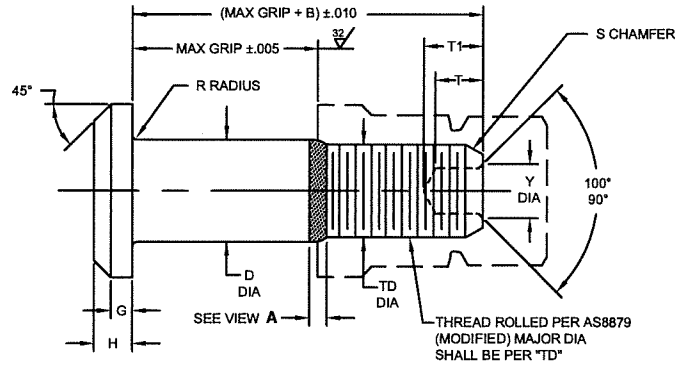
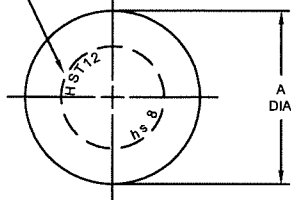
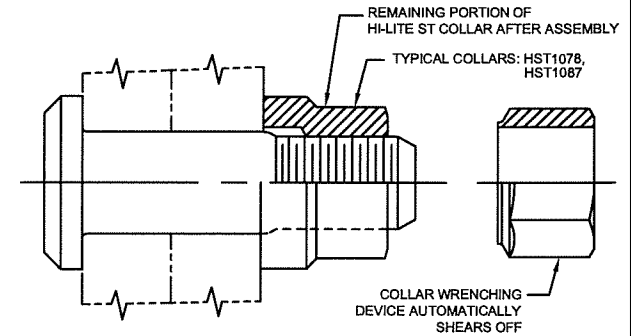


INDENTED HEAD MARKING MAXIMUM DEPTH .010"  
 "hs" INDICATES HI-SHEAR TRADEMARK.  
 THE NUMBER(S) FOLLOWING THE "hs" INDICATES  
 FIRST DASH NUMBER. ARRANGEMENT OPTIONAL.



HI-LITE ST PIN



HI-LITE ST PIN AND COLLAR AFTER ASSEMBLY

FIRST DASH NO.	PIN NOM DIA	A DIA	B REF	D DIA		TD DIA	G REF	H	R RAD	S CHAMFER REF	THREAD	SOCKET				DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
				WITHOUT COATING OR SOLID FILM	WITH COATING OR SOLID FILM							W HEX	T DEPTH MIN	T1 DEPTH MAX	Y DIA		
5	5/32	.322 .306	.280	.1635 .1630	.1635 .1625	.1595 .1570	.030	.065 .055	.025 .015	1/32" x 37°	8-32UNJC-3A Modified	.0801 .0791	.080	.135	.104 .094	4,010	2,180
6	3/16	.377 .357	.290	.1895 .1890	.1895 .1885	.1840 .1810	.035	.074 .064	.025 .015	1/32" x 37°	10-32UNJF-3A Modified	.0806 .0791	.080	.135	.119 .104	5,380	3,180
8	1/4	.440 .415	.320	.2495 .2490	.2495 .2485	.2440 .2410	.045	.090 .080	.025 .015	1/32" x 37°	1/4-28UNJF-3A Modified	.0967 .0947	.090	.160	.142 .122	9,300	5,820
10	5/16	.505 .475	.380	.3120 .3115	.3120 .3110	.3060 .3020	.055	.112 .102	.030 .020	3/64" x 37°	5/16-24UNJF-3A Modified	.1295 .1270	.110	.200	.180 .160	14,600	9,200
12	3/8	.600 .565	.420	.3745 .3740	.3745 .3735	.3680 .3640	.075	.140 .130	.030 .020	3/64" x 37°	3/8-24UNJF-3A Modified	.1617 .1582	.140	.235	.217 .197	21,000	14,000
14	7/16	.676 .641	.500	.4370 .4365	.4370 .4360	.4310 .4260	.095	.160 .150	.030 .020	3/64" x 37°	7/16-20UNJF-3A Modified	.1930 .1895	.150	.246	.253 .233	28,600	18,900
16	1/2	.770 .735	.600	.4995 .4990	.4995 .4985	.4930 .4880	.095	.188 .178	.030 .020	3/64" x 37°	1/2-20UNJF-3A Modified	.2242 .2207	.170	.275	.289 .269	37,300	25,600
18	9/16	.877 .842	.700	.5615 .5610	.5615 .5605	.5550	.125	.210 .200	.040 .025	1/16" x 37°	9/16-18UNJF-3A Modified	.2555 .2520	.200	.329	.326 .306	47,200	32,400
20	5/8	.953 .918	.780	.6240 .6235	.6240 .6230	.6180 .6120	.140	.238 .228	.040 .025	1/16" x 37°	5/8-18UNJF-3A Modified	.2555 .2520	.210	.339	.326 .306	58,300	41,000
24	3/4	1.150 1.110	1.020	.7490 .7485	.7490 .7480	.7430 .7370	.200	.335 .320	.045 .030	1/16" x 37°	3/4-16UNJF-3A Modified	.3185 .3150	.290	.452	.398 .378	83,900	59,500
28	7/8	1.330 1.290	1.160	.8740 .8735	.8740 .8730	.8680 .8610	.250	.385 .370	.050 .035	5/64" x 37°	7/8-14UNJF-3A Modified	.3820 .3780	.340	.525	.471 .451	107,000	77,500
32	1	1.510 1.470	1.305	.9990 .9985	.9990 .9980	.9930 .9860	.300	.435 .420	.060 .045	5/64" x 37°	1-12UNJF-3A Modified	.5100 .5040	.460	.682	.618 .598	140,000	100,900

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

THIS AREA OF SPECIAL CONFIGURATION AND COLD WORKING TO MEET PHYSICAL REQUIREMENTS



VIEW A  
 HI-LITE THREAD TRANSITION AREA  
 SEE SPECIFICATION FOR INSPECTION

U.S. Patents 4,326,825; 4,485,510 and 4,957,401.  
 Other U.S. and international patents pending.  
 "Hi-Lite" and "HST" are registered trademarks and "Hi-Lite ST" is a trademark of Hi-Shear Corporation.

DRAWN	DATE	TITLE
D.P.S.	3-18-83	<b>HI-LITE® ST™ PIN</b>
APPROVED	DATE	PROTRUDING TENSION HEAD
R.Ting	3-18-83	TITANIUM
		1/16" GRIP VARIATION
REVISION	DATE	DRAWING NUMBER
22	L.Valencia 2-9-09	<b>HST12</b>

- GENERAL NOTES:**
1. Concentricity: "A" to "D" diameter within .010 FIM.
  2. Dimensions to be met after finish.
  3. Surface texture per ANSI B46.1.
  4. Hole preparation per NAS618.
  5. Maximum "D" diameter may be increased by .0002 to allow for solid film or aluminum coating application.
  6. Broach petals removed.
  7. Use HST112 for oversize replacement.

**MATERIAL:** 6AL-4V titanium alloy per AMS4928 or AMS4967.

**HEAT TREAT:** 160,000 psi tensile minimum (95,000 psi shear minimum for sizes up to 3/4; 90,000 psi shear minimum for 7/8 and larger).

- FINISH:**
- HST12(-)(-) = Cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST12AB(-)(-) = I.V.D. aluminum coating per BAC5315 with conversion coating (.0003-.0006 thick) per MIL-C-5541, Class 1A and cetyl alcohol lube per Hi-Shear Spec. 305.
  - ② HST12AG(-)(-) = Hi-Kote 1 aluminum pigmented coating per Hi-Shear Spec. 294, with color orange on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - ② HST12AP(-)(-) = Hi-Kote 1 aluminum pigmented coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - ② HST12AZ(-)(-) = Hi-Kote 1 aluminum pigmented coating per Hi-Shear Spec. 294, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST12BJ(-)(-) = I.V.D. aluminum coating per MIL-DTL-83488, Type II, Class 3, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - 6 HST12CT(-)(-) = Color orange on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST12CZ(-)(-) = Color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST12HK(-)(-) = Hi-Kote 4 aluminum coating per Hi-Shear Spec. 397.
  - 6 HST12K(-)(-) = Solid film lube per "Lubeco" 905.
  - 6 HST12MA(-)(-) = Solid film lube per KalGard RA.
  - HST12RP(-)(-) = Phosphate fluoride treat with color orange on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST12RS(-)(-) = Phosphate fluoride treat, solid film lube per AS5272, Type I, and color orange on thread end.
  - HST12RV(-)(-) = Phosphate fluoride treat, Hi-Kote 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - ② HST12SU(-)(-) = Hi-Kote 1 aluminum pigmented coating per Hi-Shear Spec. 294, with color light blue on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST12TB(-)(-) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST12UV(-)(-) = Surface coating per Hi-Shear Spec. 306, Type II, Hi-Kote 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST12WF(-)(-) = Surface coating per Hi-Shear Spec. 306, Type I, color blue, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - HST12YW(-)(-) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292 on threads only, with color code white on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
  - ② HST12GD(-)(-) = Hi-Kote 1 aluminum pigmented coating on threads only per Hi-Shear Spec. 294 Cetyl alcohol lube per Hi-Shear Spec. 305.

**SPECIFICATION:** Hi-Lite Product Specification 380.

**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.

**HOW TO ORDER EXAMPLES:**

