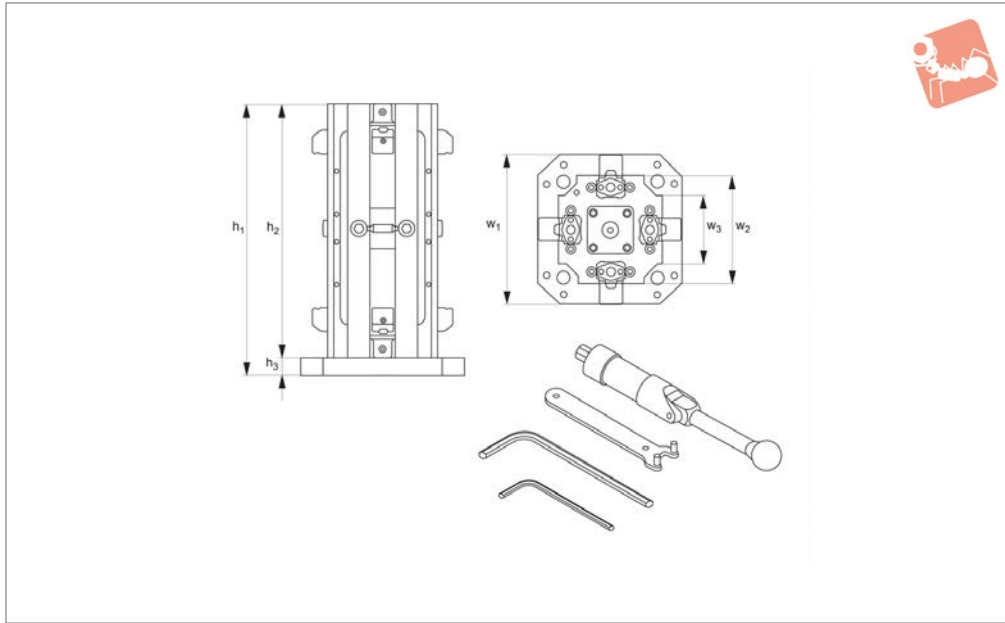




8 Station Vice - ReLock 8 converts a double to single station vice

Vice Clamping



19762

VICE CLAMPING

Material

Body: 80000 PSI ductile cast iron.
Sideways flame hardened to 40 HRC max.

Technical Notes

Vice jaws not included, order separately.
See part no. 19790.
Jaw capacity dependent upon selection of either machinable or hard jaws. See technical pages.

Replacement parts available.

Tips

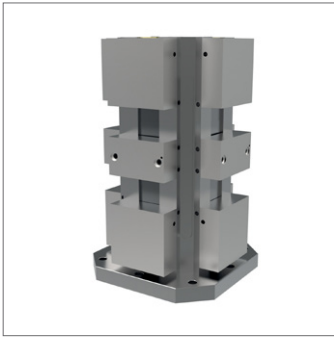
Supplied with actuation handle, hex key and wrench.
Base plate designed to adapt to wide range of machine tables.
8-station vice columns can be located on a

pallet using edge location with shims or spacers (not supplied).

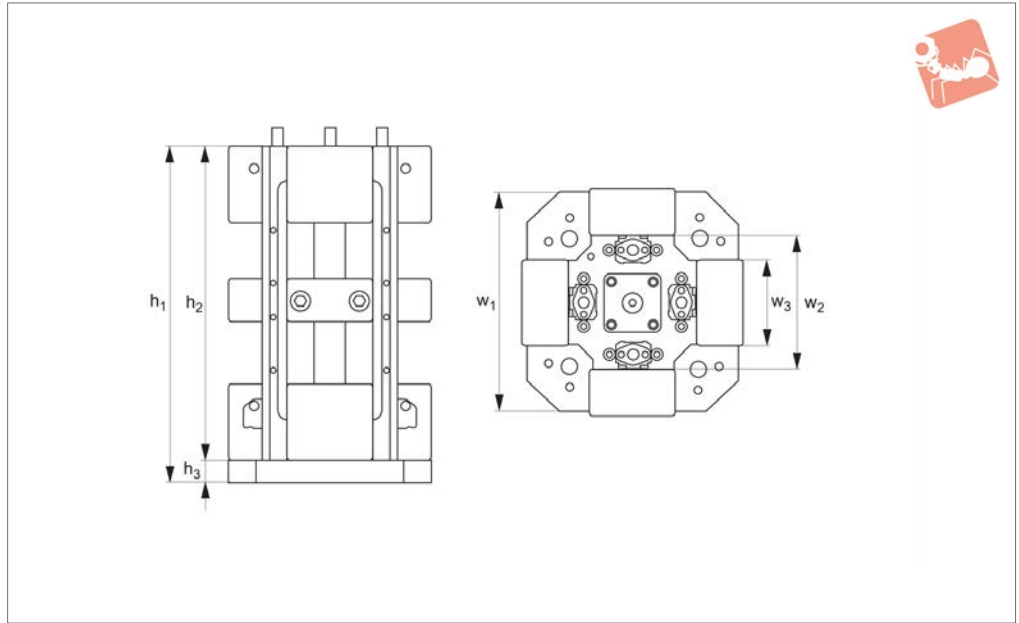
Important Notes

Not compatible with 19768 compact 8-vice column.
All dimensions are in inches unless stated *.

Order No.	Vice size	Clamp pressure lb max.	Base type	h_1	h_2	h_3	w_1	$w_2 \pm 0.001$	w_3	Weight lb
19762.W0040	4"	6000	Inch	17.90	16.75	1.15	10.75	7	4	150
19762.W0041	4"	6000	Metric	17.90	16.75	1.15	400*	7	4	150
19762.W0060	6"	12000	Inch	22.65	21.25	1.40	14.00	9	6	280
19762.W0061	6"	12000	Metric	22.65	21.25	1.40	400*	9	6	280
19762.W0080	8"	16000	Inch	31.10	29.50	1.60	18.00	12	8	750



19764



VICE CLAMPING

Material

Body: 80000 PSI ductile cast iron.
Sideways flame hardened to 40 HRC max.
Machinable jaws: aluminium.

Technical Notes

Replacement parts available.

Tips

Supplied with actuation handle, hex key and wrench.
Base plate designed to adapt to wide range of machine tables.
8-station vice columns can be located on a

pallet using edge location with shims or spacers (not supplied).

Important Notes

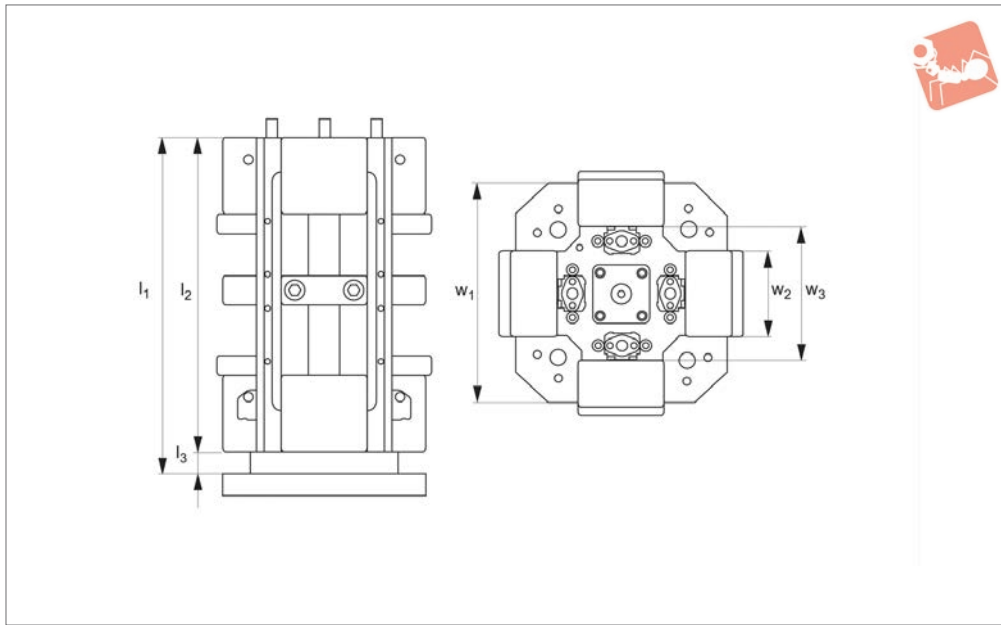
All dimensions are in inches unless stated *.

Order No.	Vice size	Set contents	Clamp pressure lb max.	Base type	Jaw capacity	h_1	h_2	h_3	w_1	$w_2 \pm 0.001$	w_3	Weight lb
19764.W0040	4"	Vice - 1 x 19762.W0040, Machinable jaws - 4 x 19790.W0401	6000	Inch	4,125 to 15,000	17.90	16.75	1.15	10.75	4	7	160
19764.W0041	4"	Vice - 1 x 19762.W0041, Machinable jaws - 4 x 19790.W0401	6000	Metric	4,125 to 15,000	17.90	16.75	1.15	400*	4	7	160
19764.W0060	6"	Vice - 1 x 19762.W0060, Machinable jaws - 4 x 19790.W0601	12000	Inch	5,125 to 19,500	22.65	21.25	1.40	14.00	6	9	292
19764.W0061	6"	Vice - 1 x 19762.W0061, Machinable jaws - 4 x 19790.W0601	12000	Metric	5,125 to 19,500	22.65	21.25	1.40	400*	6	9	292
19764.W0080	8"	Vice - 1 x 19762.W0080, Machinable jaws - 4 x 19762.W0801	16000	Inch	7,625 to 27,500	31.10	29.50	1.60	18.00	8	12	764



8 Station Vice - ReLock 8 with hard jaws

Vice Clamping



19766

VICE CLAMPING

Material

Body: 80000 PSI ductile cast iron.
Sideways flame hardened to 40 HRC max.
Carrier jaws: aluminium.
Hard jaws: steel.

Technical Notes

Replacement parts available.

Tips

Supplied with actuation handle, hex key and wrench. Base plate designed to adapt to wide range of machine tables.
8-station vice columns can be located on a pallet using edge location with shims or spacers (not supplied).

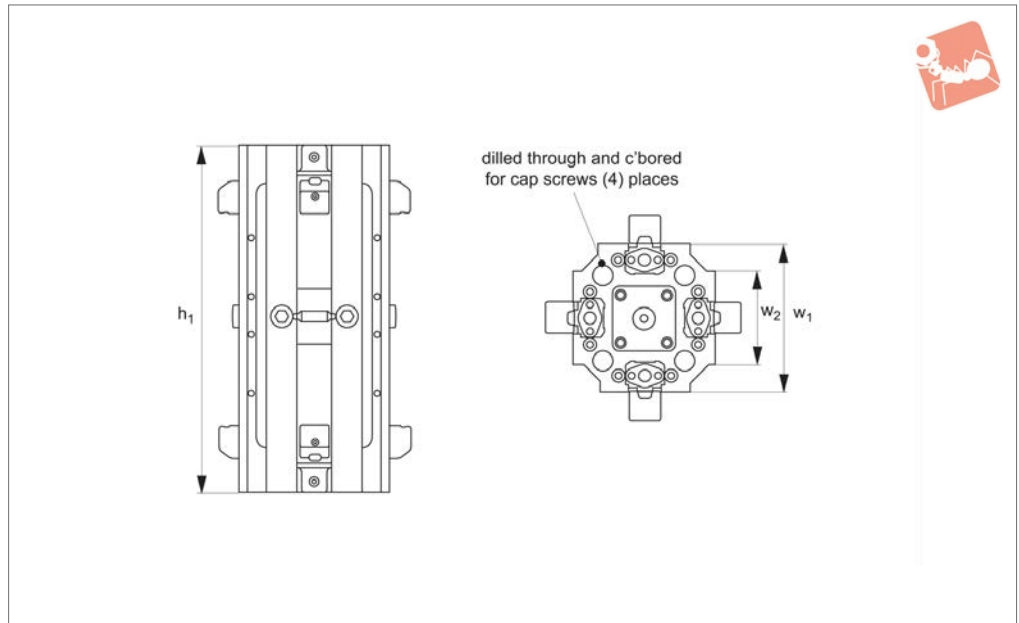
Important Notes

All dimensions are in inches unless stated *.

Order No.	Vice size	Set contents	l_1	Clamp pressure lb max.	Base type	Jaw capacity	l_2	l_3	w_1	w_2	w_3 ± 0.001	Weight lb
19766.W0040	4"	Vice - 1 x 19762.W0040, Carrier jaws - 4 x 19796.W0403,17,90 Hard jaws - 4 x 19892.W0401		6000	Imperial	4,125 to 15,000	16,75	1,15	10,75	4	7	170
19766.W0041	4"	Vice - 1 x 19762.W0041, Carrier jaws - 4 x 19796.W0403,17,90 Hard jaws - 4 x 19892.W0401		6000	Metric	4,125 to 15,000	16,75	1,15	400*	4	7	170
19766.W0060	6"	Vice - 1 x 19762.W0060, Carrier jaws - 4 x 19796.W0603,22,65 Hard jaws - 4 x 19892.W0601		12000	Imperial	5,125 to 19,500	21,25	1,40	14,00	6	9	305
19766.W0061	6"	Vice - 1 x 19762.W0061, Carrier jaws - 4 x 19796.W0603,22,65 Hard jaws - 4 x 19892.W0601		12000	Metric	5,125 to 19,500	21,25	1,40	400*	6	9	305
19766.W0080	8"	Vice - 1 x 19762.W0080, Carrier jaws - 4 x 19796.W0803,31,10 Hard jaws - 4 x 19892.W0801		16000	Imperial	7,625 to 27,500	29,50	1,60	18,00	8	12	780



19768



Material

Body: 80000 PSI ductile cast iron.
 Sideways flame hardened to 40 HRC max.
 Machinable jaws: aluminium.
 Carrier jaws: aluminium.
 Hard jaws: steel.

Technical Notes

Jaw capacity dependent upon selection of

either machinable or hard jaws, see technical pages.
 Designed for machining centres with small working envelopes. Through mounting holes are included to mount directly to a pallet without the need for a base plate.

Tips

Supplied with actuation handle, hex key

and wrench and mounting kit.
 Adaptor plate 19770 can be used to attach this compact vice column to a pallet or indexer.

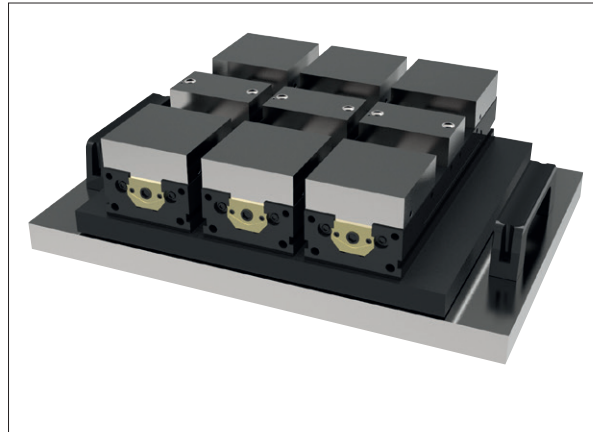
Important Notes

All dimensions are in inches.

Order No.	Vice size	Set contents	Clamp pressure lb max.	Jaw capacity	Recommended foot lb	h_1	w_1 ± 0.001	w_2
19768.W0010	4"	Vice - 1 x 19768.W0010. No jaws.	6000	-	45-50	13.9	7	4
19768.W0020	4"	Vice - 1 x 19768.W0010, Machinable jaws - 4 x 19790.W0401.	6000	2,700 to 12,150	45-50	13.9	7	4
19768.W0030	4"	Vice - 1 x 19768.W0010, Carrier jaws - 4 x 19796.W0403, Hard jaws - 4 x 19792.W0401.	6000	1,575 to 13,150	45-50	13.9	7	4



The compact design of the ReLock vice allows you to mount the vices very closely to each other without interference. The SnapLock line of jaws allows you to literally “snap” jaws and accessories on and off the vice without the use of bolts or pins.



ReLock 2 and 8-Station Capacities

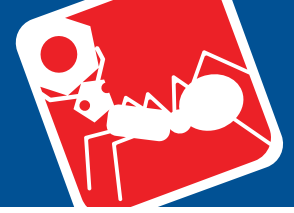
Jaw type/configuration	Vice size		
	4"	6"	8"
Machinable jaws			
	4,125	5,125	7,625
	6,875	9,060	12,812
	9,500	11,625	17,125
	12,250	15,562	22,312
	15,000	19,500	27,500
Carrier and hard jaws	4"	6"	8"
	3,000	4,000	6,000
	7,375	9,500	13,250
	7,250	9,500	14,000
	11,625	15,000	21,250
	16,000	20,500	28,500

Maximum workpiece capacities for selected vice configuration. All dimensions in inches.

Workpiece
 Vice jaws

All dimensions in inches

ov-W19752-A-T-W19766-A-T-relock-2-and-8-station-capacities-rmh - Updated - 25-10-2022



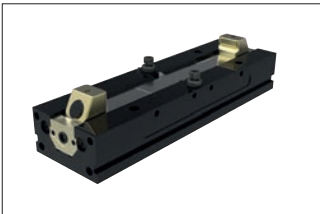
The ReLock Vice System combines high manufactured tolerances with unequalled versatility in providing two-station and 8-station production vices.

ReLock CNC Vices, available with machinable soft jaws, hard jaws, master jaws and parallels, or fixture plates, allow the machinist a variety of configurations with the same vice. Bodies are manufactured from 80,000 psi ductile cast iron, and guide parts are flame hardened and ground to accuracies of $\pm 0,0005''$.

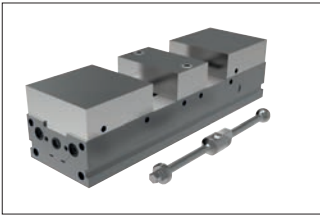
Manual and hydraulic two-station and 8-station vices are available in widths of 4", 6" and 8".

Advantages

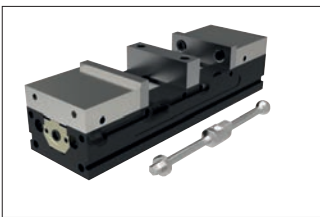
- Reduced setup times - when used with out SnapLock system, jaws can be changed or indexed in a matter of seconds.
- Extremely versatile: comprehensive array of jaws and accessories for vertical or horizontal machining.
- Accurate and durable: designed and precision manufactured from high grade materials.



19752 Double Station Vice.



19754 Double Station Vice with soft jaws.



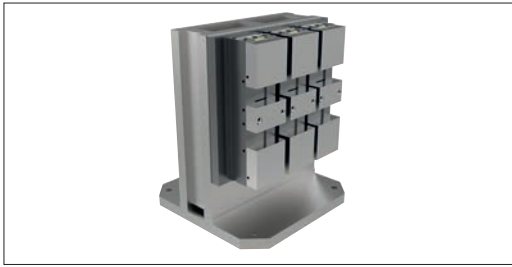
19756 Double Station Vice with hard jaws.



19764 8-Station Vice with soft jaws.

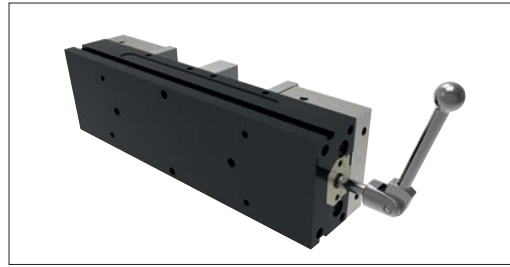


Features and Benefits



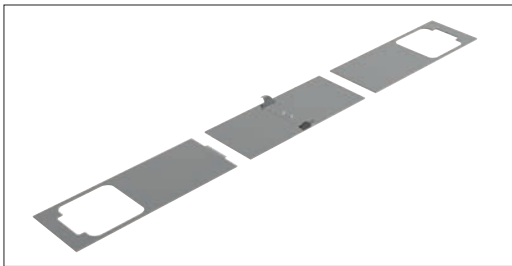
Optimised Table Space

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.



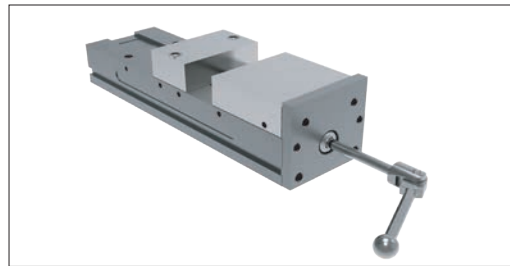
Locating and Mounting

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.



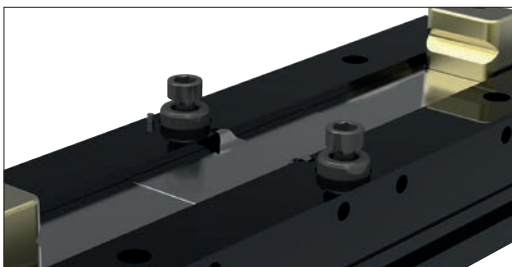
ReLock Chip Shields

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.



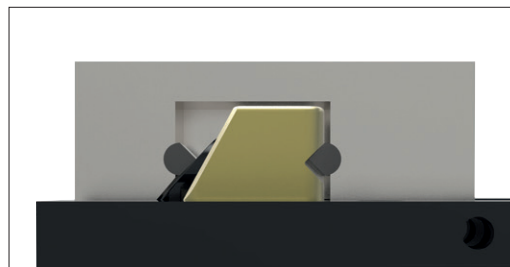
Single Station Conversion

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.



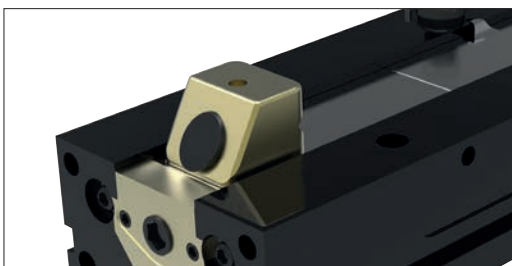
Centre Jaw Location

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.

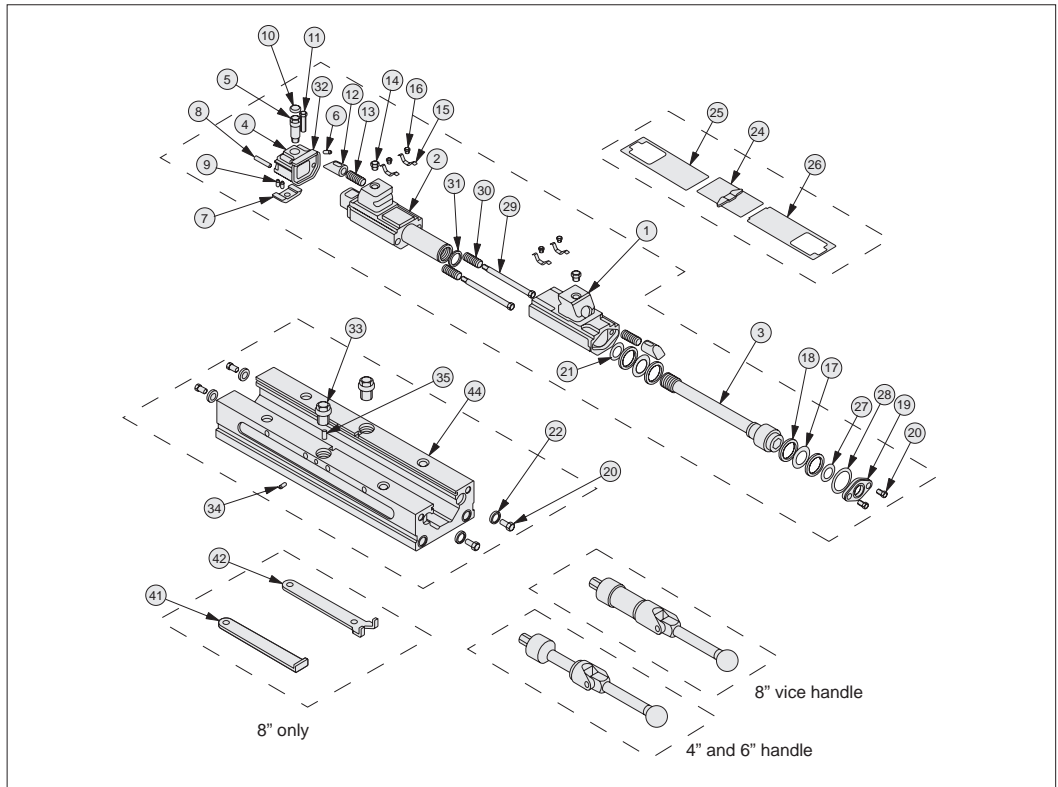


Auto Offset Mechanism

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.

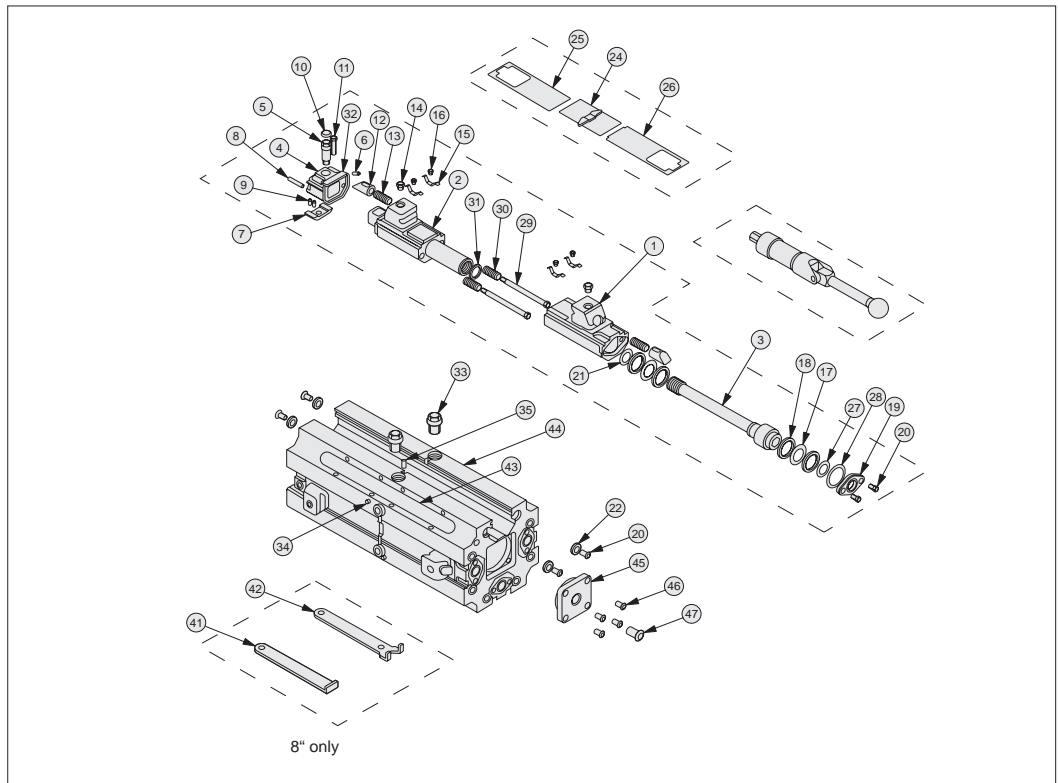


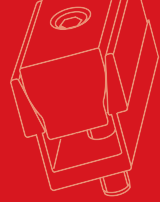
Spares available on request.
Please contact our sales office.



VICE CLAMPING

Spares available on request.
Please contact our sales office.



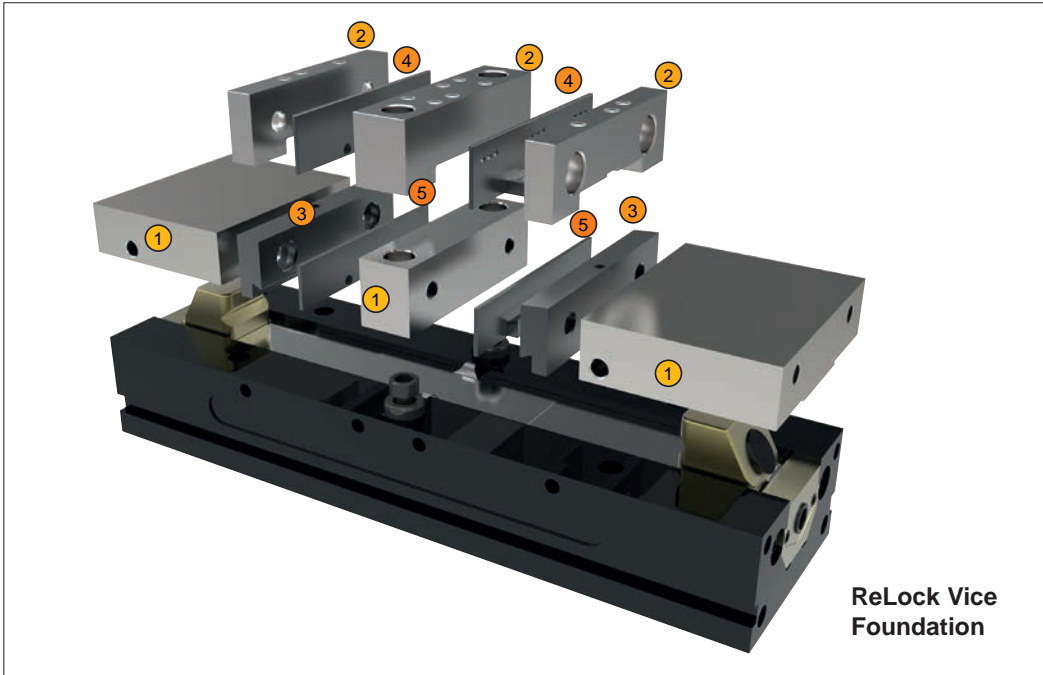


Foundation

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

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.



Initial Cleaning

After unpacking your vice and checking the contents, wipe all surfaces with a clean rag or cloth to remove any debris or rust inhibitor that is present. This will ensure that the vice will operate at its maximum efficiency.

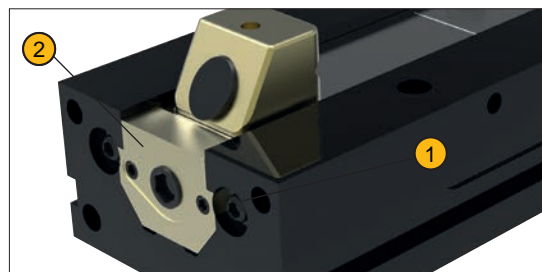
Operating Instructions

Behind the rear knuckle (opposite the handle end) you will find two hex screws. One is to adjust the automatic offset mechanism (discussed later) and the other is to adjust the brake mechanism for the vice (see drawing A).

Tighten Brake Mechanism

Simply tighten the brake screw in a clockwise rotation until it is snug. **DO NOT OVERTIGHTEN.** Failure to set brake properly will:

- not allow vice to open and close properly and/or
- will not allow the automatic offset mechanism to operate correctly.



1 Offset Mechanism

2 Break assembly

Drawing A

Do not fully close vice without jaws properly mounted on vice knuckles.

The ReLock vice should only be fully closed when:

- a three piece SnapLock Machine Jaw Set is on vice
- a SnapLock Carrier Jaw Set and AccuSnap or QuickChange Master Jaw configuration is on vice

Failure to do this could result in damage to the centre chip shield.

Automatic Offset Mechanism

Behind the rear knuckle (opposite the handle end) you will find two hex screws. One is to adjust the automatic offset mechanism and the other is to adjust the brake mechanism for the vice (see drawing A on previous page). The automatic offset mechanism allows the user to set the distance that one jaw will break (i.e. open) before the next jaw breaks. The offset can be set to three distances: .030, .125, .250. The automatic part of the mechanism allows the user to change workpiece sizes without any further adjustment to the offset mechanism. For example: You set your offset to .250 and you are setting up a job that the workpiece is a 3" square then you switch to the next job where the workpiece is 4" square, the offset mechanism will automatically break the back jaw .250 for both workpieces. Similarly, you can change the offset for both jobs simply by turning the adjustment screw to the desired distance. This feature is especially useful in a horizontal machining centre application. This will prevent both workpieces from falling out of your fixture at the same time and allows you to set the distance.

Jaw Opening & Closing

When closing the vice, the front jaw (handle end) will open first. Once contact is made to the workpiece, the back jaw will move. When contact is made by the back jaw both jaws will tighten together to your desired pressure. **DO NOT OVER-TORQUE VICES.** Over-torquing will cause damage to the vice and could cause harm to the operator.

Recommended clamping pressures:

4": 0-6,000 lbs. 6": 0-12,000 lbs. 8": 0-16,000 lbs.



Mounting Information

2-station Vices

This vice has two, standard mounting options:

1. The bottom of the vice has four (4) locating holes and four (4) cap screw holes for mounting. The cap screw holes can be accessed through the top of the vice. When SnapLock Jaws are mounted on the vice the cap screw holes are completely covered preventing any coolant, fluid or chips from entering the holes. This option will allow you to mount vices very close to each other without interference.
2. The other option is to utilise the slots on either side of the vice in conjunction with toe or strap clamps.

8-station Vices

All standard baseplates come with a 50mm centre bushing and edge locating. Please refer to catalogue for specific mounting specifications.

Maintenance and Cleaning

Like any piece of quality equipment, the ReLock vice will need to periodic cleaning and maintenance to prevent lock-up and ensure maximum efficiency. The entire side segment of the vice can be easily removed and replaced.

1. Remove all jaws and accessories from the vice.
2. Remove the two retaining screws on one of the ends (or top only of 8-Station Vice).
3. Loosen the brake mechanism to allow the segment to slide freely. Do not remove screw.
4. Use the SnapLock pry wrench to lift and slide the centre chip shield locking wings onto bed of vice.
5. Slide the entire segment out of the vice way.
6. Be sure to set the chip shields aside until needed for re-assembly.
7. Place segment on table or flat surface.
8. Use the vice handle to separate the two sections of the slide segment making sure that the segment does not turn with the lead screw.
9. Remove rubber seal from the lead screw and inspect for damage.
10. Completely clean all surfaces and holes from all coolant, fluids and chips.
11. Grease both the external and internal threads of the lead screw.
12. Remove the two screws from the handle end of the front segment and remove plate.
13. Push the lead screw through the front segment to expose thrust washers.
14. Grease all thrust washers, push front segment back onto lead screw and replace plate with screws.
15. Remove the screw from the top of each knuckle and grease the SnapLock plunger assembly.
16. Re-assemble plunger assembly.
17. Clean entire vice body especially the centre way before re-assembling vice.
18. Place seal back onto the lead screw making sure to push it past the threads.
19. Assemble two slide segment units back together by again preventing the segments from turning while screwing the lead screw back into the rear segment.
20. Once external threads are not visible, place the seal back into the slot provided by using a small screwdriver or tool. Make sure that the seal is properly installed. Failure to do this can result in damage to the vices' internal mechanisms.
21. Place the outside chip shields onto the proper knuckles. Shields are notched to fit only one end. Failure to do this will allow coolant and chips into the lead screw area and cause binding.
22. Slide rear segment into the vice.
23. Place the centre chip shield into the slot prying the wings onto the bed of the vice.
24. Slide the rest of the segment in to position making sure that the outside chip shields slide under the centre chip shield.
25. Replace retaining screws in vice.

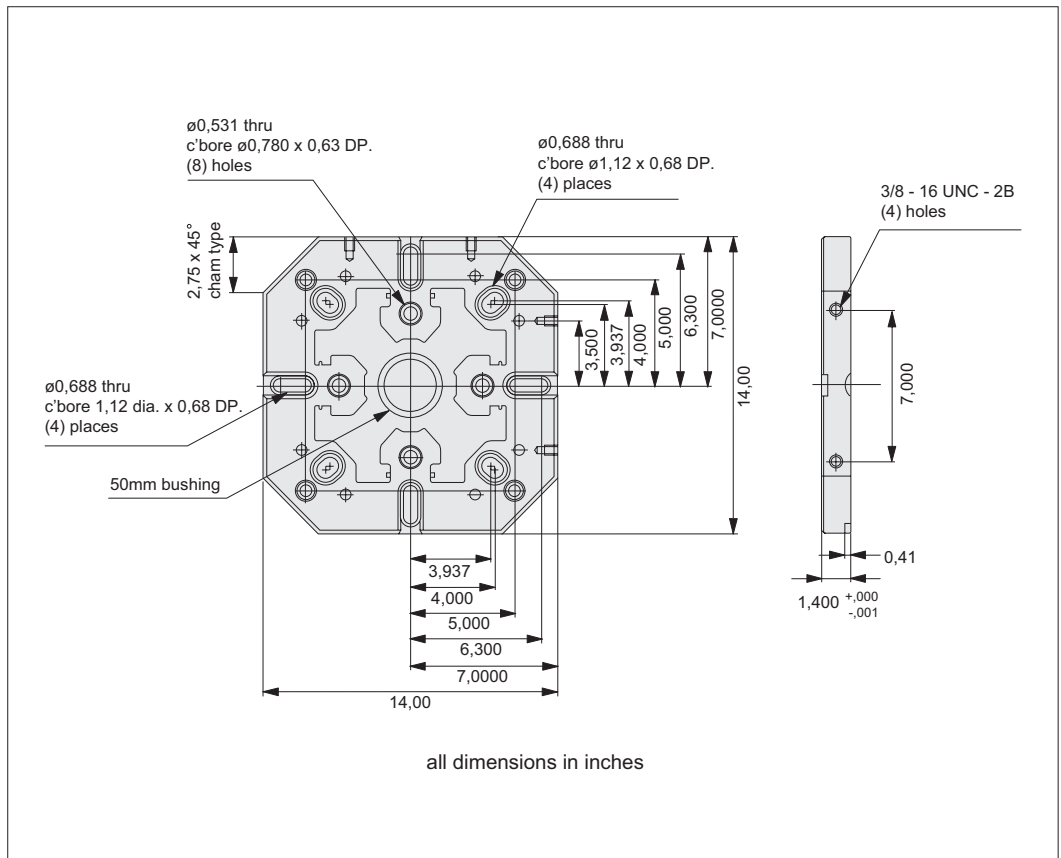
This maintenance procedure should be done periodically.

The frequency of this procedure depends on how much you use your vice.



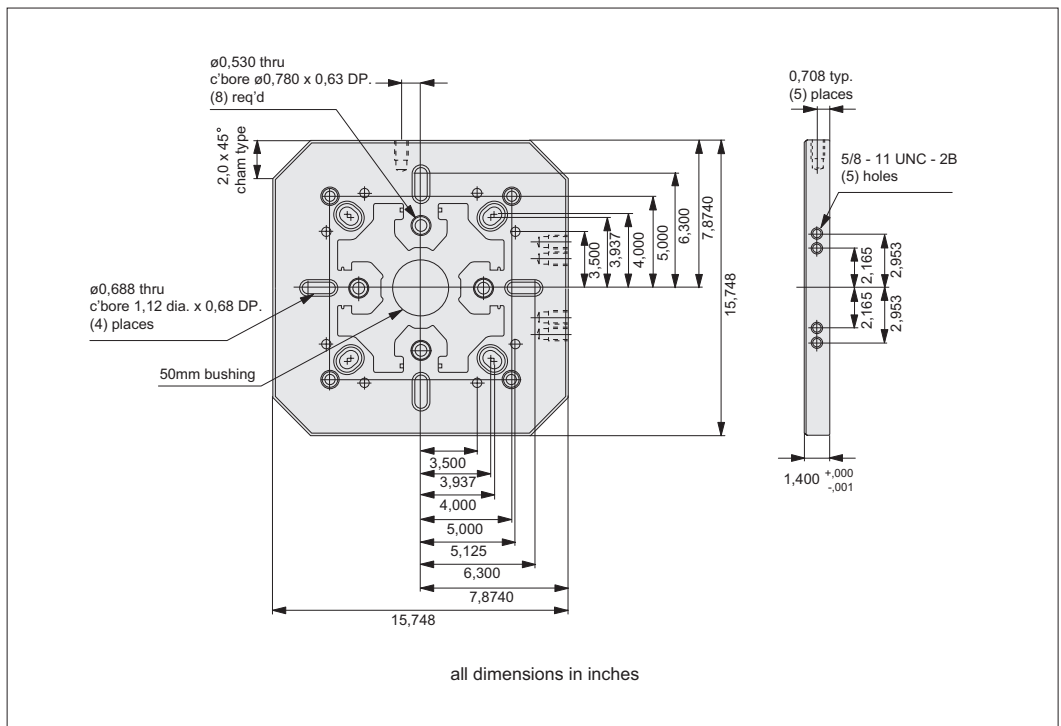
Universal Baseplate for 6" ReLock 8-Station Vice

Details of baseplate included with vice no. **19762.W0060**.



400mm Baseplate for 6" ReLock 8-Station Vice

Details of baseplate included with vice no. **19762.W0061**.





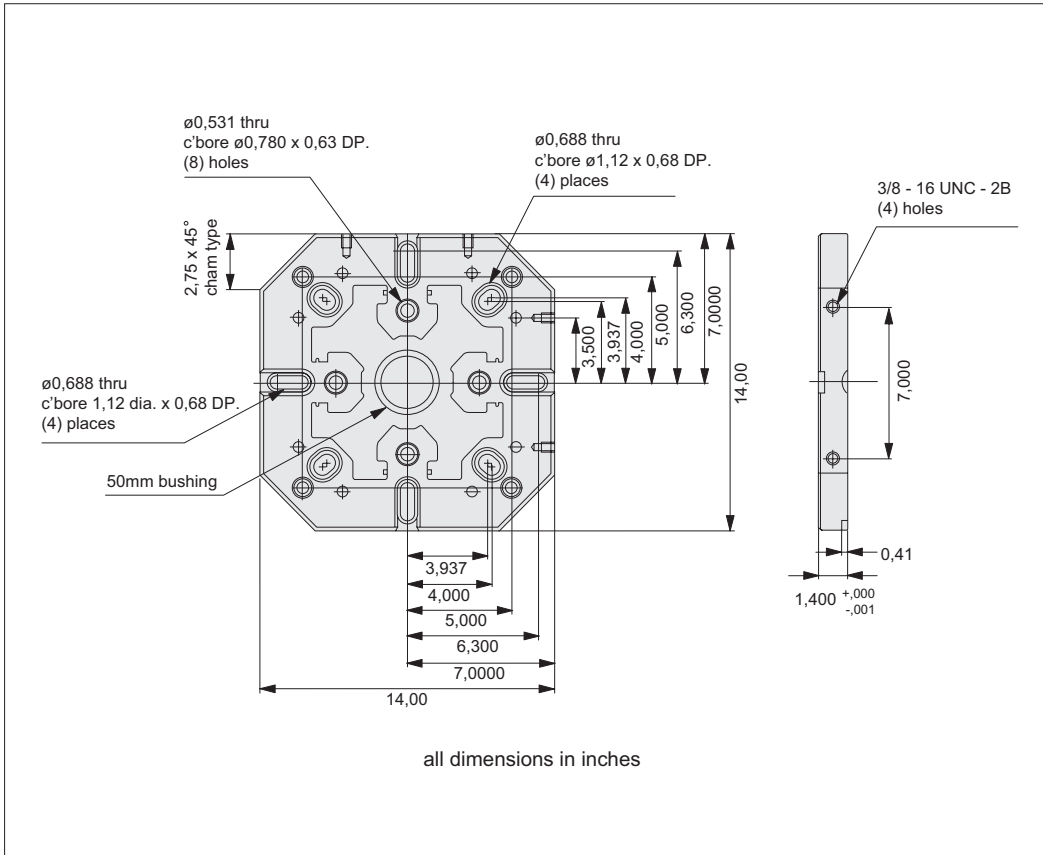
8-Station Vice Baseplate Mounting Information



Clamping & Height Setting

Universal Baseplate for 6" ReLock 8-Station Vice

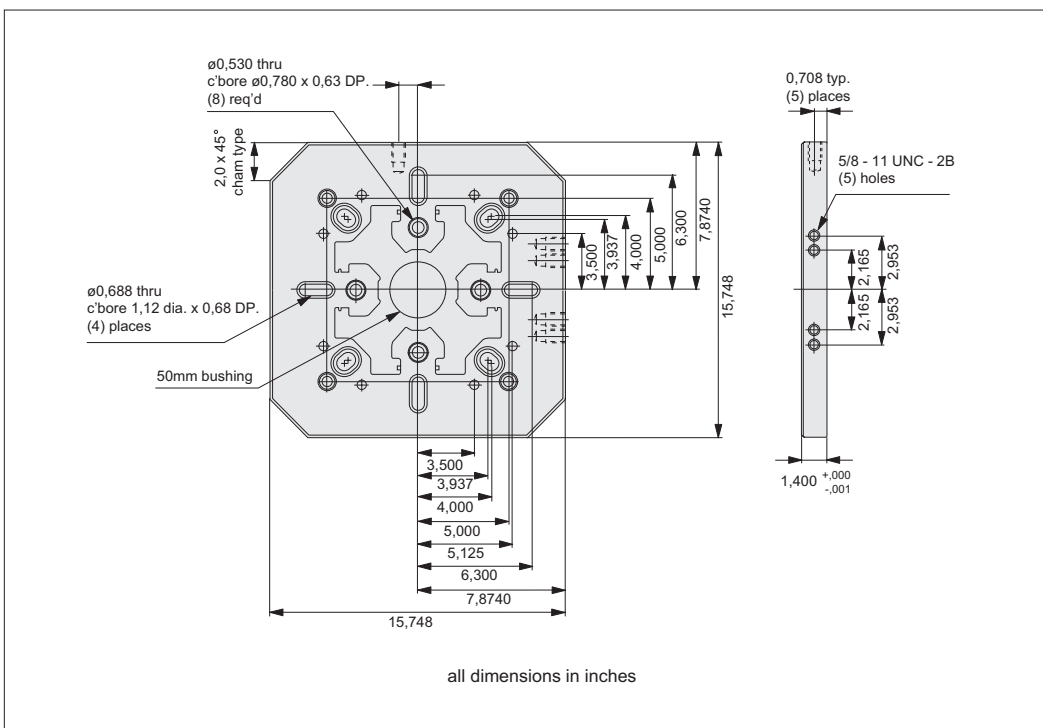
Details of baseplate included with vice no. **19762.W0060**.



VICE CLAMPING

400mm Baseplate for 6" ReLock 8-Station Vice

Details of baseplate included with vice no. **19762.W0061**.

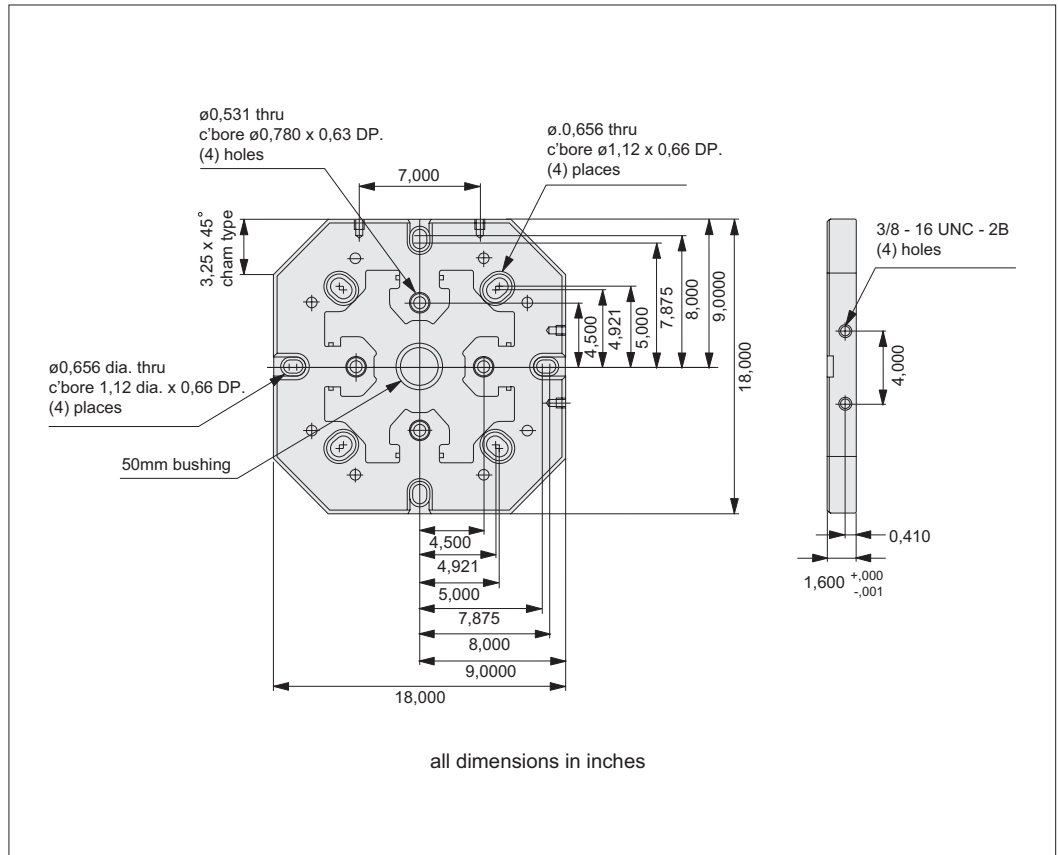


ov-W19762.W0060-61-A-T-8-station-mounting-information-6-inch-rmh - Updated - 26-10-2022



Universal Baseplate for 8" ReLock 8-Station Vice

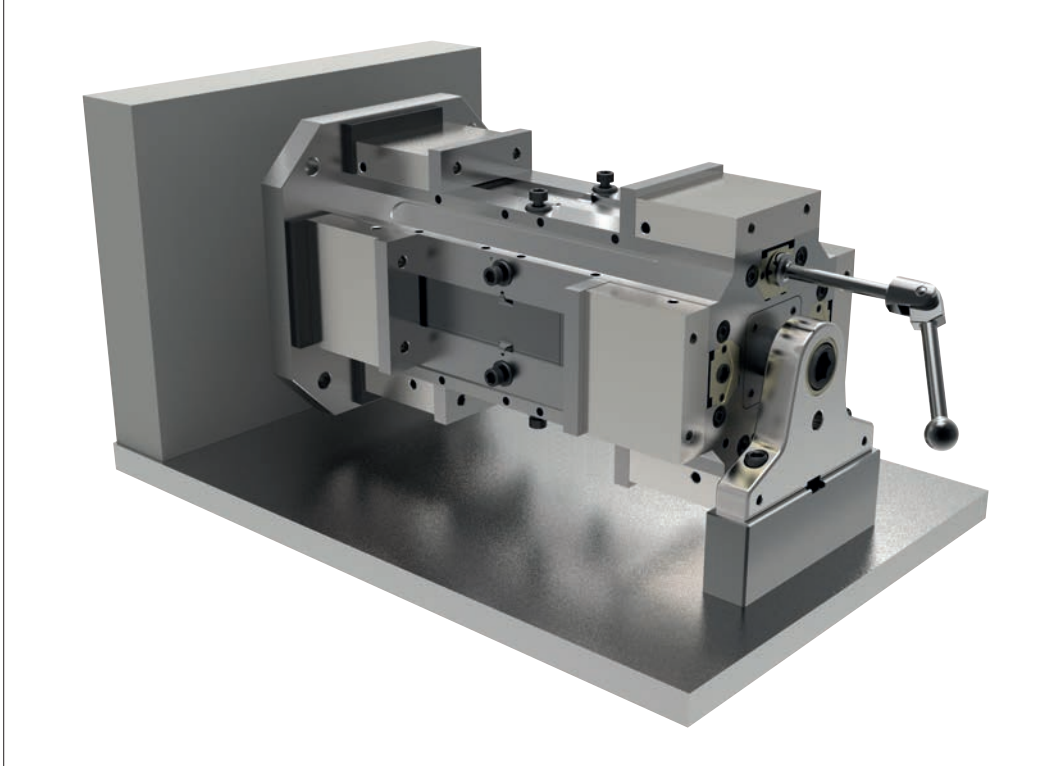
Details of baseplate included with vice no. **19762.W0080**



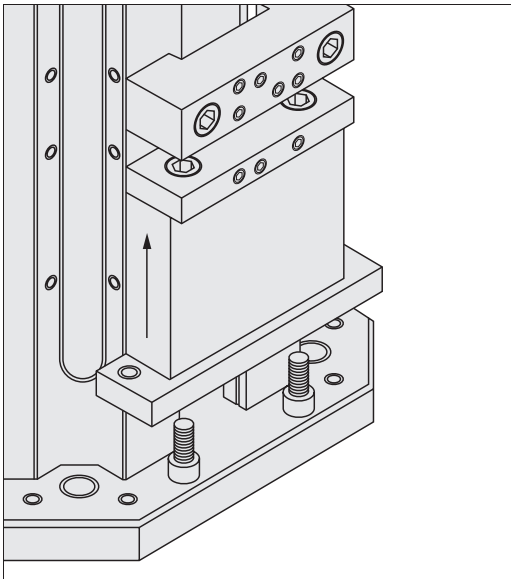
VICE CLAMPING



The ReLock 8-Station's compact and lightweight unibody design is perfect for horizontal machining centres. The unibody is manufactured from 80,000 psi ductile cast iron and the guide parts are flame hardened and precision ground to accuracies of $\pm 0,0005''$. It's also ideal for use with rotary indexers on vertical machining centre applications.

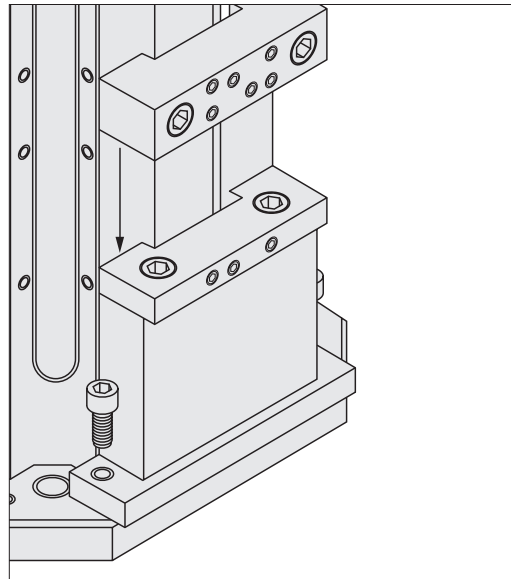


Single Station Conversion Plate



Step 1

Crank bottom jaw toward centre of vice. Mount single station conversion plate **19769** to the back carrier jaw as shown.



Step 2

Crank bottom jaw down until the single station conversion plate touches baseplate. Mount the single station conversion plate to the baseplate.

Easy mounting instructions for the Single Station Conversion Plate **19769** on a ReLock 8-Station vice.

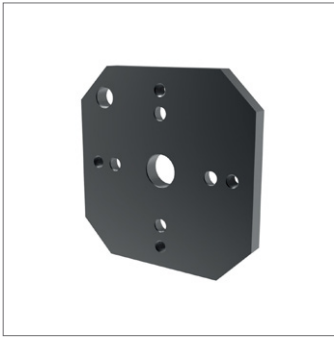


Adapter Plate - ReLock 8

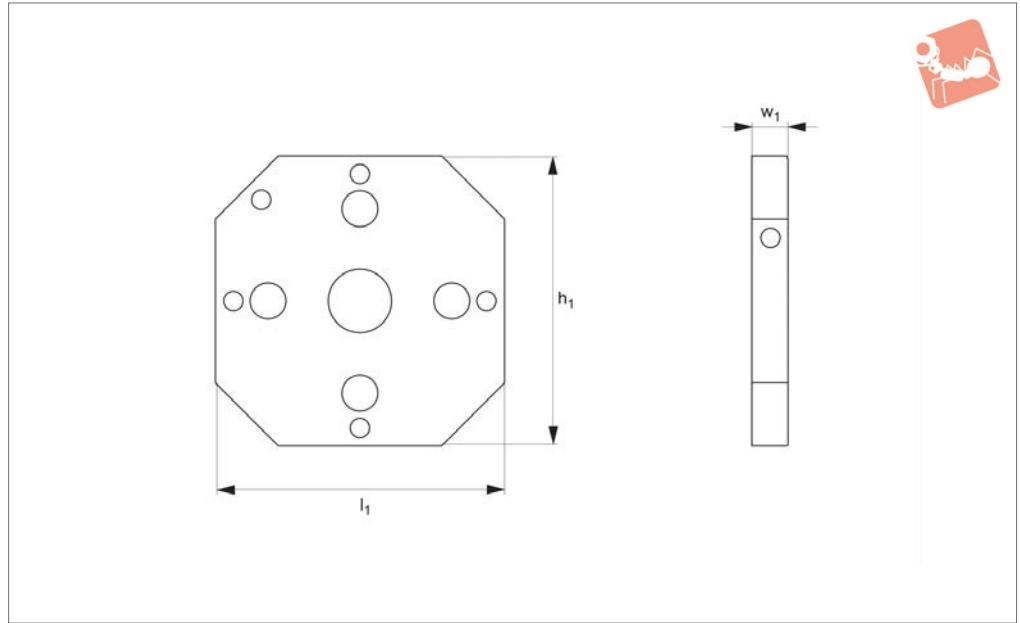
8 station vice pallet or indexer mounting



VICE CLAMPING



19770



Material

Body: 80000 PSI ductile cast iron.
Sideways flame hardened to 40 HRC max.

column vice to pallet or indexer.

Important Notes

All dimensions are in inches.

Technical Notes

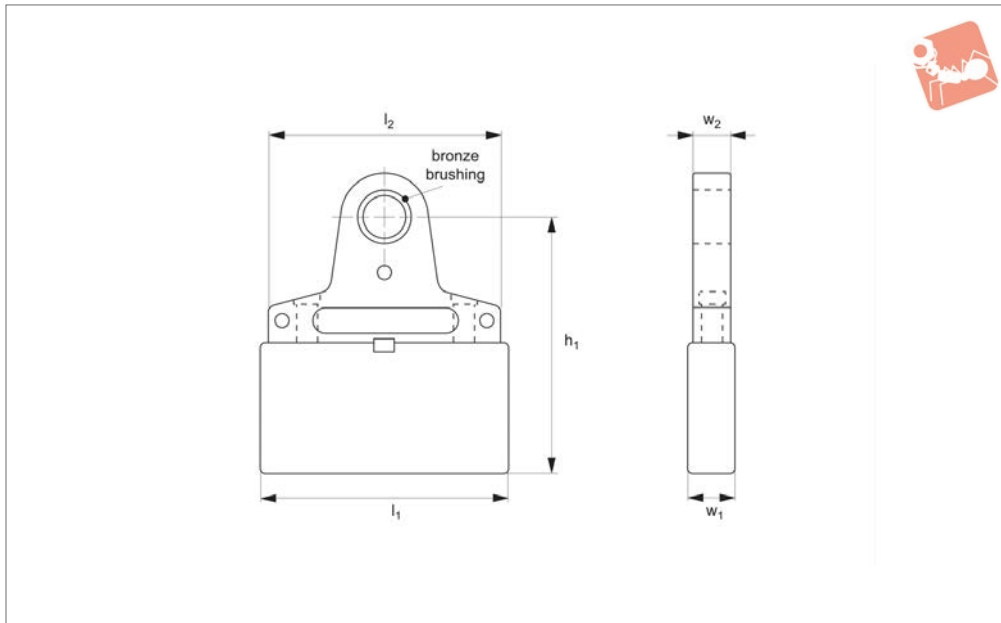
Adapter plate simplifies attachment of 8-

Order No.	Vice size	l_1	h_1	w_1
19770.W0004	4"	9	9	0.75
19770.W0006	6"	12	12	1.00



Support Bracket - ReLock 8 for 8 station vice

Vice Clamping



19771

VICE CLAMPING

Material

Body: 80000 PSI ductile cast iron.
Sideways flame hardened to 40 HRC max.

required height.

Important Notes

All dimensions are in inches.

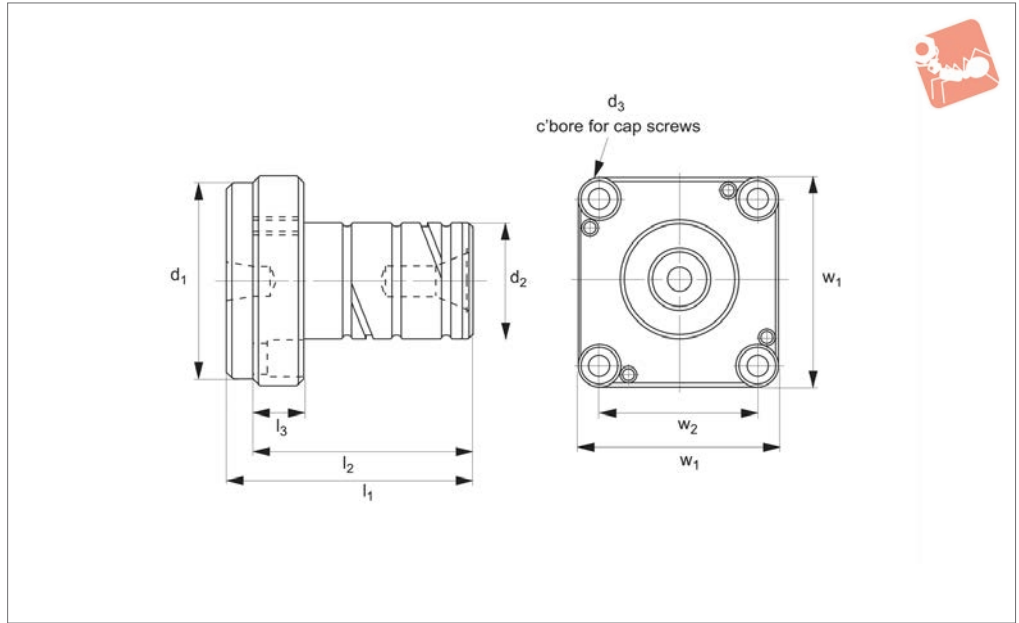
Technical Notes

Support plate, modify base to your

Order No.	l_1	h_1	l_2	w_1	w_2
19771.W0001	10	12	9.5	2	1.5



19772



VICE CLAMPING

Material

Body: 80000 PSI ductile cast iron.
Sideways flame hardened to 40 HRc max.

19771 and adapter plate 19770 for lasting precision to 0,001" total indicator reading (T.I.R.).

Technical Notes

Works in conjunction with support bracket

Important Notes

All dimensions are in inches.

Order No.	For vice size	l_1	d_1 +0.0000 -0.0002	d_2	d_3	l_2	l_3	w_1 +0.000 -0.005	w_2
19772.W0004	4 "	3.000	2.750	19.672	5/16-18	2.750	0.469	2.875	2.207
19772.W0006	6 "	3.125	3.375	19.672	3/8-16	2.875	0.593	3.500	2.726
19772.W0008	8 "	3.250	5.125	19.672	1/2-13	3.000	0.718	5.250	4.187