VW Amorak **Gearbox or Bearing Noise?**

Peter Farrell, PJF Motors, Tuam

A 2018 Volkswagen Amarok with a 3.0 litre V6 engine, was brought into PJF Motors in Tuam, with the complaint of a noise that was coming, or seemed to come, from the gearbox. The noise had been diagnosed at another garage. They concluded that the noise was coming from within the gearbox, and was most likely caused by worn gearbox components. The other garage's solution was to replace the gearbox with a remanufactured/rebuilt one. But this noise can also be caused by worn rear wheel bearings, as Peter Farrell, of PJF Motors explains.

The owner of the vehicle lived near our garage in Tuam, so he arranged to have us replace the gearbox with a rebuilt one. The gearbox was not cheap, it was around €8,500 for the gearbox alone, plus the cost of labour to install it. Arrangements were made, and a replacement gearbox was delivered to us, before the customer brought the Amarok to our garage.

The wheel bearing and ABS sensor ring are held in place with a crimped nut threaded onto the axle shaft

Cover the teeth of the sensor ring to protect them from foreign objects

I would recommend that any time a diagnosis is handed to you, check everything yourself, to see if you come to the same diagnosis. In this instance, I was aware that it is common for rear wheel bearings on an Amarok, to make a noise that would seem to emanate from the gearbox. Bearing noise can travel up through the axles and propeller shaft, even though the noise appears to be coming from within the gearbox.

N.B. Bearing noise can travel along the axle and the propeller shaft on an Amarok, through the airspace around the axle within the housing, and through the void inside of the propeller shaft

The first thing I examined on the Amarok was the condition of the rear wheel bearings. It was quickly and easily confirmed that the rear wheel bearings were worn and would certainly be making noise, and that they were the likely cause of the noise.

Both axles were removed, and both wheel bearings replaced. There are some precautions that should be made while replacing these wheel bearings. With each axle removed from the Amarok, the next step should be to use electrical tape to cover the ABS sensor ring. This prevents any foreign objects from dropping into the gears during handling. Foreign objects will cause an ABS wheel speed sensor fault after re-assembly.

Each wheel bearing is kept in place by a locking nut. Be aware that there are right hand threads on the locking nut on the right axle, but there are left hand threads on the locking nut on the left axle. After properly torquing the locking nut onto each axle, the top thin edge of each locking nut should be dimpled into both keyways, on each axle shaft. This prevents the nuts from tightening or loosening as the axles rotate.

Once both wheel bearings were replaced, the Amarok was taken for a test drive. The noise that was previously heard coming from the area of the gearbox was gone. What would have been an expensive and unproductive, replacement of the gearbox, was avoided.

If the misdiagnosis had been my fault, I would have wasted more than the customer's money, I would have also wasted my time. The best course of action, is to always start at the beginning of each diagnosis and confirm, or correct, the initial diagnosis.