

DINGO 125 inyección Euro4-Euro5 – DIAGNOSIS MANUAL -

1. Modo Diagnósis:

Cuando el indicador de fallo se mantiene encendido, y no se dispone de una herramienta de diagnóstico OBD, se puede diagnosticar el fallo entrando en modo diagnóstico manualmente.

- Coloque la llave de contacto en la posición "ON"
- Rotar el Puño de Gas hasta la posición máxima del ángulo, rápidamente dos veces dentro de 1 segundo, entonces se entra en el modo diagnóstico.



Lista de Comprobación de errores (basados en los parpadeos del indicador)

Fije el fallo por los parpadeos del indicador del cuentakilómetros o del ECU:

Fallo único, parpadea el mismo código de error repetidamente, e.g., parpadea 4 veces, para durante 1 segundo, y luego vuelve a parpadear 4 veces más, para durante 1 segundo, repetidamente, entonces esto significa que es un fallo del "Sensor de Angulo";

Multi fallo, parpadea los códigos de error en círculo repetidamente, e.g., parpadea 4 veces, para durante 1 segundo, y luego vuelve a parpadear 8 veces más, para durante 1 segundo, entonces parpadea 4 veces, para durante 1 segundo, y luego vuelve a parpadear 8 veces más, repetidamente, entonces esto significa que es un fallo del "Sensor de Angulo" y otro del "inyector".

Para ver los detalles por favor compruebe la siguiente tabla:

Num. de Parpadeos	Fault	Fault content	Solution
2	air is too little at idling	idling flow area is too small	clean the throttle valve plate and the idling pass, or adjust the idling bolt

3	interference	the system is interfered by eletro wave or electricity source	check the resistance of spark plug and spark plug cap, check whether the rectifier is damaged
4	angle sensor	abnormal angle sensor	check plug, adjust the clearance of magnetor boss to 0.5-0.8mm
5	battery voltage	too high	check the plug of rectifier, replace rectifier
6	O2 sensor	O2 sensor short circuit or open circuit, abnormal O2 concentration signal	check plug, or replace O2 sensor
7	cylinder head temparetur	open circuit or short circuit, or high temperature	check whetheit's the cooling system fault, check plug, or replace temperature sensor
8	Inyector	Circuito abierto o cortocircuito	Comprobar el conector , ver si la Resistencia de la bomba de gasolina está entre 12-17 Ω ; si no es asi, sustituir
9	Bomba Gasolina	Circuito abierto o cortocircuito	Comprobar el conector , ver si la Resistencia de la bomba de gasolina esta entre 1.2-1.7 Ω ; si no es asi, sustituir
10	ingnition output	open circuit	check plug, or replace the ignition unit
11	throttle valve	wrong fixture	Fix again (pull the throttle to the end, open by key, release the throttle within 10 seconds, close the key), or replace ECU
12	ECU	software damage	ECU check the resistance of spark plug or spark plug cap, replace ECU
13	air in temperature	open circuit or short circuit	ECU replace ECU

2. Fault Diagnosis

当故障灯启亮时，则说明电喷系统出现故障，需要进行检查和维修，方法如下：

When the fault indicator is lighted, then it means the fuel injection system has problem, which requires check and repair. The methods are as follows (totally 3 methods),

1. Use the diagnosis tool to read the fault code through OBD diagnosis end.
2. Use bluetooth plus the mobile phone APP to reach the fault code.
3. After entering the diagnosis mode, then we should check the flash frequency of the fault indicator, and find out the fault on the check list. (details please check the previous two pages)

OBD Diagnosis



- Turn off the main switch to “OFF” by key
- Connect the diagnosis tool with ECU communications end by connecting wire
- Turn on the main switch to “ON”
- The detailed using steps of diagnosis tool please check the user’ s manual of diagnosis tool

Fault check list

Fault code	DTC naming	Fault detection criteria
P0110	Intake Air Temperature Sensor 1 Circuit	The signal voltage is more than the specified value 1 or less than specified value 2.
P0115	Engine Coolant Temperature Sensor 1 Circuit	The signal voltage is more than the specified value 1 or less than specified value 2
P0118	Engine Coolant Temperature Sensor 1 Circuit High	The signal voltage is more than the specified Value.
P0121	Throttle Position Sensor Circuit Range	The signal of TPS is over 4.95V or less than 0.05V
P0132	O2 Sensor Circuit High Voltage	The signal voltage is more than the specified value.
P0133	Slow reaction from O2 Sensor	The time from low voltage to high voltage is more than the specified value.
P0335	Crankshaft Position Sensor "A" Circuit	Resistance between input and ground is greater than the specified value
P0336	Crankshaft Position Sensor "A" Circuit Performance	positive pulses numbs are not equal to negative pulses numbers.

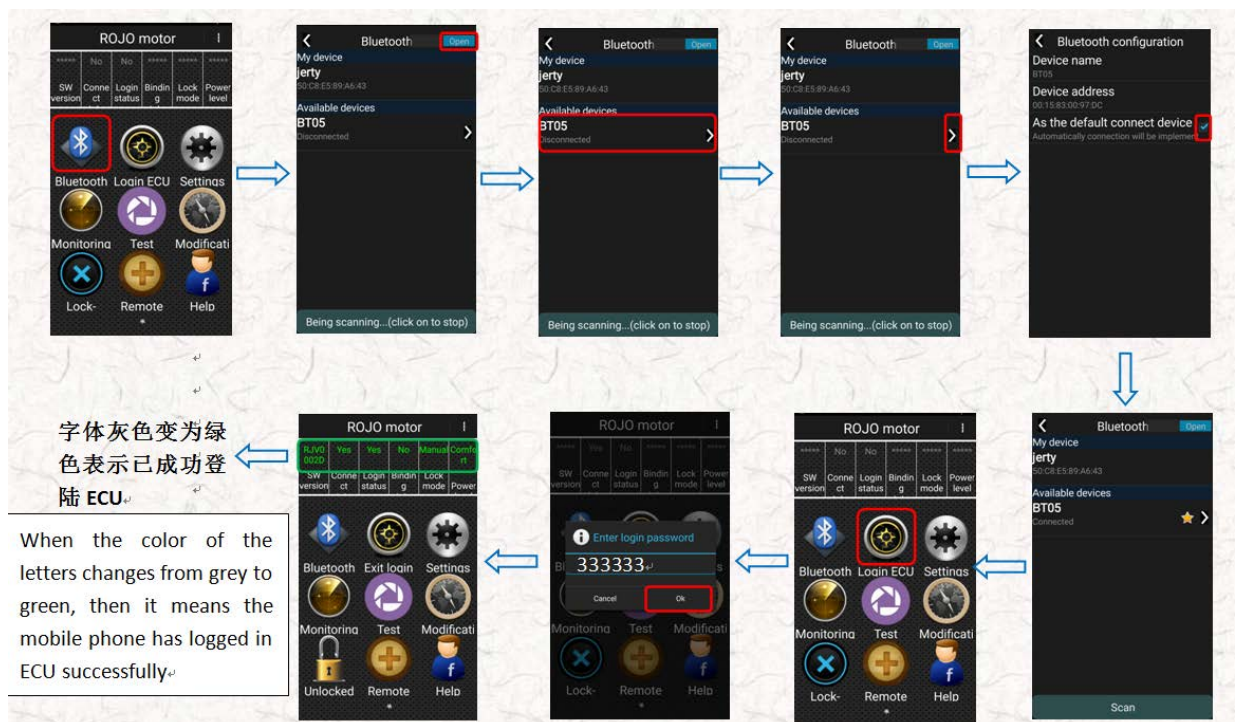
APP diagnose by Mobile phone (please install the attached app. on your mobile phone with android system, the file doc. is called com.example.honzenproj.apk)

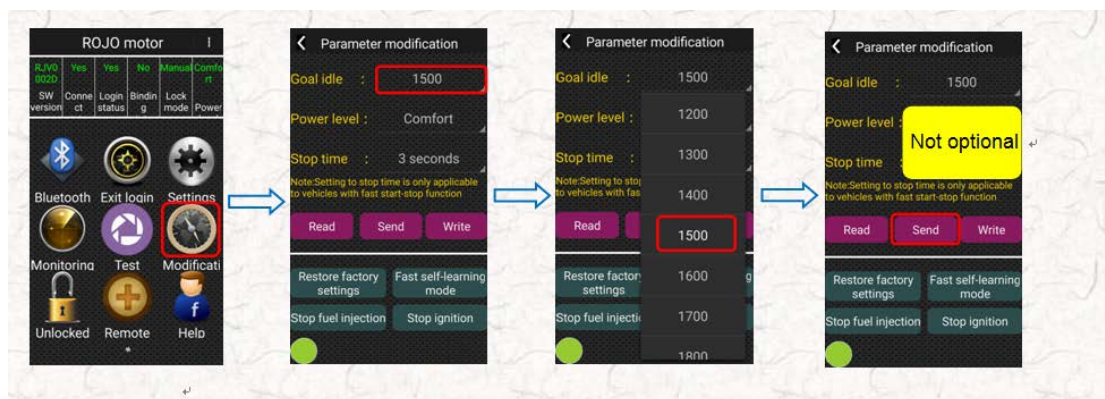
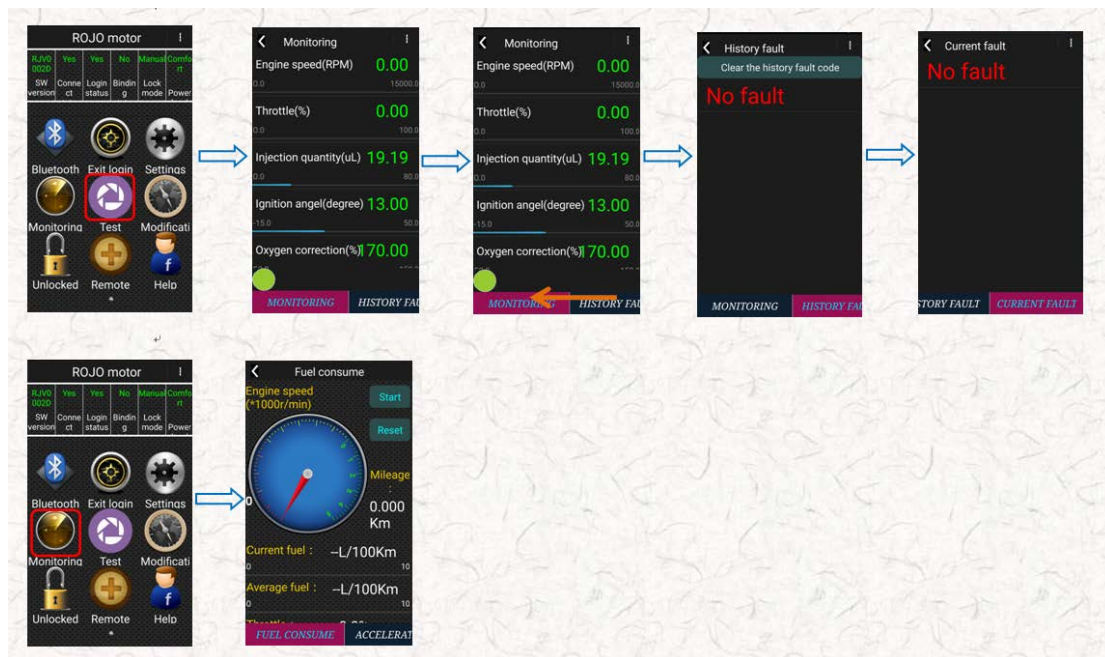


- 用钥匙使电门锁关闭至“OFF”档 Turn off the main switch to “OFF”;
- 将蓝牙连接线与 ECU 通讯端口相连接(如图)connect the bluetooth wire with the ECU communications end as the drawing shows;

- 打开电门锁至“ON”档。Open the main switch to “ON”
- 打开手机上 ROJO 助手, 进入软件界面后点击“蓝牙连接”(如图)

Open the “ROJO assistant” on the mobile phone , then click “bluetooth connection” as the drawing shows





主要故障速查表 Fault check list

分类 category	故障源 Fault source	故障现象 Fault phenomenon	故障灯 Fault indicator	故障机理和排除方法 Cause and Solution
气路 Air supply	怠速气量过低 air volumn is too low at idling	容易熄火 easy cutoff	Fault indicator flashes twice, idle speed is too low	idling pass is blocked, clean by detergent
	进气管螺钉松动 screw of pipe inlet is loose	容易熄火 easy cutoff		too much air, thin fuel and air mixture, tight
油路 Fuel supply	油泵压力不足 pressure of fuel pump is not enough	容易熄火 easy cutoff 加速无力 weak accelaration		insufficient injecting volumn, fuel atomization is not good, replace the pump
	负压泵供油量不足 fuel supply from the vacuum pump is not enough	容易熄火 easy cutoff 加速无力 weak accelaration		fuel pump is hard to get cool, air blocked, replace the vacuum pump
	管路弯折不通畅 the hose is bended and the fuel cannot go through smoothly	容易熄火 easy cutoff 加速无力 weak accelaration		air blocked during engine warming, elimincate the bend
	喷油器滴漏或者长喷 Injector drips or spays for a long time	启动困难 hard to start 加速无力 weak accelaration		fuel and air mixture is too thick, replace the injector
	喷油器喷孔或滤网堵塞 Block in the injector hole or filter net	启动困难 hard to start off 容易熄火 easy cutoff 加速无力 weak accelaration		Injecting volumn is too small, replace the fuel filter, wash or replace the injector
点火 Ignition	点火模块故障 ignition unit fault	启动困难 hard to start off 容易熄火 easy cutoff 加速无力 weak accelaration		no spark or weak spark, replace
	火花塞失效 spark plug is invalid	启动困难 hard to start off 容易熄火 easy cutoff		no spark or weak spark, replace
	火花塞或火花帽无电阻 no resistance on the spark plug or spark plug cap	容易熄火 easy cutoff	故障灯闪 13 下 fault indicator flashes 13 times	interfere with the working of ECU, replace the spark plug or spark plug cap with resistance
电路 Electricity supply	电瓶接线端子接触不良 bad contact of battery connecting terminal	启动困难 hard to start off		unsteady electricity supply by ECU, tight
	线束和接插件故障 fault of wiring harness and plug-in unit	容易熄火 easy cutoff	故障灯闪烁 fault indicator flashes	Influence the receiving and sending of signal, eliminate the loose problem
	整流器故障 rectifier fault	容易熄火 easy cutoff 加速无力 weak accelaration	故障灯闪 7 下 fault indicator flashes 7 times	Voltage fluctuates too much, which interferes or damage ECU and battery, replace
发动机 Engine	气门间隙过小 the vavle clearance is too small	启动困难 hard to start off 容易熄火 easy cutoff		The valve cannot get fully closed, and the pressure in the cylinder is low, enlarge the clearance
传感器 Sensor	缸头温度传感器失效 the cylinder head temperature sensor is invalid	启动困难 hard to start off	故障灯闪 2 下 fault indicator flashes 2 times	Fuel is not enough by cool start, check plug or replace
	氧浓度传感器失效 O2 concentrations is invalid	容易熄火 easy cutoff 加速无力 weak accelaration	故障灯闪 4 下 fault indicator flashes 4 times	the closed loop of injecting volumn is invalid, result in the fault injectin volumn, chech the plug, replace the sensor

	磁电机间隙大于 1mm magnetor clearance is over 1mm	启动困难 hard to start off	故障灯闪 5 下 fault indicator flashes 5 times	insufficient voltage at low speed angle signal , reduce the clearance
	磁电机间隙小于 0.5mm magnetor clearance is less than 1mm	容易熄火 easy cutoff 加速无力 weak accelaration	故障灯闪 5 下 fault indicator flashes 5 times	noise wave of high speed Crank angle signal, enlarge clearance
ECU	自学错误 Memory fault	启动困难 hard to start off 容易熄火 easy cutoff 加速无力 weak accelaration		because of abnormal O2 sensor, reset
	软件或硬件损坏 damage on software and hardware		故障灯闪 12 下 fault indicator flashes 12 times	spark plug cap, spark plug or rectifier is not qualified, which results in the damage of ECU software or hardware