



BLIND BOLT ASSEMBLY		BB312 CORE BOLT									BB336.64 SLEEVE						BB415GA EXPANDER				SUGGESTED HOLE PREPARATION		PROTRUSION AFTER INSTALLATION		
FIRST DASH NUMBER	NOMINAL DIAMETER	FIRST DASH NUMBER	RECESS	A DIA.	D DIA.	H	P <sub>1</sub>	T (REF.)	THREAD	FIRST DASH NUMBER	A <sub>1</sub> DIA.	B GRIP RANGE 0-3/4	B GRIP RANGE 1 1/16-1 1/16	B GRIP RANGE 1 1/4-1 1/4	B GRIP RANGE 1 1/2-2 1/4	D <sub>1</sub> DIA.	H <sub>1</sub>	DASH NUMBER	D <sub>2</sub> DIA.	L (LENGTH)	THREAD	HOLE DIA.	CORE BOLT INSTALLATION TORQUE	P	D <sub>2</sub> DIA. (REF.)
-5	5/32	-5	Phillips #1	.2274 .2226	.1120 .1100	.048 .046	.208	.274	4-40NC-3A	-5	.294 .274	.210	.225		.185 .182	.055 .045	-5	.167	.153	4-40NC-3B	.189 .186	8 10 IN. LBS.	.208	.226	
-6	3/16	-6	Phillips #1	.2514 .2466	.1240 .1220	.053 .051	.239	.304	5-40NC-3A	-6	.315 .295	.250	.265	.330	.203 .200	.065 .055	-6	.194	.184	5-40NC-3B	.208 .204	10 14 IN. LBS.	.239	.260	
-8	1/4	-8	Phillips #2	.3304 .3256	.1650 .1630	.069 .067	.316	.397	8-32NC-3A	-8	.412 .387	.315	.330	.370	.264 .262	.090 .080	-8	.255	.245	8-32NC-3B	.270 .265	20 30 IN. LBS.	.316	.343	

### BB312 CORE BOLT

GENERAL NOTES: 1. Concentricity: Head to "D" diameter within .005 FIR.  
2. Complete threads shall begin within two thread pitches maximum. Two thread pitch maximum may consist of incomplete thread and extrusion angle.  
3. "H" is dimensioned from maximum "D" diameter.

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.

### BB336.64 SLEEVE

GENERAL NOTES: 1. Concentricity: Hole to "D" diameter within .005 FIR. Head to "D<sub>1</sub>" diameter within .010 FIR.

MATERIAL: A-286 alloy per AMS5731.  
HEAT TREAT: Anneal per AMS5736.  
CODE: First dash number indicates nominal diameter of sleeve in 32nds for which the BB336.64 is the 1/64 oversized replacement. Second dash number indicates mean assembly grip length (thickness of work) in 16ths.  
EXAMPLE: BB336.64-6-12 = 3/16 nominal sleeve diameter, 3/4 mean assembly grip length.

### BB415GA EXPANDER

GENERAL NOTES: 1. Threads per MIL-S-8879.  
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.

### BB391.64 BLIND 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: BB391.64-6-12  
3/4 Mean Assembly Grip Length  
3/16 Nominal Diameter Blind Bolt Assembly  
Blind Bolt Assembly which includes:  
BB312 Core Bolt, BB336.64 Sleeve, and BB415GA Expander

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

TITLE					
<b>BLIND BOLT™ ASSEMBLY PROTRUDING HEAD STYLE A-286 ALLOY</b>					
DRAWN	DATE	APPROVED	DATE	REVISION	DRAWING NUMBER
<i>[Signature]</i>	12/20/77	<i>[Signature]</i>	12/20/77	1	D. P. S. 5-24-77 <b>BB391.64</b>

CODE IDENTIFICATION NO. 73197

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