

Fuel System

K-Jetronic: Troubleshooting Symptoms

K-Jetronic is a mechanical system: the fuel is continuously metered in proportion to the quantity of air drawn in by the engine. The K-Jetronic system was installed as Original Equipment in series production vehicles in the years 1973 through 1995. Since then, the K-Jetronic system has been only of significance for repairs and maintenance.

SYMPTOM: ENGINE DOES NOT START/STARTS HARD WHEN COLD

Cause	Remedy
Sensor plate and/or plunger not moving freely	Check for free movement
Auxiliary air valve does not open	Check valve for correct function
Electric fuel pump not operating	Check pump fuse, pump relay and pump
Cold start system defective	Check cold start system
Thermo-time switch defective	Test thermo-time switch
"Cold" control pressure outside tolerance	Test pressure
Injector leaking, opening pressure low	Check injectors on tester
Injected fuel quantities unequal	Check for equal fuel quantities
Basic idle setting incorrect	Check and adjust CO level

SYMPTOM: ENGINE DOES NOT START/STARTS HARD WHEN WARM

Cause	Remedy
Leaks in air intake system (false air)	Check air system for leaks
Sensor plate and/or plunger not moving freely	Check for free movement
Air flow sensor plate stop incorrectly set	Check and reset
Electric fuel pump not operating	Check pump fuse, pump relay and pump
"Warm" control pressure too high	Test pressure
Fuel system leakage	Inspect fuel system for leaks
Injector leaking, opening pressure low	Check injectors on tester
Injected fuel quantities unequal	Check for equal fuel quantities
Basic idle setting incorrect	Check and adjust CO level

SYMPTOM: ENGINE STARTS BUT IMMEDIATELY DIES

Cause	Remedy
Electric fuel pump not operating	Check pump fuse, pump relay and pump
Excessive fuel delivery to control circuit	Check fuel delivery
"Warm" control pressure too high	Test pressure
"Warm" control pressure too low	Test pressure
Primary system pressure out of tolerance	Test pressure and adjust with shim

SYMPTOM: IRREGULAR IDLE DURING WARM-UP

Cause	Remedy
Leaks in air intake system (false air)	Check air system for leaks
Auxiliary air valve does not open	Check valve for correct function
Cold start valve leaking	Check cold start valve
"Cold" control pressure outside tolerance	Test pressure
Injector leaking, opening pressure low	Check injectors on tester
Injected fuel quantities unequal	Check for equal fuel quantities
Basic idle setting incorrect	Check and adjust CO level
Lambda control system not functioning correctly	Check Lambda control system

SYMPTOM: IRREGULAR IDLE WITH WARM ENGINE

Cause	Remedy
Leaks in air intake system (false air)	Check air system for leaks
Sensor plate and/or plunger not moving freely	Check for free movement
Cold start valve leaking	Check cold start valve
"Warm" control pressure too high	Test pressure
"Warm" control pressure too low	Test pressure
Injector leaking, opening pressure low	Check injectors on tester
Injected fuel quantities unequal	Check for equal fuel quantities
Basic idle setting incorrect	Check and adjust CO level
Lambda control system not functioning correctly	Check Lambda control system

SYMPTOM: ENGINE WILL NOT ACCELERATE, BACKFIRES

Cause	Remedy
Leaks in air intake system (false air)	Check air system for leaks
Sensor plate and/or plunger not moving freely	Check for free movement
"Warm" control pressure too high	Test pressure
"Warm" control pressure too low	Test pressure
Basic idle setting incorrect	Check and adjust CO level
Lambda control system not functioning correctly	Check Lambda control system

SYMPTOM: ENGINE BACKFIRES UNDER LOAD

Cause	Remedy
Sensor plate and/or plunger not moving freely	Check for free movement
Electric fuel pump not operating	Check pump fuse, pump relay and pump
"Warm" control pressure too high	Test pressure
Primary system pressure out of tolerance	Test pressure and adjust with shim

Injector leaking, opening pressure low	Check injectors on tester
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SYMPTOM: POOR PERFORMANCE

Cause	Remedy
Leaks in air intake system (false air)	Check air system for leaks
Sensor plate and/or plunger not moving freely	Check for free movement
"Warm" control pressure too high	Test pressure
"Warm" control pressure too low	Test pressure
Primary system pressure out of tolerance	Test pressure and adjust with shim
Injected fuel quantities unequal	Check for equal fuel quantities
Throttle butterfly does not open completely	Check butterfly and stops in throttle venturi
Lambda control system not functioning correctly	Check Lambda control system

SYMPTOM: ENGINE RUNS ON

Cause	Remedy
Sensor plate and/or plunger not moving freely	Check for free movement
Air flow sensor plate stop incorrectly set	Check and reset
Cold start valve leaking	Check cold start valve
Injector leaking, opening pressure low	Check injectors on tester
Basic idle setting incorrect	Check and adjust CO level

SYMPTOM: FUEL CONSUMPTION TOO HIGH

Cause	Remedy
Cold start valve leaking	Check cold start valve
"Warm" control pressure too low	Test pressure
Basic idle setting incorrect	Check and adjust CO level
Lambda control system not functioning correctly	Check Lambda control system

SYMPTOM: DRIVING PERFORMANCE UNSATISFACTORY

Cause	Remedy
Leaks in air intake system (false air)	Check air system for leaks
Sensor plate and/or plunger not moving freely	Check for free movement
Excessive fuel delivery to control circuit	Check fuel delivery
"Warm" control pressure too high	Test pressure
"Warm" control pressure too low	Test pressure
Primary system pressure out of tolerance	Test pressure and adjust with shim
Basic idle setting incorrect	Check and adjust CO level
Lambda control system not functioning correctly	Check Lambda control system

SYMPTOM: CO CONCENTRATION AT IDLE TOO HIGH

Cause	Remedy
Sensor plate and/or plunger not moving freely	Check for free movement
Cold start valve leaking	Check cold start valve
"Warm" control pressure too high	Test pressure
Basic idle setting incorrect	Check and adjust CO level
Lambda control system not functioning correctly	Check Lambda control system

SYMPTOM: CO CONCENTRATION AT IDLE TOO LOW

Cause	Remedy
Leaks in air intake system (false air)	Check air system for leaks
Sensor plate and/or plunger not moving freely	Check for free movement
Basic idle setting incorrect	Check and adjust CO level
Lambda control system not functioning correctly	Check Lambda control system

SYMPTOM: IDLE SPEED CANNOT BE ADJUSTED (TOO HIGH)

Cause	Remedy
Auxiliary air valve does not close	Check valve for correction function