How to Remove your Soft Top from the BMW Z4

The Electro/Hydraulic Motor for the Soft Top finally went out on my 2003 Zed. This repair has been accomplished so I will detail how I did it.

The primary cause for the motor to go bad is water intrusion into the motor housing.

If you are decently handy with tools you can do this yourself, saving a TON of money from the dealer.

I broke this How-To into two parts. One is removing your top and two will be replacing your soft top motor. Both are available on my website in PDF format. http://www.shipkiller.com

Tools:

Set of Torx bits. If you like working on your BMW, you better get a good set of these. The Germans love Torx.... Screw drivers (Flathead and Phillips)

Metric Sockets.

Razor Blades or equivalent.

Flashlights or Drop lights

Parts Needed:

Some Tie-Wraps or tape.

Blue Painters Tape.

Extras:

A tube of Silicon Grease. Non-curing... This is use for lubrication of the weather seal upon re-installation. **Not to glue it in place.....**

I really recommend you take pictures of the wiring harness's routing... and the refer back to your pictures when you put the top back in the car... You REALLY don't want to cut a cable when you test out the top the first time. DON'T RELY ON YOUR MEMORY.....

It is better to do this in a garage or someplace that the inside of the car is protected. Just a thought....

1. Open your soft top part way.

If you cannot use the normal method, go to the trunk (boot), pull and SET the RED soft top release handle. This release activates a hydraulic by-pass valve and permits the hydraulic fluid to flow without the motor running, allowing you to move the top by hand.

Press and hold the top down button. This will unlock the top permitting you to move the top by hand. Either use two persons to move the top or move the top from the center.

You WILL have to move the top by hand to several positions during removal.

2. Now position your seats and the seat backs as far **forward** as you can.

You do not need to do these next two steps, but it is highly recommended.

- 2a. Disconnect your battery......
- 2b. Take your roll of blue painters tape and tape off the car around the top. I did not do this until later as you will see in the pictures....

Steps three through 12 can be completed in any order.

3. Now on each side, remove the rubber weather stripping from the top mechanism.



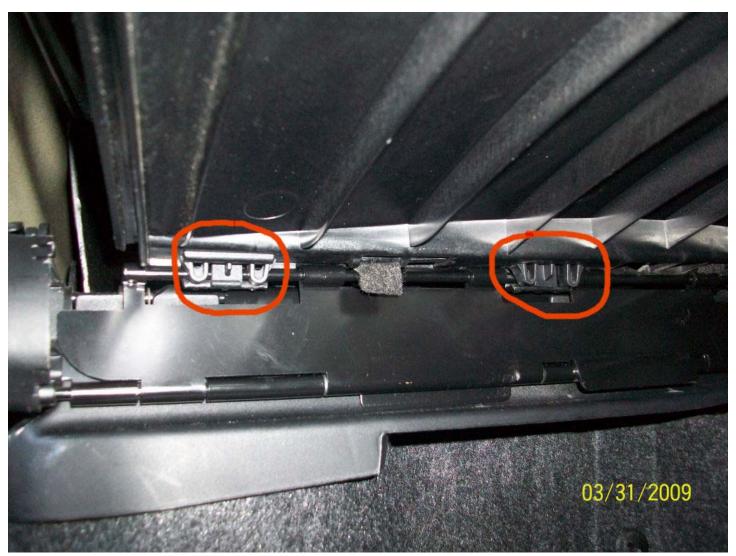


4. Then pull the door seal weather stripping from around the door. It does not have to come completely out. Just part way....



5. Now you have to remove the 'Soft top Compartment Floor' from the trunk. I did not take many pictures of this, because I have had this out on many occasions.. Sorry...

Disengage the soft top flap that is attached to the floor. Then pinch and release the clips that are on each end of the floor. Mine only had two on each side. I think there are supposed to be three. They will pop up and lay on the side. Then notice the hinge bars. That is just snap fit into the hinges on the floor. Unfasten those and then remove the floor.



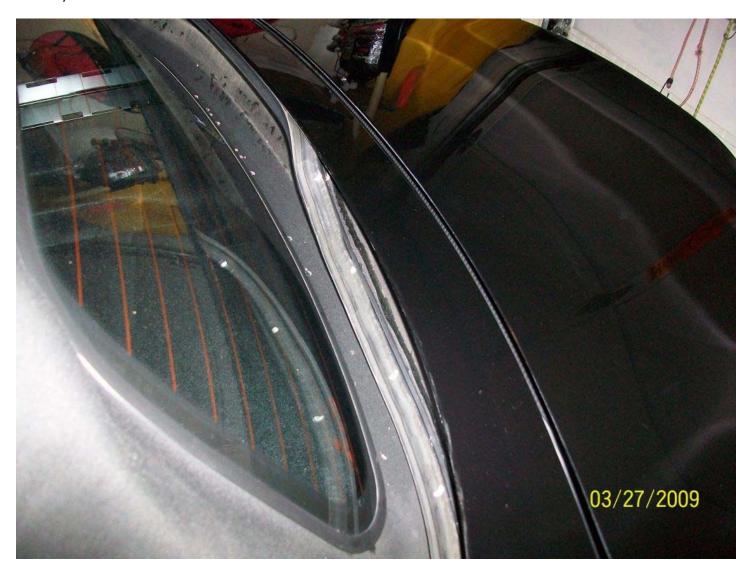


Picture with the floor removed. You can now see the rear glass. The top is in stowed (down) position in this picture. That flap hanging down is the flap you removed from the floor..



6. Now remove the weather stripping that attaches the top to the car. Only remove it from around the car body, NOT from the top itself. Don't try to remove it from the top or you will be buying a new top....

Part way removed....



Once that is done, then you get to remove some more interference..

The TIS has you remove the rear center console and trim from behind the roll bars. Unless you have gorilla large hands, this is not necessary.

NOTE for the next step: If you do not have sub woofers there, you are on your own. Figure it out. It can't be hard to remove the storage box.

7. Pop off your sub woofer grills, air vent and the small round access cover above the air vent. Notice in the picture, that there is a small round cover behind the air vent. Take that off also. The white box behind the air vent is your soft top controller module.

Nice time to clean your speaker housings.....

8. Now remove the torx screws that hold the back trim in place. They are marked in RED. NOT the speaker housing screws.

You still cannot remove the trim piece but it will give you some wiggle room now to get your hands behind it to remove the electrical connections.



Now you can access the wiring harness on both sides.



The driver's side has two cables. One cable is bifurcated (two connectors) for a total of three connectors. The passenger's side has just one cable and connector.

9. Follow the cables that lead FROM the soft top and disconnect those connectors. Again, three on the driver's side, one on the passenger's side.

The soft top connectors are mounted vertically to the chassis with plastic grommets. This is where I don't like how BMW did this. The connectors leading from the soft top are on the bottom. You must reach down and disconnect the connectors, the top connectors are part of the chassis wire harness. It's just backward..

Then you can attempt to pull the plastic grommets out of their holes or just break them. Up to you.

The connectors are keyed so they only fit with their proper mates. You can't screw this up when you reconnect....



The wiring harnesses from the soft top running along the door frame are also mounted to the chassis. I recommend that you cut the fastening tape.

Once the connectors are disconnected, route them out of the car and let the wiring harness hang. Remember, do BOTH

sides.... and watch the paint......

Now it is time to put your body in some positions that it was never designed to be in.

Get your flashlight/drop light and a 10mm socket. I use a head mounted flashlight. It leaves the hands free.

My wife says it makes me look like a geek, but it WORKS....

Climb into the trunk on your back with your head on the rear bulkhead. As you look around you will see a silver band (BMW calls it a 'hoop') that runs from the front of the top, just aft of the door sill, around the back and to the other side. A big 'U'.

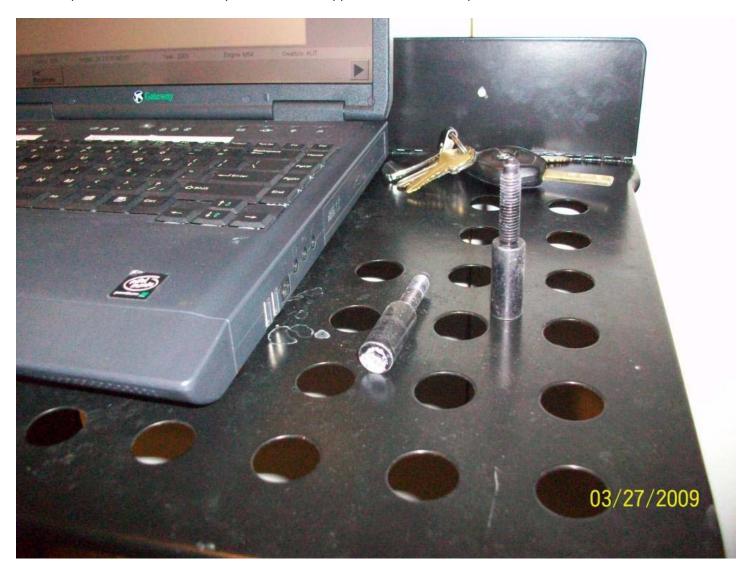
The soft top and weather stripping (you removed from the chassis previously) are attached to this 'hoop'.

10. There are seven bolts you must remove. They are located on the around the rear of the car along the hoop. These bolts do not extend up to the ends of the hoop. Make sure you get them all..... and make sure you do not remove the much smaller torx bolts that run the entire length of the hoop. These are fasteners that hold the two parts of the hoop together. The soft top fabric and weather-stripping are sandwiched between these two metal hoops, making them one hoop. The black "cables" running along the hoop are the hydraulic lines going to the other side.



11. Now take your torx bits and go back inside of your car. Behind the vents grills you removed, was a round plastic cover, that I also had you remove. These are the lower mounting bolts. Now using a torx bit, loosen these lower mounting bolts on both sides. These two bolts do not have to be removed. It won't hurt, but is is not necessary, once you get the top out of the car and see the mounting hardware.

Here is a picture of the bolts. On my car, the white topped ones were the top bolts.



12. Now completely remove the two upper torx bolts. The complete soft top assembly is now free and almost ready to be removed.

This next step took me almost two hours to figure out. Now, it should only take you five minutes... The forward portions of the 'hoop' are not bolted but use a clip in mount to hold it in place.





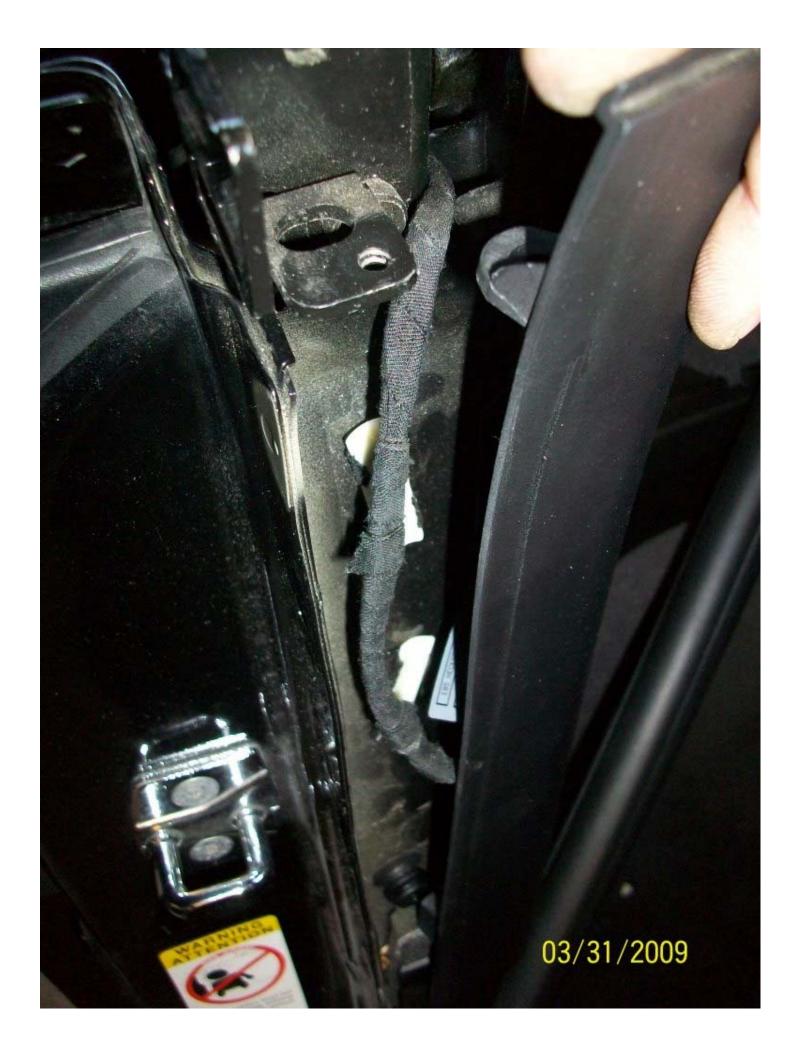
- 13. Move the top to approx. the middle position. Now pull up on the hoop ends up and then inward (toward car center line) and allow the end to come completely up and out of the car. If the top is in the stowed (open) position, there is not enough room to accomplish this. The TIS has you use a special tool (a flat pry bar) to assist in moving the inward. Not needed. If you look at them from the trunk, you can see if the hoop up and clear of the clips. I was initially using a flat pry bar and the wood was inserted to keep from crushing the weatherstrip guides....I took the pictures after the top was out for a clearer shot of them...
- 14. Now using another person, lift the top out of the car. For me, I had to keep the top in mid-position or it would fold down onto the hoop, pushing it back into the car. Once the top is out of the car and on the ground you can manually close it up.

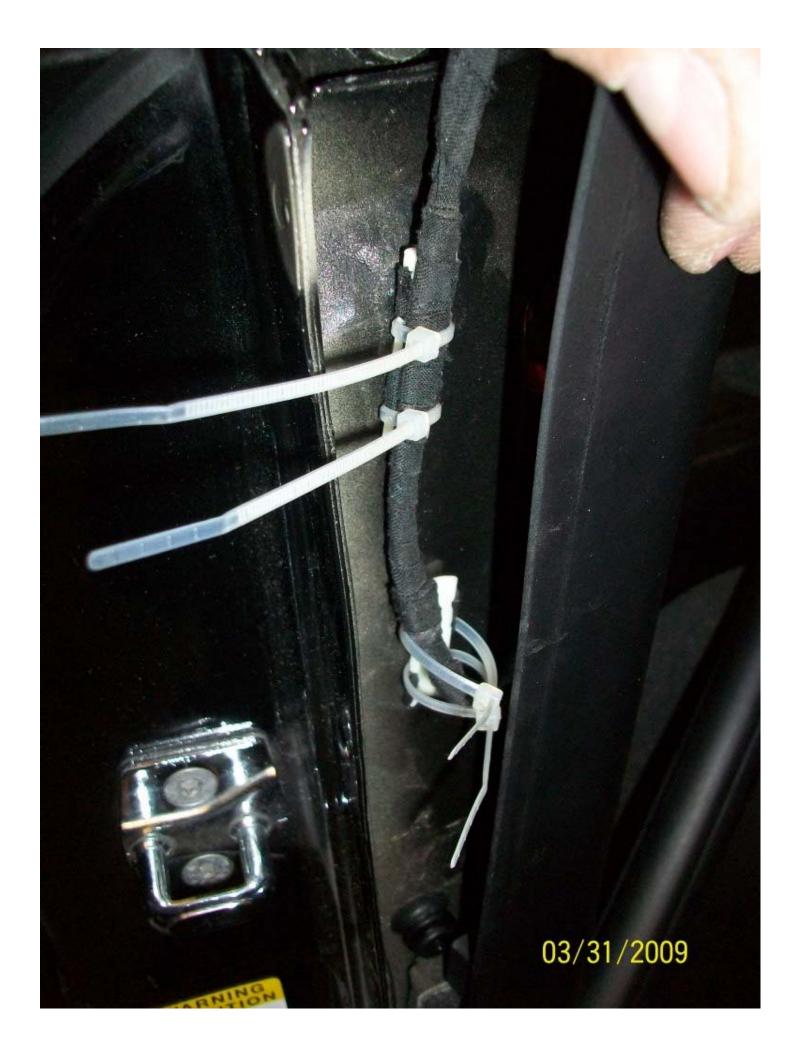


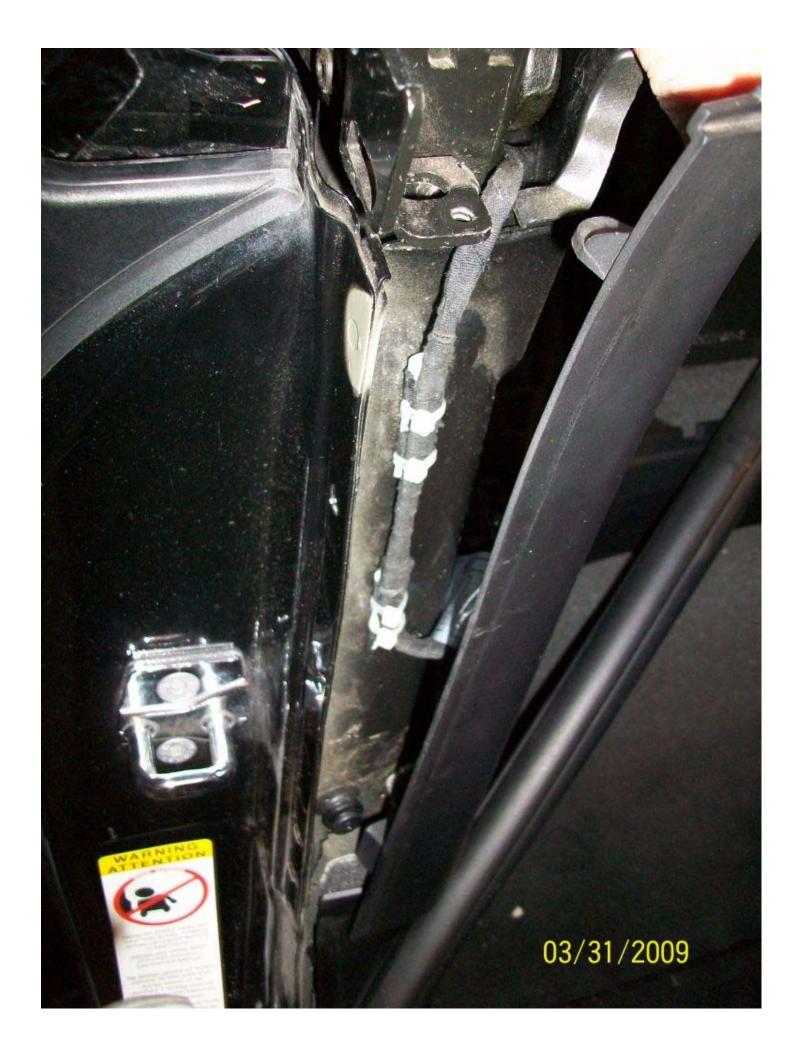


Installation is just the reverse...but here is how I reworked the wiring harnesses.

I used the existing tie-downs, but used small tie-wraps to tie them in place. These pictures just happen to be the passenger's side.







Remember those large rubber trim pieces you removed at the start. Well, to get them to go in properly you have to replace the double-sided tape that is on them. Notice the white rectangles. Scrape them off and replace with your own double-sided tape.

