

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

› [Eberspächer](#) /

› [Eberspacher Airtronic D2 Diesel Air Heater 12V with 801 Diagnostic Controller User Manual](#)

Eberspächer Airtronic D2

Eberspacher Airtronic D2 Diesel Air Heater 12V User Manual

Model: Airtronic D2 with 801 Diagnostic Controller

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your Eberspacher Airtronic D2 12V Diesel Air Heater. Please read this manual thoroughly before attempting any installation or operation to ensure proper function and longevity of the unit. Retain this manual for future reference.

2. PRODUCT OVERVIEW AND COMPONENTS

The Eberspacher Airtronic D2 is a compact and powerful diesel air heater designed for various applications, including vehicles and RVs. The complete kit includes all necessary components for installation and operation.



Figure 1: Eberspächer Airtronic D2 Diesel Air Heater 12V Complete Kit Contents. This image displays the main heater unit, fuel pump, fuel hose, exhaust silencer, exhaust pipe, intake air pipe, hot air ducting, exhaust/intake air grilles, various screws, clips, plastic straps, the 801 diagnostic controller, and accompanying manuals.

The standard kit typically includes:

- Airtronic D2 Heater Unit (12V Diesel)
- Fuel Pump
- Fuel Hose
- Exhaust Silencer
- Exhaust Pipe
- Intake Air Pipe
- Hot Air Ducting (60mm diameter)
- Exhaust/Intake Air Grilles
- Mounting Hardware (screws, clips, plastic straps)
- 801 Diagnostic Controller
- Installation Manual
- Warranty Card

3. SETUP AND INSTALLATION

Proper installation is crucial for the safe and effective operation of your Airtronic D2 heater. Refer to the detailed installation manual included with your kit for specific instructions tailored to your application. Below is a general checklist of key installation considerations.


 Diesel Heater Installation Check List	
Heater Serial No. _____	Heater Kit No. _____
<p style="text-align: center;">Heater Mounting</p> <ul style="list-style-type: none"> <input type="checkbox"/> Flange seal is fitted to base of heater <input type="checkbox"/> Heater securely fastened within the permissible installation angles and positions <input type="checkbox"/> Impellor fan wheel turns freely & does not foul casing <input type="checkbox"/> Floor mounting plate protrudes sufficiently through the floor and sealed to prevent fume or water ingress <input type="checkbox"/> Heater can be accessed for servicing <input type="checkbox"/> Externally boxed heater securely fastened and protected from potential impact damage <p style="text-align: center;">Ducting / Water Hose</p> <ul style="list-style-type: none"> <input type="checkbox"/> Ducting / water hose not damaged, restricted or kinked <input type="checkbox"/> Correct internal diameter ducting / water hose used for the type of air or water system fitted <input type="checkbox"/> Suitable clearance between air heaters intake and any bulkhead or obstruction <input type="checkbox"/> Air ducting does not exceed permissible length <input type="checkbox"/> Ducting / water hose is securely fastened away from heat sources, sharp edges and moving parts <input type="checkbox"/> Hose clips sufficiently tightened <p style="text-align: center;">Combustion Air and Exhaust</p> <ul style="list-style-type: none"> <input type="checkbox"/> Pipes do not exceed permissible lengths <input type="checkbox"/> Directed away from direction of travel, heat sources, water ingress & fumes <input type="checkbox"/> Combustion air is not drawn from the passenger compartment <input type="checkbox"/> Exhaust is terminated to atmosphere <input type="checkbox"/> Exhaust is angled down, securely fastened ensuring sufficient clearance from cables, fuel lines and any flammable component or surface <input type="checkbox"/> 5mm diameter drain hole drilled at any low point of exhaust / combustion air (not marine craft) 	<p style="text-align: center;">Fuel System</p> <ul style="list-style-type: none"> <input type="checkbox"/> Heaters fuel connections are secure and fitted in accordance to the manufacturers guidelines <input type="checkbox"/> Fuel metering pump is angled up between 15° and 35° with the electrical connection uppermost <input type="checkbox"/> Correct internal diameter of fuel lines for suction and delivery side of the fuel metering pump <input type="checkbox"/> Fuel lines do not exceed permissible lengths <input type="checkbox"/> Fuel lines are protected and securely clipped away from heat sources, sharp edges and moving parts <p style="text-align: center;">Electrical</p> <ul style="list-style-type: none"> <input type="checkbox"/> Looms are securely fastened away from heat sources sharp edges and moving parts <input type="checkbox"/> Connections and crimps securely made <input type="checkbox"/> Fuse ratings are as per the manufactures specification <p style="text-align: center;">Water system</p> <ul style="list-style-type: none"> <input type="checkbox"/> Circulation pump is installed within the permissible installation angles and positions <input type="checkbox"/> System pressure tested to ensure no leaks <input type="checkbox"/> System bled in accordance with EBUK instruction <input type="checkbox"/> Correct mix of antifreeze added to system <p style="text-align: center;">Final Check</p> <ul style="list-style-type: none"> <input type="checkbox"/> Fuel system bled and checked for leaks <input type="checkbox"/> Heater has been operated in maximum for at least 20 minutes (air heater) 30 minutes (water heater) <input type="checkbox"/> Heaters fault code memory cleared of faults <input type="checkbox"/> Duplicate heater serial plate and "Switch off when Re-fuelling" labels fitted in a clearly visible location <input type="checkbox"/> Warranty documentation completed <input type="checkbox"/> User instruction, service record and green copy of warranty document left with heater
<p>Comments</p> <p style="text-align: center;"><i>Your genuine UK warranted Eberspacher heater has been supplied by Butlertechnik - please visit www.sales.butlertechnik.com</i></p>	
<p>The above has been installed & commissioned in accordance with Eberspächer installation guidelines</p>	
Engineers Name.....	Accreditation or Installation Approval Number
Engineers Signature.....
<p>This form must be completed and left with the green copy of the warranty document</p>	
<p>29.2100.20.1008 - A</p>	

Figure 2: Eberspacher Airtronic D2 Diesel Heater Installation Checklist. This checklist covers critical aspects of heater mounting, fuel system connection, ducting and water hose routing, electrical connections, water system integration, combustion air and exhaust management, and final checks.

Key Installation Areas:

- **Heater Mounting:** Ensure the heater is securely fastened to a flat base, allowing for proper air circulation and access for servicing.
- **Fuel System:** Connect the fuel pump and fuel lines according to manufacturer guidelines, ensuring correct diameter and secure fittings.
- **Ducting and Air Intake:** Install hot air ducting without kinks or restrictions. Ensure combustion air intake is clear and drawn from outside the passenger compartment.
- **Exhaust System:** Route the exhaust pipe away from heat-sensitive components and ensure it is securely fastened. An exhaust silencer is typically included to reduce noise.
- **Electrical Connections:** Follow the wiring diagram provided in the installation manual. Ensure all connections are secure and protected from moisture and heat.
- **Final Checks:** Before initial operation, verify all connections, check for fuel leaks, and ensure the system is bled of air.

For detailed, step-by-step instructions, always refer to the dedicated installation manual provided with your Eberspächer Airtronic D2 kit.

4. OPERATION

The Eberspächer Airtronic D2 heater is controlled via the 801 Diagnostic Controller, which allows for temperature adjustment, mode selection, and diagnostic feedback.



Figure 3: Eberspächer 801 Series Digital Modulator Control Unit. This image shows the digital display and control buttons for operating the heater, including power, fan speed, temperature adjustment, and diagnostic functions.

Starting the Heater:

1. Ensure the vehicle's battery is adequately charged and there is sufficient diesel fuel.
2. Press the power button on the 801 controller. The heater will initiate its startup sequence.

3. Adjust the desired temperature or heat output using the controller's interface.

Stopping the Heater:

1. Press the power button again. The heater will enter a cool-down phase to prevent overheating and clear residual combustion products.
2. Do not disconnect power during the cool-down phase, as this can damage the unit.

Diagnostic Functions:

The 801 controller can display fault codes if an issue arises. Consult the controller's specific manual for a list of fault codes and their meanings to assist in troubleshooting.

5. MAINTENANCE

Regular maintenance ensures the reliable and safe operation of your Eberspacher Airtronic D2 heater. Adhere to the recommended service schedule.

Recommended Service Schedule *AIRTRONIC D2/D4*



Heater Model No.	Fabrik No.	Year 1	Year 2	Year 3
1. Carry out diagnostic investigation, call up fault codes and rectify if necessary. Clear memory.		●	●	●
2. Remove glow pin, inspect for carbon build up and clean.		●	●	●
3. Replace fuel screen in glow pin port with special tool supplied with new screen.		●	●	●
4. Check for blocked or damaged ducting and rectify or replace as required. (if applicable)		●	●	●
5. Inspect intake and outlet grilles for blockages; also inspect intake fan blades for any restriction (e.g. Dirt, fluff etc). Clean as necessary.		●	●	●
6. Check electrical connections including main fuse holders for corrosion. Spray exposed connections with a water dispersant spray.		●	●	●
7. Check for blocked or damaged exhaust pipe.		●	●	●
8. Check for blocked or damaged combustion air intake.		●	●	●
9. Test fire heater and check for correct operation.		●	●	●
10. Check exhaust colour as a guide for carbon build up.		●	●	●
11. Check heater delayed shut down time, (approximately 240 seconds after switching off).		●	●	●
12. Check all fuel lines and connections for security and abutments; also ensure there are no fuel leaks.		●	●	●
13. Remove fuel metering pump filter and replace.		●	●	●
14. Remove all dirt and corrosion from fuel metering pump.		●	●	●
15. Check fuel metering pump for correct delivery of fuel.				●
<p>Important: Please note the heat exchanger must be replaced after 10 years in accordance to European law.</p> <p>for genuine Eberspächer repair and service parts please visit www.sales.butlertechnik.com</p> <p>UK: 01427 787121 International: +44(0)1427787121</p>				
Part No.16/1/19/1		RH/9/08		

Figure 4: Eberspächer Airtronic D2/D4 Recommended Service Schedule. This table outlines annual maintenance tasks for the heater, including diagnostic investigations, glow pin inspection and cleaning, fuel screen replacement, ducting checks, electrical connection inspection, combustion air and exhaust pipe checks, and fuel system maintenance.

Annual Service Recommendations:

- **Diagnostic Investigation:** Check for fault codes and rectify as necessary. Clear memory.
- **Glow Pin:** Remove glow pin, inspect for carbon buildup, clean, and replace fuel screen if needed.
- **Ducting and Grilles:** Inspect intake and outlet grilles for blockages (e.g., dirt, fluff) and clean. Check for blocked or damaged ducting.
- **Electrical Connections:** Check all electrical connections, including main fuse holders, for corrosion.

- **Combustion Air and Exhaust:** Check for blocked or damaged combustion air intake and exhaust pipe.
- **Fuel System:** Remove and clean the fuel metering pump filter. Check fuel metering pump for correct delivery.

It is important to note that the heat exchanger must be replaced after 10 years in accordance with European law. For genuine Eberspacher repair and service parts, consult an authorized dealer.

6. TROUBLESHOOTING

If your Eberspacher Airtronic D2 heater is not functioning correctly, consult the following general troubleshooting steps. For specific fault codes, refer to the 801 Diagnostic Controller manual.

Common Issues and Solutions:

- **Heater Fails to Start:**
 - Check battery voltage. Ensure it is above the lower voltage limit (approx. 10.5V for 12V systems).
 - Verify fuel level and ensure the fuel pump is operating.
 - Check all electrical connections and fuses.
 - Inspect the intake and exhaust for blockages.
- **Low Heat Output:**
 - Ensure hot air ducting is not restricted or kinked.
 - Clean intake and outlet grilles.
 - Check for proper fuel delivery and quality.
- **Excessive Smoke/Odor:**
 - This may indicate incomplete combustion. Check the glow pin and fuel screen for carbon buildup.
 - Ensure correct fuel quality is being used.
- **Unusual Noise:**
 - Check for loose mounting hardware.
 - Inspect the fan for obstructions or damage.

If troubleshooting steps do not resolve the issue, contact an authorized Eberspacher service center.

7. SPECIFICATIONS

The following table provides key technical specifications for the Eberspacher Airtronic D2 heater.

Technical data					
Heater type	Airtronic				
Heater	Airtronic D2				
Version	D2				
Heating medium	Air				
Control of the heat flow	Stage				
	Power	Large	Medium	Small	Off
Heat flow (watt)	2200	1800	1200	850	–
Heater air flow rate with hood Ø 60 mm without counterpressure (kg/h)	105	90	60	40	13
Fuel consumption (l/h)	0.28	0.23	0.15	0.10	–
Elektr. power consumption (watt)	in operation (12 and 24 volt)				
	34	22	12	8	5
at start (12 and 24 volt)		≤100			
Rated voltage	12 or 24 volt				
Operating range Lower voltage limit: An undervoltage protection in the controller switches off the heater when the voltage limit is reached.	approx. 10.5 volt resp. 21 volt Undervoltage protection trigger time: 20 seconds				
	Upper voltage limit: An overvoltage protection in the controller switches off the heater when the voltage limit is reached.	approx. 16 volt resp. 32 volt Overvoltage protection trigger time: 20 seconds			
Fuel "Fuel quality" and "Fuel at low temperatures" see page 28.		Commercially available diesel fuel (DIN EN 590)			
Tolerable ambient temperature	Operation		Not running		
	Heater	–40 °C to +70 °C	–40 °C to +85 °C		
	Dosing pump	–40 °C to +50 °C	–40 °C to +125 °C		
Maximum air intake temperature	+40 °C				
Interference suppression	Interference suppression class 5 to DIN EN 55 025				
Weight	approx. 2.7 kg				
Ventilation mode	possible				

Figure 5: Eberspacher Airtronic D2 Technical Data Table. This table details heater type, version, heating medium, control of heat flow, power output (watt), heater air flow rate, fuel consumption (l/h), electrical power consumption (watt), rated voltage, operating range, voltage limits, fuel type, tolerable ambient temperature, maximum air intake temperature, interference suppression, weight, and ventilation mode.

General Specifications:

- **Heater Type:** Airtronic D2
- **Heating Medium:** Air
- **Rated Voltage:** 12 Volts
- **Heat Flow (Watt):** Up to 2200W (Large), 1800W (Medium), 1200W (Small), 850W (Off)
- **Fuel Consumption (l/h):** 0.10 to 0.28 (depending on heat setting)
- **Electrical Power Consumption (watt):** 5 to 34 (depending on heat setting)
- **Operating Range:** Lower voltage limit approx. 10.5V, Upper voltage limit approx. 16V
- **Fuel:** Commercially available diesel fuel (DIN EN 590)
- **Tolerable Ambient Temperature:** Operation: -40°C to +70°C (Heater), -40°C to +50°C (Dosing pump)
- **Weight:** Approx. 2.7 kg

Dimensions:

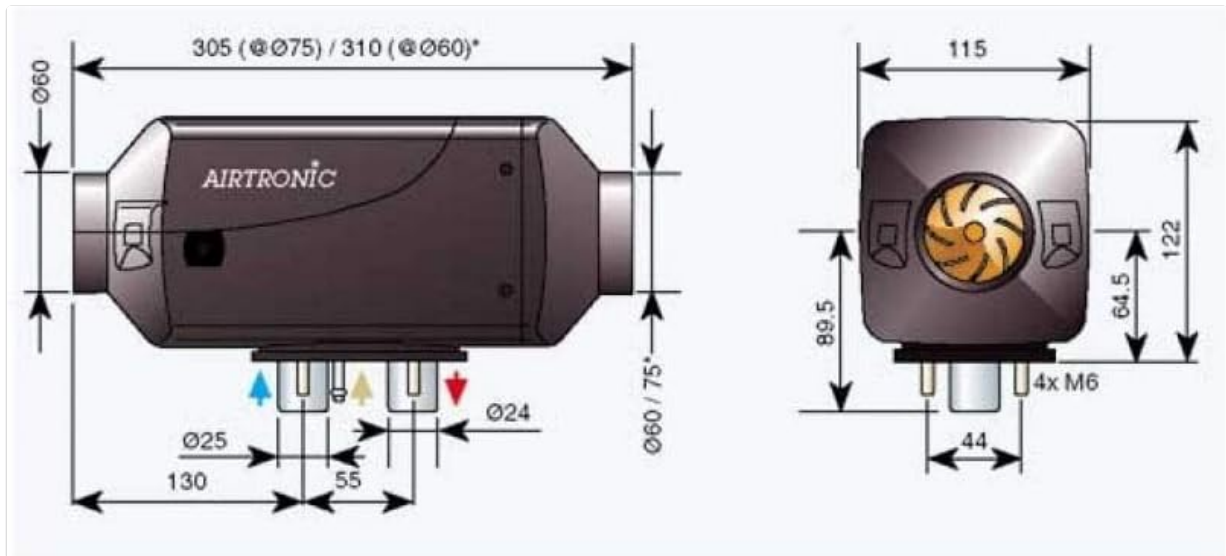


Figure 6: Eberspacher Airtronic D2 Heater Dimensions Diagram. This diagram provides detailed measurements of the heater unit, including length, width, height, and connection point diameters, in millimeters.

8. WARRANTY AND SUPPORT

Your Eberspacher Airtronic D2 heater comes with a warranty. Please register your product and retain your warranty card and proof of purchase.

heater supplied by ButlerTechnik www.sales.butlertechnik.com

WARRANTY DOCUMENTS

Dear Customer,

Thank you for purchasing one of our range of Eberspacher products.

Within this folder you will find the standard warranty control card, plus a list of UK and Eire authorised Eberspacher dealers.

Please refer to the terms and conditions of warranty on the reverse of the green warranty control card. These do not affect your statutory rights.

These can also be found at www.eberspacher.com along with a list of our accredited dealers.

Any claim within the standard warranty period must be made through any one of our accredited dealers.

Please keep this document in a safe place, you will need it should you require a repair.

This warranty is transferable, if you sell or transfer ownership of the vehicle or boat in which the equipment has been installed, please present these documents to the new owner.

EBERSPÄCHER (UK) LTD – 36 MONTHS WARRANTY CONTROL / REGISTRATION CARD

Please complete using a ball point pen and return to Eberspacher (UK) Ltd

VEHICLE KIT ONLY

HEATING	
Model Type	<i>D2</i>
Serial Number	<i>96519180</i>
Kit Number	<i>02799901/20178</i>
Part Number	<i>75321405</i>

AIR CONDITIONING / REFRIGERATION	
Serial Number	Kit Number

COMPONENTS	
Serial Number	Kit / Part Number
Serial Number	Kit / Part Number
Serial Number	Kit / Part Number

Dealer Name	<i>210051-01</i>	Date of Sale	
Installer Name		Date of Installation	
Customer Name		Date of Commissioning	
End User Name			
Street		Town	
County		Post Code	

INSTALLATION DETAILS					
Manufacturer					
Registration No. / Chassis No. / Boat Name					
Voltage	(Tick relevant voltage box)	12V	<input checked="" type="checkbox"/>	24V	<input type="checkbox"/>
		230V	<input type="checkbox"/>	415V	<input type="checkbox"/>

EBERSPÄCHER USE ONLY	
Reference No.	<i>275 6475</i>
Stores Dispatch Date	<i>12/2/2015</i>

Eberspacher (UK) Ltd
Climate House, Neaman Road
Ringwood, Hampshire BH24 3FA
Tel: 01425 480151
Fax: 01425 480152
E-mail: enquiries@eberspacher.com
Internet: www.eberspacher.com

White Copy – Retained by Eberspacher (UK) Ltd.
Blue Copy – Dealer copy
Yellow Copy – Return to Eberspacher (UK) Ltd.
Green Copy – Customer warranty pack.

7/3/12 Issue D – Jan 2015

Figure 7: Eberspacher (UK) Ltd 36 Months Warranty Control / Registration Card. This card provides sections for filling in details about the heating unit, air conditioning/refrigeration, components, dealer information, installer information, customer details, and installation details, along with Eberspacher use only sections.

The warranty period for this product is typically 36 months (3 years) from the date of sale. The warranty

covers manufacturing defects under normal use conditions. Please refer to the specific terms and conditions outlined on your warranty card for full details.

Warranty Registration:

Complete the Warranty Control / Registration Card included with your kit and submit it as instructed to activate your warranty. Keep a copy for your records.

Customer Support:

For technical assistance, warranty claims, or to locate an authorized service center, please contact your Eberspacher dealer or visit the official Eberspacher website. Ensure you have your product model number and serial number available when contacting support.