

Dometic 30621

Dometic Atwood 30621 DSI Board Kit Instruction Manual

Model: 30621 | Brand: Dometic

INTRODUCTION

This manual provides essential information for the proper installation, operation, maintenance, and troubleshooting of the Dometic Atwood 30621 Direct Spark Ignition (DSI) Board Kit. This kit is designed as a replacement or upgrade component for RV furnace ignition systems, ensuring reliable and efficient heating.

SAFETY INFORMATION

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, personal injury, or loss of life. Read the installation, operating, and maintenance instructions thoroughly before installing or servicing this equipment.

- Always disconnect all power to the RV furnace before attempting any installation, maintenance, or service.
- Installation and service must be performed by a qualified installer, service agency, or the gas supplier.
- Ensure all gas connections are properly sealed and tested for leaks after any work involving gas lines.
- Wear appropriate personal protective equipment (PPE) during installation and service.

WHAT'S IN THE BOX

The Dometic Atwood 30621 DSI Board Kit typically includes:

- One (1) Atwood Mobile Products 30621 DSI Board Kit

Note: Contents may vary slightly. Inspect all components upon receipt.

SPECIFICATIONS

Model Number	30621
Brand	Dometic

Manufacturer	Dometic USA
Item Weight	8.5 ounces
Product Dimensions	6.5 x 4.25 x 2.5 inches
Product Type	AUTO_ACCESSORY
Country of Origin	China

INSTALLATION AND SETUP

The Dometic Atwood 30621 DSI Board Kit is an electrical component for RV furnaces. Installation should ideally be performed by a certified RV technician or a qualified professional due to the involvement of gas and electrical systems.

- Disconnect Power:** Before beginning any work, ensure all 12V DC power to the RV furnace is disconnected. This typically involves turning off the main battery disconnect switch and/or removing the fuse for the furnace circuit.
- Access the Furnace Control Board:** Locate and access the existing DSI control board within your RV furnace. This may require removing an access panel or cover.
- Document Wiring:** Carefully photograph or diagram the existing wiring connections to the old board. Note the color and position of each wire.
- Remove Old Board:** Disconnect all wires from the old DSI board and remove it from its mounting.
- Install New Board:** Mount the new Dometic Atwood 30621 DSI Board Kit in the same location as the old board.
- Connect Wiring:** Reconnect all wires to the new board according to your documented diagram. Ensure all connections are secure and properly seated. Applying a small amount of dielectric grease to electrical connectors can help prevent corrosion and ensure good contact.
- Secure and Test:** Replace any access panels or covers. Restore 12V DC power to the furnace. Initiate a call for heat from the RV thermostat to test the new board's operation. Observe the ignition sequence.



Image: The Dometic Atwood 30621 DSI Board Kit. This image shows the circuit board with various connectors for wiring into an RV furnace system.

OPERATION

The Dometic Atwood 30621 DSI Board Kit functions as the primary control for the RV furnace's ignition sequence. Its operation is largely automatic once installed correctly and integrated into the furnace system.

- **Call for Heat:** When the RV thermostat calls for heat, the DSI board receives a signal.
- **Blower Activation:** The board first activates the furnace's blower motor to purge the combustion chamber.
- **Ignition Sequence:** After a short delay, the board opens the gas valve and simultaneously sends a high-voltage signal to the igniter, creating a spark. You may hear a rapid clicking sound during this phase.
- **Flame Sensing:** The board monitors for a flame. If a flame is detected, the gas valve remains open, and the furnace continues to operate.
- **Safety Lockout:** If a flame is not detected within a specified number of ignition attempts (typically three), the board will enter a lockout mode to prevent unburned gas accumulation. The furnace will then require a manual reset (usually by cycling the thermostat or furnace power).

- **Heating Cycle Completion:** Once the thermostat's set temperature is reached, the board closes the gas valve, and the blower continues to run for a short period to cool the heat exchanger before shutting off.

MAINTENANCE

The DSI board itself requires minimal maintenance. However, periodic inspection of the furnace system can help ensure its longevity and reliable operation.

- **Visual Inspection:** Annually, or before the heating season, visually inspect the DSI board and its wiring connections for any signs of corrosion, loose wires, or physical damage.
- **Clean Connections:** If corrosion is present on electrical terminals, carefully clean them after disconnecting power. Reapply dielectric grease to help prevent future corrosion.
- **Furnace Maintenance:** Ensure the overall RV furnace system, including the igniter, flame sensor, and gas valve, is regularly inspected and maintained according to the furnace manufacturer's guidelines.

TROUBLESHOOTING

If your RV furnace is not operating correctly, the DSI board may be a factor. Always ensure basic furnace components (gas supply, power, thermostat settings) are checked first.

Symptom	Possible Cause	Action
Furnace does not ignite (no clicking, no heat)	No 12V power to board, faulty thermostat, open limit switch, faulty DSI board.	Check furnace fuse/breaker. Verify thermostat is calling for heat. Consult furnace manual for limit switch location. If all else fails, DSI board may be faulty.
Furnace clicks but does not ignite (no flame)	No gas supply, faulty igniter, dirty flame sensor, faulty gas valve, incorrect igniter gap.	Verify propane tanks are open and not empty. Check for gas flow to furnace. Inspect igniter and flame sensor for cleanliness and damage. Consult a professional for gas valve or igniter gap issues.
Furnace ignites then immediately shuts off	Dirty or faulty flame sensor, low gas pressure, faulty DSI board.	Clean flame sensor. Ensure adequate gas pressure. If problem persists, DSI board may be failing to sense flame.
Intermittent operation	Loose wiring connections, intermittent power supply, failing DSI board.	Inspect all wiring connections for tightness and corrosion. Check for stable 12V power. If issues continue, consider professional diagnosis.

Always disconnect power before inspecting or attempting repairs. If you are unsure about any troubleshooting step, contact a qualified RV technician.

WARRANTY INFORMATION

For specific warranty details regarding the Dometic Atwood 30621 DSI Board Kit, please refer to the documentation included with your purchase or visit the official Dometic website. Warranty terms and conditions may vary.

SUPPORT

If you require further assistance, technical support, or have questions not covered in this manual, please contact Dometic customer service. You can typically find contact information on the Dometic website or through your product retailer.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question