Gazette August 2013 Control Co



The official Mercedes-Benz Club Founded 1952

In this month's issue



C63 AMG



Emil Jellinek



Ponton electronic distributor



Upgrading a 1959 Ponton 180a with a 123 electronic distributor

by David Robertson

few years ago we inherited my fatherin-law's 1959 180a. It had been his family car during the 1960s and 70s, first in Wimbledon and then in Corsica. Then the car sat in his garage near Paris for 25 years. Although it wasn't in good condition we couldn't let it go to the scrapyard so we took the plunge, shipped it to Marek, a mechanic we knew in Poznan, Poland, and our restoration journey began. The job turned out to be bigger than we expected! Two years later, and £10,000 lighter, we flew to Poznan to drive back to the UK.

Marek met us at the airport and we were thrilled - the car looked wonderful and we set off for Berlin. Just as we left his house I noticed the mileage - all the nines. How exciting to be starting on our third time round the clock!

We overheated in Berlin and then headed south to see friends in Salzburg. From there west towards Switzerland. Just past Innsbruck the engine stopped as we climbed into an alpine tunnel. On a bend and with no hard shoulder, we rolled the car backwards - lucky to escape with our lives! The tow truck carried us to the nearby



The Ponton after 25 years in a garage.

TechnicalCorner

Mercedes-Benz dealership. Of course it was 6.00pm on a Friday evening. We spent an unscheduled weekend in the little town of Imst

On Monday morning in the pristine workshop a couple of young mechanics fiddled and sent us on our way. By midday and after only 10kms (six miles) we were back on the same tow truck. Some older mechanics took over in the afternoon and by 5.00pm the car was idling on the forecourt. In excitement and relief we waved goodbye and as I let the clutch out the engine died. They gave up and the car was repatriated. We gave up and hired a VW. All paid for – the best £200 we ever spent on insurance.

Since then I've worked hard - cleaned the petrol tank, fitted a new fuel pump, had the Solex carburettor restored by Gower & Lee, fitted a new throttle linkage, new hoses and clips, a new coil and distributor parts and last summer we set off for Ireland. After much admiration, from Limerick to Sligo, we reached our destination: Ballinamore, County Leitrim. We got in the car for the long drive to the ferry at Rosslare but it refused to start. On taking off the distributor cap we found the carbon contact broken off and the points burnt away. As both the cap and points were brand new I hadn't brought replacements - foolish me. A local garage provided the carbon contact from a similar cap and luckily an auto centre in Enniskillen had the points.

Expert help

On return to Wargrave I decided I really needed more expert help so I contacted Club Technical Director Jeremy Stevens. He immediately spotted two things: The distributor was not the original one and would therefore have the wrong advance and, more importantly, the red coil I'd bought from Mercedes-Benz Brentford required a ballast resistor. I went back to Russell at Brentford and bought a 1R8 with the pink mounting band (used on Pagodas and the W109 6.3).

Jeremy also suggested an electronic distributor from 123 Ignition. I looked at the 4-R-V (you need the V version if you have vacuum advance) and although apparently it wasn't made for the M121 engine, the dimensions were fine and the instructions refer to the 180a and the original Bosch number (VJU 4 BR 22). I decided to go ahead and bought one from Roy at Southern Carburettors (the UK importer) – not cheap at nearly £300 but if it works...

I'm not an experienced mechanic so I was nervous about doing the job alone. I asked Jeremy if he would supervise me and, with the ballast resistor in place, we drove to his house and got started. It's actually an easy job — well, anything feels easy with the master at your shoulder!

The 123 distributor seems to be very well made, takes the Bosch cap and looks similar to the real thing. Jeremy did spend some time making up a new jumper lead between the



Restoration underway.



En route from Poznan to Berlin.

coil and ballast, and ensuring that the new wires from the 123 distributor were protected with Vidaflex high-temperature glass reinforced sleeving. He made sure that all the new terminals were soldered and sleeved as per the original specification.

You start by unscrewing a plug on the side and turning the rotary-switch to select the advance curve for your engine (for 180a it's B). Next you crank the engine to cylinder number one top dead centre (TDC)—the rotor arm will line up with a mark on the body of the old distributor. Make sure the 123 unit is oriented the same way and pull out the old distributor. Just slide the 123 into the hole and, as the instruction book says, make sure the 'drive-dog mates correctly'. This is easy as the lugs are off centre and will only engage one way. Tighten the clamp so you can still

just rotate the body. Now connect the red wire to the positive side of the coil, turn on the ignition and rotate the distributor until the green timing LED comes on.

It's time to give it a go: Connect the black wire to the coil, fit the cap and start up. I don't think we quite got the LED step right as we had to rotate the distributor before it would start. Once running, Jeremy timed it by ear and then checked the setting with a strobe timing lamp. The timing was set as per the original specification (eight degrees before TDC with the vacuum line disconnected) and we raised the engine speed to check timing scatter and for the correct advance. Then the vacuum pipe was connected at a fast idle to confirm that the vacuum advance was working. All was well and it was time for a successful test drive round Ealing.

TechnicalCorner





On the tow truck.



123 distributor.



Ballast resistor.



Setting the advance curve microswitch.



Top dead centre.



Distributor mounting hole.



Green LED.



Using a strobe light to check the timing.