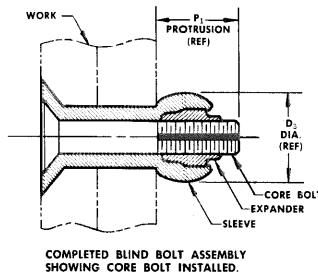
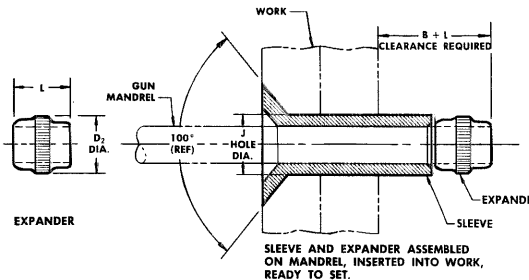
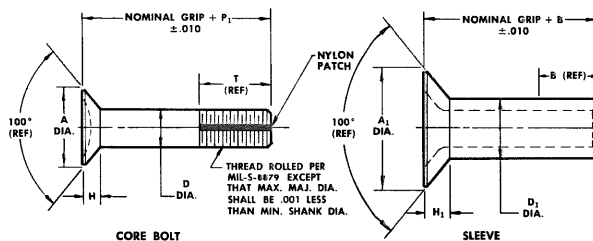
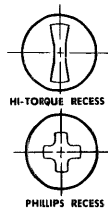




2600 SKYPARK DRIVE
TORRANCE, CALIFORNIA 90509
AREA CODE 213 • 775-3181 • 326-8110



BLIND BOLT ASSEMBLY		BB461 CORE BOLT								BB435 SLEEVE						BB459 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 0-3/4	B GRIP RANGE 1 1/16-1 1/4			D ₁ DIA.	H ₁	DASH NUMBER	D ₂ DIA.	L (LENGTH)	THREAD	J HOLE DIA.	CORE BOLT INSTALLATION TORQUE	P ₁	D ₂ DIA. (REF)
-5	5/32	-5	Phillips #1	.2274 .2226	.1120 .1100	.048 .046	.208	.274	4-40 UNJC-3A	-5	.2844 .2794	.210	.225			.169 .166	.0488 .0467	-5	.167	.153	4-40 UNC-3B	.173 .170	8 10 IN. LBS.	.208	.210
-6	3/16	-6	Phillips #1	.2514 .2466	.1240 .1220	.053 .051	.239	.304	5-40 UNJC-3A	-6	.3536 .3486	.250	.265			.196 .193	.0660 .0640	-6	.194	.184	5-40 UNC-3B	.201 .197	10 14 IN. LBS.	.239	.253
-8	1/4	-8	Phillips #2	.3304 .3256	.1650 .1630	.069 .067	.316	.397	8-32 UNJC-3A	-8	.4732 .4682	.315	.330			.257 .254	.0940 .0890	-8	.255	.245	8-32 UNC-3B	.264 .258	20 30 IN. LBS.	.316	.335
-10	5/16	-10	Hi-Torque #3	.4454 .4406	.2180 .2160	.095 .093	.414	.498	12-28 UNJF-3A	-10	.5619 .5569	.380	.400			.338 .335	.0980 .0930	-10	.328	.307	12-28 UNF-3B	.345 .339	50 80 IN. LBS.	.414	.438

BB461 CORE BOLT

- GENERAL NOTES: 1. Concentricity: Head to "D" diameter within .005 TIR.
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: Type 431 stainless steel per Spec. QQ-S-763.
HEAT TREAT: 125,000 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: BB461-10-12 = 12-28 core bolt for 5/16 nominal diameter sleeve, 3/4 mean assembly grip length.

BB435 SLEEVE

- GENERAL NOTES: 1. Concentricity: Hole to "D1" diameter within .005 TIR; "D1" diameter to head within .005 TIR.
2. "H1" is dimensioned from maximum "D1" diameter.

MATERIAL: Aluminum 2017.

HEAT TREAT: Annealed.

FINISH: Anodize.

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: BB435-10-12 = 5/16 nominal diameter sleeve, 3/4 mean assembly grip length.

BB459 EXPANDER

- GENERAL NOTES: 1. Threads per MIL-S-8879
MATERIAL: Type 431 stainless steel per Spec. QQ-S-763.
HEAT TREAT: 125,000 psi shear minimum.

FINISH: Cadmium plate per QQ-P-416, Type I, Class 3.
CODE: Dash number indicates diameter of Blind Bolt Assembly in 32nds.

EXAMPLE: BB459-10 = 12-28 expander for use with 5/16 nominal diameter Blind Bolt.

BB460 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: BB460-10-12
10-3/4 Mean Assembly Grip Length
5/16 Nominal Diameter Blind Bolt Assembly
Blind Bolt Assembly which includes: BB461 Core Bolt, BB435 Sleeve, and BB459 Expander

U.S. Patent 2,959,999. Foreign patents issued. Hi-Torque® trademark.

TITLE				
BLIND BOLT™ ASSEMBLY				
100° COUNTERSUNK AN426 HEAD STYLE WITH NYLON THREAD LOCK				
DRAWN	DATE	APPROVED	DATE	DRAWING NUMBER
<i>Shirley</i>	9-13-72	<i>Shirley</i>	9-13-72	BB460

CODE IDENTIFICATION NO. 73197

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