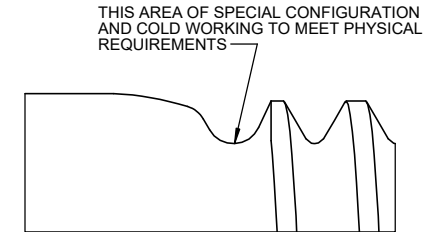


HI-LITE™ PIN AND COLLAR AFTER ASSEMBLY

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

5

| FIRST DASH NO. | PIN NOM DIA | A DIA | B REF | D DIA | | TD DIA | G REF | H | R RAD | S CHAMFER REF | THREAD MODIFIED | SOCKET | | | DOUBLE SHEAR POUNDS MINIMUM | TENSION POUNDS MINIMUM |
|----------------------|-------------------|----------------|----------|--|--------------------------------------|----------------|----------|--------------|--------------|---------------------|----------------------|----------------|--------------|--------------|--------------------------------------|------------------------------|
| | | | | WITHOUT COATING OR SOLID FILM | AFTER COATING OR SOLID FILM | | | | | | | W HEX | T DEPTH | Y DIA | | |
| 5 | 5/32 | .262 .242 | .280 | .1635 .1630 | .1635 .1625 | .1595 .1570 | .020 | .047 .037 | .025 .015 | 1/32 x 37° | .1640-32 UNJC-3A | .0645 .0635 | .135 .115 | .090 .075 | 4,010 | 1,940 |
| 6 | 3/16 | .315 .295 | .290 | .1895 .1890 | .1895 .1885 | .1840 .1810 | .025 | .055 .045 | .025 .015 | 1/32 x 37° | .1900-32 UNJF-3A | .0806 .0791 | .100 .080 | .119 .104 | 5,380 | 2,500 |
| 8 | 1/4 | .412 .387 | .320 | .2495 .2490 | .2495 .2485 | .2440 .2410 | .030 | .069 .059 | .025 .015 | 1/32 x 37° | .2500-28 UNJF-3A | .0967 .0947 | .150 .130 | .142 .122 | 9,300 | 4,300 |
| 10 | 5/16 | .505 .475 | .380 | .3120 .3115 | .3120 .3110 | .3060 .3020 | .035 | .078 .068 | .030 .020 | 3/64 x 37° | .3125-24 UNJF-3A | .1295 .1270 | .170 .150 | .180 .160 | 14,600 | 6,300 |
| 12 | 3/8 | .600 .565 | .420 | .3745 .3740 | .3745 .3735 | .3680 .3640 | .040 | .088 .078 | .030 .020 | 3/64 x 37° | .3750-24 UNJF-3A | .1617 .1582 | .200 .180 | .217 .197 | 21,000 | 8,700 |
| 14 | 7/16 | .676 .641 | .485 | .4370 .4365 | .4370 .4360 | .4310 .4260 | .045 | .105 .093 | .030 .020 | 3/64 x 37° | .4375-20 UNJF-3A | .1930 .1895 | .230 .210 | .253 .233 | 28,600 | 12,100 |
| 16 | 1/2 | .770 .735 | .525 | .4995 .4990 | .4995 .4985 | .4930 .4880 | .050 | .115 .103 | .030 .020 | 3/64 x 37° | .5000-20 UNJF-3A | .2242 .2207 | .260 .240 | .289 .269 | 37,300 | 15,300 |
| 18 | 9/16 | .864 .829 | .600 | .5615 .5610 | .5615 .5605 | .5550 .5500 | .055 | .127 .112 | .040 .025 | 1/16 x 37° | .5625-18 UNJF-3A | .2555 .2520 | .290 .270 | .326 .306 | 47,200 | 19,000 |
| 20 | 5/8 | .953 .918 | .660 | .6240 .6235 | .6240 .6230 | .6180 .6120 | .060 | .137 .122 | .040 .025 | 1/16 x 37° | .6250-18 UNJF-3A | .2555 .2520 | .330 .305 | .326 .306 | 58,300 | 23,000 |
| 24 | 3/4 | 1.108 1.066 | .895 | .7490 .7485 | .7490 .7480 | .7430 .7370 | .070 | .151 .136 | .045 .030 | 1/16 x 37° | .7500-16 UNJF-3A | .3185 .3150 | .395 .365 | .398 .378 | 83,900 | 30,700 |
| 28 | 7/8 | 1.285 1.241 | 1.000 | .8740 .8735 | .8740 .8730 | .8680 .8610 | .090 | .187 .172 | .050 .035 | 5/64 x 37° | .8750-14 UNJF-3A | .3820 .3780 | .455 .425 | .471 .451 | 114,000 | 45,000 |
| 32 | 1 | 1.468 1.424 | 1.160 | .9990 .9985 | .9990 .9980 | .9930 .9860 | .110 | .218 .203 | .060 .045 | 5/64 x 37° | 1.0000-12 UNJF-3A | .5100 .5040 | .580 .550 | .618 .598 | 149,000 | 60,900 |



VIEW A

HI-LITE™ THREAD TRANSITION AREA
SEE SPECIFICATION FOR INSPECTION

"HI-LITE", "HST", AND "HI-KOTE",
ARE TRADEMARKS OF HI-SHEAR CORPORATION

| | | |
|--------------------|-------------------------------|---|
| DRAWN BY D.P.S | DATE 1982-08-04 | TITLE HI-LITE™ PIN PROTRUDING SHEAR HEAD TITANIUM 1/16 GRIP VARIATION |
| APPROVED R.TING | DATE 1982-08-06 | |
| REVISION 41 | DATE K. PHAM 2022-06-20 | DRAWING NUMBER HST10 |

- GENERAL NOTES:**
1. Concentricity: "A" to "D" diameter within .010 FIM.
 2. Dimensions are in inches and to be met after finish.
 3. Surface texture per ASME 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 HST110 for oversize replacement.
 - 8 After February, 21st of 2015, HI-KOTE™ 1 aluminum pigmented coating will be replaced by REACH compliant HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on fasteners coated in the UK and European Union.
 - 9 After September 30th of 2015, HI-KOTE™ 4 coating per HS397 will be replaced by HI-KOTE™ 4 NC coating per HS397.

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:** HST10-()-() = Cetyl alcohol lube per Hi-Shear Spec. 305.
- 41 8 HST10AG()-() = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, with color orange on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 41 8 HST10AP()-() = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 41 8 HST10AZ()-() = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST10BJ()-() = I.V.D. aluminum coating per MIL-DTL-83488, Type II, Class 3, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST10BL()-() = I.V.D. aluminum coating per MIL-DTL-83488, Type II, Class 3, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 6 HST10CT()-() = Color orange on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST10CZ()-() = Color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 9 HST10HK()-() = HI-KOTE™ 4 NC aluminum coating per Hi-Shear Spec. 397.
- 41 8 HST10GD()-() = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on threads only, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 41 8 HST10GM()-() = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on threads (no overspray on the shank allowed) and head only with color white on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 6 HST10K()-() = Solid film lube per "Lubeco™" 905. "LUBECO" is a trademark of Lubeco Incorporated.
- 6 HST10MA()-() = Solid film lube per "KalGard™" RA. "KALGARD" is a trademark of Metal Improvement Company.
- HST10RP()-() = Phosphate fluoride treat with color orange on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST10RS()-() = Phosphate fluoride treat, solid film lube per AS5272, Type I, and color orange on thread end.
- HST10RV()-() = Phosphate fluoride treat, HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 41 8 HST10SU()-() = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, with color light blue on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST10TB()-() = HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST10TF()-() = HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292.
- 41 HST10UT()-() = Ti-Shield III, HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292.
- HST10UV()-() = Anodize 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.
- 41 HST10VF()-() = Anodize per Hi-Shear Spec 306, Type I, color blue, and cetyl alcohol lube per Hi-Shear Spec. 305.
- 41 HST10WF()-() = Anodize per Hi-Shear Spec 306, Type I, color blue, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST10YV()-() = HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292 on threads only, with color orange on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.

- HST10NAG()-() = HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, with color orange on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST10NKJ()-() = HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, with color silver on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST10NKK()-() = Sulfuric acid anodizing per ISO8080 and HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on threads only, with color silver on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST10NKL()-() = HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on threads only, with color silver on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
- HST10NAP()-() = HI-KOTE™ 1 NC Aluminum Coating 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
 EXAMPLE:**

Pin Part Number
 HST10AP8-8

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

HST110

DRAWING NUMBER

HST10

2 OF 2