

HI-LITE® ST™ PIN AND COLLAR AFTER ASSEMBLY

HI-LITE® ST™ PIN

TABLE 1

| FIRST DASH NO. | PIN NOM DIA | A DIA | A1 DIA | B REF | D DIA BEFORE FINISH | D1 DIA MAX | F | TD DIA | H | K MAX | M DIA FLAT | R RAD | Z MAX | S CHAMFER REF | THREAD | DOUBLE SHEAR POUNDS | TENSION POUNDS MINIMUM |
|-----------------------|-------------|----------------|--------------|-------|---------------------|------------|------|----------------|----------------|-------|--------------|--------------|-------|---------------|----------------------------|---------------------|------------------------|
| 5 | 5/32 | | | | | | | | | | | | | | | | |
| NOTE: USE HSL627-6(-) | | | | | | | | | | | | | | | | | |
| 6 | 7/32 | .3303 .3253 | .323 .311 | .325 | .2182 .2177 | .212 | .005 | .1840 .1810 | .0470 .0450 | .016 | .155 .135 | .030 .020 | .015 | 1/32" x 37" | 10-32UNJF-3A Modified | 8,200 7,100 | 2,000 |
| 8 | 9/32 | .4260 .4210 | .418 .407 | .395 | .2807 .2802 | .275 | .006 | .2440 .2410 | .0610 .0590 | .021 | .200 .180 | .030 .020 | .015 | 1/32" x 37" | 1/4-28UNJF-3A Modified | 13,500 11,800 | 3,700 |
| 10 | 11/32 | .5051 .5001 | .498 .486 | .500 | .3432 .3427 | .337 | .007 | .3060 .3020 | .0680 .0660 | .026 | .265 .245 | .040 .030 | .015 | 3/64" x 37" | 5/16-24UNJF-3A Modified | 20,200 17,600 | 5,000 |
| 12 | 13/32 | .5916 .5866 | .584 .572 | .545 | .4057 .4052 | .400 | .008 | .3680 .3640 | .0780 .0760 | .030 | .325 .300 | .040 .030 | .015 | 3/64" x 37" | 3/8-24UNJF-3A Modified | 28,200 24,600 | 7,200 |
| 14 | 15/32 | .6992 .6932 | .692 .668 | .635 | .4682 .4677 | .462 | .009 | .4310 .4260 | .0970 .0945 | .035 | .380 .355 | .050 .040 | .022 | 3/64" x 37" | 7/16-20UNJF-3A Modified | 37,600 32,700 | 10,000 |
| 16 | 17/32 | .7852 .7792 | .778 .754 | .685 | .5307 .5302 | .525 | .010 | .4930 .4880 | .1070 .1045 | .039 | .445 .415 | .050 .040 | .022 | 3/64" x 37" | 1/2-20UNJF-3A Modified | 48,250 42,000 | 13,500 |

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 after finish, except as noted.
 - Surface texture per ANSI B46.1.
 - Hole preparation per NAS618.
 - Flat permissible within "M" diameter.
 - Curved or flat edge manufacturer's option.
 - "D" diameter may increase by .0005" after application of solid film lube and .001" after application of aluminum coating.
 - Lead radius must be tangent to "D" diameter within "K" distance and be continuous within this area.
 - Oversize replacement for HSL527 and HSL627.
 - Shorter or longer grips than those listed may be available as specials.

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

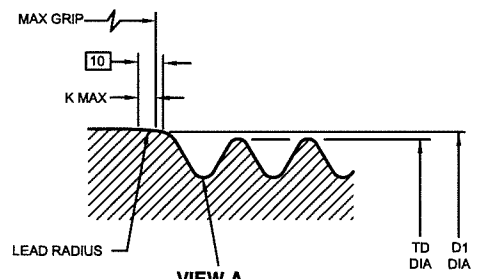
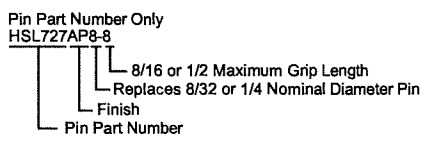
HEAT TREAT: 95,000 psi shear minimum.

FINISH: HSL727DL(-) = Kalgard FA or EM620C solid film lube per AS5272, Type I, and cetyl alcohol lube per Hi-Shear Spec. 305.
 HSL727AP(-) = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.

SPECIFICATION: Hi-Lite Product Specification 380-2.

CODE: First dash number indicates nominal diameter in 1/32nds of the pin which HSL727 oversize pin replaces.
 Second dash number indicates maximum grip in 1/16ths.
 See "Finish" note for explanation of code letters.

HOW TO ORDER EXAMPLE:



VIEW A
 HI-LITE THREAD TRANSITION AREA. THIS AREA OF SPECIAL CONFIGURATION AND COLD WORKING TO MEET PHYSICAL REQUIREMENTS. 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.

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|------------|-----------------|---|
| DRAWN | DATE | TITLE HI-LITE® ST™ PIN 100° FLUSH SHEAR CROWN HEAD BREAK STEM, SPECIAL THREAD TITANIUM 1/16" GRIP VARIATION, 1/32" OVERSIZE |
| J.F.Obispo | 7-29-92 | |
| APPROVED | DATE | DRAWING NUMBER HSL727 |
| DAW | 7-30-92 | |
| REVISION | DATE | Sheet 1 of 2 |
| 4 | JFO 9-2-2008 | |

HSL727

TABLE 2

| SECOND DASH NUMBER | L (REF) 12 | | | | | |
|--------------------------|------------|------------|-------------|-------------|-------------|-------------|
| | -6 DIA. | -8 DIA. | -10 DIA. | -12 DIA. | -14 DIA. | -16 DIA. |
| 1 | - | - | - | - | - | - |
| 2 | .955 | .940 | - | - | - | - |
| 3 | 1.080 | 1.065 | 1.185 | - | - | - |
| 4 | 1.205 | 1.190 | 1.310 | 1.300 | - | - |
| 5 | 1.330 | 1.315 | 1.435 | 1.425 | 1.530 | - |
| 6 | 1.455 | 1.440 | 1.560 | 1.550 | 1.655 | 1.645 |
| 7 | 1.580 | 1.565 | 1.685 | 1.675 | 1.780 | 1.770 |
| 8 | 1.705 | 1.690 | 1.810 | 1.800 | 1.905 | 1.895 |
| 9 | 1.830 | 1.815 | 1.935 | 1.925 | 2.030 | 2.020 |
| 10 | 1.955 | 1.940 | 2.060 | 2.050 | 2.155 | 2.145 |
| 11 | 2.080 | 2.065 | 2.185 | 2.175 | 2.280 | 2.270 |
| 12 | 2.205 | 2.190 | 2.310 | 2.300 | 2.405 | 2.395 |
| 13 | 2.330 | 2.315 | 2.435 | 2.425 | 2.530 | 2.520 |
| 14 | 2.455 | 2.440 | 2.560 | 2.550 | 2.655 | 2.645 |
| 15 | 2.580 | 2.565 | 2.685 | 2.675 | 2.780 | 2.770 |
| 16 | 2.705 | 2.690 | 2.810 | 2.800 | 2.905 | 2.895 |
| 17 | 2.830 | 2.815 | 2.935 | 2.925 | 3.030 | 3.020 |
| 18 | 2.955 | 2.940 | 3.060 | 3.050 | 3.155 | 3.145 |
| 19 | 3.080 | 3.065 | 3.185 | 3.175 | 3.280 | 3.270 |
| 20 | 3.205 | 3.190 | 3.310 | 3.300 | 3.405 | 3.395 |
| 21 | 3.330 | 3.315 | 3.435 | 3.425 | 3.530 | 3.520 |
| 22 | 3.455 | 3.440 | 3.560 | 3.550 | 3.655 | 3.645 |
| 23 | 3.580 | 3.565 | 3.685 | 3.675 | 3.780 | 3.770 |
| 24 | 3.705 | 3.690 | 3.810 | 3.800 | 3.905 | 3.895 |
| 25 | - | - | 3.935 | 3.925 | 4.030 | 4.020 |
| 26 | - | - | 4.060 | 4.050 | 4.155 | 4.145 |
| 27 | - | - | 4.185 | 4.175 | 4.280 | 4.270 |
| 28 | - | - | 4.310 | 4.300 | 4.405 | 4.395 |
| 29 | - | - | - | - | 4.530 | 4.520 |
| 30 | - | - | - | - | 4.655 | 4.645 |
| 31 | - | - | - | - | 4.780 | 4.770 |
| 32 | - | - | - | - | 4.905 | 4.895 |

HSL727