# **R129.** Removal of the rear cylinders.

Remove:

Plastic trim around the lock latches (two screws)

Top cover screws on the both sides (look under the weatherstrip if they are not seen.

Slide the top cover to the rear using you palm, but not remove yet. Lift the cover carefully and disconnect the electrical connector. Now you can remove the cover.

Remove the clips holding the hydraulic line. DO NOT LOOSE THE CLIPS.

Remove three torx bolts holding the latches. Carefully guide the latches out of the frame removing the hydraulic lines at the same time. Do not bend the lines. When putting the latches back, try to guide the lines carefully into the cylinders aligning at the right angle.

### **Rear locks.**

Remove:

- fuse cover.

- carpet and battery cover.
- windscreen of cause :)
- For the driver side the CD player is on your way and have to go for good ? :)
- clips for the carpeting
- carpeting
- Now you can remove the c-clip and swing the cylinder to reveal the nut.
- Remove the hydraulic line clips (NOT TO LOOSE THE CLIPS)
- The lock is all yours now.

Try to keep the piston inside the cylinder. Only pull it out when you need,

If you can not get the end tip out, try to soften the threadlock. Acetone or a nail polish come to mind. Propane torch is the last resort. In many cases, you can undo the rod from the lock if you use vise with the rubber overgrips and wipe the rod clean with solvent before tightening. Be careful though. Once you have the cylinder out, remove the snap ring with a small flat screwdriver and pull out all the guts.

Use rags to cover the lock and especially hydraulic line holes all the time during removal process, because a lot of oil will get pushed out of the cylinder when you cycle the rod.

## Rear bow cylinder removal.

The main idea is that you leave the front of the soft top unlatched. Put something on the front top frame to prevent latches from engagement. The tonneau cover should always be opened. The rear bow should be lowered into the rear compartment (horizontal position, cover is opened) when you are ready to undo the lower bolt from the inside. There is an opening for the bolt in the door jamb. You have to pull the inner side panel a little for the access and stick something to keep the panel out of the way.

Once the lower bolt is undone and removed, you lift the rear bow just a little to stick your hand inside and remove the clip and pin (or bolt only) on top. Now you can pull the cylinder out either from inside or from outside. If you try the later, keep the rear bow down (horizontal) as much as you can leaving yourself just enough gap to work. If you work from inside, the rear bow should be all way down. Before you start, look carefully how the micro switch on one side is located and how you should wiggle the cylinder to get it out. Pushing the rod all way in before pulling the cylinder out also helps. It is one of these situations when you have to remove a part from a small opening by positioning all the crap around it and orienting the part so that it can go thru.

Once the cylinder is clear, you can remove the line clips and free out the lines. It sounds more difficult than it is. Just do not rush it.

Rear bow actuator is a little tricky to take apart.

Put it in a vise. Use propane torch to heat up the threaded area of the gland. Heat it up from three sides where no hydraulic lines are coming out. When the threadlock starts to boil out of the thread try to unscrew the gland with a right angle strong snap ring pliers. Cool down and repeat if necessary. Do not rush.

### Main cylinders.

For the mains you have to remove the rear side panels, but first remove the rear box. After that, you will get access to the T-40 lower bolt (usually the access hole is covered by a plug). Undo the lower bolt. The top is obvious. Pull the cylinder out, disconnect the hydraulic lines.

## R129 hydraulic cylinders disassembly.

### Rear bow actuators.

While replacing these seals, be sure to use heat to undo the cylinder's gland nut.

Remove the end tip from the rod.

If it can not be unscrewed by hand do the following:

- extend the rod all way;

- wipe it clean with any solvent to remove the oil;
- place the rod in the vise with leather or rubber overgrips (careful, do not damage the rod);
- unscrew the end tip with a wrench.

Push the rod all way into the cylinder.

Protect the rod thread (heat shrink or a scotch tape).

Place the cylinder in the vise the rod end pointing up.

Heat the cylinder with a propane torch from three side (where there is no hydraulic lines coming into) until you see some bubbling from the gland nut thread.

At this point, quickly unscrew the gland nut with a right angle needle nose pliers.

Slide the gland nut from the rod.

The seal is inside the gland nut. The black o-ring is inside the cylinder (if you decide not to replace the black o-ring, there is no need to pull the rod with the piston out of the cylinder).

### R129 main cylinder disassembly.

Disassemble in similar fashion to the A124 (see attached file).

#### R129 lock cylinders and tonneau cover actuators.

#### SNAP RING REMOVAL FROM MB LOCK CYLINDERS

Try to put the cylinder in the vise the rod up and push the rod all way in.

Now, find a suitable socket and lightly tap on the gland nut (seal holder). The point is to move it inside slightly to break it loose. It is only pushed up by the black o-ring.

Take a small sharp and high quality (difficult to find these days, I know) screwdriver. Rotate the snap ring into comfortable position and stick the screwdriver in between the snap ring and the cylinder wall. Do it closer to the snap ring end. Rock the screwdriver back and forth and push to get it in between the ring and the cylinder. Nothing else will work, but the screwdriver will get in.

After few tries to find a comfortable distance from the ring end, you should be able to leverage the ring out. Cover the ring with your thumb or a rag to keep it, as it will fly away. It is nothing, but a powerful spring. First snap ring seems to be impossible to remove, next one is a few sec job.

Watch a video: https://www.youtube.com/watch?v=ld4uXs\_4R3Q