

# 5" 125mm Professional Windscreen Kit (Without Machine)

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Thank you for purchasing our windscreen smart repair kit. This kit can remove medium and light scratches from all types of vehicle glass. It can also be used to polish wiper blade damage and damage caused by electric windows.

The most important thing to understand to use this kit correctly is that there are various grades of abrasive in the kit you must use the correct grade for the damage being repaired. Only use the most course abrasive for the deepest damage. We recommend you practice on a spare windscreen before starting to use this kit professionally.

**Please read all instructions in full before use** and take care to follow the instructions carefully.

**Heat and Pressure** – At all times during the polishing process do not forget about the heat you are generating. Too much heat could crack the glass. Too much pressure around the edge of the glass could cause the glass to crack. Periodically check the glass temperature by placing the back of your hand against the glass. If the glass is too hot, let it cool down before proceeding. **DO NOT** use your fingers or palm of your hand as the natural oils in your skin could cause problems and your finished results will be compromised.

**M14 Polishing machine.** This system is designed to work with a M14 variable speed polishing machine. **Important. Do not operate this system at speeds exceeding 2500 rpm.** Please ensure that you read the instructions for the electric drill before use.

**Existing Damage.** Before any repair to glass check the glass for any existing damage. If the glass has any cracks or chips then this will create a weak point on the glass and a repair could cause the glass to break or crack.

**Take your time:** Rushing will only lead to a poor quality finish and could cause mistakes and damage your glass. Slower is quicker

Keep tools and your work area clean. Never allow the polishing pads to come in contact with dust or dirt. If you get grit or dirt on the polishing pad you will cause more damage to the glass being repaired.

## Instructions

### Step 1 – Scratch Removal

Prepare the surface. Use an ample amount of water and soft paper towel to thoroughly clean the entire surface of the glass.

Determine the severity of the damage. If the scratch catches a fingernail, start with the 600 disc. Only use the 320 grit abrasive on the deepest damage. For shallower or lighter scratches, scuffs or acid marks you may be able to start with the finer 1000 disc. It is important to choose the correct abrasive, if you begin with too coarse a grade, it will result

in unnecessary work and effort. Too fine a grade and you will not remove the scratch. If in any doubt start with the 1000 disc first and the 600 disc if necessary.

Understand this next part before you begin:

You are about to use an abrasive action to polish the glass to the depth of the scratch. If you concentrate on polishing only the immediate area of the scratch, you will cause distortion.

### **If you have just one or two scratches to remove:**

Put a small amount of water as a mist spray on the glass. With the drill running at approximately 2000 RPM, gently connect with the surface of the glass. Apply firm, even pressure. You want to start directly on the scratched area, do not put the abrasive flat on the glass, raise one edge approx 15 degrees off the glass. Cover the damaged area, slightly increasing the radius of your working area each time. If you hold the abrasive flat on the glass the abrasive will become blocked with glass dust and will not work. Regularly check the face of the abrasive and remove any buildup of glass dust. After increasing your area three or four times, return to the center and start again, increasing slightly every time.

Keep repeating this process until the scratch damage has been removed. Your working area should now have a uniform clouded appearance. If you have heavier cloud in some areas, repeat the process. Do not move on until you have uniform cloudiness on the whole area. If you move on with heavier clouding in some areas this will affect the end result and could leave a ghosting/haziness on the glass.

Remember: If the glass gets hot, lift the disc away from the glass, apply more water and fan the glass with the disc running 1"-2" above the area.

### **If you have a larger damaged area:**

Put a small amount of water as a mist spray on the glass. With the drill running at approximately 2000 RPM, gently connect with the surface of the glass. Apply firm, even pressure. Imagine your working area is within a box. Stand with your legs apart, hold the drill in front of you using both hands and move the drill slowly from right to left (from one side of your box to the other) do not put the abrasive flat on the glass, raise one edge approx 15 degrees off the glass. After each pass come down one half width of your pad and repeat right to left again and so on until you have covered the area or your box. If you hold the abrasive flat on the glass the abrasive will become blocked with glass dust and will not work. Regularly check the face of the abrasive and remove any buildup of glass dust. Repeat this process until your scratch damage has disappeared leaving a uniform clouded appearance. If you have heavier cloud in some areas, repeat the process. Do not move on until you have uniform cloudiness on the whole area. If you move on with heavier clouding in some areas this will affect the end result and could leave a ghosting/haziness on the glass.

## **Step 2 – Scratch Refining.**

*If you start polishing with the 320 abrasive – proceed to the 600 abrasive, then 1000 then final polish.*

*If you start polishing with the 600 abrasive – proceed to the 1000 abrasive then final polish.*

*If you start polishing with the 1000 abrasive – proceed straight to the final polishing stage.*

Use an ample amount of water and clean paper towel to thoroughly remove any residue and loose particles from the entire glass surface. Repeat the previous process using the next finer grade 1000 disc. Remember to overlap your previous work area slightly do not stop in the same place as the previous abrasive because this could cause a distortion to the glass. When you think that the scratches from the previous grade have been refined, wipe the surface clean and inspect the surface. Your working area should now have a very light, even, cloudy appearance with no patches or scratches remaining. You are now ready to start the final polishing stage.

### Step 3 – Final Polish

#### **Cleanliness is of the utmost importance in the final polishing stage.**

Thoroughly clean the glass surface as in the previous steps to ensure that all dust and stray particles have been removed. Fit a polishing pad to the Backing Pad. The hard side of the felt pad goes onto the backing pad; the soft side goes onto the glass. Apply a pea size amount of the polishing compound to the middle of the polishing pad and place the face of the pad on the glass. Do not start the drill until the pad is against the glass or the compound will splatter everywhere. Start the drill. Keeping the polishing face flat against the glass, move the drill slowly from left to right. Keep a nice even pressure against the glass as you move the pad over the glass. Do not stop in one area too long as the glass will get hot.

**Do not leave the fringe areas to polish last.** After a few seconds of polishing, milky looking slurry will form. Continue polishing until the slurry is dry. Repeat this process as many times as necessary until the glass is visually clear. (Usually 2-3 times.) Remove all residues that remains by polishing dry.

Wipe the surface clean and inspect carefully. The glass surface should now be crystal clear.

Do not keep adding compound to the pad as this will block the pad and stop the compound from working. If the polishing pad becomes blocked with compound spray the working face with water or run under a tap to unblock. If you put too much compound onto the pad this will block the pad and will stop the process from working.

### Disclaimer

As this product is sold for Home Use on a Do-It-Yourself basis, it is sold with no warranty and/or liability for any glass, fittings or fixtures and/or any personal injury. Although all products contained in the kit are non-toxic and safe to use, please keep this kit out of reach of small children.