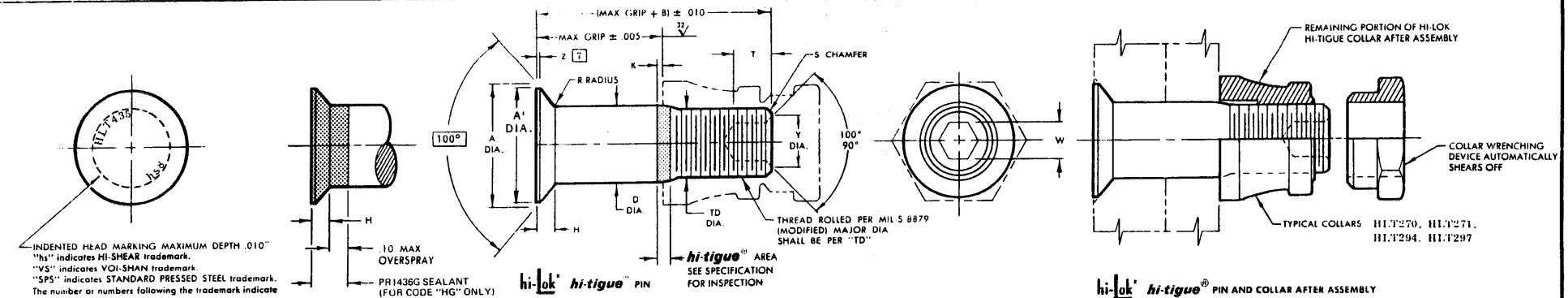
STANDARDS COMMITTEE FOR HI-LOK® HI-TIGUE® PRODUCTS

2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509

HI-SHEAR CORPORATION U S A — Division of Hi-Shear Industries Inc U S A	(Patent Holder)	U S Federal Code I D No 73197	HI-SHEAR FASTENERS EUROPE LTD U K — Division of Hi-Shear Industries Inc U S A	(Licensee)
AIR INDUSTRIES CO INC	(Licensee)	U S Federal Code I D No 06725	KAMAX-WERKE Germany — Rudolph Kellermann GmbH & Co	(Licensee - EEC Countries)
DEUTSCH FASTENER CO INC	(Licensee)	U S Federal Code I D No 97928	ST CHAMOND GRANAT, S A France	(Licensee - EEC Countries)
SPS TECHNOLOGIES, U S A	(Licensee)	U S Federal Code I D No 56878	SIMMONDS S A France	(Licensee - EEC Countries - Cellars)
VOI-SHAN Division of VSI Corp U S A	(Licensee)	U S Federal Code I D No 82215	TOKYO SCREW COMPANY Japan	(Licensee Japan)
WEST COAST AEROSPACE INC U S A	(Licensee - Pin & Steel Collars)	U S Federal Code I D No 60516		



hi-lok® hi-tigue® PIN

hi-lok® hi-tigue® PIN AND COLLAR AFTER ASSEMBLY

FIRST DASH NO.	NOM. DIA.	A DIA.	A' DIA. MIN.	B REF.	D DIA. [8] WITH CETYL ALCOHOL	D DIA. [8] WITH COATING OR SOLID FILM LUBE	TD DIA.	F [1]	H	K REF.	R RAD.	Z [7] MAX.	S CHAMFER REF.	THREAD	SOCKET W HEX.	SOCKET T DEPTH	SOCKET Y DIA.	DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
-5		NOTE: USE HLT335-6 or HLT451-6																	
-6	13/64	.3016 .2966	.270	.360	.2026 .2021	.2026 .2016	.1840 .1810	.005	.0415 .0394	.020	.030 .020	.015	1/32" x 37°	10-32UNJF-3A Modified	.0806 .0791	.100 .080	.119 .104	6,130	2,000
-8	17/64	.3948 .3898	.363	.435	.2651 .2646	.2651 .2641	.2440 .2410	.006	.0544 .0523	.025	.030 .020	.015	1/32" x 37°	1/4-28UNJF-3A Modified	.0967 .0947	.110 .090	.142 .122	10,490	3,700
-10	21/64	.4739 .4689	.442	.545	.3276 .3271	.3276 .3266	.3060 .3020	.007	.0614 .0593	.031	.040 .030	.015	3/64" x 37°	5/16-24UNJF-3A Modified	.1295 .1270	.130 .110	.180 .160	16,000	5,000
-12	25/64	.5604 .5554	.529	.590	.3901 .3896	.3901 .3891	.3680 .3640	.008	.0714 .0693	.037	.040 .030	.015	3/64" x 37°	3/8-24UNJF-3A Modified	.1617 .1582	.160 .140	.217 .197	22,700	7,200
-14	29/64	.6680 .6620	.620	.690	.4526 .4521	.4526 .4516	.4310 .4260	.009	.0904 .0879	.039	.050 .040	.022	3/64" x 37°	7/16-20UNJF-3A Modified	.1930 .1895	.190 .170	.253 .233	30,600	10,000
-16	33/64	.7540 .7480	.706	.740	.5151 .5146	.5151 .5141	.4930 .4880	.010	.1002 .0977	.045	.050 .040	.022	3/64" x 37°	1/2-20UNJF-3A Modified	.2242 .2207	.220 .200	.289 .269	39,600	13,500
-18	37/64	.8380 .8310	.790	.825	.5771 .5766	.5771 .5761	.5550 .5500	.010	.1094 .1065	.043	.050 .040	.022	1/16" x 37°	9/16-18UNJF-3A Modified	.2555 .2520	.260 .240	.326 .306	49,700	17,000
⑫ -20	41/64	.9250 .9180	.877	.890	.6396 .6391	.6396 .6386	.6180 .6120	.010	.1197 .1168	.045	.050 .040	.022	1/16" x 37°	5/8-18UNJF-3A Modified	.2555 .2520	.260 .240	.326 .306	61,000	21,000
⑫ -24	49/64	1.0970 1.0850	1.049	1.115	.7646 .7641	.7646 .7636	.7430 .7370	.012	.1394 .1344	.045	.050 .040	.022	1/16" x 37°	3/4-16UNJF-3A Modified	.3185 .3150	.330 .300	.398 .378	87,200	30,700

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

GENERAL NOTES:
1. [1] Head edge out of roundness shall not exceed "F".
2. Concentricity: Conical surface of head to "D" diameter within .005 FIR.
3. "H" dimensioned from maximum "D" diameter.
4. Surface texture per ANSI B46.1.
5. Hole preparation per NAS618.
6. Use HLT635 for oversize replacement.
7. [7] Curved or flat edge manufacturer's option.
8. [8] Maximum "D" diameter may be increased by .0002 to allow for coating application.

MATERIAL: 6Al-4V titanium alloy per Spec. AMS4928 or AMS4967.

HEAT TREAT: 95,000 psi shear minimum.

⑫ FINISH:
- HLT435-( )-( ) = Bright clean per Hi-Shear Spec. 211, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT435AP-( )-( ) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT435AZ-( )-( ) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT435BJ-( )-( ) = I.V.D. aluminum coating per MIL-C-83488, Type II, Class 3, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT435FB-( )-( ) = Grit blast top of head and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT435FW-( )-( ) = Grit blast top of head, Hi-Kote 2 solid film lube on threads only per Hi-Shear Spec. 292, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT435HG-( )-( ) = I.V.D. aluminum coating per MIL-C-83488, Type II, Class 3, and apply precoat No. PR1436G sealant (.002 - .005 thick), and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT435LL-( )-( ) = Cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT435TA-( )-( ) = Ti-Shield IIIA or Tiodize Type II, Hi-Kote 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi- Shear Spec. 305.
- HLT521TB-( )-( ) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HLT435YT-( )-( ) = Grit blast top of head, color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.

SPECIFICATION: Hi-Lok Hi-Tigue Product Specification 342.

CODE: First dash number indicates nominal diameter in 1/32nds of the pin which HLT435 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
HLT435-8-8
- 8/16 or 1/2 Maximum Grip Length
- Replaces 8/32 or 1/4 Nominal Diameter Pin
- Pin Part Number

Pin and Collar Assembly Part Number Combination
HLT435270-8-8
- Size and Grip Length, See Above Example
- Collar Part Number
- Pin Part Number

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

DRAWN	DATE	TITLE
Van	3-17-69	HI-LOK® / HI-TIGUE® PIN 100° FLUSH SHEAR HEAD TITANIUM 1/16" GRIP VARIATION - 1/64" OVERSIZE
APPROVED	DATE	
J. Miller	3-19-69	
REVISION	DATE	DRAWING NUMBER
⑫	D.P.S. 8-11-92	HLT435

HLT435