

BEFORE YOU START

The RX8 is a high-competition, high-quality, 1/8-scale on-road nitro car intended for persons aged 16 years and older with previous experience building and operating RC model racing cars. This is not a toy; it is a precision racing model. This model racing car is not intended for use by beginners, inexperienced customers, or by children without direct supervision of a responsible, knowledgeable adult. If you do not fulfill these requirements, please return the kit in unused and unassembled form back to the shop where you have purchased it.

Before building and operating your RX8, YOU MUST read through all of the operating instructions and instruction manual and fully understand them to get the maximum enjoyment and prevent unnecessary damage.

CUSTOMER SUPPORT

We have made every effort to make these instructions as easy to understand as possible. However, if you have any difficulties, problems, or questions, please do not hesitate to contact the XRAY support team at <u>info@teamxray.com</u>. Also, please visit our Web site at <u>www.teamxray.com</u> to find the latest updates, set-up information, option parts, and many other goodies. We pride ourselves on taking excellent care of our customers.

You can join thousands of XRAY fans and enthusiasts in our online community at: www.teamxray.com

Read carefully and fully understand the instructions before beginning assembly. Make sure you review this entire Instruction Manual and examine all details carefully. If for some reason you decide the RX8 is not what you wanted or expected, do not continue any further. Your hobby dealer cannot accept your RX8 kit for return or exchange after it has been partially or fully assembled.

Contents of the box may differ from pictures. In line with our policy of continuous product development, the exact specifications of the kit may vary without prior notice.

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FAILURE TO FOLLOW THESE INSTRUCTIONS WILL BE CONSIDERED AS ABUSE AND/OR NEGLECT.

SAFETY PRECAUTIONS

WARNING: This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.

CAUTION: CANCER HAZARD

Wash thoroughly after using. DO NOT use product while eating, drinking or using tobacco products. May cause chronic effects to gastrointestinal tract, CNS, kidneys, and blood. MAY CAUSE BIRTH DEFECTS.

When building, using and/or operating this model always wear protective glasses and gloves.

Take appropriate safety precautions prior to operating this model. You are responsible for this model's assembly and safe operation! Please read the instruction manual before building and operating this model and follow all safety precautions. Always keep the instruction manual at hand for quick reference, even after completing the assembly. Use only genuine and original authentic XRAY parts for maximum performance.

🛆 IMPORTANT NOTES – GENERAL

- This product is not suitable for children under 16 years of age without the direct supervision of a
 responsible and knowledgeable adult.
- Carefully read all manufacturers warnings and cautions for any parts used in the construction and use
 of your model.
- Assemble this kit only in places away from the reach of very small children.
- First-time builders and users should seek advice from people who have building experience in order to
 assemble the model correctly and to allow the model to reach its performance potential.
- Exercise care when using tools and sharp instruments.
- Take care when building, as some parts may have sharp edges.
- Keep small parts out of reach of small children. Children must not be allowed to put any parts in their mouth, or pull vinyl bag over their head.
- Read and follow instructions supplied with paints and/or cement, if used (not included in kit).
- Immediately after using your model, do NOT touch equipment on the model such as the motor and speed controller, because they generate high temperatures. You may seriously burn yourself seriously touching them.
- · Follow the operating instructions for the radio equipment at all times.
- Do not put fingers or any objects inside rotating and moving parts, as this may cause damage or serious injury as your finger, hair, clothes, etc. may get caught.
- Be sure that your operating frequency is clear before turning on or running your model, and never share the same frequency with somebody else at the same time. Ensure that others are aware of the operating frequency you are using and when you are using it.
- Use a transmitter designed for ground use with RC cars. Make sure that no one else is using the same
 frequency as yours in your operating area. Using the same frequency at the same time, whether it is
 driving, flying or sailing, can cause loss of control of the RC model, resulting in a serious accident.
- Always turn on your transmitter before you turn on the receiver in the car. Always turn off the receiver before turning your transmitter off.

🚵 IMPORTANT NOTES – NITRO ENGINES

- Always test the brakes and the throttle before starting your engine to avoid losing control of the model.
- Make sure the air filter is clean and oiled.
- Never run your engine without an air filter. Your engine can be seriously damaged if dirt and debris get inside the engine.
- · For proper engine break-in, please refer to the manual that came with the engine.

Improper operation may cause personal and/or property damage. XRAY and its distributors have no

control over damage resulting from shipping, improper construction, or improper usage. XRAY assumes and

accepts no responsibility for personal and/or property damages resulting from the use of improper building

materials, equipment and operations. By purchasing any item produced by XRAY, the buyer expressly warrants that he/she is in compliance with all applicable federal, state and local laws and regulation

regarding the purchase, ownership and use of the item. The buyer expressly agrees to indemnify and hold harmless XRAY for all claims resulting directly or indirectly from the purchase, ownership or use of the

product. By the act of assembling or operating this product, the user accepts all resulting liability. If the buyer

is not prepared to accept this liability, then he/she should return this kit in new, unassembled, and unused

- Keep the wheels of the model off the ground when checking the operation of the radio equipment.
- Disconnect the battery pack before storing your model.

Using any third party parts on this model will void guaranty immediately.

- When learning to operate your model, go to an area that has no obstacles that can damage your model if your model suffers a collision.
- Remove any sand, mud, dirt, grass or water before putting your model away.
- If the model behaves strangely, immediately stop the model, check and clear the problem.
- To prevent any serious personal injury and/or damage to property, be responsible when operating all
 remote controlled models.
- The model car is not intended for use on public places and roads or areas where its operation can conflict with
 or disrupt pedestrian or vehicular traffic.
- Because the model car is controlled by radio, it is subject to radio interference from many sources that
 are beyond your control. Since radio interference can cause momentary loss of control, always allow a
 safety margin in all directions around the model in order to prevent collisions.
- Do not use your model:

condition to the place of purchase.

- Near real cars, animals, or people that are unaware that an RC car is being driven.
- In places where children and people gather
- In residential districts and parks
- In limited indoor spaces
- In wet conditions
- In the street
- In areas where loud noises can disturb others, such as hospitals and residential areas.
- At night or anytime your line of sight to the model may be obstructed or impaired in any way.

To prevent any serious personal injury and/or damage to property, please be responsible when operating all remote controlled models.

- Do not run near open flames or smoke while running your model or while handling fuel.
- Some parts will be hot after operation. Do not touch the exhaust or the engine until they have cooled. These parts may reach 275°F during operation!



🛆 IMPORTANT NOTES – ELECTRICAL

- Insulate any exposed electrical wiring (using heat shrink tubing or electrical tape) to prevent dangerous
 short circuits. Take maximum care in wiring, connecting and insulating cables. Make sure cables are
 always connected securely. Check connectors for if they become loose. And if so, reconnect them securely.
 Never use R/C models with damaged wires. A damaged wire is extremely dangerous, and can cause
 short-circuits resulting in fire. Please have wires repaired at your local hobby shop.
- Low battery power will result in loss of control. Loss of control can occur due to a weak battery in either the transmitter or the receiver. Weak running battery may also result in an out of control car if your car's receiver power is supplied by the running battery. Stop operation immediately if the car starts to slow down.
- When not using RC model, always disconnect and remove battery.
- Do not disassemble battery or cut battery cables. If the running battery short-circuits, approximately 300W of electricity can be discharged, leading to fire or burns. Never disassemble battery or cut battery cables.
- Use a recommended charger for the receiver and transmitter batteries and follow the instructions

赵 IMPORTANT NOTES – NITRO FUEL

- Handle fuel only outdoors. Never handle nitro fuel indoors, or mix nitro fuel in a place where ventilation is bad.
- Only use nitro fuel for R/C models. Do not use gasoline or kerosene in R/C models as it may cause a fire
 or explosion, and ruin your engine.
- Nitro fuel is highly inflammable, explosive, and poisonous. Never use fuel indoors or in places with open fires and sources of heat.
- Always keep the fuel container cap tightly shut.
- Always read the warning label on the fuel container for safety information.
- Nitro-powered model engines emit poisonous vapors and gasses. These vapors irritate eyes and can be highly
 dangerous to your health. We recommend wearing rubber or vinyl gloves to avoid direct contact with nitro fuel.
- Nitro fuel for RC model cars is made of the combination of the methyl alcohol, castor or synthetic oil,

R/C & BUILDING TIPS

- Make sure all fasteners are properly tightened. Check them periodically.
- Make sure that chassis screws do not protrude from the chassis.
- For the best performance, it is very important that great care is taken to ensure the free movement of all parts.
- Clean all ball-bearings so they move very easily and freely.
- Tap or pre-thread the plastic parts when threading screws.
- Self-tapping screws cut threads into the parts when being tightened. Do not use excessive force when
 tightening the self-tapping screws because you may strip out the thread in the plastic. We recommended

WARRANTY

XRAY guarantees this model kit to be free from defects in both material and workmanship within 30 days of purchase. The total monetary value under warranty will in no case exceed the cost of the original kit purchased. This warranty does not cover any components damaged by use or modification or as a result of wear. Part or parts missing from this kit must be reported within 30 days of purchase. No part or parts will be sent under warranty without proof of purchase. Should you find a defective or missing part, contact the local distributor. Service and customer support will be provided through local hobby store where you have purchased the kit, therefore make sure to purchase any XRAY products at your local hobby store. This model racing car is considered to be a high-performance racing vehicle. As such this vehicle will be used in an extreme range of conditions and situations, all which may cause premature wear or failure of any component. XRAY has no control over usage of vehicles once they leave the dealer, therefore XRAY can only offer warranty against all manufacturer's defects in materials, workmanship, and assembly at point of sale and before use. No warranties are expressed or implied that cover damage caused by what is considered normal use, or cover or imply how long any model cars' components or electronic components will last before requiring replacement.

Due to the high performance level of this model car you will need to periodically maintain and replace consumable components. Any and all warranty coverage will not cover replacement of any part or component damaged by neglect, abuse, or improper or unreasonable use. This includes but is not limited to damage from crashing, chemical and/or water damage, excessive moisture, improper or no maintenance, or user

QUALITY CERTIFICATE

XRAY MODEL RACING CARS uses only the highest quality materials, the best compounds for molded parts and the most sophisticated manufacturing processes of TQM (Total Quality Management). We guarantee that all parts of a newly-purchased kit are manufactured with the highest regard to quality. However, due to the many factors inherent in model racecar competition, we cannot guarantee any parts once you start racing the car. Products which have been worn out, abused, neglected or improperly operated will not be covered under warranty. We wish you enjoyment of this high-quality and high-performance RC car and wish you best success on the track! correctly. Over-charging, incorrect charging, or using inferior chargers can cause the batteries to become dangerously hot. Recharge battery when necessary. Continual recharging may damage battery and, in the worst case, could build up heat leading to fire. If battery becomes extremely hot during recharging, please ask your local hobby shop for check and/or repair and/or replacement.

- Regularly check the charger for potential hazards such as damage to the cable, plug, casing or other
 defects. Ensure that any damage is rectified before using the charger again. Modifying the charger may
 cause short-circuit or overcharging leading to a serious accident. Therefore do not modify the charger.
- Always unplug charger when recharging is finished.
- Do not recharge battery while battery is still warm. After use, battery retains heat. Wait until it cools down before charging.
- Do not allow any metal part to short circuit the receiver batteries or other electrical/electronic device on the model.
- Immediately stop running if your RC model gets wet as may cause short circuit.
- Please dispose of batteries responsibly. Never put batteries into fire.

nitro methane etc. The flammability and volatility of these elements is very high, so be very careful during handling and storage of nitro fuel.

- Keep nitro fuel away from open flame, sources of heat, direct sunlight, high temperatures, or near batteries.
- Store fuel in a cool, dry, dark, well-ventilated place, away from heating devices, open flames, direct sunlight, or batteries. Keep nitro fuel away from children.
- Do not leave the fuel in the carburetor or fuel tank when the model is not in use. There is danger that the fuel may leak out.
- Wipe up any spilled fuel with a cloth
- Be aware of spilled or leaking fuel. Fuel leaks can cause fires or explosions.
- Do not dispose of fuel or empty fuel containers in a fire. There is danger of explosion.

you stop tightening a screw when you feel some resistance.

• Ask your local hobby shop for any advice.

Please support your local hobby shop. We at XRAY Model Racing Cars support all local hobby dealers. Therefore we ask you, if at all possible, to purchase XRAY products at your hobby dealer and give them your support like we do. If you have difficulty finding XRAY products, please check out www.teamxray.com to get advice, or contact us via email at info@teamxray.com, or contact the XRAY distributor in your country.

modifications which compromise the integrity of components. Warranty will not cover components that are considered consumable on RC vehicles. XRAY does not pay nor refund shipping on any component sent to XRAY or its distributors for warranty. XRAY reserves the right to make the final determination of the warranty status of any component or part.

Limitations of Liability

XRAY makes no other warranties expressed or implied. XRAY shall not be liable for any loss, injury or damages, whether direct, indirect, special, incidental, or consequential, arising from the use, misuse, or abuse of this product and/or any product or accessory required to operate this product. In no case shall XRAY's liability excess the monetary value of this product.

Take adequate safety precautions prior to operating this model. You are responsible for this model's assembly and safe operation.

Disregard of the any of the above cautions may lead to accidents, personal injury, or property damage. XRAY MODEL RACING CARS assumes no responsibility for any injury, damage, or misuse of this product during assembly or operation, nor any addictions that may arise from the use of this product.

All rights reserved.

Please note that raw materials such as aluminum, steel, brass, fibreglass, or carbon fibre may have small scratches on the surface which is a standard characteristic of any raw material. Scratches on the surface of any materials are NOT considered to be material defects.

Products may potentially have small amounts of corrosion on them. This may be caused by variances in weather during different times of the year, humidity in the shop or during shipping, and other contributing factors. Even though we have taken all precautions and protection methods to prevent corrosion, these small amounts of corrosion (if present) are unavoidable and considered to be acceptable.

In line with our policy of continuous product development, the exact specifications of the kit may vary. In the unlikely event of any problems with your new kit, you should contact the model shop where you purchased it, quoting the part number. We do reserve all rights to change any specification without prior notice. All rights reserved.



1. FRONT ONE-WAY & REAR SOLID AXLE





























REAR SUSPENSION MULTI-FLEX™ TECHNOLOGY

The all-new rear suspension design features Multi-Flex ™ quick adjustment to easily adapt the handling of the car to particular track conditions and tires used. There are 3 different flex characteristics to choose from.

ALTERNATIVE 1 SOFT

Graphite brace and posts are not used. This allows maximum flex of the rear suspension and generates maximum rear traction. Recommended for low-traction tracks.

ALTERNATIVE 2 MEDIUM

Graphite brace connected to 2-speed bulkheads without posts. This slightly reduces the flex of the rear suspension and improves out-of-corner steering and rotation of the car, but also slightly decreases rear traction. Recommended for medium-traction tracks.

ALTERNATIVE 3 STIFF (INITIAL SETTING)

Graphite brace connected to 2-speed bulkheads with posts. This connects the entire rear suspension together, creating a stiff frame which allows the car to rotate more and improves out-of-corner steering. Recommended for high-traction tracks.







RX81E













RX815



3. REAR TRANSMISSION



3. REAR TRANSMISSION











4. FRONT SUSPENSION 345430 OPTION #345432 FRONT ANTI-ROLL BARS LOW-FRICTION KEVLAR® DRIVE BELT #342470 ø2.0mm OPTION FRONT 6.0x204mm OPTION #342472 ø2.2mm OPTION #342474 ø2.4mm 342070 #342476 ø2.6mm INCLUDED 345001 #342478 ø2.8mm OPTION 94<u>1218</u> 342032 342014 342042 902308 342045 342084 342045 903306 901303 901304 901410 342024 342476 940508 333461 <u>3434</u>81 362650 342315 902310 <u>902310</u> 962032 903408 88 337311 302663 341322 372651 302080 302080 342315 342711 960040 347212 302293 <u>342180</u> 341201 903406 342711 302293 <u>902410</u> 903412 903406 COMPOSITE CASTER CLIPS SET 4+3+2+1 MM (2) FRONT LOWER INNER PIVOT PIN (2) 302080 347212 C-HUB BUSHING COMPOSITE - V2 (4) BAG BALL END 4.9MM WITH THREAD 6MM (2) 302293 362650 COMPOSITE BALL JOINT 4.9MM - OPEN - V2 (8) PIVOT BALL UNIVERSAL 4.9 MM - HUDY SPRING STEEL (2) 302663 372651 04.2 333461 COMPOSITE ANTI-ROLL BAR BALL JOINT 4.9 MM - V3 (4) 337311 **PIVOT PIN WITH FLAT SPOT (2)** 901303 HEX SCREW SB M3x3 (10) 341201 **COMPOSITE BUMPER - DOWNFORCE** 901304 HEX SCREW SB M3x4 (10) ALU FRONT BODY POST - SHORT - SWISS 7075 T6 (2) HEX SCREW SB M4x10 (10) 341322 901410 ALU LOWER BULKHEAD FRONT - SWISS 7075 T6 - RIGHT ALU LOWER BULKHEAD FRONT - SWISS 7075 T6 - RIGHT ALU LOWER BULKHEAD FRONT - SWISS 7075 T6 - LEFT 902308 HEX SCREW SH M3x8 (10) 342014 HEX SCREW SH M3x10 (10) 342024 902310 ALU UPPER ARM HOLDER RIGHT - SWISS 7075 T6 - SET HEX SCREW SH M4x10 (10) 342032 902410 342042 ALU UPPER ARM HOLDER LEFT - SWISS 7075 T6 - SET 903306 HEX SCREW SFH M3x6 (10) 342045 ALU UPPER CLAMP FRONT - SWISS 7075 T6 - (L+R) 903406 HEX SCREW SFH M4x6 (10) 342070 **COMPOSITE SET OF BUSHINGS (2)** 903408 HEX SCREW SFH M4x8 (10) 342084 **GRAPHITE SHOCK TOWER FRONT** 903412 HEX SCREW SFH M4x12 (10) **COMPOSITE SUSPENSION ARM DOWNSTOP (2)** 342170 940508 HIGH-SPEED BALL-BEARING 5x8x2.5 RUBBER SEALED (2) COMPOSITE LOWER SUSP. ARM CLIPS (2) HIGH-SPEED BALL-BEARING 12x18x4 RUBBER SEALED (2) 342180 941218 NUT M4 (10) COMPOSITE FRONT UPPER SUSP. ECCENTRIC BUSHING (4) 342315 960040 342476 ANTI-ROLL BAR FRONT 2.6 MM 962032 WASHER S 3x6x0.2 (10) ALU LOWER FRONT SUSPENSION HOLDER (1) - SWISS 7075 T6 342711 343481-K ALU CUTTED ANTI-ROLL BAR COLLAR - BLACK (2) 345001 FRONT ONE-WAY - HARDCOATED + LIGHTWEIGHT ADAPTERS PUR® REINFORCED DRIVE BELT FRONT 6.0 x 204 MM 345430





The RX8 kit comes with both types of front anti-roll bars; blade-style or wire. Decide which anti-roll bar to use.

Blade anti-roll bar (Alternative 1) page 27

Wire anti-roll bar (Alternative 2) go to page 28

is recommended for long, fast tracks when maximum cornering speed is needed. With the blade anti-roll bar, the car will not dive in the corners and will maintain maximum speed. Follow the "Alternative 1" assembly steps (immediately below).

is recommended for smaller, technical tracks when fast direction changes and side weight changes are needed. Follow the "Alternative 2" assembly steps starting on page 28; DO NOT assemble the blade bars as described immediately below.

ALTERNATIVE 1 (BLADE ANTI-ROLL BAR)



ALTERNATIVE 2 (WIRE ANTI-ROLL BAR)







5. FRONT TRANSMISSION









6. STEERING



7. FUEL TANK & ELECTRONICS



NOTE ORIENTATION

NOTE: The fuel tank insert can be easily mounted to the bottom of the fuel tank using the provided screw, when the fuel tank cap is opened fully.

NOTE ORIENTATION


7. FUEL TANK & ELECTRONICS



















JERRAN

9. SHOCK ABSORBERS



9. SHOCK ABSORBERS



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9. SHOCK ABSORBERS











RXB'15





CARB LINKAGE ADJUSTMENT



FULL THROTTLE



With the engine NOT RUNNING but the receiver turned ON, apply full throttle at the transmitter.

Adjust the transmitter's throttle servo high-end point so that the servo horn fully opens the carburettor when the transmitter's throttle control (e.g., throttle trigger) is at 95% of full throttle. The servo should not have excessive strain when at full throttle, or throttle/carb damage will result.

If the transmitter does not have throttle high-end point adjustment, adjust the throttle linkage pivot position on the servo horn until full throttle is obtained.











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