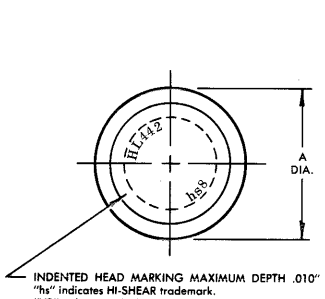
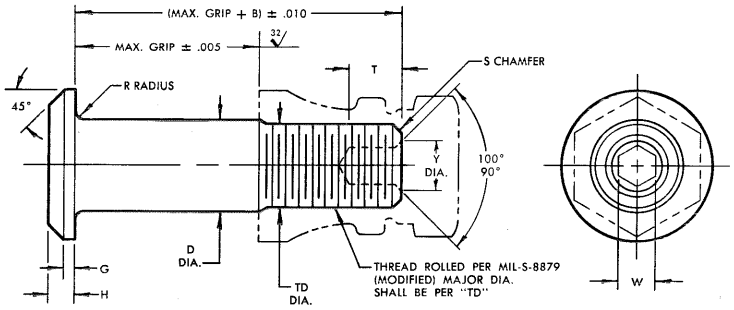
STANDARDS COMMITTEE FOR HI-LOK® PRODUCTS
2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509

⑨ HI-SHEAR CORPORATION, U.S.A. (Patent Holder) — U.S. Federal Code No. 73197
Division of Hi-Shear Industries Inc., U.S.A.
AIR INDUSTRIES CO., INC. (Licensee - U.S. & Canada) — U.S. Federal Code No. 06725
DEUTSCH FASTENER CO., INC. (Licensee) — U.S. Federal Code No. 97928
SPS TECHNOLOGIES, U.S.A. (Licensee) — U.S. Federal Code No. 56878
VOI-SHAN, Division of VSI Corp., U.S.A. (Licensee) — U.S. Federal Code No. 92215
WEST COAST AEROSPACE INC., U.S.A. (Licensee- Pins & Steel Collars) — U.S. Federal Code No. 60516

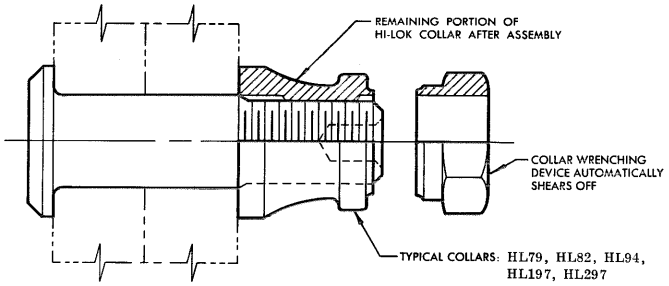
HI-SHEAR FASTENERS EUROPE, LTD., U.K. (Licensee)
Division of Hi-Shear Industries Inc., U.S.A.
KAMAX-WERKE, Germany (Licensee - EEC Countries)
Rudolph Kellerman GmbH & Co.
ST. CHAMOND GRANAT, S.A. France (Licensee - EEC Countries)
SIMMONDS, S.A. France (Licensee - EEC Countries- Collars)
TOKYO SCREW COMPANY, Japan (Licensee - Japan)



INDENTED HEAD MARKING MAXIMUM DEPTH .010"
"hs" indicates HI-SHEAR trademark.
"VS" indicates VOI-SHAN trademark.
"SPS" indicates STANDARD PRESSED STEEL trademark.
The number(s) following the trademark indicate first dash number. Arrangement optional.



HI-LOK PIN



HI-LOK 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	SOCKET W HEX.	SOCKET T DEPTH	SOCKET Y DIA.	DOUBLE SHEAR POUNDS MINIMUM *	TENSION POUNDS MINIMUM
-5	3/16	NOTE: Use HL440-6													
-6	13/64	.315 .295	.325	.2026 .2016	.1840 .1810	.025	.055 .045	.025 .015	1/32" x 45°	10-32UNJF-3A Modified	.0806 .0791	.135 .115	.119 .104	6,130	2,500
-8	17/64	.412 .387	.395	.2651 .2641	.2440 .2410	.030	.069 .059	.025 .015	1/32" x 45°	1/4-28UNJF-3A Modified	.0967 .0947	.150 .130	.142 .122	10,490	4,300
-10	21/64	.505 .475	.500	.3276 .3266	.3060 .3020	.035	.078 .068	.030 .020	3/64" x 45°	5/16-24UNJF-3A Modified	.1295 .1270	.170 .150	.180 .160	16,000	6,300
-12	25/64	.600 .565	.545	.3901 .3891	.3680 .3640	.040	.088 .078	.030 .020	3/64" x 45°	3/8-24UNJF-3A Modified	.1617 .1582	.200 .180	.217 .197	22,700	8,700
-14	29/64	.676 .641	.635	.4526 .4516	.4310 .4260	.045	.105 .093	.030 .020	3/64" x 45°	7/16-20UNJF-3A Modified	.1930 .1895	.230 .210	.253 .233	30,600	12,100
-16	33/64	.770 .735	.685	.5151 .5141	.4930 .4880	.050	.115 .103	.030 .020	3/64" x 45°	1/2-20UNJF-3A Modified	.2242 .2207	.260 .240	.289 .269	39,600	15,300
⑨ -18	37/64	.864 .829	.770	.5771 .5761	.5550 .5500	.055	.127 .112	.040 .025	1/16" x 45°	9/16-18UNJF-3A Modified	.2555 .2520	.290 .270	.326 .306	49,700	19,000
⑨ -20	41/64	.953 .918	.825	.6396 .6386	.6180 .6120	.060	.137 .122	.040 .025	1/16" x 45°	5/8-18UNJF-3A Modified	.2555 .2520	.330 .305	.326 .306	61,000	23,000
⑨ -24	49/64	1.108 1.066	1.050	.7646 .7636	.7430 .7370	.070	.151 .136	.045 .030	1/16" x 45°	3/4-16UNJF-3A Modified	.3185 .3150	.395 .365	.398 .378	87,200	30,700

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

* The double shear values shown are based on cross sectional area for nominal diameter pin.

GENERAL NOTES:
1. Concentricity: Head to "D" diameter within .010 FIR.
2. Dimensions to be met after finish.
3. Surface texture per ANSI B46.1.
4. Hole preparation per NAS618.
5. Use HL240 for oversize replacement.

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

HEAT TREAT: 95,000 psi shear minimum at 70°F.

FINISH:
HL442-( )-( ) = Cadmium plate per Spec. QQ-P-416, Type II, Class 2, color code blue (HINAC Process) top of head only, and cetyl alcohol lube per Hi-Shear Spec. 305.
HL442AP-( )-( ) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
HL442AZ-( )-( ) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, with color code black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
HL442N-( )-( ) = Cadmium plate per Spec. QQ-P-416, Type II, Class 2, without lubricant (For use in LOX systems).
HL442UC-( )-( ) = Cadmium plate per Spec. QQ-P-416, Type II, Class 2, with color code green on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.

SPECIFICATION: Hi-Lok Product Specification 342.

CODE: First dash number indicates nominal diameter in 1/32nds of the pin which HL442 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
HL442N-8-8
- 8/16 or 1/2 Maximum Grip Length
- Replaces 8/32 or 1/4 Nominal Diameter Pin
- Type II Cadmium Plate Without Lube
- Pin Part Number

Pin and Collar Assembly Part Number Combination
HL442N94-8-8
- Size and grip length, see above example
- Collar Part Number
- Pin Finish
- Pin Part Number

"Hi-Lok" and "HL" are internationally registered trademarks of Hi-Shear Corporation

DRAWN	DATE	TITLE
D.M.B.	12-6-62	HI-LOK®PIN PROTRUDING SHEAR HEAD A-286 HIGH TEMPERATURE ALLOY 1/16" GRIP VARIATION - 1/64" OVERSIZE PLATED
APPROVED	DATE	
Cessna	12-6-62	
REVISION	DATE	DRAWING NUMBER
⑨	D.P.S. 9-9-92	HL442

HL442

2-1501