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## Advices to performance consumers

**In this issue of the RRI Column's Sven Andersson dives into the subject of buying car performance and what to think of and look out for.**

The consumer advices presented below are meant to be a helpful guide for all people loving cars and combustion engines. In every business there are people taking shortcuts and often the shortcuts come out as a mess. During the years I have followed the motoring market in Sweden and abroad and I have found that vehicle performance and its heart, the powertrain performance, is a complicated issue, not completely understood by many. I hope this column with my shared experiences will be a check list with advices for the non-expert performance buyer.

### **Fairy tales**

Real performance is not BHP "Brochure Horse Power" or "performance fairy tales". It is accurately measured and proven engine or powertrain performance at Steady State or Steady Rate [rpm/sec] (during constant acceleration rates) supplied from professionals using adequate equipment. Buyers of performance and/or race cars, parts and upgrades have the right to know the amount of real Powertrain Performance they pay for. For instance Rototest Research Institute, RRI, with its continuously growing database of powertrain performance graphs, is a good source to know what the car produces in its standard shape and form.

### **Advices to performance consumers**

Use only suppliers with real measurement and R&D resources and that are suppliers (racing and engineering companies, tuners, car services etc.) that use good engine dynamometers and/or engineering / scientific chassis dynamometers. Note that a performance graph that can't be reproduced by other professional suppliers is useless for comparisons with others. Take the ROTOTEST dynamometer as an example. Tests correctly conducted on a ROTOTEST chassis dynamometer are always possible to verify with any other ROTOTEST chassis dynamometer worldwide.

### **Don't get mislead**

Don't get mislead, always require a hard copy performance graph (showing power and torque with background information) from your professional performance supplier. Also be aware of estimations and poor measurement results from toy dynos like low cost road dynos, rolling roads and service grade hub dynos. Don't buy or recommend cars with built in auto- and/or racing manufacturer protection against customer rights to perform powertrain performance controls.



*Sven Andersson is a sports car enthusiast and writes in the RRI Column on an irregular basis on controversial subjects relating to cars in general and car performance in particular. Andersson has devoted half a lifetime in the world of cars and has insights in everything from the car industry to the opinion of the everyday motorist.*

## **Don't get fooled**

Don't get fooled, always demand accurate powertrain performance graphs whenever you buy a new or used performance car, buy performance upgrades or parts and before your car's warranty ends. Only then you can rest assured that you are not being deceived.

I end this column with a phrase what always to remember when buying car performance:

**"BROCHURE HORSE POWER" – NO MORE!**

Sven Andersson

### **Sven Andersson's recommendation of when to demand a powertrain performance graph.**

- ✓ When you buy a new or used performance and/or race car.
- ✓ Before your car's warranty ends.
- ✓ When you buy performance upgrades for your car.
- ✓ When you buy specific performance parts.
- ✓ When you service your performance and/or race car.
  - Does your car reach the stated maximum speed and at the right time?
  - Do you have the expected performance in the engine and/or at the wheel hubs?
  - Are all engine systems in optimal function in maximum performance situations?
  - Is the maximum performance (power and/or torque) decreased, due to problems, for the car manufacturer, with warranty commitments?