How To: Replace the alternator on a D9 V6 coupe

Car is a 2001 V6 SE

Symptoms of failure were occasional blinking of the battery light, with a message on the multi-function display of "Battery charge low" or something similar. The frequency of the battery light coming on went, in the space of about 2 weeks, from once per 2-3 days, to once every 30 seconds... then it was on continuously.

Battery voltage was slowly coming down, engine not running, from a normal 12.6 v to about 11.6 v. When the alternator was occasionally working, and with the engine running, I was getting about 13.8 - 14.2 v across the battery. When the voltage was below about 12 v several functions stopped working, e.g. heated rear screen, trip computer, heated seats etc...

It was impossible for me to get to the alternator electrical connections to test the output directly at the alternator.

A replacement alternator was located by a very friendly electrical supplier in Southampton. Turned out that there are not many places where these alternators are available as recon units, as not many of them have failed yet! The Southampton company actually had to get this one in from the Netherlands. Price was about $\hat{A}\pounds$ 160 + VAT (exchange) compared with over $\hat{A}\pounds$ 300 from Halfords (but no guarantee that they could actually get one) to over $\hat{A}\pounds$ 600 from Peugeot. One or two places offered to take the old unit and recondition it for "about $\hat{A}\pounds$ 200, and it will take 2-3 days "

Well, I decided to remove it myself and fit the new unit.

Procedure was as follows.

Release the drive belt tensioner with 3/8 drive and ratchet and remove the belt

Remove the 4 power steering pump drive pulley bolts and remove the pulley.

Lift the front of the car using a jack on each side (If you have a pit/hoist you don't have to do this) and remove the engine under tray.

This gives access to 2 of the 4 alternator fixing bolts, at the belt end of the engine. These 2 bolts are reasonably easy to get to, and a 16mm socket and ring spanner did the trick on these. PS the fixing bolts go into threaded holes on the alternator body, so no nuts to hold/remove. But you do have to get at the bolts from under the car...

The 2 bolts on the other end of the alternator require the following to be removed, to give access to them.

Engine trim cover (the bit with the oil filler passing through it)

Manifold heat shields (upper and lower). Top one has 3 bolts and is fairly easy to remove, bottom one also has 3 bolts and one of these bolts is a nightmare to get at and to turn.... I used a combination of a ratchet, a 1/4 inch socket, open ended spanner, and a lot of cussing...

power steering pipes which run across the front of the engine the hexagon mounts which support these pipes

Now you can JUST get to the top alternator bolt with a ring spanner / open ender (16mm)

The bottom bolt has to be reached from under the car.

You will need to remove the oil filter canister, and probably also the oil/water heat exchanger which sits between the canister and the block. Then you have to unclip the cable to the oil pressure switch, and remove the pressure switch itself. Then you can just about get a socket and bar onto the last alternator bolt. Just possible that if you have very short/thin

16mm socket and good socket u/j you might not have to remove the oil filter etc, but I didn't have any choice.

OK the alternator will eventually drop a centimetre or two from its position, but then you have to take it out...

That means draining and removing the radiator, which also means removal of the air filter box.

By careful manouevring of the alternator you can get to the nuts holding the 2 cables to the alternator, then ease it out between the front of the engine and the aircon radiatior, but it's tight!!!

Refitting is a reverse of the removal!

It might be possible to make life a bit easier either by removing the power steering pump, but I decided it wouldn't help much. Also might be possible to remove the alternator from below but the Aircon compressor is in the way. The only way I could see this coming off would involve depressurising and re-gassing the system and I didn't want to do that either.

Hope this helps. Any Pug techs out there who can offer the "official" way to do this are invited to pm me to show how easy this really is, and maybe to tell me how much Pug would have charged.