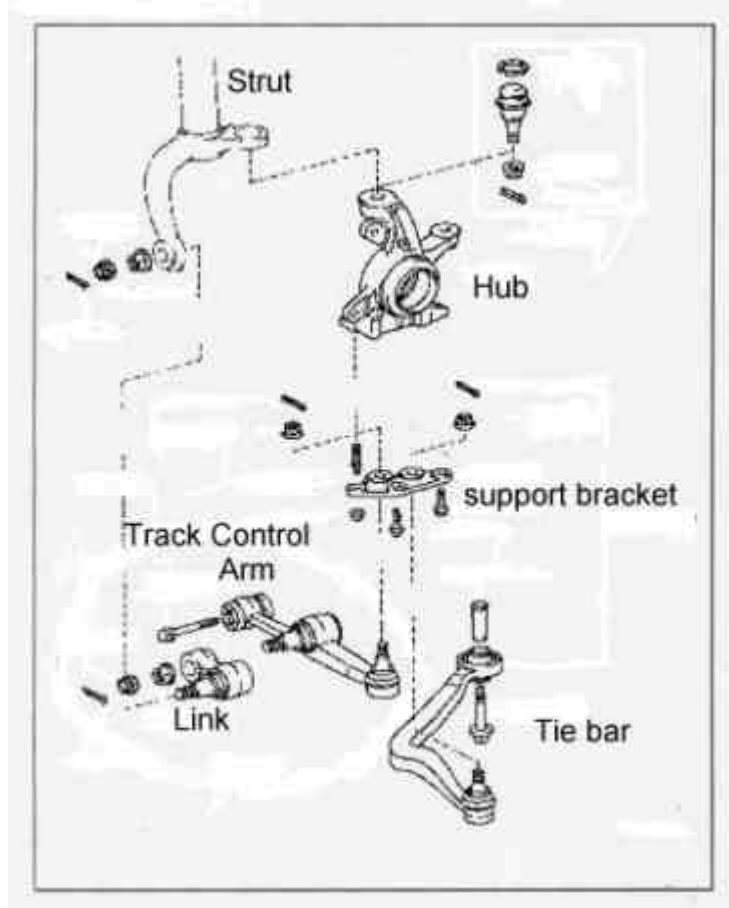


It seems that clonks and clunks from the front suspension of the ST205 are becoming a common occurrence. My 1994 example had reached 100000km when I first heard the problem. Usually it starts with a squeaking sound as you go over bumps. This then becomes a clonking sound. Eventually the steering will lose all precision and you will feel the car moving around on the road as you come on and off the gas. I probably left the job far too long and let it get to that stage.....

#### How to check your car for wear

Firstly, here's a diagram to help you identify the bits I'm talking about:



Jack the car up having loosened the wheel nuts. Ask a friend to try to move the wheel in a side to side motion (when sitting holding the wheel, try to move the wheel towards the front of the car and then towards the back. The steering should be turned straight at the time). Whilst this is happening, reach in and feel for movement in the following areas:

- The joint where the link joins to the strut – by far the worst wear on my car.
- The joint where the link joins the lower track control arm – also worn on my car.
- The balljoints on the end of the tie-bar (worn on my car) and on the end of the track control arm. These are both under the hub.
- For completeness, the balljoint that attaches the strut to the hub.

I found it best to do these checks with the wheel on the car as you got more leverage. People with very large hands may struggle to reach the balljoints though.

## Getting hold of the bits you need

If you need to replace the link piece, look very carefully at the track control arm as it is likely to be worn too. Cost of these parts from MrT is £320+Vat or alternatively a contact through the owners club can refurb these items for approx £220.

I found that the track control arms were sold out at Toyota Celica Breakers....you may want to try them though.

The tie-bar is available from MrT for £230+Vat. I got one from Toyota Celica Breakers for £94 all in.

When removing the tie-bar you will have to hacksaw through a sleeve that runs through the bush holding the tie-bar to the chassis. I think MrT charge £4 for them.

## Tools you will need

Socket set with minimum 17,19mm and 22mm sockets

Extension bar (long as possible!)

Three legged bearing puller

Fork type balljoint splitter

Soft faced hammer

Pliers

Spare jack (trolley one preferably)

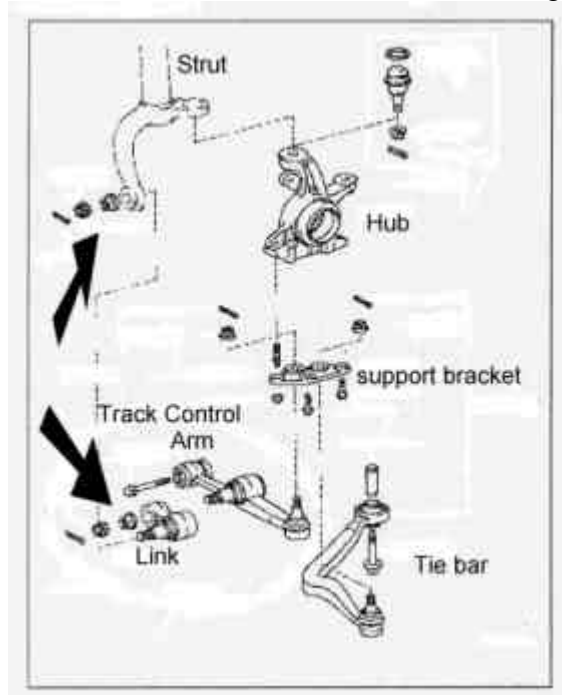
Crow bar

## Dismantling

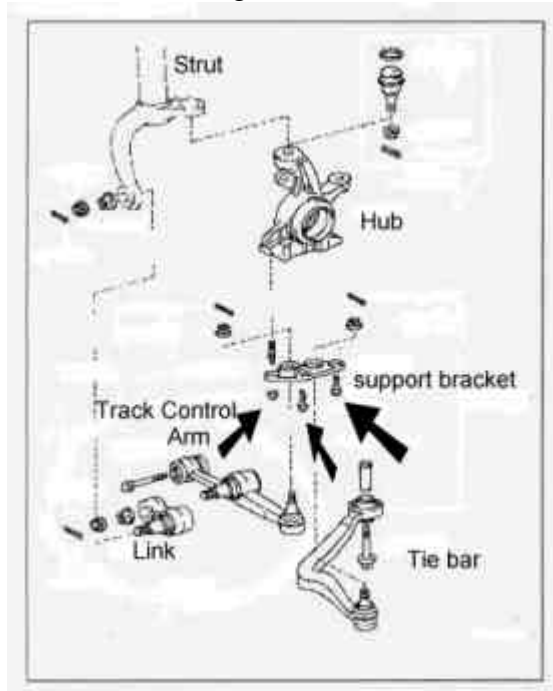
I learnt the hard way how to do this. I found that the ball joints under the hub are an absolute bitch to split. It took a blow lamp and a large hammer to split them. This meant that the dust covers were split/frazzled and the whole thing was rather painful.

To save that grief (and thanks to advice of people on the list) you should do the following:

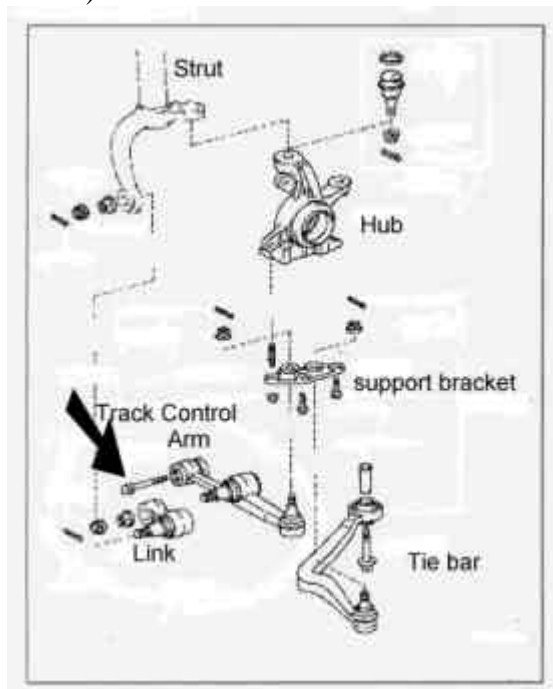
- 1) Jack up the car and support well.
- 2) Remove the alloy wheel.
- 3) Using 22mm socket wrench and long bar, undo the nuts on the joints between link and strut, and link and track control arm. See diagram:



- 4) Using the three-leg bearing puller, separate the link from the strut. Do not use any other type of puller/splitter as you will likely damage the seals and render the parts unsuitable for refurb. I used a Halfords bearing puller that cost £23.
- 5) Using a 17mm socket, undo the two bolts and one nut that hold the support bracket to the hub. See diagram:

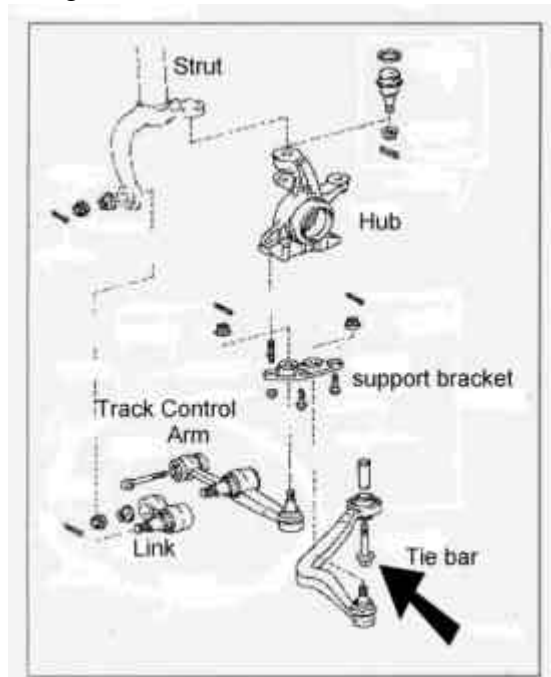


- 6) Undo the bolt that attaches the track control arm to the subframe. See diagram. (19mm socket).



On the OSF (drivers side) I found that this bolt would not fully withdraw from the hole. It fouls on the sump. The track control arm is a very tight fit on the subframe, so initially you panic a little. The thing to do is to tap the track control arm upwards using a soft faced hammer such that the track control arm is slightly twisted in it's mounting – then the bolt will come out. Alternatively you can put a trolley jack under the engine and move the engine up. I found that there was enough movement in the engine mountings for this to work – you only need a couple of millimetres. Be careful not to jack the engine up too hard – the sump will bend (as I found out!).

- 7) Once the bolt is out, using a soft faced hammer, tap the track control arm down and it will come away from the subframe.
- 8) Undo the bolt holding the tie bar to the subframe. Withdraw the bolt from the hole. See diagram:



You will find that the tie bar is still held firmly in place on the subframe. There is a metal sleeve which runs through the tiebar bush and into the subframe. Prise the chassis away from the tie-bar and use a hacksaw to cut through the metal sleeve. This is quite fiddly I'm afraid. ....

- 9) You should now have the Track control arm, link, support bracket and tiebar off the car. The next job is to separate them so that any worn parts can be replaced. The ball joints under the hub were a right sod to split. I found that the usual ball-joint splitters you buy from Halfords do not have wide enough jaws to go onto the ball joint. The only splitter I found to work was the 'fork' type which will destroy the dust cover on the ball-joint. If that doesn't appeal, go down to a local garage and ask them to split'em. This shouldn't cost any more than a drink as they'll invariably use a hydraulic press to do it and it'll take about 5 minutes.
- 10) You can now start the re-assembly with your new/refurbished parts!

### Reassembly

Reassembly is largely the reverse of the dismantling procedure. However, I found it easiest this way:

- 1) Bolt the support bracket back on the hub.
- 2) Using a new sleeve, fix the tie-bar to the subframe.
- 3) Tap the track control arm into it's mounting position on the subframe. Insert the bolt and fix in place.
- 4) Assemble loosely the link, track control arm and strut joints.
- 5) Push the balljoints on both the tie-bar and track control arm into position such that the ball joints under the hub are ready to be tightened. Place a jack under the balljoints and take some of the weight of the car. Tighten the lock nuts.
- 6) Tighten the nuts on the track control arm and link. Use a long bar to tighten.
- 7) Replace road wheel.
- 8) Job done!