# **TECHNICAL** NEWSLETTER

Gear Position Sensor











**AUTOMOTIVE TECHNOLOGY** 

#### **GEAR MODULE:**

The Gear Module has the function of controlling the gear change according to driver's orders and operating conditions. For this purpose, a group of sensors generate information about the system and share it with other vehicle systems. Thus, the Gear Module maintains a "conversation" with the Injection Module, ABS Module, etc., and the vehicle works according to the parameters established by the manufacturer.



## CONCEPT:

The DS Gear Position Sensor is electronic, being more accurate and reliable.

There is no corrosion, wear or poor contact conditions, which makes it possible for it to tolerate oil residues, if there were a small leak.

# PRINCIPLE:

The purpose of the sensor is to send information about gear position (selection / coupling) directly to the Gear Module. With this information, the Module manages to determine operating strategies, for example, how to control or operate the solenoid valves for the next gear changes.

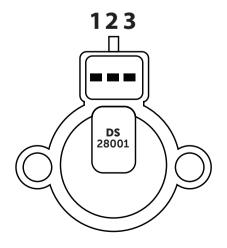
## LOCATION:

In the Dualogic Gear, the set is divided into two parts. The gear position sensors are in the group of solenoid valves.



### How to test the DS 28001:

If it is an Automatic Gear, it is ideal to use a diagnostic device that performs reading of the Gear Module. Using graphical analysis, it is possible to visualize - at the time of the changes - the behaviour of the sensor, whether it is inside or outside the parameters. If it is necessary to evaluate it with a tester, do the following:



TERMINAL	FUNCTION
1	Negative supply (GND)
2	Output
3	Positive supply (5V)

Note: The part has to be powered and checked in the DC voltage.



## CAUTION:

The torque should follow the vehicle handbook. In the case of the DS 28001, torque is 3.6 Nm (+- 0.6).