

#### Table of contents



| Page 1     | Contents and disclaimer             |
|------------|-------------------------------------|
| Page 2 - 3 | Overview valve/seat problems        |
| Page 4 - 5 | Overview injector module problems   |
| Page 6     | Overview petrol fuel gauge problems |
| Page 7     | Overview fuel pressure problems     |
| Page 8     | Overview miscellaneous problems     |

#### General disclaimer Prins Autogassystemen BV:

The information contained in this archive is provided 'as is' without warranty of any kind. The entire risk as to the results and the performance of the information is assumed by the user, and in no event shall Prins Autogassystemen BV be liable for any consequential, incidental or direct damages suffered in the course of using the information in this archive. Use of the information contained in this archive are governed by their respective license agreements and may contain restrictions on use."



#### Overview valve/seat problems <100.00 km



Based on practical experiences, Prins has compiled a list of vehicles in which problems with valves/valve seats (excessive wear) may occur at a a low mileage (<100,000 km). This list is updated regularly. To keep this list up-to-date, Prins is asking their clients to report any valve/valve seat problems (service@prins.eu).

A base d'expériences sur le marché, Prins a établi une liste des véhicules susceptibles d'avoir des problèmes avec les soupapes/sièges de soupape à un kilométrage réduit (<100.00 km) (usure excessive). Cette liste est mise à jour régulièrement. Afin de tenir cette liste à jour, Prins demande ses clients de bien vouloir signaler des problèmes de soupapes/sièges de soupape (service@prins.eu).

Op basis van ervaringen uit de markt heeft Prins een lijst samengesteld waarin voertuigen staan vermeld die bij een geringe kilometerstand (<100.000 km) problemen met kleppen/klepzittingen kunnen krijgen (overmatige slijtage). Deze lijst wordt regelmatig bijgewerkt. Om deze lijst up-to-date te houden vraagt Prins zijn klanten om klep/klepzitting problemen te melden (service@prins.eu).

Auf der Grundlage von Erfahrungen aus dem Markt hat Prins eine Liste mit Fahrzeugen zusammengestellt, die bei einer geringen Kilometerzahl (< 100.000 km) Probleme mit den Ventilen/Ventilsitzen bekommen können (übermäßiger Verschleiß). Diese Liste wird regelmäßig aktualisiert. Damit diese Liste ständig aktuell ist, bittet Prins ihre Kunden, Ventil/Ventilsitz-Probleme zu melden (service@prins.eu).

| nd Model                    | Year of construction | Engine code                 | Engine capacity | Edition               | Problem description            | Solution   | Remarks   | Information source (Prins or customer)               |
|-----------------------------|----------------------|-----------------------------|-----------------|-----------------------|--------------------------------|--|---|--|
| Different types             |                      | BSE                         | 1600 cc         |                       | Excessive wear of valves/seats |  | Cylinderhead Mexico   | Customer   |
| Dilicient types             |                      | DOL                         | 1000 CC         |                       | Excessive wear or varves/seats |  | Gyirriderricad Mickied  | Customer   |
| Escalade                    | 2000>                |                             | 6000 cc 16V     |                       | Excessive wear of valves/seats |  |   | Customer   |
| Esseriade                   | 2000-                |                             | 0000 00 101     |                       | Excessive wear of varves/seats |  |   | Castories  |
| All models                  | 1998>                |                             |                 |                       | Excessive wear of valves/seats |  |   | Customer   |
|                             | 1998>                | Vortec                      |                 |                       | Excessive wear of valves/seats |  | Even problems with flash lube   | Customer   |
|                             |                      |                             |                 |                       |                                |  |   |  |
| Berlingo                    | 1998>                | LFX                         | 1800 cc 8V      |                       | Excessive wear of valves/seats |  |   | Customer   |
| Xantia                      | 1998?                | LFX                         | 1800 cc 8V      |                       | Excessive wear of valves/seats |  |   | Customer   |
| C1                          | 2005>                |                             | 1000 cc 12V     |                       | Excessive wear of valves/seats |  |   | Customer   |
|                             |                      |                             |                 |                       |                                |  |   |  |
| Tacuma                      | 2000>                |                             | 2000 cc 8V      |                       | Excessive wear of valves/seats |  |   | Prins  |
|                             |                      |                             |                 |                       |                                |  |   |  |
| Logan                       | 2006>                |                             | 1400 cc 8V      |                       | Excessive wear of valves/seats |  |   | Customer   |
| Logan                       | 2006>                | K7M710                      | 1600 cc 8V      |                       | Excessive wear of valves/seats |  |   | Customer   |
|                             |                      |                             |                 |                       |                                |  |   |  |
| Terios                      | 2001>                | K3-VE                       | 1300 cc 16V     |                       | Excessive wear of valves/seats |  |   | Customer   |
| YRV                         | 2001>                | K3-VE                       | 1300 cc 16V     |                       | Excessive wear of valves/seats |  |   | Customer   |
|                             |                      |                             |                 |                       |                                |  |   |  |
| Ram 1500/2500               | 2002>                |                             | 4700 cc 16V     |                       | Excessive wear of valves/seats |  |   | Customer   |
| Caliber                     | 2006>                |                             | 1800 cc 16V     |                       | Excessive wear of valves/seats |  |   | DCNL   |
| Caliber                     | 2006>                |                             | 2000 cc 16V     |                       | Excessive wear of valves/seats |  |   | DCNL   |
| Nitro                       | 06-2007>             |                             | 3700 cc         |                       | Excessive wear of valves/seats |  | After 40.000 km problems with<br>valves/seats while driving only on<br>petrol. Not jet LPG experience, but<br>this will be worse. | DCNL   |
|                             |                      |                             |                 |                       |                                |  |   |  |
| Focus                       | 1998>                |                             | 1800 cc         |                       | Excessive wear of valves/seats |  |   | Customer   |
| Fiesta                      | 11-2002>             | A9JA                        | 1300 cc 8V      |                       | Excessive wear of valves/seats |  | After 20.000 km   | Customer   |
| Mondeo                      | 1998>                |                             | 1800 cc         |                       | Excessive wear of valves/seats |  |   | Customer   |
| Ka                          |                      |                             | 1250 cc         |                       | Excessive wear of valves/seats |  |   | Customer   |
| Explorer                    | 1993-1998            |                             | 4000 cc 12V     |                       | Excessive wear of valves/seats |  | Exhaust valves  | Customer   |
| Windstar                    | 1995                 |                             | 3000 cc 12V     |                       | Excessive wear of valves/seats |  | Exhaust valves  | Customer   |
|                             |                      |                             |                 |                       |                                |  |   |  |
| All models                  | 2003>                |                             |                 |                       | Excessive wear of valves/seats |  |   | Customer   |
|                             |                      |                             |                 |                       |                                |  |   |  |
| Sonata                      | 2005>                | G4KC                        | 2400 cc 16V     |                       | Excessive wear of valves/seats |  |   | Customer   |
| Trajet                      | 2000-2004            | G4JP                        | 2000 cc 16V     |                       | Excessive wear of valves/seats |  |   | Prins  |
|                             |                      |                             |                 |                       |                                |  |   |  |
| All models                  |                      |                             |                 |                       | Excessive wear of valves/seats |  |   | Customer   |
|                             |                      |                             |                 |                       |                                |  |   |  |
| FX35                        | 2003>                |                             | 3500 cc 24V     |                       | Excessive wear of valves/seats |  |   | Customer   |
|                             |                      |                             |                 |                       |                                |  |   |  |
| Grand Cherokee              | 1999-2005            |                             | 4700 cc 16V     |                       | Excessive wear of valves/seats |  |   | Customer/Importer                                    |
|                             |                      |                             |                 |                       |                                |  |   |  |
| RX300                       | 2001>                | 1MZ-FE                      | 3000cc 24V      |                       | Excessive wear of valves/seats |  |   | Customer   |
| FX35  Grand Cherokee  RX300 |                      | 2003><br>1999-2005<br>2001> | 1999-2005       | 1999-2005 4700 cc 16V | 1999-2005 4700 cc 16V          | 1999-2005 4700 cc 16V Excessive wear of valves/seats | 1999-2005 4700 cc 16V Excessive wear of valves/seats  | 1999-2005 4700 cc 16V Excessive wear of valves/seats |



# Overview valve/seat problems <100.00 km



| Mazda            | Mazda 6          | 2002>          | All ford engines |                            | Excessive wear of valves/seats                                |                                       | All Ford engines!!!           | Customer             |
|------------------|------------------|----------------|------------------|----------------------------|---|---------------------------------------|-------------------------------|----------------------|
| Mazda            | Tribute          | 2001-2004      | MOT.YF           | 2000cc 16V                 | Excessive wear of valves/seats                                |                                       | 7 til 1 ord enginee           | Customer             |
| Mazda            | 121              | 2001 2001      |                  | 1250 cc                    | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| viazaa           | 121              |                |                  | 1200 00                    | Exocosive wear or varves/seats                                |                                       |                               | Gustomer             |
| Mercedes         | A-class          | 2005>          | All engines      | 1500/1700/2000/T           | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| iviercedes       | A-class          | 2005>          | All engines      | (8V)                       | Excessive wear or valves/seats                                |                                       |                               | Customer             |
| Mercedes         | B-class          | 2005>          | All engines      | 1500/1700/2000/T           | Excessive wear of valves/seats                                | Fit special LPG cylinderhead original |                               | Customer             |
| Mercedes         | D-Class          |                | All eligines     | (8V)                       | Excessive wear or varves/seats                                | Mercedes                              |                               | Customer             |
| Mercedes         | Vaneo            | 2004-2005      |                  | 1900 cc                    | Excessive wear of valves/seats                                |                                       |                               | Customer             |
|                  |                  |                |                  |                            |   |                                       |                               |                      |
| Mitsubishi       | Outlander        | 2001>          |                  | 2400 cc 16V                | Excessive wear of valves/seats                                |                                       |                               | Importer             |
| Mitsubishi       | Grandis          | 2004>          |                  | 2400 cc 16V                | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| N.C              | Marriago OV      | 4005-          |                  | 2000                       | Events in the second sector of                                |                                       |                               | 0                    |
| Nissan           | Maxiam QX        | 1995>          | All annings      | 3000 cc                    | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| Nissan           | Primera          | 1998>          | All engines      | 0000 401/                  | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| Nissan           | X-Trail<br>350 Z | 2003><br>2004- |                  | 2000 cc 16V                | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| Nissan<br>Nissan | Murano           | 2004-          |                  | 3500 cc 24V<br>3500 cc 24V | Excessive wear of valves/seats Excessive wear of valves/seats |                                       |                               | Customer<br>Customer |
| INISSAII         | IVIUI al IO      | 2004-          |                  | 3500 CC 24V                | Excessive wear or valves/seats                                |                                       |                               | Customer             |
| Opel             | All models       | 2004>          | Z14XEP           | 1400 cc 16V                | Excessive wear of valves/seats                                |                                       |                               | Prins                |
| Opel             | All models       | 2004>          | Z16XEP           | 1600 cc 16V                | Excessive wear of valves/seats                                |                                       |                               | Prins                |
| Opel             | All models       | 2004>          | Z16XEP           | 1600 cc 16V                | Excessive wear of valves/seats                                |                                       |                               | Prins                |
| Opel             | All models       | 2004>          | Z16XER           | 1600 cc 16V                | Excessive wear of valves/seats                                |                                       | <u> </u>                      | Prins                |
| Opel             | All models       | 2004>          | Z18XER           | 1800 cc 16V                | Excessive wear of valves/seats                                |                                       |                               | Prins                |
| Opoi             | 7 di Hiodola     | 2007           | LIONLIN          | 1000 00 100                | Excessive wear or varves/seats                                |                                       |                               | 1 1110               |
| Peugeot          | 406              | 1998>          | LFX              | 1800 cc 8V                 | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| Peugeot          | Boxer            | 1995>          | XU10J2/RFW       | 2000 cc 8V                 | Excessive wear of valves/seats                                |                                       |                               | Peugeot NL           |
| Peugeot          | Partner          | 1996>          | LFX              | 1800 cc 8V                 | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| Peugeot          | 107              | 2005>          |                  | 1000 cc 12V                | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| <b>J</b>         |                  |                |                  |                            |   |                                       |                               |                      |
| Pontiac          | Trans Sport      | 1993-1997      | Quad 4           | 2300 cc 16V                | Excessive wear of valves/seats                                |                                       |                               | Customer             |
|                  |                  |                |                  |                            |   |                                       |                               |                      |
| Porsche          | Cayenne          | 2004>          |                  | 3200 cc 24V                | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| Porsche          | Cayenne S        | 2004>          |                  | 4500 cc 32V                | Excessive wear of valves/seats                                |                                       |                               | Customer             |
|                  |                  |                |                  |                            |   |                                       |                               |                      |
| Renault          | Laguna           | 1994-1998      |                  | 2000 cc 8V                 | Excessive wear of valves/seats                                |                                       |                               | Prins                |
| Renault          | Espace           | 1994-1998      |                  | 2000 cc 8V                 | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| Renault          | Espace IV        | 2002-          |                  | 3500 cc 24V                | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| Renault          | Vel Satis        | 2002-          |                  | 3500 cc 24V                | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| Renault          | Megane 2         | 2002-          |                  | 1600 cc 16V                | Excessive wear of valves/seats                                |                                       | inlet+exhaust valves          | Customer             |
| Renault          | Kangoo           | 1998-          |                  | 1400 cc 8V                 | Excessive wear of valves/seats                                |                                       | Inlet valves                  | Customer             |
|                  |                  |                |                  |                            |   |                                       |                               |                      |
| Saab             | 9- versions      | 1998>          | 16V              |                            | Excessive wear of valves/seats                                |                                       |                               | Customer             |
|                  |                  |                |                  |                            |   |                                       |                               |                      |
| Seat             | Alhambra         | 2000>          | ATM              | 2000 cc 8V                 | Excessive wear of valves/seats                                |                                       |                               | Prins                |
| Cleada           | Fahia            | 2000>          | A 71             | 2000 22 8)/                | Evenenius varantianius (                                      |                                       | inlet velves 120 000 l        | Customer             |
| Skoda            | Fabia            | 2000>          | AZL              | 2000 cc 8V                 | Excessive wear of valves/seats                                |                                       | inlet valves 120.000 km       | Customer             |
|                  |                  |                |                  | 1100/1300/1500             |   |                                       |                               |                      |
| Smart            | Forfour          | 2004>          |                  | cc (12V)                   | Excessive wear of valves/seats                                |                                       | (2 reports from NL)           | Customer             |
|                  |                  |                |                  | CC (12V)                   |   |                                       |                               |                      |
| Suzuki           | Liana            | 2004>          |                  | 1600 cc 16V                | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| OUZUNI           | Liaila           | 20047          |                  | 1000 66 100                | LACESSIVE WEDI UI VAIVES/SEDIS                                |                                       |                               | Odstorner            |
| Toyota           | All models       | 1996>          |                  | All models                 | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| Toyota           | Corolla          | 2004>          | VVTI             | 7 11 11104013              | Excessive wear or varves/seats                                |                                       | Problems even with flash lube | Customer             |
| Toyota           | Aygo             | 2005>          |                  | 1000 cc 12V                | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| ,                | .,,50            |                |                  | 1:50 00 121                | Excessive field of varyourouts                                |                                       |                               | 2 201011101          |
|                  | 01               | 0000           | 4.74             | 0000 01/                   |   | Fit special CNG cylinderhead original |                               |                      |
| Volkswagen       | Sharan           | 2000>          | ATM              | 2000 cc 8V                 | Excessive wear of valves/seats                                | Volkswagen                            |                               | Customer             |
| Volkswagen       | Touareg          | 2003>          |                  | 3200 cc 24V                | Excessive wear of valves/seats                                |                                       |                               | Customer             |
|                  |                  |                | AVA              |                            |   | Fit special CNG cylinderhead original | Ordinate and Mari             |                      |
| Volkswagen       | T5               | 1              | AXA              | 2000 cc 8V                 | Excessive wear of valves/seats                                | Volkswagen                            | Cylinderhead Mexico           | Customer             |
| Volkswagen       | Phaeton          | 2002>          | BKL              | 3200 cc 24V                | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| Volkswagen       | Golf             | 2005>          | BUB              | 3200 cc 24V                | Excessive wear of valves/seats                                |                                       |                               | Customer             |
| Volkswagen       | Different types  |                | BSE              | 1600 cc                    | Excessive wear of valves/seats                                |                                       | Cylinderhead Mexico           | Customer             |
|                  | 1.25.1           |                |                  | _                          |   | 1                                     | i -                           |                      |



#### Overview valve/seat problems <100.00 km



| Volvo | XC90    | 2003> | Turbo | 2500 cc turbo | Excessive wear of valves/seats |                               | Customer |
|-------|---------|-------|-------|---------------|--------------------------------|-------------------------------|----------|
| Volvo | S60/V70 | 2000> | Turbo | 2400 cc turbo | Excessive wear of valves/seats |                               | Customer |
| Volvo | S40/V50 | 2003> |       | 1800 cc       | Excessive wear of valves/seats | Problems even with flash lube | Customer |
|       |         |       |       |               |                                |                               |          |
|       |         |       |       | l             |                                |                               |          |



#### Overview injector module problems



Mogelijke problemen hangen af van gebruikte type injectiemodule.

New wiring loom 180/700.. : Replace injector simulator to the old Neuer Kabelbaum 180/700.. : Der Injector Modul ersetzen nach version 091/0145 (4/8 cyl.) or 091/0155 (6cyl.).

der alte Version 091/0145 (4/8 Zyl.) oder 091/0155 (6Zyl.)

| Brand       | Model          | Year of construction     | Engine code  | Engine capacity        | Problem with module type: | Problem description  | Solution  | Remarks                               | Information source customer) | (Prins or |
|-------------|----------------|--------------------------|--------------|------------------------|---------------------------|--|---|---------------------------------------|------------------------------|-----------|
| Alfa        | GTV turbo      |                          |              | 2000 сс                | 180/700XX                 |  | Fit "old" module 091/0145                                     | Not more information known            | Customer                     |           |
|             |                |                          |              |                        |                           |  |   |                                       |                              |           |
| Citroën     | C5 V6          |                          |              | 3000 cc                | 180/700XX                 | Not every car has a problem!   | Fit "old" module 091/0155                                     | Not more information known            | Customer                     |           |
| Chevrolet   | Chevy V8       |                          | (12,7 Ohm)   | 5700 CC                | 180/700XX                 |  | Fit "old" module 091/0145 (2x)                                | No more information known             | Customer                     |           |
| Cheviolet   | Crievy vo      |                          | (12,7 (1111) | 3700 CC                | 100/700/X                 |  | Tit old module 09 1/0143 (2x)                                 | INO HIGHE IIIIOITIIALIOIT KIIOWII     | Customer                     |           |
| Chrysler    | Le Baron turbo | 1989                     |              |                        |                           | Peak&Hold injector signal petrol   | No solution   | Not possible to convert with VSI      | Customer                     |           |
|             |                |                          |              |                        |                           | 7 9  |   |                                       |                              |           |
| Dodge       | Dakota V6      | 2006 model               |              | 3700 CC                |                           | Check engine "open circuit"  | Parallel 370 Ohm resistor                                     |                                       | Prins                        |           |
|             |                |                          |              |                        |                           |  |   |                                       |                              |           |
| Infiniti    | FX45 V8        |                          |              | 4500 cc                |                           | Voltage drops during starting under 6<br>Volt. Car won't start on petrol with a<br>cold engine (small battery: 60 Ah | Fit "old" module 091/0145                                     | Bigger battery can also be a solution |                              |           |
|             |                |                          | ==           |                        |                           |  |   |                                       |                              |           |
| Fiat        | Punto          | 2006                     | 1,4 70 Kw    | 1400 cc                |                           | Petrol in system above 4500 RPM  | Fit "old" type module 091/0145                                |                                       | Customer                     |           |
| Ford        | Scorpio        | 1999                     | 2,0i         | 2000 cc                |                           |  | Fit "old" type module 091/0145                                |                                       | Customer                     |           |
| 1 010       | Осогрю         | 1000                     | 2,01         | 2000 CC                |                           |  | The old type module 03 7/0143                                 |                                       | Odstoriici                   |           |
| Hyundai     | Coupe          | 2006                     |              | 1600 cc                |                           | Shaking on high revs (little bit of petrol injected while driving on LPG)  | Fit "old" type module 091/0145                                |                                       | Prins                        |           |
| loguer      | V8             | 1998                     |              |                        |                           |  | Fit "old" type module 091/0145                                |                                       |                              |           |
| Jaguar      |                | i e                      |              | 3200 cc and 4000       |                           |  | Fit old type module 09 1/0 145                                |                                       |                              |           |
| Jaguar      | XJ and S       | 1997                     |              | CC                     |                           | Check engine on injector circuit   |   |                                       | Customer                     |           |
|             |                |                          |              |                        |                           |  |   |                                       |                              |           |
| Jeep        | Cherokee       | <1991                    |              |                        |                           | Peak&Hold injector signal petrol   | No solution   | Not possible to convert with VSI      | Cutsomer                     |           |
|             |                |                          |              |                        |                           |  |   |                                       |                              |           |
| Kia         | Carnival       | 2002                     |              | 2000 cc                |                           |  | Fit "old" type module 091/0145                                |                                       | Customer                     |           |
| Managaria - | E240           | 2000                     |              | 0400                   |                           | Objective regions  | Et Heldling dule 004/0455                                     |                                       | 0                            |           |
| Mercedes    | E240           | 2000                     |              | 2400 cc                |                           | Check engine Drives well on LPG, but on petrol the   | Fit "old" module 091/0155                                     |                                       | Customer                     |           |
| Mercedes    | E klasse       | 2002                     | V8           | 5000 cc                |                           | engine stalls at 4500 rpm  | Fit "old" module 091/0145 (2x)                                |                                       | Customer                     |           |
| Mercedes    | M111           | 1993                     | R4           | 2000 cc and 2200<br>cc |                           |  | Fit "old" type module 091/0145                                |                                       | Customer                     |           |
| Mercedes    | M104           | 1993                     | R6           |                        |                           |  | Fit "old" type module 091/0155                                |                                       | Customer                     |           |
| Mercedes    | M112           |                          | V6           |                        |                           |  | Fit "old" type module 091/0155                                |                                       | Customer                     |           |
| Mercedes    | M113           |                          | V8           |                        |                           |  | Fit "old" type module 091/0145 (2x)                           |                                       | Customer                     |           |
|             |                |                          |              |                        |                           |  |   |                                       |                              |           |
| Mitsubishi  | Lancer         | 1998                     | (15,8 Ohm)   |                        |                           | Check engine   | Fit "old" type module 091/0145                                |                                       | Customer                     |           |
| Mitsubishi  | Spacewagon     | 1998                     | (15,8 Ohm)   |                        |                           | Check engine   | Fit "old" type module 091/0145                                |                                       | Customer                     |           |
| Mitsubishi  | Sigma          | 1992<br>All models <1999 |              |                        |                           | Check engine   | Fit "old" type module 091/0145 Fit "old" type module 091/0145 | <u> </u>                              | Customer                     |           |
| Mitsubishi  | General        | All models < 1999        |              |                        |                           | Check engine   | Fit old type module 091/0145                                  |                                       | Customer                     |           |
| Renault     | Espace         | 2006                     | 2,0 turbo    | 2000 cc                |                           | Disturbance caused by the ignition at high RPM. Petrol consumption by driving on LPG.                                | Fit "old" type module 091/0145                                | Problem is still in investigation     | Prins                        |           |
| Renault     | Espace         |                          |              | 3500 cc                |                           | Check engine   | Fit "old" type module 091/0145                                |                                       | Customer                     |           |
| Renault     | Velsatis       | 4004                     | <del> </del> | 3500 cc                |                           | Check engine   | Fit "old" type module 091/0145                                | Net a secible to second with VO       | Customer                     |           |
| Renault     | Espace         | 1991                     |              | 2200 cc                |                           | Peak&Hold injector signal petrol   | No solution   | Not possible to convert with VSI      | Customer                     |           |
| Seat        | Alhambra       | 2004                     |              | 2000 cc                |                           | Check engine   | Fit "old" type module 091/0145                                |                                       | Customer                     |           |
| ocat        | AIIIAIIIVIA    | 2004                     |              | 2000 66                |                           | Oncok origine  | The old type module 09 1/0 145                                |                                       | Oustoffici                   |           |
| Volvo       | 960            | 1994                     |              | 3000 cc                |                           | Car does not run on LPG (wrong emulation value for petrol ECU)   | Fit "old" type module 091/0155                                |                                       | Customer                     |           |
| Volvo       | 740            | 1992                     | 1            |                        |                           | Check engine?  | Fit "old" type module 091/0145                                |                                       | Customer                     |           |



# Overview injector module problems



| Volvo      | 850           | 1994 |    | 2000 cc and 2500<br>cc | Check engine? | Fit "old" type module 091/0145 | Customer |
|------------|---------------|------|----|------------------------|---------------|--------------------------------|----------|
| Volvo      | V70           |      | T6 | 2900 сс                | Check engine? | Fit "old" type module 091/0155 | Customer |
| Volvo      | 460/480 turbo |      |    | 1700 cc                | Ckeck engine? | Fit "old" type module 091/0145 | Customer |
|            |               |      |    |                        |               |                                |          |
| Volkswagen | Golf          | 2004 |    | 2000 cc                | Check engine  | Fit "old" type module 091/0145 | Customer |
|            |               |      |    |                        |               |                                |          |



# Overview petrol fuel gauge problems



| construction                     | 3.2 V6 5.3 V8 ? ?  5.4 V8 Supercharger  2.4 (4cil) 16v G4KC  all engines |              | USA/Canada edition ? ? | Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.  Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.  Level indication goes down during driving on LPG until tank is empty. | Filling the tank to 3/4.  - AEB 392 module type P AEB 392 module type P   | DTC P0460  DTC No fuel consumption over miles  DTC P0460. DTC becomes active after a driving a large distance  | Customer  Customer  Customer  AEB  AEB  Customer   |
|----------------------------------|--|--------------|------------------------|---|---|--|--|
| > 1999<br>?<br>.o > 2002<br>2003 | - ? ?  |              | edition ?              | driving on LPG until tank is empty. Restarting does not reset the level indication. Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.  Level indication goes down during driving on LPG until tank is empty.                                    |   | DTC No fuel consumption over miles  DTC P0460. DTC becomes active  | Customer  AEB  AEB   |
| > 1999<br>?<br>.o > 2002<br>2003 | - ? ?  |              | edition ?              | driving on LPG until tank is empty. Restarting does not reset the level indication. Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.  Level indication goes down during driving on LPG until tank is empty.                                    |   | DTC No fuel consumption over miles  DTC P0460. DTC becomes active  | Customer  AEB  AEB   |
| ? > 2002                         | Supercharger  2.4 (4cil) 16v G4KC  |              | edition ?              | driving on LPG until tank is empty. Restarting does not reset the level indication. Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.  Level indication goes down during driving on LPG until tank is empty.                                    |   | DTC P0460. DTC becomes active  | AEB<br>AEB   |
| ? > 2002                         | Supercharger  2.4 (4cil) 16v G4KC  |              | edition ?              | driving on LPG until tank is empty. Restarting does not reset the level indication. Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.  Level indication goes down during driving on LPG until tank is empty.                                    |   | DTC P0460. DTC becomes active  | AEB<br>AEB   |
| 2003                             | Supercharger  2.4 (4cil) 16v G4KC  |              | ?  Australian edition  | driving on LPG until tank is empty. Restarting does not reset the level indication. Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.  Level indication goes down during driving on LPG until tank is empty.                                    |   |  | AEB  |
| 2003                             | Supercharger  2.4 (4cil) 16v G4KC  |              | ?  Australian edition  | driving on LPG until tank is empty. Restarting does not reset the level indication. Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.  Level indication goes down during driving on LPG until tank is empty.                                    |   |  | AEB  |
| 2003                             | Supercharger  2.4 (4cil) 16v G4KC  |              | ?  Australian edition  | driving on LPG until tank is empty. Restarting does not reset the level indication.  Level indication goes down during driving on LPG until tank is empty.  | AEB 392 module type P   |  |  |
|                                  | Supercharger  2.4 (4cil) 16v G4KC  |              | Australian edition     | driving on LPG until tank is empty.   |   |  | Customer   |
|                                  | Supercharger  2.4 (4cil) 16v G4KC  |              | Australian edition     | driving on LPG until tank is empty.   | -   |  | Customer   |
| 2006                             | G4KC   |              | Australian edition     | driving on LPG until tank is empty.   |   |  |  |
| 2006                             | G4KC   |              | Australian edition     | driving on LPG until tank is empty.   |   |  |  |
| 2006                             | all engines  |              |                        | Restarting does not reset the level indication.   | -   |  | Customer   |
|                                  |  |              | -                      | Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.   | Mercedes B reset module   |  | Prins  |
| 2005                             | all engines  |              | -                      | Level indication goes down during<br>driving on LPG until tank is empty.<br>Restarting does not reset the level<br>indication.  | -   |  | Prins  |
| 2001-2002                        | ?  |              | ?                      | Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.   | AEB 391 module type R   |  | AEB  |
| 2007                             | 3.2 V6   |              | Europe                 | Level indication goes down during<br>driving on LPG until tank is empty.<br>Restarting does not reset the level<br>indication.  | -   |  | Customer   |
| > 2002                           | ?  |              | ?                      | Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.   | AEB 392 module type P   |  | AEB  |
| ?                                | ?  |              | ?                      | Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.   | AEB 392 module type P   |  | AEB  |
| > 2002                           | ?  |              | ?                      | Level indication goes down during<br>driving on LPG until tank is empty.<br>Restarting does not reset the level<br>indication.  | AEB 392 module type P   |  | AEB  |
|                                  | 1.8 16v  |              | Europe                 | Level indication goes down during<br>driving on LPG until tank is empty.<br>Restarting does not reset the level<br>indication.  | -   |  | Prins  |
|                                  | ?  | ? ? > 2002 ? | ? ? > 2002 ?           | ? ? ? ? ?   | ? driving on LPG until tank is empty. Restarting does not reset the level indication.  Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.  Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.  Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication on LPG until tank is empty. Restarting does not reset the level | Page 2002   Page 2002   Page 2005   Page | ? driving on LPG until tank is empty. Restarting does not reset the level indication.  Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.  Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.  AEB 392 module type P  Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.  Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level or reset the |



# Overview petrol fuel gauge problems



| Renault | Espace    | > 2003    | ?      | ? | Level indication goes down during driving on LPG until tank is empty. Restarting does not reset the level indication.  | AEB 392 module type P    |              | AEB   |
|---------|-----------|-----------|--------|---|--|--------------------------|--------------|-------|
| Renault | Espace    | 2001-2002 | ?      | ? | Level indication goes down during<br>driving on LPG until tank is empty.<br>Restarting does not reset the level<br>indication.   | AEB 391 module type R    |              | AEB   |
| Renault | Avantime  | ?         | ?      | ? | Level indication goes down during<br>driving on LPG until tank is empty.<br>Restarting does not reset the level<br>indication.   | AEB 391 module type R    |              | AEB   |
| Renault | Vel Satis | ?         | ?      | ? | Level indication goes down during<br>driving on LPG until tank is empty.<br>Restarting does not reset the level<br>indication.   | AEB 391 module type R    |              | AEB   |
|         |           |           |        |   |  |                          |              |       |
| Saab    | 97x       | 2006      | 5.3 V8 |   | Level indication does not go down during driving on LPG but after a while the indication will be switched off. No reset afterstarting, no error code will become active. | Filling the tank to 3/4. | Saab problem | Prins |
|         |           |           |        |   |  |                          |              |       |



# Overview Fuel pressure problems



| Brand  | Model     | Year of construction | Engine code                 | Engine capacity | Edition | Problem description   | Solution                           | Remarks  | Information source (Prins or customer) |
|--------|-----------|----------------------|-----------------------------|-----------------|---------|---|------------------------------------|--|--|
| Ford   | Mustang   | 2005-                | V8                          |                 |         |   | -                                  | -  | Customer                               |
| Ford   | Freestyle | 2006                 | 3000 cc V6                  |                 |         |   | -                                  | Prins module does not work   | Prins                                  |
| Ford   | Mavarick  | 2004-                | duratec                     | 110 Kw          |         | Petrol pressure becomes too high -> bad running on petrol after switching |                                    |  | Customer                               |
|        |           |                      |                             |                 |         |   |                                    | Not possible with Prins simulator.   |  |
| Jaguar |           | <2003                | 2.5 V6 / 3.0 V6 /<br>4.2 V8 |                 |         |   |                                    | I.c.w. the AGS simulator, vehicle does not enter limp-mode, but it is possible that a DTC will be set.   | AGS Belgium                            |
| Jaguar |           | >2003                | 2.5 V6 / 3.0 V6 /<br>4.2 V8 |                 |         |   | AGS simulator: contact AGS Belgium | Not possible with Prins simulator.<br>l.c.w. the AGS simulator, vehicle does<br>not enter limp-mode, but it is possible<br>that a DTC will be set. | AGS Belgium                            |
|        |           |                      |                             |                 |         |   |                                    |  |  |
| Mazda  | Tribute   | 2007                 | 2300 cc 16V                 | 110 Kw          |         | Petrol pressure becomes too high -> bad running on petrol after switching | -                                  |  |  |
|        |           |                      |                             |                 |         |   |                                    |  |  |
| Volvo  | V70 R     | 2003-                | 2.5L Turbo 220<br>kW        |                 |         |   | -                                  | DTC petrol pressur<br>range/performance. Car changes<br>between 2 different fuel pressures.  |  |
| Volvo  | XC90      | 2006                 | 4.4 V8                      |                 |         |   | No solution by Prins               | AGS belgium has a fuel return<br>solution. A DTC is possible. Please<br>contact AGS for more information   |  |
|        |           |                      |                             |                 |         |   |                                    |  |  |



# Overview miscellaneous problems



| Brand      | Model                | Year of construction | Engine code | Engine capacity | Edition | Problem description  | Solution   | Remarks   | Information source (Prins or customer) |
|------------|----------------------|----------------------|-------------|-----------------|---------|--|--|---|--|
| Audi       | A4 Avant             | 2003                 | ALT         | 2000 cc         |         | Shaking during warming up phase                                      | Special software icw temp simulation See also AUD0107  | Results are good  | Prins                                  |
| Chevrolet  | Trailblazer          | 2001-                | LL8         | 4200 cc 24V     |         | Bad idling behaviour / stalling                                      | Special software 041/95050 and: Nylon hoses far enough inside manifold. See also CHE1007                 | Results are good  | Prins                                  |
| Dodge      | Dacota               | 2002-                | 6 cyl.      | 4000 cc         |         | stalling after short accelerating                                    |  | Results not bad, but Prins does not advise to convert this car                | Prins                                  |
| Dodge      | Ram 1500 & 2500      | 08-2005-             | 8 cyl.      | 5700 cc Hemi    |         | In some cases injector errors will be set in the EOBD system         | Solder extra resitors in the wiringloom of the injection module to change the replacement resistor value | Results are good  | Prins                                  |
| Fiat       | Coupe turbo (5 cyl.) | 2000                 | 175A3       | 2000 cc         |         | Shaking during accelerating and when the car goes into cut-of phase  | Fit a turbo extension kit icw a special programmed ECU. See also FIA0207                                 | This car is very sensitive on petrol. The problem on LPG is not 100% vanished | Prins                                  |
| Opel       | Vectra turbo         | 2005>                | Z20NET      | 2000 cc         |         | Shaking during accelerating and when the car goes into cut-of phase. | Fit a turbo extension kit icw a special programmed ECU. See also OPE0207                                 | Results are good  | Prins                                  |
| Volkswagen | Passat               | 2001                 | AZM         | 2000 сс         |         | Shaking during accelerating  | Program the ECU that the Inj. in and Inj. out times are exactly the same. See also VOL0107               | Results are good  | Prins                                  |
| Subaru     | Legacy outback       | 1999                 | EJ25        | 2500 cc         |         | Shaking during accelerating  | Program the ECU that the Inj. in and Inj. out times are exactly the same. See also SUB0307               | Results are good  | Prins                                  |