10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
1.2.5.2.	Thermal switch Brush motor 1); 2); 3); 4); 5)	Wire broken since NC activation? Measure operating current (approx. 12 A for a motor when operated without increased pressure and on Fama Famin) Motor overload due to unfavourable floor-brush-combination and/or permanent ride with increased ground pressure?
1.2.5.5.	Thermal switch 3rd Brush motor (Modul3 Code C) 4) ; 5)	Wire broken since NC activation? Measure operating current (approx. 12 A for a motor when operated without increased pressure and on Fama Famin) Motor overload due to unfavourable floor-brush-combination and/or permanent ride with increased ground pressure?

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
1.2.6.1.	Blocking protection Brush motor (right and left) 1); 2); 3); 4); 5)	Check 35 A fuse Measure operating current (approx. 12 A for a motor when operated without increased pressure and on Fama Famin) Motor overload due to unfavourable floor-brush-combination and/or permanent ride with increased ground pressure?
1.2.6.2.	Blocking protection 3rd Brush motor (Modul3 Code C) 4); 5)	Check 35 A fuse Measure operating current (approx. 12 A for a motor when operated without increased pressure and on Fama Famin) Motor overload due to unfavourable floor-brush-combination and/or permanent ride with increased ground pressure?

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
1.2.6.3.	Electronic circuit-breaker Brush lifting element 1); 2); 3); 4); 5)	Jammed? Lifting element stopped by limit stop before being switched off by micro-switch? Check coding of Module 1 Measure operating current (approx. 3.5A max. during lifting)
1.3.5.1.	Thermal switch Side brush 1); 2)	Jammed? Permanent contact to border during ride? Wire broken since NC activation? Check 35 A fuse; Measure operating current (approx. 8 A max.)
1.3.6.1.	Blocking protection Side brush 1); 2)	Jammed? Permanent contact to border during ride? Wire broken since NC activation? Check 35 A fuse; Measure operating current (approx. 8 A max.)

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
1.3.6.2.	Blocking protection Lifting element Side brush 1); 2)	Jammed? Lifting element stopped by limit stop before being switched off by micro-switch? Check coding of Module 3 Code D Measure operating current (approx. 1.2A max. during lifting)
1.4.6.1.	Electronic circuit-breaker Lifting element Squeegee 1); 2); 3); 4); 5)	Jammed? Lifting element stopped by limit stop before being switched off by micro-switch? Check coding of Module 1 Measure operating current (approx. 3.2A max. during lifting)

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
2.2.5.1.	Thermal switch Broom (and thermal switch Side brush Motor if new version is fitted) 1); 5)	Thermal switch of Broom or Side brush motor opened or cabling faulty? Jammed? Measure operating current (approx. 9.5 A max. on Fama Famin for broom motor) Wrong sweeping track width? Unfavourable floor-brush-combination? At machines equipped with the new side brush version (Kit 105-736, side brush motor PN 105-733): Is side brush setting okay? Jammed? Measure operating voltage (max. 2.5 A after approx. 10 minutes run) and approx. 100-110 rpm

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
2.2.6.1.	Blocking protection broom 1); 5)	Jammed? Check 35 A fuse Measure operating current (approx. 9.5 A on Fama Famin floor), Sweeping track adjustment (30 mm - 50 mm) Unfavourable floor-broom combination?
2.2.6.2.	Blocking protection lifting element broom 1); 5)	Jammed? Does lifting element moves up to dead stop before being switched off by micro switch? Check module coding module 3 Code A switch S4 to OFF Measure operating current (approx. 3.3 A when lifting)

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
2.3.5.1.	Thermal switch side broom left / right 1); 3); 5)	Side broom setting okay? Jammed? Measure operating current (max. 2.5 A after approx. 10 minutes run)
2.3.6.1.	Blocking protection L-h side broom 1); 3); 5)	Side broom setting okay? Jammed? Measure operating current (max. 2.5 A after approx. 10 minutes run) and approx. 100-110 rpm
2.3.6.2.	Blocking protection R-h side broom 1); 3); 5)	Side broom setting okay? Jammed? Measure operating current (max. 2.5 A after approx. 10 minutes run) and approx. 100-110 rpm

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
2.3.6.4.	Blocking protection lifting element side broom 3)	Jammed? Does lifting element moves up to dead stop before being switched off by micro switch?
3.1.6.1.	Fuse Module 1 1); 2); 3); 4); 5)	Check 10 A / 80 V fuse. If code for blocking protection of lifting element for brush or squeegee is indicated, check these, check water pump; with SWA equally check K2 and water pump (SWA) check 35A fuse; measure operating current of suction turbines (approx. 19.5 A max. for one Motor)

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
3.1.6.2.	Fuse Module 3 Code A (for pre-sweeper) 1); 3); 5)	Check all fuses F1(10 A / 80 V) and F4-F7, check motors for filter suction (F6 = 20A/80V), shaking (F7 = 20A/80V), r-h (F4) and l-h side broom (F5) Caution: If old version of side broom motor (PN 51-237) is still installed, the F4 and F5 fuses are 20A/80V. If new version of side brush motor (PN 105-733) is already installed, the F4 and F5 fuses are 10A/80V

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
3.1.6.5.	Fuse Module 3 Code C (for 3rd brush) 4); 5)	Check all fuses F1(10 A / 80 V) and F4-F7 (5A/80V)

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
3.1.6.6.	Fuse Module 3 Code D (for side brush) 1); 2)	Check all fuses (F4 - F7 (5 A / 80 V)) and F1 (10 A / 80 V), check water valve Side brush
3.1.6.7.	Fuse Control electronic 1); 2); 3); 4); 5)	Check fuse 7.5 A / 32 V Check connection to cleaning agent unit (A7:X2:2), to Module 1 (A5:X1) and to the Modules 3 (A4:X1 and A9:X1) and to the operator panel cleaning agent/SWA (A10:X1:1) for abrasion, short-circuit, etc.

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
3.2.1.1.	TSG defective 1); 2); 3); 4); 5)	Measure approximate battery voltage on control electronics A1.X2 PIN 1 and 4 even with the machine being switched off; if not okay, check cable connection up to battery plug; check battery selection setting of Dip switch on control electronics; if okay but error 3.2.1.1 still present, then replace control electronics (also see chapter 3.4)
3.4.1.1.	Accelerator fault 1); 2); 3); 4); 5)	Check accelerator and direction switch as well as cabling

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
3.4.5.1.	Thermal switch of drive motor 1); 2); 3); 4); 5)	Is travel drive smooth? Parking brake setting okay? Longer uphill rides effectuated? Interrupted wire since NC activation? Measure operating current (approx. 40 A during cleaning)
4.1.2.1.	Module 1 not recognised 1); 2); 3); 4); 5)	Check fuse F1 (2 A / 32 V), check water valve of brushes and SWA; check contacts and contactors; check current supply of Module 1 (voltage transformer) check CAN connectivity

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
4.1.3.1.	Module 1 no response (timeout) 1); 2); 3); 4); 5)	Check fuse F1 (2 A / 32 V); check CAN bus; check contacts and connectors; check resistance (2 x 120 Ω) check current supply of Module 1 (voltage transformer)
4.3.2.1.	Module 3 Code A not recognised (for pre-sweeper) 1); 3); 5)	CAN bus connected? Check fuse F3 (2 A / 32 V); check contacts and connectors; module coding okay? (see chapter 6.2) check current supply of Module 3 (voltage transformer)

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
4.3.2.3.	Module 3 Code C not recognised (for 3rd brush) 4); 5)	CAN bus connected? Check fuse F3 (2 A / 32 V); check contacts and connectors; module coding okay? (see chapter 6.2) check current supply of Module 3 (voltage transformer)
4.3.2.4.	Module 3 Code D not recognised (for side brush) 1); 2)	CAN bus connected? Check fuse F3 (2 A / 32 V); check contacts and connectors; module coding okay? (see chapter 6.2) check current supply of Module 3 (voltage transformer)

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
4.3.3.1.	Module 3 Code A no response; timeout (for pre-sweeper) 1); 3); 5)	CAN bus connected? Check fuse F3 (2 A / 32 V); check contacts and connectors; module coding okay? (see chapter 6.2) check current supply of Module 3 (voltage transformer)
4.3.3.3.	Module 3 Code A no response; timeout (for pre-sweeper) 4); 5)	CAN bus connected? Check fuse F3 (2 A / 32 V); check contacts and connectors; module coding okay? (see chapter 6.2) check current supply of Module 3 (voltage transformer)

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
4.3.3.4.	Module 3 Code D no response; timeout (for side brush) 1); 2)	CAN bus connected? Check fuse F3 (2 A / 32 V); check contacts and connectors; module coding okay? (see chapter 6.2) check current supply of Module 3 (voltage transformer)
4.5.2.1.	CAN operator panel Code A not recog-nised (for pre-sweeper/side brush) 1); 5)	Check CAN bus to operator panel pre-sweeper/side brush; check contacts and connectors; check resistance (120 Ω); check module coding (see chapter 7) (60 Ω due to parallel connection)

10. Error Table With Information On Service Display

Error code in the display	Malfunction	Remark
4.5.2.2.	CAN operator panel Code B not recognised (for Cleaning agent/ SWA) 1); 5)	Check CAN bus to Cleaning agent/SWA operator panel; check contacts and connectors; check resistance (120 Ω); check module coding (see chapter 7) (60 Ω due to parallel connection)
4.5.3.1.	CAN operator panel Code A no response; timeout (for pre-sweeper / side brush) 1); 5)	Check CAN bus to pre-sweeper/side brush operator panel; check contacts and connectors; check resistance (120 Ω); check voltage supply of operator panel (voltage transformer) (60 Ω due to parallel connection)

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
4.5.3.2.	CAN operator panel Code B no response; timeout (for Cleaning agent / SWA) 1); 5)	Check CAN bus to Cleaning agent/SWA operator panel; check contacts and connectors; check resistance (120 Ω); (60 Ω due to parallel connection) Check voltage supply of operator panel (voltage transformer)
4.6.1.1.	Internal control unit error 1); 2); 3); 4); 5)	Check contacts of all connectors on control electronics (for corrosion); check voltage supply (current transformer) replace control electronics

10. Error Table With Information On Service Display

PowerBoss® The Power of Clean

Error code in the display	Malfunction	Remark
4.6.2.1.	CAN bus error (no response - timeout) 1); 2); 3); 4); 5)	Check CAN bus cabling between control electronics and modules; check contacts and connectors; check resistance (120 Ω) (60 Ω due to parallel connection)
4.6.3.1.	CAN bus error (Buserror) 1); 2); 3); 4); 5)	Check CAN bus cabling between control electronics and modules; check contacts and connectors; check resistance (120 Ω) (60 Ω due to parallel connection)
4.6.3.2.	CAN bus error (overrun) 1); 2); 3); 4); 5)	Check CAN bus cabling between control electronics and modules; check contacts and connectors; check resistance (120 Ω) (60 Ω due to parallel connection)

10. Error Table With Information On Service Display

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Error code in the display	Malfunction	Remark
4.6.5.1.	Wrong machine type set 1); 2); 3); 4); 5)	Check machine setting of Dip switch A on control electronics A1
4.6.5.2.	Set option not available 1); 2); 3); 4); 5)	Too many options set on Dip switch B (see chapter 3)? All modules connected via CAN bus?

10. Error Table With Information On Service Display

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Error code in the display	Malfunction	Remark
4.6.5.3.	Module overhang (too many modules in the machine) 1); 2); 3); 4); 5)	All options set on Dip switch B (see chapter 3)?

1) - Hakomatic B1100
2) - Hakomatic B 1050 TB
3) - Hakomatic B 1050 WZB
4) - Hakomatic B 1050 TB 1230
4) - Hakomatic B 1100 TB 1230

Current values for cleaning units always depend on the condition of broom and brushes as well as on the type of floor.