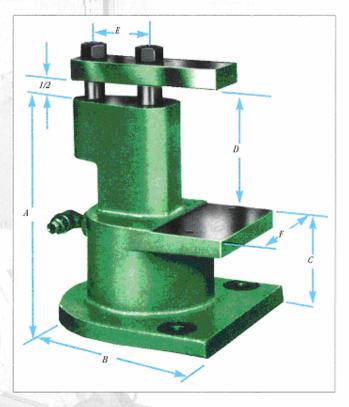


# **Vertical Clamping Fixtures**

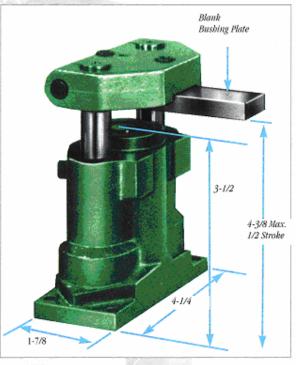


No. 2VC099 Clamping Fixtures are used for holding small piece parts during drilling and tapping operations.

- Fixture 1 Clamping Pressure at 100 Lbs.
- Fixture 1 Line Pressure at 150 Lbs.
- Fixture 2 Clamping Pressure at 100 Lbs.
- Fixture 2 Line Pressure at 426 Lbs.

#### Dimensions

	Fixture 1	Fixture 2	
A	5-15/16"	8-3-32"	
В	4-5/8"	5-15/16"	
C D	2-9/16"	3-1/16"	
D	2-5/8"	3-15/16"	
E	1.500	1.875"	
F	2-1/2"	3-3/4"	



No. 3VC099 Air-Operated Hold Down Clamping Fixture for use either alone or in combination with a horizontal indexing fixture where a clamping and indexing cycle is needed.

- Clamping Pressure at 100 Lbs.
- Line Pressure at 426 Lbs.

### Additional blank bushing plate

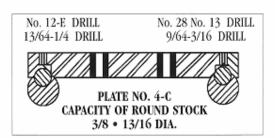
No.	Plate	
8L3	3/8"	
8L4	1/2"	
8L5	5/8"	
8L6	3/4"	

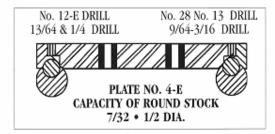
## **Vertical Clamping Fixtures**

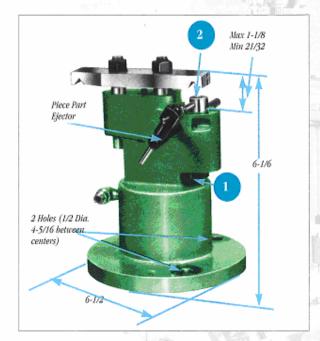
No. 4 Air-Operated Universal Cross Drilling Fixture with standard V-notched top plate. Easily accessible adjusting screw (1) Supporting studs are available in two lengths.(2)

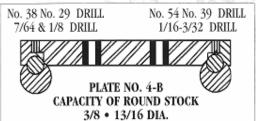
- Customer must select bushing plate
- Standard plates for various drill sizes and stock diameters
- Special plates can be furnished for either smaller or larger diameters
- Clearance between end of drill bushing and part to be drilled must be minimum of (1) drill diameter
- Clamping pressure at 4 times the line pressure.
- Normal clamping pressure is 40-80 Lbs.

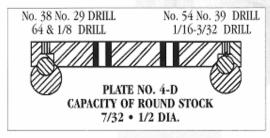
Plate	Capacity
4-B	3/8"-13/16" dia.
4-C	3/8"-13/16" dia.
4-D	7/32"-1/2" dia.
4-E	7/32"-1/2" dia.
4-F	1/8"-5/16" dia.
4-G	Blank

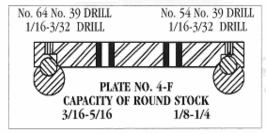




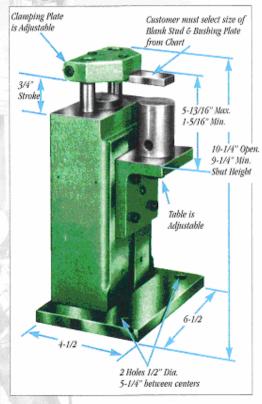








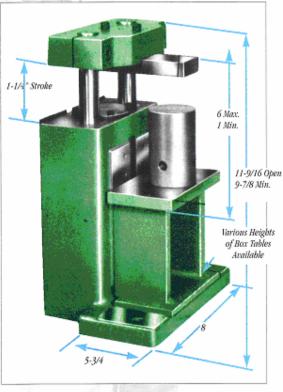






No. 8 Universal Clamping Fixture for holding small parts during drilling and tapping operations.

- Clamping Pressure at 148 Lbs.
- Line Pressure at 100 Lbs.
- Customer must select size of blank stud and bushing plate.
- Clamping plate is adjustable.



No. 9-1 Universal Clamping Fixture for holding larger parts during drilling and tapping operations.

- Clamping Pressure at 276 Lbs.
- Line Pressure at 100 Lbs.
- Customer must select size of blank stud and bushing plate.
- Clamping plate is adjustable.

### Catalog No. 9VC99

(with standard box table shown)

#### 9AT99

(with Angle Table as used in #8 fixture)

Angle Table Only

Optional Box Tables

9T399 (3-11/16")

9T499 (4-11/16")

9T799 (7-3/16")

## **Vertical Clamping Fixtures**

## Bushing Plate & Tooling Studs for No. 8 & No. 9-1

No. 8L and 9N Bushing & Clamping Plate available in four stock sizes: 3/8", 1/2", 5/8" and 3/4"

#### Additional Tooling Studs available

No.	Plate
8L3	3/8"
8L4	1/2"
8L5	5/8"
8L6	3/4"
9N3	3/8"
9N4	1/2"
9N5	5/8"
9N6	3/4"

Dimensions for machining tooling studs for cross drilling various diameters of round stock

## A - DIM = PIECE PART DIAM. NOTE: SLOT A-C MUST BE IN PERFECT

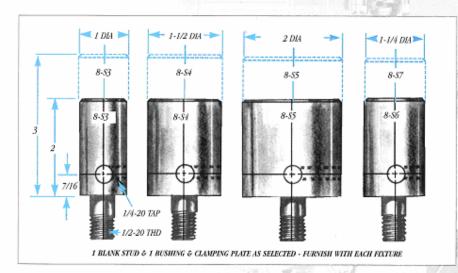
NOTE: SLOT A-C MUST BE IN PERFECT ALIGNMENT WITH SLOT B-D

B-DIM. = 3/4 x PIECE PART DIAM.

C-DIM. = PIECE PART DIA. 
$$+1$$
 32

## D-DIA. = DIA. OF DRILL TO BE USED + $\underline{\mathbf{A}}$

NOTE: SEE CHART FOR A-B-C- DIMENSIONS





This knife edge is superior to "r" Groove for locating and bolding round stock

A	В	C
1/4	3/16	1/8
9/32	13/64	1/8
5/16	15/4	9/64
3/8	9/32	5/32
7/16	21/64	3/16
1/2	3/8	13/64
9/16	27/64	7/32
5/8	15/32	1/4
3/4	9/16	9/32
7/8	21/32	5/16
1	3/4	23/64

