



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	F	H	R RAD	Z MAX	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	Y DIA		
5	5/32	.3304 .3256	.280	.1635 .1630	.1635 .1625	.1595 .1570	.004	.0700 .0680	.025 .015	.012	1/32" x 45°	8-32UNJC-3A Modified	.0801 .0791	.100 .080	[8]	5,280	2,940
6	3/16	.3813 .3765	.290	.1895 .1890	.1895 .1885	.1840 .1810	.005	.0805 .0785	.030 .020	.015	1/32" x 45°	10-32UNJF-3A Modified	.0806 .0791	.100 .080	.119 .104	7,060	4,350
8	1/4	.5066 .5018	.320	.2495 .2490	.2495 .2485	.2440 .2410	.006	.1080 .1060	.030 .020	.015	1/32" x 45°	1/4-28UNJF-3A Modified	.0967 .0947	.110 .090	.142 .122	12,260	7,750
10	5/16	.6335 .6287	.380	.3120 .3115	.3120 .3110	.3060 .3020	.007	.1350 .1330	.040 .030	.015	3/64" x 45°	5/16-24UNJF-3A Modified	.1295 .1270	.130 .110	.180 .160	19,160	12,300
12	3/8	.7604 .7556	.420	.3745 .3740	.3745 .3735	.3680 .3640	.008	.1620 .1600	.040 .030	.015	3/64" x 45°	3/8-24UNJF-3A Modified	.1617 .1582	.160 .140	.217 .197	27,600	19,100
14	7/16	.8884 .8812	.485	.4370 .4365	.4370 .4360	.4310 .4260	.009	.1895 .1865	.050 .040	.022	3/64" x 45°	7/16-20UNJF-3A Modified	.1930 .1895	.190 .170	.253 .233	37,500	25,800
16	1/2	1.0139 1.0068	.525	.4995 .4990	.4995 .4985	.4930 .4880	.010	.2160 .2130	.050 .040	.022	3/64" x 45°	1/2-20UNJF-3A Modified	.2242 .2207	.220 .200	.289 .269	49,100	34,300

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

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 after finish.
- Surface texture per ANSI B46.1.
- Hole preparation per NAS618.
- Maximum "D" diameter may be increased by .0002 to allow for solid film or aluminum coating application.
- Evidence of broken edge across points.
- Curved or flat edge manufacturer's option.

MATERIAL:

PH13-8Mo stainless steel per AMS5629.

HEAT TREAT:

125,000 psi shear minimum.

FINISH:

- HST647(-)(-) = Passivate per Hi-Shear Spec. 258 and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST647AP(-)(-) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST647DU(-)(-) = Solid film lube per AS5272, Type I.
- HST647TB(-)(-) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST647TP(-)(-) = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292, with color code orange on thread end, and 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 EXAMPLE:

Pin Part Number Only
HST647-8-8
8/16 or 1/2 Maximum Grip Length
8/32 or 1/4 Nominal Diameter Pin
Pin Part Number

Pin and Collar Assembly Part Number Combination
HST64779-8-8
Size and Grip Length,
See Above Example
Collar Part Number
Pin Part Number

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	HI-LITE® ST™ PIN
APPROVED	DATE	100° FLUSH TENSION HEAD PH13-8Mo STAINLESS STEEL 1/16" GRIP VARIATION
R.Ting	3-18-83	
REVISION	DATE	DRAWING NUMBER
3	J.F. Obispo 6-9-2005	HST647