

## 2008 Turbo with Chain Noises

*My 2008 911 Turbo Cabriolet has 14,000 miles and makes a "timing chain noise" at idle and other engine speeds. This is driving me absolutely crazy. I have had it to Porsche dealers and "experts," and they all tell me "the timing chain noise is normal in Turbos. If you don't want the chain noise, buy a normally-aspirated 997!" Personally, I think this is B.S.*

*This dealer's explanation doesn't make sense to me. A \$170,000 car*

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*should not make this kind of noise. I have read long threads in online forums about this issue and most accept it begrudgingly. It would be nice, however, to have an expert present the real reasoning on why Porsche hasn't had its engineering team solve this aggravating feature on one of its star products.*

*In the old days, I would have just replaced the chain tensioners myself, but now, having spent a handsome amount for a "superior automobile," all I can do is wonder what is going on in these expensive powerplants? Is it that Porsche knows it has made a long-running mistake and doesn't want to bear the expense of correcting it? I had a 1987 Turbo for years and it didn't have this problem.*

The original, "Mezger" flat six's crankcase — with an intermediate shaft and chain drive for the camshafts — always made noise. Not a

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*lot of noise, but quite a bit of noise, and it was mostly blamed on the valve adjustment. Back in the late 1970s or early 1980s, I had a customer who had a 911 SC with one valve that would start tapping about 8,000 to 10,000 miles after a valve adjustment — and he would bring it in and make us readjust that one valve. The noisy valve was always the same exhaust valve.*

*One time, when he brought his 911 in for the readjustment, I impulsively took him out into the shop after we had adjusted the one valve again to show him there were no noisy valves and that what he heard was all the noise that the intermediate shaft and chain drive made. He was horror-struck. I explained to him that they all sounded that way and that it was normal.*

*Not long after I had taken him for a tour under his 911 engine while it was running, he stopped by with a new motorcycle, one of those Hon-*

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*da six-cylinders with 24 valves. When he started it up, I asked him if he gave the Honda mechanics as much of a hassle over the noisy valves as he did me. Again he was horror-struck. For some reason, he had not heard the noisy valves, or perhaps he didn't realize that was what all the racket was.*

*The noise from 996 GT3/GT2/Turbo engines and, to a lesser degree, 997 GT3/GT2/Turbo engines is only really noticeable when the engine lid is open and you're standing there. These engines have more stuff driven by the intermediate shaft: four camshafts; vane cell variable valve timing adjusters, and 12 variable-lift cam followers. The harmonic from all of these things is greatest at idle and attenuates as engine speed increases.*

*The 996 and 997 GT3, 996 Turbo, and 997-1 Turbo engines were derived from the 1996-98 911 GT1 racing engines, which were based*

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*on the original Mezger crankcase and intermediate shaft layout as used on the original 911 engines. Porsche used a modified version of the 993 crankcase for GT1 engines. The first GT3 engines did not have the Variocam variable cam timing, but later GT3 engines did and all of the Turbos had Variocam Plus, which changed both the cam timing and the intake valve lift.*

*The 2009 997-2 Turbo changed over to the new 9A1 engine family. These engines are quieter because they have a greatly simplified internal auxiliary chain-drive scheme compared to the Mezger design.*

*Bottom line? Noise is not a big deal. Late-model 911 Turbo engines have little or no intermediate gear backlash. The factory specification is around 0.004 mm and most have — at the most — 0.001 mm. The Turbo intermediate gear is a two-piece gear like the one used in the air/oil-cooled engines, while GT3s use a one-piece gear with a different number of teeth and pitch.*

*I've heard a rumor that Wiedeking said that the company would have to repair all of the Turbos that had been built if Porsche engineers found a fix for the noise — so no fix would ever be found. Unless Wiedelin wants to weigh in, however, this will remain just that: a rumor.*