture per ANSI B46.1.
4. Hole preparation per NAS618.
5. USE HL62 for oversize replacement.
[6] Evidence of broken edge across points.

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.

MATERIAL: Alloy steel per Spec. MIL-S-5000, MIL-S-5626 or MIL-S-6049.

HEAT TREAT: 95,000 psi shear minimum (160,000-180,000 psi tensile Spec. MIL-H-6875).

FINISH:
HL18-( )-( ) = Cadmium plate per Spec. QQ-P-416, Type I, Class 2, and cetyl alcohol lube per Hi-Shear Spec. 305.
(20) HL18KD-( )-( ) = Aluminum coating per Boeing BMS 10-85, Type I, Class B, with color code black on thread end and cetyl alcohol lube per Hi-Shear Spec. 305.
HL18PB-( )-( ) = Cadmium plate per Spec. QQ-P-416, Type II, Class 2, color bronze, and cetyl alcohol lube per Hi-Shear Spec. 305.
HL18PH-( )-( ) = Cadmium plate per Spec. QQ-P-416, Type II, Class 2, black finish per unichrome dip Bulletin 65-B-Cd, and cetyl alcohol lube per Hi-Shear Spec, 305.
HL18TF-( )-( ) = Cadmium plate per QQ-P-416, Type III, Class 2, and Hi-Kote 2 solid film lube per Hi-Shear Spec. 292.

SPECIFICATION: Hi-Lok Product Specification 342.

HOW TO ORDER EXAMPLES:

Pin Part Number Only
HL18 PB-8-8
- 8/16 or 1/2 Maximum Grip Length
- 8/32 or 1/4 Nominal Diameter Pin
- Type II Cadmium Plate, Color Bronze
- Pin Part Number

Pin and Collar Assembly Part Number Combination
HL18 PB 70-8-8
- Size and Grip Length, See Above Example
- Collar Part Number
- Pin Finish
- Pin Part Number

DRAWN J.C.S	DATE 7-19-62	hi-lok® PIN **PROTRUDING SHEAR HEAD ALLOY STEEL 1/16" GRIP VARIATION**
APPROVED Cessna	DATE 7-24-62	
REVISION (20)	DATE D. P. S. 10-9-79	DRAWING NUMBER HL18