VisiTyre Batteryless TPMS: Number One for Simplicity

In the USA the driver for the rapid deployment of TPMS has been the TREAD Act legislation with NHTSA (National Highway Traffic Safety Administration) stipulating that by 2008 all cars under 10000 lbs must be fitted with a TPMS which is capable of detecting simultaneous under-inflation of all four tyres.

Many companies responded to this new market opportunity by releasing TPMS products that use an obvious means of getting tyre pressure and temperature data across a vehicle's rotating wheel-chassis boundary. They chose to use battery powered radio frequency transmitter modules. However, in an effort to deal with the problems created by battery limitations, each company's product is slightly different from the other. There are now a plethora of different systems, each requiring individual set up procedures and specialized initialization and diagnostic tools.

Unfortunately, TPMS support has now become a "dog's breakfast" of confusing and patchwork standards in the automotive industry sector. This sector is very large and includes vehicle manufacturers and assembly plants, OE dealers, tyre fitters, auto electricians and last, but not least, the vehicle owners and drivers at the end of the frustration chain. Information and training in diagnosing TPMS faults, correctly repairing/replacing the multitude of different TPMS components, TPMS "Learn tools", all the different TPMS activation and reset procedures has become so complex, as to become a specialist service industry in itself.

VisiTyre is the first TPMS which brings relief and simplicity to all areas of the automotive sector by getting rid of the batteries in 'direct' sensor wheel modules. The *VisiTyre* technology not only eliminates sensor batteries but also eliminates all of the previous TPMS problem areas, complex support tools and procedures and also their associated high costs.

Unlike the other TPMS, the *VisiTyre* technology has:

- No Battery;
- No hibernation in storage (therefore No wakeup procedure for sensor going into service);
- No Learn Tools or retrain procedure when tyres are rotated or faulty sensors are replaced;
- No Scan Tool required to plug into OBD;
- No requirement for a warning indicator "reset" procedure;
- Standard tyre mount and dismount procedures;
- Standard tyre valves;
- Transparency to all replacement tyres, irrespective of carbon or ferrous content;
- Monitoring of the spare tyre;
- Zero Maintenance.

Now *VisiTyre* makes life much easier for tyre fitters . . . All TPMS systems which use battery powered 'direct' pressure sensors present significant issues to tyre fitters. Battery powered sensors are either part of the valve stem or banded to the rim's dropwell centre. With all battery powered systems Tyre fitters need to exercise great care not to damage sensor modules during tyre mount and dismount procedures. Unfortunately, every time there is a need to rotate tyres or replace a faulty sensor, the battery sensor's ECU requires "relearn" procedures and tools to reprogram the matching sensor ID and position combination on the vehicle. On the other hand, *VisiTyre's* zero maintenance Batteryless TPMS technology does not require such relearn procedures.

Conclusion: *VisiTyre* batteryless TPMS dispenses with the need for a complex portfolio of installation and service products in all sectors of the industry from OE installation and assembly to industry service personnel and end users.