

Redcat Racing 02098

Redcat Racing M3x3 Grub Screw Instruction Manual

Model: 02098

1. INTRODUCTION

This manual provides essential information for the proper use and maintenance of the Redcat Racing 02098 M3x3 Grub Screws. These screws are designed as replacement or spare parts for various Redcat Racing vehicles, ensuring secure fastening of components.

The package includes 8 pieces of M3x3 grub screws, which are small, headless screws typically used to secure a rotating part to a shaft.



Figure 1: Redcat Racing 02098 M3x3 Grub Screws (8-Piece)

This image displays the eight black M3x3 grub screws included in the package. Each screw is small, cylindrical, and features a threaded body with no protruding head, designed to be driven by an internal hex wrench.

2. SAFETY INFORMATION

Please read and understand all safety precautions before handling and installing the grub screws. Failure to do so may result in injury or damage to components.

- **Small Parts:** Keep these screws out of reach of small children and pets. They pose a choking hazard.
- **Eye Protection:** Always wear appropriate eye protection when working with tools and small parts to prevent injury from flying debris or accidental slips.
- **Proper Tools:** Use only the correct size hex wrench (typically 1.5mm or 2.0mm for M3 screws, consult your vehicle manual) to avoid stripping the screw head or damaging the component.
- **Over-tightening:** Do not over-tighten grub screws, as this can strip the threads in the component or break the screw itself. Tighten until snug.

3. PRODUCT OVERVIEW

The Redcat Racing 02098 M3x3 Grub Screws are precision-engineered fasteners. An M3x3 grub screw indicates a screw with a 3mm diameter thread and a 3mm length. These screws are commonly used in RC vehicles for securing pinions to motor shafts, wheel hexes to axles, and other similar applications where a flush or recessed fastener is required.

Key Features:

- M3x3 size for precise fitment.
- Durable black finish.
- Comes in a pack of 8 pieces.
- Essential spare part for various Redcat Racing models.

4. INSTALLATION (SETUP)

Proper installation of grub screws is crucial for the reliable operation of your RC vehicle. Always refer to your specific vehicle's manual for detailed instructions and diagrams, as applications may vary.

1. **Identify the Application:** Determine where the grub screw needs to be installed (e.g., securing a pinion gear to a motor shaft, or a wheel hex to an axle).
2. **Prepare the Component:** Ensure the component receiving the grub screw (e.g., motor shaft, axle) is clean and free of debris or old threadlock.
3. **Align Components:** If securing a pinion to a motor shaft, align the flat spot on the motor shaft with the grub screw hole on the pinion. For wheel hexes, ensure the hex is properly seated on the axle.
4. **Insert and Tighten:** Insert the M3x3 grub screw into the designated hole. Using the appropriate hex wrench (not included), carefully tighten the screw. Apply a small amount of blue threadlock (e.g., Loctite 242, not included) to the threads of the grub screw before insertion for added security, especially in high-vibration applications.
5. **Do Not Over-tighten:** Tighten until the screw is snug and the component is securely fastened. Excessive force can strip the screw head or the threads in the component.
6. **Verify Security:** After tightening, gently attempt to move the secured component to ensure it is firmly in place and does not slip.

5. COMPATIBILITY

The Redcat Racing 02098 M3x3 Grub Screws are compatible with a wide range of Redcat Racing vehicles. Always consult your specific vehicle's manual for correct fitment and assembly details.

Known Compatible Redcat Racing Vehicles:

- Hurricane XTE
- Hurricane XTR
- Lightning EP Drift
- Lightning EPX PRO
- Lightning STR
- Monsoon XTR
- Sandstorm
- Shockwave
- Tornado BB
- Tornado EPX/EPX PRO
- Tornado S30
- Tsunami
- Tsunami Epx
- Volcano EPX/EPX PRO
- Volcano MX
- Volcano S30
- Volcano STX
- Volcano SV
- Vortex EPX/EPX PRO
- Vortex SS

6. MAINTENANCE

While grub screws themselves require minimal maintenance, proper care ensures their longevity and effectiveness.

- **Regular Inspection:** Periodically check grub screws in your RC vehicle for looseness or signs of wear (e.g., stripped hex head, damaged threads).
- **Cleaning:** If removing screws, clean any old threadlock or debris from the threads before reinstallation.
- **Storage:** Store unused grub screws in a dry, organized container to prevent loss and corrosion.
- **Replacement:** Replace any grub screws that show signs of damage or stripping to prevent component failure during operation.

7. TROUBLESHOOTING

Here are some common issues related to grub screws and their potential solutions:

Problem	Possible Cause	Solution
Grub screw head is stripped.	Incorrect hex wrench size, worn wrench, or excessive force.	Use a new, correct-sized hex wrench. If severely stripped, use a screw extractor or carefully drill out. Replace the screw.

Problem	Possible Cause	Solution
Component (e.g., pinion) slips on shaft.	Grub screw is loose, not tightened enough, or not aligned with flat spot.	Re-tighten the grub screw, ensuring it's aligned with the flat spot on the shaft. Consider using blue threadlock.
Grub screw won't tighten.	Stripped threads in the component or on the screw.	Inspect both the screw and the component's threads. Replace the screw. If component threads are stripped, consider a larger screw (if possible) or component replacement.

8. SPECIFICATIONS

Detailed specifications for the Redcat Racing 02098 M3x3 Grub Screws:

Model Number	02098
Screw Type	M3x3 Grub Screw
Quantity	8 Pieces
Color	Black
Product Dimensions (approx.)	0.15 x 0.1 x 0.1 inches (per screw)
Item Weight (approx.)	0.3 ounces (total for 8 pieces)
Manufacturer	Redcat Racing
Recommended Age	14 years and up

9. WARRANTY AND SUPPORT

Redcat Racing stands behind its products. For specific warranty information regarding the 02098 M3x3 Grub Screws or any other Redcat Racing product, please refer to the official Redcat Racing website or contact their customer support directly.

Redcat Racing is located in the United States and provides a full staff of support personnel to assist you with your product. Always consult your vehicle manual for correct fitment and assembly details.

Contact Information:

- **Official Website:** www.redcatracing.com
- **Customer Support:** Refer to the website for contact methods (phone, email, support tickets).