

How to use the G-100 to Remove Swirls

[Using the G-100 to remove swirls with the Professional Line](#)

Tips & Techniques for using the [G-100a](#) to remove swirls and other paint defects.

Products Used

[Smooth Surface™ Clay Kit](#)

[G-100a](#)

[1 each W-7006 SOFTBUFF™ Cutting Pad](#) (For use with the the Gold Class Bonnets)

[2 each W-8006 Soft Buff® Foam Polishing Pads](#) (For use applying cleaner/polishes)

[1 each W-9006 SOFTBUFF™ Finishing Pad](#) (For use applying NXT Tech Wax)

[#83 Dual Action Cleaner Polish](#)

[#80 Speed Glaze](#)

[Meguiar's NXT Generation Tech Wax](#)

[Supreme Shine Microfiber](#)

[X4003 Gold Class Clear Coat Safe Microfiber Bonnets 2-Pack](#)

First wash the car thoroughly. Pay special attention to loosening and removing any dirt particles from cracks and crevices to prevent these dirt particles from being introduced onto the surface during the polishing process. After washing and drying, inspect the surface both visually for *below surface defects* and with the palm of your clean hand for *above surface defects*.

If you feel any tiny little bumps still attached to the finish after washing, proceed to clay the paint to safely remove these contaminants. After claying each panel, wipe the panel down with a quick detailer to remove any residue.

Using **Painters Tape**, tape-off any plastic trim or components that you don't not want to get product onto and also tape-off any edges, high points or areas with known thin paint.



Your car may not look like the below car, but the taped-off areas should... 🇺🇸 It's virtually impossible to be so good with a machine to avoid the problem 100% on each car you work on so the next best thing is to be pro-active in your approach and by this we mean to tape-off any trim or other surfaces that you don't want to get residue on.











Let's begin!

Using M83 Dual Action Cleaner Polish to Remove Serious Below Surface Defects such as deep swirls, scratches and etchings in the paint

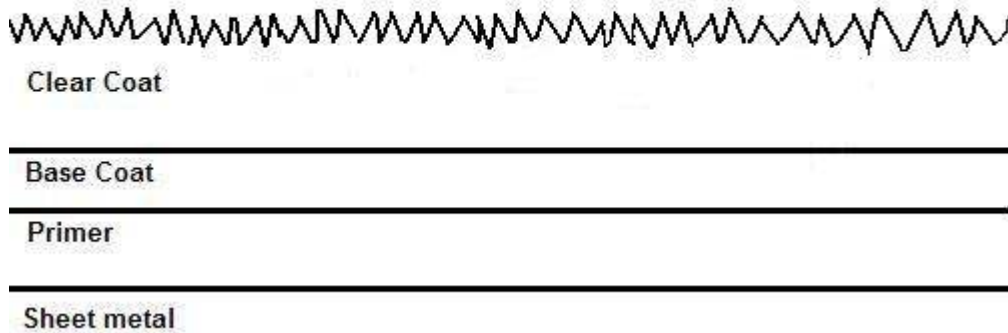
This step would be for car finishes that have been neglected and/or abused. In most cases you would want to first do a **Test Spot** using M80 Speed Glaze and then check your results. If M80 Speed Glazes wasn't aggressive enough then you would try something more aggressive and this would be Meguiar's M83 Dual Action Cleaner Polish.

Applying #83 Dual Action Cleaner/Polish with the G-100

- **Speed Setting** - 5.0
- **Arm Speed** - Slow Arm Speed
- **Pressure** - 15 to 20 pounds of pressure on the head of the polisher
- **Work Area** - Work a small area at a time, about 1 foot square
- **Overlapping motions** - Overlap each pass by 50%, move the polisher using different patterns
- **Time** - Work the product until the diminishing abrasives have broken down, but you haven't gone completely to a dry buff.
- **Amount of product** - Don't overuse product, use enough to lay down a film in the area you are working

The below diagram represents swirls and scratches evenly distributed throughout your car's finish from a horizontal point of view.

Horizontal view of swirls in paint



You can see that in order to remove these below surface defects you need to remove the highest areas of the paint until they are level with the lowest depths of the deepest scratches. In essence, *you must remove paint*.

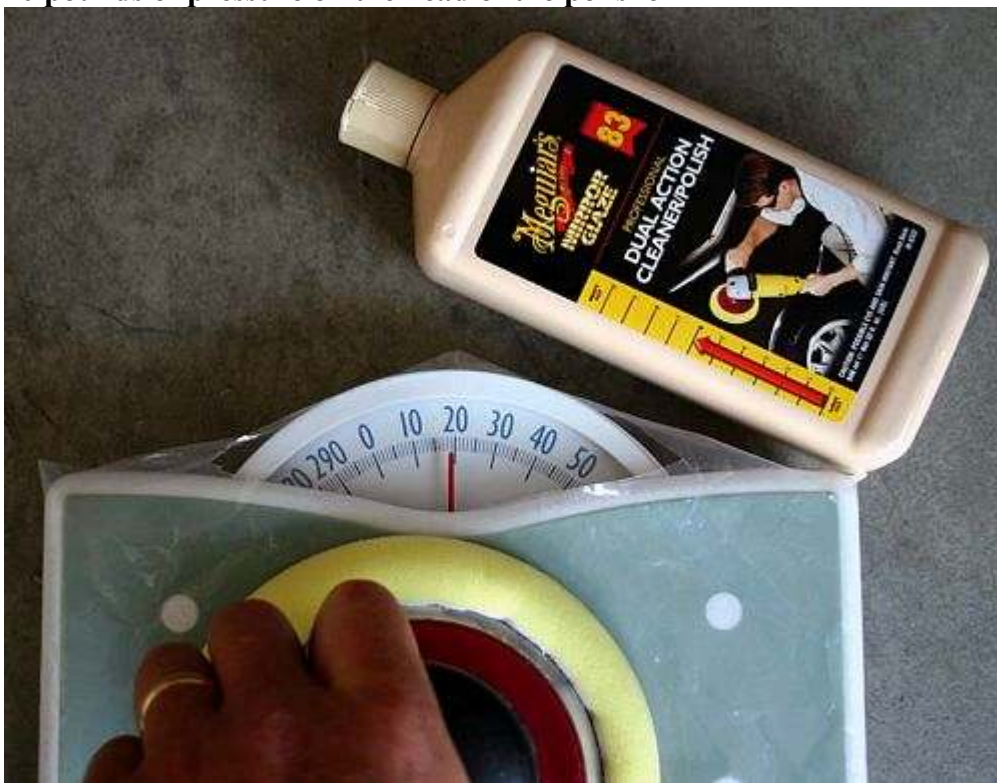
When using the G100 Dual Action Polisher to *remove* defects, (This is different then merely applying a polish or a wax because you're trying to *remove paint*), you need to use a slow arm speed, overlap you passes by 50% and apply *between* 15 pounds and 20 pounds of pressure onto the head of the polisher.

To get an idea of how hard this is to push down, simply place your polisher onto an everyday bathroom scale and then press down on the head of the polisher and take note of how hard you're pushing. If you like, you can even tape some heavy plastic around the scale as you can see that I did in the below picture and actually turn the polisher on and practice pushing down as you move the polisher around. Also listen to the sound of the motor to get an idea of how it sounds at the pressure you are applying. Make sure you have someone to hold the scale in place when you do this.

15 pounds of pressure on the head of the polisher



20 pounds of pressure on the head of the polisher

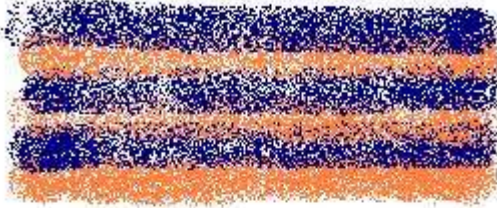


Move the polisher in different directions

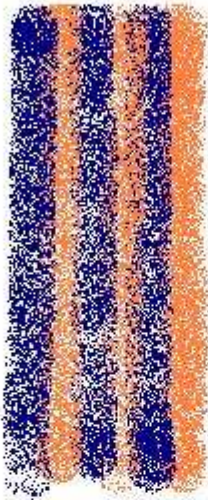
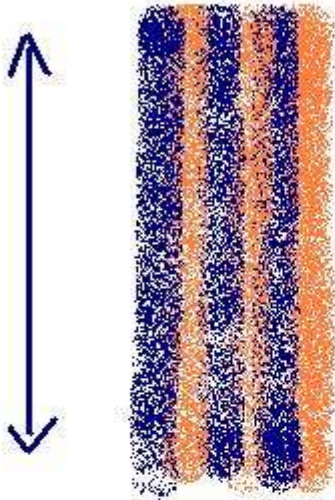
You also want to go in at least two different directions, for example, from where you're standing, side to side, then front to back. You can also move the polisher in a kitty/corner fashion for complete, thorough and uniform cleaning action.

Overlap your passes by 50% in each direction. Move the polisher in at least 2 different directions.

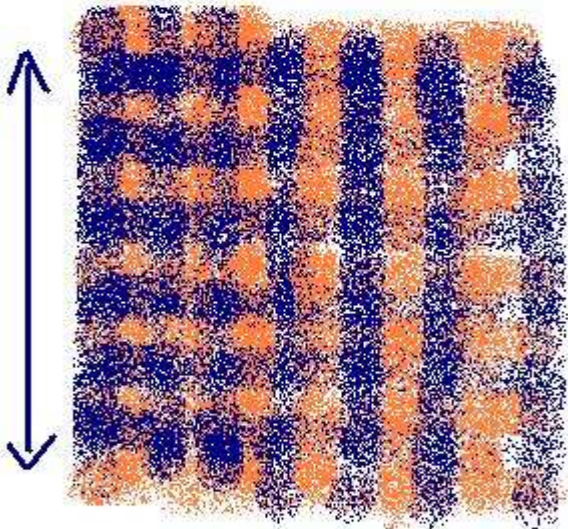
First set of overlapping passes in a side to side direction



Next, make your overlapping passes in the opposite direction.



The effect should be somewhat like this...



Only work a small area at a time

This will vary according to the shape, curve or body line of the panel you are polishing but for example on a large flat panel, you want to stay around a 12" to 18" squared area. The point being, don't try to work to large of an area all at once or you won't remove the defects equally everywhere.

Overlap your sections

When you move on to a new section, overlap into the old section for a uniform end results.

If you're applying a pure polish, or a polish/wax or a pure wax, then you can polish larger areas at a time, use a faster arm speed, use less pressure and make fewer passes because when applying these types of products you're not trying to remove paint, merely do a good job of working the product in and leaving behind a thin even coating.

This does not apply when using a cleaner/wax like ColorX on neglected paint because in this situation you're again trying to remove paint.

The point of the cleaning step is to remove the defects. Because the G100's polishing action is gentle and therefore safe, it takes time to remove small particles of paint in an effort to remove a defect, so concentrate hard at doing your best work when doing the cleaning step, don't skimp out during the step and try to rush it, your results will reflect that you didn't do a good job the first time.

Using M83 Dual Action Cleaner Polish to remove light or shallow below surface defects such as deep swirls, scratches and etchings in the paint

This step would be for car finishes that have are in pretty good shape except of light/shallow swirls, scratches and etchings.

In most cases you would want to first do a **Test Spot** using M80 Speed Glaze and then check your results. If M80 Speed Glazes wasn't aggressive enough then you would try something more aggressive and this would be Meguiar's M83 Dual Action Cleaner Polish. Another option would be to apply a second application of M80 Speed Glaze and work it really well and check to see if this removed the defects instead of switching to the M83.

Applying M80 Speed Glaze is also excellent for re-polishing show cars to bring them back up to show car status. M80 Speed Glaze perfectly prepares any paint for application of your choice of wax.

Here are two cars that have been re-polished using M80 Speed Glaze to remove light

swirls and scratches and prepare them for display.

The Panic Parrot

This wild Pro Street 1950 Studebaker Starlight Coupe is named Panic Parrot. Owner Steve Metz Creator of Muscle Machines is famous for taking his wildest imaginations and turning them into reality! With the Panic Parrot he has created yet another wild super rod in the same legacy of the Frantic Frog. And it not only looks wild, it is wild with a fuel injected 632 cubic inch Chevrolet engine.



Sniper

"Sniper", a 1954 Plymouth Belvedere that was totally reworked and customized by Troy Trepanier features a Viper V-10 engine and modified drive-train from a GTS Coupe. Unveiled at the SEMA Show as part of Hot Rod Magazine's 50 years of Hot Rodding Showcase, it has been the recipient of many design awards.



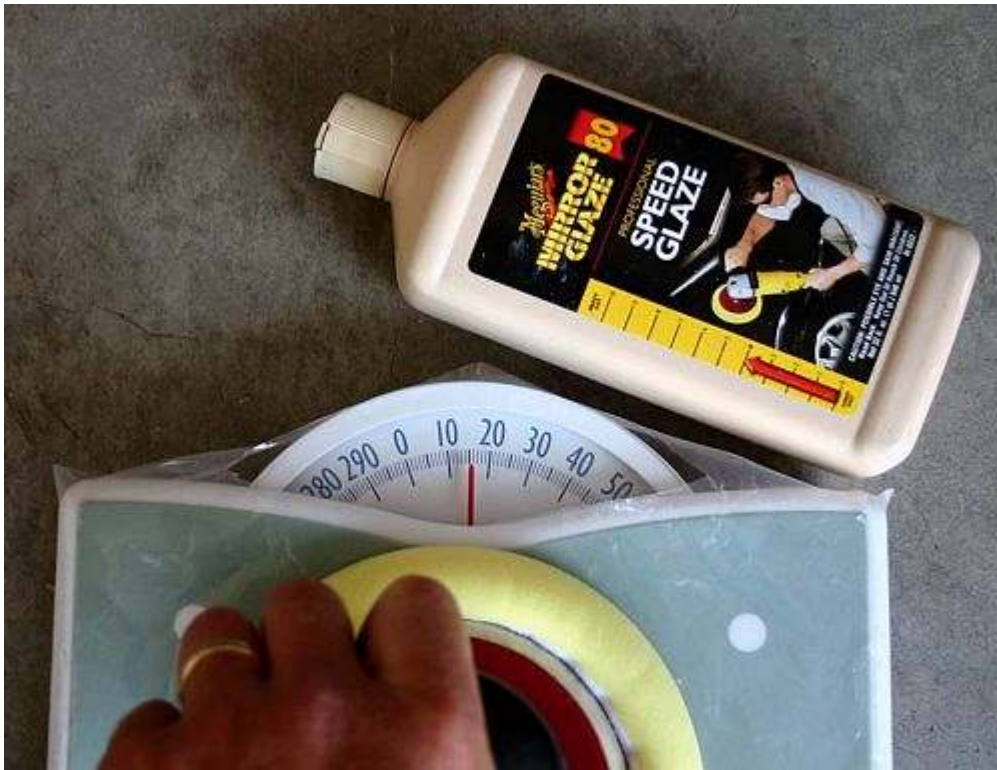
If you use M80 Speed Glaze to showcase your talents as a detailer and create a flawless, liquid wet-looking finish on your car... then you're in good company!

Applying #80 Speed Glaze with the G-100

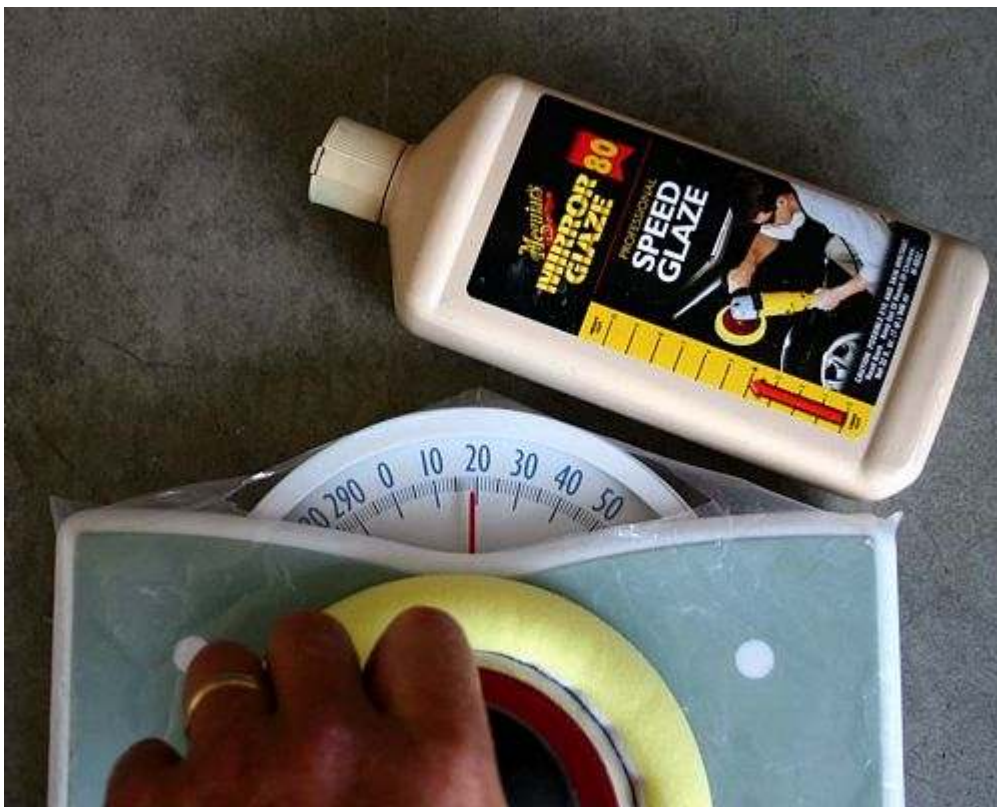
- **Speed Setting** - 4.5 to 5.0
- **Arm Speed** - Medium Arm Speed
- **Pressure** - 15 to 20 pounds of pressure on the head of the polisher
- **Work Area** - Work a small area at a time, about 1 foot square
- **Time** - Work the product until the diminishing abrasives have broken down, but you haven't gone completely to a dry buff.
- **Amount of product** - Don't overuse product, use enough to lay down a film in the area you are working. Speed Glaze is rich in polishing oils a little bit goes a long ways

When attempting to remove light swirls and scratches from your car's finish, use between 15 and 20 pounds of pressure to the head of the polisher. After polishing at these more aggressive pressures, you can always lighten up and make a few cover-passes at 10 to 15 pounds of pressure.

For very light polishing, you need only apply between 10 and 15 pounds of pressure to the head of the polisher.



For a little more aggressive cleaning action with the M80 Speed Glaze, increase your pressure to the 18, 19 and 20 pound range.



If you decide to re-polish any panels with a second application of the M80 Speed Glaze, be sure to first remove any leftover residue first before applying fresh product. This will insure the remaining residue will not adulterate or dilute the fresh product for best results.

After you've cleaned and polished your car's paint with either one-step process, (M80 Speed Glaze), or a two step process, (M83 Dual Action Cleaner Polish followed by M80 Speed Glaze), and have wiped off any and all residue left on the finish, you are now ready to apply your favorite wax.

In the below outline, we list Meguiar's NXT Generation Tech Wax; you can however use any wax you like for this step.

Applying NXT Tech Wax with the G-100

- **Speed Setting** - 3.0 to 4.0
- **Arm Speed** - Medium Arm Speed
- **Pressure** - 5 to 10 pounds of pressure on the head of the polisher. You want to lightly engage the foam pad with the surface, not just float over it. This means using a few more pounds of pressure than just the weight of the machine resting on the surface.
- **Work Area** - You can work a much larger area when apply a wax if you have already previously cleaned and polished the finish with a cleaning and polishing step like those outlined above. For example you can apply wax to one half of the hood and then walk to the other side of the car and apply to the other half of the hood and continue to apply your wax like this as you work around the car. Apply wax to the entire car and then stop and wait for the wax to dry until it [swipes clear.](#)
- **Time** - Work the product long enough to make 2 to 3 passes over each square inch of the finish then move on to a new section.
- **Amount of product** - Don't overuse product, use enough to lay down a film in the area you are working. Thin coats are just as effective as thick coats plus they remove easier and use less product.

5 to 6 pounds of pressure for applying a wax after a dedicated cleaning and polish step



9 to 11 pounds of pressure for applying a wax if you need a little cleaning power when you're applying the wax



Removing the dried wax by hand or machine

After allowing the coating of wax to dry until it swipes clear, you are now ready to remove the wax by hand using a premium quality microfiber polishing cloth or a 100% cotton terry cloth towel. If you like however, you can also use your dual action polisher to remove the wax by using a microfiber bonnet over a clean dry pad.

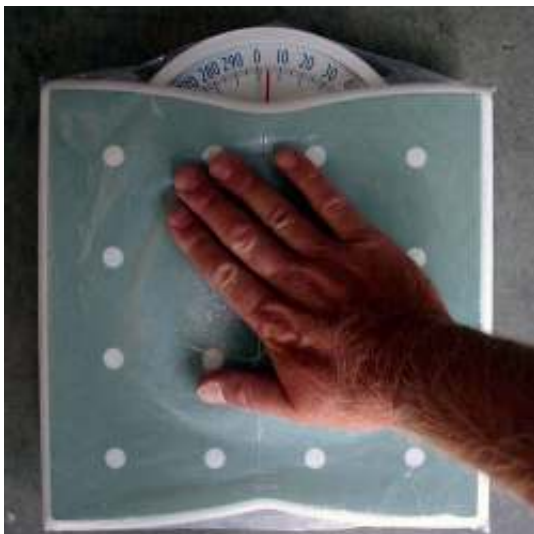
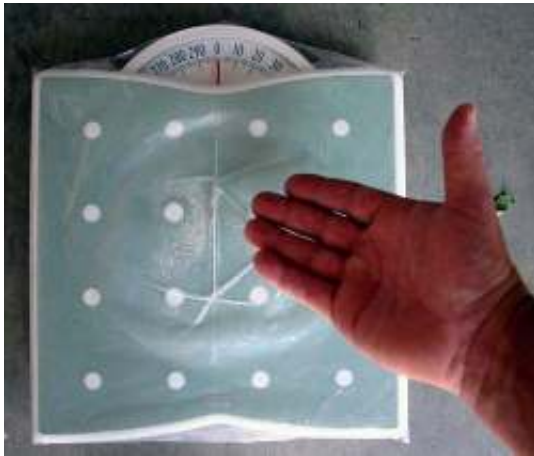
Removing Polish or Wax with an Ultimate Bonnet on the G-100

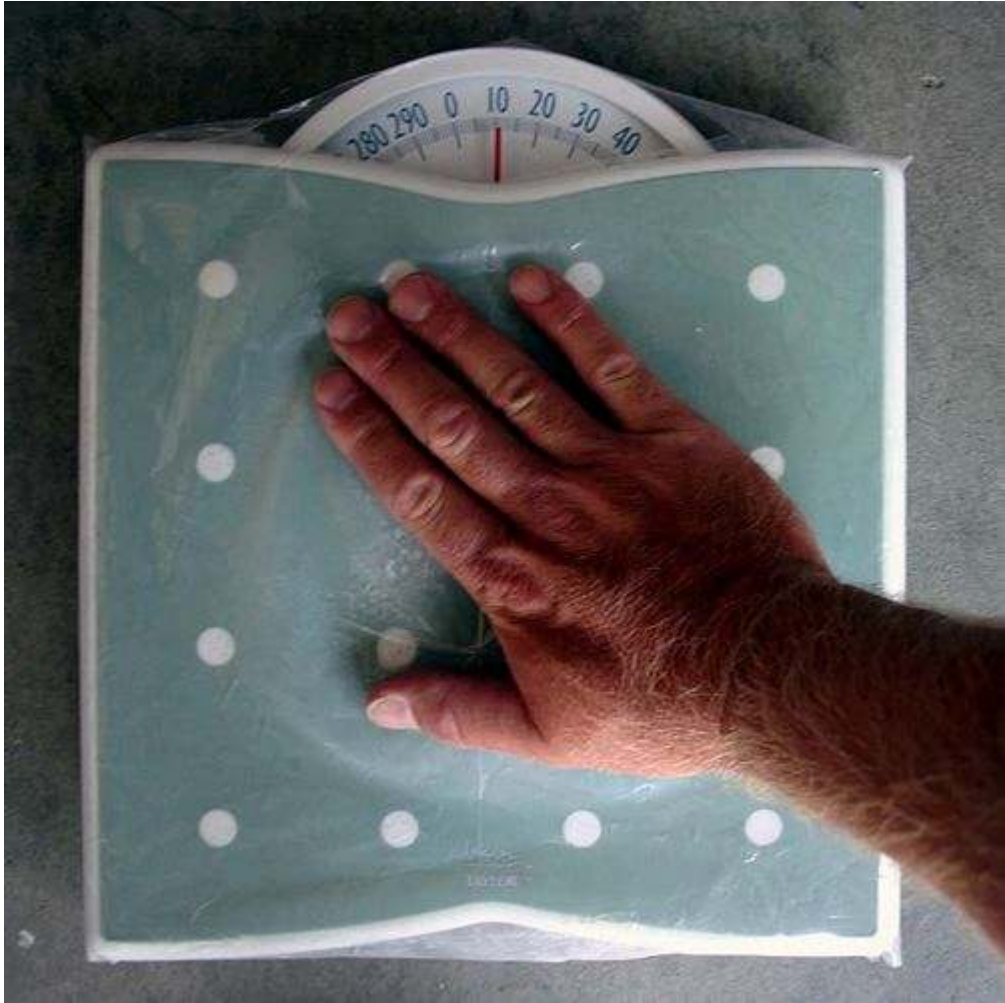
- **Speed Setting** - 4.0 to 5.0
- **Arm Speed** - Medium Arm Speed
- **Pressure** - 15 to 20 pounds of pressure on the head of the polisher.
- **Work Area** - You can work panel by panel, for example, remove the wax from one half of the hood and then walk to the other side of the car and remove the wax from the other half of the hood. Repeat this to the entire car until all of the wax has been removed.

At this point you can call it quits or apply a second coat of wax.

Note about the pressure applied to the head of the polisher...

I've placed my hand on a scale before and often times guesstimated how hard to push down on the buffer head, but today I covered our bathroom scale with a thick plastic from a bag I cut up, taped it securely around the scale, then experimented running the polisher over the scale using the correct pad and chemical to try as best as I could to duplicate the exact thing I would do if I we're working on a real car.









I've polished out hundreds of cars using both the rotary buffer and the dual action polisher and have a pretty good feel for how much pressure to apply depending on what you want to accomplish.

To tell you the truth, I was quite surprised by the scale readings myself. I posted a range because that's truly how the dual action polisher works, it works within a range of pressure not a set number. Another factor is the condition of the paint, paint with only light swirls will only need pressure in the 15 pound range while paint with really deep swirls and harder paint will require pressure in the upper range running anywhere from 17 to 20, maybe even bumping over 20.

It was not a perfect system, but I'm confident the numbers are in the real world correct range. If you have a scale, and you have experience polishing out swirls with a dual action polisher using a foam pad like our W-8006 foam polishing pad, give it a try and compare notes.

Also when applying a wax, I found a little more than the weight of the polisher, yet

enough to keep the pad flat against the finish was around the 10 pound range. For more cleaning ability, a person could apply a tad more pressure, so the range depends upon what you're trying to do.

These are all just suggestions, or course you can experiment with your car's finish and determine what works best for you.

Remember, it's not just about breaking down abrasives; *it's about removing below surface defects*. You remove below surface defects by *removing* the upper level paint that surrounds them.

Gliding the dual action polisher over a clear coat finish will not remove paint. Pushing down on the polisher, moving it slowly and the combination of time, your pad choice, chemical and oscillating action, gently and carefully abrade and remove small amounts of paint which levels the finish and thus removes the defects