

marson TABLE OF CONTENTS

PRODUCT	PAGE
Rivet Fastening System — Here's Why	3
Rivet Fastening System — Here's How	
Rivet Fastening System — Here's Where	3
Klik-Fast Hand Rivet Tools	
Heavy-Duty Hand & Air/Hydraulic Tools	
Klik-Fast Lightweight BZ Series	
Air/Hydraulic Rivet Tools Specifications	
Klik-Fast Rivet Tool Nosepieces and Back-up Washers	
Klik-Fast Riveter Capacity Chart	
How to Select the Correct Klik-Fast Rivet	
Actual Size Rivet Chart	
Rivet Code Explanation	10
Klik-Fast Rivet Specifications: Plated Steel Rivet/Coated Steel Mandrel	10
Aluminum Rivet/Aluminum Mandrel	
Aluminum Rivet/Coated Steel Mandrel	
Copper Rivet/ Copper Plated Steel Mandrel	
Stainless Steel Rivet/Stainless Steel Mandrel	
Stainless Steel Rivet/Coated Steel Mandrel	
Aluminum Rivet/Coated Steel Mandrel	
Klik-Lok Plastic Rivets	
Special Application Rivets	
Actual Size Plastic Rivet Chart	
Klik Thread Setter Threaded Insert System	17
How to Install Klik Threaded Inserts	
Klik-Fast Thread Setter Tools	18
Air/Hydraulic Thread Setter Tool	
Rivet-Nut/Poly-Nut Thread Size, Shear & Tensile Strength	19
Klik Rivet-Nut Specifications	
Klik Poly-Nut Specifications	
Important Blind Rivet Considerations	
Application Assistance Form	
Decimal Equivalents of Standard Sheet Aluminum and Steel Gauges	
Inch-Metric Conversion Table	23

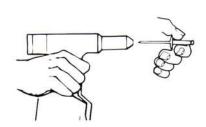
THE PREFERRED FASTENING SYSTEM VINGISON

HERE'S WHY

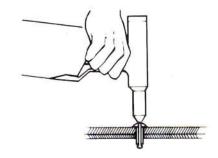
- Low in-place cost because of the ease and speed of installation.
- · No special skills required.
- For blind side applications, and where both sides of work are accessible.
- Vibration Resistant. Klik-Fast Rivets will not back out or loosen as can threaded fasteners.
- Tamper Resistant. Klik-Fast Rivets discourage unauthorized dismantling of signs, panels, assemblies, etc.

- Low Head Profile provides a snag-free smooth appearance.
- Will not mar painted or other finished surfaces.
- Provides secure fastening of thin and thick applications and hard and soft materials.
- Eliminates thread strip-out.
- Versatile. Klik-Fast Rivets available in a wide range of diameters, lengths, alloys, and head styles. Special sizes/styles available upon request.

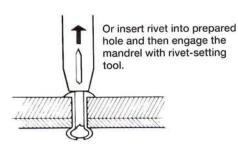
HERE'S HOW



Insert rivet mandrel in rivet setting tool.

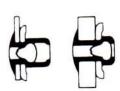


2. Using tool as a guide, insert rivet into prepared hole.



 Squeeze trigger or handles to set rivet. Mandrel ejects after rivet is set.

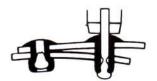
HERE'S WHERE



One Length Handles Both



Hollow Extrusions and Tubes



High Grip Strength No Surface Distortion



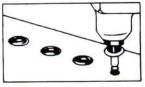
For Hard and Soft Materials



Vibration and Tamper Resistant



High Strength



No Marred Surfaces



Low-Profile Heads

Marson KLIK-FAST HAND RIVET TOOLS

HP-28/39000

Features to look for in a well designed, industrial quality Hand Riveter:

- Precision die cast body of high strength aluminum alloy.
- A steel insert into which the working nosepiece is screwed.
- 3. A fulcrum pin that cannot rotate.
- 4. Heat treated carbon steel upper handle.
- 5. Long life jaws.

HERE'S WHY

Even in high strength aluminum alloy, the threads into which the working nosepiece is screwed are not strong enough to resist the pulling force of repeated rivet setting, or the excessive torque often applied when tightening nosepieces. The HP-2 has a special steel insert which eliminates these problems common in many imitation tools. A fulcrum pin that rotates during rivet setting will elongate the engaging holes in the aluminum body causing premature and expensive tool failure. Marson's HP-2 has a unique cold formed, heat treated steel fulcrum pin with a square shoulder which fits into a square hole in the aluminum body. THE FULCRUM PIN CANNOT ROTATE. The opposite end passes through a heat treated steel bushing that also fits into a square hole.

These engineered features plus long-life jaws and heat treated carbon steel upper handles combine to assure professional quality riveting tools that are often copied in appearance, but never equaled in durability and performance.



200KIT/39001

Handsomely packaged in a durable case, the 200KIT contains the HP-2 rivet tool, 200 assorted Klik-Fast rivets in popular sizes. Weight: 4 lbs.



Kliker II/39040



The perfect medium duty tool. Sets all $\frac{1}{8}$ " to $\frac{5}{2}$ " steel, and $\frac{3}{16}$ " all aluminum Klik-Fast rivets. Rivets are automatically held in the Kliker II regardless of the angle of the tool. Packaged in a pouch with an assortment of Klik-Fast rivets and washers.

Packaged six per case. Weight: 1 lb.

Big Daddy®/39031

Marson's Big Daddy™ has a steel insert cast into the aluminum body to provide stronger threads for the nosepieces listed. Reduction gear design, high strength alloys and long handles provides easy installation of Klik-Fast Rivets through the 1/4" diameter size in all alloys. A one piece collet case eliminates the need to adjust the tool when changing rivet diameters. Spare nosepieces are stored in the single unit body construction. Nosepieces included are 5/32", 3/16", and 1/4". The 1/8" is nosepiece available upon request. Weight: 33/4 lbs.

NOTE: See page 8 for all standard and special nosepieces.

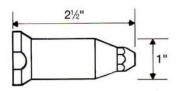
NEW: Adaptor Kit #39009

Big Daddy Head Extension Kit adds 21/2" in length of

head.



The Marson HP-7 is designed for setting rivets where accessibility is a problem. Sets 5/32", 3/16", and 1/4" diameter Klik-Fast rivets in all alloys. Included are 3/16" and 1/4" nosepieces and servicing wrench. Weight: 41/2 lbs.



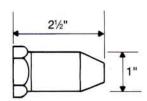
PHT-3/39016

This standard duty tool sets blind rivets from 1/8" diameter in all alloys, up to 3/16" all steel rivets. Standard 1/8" and 3/16" nosepieces, service wrenches, plastic bottle to catch ejected mandrels included. Adaptor Kit #95058 available for setting 3/32" rivets. Weight: 31/2 lbs.

NOTE: See page 8 for all standard and special nosepieces.



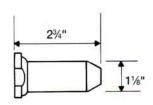




PHT-4/39017

This heavy duty tool sets Marson Klik-Fast rivets from 3/16" to 1/4" diameter in all alloys. Included are 3/16" and 1/4" nosepiece, service wrenches and plastic bottle to catch ejected mandrels. Weight: 51/2 lbs.

NOTE: See page 8 for all standard and special nosepieces.





MOTEON KLIK-FAST LIGHT WEIGHT BZ SERIES

MARSON BZ 10/BZ 10A

MARSON BZ 10 (95001)

Air-Hydraulic Rivet Tool.

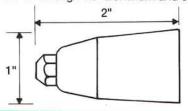
Manufactured from high impact-resistant materials. The BZ tool's comfortable grip and trigger allow the operator fatigue free operation for long production runs. Weighing only 2.5 lbs., this lightweight tool also allows for the air supply to be accessed from either side of tool for further operator ease and comfort.

MARSON BZ10A (95002)

With vacuum system.

With slight trigger pressure, the operator can hold rivet in nosepiece for placement directly into workpiece hole. Further pressure sets rivet, and again with another slight pressure actuates vacuum of mandrel into collection bottle.

Long lasting, lightweight, comfortable operation allows these tools to be used by any operator for long production runs without fatigue. New, state-of-the-art manufacturing design gives reliable trouble-free operation. Sets Klik-Fast rivets from 1/8" through 5/32" aluminum and steel.

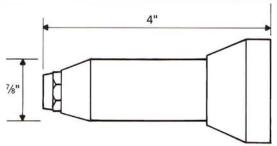




Weight: 2.5 lbs.

MARSON BZ 100/BZ 100A





MARSON BZ 100 (95003)

Air-Hydraulic Rivet Tool.

High impact-resistant materials, comfortable trigger and grip, and lightweight (4.3 lbs.) lessens operator fatigue and increases productivity. Air supply can be accessed from either side of tool base.

MARSON BZ 100A (95004)

With vacuum system.

The BZ 100A has all of the BZ 100 features and includes an adjustable air flow which allows for various size rivets to be held in the nosepiece by operator for one hand placement of rivet in workpiece. A vacuum system removes spent mandrels immediately after setting either into a collection bottle or by tube into a larger carrier. The vacuum system also allows collection of ¾6" diameter Monobolts® set with this unique high production tool. Sets all Klik-Fast rivets from ¾2" through ¾6" steel, and 5¾2" stainless.

Weight: 4.3 lbs.

AIR/HYDRAULIC RIVET TOOLS morson

MARSON BZ 120A

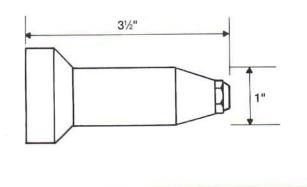
MARSON BZ 120A (95005)

Air-Hydraulic Rivet Tool.

Available only with vacuum system. This heavy duty production tool has adjustable air flow to hold rivet in nosepiece, allows air line access from either side of tool, and draws spent mandrels immediately into collection bottle or through collection tube. Lightweight (4.6 lbs.), and durable for heavy duty production use. This tool sets all Klik-Fast rivets from $^{5}\!\!\!/_{2}$ " diameter to $^{1}\!\!\!/_{4}$ " aluminum, steel and $^{3}\!\!\!/_{6}$ " stainless. The BZ 120A is also capable of setting $^{3}\!\!\!/_{6}$ " and $^{1}\!\!\!/_{4}$ " Monobolts.®



Weight: 4.6 lbs.



TOOL	WEIGHT	WORK FORCE	AVG. AIR CONSUMPTION	STROKE
PHT-3	3.3 lbs.	85 P.S.I./6 bar	.0097 cu. ft,/stroke	.437 incl
(39016)	1.5 kg	1,980 lbs./9,100 N		11 MM
PHT-4	4.8 lbs.	85 P.S.I./6 bar	.021 cu. ft./stroke	.625 incl
(39017)	2.1 kg.	3,120 lbs:/14.300 N		15.8 MM
BZ-10				
(95001)	2.5 lbs.	85 P.S.I./6 bar	.0054 cu, ft./stroke	.51 inch
BZ-10A	1.157 kg.	1,200 lbs./5,500 N		13 MM
(95002)				
BZ-100				States of
(95003)	4.3 lbs.	85 P.S.I./6 bar	.0117 cu. ft./stroke	.67 inch
BZ-100A	1.96 kg.	2,400 lbs./11,000 N		17 MM
(95004)				
BZ-120A	4.6 lbs.	85 P.S.I./6 bar	.019 cu. ft./stroke	.73 inch
(95005)	2.1 kg.	3,750 lbs./17,000 N		18.5 MM

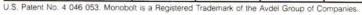
MOTEON KLIK-FAST RIVET TOOL ACCESSORIES

								•		K	LIK-	FAS	T® F	IVE	TER	CAP	ACIT	Y CH	ART					
RIVETER MODEL			STE	EL			ALI	ALL JMII					MIN	IUM L	/		STAII	NLES:	s	COPPER STEEL	MONO	BOLTS®	"T" R	IVETS
	3/32	1/8	5/32	3/16	1/4	3/32	1/8	5/32	3/16	1/4	3/32	1/8	5/32	3/16	1/4	3/32	1/8	5/32	3/16	1/8	3/16	1/4	3/16	1/4
KR-II/39040	•	•																						
HP-2/39000	•				1																			
BIG DADDY/39031					•																			_
HP-7/39007		•				ľ		•													-		1.7	
PHT-3/39016																			-					
PHT-4/39017										•														
BZ-10/95001	•		ı			•																-		150
BZ-10A/95002							•																	(e
BZ-100/95003																							172	
BZ-100A/95004																								
BZ-120A/95005																								

			HAND TO	OLS — STANDA	ARD NOSEPIEC	ES				
TOOL MODEL			SIZES			MONOBO	ILT® SIZES	"T" RIVET SIZES		
	3/32"	1/8"	5/32"	3/16"	1/4"	3/16"	1/4"	3/16"	1/4"	
HP-2 (39000)	39131	39128	39130	39129						
KR-II (39040)	39131	39128	39130	39129						
BIG DADDY (39031)		96024	96025	96026	96027	96031	96030	96029	96028	
HP-7 (39007)		PATILIO VISINI	97033	97013	97014			00020	30020	
			AIR/HYDRAUL	IC TOOLS — ST	ANDARD NOSE	PIECES				
PHT-3 (39016)	95058	97037	97033	97013				98124		
KLONG PHT-3 (39016)		97038	97039	97040		1		07670007650		
PHT-4 (39017)				98018	98017	98120	98119	98122	98121	
BZ 10 (95001)	95127	95133	95134				00110	00122	30121	
BZ 10A (95002)	95127	95133	95134							
BZ 100 (95003)	95127	95133	95134	95135		95141		95144		
BZ 100A (95004)	95127	95133	95134	95135		95141		95144		
BZ 120A (95005)			95112	95113	95115	95142	95143	95145	95146	

EXTRA LONG HAND TOOL NOSEPIECES											
TOOL MODEL	LENGTH			W 100 CO							
HP-2 (39000)	7/16"	39110									
KR-II (39040)	7/16"	39110									
HP-7 (39007)	9/16"	97038	97039	97040							

	ROU	ND AND SQUAR	E BACK-UP WASI	HERS	
CODE NO.	BULK NO.	PACKAGED NO.	MATERIAL	HOLE SIZE	DIAMETER
SS-3	50653	40653	STEEL	3/32*	1/2" SQ
SS-4	50654	40654	STEEL	1/8"	1/2" SQ
SS-6	50656	40656	STEEL	3/16"	1/2" SQ
SS-8	50658	40658	STEEL	1/"	3/8" RD
SS-10	50661	40661	STEEL	3/16"	1/2" RD
AS-8	50657	40657	ALUMINUM	1/8"	3/8" RD
AS-9	50659	40659	ALUMINUM	5/32"	7/16" RD
AS-10	50660	40660	ALUMINUM	3/16"	1/2" RD







Standard Nosepiece

Extra Long Nosepiece

Back-up washers are .056" thick. For use when fastening soft materials or to compensate for oversize holes where access to both sides of the work is possible.





Model D-120 Double Ended Drill — drills and countersinks in one operation. Double ended for extended life.

SELECT THE CORRECT KLIK-FAST RIVET \morson

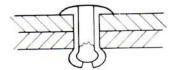
- 1. The shear and tensile strength of the rivet selected and the number of rivets used in the application should equal or exceed the joint strength requirements. Typical ultimate shear and tensile values of KLIK-FAST rivets are listed by rivet body diameter and by rivet body alloy on the specification pages starting on page 10.
- Determine the total material thickness to be joined. Refer to the GRIP RANGE column on the specification page, and select the rivet that equals or exceeds the application thickness. Note the rivet barrel length, Column L, is not the grip range.
- 3. The rivet body alloy, in addition to being chosen for strength requirements, should also be selected for compatibility with the materials to be joined to avoid galvanic corrosion caused by coupling dissimilar metals. If dissimilar metals are widely separated on the galvanic chart, it is advisable to separate them with a dialectric material such as paint or other coating.





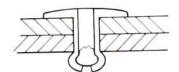


4. HEAD STYLES

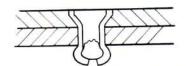


BUTTONHEAD KLIK-FAST RIVETS are the most popular for industrial applications. The low profile head diameter is twice the rivet body diameter, providing adequate bearing for nearly all applications.

1/4" dia. 6.4 mm

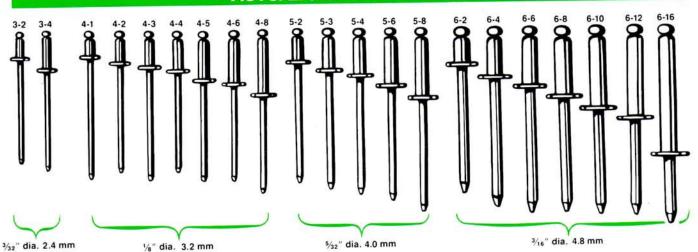


LARGE FLANGE KLIK-FAST RIVETS provide greater bearing surface for fastening soft and brittle facing materials such as plywood and plastics including neoprene, vinyl, etc.

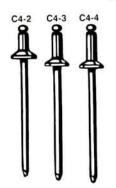


120° COUNTERSUNK KLIK-FAST RIVETS are for application where a flush appearance is required.

ACTUAL SIZE RIVET CHART



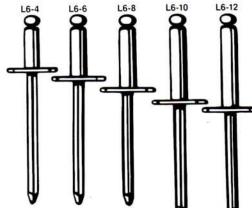




COUNTERSUNK RIVETS FOR JOBS WHICH REQUIRE A FLUSH SURFACE. D-120 DRILL MAKES HOLE AND COUNTERSINKS IN ONE OPERATION.



L4-3



LARGE FLANGE RIVETS FOR FASTENING SOFT OR BRITTLE TOP PANELS WHERE GREATER LOAD BEARING SURFACE IS NEEDED

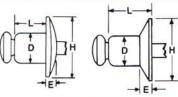
1/8" dia. 3.2 mm

1/8" dia. 3.2 mm

3/16" dia. 4.8 mm

KLIK-FAST RIVETS

BUTTONHEAD



ALUMINUM RIVET COATED STEEL MANDREL

KLIK-FAST	D		Н	E			GRIP	RANGE	TYPICAL	ULTIMATE
RIVET CODE	RIVET DIA. NOM. INCH	DRILL NO. & Hole Size	HEAD DIA. NOM. INCH	HEAD HEIGHT MAX.	RIVET I		annin jan			TH (LBS.)
NO.	(mm)	(mm)	(mm)	(mm)	INCH	(mm)	INCH	(mm)	SHEAR	TENSILE
AB3 - 2 AB3 - 4	³ / ₃₂ " (.094) 2.4	# 41 (.097100) 25 (2.46 - 2.54)	.188 4.78	.032 0.81	.250 .375	6.4 9.5	.032125 .126250	0.8 - 3.2 3.3 - 6.4	70 310	80 360
AB4 - 1 AB4 - 2 AB4 - 3 AB4 - 4 AB4 - 5 AB4 - 6 AB4 - 8	1/8" (.125)	# 30 (.129133) 3.3 (3.28 - 3.38)	.250 6.35	.040 1.02	.212 .275 .337 .400 .462 .525 .650	5.4 7.0 8.6 10.2 11.7 13.4 16.5	.032062 .063125 .126187 .188250 .251312 .313375 .376500	0.8 - 1.6 1.7 - 3.2 3.3 - 4.8 4.9 - 6.4 6.5 - 7.9 8.0 - 9.5 9.6 - 12.7	120 53 0	150 670
AB5 - 2 AB5 - 3 AB5 - 4 AB5 - 6 AB5 - 8	⁵ / ₃₂ " (.156)	# 20 (.160164) 4.1 (4.06 - 4.18)	.312 7,92	.045 1.14	.300 .362 .425 .550 .675	7.6 9.2 10.8 14.0 17.2	.062125 .126187 .188250 .251375 .376500	1.6 - 3.2 3.3 - 4.8 4.9 - 6.4 6.5 - 9.5 9.6 - 12.7	190 850	230 1020
AB6 - 2 AB6 - 4 AB6 - 6 AB6 - 8 AB6 - 10 AB6 - 12 AB6 - 16	³ / ₁₆ " (.187) 4.8	# 11 (.192196) 4.9 (4.88 - 4.98)	.375 9.53	.055 1.40	.325 .450 .575 .700 .825 .950 1.200	8.3 11.5 14.6 17.8 21.0 24.2 25.4	.062125 .126250 .251375 .376500 .501625 .626750 .751 - 1.00	1.6 - 3.2 3.3 - 6.4 6.5 - 9.5 9.6 - 12.7 12.8 - 15.9 16.0 - 19.1 19.2 - 25.4	260 1160	* 320 1420
AB8 - 4 AB8 - 6 AB8 - 8 AB8 - 12	1/4" (.250) 6.4	F (.257261) 6.5 (6.53 - 6.63)	.500 12.70	.074 1.88	.500 .625 .750 1.000	12.7 15.9 19.1 25.4	.062250 .251375 .376500 501750	1.6 - 6.4 6.5 - 9.5 9.6 - 12.7 12.8 - 19.1	580 2580	880 3910
LARGE	FLANGE									
ABL4 - 2 ABL4 - 3 ABL4 - 4	1/8" (.125) 3.2	# 30 (.129133) 3.3 (3.28 - 3.38)	.375 9.53	.045	.275 .337 .400	7.0 8.6 10.2	.032125 .126187 .188250	0.8 - 3.2 3.3 - 4.8 4.9 - 6.4	120 530	150 670
ABL6 - 4 ABL6 - 6 ABL6 - 8 ABL6 - 10 ABL6 - 12	³ / ₁₆ " (.187)	# 11 (.192196) 4.9 (4.88 - 4.98)	.625 15.88	.082 2.08	.450 .575 .700 .825 .950	11.5 14.6 17.8 21.0 24.2	.062250 .251375 .376500 .501625 .626750	1.6 - 6.4 6.5 - 9.6 9.6 - 12.7 12.8 - 15.9 16.0 - 19.1	260 1160	320 1420
120° CC	UNTERS	UNK							1	
AC4 - 2 AC4 - 3 AC4 - 4	1/8" (.125) 3.2	# 30 (.129133) 3.3 (3.28 - 3.38)	.236 5.99	.045	.275 .337 .400	7.0 8.6 10.2	.062125 .126187 .188250	1.6 - 3.2 3.3 - 4.8 4.9 - 6.4	120 530	150 670

#110 COPPER RIVET COPPER PLATED STEEL MANDREL

BUTTONHEAD

IFI GRADE 20

KLIK-FAST RIVETS conform to IFI-114 (inch) and IFI-505 (metric). Millimeters (mm) and newtons (N) are in blue.



KLIK-FAST RIVETS

1/8" (.125)

3/16" (.187)

4.8

SSBL4 - 3S

SSBL4 - 4S

SSBL6 - 4S SSBL6 - 6S

SSBL6 - 8S

SSBL6 - 10S

SSBL6 - 12S

BUTTONHEAD

30 (.129 - .133)

11 (.192 - .196)

4.9 (4.88 - 4.98)

.375

.625

15.88

.045

.082

BUTTONHEAD



STAINLESS STEEL RIVET STAINLESS STEEL MANDREL

IFI GRADE 51

420

950

1.6 - 6.4

530

1200

IFI GRADE 50

	D		Н	E			GRIP	RANGE	TYPICAL	ULTIMATE
KLIK-FAST RIVET CODE	RIVET DIA.	DRILL NO. & Hole Size	HEAD DIA. NOM. INCH	HEAD HEIGHT MAX.	RIVET L		annin ju			TH (LBS.) wtons)
NO.	(mm)	(mm)	(mm)	INCH (mm) INCH (mm)		INCH	(mm)	SHEAR	TENSILE	
SSB4 - 2S SSB4 - 3S SSB4 - 4S SSB4 - 6S SSB4 - 8S	1/8" (.125) 3.2	#30 (.129133) 3.3 (3.28 - 3.38)	.250 0.35	.040 1.02	.275 .337 .400 .525 .650	7.0 8.6 10.2 13.4 16.5	.063125 .126187 .188250 .313375 .376500	1.7 - 3.2 3.3 - 4.8 4.9 - 6.4 6.0 - 9.5 9.6 - 12.7	420 1870	530 2360
SSB5 - 2S SSB5 - 4S SSB5 - 6S	5/ ₃₂ " (.156) 4.0	#20 (.160164) 4,1 (4.06 - 4.18)	.312 7.92	.045 1.14	.300 .425 .550	7.6 10.8 14.0	.062125 .126250 .251375	1.6 - 3.2 4.9 - 6.4 6.5 - 9.5	650 2890	820 3650
SSB6 - 2S SSB6 - 4S SSB6 - 6S SSB6 - 8S SSB6 - 10S SSB6 - 12S	³ / ₁₆ " (.187)	# 11 (.192196) 4.9 (4.88 - 4.98)	.375 9.53	.055 1.40	.325 .450 .575 .700 .825 .950	8.3 11.5 14.6 17.8 21.0 24.2	.062125 .126250 .251375 .376500 .501625 .626750	1.6 - 3.2 3.3 - 6.4 6.5 - 9.5 9.6 - 12.7 12.8 - 16.8 16.0 - 19.1	950 4230	1200 5340
LARGE I	FLANGE									
SSRIA - 2S					275	7.0	.032125	0.8 - 3.2		

.337

.400

.450

.575

.700

.825

.950

STAINLESS STEEL RIVET COATED STEEL MANDREL

.126 - .187

.188 - .250

.062 - .250

.251 - .375

.376 - .500

.501 - .625

.626 - .750

.251 - .375

.376 - .500

.501 - .625

.626 - .750

SSB4 - 2 SSB4 - 3 SSB4 - 4 SSB4 - 6 SSB4 - 8	1/8" (.125) 3.2	#30 (.129133) 3.3 (3.28 - 3.38)	.250 6.35	.040 1.02	.275 .337 .400 .525 .650	7.0 8.6 10.2 13.4 18.5	063 - 125 .126 - 187 .188250 .313375 .376500	1.732 3.3 - 4.8 4.9 6.4 8.0 - 9.5 9.6 - 12.7	420 1870	530 2360
SSB5 - 2 SSB5 - 4 SSB5 - 6	5/ ₃₂ " (.156) 4.0	#20 (.160164) 4.1 (4.06 - 4.16)	.312 7.92	.045 1.14	.300 .425 .550	7.6 10.8 14.0	.062125 .126250 .251375	1.6 - 3.2 4.9 - 6.4 6.5 - 9.5	650 2890	820 3650
SSB6 - 2 SSB6 - 4 SSB6 - 6 SSB6 - 8 SSB6 - 10 SSB6 - 12	³ / ₁₆ " (.187) 4.8	# 11 (.192196) 4.9 (4.88 - 4.98)	.375 9.53	.055 1.40	.325 .450 .575 .700 .825 .950	8,3 11,5 14,0 17,8 21,0 24,2	.062125 .126250 .251375 .376500 .501625 .626750	1.6 - 3.2 3.3 - 6.4 6.5 - 9.5 9.6 - 12.7 12.8 - 15.9 16.0 - 19.1	950 4230	1200 534B
LARGE	FLANGE									
SSBL4 - 2 SSBL4 - 3 SSBL4 - 4	1/8" (.125) 3.2	# 30 (.129133) 3.3 (3.28 - 3,38)	.375 9.53	.045 1.14	.275 .337 .400	7.0 8.6 10.2	.032125 .126187 .188250	0.8 - 3.2 3.3 - 4.8 4.9 - 8.4	420 1870	530 2360
SSBL6 - 4					.450	11.5	.062250	1.6 - 6.4		

.575

.700

.825

.950

.082

.625

1200

950

12.8 - 15.9

SSBL6 - 6

SSBL6 - 8

SSBL6 - 10 SSBL6 - 12 ³/₁₆" (.187)

4.8

11 (.192 - .196)

4.9 (4.88 - 4.98)



KLIK-FAST RIVETS

CLOSED-END BUTTONHEAD - HOLLOW CORE



ALUMINUM RIVET COATED STEEL MANDREL

I GRADE 19

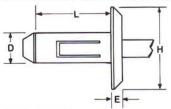
KLIK-FAST	D		н	E	L	GRIP RANGE		GHADE
RIVET CODE NO.	RIVET DIA. NOM. INCH	DRILL NO. AND HOLE SIZE	HEAD DIA. NOM. INCH	HEAD HEIGHT	RIVET LENGTH		TYPICAL ULTIMAT STRENGTH (LBS.	
110.		HOLL SIZE	INCH	NOM.INCH	MAX.INCH	INCH	SHEAR	TENSILE
AB4 - 1CLD					.256	.032062		
AB4 - 2CLD		***		1 1	.315	.063125		
AB4 - 3CLD	1/8" (.125)	#30	.236	.040	.374	.126187	240	280
AB4 - 4CLD		(.129133)			.433	.188250	the start	1.55.51
AB4 - 5CLD					.492	.251315		
AB5 - 2CLD		0.22			.315	.063125		
AB5 - 3CLD	5/32" (.156)	#20	.312	.060	.374	.126187	350	480
AB5 - 5CLD		(.160164)			.492	.188312	3.00	
AB6 - 2CLD					.315	.063125		
AB6 - 4CLD	1,-	www		1 1	.433	.126250		
AB6 - 6CLD	3/16" (.187)	#11	.375	.070	.551	.251375	500	690
AB6 - 8CLD		(.192196)			.709	.376500		
AB6 - 10CLD					.827	.500625		
AB8 - 4CLD	1/4" (.250)	E	.500	000	.492	.062250	201	
AB8 - 6CLD	74 (.250)	(.257261)	.500	.090	.630	.251375	900	1100

- Closed-end hollow core rivets have 100% mandrel head retention.
- Closed-end hollow core rivets are moisture resistant.
- Closed-end hollow core rivets have increased shear and tensile strength over open-end rivets of similar sizes and materials.



KLIK-LOK PLASTIC RIVETS morson

KLIK-LOK™ PLASTIC RIVETS



KLIK-LOK	D	With the Lot	Н	E	THE RESERVE	GRIP RANGE	10 15	
RIVET	RIVET DIA. NOM.	HOLE SIZE	HEAD DIA. NOM.	HEAD HEIGHT	RIVET LENGTH		STRENGTH (LBS.)	
NO.	INCH	(MM)	INCH	NOM.INCH	MAX.INCH	INCH	SHEAR	TENSILE
58105	.195	.197(5)	.472	.130	.728	.059177	68	120
58106	.195	.197(5)	.472	.071	.787	.118236	68	120
58107	.195	.197(5)	.472	.071	.787	.118177	68	120
58108	.195	.197(5)	.472	.071	.984	.236394	68	120
58149	.246	.250 (6.3)	.669	.098	.709	.157236	121	194
58150	.246	.250 (6.3)	.669	.098	1.102	.157394	121	194
58151	.246	.250 (6.3)	.512	.098	1.102	.157394	121	194
58185	.258	260 (6.6)	.512	.098	.787	.098197	137	219
58186	.258	260 (6.6)	.709	.098	.787	.098197	137	219

Klik-Lok Plastic Rivets are made from precision-molded nylon. Besides being designed as original equipment for GM, Ford, Chrysler and replacement parts, plastic rivets have many uses, especially in non-conductive and non-corrosive environments. When set, the rivet forms three legs that compress against blind side of work.

Klik-Lok Plastic Rivet Setter/48000



Delivers extra long pulling stroke needed to set plastic rivets. Steel construction and full-sized handles for smooth, easy operations. Packed in reusable pouch.

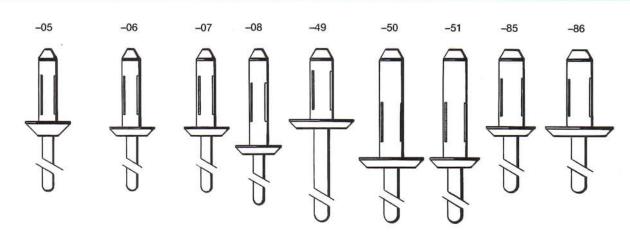
Klik-Lok Plastic Rivet Kit/48001





Includes Plastic Rivet Setter 48000 and package of each of the four most popular rivet sizes. A reclosable carton provides storage for rivets and tool.

ACTUAL SIZE RIVET GUIDE





SPECIAL APPLICATION RIVETS

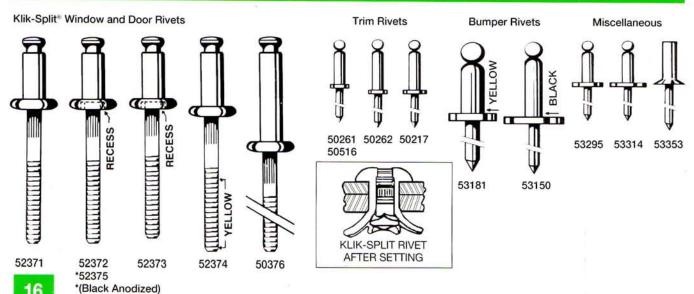
ALL RIVETS CONFORM TO IFI STANDARDS FOR STRENGTHS AND TOLERANCES

PART NUMBER	BULK QTY.	DESCRIPTION	GRIP RANGE	MATERIALS Body/Mandrel	RIVET DIA. NOM.	FLANGE DIA. NOM.	HOLE DIAMETER RANGE	500 PK. NUMBER	APPLICATIONS					
TRIM RIVETS														
50217	10M	Trim Channel Rivet	.188250	Alum/Alum	.125	.250	.129133	40217	(AB4-4A)					
50261*	10M	Trim Moulding Rivet	.126187	Alum/Alum	.125	.208	.129133	40261	(ABN4-3A)					
50262*	10M	Long Trim Moulding Rivet	.188250	Alum/Alum	.125	.208	.129133	40262	(ABN4-4A)					
50516*	10M	Trim Moulding Rivet w/SS Body	.126187	SS/Steel	.125	.208	.129133	40516	(SSBN4-3)					

^{*}Use 39112 Trim Clip Rivet Nosepieces with HP-2 or Kliker Riveter to form trim clip studs with 50261; 50262; 50516 rivets.

			KLIK-SPLIT®	WINDOW AND DO	OR RIVET	S			
		REQUIRES NOSEPIECE #9	6028 WHEN L	ISING THE MARS	ON BIG DA	DDY* (39	031) HAND TO	OL	
52371	2M	Window Regulator Rivet	.032140	Alum/Steel	.250	.500	.257261	NA	GM 9436175 Ford 385189 Chry 6031115
52372	2M	Outside Door Handle Rivet with recessed head	.090115	Alum/Steel	.250	.500	.257261	NA	Ford 388047-S100
52373	2M	Door Handle Rivet with recessed head and zinc coated mandrel	.110177	Alum/Steel	.250	.500	.257261	NA	GM 20713843
52374	2M	Window Regulator Rivet w/yellow zinc coated mandrel	.140187	Alum/Steel	.250	.500	.257261	NA	GM 9437486 Chry 6032926
52375	2M	Blk. Anodized Door Handle Rivet	.090115	Alum/Steel	.250	.500	.257261	NA	Ford 388047-S102
50376	2M	Glass Stop Rivet	.520620	Alum/Steel	.250	.500	.257261	NA	Ford 385323 Chry 6031091
			В	UMPER RIVETS					
53150	2.5M	Bumper Fascia Rivet large flange black	.250375	Steel/Steel	.187	.625	.192196	NA	GM 9439719
53181	2M	Bumper Fascia Rivet with	.125250	Steel/Steel	.250	.500	.257261	NA	Ford 372820-S36
		MIS	CELLANEOUS	SPECIAL APPLIC	ATION RIV	ETS		CID	
53292	10M	Rear Window Gasket Rivet	.125187	Alum/Steel	.125	.325	.129130	NA	GM 20325696
53314	10M	Multi-Purpose Rivet, large flange	.125187	Alum/Steel	.125	.375	.129130	NA	GM 9432552
53353	5M	Trunk Lock Swivel Emblem Rivet sealed end, countersunk head Requires Nosepiece #39144	.126187	Alum/Steel	.156	.312	.160164	NA	GM 9432137 Chry 6032138

ACTUAL SIZE RIVET GUIDE



Klik Rivet-Nuts™ and Klik Poly-Nuts™ are used in a wide range of applications where a threaded hole is required and both sides of panel cannot be reached.

Klik Rivet-Nuts and Klik Poly-Nuts assure captive load bearing threads in materials too thin to independently provide efficient thread strength. Rivet-Nuts and Poly-Nuts



Klik Rivet Nut





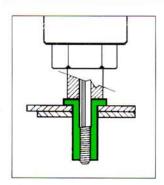
Klik Poly Nut

are installed by one person from one side of the assembly using air or hand powered tools, quickly and easily.

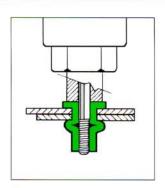
Klik Rivet-Nuts with large diameter heads can be used in soft materials which inherently offer little, if any, thread strength.

Klik Poly-Nuts provide a nearly flush installation along with an excellent fit to mating materials.

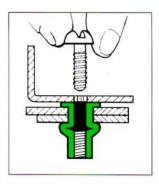
4 EASY STEPS FOR INSTALLATION



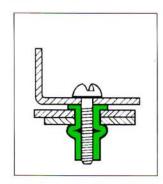
Drill hole to correct diameter, thread fastener onto tool mandrel and insert into hole.



Actuate tool to properly set fastener into material. (See detailed instructions below for proper tool operation.)



Complete your fastening operation with a bolt or screw with the proper thread.



The positive riveting action of both Klik Rivet-Nuts and Klik Poly-Nuts provide consistent firm fastening. Push-out and shake-loose are virtually eliminated.

HAND TOOL OPERATION TO SET KLIK RIVET-NUTS AND KLIK POLY-NUTS:

- 1. Determine thread size, material and type required. Use Klik Rivet-Nuts where a large head is required to cover an oversized hole or act as a spacer. Use Klik Poly-Nuts where a nearly flush-type head is required or extra grip is needed.
- 2. Drill proper size hole in work piece. Refer to information on fastener box or technical page in catalog for correct hole size.
- 3. Install proper size mandrel (male threads on both ends) and nosepiece. Refer to parts list for information on which mandrels require nosepieces.
- Release the grips opening tool completely. Thread "head end" of Klik Rivet-Nut or Klik Poly-Nut onto mandrel. Thread on until mandrel end is flush with bottom of fastener.
- 5. Rotate adjusting knob counterclockwise until fastener head touches tool. Do not tighten. The blind Klik Rivet/Poly-Nut is now
- 6. Insert Klik Rivet-Nut or Klik Poly-Nut in hole in work piece. Hold flush and square in contact with work piece.
- 7. Close handles to set. NOTE: Klik Rivet-Nuts and Klik Poly-Nuts work by forming a bulge on the other side. The handles will 'give" then stop. When handles will not move further with hand force, the fastener is set.
- 8. Release handles and rotate adjusting knob counterclockwise to unscrew Thread Setter from Klik Poly-Nut or Klik Rivet-Nut.

THREAD OR ENGAGEMENT

The threaded mandrel should be flush with or extend just beyond the end of the fastener to assure 100% thread engagement. Less than total thread engagement can result in deformed, unusable threads or thread strip-out.

The head of the fastener must be snug against the nosepiece before actuating the tool.

Should it become necessary to remove the Klik Rivet-Nuts or Klik Poly-Nuts use the same size drill which made the original hole. Drill through the head then punch out the remains. The same size fastener can be used again.

NOTE: *IMPORTANT

When total material thicknesses approach the minimum or maximum of grip range, and when shear and/or tensile strengths are critical in design or application,

*PILOT TESTS are always recommended.

Marson KLIK THREAD SETTER TOOLS



Thread Setter[™] Tool

Model #34500 thread setter installs all sizes of Klik Poly-Nuts, Klik Rivet-Nuts up to ¼" and 6MM steel. The forged, heat treated steel upper handle, the precision die cast body of high strength alumínum alloy and the patented fulcrum pin design combine to make the thread setter a rugged, durable tool. Select mandrels and nosepieces listed. Weight: 1¼ lbs.

6-32	39254	39261
8-32	39255	39262
10-24	39256	39263
10-32	39257	39263
1/4-20	39258	Not Needed
1/4-28	39271	Not Needed
4 MM	39266	39262
5 MM	39267	39263
6 MM	39268	Not Needed

MANDREL NO.



Lever Tool

Model #39205 lever tool for installing Klik Rivet-Nuts and Klik Poly-Nuts in all sizes up to and including #10's and 5MM in aluminum or steel. Features a spiral ratchet mechanism for speed in setting either type fastener. The stroke is adjustable. Select mandrels and nosepieces listed. Weight: 2½ lbs.

6-32	39406	39407
8-32	39408	39409
10-24	39410	39411
10-32	39412	39411
4 MM	39430	39409
5 MM	39431	39411



Heavy Duty Lever Tool

Model #39210 heavy duty level tool for installing ½", ½", ½", 6MM to I0MM Klik Rivet-Nuts. The spiral ratchet mechanism provides fast installation. The stroke is adjustable. Select mandrels and nosepieces listed. Weight: 4½ lbs.

1/4-20	39405	39404
1/4-28	39435	39404
5/16-18	39403	39402
5/16-24	39436	39402
3/8-16	39400	39401
6 MM	39432	39404
8 MM	39433	39402
10 MM	39434	39401

Thread Setter™ Kit

Model #34501 thread setter kit contains the thread setter tool, mandrels and nosepieces for 6-32, 8-32, 10-24 sizes and mandrel for 1/4-20 size. Kit includes 100 assorted Klik Rivet-Nuts and Klik Poly-Nuts, instructions, all contained in a compartmented carrying case. Select additional sizes of mandrels and nosepieces listed above. Weight: 2\% lbs.

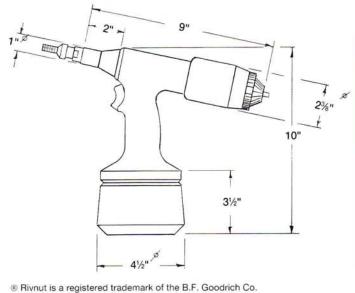


AIR/HYDRAULIC THREAD SETTER TOOL MORSON

Model #39220

New and improved, this light weight production tool has a wide setting capacity. Tool sets from #6 through %-16" steel Rivnut® or equal, and 4 MM through 10 MM. Automatic threading of nut on first trigger pull, nut is set on next pull. Automatic reverse after set is ended by tapping trigger. Quick and simple thread length adjustment. Freestanding housing. Fast-can set up to 25 pcs. per minute. Weight: 41/4 lbs.

ENGINEERING	DATA
Operating Pressure:	85 psi
Weight:	41/4 lbs.
Height:	9.8"
Length of Pulling Head:	105/8"
Working Stroke:	.216"
Tensile Force	4.800 lbs.





THREAD SIZE	ADAPTOR NO.	MANDREL NO.
6-32	39230	39221
8-32	39231	39222
10-24	39232	39223
10-32	39233	39224
1/4-20	39234	39225
1/4-28	39235	39226
5/16-18	39236	39227
5/16	39237	39228
3/8-16	39238	39229
4 MM	39239	39244
5 MM	39240	39245
6 MM	39241	39246
8 MM	39242	39247
10 MM	39243	39248

PRODUCT STRENGTH

KLIK RIVET-NUTS THREAD SIZE

	TYPICAL SHEAR S	TRENGTH (lbs.)	TYPICAL TENSILE	STRENGTH (lbs.)			
THREAD SIZE	ALUMINUM	STEEL	ALUMINUM	STEEL			
6-32	215	365	225	525			
8-32	280	525	285	575			
10-24	300	650	415	815			
10-32	300	650	415	815			
1/4-20	525	700	650	1250			
5/16-18	640	900	905	1400			
3/8-16	1000	1370	1300	1500			

The above figures are averages only. Variations are to be expected in practice.

TYPICAL PUSH-OUT (LBS.)*

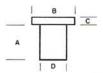
KLIK POLY-NUTS THREAD SIZE

6-32	8-32	10-24	10-32	1/4-20	1/4-28	5/16-18	5/16-24	3/8-16	4MM	5MM	6MM	8MM	10MM
330	330	425	425	510	510	690	690	690	330	425	510	690	690

^{*} Push out values are typical. Actual values will vary depending upon application.



KLIK RIVET-NUT™



STEEL ZINC PLATED OR ALUMINUM

CLASS 2B THREADS

	PART	NO.	D		В	C	Α	GRIP RANGE
THREAD SIZE	STEEL ZINC PLATED	ALUM.	NOM. DIA. +.000 004	DRILL NO. & Hole Size	HEAD DIA. ±.015	HEAD HEIGHT NOM.	BODY Length ±.015	
				#12				
6-32	57110	57210	.189	.189/.193	.325	.032	.438	.010/.075
8-32	57120	57220		#2			.438	.010/.075
8-32	57121	57221	.221	.221/.226	.357	.032	.500	.075/.120
10-24	57130	57230					.531	.010/.080
10-24	57131	57232		1/4"			.594	.080/.130
10-32	57140	57240	.250	.250/.254	.406	.038	.531	.010/.080
10-32	57142	57242		***************************************	poster.		.594	.080/.130
1/4-20	57150	57250		0			.625	.020/.080
1/4-20	57152	57252	222	0	175	252	.687	.080/.140
1/4-20	57154	57254	.332	.332/.338	.475	.058	.750	.140/.200
5/16-18	57171	57271		Z			.750	.030/.125
5/16-18	57174	57274	.413	.413/.423	.665	.062	.875	.125/.200
3/8-16	57181	57281		12.5 MM			.844	.030/.115
3/8-16	57184	57284	.490	.490/.500	.781	.088	.938	.115/.200

KLIK POLY-NUT™



LOW CARBON STEEL ZINC PLATED

CLASS 2B THREADS

		D	· · · · · · · · · · · · · · · · · · ·	В	A	GRIP RANGE
THREAD Size	PART NO.	DIA. Max.	DRILL NO. & Hole Size	HEAD DIA. Ref.	BODY LENGTH MAX.	
6-32	57415	.249	1/4"250/.254	.287	.410	.020/.080
8-32	57425	.249	1/4"250/.254	.287	.410	.020/.080
10-24 10-32	57435 57445	.280	9/32" .281/.285	.320	.465	.020/.130
1/4-20 1/4-28	57455 57456	.374	3/8" .375/.379	.415	.610	.030/.165
5/16-18 5/16-24	57475 57478	.499	½" .500/.504	.540	.720	.030/.165
3/8-16	57485	.499	1/2"500/.504	.540	.720	.030/.165
4 MM	57407	.249	1/4"250/.254	.287	.410	.020/.080
5 MM	57409	.280	9/32"281/.285	.320	.465	.020/.130
6 MM	57411	.374	3/8"375/.379	.415	.610	.030/.165
8 MM	57413	.499	1/2"500/.504	.540	.720	.030/.165
10 MM	57414	.499	1/2"500/.504	.540	.720	.030/.165

IMPORTANT BLIND RIVET DESIGN CONSIDERATIONS MORSON

- 1. The shear and tensile strength of the rivet selected and the number of rivets used in the application should equal or exceed the joint strength requirements. Typical ultimate shear and tensile strengths are listed by diameter and alloy on pages 10 through 16 of this catalog. Testing is recommended before final selection and use in product.
- 2. The rivet body material should be compatible with the materials to be joined to resist galvanic corrosion which may result in reduction of joint strength. If dissimilar materials are widely separated on the galvanic chart, it is advisable to separate them with a dialectric material such as paint or other coating. Marson can paint colors to match, anodize or plate to your specifications as required.
- 3. After determination of strengths required by diameter and alloy, the total thickness of materials to be joined must be considered. The grip range for each rivet is listed on pages 10 through 16 of this catalog. Select the rivet grip range which includes the total thickness of materials to be joined. Please note that the rivet barrel length, Column L is not the grip range.
- **4.** Recommended hole sizes listed for each rivet diameter on pages 10 through 16 should be followed closely. An undersize hole will not allow insertion of the rivet body, an oversize hole will reduce shear and tensile strengths and may cause improper rivet setting all of which promote joint failure.
- **5.** The various head styles are offered to accommodate different assembly needs. The buttonhead Klik-Fast Rivet, the most popular, has a lower profile head which is twice the diameter of the rivet body. This provides adequate bearing for nearly all applications.

The large flange Klik-Fast Rivet provides greater bearing surface for the fastening of soft or brittle facing materials.

The countersunk Klik-Fast Rivet is available for applications where a flush appearance is required.

6. Besides the sizes, alloys and head styles listed, the Marson Corporation manufactures a wide range of special rivets to accommodate a variety of customer needs for strength, head styles and grip ranges.

You are invited to send your application questions or problems to Marson Headquarters for evaluation, testing and recommendations.

- Samples are available upon request.
- Special packaging needs are quickly and easily met.

KLIK-FAST BLIND RIVET TOOLS

1. Marson offers a wide range of hand-actuated Klik-Fast tools, among which is the most widely recognized, copied and envied riveting tool manufactured — the HP-2. 2. Also offered are Air/Hydraulic Klik-Fast Blind Riveting Tools with a wide range of rivet setting capacity.

The PHT Series of popularly priced tool are ideal for a variety of production applications.

The BZ Series of high production tools have the following user-friendly features: nosepiece storage located on the tool, built in air pressure safety release valve, light weight and comfortable hand grip to minimize operator fatigue.

Also available for the BZ Series is a vacuum system which not only holds the rivet securely in the nose-piece, but also collects the spent mandrel for recyclable scrap.

3. Marson riveters carry a 90 day warranty.

SPECIALTY RIVETS

1. Closed-End Rivets

The Marson Closed-End Rivet provides a very high rate of radial expansion during setting, which is highly suitable for application where the prepared holes are elongated or oversize. Most important, the rivet wall is thicker than a standard blind rivet which results in higher tensile and shear strengths.

2. Plastic Rivets

- Designed for plastic or metal surfaces, chassis, or supporting structures.
- Eliminates the galvanic corrosion that occurs when dissimilar metals are in contact.
- Non-conductive materials make it ideal for any application where electrical impulses or currents are involved.
- The unique three leg design draws the panel together and securely fastens them at the same time.

3. Special Application Rivets

For over three decades, Marson Corporation has been a major manufacturer and trusted supplier of blind rivets to American and foreign industry. Marson's Special Application Rivets are designed for original equipment automotive applications. Today, these rivets are valued by repair shops, assemblers, fabricators, and other production facilities for their special features, and in-place economy.

KLIK-FAST THREAD SETTER SYSTEM

- Steel rivets nuts available in flanged and poly series.
- 2. Aluminum rivet nuts in flanged series.
- 3. Hand-actuated and air hydraulic Thread Setter tools available to set industry standards.

Mail or Fax (photocopy) This Form To Attn:

Sales Department

MARSON CORPORATION

130 Crescent Avenue Chelsea, MA 02150 Fax: (617) 884-1804

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DECIMAL EQUIVALENTS OF STANDARD SHEET ALUMINIUM & STEEL GAUGES

ALUMINIUM & STEEL GAUGES						
	THICKNESS IN THOUSANDTHS					
NO. OF GAUGE	ALUMINUM (B&S)	STEEL (U.S. STD.)				
10	.1019	.1345				
11	.0907	.1196				
12	.0808	.1046				
13	.0720	.0897				
14	.0641	.0747				
15	.0571	.0673				
16	.0508	.0598				
17	.0453	.0538				
18	.0403	.0478				
19	.0359	.0418				
20	.0320	.0359				
21	.0285	.0329				
22	.0253	.0299				
23	.0226	.0269				
24	.0201	.0239				
25	.0179	.0209				
26	.0159	.0179				
27	.0142	.0164				
28	.0126	.0149				
29	.0113	.0135				
30	.0100	.0120				

INCH-METRIC CONVERSION TABLE						
Inches			Inches			
Frac.	Dec.	mm	Frac.	Dec.	mm	
1/64	0.015 625	0.3969	33/64	0.515 625	13.0969	
1/32	0.031 250	0.7938	17/32	0.531 250	13.4938	
3/64	0.046 875	1.1906	35/64	0.546 875	13.8906	
1/16	0.062 500	1.5875	9/16	0.562 500	14.2875	
5/64	0.078 125	1.9844	37/64	0.578 125	14.6844	
3/32	0.093 750	2.3812	19/32	0.593 750	15.0812	
7/64	0.109 375	2.7781	39/64	0.609 375	15.4781	
1/8	0.125 000	3.1750	5/8	0.625 000	15.8750	
9/64	0.140 625	3.5719	41/64	0.640 625	16.2719	
5/32	0.156 250	3.9688	21/32	0.656 250	16.6688	
11/64	0.171 875	4.3656	43/64	0.671 875	17.0656	
3/16	0.187 500	4.7625	11/16	0.687 500	17.4625	
13/64	0.203 125	5.1594	45/64	0.703 125	17.8594	
7/32	0.218 750	5.5562	23/32	0.718 750	18.2562	
15/64	0.234 375	5.9531	47/64	0.734 375	18.6531	
1/4	0.250 000	6.3500	3/4	0.750 000	19.0500	
17/64	0.265 625	6.7469	49/64	0.765 625	19.4469	
9/32	0.281 250	7.1438	25/32	0.781 250	19.8437	
19/64	0.296 875	7.5406	51/64	0.796 875	20.2406	
5/16	0.312 500	7.9375	13/16	0.812 500	20.6375	
21/64	0.328 125	8.3344	53/64	0.828 125	21.0344	
11/32	0.343 750	8.7312	27/32	0.843 750	21.4312	
23/64	0.359 375	9.1281	55/64	0.859 375	21.8281	
3/8	0.375 000	9.5250	7/8	0.875 000	22.2250	
25/64	0.390 625	9.9219	57/64	0.890 625	22.6219	
13/32	0.406 250	10.3188	29/32	0.906 250	23.0188	
27/64	0.421 875	10.7156	59/64	0.921 875	23,4156	
7/16	0.437 500	11.1125	15/16	0.937 500	23.8125	
29/64	0.453 125	11.5094	61/64	0.953 125	24.2094	
15/32	0.468 750	11.9062	31/32	0.968 750	24.6062	
31/64	0.484 375	12.3031	63/64	0.984 375	25.0031	
1/2	0.500 000	12.7000	1	1.000 000	25.4000	

