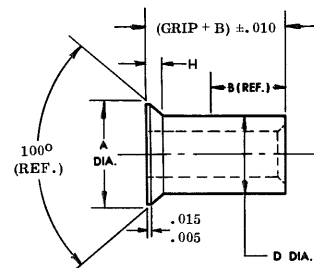
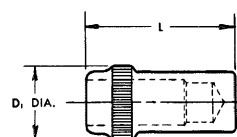


hi-shear
CORPORATION

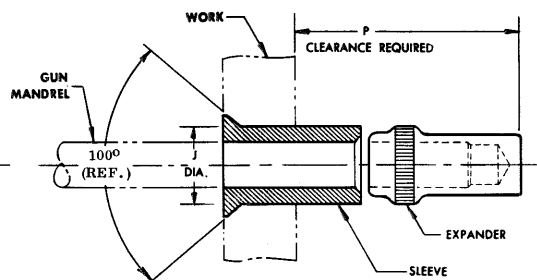
2600 SKYPARK DRIVE
TORRANCE, CALIFORNIA 90509
AREA CODE 213 • 775-3181 • 326-8110



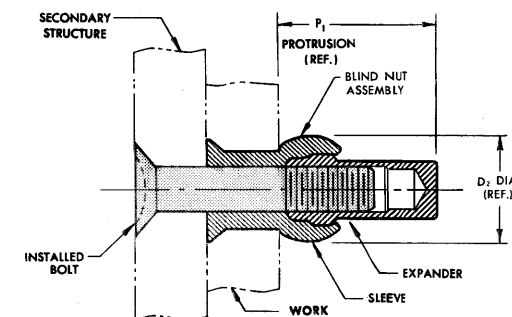
SLEEVE



EXPANDER



SLEEVE AND EXPANDER ASSEMBLED
ON MANDREL, INSERTED INTO WORK,
READY TO SET.



COMPLETED BLIND NUT ASSEMBLY
SHOWING SECONDARY STRUCTURE
AND INSTALLED BOLT

BN535 BLIND NUT ASSEMBLY		BN329 SLEEVE							BB413 EXPANDER					HOLE PREPARATION			PROTRUSION AFTER INSTALLATION		
FIRST DASH NUMBER		FIRST DASH NUMBER	A DIA.	S GRIP RANGE 0-1/2	S GRIP RANGE 1/2-3/4	S GRIP RANGE 3/4-1 1/4	D DIA.	H		PART NUMBER	D ₁ DIA.	L	THREAD	J HOLE DIA.	P		D ₂ DIA.	P ₁	
-1024		-1032	.474 .469	.380	.420	.460	.312 .309	.0679 .0659		BB413-1024	.309	.850	10-24UNC-3B	.319 .313	B + .860		.410	.890	
-1032		-1032	.474 .469	.380	.420	.460	.312 .309	.0679 .0659		BB413-1032	.309	.790	10-32UNF-3B	.319 .313	B + .800		.410	.830	
-420		-428	.560 .555	.450	.450	.450	.390 .387	.0715 .0695		BB413-420	.383	.930	1/4-20UNC-3B	.397 .391	B + .940		.510	.980	
-428		-428	.560 .555	.450	.450	.450	.390 .387	.0715 .0695		BB413-12	.383	.860	1/4-28UNF-3B	.397 .391	B + .870		.510	.910	
-518		-524	.668 .662	.500	.500	.500	.468 .465	.0839 .0814		BB413-518	.458	1.070	5/16-18UNC-3B	.477 .469	B + 1.080		.600	1.110	
-524		-524	.668 .662	.500	.500	.500	.468 .465	.0839 .0814		BB413-14	.458	1.000	5/16-24UNF-3B	.477 .469	B + 1.010		.600	1.040	
-616		-624	.754 .748	.550	.550	.550	.530 .527	.0940 .0915		BB413-616	.521	1.150	3/8-16UNC-3B	.539 .531	B + 1.160		.662	1.190	
-624		-624	.754 .748	.550	.550	.550	.530 .527	.0940 .0915		BB413-16	.521	1.050	3/8-24UNF-3B	.539 .531	B + 1.060		.662	1.090	

BN329 SLEEVE

GENERAL NOTES: 1. Concentricity: Hole to "D" diameter within .005 TIR;
"D" diameter to head within .005 TIR

MATERIAL: Type 305 stainless steel per QQ-S-763.

FINISH: Sandblast.

CODE: First dash number indicates size of bolt to be used.
Second dash number indicates grip length (thickness
of work) in 16ths.

EXAMPLE: BN329-624-12 = Sleeve for 3/8-24 bolt, 3/4 grip length.

BB413 EXPANDER

GENERAL NOTES: 1. Threads per MIL-S-7742.

MATERIAL: 17-4PH stainless steel per AMS5643.

HEAT TREAT: 125,000 psi shear minimum.

FINISH: Cadmium plate per QQ-P-416, Type II, Class 3.

CODE: Dash number indicates expander used in assembly.

EXAMPLE: BB413-16 = Expander for 3/8-24 bolt.
BB413-616 = Expander for 3/8-16 bolt.

BN535 BLIND NUT ASSEMBLY

CODE: First dash number indicates size of bolt to be used.
Second dash number indicates grip length (thickness
of work) in 16ths.

EXAMPLE: BN535-624-12
3/4 Grip Length
For 3/8-24 Bolt
Blind Nut Assembly which includes:
BN329 Sleeve and BB413 Expander

U.S. Patent 2,959,999. Foreign patents issued.

TITLE							
BLIND NUT™ ASSEMBLY							
① 100° COUNTERSUNK HEAD DOME TYPE							
DRAWN	DATE	APPROVED	DATE	REVISION	DATE	DRAWING NUMBER	
YKH	10-12-66	R. W. W. W.	10-12-66	①	Shrode	BN535	

CODE IDENTIFICATION NO. 73197

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BN535