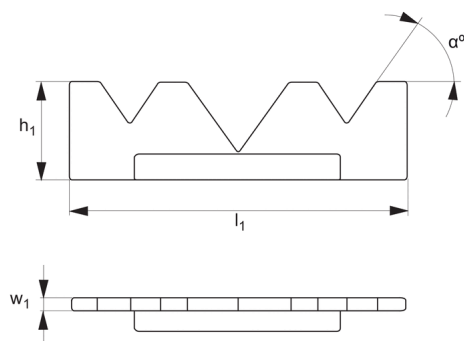




# Vice Mill Angles - QuickChange

for use with QuickChange master jaws 19850

## Vice Clamping



# 19856

VICE CLAMPING

### Material

Body: 80000 psi ductile cast iron.

19850.

All dimensions are in inches.

### Technical Notes

For use with QuickChange master jaw

### Important Notes

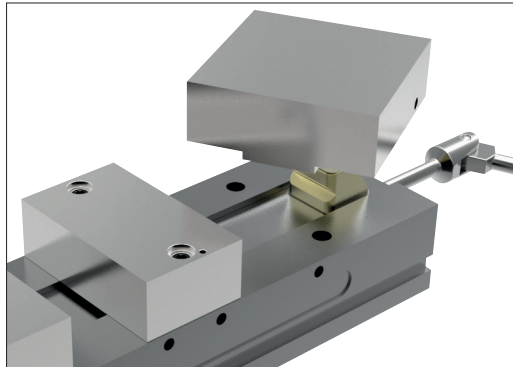
Sold individually, for a pair please order quantity of 2.

| Order No.   | For vice size | $l_1$ | $h_1$ | $w_1$ | $\alpha$ |
|-------------|---------------|-------|-------|-------|----------|
| 19856.W0040 | 4"            | 4     | 1.24  | 0.118 | 20       |
| 19856.W0041 | 4"            | 4     | 1.24  | 0.118 | 25       |
| 19856.W0042 | 4"            | 4     | 1.24  | 0.118 | 30       |
| 19856.W0043 | 4"            | 4     | 1.24  | 0.118 | 35       |
| 19856.W0044 | 4"            | 4     | 1.24  | 0.118 | 40       |
| 19856.W0045 | 4"            | 4     | 1.24  | 0.118 | 45       |
| 19856.W0060 | 6"            | 6     | 1.74  | 0.118 | 20       |
| 19856.W0061 | 6"            | 6     | 1.74  | 0.118 | 25       |
| 19856.W0062 | 6"            | 6     | 1.74  | 0.118 | 30       |
| 19856.W0063 | 6"            | 6     | 1.74  | 0.118 | 35       |
| 19856.W0064 | 6"            | 6     | 1.74  | 0.118 | 40       |
| 19856.W0065 | 6"            | 6     | 1.74  | 0.118 | 45       |
| 19856.W0080 | 8"            | 8     | 2.23  | 0.118 | 20       |
| 19856.W0081 | 8"            | 8     | 2.23  | 0.118 | 25       |
| 19856.W0082 | 8"            | 8     | 2.23  | 0.118 | 30       |
| 19856.W0083 | 8"            | 8     | 2.23  | 0.118 | 35       |
| 19856.W0084 | 8"            | 8     | 2.23  | 0.118 | 40       |
| 19856.W0085 | 8"            | 8     | 2.23  | 0.118 | 45       |



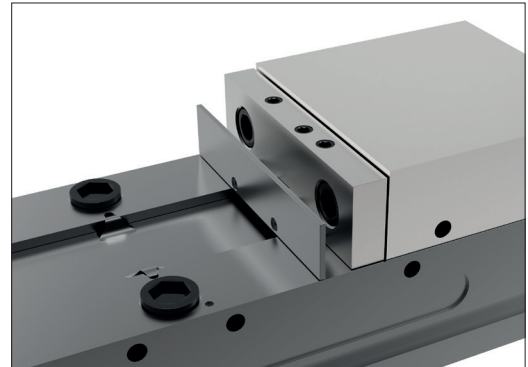
## ReLock Accessories

Both the AccuSnap and QuickChange vice jaw systems can be used in conjunction with most vice systems.



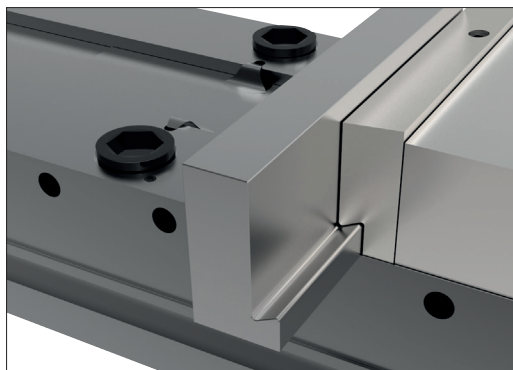
### SnapLock Machinable Fixture Jaws

Jaws can be attached, reversed, removed or indexed in a matter of seconds. The jaws are extremely versatile, allowing endless customising possibilities. Jaws are manufactured from steel and high quality aluminium.



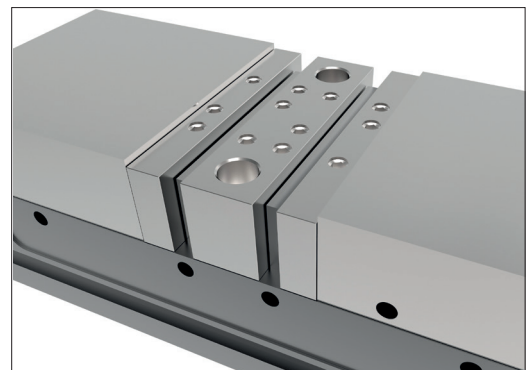
### SnapLock Carrier Jaws

Carrier jaws allow mounting of AccuSnap and QuickChange master jaws or standard bolt-on jaws using an industry standard bolt pattern.



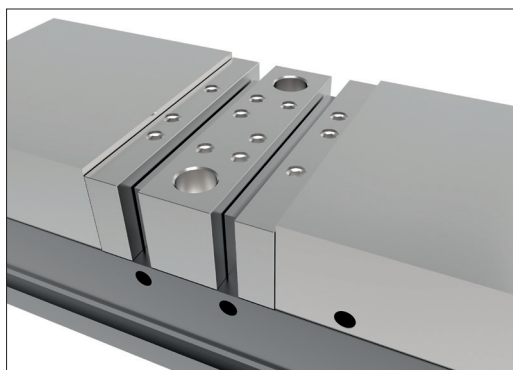
### QuickChange Vice System

QuickChange jaws slide into position via a dovetail slot, as shown. The system includes master jaws, parallels, V-blocks, mill angles and machinable soft jaws. Adaptable to most vice systems.



### AccuSnap Vice Jaw System

The AccuSnap vice jaw system (pictured), shows master jaws and parallels being used for workpiece set-up. The AccuSnap system allows setup change-over in seconds with extreme accuracy.



### AccuSnap Machinable Fixture Jaws

Ideal for many workholding options of smaller workpieces. Jaws are offered in two thicknesses, from either aluminium or pre-hardened steel.



### AccuSnap Workstops

Easily mount to AccuSnap parallels in a variety of configurations. Provides extreme workpiece location accuracy and repeatability. Can be used in conjunction with the AccuSnap presetting gauge to accurately reference your X, Y and Z machine datums.

# How to use the SnapLock Jaw System

19790-19862  
Clamping & Height Setting

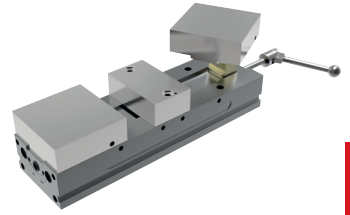
The SnapLock system's allows simple, quick changeovers between machinable and carrier jaws.

## SnapLock Machinable Fixture Jaws

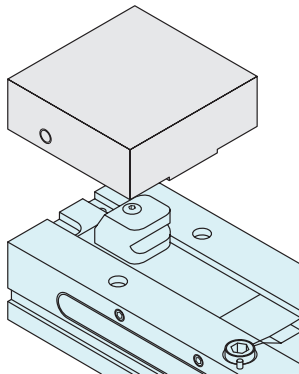
- Can be attached, reversed, removed or indexed in a matter of seconds.
- Extremely versatile, allowing endless customisation possibilities.
- Manufactured from high quality aluminium.

## SnapLock Carrier Jaws

- Allows mounting of AccuSnap and QuickChange master jaws or standard bolt-on jaws using an industry standard bolt size and pattern.

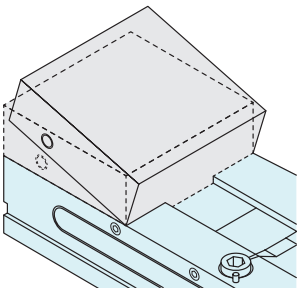


## Operation



### Step 1

Align the SnapLock outer jaw over the appropriate ReLock vice knuckle

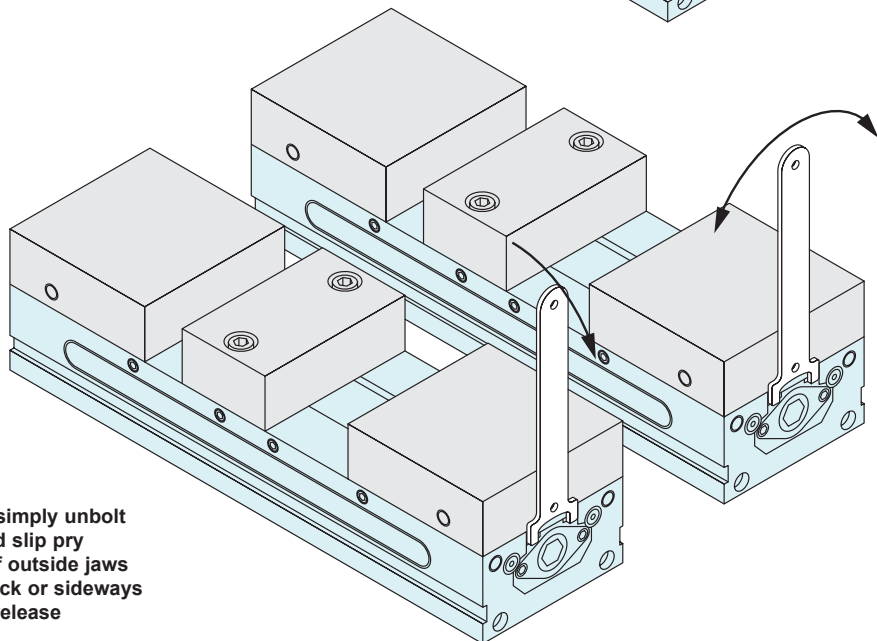
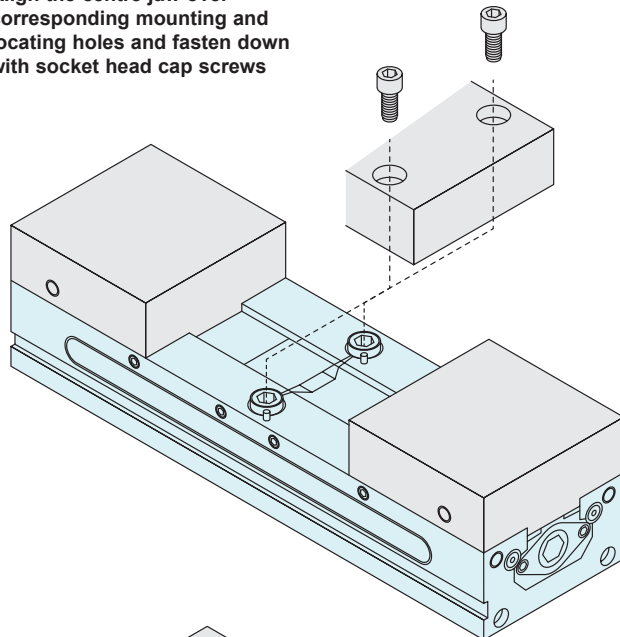


### Step 2

Place the front edge of the jaw over the knuckle and press firmly down to "snap" into place

### Step 3

Align the centre jaw over corresponding mounting and locating holes and fasten down with socket head cap screws



### Step 4

For jaw removal, simply unbolt the centre jaw and slip pry wrench in slots of outside jaws as shown; pull back or sideways on the handle to release

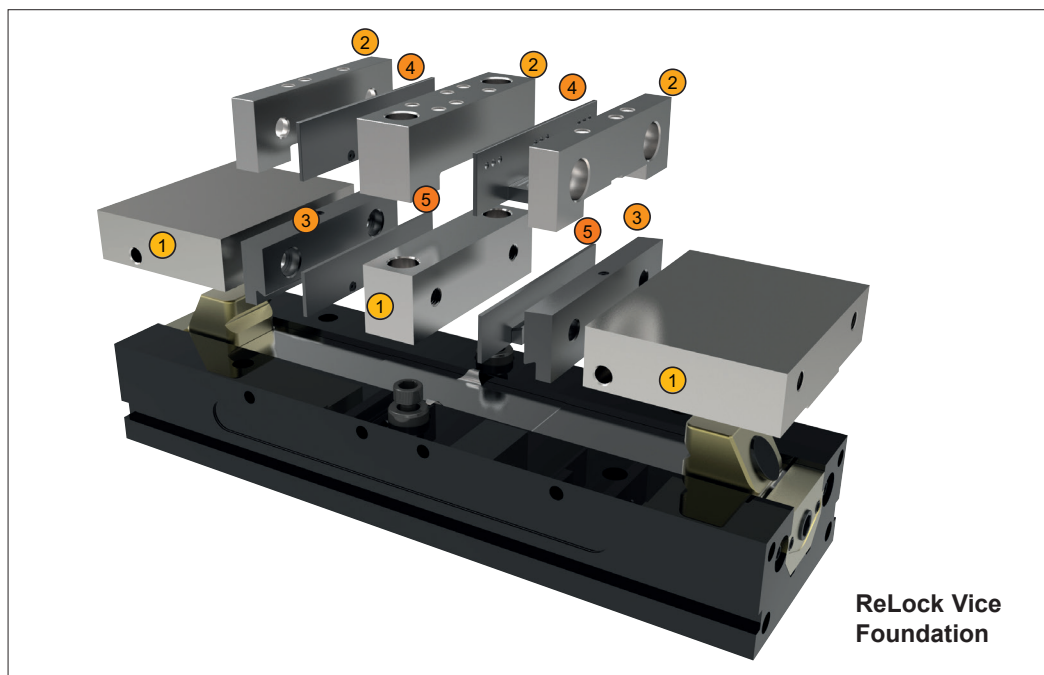
## Foundation

The ReLock vice is the foundation for a fully flexible vice system, with a multitude of interchangeable jaws, parallels or mill angles to suit your application.

Base vice - ReLock 2 or ReLock 8.

- SnapLock® Carrier Jaws - accepts both AccuSnap® and QuickChange™ Jaw systems.
- AccuSnap or QuickChange Parallels and Mill Angles - select the approach best suited to your application.

## Flexibility



ReLock Vice Foundation

### 1 SnapLock Carrier Jaws

SnapLock carrier jaws allow mounting of AccuSnap and QuickChange master jaws by using an industry standard bolt size and pattern. Carrier jaws snap on and off the SnapLock knuckles in seconds.

### 2 3 AccuSnap and QuickChange Master Jaws

AccuSnap QuickChange master jaws easily mount to the SnapLock carrier jaws by using an industry bolt size and pattern. AccuSnap master jaws patented locking receptacle accepts all AccuSnap accessories.

### 4 5 AccuSnap and QuickChange Parallels

AccuSnap and QuickChange parallels are designed for a range of set up variations when you need to position a workpiece between hardened jaws. AccuSnap parallels snap in and out of the AccuSnap master jaws in seconds. QuickChange parallels slide into position via a dovetail slot and gib.

Also available:

### Machinable Fixture Jaws

AccuSnap and QuickChange machinable fixture jaws can be customised quickly to fixture a wide range of workpieces. The jaws snap or slide in and out of the master jaws in seconds. Available in either aluminium or hardened steel.

### SnapLock Reversible Machinable Fixture Jaws

SnapLock reversible machinable fixture jaws are the most versatile method of fixturing on the ReLock System. Customising options are endless. Jaws can be machined on two faces for additional set up. Manufactured from high quality aluminium.

### Fixture Plate

Ideal for a wide variety of fixturing applications, such as holding many small parts or parts with difficult clamping or locating requirements. Fixture plates can be attached or removed in seconds and are offered in two widths. Manufactured from high quality aluminium.

### Modular Workstops

AccuSnap modular workstops quickly mount to parallels in many different positions. As many as three stops can be mounted to a single parallel to accommodate multi-piece set-ups.

### Universal Workstop

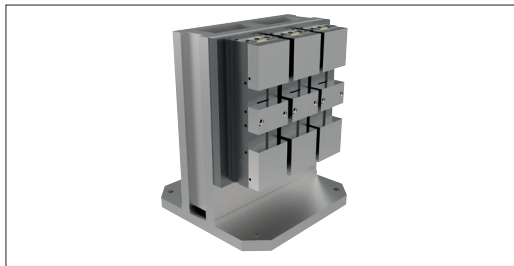
The universal workstop easily mounts to the side of the ReLock in numerous positions. Optional extension is available for larger workpieces.

### Workstop Presetting Gauge

The AccuSnap workstop presetting gauge, in combination with a standard micrometer, allows you to precisely preset your modular workstop positions in relation to the X, Y, and Z machine datums.

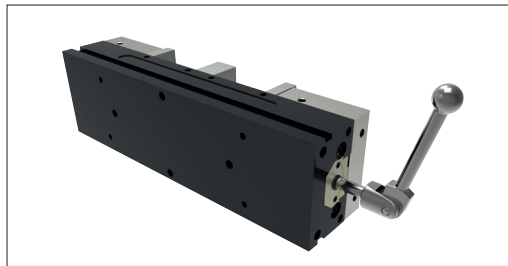
### Single Station Conversion Plate

The single station conversion plate quickly converts the ReLock from double station to single station vice for larger workpieces.



#### Optimised Table Space

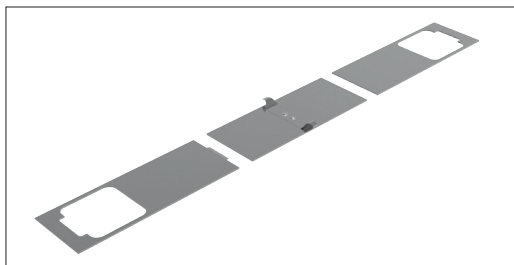
Compact modular design allows a multitude of mounting configurations. Vices can be mounted close together without hindering the removal or attachment of jaws. The ReLock 8-station (shown) is ideal for horizontal machining centres, as well as for use with rotary indexers on vertical machining centres.



#### Locating and Mounting

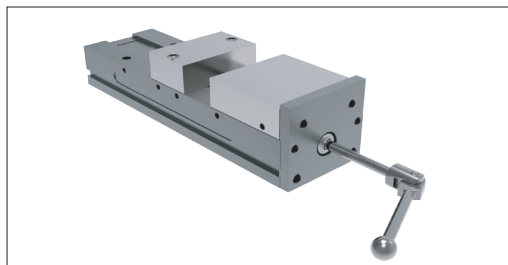
Locating and mounting options are simple and accurate. The bottom surface of the system has four precision dowel pin holes for locating and four drilled and counterbored holes drilled through from the top surface for rugged mounting. Side clamp slots are also incorporated.

#### Features and Benefits



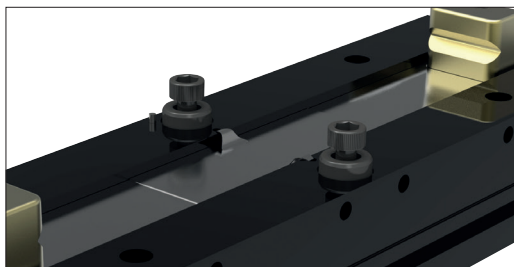
#### ReLock Chip Shields

ReLock's unique three piece telescopic chip shield wraps completely around the SnapLock knuckles, keeping swarf from getting into the vice's clamping mechanism. Shields can be quickly and easily removed for maintenance purposes.



#### Single Station Conversion

Used in conjunction with SnapLock carrier jaws, the conversion plate allows the ReLock system to be converted from a double to a single station vice – ideal for larger workpieces.



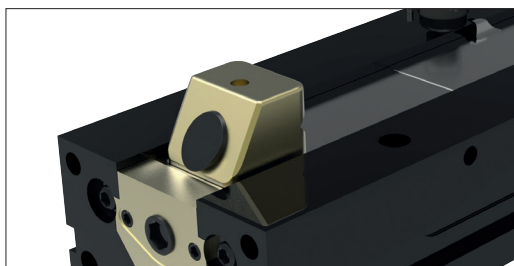
#### Centre Jaw Location

The ReLock's centre jaw locating studs allow quick jaw mounting and indexing to accuracies of  $\pm 0.0005"$ . Foolproof pin eliminates the possibility of the jaws being accidentally mounted in reverse.



#### SnapLock Knuckle

Exclusive SnapLock knuckle allows SnapLock soft jaws and SoftLock carrier to be attached and removed in seconds.



#### Auto Offset Mechanism

Exclusive automatic offset mechanism allows non-simultaneous workpiece clamping and unclamping to one of the three optional offset settings: 4" and 6": 0.030", 0.125", or 0.250"; 8": 0.125", 0.250", or 0.375". The offset setting is the distance the rear jaw backs away from the workpiece before the front jaw begins to back away from the workpiece.