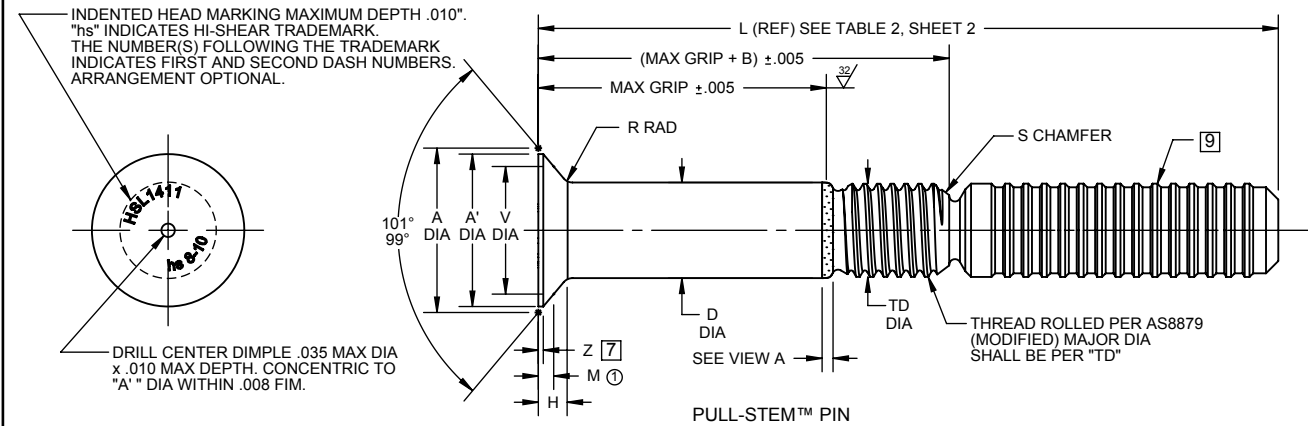
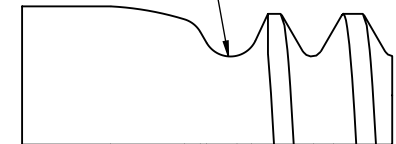


PULL-STEM™ PIN AND NUT/COLLAR AFTER ASSEMBLY

FIRST DASH NO.	PIN NOM DIA	A DIA MAX	A' DIA MIN	B REF	D DIA	F	TD DIA	H REF	M GAGE PROT	R RAD	V GAGE DIA	Z MAX	S CHAMFER REF	THREAD MODIFIED	DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM	TENSION-TENSION FATIGUE POUNDS MAX
6	3/16	.3277	.296	.290	.1895 .1885	.005	.1840 .1810	.056	.0295 .0263	.030 .020	.2560 .2558	.015	1/32 x 37°	.1900-32 UNJF-3A	5,380	2,506	900
7	7/32	.3766	.345	.305	.2182 .2172	.006	.2100 .2070	.065	.0323 .0293	.030 .020	.2982 .2980	.015	1/32 x 37°	.2160-28 UNJF-3A	7,194	3,250	1,137
8	1/4	.4283	.397	.320	.2495 .2485	.006	.2440 .2410	.074	.0227 .0195	.030 .020	.3732 .3730	.015	1/32 x 37°	.2500-28 UNJF-3A	9,300	4,500	1,575
10	5/16	.5361	.505	.380	.3120 .3110	.007	.3060 .3020	.092	.0234 .0198	.040 .030	.4791 .4789	.015	3/64 x 37°	.3125-24 UNJF-3A	14,600	6,850	2,397
12	3/8	.6415	.610	.420	.3745 .3735	.008	.3680 .3640	.110	.0295 .0259	.040 .030	.5698 .5696	.015	3/64 x 37°	.3750-24 UNJF-3A	21,000	10,200	3,574
14	7/16	.7425	.694	.485	.4370 .4360	.009	.4310 .4260	.126	.0347 .0307	.050 .040	.6582 .6580	.022	3/64 x 37°	.4375-20 UNJF-3A	28,600	13,100	4,586
16	1/2	.8423	.794	.525	.4995 .4985	.010	.4930 .4880	.142	.0504 .0464	.050 .040	.7200 .7198	.022	3/64 x 37°	.5000-20 UNJF-3A	37,300	18,000	6,300

SEE NUT/COLLAR STANDARDS
 FOR STRENGTHS.
 LOWER STRENGTH (PIN OR
 NUT/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:**
1. Concentricity: Head edge to "D" diameter shall not exceed "F".
 2. Concentricity: Conical surface of head to "D" diameter within .005 FIM.
 3. "H" is dimensioned from maximum "D" diameter.
 4. Dimensions in inches and to be met after finish.
 5. Surface texture per ASME B46.1.
 6. Hole preparation per HSL/HPL-IS01: PULL-STEM™/PULL-IN™ fastener installation specification for HSL/HPL pins.
 7. Curved or flat edge manufacturer's option.
 8. Use HSL1511 for oversize replacement.
 9. Coating and lube not mandatory on pintail.
 10. Product in accordance with LISI AEROSPACE Product Specification N°415.

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
 HSL1411NAP8-8
 L 8/16 or 1/2 Maximum Grip Length
 L 8/32 or 1/4 Nominal Diameter Pin
 L Finish Code
 L Pin Basic Part Number

MATERIAL: Pin = Titanium alloy 6Al-4V per AMS4928 or AMS4967.

HEAT TREAT: Pin = 160,000 psi tensile minimum and 95,000 psi shear minimum.

FINISH: HSL1411NAP()-() = HI-KOTE™ 1 NC aluminum coating per Hi-Shear Spec. 294,
 and cetyl alcohol lube per Hi-Shear Spec. 305.

"HI-KOTE", "HI-LITE", "PULL-STEM" AND "HSL",
 ARE TRADEMARKS OF HI-SHEAR CORPORATION

DRAWN BY F.CARINGELLA	DATE 2016-02-08	TITLE PULL-STEM™ PIN 100° FLUSH SPECIAL SHEAR HEAD BREAK STEM, INTERFERENCE FIT TITANIUM 1/16 GRIP VARIATION
APPROVED CRAIG REITZ	DATE 2016-02-08	
REVISION 1	DATE F.CARINGELLA 2017-10-27	DRAWING NUMBER HSL1411

TABLE 2

SECOND DASH NUMBER	L (REF)						
	-6 DIA.	-7 DIA.	-8 DIA.	-10 DIA.	-12 DIA.	-14 DIA.	-16 DIA.
1	-	-	-	-	-	-	-
2	.945	1.000	.927	-	-	-	-
3	1.070	1.125	1.052	1.160	-	-	-
4	1.195	1.250	1.177	1.285	1.265	-	-
5	1.320	1.375	1.302	1.410	1.390	1.500	-
6	1.445	1.500	1.427	1.535	1.515	1.625	1.610
7	1.570	1.625	1.552	1.660	1.640	1.750	1.735
8	1.695	1.750	1.677	1.785	1.765	1.875	1.860
9	1.820	1.875	1.802	1.910	1.890	2.000	1.985
10	1.945	2.000	1.927	2.035	2.015	2.125	2.110
11	2.070	2.125	2.052	2.160	2.140	2.250	2.235
12	2.195	2.250	2.177	2.285	2.265	2.375	2.360
13	2.320	2.375	2.302	2.410	2.390	2.500	2.485
14	2.445	2.500	2.427	2.535	2.515	2.625	2.610
15	2.570	2.625	2.552	2.660	2.640	2.750	2.735
16	2.695	2.750	2.677	2.785	2.765	2.875	2.860
17	2.820	2.875	2.802	2.910	2.890	3.000	2.985
18	2.945	3.000	2.927	3.035	3.015	3.125	3.110
19	3.070	3.125	3.052	3.160	3.140	3.250	3.235
20	3.195	3.250	3.177	3.285	3.265	3.375	3.360
21	3.320	3.375	3.302	3.410	3.390	3.500	3.485
22	3.445	3.500	3.427	3.535	3.515	3.625	3.610
23	3.570	3.625	3.552	3.660	3.640	3.750	3.735
24	3.695	3.750	3.677	3.785	3.765	3.875	3.860
25	-	-	-	3.910	3.890	4.000	3.985
26	-	-	-	4.035	4.015	4.125	4.110
27	-	-	-	4.160	4.140	4.250	4.235
28	-	-	-	4.285	4.265	4.375	4.360
29	-	-	-	-	4.390	4.500	4.485
30	-	-	-	-	4.515	4.625	4.610
31	-	-	-	-	4.640	4.750	4.735
32	-	-	-	-	-	4.875	4.860
33	-	-	-	-	-	5.000	4.985
34	-	-	-	-	-	5.125	5.110
35	-	-	-	-	-	5.250	5.235
36	-	-	-	-	-	5.375	5.360

HSL1411

DRAWING NUMBER

HSL1411

2 OF 2