



Model 1000 Operations Manual

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Set up of Machine

READ THIS MANUAL BEFORE TURNING MACHINE ON !

This first section will describe the basic set up of the machine. First off unpack your machine but don't throw anything away just yet. You will want to make sure you have everything you need to adjust your machine properly. If you purchased the Business in the box you will have all materials you need to get up and running within a few minutes. However if you just purchased the machine ala cart you may need to gather some items before you do your first test run. In your (business pack) you will find a booklet entitled "Tips on what to look for when buying scratched CD's" it is recommended that you first read this booklet to familiarize yourself with the make up of a CD. This will also give you a good understanding of how CD repair works. There should be a good understanding of which side is repairable and which is not. This is all described in that booklet. For safety and review I must mention that there are two sides to a disc, the label side and the clear reading side. **The clear reading side is the only side to be repaired.**

Once you have unpacked your machine, set it up on a sturdy table and leave yourself some room on both sides of the machine (enough room to pile CD's on either side of the machine) you will need a clean area to do this in. The more dirt around the more likely you will re-scratch the disc once it is repaired. CD's are originally manufactured in a clean room environment for this and many other reasons. After market disc repair does not require the same tolerances of a clean room however, the cleaner your working environment the better.

Plug in your machine, But **Do NOT TURN IT ON YET!** You must first make sure of a few things.

1. Remove all packing materials and tape from the machine
2. Make sure the slide box slides in and out with ease and is not obstructed.
3. **Always have the slide box in the original position (it should be outside of the machine, not in contact with the polish wheel) every time before you turn the machine on.**

4. Open the access door and check the Locking nuts. Make sure they are snug and tight. Be sure not to move the factory setting.
5. Now before you start repairing discs pull out a scrap disc. This will be used to adjust the pressure between the contact wheel and the CD. This will determine the finish on the disc, it is the most important part for removing the most scratches and ending up with the final polished look of an original CD. Again make sure you do this part of the set up with a scrap disc.
6. Gather the polish compounds and prepare them for use (unpack them).
7. If you are setting up the 1000 model remember you must only use the compounds that are compatible with this machine, these are Tan Goo, and White Goo. You may use both of these compounds on the CS-1000.
8. When setting up Model 1000 use the Tan Goo for test runs. This is the beige colored, liquid it produces a finer finish.
9. Make sure there is a disc pad on the platen. Now place the disc on the platen with the clear side up. The side to be repaired must be facing up. Remember it like this: The side facing up will come into contact with the polishing wheel. If you have the label side up, all of the screen-printing will be removed, causing permanent damage to the disc. If you ever do this by accident you must replace the polishing wheel immediately.
10. Now that the Clear side to repaired is up on the platen, apply the compound generously on the disc. The first ten hours of use apply the amount approximately the size of a quarter. Use the sponge spreader to make sure the entire disc is covered with compound. A thin coat is proper. Once the wheel has compound imbedded in it, you may use less of the compound (about the size of a dime). You may use more or less depending on the scratches to be removed, however the less compound you can get away with and get the job done the better. Do not polish a disc DRY! The polish acts as lubricant as well as removes scratches.
11. Ok you are now ready to turn the machine on, turn it on and make sure both motors are working properly. The platen with the disc on it should be spinning The polishing wheel should also be spinning.
12. Now very carefully push the slide box into the machine. Let the CD come into contact with the wheel only slightly. About a half an inch of the disc should be getting polished.
13. You must now make sure that the contact is not too harsh on the disc. Each machine is adjusted at the factory but may have shifted during shipping.

14. Look through the viewing window. The Polishing wheel should be bent only slightly from contact with the disc. If it is grabbing the disc and pulling it in further on its own it may need adjustment. Check by pushing the slide box in a little more. There should be a consistent feel, it should be only slightly more aggressive as you approach the center of the disc.
15. To polish a CD, allow about a half-inch to come into contact with the wheel. Let the CD rotate 1-2 times around, then slowly push the disc in further to polish the middle area of the disc. Again allow the disc to rotate 1-2 times around. You will notice which areas that have been polished because the compound evaporates and the disc becomes shiny on those areas. Slowly pull the disc out allowing it to spiral itself out. Be patient when pulling the disc out, it is still being polished. Going slowly also pulls off any remaining compound from the disc. Properly done the disc should exit the machine completely shiny with very little if any residue remaining on the disc.
16. Remove the disc from platen and inspect it.
17. A properly adjusted machine will polish the disc with little or no visual evidence of the wheels contact. If the disc has a strong haze of compound left in areas you will need to lower the wheel slightly.
18. If there is heavy markings caused by the wheel you may need to raise the wheel.
19. With normal use you will still have to spray the disc with a compound remover and wipe the disc clean. But if there is heavy amounts of compound remaining on a disc after repair, you need to lower the wheel slightly.

Adjusting the height of the wheel

You should only adjust the height of the wheel after testing the machine first, as well as checking these things.

1. Is there only one CD on the platen? Make sure two discs have not stuck together.
2. Check and make sure there is a disc Pad in place. It may have stuck to the back of the last disc you repaired.

When to adjust the height

If the disc is not removing the compound from the disc (it leaves areas of compound on the disc that don't come into contact with the wheel). The light scratches are not coming out.

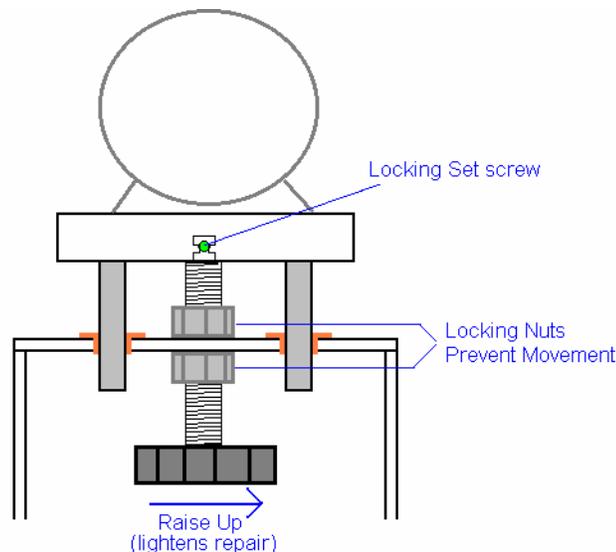
If these things occur, you may need to lower the wheel allowing a more aggressive polish.

If the finish is showing large lines or stripes in the disc or causes the disc to heat up real fast. If when you leave a disc for a 30 seconds or less and it causes the disc to wobble inside the machine. First push the disc in farther if this does not solve this problem the Wheel may need to be raised. If you are just getting to aggressive of a finish, you may want to raise the wheel, which will give you a finer finish. If the CD gets heat cracks in the disc the wheel must be raised!

Always adjust the height in small movements!

The adjustment is a very important thing. The mechanism that raises and lowers the wheel has fine threads on it so you get a precise adjustment. Always make changes in small increments, and test the machine with a scrap disc between every change.

There are two locking nuts as well as an Allen bolt that lock the mechanisms movement.



These must be locked into place every time before using or testing the machine.

Once the machine has been adjusted and locked in place you should not have to adjust for at least 6 months or 2000 repairs. Over time the wheel will wear slightly and will need to be lowered to compensate for the wear.

Operating the machine

This area is briefly covered in the set up section but we will review this area again to clarify.

1. Never operate Machine without a disc in place.
2. Make sure you have the disc pad in place.
3. Place the disc clear side up on the platen. (label side down)
4. Turn on Machine
5. Apply small amount of compound to disc, spread it evenly so a thin coat covers entire face of disc to be repaired.
6. Push disc slowly into contact with wheel (allow ½” to 1” contact)
7. Let disc rotate 2-3 times
8. Slowly push in the rest of the way
9. Let disc rotate 2-3 times more
10. Slowly pull disc out (allowing spiral effect to remove the compound)
11. Stop at the edge again and let rotate at least one more full rotation
12. Remove disc, and spray compound remover on the clear side.
13. Use the special cloth to gently remove any remaining residue be sure not to press too hard when doing this. Be careful not to re-scratch the disc with a dirty cloth.
14. Repeat if necessary.

The whole process should only take you a minute or two. Lightly scratched discs are usually repaired within 30-45 seconds. If the scratches are heavier you may need to extend the time that the disc is being polished. Allow the disc to rotate a few more times in each area. It is always better to remove the disc and apply more compound then place it back in the machine, rather than leave the disc in for five minutes. The compound gives an initial cut and gets kicked off the surface of the disc and then allows the buffing wheel to polish the disc. So if you need to get more aggressive on a scratch repeat the process above, several times if necessary. If the scratch still remains you may consider the use of our more aggressive Model 1500 this will allow you to remove more material off the disc and then go to the Model 1000 for the final polish. If you still see scratches in the disc Make sure that they are not on the other side (the foil side). For more information on this subject Please

refer to the other manual entitled “**What to look for when buying scratched Discs**” This manual outlines which discs are repairable and which are not. If you have interest in repairing the more severely gauged and damaged discs, please call us for updates on new product releases.

**If you need a finer finish on the disc
And have been using the machine for 6 months or more**

You may need to rake the Polishing wheel, this will remove any residue from the compounds that build up. An alternative to this is to replace the wheel with a new one. Raking the wheel is dangerous and should be only done by an experienced technician.

Cleaning and Maintenance

Always unplug the machine before cleaning

The machine should be cleaned every three months or after 1000 repairs. The outer casing can be washed with a damp non-abrasive cloth. Be sure not to get the switch wet. Use a damp cloth only. Do not spray water directly on any part of the machine. To clean the inside of the machine it is recommended that you use a small vacuum attachment. This will pick up the dust type residue real well. If you need a more thorough cleaning remove the outer casing, (be sure not to pull out any electrical connections). The switch should remain connected to the case. Lay the cover on its back and access the rest of the machine. Use a vacuum where ever possible. The remaining areas may be wiped with a damp cloth. **DO NOT GET THE POLISH WHEEL WET.** If you get the wheel wet you will need to replace it. Once you have the cover off inspect the wheel and evaluate whether it needs replacement now having the cover off for cleaning is the best time to do that.

If you have any Technical questions please call (602) 827-8786 and we will be glad to assist you in any way.