

Steering Hiss Noise

Automotive Noise Testing



- **Steering "hiss" - noticeable when parking**
- **Hard to measure objectively**
- **Easy to design and implement test in DATS**
- **Allows objective comparison**
- **Saved several weeks of testing**

A Prosig customer had an issue with excessive steering "hiss". This noise is most noticeable when parking and varies with steering load. It is also difficult to measure consistently in-car.

A need was identified for a standard test that was

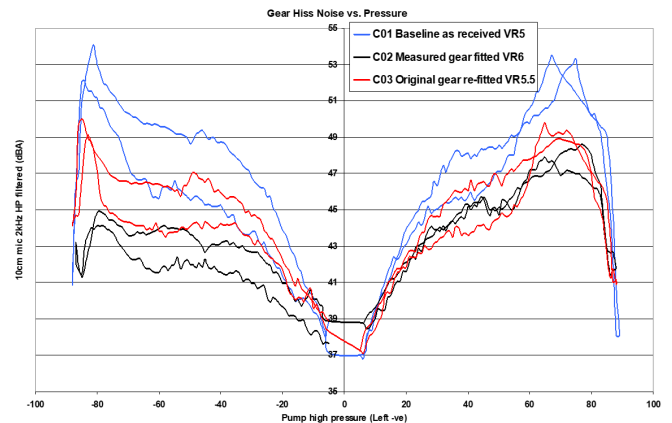
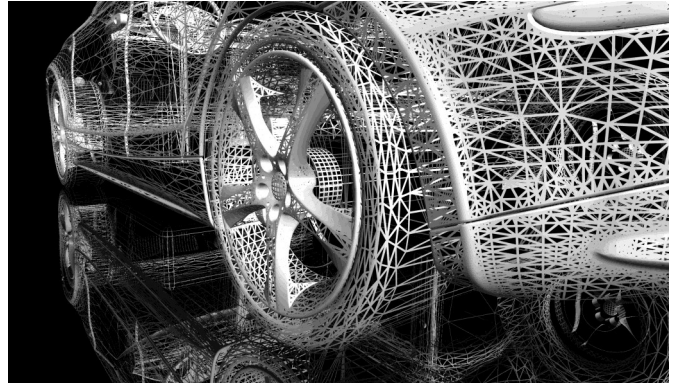
- Easy to use
- Repeatable
- Easy and clearly comparable
- Standardised for rig & vehicle

Several measures were taken to ensure consistent, repeatable results. The steering was turned by hand to both full locks and back to centre several times. At the same time the boost pressure was measured so that multiple tests could be averaged at common pressure points.

During analysis the data was high pass filtered to accentuate the "hiss" and multiple runs were averaged at the different pressure points to compensate for operator variability. The measure

It was simple for the customer to design and implement a custom test to measure and analyse the noise. By innovating the testing using DATS the engineers were quickly able to test multiple setups and vehicles and find the root cause of the noise problem.

Being able to quickly cross a range of scenarios proved the benefit of the flexibility inherent in the DATS tools. Using more traditional, fixed test software would have consumed days and weeks of the engineers' time. With DATS the problem was identified and remedied quickly and efficiently.



About Prosig

Prosig is a UK company specialising in the testing and monitoring of complex machinery, vehicles and structures within the advanced engineering, automotive, aerospace, and industrial sectors. The company offers a wide range of system capabilities, experience and innovation, with a particular focus on advanced vibration and acoustic monitoring and analysis techniques. Prosig is part of Condition Monitoring Group Ltd, an international group, with headquarters in the UK and subsidiaries in three USA, Germany and Italy.

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