

user instructions

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LABORATORY ROTATOR MODELS MR1512 & MR1524

The Glas-Col mini laboratory rotator is a space saving bench top rotator designed to hold various types of laboratory microcentrifuge tubes and micro test tubes. Model MR1512 is for use on 120 volt applications, while the model MR1524 is available for use on 240 volt applications. The rotator has a variable speed drive and is adjustable from 2 to 80 revolutions per minute.

There are two different types of heads available for a variety of laboratory containers. See catalog for more details.

Mini Rotator Set-Up

Unpack the rotator and set it on the bench top where desired. Plug the power cord from the back of the unit into a grounded 120 volt (240 volt for the MR1524) outlet. The power switch, and fuse are all located on the back of the unit. The speed dial is located on the left side of the mini rotator.

The rotator is furnished with a test tube holder, for holding tubes of 5-10mm and 12-14mm tubes. The tube holder has a capacity of 15 tubes at one time and does not need to be balanced. Fifteen small tubes 5-10mm in diameter can be held by attaching the smaller clips to the holder. The larger 12-14mm tubes in diameter will use the larger clips. The large and the small clips can be attached to the disk to hold both large and small tubes simultaneously.

Attaching Clips to Disk

The test tube head is shipped without clips attached to the disk to allow the user to attach whichever clip size is needed for the application. To attach the clips to the disk, see Figure 1. By using a nut-driver or wrench to hold the nut on the back side of the disk, the screw can be tightened to achieve the proper tension to securely hold the tube. When using the small clips, tighten the screw to achieve a distance of 1/16" between the fingers at the top of the clip. This tension will accept a tube from 5mm to 10mm in diameter. See Figure 2.

The large clips are attached in the same manner as mentioned above, however, due to the size of the clips, every other hole in the disk must be used. The tension that the large clip is adjusted to will accept a tube from 12mm-14mm in diameter. See Figure 2.

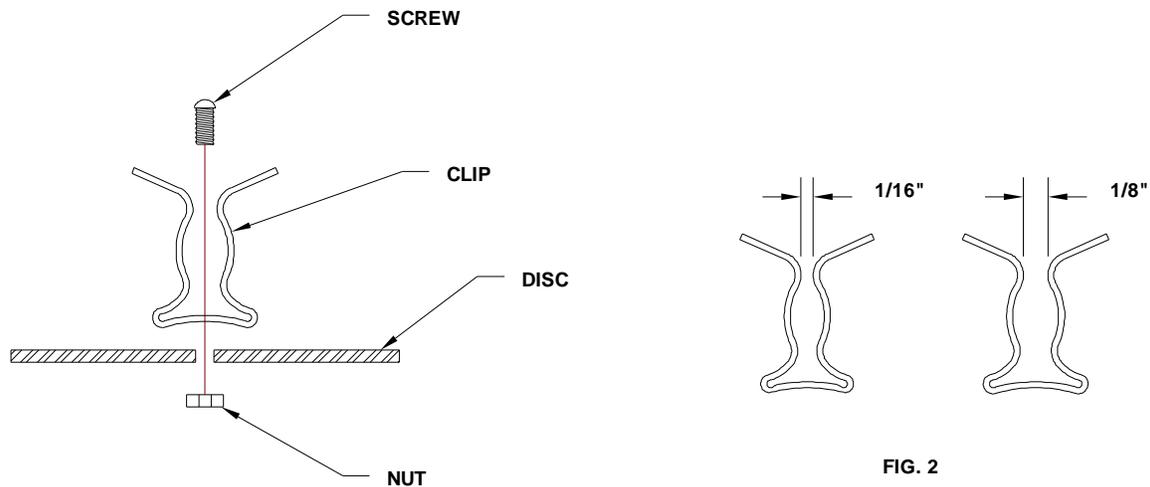


FIG. 1

FIG. 2

Attaching the Disk to Rotator

Place the disk with the clips on the black plastic bushing, located on the end of the motor shaft. The bushing is secured to the motor shaft with a set screw. Align the dimple on the disk with the indentation on the bushing. Insert the tri knob through the center hole of the disc and secure it to the bushing.

Placing Tubes in Clips

Tubes can be inserted or removed by one of two methods. Tubes can be slid in radially from the side of the clip. This method is preferable because the tube is less likely to break. As the diameter of the tube increases, inserting them using this method requires a bit more effort. Tubes can also be inserted from the top, and removed in the same way. **EXERCISE CAUTION WITH ALL GLASSWARE WHEN INSERTING INTO THE CLIPS.**

Operating the Unit

Make sure all of the test tubes are secure and will clear the work bench before turning the speed control to the desired setting. Flip the switch to the ON position with the motor speed control set to the lowest possible setting. Observe the rotator make one revolution at a very slow speed. Once satisfied that the rotating vessels clear the work bench and any other adjacent obstructions, set the motor speed to the desired setting.

Maintenance

Every six months, periodic checking of the motor brushes is recommended especially if the unit is used in an elevated temperature environment such as an incubator. Most motor failure can be attributed to brush wear. To check the brushes, unplug the unit and remove the housing cover of the unit. The brush holders are located at the end of the motor. These are the two black plastic circular areas, 180 degrees apart. The caps covering each brush holder have a slot in them to allow access to the brush/spring by unscrewing them. Check one side at a time.

The brush/spring can now be removed by turning the motor on its side to allow the brush/spring to fall out of the holder. Check the brush size. Lengths of 3/16" or less should be replaced with new ones.

To replace the brushes, simply slide the new brush/spring into the holder, curved surface first, replace cap and tighten.

The mini rotator should be protected from spills, mechanical damage and corrosive atmospheres so far as possible. Any spills should be cleaned quickly and any damage should be repaired immediately. Common replacement parts are listed on the other page:

Tri-knob.....099B R60 465
Brushes..... 099B R70 236
#6-32 x 1/2"099B R84 167

#6-32 Hex Nut.....099B R84 253
Small Clips.....099B R96 416
Large Clips.....099B R96 415

Limited Warranty

Glas-Col warrants products of its manufacture to be free from defects in material and workmanship for **one year** and agrees to repair or replace without charge any products found defective upon examination at the factory. With proper care and operation, Glas-Col products will give long and efficient service. Chemical spillage, overloading and general misuse will greatly reduce the service life. Glas-Col is not responsible for damage to apparatus due to improper installation or through attempts to operate the apparatus beyond its rated capacity, intentional or otherwise.

Limitations of Warranties

APART FROM SUCH WRITTEN STATEMENT OF WARRANTY, THERE ARE NO WARRANTIES, EXPRESSED, IMPLIED OR STATUTORY, WHICH EXTEND BEYOND THE DESCRIPTION OF THE PRODUCTS ON THE FACE HEREOF.

Glas-Col products are intended only for legal and legitimate purposes in commercial laboratory and industrial settings.

Glas-Col reserves the right to make product refinements without prior notice.

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