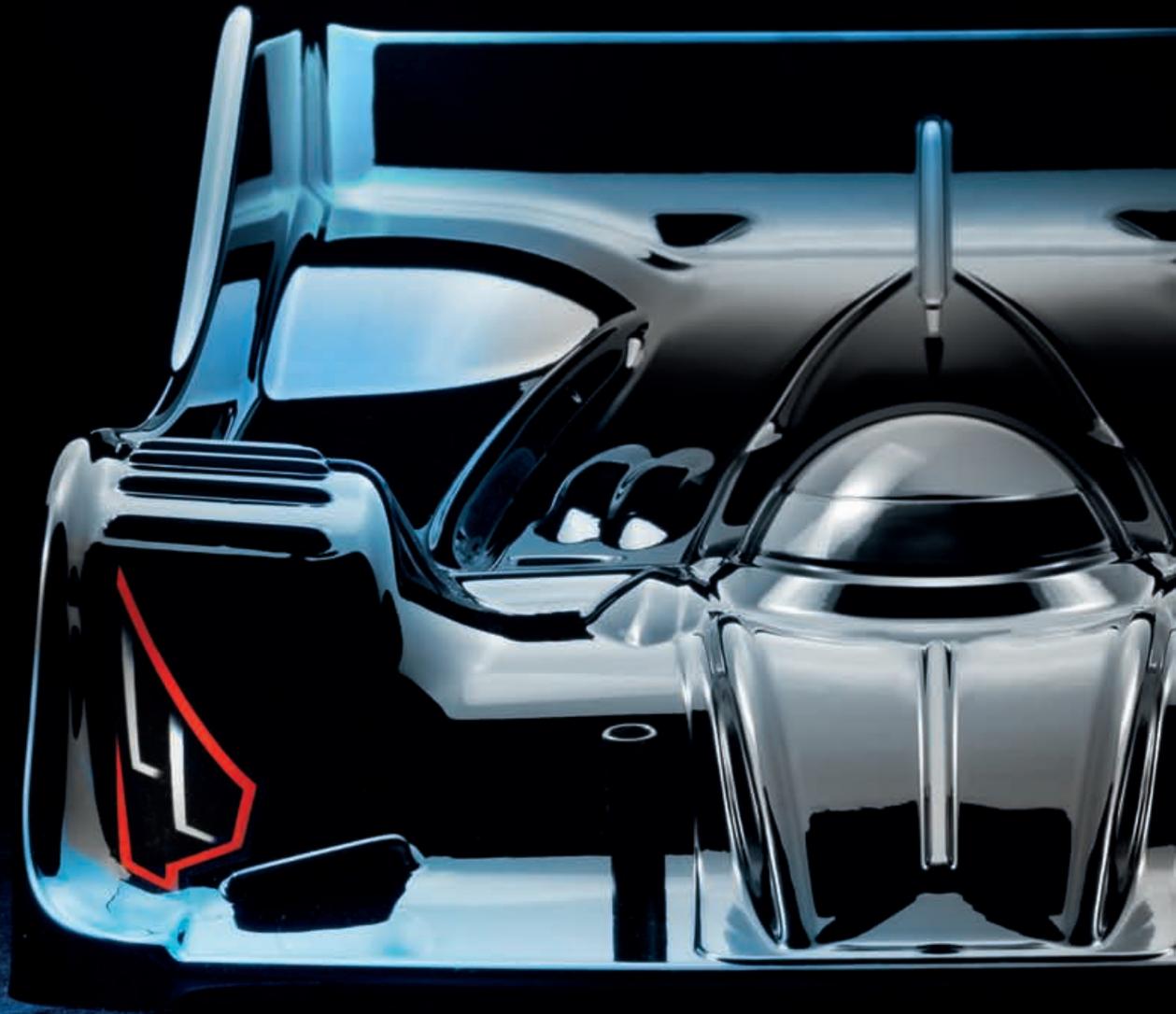


1/8 LUXURY PAN CAR

XRAY X8



INSTRUCTION MANUAL

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.

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

Read 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

K Vystavisku 6992
91101 Trenčín
Slovakia, EUROPE
Phone: 421-32-7401100
Fax: 421-32-7401109
E-mail: info@teamxray.com

XRAY USA

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

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 - 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 RC 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 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 additions 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.

TOOLS REQUIRED



Side Cutters
(HUDY #189010)



Combination Pliers
(HUDY #189020)



HUDY Ball Joint Wrench (HUDY #181110)



Pocket Hobby Knife (HUDY #188981)



Turnbuckle Wrench 3.5mm
(HUDY #181035)



Special Tool for Turnbuckles & Nuts (HUDY #181090)



HUDY Tweezers Straight (HUDY #188970)



HUDY Tweezers Curved (HUDY #188971)



Scissors (HUDY #188990)



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



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



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



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



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



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



Socket 7.0mm (#177035 - HUDY EXCLUSIVE Limited Edition)



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



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



Reamer (#107602 - HUDY EXCLUSIVE Limited Edition)



Blade Hobby Knife with Alu Handle (HUDY #188980)



Cross Wrench 5mm (HUDY #107581)



Professional Multi Tool (HUDY #183011)

EQUIPMENT INCLUDED

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

(HUDY #106210)
Premium Graphite Grease



NOT INCLUDED



Follow Set-Up Book:

To ensure that you always have access to the most up-to-date version of the Set-up Book you can download the HUDY Set-up Book from their web site at [www.hudy.net] By offering this online version instead of including a hardcopy printed version in kits, you will always be assured of having the most current updated version.



SAMPLE OF OPTIONAL PARTS

#34XXX	TYPE1	OPTION 1
#34XXX	TYPE2	OPTION 2
#34XXX	TYPE	INCLUDED
#34XXX	TYPE3	OPTION 3

XRAY offers wide range of optional tuning parts which are listed in a table like this. Please refer to the exploded view of each main section to verify which part is included in the kit while all other parts are available only as an optional part and must be purchased separately.

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:

341132

STYLE A - indicates parts that are included in the bag marked for the section.

341130

STYLE B - indicates parts that are included in the box.

345001

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

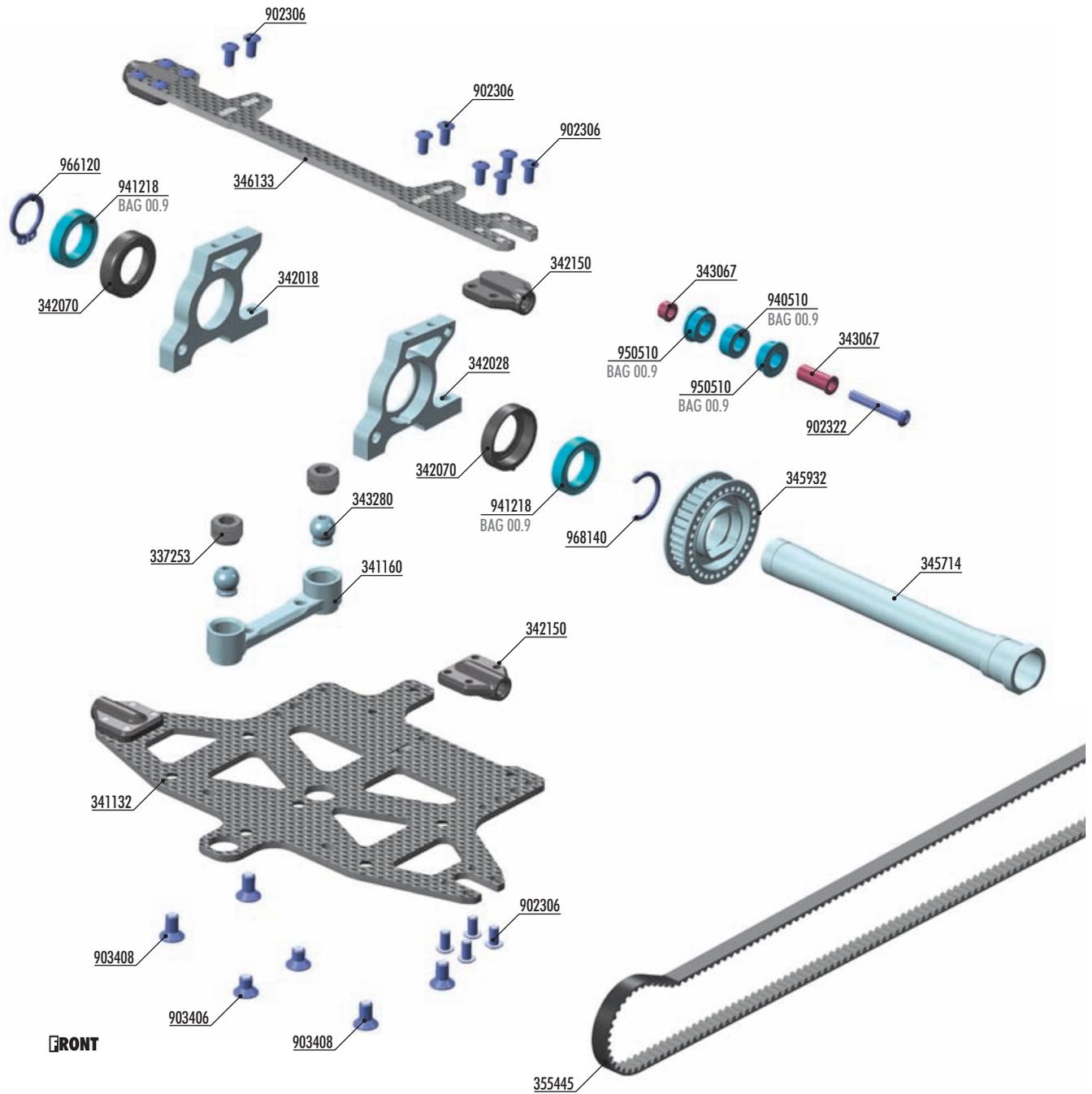
346132

STYLE D - indicates parts that are optional.

EQUIPMENT REQUIRED

<p>Transmitter & Receiver</p>	<p>Speed Controller</p>	<p>Steering Servo</p>	<p>Battery Charger</p>	<p>LiPo Battery Pack</p>
<p>Electric Motor</p>	<p>Pinion Gear (HUDY #294213~25)</p>	<p>Wheels & Tires</p>	<p>Tire Truer (HUDY #102003)</p>	<p>Lexan™ Paint</p>
<p>1/8 On-road Body</p>	<p>Double-sided Tape (HUDY #107875)</p>	<p>Threadlock</p>	<p>Bearing Oil (HUDY #106230)</p>	<p>One-Way Bearing Oil (HUDY #106231)</p>
<p>Snap Ring Pliers</p>	<p>Set-up Station (HUDY #108001)</p>	<p>Support Blocks 10mm (HUDY #107702)</p>	<p>Ride Height Gauge 2~15mm (HUDY #107713)</p>	<p>Set-Up Board Lightweight (HUDY #108501)</p>

1. FRONT TRANSMISSION



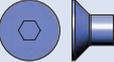
BAG

01

- 337253 COMPOSITE ADJUSTING NUT M10x1 WITH BALL CUP (4)
- 341132 X8 GRAPHITE FRONT SUSPENSION PLATE
- 341160 X8 ALU CHASSIS PIVOT HOLDER - HARD COATED - SWISS 7075 T6
- 342018 X8 ALU LOWER BULKHEAD FRONT - RIGHT - SWISS 7075 T6
- 342028 X8 ALU LOWER BULKHEAD FRONT - LEFT - SWISS 7075 T6
- 342070 COMPOSITE SET OF BUSHINGS (2)
- 342150 X8 COMPOSITE SUSPENSION BALL JOINT ADAPTER (2)
- 343067 X8 STEEL BUSHING SHORT & LONG
- 343280 HARD STEEL PIVOT BALL 8MM (2)
- 345445 LOW FRICTION DRIVE BELT SIDE 6.0 x 699MM
- 345714 X8 ALU FRONT SHAFT WITH ONE-WAY BEARINGS - SWISS 7075 T6
- 345932 X8 ALU SIDE BELT PULLEY 32T - HARD COATED - SWISS 7075 T6
- 346133 X8 GRAPHITE FRONT UPPER SUSPENSION PLATE

- 902306 HEX SCREW SH M3x6 (10)
- 902322 HEX SCREW SH M3x22 (10)
- 903406 HEX SCREW SFH M4x6 (10)
- 903408 HEX SCREW SFH M4x8 (10)
- 940510 BALL-BEARING 5x10x4 RUBBER SEALED - OIL (2)
- 941218 BALL-BEARING 12x18x4 RUBBER SEALED - OIL (2)
- 950510 BALL-BEARING 5x10x4 FLANGED - STEEL SEALED - OIL (2)
- 966120 CH-CLIP 12 (10)
- 968140 C-CLIP 14 (10)

1. FRONT TRANSMISSION


2x 903406
 SFH M4x6

4x 903408
 SFH M4x8

TIP Tighten composite hex nuts using HUDY tool #107581.

5mm Allen

ASSEMBLY VIEW

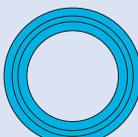
FRONT

4x6mm

4x8mm

DETAIL
Cutaway view

! Pivot Balls Move Freely.


2x 941218
 BB 12x18x4

2x **L-R**
Composite set of bushings

ECCENTRIC (INITIAL SETTING)

! NOTE ORIENTATION
Both bushings must be in same position.


1x 968140
 C14

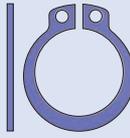
ONE-WAY LUBE (HUDY #106231)

! NOTE ORIENTATION

TIP Combination Pliers (HUDY #189040)
Install C-clip using pliers.

FRONT AXLE PULLEY 32T

FRONT ONE-WAY AXLE ONE-WAY LUBE (HUDY #106231)

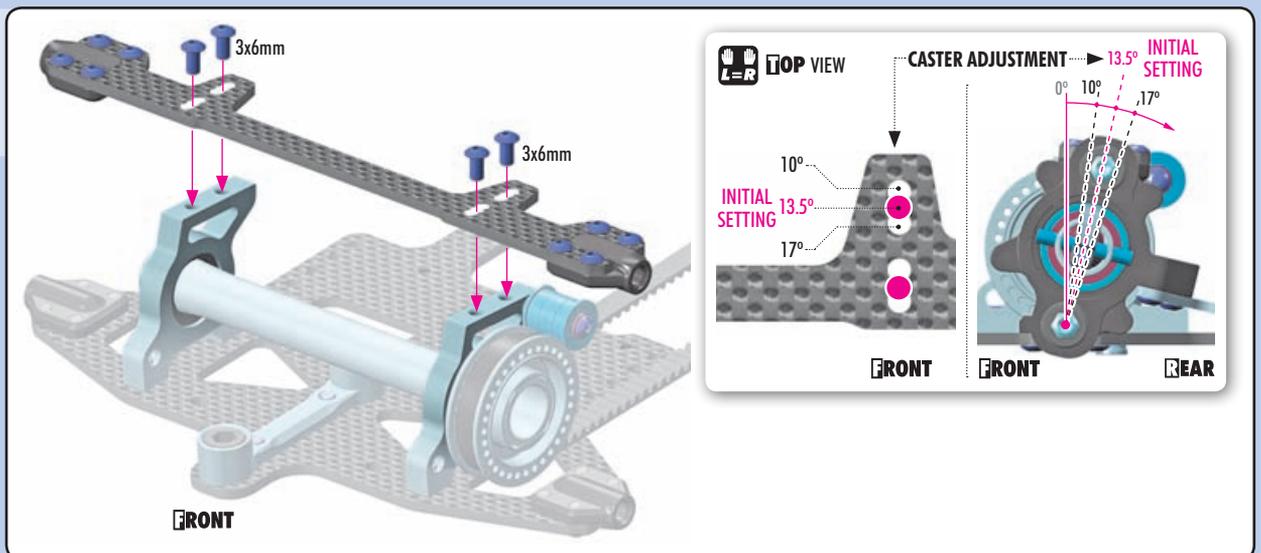
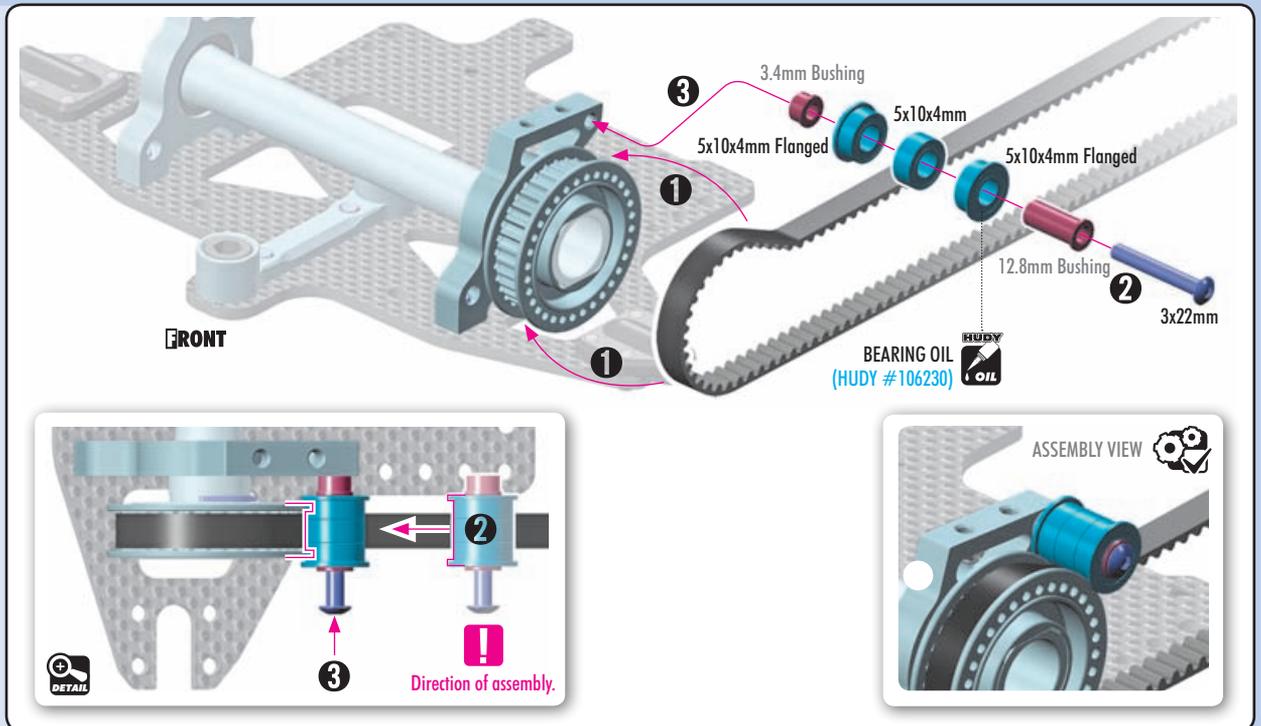
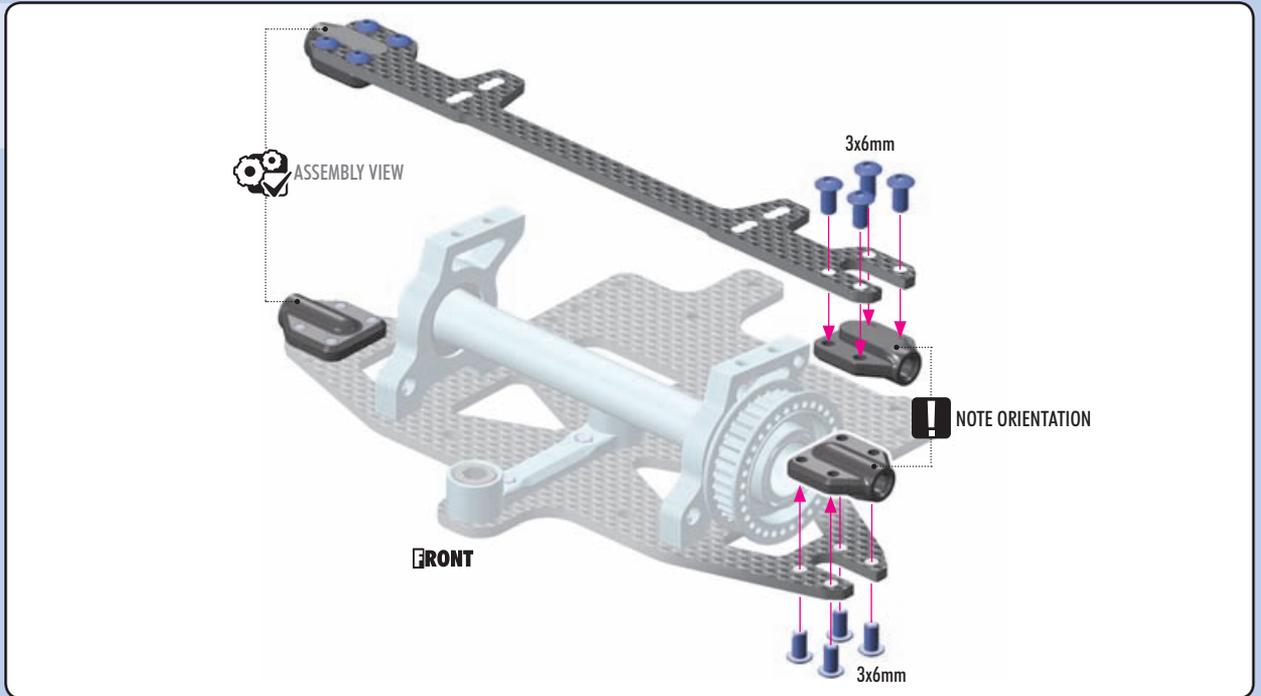

1x 966120
 CH 12

TIP Use Snap ring pliers.

FRONT

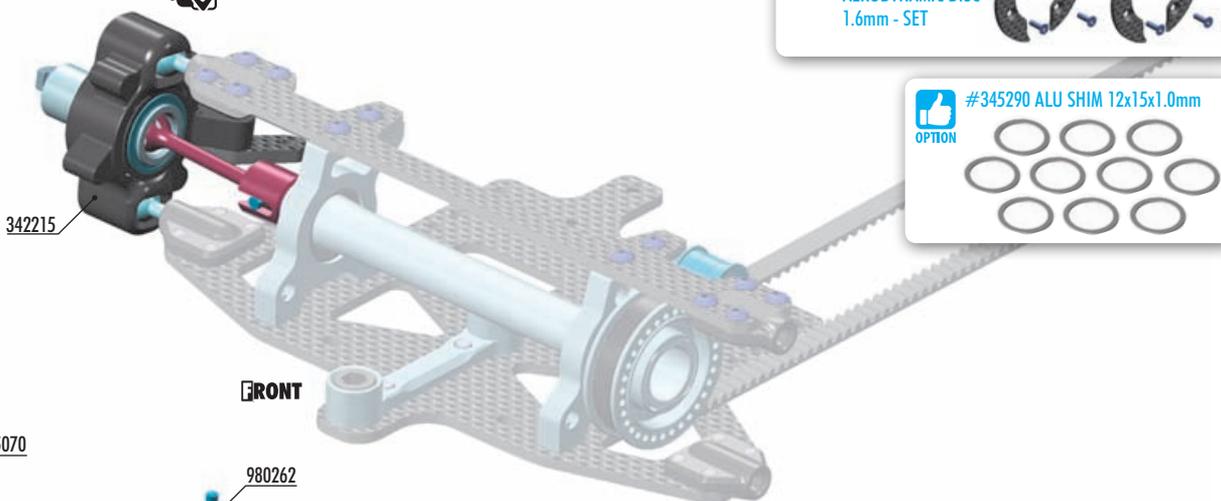
FRONT ONE-WAY AXLE ONE-WAY LUBE (HUDY #106231)

1. FRONT TRANSMISSION



2. FRONT SUSPENSION

ASSEMBLY VIEW 



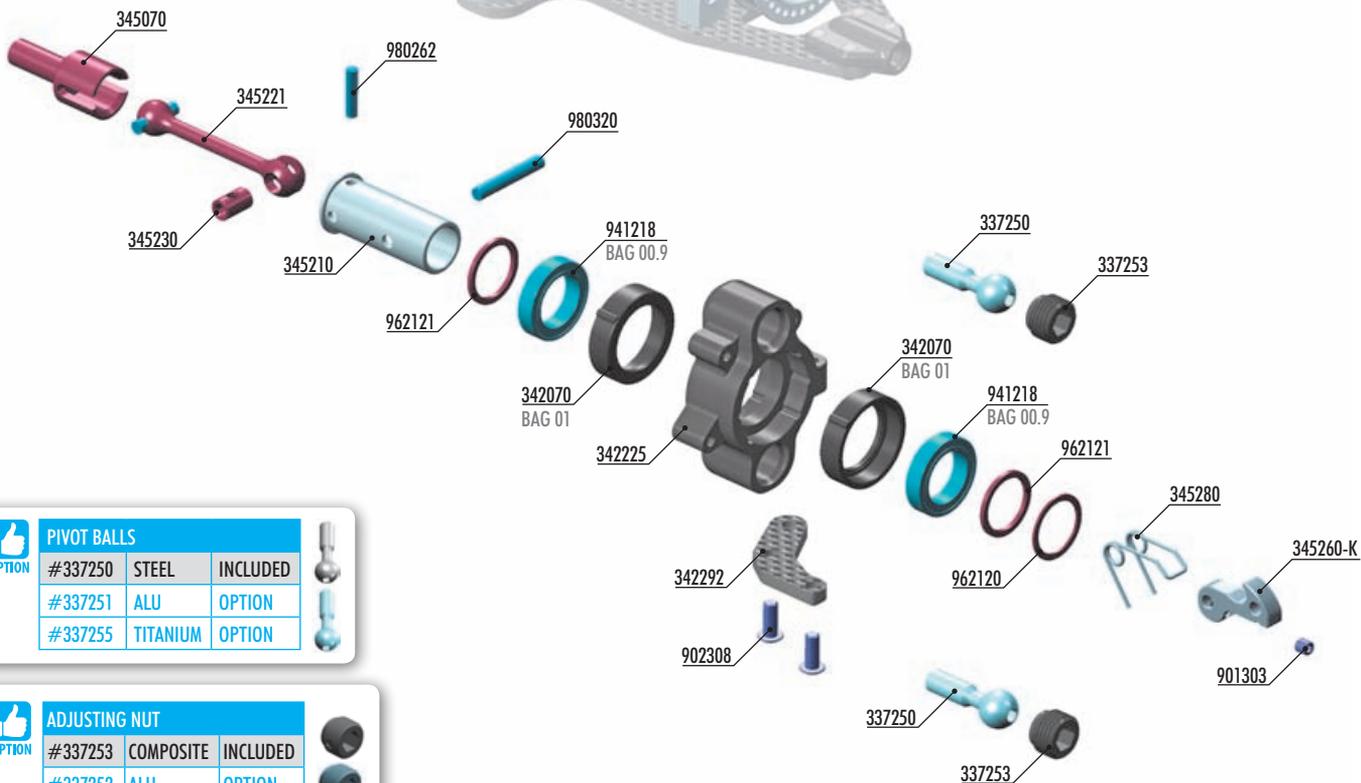
#345270
GRAPHITE FRONT AERODYNAMIC DISC 1.6mm - SET



#345290
ALU SHIM 12x15x1.0mm



FRONT



PIVOT BALLS

#	MATERIAL	STATUS	IMAGE
#337250	STEEL	INCLUDED	
#337251	ALU	OPTION	
#337255	TITANIUM	OPTION	

ADJUSTING NUT

#	MATERIAL	STATUS	IMAGE
#337253	COMPOSITE	INCLUDED	
#337252	ALU	OPTION	

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

STEERING BLOCKS

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

#980320-T TITAN PIN 3x20 (2)



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



BAG

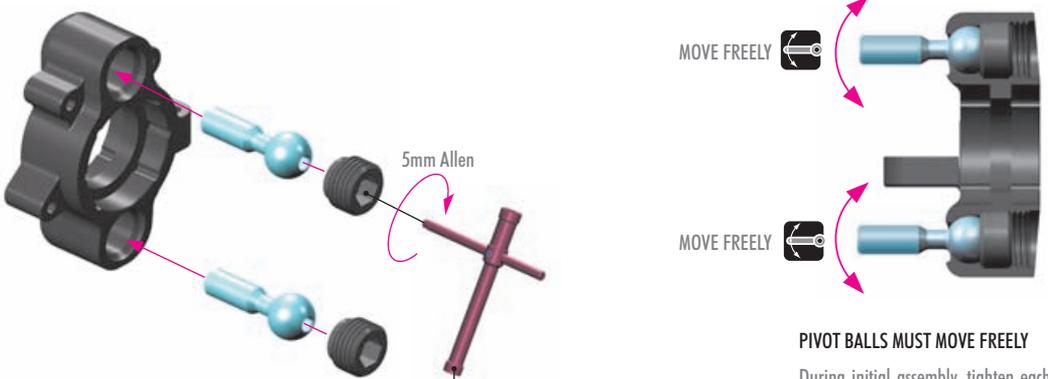
02

- 337250 STEEL PIVOT BALL 8.4 MM (2)
- 337253 COMPOSITE ADJUSTING NUT M10x1 (4)
- 342070 COMPOSITE SET OF BUSHINGS (2)
- 342215 EXTRA ECCENTRIC STEERING BLOCK FOR AERO DISC - RIGHT - MEDIUM
- 342225 EXTRA ECCENTRIC STEERING BLOCK FOR AERO DISC - LEFT - MEDIUM
- 342292 X8 GRAPHITE EXTENSION FOR STEERING BLOCK (2)
- 345070 FRONT ONE-WAY AXLE OUTDRIVE ADAPTER - HUDY SPRING STEEL™ (2)
- 345210 FRONT WHEEL AXLE - HUDY SPRING STEEL™
- 345221 FRONT CVD DRIVE SHAFT 37MM - HUDY SPRING STEEL™
- 345230 DRIVE SHAFT COUPLING - HUDY SPRING STEEL™
- 345260-K ALU FRONT WHEEL LOCK - SWISS 7075 T6 - BLACK (2)
- 345280 WHEEL SPRING (2)

- 901303 HEX SCREW SB M3x3 (10)
- 902308 HEX SCREW SH M3x8 (10)
- 941218 BALL-BEARING 12x18x4 RUBBER SEALED - OIL (2)
- 962120 WASHER S 12x15x0.5 (10)
- 962121 WASHER S 12x15x1.0 (10)
- 980262 PIN 2.5x12 (10)
- 980320 PIN 3x20 (10)

2. FRONT SUSPENSION

2x 



5mm Allen

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

MOVE FREELY

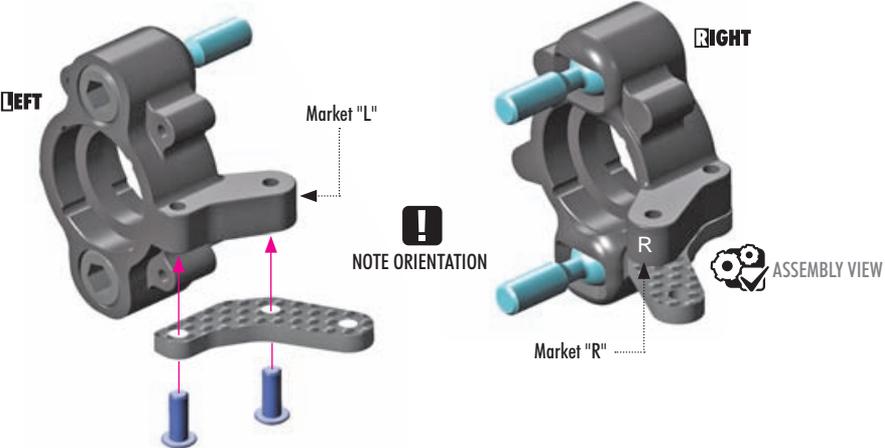
MOVE FREELY

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.



2x 



LEFT

Market "L"

RIGHT

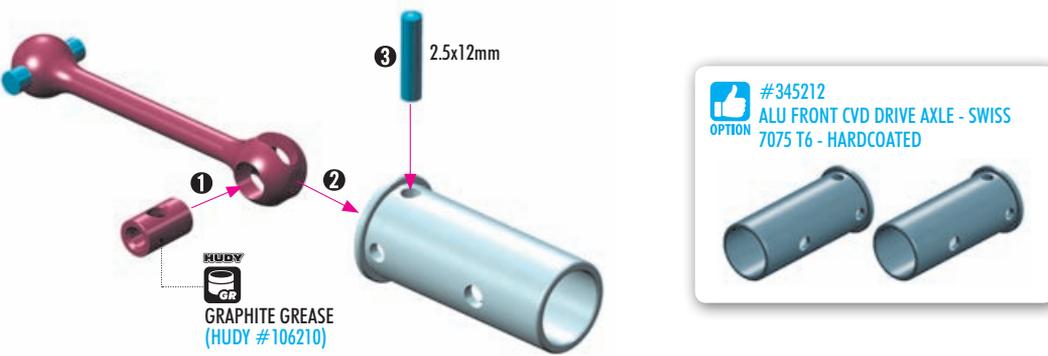
Market "R"

NOTE ORIENTATION

ASSEMBLY VIEW



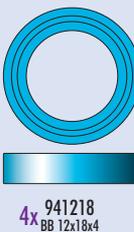
2x 



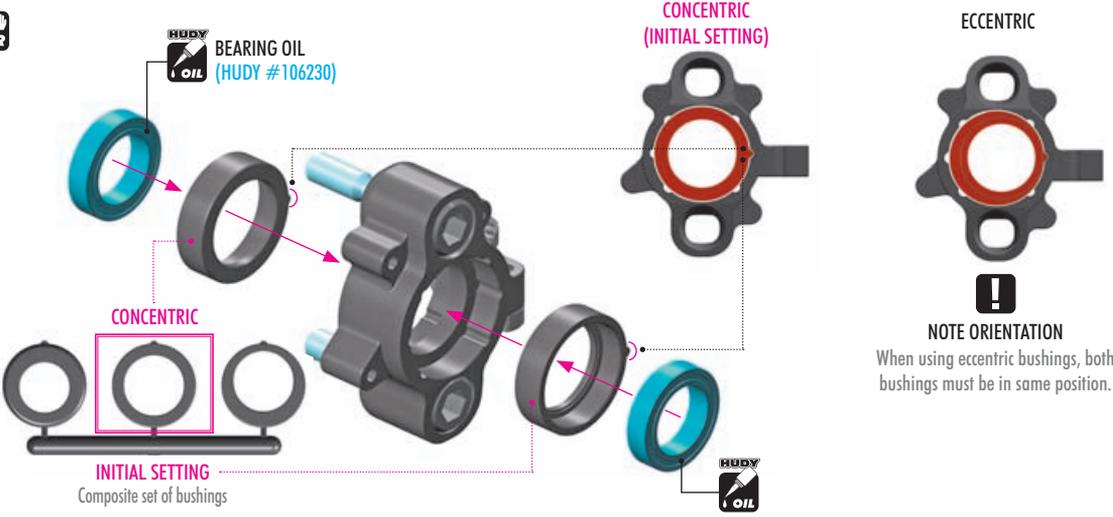
2.5x12mm

GRAPHITE GREASE (HUDY #106210)

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



2x 



BEARING OIL (HUDY #106230)

CONCENTRIC (INITIAL SETTING)

ECCENTRIC

NOTE ORIENTATION

When using eccentric bushings, both bushings must be in same position.

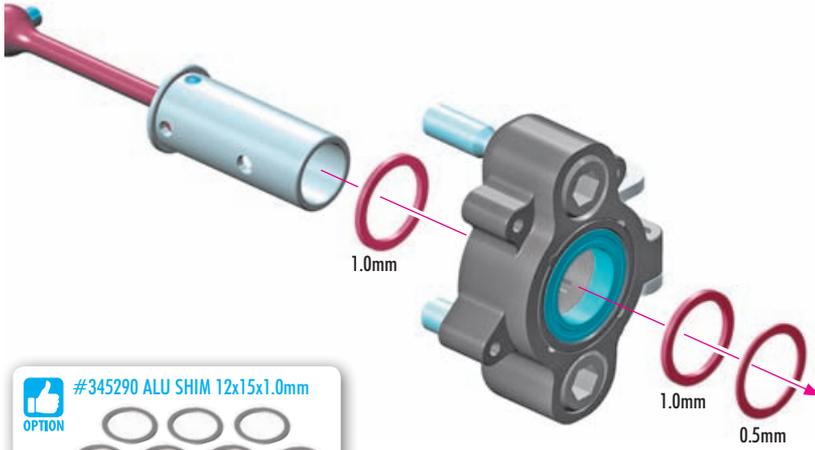
INITIAL SETTING
Composite set of bushings

2. FRONT SUSPENSION

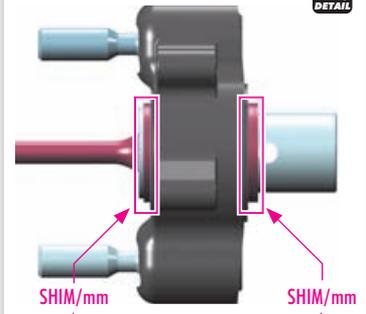


962121 962120
S 12x15x1.0 S 12x15x0.5
4x 2x

2x L=R



FRONT TRACK WIDTH SETTING



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

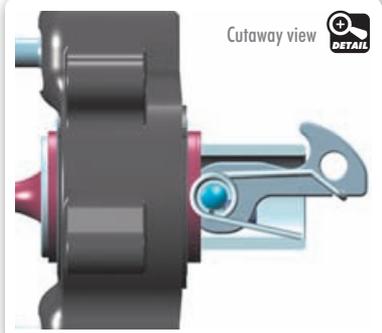
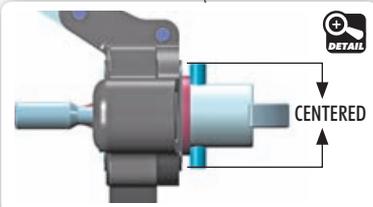
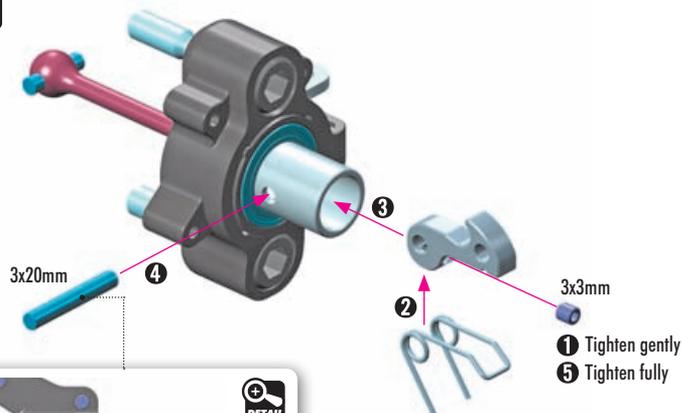


2x 901303 SB M3x3

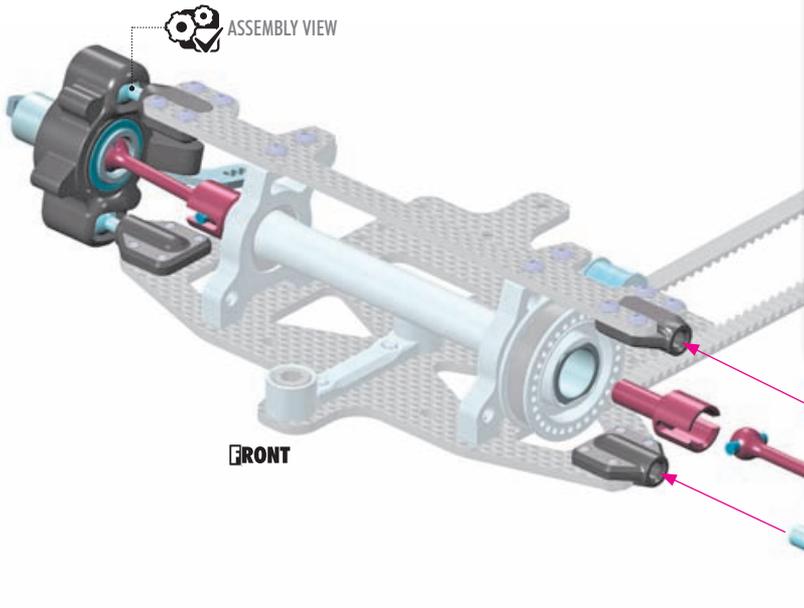


2x 980320 P 3x20

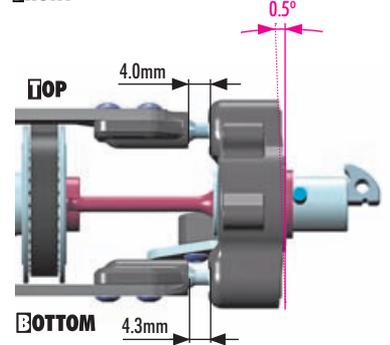
2x L=R



2x L=R

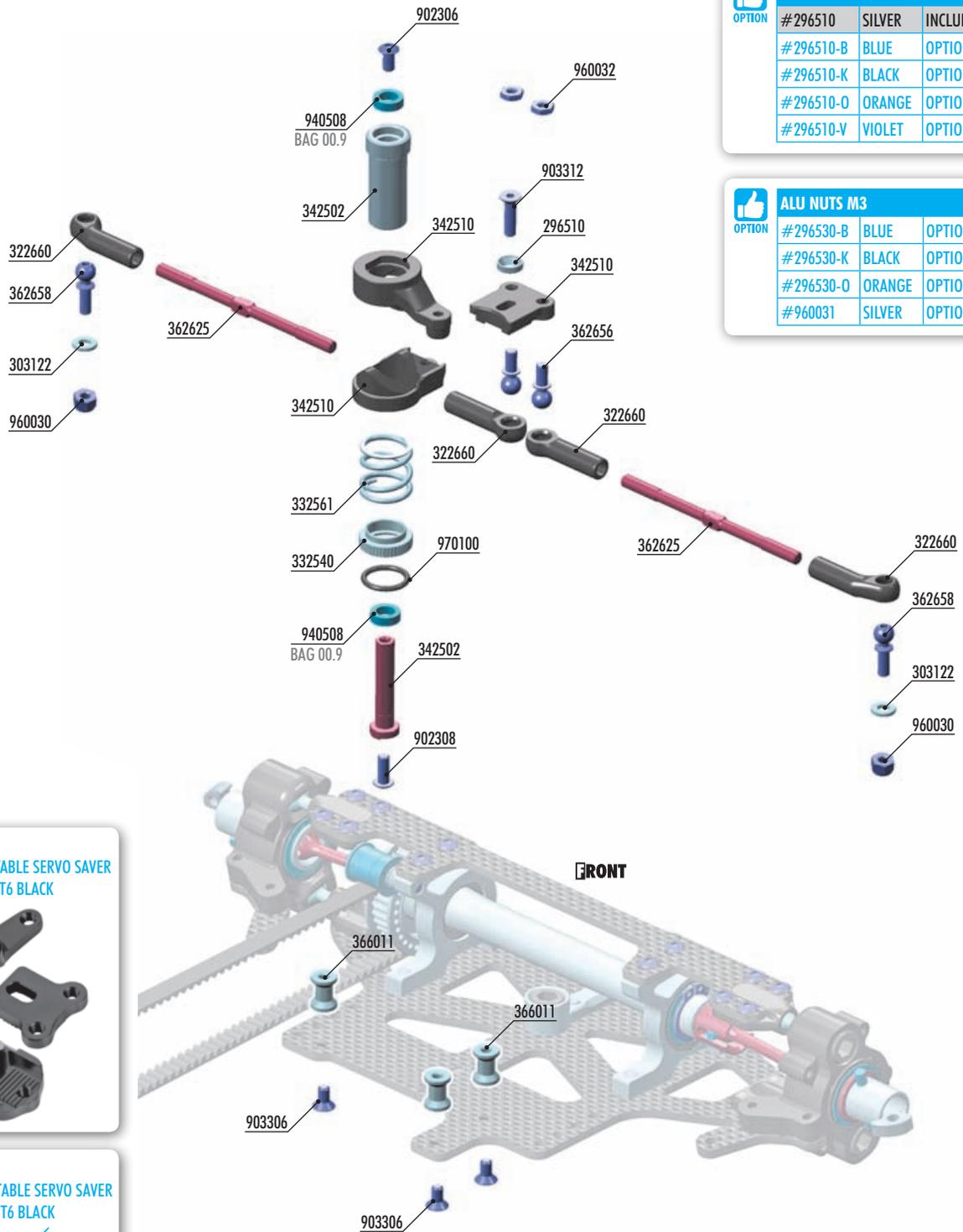


FRONT CAMBER ADJUSTMENT



*INITIAL SETTING VALUES = 0.5° CAMBER

3. SERVO SAVER



OPTION	COUNTERSUNK SHIMS		
#296510	SILVER	INCLUDED	
#296510-B	BLUE	OPTION	
#296510-K	BLACK	OPTION	
#296510-O	ORANGE	OPTION	
#296510-V	VIOLET	OPTION	

OPTION	ALU NUTS M3		
#296530-B	BLUE	OPTION	
#296530-K	BLACK	OPTION	
#296530-O	ORANGE	OPTION	
#960031	SILVER	OPTION	

OPTION #342511-K
ALU ADJUSTABLE SERVO SAVER
SWISS 7075 T6 BLACK

OPTION #342512-K
ALU ADJUSTABLE SERVO SAVER
SWISS 7075 T6 BLACK
(NARROWER)

FRONT



- 296510 ALU COUNTERSUNK SHIM (4)
- 303122 ALU SHIM 3x6x1.0MM (10)
- 322660 COMPOSITE BALL JOINT 5.4MM (12+1+1)
- 332540 ALU SERVO SAVER ADJUSTABLE NUT
- 332561 SERVO SAVER SPRING C=14
- 342502 SERVO SAVER COMPLETE SET
- 342510 COMPOSITE SERVO SAVER
- 362625 ADJUSTABLE TURNBUCKLE 55MM M3.5 L/R - HUDY SPRING STEEL™ (2)
- 362656 HARD STEEL BALL END 5.4MM WITH THREAD 6MM - NICKEL COATED (2)
- 362658 HARD STEEL BALL END 5.4MM WITH THREAD 8MM - NICKEL COATED (2)
- 366011 ALU BRACE MOUNT - SWISS 7075 T6 (2)
- 902306 HEX SCREW SH M3x6 (10)
- 902308 HEX SCREW SH M3x8 (10)
- 903306 HEX SCREW SFH M3x6 (10)
- 903312 HEX SCREW SFH M3x12 (10)
- 940508 BALL-BEARING 5x8x2.5 RUBBER SEALED - OIL (2)
- 960030 NUT M3 (10)
- 960032 NUT M3 - BLACK (10)
- 970100 O-RING 10 x 1.5 (10)

3. SERVO SAVER

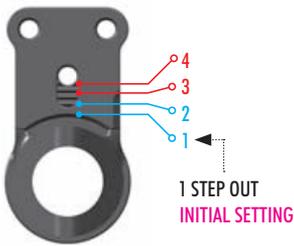


There are 4 different Ackermann settings possible with the Quick-Saver™

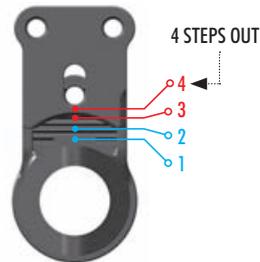
USE ONLY ACKERMANN POSITIONS 1 OR 2.

DO NOT use Ackermann positions 3 or 4; these can be used ONLY after modifying the ball joint & one-way pulley so they DO NOT touch.

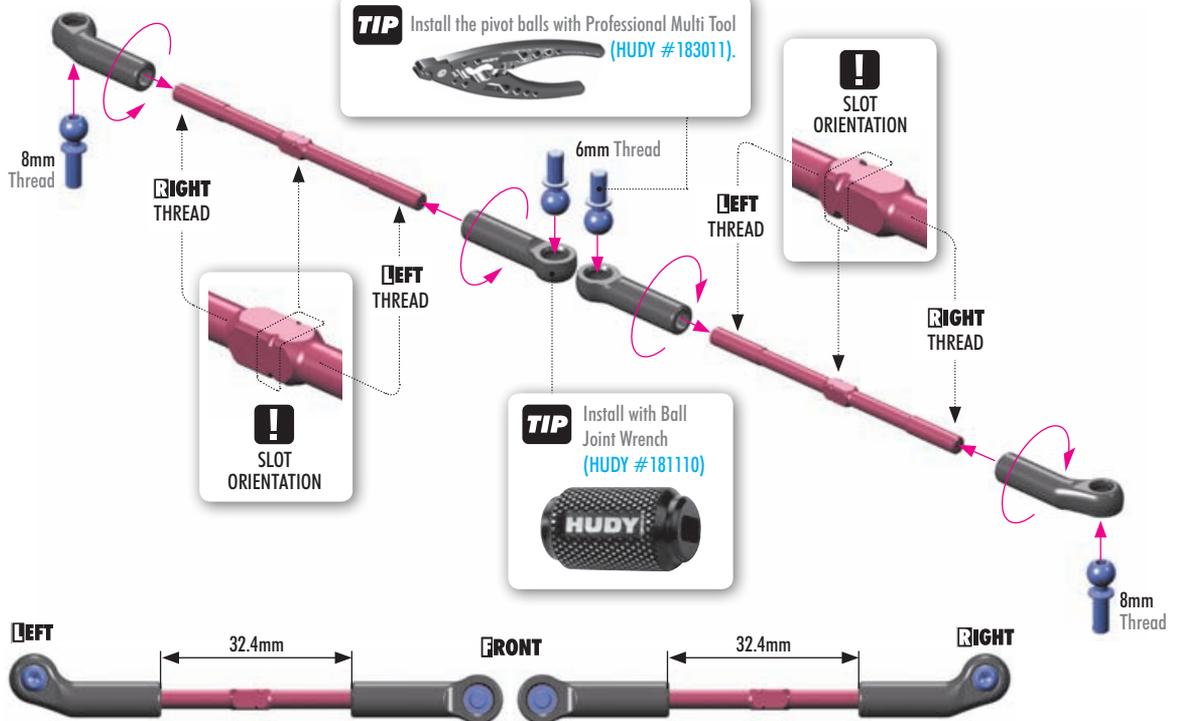
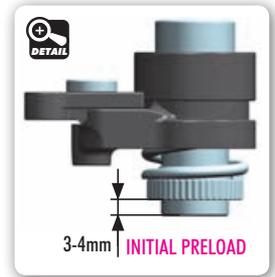
For initial Ackermann setting, use Step 1.



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.

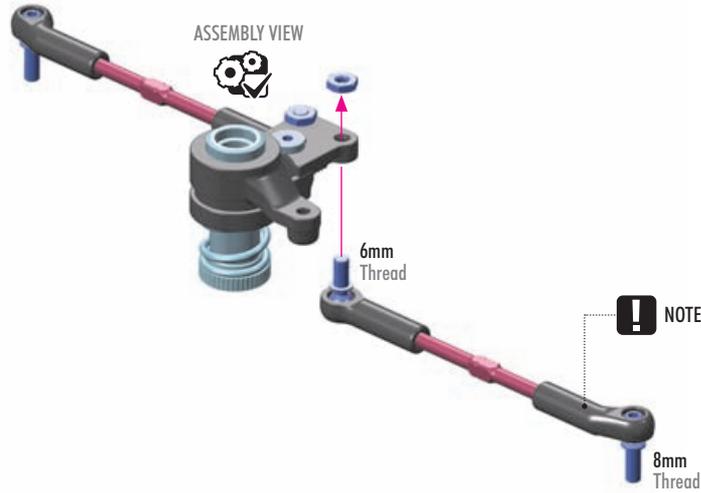


3. SERVO SAVER



2x L=R

ASSEMBLY VIEW



2x 303122 SHIM 3x6x1



1x 902306 SH M3x6



1x 902308 SH M3x8



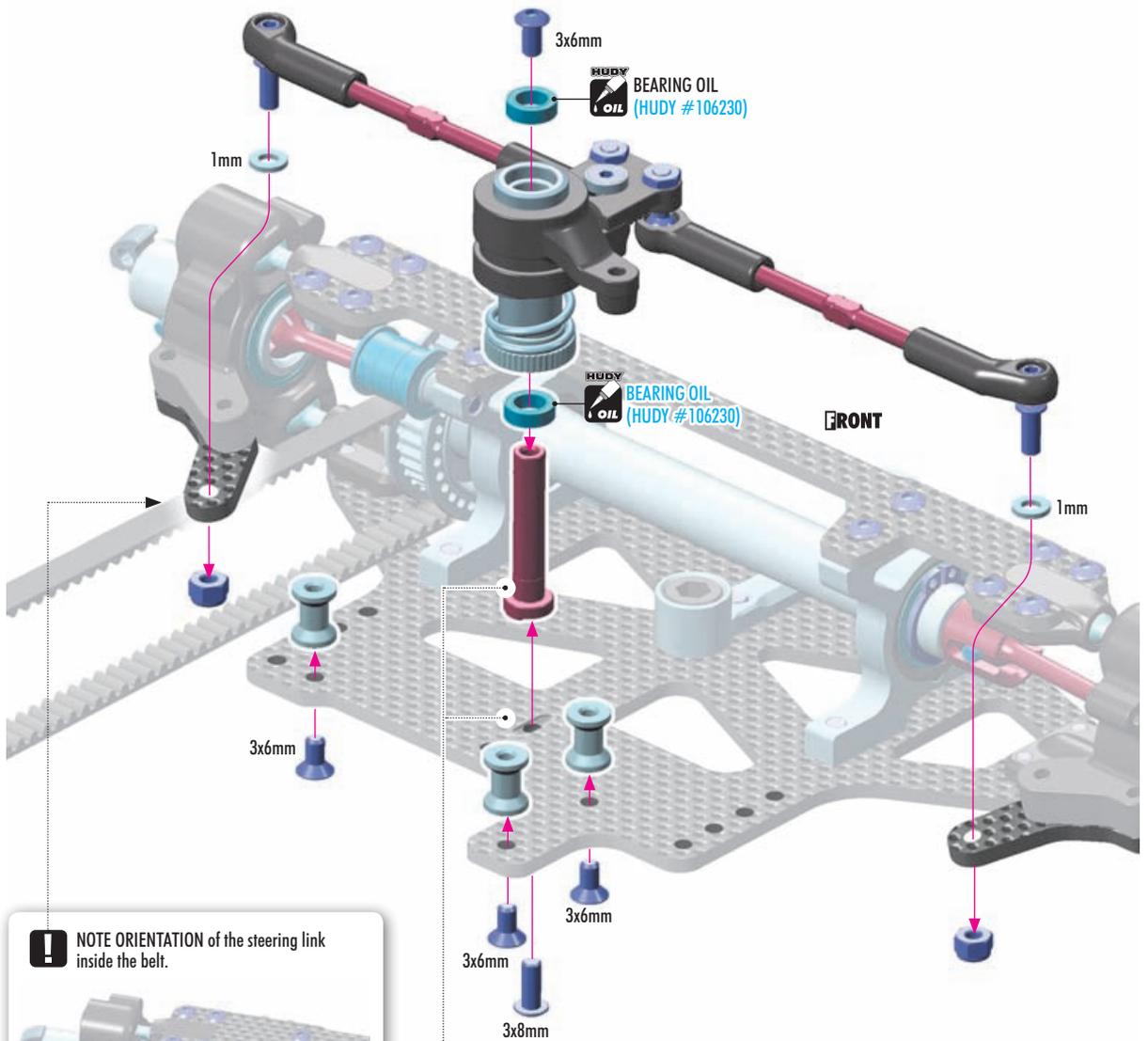
3x 903306 SFH M3x6



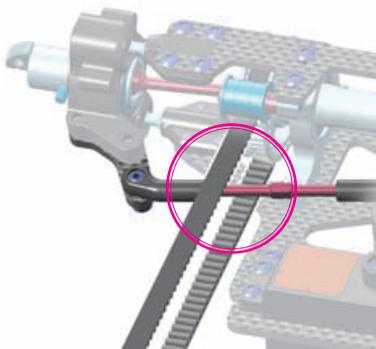
2x 940508 BB 5x8x2.5



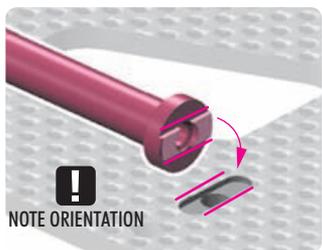
2x 960030 N M3



! NOTE ORIENTATION of the steering link inside the belt.



! NOTE ORIENTATION

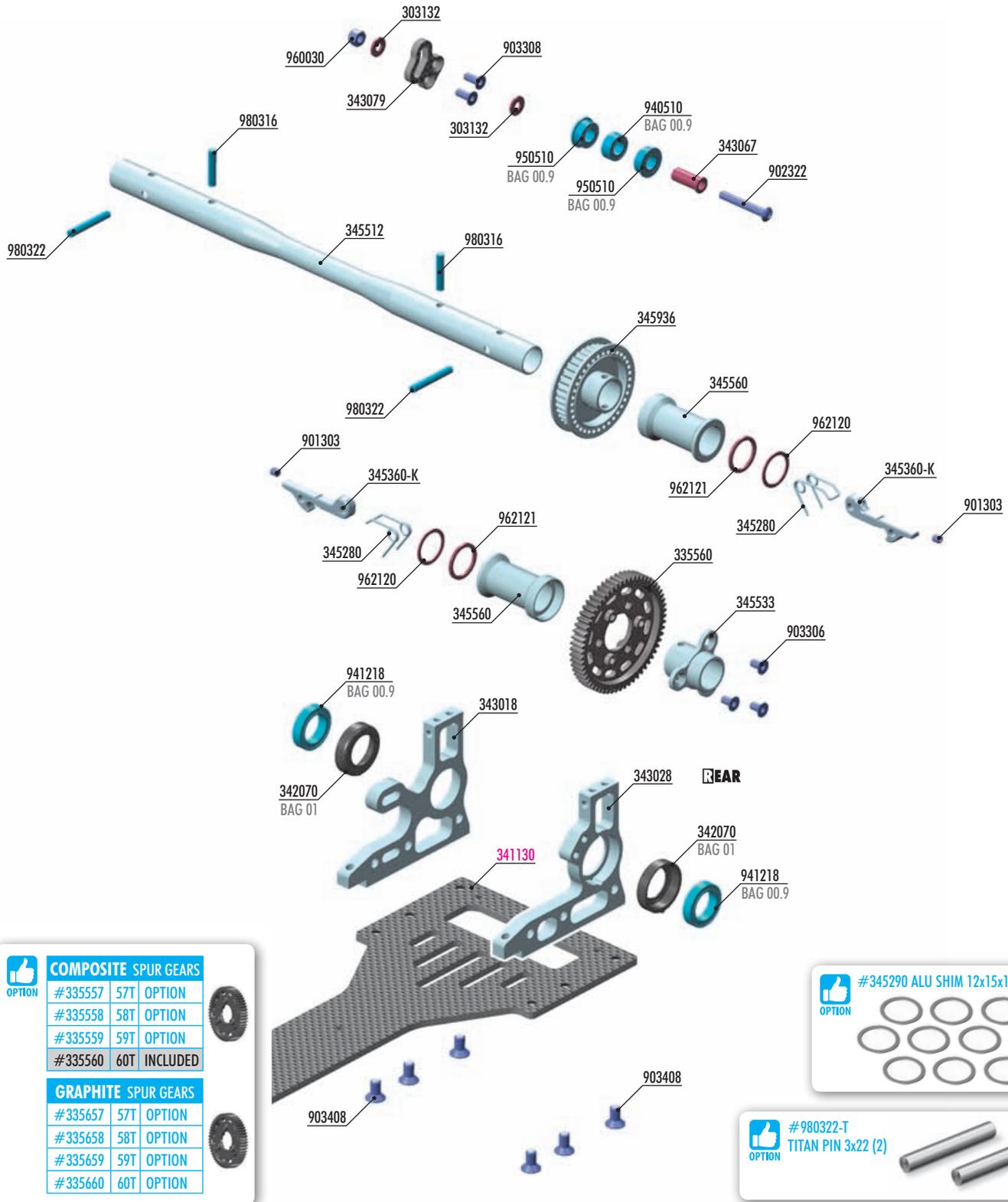


ALU NUTS M3

OPTION

#296530-B	BLUE	OPTION	
#296530-K	BLACK	OPTION	
#296530-O	ORANGE	OPTION	
#960031	SILVER	OPTION	

4. REAR TRANSMISSION



COMPOSITE SPUR GEARS		
#335557	57T	OPTION
#335558	58T	OPTION
#335559	59T	OPTION
#335560	60T	INCLUDED

GRAPHITE SPUR GEARS		
#335657	57T	OPTION
#335658	58T	OPTION
#335659	59T	OPTION
#335660	60T	OPTION

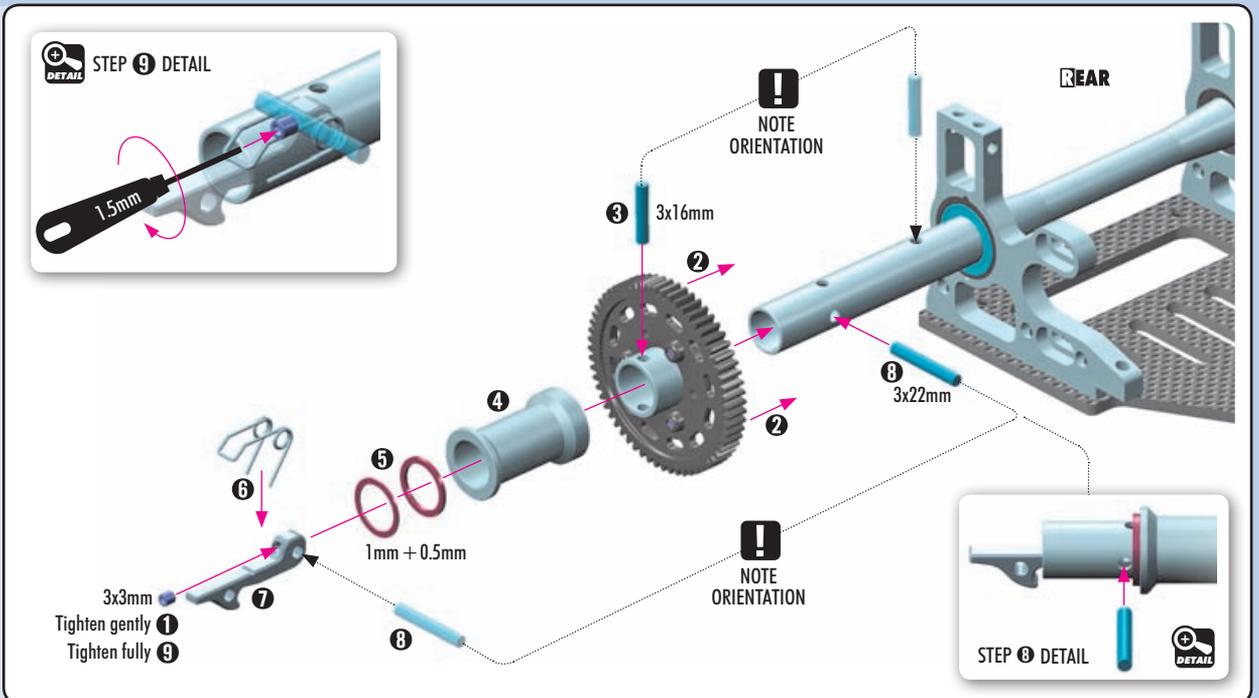
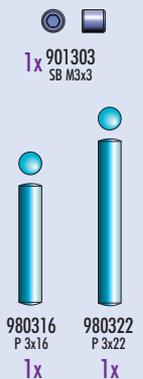
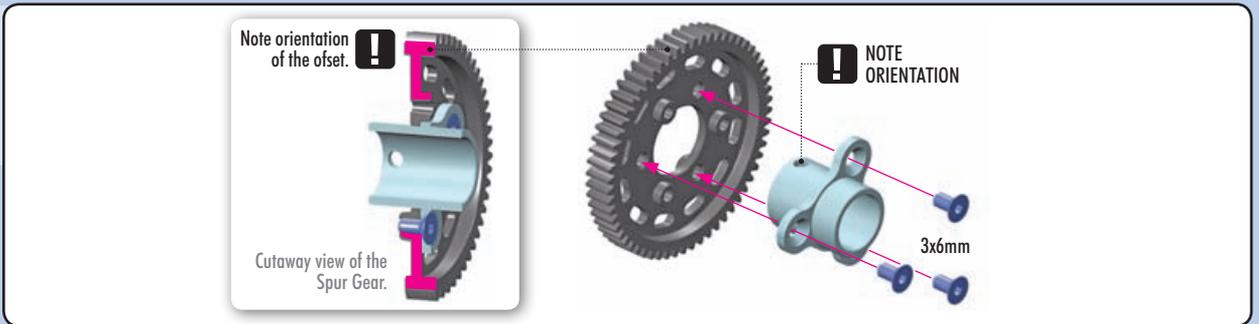
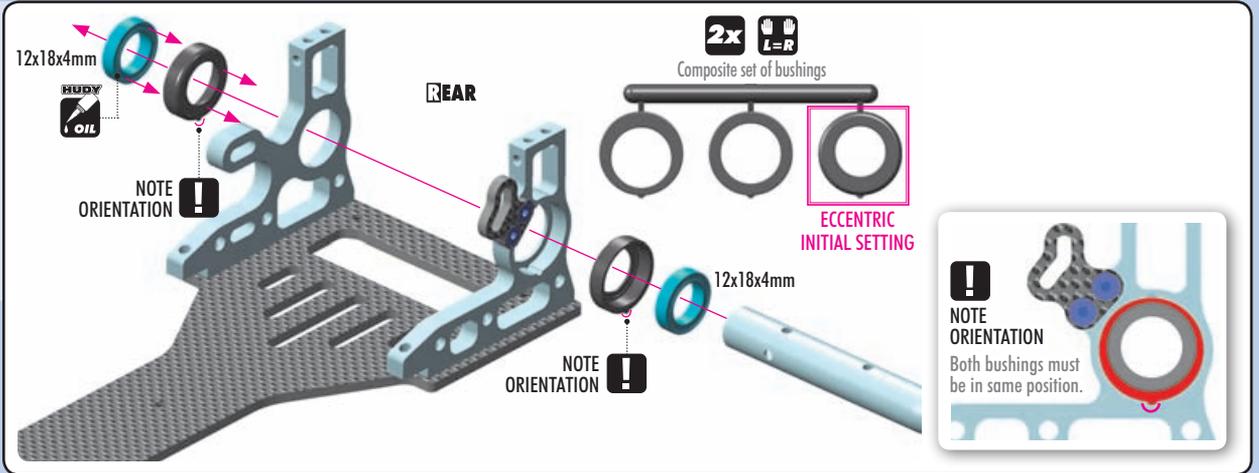
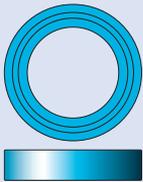
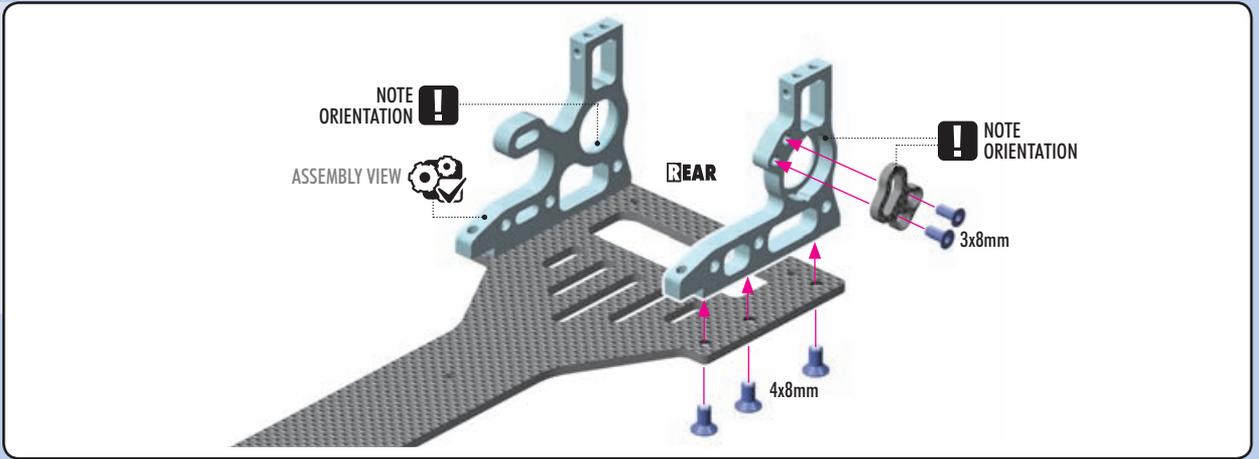
BAG
04

- 303132 STEEL SHIM FOR LOWER SUSP. HOLDER 3x7.5x0.75 (10)
- 335560 COMPOSITE GEAR 60T
- 342070 COMPOSITE SET OF BUSHINGS (2)
- 343018 X8 ALU LOWER BULKHEAD REAR - RIGHT - SWISS 7075 T6
- 343028 X8 ALU LOWER BULKHEAD REAR - LEFT - SWISS 7075 T6
- 343067 X8 STEEL BUSHING SHORT & LONG
- 343079 X8 GRAPHITE BELT TENSIONER HOLDER - SET
- 345280 WHEEL SPRING (2)
- 345360-K ALU REAR WHEEL LOCK - SWISS 7075 T6 - BLACK (2)
- 345512 X8 ALU REAR TRANSMISSION SHAFT - HARD COATED - SWISS 7075 T6
- 345533 X8 ALU DRIVE FLANGE FOR SPUR GEAR - SWISS 7075 T6
- 345560 X8 ALU MIDDLE SHAFT ADAPTER - SWISS 7075 T6
- 345936 X8 ALU SIDE BELT PULLEY 36T - HARD COATED - SWISS 7075 T6

- 901303 HEX SCREW SB M3x3 (10)
- 902322 HEX SCREW SH M3x22 (10)
- 903306 HEX SCREW SFH M3x6 (10)
- 903308 HEX SCREW SFH M3x8 (10)
- 903408 HEX SCREW SFH M4x8 (10)
- 940510 BALL-BEARING 5x10x4 RUBBER SEALED - OIL (2)
- 941218 BALL-BEARING 12x18x4 RUBBER SEALED - OIL (2)
- 950510 BALL-BEARING 5x10x4 FLANGED - STEEL SEALED - OIL (2)
- 960030 NUT M3 (10)
- 962120 WASHER S 12x15x0.5 (10)
- 962121 WASHER S 12x15x1.0 (10)
- 980316 PIN 3x16 (10)
- 980322 PIN 3x22 (10)

341130 X8 GRAPHITE CHASSIS

4. REAR TRANSMISSION



4. REAR TRANSMISSION

901303
SB M3x3
1x

980316
P 3x16
1x

980322
P 3x22
1x

962121
S 12x15x1.0
1x

962120
S 12x15x0.5
1x

REAR

NOTE ORIENTATION

NOTE ORIENTATION

STEP 8 DETAIL

STEP 9 DETAIL

Tighten gently 1
Tighten fully 9

REAR TRACK WIDTH ADJUSTMENT

ALTERNATIVE TRACK WIDTH
-3mm
(Without Shims)
L=R

SHIMS
1mm + 0.5mm

SHIMS
1mm + 0.5mm

ALTERNATIVE STANDARD TRACK WIDTH
L=R

(INITIAL SETTING)

960030
N M3
1x

902322
SH M3x22
1x

303132
SHIM 3x7.5x0.75
2x

940510
BB 5x10x4
1x

950510
BB 5x10x4
2x

TIP Install with Special Tool for Turnbuckles & Nuts (HUDY #181090)

REAR

0.75mm

0.75mm

5x10x4mm Flanged

5x10x4mm Flanged

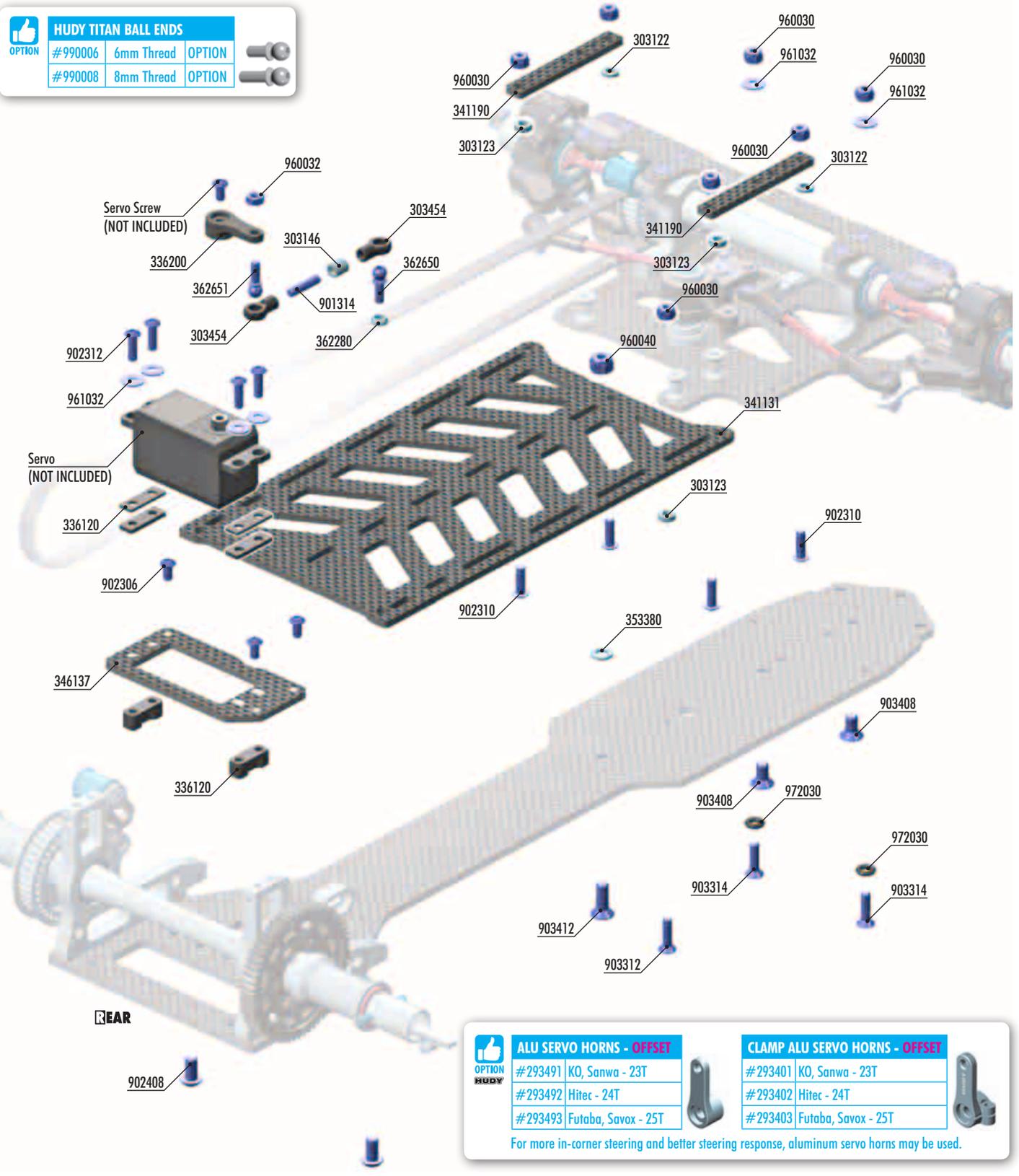
5x10x4mm

BEARING OIL (HUDY #106230)

3x22mm

(INITIAL SETTING)

5. FRONT END & BATTERY PLATE



HUDY TITAN BALL ENDS		
#990006	6mm Thread	OPTION
#990008	8mm Thread	OPTION

ALU SERVO HORNS - OFFSET	
#293491	KO, Sanwa - 23T
#293492	Hitec - 24T
#293493	Futaba, Savox - 25T

CLAMP ALU SERVO HORNS - OFFSET	
#293401	KO, Sanwa - 23T
#293402	Hitec - 24T
#293403	Futaba, Savox - 25T

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

BAG
05

- 303122 ALU SHIM 3x6x1.0MM (10)
- 303123 ALU SHIM 3x6x2.0MM (10)
- 303146 ALU BUSHING 3x5x6.0MM (2)
- 303454 COMPOSITE BALL JOINT 4.9MM - OPEN (4)
- 336120 COMPOSITE STEERING SERVO HOLDER - SET - V2
- 336200 COMPOSITE STEERING SERVO ARMS - SET
- 341131 X8 GRAPHITE BATTERY PLATE
- 341190 X8 GRAPHITE FRONT CHASSIS BRACE (2)
- 346137 X8 GRAPHITE SERVO PLATE
- 353380 ALU SHIM 4x7.5x1 (4)
- 362280 ALU CONICAL SHIM 3x6x2.0MM (10)
- 362650 BALL END 4.9MM WITH THREAD 6MM (2)
- 362651 BALL END 4.9MM WITH THREAD 8MM (2)

- 901314 HEX SCREW SB M3x14 (10)
- 902306 HEX SCREW SH M3x6 (10)
- 902310 HEX SCREW SH M3x10 (10)
- 902312 HEX SCREW SH M3x12 (10)
- 902408 HEX SCREW SH M4x8 (10)
- 903312 HEX SCREW SFH M3x12 (10)
- 903314 HEX SCREW SFH M3x14 (10)
- 903408 HEX SCREW SFH M4x8 (10)
- 903412 HEX SCREW SFH M4x12 (10)
- 960030 NUT M3 (10)
- 960032 NUT M3 - BLACK (10)
- 960040 NUT M4 (10)
- 961032 WASHER S 3.2 (10)
- 972030 SILICONE O-RING 3x2 (10)

5. FRONT END & BATTERY PLATE



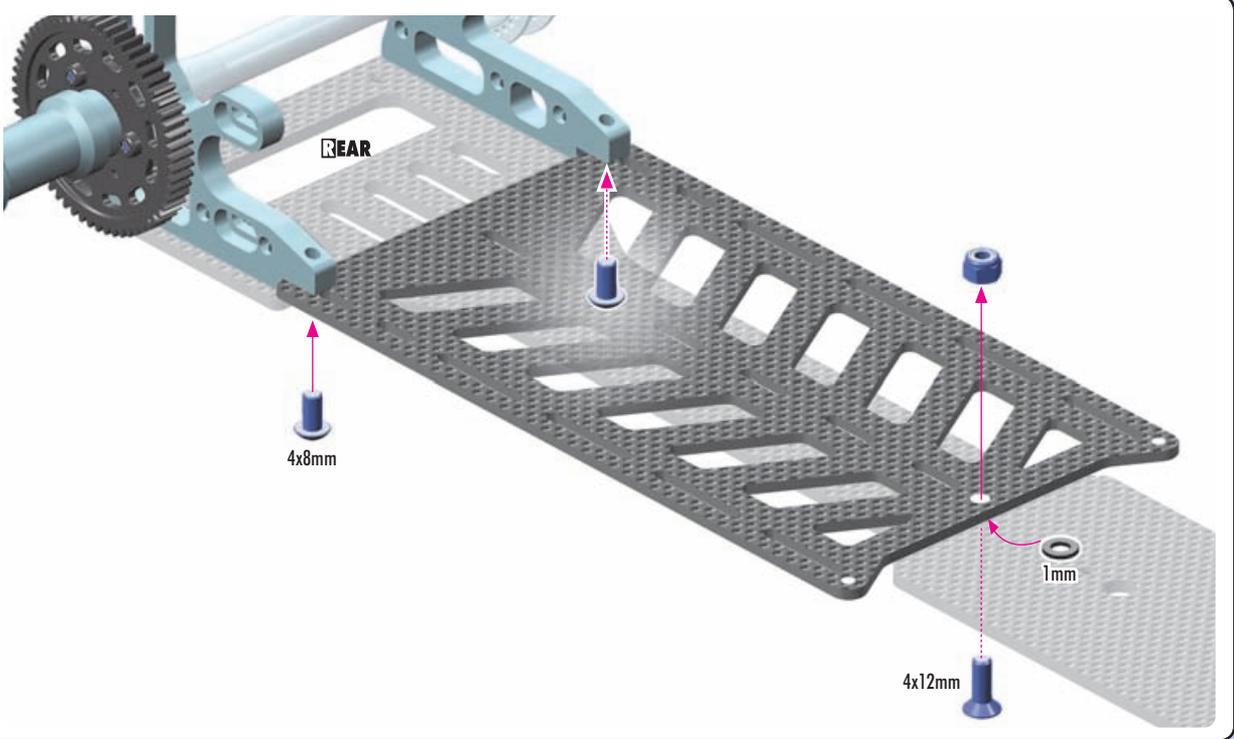
2x 902408
SH M4x8



1x 902412
SH M4x12



1x 353380
SHIM 4x7.5x1



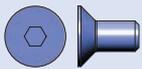
1x 303123
SHIM 3x6x2



1x 903312
SFH M3x12



2x 903314
SFH M3x14



2x 903408
SFH M4x8



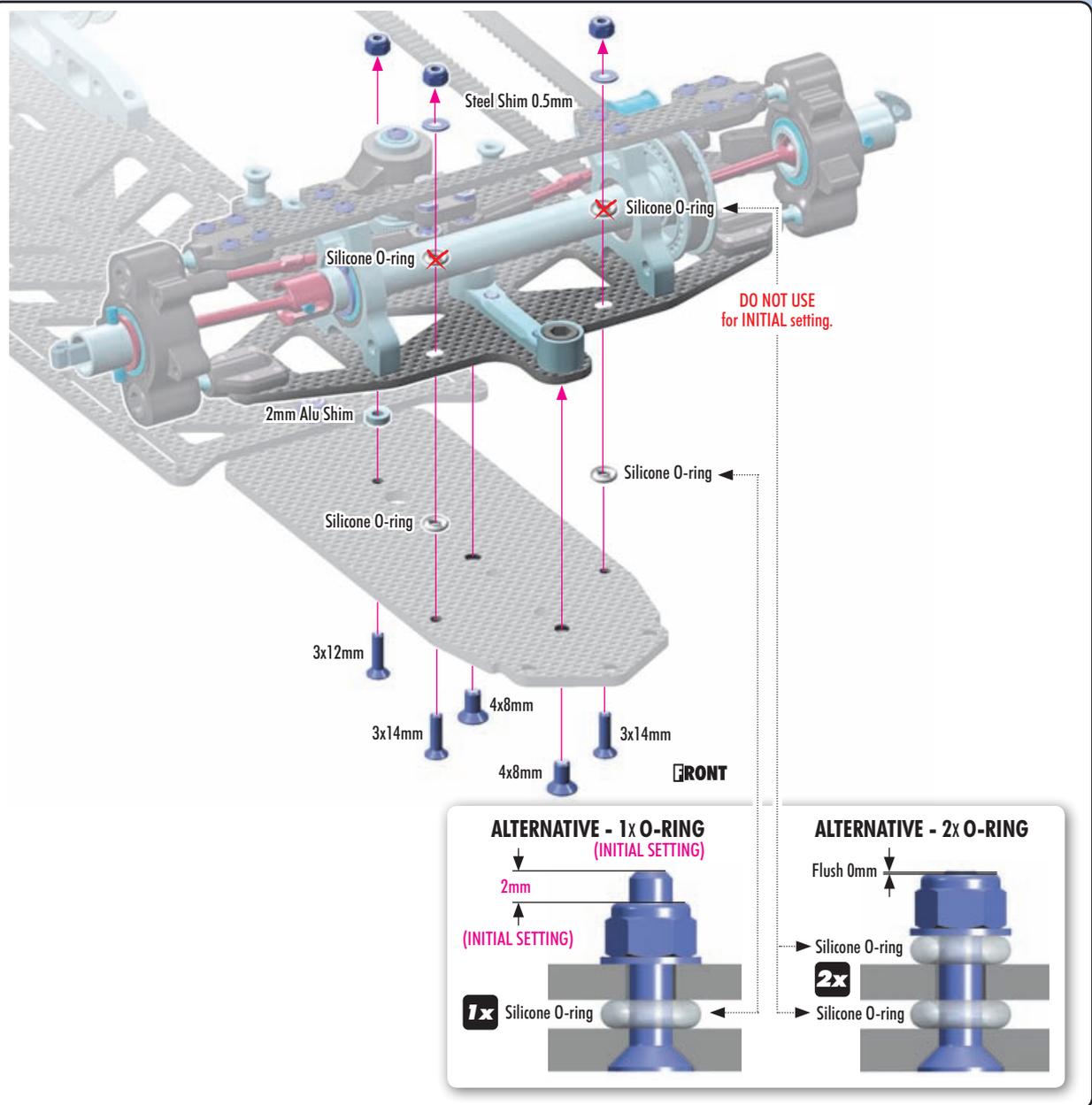
3x 960030
N M3



2x 961032
S 3.2

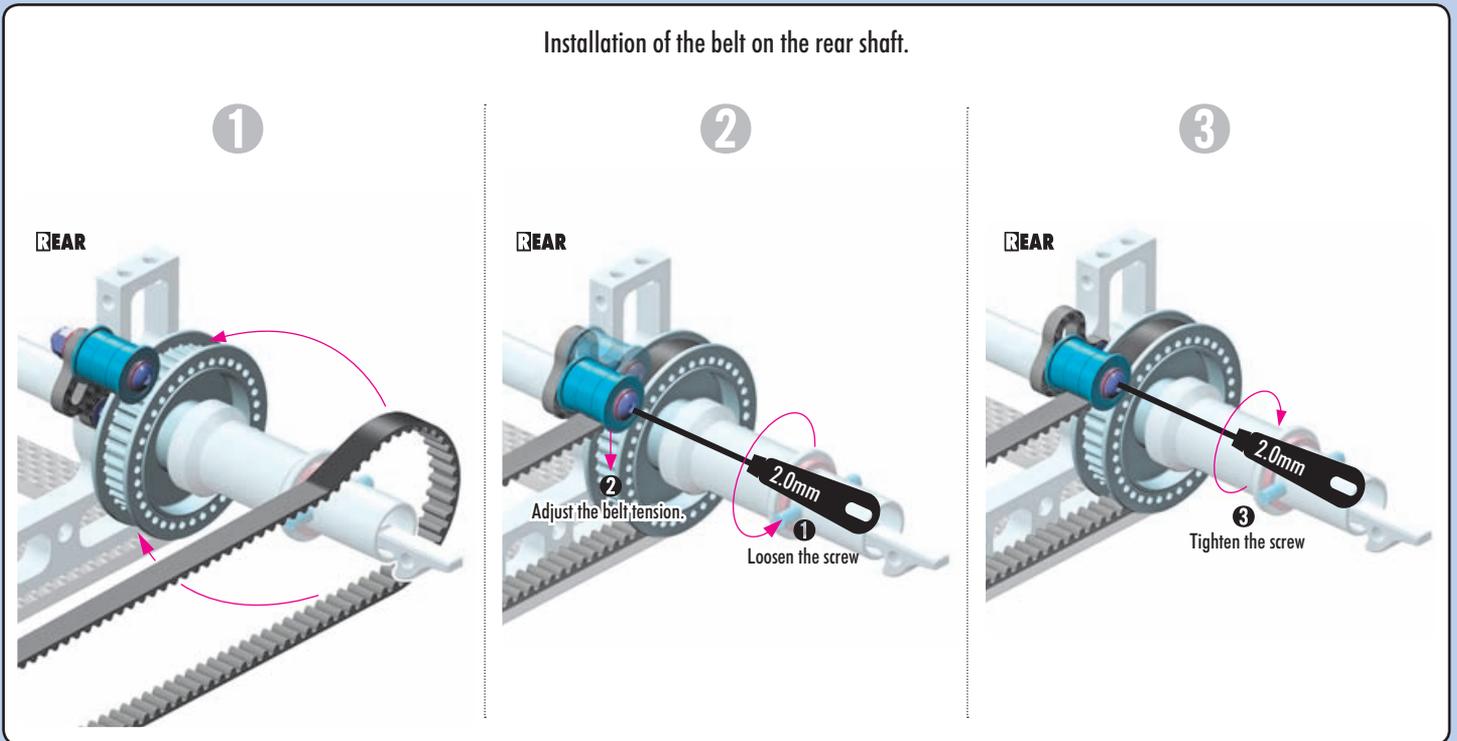


4x 972030
O 3x2



5. FRONT END & BATTERY PLATE

Installation of the belt on the rear shaft.



2x 303122
SHIM 3x6x1



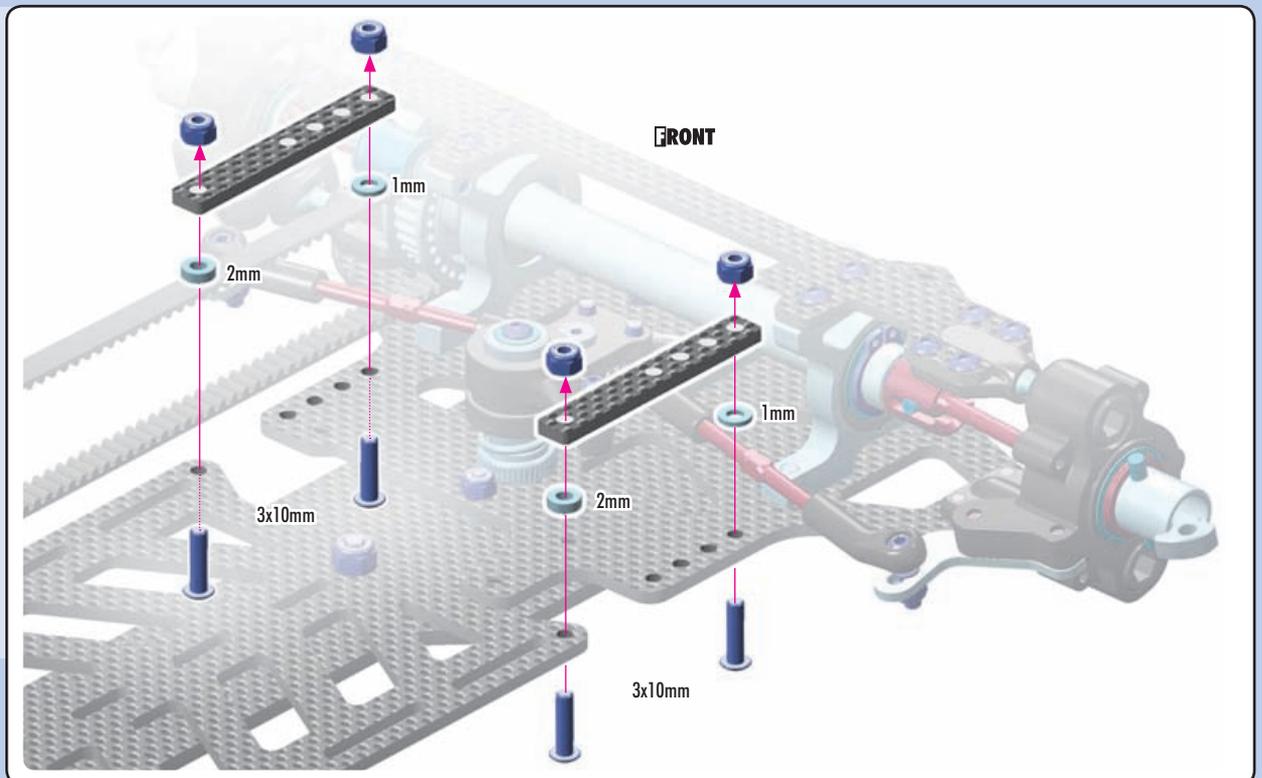
2x 303123
SHIM 3x6x2



4x 902310
SH M3x10



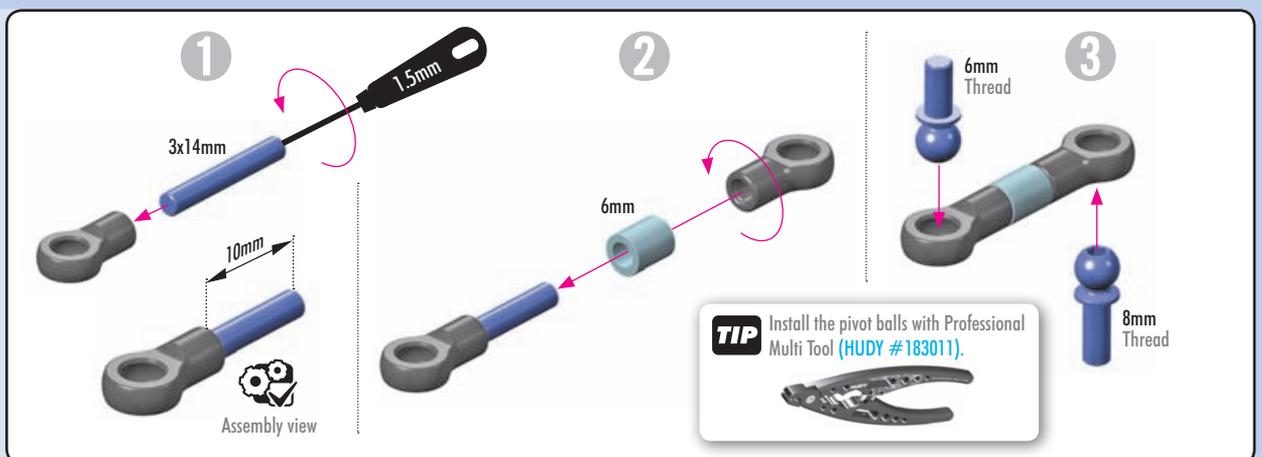
3x 960030
N M3



1x 303146
SHIM 3x5x6

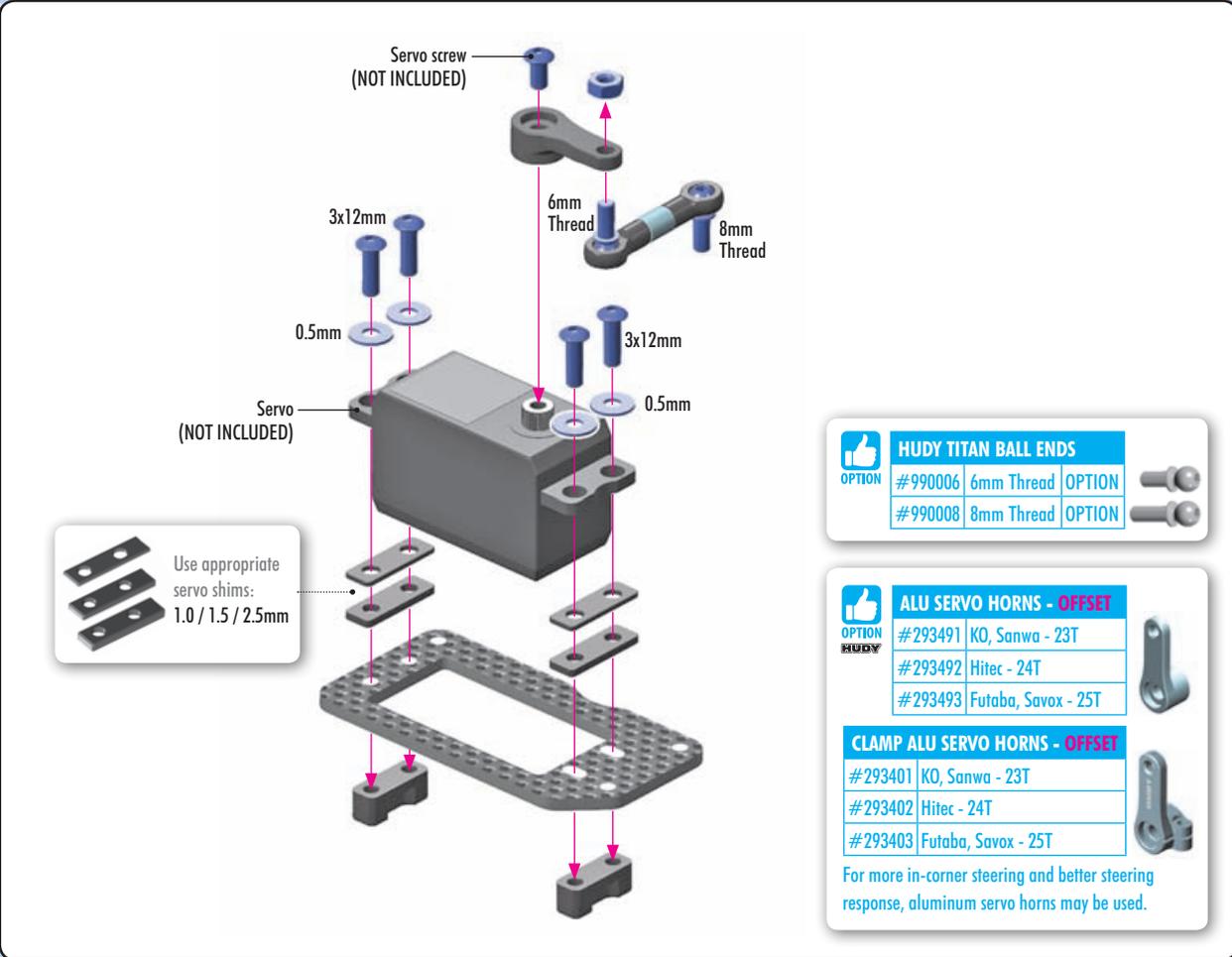


1x 901314
SB M3x14

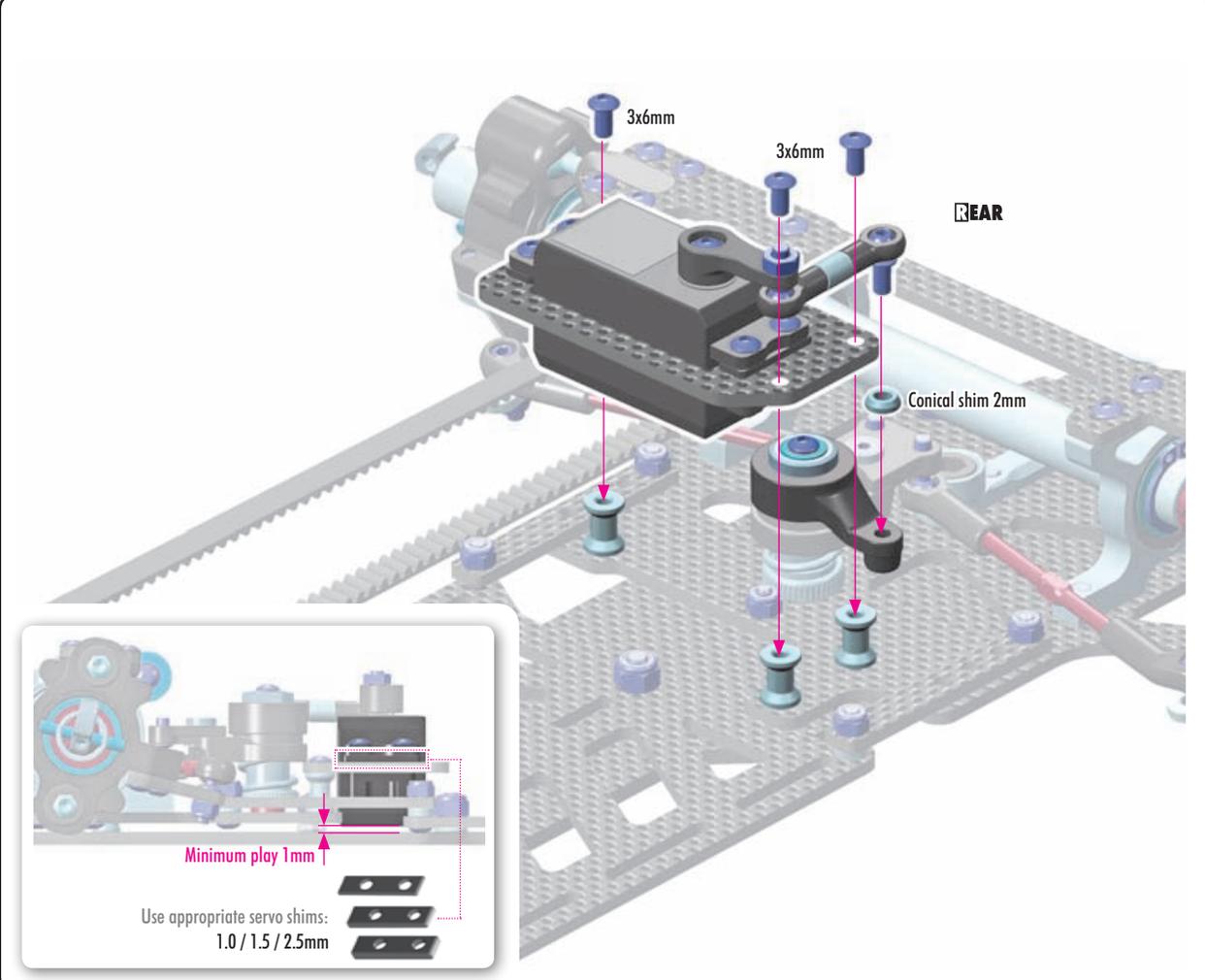


5. FRONT END & BATTERY PLATE

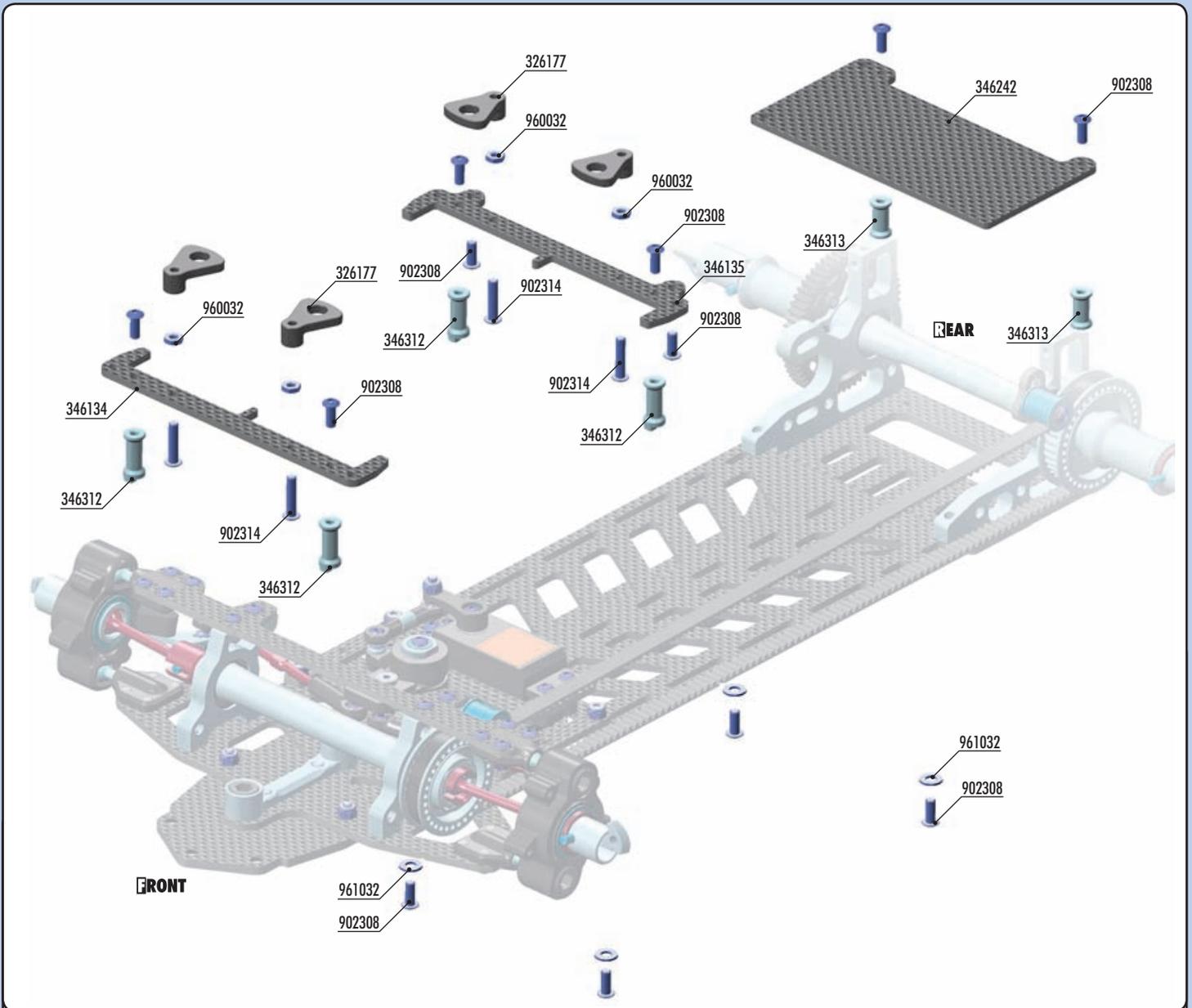
-  4x 902312 SH M3x12
-  1x 960032 N M3
-  4x 961032 S 3.2



-  1x 362280 CON. SHIM 3x6x2
-  3x 902306 SH M3x6



6. BATT. HOLDERS & ELECTRONICS PLATE



BAG

06

- 326177 COMPOSITE BATTERY CLAMP (2)
- 346134 X8 GRAPHITE BATTERY HOLDER
- 346135 X8 GRAPHITE BATTERY HOLDER - WITH RADIO PLATE MOUNTS
- 346242 X8 GRAPHITE ELECTRONICS PLATE
- 346312 X8 ALU SLOT MOUNT - BLACK - SWISS 7075 T6 (2)
- 346313 X8 ALU MOUNT 12MM - BLACK - SWISS 7075 T6 (2)

- 902308 HEX SCREW SH M3x8 (10)
- 902314 HEX SCREW SH M3x14 (10)
- 960032 NUT M3 - BLACK (10)
- 961032 WASHER S 3.2 (10)



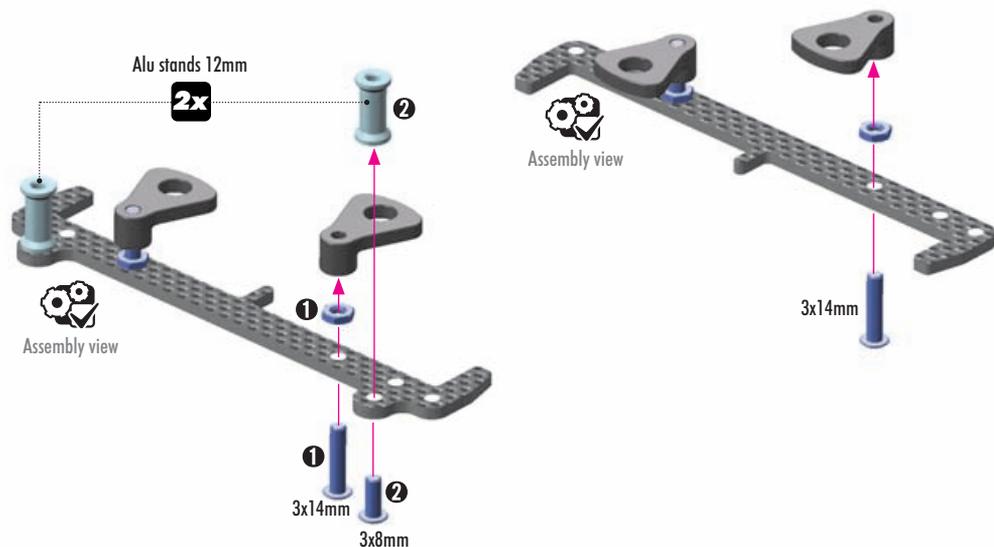
2x 902308 SH M3x8



4x 902314 SH M3x14



4x 960032 N M3



6. BATT. HOLDERS & ELECTRONICS PLATE

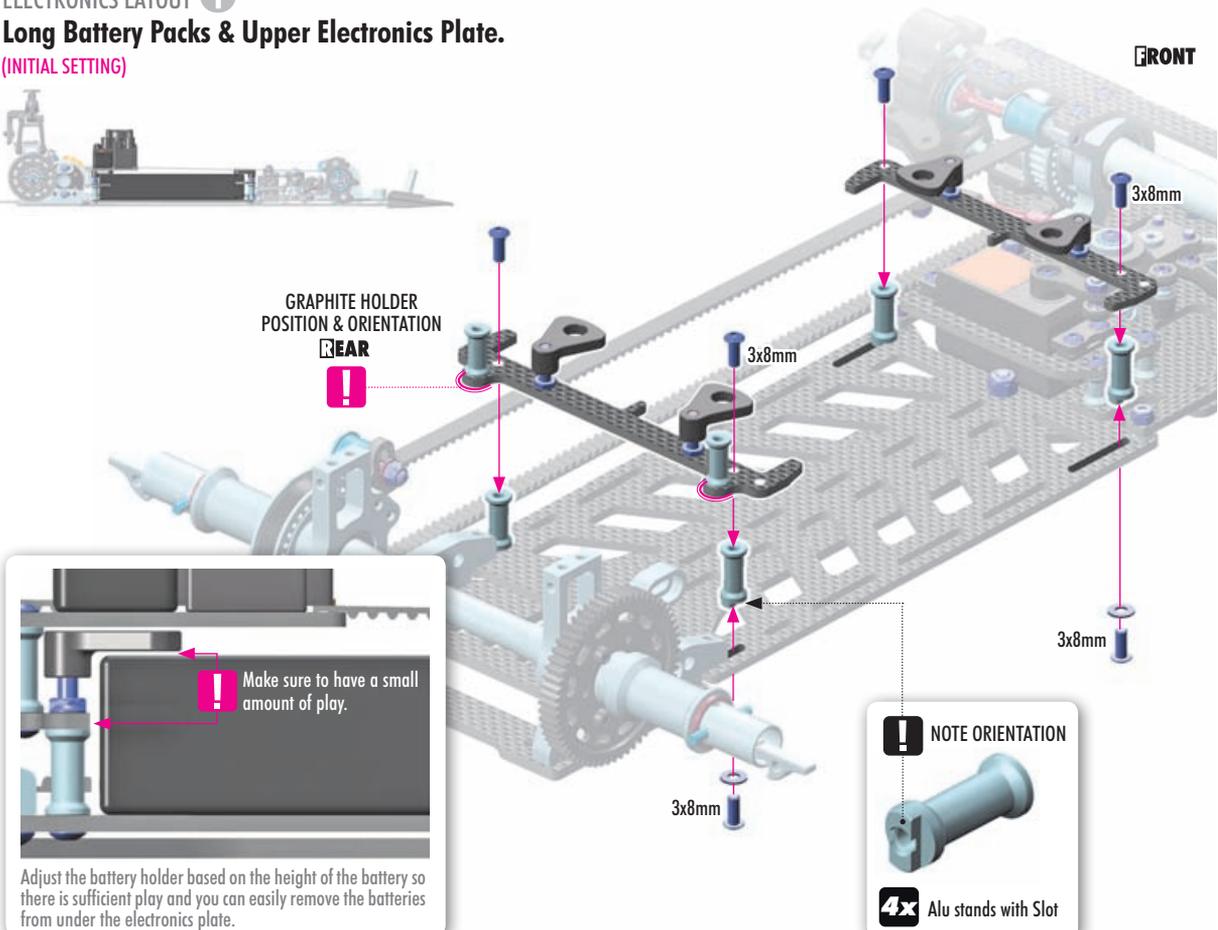
- 

8x 902308 SH M3x8
- 

4x 961032 S 3.2

ELECTRONICS LAYOUT 1

Long Battery Packs & Upper Electronics Plate. (INITIAL SETTING)



FRONT

REAR

GRAPHITE HOLDER POSITION & ORIENTATION

Make sure to have a small amount of play.

Adjust the battery holder based on the height of the battery so there is sufficient play and you can easily remove the batteries from under the electronics plate.

NOTE ORIENTATION

4x Alu stands with Slot

3x8mm

3x8mm

3x8mm

3x8mm

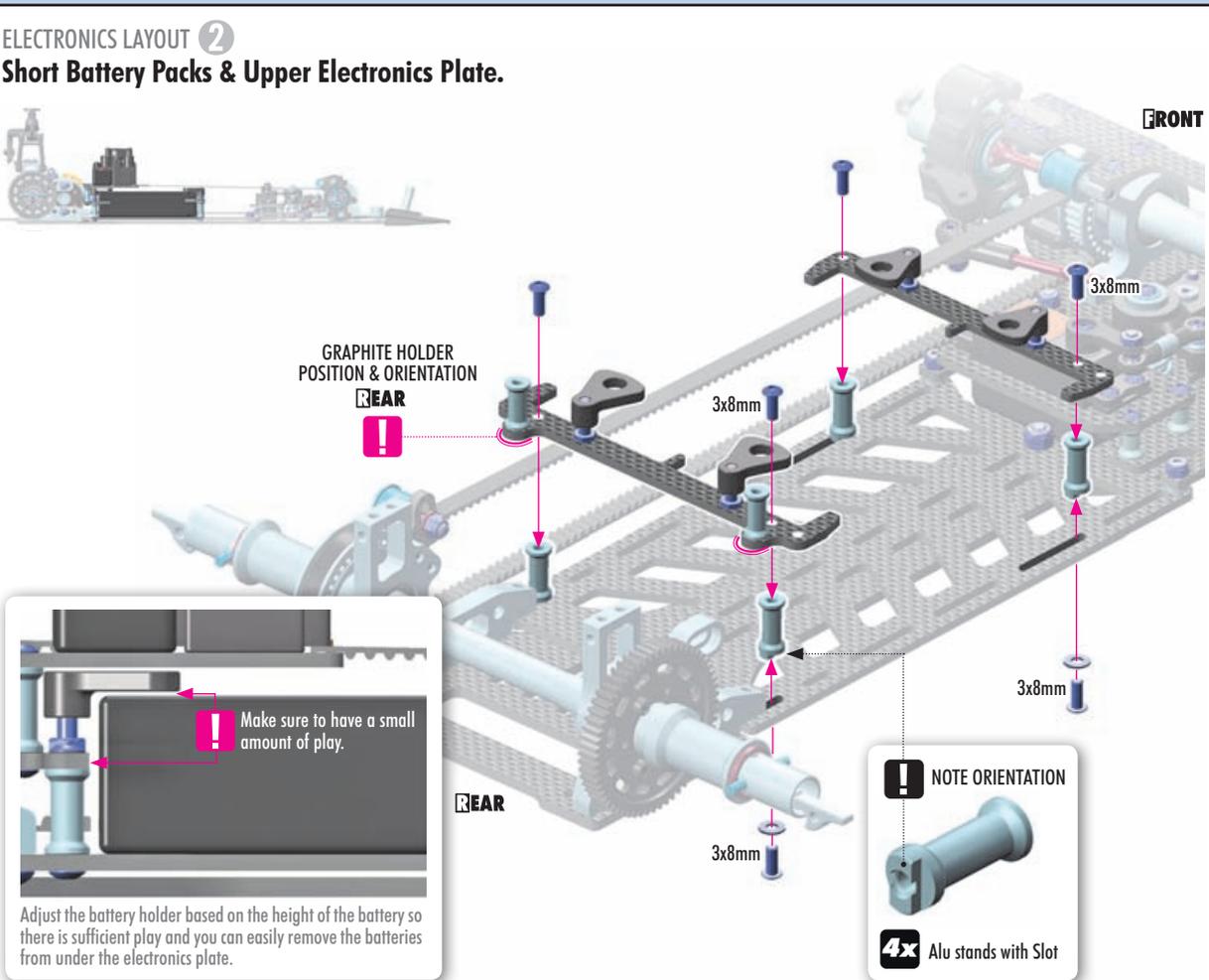
- 

8x 902308 SH M3x8
- 

4x 961032 S 3.2

ELECTRONICS LAYOUT 2

Short Battery Packs & Upper Electronics Plate.



FRONT

REAR

GRAPHITE HOLDER POSITION & ORIENTATION

Make sure to have a small amount of play.

Adjust the battery holder based on the height of the battery so there is sufficient play and you can easily remove the batteries from under the electronics plate.

NOTE ORIENTATION

4x Alu stands with Slot

3x8mm

3x8mm

3x8mm

3x8mm

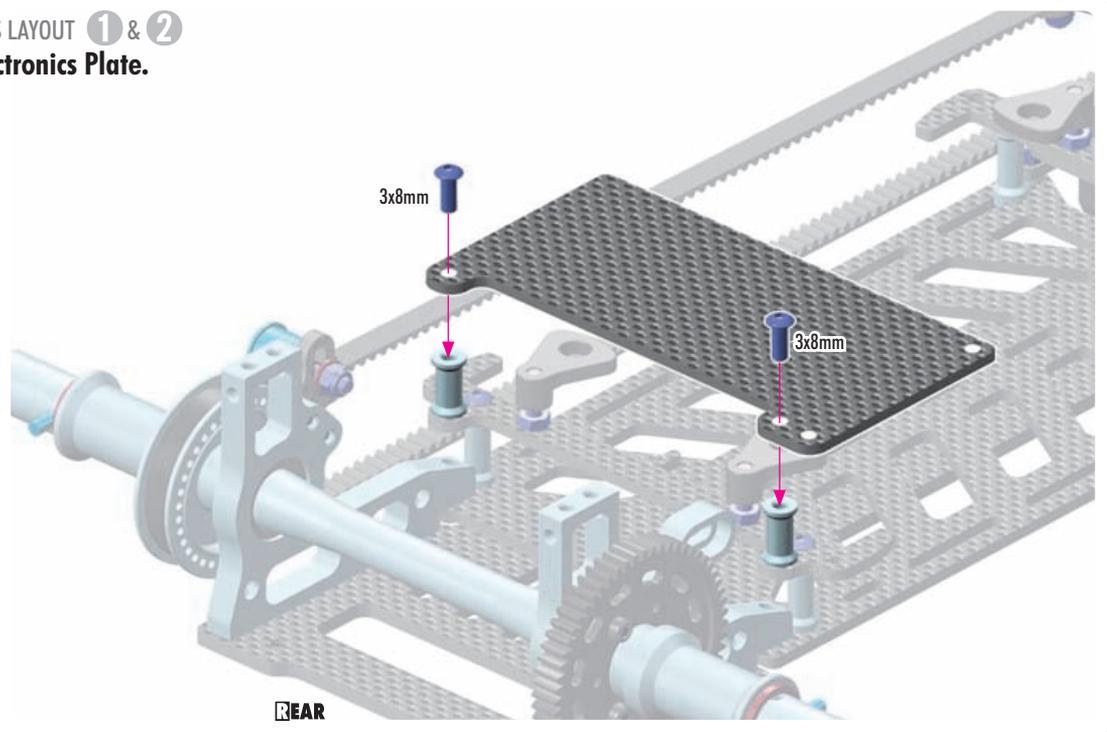
6. BATT. HOLDERS & ELECTRONICS PLATE



2x 902308
SH M3x8

ELECTRONICS LAYOUT 1 & 2

Upper Electronics Plate.



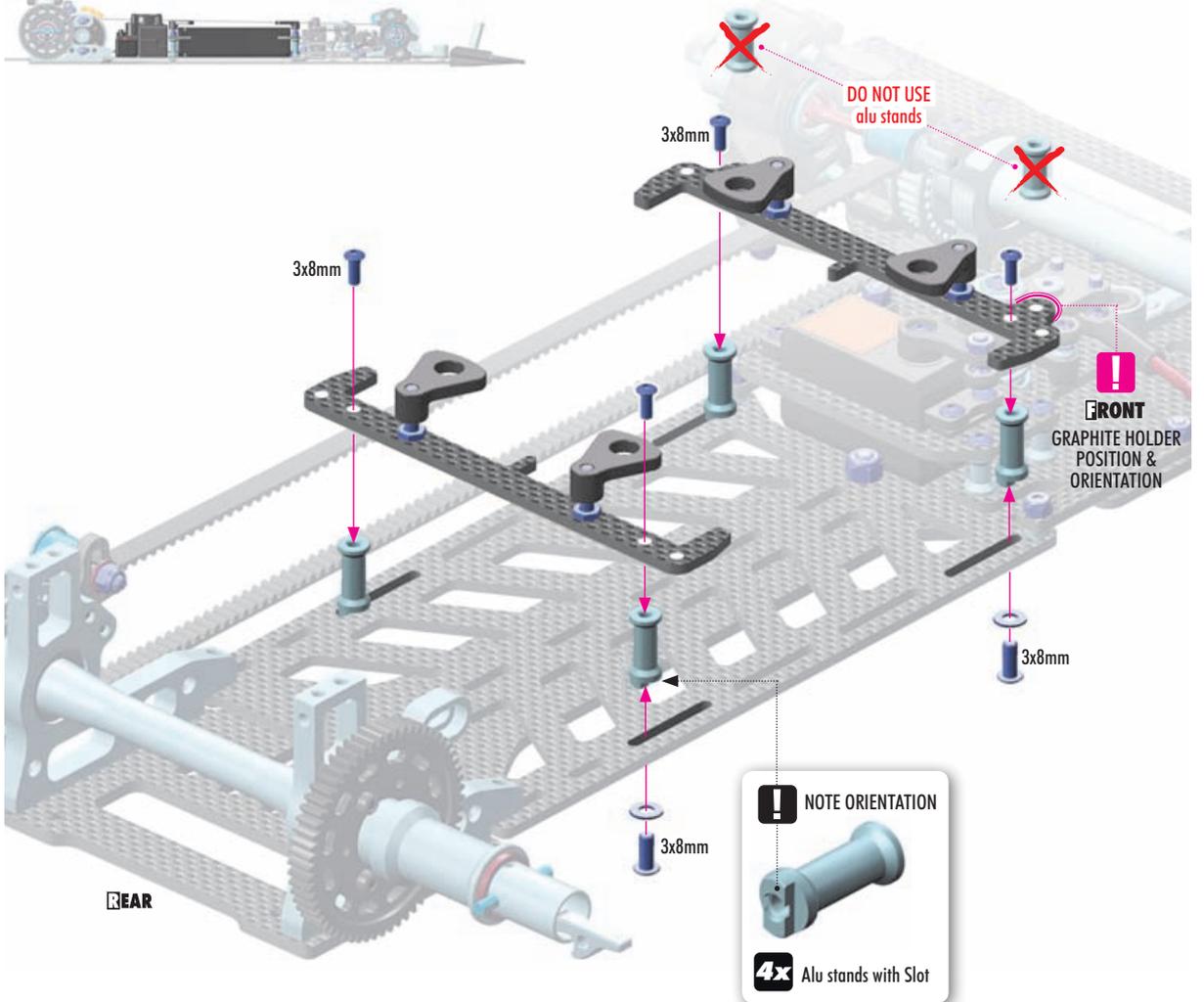
8x 902308
SH M3x8



4x 961032
S 3.2

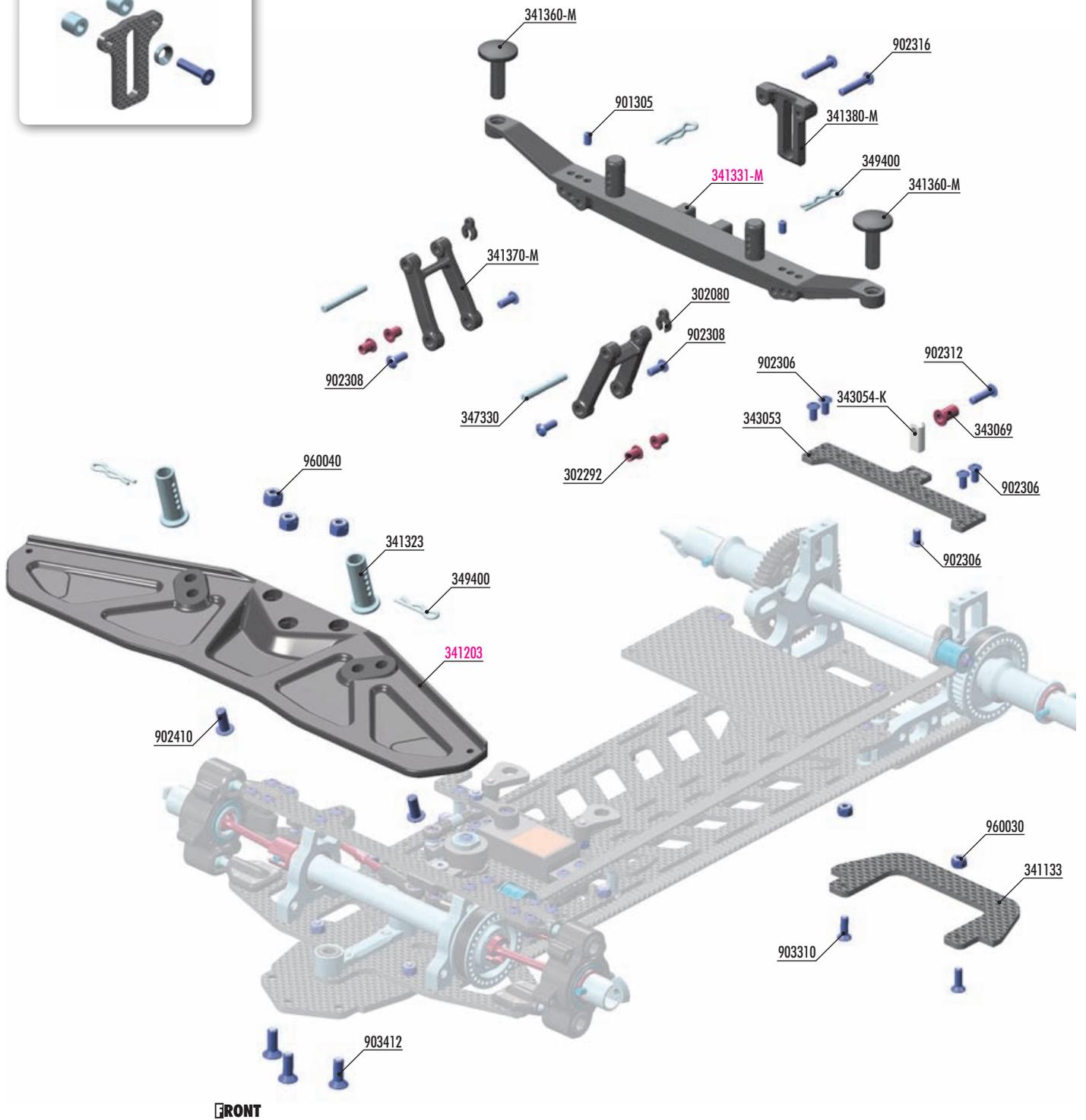
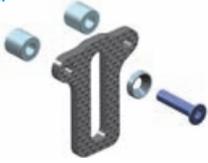
ELECTRONICS LAYOUT 3

Short Battery Packs with Chassis Mounted Electronics.



7. FRONT & REAR ASSEMBLY

#341381 GRAPHITE REAR BODY CENTERING PLATE - SET
OPTION



BAG

07

- 302080 COMPOSITE CASTER CLIPS SET 4+3+2+1 MM (2)
- 302292 STEEL STEERING BUSHING LONG (4)
- 341133 X8 GRAPHITE REAR BUMPER/HOLDER
- 341323 ALU FRONT BODY POST - SHORT - SWISS 7075 T6 (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
- 343053 X8 GRAPHITE REAR BULKHEAD BRACE
- 343054-K X8 ALU MOUNT FOR REAR BODY CENTERING PLATE
- 343069 STEEL BUSHING (2)
- 347330 REAR BODY HOLDER ARM PIN (2)
- 349400 BODY CLIP (10)

- 901305 HEX SCREW SB M3x5 (10)
- 902306 HEX SCREW SH M3x6 (10)
- 902308 HEX SCREW SH M3x8 (10)
- 902312 HEX SCREW SH M3x12 (10)
- 902316 HEX SCREW SH M3x16 (10)
- 902410 HEX SCREW SH M4x10 (10)
- 903310 HEX SCREW SFH M3x10 (10)
- 903412 HEX SCREW SFH M4x12 (10)
- 960030 NUT M3 (10)
- 960040 NUT M4 (10)

- 341203 COMPOSITE BUMPER - DOWNFORCE
- 341331-M COMPOSITE REAR BODY HOLDER - HIGHER - MEDIUM

7. FRONT & REAR ASSEMBLY



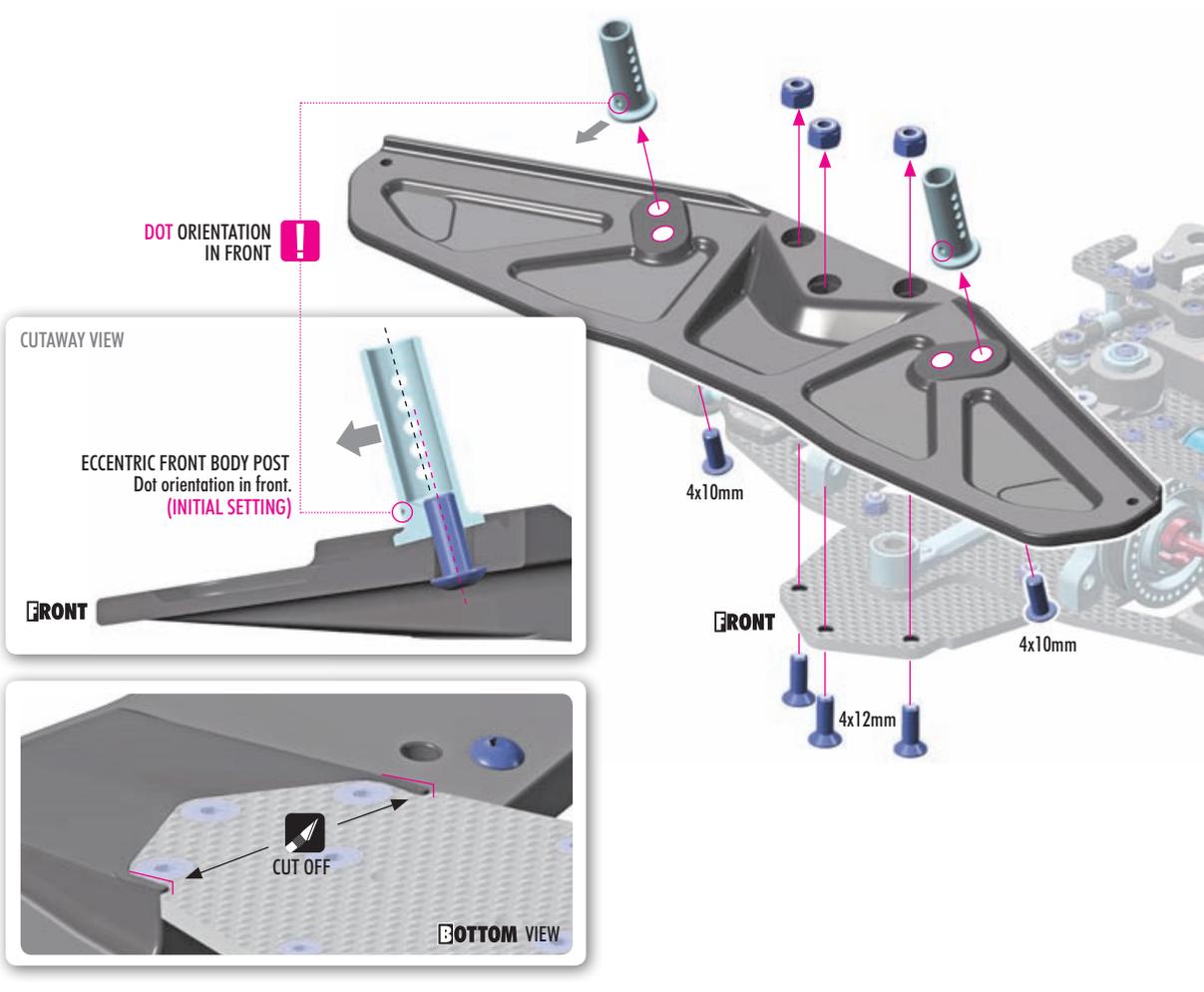
2x 902410
SH M4x10



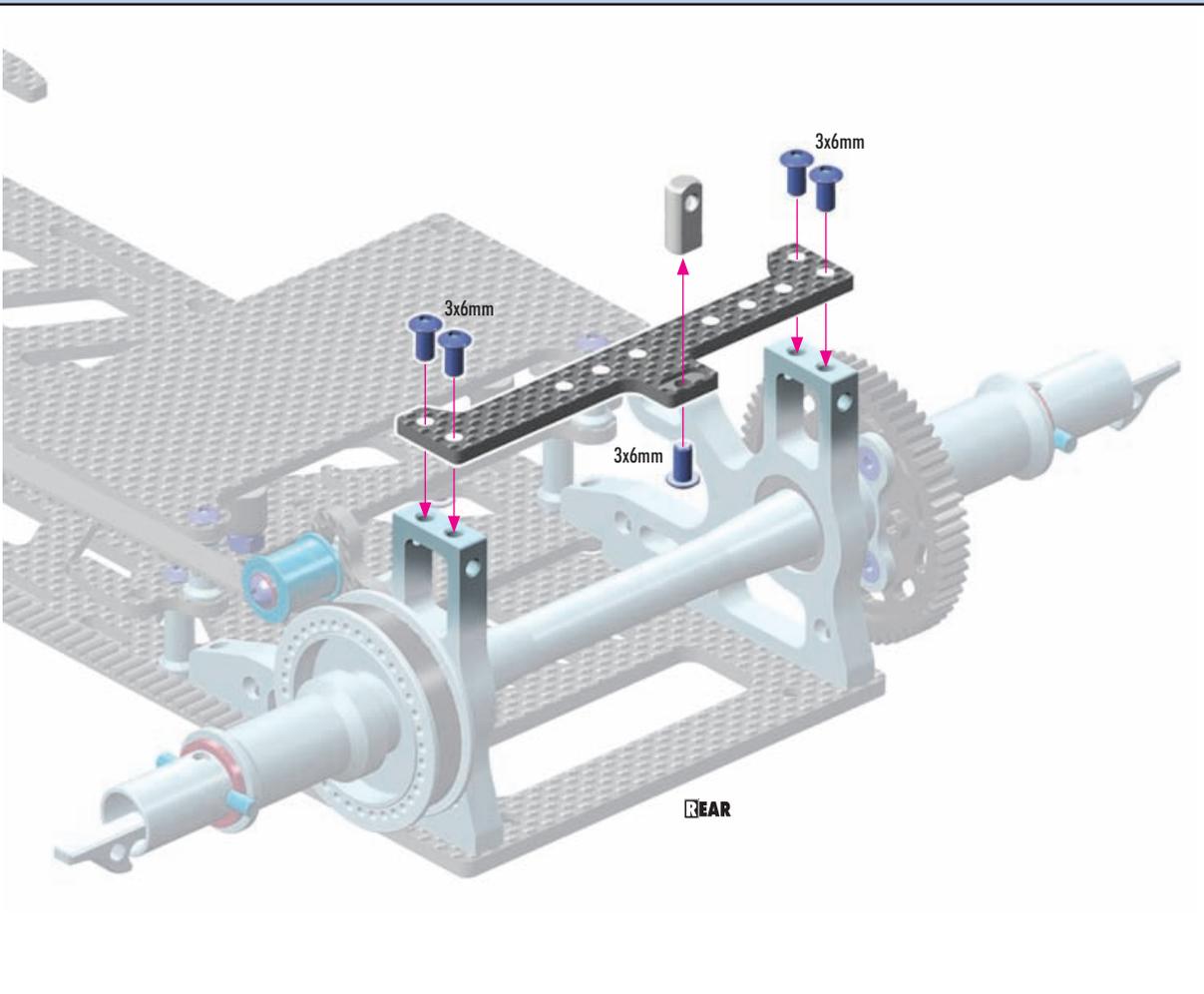
3x 903412
SFH M4x12



3x 960040
N M4



5x 902306
SH M3x6



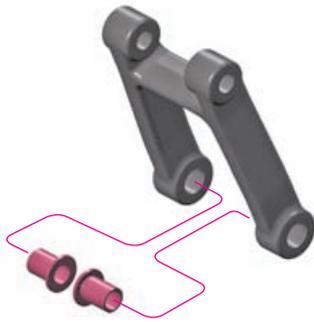
7. FRONT & REAR ASSEMBLY



4x 902308
SH M3x8

1

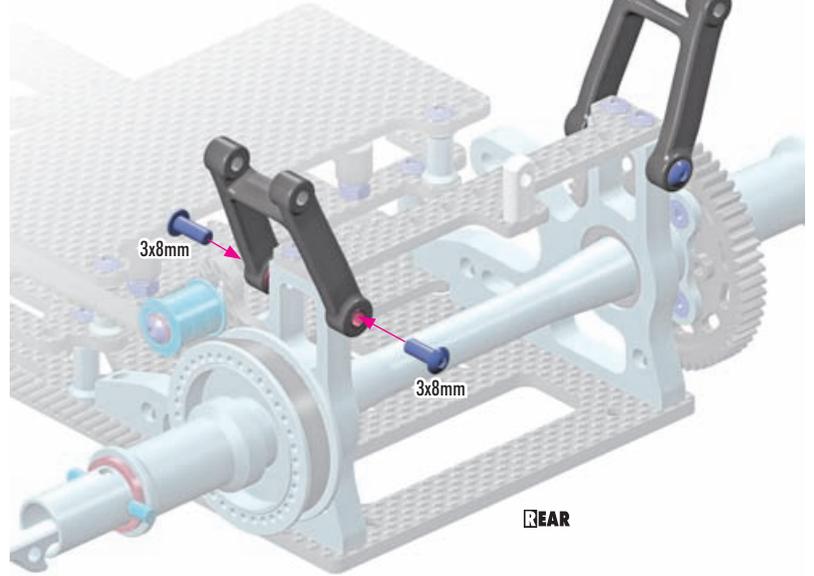
2x L=R



2

2x L=R

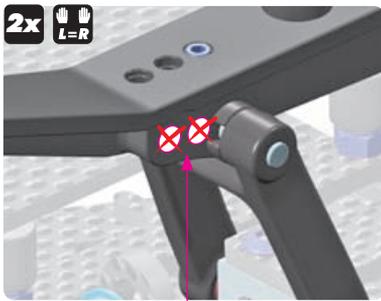
ASSEMBLY VIEW



REAR

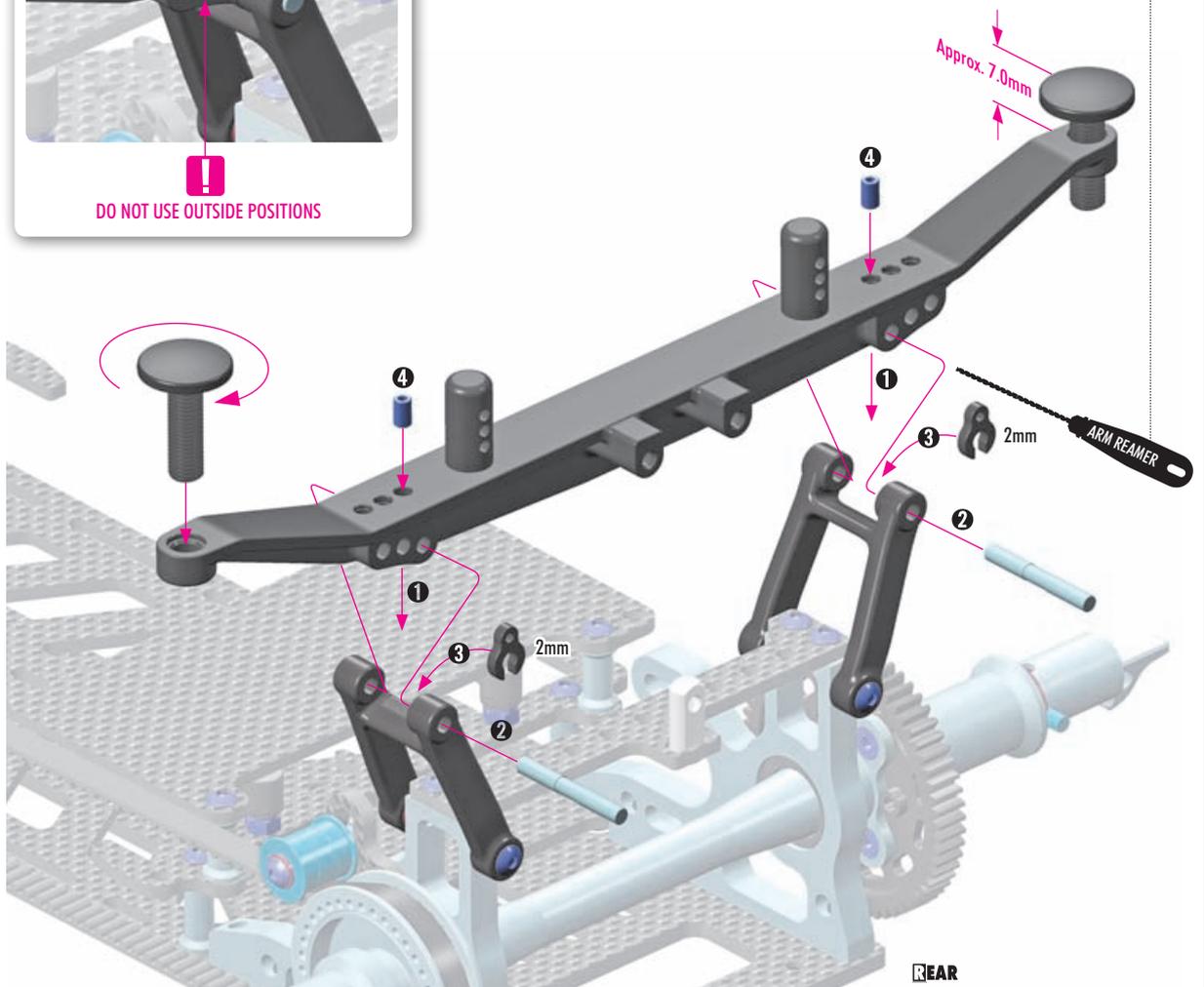


2x 901305
SB M3x5



DO NOT USE OUTSIDE POSITIONS

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.



REAR

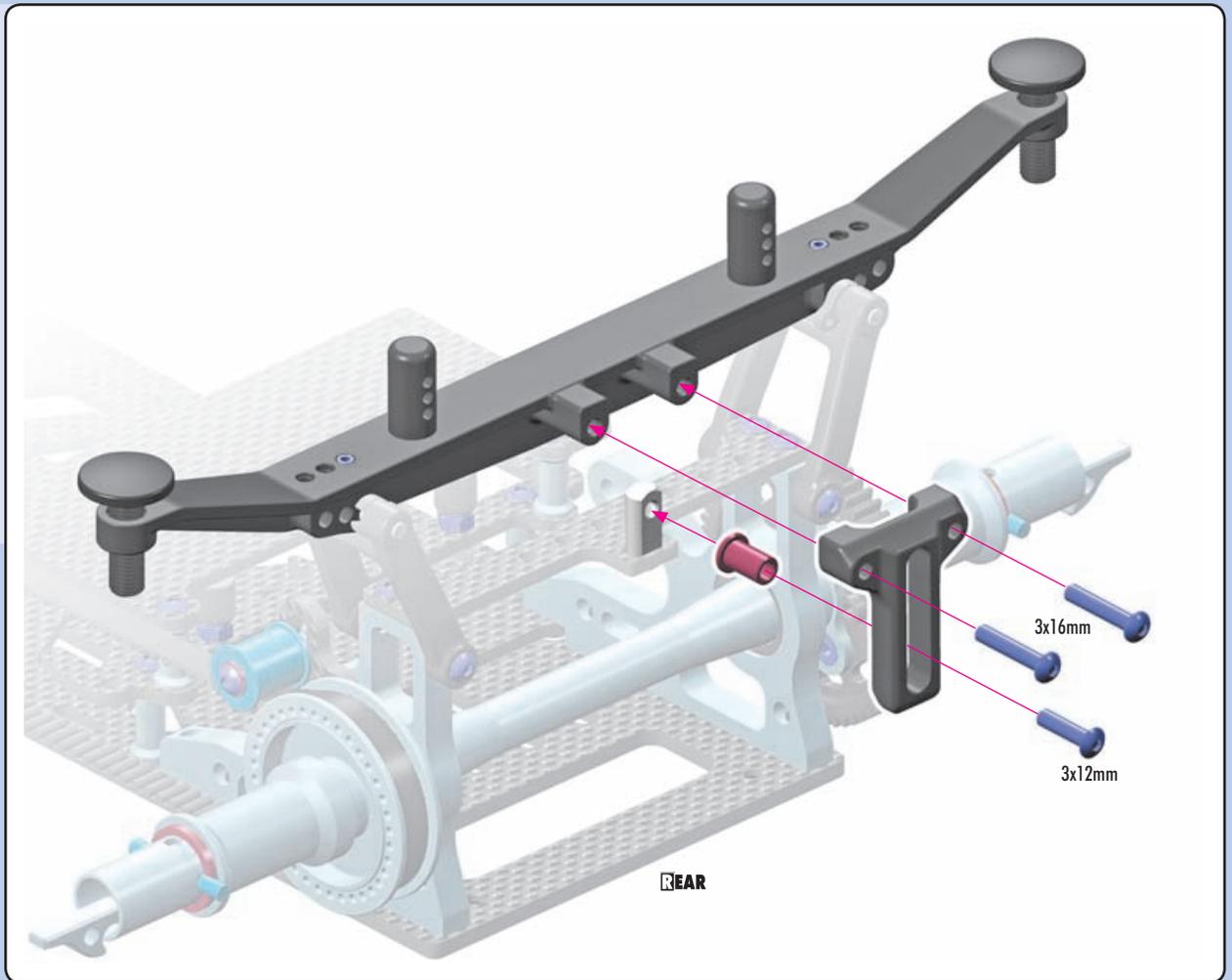
7. FRONT & REAR ASSEMBLY



1x 902312
SH M3x12



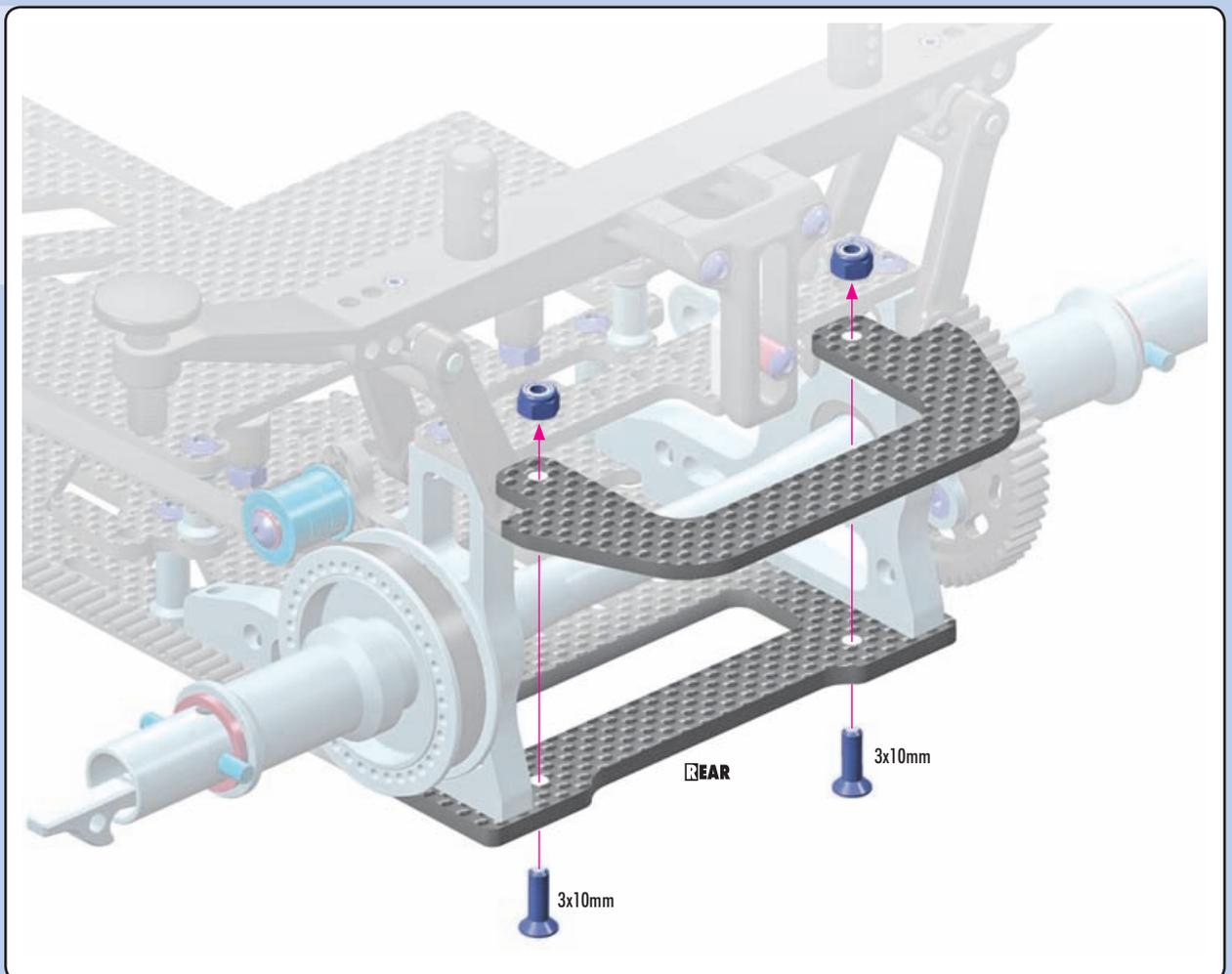
2x 902316
SH M3x16



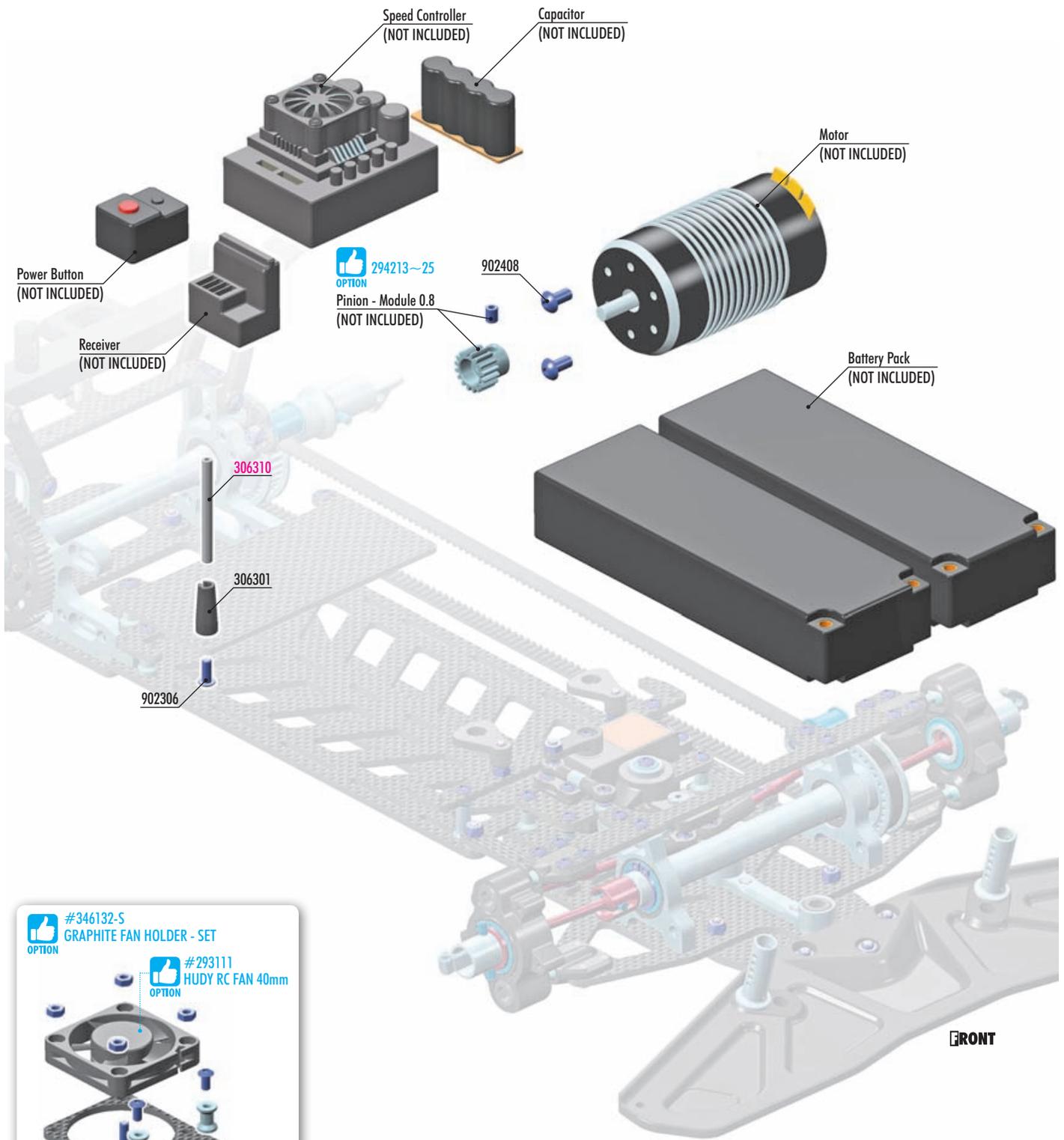
2x 903310
SFH M3x10



2x 960030
N M3



7. FINAL ASSEMBLY

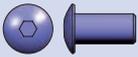


BAG

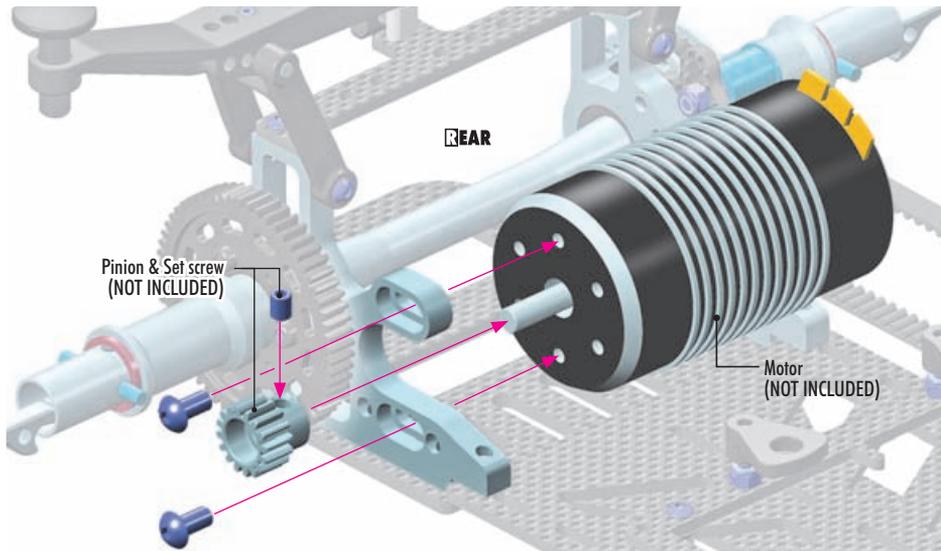
07

- 306301 ANTENNA MOUNT - THIN
- 902306 HEX SCREW SH M3x6 (10)
- 902408 HEX SCREW SH M4x8 (10)
- 306310 ANTENNA (2)

7. FINAL ASSEMBLY



2x 902408
SH M4x8



GEAR RATIO Final Drive Ratio

$$60 : X = \text{FDR}$$

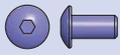
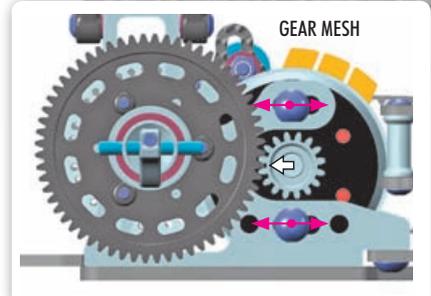
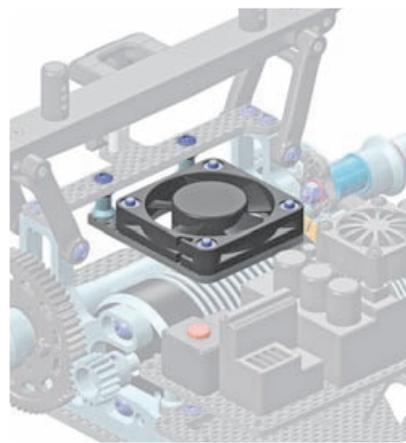
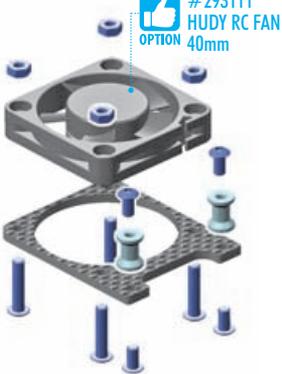
(Spur) (Pinion)



PINIONS (Mod 0.8)

#294213	13T
#294214	14T
#294215	15T
#294216	16T
#294217	17T
#294218	18T
#294219	19T
#294220	20T
#294221	21T
#294222	22T
#294223	23T
#294224	24T
#294225	25T

#346132-S
GRAPHITE FAN HOLDER - SET
OPTION



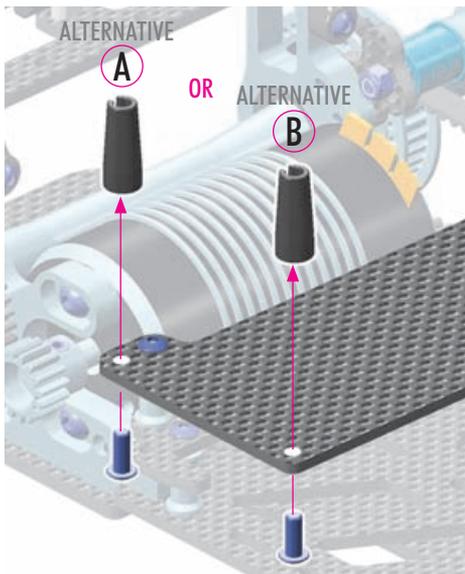
1x 902306
SH M3x6

ELECTRONICS LAYOUT ① & ②
UPPER ELECTRONICS PLATE
(INITIAL SETTING)

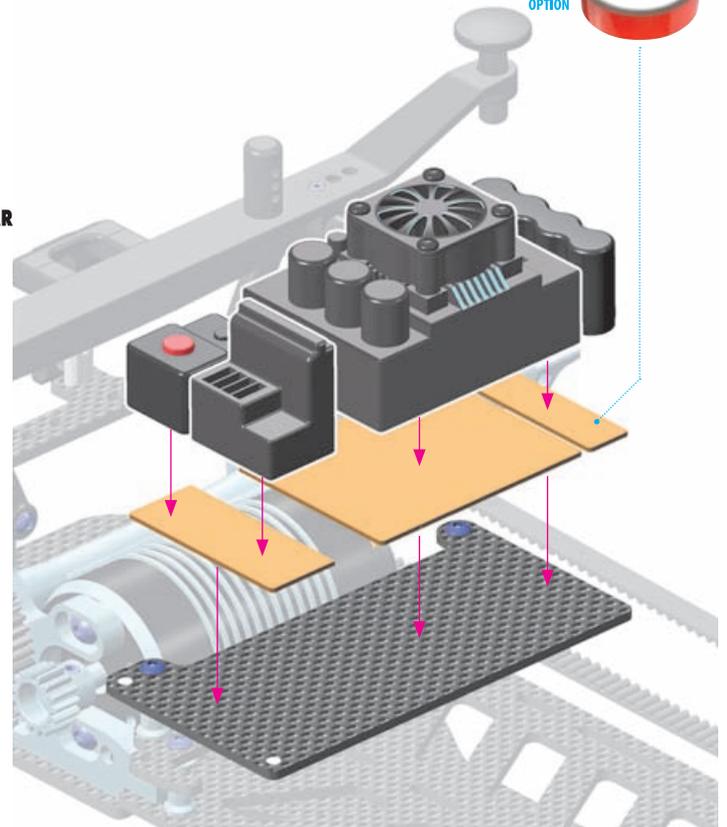
#107875
DOUBLE-SIDED TAPE
OPTION



ANTENNA MOUNT ALTERNATIVE A or B



REAR



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