

Turbo Wheel Polishing Kit contents:



Turbo Wheel Polish #1 - Use as the first step to smooth the contact surfaces of the wheel.



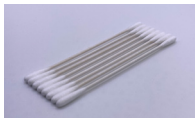
Turbo Wheel Polish #2 - Use as the final step to smoothing/polishing the contact surfaces of the wheel.



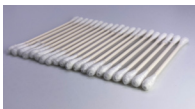
Turbo Wheel Wax - Use to create a shiny, slippery finish on the polished surfaces.



Microfiber cloth - Use to apply the polishes to the wheel and buff the wheel after waxing.



Bore Polishers (x8) - Use to polish the wheel bores.



Cotton Swabs (x20) - Use to polish the outer hub. They can also be used to polish the tread, tread edge, and inner hub. Additionally, the stalk can be used to hold the wheel in the drill chuck.



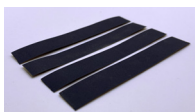
Synthetic Chord - Use to clean the wheel bore after polishing and to buff the wheel bore after waxing.



Wax Applicators (x4) - Use to apply wax to the polished surfaces.



Stainless Steel Pin - Use to burnish graphite into the wheel bore.



Abrasive Paper (x4) - Use to sand the wheel tread edge.



Microfiber Thread - Use to pull the synthetic chord through the wheel bore.

Wheel Preparation Instructions

Supplies needed for Wheel preparation:

- Handheld power drill
- Method to hold the wheels in the drill
- Small Bowl of water
- Dish soap
- Paper towel or cotton cloth
- Jeweler's loop or other magnification
- Lemon Pledge furniture polish (optional)

1

You will need a method to hold the wheels in a drill. Here are two options:



Turbo Chucks,
[available here](#).



Stalk from the cotton
swabs in the wheel kit.

TIP: If the wheel spins on the cotton swab stalk, wet the stalk slightly, it will swell and hold the wheel.

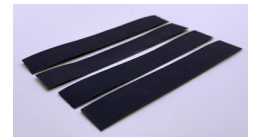
Sand the tread edge



On a lathed wheel keep the edges sharp, don't round them.



Using the 1000-grit abrasive paper, sand the tread edge for 1 minute. The target RPM is 600; if your drill spins faster or slower than this, adjust the time accordingly. Dip the abrasive paper in the water bowl before and during the sanding process; this helps keep the plastic from getting too hot and washes away the removed material. Sand just enough to remove any cuts, nicks, or other imperfections in the edge.



If using modified wheels, remove any burrs from the cutting process, but DO NOT round over the edge. Use a wet paper towel or cotton cloth to clean the wheel.

2

In this step, you will use the kit's enclosed microfiber cloth to polish the tread edge AND inner hub. If using a cotton swab stalk to hold the wheel, you may need to shorten the stalk so it does not protrude from the inner hub and interfere.

STOP BE CAREFUL with the cloth near the spinning drill as it can become entangled with the drill chuck, and pull fingers in with it. Cutting the microfiber cloth into smaller pieces or using a cotton swab to polish can help reduce this risk.



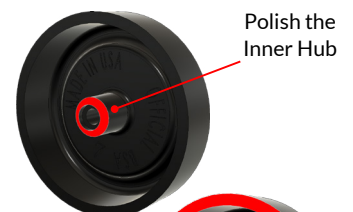
Cut cloth into pieces



Alternative to using microfiber cloth



Apply Turbo Wheel Polish #1 in a circular pattern with a dot in the middle to the microfiber cloth. Spin the wheel, using light pressure, polish both the inner hub and the tread edge for 1-2 minutes. Use a wet paper towel or cotton cloth to clean any remaining polish on the wheel. **Repeat this step using Turbo Wheel Polish #2.**



Polish the Inner Hub



Polish the Tread Edge

Inspect the polished areas; they should be smooth and shiny. If not, repeat the polishing step with polish # 2, but do so in 30-second intervals.

3

Turn the wheel around to polish the tread. Apply a small amount of Turbo Wheel Polish #1 to the microfiber cloth. Spin the wheel, using light pressure polish the tread with the microfiber/polish for 1 minute. Use a wet paper towel or cotton cloth to clean any remaining polish off the wheel. **You want the wheel treads to be smooth but NOT slippery, so don't overdo polishing the wheel tread.**



Alternative wheel holding method:



Chuck the wheel directly into the drill using the inner hub. You must be VERY careful when doing this. Tighten the chuck JUST ENOUGH to hold the wheel. Otherwise you risk damaging the inner hub.

Polish the tread



Polish the outer hub



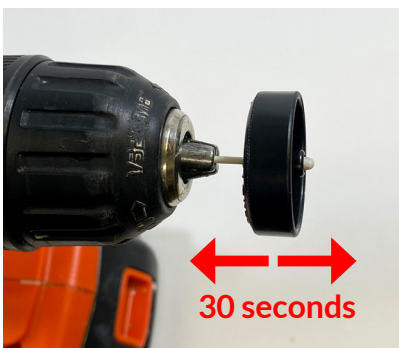
4

Apply a small amount of Turbo Wheel Polish #1 to one of the large cotton swabs in the kit. While spinning the wheel, use medium pressure to polish the outer hub. Using stock wheels from the kit, you'll want to concentrate on the outer step. Polish for 1-2 minutes. Use a wet paper towel or cotton cloth to clean any remaining polish on the wheel. **Repeat the polishing step using Turbo Wheel Polish #2.** Next, inspect the hub making sure it is smooth and shiny. If you feel the plastic is not shiny enough, repeat the polishing steps with polish #2, but do so in 30-second intervals.



5

This step utilizes the smaller, double-tipped cotton swabs. Cut one in half and insert into the drill. Apply a small amount of Turbo Wheel Polish #1. Spin the drill VERY SLOWLY, target 60-80 RPMs. Insert the wheel from the front, and move the wheel forward and back slowly for 30 seconds. Remove the wheel, add more polish, flip the wheel and polish the bore for another 30 seconds. Rinse the bore in a sink with warm water. **Repeat this step using Turbo Wheel Polish #2.** Inspect the bore making sure it is smooth and shiny. A magnifying glass or jeweler's loop is a handy tool for this. Hold the wheel toward a light so you can see in the bore. If you feel the plastic is not shiny enough, repeat the polishing steps with polish #2, but do so in 15-second intervals. Remember, when polishing the bores, you want to spin the drill nearly as slow as it will go. Spinning the drill too fast can stretch/enlarge the bore, leading to an unstable car.

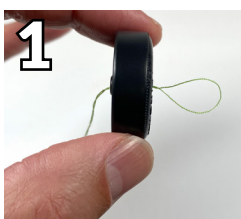


6

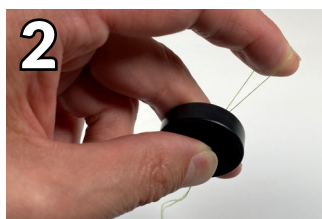
Once you have polished all critical surfaces, soak the wheels in a mixture of warm water and dish soap for 5 minutes. Soaking the wheels will help remove any residue from the polish. **Next, rinse the wheels in water thoroughly to remove all traces of the soap.** Finally, use a wet paper towel or cotton cloth to wipe all polished surfaces (tread, tread edge, inner hub, outer hub).



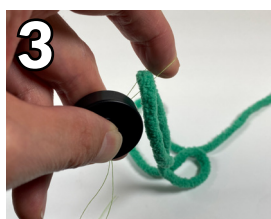
Cut a 3-4 foot section of the synthetic cord to clean the bore. Use the piece of thread to pull the cord into the wheel bore by following these steps:



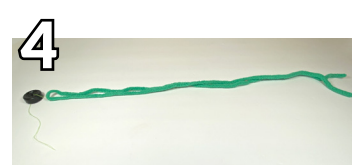
Feed both ends of the thread into the wheel bore, creating a small loop.



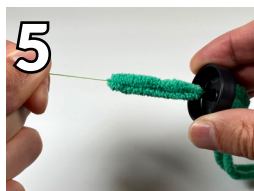
Use your thumb to hold the thread against the inner hub, and put your index finger through the loop.



Feed the cord through the thread loop.



Feed the cord until at its halfway point.



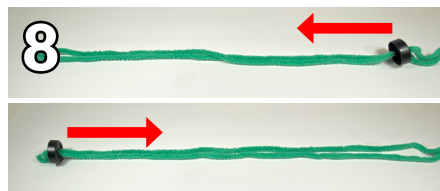
Tug on the thread, so it pulls the cord through the bore.



Soak the cord with water.



Pull the cord through the wheel, but not all the way out.



Pull the cord back and forth through the wheel 4-5 times to thoroughly clean the wheel bore!

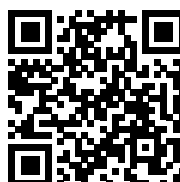


CLICK HERE:

Here is a video demonstration of these steps:



OR SCAN:

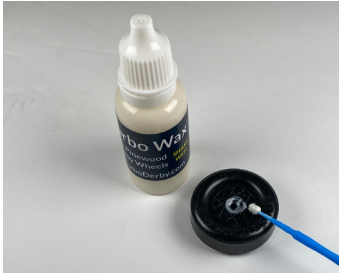


TIP - A great way for young racers to participate is have their adult partner hold each end of the synthetic cord while the racer pushes the wheel back and forth over the cord!

Do a final rinse of the wheels under running water to remove any lint from the synthetic cord, or use compressed air.

7

For this step, the wheels need to be clean and dry. Using the blue-handled wax applicators, apply a thin coat of Turbo Wheel Wax to each of the wheel's polished surfaces, **excluding the treads**. If running a rail rider/runner setup, it is a good practice NOT to wax the tread edges of your rear wheels as that can lead to instability. Therefore, you may consider designating and marking the wheels for the front and rear and waxing the tread edge on the front wheels only.



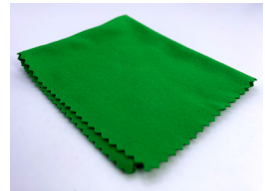
Allow the wax to dry (typically 2-3 hours) and buff using the microfiber cloth. You may need to bunch it up to buff the outer hubs.



For the bore, cut a 6-foot length of the synthetic cord and **use the technique in step 6** to insert the cord into the bore. Pull the cord back and forth through the wheel several times to buff the wax (do **NOT** wet the cord in this step). For race teams, the adult can hold both ends of the cord while the younger team member pushes the wheel back and forth!



If wax builds up in the wheel spokes, use a soft bristle toothbrush (dry, no water) to clean the wheel once the wax has cured. **Multiple coats of wax (2-4) can help add additional speed!**



Do a final inspection of the wheels for any polish/wax residue or lint from the polishing cloth, synthetic cord, or cotton swabs. Any foreign material trapped on the polished surfaces can reduce speed. Compressed air can be used to clean off the wheels. Alternatively, the wheels can be rinsed in cool water to remove debris.

If using oil as the lubricant, wheel preparation is complete.

8

The following steps are ONLY for cars using graphite as the lubricant.

If using Turbo Chucks, place the wheel in the chuck to spin it. If not, place the cotton swab in the drill and hold the wheel by hand. Do NOT use the cotton swab stalk in these steps.

NOTE: You can't graphite too much, so feel free to add additional repetitions of these steps!



OPTIONAL: For maximum performance, dust the items used to apply graphite with Lemon Pledge furniture polish.



Lightly spray the tip of the cotton swab with Lemon Pledge (optional). Sprinkle the cotton swab tip with graphite. Spin the wheel (or the cotton swab) and press the swab into the outer hub. Run the drill for about 1 minute. Apply more graphite to the cotton swab and repeat 3 - 5 times.



9

Flip the wheel and repeat the above steps for the inner hub. If using a rail riding setup, burnish graphite onto the inner edge of the tread on the FRONT wheels only. Burnishing graphite on the edge of the rear wheels will foul the actual tread and lead to an unstable car.

If not using [Turbo Chucks](#) to hold the wheel, burnish the inner hub using the step above (spinning the swab in a drill). For the tread edge, spray a cotton cloth with Lemon Pledge (optional) and sprinkle with graphite; press the tread edge into the cloth and turn the wheel by hand.



Burnish the edge on the front wheels only



10

This step uses the [stainless steel pin](#) included in the kit. It is a good idea to polish this pin much like you would an axle. Start with 1k abrasive paper and work through 5k or 7k paper along with metal polish; this will ensure you do not damage or scratch the wheel bore when burnishing.

Fill the wheel bore with graphite. Insert the polished pin into the wheel bore. Gently roll the wheel forward and backward on a towel or similar surface while applying slight downward pressure on the pin. Do this for a minute or two. Repeat this step 3-5 times. This process crushes the graphite and coats the wheel bore.

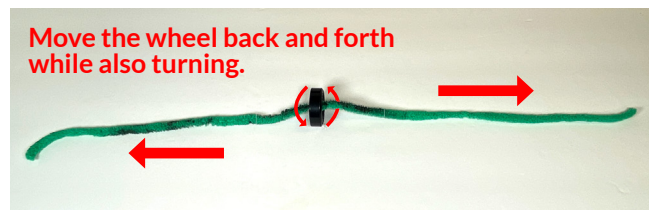


11

Cut a 1-foot piece of the [synthetic cord](#). Insert into the wheel bore using the technique in step 6. However, pull one end through so only a single strand passes through the wheel bore (not doubled like in previous steps). Lightly spray the cord with Lemon Pledge (optional). Sprinkle with graphite and pull the cord back and forth through the wheel bore several times while also rotating the wheel. Add additional graphite to the cord and repeat 3-5 times.



Do **NOT** apply graphite to the tread, use isopropyl alcohol to remove any graphite from the tread



Do a final inspection of the wheels and remove any lint or debris from the polishing and graphite process.