



SI 1011
For technical personnel only!
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SERVICE INFORMATION

OPEL/VAUXHALL EGR VALVE

ERROR MESSAGES WITH NEW PARTS

Suitable for: Opel/Vauxhall	Product: EGR valve		
	Pierburg no.	Replacement for	Ref. No.*
Agila 1.0i/1.2i; 12V/16V, Astra G/H/Mk IV/Mk V 1.2i/1.4i; 12V/16V, Corsa C 1.0i/1.2i/1.4i; 12V/16V, Meriva 1.4i 16V, Tigra B 1.4i 16V	7.22875.13.0	7.22875.00.0	8 51 593 9157671

POTENTIAL COMPLAINTS:

- Signal voltage outside tolerance
- New part with error message
- Malfunction indicator lamp lights up
- Diagnostic trouble code P0400



Every EGR valve has a characteristic curve in the form of a hysteresis. The hysteresis has tolerances based on manufacturing technology, i.e. each EGR valve has a slightly different hysteresis. For this reason, there is a control range in the control unit into which the hysteresis must fall. An error message is displayed if any results fall outside of the control range. In the example shown in Fig. 1 this would refer to all of the red areas of the characteristic curve that fall outside the control range (for example the green area).

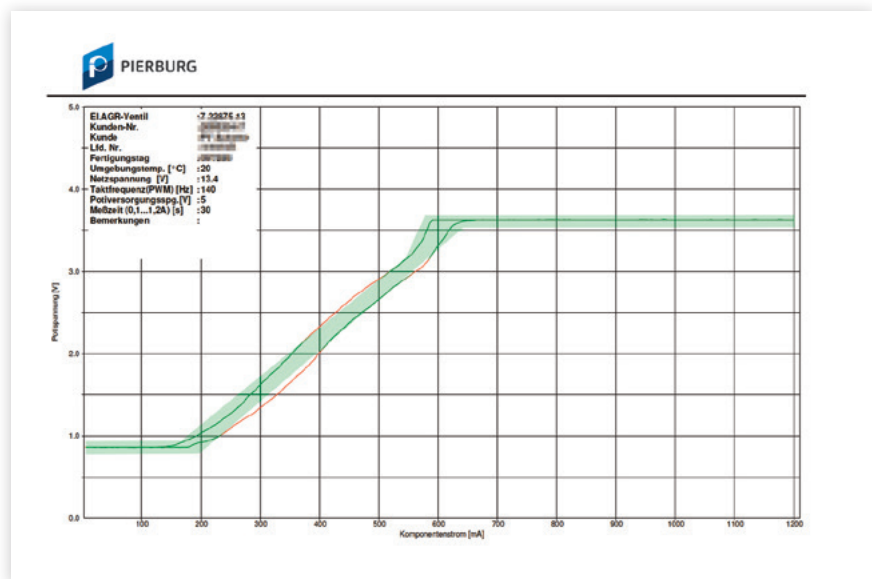


Fig. 1: Original data sheet; control range (example) highlighted in green

All content including pictures and diagrams is subject to change. For assignment and replacement, refer to the current catalogues or systems based on TecAlliance.



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SOLUTION:

In the case of the aforementioned EGR valve it is possible that the control range in the control unit has been set too small. An update of the engine control unit software can be used to extend the control range, thereby solving the problem.



NOTE:

In simple terms, a hysteresis is a characteristic curve that takes a "different route back from the one it took to get there" (see Fig. 2).

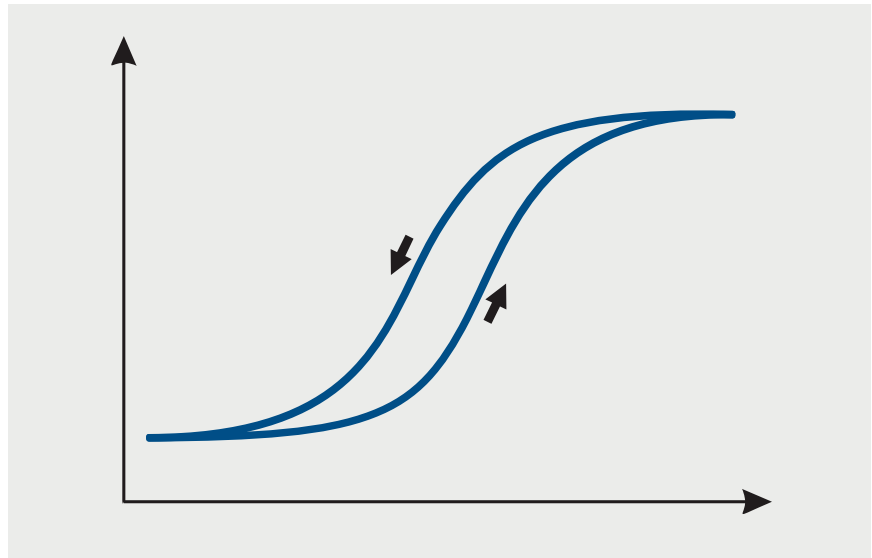


Fig. 2: Hysteresis