

Huck BOM® The Highest Strength Blind Fasteners in the World





The Huck BOM®

The Highest Strength Blind Oversize Fasteners in the World

BOM® (Blind, Oversize Mechanically locked) fasteners from Arconic Fastening Systems are so strong, one can do the work of up to four conventional fasteners.

There is not a more vibration resistant blind fastener than the BOM, or one that works harder in so many different applications. Featuring a unique push-and-pull installation design, the BOM fastening system is tough enough for military vehicles and equipment, auto suspensions, amusement park rides, rail car assembly, and shaft steel storage and retrieval racks. Even the most demanding high-tensile application is no match for the strength of the BOM fastening system.

Because installing BOM fasteners is so easy, a worker can learn the installation procedure in just 10 minutes, eliminating the need to hire certified welders or specially trained employees.

And because they install from just one side, BOMs can be used in all blind side applications.

Installations are more accurate than other fasteners, because the element of human error is not an issue. In other words, correct installation doesn't depend on operator skill or specialized tools. In addition, you can often start using BOM fasteners immediately with your current tools, saving you more money in the long run.

BOM Benefits

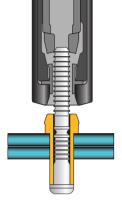
- Unmatched installation speed
- Low overall installed cost
- Vibration resistance
- Quiet non-torque tools
- No repetitive stress injuries
- Eliminates need for secondary operations
- No special training or skills required for operators





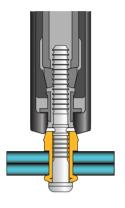
Installation Sequence

1



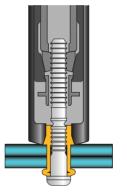
Insert the fastener into the hole and slip the installation tool over the pintail.

2



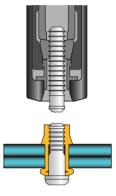
Press the trigger to initiate pulling action. As the tool pulls on the pintail, the unique collar design "stands off" the swaging action until the maximum allowable bulb is formed on the backside.

3



Continued pulling on the pintail draws the work pieces together and the swaging anvil overcomes releases the puller to complete the standoff and moves down the length of the collar, securely locking the collar to the pin.

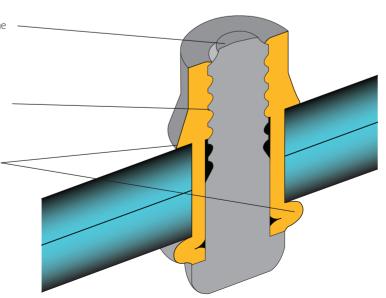
4



Once the collar is swaged, the tool ejects the fastener and the sequence.

Secure, Fast Installation

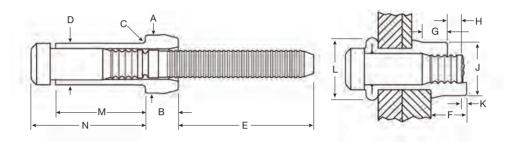
- 1. When the pin separates near flush, the BOM fastener is installed correctly. The BOM fastener does not require surface preparation, grinding or filling after installation.
- 2. The collar is locked to the pin through the "swaging" process, creating a high vibration resistant connection and the highest strength of any blind fastener.
- 3. Large bearing area on both sides of the work piece ensures a permanently held, tamper resistant joint.





Data and Dimensions

Small Diameter Bullet Head Blind Rivet



Dimensiona	Dimensional Data										
DIA.	DIA	Hole Size	А	В	СМах	D	EMIN				
3/16″	(6)	.208222	0.276-0.286	0.152-0.168	0.015	0.196-0.206	0.785				
1/4″	(8)	.277292	0.368 - 0.380	0.205 - 0.225	0.020	0.262 - 0.275	0.860				
5/16″	(10)	.348368	0.468 - 0.478	0.266-0.278	0.025	0.332-0.346	1.285				
3/8″	(12)	.413435	0.553-0.563	0.315 - 0.327	0.030	0.393-0.411	1.230				
1/2″	(16)	.546581	0.740-0.755	0.415 - 0.438	0.035	0.529-0.544	1.530				
5/8″	(20)	.687728	0.925 - 0.941	0.507 - 0.545	0.040	0.662 - 0.685	1.710				
3/4"	(24)	.828873	1.110 - 1.130	0.637 - 0.654	0.050	0.795 - 0.816	2.150				

Inspection Data										
DIA.	FNom	G Min	НМах	JMax	КМах	LNom				
3/16″	0.177	0.109	0.094	0.261	0.031	0.306				
1/4″	0.232	0.156	0.094	0.346	0.031	0.405				
5/16″	0.300	0.187	0.171	0.434	0.046	0.517				
3/8″	0.360	0.203	0.171	0.510	0.046	0.605				
1/2″	0.475	0.297	0.171	0.686	0.063	0.841				
5/8″	0.595	0.406	0.313	0.874	0.078	1.038				
3/4"	0.722	0.438	0.313	1.027	0.078	1.267				

Installed Values in Nominal Grip (lbs.)						
Diameter	Shear	Tensile				
3/16″	2800	1800				
1/4″	5100	3250				
5/16″	8050	5200				
3/8″	11100	7250				
1/2″	20150	13000				
5/8″	28500	20500				
3/4″	45100	29100				

Note: These are minimum ultimate shear and tensile strengths, in pounds, of installed fastener, when tested in a grip equal to or greater than one and one half the fastener diameter.



	Grip No.	GRIP RANGE	М Мом	N Max		Grip No.	Grip Range	М Мом	N Max
	2	.093156	.376	.500		4	.188312	.766	.975
	3	.157219	.439	.562		6	.313437	.891	1.100
	4	.220281	.501	.625		8	.438562	1.016	1.225
	5	.282344	.564	.687		10	.563687	1.141	1.350
	6	.345406	.626	.750	12 (3/8")	12	.688812	1.266	1.475
6 (3/16")	7	.407469	.689	.812		14	.813937	1.391	1.600
. (.,	8	.470531	.751	.875		16	.938 - 1.062	1.516	1.725
	9	.532594	.814	.937		18	1.063 - 1.187	1.641	1.850
	10	.595656	.876	1.000		20	1.188 - 1.312	1.766	1.975
	11	.657719	.939	1.062		4	.251375	1.000	1.266
	12	.720781	1.001	1.125		6	.376500	1.125	1.391
	2	.093156	.460	.625		8	.501625	1.250	1.516
	3		.523	.688	16(1/2″)	10	.626750	1.375	1.641
		.157219				12	.751875	1.500	1.766
	4	.220281	.585	.750		14	.876-1.000	1.625	1.891
	5	.282344	.648	.813		16	1.001 -1.125	1.750	2.016
	6	.345406	.710	.875		18	1.126-1.250	1.875	2.141
	7	.407469	.773	.938		20	1.251 -1.375	2.000	2.266
8 (1/4")	8	.470531	.835	1.000		22	1.376 - 1.500	2.125	2.391
	9	.532594	.898	1.063		24	1.501 - 1.625	2.250	2.516
	10	.595656	.960	1.125		4	.251500	1.213	1.531
	11	.657719	1.023	1.188		8	.501750	1.463	1.781
	12	.720781	1.085	1.250	20 (5/8″)	12	.751 -1.000	1.713	2.031
	13	.782843	1.147	1.313		16	1.001 - 1.250	1.963	2.281
	14	.844905	1.209	1.375		20	1.251 -1.500	2.213	2.531
	4	.188312	.695	.875		4	.251500	1.380	1.750
	5	.250375	.758	.938		8	.501750	1.630	2.000
	6	.313437	.820	1.000		12	.751 -1.000	1.880	2.250
	8	.438562	.945	1.125		16	1.001 - 1.250	2.130	2.500
10 (5/16")	10	.563687	1.070	1.250	24(3/4″)	20	1.251 - 1.500	2.380	2.750
	12	.688812	1.195	1.375		24	1.501 - 1.750	2.630	3.000
	14	.813937	1.320	1.500		28	1.751 - 2.000	2.880	3.250
						32	2.001 - 2.250	3.130	3.500
	16	.938 - 1.062	1.445	1.625		36	2.251 - 2.500	3.380	3.750





BOM Installation Tooling

Installation Tools										
	Pneudrai	JLIC TOOLS			HydraulicTools					
Tool Model	Tool Model Size* 254 256			2480	2581	2600	2624	2624 PTD	3585	
Nose Assembly	3/16″	99-1053	99-1053	99-994	99-1053					
	1/4″	99-830-1	99-830-1		99-830-1					
	5/16″		99-769		99-769**	99-3119				
	3/8″		99-1272*			99-3122				
	1/2″						99-5107	99-5106	99-5107	
	5/8″						99-5102		99-5102	
	3/4″								99-5103	

^{*} Use only in very low volume repair applications.

^{**} Requires 123634-2580 steel deflector



Tooling Weight and Dimensions									
Model	Түре	Weight	Length	Неіднт	Width				
254	Pneudraulic	8.67	8.0	14.9	5.2				
256	Pneudraulic	11.1	7.9	14.9	6.3				
2480	Hydraulic	2.2	8.2	6.6	1.9				
2581	Hydraulic	6.6	8.5	7.3	2.2				
2600	Hydraulic	7.3	9.5	7.9	2.7				
2624	Hydraulic	17.4	7.4	7.7	3.5				
2624 PTD	Hydraulic	17.4	13.02	7.7	3.5				
3585	Hydraulic	19	7.9	11.3	2				



Ordering Information

Follow the form below to construct a part number for ordering Huck BOM blind fasteners. Refer to the Grip Data chart for grip numbers.

Ordering Information

BOM-R (DIAMETER) - (GRIP NUMBER)

Example: BOM-R8-6 is a BOM blind rivet, Steel, 1/4" Diameter, Grip 6.

Material	Code
Steel	R

Diameter	Code
3/16″	6
1/4″	8
5/16″	10
3/8″	12
1/2″	16
5/8″	20
3/4″	24

Materials and Finishes										
Material	Sleeve	Pin	*Sleeve Finish	*Pin Finish						
Steel	Low Carbon Steel	MEDIUM CARBON STEEL	ZINC PLATED CLEAR CHROMATE	BLACK OIL						

^{*} Optional coatings available



Arconic Fastening Systems











Arconic Inc. (NYSE: ARNC) creates breakthrough products that shape industries, providing solutions to complex engineering challenges to transform the way we fly, drive, build, and power. Combining ingenuity and advanced manufacturing, we deliver products that meet the challenges and demands faced by our customers.

Arconic Fastening Systems, formerly Alcoa Fastening Systems & Rings, is a global leader in fastening technology. Offering the greatest breadth and depth of fastening system solutions in the industry, Arconic continues to reflect the same commitment to product quality and support that customers have come to expect. To serve its growing market, Arconic Fastening Systems maintains corporate offices worldwide. In addition, Arconic distributors are located in many key industrial centers throughout the world, providing a ready supply of fasteners, installation tools, tool parts, and application assistance.

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