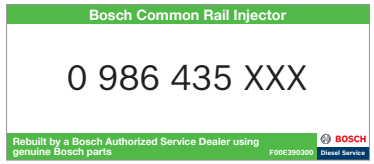
OE Replacement for OE Performance

If replacement injectors are needed, use only genuine Bosch new or remanufactured injectors or injectors from an Authorized Bosch Common Rail Field Repair location.

- Remanufactured/Repaired using genuine OE parts
- Meets OEM performance and emission requirements



Bosch Authorized part label

Bosch Authorized test equipment

To find a local Bosch Diesel Service Center, visit:
www.boschcarservice.us

BOSCH
Invented for life

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Mississauga, Ontario L5N 1R1

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www.boschautoparts.ca

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Bosch Common Rail Injectors
Potential Failures and Causes

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You're telling me I need new injectors, what happened?

The diesel fuel system supplies, transfers, cleans and delivers fuel to the engine cylinders to facilitate combustion, thereby producing power.

The key causes of injector failures are:

- Poor Fuel Filtration
- Fuel Contamination
- Incorrect Installation

Poor Fuel Filtration

A common problem with diesel injectors today is ball seat erosion. The heart of the common rail injector is the magnetic valve through which fuel passes at extremely high pressure. The passage opening is sealed using a small ball that is only 1mm in size. A proper seal is critical for proper injector performance. Abrasive contaminants can erode and damage the ball seat causing the ball not to seal properly leading to improper injection.

To ensure exact performance within the designed service life of the injector, use only OE filters or filters having the same OE micron rating and follow the recommended OE filter change interval. Using anything less can cost you more in the long run.

Fuel Contamination

Repair statistics show that the majority of diesel engine problems stem from contaminated fuel. One of the most common problems with diesel injectors is corrosion, which is caused by water in the fuel.

How does the water get into the fuel? A vented cap allows air to enter the storage tank to equalize pressure as the fuel flows out. The outside air contains moisture and this moisture condenses into water inside the tank.

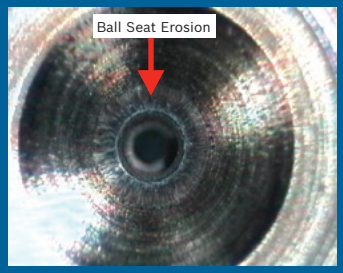
Always purchase fuel from a reputable service provider and use a proper fuel/water separator.

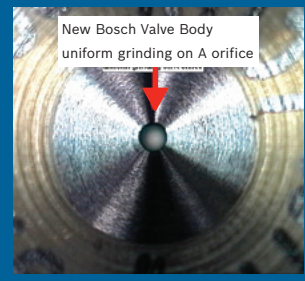
Incorrect Installation

Missing sealing rings, incorrect tightening torque, incorrect cleaning of nozzle can cause poor performance, misfiring, black smoke and check engine light (MIL) to come on.

Always follow the engine manufacturer's maintenance procedures.

Filtration





Causes:
- Inadequate filtration
- Poor quality fuel supply
- Inadequate maintenance intervals

Effect:
- Starting problems
- Poor performance
- Idling problems (vibration)

Fuel Contamination and Corrosion

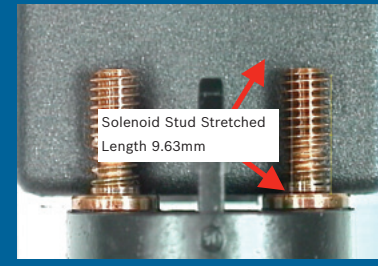
Causes:
- Water in fuel
- Poor quality fuel supply
- Inadequate filtration, water separation
- Inadequate maintenance interval

Effect:
- Poor performance
- Idling problems (vibration)

Incorrect Installation

Causes:
- Missing sealing ring
- Incorrect procedure and/or tightening torque when installed

Effect:
- Black smoke
- Poor performance



Cause:
- Incorrect tightening torque

Effect:
- Misfire
- Check Engine Light (MIL)