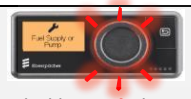
Error Messages & Troubleshooting - EasyStart Pro

Protection or fault type	Display message	Status ring condition	Cause of failure	Recommended Actions
Below Messages are displayed in the general user interface				
Heater not detected by controller (heater will not start, no fan, no pump operation)	No Heater	Flashing **Red** Ring	1) Power was connected to the controller before the system was fully set-up 2) 5A fuse has blown in harness 3) Wiring loom plug not connected properly at heater or controller 4) Wiring loom plug pin bent or damaged 5) Wiring loom has been modified or damaged	1) Remove fuses for 5min and re-insert - if error still remains then, 2) Check 5A fuse in fuseholder and replace if needed - if error still remains then, 3) Check loom plugs are all connected properly and if any pins are bent or damaged and repair if needed. 4) Check if loom has been modified or damaged and replace if needed.
Controller has paired with a different heater unit previously	MISMATCH OK: Regroup	**NOT** Flashing	Controller has previously been connected to another heater unit and paired with it	1) Press the operating knob once to pair the controller with the heater unit currently connected. 2) If error remains, perform a ***Factory Reset*** of the controller in the ***WORKSHOP*** menu.
General fault with heater	Service	Flashing **Red** Ring	Follow steps below on Pg 4, record error messages & delete errors	If error reoccurs, call Modular Wholesale technical department for further assistance – 1300 770 588
Service message show every time controller is powered on	Service	**NOT** Flashing	If RED ring on controller is NOT flashing, this is just a reminder for service.	If occurring after only a small amount of usage, the service reminder might have been incorrectly set during commissioning. Enter ***WORKSHOP*** menu and adjust ***Maint. Interval*** as needed. ***Note:*** *Message can be cleared and the heater safely used by pressing the operating knob (however massage will continue to reappear until reminder is reset).*
Heater cannot start due to no flame	Fuel Supply or Pump	Flashing **Red** Ring	1) No fuel in tank. 2) Fuel line has a leak, trapped air or restriction (kinked line). 3) If commissioning a new heater and bleeding the fuel through the line then it can take 1 or 2 restarts. If any more than this the fuel system should be checked.	1) Check there is enough fuel in the tank. 2) Check all fuel line joins are secure and no leaks or air bubbles. 3) Check for damage, blockages or kinks in fuel line or filter. ***Note:*** *If this error occurs* ***10 times*** *in a row the heater will be* ***locked out*** *(see below).* *To prevent this remove the fuses during the restart process (before the 10th attempt).*
Heater is locked due to repeated fuel supply errors (10 consecutive errors)	Fuel Supply Heater locked.	Flashing **Red** Ring	Heater has failed to start too many consecutive times with the fuel supply error. This is a safety lockout to prevent excessive fuel leaks. Fault will require resetting via EasyScan.	Unit requires connection to Easy scan to clear. ***Note:*** *This error cannot be cleared in the field without scan tool, call Modular Wholesale for further assistance.*
Air in heater is over the temperature limit	Air Ducting or Outlet	Flashing **Red** Ring	Internal air temperature is too high. 1) Restricted or blocked air ducting. 2) Blocked or restricted air intake or outlets	1) Check the air ducting is not blocked or been crushed. 2) Check there are not too many bends or excessively sharp bends in the ducting (check the duct rating is within limits for the heater model). 3) Check there is at least one outlet always open when the heater is operating. 4) Check there is nothing restricting or blocking the intake or outlet vents - such as bags, bed coverings, blankets, clothing, wrappers, etc.
Heater is locked due to repeated overheat errors (10 consecutive errors)	Overheat. Heater locked.	 Flashing **Red** Ring	Heater has been restarted too many times with the overheat error. This is a safety lockout to ensure overheat does not damage the unit.	1) Properly diagnose the cause of the repeated overheating (see above error) 2) Switch on the heater and remove the main fuse within 20 seconds, then re-insert fuse after 5 seconds.
Supply voltage to the unit is too low	Undervoltage	Flashing **Red** Ring	Supply voltage has dropped below lower limit for over 20 sec: - Below 10.5V for a 12V system - Below 21V for a 24V system	1) Check the battery condition and charge or replace if needed. 2) Check battery terminals are clean and joins are secure. 3) Check cable condition for excessive voltage drop between battery and unit and upgrade cable if needed.

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Supply voltage to the unit is too high	Overvoltage	Flashing **Red** Ring	Supply voltage has risen above the limit for over 20 sec: - Above 16V for a 12V system - Below 32V for a 24V system	1) Check the battery condition and replace if needed.
Controller cannot detect signal from external temperature sensor (if connected)	◄ 1 ► Ext. Temp. Sensor defective	Flashing **Red** Ring	***NOTE:*** *Kits with EasyStart Pro controller do not feature external temperature sensors.* Caused by defective external temperature sensor (if fitted)	1) Check controller setting as it could be set to look for an external temperature sensor. 2) Perform a ***Factory Reset*** of the controller in the ***WORKSHOP*** menu.
Controller cannot detect signal from internal temperature sensor	◄ 2 ► Int. Temp. Sensor defective	Flashing **Red** Ring	Caused by defective internal temperature sensor	Replace the EasyStart Pro controller.
Rotary knob button is stuck	◄ 3 ► Rotary Knob jammed	Flashing **Red** Ring	1) Rotary Knob has become stuck due to misalignment in the housing 2) Rotary Knob was held down for too long	1) Gently try to free the knob by turning or manipulating it to correct the alignment. 2) If cannot be freed, replace the EasyStart Pro controller. **Note:** Do Not pull too hard on the knob as it can become detached from the housing, and it is not possibe to replace the knob without dis-assembling the controller.
Back button is stuck	◄ 4 ► Pushbutton jammed	Flashing **Red** Ring	1) Back button has become stuck due to misalignment in the housing 2) Back button was held down for too long or pressed to many times.	1) Gently try to free the button by manipulating it to correct the alignment. 2) Disconnect power from system for 5 min, replace the EasyStart Pro controller. if fault doesn't reset.
Setup data is missing from controller	◄ 6 ► Missing Data	Flashing **Red** Ring	Some setup data is missing which is required for correct operation	1) Remove fuses for 5min and re-insert, 2) Then complete full setup as per manual.
Communication between controller and heater is not as expected	◄ 9 ► CAN communi-cation error	Flashing **Red** Ring	1) Wiring harness is damaged or has been modified / cut / lengthened 2) 5A fuse was removed or not in properly while power connected to controller	1) Check 5A fuse in fuse holder and replace if needed - if error still remains then, 2) Check loom plugs are all connected properly and if any pins are bent or damaged and repair if needed. 3) Check if loom has been modified or damaged and replace if needed.
Heater will not start (Controller will light up and function as normal but heater will not start fan or burner will not start)	*No messages displayed*	**NOT** Flashing	Can be caused by previous errors logged in the memory (to many restarts for example).	1) Go into the ***Workshop*** menu in the controller. 2) Go to ***Error Memory*** 3) Select ***H1: Heater*** and check and record all the error codes shown (they normally are of format "P000xxx") 4) Erase them 5) Go back and select ***Control Unit*** and check and record all error codes shown 6) Erase them 7) Exit ***Workshop*** menu 8) Try restarting the heater **Note:** Past error codes will not show in the ***Setup*** menu - you must go into the ***Workshop*** menu to view the "P000xxx" error codes. **It is critical that error codes logged are noted down before erasing them and to ensure the root cause of each of them is addressed.**
A full list of the "P000xxx" format error codes, their meaning and the causes can be found in the Eberspächer Troubleshooting Manual *"REPAIR INSTRUCTIONS - AIRTRONIC S2/M2"*				

AUTOPARTS WHOLESALE

Error Messages & Troubleshooting - EasyStart Pro

Protection or fault type	Display message	Status ring condition	Cause of failure	Recommended Actions
Controller specific error codes (shown via the Workshop menu):				
HW - Watch Dog Reset	**P000301**		Internal error	Delete errors, the heater remains ready for operation.
HW - Too Many Watch Dog Reset	**P000302**		Internal error	Replace heater ECU
CAN Communication Error	**P00030A**		5A fuse was removed or not in properly while power connected to controller or wiring harness is damaged or has been modified/cut/lengthened	1) Check 5A fuse in fuse holder and replace if needed - if error still remains then, 2) Check loom plugs are all connected properly and if any pins are bent or damaged and repair if needed. 3) Check if loom has been modified or damaged and replace if needed.
Lack of devices on CAN (No Heater)	**P001700**		1) Power was connected to the controller before the system was fully set-up 2) 5A fuse has blown in harness 3) Wiring loom plug not connected properly at heater or controller 4) Wiring loom plug pin bent or damaged 5) Wiring loom has been modified or damaged	1) Remove fuses for 5min and re-insert - if error still remains then, 2) Check 5A fuse in fuse holder and replace if needed - if error still remains then, 3) Check loom plugs are all connected properly and if any pins are bent or damaged and repair if needed. 4) Check if loom has been modified or damaged and replace if needed.
Change of devices on CAN (MISMATCH)	**P001701**		Controller has previously been connected to another heater unit and paired with it	1) Press the operating knob once to pair the controller with the heater unit currently connected. 2) If error remains, perform a ***Factory Reset*** of the controller in the ***WORKSHOP*** menu.
External Temp Sensor Faulty (short circuit)	**P001702**		N/A - no external temp sensor used	Check if loom has been modified or damaged and replace if needed.
External Temp Sensor Faulty (interruption)	**P001703**		N/A - no external temp sensor used	Check if loom has been modified or damaged and replace if needed.
Fatal Internal Error	**P001704**		Controller has internal error	Replace EasyStart Pro controller
External Flash Defect	**P001705**		Controller has internal error	Replace EasyStart Pro controller
Push Button Jammed	**P001706**		Back button is jammed or has been held down for too long	1) Gently try to free the button by manipulating it to correct the alignment. 2) If cannot be freed, replace the EasyStart Pro controller.
Internal Temp Sensor Faulty (short circuit)	**P001707**		Faulty temperature sensor	Replace EasyStart Pro controller
Internal Temp Sensor Faulty (interruption)	**P001708**		Faulty temperature sensor	Replace EasyStart Pro controller
Clock not Calibrated	**P00170A**		Some configuration data is missing	1) Remove fuses for 5min and re-insert, 2) Then complete full setup as per manual.
Invalid Configuration of System	**P00170B**		Some configuration data is missing	1) Remove fuses for 5min and re-insert, 2) Then complete full setup as per manual.
Control Knob Jammed	**P00170C**		Rotary Knob is jammed or has been held down for too long	1) Gently try to free the knob by turning or manipulating it to correct the alignment. 2) If cannot be freed, replace the EasyStart Pro controller. **Note:** Do Not pull too hard on the knob as it can become detached from the housing, and it is not possible to replace the knob without dis-assembling the controller.

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How to enter the Workshop Menu for EasyStart Pro

1) Activate heater by pressing the rotary knob (if not already ON)
2) Rotate the knob to select the **Setup** menu (cog icon) and press the rotary knob
3) Rotate the knob to select the **Timer** sub-menu (clock icon) but **DO NOT** press the rotary knob
4) Hold down the Back button for 2 seconds - **Workshop** will show on the screen.
5) Rotate the knob to select the **Error Memory** sub-menu
6) Select **H1: Heater** to check stored errors in the heater (record all the errors codes listed - they are in P00xxxx format)
7) Once recorded they can be deleted by selecting **Erase**
8) Select **Control Unit** to check stored errors in the EasyStart Pro controller (record all the errors codes listed - they are in P00xxxx format)
9) Once recorded they can be deleted by selecting **Erase**

In Settings menu, when Heater icon is flashing

Press and HOLD Back button for at least 2 sec

- Confirm the menu by pressing the operating button.
- Select [Control unit] or [Heater] by turning the operating button.

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