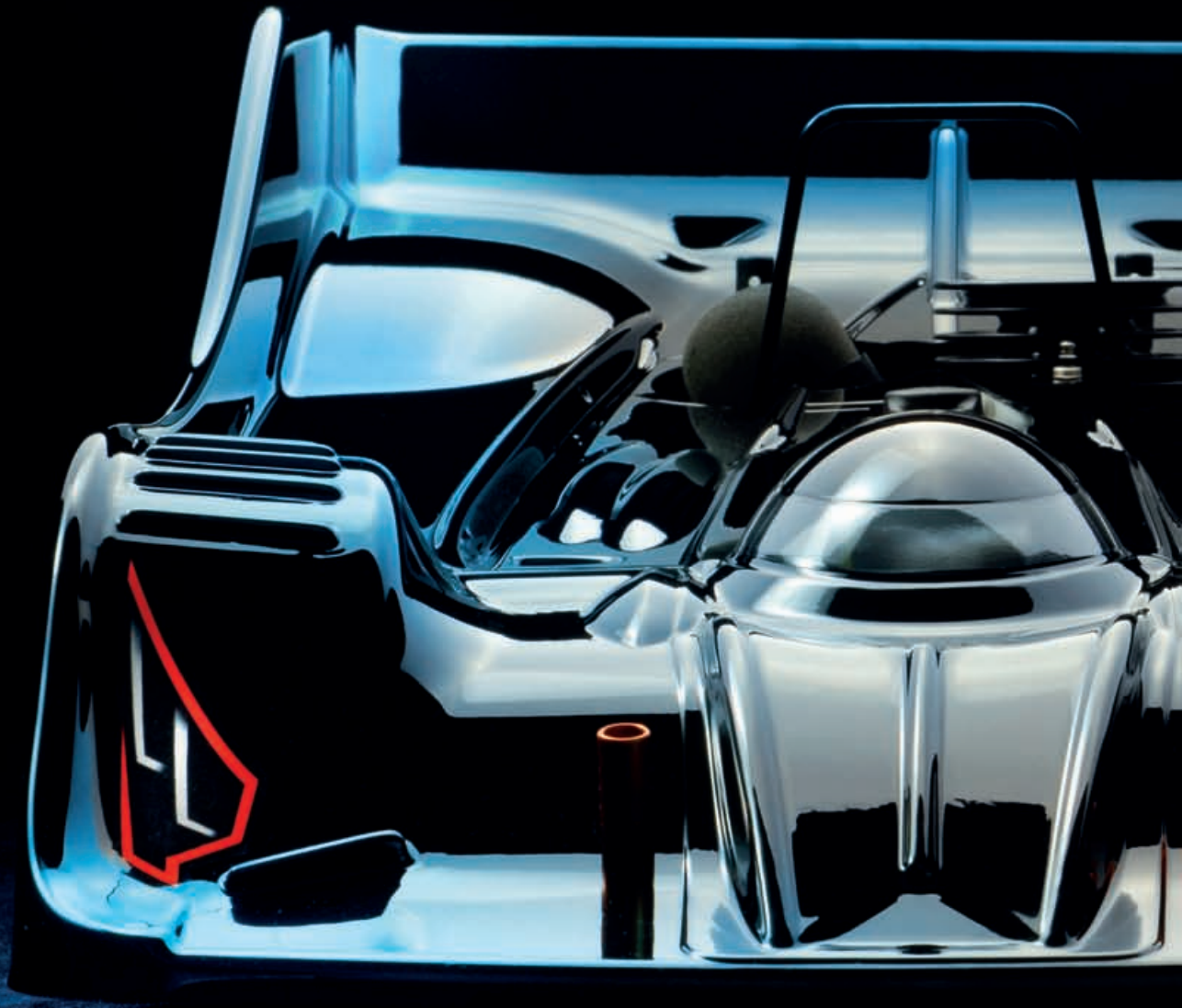


1/8 LUXURY NITRO ON-ROAD CAR

XRAY RX8



INSTRUCTION MANUAL

XRAY RX8'23 & XRAY RX8E'23

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.

XRAY Europe

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Phone: +421-32-7401100
Fax: +421-32-7401109
Email: info@teamxray.com

XRAY USA

RC America, 2030 Century Center Blvd #15
Irving, TX 75062
USA
Phone: (214) 744-2400
Fax: (214) 744-2401
Email: xray@rcamerica.com

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 warranty 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 included in kit).
- Immediately after using your model, do NOT touch equipment on the model such as the motor and speed controller, because they generate high temperatures. You may seriously burn yourself seriously touching them.
- Follow the operating instructions for the radio equipment at all times.
- Do not put fingers or any objects inside rotating and moving parts, as this may cause damage or serious injury as your finger, hair, clothes, etc. may get caught.
- Be sure that your operating frequency is clear before turning on or running your model, and never share the same frequency with somebody else at the same time. Ensure that others are aware of the operating frequency you are using and when you are using it.
- Use a transmitter designed for ground use with RC cars. Make sure that no one else is using the same frequency as yours in your operating area. Using the same frequency at the same time, whether it is driving, flying or sailing, can cause loss of control of the RC model, resulting in a serious accident.
- Always turn on your transmitter before you turn on the receiver in the car. Always turn off the receiver before turning your transmitter off.
- 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!

XRAY

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 flammable, 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 exceed 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 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!

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	Ensure smooth non-binding movement	Detail	Assemble in the specified order	Part bags used
Apply oil	Cut off remaining material	Pay attention here	Assembly view	Assemble left and right sides the same way
Apply grease	Assemble as many times as specified	Follow tip here	Optional parts	Number of teeth

TOOLS REQUIRED

Combination Pliers
(HUDY #189020)

Side Cutters
(HUDY #189010)

Pocket Hobby Knife (HUDY #188981)

Cross Wrench 3mm (HUDY #107581)

HUDY Ball Joint Wrench
(HUDY #181110)

Clutch Spring Tool (HUDY #182005)

Turnbuckle Wrench 3mm
(HUDY #181030)

Turnbuckle Wrench 5mm
(HUDY #181050)

Special Tool for turnbuckles, nuts (HUDY #181090)

Tweezers

Scissors (HUDY #188990)

Alu RX8 Pinion Gear Tool
(XRAY #349903)

Allen 1.5mm (#111545 - HUDY EXCLUSIVE Limited Edition)

Allen 2.0mm (#112045 - HUDY EXCLUSIVE Limited Edition)

Ball Allen Wrench 2.0mm (#132045 - HUDY EXCLUSIVE Limited Edition)

Allen Wrench 2.5mm (#112545 - HUDY EXCLUSIVE Limited Edition)

Ball Allen Wrench 2.5mm (#132545 - HUDY EXCLUSIVE Limited Edition)

Allen 3.0mm (#113045 - HUDY EXCLUSIVE Limited Edition)

Arm Reamer 3.0mm (#107643 - HUDY EXCLUSIVE Limited Edition)

Arm Reamer 4.0mm (#107644 - HUDY EXCLUSIVE Limited Edition)

Socket 5.5mm (#175535 - HUDY EXCLUSIVE Limited Edition)

Slotted Screwdriver 3.0mm (#153055 - HUDY EXCLUSIVE Limited Edition)

Slotted Screwdriver 4.0mm (#154055 - HUDY EXCLUSIVE Limited Edition)

Caster Clip Remover (#107612 - HUDY EXCLUSIVE Limited Edition)

Reamer (#107602 - HUDY EXCLUSIVE Limited Edition)

Flywheel/Clutch Multi-Tool (HUDY #182010)

Professional Multi Tool
(HUDY #183011)

EQUIPMENT INCLUDED

* Kit includes smaller but sufficient amount of oil and grease to build the car.

600cSt (#106360)
HUDY Premium Silicone Oils



(HUDY #106210)
Premium Graphite Grease



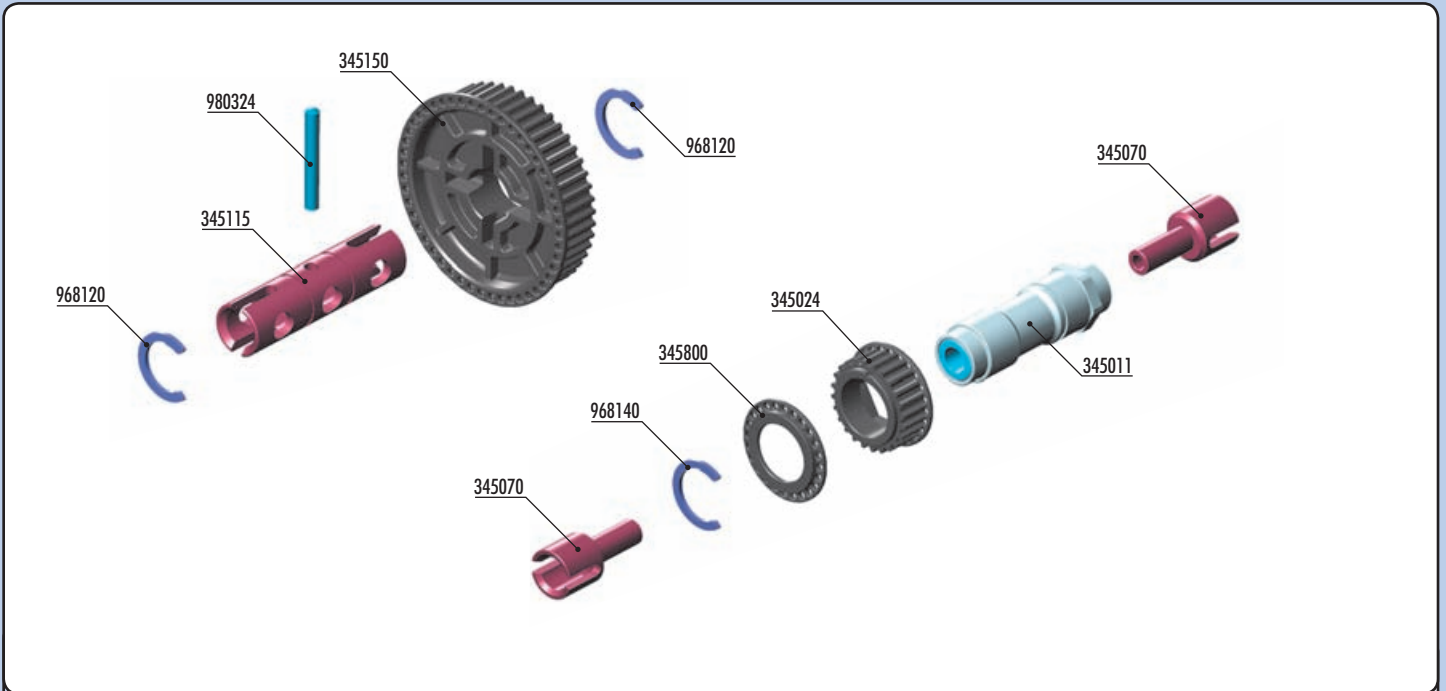
At the beginning of each section is an exploded view of the parts to be assembled. There is also a list of all the parts and part numbers that are related to the assembly of that section. The part descriptions are color-coded to make it easier for you to identify the source of a part. Here are what the different colors mean:

STYLE A - indicates parts that are included in the bag marked for the section.
 STYLE B - indicates parts that are included in the box.
 STYLE C - indicates parts that are already assembled from previous steps.

EQUIPMENT REQUIRED

<p>Transmitter & Receiver</p>	<p>Engine (FX R900 #660200)</p>	<p>Exhaust & Manifold - Set (FX #669550)</p>	<p>Starter Box & Battery Pack (HUDY #104500)</p>	<p>Glow Plug Igniter</p>
<p>Steering and Throttle Servos</p>	<p>Double-sided Tape (HUDY #107875)</p>	<p>Lexan™ Paint</p>	<p>Fuel + Fuel Bottle (HUDY #104200)</p>	<p>Bodyshell</p>
<p>Battery Charger</p>	<p>Receiver Pack</p>	<p>Wheels & Tires</p>	<p>Bearing Oil (HUDY #106230)</p>	<p>Threadlock</p>
<p>Engine After Run Oil (HUDY #106250)</p>	<p>One-Way Lube (HUDY #106231)</p>	<p>Air Filter Oil (HUDY #106240)</p>	<p>CA glue</p>	<p>Tire Truer (HUDY #102003)</p>

1. FRONT ONE-WAY & REAR SOLID AXLE



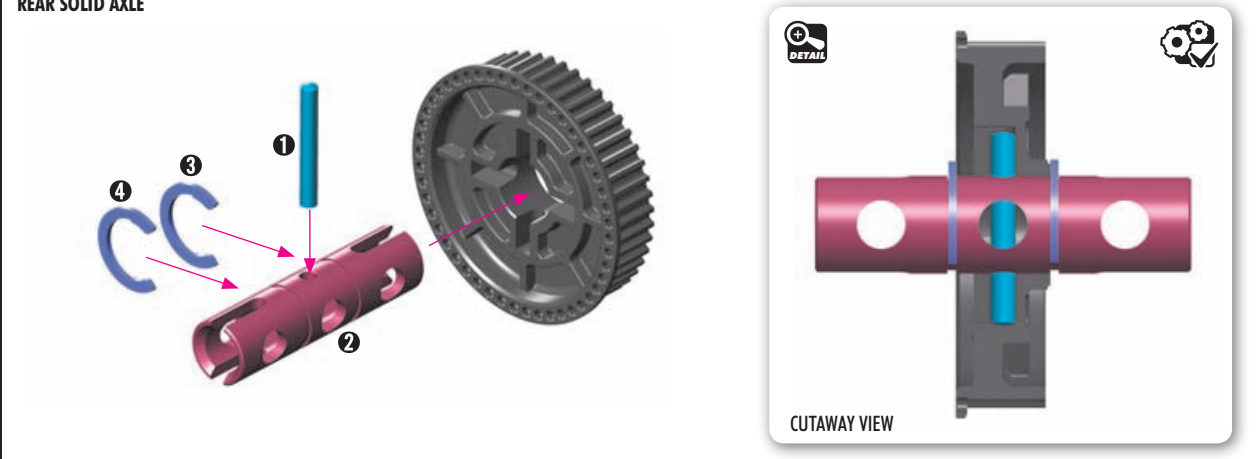
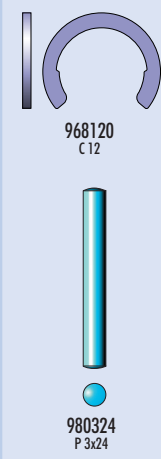
BAG

01

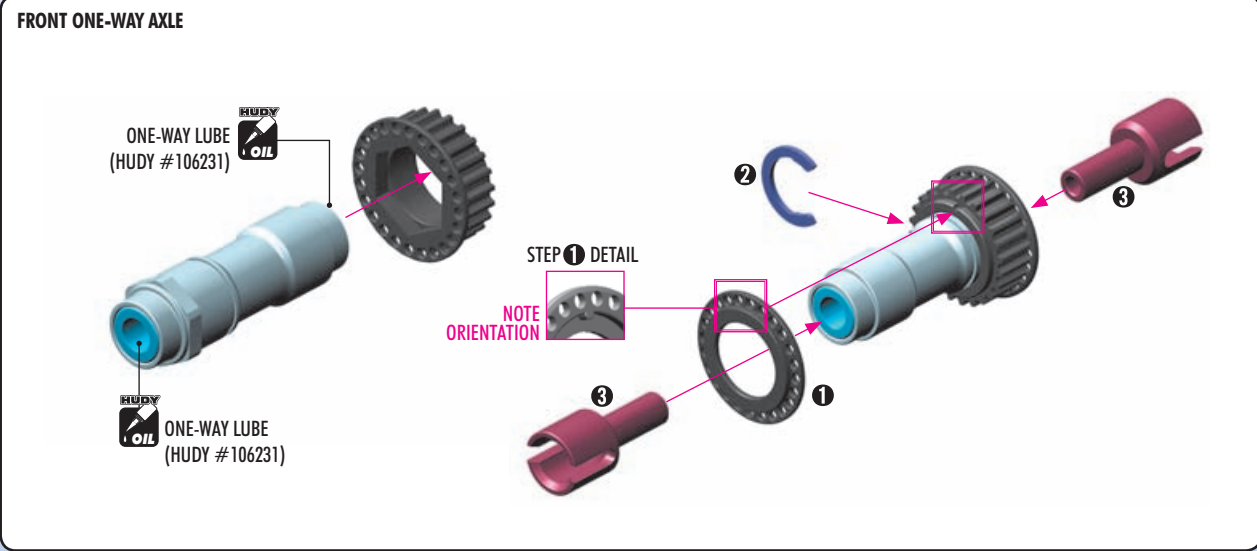
- 345001 FRONT ONE-WAY - HARDCOATED + LIGHTWEIGHT ADAPTERS
- 345011 FRONT ONE-WAY AXLE - BLACK COATED
- 345024 COMPOSITE FRONT ONE-WAY AXLE PULLEY 24T
- 345070 FRONT ONE-WAY AXLE OUTDRIVE ADAPTER - HUDY SPRING STEEL™ (2)
- 345115 REAR SOLID AXLE SHAFT - LIGHTWEIGHT - HUDY SPRING STEEL™
- 345150 COMPOSITE REAR SOLID AXLE PULLEY 48T
- 345800 COMPOSITE BELT PULLEY COVER SET

- 968120 C-CLIP 12 (10)
- 968140 C-CLIP 14 (10)
- 980324 PIN 3x24 (10)

REAR SOLID AXLE

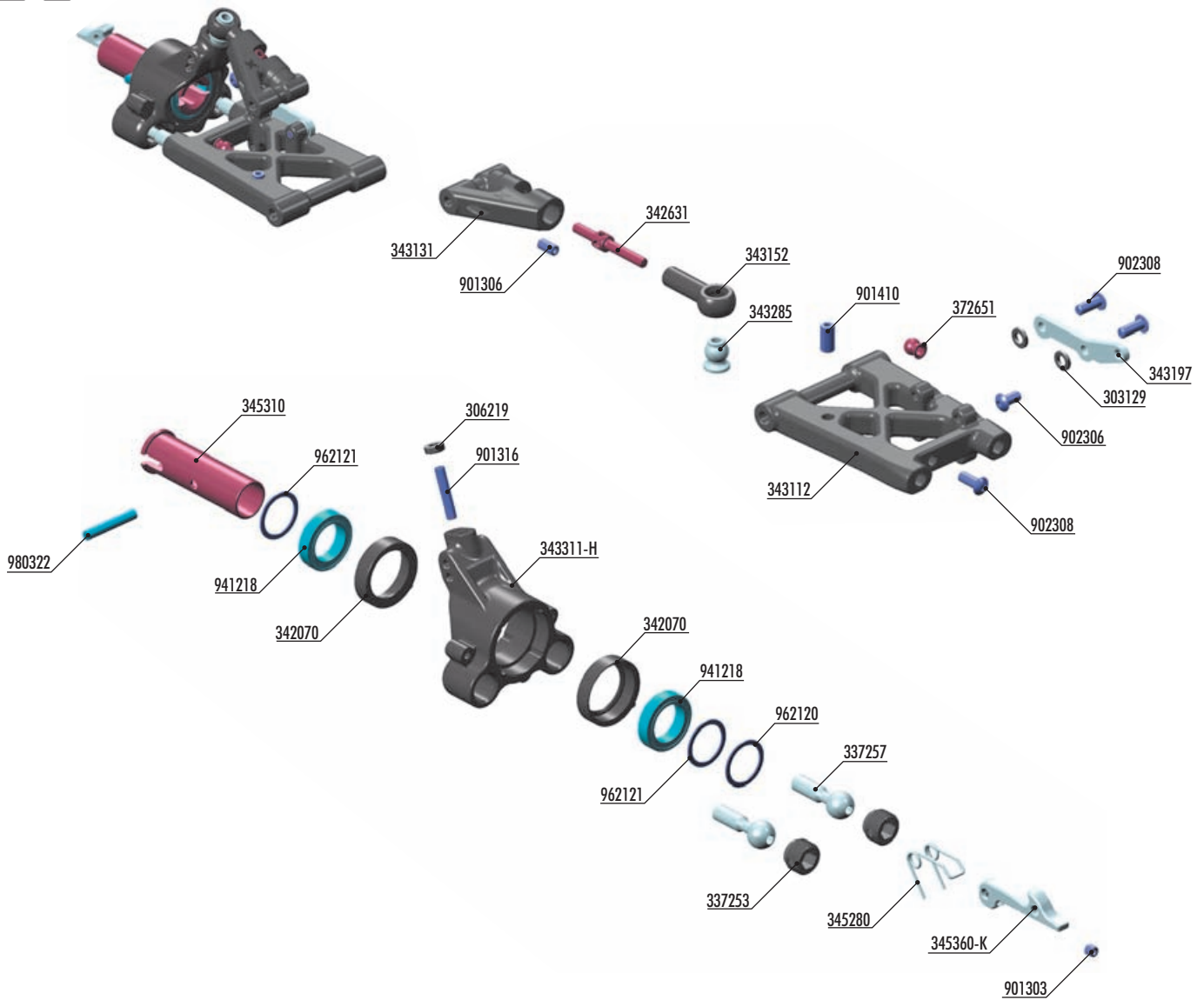


FRONT ONE-WAY AXLE



2. REAR SUSPENSION

2x 



REAR UPRIGHTS

#343311	MEDIUM	OPTION
#343311-H	HARD	INCLUDED
#343311-G	GRAPHITE	OPTION



ADJUSTING NUT

#337253	COMPOSITE	INCLUDED
#337252	ALU	OPTION

*The alu nut must be used together with #337254 – Composite Ball Cup 8.4mm.



#980322-T
TITAN PIN 3x22 (2)



SUSPENSION UPPER ARMS

#343130	MEDIUM	OPTION
#343131	HARD	INCLUDED
#343132	GRAPHITE	OPTION



#345301
REAR CVD DRIVE SHAFT SET
HUDY SPRING STEEL™



#345290
ALU SHIM 12x15x1.0MM (4)



SUSPENSION LOWER ARMS

#343111	MEDIUM	OPTION
#343112	HARD	INCLUDED
#343113	GRAPHITE	OPTION



#345312
ALU REAR CVD DRIVE
AXLE SWISS 7075 T6
HARDCOATED



#345370
GRAPHITE REAR AERO DISC
1.6mm - SET



BAG
02.1

303129 COMPOSITE SET OF SHIMS 3x3x6x1MM; 1x3x6x2MM (2)
306219 COMPOSITE SET OF SERVO SHIMS (4)
337253 COMPOSITE ADJUSTING NUT M10x1 (4)
337257 STEEL PIVOT BALL 8.4 MM (2)
342070 COMPOSITE SET OF BUSHINGS (2)
342631 ADJ. TURNBUCKLE L/R 28 MM - HUDY SPRING STEEL™ (2)
343112 SUSPENSION ARM FOR EXTENSION - REAR LOWER - HARD
343131 COMPOSITE SUSPENSION ARM REAR UPPER - HARD
343152 UPPER BALL JOINT 5.8MM - SHORT & LONG (2+2)

343197 ALU EXTENSION FOR SUSPENSION ARM - REAR LOWER - 7075 T6 (2)
343285 PIVOT BALL 6.8MM (2)
343311-H COMPOSITE UPRIGHT REAR FOR AERO DISC - HARD
345280 WHEEL SPRING (2)
345310 REAR WHEEL AXLE - HUDY SPRING STEEL™
345360-K ALU REAR WHEEL LOCK - SWISS 7075 T6 - BLACK (2)
372651 PIVOT BALL UNIVERSAL 4.9 MM - HUDY SPRING STEEL™ (2)
941218 BALL-BEARING 12x18x4 RUBBER SEALED - OIL (2)

901303 HEX SCREW SB M3x3 (10)
901306 HEX SCREW SB M3x6 (10)
901316 HEX SCREW SB M3x16 (10)
901410 HEX SCREW SB M4x10 (10)
902306 HEX SCREW SH M3x6 (10)
902308 HEX SCREW SH M3x8 (10)
962120 WASHER S 12x15x0.5 (10)
962121 WASHER S 12x15x1.0 (10)
980322 PIN 3x22 (10)

2. REAR SUSPENSION

10

303129
SHIM 3x6x1

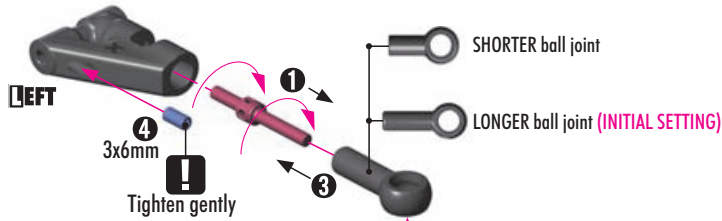
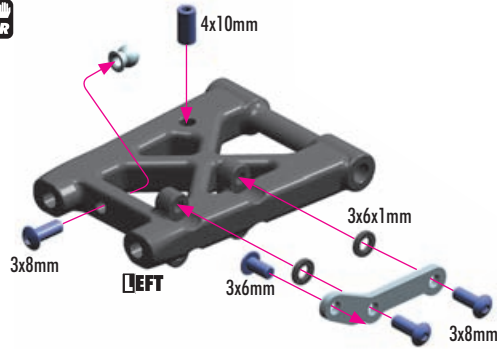
901306
SB M3x6

901410
SB M4x10

902306
SH M3x6

902308
SH M3x8

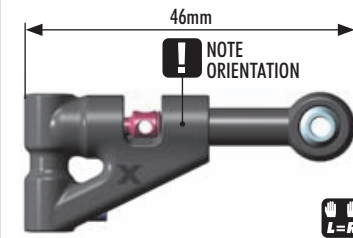
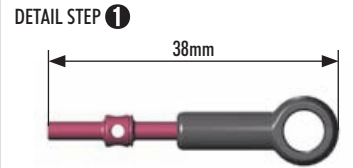
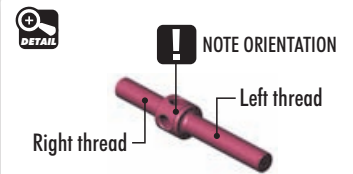
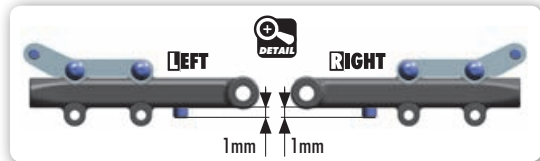
2x



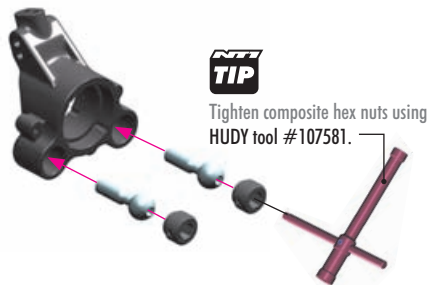
TIP Install the pivot balls with Professional Multi Tool (HUDY #183011).

OPTION	SUSPENSION UPPER ARMS		
	#343130	MEDIUM	OPTION
	#343131	HARD	INCLUDED
	#343132	GRAPHITE	OPTION

OPTION	SUSPENSION LOWER ARMS		
	#343111	MEDIUM	OPTION
	#343112	HARD	INCLUDED
	#343113	GRAPHITE	OPTION



2x



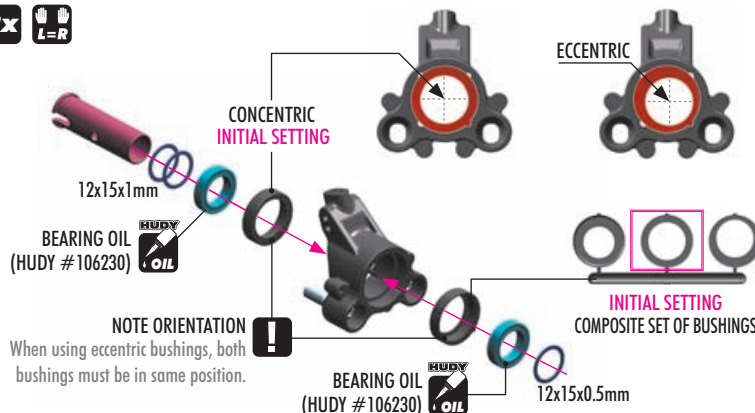
PIVOT BALLS MUST MOVE FREELY

During initial assembly, tighten each composite hex nut until the pivot ball starts to bind, then loosen slightly. Verify that the pivot balls move freely.

OPTION	ADJUSTING NUT		
	#337253	COMPOSITE	INCLUDED
	#337252	ALU	OPTION

*The alu nut must be used together with #337254 – Composite Ball Cup 8.4mm.

2x



SHIM		SHIM	
IN	INITIAL SETTING	OUT	
1+1	INITIAL SETTING	0.5	
1+0.5		1	
1		1+0.5	
0.5		1+1	
0		1+1+0.5	

941218
BB 12x18x4

962120
S 12x15x0.5

962121
S 12x15x1.0

#345290
ALU SHIM 12x15x1.0MM (4)

#345301
REAR CVD DRIVE SHAFT SET
HUDY SPRING STEEL™

#345312
ALU REAR CVD DRIVE AXLE
SWISS 7075 T6 - HARDCOATED

2. REAR SUSPENSION

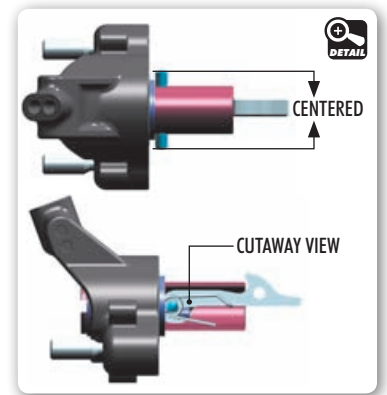
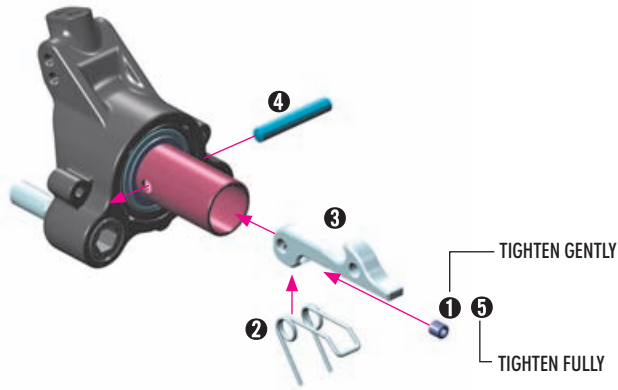


901303
SB M3x3



980322
P 3x22

2x



REAR UPRIGHTS

OPTION	Part Number	Material	Status
	#343311	MEDIUM	OPTION
	#343311-H	HARD	INCLUDED
	#343311-G	GRAPHITE	OPTION



#980322-T
TITAN PIN 3x22 (2)



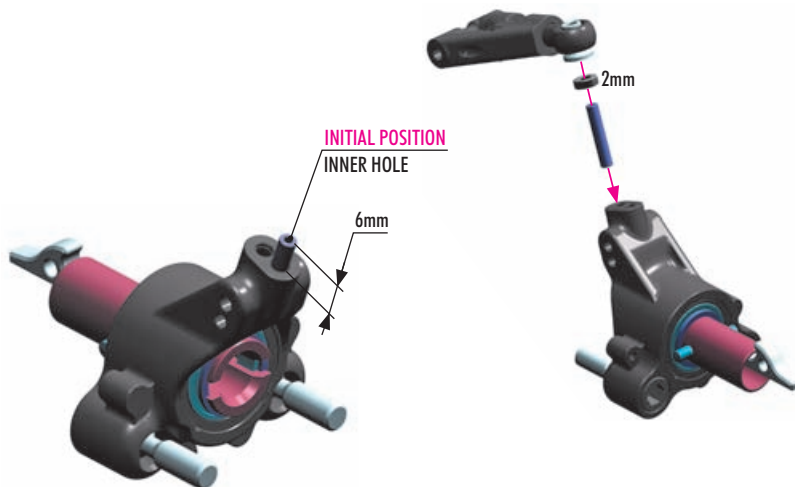
10

306219
SHIM 3x6x2

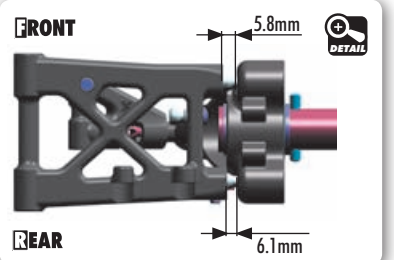
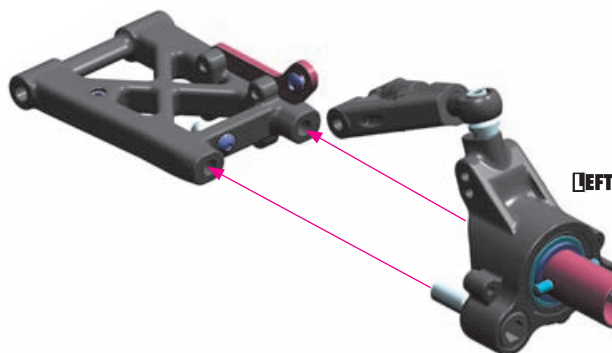


901316
SB M3x16

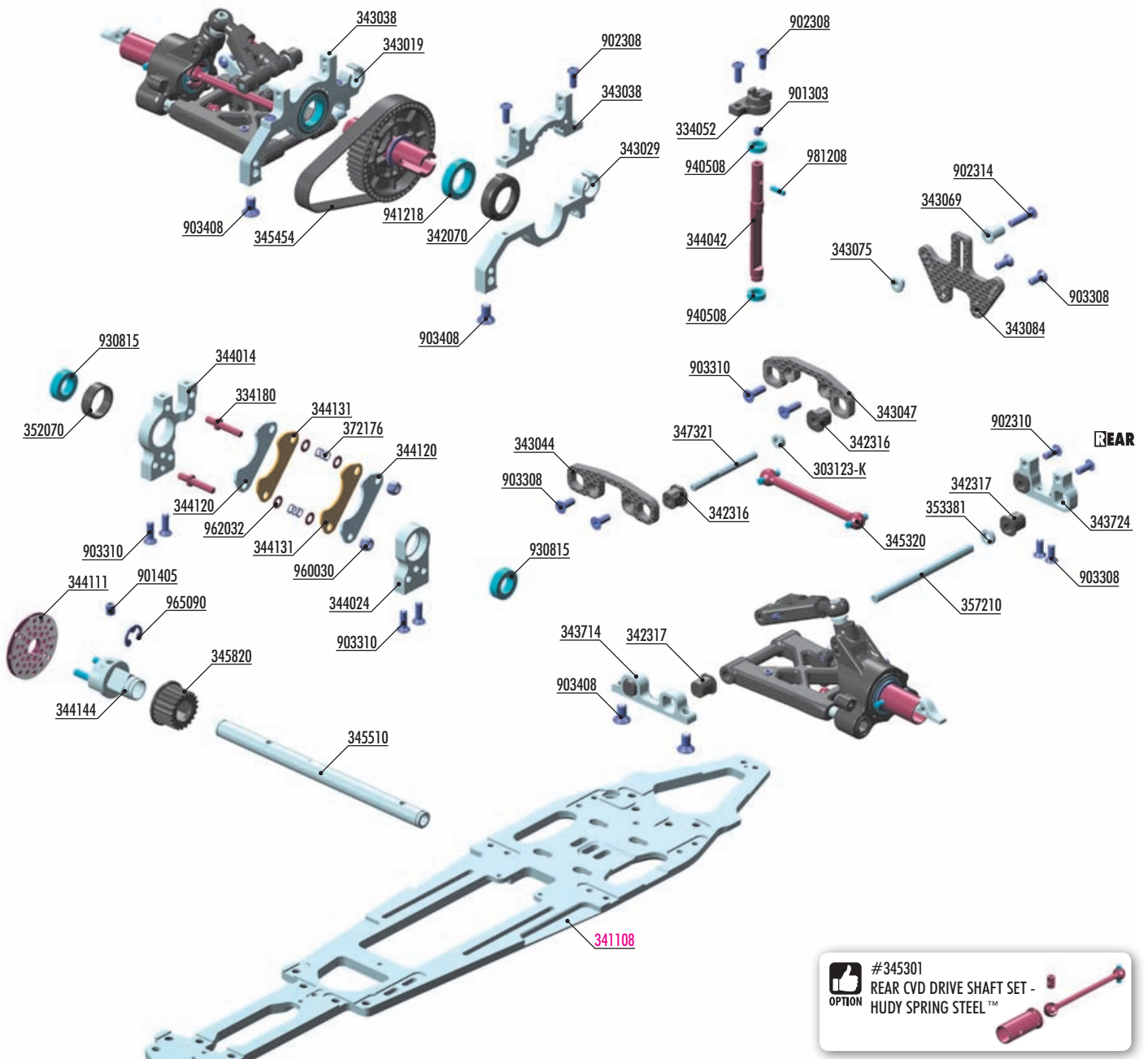
2x



2x



2. REAR SUSPENSION



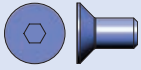
BAG

02.2

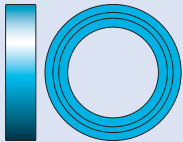
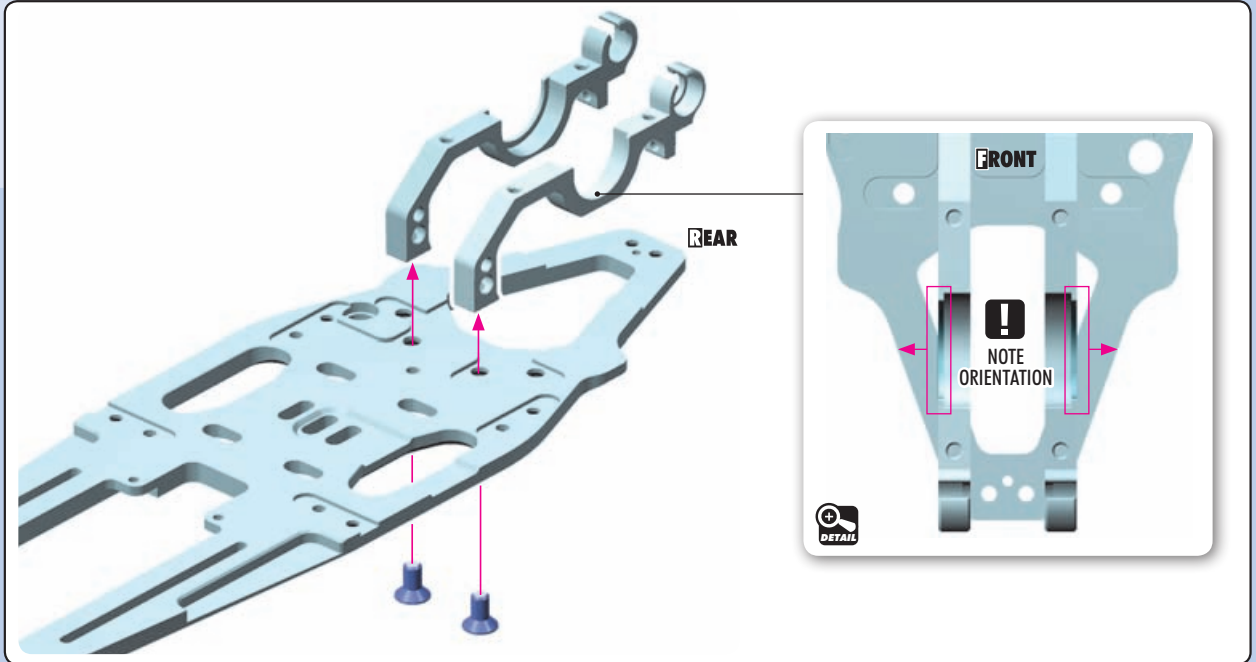
303123-K	ALU SHIM 3x6x2.0MM - BLACK (10)	347321	REAR UPPER INNER PIVOT PIN WITH FLAT SPOT (2)
334052	COMPOSITE BRAKE UPPER PLATE	352070	COMPOSITE BEARING HUB FOR DIFF (4)
334180	ADJUSTABLE BRAKE PAD GUIDE PIN - HUDY SPRING STEEL™ (2)	353381	ALU SHIM 4x7.5x2 (4)
342070	COMPOSITE SET OF BUSHINGS (2)	357210	REAR LOWER INNER PIVOT PIN (2)
342316	COMPOSITE REAR UPPER SUSP. ECCENTRIC BUSHING (4)	372176	SPRING 4.25 COILS 3.6x6x0.4MM, C=1.5 - GOLD (SOFT) (2)
342317	COMPOSITE REAR LOWER SUSP. ECCENTRIC BUSHING (4)		
343019	ALU LOWER BULKHEAD FRONT - SWISS 7075 T6 - RIGHT	901303	HEX SCREW SB M3x3 (10)
343029	ALU LOWER BULKHEAD FRONT - SWISS 7075 T6 - LEFT	901405	HEX SCREW SB M4x5 (10)
343038	ALU UPPER CLAMP REAR - SWISS 7075 T6 - (L+R)	902308	HEX SCREW SH M3x8 (10)
343044	GRAPHITE REAR UPPER ARM HOLDER 3.5MM - FRONT	902310	HEX SCREW SH M3x10 (10)
343047	GRAPHITE REAR UPPER ARM HOLDER 3.5MM - REAR	902314	HEX SCREW SH M3x14 (10)
343069	STEEL BUSHING (2)	903308	HEX SCREW SFH M3x8 (10)
343075	STEEL NUT (2)	903310	HEX SCREW SFH M3x10 (10)
343084	GRAPHITE SHOCK TOWER REAR	903408	HEX SCREW SFH M4x8 (10)
343714	ALU REAR LOWER SUSPENSION HOLDER - FRONT - RF - BLACK	930815	BALL-BEARING 8x14x4 STEEL SEALED - OIL (2)
343724	ALU REAR LOWER SUSPENSION HOLDER - REAR - RR - BLACK	940508	BALL-BEARING 5x8x2.5 RUBBER SEALED - OIL (2)
344014	ALU BRAKE STAND - SWISS 7075 T6 - SET	941218	BALL-BEARING 12x18x4 RUBBER SEALED - OIL (2)
344024	ALU 2-SPEED HOLDER - SWISS 7075 T6	960030	NUT M3 (10)
344042	BRAKE CAM POST - STEEL	962032	WASHER S 3x6x0.2 (10)
344111	VENTILATED BRAKE DISC PRECISION-GROUND LIGHTWEIGHT	965090	E-CLIP 9 (10)
344120	STEEL BRAKE PAD - HARDENED (2)	981208	PIN 2x8 (10)
344131	BRAKE PAD "SLS" (2)		
344144	BRAKE DISK ADAPTER - 7075 T6 - HARD COATED		
345320	REAR DRIVE SHAFT 61MM - HUDY SPRING STEEL™		
345454	PUR® REINFORCED DRIVE BELT REAR 9.0 x 201 MM		
345510	2-SPEED SHAFT 8MM - SUPER LIGHTWEIGHT - HUDY SPRING STEEL™		
345820	COMPOSITE 2-SPEED BELT PULLEY 20T - CENTER		
		341108	CHASSIS 5MM - CNC MACHINED - SWISS 7075 T6



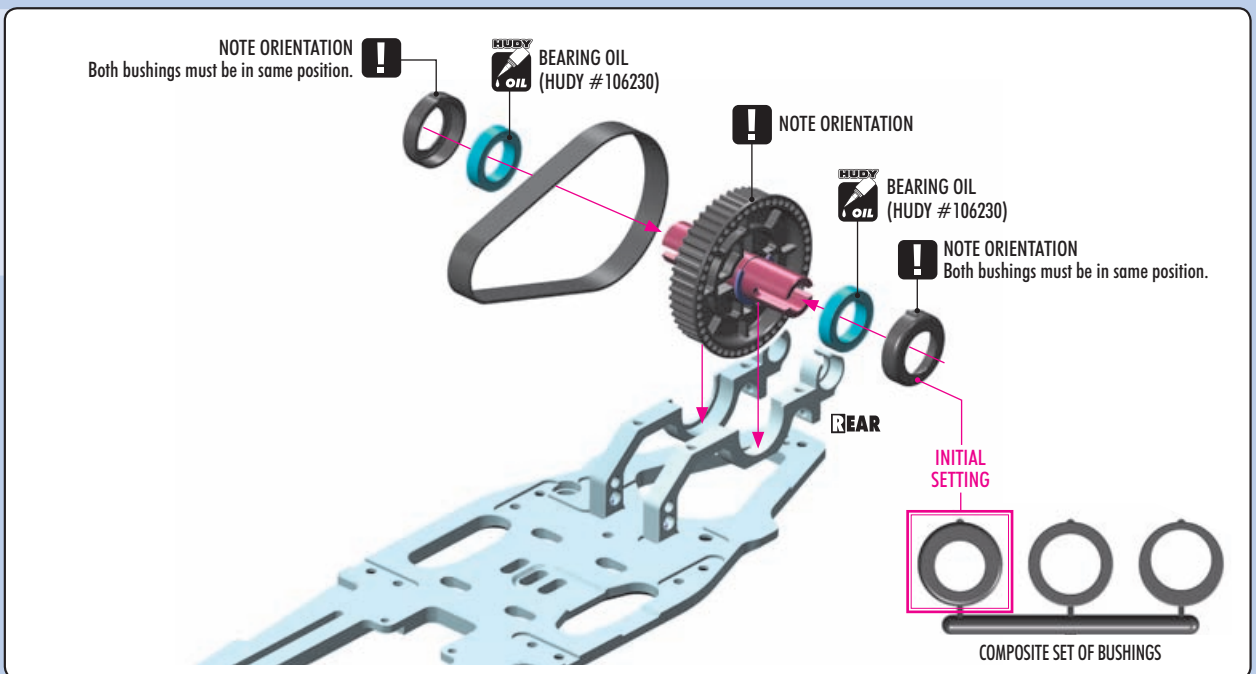
2. REAR SUSPENSION



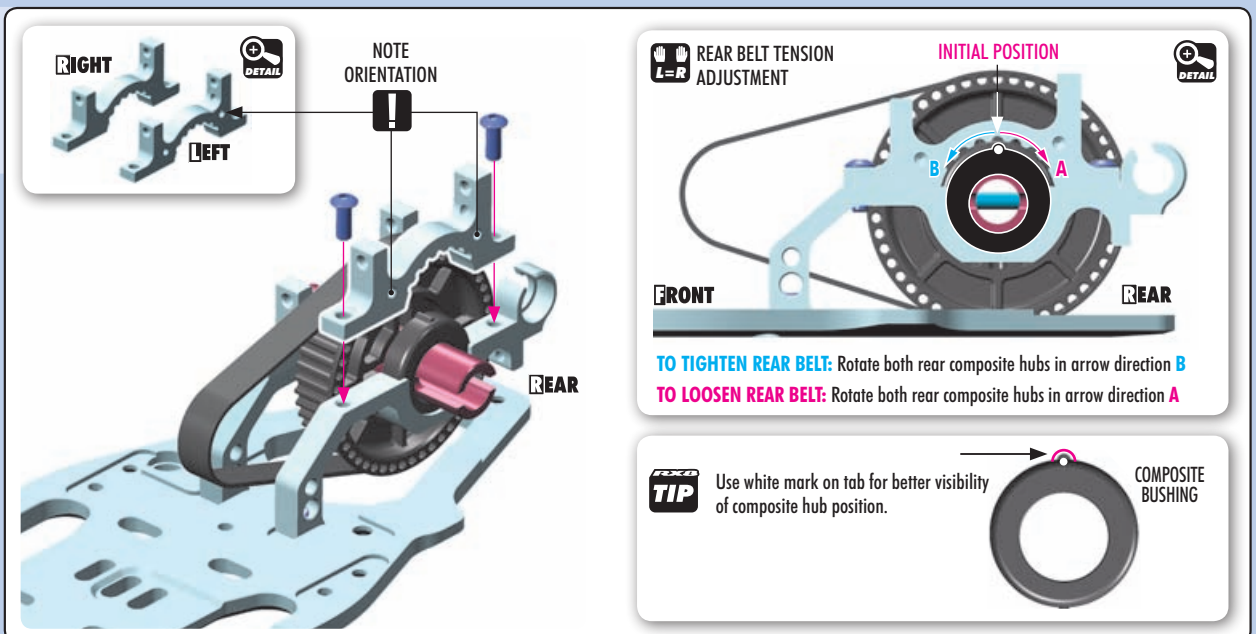
903408
SFH M4x8



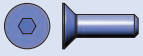
941218
BB 12x18x4



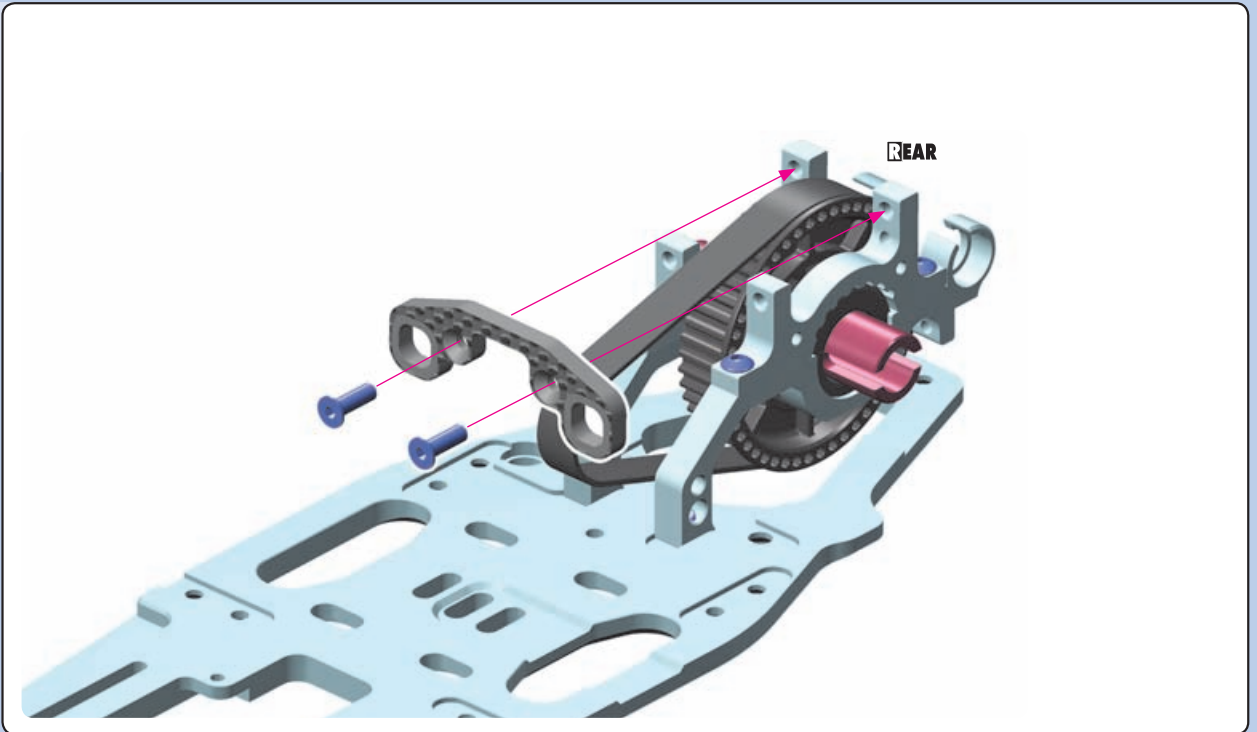
902308
SH M3x8



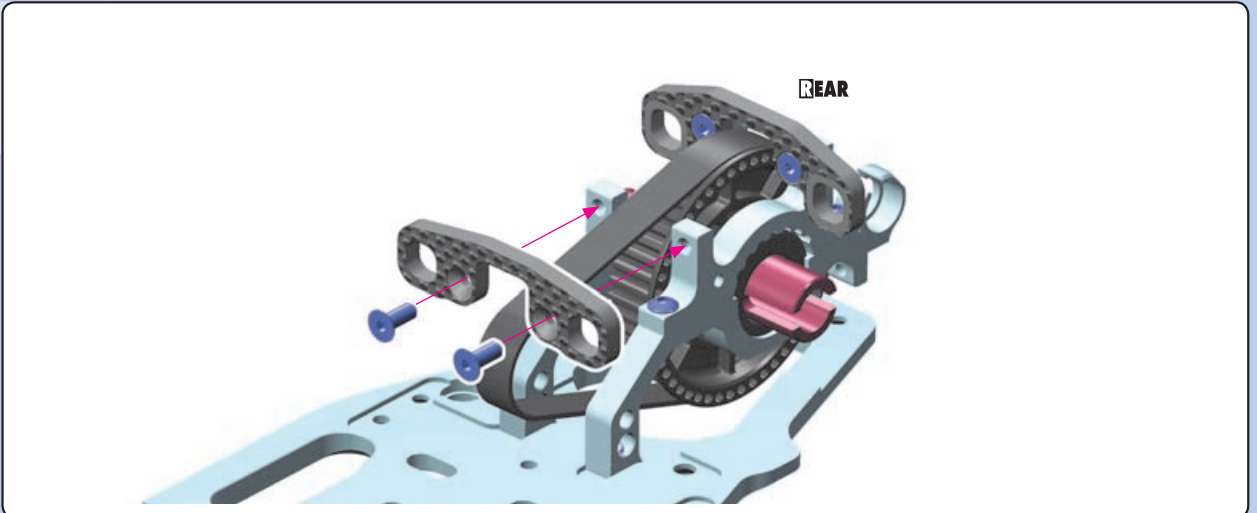
2. REAR SUSPENSION



903310
SFH M3x10



903308
SFH M3x8



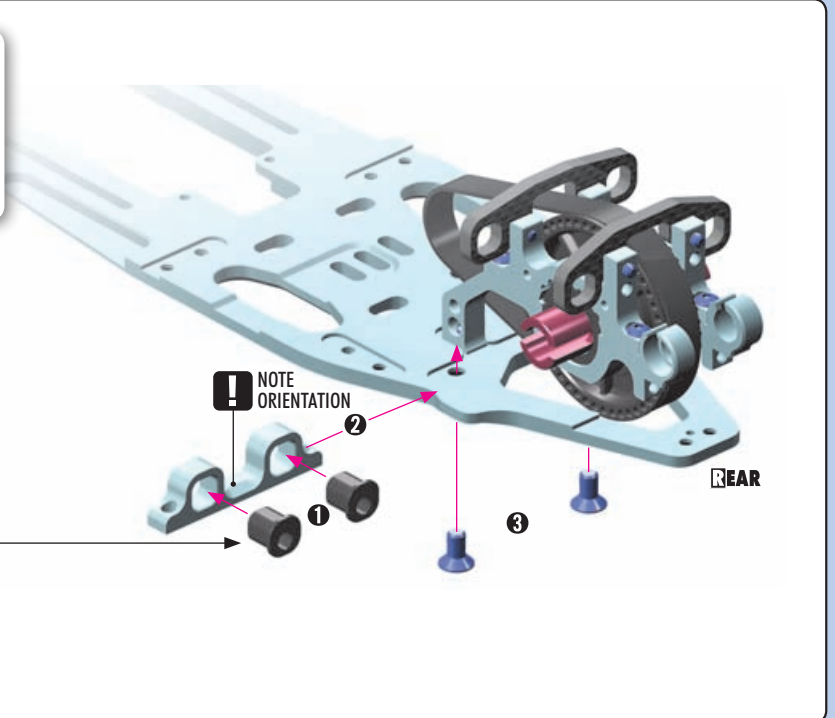
903408
SFH M4x8

!

NOTE

The upper roll center positions cannot be used. Use always low or medium roll center positions **ONLY**.

INITIAL SETTING



2. REAR SUSPENSION

10

353381
SHIM 4x7.5x2



902310
SH M3x10



903308
SFH M3x8

OPTION #345301
REAR CVD DRIVE SHAFT SET -
HUDY SPRING STEEL™

RIGHT

REAR

LEFT

Fuel tube

2mm

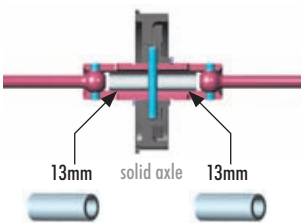
ARM REAMER

It is extremely important that the arms move freely on the pivot pins. If they do not, use the #107644 HUDY Arm Reamer to slightly resize the holes in the arms.

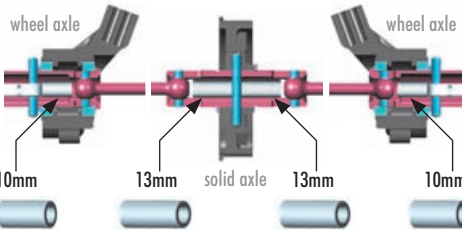
TIP When using wider rear TRACK WIDTH, we recommend to put fuel tube between the into the solid axle from both sides before inserting the drive shaft to make sure that the drive shaft will not fall out. We recommend to use 260mm rear track width as INITIAL SETTING.



If you use the rear width wider than 261mm, we recommend to use 13mm wide tube from each side of the solid axle.

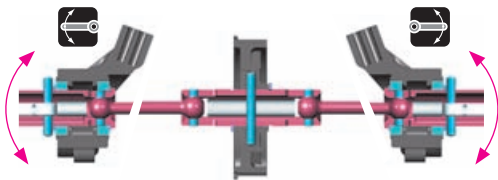


If you use the rear width wider than 264mm, we recommend to use 13mm wide tube from each side of the solid axle and 10mm wide tube inside of the rear wheel axle.



IT IS VERY IMPORTANT

that the drive shaft has axial play otherwise without play, the whole suspension will not move freely and it will have very negative impact on the car handling.



Eccentric bushings

INITIAL SETTING

The upper roll center positions cannot be used. Use always low or medium roll center positions ONLY.



303123-K
SHIM 3x6x2

2x **L=R**

RIGHT

REAR

2mm

LEFT

INITIAL SETTING

NOTE ORIENTATION

TIGHTEN FULLY
set-screw M3x6 onto flatspot.

It is extremely important that the arms move freely on the pivot pins. If they do not, use the #107643 HUDY Arm Reamer to slightly resize the holes in the arms.

ARM REAMER

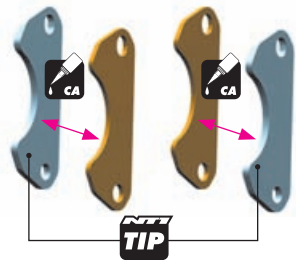
2. REAR SUSPENSION



960030
N M3

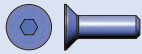
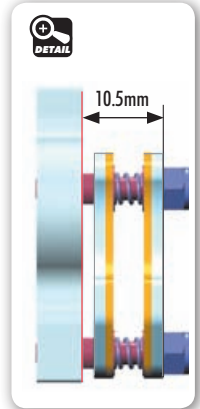
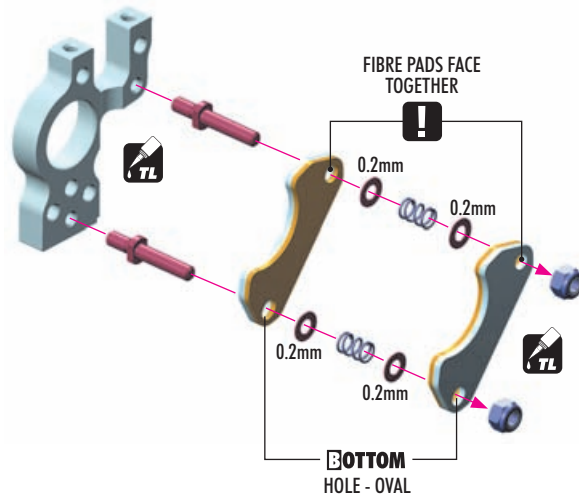
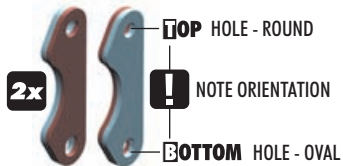


962032
SHIM 3x6x0.2



Roughen steel plates with sandpaper before gluing fibre pads.

We recommend gluing the brake pads to the steel pads, however there is no performance difference between glued & unglued brake pads.



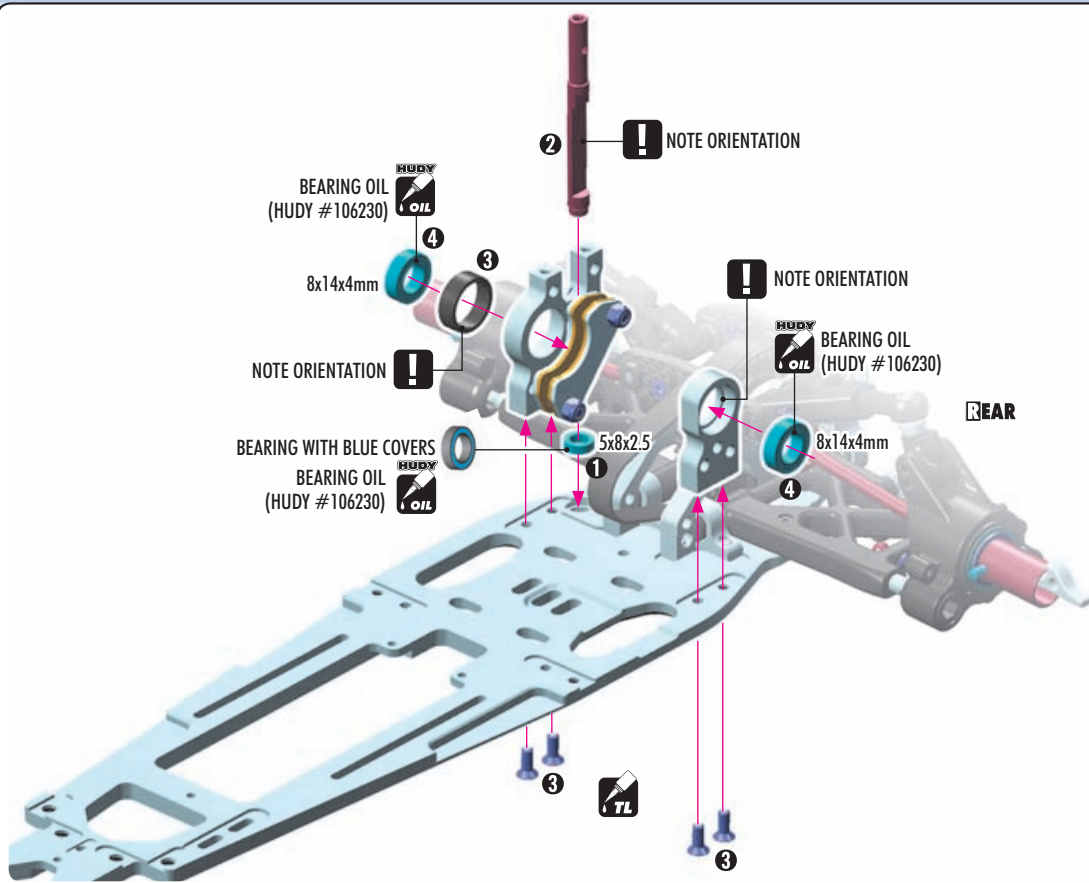
903310
SFH M3x10



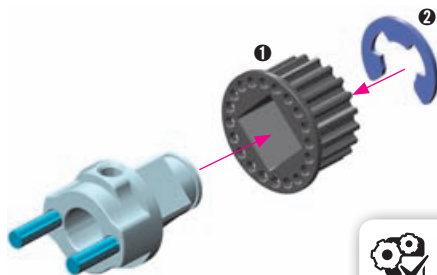
940508
BB 5x8x2.5



930815
BB 8x14x4



965070
C7



#345801-G
LOW FRICTION COMPOSITE BELT PULLEY SET - GRAPHITE
OPTION

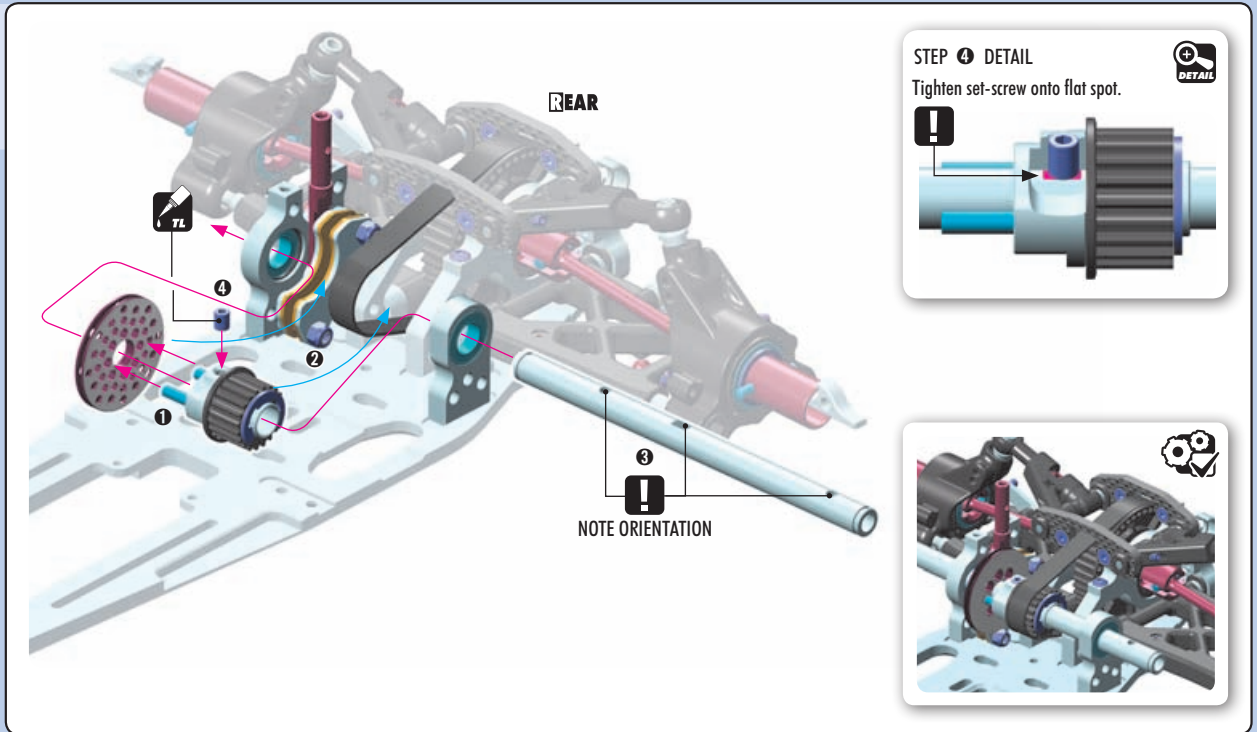
BELT PULLEY 20T - 2-SPEED CENTER
BELT PULLEY 18T - ø8 REAR
BELT PULLEY 18T - ø6 CENTER
BELT PULLEY 28T - FRONT
BELT PULLEY 29T - FRONT



2. REAR SUSPENSION



901405
SB M4x5



901303
SB M3x3



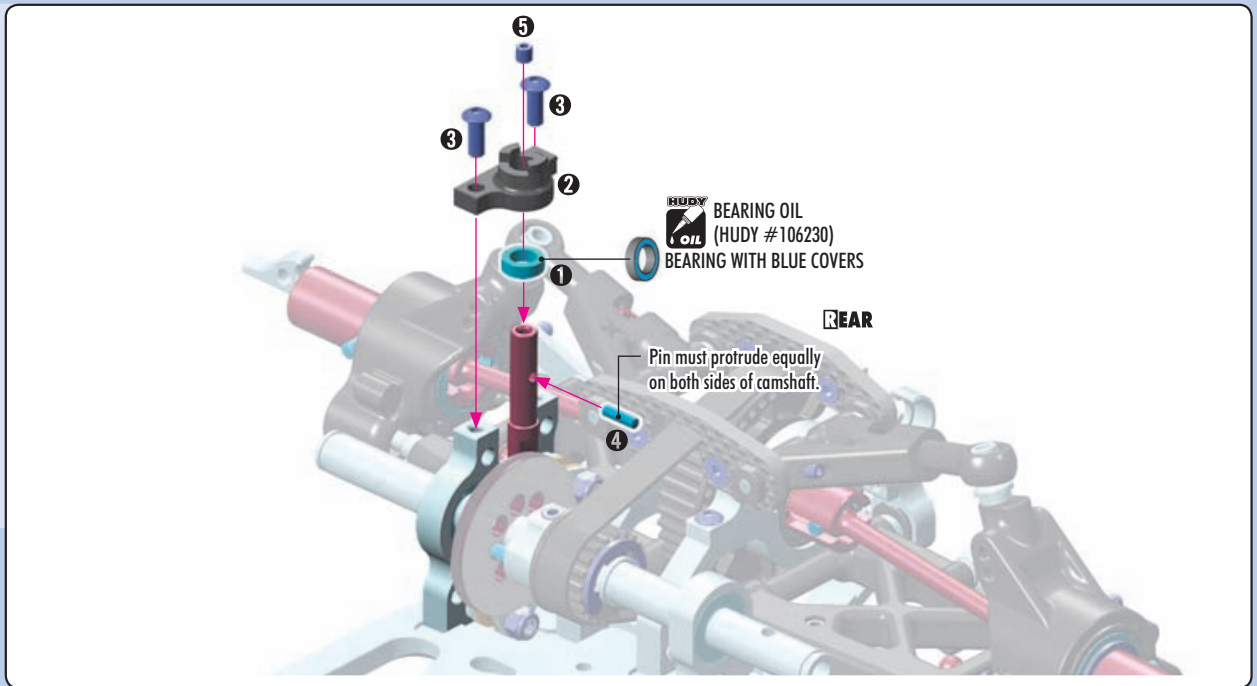
902308
SH M3x8



940508
BB 5x8x2.5



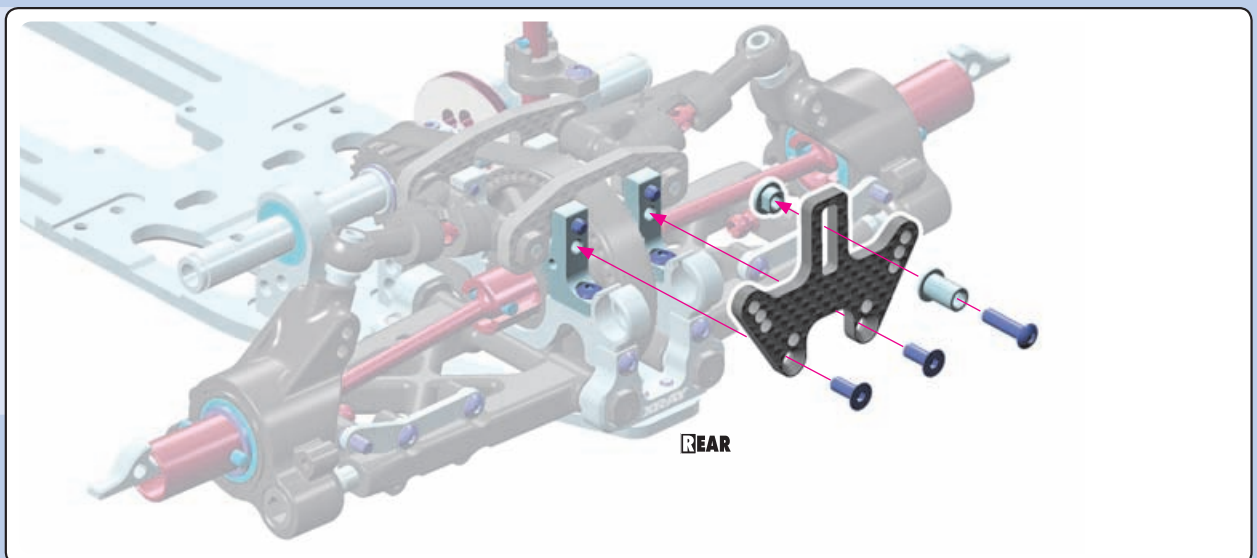
981208
P 2x8



902314
SH M3x14



903308
SFH M3x8



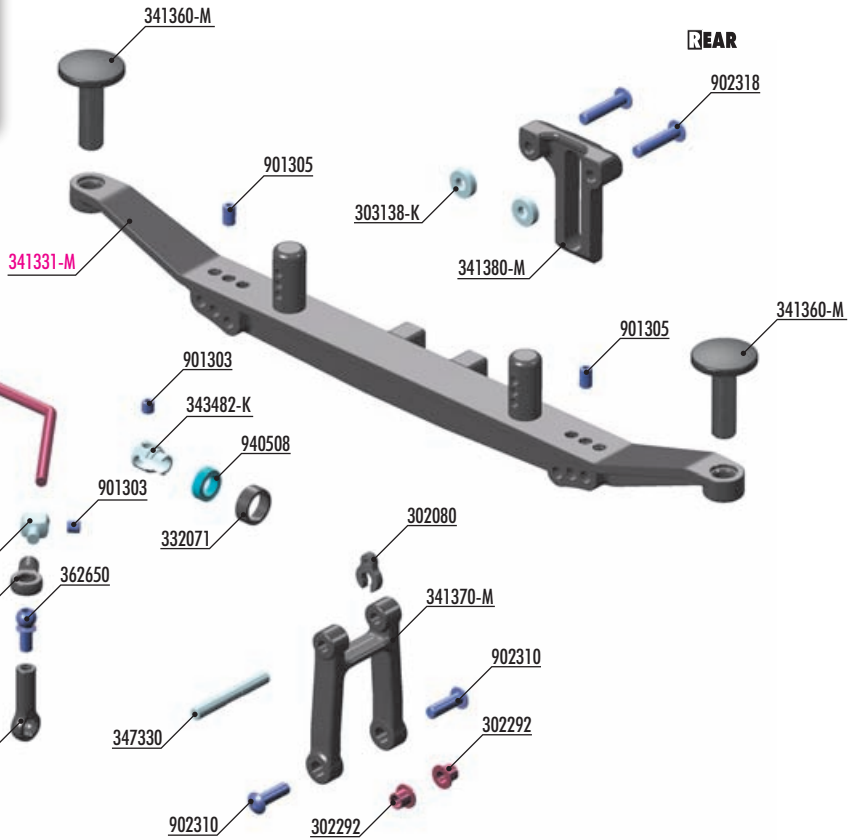
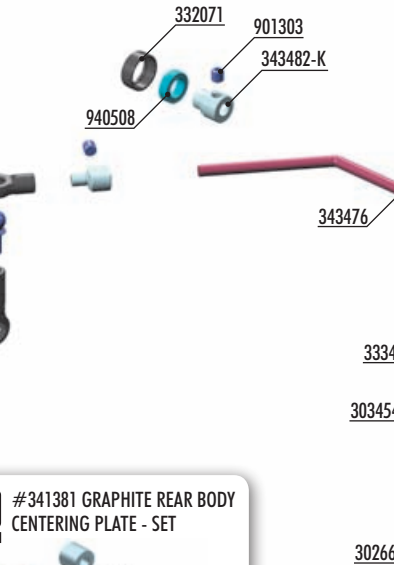
2. REAR SUSPENSION



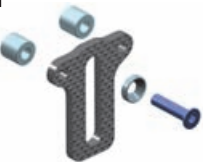
REAR ANTI-ROLL BARS			COLLARS	
#343476	2.6mm	INCLUDED	#333442 + 343482-K	INCLUDED



#343478	2.8mm	OPTION	#333441 + 343485-K
#343479	3.0mm	OPTION	#333441 + 343481-K



#341381 GRAPHITE REAR BODY CENTERING PLATE - SET



BAG

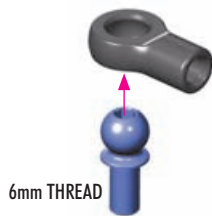
02.3

- 302080 CASTER CLIPS SET 4+3+2+1 MM (2)
- 302292 STEEL STEERING BUSHING LONG (4)
- 302663 COMPOSITE BALL JOINT 4.9MM - OPEN - V2 (8)
- 303138-K ALU SHIM 3x7x2.0MM - BLACK (10)
- 303454 BALL JOINT 4.9MM - OPEN (4)
- 332071 COMPOSITE BALL-BEARING HUB (4)
- 333442 ALU ANTI-ROLL BAR COLLAR 2.6 (2)
- 341360-M COMPOSITE REAR BODY HOLDER SCREW - MEDIUM (2)
- 341370-M COMPOSITE REAR BODY HOLDER ARM - MEDIUM
- 341380-M COMPOSITE REAR BODY CENTERING PLATE - MEDIUM
- 343476 ANTI-ROLL BAR REAR 2.6MM
- 343482-K ALU CUT ANTI-ROLL BAR COLLAR 2.6MM - BLACK (2)

- 347330 REAR BODY HOLDER ARM PIN (2)
- 362650 BALL END 4.9MM WITH THREAD 6MM (2)
- 901303 HEX SCREW SB M3x3 (10)
- 901305 HEX SCREW SB M3x5 (10)
- 902310 HEX SCREW SH M3x10 (10)
- 902318 HEX SCREW SH M3x18 (10)
- 940508 BALL-BEARING 5x8x2.5 RUBBER SEALED - OIL (2)

341331-M COMPOSITE REAR BODY HOLDER - HIGHER - MEDIUM

2x



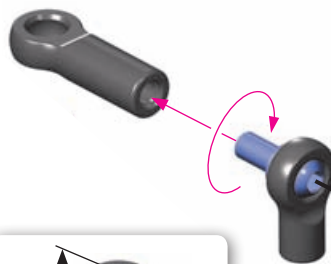
6mm THREAD

TIP

Install the pivot balls with Professional Multi Tool (HUDY #183011).



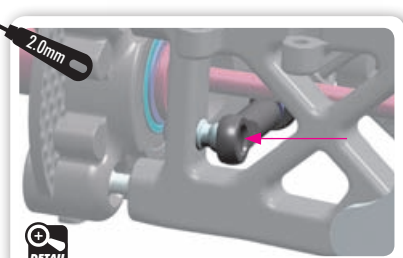
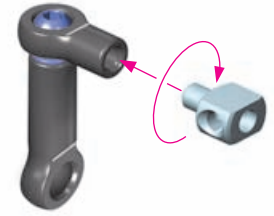
2x



26mm



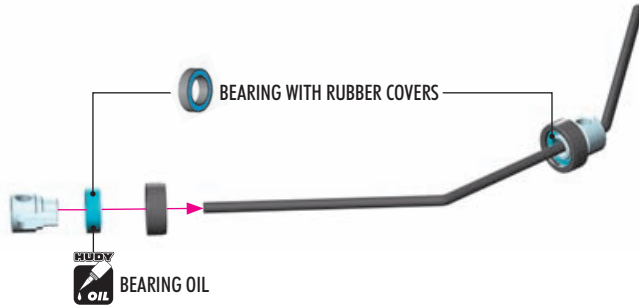
2x



2. REAR SUSPENSION



940508
BB 5x8x2.5

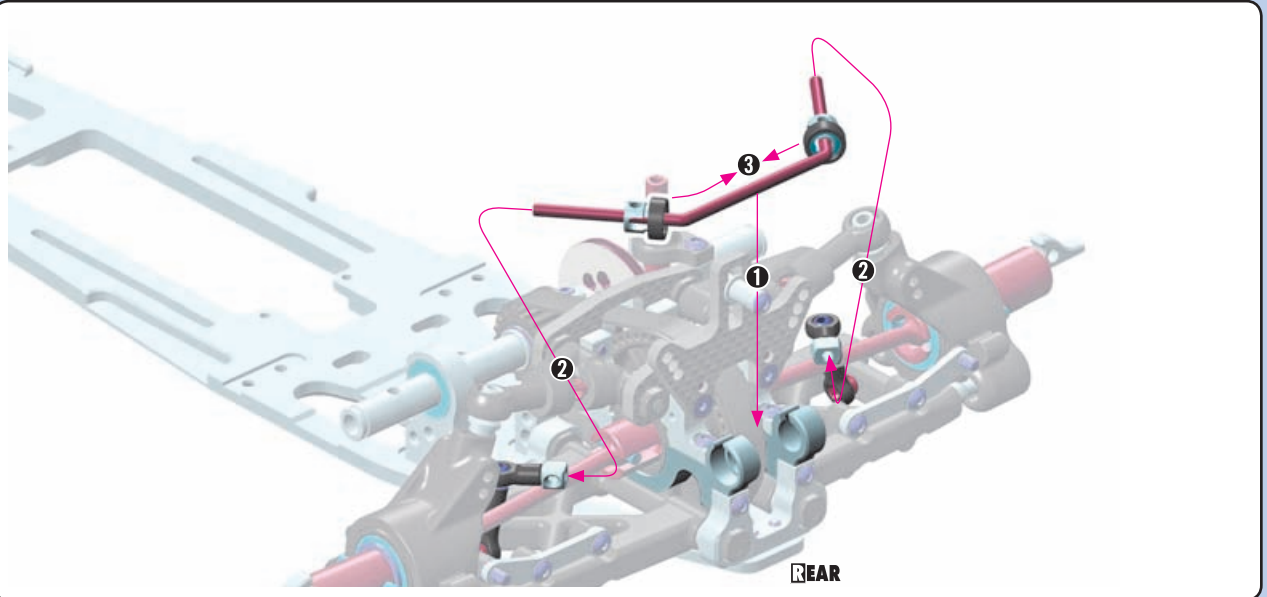


OPTION

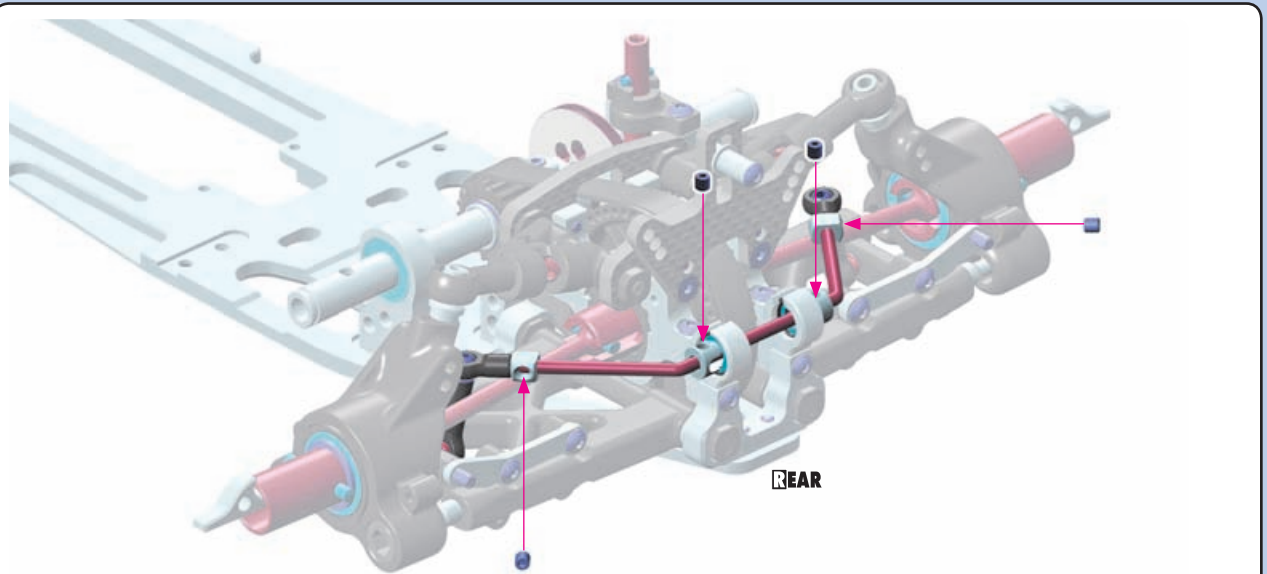
REAR ANTI-ROLL BARS

COLLARS

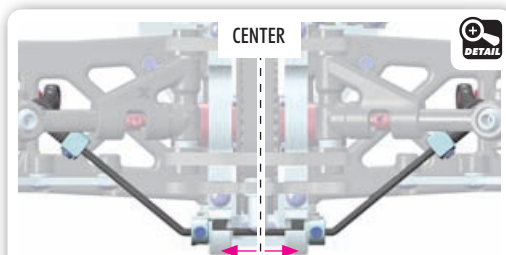
REAR ANTI-ROLL BARS	COLLARS
#343476 2.6mm INCLUDED	#333442 + 343482-K INCLUDED
#343478 2.8mm OPTION	#333441 + 343485-K
#343479 3.0mm OPTION	#333441 + 343481-K



901303
SB M3x3



When the bars are 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 and that the bar wire is flat.



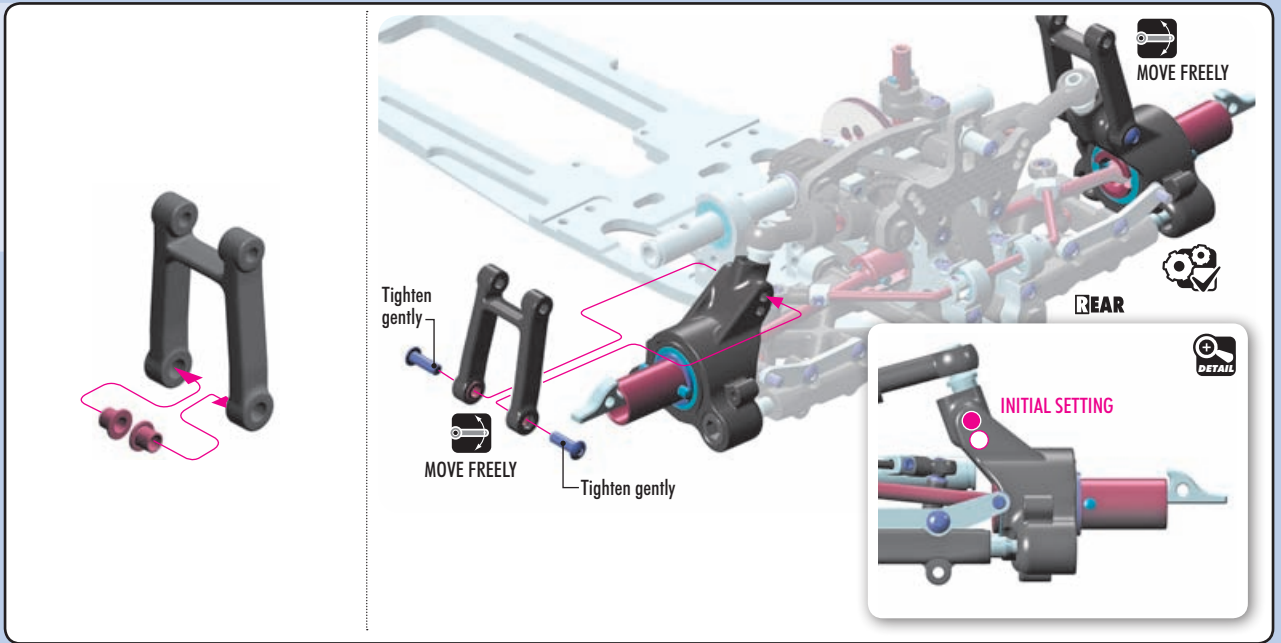
Set the bar into the center, remove the play in the bushings, and tighten the setscrews fully.

REAR

2. REAR SUSPENSION

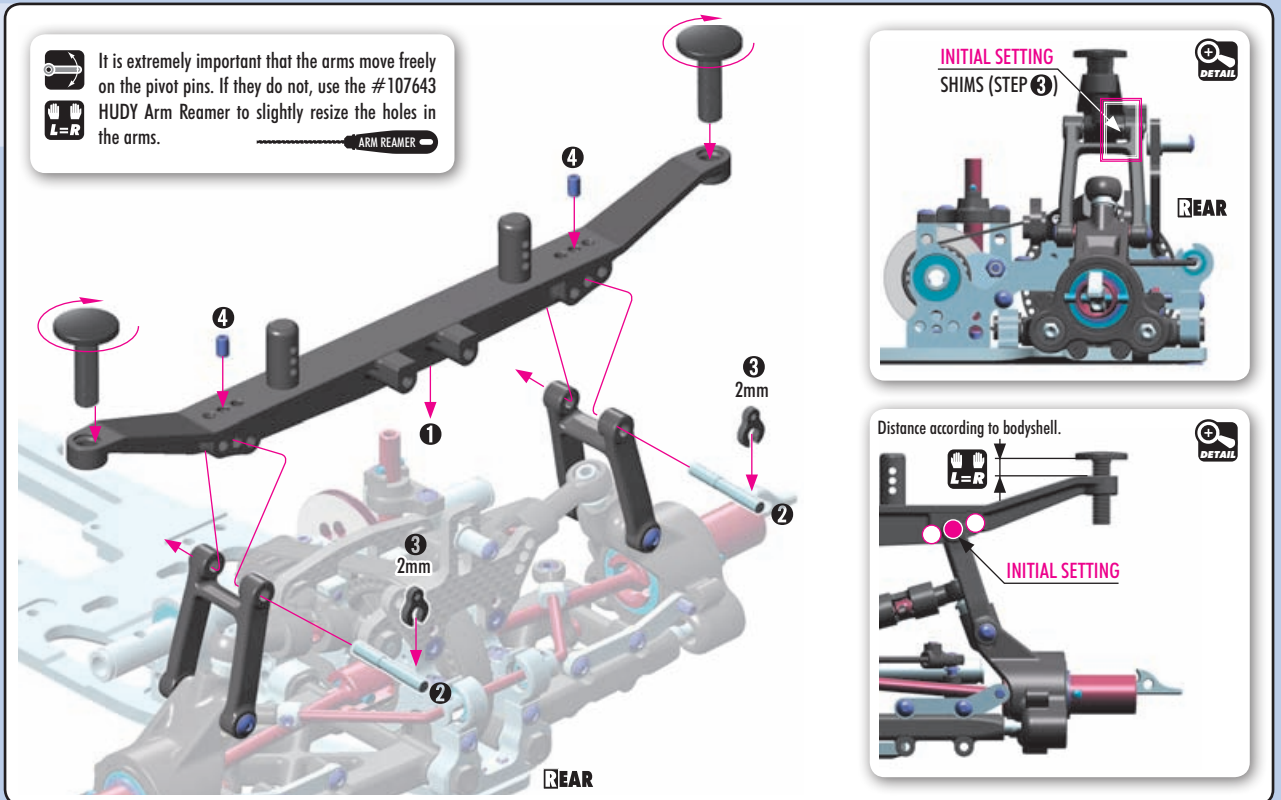


902310
SH M3x10



901305
SB M3x5

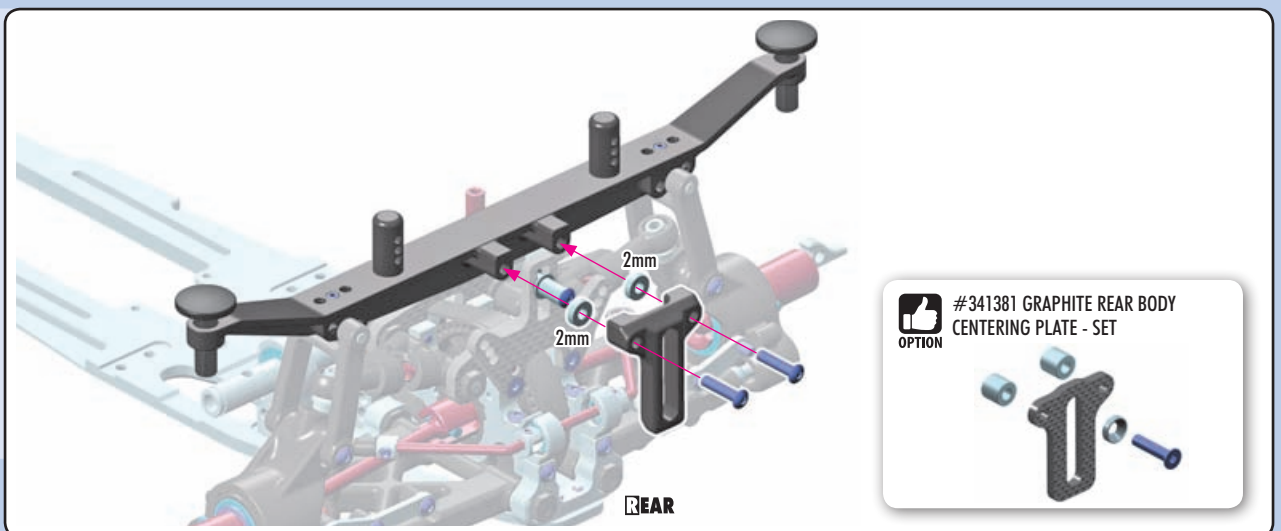
It is extremely important that the arms move freely on the pivot pins. If they do not, use the #107643 HUDY Arm Reamer to slightly resize the holes in the arms.



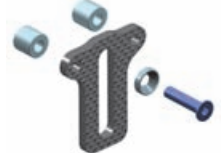
303123-K
SHIM 3x6x2



902318
SH M3x18



#341381 GRAPHITE REAR BODY
CENTERING PLATE - SET



3. REAR TRANSMISSION

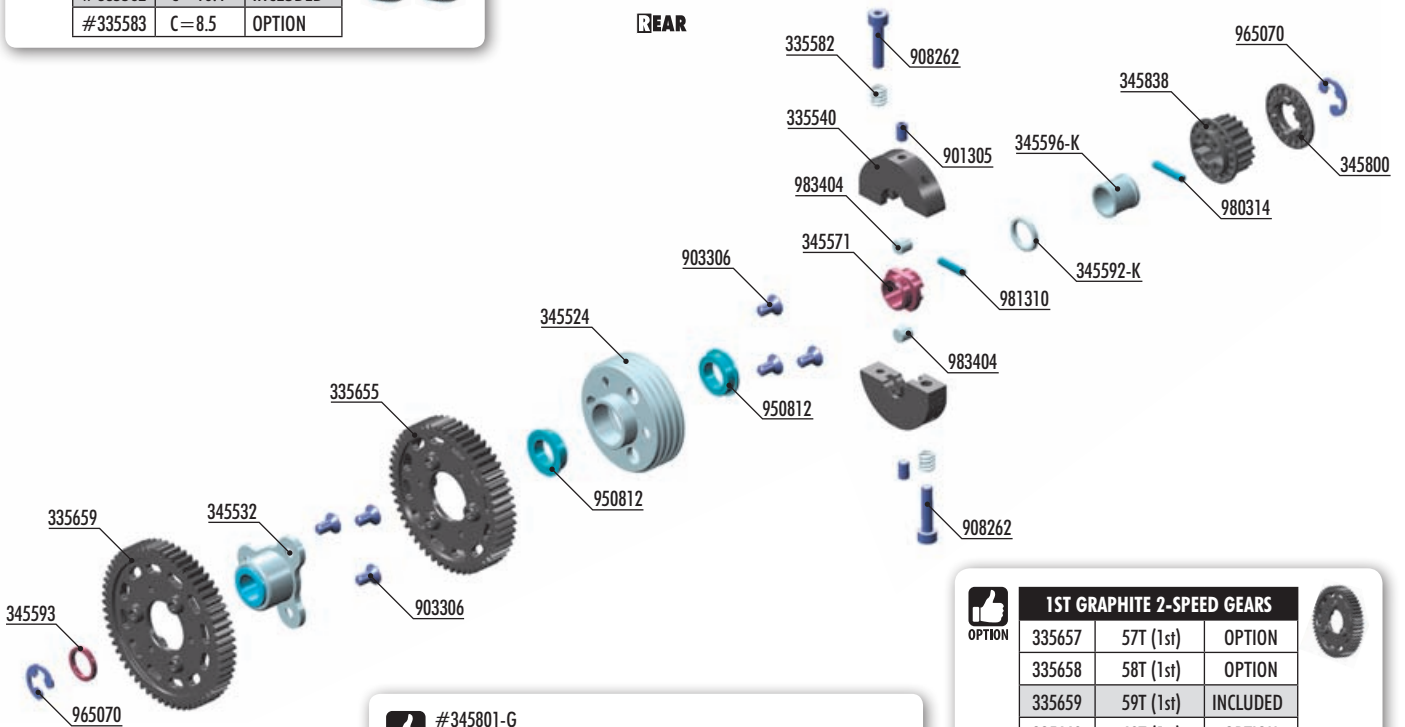


GEAR BOX SPRING

#335581	C=7.8	OPTION
#335582	C=10.4	INCLUDED
#335583	C=8.5	OPTION



REAR



#345801-G LOW FRICTION COMPOSITE BELT PULLEY SET - GRAPHITE

- BELT PULLEY 20T - 2-SPEED CENTER
- BELT PULLEY 18T - ø8 REAR
- BELT PULLEY 18T - ø6 CENTER
- BELT PULLEY 28T - FRONT
- BELT PULLEY 29T - FRONT



1ST GRAPHITE 2-SPEED GEARS

335657	57T (1st)	OPTION
335658	58T (1st)	OPTION
335659	59T (1st)	INCLUDED
335660	60T (1st)	OPTION



2ND GRAPHITE 2-SPEED GEARS

335653	53T (2nd)	OPTION
335654	54T (2nd)	OPTION
335655	55T (2nd)	INCLUDED



BAG



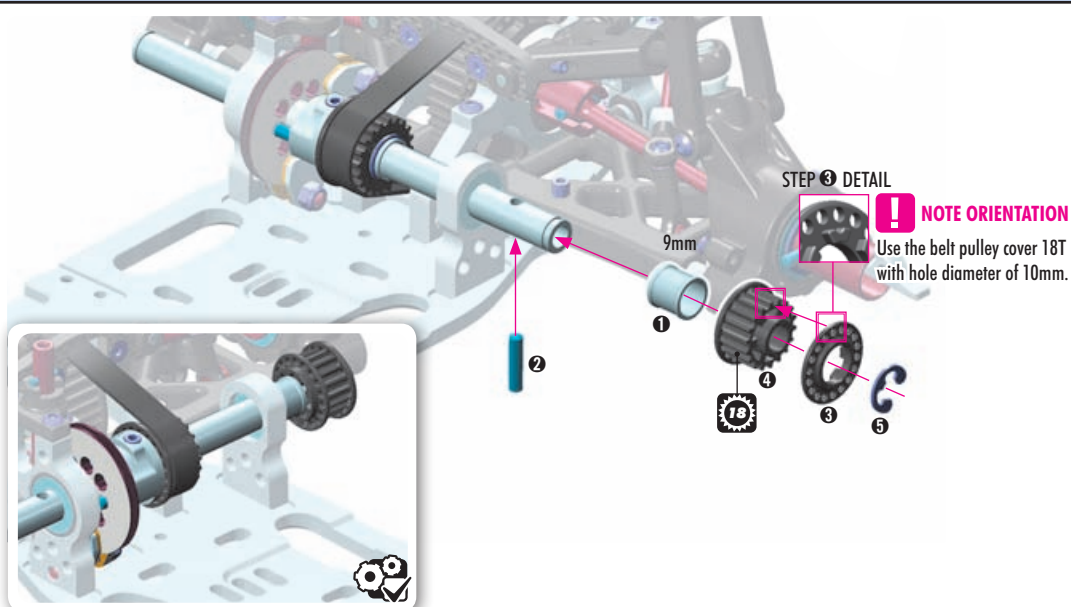
- | | | | |
|----------|---|--------|--|
| 335540 | COMPOSITE 2-SPEED GEAR BOX SHOE SET | 345838 | COMPOSITE SIDE BELT PULLEY 18T ø8 - REAR |
| 335655 | GRAPHITE 2-SPEED GEAR 55T (2nd) | 901305 | HEX SCREW SB M3x5 (10) |
| 335659 | GRAPHITE 2-SPEED GEAR 59T (1st) | 903306 | HEX SCREW SFH M3x6 (10) |
| 335582 | SPRING FOR GEAR BOX - HARD (2) | 908262 | HEX SCREW SOCKET HEAD CAP M2.5x12 (10) |
| 345524 | CARRIER FOR 2-SPEED GEAR (2nd) - SMALL | 950812 | BALL-BEARING 8x12x3.5 FLANGED - STEEL SEALED - OIL (2) |
| 345532 | ALU DRIVE FLANGE WITH ONE-WAY BEARING - SMALL - LIGHTWEIGHT | 965070 | E-CLIP 7 (10) |
| 345571 | ADAPTER 2-SPEED SMALL | 980314 | PIN 3x14 (10) |
| 345592-K | ALU 2-SPEED SHAFT SHIM - BLACK (2) | 981310 | PIN 3x10 (10) |
| 345593 | STEEL 2-SPEED SHAFT SHIM (2) | 983404 | ROLLER PIN 4x4 MM (2) |
| 345596-K | ALU COLLAR 8x9.8x9MM - BLACK | | |
| 345800 | COMPOSITE BELT PULLEY COVER SET | | |



965070
C7



980314
P 3x14



3. REAR TRANSMISSION



901305
SB M3x5



908262
SFH M2.5x12



983404
RP 4x4

NOTE ORIENTATION (multiple instances)

1 SHOE-GAP SET-SCREW
2
3
4
5 SHIFT-POINT SCREW

TIP Use white paint to color the top of ONE screw head. This will allow you to identify the two different screws - one white, one dark - when you are adjusting the shift point.

DETAIL Set-screws must NOT protrude.

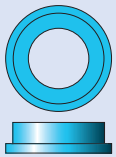
Top of screw head should be level with hole bottom edge.

Do not overtighten gap-setting set-screws. Only tighten until roller pins contact the center hub.

GEAR BOX SPRING			
OPTION	#335581	C=7.8	OPTION
	#335582	C=10.4	INCLUDED
	#335583	C=8.5	OPTION



903306
SFH M3x6



950812
BB 8x12x4

2ND GEAR

NOTE ORIENTATION

1
2
3
4
5

BEARING OIL (HUDY #106230)

BEARING OIL (HUDY #106230)

Use HUDY Reamer #107601 or #107602 to slightly chamfer the edges on all 3 screw holes from inside.

1ST GEAR

NOTE ORIENTATION

1
2
3
4
5

BEARING OIL (HUDY #106230)

ONE-WAY LUBE (HUDY #106231)

Use HUDY Reamer #107601 or #107602 to slightly chamfer the edges on all 3 screw holes from inside.



345592-K
ALU SHIM 8x10x1.5



345593
STEEL SHIM 8x10x1.5



965070
C7



981310
P 3x10

! When the #345511 - 2-Speed Shaft 8mm Short is used this STEEL shim CAN NOT be used.

1
2
3
4
5
6

STEEL Shim
Marked 1 strip

NOTE ORIENTATION

ALU Shim

NOTE ORIENTATION


2ND GEAR

1ST GEAR

OPTION

1ST GRAPHITE 2-SPEED GEARS
2ND GRAPHITE 2-SPEED GEARS
See page 19, exploded view.

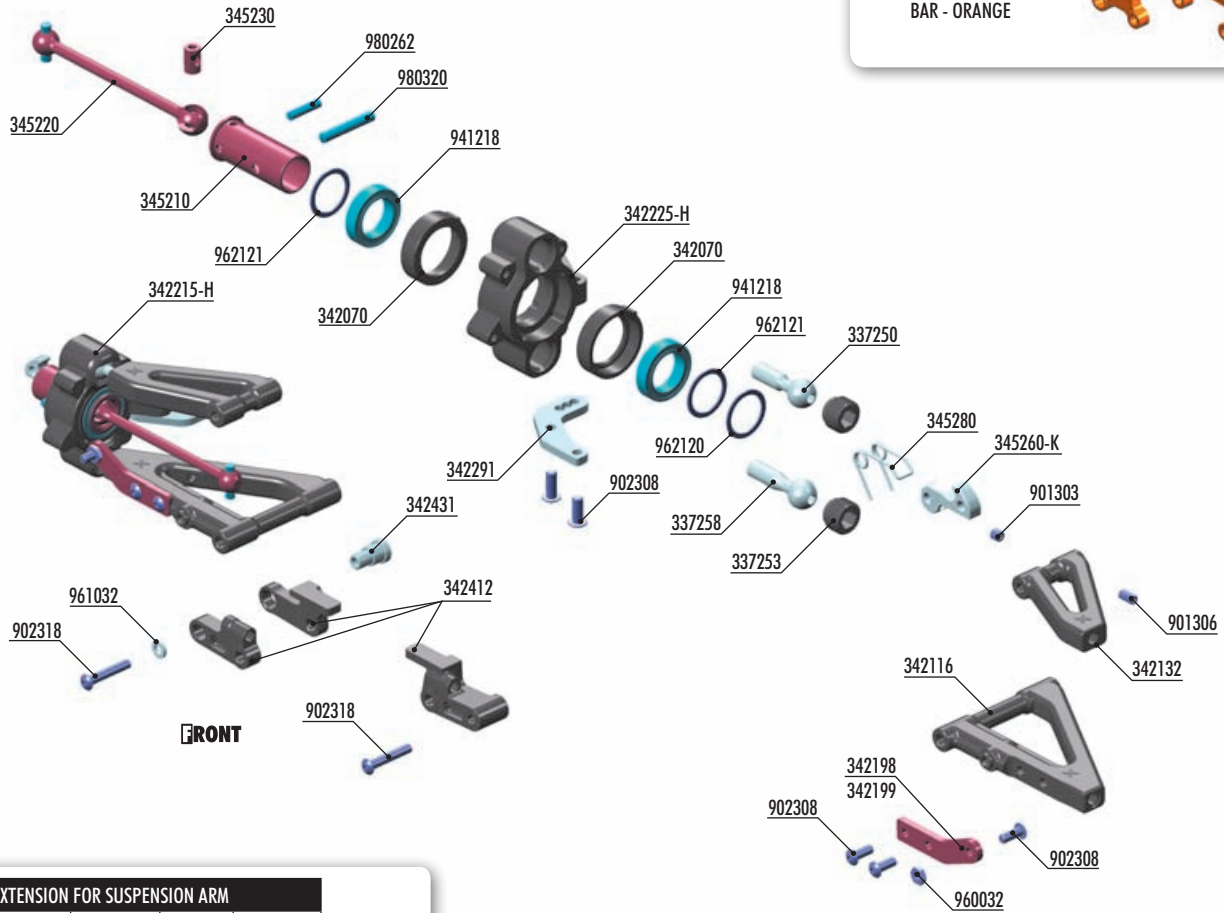
4. FRONT SUSPENSION


FRONT SUSPENSION UPPER ARMS			
 OPTION	#342131	MEDIUM	OPTION
	#342132	HARD	INCLUDED
	#342133	GRAPHITE	OPTION
	#342134	SOFT	OPTION

 OPTION #345270 GRAPHITE FRONT AERODYNAMIC DISC 1.6mm - SET




 OPTION #342401-0 DOWNSTOP INDEPENDENT ALU FRONT ANTI-ROLL BAR - ORANGE





 OPTION

EXTENSION FOR SUSPENSION ARM			
#342196	STEEL	SHORT	OPTION
#342197	GRAPHITE	SHORT	OPTION
#342198	STEEL	LONG	INCLUDED
#342199	GRAPHITE	LONG	INCLUDED

 OPTION

STEERING BLOCKS			
#342215	RIGHT	MEDIUM	OPTION
#342215-H	RIGHT	HARD	INCLUDED
#342215-G	RIGHT	GRAPHITE	OPTION
#342225	LEFT	MEDIUM	OPTION
#342225-H	LEFT	HARD	INCLUDED
#342225-G	LEFT	GRAPHITE	OPTION

 OPTION

FRONT SUSPENSION LOWER ARMS		
#342114	MEDIUM	OPTION
#342116	HARD	INCLUDED
#342115	GRAPHITE	OPTION

 OPTION #345212 ALU FRONT CVD DRIVE AXLE - SWISS 7075 T6 - HARDCOATED



 OPTION #980320-T TITAN PIN 3x20 (2)



BAG

04.1

- | | | | |
|----------|--|----------|--|
| 337250 | STEEL PIVOT BALL 8.4 MM (2) | 345230 | DRIVE SHAFT COUPLING - HUDY SPRING STEEL™ |
| 337258 | COMPOSITE ADJUSTING NUT M10x1 (4) | 345260-K | ALU FRONT WHEEL LOCK - SWISS 7075 T6 - BLACK (2) |
| 342070 | STEEL PIVOT BALL 8.4 MM ø3.3 L=25MM (2) | 345280 | WHEEL SPRING (2) |
| 342116 | COMPOSITE SET OF BUSHINGS (2) | | |
| 342132 | SUSPENSION ARM FOR WIRE ANTI-ROLL BAR - FRONT - HARD | 901303 | HEX SCREW SB M3x3 (10) |
| 342198 | COMPOSITE SUSPENSION ARM FRONT UPPER - SHORT - HARD | 901306 | HEX SCREW SB M3x6 (10) |
| 342291 | STEEL EXTENSION FOR SUSPENSION ARM - FRONT LOWER - LONG (2) | 902308 | HEX SCREW SH M3x8 (10) |
| 342412 | GRAPHITE EXTENSION FOR SUSPENSION ARM - FRONT LOWER - LONG (2) | 902318 | HEX SCREW SH M3x18 (10) |
| 342215-H | EXTRA ECCENTRIC STEERING BLOCK FOR AERO DISC - RIGHT - HARD | 941218 | BALL-BEARING 12x18x4 RUBBER SEALED - OIL (2) |
| 342225-H | EXTRA ECCENTRIC STEERING BLOCK FOR AERO DISC - LEFT - HARD | 960032 | NUT M3 (10) |
| 342291 | ALU EXTENSION FOR STEERING BLOCK - SWISS 7075 T6 (2) | 961032 | WASHER S 3.2 (10) |
| 342412 | COMPOSITE FRONT ANTI-ROLL BAR HOLDERS | 962120 | WASHER S 12x15x0.5 (10) |
| 342431 | ALU FRONT ANTI-ROLL BAR HUB (2) | 962121 | WASHER S 12x15x1.0 (10) |
| 345210 | FRONT WHEEL AXLE - HUDY SPRING STEEL™ | 980262 | PIN 2.5x12 (10) |
| 345220 | FRONT CVD DRIVE SHAFT 71MM - HUDY SPRING STEEL™ | 980320 | PIN 3x20 (10) |

4. FRONT SUSPENSION

2x

Short Ball

Long Ball

Tighten the composite hex nuts using HUDY tool #107581. **TIP**

PIVOT BALLS MUST MOVE FREELY

During initial assembly, tighten each composite hex nut until the pivot ball starts to bind, then loosen slightly. Verify that the pivot balls move freely.

ADJUSTING NUT

OPTION	Part #	Material	Status
	#337253	COMPOSITE	INCLUDED
	#337252	ALU	OPTION

*The alu nut must be used together with #337254 – Composite Ball Cup 8.4mm.

STEERING BLOCKS

OPTION	Part #	Side	Material	Status
	#342215	RIGHT	MEDIUM	OPTION
	#342215-H	RIGHT	HARD	INCLUDED
	#342215-G	RIGHT	GRAPHITE	OPTION
	#342225	LEFT	MEDIUM	OPTION
	#342225-H	LEFT	HARD	INCLUDED
	#342225-G	LEFT	GRAPHITE	OPTION

902308
SH M3x8

2x

LEFT

RIGHT

NOTE ORIENTATION

2x

1

2

3

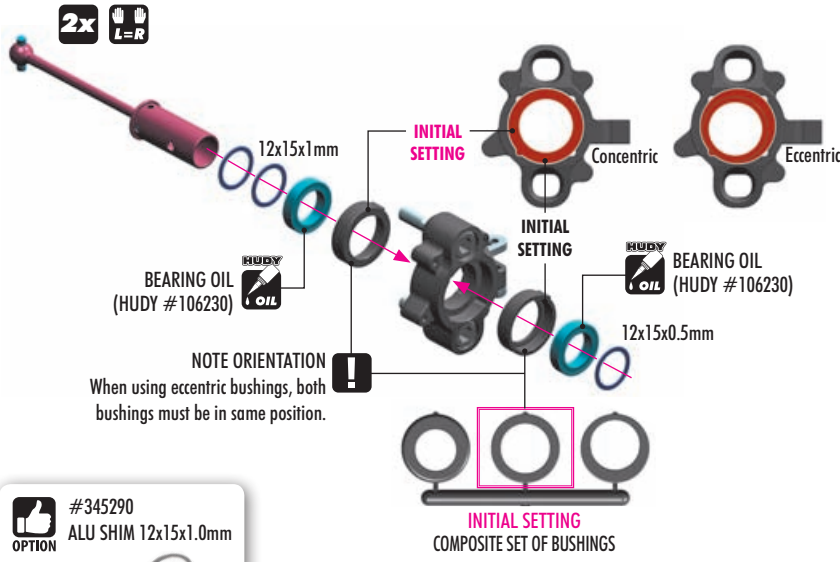
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GRAPHITE GREASE (HUDY #106210)

#345212 ALU FRONT CVD DRIVE AXLE - SWISS 7075 T6 - HARDCOATED

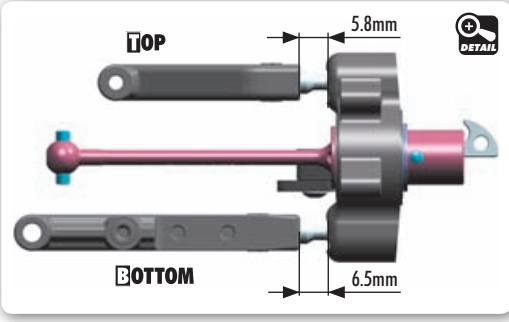
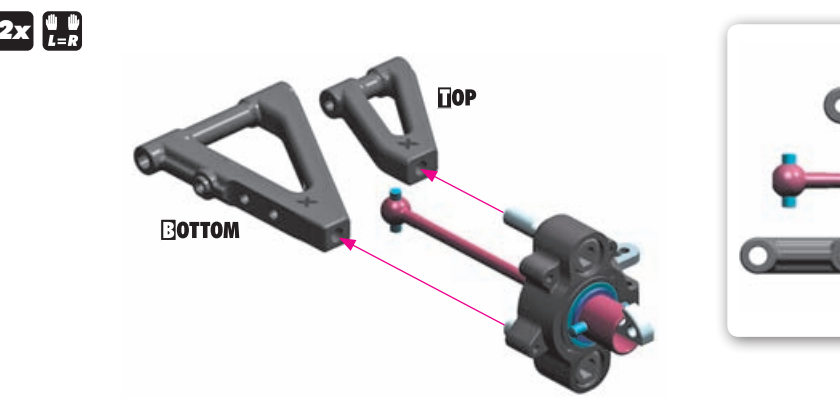
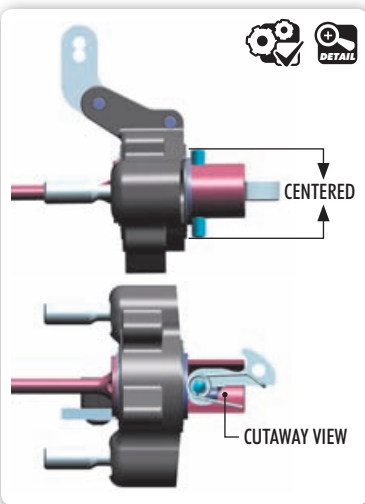
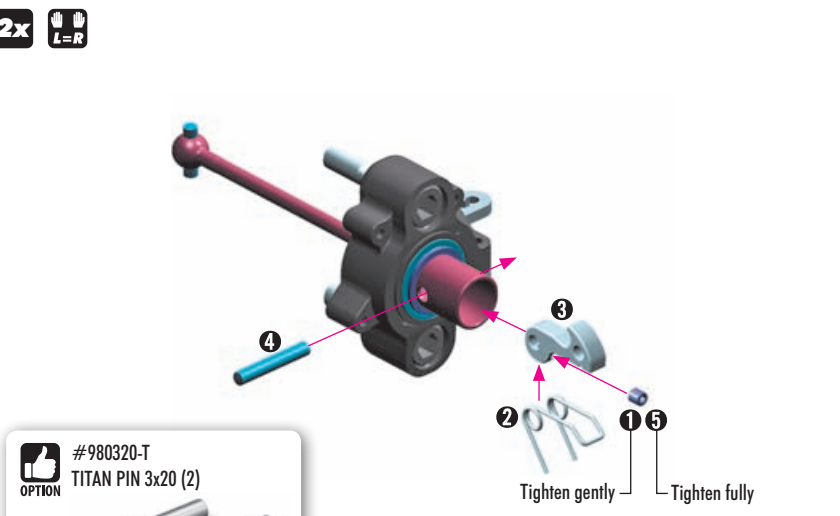
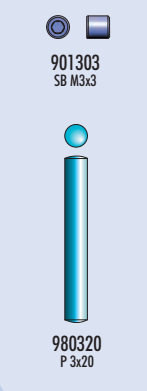
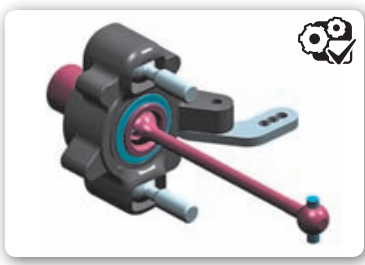
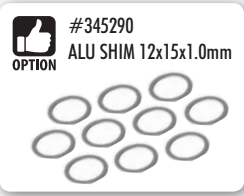
OPTION

4. FRONT SUSPENSION



SHIM **SHIM**

INNER	INITIAL SETTING	OUTER
1+1		0.5
1+0.5		1
1		1+0.5
0.5		1+1
0		1+1+0.5



FRONT SUSPENSION UPPER ARMS

OPTION	Part #	Material	Status
	#342131	MEDIUM	OPTION
	#342132	HARD	INCLUDED
	#342133	GRAPHITE	OPTION
	#342134	SOFT	OPTION

FRONT SUSPENSION LOWER ARMS

OPTION	Part #	Material	Status
	#342114	MEDIUM	OPTION
	#342116	HARD	INCLUDED
	#342115	GRAPHITE	OPTION

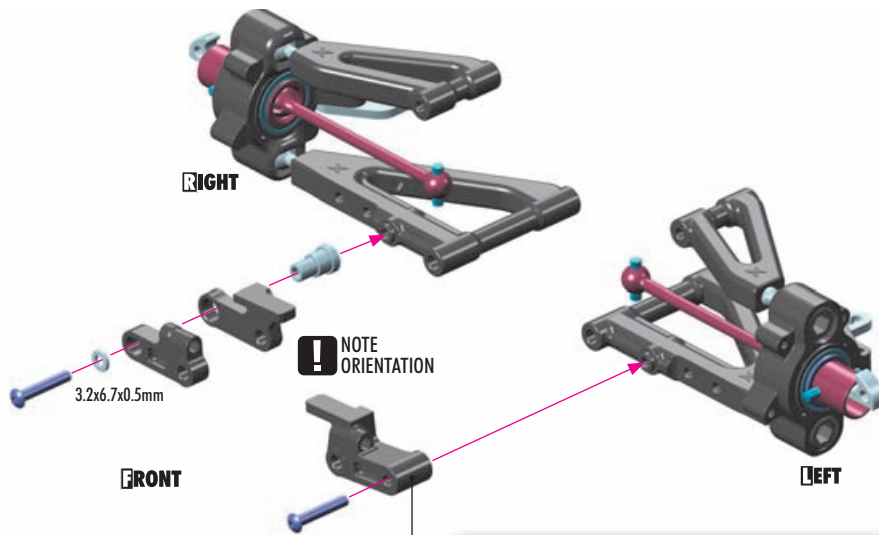
4. FRONT SUSPENSION



902318
SH M3x18



961032
S 3.2

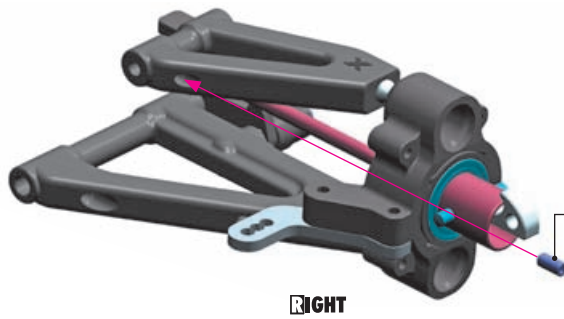


OPTION #342401-0
DOWNSTOP INDEPENDENT
ALU FRONT ANTI-ROLL
BAR - ORANGE



901306
SB M3x6

2x L=R



TIGHTEN GENTLY, tighten fully when the drive pins are assembled. (Page 28, step 1)

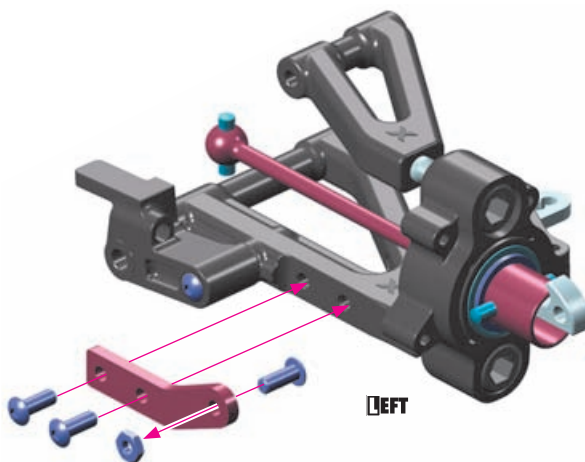


902308
SH M3x8



960032
N M3

2x L=R

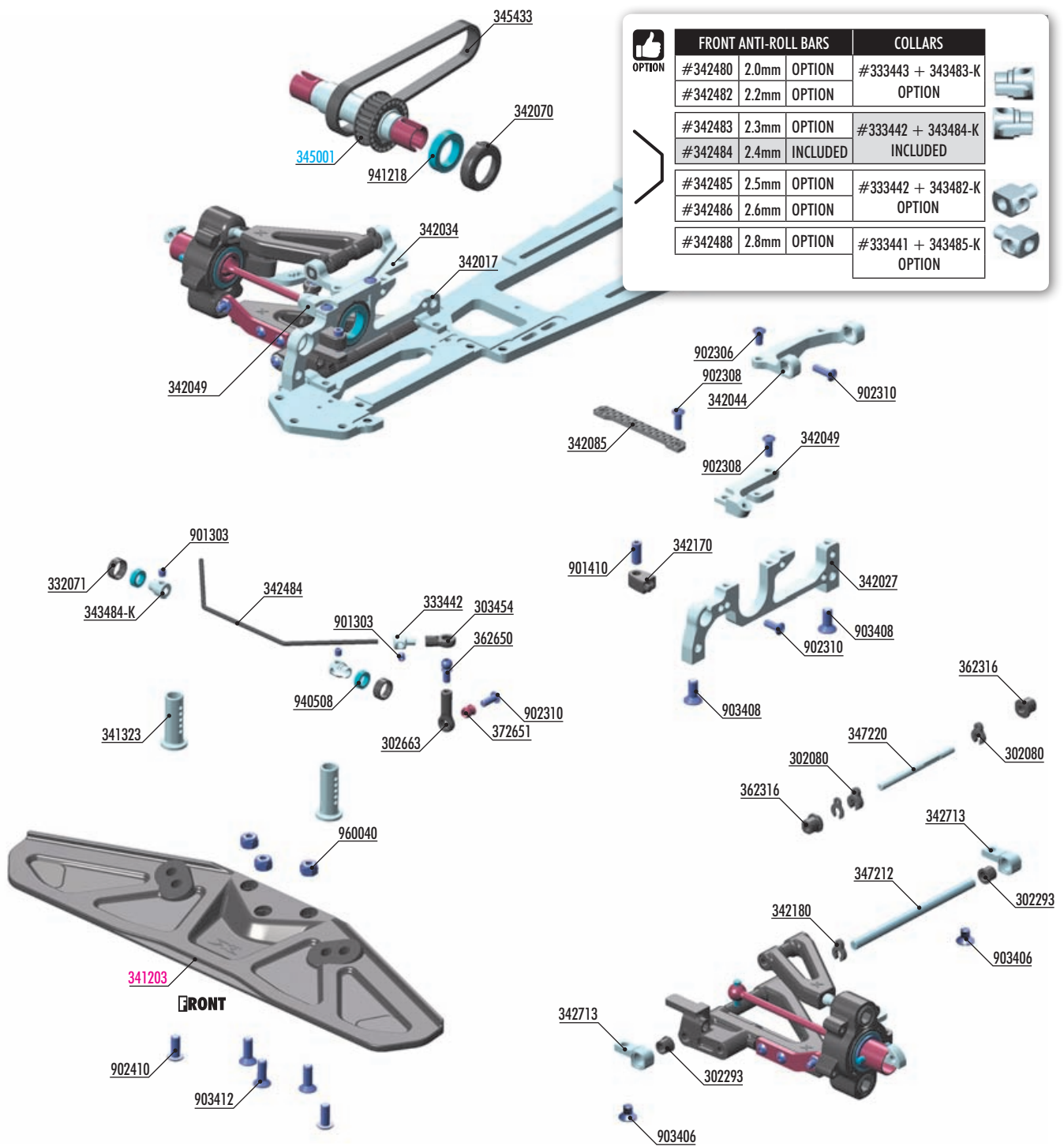


OPTION EXTENSION FOR SUSPENSION ARM

#342196	STEEL	SHORT	OPTION
#342197	GRAPHITE	SHORT	OPTION
#342198	STEEL	LONG	INCLUDED
#342199	GRAPHITE	LONG	INCLUDED



4. FRONT SUSPENSION



OPTION

FRONT ANTI-ROLL BARS			COLLARS	
#342480	2.0mm	OPTION	#333443 + 343483-K	OPTION
#342482	2.2mm	OPTION		
#342483	2.3mm	OPTION	#333442 + 343484-K	INCLUDED
#342484	2.4mm	INCLUDED		
#342485	2.5mm	OPTION	#333442 + 343482-K	OPTION
#342486	2.6mm	OPTION		
#342488	2.8mm	OPTION	#333441 + 343485-K	OPTION

BAG

04.2

- 302080 COMPOSITE CASTER CLIPS SET 4 + 3 + 2 + 1 MM (2)
- 302293 C-HUB BUSHING COMPOSITE - V2 (4)
- 302663 COMPOSITE BALL JOINT 4.9MM - OPEN - V2 (8)
- 303454 BALL JOINT 4.9MM - OPEN (4)
- 332071 COMPOSITE BALL-BEARING HUB (4)
- 333442 ALU ANTI-ROLL BAR COLLAR ø2.6 (2)
- 341323 ALU FRONT BODY POST - SHORT - SWISS 7075 T6 (2)
- 342017 ALU LOWER BULKHEAD FRONT - SWISS 7075 T6 - RIGHT
- 342027 ALU LOWER BULKHEAD FRONT - SWISS 7075 T6 - LEFT
- 342034 ALU UPPER ARM HOLDER RIGHT - SWISS 7075 T6 - SET
- 342044 ALU UPPER ARM HOLDER LEFT - SWISS 7075 T6 - SET
- 342049 ALU UPPER CLAMP FRONT - SWISS 7075 T6 - (L+R)
- 342070 COMPOSITE SET OF BUSHINGS (2)
- 342085 GRAPHITE FRONT BRACE
- 342170 COMPOSITE SUSPENSION ARM DOWNSTOP (2)
- 342180 COMPOSITE LOWER SUSP. ARM CLIPS (2)
- 342484 ANTI-ROLL BAR FRONT 2.4MM
- 342713 ALU LOWER FRONT SUSPENSION HOLDER (1) - BLACK - 7075 T6
- 343484-K ALU CUTTED ANTI-ROLL BAR COLLAR ø2.4 - BLACK (2)
- 345433 LOW FRICTION DRIVE BELT FRONT 6.0 x 207 MM
- 347212 FRONT LOWER INNER PIVOT PIN (2)


- 347220 PIVOT PIN WITH FLAT SPOT (2)
- 362316 COMPOSITE OPEN ECCENTRIC BUSHING SET (2)
- 362650 BALL END 4.9MM WITH THREAD 6MM (2)
- 372651 PIVOT BALL UNIVERSAL 4.9 MM - HUDY SPRING STEEL (2)

- 901303 HEX SCREW SB M3x3 (10)
- 901410 HEX SCREW SB M4x10 (10)
- 902306 HEX SCREW SH M3x6 (10)
- 902308 HEX SCREW SH M3x8 (10)
- 902310 HEX SCREW SH M3x10 (10)
- 902410 HEX SCREW SH M4x10 (10)
- 903406 HEX SCREW SFH M4x6 (10)
- 903408 HEX SCREW SFH M4x8 (10)
- 903412 HEX SCREW SFH M4x12 (10)
- 940508 BALL-BEARING 5x8x2.5 RUBBER SEALED - OIL (2)
- 941218 BALL-BEARING 12x18x4 RUBBER SEALED - OIL (2)
- 960040 NUT M4 (10)

341203 COMPOSITE BUMPER - DOWNFORCE

345001 FRONT ONE-WAY - HARDCOATED + LIGHTWEIGHT ADAPTERS

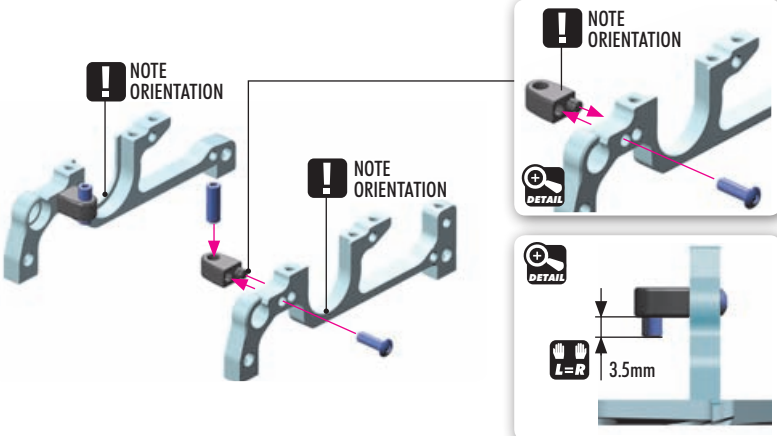
4. FRONT SUSPENSION

2x 

901410 SB M4x10

902310 SH M3x10

903408 SFH M4x8



NOTE ORIENTATION

NOTE ORIENTATION

NOTE ORIENTATION

NOTE ORIENTATION

DETAIL

3.5mm

DETAIL

FRONT


NOTE ORIENTATION

BEARING OIL (HUDY #106230)

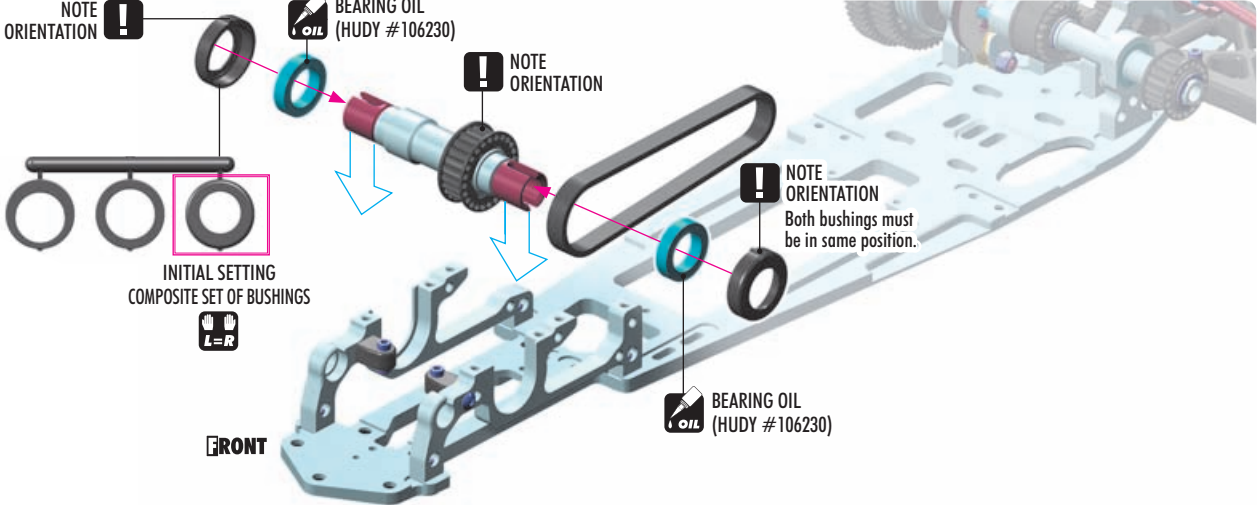
NOTE ORIENTATION


NOTE ORIENTATION
Both bushings must be in same position.

BEARING OIL (HUDY #106230)

INITIAL SETTING
COMPOSITE SET OF BUSHINGS


FRONT



2x 

902308 SH M3x8

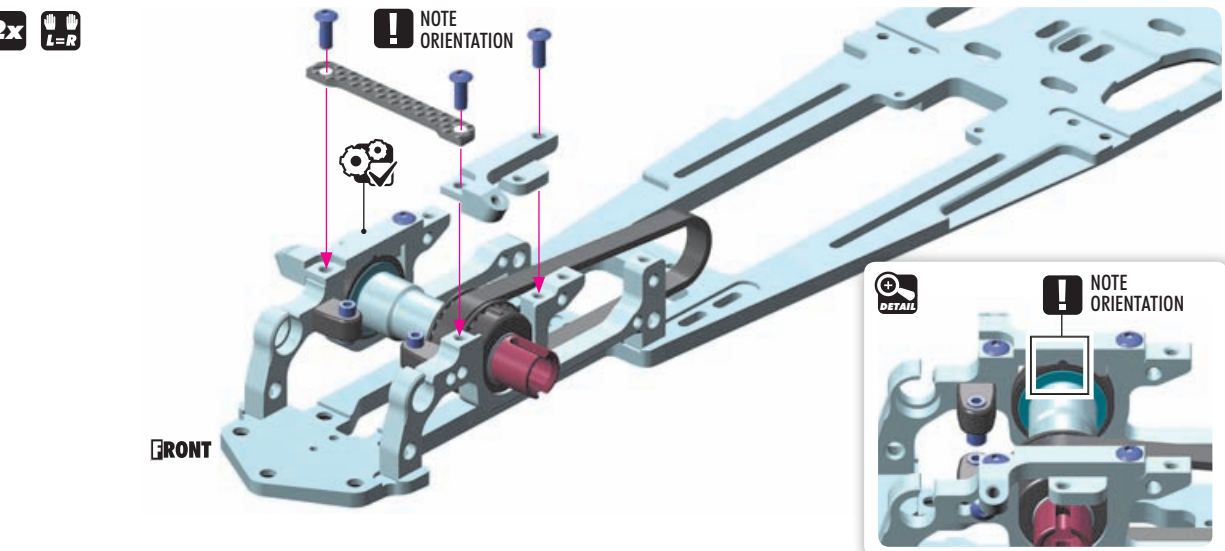
NOTE ORIENTATION

NOTE ORIENTATION

FRONT

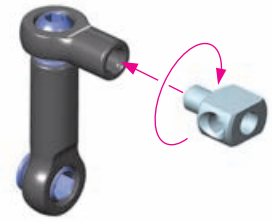
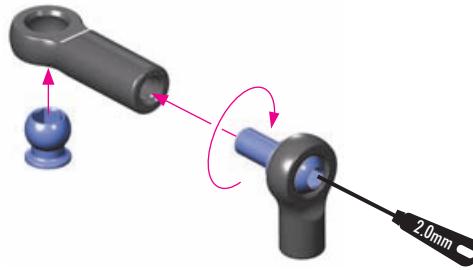
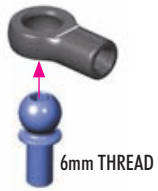
DETAIL

NOTE ORIENTATION

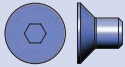


4. FRONT SUSPENSION

2x

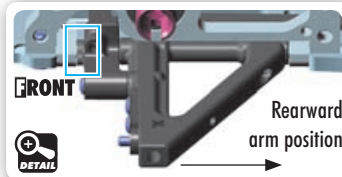
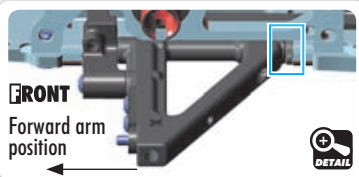
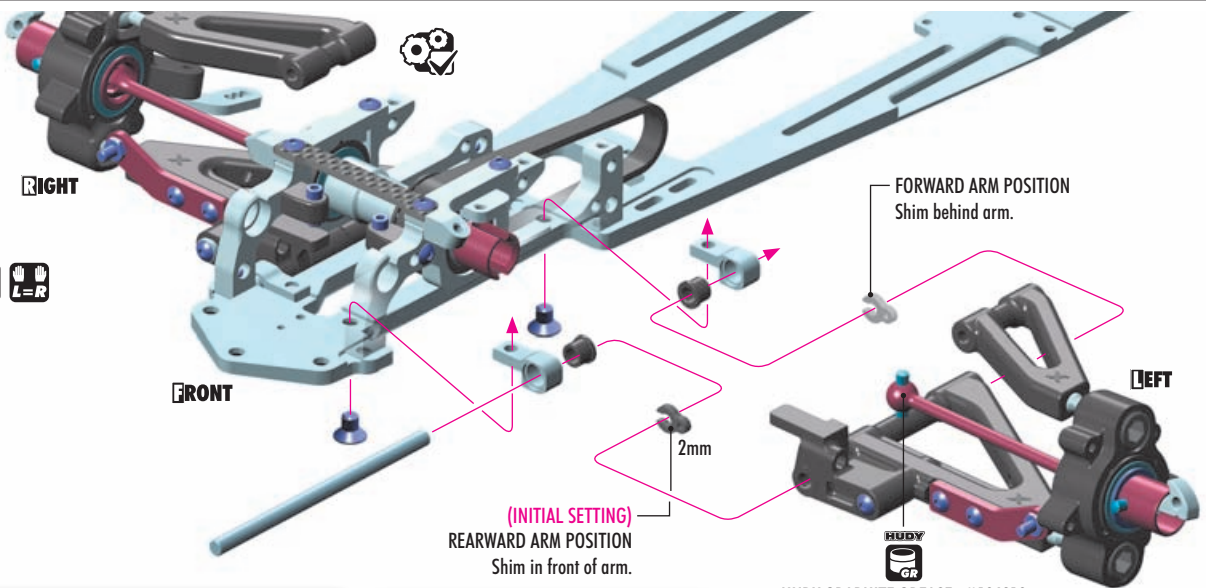


TIP Install the pivot balls with Professional Multi Tool (HUDY #183011).



903406
SFH M4x6

2x
L=R



It is extremely important that the arms move freely on the pivot pins. If they do not, use the #107644 HUDY Arm Reamer to slightly resize the holes in the arms.



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 32).

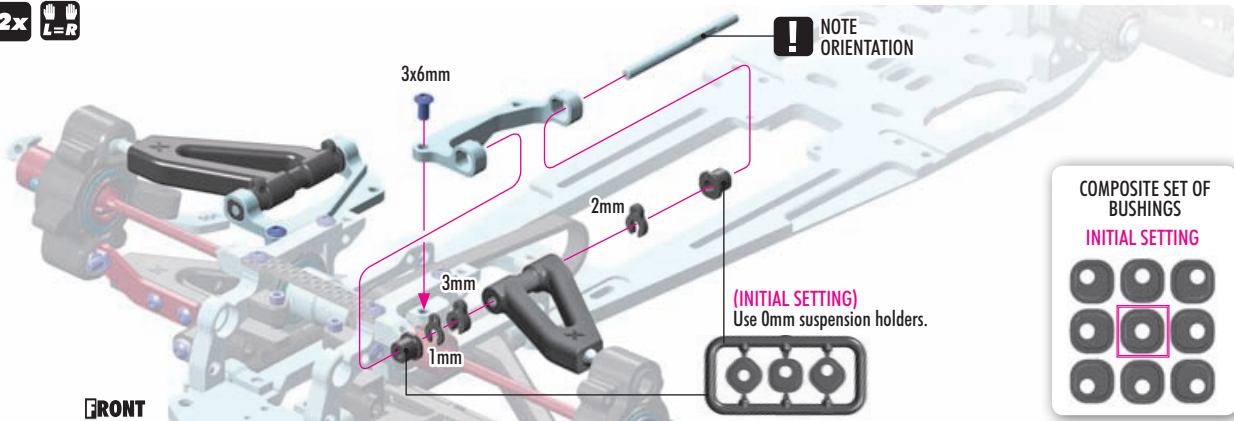


902306
SH M3x6

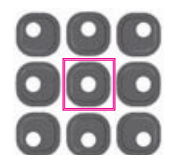


902310
SH M3x10

2x
L=R



COMPOSITE SET OF BUSHINGS
INITIAL SETTING



4. FRONT SUSPENSION

2x **L=R**

FRONT

TIGHTEN FULLY

DETAIL

NOTE ORIENTATION

902310
SH M3x10

2x **L=R**

FRONT

940508
BB 5x8x2.5

2x **L=R**

FRONT

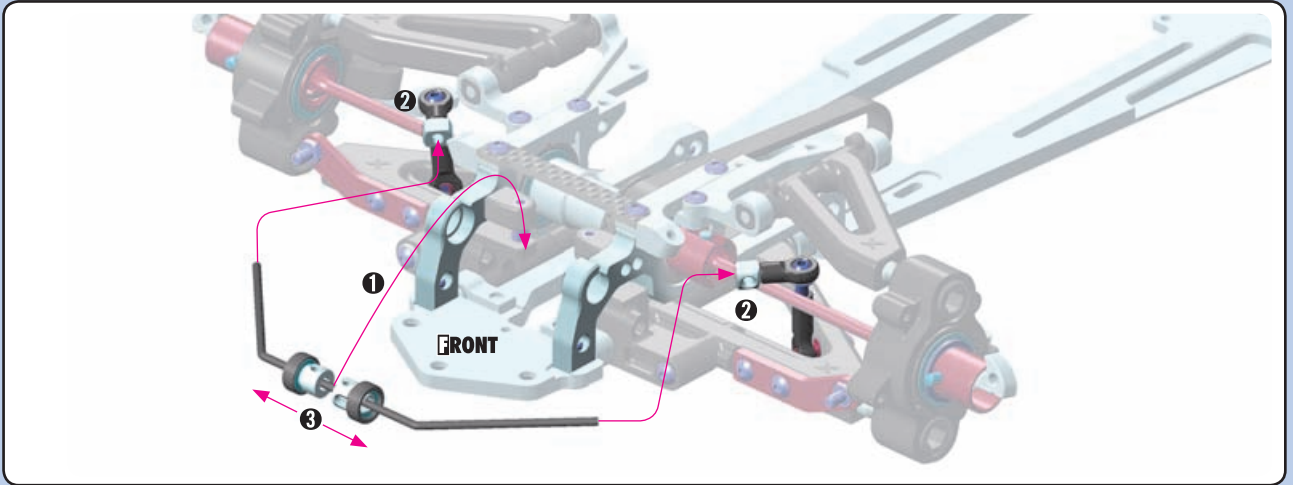
OPTION

FRONT ANTI-ROLL BARS			COLLARS	
#342480	2.0mm	OPTION	#333443 + 343483-K	
#342482	2.2mm	OPTION	OPTION	
#342483	2.3mm	OPTION	#333442 + 343484-K	
#342484	2.4mm	INCLUDED	INCLUDED	
#342485	2.5mm	OPTION	#333442 + 343482-K	
#342486	2.6mm	OPTION	OPTION	
#342488	2.8mm	OPTION	#333441 + 343485-K	

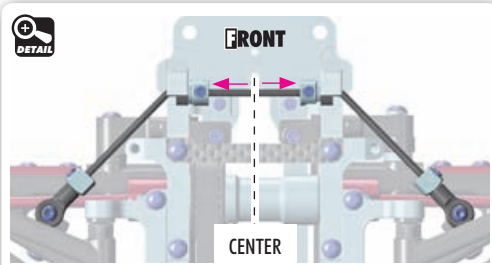
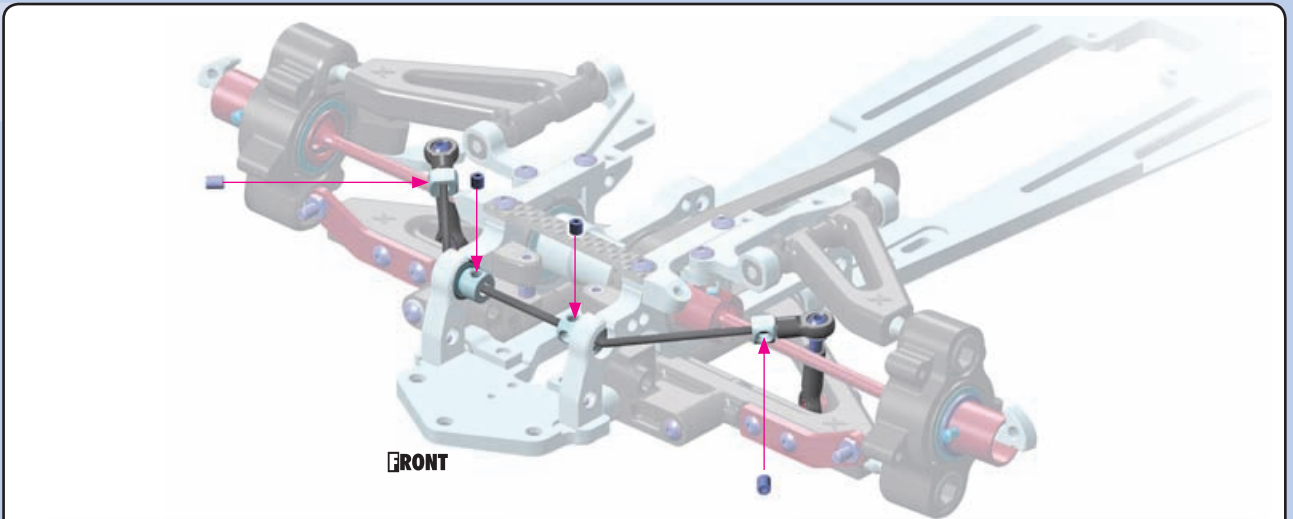
BEARING WITH RUBBER COVERS

BEARING OIL
(HUDY #106230)

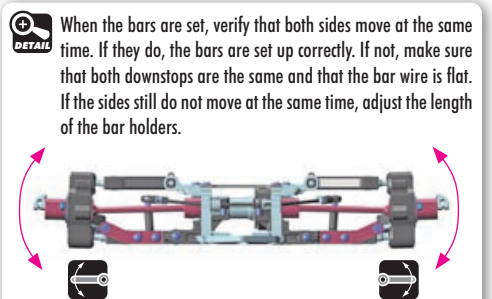
4. FRONT SUSPENSION



901303
SB M3x3



Set the bar into the center, remove the play in the bushings, and tighten the set-screws fully.



When the bars are 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 and that the bar wire is flat. If the sides still do not move at the same time, adjust the length of the bar holders.



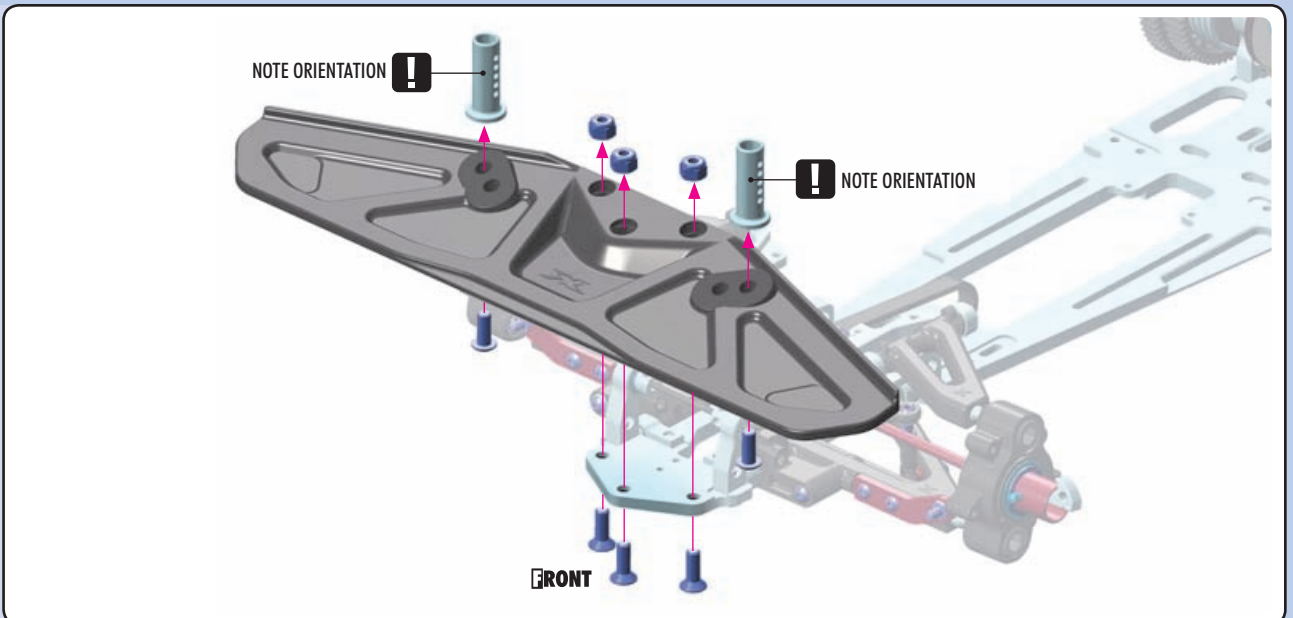
902410
SH M4x10



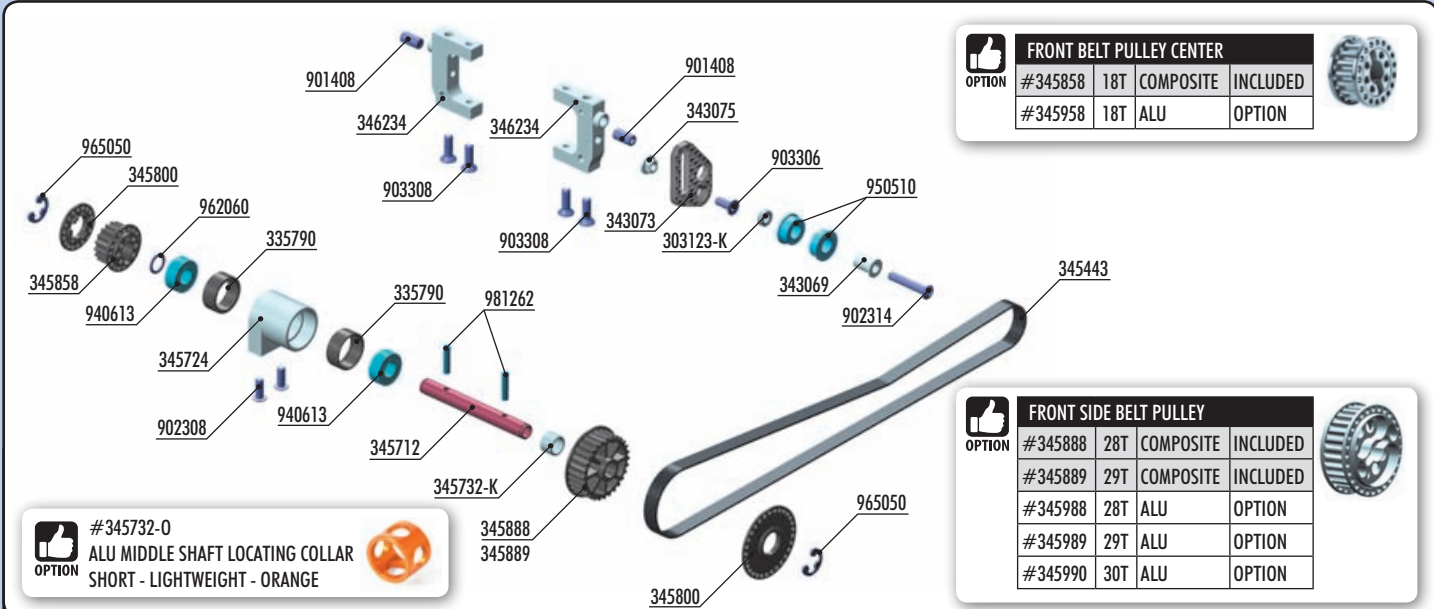
903412
SFH M4x12



960040
N M4



5. FRONT TRANSMISSION



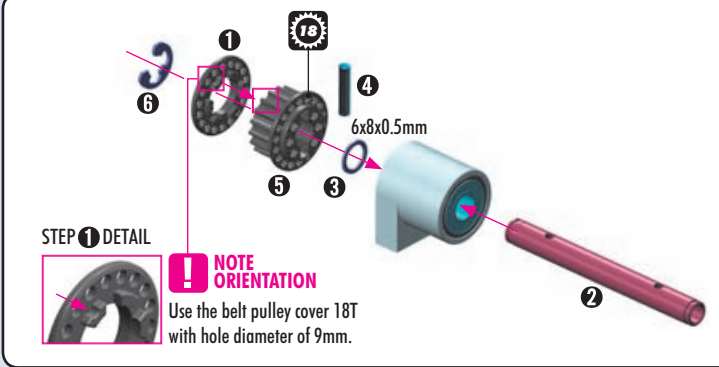
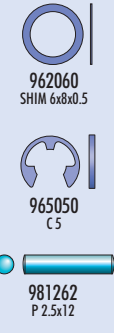
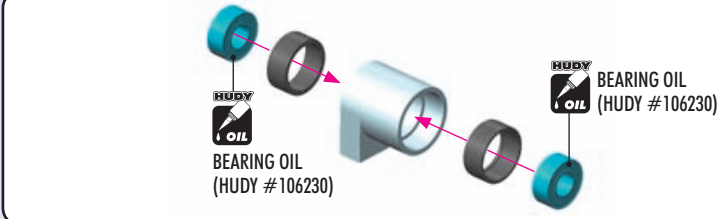
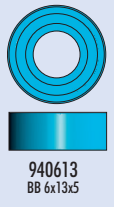
FRONT BELT PULLEY CENTER			
OPTION	#345858	18T	COMPOSITE INCLUDED
	#345958	18T	ALU OPTION

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

#345732-0
ALU MIDDLE SHAFT LOCATING COLLAR
 SHORT - LIGHTWEIGHT - ORANGE

BAG
05

- | | | | |
|----------|---|--------|--|
| 303123-K | ALU SHIM 3x6x2.0MM - BLACK (10) | 346234 | ALU RADIO PLATE MOUNT - BLACK - SWISS 7075 T6 (2) |
| 335790 | COMPOSITE BALL-BEARING BUSHING FOR MIDDLE SHAFT (2) | 901408 | HEX SCREW SB M4x8 (10) |
| 343069 | STEEL BUSHING (2) | 902308 | HEX SCREW SH M3x8 (10) |
| 343073 | BELT TENSIONER SET - STEEL | 902314 | HEX SCREW SH M3x14 (10) |
| 343075 | STEEL NUT (2) | 903306 | HEX SCREW SFH M3x6 (10) |
| 345443 | LOW FRICTION DRIVE BELT SIDE 6.0 x 435 MM | 903308 | HEX SCREW SFH M3x8 (10) |
| 345712 | FRONT MIDDLE SHAFT - LIGHTWEIGHT - HUDY SPRING STEEL™ | 940613 | BALL-BEARING 6x13x5 RUBBER SEALED - OIL (2) |
| 345724 | ALU FRONT MIDDLE SHAFT HOLDER - BLACK - SWISS 7075 T6 | 950510 | BALL-BEARING 5x10x4 FLANGED - STEEL SEALED - OIL (2) |
| 345732-K | ALU MIDDLE SHAFT LOCATING COLLAR - SHORT - BLACK | 962060 | WASHER S 6x8x0.5 (10) |
| 345800 | COMPOSITE BELT PULLEY COVER SET | 965050 | E-CLIP 5 (10) |
| 345858 | COMPOSITE FRONT BELT PULLEY 18T ø6 - CENTER | 981262 | PIN 2.5x12 (10) |
| 345888 | COMPOSITE SIDE BELT PULLEY 28T - FRONT | | |
| 345889 | COMPOSITE SIDE BELT PULLEY 29T - FRONT | | |

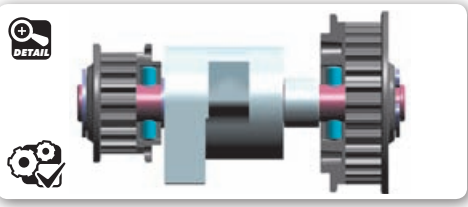
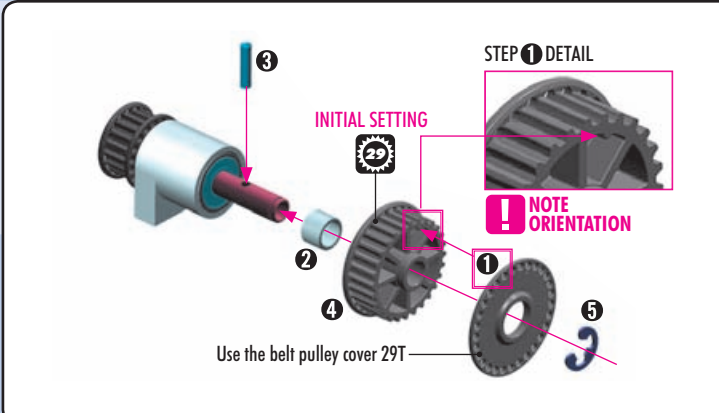


#345801-G
LOW FRICTION COMPOSITE BELT PULLEY SET - GRAPHITE

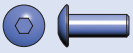
BELT PULLEY 20T - 2-SPEED CENTER
 BELT PULLEY 18T - ø8 REAR
 BELT PULLEY 18T - ø6 CENTER
 BELT PULLEY 28T - FRONT
 BELT PULLEY 29T - FRONT

FRONT BELT PULLEY CENTER			
OPTION	#345858	18T	COMPOSITE INCLUDED
	#345958	18T	ALU OPTION

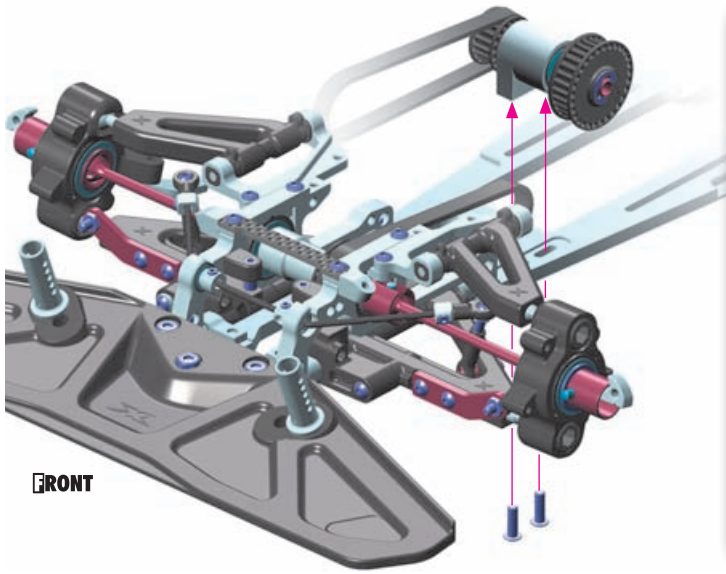
FRONT SIDE BELT PULLEY			
OPTION	#345888	28T	COMPOSITE INCLUDED
	#345889	29T	COMPOSITE INCLUDED
	#345988	28T	ALU OPTION
	#345989	29T	ALU OPTION
	#345990	30T	ALU OPTION



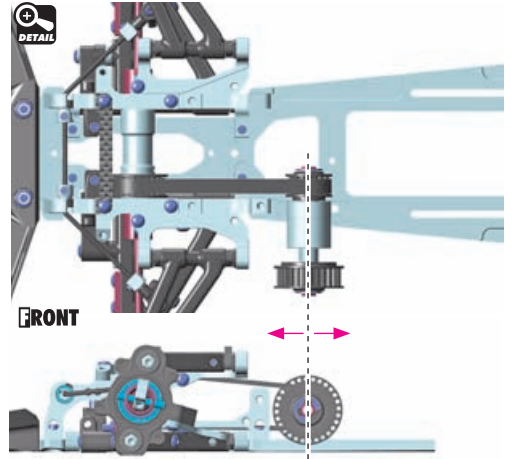
5. FRONT TRANSMISSION



902308
SH M3x8



FRONT



FRONT

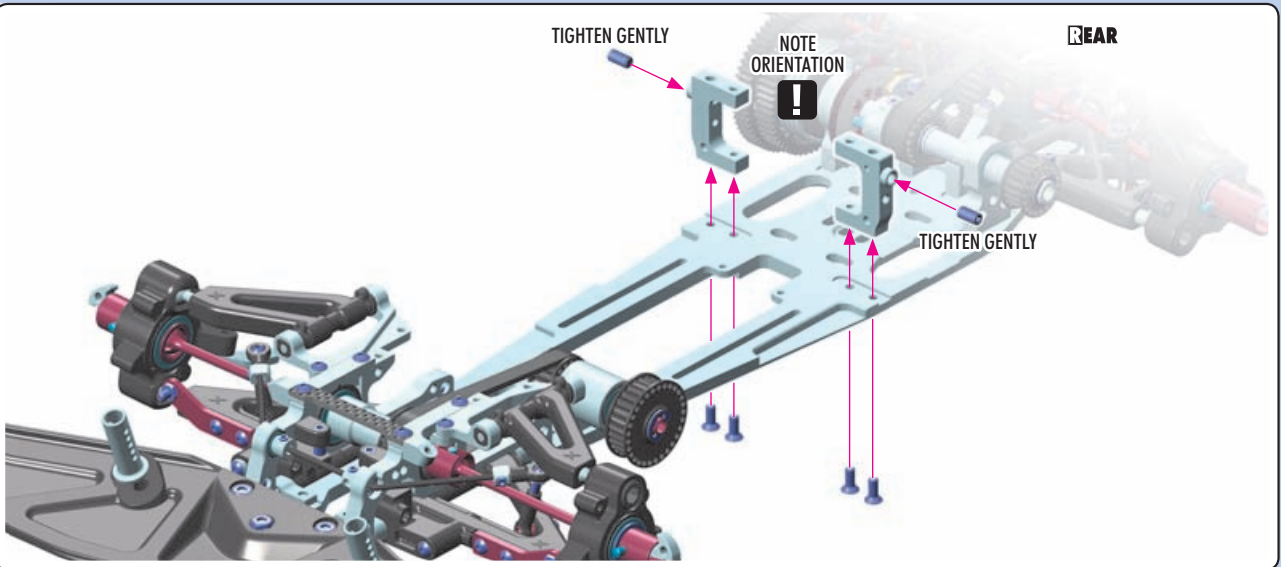
Adjust the tension of the front & side belt by moving the front middle shaft holder.



901408
SB M4x8



903308
SFH M3x8



REAR

TIGHTEN GENTLY

NOTE ORIENTATION

TIGHTEN GENTLY



303123-K
SHIM 3x6x2



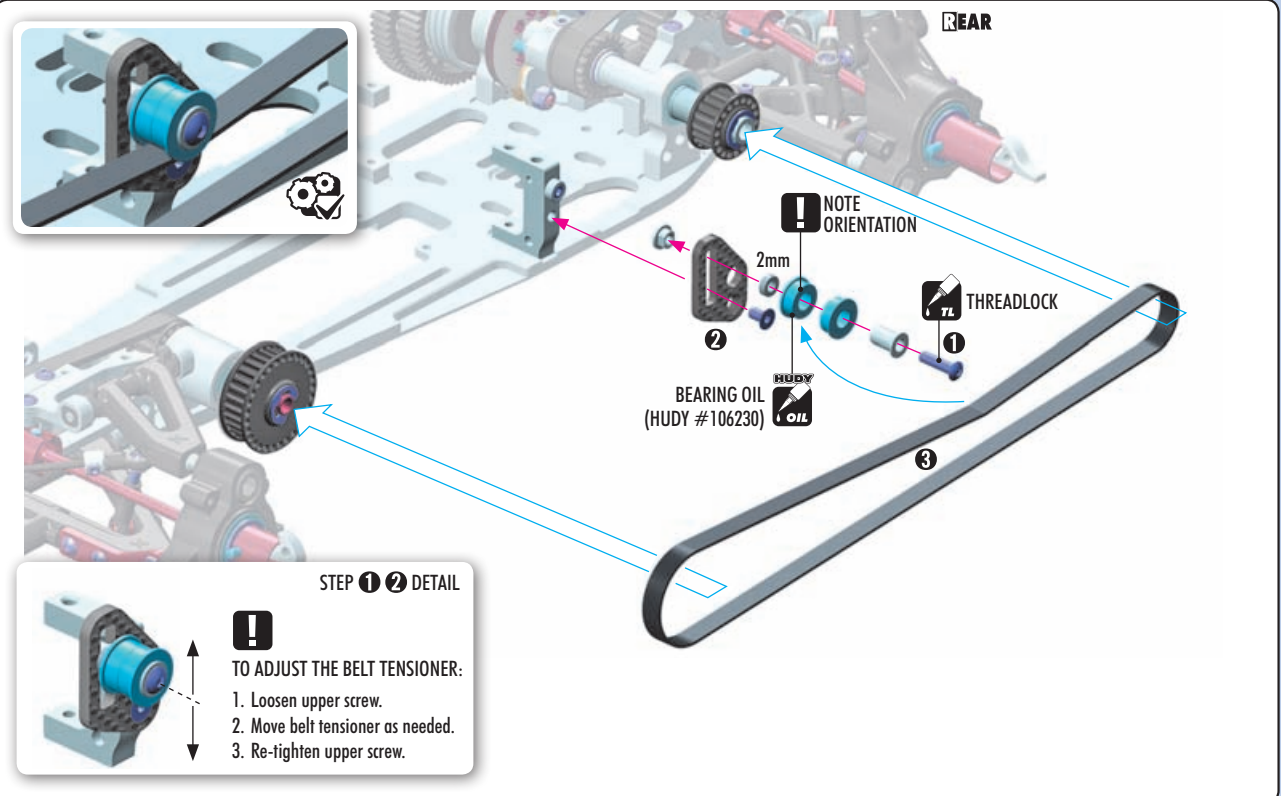
902314
SH M3x14



903306
SFH M3x6



950510
BB 5x10x4



REAR

NOTE ORIENTATION

2mm

BEARING OIL
(HUDY #106230)

THREADLOCK

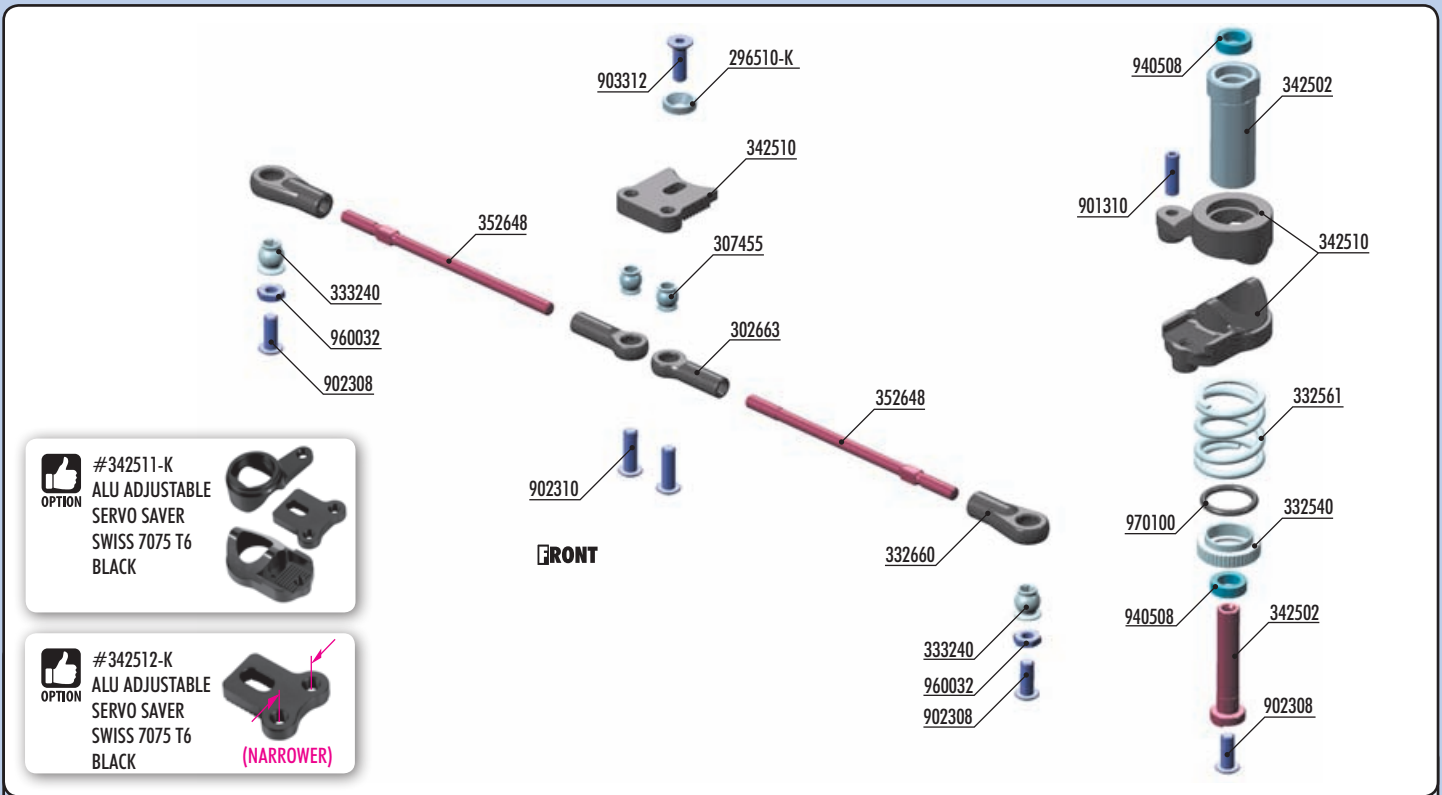
STEP 1 2 DETAIL



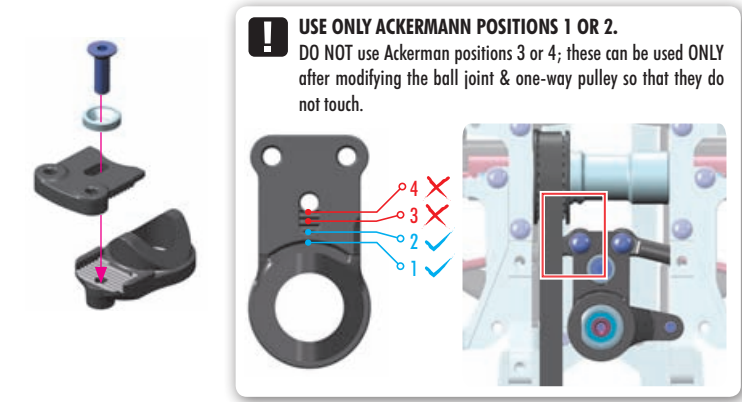
TO ADJUST THE BELT TENSIONER:

1. Loosen upper screw.
2. Move belt tensioner as needed.
3. Re-tighten upper screw.

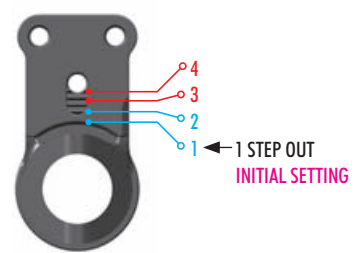
6. STEERING



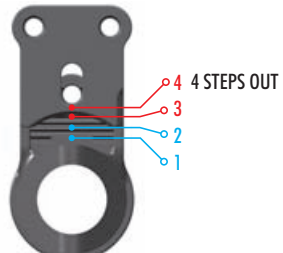
BAG 	296510-K	ALU COUNTERSUNK SHIM - BLACK (4)	352648	ADJ. TURNBUCKLE M3 L/R 62 MM - HUDY SPRING STEEL (2)
	302663	COMPOSITE BALL JOINT 4.9MM - OPEN - V2 (8)	901310	HEX SCREW SB M3x10 (10)
06	307455	PIVOT BALL 4.9 MM DOUBLE BEVEL SHOULDERS (10)	902308	HEX SCREW SH M3x8 (10)
	332540	ALU SERVO SAVER ADJUSTABLE NUT	902310	HEX SCREW SH M3x10 (10)
	332561	SERVO SAVER SPRING C=14	903312	HEX SCREW SFH M3x12 (10)
	332660	COMPOSITE STEERING & SERVO BALL JOINT 5.8 MM (4+2)	940508	BALL-BEARING 5x8x2.5 RUBBER SEALED - OIL (2)
	333240	BALL UNIVERSAL 5.8 MM HEX (4)	960032	NUT M3 (10)
	342502	SERVO SAVER COMPLETE SET	970100	O-RING 10 x 1.5 (10)
	342510	COMPOSITE SERVO SAVER		



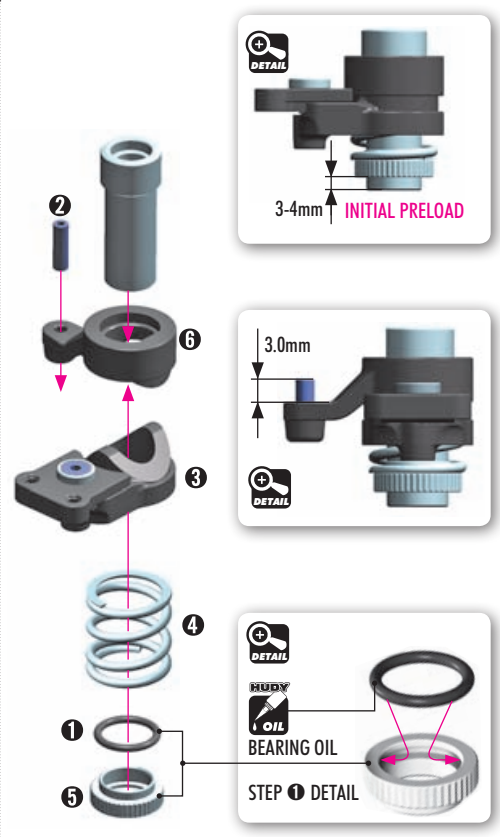
THERE ARE 4 DIFFERENT ACKERMANN SETTINGS POSSIBLE WITH THE QUICK-SAVER™
 For initial Ackermann setting, use Step 1 (2nd shortest length).



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.



TIP Install the pivot balls with Professional Multi Tool (HUDY #183011).

TIP BALL JOINT WRENCH (HUDY #181110)

NOTE ORIENTATION

NOTE ORIENTATION

NOTE ORIENTATION

NOTE ORIENTATION

LEFT

RIGHT

42.5mm

42.5mm

2x

NOTE ORIENTATION

NOTE ORIENTATION

902310
SH M3x10

BEARING WITH BLUE RUBBER COVERS

BEARING OIL (HUDY #106230)

BEARING WITH BLUE RUBBER COVERS

BEARING OIL (HUDY #106230)

FRONT

902308
SH M3x8

940508
BB 5x8x2.5

2

2

1

3

FRONT

FRONT

INITIAL SETTING

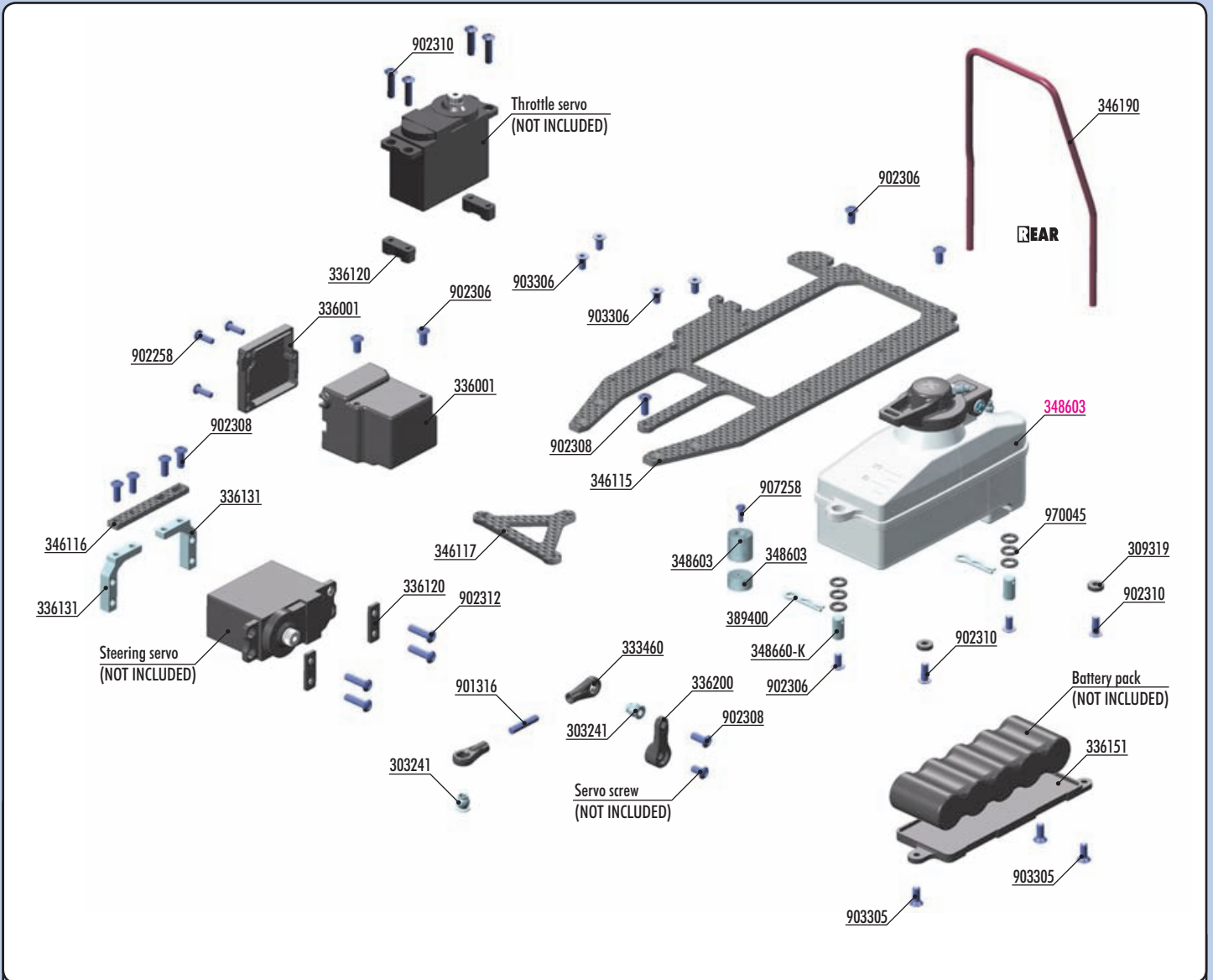
2x

L-R

902308
SH M3x8

960032
N M3

7. FUEL TANK & ELECTRONICS

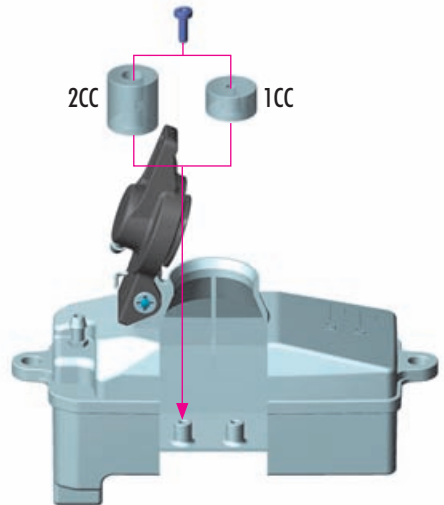
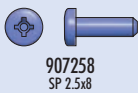


BAG
07

- 303241 BALL UNIVERSAL 5.8 MM HEX (4)
- 309319 UNIVERSAL SET OF PLASTIC SHIMS
- 333460 COMPOSITE BALL JOINT 5.8 MM (4)
- 336001 COMPOSITE RECEIVER CASE - COMPACT SIZE
- 336120 COMPOSITE STEERING SERVO HOLDER - SET - V2
- 336131 ALU STEERING SERVO MOUNT - BLACK - SWISS 7075 T6 (2)
- 336151 COMPOSITE BATTERY PLATE
- 336200 COMPOSITE STEERING SERVO ARMS - SET
- 346115 GRAPHITE RADIO PLATE

- 346116 GRAPHITE ADJUSTABLE SHIM FOR RADIO PLATE
- 346117 GRAPHITE FRONT UPPER BRACE
- 346190 ROLL-OVER BAR
- 348660-K ALU FUEL TANK MOUNT - BLACK (2)
- 389400 MICRO BODY CLIP (10)
- 901316 HEX SCREW SB M3x16 (10)
- 902258 HEX SCREW SH M2.5x8 (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)
- 907258 SCREW PHILLIPS M2.5x8 (10)
- 970045 O-RING 4.5x1.5 (10)
- 348603 FUEL TANK 125CC - SET



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.

2CC FUEL TANK INSERT
The larger insert decreases the fuel tank volume by 2cc, and is recommended for use when the fuel filter is used.

1CC FUEL TANK INSERT
The smaller insert decreases the fuel tank volume by 1cc.

NOTE ORIENTATION

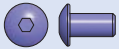
NOTE ORIENTATION

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

7. FUEL TANK & ELECTRONICS



309319
SHIM 3x7x1



902306
SH M3x6



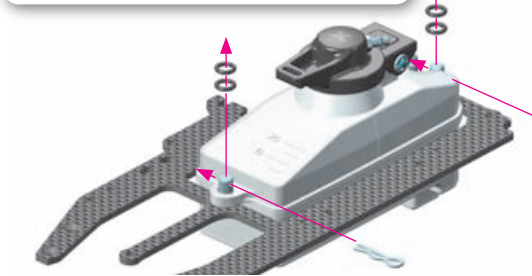
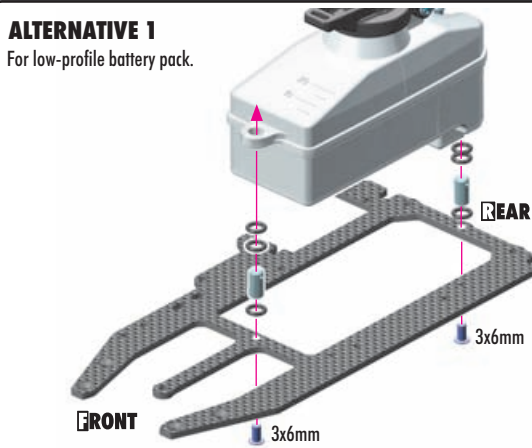
902310
SH M3x10



970045
0.4.5x1.5

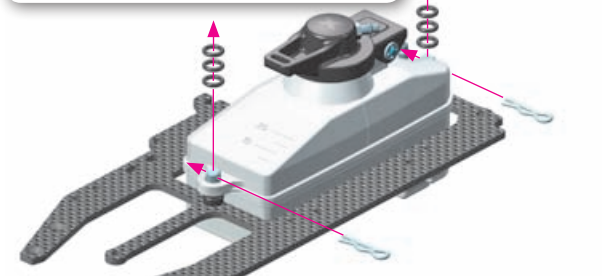
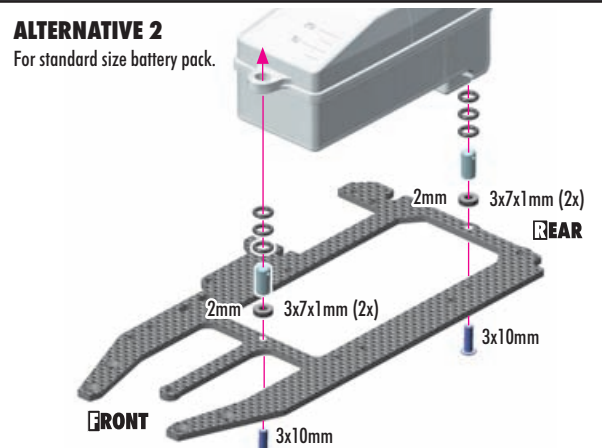
ALTERNATIVE 1

For low-profile battery pack.

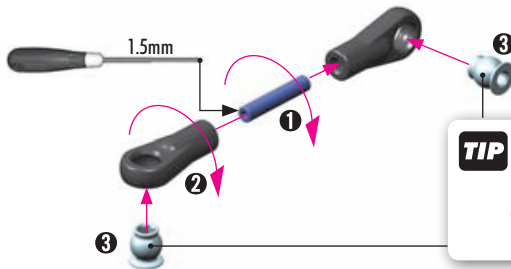


ALTERNATIVE 2

For standard size battery pack.



901316
SB M3x16



TIP Install the pivot balls with Professional Multi Tool (HUDY #183011).



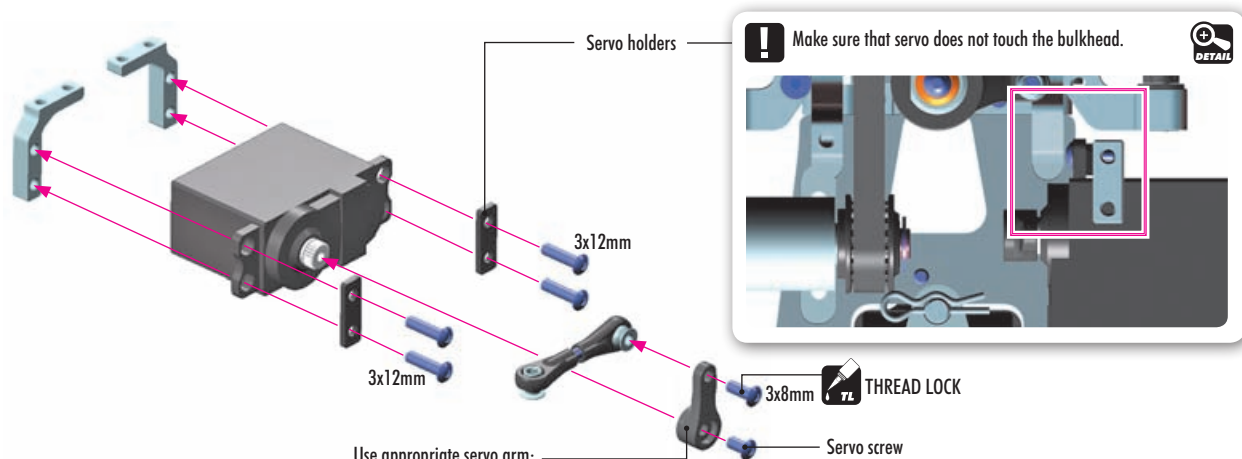
Note the 90° angle difference between the ball joints.



902308
SH M3x8



902312
SH M3x12



Use appropriate servo arm:
K - (23T) = KO, JR, Airtronics
H - (24T) = Futaba,
F - (25T) = Hitec



ALU SERVO HORNS - OFFSET

#293491	KO, Sanwa - 23T
#293492	Hitec - 24T
#293493	Futaba - 25T

CLAMP ALU SERVO HORNS - OFFSET

#293401	KO, Sanwa - 23T
#293402	Hitec - 24T
#293403	Futaba - 25T

For more in-corner steering and better steering response, aluminum servo horns may be used.

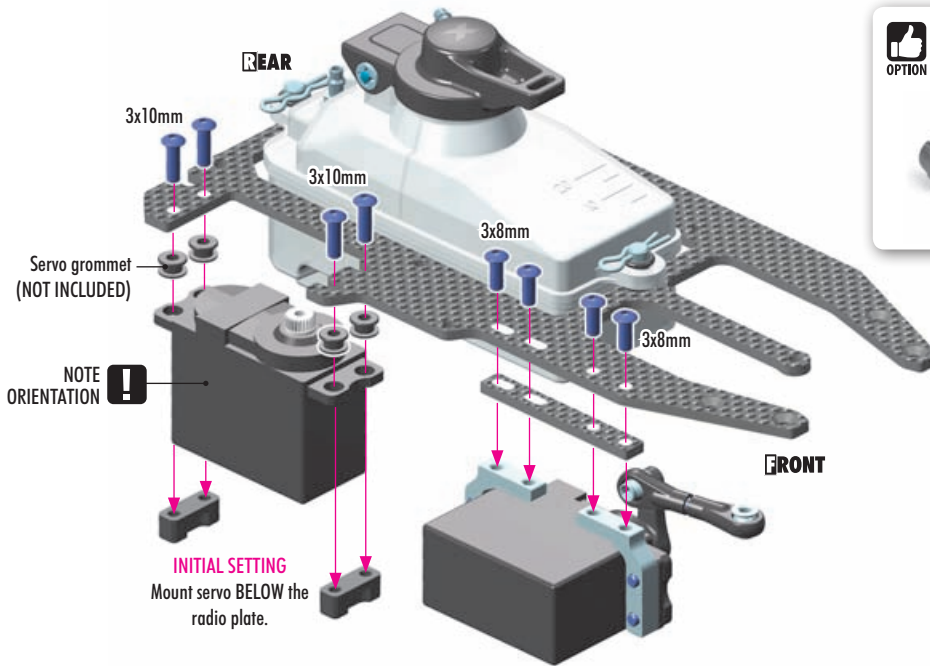
7. FUEL TANK & ELECTRONICS



902308
SH M3x8



902310
SH M3x10



OPTION # 358941
COMPOSITE TUBING HOLDER FOR FUEL TANK (2)
#903255 SCREWS



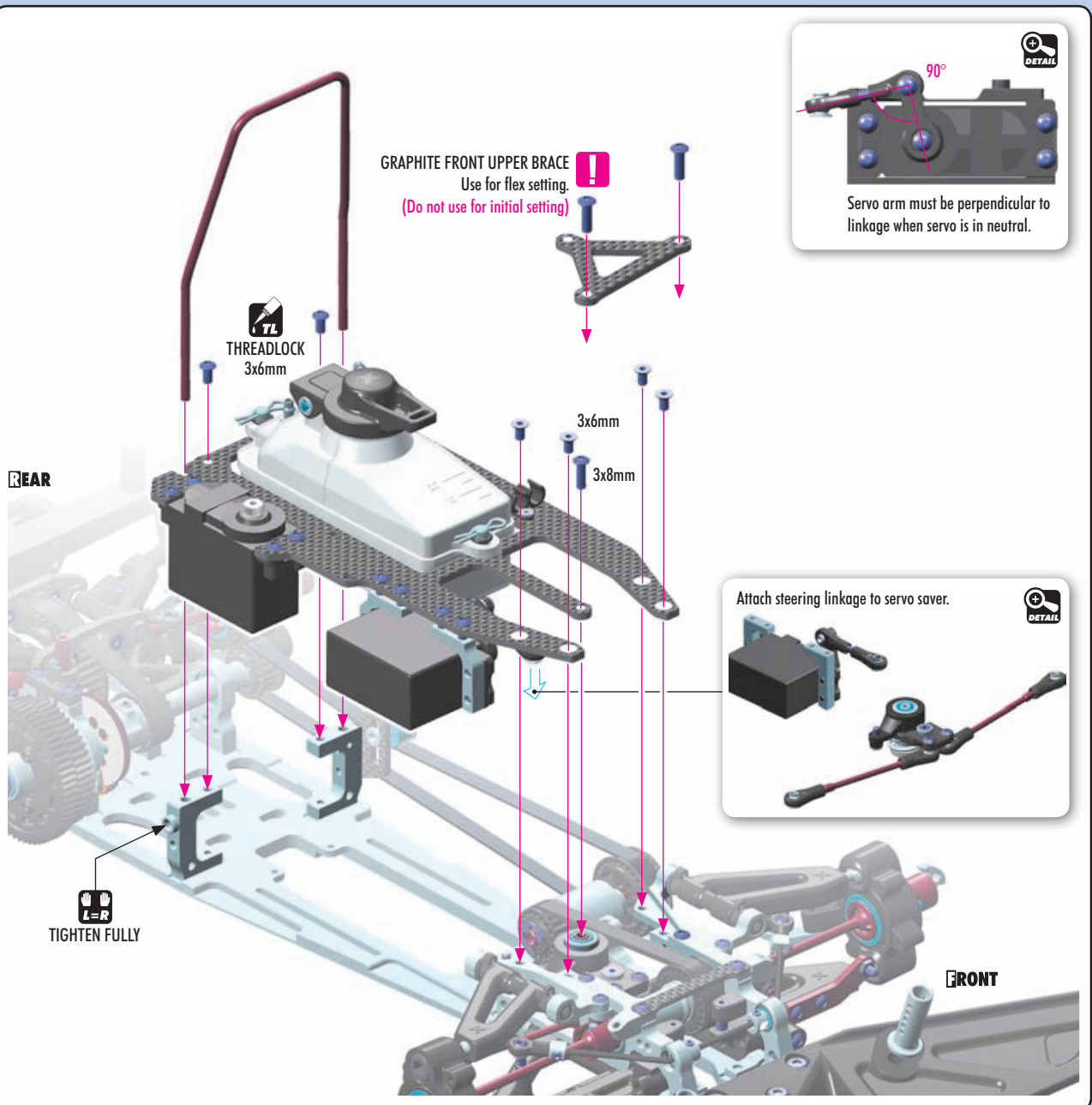
902306
SH M3x6



902310
SH M3x10



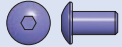
903306
SFH M3x6



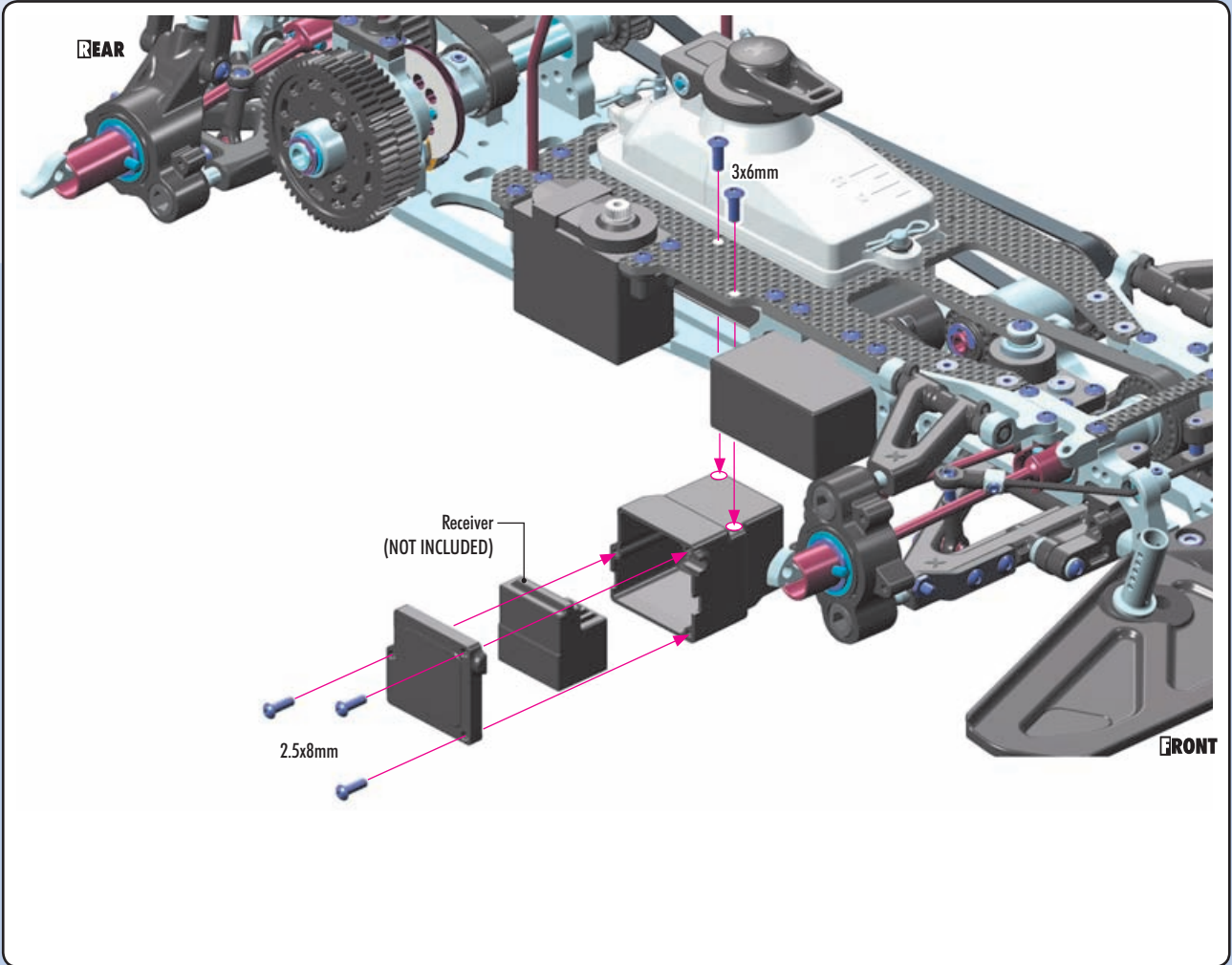
7. FUEL TANK & ELECTRONICS



902258
SH M2.5x8



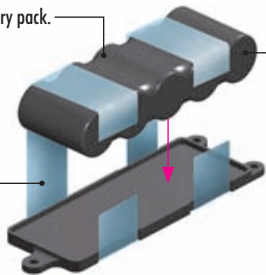
902306
SH M3x6



Use an appropriate receiver battery pack.

Battery (NOT INCLUDED)

Use tape to mount the receiver battery pack to the lower holder (NOT INCLUDED).

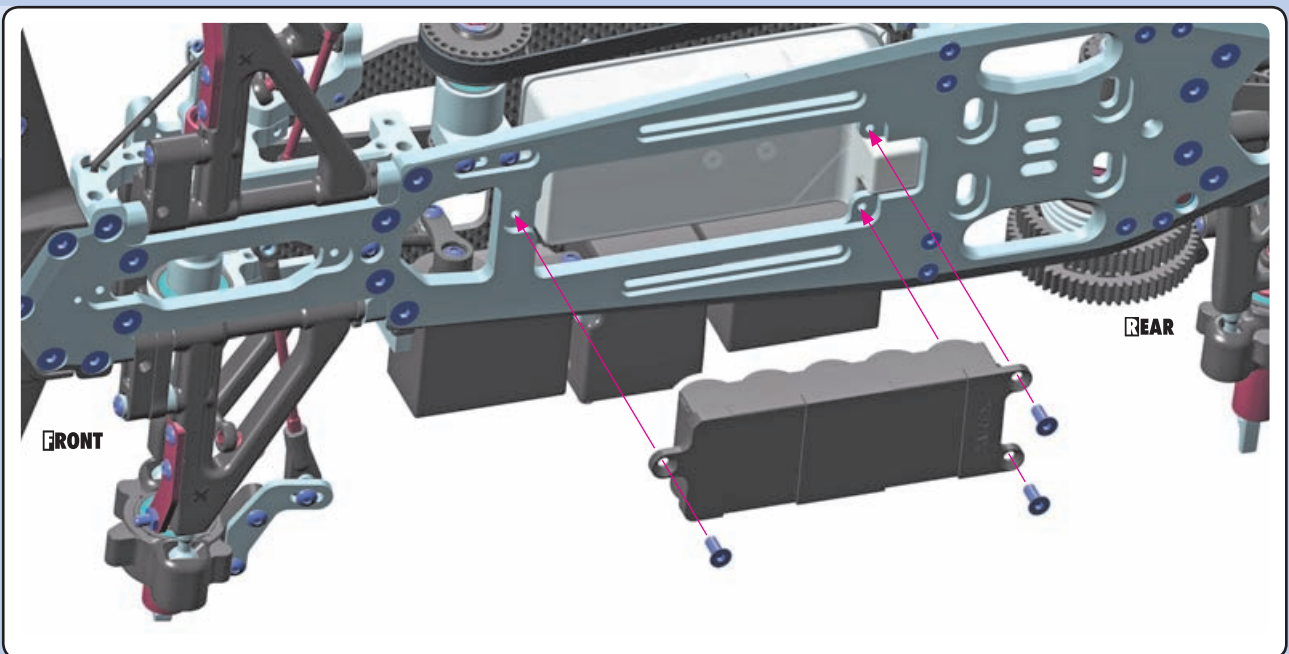


OPTION

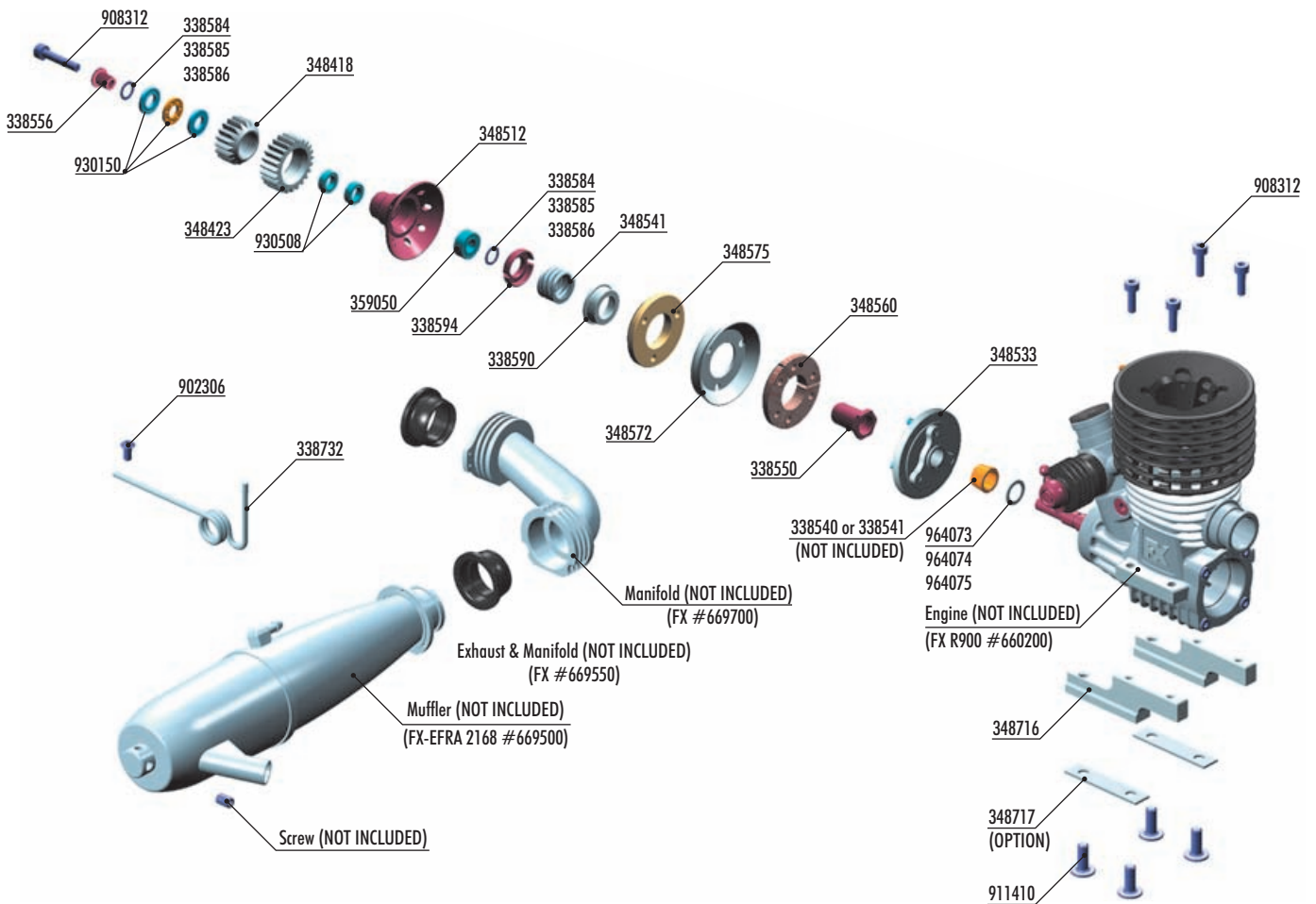
BATTERY PLATE		
#336151	COMPOSITE	INCLUDED
#336155	GRAPHITE	OPTION
#346157	BRASS (100g)	OPTION



903305
SFH M3x5



8. ENGINE & CLUTCH



1ST XCA HARDCOATED PINION GEAR			
OPTION	#348417	17T (1st)	OPTION
	#348418	18T (1st)	INCLUDED
	#348419	19T (1st)	OPTION

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



338540	FLYWHEEL COLLAR 7MM - FX, MAX, OS (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) (OPTION)
338585	SHIM 5x7x0.3 (10)	359050	CLUTCH BELL BALL-BEARING 5x10x4 (2)
338586	SHIM 5x7x0.5 (10)	902306	HEX SCREW SH M3x6 (10)
338590	CLUTCH SPRING CUP - ALU 7075 T6	908312	HEX SCREW SOCKET HEAD CAP M3x12 (10)
338594	CLUTCH PRELOAD ADJ. NUT - HUDY SPRING STEEL™	911410	HEX SCREW FLANGED SH M4x10 (10)
338732	EXHAUST MOUNTING WIRE - EXTRA-LONG	930150	CARBIDE AXIAL THRUSTBEARING F5-10 5x10x4
348418	XCA ALU PINION GEAR 18T (1ST) - 7075 T6 - HARDCOATED - LARGE	930508	BALL-BEARING 5x8x2.5 STEEL SEALED - OIL (2)
348423	XCA ALU PINION GEAR 23T (2ND) - 7075 T6 - HARDCOATED - LARGE	964073	WASHER S 7x10x0.2 (10)
348502	XCA (XRAY CENTRIFUGAL-AXIAL) CLUTCH SET - REVERSE - SMALL	964074	WASHER S 7x10x0.3 (10)
348512	XCA CLUTCHBELL FOR SMALLER PINION GEARS - HUDY STEEL	964075	WASHER S 7x10x0.5 (10)
348533	FLYWHEEL - FLAT - HARDCOATED		
348541	CLUTCH SPRING - ULTRA-STABLE		



964073
S 7x10x0.2



964074
S 7x10x0.3



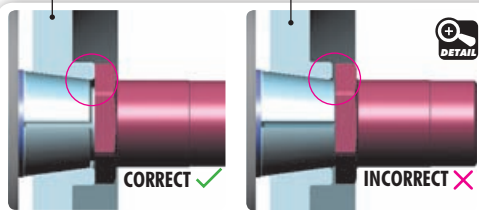
964075
S 7x10x0.5



Shim (for adjusting flywheel distance)

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

- #338540 – XRAY flywheel collar for ø7mm crankshafts
- #338541 – XRAY flywheel collar for ø6mm crankshafts

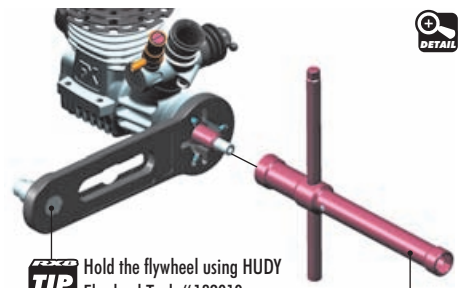


CORRECT ✓

INCORRECT ✗

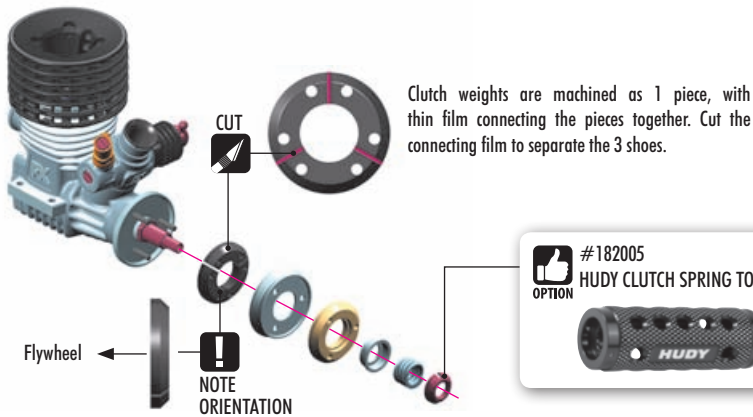
The flywheel collar must stay inside the flywheel.

If the flywheel collar is too long – if it is flush with the flywheel or protrudes slightly – remove a small amount of material from the end, or use an XRAY collar.



TIP Hold the flywheel using HUDY Flywheel Tool #182010.

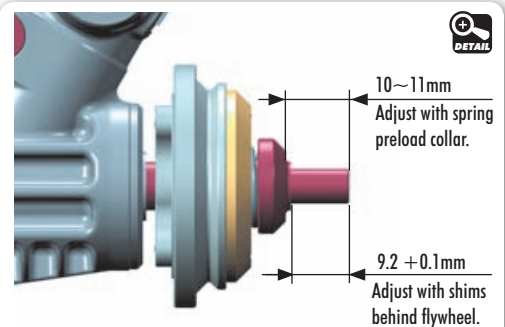
Tighten the clutch nut using HUDY tool #107581.



Clutch weights are machined as 1 piece, with thin film connecting the pieces together. Cut the connecting film to separate the 3 shoes.

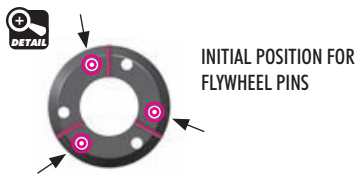
OPTION #182005 HUDY CLUTCH SPRING TOOL

Flywheel
NOTE ORIENTATION



10~11mm
Adjust with spring preload collar.

9.2 ± 0.1mm
Adjust with shims behind flywheel.



INITIAL POSITION FOR FLYWHEEL PINS



OPTION #348576 CLUTCH SHOE - RED

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.

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



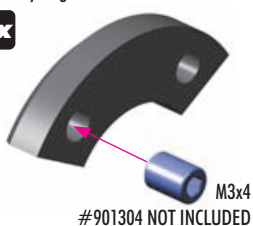
TECH TIP FOR EXTRA BOTTOM-END POWER

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!

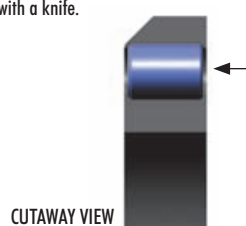
Install set-screw into free (non-pivot) end of flyweight.

3x



M3x4
#901304 NOT INCLUDED

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



CUTAWAY VIEW

1 Install clutch according to manual.

2 Check that the spring preload is not too much; for run-in process use less preload.

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).

5 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.

8. ENGINE & CLUTCH

-  338584
S 5x7x0.2
-  338585
S 5x7x0.3
-  338586
S 5x7x0.5
-  359050
BB 5x10x4
-  908312
SCH M3x12
-  930150
BA 5x10
-  930508
BB 5x8x2.5

DO NOT INSTALL this bearing when setting clutch gap.
INSTALL this bearing when setting endplay.

IMPORTANT
Degrease this bearing with standard bearing cleaner, and then lubricate with light bearing oil.

TIP
ENDPLAY SHIMS
These shims are used to adjust clutchbell endplay.

BEARING GREASE

BEARING WITH STEEL COVERS

GRAPHITE GREASE

CLUTCH GAP SHIMS
These shims are used to adjust clutch gap.

TIP
To measure the clutch gap (0.6~0.7mm) you can also use HUDY Flywheel Tool #182010.



(1) ADJUSTING THE CLUTCH GAP

1 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.

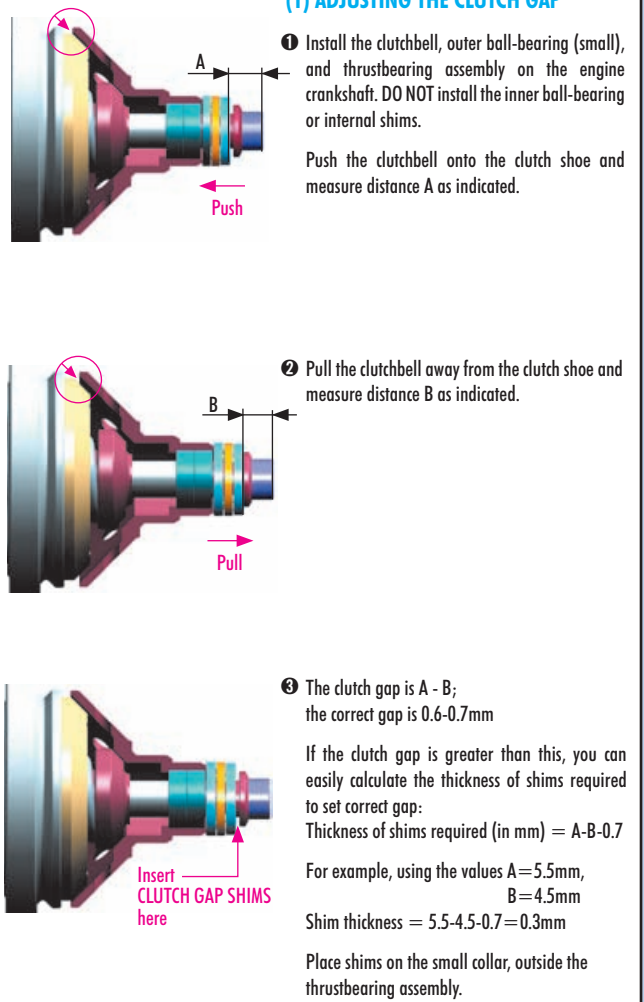
3 The clutch gap is A - B; the correct gap is 0.6-0.7mm

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.

Insert CLUTCH GAP SHIMS here

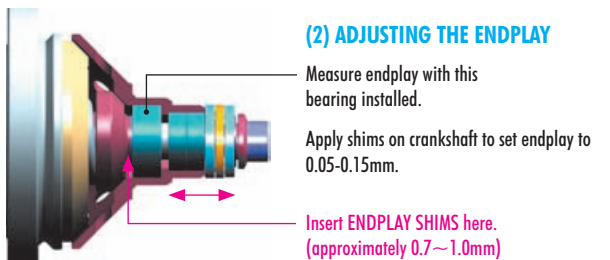


(2) ADJUSTING THE ENDPLAY

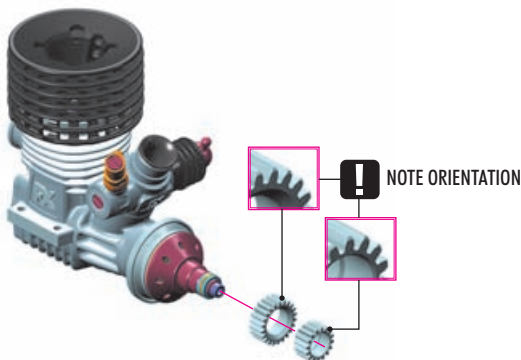
Measure endplay with this bearing installed.

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

Insert ENDPLAY SHIMS here. (approximately 0.7~1.0mm)



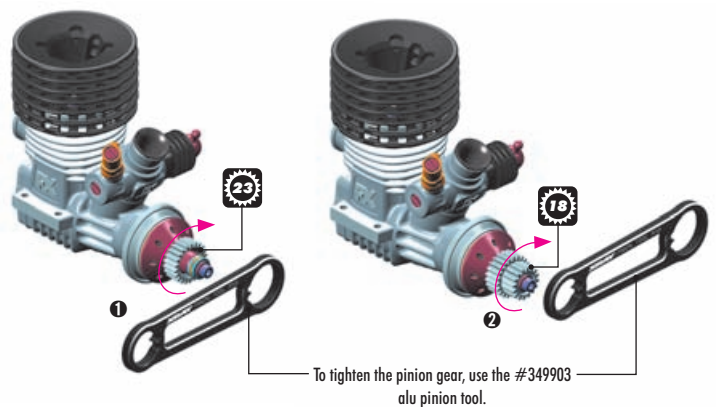
NOTE ORIENTATION



1 **23**

2 **18**

To tighten the pinion gear, use the #349903 alu pinion tool.



8. ENGINE & CLUTCH



908312
SCH M3x12

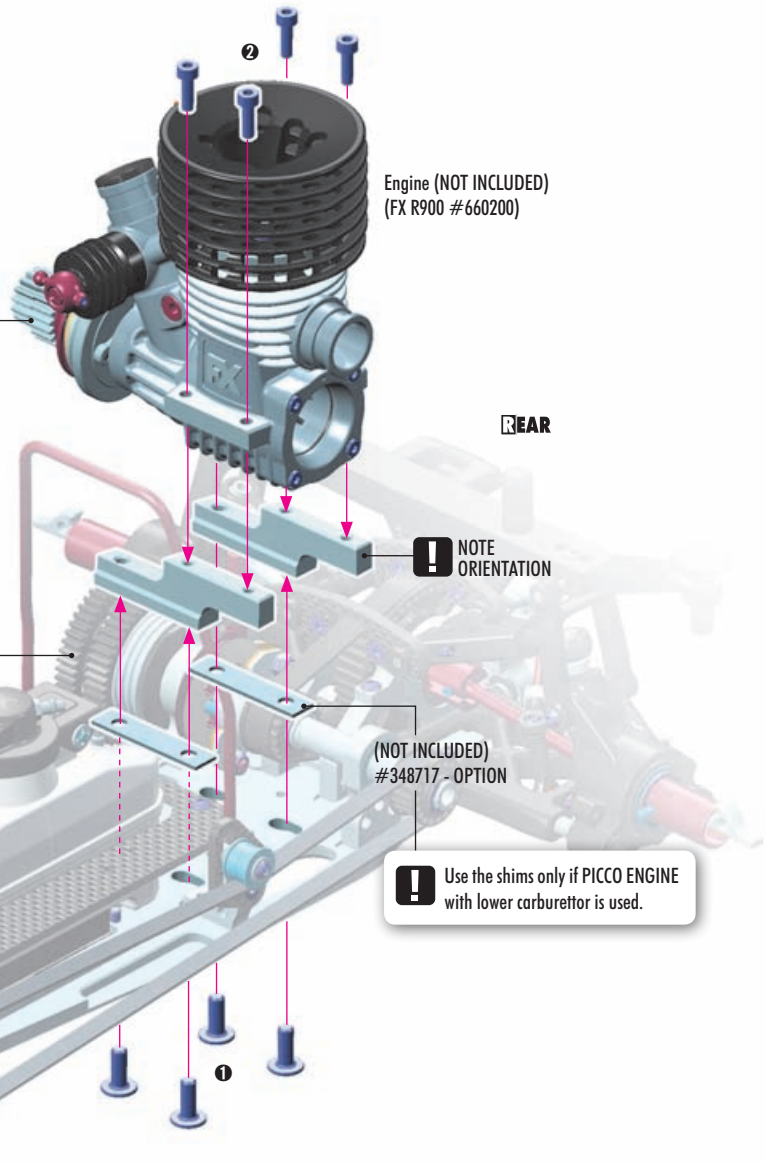
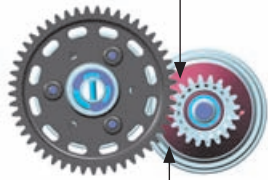


911410
SHF M4x10

Adjust gear mesh so there is minimal play between the gears.

TOO TIGHT gear mesh will put excessive strain on all parts and damage the parts.

TOO LOOSE gear mesh may result in stripped gears.



Engine (NOT INCLUDED)
(FX R900 #660200)

REAR

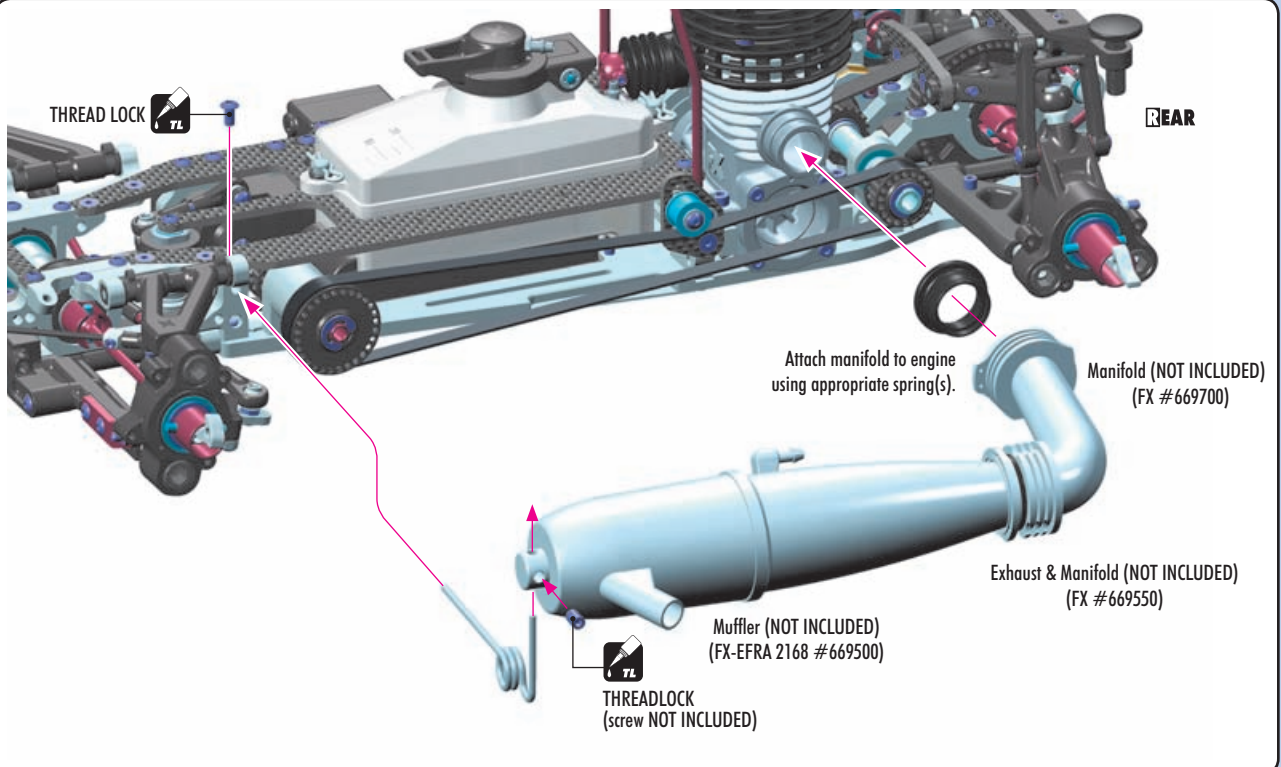
NOTE ORIENTATION

(NOT INCLUDED)
#348717 - OPTION

Use the shims only if PICCO ENGINE with lower carburettor is used.



902306
SH M3x6



THREAD LOCK



REAR

Attach manifold to engine using appropriate spring(s).

Manifold (NOT INCLUDED)
(FX #669700)

Exhaust & Manifold (NOT INCLUDED)
(FX #669550)

Muffler (NOT INCLUDED)
(FX-EFRA 2168 #669500)



THREADLOCK
(screw NOT INCLUDED)

9. SHOCK ABSORBERS

308352-K, 303241, 308331, 308091 (OPTION), 308081, 965023, 338061, 338021, 972030, 308327-K, 308036, 970121, 308040-K, 348185 FRONT - SHORT, 308331, 308315 FRONT - SHORT, 303241, 333130 REAR - LONG

DO NOT USE CROSSED-OUT PARTS

FRONT SPRINGS		
348184	C=7.0	OPTION
348185	C=7.5	INCLUDED
348186	C=8.0	OPTION
348187	C=8.5	OPTION
348188	C=7.0-9.0	OPTION
348189	C=10.0	OPTION

REAR SPRINGS		
348283	C=5.0	OPTION
348284	C=5.6	INCLUDED
348285	C=6.3	OPTION

BAG

303241	BALL UNIVERSAL 5.8 MM HEX (4)	338001-K	ALU SHOCK ABSORBER-SET - BLACK (2)
308036	COMPOSITE NON-ADJUSTABLE PISTONS - DELRIN™ - V3	338021	ALU SHOCK BODY (2)
308040-K	SHOCK ADJ. NUT ALU + O-RING - BLACK (4)	338061	HARDENED SHOCK SHAFT (2)
308081	SHOCK ABSORBER MEMBRANE - LOW (4)	965023	E-CLIP 2.3 (10)
308091	SHOCK FOAM INSERTS - LOW (4) (OPTION)	970121	O-RING 12.1x1.6 (10)
308315	COMPOSITE SHOCK BALL JOINT - LONG (4)	972030	SILICONE O-RING 3x2 (10)
308327-K	ALU CAP FOR XRAY SHOCK BODY - BLACK (2)	348185	XRAY SPRING-SET C=7.5 - FRONT (2)
308331	COMPOSITE FRAME SHOCK PARTS 4-STEP - SHORT	348284	XRAY SPRING-SET C=5.6 - REAR (2)
308352-K	ALU SHOCK CAP-NUT WITH HOLE - BLACK (2)		
333130	COMPOSITE REAR UPPER CAMBER LINK BALL JOINT 5.8 MM (4)		

965023
C 2.3

4x

2x FRONT

2x REAR

972030
O 3x2

4x

SHOCK OIL

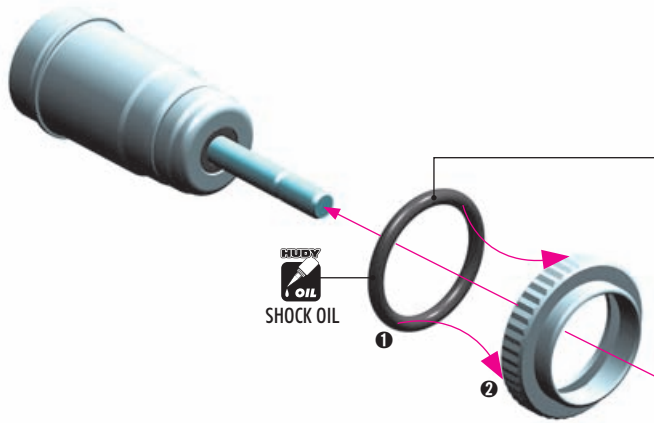
NOTE ORIENTATION

9. SHOCK ABSORBERS



970121
Ø 12.1x1.6

4x



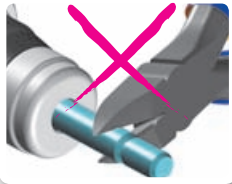
SHOCK OIL

DETAIL



Be careful not to cross-thread the collar on the shock body.

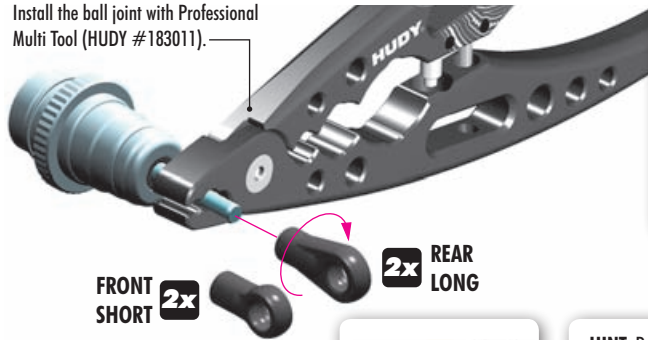
INCORRECT ✗



CORRECT ✓

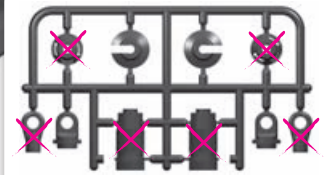


Install the ball joint with Professional Multi Tool (HUDY #183011).

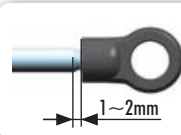


FRONT SHORT 2x

REAR LONG 2x



DO NOT USE CROSSED-OUT PARTS



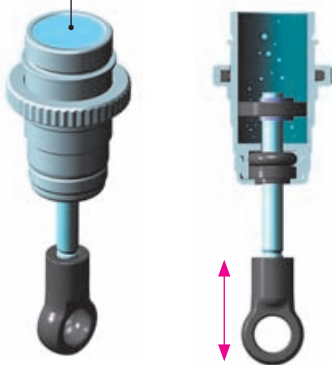
1~2mm

HINT: Pre-thread the ball joint using an M3 screw.

WARNING! Be careful not to pre-thread too far, since the ball joint may split or the plastic threads may strip out.

4x

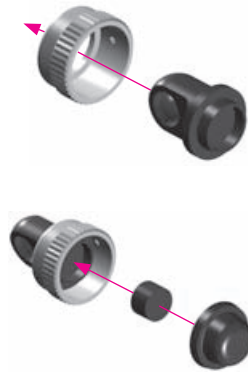
SHOCK OIL



SHOCK FILLING

- 1 Fully extend the piston rod so the piston is at the bottom of the shock body.
- 2 Hold the shock upright and slightly overfill the shock body with shock oil.
- 3 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.
- 4 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.

4x



CUTAWAY VIEW



After you insert the membrane ensure that it sits properly all around the alu cup properly.

4x



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

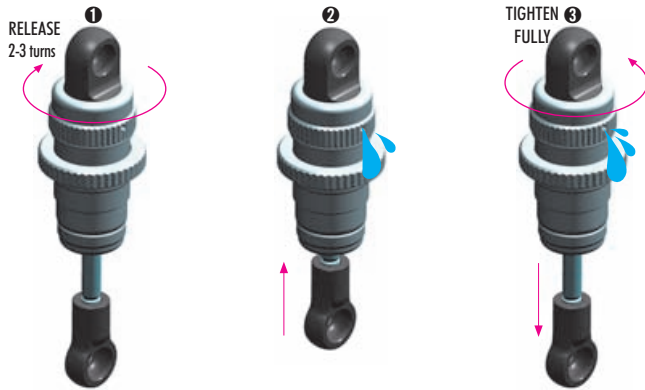
Fully tighten the cap and clean off any excess oil.

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.

9. SHOCK ABSORBERS

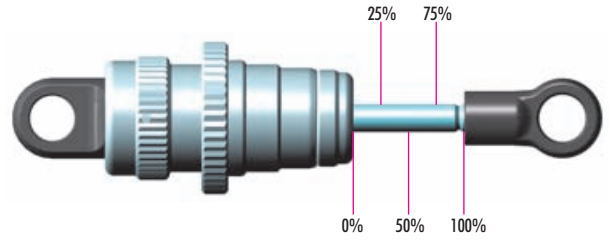
4x



REBOUND ADJUSTMENT

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

- 1 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.
- 3 Tighten the shock cap. 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.



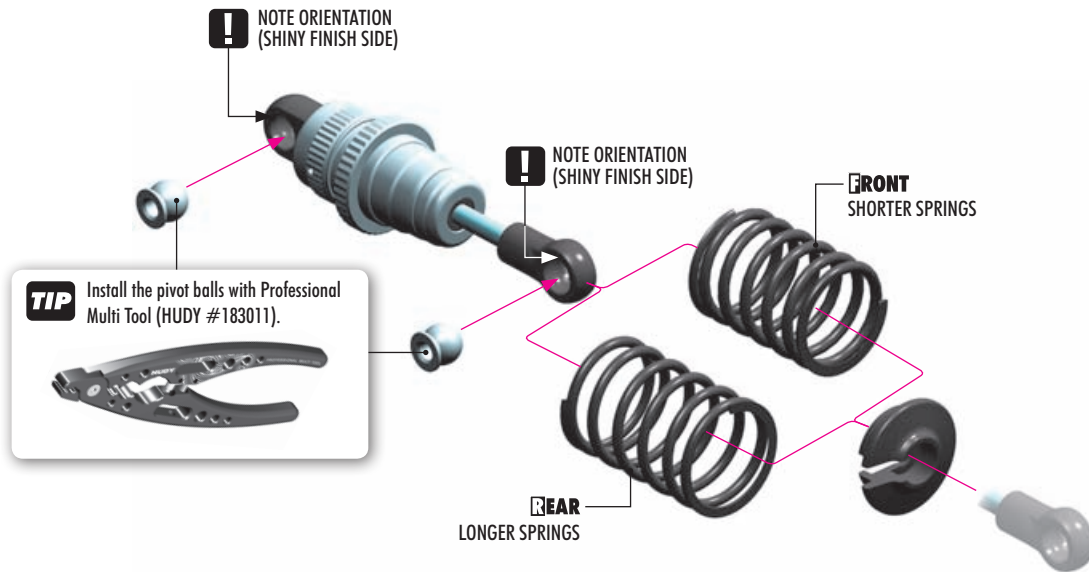
REBOUND CHECK

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 bubbles.

- 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.

4x



SHOCK SPRING RETAINING COLLAR

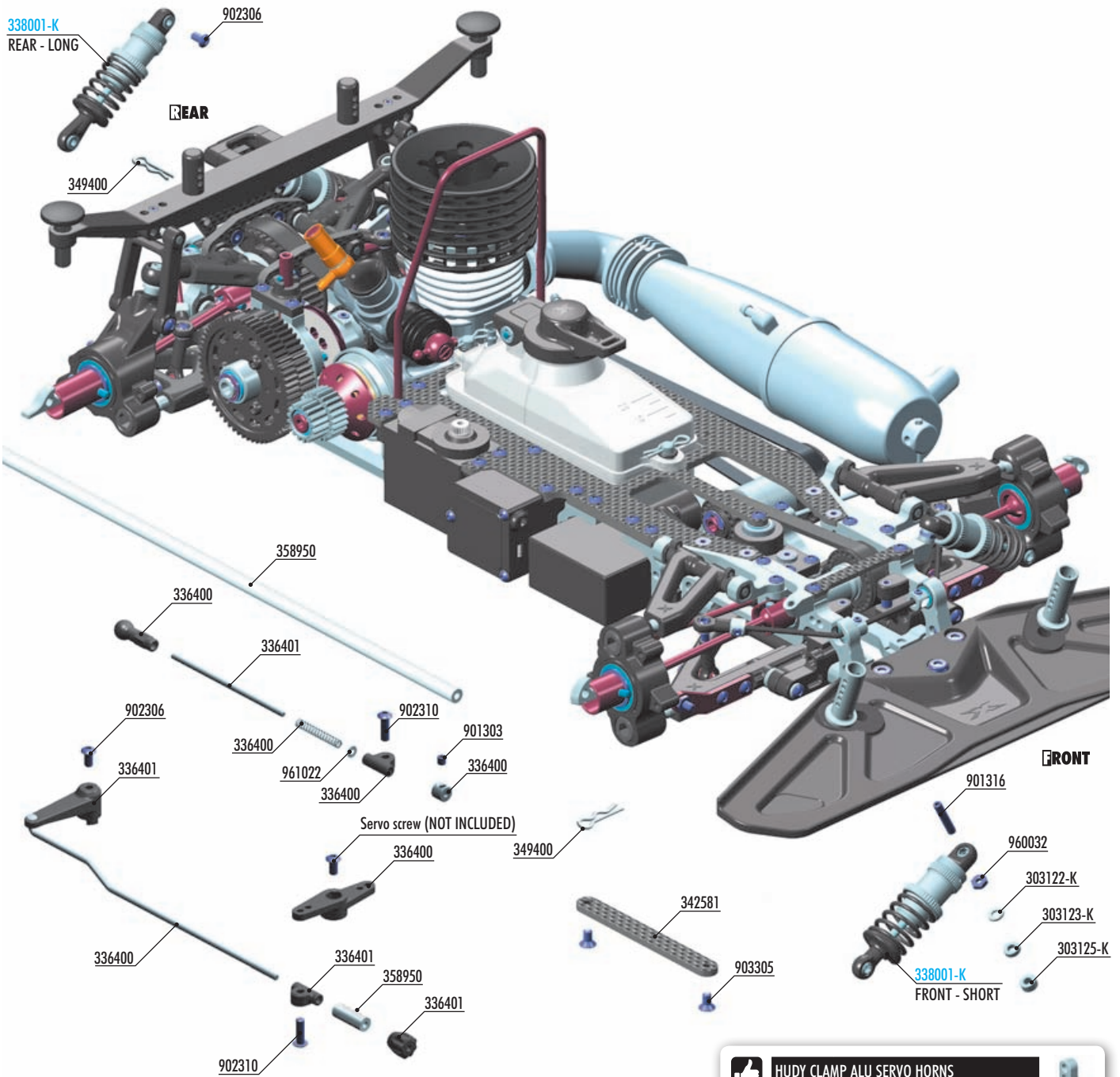
#308031	ALU - SILVER	OPTION
#308031-O	ALU - ORANGE	OPTION
#308031-K	ALU - BLACK	OPTION
#308331	COMPOSITE	INCLUDED



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



#334061-0
 ALU BRAKE POST ARM - SWISS 7075 T6 - ORANGE



#342580
 ALU FRONT CHASSIS BRACE



HUDY CLAMP ALU SERVO HORNS

#293441	23T KO Propo, Airtronics, JR, Sanwa
#293442	24T Hitec
#293443	25T Futaba



HUDY ALU SERVO HORNS

#293494	23T KO Propo, Airtronics, JR, Sanwa
#293495	24T Hitec
#293496	25T Futaba



BAG

10

303122-K ALU SHIM 3x6x1.0MM - BLACK (10)
 303123-K ALU SHIM 3x6x2.0MM - BLACK (10)
 303125-K ALU SHIM 3x6x3.0MM - BLACK (10)
 336400 THROTTLE LINKAGE SET
 336401 BRAKE LINKAGE SET
 342581 GRAPHITE FRONT CHASSIS BRACE
 349400 BODY CLIP (10)
 358950 SILICONE TUBING 1M (2.4 x 5.5MM)

901303 HEX SCREW SB M3x3 (10)
 901316 HEX SCREW SB M3x16 (10)
 902306 HEX SCREW SH M3x6 (10)
 902310 HEX SCREW SH M3x10 (10)
 903305 HEX SCREW SFH M3x5 (10)
 960032 NUT M3 (10)
 961022 WASHER S 2.2 (10)

338001-K ALU SHOCK ABSORBER-SET - BLACK (2)

10. FINAL ASSEMBLY



303122-K
SHIM 3x6x1



303123-K
SHIM 3x6x2



303125-K
SHIM 3x6x3



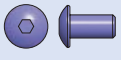
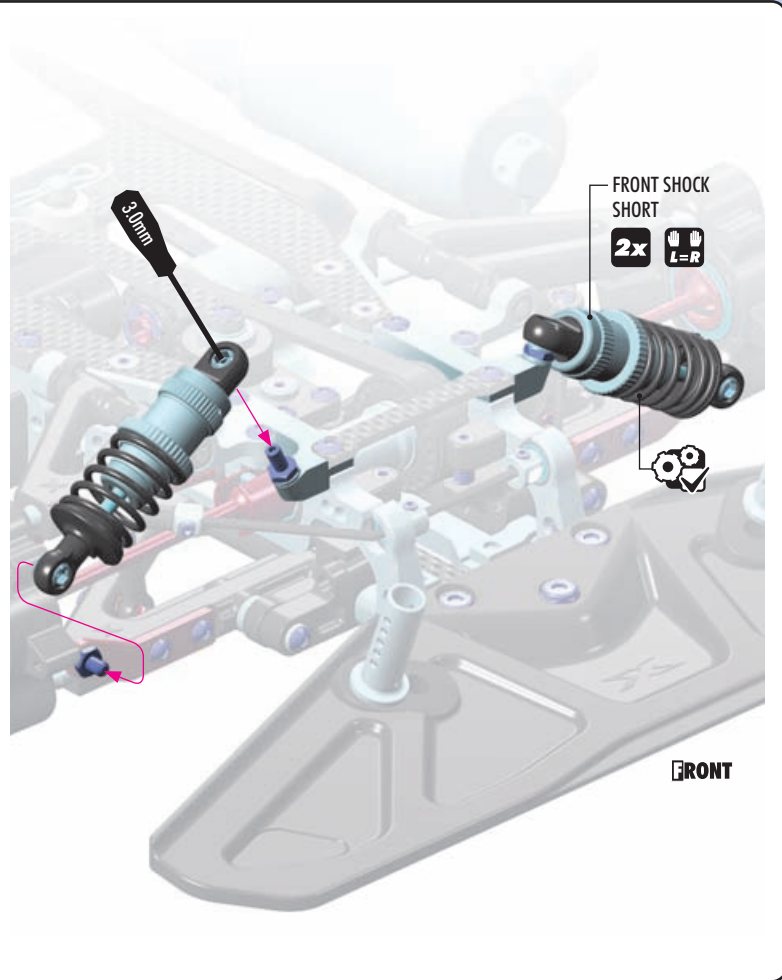
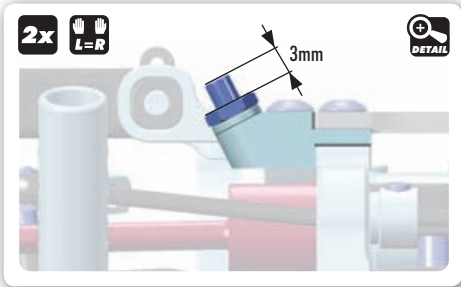
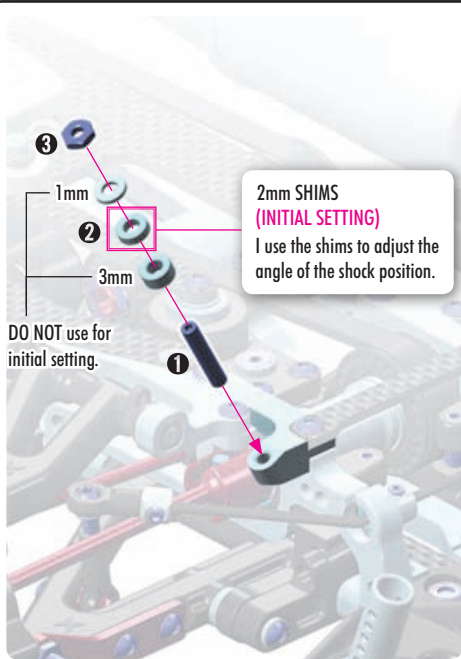
901316
SB M3x16



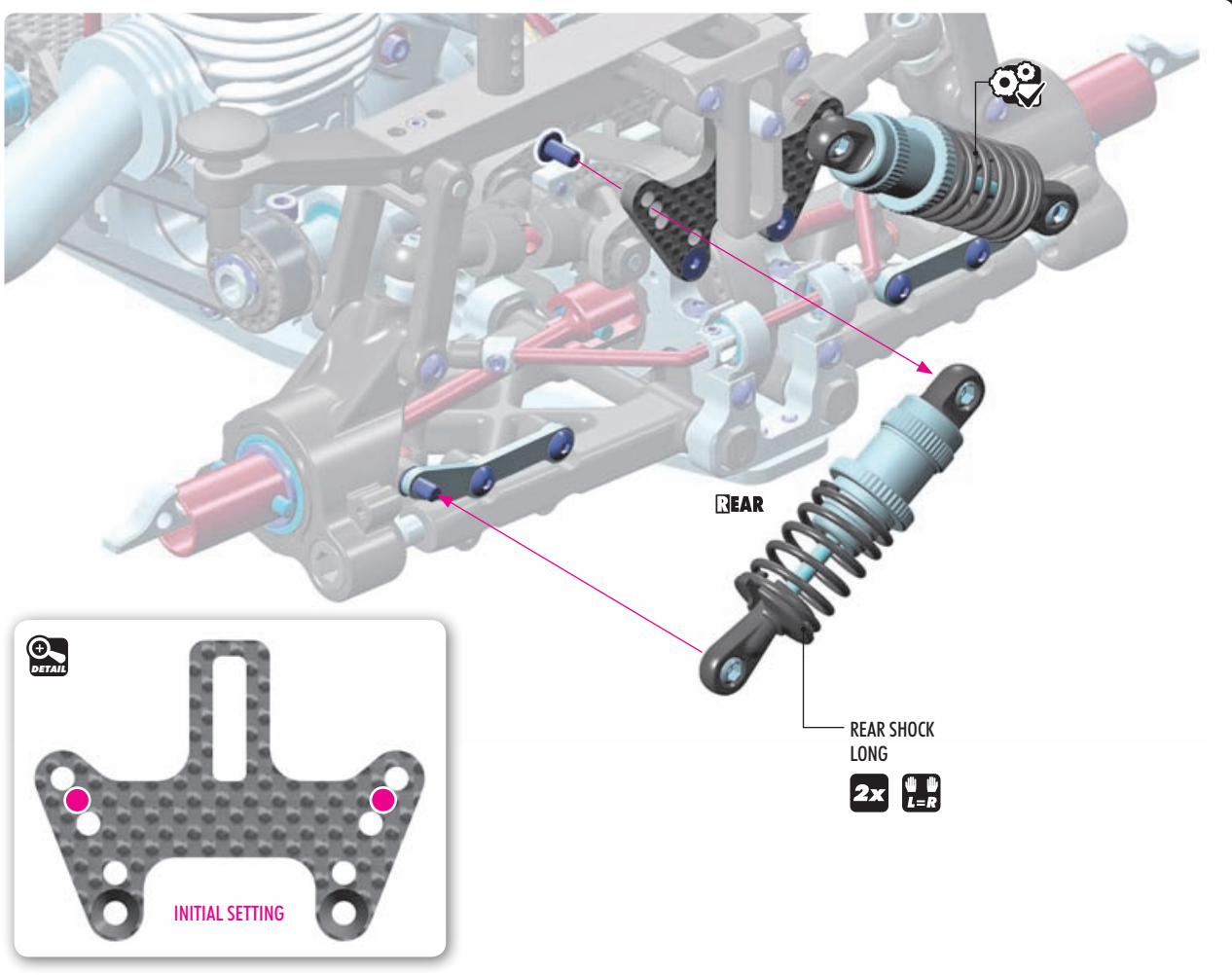
901316
SB M3x16



960032
N M3



902306
SH M3x6



10. FINAL ASSEMBLY



901303
SB M3x3



902310
SH M3x10



961022
S 2.2

THREAD

NOTE ORIENTATION

DO NOT overtighten screws; pivots must rotate freely.

Use appropriate servo arm:
K - (23T) = KO, JR, Airtronics
H - (24T) = Futaba, Rob
F - (25T) = Hitec

Approx. 15mm

Insert rod through hole in brake arm. Bend rod to proper shape.

IMPORTANT:
The composite holders and servo horn orientation depends on the servo type and servo position which can be mounted either from top of the radio plate or from the bottom.

HUDY CLAMP ALU SERVO HORNS	
#293441	23T
#293442	24T
#293443	25T

HUDY ALU SERVO HORNS	
#293494	23T KO Propo, Airtronics, JR, Sanwa
#293495	24T Hitec
#293496	25T Futaba

#334061-0
ALU BRAKE POST ARM - SWISS 7075 T6 - ORANGE



902306
SH M3x6

Servo screw (NOT INCLUDED)

10. FINAL ASSEMBLY



903305
SFH M3x5

FRONT

#342580
ALU FRONT CHASSIS BRACE
OPTION

FRONT CHASSIS FLEX ADJUSTMENT
Chassis features unique and innovative front flex adjustment using an insertable graphite brace.

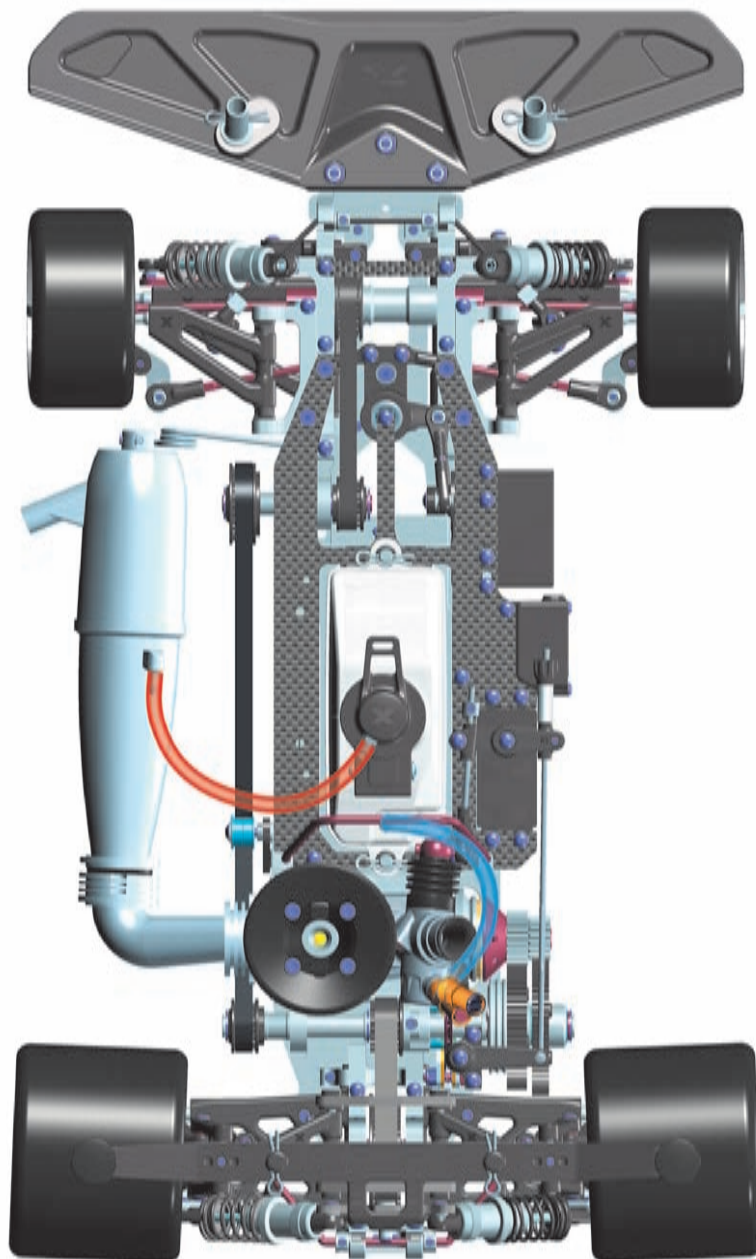
SOFT SETTING NO BRACE: The car is easier to drive and has more forward traction.	STIFF SETTING USING THE GRAPHITE BRACE: Car has increased steering response and cornering speed.
--	--

Graphite Brace

Cut 2 pieces of silicone tubing and install as follows:

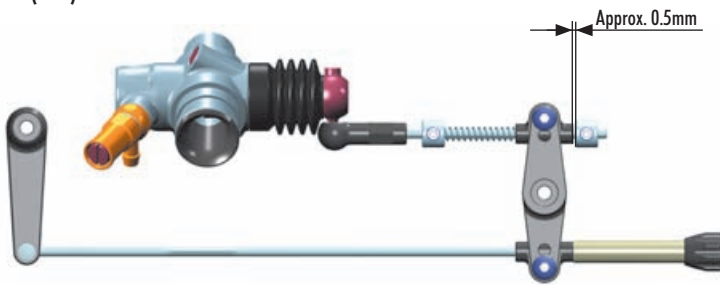
SILICONE TUBE MARKED AS RED = FROM MUFFLER TO FUEL TANK CAP

SILICONE TUBE MARKED AS BLUE = FROM FUEL TANK TO CARBURETOR



CARB LINKAGE ADJUSTMENT

NEUTRAL (IDLE)

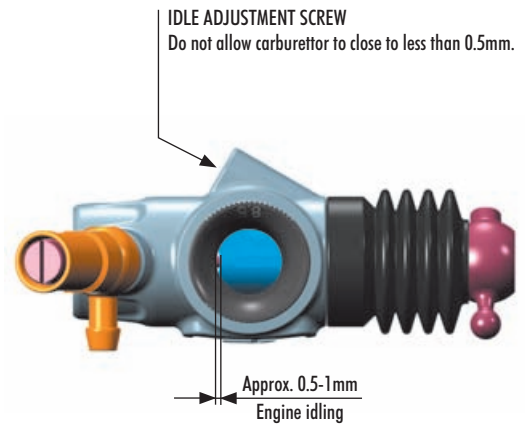


Turn on transmitter and receiver and set the throttle servo trim to the neutral position.

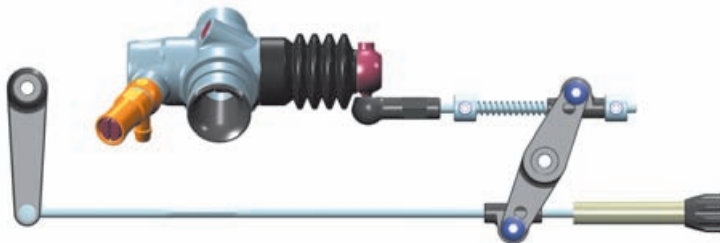
Adjust the idle adjustment screw on the carburetor to open approx. 0.5-1mm.

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



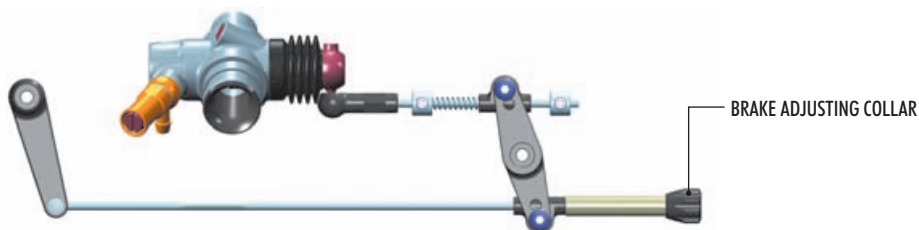
With the engine NOT RUNNING but the receiver turned ON, apply full throttle at the transmitter.

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



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 low-end point adjustment (or brake adjustment), use that to set the appropriate amount of throttle servo horn throw.

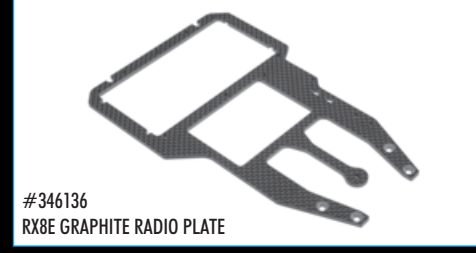
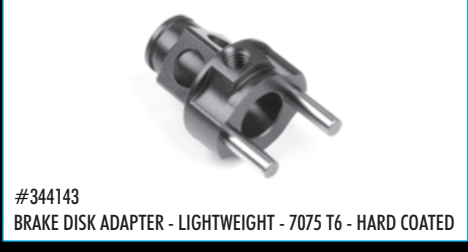
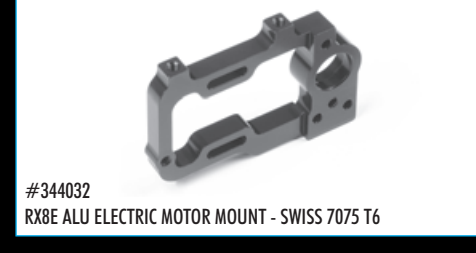
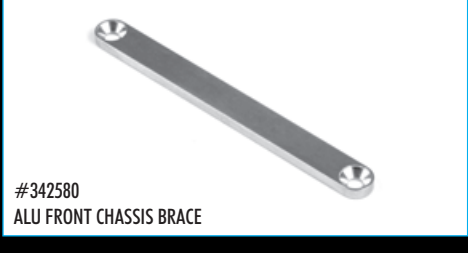
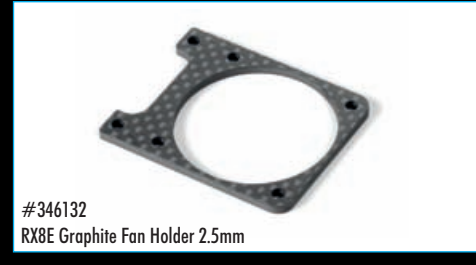
TRAXXAS RX8E

INSTRUCTION MANUAL SUPPLEMENTARY SHEET

New and Improved Parts

Use this RX8E'23 Supplementary Instruction Sheet along with the standard RX8E'23 Instruction Manual.

All of these parts are new or updated from the previous versions.





! Follow the **RX8'23** Instruction Manual for specific steps.

2. REAR SUSPENSION

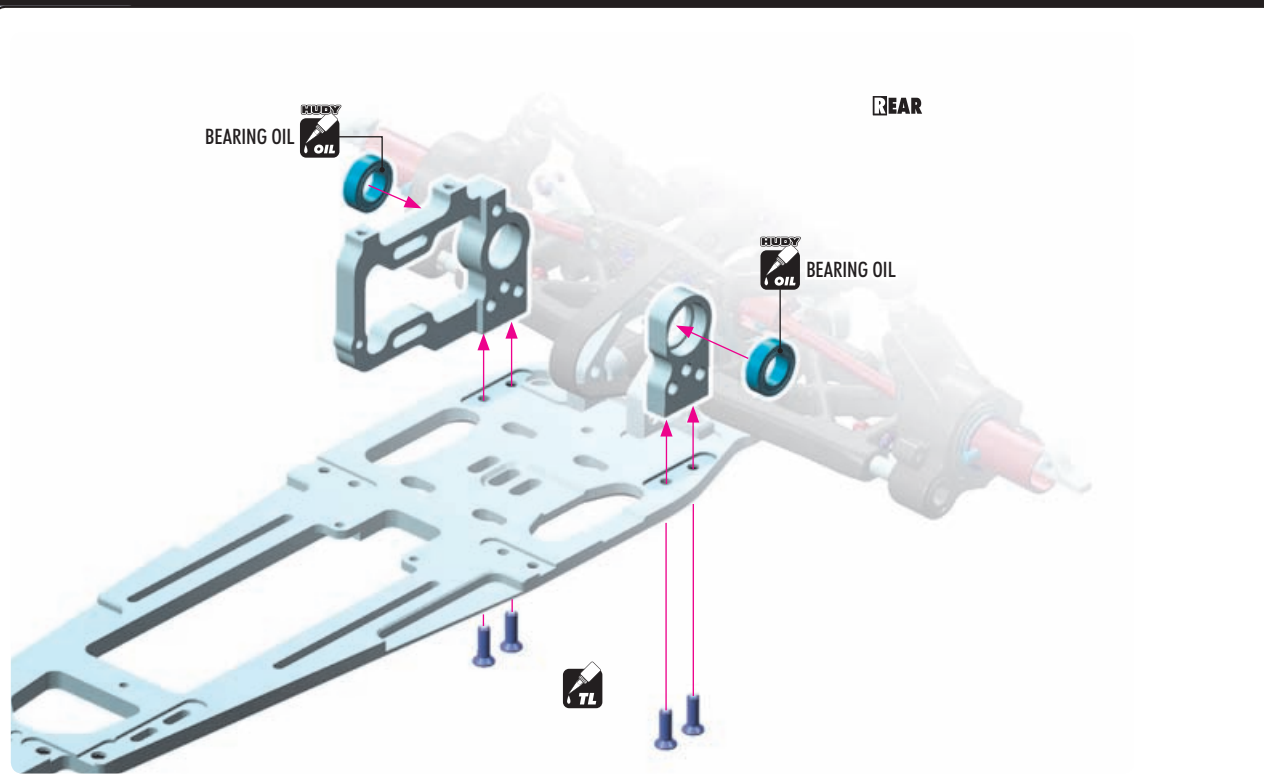
PAGE 14 / STEP 2



903310
SFH M3x10



930815
BB 8x14x4

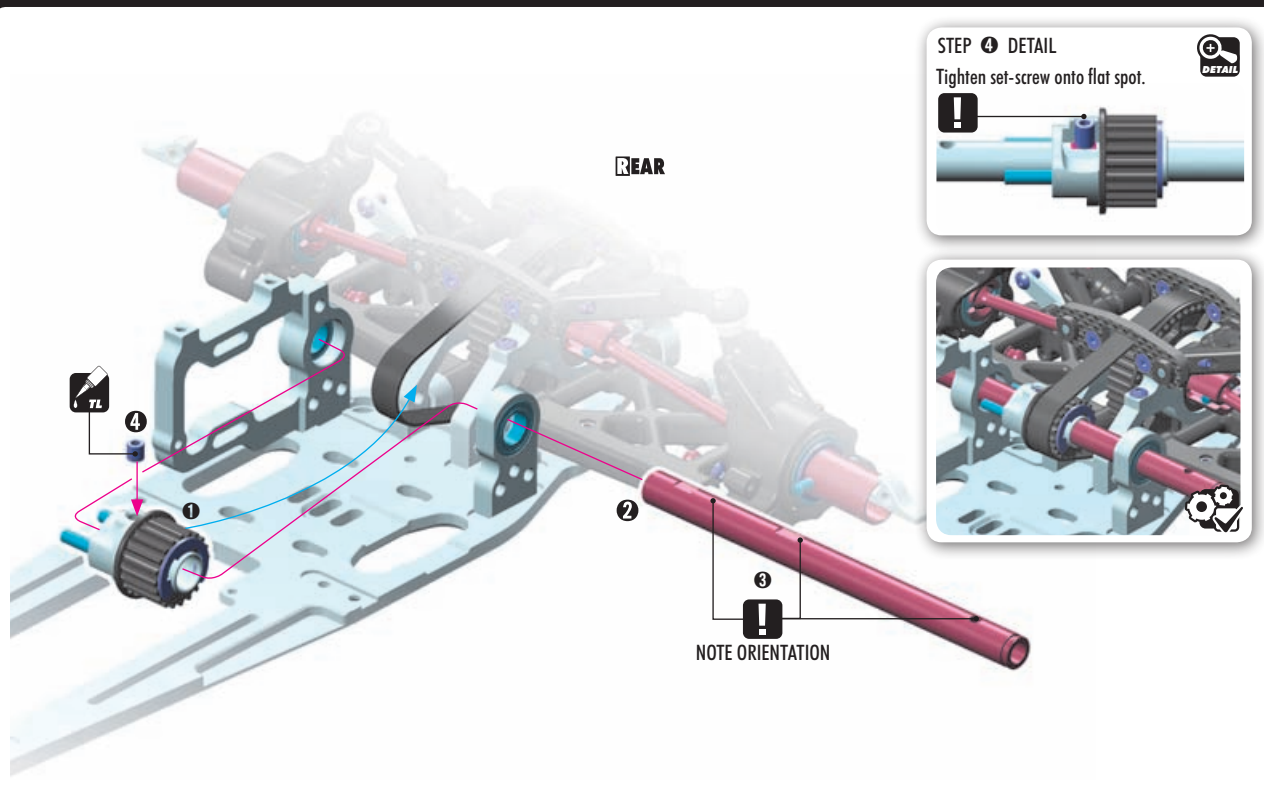


2. REAR SUSPENSION

PAGE 15 / STEP 1



901404
SB M4x4

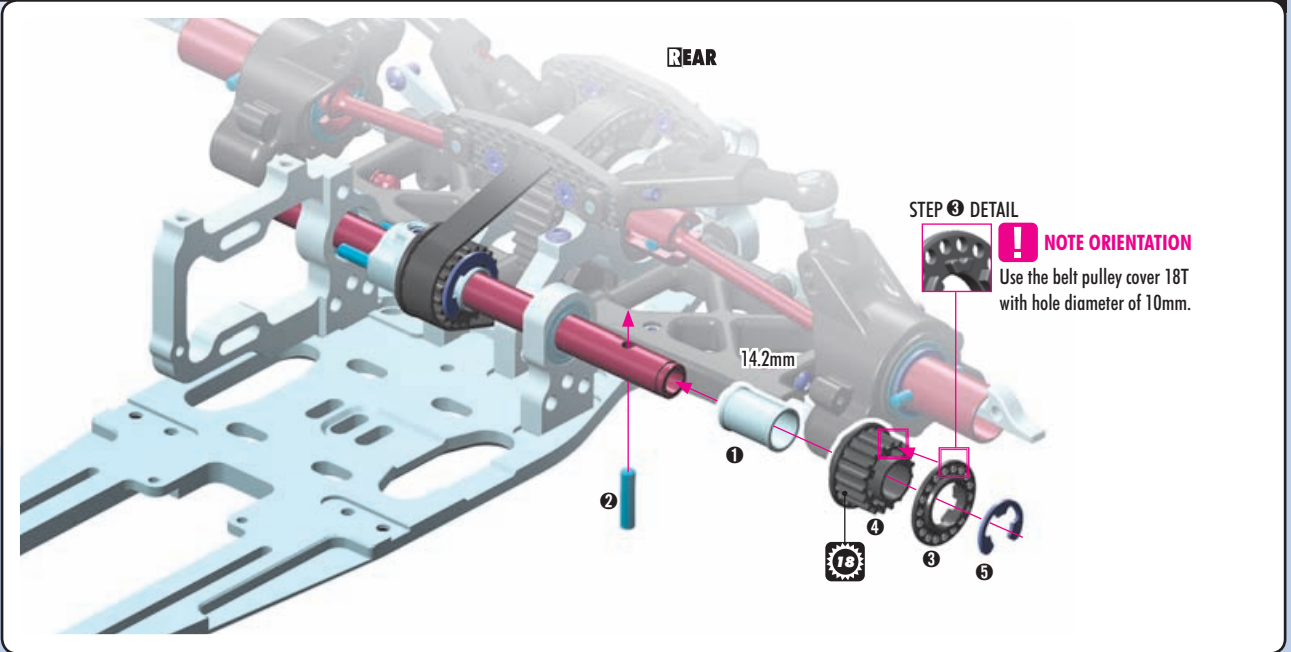




965070
C7



980314
P 3x14



903306
SFH M3x6

! NOTE ORIENTATION



TIP Use HUDY Reamer #107601 or #107602 to slightly chamfer the edges on all 3 screw holes from inside.

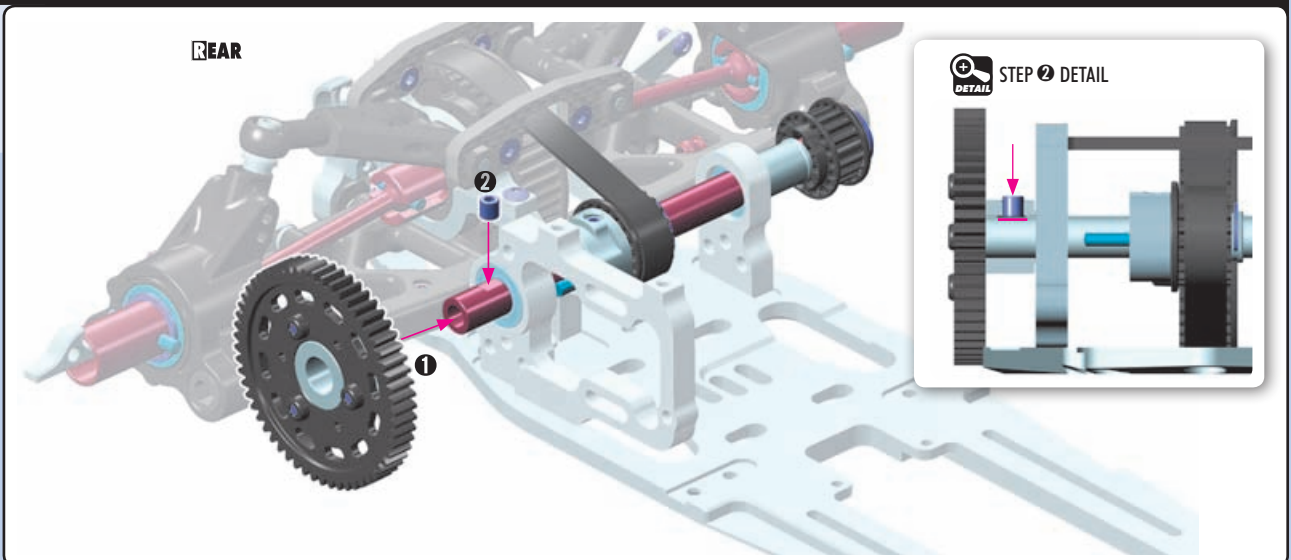


GRAPHITE GEARS

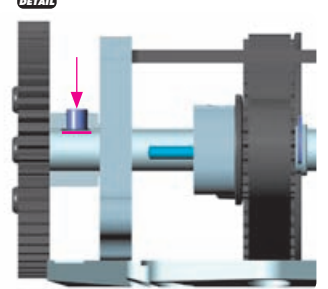
OPTION	335653	53T	OPTION
	335654	54T	OPTION
	335655	55T	OPTION
	335657	57T	INCLUDED
	335658	58T	OPTION
	335659	59T	OPTION
	335660	60T	OPTION



901404
SB M4x4



+ STEP 2 DETAIL





345733-K
SHIM 6x8x9.5



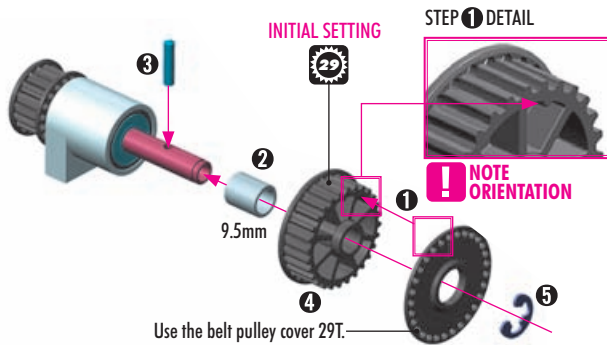
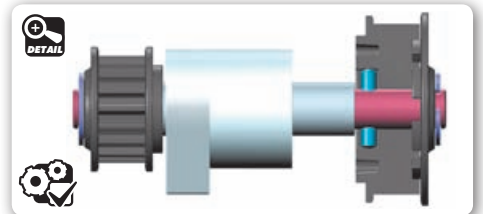
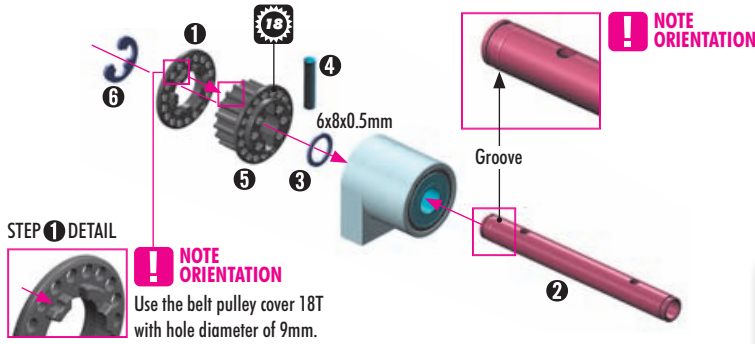
962060
SHIM 6x8x0.5



965050
CS



981262
P 2.5x12



FRONT SIDE BELT PULLEY

OPTION	Part Number	Teeth	Material	Status
	#345888	28T	COMPOSITE	INCLUDED
	#345889	29T	COMPOSITE	INCLUDED
	#345988	28T	ALU	OPTION
	#345989	29T	ALU	OPTION
	#345990	30T	ALU	OPTION



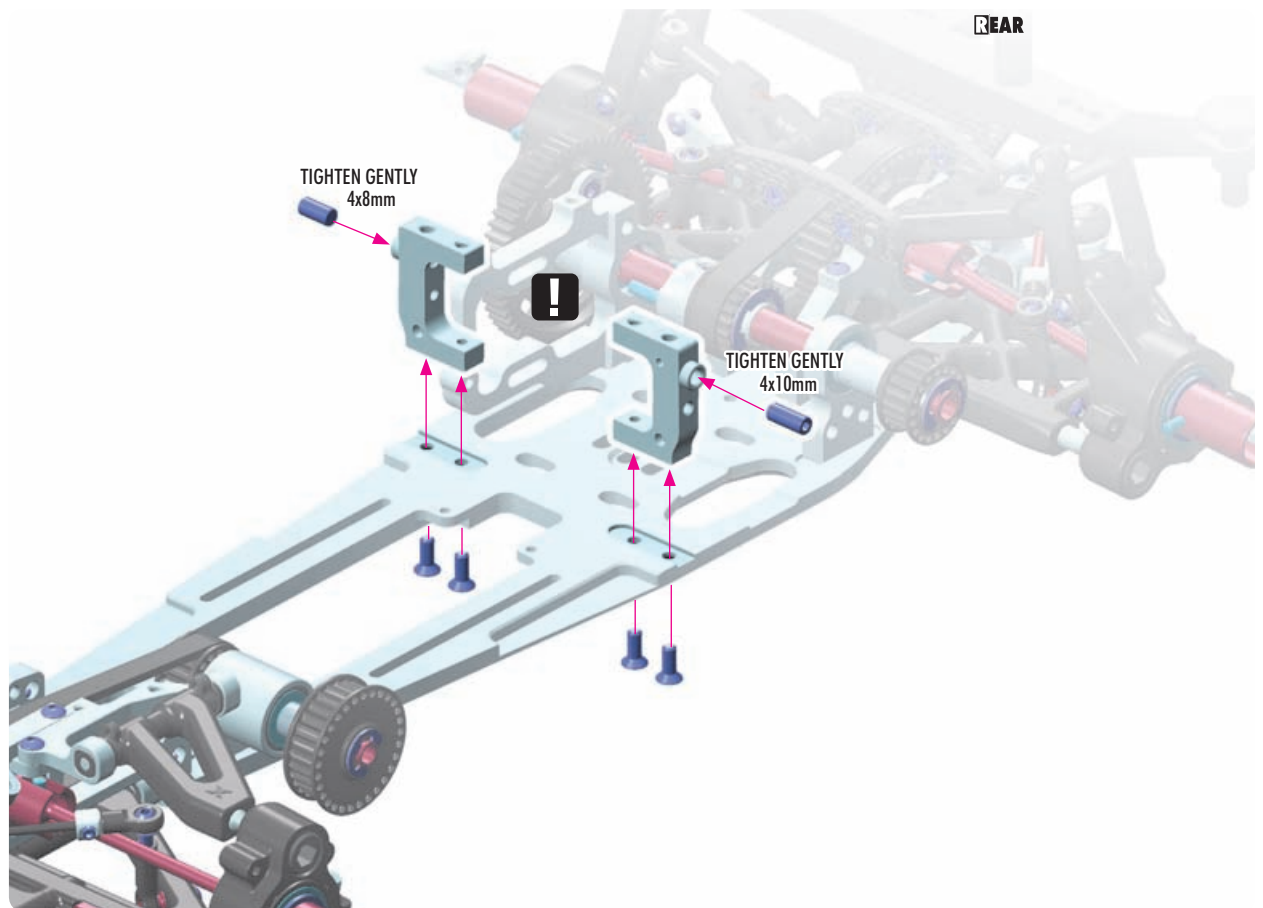
901408
SB M4x8



901410
SB M4x10



903308
SFH M3x8





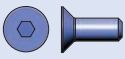
303120
SHIM 3x6x2.5



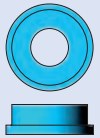
303126-K
SHIM 3x6x5



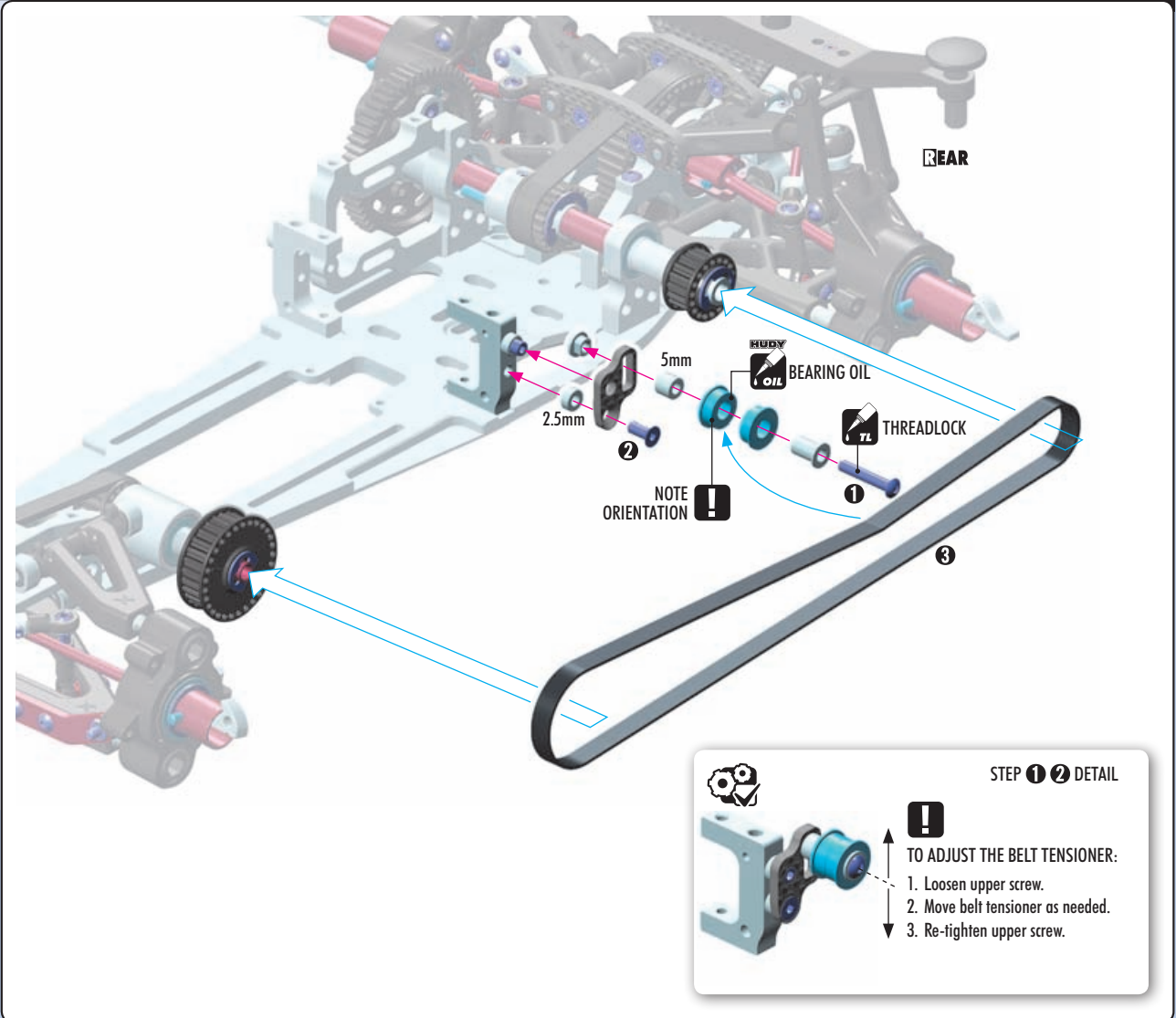
902318
SH M3x18



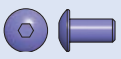
903308
SFH M3x8



950510
BB 5x10x4



7. ELECTRONICS



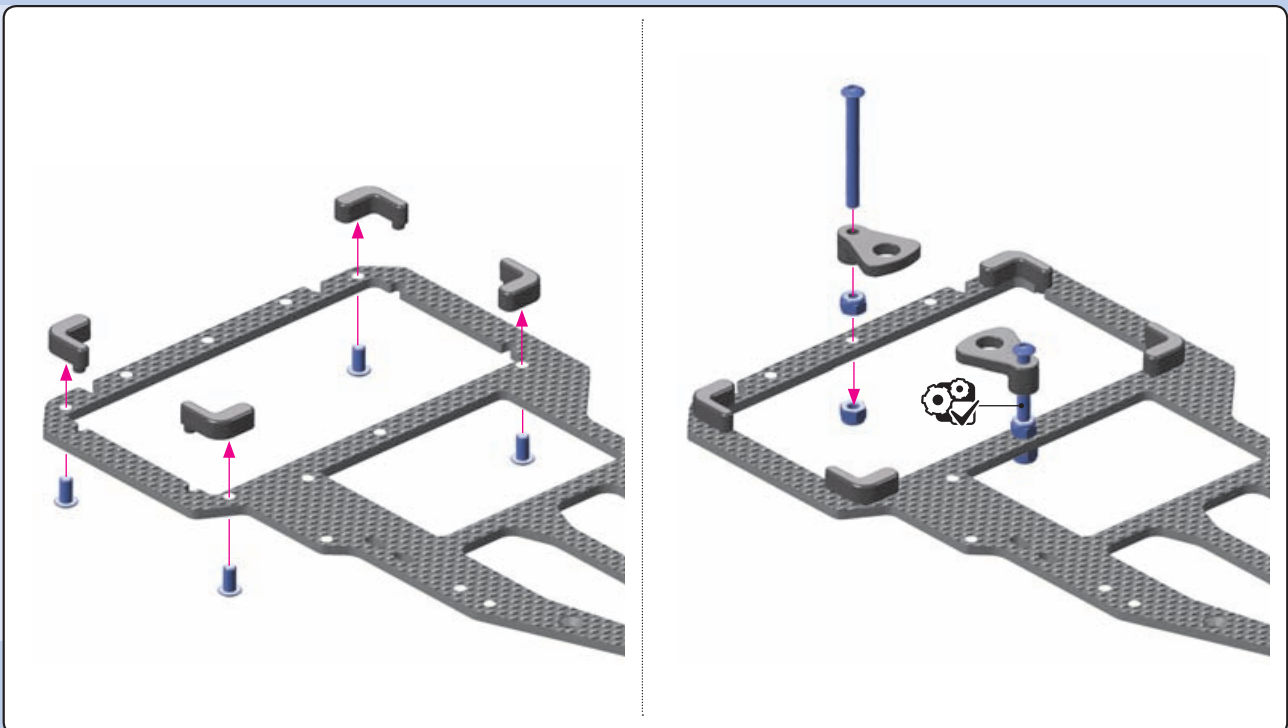
902306
SH M3x6

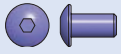


902330
SH M3x30



960030
N M3





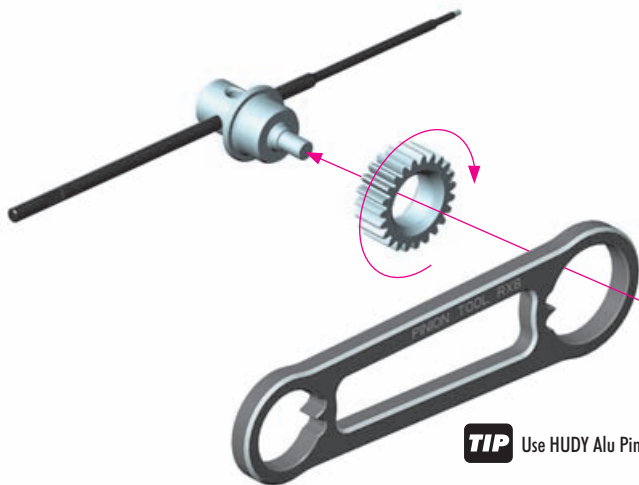
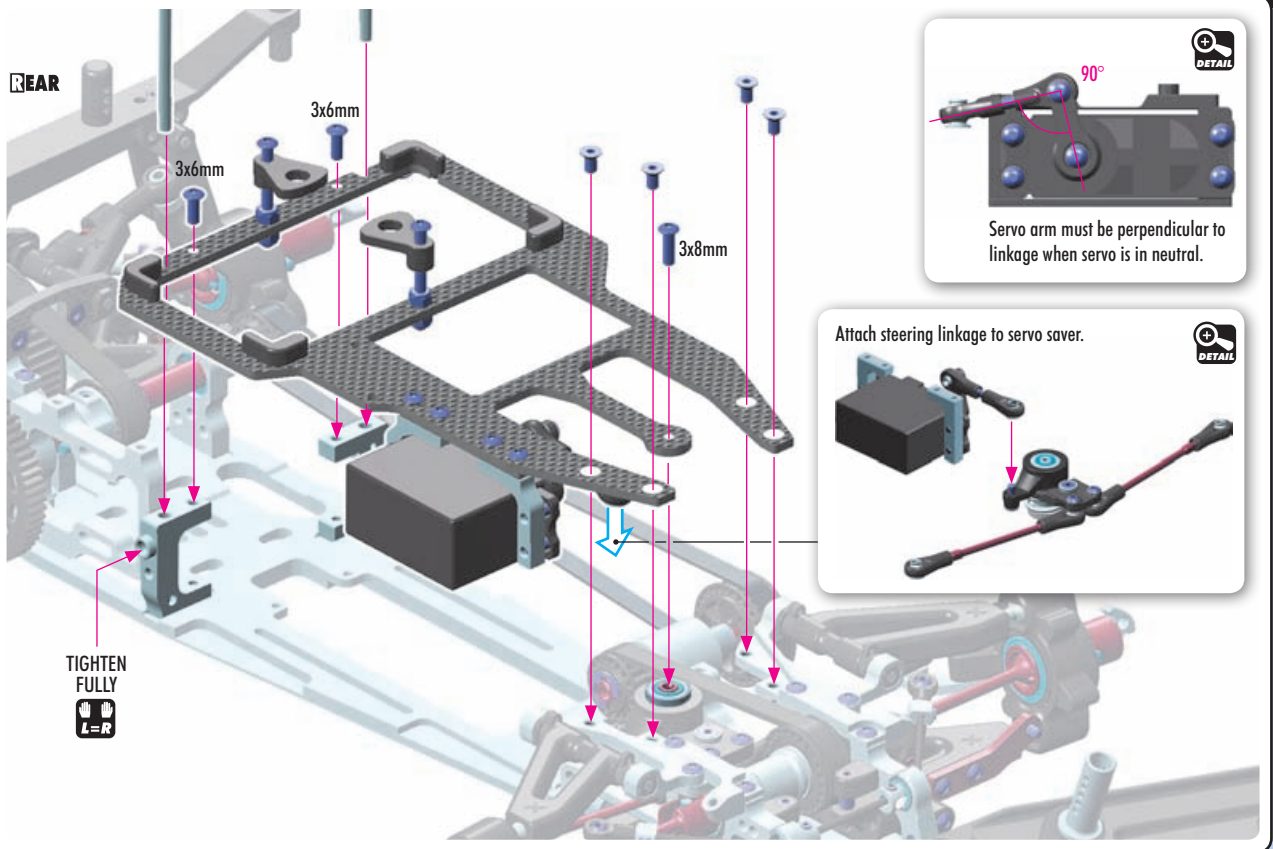
902306
SH M3x6



902308
SH M3x8



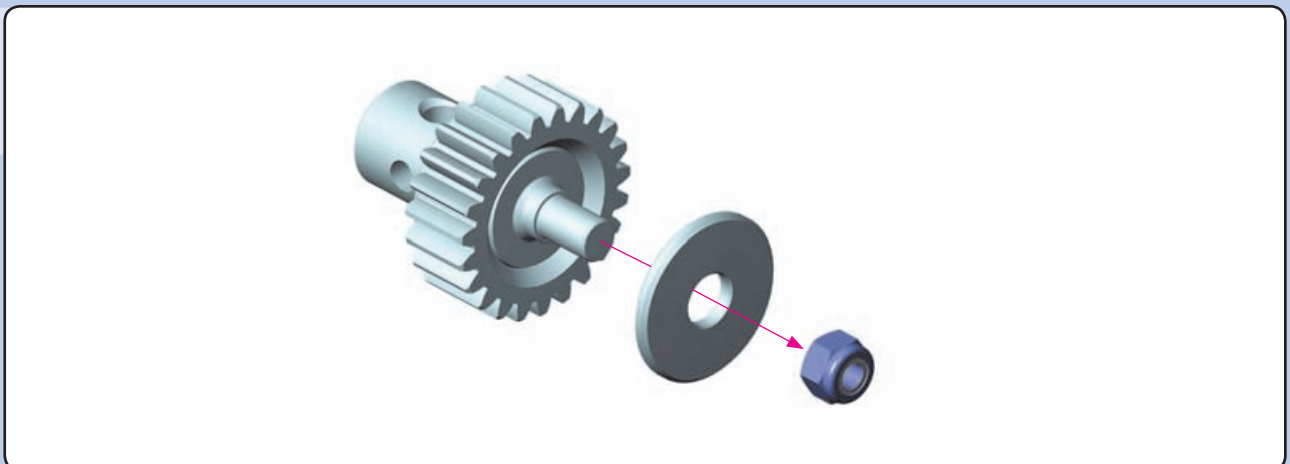
903306
SFH M3x6

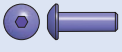


XCA HARDCOATED PINION GEAR			
OPTION	#348422	22T	OPTION
	#348423	23T	OPTION
	#348424	24T	OPTION
	#348425	25T	INCLUDED RECOMMENDED

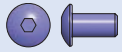


960040
N M4

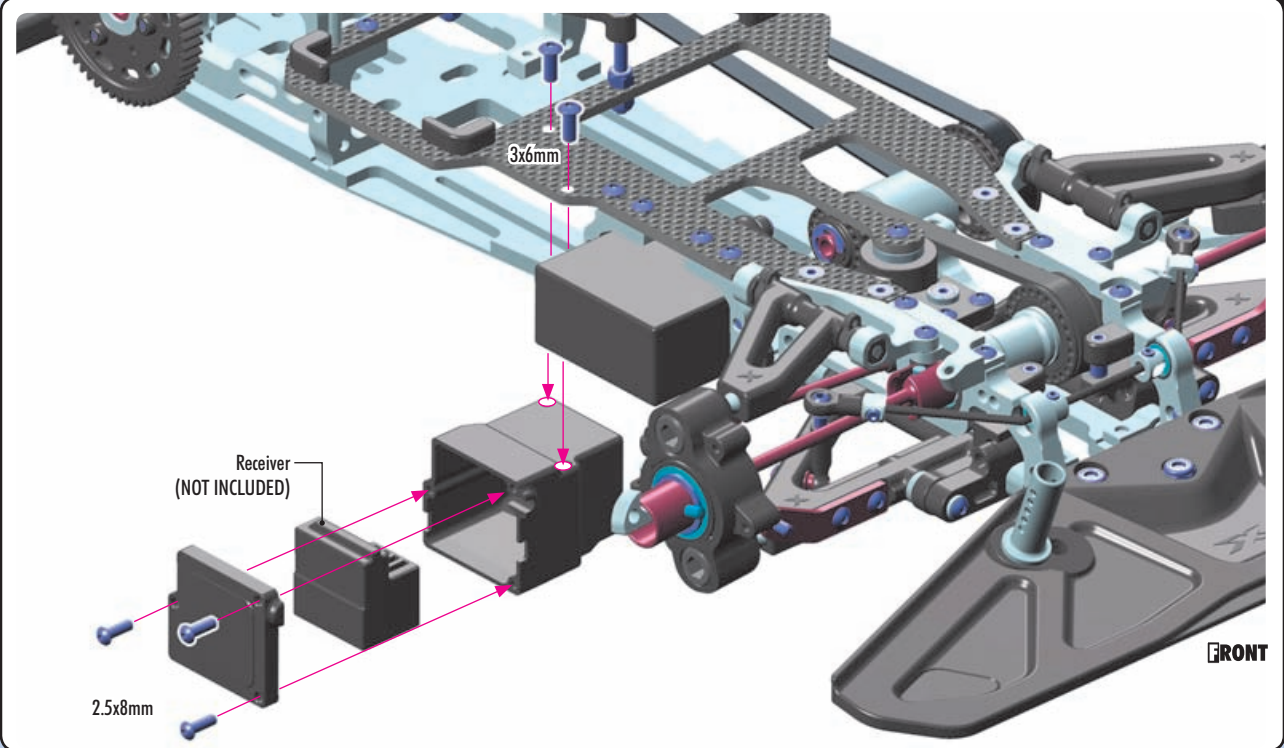




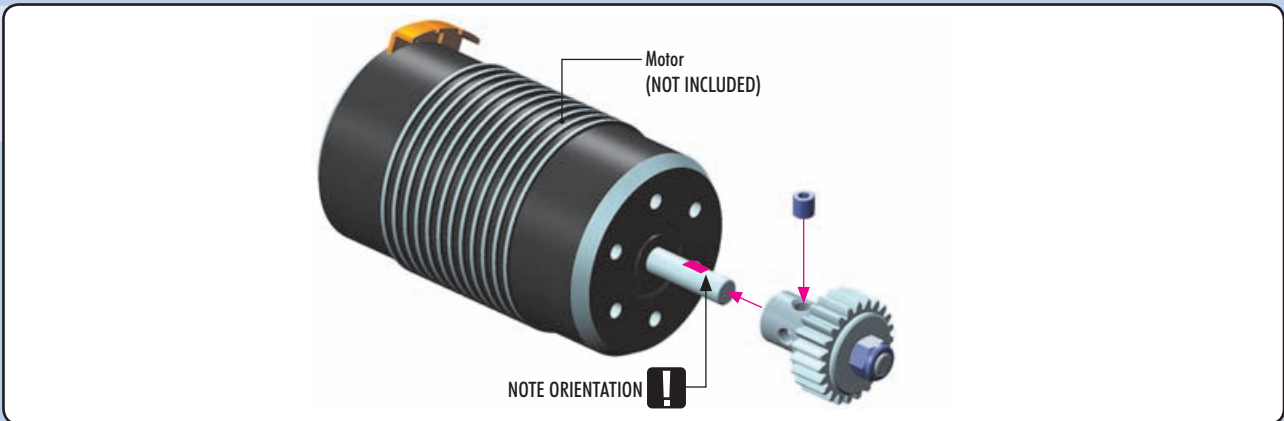
902258
SH M2.5x8



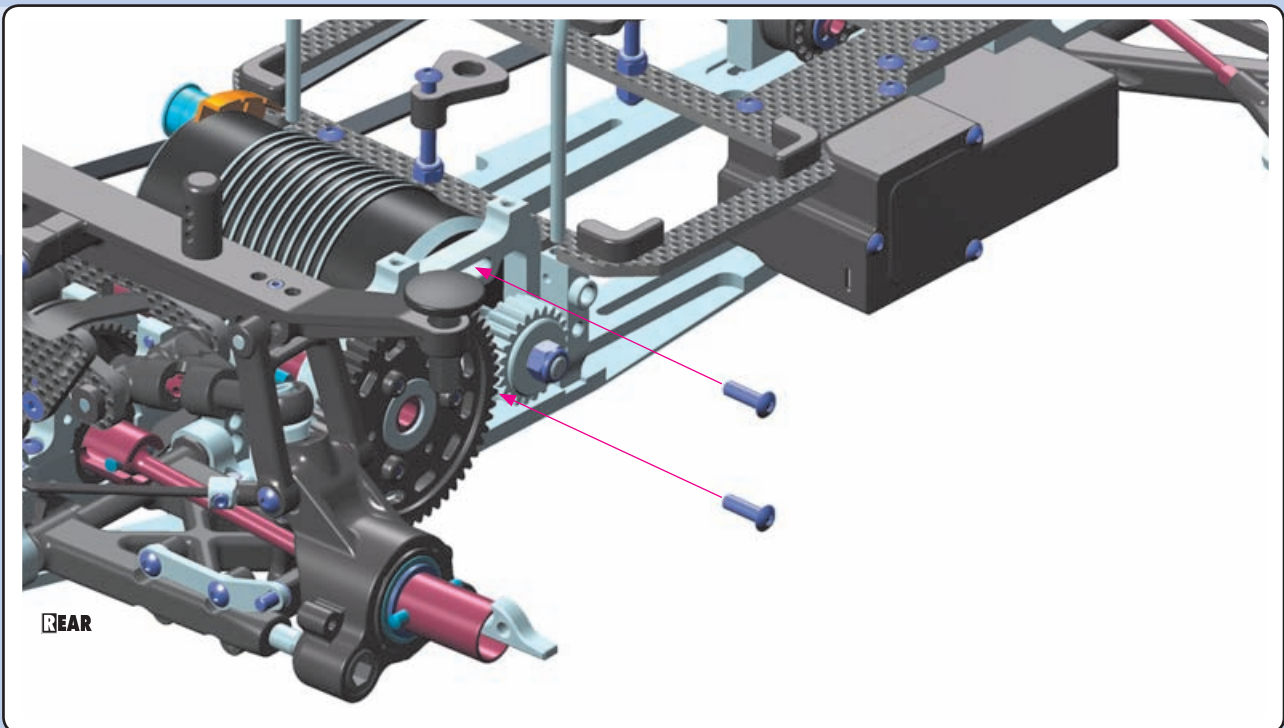
902306
SH M3x6



901404
SB M4x4



902310
SH M3x10



7. ELECTRONICS



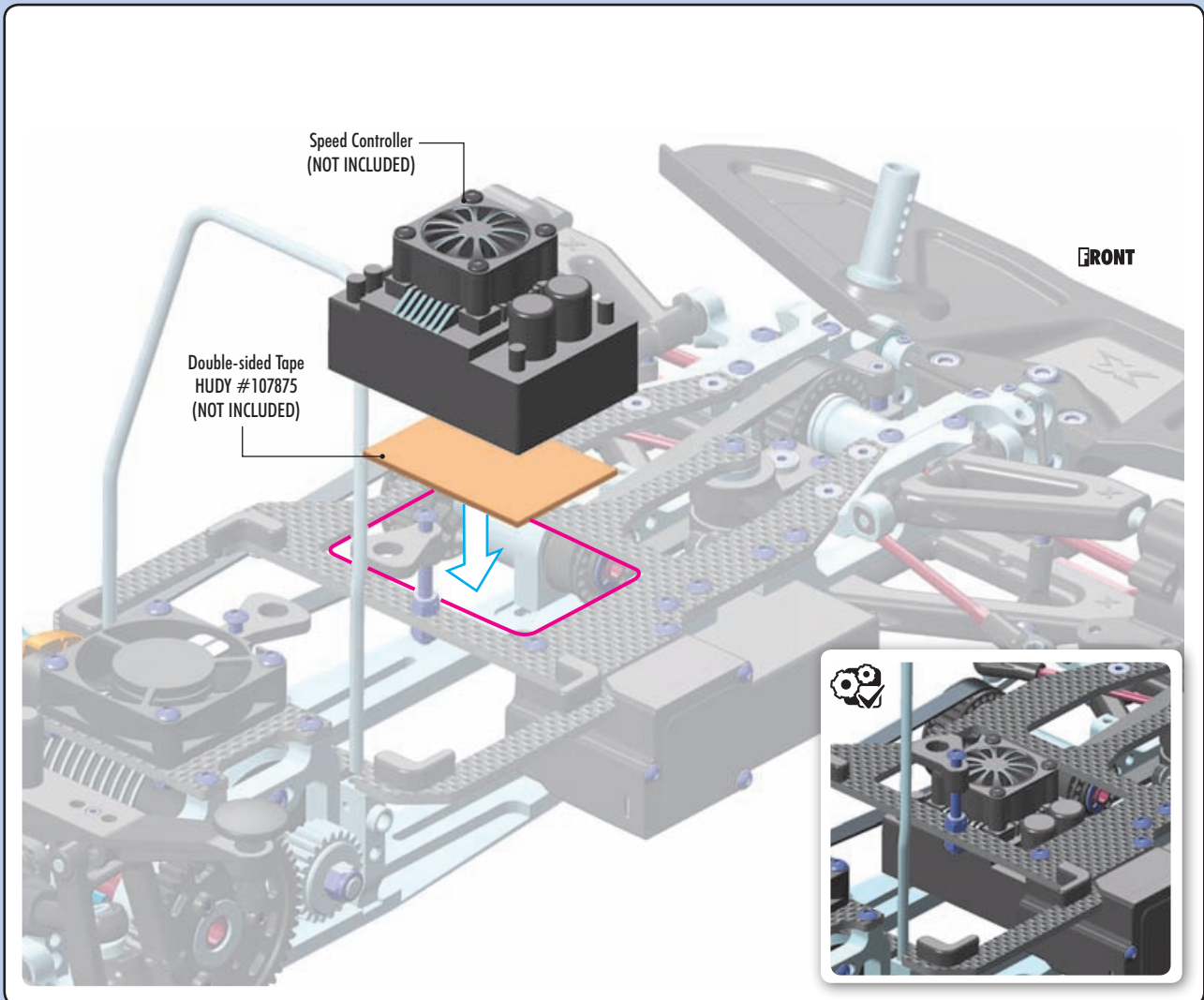
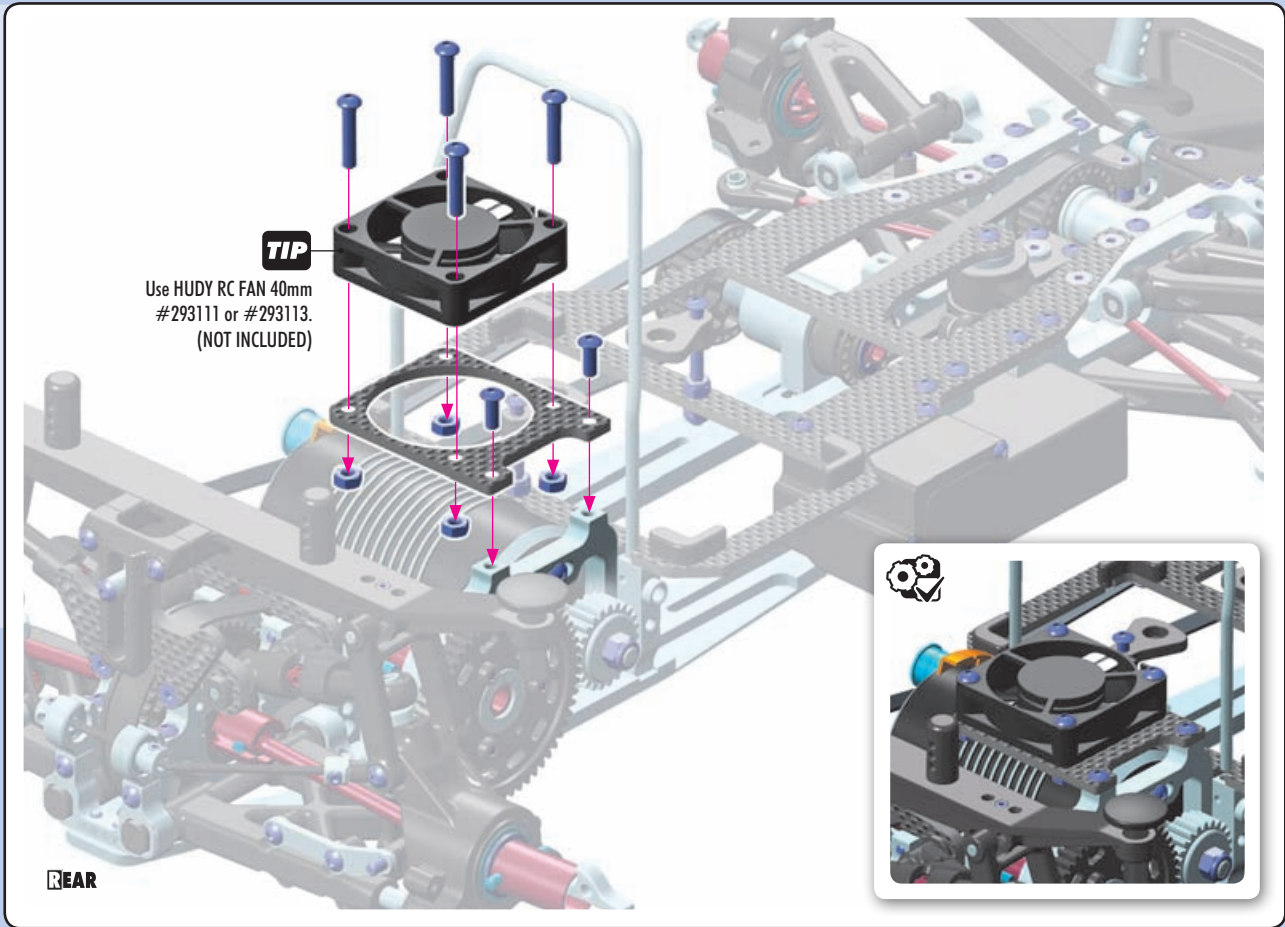
902308
SH M3x8



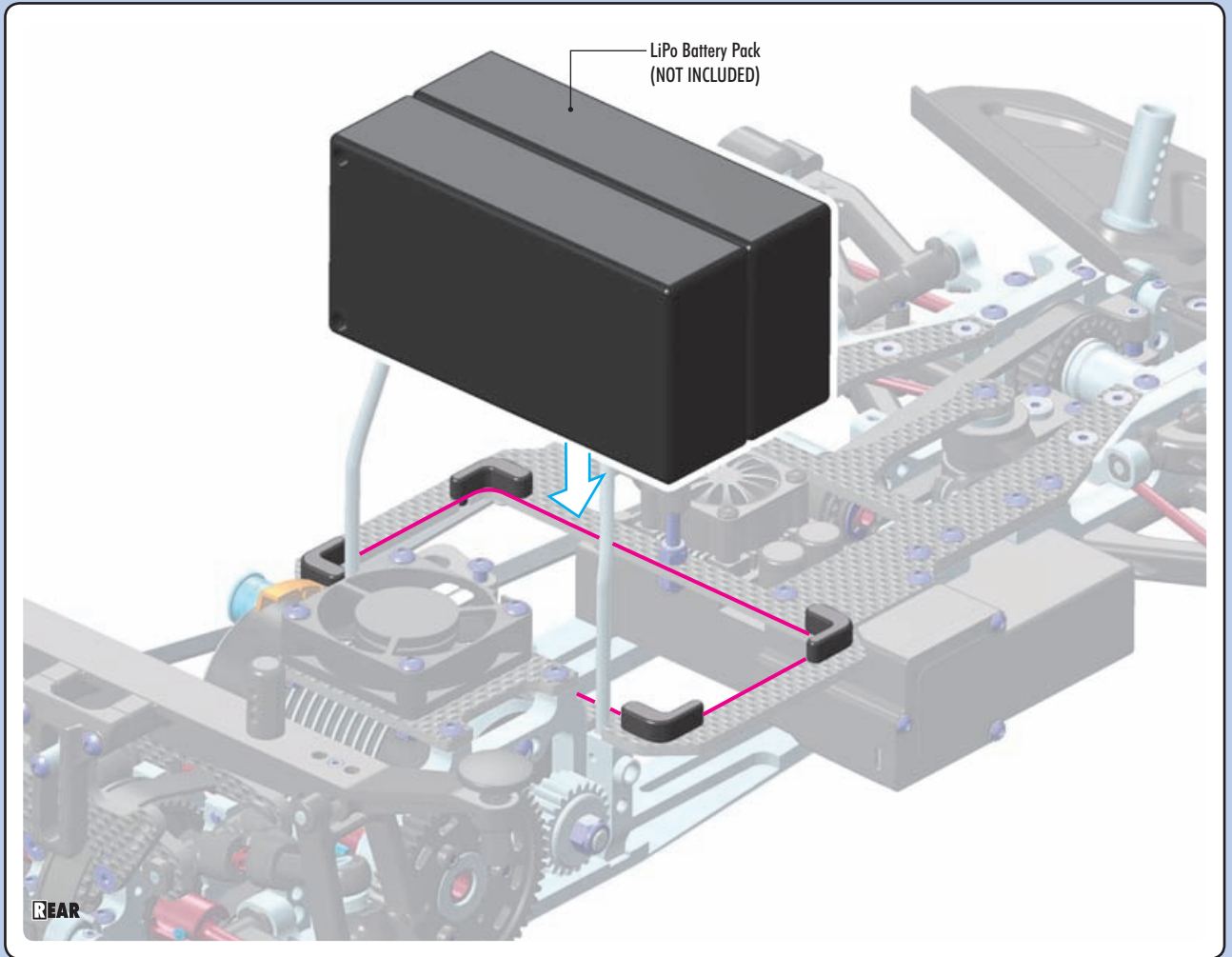
902316
SH M3x16



960032
N M3



7. ELECTRONICS

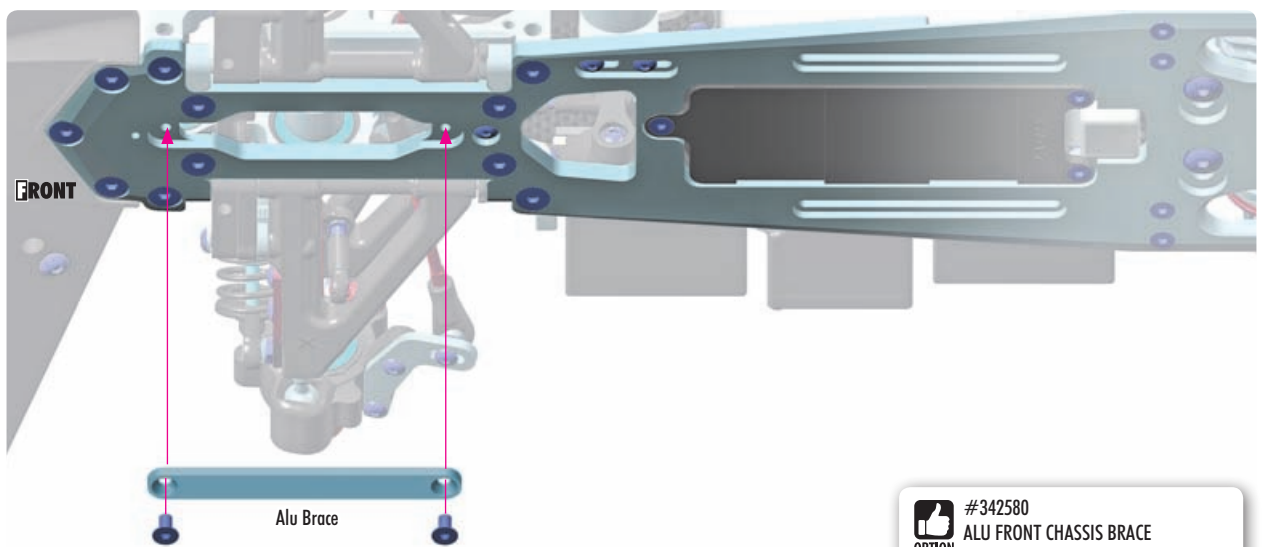


10. FINAL ASSEMBLY

PAGE 48 / STEP 1



903305
SFH M3x5



#342580
ALU FRONT CHASSIS BRACE
OPTION



FRONT CHASSIS FLEX ADJUSTMENT

Chassis features unique and innovative front flex adjustment using an insertable graphite brace.

SOFT SETTING

NO BRACE: The car is easier to drive and has more forward traction.

STIFF SETTING

USING THE GRAPHITE BRACE: Car has increased steering response and cornering speed.

NOTE

A large, empty rectangular box with a thin black border, occupying most of the page. It is intended for a note or additional information.

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