

## AMORIL RE002

# Amoril Motor Heat Sink with Cooling Fan User Manual

Model: RE002

## PRODUCT OVERVIEW

The Amoril Motor Heat Sink with Cooling Fan is designed to efficiently dissipate heat from 1/10 scale Omni-Terminator 28 Series motors, ensuring optimal performance and extending motor lifespan. This unit combines a robust metal heat sink with an integrated cooling fan for active thermal management.

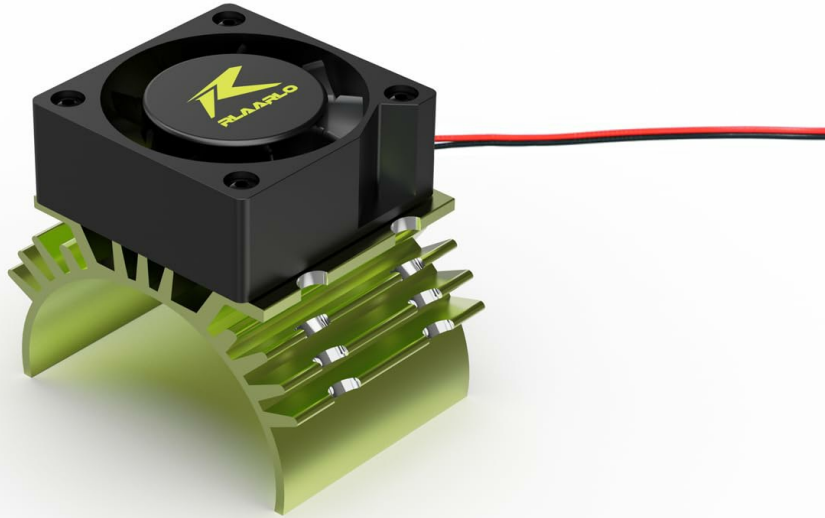


Image: The Amovil Motor Heat Sink with Cooling Fan. It features a green, finned metal heat sink base with a black square cooling fan mounted on top. Two wires, red and black, extend from the fan for power connection.

## SPECIFICATIONS

Feature	Detail
Model Number	RE002
Compatibility	1/10 Omni-Terminator 28 Series Motors
Material	Metal (Heat Sink)
Dimensions (Approx.)	0.1 x 0.1 x 0.1 inches (Package Dimensions)
Weight (Approx.)	1.6 ounces (Package Weight)

## SETUP AND INSTALLATION

1. **Preparation:** Ensure your 1/10 Omni-Terminator 28 Series motor is clean and free of debris. Disconnect power from the motor and associated electronic speed controller (ESC) before installation.
2. **Positioning the Heat Sink:** Carefully place the metal heat sink base over the motor. The heat sink is designed to fit snugly around the motor casing to maximize thermal contact.
3. **Securing the Heat Sink:** Use the provided mounting hardware (if applicable, or existing motor mounts) to secure the heat sink firmly in place. Ensure it does not interfere with any moving parts of the vehicle.
4. **Connecting the Fan:** Connect the cooling fan's power wires (red and black) to an appropriate power source on your RC vehicle. This is typically a dedicated fan port on the ESC or a receiver port that provides the correct voltage (usually 5V-8.4V, refer to your ESC/receiver manual for specifics). Ensure correct polarity (red to positive, black to negative).
5. **Final Check:** Before operating, visually inspect all connections and ensure the heat sink and fan are securely mounted and clear of any obstructions.

## OPERATING INSTRUCTIONS

Once installed, the cooling fan will activate when power is supplied to its connection point. The fan operates continuously to draw heat away from the motor through the heat sink fins. Monitor motor temperatures during initial operation to confirm effective cooling.

- **Continuous Operation:** The fan is designed for continuous operation during vehicle use to maintain optimal motor temperatures.
- **Temperature Monitoring:** For advanced users, consider using a temperature gun to periodically check motor temperature, especially during extended or high-stress operation. Ideal motor temperatures typically range between 140°F - 160°F (60°C - 71°C).
- **Environmental Factors:** Performance may vary based on ambient temperature, vehicle setup, and driving style.

## MAINTENANCE

- **Regular Cleaning:** Periodically inspect the heat sink fins and fan blades for dust, dirt, or debris accumulation. Use a soft brush or compressed air to gently clean these areas. Accumulation can reduce cooling efficiency.
- **Fan Inspection:** Check the fan for any signs of damage, such as bent blades or unusual noises during operation. Replace the fan if it is damaged or not spinning freely.
- **Connection Check:** Ensure all electrical connections remain secure and free from corrosion.

- **Heat Sink Integrity:** Verify that the heat sink remains firmly attached to the motor and that there are no cracks or deformities in the metal.

## TROUBLESHOOTING

- **Fan Not Spinning:**
  - Check power connection: Ensure the fan is correctly plugged into a powered port with correct polarity.
  - Verify power source: Confirm the ESC or receiver port is supplying adequate voltage.
  - Inspect fan blades: Ensure no debris is obstructing the fan blades.
  - Test fan: If possible, test the fan with an alternative power source to determine if the fan itself is faulty.
- **Motor Still Overheating:**
  - Ensure proper heat sink contact: The heat sink must be in firm contact with the motor casing.
  - Clean heat sink and fan: Dust or debris can reduce efficiency.
  - Check motor gearing/setup: Excessive gearing or an overloaded motor can generate more heat than the cooling system can dissipate. Consider adjusting gearing or reducing load.
  - Ambient temperature: In very hot environments, even with cooling, motors may run warmer.

## WARRANTY AND SUPPORT

This product is manufactured by AMORIL. For warranty inquiries, technical support, or replacement parts, please contact AMORIL customer service directly. Refer to your purchase documentation for specific warranty terms and contact information.

You may also visit the official AMORIL store on Amazon for additional product information and support resources:

[Visit the AMORIL Store on Amazon](#)

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