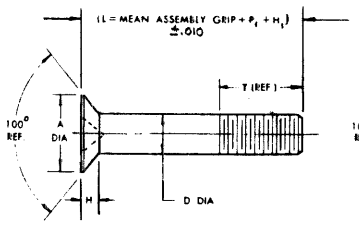
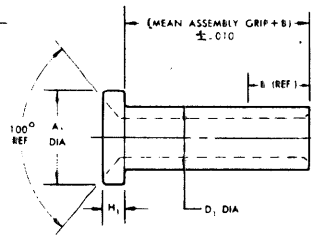
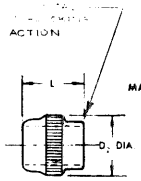


CORE BOLT

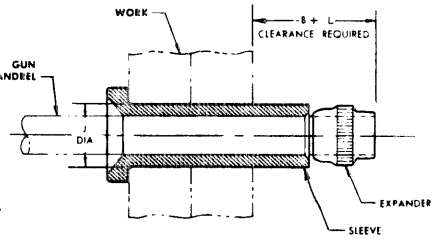


SLEEVE

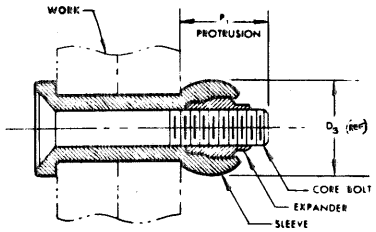


PATENT APPLIED FOR

EXPANDER



BEFORE SETTING –
SLEEVE AND EXPANDER ON MANDREL
AND INSERTED INTO WORK – READY FOR SETTING



AFTER SETTING –
EXPANDER CINCHED INTO SLEEVE –
MANDREL REMOVED – CORE BOLT INSTALLED

BB352 F BOLT ASSEMBLY		BB302F CORE BOLT								BB322 SLEEVE								BB341 EXPANDER				SUGGESTED HOLE PREPARATION					PROTRUSION AFTER INSTALLATION	
FIRST DASH NUMBER	NOMINAL DIAMETER	FIRST DASH NUMBER	HEAD STYLE	A HEAD DIA	T REF	D SHANK DIA	H HEAD HEIGHT	P_1	THREAD	FIRST DASH NUMBER	A_1 HEAD DIA	B GRIP RANGE 0 to 1/4	B GRIP RANGE 1/4 to 1/4	B GRIP RANGE 1/4 to 1 1/4		D_1 SHANK DIA	H_1 HEAD HEIGHT	FIRST DASH NUMBER	D_2 OUTSIDE DIA	L LENGTH	THREAD	J HOLE DIA				CORE BOLT INSTALLATION TORQUE	P_1 PROTRUSION APPROX.	D_3 APPROX
-5	5/32	-5	FREARSON	.2274 .2226	.274	.1120 .1100	.048 .046	.208	4-40NC-3A	-5	.294 .274	.210	.225			.169 .166	.055 .045	-5	.167	.153	4-40NC-3B	.173 .170				8 10 IN. LBS.	.208	.210
-6	3/16	-6	FREARSON	.2514 .2466	.304	.1240 .1220	.053 .051	.239	5-40NC-3A	-6	.315 .295	.250	.265	.330		.196 .195	.065 .055	-6	.194	.184	5-40NC-3B	.201 .197				10 14 IN. LBS.	.239	.253
-8	1/4	-8	FREARSON	.3304 .3256	.397	.1650 .1630	.069 .067	.316	8-32NC-3A	-8	.412 .387	.315	.330	.370		.257 .254	.090 .080	-8	.255	.245	8-32NC-3B	.264 .258				20 30 IN. LBS.	.316	.335

The information disclosed herein is proprietary material of the Hi-Shear Rivet Tool Company and is not to be reproduced, used or disclosed to anyone without permission of Hi-Shear Rivet Tool Company

GENERAL NOTES

BB302F CORE BOLT

1. Head and shank to be concentric within .005 T.I.R.
2. Complete threads shall begin within two thread pitches maximum. Two thread pitch maximum may consist of incomplete thread or extrusion angle. Maximum major diameter shall be at least .001 less than minimum shank diameter but not less than minimum major diameter.

CODE: First dash number indicates nominal diameter of Sleeve in 1/32 increments into which Core Bolt will fit.
Second dash number indicates thickness of work (grip length) in 1/16 increments.

EXAMPLE: BB302F-8-12 ← 12/16 or 3/4 mean assembly grip length
└ 8/32 or 1/4 Sleeve nominal diameter
└ Core Bolt basic part number

BB322 SLEEVE

1. Hole and shank to be concentric within .005 T.I.R.
2. Head and shank to be concentric within .010 T.I.R.

CODE: First dash number indicates nominal diameter of Sleeve in 1/32 increments.
Second dash number indicates thickness of work (grip length) in 1/16 increments.

EXAMPLE: BB322-8-12 ← 12/16 or 3/4 mean assembly grip length
└ 8/32 or 1/4 Sleeve nominal diameter
└ Sleeve basic part number

BB341 EXPANDER

CODE: Dash number indicates nominal diameter of Blind Bolt Assembly in 1/32 increments.

EXAMPLE: BB341-8 ← 8/32 or 1/4 Blind Bolt Assembly nominal diameter
└ Expander basic part number

BB352F BOLT ASSEMBLY

1. Blind Bolt Assembly consists of Core Bolt, Sleeve and Expander.

CODE: First dash number indicates nominal diameter of Blind Bolt Assembly in 1/32 increments. Second dash number indicates thickness of work (grip length) in 1/16 increments.

EXAMPLE: BB352F-8-12 ← 12/16 or 3/4 mean assembly grip length
└ 8/32 or 1/4 Blind Bolt Assembly nominal diameter.
└ Blind Bolt Assembly which includes:
BB302F-8-12 Core Bolt, BB322-8-12 Sleeve, BB341-8 Expander

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U.S. Patent 2,677,985. Other U.S. and foreign patents pending

	BB302F CORE BOLT	BB322 SLEEVE	BB341 EXPANDER
MATERIAL	431 Corrosion resistant steel per specification MIL-S-8536, class 10	Type 302 modified stainless steel	431 Corrosion resistant steel per specification MIL-S-8536, class 10
HEAT TREAT	Minimum 125,000 PSI shear		Minimum 125,000 PSI shear
FINISH			Cadmium plate per specification QQ-P-416, Type I, Class C. Plating thickness .0002-.0005.

TITLE: BLIND BOLT ASSEMBLY
PROTRUDING HEAD STYLE
FREARSON RECESS

DRAWN	APPROVED	REVISION	DATE	DRAWING NUMBER
12-12-56	12-13-56	(1)	5-7-59	BB352 F