



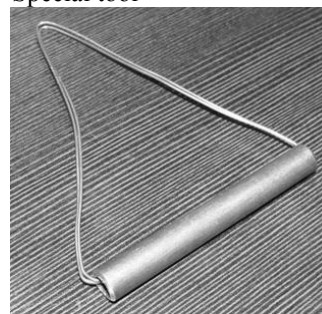
Upgrade from Manual to Automatic Mover

Step by step procedure

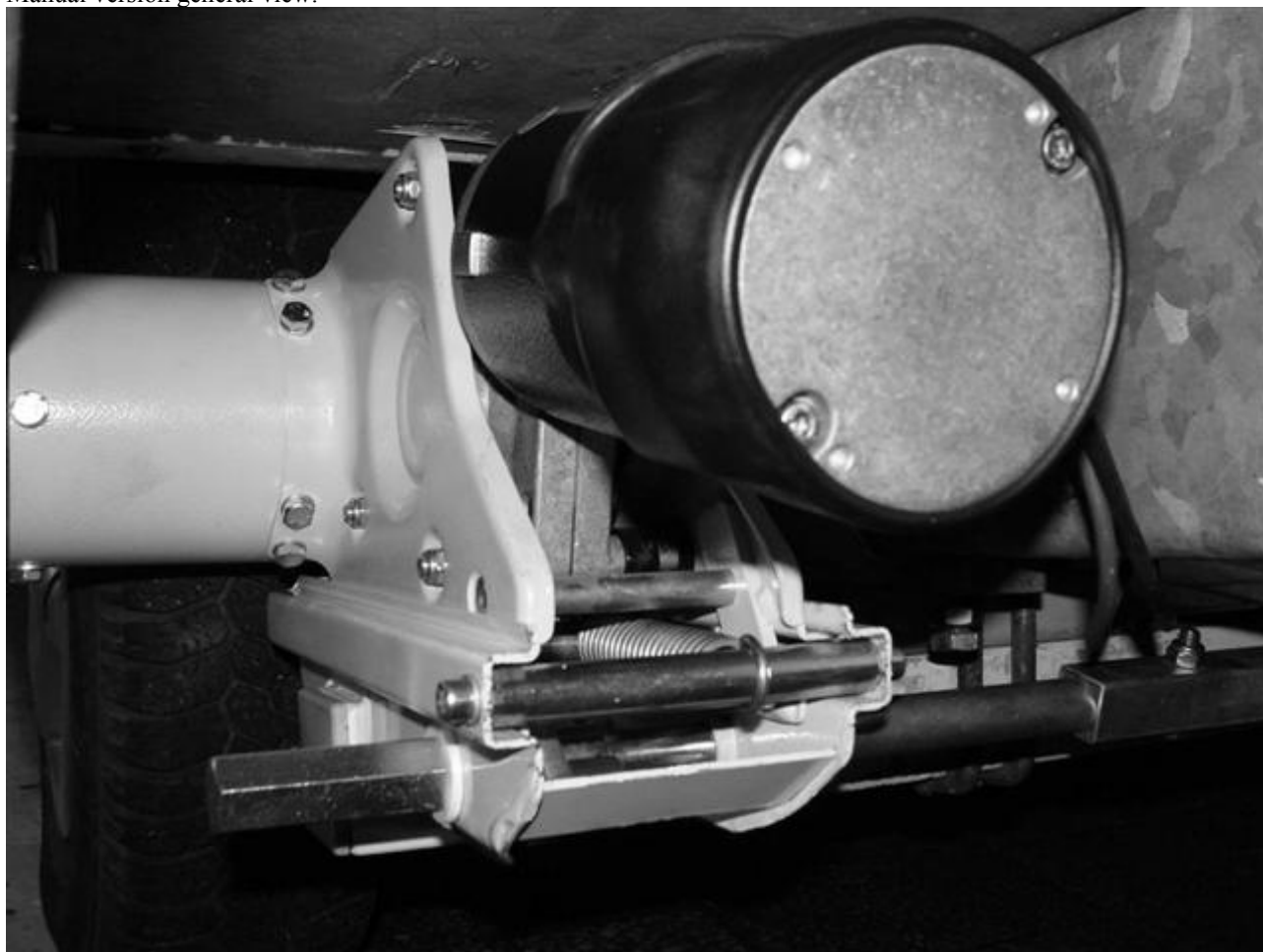
Tools needed:

- 10mm open-end spanner x2 (or one flat one 10mm socket)
- 3mm hex key
- 4mm hex key
- 5mm hex key
- 19mm spanner (optional)
- small hammer
- pointed awl (dradawl) 3-4mm
- flat screwdriver
- special tool (optional)

Special tool



Manual version general view.



Time needed for the complete upgrade appr. 2 hours.

Warning! MAIN battery must be disconnected before starting any work

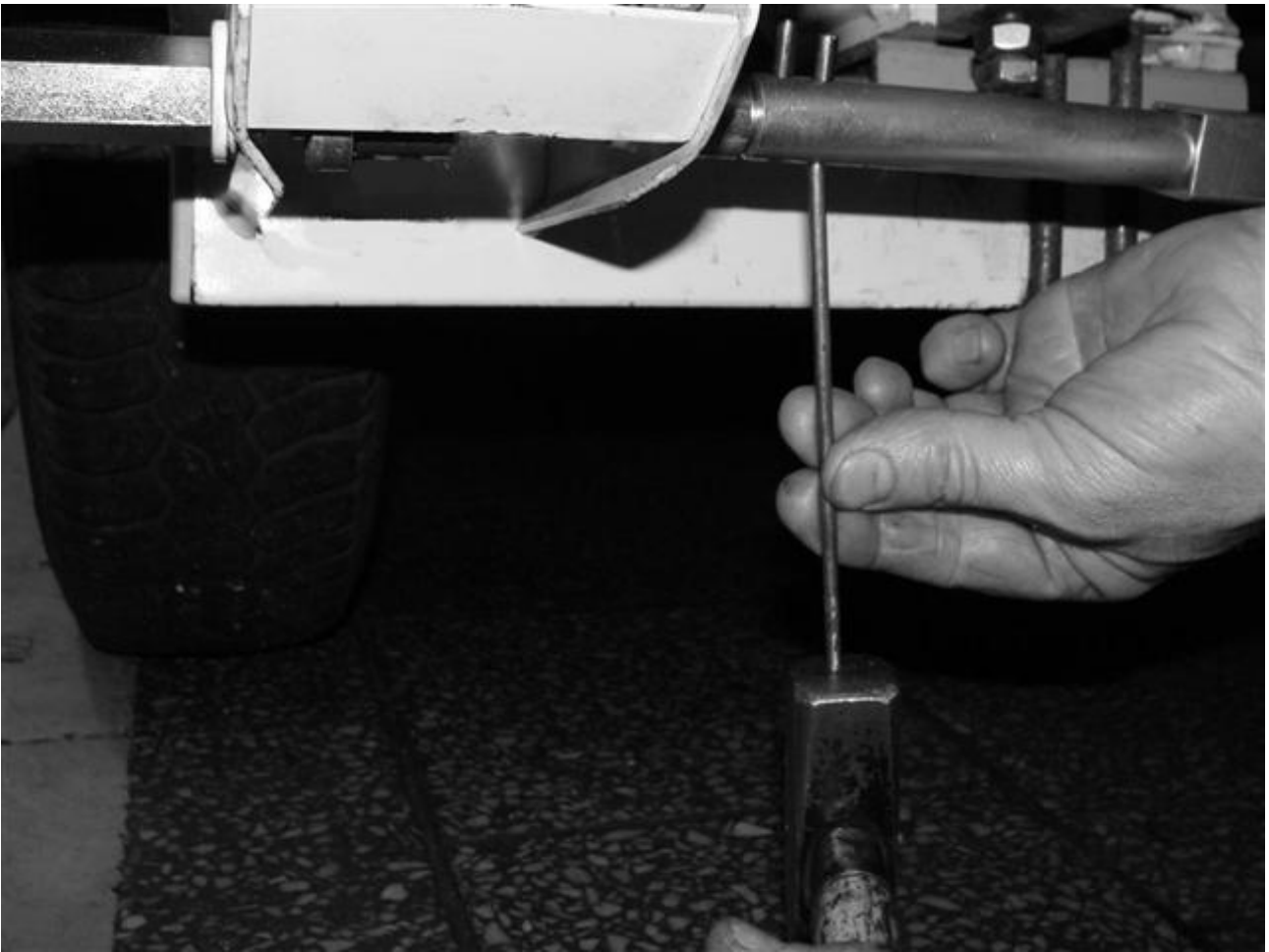
Disconnect motor cables (you may want to remove protective grommet first).



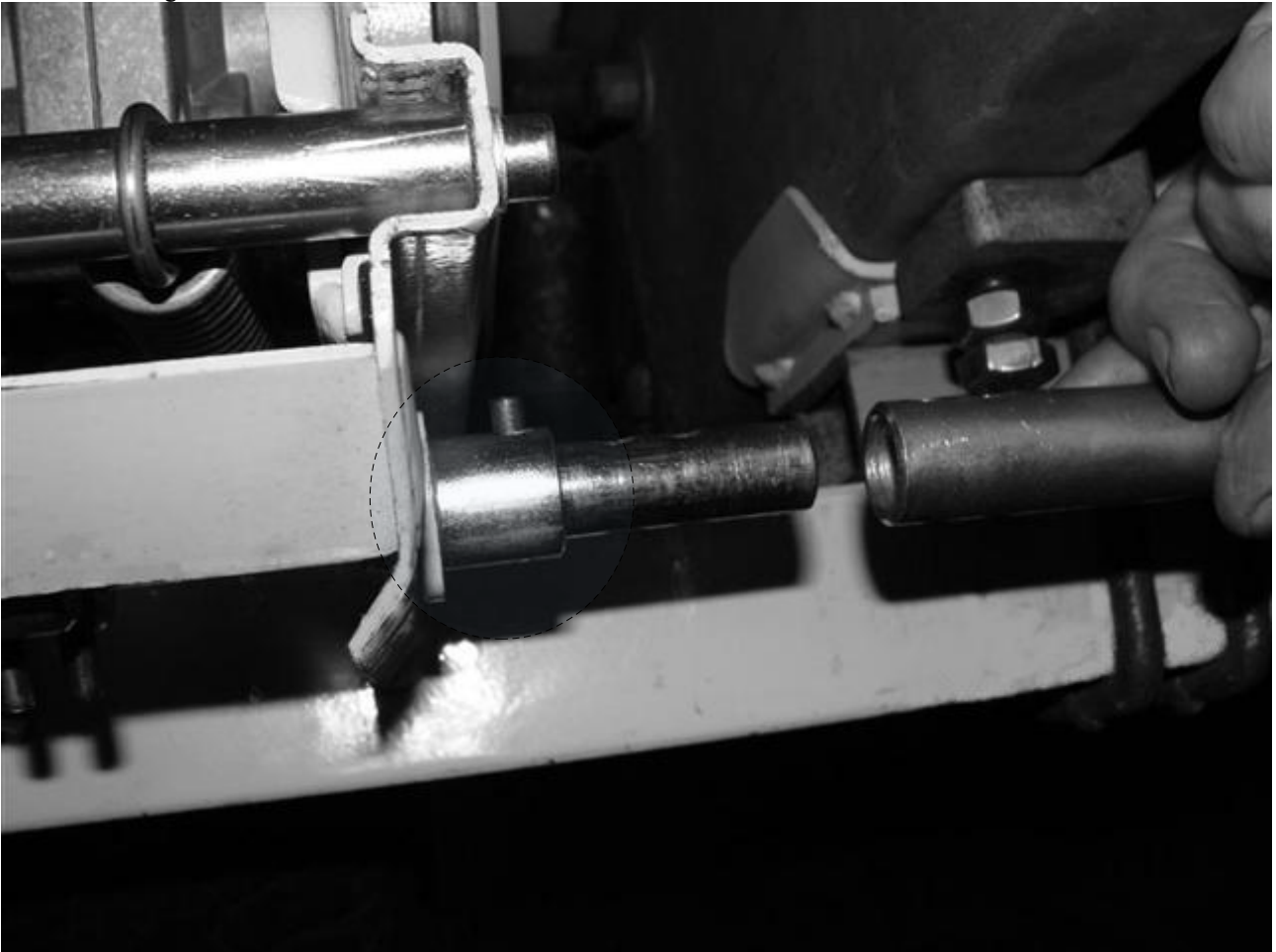
Loosen two 10mm screws on square cross-bar (first loosen counter-screws).



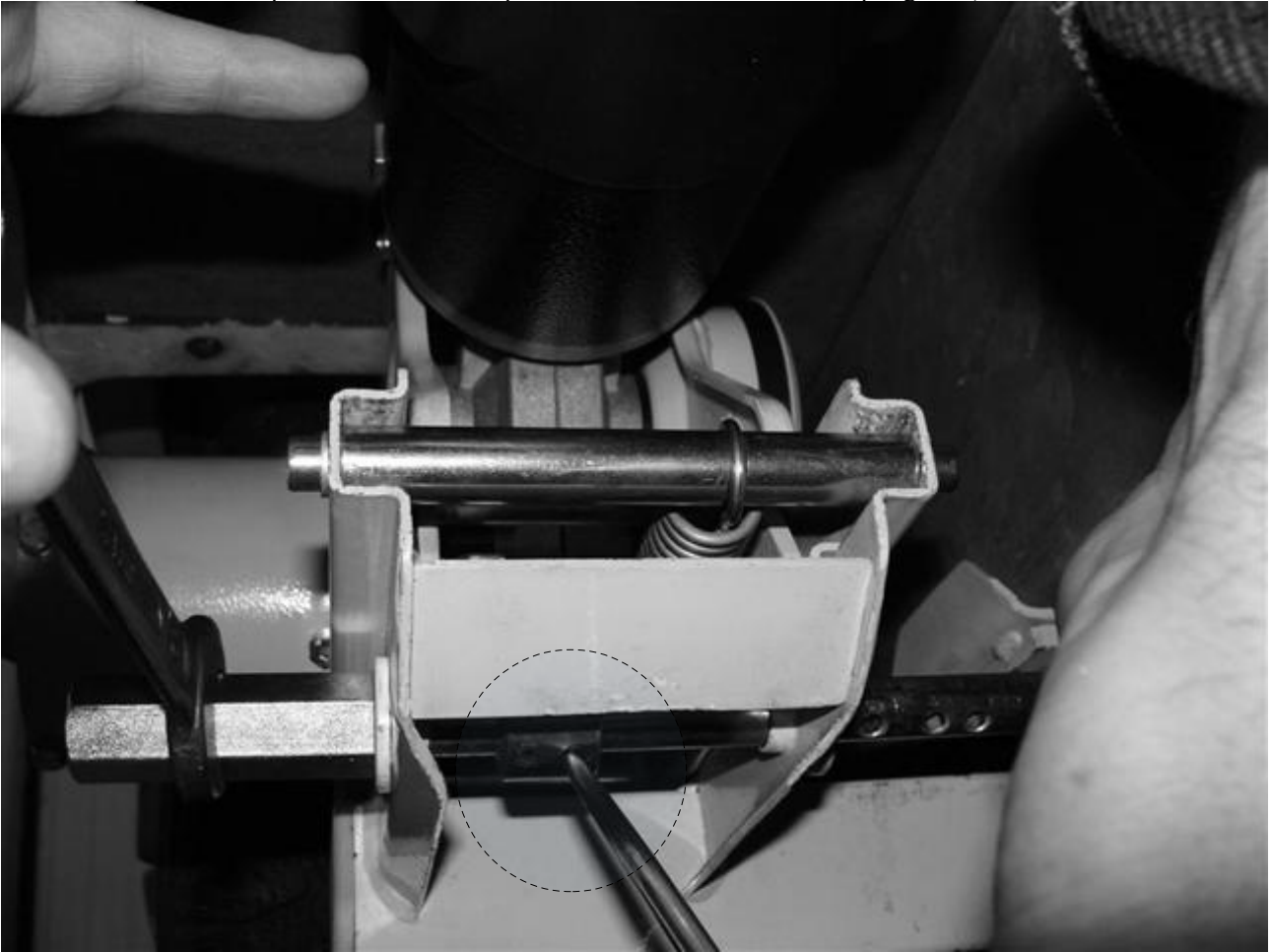
Hammer out the two dowels on extension tube.



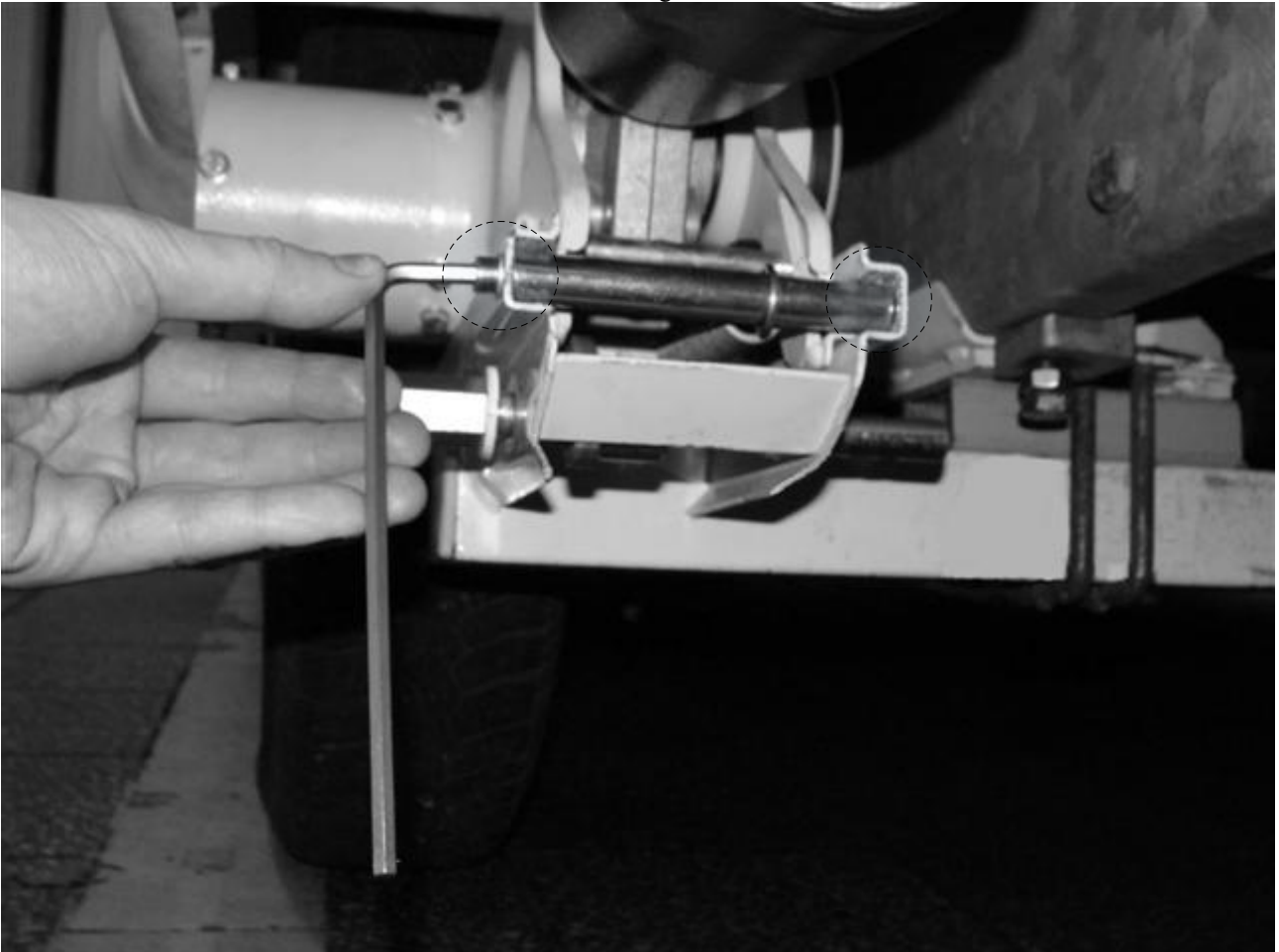
Slide the tube off the shaft (it will slide into square centre section). Hammer out the third dowel and remove the distance bushing.



Hammer out the two remaining dowels off the lever (you may want to turn the camshaft forward (19mm spanner) to get better access; secure the spanner or ask another person to hold it – camshaft will spring back)



Remove the two 5mm hex screws on both sides of the retaining shaft.



Remove the retaining shaft by pulling the spring/the shaft itself. You may want to use the special tool or similar tool to hold the spring eye.



Slide out the camshaft, lever and nylon washers.

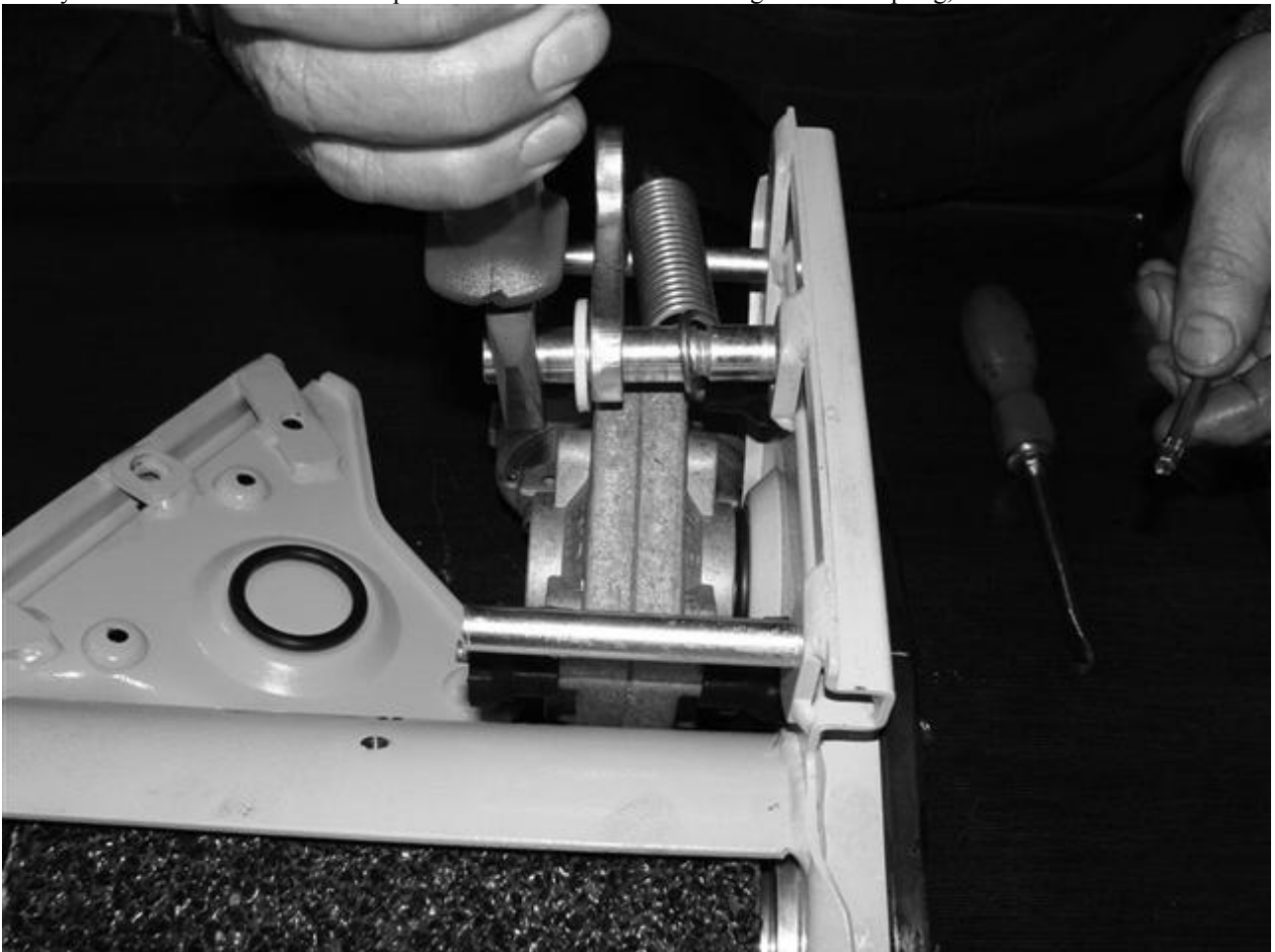


Raise the spring and lever member to slide the whole carrier off the caravan.

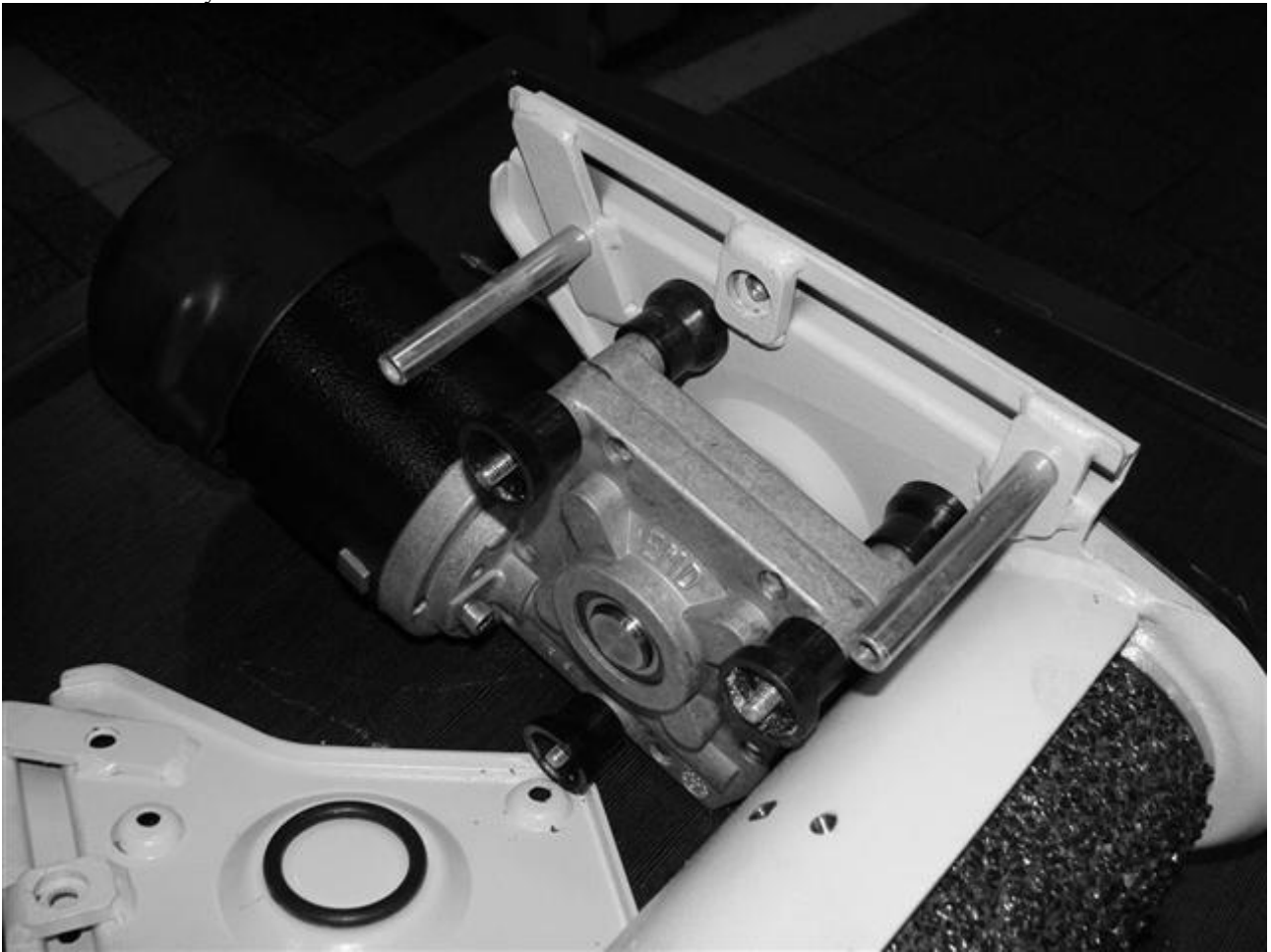




Now you can remove the whole side plate. Remove the middle retaining shaft with spring, washer and lever member.



Carrier is now ready to fit the actuator.



Reassembly the side plate. The reassembly procedure is reversal of the removal.

Now the carrier is ready for refitting.

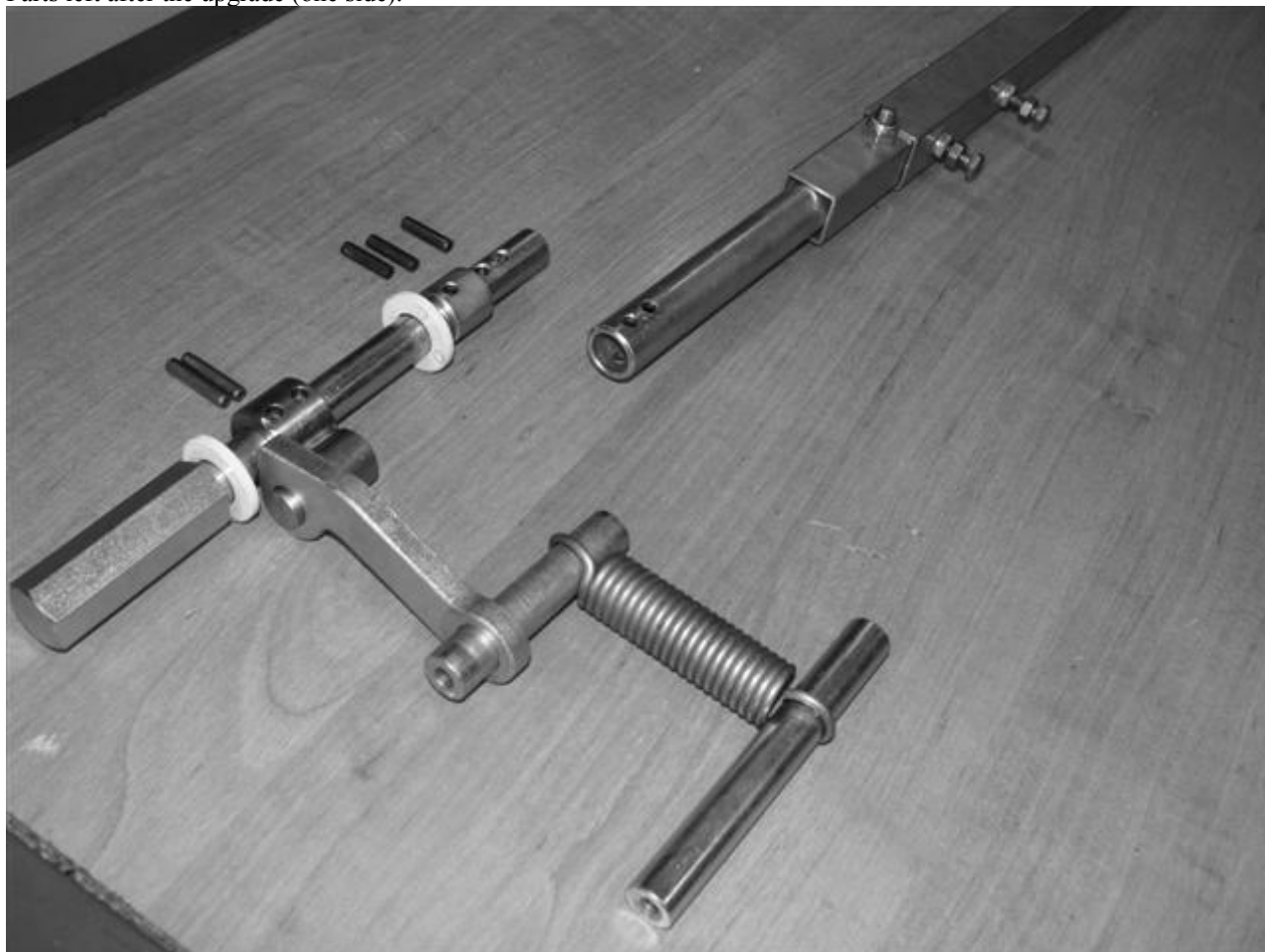


Slide the carrier into the mover, secure the actuator bracket with the two 5mm hex screws with washers, fit a plug where camshaft went and fit protective grommet onto the actuator bracket.

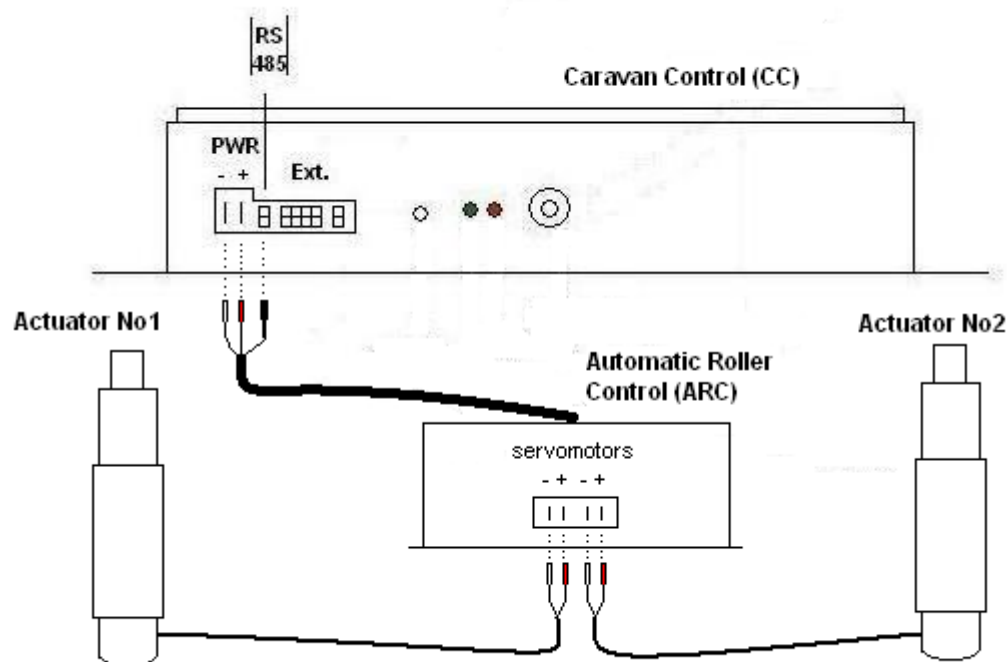


Repeat the whole procedure with the other side of the mover.

Parts left after the upgrade (one side).



Electrical assembly



1. Lead the actuator wires to where the Automatic Roller Control (ARC) is fitted. Remember to leave a bit of slack wires to allow full swing of actuators. Do not cut the wires to length - wind the extent in a coil instead (the automatic individual tyre pressure sensors may not work properly with different length of wires)
2. Connect actuator wires to ARC (servomotor socket). Mind polarity (red connectors are positive (+))

3. Connect the ARC to caravan control box (CC) using PWR + - and RS485 sockets. Red connector is positive polarity (+)
4. Open the (CC) cover. Plug a 20A fuse into socket. Make sure the small dip switch (beside fuse socket) is at RCU position. Replace the cover.
5. Connect main battery. System is ready to work. Check operation of automatic rollers.