



SECTION 5: SPEED RIVETING

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1.800.258.2579

The Modern, Faster, Low Finished Cost Successor to Blind Riveting.

SPEED RIVETS are permanent fastener designed for blind or 1 sided riveting in medium and high volume applications. Rivets are aligned in a paper strip called a pod or magazine so that the rivets can be automatically fed into the speed riveter. The result? Increased output, lower assembly cost and a labor saving permanent fastening solution.

Why Speed Riveting?

Increased Output

Speed Rivets can be installed up to 4 times faster than traditional blind rivets or screws. Cycle times are limited to less than 2 seconds and installation speeds can reach up to 30 ppm (Semi-Automatic) and 60 ppm (fully automatic).

Reduced Labor

Many users require additional labor to pre-install standard rivets or screws for faster assembly. The Speed Rivet eliminates this task by allowing the user to feed the rivets themselves. And in those applications where the user is installing the standard blind rivet or screw individually by hand, the Speed Rivet offers the increased assembly speed because the feed of the tool occurs once per pod, as apposed to once per rivet. The increased output leads to a reduction in the number of workers required to meet the manufacturing demand of the product.

Minimal Waste, Improved Safety

Standard blind rivets have a disposable nail or mandrel that can pose a safety problem when dropped on the floor. The Speed Rivet System employs a re-usable mandrel that can be used for up to 50 rivets. Depending on rivet size and material. The only waste generated is that of the paper pods (made of recycled paper), which again can again be recycled.

Cost Savings

Increased Output & Production Capacity, Reduced Labor Cost, Minimized Waste and Improved Safety equals overall cost savings to the user.

Improved Joint Quality & Performance

Permanent fastening offers a higher clamp up value then that of screws. In addition, because of the clamping force applied, the joint is more secure when under shear and tension loads as well as resists vibration.

Perfect For Electronic & PCB Applications

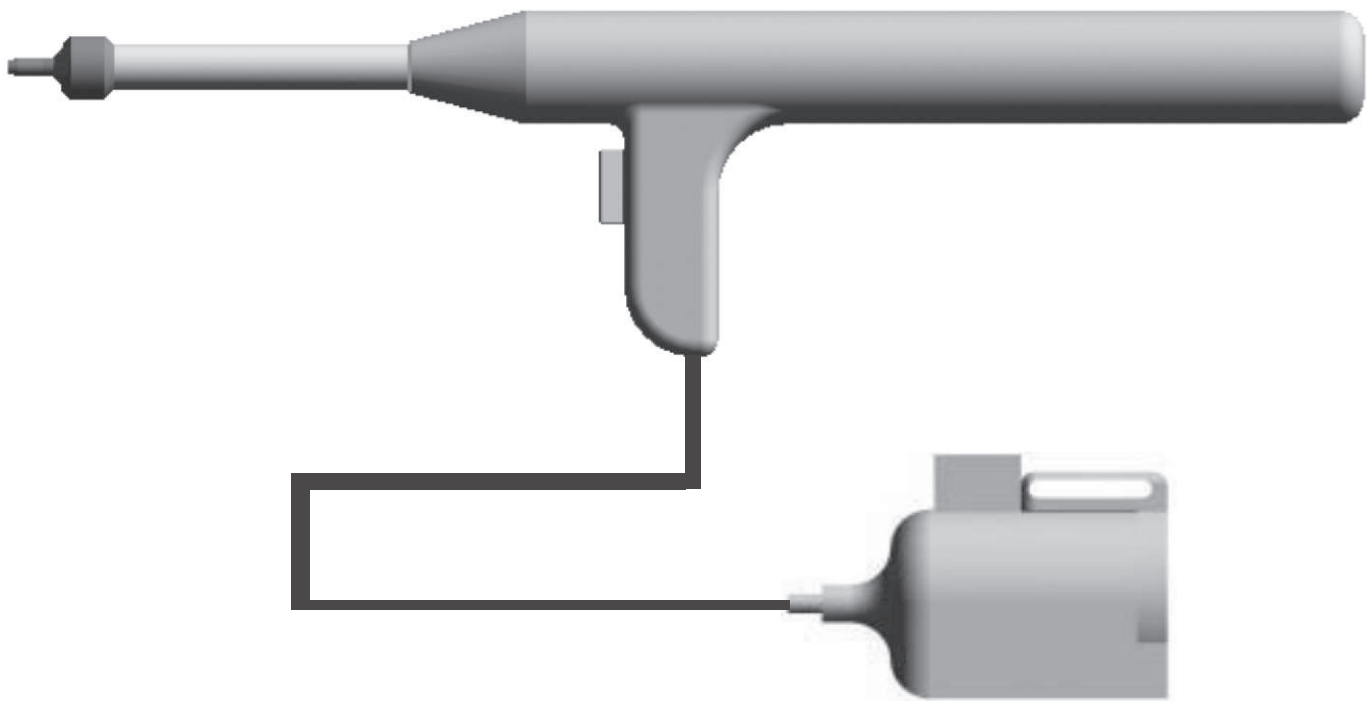
A Typical problem in standard blind riveting for electronic applications is due to the remaining portion of the nail or mandrel left in the rivet after assembly. Under the right conditions this small piece of the mandrel can fall out of the rivet into the electronic component causing an short circuit. Speed Rivet are not affected by this condition because the mandrel is completely withdrawn from the rivet during assembly. In addition, Speed Rivet are a great catalyst in dispursing heat generated in electronic components which makes it perfect for high temperature enviroments suchas HeatSinks, Rambus Fixtures and Microchips.

Reliability and Consistancy

When the proper Speed Rivet Componets are selected, you can be sure that the rivets will peform consistantly both during and after assembly, eliminating the need for frequent adjustments.

Fine Tuning & Flexability

Due to the variety of rivet types, materials, front jaw assemblies, and mandrel sizes, the Speed Rivet System can be fine tuned to work perfectly with your application. Whether a tight clinch for good hole fill or a light clinch for use with fragile PCB's, the Speed Rivet Tool System is completely customizable and can be interchanged for use with alterative Speed Rivet products on other assembly lines.



Built with speed, power, and reliability in mind, the RK-753 is your turnkey solution to installing ZipRiv[®] and ZipSho[®] QuickRivets[®]. The RK-753 HydroPneumatic QuickRiveter[®] separates the nose of the tool from the weight of the tool body, therefore, the operator carries only 2.37 lbs, while the heavier remote intensifier is stored at ground level. In addition, an on-board oil reservoir allows for proper lubrication during use. Applicable nose pieces, mandrels, springs, and spare parts are always available from your local distributor.

Technical Specifications & Performance Data	
Setting Capacity:	3/32" - 1/8" - 5/32" - 3/16"
Rivet Types:	Speed Rivets
Air Supply Pressure:	72.5 - 101.5 psi
Free Air Pressure:	74 psi w/ 158.66 in
Traction Power @ 90psi:	874 lb/f
Stroke Length:	1.18" Minimum
Cycle Time:	1-2 Seconds
Weight:	2.376 lbs
Vibration:	2.7 m/s
Overall Length:	18.70" Inches
Noise Level:	70 dBa Max.
Intensification Ratio:	30:1

Upright, Downward, Foot Pedal and Custom Configurations are Available.

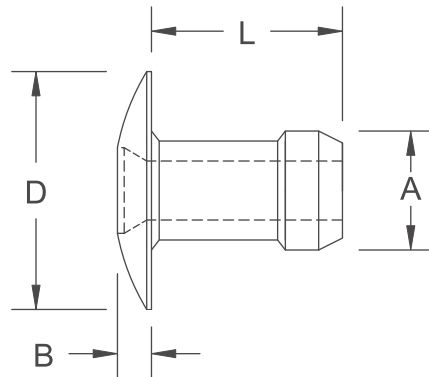


DOME HEAD

BULB TYPE

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Extensively used in sheet metal fabrication, Bulb Type offers a high clamp up to steel, brass, aluminum and plastic substrates. Offered in Dome or Countersunk Head Styles; Steel, Aluminum, Brass and Stainless Steel Materials with zinc clear, zinc black and black anodized finishes.

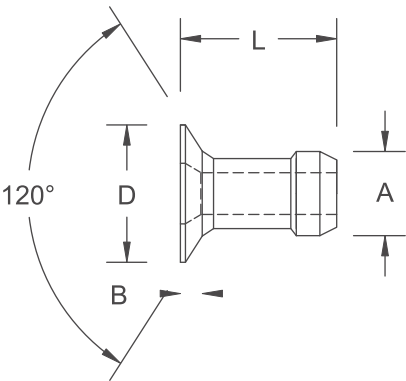


Inch Standard

"A"	Part Number	Grip Range	Length	"D"	"B"	Hole Size	Pcs Per Pod
1/8"	[]DZ-0404						58
	[]DZ-0406						48
	[]DZ-0408			.257	.125	.1315	42
	[]DZ-0410			.233	.120	.1285	37
	[]DZ-0412						33
	[]DZ-0414						30
5/32"	[]DZ-0505						52
	[]DZ-0507						44
	[]DZ-0509			.322	.154	.1592	38
	[]DZ-0511			.298	.150	.1562	34
	[]DZ-0513						30
3/16"	[]DZ-0607						42
	[]DZ-0609						36
	[]DZ-0611			.382	.189	.1940	31
	[]DZ-0613			.358	.184	.1910	28
	[]DZ-0615						24

Material	Part# Prefix	1/8"		5/32"		3/16"	
Aluminum	A []	756 N	1312N	1134 N	1734 N	1512 N	2735 N
Steel	S []	1134 N	1823 N	1645 N	2802 N	2246 N	3713 N
Brass	B []	1112 N	1912 N	1868 N	2757 N	2312 N	2602 N
Stainless Steel	F []	1300 N	2000 N	2446 N	3558 N	3558 N	5114 N
		Shear	Tension	Shear	Tension	Shear	Tension
TYPICAL PERFORMANCE SPECIFICATIONS							

Other Head Styles
Available Upon Request



Inch Standard

"A"	Part Number	Grip Range	Length	"D"	"B"	Hole Size	Pcs Per Pod
1/8"	[]CZ-0405	.050 - .090	.170				65
	[]CZ-0406	.060 - .110	.172				64
	[]CZ-0407	.100 - .150	.212	.235	.035	.1315	52
	[]CZ-0408	.140 - .190	.252	.200	.023	.1285	44
	[]CZ-0410	.180 - .230	.292				38
	[]CZ-0411	.220 - .270	.332				33
5/32"	[]CZ-0505	.062 - .115	.204				59
	[]CZ-0506	.085 - .135	.224				54
	[]CZ-0507	.105 - .155	.244	.274	.040	.1592	49
	[]CZ-0509	.145 - .195	.284	.239	.028	.1562	42
	[]CZ-0511	.185 - .235	.324				36
	[]CZ-0513	.225 - .275	.364				32
3/16"		Available Upon Request					

Material	Part# Prefix	1/8"		5/32"		3/16"	
Aluminum	A []	700 N	1300 N	1100 N	1700 N	-	-
Steel	S []	900 N	1600 N	1600 N	2800 N	-	-
Brass	B []		Available Upon Request				
Stainless Steel	F []		Available Upon Request				
		Shear	Tension	Shear	Tension	Shear	Tension
TYPICAL PERFORMANCE SPECIFICATIONS							

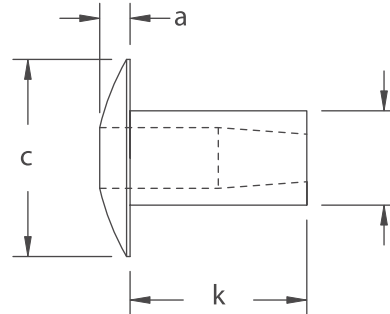
DOME HEAD

SHANK TYPE

SECTION 5

Typically used in soft or brittle materials, SHANK TYPE is designed for fastening applications that may be sensitive to excess clamping force and shock. SHANK TYPE assemblies materials such as acrylic, plastic, vinyl, rubber, wood or brittle metals that can crack or break under extreme clamping pressure. An internally tapered hole causes controlled radial expansion of the tail which firmly fastens without adversely affecting the riveted substrates.

Other Head Styles
Available Upon Request



"A"	Part Number	Grip Range	Length	"D"	"B"	Hole Size	Pcs Per Pod
1/8"	[J DZS-0404	.000 - .062	.125	.217 .193	.045 .033	.132 .129	71
	[J DZS-0406	.062 - .125	.187				51
	[J DZS-0408	.125 - .187	.250				39
	[J DZS-0410	.187 - .250	.312				32
	[J DZS-0412	.250 - .312	.375				27
	[J DZS-0414	.312 - .375	.437				23
5/32"	[J DZS-0506	.062 - .125	.187	.257 .235	.057 .047	.164 .161	47
	[J DZS-0508	.125 - .187	.250				38
	[J DZS-0510	.187 - .250	.312				31
	[J DZS-0512	.250 - .312	.375				27
	[J DZS-0514	.312 - .375	.437				23
3/16"	[J DZS-0607	.062 - .125	.291	.349 .329	.070 .060	.194 .191	38
	[J DZS-0609	.125 - .187	.281				33
	[J DZS-0611	.187 - .250	.344				28
	[J DZS-0613	.250 - .312	.409				24
	[J DZS-0615	.312 - .375	.479				21

Material	Part# Prefix	1/8"		5/32"		3/16"	
Aluminum	A []	623 N	1000 N	979 N	1624 N	1423 N	2291 N
Steel	S []	1148 N	1660 N	1926 N	2891 N	2615 N	3790 N
Brass	B []	1289 N	-	-	-	-	-
Stainless Steel	F []	Available upon request					
		Shear	Tension	Shear	Tension	Shear	Tension
TYPICAL PERFORMANCE SPECIFICATIONS							

CONSUMABLE TOOLING - SKEWERS

SECTION 5



"A"	Part Number*	Description	Hole Size	TipØ	Tip Color	Spring#	Long Spring#
1/8"	ZRTM-125-S	Standard	.128	.092	Green	ZRTS-125	ZRTS-125L
	ZRTM-125-10S	#1 O.S.	.133	.097	Yellow	ZRTS-125	ZRTS-125L
	ZRTM-125-20S	#2 O.S.	.138	.102	Blue	ZRTS-125	ZRTS-125L
	ZRTM-156-S	Standard	.156	.110	Green	ZRTS-156	ZRTS-156L
5/32"	ZRTM-156-10S	#1 O.S.	.161	.115	Yellow	ZRTS-156	ZRTS-156L
	ZRTM-156-20S	#2 O.S.	.166	.120	Blue	ZRTS-156	ZRTS-156L
	ZRTM-187-S	Standard	.191	.140	Green	ZRTS-187	ZRTS-187L
3/16"	ZRTM-187-10S	#1 O.S.	.196	.145	Yellow	ZRTS-187	ZRTS-187L
	ZRTM-187-20S	#2 O.S.	.201	.150	Blue	ZRTS-187	ZRTS-187L
	ZRTM-187-20S	#3 O.S.	.204	.153	Red	ZRTS-187	ZRTS-187L

*Long mandrels are available. Just add the letter "L" to the end of the part number.



"A"	Part Number*	Description	Hole Size	TipØ	Tip Color	Spring#	Long Spring#
1/8"	ZSTM-125-S	Standard	.128	.088	Green	ZSTS-125	ZSTS-125L
	ZSTM-125-10S	#1 O.S.	.133	.092	Yellow	ZSTS-125	ZSTS-125L
	ZSTM-125-20S	#2 O.S.	.140	.098	Blue	ZSTS-125	ZSTS-125L
	ZSTM-125-30S	#3 O.S.	.144	.102	Red	ZSTS-125	ZSTS-125L
5/32"	ZSTM-156-S	Standard	.161	.107	Green	ZSTS-156	ZSTS-156L
	ZSTM-156-10S	#1 O.S.	.169	.115	Yellow	ZSTS-156	ZSTS-156L
	ZSTM-156-20S	#2 O.S.	.176	.122	Blue	ZSTS-156	ZSTS-156L
	ZSTM-156-30S	#3 O.S.	.186	.132	Red	ZSTS-156	ZSTS-156L
3/16"	ZSTM-187-S	Standard	.193	.132	Green	ZSTS-187	ZSTS-187L
	ZSTM-187-10S	#1 O.S.	.208	.146	Red	ZSTS-187	ZSTS-187L
	ZSTM-187-20S	#2 O.S.	.218	.156	Yellow	ZSTS-187	ZSTS-187L

*Long mandrels are available. Just add the letter "L" to the end of the part number.

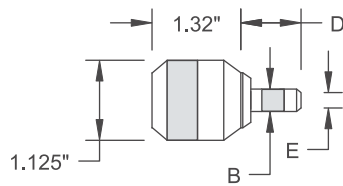
NOSE JAW SELECTION

SECTION 5

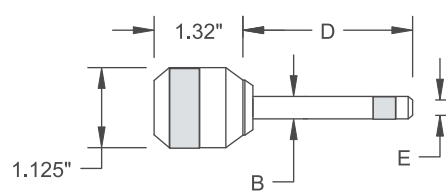
The Nose Jaw is an integral part of the System. The type of nose Jaw you select is application dependent. While the flat endform is standard, the recessed endform allows for high clamp up or can be used to deform a countersunk head into a dome head in order to capitalize on the benefits of SKU and Inventory reduction. The length and shape of the nose jaw is specifically designed to fit in limited access, hard to reach area's.



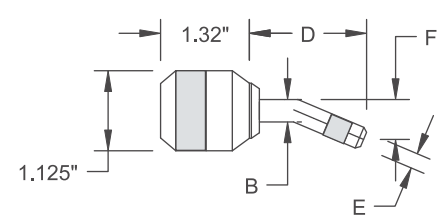
STANDARD NOSE



LONG NOSE

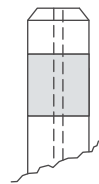


CURVED NOSE

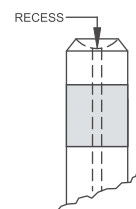


Long	Part#	Nose Type & Form	Dimension		
			B	D	E
1/8"	Z-7150-3004	STANDARD FLAT	.41	1.18	.20
	Z-7170-3004	STANDARD RECESSED	.41	1.20	.30
	Z-7150-4004	LONG FLAT	.41	2.18	.20
	Z-7170-3204	LONG RECESSED	.41	2.18	.30
	Z-7150-5004	CURVED LONG FLAT	.41	2.22	.20
	Z-7170-3304	CURVED LONG RECESSED	.41	2.22	.30
5/32"	Z-7150-3005	STANDARD FLAT	.48	1.30	.24
	Z-7170-3005	STANDARD RECESSED	.48	1.32	.41
	Z-7150-4005	LONG FLAT	.48	2.30	.24
	Z-7170-3205	LONG RECESSED	.51	2.30	.41
	Z-7150-5005	CURVED LONG FLAT	.48	2.23	.24
	Z-7170-3305	CURVED LONG RECESSED	.51	2.23	.41
3/16"	Z-7150-3006	STANDARD FLAT	.56	1.18	.33
	Z-7170-3006	STANDARD RECESSED	.56	1.20	.47
	Z-7150-4006	LONG FLAT	.56	2.30	.33
	Z-7170-3206	LONG RECESSED	.56	2.30	.47
	Z-7150-5006	CURVED LONG FLAT	.56	2.21	.33
	Z-7170-3306	CURVED LONG RECESSED	.56	2.21	.47

FLAT
END FORM



RECESSED
END FORM



Item#	Part Number	Description
1	ZRT-IC	Indexing Cursor
2	ZRT-PJ	Vice Jaws
3	ZRT-WX	Mandrel Wax
4	ZRT-HO	Hydraulic Oil
5	ZRTS-125	1/8" Short Mandrel Spring
	ZRTS-156	5/32" Short Mandrel Spring
	ZRTS-187	3/16" Short Mandrel Spring
	ZRTS-125L	1/8" Long Mandrel Spring
	ZRTS-156L	5/32" Long Mandrel Spring
	ZRTS-187L	3/16" Long Mandrel Spring
5	ZSTS-125	1/8" Short Mandrel Spring
	ZSTS-156	5/32" Short Mandrel Spring
	ZSTS-187	3/16" Short Mandrel Spring
	ZSTS-125L	1/8" Long Mandrel Spring
	ZSTS-156L	5/32" Long Mandrel Spring
	ZSTS-187L	3/16" Long Mandrel Spring

Universal Cursor

Item#1 -
Indexing Component for Mandrel
Assembly



Universal Vice Jaws

Item#2 -
Mandrel Pulling Device



Universal Mandrel Spring

Item#5 -
For Mandrel Assembly



Hydraulic Oil

Item #4 -
For Hydraulic Tool

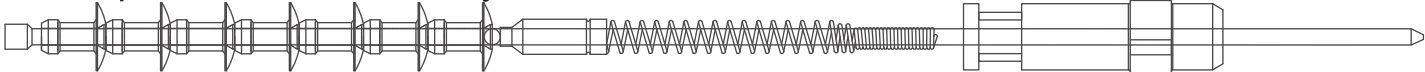


Mandrel Wax

Item#3 -
Increases Mandrel Life



Proper Mandrel Assembly



FASTENER & TOOLING SELECTION

SECTION 5

A	D	Z	05	08	BA		
Rivet Material	Head Style	Rivet Type	Nominal Hole Ø	Grip Range	Surface Finish		
Aluminum Steel Brass (F)Stainless	Dome C'sunk Low Profile Truss Undersized	Bulb Type Shank Type	(03) 3/32" (04) 1/8" (05) 5/32" (06) 3/16" (08) 1/4"	See Specification Sheet for ZipRiv™ or ZipSho™ Pages 3,4, or 5	Plain Black Anodize Black Zinc Tin		

Step1 - Determine Rivet Type and Rivet Material Preference.

Step2 - Determine the Closest Nominal Rivet Diameter via your Hole Size. Then record the Actual Hole Diameter in the box to the right.

Step 3 - Determine Rivet Grip Range via Total Grip Thickness. Record the Actual Total Grip Thickness of your assembly to the right.

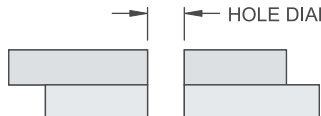
Step 4 - Determine the Rivet Part Number by using the Chart Above and the tables on spec sheet pages for ZipRiv and ZipSho (page 3,4 & 5) then record it to the right.

Step 5 - Determine Proper Mandrel Size by referencing the actual hole diameter to the chart on page 8. Record the mandrel part# to the right.

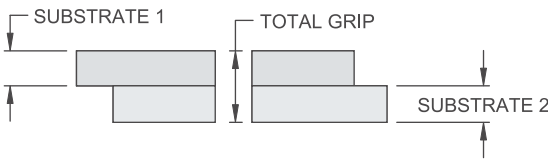
Step 6 - Determine Proper Spring Size by referencing the chart on Page 9. Record the Spring Part# to the right.

Step 7 - Depending on the type of clinch you prefer, Choose the proper Nose Jaw on page 10. If you are not sure, choose standard, flat. Record the Nose Jaw Part# to the right.

Actual Hole Ø



Actual Grip



Rivet Part#

-/



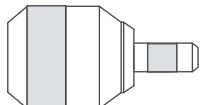
Mandrel Part#



Spring Part#



Spring Part#



***Please consult R&R Rivet for all applications**

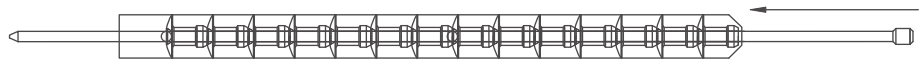
SET-UP & ASSEMBLY PROCESS

SECTION 5

Step 1 - Install the Indexing Cursor into the barrel portion of the rivet tool making sure it is facing the proper direction. Then screw the Nose Jaw Assembly onto the Barrel.



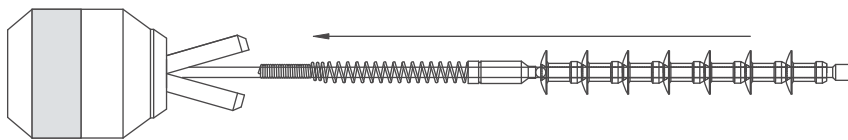
Step 2 - Insert the mandrel into the hole of the podded rivets in the proper direction. Then tear off and dispose of the podding paper.



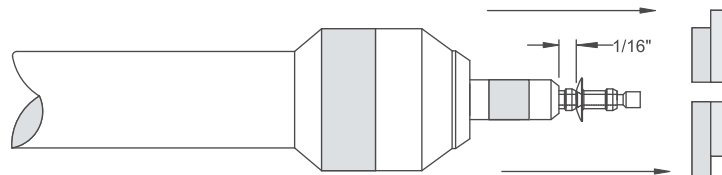
Step 3 - Insert the mandrel spring onto the mandrel in the proper direction.



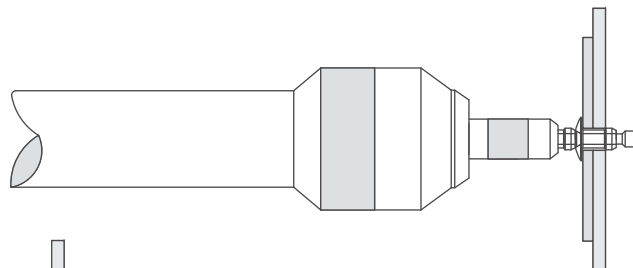
Step 4 - Split the nose jaw open and insert the mandrel assembly (mandrel, spring and rivets), inside the nose jaw until the last rivet remains outside of the nose jaw.



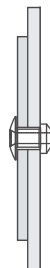
Step 5 - Make sure the head of the rivet is about 1/16" away from the front of the nose jaw. Proper spacing is essential for proper indexing and function.



Step 6 - Using the handle of the tool, insert the rivet and mandrel through the hole of your workpiece until the head is sitting flush on the bearing surface. Pull the trigger to actuate the tools cycle and clinch the rivet.



Step 7 - After proper assembly, the next rivet will automatically feed through the nose jaw to advance the next rivet.



Step 8 - Continue until rivets have been used up and the spring appears through the nose jaw. Then go to step 1 and repeat the procedure.

