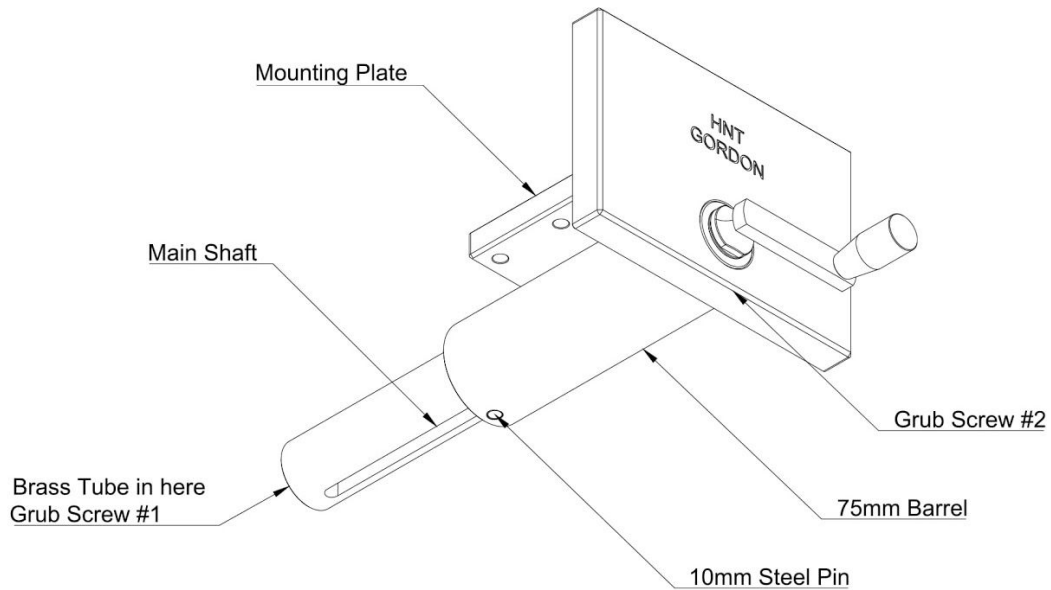


VICE REFERENCE



Front Vice Installation Guide.

1. Your vice is optimised for fitment to a 75mm thick benchtop, in which case the mounting plate is fixed directly to the underside of your bench. If your bench top is less than 75mm then you will need to make a wooden spacer the same size as the mounting plate and at the relevant thickness to build the mounting thickness up to 75mm. e.g. if your bench top is 60mm then make a 15mm spacer. Similarly if your bench top is more than 75mm you will need to inset the mounting plate by the amount greater than 75mm. The top of the vice jaw should be 1-2 mm below the benchtop when installed so you don't run into it with a plane etc.
2. The back jaw of the vice is the side of your bench top, and the mounting plate is made perfectly square to jaw, so you must ensure that the position where you mount the vice is square to the side of the bench.

3. You have two options when mounting the vice. The mounting plate can be put in two positions on the 75mm barrel, simply by taking the 4 bolts out and reversing the mounting plate. The vice comes with the mounting plate bolted flush with the 75mm barrel and mounting it this way will make the side of your bench top the back jaw. However if you wish to put a false wooden jaw on the side of your bench then you simply reverse the mounting plate which will bring the 75mm barrel out past the edge of your bench. You can then make a false jaw 20mm thick that is screwed to the side of your bench top.
4. Once you decide on the mounting option, select where you will mount the vice on the bench. If you can take your bench top off easily then turning it over may be the easiest option. But this guide will describe mounting the vice with the bench top in position.
5. Get a 1 - 2mm thick parallel packer that is about 20mm wide and place it between the jaw and 75mm barrel and do the vice up which will hold this packer in place. Ensure the packer is below the mounting plate then clamp the vice into position with the vice jaw hard up against the side of your bench. The 1 - 2mm packer will ensure the 75mm barrel doesn't protrude beyond the back jaw (side of your bench top) when it is mounted.
6. The holes in the mounting plate are 10mm. Select the types mount bolts/screws you intend to use and the corresponding size drill bit to make the holes. It is important that you drill the front two holes first and put those bolts in and do them up so they are firm but not tight. Also you need to put the mounting plate wooden spacer in position that you have made to suit the thickness of your top.
7. With the front two bolts done up wind the vice handle so that the front jaw pulls up hard and parallel against the back jaw (side of your bench top). This ensures that any gap between the 10mm hole and the mounting bolts is eliminated. Then drill the back two holes and bias the drill toward the back of the 10mm hole. Then put those two bolts in and do all four bolts up tightly. You will now have a situation where the mount plate can't move in service.
8. If you think that you need the mounting plate to be more secure then there are two other 10mm holes in the middle of the mounting plate where you can put some dowels into the bench top. It is very important that the mounting plate doesn't move in service otherwise your vice jaw will not pull up parallel. Once the vice is mounted, take a piece of wood that you know is parallel and square and check the jaw is pulling up nice and parallel.
9. Mounted correctly this vice will not rack and will hold parallel pieces of wood with very little force on the handle. If it doesn't hold the wood nicely it is most likely that the wood is not quite parallel or square. You have an option to glue some leather or cork on the aluminium jaw which will take up the slack of holding something firmly that is not quite parallel.
10. A video on how to install the vice is also available on the HNT Gordon YouTube Channel.

Useful dimensions:

Mounting plate:	140mm x 140mm x 19.2mm
Jaw:	230mm x 162mm x 25.4mm

Vice Use

Your vice is precisely made to eliminate the need for excessive force to hold your workpiece. As such the vice handle is short to minimise the force you can apply, but this handle is designed to be fast and efficient for doing woodworking and similar activities.

This vice is not designed for holding irregular shaped metal parts used in the automotive industry as holding these types of parts requires excessive force and as such the short handle will prevent you from applying excessive force to hold certain parts. You will lose your warranty if a spanner is used on the handle to create excessive holding force.

Vice Maintenance

The only maintenance that should be required is to put a few drops of oil between the shaped brass nut which holds the handle on and the brass bush that fits in the vice jaw.

Also if you are using your vice to hold parts for gluing, ensure you check the main 50mm shaft is kept free of glue as this will foul the sliding action.

Should your vice malfunction it can be easily disassembled.

1. First, remove the vice from your bench and close the vice jaw. Before you remove any parts, mark the brass tube, 10mm pin and handle bush with a pen as they must go back in the same orientation as they were removed.
2. Then find the 3/16" grub screw in the end of the brass tube which is located inside the main aluminium shaft of the vice. Once the grub screw is removed you will be able to knock the 10mm steel pin out using a pin punch. It is best to knock the pin out from the underside of the 75mm barrel. Once the pin is removed you will be able to slide the 75mm barrel from the main shaft.
3. Remove the second 3/16" grub screw located under the vice jaw (adjacent to the handle shaft). With a piece of wooden dowel (about 12 -19mm diameter) and a hammer you will be able to tap the inner brass tube and handle thread assembly out of the 50mm main aluminium shaft. This is done by tapping the brass tube where you took the first 3/16" grub screw out (at the opposite end to the vice). Once it has moved about 10mm, the vice threaded rod and brass tube will slide out from the main shaft.
4. At this stage you should be able to locate any issue which will most likely be some dirt fouling the sliding action of the vice. Or possibly the aluminium slot in the main 50mm shaft has galled on the steel pin. If this is the case, lightly file the rough aluminium surface causing the problem and give the surface a light sand to finish off.

5. Clean the plastic bushes, the inside of the main shaft, the outside of the brass tube and the bush which takes the threaded rod with turps or a white spirit. Only re-grease the thread inside the brass tube. Do not grease or oil the inside of the 50mm main shaft or the plastic bushes as this will just attract dust and dirt to foul the sliding action of the vice. You can sparingly use some dry lube on the outside of the brass tube and around the black seal found in the 75mm barrel.
6. Check that the steel threaded rod spins nicely in the brass bush, simply, by spinning the brass bush. If it is tight, try putting some oil on the brass bush where it spins and work the oil in by spinning the bush. If it is still tight, take a 24mm spanner and hold the shaped nut adjacent the handle and with another spanner turn the handle so the handle comes off.
7. This is a right hand thread. Remove the handle and shaped nut. There is a low strength thread lock on these parts so they will be reasonably tight to remove. Once apart you can clean these parts and re grease the brass bush where the threaded rod shaft fits through. Reassemble the handle ensuring the brass bush spins freely but with minimal gap between the spinning bush and shaped nut. Put some low strength thread lock on the handle thread and lock the handle and shaped nut together using two spanners.
8. You should now be able to reassemble the vice. The brass tube should slide nicely through the inside of the main shaft and the main shaft should slide nicely through the 75mm barrel with plastic bushes with just a little bit of resistance. Once all sliding nicely put the 10mm steel rod back in tapping it in from the top of the 75mm barrel. This should tap in easily. If this is difficult to get in you may have the brass tube in 180 degrees out. Just spin the brass tube 180 degrees and try again. Once the pin has been inserted, put the small grub screw back in and do it up. The handle assembly is easy to get back in simply by doing the vice up with a piece of wood between the jaw and the 75mm barrel as that will pull the brass bush into position. But ensure the grub screw hole in the brass bush aligns with the long grub screw that fits in the bottom of the vice jaw. Do the grub screw up and your vice is ready to bolt back on your bench.
9. If you have any issues please contact HNT Gordon for advice.