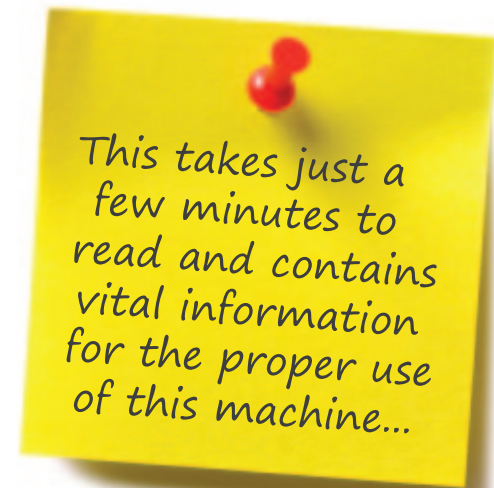


VMI Hybrid 2

Quick, cheap, clean and very effective disc repairs.



What's In This User Guide?

- Getting started - repair a disc right now
- Getting to know your machine and how it works
- Changing the consumables and other operations
- Maintenance and other useful information

Getting Started

Setting up the machine

If you haven't done so already, please refer to the Setup Sheet before using your machine for the first time. This contains important information which must be followed before performing a repair.

Your first repair

For your first repair, choose a disc that you think has a light-medium amount of scratches. This will help give an indication of what can be repaired by the machine.



Basic operation

1. Turn ON power to the unit with the ON/OFF switch located in the rear of the unit. The Lid will open automatically after a few seconds.
2. Choose which type of disc you would like to repair by selecting either the Regular or Blu-Ray button on the front of the machine.
3. Select the amount of time that you would like to repair your disc for by pressing the Regular or Blu-Ray button until the LED next to the desired amount of time is illuminated.
4. Place the scratched disc onto the turntable with the label side of the disc facing down.
5. Close the lid - the cycle will start automatically and the timer will commence.
6. Once the cycle has completed the Lid will open automatically so you can remove your disc. Do not close the lid as this will start the repair process again!



Your repaired disc may have a trace amount of polish left on it. This is perfectly normal - use the provided CD spray and cloth to wipe this off.

Inspecting a repaired disc

Your first repair should have made a visible improvement - if not, put the disc in again for another repair. You will soon get a feel for how long a disc will need repairing for by just inspecting the playing surface.

Because this machine partly uses heat to repair the disc, you should allow each disc to cool down a little before repairing again to prevent warping of the disc.

Parts of the machine

Selected repair cycle display

Supplies display

Lifting handles

Chip slot

Water pump

Polish pump

Lid manual release catch

Countdown timer

Repair selection buttons

Priming buttons

Hinge cover

Water bottle

Polish pipe/bottle area

Rear door

Buffing pads

Jet Nozzle Extenders

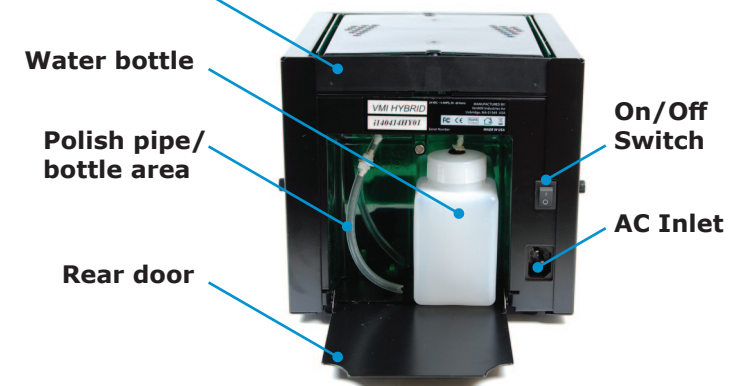
Disc turntable

Centre Hub

On/Off Switch

AC Inlet

Hinge cover



Getting To Know The Machine

Understanding the repair cycle

The Hybrid 2 uses a combination of heat and abrasive polish to soften - and then remove - extremely thin layers of the polycarbonate disc to reveal a smooth surface underneath.

When choosing which repair cycle to use on a disc, you must assess the deepest scratch, as all shallower scratches will be removed in the process.

Modes of operation

Regular:

This setting is used for all types of DVD, CD, PS2, Xbox and all other games discs that do not have the Blu-ray logo.

There are 5 time settings available, which you will choose depending upon the severity of damage on the disc. When you press the 'Regular' button for the first time, the green light next to it will light up.

The quickest cycle is just 30 seconds, then there are 1, 2, 3 and 4 minute cycles; a green light appears next to whichever cycle is selected.

When you close the lid, the cycle will start.

When the cycle finishes, the lid will open.



The disc will still be spinning at high speed when the lid opens so be careful when touching it, or just wait.

Blu-ray:

Blu-ray discs have a protective coating which requires a different ratio of polish and water to repair it. You can read more about the Blu-ray format on page 6.

The repair cycles available in Blu-ray mode are 1, 2, 3 and 4 minutes, again cycled through by pressing the "Blu-ray" button.

Stopping the repair cycle early

At any time during the cycle, the User may press any button on the Keypad to stop the cycle. Once the button is pressed, the cycle will stop and the Lid will open automatically.

The Main Screen will then display the "ER" error message indicating that an Emergency Stop has been activated.

Once the unit has reset to the Main Function, the "ER" error message will disappear and you can continue with operation.

Daily priming of the pumps

During set-up you learned how to prime the polish and water. You should continue to prime them each day before using the machine, as otherwise the polish can harden in the tubing during periods of rest.

To prime the pipes, simply place a tissue under the nozzles and press the "C" and "W" buttons to start the Compound and Water pumps respectively. Once drips come out of the polish and water nozzles, press each button again to stop the feed.

Top Tip - Repair Pads

To continue to get the highest quality of repair, we advise removing the pads and rinsing them under a running tap at the end of each day's use.

The catch tray

During repairs, the polish and water will drain down into the Catch Tray. After 250 minutes of machine operation, the Countdown Timer Screen will display the "CC" message indicating that the Catch Tray needs to be emptied and cleaned out.

How to clean the Catch Tray:

1. Remove the Hinge Cover so the lid can open fully
2. Lift off the Turntable from the motor shaft
3. Remove the Catch Tray
4. Rinse under warm water, clearing dry polish away
5. Dry all the water off the tray with a cloth and re-install along with the Turntable
6. Re-install the Hinge Cover



Once the the Catch Tray has been replaced, press the "Regular" button and then the "Blu-ray" button on the Keypad to clear the "CC" message.



Please ensure the Catch Tray has been refitted before using the machine again. Failure to do so will cause polish to enter the machine, resulting in serious damage not covered by warranty.

The "CC" message is also the point at which you need to change the polish bottle, even if there is a little left in the bottle. This ensures high quality results consistently.

The following pages cover this in more detail.

The Consumables

The consumables pack

All of the supplies are provided in a consumables pack. It contains everything you need for 500 minutes of repair time.

VMI Hybrid Consumables Pack



Pack Contents:

- 2 x 250ml Polish Bottles
- 12 x Buffing Pads (6 left, 6 right)
- 6 x Centre Hubs
- 1 x 500 minute Credit Chip
- 2 x Jet Nozzle Extenders (for Hybrid v2)
- 1 x Jet Nozzle Cover (for Hybrid v1)

On the original Hybrid (v1) there was a red Nozzle Cover which was used to cover the polish and water nozzles when the machine was not in use. Its purpose was to prevent polish drying in the tubes, which could lead to machine damage.

On the new Hybrid (v2) there is instead a pair of Nozzle Extenders which attach to the polish and water nozzles. These extenders can be removed and squeezed to remove any dried polish. They should be left in place at all times and changed over with each consumable pack.

There is just one consumable pack for the Hybrid 1 and Hybrid 2, so both the Nozzle Extenders & Nozzle Cover is supplied - simply dispose of the one you don't require.

The repair Credit Chip

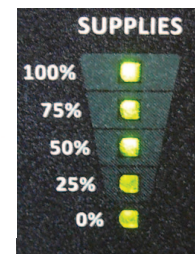
The Chip contains 500 minutes of repair time.

This Chip ensures that every disc is repaired to the highest standard. The time depletes as you use the machine and when it runs out, the machine will not operate again until you replace the consumables and install a Chip from a new pack.

It is essential that you follow the prompts from the machine and replace the various consumable items at the correct intervals.

The items may look okay - and there may be some polish left in the bottle - but you must discard them and replace with new ones to guarantee good results.

The amount of consumable usage time remaining is shown on the Supplies Display; as the consumables deplete, the fuel gauge will reduce accordingly.



Replacing the repair Credit Chip

Once the Chip reaches 25%, the Green LED will turn Yellow and the 0% Green LED will turn Red and will blink every two seconds.

We recommend you make sure you have a spare consumable pack available so you won't have any down-time when the current Chip runs out.

Once it reaches 0%, the flashing light will change to a continuous Red LED. At this point the "RC" error message will appear on the Main Screen and you will not be able to use the machine until a new Chip is installed.

Installing the new Chip should always coincide with changing the Polish and Water, plus fitting new Pads, a Centre Hub, and Jet Nozzle Extenders.

Install the new chip:

1. Turn off power to the machine
2. Remove the Credit Chip from the front left side of the machine and discard
3. Install the new Credit Chip
4. Turn the power back on
5. The Consumables Fuel Gauge will display 100%

The polish bottle

Change every 250 minutes of repair time.

The "CC" error message is your prompt to change the bottle of Machine Polish.

There is an excess of polish in each bottle as the amounts used for priming the machine can vary greatly depending on frequency of use. Simply discard the leftover polish.

Changing the Polish Bottle:

1. Remove the spent bottle from the back of the machine, pulling out the pipe carefully
2. Discard the bottle and its content safely
3. Take the new bottle, remove the inside cap, then feed the pipe into the hole in the lid
4. Insert the bottle into the slot in the machine and close the back access door

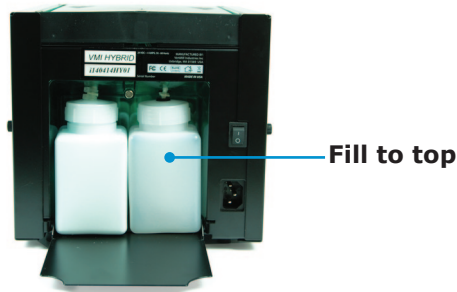
After the bottle has been replaced, if the "CC" message is still showing, simply press the "Regular" button, then the "Blu-ray" button to clear the message and the machine will be ready to repair



The water bottle

Refill every 125 minutes of repair time.

After 125 minutes of machine operation the Main Screen will display the "AW" message. This indicates that water must be added to the Water Bottle.



Once the Water Bottle has been refilled, press the "Regular" button and then the "Blu-ray" button on the Keypad to clear the AW message.

Check the water bottle regularly and refill as necessary. A lack of water may result in damage to your discs and to the machine itself.

The buffing pads & centre hubs

Change every 84 minutes of repair time.

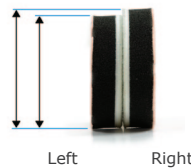
After 84 minutes of machine operation, the Main Screen will display the "CP" message, indicating that the Buffing Pads and the Centre Hub must be replaced.

Once the new Buffing Pads and the Centre Hub have been installed, press the "Regular" and then the "Blu-ray" button to clear the "CP" message.

It is vital to follow the Main Screen messages as this will guarantee a high standard of repair throughout the life of each consumable pack.



The Buffing Pads are attached with Velcro - simply press them on and pull them off.



Note that the left and right pads are different sizes, so please ensure the correct one is fitted to each pad holder.



The centre hub fits snugly onto the hexagonal shaft - simply pull it off and push it on.

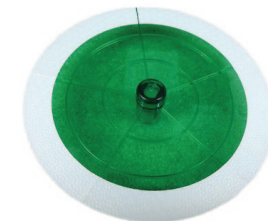
Message code summary

Here is a summary of what the various message codes mean:

- CP:** Replace Buffing Pads & Centre Hub
After 84 minutes
- AW:** Top up the Water Bottle
After 125 minutes
- CC:** Replace Polish Bottle & clean Catch Tray
After 250 minutes
- RC:** Replace all consumables
(Chip, pads, polish, water, nozzle extenders & centre hub)
After 500 minutes

The Turntable Assembly

The Turntable Assembly is the part that the disc sits on top of. It helps grip the disc during repairs. Over time, the white circular piece of rubber will wear and eventually the whole assembly will need replacing. It is classed as a semi-durable part (like tyres on a car) and so is not covered by warranty.



How long it will last before replacement depends on several factors - such as the number of disc repairs performed and how clean the machine is kept, but it is recommended that you have one of these spare for when it needs changing.

Support & Information

Error messages

E1: Lid open during cycle

Try closing the lid more firmly until the catch clicks

E2: There is not enough pressure on the disc

- Check the Platen Assembly isn't worn
- Check the center hub is correctly installed

E3: There is too much pressure on the disc

- Check there is a sufficient level of water in the bottle
- Check polish, pads, center hub and platen

E4: Polish Pump is not working

There is a fault with the polish pump - please contact Technical Support

E5: Water Pump is not working

There is a fault with the polish pump - please contact Technical Support

ER: Emergency Stop

If any button is pressed during repair - the machine stops immediately.

Getting support

If you feel your machine is not working correctly or you have any questions on setup, operation or maintenance, then please don't hesitate to contact our Support team. They are available Mon-Fri, 9am-5pm over the telephone and also by email. This is offered for the entire life of the machine.

Our technicians will always attempt to resolve any problems over the phone and can send out parts and assist with fitting should this be required.

In the unlikely event that the machine has to come in for repair the cost of parts and labour will be covered during your warranty period. Shipping in both directions is covered for the first quarter of the warranty period.



0800 412 5424 Mon-Fri, 9am-5pm



support@totaldiscrepair.co.uk

Frequently asked questions

Why should I keep the Lid open when my machine is not in use?

Leaving the Lid in the closed position for a prolonged period of time will flatten the Buffing Pads reducing their effectiveness. If you would like to keep the Lid closed when the machine is not in use, first remove either the Buffing Pads or the Platen Assembly.

Can I repair a 3 inch disc?

Yes, but you will need to purchase a special adapter, available from our website.

Can I repair a Blu-ray disc? Yes

Can I repair a Double-Sided disc? No

Can I repair a disc that is warped or cracked? No

How long will a bottle of Polish last?

One bottle of Buffing Solution will last 250 minutes of machine operation.

How long will a set of Buffing Pads last?

One set of Buffing Pads will last 84 minutes of machine operation.

When should I replace my Platen Assembly?

There is no set life expectancy for the Platen Assembly - but will need changing every few consumable packs. Replace it when you notice any imperfections - rips, worn spots or missing material.

Can I run my VMI Hybrid for more than 500 minutes without replacing the Chip?

No - once the Chip is depleted the unit will not allow any more cycles to be run. Once a new Chip has been installed, the machine will continue with normal operation.

Why do I have to remove the Water and the Polish Bottles from the machine for shipping?

We ask that you remove these bottles to ensure that no Water or Polish leaks into the machine in transit, which could cause damage to the unit.

What can I do if there is polish left on my disc?

Spray the disc with the CD Cleaning spray and then wipe it dry with the special micro fibre cloth. This will remove the left over residue and will leave your discs with a mirror finish.

Repackaging the machine

If your machine ever needs to come back to us for repair, it must travel in its original packaging. If you no longer have the original packaging please contact Technical Support to request a replacement.

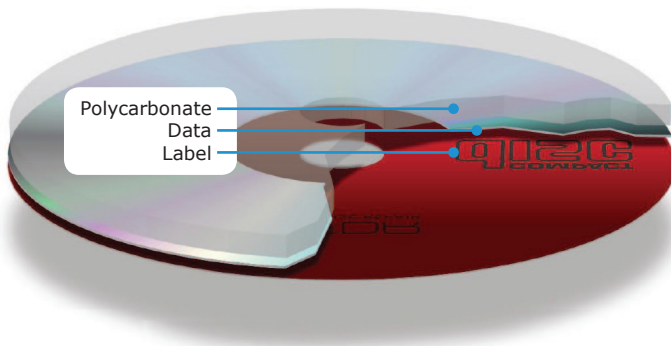
1. Remove the Pads and Centre Hub.
2. Remove the Water and Polish bottles
3. Wipe any excess Water/Polish away from pipes.
4. Drain both Water and Polish pipes.
5. Turn the power switch to "Off"
6. Remove the mains cable.
7. Place the machine in the protective bag.
8. Place the machine into the protective foams.
9. Now fit the packaged unit into the box.
10. Place the cardboard inserts back into position.
11. Insert anything else that has been requested.
12. Close and tape the box well.
13. Write the RMA number on the box.

An RMA number is given to you when you book a machine in for repair or service by calling **0800 412 5424**.

Disc Types

CDs

When discs were invented the process of construction was quite simple. These are what we call CD discs. To produce the disc, a solid polycarbonate disc was made. Then the data layer was applied to the top surface of the disc. To protect this data layer, a lacquer, or label, was then applied over the top of the data layer.



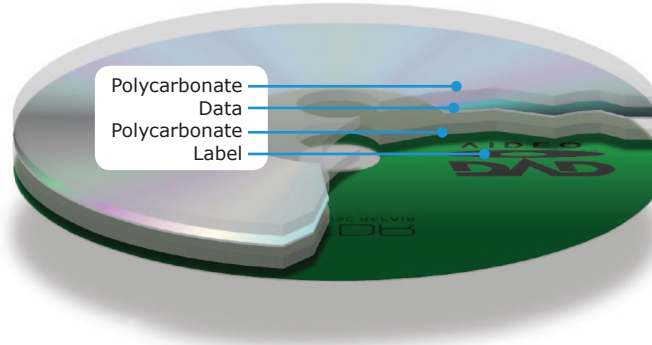
This made the data layer quite vulnerable because any scratch to the label could damage the data layer beneath. If a scratch has reached the data layer it is not repairable. Disc repair can only repair the polycarbonate on the underside of the disc.

Formats:

- Audio Books
- Audio CDs
- CD-ROMS
- Playstation version 1 discs

DVDs

The early CDs were mainly used for audio and so often a small scratch was not enough to disrupt the data. However as the data on discs became more complicated it became more important to protect the data layer. On DVD discs the data layer is sandwiched in the middle of the disc between two pieces of polycarbonate. This protects the data layer and makes the disc virtually indestructible. The only issue with this type of disc is that the two layers of disc can separate around the whole in the centre of the disc, although this is quite rare.



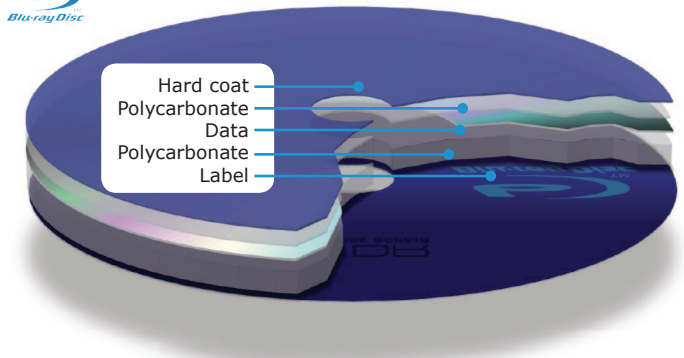
Because the data is so protected virtually all DVD discs can be repaired by the disc repair process.

Formats:

- DVDs
- Playstation 2 discs
- Xbox 360
- Wii
- DVD ROM

Blu-rays

With the invention of High Definition (HD) there was a need to carry more information on a disc and soon the data space on a DVD was not enough. Sony solved this with the invention of the Blu-ray disc.



It is essentially the same as a DVD with 2 main differences:

1. The polycarbonate on the bottom of the discs is much thinner than a DVD and so the number of times that the same disc can be repaired falls to around 10-15.
2. The polycarbonate on the bottom of the disc has a hard coated lacquer on top of it. This hard coat reduces the chance of the disc being scratched in the first place, but nonetheless scratches can still happen.

Formats:

- Blu-ray film
- Playstation 3
- Playstation 4
- XBox One

Good Machine Use & Safety...

Here are a few simple tips for you to get the most out of your disc repair machine.

We're here to help!

- ▶ Our Technical Support Team is on hand five days a week to help you. You can reach us by phone or email & there is also information on our website.
- ▶ Whenever you have a question, or if you suspect a problem, we'd love to hear from you – calls are free!
- ▶ Most things can be dealt with over the phone, though our turn-around time for repairs is pretty quick.

Staying safe whilst repairing...

- ▶ Locate and use the machine in a safe and suitable location.
- ▶ Never use a damaged power cable, or any other than the one supplied.
- ▶ Touching the machine or its plug with wet hands could cause injury.
- ▶ Seek medical attention if the polish comes in contact with your eyes or mouth.
- ▶ Please keep the machine out of the reach of children.

Prevent damage to your machine...

- ▶ Running a repair cycle on the machine without a disc on the tray may cause damage to the pads and tray surface.
- ▶ To clean the machine just use a damp cloth and a bit of CD spray can help. Please don't clean the machine by running it under a tap, electronics don't like water!
- ▶ Please contact us before disassembling the machine in any way.

Prevent voiding your warranty...

- ▶ Only use authentic TDR consumables in your machine, 'home brew' products invariably cause damage to the machine and of course void the warranty.
- ▶ Making unauthorised modifications to your machine is dangerous and will also void your warranty.
- ▶ Not using the machine in the way instructed by this user guide may also affect your warranty if faults occur.

Contacting Technical Support:

Freephone:

0800 412 5424

Lines are open Monday to Friday, 9am to 5pm (excluding Bank Holidays).

Email:

support@totaldiscrepair.co.uk

We aim to respond within an hour, though it could be up to one working day.

Thank you once again for buying with TDR and joining our extensive network of professional disc repairers, we recommend putting this sheet up near your machine for reference. If personal injury or damage to your machine or property occurs as a result of not following these instructions, TDR can not be held liable.