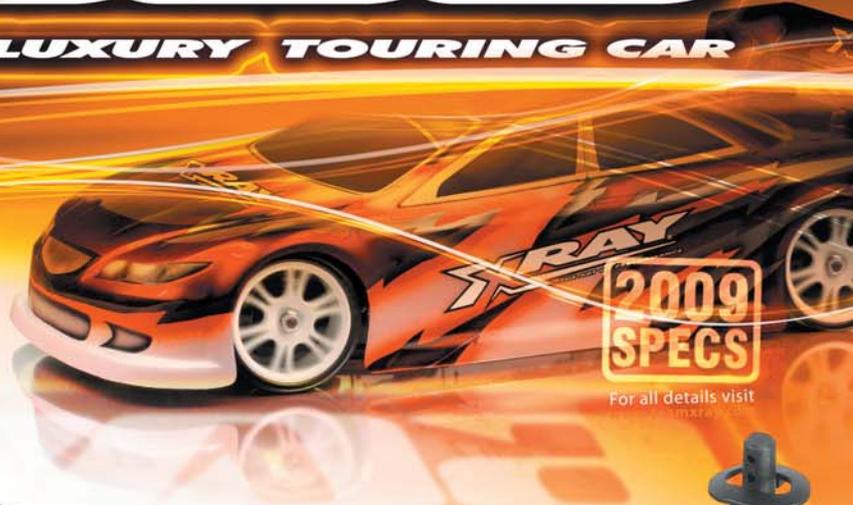


# T2009

1/10 LUXURY TOURING CAR



**2009  
SPECS**

For all details visit  
[www.xray.com](http://www.xray.com)



**11x**  
CAR OF  
THE YEAR

**20x**  
NATIONAL  
CHAMPION

**3x**  
EUROPEAN  
CHAMPION

**caraction**  
Reader's  
Choice Award

**US**  
**CNOBIRD**  
*Nationals*  
**WINNER**  
04-05-06-07-08

# INSTRUCTION MANUAL V9



## BEFORE YOU START

The T2'009 is a high-competition, high-quality, 1/10-scale touring 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 T2'009, YOU MUST read through all of the operating instructions and instruction manual and fully understand them to get

## 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](mailto:info@teamxray.com). Also, please visit our Web site at [www.teamxray.com](http://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](http://www.teamxray.com)

**Failure to follow these instructions will be considered as abuse and/or neglect.**

## SAFETY PRECAUTIONS

Contains:

LEAD (CAS 7439-92-1) ANTIMONY (CAS 7440-36-0)

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

Contains lead, a listed carcinogen. Lead is harmful if ingested. Wash thoroughly after using. DO NOT use product while eating, drinking or using tobacco products. May cause chronic effects to gastrointestinal tract, CNS, kidneys, and blood. MAY CAUSE BIRTH DEFECTS.

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

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

## 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.

the maximum enjoyment and prevent unnecessary damage. Read carefully and fully understand the instructions before beginning assembly.

Make sure you review this entire manual, the included set-up book, and examine all details carefully. If for some reason you decide The T2'009 is not what you wanted or expected, do not continue any further. Your hobby dealer cannot accept your T2'009 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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Fax: (214) 744-2401  
Email: [xray@rcamerica.com](mailto:xray@rcamerica.com)

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.

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

**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.

## **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](http://www.teamxray.com) to get advice, or contact us via email at [info@teamxray.com](mailto: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.**

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## SYMBOLS USED

Part bags used 	Assemble in the specified order 	Assemble left and right sides the same way 	Pay attention here 	Assemble as many times as specified (here twice) 	Apply thread lock 	Apply CA glue 
Apply oil 	Apply grease 	Use pliers 	Ensure smooth non-binding movement 	Tighten screw gently 	<p><b>CORRECT</b> </p> <p><b>WRONG</b> </p> <p>Overtightened      The threads are stripped.</p>	Follow Set-Up Book 

## TOOLS REQUIRED

<p>HUDY TOOLS: Allen: 1.5mm, 2.0mm, 3.0mm Socket: 7.0mm</p>	<p>Pliers</p>	<p>Scissors</p> <p>Side Cutters</p>	<p>Hobby Knife</p>	<p>Turnbuckle 3 mm (HUDY #181030)</p>	<p>Reamer (HUDY #107600)</p>
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## EQUIPMENT INCLUDED

<p>XRAY Premium Silicone Oil 350cSt (#359235)</p>	<p>Diff. Grease (HUDY #106211)</p>	<p>Graphite Grease (HUDY #106210)</p>
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## EQUIPMENT REQUIRED

<p>Transmitter</p>	<p>Receiver</p>	<p>Steering Servo</p>	<p>Electric Motor &amp; Pinion Gear and Setscrew</p>	<p>Bearing Oil (HUDY #106230)</p>	<p>Speed Controller</p>
<p>190mm Bodysell</p>	<p>5-cell or 6-cell Battery Pack (Inline)</p>	<p>Lexan Paint</p>	<p>Battery Charger</p>	<p>Fibre Tape (HUDY #107870)</p>	<p>Wheels &amp; Tires &amp; Inserts</p>

# 0. KIT (FACTORY PRE-ASSEMBLED)

## COLOR INDICATIONS

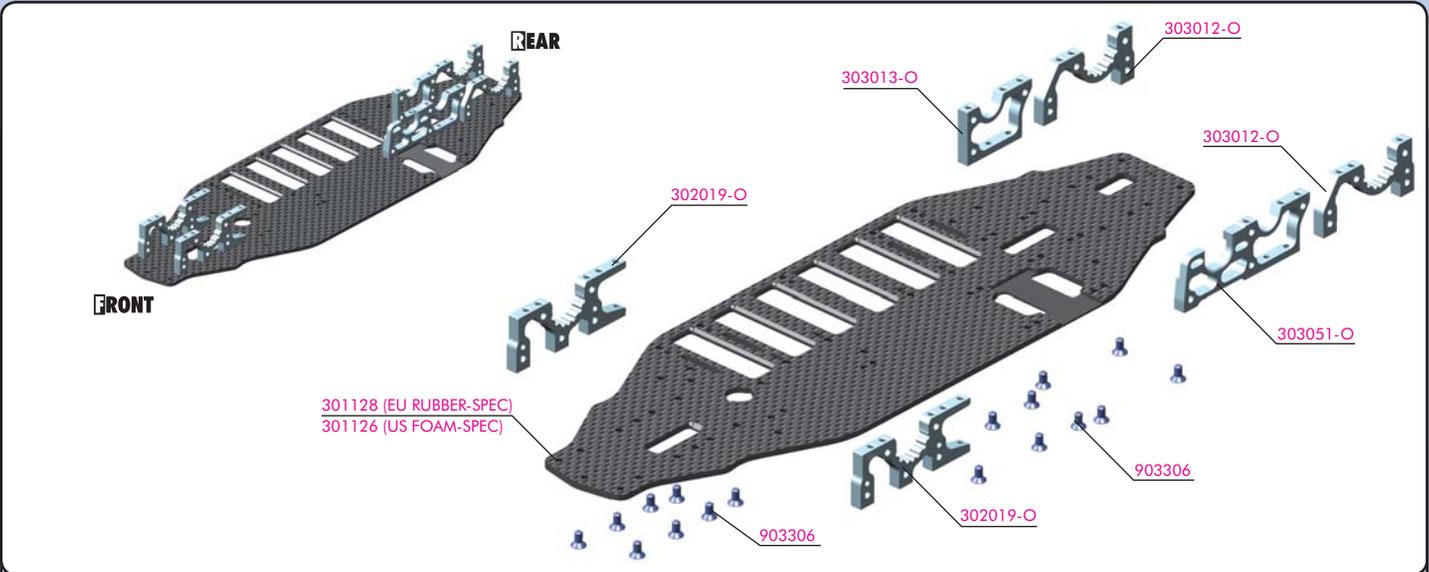
At the beginning of each section is an exploded view of the parts to be assembled. There is also a list of all the parts and part numbers that are related to the assembly of that section.

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 were set aside in Section 0.

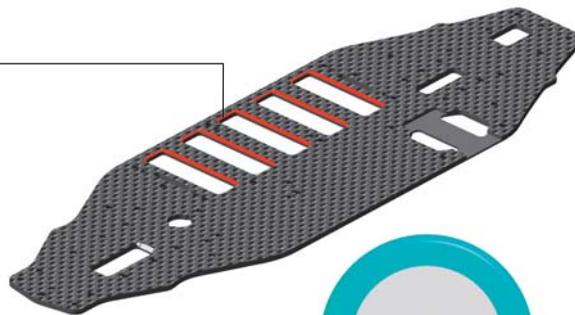
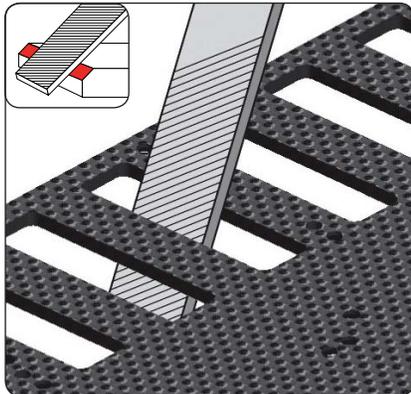
**STYLE C** - indicates parts that are already assembled from previous steps.



## KIT

30 1126	T2'008 CHASSIS 3.5MM GRAPHITE - 6-CELL - FOAM-SPEC	30 3013-O	T2'008 RIGHT ALU LAYSHAFT BULKHEAD - ORANGE
30 1128	T2'009 CHASSIS 2.5MM GRAPHITE - 6-CELL - RUBBER-SPEC	30 3051-O	T2'008 MOTOR MOUNT BULKHEAD - ORANGE
30 2019-O	T2'008 ALU FRONT LOWER SUSP. ADJUST. BULKHEAD - ORANGE	90 3306	HEX SCREW SFH M3x6 (10)
30 3012-O	T2'008 ALU REAR LOWER SUSP. ADJUST. BULKHEAD - ORANGE		

The XRAY T2'009 comes partially pre-assembled. Before starting assembly, disassemble the chassis parts, noting the position and orientation of the parts, particularly the bulkheads. Keep the parts, including the screw hardware, close at hand. In the assembly steps that follow, each section begins with a parts list. Parts indicated with **STYLE B** are from the previously disassembled chassis parts in section 0.



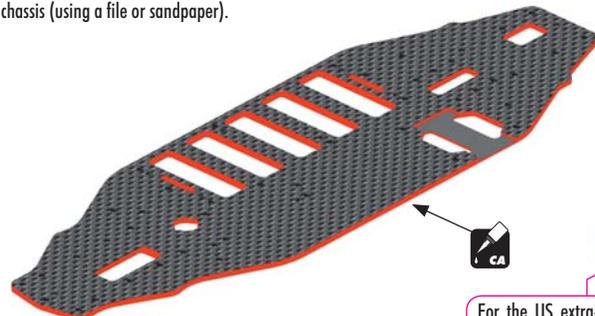
Lightly file edges of battery slots to remove sharp edges. Please note that the US Foam-Spec 3.5mm Extra-Thick Chassis requires the battery slots to be filed more than the standard 2.5mm thick chassis.

Do not file battery slots too much, or batteries may protrude below the chassis bottom.

To protect and seal edges of graphite parts, sand edges smooth and then apply CA glue.

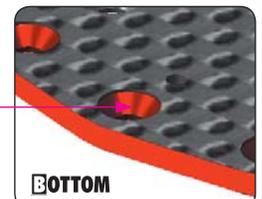
Do this for: chassis edges; filed battery slots, countersunk holes for front bumper screws.

For the US extra-thick chassis, we recommend rounding the bottom forward edge of the chassis (using a file or sandpaper).

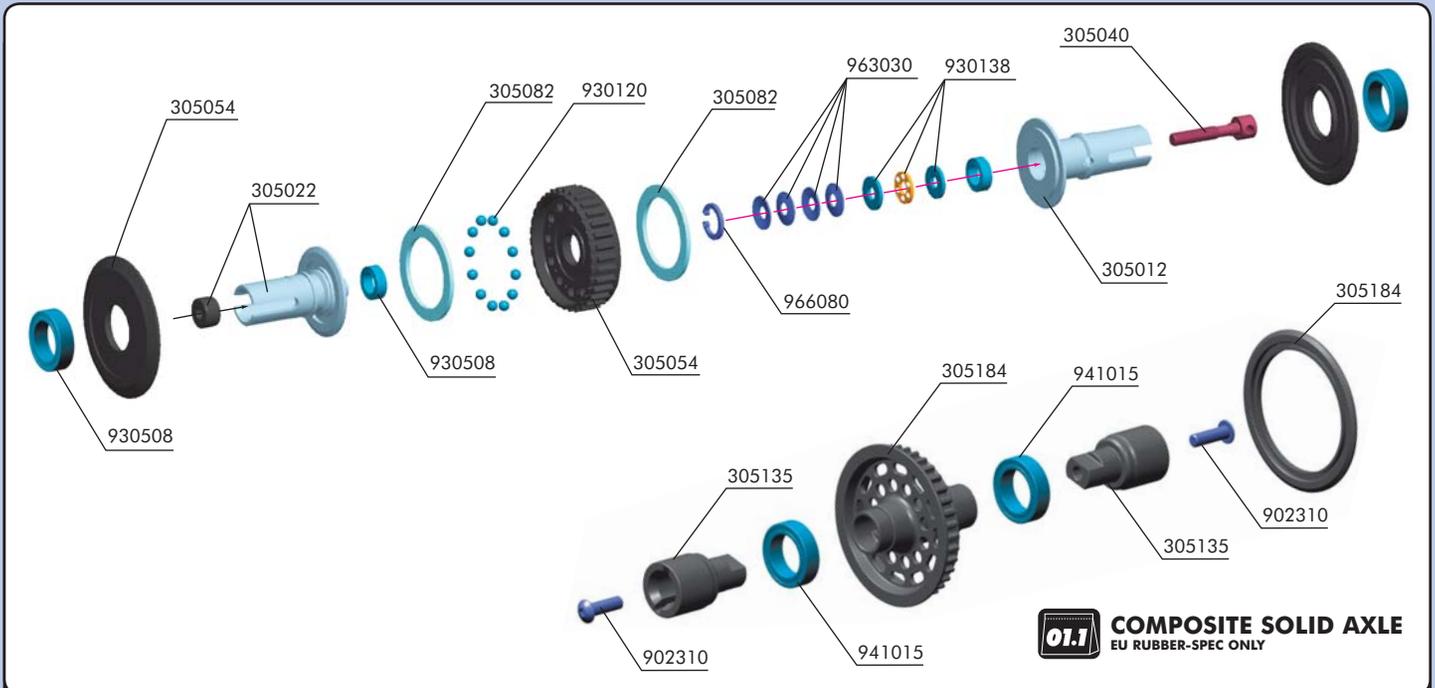


For the US extra-thick chassis, we recommend rounding the bottom forward edge of the chassis (using a file or sandpaper).

Apply only a bit of CA glue on the countersunk holes



# 1. ALU BALL DIFF. & FRONT SOLID AXLE

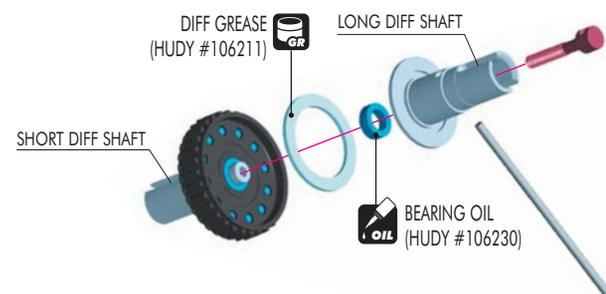
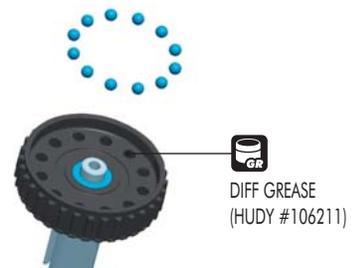
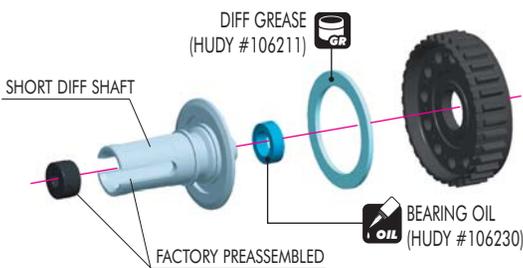
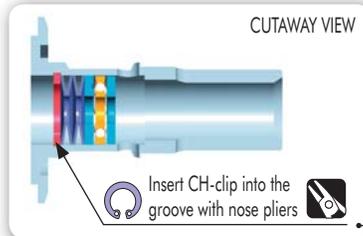
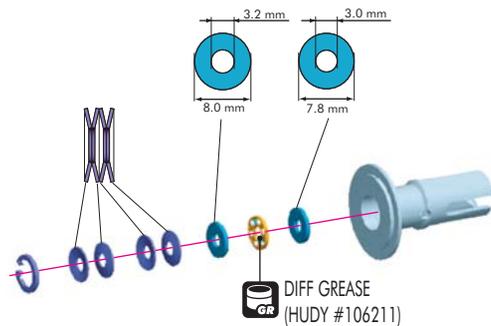


**BAG**

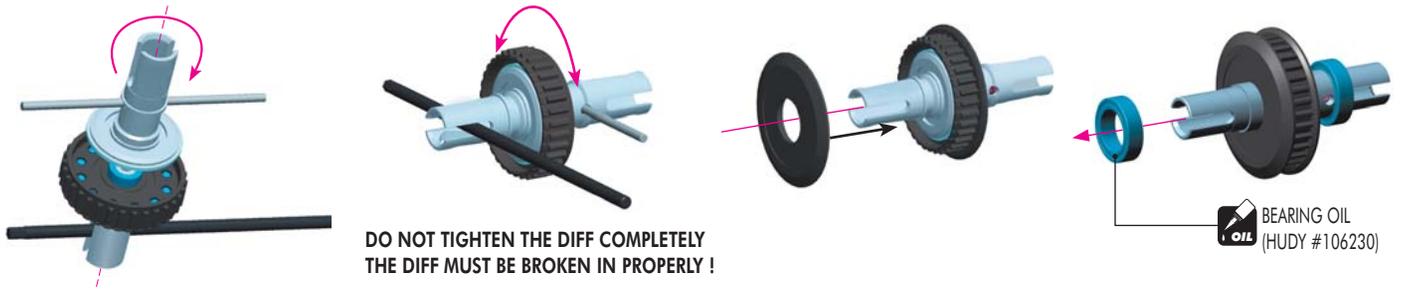


30 5003 T2'008 ALU BALL DIFFERENTIAL 34T + 38T PULLEY - 7075 T6 - SET  
 30 5012 T2'008 ALU T6 DIFF LONG OUTPUT SHAFT - HARD COATED  
 30 5022 T2'008 ALU T6 DIFF SHORT OUTPUT SHAFT - HARD COATED  
 30 5040 SCREW FOR EXTERNAL DIFF ADJUSTMENT - SPRING STEEL  
 30 5054 T2'008 DIFF PULLEY 34T WITH LABYRINTH DUST COVERS  
 30 5082 DIFF WASHER 17 x 23 x 1 (2)  
 30 5104 XRAY MULTI-DIFF™ T2'008 (OPTION)  
 30 5135 T2'008 COMPOSITE SOLID AXLE DRIVESHAFT ADAPTERS (2)  
 30 5136 T2'008 ALU SOLID AXLE DRIVESHAFT ADAPTERS (2) (OPTION)

30 5184 T2'008 COMPOSITE SOLID AXLE 34T - SET  
 30 5188 T2'008 COMPOSITE SOLID AXLE 38T - SET (OPTION)  
 90 2310 HEX SCREW SH M3x10 (10)  
 93 0120 CARBIDE BALL 2.4 MM (12)  
 93 0138 CARBIDE BALL-BEARING AXIAL F3-8 3x8x3.5  
 93 0508 BALL-BEARING MR85ZZ 5x8x2.5 (2)  
 94 1015 HIGH-SPEED BALL-BEARING 10x15x4 RUBBER SEALED (2)  
 96 3030 CONE WASHER ST 3x8x0.5 (10)  
 96 6080 CH-CLIP 8 (10)



# ALU BALL DIFF. & FRONT SOLID AXLE



**DO NOT TIGHTEN THE DIFF COMPLETELY  
THE DIFF MUST BE BROKEN IN PROPERLY !**

**IMPORTANT:** When you build the differential, do not tighten it fully initially; the differential needs to be broken in properly. When you build the diff tighten it very gently. When you put the diff in the car and complete the assembly, run the car for a few minutes, tighten the diff a little bit, and then recheck the diff. Repeat this process several times until you have the diff tightened to the point you want it. Final adjustments should ALWAYS be made with the diff in the car and on the track.

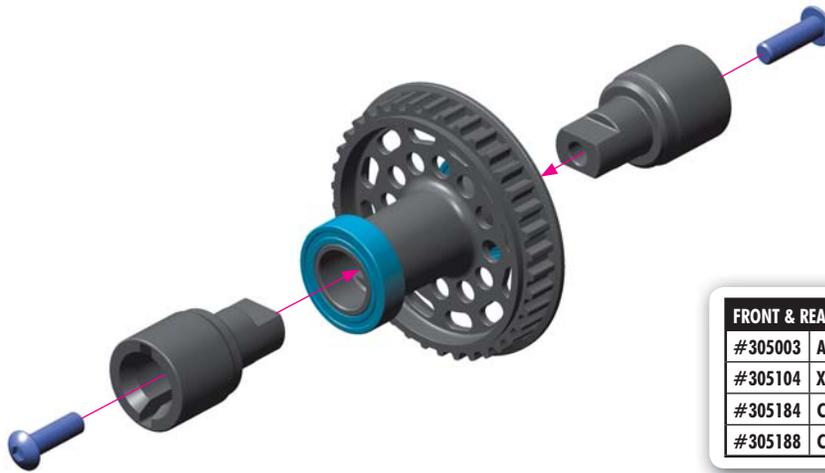
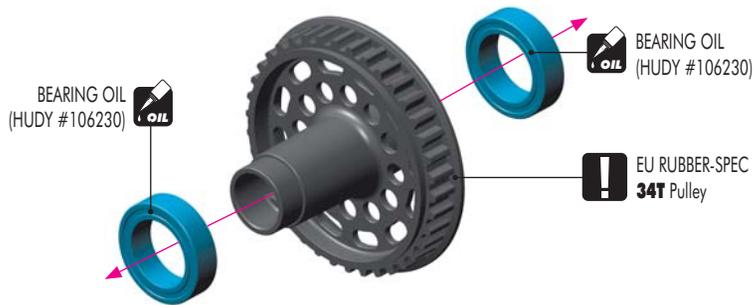
## COMPOSITE FRONT SOLID AXLE (EU RUBBER-SPEC ONLY)



902310  
SH M3x10

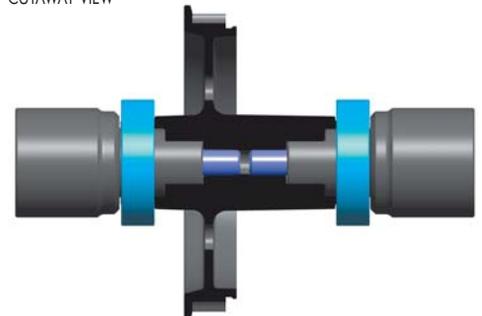


941015  
BB 10x15x4



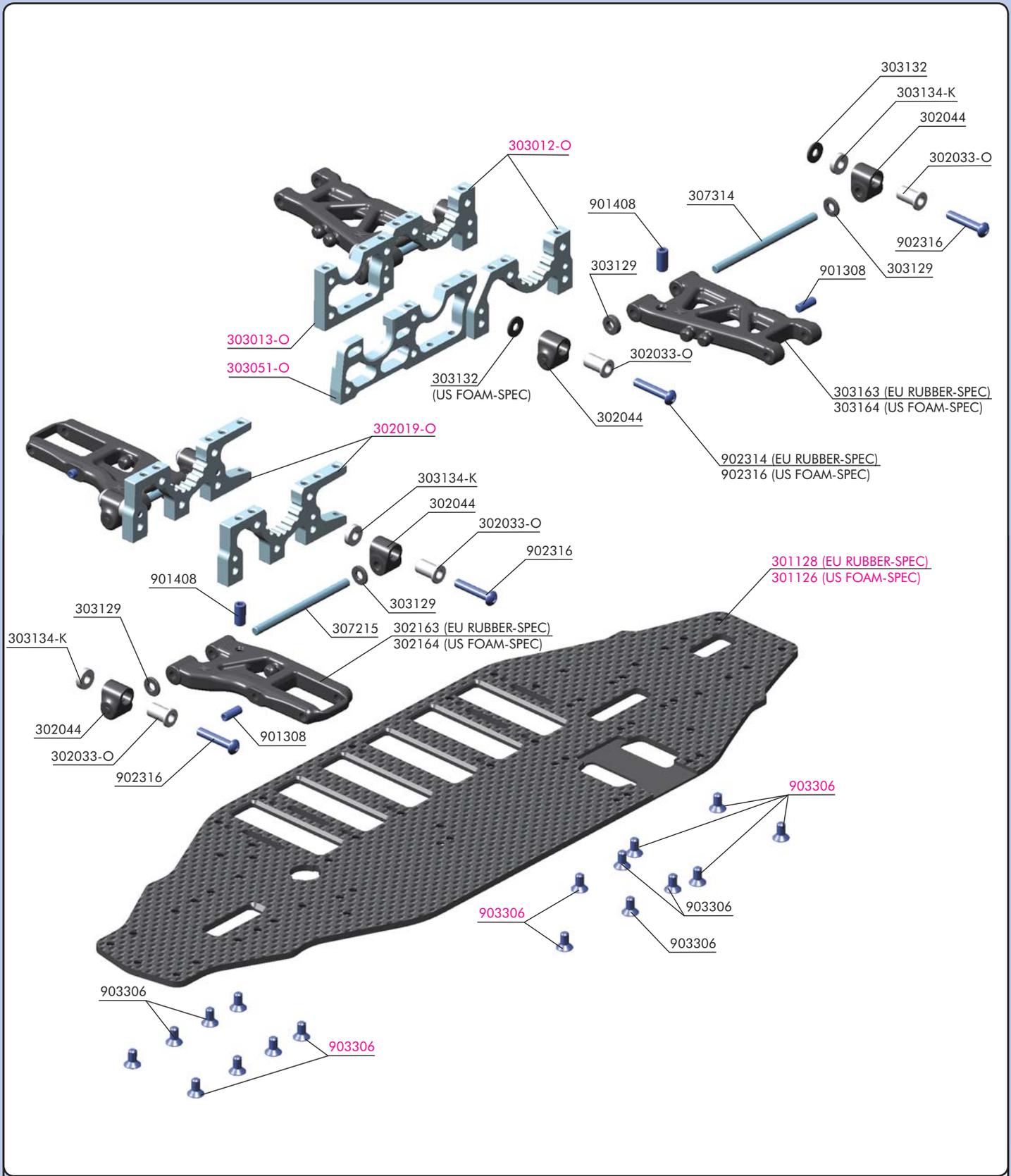
FRONT & REAR AXLES	
#305003	ALU DIFF 34T + 38T PULLEY
#305104	XRAY ALU MULTI-DIFF
#305184	COMPOSITE SOLID AXLE 34T PULLEY
#305188	COMPOSITE SOLID AXLE 38T PULLEY

CUTAWAY VIEW



FRONT & REAR AXLES

## 2. FRONT & REAR SUSPENSION



**BAG**

**02**

- 30 2033-O T2 ALU NUT FOR SUSPENSION HOLDER - ORANGE (2)
- 30 2044 T2 LOWER SUSPENSION HOLDERS (2+2+2)
- 30 2163 T2'008 FRONT SUSPENSION ARM - HARD - RUBBER-SPEC - 1-HOLE
- 30 2164 T2'008 FRONT SUSPENSION ARM - EXTRA-HARD - FOAM-SPEC - 1-HOLE
- 30 3129 COMPOSITE SET OF WHEELBASE SHIMS (3x1MM; 1x2MM) (2)
- 30 3132 STEEL SHIM FOR LOWER SUSP. HOLDER 3x7.5x0.75 (10)
- 30 3134-K ALU SHIM FOR LOWER SUSP. HOLDER 3x7.5x1.5 - BLACK (10)
- 30 3163 T2'008 REAR SUSPENSION ARM - HARD - RUBBER-SPEC - 1-HOLE
- 30 3164 T2'008 REAR SUSPENSION ARM - EXTRA-HARD - FOAM-SPEC - 1-HOLE
- 30 7215 T2 FRONT SUSPENSION PIVOT PIN (2)
- 30 7314 T2'008 REAR SUSPENSION PIVOT PIN (2)
- 90 1308 HEX SCREW SB M3x8 (10)

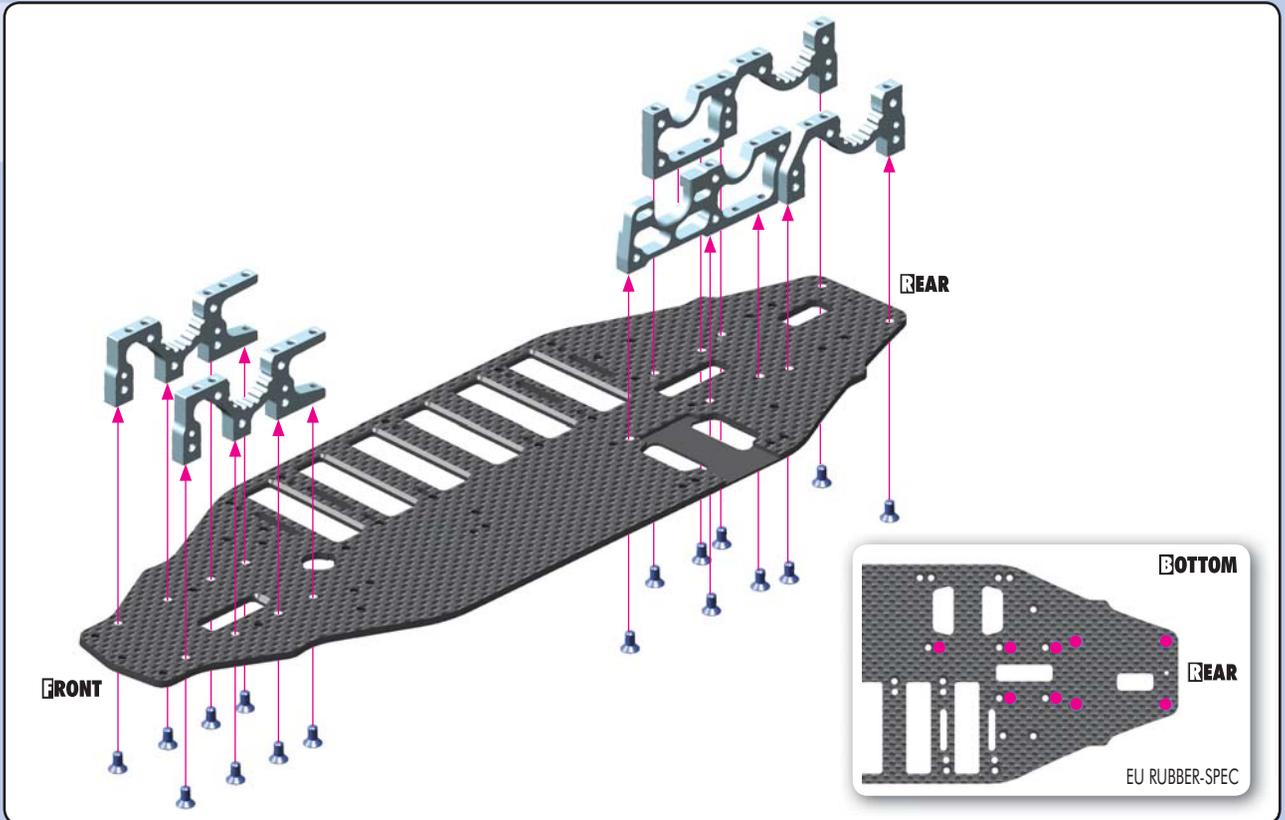
- 90 1408 HEX SCREW SB M4x8 (10)
- 90 2314 HEX SCREW SH M3x14 (10)
- 90 2316 HEX SCREW SH M3x16 (10)
- 90 3306 HEX SCREW SFH M3x6 (10)

- 30 1126 T2'008 CHASSIS 3.5MM GRAPHITE - 6-CELL - FOAM-SPEC
- 30 1128 T2'009 CHASSIS 2.5MM GRAPHITE - 6-CELL - RUBBER-SPEC
- 30 2019-O T2'008 ALU FRONT LOWER SUSP. ADJUST. BULKHEAD - ORANGE
- 30 3012-O T2'008 ALU REAR LOWER SUSP. ADJUST. BULKHEAD - ORANGE
- 30 3013-O T2'008 RIGHT ALU LAYSHAFT BULKHEAD - ORANGE
- 30 3051-O T2'008 MOTOR MOUNT BULKHEAD - ORANGE
- 90 3306 HEX SCREW SFH M3x6 (10)

## 2. FRONT & REAR SUSPENSION



903306  
SFH M3x6

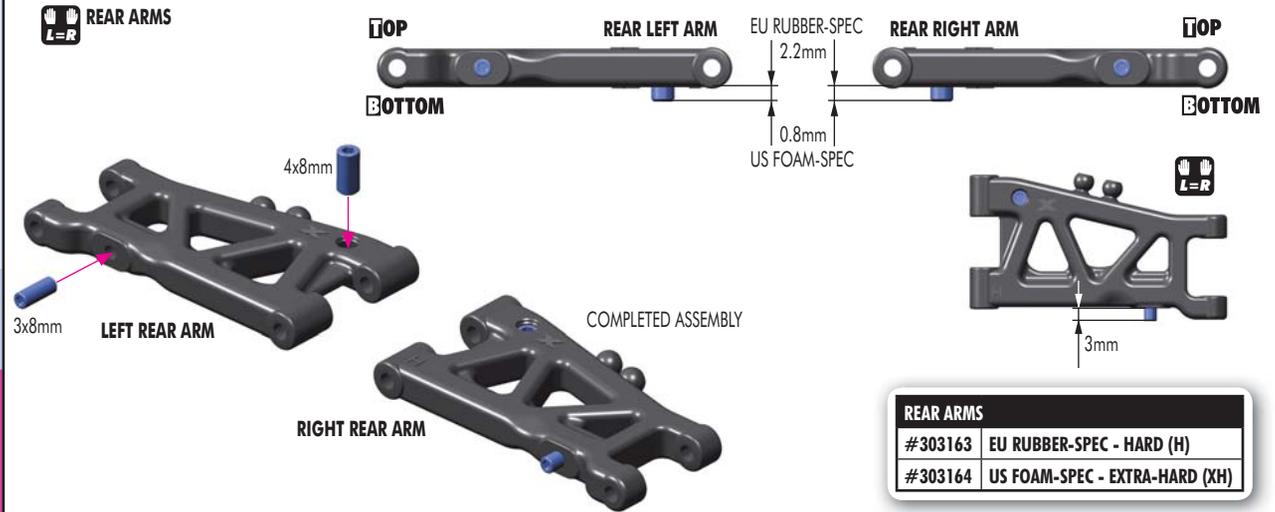


901308  
SB M3x8



901408  
SB M4x8

### REAR ARMS



REAR DOWNSTOP  
ADJUSTMENT

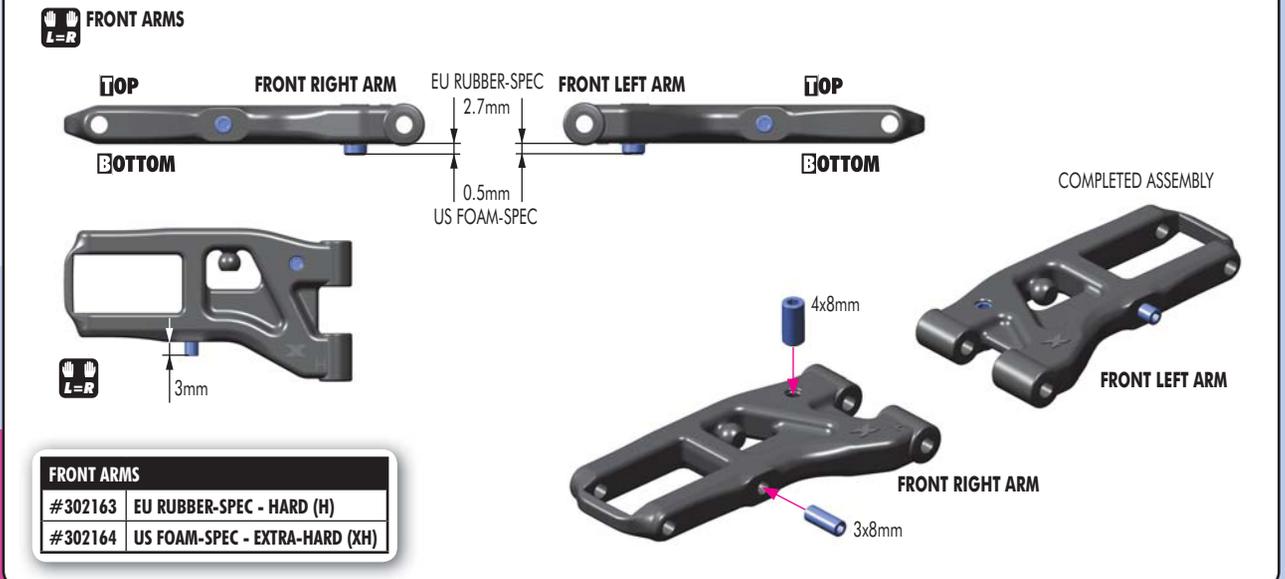


901308  
SB M3x8



901408  
SB M4x8

### FRONT ARMS



FRONT DOWNSTOP  
ADJUSTMENT

## 2. FRONT & REAR SUSPENSION

**IO**  
303129  
SHIM 3x6x1

**IO**  
303129  
SHIM 3x6x2

**IO**  
303132  
SHIM 3x7.5x0.75

**IO**  
303134-K  
SHIM 3x7.5x1.5

**IO**  
902314  
SH M3x14

**IO**  
902316  
SH M3x16

**L=R**

It is extremely important that the arms move freely on the pivot pins. If they do not, use the #107633 HUDY Arm Reamer to slightly resize the holes in the arms.

**REAR**

THIN BLACK STEEL SHIM  
3 x 7.5 x 0.75mm

THICK ALU SHIM  
3 x 7.5 x 1.5mm

THICK COMPOSITE SHIM  
3x6x2mm

THIN COMPOSITE SHIM  
3x6x1mm

3x16mm

**REAR LEFT ARM**

3x14mm (EU RUBBER-SPEC)  
3x16mm (US FOAM-SPEC)

THIN BLACK STEEL SHIM  
3 x 7.5 x 0.75mm  
use only for US FOAM-SPEC

Use these suspension holders for initial assembly

Roll Center Position:  
**-0.75mm**

Roll Center Position:  
**0mm**

Roll Center Position:  
**+0.75mm**

50.5 mm

**2x 1:1**

**SET-UP BOOK**

TOE-IN ADJUSTMENT  
TRACK WIDTH ADJUSTMENT  
WHEELBASE ADJUSTMENT  
ROLL CENTER ADJUSTMENT  
SQUAT ADJUSTMENT

**IO**  
303129  
SHIM 3x6x1

**IO**  
303134-K  
SHIM 3x7.5x1.5

**IO**  
902316  
SH M3x16

**L=R**

It is extremely important that the arms move freely on the pivot pins. If they do not, use the #107633 HUDY Arm Reamer to slightly resize the holes in the arms.

**FRONT LEFT ARM**

**FRONT**

THICK ALU SHIM  
3 x 7.5 x 1.5mm

THIN COMPOSITE SHIM  
3x6x1mm

THIN COMPOSITE SHIM  
3x6x1mm

3x16mm

THICK ALU SHIM  
3 x 7.5 x 1.5mm

3x16mm

Use these suspension holders for **US FOAM-SPEC** initial assembly

Use these suspension holders for **EU RUBBER-SPEC** initial assembly

Roll Center Position:  
**-0.75mm**

Roll Center Position:  
**0mm**

Roll Center Position:  
**+0.75mm**

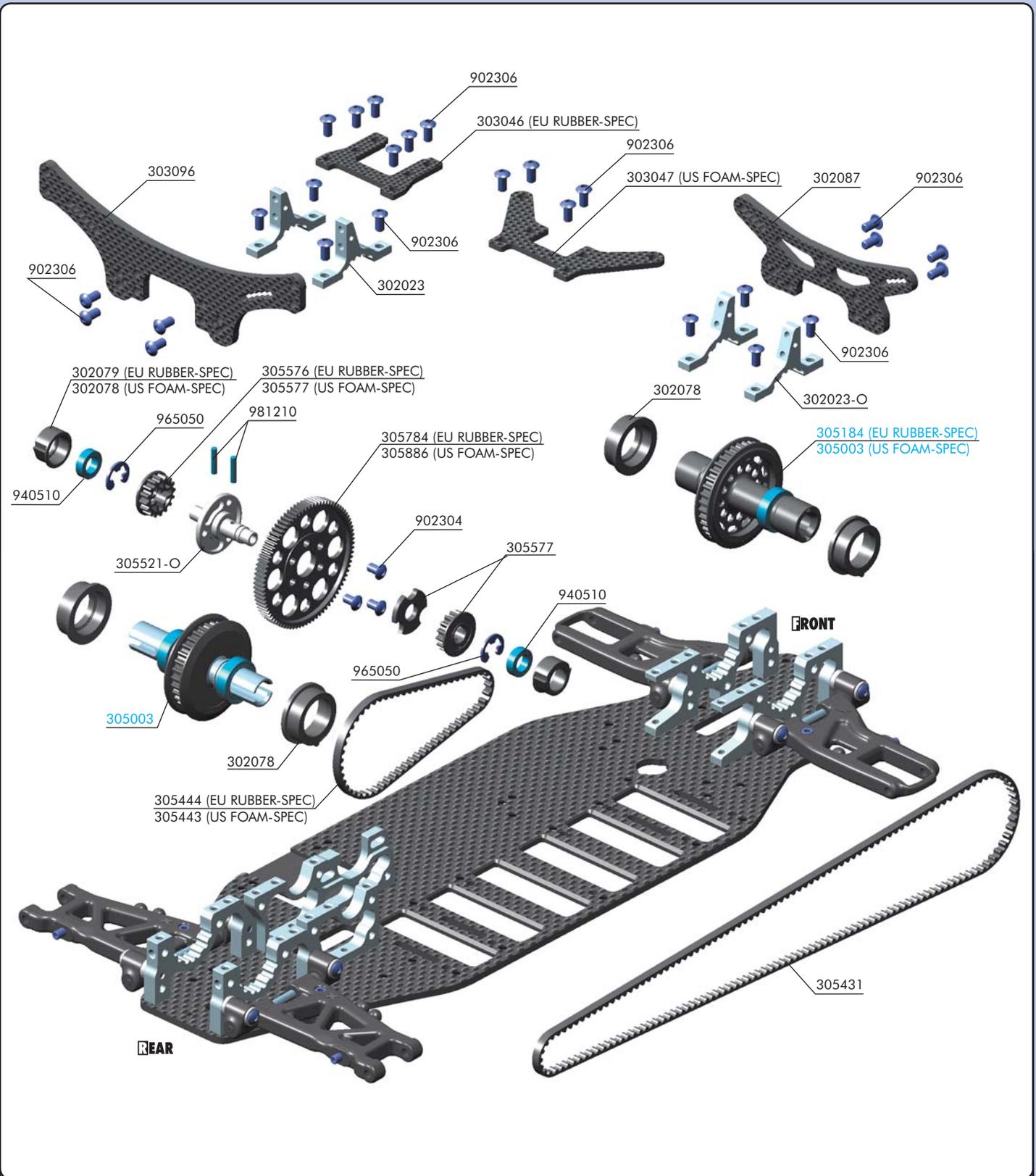
47.5 mm

**2x L=R**

**SET-UP BOOK**

TRACK WIDTH ADJUSTMENT  
WHEELBASE ADJUSTMENT  
ROLL CENTER ADJUSTMENT  
DIVE ADJUSTMENT

### 3. CENTRAL TRANSMISSION



**BAG**  
03

- |           |   |         |   |
|-----------|---|---------|---|
| 30 2023-O | T2'008 ALU UPPER BULKHEAD - ORANGE                  | 30 5874 | OFFSET SPUR GEAR 104T / 64 (OPTION)                           |
| 30 2078   | T2'007 SET OF COMPOSITE HUBS FOR BULKHEADS (4+2)    | 30 5876 | OFFSET SPUR GEAR 106T / 64 (OPTION)                           |
| 30 2079   | T2'008 EU-SPEC COMPOSITE LAYSHAFT BUSHING (2)       | 30 5878 | OFFSET SPUR GEAR 108T / 64 (OPTION)                           |
| 30 2087   | T2'008 SHOCK TOWER FRONT 3.0MM GRAPHITE             | 30 5880 | OFFSET SPUR GEAR 110T / 64 (OPTION)                           |
| 30 3046   | T2'008 RUBBER-SPEC REAR UPPER DECK GRAPHITE         | 30 5882 | OFFSET SPUR GEAR 112T / 64 (OPTION)                           |
| 30 3047   | T2'008 FOAM-SPEC REAR UPPER DECK GRAPHITE           | 30 5884 | OFFSET SPUR GEAR 114T / 64 (OPTION)                           |
| 30 3096   | T2'008 SHOCK TOWER REAR 3.0MM GRAPHITE              | 30 5886 | OFFSET SPUR GEAR 116T / 64                                    |
| 30 5431   | HIGH-PERFORMANCE KEVLAR DRIVE BELT FRONT 3 x 507 MM | 30 5888 | OFFSET SPUR GEAR 118T / 64 (OPTION)                           |
| 30 5443   | HIGH-PERFORMANCE KEVLAR DRIVE BELT REAR 3 x 186 MM  | 90 2304 | HEX SCREW SH M3x4 - STAINLESS (10)                            |
| 30 5444   | HIGH-PERFORMANCE KEVLAR DRIVE BELT REAR 3 x 183 MM  | 90 2306 | HEX SCREW SH M3x6 (10)  |
| 30 5521-O | T2'008 ALU SOLID LAYSHAFT - ORANGE                  | 94 0510 | HIGH-SPEED BALL-BEARING 5x10x4 RUBBER SEALED (2)              |
| 30 5576   | T2'008 FIXED PULLEY 16T (2) (OPTION)                | 96 5050 | E-CLIP 5 (10)   |
| 30 5577   | T2'008 FIXED PULLEY 20T (2)                         | 98 1210 | PIN 2x10 (10)   |
| 30 5778   | OFFSET SPUR GEAR 78T / 48 (OPTION)                  | 30 5003 | T2'008 ALU BALL DIFFERENTIAL 34T + 38T PULLEY - 7075 T6 - SET |
| 30 5781   | OFFSET SPUR GEAR 81T / 48 (OPTION)                  | 30 5184 | T2'008 COMPOSITE SOLID AXLE 34T - SET                         |
| 30 5784   | SPUR GEAR 84T / 48                                  | 30 5188 | T2'008 COMPOSITE SOLID AXLE 38T - SET (OPTION)                |
| 30 5787   | SPUR GEAR 87T / 48 (OPTION)                         |         |   |
| 30 5790   | SPUR GEAR 90T / 48 (OPTION)                         |         |   |

# 3. CENTRAL TRANSMISSION



902304  
SH M3x4



965050  
CS



981210  
P 2x10



GEARING ADJUSTMENT

1.

2.

3.

**NOTE ORIENTATION**  
Only when using XRAY OFFSET spur gears

CUTAWAY VIEW

SPUR GEARS	
#305778	OFFSET SPUR GEAR 78T / 48P
#305781	OFFSET SPUR GEAR 81T / 48P
#305784	SPUR GEAR 84T / 48P
#305787	SPUR GEAR 87T / 48P
#305790	SPUR GEAR 90T / 48P
#305874	OFFSET SPUR GEAR 104T / 64P
#305876	OFFSET SPUR GEAR 106T / 64P
#305878	OFFSET SPUR GEAR 108T / 64P
#305880	OFFSET SPUR GEAR 110T / 64P
#305882	OFFSET SPUR GEAR 112T / 64P
#305884	OFFSET SPUR GEAR 114T / 64P
#305886	OFFSET SPUR GEAR 116T / 64P
#305888	OFFSET SPUR GEAR 118T / 64P



940510  
BB 5x10x4

**! IMPORTANT**

Insert composite bushings perfectly straight in bulkheads so the bearings spin freely. If the bearings do not spin freely, reinstall the composite bushings properly.

**NOTE ORIENTATION**

long belt    short belt

**US FOAM-SPEC** kit contains a front ball differential.  
**EU RUBBER-SPEC** kit contains a front composite solid axle.

BEARING OIL (HUDY #106230)

BEARING OIL (HUDY #106230)

FRONT

REAR

**FRONT BELT TENSION ADJUSTMENT**

Upper diff position is recommended for tight and technical carpet tracks. The upper diff position improves handling in chicanes as it provides more traction, increased steering and makes the car easier to drive.

Lower diff position is recommended for large open asphalt tracks with long sweepers.

UPPER DIFF POSITION

LOWER DIFF POSITION

**INITIAL POSITION EU RUBBER-SPEC**  
PLACE TAB IN THIS NOTCH

**INITIAL POSITION US FOAM-SPEC**  
PLACE TAB IN THIS NOTCH

**TO LOOSEN FRONT BELT:** Rotate both front nylon hubs in arrow direction (A)

**TO TIGHTEN FRONT BELT:** Rotate both front nylon hubs in arrow direction (B)

**REAR BELT TENSION ADJUSTMENT**

Lower diff position is recommended for large open asphalt tracks with long sweepers.

Upper diff position is recommended for tight and technical carpet tracks. The upper diff position improves handling in chicanes as it provides more traction, increased steering and makes the car easier to drive.

LOWER DIFF POSITION

UPPER DIFF POSITION

**INITIAL POSITION US FOAM-SPEC**  
PLACE TAB IN THIS NOTCH

**INITIAL POSITION EU RUBBER-SPEC**  
PLACE TAB IN THIS NOTCH

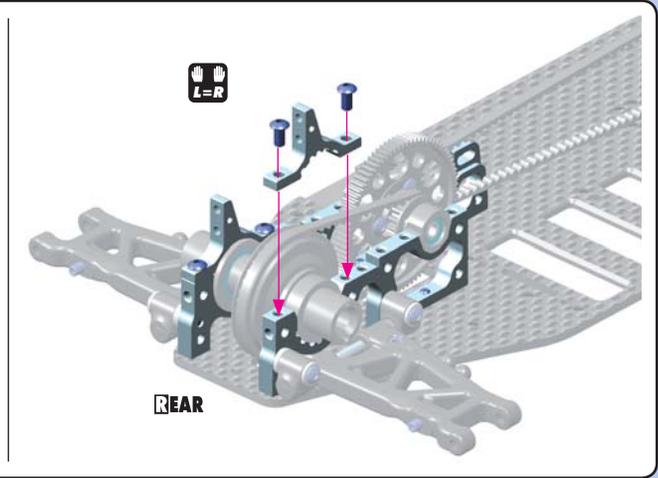
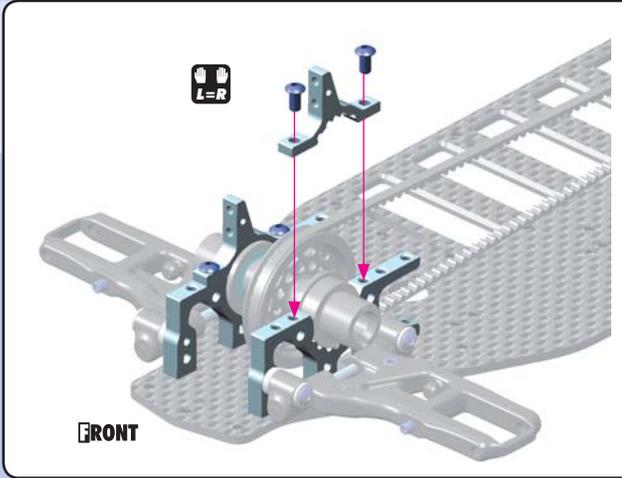
**TO LOOSEN REAR BELT:** Rotate both rear nylon hubs in arrow direction (A)

**TO TIGHTEN REAR BELT:** Rotate both rear nylon hubs in arrow direction (B)

### 3. CENTRAL TRANSMISSION



902306  
SH M3x6



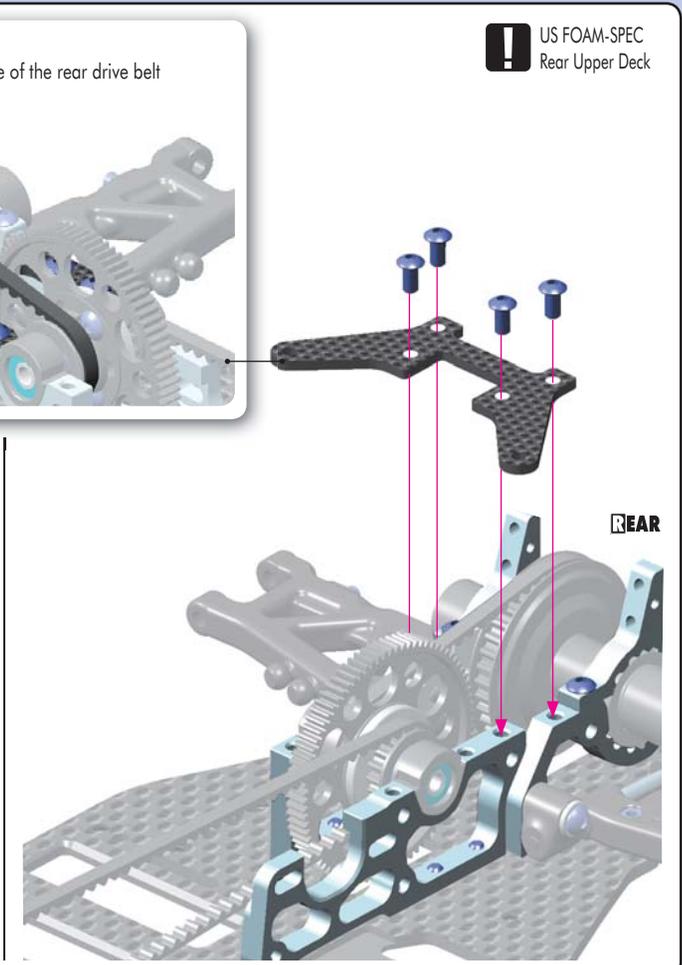
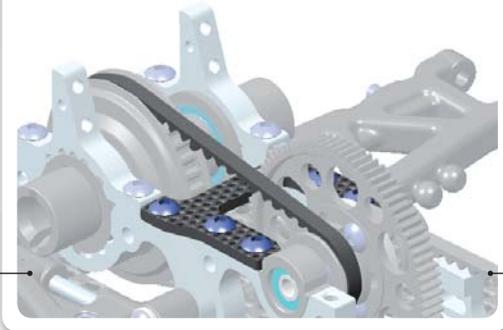
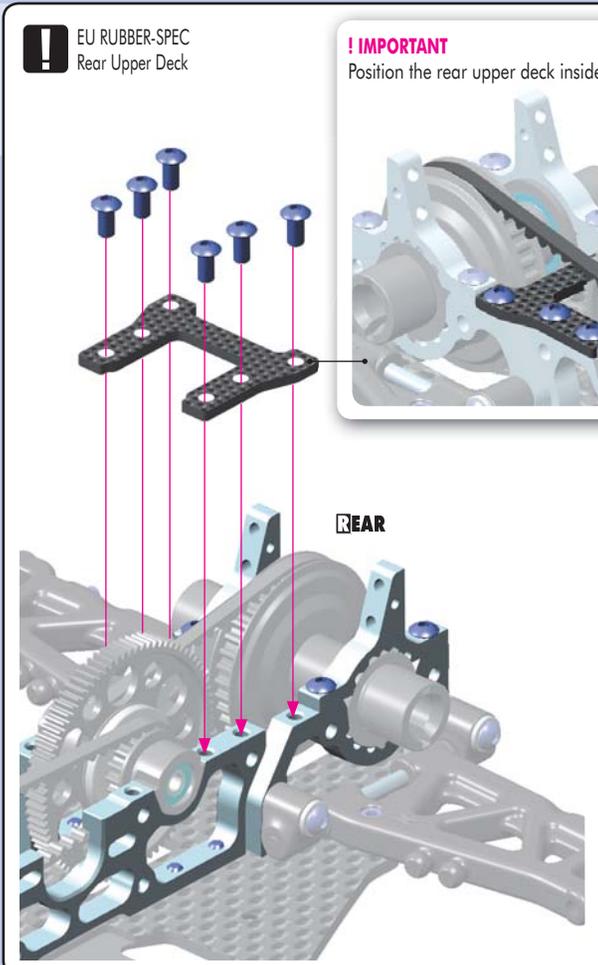
902306  
SH M3x6

**!** EU RUBBER-SPEC  
Rear Upper Deck

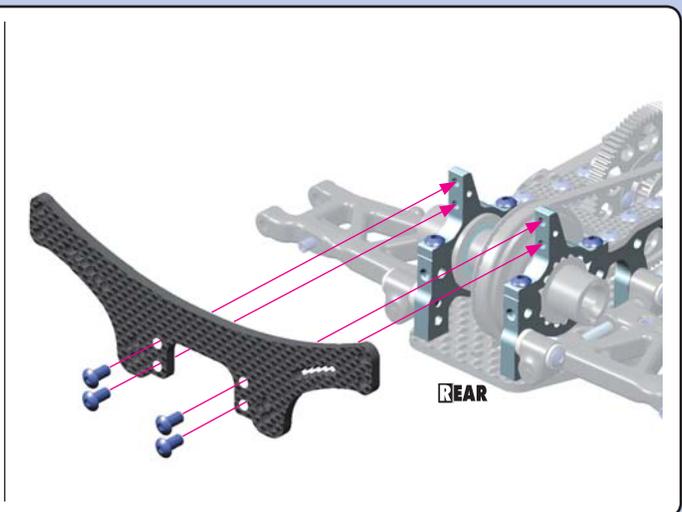
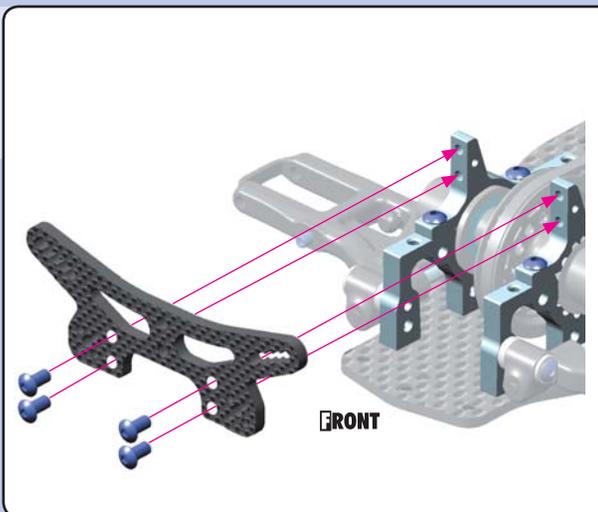
**! IMPORTANT**

Position the rear upper deck inside the rear drive belt

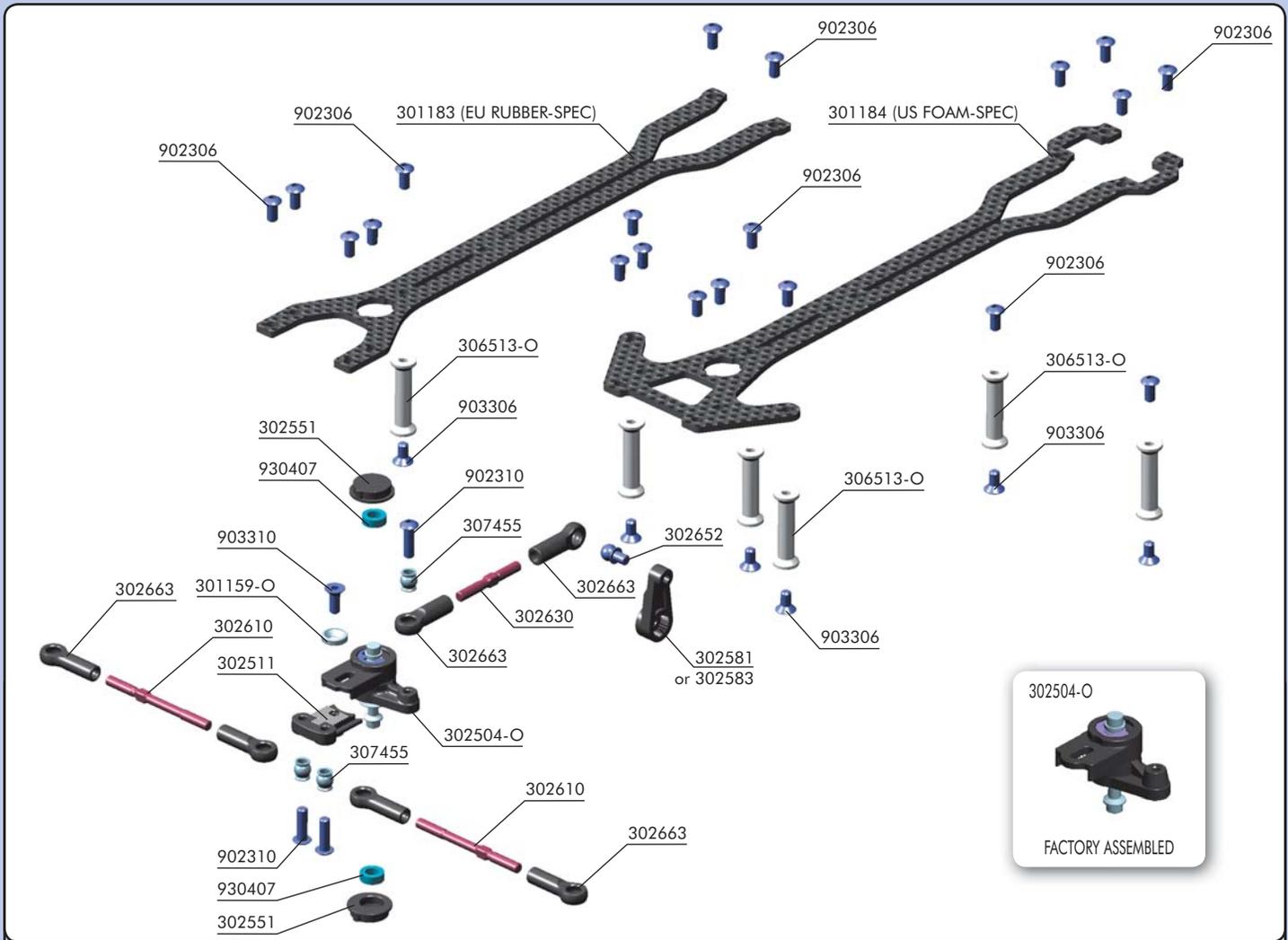
**!** US FOAM-SPEC  
Rear Upper Deck



902306  
SH M3x6



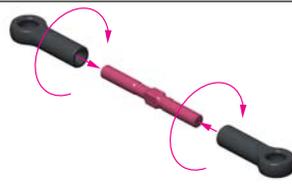
# 4. STEERING



**BAG**

**04**

30 1159-O	ALU COUNTERSUNK SHIM - ORANGE (4)	30 2663	T2 BALL JOINT 5 MM - OPEN (8)
30 1183	T2'008 RUBBER-SPEC UPPER DECK GRAPHITE	30 6513-O	T2'008 ALU LOW TOP DECK MOUNT - ORANGE (2)
30 1184	T2'008 FOAM-SPEC UPPER DECK GRAPHITE	30 7455	T2 PIVOT BALL 5.0 MM DOUBLE BEVEL SHOULDERS (10)
30 2504-O	XRAY QUICK-SAVER™ - ADJUSTABLE SERVO SAVER SET - ORANGE	90 2306	HEX SCREW SH M3x6 (10)
30 2511	XRAY QUICK-SAVER - COMPOSITE SERVO SAVER PARTS	90 2310	HEX SCREW SH M3x6 (10)
30 2551	SERVO SAVER PLASTIC COVER - ECCENTRIC (2)	90 3306	HEX SCREW SFH M3x6 (10)
30 2581	T2'007 COMPOSITE SERVO HORN - KO, JR, AIRTRONICS	90 3310	HEX SCREW SFH M3x10 (10)
30 2583	T2'007 COMPOSITE SERVO HORN - FUTABA, ROBE	93 0407	BALL-BEARING MR74ZZ 4x7x2.5 (2)
30 2610	ADJ. TURNBUCKLE M3 L/R 40 MM - HUDY SPRING STEEL (2)		
30 2630	ADJ. TURNBUCKLE L/R 20 MM - HUDY SPRING STEEL (2)		
30 2652	T2'007 BALL END 5 MM WITH THREAD (2)		



**SET-UP BOOK**  
FRONT TOE-IN ADJUSTMENT



**SET-UP BOOK**  
ACKERMANN ADJUSTMENT

There are 5 different Ackermann settings possible with the Quick-Saver™

**For initial Ackermann setting, use Step 2 (2nd shortest length).**

Step 1 gives the most Ackermann and makes the car understeer more into and out of corners. It offers good corner speed and creates very good traction mainly in chicanes, because the car is more stable.

We recommend using Step 1 on low-traction carpet tracks with a lot of chicanes.

Step 5 gives the least Ackermann and creates a lot of steering into and out of corners. However, the car is more difficult to drive in chicanes because there is less traction and stability.

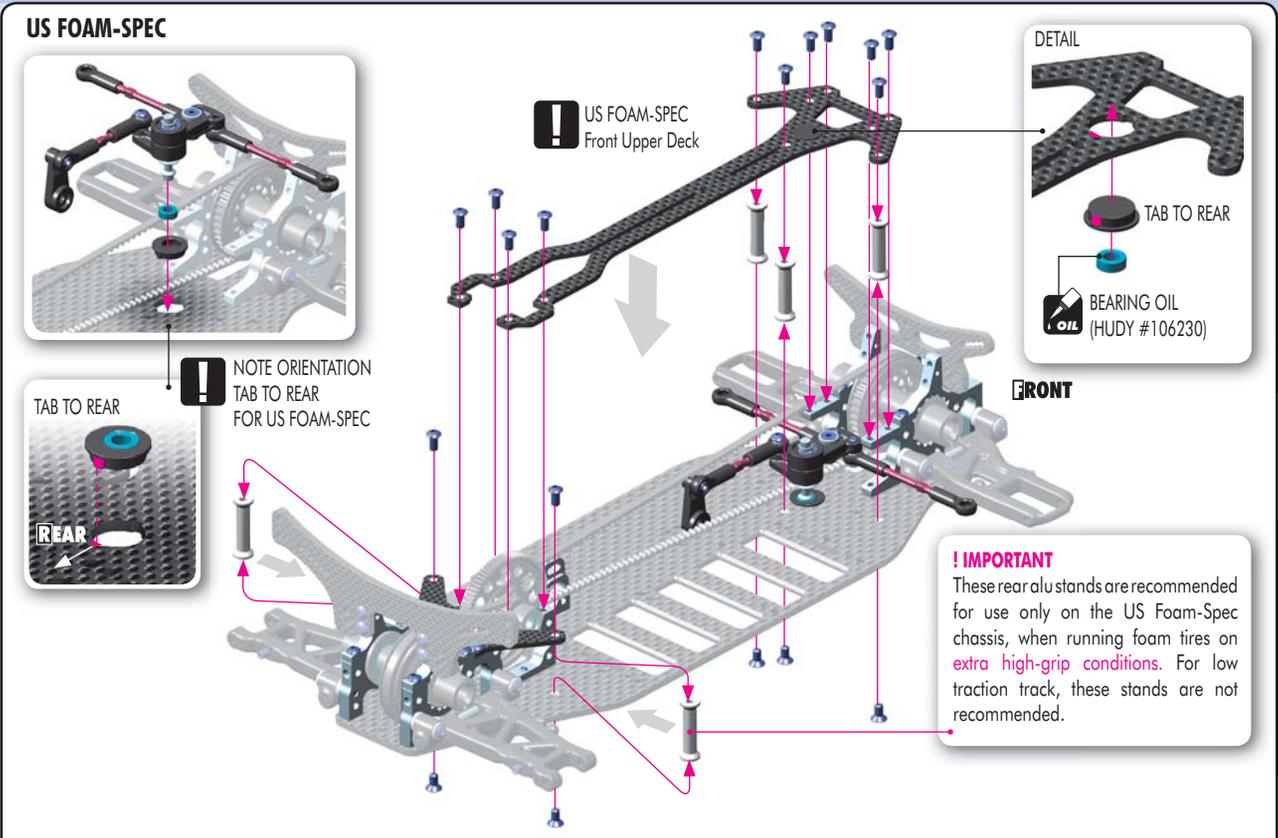
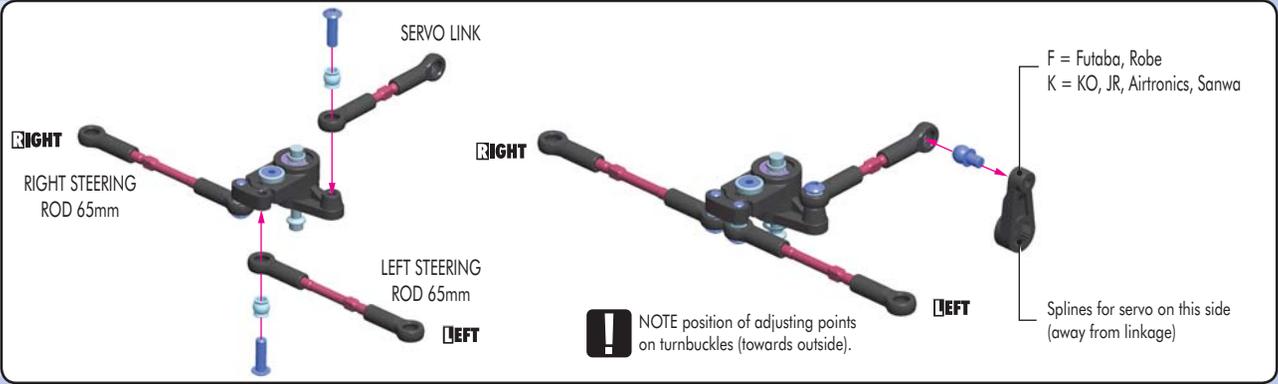
We recommend using Step 5 on high-traction asphalt tracks.

**INITIAL POSITION #2**

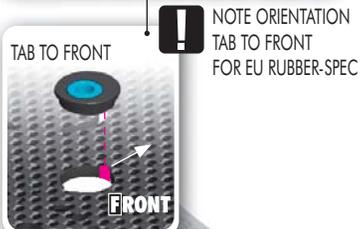
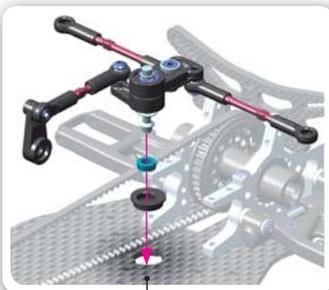
**1 STEP OUT**

**5 STEPS OUT**

# 4. STEERING



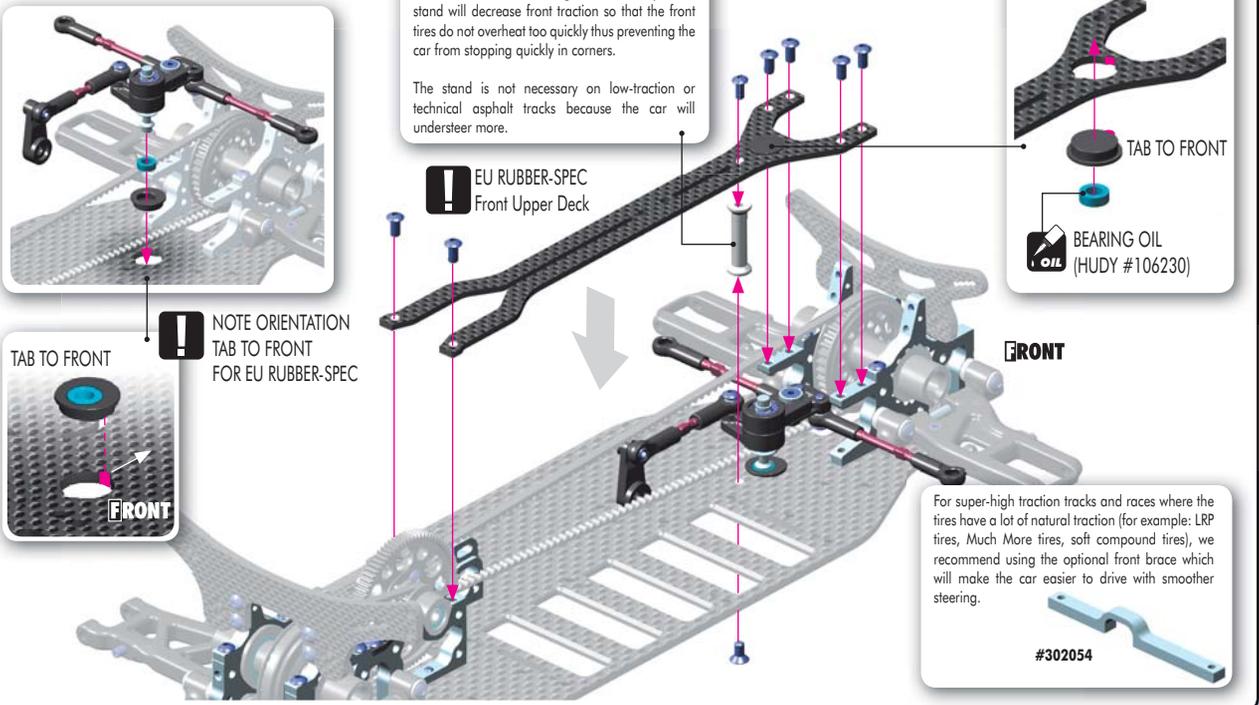
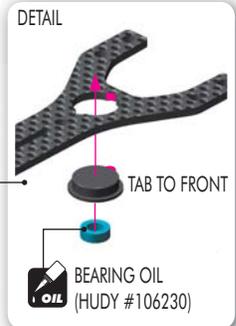
## EU RUBBER-SPEC



Install this stand when using EU car on carpet; the stand will decrease front traction so that the front tires do not overheat too quickly thus preventing the car from stopping quickly in corners.

The stand is not necessary on low-traction or technical asphalt tracks because the car will understeer more.

### EU RUBBER-SPEC Front Upper Deck

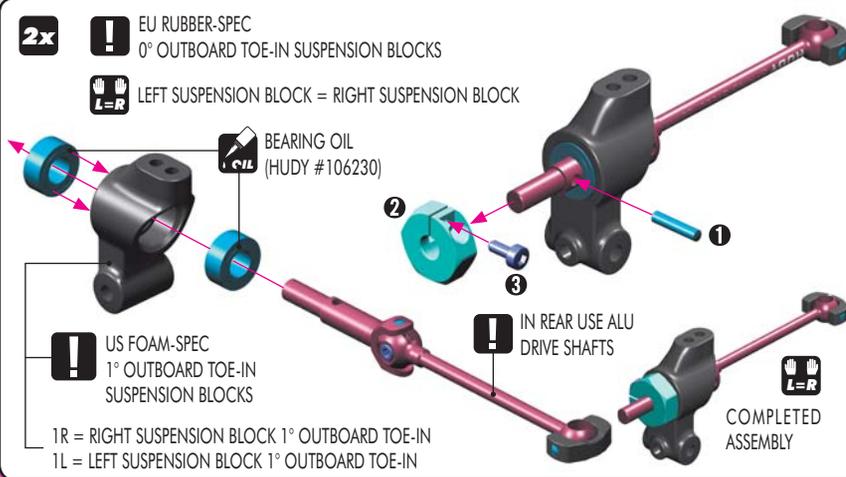


**SET-UP BOOK**

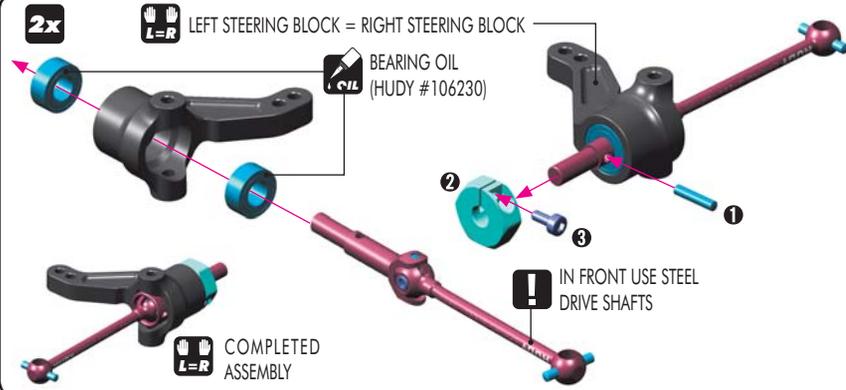
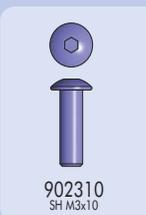
ACKERMANN ADJUSTMENT  
STEERING THROW SYMMETRY  
CHASSIS FLEX SETTING  
TOP DECK FLEX SETTING



# 5. FRONT & REAR TRANSMISSION

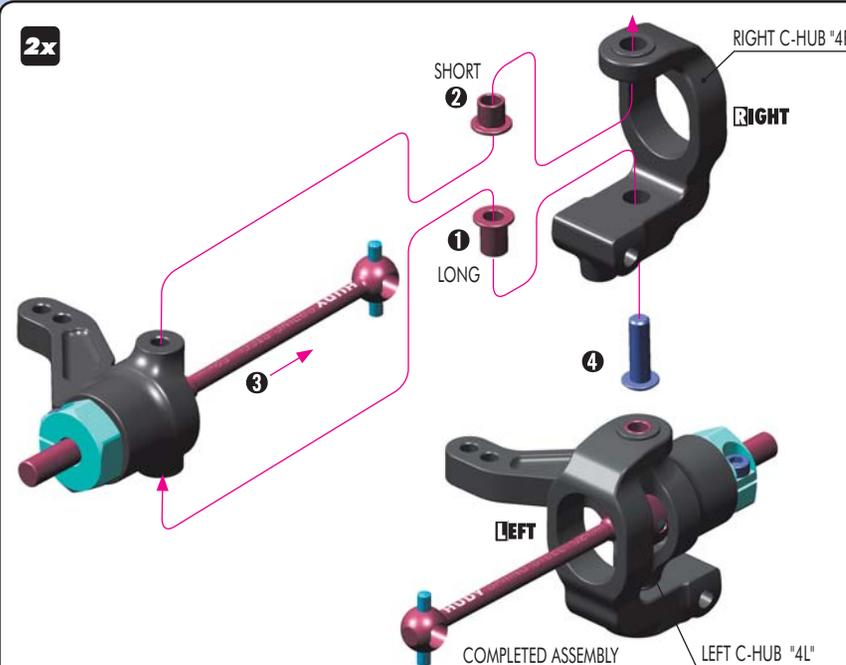


UPRIGHTS	
#303351	1° - RIGHT - MEDIUM - RUBBER-SPEC
#303352	0° - R/L - MEDIUM - RUBBER-SPEC
#303353	1° - RIGHT - HARD - FOAM-SPEC
#303354	0° - R/L - HARD - FOAM-SPEC
#303361	1° - LEFT - MEDIUM - RUBBER-SPEC
#303363	1° - LEFT - HARD - FOAM-SPEC
#303358	ALU 1° - R/L
#303359	ALU 2° - R/L

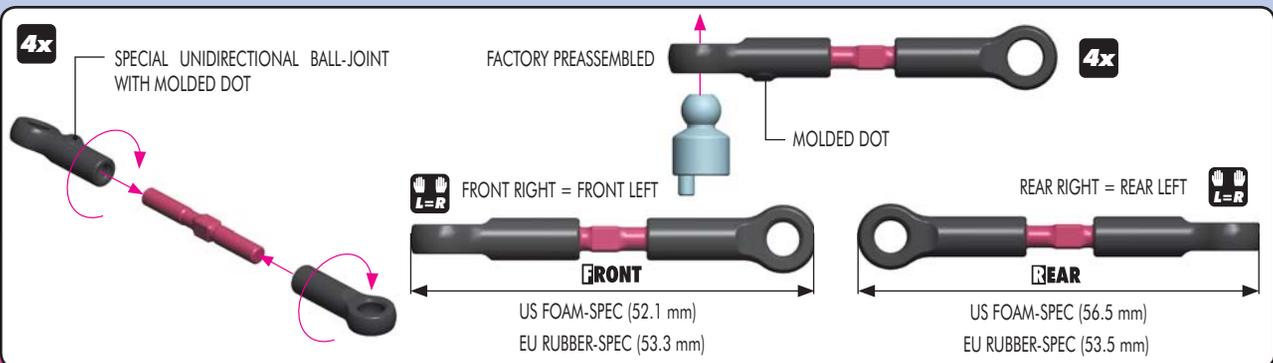


STEERING BLOCKS	
#302252	MEDIUM - RUBBER-SPEC
#302253	HARD - FOAM-SPEC
#302256	ALU

WHEEL HUBS	
#305350	ALU - OFFSET 0 MM
#305351	ALU - OFFSET -0.75 MM
#305352	ALU - OFFSET +0.75 MM
#305353	ALU - OFFSET +1.5 MM



C-HUBS	
#302334	ALU 0° - R+L
#302335	ALU 2° - RIGHT
#302336	ALU 2° - LEFT
#302337	ALU 4° - RIGHT
#302338	ALU 4° - LEFT
#302339	ALU 6° - RIGHT
#302340	ALU 6° - LEFT
#302361	2° - RIGHT - MEDIUM - RUBBER-SPEC
#302362	2° - LEFT - MEDIUM - RUBBER-SPEC
#302363	4° - RIGHT - MEDIUM - RUBBER-SPEC
#302364	4° - LEFT - MEDIUM - RUBBER-SPEC
#302365	6° - RIGHT - MEDIUM - RUBBER-SPEC
#302366	6° - LEFT - MEDIUM - RUBBER-SPEC
#302371	2° - RIGHT - HARD - FOAM-SPEC
#302372	2° - LEFT - HARD - FOAM-SPEC
#302373	4° - RIGHT - HARD - FOAM-SPEC
#302374	4° - LEFT - HARD - FOAM-SPEC
#302375	6° - RIGHT - HARD - FOAM-SPEC
#302376	6° - LEFT - HARD - FOAM-SPEC



# 5. FRONT & REAR TRANSMISSION



### US FOAM-SPEC

**RIGHT** (56.5 mm) **REAR** **LEFT** **"1L"**

3x14mm (US FOAM-SPEC)

**INITIAL POSITION**  
Quick Roll Center™ tabs in lower outer holes

**!** US FOAM-SPEC  
Use 3x6x1mm alu shim and 3x6x2mm alu shim on each side (total thickness = 3mm).

ALU SHIM 3x6x1mm  
ALU SHIM 3x6x2mm

**INITIAL POSITION**  
Use outer hole

**TIGHTEN GENTLY**

25 mm

1:1 2x

**DETAIL STEP 1**

"CLICK"

After you tighten the screw into the upright, pull the linkage upward so the ball joint "snaps" onto the pivot ball. The whole assembly should move freely.

### EU RUBBER-SPEC

**LEFT SUSPENSION BLOCK = RIGHT SUSPENSION BLOCK**

**!** EU RUBBER-SPEC  
0° OUTBOARD TOE-IN SUSPENSION BLOCKS

**RIGHT** (53.5 mm) **REAR** **LEFT** **"1L"**

3x10mm (EU RUBBER-SPEC)

**!** EU RUBBER-SPEC  
Use 3x6x1mm alu shim.

ALU SHIM 3x6x1mm

**INITIAL POSITION**  
Use inner hole

**TIGHTEN GENTLY**

25 mm

1:1 2x

**DETAIL STEP 1**

"CLICK"

After you tighten the screw into the upright, pull the linkage upward so the ball joint "snaps" onto the pivot ball. The whole assembly should move freely.

**INITIAL POSITION**  
Quick Roll Center™ tabs in upper inner holes

Quick Roll Center positions guideline for use in the T2'008 SET-UP SHEET.



# 5. FRONT & REAR TRANSMISSION



307455  
PB 5mm



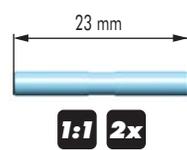
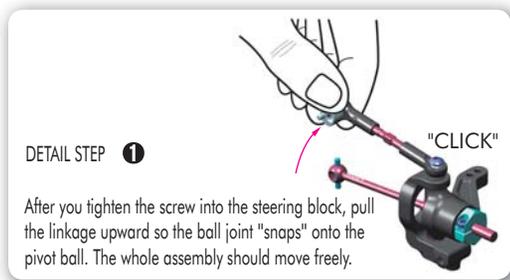
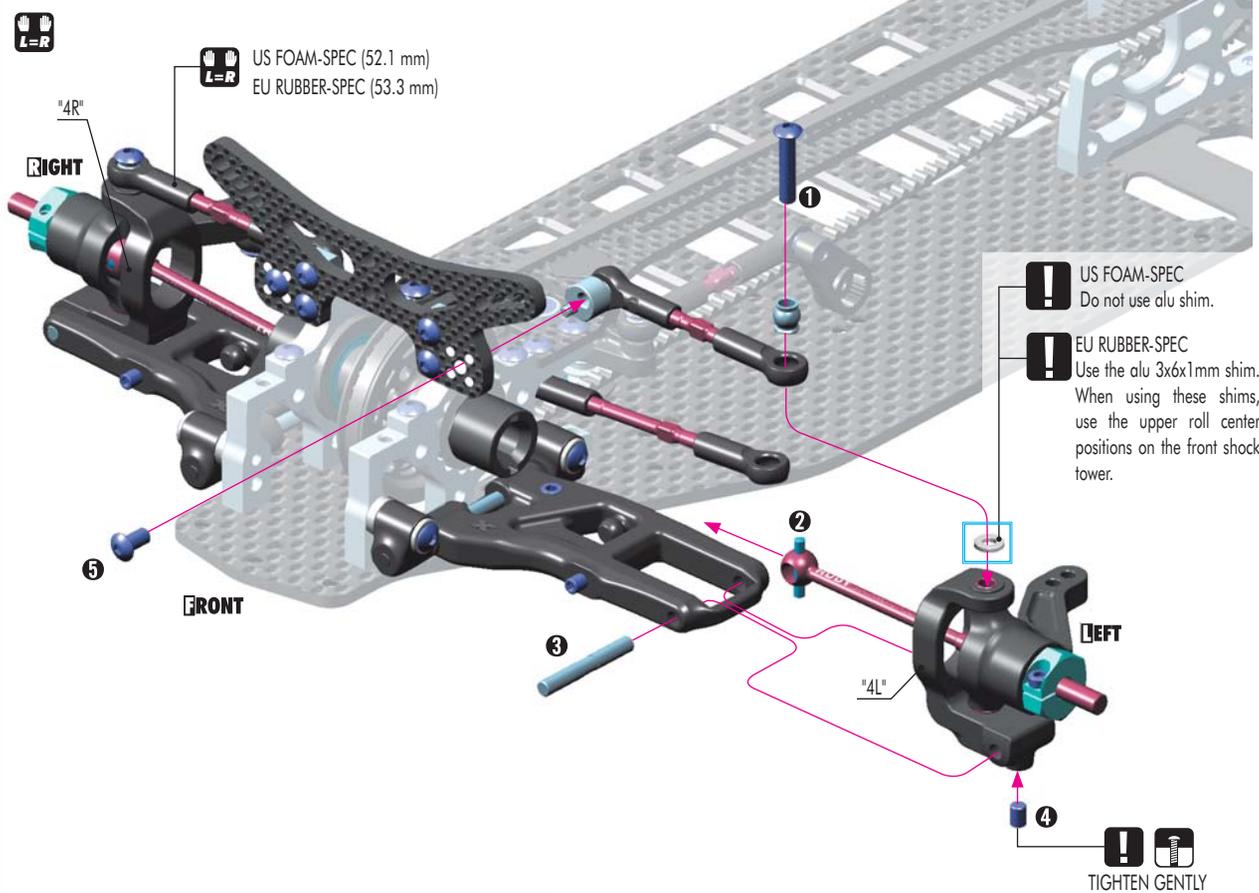
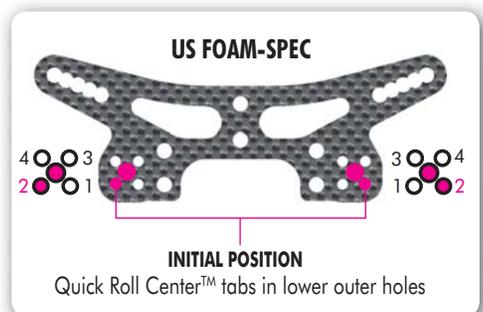
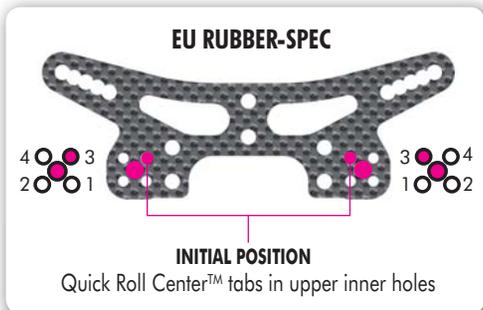
901304  
SB M3x4



902306  
SH M3x6

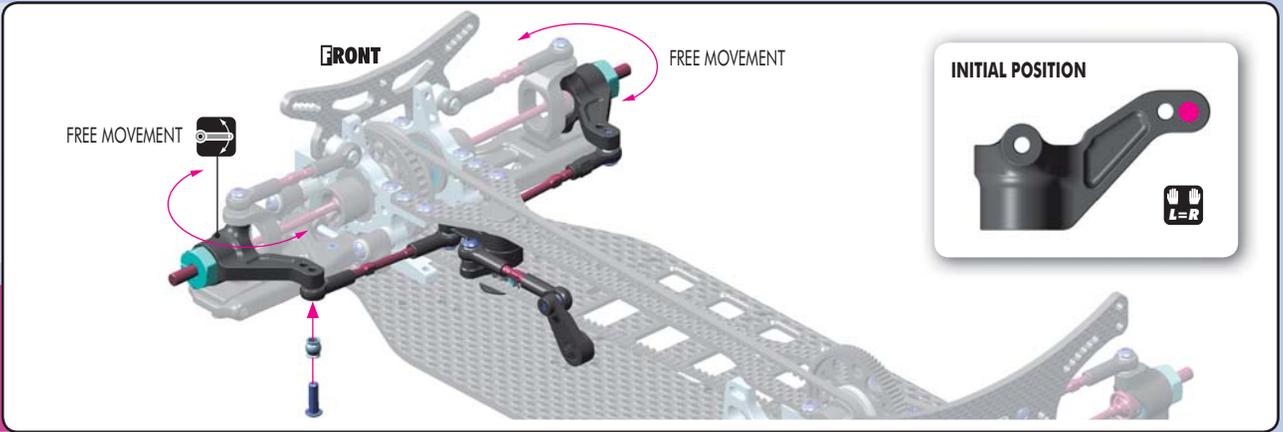


902314  
SH M3x14

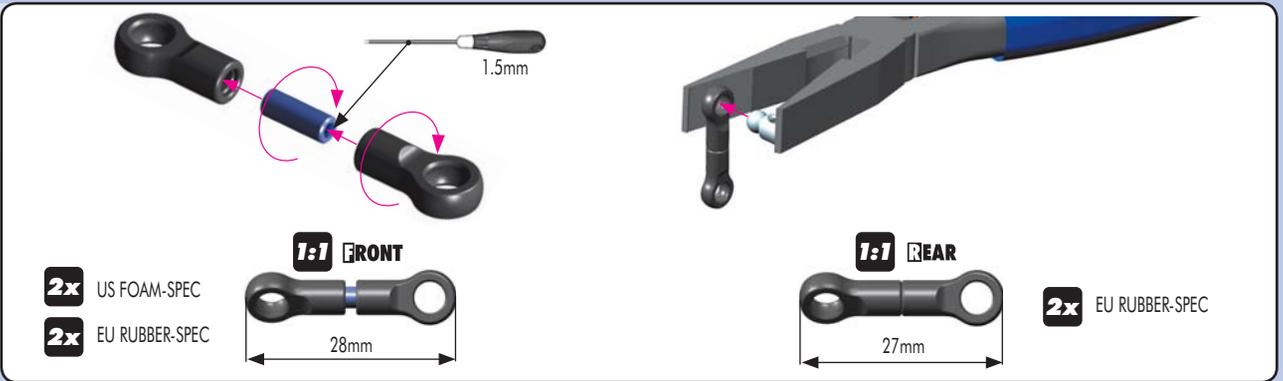


# 5. FRONT & REAR TRANSMISSION

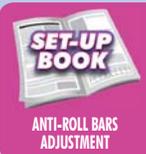
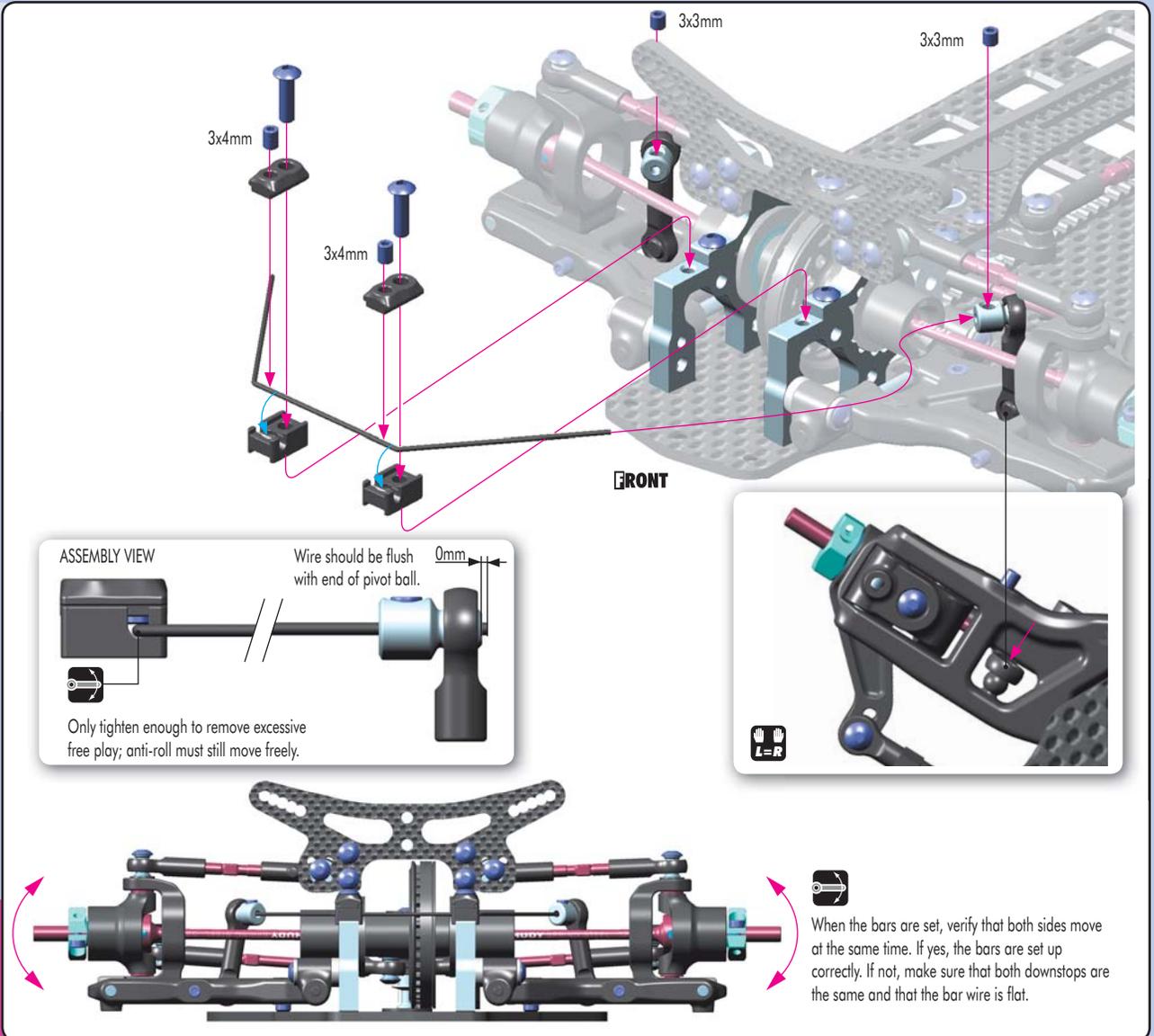
-  307455  
PB 5mm
-  902310  
SH M3x10



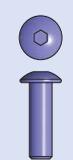
-  901308  
SB M3x8



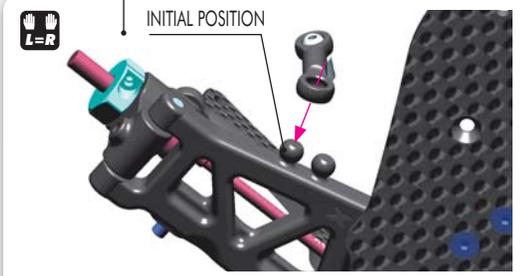
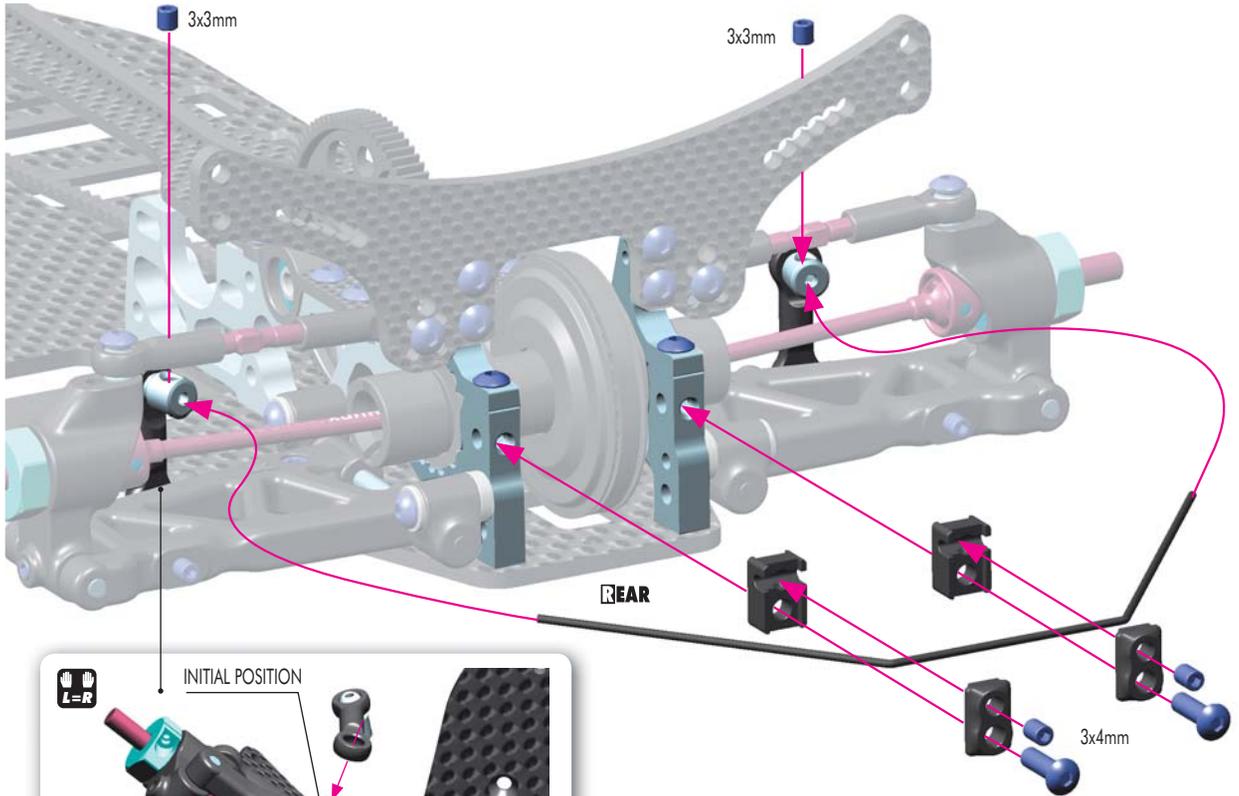
-  901303  
SB M3x3
-  901304  
SB M3x4
-  902310  
SH M3x10



# 5. FRONT & REAR TRANSMISSION

-  901303  
SB M3x3
-  901304  
SB M3x4
-  902310  
SH M3x10

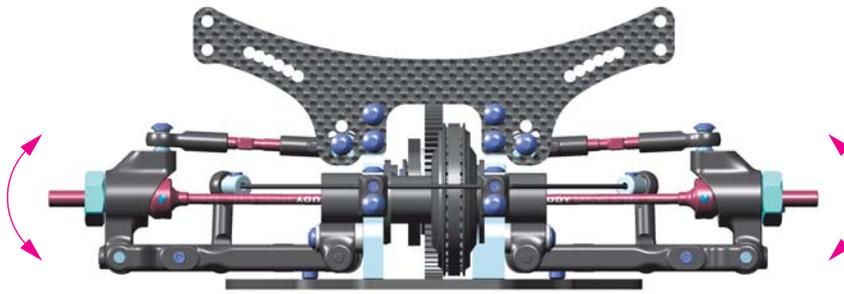
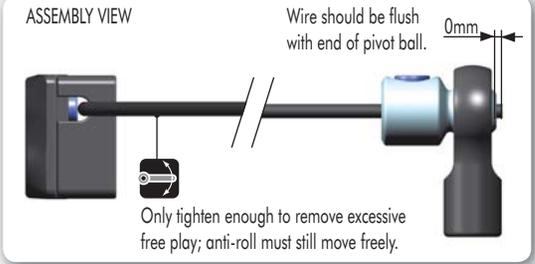
## REAR ANTI-ROLL BAR (EU RUBBER-SPEC ONLY)



Initial position = OUTER ball

Use the INNER ball only on low-traction tracks. The car will get have rear traction and better stability under acceleration and braking.

Use the OUTER ball on good-traction tracks. The car will have a little less traction but more steering.



When the bars are set, verify that both sides move at the same time. If yes, the bars are set up correctly. If not, make sure that both downstops are the same and that the bar wire is flat.



FRONT

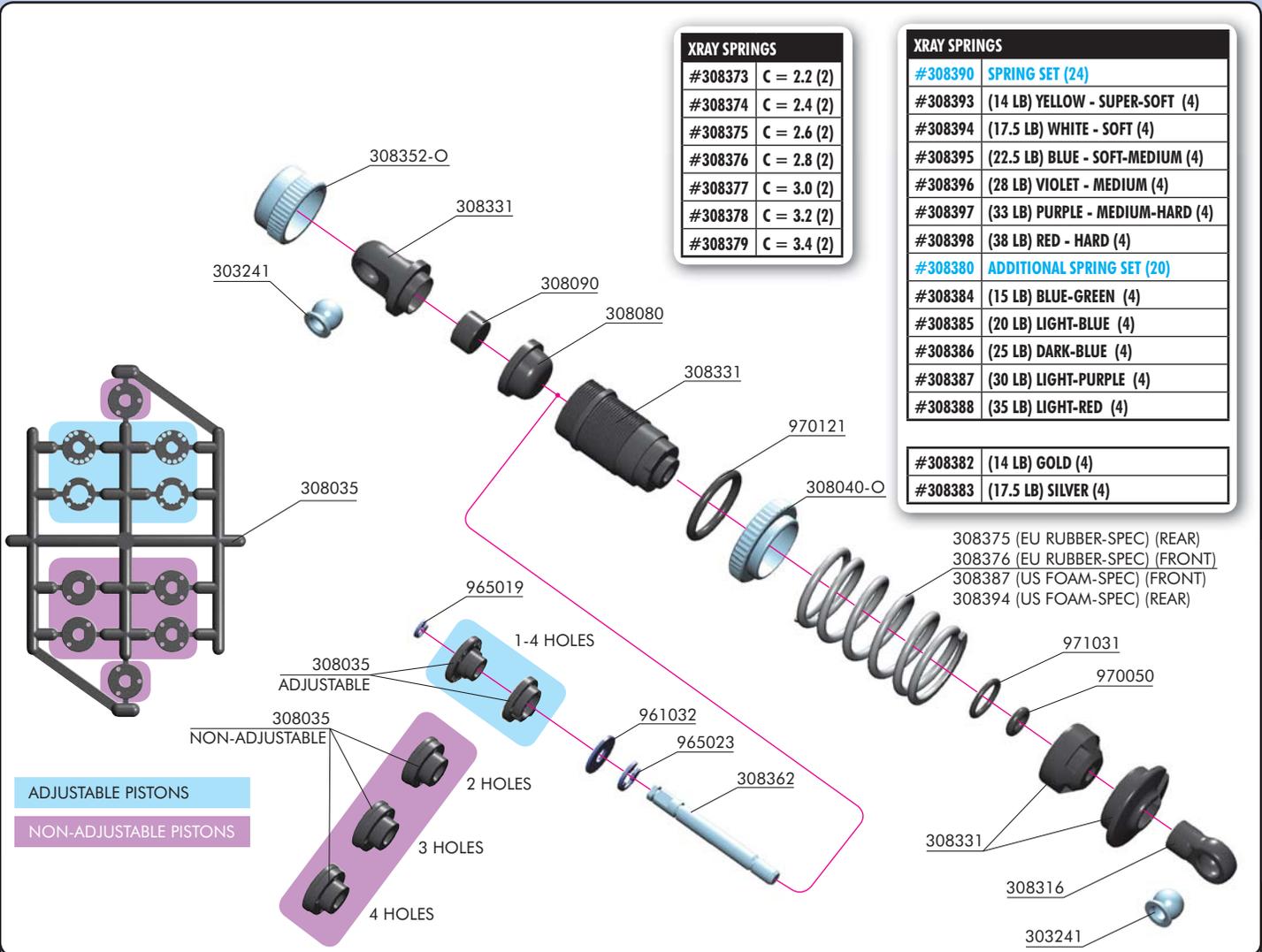
ANTI-ROLL BARS FRONT	
#302482	FRONT 1.2 MM
#202483	FRONT 1.3 MM
#302484	FRONT 1.4 MM
#302485	FRONT 1.5 MM
#302486	FRONT 1.6 MM
#302488	FRONT 1.8 MM



REAR

ANTI-ROLL BARS REAR	
#303481	REAR 1.1 MM
#303482	REAR 1.2 MM
#203483	REAR 1.3 MM
#303484	REAR 1.4 MM
#303485	REAR 1.5 MM
#303486	REAR 1.6 MM

# 6. SHOCK ABSORBERS

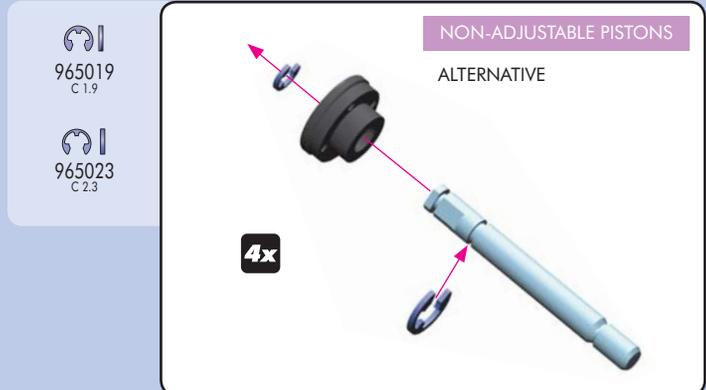
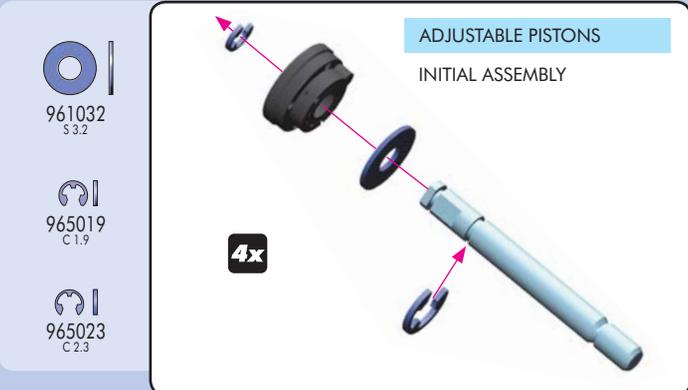


**BAG**

**06**

- 30 3241 BALL UNIVERSAL 5.8 MM HEX (4)
- 30 8035 COMPOSITE PISTONS ADJUSTABLE + NON-ADJUST. (SET 2+6)
- 30 8040-O SHOCK ADJ. NUT ALU - ORANGE + O-RING (4+4)
- 30 8080 SHOCK ABSORBER MEMBRANES (4)
- 30 8090 SHOCK FOAM INSERTS (4)
- 30 8302 T2'008 XRAY SHOCK ABSORBER-SET 4-STEP - SHORT (2)
- 30 8306 XRAY T2'008 ALU SHOCK ABSORBER-SET (2) (OPTION)
- 30 8316 T2 SHOCK BALL JOINT - OPEN (4)
- 30 8331 T2'008 COMPOSITE FRAME SHOCK PARTS 4-STEP - SHORT
- 30 8352-O T2 ALU SHOCK CAP-NUT WITH VENT HOLE - ORANGE (2)
- 30 8362 T2'008 HARDENED SHOCK SHAFT - SHORT (2)
- 30 8380 ADDITIONAL XRAY ULTIMATE RACING SPRINGS (20)

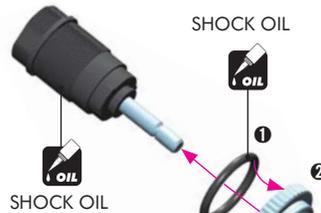
- 30 8390 XRAY SELECTED ULTIMATE RACING SPRINGS (24)
- 30 8375 XRAY SPRING-SET C=2.6
- 30 8376 XRAY SPRING-SET C=2.8
- 30 8387 XRAY SPRING-SET D=1.8 (30 LB) LIGHT-PURPLE (4)
- 30 8394 XRAY SPRING-SET D=1.5 (17.5 LB) WHITE - SOFT (4)
- 96 1032 WASHER S 3.2 (10)
- 96 5019 E-CLIP 1.9 (10)
- 96 5023 E-CLIP 2.3 (10)
- 97 0050 O-RING 5x1 (10)
- 97 0121 O-RING 12.1x1.6 (10)
- 97 1031 SILICONE O-RING 3.1x1.6 (10)



# 6. SHOCK ABSORBERS



4x



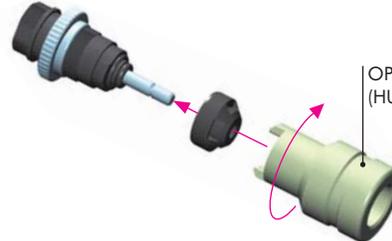
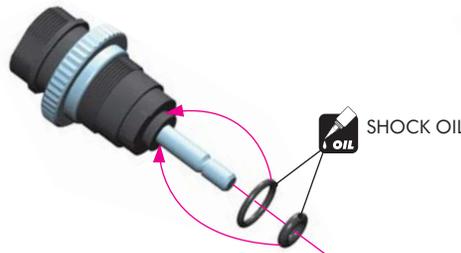
CUTAWAY VIEW



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



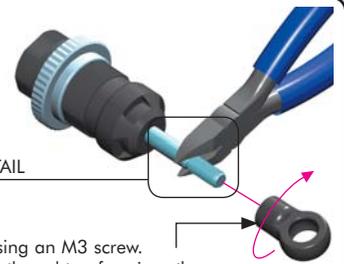
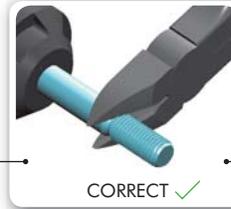
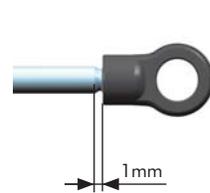
4x



OPTIONAL SHOCK TOOL (HUDY #183010)



4x



USE ONLY separate ball-joints (part #308316).

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

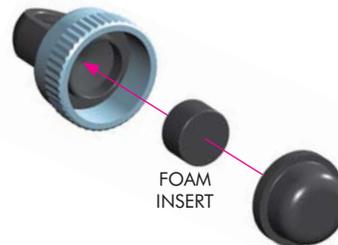
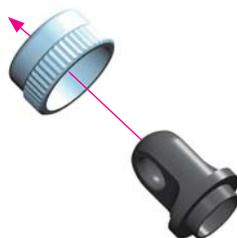


SHOCK FILLING

- 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.

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.

SHOCK OILS		#359245	450cSt
#359210	100cSt (XRAY 20W)	#359250	500cSt
#359215	150cSt	#359260	600cSt (XRAY 35W)
#359220	200cSt (XRAY 25W)	#359270	700cSt
#359225	250cSt	#359280	800cSt
#359230	300cSt	#359290	900cSt
#359235	350cSt (XRAY 30W)	#359301	1000cSt (XRAY 40W)
#359240	400cSt	#359302	2000cSt (XRAY 50W)



# 6. SHOCK ABSORBERS

### REBOUND ADJUSTMENT

1. RELEASE

2.

3. TIGHTEN

### REBOUND CHECK

REBOUND

0%

25%

50%

75%

100%

After the shock is assembled you have to set the Shock Rebound.

1. Release the shock composite lower cap.
2. VERY SLOWLY do the following: Fully pull out the shock rod, push it back in fully, and then fully pull it out once more. Repeat this procedure the following number of times to achieve the desired Shock Rebound setting:  
 10 times - approximately 75% rebound (high rebound - suggested for very low traction track)  
 15 times - approximately 50% rebound (medium rebound - suggested for standard track)  
 20 times - approximately 25% rebound (low rebound - suggested for very high traction track)
3. After you have set the Rebound Adjustment, re-install the shock lower composite cap.
4. Check the Shock Rebound setting by pushing the shock rod fully into the shock body, releasing it, and observing how far the shock rod extends by itself:  
 \* 25% out of the shock body (low rebound)  
 \* 50% out of the shock body (medium rebound)  
 \* 75% out of the shock body (high rebound).  
 If the shock rod rebounds too much, return to Step 1 and repeat the procedure.

During the Rebound Adjustment procedure shock oil will leak out of the shock body through the O-ring on the shock rod... this is normal. During the Rebound Adjustment procedure DO NOT open the upper shock cap.

If the shock rod does not rebound enough, you will have to refill the shock with shock oil, and then repeat the bleeding and Shock Rebound procedures.

### Cutaway view of assembled shock absorber

SOFTEST 4 HARDEST 1

3 2

2

1

### 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.

### Damping adjustment:

If you built the adjustable shocks, fully extend the shock rod and turn it slightly to lock the piston in the shock body.

Turning the shock rod fully CCW aligns 4 holes in the pistons (softest damping). Turning the shock rod fully CW aligns 1 hole in the pistons (hardest damping). The shocks have four settings, each of which can be felt by a slight "click".

Set all four shocks initially to position 3 (3 holes open): turn fully CCW, then turn CW by 1 click.

**2x** FRONT SHOCKS  
(C=2.8 springs - EU RUBBER-SPEC)  
(Light-Purple springs - US FOAM-SPEC)

**2x** REAR SHOCKS  
(C=2.6 springs - EU RUBBER-SPEC)  
(White springs - US FOAM-SPEC)

**SET-UP BOOK**

SHOCK DAMPING ADJUSTMENT

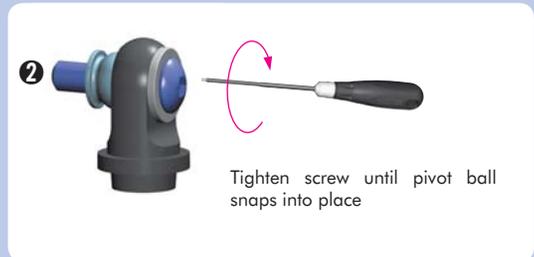
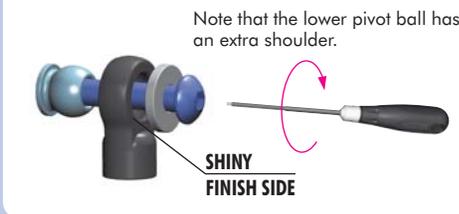
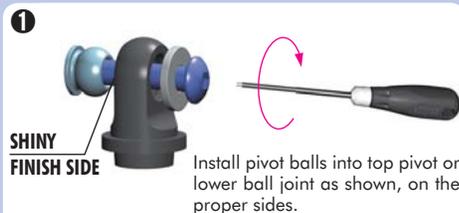
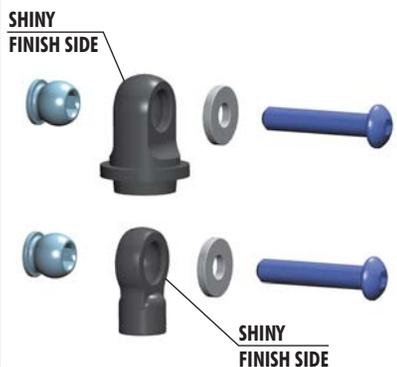
SPRING RATE SELECTION

## TECH TIP

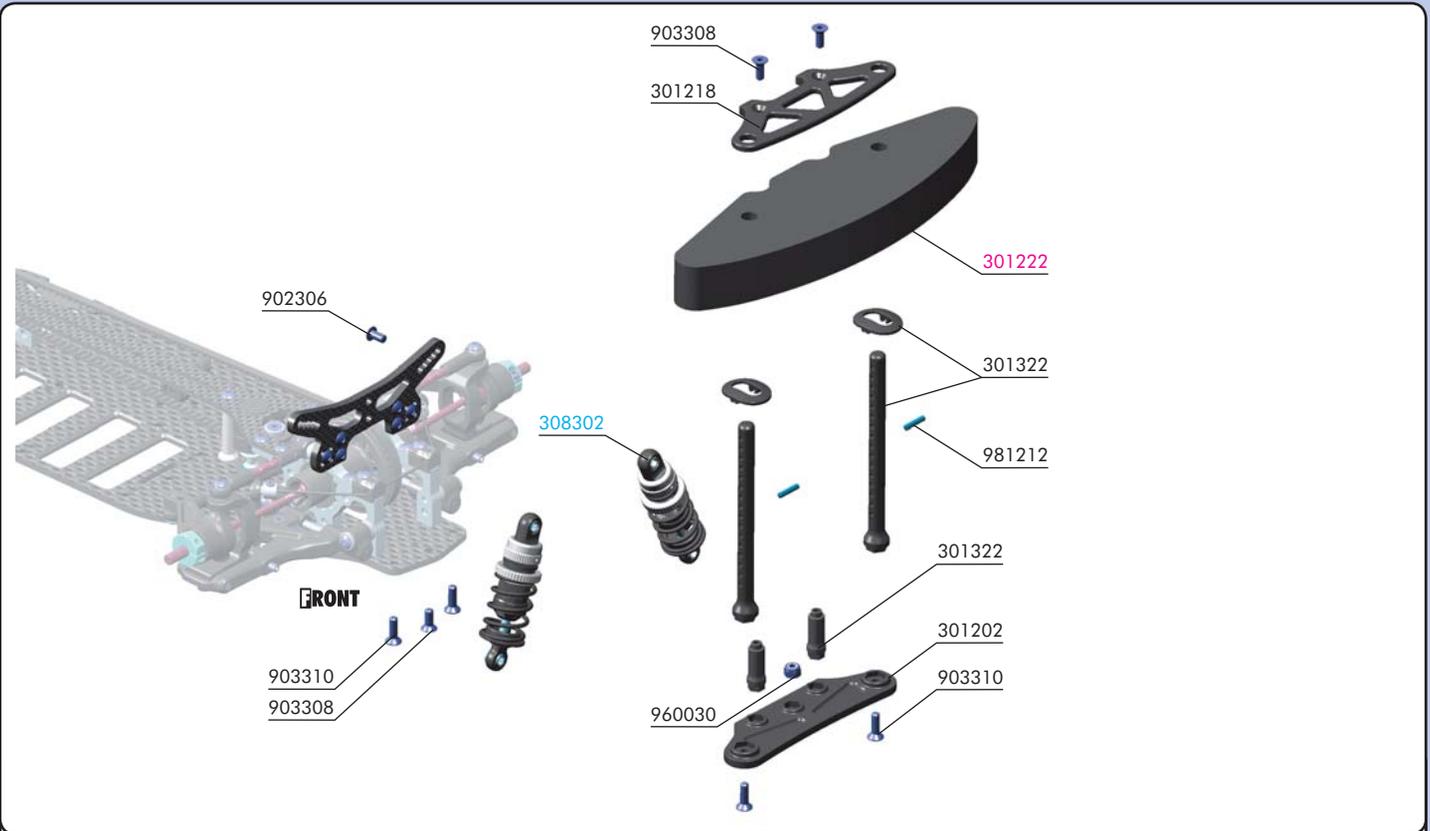
Follow this tech tip to properly install pivot balls into the top pivot and bottom ball joint.

- Parts Needed:
- M3 x 16 SH screw
  - M3 shim

Note that the composite parts have two sides, noticeable around the pivot ball hole: one side has a shiny finish, the other side has a regular finish.



# 7. FRONT & REAR ASSEMBLY



**BAG**

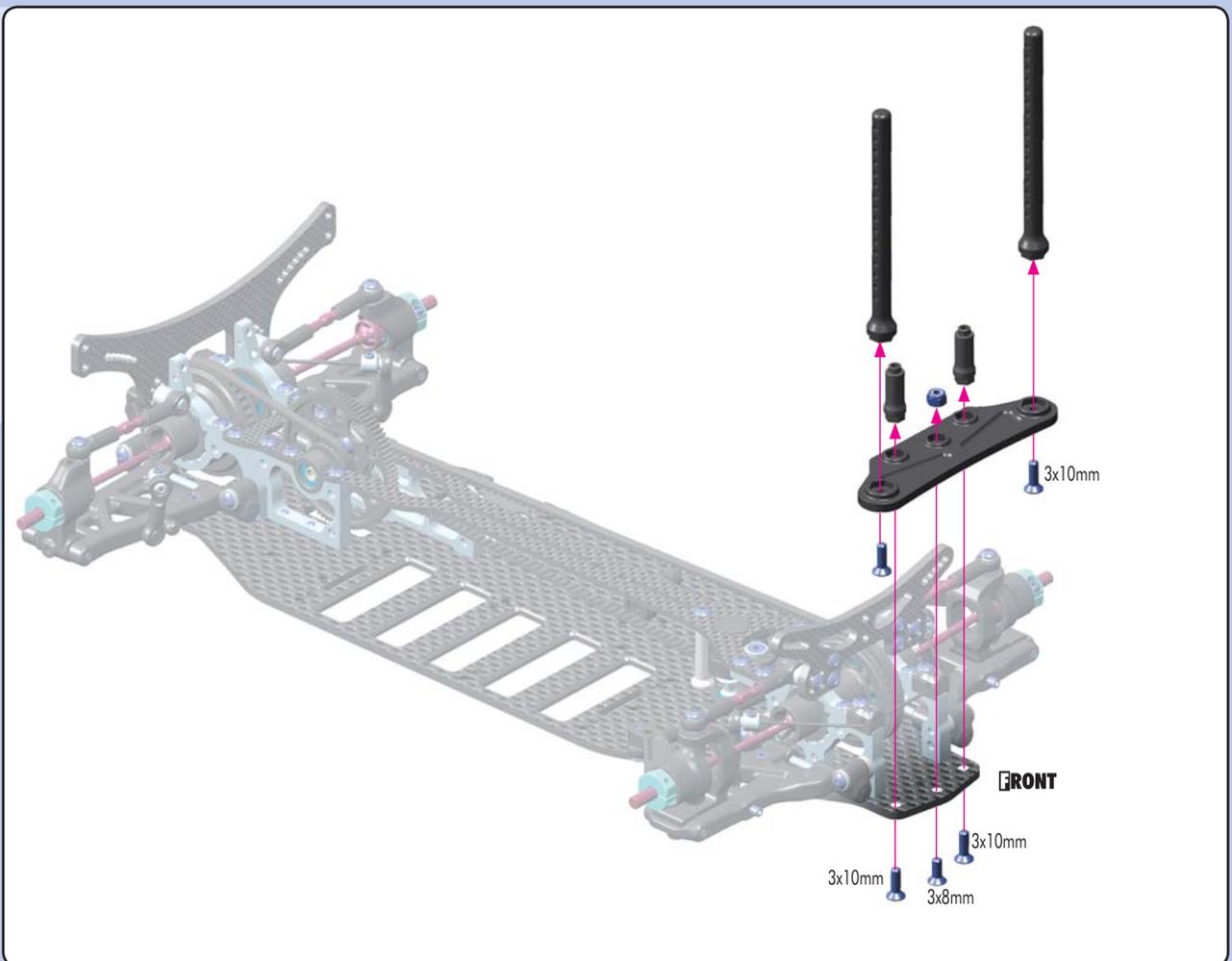
**07**

30 1202 T2 COMPOSITE BUMPER  
 30 1218 T2 COMPOSITE UPPER HOLDER FOR BUMPER  
 30 1322 T2 FRONT BODY MOUNT SET 6MM

90 2306 HEX SCREW SH M3x6 (10)  
 90 3308 HEX SCREW SFH M3x8 (10)  
 90 3310 HEX SCREW SFH M3x10 (10)

96 0030 NUT M3 (10)  
 98 1212 PIN 2x12 (10)

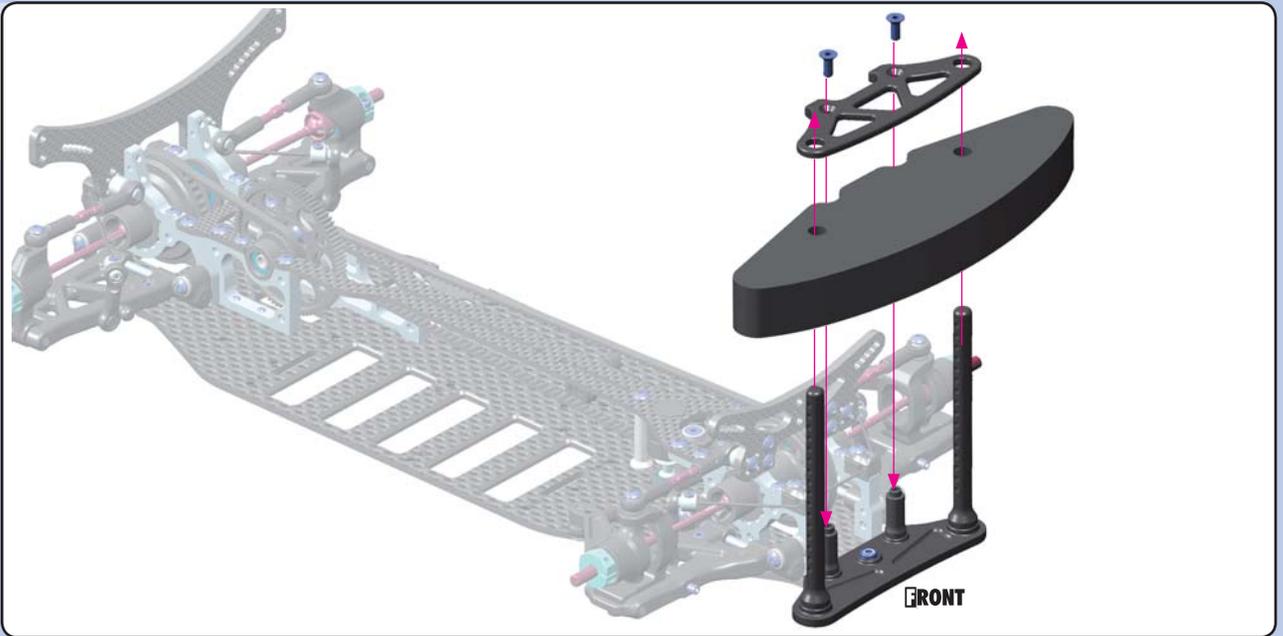
30 1222 T2 FOAM BUMPER  
 30 8302 T2'008 XRAY SHOCK ABSORBER-SET 4-STEP - SHORT (2)



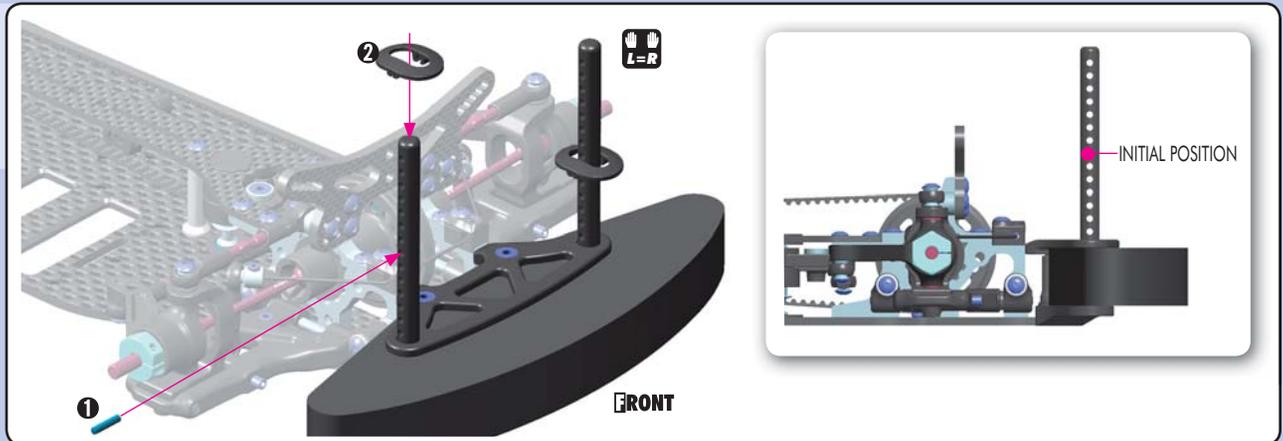
# 7. FRONT & REAR ASSEMBLY



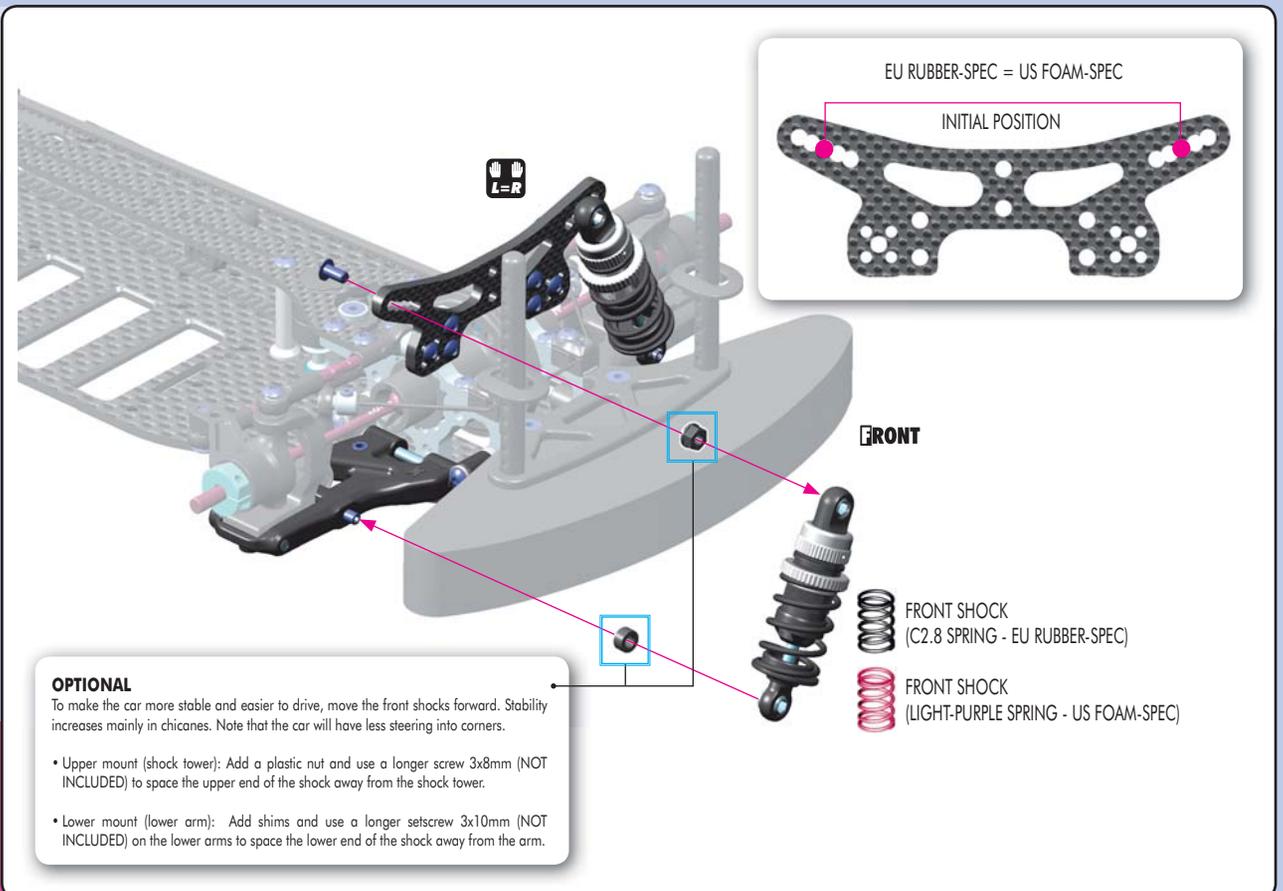
903308  
SFH M3x8



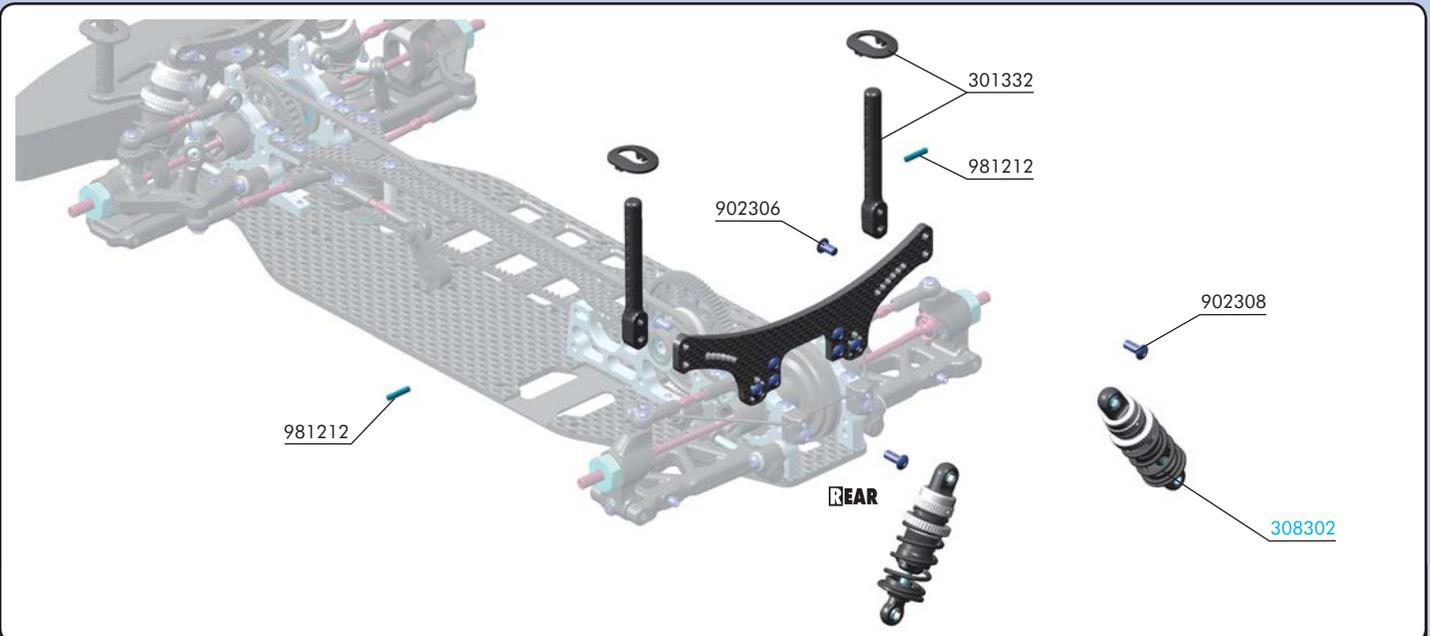
981212  
P 2x12



902306  
SH M3x6



# 7. FRONT & REAR ASSEMBLY



**BAG**

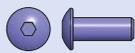
**07**

30 1332 T2 REAR BODY MOUNT SET 6MM

90 2306 HEX SCREW SH M3x6 (10)  
90 2308 HEX SCREW SH M3x8 (10)

98 1212 PIN 2x12 (10)

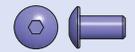
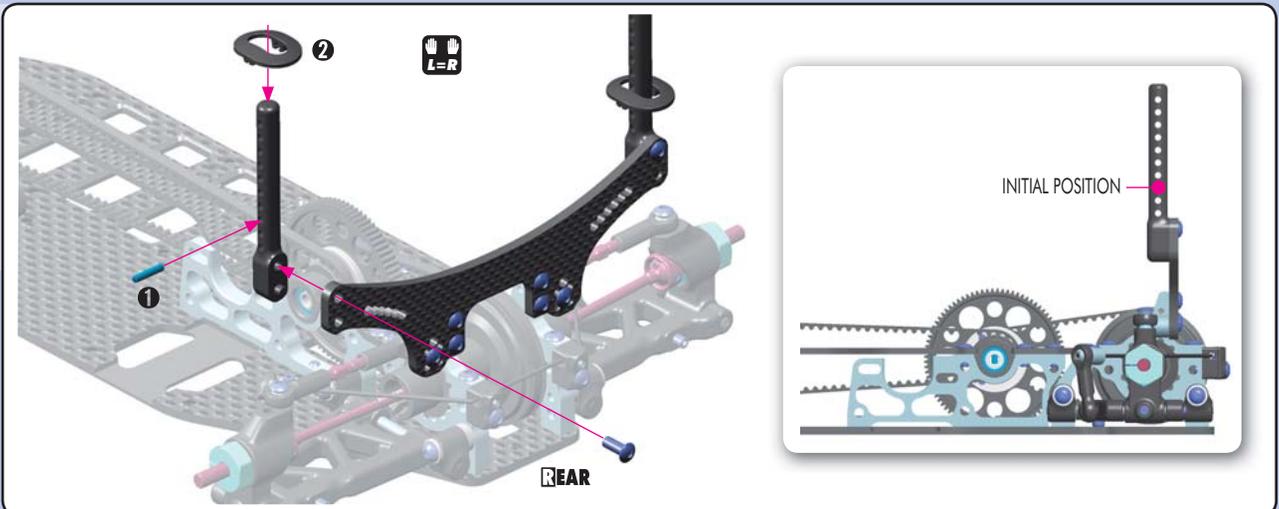
30 8301 T2 XRAY SHOCK ABSORBER-SET 4-STEP - SHORT (2)  
30 8306 XRAY T2'008 ALU SHOCK ABSORBER-SET (2) (OPTION)



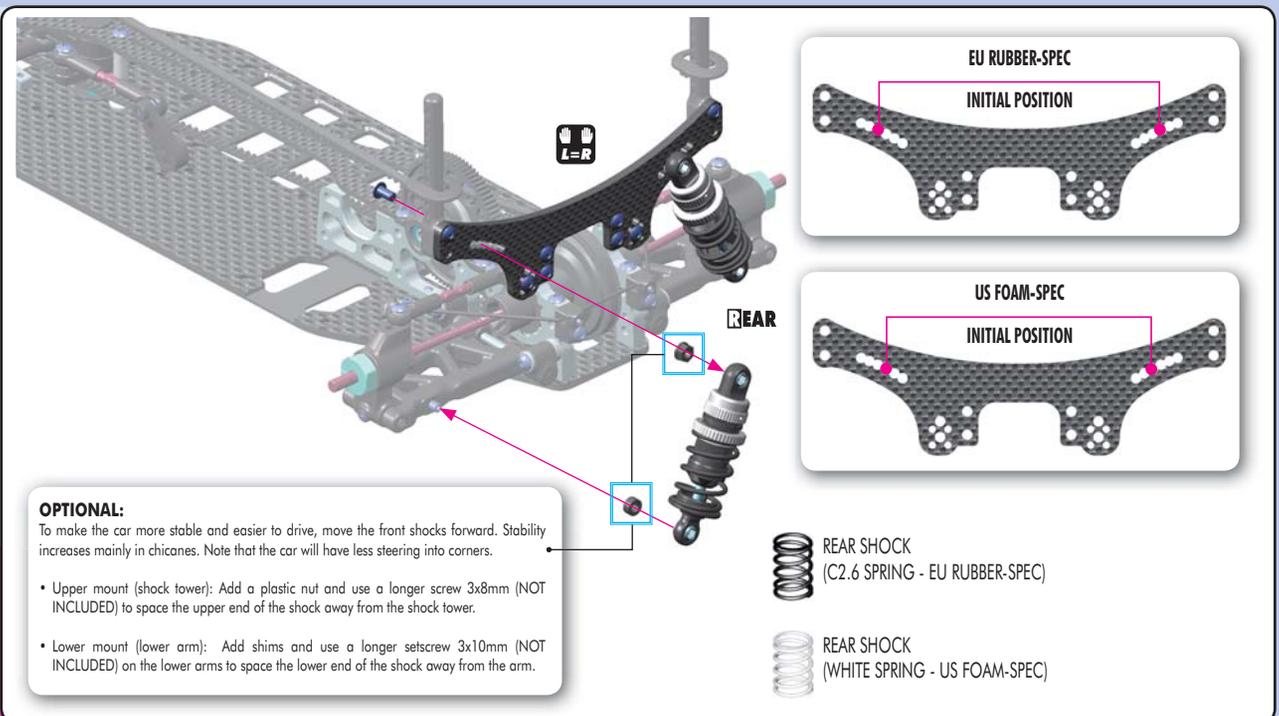
902308  
SH M3x8



981212  
P 2x12



902306  
SH M3x6



**OPTIONAL:**

To make the car more stable and easier to drive, move the front shocks forward. Stability increases mainly in chicanes. Note that the car will have less steering into corners.

- Upper mount (shock tower): Add a plastic nut and use a longer screw 3x8mm (NOT INCLUDED) to space the upper end of the shock away from the shock tower.
- Lower mount (lower arm): Add shims and use a longer setscrew 3x10mm (NOT INCLUDED) on the lower arms to space the lower end of the shock away from the arm.



REAR SHOCK  
(C2.6 SPRING - EU RUBBER-SPEC)

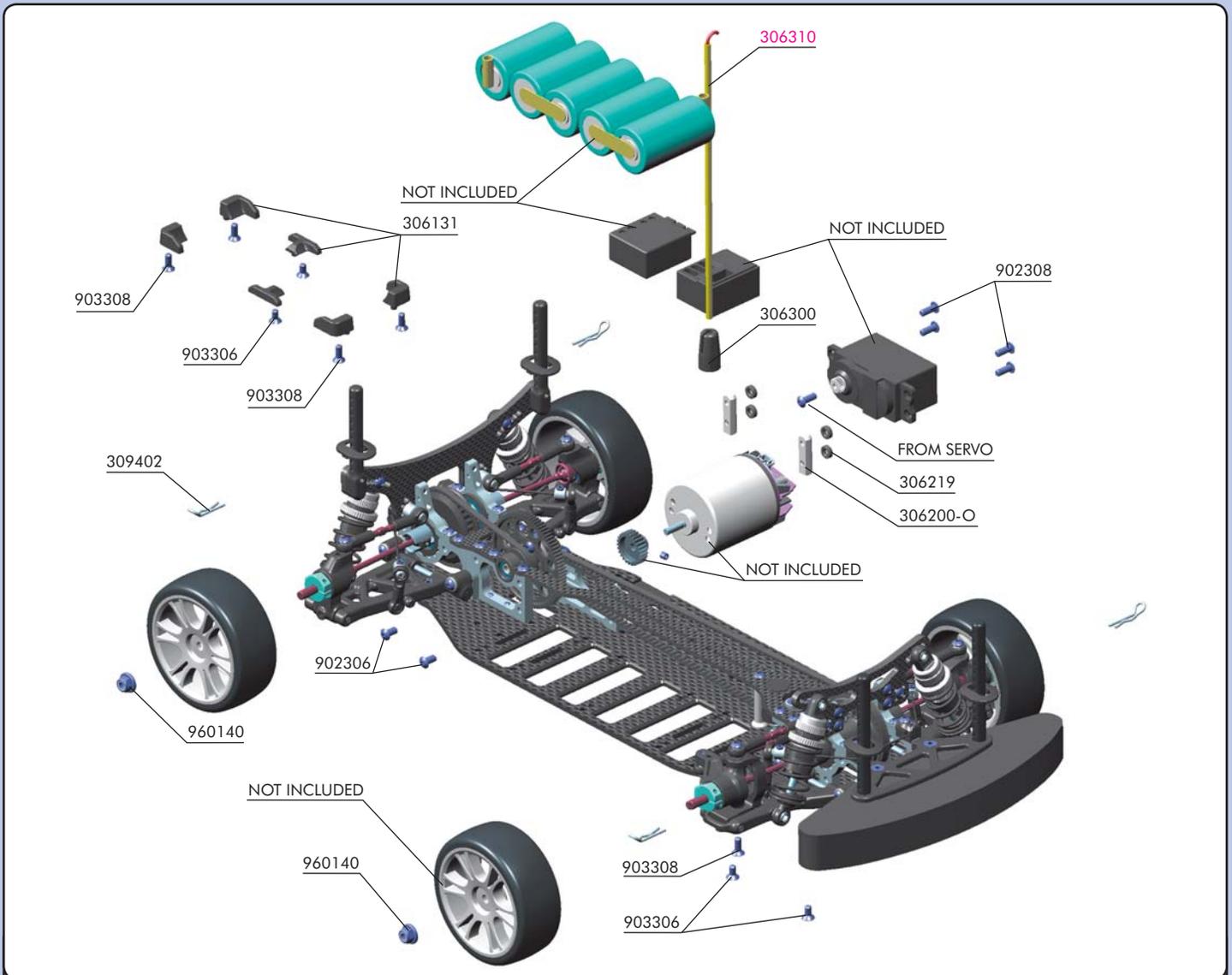


REAR SHOCK  
(WHITE SPRING - US FOAM-SPEC)



SHOCK POSITION ADJUSTMENT  
RIDE HEIGHT ADJUSTMENT  
DROOP ADJUSTMENT

# 8. FINAL ASSEMBLY



**BAG**

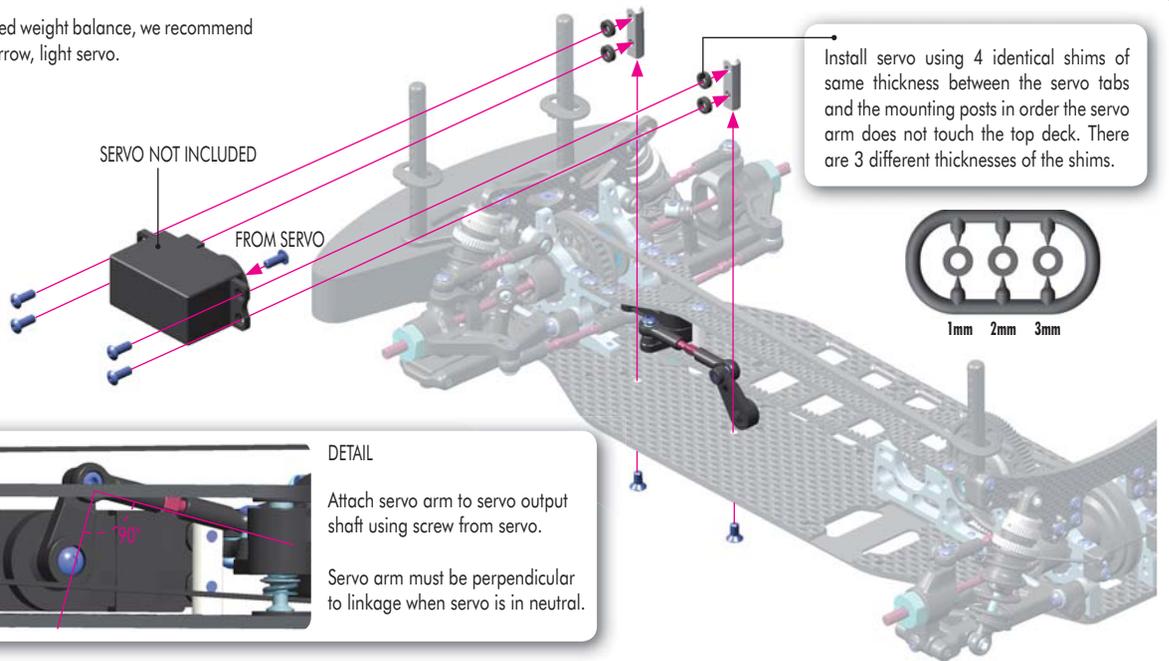


- |           |   |         |                                 |
|-----------|---|---------|---------------------------------|
| 305912-88 | NARROW PINION GEAR ALU HARD COATED (OPTION)           | 30 9402 | BODY CLIP FOR 6MM BODY POST (4) |
| 30 6131   | SET OF BATTERY BACKSTOPS - V2                         | 90 2306 | HEX SCREW SH M3x6 (10)          |
| 30 6163   | T2 6-CELL GRAPHITE BATTERY STRAP (SET) - (OPTION)     | 90 2308 | HEX SCREW SH M3x8 (10)          |
| 30 6164   | T2'008 5-CELL GRAPHITE BATTERY STRAP (SET) - (OPTION) | 90 3306 | HEX SCREW SFH M3x6 (10)         |
| 30 6200-O | ALU SERVO MOUNT - ORANGE (2)                          | 90 3308 | HEX SCREW SFH M3x8 (10)         |
| 30 6219   | COMPOSITE SET OF SERVO SHIMS (4)                      | 96 0140 | NUT M4 WITH FLANGE (10)         |
| 30 6300   | ANTENNA MOUNT   |         |                                 |

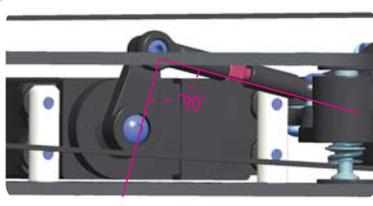
30 6310 ANTENNA (2)



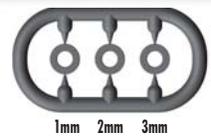
For improved weight balance, we recommend using a narrow, light servo.



Install servo using 4 identical shims of same thickness between the servo tabs and the mounting posts in order the servo arm does not touch the top deck. There are 3 different thicknesses of the shims.



**DETAIL**  
Attach servo arm to servo output shaft using screw from servo.  
Servo arm must be perpendicular to linkage when servo is in neutral.



# 8. FINAL ASSEMBLY

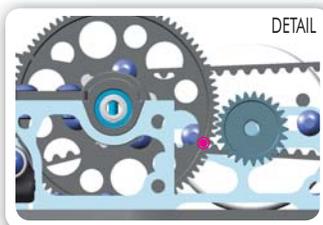


902306  
SFH M3x6

When installing the motor on the bulkhead, rotate the spur gear so the motor screw can be installed through a hole in the spur gear. See the detail image below.

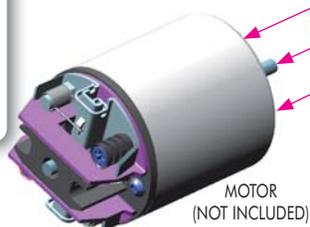
Adjust the motor so the pinion meshes with the spur gear properly. Make sure the gear mesh is not too tight.

There should be a small amount of play between the teeth of the pinion gear and spur gear.



DETAIL

Suggested to use  
3x2.5mm set screw



PINION  
(NOT INCLUDED)

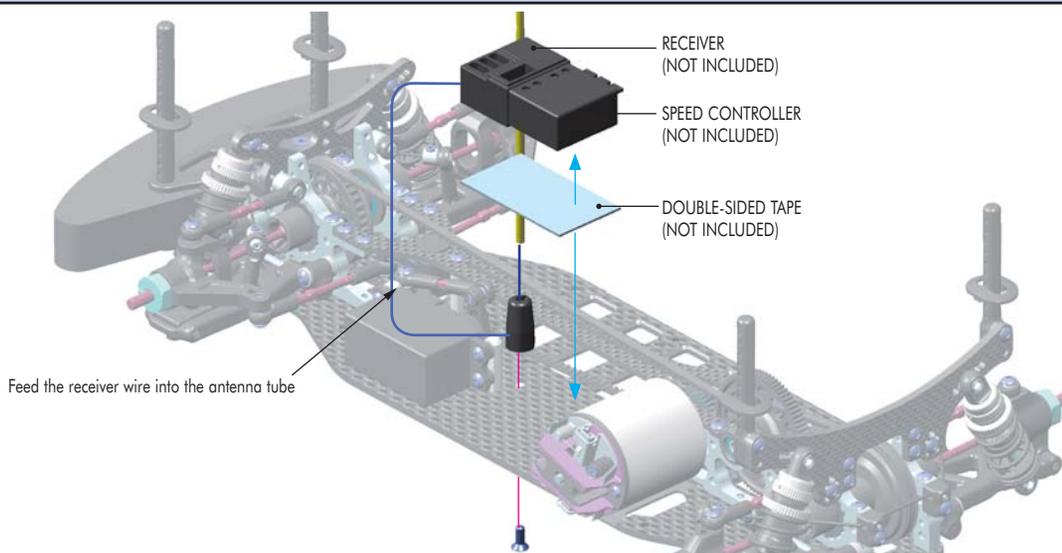
MOTOR  
(NOT INCLUDED)



GEARING ADJUSTMENT



903308  
SFH M3x8



RECEIVER  
(NOT INCLUDED)

SPEED CONTROLLER  
(NOT INCLUDED)

DOUBLE-SIDED TAPE  
(NOT INCLUDED)

Feed the receiver wire into the antenna tube

## BATTERY ASSEMBLY CONFIGURATION

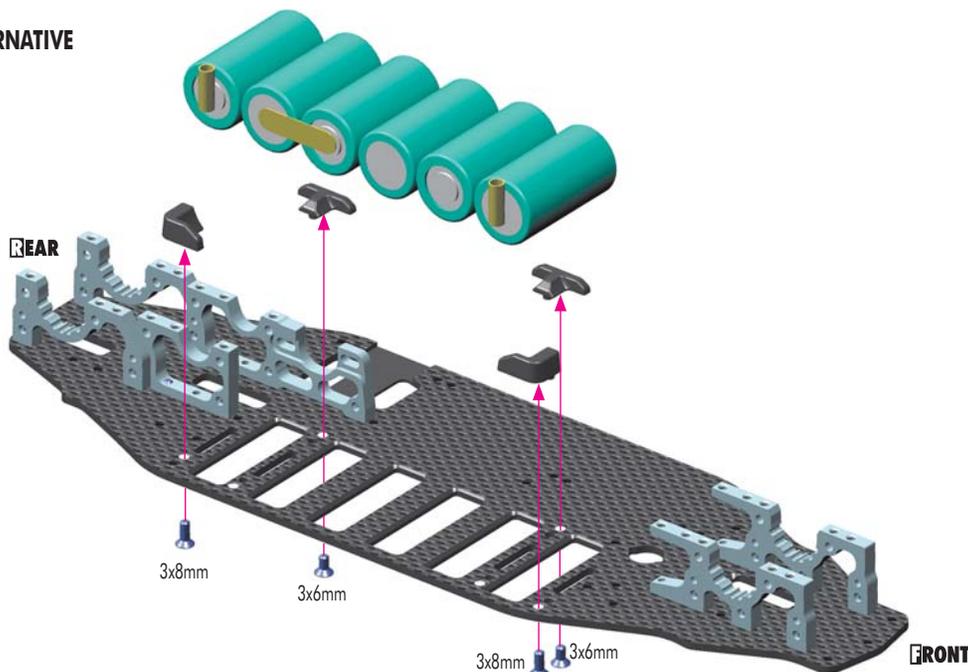


903306  
SFH M3x6



903308  
SFH M3x8

### 6-CELL ALTERNATIVE



REAR

FRONT

3x8mm

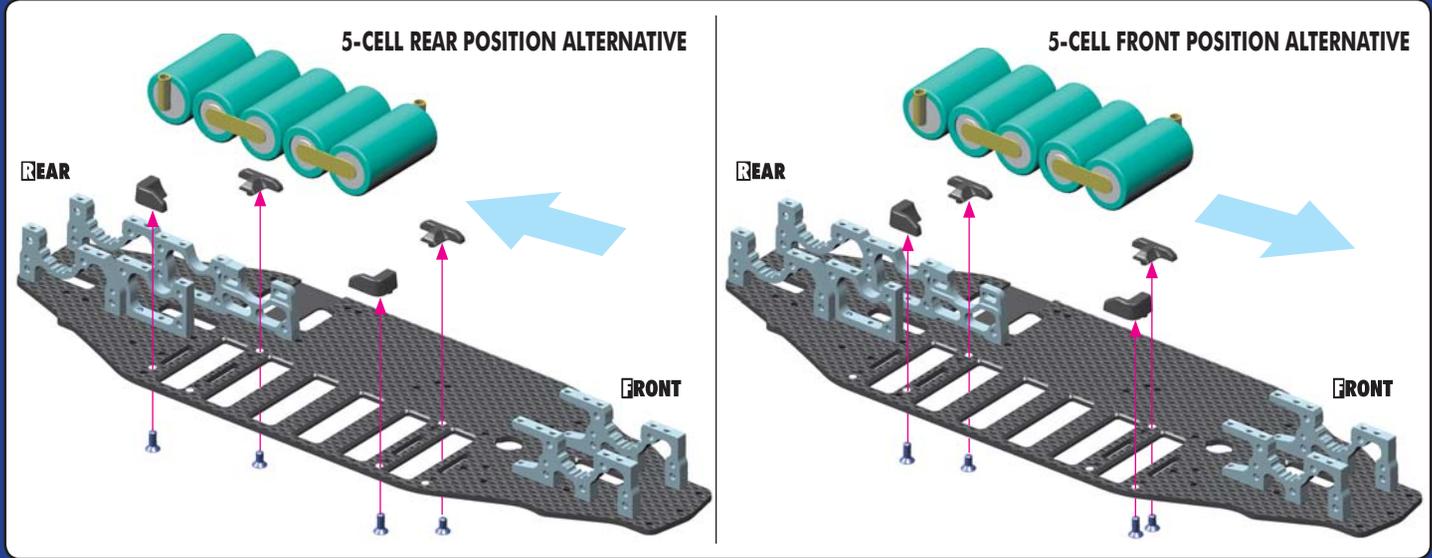
3x6mm

3x8mm

3x6mm

# 8. FINAL ASSEMBLY

## BATTERY ASSEMBLY CONFIGURATION



**4x** WHEELS & TIRES & INSERTS (NOT INCLUDED)

**WARNING!** Follow the adhesive manufacturer's instructions for proper use and safety. Wear proper eye and hand protection.

**US Foam-Spec Notice:**

Some foam wheels may be slightly wider and may touch the front steering blocks. To avoid this, we recommend grinding the inside edge of the wheel, using a tire truer and a file. Make sure that both front tires/wheels end up being the same width, and that there are no rough edges.

Also, make sure that the front wheels and tires do not touch the steering blocks when the steering is turned, and that the wheels and tires do not touch the shocks.



We recommend using #107870 HUDY Fibre Reinforced Tape

or the optional battery holders:

#306163 XRAY Graphite Battery Holder (for 6-cell chassis)

5-CELL OR 6-CELL INLINE BATTERY PACK (NOT INCLUDED)

FIBRE TAPE (HUDY #107870) (NOT INCLUDED)

960140 N M4

Make sure the wheel nuts are very tight, so the wheels do not loosen during racing.



# SET-UP SHEET

**XRAY T2.019**

<b>RACE</b>			
<b>TRACK</b>			
<b>NAME</b>			
<b>CITY / COUNTRY</b>			
<b>CONTACT</b>			

<b>DATE</b>	TEMPERATURE / AIR °F or °C	AIR	TRACK
QUALIFYING POSITION	BEST LAPTIME / sec	FINAL POSITION	RACE LENGTH / minutes

<b>TRACK CONDITION</b>	<input type="checkbox"/> CARPET	<input type="checkbox"/> ASPHALT	
	<input type="checkbox"/> TECHNICAL	<input type="checkbox"/> MIXED	<input type="checkbox"/> FAST
<b>TRACTION</b>	<input type="checkbox"/> LOW	<input type="checkbox"/> MEDIUM	<input type="checkbox"/> HIGH

FRONT	REAR
<b>TRANSMISSION</b>	

FRONT PULLEY	REAR PULLEY
<b>DIFF.</b>	
<input type="checkbox"/> LOOSE <input type="checkbox"/> MEDIUM <input type="checkbox"/> TIGHT	<input type="checkbox"/> LOOSE <input type="checkbox"/> MEDIUM <input type="checkbox"/> TIGHT
ONE WAY DIFFERENTIAL	<input type="checkbox"/> YES
SOLID ONE WAY DIFF.	<input type="checkbox"/> YES
SOLID AXLE	<input type="checkbox"/> YES
<b>MIDDLE ONE WAY PULLEY</b>	
FIXED <input type="checkbox"/> ONE-WAY <input type="checkbox"/>	

PINION / T	SPUR GEAR / T
FINAL DRIVE RATIO	ROLLOUT

FRONT		REAR	
<input type="checkbox"/> ALU	<input type="checkbox"/> PLASTIC	<input type="checkbox"/> ALU	<input type="checkbox"/> PLASTIC
<b>SHOCKS</b>			
<b>XRAY SPRINGS</b>			
#308393	Super Soft	<input type="checkbox"/> YELLOW	(D=1.4) 14 lb
#308384		<input type="checkbox"/> BLUE-GREEN	(D=1.5) 15 lb
#308394	Soft	<input type="checkbox"/> WHITE	(D=1.5) 17.5 lb
#308385		<input type="checkbox"/> LIGHT-BLUE	(D=1.6) 20 lb
#308395	Soft Medium	<input type="checkbox"/> BLUE	(D=1.6) 22.5 lb
#308386		<input type="checkbox"/> DARK-BLUE	(D=1.7) 25 lb
#308396	Medium	<input type="checkbox"/> VIOLET	(D=1.7) 28 lb
#308387		<input type="checkbox"/> LIGHT-PURPLE	(D=1.8) 30 lb
#308397	Medium Hard	<input type="checkbox"/> PURPLE	(D=1.8) 33 lb
#308388		<input type="checkbox"/> LIGHT-RED	(D=1.9) 35 lb
#308398	Hard	<input type="checkbox"/> RED	(D=1.9) 38 lb
#308373		<input type="checkbox"/> C 2.2	
#308374		<input type="checkbox"/> C 2.4	
#308375		<input type="checkbox"/> C 2.6	
#308376		<input type="checkbox"/> C 2.8	
#308377		<input type="checkbox"/> C 3.0	
#308378		<input type="checkbox"/> C 3.2	
#308379		<input type="checkbox"/> C 3.4	

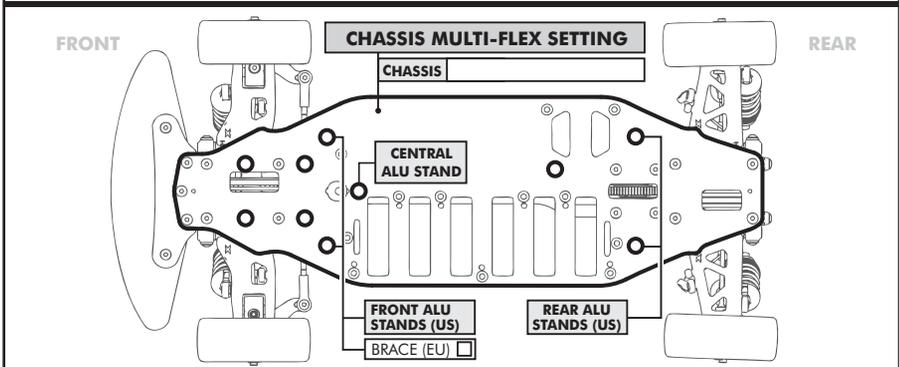
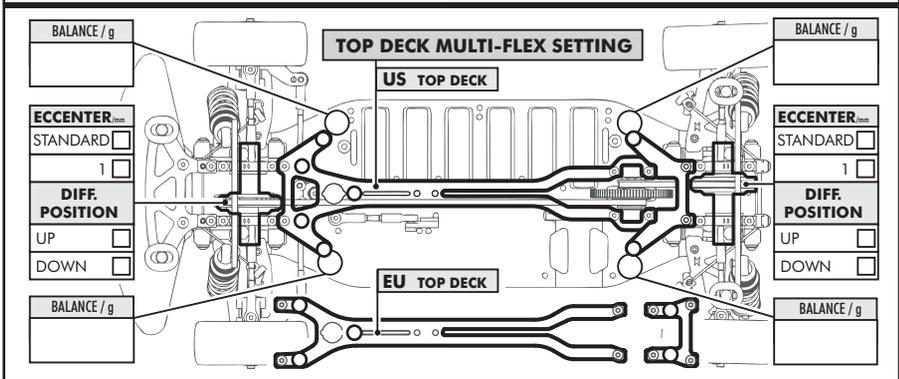
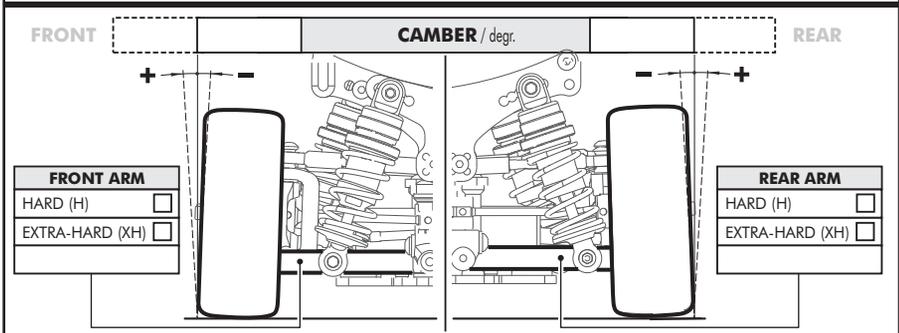
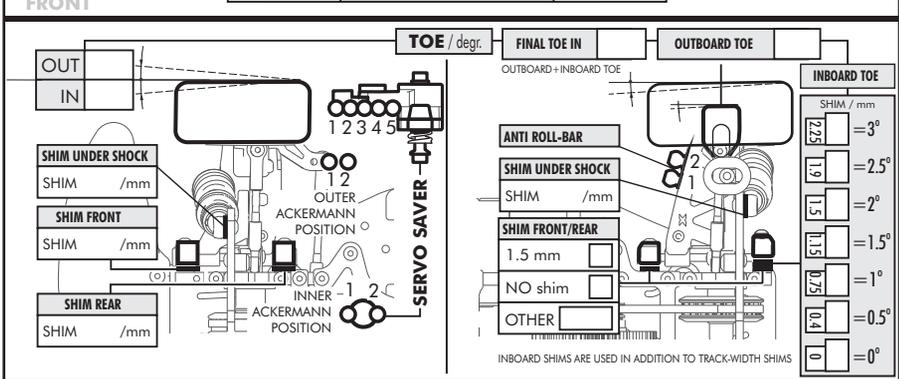
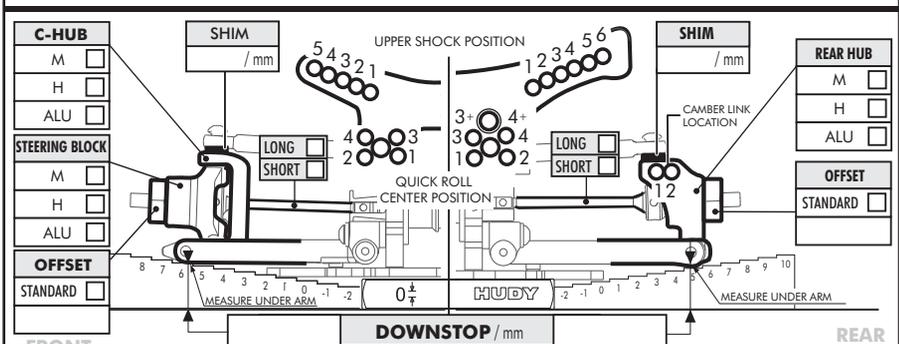
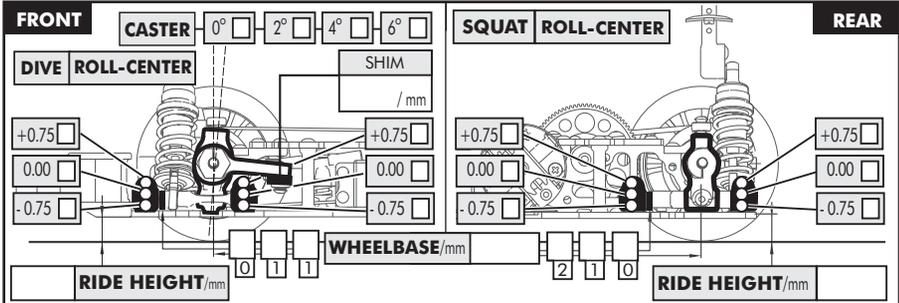
OTHER SPRING	
OIL / CST	
LENGTH / mm	
PRELOAD / mm	
REBOUND %	
<input type="checkbox"/> YES <input type="checkbox"/> NO	FOAM INSERTS <input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/> YES <input type="checkbox"/> NO	O-RING ON SHAFT <input type="checkbox"/> YES <input type="checkbox"/> NO
<input type="radio"/> OPENED <input type="radio"/> CLOSED	HOLES IN PISTON

<b>ANTI-ROLL BAR</b>	
THICKNESS / mm	THICKNESS / mm
<b>TIRES</b>	
DIAMETER / mm	
INSERTS	
ADDITIVE	

FRONT LEFT	FRONT RIGHT	REAR LEFT	REAR RIGHT
<b>TREATED AREA</b>			
<b>WHEELS</b>			
S <input type="checkbox"/> M <input type="checkbox"/> H <input type="checkbox"/>	HARDNESS		S <input type="checkbox"/> M <input type="checkbox"/> H <input type="checkbox"/>

<b>MOTOR</b>	ARMATURE			
	+ SPRING -			
	+ BRUSH COMP -			
<b>ESC</b>	<b>BATTERIES</b>			
BRUSHLESS	PROGRAM	PUNCH	INITIAL BRAKE	AUTO BRAKE
<b>BODY</b>	<b>WING</b>			

<input type="checkbox"/> APPLIED	S SOFT	M MEDIUM	H HARD
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