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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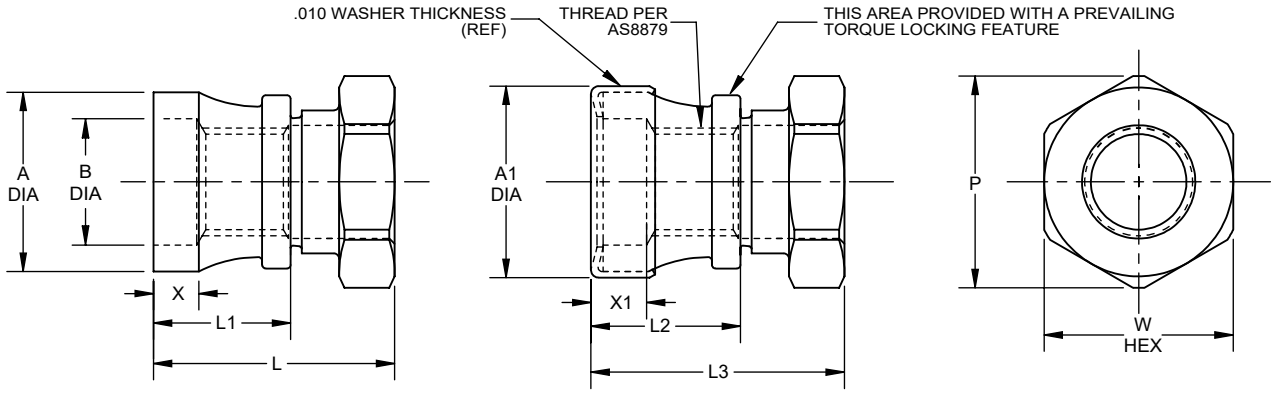

DASH. NO	PIN NOM DIA	THREAD	A DIA	A1 DIA (REF)	B DIA	L	L1 MAX	L2 (REF)	L3 (REF)	P (REF)	W	X (REF)	X1 (REF)	UTS. LBS. MIN	TORQUE-OFF INCH POUNDS
4	1/8	.1380-32 UNJC-3B	.245 .235	.270	.147 .143	.420 .400	.260	.270	.435	.344	.314 .302	.107	.120	1,350	10-20
5	5/32	.1640-32 UNJC-3B	.287 .283	.320	.173 .166	.447 .427	.275	.290	.460	.344	.314 .302	.107	.120	1,940	15-25
6	3/16	.1900-32 UNJF-3B	.307 .303	.340	.200 .195	.457 .437	.294	.309	.470	.344	.314 .302	.107	.120	2,500	25-35
7	7/32	.2160-28 UNJF-3B	.374 .370	---	.228 .222	.500 .480	.315	---	---	.481	.440 .425	.107	---	3,300	40-55
8	1/4	.2500-28 UNJF-3B	.412 .408	.442	.261 .254	.552 .532	.350	.365	.565	.484	.440 .425	.112	.125	4,300	60-80
10	5/16	.3125-24 UNJF-3B	.518 .512	.552	.325 .319	.672 .652	.440	.455	.685	.624	.565 .550	.122	.135	6,300	130-160
12	3/8	.3750-24 UNJF-3B	.620 .614	.665	.388 .381	.744 .724	.490	.505	.755	.715	.628 .613	.122	.135	8,700	200-240
14	7/16	.4375-20 UNJF-3B	.733 .727	.765	.450 .442	.862 .842	.570	.585	.875	.840	.753 .736	.137	.150	12,100	270-330
16	1/2	.5000-20 UNJF-3B	.848 .842	.880	.521 .507	.942 .922	.620	.635	.955	.970	.878 .861	.137	.150	15,300	370-430
18	9/16	.5625-18 UNJF-3B	.915 .905	.940	.576 .570	1.029 1.009	.680	.695	1.042	1.045	.941 .924	.145	.158	20,500	500-575
20	5/8	.6250-18 UNJF-3B	.995 .985	1.020	.640 .634	1.123 1.103	.745	.755	1.136	1.120	1.003 .986	.145	.158	25,700	625-700
24	3/4	.7500-16 UNJF-3B	1.120 1.110	1.190	.770 .762	1.371 1.351	.950	.960	1.485	1.240	1.128 1.110	.156	.170	37,300	900-1000
28	7/8	.8750-14 UNJF-3B	1.345 1.335	1.365	.895 .887	1.575 1.545	1.070	1.080	1.585	1.520	1.380 1.356	.169	.182	50,900	1200-1325
32	1	1.0000-12 UNJF-3B	1.490 1.480	1.525	1.025 1.015	1.840 1.810	1.235	1.245	1.850	1.650	1.504 1.480	.186	.200	67,000	1450-1600

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	DATE	BY
DRAWN	1960-11-31	Van
APPROVED	1960-11-31	Cessna
(48) REVISION	2024-09-30	C.ARTOS

TITLE

HI-LOK™ COLLAR

A-286 HIGH TEMPERATURE ALLOY
1/16 GRIP VARIATION, SHEAR APPLICATION

DRAWING NO.

HL97

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2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509 U.S.A.

NOTES:
1. Go thread gage penetration shall be 3/4 of one revolution minimum.
2. Dimensions are in inches and apply after finish and before application of lubricants.
3. Use HL197 for oversize replacement.
4. Use the following test bolts for thread lock inspection:
   TB286PZ( )L for HL97-( ), HL97W( ), and HL97WU( ).
   (48) TB64VF( )L for HL97DJ( ), HL97HK(), HL97DN( ), HL97DU( ), HL97K( ), HL97LP( ), HL97MA( ), HL97TF( ),HL97V( ), HL97DUW( ), HL97DUWU( ), HL97KW( ), HL97TFW( ), and HL97VW( ).
   TB286PY( )L for HL97EG( ).
   TB286TB( )L for HL97TB( ).
   TB64AP( )L for HL97Y( ).
   TB8740PB( )L for HL97KG( ), HL97KGW( ), HL97PB(), HL97PBW( )

MATERIAL:

Collar	A-286 high temperature alloy per AMS5731, AMS5734, or AMS5736.
Washer	Type 300 series CRES per ASTM A 240, AMS5901, AMS5516 or AMS5513.

FINISH:

Collar

HL97-( )	= Collar only with silver plate per AMS2410 (.0002-.0004 thick) and cetyl alcohol lube per Hi-Shear Spec. 305.
HL97DJ( )	= Collar only with solid film lube per AS5272, Type I plus green identification on body of collar.
HL97DN( )	= Collar only with solid film lube per AS5272, Type I.
HL97DU( )	= Collar only with solid film lube per AS5272, Type I plus yellow MIL-PRF-23377 identification on body of collar.
HL97EG( )	= Collar only with Everlube 620 solid film lube.
HL97K( )	= Collar only with solid film lube per Lubeco 905.
HL97KG( )	= Collar only with cadmium plate per AMS-QQ-P-416, Type II, Class 2, color green, and cetyl alcohol lube per Hi-Shear Spec. 305.
HL97LP( )	= Collar only with solid film lube per AS5272, Type II.
HL97MA( )	= Collar only with Kalgard RA solid film lube per AS5272, Type II.
HL97PB( )	= Collar only with cadmium plate per AMS-QQ-P-416, Type II, Class 2, and cetyl alcohol lube per Hi-Shear Spec. 305.
HL97TB( )	= Collar only with HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292, and cetyl alcohol lube per Hi-Shear Spec. 305.
HL97TF( )	= Collar only with HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292.
HL97V( )	= Collar only with solid film lube per Lubeco 2123.
HL97Y( )	= Collar only with 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.
HL97HK( )	= Collar only with HI-KOTE™ 4 NC aluminum coating per Hi-Shear Spec. 397.

Collar & Washer

HL97DUW( )	= Collar finish the same as HL97DU( ), and washer with cadmium plate per AMS-QQ-P-416, Type II, Class 2.
HL97DUWU( )	= Collar finish the same as HL97DU( ), and washer with passivate per AMS2700, Method 1, Type 8, Class 1.
HL97KGW( )	= Collar finish the same as HL97KG( ), and washer with passivate per AMS2700, Method 1, Type 8, Class 1.
HL97KW( )	= Collar finish the same as HL97K( ), and washer with passivate per AMS2700, Method 1, Type 8, Class 1.
HL97PBW( )	= Collar finish the same as HL97PB( ), and washer with passivate per AMS2700, Method 1, Type 8, Class 1.
HL97TFW( )	= Collar finish same as HL97TF( ), and washer with passivate per AMS2700, Method 1, Type 8, Class 1.
HL97W( )	= Collar with silver plate and cetyl alcohol lube, and washer with passivate per AMS2700, Method 1, Type 8, Class 1.
HL97VW( )	= Collar and washer both Lubeco 2123 solid film lube.

SPECIFICATION: HI-LOK™ Product Specification 345. Test bolt requirement exceptions per note 4 above.

CODE: Dash number indicates nominal thread size in 1/32nds.
See Finish note for explanation of code letters.

EXAMPLE: HL97TFW8 = Collar with HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292, and passivated washer.

DRAWING NO.

HL97

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