Double Bridge Kit

Single Bridge Kit

Automotive Glass Chip Repair

Introduction to Windscreen Repair

This manual is designed to give you the basic information and technical training by answering questions about the MG Group Kit repair system

We recommend that you inform each customer before beginning a repair that it will not disappear completely. “We are Technicians, not Magicians” The main purpose of the repair is to keep the damaged area from becoming a long crack. The repair will look much better than before but no matter what kit or resin you use, you will never make any chip completely disappear. This especially applies to the pit where the rock has hit the windscreen.

In the early 1970’s windscreen repair was introduced to the auto glass industry. As industry grew, newer equipment and resins began making it economical and profitable to repair windscreens. Some kit over complicates the process!
The MG Group kit is a simple yet very effective method of doing a repair with minimal risk of further damaging the windscreen. Our kit is quickly becoming the preferred kit to well-known South African Automotive Glass retailers and new windscreen repair Partners.

If a Windscreen repair is done properly, it offers the following:

- ✓ Improvement of the windscreen’s strength and integrity.
- ✓ Keeps the windscreen from further damage, cracking, or splitting.
- ✓ It will look much better after the repair. Increased drivers’ visibility.
- ✓ Saves the original seal by avoiding replacement.

What is Windscreen Repair?

Windscreen repair is the simple process of injecting a liquid resin into the damaged area of laminated glass and allowing it to be cured, thereby restoring the integrity of the windscreen and preventing further damage from occurring

MG Group Windscreen Repair System

The following are the key basic components you will need to do quality repairs for your customers.

The MG Group repair kit does not use a drill!

The Cylinder-Grommet combination generates enough pressure to do a chip without drilling and prevents unnecessary damage to the windscreen by not leaving drill scaring. This no-drill process produces a much nicer and smother finish to impact pit. It also eliminates the risk of cracking a windscreen whilst drilling as well as reducing the cost of the repair (no cost of drill bit replacement)

The basic repair time of a chip is between 5 to 10 minutes depending on the chip type if guidelines in this manual are followed

- **Windscreen Repair Bridge (Suction cup & Perspex bridge) & Injector (Aluminum Piston):**
- This device is used to inject the resin into the damaged area of the windscreen.

- **Injector grommet (tip) – Vacuum chamber**
- **LED Repair Resin: MG Group** Repair resin is a 10cps and is a thinner resin than pit filler, ideal for bulls eye and thin enough to penetrate star chip cracks. It is also UV LED compatible.
- **Curing Film:** Curing film is used to hold the resin in place after the vacuum process, flatten it, and accelerate the curing process. This comes in cut to size roll. Cut the film into squares. You can re-use it several times if needed.
- **Ultraviolet LED Torch:** Windscreen repair resin is **UV sensitive**. When exposed to UV rays, whether from sunlight or a UV light, the resin will harden and bond the damaged glass together.
- **Probe:** Used to place pressure on the star chip cracks to allow the resin to flow.
- **Razor blade:** Used to scrape off the excess resin from around the pit after curing as well as clean dirt from the impact pit.
- **Mirror:** This is to see the underside of piston and vacuum process and helps with positioning piston over chip impact.

Note:
In directions for all the types of chip repairs, you are taught to place the chip under pressure.

Important: never pivot the bridge away from the pit (impact point) unless you have first removed the pressure on the piston filled with resin, by reversing the piston. Ignoring this step can cause resin to squirt directly in your eyes, thus wear safety glasses. If your kit does not have safety glasses, get a pair before you begin. If you get resin in your eyes, flush with water and seek medical attention. Keep all resins out of the reach of children.

Product Care and Precaution Information

Repair Bridge:

For storage wipe all parts with a clean, soft cloth (supplied in kit). Remove injector unit from Bridge when storing. Once a week, during times of heavy use, you can soak the injector and piston in boiling water. Piston grommet (tip) should be replaced as needed (recommended with each new bottle of resin – about 25 chips). Be aware of spilling resin onto Injector unit when filling with resin.

The LED Resin is a fast-curing resin. Should the injector unit get stuck in the bridge it means that you got some resin between the injector and bridge thread. In this case do not attempt to remove the piston with plyers, break the Perspex bridge and the remove piston. It is cheaper to replace the Perspex bridge.

LED Repair Resin:

Repair resins are **UV** sensitive. ***Always replace the cap after use***. Be sure to tighten the cap and store it in the carrying case when not in use. Keep resin bottles out of direct sunlight.
If you are working in the sun, keep the repair covered with your hand while working. If you walk away place a rag over the bridge to block UV rays. You do not want your resin to be cured until you are done with the repair.

If resin gets on your skin wash with soap and water

Razor Blades:

Razor blades should always be stored in a safe place.

Single Point Probe:

The probe should be handled and stored with care. The pointed end can cause injury or damage if handled carelessly.

Different types of chips

Figure 1.1

Star Break

Figure 1.2

Bull's Eye

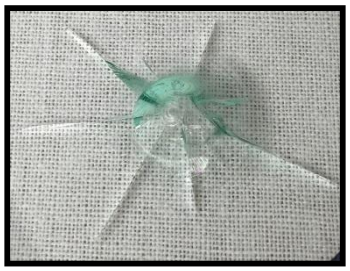

Figure 1.3

Combo

Figure 1.4

Small Crack

Bull's Eye repair

Figure 2.1

Important:

A Bull's Eye is a small cone shaped break inside the first layer of glass **(Figure 2.1).** As you can see in **Figure 2.1**, the top of the cone is where the pit (impact point) is located. The bottom of the cone lays on the lamination of the windscreen.

When you repair a Bull's Eye, you are forcing resin from the top to the bottom or border area of the cone. Because the bottom of the cone lays on the lamination, this circular area is a place where damage can occur to the windscreen. The lamination can become soft from too much heat or age (older vehicles).

When repairing a bull or combo bull star break, watch closely and if you see the border expanding or changing in anyway, immediately reverse the piston to avoid damage to the lamination. A slight expansion beyond the border is not a problem. A small amount of air will dissipate to the outer edges of the bull. This will not be very visible.

Figure2.2 Bridge & Piston Cylinder **Figure 2.3**

Bulls eye Repair.

1.Clean the pit area (impact area) by using your edge of the razor blade and scratch away dirt and loose glass. Don't over scratch as this may create a larger pit area.

2.Mount the repair bridge so that you can see the center of the pit through the Perspex bridge hole. You can use your mirror to assist. Fill cylinder grommet with the required drops of resin from the front with piston inserted in the cylinder chamber. Carefully insert (place) the cylinder into the Perspex thread hole without spilling resin on the Perspex thread. If you do spill resin remove and clean thread with rag. You will become better at this as you get more hands-on experience. You can make final adjustments to the positioning of the piston by loosening the bridge knob slightly and maneuvering the piston into the correct position. Tighten the knob again.

3.Turn the cylinder until it is firm and sealed up on the glass. Screw Cylinder and adjust pressure by hand (Bridge counter levers at back to create piston pressure). This will create a tight seal between the windscreen and the repair bridge. You may need to tighten and adjust the cylinder pressure slightly as you proceed with the repair.
You can now proceed with piston action to release air. Always first reverse piston completely from cylinder for resin to settle to the bottom of cylinder grommet and secondly create an air pocket (the resin is forced into chip with air pressure).
(Never overtighten these parts of the bridge. You can crack the windscreen by doing so.)

Drop resin into the cylinder from front (with piston removed from bridge)

Most chips take between 3 to 4 drops of repair resin in the cylinder **(Figure 2.4)**. When you perform your first repair of the day the cylinder is dry, therefore some of the resin is absorbed into the threads, you may need to use a bit more resin for the first repair of the day (4-6 drops).

A larger Bull may take a bit more resin. Please note that if you do not use enough resin on any type of repair, you will not get a proper seal. Do not overfill grommet otherwise you cannot create an air lock. Too much resin and you will not be able to get into the vacuum cycle.

Figure 2.4

Figure 2.5

Step 3: Forcing the Resin into the Pit and Vacuuming Air Out

After the initial setup and sealing the cylinder against glass and before you begin to pressurize the chip, turn the piston (top part of Cylinder unit out first). This will let the resin settle in the main chamber and create an air pocket required for vacuum process. Slowly turn the piston into cylinder till you feel pressure build up. This will force resin down into the Bull's Eye. It is important to use small slow turns; small turns will allow you to have better control over the resin flow. Watch closely as the resin flows to the outward edges of the bull. Do not turn piston down all the way into cylinder (this will over pressure and force resin to spill out the sides of seal. You just require enough pressure for a steady resin flow).

Once the resin reaches the border of the Bull's Eye, reverse the direction of the piston all the way out. This action will produce suction, creating a vacuum cycle. You may or may not be able to see air leaving the Bull's Eye and flowing into the injector. Allow 3-5 seconds before moving to the next step (any air in the chip will look like small black lines or bubbles moving in the direction of the injector). Areas within the chip that contain air are generally dark or black.

Bring the pressure down a second time

Again, slowly screw the piston clockwise to force the resin into the bull. As soon as the resin reaches the border of the Bull's Eye let it flow for a few seconds, reverse the piston again just as before.

Bring the pressure down on the bull for a third time. Watch the border of the bull closely. If you see resin moving beyond the border, reverse the direction of the piston immediately. A small amount of air will dissipate into the edges and slightly increase the size of the border. That is fine, you are making the air go away, that is what you want. Provided you do not see a problem such as the border changing too much in appearance, leave it in the pressure cycle for about 10 or 15 seconds. Relieve the pressure and it should be done. If you still see the air, you will need to cure it under pressure.

CAUTION: NEVER TURN THE BRIDGE WHILE UNDER PRESSURE

Reverse the piston slowly to relieve the pressure. Now, slightly unscrew the cylinder and rear set screw (piston) by turning them counter-clockwise until they are both loosely touching the glass. You can now pivot the bridge away from the chip and view the repair. If all the air has been removed from the chip, it should look much less visible (Not the pit, it will never disappear).

LED UV Torch

Scraper blade

Cure and Scrape the Resin:

Once you are satisfied release the pressure by reversing the piston. You can then release the Cylinder pressure slowly and remove the bridge from the windscreen. Place a piece of curing film over the pit and if needed add a drop. You can then secure the UV Torch over the repair site and cure the resin. It will take about 45 seconds to cure the resin. Once the resin is hard to touch, you can remove the UV Torch. If it is still soft, let it cure a bit longer.

You can now remove the curing film and with a razor blade, shave the excess resin away from the pit in a circularmotion. This helps not to pull the resin out of the pit (impact point). You should have a smooth finish. This also prevents future wiper blade damage.

Buffing the Pit:

This step is optional. If you chose you can buff the chip with car polish. It will look a bit better from outside the vehicle.

Important: If you have never repaired a windscreen, it is important that you understand how to identify a small crack with resin, versus one without. You need to be able to determine whether the chip has previously been filled by another technician, it is common for a technician to be asked to repair a chip that someone else has already filled.

<u>Follow this simple rule:</u> If a chip crack is visible from <u>any & all</u> angles, it does not have resin in it. If a chip crack is only visible from <u>certain</u> angles, it has resin in it.

This rule is extremely important for those just starting in windscreen repair. You don't want to find yourself trying to fill a break someone else has already filled. Try to view any cracks from every angle while you are injecting it with resin. This practice will help you become familiar with seeing resin as it flows into the small cracks**.**

The legs or cracks will not disappear. Your eye will become trained to see legs or small cracks that are filled with resin vs not filled.

Mounting the bridge:

Again, before you place the Bridge on the windscreen, make sure the injector is removed from the bridge assembly. Otherwise, the cup will not adhere to the windscreen**.**

Forcing the Resin into a star break chip

Place the piston into the cylinder and begin driving resin into the break, by turning the piston slowly clockwise. Use fractions of a turn. As the resin begins to enter the damaged area of the windscreen you will start to feel resistance. Watch closely and you should see the resin begin to flow into the legs of the star break. *(The "Legs" are the small cracks)* At this time turn the Piston insert approximately two cycles of a turn more, or until it feels firm. It may even leak a bit. That is okay. Let the injector stay in that position and begin to probe the legs.

Probing the Cracks or "Legs"

With the star break or small crack under pressure, you need to help the resin flow to the outer end of each crack. With your probe at an angle, put pressure directly on the leg that you are trying to fill Hold the pressure down on the leg for 3 or 4 seconds. This pressure opens the crack,and you will see the resin flowing outward. Lift the probe and apply gentle pressure again 2 or 3 times for each leg. You need to find every leg within a star break and probe each one of them. Be careful not to apply too much pressure so you do not cause a longer leg or crack, if this happens just let the resin flow into the longer leg and move onto the next leg of the star break. It's very important that you look closely and find the angle needed to view each leg as the resin flows. Remember, small cracks look different when they have resin in them, and you will learn to find the angle at which to view the flow of resin. You must also learn to know when the leg is full, as you do not want to be trying to fill a leg that is full. It will still be visible from certain angles even when full. Once legs are filled you can also use the lighter to expand the legs further by applying some heat. The glare of the crack should disappear. (Do not over-heat the glass as this may melt the vinyl lamination on the inside of glass).

Vacuum

Reverse the pressure from the injector by turning the piston counter-clockwise until completely out of cylinder. This will create suction, placing the injector in the vacuum cycle. Leave it this way for 5 seconds, it takes a certain amount of turns to get into this cycle. A good start is about 3-5 cycles of vacuum and injecting. You may or may not see air slowly moving out of the legs, as you cannot always see the air moving.

(You will learn the techniques by hands-on experience.)

Inspect the Repair

Inspect the repair by taking the pressure off and pivoting the bridge as described above if you do not use a mirror. All the legs should be filled with resin. Certain facts may keep you from filling every star break perfectly; how long it has been there, how much oil, road debris, grease, dirt, rain, etc. may have penetrated the break. Just do your best. A finished chip will still be visible from inside the vehicle and the pit will always be visible from inside and out. If you achieved 85% and above visibility enhancement the chip is of good standard.

Remember that you tell your customer before each repair that the break will not disappear completely. The main purpose of the repair is to keep it from spreading to a long crack and you guarantee your work.

Frequently Asked Questions

These pages contain important information that will be useful for you when you are in the field. We suggest you read the Frequently Asked Questions before you begin performing rock chip repairs.

1. **What is "the pit" (Impact Point)?**

The pit (impact point) is the center of the damage on the windscreen where the rock hit. This is the area where resin is injected into the chip.

2. **Will I encounter different types of chips besides those discussed in this training manual?**

Yes, however, nearly every chip you will ever find will have some characteristics of the chips found in your manual and you can always simply follow the same steps to repair them.

3. **What is the "lamination" in a windscreen?**

Lamination is the thin layer of clear soft plastic between the two layers of glass. Lamination is a required safety feature that keeps the glass in a windscreen from shattering. It is what keeps a rock from flying through the windscreen when you are driving down the road. Most people do not know that a windscreen is really made up of two pieces of glass. When a windscreen is chipped, it is usually the outside layer of glass that is damaged.

4. **Is it possible to damage the lamination during windscreen repair?**

Yes, the laminate can be damaged by drilling too deep and damaging and scarring the lamination layer.

5. **What is a "Daisy?"**

A daisy is damage to the lamination usually caused by a combination of too much heat and pressure on the chip. It looks a lot like a real daisy flower but is transparent. The size of a daisy will usually depend on the length of time the chip is left under pressure. A daisy cannot be repaired or reversed. It is unlikely you will cause a daisy in chips other than a Bull or Combination Bull-Star Break, this is because of the large opening to the lamination in these types of chips.

6. **How do you avoid causing a "Daisy?"**

Use tiny fractions of a turn while driving the resin down and pay close attention to the border of the Bull or Combo. If you see the resin going beyond the border, quickly reverse the piston to relieve the pressure.

7. **Why won't my bridge cup adhere to the windscreen?**

First, make sure the windscreen isn't dirty. Use a small amount of cleaner to prepare the area (Never spray glass cleaner into the pit). Next, hold up the bridge assembly and make sure the cup is positioned lower than the cylinder and rear of Perspex bridge. If not, then adjust the bridge accordingly. Finally, before you press down to secure the cup to the glass make sure you are also applying a downward pressure on the whole bridge assembly. You can also use some suction cup lubrication to assist with suction cup vacuum.

8. **Why not heat a chip before injecting?**

Heating cracks can cause them to temporarily disappear or close. We do not recommend heating chips first because of the cracks.

If it's a hot sunny day, should I take any extra precautions in repairing windscreens?

Yes! If the windscreen is extra hot, we recommend cooling it before you begin. If you reside in a hot environment, it is a good idea to either have an awning that you can set up to shade the windscreen or keep a golf umbrella in your vehicle. The other option is to let the customer know ahead of time to have the vehicle parked under a tree or somewhere in the shade, however, this is only a recommendation and not a requirement. Anytime you are working on a warm windscreen it is very important to pay special close attention to the effect the pressure will have on the cracks and lamination. A warm windscreen is also a good thing. You will find it easy to fill Bulls, Combinations, and small cracks, so don't be discouraged if it is a hot day, just remember to careful in all you do. Use less pressure in every way, this includes how tight you mount the bridge and how much pressure you place on the resin (never try to cool a chip with ice or anything similar, as you will crack the glass).

9. **Is it possible to drive air into the lamination?**

Yes, it most often occurs on older windscreens or extra hot windscreens. The lamination in an older car can become liquefied on a hot day. If it's hot outside or you are working on an old car with original windscreen, be extra careful and shade the glass before you begin working. Older cars are generally considered those that are 15-20 years old. Cars kept in extreme weather conditions – such as very hot areas, may have windscreen laminates that liquefy more easily than the average vehicle. Either do not attempt a repair on an old vehicle or warn the customer ahead of time absolving you of any responsibility.

10. **How can I stop my end seal from leaking resin?**

It isn't anything to worry about if your end seal leaks a small amount of resin. If the end seal is new, the problem will subside after a few repairs. Make sure your grommet (Tip) is fitted correctly to piston cylinder

11. **How do you decide if a windscreen is too old to repair?**

If the vehicle is older, you may still be able to repair the windscreen. You do need to take extra care if the windscreen looks to be aged. Older cars are generally considered those that are 15-20 years old.

12. **What is the high stress area of the windscreen and how do you do repairs in this area?**

About 3-4 inches from the edge of the windscreen is considered a high stress location. This area is close to where the windscreen is glued to the vehicle, so be extra careful when repairing chips in this area. It's a good idea to let the customer know of the risk before you do a repair in this area of the windscreen. This is a policy you will need to set for yourself. Never use heat when repairing a chip near the edge of the glass. The customer will understand why the repair may not look as good as it could be when you explain to him/her the extra caution you are taking.

Before you do any repairs in this area, let your customer know that if the windscreen cracks while doing the repair, you will not be held liable for a replacement. Also inform the customer that you will be extra careful while injecting the resin into the chip. Of course, if the chip is not repaired, the chances of it spreading are even greater. After explaining this to the customer, let him/her decide. The customer will usually allow you to do the repair.

13. **How will I know when to change the grommet or tip on my injector set?**

The end seal will begin to expand and/or leak excessively. Remember to wipe off any resin from your Grommet and end seal after every appointment. This will extend the life of these parts.

Generally, you will replace the Grommet (tip) with every new bottle of resin (Grommet is supplied with new bottle as a set).

14. **What is a ½ or ¼ Bull?**

A ½ Bull is when the cone of the Bull is only half formed, and the same goes for a ¼ bull. It's only ¼ formed or maybe ⅓ formed. Treat these types of partial Bulls as you would a full Bull. You can make these types of damage nearlydisappear.

I have a Bull's Eye that won't take resin. What should I do?

This is rare, but sometimes a Bull won't accept resin. Take your probe and put direct pressure on the center of the Bull. This is the top of the cone of the Bull. As you put pressure down on the cone you will see the Bull flexing. After doing this a few times, use your blade to clean around the top of the cone and inject it. It should now take resin. Another consideration is the Bull may have already been repaired. The resin that was injected and cured will keep you from doing it again.

15. **A small area of the Bull will not take resin; what can I do to complete the repair?**

This is also rare, but sometimes a small area of the Bull is stubborn and won't allow you to pressurize it with resin. Leave the Piston on under pressure for about 5 minutes without any vacuum cycles.

16. **I did a Bull repair and when I was finished, I could see small cracks in the cone. Why?**

Sometimes the cone of a Bull will contain fractures inside it. These small cracks in the cone pose no threat andthere is nothing you can do to make them disappear. You may wish to explain this to your customer before you begin.

17. **I am doing a star break and one or more of the legs won't fill with resin. What now?**

First, be sure that you have probed the cracks by putting direct pressure on the legs, while the star break is under pressure with resin. If necessary, repeat this for at least 3 or 4 cycles. If there are still one or more cracks that are not taking any resin, simply go inside the vehicle and heat the cracks while under pressure with resin

18. **How much pressure can I put on a crack when probing?**

There is no exact way to determine how much pressure to put on a crack with your probe. It is possible to enlarge a crack when probing. If you see the crack enlarge remove the pressure immediately. This does not happen very often and when it does, the crack will usually not go far. The resin will usually fill out to the end of the now longer crack, making it nearly invisible. You will learn by experience how to determine how much pressure is needed for probing cracks.

19. **My injector does not seem to be vacuuming out any air; why is that?**

If you do not see air being removed from a chip it is most likely because you are using too much resin. Too much resin in the injector will fill the injector and not allow for the vacuum cycle. Try using a few less drops of resin when doing a repair. Also, just because you do not see air coming out does not mean that it is not coming out. Follow the steps and you should be fine.

20. **Heating cracks under pressure makes the resin flow so why not do that from the start?**

You could do that. The problem is you wouldn't be getting any air out of the cracks. This is a very important part of the process. Air in a chip is always visible. Where there is air, there is no resin! With star breaks and small cracks, it's always best for heat to be the very last option as part of the process.

21. **Should I repair a windscreen in the rain?**

We do not recommend repairing windscreens in the rain. If a windscreen is wet, it needs to be dry before repairing. Just as a chip will absorb resin, it will also absorb water. Water does not mix with repair resin. You must dry the chip out before repairing it. A good way to do this is to have the customer run his or her vehicle with defrost on full heat for about 15 minutes before doing the repair. Check to make sure the chip is dry. A Bull is dry when is has a dark "marble-like" look to it. With your probe, put pressure on the bull and flex the cone inside. If the appearance changes as you do this, it has water in it. With a small crack or star break, remember the rule? If a crack is visible from any angle, it does not have resin in it. If a crack is only visible from certain angles, it has resin in it. The same holds true with water. Water in a small crack will make the crack visible from certain angles only. If a small crack is completely dry, it will be visible from any angle. Just be sure to give small cracks and star breaks plenty timeto dry before repairing.

22. **What happens if I crack the customer's windscreen?**

This is a policy that you will need to set for your business. There is always a small possibility this may happen whenever you do a windscreen repair. If you do a lot of windscreen repairs, and

that is obviously your goal, it is likely that at some point in time you will accidentally crack a windscreen, and it may not even be your fault. You might be following the instructions of your manual exactly and still crack out a windscreen. It is important to know that it is a rare occasion, and most customers are very understanding about it when it happens. They realize that the windscreen was damaged before you began the repair anyway. Some technicians and business owners will pay for a replacement or refer customers to someone they know to replace the windscreen for them at a special rate. While other technicians will let the customer know ahead of time that there is a slight possibility of the windscreen cracking during the repair and because the windscreen is already damaged, they will not be held responsible. But do remember if you follow the directions of your manual closely, cracking a windscreen will be extremely rare. ***It is a good idea to have the customer sign an agreement (disclaimer) which does not hold you responsible for further damage to the windscreen.***

How do I know if a windscreen has a rock chip that has already been repaired?

Anyone who enters the windscreen repair business will soon learn how to spot a chip that's already been repaired. The problem is customers will sometimes insist that a chip needs to be fixed and has never been repaired. One way of determining if a repair has been done is to look at the pit. If there is some yellowing in the center, you know its aged resin. You can also take your probe to the pit and if it feels soft, it probably has resin in it. In most cases, you cannot repair a chip a second time.

23. **My customer has a surface chip. Is that something that would need to be repaired?**

We do not recommend repairing surface chips. There is little or no benefit to the customer and we would certainly not recommend billing for it.

24. **I have followed all the steps, and I am not satisfied with the appearance. What now?**

Leave it alone! Remember what you told the customer before you began? The chip won't disappear. It will look better but the main reason for the repair is to keep the chip from spreading to a long crack. We do not recommend going over a chip repair a second time after the resin has been cured. If a chip has just happened, it will fill easily. If it has been there a while it may not. They absorb dirt, grease, wax, etc. Just do your best and when it is done it is done.

25. **What kind of guarantee should I give to my customers?**

This will be up to you. A good guarantee is this, "Mrs. Johnson, if the repair ever fails, the money is refunded back to you

If I get resin on the paint of a vehicle, will it remove the paint?

If you do spill resin on a painted area you must clean it right away. You don't want the resin to cure on the paint, so it is best to spray the area with cleaner and wipe it as soon as possible

26. **My potential customer has a huge chip. Can I help this person?**

Yes, you can inject at least some resin into almost any damage on a windscreen. Just let the customer know that it certainly will not disappear. It should keep the windscreen from becoming worse. Mount your bridge and inject it. Even if it leaks because it is so big it should take some resin. You do not have much to lose. Most likely your customer will be amazed at your work!