

Pillar Drill

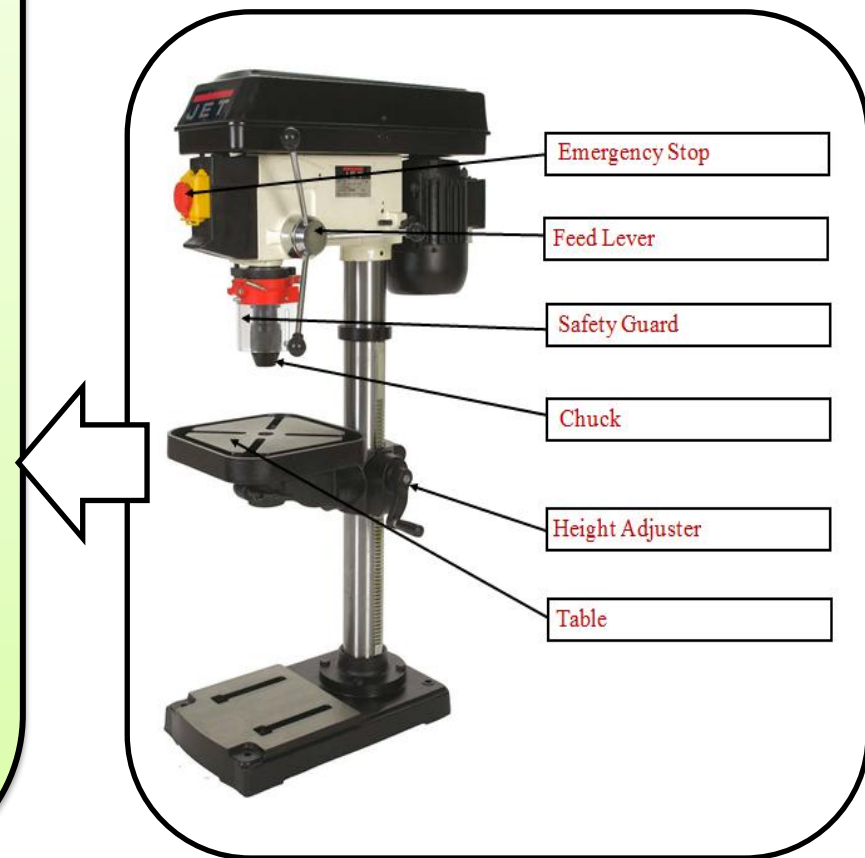
Table- is used to hold the workpiece in place. Its height can be adjusted by using the **height adjuster** handle. Once the height is adjusted the table lock holds the table in a fixed position.

Chuck- This holds the drill bit in place. When fitting a drill bit the chuck key is used to tighten and loosen the drill bit in the chuck. In the diagram on the (right) we can see a **safety guard** has been fitted around the chuck to prevent entanglement in the machine.

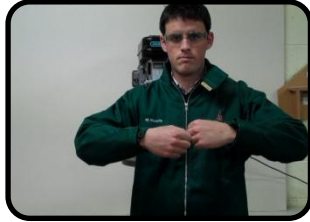
Feed lever- is used to lower the drill bit into the workpiece. This lever is normally fitted with an adjustable coil spring which automatically returns the lever to its original position.

Emergency stop button is used to turn off the machine in the case of an emergency.

The Pillar Drill is used for drilling accurate holes through materials such as woods, plastics and metals. It may be mounted on a stand or bolted to the floor or workbench.



Process



Step 1

- Before starting the process it important that long hair is tied up, sleeves are rolled up, any jewellery is removed and safety glasses are put on.



Step 2

- It is essential that the stock is clamped firmly to the table at all times. This can be done using a clamp. It is important to clamp small and odd shaped pieces in a fixture or make sure that they are held securely by a jig. The workpiece should never be held by hand.



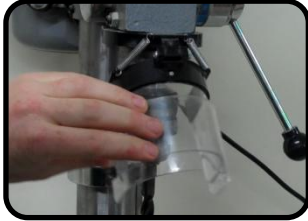
Step 3

- Before changing the drill bit it is important to always make sure that the machine is plugged out.



Step 4

- When tightening the drill bit in the chuck always tighten each of the three chuck holes using the chuck key.



Step 5

- Make sure that the chuck key is removed and the guard is put in place before operation.



Step 6

- A depth stop can also be setup which will only allow the drill bit go down a set distance into the workpiece.



Step 7

- When operating the machine it is important to fully concentrate on the task. Lower the drill bit in to the material carefully. Every few centimetres raise the drill bit up to allow some of the waste material to escape.