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> RACO 454942 3.5 x 1.5-Inch Octagon Box Instruction Manual

RACO 454942

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Model: 454942 | Brand: RACO

1. INTRODUCTION

This manual provides essential information for the safe and proper installation and use of the RACO 454942 3.5 x 1.5-Inch Octagon Box. This steel electrical box is designed for various electrical wiring applications, providing a secure enclosure for connections and devices. Please read all instructions carefully before beginning installation.

2. SAFETY INFORMATION

WARNING: Electrical work can be dangerous. Always consult with a qualified electrician if you are unsure about any part of the installation process. Ensure power is turned off at the circuit breaker or fuse box before installing or servicing this product.

- Always disconnect power before working on electrical circuits.
- Use appropriate personal protective equipment (PPE) such as safety glasses and insulated gloves.
- Ensure all wiring connections are secure and comply with local electrical codes.
- Do not overload the electrical box with excessive wiring or devices.
- This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm (Proposition 65 Warning). Wash hands after handling.

3. PRODUCT FEATURES

- **Type:** 3-1/2-Inch Octagon Box, Drawn, Metallic
- **Depth:** 1-1/2 inches
- **Side Knockouts:** (4) 1/2-inch
- **Bottom Knockouts:** (1) 1/2-inch
- **Cubic Inches:** 11.8 cubic inches capacity
- **Maximum Static Load:** 50 lbs. (suitable for light fixtures)
- **Material:** Steel construction for durability and protection.

4. SETUP AND INSTALLATION

Follow these general steps for installing the RACO 454942 Octagon Box. Specific installation methods may vary based on your application (e.g., new construction, old work, ceiling, wall).

1. **Prepare the Installation Area:** Turn off power at the main circuit breaker. Identify the desired location for the electrical box. Ensure there are no hidden wires, pipes, or other obstructions.
2. **Mounting the Box:**



Figure 1: Front view of the RACO 454942 octagon electrical box, showing the interior and knockout locations.

Secure the octagon box to a structural element (e.g., ceiling joist, wall stud) using appropriate fasteners. The box features mounting holes for this purpose. Ensure the box is flush with the finished surface (e.g., drywall, plaster) if applicable.



Figure 2: Side view of the RACO 454942 octagon electrical box, highlighting its depth and construction.

3. Removing Knockouts:



Figure 3: Rear view of the RACO 454942 octagon electrical box, showing the back knockout and mounting points.

Carefully remove the necessary knockouts (1/2-inch) using a screwdriver and pliers to allow for wire entry. Only remove the knockouts required for your wiring configuration.

4. **Running Wires:** Feed electrical wires into the box through the opened knockouts. Use appropriate cable connectors or clamps to secure the wires and protect them from abrasion at the entry points.
5. **Making Connections:** Make all necessary electrical connections inside the box according to your wiring diagram and local electrical codes. Ensure all splices are properly insulated with wire nuts or other approved connectors.
6. **Installing Devices/Covers:** Once wiring is complete, install the intended electrical device (e.g., light fixture, receptacle) or a blank cover plate onto the box. Ensure all screws are tightened securely.
7. **Restore Power:** After verifying all connections are correct and secure, restore power at the circuit breaker.

5. OPERATING INSTRUCTIONS

The RACO 454942 Octagon Box functions as a protective enclosure for electrical wiring and devices. Once properly installed and wired, it provides a safe environment for electrical connections. No specific operational steps are required for the box itself beyond its initial installation and proper closure.

6. MAINTENANCE

The RACO 454942 Octagon Box requires minimal maintenance. Periodically inspect the box and its connections for any signs of damage, corrosion, or loose wiring. If any issues are found, disconnect power immediately and address the problem. Ensure the cover plate or device is securely attached to prevent dust and moisture ingress.

7. TROUBLESHOOTING

As an electrical enclosure, the octagon box itself typically does not malfunction. Troubleshooting usually relates to the electrical circuit or devices connected within it.

- **No Power to Device:** Check the circuit breaker for trips. Verify all wire connections inside the box are secure and correctly made. Ensure the device itself is functional.
- **Loose Connections:** If a device flickers or intermittently loses power, turn off power and re-tighten all wire connections within the box.
- **Overheating:** If the box or connected device feels hot, immediately turn off power. This could indicate an overload or a short circuit. Consult a qualified electrician.

8. SPECIFICATIONS

Feature	Specification
Model Number	454942
Material	Steel
Dimensions (W x H x D)	3.563" x 3.563" x 1.775" (approx. 3.5" x 1.5")
Depth	1-1/2 inches
Cubic Capacity	11.88 Cubic Inches
Side Knockouts	(4) 1/2-inch
Bottom Knockouts	(1) 1/2-inch
Maximum Static Load	50 lbs.
Item Weight	0.353 ounces
UPC	050169001103



Figure 4: Dimensional drawing of the RACO 454942 Octagon Box.

9. WARRANTY INFORMATION

This RACO product is covered by a **Limited Warranty**. For specific details regarding warranty coverage, terms, and conditions, please refer to the official RACO website or contact customer support. Keep your purchase receipt as proof of purchase.

10. SUPPORT AND CONTACT INFORMATION

For technical assistance, product inquiries, or warranty claims, please contact RACO customer support through their official channels. You can typically find contact information on the manufacturer's website or product packaging.

Manufacturer: Hubbell (RACO is a brand of Hubbell)

Website: [Visit the RACO Store on Amazon](#)