lisi AEROSPACE
hi-shear corporation
2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509 U.S.A.

HI-SHEAR Corporation, USA
a LISI AEROSPACE Company

Design Holder

CAGE No. 73197

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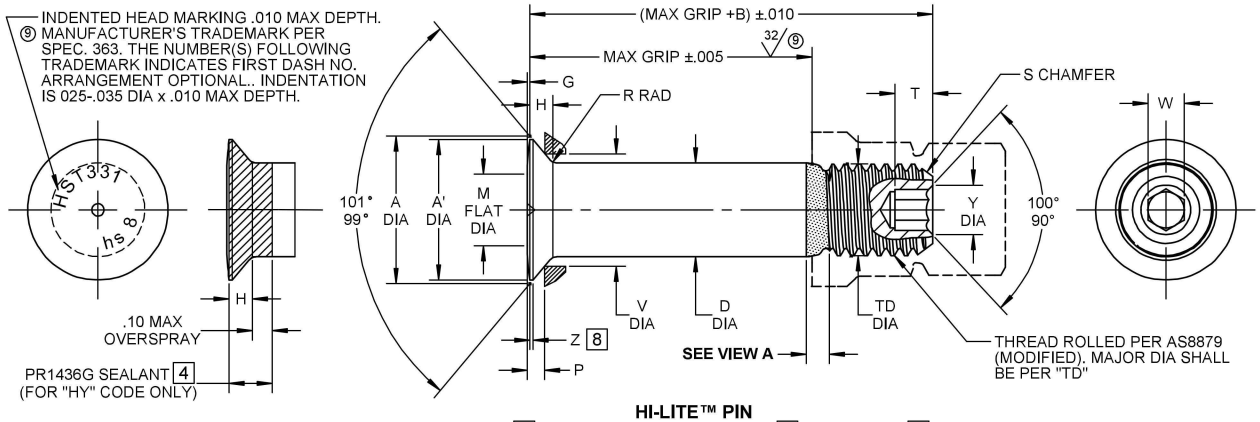
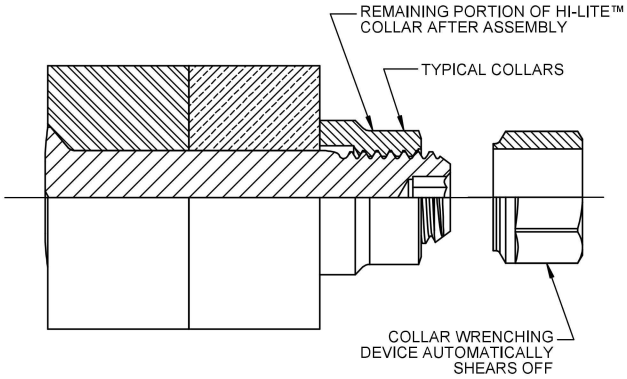



**HI-LITE™ PIN**




**HI-LITE™ PIN AND COLLAR AFTER ASSEMBLY**

| FIRST DASH NO. | PIN NOM DIA | A DIA REF | A' DIA | B REF | D DIA | TD DIA | F [1] | G REF | H REF | M FLAT DIA | P [7] GAGE PROT. | R RAD | V [7] GAGE DIA | Z REF | S CHAMFER REF | THREAD MODIFIED | SOCKET W HEX | SOCKET T DEPTH | SOCKET Y DIA | DOUBLE SHEAR POUNDS MINIMUM | TENSION POUNDS MINIMUM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 5/32 | .2605<br>.2532 | .2460<br>.2410 | .280 | .1635<br>.1625 | .1595<br>.1570 | .004 | .0035 | .040 | .130<br>.120 | .0286<br>.0256 | .025<br>.015 | .2028<br>.2026 | .010 | 1/32 x 37° | .1640-32<br>UNJC-3A | .0806<br>.0791 | .100<br>.080 | .104<br>.094 | 4,010 | 1,290 |
| 6 | 3/16 | .3011<br>.2937 | .2865<br>.2815 | .290 | .1895<br>.1885 | .1840<br>.1810 | .005 | .0035 | .046 | .161<br>.151 | .0282<br>.0252 | .030<br>.020 | .2441<br>.2439 | .010 | 1/32 x 37° | .1900-32<br>UNJF-3A | .0806<br>.0791 | .100<br>.080 | .119<br>.104 | 5,380 | 2,000 |
| 7 | 7/32 | .3497<br>.3425 | .3353<br>.3303 | .305 | .2182<br>.2172 | .2100<br>.2070 | .006 | .0045 | .053 | .175<br>.165 | .0268<br>.0238 | .030<br>.020 | .2982<br>.2980 | .010 | 1/32 x 37° | .2160-28<br>UNJF-3A | .0806<br>.0791 | .100<br>.080 | .119<br>.104 | 7,110 | 2,750 |
| 8 | 1/4 | .3944<br>.3871 | .3795<br>.3745 | .320 | .2495<br>.2485 | .2440<br>.2410 | .006 | .0045 | .060 | .195<br>.185 | .0316<br>.0286 | .030<br>.020 | .3315<br>.3313 | .010 | 1/32 x 37° | .2500-28<br>UNJF-3A | .0967<br>.0947 | .110<br>.090 | .142<br>.122 | 9,300 | 3,700 |
| 10 | 5/16 | .4731<br>.4658 | .4550<br>.4500 | .380 | .3120<br>.3110 | .3060<br>.3020 | .007 | .0050 | .067 | .255<br>.245 | .0346<br>.0316 | .040<br>.030 | .4047<br>.4045 | .012 | 3/64 x 37° | .3125-24<br>UNJF-3A | .1295<br>.1270 | .130<br>.110 | .180<br>.160 | 14,600 | 5,000 |
| 12 | 3/8 | .5592<br>.5519 | .5415<br>.5365 | .420 | .3745<br>.3735 | .3680<br>.3640 | .008 | .0065 | .077 | .317<br>.307 | .0385<br>.0355 | .040<br>.030 | .4854<br>.4852 | .012 | 3/64 x 37° | .3750-24<br>UNJF-3A | .1617<br>.1582 | .160<br>.140 | .217<br>.197 | 21,000 | 7,200 |

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

**GENERAL NOTES:**
[1] Head edge out of roundness shall not exceed "F".
2. Concentricity: Conical surface of head to "D" diameter within .003 FIM.
3. "H" is dimensioned from maximum "D" diameter.
[4] Dimensions are in inches and to be met after finish, except for "HY" code to be met before application of sealant.
5. Surface texture per ASME B46.1.
6. Hole preparation per NAS618.
[7] Head protrusion measurement in accordance with Boeing D-11805, Inspection Method A.
[8] Curved or flat edge manufacturer's option.
⑨ [9] After February, 21st of 2015, HI-KOTE™ 1 aluminum pigmented coating per Hi-Shear Spec. 294 will be replaced by REACH compliant HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294 on fasteners coated in UK and European Union.

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

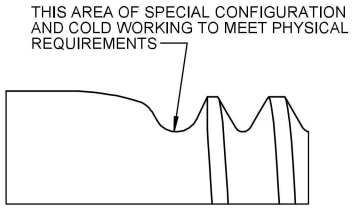
**HEAT TREAT:** 95,000 psi shear minimum.

⑨ **FINISH:** [9] HST331AG( )-( ) = 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.
HST331BJ( )-( ) = I.V.D. aluminum coating per MIL-DTL-83488, Type II, Class 3, and cetyl alcohol lube per Hi-Shear Spec. 305.
⑨ [9] HST331HE( )-( ) = 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. Top of head shall be painted in accordance with BAC5684, Type I. No overspray is allowed except in the "Z" land area.
⑨ [9] [4] HST331HY( )-( ) = HI-KOTE™ 1 or HI-KOTE™ 1 NC aluminum pigmented coating per Hi-Shear Spec. 294, with color orange on thread end, and apply Precoat No. PR1436G sealant (.002-.005 thick) and cetyl alcohol lube per Hi-Shear Spec. 305.
HST331NAG( )-( ) = 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.

**SPECIFICATION:** Boeing Specification BPS-F-67, except as noted.

**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
HST331AG8-8
- 8/16 or 1/2 Maximum Grip Length
- 8/32 or 1/4 Nominal Diameter Pin
- Finish Code
- Pin Basic Part Number




**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 | DATE | TITLE |
|---|---|---|
| J.OBISPO | 1996-12-17 | HI-LITE™ PIN<br>100° FLUSH CROWN SHEAR HEAD<br>TITANIUM<br>1/16 GRIP VARIATION<br>(BOEING SPECIAL) |
| APPROVED<br>E.E.B. | DATE<br>1996-12-17 | |
| REVISION<br>9 | DATE<br>K. PHAM<br>2022-03-15 | DRAWING NUMBER<br>**HST331**<br>1 OF 1 |

HST331

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