

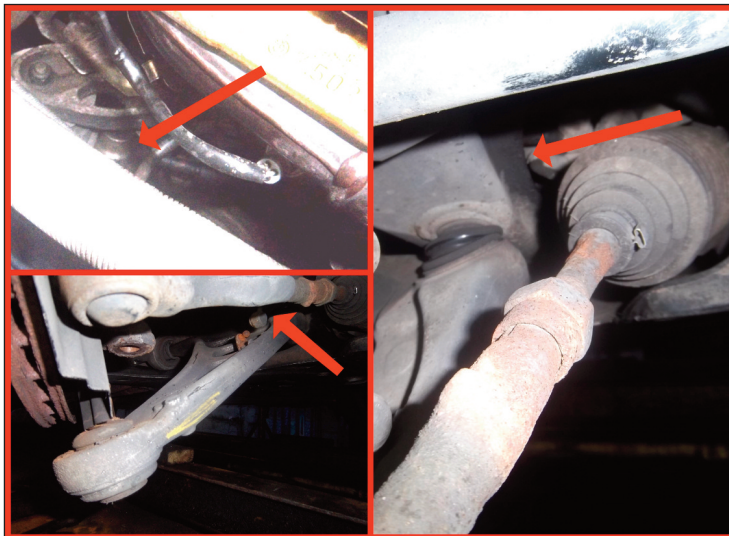
BMW 325Gi - Knocking Front Suspension

It was not too surprising to find that the offside front lower ball joint on this 2001 BMW 325i had excessive wear. The knocking noise it was making as it drove along the road was enough to indicate attention was needed.

The lower arm has two ball joints and a rear mount, although the rear mount

can be removed from the arm, this is not always easily achieved. In my mind, it is much quicker and easier to just replace the complete arm, along with the mount.

One of the tricky parts of the job is undoing the top nut on the inner ball joint. On this car, it is not accessible using a socket, and if the joint begins to spin before the nut has been removed this adds to the problems.



The inner nut is not accessible with a socket and so a spanner is used through the underside

This one played by the rules, and although a spanner was needed to undo the inner nut (accessing this through the underside) it was soon removed. The rear mount unbolted easily and with both ball joints undone and split, the old arm was off.

Once the new arm was fitted into place, the Beemer could be driven along the road without the accompanying knocking noise.



Stephen Rothwell

Ford Focus - Rear Arm Removal



The corroded lower arm required the bolt cutting through to release it

For a 2003 car that lives near the coast and parks less than 100 meters from the sea, it looked to be in pretty good nick. After looking from underneath, this Focus estate was starting to look a bit weather beaten. The latest NCT brought up a couple of corrosion related issues, including corrosion in both of the outer sills.

The other more manageable problem, was the nearside lower arm had corroded badly and would soon be allowing the spring to push its way down and through to freedom.

The lower arms, in theory, should be quite easily replaceable. With this one, we discovered that the securing bolts were corroded firmly into the centre sleeve of the bush. No amount of penetrating fluid was going to free this one off, and so along with the new lower arm, we ordered up a couple of new bolts.

This allowed us to simply slice through the old bolts using the air-saw, releasing the arm which had first been supported with a jack against the spring pressure, to keep it in position once released.

Once the new arm and bolts were in place, the camber adjustment was checked. This needs to be done, as this is adjustable with the inner bolt locating on a cam washer to control the adjustment.

Opel Astra - Curious Burning Smell

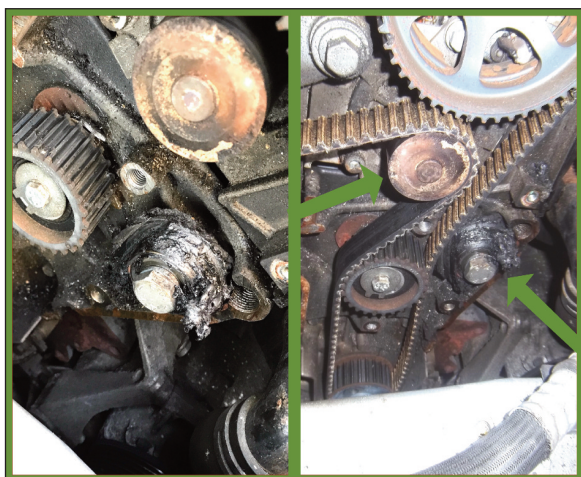
When the owner of this 2008 Opel Astra became aware of a burning smell, he was concerned that the motor was about to go up in flames. He had seen the reports of problems with the Zafira and was wondering if this was similar.

Driving straight into our garage, I opened the bonnet to discover that the burning smell

was coming from behind the timing belt cover, and the coolant header tank was empty. Not wishing to take any chances, the short distance into the workshop was covered by pushing the motor.

Once stripped down, I was pleased that the engine hadn't been started again. Not only had the water pump bearing collapsed, but the plastic tensioner on the cam-belt had melted away. This was probably the result of hot coolant spraying onto it whilst spinning, washing the bearing and then causing it to seize.

The timing belt had also jumped a tooth, proving how close this engine was to failure. Thankfully, the timing on this 1.9L diesel engine is quite easily set with the correct tools. Added to this, the new belt has marks to align with the pulleys, meant that once the new water pump, tensioners and belt were fitted, we could be confident that the valve timing would be correct.



Very close to disaster, the water pump had failed, and the tensioner had all but melted away

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