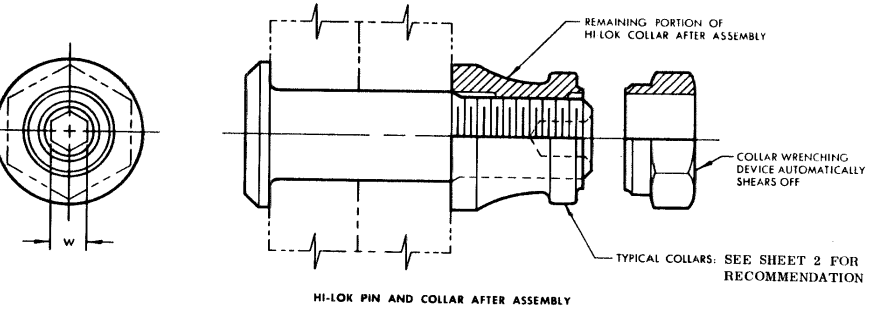
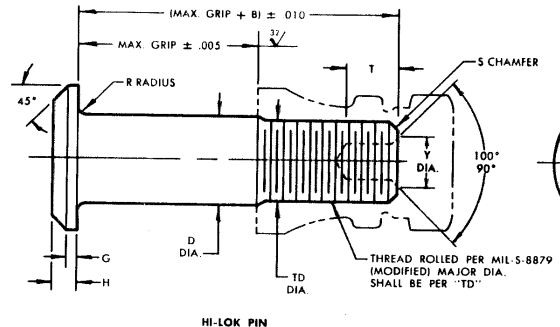
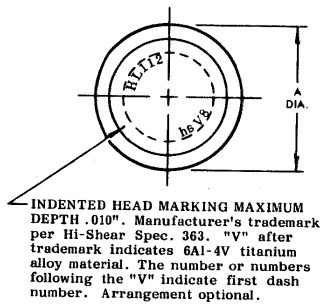


**STANDARDS COMMITTEE
FOR HI-LOK® PRODUCTS**
2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509

HI-SHEAR CORPORATION, U.S.A. (Patent Holder) U.S. Federal Code No. 73197
 Division of Hi-Shear Industries Inc., U.S.A.
 AIR INDUSTRIES CO., INC. (Licensee - U.S. & Canada) U.S. Federal Code No. 06725
 DEUTSCH FASTENER CO., INC. (Licensee) U.S. Federal Code No. 67928
 SFS TECHNOLOGIES, U.S.A. (Licensee) U.S. Federal Code No. 58878
 VOI-SHAM, Division of VSI Corp., U.S.A. (Licensee) U.S. Federal Code No. 52215
 WEST COAST AEROSPACE INC., U.S.A. (Licensee) U.S. Federal Code No. 60516
 Pins & Steel Collars

HI-SHEAR FASTENERS EUROPE, LTD., U.K. (Licensee)
 Division of Hi-Shear Industries Inc., U.S.A.
 KAMAX-WERKE, Germany (Licensee - EEC Countries)
 Rudolph Kellershan GmbH & Co.
 ST. CHANOND GRAMAT, S.A. France (Licensee - EEC Countries)
 SIMONONS, S.A. France (Licensee - EEC Countries)
 Collars

TOKYO SCREW COMPANY, Japan (Licensee - Japan)



FIRST DASH NO.	NOM. DIA.	A DIA.	B REF.	D DIA.		TD DIA.	G REF.	H	R RAD.	S CHAMFER REF.	THREAD	SOCKET			** DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM	
				WITHOUT COATING OR SOLID FILM LUBE	WITH COATING OR SOLID FILM LUBE							W HEX.	T DEPTH	Y DIA.			
-5				NOTE: USE HL12V-6													
-6	13/64	.377 .357	.325	.2026 .2021	.2026 .2016	.1840 .1810	.035	.074 .064	.025 .015	1/32" x 37°	10-32UNJF-3A Modified	.0806 .0791	.135 .115	.119 .104	6,130	3,180	
-8	17/64	.440 .415	.395	.2651 .2646	.2651 .2641	.2440 .2410	.045	.090 .080	.025 .015	1/32" x 37°	1/4-28UNJF-3A Modified	.0967 .0947	.150 .130	.142 .122	10,490	5,820	
-10	21/64	.505 .472	.500	.3276 .3271	.3276 .3266	.3060 .3020	.055	.112 .102	.030 .020	3/64" x 37°	5/16-24UNJF-3A Modified	.1295 .1270	.170 .150	.180 .160	16,000	9,200	
-12	25/64	.600 .530	.545	.3901 .3896	.3901 .3891	.3680 .3640	.075	.140 .130	.030 .020	3/64" x 37°	3/8-24UNJF-3A Modified	.1617 .1582	.200 .180	.217 .197	22,700	14,000	
-14	29/64	.676 .592	.635	.4526 .4521	.4526 .4516	.4310 .4260	.095	.160 .150	.030 .020	3/64" x 37°	7/16-20UNJF-3A Modified	.1930 .1895	.230 .210	.253 .233	30,600	18,900	
-16	33/64	.770 .717	.685	.5151 .5146	.5151 .5141	.4930 .4880	.095	.188 .178	.030 .020	3/64" x 37°	1/2-20UNJF-3A Modified	.2242 .2207	.260 .240	.289 .269	39,600	25,600	
-18	37/64	.877 .842	.770	.5771 .5766	.5771 .5761	.5550 .5500	.125	.210 .200	.040 .025	1/16" x 37°	9/16-18UNJF-3A Modified	.2555 .2520	.290 .270	.326 .306	49,700	32,400	
-20	41/64	.953 .905	.825	.6396 .6391	.6396 .6386	.6180 .6120	.140	.238 .228	.040 .025	1/16" x 37°	5/8-18UNJF-3A Modified	.2555 .2520	.330 .305	.326 .306	61,000	41,000	
-24	49/64	1.150 1.110	1.050	.7646 .7641	.7646 .7636	.7430 .7370	.200	.335 .320	.045 .030	1/16" x 37°	3/4-16UNJF-3A Modified	.3185 .3150	.330 .300	.398 .378	87,200	59,500	

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

** The Double Shear Values shown are based on cross sectional area for nominal pin diameter.

"Hi-Lok" and "HL" are internationally registered trademarks of Hi-Shear Corporation.

DRAWN	DATE	 PROTRUDING TENSION HEAD TITANIUM 1/16" GRIP VARIATION - 1/64" OVERSIZE
D. P. S.	11-4-63	
APPROVED	DATE	DRAWING NUMBER HL112 SHEET 1 OF 2
MC	11-5-63	
REVISION	DATE	
(24)	D. P. S. 5-28-92	

HL112

- GENERAL NOTES:**
1. Concentricity: "A" to "D" diameter within .010 FIR.
 2. Dimensions to be met after finish.
 3. Surface texture per ANSI B46.1.
 4. Hole preparation per NAS618.
 5. Use HL412 for oversize replacement.
 6. Maximum "D" diameter may be increased by .0002 to allow for solid film or aluminum coating application.
 7. Non-lubed pins must be used with lubed collars or with wet sealant.

MATERIAL: 6Al-4V titanium alloy per Spec. AMS4928 or AMS4967.

HEAT TREAT: 160,000 psi tensile minimum (98,000 psi shear minimum).

④ FINISH:	HL112V-()-() = Cetyl alcohol lube per Hi-Shear Spec. 305. _____	HL75DU, HL75V, HL87DU, HL198, HL198V, HL198SY, HL280SY
	HL112VAP-()-() = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, and cetyl alcohol lube per Hi-Shear Spec. 305. _____	HL75, HL75PB, HL87
	HL112VAZ-()-() = Hi-Kote 1 aluminum coating per Hi-Shear Spec. 294, with color code black on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305. _____	HL75, HL75PB, HL87
	HL112VBJ-()-() = I.V.D. aluminum coating per MIL-C-83488, Type II, Class 3, and cetyl alcohol lube per Hi-Shear Spec. 305. _____	HL75, HL87
	7 HL112VBV-()-() = I.V.D. aluminum coating per MIL-C-83488, Type II, Class 3, with color code blue on thread end. _____	HL75DU, HL87DU, HL198
	HL112VF-()-() = Surface coating per Hi-Shear Spec. 306, Type I, color blue, and cetyl alcohol lube per Hi-Shear Spec. 305. _____	HL75DU, HL75V, HL87DU, HL198, HL198V, HL198SY, HL280SY
	HL112VJU-()-() = I.V.D. aluminum coating per MIL-C-83488, Type II, Class 3, with color code red on thread end. _____	HL75DU, HL87DU, HL198
	HL112VR-()-() = Surface coating per Hi-Shear Spec. 306, Type II, and solid film lube per "Electrofilm" 4398. _____	HL75, HL75PB, HL87
	HL112VRA-()-() = Phosphate fluoride treat with color code red on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305. _____	HL75DU, HL75V, HL87DU, HL198, HL198V, HL198SY, HL280SY
	HL112VSY-()-() = Phosphate fluoride treat, solid film lube per MIL-L-46010, Type I, and color code red on thread end. _____	HL75, HL75PB, HL87
	HL112VT-()-() = Surface coating per Hi-Shear Spec. 306, Type I, color pink, and cetyl alcohol lube per Hi-Shear Spec. 305. _____	HL75DU, HL75V, HL87DU, HL198, HL198V, HL198SY, HL280SY
	HL112VTF-()-() = Hi-Kote 2 solid film lube per Hi-Shear Spec. 292. _____	HL75TF, HL87DU
	HL112VUE-()-() = Surface coating per Hi-Shear Spec. 306, Type II, and cetyl alcohol lube per Hi-Shear Spec. 305. _____	HL75, HL75DU, HL75V, HL75PB, HL87, HL87DU, HL198, HL198V, HL198SY, HL280SY
	HL112VV-()-() = Solid film lube per "Lubeco" 2123, Type II. _____	HL75, HL75DU, HL75V, HL75PB, HL87, HL87DU

SPECIFICATION: Hi-Lok Product Specification 342.

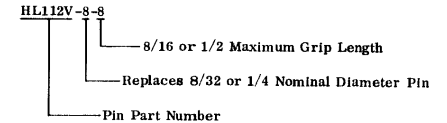
To prevent seizing and galling, the following combinations are recommended.

RECOMMENDED COLLARS

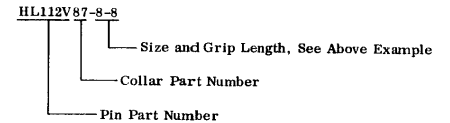
CODE: First dash number indicates nominal diameter in 1/32nds of the pin which HL112V oversize pin replaces. Second dash number indicates maximum grip in 1/16ths. See "Finish" note for explanation of code letters.

HOW TO ORDER EXAMPLES:

Pin Part Number Only



Pin and Collar Assembly Part Number Combination



HL112

SHEET 2 OF 2