

## **Alfa Romeo 145 and 146**

### **Fault:**

Engine surges when idle, there is jerking in the engine and bad throttle response.

### **Cars involved:**

All vehicles having Bosch Motronic M1.5.5 engine management system.

### **Reason:**

Throttle body having layer of deposits which is preventing the throttle valve from closing properly.

### **Solution:**

- Take off the throttle body and remove deposits from the inner wall.
- Manually activate the throttle valve 3-5 times.
- Check the throttle body for deposits, if any left then clean again and fit back the throttle body.
- Check the speed of the engine on idle.

### **Fault:**

At neutral gear, there is misfire/choking from the engine.

### **Cars involved:**

All vehicles manufactured between 1994-1997.

### **Reason:**

The ignition coil cover traps the low tension wiring of the ignition coil.

### **Solution:**

- Check the wiring for damage and repair if required.
- Change the path of the wiring and if needed, de-bur the sides of the ignition coil cover.
- Attach a cable tie to the No.4 High Tension Lead.

### **Fault:**

Too much surge in engine affecting drivability.

**Cars involved:**

All petrol cars manufactured up to 03/1998.

**Reason:**

Water enters into the Evaporative Emission Canister Purge Valve Air Intake Aperture due to a gap in the body beside the right hand bonnet hinge.

**Solution:**

- Take off the wiper arm on the right side and the rubber insulation beside the right side bonnet hinge.
- Also remove the air intake grill on the right hand side and seal the opening at the back of the hinge.

**Alfa Romeo 147**

**Fault:**

Engine Malfunction Indicator Lamp (MIL) lights up on start when engine is cold.

**Cars involved:**

All vehicles, Vehicle Index Number 03186763-03237708, 05127427-05235631.

**Reason:**

The problem occurs due to problem with the Glow Plug Control Module.

**Solution:**

On the Glow Plug Control Module, make sure the date code is not between 18/03/2004 and 21/04/2004 (both inclusive), if it is then replace Glow Plug Control Module with the following part number 55193073.

**Fault:**

Engine not starting properly when hot.

**Cars involved:**

All vehicles Vehicle Index Number 03191965 - 03248406, 05111642 - 05151383.

**Reason:**

Mapping fault with software of the Engine Control Module.

**Solution:**

Make use of diagnostic gadget and upgraded software part no 1806563000 to reprogram Engine Control Module.

**Alfa Romeo 155**

**Fault:**

At neutral gear, there is misfire/choking from the engine.

**Cars involved:**

All vehicles manufactured between 1994-1997.

**Reason:**

The ignition coil cover traps the low tension wiring of the ignition coil.

**Solution:**

- Check the wiring for damage and repair if required.
- Change the path of the wiring and if needed, de-bur the sides of the ignition coil cover.
- Attach a cable tie to the No.4 High Tension Lead.

**Fault:**

The engine or turbocharger causes a whistling noise.

**Cars involved:**

All vehicles with turbocharged engines.

**Reason:**

Entry of litter through the inlet circuit during air filter replacement damages the Turbocharger Vanes.

**Solution:**

Check Turbocharger for damage and if required then replace it. Also clean inlet circuit and air filter housing with a vacuum cleaner during air filter replacement.

**Alfa Romeo 156**

**Fault:**

The brake pedal stays initially hard after cold start with poor brake servo involvement.

**Cars involved:**

All vehicles having Q-System Automatic Transmission.

**Reason:**

After cold start, the vacuum at low speed is not enough.

**Solution:**

Check the vacuum intake system type and if required, then change the vacuum intake pipe with one having part no 60664715 and change the corrugated intake hose with one having part number 606673919. Also use two collars of part numbers 13126170 and 13126770.

**Fault:**

The power steering high-pressure pipe makes a droning sound.

**Cars involved:**

All vehicles manufactured up to 1999.

**Reason:**

The power steering retaining bolt or valve is defective.

**Solution:**

Change the retaining bolt or valve with the one having part no 60807575 and use seal (part no 10282460) and exude the fluid from the power steering system.

**Fault:**

Engine surges when idle, there is jerking in the engine and bad throttle response.

**Cars involved:**

All vehicles having Bosch Motronic M1.5.5 engine management system.

**Reason:**

Throttle body having layer of deposits which is preventing the throttle valve from closing properly.

**Solution:**

- Take off the throttle body and remove deposits from the inner wall.

- Manually activate the throttle valve 3-5 times.
- Check the throttle body for deposits, if any left then clean again and fit back the throttle body.
- Check the speed of the engine on idle.

**Fault:**

Misfire of engine erratically and lighting up of the Engine Malfunction Indicator Lamp (MIL).

**Cars involved:**

All vehicles manufactured up to 01/2001.

**Reason:**

The multi plug connection between the Accelerator Pedal Position (APP) sensor and Engine Control Module (ECM) is not consistent.

**Solution:**

Cars manufactured after 02/2001 have a 6 point multi plug but for cars before that look for diagnostic problem codes and flush as necessary. Detach the multi plug and solder the wires in permanently.

**Fault:**

Engine Malfunction Indicator Lamp (MIL) lights up on start when engine is cold.

**Cars involved:**

All vehicles, Vehicle Index Number 00260753-00265978, 01320558-01366144.

**Reason:**

The problem occurs due to problem with the Glow Plug Control Module.

**Solution:**

On the Glow Plug Control Module, make sure the date code is not between 18/03/2004 and 21/04/2004 (both inclusive), if it is then replace Glow Plug Control Module with the following part number 55193073.

**Fault:**

Engine cuts out when idle and does not start again. High engine revolution when idle.

**Cars involved:**

All vehicles 1997-1999.

**Reason:**

Problem with Idle Speed Control Actuator.

**Solution:**

- Replace Idle Speed Control (ISC) Actuator with one having the following part no 71713829.
- Make sure the ISC Actuator is initialized by connecting diagnostic equipment connected to Data Link Connector.

**Fault:**

Vibration from front brakes when braking at moderate to high speed.

**Cars involved:**

All vehicles manufactured up to 2000.

**Reason:**

Distorted front brake disc.

**Solution:**

Change the brake discs (part no 60658565 for ventilated disc and part no 60658567 for solid disc) and the front brake pads (part no 9948334 for ventilated disc and part no 9948335 for solid disc). The brake pads mentioned above will have a metal back plate with **Ferodo 4412** imprinted on it.

**Fault:**

Engine cuts out/chokes when accelerating.

**Cars involved:**

All vehicles between 1997-2000.

**Reason:**

Pressure variations caused due to fuel lift pump impeller dirtying the casing.

**Solution:**

- Switch ignition on and off every 10 seconds to check fuel pressure through 10 cycles.
- ~•• Replace the fuel pump if the pressure is not between 1.5 to 2 bars, making sure the reference arrows are correctly aligned.

**Fault:**

When the surrounding air temperature is below 0°C and the car is immediately driven after starting, then the Engine Malfunction Indicator Lamp (MIL) lights up.

**Cars involved:**

All vehicles.

**Reason:**

The engine is not able to reach optimum temperature within the time span set by Engine Control Module (ECM).

**Solution:**

After starting, keep engine idle for 30-45 seconds and then start driving.

**Fault:**

Turbo charger leaking oil in 1.9L engine cars.

In 2.4L engine cars, the Engine Malfunction Indicator Lamp (MIL) lights up.

**Cars involved:**

All vehicles manufactured up to 07/2000.

**Reason:**

Crankcase experiencing excess pressure due to Blow-by Diaphragm diameter not being enough.

**Solution:**

Increase the Blow-by Diaphragm opening to 7mm and make sure to remove all dirt from diaphragm before reassembly.

**Fault:**

The air flow pattern and/or air temperature from the air vents does not match to those set.

**Cars involved:**

All vehicles having Automatic Temperature Control (ATC).

**Reason:**

•••••••• Ignition turned on right after connecting battery.

••••••• Disruption in the proper cycle of AC or heater flap mix motor and air direction motor position.

**Solution:**

Switch ignition on after a minimum wait of 2 minutes after disconnection and reconnection of battery.

**Fault:**

Problems in driving performance when warming up the engine from cold state as well as bad engine performance when idling.

**Cars involved:**

All vehicles apart from 1.8 and 2.0 having double Engine Coolant Temperature (ECT) sensors.

**Reason:**

Problem with Engine Control Module (ECM) software.

**Solution:**

Re-program ECM using upgraded software, taking help of diagnostic gadgets.

**Fault:**

Engine not starting properly when hot.

**Cars involved:**

All vehicles Vehicle Index Number 00246800-00270335, 01342413-01373043.

**Reason:**

Mapping fault with software of the Engine Control Module.

**Solution:**

Make use of diagnostic gadget and upgraded software part no 1806563000 to reprogram Engine Control Module.

**Alfa Romeo 166**

**Fault:**

When accelerating from cold start, there is black smoke as well as choking in the engine. The engine also surges to 2500-3000 rpm.

**Cars involved:**

All vehicles.

**Reason:**

Problem with Engine Control Module (ECM) software.

**Solution:**

Re-program ECM using upgraded software, taking help of diagnostic gadgets.

**Fault:**

Engine surges when idle, there is jerking in the engine and bad throttle response.

**Cars involved:**

All vehicles having Bosch Motronic M1.5.5 engine management system.

**Reason:**

Throttle body having layer of deposits which is preventing the throttle valve from closing properly.

**Solution:**

- Take off the throttle body and remove deposits from the inner wall.
- Manually activate the throttle valve 3-5 times.
- Check the throttle body for deposits, if any left then clean again and fit back the throttle body.
- Check the speed of the engine on idle.

**Fault:**

Misfire of engine erratically and lighting up of the Engine Malfunction Indicator Lamp (MIL).

**Cars involved:**

All vehicles manufactured up to 01/2001.

**Reason:**

The multi plug connection between the Accelerator Pedal Position (APP) sensor and Engine Control Module (ECM) is not consistent.

**Solution:**

Cars manufactured after 02/2001 have a 6 point multi plug but for cars before that look for diagnostic problem codes and flush as necessary. Detach the multi plug and solder the wires in permanently.

**Fault:**

Engine Malfunction Indicator Lamp (MIL) lights up on start when engine is cold.

**Cars involved:**

All vehicles, Vehicle Index Number 00089965-00092639.

**Reason:**

The problem occurs due to problem with the Glow Plug Control Module.

**Solution:**

On the Glow Plug Control Module, make sure the date code is not between 18/03/2004 and 21/04/2004 (both inclusive), if it is then replace Glow Plug Control Module with the following part number 55193073.

**Fault:**

Climate Control not working regularly and the Digital Multifunction Display shows error " Air Conditioning Faulty, contact Service Centre'.

**Cars involved:**

All vehicles manufactured up to 11/2000.

**Reason:**

The wiring of the AC or heater Air Mix Flap Motor is stuck in Engine Bay Fuse Box or Relay Plate.

**Solution:**

- Inspect the Air Mix Flap Motor Wiring. If it is damaged then use tape to repair.
- Lay the wiring again, this time through the left of the fuse box or relay plate and use wiring harness clips to keep the wires in position.

**Fault:**

When the Automatic Transmission Torque converter Lock-up Clutch is working, there is vibration on gentle acceleration or when traveling between 37-43mph.

**Cars involved:**

All vehicles having Automatic Transmission apart from Euro stage 3 emission standards.

**Reason:**

The problem is caused due to the Automatic Transmission Lock-up clutch, closing point at 37 mph.

**Solution:**

- Change Transmission Control Module with the one having the following part number ( P/N: 717.190.92 for 2.5L engines and 717.190.93 for 3.0L engines).

**Fault:**

The back suspension does not respond properly on rough roads.

**Cars involved:**

All vehicles.

**Reason:**

The back suspension loses its hardness when driven in a sporty style.

**Solution:**

The following suspension components will have to be fitted like the way in 3.0 Manual Transmission Vehicles.

- 2 Front shock absorber (Part no: 60662410 )
- 2 Front bump stop (Part no: 60662611 )
- 2 Rear shock absorber (Part no: 60662782 )
- ~•••• 2 Rear bump stop (Part no: 60662612 )
- ~••• 4 Nuts (Part no: 16112111 )

**Fault:**

The engine or turbocharger causes a whistling noise.

**Cars involved:**

All vehicles with turbocharged engines.

**Reason:**

Entry of litter through the inlet circuit during air filter replacement damages the Turbocharger Vanes.

**Solution:**

Check Turbocharger for damage and if required then replace it. Also clean inlet circuit and air filter housing with a vacuum cleaner during air filter replacement.

### **Alfa Romeo GTV**

#### **Fault:**

Misfire of engine erratically and lighting up of the Engine Malfunction Indicator Lamp (MIL).

#### **Cars involved:**

All vehicles manufactured up to 01/2001.

#### **Reason:**

The multi plug connection between the Accelerator Pedal Position (APP) sensor and Engine Control Module (ECM) is not consistent.

#### **Solution:**

Cars manufactured after 02/2001 have a 6 point multi plug but for cars before that look for diagnostic problem codes and flush as necessary. Detach the multi plug and solder the wires in permanently.

### **Alfa Romeo Spider and GTV**

#### **Fault:**

Battery charge dropping.

#### **Cars involved:**

All vehicles.

#### **Reason:**

Battery recharging system incapable of doing enough after prolonged use of AC and other consumers during low engine speed discharges the battery.

#### **Solution:**

Disconnect the battery and change the 60 mm alternator pulley with a one of 52mm (part no 60671643).

#### **Fault:**

Engine surges when idle, there is jerking in the engine and bad throttle response.

**Cars involved:**

All vehicles having Bosch Motronic M1.5.5 engine management system.

**Reason:**

Throttle body having layer of deposits which is preventing the throttle valve from closing properly.

**Solution:**

- Take off the throttle body and remove deposits from the inner wall.
- Manually activate the throttle valve 3-5 times.
- Check the throttle body for deposits, if any left then clean again and fit back the throttle body.
- Check the speed of the engine on idle.

**Fault:**

At neutral gear, there is misfire/choking from the engine.

**Cars involved:**

All vehicles manufactured between 1994-1997.

**Reason:**

The ignition coil cover traps the low tension wiring of the ignition coil.

**Solution:**

- Check the wiring for damage and repair if required.
- ~•••• Change the path of the wiring and if needed, de-bur the sides of the ignition coil cover.
- ~•••• Attach a cable tie to the No.4 High Tension Lead.

**Fault:**

Problems in driving performance when warming up the engine from cold state as well as bad engine performance when idling.

**Cars involved:**

All vehicles apart from 1.8 1998 MY (up to VIN 6062029) and 2.0 1998 MY (up to VIN 6061722) having double Engine Coolant Temperature (ECT) sensors.

**Reason:**

Problem with Engine Control Module (ECM) software.

**Solution:**

Re-program ECM using upgraded software, taking help of diagnostic gadgets.

**Fault:**

The engine or turbocharger causes a whistling noise.

**Cars involved:**

All vehicles with turbocharged engines.

**Reason:**

Entry of litter through the inlet circuit during air filter replacement damages the Turbocharger Vanes.

**Solution:**

Check Turbocharger for damage and if required then replace it. Also clean inlet circuit and air filter housing with a vacuum cleaner during air filter replacement.