

Weichai power engine Euro III flash code list (for WP high pressure common rail series diesel engine)

Flash code			Error type	Related parts	Problems caused	Error reason	Remedies	Flash code Lamp on
1	1	1	Error relevant to starting	ECU internal ADconverter error	ECU does not treat signal correctly; engine cannot run normally, and even cannot start	-	Cut off power and restart ECU; if there're still problems, ECU should be replaced	√
1	1	1		Synchronization signal error	Synchronization signal is the basis of fuel injection timing. Synchronization error causes abnormal fuel injection, even leading to difficult startup, giving out black smoke or engine abnormal sound, etc.	Signal tested in the crankshaft rotating speed sensor or camshaft rotation sensor is wrong	Check the connection of the two rotating speed sensors, the matching relation of high pressure fuel pump and crankshaft gear, and existence of gap between crankshaft rotating speed sensor and flywheel (whether it is between 1.0±0.5mm).	√
1	1	3						
1	1	4						
1	1	5		ECU internal time treatment unit error	Stop the engine, and then it cannot start	-	Cut off power and restart ECU; if there're still problems, ECU should be replaced	√

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1	1	6		-	Engine power is not enough	-	Cut off power and restart ECU; if there're still problems, ECU should be replaced	√
1	2	1		Starter relay error	Engine cannot start smoothly	Harness is damaged, start relay is damaged	Check start relay and wires	√
1	2	1						
1	2	2		T15 switch error	-	-	Check T15 switch	√
1	2	3		T50 switch error		Switch is closed continually for over 120s	Check T50 switch	√
1	2	4		电池	It is not allowable to make compression test	Battery voltage is too high (>36V) or too low(<6V)	Check battery, engine and vehicle harness	
1	2	5		FMTC pulse frequency spectrum diagram	-	Calibration error	Change calibration	

Flash code			Error type	Related parts	Problems caused	Error reason	Remedies	Flash code Lamp on
1	3	1		ECU internal Sensor power module	Engine power is insufficient with black smoke	ECU internal error or air intake pressure (2.33), oil pressure sensor power (2.32) and vehicle power (24V) short-circuited or earthing	Check air intake pressure, oil pressure sensor harness (The maximum power current of SSP1 is 90mA)	√
1	3	1			-	-	-	-
1	3	1			Engine power is not enough	ECU internal error or accelerator pedal sensor 2 power (1.84), fan rotating speed sensor power (1.68) and vehicle power short-circuited or earthing	Check accelerating pedal sensor 2, fan rotating speed sensor (The maximum power supply of SSP2 is 90mA)	√

Flash code			Error type	Related parts	Problems caused	Error reason	Remedies	Flash code Lamp on
1	3	1		Main relay error	Engine power is not enough	ECU internal error or accelerating pedal sensor 1 power (1.84) rail pressure sensor power (2.13) and vehicle power short-circuited or ground	Check accelerating pedal sensor 1, rail pressure sensor (The maximum power supply of SSP3 is 50mA)	√
1	3	2			Common rail pressure release valve (PRV) opens and engine power is insufficient	Flow calculation unit is grounded or short-circuited (3.09 3.10)	Check flow calculation unit harness	√
1	3	2				ECU power output is grounded or short-circuited (1.04 2.03)	Check vehicle harness 2.03, 1.04 (please note: It should adopt ECU power output, and should not be connected to outer power)	√
1	3	2						

Flash code			Error type	Relatedparts	Problems caused	Error reason	Remedies	Flash code Lamp on				
1	3	3	Common rail system relevant component	Rail pressure sensor	Common rail pipe release valve opens, return oil temperature rise, engine power is insufficient	Rail pressure sensor is damaged or connecting harness is short -circuited, open-circuited	Check rail pressure sensor and connecting harness, and change them when necessary	√				
1	3	3										
				Common rail release valve malfunctions		Fuel pipe problem might result from rail pressure sensor or flow calculation unit, or excessive ail pressure adjustment due to unsmooth fuel flow.	Check the fuel pipe, the rail pressure sensor and fuel flow calculation unit.	√				
1	3	4										
1	3	5							Fuel flow calculation unit error	Fuel flow calculation unit is damaged or	Check fuel flow calculation unit and its connecting harness	√
1	3	5										
1	3	5										

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1	3	5				connecting harness is short-		
1	3	6	Common rail parts	Common rail pipe pressure release valve	Release vale is worn out, and not well closed, causing rail pressure to wave abnormally	Low pressure oil pipe (including fuel inlet and return) is not smooth, causing release valve to constantly open or keep too long open time.	Replace the common rail pipe	√
1	4	1	Injector	Cylinder 1 injector er	Engine power is not enough; it runs unstably and even shuts donw.	Injector harness is not well connected, worn-out harness is open-circuited, or cylinder, ect is open-circuited.	Check cylinder 1 injector	√
1	4	1						
1	4	2		Cylinder 2 injector error			Check cylinder 2 injector	
1	4	2						
1	4	3		Cylinder 3 injector error			Check cylinder 3 injector	
1	4	3						
1	4	4		Cylinder 4 injector error			Check cylinder 4 injector	
1	4	4						
1	4	5		Cylinder 5 injector error			Check cylinder 5	

Flash code			Error type	Related parts	Problems caused	Error reason	Remedies	Flash code Lamp on
1	4	5		Cylinder 6 injector error			injector	
1	4	6					Check cylinder 6 injector	
1	4	6						
1	5	1	Control capacitor of injector	Capacitor 1(control injectors)error		Injector harness	Check cylinder No 1, 2 and 3 injectors harness	√
1	5	1		Capacitor 2(control No.4.5 and 6 injectors)error		Injector harness	Check cylinder No 4, 5 and 6 injectors harness	√
1	5	2						
1	5	2	Control inject chip	Control injector chip CY33X error		Internal error	Engine is off, cut off electricity and restart the engine	√
1	5	3						
1	5	4	Injection	Injector cannot reach minimum normal working	Engine stop	Harnesses of more than 3 cylinders are short-circuited or open-circuited.	Check injector harnesses on all cylinders	
1	5	5		ECU internal limit on fuel injection	-	-	-	
2	1	1	key switches and sensors	Fuel contains water	Lamp is on when fuel contains water, water level alarm	Diesel coarse filter has gathered water in full	Maintenance of diesel filter	√

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2	2	1		Pedal sensor error	It cannot supply fuel to engine, rotating speed stays at 1000rpm	Harness connection or pedal sensor quality is not reliable.	Check harness connection, and replace pedal sensor if possible (Please notice pedal model before replacement! Model error can lead to abnormal working)	√
				Pedal sensor2error				
2	2	1						
2	2	2		Clutch switch error	It is imposible to cruise.	Switch is not reliable or harness is open-circuited	Check switch and harness	√
				Brake switch error				√
2	2	3						√
2	2	3						
2	2	3						
				Single brake switch error		Brake is not activated, so cruise is not allowed	Press the brake pedal before cruise	√
2	2	3						
2	2	5		Trusted tests of accelerator and brake are wrong	-	Depress both the accelerator pedal and the brake pedal at the same time	-	

Flash code			Error type	Related parts	Problems caused	Error reason	Remedies	Flash code Lamp on
2	2	6		Engine protection	-	Engine is over speed (>2650rpm)	-	
2	2	7			-	Transmission input torque is too much	-	
2	2	8		Engine torque is over adjusted	Torque is not enough			
2	2	9		Remote accelerator pedal	Remote accelerator pedal malfunctions	Accelerator pedal sensor is in error or harness is short-circuited or open-circuited	Check sensor harness, and replace accelerator pedal when necessary	
2	2	9						
2	3	1		Air intake pressure sensor	Limp Home	Sensor error or harness is short-circuited or open-circuited	Check air intake sensor harness, and replace sensor when necessary	√
2	3	2		Air pressure sensor			The sensor is integrated on ECU; check that it is blocked by foreign matter.	√
2	3	3		Air intake temperature sensor			Check air intake sensor harness, and replace sensor when necessary	√

Flash code			Error type	Related parts	Problems caused	Error reason	Remedies	Flash code Lamp on
2	4	1		Coolant temperature sensor	Limp home, causing that intake heating cannot work normally.		Check water sensor harness, and replace sensor when necessary	√
2	4	2		Too high water temperature alarm	Water temperature is over 105°C, engine begins to limit running of power	Water temperature is too high	Check engine cooling system	√
2	4	3		Oil pressure sensor pressure too high alarm	If instrument adopt CAN Bus, oil pressure is in error.	Oil pressure sensor is in error or oil pressure is too high	Check sensor harness, and replace sensor when necessary; check engine lubrication system	√
2	4	3		Too low oil pressure alarming	-	Oil pressure is too low		
2	4	4		Oil temperature sensor	-	Oil temperature sensor is in error or oil temperature is too low		√
2	4	4		Too high oil temperature alarm	-	Oil temperature is too high		
2	4	5		Water sensor test	-	-	-	-
2	4	5			-	-	-	-

Flash code			Error type	Related parts	Problems caused	Error reason	Remedies	Flash code Lamp on
2	5	1	Rail pressure monitoring	High pressure fuel pipe low pressure fuel pipe malfunctions with leakage	Starting is difficult ; Limp Home; Relief valve is open, there is plenty of high pressure fuel leakage, and fuel return temperature rises.	Inlet fuel resistance is too big; or there is inlet fuel pipe leakage; Fuel return resistance is too big;	Check fuel pipe of engine, and replace filter, fuel pipe, etc. when necessary	√
2	5	2						
2	5	3						
2	5	3						
2	5	4						
2	5	4						
2	5	5						
2	5	6						
2	5	7						
2	5	8						
2	6	1	ECU	ECU system restores	Relief valve open, Limp Home	ECU internal error	Cut off power, and restart the engine; if problem still exists, ECU should be replaced.	
2	6	1						
2	6	1						√
2	6	2		Over speed test	-	-	-	√
2	6	2			-	-	-	
2	6	3	ECU internal	Chip CJ940 (broken down by external high voltage,	Engine shuts down	Communication error	Replace ECU	√

Flash code			Error type	Related parts	Problems caused	Error reason	Remedies	Flash code Lamp on
2	6	3	hardware test	and special attention should be paid to the protection of ECU! E.g. when welding)		Internal voltage is too high		
2	6	3				Internal voltage is too low		
2	6	4		ECU chip and Watchdog	Engine shuts down (cut off electricity and restart, and it can be started)	Communication error		
2	6	5		EEPROM (Electrically Erasable Programmable Read-Only Memory)	Mileage information, etc cannot be recorded	-	Rewrite ECU (It guarantees 20 seconds of AfterRun time)	
3	1	1	ECU vehicle related function and switch	Exhaust brake solenoid valve	Exhaust brake in failure	Exhaust brake solenoid valve (2.06) and electricity short-circuited	Check exhaust brake solenoid valve harness	√
3	1	1				Exhaust brake solenoid valve (2.06) is short-circuited to ground		

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3	2	4			switch under vehicle is in failure	or vehicle speed signal is not	sensor if necessary	
3	2	7		Multimode switch	The functions including torque limit, rotating speed limit etc, cannot be realized	Harness or resistor error	Check multimode switch	
3	3	1		System lamp	Relevant lamp indication function is not realized	Wire is connected wrong or not connected	Check that all wires of lamps or lamps are damaged	
3	3	2		Cold start lamp				
3	3	2		Warning lamp				
3	3	4		Water-contained fuel lamp				
3	3	4		Warning lamp	-	-	-	
3	4	1		Cruise switch	Cannot realize cruise/PTO, or cruise/PTO exits	Cruise switch has combination error	It's recommended to use auto reset switch	√
3	4	2		Exhaust brake switch	-	-	-	-
3	4	3		Starting switch under vehicle	It cannot start with the starting switch under vehicle	Switch gets stuck	Check switch and connection wire	
5	1	1	External test	Engine misfire test	Engine power is insufficient, and running	Cylinder 1 misfire	Check relevant injector, cylinder head	

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5	1	2			is unstable.	Cylinder 2 misfire	sealing, valve gap, etc.	
5	1	3				Cylinder 3 misfire		
5	1	4				Multi-cylinders misfire		
5	3	1				Cylinder 4 misfire		
5	3	2				Cylinder 5 misfire		
5	3	3				Cylinder 6 misfire		
5	3	4		External test	-	-	-	
5	2	1			These failures are functional indication. When activating ECU internal testing function by diagnostic instrument, if testing is successful, store flash code.			
5	2	2						
5	2	3						
5	4	1	Start relevant	Synchronization signal problem	-	Flywheel processing is unacceptable	Replace flywheel	√

