



BLIND BOLT ASSEMBLY			BB439 CORE BOLT							BB438 SLEEVE							BB415G AND BB415GA EXPANDER				SUGGESTED HOLE PREPARATION		PROTRUSION AFTER INSTALLATION		INSTALLATION PRESSURE (psi)		MECH. PROPERTIES OF ASSEMBLY LBS. MIN.
FIRST DASH NUMBER	NOMINAL DIAMETER	FIRST DASH NUMBER	A DIA.	D DIA.	H	W HEX.	T (REF)	THREAD	FIRST DASH NUMBER	A ₁ DIA.	B GRIP RANGE 6-7/8	B GRIP RANGE 1 1/16-1 1/8	B GRIP RANGE 1 3/8-1 1/2	D ₂ DIA.	H ₁	Z	DASH NUMBER	D ₂ DIA.	L (LENGTH)	THREAD	J HOLE DIA.	CORE BOLT INSTALLATION TORQUE - OFF	F	D ₃ DIA. (REF)	BG1750	BG2500	DOUBLE SHEAR
-5	5/32	-5	.1879 .1831	.1120 .1100	.032 .029	.110 .107	.274	4-40UNJC-3A	-5	.530 .510	.210	.225	—	.1645 .1640	.038	.012 .005	-5	.162	.153	4-40UNJC-3B	.168 .164	8 10 IN. LBS.	.208	.210			4,000
-6	3/16	-6	.2289 .2241	.1240 .1220	.045 .042	.126 .123	.304	5-40UNJC-3A	-6	.620 .600	.250	.265	.330	.1980 .1985	.044	.012 .005	-6	.194	.184	5-40UNJC-3B	.194 .190	10 14 IN. LBS.	.239	.253			5,500
-8	1/4	-8	.2922 .2874	.1650 .1630	.054 .051	.171 .168	.397	8-32UNJC-3A	-8	.805 .785	.315	.330	.370	.2600 .2585	.057	.012 .005	-8	.255	.245	8-32UNJC-3B	.254 .250	20 30 IN. LBS.	.316	.335	700		9,500

BB439 CORE BOLT

GENERAL NOTES:

- Concentricity: Head to "D" diameter within .005 TIR.
- 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.

MATERIAL: A-286 high temperature alloy per AMS5731 or AMS5737.
HEAT TREAT: 95,000 psi shear minimum at room temperature.
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: BB439-6-12 = 3/16 nominal sleeve diameter, 3/4 mean assembly grip length.

BB438 SLEEVE

GENERAL NOTES:

- Concentricity: Hole to "D₁" diameter within .005 TIR. "D₁" diameter to head within .005 TIR.
- "H₁" is dimensioned from maximum "D₁" diameter.

① **MATERIAL:** Type A-286 per AMS5731 and AMS5737.
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: BB438-6-12 = 3/16 nominal sleeve diameter, 3/4 mean assembly grip length.

① **BB415G AND BB415GA EXPANDER**

GENERAL NOTES:

- Threads per MIL-S-8879.

MATERIAL: A-286 stainless steel per Spec. AMS5731.
HEAT TREAT: 110,000 psi shear minimum.
BB415G = Silver plate per AMS2410.
BB415GA = Silver plate per AMS2411.
CODE: Dash number indicates diameter of Blind Bolt assembly in 32nds.
① **EXAMPLE:** BB415G-6 = 3/16 nominal diameter Blind Bolt Assembly.

BB437 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: BB437-6-12
 — 3/4 Mean Assembly Grip Length
 — 3/16 Nominal Diameter Blind Bolt Assembly
 — Blind Bolt Assembly which includes: BB439 Core Bolt, BB438 Sleeve, and BB440G EXPANDER

① **BB437GA-6-12 = AS EXAMPLE EXCEPT WITH EXPANDER BB415GA.**

U. S. Patent 2, 959, 999, Foreign patents issued and pending.

BLIND BOLT™ ASSEMBLY
156° COUNTERSUNK 3.5D SHEAR HEAD
A-286 ALLOY - CONTROLLED TORQUE
HONEYCOMB APPLICATION

DRAWN	DATE APPROVED	DATE REVISION	DATE	DRAWING NUMBER
<i>Shore</i>	7-28-71	9-25-71	1	BB437
			D. P. S.	
			3-9-73	

BB437