RANDOM ORBITAL INSTRUCTIONS

THE PORTER CABLE RANDOM ORBITAL

The PORTER CABLE RANDOM ORBITAL is a professional duty machine. It’s perfect for the weekend user or the professional detailer. It was designed with enough torque so it won’t bog down and stall like other random orbitals.

BEFORE YOU MACHINE POLISH

Always start off by using Griot’s Garage Paint Cleaning Clay (Item 11153) before machine polishing. Paint Cleaning Clay will remove contaminants embedded in the paint that even a machine polish may have trouble removing. This way you aren’t relying on the polishes to clean the paint. Polishes are designed to reduce and remove swirl marks, light scratches and paint blemishes.

ANALYZE YOUR PAINT BEFORE STARTING

Before polishing, start by analyzing your paint. Look at the swirl marks and scratches in the paint. How deep are they? Do they go halfway down into the paint, or are they light surface swirls caused by normal wear and tear? Keep in mind, to remove a swirl mark you must polish the paint in the surrounding area down to the base of the scratch. In many cases, if not all, it is much better to polish out the minor scratches while reducing the visibility of the deep ones. We have certain products that contain special fillers and waxes that do their best to fill in deeper scratches.

THE SMOOTH FOAM PAD

Our specially developed foam pads, combined with our machine polishes and waxes, allow the paint to remain cool. Cool paint eliminates the fear of burning through your finish. It is important to use a separate pad for each machine polish or wax. This way, no contamination occurs between the pads. (You wouldn’t want to use a polish pad to apply a final coat of wax!) The pads can be marked on the side with a permanent felt pen to keep them separated.

HOW TO USE YOUR ORBITAL POLISHER

Start by centering the pad on the orbital’s hook and loop backing plate. Apply your wax or polish to the pad as you would spread butter on a piece of bread. Spread it out with your finger over the entire surface. (If you apply the polish to the pad in thin rings, the polish will leave thin “polished” rings over the surface of the paint, while other areas will remain unpolished.)

To get comfortable using the PORTER CABLE RANDOM ORBITAL, I recommend setting the speed to three and then turn it on as the pad comes in contact with the paint’s surface. Increase the speed gradually to four or five so that the backing plate is rotating at approximately one revolution per one or two seconds. The more you lean into the machine, the slower the rotation will be. Try not to lean into the machine until you feel comfortable with this system.

Different polishes and waxes will require different speeds. For example, Griot’s Garage Machine Polish 1 has more “bite”. To remove deep swirl marks, it may be necessary to increase the speed to six. Your final waxes, on the other hand, may only require speeds 3 or 4.

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Make an imaginary square on the panel normally I start with a 1/4 of a hood) and start in the upper left hand corner. Go across to the right (see diagram A) then drop down and go to the left. When you reach the left side, drop down and go to the right. When you can’t go across the panel anymore, start going up and down in the same fashion.

What you are trying to do is distribute the polish or wax evenly and cover every part of the panel. Keep going in this motion until all of the liquid is evenly distributed and has just about disappeared. I like to pass over an area six to eight times. (Complete the imaginary square three or four times.) Wipe off the excess with a 100% cotton towel, our 100% Cotton Polishing Cloths (Item 14600) or our Disposable Wax Removal Towels (Item 14805) and then examine your paint.

WHICH POLISH SHOULD YOU START WITH?

Always start with Griot’s Garage Machine Polish 3. It is a final polish that will remove many imperfections on the first pass. If you would like to remove even more imperfections, use Machine Polish 1 one more time. You may use Machine Polish 3 as often as you want. It is the most foolproof way of polishing your paint.

Once you get used to your machine, you may want to start off with Machine Polish 2 or 1 to remove deeper scratches and swirl marks. After using Machine Polishes 1 & 2, you may see minute scratches. This is normal. Remember, to remove a scratch, you have to get down to the bottom of the scratch, and that means removing paint (microns at a time) in the surrounding area. Your subsequent steps (Polish 1 to 2, then 2 to 3) will remove the minute scratches.

PORTER CABLE MACHINE POLISHES are designed to work in steps. If you start out with Machine Polish 1, you must follow up with Machine Polish 2 to remove the minute scratches left behind by Machine Polish 1. After using Machine Polish 2, use Machine Polish 3 to remove the minute scratches left behind by Machine Polish 2. At this point you may want to use Machine Polish 3 again to further enhance the paint.

FINISHING UP

After completing these steps, you have fully...
polished your paint and it is ready for wax protection. Now is the time to apply Griot's Garage Best of Show Wax® in the same manner as the polishes. Not much wax is needed on the pad, and it is important to work the wax in evenly, using the same imaginary square technique (see diagram A). You will notice even more swirl marks disappear, the paintwork will be deeper in color, and the gloss will be enhanced. Work the wax in until you can hardly see any haze. Now buff it out by hand with a 100% cotton towel, our 100% Cotton Polishing Cloths (Item 1600) or our Disposable Wax Removal Towels (Item 14805) for a haze-free finish.

For improved depth, color and gloss, apply Best of Show Wax® again in the same manner. Best of Show Wax® will take your paint to the next level of perfection. This is the wax concours participants use to obtain unmatched results. When you are done, you will have a flawless finish that lasts longer and looks better than any other machine applied product on the market.

Follow Up Care
After you have fully polished your paint, you may only need to use Best of Show Wax® to maintain your paint's impeccable finish throughout the year. To do this, just use the Paint Cleaning Clay first, follow up with the Best of Show Wax®, and you're done! For fast clean-ups between waxes, try Griot's Garage Speed Shine®.

Cleaning Your Foam Pads
Cleaning your foam orbital pads is simple! First wet your pads with lukewarm water. Take some Griot's Garage Car Wash and put a small amount on the pad. Take your fingers and lather up the pad, then squeeze the pad together, freeing the pad of the compounds and waxes. Rinse thoroughly and wring out. Dry out the pad by standing it up on its side.

Other Tips To Help You
- Always start with the least abrasive polish and work down. If your paint is in excellent shape, you may only need to use Machine Polish 3 or just Best of Show Wax®. For paint that has been left to the elements for over a year or has mild oxidation, you may want to start off with Machine Polish 2 and then follow up with Machine Polish 3. Only use Machine Polish 1 when you are dissatisfied with the results of 2 & 3 and are trying to remove deep scratches.
- Try not to bear down on the orbital; let the machine and the polishes do the work. Start with a tablespoon of product to moisten the pad initially, the 1 teaspoon to keep the pad moist for subsequent panels. Make sure you fully work the polish in so when it comes to the wiping it off it is much easier. As for Best of Show Wax® a little goes a long way.
- Do not use any wool pads with this machine. Wool pads (and synthetic wool) should only be used to "knock down" paint after it has been freshly painted. Using a wool pad with the wrong compound can seriously damage otherwise good paint. Also, steer away from cotton pads. Polishing compounds can load up on a cotton pad, causing it, in some cases, to introduce new swirl marks!
- Regardless of what type of paint you have (from ultra-hard urethanes and newer clearcoats to softer enamels and other single stage paints), you will be able to remove most any paint imperfection you desire. Our process may take you longer than other machine applied systems, but it is totally safe, and produces a finish free of burn marks and other swirls typically associated with other machine applied polishing systems.
- If any hazing has occurred, mist the surface with distilled water and buff out with a 100% cotton towel, our 100% Cotton Polishing Cloths (Item 1600) or our Disposable Wax Removal Towels (Item 14805).
- To keep your paint looking sharp between washes, use Griot's Garage Speed Shine® (Item 11146). It is important to remove tree sap, bird droppings, acid rain and other contaminants as soon as possible.
- After your first experience you will see how easy it is to maintain your paint with the random orbital and you will become an expert for your car's particular paint condition.

Griot's Garage Orbital Products

**Griot's Garage Machine Polish 1**
Our most aggressive polish that is still safe for any paint surface. I would not recommend going to a stronger compound than this. Removes moderate oxidation, water spots, deep swirl marks, stains and other paint defects. Use this product only after Machine Polish 2 has been tried. Follow up with Machine Polish 2 and 3 for a show finish. 16 fl oz.
11161 Machine Polish 1 $12.95

**Griot's Garage Machine Polish 2**
A mild polish. Use Machine Polish 2 when Machine Polish 3 can't remove the deeper swirl marks. If you still can't take out heavy swirl marks and other paint imperfections, go on to Machine Polish 1. Removes light oxidation, mild water spots, swirls, stains and other minor paint defects. 16 fl oz.
11162 Machine Polish 2 $12.95

Griot's Garage Best of Show Wax®
A natural, carnauba-based, liquid wax that offers unmatched depth, color enhancement, ease of use, and the ability to layer up to five coats at a time! May be used by machine or by hand. Lasts at least three to four months. For the finest possible finish, this is the wax to use. 16 fl oz.
11171 Best of Show Wax® $19.95

**Orange Foam Polishing Pad**
A 6" diameter pad perfect for use with the Porter Cable Random Orbital. Allows you to lean into the machine more to remove even deeper scratches. Safe for clearcoats and all other types of paint.
10626 Orange Foam Polishing Pad $10.95

**Red Foam Waxing Pad**
A 6" diameter pad that is softer and gentler for waxing with our Best of Show Wax®, 10628 Red Foam Waxing Pad $12.95

**Wax Removal Bonnet**
A safe, micro fiber bonnet specifically designed for use with our Machine Polishing System. Fits over one of our thin red or orange pads and eliminates the need to remove wax by hand.
11536 Wax Removal Bonnet $14.95

**Answers to Your Questions**
Should you want to order any of these fine polish and wax products, or for a complete selection of quality Griot's Garage car care products, tools and automotive accessories, please call us toll-free at 800-345-5789 or visit us online at www.griotsarage.com.

**Have fun in your garage!**

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