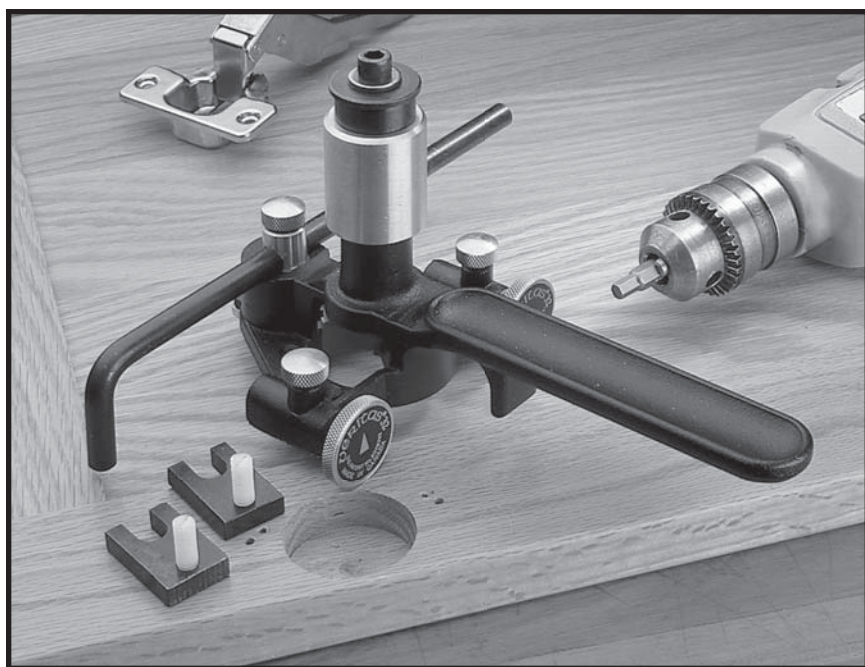


veritas[®] Hinge-Boring Jig



05J07.01

This versatile jig contains a built-in carbide cutter and is designed to be powered by your own electric drill. It will locate cup and screw holes for 35mm cup hinges. With this handy tool you can avoid an expensive production-line machine tool or a specially jugged drill press and, of course, it fits into your toolbox for outside work.

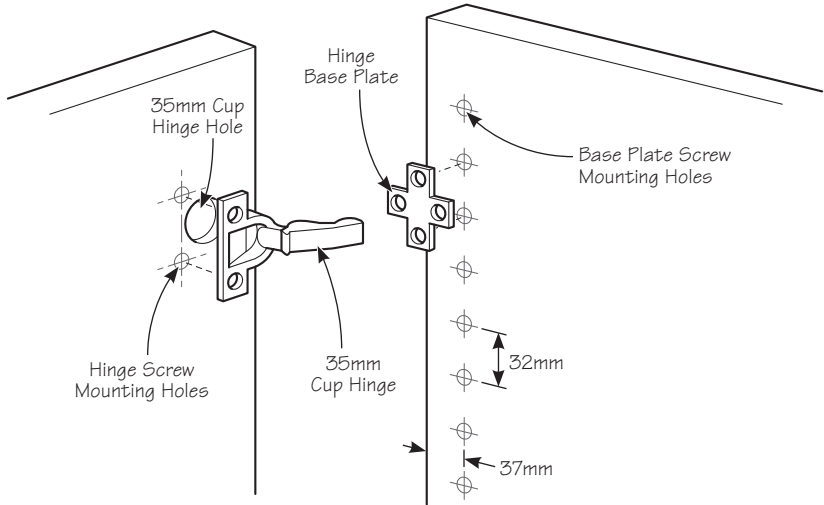


Figure 1: Jig locates cup and screw holes for 35mm cup hinges.

Just set the depth and lateral adjustments explained in the following instructions and this jig will give you accurately placed, squarely driven cup and screw holes in the door. Also, if the inside wall partition does not have a row of 32mm spaced holes to receive the base plate that anchors the other end of the hinge, this jig will easily locate a pair of these for you.

As an added feature, the jig can be set up to install compact flap hinges or double cup hinges in which the cup holes actually break through the edge of the door and through the edge of the corresponding side member of the cabinet.

The following information explains the construction in detail and provides step-by-step instructions on operation and maintenance.

Three-Step Summary Instructions

Detailed instructions are contained here, but for those who just want a summary, the following 3-step guide is provided.

- 1. Set Cutter Depth:** with the collar set screw loosened and your thumb holding the cutter up, depress the collar until the bottom of the spring cage is in line with the required depth gauge mark. Relock the collar.
- 2. Set the Micrometer Fences For Backset:** with the micrometer fences screwed in all the way, the 35mm cup hole will just break through the edge of the door (zero backset). With both fence locking thumbscrews loosened, unscrew the micrometer fences one turn for each required millimetre of backset (the screws have a 1mm pitch thread). Tighten the fence locking thumbscrews.
- 3. Set the Hook Gauge:** with the hook gauge in the central hole at the rear of the jig, loosen the thumbscrew, hook the bent rod over the door end, slide the gauge until it is the required distance from the end, and tighten the thumbscrew.

All adjustments for basic 35mm cup holes have now been made, and you are ready to drill. Simply chuck the hex driver in your drill, hold the jig with the micrometer fences and hook gauge against the edges of the door and drill.

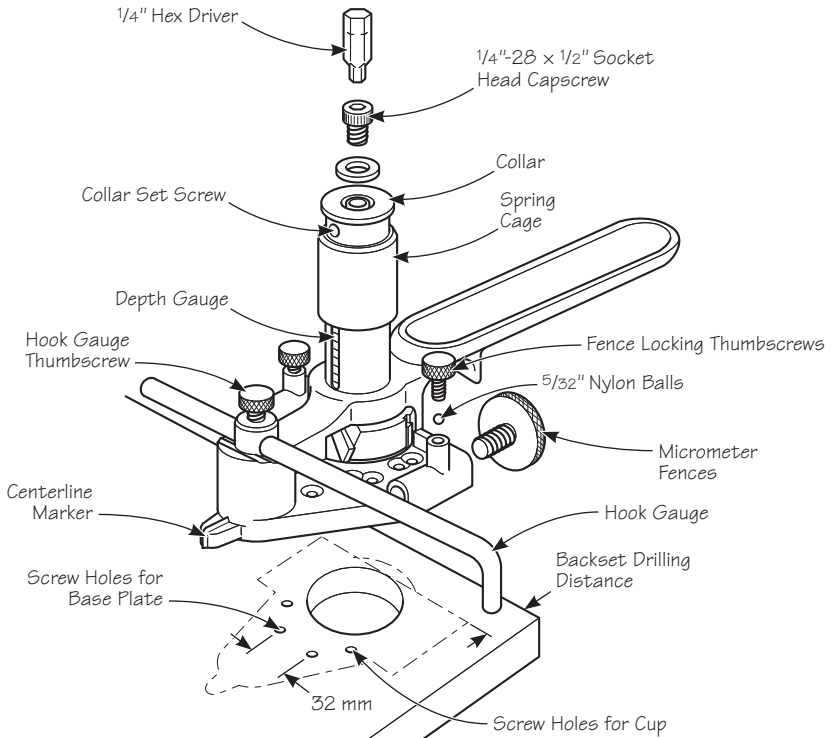


Figure 2: Hinge-boring jig components.

Detailed Instructions

Step 1: Setting the Depth of the Cup Holes

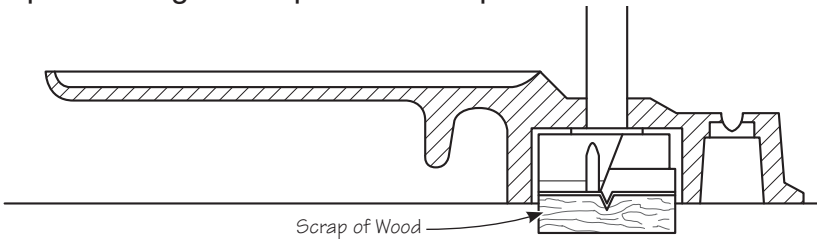


Figure 3: Preventing the cutter from marking your workpiece.

Place the jig on a small scrap of wood that has a small hole ($1/8"$ to $1/4"$) in the center, locating the drill center-point over the hole. This will keep the bit up, preventing the cutter center-point from marking your workpiece. Now, loosen the collar set screw and push the collar down until the bottom of the spring cage lines up with the required cup hinge depth reading on the depth gauge. Relock the collar securely. As you proceed to drill with

this setting, you will note that the cutter stops its downward travel as the bottom of the spring cage engages the ledge on the jig body. The total downward travel is actually more than the depth called for on the depth gauge. This is because free travel is built into the system to ensure that the retracted cutter point will not project below the foot of the jig where it could scratch the workpiece.

Step 2: Setting Distance of Cup from Edge of Door (Backset Drilling Distance)

The distance of the cup from the door edge is determined by the position of the micrometer fences that project below the jig base and bear against the edge of the door. If these micrometer fences are screwed in tight, the cup drilling distance will have zero backset (i.e., the edge of the cutter will just break through the edge of the door). The threads of the micrometer fences have a 1mm pitch, thus the backset will increase by 1mm with each "back off" turn. Therefore, check the backset requirement of your hinges, zero the fences, and back off one turn for each millimetre called for. Tighten the fence locking thumbscrews.

Note that the locking mechanism for the micrometer fences has $\frac{5}{32}$ " nylon balls inserted between the ends of the locking thumbscrews and the threads of the adjustment screws. They protect the threads from damage. If you dismantle the fence mechanism, be careful not to lose them.

Step 3: Setting Distance Between Hinge and Top or Bottom of Door

This distance is set by extending the hook gauge to the desired distance, tightening the thumbscrew, and hooking the gauge over the end of the door. With the hook gauge fixed by the thumbscrew so it cannot slide, it can still be lifted slightly and turned through 180°, allowing the jig to be repositioned at the same distance from the opposite end of the door.

If the door will be mounted to a cabinet that has a row of 32mm spaced system holes on the inside cabinet wall, set the hook gauge so that the 35mm cup hole will line up centered between a pair of these holes (or in line with one of these holes if you are using the in-line type base plate).

Step 4: Holding the Jig and Operating the Electric Drill

We recommend that you use a 1/4" quick-change chuck on your electric drill to engage the hex driver or drill pilot holes. This speeds up the work and provides some flexibility in the drive. Make sure that the micrometer fences and hook gauge are secure and held firmly against their respective work faces. Also, make sure that the foot of the gauge remains flat against the workpiece and does not tilt as drilling progresses. As with any power tool accessory, always wear safety glasses.

Please see *Care and Maintenance* section at the end.

Adjusting the Jig to Drill Cups for Compact Flap Hinges

These compact hinges, attractive for smaller cabinets, usually have cups on either end (double cup). The compact features require that the cup holes break through the edge of the door and the edge of its adjoining member. To achieve this breakout, one spacer can be clamped under each micrometer fence, as shown in **Figure 4**. This spacer extends down to hold a second micrometer screw operating parallel to the first. This second screw is made of nylon and is self locking in the threads. It also advances at the rate of 1mm per turn. Hence, set the nylon screw flush with the spacer's inside face and advance it one turn for each millimetre of required breakout.

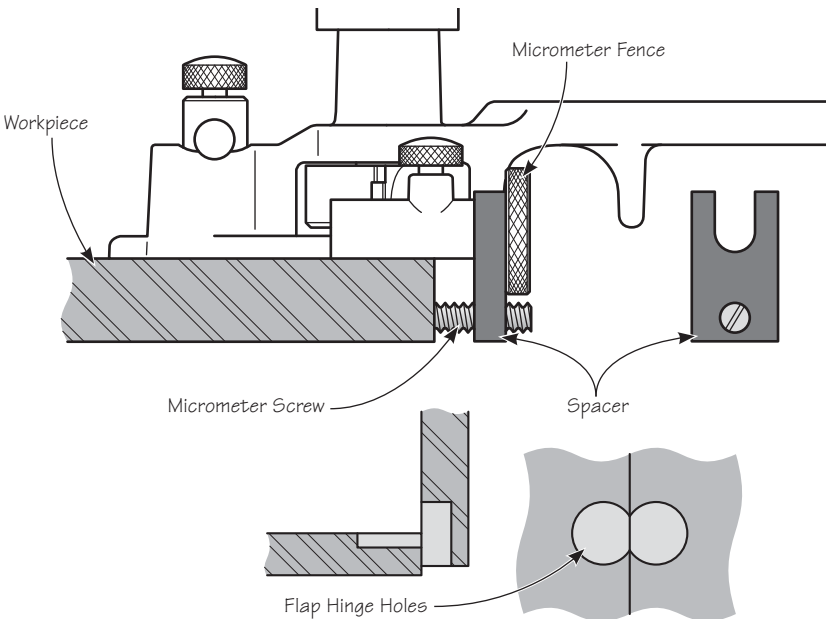


Figure 4: Clamping spacer under micrometer fence.

Retrofitting Existing Cabinets

To retrofit new doors onto old cabinets (which do not have a row of 32mm spaced system holes to accommodate the hinge base plates), align the door with the cabinet and mark off hinge center heights at the junction line. These marks can then be extended with a square. With the micrometer fences screwed all the way in, hold the jig over this centerline using the centerline marker located at the front of the jig, and proceed to drill the required pair of 32mm spaced holes (see **Figure 1**). It is always best to use the hook gauge to firmly position the jig before you start to drill. The resultant holes will be 32mm apart, backset 37mm from the front edge of your cabinet, both the required distances for most hinge base plates.

See "A-A" in table on next page.

Using the Jig as a Template for Screw Holes

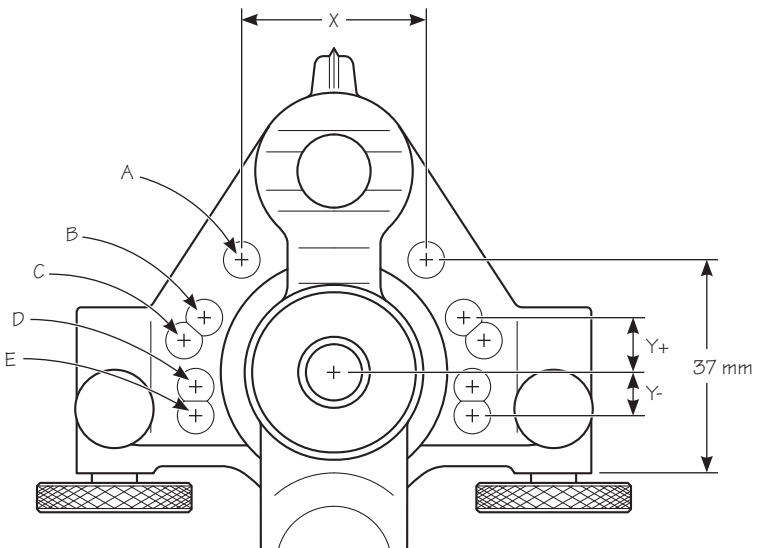


Figure 5: Using jig as a template.

You will find that the jig base plate comes equipped with five pairs of dimples, which match the more common cup hinge screw patterns. These dimples are designed to be drilled through as required to locate screw pilot holes (either drilled or pricked with an awl). These dimples were not drilled through at the factory because size and type of holes may vary,

depending on application. For instance, you may want to use only one style of hinge and hence only one pair of dimples should be drilled out to avoid confusion. Plus, for use with 32mm spaced system holes, you may not want the two top holes drilled out.

Measure the hinge itself to determine the required spacing and distance of screw holes from the cup centerline. With this information, use the table below to determine which pair of dimples you will need to drill out to provide this template.

Instructions below provide more information on procedures for drilling out dimples. Please read this before you proceed.

Pair	X	Y
A - A*	32mm	19.5mm
B - B	45mm	9.5(+)mm
C - C	52mm	5.5(+)mm
D - D	48mm	2.5(-)mm
E - E	48mm	7.5(-)mm

** Used for drilling cabinet system holes only.*

If you intend to drill out dimples with an ordinary drill, ensure that the bit is well sharpened and has a sharp point to prevent wandering.

Note: *If you are using a hinge that has screw mounting holes that do not match the provided dimples, you can drill the cup holes first, press the hinges into place and align them with a scrap piece of stock (or other straight edge). Then use the hinge holes themselves as a drilling guide.*

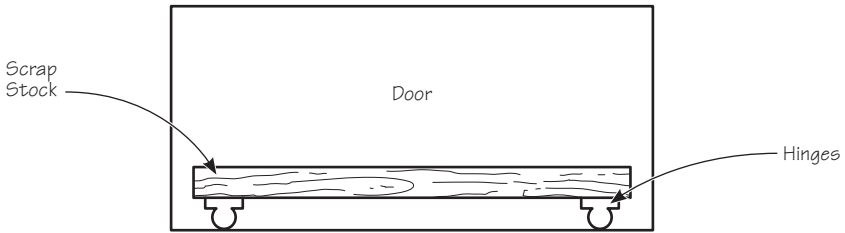


Figure 6: Using hinge holes as drilling guide.

Care and Maintenance

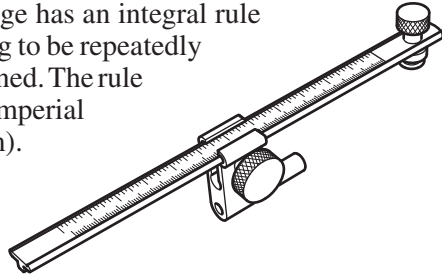
There are several rubbing faces in the jig, all of which are lubricated. These faces include the cutter spindle, the cutter thrust face on top of the cutter head, and the thrust face between the collar and the spring cage. The unit should be disassembled periodically for inspection. To do this, block rotation of the cutter by inserting an elongated piece of wood between the cutter spokes and the body framework, then unscrew the hex drive. Further disassembly is evident in **Figure 2**. Depending on the inspection (i.e., evidence of existing or impending metal-to-metal contact), the grease films should be swabbed and replaced by smearing on fresh grease using a small wooden rod, preferably flattened like a small spade. The annular cavity under the collar should be repacked with fresh grease, as should the adjoining thrust faces of the cutter. Avoid excessive grease build-up, especially at the top of the cutter head, as this may flow out and cause undesirable stains on the workpiece.

Use a light viscosity straight mineral grease. Do not use synthetic or additive greases as some of these may attack alloy metals.

Always make sure that the jig is firmly held and that thrust to the electric drill is applied straight downwards. As with any power tool accessory, watch for signs of binding or overheating. Stop and correct the cause before resuming operation. Wear safety glasses while drilling.

Accessories

- 05J07.02** Replacement 35mm Carbide Cutter
- 05J06.10** Gauge Head – This gauge has an integral rule and stop, allowing the jig to be repeatedly and accurately repositioned. The rule has both metric and Imperial graduations to 6" (15cm).



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