

Mercedes W209 CLK-Class Hydraulic Pump Removal guide

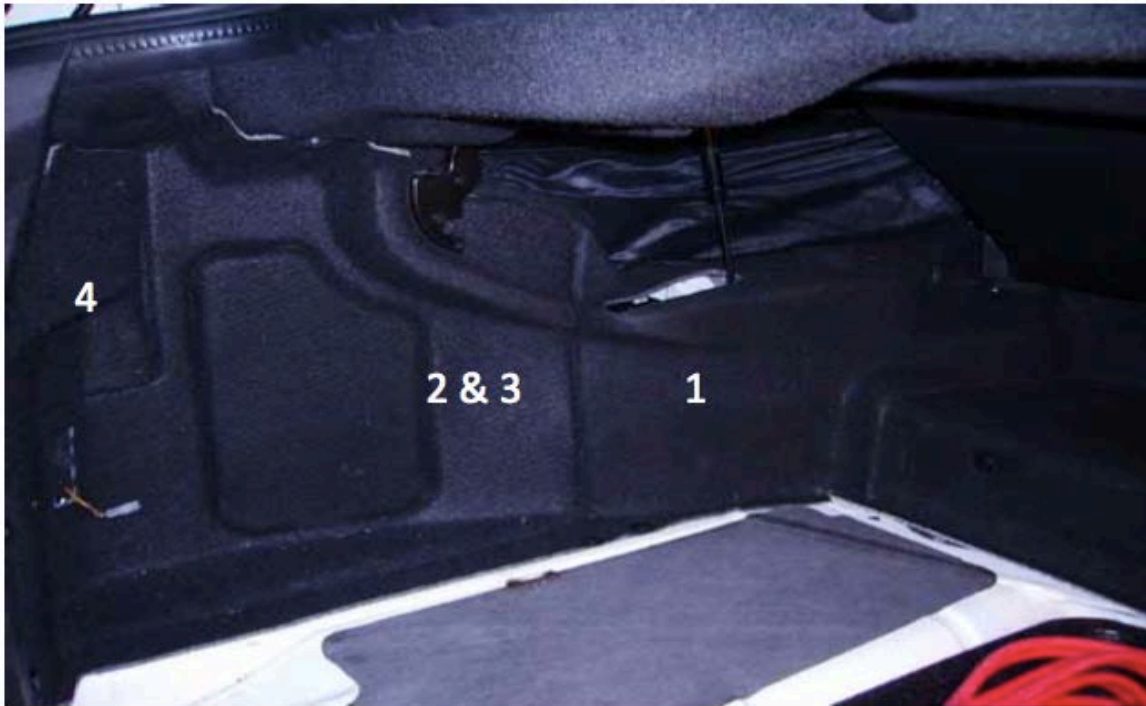
Graciously provided by bhoeffner from BenzWorld.org.

Another happy customer!



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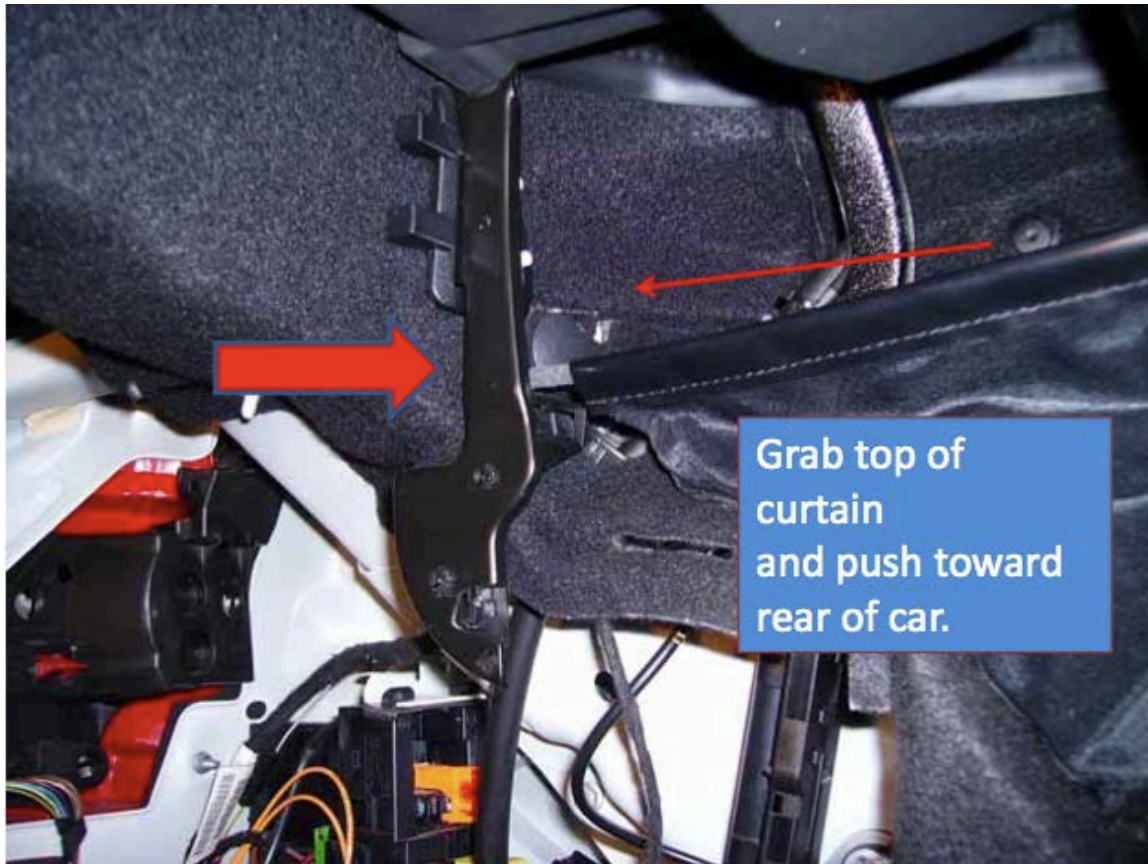
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The convertible top hydraulic pump is located on the driver's side of the trunk. All 4 of the carpeted interior panels need to be removed from that side of the trunk to allow easy access to the pump.

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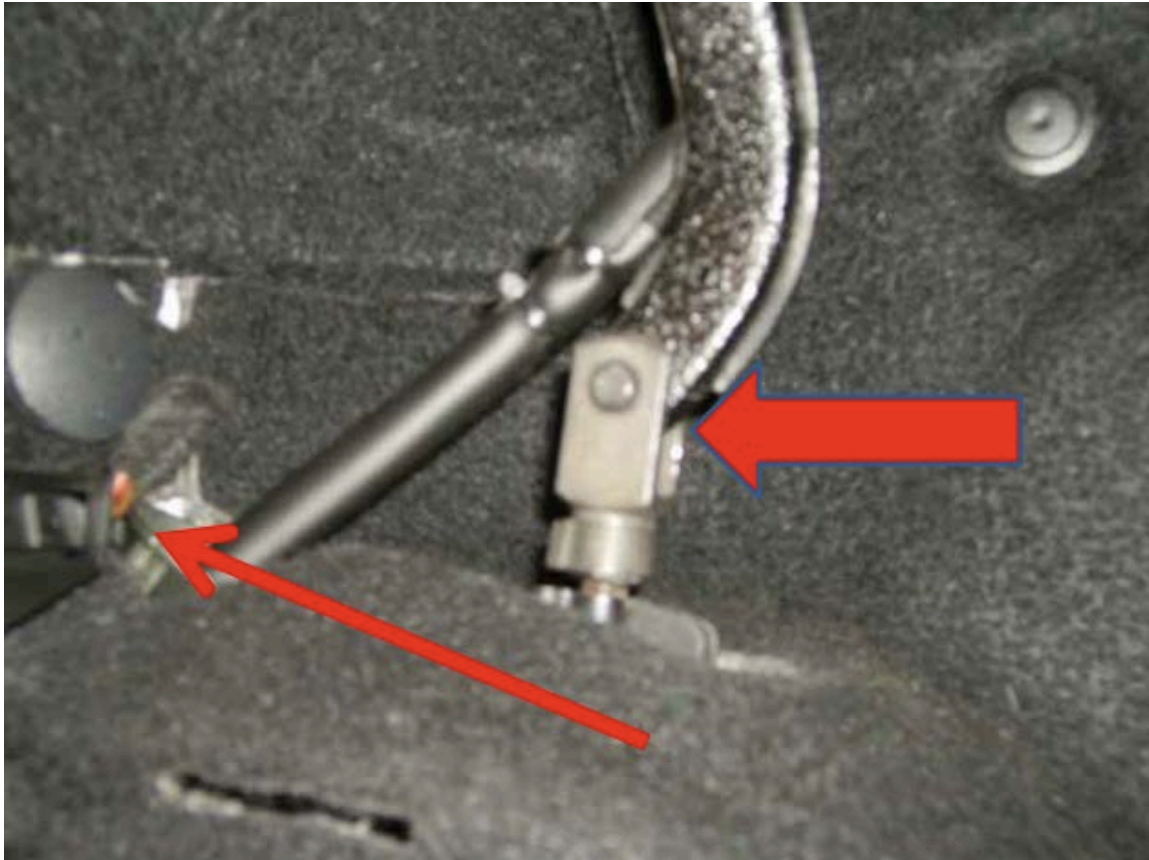
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Covers 2, 3, and 4 are very simple to remove. The larger cover, which I have labeled #1 takes some work. You must remove the hydraulic cylinder, the gas strut, nylon curtain (seen above), plastic bump stop, and disconnect two micro-switches.

We will start with the nylon curtain. The curtain is held by a simple loop located on the backside of the shown bracket. Once disconnected, flip the nylon cover out of the way.

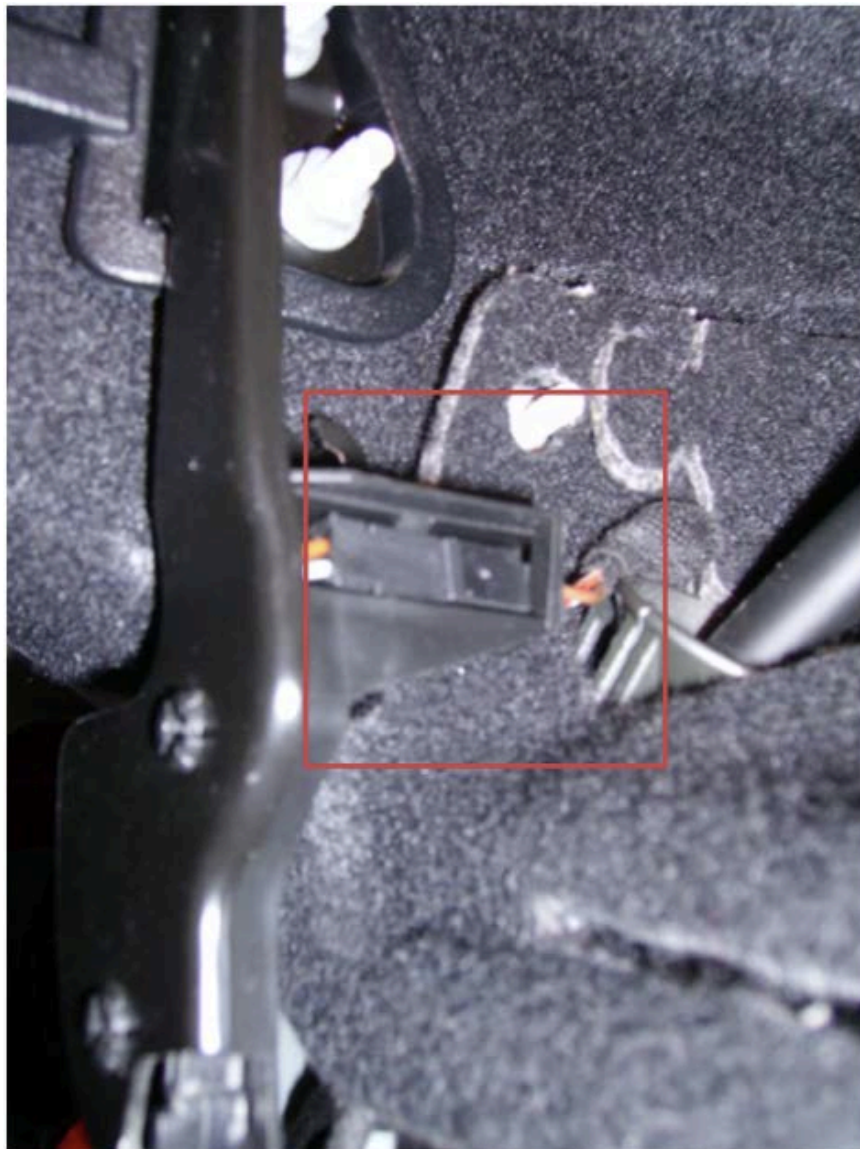
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With the nylon curtain out of the way, the next step is to disconnect the micro-switch and the hydraulic cylinder. Both are shown above.

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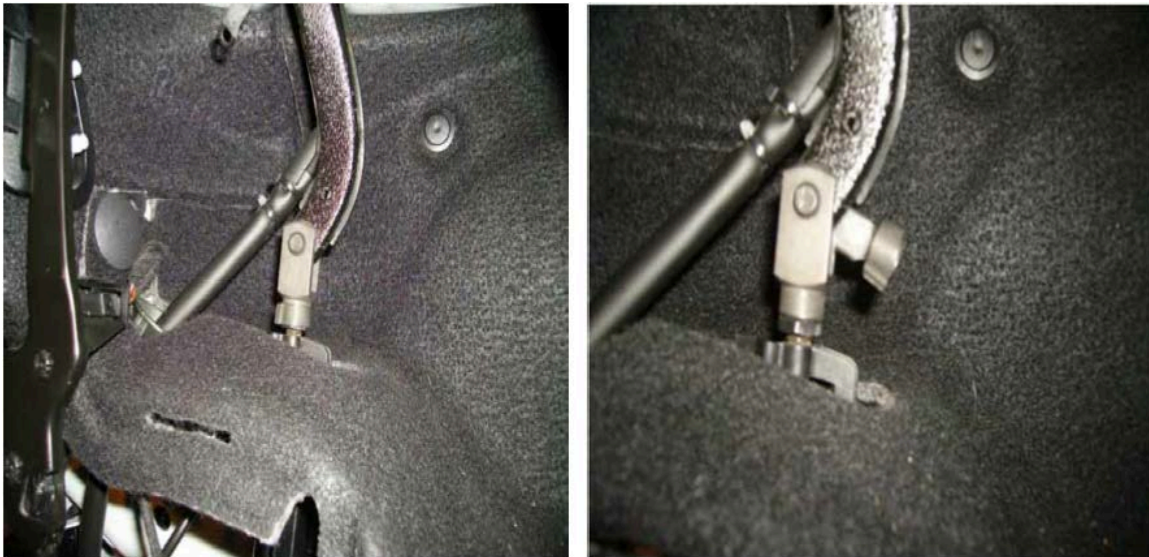
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To disconnect the micro-switch just pull the connector out.
Be careful, as the wires and connector are very small.

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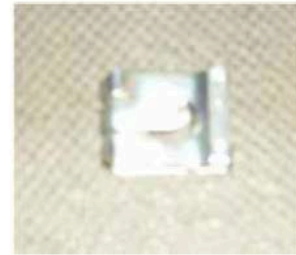
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To disconnect the hydraulic cylinder from the convertible top, flip the pin's retaining clip toward the front of the car (as seen in the photo on the right) and push the pin out.

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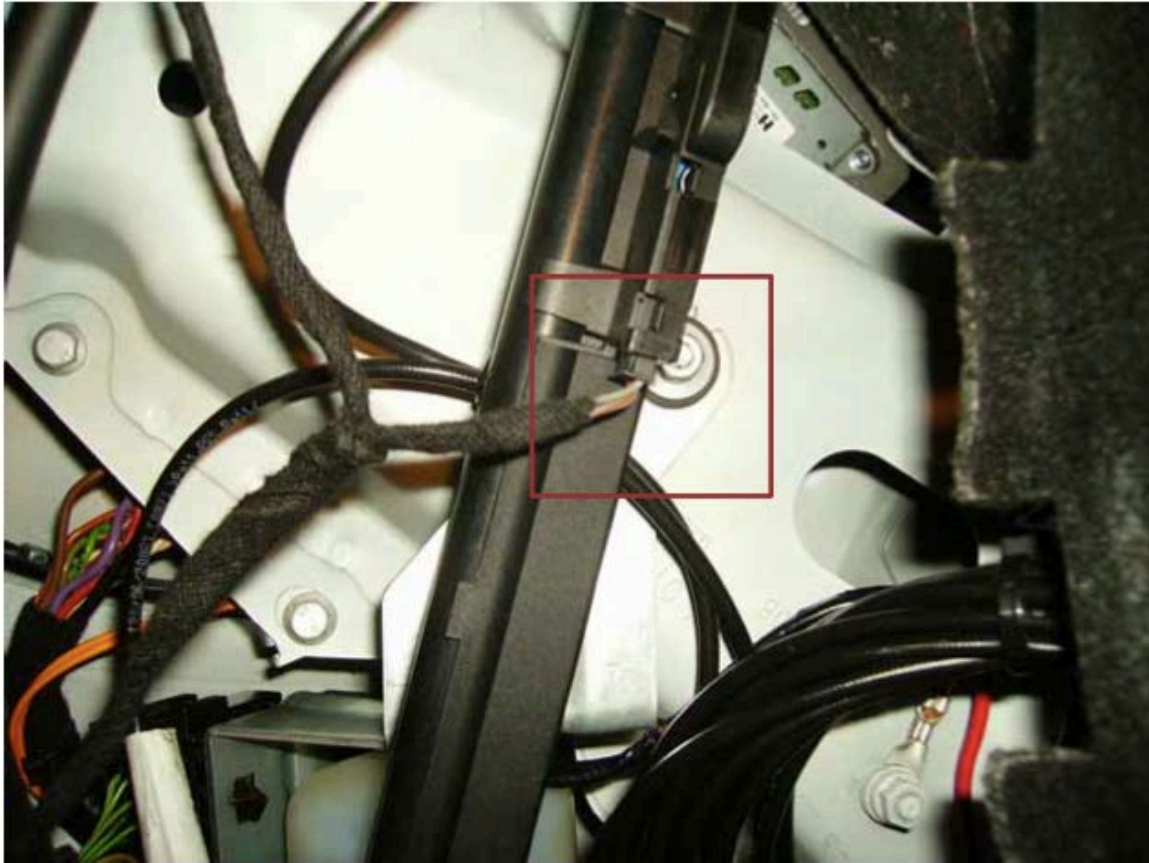


Picture of pin retaining clip.

Now disconnect the hydraulic cylinder from the floor of the trunk. This is done by removing the pin that holds the bottom of the cylinder to the support bracket. There is a retaining clip on the back side of the pin that must be removed before the pin can be pulled out. Removing this clip is not easy due to the limited work space.

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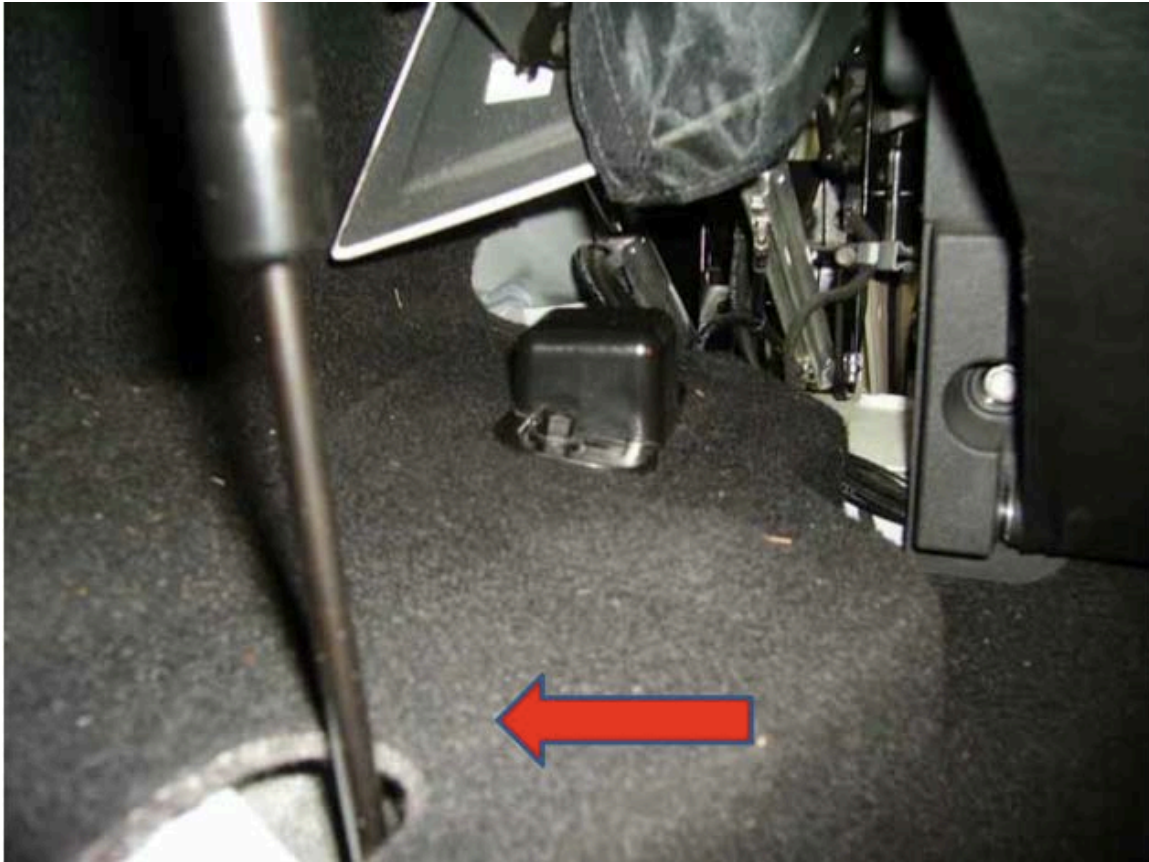
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Once the top and bottom pins on the hydraulic cylinder have been removed, disconnect the hydraulic cylinder micro-switch and lay the hydraulic cylinder on the floor of the trunk.

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Now move onto the gas strut that connects to the trunk partition and floor of the trunk. The strut does not have to be completely removed, only disconnected from the floor of the trunk so that the strut can be slid through the hole in the last carpeted interior panel as seen in the photo.

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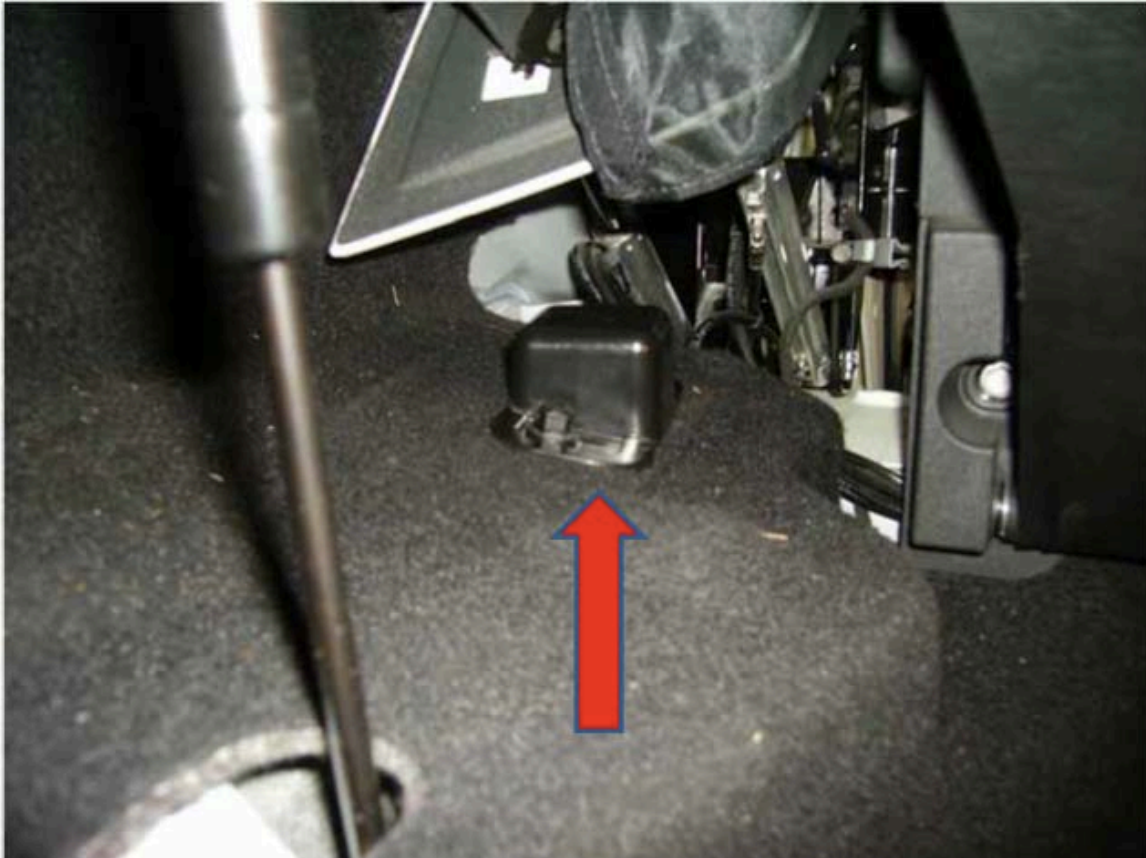
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Lift the carpeted panel up toward the top of the trunk to allow access to the connection of the gas strut to the trunk floor. A small screwdriver is needed to remove the retaining clip from the end of the strut. Pry the clip out of the plastic housing with the screwdriver blade to remove it.

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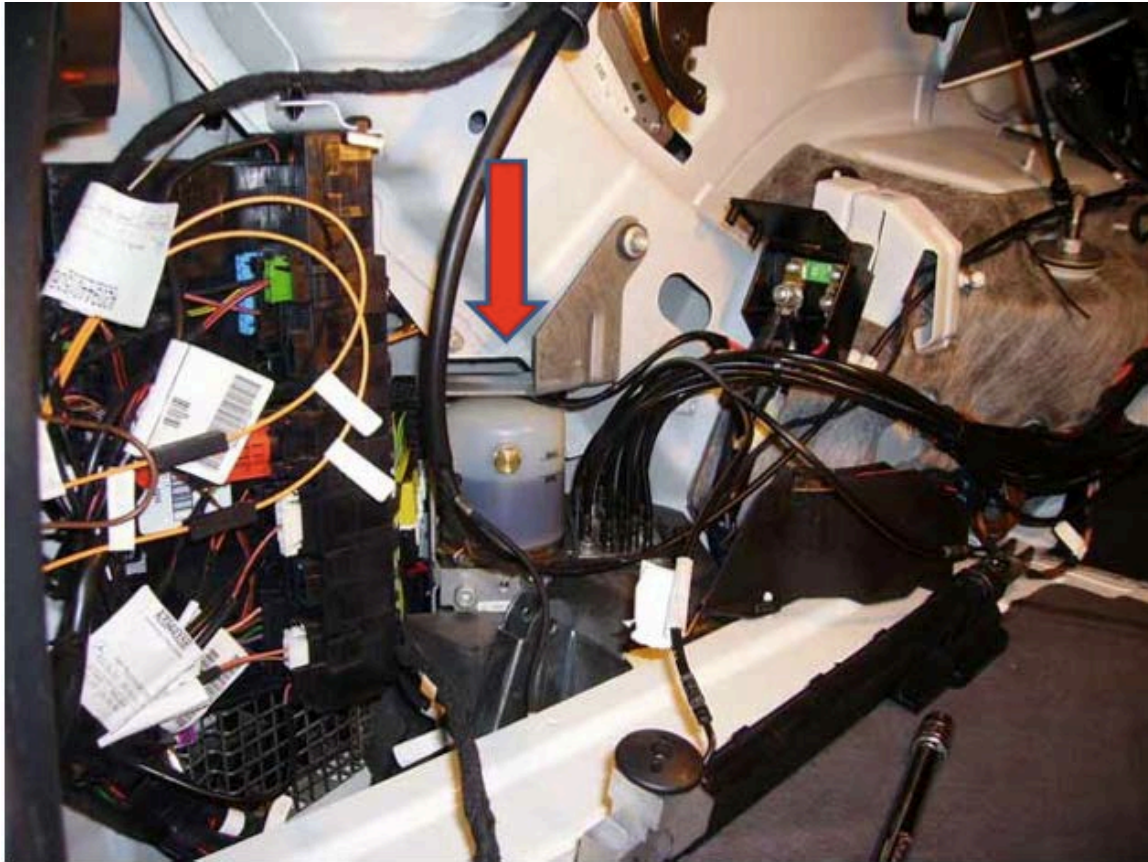
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The last item that must be removed is the plastic bump stop seen above. It is held in place by two plastic nuts. Use a 10mm wrench to loosen the nuts and remove the bump stop. After the bump stop is removed, pull the carpeted panel out of the trunk.

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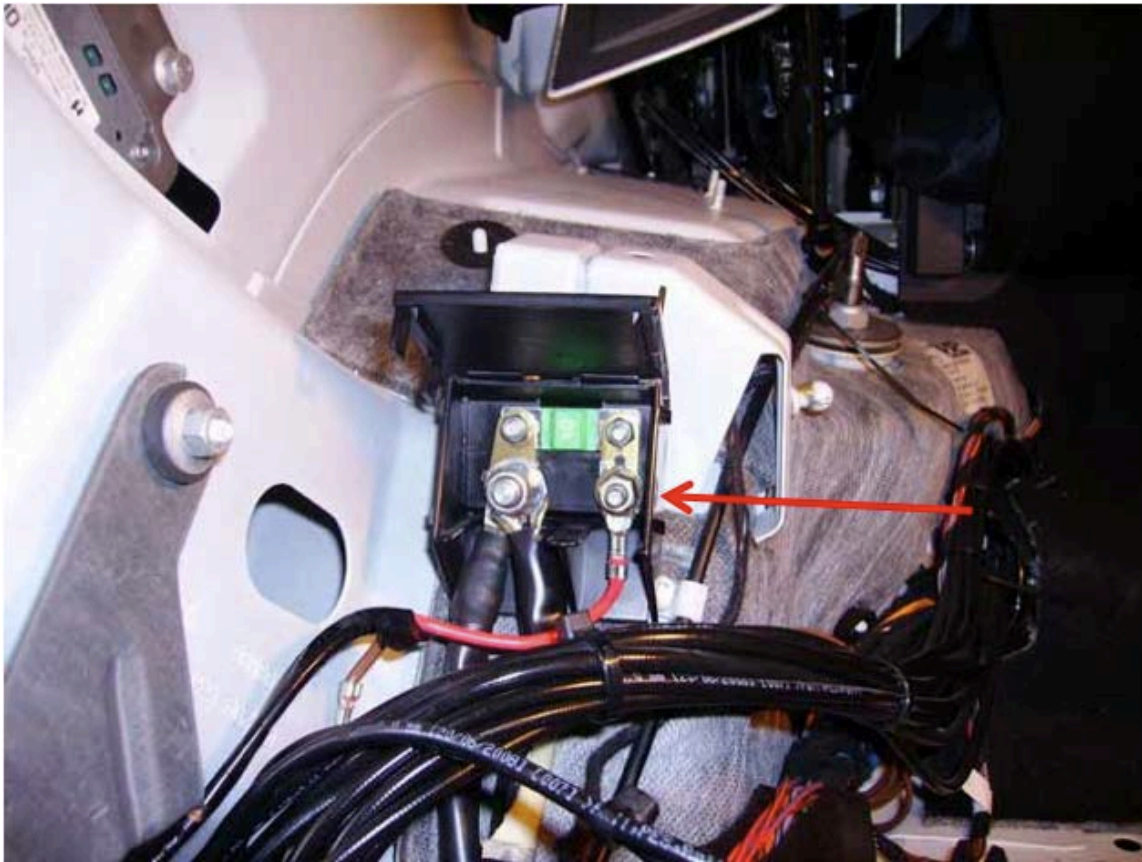
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Here's the view of the trunk with all of the carpeted panels removed. From here we get a great view of the convertible top hydraulic pump.

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The first step in removing the pump is disconnecting the electrical power. Remove the red wire using a 10mm socket.

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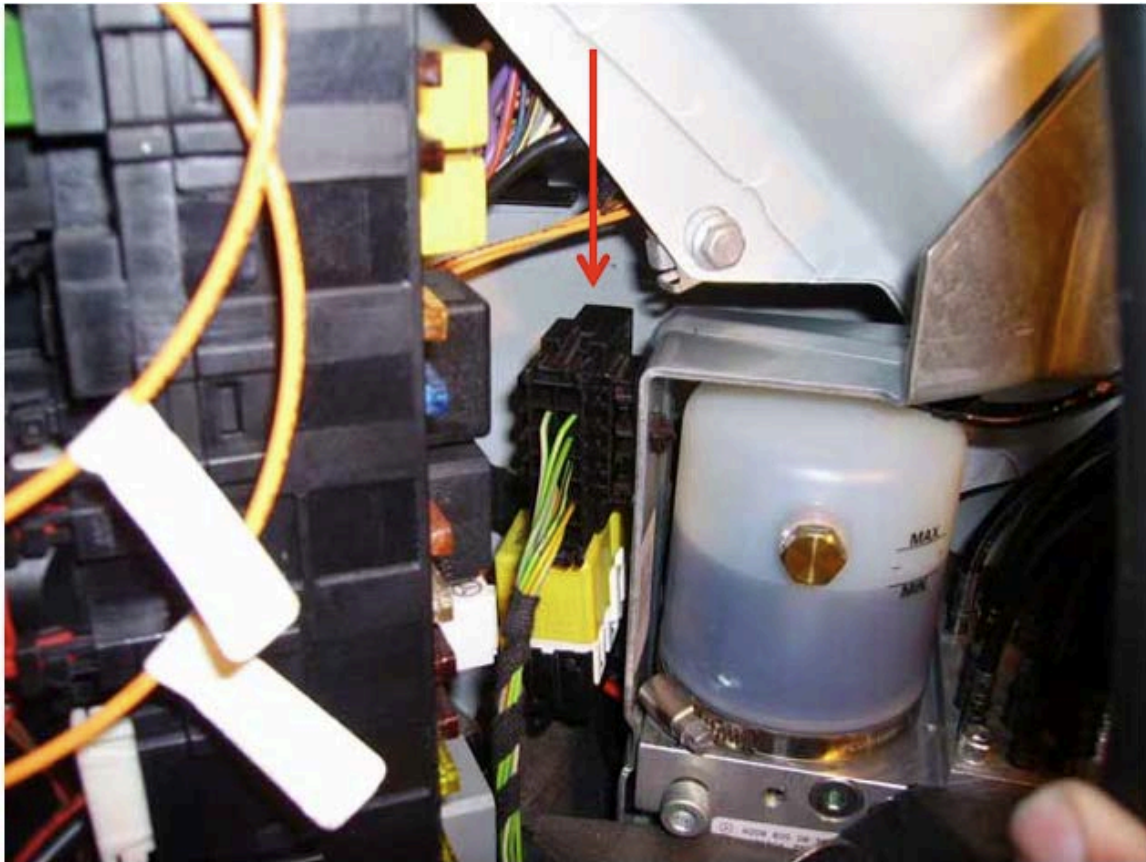
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Now disconnect the ground wire using a 10mm socket.

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Disconnect the black 14-pin connector from the pump motor.

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There is only one mounting point for the convertible top motor bracket as seen in the photo. Remove the nut using a 10mm socket. The pump simply lifts up and out of the foam block that holds it in place.

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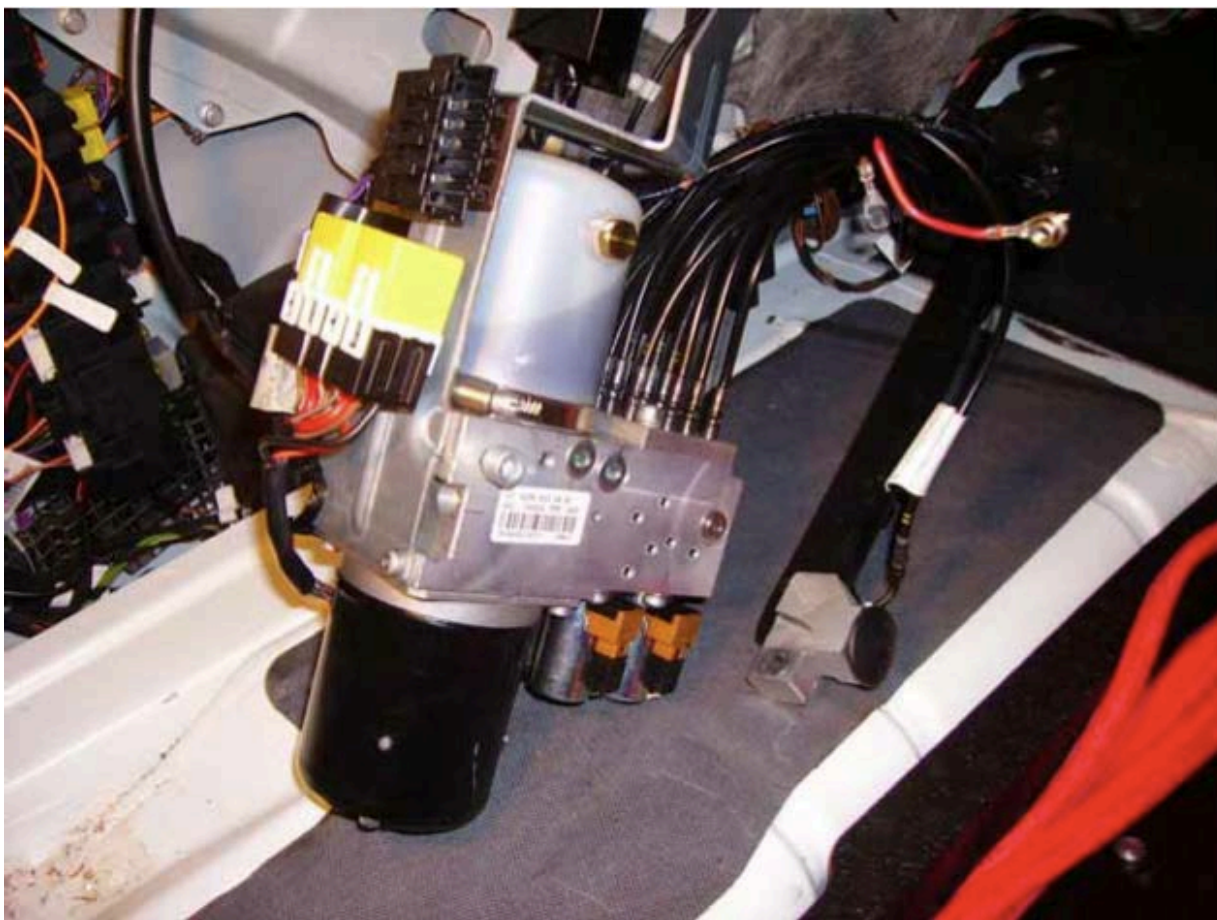
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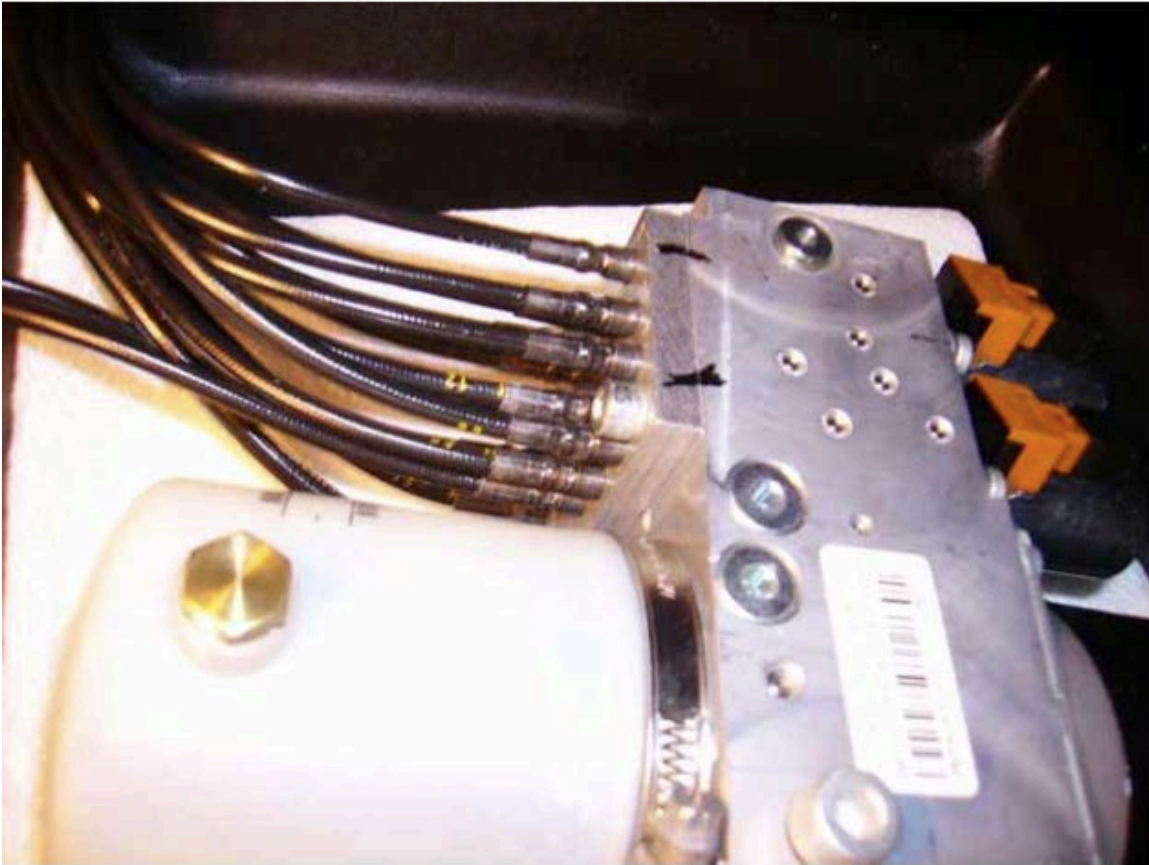
Making OEM convertible top cylinders "better than new"

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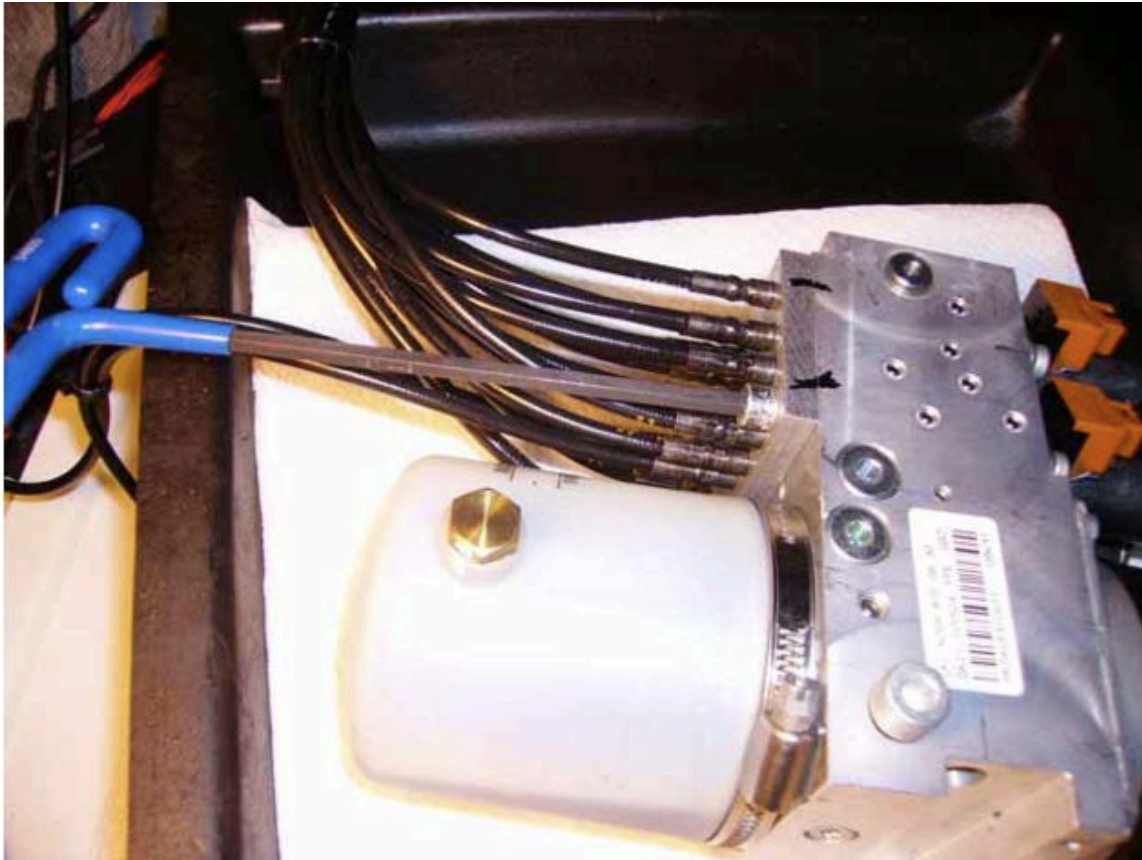
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Place the pump assembly in an oil catch pan. I lined mine with paper towels to keep the pump from getting scratched up and to absorb the hydraulic oil once the lines are disconnected. I marked the pump with the two black markings seen in the photo to ensure I replaced the hydraulic line backing plate correctly. This is not necessary as the plate only goes on one way.

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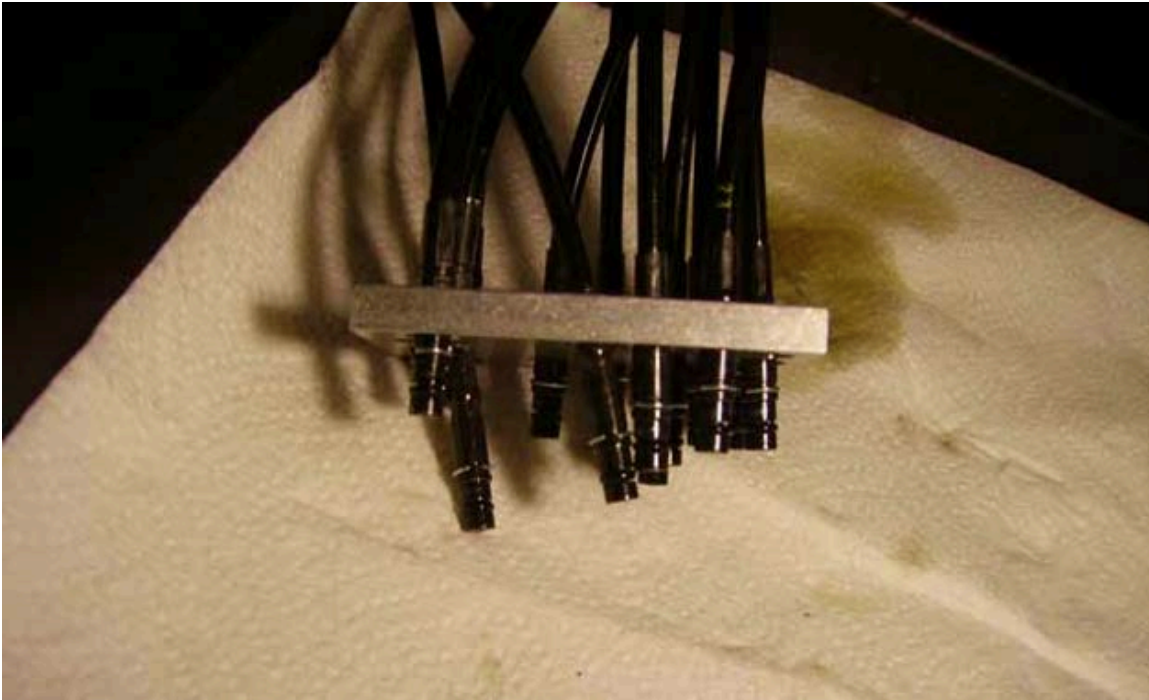
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Use a 5mm hex key to remove the three bolts that hold the backing plate. Once the three bolts are removed grasp each line individually work them loose from the pump assembly. The lines do not pull out of the backing plate so do not worry about marking them or indexing their location. The lines are fairly snug so it takes a little force to get them out. Be patient and work them out slowly, one by one.

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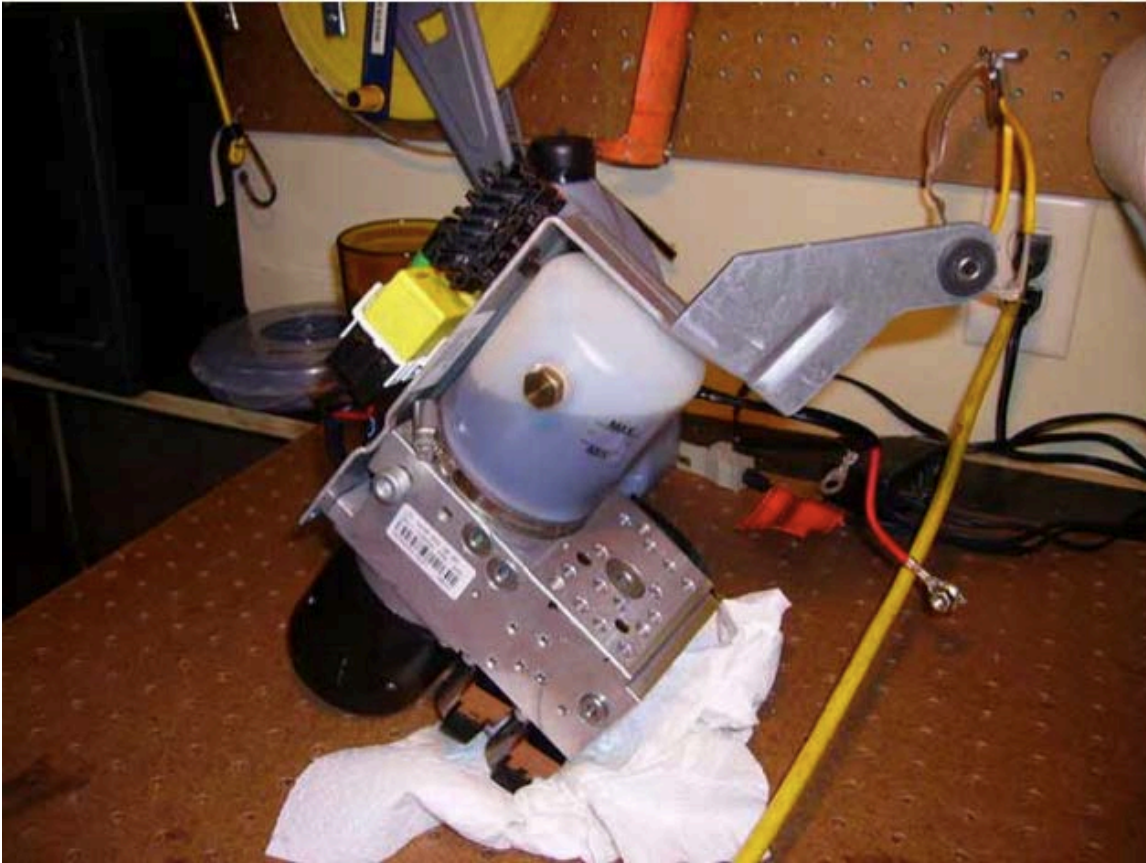
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Place loose hydraulic lines in a Ziploc bag filled with paper towels and stuff into the foam block that held the pump for safekeeping. Reconnect the hydraulic cylinder and the gas strut to keep them from bouncing around in the trunk. Note: you ***MUST*** reconnect both of the micro-switches before closing the trunk. Failure to do so will result in the trunk automatically locking. With those switches disconnected the car thinks the top is being operated and will not allow you to open the trunk. Not hard to overcome if it happens just unlock the trunk manually using the emergency key that's built into the key fob and open the trunk. I learned this the hard way.

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Here's the removed pump. Drain all the oil from the pump by removing the brass fitting that's located in the clear plastic fluid reservoir. Once drained replace brass nut. Pack pump safely in a box and ship to Top Hydraulics for rebuild service.

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My wife's car is her daily driver and she needs the trunk space, so I replaced all of the carpeted panels excluding the largest to protect the various electrical components in the trunk.

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