

# Installation Instructions



Congratulations on your purchase of OPTIC ARMOR RACING WINDSHIELDS. This sheet will help you successfully install your OPTIC ARMOR windows. Depending on your application, the OPTIC ARMOR window you receive should be approximately 1" oversized in all directions. On O.E.M. steel bodies, installation is usually very simple and straightforward. On O.E.M. steel bodies it is recommended to remove original molding and not to plan on reusing any molding. However, in the case of Optic Armor's DIBO windows this can be successfully done. In aftermarket fiberglass or composite bodies, sometimes there are many differences from one to another. For these reasons we are forced to oversize these OPTIC ARMOR windows. Trimming is required!

## Tools You May Need:

- Permanent Marker
- Masking Tape (if using a template)
- Clear Tape (if not using a template)
- 3/8" Hand Drill
- Proper Size Drill Bits
- Counter Sink Tool
- Hand Grinder
- Jig Saw or Band Saw
- 3m Super 88 Black tape (for blackout only)
- Handheld sandblaster (for blackout only)
- Razor knife (for blackout only)
- 180 grit sandpaper (for blackout only)

**\*\* IMPORTANT NOTICE \*\***After receiving your OPTIC ARMOR, make sure the window(s) will fit properly prior to the removal of any masking. OPTIC ARMOR may not be returned for any reason after the protective masking has been removed.

**Special Note:** to prevent windows from cracking due to uncontrollable conditions such as tire shake, extreme vibrations, etc. some vehicles may require a soft barrier (available in OPTIC ARMOR installation kits) between the window and the body.

**Special Note:** If you are installing a 1/8" front windshield you must use braces to support the windshield in the center. If you choose to run the 1/8" windshield without braces; OPTIC ARMOR will not be responsible for any damage to the windshield.

## **STEP 1. WINDOW PREPARATION**

Your OPTIC ARMOR window was shipped with a poly-masking for protection. It is best to leave this masking in place during installation. Unfold the masking and **carefully** trim it back approximately 3” from the edge of the window on both sides. If you intend to make or use a template to trace a pattern onto the OPTIC ARMOR, you may want to use 2” or 3” wide masking tape (it is easy to mark on). If you will be marking the window as it needs to be trimmed with no template, clear tape 2” or 3” wide will allow you to see through the window. If you must mark directly on the OPTIC ARMOR, permanent marker **will not** work, a grease pencil will. **Important:** All OPTIC ARMOR windows are manufactured with 2 holes drilled in small tabs. These holes are for manufacturing purposes only and are intended to be trimmed off.

## **STEP 2. TRIMMING / FINAL FITTING**

If at all possible, it is best to use a template of your window opening. This can be a template that you cut or even better, an existing window. This will allow you to trace around the template, onto the OPTIC ARMOR, and then cut on the line. You may want to stay on or outside the line to ensure that the cut piece is large enough, and then the window can be fit very closely. The best way to obtain a final fit, is the use of a power planer and a hand grinder on inside curves (sanding is not a very effective method). If you do not have, or cannot make a template of your window, you should be able to hold the window to its opening and see/mark where the window should be trimmed. After final fit is attained, it is recommended to sand the edges smooth with an orbital sander or sanding block.

## **STEP 3. BLACKING OUT (optional)**

After final fitting, the window can be blacked out to apply adhesives or just for looks. The coating is so chemical resistant that you need to sand or blast off our OPTIC ARMOR coating so that the paint can stick to the raw LEXAN (no paints or adhesives will stick to our coating.)

First you need to mask off the area you do not want to remove the coating. In order to make a perfect line you can use 3M Super 88 1.25" black tape as a mask. Peel back the poly-masking that came on your OPTIC ARMOR just enough to run the tape inside of where you want your black out to be. Go ahead and do this all the way around your window. (Do not worry about rounding corners with tape.) Now you can take your razor and trim poly-masking so that it overlaps the black tape but does not cover where you want to sand. (You can use the rest of your black tape to keep the sheeting stuck to the black tape or to fill any voids you may have over cut.) Next take a razor blade and follow the outside edge, (This step will ensure a clean line when you sand it or blast It.) when you reach the corner you can cut trough the tape intersection to make your desired radius on the corner. Now your window is masked and ready to remove coating. There are two ways of doing this. One way is by hand or pad sander using 180 grit sand paper. This process may take some time because you need to remove coating completely. (You can tell the coating is removed when the material is dull after you wipe it with a damp cloth and scratches easily) Another way to remove the coating is by using an economical hand held sandblaster. These are usually under \$40.00 and will save you a lot of time. You can follow the directions that came with your sandblaster to remove the coating. Now your coating is removed and you can use any automotive grade paint to black out your window.

## **STEP 4. FASTENING**

After final fitting, the window can be fastened in. First the window should be put in place and marked. The marks should be spaced a minimum of ½” from the edge of the OPTIC ARMOR

window. The frequency of fasteners is up to you. We recommend every 4" on most applications. If rivets are used, only normal drilling is required. If bolts or screws are used, you may want to countersink the holes for best appearance. Fasten the window from the center out.

**Important:** If bolts are used, you must use a locking nut on the backside.

**Note:** to prevent windows from cracking due to uncontrollable conditions such as tire shake, extreme vibrations, etc. some vehicles may require a soft barrier (available in OPTIC ARMOR installation kits) between the window and the body.

If you are installing a 1/8" front windshield you must use braces to support the windshield. If you choose to run the 1/8" windshield without braces; OPTIC ARMOR will not be responsible for any damage to the windshield.

**Do not:** Over-tighten bolts, rely on the locking nut to hold the fastener tight.

Using these steps, you should have an excellent fit and appearance.

## ***CLEANING***

Care should be taken to wash all dirt, bugs, etc. off with water or regular windshield cleaner before any wiping take place. When wiping OPTIC ARMOR clean take care not to allow dust, sand, etc. between cloth/sponge and the OPTIC ARMOR