



| BLIND BOLT ASSEMBLY | | BB301 CORE BOLT | | | | | | | | | | BB321 SLEEVE | | | | | BB341 EXPANDER | | | SUGGESTED HOLE PREPARATION | | PROTRUSION AFTER INSTALLATION | | INSTALLATION PRESSURE (psi) USING HI-SHEAR TOOLING | | | | |
|---------------------|---------|-----------------|----------------|-------------|----------------|----------------|--------------|------|---------|----------------|----------------|------------------|----------------------|-----------------------------|----------------------------|------------------------------|----------------|----------------|----------------|----------------------------|----------|-------------------------------|--------------|--|----------|--------------|--------|--------|
| FIRST DASH NO. | NOM DIA | MIN GRIP | FIRST DASH NO. | RECESS NO. | A DIA | D DIA | H | P1 | T (REF) | THREAD | FIRST DASH NO. | A1 DIA | B GRIP RANGE 0 - 3/4 | B GRIP RANGE 13/16 - 1 1/16 | B GRIP RANGE 1 1/8 - 1 5/8 | B GRIP RANGE 1 11/16 - 2 1/4 | D2 DIA | H1 DIA | FIRST DASH NO. | D2 DIA | L LENGTH | THREAD | HOLE DIA | CORE BOLT INSTALLATION TORQUE IN-LBS. | P1 (REF) | D3 DIA (REF) | BG1750 | BG2500 |
| 5 | 5/32 | -1 | 5 | Phillips #1 | .2274 .2226 | .1120 .1100 | .048 .046 | .208 | .274 | 4-40UNJC-3A | 5 | .3310 .3262 | .210 | .225 | .265 | .305 | .169 .166 | .0680 .0660 | 5 | .167 | .153 | 4-40UNJC-3B | .173 .170 | 10 8 | .208 | .210 | 500 | 250 |
| 6 | 3/16 | -2 | 6 | Phillips #1 | .2514 .2466 | .1240 .1220 | .053 .051 | .239 | .304 | 5-40UNJC-3A | 6 | .3813 .3765 | .250 | .265 | .330 | .395 | .196 .193 | .0780 .0760 | 6 | .194 | .184 | 5-40UNJC-3B | .201 .197 | 14 10 | .239 | .253 | 700 | 350 |
| 8 | 1/4 | -2 | 8 | Phillips #2 | .3304 .3256 | .1650 .1630 | .069 .067 | .316 | .397 | 8-32UNJC-3A | 8 | .5066 .5018 | .315 | .330 | .370 | .425 | .257 .254 | .1050 .1030 | 8 | .255 | .245 | 8-32UNJC-3B | .264 .258 | 30 20 | .316 | .335 | 1100 | 650 |
| 10 | 5/16 | -2 | 10 | HT #3 | .4454 .4406 | .2180 .2160 | .095 .093 | .414 | .498 | 12-28UNJF-3A | 10 | .6335 .6287 | .380 | .400 | .420 | .440 | .338 .335 | .1240 .1220 | 10 | .328 | .307 | 12-28UNJF-3B | .345 .339 | 80 50 | .414 | .438 | 1850 | 950 |
| 12 | 3/8 | -4 | 12 | HT #4 | .5066 .5018 | .2490 .2470 | .108 .106 | .485 | .567 | 1/4-28UNJF-3A | 12 | .7604 .7556 | .450 | .450 | .450 | .450 | .390 .387 | .1554 .1534 | 12 | .383 | .368 | 1/4-28UNJF-3B | .397 .391 | 150 125 | .485 | .510 | - | 1450 |
| 14 | 7/16 | -4 | 14 | HT #5 | .6335 .6287 | .3110 .3090 | .135 .133 | .543 | .628 | 5/16-24UNJF-3A | 14 | .8884 .8812 | .500 | .500 | .500 | .500 | .468 .465 | .1764 .1734 | 14 | .458 | .429 | 5/16-24UNJF-3B | .475 .469 | 220 200 | .543 | .600 | - | 1900 |
| 16 | 1/2 | -4 | 16 | HT #6 | .7604 .7556 | .3740 .3720 | .162 .160 | .600 | .685 | 3/8-24UNJF-3A | 16 | 1.0139 1.0068 | .550 | .550 | .550 | .550 | .530 .527 | .2030 .2000 | 16 | .521 | .491 | 3/8-24UNJF-3B | .539 .531 | 400 380 | .600 | .662 | - | 2250 |

BB301 CORE BOLT

- NOTE:**
- Concentricity: Head to "D" diameter within .005 FIM.
 - Complete thread shall begin within two thread pitches maximum which may consist of incomplete thread and extrusion angle.
 - "H" is dimensioned from maximum "D" diameter.

MATERIAL: Type AISI 431 stainless steel.

HEAT TREAT: 125,000 psi shear minimum.

FINISH: BB301-() = Passivate.

CODE: First dash number of core bolt indicates sleeve nominal diameter in 32nds.
Second dash number indicates nominal grip length in (thickness of work) in 16ths.

EXAMPLE: BB301-8-12 = 8-32 core bolt for 1/4 nominal diameter sleeve, 3/4 (.750) grip length.

BB321 SLEEVE

- NOTE:**
- Concentricity: Hole to "D1" diameter within .005 FIM. Head to "D1" diameter within .005 FIM.
 - "H1" is dimensioned from maximum "D1" diameter.

MATERIAL: Type CRES: 305 per AMS-QQ-S-763, 302 HQ, or 18-9 LW (ASTM A-493).

FINISH: BB321-() = Passivate.
BB321P() = Cadmium plate per AMS-QQ-P-416, Type I, Class 2.
BB321PB() = Cadmium plate per AMS-QQ-P-416, Type II, Class 2.

CODE: First dash number indicates nominal diameter of sleeve in 32nds.
Second dash number indicates nominal grip length (thickness of work) in 16ths.
See "Finish" note for explanation of code letters.

EXAMPLE: BB321-8-12 = 1/4 nominal diameter sleeve, 3/4 (.750) grip length.

BB341 EXPANDER

NOTE: 1. Threads per AS8879.

MATERIAL: Type AISI 431 stainless steel.

HEAT TREAT: 125,000 psi shear minimum.

FINISH: BB341-() = Cadmium plate per AMS-QQ-P-416, Type I, Class 2, and cetyl alcohol lube per Hi-Shear Spec. 305.

BB341DU() = Solid film lube per AS5272, Type I

BB341G() = Silver plate per AMS2410 (.0002-.0004 thick) and cetyl alcohol lube per Hi-Shear Spec. 305.

BB341GU() = Silver plate per AMS2410 (.0002-.0004 thick), no lube.

BB341PB() = Cadmium plate per AMS-QQ-P-416, Type II, Class 2, and cetyl alcohol lube per Hi-Shear Spec. 305.

CODE: Dash number indicates diameter of Blind Bolt Assembly in 32nds.
See "Finish" notes for explanation of code letters.

EXAMPLE: BB341-8 = 8-32 Expander for use with 1/4 nominal diameter Blind Bolt Assembly.

BB351 BLIND BOLT ASSEMBLY

CODE: First dash number indicates nominal diameter of Blind Bolt Assembly in 32nds.
Second dash number indicates nominal grip length.
See "Finish" notes for explanation of code letters.

EXAMPLE: BB351-8-12
├── 3/4 Grip Length
└── 1/4 Nominal Diameter Blind Bolt Assembly
Blind Bolt Assembly which includes:
BB301 Core Bolt, BB321 Sleeve, and BB341 Expander.

BB351G8-12 = As example, except with BB341G Expander.
BB351P8-12 = As example, except with BB321 Sleeve.
BB351PB8-12 = As example, except with BB321PB Sleeve and BB341PB Expander.

SPECIFICATION: Product Specification per HS396. (32)

| DRAWN | | DATE | | TITLE | |
|----------|------------------------|--|--|-------|--|
| Cessna | 1-12-55 | BLIND BOLT™ ASSEMBLY 100° COUNTERSUNK AN509 HEAD STYLE | | | |
| APPROVED | DATE | | | | |
| G.S.Wing | 1-17-55 | | | | |
| REVISION | DATE | DRAWING NUMBER | | BB351 | |
| (32) | J.F. Obispo 9-17-07 | | | | |