

3d Printed Targa Hardtop by FezCreations

Instructions for Assembly

Thank you for purchasing the 3d printed hardtop Assembly! Thanks to you all, I can continue to make great products for the community. This is a first draft, so please let me know if you think of anything that can improve this document.

Make sure you have all the required pieces for assembly.

From FezCreations:

- Complete ASA panels w/ heatset inserts & supporting hardware (M6x1.0)
- Mounting Blocks

Hardware included:

- M6x1.0 12mm bolts
- ¼" x 1" stainless steel flat washers
- ¼" x 1" x ⅛" rubber washers
- Heat-set Inserts: m6x1.0 @ 12.7mm length

You should have:

- Zipties. Size & amount varies. (Typically a 50ct. Of 4" ties will work)
- Sandpaper, coarse grit
- Plastic Welding Kit (can be found for ~\$20 via amazon) with wave hot staples and spatula tool
- Painters Tape
- string/twine
- 10mm socket/wrench
- Super Glue/Epoxy for plastics
- razor/box cutter
- Electrical tape/weatherproofing tape
- 1/16" thick x ½" wide adhesive foam weather stripping/seal/gasket

Assembly:

Organize all panels and make sure they are laid out properly. Using painters tape & a marker, label the panels in a way you can remember which order they get put together.

Using a sharp tool, remove any excess plastic or overhang from panels to ensure smooth connections.

Using sandpaper, lightly sand any edges that will come in contact with a bonding agent. This will ensure that the adhesive has a strong grip to the panel edges.

Connect the front and rear sections separately using zip ties. Then connect the front and rear sections using the M6 hardware, rubber washers, and metal washers provided. Be careful to not over tighten the nuts, as it could damage the threaded insert (Just enough to where the rubber washer starts to compress).

Using the rear pillars as starting locations, use string/tape to temporarily hold the panels in place as you start to align all of the panels to the car.

Once you have temporarily secured the top to the car, you can start to hot staple or glue the underside of the panels together. This step is important, after this step, you will not be able to re-align any of the panels.

Staple/Glue one set of the panels interior edges at a time. You should only need a few staples or spots of glue to hold the panels in place. You will be fully fusing/gluing them in place once the top has been set in place and removed from the car. **DO NOT FUSE THE FRONT AND REAR TARGA SECTIONS TOGETHER**

Once the front and rear sections are lightly fused together, you can remove them from the car and separate the front from the rear.

Using Hot Staples to fuse the panels:

Set a staple at each joined corner and along the seam at MIN. 3" apart from each other. The more you use, the better the connections will be. Once you've set all the staples in place, you can remove the break-off tabs that protrude from the plastic. Once all the tabs have been removed, you can use the hot spatula tool to smooth over any sections where you set the staples. Do this for the front and rear sections. I recommend watching some youtube videos that go over how these work.

Using Glue after the panels have been stapled:

Tape over the top of the seams using painters tape. Using an adhesive/bonding agent, carefully apply it to the underside of the seams and let it set. Be careful to make sure it is not getting past the seams on the underside. Once the panels are glued at all seams, you can set in hot staples as the step above states.

Once the Top is completely joined, reconnect the front and rear sections of the top & place it on the car. You can choose to apply weatherstripping at the underside of the top

where it touches down on the package tray surround. Using hardtop brackets (not provided Miatacage.com. [Hard Top Mounts - Complete Set](http://Miatacage.com) are a good option) line up the blocking and bracket locations so that the holes line up. Set the mounting blocks using glue and fuse along the edges of the blocks using staples in a similar way to the panels.

The blocks should accept M6 heat-set hardware. Be sure to not overtighten them. You can also drill through the entire assembly at the mounting hole locations and connect using a more compressive setup. Ask me for more information if interested in this route.

OPTIONAL - added strength along seams:

Apply fiber tape along the underside of the seams & epoxy the underside of the hardtop.

OPTIONAL - rear window:

Rear Lexan Window Instal:

Purchase or cut out a sheet of lexan matching the shape of the OEM window. This info can be found online to purchase the window.

Mark a spot 1" down and every 6" along the window edge (or as the window comes pre drilled). Drill at these locations through the window and panels. You can use any size hardware you like and also apply sealant or a seal to make the window more watertight. Be careful to not overtighten.

OPTIONAL - targa water/weather stripping:

Once you have assembled the top following the steps above, you should be ready to apply weatherstripping along the 'rain rail'. Make sure that the targa connection at the front panel is clean. Using electrical or weather sealing tape, apply tape along the front and rear panels of the targa top, making a continuous seal from the drivers to passenger side. Apply the 1/16" weatherstripping to the "s" curve of the front panels. Once the strip is installed, it should create a better seal between the two panels.

IF ANY PANEL GET DAMAGED DURING INSTALL:

Please reach out to me via email: fezcreations@outlook.com

I can print and send you replacement panels as needed for the cost of materials & shipping.

Customer Is responsible for constructing and using the top in a legal and safe way for their own intended purposes. This top may not be legal on all public roads and will have to advise local laws regarding aftermarket exterior car parts for public roadways.

Mounting hardware is not included, though can be purchased separately. I will provide instruction upon delivery & will be available for any questions you may need during your building process.