

## Opel Combo - Steering Rack Surprise

The driver of this 2008 Vauxhall Combo van, had been unhappy with the steering for a little while. The steering felt too rough, and there was more play in the steering wheel than would have been expected.

Jacking the vehicle up and feeling the amount of play at the front wheels confirmed that the steering rack was going to need replacing. Not too difficult a job on the Combo van, the sub-frame does need dropping slightly to give sufficient manoeuvring room, but this is not too much work.

With the rack off, we noticed that the rack boot securing clips on the offside were different to those on the nearside. Out of curiosity, I removed the offside boot to discover that the steering rack was red with rust. My assumption on this, is that at some stage, the rack boot had failed and been



**The steering rack had excessive rust in the unit cause by a lack of lubrication following a boot replacement**

replaced, but when it was replaced, insufficient care was taken to ensure that the steering rack mechanism within the boot was lubricated.

If better attention had been paid to detail when the boot was fitted, it may have saved the cost of the replacement rack, now being carried out.

## Audi A5 - Clutch Replacement

We had just completed a clutch replacement on a 2010 Audi A6. When this A5 was booked in, I was expecting this job to be similar. My mistake.

The clutch on the A5 is a very different job. The set-up of the engine and gearbox means that the drive-shafts on the A5 are so far forward of

the inline gearbox, that one of the drive-shafts actually passes through bell housing and sits in a gap in the DMF. The clutch unit is bolted to the DMF and the whole assembly needs to be removed complete with the gearbox after unbolting it from the drive plate. This is similar to unbolting a torque convertor to remove an automatic gearbox, but with the added weight of the heavy flywheel.

Once unbolted, the six-speed gearbox, the DMF and clutch assembly needs to be lowered out of the vehicle. Once out, the nearside driveshaft which runs through the bell-housing can be removed, allowing the clutch and flywheel assembly to slide off the input shaft.

The new DMF and clutch needs to be assembled before refitting onto the gearbox. Once in place, slide the driveshaft back into position.

This job calls for 7.5-hour of labour time. With the cost of the new DMF and clutch, this works out to be an expensive repair.



**The drive shaft runs through the specially designed DMF unit**



**Stephen Rothwell**

## Peugeot 207 Sport - Collapsed Oil Filter



**The oil filter was well past its best and was collapsing due to blockage and age**

The owner of this 2006 1360CC Peugeot Sport, told us that the engine had only recently started to use a lot of oil. It was also sounding strange and it had begun to smoke. He insisted that he did check the oil regularly and always topped it up when needed, but had no recollection of the oil and filter having ever been changed. Once we heard this, we persuaded him that an oil change should be the first move. He asked us to carry out the oil and filter change before carrying out any further checks.

When we removed the cartridge type oil filter, we were immediately aware that this was well past its serviceable life. When a cartridge filter begins to clog it will start to collapse as the oil struggles to draw through it. This often makes it appear as though the filter has been squashed in the housing. Looking deeper into the folds of the filter element, we could see copious amounts of congealed oil deposits.

When we removed the drain bung we were surprised to discover that almost nine litres of oil drained down from the sump. The system should only take around three litres with the oil filter, so it was dangerously overfilled. The owner had been topping up the oil, but hadn't been checking that it needed it!

With the oil and filter change complete, all the noises and problems were gone.