

4.1 Error code charts



Danger!

When switching over to emergency operation, the speed can no longer be changed using the arrow keys on the monitoring screen. The servo control, parking brake and swing gear brake can no longer be activated.




- ▶ Please also note the subheading “Emergency operations” in the chapter “Operating the machine” in this regard.

Error code	Effect	Cause	Measure / remedy
E 004	Engine coolant level	Short circuit to earth	Check engine coolant level.
E 005		Short circuit + 24 V	
E 006		Cable break	
E 010	Hydraulic oil level not being monitored.	Short circuit to earth	Check hydraulic oil level.
E 011		Short circuit + 24 V	
E 012		Cable break	
E 013	Hydraulic oil temperature not being monitored.	Short circuit to earth	Check that the radiator is not dirty.
E 014		Short circuit + 24 V	
E 015		Cable break	
E 016	Gear oil temperature	Short circuit to earth	Check gear oil temperature.
E 017		Short circuit + 24 V	
E 018		Cable break	
E 022	Diesel engine RPM	Short circuit to earth	
E 023		Short circuit + 24 V	
E 024		Cable break	
E 027	Solenoid valve for power control (LR)	Cable break	
E 033	Solenoid valve for cooler fan regulation (EV5)	Cable break	
E 036	Solenoid valve for flow control (hydraulic pump 1) EV1	Cable break	
E 039	Solenoid valve for flow control (hydraulic pump 1) EV2	Cable break	
E 042	Solenoid valve - Reserve (EV3)	Cable break	
E 045	Solenoid valve - Pressure operate (EV6)	Cable break	
E 068	Fan RPM	Fan RPM defective	
E 302	Keyboard	No coding plug	
E 303	Keyboard	No CAN bus connection to BST	
E 305	Keyboard	No CAN bus connection to ESP01 board	
E 308	Display	No connection between keyboard and display	




Error code	Effect	Cause	Measure / remedy
E 309	Display	No Software compatibility between keyboard and display	
E 319	BST	No compatibility between hardware coding and software coding	
E 321	BST	No reception of recognised machine typ by BBT	
E 322	BST	Unknown Hardware coding	
E 442	Joystick left	Short circuit + 24 V	
E 443		Short circuit to earth or Cable break	
E 445	Joystick right	Short circuit + 24 V	
E 446		Short circuit to earth or Cable break	
E 450	The pressure for pressureless boom down movement not being monitored.	Cable break	
E 454	Rotation gear speed	Short circuit + 24 V	
E 455		Short circuit to earth or Cable break	
E 456	Fuel tank sensor	Short circuit + 24 V	
E 458		Short circuit to earth or Cable break	

4.2 Faults and remedies




4.2.1 Diesel engine and fuel system




 Fault / error	 Cause	 Solution
Diesel engine does not start	Fuel tank almost or completely empty	Fill tank and vent fuel system
	Low pressure in tank	Remove fuel filler cap
	Fuel filter dirty	Clean or change filter and vent fuel system, drain fuel / clean tank
	Outside temperature below 0°C	For operation under specific climatic conditions, see operating instructions
	Starter motor not drawing through	Check line connections, overhaul starter motor
	Batteries have no power	Charge / replace

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 Fault / error	 Cause	 Solution
Engine starts but stops immediately after or runs irregularly	Fuel tank empty (low pressure in tank)	Fill tank and vent fuel system
	Fuel filter dirty	Clean or change filter and vent fuel system (tank)
	Particularly in winter: too viscous engine oil used	Use engine oil suitable for the outside temperature
	Dry-air filter dirty	Clean or change main filter element
	Air in fuel system	Vent fuel system
	Ventilation in fuel tank obstructed	Clean
	Fuel line bent	Check line and repair if required
Diesel engine emitting grey or black smoke	Dry-air filter dirty	Clean or change filter
Diesel engine continually emitting white smoke (steam)	Water in combustion chamber	Consult customer service
Diesel engine does not reach full speed	Speed adjustment not set to maximum value	Set speed adjustment to maximum value
	Injection system is set incorrectly	Consult customer service
	Dry-air filter dirty	Clean or replace filter
	Bad fuel supply	Clean or change fuel filter, check lines, drain water from tank
Diesel engine becomes too hot	Too little coolant	Fill coolant, check for leaks
	Water pump defective	Repair
	Thermostats do not work	Change thermostats
	Coolant contaminated	Clean coolant
Diesel engine has insufficient oil pressure Note! Switch off diesel engine immediately	Oil level too low	Correct oil level
	Oil pressure display faulty	Change oil pressure switch
Diesel engine consumes too much oil	External leak on diesel engine	Retighten screws, replace seals if required
Oil in coolant or coolant in oil		Consult customer service
Unusual noise / sounddevelopment on exhaust side	Exhaust system leaking	Check exhaust system / repair

4.2.2 Hydraulic system

 Fault / error	 Cause	 Solution
Unusual noise / sounddevelopment at hydraulic pumps Note! Switch off diesel engine immediately	Shutoff valve on hydraulic tank closed	Open stop cock
	Hydraulic pumps taking in air	Check oil level in hydraulic tank, check intake lines for leaks
Modes E and P showing lack of power	No power adjustment via proportional solenoid valve Y50	Unplug cable of Y50 connection, remove safety cotter pin, move lever to emergency setting




 Fault / error	 Cause	 Solution	
Hydraulic oil temperature too high	Coolant contaminated	Clean coolant	
	Fan or fan control defective	Rectify error / consult customer service	
Hydraulic oil level too low	Oil loss	Repair leaks, exchange hoses, refill oil via return-line filter	
Cannot drive	Push the safety lever up	Push the safety lever down	
	No direction of travel preselected	Use drive selection switch in right joystick to determine direction of travel	
	Parking brake pressure switch defective	Consult customer service	
	Parking brake not released	Release parking brake using switch	
	Parking brake will not release despite switch being operated	Servo pressure present:	Operate emergency function Y6
		Servo pressure not present:	Consult customer service
Service brake engaged	Release service brake		
Slewing gear not functioning	No servo control	Push the safety lever down	
		Switch on servo control	
	Slewing gear brake activated	Push the safety lever down	
		Release slewing gear brake	
No working movement	No servo control	Push the safety lever down	
		Switch on servo control	
	No servo pressure present	Consult customer service	
	No pump high pressure present	Consult customer service	

4.2.3 Transmission




 Fault / error	 Cause	 Solution
Oil flowing out on track rollers, support rollers or leading wheel	Seal defective	Replace seal
Insufficient crawler tracking on leading wheel	Leading wheel tracking on track roller mounting has too much play	Adjust the leading wheel tracking play
Crawler jumps off or over	Crawler tension too low / crawler wheel worn	Adjust crawler tension
Correctly tensioned crawler losing tension quickly during use	Crawler tensioning cylinder defective	Check crawler tensioning cylinder, change if required or seal (only authorized specialist personnel)
Track roller or support roller sticking	Running gear extremely dirty	Clean running gear

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4.2.4 Electrical system

 Fault / error	 Cause	 Solution
Battery charge telltale light does not go out	Drive belt for alternator loose or torn	Tension or replace drive belt
	Alternator defective	Replace alternator
Batteries do not charge or charge poorly	Batteries defective	Replace batteries
	Battery connections dirty / oxidised	Clean battery connections
	Cable loose or damaged	Connect or replace cable
Telltale light or display instrument not functioning or functioning incorrectly	Bulb burnt out, display instrument defective	Replace defective part
Some or all functions on instrument panel drop out	Plug connector separated or damaged, earth lead interrupted, short circuit fuse defective	Mount plug connector correctly or change, rectify short circuit, replace fuse or activate overload cut-outs
Diesel speed adjustment via operating keypad (mode and arrow keys) not functioning	Automatic idling switch S20 is activated	Touch the joystick or deactivate automatic idling switch S20.
	Excavator speed adjustment electronics do not function	Switch the emergency function over from "AUTO" to "MANU" using switch S71 in the right control panel. Set speed using switch S72. Emergency function display appears on monitoring screen. Consult customer service.
	No signal emits from speed sensor B12	
Automatic idling not functioning, speed does not reduce	Permanent sensor signal	Consult customer service
	Switch S20 is deactivated	Activate switch S20
Servo control cannot be activated using switch	Excavator electrics faulty	Switch on emergency function using switch S73 in the right control panel Caution: Servo circuit and brake circuit can only be switched off using the safety lever. Keypad not functioning. Consult customer service.
Parking brake cannot be released using switch		
Slewing gear brake cannot be released using switch		

4.2.5 Heating/air-conditioning system

 Fault / error	 Cause	 Solution
Heating not giving out warm air	Shutoff valves for coolant line on diesel engine closed	Open shutoff valve
	Engine not at operating temperature	Bring engine to operating temperature
Heating fan does not operate	No power supply	Check fuse and wiring / repair
	Fan motor defective	Change fan motor
Only low air flow in cab	Outside air filter / recirculated air filter dirty	Clean air intake opening, replace outside air filter
	Air vent closed	Open air vent

4.2.6 Work equipment

 Fault / error	 Cause	 Solution
Cylinder stretches when loaded	Piston seal in cylinder defective	Overhaul cylinder
Bearing clearance too high on equipment	Bearing points worn out	Replace bearing parts
Grab / bucket does not move	Valve block on tilting cylinder incorrectly switched	Switch over valve block
Add-on unit cannot be turned / rotated / operated	Auxiliary function has not been released	Release auxiliary function using switch S19
	Lines are not connected	Connect lines