

**Advantage**  
**Disc RepairMachine**  
**Knowledge Resource**



**7307 South 89th Place**  
**Mesa, Arizona 85212**  
**480-827-8786**

[www.azuradisc.com](http://www.azuradisc.com)

# QUICK START

## The Advantage •••••

**WARNING!**

**VERIFY THAT ALL PACKING MATERIALS HAVE BEEN REMOVED BEFORE APPLYING POWER TO THE ADVANTAGE.**



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## SAFETY

Safety is the highest priority in the Azuradisc product line, and we have achieved safe designs with user-friendly interfaces through extensive research and maximized use of technology for all of our machines. It is the operator's responsibility to be familiar with the operation of the machine and routinely follow the maintenance instructions provided in this manual.

### WARNING:

The Machine must be turned OFF for maintenance. Unless otherwise stated in this manual, all product maintenance instructions MUST be performed with the machine turned OFF and the power lead removed from the rear socket.

When using the Advantage disc repair machine, the following basic safety precautions should always be followed to reduce the risk of fire, electric shock, and/or injury to persons:

- Read this manual before assembling or using the machine.
- Use this machine only for its intended use as described in this manual.
- Use only with Azuradisc recommended accessories and repair materials. (The use of repair materials not evaluated for use with this machine may damage discs permanently, cause injuries, and/or void the warranty.)
- This machine is not intended for use by children or infirm persons.
- Do not operate this machine if it has a damaged cord or plug, is not working properly, has been damaged, or immersed in water. Return the machine to Azuradisc or authorized technician for examination, repair, or adjustment.
- To disconnect, turn off the machine, then remove plug from the electrical outlet.
- When using an extension cord, use a grounded plug or socket to connect the machine.
- Disconnect electrical supply before cleaning.

## TRAINING OPTIONS

### FACTORY TRAINING

Training sessions may be scheduled with a Factory Direct Representative by calling the corporate headquarters Tech Services Department in the United States of America at 1.480.827.8786. For participation and availability outside of the United States, please contact your local distributor.

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### Corporate Headquarters:

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Sales Inquires: 1.800.933.4923  
Email: support@azuradisc.com

## DISCLAIMER

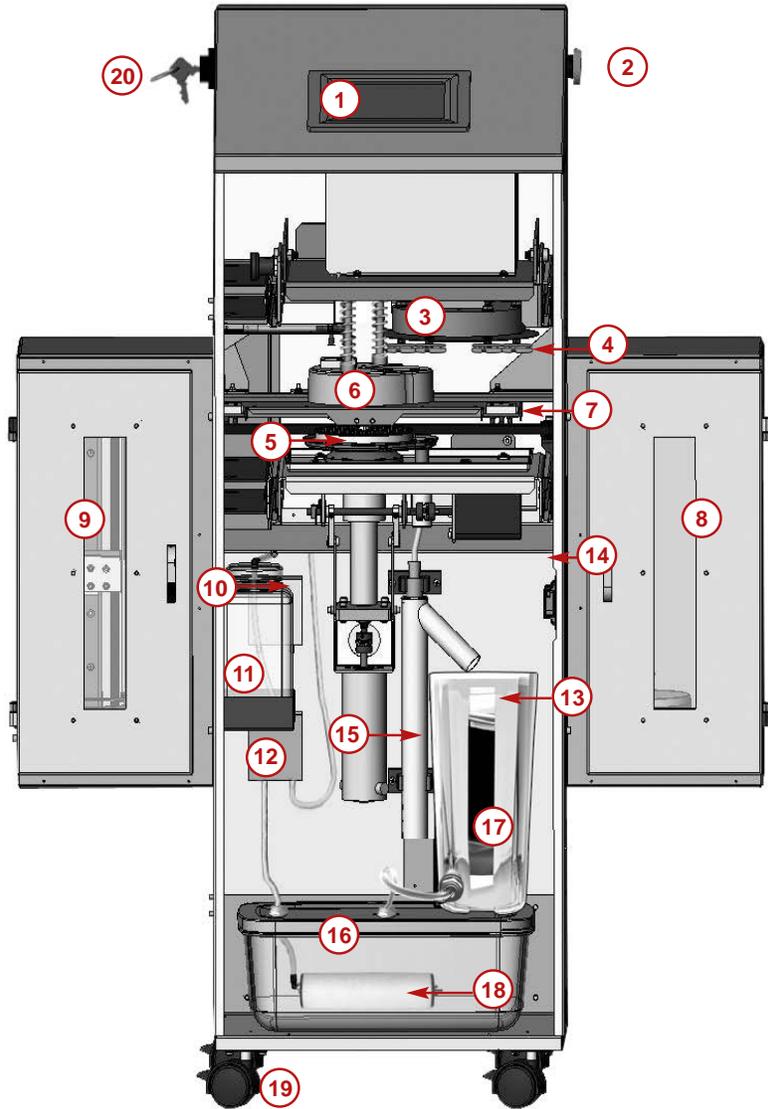
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## THE ADVANTAGE PART IDENTIFICATION

- ① Operator Interface Touchscreen (OIT)
- ② On/Off Button
- ③ Turret
- ④ Polish Head With Pads
- ⑤ Disc Turntable
- ⑥ Splash Guard
- ⑦ Disc Transfer Arm
- ⑧ Unload Chamber (With Spindle Inside)
- ⑨ Load Chamber (With Spindle Inside)
- ⑩ Polish Pump
- ⑪ Polish Reservoir
- ⑫ Water Pump
- ⑬ Filters 1 & 2 (Inside Water Pitcher)
- ⑭ Serial Number Label (Inside Cabinet)
- ⑮ Water Recirculation System
- ⑯ Water Tank
- ⑰ Water Pitcher
- ⑱ Filter 3 (Inside Water Tank)
- ⑲ Caster Locks
- ⑳ Lock-Out/Maintenance Key



## THE ADVANTAGE PACKING MATERIALS IDENTIFICATION

- ① Crate
- ② ESD Safe Cover
- ③ Protective Foam
- ④ Instruction Kit / Start-up
- ⑤ Protective Foam
- ⑥ Protective Foam
- ⑦ Caution Labels
- ⑧ Manuals / Tool Kit
- ⑨ Gouge Kit:
  - Polish Compound
  - Micro-Abrasive Pads
  - A&B Solution

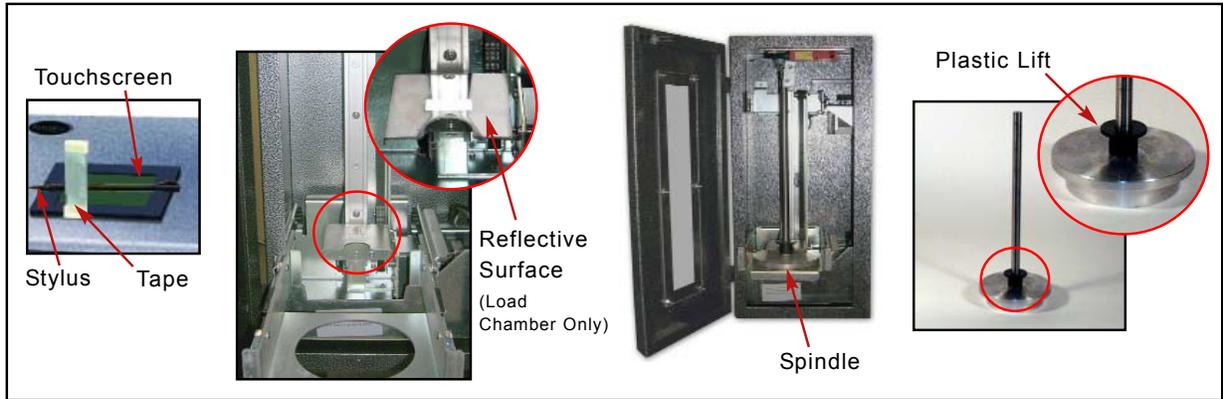


**WARNING:**

Verify that all packing materials have been removed before applying power to the Advantage.

## SET UP

### REMOVE PACKING MATERIAL



1. Remove Stylus from the Touchscreen
2. Verify the reflective surface is clean on the Load Chamber Lift Assembly.
3. Install the Spindles in the Load and Unload Chambers.

**NOTE:**

Pull out drawer on Load Side to install Spindle.

### Load Chamber - Spindle Installation



### Unload Chamber - Spindle Installation



4. Ensure that the Plastic Lift is properly installed (T-side up) on both Spindles.

## LOAD SIDE - Disc Separator Spindle (DSS)

### Please Read Below Notice Prior to Initial Operation

**DSS units shipped with a new machine have been factory calibrated for that particular repair machine, and further calibration should not be necessary. If you have received a separate DSS, please refer to the calibration instructions below to ensure optimum function in your disc repair machine.**

Azuradisc has designed a spindle specifically for use on the load side of The Advantage & One Touch Professional Disc Repair Machines to reduce the possibility of the machine picking up more than one disc at a time. This condition can occur if the stacked discs adhere to one another for any number of reasons. Discs can get stuck together because of soda, static cling, because they are damp or many other reasons. This new & improved design is called the Disc Spindle Separator (DSS), it is designed to help separate lightly stuck together discs, however is not designed to pry apart discs that are seriously stuck together.

Your DSS has a RED MARK on it for Proper Alignment, be sure to line up the red line mark on the base of the spindle with the red line mark on the spindle drawer.

### SPINDLE ASSEMBLY AND INSTALLATION



The Disc Spindle Separator is made up of three pieces:

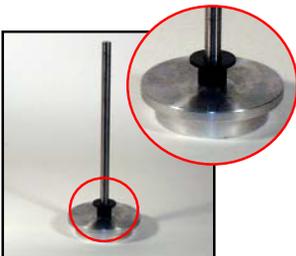
- Spindle base with an adjustable nut
- Spindle shaft
- Plastic lifting ring



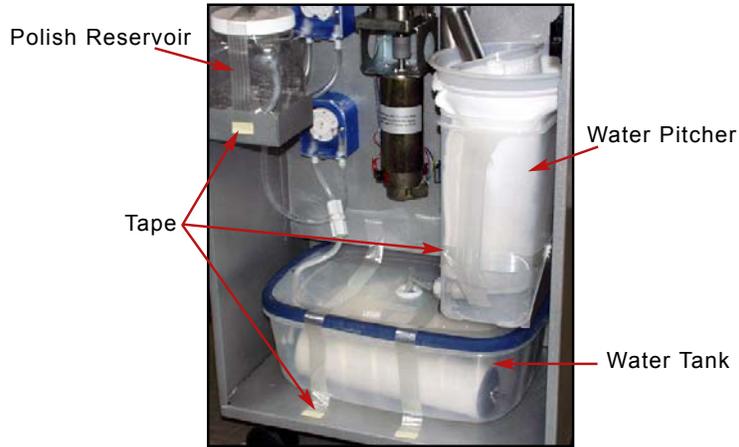
Adjustable Nut



Step 1. Screw the shaft onto the threaded base. The adjustable nut is the white nylon collar just below the shaft threads.

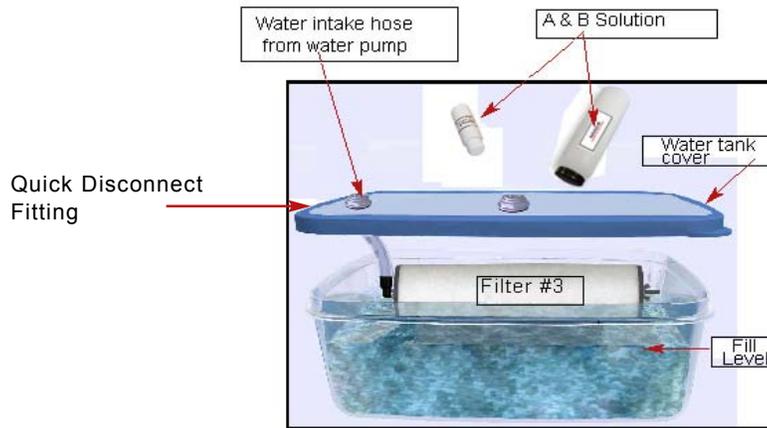


Step 2. Place the plastic lifting ring onto the shaft. The big end of the ring should be towards the spindle end (like a T).



5. Remove the packing tape from the Polish Reservoir, Water Tank and Water Pitcher.

**PREPARE WATER TANK**



6. Add 1 entire bottle each of Solution A & B and fill Water Tank with water until Filter 3 is fully covered.

**NOTE:**

Gently stir the solution and water mixture to prevent undesirable repair marks on discs.



7. Verify the Water Intake hose is connected to Filter #3 and replace cover.



8. Place Water Tank in the bottom of the Advantage and verify the Water Intake Hose is secure in the quick disconnect fitting.

**PREPARE WATER PITCHER**



9. Verify that Filter 1 is inside Filter 2 and both filters are in the Water Pitcher.

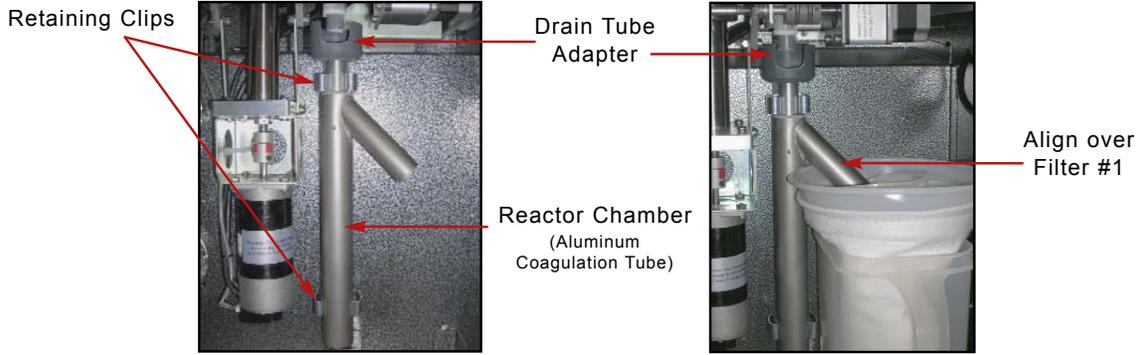


10. Verify that Drain Tube is secure in the Water Tank Cover quick disconnect fitting.

**PREPARE POLISH RESERVOIR AND REACTOR CHAMBER**



11. Fill the Polish Reservoir and place in the holding tray.



12. Verify the Reactor Chamber is in the retaining clips, the Chamber exit is over Filter #1, and the drain tube adapter is inserted into the top of the Aluminum Coagulation Tube with opening of drain tube adapter facing forward.

**ATTACH POLISH PADS**



13. Lift both Release Tabs and pull out the Polishing Pad Turret Drawer.



14. Pull drawer out. Pull knob on left side of drawer out. While holding knob out, slowly lift drawer up and rotate back. Release knob into place.



15. Ensure that the turret drawer knob is locked in place.



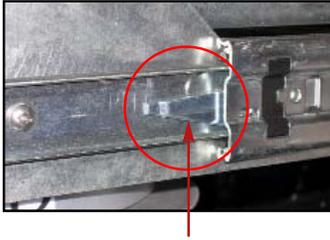
16. Place pads on heads according to velcro color code. Ensure the pads are centered on the heads.



17. Press pads firmly in place.  
 18. Pull drawer knob again to flip Turret back over and close drawer.  
 19. Ensure Drawer Latches are secure.

**NOTE:**

If the Turret Drawer is pulled completely forward, lift the side latches to push Turret Drawer back in.



Side Latch (Both sides of drawers)

20. Lift side latches simultaneously and gently push until drawer moves. Then, grab the center of the drawer and push into place and lock. Ensure that drawer cannot be pulled back out.

**NOTE:**

Refer to "Replacing Polish Pads" section of this manual if polish pads need to be removed for any reason.

**INITIALIZE THE ADVANTAGE**

**WARNING:**

Verify that all packing materials have been removed before applying power to the machine.



21. Plug the machine into a correct electrical source.

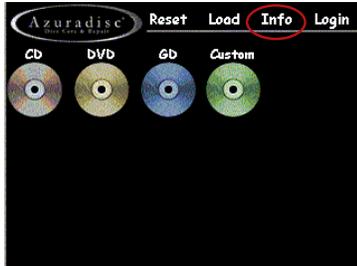
22. Press the On/Off button to turn on.

23. Allow the software to initialize.

**NOTE:**

The water and polish hoses must be primed prior to using for the first time.

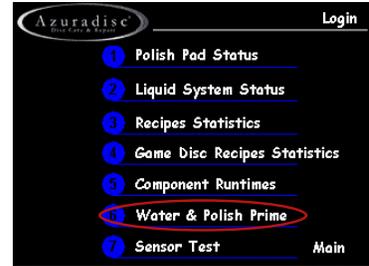
**PRIME WATER AND POLISH HOSES**



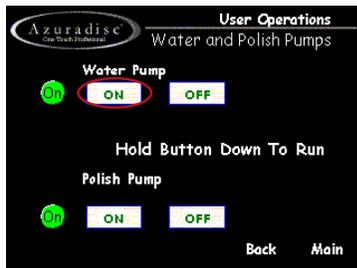
24. Select: Info on the OIT Main Menu.



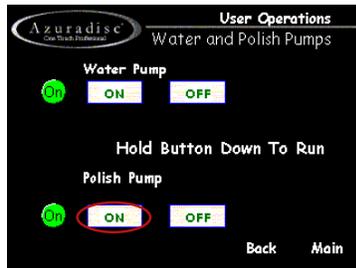
25. Place a cloth or paper towel on the turntable (under the top splash guard) to collect polish during hose priming.



26. Select: Water & Polish Prime.



27. Run the Water Pump until all air bubbles are gone from the water hoses. Press OFF.



28. Run the Polish Pump until all air bubbles are gone from the polish hoses. Press OFF.

# EDUCATION

The Advantage .....



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## HOW DISCS ARE MADE

### HOW A CD IS MADE

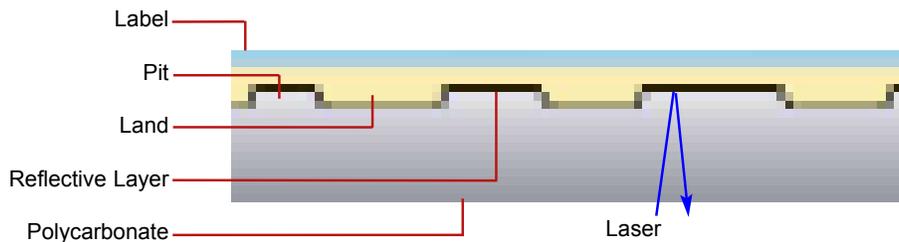
CDs consist of 99% clear polycarbonate plastic. The reflective layer, protective layer and screen print comprise the remaining 1% of the disc.



1. A disc is created from molten polycarbonate and digital information is stamped on the top of the disc, while it is still near melting point, using a die with microscopic bumps. These bumps are known as "pits and lands".
2. After the information is molded into the polycarbonate, a reflective foil layer is applied using a process called sputtering or wet silvering. This layer reflects the laser back to the player, so its integrity is extremely important. The layer is usually silver, but can be made of gold or platinum.
3. A clear lacquer coating is applied to seal the reflective layer and prevent oxidation. This layer is very thin and offers little protection from top side scratches.
4. Finally the artwork is screen-printed on the top of the disc.

Pits and Lands are imprinted into the disc to indicate a one or a zero. A laser beam is sent from the player to the disc and the reflective layer reflects it back to the reader and the ones and zeros are translated by the player.

Recordable discs have a photosensitive dye type layer instead of the stamped information layer. This layer, when exposed to a certain light, will make an impression of a pit into the layer.



Re-recordable discs use a layer that allows the laser to polarize the photosensitive layer back and forth between a visible pit to an invisible pit.

### HOW A DVD IS MADE

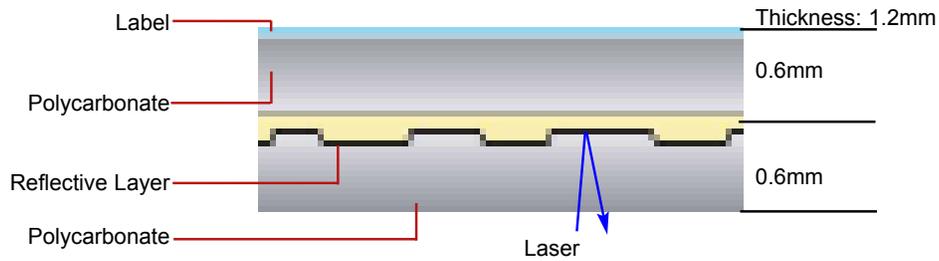
DVDs are made in different ways depending on the amount of information that is recorded on the disc. DVDs may be single or double layered and single or double layered double sided.

#### NOTE:

Due to the amount of information stored on DVD's, the amount of polycarbonate is less than a normal CD; therefore a DVD can not be repaired as many times as a CD.

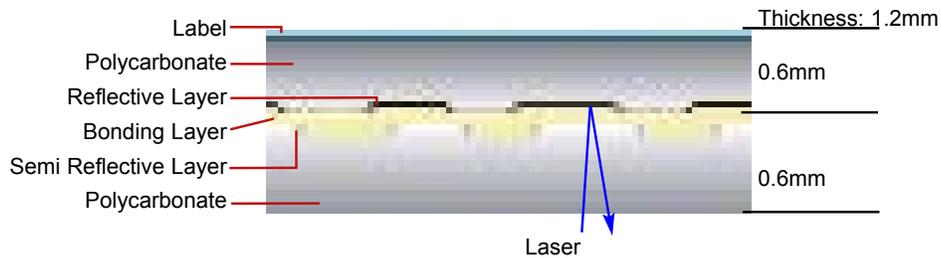
**Single Layer DVDs** (DVD-5 - 4.7GB)

These DVDs are made the same way as a CD with one additional polycarbonate layer added between the label and the pits and lands.



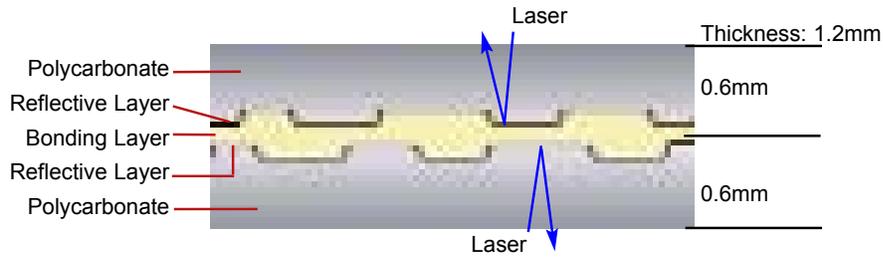
**Double Layered DVDs** (DVD-9 - 8.5GB)

Double layered DVDs have a semi reflective layer and a reflective layer giving two layers to store information.



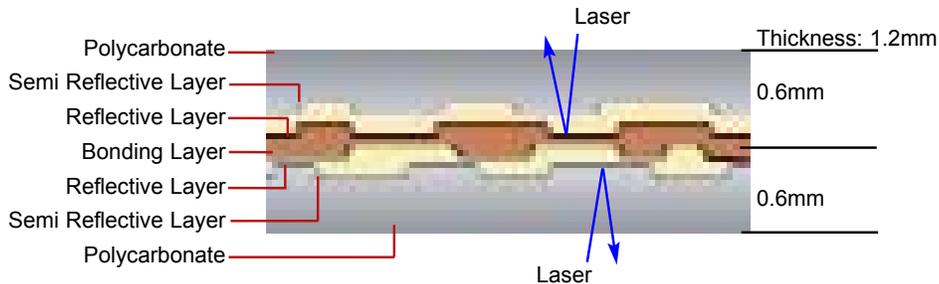
**Double Sided DVDs** (DVD-10 - 9.4GB)

Double sided DVDs consist of two discs bonded back to back with the reflective layers in the middle and both sides are repairable. Double sided DVDs use a different size of micro-abrasive polishing papers to prevent the manufacturer's label area from being removed during the repair process.



**Double Sided/Double Layered DVDs** (DVD-18 - 17.1GB)

Double sided/double layered DVDs are simply two double layered discs bonded back to back.

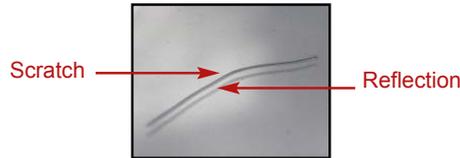


## IDENTIFYING SCRATCHES

The three basic types of scratches are topside, reading side, and the top side foil dent. When repairing DVDs the top side scratch and the foil dent do not apply due to the construction of the disc.

### CDs, CD-ROMs & DVDs

#### Reading Side Scratches



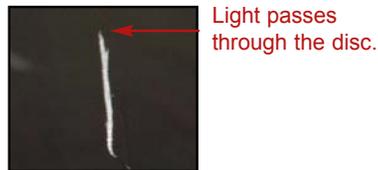
Reading side scratches are the most common type, the easiest to identify, and the only type of scratch that can be repaired.

If the scratch has a double image, as shown in the figure to the right, it is a reading side scratch and can be repaired by using an Azuradisc scratch repair machine. The double image is the result of the actual scratch and a reflection made by the reflective foil layer.

### CDs & CD-ROMs ONLY

The scratches shown are not found on DVDs

#### Top Side Scratches



Top side scratches are caused by a sharp object damaging the printed label of a disc. In this case, the information just below the printed label is damaged and causes a skip. Top side scratches cannot be repaired, however they can be prevented by using an Azuradisc Scratch Guard.

The easiest way to identify the top side scratch is to hold the suspected scratch up to a light source and the light will pass through the disc.

#### NOTE:

If light does not pass through, check the reading side of the disc and if there is a scratch without a “double image”, it is a top side scratch that did not remove any of the label.

#### Top Side Foil Dents



Top side foil dents are not scratches but look like a scratch on the reading side of the disc. The dent is made by a large amount of pressure put on the label side of the disc, causing the foil layer to dent. This dent will cause skips and cannot be repaired, however they can be prevented using an Azuradisc Scratch Guard.

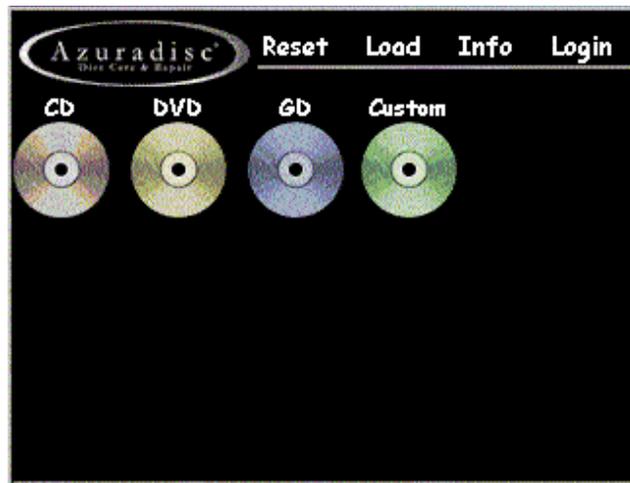
The easiest way to identify the top side foil dent is to see if there is a “double image” produced. There should not be a second image because the damage is to the inner foil layer. There will not be any evidence on the label side of the disc because the pressure did not cause any of the label to be removed.

# OPERATION & TROUBLESHOOTING

## The Advantage .....

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## CONTACT US

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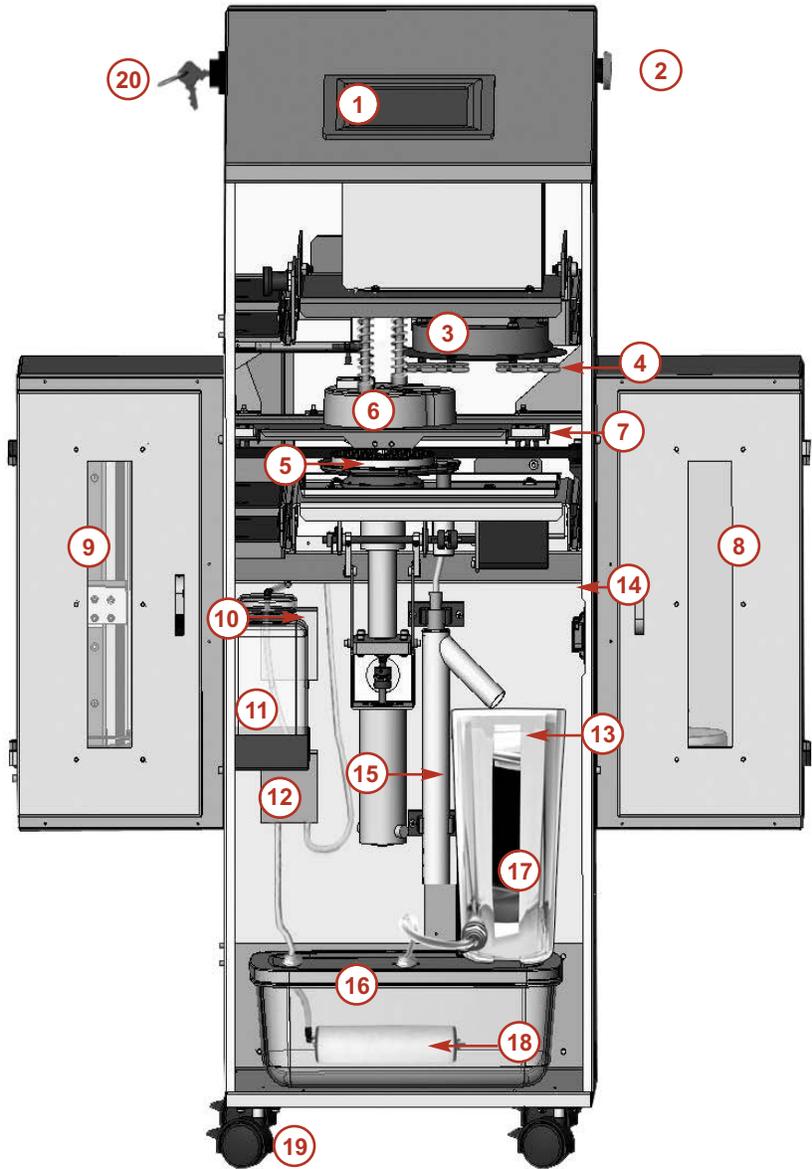
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- ⑭ Serial Number Label (Inside Cabinet)
- ⑮ Water Recirculation System
- ⑯ Water Tank
- ⑰ Water Pitcher
- ⑱ Filter 3 (Inside Water Tank)
- ⑲ Caster Locks
- ⑳ Lock-Out/Maintenance Key



## PRE-OPERATION CHECK

For optimum performance of your machine, check the following items before each use:

1. Verify the machine is located on a stable level surface and the casters are locked to prevent it from rolling around.
2. Connect the machine to a standard electrical source.
3. Polish Pads are installed on the Turret.
4. Drain from Lower Splash Guard to Reactor Chamber is clear.
5. Premixed water level is between minimum and maximum fill lines.
6. Water & Polish Tubing have no air bubbles.
7. Polish is present in the reservoir.

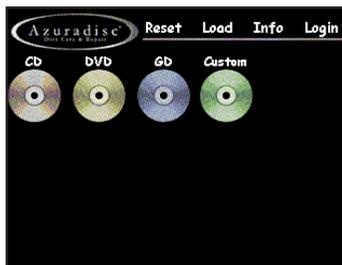
## NORMAL OPERATION

### NOTE:

Selecting the Azuradisc Logo will return the screen to the Main Menu from any other screen. The Stylus may be used to make selections on the OIT.

### MAIN MENU SCREEN

Figure 1 - Main Menu



Selection	Definition
AZURADISC LOGO	Returns to Main Screen
RESET	Clears all previous selections and returns all machine functions to home positions.
LOAD	Load discs before, during, or after the repair process.
INFO	Info screen to access supply levels, usage statistics, and other features.
LOGIN	Accesses advanced user levels and maintenance tools.
CD	Recipes designed for clear-type discs such as music and data discs.
DVD	Recipes designed for high-density and multi-layered discs such as movie discs.
GD	Recipes designed for different game-type discs.
CUSTOM	Custom recipes (currently reserved for future use).

1. Press the On/Off Switch on the top right side of the machine and wait for it to initialize.
2. Verify the type and condition of the Polish Pads.
3. Ensure there is an adequate supply of Polish and water.
4. Sort the discs to be repaired by type (i.e. Music CDs, DVDs or Game Discs.)

**NOTE:**

Only one type of disc may be repaired in a session and discs must be clean and dry.

5. Discs are sorted by the type of repair or cleaning needed (i.e. gouged, scratched, clean etc.).
6. Press Load on the Operator Interface Touchscreen (OIT), open the door on the Load Chamber and place the discs on the spindle with the disc labels facing down.

**NOTE:**

Discs must be loaded with the labels facing down!

7. Close the Load Chamber door and select the type of disc to be repaired on the OIT.
8. Select the level of cleaning or repair required on the OIT.
9. Press Start on the OIT to begin the process.

**CD & DVD MENUS**

1. Sort the discs to be repaired by type (i.e. Music CDs, DVDs or Game Discs).

**NOTE:**

Only one type of disc may be repaired in a session and discs must be clean and dry.

2. Sort discs by the type of repair needed (i.e. gouged, deep scratches, clean etc.).
3. Press Load on the OIT, open the door on the Load Chamber and place the discs on the spindle with the disc labels facing down.

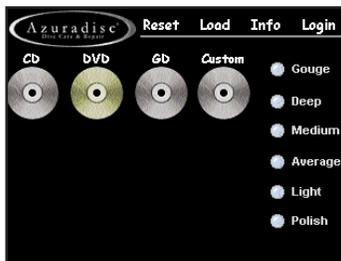
**NOTE:**

Discs must be loaded with the labels facing down!

4. Close the Load Chamber door and select CD or DVD on the OIT.
5. Select the level of cleaning or repair required on the OIT.
6. Press Start on the OIT to begin the process.

**CLEAN - REPAIR MENU**

Figure 2 - Clean/Repair - Menu



Selection	Definition
GOUGE	For repairing extremely deep scratches or gouges.
DEEP	For repairing deeply scratched discs.
MEDIUM	For repairing average-depth scratched discs.
AVERAGE	For repairing lightly scratched discs.
LIGHT	For polishing lightly scuffed and scratched discs.
POLISH	For cleaning discs with fingerprints, dust, dirt, or oil.

**GAME DISC SCREENS**

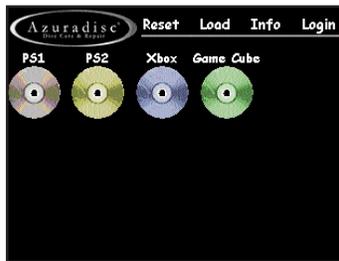
1. Sort the discs to be repaired by type (i.e. Music CDs, DVDs or Game Discs).
2. Sort discs by the type of repair needed (i.e. gouged, deep scratches, clean etc.)
3. Press Load on the Touch Screen, open the door on the Load Chamber and place the discs on the spindle with the disc labels facing down.
4. Close the Load Chamber door and select the type of game (i.e. PlayStation®1, Playstation®2, Xbox or GameCube™) on the OIT.

**NOTE:**

An adapter for the Disc Turntable is required for repairing or cleaning Game Cube discs.

**GAME DISC SCREEN 1**

Figure 3 - Game Menu #1

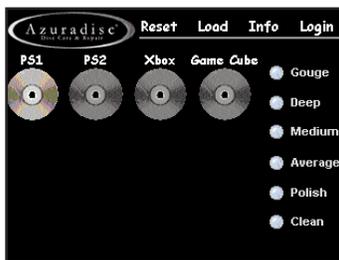


Selection	Definition
PS 1	Selects PlayStation®1 type discs.
PS 2	Selects Playstation®2 type discs.
Xbox	Selects Xbox type discs.
Game Cube	Selects Game Cube® type discs (Note: Turntable Adapter Required).

**GAME DISC SCREEN 2**

5. Select the level of cleaning or repair required on the Touch Screen

Figure 4 - Game Disc Menu #2



Selection	Definition
GOUGE	For repairing extremely deep scratches or gouges.
DEEP	For repairing deeply scratched discs.
MEDIUM	For repairing average-depth scratched discs.
AVERAGE	For repairing lightly scratched discs.
LIGHT	For polishing lightly scuffed and scratched discs.
POLISH	For cleaning discs with fingerprints, dust, dirt, or oil.

6. Press Start on the OIT to begin the process

# DISC REPAIR PROGRESS SCREEN



Selection	Definition
COMPLETE DISC THEN STOP	Completes current disc repair & ends process
ABORT	Aborts process to allow operator to check for problem to reset system. You must power off and on the machine

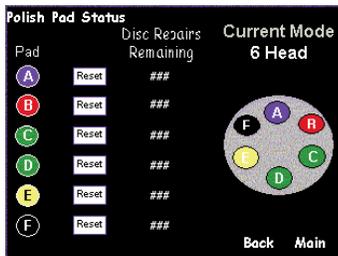
# INFO MENU

Figure 5 - Info Menu

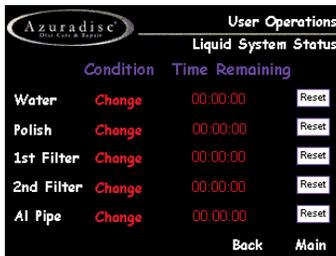


Selection	Definition
POLISH PAD STATUS	Allows the polish pad timers to be reset.
LIQUID SYSTEM STATUS	Allows the liquid system timers (water, polish, filters, and Aluminum Tube) to be reset.
RECIPE STATISTICS	Displays recipe statistics and tracking; allows resetting counters.
GAME DISC RECIPE STATISTICS	Displays recipe statistics and tracking for game discs; allows resetting counters.
COMPONENT RUN TIME	Tracks component run time.
WATER & POLISH PRIME	Allows manual operation of water and polish pumps to prime systems.
SENSOR TEST	Shows status of disc spindles, disc count position and door sensors.
MAIN	Returns to Main Menu.

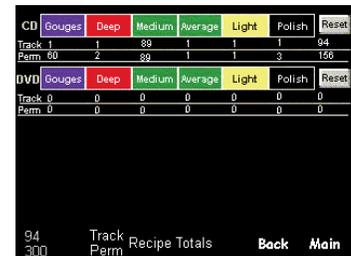
### POLISH PAD STATUS



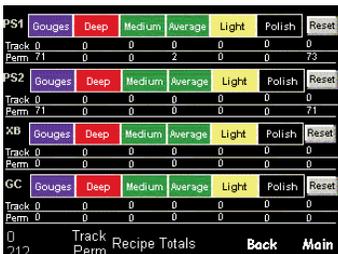
### LIQUID SYSTEM STATUS



### RECIPE STATISTICS



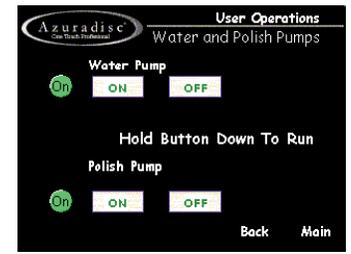
### GAME DISC RECIPE STATISTICS



### COMPONENT RUN TIME



### WATER & POLISH PRIME



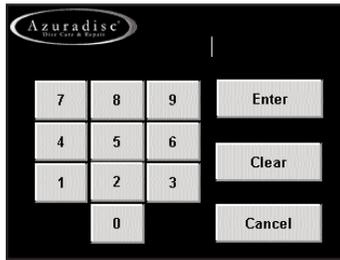
### SENSOR TEST



# ADVANCED OPERATIONS

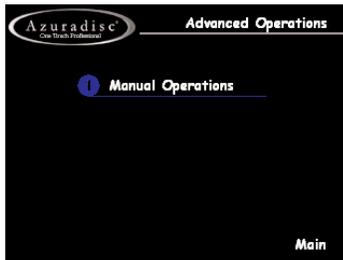
## LOGIN SCREEN

Figure 6 - Login Screen



Selection	Definition
USER MODE	No password required.
ADVANCED OPERATION	Access additional user levels and maintenance tools (Password: 741852).

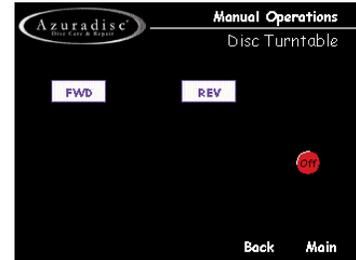
### ADVANCED OPERATIONS



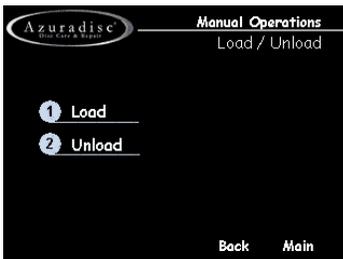
### MANUAL OPERATIONS



### DISC TURNTABLE



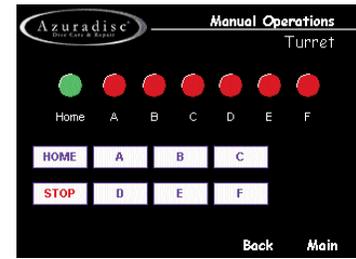
### LOAD / UNLOAD



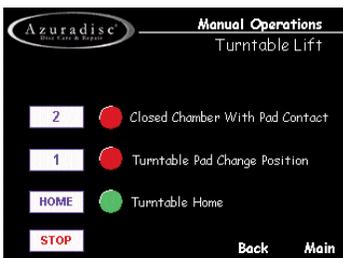
### POLISH PAD MOTOR



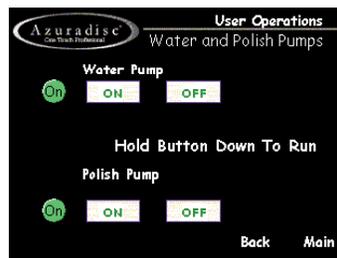
### TURRET



### TURNTABLE LIFT



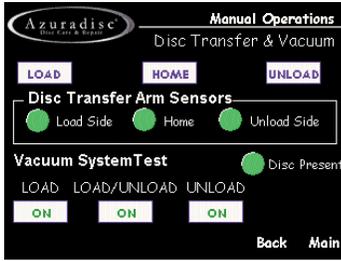
### WATER & POLISH PUMPS



### WATER RECYCLE

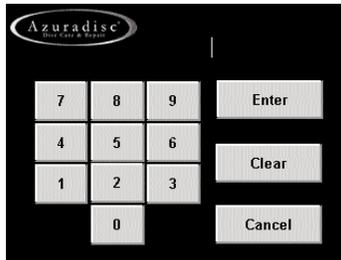


DISC TRANSFER



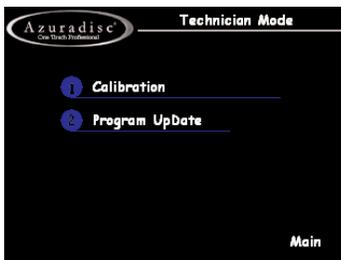
TECHNICIAN MODE

Figure 7 - Login Screen



Selection	Definition
USER MODE	No password required.
TECHNICIAN MODE	To be used by advanced users only (Password: 753951).

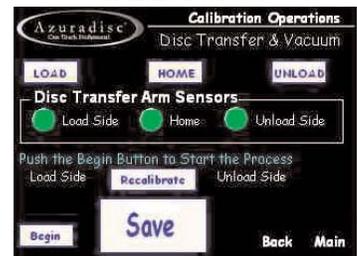
MAIN TECHNICIAN MENU



MAIN CALIBRATION MENU



DISC TRANSFER CALIBRATION



LOAD ELEVATOR CALIBRATION



TURNTABLE LIFT CALIBRATION



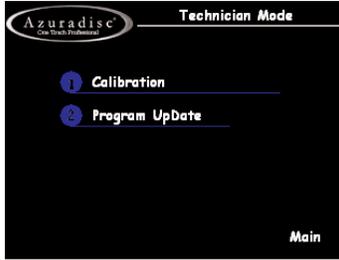
TURRET CALIBRATION



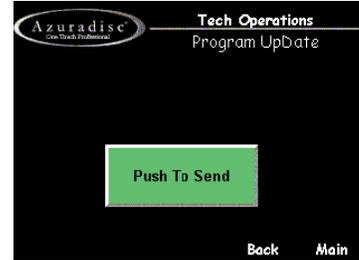
FORCE ADJUST SETUP



PROGRAM UPDATE  
MAIN MENU



PROGRAM UPDATE



**Advantage  
TROUBLESHOOTING GUIDE**

<b>PROBLEM</b>	<b>AREA</b>	<b>SEVERITY OF CONSEQUENCES</b>	<b>POSSIBLE CAUSE(S)</b>	<b>CONFIRMATION</b>	<b>SOLUTION</b>	<b>CALIBRATION PROCEDURE</b>
Abrasive and/or polish pads torn, off leaving adhesive on discs	Finish	High	Turntable not spinning	Reboot machine and check turntable station-holding	Shut down and re-insert turntable drawer	Preflight Checklist
Concentric circular marks on disc	Finish	High	Sanding pads not spinning	Manual Operations- run sanding motor while observing pads		
Deep round marks on Disc	Finish	High	Turntable not spinning	Reboot machine and check turntable station-holding	Shut down and re-insert turntable drawer	Preflight Checklist
Drips on finished discs	Finish	Low	Liquid build-up in splash cover	White drips on discs on Unload Spindle	Clean upper splash cover with damp cloth	NA
Hazy Discs	Finish	Low	Insufficient Polish	Prime pump and observe polish flow	Check hose connections, replace pump tube	Prime Water and Polish
Hazy Discs	Finish	Low	Insufficient Pressure	Change Turntable force to see if finish improves	Increase Turntable Force Adjustment in 1 step increments until finish improves	Turntable Force Adjustment
Hazy Discs	Finish	Low	Using OT50 Stage 2 pad instead of OTPro F Pad	Compare black velcro on pads- F pads have straight rows, OT50 pads have random velcro	Replace with correct F pads	NA
Pitted Discs	Finish	Medium	Insufficient Water Flow	Prime pump and observe water flow	Reconnect all Quick-Disconnects, Replace pump tube	Prime Water and Polish
Repair marks near stacking ring	Finish	Low	Abrasive pad off-center	power off OTP and visually inspect pads	Re-center abrasive pads in holders	NA
"Dropped Disc" Error	Error Message	Low	DSS Set too high	Manual Operations- Disc Transfer	Calibrate DSS	DSS Setup
"Failed to Home Load Elevator" message on start-up	Error Message	Medium	Black plastic lift ring is under the load elevator	Visual Inspection	Pull out load spindle drawer and re-boot; elevator should home normally	NA
"Failed to Pick Up Disc" Error	Error Message	Low	All three suction cups not contacting the disc due to loose elevator screws	Move the elevator fork by hand to check for loose screws	Disassemble track and tighten screws, re-assemble with Loctite	Load Elevator Calibration
Load Elevator over-running top of tower during calibration	Load Chamber	Medium	Vacuum switch set incorrectly	Push "Mode" on Vacuum guage, P1 should read -7.00	Use the up and down arrows to adjust P1 to -7.00	NA
Unpleasant odor	Recirculation System	Low	Bacterial growth in water reservoir	Open water reservoir lid	Thoroughly clean reservoir, filters and flush water lines. Refill with water + A&B solutions and prime water lines	Prime Water and Polish
White sediment in Water Reservoir	Recirculation System	Low	Coagulation tube not working correctly	No "Cottage Cheese" appearance in filter 1	Replace Al pipe, verify voltage between Al pipe and outer tube	NA

White sediment in Water Reservoir	Recirculation System	Low	Hole in filters 1 or 2	Remove filters 1 and 2 and wash out, looking for leaks	Replace leaking filter	NA
"Dropped Disc" Error	Error Message	Low	Fluid hoses contacting disc during transfer	Manual Operations- Disc Transfer	Secure Fluid hoses with Zip Ties clear of disc path	NA
"Failed to Pick Up Disc" Error	Error Message	Low	Transfer arm suction cups not centered over disc	Manual Operations- Transfer Arm Test	Calibrate transfer arm	Transfer Arm Calibration
Damaged Discs	Repair Chamber	High	Disc caught between upper and lower splash housings	Open Main door and check turntable during process	Check the chamber for obstructions that knock the disc from the transfer arm	Manual Operations, Transfer Arm Test
Damaged Discs	Repair Chamber	High	Two discs being repaired at the same time	Open Main door and check turntable during process	Adjust DSS to prevent double disc pickup	DSS Setup
Noise- grinding during repairs	Repair Chamber	High	Insufficient Water Flow	Finished discs are very warm and possibly pitted, bubbles in water line	Reconnect all Quick-Disconnects, Replace pump tube	Prime Water and Polish
Noise- grinding during repairs	Repair Chamber	High	Too much repair pressure	Finished discs are very warm	Decrease turntable force	Turntable Force Adjustment
Noise- whining during repairs	Repair Chamber	Low	Polish Shaft gear or drive gear worn or broken	Visually inspect gears using Turret Test	Replace worn or broken gears	Turret Calibration
Noise- whining during repairs		Low	Polish Shaft gear to drive gear out of tolerance	Visually inspect gears using Turret Test	Calibrate Turret	Turret Calibration
False Error messages displayed	Touch Screen	Low	Incorrect com cable between Touch Screen and Control Boards	Occasional Dropped Disc and Failed to Pick Up Disc errors on screen, but machine continues to operate correctly.	Replace Com cable	NA
Freeze at "Loading Please Wait"	Touch Screen	Low	Com cable disconnected	Visually check cable at Touch Screen and Control Board	Re-connect cable	NA
Partial blackout of Touch Screen	Touch Screen	Low	Touch Screen retaining screws too tight	Screws should be installed finger-tight with Loctite	Remove and re-install screws finger tight with Loctite	NA
"Failed to Home Turntable" message on start-up	Turntable Drawer	Low	Turntable Drawer not properly seated	Re-seat drawer	Power off OTP and re-seat Turntable Drawer	NA
Turntable not spinning	Turntable Drawer	High	Bad control board output	Coupler ok, No position reporting in Motor Position screen	Replace encoder	Manual ops, Motor Position
Turntable not spinning	Turntable Drawer	High	Bad Turntable motor encoder	Coupler ok, No position reporting in Motor Position screen	Replace encoder	Manual ops, Motor Position
Turntable not spinning	Turntable Drawer	High	Broken or Loose Turntable Coupler	If turntable spins but motor shaft does not spin	replace or tighten coupler	Manual ops, turntable
Turntable not spinning	Turntable Drawer	High	Motor wires disconnected	Visually confirm wires connected to motor	Re-connect motor	Manual ops, turntable
"Failed to Home Turret" message on start-up	Turret Drawer	Low	Turret Drawer not properly seated	Re-seat drawer	Power off OTP and re-seat Turret Drawer	NA
Load Elevator not raising when start button is pressed and giving a very low or high disc count	Load Chamber	High	Slit mask has moved over the disc present sensor.	When the start button is pressed the load elevator does not come up and the disc count is very large. Also during the calibration, the first ten discs do not move and the pro instantly asks to put the one disc on the elevator. The one disc moves up slowly to meet the suction cups.	Remove the slip mask	NA

**Advantage  
TROUBLESHOOTING GUIDE**

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Deep round marks on Disc	Finish	High	Turntable not spinning	Reboot machine and check turntable station-holding	Shut down and re-insert turntable drawer	Preflight Checklist
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"Failed to Home Load Elevator" message on start-up	Error Message	Medium	Black plastic lift ring is under the load elevator	Visual Inspection	Pull out load spindle drawer and re-boot; elevator should home normally	NA
"Failed to Pick Up Disc" Error	Error Message	Low	All three suction cups not contacting the disc due to loose elevator screws	Move the elevator fork by hand to check for loose screws	Disassemble track and tighten screws, re-assemble with Loctite	Load Elevator Calibration

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# PREVENTIVE MAINTENANCE

The Advantage .....



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## **SAFETY**

Safety is the highest priority in the Azuradisc product line, and we have achieved safe designs with user-friendly interfaces through extensive research and maximized use of technology for all of our machines. It is the operator's responsibility to be familiar with the operation of the machine and routinely follow the maintenance instructions provided in this manual.

### **WARNING:**

The Machine must be turned OFF for maintenance. Unless otherwise stated in this manual, all product maintenance instructions MUST be performed with the machine turned OFF and the power lead removed from the rear socket.

When using the Advantage disc repair machine, the following basic safety precautions should always be followed to reduce the risk of fire, electric shock, and/or injury to persons:

- Read this manual before assembling or using the machine.
- Use this machine only for its intended use as described in this manual.
- Use only with Azuradisc recommended accessories and repair materials. (The use of repair materials not evaluated for use with this machine may damage discs permanently, cause injuries, and/or void the warranty.)
- This machine is not intended for use by children or infirm persons.
- Do not operate this machine if it has a damaged cord or plug, is not working properly, has been damaged, or immersed in water. Return the machine to Azuradisc or authorized technician for examination, repair, or adjustment.
- To disconnect, turn off the machine, then remove plug from the electrical outlet.
- When using an extension cord, use a grounded plug or socket to connect the machine.
- Disconnect electrical supply before cleaning.

## **TRAINING OPTIONS**

### **FACTORY TRAINING**

Training sessions may be scheduled with a Factory Direct Representative by calling the corporate headquarters Tech Services Department in the United States of America at 1.480.827.8786. For participation and availability outside of the United States, please contact your local distributor.

### **ADDITIONAL TRAINING**

Contact the local sales representative or distributor for participation pricing and availability of additional training options.

## **CONTACT US**

### **Corporate Headquarters:**

United States of America  
 Azuradisc Corporate Headquarters  
 2885 N. Nevada St. Suite #140  
 Chandler AZ, 85225  
 www.azuradisc.com  
 Technical Support: 1.480.827.8786  
 Sales Inquires: 1.800.933.4923  
 Email: support@azuradisc.com

### **Azuradisc South Pacific Headquarters**

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 59 Paul Matthews Road  
 North Harbour, Auckland 3013  
 New Zealand

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 Email: newzealandinfo@azuradisc.com

### **Azuradisc Australia**

Telephone: 1.300.360.565  
 Fax: 1.300.360.144  
 Email: australiainfo@azuradisc.com

## **DISCLAIMER**

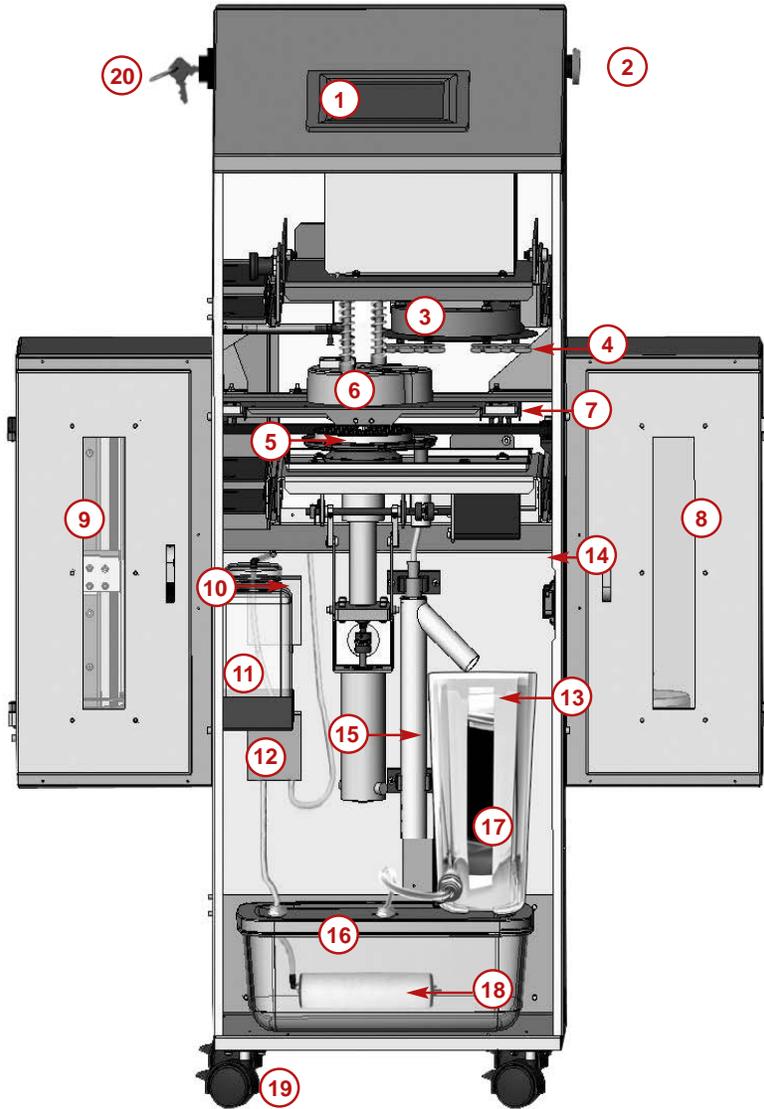
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### THE ADVANTAGE PART IDENTIFICATION

- ① Operator Interface Touchscreen (OIT)
- ② On/Off Button
- ③ Turret
- ④ Polish Head With Pads
- ⑤ Disc Turntable
- ⑥ Splash Guard
- ⑦ Disc Transfer Arm
- ⑧ Unload Chamber (With Spindle Inside)
- ⑨ Load Chamber (With Spindle Inside)
- ⑩ Polish Pump
- ⑪ Polish Reservoir
- ⑫ Water Pump
- ⑬ Filters 1 & 2 (Inside Water Pitcher)
- ⑭ Serial Number Label (Inside Cabinet)
- ⑮ Water Recirculation System
- ⑯ Water Tank
- ⑰ Water Pitcher
- ⑱ Filter 3 (Inside Water Tank)
- ⑲ Caster Locks
- ⑳ Lock-Out/Maintenance Key



## INTRODUCTION

This guide provides specific maintenance instructions and schedule requirements for the Advantage Disc Repair Machine. To ensure optimal performance, maximize supply usage, and minimize errors during operation:

- Replace supply items when indicated by the Operator Interface Touchscreen (OIT)
- Regularly perform the maintenance procedures in this manual.

### WARNING:

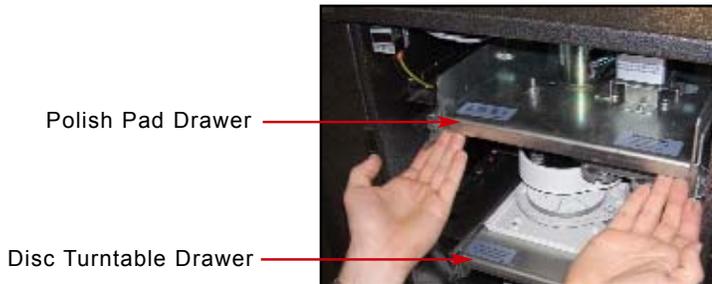
Unless otherwise stated in this manual, all product maintenance instructions **MUST** be performed with the machine turned OFF and the power cord removed from the rear socket.

## PRE-START CHECKLIST

After performing maintenance procedures, ensure all of the following items are complete before initializing the machine for use:



- All Polish Pads are fitted to the Polish Heads Properly.



- Polish Pad Drawer is fully inserted and locked into position. If you pull on the drawer it shouldn't budge.
- Disc Turntable Drawer is correctly locked in position. If you pull on the drawer it shouldn't budge.



- Reactor Chamber is installed correctly with exit feeding into the first filter in the water pitcher.

## PREVENTIVE MAINTENANCE

- Waste Water is feeding properly into the Aluminum Coagulation Tube.



- Water level is correct and filters are in place.
- A&B Solution has been added to the water, and the water pumps have been primed and do not contain air pockets or air bubbles.



- Polish bottle is full and system is primed, insure no air bubbles or air pockets are in the feed lines.

If all items have been checked and are correct, turn the machine on and allow it to initialize.

## MAINTENANCE REQUIREMENTS

The following items are required to perform the maintenance procedures for the Advantage Disc Repair Machine:

1. For detailed knowledge and understanding the operation instructions, refer to:
  - Quick Start Manual or
  - Operation Manual.
2. Basic understanding of the various names and positions of the parts of the machine; refer to the Part Identification section of this manual.
3. Knowledge of the procedures required to access the various parts.

The following tools are required to complete instructions in this manual:

10 mm Bottle Brush

Advantage Maintenance Kit: (actual contents may vary from photo)

- 1 - #0 Phillips Screwdriver
- 1 - #2 Phillips Screwdriver
- 1 - #3 Slotted Driver
- 4 - Fluran Tubing 5"x5"
- 2 - Small Suction Cups
- 1 - 5.5 Amp Fuse
- 1 - Elbow
- 3 - V-Seals for Dongle
- 15 - E-Clips 3/32 (Retaining Clips)



- 30 - Polish Head Springs
- 1 - Flash Card Reader
- 6 - Small Head Gears
- 1 - Large Head Gear
- 30 - Zip Ties
- 2 - Zip Tie Holders
- 1 - Red Coupling Platen Shaft
- 2 - Bearings
- 1 - Gray Coupling
- 1 - Crescent Wrench
- 1 - Disc Turntable Pad
- 1 - Loctite
- 1 - .050 Allen Wrench
- 1 - 5/64 Allen Wrench
- 1 - 3/32 Allen Wrench

## MAINTENANCE SCHEDULE

There are the two maintenance schedules (based on a "medium" repair selection for most repairs):

- Schedule One: For quantities less than 50 disc repairs per day.
- Schedule Two: For quantities between 50-100 disc repairs per day.

Select the schedule that applies to the machine usage (Schedule One or Schedule Two) and follow the schedule based on either the average number of disc repairs performed or the amount of time, whichever comes first. For example, using Schedule Two, the Top Splash cover would be cleaned every 500 disc repairs or weekly, whichever came first.

The four maintenance tasks to be performed are:

- Check: The item should be visually inspected and checked as required
- Clean: The item should be specifically cleaned as required
- Replace: The item should be replaced with a new part
- Lubricate: Grease and lubricate parts as required

### IMPORTANT:

1. **If average disc repair quantity is greater than 100 discs per day, the following maintenance schedule may need to be modified.**
2. **If the machine is not used for 3 or more days:**
  - a. **Check the filters, polish, and the water levels before using.**
  - b. **The schedule should be based on time rather than the "number of discs repaired."**

**PREVENTIVE MAINTENANCE**

Item:	Schedule One:	Before any disc repairs	After 90 disc repairs	After 100 disc repairs OR	After 500 disc repairs OR	After 1000 disc repairs OR
	Schedule Two:	Before any disc repairs	After 90 disc repairs	Weekly	Every 2 weeks	Monthly
Turret		Check	Check	Check	Check	Clean
Top Splash Cover					Clean	Clean
Drain Hole		Check	Check	Check	Clean	Clean
Disc Turntable					Clean	Clean
Disc Transfer Cups					Clean	Clean
Bottom Splash Cover					Clean	Clean
Lower Tray						Clean
Sensors						Clean
Water		Check				Replace
Aluminum Tube				Clean*	Clean*	Clean*
1st Filter				Clean	Clean or Replace	Clean or Replace
2nd Filter					Clean	Replace
Water & Polish Tubing		Check				Clean
Polish		Check**				

\* Replace when walls of tube are nearly worn through.

\*\* Add as required.

**MAINTENANCE AND SUPPLY ITEM USAGE CHART**

The Mean Time Between Failures (MTBF) Rating is the life expectancy of maintenance and supply items.

The following information is based on average use of the OTPro maintenance and supply items. Actual usage time may vary.

Maintenance Item:	MTBF Rating:
Water Pump	1500 hours
Polish Pump	1500 hours
Polish Pad Motor	2000 hours
Turntable Motor	2000 hours
Turret Motor	700 hours
Turntable Lift Motor	700 hours
Gears	5,000 - 10,000 Discs*
Belts	12 Months or Sooner*
Splash Guard	Extreme Use or Breakage only

\* Based on actual wear or usage

Supply Item:	MTBF Rating:
Polishing Pad #A	90 Discs
Polishing Pad #B	90 Discs
Polishing Pad #C	90 Discs
Polishing Pad #D	90 Discs
Polishing Pad #E	90 Discs
Polishing Pad #F	90 Discs
Polish*	240 Discs
1st. Filter**	5000 Minutes
2nd. Filter**	5000 Minutes
3rd. Filter**	5000 Minutes
Aluminum Tube**	5000 Minutes

\* Based upon container size

\*\* See the "Water Recirculation System" section of this manual for cleaning instructions.

## TURRET INSPECTION & MAINTENANCE

### GENERAL

This section contains instructions for checking and cleaning the Turret.

For optimal use of the Advantage:

- Check the Turret prior to each use of the machine.
- Clean the Turret after every 1000 disc repairs.

### CHECK AND CLEAN TURRET AND TOP SPLASH COVER



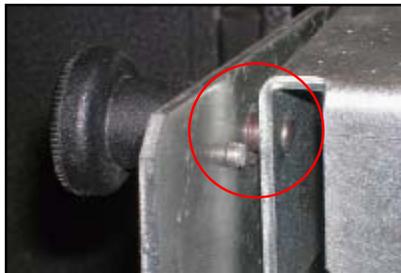
1. Lift both Release Tabs and pull out the Polishing Pad Turret Drawer.



2. Pull drawer out. Pull knob on left side of drawer out. While holding knob out, slowly lift drawer up and rotate back. Release knob into place.



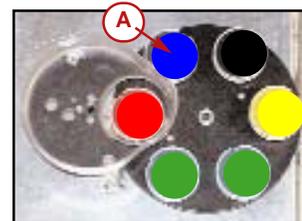
3. Ensure that the turret drawer knob is locked in place.



#### NOTE:

[Azuradisc Optical Spray Cleaner](#) may be used to help loosen polish build-up.

4. Check all springs on the Polish Heads to ensure they are in satisfactory working condition.
5. Check Polish Heads to ensure they spin freely.
6. Check the gears for damage and verify that set screws are secure. (Refer to the "Replacing Polish Pad Gears" section of this manual)
7. Remove the Polish Pads. (Refer to the "Replacing Polish Pads" section of this manual)
8. Clean the protective plastic splash cover using a toothbrush, lint-free cloth and warm water. Use care when handling the splash cover to avoid damage.
9. Clean any polish residue from the Polish Heads.
10. Remove any dust or dirt from entire unit.
11. Re-install or replace Polish Pads according to color code, and ensure pads are centered on the Polish Heads. (Refer to the "Replacing Polish Pads" section of this manual)
12. Pull drawer knob again to flip Turret back over and close Drawer.
13. Ensure Drawer Latches are secure.



**REPLACING POLISH PADS**

**NOTE:**

When Polish Pads are changed before a notification is shown on the OIT, the operator MUST reset the appropriate system status item to prevent false notifications.

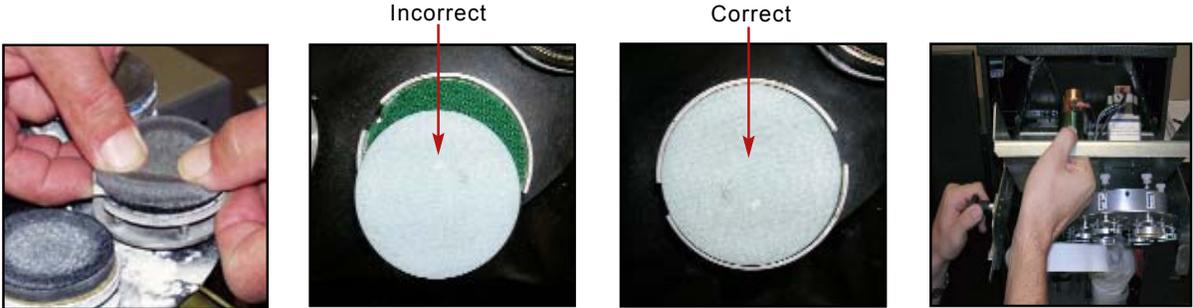
From the MAIN MENU on the OIT, select "INFO" and then "POLISH PAD STATUS". Select "RESET" for the appropriate Polish Pad(s).



1. Lift both Release Tabs and pull out the Polishing Pad Turret Drawer.
2. Pull drawer out. Pull knob on left side of drawer out. While holding knob out, slowly lift drawer up and rotate back. Release knob into place.



3. Carefully lift the edge of the Polish Pad and insert the tip of a small flat screwdriver between the "hook and loop" fastener as shown.
4. Push the screwdriver through the "hook and loop" fastener until it extends out the opposite side of the Polish Head.
5. While holding the "hook and loop" fastener down on the Polish Head with the screwdriver, turn the Polish Head to remove the Pad.
6. Prior to installing a new Polish Pad, verify the "hook and loop" fastener is firmly attached to the Polish Head.



7. Place the new pad on the Polish Head. Ensure the Pad is centered on the Polish Head and firmly in place.
8. Pull drawer knob again to flip Turret back over and close Drawer.
9. Ensure Drawer Latches are secure.

**REPLACING POLISH HEADS**

**NOTE:**

Replace Polish Heads individually to maintain proper color code!

**NOTE:**

When Polish Pads are changed before a notification is shown on the OIT, the operator MUST reset the appropriate system status item to prevent false notifications.

From the MAIN MENU on the OIT, select "INFO" and then "POLISH PAD STATUS". Select "RESET" for the appropriate Polish Pad(s).



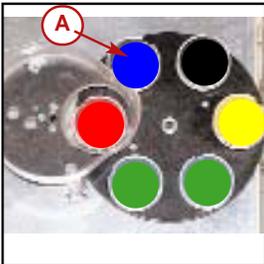
1. Lift both Release Tabs and pull out the Polishing Pad Turret Drawer.
2. Pull drawer out. Pull knob on left side of drawer out. While holding knob out, slowly lift drawer up and rotate back. Release knob into place.



3. Using a #1 Phillips screwdriver, remove the small screw from the small gear.
4. Using a 7/16 wrench, remove nut.
5. Remove polish head from turret.



6. Remove retaining clips using needle nose pliers, replace polish head and reinstall retaining clips.
7. After you have installed the new polish head, place it back on the turret. Replace nut using the 7/16 wrench. Replace gear and small screw using the Phillips screwdriver.



8. Repeat the previous steps for all Polish Head positions. Verify color code is correct prior to installing Polish Pads. Position "A" is Blue.



9. Pull drawer knob again to flip Turret back over and close Drawer.
10. Ensure Drawer Latches are secure.

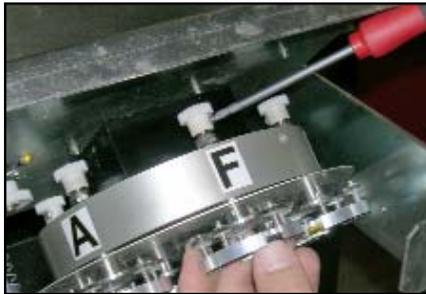
REPLACING POLISH HEAD GEARS



1. Lift both Release Tabs and pull out the Polishing Pad Turret Drawer.



2. Pull drawer out. Pull knob on left side of drawer out. While holding knob out, slowly lift drawer up and rotate back. Release knob into place.

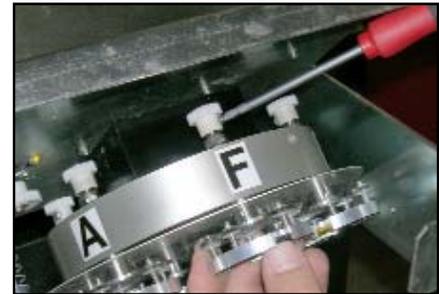


3. Using a #1 Phillips screwdriver, loosen the lock screw and remove the Polish Head drive gear.



**NOTE:**

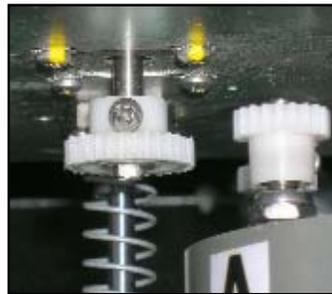
When installing the new gear, the set screw must be aligned with the hole in the mounting shaft.



4. Install the new gear and tighten the lock screw securely.



5. Using a #1 Phillips screwdriver, remove the lock screw from the Polish Head Motor drive gear.



**NOTE**

When installing the new gear, the set screw must be aligned with the flat surface on the mounting shaft as shown above.

6. Install the new gear ensuring that it is aligned with one of the Polish Head Gears and tighten the lock screw securely.



7. Pull drawer knob again to flip Turret back over and close Drawer.

8. Ensure Drawer Latches are secure.

## DISC TURNTABLE

This section contains instructions for checking and cleaning the Disc Turntable and Bottom Splash Cover.

- Clean the Disc Turntable after every 500 disc repairs.
  1. Open front door
  2. Lift both Release Tabs and pull out the Disc Turntable Drawer.
  3. Clean the disc platen and center post with mild soap and water.

**NOTE:**

[Azuradisc Optical Spray Cleaner](#) may be used to help loosen polish build-up.

4. Check the drain for blockage and clean by pushing a small bottle brush (10mm) gently through the drain hole and the Reactor Chamber and Aluminum Tube.

**IMPORTANT:** This is a critical area to check to prevent the machine from flooding the drip tray (which can cause the machine to stop or cause other damage).

6. Clean the Bottom Splash Cover with mild soap and water and rinse drain with warm water.

**IMPORTANT:** Use care when handling the splash cover to avoid damage.

7. Clean drip tray with mild soap and water.
8. Re-install Reactor Chamber in clips.
9. Push Disc Turntable Drawer in.

**NOTE:**

[If the Turret Drawer is pulled completely forward, lift the side drawer latches to push drawer back in.](#)

10. Close front door.

**IMPORTANT:** If the water is cloudy, refer to Water Recirculation System section of this manual.

## WATER RECIRCULATION SYSTEM

This section contains instructions for checking and servicing the water recirculation system. For optimal use of the Machine:

- Check the water prior to each use.
- Replace the water after every 1000 disc repairs or if the water becomes stagnate or smelly from non-usage.

**IMPORTANT:**

- a. Clean water reduces wear on supplies and components and ensures effective disc repair.
- b. New A & B solution must be added each time the water is changed.
- c. Replace the water every 2 weeks regardless of the number of discs repaired.

To service the water recirculation system:

**NOTE:**

If water or filters are added or changed before a notification is shown on the OIT, the operator MUST reset the appropriate system status item to prevent false notifications.

From the MAIN MENU on the OIT, select "INFO" and then "LIQUID SYSTEM STATUS". Select "RESET" for water, filters 1&2, or Filter 3.

## PREVENTIVE MAINTENANCE

1. Check the water level in the Water Pitcher and Water Tank. Add to the fill levels as needed.

**IMPORTANT:** If the water filters are cleaned and maintained per the instructions in this guide, the water should remain relatively clear for about 1000 disc repairs. If the water becomes cloudy, change it immediately.

2. System Priming: After replacing the water or cleaning or replacing any filters it is necessary to prime the water system.

**NOTE:**

The machine must be plugged in and power turned on for this operation.

3. Press "Info" on the main OIT menu.
4. Press "Water & Polish Prime".
5. Press the Water Pump On button.
6. Let the water pump run until all air bubbles are gone and the water is flowing continuously from the water nozzle. Press the Water Pump Off button.

**IMPORTANT:** Do not leave the machine unattended during this process. If air bubbles are visible and water is not flowing from the water nozzle within 3 minutes of running the pump, turn the machine off and check the water system for leaks.

7. Press "Main" to return to the OIT main menu.

## REACTOR CHAMBER

**NOTE:**

If the aluminum coagulation tube is changed before a notification is shown on the OIT, the operator MUST reset the appropriate system status item to prevent false notifications.

From the MAIN MENU on the OIT, select "INFO" and then "LIQUID SYSTEM STATUS". Select "RESET" for AI Pipe.

1. Disconnect the rubber tube and remove the Reactor Chamber.

**IMPORTANT:** Polish compound build-up is normal, however regular cleaning will result in longer life of the Aluminum Tube inside the Reactor Chamber and reduce the chances of a blocked drain.

2. Disassemble the Reactor Chamber and Aluminum Tube and clean with warm water.
3. Clean rust or corrosion from Reactor Chamber mounting clips.
4. Re-assemble and re-install the Reactor Chamber and re-insert the rubber tube.

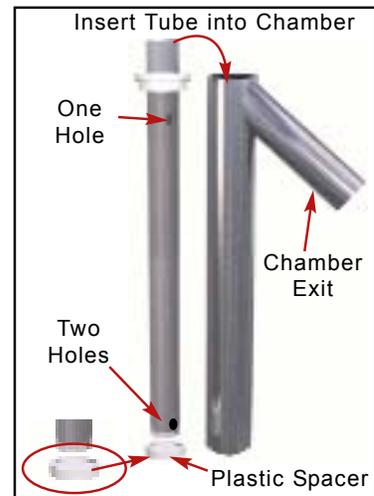
**NOTE:**

Align the single hole near the top of the Aluminum Tube with the Chamber Exit of the Reactor Chamber.

5. Align the Reactor Chamber Exit with the Filter #1 opening in the Water Pitcher.

**NOTE:**

Verify the Plastic Spacer installed in the bottom of the Reactor Chamber is oriented as shown.



## WATER SYSTEM FILTERS

**NOTE:** If filters are changed before a notification is shown on the OIT, the operator **MUST** reset the appropriate system status item to prevent false notifications.

From the MAIN MENU on the OIT, select "INFO" and then "LIQUID SYSTEM STATUS". Select "RESET" for filters 1&2, or filter 3.

For optimal use:

- Clean filters 1, 2 & 3 after 240 disc repairs.
- Replace filters 1, 2 & 3 filters after 2,000 - 5,000 disc repairs, or as needed to keep water clear.

### IMPORTANT:

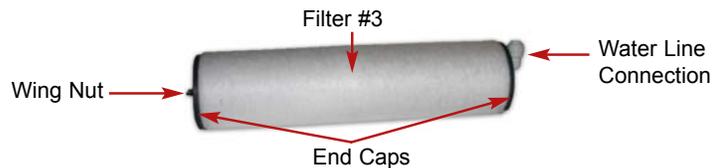
- a. **Ensure that your hands are clean when checking, cleaning, and replacing the filters.**
- b. **It is recommended to clean the filters and Water Pitcher after every 90 disc repairs to maximize the filter use.**

### *To service Filters 1 & 2*

1. Open front door.
2. Swivel the exit of the Reactor Chamber away from the top of the Water Pitcher.
3. Carefully remove the Water Pitcher while withdrawing the drain tube from the Water Tank.
4. Remove and clean both Filters with warm water, or replace as needed.
5. Clean the Water Pitcher with mild soap and water
6. Re-install the Filters ensuring the filters are open and do not rest on the bottom of the pitcher. (The bottom of the filters must be at least 25mm above the bottom of the pitcher.)
7. Re-install the Water Pitcher, ensuring the drain tube is inserted in the Water Tank Cover.
8. Align the outlet of the Reactor Chamber with the Water Pitcher opening.
9. Close the front door.

### *To service Filter 3*

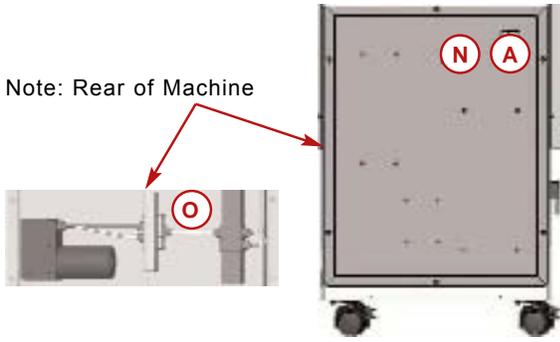
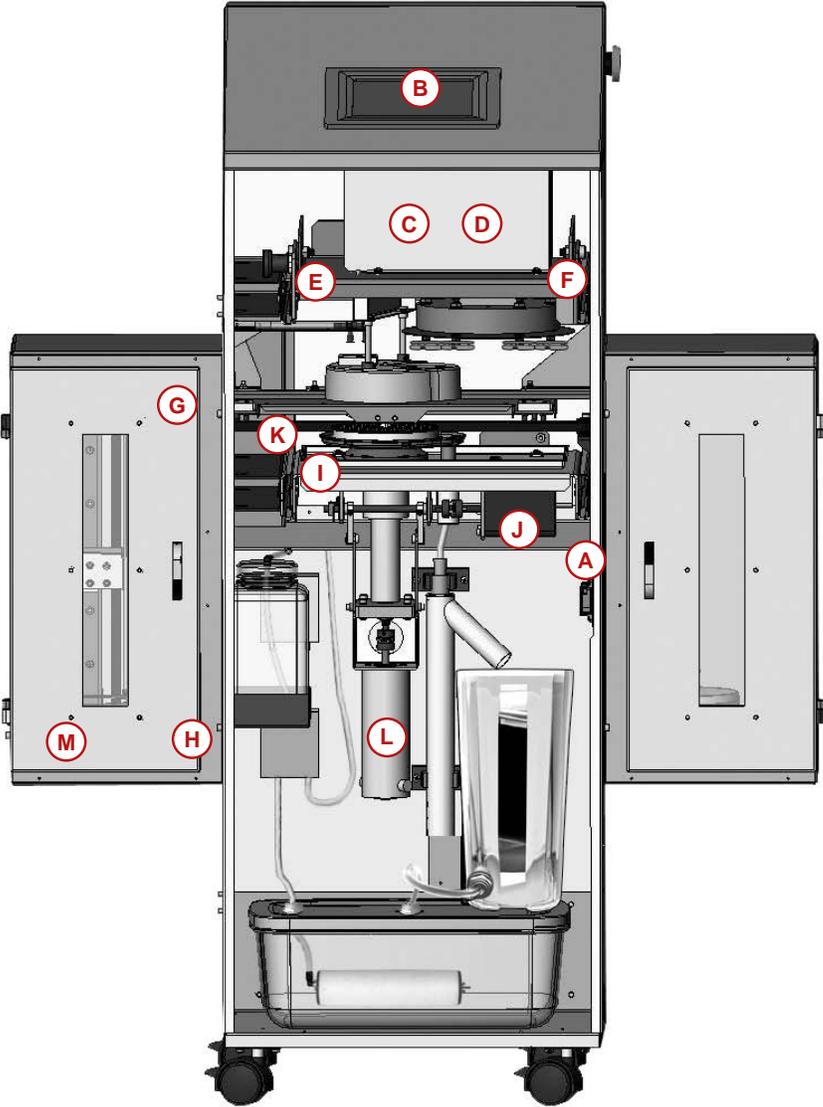
1. Open front door.
2. Carefully remove the drain tube coming from the Water Pitcher to the Water Tank.
3. Remove the top cover of the Water Tank and disconnect the tube from Filter 3.
4. Remove the wing nut and cover from the end of the filter assembly.
5. Clean Filter 3 with warm water and clean the Water Tank with mild soap and water.
6. Re-install the Water Tank.
7. Re-assemble Filter 3 assembly as shown below.



8. Re-attach the water tube to Filter 3, ensuring it is routed through the hole in the Water Tank Cover.
9. Add one bottle each of Solution A and Solution B and clean water to the fill level on the Water Tank. Gently stir the solution and water mixture.
10. Insert the drain tube from the Water Pitcher in the Water Tank Cover.
11. Prime the water system as described in the Water Recirculation System section of this manual.

**ADVANTAGE COMPONENT LABELS**

- (A)** Serial Number Label  
(Inside cover on right side and on rear of machine)
- (B)** Touch Screen  
(located on underside)
- (C)** Turret Motor
- (D)** Polish Pad Motor
- (E)** Polish Pad Drawer
- (F)** Drawer Warning
- (G)** Transfer Arm Motor
- (H)** Load Elevator Motor
- (I)** Disc Turntable Drawer
- (J)** Turntable Lift Motor
- (K)** Disc Transfer Assembly
- (L)** Disc Turntable Motor
- (M)** Load Elevator Assembly
- (N)** Electrical Back Panel  
(rear of machine)
- (O)** Vacuum System Panel  
(inside electrical panel)



**PREVENTIVE MAINTENANCE**

**LABEL SAMPLES**

<p><b>A</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="2" style="text-align: center;"><b>Azuradisc Inc.</b></td> </tr> <tr> <td colspan="2" style="text-align: center;">2885 N. Nevada St. Suite 140 Chandler Arizona 85225 U.S.A. Tel-480-827-8786 www.azuradisc.com</td> </tr> <tr> <td style="width: 50%;"><b>Model</b></td> <td><b>Advantage</b></td> </tr> <tr> <td><b>AC Input</b></td> <td>108-250 -Vac 47-63 Hz.</td> </tr> <tr> <td><b>Amps</b></td> <td>7. ~</td> </tr> <tr> <td><b>Serial No.</b></td> <td>I-A-O1A-0508/01-0006</td> </tr> <tr> <td><b>Mfg. Date.</b></td> <td>August/2005</td> </tr> <tr> <td colspan="2" style="font-size: small;">Mfg. Under one or more of the following US. Patents: 5,733,179 ; 6,431,967 ; 6,547,657. <b>Made in USA</b></td> </tr> </table>	<b>Azuradisc Inc.</b>		2885 N. Nevada St. Suite 140 Chandler Arizona 85225 U.S.A. Tel-480-827-8786 www.azuradisc.com		<b>Model</b>	<b>Advantage</b>	<b>AC Input</b>	108-250 -Vac 47-63 Hz.	<b>Amps</b>	7. ~	<b>Serial No.</b>	I-A-O1A-0508/01-0006	<b>Mfg. Date.</b>	August/2005	Mfg. Under one or more of the following US. Patents: 5,733,179 ; 6,431,967 ; 6,547,657. <b>Made in USA</b>		<p><b>B</b></p> <p>Description: Touch Screen Azuradisc # OTP21-00875 (5)-00A MFG. Date YY 05 MM 08 DD 01</p> <p><b>Power Must Be Disconnected Before Removing Flash Memory</b></p>	<p><b>I</b></p> <p>Description: Disc Turntable Drawer Azuradisc # OTP1-00725 (3)-00A MFG. Date YR 05 MM 08 DD 01</p> <p style="text-align: right; font-size: small;">REV. C.1</p>
<b>Azuradisc Inc.</b>																		
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<p><b>C</b></p> <p>Description: Turret Motor Azuradisc # OTP2-00791 (8)-00A MFG. Date YY 05 MM 08 DD 01</p>	<p><b>J</b></p> <p>Description: Turntable Lift Motor Azuradisc # OTP1-00764 (2)-00A MFG. Date YY 05 MM 08 DD 01</p>	<p><b>K</b></p> <p>Description: Disc Transfer Assembly Azuradisc # OTP6-00813 (0)-00A MFG. Date YY 05 MM 08 DD 01</p>																
<p><b>D</b></p> <p>Description: Polish Pad Motor Azuradisc # OTP2-00799 (4)-00A MFG. Date YY 05 MM 08 DD 01</p>	<p><b>E</b></p> <p>Description: Polish Pad Drawer Azuradisc # OTP2-00786 (6)-00A MFG. Date YY 05 MM 08 DD 01</p> <p style="text-align: right; font-size: small;">Rev C.2</p>	<p><b>L</b></p> <p>Description: Disc Turntable Motor Azuradisc # OTP1-007659 MFG. Date YY 05 MM 08 DD 01</p>																
<p><b>F</b></p> <p style="text-align: center;"><b>Warning!</b></p> <p style="text-align: center;">Do Not Unlatch Drawer When Power is On Damage will Occur</p>	<p><b>M</b></p> <p>Description: Load Elevator Assembly Azuradisc # OTP7-00823 (6)-00A MFG. Date YY 05 MM 08 DD 01</p>	<p><b>N</b></p> <p>Description: Electrical Back Panel Azuradisc # OTP20-00865 (6)-00A MFG. Date YY 05 MM 08 DD 01</p>																
<p><b>G</b></p> <p>Description: Transfer Arm Motor Azuradisc # OTP23-0912 (7)-00A MFG. Date YY 05 MM 08 DD 01</p>	<p><b>H</b></p> <p>Description: Load Elevator Motor Azuradisc # OTP7-00831 (1)-00A MFG. Date YY 05 MM 08 DD 01</p>	<p><b>O</b></p> <p>Description: Vacuum System Panel Azuradisc # OTP22-00878 (6)-00A MFG. Date YY 05 MM 08 DD 01</p>																