1/10 LUXURY NITRO TOURING CAR



INSTRUCTION MANUAL
XRAY NT1.3

BEFORE YOU START

This is a high-competition, high-quality RC 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 XRAY, 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

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 our customers

You can join thousands of XRAY fans and enthusiasts in our online community at:

www.teamxray.com

carefully and fully understand the instructions before beginning assembly.

Make sure you review this entire manual, download and use set-up book from the web, and examine all details carefully. If for some reason you decide this is not what you wanted or expected, do not continue any further. Your hobby dealer can not accept your 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

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 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
- 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.
- 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 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 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 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, 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.

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 newlypurchased 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!

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 threadlock



Apply oil (may indicate specific type)



Apply cyanoacrylate (CA) glue



Apply grease



Assembly view



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)



Detail view



Number of teeth



Pay attention here

Follow tip here

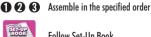
NOT INCLUDED



Use pliers



Part bags used



Follow Set-Up Book

INCLUDED



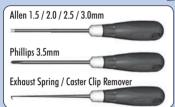
Silicone Shock Oil (HUDY #106360 600cSt)



Silicone Diff Oil (HUDY #106560 60.000cSt) (HUDY #106630 300.000cSt)

To ensure that you always have access to the most up-to-date version of the XRAY Set-up Book, XRAY will now be offering only the digital online version at our Website at www.teamxray.com. By offering this online version instead of including a hardcopy printed version in kits, you will always be assured of having the most up-to-date version.

TOOLS REQUIRED

























EOUIPMENT REOUIRED











Fibre Tape (HUDY #107870)



Wheels & Tires



 $\mathsf{Fuel} + \mathsf{Fuel} \ \mathsf{Bottle}$

(HUDY #104200)











Bearing Oil (HUDY #106230)

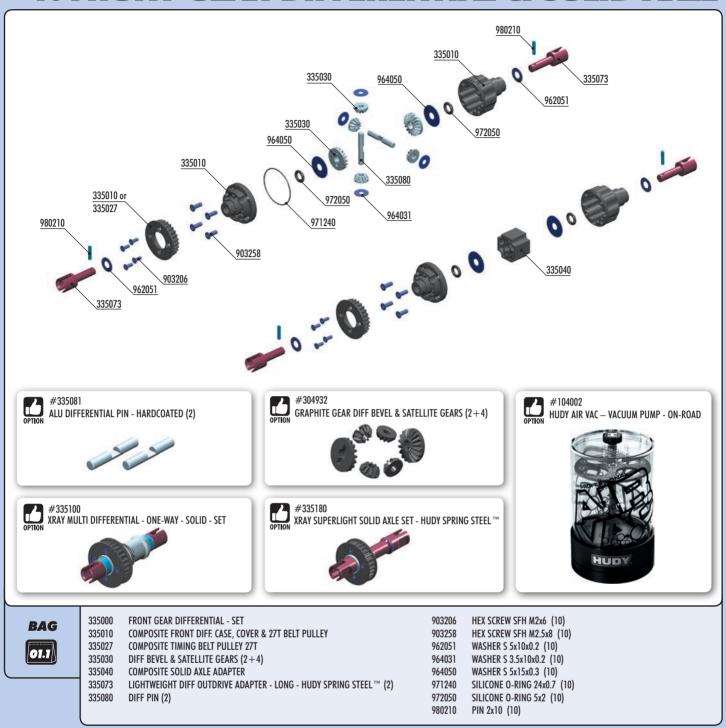


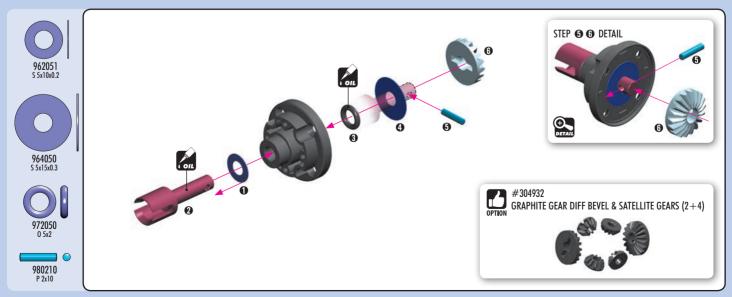




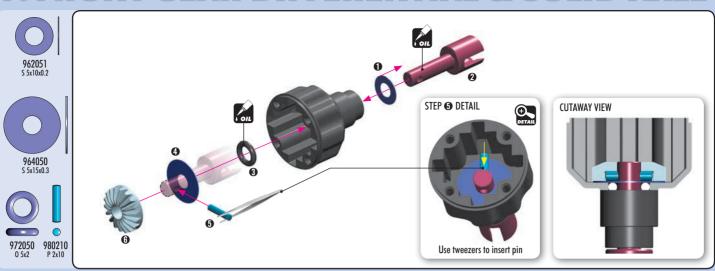


1. FRONT GEAR DIFFERENTIAL & SOLID AXLE

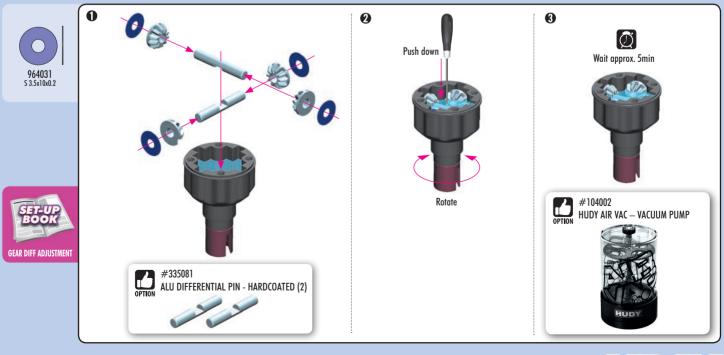




1. FRONT GEAR DIFFERENTIAL & SOLID AXLE







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 Π After disassembling the differential, the large O-ring may have an increased size and may be more difficult to re-install. We recommend either replacing the O-ring with a new one or carefully re-inserting the old O-ring in the diff cover.



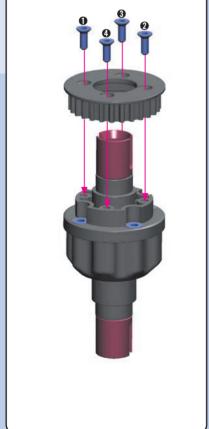


Tighten the screws equally but do NOT tighten them completely



Finish tightening in this order





SOLID AXLE



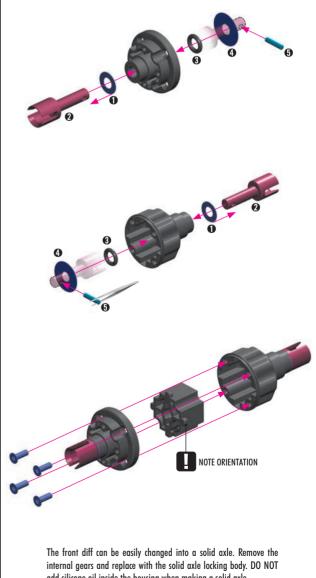






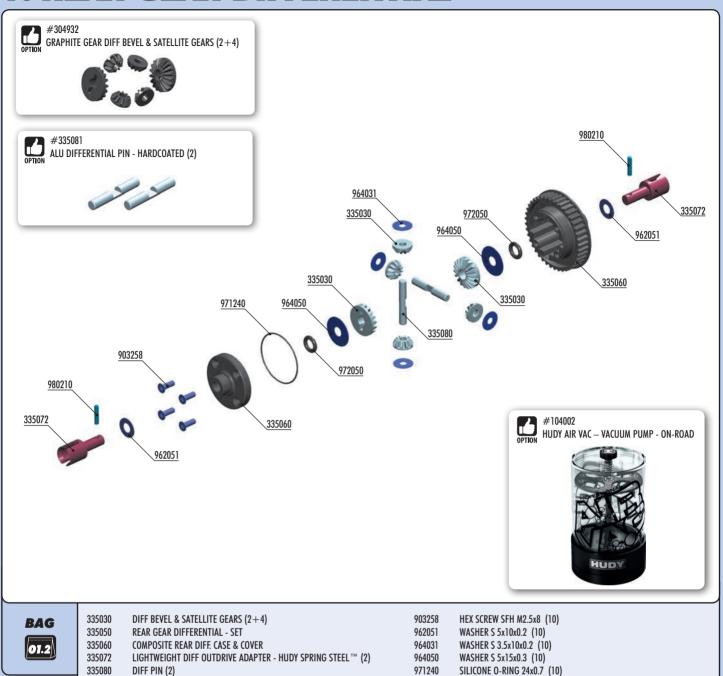


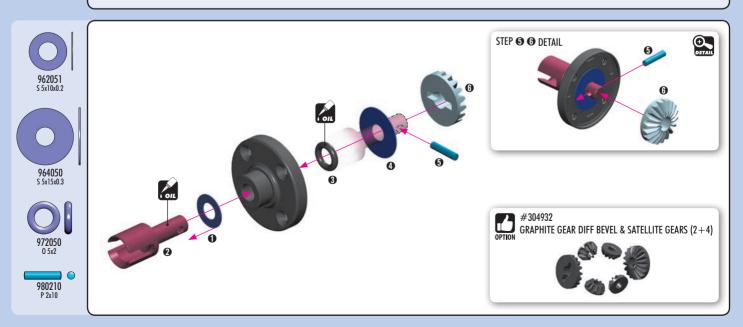




add silicone oil inside the housing when making a solid axle.

1. REAR GEAR DIFFERENTIAL





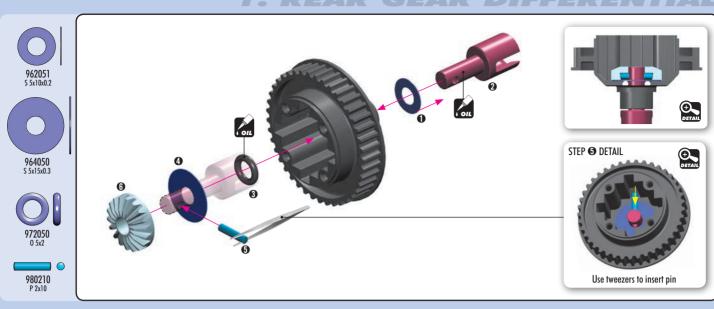
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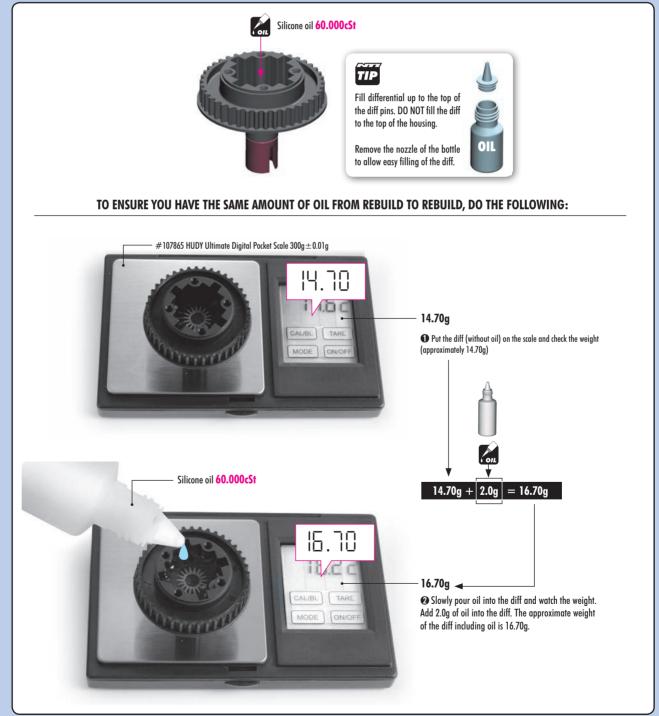
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SILICONE O-RING 5x2 (10)

PIN 2x10 (10)

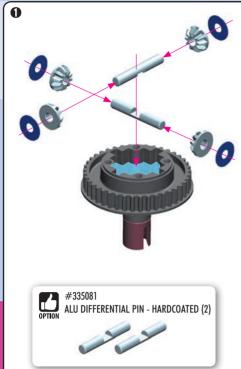
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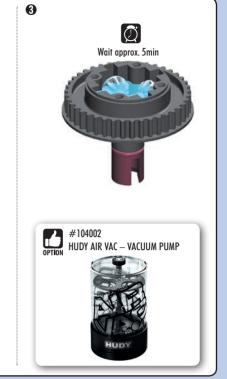


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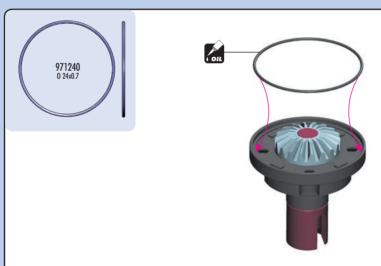








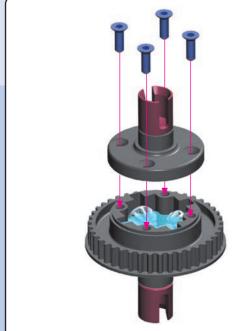




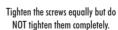


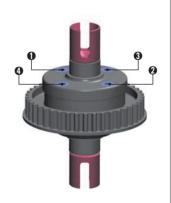
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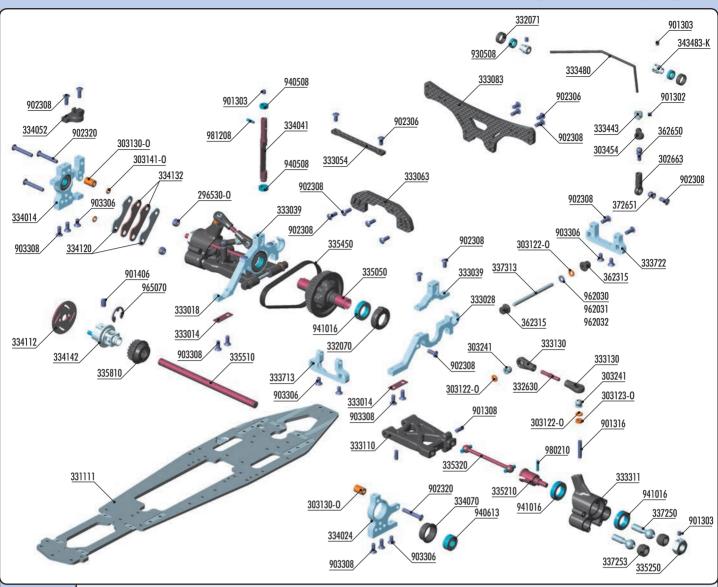








Finish tightening in this order.



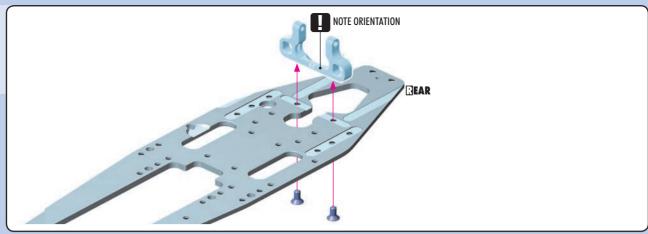
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296530-0 ALU NUT M3 - ORANGE (10) 335210 DRIVE AXLE - HUDY SPRING STEEL™ COMPOSITE BALL JOINT 4.9MM - OPEN - V2 (8) ALU WHEEL HUB 12MM - BLACK (2)
DRIVE SHAFT - 60 MM - HUDY SPRING STEEL™ 302663 335250 303122-0 ALU SHIM 3x6x1.0MM - ORANGE (10) 303123-0 ALU SHIM 3x6x2.0MM - ORANGE (10) 335320 335450 PUR®-REFINFORCED DRIVE BELT REAR 5.5 x 177 MM 303130-0 ALU SHIM 3x6x9.0MM - ORANGE (10) 335510 2-SPEED SHAFT - V2 303141-0 ALU SHIM 3x5x1.0MM - ORANGE (10) 335810 COMPOSITE BELT PULLEY 20T - 2-SPEED-CENTER 303241 BALL UNIVERSAL 5.8 MM HEX (4) 337250 STEEL PIVOT BALL 8.4 MM (2) BALL JOINT 4.9MM - OPEN (4) COMPOSITE ADJUSTING NUT M10x1 WITH BALL CUP (4) 303454 337253 CHASSIS 3MM - CNC MACHINED - SWISS 7075 T6 REAR LOWER INNER PIVOT PIN (2) 331111 337313 COMPOSITE ADJUST. BALL-BEARING HUB (4) ALU CUTTED ANTI-ROLL BAR COLLAR o2.3 - BLACK (2) 332070 343483-K ECCENTRIC BUSHING SET (2)
BALL END 4.9MM WITH THREAD 6MM (2) COMPOSITE BALL-BEARING HUB (4) 332071 362315 332630 ADJ. TURNBUCKLE L/R 25 MM - HUDY SPRING STEEL™ (2) 362650 BULKHEAD SHIM (2) PIVOT BALL UNIVERSAL 4.9 MM - HUDY SPRING STEEL (2) 333014 372651 ALU LOWER BULKHEAD REAR RIGHT - BLACK - SWISS 7075 T6 333018 HEX SCREW SB M3x2.5 (10) HEX SCREW SB M3x3 (10) ALU LOWER BULKHEAD REAR LEFT - BLACK - SWISS 7075 T6 901302 333028 ALU UPPER CLAMP REAR (L+R - BLACK - SWISS 7075 T6 333039 901303 GRAPHITE REAR BULKHEAD BRACE HEX SCREW SB M3x8 (10) 333054 901308 333063 **GRAPHITE ROLL-CENTER BRIDGE** 901316 HEX SCREW SB M3x16 (10) 333083 **GRAPHITE SHOCK TOWER REAR** 901406 HEX SCREW SB M4x6 (10) 333110 **COMPOSITE SUSPENSION ARM REAR LOWER - V2** 902306 HEX SCREW SH M3x6 333130 COMPOSITE REAR UPPER CAMBER LINK BALL JOINT 5.8 MM (4) 902308 HEX SCREW SH M3x8 (10) COMPOSITE UPRIGHT REAR FOR AERO DISC 902320 HEX SCREW SH M3x20 (10) 333311 ALU ANTI-ROLL BAR COLLAR o2.2 (2) HEX SCREW SFH M3x6 (10) 333443 903306 333480 ANTI-ROLL BAR FOR BALL-BEARINGS - REAR 2.0 MM 903308 HEX SCREW SFH M3x8 (10) BALL-BEARING 5x8x2.5 STEEL SEALED - OIL (2) ALU REAR LOWER 1-PIECE SUSPENSION HOLDER - FRONT - BLACK - RF 333713 930508 BALL-BEARING 5x8x2.5 RUBBER SEALED - OIL (2) ALU REAR LOWER 1-PIECE SUSPENSION HOLDER - REAR - BLACK - RR 940508 333777 ALU BRAKE STAND - BLACK - SWISS 7075 T6 BALL-BEARING 6x13x5 RUBBER SEALED - OIL (2) 334014 940613 BALL-BEARING 10x16x4 RUBBER SEALED - OIL (2) ALU 2-SPEED HOLDER - BLACK - SWISS 7075 T6 - SET 941016 334024 WASHER S 3x6x0.3 (10) 334041 BRAKE CAM POST - STEEL 962030 WASHER S 3x6x0.1 (10) COMPOSITE BRAKE UPPER PLATE 334052 962031 COMPOSITE 6x13x5 BALL-BEARING HUB (2) 334070 962032 WASHER S 3x6x0.2 (10) VENTILATED BRAKE DISK - LASER CUT - PRÉCISION-GROUND 334112 965070 E-CLIP 7 (10) 334120 HARDENED STEEL BRAKE PAD - LASER CUT (2) 981208 PIN 2x8 (10) BRAKE PAD "SLS" (2) PIN 2x10 (10) 334132 980210 334142 ALU LIGHTWEIGHT BRAKE DISK ADAPTER - BLACK - SWISS 7075 T6

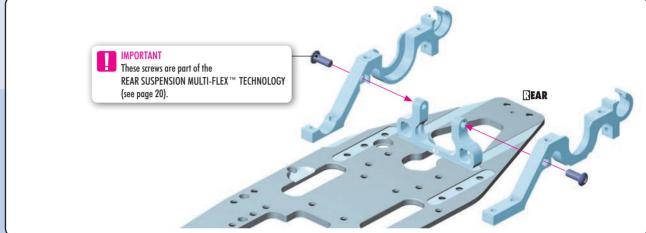
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REAR GEAR DIFFERENTIAL - SET

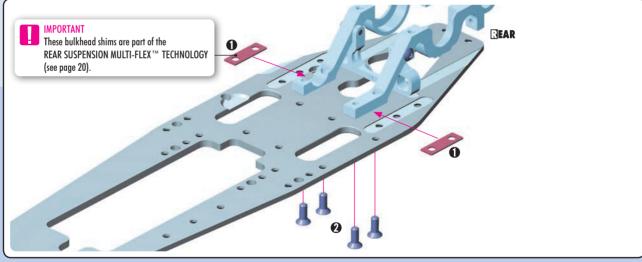






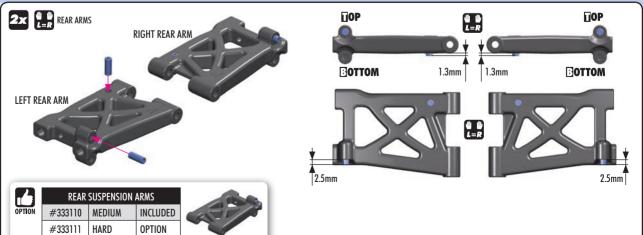




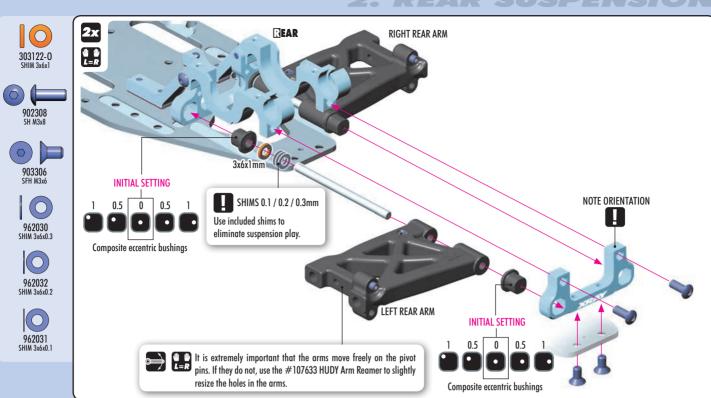


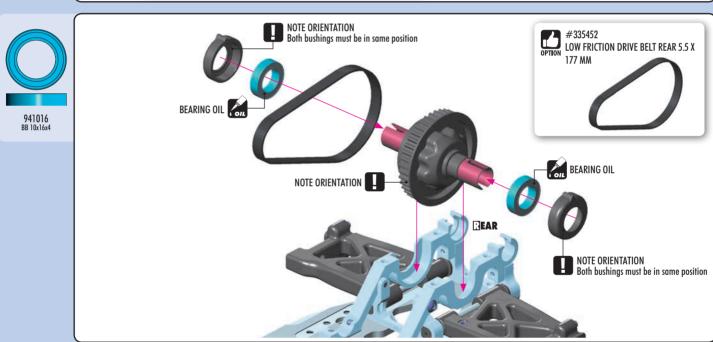


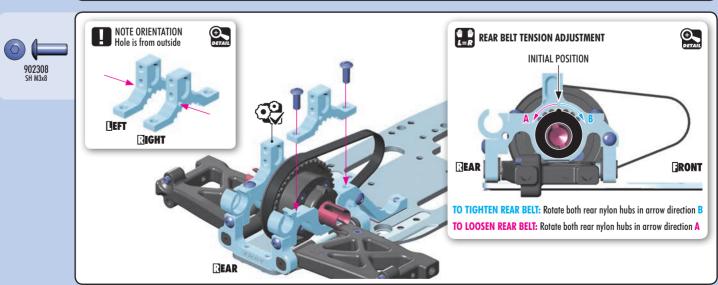


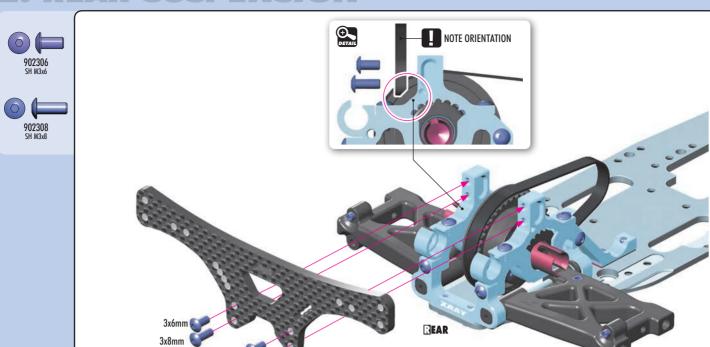




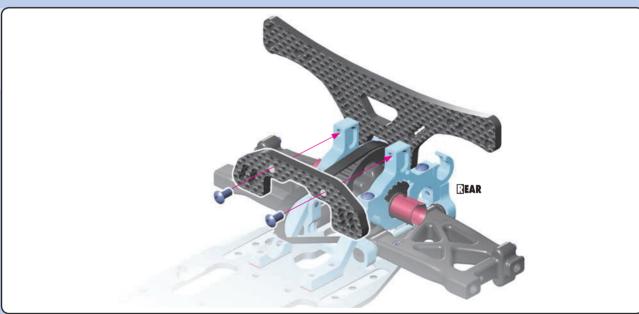


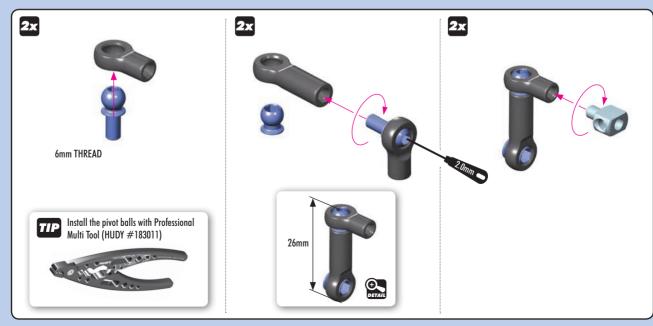






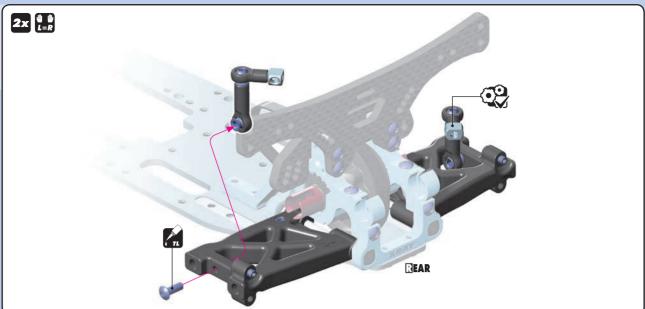




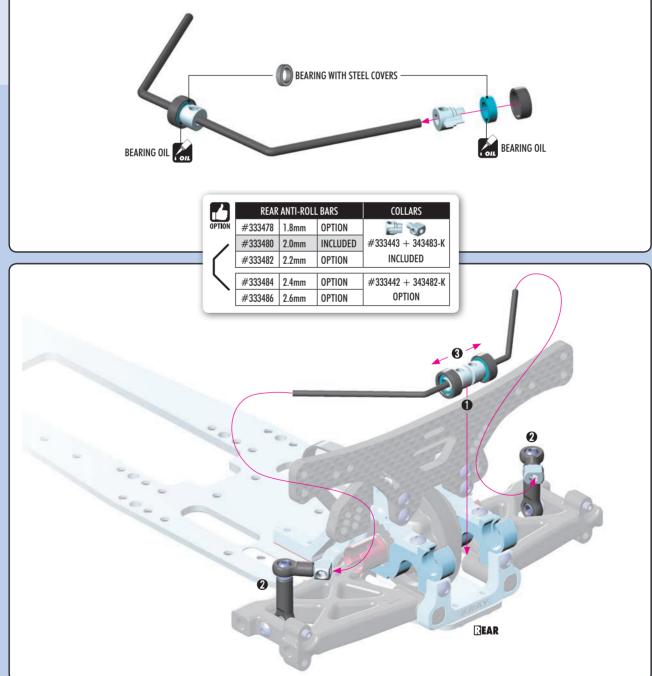




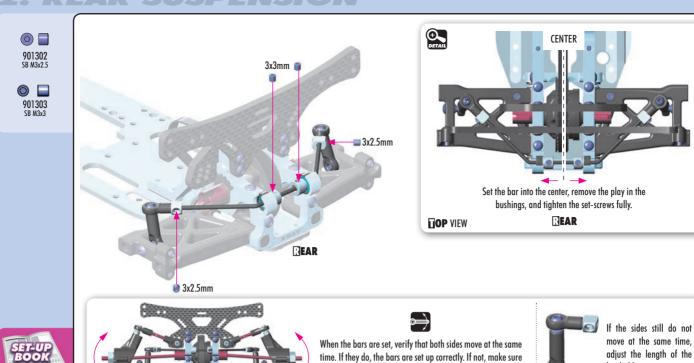


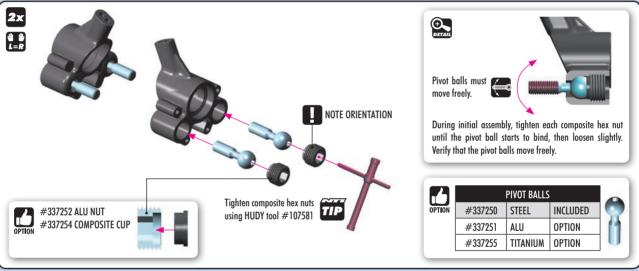




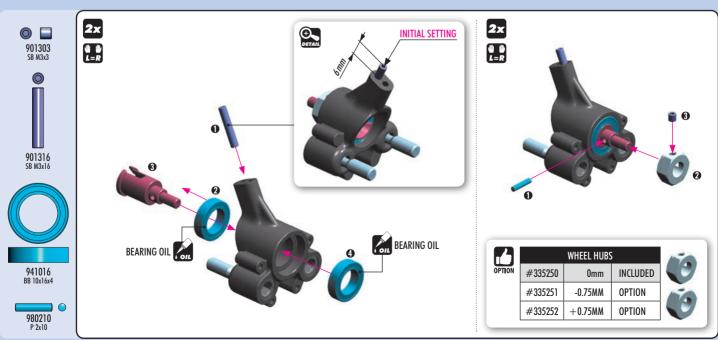


REAR

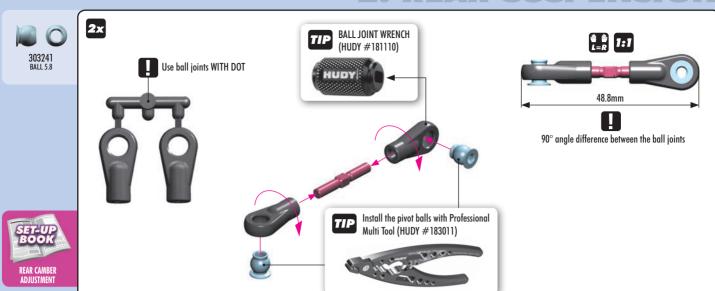


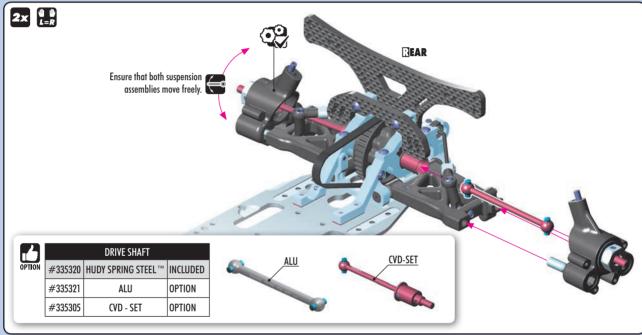


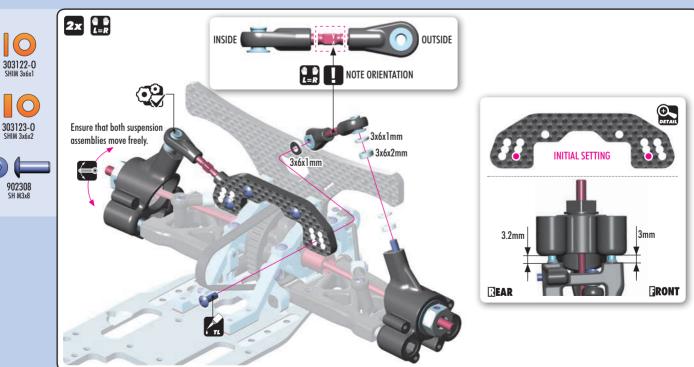
that both downstops are the same and that the bar wire is flat.



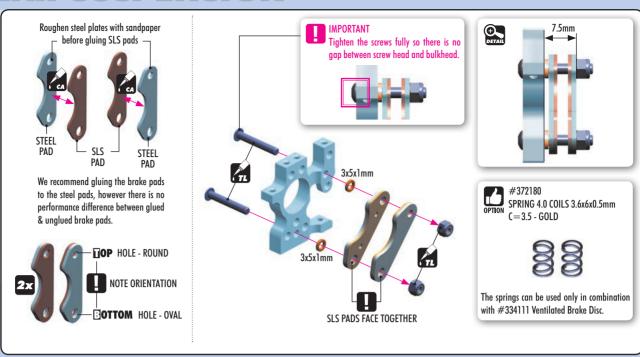
bar holders.



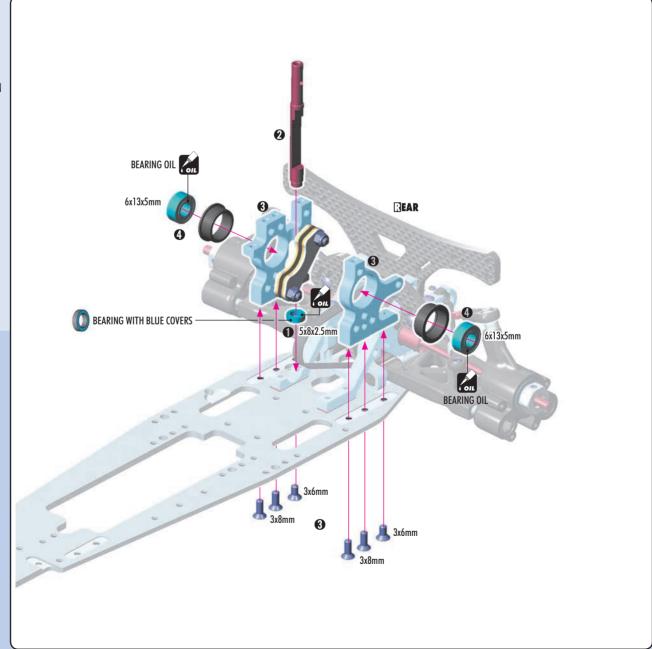






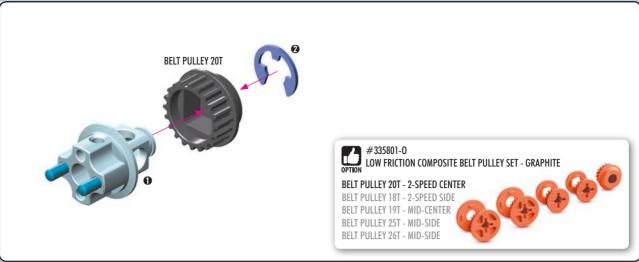




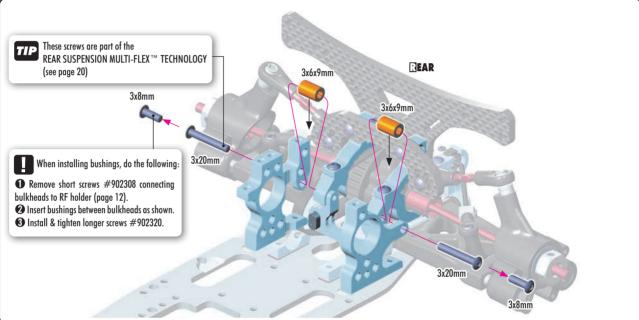




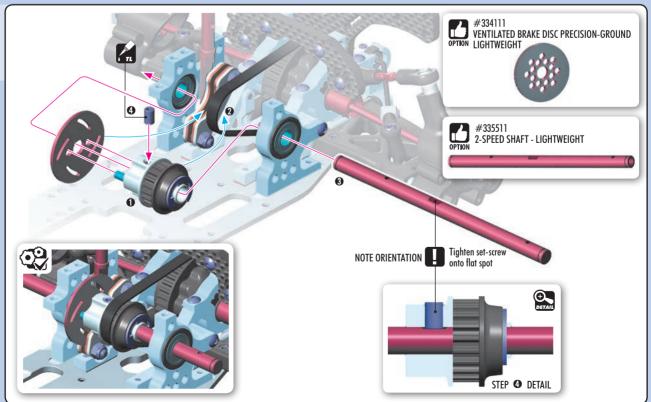




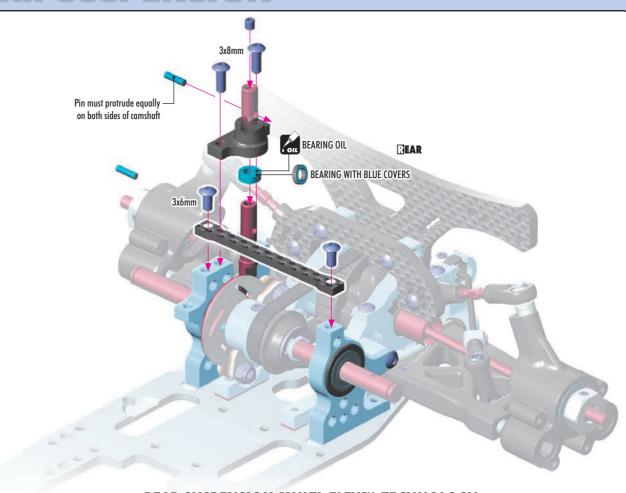










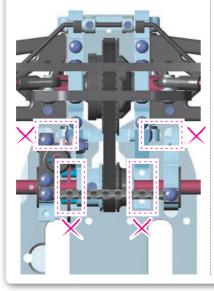


REAR SUSPENSION MULTI-FLEX™ TECHNOLOGY

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

Steel spacers and bracket bushings are not used. This allows maximum flex of the rear suspension and generates maximum rear traction. Recommended for low-traction tracks, or races with spec hard or large tires.

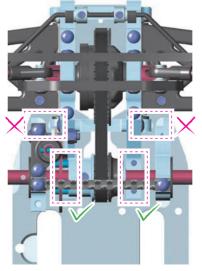


ALTERNATIVE 2

MEDIUM

(INITIAL SETTING)

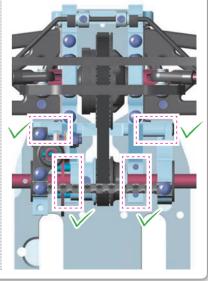
Steel spacers connects the rear bulkheads with chassis, bracket bushings not used. This reduces the flex of the rear suspension and improves out-of-corner steering and rotation of the car, but also slightly decreases rear traction. Recommended for medium-traction tracks, or races with spec softer tires.



ALTERNATIVE 3

STIFF

Steel spacers connects the rear bulkheads with chassis, bracket bushings are used. 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, or when tires with additive are used.



3. REAR TRANSMISSION

PIN 2x10 (10)

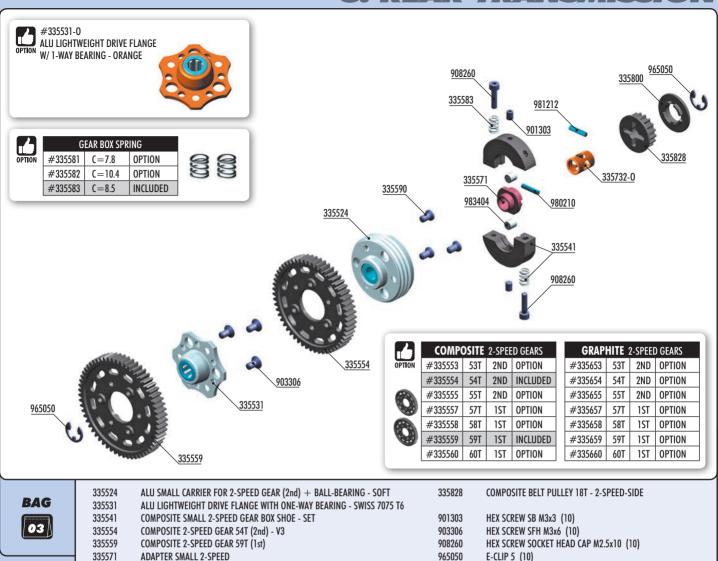
PIN 2x12 (10)

ROLLER PIN 4x4 MM (2)

980210

981212

983404





335590

335583

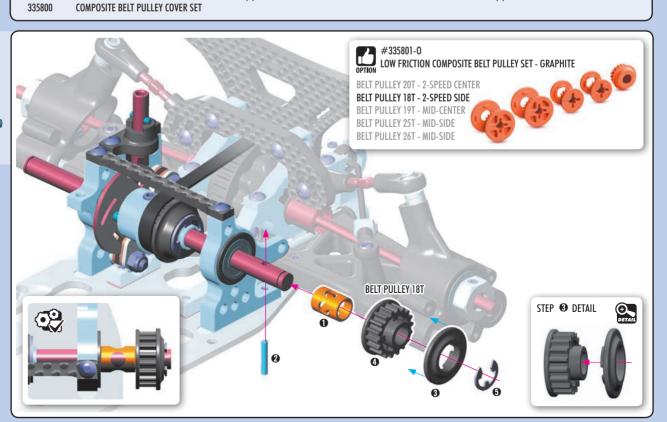
335732-0

HEX SCREW SFH M3x6 - GRINDED (3)

SPRING FOR SMALL GEAR BOX - MEDIUM-HARD (2)

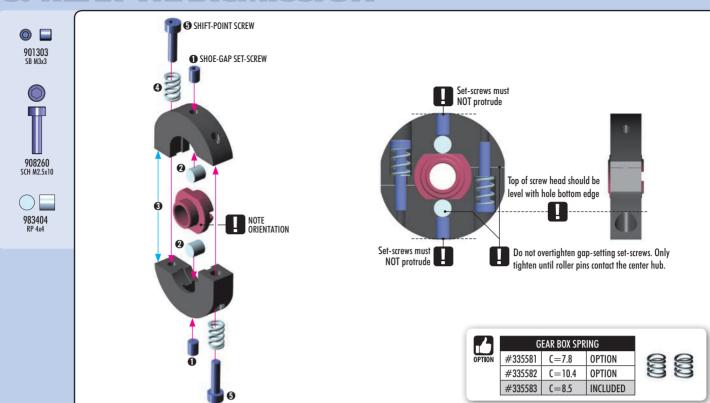
ALU LIGHTWEIGHT LOCATING COLLAR - ORANGE (2)

981212 P 2x12

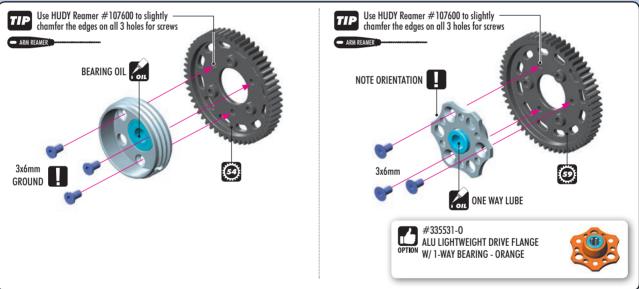


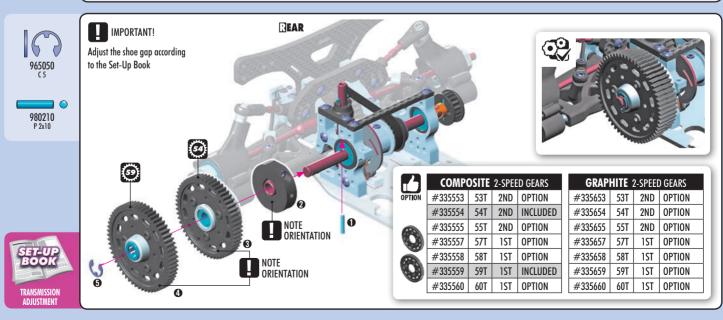


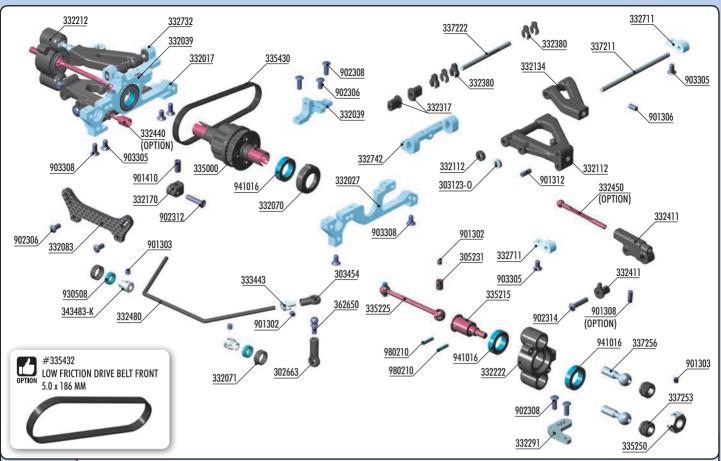
3. REAR TRANSMISSION







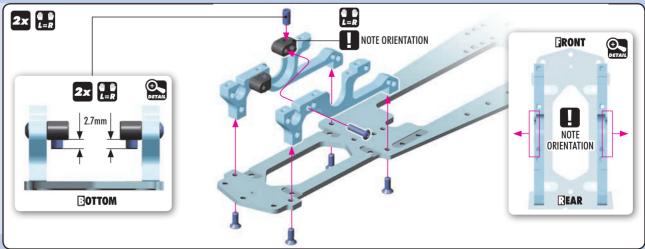




BAG

302663	COMPOSITE BALL JOINT 4.9MM - OPEN - V2 (8)	335250	ALU WHEEL HUB 12MM - BLACK (2)
303123-0	ALU SHIM 3x6x2.0MM - ORANGE (10)	335430	PUR®-REINFORCED DRIVE BELT FRONT 5 x 186 MM
303454	BALL JOINT 4.9MM - OPEN (4)	337211	FRONT LOWER INNER PIVOT PIN (2)
305231	DRIVE SHAFT COUPLING - HUDY SPRING STEEL™	337222	FRONT UPPER PIVOT PIN WITH FLAT SPOT (2)
332017	ALU LOWER BULKHEAD FRONT RIGHT - BLACK - SWISS 7075 T6	337253	COMPOSITE ADJUSTING NUT M10x1 WITH BALL CUP (4)
332027	ALU LOWER BULKHEAD FRONT LEFT - BLACK - SWISS 7075 T6	337256	STEEL PIVOT BALL 8.4 MM (2)
332039	ALU UPPER CLAMP FRONT (L + R) - BLACK - SWISS 7075 T6	343483-K	ALU CUTTED ANTI-ROLL BAR COLLAR o2.3 - BLACK (2)
332070	COMPOSITE ADJUST. BALL-BEARING HUB (4)	362650	BALL END 4.9MM WITH THREAD 6MM (2)
332071	COMPOSITE BALL-BEARING HUB (4)		
332083	GRAPHITE SHOCK TOWER FRONT 2.5MM	901302	HEX SCREW SB M3x2.5 (10)
332112	COMPOSITE SUSP. ARM FRONT LOWER FOR WIRE ANTI-ROLL BAR	901303	HEX SCREW SB M3x3 (10)
332134	COMPOSITE SUSP. ARM FRONT UPPER WITH HOLE - SOFT	901306	HEX SCREW SB M3x6 (10)
332170	COMPOSITE SUSP. ARM BACKSTOP (2)	901312	HEX SCREW SB M3x12 (10)
332212	COMPOSITE STEERING BLOCK RIGHT FOR AERO DISC	901410	HEX SCREW SB M4x10 (10)
332222	COMPOSITE STEERING BLOCK LEFT FOR AERO DISC	902306	HEX SCREW SH M3x6 (10)
332291	ALU EXTENSION FOR STEERING BLOCK - SWISS 7075 T6 (2)	902308	HEX SCREW SH M3x8 (10)
332317	COMPOSITE SUSP. ECCENTRIC BUSHING (2+2)	902312	HEX SCREW SH M3x12 (10)
332380	COMPOSITE CASTER CLIPS (2)	902314	HEX SCREW SH M3x14 (10)
332411	COMPOSITE FRONT ANTI-ROLL BAR HOLDER & ECCENTRIC W/O UPSTOP (2+2)	903305	HEX SCREW SFH M3x5 (10)
332480	ANTI-ROLL BAR FRONT 2.0 MM	903308	HEX SCREW SFH M3x8 (10)
332711	ALU LOWER 2-PIECE FRONT SUSPENSION HOLDER - BLACK (1)	930508	BALL-BEARING 5x8x2.5 STEEL SEALED - OIL (2)
332732	ALU UPPER ARM HOLDER RIGHT - BLACK - SWISS 7075 T6 - SET	941016	BALL-BEARING 10x16x4 RUBBER SEALED - OIL (2)
332742	ALU UPPER ARM HOLDER LEFT - BLACK - SWISS 7075 T6 - SET	980210	PIN 2x10 (10)
333443	ALU ANTI-ROLL BAR COLLAR o2.2 (2)		
335000	FRONT GEAR DIFFERENTIAL - SET CVD AXLE - SUPER LIGHT - HUDY SPRING STEEL™		
335215	CVD DRIVE SHAFT - FRONT - HUDY SPRING STEEL™		
335225	CAN NVIAE SUALI - LYONI - UONI SLVINO SIEEF		





The NT1 kit includes wire anti-roll bar system. Blade anti-roll bar is available as an option part.

Wire anti-roll bar (Alternative 1) page 24 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 described immediately below.

Blade anti-roll bar (Alternative 2) go to page 29 is recom OPTIONAL

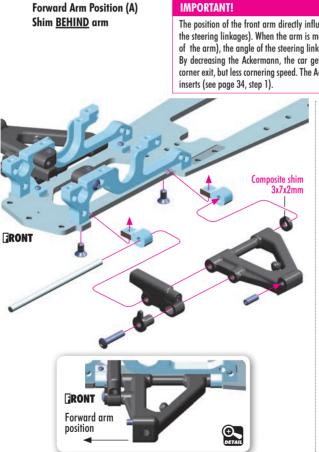
is recommended for smaller, technical tracks when fast direction changes and side weight changes are needed. Follow the "Alternative 2" assembly steps starting on page 29; DO NOT assemble the blade bar as described immediately below.

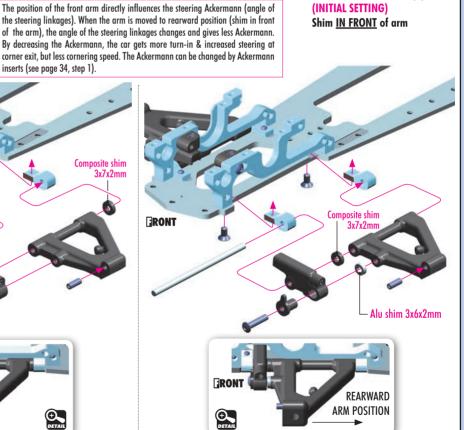
ALTERNATIVE 1 (WIRE ANTI-ROLL BAR) - INITIAL SETTING





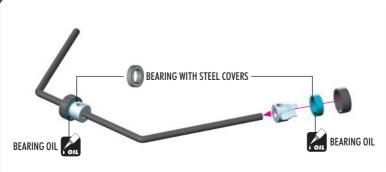






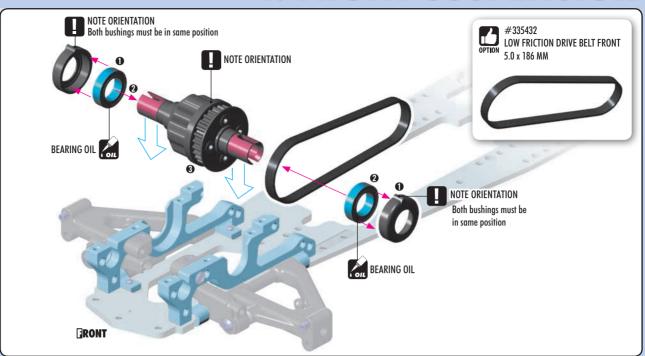
Rearward Arm Position (B)



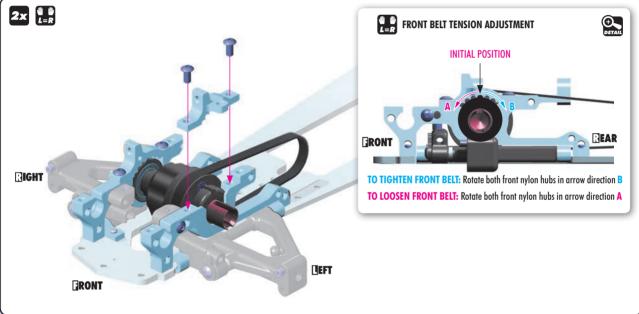


	FRONT ANTI-ROLL BARS		COLLARS	
PTION	#332479	1.8mm	OPTION	1 80
	#332480	2.0mm	INCLUDED	#333443 + 343483-K
	#332482	2.2mm	OPTION	INCLUDED
	#332484	2.4mm	OPTION	#333442 + 343482-K
/	#332486	2.6mm	OPTION	OPTION
	#332488	2.8mm	OPTION	#333441 + 343481-K
				OPTION

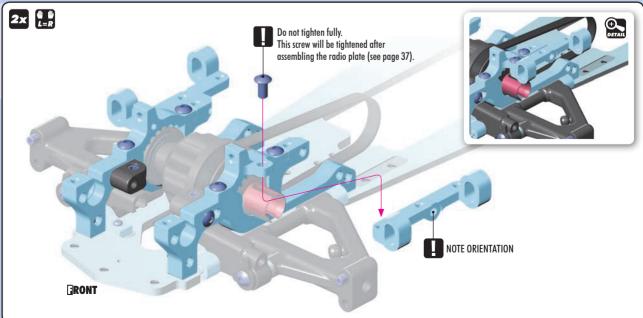


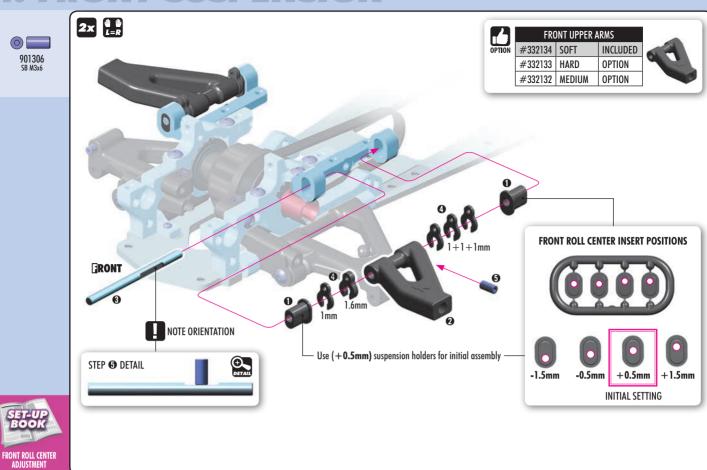


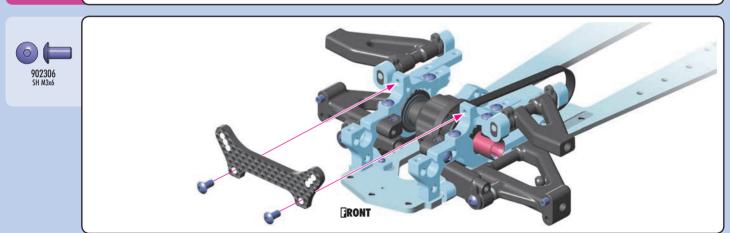


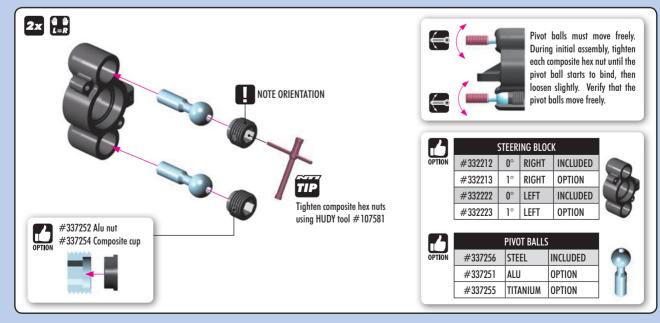




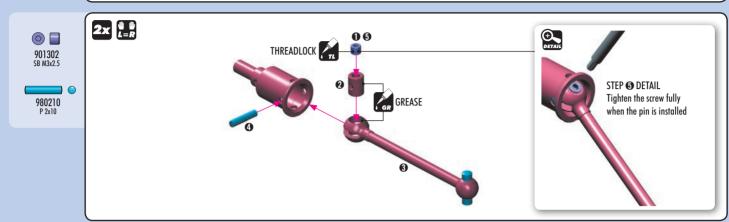


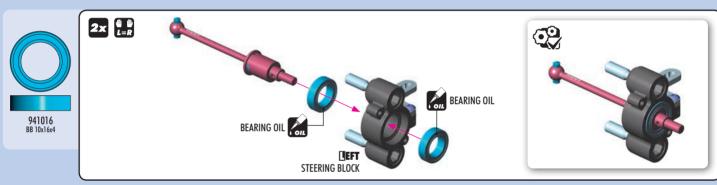


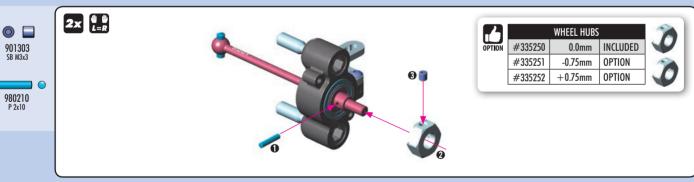


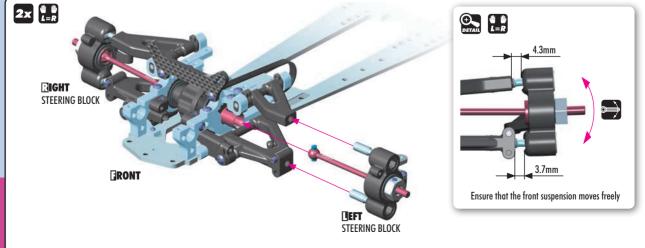








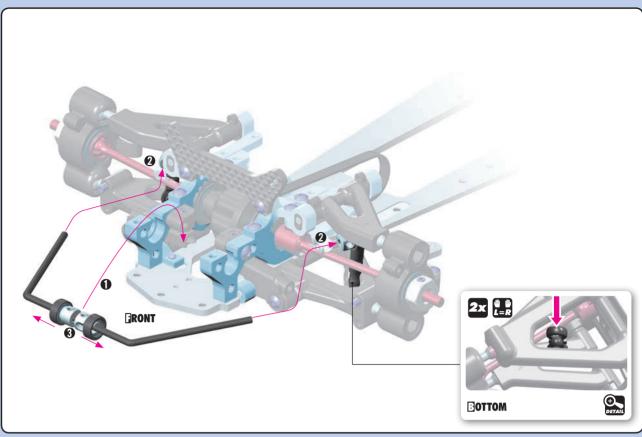


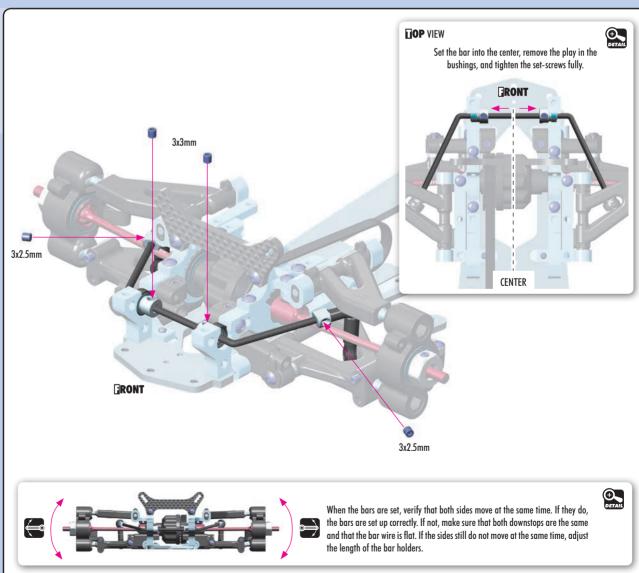




SB M3x3

P 2x10





O

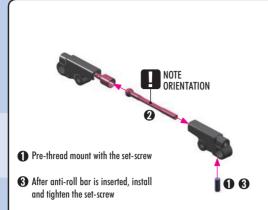
901302 SB M3x2.5

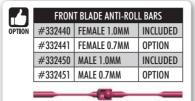
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901303 SB M3x3



ALTERNATIVE 2 (BLADE ANTI-ROLL BAR) - **OPTION**







Rearward Arm Position (B)

(INITIAL SETTING)

U U L=R



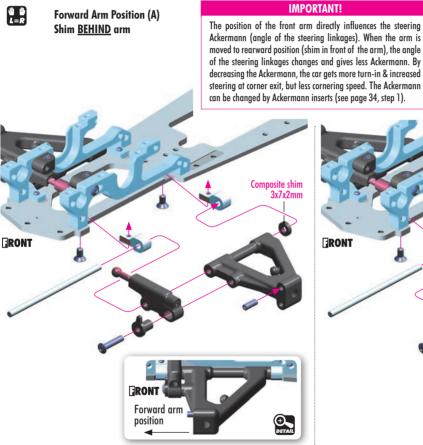
901308 SR M3v8

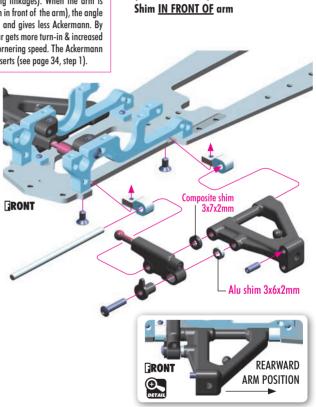


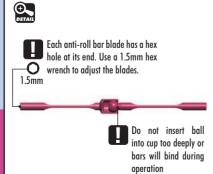


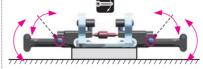






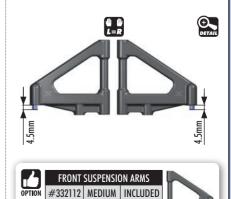






Ensure that the suspension arms move freely. Ensure that the eccentric holders move freely.

When the bar is set, verify that both sides move at the same time. If they do, the bars are set up correctly. If not, make sure that both downstops are the same. If the arms still do not move at the same time, gently loosen the screw which holds eccentric bushing and rotate the bushing until the arms move at the same time. Retighten the screws fully.



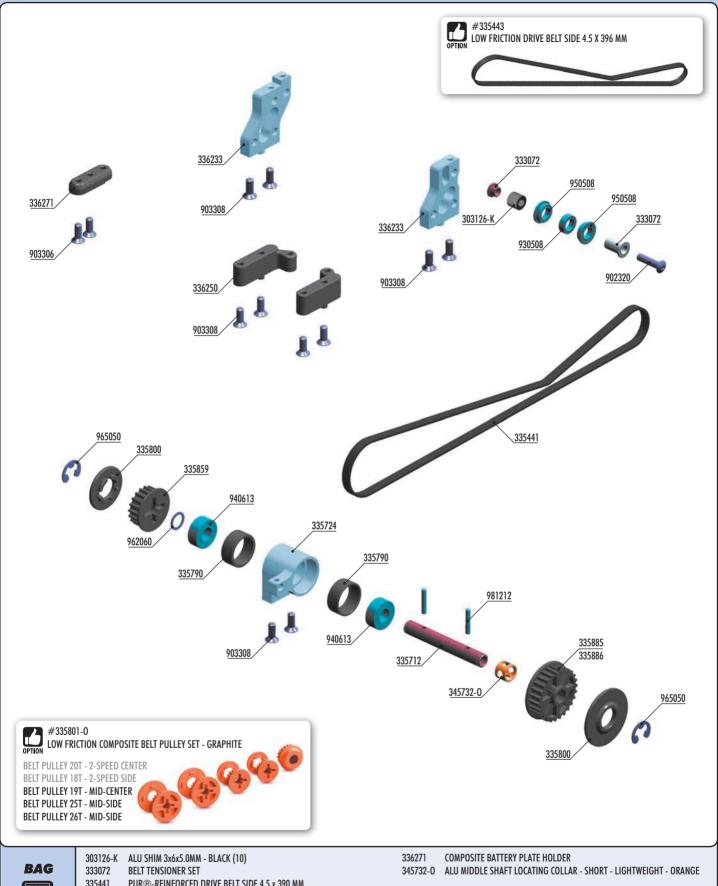
OPTION

#332113 HARD





5. FRONT TRANSMISSION

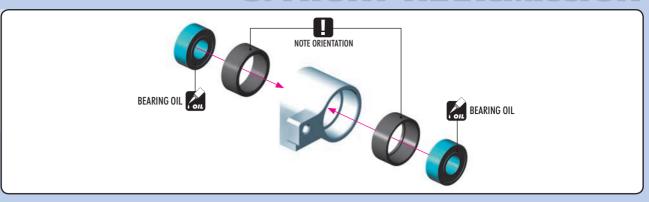




303126-K	ALU SHIM 3x6x5.0MM - BLACK (10)	336271	COMPOSITE BATTERY PLATE HOLDER
333072	BELT TENSIONER SET	345732-0	ALU MIDDLE SHAFT LOCATING COLLAR - SHORT - LIGHTWEIGHT - ORANGE
335441	PUR®-REINFORCED DRIVE BELT SIDE 4.5 x 390 MM		
335712	FRONT MIDDLE SHAFT - HUDY SPRING STEEL™ - LIGHTWEIGHT	902320	HEX SCREW SH M3x20 (10)
335724	ALU FRONT MIDDLE SHAFT HOLDER - BLACK - SET	903306	HEX SCREW SFH M3x6 (10)
335790	COMPOSITE BALL-BEARING BUSHING FOR MIDDLE SHAFT (2)	903308	HEX SCREW SFH M3x8 (10)
335800	COMPOSITE BELT PULLEY COVER SET	930508	BALL-BEARING 5x8x2.5 STEEL SEALED - OIL (2)
335859	COMPOSITE BELT PULLEY 19T - MID-CENTER	940613	BALL-BEARING 6x13x5 RUBBER SEALED - OIL (2)
335885	COMPOSITE BELT PULLEY 25T - MID-SIDE	950508	BALL-BEARING 5x8x2.5 FLANGED - STEEL SEALED - OIL (2)
335886	COMPOSITE BELT PULLEY 26T - MID-SIDE	962060	WASHER S 6x8x0.5 (10)
336233	ALU RADIO PLATE MOUNTS (L $+$ R) - SWISS 7075 T6 - BLACK	965050	E-CLIP 5 (10)
336250	COMPOSITE BATTERY MOUNT $L+R$ (2)	981212	PIN 2x12 (10)
$\overline{}$			

5. FRONT TRANSMISSION







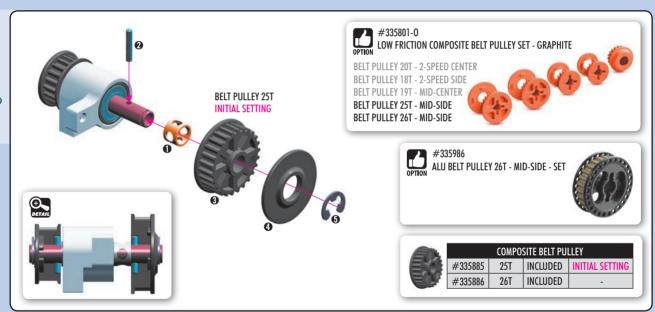


981212 P 2x12

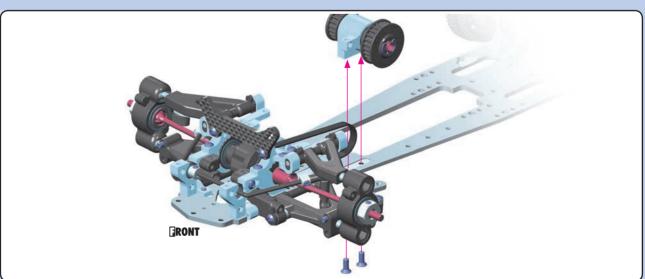






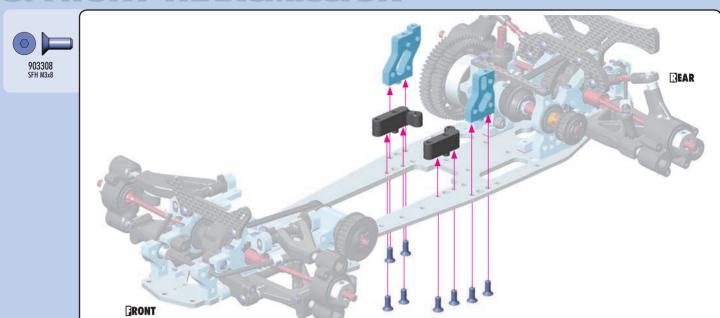


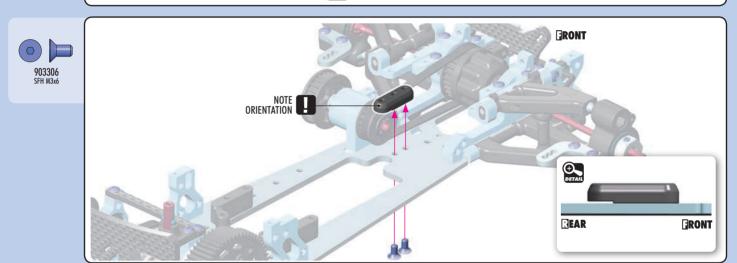


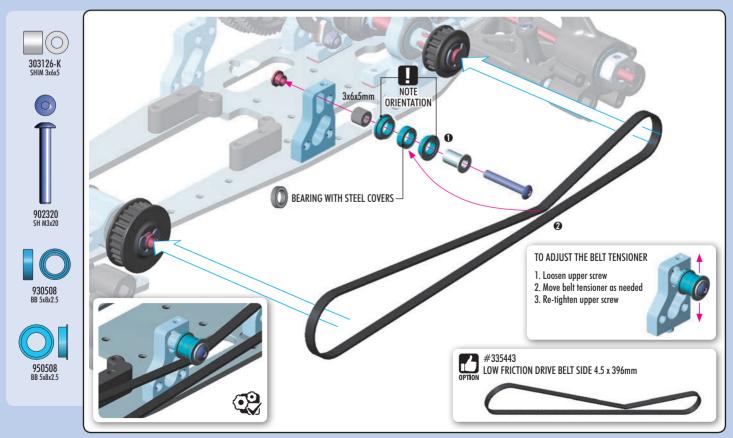




5. FRONT TRANSMISSION

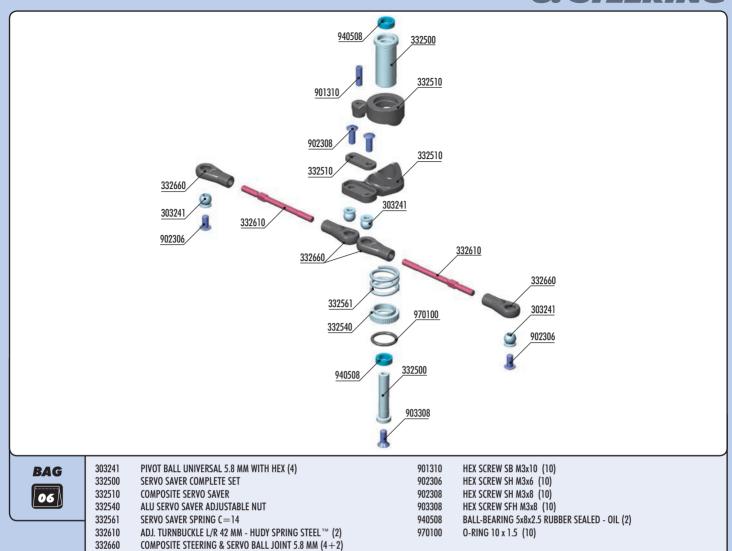






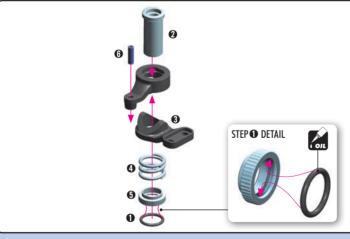


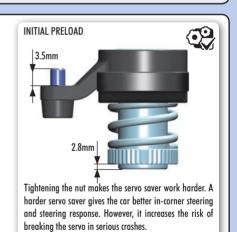
6. STEERING

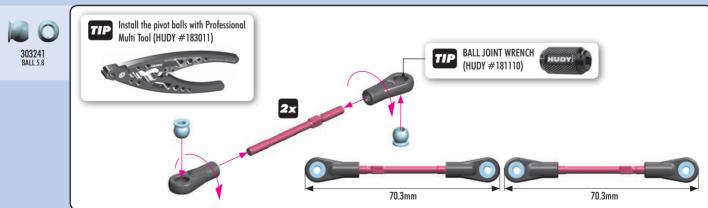






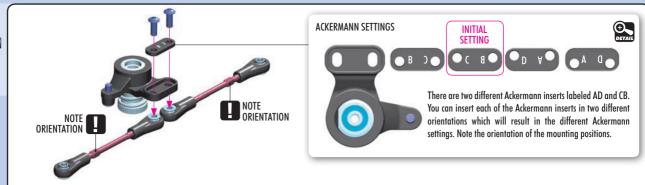




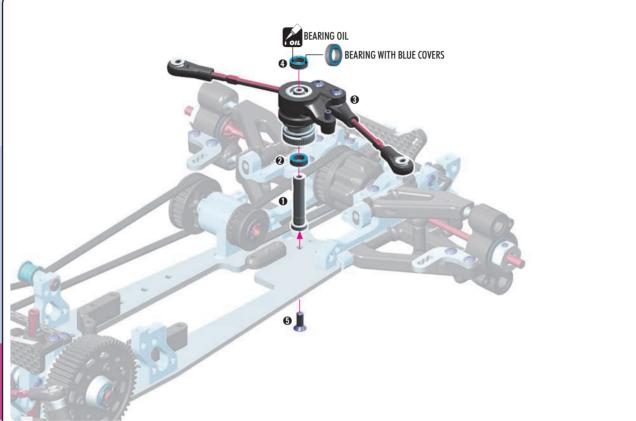


6. STEERING



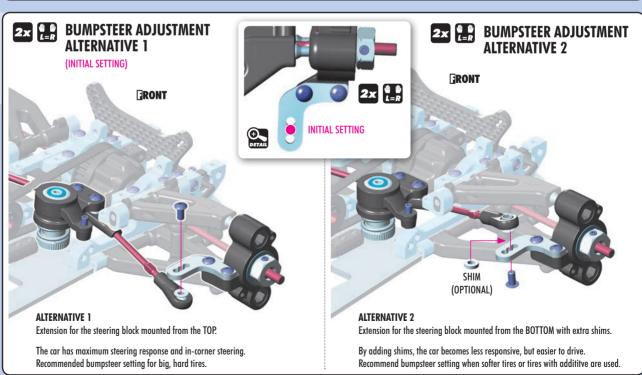






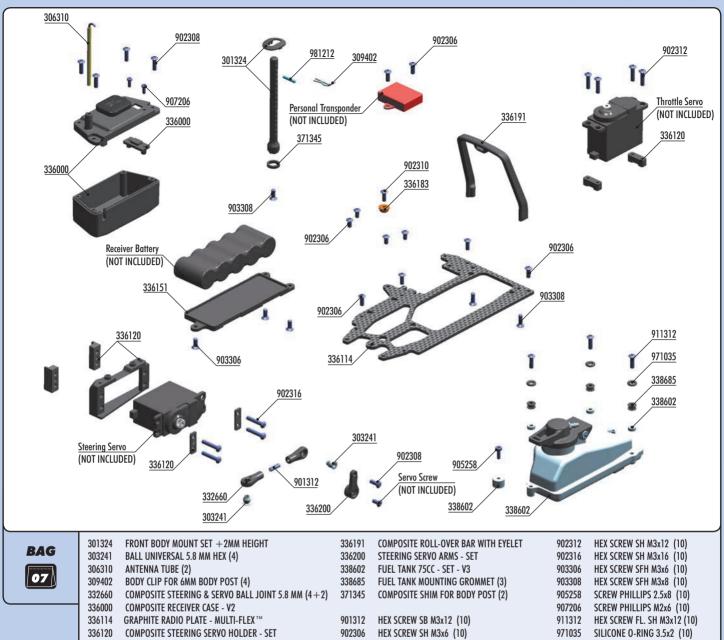


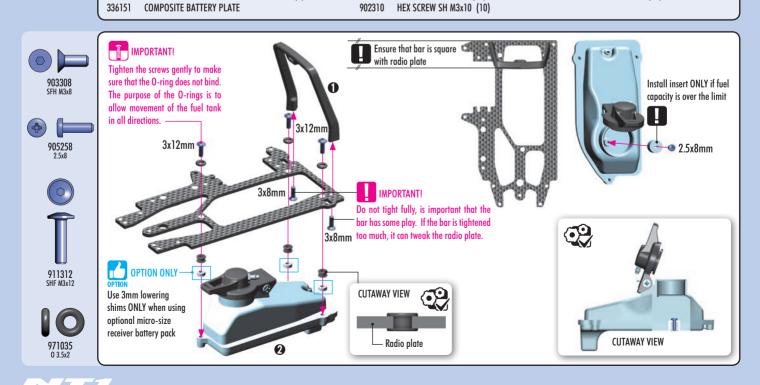
902306 SH M3x6



7. FUEL TANK & ELECTRONICS

PIN 2x12 (10)



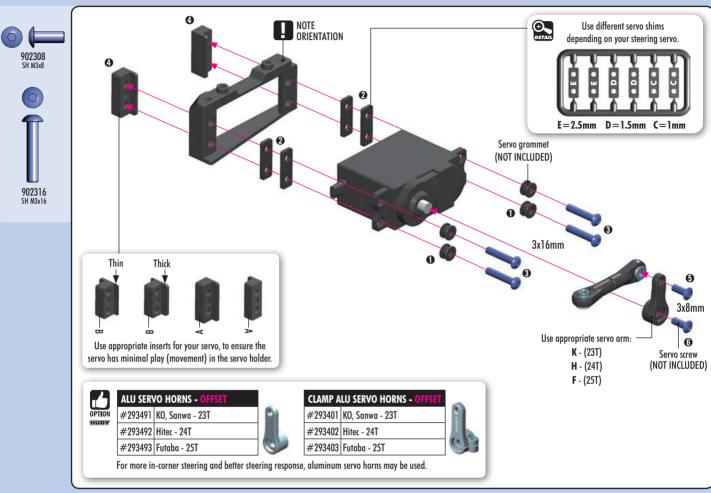


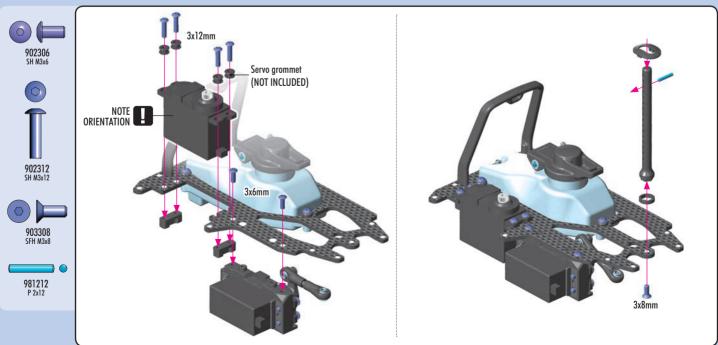
HEX SCREW SH M3x8 (10)

ALU RADIO PLATE MULTI-FLEX™ BUSHING (2)

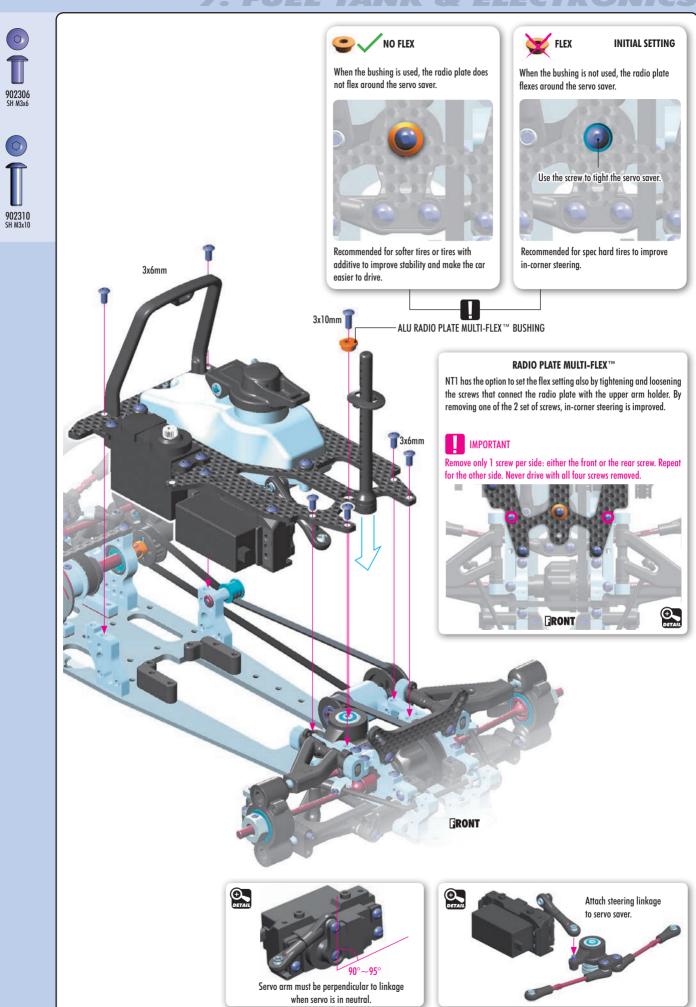
7. FUEL TANK & ELECTRONICS



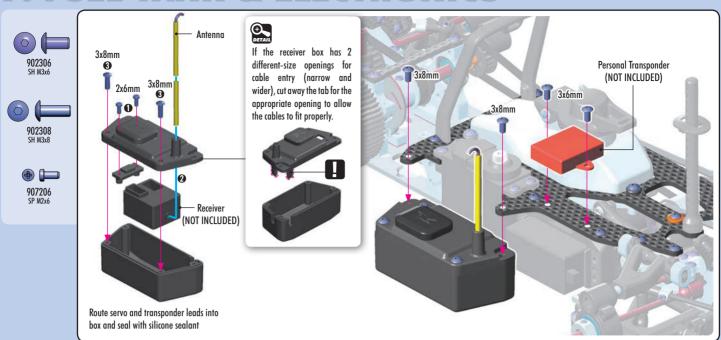


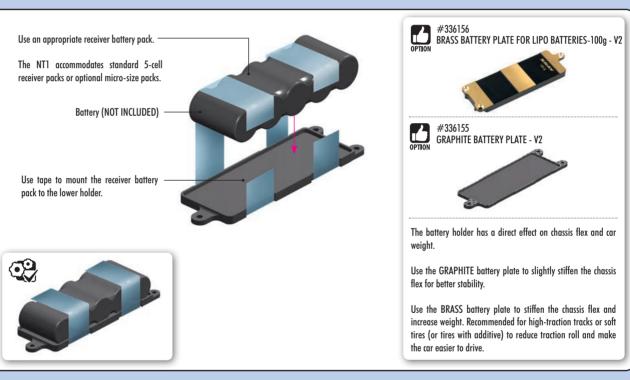


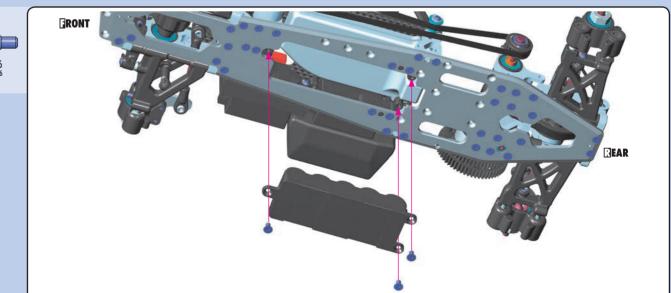
7. FUEL TANK & ELECTRONICS



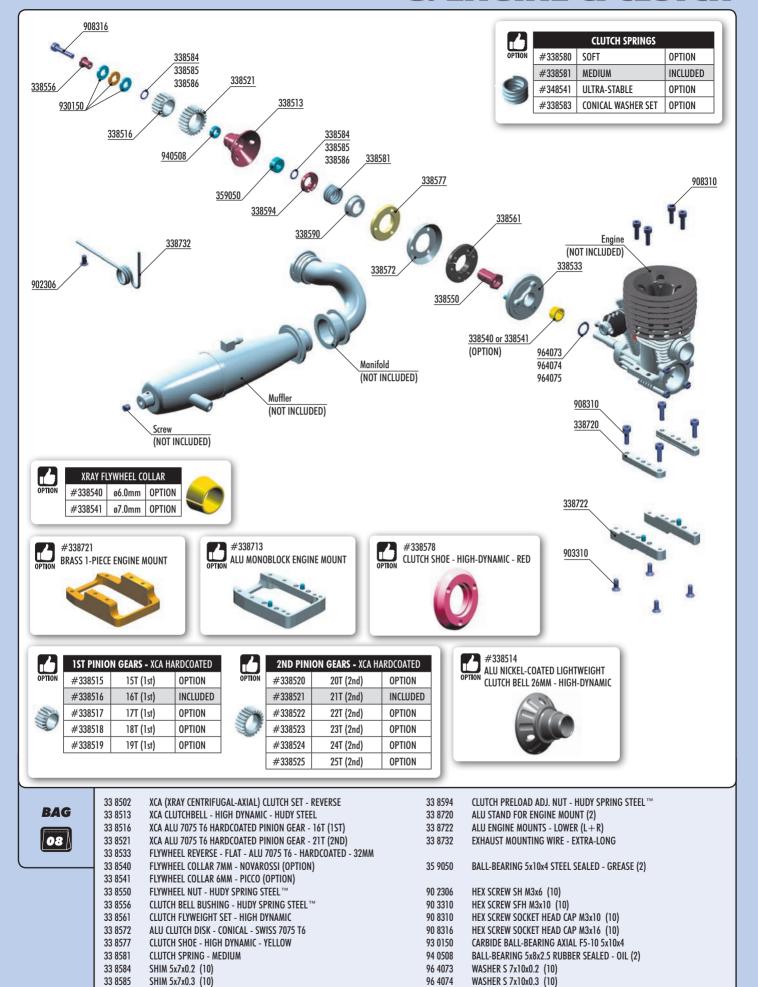
7. FUEL TANK & ELECTRONICS







8. ENGINE & CLUTCH



96 4075

WASHER S 7x10x0.5 (10)

33 8586

33 8590

SHIM 5x7x0.5 (10)

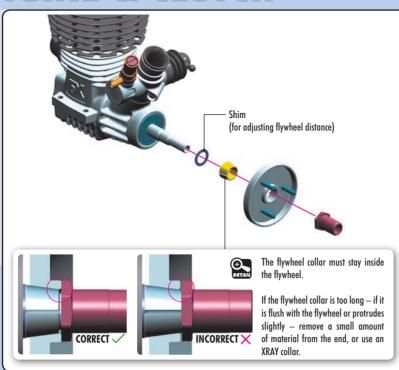
CLUTCH SPRING CUP - ALU 7075 T6

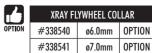
8. ENGINE & CLUTCH







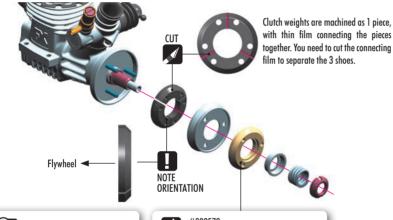






Use the flywheel collar that comes with your engine, or use optional XRAY collars.

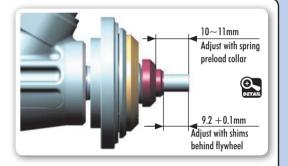












	CLUTCH SPRINGS				
OPTION	#338580	SOFT	OPTION		
	#338581	MEDIUM	INCLUDED		
	#348541	ULTRA-STABILE	OPTION		
	#338583	CONICAL WASHER SET	OPTION		



TECH TIP FOR EXTRA BOTTOM-END POWER

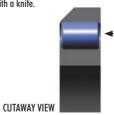
For extra bottom-end power, thread a M3x4 setscrew (#901304) into each clutch flyweight as shown. The set-screw will add more weight to the end of the flyweight which will cause the flyweight to open harder, giving more bottom-end power. This is recommended for high-traction tracks where bottom-end power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



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.



TECH TIP FOR NT1 CLUTCH SHOE

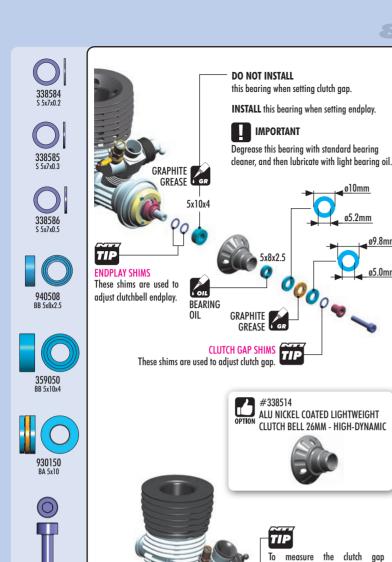
To ensure that the NT1 clutch shoe works properly and for a long time, it is very important to run in the clutch shoe.

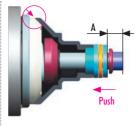


Please follow these run-in steps to help ensure proper clutch operation:

- 1 Install clutch according to this Instruction Manual.
- ② Check that the spring preload is not too much; for run-in process use less preload.
- When you start the engine, the clutch should start to 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.
- 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.)
- 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.
- 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.





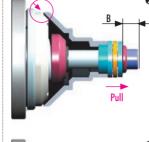


(1) ADJUSTING THE CLUTCH GAP

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

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

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:

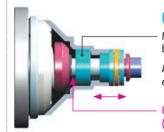
Thickness of shims required (in mm) = A-B-0.7

For example, using the values A=5.5mm,

B=4.5mm

Shim thickness = 5.5-4.5-0.7=0.3mm

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

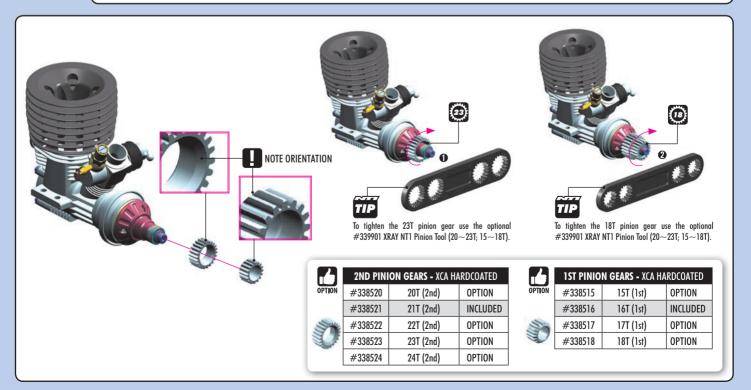


(2) ADJUSTING THE ENDPLAY

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)

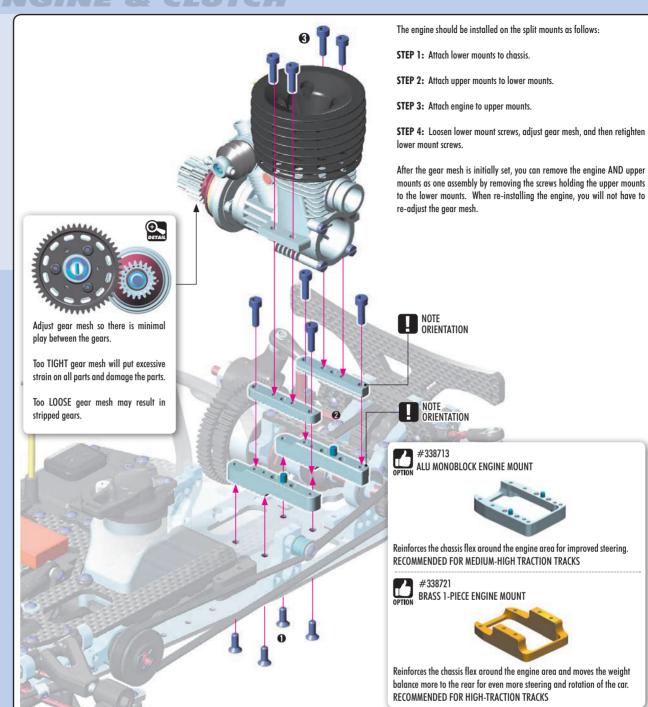


 $(0.6 \sim 0.7 \text{mm})$ you can also use

HUDY Flywheel Tool #182010

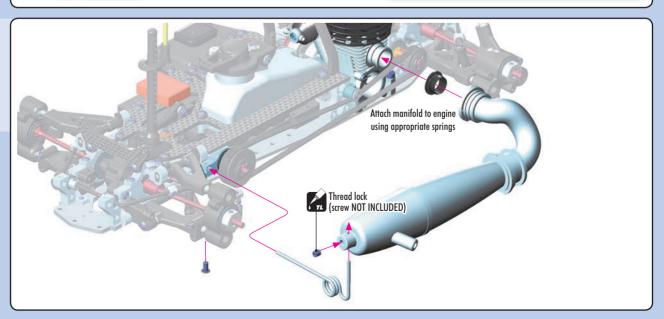
908316 SCH M3x16

8. ENGINE & CLUTCH



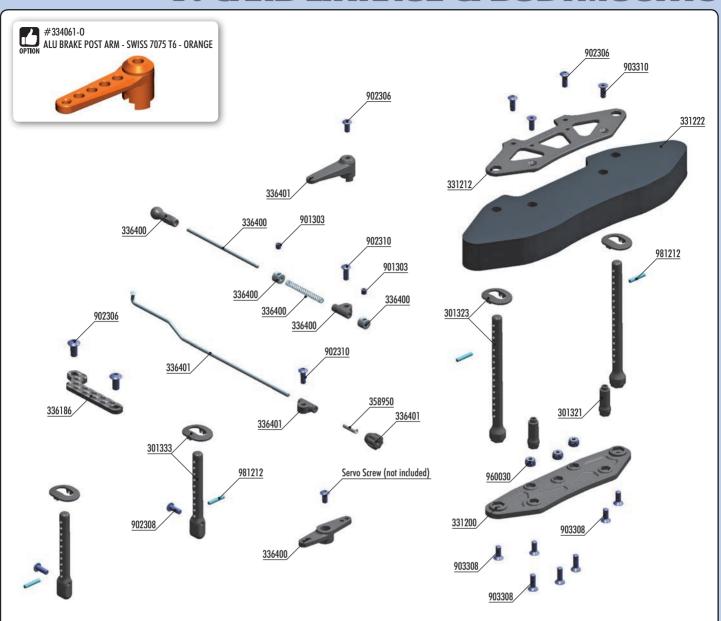


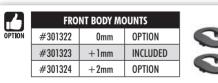
908310 SCH M3x10



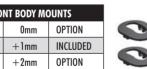


9. CARB LINKAGE & BODYMOUNTS











Very handy, easily externally adjustable body post from Swiss 7075 T6 aluminum. Allows for adjustment of body height by 3mm without needing to change the position on the body post.





The wider front bumper improves steering, but may allow more front damage under hard crashes.

The wider front bumper is used without the foam bumper.

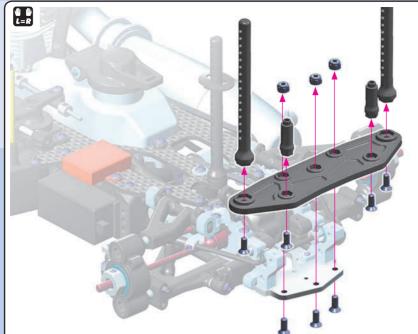


BAG	ì
09	

30 13	. ,	35 8951	SIL. TUBING 1M (2.4 x 5.5MM) YELLOW (OPTION)
30 13		00 1000	HEV CCDEM CD MO-0 /10)
30 13		90 1303	HEX SCREW SB M3x3 (10)
33 12	00 COMPOSITE BUMPER	90 2306	HEX SCREW SH M3x6 (10)
33 12	12 COMPOSITE UPPER HOLDER FOR BUMPER	90 2308	HEX SCREW SH M3x8 (10)
33 12	22 FOAM BUMPER FOR ANTI-ROLL BAR	90 2310	HEX SCREW SH M3x10 (10)
33 61	86 GRAPHITE REAR STIFFENER	90 3308	HEX SCREW SFH M3x8 (10)
33 64	00 THROTTLE SYSTEM SET	90 3310	HEX SCREW SFH M3x10 (10)
33 64	01 BRAKE SYSTEM SET	96 0030	NUT M3 (10)
35 89	50 SILICONE TUBING 1M (2.4 x 5.5MM)	98 1212	PIN 2x12 (10)
(

9. CARB LINKAGE & BODYMOUNTS



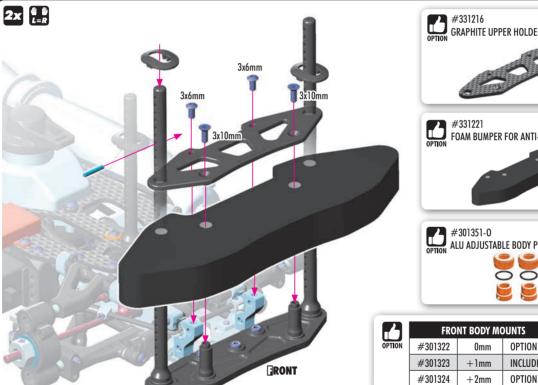




The wider front bumper is used $\underline{\text{without}}$ the foam bumper.

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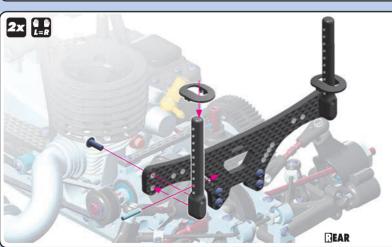




INCLUDED



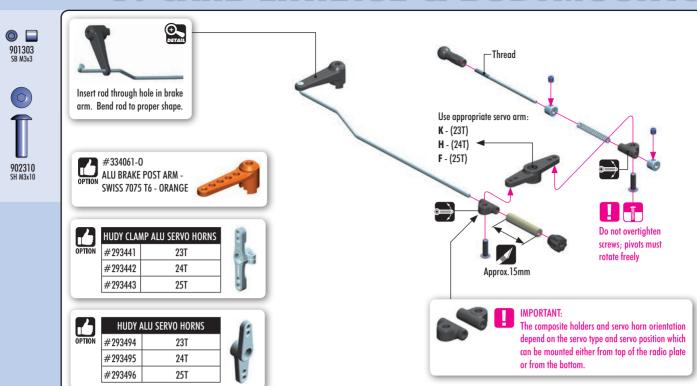
981212 P 2x12

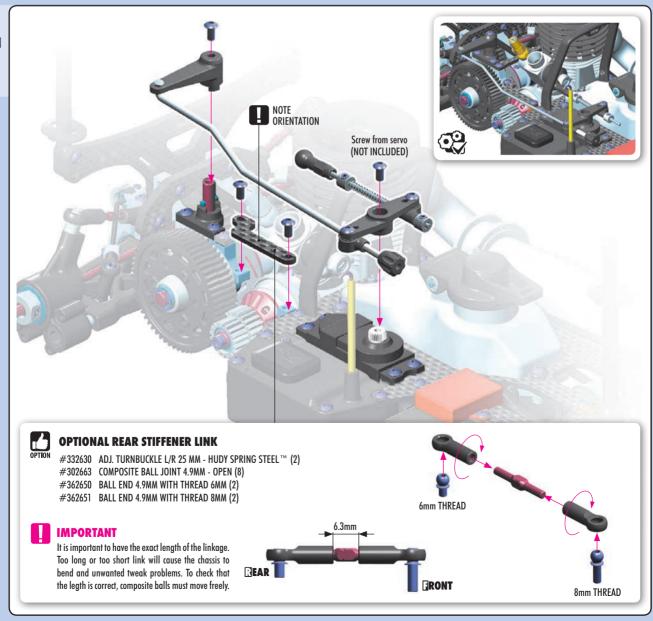


4	REAR BODY MOUNTS		
PTION	#301332	0mm	INCLUDED
	#301333	+1mm	OPTION
	#301334	+2mm	OPTION



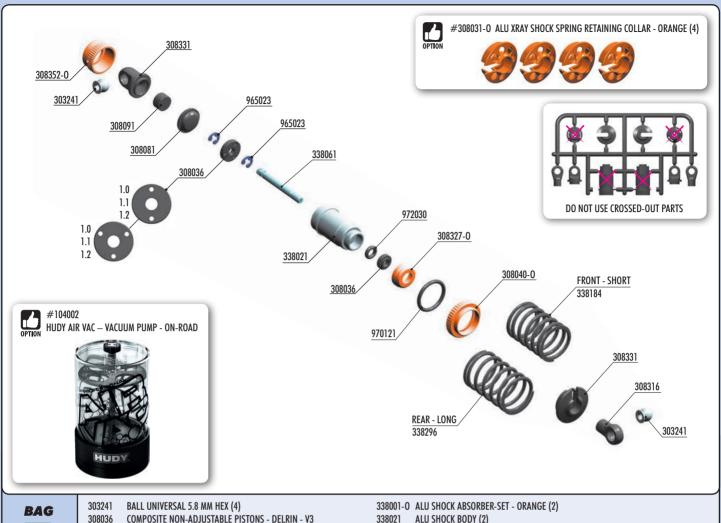
9. CARB LINKAGE & BODYMOUNTS





902306 SH M3x6

10. SHOCK ABSORBERS



TO

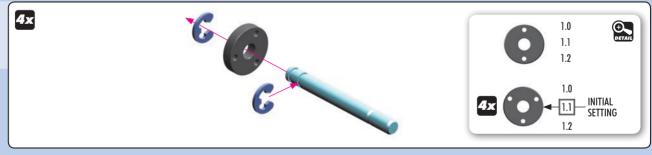
303241 BALL UNIVERSAL 5.8 MM HEX (4)
308036 COMPOSITE NON-ADJUSTABLE PISTONS - DELRIN - V3
308040-0 SHOCK ADJ. NUT ALU + O-RING - ORANGE (4)
308081 SHOCK ABSORBER MEMBRANE - LOW (4)
308091 SHOCK FOAM INSERTS - LOW (4)
308316 COMPOSITE SHOCK BALL JOINT - OPEN (4)
308327-0 ALU CAP FOR XRAY SHOCK BODY - ORANGE (2)
308331 COMPOSITE FRAME SHOCK PARTS 4-STEP - SHORT
308352-0 ALU SHOCK CAP-NUT WITH HOLE - ORANGE (2)

338021 ALU SHOCK BODY (2) 338061 HARDENED SHOCK SHAFT (2)

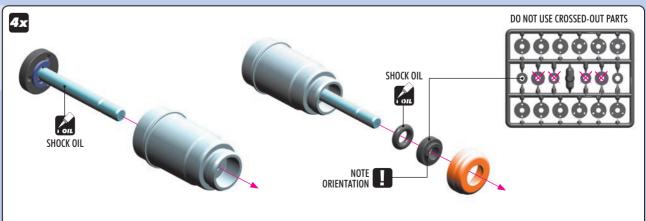
338184 SPRING-SET C=5.0 - MEDIUM - FRONT (2) 338296 SPRING-SET C=4.0 - MEDIUM - REAR (2)

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

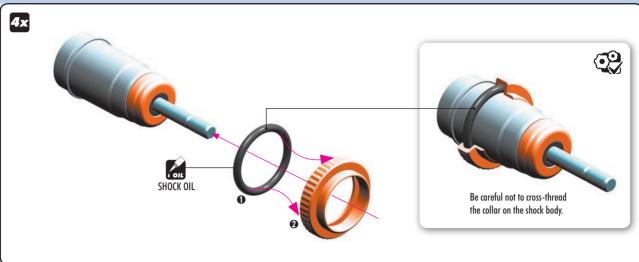
965023 C 2.3

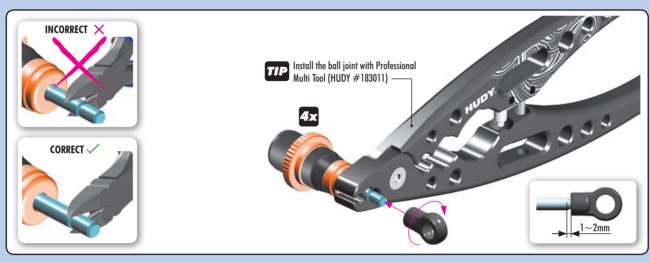










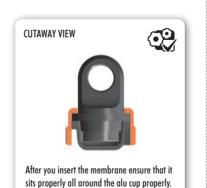




- Hold the shock upright and slightly overfill the shock body with shock oil.
- Let the oil settle and allow air bubbles to rise to the top. Slowly move the piston up and down until no more air bubbles appear. Add shock oil as necessary.
- Pull the piston rod most of the way out of the shock body. Let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

HUDY AIR VAC — VACUUM PUMP - ON-ROAD





4x



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.



10. SHOCK ABSORBERS



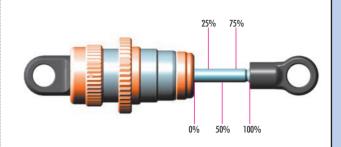




REBOUND ADJUSTMENT

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.

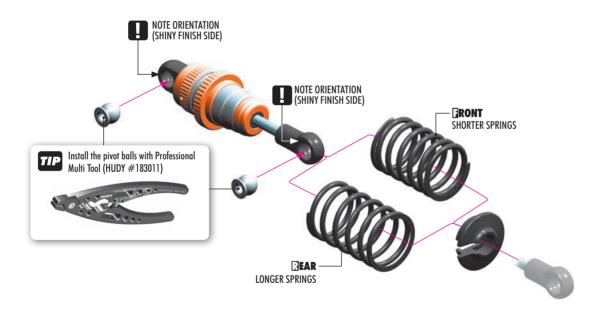


SHOCK LENGTH ADJUSTMENT:

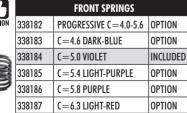
It is VERY important that all shocks are equal length.

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.









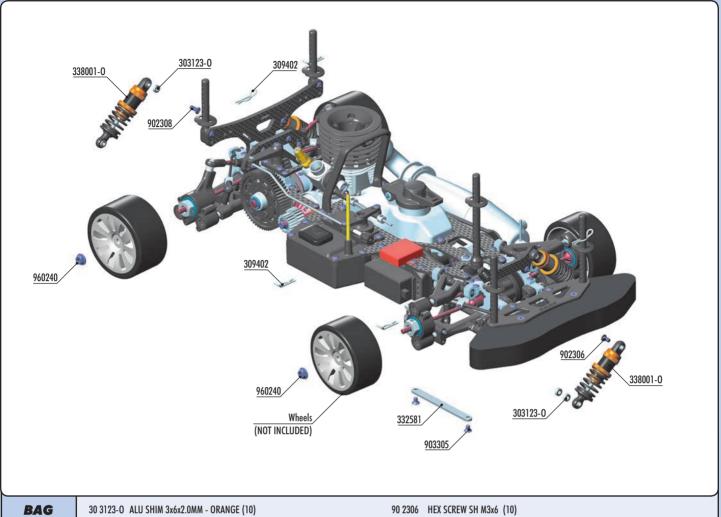


771		REAR SPRINGS	
PTION	338281	PROGRESSIVE C=3.7-4.7	OPTION
	338286	C=3.6 DARK-BLUE	OPTION
	338296	C=4.0 VIOLET	INCLUDED
	338287	C=4.5 LIGHT-PURPLE	OPTION
	338297	C=5.0 PURPLE	OPTION
	338288	C=5.6 LIGHT-RED	OPTION





FINAL ASSEMBLY

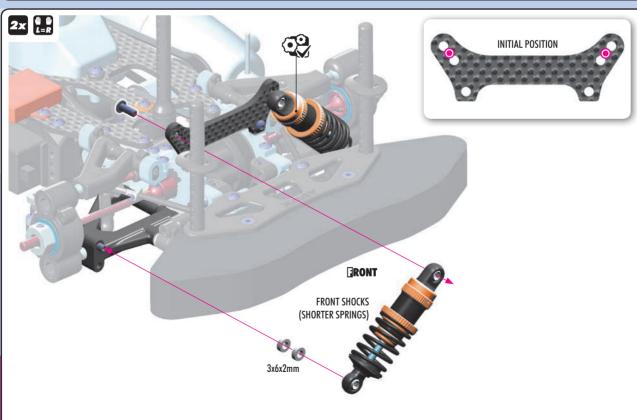


DAG 09 30 3123-0 ALU SHIM 3x6x2.0MM - ORANGE (10) 30 9402 BODY CLIP FOR 6MM BODY POST (4) 33 2581 ALU FRONT CHASSIS BRACE

33 8001-0 ALU SHOCK ABSORBER-SET - ORANGE (2)

90 2306 HEX SCREW SH M3x6 (10) 90 2308 HEX SCREW SH M3x8 (10) 90 3305 HEX SCREW SFH M3x5 (10) 96 0240 NUT M4 WITH SERRATED FLANGE (10)

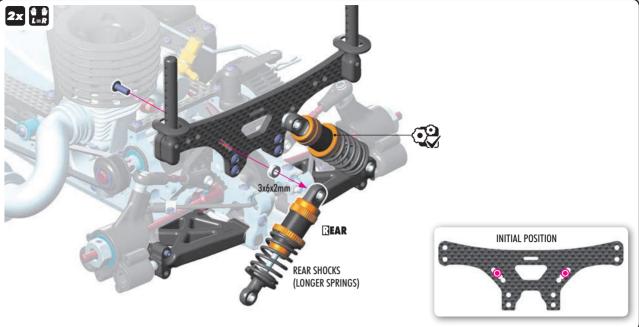




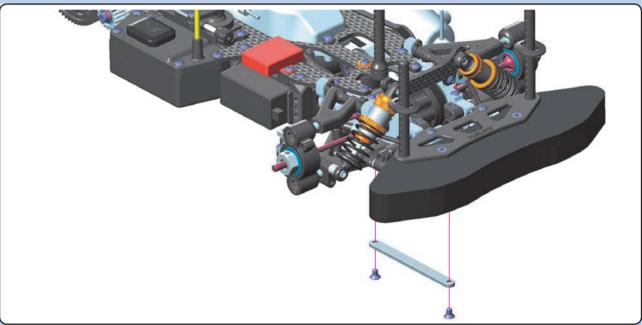


FINAL ASSEMBLY

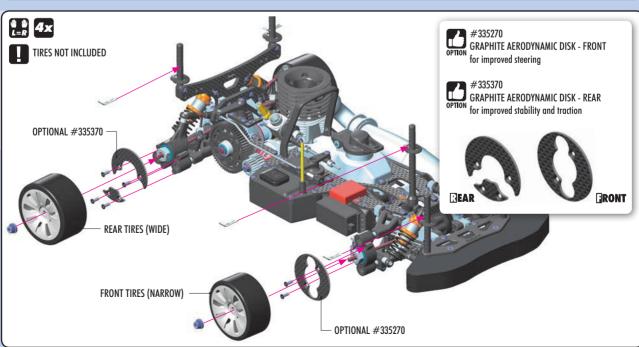


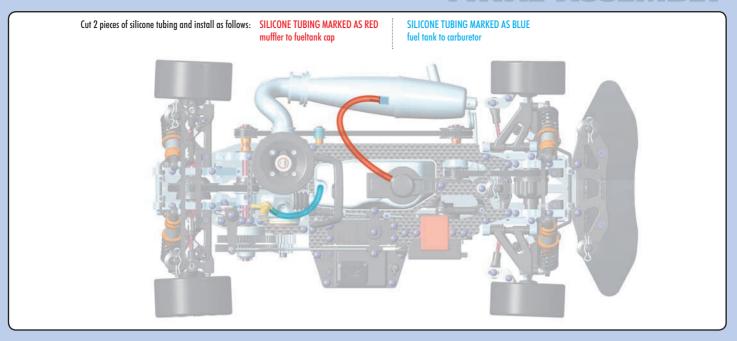




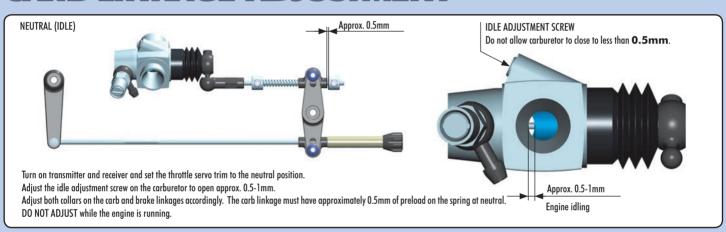


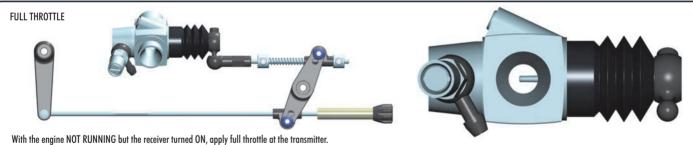






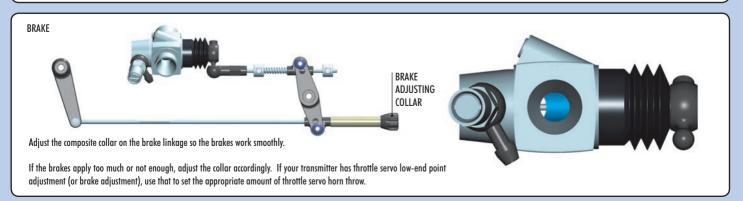
CARB LINKAGE ADJUSTMENT





Adjust the transmitter's throttle servo high-end point so that the servo horn fully opens the carburetor 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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