

## Team Associated 31747

# Associated 31747 Shock Piston (4x1.1) TC7.1 Instruction Manual

*Model: 31747*

## 1. INTRODUCTION

This manual provides essential information for the proper installation, function, and maintenance of your Team Associated 31747 Shock Piston (4x1.1) for the TC7.1 vehicle. Please read these instructions carefully before use to ensure optimal performance and longevity of the component.

## 2. PRODUCT OVERVIEW

The Associated 31747 Shock Piston is a critical component of the suspension system in the Team Associated TC7.1 remote-controlled sedan. This specific piston features a 4x1.1 configuration, indicating four holes, each with a diameter of 1.1mm. Shock pistons regulate the flow of shock oil, controlling the damping characteristics of the suspension. Proper selection and installation are vital for vehicle handling and performance.



**Figure 1:** Associated 31747 Shock Piston (4x1.1) TC7.1. This image displays the small, circular shock piston with four precisely drilled holes, designed for specific damping characteristics in RC vehicle shocks.

Key features:

- Designed for Associated TC-7 Sedan.
- Part number: 31747.
- Manufactured by Team Associated, a United States-based company.

### 3. SETUP AND INSTALLATION

Installing the shock piston requires careful attention to detail and proper tools. Always refer to your vehicle's specific assembly manual for detailed shock rebuild procedures. The following steps provide a general guide:

1. **Disassembly:** Carefully remove the shock absorber from the vehicle. Disassemble the shock by unscrewing the shock cap and draining the existing shock oil. Remove the shock shaft and the old piston.
2. **Piston Installation:** Slide the new Associated 31747 Shock Piston onto the shock shaft. Ensure the piston is oriented correctly according to your vehicle's manual (some pistons have a specific top/bottom). Secure the piston with the retaining E-clip or screw, ensuring it is firmly seated and does not wobble.
3. **Reassembly:** Reinstall the shock shaft into the shock body. Fill the shock body with the

recommended shock oil, ensuring no air bubbles are present. Slowly cycle the shock shaft to bleed air. Reinstall the shock cap and ensure a proper seal.

4. **Testing:** Once reassembled, test the shock's damping action. It should move smoothly without binding or excessive air pockets. Reinstall the shock onto the vehicle.

**Note:** Use only genuine Team Associated parts and recommended shock oils for optimal performance and compatibility.

## 4. FUNCTION AND PERFORMANCE CONSIDERATIONS

The 4x1.1 piston configuration influences the damping rate of your TC7.1's suspension. A piston with smaller or fewer holes will result in stiffer damping, while larger or more holes will provide softer damping. This piston is designed to offer a specific balance for the TC7.1 chassis.

- **Damping Adjustment:** The primary way to adjust damping with this piston is by changing the viscosity (weight) of the shock oil. Heavier oil increases damping, lighter oil decreases it.
- **Consistency:** Ensure all four shock pistons on your vehicle are identical and installed correctly for consistent handling characteristics.
- **Smooth Operation:** The piston should move freely within the shock body without excessive friction. Any binding can indicate incorrect assembly or a damaged component.

## 5. MAINTENANCE

Regular maintenance of your shock pistons and shock absorbers is crucial for consistent performance and longevity.

- **Inspection:** Periodically inspect the shock pistons for wear, cracks, or damage. Worn pistons can lead to inconsistent damping.
- **Cleaning:** During shock rebuilds, thoroughly clean the piston and shock shaft to remove any dirt, debris, or old oil residue.
- **Shock Oil Replacement:** Replace shock oil regularly, as it can degrade over time and affect damping performance. The frequency depends on usage.
- **Seal Integrity:** While the piston itself doesn't have seals, ensure the shock shaft O-rings and shock cap seals are in good condition to prevent oil leakage and maintain proper pressure.

## 6. TROUBLESHOOTING

If you experience issues with your vehicle's suspension after installing or servicing the shock pistons, consider the following:

- **Inconsistent Damping:**
  - Check for air bubbles in the shock oil.
  - Verify that all pistons are identical and correctly installed.
  - Inspect pistons for wear or damage.
  - Ensure shock oil viscosity is consistent across all shocks.
- **Leaking Shocks:**
  - Piston issues are unlikely to cause leaks directly, but ensure the shock shaft is not bent or scratched, which can damage O-rings.
  - Check shock cap and bottom seals for proper seating and damage.

#### • Binding/Rough Movement:

- Ensure the piston is not damaged or warped.
- Verify the shock shaft is straight and free of burrs.
- Check for debris inside the shock body.

## 7. SPECIFICATIONS

Attribute	Value
Part Number	31747
Piston Configuration	4x1.1 (4 holes, 1.1mm diameter each)
Compatibility	Associated TC-7 Sedan
Product Dimensions	0.25 x 5 x 5 inches
Item Weight	0.32 ounces
Manufacturer	Team Associated

## 8. WARRANTY AND SUPPORT

Team Associated products are manufactured to high standards. For specific warranty information, please refer to the official Team Associated website or contact their customer support directly. Generally, components like shock pistons are covered against manufacturing defects.

**Return Policy:** This product may be eligible for returns within 30 days of purchase, subject to the retailer's return policy. Please retain your proof of purchase.

For technical assistance or further inquiries, please visit the official Team Associated support channels.