Rear bearing/hub renewal

The description below refers to a 20v/vt model. On earlier 16v/vt models the layout of the bearing/hub assembly is different although the basic techniques remain similar. If in doubt consult a coupé specialist or the forum for further information.

In this car below the removal was straightforward and did not need any pullers but be warned that the bearing can sometimes split on removal and would therefore require the use of an angle grinder.

Tools needed :

Trolley Jack and axle stand/Wheel chocks Ratchet 12mm and 13mm socket/spanner 15mm open-ended spanner 19mm socket and bar (for the wheels) 32mm socket, bar and length of pipe (around 4 feet) Flat-bladed screwdriver Hammer Torque wrench

Time taken: 1 hour

1). Park the car on level ground with the handbrake off and slacken off the wheel nuts.

2). Chock front wheels

3). Jack the car up off the rear arm just below the spring and support the car with an axle stand.

Trolley jack location



4). Remove the centre hub cap using a screwdriver and hammer and working your way around the lip, then remove the 2 wheel locating pegs (12mm). They should go with a quick twist of the ratchet but if not just use a bar to lock the wheel like in the picture.

Centre hub cap removed



Using bar to lock wheel



5). Remove the calliper fixing bolts with the 13mm and 15mm spanners and take the pads out. Hang the calliper on the edge of the carrier frame to save stressing the hose and handbrake cable <u>DO NOT</u> <u>DISCONNECT OR MOVE THE HANDBRAKE CABLE/LEVER!</u>

Calliper fixing bolts



Calliper resting on carrier



6). If things go well then the disc will be able to be removed from the hub. If it is seized then spray some penetrating fluid between the disc and hub and try tapping round the hub with a hammer.

Disc removed



7). You need to use a 32mm socket and bar to slacken off the hub retaining nut.

Slackening hub retaining nut



8). This is the point where things can go either way. In this case the bearing simply slid off. If you feel substantial resistance when using a puller then make sure you have access to an angle grinder and appropriate safety equipment in case the bearing splits as you'll need to grind off the old bearing race before fitting the new bearing.

9). After a quick comparison (note you have to re-use the washer as there is only a new nut in the supplied kit). Gave the backplate a clean just to make sure no foreign objects are going to get in the way of the new bearing, take care round about the ABS sensor though.

Bearing comparison 01



Bearing comparison 02



ABS Sensor (bottom)



10). You may find a small plastic bush inside the bearing, which is only fitted to keep the 2 bearing halves together and has to be removed before fitting the bearing.

Note: apply a *thin* smear of grease to the stub axle before fitting the new bearing/hub.

Plastic bush



11). Fit the old washer after giving it a clean.

Re-use old washer



12). Fit the new nut. You'll only be able to screw the nut on so far with your fingers as most new nuts are of a self-locking type with crimped ends.

<u>New nut</u>



13). The nut should be tightened to 280Nm. Use a torque wrench for this but reasonably tight with a 4 foot pipe on the bar would be ok. If you are unsure about how tight to go then you would be best to leave it to a mechanic as you can damage the bearing by tightening it too much!

Man-size torque wrench



Nut tightened



14). Spray the hub face with copper grease and re-fit the disc.

Hub sprayed



15). Re-fit the brake pads and calliper. Spray the wheel contact area with copper grease too.

Disc, brake pads and calliper fitted



- 16). Fit the wheel and nip the bolts up.
- 17). Before lowering the jack give the wheel a spin and check for any play.
- 18). Remove the axle stand(s) and lower the jack.

19). Tighten the wheel bolts (98Nm).

20). Before driving off in the car give the brakes a press just to make sure they`re ok after disturbing the braking system.