

TechNote

Vehicles affected: 2001-2006 Lexus LS430

Recurring catalyst efficiency codes even after replacing both forward (monitored) converters on these vehicles has left many a technician scratching his head, especially when the fault is discovered!

These cars have 3 catalytic converters, 1 mounted beneath each exhaust manifold and 1 in the Y-pipe behind.

Only the 2 front catalysts are monitored, therefore they are the only 2 that can possibly set a code.

Often, these vehicles exhibit no abnormality in their fuel trim readings and no drivability issues are present, in fact, the cars run perfectly, yet a persistant P0420 or P0430 code is stored and the Malfunction Indicator Lamp is illuminated.

Well it seems that the lower catalytic converter (the Y-Pipe assembly) which is where the downstream O2 sensors are mounted, is prone to developing small leaks in the piping BEHIND the O2 sensors.

This would make most experienced technicians disregard these leaks even if they could be detected because a leak BEHIND the downstream O2 sensors shouldn't be able to cause any code to be set.

Well they can, and it seems that the clamps that hold the heatshield on this pipe rust away allowing the shield to rub small holes in the piping. So small you can't even hear them, and they are well below the 2 downstream O2 sensors.

Our experience, and that of at least one poster on us.lexusownersclub.com has been that these tiny leaks are causing the inefficiency codes to be set. Replacement of the pipe has cured *many* recurring P0420/P0430 codes.

It is strongly suggested that you use a smoke machine to detect any possible exhaust leaks BEFORE replacing any catalytic converter on these vehicles.