## BMW X5 - Twin turbo partial failure

his 2010 BMW X5 xdrive40d 3.0 litre diesel, was at the 100,000 mile mark, and up to now had run smoothly without any problems. All of a sudden, the motor had lost power, and the exhaust was emitting copious amounts of smoke. The twin turbo set up on this engine uses a high pressure and a low pressure turbocharger, this true twin turbo set up is a more powerful unit than the twin scroll turbo engines, which can also be labelled twin turbo



The smaller, high pressure turbo was easier to replace than the larger. low pressure turbo

The smaller turbo (the high pressure one) on this BMW had failed, this is the one which is used to supply the lower engine torque. The larger, low pressure turbocharger, was still working, but the total

failure of the high pressure turbo would have soon put paid to that.

With the symptom of the loss of power and copious amounts of smoke emitting from the exhaust, the repair needed to be carried out immediately. Luckily, the owner realised he shouldn't continue driving.

Fortunately for the owner, the job time on the smaller turbo is just under two hours, whereas for the larger unit it would have been 7.2 hours.

The new turbo was fitted, along with the oil feed

pipe, and the oil return was also checked to ensure this was clear. The X5 was then given a quick run in a very quiet area, to clear the exhaust before returning it to the owner.