

One of the best ways to make your car's paintwork more shiny and swirl free is to use a machine polisher to remove the swirl marks and enhance the gloss by burnishing the finish. Polishing can be done by hand or by a machine polisher. However, the rotary polisher represents the best step in machine polishing: a tool highly capable of fast correction but also capable of very high clarity, sharp and deep finishes.

The rotary machine polisher is a popular and well used tool by professionals and enthusiast detailers alike. Alas it is sometimes misused and as a result it can get itself a rather bad name as a dangerous, fire breathing monster that will burn your paint as soon as you look at it! Used correctly however, the rotary is a safe and hugely effective machine which doesn't deserve its reputation. We only have to look at the fantastic results achieved by Stu on his first attempt with only a 5 minute chat to pick up the basics of what's in this guide. So use a bit of common sense, read this and watch a couple of vids on the tube. You'll be fine.

So, this guide is just that, a guide. If you are in any doubt about something then you have several courses of action open to you,

1. Have a search on Youtube for a video demo. This is good.
2. Ask in the forum. Several members know a bit about this.
3. Wade in and have a go.

DISCLAIMER. If you do manage to royally mess things up you accept this is a risk and that you chose to take that risk when starting the job. The D3C is in no way responsible for calamities by lending you this machine and kit.

THE ROTARY POLISHER

Rotary polishers are the mainstay of bodyshops and professional detailers for paintwork correction. They can be used with many types of pads, and when used correctly, a rotary polisher is capable of spectacularly good results: high levels of paintwork correction; super sharp clarity and depth in finishing. In the wrong hands, such a machine is capable of severe paint damage! Did I already mention this is at your own risk? Well it is.

In addition to being serious correction machines, rotary polisher also excel at finishing. The constant radius of the pad motion results in the abrasives being broken down more evenly which has been demonstrated to give a slightly sharper finish than using the equivalent polish by dual action polisher. This is not to say the finish delivered by a dual action polisher will be a poor one in comparison – very far from it. You will only notice the “rotary enhancement” on certain paints, generally soft solid dark paints. What you will notice with the rotary machine is speed. It's way faster than dual action machines which is why the D3C chose to put the Makita rotary machine in the club kit. It's strong, of professional quality and spares are readily available should we need them.

Backing Plates

With the polisher come 2 backing plates and these screw on to the M14 thread on the Makita. They can be removed by locking the spindle with the button and either unscrewing by hand or by using a spanner if it's too tight. The backing plates are different sizes, small and large. Weirdly this corresponds to the 2 different sizes of foam pads supplied in the kit.

Then we come to the pads themselves. There are 2 grades of each size, these being:

Large.

Yellow pads = harder foam = more paint cut. Used for heavy swirl and scratch removal when used with a coarse compound.

Black waffle pads = soft foam = finishing grade. Used for lighter marks and final finishing after the coarse compounds.

Small.

Orange = harder foam = more paint cut. Used for heavy swirl and scratch removal when used with a coarse compound.

White = soft foam = finishing grade. Used for lighter marks and final finishing after the coarse compounds.

It should be noted that when using small pads the work effort of the machine will be concentrated in a smaller area so it will cut more quickly.

When you have finished using a pad it should be thoroughly washed out in soapy water (Fairy liquid is fine) and rinsed in clean. It should be dried and put back in the plastic bag so as not to become contaminated with dirt. If you drop a pad and there is any trace of grit or dirt it should be washed before going anywhere near paintwork.

Polishing Compounds.

There are 3 grades of compound supplied in this kit. They are in bottles with fancy labels which you can ignore. I have taped the bottles as follows:

RED. Coarse compound

BLUE. Medium Compound

GREEN. Light/Finishing compound.

If you're in any doubt take a look at the label and the slider diagram. The more to the left, the coarser the compound.

These polishes are the diminishing type so as you work them the particles of abrasive explode into smaller particles progressively until all that's left is the carrier medium, a clear grease like substance. Once you get the polish to this stage it's time to wipe down and apply some more. Wiping down is normally done with a clean microfiber and some of the pink fluid.

Meguiars Last Touch (Pink Fluid)

This is in the spray bottle and is basically a cloth & pad lubricant. A new/clean pad will benefit from a quick spritz with this stuff when first applying the compound. It is also good for wiping down the panel to inspect your work. If you use a dry cloth you run the risk of making more swirls to remove. A light spray over the area you are about to wipe down is fine.

Rolls of blue tape

These are used to mask up your trims and vulnerable parts. If you touch things like rubbers around the glass with a polishing pad it will burn. You don't need to go mad with it, just mask up the edges of vulnerable parts.

OK, to business then. How to do this.

The machine has an Electronic speed control to maintain constant pad speed regardless of pressure, a constant torque motor if you prefer. It has a large D shaped handle at the head and the regular handle at the back. The D handle can be removed if desired with the allen key provided. Please refit before returning the kit.

Having washed the car beforehand (yes it is ABSOLUTELY necessary) you choose an easy panel to begin with. This is the bonnet on a D3 as it's flat and horizontal. Fit a backing plate and pad (large) and give the pad a squirt of pink fluid. Dab on 3 or 4 spots of compound about the size of a 5p coin (less is more) and set the machine to speed 1. Spread the polish evenly over an area about 1/8th the size of the bonnet by moving the machine on speed 1 for 2 or 3 passes. Without stopping move up to speed 2/3/4 and so on to work the polish. It's unlikely you'll get to top speed before the compound has worked its magic. The key is to keep the machine moving smoothly and gently in sweeping movements.

Once the compound goes clear you come back down the speeds and lift off. Wipe down with pink fluid & a cloth. Check the panel. If it needs more, carry on again. If not then move to the next 1/8th and so on.

If the machine starts to "grab" then a spritz with pink will lubricate the pad and stop this. Don't carry on if it grabs or you can burn the finish.

I STRONGLY recommend watching a couple of Youtube videos beforehand. Search for DAVEKG or JUNKMAN.

The Variable speed feature is crucial to making use of the flexibility of a rotary polisher, and the greater the range the better. Slower speeds are useful for finishing and refining, higher speeds are useful for aggressive cutting. An electronic speed control that ensures the pad rotates at a constant speed regardless of pressure is highly useful in making the rotary a predictable machine as well as guaranteeing that the pad does not bog down at slow speeds which can make finishing a less easy task.

Now, to explain the pads and compounds a little more.

Always start with a soft pad. If you have heavy marring to remove try the BLUE medium compound to go with this. If it needs to be more aggressive move to the RED compound. If this still isn't tough enough move to the hard pad and medium compound, with the last option being hard pad & coarse compound. To be frank, on Land Rover paint the last option is never needed. LR paint isn't the hardest by a long way. Using this combination will be likely to burn through clearcoat very quickly.

The soft pad and fine compound is for finishing and it is this combination which will give you the nice swirl and hologram free finish to your paint. 90% of the time (unless you've been laning with Stu) you will be unlikely to need much more than this.

Things to avoid doing

OK, this list is not exhaustive but a good starting point.

1. Keep the centre of the pad away from panel edges when polishing. The edge of the panel is where paint is thinnest and the centre of the pad is where the energy is most concentrated.
2. Keep the pads away from sharp objects, badges etc. These will tear lumps out of the pad and make it useless, effectively ending its useful life. They are about 8 quid each incidentally. Tape up the sharp bits first.
3. Don't go near un-taped black plastic or rubber trims. You will ruin them if you do.
4. Don't use any more than speed 2 if you are polishing the painted plastics, e.g. colour coded bumpers. Heat will just wrinkle the paint VERY QUICKLY and it'll be off to the paint shop.
5. Don't put the machine down with the pad touching the floor. If you get a single piece of grit on the pad, well take a guess at what it will do to your paint. !!! The same thing goes for cloths. If you drop it, wash it THOROUGHLY before using it again.
6. Don't work with the machine if you are in an uncomfortable position. This machine is torquey and if it's out of control you run the risk of damage, either to the car or yourself.

The Disco3Club bits

This kit and machine is provided to D3C members as a shared tool and as one of the benefits of membership. The D3C are not responsible for how you use it and it is supplied "As-Is". You understand the risks involved when taking the loan of the kit.

Further, the consumables are not free. They will be kept topped up from bulk supplies to keep costs down and therefore a suggested donation for the use of the kit is £10 per car done.

If you damage pads by tearing them on sharp edges etc it is your responsibility to replace them. The ones in the kit should do at least 20 cars if used properly and washed out after each use.

The pink wipe down fluid comes from a large bottle. One of the spray bottles is sufficient for at least 2 cars the size of a D3.

The blue tape is the professional 3M stuff, not 50p B&Q rubbish. Use it properly, but not to wrap the entire car.

Cloths are not supplied. These are your own responsibility. Decent microfibre cloths can be bought in packs of 3 at any supermarket.

When you have finished with the kit please pack it back up as you found it. If it's going to another member arrange the transport. If not please return it to Dom (mzplcg) who will replenish the consumables as required ready for the next person.

What's in the kit?

- 1 Makita rotary polisher
2. Screw on hook & loop backing plates for item 1 (2 off)
3. Yellow large cutting pad. Firm. (2 off)
4. Black large finishing pad. Soft. (2 off)
5. Orange small cutting pad. Firm. (2 off)
6. White small finishing pad. Soft. (2 off)
7. Bottle of FG500 coarse polish. (1 off)
8. Bottle of PF2300 medium polish. (1 off)
9. Bottle of SF4500 fine polish. (1 off)
10. Rolls of blue masking tape (2 off)
11. 1 litre spray bottle of Meguiars Last Touch – pink fluid. (1 off)