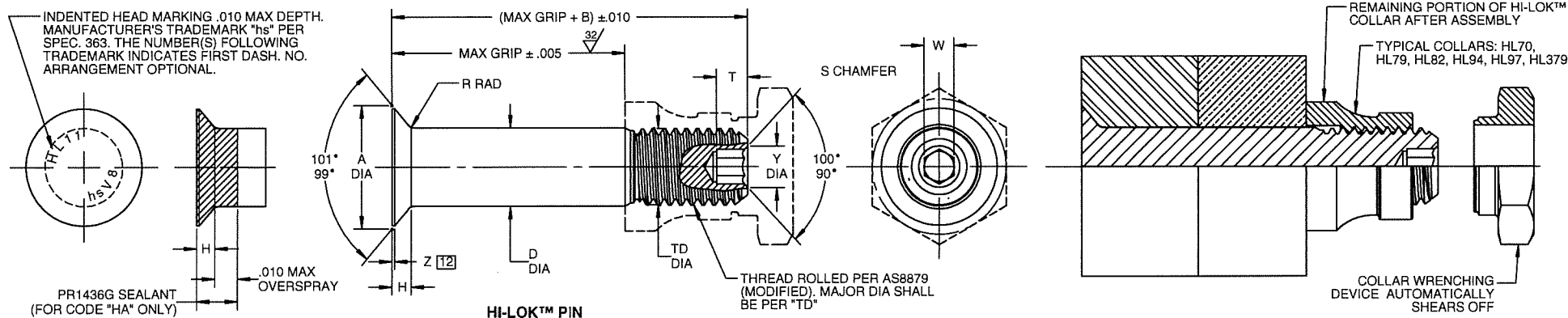




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HI-LOK™ PIN AND COLLAR AFTER ASSEMBLY

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

FIRST DASH NO.	PIN NOM DIA	A DIA	B REF	D DIA		TD DIA	F REF	H	R RAD	Z MAX	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		
4	1/8	.2219 .2171	.294	.1375 .1370	.1375 .1365	.1335 .1310	.003	.0354 .0334	.025 .015	.010	1/32 x 37°	.1380-32 UNJC-3A	.0645 .0635	.100 .085	[10]	2,840	950
5	5/32	.2612 .2564	.312	.1635 .1630	.1635 .1625	.1595 .1570	.004	.0410 .0390	.025 .015	.010	1/32 x 37°	.1640-32 UNJC-3A	.0645 .0635	.135 .115	.090 .075	4,010	1,650
6	3/16	.3016 .2966	.325	.1895 .1890	.1895 .1885	.1840 .1810	.005	.0470 .0450	.030 .020	.015	1/32 x 37°	.1900-32 UNJF-3A	.0806 .0791	.135 .115	.119 .104	5,380	2,000
8	1/4	.3948 .3898	.395	.2495 .2490	.2495 .2485	.2440 .2410	.006	.0610 .0590	.030 .020	.015	1/32 x 37°	.2500-28 UNJF-3A	.0967 .0947	.150 .130	.142 .122	9,300	3,700
10	5/16	.4739 .4689	.500	.3120 .3115	.3120 .3110	.3060 .3020	.007	.0680 .0660	.040 .030	.015	3/64 x 37°	.3125-24 UNJF-3A	.1295 .1270	.170 .150	.180 .160	14,600	5,500
12	3/8	.5604 .5554	.545	.3745 .3740	.3745 .3735	.3680 .3640	.008	.0780 .0760	.040 .030	.015	3/64 x 37°	.3750-24 UNJF-3A	.1617 .1582	.200 .180	.217 .197	21,000	7,200
14	7/16	.6680 .6620	.635	.4370 .4365	.4370 .4360	.4310 .4260	.009	.0989 .0944	.040 .030	.022	3/64 x 37°	.4375-20 UNJF-3A	.1930 .1895	.230 .210	.253 .233	28,600	10,000
16	1/2	.7540 .7480	.685	.4995 .4990	.4995 .4985	.4930 .4880	.010	.1068 .1043	.050 .040	.022	3/64 x 37°	.5000-20 UNJF-3A	.2242 .2207	.260 .240	.289 .269	37,300	13,500
18	9/16	.8380 .8310	.770	.5615 .5610	.5615 .5605	.5550 .5500	.010	.1160 .1131	.050 .040	.022	1/16 x 37°	.5625-18 UNJF-3A	.2555 .2520	.290 .270	.326 .306	47,200	17,000
20	5/8	.9250 .9180	.825	.6240 .6235	.6240 .6230	.6180 .6120	.010	.1260 .1230	.050 .040	.022	1/16 x 37°	.6250-18 UNJF-3A	.2555 .2520	.330 .305	.326 .306	58,300	21,000
24	3/4	1.0970 1.0850	1.050	.7490 .7485	.7490 .7480	.7430 .7370	.012	.1460 .1410	.050 .040	.022	1/16 x 37°	.7500-16 UNJF-3A	.3185 .3150	.395 .365	.398 .378	83,900	30,700
28	7/8	1.3197 1.3030	1.210	.8740 .8735	.8740 .8730	.8680 .8610	.014	.1870 .1800	.050 .040	.022	5/64 x 37°	.8750-14 UNJF-3A	.3820 .3780	.455 .425	.471 .451	114,000	42,000
32	1	1.5186 1.4995	1.390	.9990 .9985	.9990 .9980	.9930 .9860	.014	.2180 .2100	.050 .040	.022	5/64 x 37°	1.0000-12 UNJF-3A	.5100 .5040	.580 .550	.618 .598	149,000	55,000

"HI-LOK", "HL", and "HI-KOTE", are Trademarks of Hi-Shear Corporation

DRAWN BY J.F. Obispo	DATE 7-22-14	TITLE HI-LOK™ PIN 100° FLUSH SHEAR HEAD TITANIUM 1/16 GRIP VARIATION
Brlcj	11-26-62	
APPROVED Cessna	DATE 11-26-62	DRAWING NUMBER HL11
REVISION (48)	DATE J.F.O. 12-15-14	

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HL11

- 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. Dimensions to be met after finish.
 4. Surface texture per ANSI B46.1.
 5. Hole preparation per NAS618.
 6. "H" is dimensioned from maximum "D" diameter.
 - 7 Maximum "D" diameter may be increased by .0002 to allow for solid film or aluminum coating application.
 - 8 Broach petals removed.
 - 9 Dimensions to be met before finish for "VY" code only.
 - 10 Evidence of broken edge across points.
 - 11 Non-lubed pins must be used with lubed collars or wet sealant.
 - 12 Curved or flat edge manufacturer's option.
 13. Use HL111 for oversize replacement.
 - 14 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 European Union.

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:**
- HL11V(-)(-) = Cetyl alcohol lube per Hi-Shear Spec. 305.
 - 14 HL11VAP(-)(-) = HI-KOTE™ 1 aluminum pigmented coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - 14 HL11VAZ(-)(-) = HI-KOTE™ 1 aluminum pigmented coating per Hi-Shear Spec. 294, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - HL11VBJ(-)(-) = I.V.D. aluminum coating per MIL-DTL-83488, Type II, Class 3, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - HL11VBR(-)(-) = Color code white on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - 11 HL11VBU(-)(-) = I.V.D. aluminum coating per MIL-DTL-83488, Type I, Class 3, with color yellow on thread end.
 - 11 HL11VBV(-)(-) = I.V.D. aluminum coating per MIL-DTL-83488, Type II, Class 3, with color blue on thread end.
 - HL11VCB(-)(-) = I.V.D. aluminum coating per MIL-DTL-83488, Type I, Class 3, with color black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - 8 HL11VDK(-)(-) = Solid film lube per "KalGard™" FA. "KALGARD" is a trademark of Metal Improvement Company.
 - HL11VF(-)(-) = Surface coating per Hi-Shear Spec. 306, Type I, color blue, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - 14 HL11VHA(-)(-) = HI-KOTE™ 1 aluminum pigmented coating per Hi-Shear Spec. 294, with color black on thread end, and apply Precoat No. PR1436G sealant (.002-.005 thick), and cetyl alcohol lube per Hi-Shear Spec. 305.
 - 8 HL11VK(-)(-) = Solid film lube per Lubeco 905.
 - HL11VLJ(-)(-) = Surface coating per Hi-Shear Spec. 306, Type II, and solid film lube per AS5272.
 - HL11VLV(-)(-) = Phosphate fluoride treat and Esna-Lube No. 382 (Everlube Corp).
 - HL11VR(-)(-) = Surface coating per Hi-Shear Spec. 306, Type II, and solid film lube per "Electrofilm" 4396.
 - HL11VRA(-)(-) = Phosphate fluoride treat with color red on thread end and cetyl alcohol lube per Hi-Shear Spec. 305.
 - HL11VSY(-)(-) = Phosphate fluoride treat, solid film lube per AS5272, Type I, and color red on thread end.
 - HL11VT(-)(-) = Surface coating per Hi-Shear Spec. 306, Type I, color pink, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - HL11VTA(-)(-) = Anodize Ti-Shield III and HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - HL11VTB(-)(-) = HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - HL11VTF(-)(-) = HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292.
 - HL11VTL(-)(-) = Anodize Ti-Shield III, solid film lube per DAG-258, and cetyl alcohol lube per Hi-Shear Spec. 305; or anodize per Tiodize Type II, solid film lube per TI-O-LUBE TAL-58, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - HL11VTT(-)(-) = Translube.
 - HL11VUE(-)(-) = Surface coating per Hi-Shear Spec. 306, Type II, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - HL11VUU(-)(-) = Surface coating per Hi-Shear Spec. 306, Type II, and solid film lube per "Lubeco" 2123, Type II.
 - HL11VV(-)(-) = Solid film lube per "Lubeco" 2123, Type II.
 - 9 HL11VY(-)(-) = Surface coating per Hi-Shear Spec. 306, Type I, color blue, and solid film lubricant per M88. (British Aircraft Corporation Spec. MP-1071).
 - HL11VNKJ(-)(-) = 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.
 - HL11VNKK(-)(-) = 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.
 - HL11VNKL(-)(-) = 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.

SPECIFICATION: HI-LOK™ Product Specification 342.

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:

