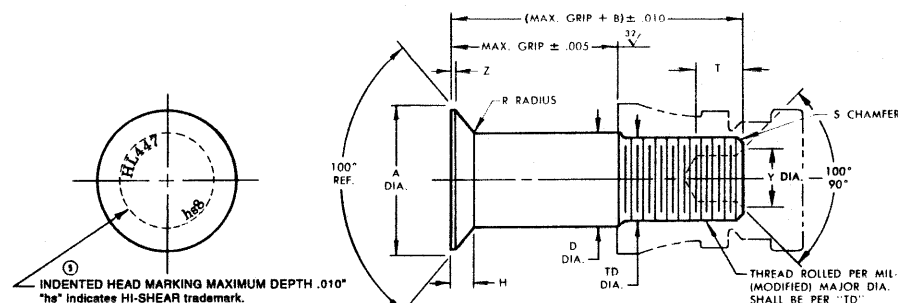


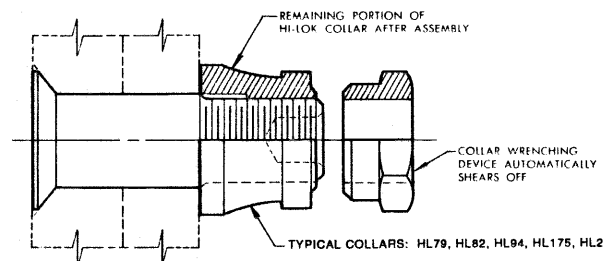
STANDARDS COMMITTEE FOR HI-LOK® PRODUCTS

2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA 90509

HI-SHEAR CORPORATION, U.S.A. (Patent Holder)	U.S. Federal Code No. 73197	HI-SHEAR FASTENERS EUROPE, LTD. U.K. (Licensee)
Division of Hi-Shear Industries Inc. U.S.A.		Division of Hi-Shear Industries Inc. U.S.A.
AIR INDUSTRIES CO., INC. (Licensee) U.S. & Canada	U.S. Federal Code No. 06725	KANAK WERKE, Germany (Licensee - EEC Countries)
DEUTSCH FASTENER CO., INC. (Licensee)	U.S. Federal Code No. 37928	Rudolph Kallmann GmbH & Co.
SPS TECHNOLOGIES, U.S.A. (Licensee)	U.S. Federal Code No. 58875	ST. CHAMOND GRANT, S.A. France (Licensee - EEC Countries)
VOI-SHAN, Division of VSI Corp., U.S.A. (Licensee)	U.S. Federal Code No. 92215	SIMMONDS, S.A. France (Licensee - EEC Countries)
WEST COAST AEROSPACE INC. U.S.A. (Licensee)	U.S. Federal Code No. 69518	Collars (Licensee - EEC Countries)
		TOKYO SCREW COMPANY, Japan (Licensee - Japan)



HI-LOK PIN



HI-LOK PIN AND COLLAR AFTER ASSEMBLY

① INDENTED HEAD MARKING MAXIMUM DEPTH .010"
"hs" indicates HI-SHEAR trademark.
"VS" indicates VOI-SHAN trademark.
"SPS" indicates STANDARD PRESSED STEEL trademark.
The number or numbers following the trademark indicate first dash number. Arrangement optional.

FIRST DASH NO.	NOM. DIA.	A DIA.	B REF.	D DIA.		TD DIA.	F	H	R RAD.	Z	S CHAMFER REF.	THREAD	SOCKET			# DOUBLE SHEAR POUNDS MINIMUM	TENSION POUNDS MINIMUM
				WITHOUT COATING OR PLATING	WITH COATING OR PLATING								W HEX.	T DEPTH	Y DIA.		
-5	3/16			NOTE: Use HL445-6													
-6	13/64	.3536 .3486	.325	.2026 .2021	.2026 .2016	.1840 .1810	.005	.0833 .0612	.030 .020	.015 .005	1/32" x 45°	10-32UNJF-3A Modified	.0806 .0791	.135 .115	.119 .104	6,130	2,590
-8	17/64	.4732 .4682	.395	.2651 .2646	.2651 .2641	.2440 .2410	.006	.0873 .0852	.030 .020	.015 .005	1/32" x 45°	1/4-28UNJF-3A Modified	.0967 .0947	.150 .130	.142 .122	10,490	4,760
-10	21/64	.5619 .5569	.500	.3276 .3271	.3276 .3266	.3060 .3020	.007	.0983 .0962	.040 .030	.015 .005	3/64" x 45°	5/16-24UNJF-3A Modified	.1295 .1270	.170 .150	.180 .160	16,000	7,100
-12	25/64	.6912 .6862	.545	.3901 .3896	.3901 .3891	.3680 .3640	.008	.1263 .1242	.040 .030	.015 .005	3/64" x 45°	3/8-24UNJF-3A Modified	.1617 .1582	.200 .180	.217 .197	22,700	10,600
-14	29/64	.8041 .7989	.635	.4526 .4521	.4526 .4516	.4310 .4260	.009	.1474 .1444	.050 .040	.022 .005	3/64" x 45°	7/16-20UNJF-3A Modified	.1930 .1895	.230 .210	.253 .233	30,600	14,450
-16	33/64	.9166 .9095	.685	.5151 .5146	.5151 .5141	.4930 .4880	.010	.1684 .1654	.050 .040	.022 .005	3/64" x 45°	1/2-20UNJF-3A Modified	.2242 .2207	.260 .240	.289 .269	39,600	19,550
① -18	37/64	1.0337 1.0266	.770	.5771 .5766	.5771 .5761	.5550 .5500	.010	.1916 .1886	.050 .040	.025 .005	1/16" x 45°	9/16-18UNJF-3A Modified	.2555 .2520	.290 .270	.326 .306	49,700	24,700
① -20	41/64	1.1230 1.1158	.825	.6396 .6391	.6396 .6386	.6180 .6120	.010	.2028 .1998	.050 .040	.025 .005	1/16" x 45°	5/8-18UNJF-3A Modified	.2555 .2520	.330 .305	.326 .306	61,000	29,600
① -24	49/64	1.3500 1.3428	1.050	.7646 .7641	.7646 .7636	.7430 .7370	.012	.2456 .2426	.050 .040	.025 .005	1/16" x 45°	3/4-16UNJF-3A Modified	.3185 .3150	.395 .365	.398 .378	87,200	42,900

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

- ① GENERAL NOTES:
- Head out of roundness shall not exceed "F".
 - Concentricity: Conical surface of head to "D" diameter within .005 FIR.
 - "H" dimensioned from maximum "D" diameter.
 - Dimensions to be met after finish.
 - Surface texture per ANSI B46.1.
 - Hole preparation per NAS618.
 - Use HL257 for oversize replacement.

MATERIAL: A-286 high temperature alloy per Spec. AMS5737 or AMS5731.

HEAT TREAT: 95,000 psi shear minimum at 70°F.

- ① FINISH:
- HL447-()-() = Passivate per Hi-Shear Spec. 258, and cetyl alcohol lube per Hi-Shear Spec. 305.
 - HL447AZ-()-() = 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.
 - HL447PB-()-() = Cadmium plate per QQ-P-416, Type II, Class 2, with color code green on thread end, and cetyl alcohol lube per Hi-Shear Spec. 305.

① SPECIFICATION: Hi-Lok Product Specification 342.

CODE: First dash number indicates nominal diameter in 1/32nds of the pin which HL447 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
HL447PB-8-8
8/16 or 1/2 Maximum Grip Length
Replaces 8/32 or 1/4 Nominal Diameter Pin
Type II Cadmium Plate
Pin Part Number

Pin and Collar Assembly Part Number Combination
HL447PB94-8-8
Size and grip length, see above example
Collar Part Number
Pin Finish
Pin Part Number

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

DRAWN DATE M.C.C. 2-15-68		TITLE HI-LOK®PIN 100° FLUSH MS20426 HEAD A-286 HIGH TEMPERATURE ALLOY 1/16" GRIP VARIATION - 1/64" OVERSIZE	
APPROVED DATE J.M. 2-22-68		DRAWING NUMBER HL447	
REVISION DATE ⑤ D.P.S. 8-7-92			