

Magna-Grip® Lockbolt

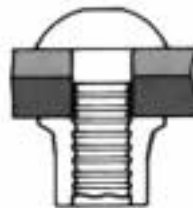
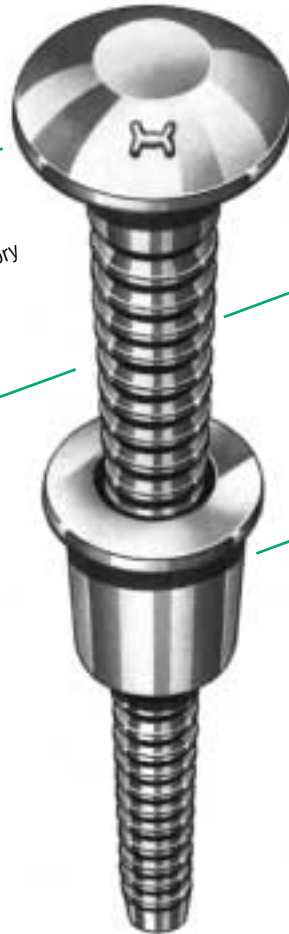
A unique two piece fastener, with a wide grip range and high resistance to vibratory loosening, that breaks flush with the collar every time. Available in diameters from 3/16" (4.8mm) - 3/4" (19.1mm) with a wide variety of head styles and finishes.

Wide Grip and Diameter range Available
High cost savings due to lower inventory part no's and stock levels.

Swaged Collar/Lock Groove Design
Ensures consistent uniform results with vibration resistance.

Fast East Installation
Reduces error and rework. Increased productivity without skilled labour.

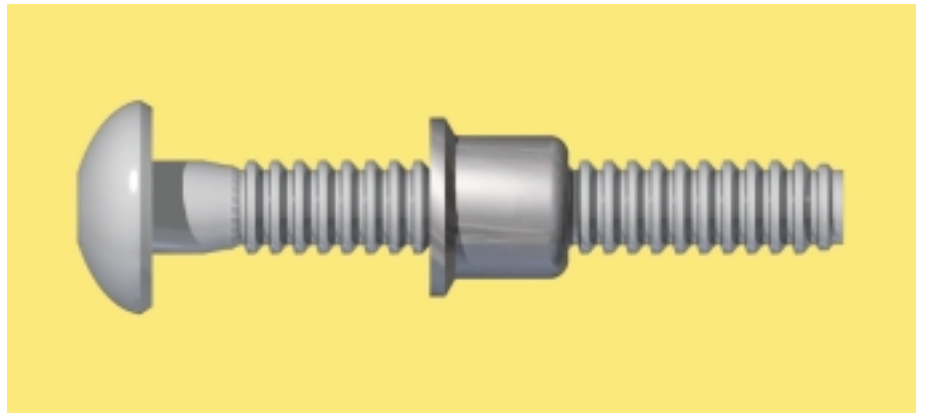
Visual Inspection
No need to x-ray welds, or check torque. Saves time and cost.



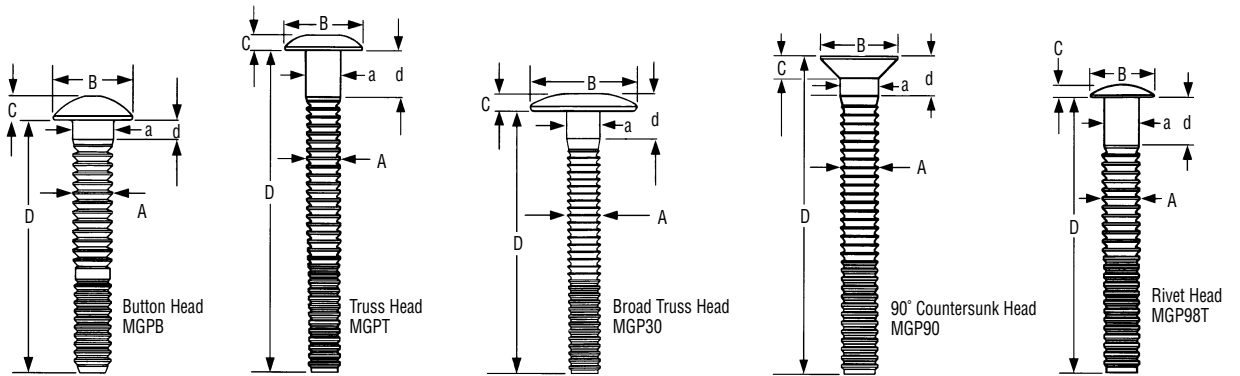
APPLICATIONS

- Sheet Metal Fabrication
- Trucks and Trailers
- Buses
- Mining Equipment
- Railcars and Waggons
- Containers
- Heating Ventilation and Air Conditioning
- Electrical Equipment

Magna-Grip® Lockbolt 4.8 - 9.5mm



MAGNA-GRIP® Lockbolt 4.8 mm (3/16"), 6.4 mm (1/4"), 7.9 mm (5/16"), 9.5 mm (3/8") Diameters



Button Head - MGPB

Nom. Dia.	Grip No.	Grip Range		Max Hole Dia	Fastener Dimension		C	D ^{Steel}	a Ref	d Ref	Minimum Installed Values (N)			Tensile Steel		Alum	
		Min	Max		A	B					Steel	Alum	Shear Steel	Alum	Steel	Alum	
4.8 mm (3/16")	10	1.57	15.88	5.16	4.65-4.75	9.04-10.01	2.87-3.18	45.42	4.85-4.95	2.62-3.18	4110	2450	7670	3340	6230	4000	4000
	20	7.92	31.75	5.16	4.65-4.75	9.04-10.01	2.87-3.18	60.20	4.85-4.95	7.72-8.13	4110	2450	7670	3340	6230	4000	4000
6.4 mm (1/4")	10	1.57	15.88	6.73	6.22-6.32	12.07-13.34	3.45-3.86	49.91	6.35-6.58	2.77-3.58	5340	4230	9790	5340	11340	7210	7210
	20	7.92	31.75	6.73	6.22-6.32	12.07-13.34	3.45-3.86	65.02	6.35-6.58	7.49-8.36	5340	4230	9790	5340	11340	7210	7210
7.9 mm (5/16")	12	3.18	19.05	8.33	7.80-7.90	15.09-16.66	4.60-5.11	59.44	6.96-7.19	6.38-Max	9560	7120	13340	9790	17390	11120	11120
	22	15.88	34.93	8.33	7.80-7.90	15.09-16.66	4.60-5.11	72.14	8.05-8.18	14.20-15.01	9560	7120	13340	9790	17390	11120	11120
9.5 mm (3/8")	14	3.18	22.23	9.91	9.37-9.53	18.11-19.99	5.66-6.30	73.03	9.65-9.78	4.37-5.18	14230	10680	18680	13340	25020	17790	17790
	26	20.62	41.28	9.91	9.37-9.53	18.11-19.99	5.66-6.30	88.90	9.65-9.78	20.17-20.98	14230	10680	18680	13340	25020	17790	17790

Truss Head - MGPT

6.4 mm (1/4")	10	1.57	15.88	6.73	6.22-6.32	13.49-15.09	2.62-2.92	49.91	6.35-6.58	2.77-3.58	5340	4230	9790	5340	11340	7210	7210
	20	7.92	31.75	6.73	6.22-6.32	13.49-15.09	2.62-2.92	65.02	6.35-6.58	7.49-8.36	5340	4230	9790	5340	11340	7210	7210
7.9 mm (5/16")	12	3.18	19.05	8.33	7.80-7.90	17.86-20.24	3.23-3.58	59.44	6.96-7.19	6.99-7.11	9560	7120	13340	9790	17390	11120	11120
	22	15.88	34.93	8.33	7.80-7.90	15.09-16.66	3.23-3.58	72.14	8.05-8.18	13.54-14.40	9560	7120	13340	9790	17390	11120	11120
9.5 mm (3/8")	14	3.18	22.23	9.91	9.37-9.53	21.03-23.42	3.86-4.27	73.03	9.65-9.78	4.37-5.18	14230	10680	18680	13340	25020	17790	17790
	26	20.62	41.28	9.91	9.37-9.53	18.11-19.99	3.86-4.27	88.90	9.65-9.78	20.17-20.98	14230	10680	18680	13340	25020	17790	17790

Broad Truss Head - MGP30

6.4 mm (1/4")	10	3.96	15.88	6.73	6.22-6.32	*	3.51-4.11	49.91	6.35-6.58	2.77-3.58	5340	4230	9790	5340	11340	7210	7210
	24	15.88	38.10	6.73	6.22-6.32	*	3.51-4.11	71.37	6.35-6.58	13.87-14.68	5340	4230	9790	5340	11340	7210	7210
9.5 mm (3/8")	24	15.88	38.10	9.91	9.37-9.53	30.18-31.75	4.78-5.38	85.73	9.65-9.78	16.87-17.68	14230	10680	18680	13340	25020	17790	17790
	32	28.58	50.80	9.91	9.37-9.53	30.18-31.75	4.78-5.38	85.73	9.65-9.78	29.57-30.38	14230	10680	18680	13340	25020	17790	17790

90° Countersunk Head - MGP90

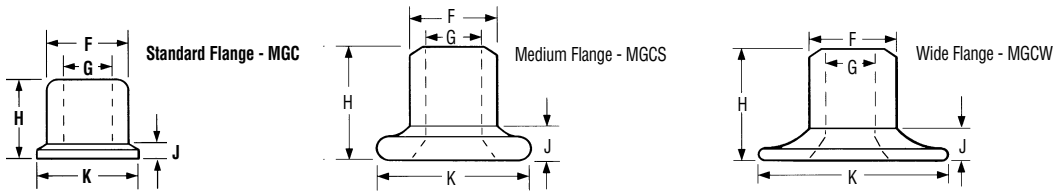
4.8 mm (3/16")	10	1.57	15.88	5.16	4.65-4.75	8.20-9.12	2.34-2.59	45.42	4.85-4.95	8.94-Max.	4110	2450	7670	3340	6230	4000	4000
	20	7.92	31.75	5.16	4.65-4.75	8.20-9.12	2.34-2.59	60.20	4.85-4.95	7.49-8.36	4110	2450	7670	3340	6230	4000	4000
6.4 mm (1/4")	10	1.57	15.88	6.73	6.22-6.32	11.00-12.14	3.02-3.25	49.91	5.51-5.74	9.60-Max.	5340	4230	9790	5340	11340	7210	7210
	20	7.92	31.75	6.73	6.22-6.32	11.00-12.14	3.02-3.25	65.02	6.35-6.58	7.49-8.36	5340	4230	9790	5340	11340	7210	7210
7.9 mm (5/16")	12	3.18	19.05	8.33	7.80-7.90	13.77-15.09	3.28-3.61	59.44	6.99-7.11	10.46-Max	9560	7120	13340	9790	17390	11120	11120
	22	15.88	34.93	8.33	7.80-7.90	13.77-15.09	3.28-3.61	72.14	8.05-8.18	14.20-15.01	9560	7120	13340	9790	17390	11120	11120
9.5 mm (3/8")	14	6.35	22.23	9.91	9.37-9.53	16.54-18.14	4.52-4.95	73.03	8.56-8.69	11.25-Max	14230	10680	18680	13340	25020	17790	17790
	26	20.62	41.28	9.91	9.37-9.53	16.54-18.14	4.52-4.95	88.90	9.65-9.78	20.14-21.01	14230	10680	18680	13340	25020	17790	17790

Rivet Head - MGP98T

4.8 mm (3/16")	10	1.57	15.88	5.16	4.65-4.75	11.43-12.40	2.31-2.67	45.42	4.85-4.95	1.98-2.44	4110	2450	7670	3340	6230	4000	4000
	20	7.92	31.75	5.16	4.65-4.75	11.43-12.40	2.31-2.67	60.20	4.85-4.95	7.70-8.15	4110	2450	7670	3340	6230	4000	4000

* Steel 23.8 Aluminium 27.0

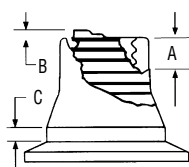
Collars



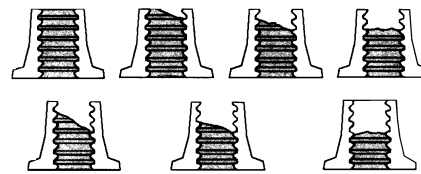
Collar Dimensions

Collar	Diameter	F	G	H	J	K
MGC	4.76 mm (3/16")	7.85-7.92	4.83-4.93	6.86-7.11	1.07-1.27	9.35-9.70
	6.35 mm (1/4")	10.24-10.31	6.40-6.48	9.40-9.65	1.45-1.70	12.45-12.95
	7.94 mm (5/16")	12.78-12.88	7.98-8.08	10.97-11.28	1.80-2.13	15.54-16.18
	9.53 mm (3/8")	15.37-15.47	9.60-9.70	12.70-12.95	2.24-2.49	18.80-19.30
MGCS	4.76 mm (3/16")	7.82-8.00	4.80-4.95	7.37-8.13	2.16-2.79	12.70-13.46
MGCW	4.76 mm (3/16")	7.80-7.98	4.67-5.00	7.82-9.09	1.98-2.97	16.26-19.38
	6.35 mm (1/4")	10.24-10.41	6.40-6.48	10.97-11.73	2.92-3.68	21.72-25.40

Inspection Data



Nom. Dia.	A (max)	B (max)	C (max)
4.8 mm (3/16")	1.6 mm (1/16")	0.8 mm (1/32")	1.27 mm (1/2")
6.4 mm (1/4")	3.2 mm (1/8")	0.8 mm (1/32")	2.54 mm (1")
7.9 mm (5/16")	4.8 mm (3/16")	3.6 mm (9/64")	2.54 mm (1")
9.5 mm (3/8")	6.4 mm (1/4")	4.4 mm (11/64")	2.54 mm (1")



Acceptable Fractures - Substantially flush with end of collar up to maximum of two lock witness marks within collar.
 Unacceptable Fractures - Three witness marks within collar.

How to Order

Magna-Grip Pins Follow the form below to construct a part number for ordering Magna-Grip pins. Refer to the grip data chart.

MGP (HEAD STYLE) - (MATERIAL) (DIAMETER) - (GRIP RANGE) (FINISH)

Example: **MGPB-R6-10** is a Magna-Grip Button Head Pin, Carbon Steel, 4.8mm (3/16") Diameter, Grip Range .062"-.625", No Finish.

Pin	Head Style	Material	Diameter	Grip	Finish
Magna-Grip	MGP	Carbon Steel	4.8mm (3/16")	6	Zinc Clear Chromate G
Pin	-	7075-T6 Alum.	6.4mm (1/4")	8	No Plate Blank
	Broad Truss		7.9mm (5/16")	10	
	90° Countersunk		9.5mm (3/8")	12	
	Rivet				

Magna-Grip Collars Follow the form below to construct a part number for ordering collars for Magna-Grip pins.

MG (BASE STYLE) - (MATERIAL) (DIAMETER) (FINISH) (OPTIONS)

Example: **MGC-F12GL** is a Standard Flange, Aluminium, 9.5mm (3/8") Diameter, Zinc Chromate Colourless Finish, Tab-Lok Option.

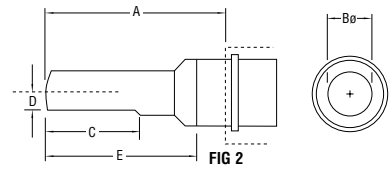
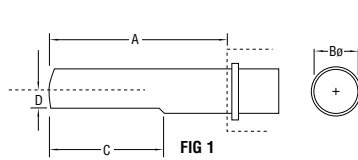
Pin	Head Style	Material	Diameter	Finish	Options
Magna-Grip	MG	Carbon Steel	4.8mm (3/16")	Zinc Chrom., Gold U	Tab-Lok L
Collar	-	6061 Alum.	6.4mm (1/4")	Zinc Chrom.,	
	Wide Flange		7.9mm (5/16")	Clear G	
	No Flange		9.5mm (3/8")		

Magna-Grip® 4.8, 6.4, 7.9, 9.5mm Installation Tooling

Huck Installation Tools

Huck installation tools consist of a nose assembly and a tool. The choice of tool and nose assembly is determined by the fastener diameter and application. Tools and nose assemblies are easily changed as installation requirements demand.

Huck offers pneumatic and hydraulic installation tools. Pneumatic tools operate on 6.2-6.9 bar (90-100 psi) air pressure. The lighter weight hydraulic tools operate on hydraulic power supplied by a Huck POWERIG®, Hydraulic Unit.



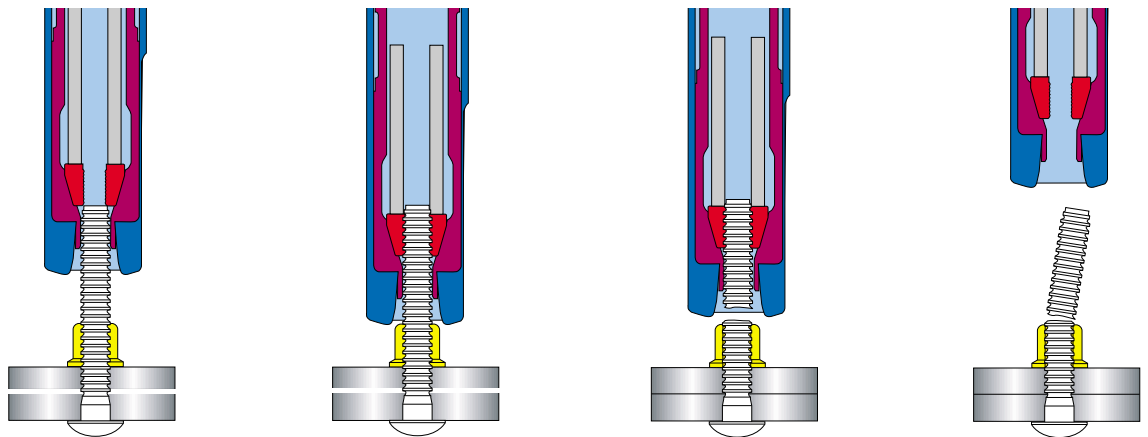
Code	Diameter	Nose Ass.	Fig.	A mm	B mm	C mm	D mm	E mm	Pneumatic Tooling	Hydraulic Tooling
6	4.8 mm (3/16")	99-3200	1	21.6	19.1	-	-	-	2025 / 2025V / LH-224	2480
		99-1456	1	48.7	18.8	-	-	-	2025 / 2025V / LH-224	2480
		99-1456L	1	48.7	18.8	-	-	-	2025L	2480L
		99-3202	1	150.3	19.1	-	-	-	2025 / 2025V / LH-224	2480
		99-3206	2	91.0	19.1	-	-	74.2	245 / 246 / 255 / 256	2503 / 2580
8	6.4 mm (1/4")	99-3203	1	26.7	19.1	-	-	-	2025 / 2025V / LH-224	2480
		99-1458	1	50.1	19.1	-	-	-	2025 / 2025V / LH-224	2480
		99-1458L	1	50.1	19.1	-	-	-	2025L	2480L
		99-3205	1	152.6	19.1	-	-	-	2025 / 2025V / LH-224	2480
		99-3207	2	92.5	18.8	-	-	78.9	245 / 246 / 255 / 256	2503 / 2580
10	7.9 mm (5/16")	99-1439	1	71.1	27.9	50.8	12.5	245 / 246 / 255 / 256	2503 / 2580	
12	9.5 mm (3/8")	99-1440	1	72.9	27.7	50.8	12.7	245 / 256	2503 / 2580	

Items in **bold** are part of our FOCUS Tooling Range

Note: Other tool and nose assembly combinations may be available for specific applications. Please contact Huck for details.

Installation Tooling

Installation Sequence



[Click Here to view animation of installation sequence](#)