# RADZIKONE LIFT KIT 3" OR 4" FOR SUZUKI VITARA I (1988-1999) INSTALLATION INSTRUCTION

### **IMPORTANT:**

- 1. "Tatra" effect (wrong front wheel angle), depends on driving style, will maintain even <u>for few thousand kilometers</u>. If this effect won't dissapear you have to check the wheel alignment setting.
- 2. If the rear propeller shaft spiders are old and producing chattering or rattling noise, inspect them for wear. Check to see if cross spider rattles in yokes or if splines are worn down and replace defective shaft propeller with new one.
- 3. After 100km drive or after first off-road drive, check the tightness of all bolts which you screwed during the installation.
- 4. If you want to replace oil in front lowered axle you should fill it with oil after you lift the front of the car the easiest way is to park the front of your car on steep hill. Ultimately there should be 1L of oil in front axle.

#### Each lift kits elements should be install in below order:

## **REAR OF THE CAR:**

- 1. Loosen handbrake cable holders on the transverse part of chassis (there where the rear control arm is screwed, wrench 12) and lower arms (wrench 10). Instead of screws use cable ties loosely (included in a set).
- 2. Replace axle venting hose (two hoses are included the shorter one to the rear).
- 3. Install rear prop spacer and rear control arm spacer.
- Replace rear springs (Kayaba): Tight spring coils to the bottom.
- 5. Replace rear shocks m10 screws inculded in a set (replace original m12 screws).
- 6. Tigthen the spring gooing from the rear control arm to proportioning valve.

## **FRONT OF THE CAR:**

- 7. As we are experienced it's better to start with loosen nuts and front steering tie rod end adjusting sleeves, because after whole lift kit installation you will need them to set the wheel alignment.

  If they won't loosen easily, the best would be to take them out all togheter it would be easier to deal with them.
- 8. Install lowering diff drop bracket kit: dismantle old, three brackets. New brackets fit to both types of axles: with 3 and 4 screws. Then install two front brackets (left and right) by screwing M12 screws to the frame first. Don't screw the screws until all three brackets will be on their places. Next screw rear bracket. Right, shorter bracket should be screwed with using thread glue.
- 9. Replace front axle venting hose (two hoses are included the longer one to the front).
- 10. Take out old front springs and install bump stop spacers (silver hexagonal shape). First screw the bump stop into the bump stop spacer. Next screw this into the frame chassis.
- 11. Replace front Lesjofors springs.

<u>Don't use spring extractor!</u> Compress the new spring with car jack placed in the end of A-arm. Set the spring in the a-arm as it's shown in photo - flat part to the top (it fits very tight so it's not simple).

The front spring MUST BE installed like it's shown in the instruction. It can't touch the front shock or the bump stop inside the spring. Otherwise there will be "banana effect" which may cause that the spring will be touching the bump stop and as the result the spring will break.

12. Install front strut spacers ("L" means the left side, "P" is the right side) with arrows pointed to the front of yours Vitara. It should be installed above the front shock absorbers. Set the upper suspension strut with a maximum offset to the center of the car (using the "oval regulating holes" in the strut spacer).

- 13. Grind the "thin collar" on the front shock absorbers (only if it rubs/touches the spring's seat). See photo on our website: radzikone.pl/instrukcja
- 14. Adjust the steering stops (one is on the idle arm and the other one next to it, on the frame two bolts 14mm). One person keeps the steering wheel turned to the left. The other person sets the steering stop so that the brake caliper was at least 3mm from the spring and the tire was at least 2cm from the frame. Repeat the operation with the right side.

  ATTENTION: If with the maximum turn, the spring will touch the caliper, this may lead to temporary loss of brakes!
- 15. After few kilometeres drive (the best: off-road drive;) set the wheel alignment as we shown in instruction.

Then we go off-road and after come back check/ set the wheel alignment one more time. In ours Vitara we check the wheel alignment every few 4x4 competition, because it takes aproximately 3 minutes;)

#### **IMPORTANT:**

Wrong wheel alignment setting is the most common mistake during installation suspension lift kit and using Suzuki Vitara I with modified suspension.

Contrary to the accepted opinions, bad wheel alignment does not affect the drift of the car to the left or right. So if the car drive straight is not the guarantee of the good wheel alignment.

Wrong wheel alignment setting may cause, among others:

- the car drives badly and "jumps" on the road
- the front of the car becomes too low (springs seems to short )
- the front of the car becomes too high the car jumps in the front and damps
- bad wheel angle ("tatra" or "antytatra")

REMEMBER – with lifted suspension, wheel alignment can't be set correctaly in workshops which use "standard" facilities putted on wheel. No "lasers" or catalogues will not help/deal with modified suspension.

**THE BEST, 100% SURE METHOD for correct setting the wheel alignment is** setting by yourself according to the instruction on next page (it's easier than seems;)

16. After setting the wheel alignment repeat point 14.

Enjoy using our products:)

Radzikone Team

We put the springs so their ends are placed in the red points of the springs seat.

Don't look at the orignal position of the springs. We avoid "banana effect".



Top view of A-arms