

Combining tooth and muscle for the tough jobs with the mechanics necessary for operator comfort



What's different about **Bennett Tools**

desirable tools.

All-pneumatic, in-line operation means no cams, gears or linkages. Just pure pneumatic power without the frictional loss. And there are less parts to worry about. There is no messy hydraulic fluid to leak, drip or replace.

manufacturing experience to engineer

rugged, lightweight, all-pneumatic, highly

Bennett Company applies the unique Multi-Power[®] Cylinder principle to a precision, ergonomically designed tool body, to provide you with the ultimate family of powerful, compact, rivet setting tools.

The Bennett 4000 shown with 6" long-reach nose barrel assembly (Part No. PP-638). See nose assembly choices on page 14.

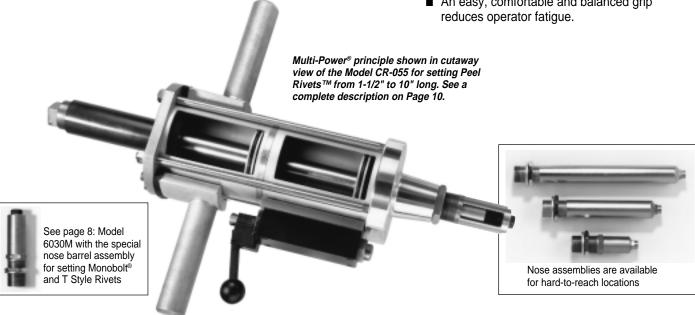
How they work

The power element uses multiple pistons attached to a common shaft. Each piston is isolated within its own chamber by means of baffles integral with the outer wall of the tool body. Special internal porting allows air pressure to energize all pistons simultaneously- thus multiplying the effect of the air pressure and enabling output forces in excess of 2700 pounds!

How they're built

The power elements have beefed up construction to meet the rigors of the many diverse rivet applications-

- Stainless steel piston rods
- Longer internal bearing lengths
- Urethane seals installed at major wear points
- Generous internal passages for air flow enabling fast cycling and high production
- High strength, cast aluminum bodies are precision machined and fitted with super quiet cushions
- An easy, comfortable and balanced grip reduces operator fatigue.



Setting all brands of rivets at forces up to 2,765 pounds on 90 psi!

Rugged, light weight, compact Bennett Tools deliver trouble-Free operation

Use them with confidence in countless applications in diverse industries

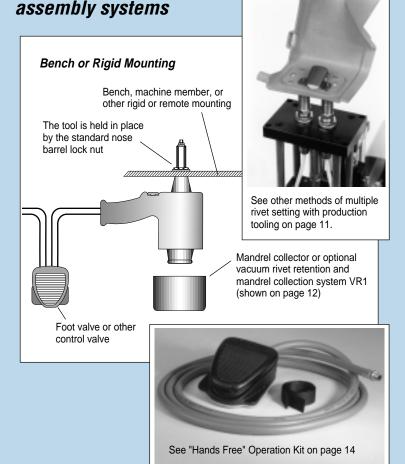
- Bennett Rivet Tools are economical and easily adapted to your needs
- Use to set all brands of rivets from 3/32" through 1/4" in aluminum, steel and stainless steel
- Use for setting plastic rivets
- Ease of use is enhanced through light weight design
- Fast cycling increases production
- Low air consumption is economical
- Ergonomic grips reduce operator fatigue and work quality remains high
- Super quiet cushions absorb energy when the mandrel snaps. Shock is eliminated in the tool making operation more comfortable for the operator
- Cushions reduce operator fatigue
- Cushions eliminate "piston slap" and prolong the useful life of the tool
- Rugged construction stands up to rough shop usage

Look for cost reductions such as replacing nut and bolt applications. Or put rivets to work on these and similar applications:

- HVAC Snaps Attaching soffits
- Roofing
 Aluminum/metal buildings
- Truck Bodies Trailers Motor Homes
- Automobile wheel assemblies
 Boats
- · Automotive sheet metal work
- · Electrical device assembly
- Plastic assembly
- · Fastening plastic to metal
- · Metal window and door frames
- Window installation
 Shower stalls
- Window crank assemblies
- Appliance manufacturing

Versatility Plus!

Use them as portable hand tools, as bench mounted equipment, or as elements in larger



Bench or Rigid Mounting

A standard feature of every *Bennett Tool* allows it to be rigidly mounted to a bench, machine element, robot arm, or other structure. A portion of the barrel on each nose piece is conveniently threaded. Insert the nose barrel into the desired mounting hole and lock the tool in position with a standard lock nut (furnished).

The tool can be remotely operated for total "hands-free" operation.

Install Multiple Rivets in Your Desired Pattern Simultaneously Consider mounting multiple tools in a pattern for simultaneously setting several rivets in a compound parts assembly.

If the tools with gravity mandrel ejection are mounted vertically, with nose up, the spent mandrels will fall out and can be collected in any convenient container mounted below the tool. If the tools are mounted in any other attitude, or if space is limited, *Bennett* offers an efficient *vacuum rivet retention and automatic mandrel collection system.* (See page 12 for complete details)



Shown with 2.3" reach standard nose barrel assembly

for Standard and plastic rivets



RIV MATE			IUM RI RESSL		
BODY	MANDREL	3/32	1/8	5/32	3/16
А	А	60	60	60	85
Α	S	60	60	85	ı
S	S	60	85	ı	I
ST	ST	60	_	-	-
Р	Р	NA	NA	NA	60

A - Aluminum, S - Steel, ST - Stainless Steel, P - Plastic

The Bennett 1000 – Slim Line is a very small, lightweight tool designed for maximum output while minimizing operator fatigue. With an optional hanger bail and balancer it is ideally suited for production bench type applications.

To achieve rivet retention and automatic mandrel collection, add the VR1 vacuum system to the 1000 for even higher production rates. A complete description of the VR1 is given on page 12.

For higher production, please refer to the application tips on page 3: • bench mounting

- · setting multiple rivets with a single shot, and
- hands free operation.

Pistol Grip Handle

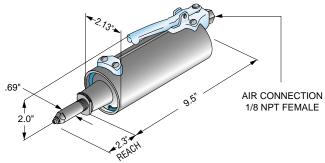
A pistol grip style handle, with trigger, may be added for those desiring this style of right angle grip. Please specify PP-150

Specifications

- Pull force @ 90 psi 795 lbs.
- Pull stroke .62"
- Air consumption .024 SCF per cycle @ 90 psi
- Operating range 60 to 100 psi maximum
- Weight 2.0 lbs.
- Weight with pistol grip 3.2 lbs.

Standard Equipment

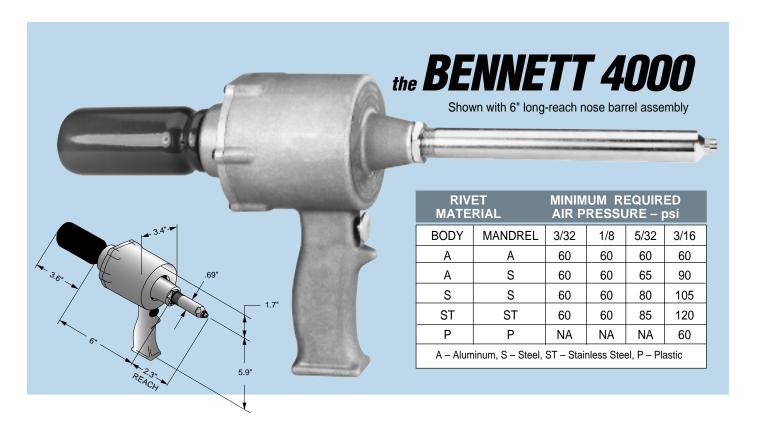
- Every tool comes with an assortment of three nose pieces for setting non-structural type rivets. Sizes include 1/8, 5/32 and 3/16.
- Super quiet cushions
- · Bench or rigid mounting



Optional Equipment Ordering Guide

Product Description	Part Number
Nose piece for 3/32 standard rivet	PP-635
Nose piece for nonstandard rivets	Consult Factory
4.5" long-reach nose assembly	PP-630
6.0" long-reach nose assembly	PP-638
Special nose barrel assemblies	Consult Factory
Hanger Bail (see page 13)	BH-2
Tool Balancer (see page 13)	B-1
Vacuum rivet retention & mandrel collection system (see page 12)	VR1
Hands free kit (see page 13)	HFV-2
Pistol grip with trigger	PP-150
Tool set up for vacuum	1000 with VA-1

Setting hard-to-reach rivets in all materials including plastic



The Bennett 4000 is a lightweight, yet very rugged pistol grip tool designed for use anywhere, including high production lines, construction job sites, auto body shops and general maintenance areas.

An optional hanger bracket and balancer can be added for increasing production rates and reducing operator fatigue during continuous or repetitive operation.

The 4000 is equipped with a mandrel collection boot. For high volume riveting you might want to consider the optional VR1 Vacuum System for the tool. This option adds vacuum rivet retention at the nose piece and automatic mandrel collection in a remote collector. The VR1 is described in detail on page 12.

Please refer to page 3 for application tips on:

• bench mounting • setting multiple rivets in a single cycle, and • total "hands free" operation.

Specifications

- Pull force @ 90 psi 1115 lbs.
- Pull stroke .62"
- Air consumption .036 SCF per cycle @ 90 psi
- Operating range 60 to 120 psi maximum
- Weight 2.9 lbs.



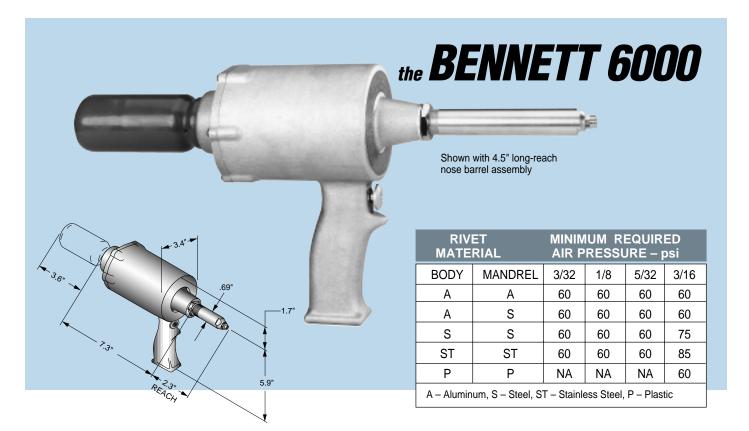
Comparing reach of nose assemblies for difficult rivet placements: Top – 6" long reach; Center – 4.5" long reach; Bottom – 2.3" standard reach

Standard Equipment

- Every tool comes with an assortment of three nose pieces for setting non-structural type rivets. Sizes include 1/8, 5/32 and 3/16.
- · Soft, vinyl plastic mandrel collection boot
- Super quiet cushions
- · Bench or rigid mounting

Optional	Equipment	Orderin	g Guide

Product Description	Part Number
Nose piece for 3/32 standard rivet	PP-635
Nose piece for nonstandard rivets	Consult Factory
4.5" long-reach nose assembly	PP-630
6.0" long-reach nose assembly	PP-638
Special nose barrel assemblies	Consult Factory
Hanger Bracket (see page 13)	BH-1
Tool balancer (see page 13)	B-1
Vacuum rivet retention & mandrel collection system (see page 12)	VR1
Hands free kit (see page 13)	HFV-1
Tool set up for vacuum	4000 with VA-6



The Bennett 6000 is a lightweight, pistol grip style tool designed for all combinations of rivet material through 3/16" diameter. This very rugged construction allows it to be used at any job site without the worry of wear and tear from misuse.

The optional hanger bracket and balancer may be added to increase operator convenience reducing operator fatigue.

The 6000 is equipped with a mandrel collection boot. For increased safety and efficiency you can add the optional VR1 Vacuum System achieving both vacuum rivet retention at the nose piece and automatic mandrel collection in a remote collector. The VR1 is described in detail on page 12.

Application tips for • bench mounting • setting multiple rivets in a single cycle, and • total "hands free" operation are shown on page 3.



Comparing reach of nose assemblies for difficult rivet placements: Top – 6" long reach; Center – 4.5" long reach; Bottom – 2.3" standard reach

Specifications

- Pull force @ 90 psi 1705 lbs.
- Pull stroke .62"
- Air consumption .051 SCF per cycle @ 90 psi
- Operating range 60 to 120 psi maximum
- Weight 3.5 lbs.

Standard Equipment

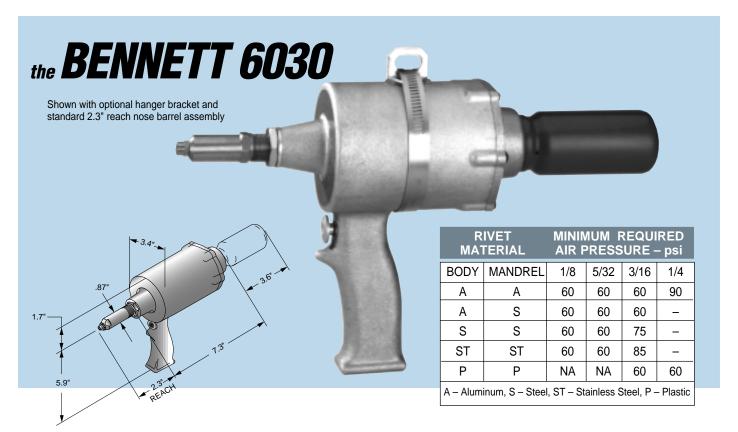
- Every tool comes with an assortment of three nose pieces for setting non-structural type rivets. Sizes include 1/8, 5/32 and 3/16.
- · Soft, vinyl plastic mandrel collection boot
- · Super quiet cushions
- · Bench or rigid mounting

Optional Equipment Ordering Guide

Product Description	Part Number
Nose piece for 3/32 standard rivet	PP-635
Nose piece for nonstandard rivets	Consult Factory
4.5" long-reach nose barrel	PP-630
6.0" long-reach nose barrel	PP-638
Special nose barrel assemblies	Consult Factory
Hanger Bracket (shown opposite)	BH-1
Tool balancer (see page 13)	B-1
Vacuum rivet retention & mandrel collection system (see page 12)	VR1
Hands free kit (see page 13)	HFV-1
Tool set up for vacuum	6000 with VA-6

Now You Can Pull Rivnut® Fasteners! Consult Factory for Details About New Adapter Kit

Setting all brands of rivets with forces to 1,705 pounds at 90 psi!



The Bennett 6030 is a time-proven version of the Model 6000 shown on the opposite page. The 6030 incorporates a three jaw system and a larger diameter mandrel eject passage so the tool can pull 1/4" plastic and all-aluminum rivets as well as all rivet material and size combinations through 3/16".

The teeth are machined into the jaws resulting in a sharper tooth that performs a quicker and more firm bite into the mandrel. With 50% more tooth area, the three jaw system significantly extends jaw life beyond that of two jaw systems – particularly with tougher rivet materials like stainless steel.

Setting Monobolt® & T Style Rivets – You can upgrade your Bennett 6030 by adding a new barrel, jaws and appropriate nose pieces. Please see the "Optional Equipment Ordering Guide" on page 8.

Specifications

- Pull force @ 90 psi 1705 lbs.
- Pull stroke .62"
- Air consumption .051 SCF per cycle @ 90 psi
- Operating range 60 to 120 psi maximum
- Weight 3.5 lbs.

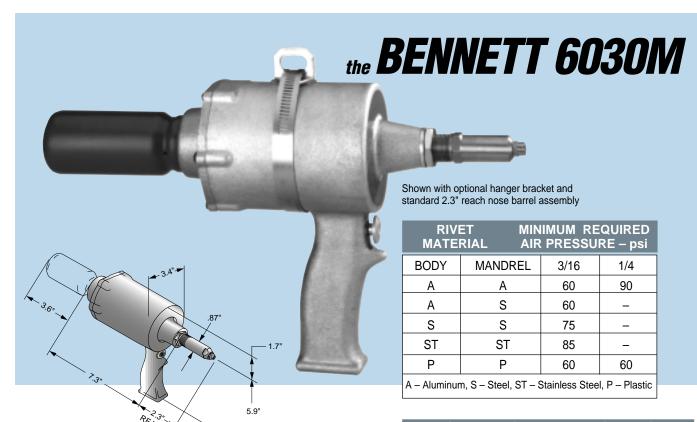


Comparing nose assemblies: Top – 4.5" long-reach; Bottom – 2.3" standard reach

Standard Equipment

- The 6030 tool comes with four nose pieces for non-structural type rivets. Sizes include 1/8, 5/32, 3/16 and 1/4.
- · Soft, vinyl plastic mandrel collection boot
- · Super quiet cushions
- Bench or rigid mounting

Optional Equipment Ordering Guide		
Product Description	Part Number	
Nose piece for nonstandard rivets	Consult Factory	
4.5" long-reach nose assembly	PP-630A	
Special nose barrel assemblies	Consult Factory	
Hanger Bracket (shown above)	BH-1	
Tool balancer (see page 13)	B-1	
Vacuum rivet retention & mandrel collection system (see page 12)	VR1	
Hands free kit (see page 13)	HFV-1	
Tool set up for vacuum	6030 with VA-63	



The Bennett 6030M – for Monobolt® & T Style Rivets is a modified version of the Model 6030 shown on the previous page. Both tools have the larger diameter mandrel eject passage for pulling 1/4" rivets.

The 6030M has a rugged new pulling head with expanded jaws sized for 3/16" Monobolts in all materials and 1/4" all-aluminum Monobolts.

Simply change nose pieces and the 6030M accepts 3/16 T Style Rivets in all materials or 1/4" all-aluminum T Style rivets – or 3/16 and 1/4 standard rivets.

Upgrade for the Bennett 6030

You can upgrade your 6030 for Monobolt and T Style rivets by adding a new barrel, jaws and appropriate nose pieces. See the blue shaded area in the "Optional Equipment Ordering Guide" for the needed parts.

Specifications

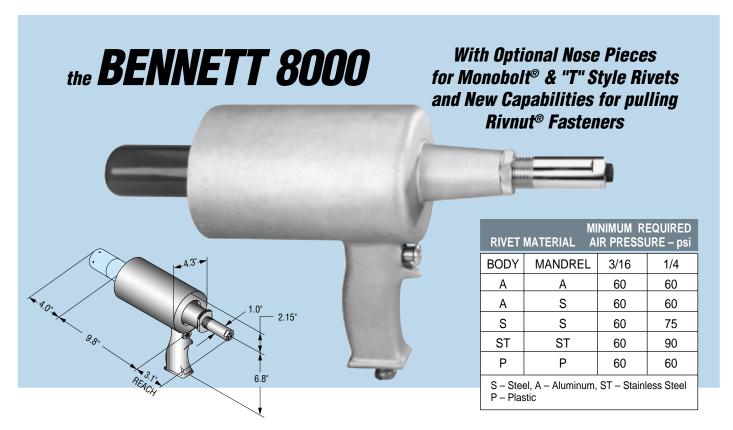
- Pull force @ 90 psi 1705 lbs.
- Pull stroke .62"
- Air consumption .051 SCF per cycle @ 90 psi
- Operating range 60 to 120 psi maximum
- Weight 3.5 lbs.

Standard Equipment

- The 6030M comes with 2 Monobolt® nose pieces. Sizes include 3/16 and 1/4.
- Soft, vinyl plastic mandrel collection boot
- Super quiet cushions
- · Bench or rigid mounting

Optional Equipment Ordering Guide

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Product Description	Part Number
Nose piece for 3/16 standard rivet	PP-800-16
Nose piece for 1/4 standard rivet	PP-800-17
Nose piece for nonstandard rivets	Consult Factory
4.5" long-reach nose assembly	PP-630M
Special nose barrel assemblies	Consult Factory
Hanger Bracket (shown above)	BH-1
Tool balancer (see page 13)	B-1
Vacuum rivet retention & mandrel collection system (see page 12)	VR1
Hands free kit (see page 13)	HFV-1
Tool set up for vacuum	6030M with VA-63
Monobolt® & T Style nose barrel upgrade for the Bennett 6030	PP-604M
Monobolt® & T Style Jaw Upgrade	PP-808-3
Nose piece for 3/16 Monobolt®	PP-800-16MB
Nose piece for 1/4 Monobolt®	PP-800-17MB
Nose piece for 3/16 T Style	PP-800-16T
Nose piece for 1/4 T Style	PP-800-16T



The Bennett 8000 is a strong, heavy duty pistol grip style tool with power and extra bite from oversized jaws. Perfect for setting large, oversized, bulky and tough rivets. With rugged construction, this tool stands up to the roughest handling.

Although lightweight for its power, a hanger bracket and tool balancer may be added for increased operator convenience and reduced fatigue.

The 8000 is equipped with a mandrel collection boot. For increased safety and efficiency you can add the optional VR1 Vacuum System achieving both vacuum rivet retention at the nose piece and automatic mandrel collection in a remote collector. The VR1 is described in detail on page 12. See page 3 for application tips.

Setting Monobolt® & T Style Rivets. Simply change nose pieces and your Bennett 8000 accommodates 3/16" and 1/4" Monobolts® and T Style Rivets in all materials.

Specifications

- Pull force @ 90 psi 2765 lbs.
- Pull stroke .87"
- Air consumption .15 SCF per cycle @ 90 psi
- Operating range 60 to 120 psi maximum
- Weight 8 lbs.

Now You Can Pull Rivnut® Fasteners! Consult Factory for Details About New Adapter Kit

Standard Equipment

- Every tool comes with two nose pieces for setting structural and non-structural type rivets. Sizes include 3/16 and 1/4.
- · Soft vinyl plastic mandrel collection boot
- Super quiet cushions
- · Bench or rigid mounting

Optional Equipment Ordering Guide		
Product Description	Part Number	
Nose piece for nonstandard rivets	Consult Factory	
Special nose barrel assemblies	Consult Factory	
Hanger Bracket	BH-3	
Tool balancer (see page 13)	B-2	
Vacuum rivet retention & mandrel collection system (see page 12)	VR1	
Hands free kit (see page 13)	Consult Factory	
Tool set up for vacuum	8000 with VA-8	
Nose piece for 3/16 Monobolt®	PP-800-16MB	
Nose piece for 1/4 Monobolt®	PP-800-17MB	
Nose piece for 3/16 T Style	PP-800-16T	
Nose piece for 1/4 T Style	PP-800-16T	

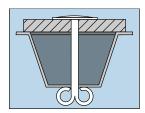
Quality products built for the rigors of construction environments

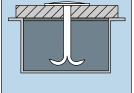


Bennett designed the CR-055 tool to set the TPR™ Peel Rivet from **S.P.C.** – A Volta Group Company. TPR Rivets offer a unique solution to the problems associated with the mechanical attachment of commercial roofing materials and systems.

What is a Peel Rivet?

Designed to curl tightly either inside or underneath the roof deck, the TPR's fingers create a gripping area four times wider than the fastener itself. Unlike threaded fasteners which depend on their thread width for holding power, the TPR has no threads and cannot back out!





Peel Rivet Under Deck

Peel Rivet Inside Deck

TPR Peel Rivet can be used to secure virtually all roofing systems including concrete, wood and metal. They are particularly well suited for lightweight decks where conventional threaded fasteners can't achieve sufficient pullout values. And because the TPR is automatically set with even compression, it cannot be over driven.

How Peel Rivets are Installed

The TPR is installed using two pneumatic tools – a Driving Tool (TPR-DT from *S.P.C.*) drives the rivet into the deck; and the Pulling Tool CR-055 (also available from *S.P.C.* as TPR-PT) pulls the mandrel into the tool. As the mandrel is pulled, the bottom portion of the rivet is split and "peeled" into four sections. When the mandrel snaps at its predetermined break point, the fastener is securely set with the curled "peels" rigidly locked.

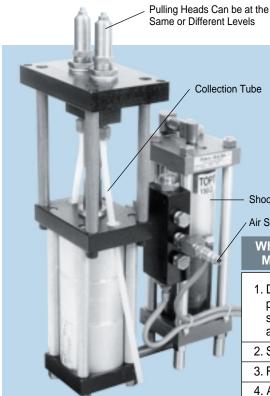
Specifications

- Pull force @ 100 psi 1200 lbs.
- Pull stroke 3"
- Air consumption .23 SCF per cycle @ 90 psi
- Operating range 60 to 120 psi maximum
- Weight 9.6 lbs.

Standard Equipment

- Single nose pieces for setting Peel Rivets in sizes 1-1/2" through 10".
- · Super quiet cushions

For information on Peel Rivets contact: S.P.C. – A Volta Group Company 315 Fairfield Road • Fairfield, NJ 07004 Tel. (201) 808-1233 • USA (800) 634-5979



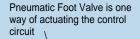
Multiple Rivet
Production Tooling

Shock Control System

Air Supply Connection

What we need to see in order to Quote Your Multiple Rivet Production Tooling System

- Drawings of parts to be riveted showing rivet pattern, rivet levels (they don't have to be on the same level), clearance space around rivets, and all pertinent dimensions.
- 2. Samples of rivets and parts to be fastened
- 3. Rivet specifications body and mandrel materials
- 4. A description of your desired operating cycle for the control circuit design
- 5. Available air pressure





Almost anything can be done

The combining of BENNETT COMPANY's extensive blind rivet setting expertise with FABCO-AIR's broad line of pneumatic cylinders and controls enables practical solutions for even the most challenging parts fastening applications.

If it can be done, BENNETT can do it. You'll find fastening equipment that is unavailable from any other source!



Automotive application requires double rivet heads on close centers for courtesy light housing assembly

When standard tools won't do it

Although any standard BENNETT Tool can be bench or plate mounted – and several tools can be actuated at the same time, the minimum center distance between rivets is controlled by the body size of the tool. For close center work you need other options.

Close center, multiple rivet setting

BENNETT Pulling Heads can be mounted on a plate in virtually any desired pattern. The plate is connected with tie rods to the face plate of a FABCO-AIR Multi-Power® Cylinder. The pulling collets and jaw assemblies are attached to a pulling bar which is in turn connected to the cylinder's piston rod. When the cylinder piston rod retracts, all of the rivets are pulled and set simultaneously!

When the cylinder rod extends, the pulling collets are returned and the broken mandrels are released.

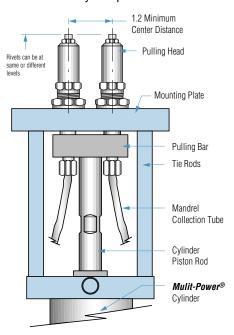
If the unit is mounted vertically, with the nose up, the mandrels simply fall out through collection tubes into containers of your choice.

If the unit is mounted in any other attitude, the mandrel collection tubes can be connected to the VR1 vacuum collection system (shown on the opposite page) so that the rivet will be held in place while parts are being positioned. Also, the system collects the broken mandrels.

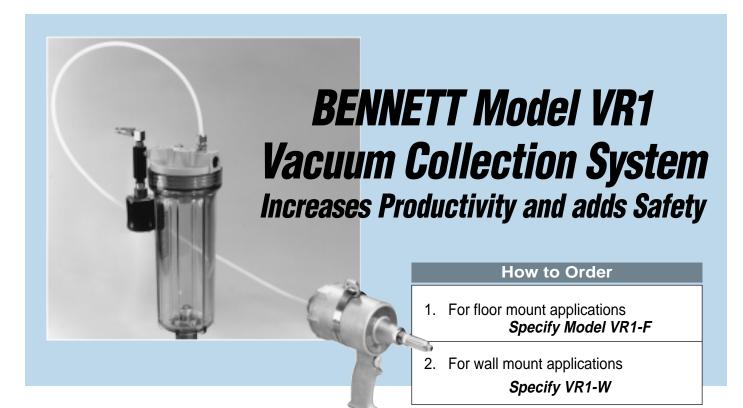
Built-in shock control system

To absorb the built-up energy when the mandrel breaks, the Multi-Power® cylinder has a built-in shock control system that is very similar to a shock absorber on a car.

BENNETT will supply all the pneumatic controls needed to meet the cycle requirements. Actuation can be by hand, foot or other means at your option.



For additional information on Multi-Power® Cylinders, please ask for your copy of FABCO-AIR's Master Catalog.



What it does

The VR1 is an air powered vacuum system for holding rivets in position in the tool nose and then automatically collecting spent mandrels in a large reservoir.

Vacuum retention of the rivet allows free use of one hand for the operator to manipulate parts being assembled.

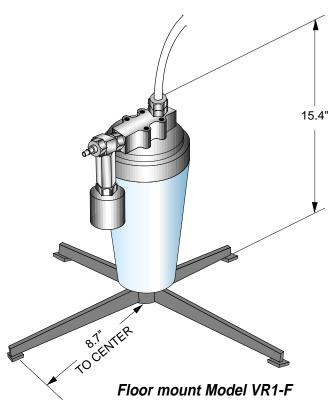
Capture of spent mandrels by the reservoir eliminates the danger and inconvenience of having loose mandrels on the floor.

With a holding capacity of 1500 to 2500 mandrels (depending on rivet size), the reservoir needs only occasional emptying—quite a time saver when compared to using collection boots!

How it works

An air powered vacuum generator is attached to the collection reservoir which in turn is connected to the tool via a Nylon collection tube. Vacuum is continuously drawn through the tool at the nose piece. Vacuum holds the rivet in place until the rivet is set and the mandrel has snapped. When the jaws release, the spent mandrel is pulled through the collection tube and deposited in the reservoir.

The system is available with a floor mount stand (as shown in the diagram) – or with a wall or post mounting bracket.



Rivet Tool Accessories

New Rivnut® Fasteners Adapter Kit for Models 6000 & 8000 - Consult Factory



Hanger Bail (top left) Hanger Bracket (top right)



Hanger Bails & Brackets Hanger bracket kits provide a central balance point by which to hang the tool using the optional tool balancer or other suspension device.

TO ORDER:

for Models 4000, 6000, 6030 or VE-900 ... Specify Part No. *BH-1* for Model 8000 Specify Part No. *BH-1*



Tool Balancers

For bench or fixed work area applications, adjustable tension tool balancers support the weight of the tool thereby reducing fatigue and increasing operator speed, efficiency and productivity. Equipped with a 10 foot Nylon cable and safety snaps, balancers are usable at any angle. Tools should be equipped with hanger bracket kits pictured above.

TO ORDER TOOL BALANCERS

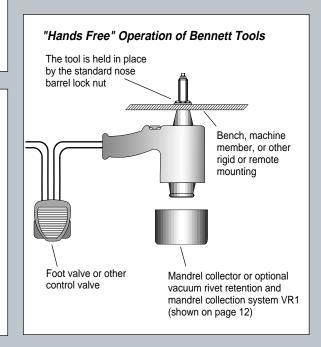
For Models 1000, 4000, 6000, 6030 & VE-900 Specify *B-1* (5 lb. maximum capacity)

For Model 8000 Specify *B-2* (10 lb. maximum capacity)



Hands Free Operation Kit – Freeing both hands for rivet and parts manipulation increases production and operator efficiency. A trigger strap holds the trigger down in the "on" position. The tool is then actuated remotely by a foot operated air valve. Each kit consists of a foot operated, 3-way air valve, air hose, and a trigger tie-down strap.

(Details opposite page and page 3) *TO ORDER*: for Model 1000 Specify Part No. *HFV-2* for Models 4000, 6000, 6030 Specify Part No. *HFV-1* for Models 8000, VE-900 *Consult Factory*



Rivet Tool Selection Guide

