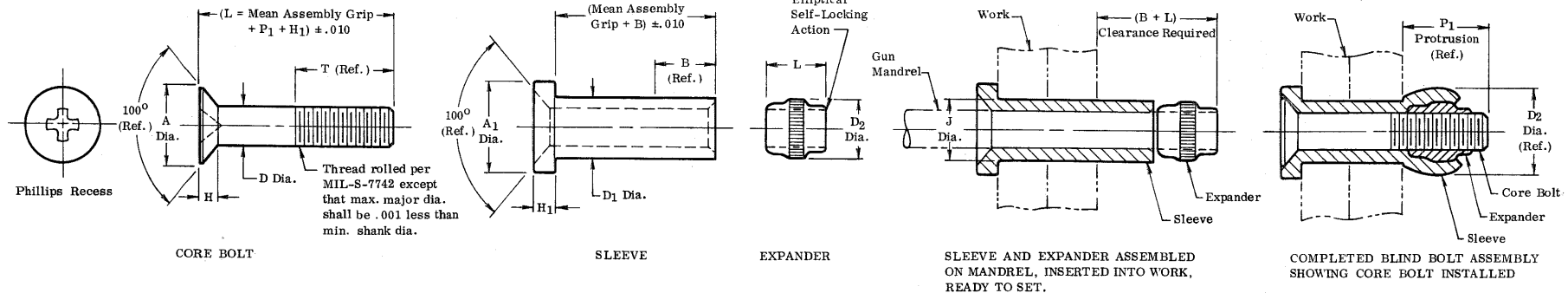


hi-shear
CORPORATION

2600 SKYPARK DRIVE
TORRANCE, CALIFORNIA 90509
AREA CODE 213 • 775-3181 • 326-8110



BLIND BOLT ASSEMBLY		BB312 CORE BOLT								BB336 SLEEVE								BB415GA EXPANDER				SUGGESTED HOLE PREPARATION		PROTRUSION AFTER INSTALLATION	
FIRST DASH NUMBER	NOMINAL DIAMETER	FIRST DASH NUMBER	RECESS	A DIA.	D DIA.	H	P ₁	T (REF)	THREAD	FIRST DASH NUMBER	A ₁ DIA.	B GRIP RANGE 0-¾	B GRIP RANGE ¾-1 13/16-1 1/8	B GRIP RANGE 1 1/8-1 1/4	B GRIP RANGE 1 1/4-1 3/8	D ₁ DIA.	H ₁	DASH NUMBER	D ₂ DIA.	L (LENGTH)	THREAD	J HOLE DIA.	CORE BOLT INSTALLATION TORQUE	P ₁	D ₁ DIA. (REF)
-5	5/32	-5	Phillips #1	.2274 .2226	.1120 .1100	.048 .046	.208	.274	4-40NC-3A	-5	.294 .274	.210	.225			.169 .166	.055 .045	-5	.167	.153	4-40NC-3B	.173 .170	8 10 IN. LBS.	.208	.210
-6	3/16	-6	Phillips #1	.2514 .2466	.1240 .1220	.053 .051	.239	.304	5-40NC-3A	-6	.315 .295	.250	.265	.330		.196 .193	.065 .055	-6	.194	.184	5-40NC-3B	.201 .197	10 14 IN. LBS.	.239	.253
-8	1/4	-8	Phillips #2	.3304 .3256	.1650 .1630	.069 .067	.316	.397	8-32NC-3A	-8	.412 .387	.315	.330	.370		.257 .254	.090 .080	-8	.255	.245	8-32NC-3B	.264 .258	20 30 IN. LBS.	.316	.335

BB312 CORE BOLT

- ① GENERAL NOTES:
- Concentricity: Head to "D" diameter within .005 FIR.
 - Complete threads shall begin within two thread pitches maximum. Two thread pitch maximum may consist of incomplete thread and extrusion angle.
 - "H" is dimensioned from maximum "D" diameter.
- ② MATERIAL: A-286 alloy per AMS5731 or AMS5735.
HEAT TREAT: 95,000 psi shear minimum.
CODE: First dash number of core bolt indicates sleeve nominal diameter in 32nds. Second dash number indicates mean assembly grip length (thickness of work) in 16ths.
EXAMPLE: BB312-6-12 = 3/16 nominal sleeve diameter, 3/4 mean assembly grip length.

BB336 SLEEVE

- ① GENERAL NOTES:
- Concentricity: Hole to "D" diameter within .005 FIR. Head to "D₁" diameter within .010 FIR.
- ② MATERIAL: A-286 alloy per AMS5731.
HEAT TREAT: Anneal per AMS5736.
CODE: First dash number indicates nominal diameter of sleeve in 32nds. Second dash number indicates mean assembly grip length (thickness of work) in 16ths.
EXAMPLE: BB336-6-12 = 3/16 nominal sleeve diameter, 3/4 mean assembly grip length.

BB415GA EXPANDER

- GENERAL NOTES:
- Threads per MIL-S-8879.
- ② MATERIAL: A-286 alloy per AMS5731 or AMS5735.
HEAT TREAT: 110,000 psi shear minimum.
FINISH: Silver plate per AMS2411, .0002—, .0004 thick.
CODE: Dash number indicates nominal diameter of Blind Bolt Assembly in 32nds.
EXAMPLE: BB415GA-6 = 3/16 nominal diameter Blind Bolt Assembly.

BB391 BOLT ASSEMBLY

- CODE: First dash number indicates nominal diameter of Blind Bolt Assembly in 32nds. Second dash number indicates mean assembly grip length (thickness of work) in 16ths.
EXAMPLE: BB391-6-12
3/4 Mean Assembly Grip Length
3/16 Nominal Diameter Blind Bolt Assembly
Blind Bolt Assembly which includes: BB312 Core Bolt, BB336 Sleeve, and BB415GA Expander

U. S. Patents 2,789, 619; 2,946, 208; 2,959, 999.
Foreign patents granted and pending.

TITLE			
BLIND BOLT™ ASSEMBLY PROTRUDING HEAD STYLE A-286 ALLOY			
DRAWN	DATE	APPROVED	DATE
By [Signature]	12-31-64	[Signature]	12-31-62
REVISION	DATE	REVISION	DATE
2	5-24-77		
DRAWING NUMBER			BB391

CODE IDENTIFICATION NO. 73197

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BB391