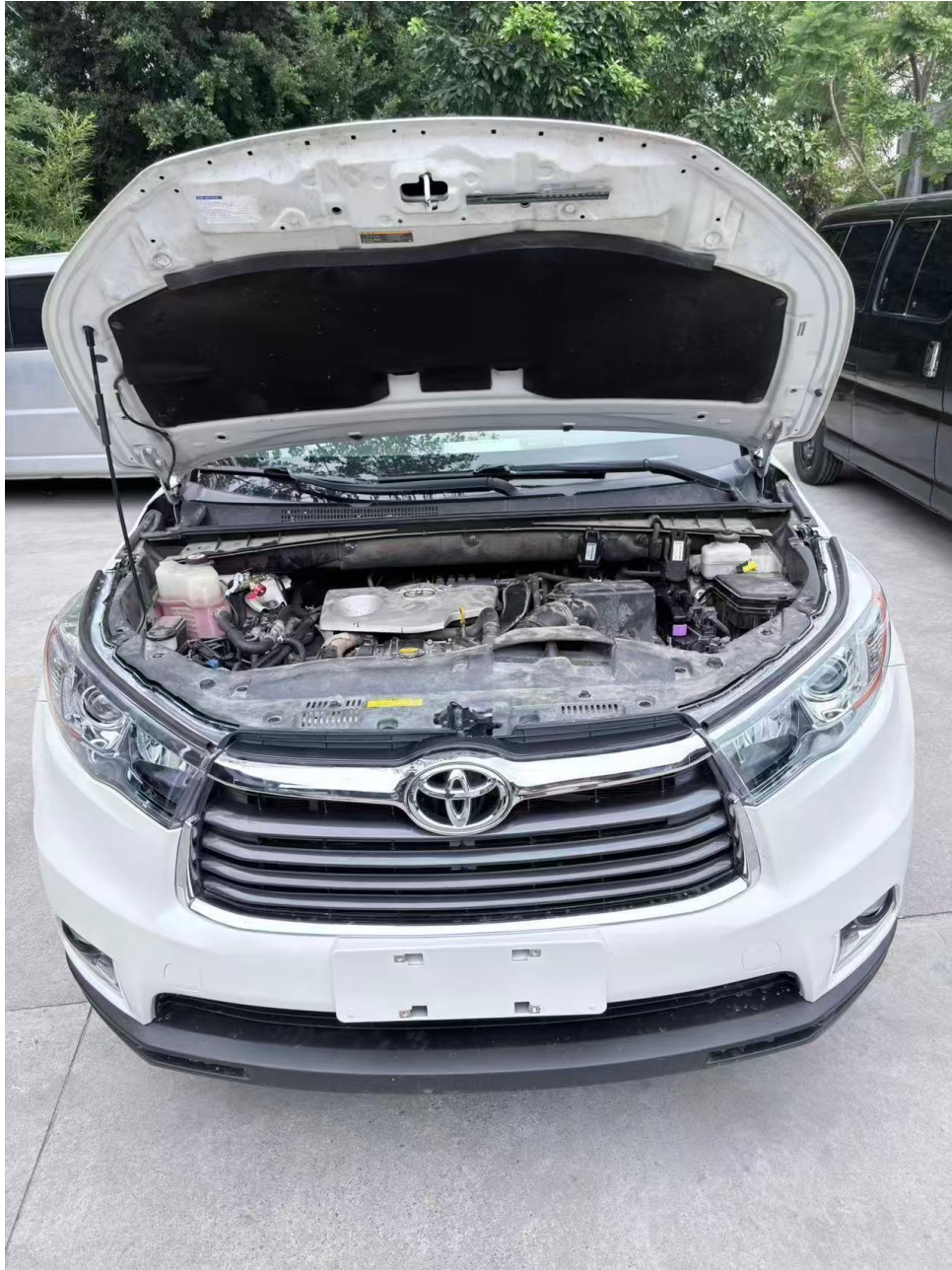


This guide covers the CNG/LPG Injector Rail step-by-step installation procedure, typical fault symptoms, root cause analysis and troubleshooting solutions. Use this document to complete injector rail replacement and resolve common issues such as check engine light, rough idle, power loss and unstable gas supply after installation.



1. Pre-Installation Safety & Preparation

Safety Warning: Shut down the gas cylinder valve completely. Start the engine and run until stall to fully depressurize the gas pipeline. Disconnect the vehicle battery negative terminal before any disassembly work.

Inspect the new injector rail: Check solenoid valves, internal rubber seals, gas nozzles and wiring connectors for defects or damage before installation.

Prepare tools: Torque wrench, screwdriver, gas leak detector, insulating tape, replacement O-rings and gaskets.

Mark all wiring plugs and gas pipe connections to prevent misconnection during reassembly.



2. Step-by-Step Injector Rail Installation

Remove air intake duct and auxiliary components to access the old injector rail assembly.

Unplug electrical connectors of each gas injector solenoid valve. Mark each wire position.

Loosen gas pipe fittings and mounting bolts, then remove the old injector rail.

Clean the intake manifold mounting surface thoroughly; remove carbon deposits, dust and residual old gaskets.

Install new O-rings and sealing gaskets onto the new injector rail, ensure all seals sit

flat without twisting.

Mount the new injector rail and tighten mounting bolts to specified torque. Do not over-tighten to avoid thread damage.

Reconnect gas pipelines and wiring harnesses according to the marks made during disassembly.

Reconnect the battery. Perform gas leakage test on all joints before starting the engine.

Start engine on gasoline mode, warm up the engine, then switch to gas mode and test idle and acceleration performance.



3. Typical Fault Symptoms of Damaged Injector Rail Solenoid

Hard to start engine: Faulty solenoid blocks gas delivery, insufficient gas supply leads to starting failure.

Engine shaking & power loss: Unstable gas injection causes engine misfire, vehicle

jerking or stall during driving.

Abnormal idle noise: Irregular gas flow creates strange noise at idle speed; idle speed fluctuates up and down.

Uneven gas injection: Solenoid valve failure affects precise gas metering, resulting in poor combustion.

Higher gas consumption: Uncontrolled gas injection causes excess gas consumption and increased operating cost.

4. Troubleshooting: Check Engine Light After Injector Rail Replacement

Check engine light turning on after injector rail replacement is one of the most frequent complaints. Main root causes and inspection steps:

No.	Possible Root Cause	Inspection & Solution
1	Defective injector rail product quality	Verify rail and solenoid quality. Replace with qualified injector rail if internal valve assembly fails.
2	Poor electrical connection, loose or corroded wiring plug	Check all wiring terminals. Reconnect and fix loose wires; use insulating tape for protection.
3	Gas pressure sensor fault	Check gas pressure sensor signal, repair or replace the sensor if abnormal.
4	Loose mounting bolts or gas pipeline leakage	Retighten mounting screws, use leak detector to check all gas connections.
5	Improper system calibration after replacement	Re-calibrate the gas ECU parameters after injector rail installation.

4 Loose mounting bolts or gas pipeline leakage Retighten mounting screws, use leak detector to check all gas joints and eliminate leakage.

5 Improper system calibration after replacement Re-calibrate the gas ECU parameters after injector rail installation.

5. Maintenance Tips

Regularly clean injector nozzles to prevent blockage caused by impurities in CNG/LPG gas.

Replace O-rings and sealing gaskets every maintenance cycle to prevent gas leakage.

Check wiring harness periodically for aging or abrasion damage.

Use qualified gas to reduce carbon and impurity accumulation inside the injector rail.