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› [Magnus](#) /

› [Magnus Class 3 Trailer Hitch Instruction Manual](#)

Magnus HT-R33750

Magnus Class 3 Trailer Hitch Instruction Manual

Brand: Magnus | **Model:** HT-R33750

Compatible with 2007-2014 Toyota FJ Cruiser

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Magnus Class 3 Trailer Hitch. Designed specifically for the Toyota FJ Cruiser (2007-2014 models), this hitch offers a robust and reliable solution for your towing needs. Please read this manual thoroughly before installation and use to ensure proper function and safety.



Image 1.1: Magnus Class 3 Trailer Hitch, showcasing its robust design and black powder-coated finish.

2. SAFETY INFORMATION

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

- Always wear appropriate personal protective equipment (PPE) during installation, including safety glasses and gloves.
- Ensure the vehicle is securely supported on a level surface before beginning installation.
- Never exceed the vehicle's or the hitch's stated towing capacity. Refer to your vehicle's owner's manual for specific towing limits.
- Regularly inspect the hitch for signs of wear, damage, or corrosion. Do not use if damaged.
- Ensure all fasteners are tightened to the specified torque values.

3. PACKAGE CONTENTS

Verify that all components listed below are present in your package before beginning installation. If any parts are missing or damaged, contact Magnus customer support.

- Magnus Class 3 Trailer Hitch Receiver
- Mounting Hardware (bolts, washers, nuts, wire puller)
- User Manual (this document)

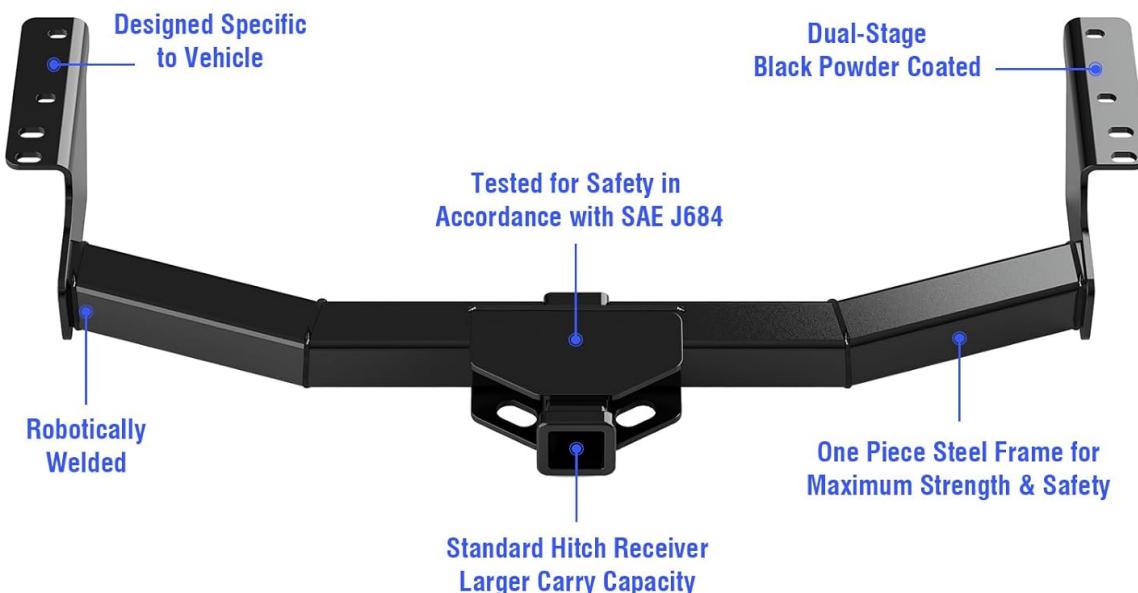


Image 3.1: Included components: the trailer hitch receiver and all necessary mounting hardware.

4. FEATURES AND BENEFITS

- **Vehicle-Specific Design:** OE style designed to fit the factory rear bumper of Toyota FJ Cruiser ALL 2007-2014.
- **Heavy Duty Towing Capacity:** Rated for 5000 lbs weight carrying capacity, 500 lbs tongue weight, 6000 lbs weight distribution, and 600 lbs weight distribution tongue weight.
- **Fully Tested for Safety:** Exceeds V5 standards and tested for safety in accordance with SAE J684.
- **Long Lasting Corrosion Resistance:** Protected by a durable high-gloss black powder coat finish, co-cured in a rust-resistant liquid aqueous coating for premium corrosion resistance against dust, chipping, and extreme weather conditions.
- **Easy to Install:** No drilling required; all necessary mounting hardware is included for a straightforward bolt-on installation.

Feature & Benefits



Back View



Image 4.1: Visual representation of key features including vehicle-specific design, dual-stage black powder coating, robotic welding, and one-piece steel frame.

5. SPECIFICATIONS

Specification	Value
Brand	Magnus

Specification	Value
Model	FJ Cruiser Receiver Hitch (HT-R33750)
Item Weight	45.36 Pounds (approx. 45.4 lbs)
Vehicle Service Type	Sport Utility Vehicle (Toyota FJ Cruiser 2007-2014)
Material	Carbon Steel
Finish Type	Powder Coated
Receiver Tube Size	2 Inches
Weight Carrying Capacity	5000 lbs
Tongue Weight (WC)	500 lbs
Weight Distribution Capacity	6000 lbs
Tongue Weight (WD)	600 lbs
UPC	720189773662

6. SETUP AND INSTALLATION

6.1 Pre-Installation Checklist

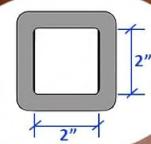
- Ensure you have all components listed in Section 3.
- Gather necessary tools: Torque wrench, sockets/wrenches (sizes may vary), safety glasses, gloves.
- Park the vehicle on a level surface and engage the parking brake.
- Allow the vehicle's exhaust system to cool down if recently driven.

6.2 Installation Steps

The Magnus Class 3 Trailer Hitch is designed for a direct bolt-on installation without the need for drilling. Follow these steps carefully:

- 1. Prepare the Vehicle:** Locate the existing mounting points on the vehicle's frame, typically near the rear bumper. These points may be covered by plastic plugs or have existing bolts that need to be removed.
- 2. Position the Hitch:** Carefully lift the trailer hitch into position, aligning the mounting holes on the hitch with the mounting points on the vehicle's frame. It may be helpful to have a second person assist with this step.
- 3. Insert Hardware:** Insert the provided mounting bolts through the aligned holes. Use the wire puller if necessary to guide bolts through tight frame openings.
- 4. Secure Fasteners:** Attach washers and nuts to the bolts. Hand-tighten all fasteners to ensure proper alignment before final tightening.
- 5. Final Tightening:** Using a torque wrench, tighten all bolts to the manufacturer's specified torque values. Refer to the hardware packaging or a vehicle-specific service manual for exact torque specifications. Ensure all bolts are securely fastened.
- 6. Final Inspection:** Double-check all connections to ensure they are tight and secure. Verify that the hitch is properly aligned and does not interfere with any vehicle components.

CLASS III TRAILER HITCH



**2 INCH
RECEIVER**

Exceed V5 Standards, Tested for Safety
in Accordance with SAE J684.



**Easy
Installation**



**All Hardware
Included**



**Weather
Resistant**



**Strong
& Durable**

Image 6.1: The Magnus Trailer Hitch installed on a Toyota FJ Cruiser, highlighting the 2-inch receiver opening.

AUTOMATIC ROBOT WELDING



Image 6.2: Detail of the automatic robot welding process, ensuring strong and flawless weld seams for durability.

7. OPERATING THE TRAILER HITCH

Your Magnus Class 3 Trailer Hitch is designed to accommodate various towing applications. Always ensure that the total weight of your trailer and its contents (Gross Trailer Weight - GTW) and the downward force on the hitch (Tongue Weight - TW) do not exceed the capacities listed in Section 5 or your vehicle's towing limits, whichever is lower.

7.1 Compatible Applications

The 2-inch receiver tube is compatible with a wide range of towing accessories and trailers, including but not limited to:

- Weight Distribution Systems
- Trailer Hitch Ball Mounts
- Cargo Carriers
- Bike Carriers
- Kayak Trailers
- Boat Trailers
- Camp Trailers

- Utility Trailers



Image 7.1: Examples of various trailers and accessories that can be used with the Magnus Class 3 Trailer Hitch.

7.2 Towing Best Practices

- Always use safety chains between the trailer and the vehicle.
- Ensure trailer lights are properly connected and functioning.
- Distribute trailer load evenly to maintain proper tongue weight.
- Adjust driving habits when towing, allowing for increased braking distance and wider turns.

8. MAINTENANCE

Regular maintenance will extend the life and ensure the safe operation of your Magnus Trailer Hitch.

- **Regular Inspection:** Periodically inspect the hitch for any signs of rust, cracks, bends, or other damage. Pay close attention to weld points and mounting areas.
- **Cleanliness:** Keep the hitch clean from dirt, salt, and road debris. Wash with mild soap and water, then rinse thoroughly.
- **Corrosion Protection:** The hitch features a durable powder coat finish for corrosion resistance. However, if the coating is scratched or chipped, touch up with rust-inhibiting paint to prevent rust.

formation.

- **Fastener Check:** Re-torque all mounting bolts periodically, especially after the first few uses, to ensure they remain tight.

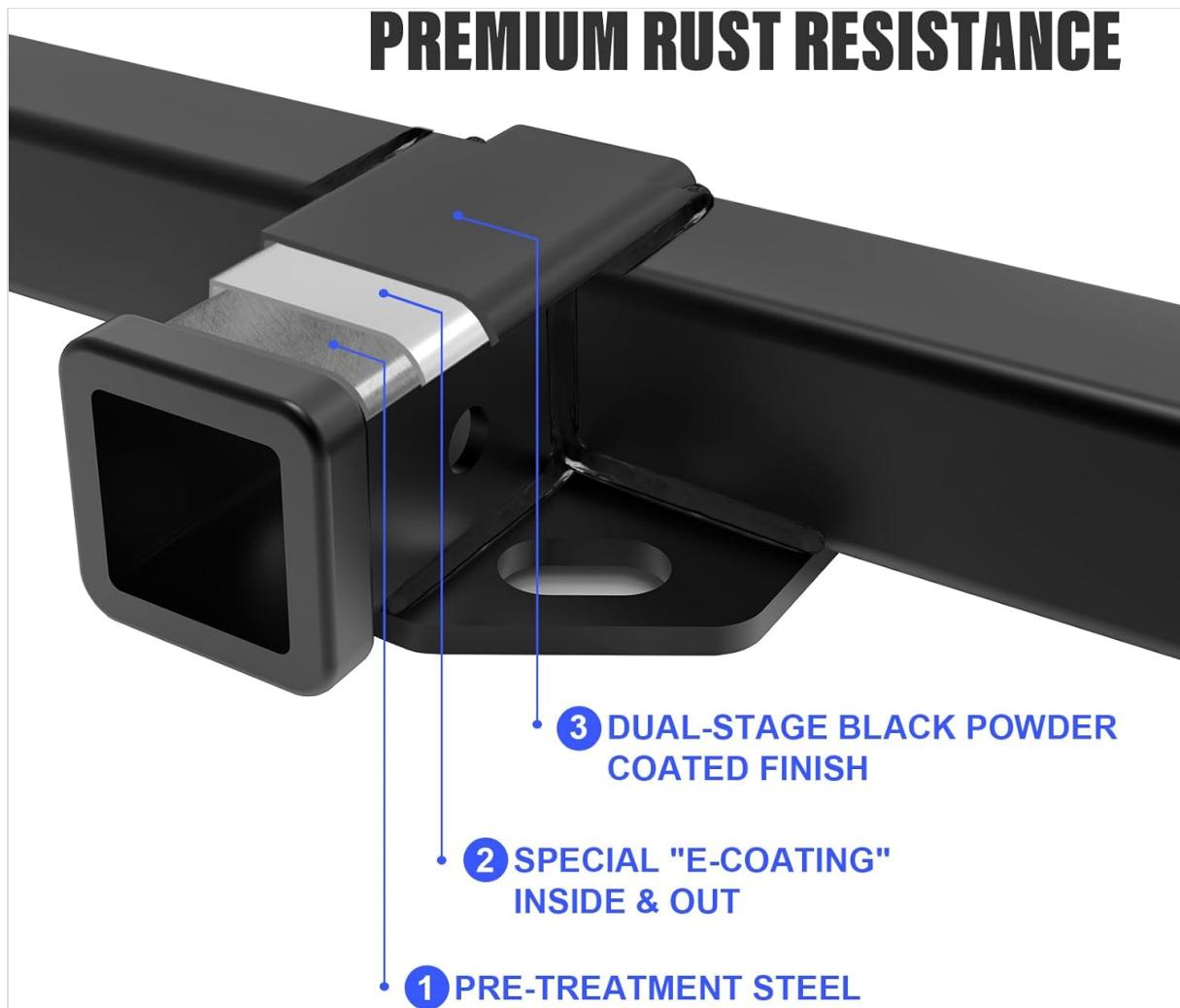


Image 8.1: Illustration of the multi-layer premium rust resistance, including pre-treatment steel, special E-coating, and dual-stage black powder coat finish.

9. TROUBLESHOOTING

Given the passive nature of a trailer hitch, extensive troubleshooting is typically not required. Most issues relate to installation or maintenance.

- **Loose Hitch:** If the hitch feels loose or rattles, re-check all mounting bolts and re-torque them to the specified values. Ensure no foreign objects are lodged between the hitch and the vehicle frame.
- **Difficulty Installing:** Ensure the hitch is correctly oriented and that no vehicle components are obstructing the mounting points. Refer to Section 6.2 for detailed installation steps.
- **Rust Formation:** While designed for corrosion resistance, prolonged exposure to harsh conditions or damage to the coating can lead to rust. Clean the affected area and apply rust-inhibiting paint as a protective measure.

10. WARRANTY AND SUPPORT

Magnus products are manufactured to high standards and undergo rigorous quality control. For specific warranty information regarding your Magnus Class 3 Trailer Hitch, please refer to the warranty card included with your purchase or visit the official Magnus website.

For technical support, missing parts, or any other inquiries, please contact Magnus customer service through the contact information provided on the product packaging or the official website. When contacting support, please have your product model number (HT-R33750) and purchase details ready.

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