

After a lot of time, the mystery about JTS engine's lack of power has finally been resolved! I'm just translating, my Alfa is running nicely now and all credits go to my mechanic ( [http://www.italiaspeed.com/2007/motorsport/rally/europe/03\\_croatia/alfa\\_gt\\_course\\_car/3005.html](http://www.italiaspeed.com/2007/motorsport/rally/europe/03_croatia/alfa_gt_course_car/3005.html) ) and to the official Croatian Alfa Romeo dealer ([www.alfaromeo.hr](http://www.alfaromeo.hr)).

The car (156 2.0 JTS 2003) had about 60kkm, it refused to run faster than 190km/h and the dyno showed only 126hp instead of declared 165hp. In some extent, the problem was already visible at about 40kkm when I bought it and it just got worse and worse.

After testing literally everything, a large deposits were found within intake channels and on intake valves.





Besides that, here are two more possible outcomes of the problem; stuffed cats and injectors:

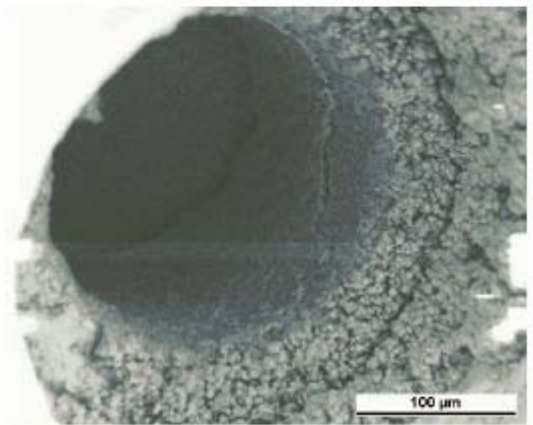
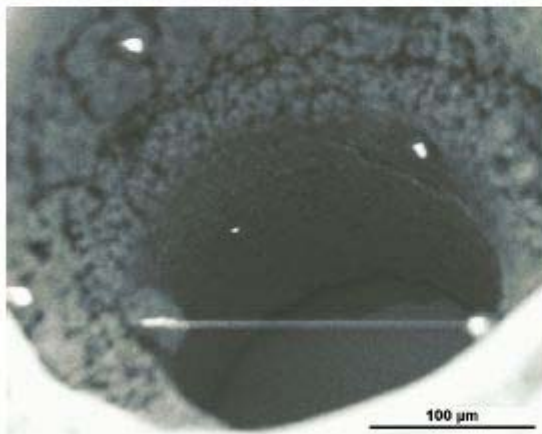
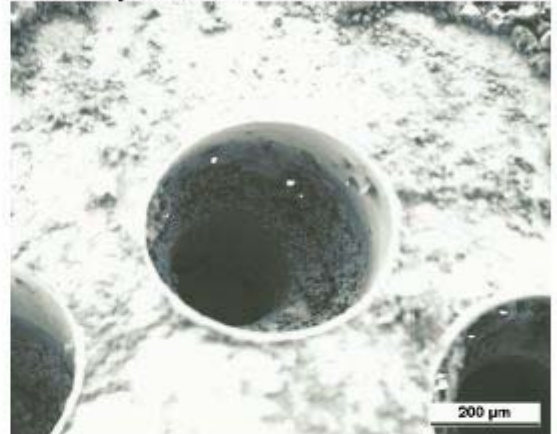
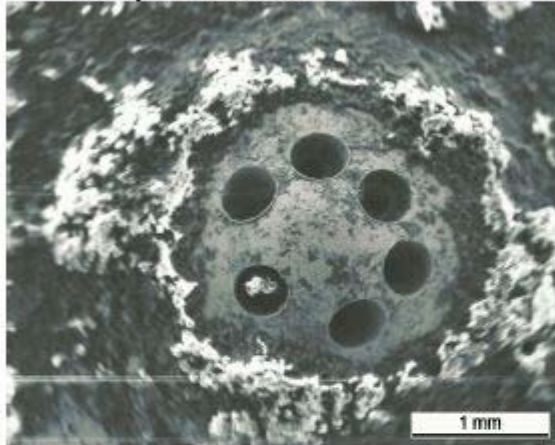




**Figure 2.** Red manganese deposits in China on a catalyst with cell density of 390/3 (catalyst channels/cells), after 20,000 miles of use. Higher cell densities (providing greater active surface area for more efficient conversion of pollutants) of 900/2 will be required to meet advanced emissions standards and appear to be even more prone to plugging.  
*Source: Schindler 2004.*

## HDEV5 - HFV6 Plugging Fleet

REM pictures from the C2-samples Phoenix #29909



Luckily, that haven't happened to my car. After cleaning/replacing engine head, car run noticeably better, the power went to 146hp and the top speed to about 210km/h. However, that only fixed existing damage; the real cause was still present and the whole problem would reappear in the future for sure.

After some consulting, the main cause had to be the ECU and intake cam:



They were replaced with newer revisions and the feeling of car power improved and the top speed jumped to full 220km/h. Note that the car has OZ Superturismo GT rims which are quite heavy; the result with default 16" probably would be even better.

It seems that the original ECU contains wrong maps and cam has wrong valve opening/closing times which led to firing fuel at the point when the intake valve is still opened. That explains how deposits came into life and the JTS power loss after (and before!) that point. Apparently, vehicles made up to April 2003 are affected by this. The solution is to replace the ECU, intake cam and there are even new gearbox gears which would make power delivery smoother (I'm happy with my original ones). Besides that, the engine head should be cleaned.

Alfa Romeo keeps its mouth shut because of the large amount of vehicles affected by this, so, they also won't cover costs of replacing the parts.