

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.

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.

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 info@teamxray.com. Also, please visit our Web site at www.teamxray.com to find the latest updates, set-up information, option parts, and many other goodies. We pride ourselves on taking excellent care of

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

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

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 condition to the place of purchase.



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
- 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
- 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.

- 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.
- . 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:
 - 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.



🔼 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.
- 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
- 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
- Use a recommended charger for the receiver and transmitter batteries and follow the instructions

- 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.



IMPORTANT NOTES – NITRO FUEL

- Handle fuel only outdoors. Never handle nitro fuel indoors, or mix nitro fuel in a place where ventilation is had
- 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,
- 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.

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

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.

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

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.

OUALITY 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!

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.



SYMBOLS USED



Apply cyanoacrylate (CA) glue



Apply grease

Assemble left and right sides the same way



Ensure smooth non-binding movement





Cut off remaining material



Assemble as many times as specified (here twice)



Number of teeth



Detail



Pay attention here



TIP Follow tip here



Part bags used



123 Assemble in the specified order



Assembly view



Optional parts

TOOLS REQUIRED













Allen Ball 2.5mm



















EQUIPMENT REQUIRED





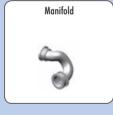






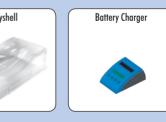










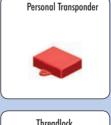




















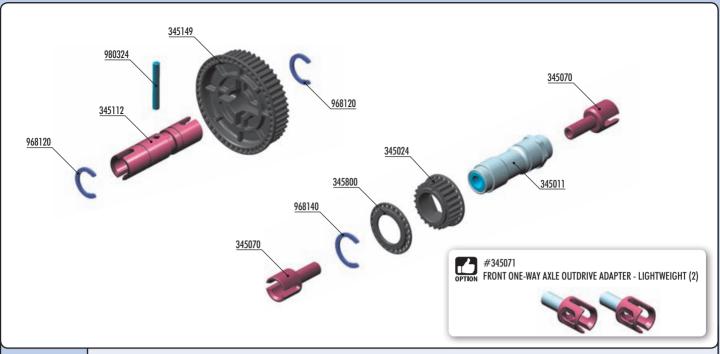








1. FRONT ONE-WAY & REAR SOLID AXLE



BAG



345149

345800

COMPOSITE REAR SOLID AXLE PULLEY 48T

COMPOSITE BELT PULLEY COVER SET

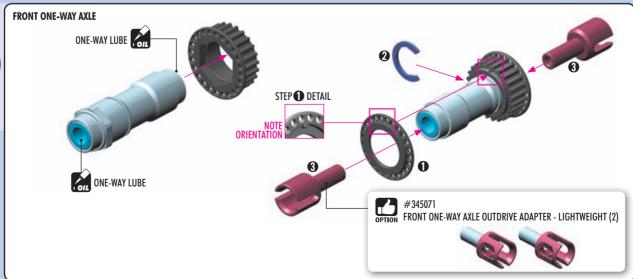
345001 FRONT ONE-WAY - HARDCOATED + LIGHTWEIGHT ADAPTERS 968120 C-CLIP 12 (10)
345011 FRONT ONE-WAY AXLE - BLACK COATED 968140 C-CLIP 14 (10)
345024 COMPOSITE FRONT ONE-WAY AXLE PULLEY 24T 980324 PIN 3x24 (10)
345070 FRONT ONE-WAY AXLE OUTDRIVE ADAPTER - HUDY SPRING STEEL™ (2)
345112 REAR SOLID AXLE SHAFT - HUDY SPRING STEEL™

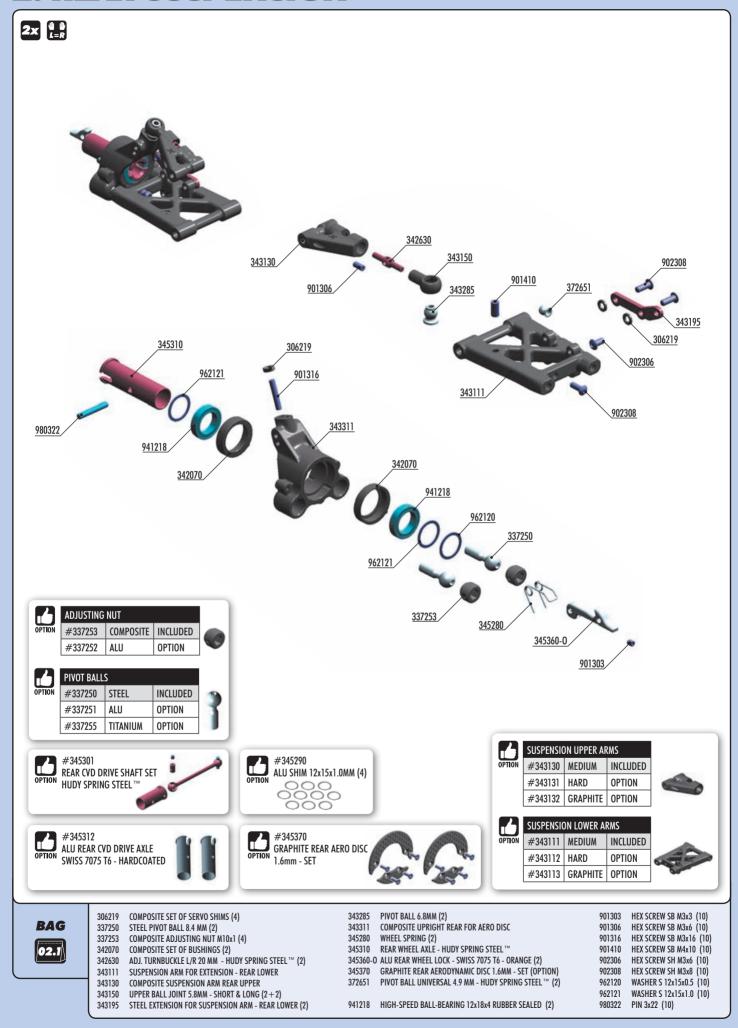




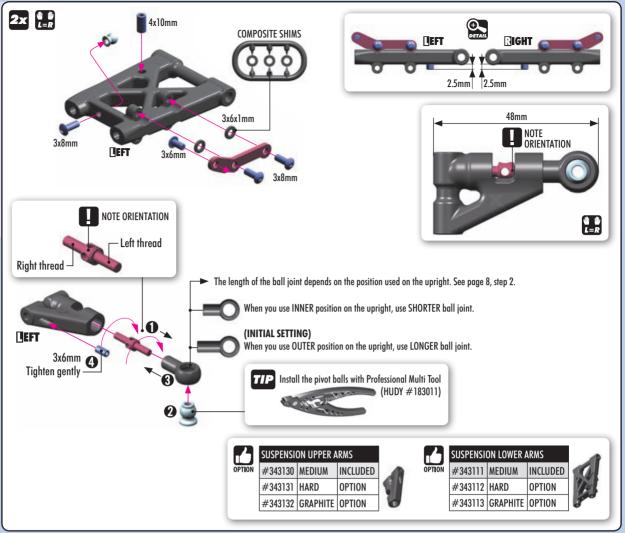


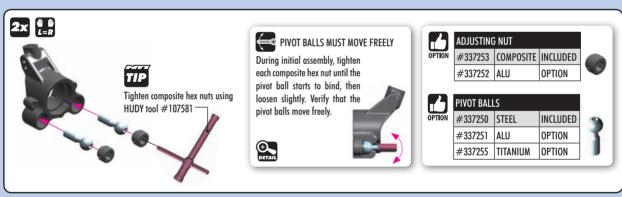




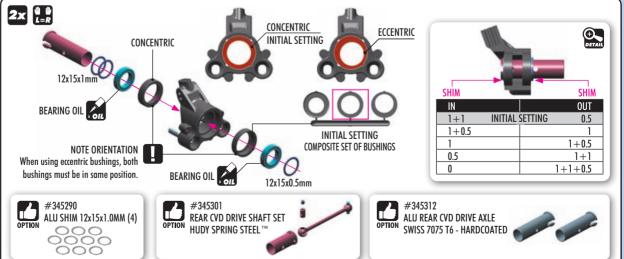




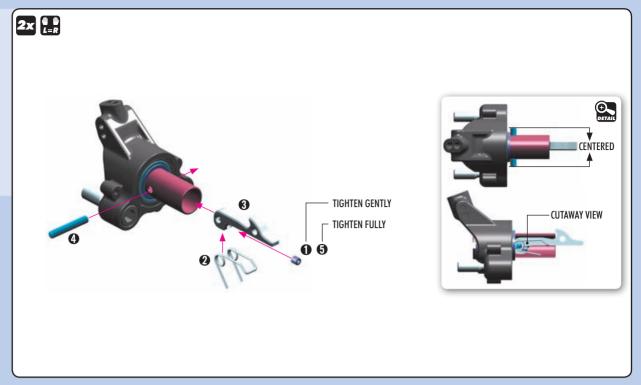




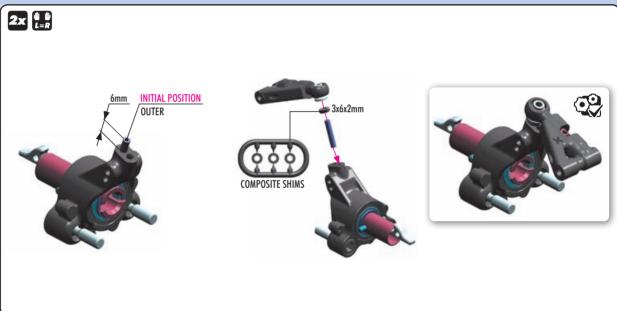


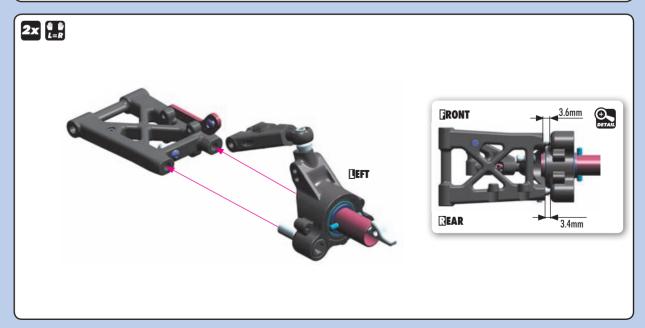


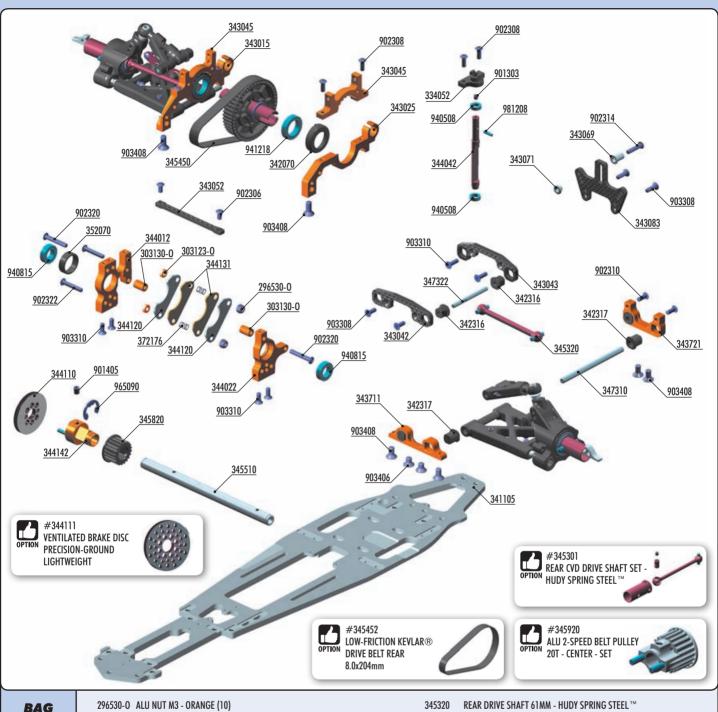








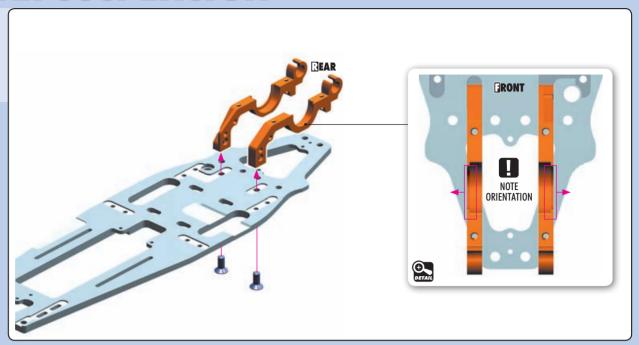




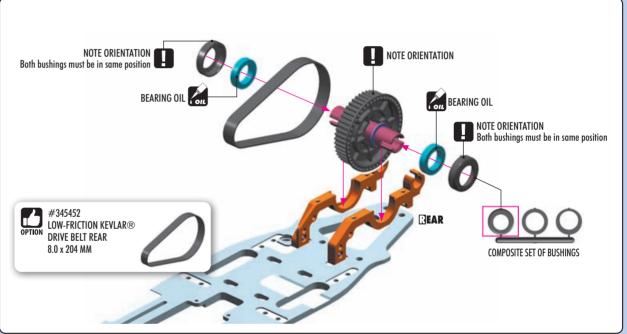


296530-0	ALU NUT M3 - ORANGE (10)	345320	REAR DRIVE SHAFT 61MM - HUDY SPRING STEEL™
303123-0	ALU SHIM 3x6x2.0MM - ORANGE (10)	345450	PUR® REINFORCED DRIVE BELT REAR 8.0 x 204 MM
303130-0	ALU SHIM 3x6x9.0MM - ORANGE (10)	345510	2-SPEED SHAFT 8MM - SUPER LIGHTWEIGHT - HUDY SPRING STEEL™
334052	COMPOSITE BRAKE UPPER PLATE	345820	COMPOSITE 2-SPEED BELT PULLEY 20T - CENTER
341105	CHASSIS 5MM - CNC MACHINED - SWISS 7075 T6	347310	REAR LOWER INNER PIVOT PIN (2)
342070	COMPOSITE SET OF BUSHINGS (2)	347322	REAR UPPER INNER PIVOT PIN WITH FLAT SPOT (2)
342316	COMPOSITE REAR UPPER SUSP. ECCENTRIC BUSHING (4)	352070	COMPOSITE BEARING HUB FOR DIFF (4)
342317	COMPOSITE REAR LOWER SUSP. ECCENTRIC BUSHING (4)	372176	SPRING 4.25 COILS 3.6x6x0.4MM; C=1.5 - GOLD (SOFT) (2)
343015	ALU LOWER BULKHEAD REAR - SWISS 7075 T6 - RIGHT		
343025	ALU LOWER BULKHEAD REAR - SWISS 7075 T6 - LEFT	901303	HEX SCREW SB M3x3 (10)
343042	GRAPHITE REAR UPPER ARM HOLDER 3.5MM - FRONT	901405	HEX SCREW SB M4x5 (10)
343043	GRAPHITE REAR UPPER ARM HOLDER 3.5MM - REAR	902306	HEX SCREW SH M3x6 (10)
343045	ALU UPPER CLAMP REAR - SWISS 7075 T6 - $(L+R)$	902308	HEX SCREW SH M3x8 (10)
343052	GRAPHITE REAR BULKHEAD BRACE 2.5MM	902310	HEX SCREW SH M3x10 (10)
343069	STEEL BUSHING (2)	902314	HEX SCREW SH M3x14 (10)
343071	BELT TENSIONER SET - STEEL	902320	HEX SCREW SH M3x20 (10)
343083	GRAPHITE SHOCK TOWER REAR	902322	HEX SCREW SH M3x22 (10)
343711	ALU REAR LOWER SUSPENSION HOLDER - FRONT - RF	903308	HEX SCREW SFH M3x8 (10)
343721	ALU REAR LOWER SUSPENSION HOLDER - REAR - RR	903310	HEX SCREW SFH M3x10 (10)
344012	ALU BRAKE STAND - SWISS 7075 T6 - SET	903406	HEX SCREW SFH M4x6 (10)
344022	ALU 2-SPEED HOLDER - SWISS 7075 T6	903408	HEX SCREW SFH M4x8 (10)
344042	BRAKE CAM POST - STEEL	940508	HIGH-SPEED BALL-BEARING 5x8x2.5 RUBBER SEALED (2)
344110	VENTILATED BRAKE DISC - PRECISION-GROUND	940815	HIGH-SPEED BALL-BEARING 8x14x4 RUBBER SEALED (2)
344120	STEEL BRAKE PAD - HARDENED (2)	941218	HIGH-SPEED BALL-BEARING 12x18x4 RUBBER SEALED (2)
344131	BRAKE PAD "SLS" (2)	965090	E-CLIP 9 (10)
344142	BRAKE DISK ADAPTER - SWISS 7075 T6 - BLACK HARDCOAT	ED 981208	PIN 2x8 (10)

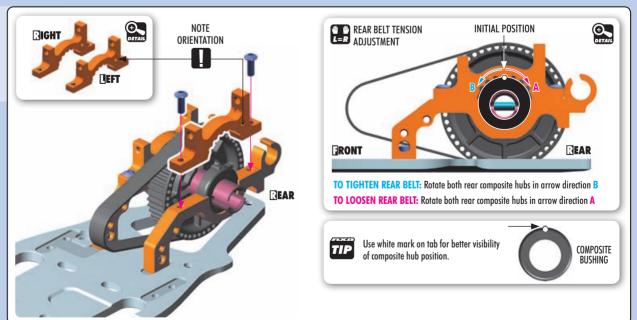




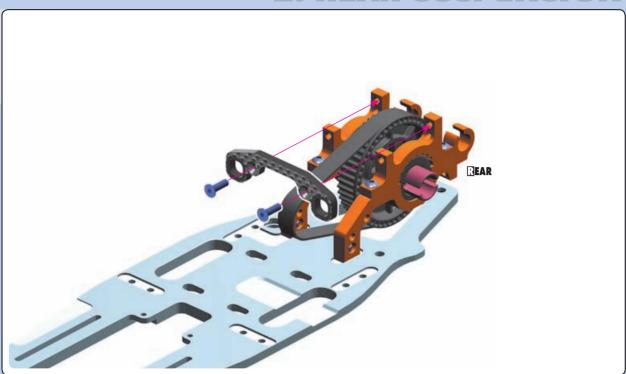




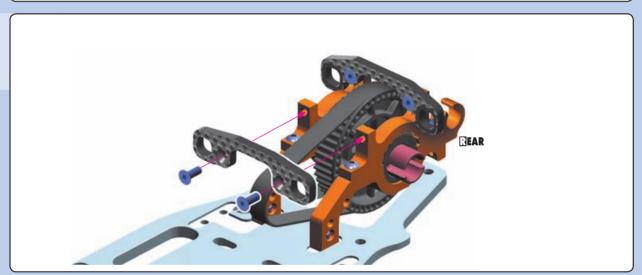




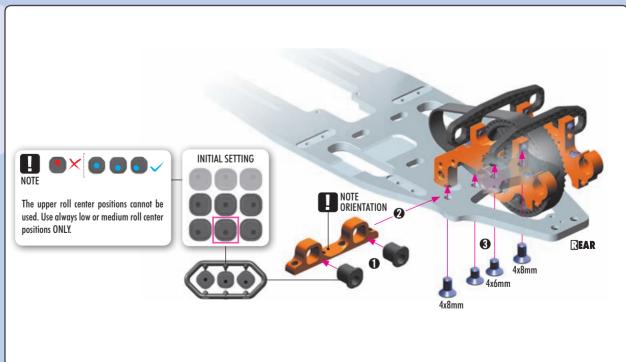


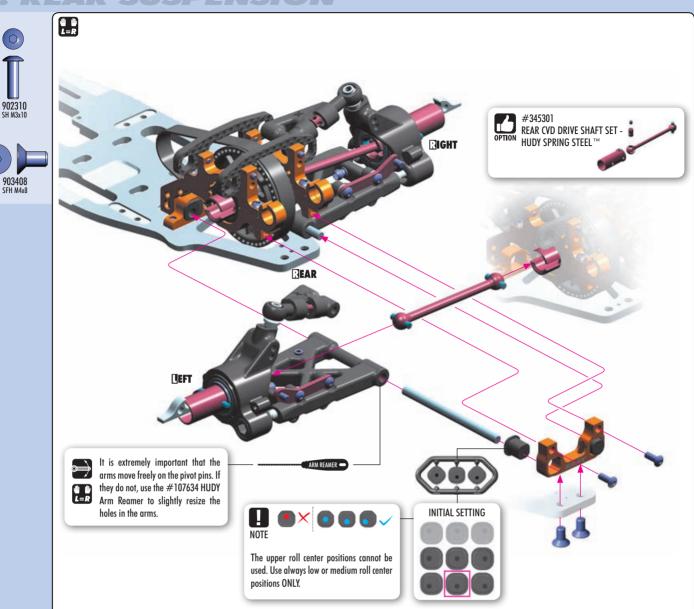


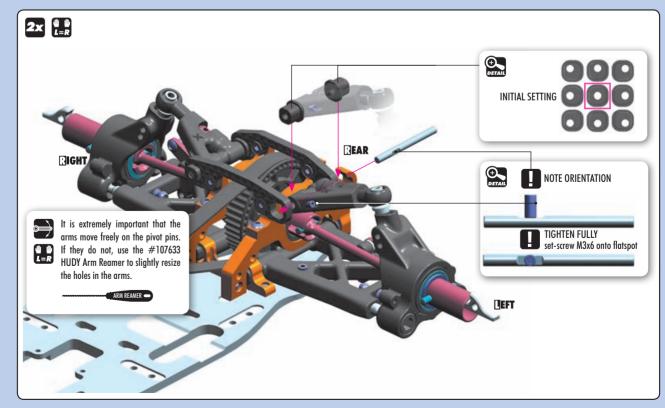




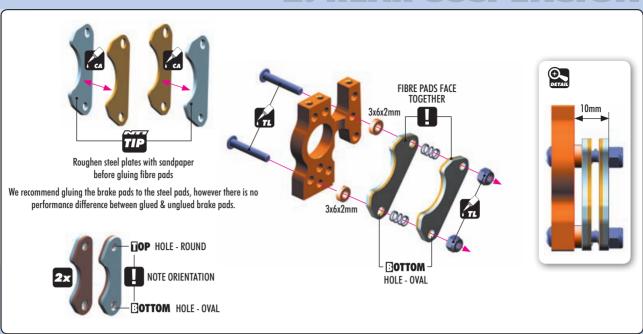


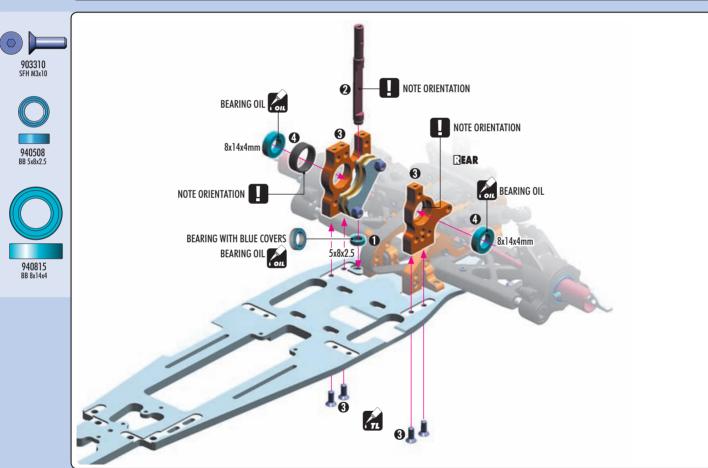




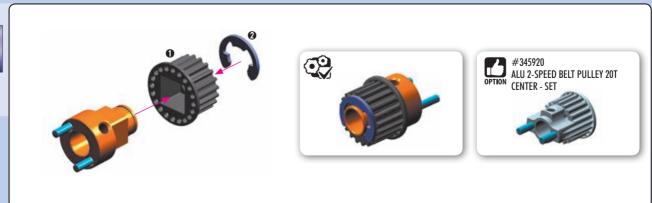


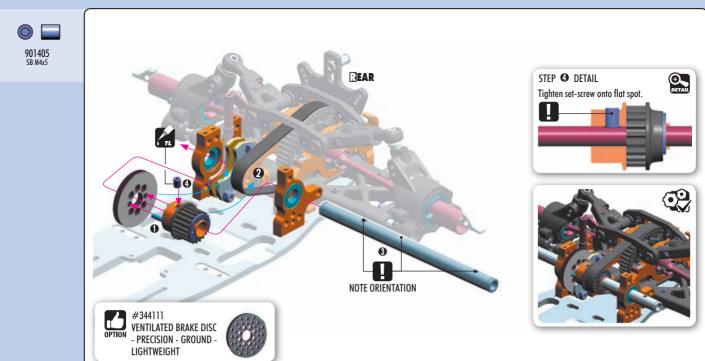


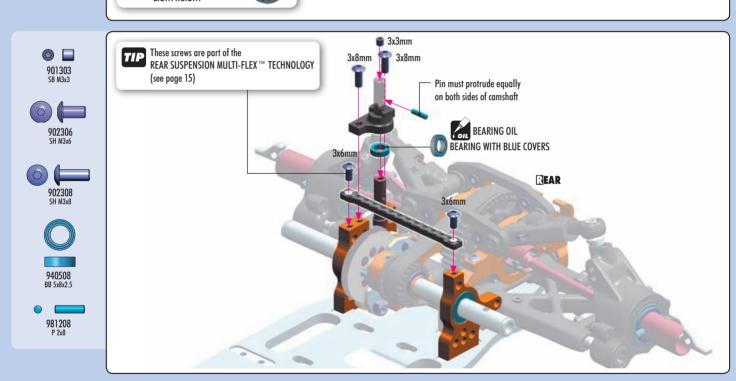


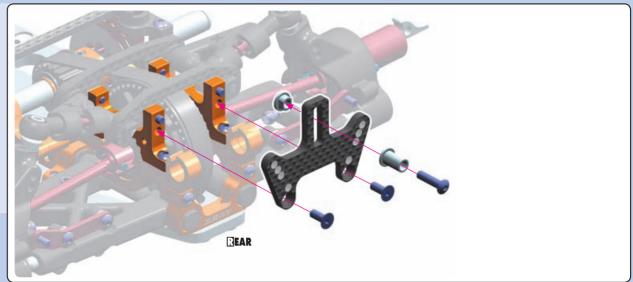
















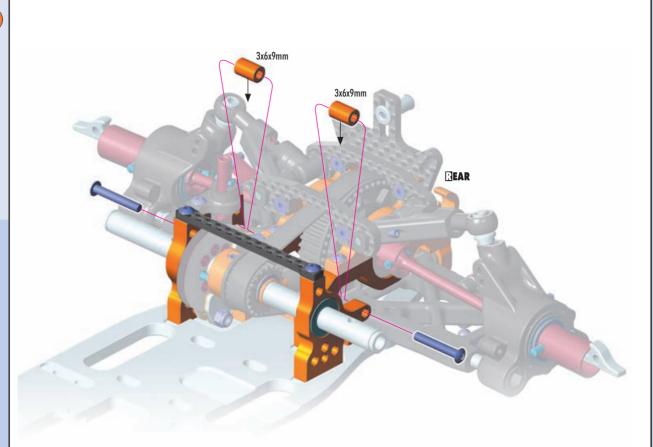


SH M3x14

SFH M3x8



902320 SH M3x20



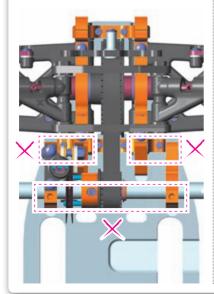
REAR SUSPENSION MULTI-FLEX™ TECHNOLOGY

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

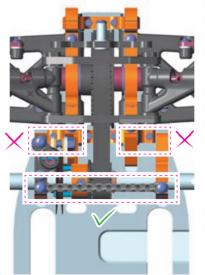
SOFT

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.

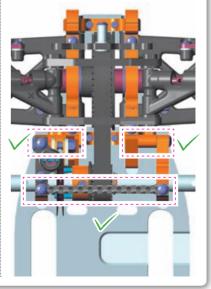


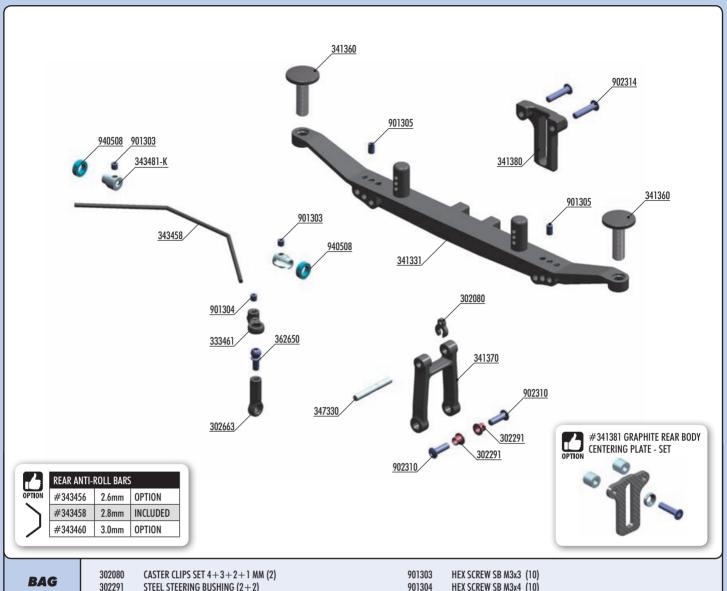
ALTERNATIVE 3

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.

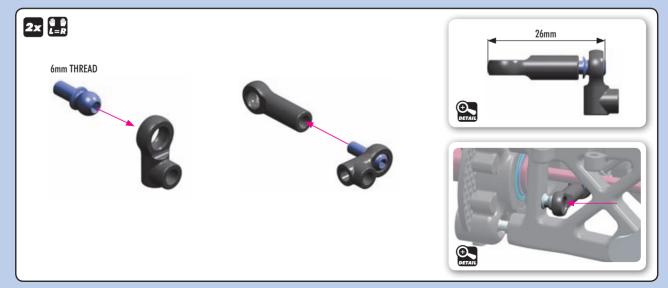




BAG02.3

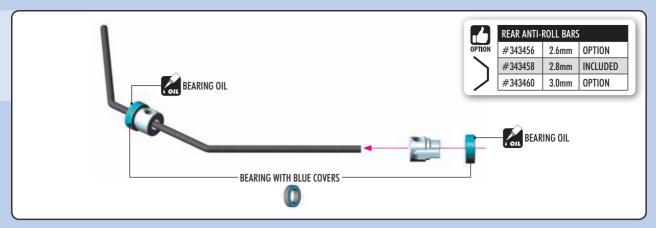
302080	CASTER CLIPS SET 4+3+2+1 MM (2)
302291	STEEL STEERING BUSHING (2+2)
302663	COMPOSITE BALL JOINT 4.9MM - OPEN - V2 (8)
333461	COMPOSITE ANTI-ROLL BAR BALL JOINT 4.9 MM - V3 (4)
341331	COMPOSITE REAR BODY HOLDER - HIGHER
341360	COMPOSITE REAR BODY HOLDER SCREW (2)
341370	COMPOSITE REAR BODY HOLDER ARM
341380	COMPOSITE REAR BODY CENTERING PLATE
343458	ANTI-ROLL BAR REAR 2.8 MM
343481-K	ALU CUTTED ANTI-ROLL BAR COLLAR - BLACK (2)
347330	REAR BODY HOLDER ARM PIN (2)
362650	BALL END 4.9MM WITH THREAD 6MM (2)

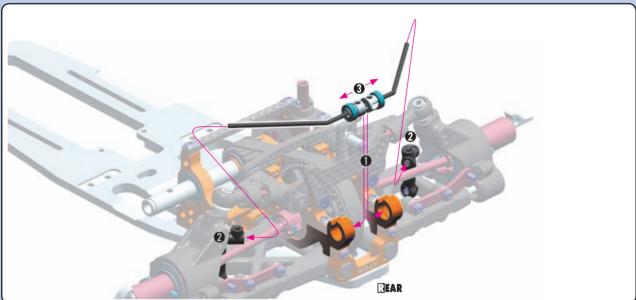
901303 HEX SCREW SB M3x3 (10) 901304 HEX SCREW SB M3x4 (10) 901305 HEX SCREW SB M3x5 (10) 902310 HEX SCREW SH M3x10 (10) 902314 HEX SCREW SH M3x14 (10) 940508 HIGH-SPEED BALL-BEARING 5x8x2.5 RUBBER SEALED (2)





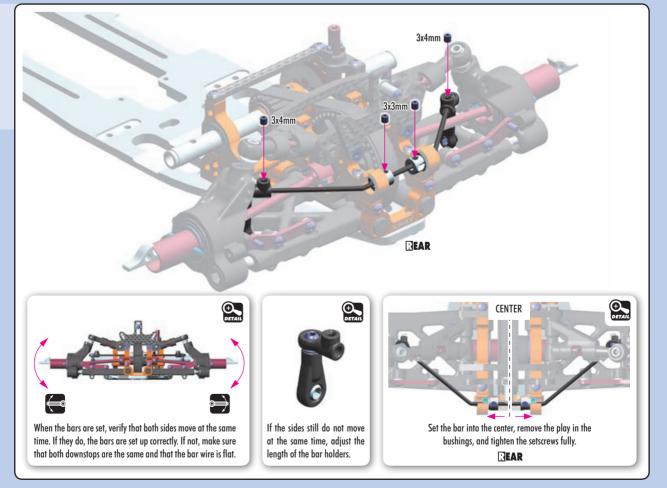




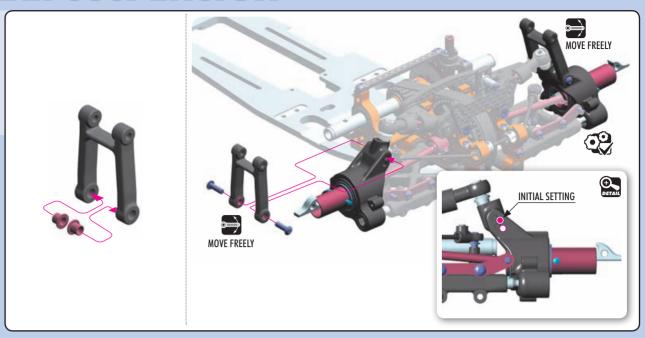




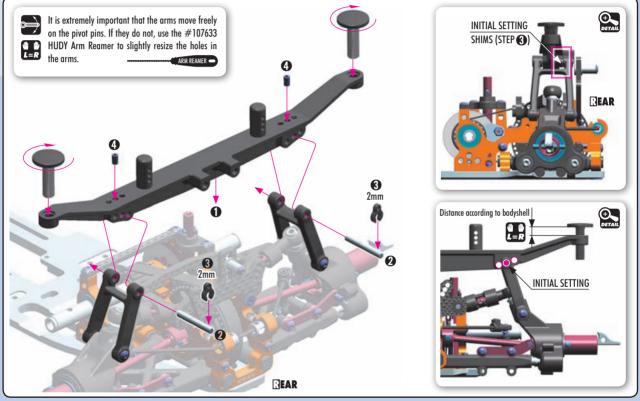




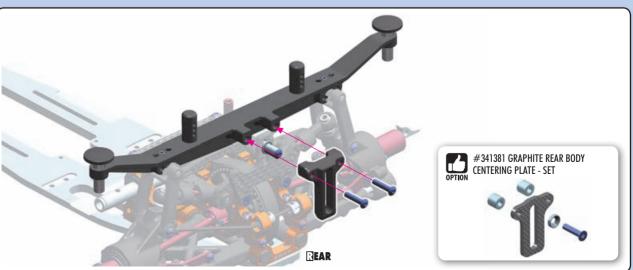






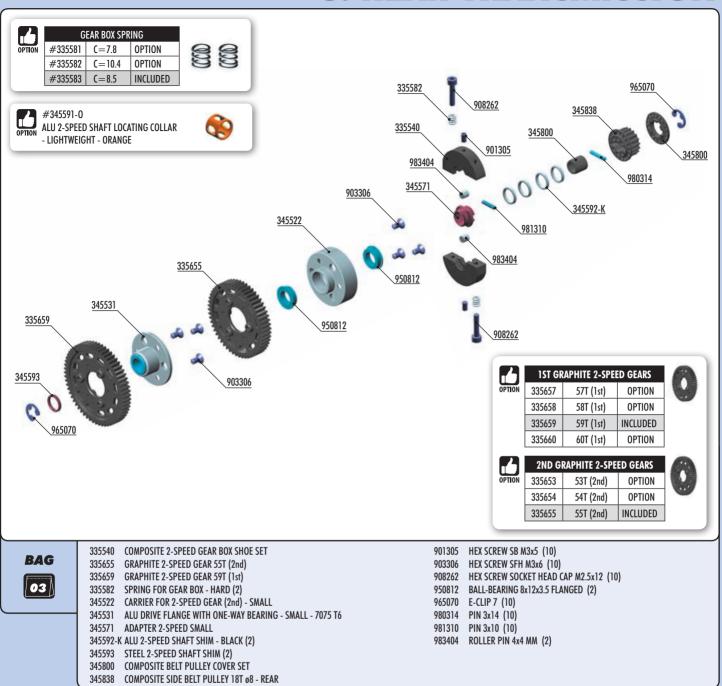


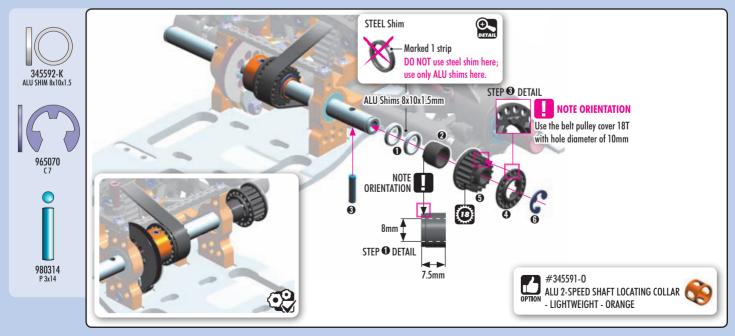




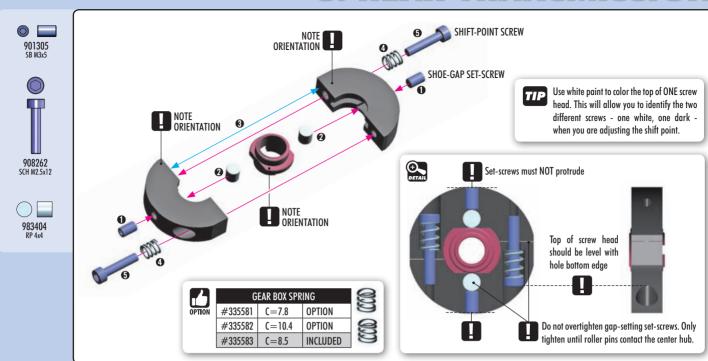


3. REAR TRANSMISSION

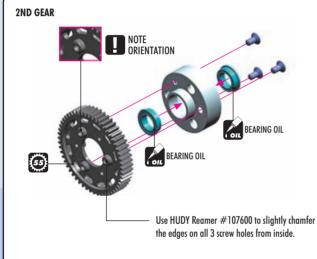


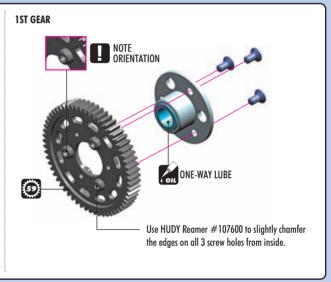


3. REAR TRANSMISSION

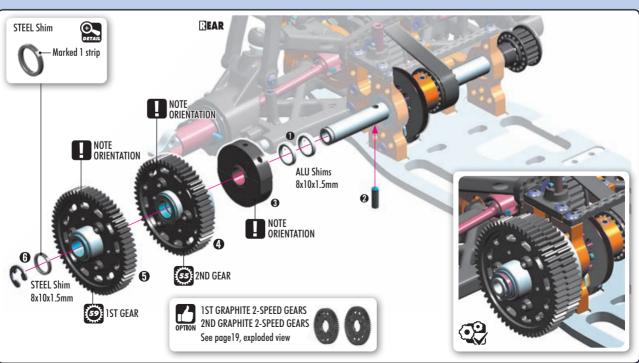


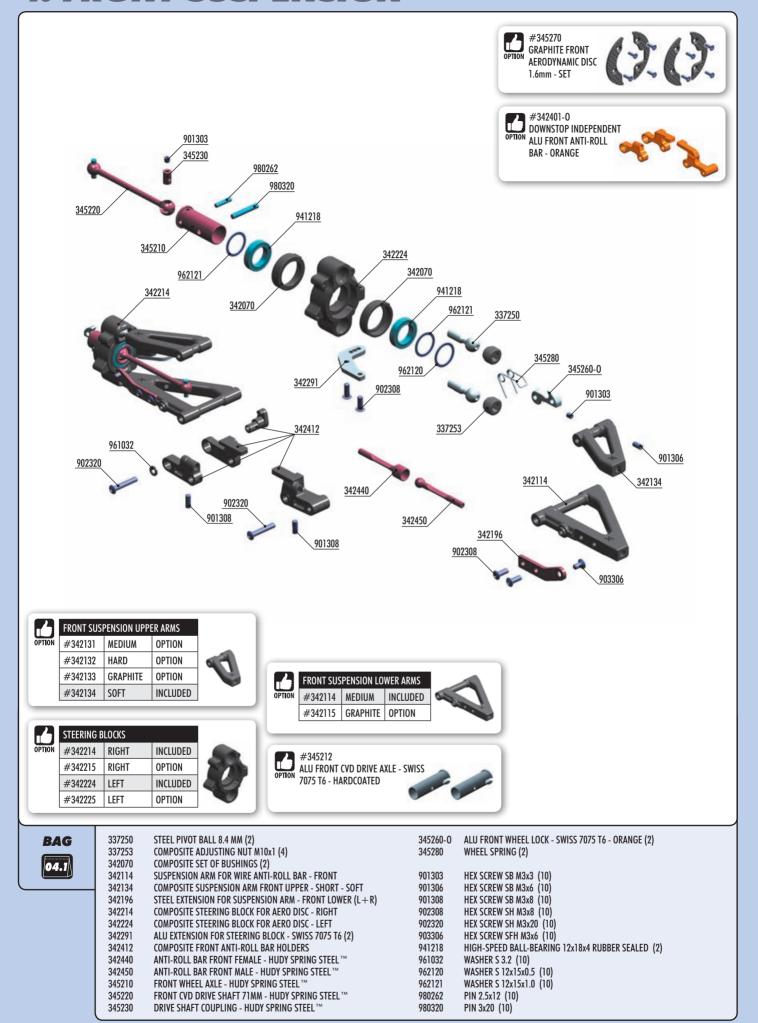


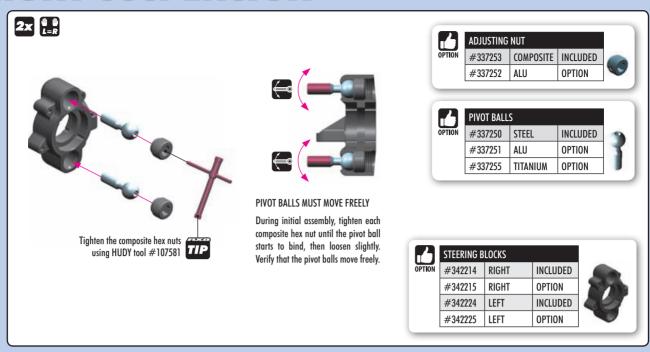


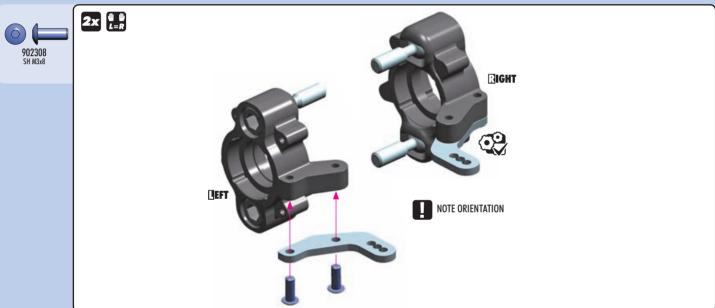


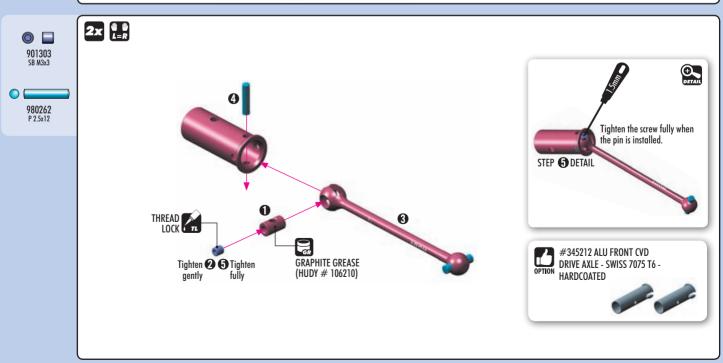


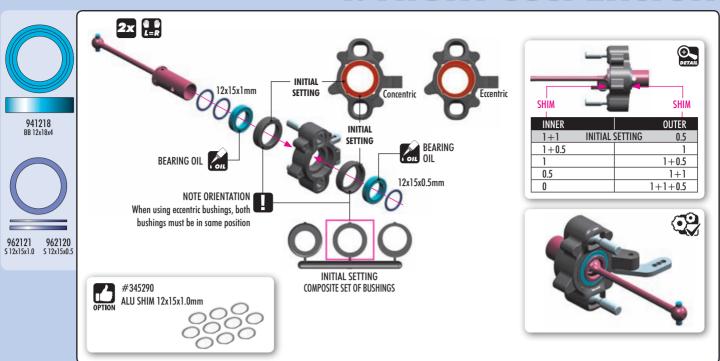


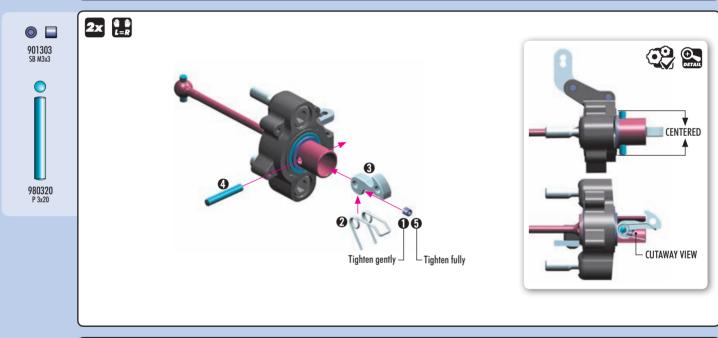


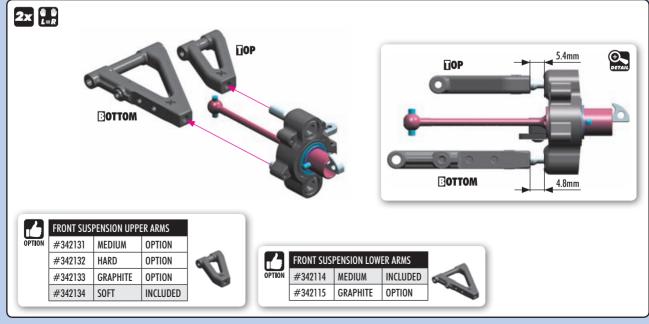


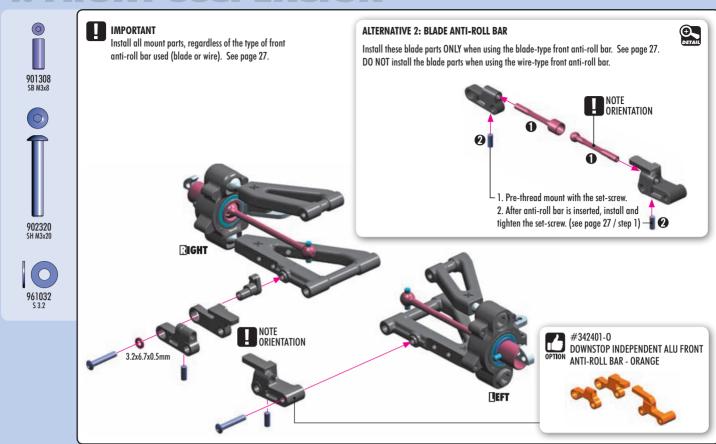


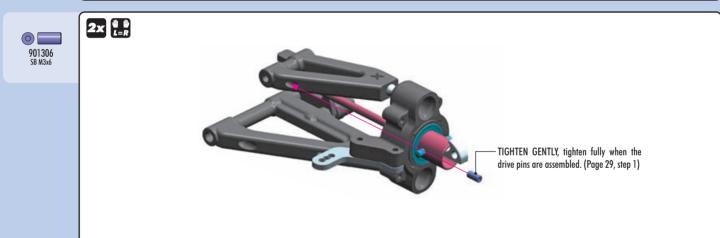


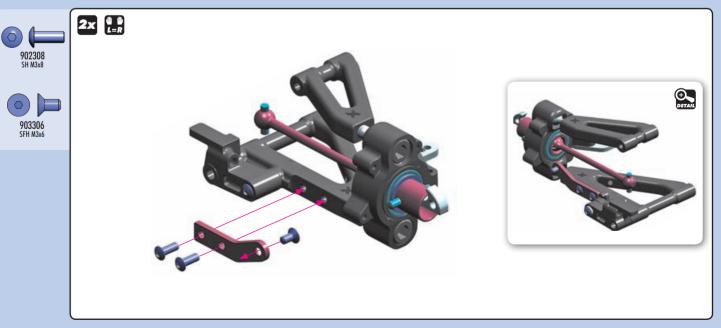


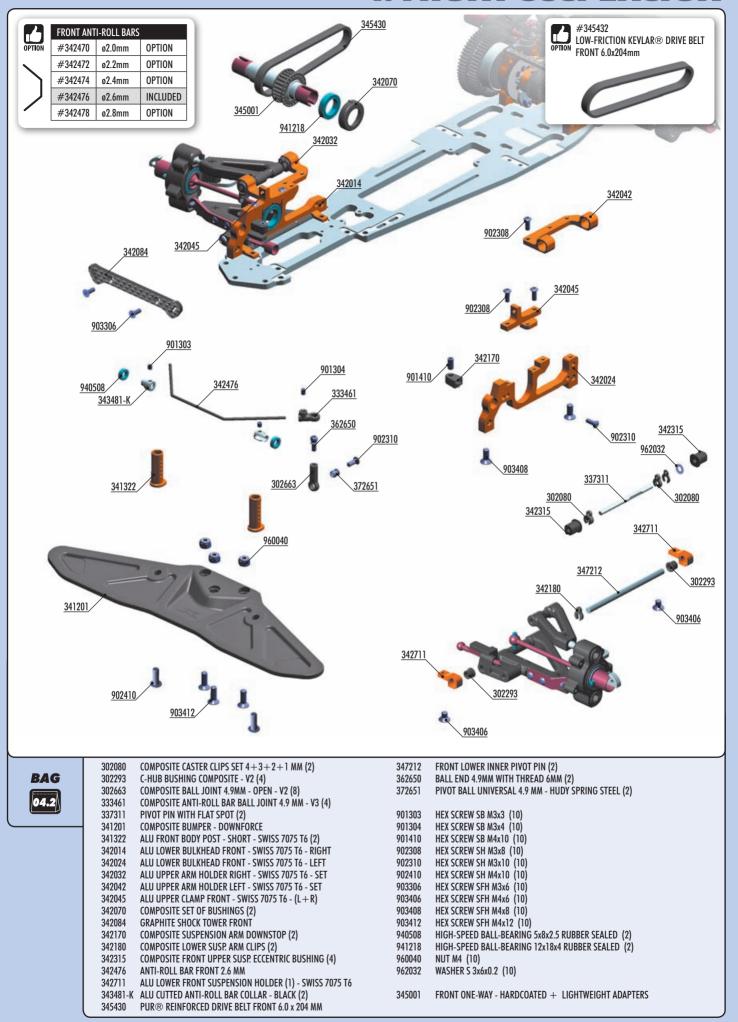


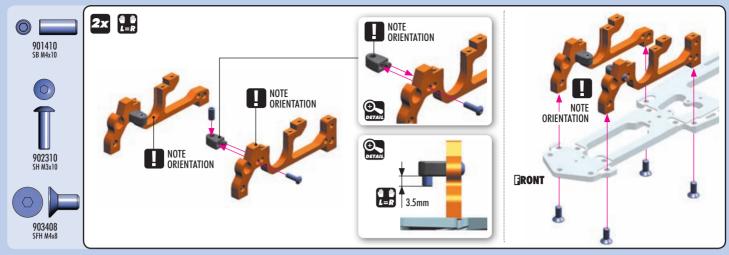


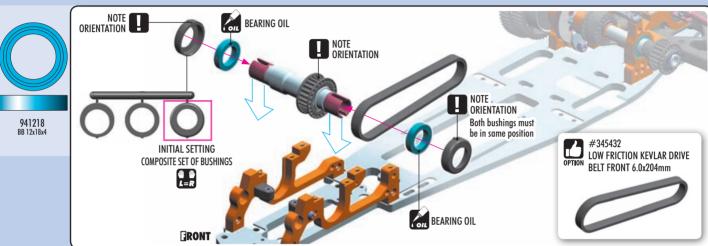


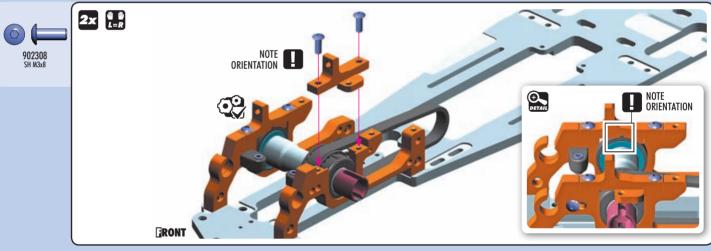


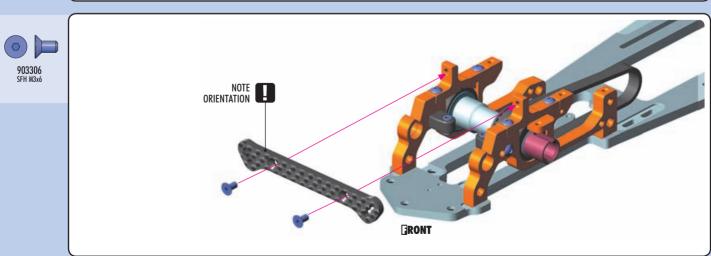












The RX8 kit comes with both types of front anti-roll bars; blade-style or wire. Decide which anti-roll bar to use.

Blade anti-roll bar (Alternative 1) page 27

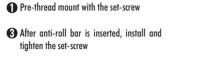
is recommended for long, fast tracks when maximum cornering speed is needed. With the blade anti-roll bar, the car will not dive in the corners and will maintain maximum speed. Follow the "Alternative 1" assembly steps (immediately below).

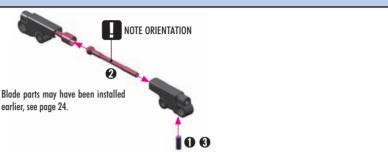
Wire anti-roll bar (Alternative 2) go to page 28

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.

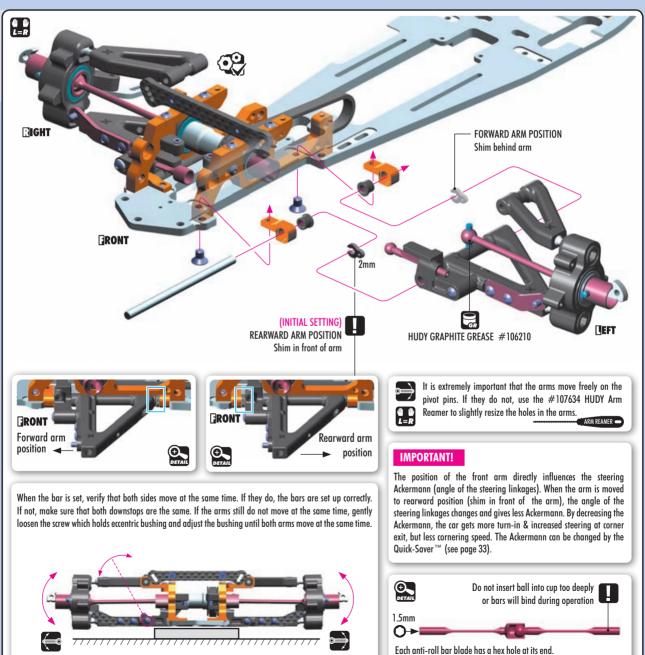
ALTERNATIVE 1 (BLADE ANTI-ROLL BAR)







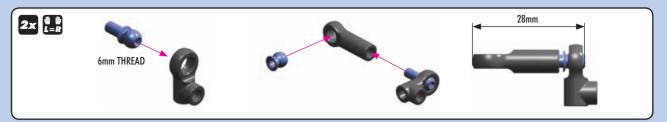




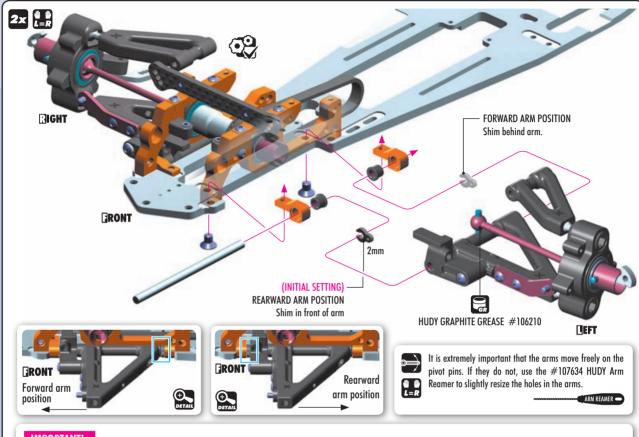
Ensure that the suspension arms move freely. Ensure that the eccentric holders move freely.

Use a 1.5mm hex wrench to adjust the blades.

ALTERNATIVE 2 (WIRE ANTI-ROLL BAR)

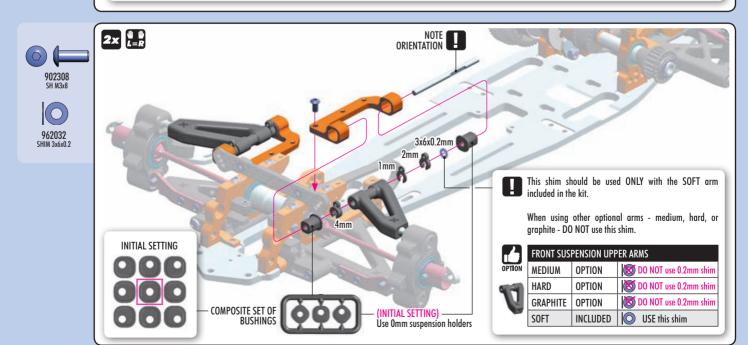


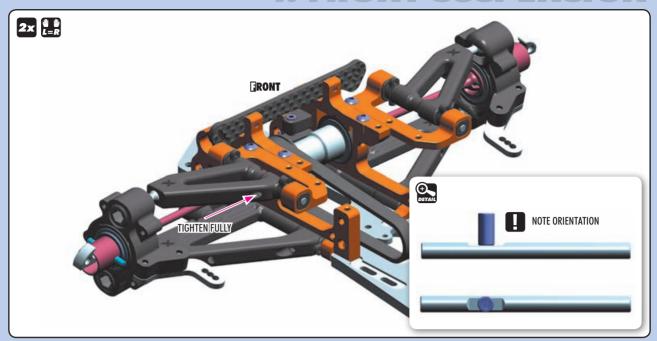




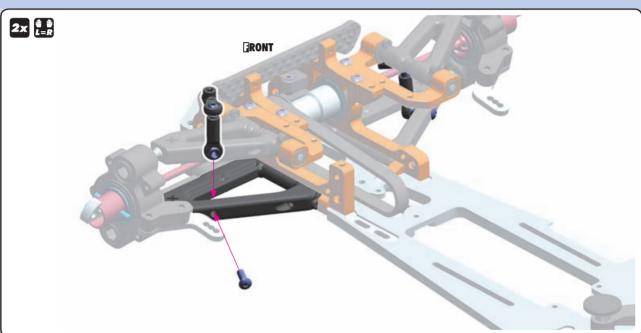
IMPORTANT!

The position of the front arm directly influences the steering Ackermann (angle of the steering linkages). When the arm is moved to rearward position (shim in front of the arm), the angle of the steering linkages changes and gives less Ackermann. By decreasing the Ackermann, the car gets more turn-in & increased steering at corner exit, but less cornering speed. The Ackermann can be changed by the Quick-Saver** (see page 33).

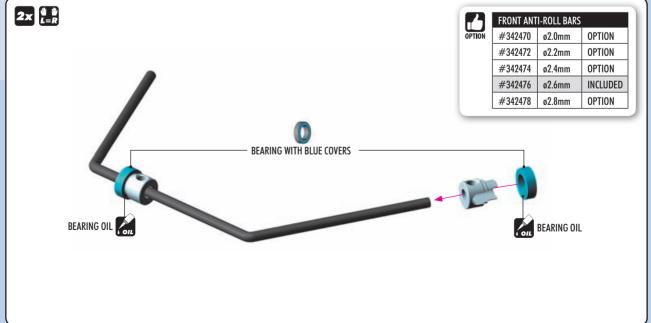


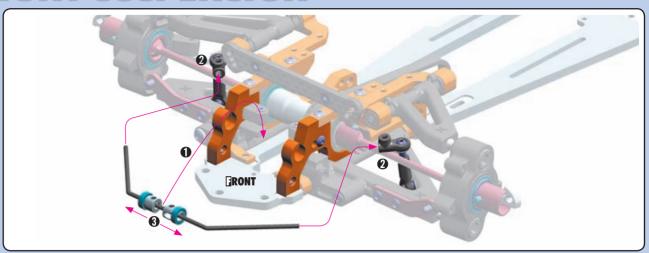






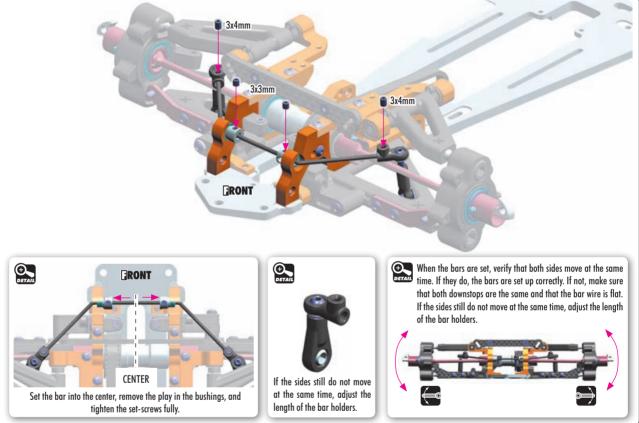




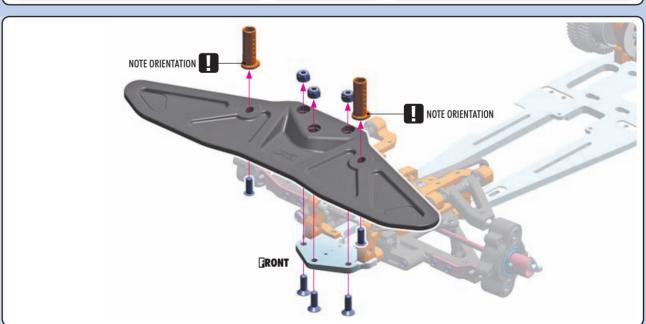






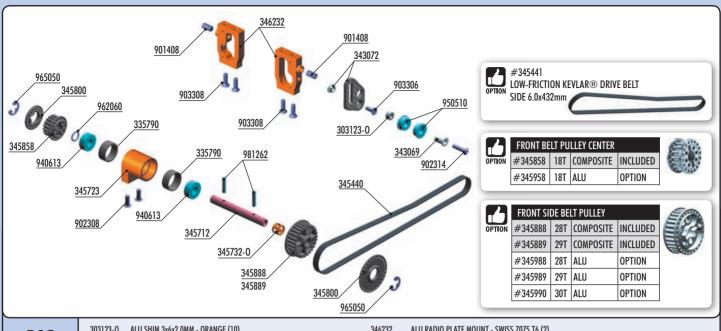








5. FRONT TRANSMISSION



BAG

303123-0 335790	ALU SHIM 3x6x2.0MM - ORANGE (10) COMPOSITE BALL-BEARING BUSHING FOR MIDDLE SHAFT (2)	346232	ALU RADIO PLATE MOUNT - SWISS 7075 T6 (2)
343069	STEEL BUSHING (2)	901408	HEX SCREW SB M4x8 (10)
343072	BELT TENSIONER SET - STEEL	902308	HEX SCREW SH M3x8 (10)
345440	PUR® REINFORCED DRIVE BELT SIDE 6.0 x 432 MM	902314	HEX SCREW SH M3x14 (10)
345712	FRONT MIDDLE SHAFT - LIGHTWEIGHT - HUDY SPRING STEEL™	903306	HEX SCREW SFH M3x6 (10)
345723	ALU FRONT MIDDLE SHAFT HOLDER	903308	HEX SCREW SFH M3x8 (10)
345732-0	ALU MIDDLE SHAFT LOCATING COLLAR - SHORT - LIGHTWEIGHT - ORANGE	940613	HIGH-SPEED BALL-BEARING 6x13x5 RUBBER SEALED (2)
345800	COMPOSITE BELT PULLEY COVER SET	950510	BALL-BEARING 5x10x4 FLANGED (2)
345858	COMPOSITE FRONT BELT PULLEY 18T ø6 - CENTER	962060	WASHER S 6x8x0.5 (10)
345888	COMPOSITE SIDE BELT PULLEY 28T - FRONT	965050	E-CLIP 5 (10)
345889	COMPOSITE SIDE BELT PULLEY 29T - FRONT	981262	PIN 2.5x12 (10)



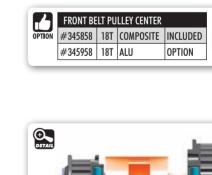




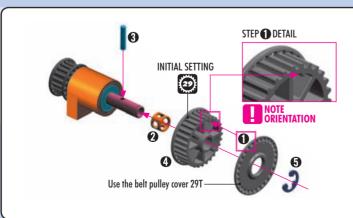


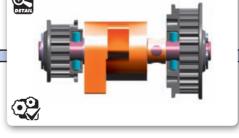






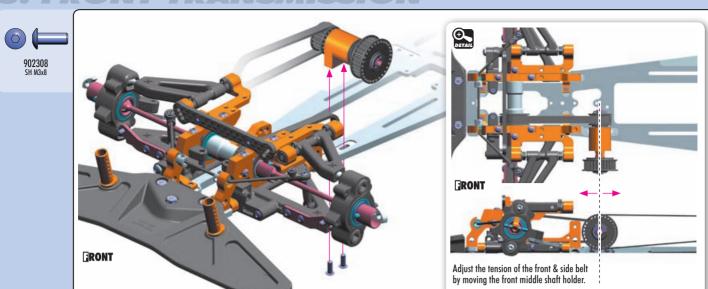


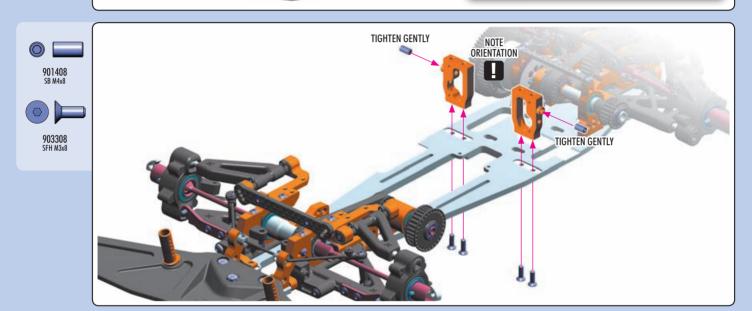


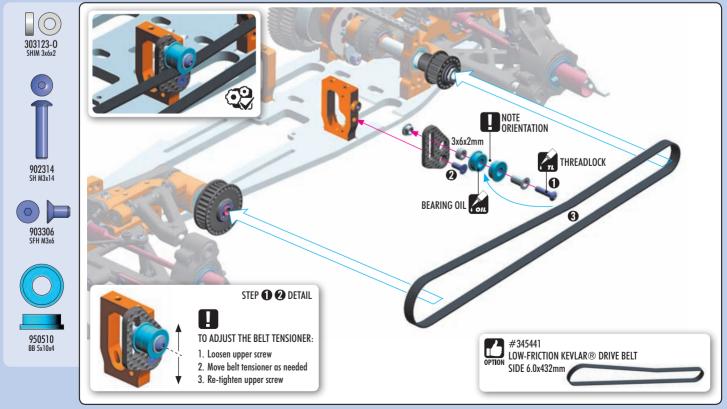


7	FRONT SIDE BELT PULLEY					
ON	#345888	28T	COMPOSITE	INCLUDED		
	#345889	29T	COMPOSITE	INCLUDED	E	
	#345988	28T	ALU	OPTION	-	
	#345989	29T	ALU	OPTION		
	#345990	30T	ALU	OPTION		

5. FRONT TRANSMISSION

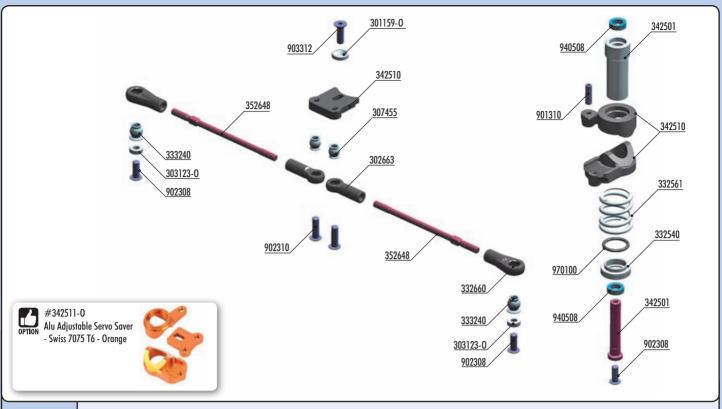








6. STEERING



BAG

301159-0 ALU COUNTERSUNK SHIM - ORANGE (4) 302663 COMPOSITE BALL JOINT 4.9MM - OPEN - V2 (8) 303123-0 ALU SHIM 3x6x2.0MM - ORANGE (10)

307455 PIVOT BALL 4.9 MM DOUBLE BEVEL SHOULDERS (10)

332540 ALU SERVO SAVER ADJUSTABLE NUT 332561 SERVO SAVER SPRING C=14

332660 COMPOSITE STEERING & SERVO BALL JOINT 5.8 MM (4+2)

333240 BALL UNIVERSAL 5.8 MM HEX (4)
342501 SERVO SAVER COMPLETE SET

342510 COMPOSITE SERVO SAVER

352648 ADJ. TURNBUCKLE M3 L/R 62 MM - HUDY SPRING STEEL (2)

901310 HEX SCREW SB M3x10 (10) 902308 HEX SCREW SH M3x8 (10) 902310 HEX SCREW SH M3x10 (10) 903312 HEX SCREW SFH M3x12 (10)

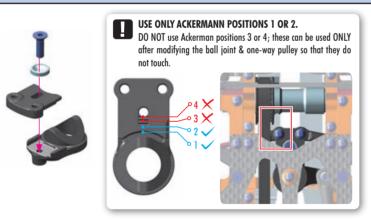
940508 HIGH-SPEED BALL-BEARING 5x8x2.5 RUBBER SEALED (2)

970100 O-RING 10 x 1.5 (10)









THERE ARE 4 DIFFERENT ACKERMANN SETTINGS POSSIBLE WITH THE QUICK-SAVER™
For initial Ackermann setting, use Step 1 (2nd shortest length).



STEP 1 gives the most Ackermann and makes the car understeer more into & out of corners. It offers good cornering speed and creates very good traction mainly in chicanes, because the car will be more stable. Recommended for tracks with long sweepers where a lot of cornering speed is needed.

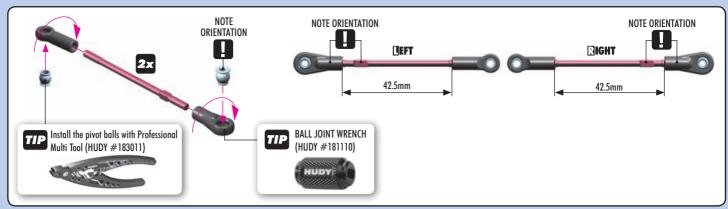


STEP 4 gives the least Ackermann and creates a lot of steering into & out of corners. However, the car is more difficult to drive in chicanes because there is less traction and stability.

Recommended for tracks where a lot of in-corner steering is needed.



6. STEERING

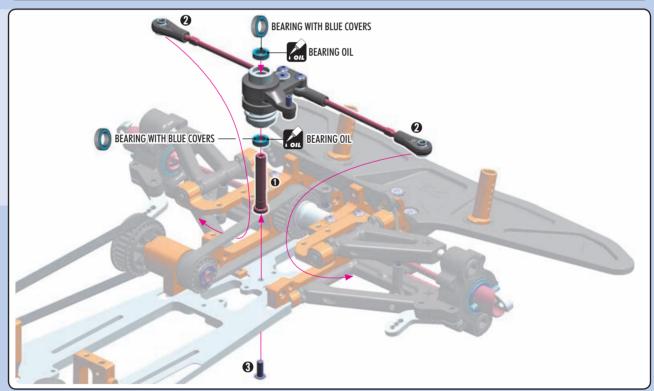




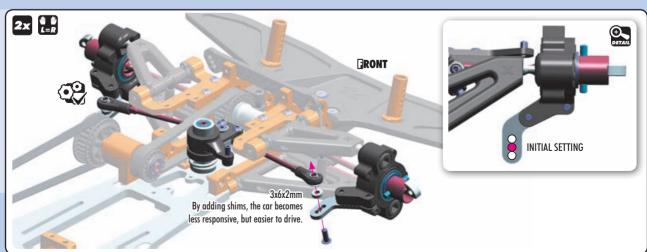






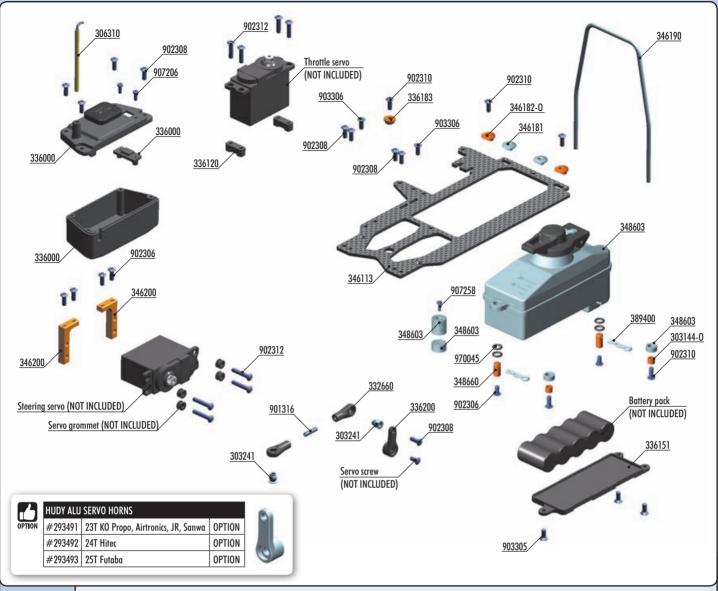








7. FUEL TANK & ELECTRONICS





 303144-0 ALU SHIM 3x5x4.0MM - ORANGE (10)
 34

 303241 BALL UNIVERSAL 5.8 MM HEX (4)
 34

 306310 ANTENNA TUBE (2)
 34

 332660 COMPOSITE STEERING & SERVO BALL JOINT 5.8 MM (4+2)
 34

 336000 COMPOSITE RECEIVER CASE
 34

 336120 COMPOSITE STEERING SERVO HOLDER - SET - V2
 34

336151 COMPOSITE BATTERY PLATE
336200 COMPOSITE STEERING SERVO ARMS - SET

336183 ALU RADIO PLATE MULTI-FLEX™ BUSHING

346113 GRAPHITE RADIO PLATE

346181 ALU RADIO PLATE TWEAK BUSHING HARDCOATED (2) 346182-0 ALU RADIO PLATE BUSHING FIXED - ORANGE (2)

346190 ROLL-OVER BAR

346200 ALU SERVO MOUNT - SWISS 7075 T6 (2)

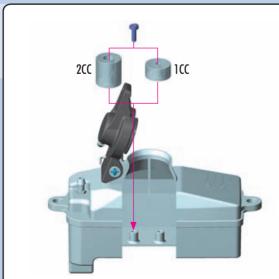
348603 FUEL TANK 125CC - SET
348660 ALU FUEL TANK MOUNT (2)
389400 MICRO BODY CLIP (10)
901316 HEX SCREW SB M3x16 (10)

902306 HEX SCREW SH M3x6 (10) 902308 HEX SCREW SH M3x8 (10) 902310 HEX SCREW SH M3x10 (10)

902312 HEX SCREW SH M3x12 (10) 903305 HEX SCREW SFH M3x5 (10) 903306 HEX SCREW SFH M3x6 (10)

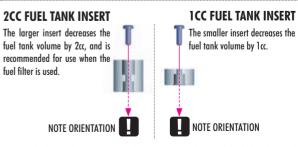
907206 SCREW PHILLIPS M2x6 (10) 907258 SCREW PHILLIPS M2.5x8 (10) 970045 O-RING 4.5x1.5 (10)





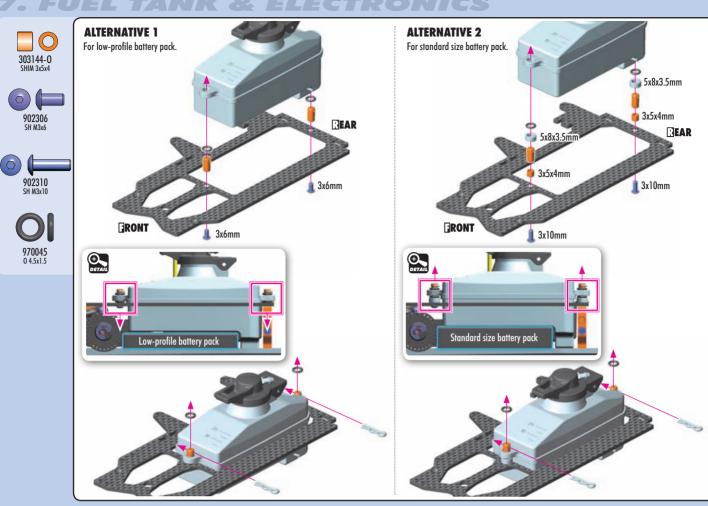
The fuel tank has a larger fuel volume and includes OPTIONAL tank inserts for decreasing the volume of the tank. Using the inserts allows you to adjust the volume of fuel inside the tank; this works in conjunction with variables such as fuel filter capacity and/or length of fuel line to ensure you have the legal fuel volume limit for racing.

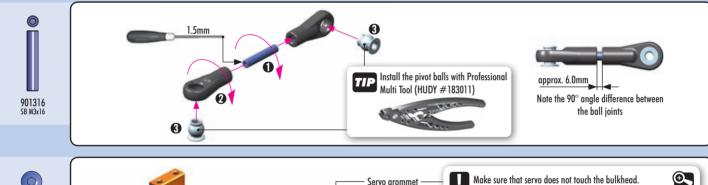
Tube holders are easily connected to the fuel tank by screws. Using screws is much more secure than using glue to attach the holders to the fuel tank.

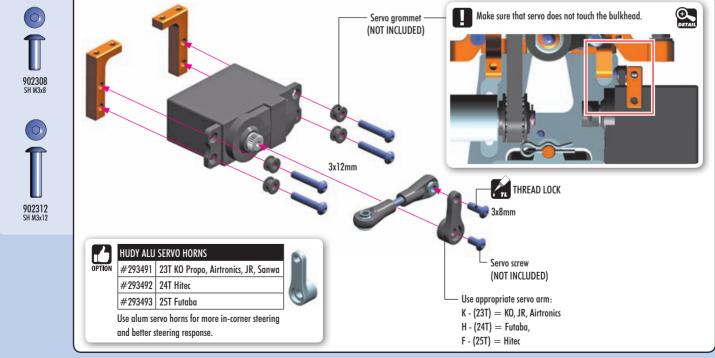


NOTE: The fuel tank insert can be easily mounted to the bottom of the fuel tank using the provided screw, when the fuel tank cap is opened fully.

7. FUEL TANK & ELECTRONICS

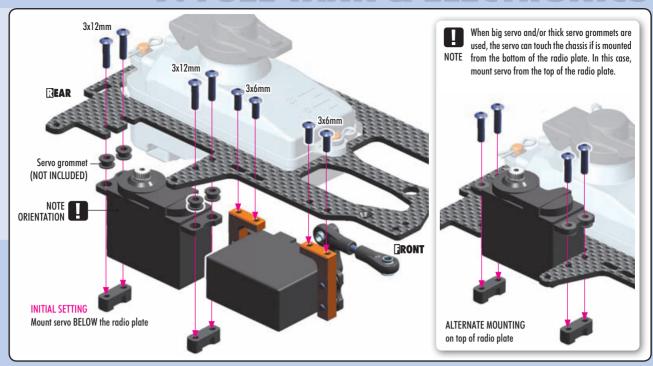






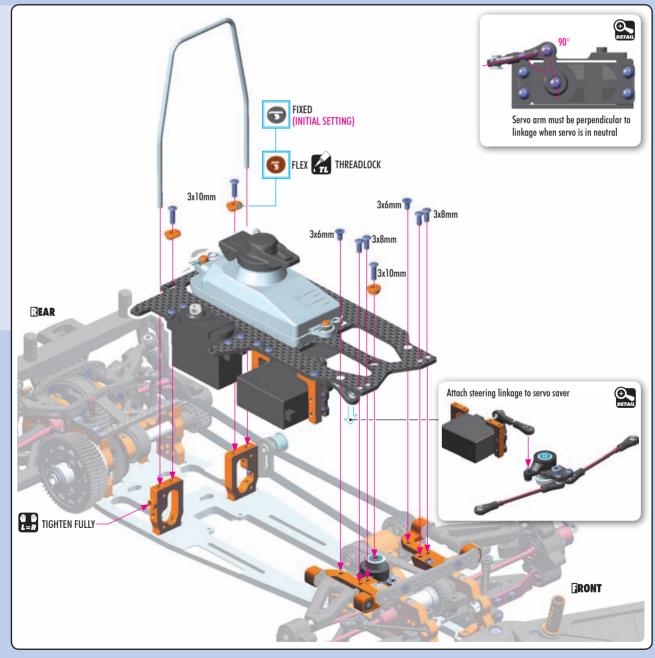
7. FUEL TANK & ELECTRONICS





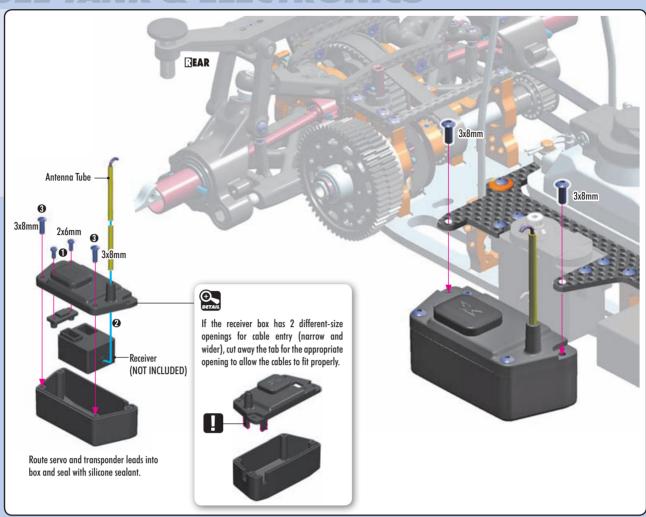


903306 SFH M3x6



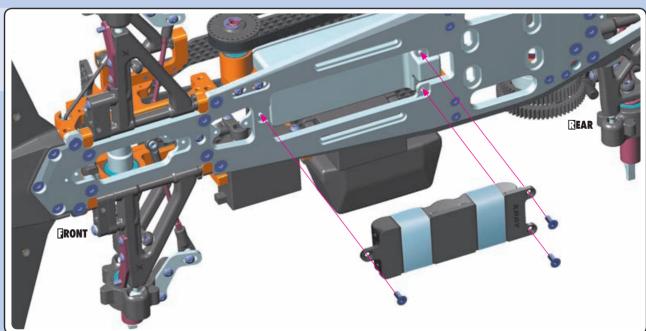
7. FUEL TANK & ELECTRONICS





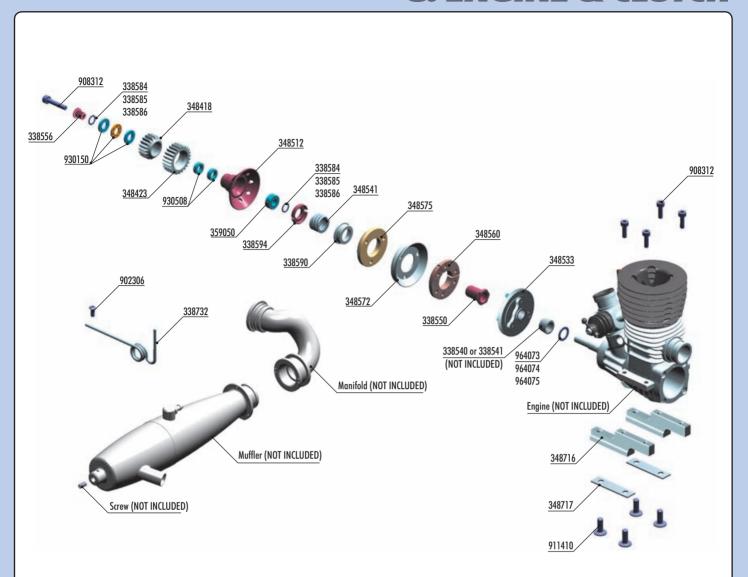




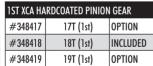




8. ENGINE & CLUTCH









2ST XCA HARDCOATED PINION GEAR			
#348422	22T (2nd)	OPTION	
#348423	23T (2nd)	INCLUDED	
#348424	24T (2nd)	OPTION	
#348425	25T (2nd)	OPTION	





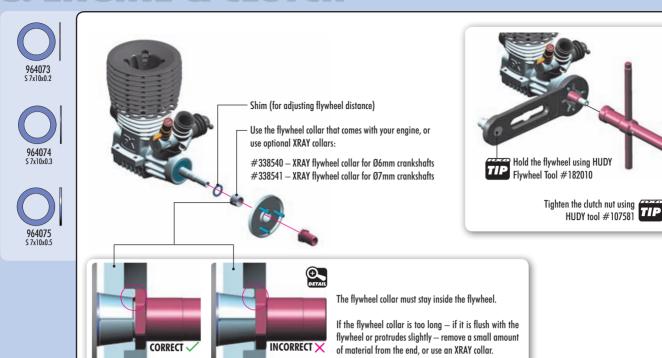




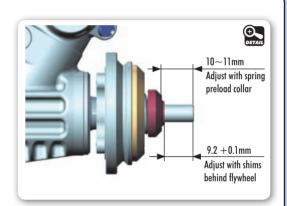
338540	FLYWHEEL COLLAR 7MM - NOVAROSSI (OPTION)	348560	CLUTCH FLYWEIGHT SET
338541	FLYWHEEL COLLAR 6MM - PICCO (OPTION)	348572	ALU CLUTCH DISK - CONICAL - SWISS 7075 T6
338550	FLYWHEEL NUT - HUDY SPRING STEEL™	348575	CLUTCH SHOE - YELLOW
338556	THRUSTBEARING COLLAR - HUDY SPRING STEEL™	348716	ALU ENGINE MOUNT (2)
338584	SHIM 5x7x0.2 (10)	348717	STAINLESS STEEL ENGINE MOUNT SHIM (2)
338585	SHIM 5x7x0.3 (10)	359050	CLUTCH BELL BALL-BEARING 5x10x4 (2)
338586	SHIM 5x7x0.5 (10)		
338590	CLUTCH SPRING CUP - ALU 7075 T6	902306	HEX SCREW SH M3x6 (10)
338594	CLUTCH PRELOAD ADJ. NUT - HUDY SPRING STEEL™	908312	HEX SCREW SOCKET HEAD CAP M3x12 (10)
338732	EXHAUST MOUNTING WIRE - EXTRA-LONG	911410	HEX SCREW FLANGED SH M4x10 (10)
348418	XCA ALU PINION GEAR 18T (1ST) - 7075 T6 - HARDCOATED - LARGE	930150	CARBIDE AXIAL THRUSTBEARING F5-10 5x10x4
348423	XCA ALU PINION GEAR 23T (2ND) - 7075 T6 - HARDCOATED - LARGE	930508	BALL-BEARING 5x8x2.5 (2)
348502	XCA (XRAY CENTRIFUGAL-AXIAL) CLUTCH SET - REVERSE - SMALL	964073	WASHER S 7x10x0.2 (10)
348512	XCA CLUTCHBELL FOR SMALLER PINION GEARS - HUDY STEEL	964074	WASHER S 7x10x0.3 (10)
348533	FLYWHEEL - FLAT - HARDCOATED	964075	WASHER S 7x10x0.5 (10)
348541	CLUTCH SPRING - ULTRA-STABLE		

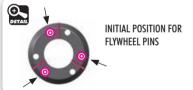
RX81E

8. ENGINE & CLUTCH











TECH TIP FOR RX8 CLUTCH SHOE

To ensure that the RX8 clutch shoe works properly and for a long time, it is very important to run in the clutch shoe.



⊕. DETAU

Please follow these run-in steps to help ensure proper clutch operation:

1 Install clutch according to manual.



3 When you start the engine, the clutch should start engage under low RPM. If the clutch engages only under high RPM, stop the engine and loosen the spring preload collar. Repeat until the clutch engages under low RPM.

4 Run in the clutch shoe on the track, or on the starter box if you have only limited time. (We recommend running it in on the track.)

3 Run in the clutch shoe for 1 tank of fuel using a soft preload setting, and then after that slightly tighten the spring preload. DO NOT run in the clutch shoe under high RPM.

6 Continue this process until the clutch shoe is properly run in; this will be indicated by a dark and glossy surface colour on the top of the clutch shoe.

TECH TIP FOR EXTRA BOTTOM-END POWER

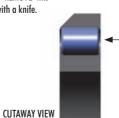
For extra bottom-end power, thread a M3x4 set-screw (#901304) into each clutch flyweight as shown. The set-screw will add more weight to the end of the flyweight which will cause the flyweight to open harder, giving more bottom-end power. This is recommended for high-traction tracks where bottom-end power is required.

IMPORTANT!

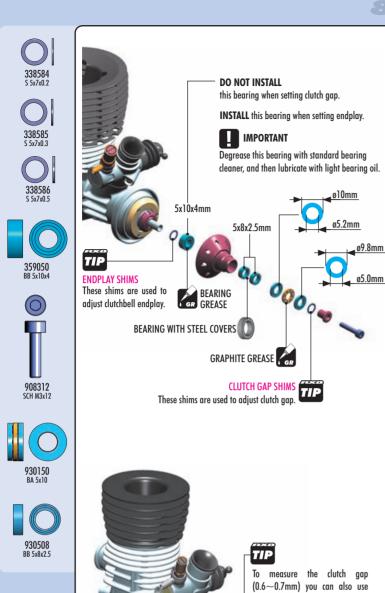
Install set-screw into free (non-pivot) end of flyweight.

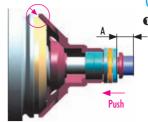


After inserting the set-screw, some excess material may come out of the hole. REMOVE this excess material with a knife.





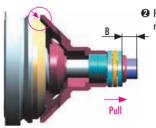




(1) ADJUSTING THE CLUTCH GAP

• Install the clutchbell, outer ball-bearing (small), and thrustbearing assembly on the engine crankshaft. DO NOT install the inner ball-bearing or internal shims.

Push the clutchbell onto the clutch shoe and measure distance A as indicated.



2 Pull the clutchbell away from the clutch shoe and measure distance B as indicated.



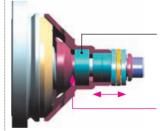
The clutch gap is A - B; the correct gap is 0.6-0.7mm

> If the clutch gap is greater than this, you can easily calculate the thickness of shims required to set correct gap:
> Thickness of shims required (in mm) = A-B-0.7

For example, using the values A=5.5 mm, B=4.5mm

Shim thickness = 5.5-4.5-0.7=0.3mm

Place shims on the small collar, outside the thrustbearing assembly.



(2) ADJUSTING THE ENDPLAY

Measure endplay with this bearing installed

Apply shims on crankshaft to set endplay to 0.05-0.15mm

Insert ENDPLAY SHIMS here (approximately 0.7~1.0mm)

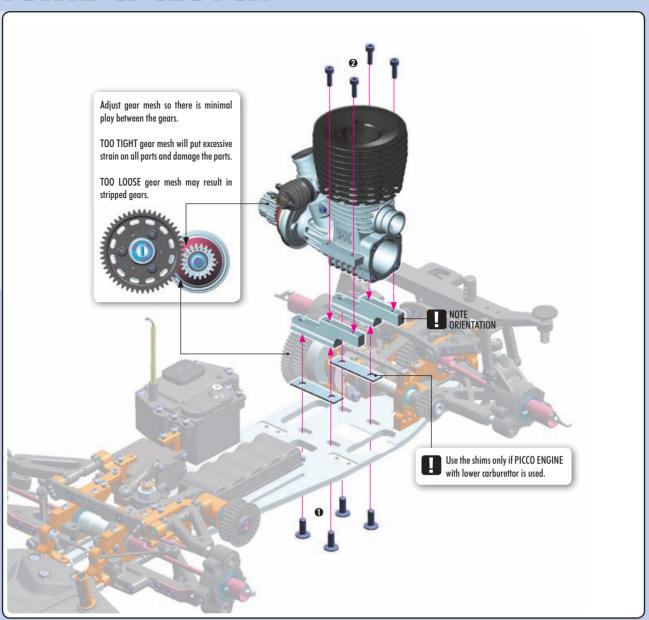




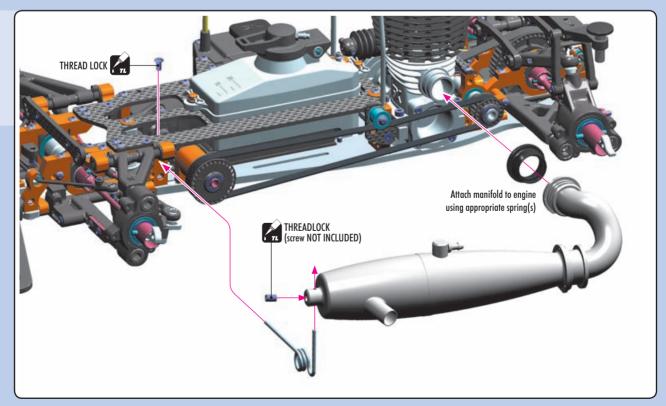
HUDY Flywheel Tool #182010

8. ENGINE & CLUTCH

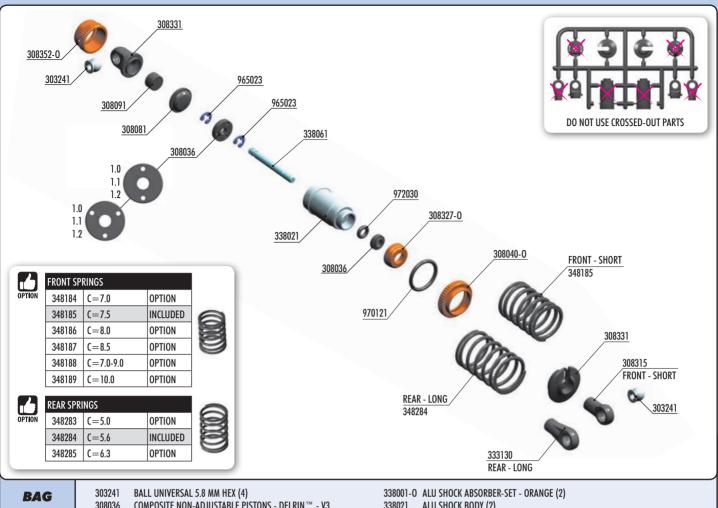








9. SHOCK ABSORBERS



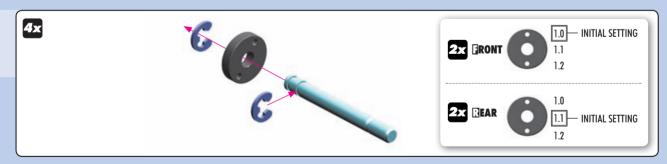
DAG 09

303241 BALL UNIVERSAL 5.8 MM HEX (4)
308036 COMPOSITE NON-ADJUSTABLE PISTONS - DELRIN™ - V3
308040-0 SHOCK ADJ. NUT ALU + O-RING - ORANGE (4)
308081 SHOCK ABSORBER MEMBRANE - LOW (4)
308091 SHOCK FOAM INSERTS - LOW (4)
308315 COMPOSITE SHOCK BALL JOINT - LONG (4)
308327-0 ALU CAP FOR XRAY SHOCK BODY - ORANGE (2)
308331 COMPOSITE FRAME SHOCK PARTS 4-STEP - SHORT
308352-0 ALU SHOCK CAP-NUT WITH HOLE - ORANGE (2)
333130 COMPOSITE REAR UPPER CAMBER LINK BALL JOINT 5.8 MM (4)

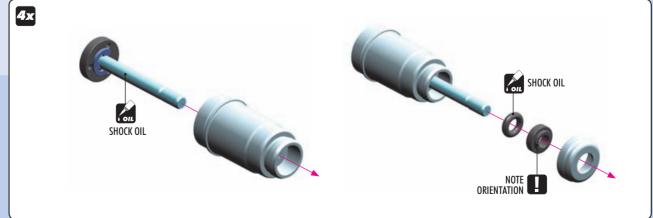
338021 ALU SHOCK BODY (2)
338061 HARDENED SHOCK SHAFT (2)
348185 XRAY SPRING-SET C=7.5 - FRONT (2)
348284 XRAY SPRING-SET C=5.6 - REAR (2)

965023 E-CLIP 2.3 (10) 970121 O-RING 12.1x1.6 (10) 972030 SILICONE O-RING 3x2 (10)

965023 C 2.3

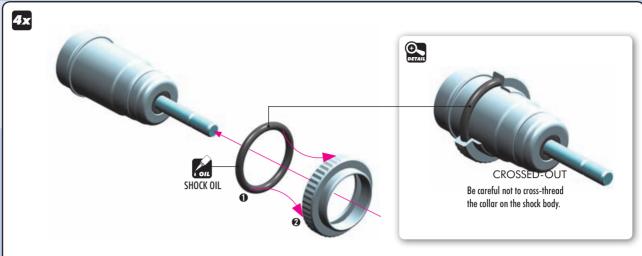


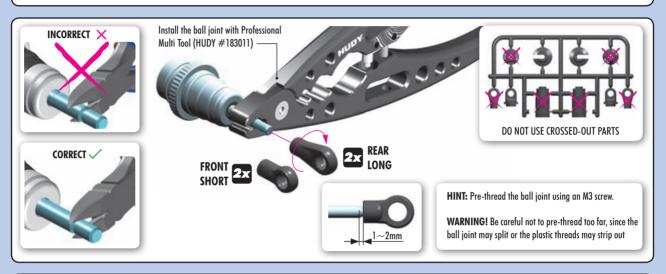




9. SHOCK ABSORBERS









SHOCK FILLING

- Fully extend the piston rod so the piston is at the bottom of the shock body.
- Hold the shock upright and slightly overfill the shock body with shock oil.
- Let the oil settle and allow air bubbles to rise to the top. Slowly move the piston up and down until no more air bubbles appear. Add shock oil as necessary.
- Pull the piston rod most of the way out of the shock body. Let the shock rest for 5 minutes to allow the air bubbles to escape.







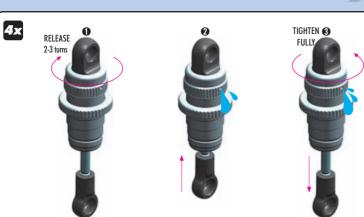
When installing the shock cap assembly on the shock body, some oil will leak out... this is normal.

Fully tighten the cap and clean off any excess oil.

After the shock is assembled, the shock rod will push itself out of the shock body fairly quickly.

Follow the next procedure to adjust the rebound.

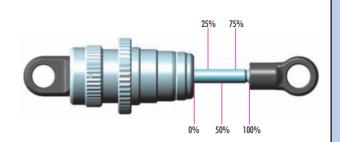




REBOUND ADJUSTMENT

AFTER THE SHOCK IS ASSEMBLED YOU HAVE TO SET THE SHOCK REBOUND

- Release the shock cap by 2-3 turns.
- 2 Push the shock shaft fully up. For the first time the extra oil will release through the hole in the alu cap-nut.
- Tighten the shock cup. When tightening the shock cap, extra oil will again release through the hole in the alu cap nut. When tightening, the shock shaft will push out from the shock body.



REBOUND CHECK

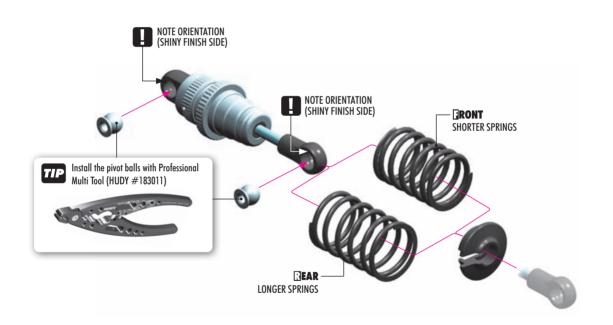
It is very important to push the shock shaft into the shock body slowly otherwise air can come into the shock body which would create bubles.

100% rebound - repeat step 2 and 3 two - three times

75% rebound - repeat step 2 and 3 until the shock shaft will push out 75% of its length
50% rebound - repeat step 2 and 3 until the shock shaft will push out 50% of its length
25% rebound - repeat step 2 and 3 until the shock shaft will push out 25% of its length
0% rebound - repeat step 2 and 3 until the shock shaft will push out 0% of its length

If the shock shaft does not rebound enough, you will have to refill the shock with shock oil, and then repeat the bleeding and rebound adjustment procedure.







SHOCK SPRING RETAINING COLLAR					
#308031	ALU - SILVER	OPTION			
#308031-0	ALU - ORANGE	OPTION			
#308031-K	ALU - BLACK	OPTION			
#308331	COMPOSITE	INCLUDED			



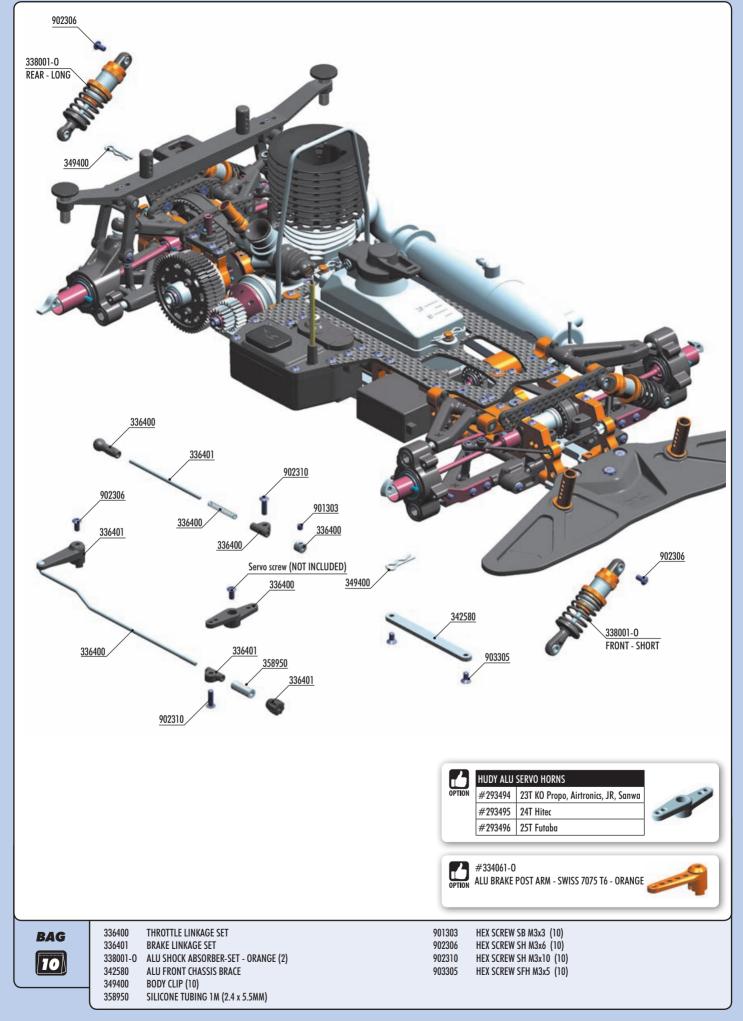


SHOCK LENGTH ADJUSTMENT

It is VERY important that all shocks are equal length.

Fully extend the shock absorber and measure the end-to-end length; we recommend using digital calipers to give an accurate measurement. If a shock absorber is shorter or longer than others, adjust the shock length by tightening or loosening the ball joint on the shock rod.

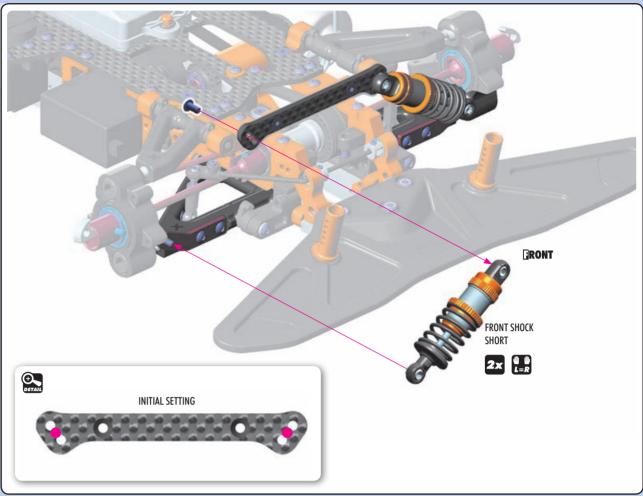
10. FINAL ASSEMBLY



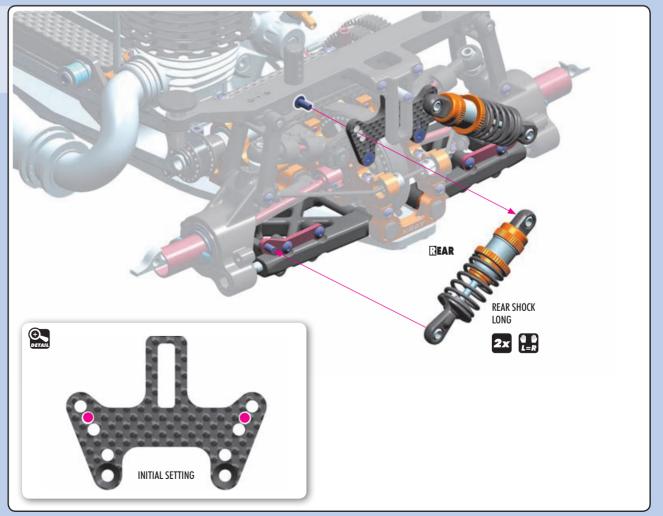


10. FINAL ASSEMBLY

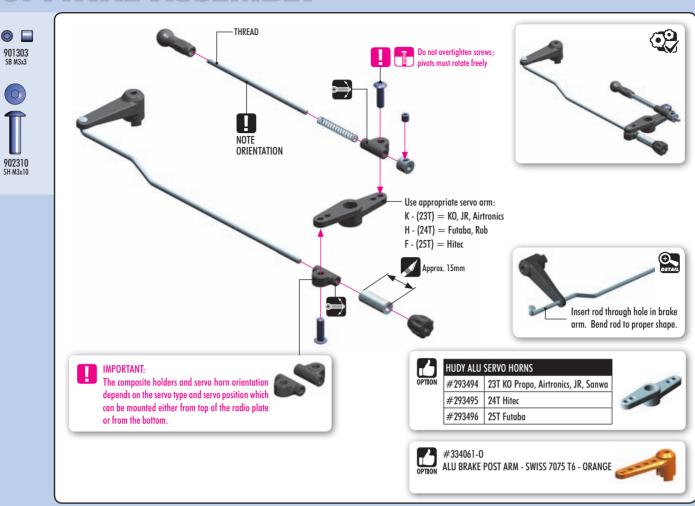


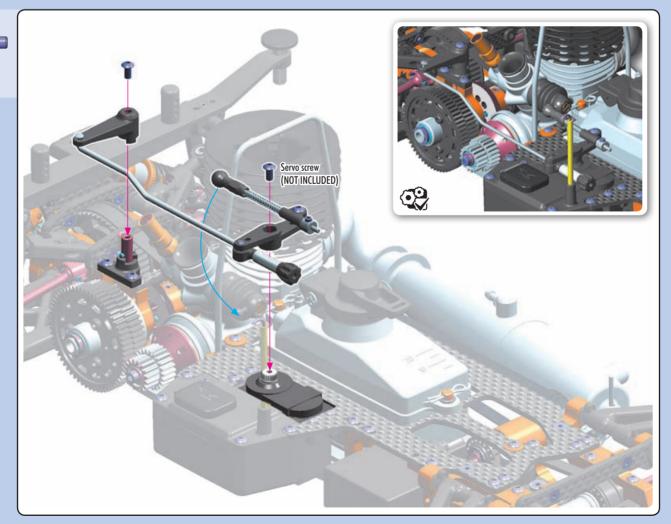






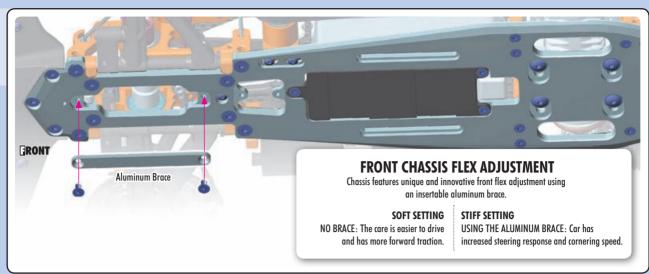
10. FINAL ASSEMBLY

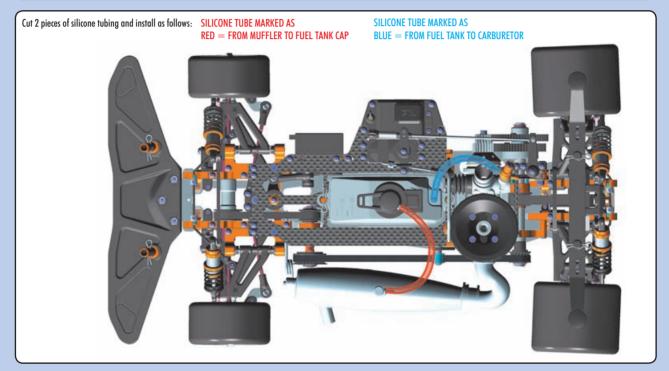




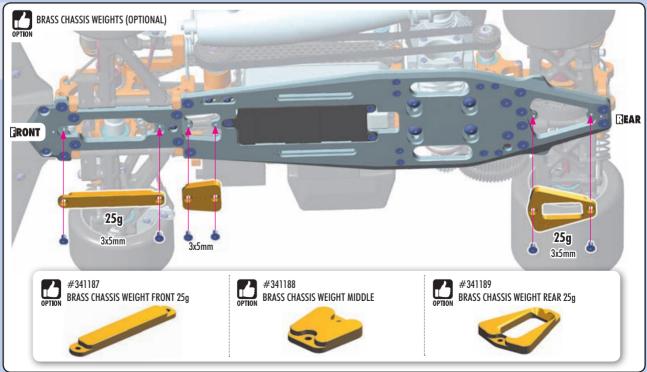
902306 SH M3x6











CARB LINKAGE ADJUSTMENT

NEUTRAL (IDLE)

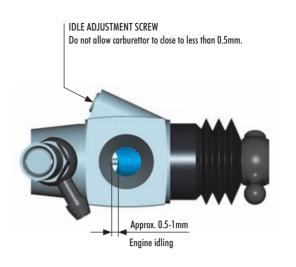


Turn on transmitter and receiver and set the throttle servo trim to the neutral position.

Adjust the idle adjustment screw on the carburetor to open approx. 0.5-1 mm.

Adjust both collars on the carb and brake linkages accordingly. The carb linkage must have approximately 0.5mm of preload on the spring at neutral.

DO NOT ADJUST while the engine is running.



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.



BRAKE

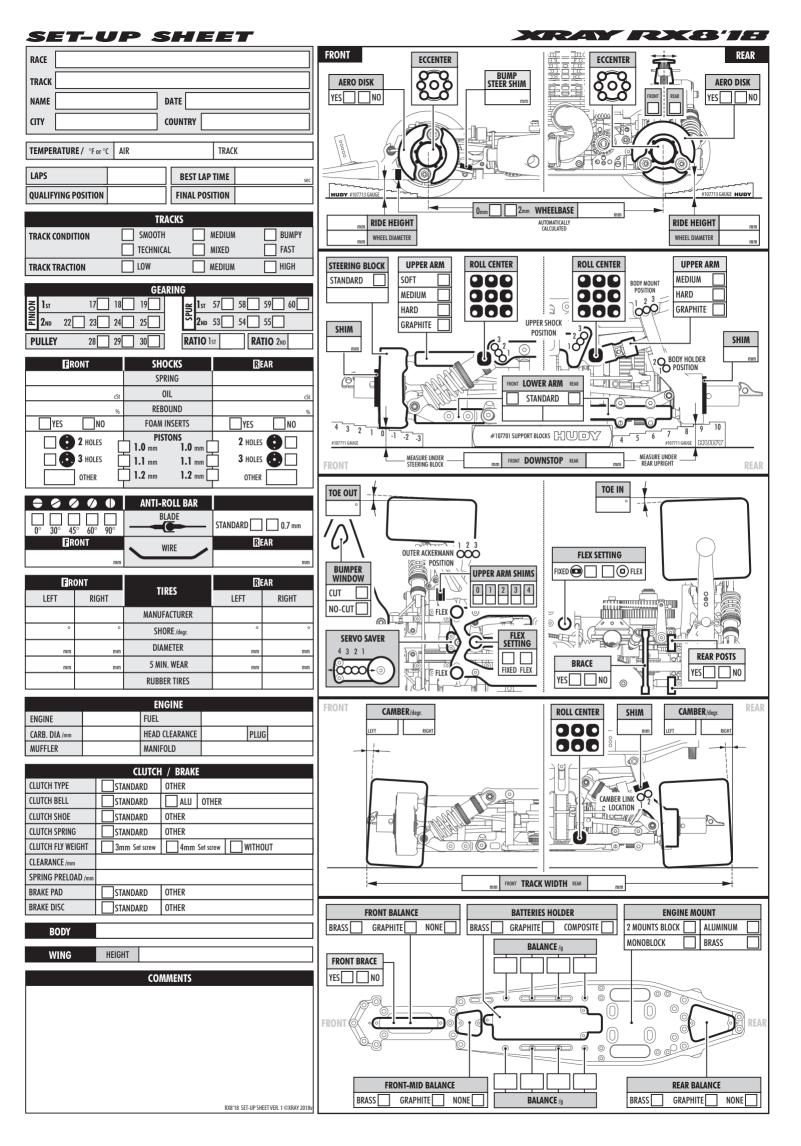


Adjust the composite collar on the brake linkage so the brakes work smoothly.

If the brakes apply too much or not enough, adjust the collar accordingly. If your transmitter has throttle servo lowend point adjustment (or brake adjustment), use that to set the appropriate amount of throttle servo horn throw.







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