

Alfa Transaxle Racing Suspensions mounting instructions

FRONT SUSPENSION

1. Check all the parts and mount everything together on a table
2. Disconnecting the anti-roll bar
 - a. First remove the cone in the middle under the chassis. This cone is connected with 4 small M6 bolts.
 - b. Then remove the caps with the M8 bolts that connect the anti roll bar to the chassis. The bar is now hanging down.
3. Lower the front by moving the lower A arm by one single notch on the torsion bar. Because of this the car's ride height will drop approximately 4 cm.
 - a. Disconnect the steering ball joints.
 - b. Disconnect the lower A arm ball joint.
 - a. Turn the castor adjusting nuts for moving the upper A arm to the front and to the rear. Eventually you can open up the connection between castor rod and upper A arm.
 - b. Mark the setting of the lower A arm in the torsion bar.
 - c. There are two methods for disconnecting the torsion bar from the lower A arm.
 - i. Use the Alfa tool A.3.0374/0001 and A.3.0374 to pull away the torsion bar towards the rear of the car, or
 - ii. Remove the M12 bolts in the lower A arm and use a hammer to split these two items.
 - d. As above, position the lower A arm one single notch higher in the torsion bar and put everything together. If you want more extreme camber settings you could use shims up to 7mm with a result of 4 degrees camber. Of course the ride height is a big influence on the resultant camber.
 - e. Adjust the toe and camber settings to your preference. Best results however will be achieved with the following settings.

Medium: Toe in 4 mm, Camber 2,5 degrees
Radical: Toe in 6 mm, Camber 4 degrees
Castor settings are governed by the available space inside the upper A arm.
2. Installing the front shocks and springs
 - a. Remove the old shocks
 - b. Use the rubber bushings at the inner fender side of the shock on your new shocks
 - c. Bolt on the bracket on the lower A arm. To achieve the proper castor settings the bracket is moved to the rear as much as possible.
 - d. Disconnect the upright from the lower a-arm with a proper tool
 - e. Lift up the upright and lead the shock into position.
 - f. First connect (a few revolutions) all bolts before tightening everything.
 - g. Use a jack to check on clearance between upper A arm and spring. Adjust so that there is no contact.
3. Ride height
 - a. Set the preferred front ride height with the adjusting rings on the shocks.
 - b. Check the suspension movement by bouncing the car up and down.

REAR SUSPENSION

1. Check all parts and mount them together on a table.
2. Lift the car and let the de-Dion tube hang down.
3. Disconnect the shocks and remove them from the car.
4. Disconnect one side from the rear anti-roll bar.
5. Pull the springs out of their position and remove them from the car.
6. If you need a lower ride height, remove the rubber from under the car (this will cause a 'ping' or 'tingling' occasionally).
7. Enlarge the hole in the de-Dion tube at the spot of the new spring adjuster.
8. Install the spring adjuster.
9. Install the spring on top of the adjuster.
10. Install the rear shocks, you will have two options:
 - a. Upside down. In this way you will benefit from the lower unsprung weight. However the shock piston could be easily damaged by debris.
 - b. Normal position. If you choose this type of mounting use the rubber protecting hose on top of the shock.
11. Connect everything and check that all parts fall into the right position whilst putting the car on to its rear wheels again.
12. Check the ride height - front to rear. Adjust as required.
 - a. You get best results in the lowest position.
 - b. Always set the rear ride height approximately 1 cm higher than the front.
 - c. Any change in ride height will require adjustment of toe in. This can be done on track with a simple line held at the front and rear wheels on each side of the car.

Final check

Please check the settings of each shock. There should be enough suspension travel left over. For the front this is 1cm bump and 1cm rebound at the minimum depending on the strength of the used springs. For the rear it's more 3cm either way. Also look at the bumpstops at the front of a Alfetta and Alfetta GTV. A car that rides on the bumpstops will not handle properly!!!!

The alfa 75 or Milano for the USA, will not have such a bump stop at the front so no worries here.

Approximate installation time:

2 hours for experienced mechanics. A full day of work for the inexperienced.

If you do it yourself, take your time and don't start at the last moment.