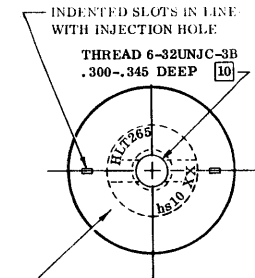


# STANDARDS COMMITTEE FOR HI-LOK® HI-TIGUE® PRODUCTS

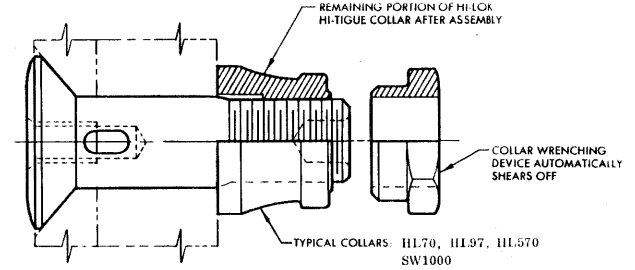
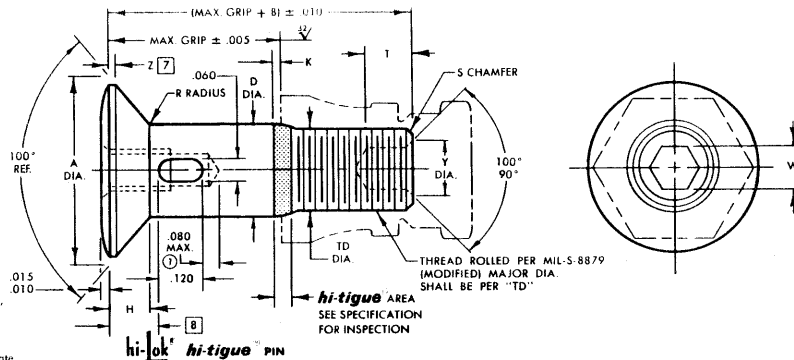
2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509 U.S.A.

HI-SHEAR CORPORATION, U.S.A. (Patent Holder) CAGE No. 73197  
 Division of Hi-Shear Industries Inc., U.S.A.  
 AIR INDUSTRIES CO., INC., U.S.A. (Licensee - U.S. & Canada) CAGE No. 06725  
 HUCK INTERNATIONAL, INC., Deutsch Operation, U.S. (Licensee) CAGE No. 97928  
 SPS TECHNOLOGIES, U.S.A. (Licensee) CAGE No. 56878  
 FAIRCHILD Aerospace Fastener Division, U.S.A. (Licensee) CAGE No. 92215  
 WEST COAST AEROSPACE INC., U.S.A. (Licensee) CAGE No. 80516  
 (Pins & Steel Collars)

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)  
 SAINT CHAMOND GRANAT, S.A. France (Licensee - EEC Countries)  
 SIMMONDS S.A., France (Licensee - EEC Countries-Collars)  
 TOKYO SCREW COMPANY, Japan (Licensee - Japan)



INDENTED SLOTS IN LINE WITH INJECTION HOLE  
 THREAD 6-32UNJ3-3B  
 .300-.345 DEEP [10]  
 100° REF.  
 .010  
 INDENTED HEAD MARKING MAXIMUM DEPTH .010"  
 "Hs" indicates HI-SHEAR trademark.  
 "Hv" indicates VCI-SHEAR trademark.  
 "SPS" indicates STANDARD PRESSED STEEL trademark.  
 The number or numbers following the trademark indicate first dash number and third dash number. (See Note 8)  
 Arrangement optional.



hi-lok hi-tigue PIN AND COLLAR AFTER ASSEMBLY

FIRST DASH NO.	NOM. DIA.	A DIA.	B REF.	D DIA.	TD DIA.	F	H	K REF.	R RAD.	Z MAX.	S CHAMFER REF.	THREAD	SOCKET			TENSION POUNDS MINIMUM
													W HEX.	T DEPTH	Y DIA.	
8	1/4	.5066 .5018	.395	.2495 .2490	.2440 .2410	.006	.1080 .1060	.021	.030 .020	.015	1/32" x 45°	1/4-28UNJF-3A Modified	.0967 .0947	.150 .130	.142 .122	[12] 6,650
10	5/16	.6335 .6287	.500	.3120 .3115	.3060 .3020	.007	.1350 .1330	.026	.040 .030	.015	3/64" x 45°	5/16-24UNJF-3A Modified	.1295 .1270	.170 .150	.180 .160	10,400
12	3/8	.7604 .7556	.545	.3745 .3740	.3680 .3640	.008	.1620 .1600	.030	.040 .030	.015	3/64" x 45°	3/8-24UNJF-3A Modified	.1817 .1582	.200 .180	.217 .197	16,000
14	7/16	.8884 .8812	.635	.4370 .4365	.4310 .4260	.009	.1895 .1865	.035	.050 .040	.022	3/64" x 45°	7/16-20UNJF-3A Modified	.1930 .1895	.230 .210	.253 .233	21,400
16	1/2	1.0139 1.0068	.685	.4995 .4990	.4930 .4880	.010	.2160 .2130	.039	.050 .040	.022	3/64" x 45°	1/2-20UNJF-3A Modified	.2242 .2207	.260 .240	.289 .269	28,100
18	9/16	1.1408 1.1337	.770	.5615 .5610	.5550 .5500	.010	.2430 .2400	.039	.050 .040	.015	1/16" x 45°	9/16-18UNJF-3A Modified	.2555 .2520	.290 .270	.326 .306	35,200
20	5/8	1.2723 1.2651	.825	.6240 .6235	.6180 .6120	.010	.2720 .2690	.050	.050 .040	.015	1/16" x 45°	5/8-18UNJF-3A Modified	.2555 .2520	.330 .305	.326 .306	43,600

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

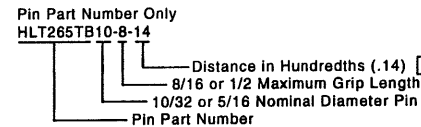
**GENERAL NOTES:**

- 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 before finish.
- Surface texture per ANSI B46. 1.
- Hole preparation per NAS618.
- Curved or flat edge manufacturer's option.
- Distance from top of head to the beginning of the injection port is specified in hundredths (XX) as the third dash number in the callout.
- The injection port must be located in the shank diameter, not in the head or in the thread.
- Roll tapped 6-32 thread is acceptable.
- Use HLT206 for oversize replacement.
- Tension minimum is 6,000 pounds with port distance .35 inch or less.

**CODE:**

First dash number indicates nominal diameter in 1/32nds. Second dash number indicates maximum grip in 1/16ths. Third dash number indicates the distance from top of head to the beginning of the injection port in hundredths. [8]  
 See Finish note for explanation of code letters.

**HOW TO ORDER EXAMPLE:**



**MATERIAL:** ② PH13-8Mo stainless steel per AMS5629.

**HEAT TREAT:** 210,000 psi tension minimum.

**FINISH:** HLT265(-)(-)(-) = Passivate per Hi-Shear Spec. 258, and cetyl alcohol lube per Hi-Shear Spec. 305.  
 HLT265TB(-)(-)(-) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292 and cetyl alcohol lube per Hi-Shear Spec. 305.

**SPECIFICATION:** Hi-Lok Hi-Tigue Product Specification 342, except fatigue tests not required.

DRAWN DATE D.P.S. 11-10-76		TITLE <b>HI-LOK® HI-TIGUE® PIN</b> 100° FLUSH CROWN MS24694 TENSION HEAD, PH13-8Mo STAINLESS STEEL 1/16" GRIP VARIATION SEALANT INJECTED APPLICATION
APPROVED DATE R.Ting 11-10-76		
REVISION DATE ⑧ J.F.Obispo 2-19-97		DRAWING NUMBER <b>HLT265</b>