

Diagnosis Overview DMC PAC212TS01 – Hako B115R

Led	Calibrator Message	Description	Action
Error Messages – LED Blinking Code			
<i>Warning Faults</i>			
ON	None (lowest Priority)	Controller operational and OK	No action required
1	Handbrake on	Handbrake switch closed	Release handbrake
2	Voltage getting low	Battery voltage getting low (normally during driving)	Charge Battery
3	not used		
4	Voltage getting high	Battery voltage getting too high (normally during braking)	Reduce braking levels or vehicle Speed
5	Motor hot	Thermal cutback, allow the motor to cool down	Use vehicle within it"s specifications
6	Controller hot	Thermal cutback, allow the controller to cool down	Check heat sinking and specifications
7	Adjustments out of range	One or more adjustments are out of range	Parameters are preadjusted ex factory. Parameter change is not allowed. Replace the controller
8	Default settings restored	Default settings restored	Check adjustments for correct values
9	E-eprom cannot be accessed	E-eprom not accessible	Internal supply voltage below 12 volt. Call DMC if this problem occurs
<i>Main Faults (Recycle to neutral)</i>			
10	2 Direction fault	Both forward and reverse selected. Recycle both directions and FS1.	Check direction switch and wiring.
11	decontrol is missing	Signal from -A1.X10.1 is missing	Check wiring and voltage potential (Batt.: B-)
12	Sequence fault	Forward / reverse or FS1 closed at key on.	First key on, then close switches.
13	Accelerator high at first power up	Accelerator voltage > 50% at key on.	Check controller settings and accelerator mechanics.
14	Inching or belly fault	Forbidden input selected with inching (FS1/Seat/Handbrake) or belly switch timeout	Open switches / check wiring

Led	Calibrator Message	Description		Action
15	Voltage too low	Internal 12V supply low.		Check battery capacity / charge level / controller voltage rating / settings
16	not used			
17	Voltage too low	Battery voltage too low		Check battery capacity / charge level / controller voltage rating / settings
18	High sided Mosfet short circuit	High sided Mosfet short circuit		Check motor insulation and line contactor, if OK replace controller
19	Low sided Mosfet short circuit (drive)	Low sided Mosfet short circuit (drive)		Check motor insulation, if OK replace controller
		<i>Hard Faults (Recycle key-switch)</i>		
20	Hardware over current (AC)	Hardware over current circuit active		Check adjustments and motor setup
21	Contactor coil short circuit	Contactor coil S/C or driver or wiring open circuit		Check contactor coils and wiring
22	Voltage too high	Battery voltage too high (normally during braking)		Reduce braking levels or vehicle Speed, defective battery
23	Low sided Mosfet short circuit (neutral)	Low sided Mosfet short circuit in neutral		Check motor insulation and line or regen contactor, if OK replace controller
24	HWFS not working	Hardware failsafe cannot disable hardware		Check wiring / replace controller
25	Contactor fault	Contactor open- or short circuit		Check all contactors for open- and shortcircuit
26	Current measurement fault	Current measurement system faulty.		Replace controller
27	Low side Mosfet short circuit	Low sided Mosfet short circuit before line contactor closed		Check motor insulation and line contactor, if OK replace controller
28	Wire off detected	Sub 0	No wire off detected	Check the related circuits
		Sub 1	motor connection	
		Sub 2	short circuit magnetic brake	
		Sub 3	wire off magnetic brake	
		Sub 4	wire off motor sensor	
		Sub 5	wire off drive pedal	
29	not used			
30	Over speed	Over speed or wrong encoder teeth setting		Check parameter setting and encoder