

TAMIYA 300058528

TAMIYA Subaru Impreza WRX STi Team Arai Kit XV-01 Instruction Manual

Model: TAM58528 (300058528)

1. INTRODUCTION

This manual provides comprehensive instructions for the assembly, operation, and maintenance of your TAMIYA Subaru Impreza 4 Wheel Drive WRX STi Team Arai Kit XV-01. The kit allows for the realistic reproduction of the sporty Impreza form, featuring a polycarbonate body, roof intake, and separate side mirror parts for a sharp finish. The distinctive markings of the race car are applied using included stickers. Equipped with rally block tires and 16-spoke wheels, this model is designed for dynamic R/C rally driving.

The XV-01 chassis is engineered for versatile R/C driving on both tarmac and gravel surfaces. Its design incorporates a front-motor, belt-driven 4WD layout, with critical components such as gearboxes, drive belt, battery, and R/C unit areas protected by covers to prevent ingress of dirt and debris. The chassis also features strategically placed holes on the bottom to facilitate the removal of any debris that may accumulate, ensuring consistent off-road performance. Detachable wheel well liners further enhance protection against mud and gravel. Customization of handling characteristics is possible through the gear differential units, which allow for the use of different viscosities of differential oils.

2. PRODUCT OVERVIEW



Figure 2.1: Fully assembled TAMIYA Subaru Impreza WRX STi RC car, showcasing its detailed polycarbonate body and rally-inspired design.



Figure 2.2: Underside view of the XV-01 chassis, highlighting the protected drivetrain and component layout.

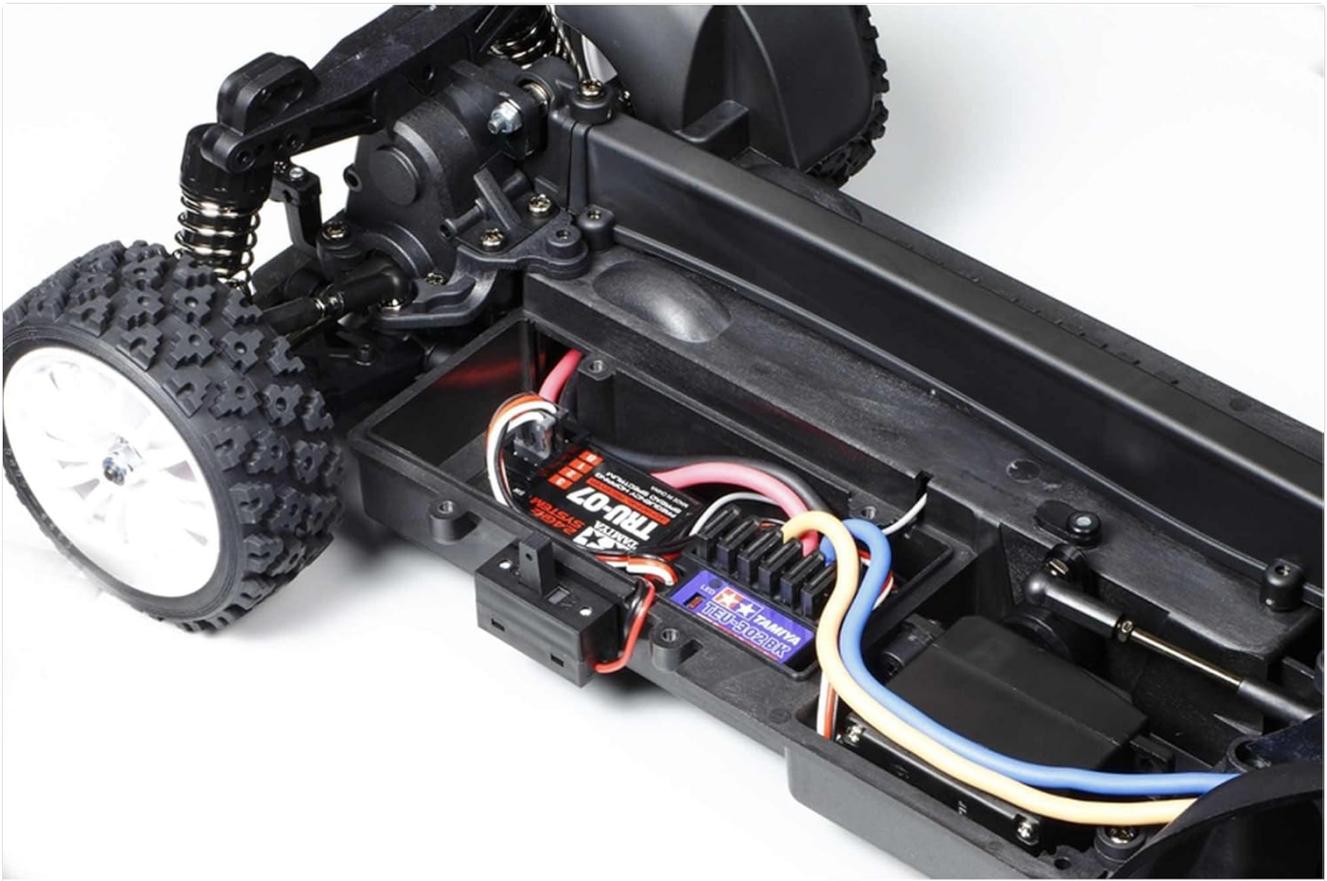


Figure 2.3: Detailed view of the sealed electronics compartment, designed to protect the receiver and ESC from dirt and moisture.

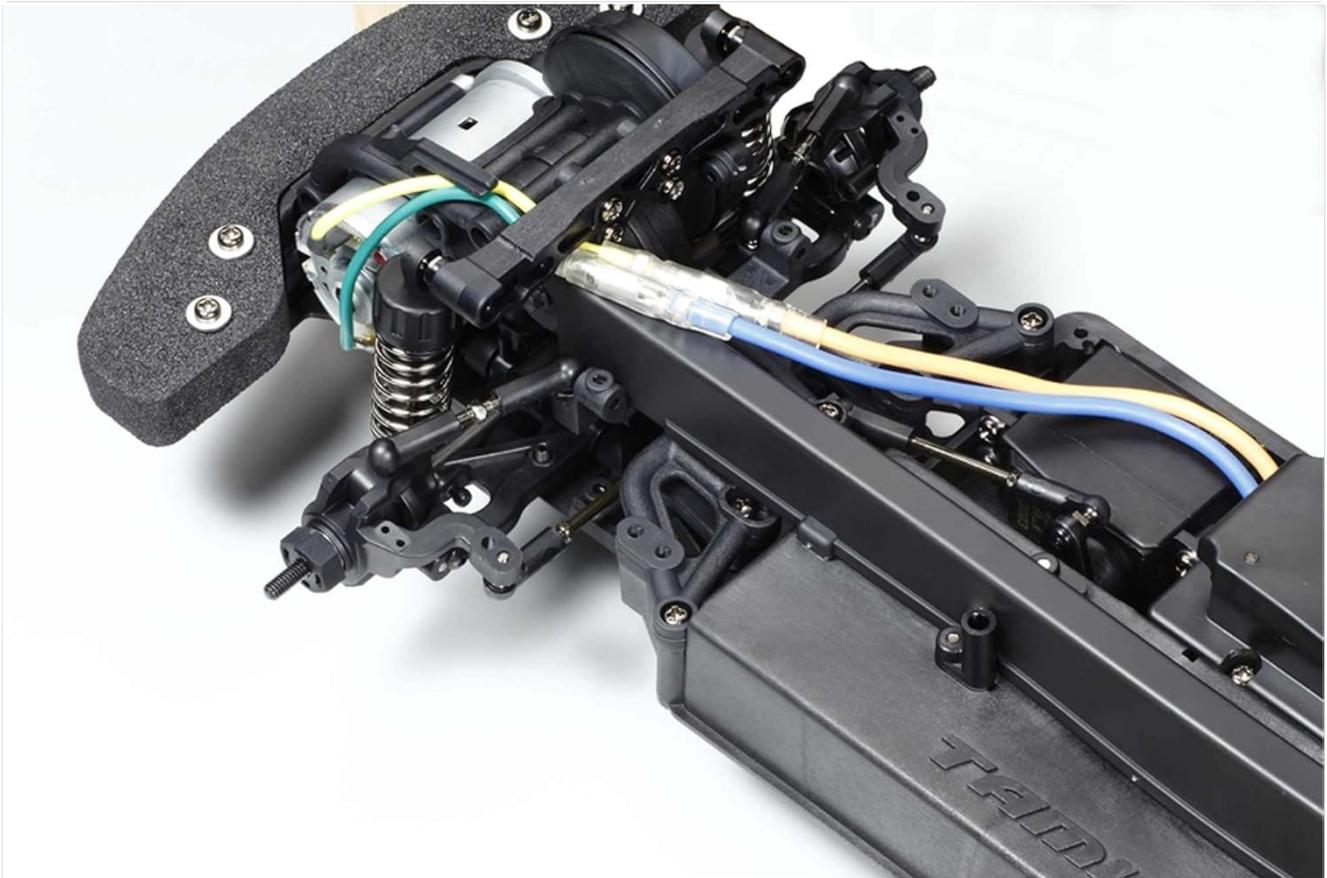


Figure 2.4: View of the front-mounted motor and the precise steering linkage system, featuring sealed bearings for accurate control.



Figure 2.5: The easily accessible battery compartment, designed for secure battery placement and quick changes.



Figure 2.6: Close-up of the rear suspension components and the robust differential housing, built for durability and performance.



Figure 2.7: The detachable wheel well liner, an essential feature for preventing mud and gravel intrusion during off-road use.

3. WHAT'S IN THE BOX

Your TAMIYA Subaru Impreza WRX STi Team Arai Kit XV-01 includes the following components:

- Polycarbonate body
- Roof intake parts
- Side mirror parts
- Rally block tires with inner sponges
- 16-spoke wheels
- Stickers for body markings

Note: This is a kit model. Additional components such as an Electronic Speed Controller (ESC), radio system (transmitter and receiver), battery, and charger are required for operation and are sold separately. A dedicated RC tool kit is highly recommended for assembly.

4. SETUP AND ASSEMBLY

Assembly of the TAMIYA XV-01 kit requires careful attention to detail. Follow the included detailed instruction manual provided within the kit for step-by-step guidance. Key assembly areas include:

- **Chassis Construction:** Assemble the main chassis components, ensuring all screws are tightened appropriately.
- **Drivetrain Assembly:** This includes the front-motor, belt-driven 4WD system, gearboxes, and differential units. Pay close attention to the differential assembly, as precise placement of internal pins is crucial.
- **Suspension System:** Assemble the shocks, suspension arms, and attach them to the chassis.

- **Steering Mechanism:** Install the steering servo and linkage. The XV-01 features a precise steering design with sealed bearings.
- **Electronics Installation:** Securely mount your ESC and receiver within the designated protected compartments. Ensure proper wiring connections.
- **Body Preparation:** Cut, paint (if desired), and apply the included stickers to the polycarbonate body. Attach the roof intake and side mirrors.
- **Wheel and Tire Assembly:** Mount the rally block tires onto the 16-spoke wheels, ensuring inner sponges are correctly placed.

Power System Considerations: The chassis is designed to accommodate standard RC electronics. Ensure your chosen ESC and battery fit within the provided compartments. Some brushless systems or larger LiPo batteries may require minor modifications or alternative mounting solutions due to their size. The battery compartment is designed for a snug fit; an extension cord for charging may be beneficial if your battery's plug is recessed.

5. OPERATING YOUR MODEL

The TAMIYA XV-01 is designed for dynamic driving on various surfaces. Before operating, ensure your battery is fully charged and your radio system is properly bound and calibrated.

- **Driving Surfaces:** The XV-01 performs well on both paved (tarmac) and unpaved (gravel, dirt) surfaces. Its rally-spec tires provide excellent grip and handling characteristics.
- **Handling:** The front-motor layout contributes to a unique weight distribution, allowing for smooth and controllable drifting, especially on loose surfaces. The precise steering system ensures accurate control.
- **Speed:** The stock motor provides appropriate speed for scale driving. For increased performance, consider upgrading to a compatible brushless motor system, keeping in mind the chassis's design limitations for larger components.

Always operate your RC model in a safe and open area, away from people, pets, and obstacles. Be mindful of your surroundings and local regulations regarding RC vehicle operation.

6. MAINTENANCE

Regular maintenance is crucial for the longevity and optimal performance of your TAMIYA XV-01. Perform these checks after each use, especially after driving on dirt or dusty conditions:

- **Cleaning:** Remove dirt, dust, and debris from the chassis, suspension components, and especially around the drive belt and gearboxes. The debris holes in the chassis assist in this. If driven on dirt, inspect and clean the drive shaft area thoroughly to prevent grit from causing wear.
- **Inspection:** Check all screws for tightness. Inspect suspension components, linkages, and bearings for any signs of wear or damage. Ensure the wheel well liners are securely in place.
- **Lubrication:** Apply appropriate lubricants to moving parts as specified in the kit's assembly manual.
- **Belt Tension:** Periodically check the tension of the drive belt. If using a high-power motor, you may need to adjust or modify the tensioning pulley to maintain proper belt tension.
- **Differential Maintenance:** If customizing with different differential oils, ensure the gear differential units are properly sealed and maintained.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your TAMIYA XV-01 kit:

- **Motor Issues:** If the included motor's shaft is too short or the grub screw doesn't hold, ensure you are using the correct motor type or consider a compatible replacement with an appropriate shaft length.
- **Battery Fit:** If your battery (especially hard-cased LiPo) does not fit the compartment, ensure it meets the specified dimensions. Padding with foam can help secure smaller batteries.
- **Rear Suspension Rods Popping Out:** If the rear suspension rods frequently pop out during sideways slides or impacts, consider upgrading to more durable aftermarket parts, such as aluminum suspension mounts (e.g., Yeah Racing 1XJ and 1XM parts, if compatible).
- **Excessive Play/Slop:** If you notice excessive play in the steering or suspension, inspect for loose screws, worn bushings/bearings, or damaged components. Replace worn parts as necessary.
- **Grinding Noises from Drivetrain:** This often indicates debris ingress, especially after driving on dirt. Disassemble and thoroughly clean the drive shaft and gearbox areas.
- **Poor Body Paint Adhesion:** Ensure the polycarbonate body is thoroughly cleaned and prepped before painting. Use paints specifically designed for polycarbonate RC bodies to prevent flaking.

For more complex issues or if you require specific technical assistance, refer to the detailed assembly manual or contact TAMIYA customer support.

8. SPECIFICATIONS

Feature	Specification
Product Dimensions	19.5 x 11.8 x 6.1 inches
Item Weight	4.4 pounds
Model Number	300058528
Manufacturer Recommended Age	14 months and up
Chassis Type	XV-01 (Front-motor, Belt-driven 4WD)
Body Type	Polycarbonate Subaru Impreza WRX STi

9. WARRANTY AND SUPPORT

For information regarding product warranty, please refer to the documentation included with your TAMIYA kit or visit the official TAMIYA website. TAMIYA products are known for their quality and detailed engineering.

If you require technical support, have questions about assembly, or need to order replacement parts, please contact TAMIYA customer service. Contact details can typically be found on the TAMIYA official website or within the kit's packaging.

Online Resources: For additional tips, community forums, and detailed build logs, consider searching online RC hobbyist communities. Many experienced builders share valuable insights and solutions for TAMIYA kits.