



FIRST DASH NO.	PIN NOM DIA	THREAD	A DIA	B	C DIA REF	D DIA REF	L REF	L1 REF	M	P REF	R SPHER. RAD REF	W HEX	X MAX	UTS LBS. MIN	PRELOAD POUNDS	TORQUE-OFF INCH-LB REF
5	5/32	.1640-32 UNJC-3B	.365 .355	.095 .085	.255	.171	.415	.220	.400 .380	.250	.20	.220 .213	.095	2,300	1,500 700	15-25
6	3/16	.1900-32 UNJF-3B	.365 .355	.095 .085	.255	.198	.425	.230	.400 .380	.280	.20	.251 .244	.095	2,750	1,800 800	25-35
8	1/4	.2500-28 UNJF-3B	.475 .465	.120 .110	.333	.259	.515	.270	.485 .465	.350	.26	.314 .302	.100	5,000	3,350 1,500	60-80
10	5/16	.3125-24 UNJF-3B	.620 .610	.130 .120	.417	.322	.615	.315	.570 .550	.420	.34	.377 .365	.105	8,300	4,500 2,500	110-140
12	3/8	.3750-24 UNJF-3B	.790 .780	.145 .135	.490	.385	.685	.355	.630 .610	.490	.38	.439 .425	.105	12,700	6,500 3,500	160-200
14	7/16	.4375-20 UNJF-3B	.895 .885	.180 .170	.570	.447	.765	.405	.695 .675	.557	.45	.503 .490	.110	19,000	9,000 4,725	220-280
16	1/2	.5000-20 UNJF-3B	1.005 .995	.205 .195	.648	.510	.835	.435	.760 .740	.624	.51	.565 .550	.110	25,500	12,150 6,250	325-425
18	9/16	.5625-18 UNJF-3B	1.125 1.115	.270 .260	.763	.575	.940	.520	.845 .825	.775	.71	.690 .675	.115	29,000	15,300 7,250	TBD
20	5/8	.6250-18 UNJF-3B	1.305 1.290	.315 .305	.855	.644	1.025	.575	.930 .910	.850	.76	.753 .736	.115	32,000	18,900 9,000	TBD
24	3/4	.7500-16 UNJF-3B	1.500 1.485	.390 .380	.985	.773	1.245	.755	1.114 1.094	.994	.81	.878 .861	.130	42,000	27,630 13,750	TBD
28	7/8	.8750-14 UNJF-3B	1.740 1.720	.450 .435	1.155	.905	1.465	.895	1.330 1.310	1.140	.92	1.003 .985	.135	62,000	37,800 18,750	TBD
32	1	1.0000-12 UNJF-3B	2.000 1.980	.505 .490	1.345	1.035	1.715	1.030	1.667 1.647	1.280	1.11	1.128 1.110	.140	84,000	49,500 25,000	TBD

- GENERAL NOTES:**
- Go thread gage penetration shall be 3/4 of one revolution minimum after thread lock.
 - Dimensions to be met after finish.
 - For used on sloped surfaces up to 7° maximum on HI-LITE™ pins.
 - For -12, -14, and -16 washers, chamfer or radius .040-.050.
 - These are reference torque-off values only and shall not be used for acceptance or rejection of collars.
 - For use on titanium HI-LITE™ pins with HI-KOTE™ 1 or HI-KOTE™ 1 NC coating and cetyl alcohol lubricant.
 - Locking torque, breakaway and preload are tested on epoxy chromate plate using preload releasing fixture.
 - Material 3Al-2.5V titanium to be used on dash -5 through -10 and 6Al-4V titanium to be used on dash -12 size and larger.

MATERIAL: Collar - 3Al-2.5V titanium alloy per AMS6940. [8]
 - 6Al-4V titanium alloy per AMS4967 or AMS4928. [8]
 Washer - 17-4PH stainless steel per AMS5643, or 17-7PH per AMS5528, or PH15-7Mo per AMS5520.

HEAT TREAT: [8] Collar - None or heat treat per AMS-H-81200 for 3Al-2.5V Ti only.
 [8] Washer - Age to H1025 condition for 17-4PH, age to TH1050 condition for 17-7PH, and PH15-7Mo per AMS2759.

FINISH: Collar HST1596YN(JA) = Pretreat per Hi-Shear Ti-Shield III, and HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292, with color orange band identification on barrel of collar, and white identification on hex portion of collar and cetyl alcohol lube per Hi-Shear Spec. 305.

[8] Washer HST1596-(J)WU = Passivate per AMS2700, Method 1, Type 8, Class 1.
 HST1596-(J)TFW = HI-KOTE™ 2 solid film lube per Hi-Shear Spec. 292.

SPECIFICATION: HI-LITE™ Product Specification 381, except note [7], material and preload as noted and test bolt is TB64AP(J)M.

CODE: Dash number indicates nominal diameter in 1/32nds.
 Code letter "A" following dash number indicates HI-LITE™ collar.
 See Finish note for explanation of code letters.

EXAMPLES: HST1596YN8AWU = Assembly of HST1596YN8A collar and HST1596-8WU washer.

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			TITLE	DRAWING NO.
	DATE	BY	HI-LITE™ COLLAR SELF-ALIGNING COLLAR ASSEMBLY (TITANIUM ALLOY COLLAR-STAINLESS STEEL WASHER) SHEAR APPLICATION, 1/16 GRIP VARIATION	HST1596
DRAWN	1992-12-03	D.P.S.		
APPROVED	1992-12-03	J.WILCOX		
[8] REVISION	2022-05-09	A. CHAE		