

Mazda MX-5 Soft Top Installation Instructions

These instructions show how to replace your soft top with the frame remaining attached to the car. This requires the use of a right angled driver which is available from www.screwfix.com (part number 13391) and is the only approved way of removing and securing the B-Pillar clamps fitted to the base of the hood.

Before starting on your soft top replacement, please take time to read these instructions fully ensuring you have all the tools listed below for efficient installation of your new soft top.

Tools Required:-

- 1x 10mm Ratchet Socket**
- 1x Right Angled Driver**
- 1x Electric Drill with 4mm Drill Bit**
- 1x Phillips Number 1 Screwdriver**
- 1x Phillips Number 2 Screwdriver**
- 1x Pop Rivet Gun**
- 1x Trim Removal Tool (an old fork with the middle prongs removed will suffice for this job)**
- 1x Roll Of Gaffer Tape**
- 1x Large Flat Blade Screwdriver or Wall Paper Scraper**
- 1x Small Permanent Marker Pen (optional)**

Normally a top install will take around 6 to 8 hours for your first time, but remember to take your time and not rush as a badly fitted top will give you problems right from the start. It can help if you are able to do the fitting in a warm environment, especially with a vinyl roof as temperature can seriously affect the tension of the new hood.

These instructions assume the rain rail is riveted to the hood, but in many cases it will be separated from the hood from a previous hood fitting.

It is not necessary to have the rain rail and the hood riveted together as this was only done at the factory to speed up the production line when the hood was being installed on the car.

Once again, take your time and don't be tempted to short cut the installation to save time – there are no prizes for being the world's fastest soft top installer!

Firstly open both doors as far as they will go and turn off you interior lights to save your battery.

Next place a towel and a large blanket on the boot lid. This will serve as a place to set your tools and screws etc. while working on the car. If you have a fixed aerial you will need to remove it.

Push your seat bottoms all the way forward and then recline the seats all the way back to make it easier to reach the back of the parcel shelf.

Now we are ready to begin the process of removing the old top.

Removing the old top

Remove the rear carpet. Use the trim removal tool to remove all the carpet fasteners. These push type retainers are fragile. Try not to pry them out by putting all the pressure on the head of the stud.

Remove the frame stops from each side of the car and remove the carpet from the car. Keep all the carpet fasteners and frame stops together in a safe place.

Remove the three metal rails that hold the rain rail to the car's body.

To do this remove the thirteen 10mm nuts and put them in a safe place.

Remove all three pieces of the rear set plates and place them in order on the floor.

Fold the hood back to remove the header rail at the front of the top. Remove the header rail screws (7 on the Mk1 MX-5, Mk2 have either 5 or 4). Pull the header rail from the hood and store it safely out of the way. Also remove the 2 black screws (each side) from the front rubber seals. Keep the screws in a safe place (ideally on the boot lid which has been covered).

Pull the front rubber seal gently from each side at the front of the car and place them in the foot well on either side of the car (so as not to mix the sides up).

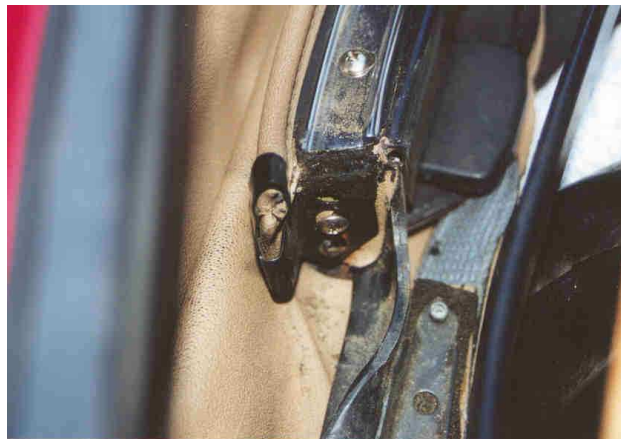
It can help next if you take the permanent marker and draw around the screws in the metal seal retainers – that way you can line them back up correctly when re-installing them later on. Remove the three screws holding the seal retainer in place on each side and put this with the front seal in the foot well. Again, make sure the screws are in a safe place and can be identified as the ones from the metal seal retainer.

With the hood still folded back, gently pull the rear seal from its retainer – be careful not to pull it too hard though as it will still be attached at the bottom of the hood frame by two fir tree plugs – use the trim tool to remove these plugs and remove the rubber seal from each side. Placing them once again in the foot wells.

Draw around the screw heads in the rear seal retainer again so as to be sure you put the screws back in the correct alignment and then remove the three screws on each side and place them with the other screws from the front seal retainer.

There is no need to remove the centre rubber from the frame as this does not come into direct contact with the hood material.

Next use the right angle driver to remove the screw from the B Pillar clamp from the hood on both sides. It can be seen by standing in the open door space and looking down where the hinge of the hood frame is (as shown below). Keep the screw and B Pillar clamp together in a safe place on the boot lid.



Next take the trim tool and remove the Rain Rail retainer stud from each side. To find these studs (the same as hold the carpet in place) look into the space close to the frame hinge with the top folded back and look towards the outside of the car. The stud is on the upper edge close to the front of the hinge cavity. The picture below should help you locate the studs.



Once this is removed, use the drill to remove the two rivets exposed when removing the rear seal retainer on each side. Raise the hood and gently pry the rain rail from the back of the car away from the 13 captive bolts that pass through it. Take great care doing this as the rain rail is incredibly fragile and can be damaged easily when removing it.

Once free from the back of the car, lift the rain rail up to expose the rear two rivets at the base of the hood holding the bottom of the hood onto the frame.

You should now be able to carefully remove the hood from the rear of the frame exposing the tension wire screw on the side of the frame.

Remove these using the No.2 screwdriver, taking care not to lose the screws.

Once the cables are released pull the material over the front of the frame to expose the top of the cables and pull them through the hood material on each side (this may require a helping hand to get them through without snagging).

You should then be able to peel the hood back exposing the listing attachments. To release the listing the large flat bladed screw driver, or wallpaper scraper should be used. Pull the old material from the listing and then pull the hood back to get to the next listing.

On Mk2 cars remove the side tabs from the frame by holding the frame part way back and using the No1 screwdriver to remove the screws holding the existing tabs to the frame.

With all three listings removed (only one on Mk2 cars) the hood should now be free to be lifted off the car carefully with the rain rail attached.

If the rain rail is still riveted to the old hood, carefully drill them out to free the rain rail and then check for cracks and splits.

If the cracks aren't too big then you will be able to use the gaffer tape to repair the rain rail by covering over all the cracks and holes in the rain rail backing (the brittle part that fits against the body of the car – not the soft rubberised section on the front).

If the cracks are too bad, or as we have found in some cases the rain rail is simply split into many pieces then new rain rail will be required.

Once the rain rail is ready then return to the car and starting on one side put the rain rail carefully back over the 13 captive bolts on the rear deck and then replace the rain rail retaining studs.

Place another cloth or towel onto the rear deck to protect your new hood's window while it is being installed.

If you are installing a glass screen top onto a Mk1 car then please see the separate instructions for the frame modification required to allow the hood to fold. These modifications must be completed before proceeding with the hood fitting instructions.

Take a long piece of thick wire (unbent wire coat hanger or the fixed aerial if your car has one) and push this through the drain holes on each side (driver's side shown in the picture) to ensure they are clear of any blockages.



These are very important to keep clean as they can cause rusting problems if they block up and over flow.

A little water can be run through them to confirm they are clear – you will see it running out of the bottom of the drain tube beneath the car.

Also check the condition of the tension wires to ensure their casings aren't split or rusting – if they are they will require replacement by drilling the rivet from the front of each side and installing the replacement in the same orientation as shown with the cable towards the outside of the car.



Installing your new soft top

Drape the hood over the raised frame and using the string provided pass the tension cables through the hood channels on each side.

These cables then pass through to the inside of the frame as shown and then are screwed back into place on the side of the frame as shown below with the hood removed to show the route of the cable.



With the cables now in place, pull the hood material down and over the bottom of the B pillar as (there is a flap of material that “folds” over the bottom of the frame here with three holes in it) – it can help to have the hood frame tilted back slightly here to remove a little of the tension from the hood material.

Once this is in place, use two rivets to fix the material in place on the B pillar and two at the bottom of the frame as shown in the pictures below.



Repeat this procedure on the other side of the car.

Fold the frame back (taking care not to damage the rear window) and allow then pull the front of the hood over the frame header as shown.



Install the header rail back in place using the screws removed earlier. Start with the centre screw to locate the header and then work outwards. The holes in the header rail should line up with corresponding holes in the front of the hood.

Install the B pillar clamps using the right angle driver. This can be a fiddly job but is achievable with a little patience.

This is also a good time to make sure the holes for the bottom rubber clips are clear – the angle driver can be used for this also to help open the holes up. There is one hole above the B pillar clamp screw and one below.

Once this is done, install the seal retainer following the screw position marks made when removing it previously.

Push the rubber clips into the holes in the frame at the base of the B pillar and then push the seal into the seal retainer working from the outside in (this may take a little time to get into place correctly but patience does pay off).

Repeat this on the other side of the car installing the B pillar clamp and seal accordingly.

Raise the hood up to place it under tension and then install the front seal retainer, again using the screw position marks made when removing.

Once both sides are fitted, fold the hood back and replace the front rubber seals on each side and fix it in place using the two black screws in the front of the seals.

Raise the hood part way up and install the listings into the bows (From behind and under the bow, up and looped into the slot, then compress the channel to hold it in place).

On plastics screen hoods, there are three listings to be installed the front two simply tuck into the channel but the rear one has a Velcro strip which needs to be pulled down over the top of the bow and secured along its length.

On glass screen hoods simply ensure the inner lining is passing over the rear two bows and under the front one.

The lining is attached to the listing itself via a Velcro strip. Ensure there is around a 5mm gap between the listing and the plastic retainer on the inner lining where it is attached using the Velcro and then install this into the channel in the bow as per the instruction above.

Next, with the hood raised up, place the three set plates into the back of the car along with the thirteen 10mm nuts. Ensure the set plates are put in the right orientation with the open part of the plate pointing downwards and the rolled section at the top (we have seen a lot of these set plates installed upside down which causes the hood to leak at the rain rail).

From inside the car, start by pushing the hood onto each of the captive bolts passing through the rain rail, ensuring the hood is being sandwiched between the inner and outer parts of the rain rail.

Start in the centre and work outwards – it can sometimes help if another person holds the hood material from the outside to stop it from pulling back off the bolts.

Once these are in place, install the long set plate. It can be easier to start at the end of one side and finger tight a nut onto the bolt then align the centre up and do the same with the nut then push the opposite end onto the bolt and fix this on using another nut.

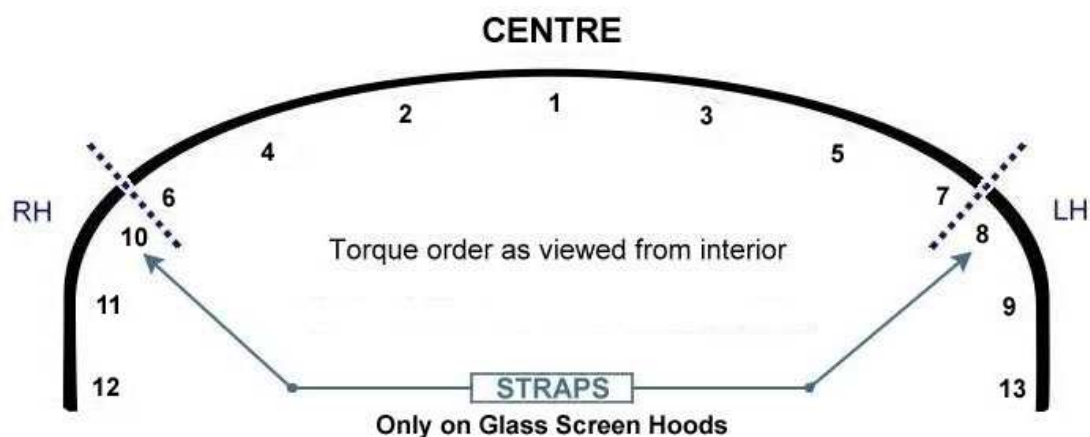
Once you have the set plate on using the three nuts, then install the extra two nuts either side of the centre fixing finger tight again.

Move onto the side plates now and starting at the rear most bolt (closest to the centre set plate) install a nut finger tight onto each bolt.

Repeat this on the other side of the car.

Remember on glass screen models to attach the rear strap to the first bolt before installing the side set plates. On plastic window models ensure the zip is not caught behind the set plate before tightening.

Using the ratchet socket, tighten each of the nuts up in the following sequence.



Once these are tightened up, you are now ready to close the hood for the first time.

Open the latch and pull the plastic cover down off the middle hex shaft. Rotate the hex shaft so that the latch is adjusted all the way out (loosen). The new material will be tight and you might have to help the top into a position to latch it. Take it slow and let the new material stretch.

Remove the towel or cloth from the rear deck and re-install the carpet using the carpet studs removed earlier and screw the frame stoppers back into the deck through the larger holes in the sides of the carpet.

If you are installing a glass screen hood, the final stage is to attach the side tabs to the frame using either the existing screws (Mk2 cars) or the 4mm rivets as part of the fixing kit (Mk1 cars).

You have now completed your soft top install.

Please remember to leave your new top up for around two weeks to allow time for the material to stretch and settle into the shape of the frame. Doing this helps prolong the life of the hood and also improves the appearance of the hood.

Some wrinkles and pulls are normal when the hood is first installed and these should settle down and disappear as the hood ages over the first few months of its life.