

### Introduction

Anyone creating fine precision work will be glad to use the Model H5678 Boring Head Set. This small, precise set features a dial with graduations of 0.001" and 0.050" per revolution, sockets for  $\frac{3}{8}$ " boring bars, a  $\frac{9}{16}$ " hole offset and a dovetail slide with locking clamp. This set also comes with a fitted wood case, Allen wrenches, 3 boring bars, and a boring head with an MT#3 arbor.

The Model H5678 has three,  $\frac{3}{8}$ " boring bar placement options for making a wide range of hole sizes.

1. Hole A is used for smaller diameter holes.
2. Hole B is used for slightly larger diameter holes.
3. Hole C is used for very large diameter holes.

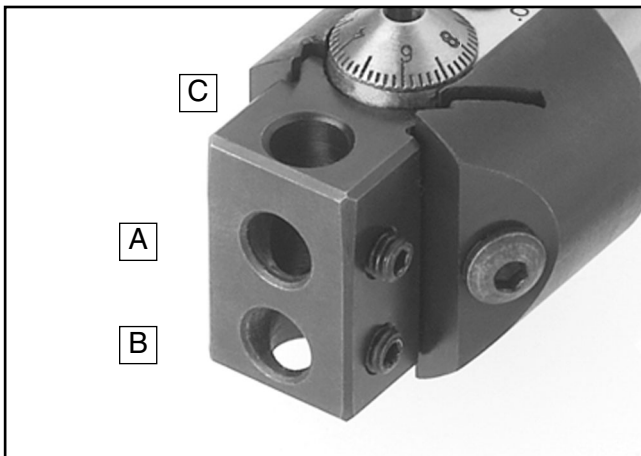


Figure 1. Boring bar hole placement.

### NOTICE

Installation of boring head into spindle can be done with or without boring bar inserted into the boring head.

To install the Model H5678 boring head:

1. Turn off power to the machine.
2. Align the center of the hole to be bored to the center of the spindle using an indicator or a center finder.
3. Place the desired boring bar into the boring head with the face of the boring bar aligned with the travel of the boring head (Figure 2). When everything is in the desired position, tighten boring bar locking setscrew.
4. Install the boring head into the spindle.
5. Check a feeds and speeds chart for an estimated starting point.

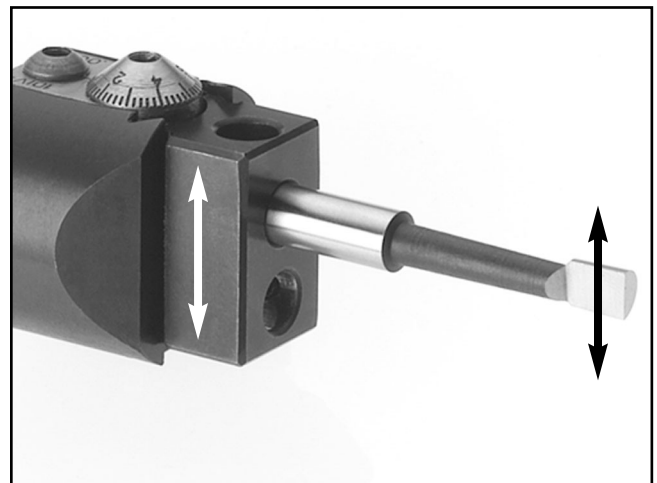
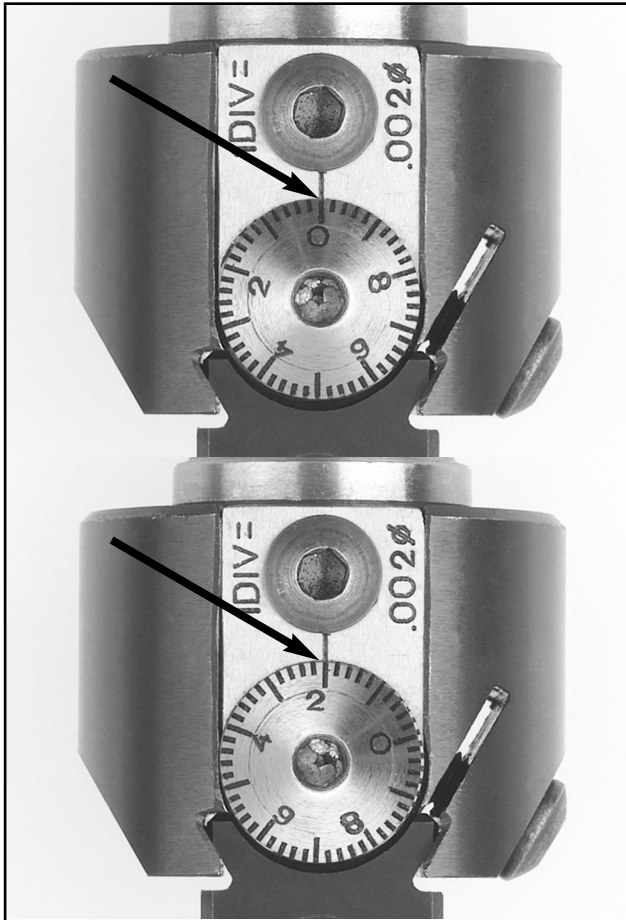


Figure 2. Face of boring bar aligned with boring head travel.



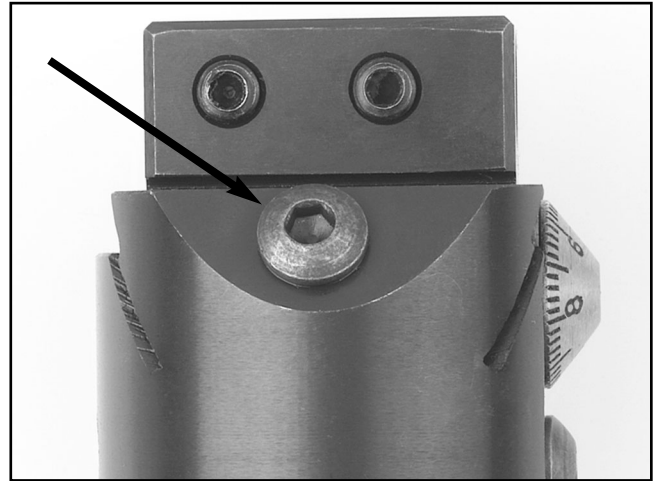
# Boring Head Features

1. The dial on this precision boring head reads 0.001" per index mark and 0.050" per revolution. Note—*This means if a 1.000" hole has been bored with the dial at "0", the diameter of the bored hole will be 1.020" with the dial at "2" (Figure 3).*



**Figure 3.** Example of dial indexing.

2. To help with the indexing adjustments, the button head screw should be adjusted so there is a small amount of drag on the ways. When the dial is indexed to the desired graduation, completely tighten the button head screw. This will help in eliminating chatter and vibration, while improving the overall accuracy and finish of the bored hole (**Figure 4**).



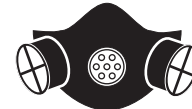
**Figure 4.** Button head screw.



For your safety it is important to please follow the warnings below:

## **!WARNING**

Damage to your eyes, lungs, and ears could result from failure to wear safety glasses, a respirator and hearing protection while using this machine. Make sure proper filter is worn while wearing respirator.



## **!WARNING**

Loose hair and clothing could get caught in machinery and cause serious personal injury. Keep loose clothing rolled up and long hair tied up and away from moving machinery.



## **!WARNING**

Make certain your machine will accept tooling. Failure to do so may result in damage to tooling and machine. Always turn spindle clockwise.