

| BLIND BOLT ASSEMBLY | | | BB703 CORE BOLT | | | | | | | | BB321 SLEEVE | | | | | BB341 EXPANDER | | | | SUGGESTED HOLE PREPARATION | | PROTRUSION AFTER INSTALLATION | | INSTALLATION PRESSURE (psi) USING HI-SHEAR TOOLING | | | | |
|---------------------|------------------|-----------|-------------------|--------|----------------|----------------|--------------|----------------|---------|---------------|-------------------|---------------------|--------------------|------------------------|--------------------------|--------------------------|---------------------|----------------|-------------|----------------------------|------------|-------------------------------|--------------|--|----------------|---------------------------|--------|--------|
| FIRST DASH NUMBER | NOMINAL DIAMETER | MIN. GRIP | FIRST DASH NUMBER | RECESS | A DIA. | D DIA. | H | P ₁ | T (REF) | THREAD | FIRST DASH NUMBER | A ₁ DIA. | B GRIP RANGE 0-3/8 | B GRIP RANGE 1/2-1 1/8 | B GRIP RANGE 1 1/4-1 3/4 | B GRIP RANGE 1 7/8-2 1/4 | D ₁ DIA. | H ₁ | DASH NUMBER | D ₂ DIA. | L (LENGTH) | THREAD | HOLE DIA. | CORE BOLT INSTALLATION TORQUE | P ₁ | D ₁ DIA. (REF) | BG1750 | BQ2500 |
| -12 | 3/8 | -4 | -12 | 10 | .5066 .5018 | .2490 .2470 | .108 .106 | .485 | .587 | 1/4-28UNJF-3A | -12 | .7604 .7556 | .450 | .450 | .450 | — | .390 .387 | .1554 .1534 | -12 | .383 | .368 | 1/4-28UNJF-3B | .397 .391 | 125 150 IN. LBS. | .485 | .510 | — | 1450 |

BB703 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.
4. Curved or flat edge manufacturer's option.

MATERIAL: A-286 high temperature alloy per AMS 5731 or AMS5737.
HEAT TREAT: 95 KSI shear minimum.
CODE: First dash number of core bolt indicates sleeve nominal diameter in 32nds. Second dash number indicates grip length (thickness of work) in 16ths.
EXAMPLE: BB700-12-10 = 1/4-28 core bolt for 3/8 nominal diameter sleeve, 5/8 grip length.

BB700 BLIND BOLT ASSEMBLY

CODE: First dash number indicates nominal diameter of Blind Bolt Assembly in 32nds.
 Second dash number indicates grip length (thickness of work) in 16ths.
 Minimum grip in table shows the lowest second dash number available.
 Letters "G" or "GU" after basic assembly number indicate silver plated expanders.
 Letters "P" or "PB" after basic assembly number indicate type of cadmium plate.

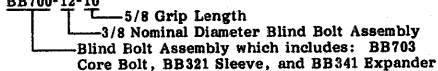
BB321 SLEEVE

GENERAL NOTES:

1. Concentricity: Hole to "D₁" diameter within .005 FIR. Head to "D₁" diameter within .005 FIR.
2. "H₁" is dimensioned from maximum "D₁" diameter.

MATERIAL: Type CRES: 305 per QQ-S-763, 302 HQ, or 18-9LW (ASTM A-493).
FINISH: BB321 = Passivate.
 BB321P = Cadmium plate per QQ-P-416, Type I, Class 2.
 BB321PB = Cadmium plate per QQ-P-416, Type II, Class 2.
CODE: First dash number indicates nominal diameter of sleeve in 32nds. Second dash number indicates grip length (thickness of work) in 16ths. Letters "P" or "PB" indicate type of plating.
EXAMPLE: BB321-12-10 = 3/8 nominal diameter sleeve, 5/8 grip length.

EXAMPLE: BB700-12-10



BB700G-12-10 = As example except with Expander BB341G.
 BB700GU-12-10 = As example except with Expander BB341GU.
 BB700P-12-10 = As example except with Sleeve BB321P.
 BB700PB-12-10 = BB703 Core Bolt, BB321PB Sleeve and BB341PB Expander

BB341 EXPANDER

GENERAL NOTES:

1. Threads per MIL-S-8879.

MATERIAL: Type AISI 431 stainless steel.
HEAT TREAT: 125,000 psi shear minimum.
FINISH: BB341 = Cadmium plate per QQ-P-416, Type I, Class 2, and cetyl alcohol lube.
 BB341DU = Solid film lubricant per MIL-L-8937.
 BB341G = Silver plate per AMS 2410 and cetyl alcohol lube per Hi-Shear Spec. 305.
 BB341GU = Silver plate per AMS 2410 (dry) no lube.
 BB341PB = Cadmium plate per QQ-P-416, Type II, Class 2, and cetyl alcohol lube.
CODE: Dash number indicates diameter of Blind Bolt Assembly in 32nds. Letters "G", "GU" or "PB" indicate type of plating. Letters "DU" indicate solid film lube.
EXAMPLE: BB341-12 = 1/4-28 Expander for use with 3/8 nominal diameter Blind Bolt Assembly.

"Blind Bolt" is a trademark of Hi-Shear Corporation.
 "ACR" is a trademark of Phillips Screw Company.

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| TITLE BLIND BOLT™ ASSEMBLY 100° COUNTERSUNK AN509 HEAD STYLE | | | | | |
| Sheet 1 of 2 | | | | | |
| DRAWN | DATE | APPROVED | DATE | REVISION | DATE |
| D.P.S. | 11-25-86 | | | | |
| | | | | | BB700 |

GRIP TABLE

| SECOND DASH NO. | GRIP | GRIP RANGE |
|-----------------|--------|----------------|
| 1 | — | — |
| 2 | — | — |
| 3 | — | — |
| 4 | 1/4 | .250 .187 |
| 5 | 5/16 | .312 .250 |
| 6 | 3/8 | .375 .312 |
| 7 | 7/16 | .437 .375 |
| 8 | 1/2 | .500 .437 |
| 9 | 9/16 | .562 .500 |
| 10 | 5/8 | .625 .562 |
| 11 | 11/16 | .687 .625 |
| 12 | 3/4 | .750 .687 |
| 13 | 13/16 | .812 .750 |
| 14 | 7/8 | .875 .812 |
| 15 | 15/16 | .937 .875 |
| 16 | 1" | 1.000 .937 |
| 17 | 1-1/16 | 1.062 1.000 |
| 18 | 1-1/8 | 1.125 1.062 |
| 19 | 1-3/16 | 1.187 1.125 |
| 20 | 1-1/4 | 1.250 1.187 |

| SECOND DASH NO. | GRIP | GRIP RANGE |
|-----------------|---------|----------------|
| 21 | 1-5/16 | 1.312 1.250 |
| 22 | 1-3/8 | 1.375 1.312 |
| 23 | 1-7/16 | 1.437 1.375 |
| 24 | 1-1/2 | 1.500 1.437 |
| 25 | 1-9/16 | 1.562 1.500 |
| 26 | 1-5/8 | 1.625 1.562 |
| 27 | 1-11/16 | 1.687 1.625 |
| 28 | 1-3/4 | 1.750 1.687 |
| 29 | 1-13/16 | 1.812 1.750 |
| 30 | 1-3/4 | 1.875 1.812 |
| 31 | 1-15/16 | 1.937 1.875 |
| 32 | 2" | 2.000 1.937 |
| 33 | 2-1/16 | 2.062 2.000 |
| 34 | 2-1/8 | 2.125 2.062 |
| 35 | 2-3/16 | 2.187 2.125 |
| 36 | 2-1/4 | 2.250 2.187 |
| 37 | 2-5/16 | 2.312 2.250 |
| 38 | 2-3/8 | 2.375 2.312 |
| 39 | 2-7/16 | 2.437 2.375 |
| 40 | 2-1/2 | 2.500 2.437 |

| SECOND DASH NO. | GRIP | GRIP RANGE |
|-----------------|---------|----------------|
| 41 | 2-9/16 | 2.562 2.500 |
| 42 | 2-5/8 | 2.625 2.562 |
| 43 | 2-11/16 | 2.687 2.625 |
| 44 | 2-3/4 | 2.750 2.687 |
| 45 | 2-13/16 | 2.812 2.750 |
| 46 | 2-7/8 | 2.875 2.812 |
| 47 | 2-15/16 | 2.937 2.875 |
| 48 | 3" | 3.000 2.937 |
| 49 | 3-1/16 | 3.062 3.000 |
| 50 | 3-1/8 | 3.125 3.062 |
| 51 | 3-3/16 | 3.187 3.125 |
| 52 | 3-1/4 | 3.250 3.187 |
| 53 | 3-5/16 | 3.312 3.250 |
| 54 | 3-3/8 | 3.375 3.312 |
| 55 | 3-7/16 | 3.437 3.375 |
| 56 | 3-1/2 | 3.500 3.437 |
| 57 | 3-9/16 | 3.562 3.500 |
| 58 | 3-5/8 | 3.625 3.562 |
| 59 | 3-11/16 | 3.687 3.625 |
| 60 | 3-3/4 | 3.750 3.687 |

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| TITLE BLIND BOLT™ ASSEMBLY 100° COUNTERSUNK AN509 HEAD STYLE |
| DRAWING NUMBER BB700 |

BB700