



*Quality, innovation and customer care, it's in our nature*



## **Installation manual Dedicated PART 2/2**

MANUFACTURER  
TYPE  
ENGINE DISPLACEMENT  
NUMBER OF VALVES  
ENGINE CODE / NUMBER  
VEHICLE CATEGORIES  
TRANSMISSION  
VERSION  
PETROL ECU MANUFACTURER / CODE  
HIGH PRESSURE PETROL PUMP  
HIGH PRESSURE PETROL INJECTOR  
MODEL YEAR:  
SYSTEM APPROVAL NUMBER ( R115 )  
LOCATION SYSTEM STICKER  
ENGINE SET NUMBER  
MANUAL NUMBER  
DATE

VOLVO  
**V70** / S60 / **V60**  
1999CC  
16V  
B4204T6  
M  
MT / AT  
Direct LiquiMax-2.0  
Bosch MED 17.0  
Bosch HDP-5-PE 0261.520.(064)/(065)/(100)/(101)  
Bosch HDEV-5-1 0261.500.(119)/(120)  
2010 / 2011  
E4-115R-000009 / DLM-LPG 02  
right side, centre door post  
**367/070001/A** / 367/070005/A / **367/070009/A**  
076/2705400  
2013-05-22



## TABLE OF CONTENTS

|                                                                                          |    |
|------------------------------------------------------------------------------------------|----|
| General instructions .....                                                               | 2  |
| Required equipment / tools / materials for installing a complete system .....            | 3  |
| Vehicle check.....                                                                       | 3  |
| Tightening moments.....                                                                  | 4  |
| Direct LiquiMax .....                                                                    | 5  |
| Overview Direct LiquiMax .....                                                           | 6  |
| Direct LiquiMax parts / approval numbers .....                                           | 7  |
| Mounting and connection points .....                                                     | 8  |
| Removal of the Bosch High Pressure Pump.....                                             | 9  |
| Installation of the Bosch High Pressure Pump .....                                       | 10 |
| High pressure pump installation.....                                                     | 11 |
| High pressure pump return .....                                                          | 12 |
| Fuel Supply Unit.....                                                                    | 13 |
| Fuel Return Unit.....                                                                    | 14 |
| Manifold preparation .....                                                               | 15 |
| Combination bracket .....                                                                | 16 |
| FSU / FRU / Boost pump installation 2th Generation ! .....                               | 17 |
| Combination bracket .....                                                                | 18 |
| Connection of the fuel hose to the boost pump .....                                      | 19 |
| LPG / petrol fuel lines.....                                                             | 20 |
| Supply hose – Return hose – Tank wiring.....                                             | 21 |
| Hose routing.....                                                                        | 22 |
| Mounting the AFC .....                                                                   | 23 |
| Wiring AFC .....                                                                         | 24 |
| Mounting the fuel selection switch .....                                                 | 25 |
| Electrical connections.....                                                              | 26 |
| Electrical connections.....                                                              | 27 |
| Electrical connections.....                                                              | 28 |
| Electrical connections.....                                                              | 29 |
| Electrical connections.....                                                              | 30 |
| Checklist after installation.....                                                        | 31 |
| <b>FOR EXPLANATION AND CIRCUIT DIAGRAMS SEE : INSTALLATION MANUAL GENERAL PART 1 / 2</b> |    |



## General instructions

- The installation of the system shall be done in accordance with the installation manual provided by Prins Autogassystemen.
- This manual is based on Dutch regulations, always install the system in accordance to the local regulations.
- For an optimal functioning of the Direct LiquiMax system, maintain a clean and organized work environment during installation and maintenance to prevent pollution of the LPG components.
- Always download the “general manual 1/2 “ from our website for basic instructions and diagrams.
- Always disconnect the battery when installing the LPG system. Make sure the ignition key is outside the car. Be aware of central door locking, radio / telephone memory code, alarm system.
- Wear safety goggles when working on petrol filled system / connections ( pressurized petrol )
- Do not place the main fuse into the fuse holder before having completed the installation of the system.
- The AFC has to be activated by means of the Prins diagnosis software.
- Never disconnect the AFC connector, unless you have removed the main fuse.
- When installing the wiring harness, ensure that it does not run near any of the ignition components.

Solder and insulate all electrical connections.

The wires in the loom are provided with numbers and text. The text on the wire explains the function of the wire. The wire harness is not model specific, therefore it may be necessary to adjust the length of the wires. Ensure maximum care is taken when connecting wiring.

Make professional joints using solder and shrink sleeve. Do not stretch the wiring harness.

- No component of the LPG-system shall be located within 100 mm of the exhaust or similar heat source, unless such components are adequately shielded against heat.
- If holes have to be drilled (wear safety glasses) for installing brackets, etc., the drilled holes must always be treated with an anti-corrosion agent, after the chips have been removed ( especially when mounting a exterior filler into body work).
- After having completed the installation, check the whole system for LPG leakage; use a LPG leak detection device. Also check for leak of engine coolant, petrol and air.
- Fitting and maintenance is only allowed by Prins Autogassystemen selected LPG engineers.
- Failure to follow the instructions in this manual can result in a poor or non-working LPG installation or a dangerous situation.
- For maintenance instructions and filter registration see owner manual.
- Prins Autogassystemen is not responsible for any damages to people or objects as a result of changes to Prins products.
- Check our website regularly for diagrams, certificates, updates, info-bulletins and product information.

Register ( warranty card ) the system on the Prins warranty portal .



## Required equipment / tools / materials for installing a complete system

- Complete workshop toolbox ( wrenches, screwdrivers, cutters, pliers, ratchet, sockets )
- Car lift
- Portable computer : operating on Windows 98,W2000 or XP.
  - Internal memory : 16 Mb or more
  - Memory HD space : 5MB
  - Screen : 256 colours, advise colours 16 bits or more
  - Com port : 1 free COM port 1 or COM port 2 with a 9 or 25 pins connector
- Vehicle fuel system scan tool or OBD scan tool Prins ( part nr. 099/99928 )
- Exhaust gas analyser
- Multimeter
- Oscilloscope
- Prins diagnostic software
- Prins serial interface
- Torque wrench ( 10Nm )
- Torque wrench ( 200-250Nm )
- Portable light
- Assortment drill bits 4 to 12 mm
- Assortment cutters ( ø 20, 30, 50, 70 mm )
- Portable drill or pneumatic drill
- Thread cutting device ( male M6x1, M8x1, M10x1 )
- Socket 46mm
- Air gun
- Vacuum cleaner
- Safety goggles
- Hot air gun
- Soldering iron, soldering tin
- Wire-stripping pliers
- Adhesive tape
- Adhesive sealant
- Thread locking compound
- Anti-corrosion agent / black body coating
- Gas leak detection device or foam leak spray
- Shrink sleeves
- Engine coolant

## Vehicle check

- Check the vehicle drivability on petrol
- Check the fuel system for error codes ( scan tool )
- Check if the catalytic converter is in good condition ( exhaust gas analyzer )
- Check the condition of the ignition system ( spark plugs, cables, coil )



### Tightening moments

|                         | Nm     | SW       |
|-------------------------|--------|----------|
| M 4 x 0,7               | 3,3    | 7        |
| M 5 x 0,8               | 6,5    | 8        |
| M 6 x 1,0               | 11,3   | 10       |
| M 7 x 1,0               | 14,5   | 11       |
| M 8 x 1                 | 45,5,1 | 13       |
| M 8 x 1,25              | 27,3   | 13       |
| M 10 x 1                | 52     | 15-16-17 |
| M 10 x 1,5              | 54     | 15-16-17 |
|                         |        |          |
| ( filtered )Banjo bolt  | 10     | 14       |
| Supply line connection  | 15     | 13       |
| Fuel module Allen bolts | 20     | 7        |
| Filler hose connection  | 50     | 22       |
|                         |        |          |

#### EXPLANATION OF SYMBOLS :



= IMPORTANT,  
CAUTION



= WEAR SAFETY GOGGLES



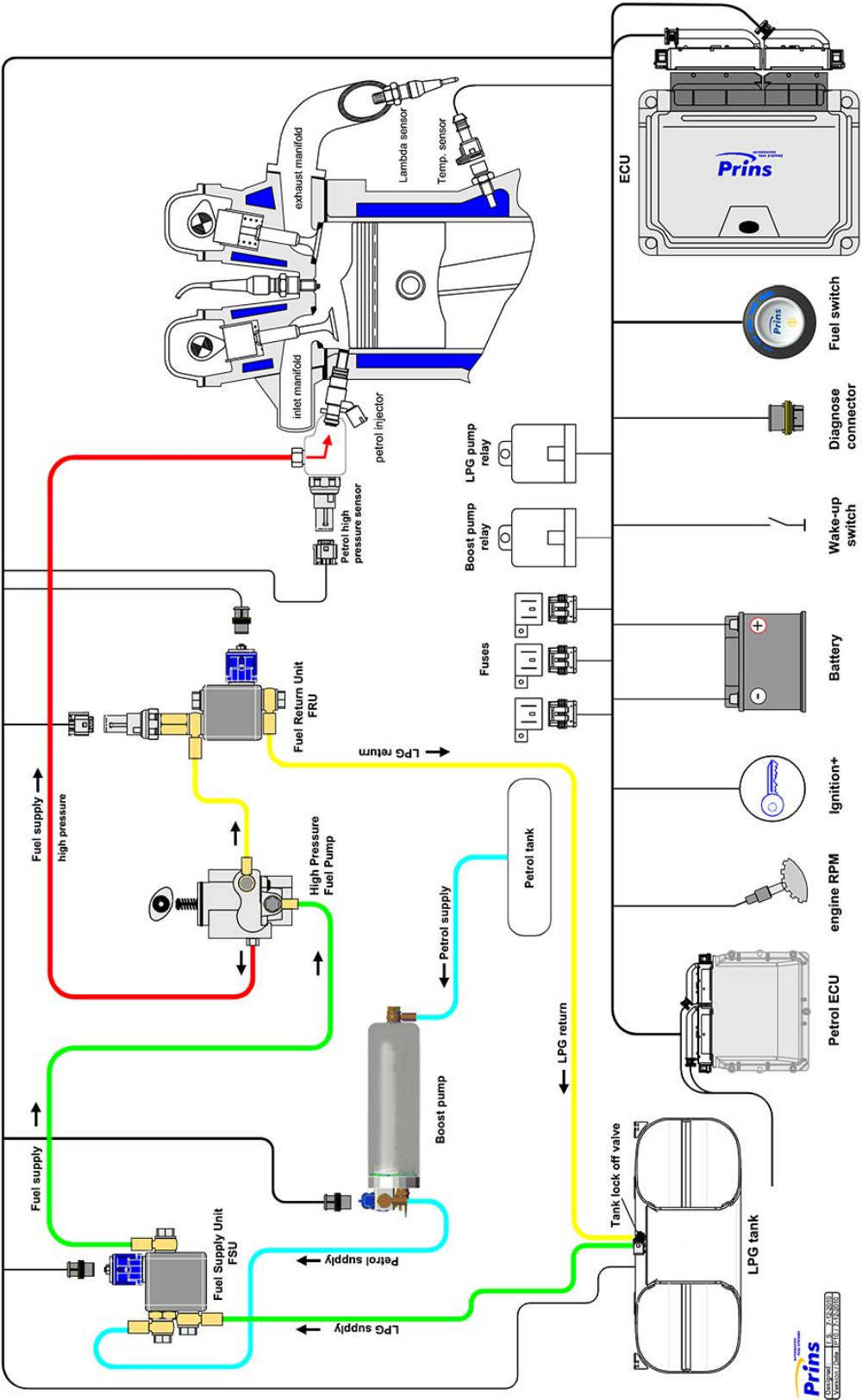


The diagram illustrates the Prins Dual Fuel system architecture. It shows the flow of petrol and LPG from their respective tanks through various pumps and sensors to the engine. The system includes a Boost pump for petrol, a Fuel Supply Unit (FSU) for LPG, and a Fuel Return Unit (FRU) for fuel return. The HPP-pump (High Pressure Pump) is connected to the engine. The system also features a Switch, a Pump driver, and a Gas Tank. The Prins logo and 'ALTERNATIVE FUEL SYSTEMS' are visible in the top right corner.



Overview Direct LiquiMax

overview Direct Liqui Max



## Direct LiquiMax parts / approval numbers

|                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>1<sup>st</sup> generation</p>  <p>2<sup>nd</sup> generation</p> |  <p>1<sup>st</sup> generation</p>  <p>2<sup>nd</sup> generation</p> |
| <p>Fuel Supply Unit : E4-67R-010269</p>                                                                                                                                                                                               | <p>Fuel Return Unit : E4-67R-010270<br/>Pressure Sensor : E4-67R-010051</p>                                                                                                                                                             |
|                                                                                                                                                     |                                                                                                                                                      |
| <p>Boost pump</p>                                                                                                                                                                                                                     | <p>High Pressure Pump : E4-67R-010266<br/>High Pressure Rail : E4-67R-010267<br/>High Pressure Injectors : E4-67R-010309</p>                                                                                                            |
|                                                                                                                                                    |  <p>XD-3 LPG</p>  <p>XD-4 LPG</p>                              |
| <p>Prins ECU : E4-67R-010098<br/>E4-10R-030507</p>                                                                                                                                                                                    | <p>Fuel lines series XD : E4-67R-010247 XD3<br/>E4-67R-010247 XD4</p>                                                                                                                                                                   |





Mounting and connection points



|                                   |                           |
|-----------------------------------|---------------------------|
| A : High pressure petrol pump     | L : R115 Approval sticker |
| B : Fuel Supply Unit : FSU        | M : Grommet               |
| C : Fuel Return Unit : FRU        | N : Gas system fuses      |
| D : Boost pump                    | P : T-ect                 |
| E : AFC                           | Q : Low pressure signal   |
| F : Boost pump relay              | R : MAP, Analog 3         |
| G : Tank relay                    | S : Analog 2              |
| H : Petrol ECU                    | T : Analog 4              |
| I : Engine speed signal RPM       | V : Digital input 3       |
| J : “+” ignition                  | W : Wake-Up               |
| K : High pressure signal Analog 1 | X : Digital input         |



L:  
R115 approval sticker :  
Right side centre door post



## Removal of the Bosch High Pressure Pump

### -REMOVAL-

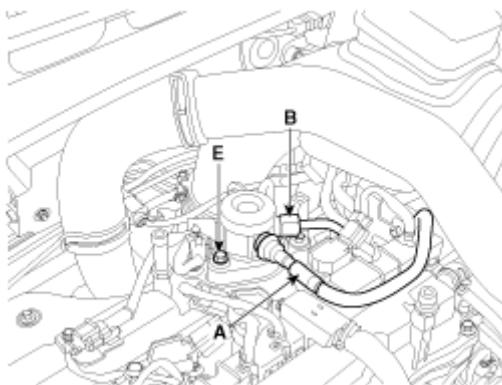
#### -WARNING-

In case of removing the high pressure fuel pump, high pressure fuel pipe, delivery pipe, there may be injury caused by leakage of the high pressure fuel.  
Don't do any repair work right after engine stops ( HOT engine ).

- Turn the ignition switch OFF and disconnect the battery negative (-) cable.
- Wear safety goggles.
- Disconnect the fuel pressure regulator valve connector
- Disconnect the High Pressure fuel feed pipe (B)
- Remove the Low Pressure fuel pipe / hose (A).
- Remove the installation bolts (E), and then remove the high pressure fuel pump from the cylinder head assembly.

#### CAUTION:

Unscrew in turn the two bolts in small steps (0.5 turns). In case of fully unscrewing one of the two bolts with the other bolt installed, the housing surface of the cylinder head may break because of tension of the pump spring.



**CAREFULLY** store the removed petrol pump. Make sure no pollution can come into the pump.

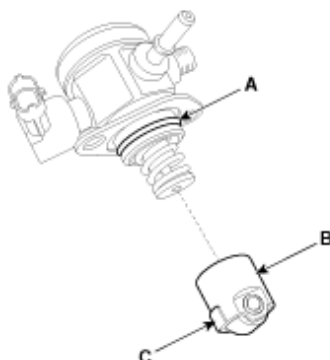


## Installation of the Bosch High Pressure Pump

### INSTALLATION:

Before installing the high pressure fuel pump, position the roller tappet ( **B&C** ) in the lowest position by rotating the crankshaft. Otherwise the installation bolts may be broken because of tension of the pump spring.

Apply engine oil to the O-ring ( **A** ) of the high pressure fuel pump, the roller tappet ( **B** ), and the protrusion ( **C** ). ( roller tappet, only if removed from cylinder head )  
Also apply engine oil to the groove on the location where the protrusion ( **C** ) is installed.



### Installation bolts:

When tightening the installation bolts of the high pressure fuel pump, tighten and turn the bolts in small step ( 0.5 turns ) after tightening them with hand-screwed torque.

**High pressure fuel pump installation bolt:** 12.8 ~ 14.7 N.m

### Fuel pipe:

First hand-tighten the nut(s) fully until they are not fastened any more in order to have them inserted in place and then completely tighten to the specified torque using a torque wrench.  
If not tightening the bolts or nuts in a straight line with the mating bolt holes or fittings, it may cause a fuel leak due to broken threads.

**High pressure fuel pipe installation nut:** 26.5 ~ 32.4 N.m

Installation is reverse of removal.

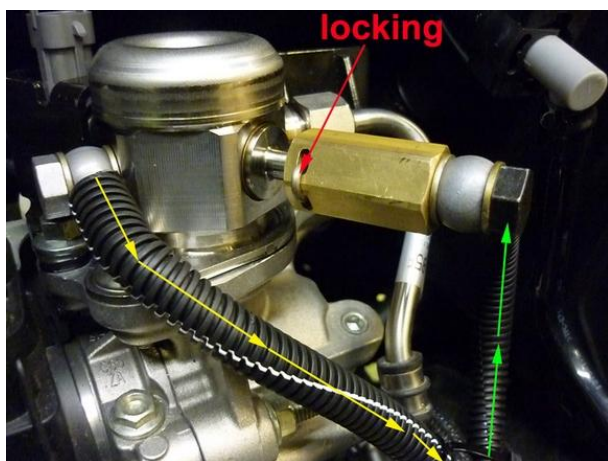




## High pressure pump installation



Replace the high pressure pump for the adapted high pressure pump.  
( Follow the workshop manual of the car ) **Remove original petrol supply hose ( quick releases )**



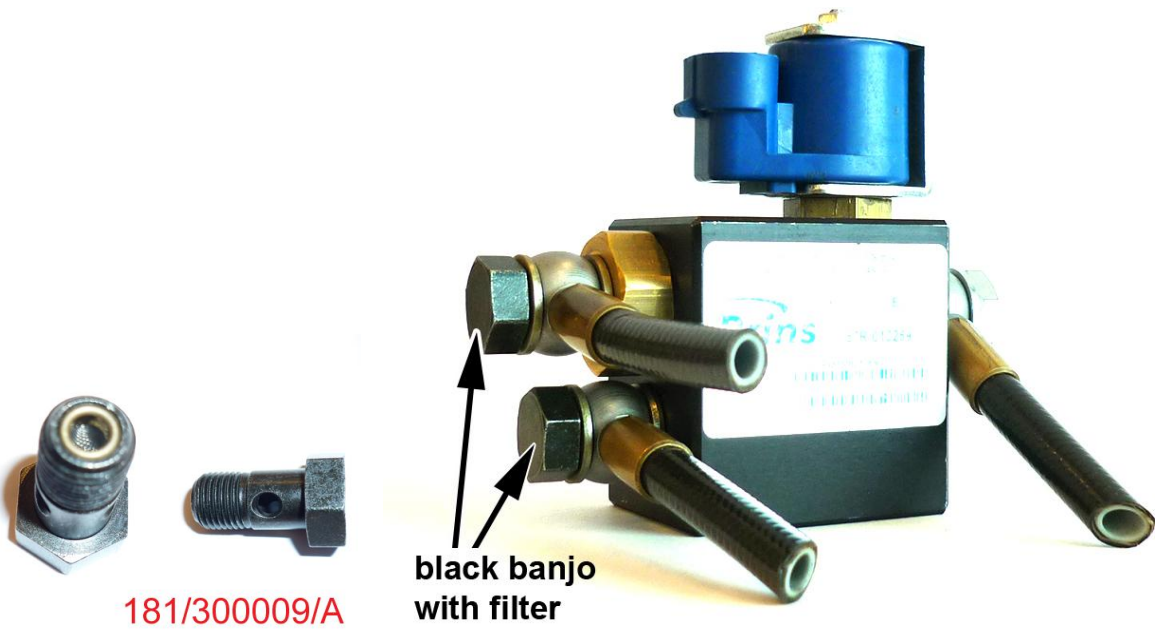
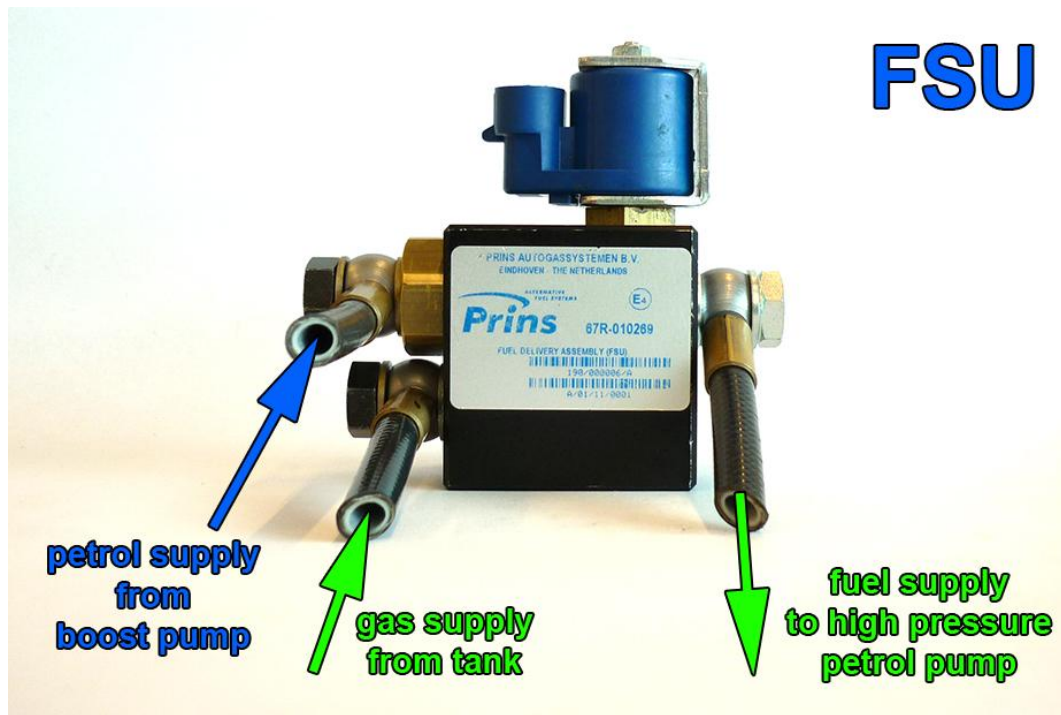


## High pressure pump return

Replace the high pressure pump for the adapted high pressure pump.  
( Follow the workshop manual of the car )



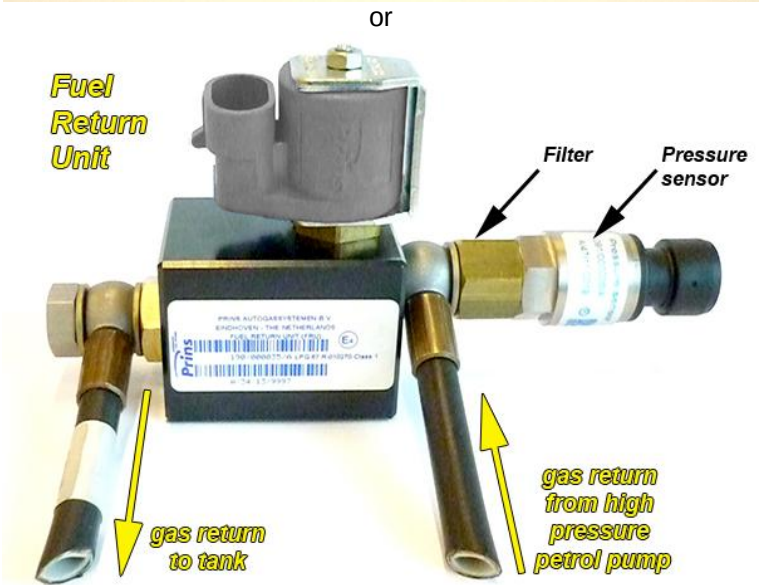
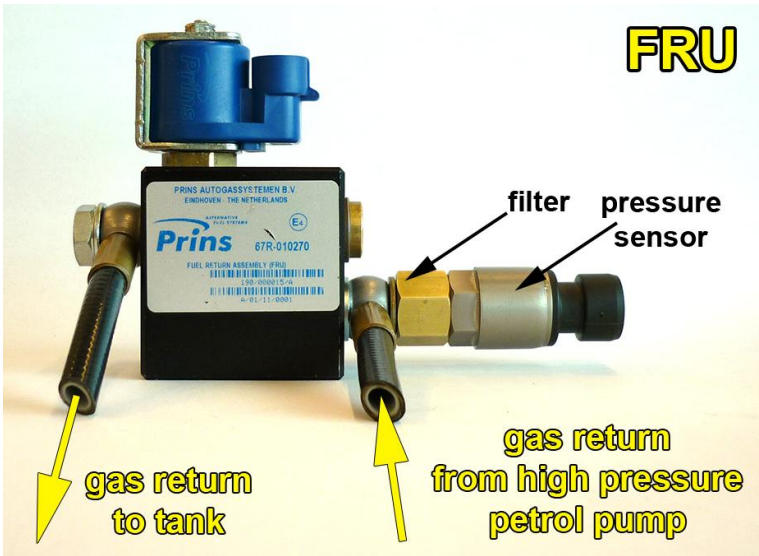
## Fuel Supply Unit



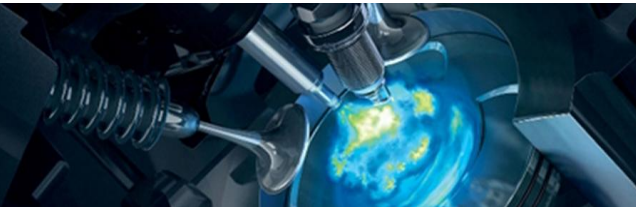
Black filtered banjo will only be used on inlet connections !



Fuel Return Unit



Filter inside sensor banjo





## Manifold preparation





## Combination bracket



Beware: FRU 1<sup>st</sup> generation coil position= opposites sensor side

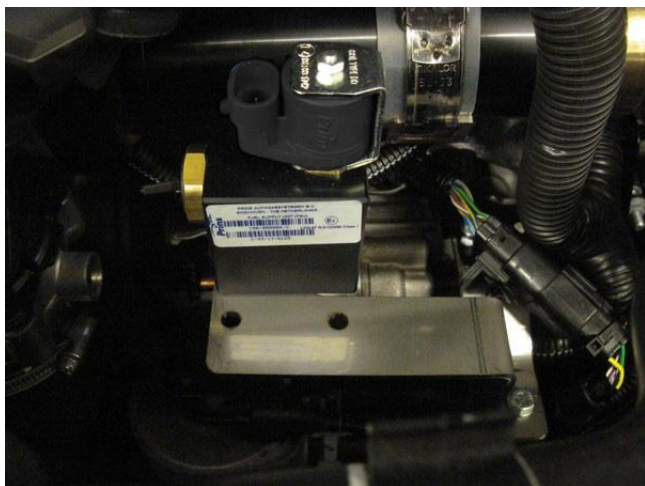
**Beware: FRU 2<sup>nd</sup> generation coil position= pressure sensor side, see next page**



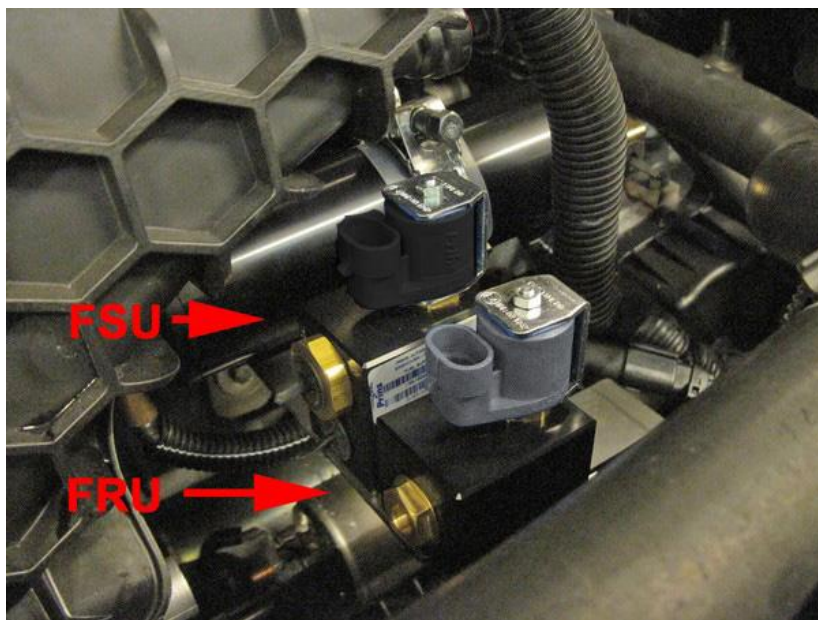
Bracket underneath pump spacer.



## FSU / FRU / Boost pump installation 2th Generation !

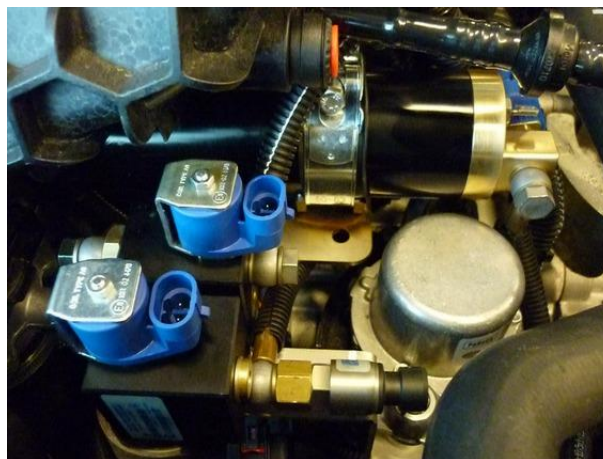
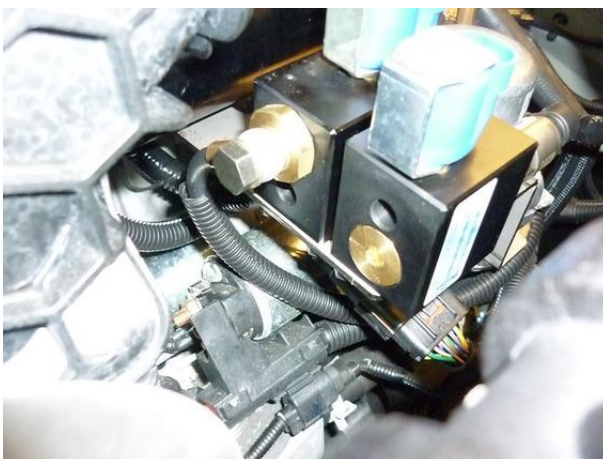
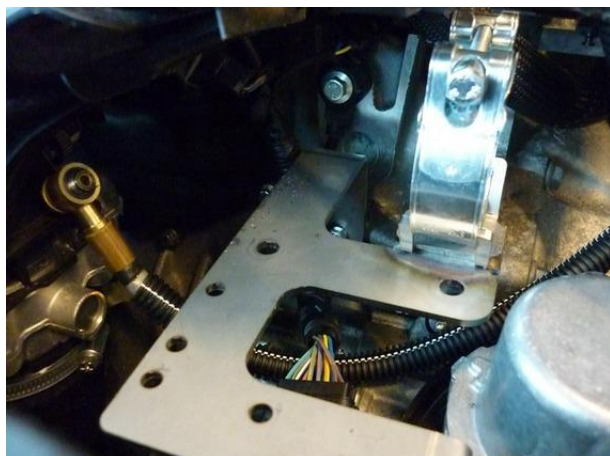


Mount FSU & FRU.





## Combination bracket

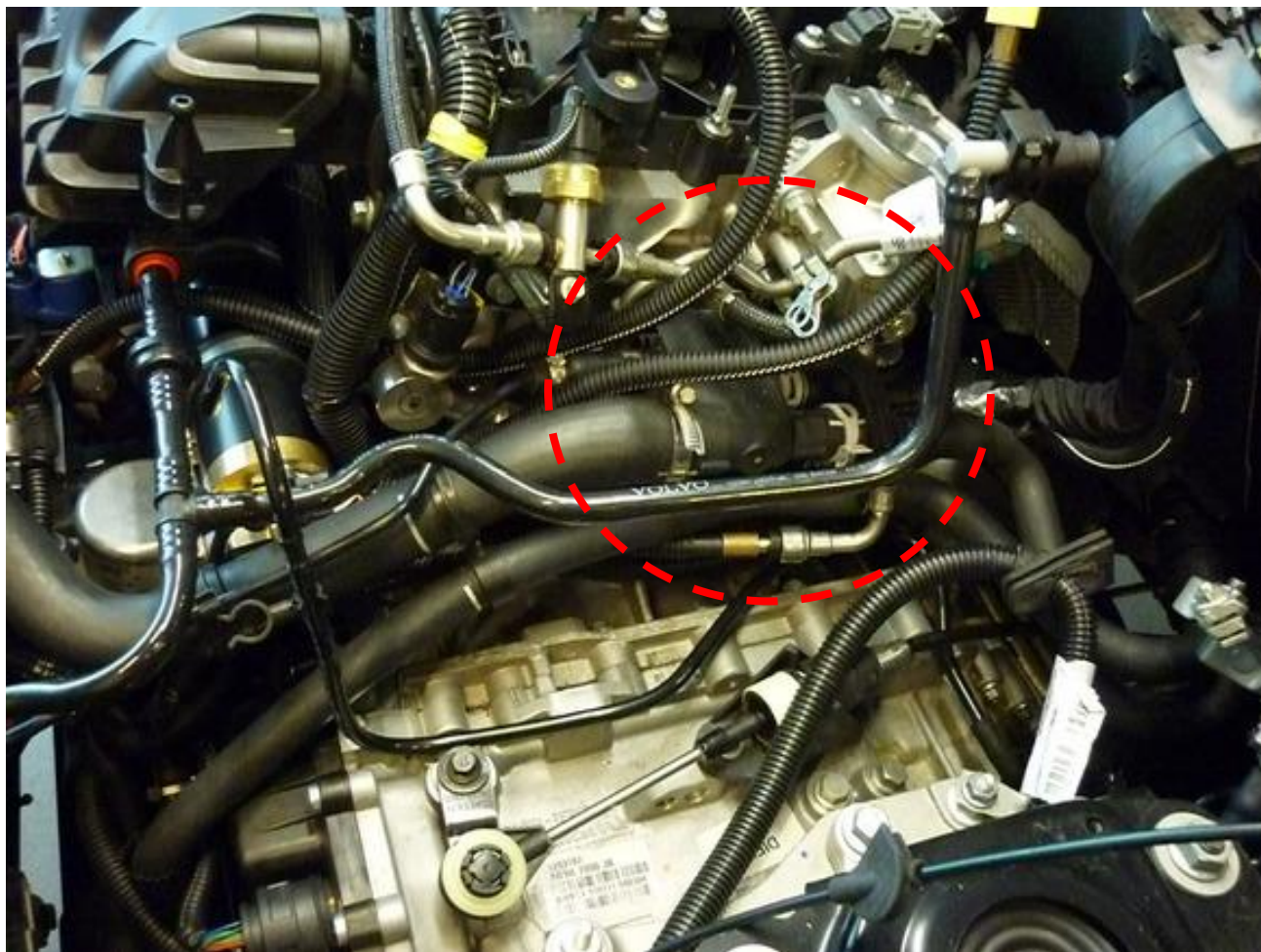


Install bracket  
Install boost pump with hose  
Install FSU with hoses  
Install FRU with hoses





### Connection of the fuel hose to the boost pump.

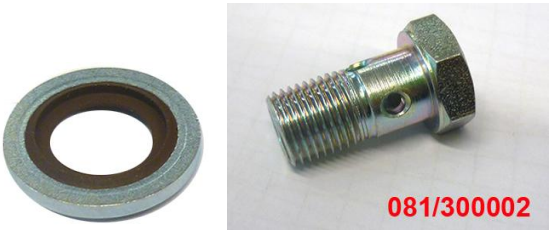


LPG / petrol fuel lines

| Hose | from                         | to                        | Length ( cm ) |
|------|------------------------------|---------------------------|---------------|
| XD-4 | Adapter original petrol hose | Petrol boost pump         | 45            |
| XD-3 | Fuel supply unit             | High pressure petrol pump | 55            |
| XD-3 | Petrol boost pump            | Fuel supply unit          | 45            |
| XD-3 | Fuel return unit             | High pressure petrol pump | 55            |
|      | Fuel return unit             | High pressure petrol rail | n.a.          |



Install the fuel line using two bonded seal washers and banjo bolt :



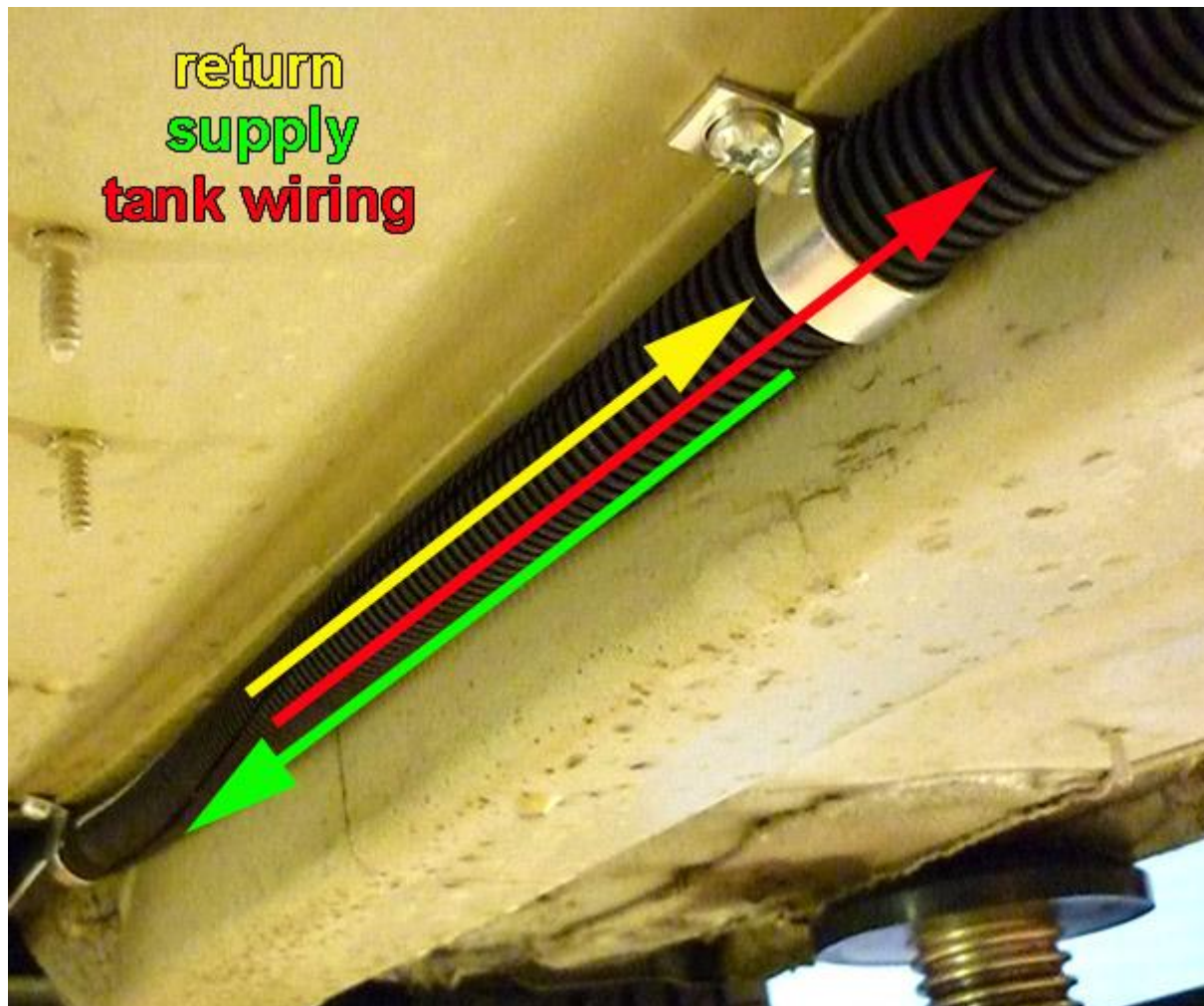
Filtered banjo: ( FSU supply inlets / boost pump inlet : black filtered banjo ) :





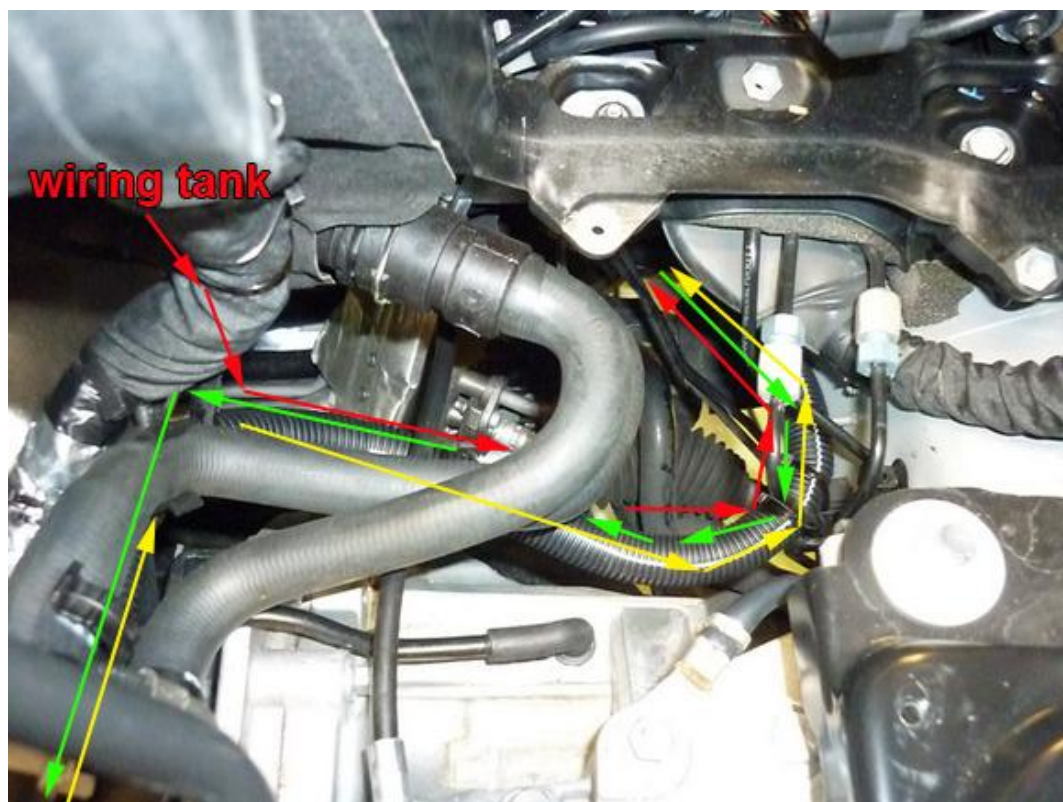
### Supply hose – Return hose – Tank wiring

Protect the supply- and return hose together with tank-wiring using the Ø16 split tube.  
Mount the "hose assembly " with clamps, with a maximum distance of 40cm.





## Hose routing

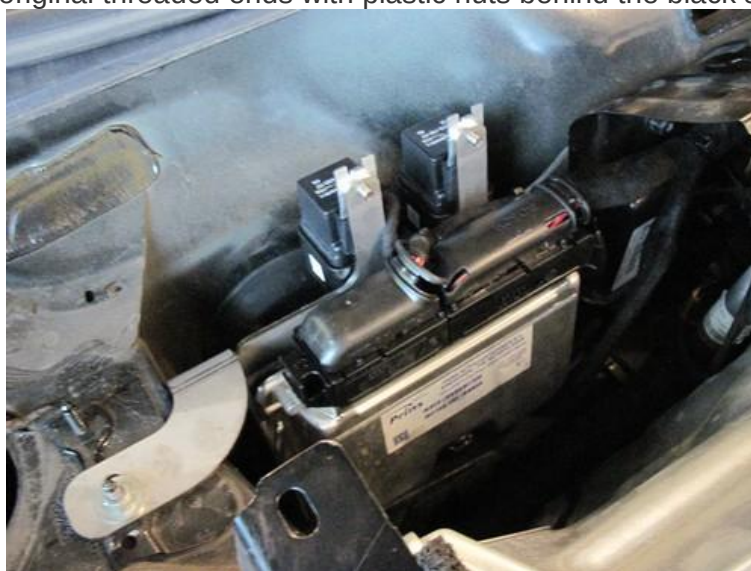


## Mounting the AFC

001/020107/A

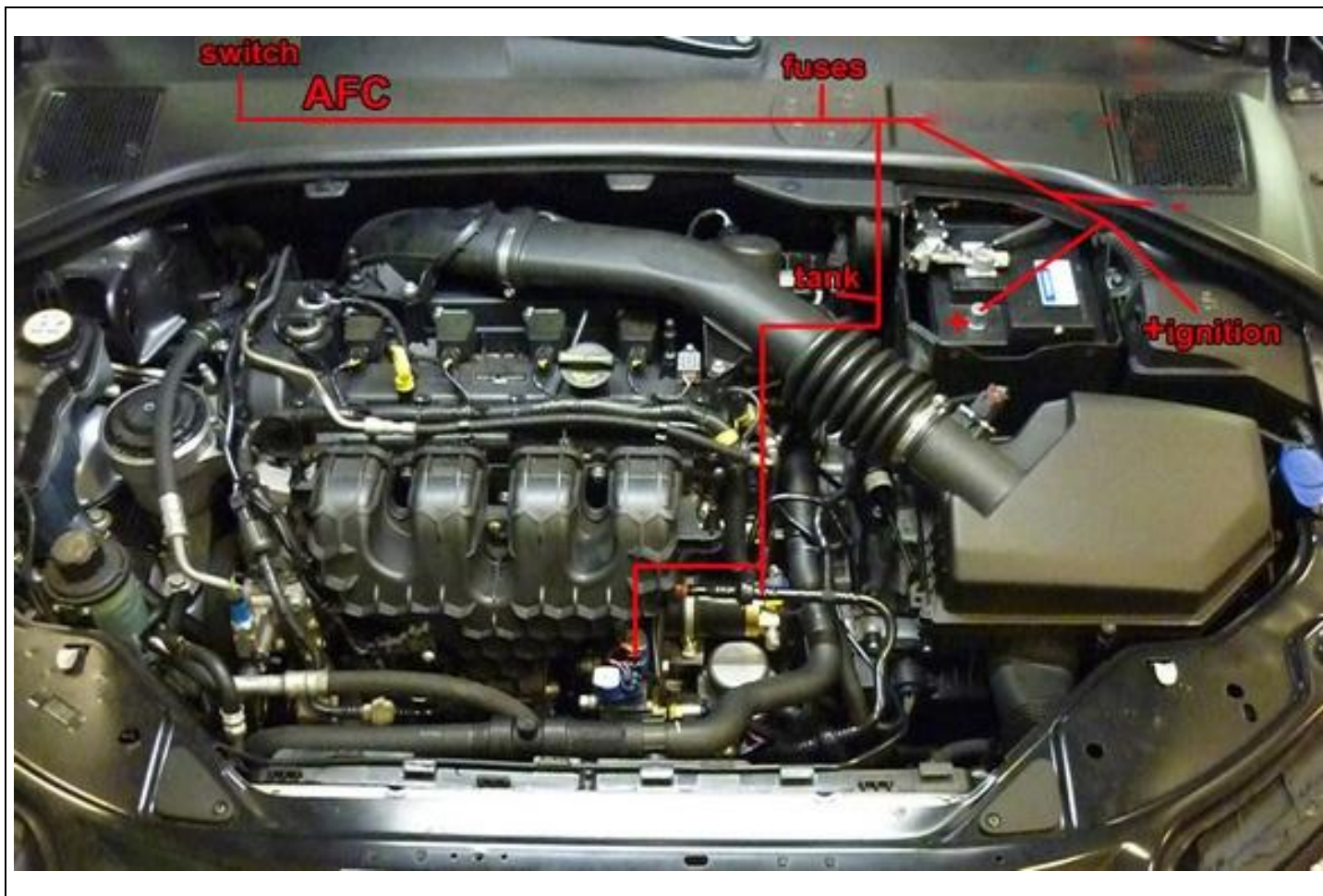


Mount the ECU unit with ECU clip and relays.  
Use original threaded ends with plastic nuts behind the black shield.





## Wiring AFC



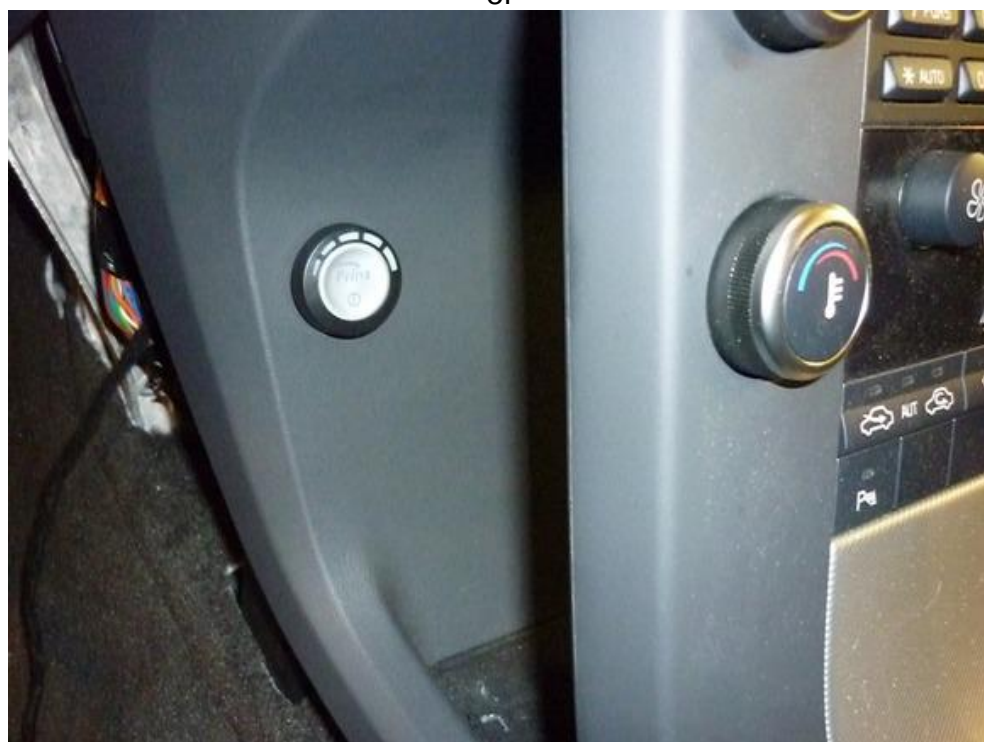


 Mount the switch.

## Mounting the fuel selection switch



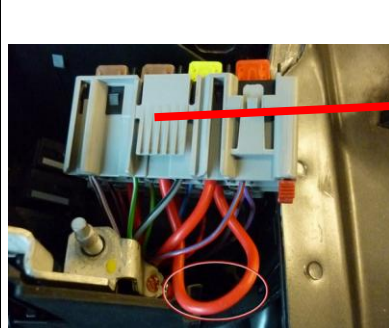
or



## Electrical connections

Check and measure the wiring in case of changes in the cars wiring colours.  
Insulate not used wires.

| Wire number / code                                                                                 | Wire colour  | Connection                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1-32<br>MAIN GND ecu<br>MAIN GROUND SENSE<br>MAIN GND pump driver<br>MAIN GND boost pump           | brown        | Connect to the '-' of the battery ( -31 ) ;<br>use a ring terminal.<br>Wire colour : Brown<br>Wire location : Under the black panel,<br>under the windshield wiper                                                            |
| 4 – 13 – 44<br>+12V BATT sense<br>+12V BATT fused<br>+12V BATT boost pump<br>+12V BATT pump driver | red          | Connect to the '+' of the battery<br>use a ring terminal.<br>Do not place the fuse in the<br>holder before having completed<br>the installation of the LPG system.<br>Wire colour : Red<br>Wire location : Battery            |
| 7 +12V IGNITION                                                                                    | grey - white | Make a connection to ignition + / contact + ( +15 ).<br>Do not place the fuse in the holder before having completed the<br>installation of the LPG system.<br>Wire colour : Red ( wire loop )<br>Wire location : In fuse box. |



## Electrical connections

**Check and measure the wiring in case of changes in the cars wiring colours.  
Insulate not used wires.**

| Wire number / code             | Wire colour            | Connection                                                                                                                           |
|--------------------------------|------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 18 Analog 1<br>25 Simulation 1 | Blue-red<br>Green-grey | High pressure petrol sensor interruption<br>Sensor side.<br>ECU side.<br>Wire colour :blue-brown<br>Wire location :Petrol ecu pin A9 |
| 19 Analog 4                    | Blue-white             | High pressure petrol sensor ground<br>Wire colour :blue-grey<br>Wire location : Petrol ecu pin A34                                   |
| 121 Wake-up                    | Red-grey               | High pressure petrol sensor 5Volt supply<br>Wire colour : grey<br>Wire location :Petrol ecu pin A23                                  |

|                                |                           |                                                                                                                                       |
|--------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 17 Analog 2<br>10 Simulation 2 | Blue-black<br>Green-black | Low pressure petrol sensor interruption<br>Sensor side.<br>ECU side.<br>Wire colour :purple-brown<br>Wire location :Petrol ecu pin A7 |
|--------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------|

|                                              |                          |                                                                                                                             |
|----------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 119 Digital input 2<br>23 Digital Simulation | Yellow-grey<br>Green-red | Digital Airflow 1<br>Sensor side.<br>ECU side.<br>Wire colour :yellow-lila<br>Wire location :Petrol ecu pin A55             |
| 115 Digital input 4                          | Yellow-red               | Petrol fuel pump driver ( PWM in )<br>Fuel control unit<br>Wire colour : yellow-orange<br>Wire location :Petrol ecu pin B45 |

**A = big ecu connector  
B = smallest ecu connector**

|                     |               |          |
|---------------------|---------------|----------|
| 117 Digital input 3 | Yellow-black  | insulate |
| 6 Lambda1 WB        | Orange        | insulate |
| 42 Lambda2 WB 10KΩ  | Orange-white  | insulate |
| 97 Digital input 5  | Yellow-orange | insulate |
| 113 Digital input 6 | Yellow-purple | insulate |





## Electrical connections

**Check and measure the wiring in case of changes in the cars wiring colours.  
Insulate not used wires.**

| Wire number / code                               | Wire colour                                                        | Connection                                                                                                                                      |
|--------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 27 +5V sensor<br>37 C ground<br>20 Analog 3 MAP* | Red<br>Brown<br>Blue<br><br>Red:insulate<br>Brown:insulate<br>Blue | For measuring the inlet manifold pressure from the engine MAP sensor.<br><br><br>Wire colour : Green-brown<br>Wire location :petrol ecu pin A83 |
| 8 RPM                                            | Purple-white                                                       | For measuring the engine speed signal.<br>Wire colour :Brown /Blue<br>Wire location : petrol ecu pin A80                                        |
| 15 T-ect                                         | Grey                                                               | For measuring the engine coolant temperature.<br>Wire colour : Yellow<br>Wire location :Petrol ecu pin A12                                      |



## Electrical connections

**Check and measure the wiring in case of changes in the cars wiring colours.  
Insulate not used wires.**

### Engine room

| Wire number / code                 | Wire colour         | Connection                                                                            |
|------------------------------------|---------------------|---------------------------------------------------------------------------------------|
| <i>3-pole connector</i>            |                     | Connect the 3-pole connector to the Psys sensor positioned into the Fuel Return Unit. |
| 35 C Ground pin A                  | Brown               | Sensor wire pin A                                                                     |
| 9 +5V sensor pin B                 | Red                 | Sensor wire pin B                                                                     |
| 16 Psys pin C                      | Green               | Sensor wire pin C                                                                     |
| 14 T-LPG                           | Grey                | Not used, insulate.                                                                   |
| <i>2-pole connector Boost Pump</i> |                     | Connect the 2-pole connector to the lock-off valve of the Boost Pump.                 |
| 106 + Lock-off Boost Pump          | Red<br>White-yellow |                                                                                       |
| 98 Ground lock-off                 |                     |                                                                                       |
| <i>2-pole connector FSU</i>        |                     | Connect the 2-pole connector to the lock-off valve of the Fuel Supply Unit            |
| 108 + Lock-off FSU                 | Red<br>Pink-yellow  |                                                                                       |
| 100 Ground lock off                |                     |                                                                                       |
| <i>2-pole connector FRU</i>        |                     | Connect the 2-pole connector to the lock-off valve of the Fuel Return Unit            |
| 90 + Lock-off FRU                  | Red<br>Blue-yellow  |                                                                                       |
| 82 Ground lock off                 |                     |                                                                                       |
| <i>4-pole diagnose connector</i>   |                     | Diagnose connector for service / diagnosis                                            |
| 46 Service TxD                     | Grey                | Connector pin 1                                                                       |
| 65 Service RxD                     | Grey                | Connector pin 2                                                                       |
| 68 C ground                        | Brown               | Connector pin 4                                                                       |
| <i>Boost pump relay</i>            |                     | Pin 86 of the boost pump relay                                                        |
| 107 + relay boost pump             | Red<br>Green-yellow | Pin 85 of the boost pump relay                                                        |
| 99 GND relay boost pump            | Red                 | Pin 30 of the boost pump relay                                                        |
| +12V fused BATT                    | Red                 | Pin 87 of the boost pump relay                                                        |
| +12V Boost pump                    |                     |                                                                                       |

### Driver room

|                               |             |                                                                  |
|-------------------------------|-------------|------------------------------------------------------------------|
| <i>3-pole micro connector</i> |             | Connect the 3-pole connector to the Prins fuel selection switch. |
| 66 Ground fuel switch         | Brown       |                                                                  |
| 3 +12V fuel switch            | Red         |                                                                  |
| 49 LIN fuel switch            | yellow      |                                                                  |
| 51 CAN-High                   | Blue-yellow | EOBD connector pin 6                                             |
| 70 CAN-Low                    | Blue        | EOBD connector pin 14                                            |

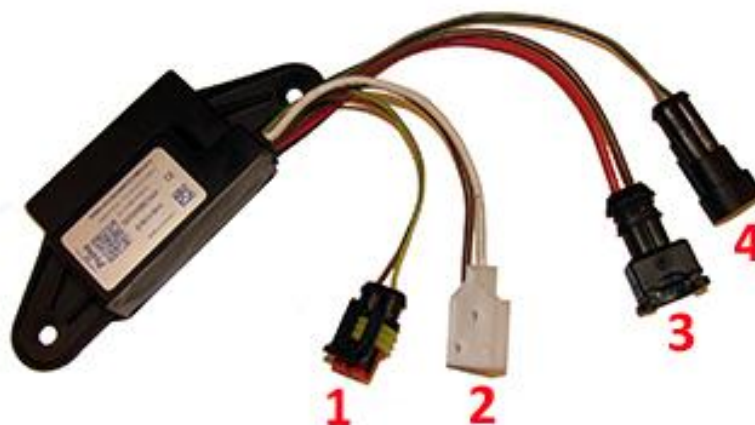


## Electrical connections

Check and measure the wiring in case of changes in the cars wiring colours.  
Insulate not used wires.

### LPG tank housing

| Wire number / code                                                                                | Wire colour                                        | Connection                                                                                                      |
|---------------------------------------------------------------------------------------------------|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 3-pole tank level connector<br>40 Ground tank gauge<br>12 Tank level in<br>11 + tank level supply | Brown<br>Blue<br>Red                               | Connect the 3-pole connector to the tank level sensor.<br>Connector pin 1<br>Connector pin 2<br>Connector pin 3 |
| 1. 2-pole connector tank lock-off                                                                 | Green-yellow<br>Brown                              | Pump driver to lock-off power<br>Pump driver to lock-off ground                                                 |
| 2. 3-pole fusite                                                                                  | Red<br>Brown<br>-                                  | 1. Pump power<br>2. Pump ground<br>3. not used                                                                  |
| 3. 2-pole connector tank pump                                                                     | Red 2.5mm <sup>2</sup><br>Brown 2.5mm <sup>2</sup> | Pump driver power<br>Pump driver ground                                                                         |
| 4. 2-pole connector                                                                               | Grey<br>Green                                      | Pump driver diagnose<br>Pump driver control                                                                     |



|                                                                                                    |                                                                         |                                                                                                              |
|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Wiring tank relay<br>2 + tank relay<br>26 Ground tank relay<br>+12V BATT fused<br>+12V pump driver | Red<br>Green-yellow<br>Red 2.5mm <sup>2</sup><br>Red 2.5mm <sup>2</sup> | Pin 86 of the tank relay<br>Pin 85 of the tank relay<br>Pin 30 of the tank relay<br>Pin 87 of the tank relay |
|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|





## Checklist after installation

1. Install the system fuses.  
Turn on ignition.  
Connect the Prins interface wire and run the Prins diagnosis program.  
When working on the car, beware of moving and rotating parts in the engine compartment ( even when the engine is not running !! ).
2. When commissioning the LPG system, you must activate the AFC with the diagnosis software.
3. Check whether the program in the AFC matches with the car ( dedicated engine set ):  
See "Identification" in the diagnosis program.
4. Check all components and connections for any LPG leakage, use a LPG leak detector device or a fluid detection like soap. Also check for petrol leakage. Make sure the solenoid valves are in open position.  
No evidence of leakage is permitted.  
Caution for moving and rotating parts in the engine compartment !
5. Use the diagnosis software to check again all input and output signals.
6. Check the system for error codes and solve these, if required.  
Check the petrol MMS for EOBD error codes.  
Place the protection connector back on the diagnose connector.
7. Make a test drive and check the cars drivability on LPG and petrol.

