



BMW 120D - Failed dual mass flywheel

The owner of this 2008 BMW 120D had to abandon her vehicle in the car park, because she couldn't select a gear. Even though the clutch operation felt normal, when attempting to push the gear lever in any gear, it was just solid.

She wasn't too far away, so we went out to try the clutch and see if we could drive the little Beemer back to the workshop. On this 120D, the clutch needs to be depressed before the engine will start, and so with plenty of room to the front of the motor, I selected first gear and pressed the start button.

The engine fired and I was able to drive back to the workshop. Changing gears became increasingly tricky, and by the time I arrived at the workshop, I was certain that the problem was with either the clutch or Dual Mass Flywheel DMF.

The six-speed gearbox is quite light and not too difficult to remove, so we soon had it dropped down to reveal the problem. The DMF



The DMF had collapsed and this was most apparent around the centre bearing

had collapsed preventing full motion of the clutch.

Fitting the new DMF into place, along with a new clutch, the gearbox was soon fitted back into position and bolted up. A quick feel of the clutch operation now confirmed that all was well.

Jeep Patriot - Charging problem

The red ignition warning light was glowing brightly on this 2007 Jeep, a quick test with the meter confirmed that the alternator was not charging. The most obvious decision would normally be to put an alternator on, presuming that this was the failure point.

Having done this in the past, only to find that there was another reason for the battery not charging, we always carry out one further test before deciding the problem must be the alternator. That test is to check the battery

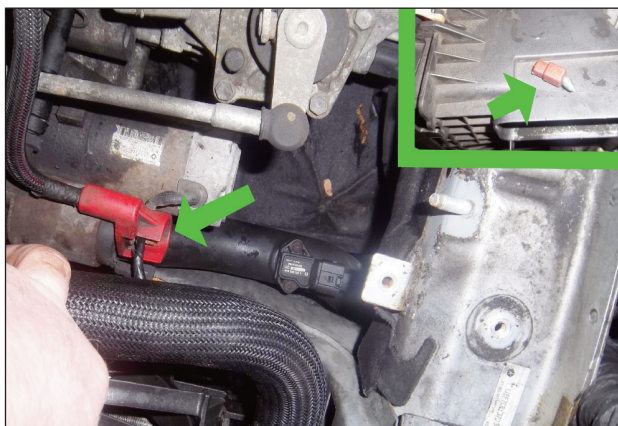
voltage directly at the alternator terminal.

You may be surprised to know how often we have found either a poor connection or a broken wire is the reason for the failure to charge. This Jeep was one such vehicle and we discovered that the voltage showing at the alternator was only around 1.3V. This confirmed that another problem was present, so we removed the battery and battery carrier to access the cable between the alternator and starter, to enable a closer examination.

Quite a few manufacturers route a battery cable from the starter terminal to the alternator and if a problem is going to occur, this is a common place to find one.

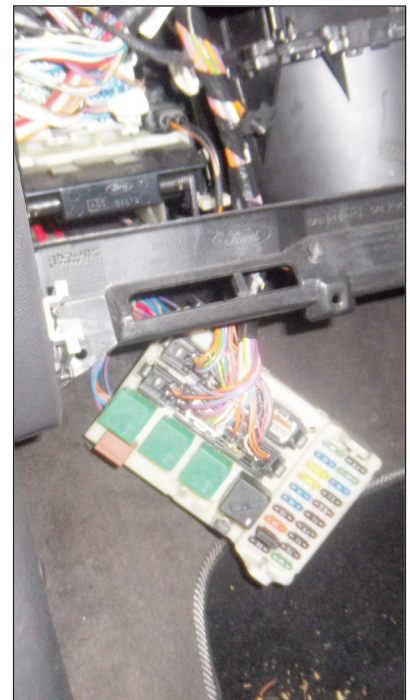
Once we had access to the cable, we discovered that the terminal had fractured and broken away, leaving the lightest of contact between the two points.

Fitting a new terminal to the cable restored the contact. When all was back together, the battery was charging correctly.



It was good that we found the broken terminal before replacing the still functioning alternator

Ford Mondeo - Fuse box problem



A prod around the fuse box had restored the connection, but for how long?

Tracing the source of an electrical problems can often be a slow drawn out process. This 1999 Ford Mondeo was in the workshop, because the owner complained that there was a lack of heat inside the car. The actual problem was that the heater blower motor was not operating. When operating the blower switch it was also noted that the air conditioning switch (which is part of the blower switch) was not illuminating, meaning this was not operating either.

Removing the control panel with a view to possibly finding a problem with the switch panel, we discovered that there was no power reaching the switch pack. This meant we needed to trace back along to the source of the problem.

Dropping down the fuse box we discovered power was going in, but no power was coming out to the blower motor and switch panel. After prodding around with the voltmeter, we suddenly heard the blower fan roar into life.

Our problem now was that we had fixed it, but for how long? It was pretty evident that the fuse box was the problem, but try as we might, the newly restored connection could not be broken again. Explaining the situation to the owner, he was quite happy to have the vehicle back on the condition that if the problem reoccurred, it would need a new fuse box.