### Gearbox removal

**By Volodjushka**

#### Works in the motor compartment

Remove the battery negative terminal with a 10 mm wrench.

Loosen and remove the starter motor upper bolt with a 13 mm wrench.

For 214: Remove two bolts (13mm wrench) from the receiver plate and remove it:

### Works in the cockpit

Remove the transfer case lever handles by twisting while pulling upwards.

Remove 6 screws from the plastic lever cover. A short screwdriver (left bottom picture) is needed to remove one of the screws. Turn the cover to the left so the tab clears the heater cover and take it out completely (older models don't have this tab:}
Turn off 3 screws and remove the transfer case levers rubber cover. Remove the diff lock light wires from the switch (don't pull on the wires; only grab and pull the plastic terminal sheathing). Turn off 2 screws and remove the gearbox shifting mechanism rubber cover. Shift the gearbox in reverse gear. Use a small screwdriver to push on the shift lever plastic retainer and pull the shift lever up to completely remove it from the shifting mechanism extension.
Remove the plastic retainer using four small screwdrivers to keep the tabs open, and then pull it out of the shifting mechanism extension:

Works from below

For 214: Use a 13mm wrench to turn off two fastening bolts of the sump guard (in front). The left picture shows the bottom edge of the radiator and the right picture shows the skirt of the forward panel:
For 214: Remove the remaining 2 rear bolts of the sump guard with the 13mm wrench.

Mark the driveshaft flanges with a chisel to ensure they’re installed correctly during the reassembly procedure. When removing the flange nuts, don’t suppose the bolts rest against the universal joint yoke (left picture). If the bolt can’t be pulled out from the flange, insert the chisel between the bolt and the flange and strike 1-3 times with a hammer. Now the bolt will separate (right picture):

Disconnect the rear driveshaft from the transfer case. If the flanges are stuck together insert the chisel between them and strike 1-2 times with the hammer. Tie the driveshaft to the muffler:
Remove the front driveshaft.

Disconnect the speedometer cable and remove the sealing washer (be careful not to lose it!)

Set the cable aside.

For 214: Grab the speed sensor with pliers and pull out the wire socket and the sealing washer. Remove the 4 catalytic converter heat shield nuts with a 10mm wrench:

Using two 19mm wrenches, remove the flexible coupling fastening bolts. Put a large clamp on the flexible coupling before removing the bolts:
Pull out the three bolts one at a time by turning the gearbox flange in the right position as shown in the pictures. The left picture shows the view from the transfer case and the right shows the view from the engine side:

Pull out the cotter pin, remove the clutch slave cylinder bolts with a 13mm wrench and take it out:

Bolts are pulled out only in this position of the gearbox flange.

Loosen the 4 transfer case mount fastening nuts almost to the end of the stud threads, hold the transfer case with one hand and take out the nuts completely to remove the transfer case:
Use a long socket extension (or several short ones connected together) and a 13mm socket to remove the middle and bottom bolts of the starter. Shift the starter 1-2 cm towards the radiator:

Remove the wires from the reverse light switch and undo the bolt of the muffler receiving pipe collar:

For 214: Take out 2 nuts of the muffler collar bracket, otherwise the gearbox will be impossible to remove:
Use a 10mm wrench to remove two bolts of the front bellhousing cover and use a 13mm wrench to remove the four gearbox rear crossmember nuts:

Remove 3 of the 4 engine-to-gearbox fastening bolts with a 19mm socket. To remove the top right one you’ll need an extension piece of 1 – 1.2 m (see the right picture), then undo the top left bolt ad finally the bottom right one:
Loosen the remaining bottom left bolt slightly. Then, holding the gearbox with one hand, remove the bolt completely:

Do not leave the gearbox hanging on the input shaft as the clutch driven disc and/or the input shaft bearing spring (thrust) washer may break. Use both hands to shake the gearbox up-and-down, separate it from the engine until the shifting mechanism extension rubs against the edge of the hole in the floor tunnel. Rest the bellhousing on the front sway bar and incline the rear end of the gearbox until the shifting mechanism gets down and out the tunnel floor hole. The gearbox is now removed from the vehicle.

**Works on the removed gearbox**

Remove the shifting mechanism rubber cup, the muffler fastening bracket, the gearbox rear crossmember and the clutch release bearing fork (to check up for cracks).

With a little practice the little gearbox can be removed in one hour.

**Washing of the gearbox outside**

Take the gearbox to a car wash and wash the outside with high pressure hot water. Spray on a can of engine degreaser and let it soak for ten minutes, finally wash it again to remove the loosened out dirt and grime:
After drying with compressed air the gearbox is now ready for disassembly.

Volodjushka, 13.03.03.