



Alfa 156 Front Wishbone Replacement

One of the annoying problems you get with a 156 is the “squeaking suspension syndrome”. This is usually where the rubber bushes in the upper and lower wishbones start to harden.

This “hints” document will hopefully show you how to replace both sets of arms. You don’t have to do them at the same time, but if one is worn, you can be pretty sure the other is too. Also the way I did mine means you take the same parts off to do either. You should not need to dismantle the driveshaft, remove the hub nut or split the steering ball joint to complete this.

But as will all work on a car, make sure you have all the right tools to hand, the parts you need and bear in mind this is one job where you definitely do reach a “point-of-no-return” as you are more than liable to damage the old part in trying to remove them, especially when you start splitting the balljoints.

I’ll also add another caveat here: these tips were written up about a year after I did this on my car. I’ve tried to remember exactly how I did everything, but you will need to bear with me if I’ve forgotten one or two small items. Just make sure you note where everything goes as you take it off .. so you can put it all back.

You will need:

- Small trolley jack (you might get away with a hydraulic bottle jack!) and axle stands
- Set of torq hex keys
- Set of metric sockets and/or spanners (ring best)
- Torque wrench
- Suitable ball-joint splitter
- Hammer!

Parts:

- Lower wishbones
- Upper wishbones
- Roll-bar drop links (optional)
- Cleaning spray/materials

Jack up the car and securely place it on axle stands (this is assuming that you don’t have access to a proper workshop and lifting gear!)

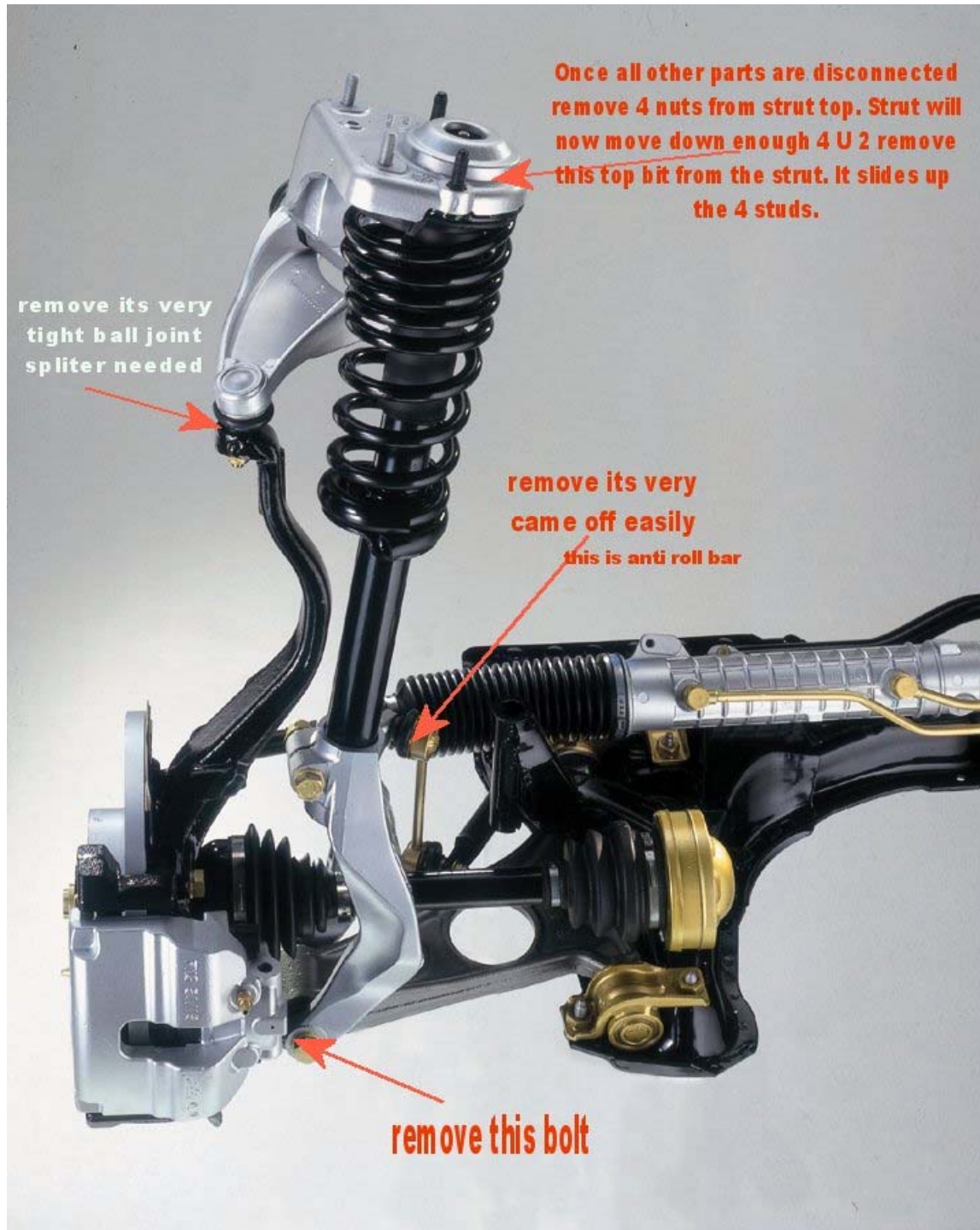
You will need to have the jack available to support the suspension strut when you start to remove all the fixing bolts.



NOTE: The rear arm mounting are threaded into an alloy. Don’t overtighten the bolts or you could strip the threads!! Result? Another new arm!! Also check that the balljoint boot isn’t trapped in the hole of the hub or you will tear it open the first time you turn the steering wheel.



THE STRUT ASSEMBLY



This picture was annotated by someone who was only doing the upper wishbones. But is a useful reference to us for the lower arms as well. It does not show all the cable, pipes and other paraphernalia that are attached to a fully working vehicle. And the parts are clean too This is the left/offside/drivers suspension looking backwards.



LOWER SUSPENSION ARMS

1. Unclip any pipes and wires from the suspension strut to allow more freedom.
2. Remove the anti-roll bar drop link. You need a ring spanner on the nut and torq key in the mounting bolt. (PS you might get away with an allen key).
3. Remove the long bolt that goes through the bottom of the strut (through the "U" shaped mounting) and the lower wishbone. At this point the strut will drop and will rest on the arm. I have read some have chosen to take the lower mounting off the bottom of the strut. I didn't find this was necessary.
4. Now loosen the inner mounting bolts but don't remove them yet.
5. Remove the balljoint mounting nut.
6. Split the lower balljoint. This is where the fun starts. Because the balljoint is actually inside the hub, I ended up using the type of balljoint splitter that you hit (hard!) with a hammer. This will effectively ruin the balljoint, so this is the "point-of-no-return". I balanced the hub on the trolley jack at this point as it is coming to the point where it isn't going to be supported by anything. In hindsight it might be worth thinking about taking the brake caliper off as this will reduce the weight as well as you not having to worry about straining the hydraulic pipes. You shouldn't need to split the steering arm.
7. Once the balljoint is split remove the four mounting bolts. Note they are different lengths for when they go back.
8. I managed to pull the strut out far enough to get the mountings out from the chassis. You may need to swing the arm to the rear to get full clearance.
9. By pushing down on the inner ends of the arm, the balljoint mounting bolt pulled clear up out of the hub and out.
10. Now put it back together ...
11. First put the balljoint end back in the hub. Be careful as this where you could damage the threads - take your time and move it back slowly. Put the balljoint nut on loosely at this stage. Make sure the balljoint rubber doesn't get trapped in the hub or it will tear.
12. Locate the ends of the arm in the chassis. Again this can be difficult as you have to pull the bottom of the strut outwards as you push and twist the mounting into place. This is where supporting the hub on the trolley jack helps as it's moveable and you are not trying to support all the weight. Put the mounting bolts back loosely. Make sure that the arm is between the two legs of the lower strut bracket.
13. Tighten the balljoint nut and four inner mounting bolts. (Torque them later!)

If you are just doing the lower arms you can carry on putting everything back. If you are doing the upper wishbones, leave it like this.

14. Replace the long bolt that goes through the lower strut mounting and the arm and replace the nut.
15. Replace the anti-roll bar drop link in the mounting bracket on the strut.

If you are replacing the droplinks, do this now.

16. Replace the caliper (if removed) and any pipes/wires.
17. Torque the various nuts to the specifications:
Balljoint nut: 8.6-9.5 Nm
Cross-bolt: 8.1-8.9 Nm
Wishbone mountings: 6.2-6.8 Nm
Caliper Hex Bolts: 4.8-5.2 Nm



NOTE: The rear arm bolts are threaded into an alloy mounting. Don't overtighten the bolts or you could strip the threads!! Result: another new arm!!



UPPER WISHBONES

Complete steps 1-3 for the lower arm instructions. If you've changed the lower arm, it will be in place except for the long cross bolt that goes through the bottom of the strut and arm.

1. 1. Split the upper ball joint now. If this proves difficult, support the bottom of the strut on the jack, or even replace the long bolt to support the strut. It may take a fair whack to do this. Again, using the hammer-type splitter will wreck the balljoint. If you put the crossbolt through, take it out again now as the strut needs to drop. Support the strut on the jack.
2. From inside the engine bar, loosen the four nuts at the top of the strut mounting.
3. Pull the strut down as much as possible.
4. Remove the four nuts and pull the strut down so the bolts clear the body work.
5. The wishbone arm and mounting lift up and off the strut mounting bolts. Pull down on the strut and push the mounting up and it should twist off.
6. Remove the bolt that runs through the mounting and wishbone. Give the mounting a good clean.
7. Replace the new wishbone and put the bolt back. Torque the fitting nut to 4.0-4.9 Nm.
8. Wiggle the mounting back over the four mounting bolts, and lift the strut. This is best done with a jack as you can move it up gradually. Take care not to catch the bolts as they pass back through the body work. They make a big "bang" if you do and they let go as the strut is moved back!! Apart from that you could damage the threads.
9. Once the four bolts are through, put the nuts back and tighten them to pull the strut into place. Torque them when the wheel is back on the ground.
10. Replace the upper balljoint and torque the nut to 4.3-4.7 Nm.
11. Replace the anti-roll bar drop links and the crossbolt and tighten. Torque crossbolt to 8.1-8.9 Nm.
12. Make sure everything is back in place. Replace the wheel and drop the car to the ground.
13. Torque the strut mounting nuts to 2.4-2.9 Nm.

Now repeat it on the other side!!