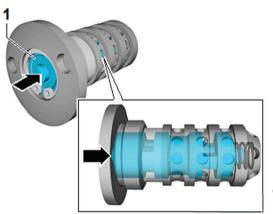
Audi TT making tapping sounds

The Autobiz Helpline was contacted by a subscriber garage, about a problem the were experiencing on a customer's 2015 Audi TT with a 2.0 litre TFSi engine. The initial complaint from the customer was an intermittent management light and an annoying tapping sound coming from the engine.

The initial code scan revealed a fault code P0341 (Camshaft Circuit Range and Performance), and the customer complaint was confirmed. The tapping noise was coming from the timing case area, so a suspected chain issue was diagnosed. The customer approved the replacement of the timing chain, and a complete kit was installed.



The Oil Control Valve on the 1.8 TFSi variant is only fitted to the inlet cam



It should be possible to press in piston (1) by around 3mm without it sticking

But the tapping persisted and on the road test and the fault code P0341 returned. The chain timing was rechecked, and it was confirmed to be in correct alignment. This setup is a rather complex and time-consuming process, but was necessary to confirm the repair. Both cam reference marks aligned perfectly with the chain. And the crank timing mark also was in alignment with the correct chain link. The chain tension was also perfect.

But still, the noise persisted even though all the components were original



Tim Stock, Autobiz Helpline

equipment and fitted correctly.

After calling the Autobiz Technical
Helpline, more investigations into the
issue were done. We decided to replace
the only thing left that could perceivably
be the issue.

A spring-loaded oil control valve was located in the end of the camshaft. It was operated via an ECU-controlled solenoid. These valves should be able to be pressed in by hand, approximately 3 mm, without sticking.

On the 2.0 litre variants, there will be one valve for each cam. On the 1.8 TFSI variants, it is only fitted to the inlet cam, as shown at right.

After replacing the control valve, engine performance was improved, the noise disappeared and the fault code did not return.