

1/10 LUXURY ELECTRIC TOURING CAR FWD

XRAY X4F



INSTRUCTION MANUAL
FOR X4F'26 EDITION

BEFORE YOU START

This is a high-competition, high-quality RC car intended for persons aged 16 years and older with previous experience building and operating RC model racing cars. This is not a toy; it is a precision racing model. This model racing car is not intended for use by beginners, inexperienced customers, or by children without direct supervision of a responsible, knowledgeable adult. If you DO NOT fulfill these requirements, please return the kit in unused and unassembled form back to the shop where you have purchased it.

Before building and operating your XRAY, **YOU MUST** read through all of the operating instructions and instruction manual and fully understand them to get the maximum enjoyment and prevent unnecessary damage.

Read carefully and fully understand the instructions before beginning assembly.

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**

Make sure you review this entire manual, download and use set-up book from the web, and examine all details carefully. If for some reason you decide this is not what you wanted or expected, **DO NOT continue any further**. Your hobby dealer can not accept your kit for return or exchange after it has been partially or fully assembled.

Contents of the box may differ from pictures. In line with our policy of continuous product development, the exact specifications of the kit may vary without prior notice.

XRAY Europe

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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 NEGLIGENCE.

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 warranty immediately.

Improper operation may cause personal and/or property damage. XRAY and its distributors have no control over damage resulting from shipping, improper construction, or improper usage. XRAY assumes and accepts no responsibility for personal and/or property damages resulting from the use of improper building materials, equipment and operations. By purchasing any item produced by XRAY, the buyer expressly warrants that he/she is in compliance with all applicable federal, state and local laws and regulation regarding the purchase, ownership and use of the item. The buyer expressly agrees to indemnify and hold harmless XRAY for all claims resulting directly or indirectly from the purchase, ownership or use of the product. By the act of assembling or operating this product, the user accepts all resulting liability. If the buyer is not prepared to accept this liability, then he/she should return this kit in new, unassembled, and unused condition to the place of purchase.



IMPORTANT NOTES - GENERAL

- This product is not suitable for children under 16 years of age without the direct supervision of a responsible and knowledgeable adult.
- Carefully read all manufacturers warnings and cautions for any parts used in the construction and use of your model.
- Assemble this kit only in places away from the reach of very small children.
- First-time builders and users should seek advice from people who have building experience in order to assemble the model correctly and to allow the model to reach its performance potential.
- Exercise care when using tools and sharp instruments.
- Take care when building, as some parts may have sharp edges.
- Keep small parts out of reach of small children. Children must not be allowed to put any parts in their mouth, or pull vinyl bag over their head.
- Read and follow instructions supplied with paints and/or cement, if used (not included in kit).
- Immediately after using your model, DO NOT touch equipment on the model such as the motor and speed controller, because they generate high temperatures. You may seriously burn yourself seriously touching them.
- Follow the operating instructions for the radio equipment at all times.
- DO NOT put fingers or any objects inside rotating and moving parts, as this may cause damage or serious injury as your finger, hair, clothes, etc. may get caught.
- Be sure that your operating frequency is clear before turning on or running your model, and never share the same frequency with somebody else at the same time. Ensure that others are aware of the operating frequency you are using and when you are using it.
- Use a transmitter designed for ground use with RC cars. Make sure that no one else is using the same frequency as yours in your operating area. Using the same frequency at the same time, whether it is driving, flying or sailing, can cause loss of control of the RC model, resulting in a serious accident.
- Always turn on your transmitter before you turn on the receiver in the car. Always turn off the receiver before turning your transmitter off.
- Keep the wheels of the model off the ground when checking the operation of the radio equipment.
- Disconnect the battery pack before storing your model.
- When learning to operate your model, go to an area that has no obstacles that can

damage your model if your model suffers a collision.

- Remove any sand, mud, dirt, grass or water before putting your model away.
- If the model behaves strangely, immediately stop the model, check and clear the problem.
- To prevent any serious personal injury and/or damage to property, be responsible when operating all remote controlled models.
- The model car is not intended for use on public places and roads or areas where its operation can conflict with or disrupt pedestrian or vehicular traffic.
- Because the model car is controlled by radio, it is subject to radio interference from many sources that are beyond your control. Since radio interference can cause momentary loss of control, always allow a safety margin in all directions around the model in order to prevent collisions.
- DO NOT use your model:
 - Near real cars, animals, or people that are unaware that an RC car is being driven.
 - In places where children and people gather
 - In residential districts and parks
 - In limited indoor spaces
 - In wet conditions
 - In the street
 - In areas where loud noises can disturb others, such as hospitals and residential areas.
 - At night or anytime your line of sight to the model may be obstructed or impaired in any way.

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

IMPORTANT NOTES – 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 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.

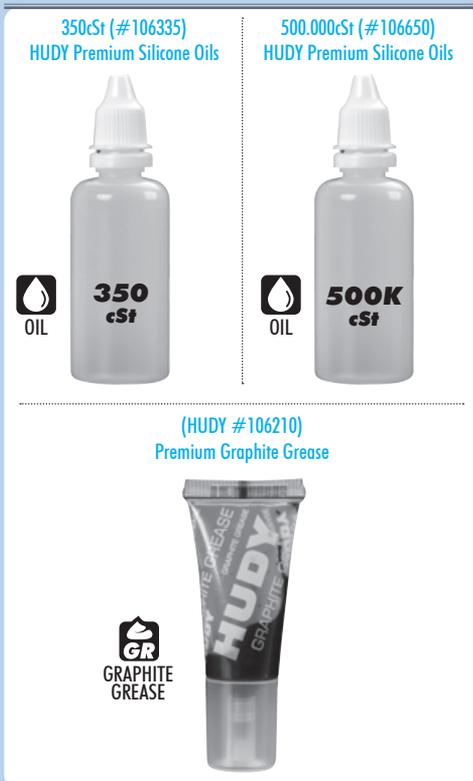
We do reserve all rights to change any specification without prior notice. All rights reserved.

X4F'26

TOOLS REQUIRED



INCLUDED



EQUIPMENT REQUIRED



BUILD TIPS & NOTES



Alexander Hagberg (Factory Driver)

When a QR CODE is found in the instruction manual, scan the code to be directed to an online video that explains that feature or adjustment in more detail. Make sure to watch all of the instructional videos to get the most performance out of your car.

VIDEO TECH TIP



NOTE!

Please note that the videos are made specifically for the X4, but will contain very good information that may apply to the X4F as well.



SAMPLE OF OPTIONAL PARTS

| OPTION | #30XXXX | TYPE1 | OPTION 1 |
|--------|---------|-------|----------|
| | #30XXXX | TYPE1 | OPTION 2 |
| | #30XXXX | TYPE1 | INCLUDED |
| | #30XXXX | TYPE1 | 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:

304911

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

301024

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

304902

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

301085

STYLE D - indicates parts that are optional.

CHASSIS PREPARATION



VIDEO TECH TIP



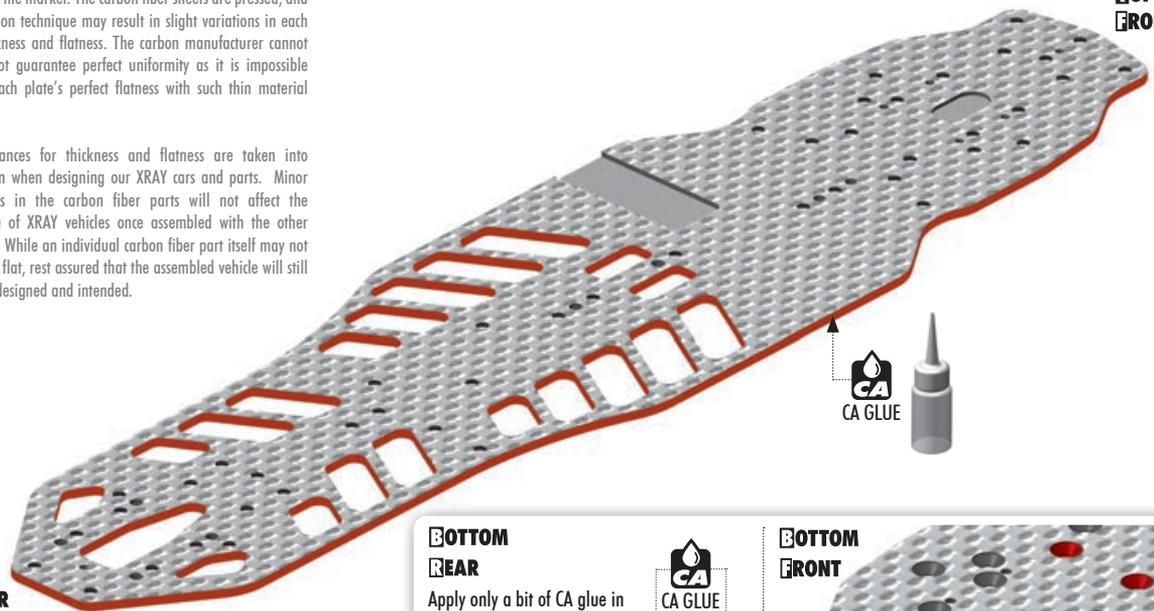
CHASSIS PREPARATION

TIP To protect and seal edges of carbon parts, sand edges smooth and then apply CA glue. Do this for: chassis edges and countersunk holes.

XRAY uses the highest quality USA-made carbon fiber sheets available on the market. The carbon fiber sheets are pressed, and this production technique may result in slight variations in each sheet's thickness and flatness. The carbon manufacturer cannot and does not guarantee perfect uniformity as it is impossible to ensure each plate's perfect flatness with such thin material thicknesses.

These tolerances for thickness and flatness are taken into consideration when designing our XRAY cars and parts. Minor irregularities in the carbon fiber parts will not affect the performance of XRAY vehicles once assembled with the other components. While an individual carbon fiber part itself may not lay perfectly flat, rest assured that the assembled vehicle will still perform as designed and intended.

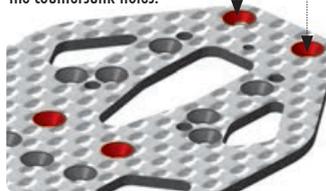
TOP
REAR



TOP
FRONT

BOTTOM
REAR

Apply only a bit of CA glue in the countersunk holes.



BOTTOM
FRONT

Apply only a bit of CA glue in the countersunk holes.



TIP

All ball-bearings are factory pre-oiled. Regularly service, clean and lubricate all ball-bearings with **HUDY Bearing Oil** (#106230). Replace any bearings that develop a "gritty" feeling to prevent inefficiency and avoid rear axle bearing blowouts.

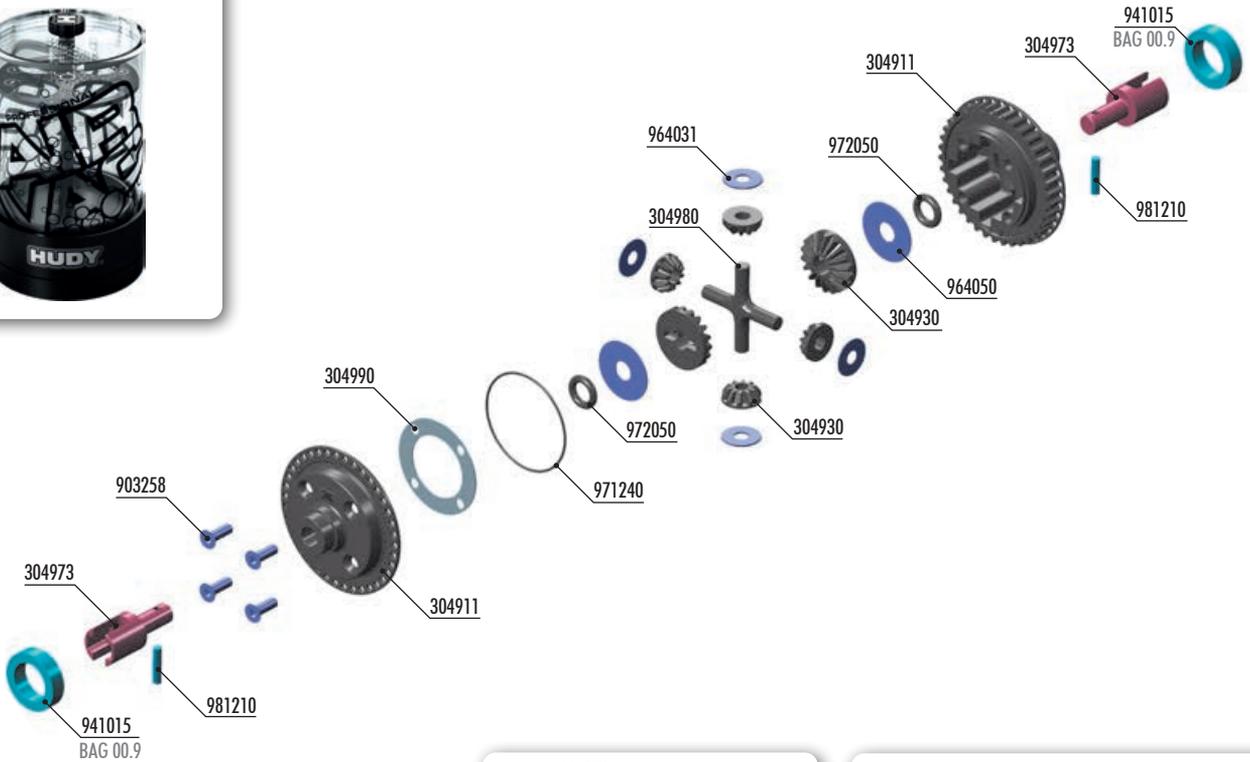
Make sure to use only original XRAY ball-bearings, which all have specific tolerances, axial and radial play, and are all individually selected. Using 3rd party ball-bearings may result in failures and damage to other parts.



1. GEAR DIFFERENTIAL



#104002
HUDY AIR VAC – VACUUM PUMP



#304972
ALU GEAR DIFF CVD BB DRIVESHAFT
ADAPTER - SWISS 7075 T6 (2)



#304932
GRAPHITE GEAR DIFF BEVEL & SATELLITE GEARS (2+4)



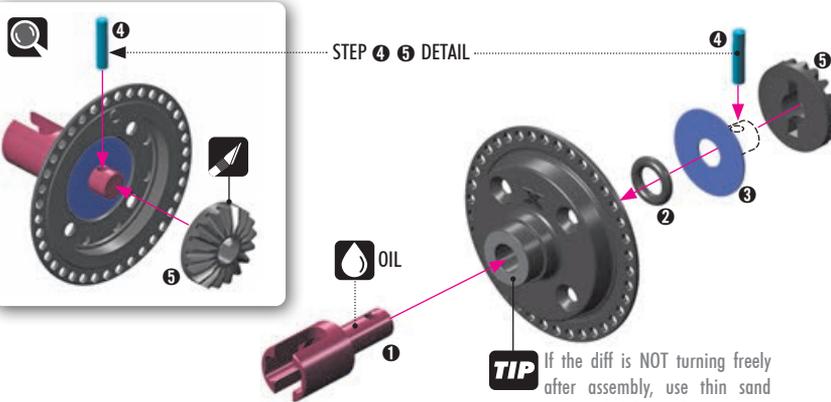
BAG

01.2

- 304902 X4 BB GEAR DIFFERENTIAL - SET
- 304911 X4 COMPOSITE GEAR DIFF CASE WITH 38T PULLEY & COVER
- 304930 COMPOSITE GEAR DIFF BEVEL & SATELLITE GEARS (2+4)
- 304973 STEEL GEAR DIFF BB DRIVESHAFT ADAPTER - HUDY SPRING STEEL™ (2)
- 304980 COMPOSITE GEAR DIFF CROSS PIN
- 304990 DIFF GASKET (4)

- 903258 HEX SCREW SFH M2.5x8 (10)
- 941015 BALL-BEARING 10x15x4 RUBBER SEALED - OIL (2)
- 964031 WASHER S 3.5x10x0.2 (10)
- 964050 WASHER S 5x15x0.3 (10)
- 971240 SILICONE O-RING 24x0.7 (10)
- 972050 SILICONE O-RING 5x2 (10)
- 981210 PIN 2x10 (10)

Numbers in parentheses () refer to quantities when purchased separately.



#304932
GRAPHITE GEAR DIFF BEVEL
& SATELLITE GEARS (2+4)



#304972
ALU GEAR DIFF CVD BB DRIVESHAFT
ADAPTER - SWISS 7075 T6 (2)



1. GEAR DIFFERENTIAL

1x 964050
S 5x15x0.3

1x 972050
O 5x2

1x 981210
P 2x10

NOTE ORIENTATION

STEP 4 DETAIL
Use tweezers to insert pin.

If the diff is NOT turning freely after assembly, use thin sand paper to lightly polish the surface.

TIP OIL

CUTAWAY VIEW

4x 964031
S 3.5x10x0.2

#304932 GRAPHITE GEAR DIFF BEVEL & SATELLITE GEARS (2+4)

OPTION

If the cross does NOT enter into the diff freely, use fine sand paper to lightly polish the ends of the cross.

INITIAL SETTING
500.000cSt

TIP
Fill differential up to the top of the diff pin. DO NOT fill the diff to the top of the housing.

TO ENSURE YOU HAVE THE SAME AMOUNT OF OIL FROM REBUILD TO REBUILD, DO THE FOLLOWING:

VIDEO TECH TIP

REAR DIFFERENTIAL

1 Put the diff (without oil) on the scale and check the weight (approximately 12.00g)

#107865 HUDY Ultimate Digital Pocket Scale 300g ± 0.01g

12.00g

12.00g + 1.50g = 13.50g

2 Slowly pour oil into the diff and watch the weight. Add 1.50g of oil into the diff. The approximate weight of the diff including oil is 13.50g.

TIPS FOR DIFFERENTIALS

- 100.000cSt (HUDY #106610)
- 150.000cSt (HUDY #106615)
- 200.000cSt (HUDY #106620)
- 300.000cSt (HUDY #106630)
- 500.000cSt (HUDY #106650) **INITIAL SETTING**
- 1 000.000cSt (HUDY #106692)
- 2 000.000cSt (HUDY #106694)

Lower viscosity oil will increase steering but reduce traction.

LOWER VISCOSITY

INITIAL SETTING

HIGHER VISCOSITY

Higher viscosity oil will improve forward traction and increase stability, but reduces steering.



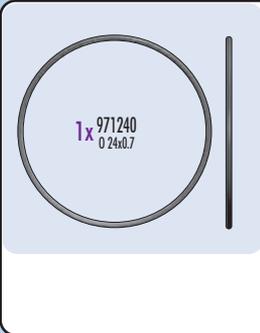
TIP To make sure that all the air is removed from the diff oil, we recommend using the HUDY Air Vac.

OPTION #104002 or #104003 HUDY AIR VAC – VACUUM PUMP

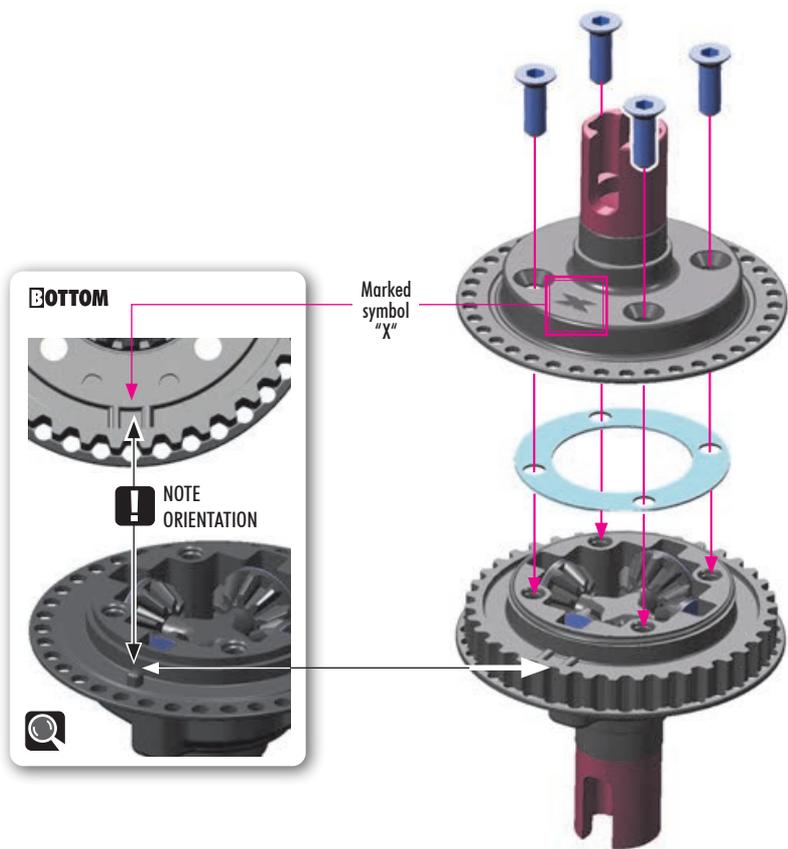
TIP To make the front differential thicker, you can use #106200 HUDY Magic Cleaning Gum instead of oil.

! Using cleaning gum instead of oil in the gear differential can lead to gear breakage because the gears are working under dry conditions.

1. GEAR DIFFERENTIAL



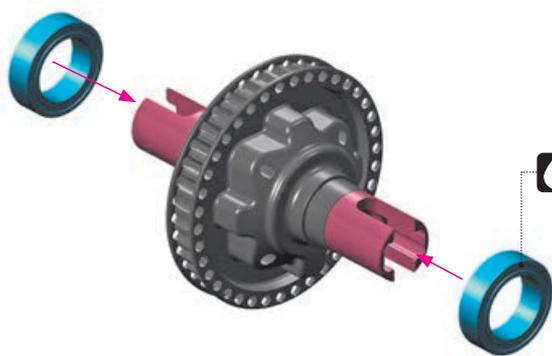
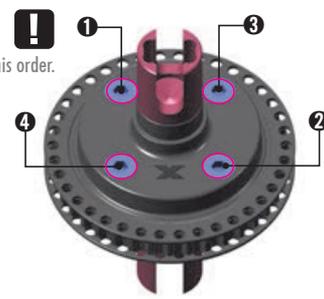
After disassembling the gear diff, the large O-ring may have an increased size and may be more difficult to re-install. We recommend either inserting the old O-ring carefully in the diff cover, or installing a new O-ring if the old one cannot be made to fit properly.



Tighten the screws equally but DO NOT tighten them completely.

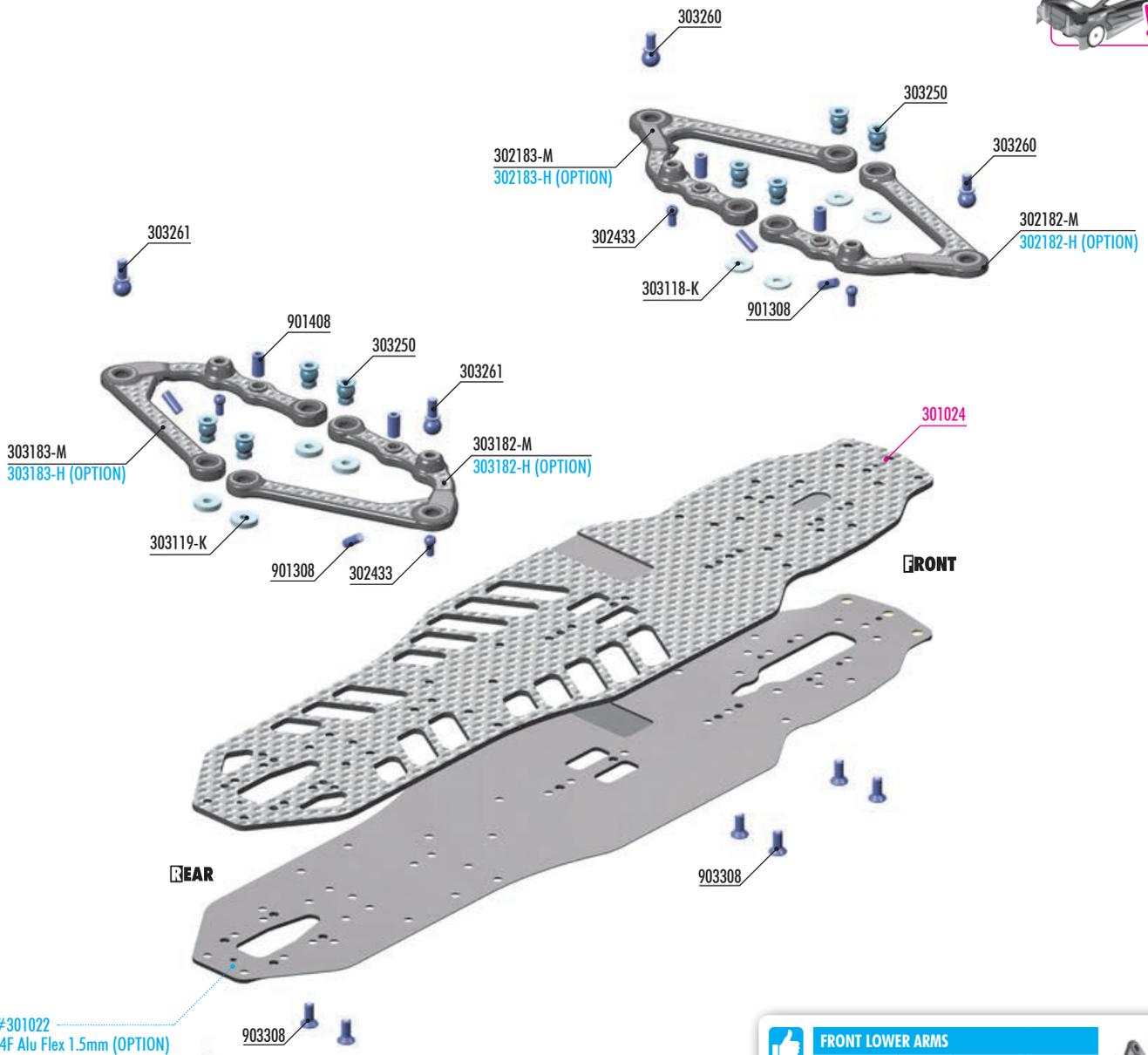


Finish tightening in this order.



BEARING OIL
(HUDY #106230)

2. FRONT & REAR SUSPENSION



#301022
X4F Alu Flex 1.5mm (OPTION)

1.5mm chassis requires special 110deg countersunk screws.

#913300
HEX SCREW 110° FOR 1.5MM CHASSIS - HUDY SPRING STEEL (33)

903308

#302121
FRONT ROLL-CENTER SPACER (2)

#302122
REAR ROLL-CENTER SPACER (2)

| FRONT LOWER ARMS | | | |
|------------------|-------|----------|----------|
| #302183-M | LEFT | MEDIUM | INCLUDED |
| #302182-M | RIGHT | MEDIUM | INCLUDED |
| #302183-H | LEFT | HARD | OPTION |
| #302182-H | RIGHT | HARD | OPTION |
| #302183-G | LEFT | GRAPHITE | OPTION |
| #302182-G | RIGHT | GRAPHITE | OPTION |

| REAR LOWER ARMS | | | |
|-----------------|-------|----------|----------|
| #303183-M | LEFT | MEDIUM | INCLUDED |
| #303182-M | RIGHT | MEDIUM | INCLUDED |
| #303183-H | LEFT | HARD | OPTION |
| #303182-H | RIGHT | HARD | OPTION |
| #303183-G | LEFT | GRAPHITE | OPTION |
| #303182-G | RIGHT | GRAPHITE | OPTION |

BAG

02

- 302182-M X4 CFF™ FRONT LOWER ARM - INNER SHOCK POSITION - MEDIUM - RIGHT
- 302183-M X4 CFF™ FRONT LOWER ARM - INNER SHOCK POSITION - MEDIUM - LEFT
- 302433 ANTI-ROLL BAR STEEL BALL END 3.8mm WITH 4mm THREAD (2)
- 303118-K ALU SHIM 3x9x1.0mm - BLACK (10)
- 303119-K ALU SHIM 3x9x2.0mm - BLACK (10)
- 303182-M X4 CFF™ REAR LOWER ARM - INNER SHOCK POSITION - MEDIUM - RIGHT
- 303183-M X4 CFF™ REAR LOWER ARM - INNER SHOCK POSITION - MEDIUM - LEFT
- 303250 X4 LOWER ARM BALL UNIVERSAL 6.0mm WITH HEX - HUDY SPRING STEEL™ (2)
- 303260 X4 PIVOT BALL 6.0mm WITH M3x5.5mm THREAD - HUDY SPRING STEEL™ (2)
- 303261 X4 PIVOT BALL 6.0mm WITH M3x6.5mm THREAD - HUDY SPRING STEEL™ (2)

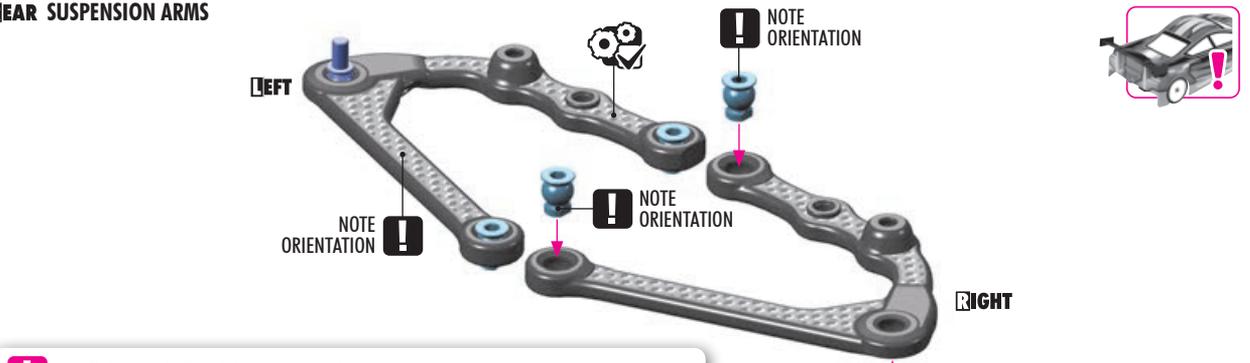
- 901308 HEX SCREW SB M3x8 (10)
- 901408 HEX SCREW SB M4x8 (10)
- 903308 HEX SCREW SFH M3x8 (10)

301024 CARBON CHASSIS 2.2mm

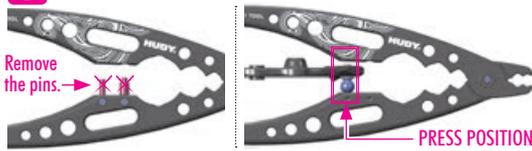
Numbers in parentheses () refer to quantities when purchased separately.

2. FRONT & REAR SUSPENSION

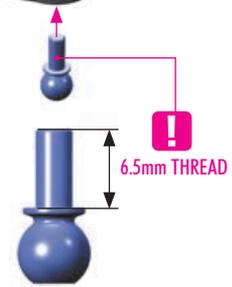
REAR SUSPENSION ARMS



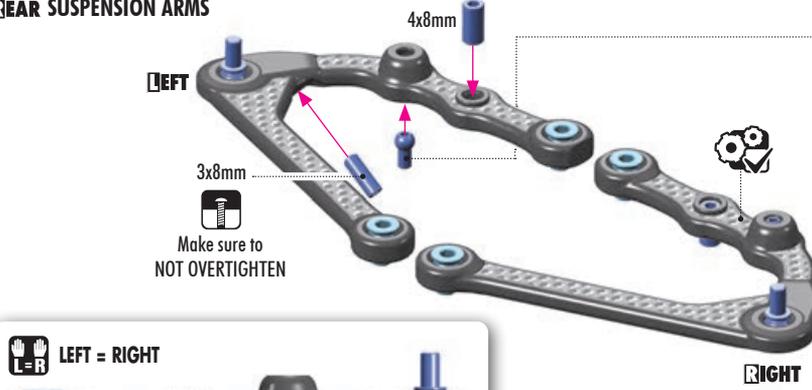
Install the pivot balls with Professional Multi Tool (HUDY #183011).



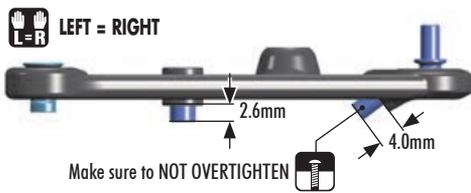
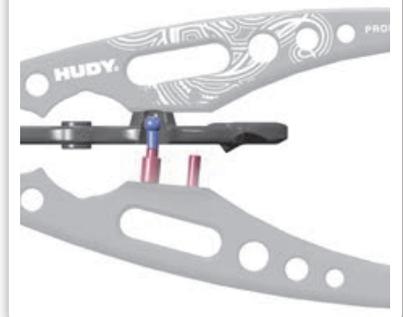
To make sure that the pivot ball is pressed into the arm correctly, remove the pins from the HUDY Multi Tool and use the exact press position like shown on the picture. This way the ball will never go through the arm and will NOT create any excessive play.



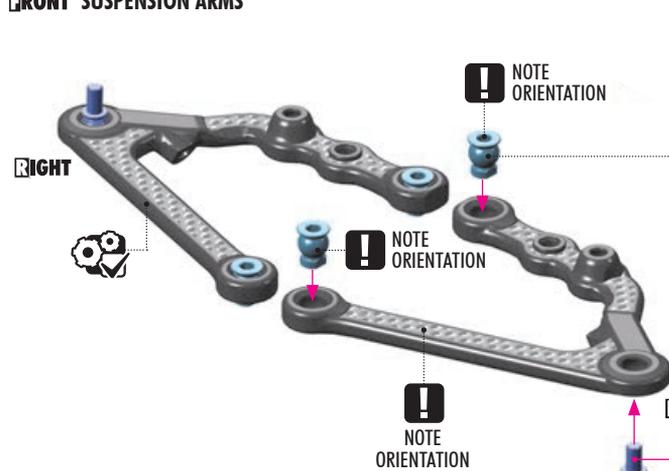
REAR SUSPENSION ARMS



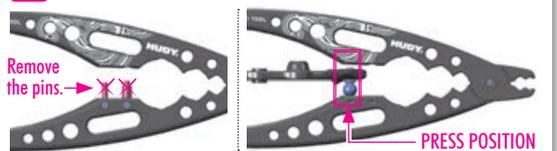
TIP Install the pivot balls with Professional Multi Tool (HUDY #183011).



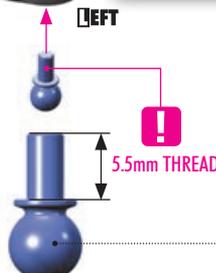
FRONT SUSPENSION ARMS



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



To make sure that the pivot ball is pressed into the arm correctly, remove the pins from the HUDY Multi Tool and use the exact press position like shown on the picture. This way the ball will never go through the arm and will NOT create any excessive play.



2. FRONT & REAR SUSPENSION

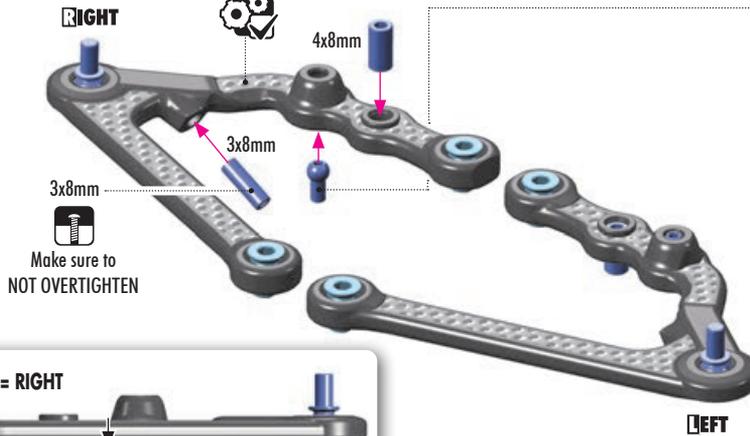


2x 901308
SB M3x8

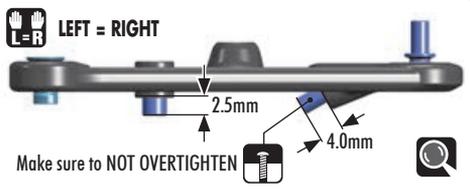


2x 901408
SB M4x8

FRONT SUSPENSION ARMS



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



4x 303118-K
SHIM 3x9x1



4x 303119-K
SHIM 3x9x2

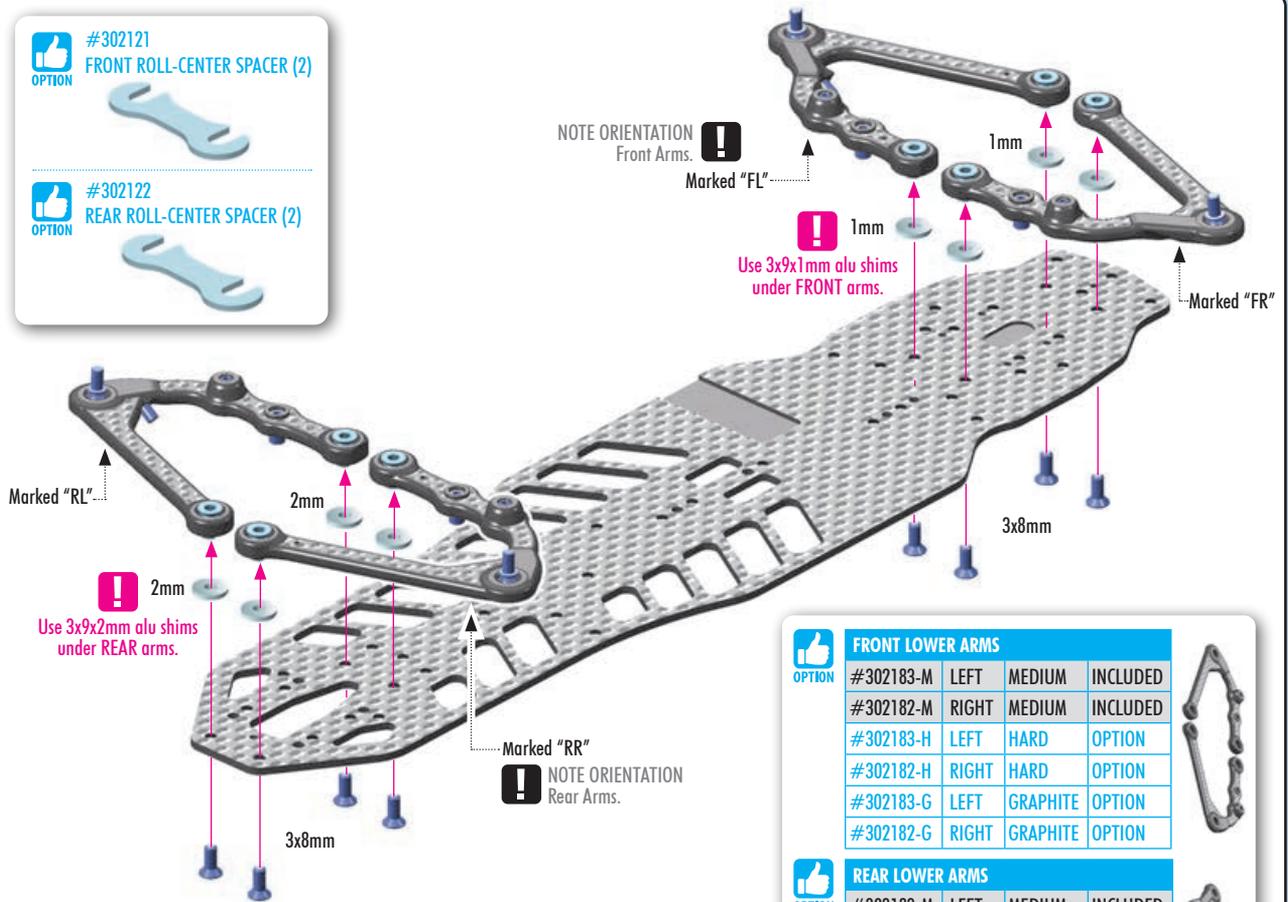


8x 903308
SFH M3x8

#302121
FRONT ROLL-CENTER SPACER (2)



#302122
REAR ROLL-CENTER SPACER (2)



VIDEO TECH TIP



ROLL-CENTER



CHASSIS ALTERNATIVES

ROLL-CENTER ADJUSTMENT

RAISING THE LOWER ARMS will raise the car's roll center. Raising the lower arms both front and rear will free up the car, and will make it initially more responsive. Side bite will be decreased. A higher roll center is typically recommended for asphalt racing.

LOWERING THE LOWER ARMS will lower the car's roll center. Lowering both the front and rear arms will lock in the car more, and will make it initially less responsive. Side bite will be increased. A lower roll center is typically recommended for carpet racing.



| OPTION | FRONT LOWER ARMS | | | |
|--------|------------------|-------|----------|----------|
| | #302183-M | LEFT | MEDIUM | INCLUDED |
| | #302182-M | RIGHT | MEDIUM | INCLUDED |
| | #302183-H | LEFT | HARD | OPTION |
| | #302182-H | RIGHT | HARD | OPTION |
| | #302183-G | LEFT | GRAPHITE | OPTION |
| | #302182-G | RIGHT | GRAPHITE | OPTION |



| OPTION | REAR LOWER ARMS | | | |
|--------|-----------------|-------|----------|----------|
| | #303183-M | LEFT | MEDIUM | INCLUDED |
| | #303182-M | RIGHT | MEDIUM | INCLUDED |
| | #303183-H | LEFT | HARD | OPTION |
| | #303182-H | RIGHT | HARD | OPTION |
| | #303183-G | LEFT | GRAPHITE | OPTION |
| | #303182-G | RIGHT | GRAPHITE | OPTION |



We recommend the **MEDIUM** hardness of the lower suspension arms for asphalt. These arms are more flexible than the H (hard) arms.

For carpet racing and even some high-traction asphalt conditions, we recommend the **HARD** suspension arms.

For very high traction conditions both carpet and asphalt, optional **GRAPHITE** arms will help to make the car more stable and easier to drive. Graphite arms should reduce chassis roll, resulting in improved cornering speed.

3. CENTRAL TRANSMISSION

#301578
ALU UPPER CLAMPS - 1.0mm
OPTION

FRONT

SPUR GEARS 48P

| | | |
|-----------|-----------|--------|
| #305772 | 72T / 48P | OPTION |
| #305776 | 76T / 48P | OPTION |
| #305778 | 78T / 48P | OPTION |
| #305779 | 79T / 48P | OPTION |
| #305781 | 81T / 48P | OPTION |
| #305784 | 84T / 48P | OPTION |
| #305784-0 | 84T / 48P | OPTION |

OFFSET SPUR GEARS 64P

| | | |
|-----------|------------|----------|
| #305860 | 90T / 64P | OPTION |
| #305862 | 92T / 64P | OPTION |
| #305866 | 96T / 64P | OPTION |
| #305866-0 | 96T / 64P | OPTION |
| #305869 | 99T / 64P | OPTION |
| #305870 | 100T / 64P | INCLUDED |
| #305870-0 | 100T / 64P | OPTION |
| #305874 | 104T / 64P | OPTION |
| #305876 | 106T / 64P | OPTION |
| #305878 | 108T / 64P | OPTION |
| #305880 | 110T / 64P | OPTION |
| #305880-0 | 110T / 64P | OPTION |
| #305882 | 112T / 64P | OPTION |
| #305884 | 114T / 64P | OPTION |

#303768
ALU CHASSIS T-BRACE - 7075 T6
OPTION

#303767
BRASS CHASSIS T-BRACE - 8g
OPTION

ALU CASTER BUSHINGS

| | | | |
|---------|------------------------------|--------|----------|
| #302310 | FRONT 3° / REAR 5.5° or 0.5° | 1 Dot | INCLUDED |
| #302311 | FRONT 4° / REAR 4.5° or 1.5° | 2 Dots | OPTION |
| #302312 | FRONT 5° / REAR 3.5° or 2.5° | 3 Dots | INCLUDED |

#305578-0
FIXED PULLEY FOR LAYSHAFT WITH BEARINGS 20T - GRAPHITE (2)
OPTION

#302064-K
ALU ADJ. BALL-BEARING HUB +1MM (2)
OPTION

#302063-K
ALU ADJUSTMENT BALL-BEARING HUB (2)
OPTION

| | | | |
|------------|-----------|--|---|
| BAG | 03 | <p>301553 X4F CARBON REAR UPPER CLAMP</p> <p>301576 ALU UPPER CLAMP - INNER SHOCK POSITION - SWISS 7075 T6 (L+R)</p> <p>301973 ALU SHOCK HOLDER FRONT FIXED - SWISS 7075 T6 (2)</p> <p>302062 COMPOSITE ADJUSTMENT BALL-BEARING HUB (4)</p> <p>302310 ALU CASTER BUSHING FRONT 3° / REAR 0.5°/5.5° - 1 DOT (4)</p> <p>302312 ALU CASTER BUSHING FRONT 5° / REAR 2.5°/3.5° - 3 DOTS (4)</p> <p>302776 ALU LOWER BULKHEAD - FRONT RIGHT - 7075 T6</p> <p>302777 ALU LOWER BULKHEAD - FRONT LEFT - 7075 T6</p> <p>302780 X4F ALU REAR BULKHEAD - FRONT - SWISS 7075 T6</p> <p>302781 X4F ALU REAR BULKHEAD - REAR - SWISS 7075 T6</p> <p>302976 ALU SHOCK HOLDER REAR FIXED - SWISS 7075 T6 (2)</p> <p>302977 ALU SHOCK HOLDER REAR ACTIVE - SWISS 7075 T6 (2)</p> <p>303126-K ALU SHIM 3x6x5.0mm - BLACK (10)</p> <p>303142-K ALU SHIM 3x5x0.5mm - BLACK (10)</p> <p>303754 X4F ALU MOTOR MOUNT - SWISS 7075 T6</p> <p>305438 HIGH-PERFORMANCE DRIVE BELT 3 x 291mm</p> <p>305525 X4F ALU SOLID LAYSHAFT & BEARINGS</p> <p>305531 X4F ALU SOLID LAYSHAFT WASHER FOR BATTERY BACKSTOP</p> | <p>305578 FIXED PULLEY FOR LAYSHAFT WITH BEARINGS 20T (2)</p> <p>305870 OFFSET SPUR GEAR 100T / 64P</p> <p>362651 BALL END 4.9MM WITH THREAD 8mm (2)</p> <p>901302 HEX SCREW SB M3x2.5 (10)</p> <p>901313 HEX SCREW SB M3x12 (10)</p> <p>902303 HEX SCREW SH M3x4 SMALL HEAD - STAINLESS (10)</p> <p>902305 HEX SCREW SH M3x5 (10)</p> <p>902306 HEX SCREW SH M3x6 (10)</p> <p>902308 HEX SCREW SH M3x8 (10)</p> <p>902310 HEX SCREW SH M3x10 (10)</p> <p>903305 HEX SCREW SFH M3x5 (10)</p> <p>903306 HEX SCREW SFH M3x6 (10)</p> <p>930407 BALL-BEARING 4x7x2.5 STEEL SEALED - OIL (2)</p> <p>962042 WASHER S 4x6x0.1 (10)</p> <p>970050 O-RING 5x1 (10)</p> <p>981208 PIN 2x8 (10)</p> <p>304902 X4 BB GEAR DIFFERENTIAL - SET</p> |
|------------|-----------|--|---|

Numbers in parentheses () refer to quantities when purchased separately.

3. CENTRAL TRANSMISSION



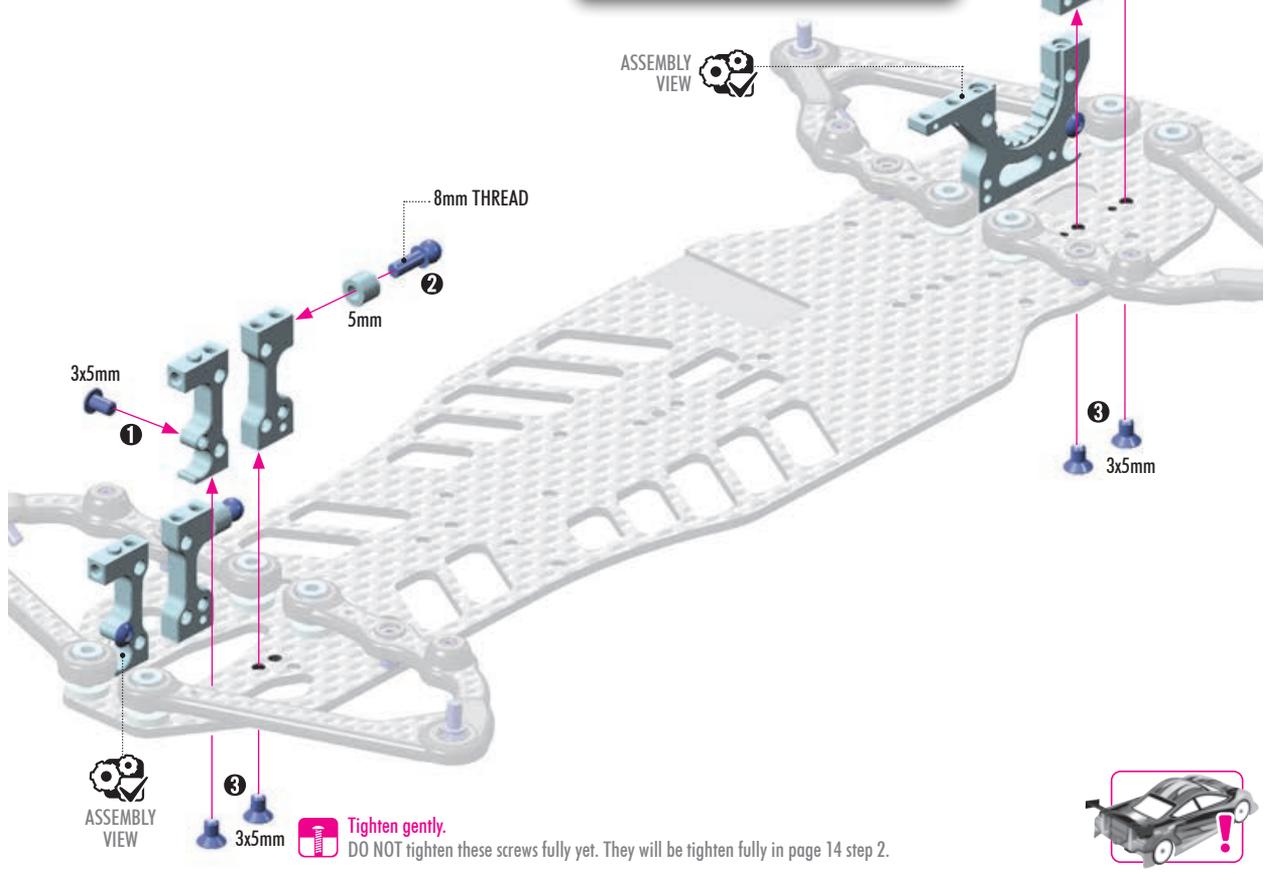
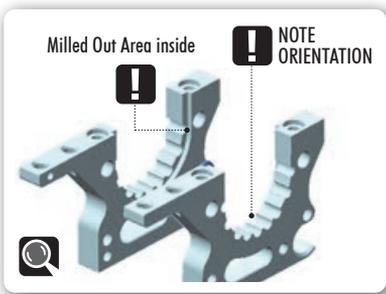
2x 303126-K SHIM 3x6x5



4x 902305 SH M3x5



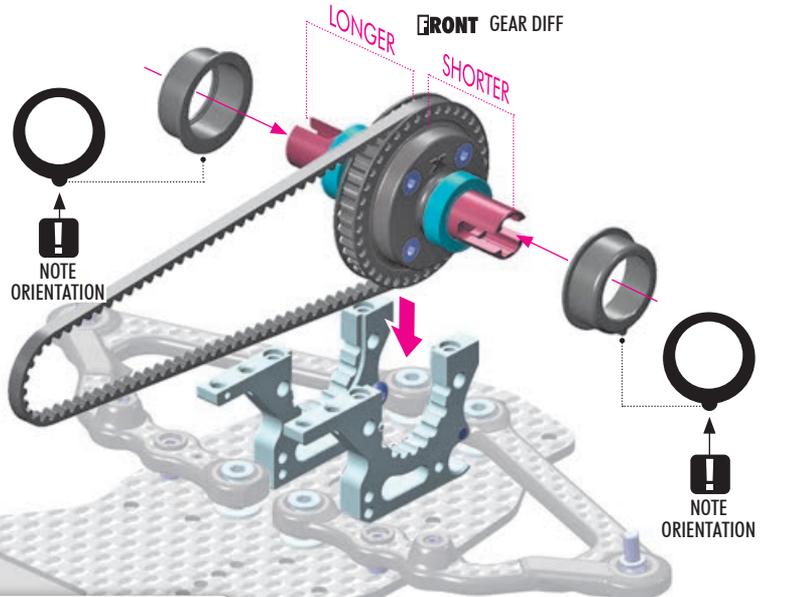
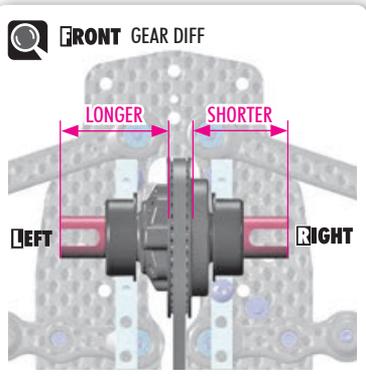
8x 903305 SFH M3x5



VIDEO TECH TIP



BUILDING THE BULKHEADS



#302064-K ALU ADJ. BALL-BEARING HUB +1MM (2)
OPTION



+1 Extra HIGH position (tab in bottom notch) increases rotation.

+1 Extra LOW position (tab in top notch) generates more traction and increases stability.

#302063-K ALU ADJUSTMENT BALL-BEARING HUB (2)
OPTION



3. CENTRAL TRANSMISSION

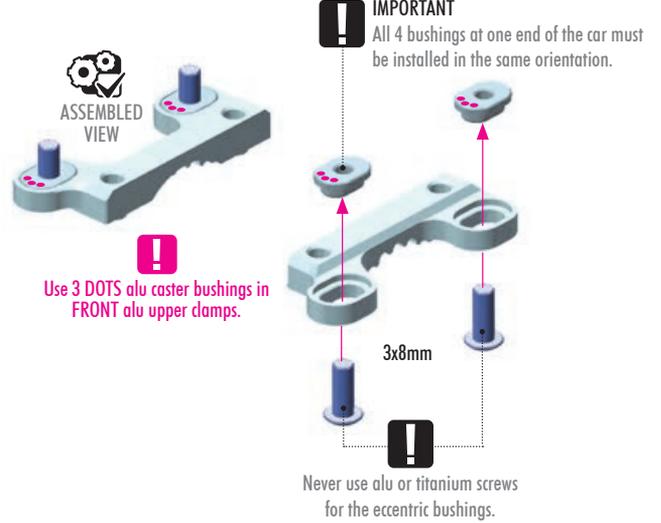
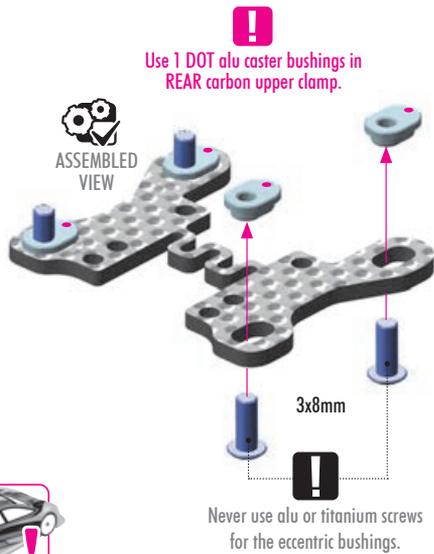


VIDEO TECH TIP



CASTER

NOTE ORIENTATION FOR ALL PARTS



ALU CASTER BUSHINGS

| OPTION | Part # | Configuration | Orientation | Status | Visual |
|--------|---------|------------------------------|-------------|----------|--------|
| | #302310 | FRONT 3° / REAR 5.5° or 0.5° | 1 Dot | INCLUDED | |
| | #302311 | FRONT 4° / REAR 4.5° or 1.5° | 2 Dots | OPTION | |
| | #302312 | FRONT 5° / REAR 3.5° or 2.5° | 3 Dots | INCLUDED | |



#301578
ALU UPPER CLAMPS - 1.0mm



The new upper clamps move the inner pivot 1.0mm closer to center. This position lengthens the upper arm and reduces camber gain to free up the car. Mid corner steering improves in long sweepers, and traction rolling is reduced in very high traction carpet conditions. Recommended for large open tracks or high traction carpet tracks.

CASTER ADJUSTMENT

FRONT CASTER

For most conditions, 5.0 deg front caster is a good starting point. Decreasing caster increases entry steering but will cause more on-power push.

REAR CASTER

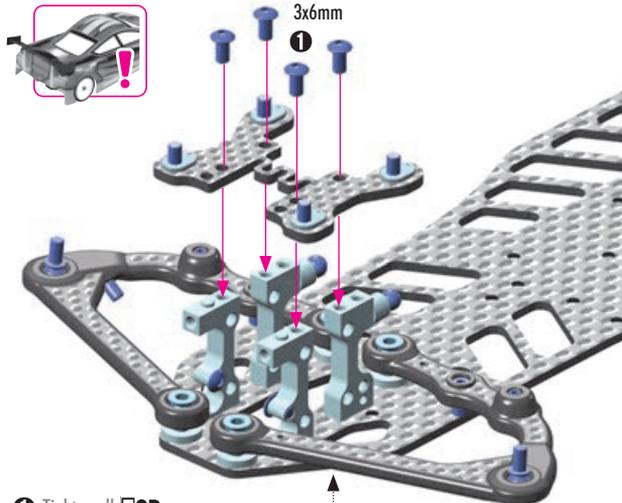
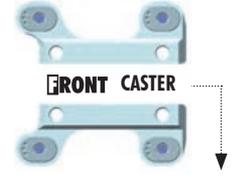
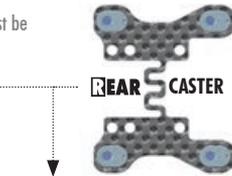
A good starting point for rear caster is 0.5°.

0.5 caster generates more cornerspeed and makes the car easier to drive in long sweepers. Recommended for both carpet and asphalt tracks.

5.5 caster improves rotation and steering, mainly recommended for tight tracks.

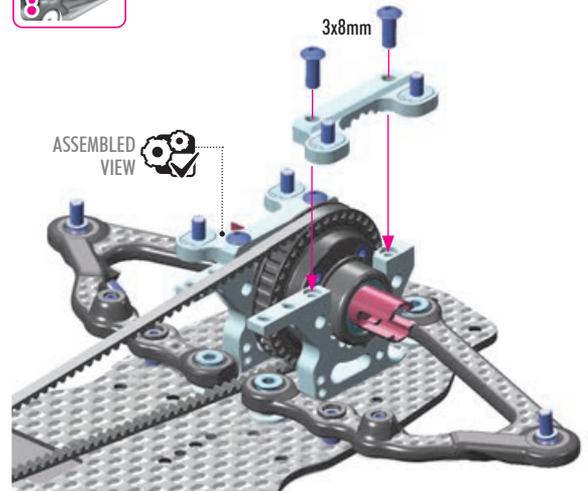
IMPORTANT

All 4 bushings at one end of the car must be installed in the same orientation.



1 Tighten all **TOP** screws.

2 Tighten all **BOTTOM** chassis screws.



3. CENTRAL TRANSMISSION

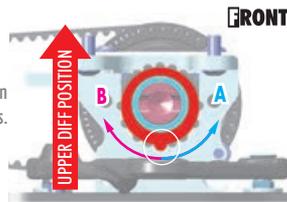


FRONT BELT TENSION ADJUSTMENT

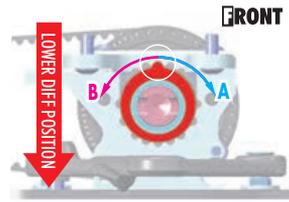
Front diff **UPPER** position - tab in bottom notch - provides **more steering**, but **less front traction**

Front diff **LOWER** position - tab in top notch - provides **more front traction**, but makes the car **push on-power**.

Recommended for **medium-high** traction tracks and technical tracks.



Recommended for **low-traction** tracks.



INITIAL POSITION FOR CARPET/ASPHALT
Place tab in this **BOTTOM NOTCH**

TO LOOSEN REAR BELT: Rotate both front nylon hubs in arrow direction **A**

TO TIGHTEN REAR BELT: Rotate both front nylon hubs in arrow direction **B**



VIDEO TECH TIP



DIFF HEIGHT



BELT TENSION ADJUSTMENT



3x 902303 SH M3x4



2x 930407 BB 4x7x2.5

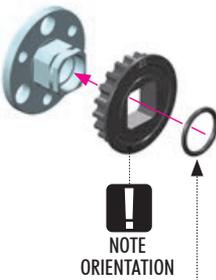


1x 970050 O 5x1



1x 966081 CH-CLIP 8

1.



NOTE ORIENTATION

#966081 CH-CLIP 8 (10) INCLUDED IN THE LAST AID BAG

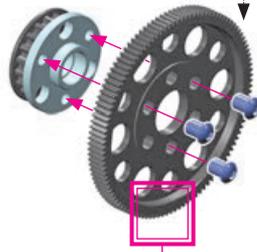
Another alternative to secure the pulley on the layshaft is to use the CH-clip which is included in the "Last Aid" Bag. To mount the clip on the layshaft, you have to use special Snap Ring Pliers.



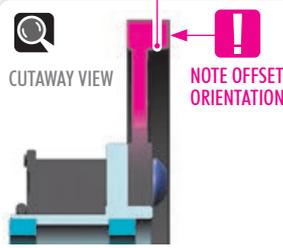
#305578-0 FIXED PULLEY FOR LAYSHAFT WITH BEARINGS 20T GRAPHITE (2)



2. ALTERNATIVE 64P OFFSET SPUR GEAR
INITIAL SETTING



NOTE ORIENTATION

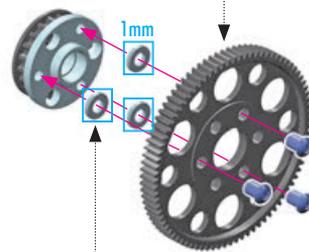


CUTAWAY VIEW

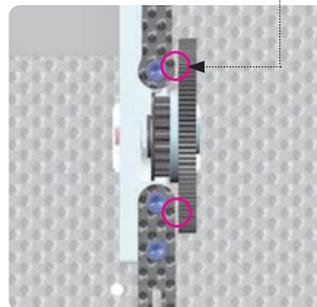
NOTE OFFSET ORIENTATION

| OFFSET SPUR GEARS 64P | | |
|-----------------------|------|----------|
| #305860 | 90T | OPTION |
| #305862 | 92T | OPTION |
| #305866 | 96T | OPTION |
| #305866-0 | 96T | OPTION |
| #305869 | 99T | OPTION |
| #305870 | 100T | INCLUDED |
| #305870-0 | 100T | OPTION |
| #305874 | 104T | OPTION |
| #305876 | 106T | OPTION |
| #305878 | 108T | OPTION |
| #305880 | 110T | OPTION |
| #305880-0 | 110T | OPTION |
| #305882 | 112T | OPTION |
| #305884 | 114T | OPTION |

2. ALTERNATIVE 48P SPUR GEAR

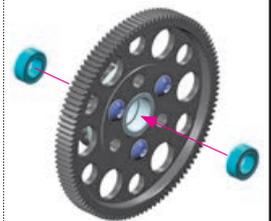


When using XRAY 48P spur gears or aftermarket spur gears without an offset, use the 3x5x1mm shims (#303141 NOT included) between the gear and layshaft to create the necessary clearance from the top deck.



| SPUR GEARS 48P | | |
|----------------|-----|--------|
| #305772 | 72T | OPTION |
| #305776 | 76T | OPTION |
| #305778 | 78T | OPTION |
| #305779 | 79T | OPTION |
| #305781 | 81T | OPTION |
| #305784 | 84T | OPTION |
| #305784-0 | 84T | OPTION |

3.



3. CENTRAL TRANSMISSION



1x 903306
SFH M3x6



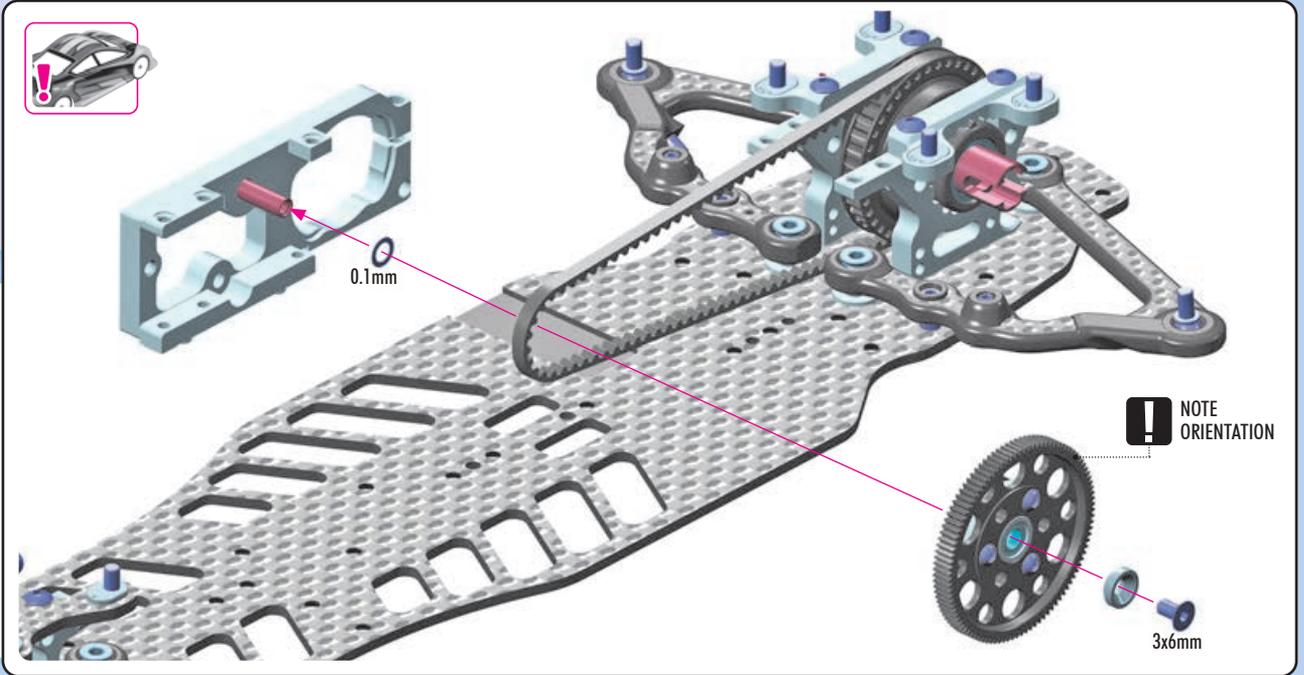
1x 962042
S 4x6x0.1



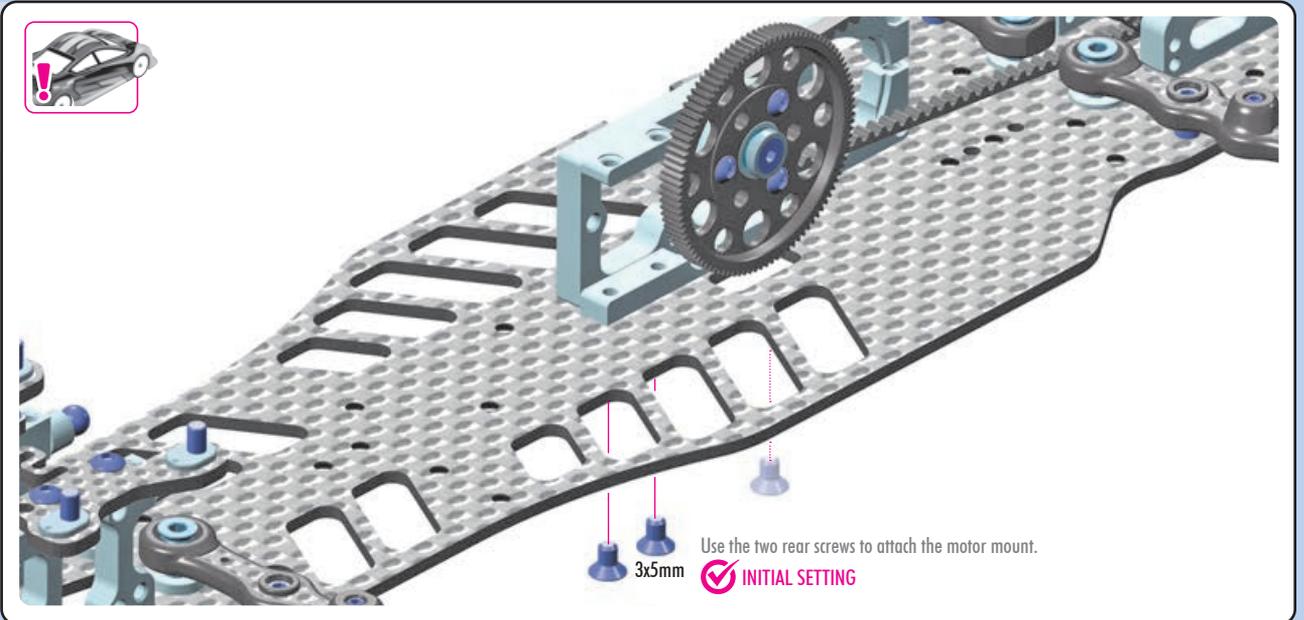
VIDEO TECH TIP



BELT TENSION
ADJUSTMENT



3x 903305
SFH M3x5



MOTOR MOUNT FLEX ADJUSTMENT



VIDEO TECH TIP

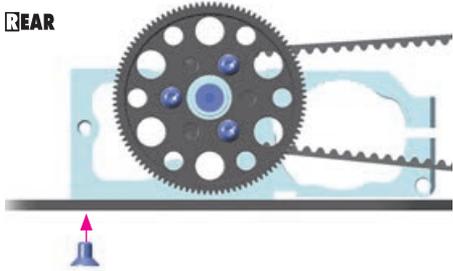


MOTOR MOUNT FLEX

SOFT

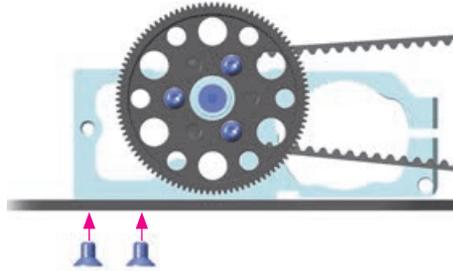
Use only the rearmost screw to attach the motor mount as shown below. This allows more central chassis flex and will improve traction, especially on power. Rear grip will improve through the entire corner. This setting is recommended for low to medium traction conditions, both on asphalt and carpet.

REAR



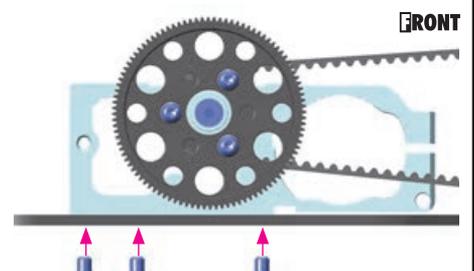
MEDIUM ✔ INITIAL SETTING

Use the two rear screws to attach the motor mount as shown, and DO NOT install the very front screw. This configuration is a compromise between stability and initial response. The additional rear screw improves stability with a slight reduction in steering.



STIFF

Use all three screws to attach the motor mount for maximum stability. Recommended for high traction surfaces.



3. CENTRAL TRANSMISSION

OPTION



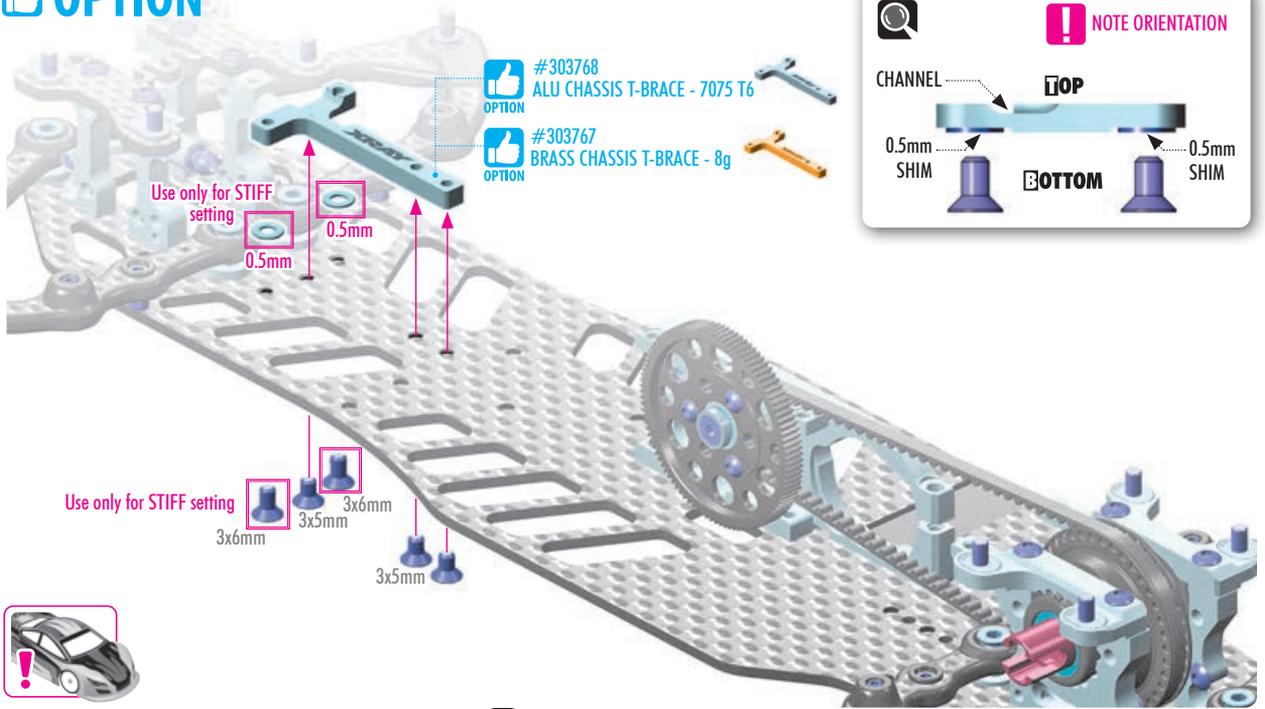
2x 303121-K
SHIM 3x6x0.5



3x 903305
SFH M3x5



2x 903306
SFH M3x6



CHASSIS FLEX ADJUSTMENT

The brace provides chassis flex adjustment possibilities depending on which screws are connected.

SOFT - NO BRACE

When the brace is NOT installed, the car will have the most steering and rotation. However, the car will be more difficult to drive as it is less stable. Recommended for medium-high traction conditions and for small, technical tracks with many hairpin corners.



REAR

SOFT - MEDIUM

Install the brace using only the 2 forward bottom centerline screws (as shown). This gives improved on-power stability but still offers great off-power steering and rotation. Recommended for medium-high traction conditions and for small, technical tracks with many hairpin corners.



REAR

MEDIUM

Install the brace using all 3 bottom centerline screws (as shown). This gives improved on-power stability and traction, but makes the car push more off-power. Recommended for low- or high-traction conditions where stability and traction is needed.



REAR

STIFF

In addition to installing all 3 bottom centerline screws, install the 2 side screws using 0.5mm shims between the brace and chassis. This setting gives maximum stability.



REAR



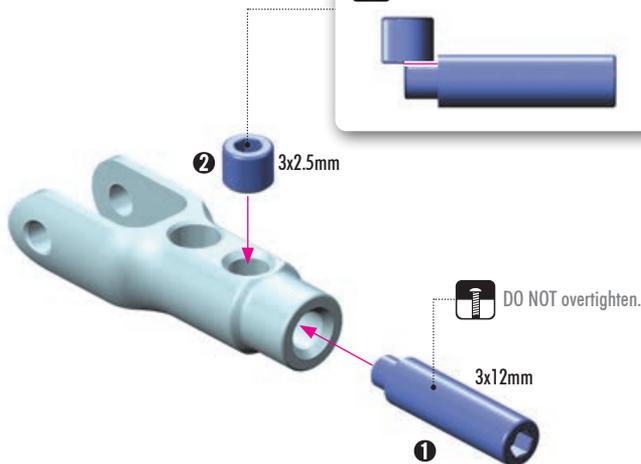
2x 901302
SB M3x2.5



2x 901313
SB M3x12

2x

The screw presses against the notch.



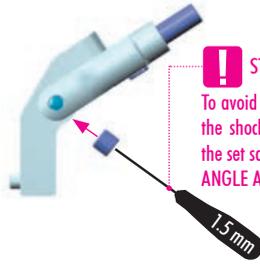
ASSEMBLED VIEW

3. CENTRAL TRANSMISSION

2x 901302
SB M3x2.5

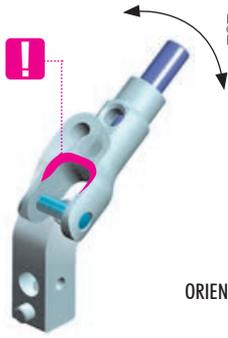
2x 981208
P 2x8

2x REAR SHOCK HOLDERS

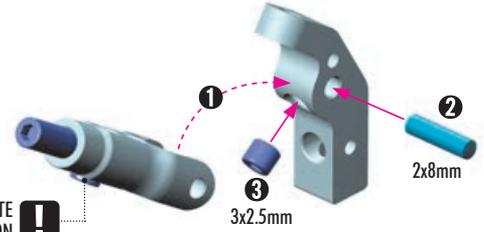


STEP 3
To avoid cross-threading and damaging the shock holders, make sure to insert the set screw slowly and at the **CORRECT ANGLE** AS SHOWN.

CHAMFERED EDGE UPPER ORIENTATION



CHECK FOR FREE MOVEMENT



NOTE ORIENTATION

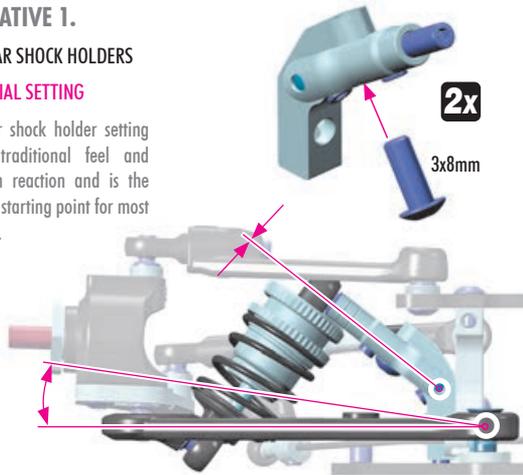
2x 902308
SH M3x8

ALTERNATIVE 1.

FIXED REAR SHOCK HOLDERS

INITIAL SETTING

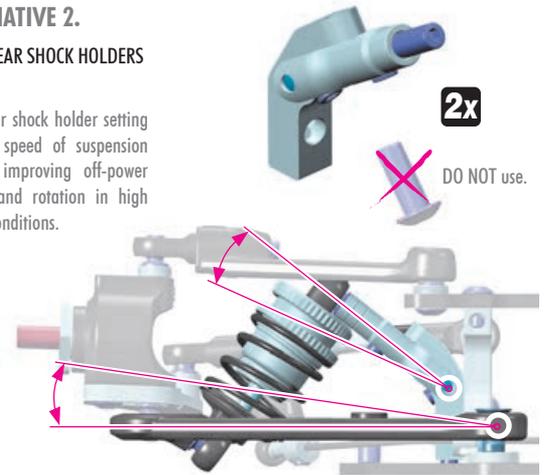
Fixed rear shock holder setting provides traditional feel and suspension reaction and is the suggested starting point for most conditions.



ALTERNATIVE 2.

ACTIVE REAR SHOCK HOLDERS

Active rear shock holder setting increases speed of suspension reaction, improving off-power steering and rotation in high traction conditions.



2x 303142-K
SHIM 3x5x0.5

2x 902310
SH M3x10

2x 903305
SFH M3x5



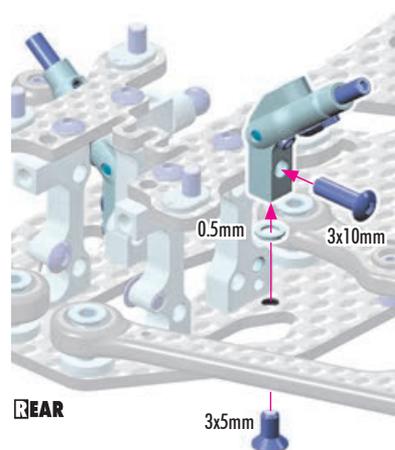
REAR SHOCK HOLDERS FLEX ADJUSTMENT

The brace provides chassis flex adjustment possibilities depending on which screws are connected.

FLEX ALTERNATIVE 1.

INITIAL SETTING

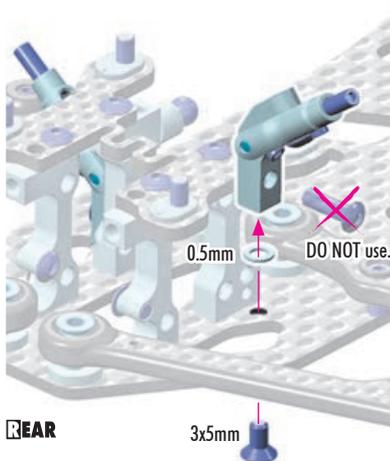
Attach the shock holder to both the chassis and bulkhead for free yet predictable handling for the easiest control. Recommended as a starting point for all traction levels.



REAR

FLEX ALTERNATIVE 2.

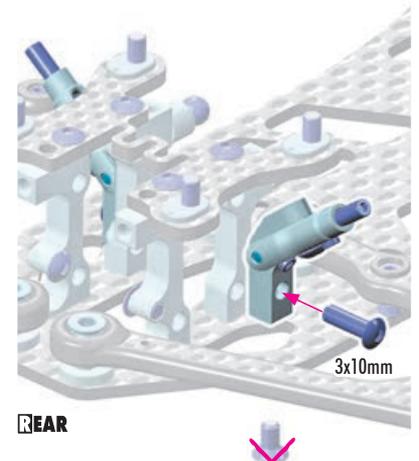
Attach the shock holder to only the chassis for medium flex setting. Provides more traction and steering than stiff setting. Recommended for medium traction tracks.



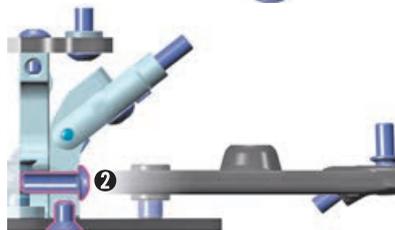
REAR

FLEX ALTERNATIVE 3.

Attaching the shock holders to only the bulkheads generates maximum traction and steering and is recommended for lower traction conditions. It can make the car less stable and can lead to traction-roll in higher traction conditions.



REAR



1 » All screws **TIGHTEN GENTLY**
» Fully **TIGHTEN** in this order



3. CENTRAL TRANSMISSION

- 2x 901302 SB M3x2.5
- 2x 901313 SB M3x12

2x FRONT SHOCK HOLDERS

ASSEMBLED VIEW

DO NOT overtighten.

6mm

3x12mm

3x2.5mm

The screw presses against the notch.

- 2x 303142-K SHIM 3x5x0.5
- 2x 902310 SH M3x10
- 2x 903305 SFH M3x5

FRONT SHOCK HOLDERS FLEX ADJUSTMENT

The brace provides chassis flex adjustment possibilities depending on which screws are connected.

FLEX ALTERNATIVE 1.

✓ INITIAL SETTING

Attach the shock holder to both the chassis and bulkhead for free yet predictable handling for the easiest control. Recommended as a starting point for all grip levels.

FRONT

FLEX ALTERNATIVE 2.

Attach the shock holder to only the chassis for medium flex setting. Provides more traction and steering than stiff setting. Recommended for medium traction tracks.

FRONT

FLEX ALTERNATIVE 3.

Attaching the shock holders to only the bulkheads generates maximum traction and steering and is recommended for lower traction conditions. It can make the car less stable and can lead to traction-roll in higher traction conditions.

FRONT

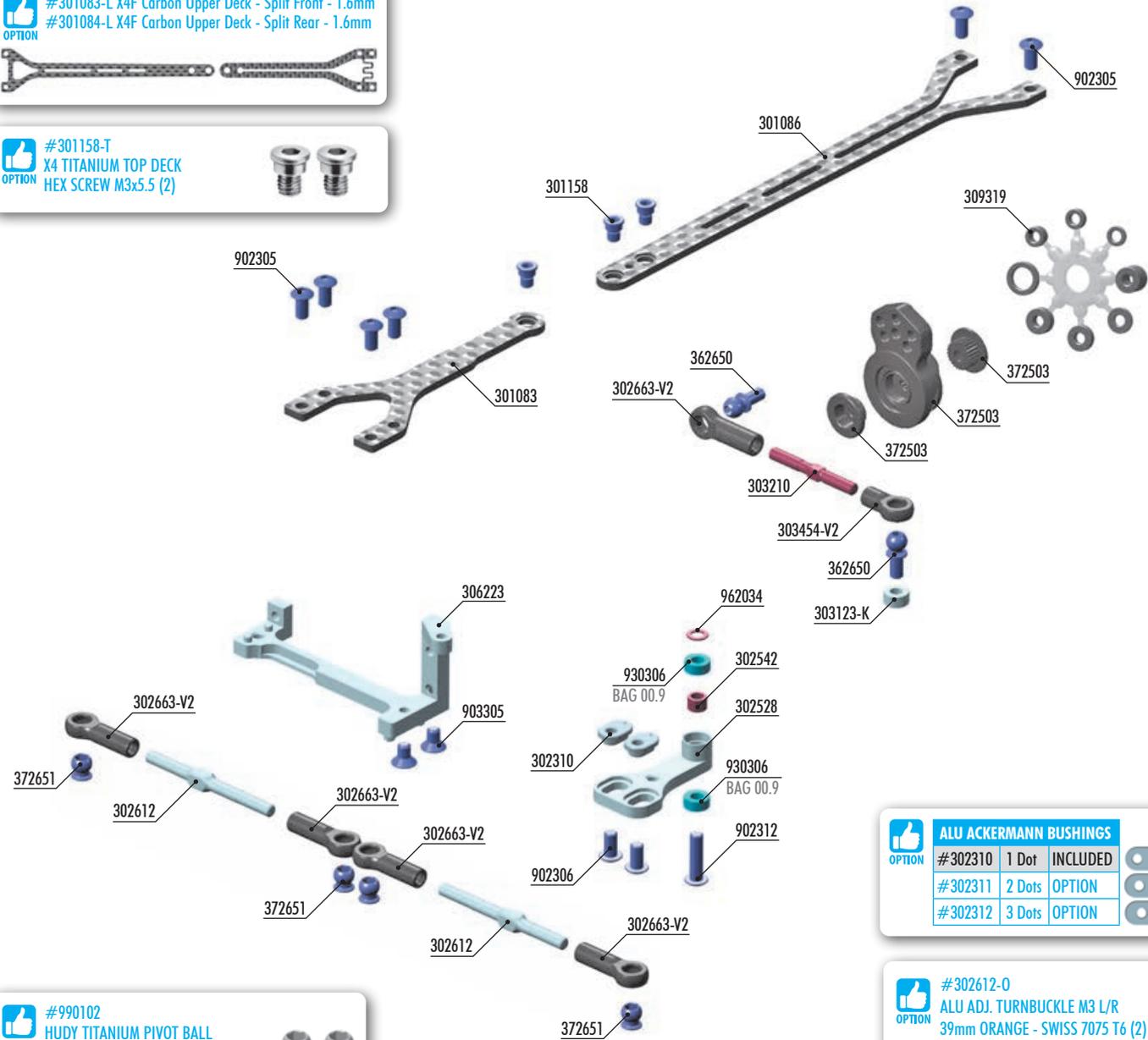
1 » All screws **TIGHTEN GENTLY**

2 » Fully **TIGHTEN** in this order 1 2

4. STEERING

OPTION #301083-L X4F Carbon Upper Deck - Split Front - 1.6mm
#301084-L X4F Carbon Upper Deck - Split Rear - 1.6mm

OPTION #301158-T X4 TITANIUM TOP DECK HEX SCREW M3x5.5 (2)



OPTION #990102 HUDY TITANIUM PIVOT BALL D=4.9 / S=3.5 / 3mm HEX (2)

OPTION #990006 HUDY TITANIUM BALL STUD D=4.9 / L=6 / S=3.5 / 2mm HEX (2)

OPTION #301085 CARBON UPPER DECK - 2.0mm
Optional one piece top deck increases chassis flex. Suggested for low traction conditions, it may remove some initial steering but generates more overall traction.

| ALU ACKERMANN BUSHINGS | | | |
|------------------------|--------|----------|--|
| #302310 | 1 Dot | INCLUDED | |
| #302311 | 2 Dots | OPTION | |
| #302312 | 3 Dots | OPTION | |

OPTION #302612-0 ALU ADJ. TURNBUCKLE M3 L/R 39mm ORANGE - SWISS 7075 T6 (2)

OPTION #302610 ADJ. TURNBUCKLE L/R 39mm HUDY SPRING STEEL (2)



BAG
04

- 301083 X4F CARBON UPPER DECK - SPLIT FRONT - 2.0mm
- 301086 X4F CARBON UPPER DECK - SPLIT REAR - 2.0mm
- 301158 TOP DECK HEX SCREW M3x5.5 - HUDY SPRING STEEL™ (2)
- 302310 ALU CASTER BUSHING FRONT 3° / REAR 0.5°/5.5° - 1 DOT (4)
- 302528 X4F ALU SERVO SAVER ARM - BLACK - SWISS 7075 T6
- 302542 STEEL SHIM 3x4.5x2.1mm (2)
- 302612 ALU ADJ. TURNBUCKLE M3 L/R 39mm - SWISS 7075 T6 (2)
- 302663-V2 COMPOSITE BALL JOINT 4.9mm - OPEN (8)
- 303123-K ALU SHIM 3x6x2.0mm - BLACK (10)
- 303210 REAR TURNBUCKLE L/R 26mm - HUDY SPRING STEEL (2)
- 303454-V2 BALL JOINT 4.9mm - OPEN (4)
- 306223 X4F ALU SERVO MOUNT - BLACK - ONE-PIECE - SWISS 7075 T6
- 309319 UNIVERSAL SET OF PLASTIC SHIMS

- 362650 BALL END 4.9mm WITH THREAD 6mm (2)
- 372503 COMPOSITE SERVO SAVER - X-STIFF - SET - V2
- 372651 PIVOT BALL UNIVERSAL 4.9mm (2)
- 902305 HEX SCREW SH M3x5 (10)
- 902306 HEX SCREW SH M3x6 (10)
- 902312 HEX SCREW SH M3x12 (10)
- 903305 HEX SCREW SFH M3x5 (10)
- 930306 BALL-BEARING 3x6x2.5 STEEL-SEALED - OILED (2)
- 962034 STEEL WASHER S 3x4.7x1 (10)

Numbers in parentheses () refer to quantities when purchased separately.

4. STEERING

2x
STEERING LINKS

NOTE ORIENTATION
Round ball joint on the long side.

LEFT THREAD **RIGHT THREAD**

2x **L-R**

26.1mm

OPTION #302612-0
ALU ADJ. TURNBUCKLE M3 L/R
39mm ORANGE - SWISS 7075 T6 (2)

OPTION #302610
ADJ. TURNBUCKLE L/R 39mm
HUDY SPRING STEEL (2)

1x
SERVO LINK

Adjust servo link to fit your servo.

LEFT THREAD **RIGHT THREAD**

approx. 16mm

2x 902306
SH M3x6

1x 902312
SH M3x12

1x 302542
SHIM 3x4.5x2.1

1x 962034
SHIM 3x4.7x1

2x 930306
BB 3x6x2.5

INITIAL SETTING
1 DOT ORIENTATION

VIDEO TECH TIP

STEERING SYSTEM

Silver 1mm

3x6x2.5mm

Black 3x4.5x2.1mm

3x6x2.5mm

3x12mm

ACKERMANN SETTINGS

There are two Ackermann setting alternatives. You can insert the Ackermann inserts in two different orientations which will result in the different Ackermann settings.

Dot oriented in the REAR:

- steering link mounted maximum forward
- less Ackermann

Makes the car more responsive, improves in-corner steering.
This setting equals to X4F'24 Ackermann position.

Dot oriented in the FRONT:

- steering link mounted maximum backward
- more Ackermann

Makes the car easier to drive, improves cornering speed.

Optional 2 Dots and 3 Dots inserts are available as an option for Ackermann setting fine tuning.

| OPTION | ALU ACKERMANN BUSHINGS | | |
|---------------|------------------------|--------|----------|
| OPTION | #302310 | 1 Dot | INCLUDED |
| | #302311 | 2 Dots | OPTION |
| | #302312 | 3 Dots | OPTION |

CHANGE ACKERMANN SETTINGS

To change the Ackermann setting, you can use 2mm screw driver and you can access to the screws from the window in the chassis.

FRONT BOTTOM

STEERING ARM HOLE
Use this hole in the chassis for tightening the steering arm screw.

ACKERMANN SETTING HOLE
Use this hole in the chassis for adjusting the Ackermann setting.

4. STEERING

TIP
Install with HUDY Multi Tool.

2x **L=R**

NOTE ORIENTATION (Outside)

NOTE ORIENTATION Ball joint open

Shiny side

Shiny side

Shiny side

Shiny side

#990102
HUDY TITANIUM PIVOT BALL
D=4.9 / S=3.5 / 3mm HEX (2)

The composite ball joints must move freely and **CAN NOT** touch each other. In case they are touching, use a hobbyknife to remove material from the ball joints.

CAN NOT TOUCH

1x **303123-K**
SHIM 3x6x2

SERVO SAVER

4.9mm BALL
6mm THREAD

2mm

4.9mm BALL
6mm THREAD

Shiny side

Shiny side

Use the adapter that matches the steering servo.
F = 25T H = 24T K = 23T

INITIAL SETTING

HUDY ADJUSTABLE CLAMP SERVO HORNS

OPTION

| | | |
|---------|-----|---------------|
| #293414 | 23T | KO, Sanwa |
| #293416 | 25T | Futaba, Savox |

ADJUSTABLE 15-19mm HEIGHT

19mm

15mm

HUDY ALU FIXED SERVO SAVER 1/10 TC & FWD - SET

OPTION #293352

Use the adapter that matches the steering servo.
F = 25T H = 24T K = 23T

VIDEO TECH TIP

STEERING SYSTEM

ALU SERVO HORNS - OFFSET

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

CLAMP ALU SERVO HORNS - OFFSET

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

CLAMP ALU SERVO HORNS - OFFSET

| | |
|---------|---------------------|
| #293411 | KO, Sanwa - 23T |
| #293412 | Hitec - 24T |
| #293413 | Savox, Futaba - 25T |

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

HUDY ALU SERVO HORNS

| | |
|---------|---------------------|
| #293497 | KO, Sanwa - 23T |
| #293498 | Hitec - 24T |
| #293499 | Savox, Futaba - 25T |

HUDY CLAMP ALU SERVO HORNS

| | |
|---------|---------------------|
| #293404 | KO, Sanwa - 23T |
| #293405 | Hitec - 24T |
| #293406 | Savox, Futaba - 25T |

HUDY ALU SERVO HORNS

| | |
|---------|---------------------|
| #293501 | KO, Sanwa - 23T |
| #293502 | Hitec - 24T |
| #293503 | Savox, Futaba - 25T |

HUDY CLAMP ALU SERVO HORNS

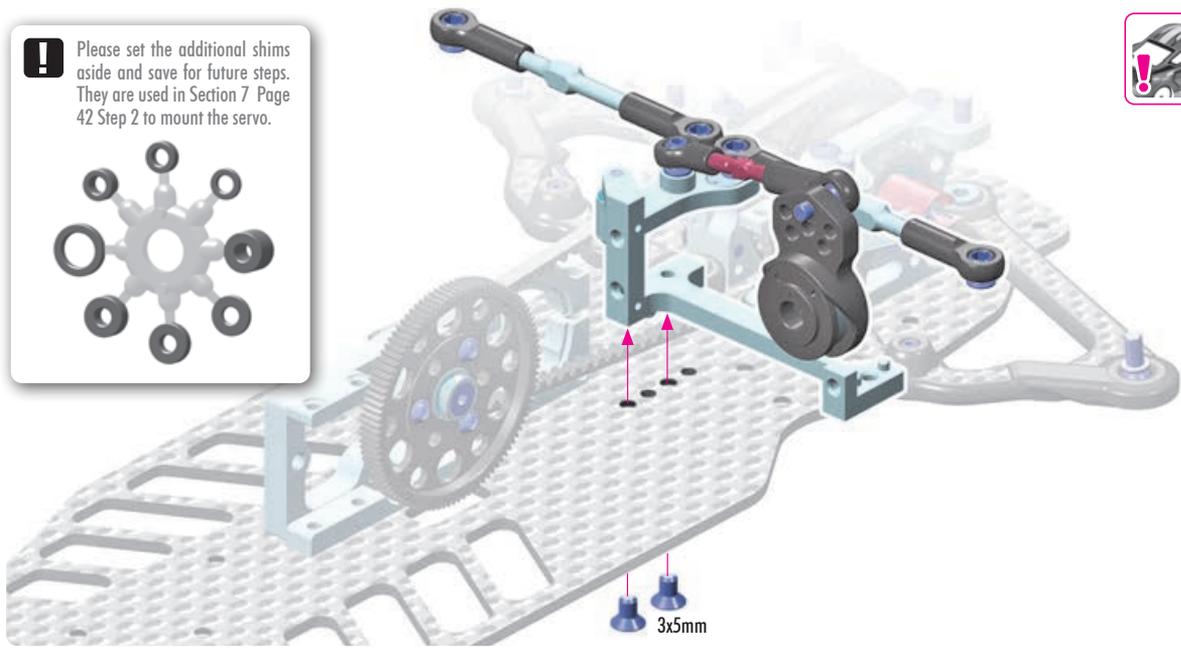
| | |
|---------|---------------------|
| #293407 | KO, Sanwa - 23T |
| #293408 | Hitec - 24T |
| #293409 | Savox, Futaba - 25T |

IMPORTANT! When an aluminum horn is used, the steering servo saver is **NOT** used. This increases the risk of breaking the servo in serious crashes.



2x 903305 SFH M3x5

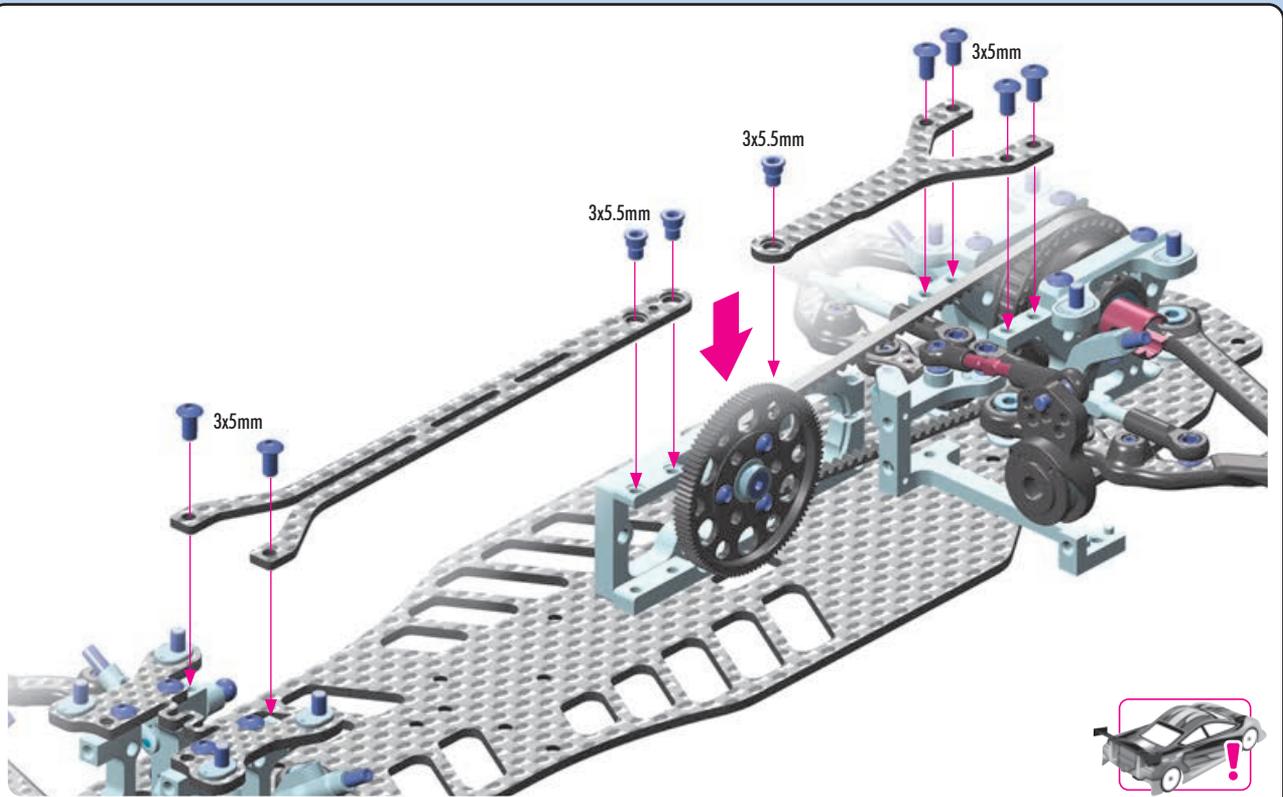
! Please set the additional shims aside and save for future steps. They are used in Section 7 Page 42 Step 2 to mount the servo.



3x 301158 SCREW 3x5.5



6x 902305 SH M3x5



VIDEO TECH TIP



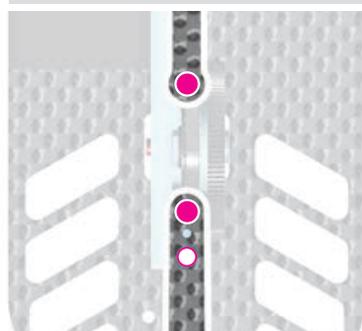
TOP DECK FLEX



TOP DECK (SPLIT) FLEX SETTINGS

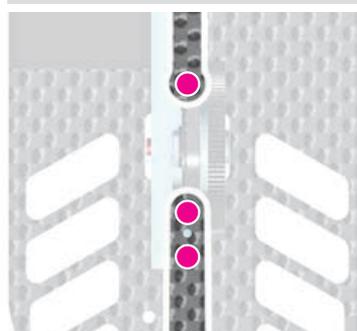
The new feature of the split top deck is the flex setting adjustment. There are two different flex setting alternatives.

SOFT



This allows maximum flex and provides maximum steering and rotation. However, the car is less stable on-power.

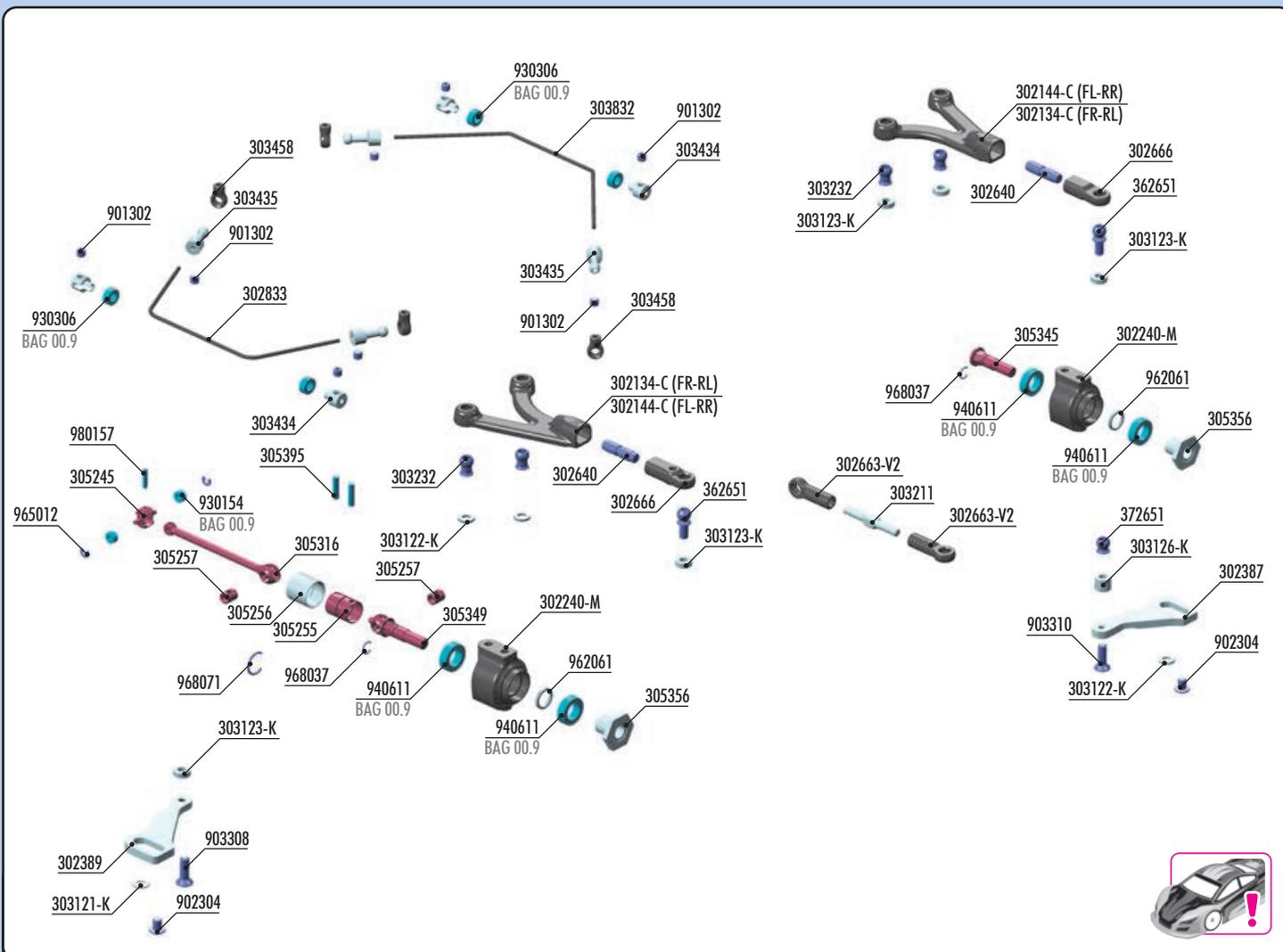
STIFF



INITIAL SETTING

This setting gives reduced flex in the rear which improves stability and on-power traction.

5. FRONT & REAR SUSPENSION



| BAG 05 | | | |
|-----------|---|--------|---|
| 302134-C | X4 COMPOSITE UPPER ARM - INNER SHOCK POSITION - FR/RL | 305257 | ECS BB SC DRIVE SHAFT COUPLING - HUDY SPRING STEEL™ |
| 302144-C | X4 COMPOSITE UPPER ARM - INNER SHOCK POSITION - FL/RR | 305306 | X4 ECS BB DRIVE SHAFT 58mm - HUDY SPRING STEEL™ - SET |
| 302240-M | X4 COMPOSITE STEERING BLOCK - MEDIUM | 305316 | X4 ECS BB DRIVE SHAFT 58mm - HUDY SPRING STEEL™ (2) |
| 302387 | X4 ALU REAR ARS PLATE - INNER SHOCK POSITION - SWISS 7075 T6 (L+R) | 305345 | X4F DRIVE AXLE - HUDY SPRING STEEL™ |
| 302389 | X4F ALU FRONT STEERING PLATE - INNER SHOCK POSITION - 7075 T6 (L+R) | 305349 | X4 ECS DRIVE AXLE - SPRING CLIP - HUDY SPRING STEEL™ |
| 302640 | ADJUSTABLE CAMBER SCREW 14mm M4 L/R - HUDY SPRING STEEL™ (2) | 305356 | X4 ALU WHEEL HUB - SPRING CLIP - SWISS 7075 T6 (2) |
| 302663-V2 | COMPOSITE BALL JOINT 4.9mm - OPEN (8) | 305395 | ECS BB SC DRIVE SHAFT PIN 2 x 8.4 (2) |
| 302666 | COMPOSITE BALL JOINT 4.9mm F+R - OPEN (2+2) | 362651 | BALL END 4.9mm WITH THREAD 8mm (2) |
| 302833 | X4 ANTI-ROLL BAR UAM - UNDER ARM MOUNT - FRONT 1.3mm | 372651 | PIVOT BALL UNIVERSAL 4.9mm (2) |
| 303121-K | ALU SHIM 3x6x0.5mm - BLACK (10) | 901302 | HEX SCREW SB M3x2.5 (10) |
| 303122-K | ALU SHIM 3x6x1.0mm - BLACK (10) | 902304 | HEX SCREW SH M3x4 - STAINLESS (10) |
| 303123-K | ALU SHIM 3x6x2.0mm - BLACK (10) | 903308 | HEX SCREW SFH M3x8 (10) |
| 303126-K | ALU SHIM 3x6x5.0mm - BLACK (10) | 903310 | HEX SCREW SFH M3x10 (10) |
| 303211 | ALU ADJUSTABLE TURNBUCKLE L/R 30mm - SWISS 7075 T6 (2) | 930154 | BALL-BEARING 1.5x4x2 STEEL-SEALED - OIL (4) |
| 303232 | X4 UPPER ARM BALL UNIVERSAL 4.9mm - HUDY SPRING STEEL™ (2) | 930306 | BALL-BEARING 3x6x2.5 STEEL-SEALED - OIL (2) |
| 303434 | ALU ANTI-ROLL BAR BUSHING ø2.0mm - 6mm (2) | 940611 | BALL-BEARING 6x10x3 RUBBER SEALED - OIL (2) |
| 303435 | ALU ANTI-ROLL BAR BALL END 3.9mm - SWISS 7075 T6 (2) | 962061 | WASHER S 6x7.5x1.0 (10) |
| 303458 | COMPOSITE ANTI-ROLL BAR BALL JOINT 3.9mm (4) | 965012 | E-CLIP 1.2 (10) |
| 303832 | X4 ANTI-ROLL BAR UAM - UNDER ARM MOUNT - REAR 1.2mm | 968037 | C-CLIP 3.7 (10) |
| 305245 | ECS BB DRIVE SHAFT ADAPTER - HUDY SPRING STEEL™ (2) | 968071 | C-CLIP 7.1 (10) |
| 305255 | ECS BB SC DRIVE SHAFT CASE - HUDY SPRING STEEL™ | 980157 | PIN 1.5x7.3 (10) |
| 305256 | ECS BB SC ALU DRIVE SHAFT SLEEVE - SWISS 7075 T6 | | |

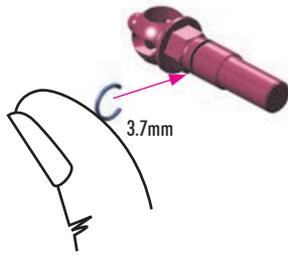
Numbers in parentheses () refer to quantities when purchased separately.

| BAG 05.1 | | | |
|-----------|---------------------------------------|--------|--|
| 302390 | X4 COMPOSITE CASTER GAUGE (2) | 303212 | ALU ADJ. TURNBUCKLE L/R 26MM - SWISS 7075 T6 (2) |
| 302663-V2 | COMPOSITE BALL JOINT 4.9mm - OPEN (8) | 902304 | HEX SCREW SH M3x4 - STAINLESS (10) |
| 302670 | COMPOSITE UPPER ARM LINKS (1+1+1+1) | | |

5. FRONT & REAR SUSPENSION

-  4x 305395 P 2x8.4
-  2x 968037 C 3.7
-  2x 968071 C 7.1

2x FRONT TRANSMISSION - ECS DRIVE SHAFT



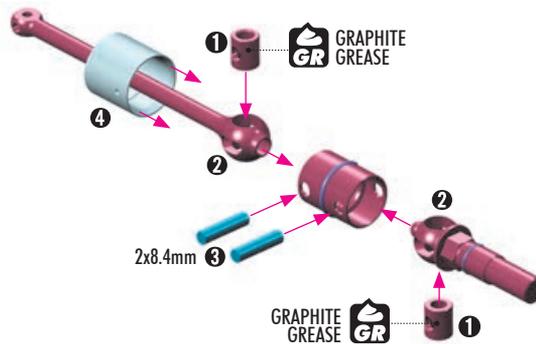
Insert the clip into the groove on the axle. The clip should fit smoothly without extra force and should NOT require pliers. Make sure the clip will rotate after installation.



2x

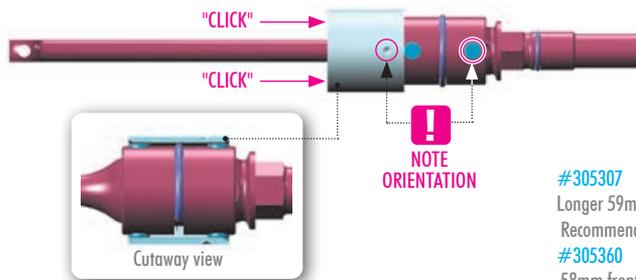


2x



| FRONT ECS DRIVE SHAFTS | | | |
|------------------------|---------|---------------|----------|
| OPTION | #305360 | 58mm - ECS | OPTION |
| | #305306 | 58mm - BB ECS | INCLUDED |
| | #305307 | 59mm - BB ECS | OPTION |

2x



#305307
Longer 59mm front drive shafts provide more stability but reduce steering. Recommended for high traction carpet.

#305360
58mm front drive shafts must be used with 305241 replacement caps.



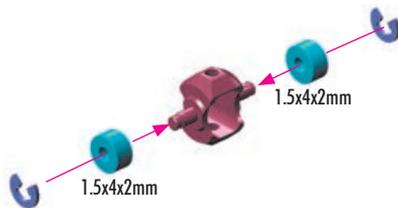
VIDEO TECH TIP



DRIVE SHAFTS

-  4x 930154 BB 1.5x4x2
-  4x 965012 E 1.2

2x



TIP DISASSEMBLY OF ECS DRIVE SHAFT

To disassemble the alu drive shaft sleeve from the drive shaft, hold the sleeve firmly with a HUDY Multi-Tool, and lightly push the drive shaft down against a flat surface.



-  2x 980157 P 1.5x7.3

2x



5. FRONT & REAR SUSPENSION



4x 940611
BB 6x10x3

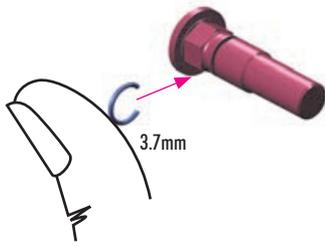


2x 962061
S 6x7.5x1



2x 968037
C 3.7

2x REAR TRANSMISSION



Insert the clip into the groove on the axle. The clip should fit smoothly without extra force and should NOT require pliers. Make sure the clip will rotate after installation.



STEERING BLOCKS

| OPTION | STEERING BLOCKS | INCLUDED |
|-----------|-----------------|----------|
| #302240-M | MEDIUM | INCLUDED |
| #302240-H | HARD | OPTION |
| #302240-G | GRAPHITE | OPTION |
| #302241 | ALU | OPTION |



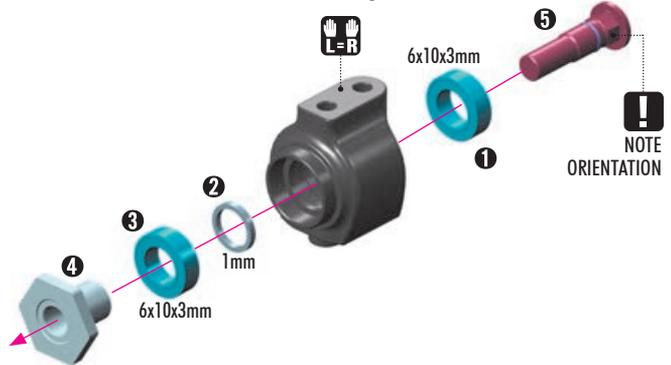
MEDIUM hubs generate the maximum amount of side traction, which is the best starting point for most conditions.

HARD hubs' additional stiffness is recommended for low to medium traction conditions for balanced handling with good traction and cornering speed.

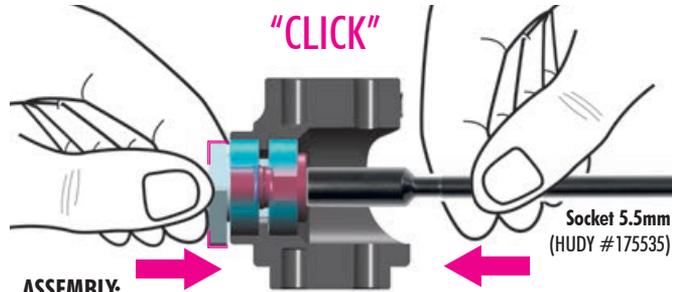
GRAPHITE hubs are recommended for high to very high traction conditions to help improve rotation and cornering speed.

ALU hubs are recommended for high traction surfaces to improve rotation and free up the car, but they will decrease traction. ALU hubs also improve durability in serious crashes.

Left UPRIGHT = Right UPRIGHT



"CLICK"



ASSEMBLY:

When installing the wheel hub on the drive axle, make sure the inside groove in the hub seats over the clip on the axle.

To confirm proper installation there should be a 'click' noise when the clip engages the inner groove in the wheel hub. There should be slight axial play once fully seated.

DISASSEMBLY:

To remove the wheel hub from the axle, push the end of the axle back through the wheel hub to separate the wheel hub from the inner clip.



OFFSET WHEEL SHIMS

| OPTION | OFFSET WHEEL SHIMS | INCLUDED |
|---------|--------------------|----------|
| #305380 | 0.75mm | OPTION |
| #305382 | 0.5mm | OPTION |
| #305381 | 1.0mm | OPTION |



To adjust the width of the car, optional wheel shims can be quickly added or removed.



#305359 ALU WHEEL HUB +0.5mm



The wider wheel hubs free up the car and improve cornering speed in high traction conditions.



#305354 ALU WHEEL HUB -0.5mm



For very low traction conditions, the narrower wheel hubs can generate more traction and steering but will make the car nervous and decrease cornering speed.

2x REAR TRANSMISSION

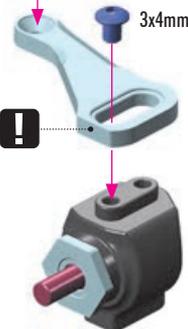
3x10mm



DO NOT OVERTIGHTEN

The thread in the rear ARS plate is very short; therefore, make sure to tighten the screw gently.

NOTE ORIENTATION



ASSEMBLY VIEW



BOTTOM VIEW



2x 902304
SH M3x4



2x 903310
SFH M3x10

5. FRONT & REAR SUSPENSION



4x 940611
BB 6x10x3



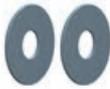
2x 962061
S 6x7.5x1

2x FRONT TRANSMISSION



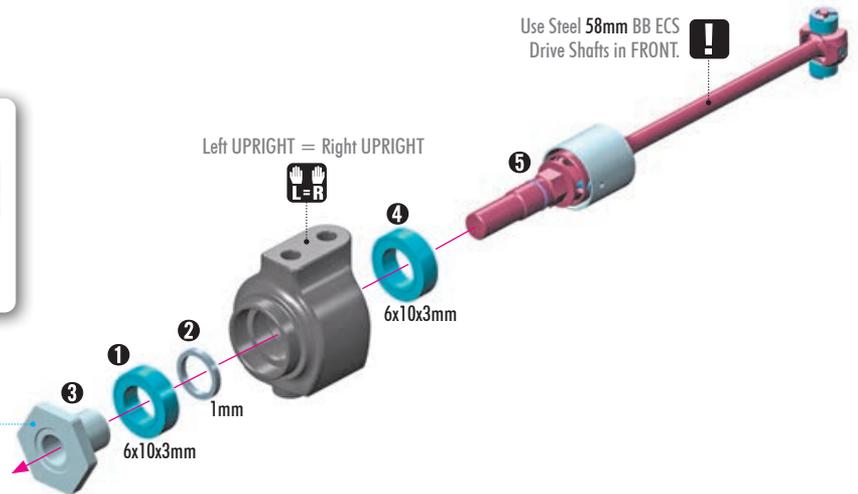
OFFSET WHEEL SHIMS

| | | |
|---------|--------|--------|
| #305380 | 0.75mm | OPTION |
| #305382 | 0.5mm | OPTION |
| #305381 | 1.0mm | OPTION |



To adjust the width of the car, optional wheel shims can be quickly added or removed.

Use Steel 58mm BB ECS
Drive Shafts in FRONT. **!**



STEERING BLOCKS

| | | |
|-----------|----------|----------|
| #302240-M | MEDIUM | INCLUDED |
| #302240-H | HARD | OPTION |
| #302240-G | GRAPHITE | OPTION |
| #302241 | ALU | OPTION |



MEDIUM hubs generate the maximum amount of side traction, which is the best starting point for most conditions.

HARD hubs' additional stiffness is recommended for low to medium traction conditions for balanced handling with good traction and cornering speed.

GRAPHITE hubs are recommended for high to very high traction conditions to help improve rotation and cornering speed.

ALU hubs are recommended for high traction surfaces to improve rotation and free up the car, but they will decrease traction. Alu hubs also improve durability in serious crashes.



#305359
ALU WHEEL HUB +0.5mm



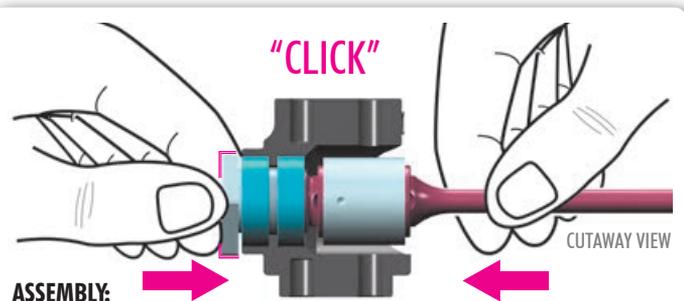
The wider wheel hubs free up the car and improve cornering speed in high traction conditions.



#305354
ALU WHEEL HUB -0.5mm



For very low traction conditions, the narrower wheel hubs can generate more traction and steering but will make the car nervous and decrease cornering speed.



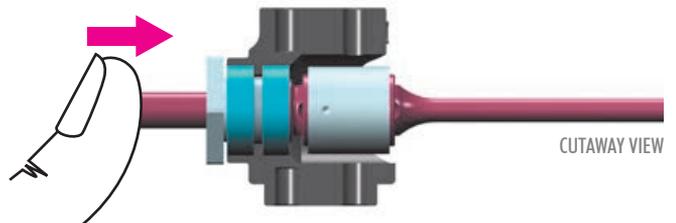
ASSEMBLY:

When installing the wheel hub on the drive axle, make sure the inside groove in the hub seats over the clip on the axle.

To confirm proper installation there should be a 'click' noise when the clip engages the inner groove in the wheel hub. There should be slight axial play once fully seated.

DISASSEMBLY:

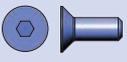
To remove the wheel hub from the axle, push the end of the axle back through the wheel hub to separate the wheel hub from the inner clip.



2x FRONT TRANSMISSION



2x 902304
SH M3x4



2x 903308
SFH M3x8

DO NOT OVERTIGHTEN

The threads in the front steering plate are very short; take caution to tighten the screw gently.



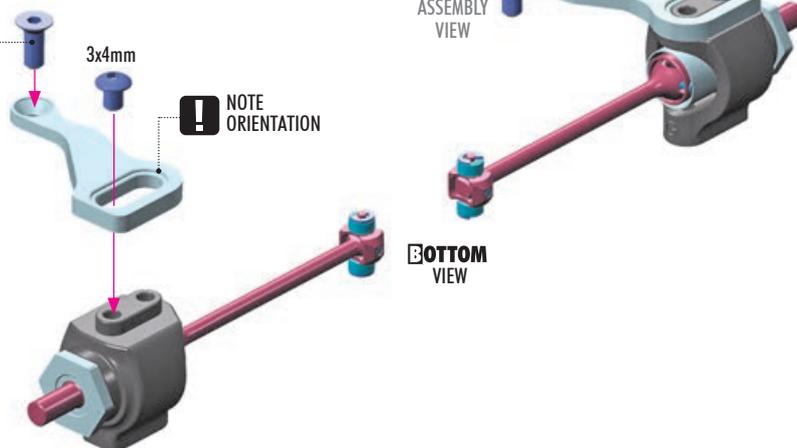
3x8mm

3x4mm

! NOTE
ORIENTATION

ASSEMBLY
VIEW

BOTTOM
VIEW

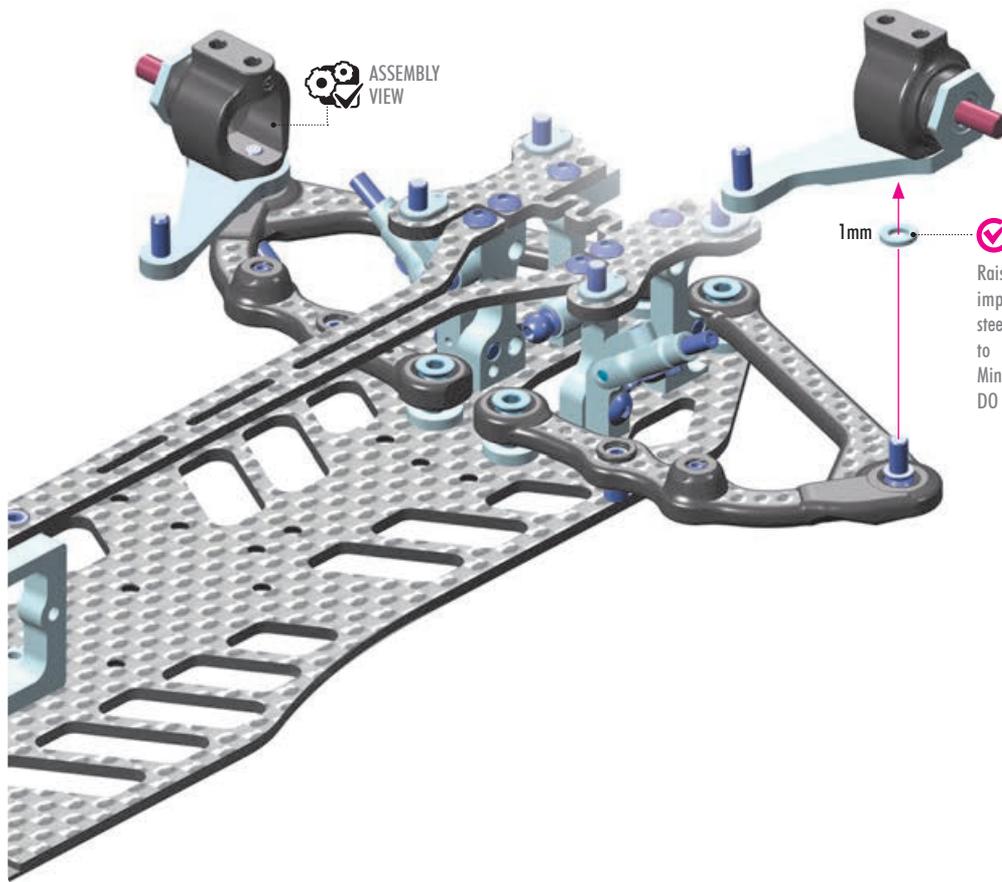


5. FRONT & REAR SUSPENSION


2x 303122-K
 SHIM 3x6x1
 VIDEO TECH TIP

 ROLL-CENTER

2x REAR SUSPENSION



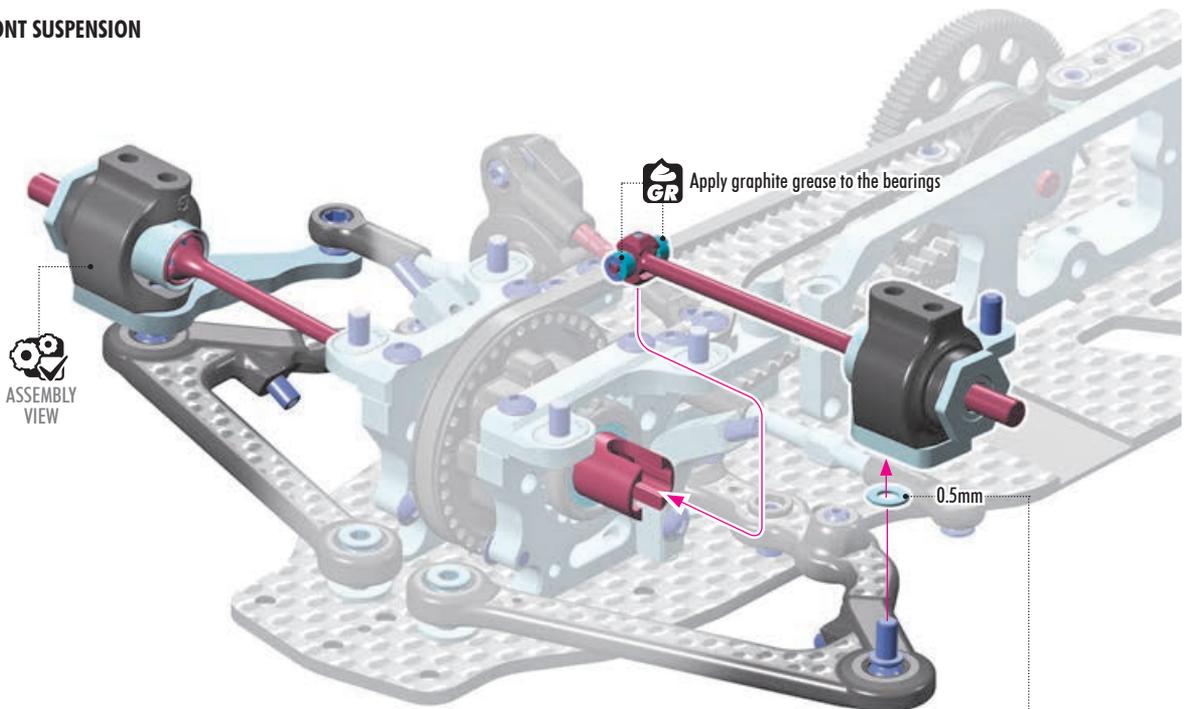
✓ INITIAL SETTING

Raising the rear axle height will improve rotation and off-power steering. Recommended for medium to high traction asphalt surfaces. Minimum shim thickness is 0.5mm; DO NOT use thinner.




2x 303121-K
 SHIM 3x6x0.5

2x FRONT SUSPENSION



Raising the front axle height will free up the front, reduce front grip, and make the car more forgiving to drive. Higher front axle also helps to avoid traction rolling in higher traction conditions. Minimum shim thickness is 0.5mm; DO NOT use thinner.



5. FRONT & REAR SUSPENSION

This kit includes two upper arm **ALTERNATIVES**. The traditional **CFF™ UPPER ARM** and **UPPER ARM LINKS**. Please read the full descriptions before selecting the best alternative.

UPPER ARMS CFF™ ALTERNATIVE

CFF™ Upper Arms are suggested for most conditions as they provide neutral handling and require minimal set-up adjustments between runs.

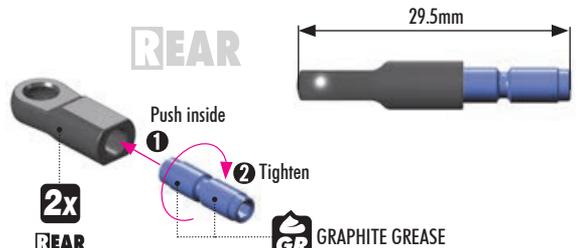
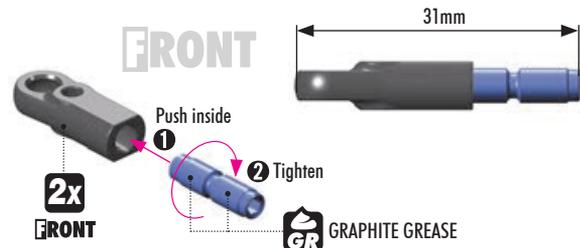
INITIAL SETTING



VIDEO TECH TIP



CAMBER & UPPER ARMS



! BOTTOM NOTE ORIENTATION

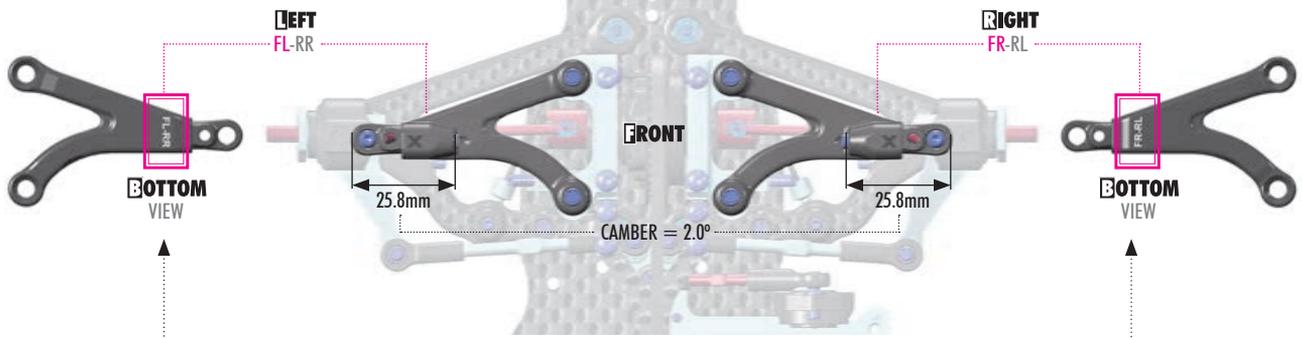
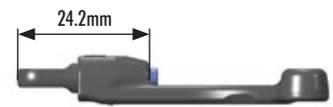
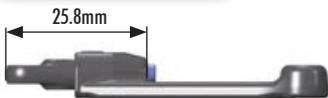
Shiny side Cut out

Ball joint should be aligned in the arm with the machined clearance facing down.

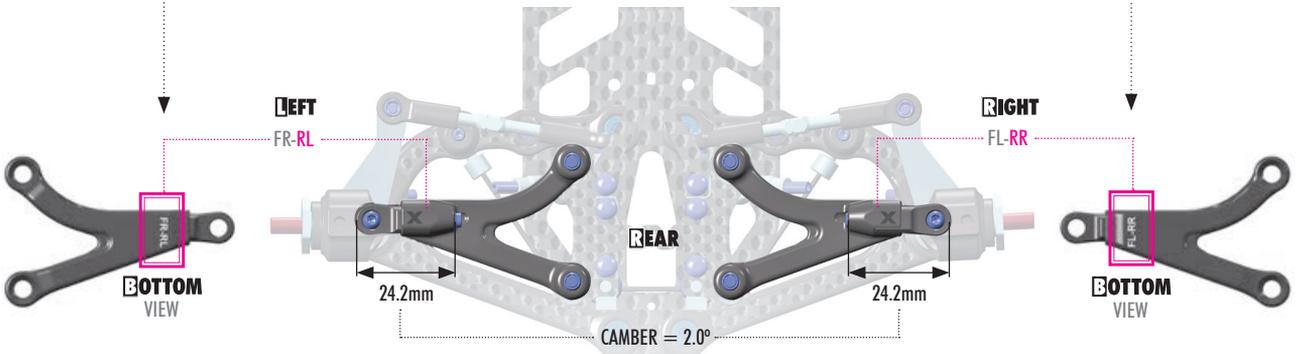
! BOTTOM NOTE ORIENTATION

Shiny side

Ball joint should be aligned in the arm with the shiny side facing down.



Check arm orientation so that each arm is in the correct location with the markings facing down when installed.



| UPPER ARMS CFF™ | | | | | UPPER ARMS CFF™ | | | | |
|-----------------|--------|-------|--------|--|-----------------|------------|-------|----------|--|
| #302144-M | MEDIUM | FL-RR | OPTION | | #302144-XS | EXTRA-SOFT | FL-RR | OPTION | |
| #302134-M | MEDIUM | FR-RL | OPTION | | #302134-XS | EXTRA-SOFT | FR-RL | OPTION | |
| #302144-S | SOFT | FL-RR | OPTION | | #302144-C | COMPOSITE | FL-RR | INCLUDED | |
| #302134-S | SOFT | FR-RL | OPTION | | #302134-C | COMPOSITE | FR-RL | INCLUDED | |



COMPOSITE upper arms are recommended for modified and in very low traction conditions. They provide maximum traction and side-bite, but reduce cornering speed and initial steering.

EXTRA SOFT upper arms are recommended for both modified and stock in low to medium traction conditions on carpet or asphalt.

SOFT upper arms are recommended for medium traction conditions.

MEDIUM upper arms are recommended in medium to high traction conditions. They provide slightly less traction than soft arms, but generate more cornering speed and are the most durable.



#302640-T
X4 ADJUSTABLE CAMBER SCREW 14mm
M4 L/R - TITANIUM (2)



5. FRONT & REAR SUSPENSION



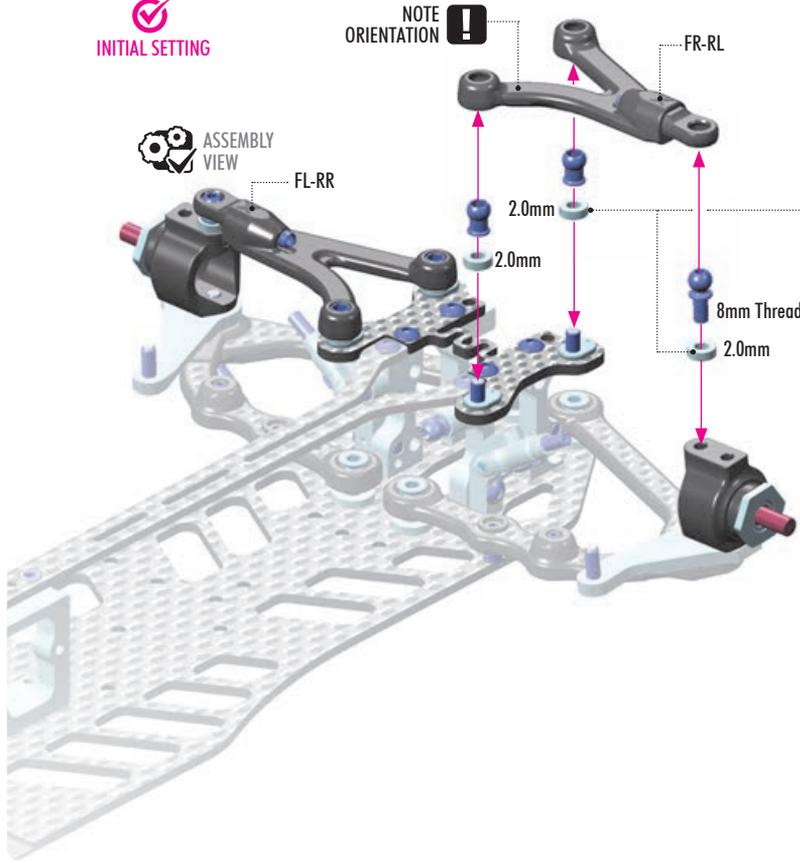
6x 303123-K
 SHIM 3x6x2

VIDEO TECH TIP

 ROLL-CENTER

UPPER ARMS CFF™ ALTERNATIVE REAR SUSPENSION


INITIAL SETTING



Rear upper arm location affects the rear roll-center and camber gain. Raising the arm with thicker shims on the carbon upper clamp will lower the rear roll-center and decrease camber gain. Reducing the shim height on the upper clamps has the same effect as increasing the shim height on the outside.

Thicker shim on carbon upper clamp provides more rotation and off-power steering but decreases rear traction.

 #990101
HUDY TITANIUM PIVOT BALL
 OPTION D=4.9 / S=5 / 3mm HEX (2)



 #990008
HUDY TITANIUM BALL STUD
 OPTION D=4.9 / L=8 / S=3.5 / 2mm
 HEX (2)





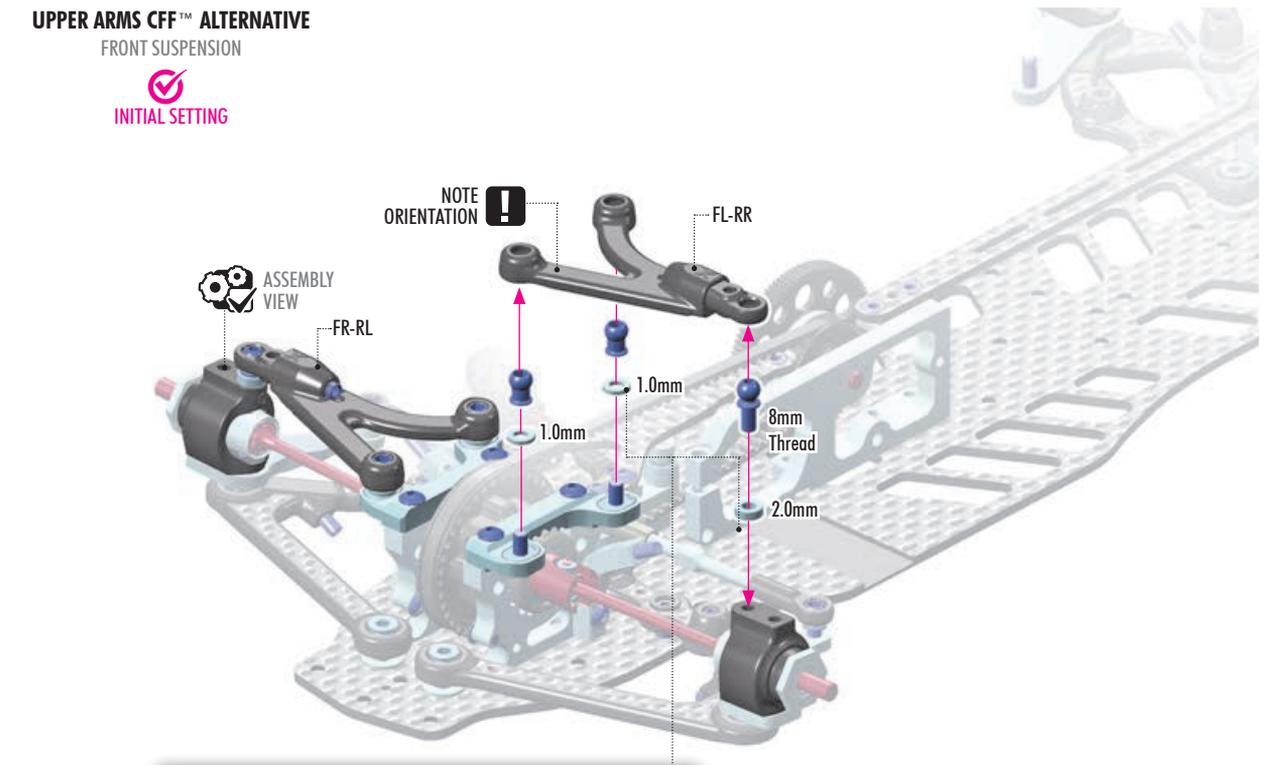

4x 303122-K
 SHIM 3x6x1



2x 303123-K
 SHIM 3x6x2

UPPER ARMS CFF™ ALTERNATIVE FRONT SUSPENSION


INITIAL SETTING



Front upper arm location affects the front roll-center and camber gain. Raising the arms with thicker shims on the upper clamps will lower the front roll-center and decrease camber gain. Reducing the shim height on the upper clamps has the same effect as increasing the shim height on the outside.



 #990101
HUDY TITANIUM PIVOT BALL
 OPTION D=4.9 / S=5 / 3mm HEX (2)



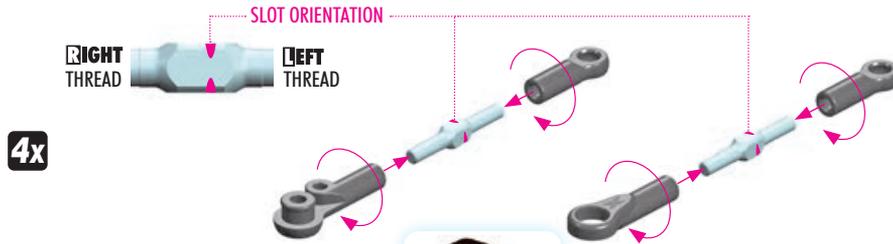
 #990008
HUDY TITANIUM BALL STUD
 OPTION D=4.9 / L=8 / S=3.5 / 2mm
 HEX (2)



5. FRONT & REAR SUSPENSION

ALTERNATIVE LINK STYLE UPPER ARMS

Replace the standard CFF upper arms. See full description below on when to use.



VIDEO TECH TIP
UPPER LINKS ADJUSTMENT

TIP Install the ball joints with Multi Tool.

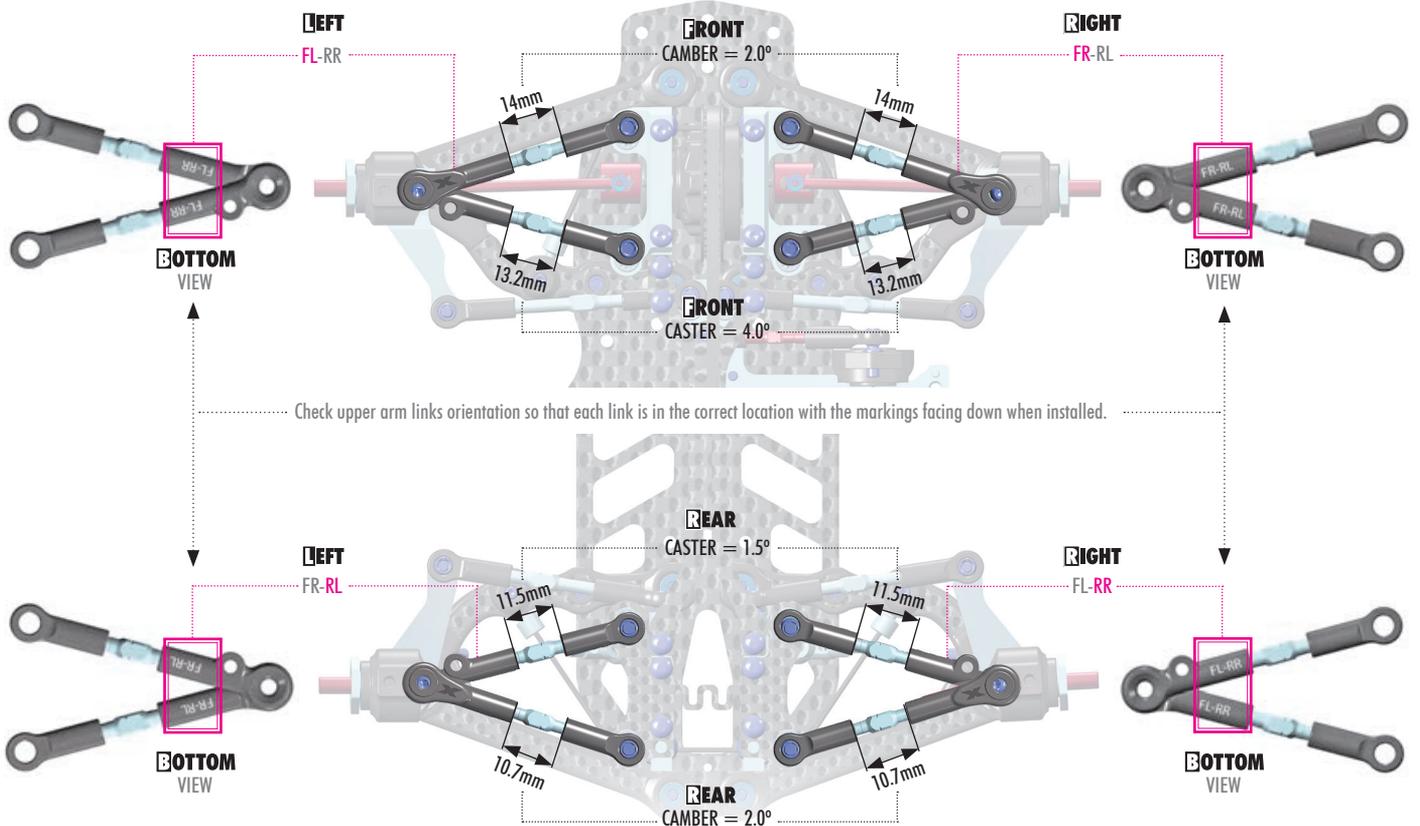
LINK STYLE UPPER ARMS

The link style upper arms are also included in the kit as an alternative to the CFF arms, offering the freedom of choice to select the one with the preferred handling characteristics and adjustment capabilities.

Please see Page 52-54 for link adjustment instructions.

The added rigidity from the turnbuckles reduces flex of the suspension assembly, which has proven beneficial on certain track conditions such as medium to high traction asphalt and carpet. The car generates more initial reaction from the increased rigidity.

When switching from CFF to Upper Link arms, retain the same caster eccentric insert positions in the upper bulkheads as previously used.



5. FRONT & REAR SUSPENSION

6x 303123-K SHIM 3x6x2

UPPER ARMS LINKS ALTERNATIVE REAR SUSPENSION

TIP Install the pivot balls with Multi Tool.

| | | | | | | |
|--------|---------------------------------|---------|-------|-----|--------|--------|
| OPTION | HUDY TITANIUM BALL STUD | #990008 | D=4.9 | L=8 | S=3.5 | OPTION |
| OPTION | HUDY TITANIUM PIVOT BALL | #990101 | D=4.9 | S=5 | OPTION | |

4x 303122-K SHIM 3x6x1

2x 303123-K SHIM 3x6x2

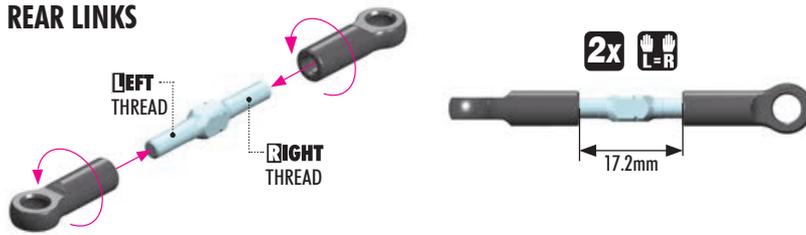
UPPER ARMS LINKS ALTERNATIVE FRONT SUSPENSION

TIP Install the pivot balls with Multi Tool.

| | | | | | | |
|--------|---------------------------------|---------|-------|-----|--------|--------|
| OPTION | HUDY TITANIUM BALL STUD | #990008 | D=4.9 | L=8 | S=3.5 | OPTION |
| OPTION | HUDY TITANIUM PIVOT BALL | #990101 | D=4.9 | S=5 | OPTION | |

5. FRONT & REAR SUSPENSION

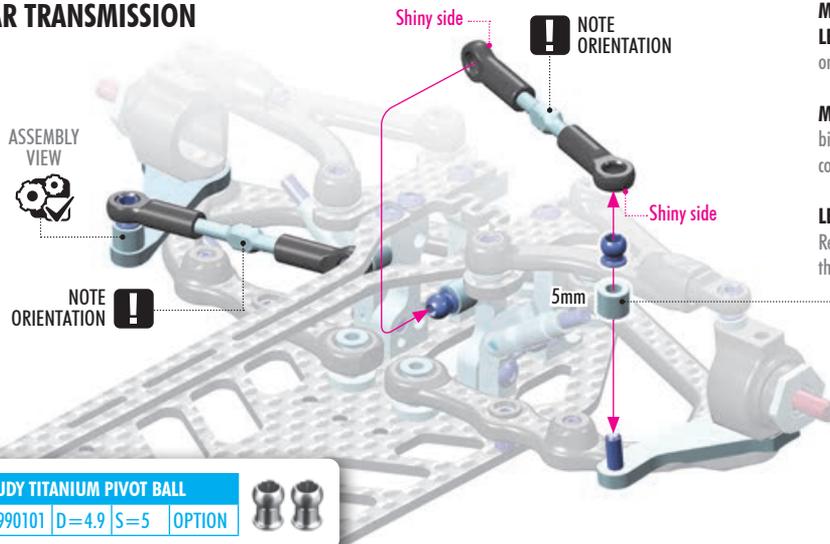
2x REAR LINKS



#303211-0 ALU TURNBUCKLE L/R
30mm ORANGE - SWISS 7075 T6 (2)



2x REAR TRANSMISSION



MORE SHIMS gives more toe-gain on compression.
LESS SHIMS gives less toe-gain (or even toe loss), on suspension compression.

MORE TOE-GAIN improves rear grip and side bite. Mainly recommended for low- to medium-grip conditions.

LESS TOE-GAIN reduces rear grip and side bite. Recommended for higher- grip conditions or tracks that require more steering.



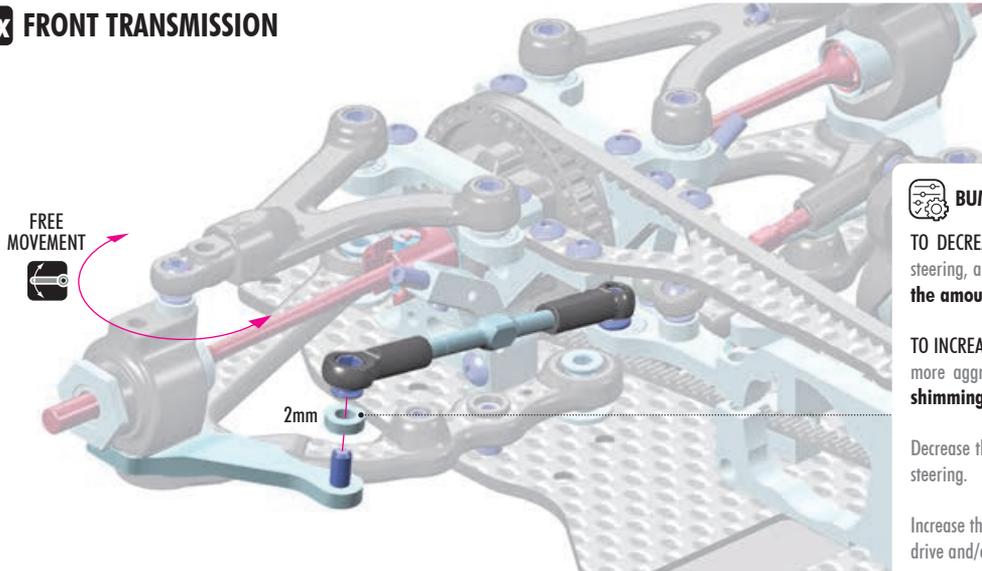
VIDEO TECH TIP



REAR TOE-GAIN



2x FRONT TRANSMISSION



BUMP STEER ADJUSTMENT

TO DECREASE bump steer, smoothen out the steering, and reduce traction rolling: **increase the amount of shimming.**

TO INCREASE bump steer, to make the steering more aggressive, **decrease the amount of shimming.**

Decrease the amount of shimming to get more steering.

Increase the shimming if the car is difficult to drive and/or it is traction rolling.



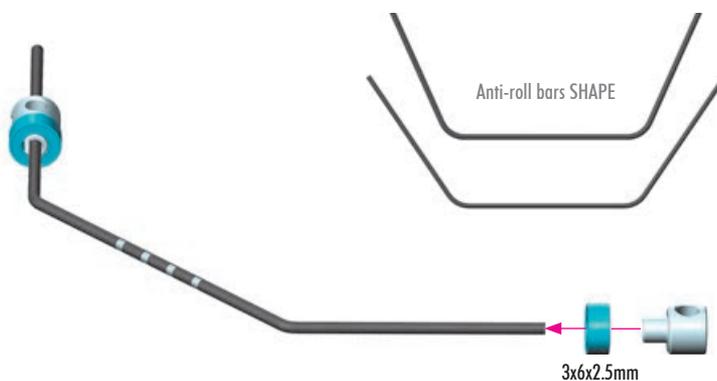
VIDEO TECH TIP



STEERING SYSTEM



2x FRONT & REAR ANTI-ROLL BARS



| FRONT ANTI-ROLL BARS | | |
|----------------------|-------|----------|
| #302831 | 1.1mm | OPTION |
| #302832 | 1.2mm | OPTION |
| #302833 | 1.3mm | INCLUDED |
| #302834 | 1.4mm | OPTION |

| REAR ANTI-ROLL BARS | | |
|---------------------|-------|----------|
| #303831 | 1.1mm | OPTION |
| #303832 | 1.2mm | INCLUDED |
| #303833 | 1.3mm | OPTION |
| #303834 | 1.4mm | OPTION |
| #303836 | 1.6mm | OPTION |
| #303838 | 1.8mm | OPTION |

VIDEO TECH TIP



ANTI-ROLL BARS

5. FRONT & REAR SUSPENSION

2x 

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

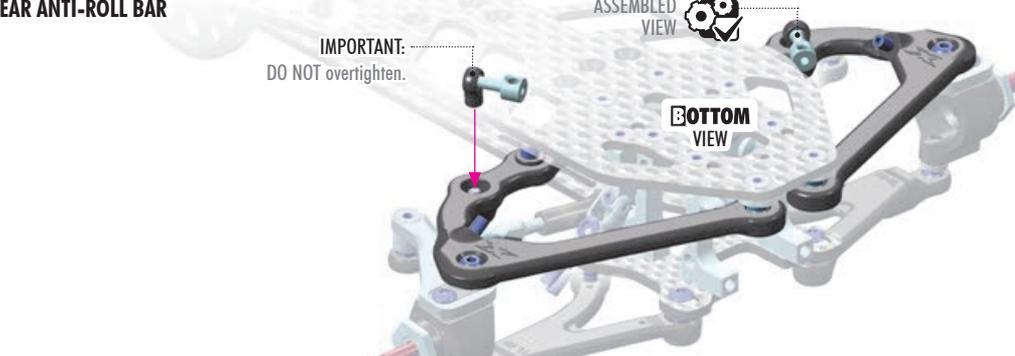


REAR ANTI-ROLL BAR

IMPORTANT: DO NOT overtighten.

ASSEMBLED VIEW

BOTTOM VIEW



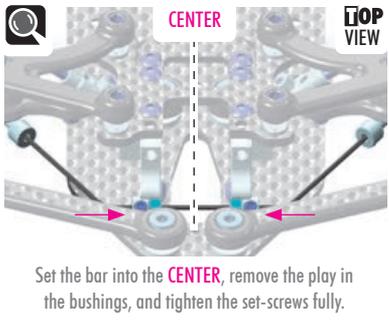
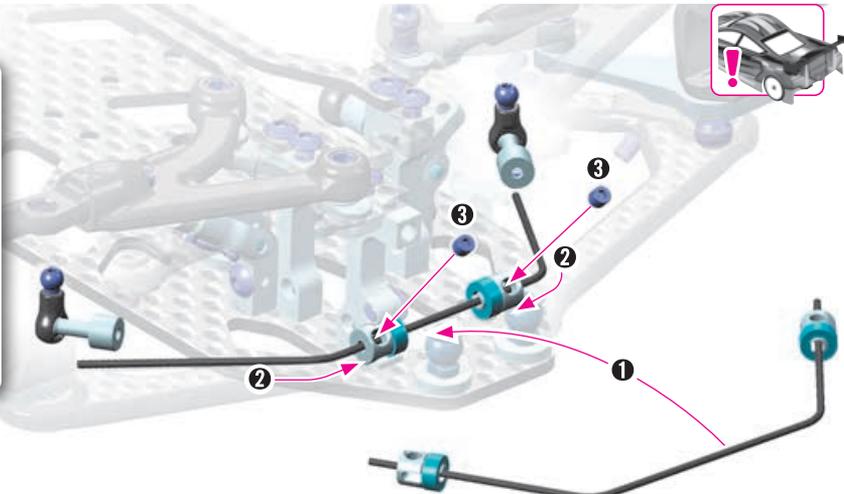

 
2x 901302
 SB M3x2.5

REAR ANTI-ROLL BAR

TOP VIEW

CENTER

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


 
2x 901302
 SB M3x2.5

REAR ANTI-ROLL BARS

| OPTION | REAR ANTI-ROLL BARS | THICKNESS | STATUS |
|---|---------------------|-----------|----------|
|  | #303831 | 1.1mm | OPTION |
|  | #303832 | 1.2mm | INCLUDED |
|  | #303833 | 1.3mm | OPTION |
|  | #303834 | 1.4mm | OPTION |
|  | #303836 | 1.6mm | OPTION |
|  | #303838 | 1.8mm | OPTION |

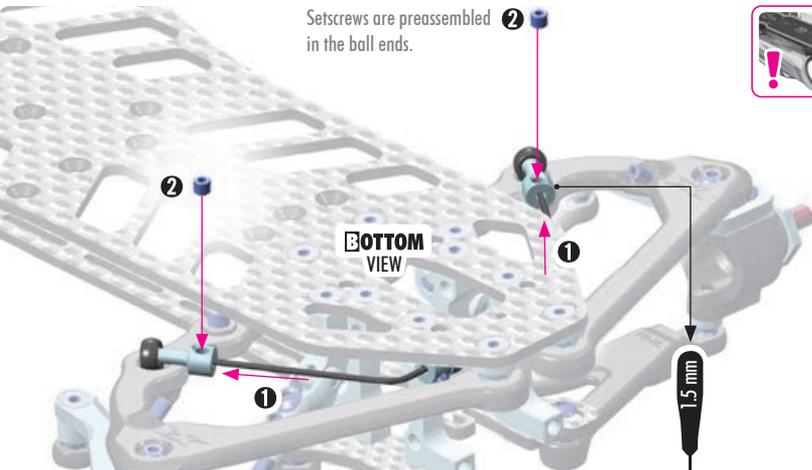
SOFTER rear anti-roll bar:
 Generates more side traction. Mainly recommended for low-grip asphalt tracks.

STIFFER rear anti-roll bar:
 Helps the car stay flatter and reduces traction rolling on high-grip surfaces.

Setscrews are preassembled in the ball ends.

BOTTOM VIEW

1.5 mm





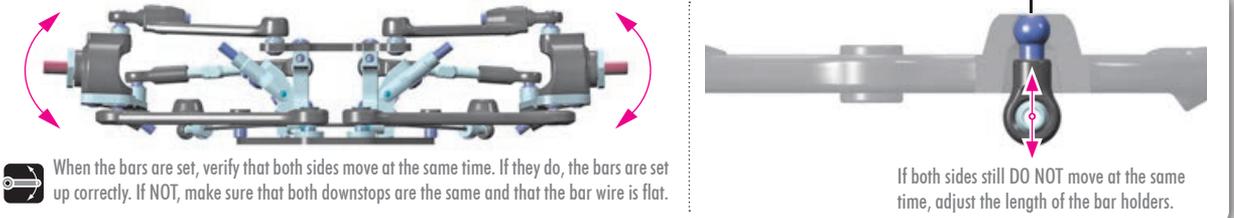
VIDEO TECH TIP



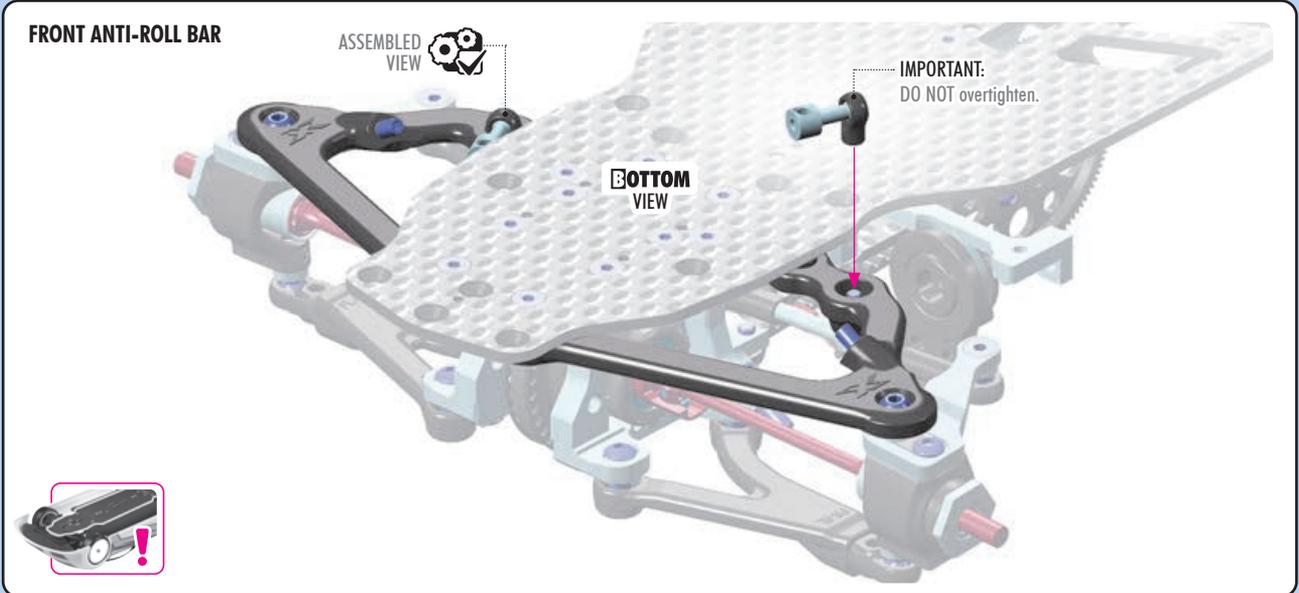
ANTI-ROLL BARS

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

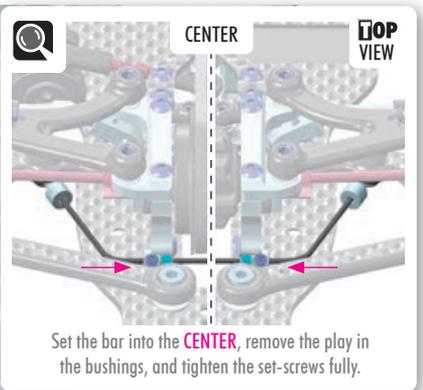
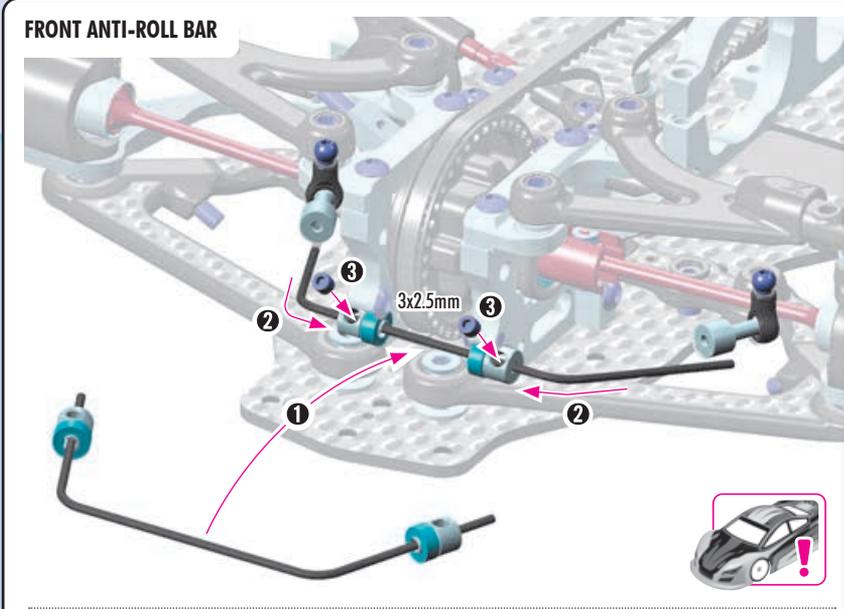
If both sides still DO NOT move at the same time, adjust the length of the bar holders.



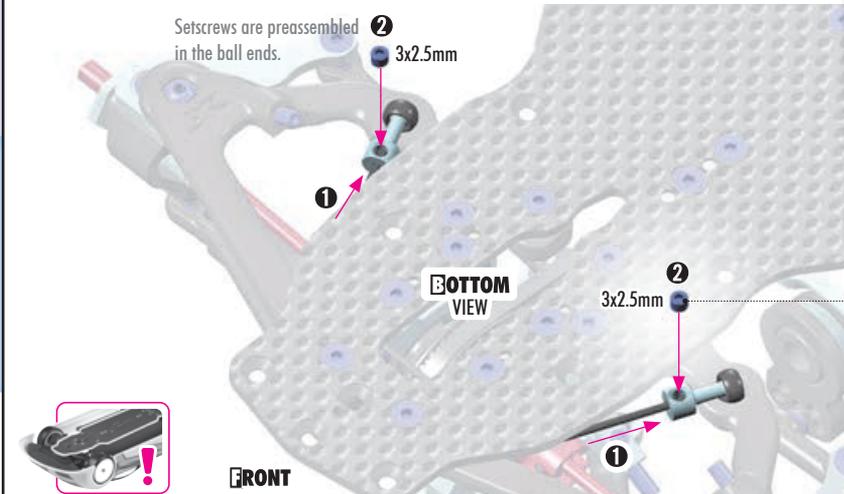
5. FRONT & REAR SUSPENSION



2x 901302 SB M3x2.5



2x 901302 SB M3x2.5



FRONT ANTI-ROLL BARS

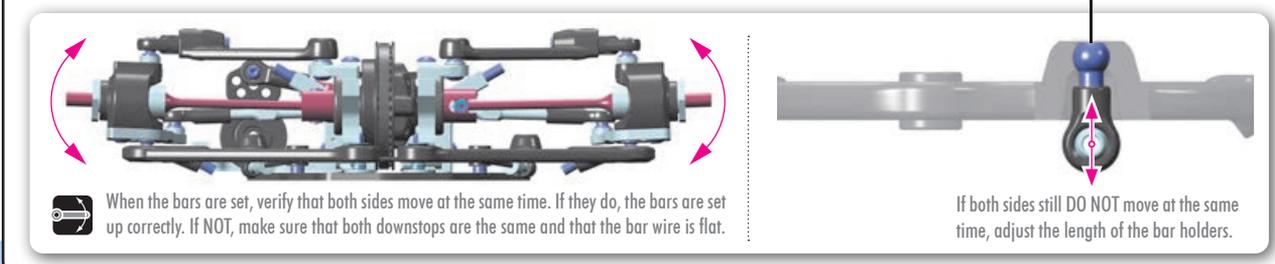
| | | |
|---------|-------|----------|
| #302831 | 1.1mm | OPTION |
| #302832 | 1.2mm | OPTION |
| #302833 | 1.3mm | INCLUDED |
| #302834 | 1.4mm | OPTION |

SOFTER front anti-roll bar:
Allows the front to roll more which gives more front grip and improves on-power steering.

STIFFER front anti-roll bar:
Makes the car initially more responsive, and helps the car stay flatter on fast direction changes. Reduces steering from mid-corner to corner exit. Mainly recommended for high-grip carpet.

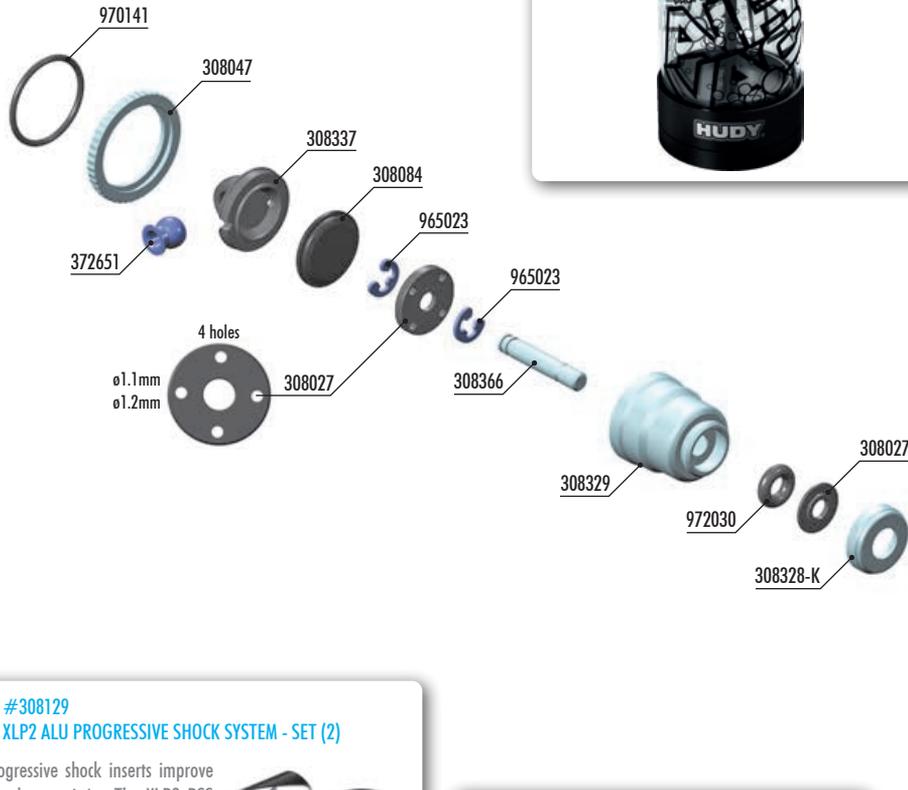
VIDEO TECH TIP

ANTI-ROLL BARS



6. SHOCK ABSORBERS

4x



#104002 or #104003
HUDY AIR VAC – VACUUM PUMP - ON-ROAD

OPTION

| XRAY SPRINGS | | |
|--------------|-------------|----------|
| #308164 | C = 2.4-2.7 | OPTION |
| #308165 | C = 2.5-2.8 | INCLUDED |
| #308166 | C = 2.6-2.9 | OPTION |
| #308175 | C = 2.5 | OPTION |
| #308176 | C = 2.6 | INCLUDED |
| #308177 | C = 2.7 | OPTION |
| #308178 | C = 2.8 | OPTION |
| #308179 | C = 2.9 | OPTION |
| #308180 | C = 3.0 | OPTION |

#308129
XLP2 ALU PROGRESSIVE SHOCK SYSTEM - SET (2)

The progressive shock inserts improve steering characteristics. The XLP2 PSS set fits the stock XLP2 shock bodies included in the kit. Must be used with: #308026 - XLP Progressive Pistons.



#308026
XLP COMPOSITE 2-HOLE ø0.8mm PROGRESSIVE PISTON (4)



OPTION

HUDY TITANIUM PIVOT BALL
 #990101 | D=4.9 | S=5 | **OPTION**



OPTION

#308033-K
ALU XLP SHOCK SPRING RETAINING COLLAR - BLACK (4)



VIDEO TECH TIP SHOCKS & SPRINGS

BAG
06

- | | | | |
|----------|--|--------|--|
| 308027 | XLP COMPOSITE 4-HOLE 1.1-1.2MM PISTON (2+2) | 965023 | E-CLIP 2.3 (10) |
| 308047 | XLP2 ALU SHOCK ADJUSTABLE NUT - BLACK (2) | 970141 | O-RING 14 x 1.0 (10) |
| 308084 | XLP2 SILICONE HYPER RESISTANT MEMBRANE (4) | 972030 | SILICONE O-RING 3 x 2 (10) |
| 308311 | XLP2 ALU SHOCK ABSORBER-SET (2) | | |
| 308329 | XLP2 ALU SHOCK BODY (2) | 308165 | XLP SPRING-SET PROGRESSIVE C=2.5-2.8 (2) |
| 308328-K | XLP ALU CAP FOR SHOCK BODY - BLACK (2) | 308176 | XLP SPRING-SET C=2.6 (2) |
| 308337 | XLP2 COMPOSITE SHOCK PARTS WITH 2 HOLES | | |
| 308366 | XLP2 HARDENED SHOCK SHAFT (2) | | |
| 372651 | PIVOT BALL UNIVERSAL 4.9 MM - HUDY SPRING STEEL™ (2) | | |

Numbers in parentheses () refer to quantities when purchased separately.

8x 965023
 E 2.3

4x **INITIAL SETTING**

4 holes ø1.1mm ø1.2mm **INITIAL SETTING**

ø0.8mm **#308026**
OPTION
XLP COMPOSITE 2-HOLE ø0.8mm PROGRESSIVE PISTON (4)

! These pistons must be used with optional: **#308129 XLP2 PROGRESSIVE SHOCK INSERTS**

! NOTE ORIENTATION

6. SHOCK ABSORBERS



4x 972030
0.3x2

4x

SHOCK OIL

NOTE ORIENTATION

SHOCK OIL

4x

INCORRECT X

CORRECT ✓

Pre-thread the ball joint using an M3 screw. **TIP**

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

4x The necessary shock length depends on the downstop setting. When using minimum downstop, increase the shock length.

7~7.5mm ✓ INITIAL SETTING

#183070
OPTION HUDY ALU SHOCK PLIERS

We recommend using HUDY shock pliers when adjusting shock length. These pliers allow super easy and comfortable shock length adjustment.

VIDEO TECH TIP

HUDY AIR-VAC SHOCK BUILD

OIL 350cSt

SHOCK FILLING

4x OIL

- 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 to allow oil into all cavities within the shock body.
- 4 Extend 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.
- 5 Add shock oil as necessary.

TIP #104002 or #104003
OPTION HUDY AIR VAC – VACUUM PUMP

To make sure that all the air is removed from the shock oil, we recommend using the HUDY Air Vac.

| SHOCK OILS (50ml) | | |
|-------------------|--------|----------|
| #106325 | 250cSt | OPTION |
| #106330 | 300cSt | OPTION |
| #106335 | 350cSt | INCLUDED |
| #106337 | 375cSt | OPTION |
| #106340 | 400cSt | OPTION |
| #106342 | 425cSt | OPTION |
| #106345 | 450cSt | OPTION |
| #106347 | 475cSt | OPTION |
| #106350 | 500cSt | OPTION |
| #106352 | 525cSt | OPTION |
| #106355 | 550cSt | OPTION |
| #106357 | 575cSt | OPTION |
| #106360 | 600cSt | OPTION |
| #106362 | 625cSt | OPTION |
| #106365 | 650cSt | OPTION |
| #106367 | 675cSt | OPTION |
| #106370 | 700cSt | OPTION |
| #106375 | 750cSt | OPTION |
| #106380 | 800cSt | OPTION |

REBOUND ADJUSTMENT

IMPORTANT

When building the shocks with brand new membranes, some rebound may occur. After a few runs, or letting the shock settle for 24 hours, the membrane will break-in and zero rebound will be possible.

Insert shock membrane.

0~25% Rebound
✓ INITIAL SETTING

For most conditions, 0-25% rebound is recommended. This is the most forgiving and best to absorb bumps. Cornering speed is generally the best with this setting.

50% Rebound

100% Rebound

For certain low traction conditions, adding additional rebound may improve initial reaction and side bite. Direction change will be faster and may feel like the car is creating more traction. Note that higher rebound settings will make the car less stable over bumps and may increase the tendency to traction roll.

6. SHOCK ABSORBERS

Gently and very slowly push shock membrane to remove excess oil.

4x

! To prevent any damage to the shock body, gently tighten the shock cap. Excessive force or overtightening can cause the shock body to break or split.

CORRECT ✓

INCORRECT ✗

SHOCK OIL

4x

ASSEMBLED VIEW

970141
0 14x1.0

4x

! **NOTE ORIENTATION**

Note the orientation of the shock collar. The XLP2 shocks are designed with the spring centered on the shock body and not the spring collar with the threaded portion of the collar towards the top of the shock.

VIDEO TECH TIP

SHOCKS & SPRINGS

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.

4x

Laser engraved springs.

FRONT C = 2.5-2.8

REAR C = 2.6

TIP

ASSEMBLED VIEW

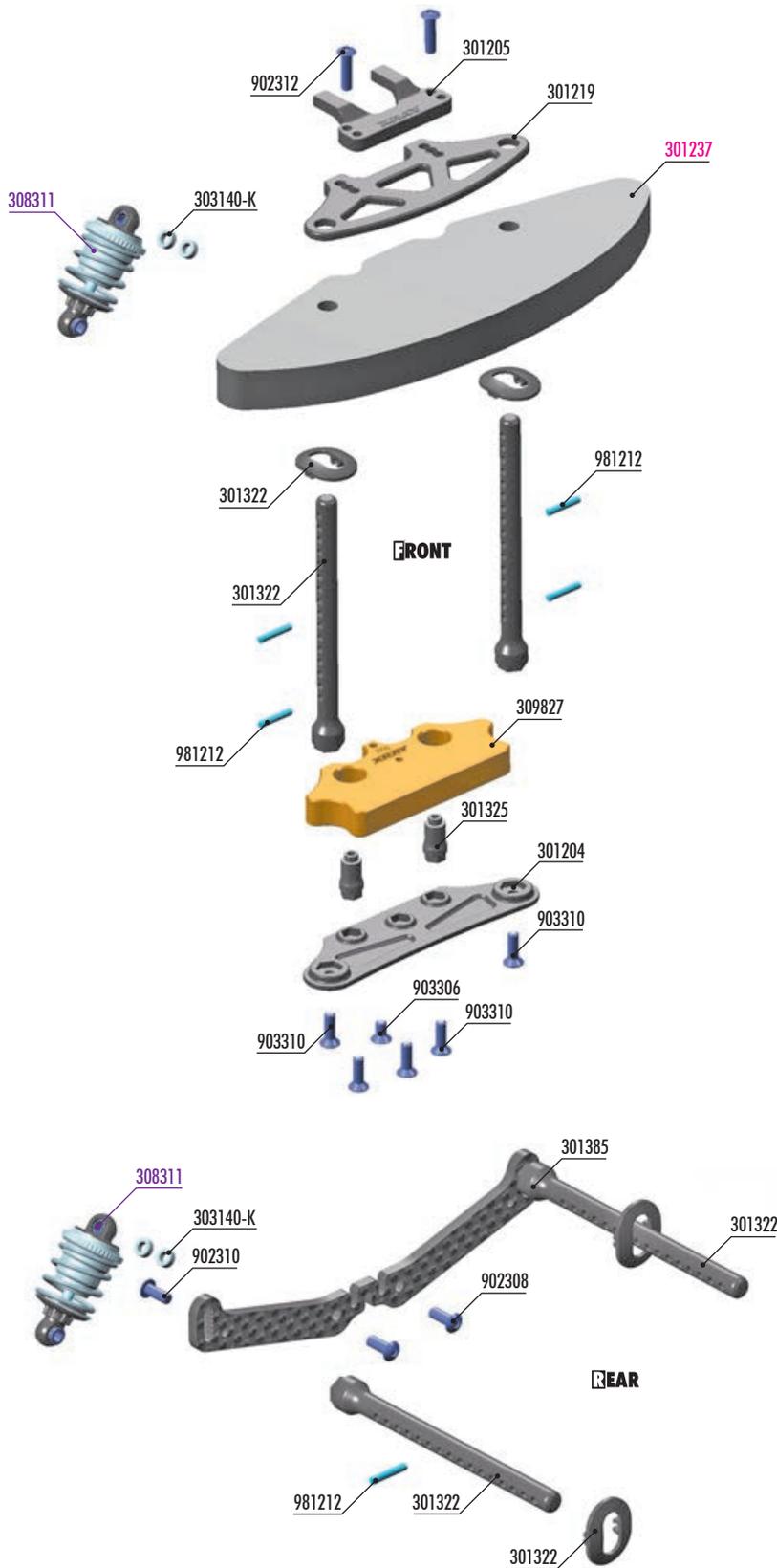
! HUDY TITANIUM PIVOT BALL

OPTION #990101 D=4.9 S=5 OPTION

! #308033-K

OPTION ALU XLP SHOCK SPRING RETAINING COLLAR - BLACK (4)

7. FRONT & REAR ASSEMBLY



FRONT BODY MOUNT SET

| | | |
|---------|------|----------|
| #301322 | 0mm | INCLUDED |
| #301323 | +1mm | OPTION |
| #301324 | +2mm | OPTION |

FRONT ECC. BODY MOUNT SET

| | | |
|---------|------|--------|
| #301326 | 0mm | OPTION |
| #301327 | +1mm | OPTION |
| #301328 | +2mm | OPTION |

#301210
CARBON UPPER HOLDER - 2.5mm
(Alu shim 4x6x2mm - INCLUDED)

#309826-L
X4F WEIGHT FRONT

#301322-H
HARD COMPOSITE HORIZONTAL
REAR BODY MOUNT POST - SET

#301351-0
ALU ADJUSTABLE BODY POST STOP (2)

#301351-K
ALU ADJUSTABLE BODY POST STOP (2)

BAG

07

301204 COMPOSITE BUMPER
301205 X4 COMPOSITE LONGER BUMPER UPPER HOLDER BRACE
301219 COMPOSITE UPPER HOLDER FOR BUMPER
301322 FRONT BODY MOUNT SET
301325 COMPOSITE BRACE FOR BUMPER - LOW (2)
301385 X4F CARBON BODY POST & BODY POST HOLDER - ONE-PIECE
303140-K ALU SHIM 3x5x2.0mm - BLACK (10)
309827 X4F BUMPER WEIGHT FRONT 100g

902308 HEX SCREW SH M3x8 (10)
902310 HEX SCREW SH M3x10 (10)
902312 HEX SCREW SH M3x12 (10)

903306 HEX SCREW SFH M3x6 (10)
903310 HEX SCREW SFH M3x10 (10)
981212 PIN 2x12 (10)

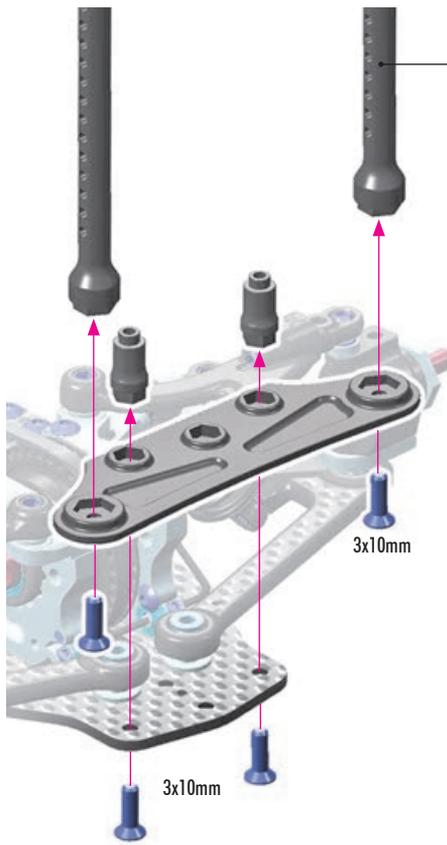
301237 X4F FOAM BUMPER FOR 100g WEIGHT - HARD

308311 XLP2 ALU SHOCK ABSORBER-SET - BLACK (2)

7. FRONT & REAR ASSEMBLY



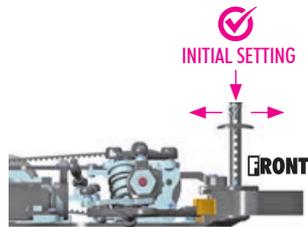
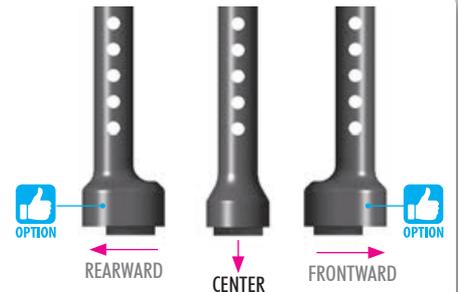
4x 903310 SFH M3x10



FRONT BODY POST ORIENTATION

This new, innovative feature allows the adjustment of body position for all kind of surfaces, traction conditions, touring classes, using only one body. There are THREE different body positions possible; rearward, center, and forward. Depending on conditions, the body post positions can be easily changed which allows the body to be moved.

- The body in the **REARWARD POSITION** makes the car super stable and very easy to drive. It makes the car easier to drive in chicanes and more predictable in high-traction conditions.
- The body in the **CENTER POSITION** makes the car more aggressive and steer faster, but is a slightly more difficult to drive in low-grip conditions.
- The body in the **FORWARD POSITION** is the most aggressive. It makes the car steer a lot, but is more difficult to drive when the traction is high or when the track has a lot of chicanes.



It is important to use the same body setting (rearward and center) on both front and rear body posts at the same time.

| FRONT BODY MOUNT SET | | | |
|----------------------|------|----------|--|
| #301322 | 0mm | INCLUDED | |
| #301323 | +1mm | OPTION | |
| #301324 | +2mm | OPTION | |

| FRONT ECC. BODY MOUNT SET | | | |
|---------------------------|------|--------|--|
| #301326 | 0mm | OPTION | |
| #301327 | +1mm | OPTION | |
| #301328 | +2mm | OPTION | |

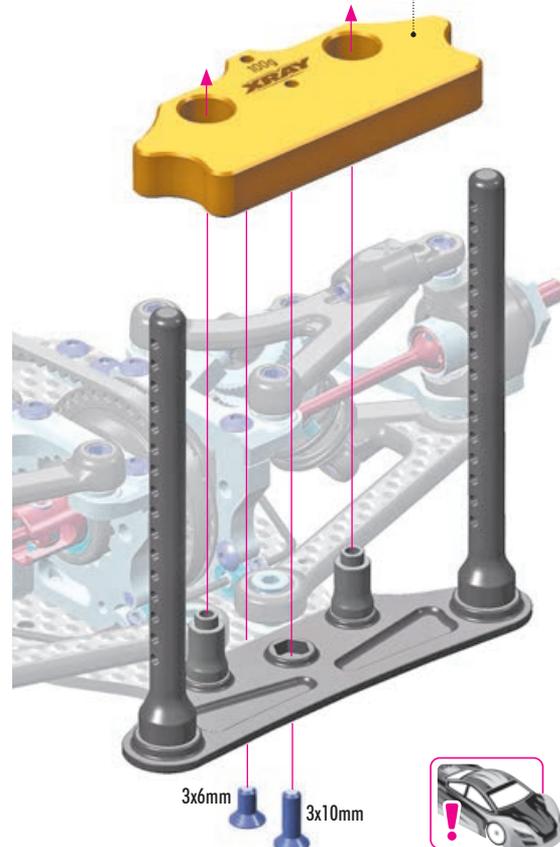


1x 903306 SFH M3x6

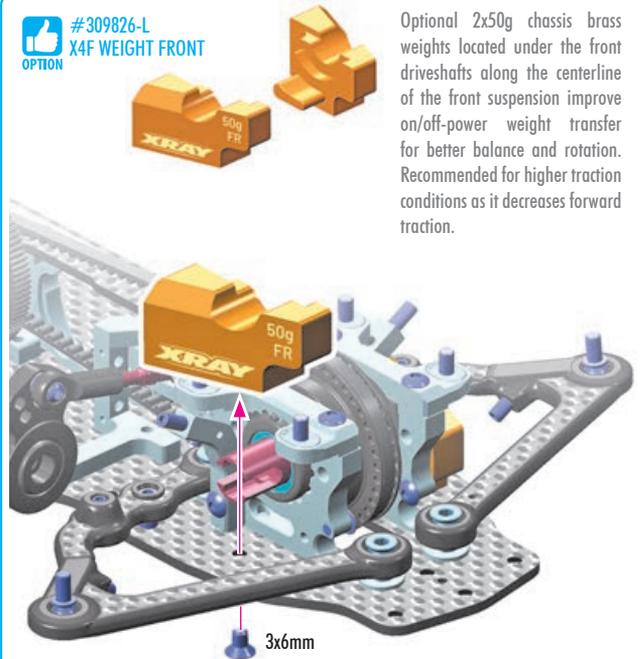


1x 903310 SFH M3x10

For very low to medium traction conditions, we recommend the X4F bumper weight to improve front traction for the car. The weight helps to improve stability of the car.



#309826-L X4F WEIGHT FRONT



Optional 2x50g chassis brass weights located under the front driveshafts along the centerline of the front suspension improve on/off-power weight transfer for better balance and rotation. Recommended for higher traction conditions as it decreases forward traction.



7. FRONT & REAR ASSEMBLY

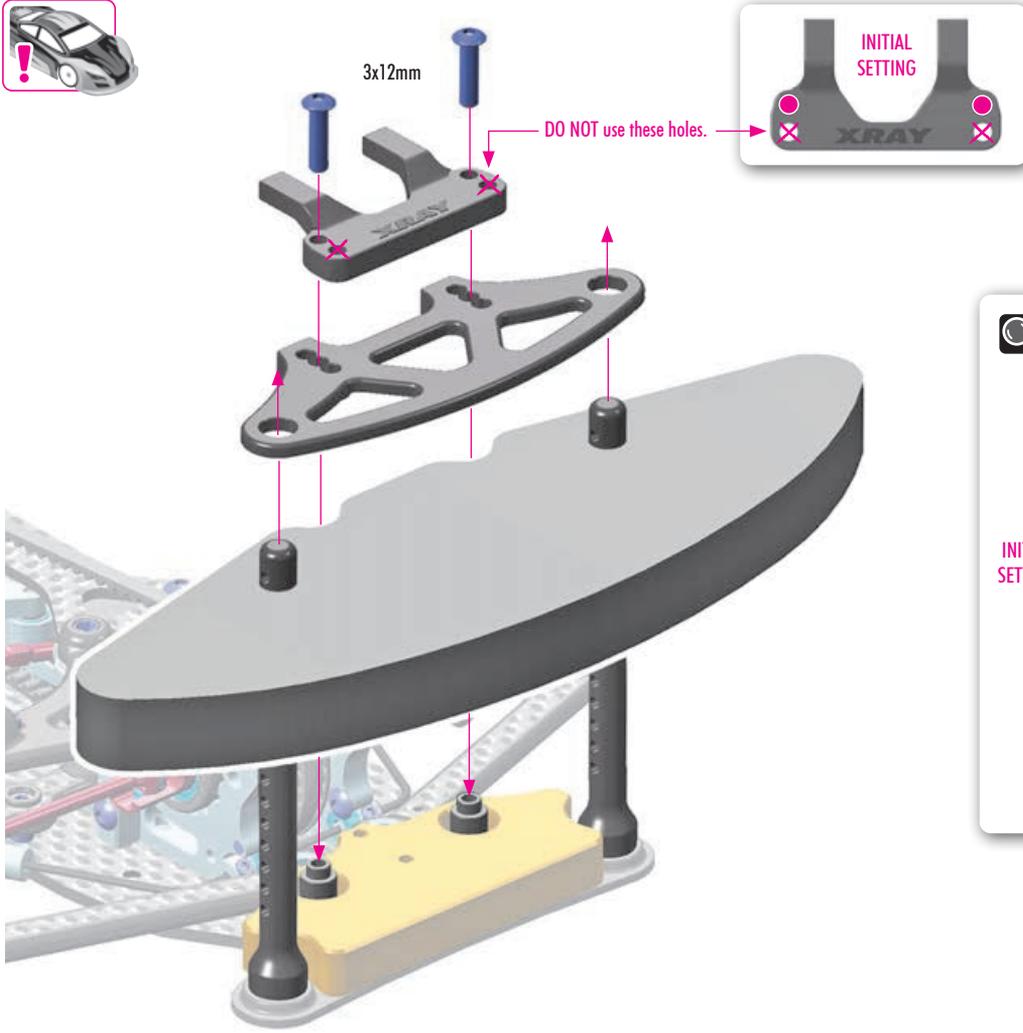




3x12mm

DO NOT use these holes.

INITIAL SETTING



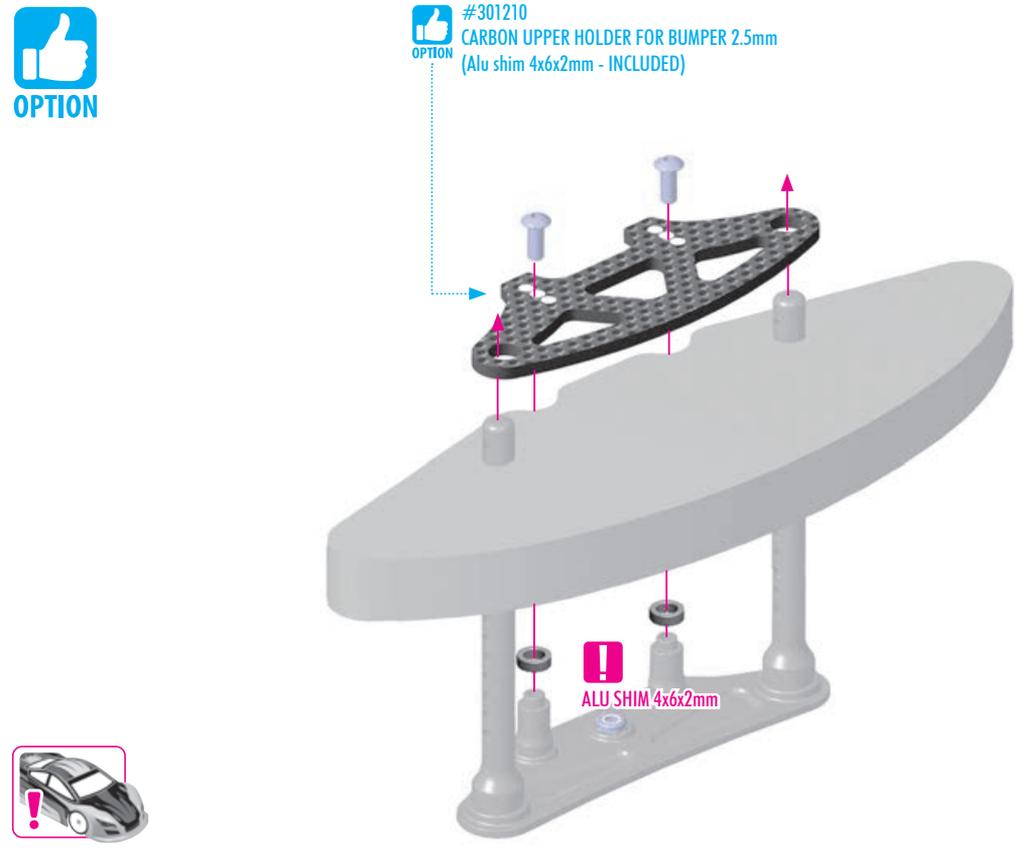
INITIAL SETTING





OPTION

#301210
CARBON UPPER HOLDER FOR BUMPER 2.5mm
(Alu shim 4x6x2mm - INCLUDED)



ALU SHIM 4x6x2mm



7. FRONT & REAR ASSEMBLY

4x 981212 P 2x12

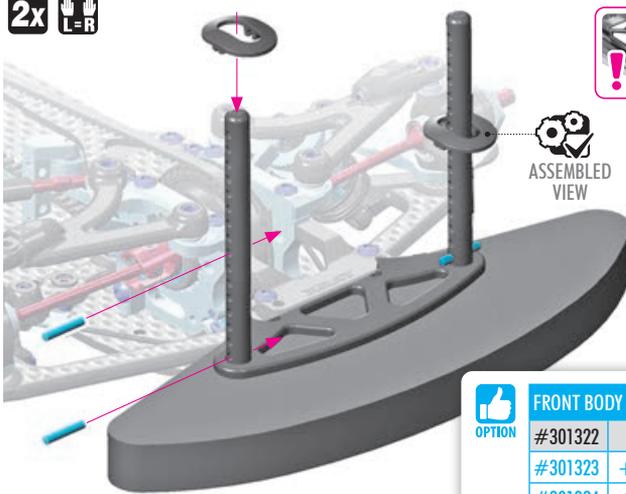


VIDEO TECH TIP



FRONT BODY UPSTOP SYSTEM

2x L-R



ASSEMBLED VIEW



#301351-0
ALU ADJUSTABLE BODY POST STOP (2)
OPTION



#301351-K
ALU ADJUSTABLE BODY POST STOP (2)
OPTION



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

FRONT BODY MOUNT SET

| | | |
|---------|------|----------|
| #301322 | 0mm | INCLUDED |
| #301323 | +1mm | OPTION |
| #301324 | +2mm | OPTION |



FRONT ECC. BODY MOUNT SET

| | | |
|---------|------|--------|
| #301326 | 0mm | OPTION |
| #301327 | +1mm | OPTION |
| #301328 | +2mm | OPTION |



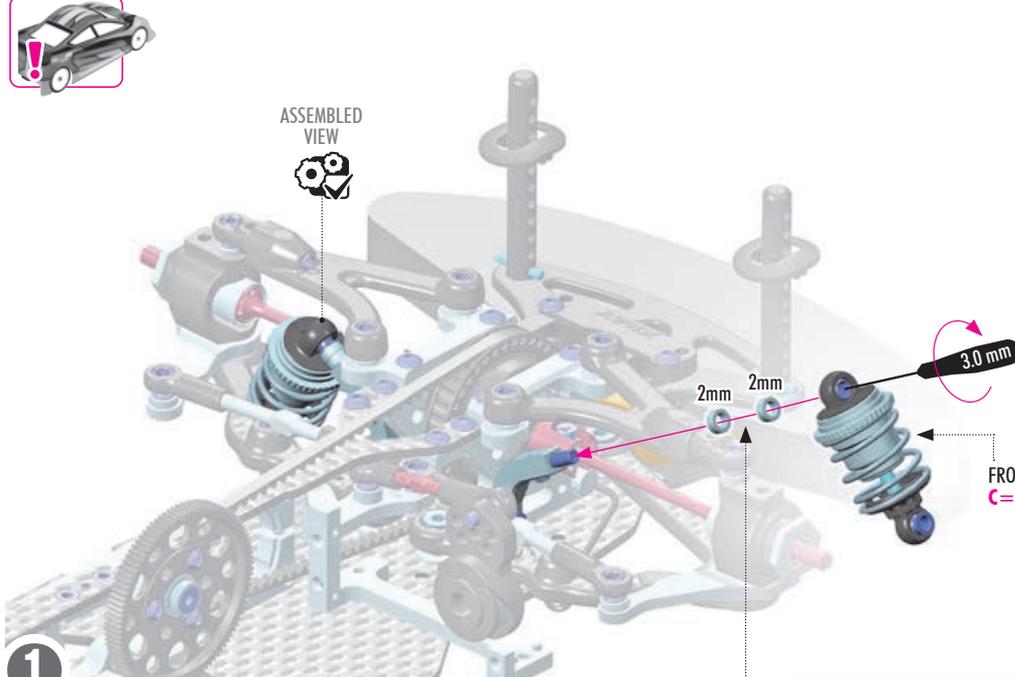
4x 303140-K SHIM 3x5x2



VIDEO TECH TIP



SHOCKS & SPRINGS



ASSEMBLED VIEW

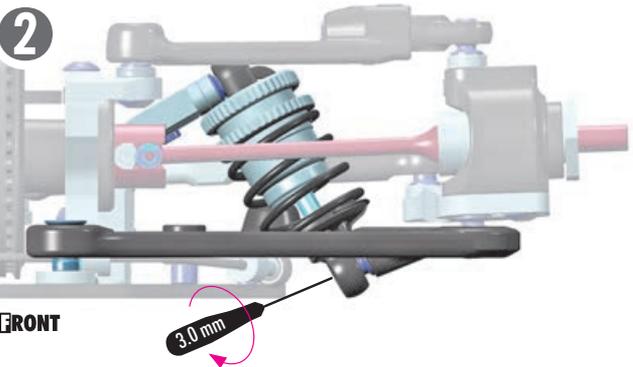
FRONT SHOCK SPRING
C=2.5-2.8

3.0 mm

2mm 2mm

1

2

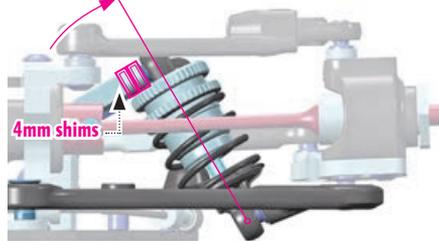


FRONT

3.0 mm

INITIAL SETTING

4mm shims - CARPET TRACKS

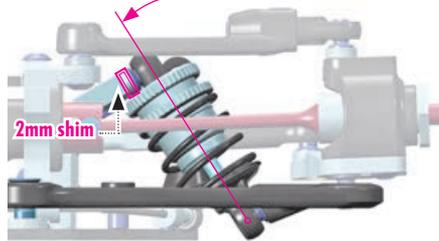


4mm shims

L-R

INITIAL SETTING

2mm shim - ASPHALT TRACKS



2mm shim

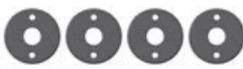
L-R

#308129
XLP2 ALU PROGRESSIVE SHOCK SYSTEM - SET (2)
OPTION

The progressive shock inserts improve steering characteristics. The XLP2 PSS set fits the stock XLP2 shock bodies included in the kit. Must be used with #308026 - XLP Progressive Pistons.



#308026
XLP COMPOSITE 2-HOLE ø0.8mm PROGRESSIVE PISTON (4)
OPTION



7. FRONT & REAR ASSEMBLY

- 2x 902308 SH M3x8
- 2x 902310 SH M3x10
- 2x 981212 P 2x12

ASSEMBLED VIEW

3x10mm

3x8mm

2x12mm

1

2

The carbon body post holder has 6 POSITIONS, spaced 1.1mm between each, for precise and easy adjustment.

VIDEO TECH TIP

REAR BODY POST MOUNTING

#301351-0
ALU ADJUSTABLE BODY POST STOP (2)
OPTION



#301351-K
ALU ADJUSTABLE BODY POST STOP (2)
OPTION



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

#301322-H
HARD COMPOSITE HORIZONTAL REAR BODY MOUNT POST - SET
OPTION

Optional HARD posts eliminates the flex of the horizontal mounting. Use these posts only for horizontal body mounting.



Optional horizontal rear body mounting has shown benefits on medium to high grip conditions, especially on technical tracks, by improving directional changes, steering response and rotation. Note that rear grip is also reduced, so may be useful in Stock or Super Stock spec class racing.

- 4x 303140-K SHIM 3x5x2



INITIAL SETTING
4mm shims - CARPET TRACKS

INITIAL SETTING
2mm shims - ASPHALT TRACKS

4mm shims

2mm shim

L=R

L=R

REAR SHOCK SPRING
C=2.6

3.0mm

2mm 2mm

REAR

1

2



VIDEO TECH TIP



SHOCK SHIMMING TUTORIAL

#308129
XLP2 ALU PROGRESSIVE SHOCK SYSTEM - SET (2)
OPTION

The progressive shock inserts improve steering characteristics. The XLP2 PSS set fits the stock XLP2 shock bodies included in the kit. Must be used with #308026 - XLP Progressive Pistons.



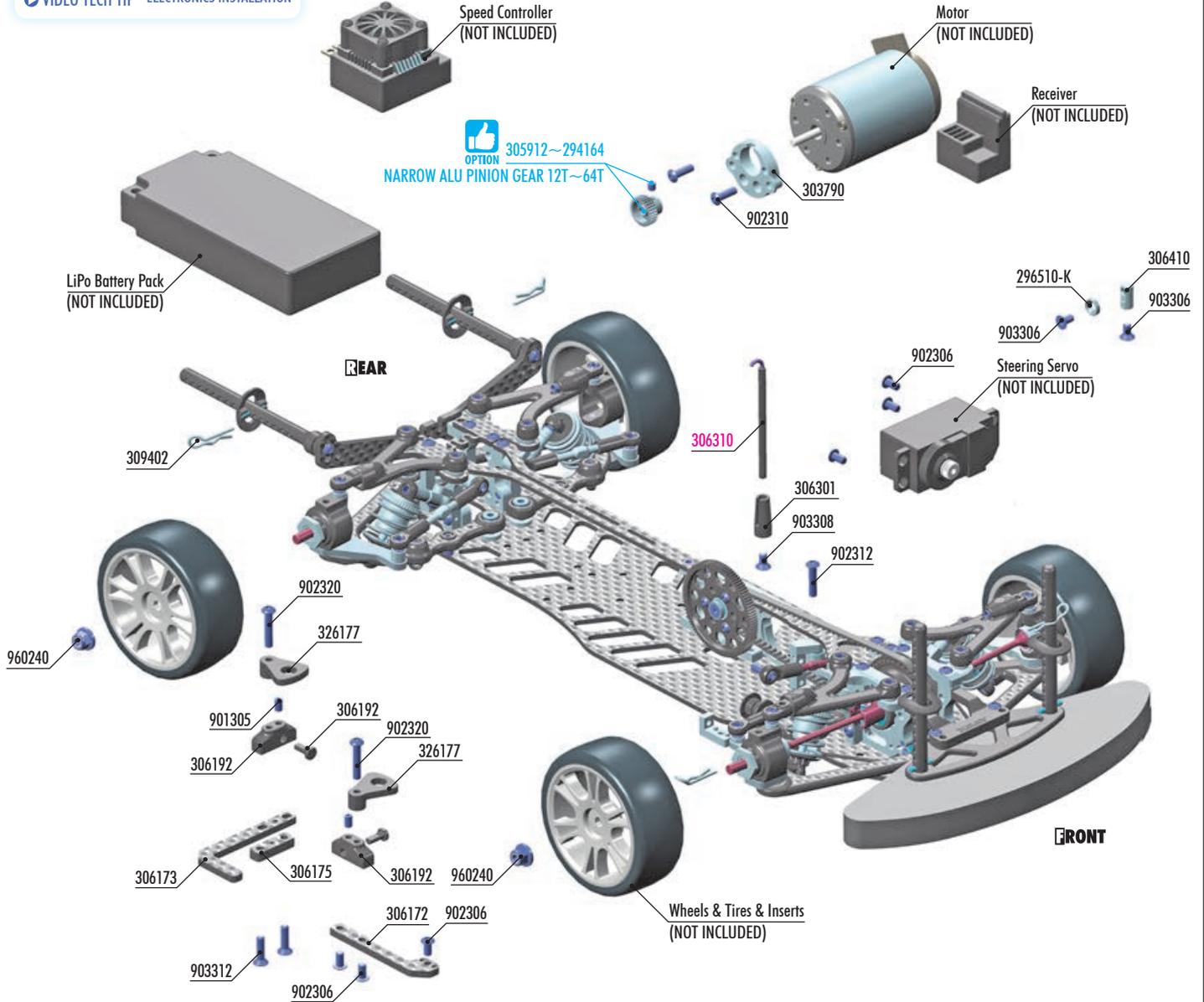
#308026
XLP COMPOSITE 2-HOLE ø0.8mm PROGRESSIVE PISTON (4)
OPTION



7. FINAL ASSEMBLY



VIDEO TECH TIP ELECTRONICS INSTALLATION



HUDY ALU RC FAN 30mm & 40mm (on page 43)



TUNGSTEN & STAINLESS STEEL WEIGHTS (on page 42 and 45)



#306410 ALU FAN MOUNT



ALU REAR WING SHIM

| # | COLOR | BRAND | OPTION |
|-----------|--------|-------|--------|
| #353561 | SILVER | XRAY | OPTION |
| #293561 | SILVER | HUDY | OPTION |
| #293561-K | BLACK | HUDY | OPTION |
| #293561-O | ORANGE | HUDY | OPTION |



BAG

07

305912~294160 NARROW ALU PINION GEAR 12T~60T (OPTION)

- 296510-K ALU COUNTERSUNK SHIM - BLACK (10)
- 303790 ALU ECCENTRIC MOTOR BULKHEAD INSERT
- 306172 X4F CARBON BATTERY HOLDER - FRONT
- 306173 X4F CARBON BATTERY HOLDER - REAR
- 306175 CARBON BATTERY PLATE SHIM (2)
- 306192 COMPOSITE ADJUSTABLE BATTERY HOLDER & BACKSTOP (2+2)
- 306301 ANTENNA MOUNT - THIN
- 306410 ALU UNIVERSAL MOUNT
- 309402 BODY CLIP FOR 6mm BODY POST (4)
- 326177 COMPOSITE BATTERY CLAMP (2)

- 901305 HEX SCREW SB M3x5 (10)
- 902306 HEX SCREW SH M3x6 (10)
- 902310 HEX SCREW SH M3x10 (10)
- 902312 HEX SCREW SH M3x12 (10)
- 902320 HEX SCREW SH M3x20 (10)
- 903306 HEX SCREW SFH M3x6 (10)
- 903308 HEX SCREW SFH M3x8 (10)
- 903312 HEX SCREW SFH M3x12 (10)
- 960240 NUT M4 WITH SERRATED FLANGE (10)

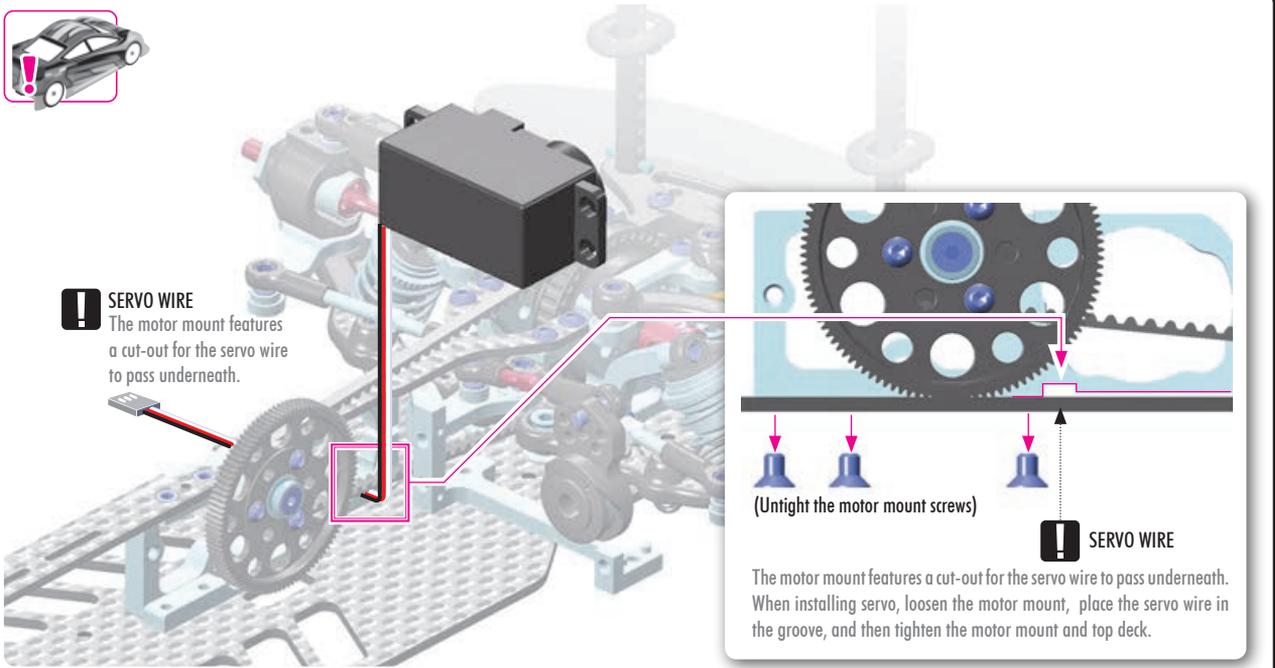
306310 ANTENNA (2)

Numbers in parentheses () refer to quantities when purchased separately.

7. FINAL ASSEMBLY



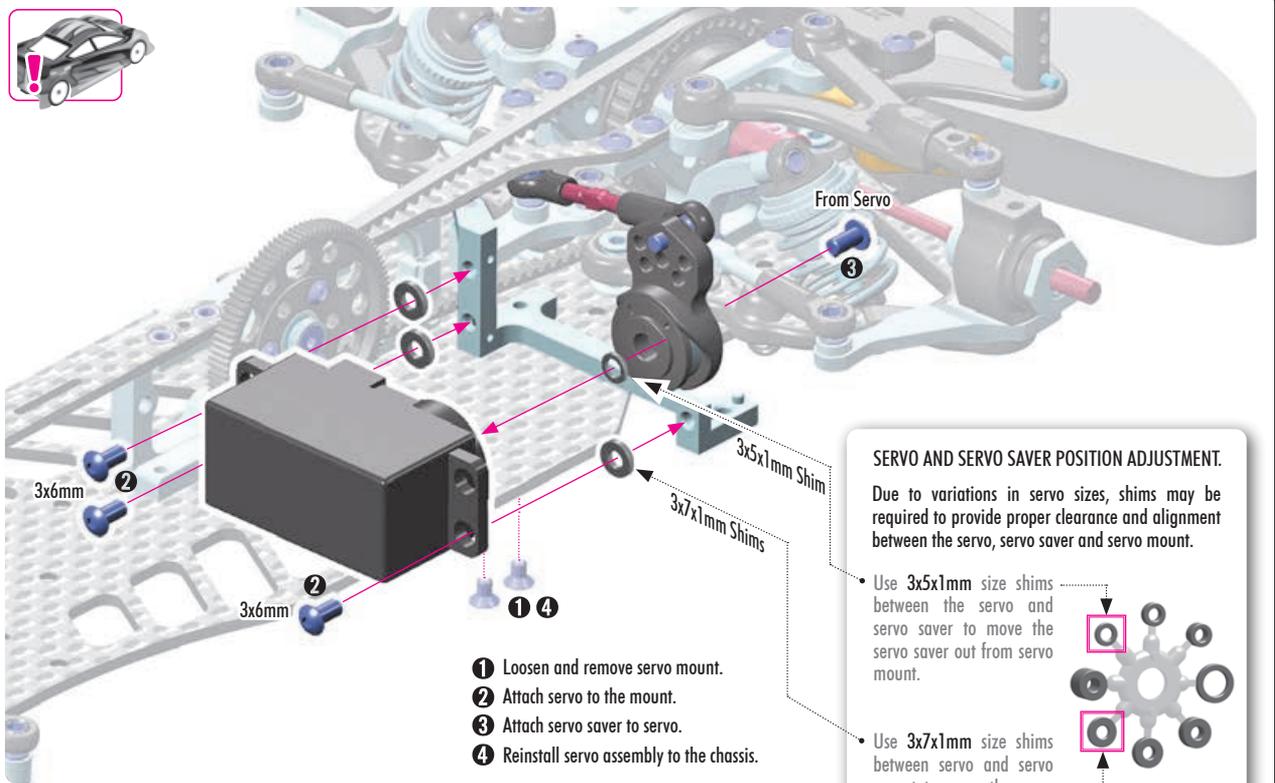
! SERVO WIRE
The motor mount features a cut-out for the servo wire to pass underneath.



(Untighten the motor mount screws)

! SERVO WIRE

The motor mount features a cut-out for the servo wire to pass underneath. When installing servo, loosen the motor mount, place the servo wire in the groove, and then tighten the motor mount and top deck.



From Servo

3x6mm

2

3x6mm

2

1 4

3x5x1mm Shim

3x7x1mm Shims

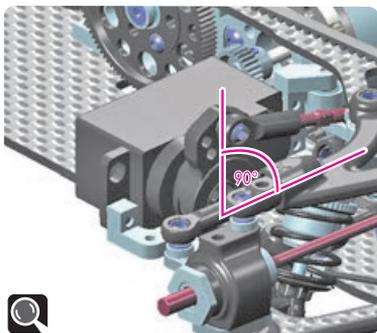
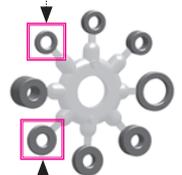
- 1 Loosen and remove servo mount.
- 2 Attach servo to the mount.
- 3 Attach servo saver to servo.
- 4 Reinstall servo assembly to the chassis.

SERVO AND SERVO SAVER POSITION ADJUSTMENT.

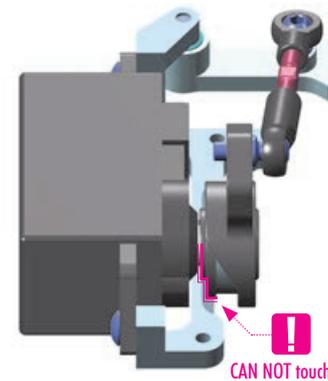
Due to variations in servo sizes, shims may be required to provide proper clearance and alignment between the servo, servo saver and servo mount.

Use 3x5x1mm size shims between the servo and servo saver to move the servo saver out from servo mount.

Use 3x7x1mm size shims between servo and servo mount to move the servo more back.



Attach servo arm to servo output shaft using screw from servo. Servo saver must be perpendicular to chassis when servo is in neutral.



! CAN NOT touch.



VIDEO TECH TIP

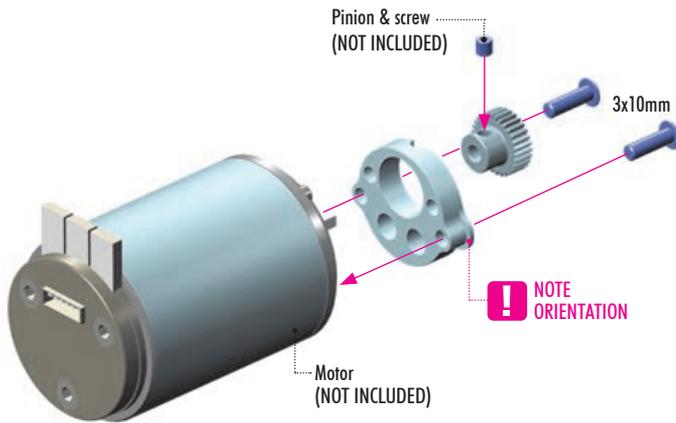


STEERING SYSTEM

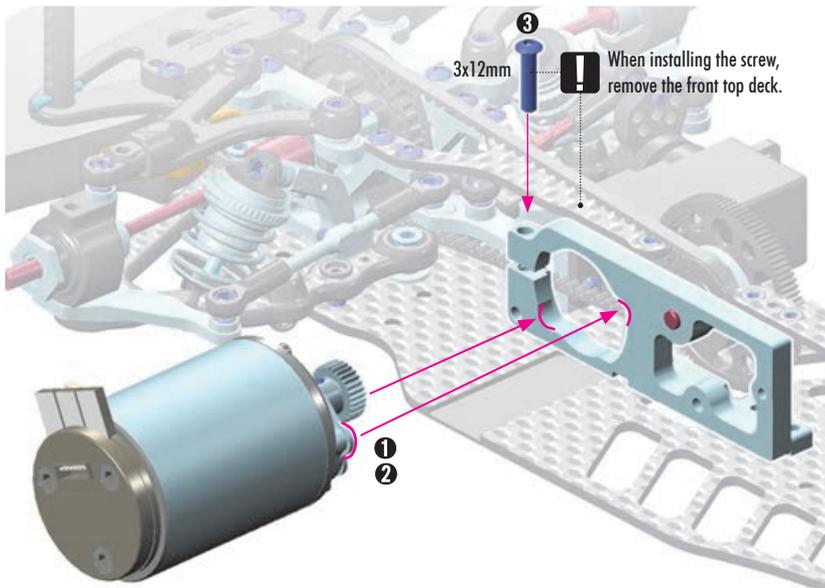
7. FINAL ASSEMBLY



2x 902310
SH M3x10



1x 902312
SH M3x12



NOTE

The most-used FWD ratios are 4.5 and 5. Use these recommended spur gears and pinions to achieve the desired ratio.

4.5 ratio - 90T spur / 38T pinion

5 ratio - 100T spur / 38T pinion

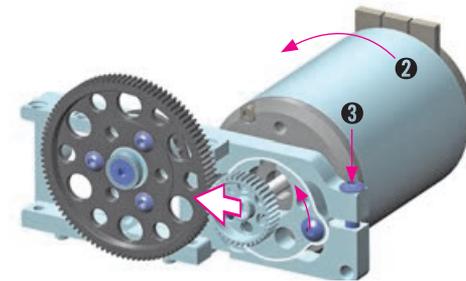


ALU PINION GEARS (OPTION)

| | |
|-------------------|-------------------|
| #305912 12T / 48P | #305968 18T / 64P |
| #305913 13T / 48P | #305969 19T / 64P |
| #305914 14T / 48P | #305970 20T / 64P |
| #305915 15T / 48P | #305971 21T / 64P |
| #305916 16T / 48P | #305972 22T / 64P |
| #294017 17T / 48P | #294123 23T / 64P |
| #294018 18T / 48P | #294124 24T / 64P |
| #294019 19T / 48P | #294125 25T / 64P |
| #294020 20T / 48P | #294126 26T / 64P |
| #294021 21T / 48P | #294127 27T / 64P |
| #294022 22T / 48P | #294128 28T / 64P |
| #294023 23T / 48P | #294129 29T / 64P |
| #294024 24T / 48P | #294130 30T / 64P |
| #294025 25T / 48P | #294131 31T / 64P |
| #305926 26T / 48P | #294132 32T / 64P |
| #305927 27T / 48P | #294133 33T / 64P |
| #305928 28T / 48P | #294134 34T / 64P |
| #305929 29T / 48P | #294135 35T / 64P |
| #294030 30T / 48P | #294136 36T / 64P |
| #305931 31T / 48P | #294137 37T / 64P |
| #305932 32T / 48P | #294138 38T / 64P |
| #294033 33T / 48P | #294139 39T / 64P |
| #305934 34T / 48P | #294140 40T / 64P |
| #294035 35T / 48P | #294141 41T / 64P |
| | #294142 42T / 64P |
| | #294143 43T / 64P |
| | #294144 44T / 64P |
| | #294145 45T / 64P |
| | #294146 46T / 64P |
| | #294147 47T / 64P |
| | #294148 48T / 64P |
| | #294149 49T / 64P |
| | #294150 50T / 64P |
| | #294152 52T / 64P |
| | #294154 54T / 64P |
| | #294156 56T / 64P |
| | #294158 58T / 64P |
| | #294160 60T / 64P |
| | #294162 62T / 64P |
| | #294164 64T / 64P |



1 Attach the motor to the eccentric motor holder in the indicated orientation. Tighten the mounting screws.



2 Adjust the gear mesh by rotating the eccentric motor holder.

3 Tighten the clamp screw.

2 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 the spur gear.



7. FINAL ASSEMBLY



1x 903308 SFH M3x8



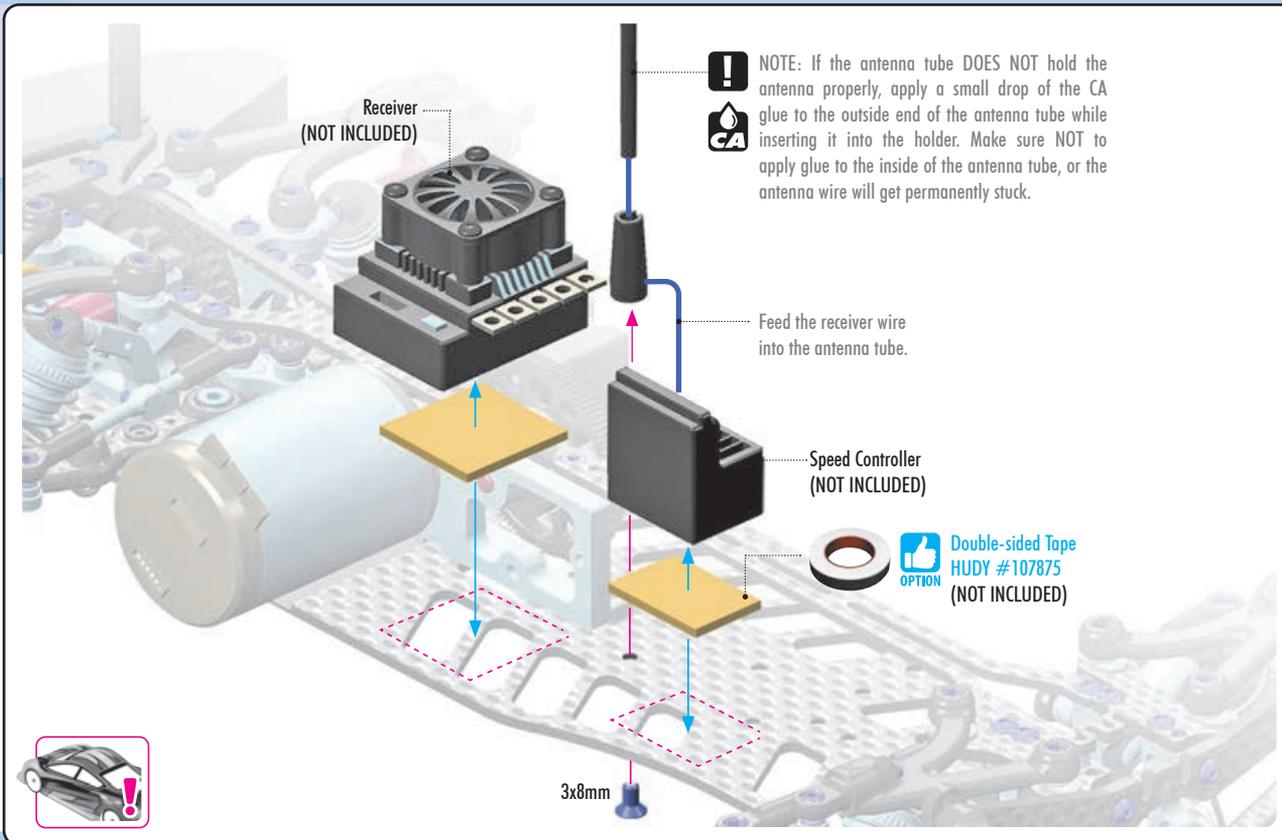
VIDEO TECH TIP



WEIGHT BALANCE



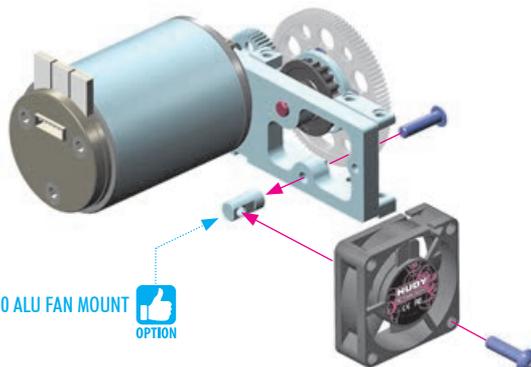
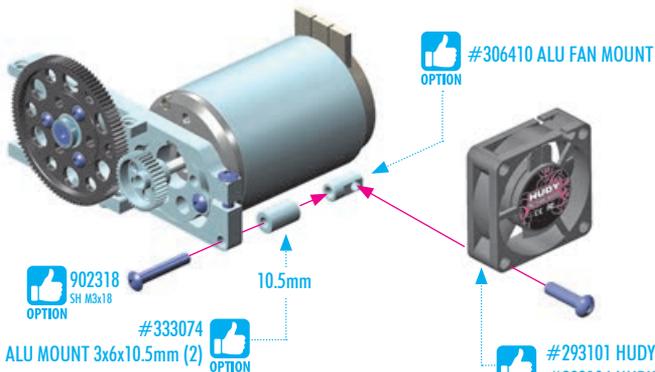
ELECTRONICS INSTALLATION



FORWARD ALU FAN MOUNT ALTERNATIVE

There are two options how to mount the fan mount depending of the style and size of the fan. Either in front or behind the motor. If you are using HUDY fan, we recommend to use FORWARD mount as it keeps the weight of the car as much in front as possible.

REARWARD ALU FAN MOUNT ALTERNATIVE



- #293101 HUDY ALU RC FAN 30MM - SIDE MOUNT 2 HOLE
- #293104 HUDY ALU RC FAN 40MM - BOTTOM/SIDE MOUNT 2 HOLE
- #293110 HUDY BRUSHLESS RC FAN 30mm WITH EXTERNAL SOLDERING TABS
- #293111 HUDY BRUSHLESS RC FAN 40mm WITH EXTERNAL SOLDERING TABS
- #293112 HUDY BRUSHLESS RC FAN 30mm WITH INTERNAL SOLDERING TABS
- #293113 HUDY BRUSHLESS RC FAN 40mm WITH INTERNAL SOLDERING TABS



2x 901305 SB M3x5



2x 902320 SH M3x20



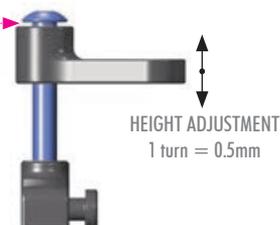
VIDEO TECH TIP



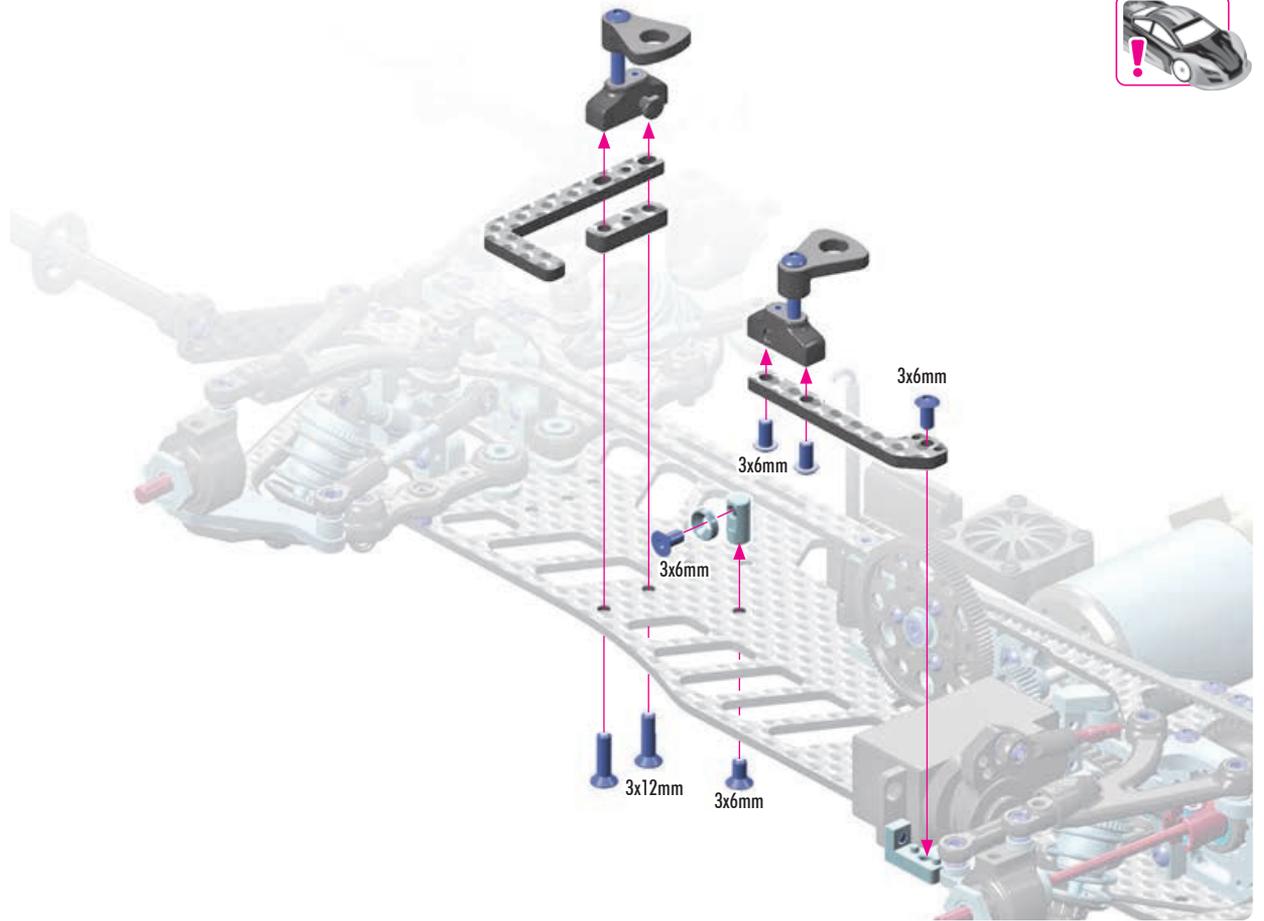
BATTERY MOUNTING SYSTEM



To ensure correct functioning of the battery holder, DO NOT overtighten the screw; the holder must be able to move.



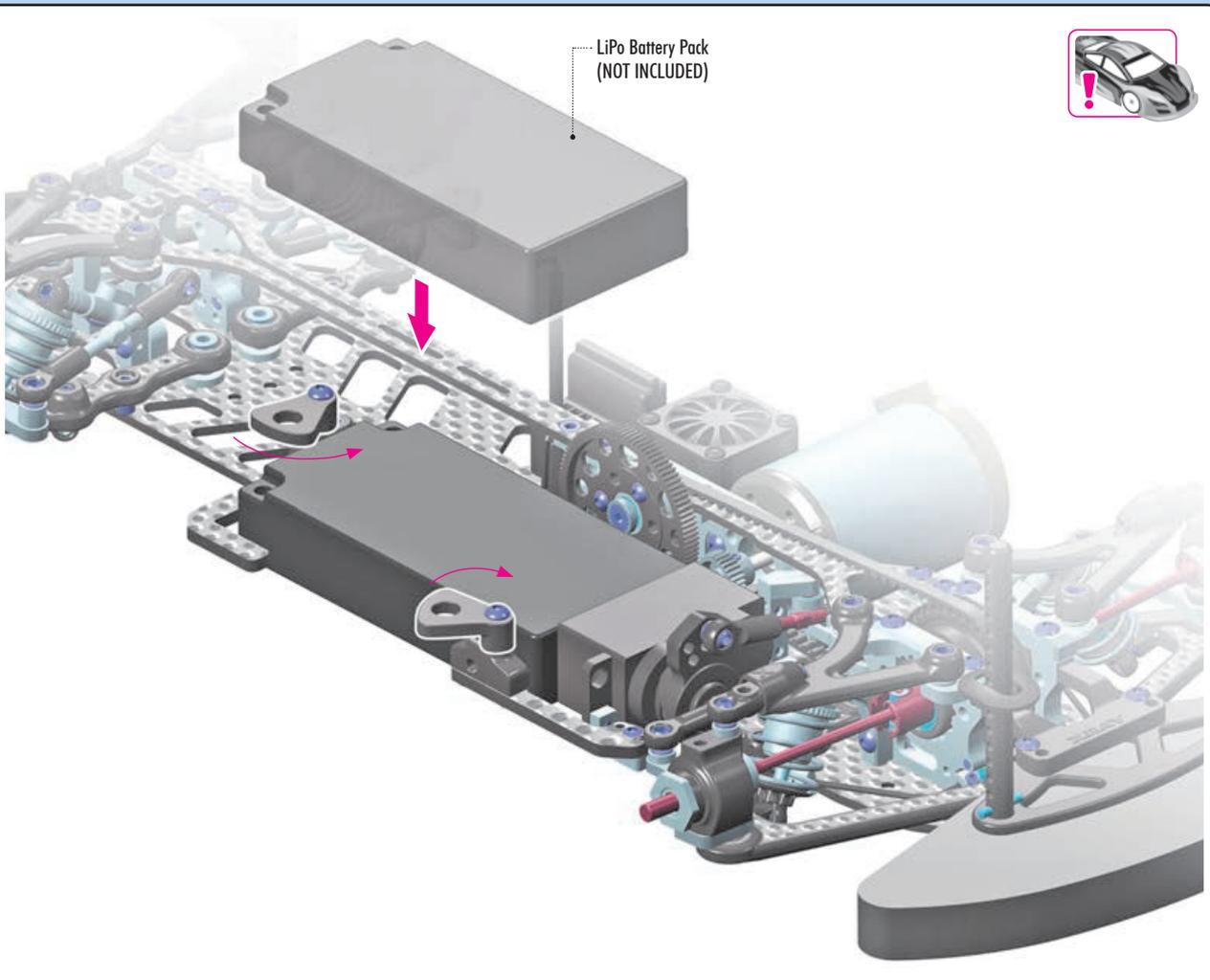
7. FINAL ASSEMBLY



VIDEO TECH TIP



WEIGHT BALANCE

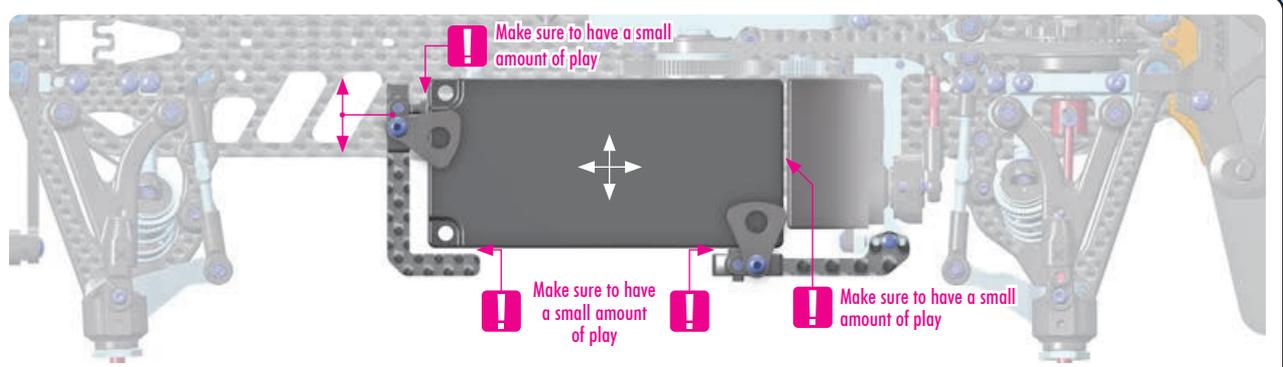


VIDEO TECH TIP



BATTERY MOUNTING SYSTEM

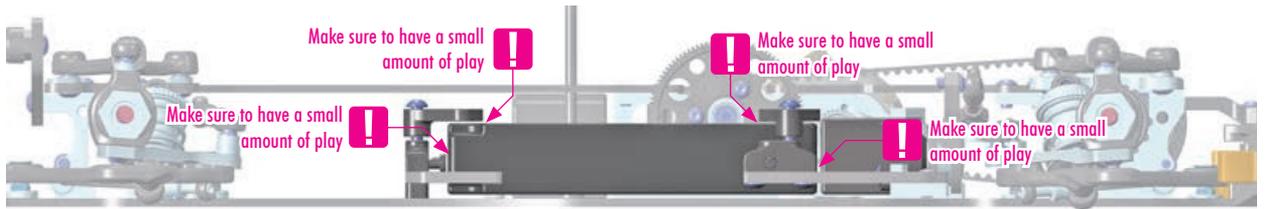
7. FINAL ASSEMBLY



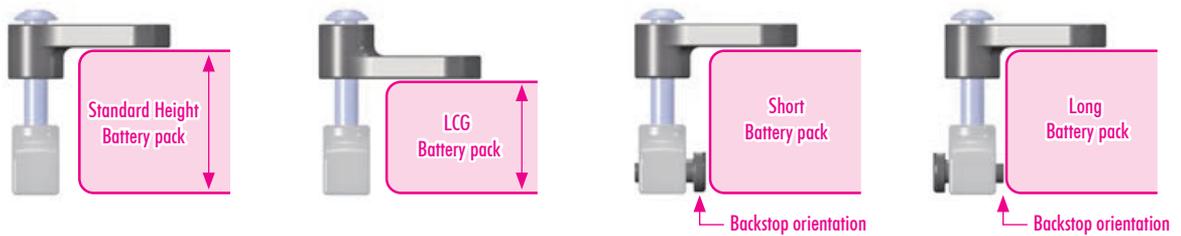
BATTERY BACKSTOP

The new adjustable battery backstop system secures the battery in the car in a tweak-free, non-fixed manner to help improve traction and makes it more stable and easier to drive.

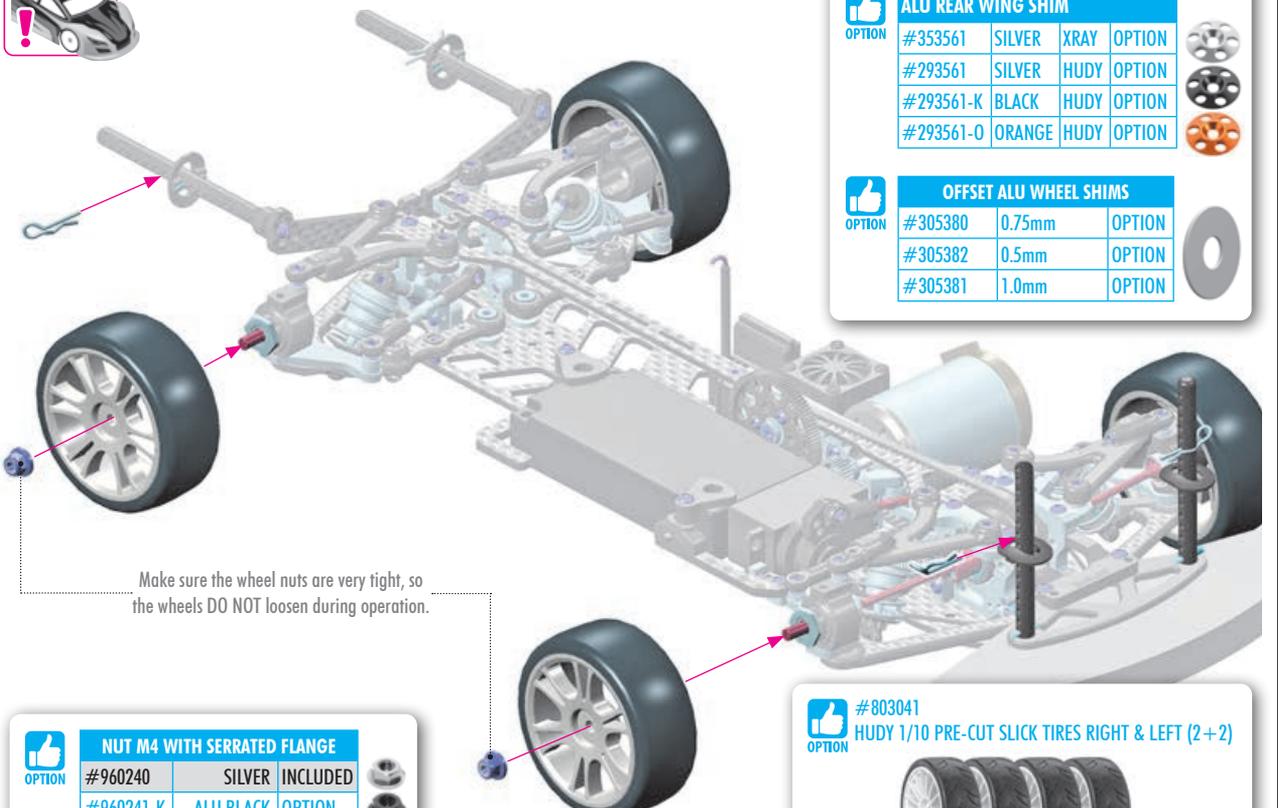
It is very important that battery has a very small amount of play in all directions so it does NOT tweak the car, but the play cannot be too much otherwise the battery may fall out in crashes.



Due to different battery sizes used on carpet and asphalt, there are multiple battery mounting possibilities.



4x 960240 N M4



Make sure the wheel nuts are very tight, so the wheels DO NOT loosen during operation.



ALU REAR WING SHIM

| | | | | |
|-----------|--------|------|--------|--|
| #353561 | SILVER | XRAY | OPTION | |
| #293561 | SILVER | HUDY | OPTION | |
| #293561-K | BLACK | HUDY | OPTION | |
| #293561-O | ORANGE | HUDY | OPTION | |



OFFSET ALU WHEEL SHIMS

| | | | |
|---------|--------|--------|--|
| #305380 | 0.75mm | OPTION | |
| #305382 | 0.5mm | OPTION | |
| #305381 | 1.0mm | OPTION | |



NUT M4 WITH SERRATED FLANGE

| | | | |
|-----------|------------|----------|--|
| #960240 | SILVER | INCLUDED | |
| #960241-K | ALU BLACK | OPTION | |
| #960241-O | ALU ORANGE | OPTION | |



#803041 HUDY 1/10 PRE-CUT SLICK TIRES RIGHT & LEFT (2+2)



VIDEO TECH TIP



TRACK WIDTH (OFFSET)



DOWNSTOP & RIDE HEIGHT



BODY STOP SYSTEM

The X4F features an adjustable front body upstop system incorporated into the new upper arm to prevent the body shell from bottoming out and hitting the ground during cornering. When the system is set correctly, it allows the body to be run lower without dragging on the ground to improve aerodynamic efficiency.



BODY STOP ALTERNATIVE
with screw and ball joint

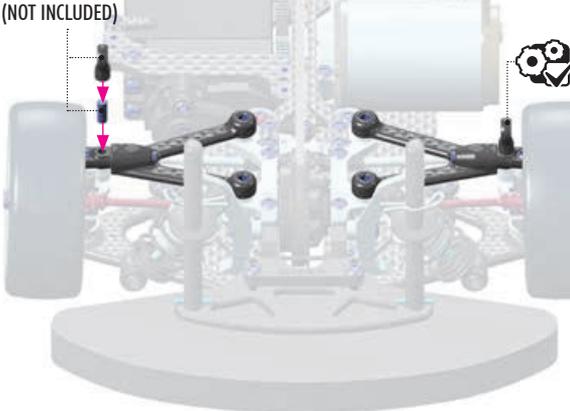
(#901308 SB M3x8mm / #303457 Ball Joint)



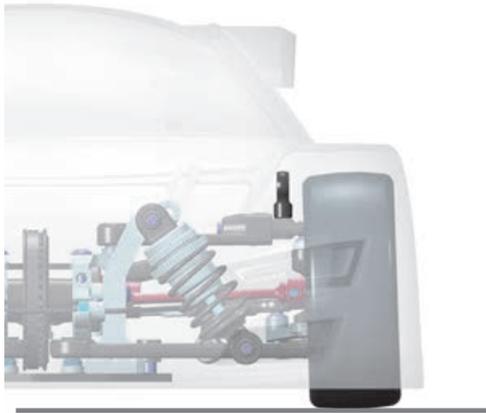
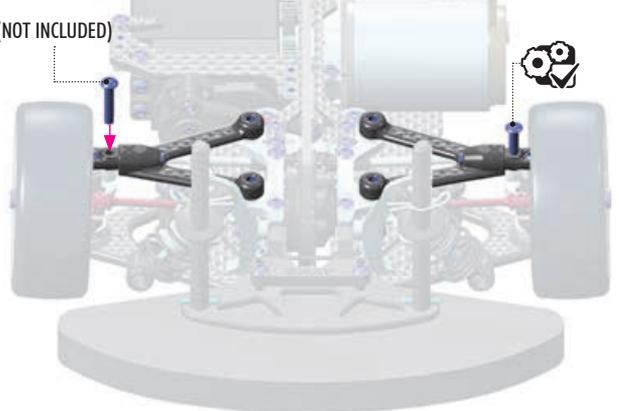
BODY STOP ALTERNATIVE
with screw

(#902316 SH M3x16mm)

(NOT INCLUDED)



(NOT INCLUDED)

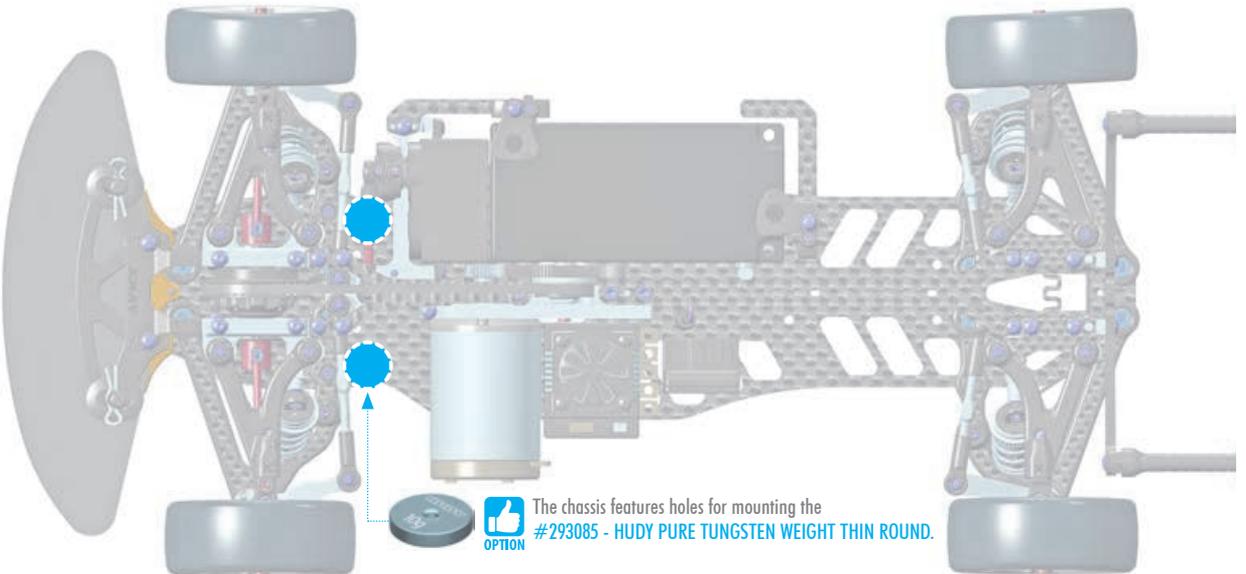


VIDEO TECH TIP

REAR BODY POST MOUNTING

VIDEO TECH TIP

CHASSIS TWEAK



#326181
STAINLESS STEEL
BATTERY WEIGHT 35g



#293083
HUDY PURE TUNGSTEN
WEIGHT 15g



#293085
HUDY PURE TUNGSTEN
WEIGHT THIN ROUND
WITH M3 - 10g

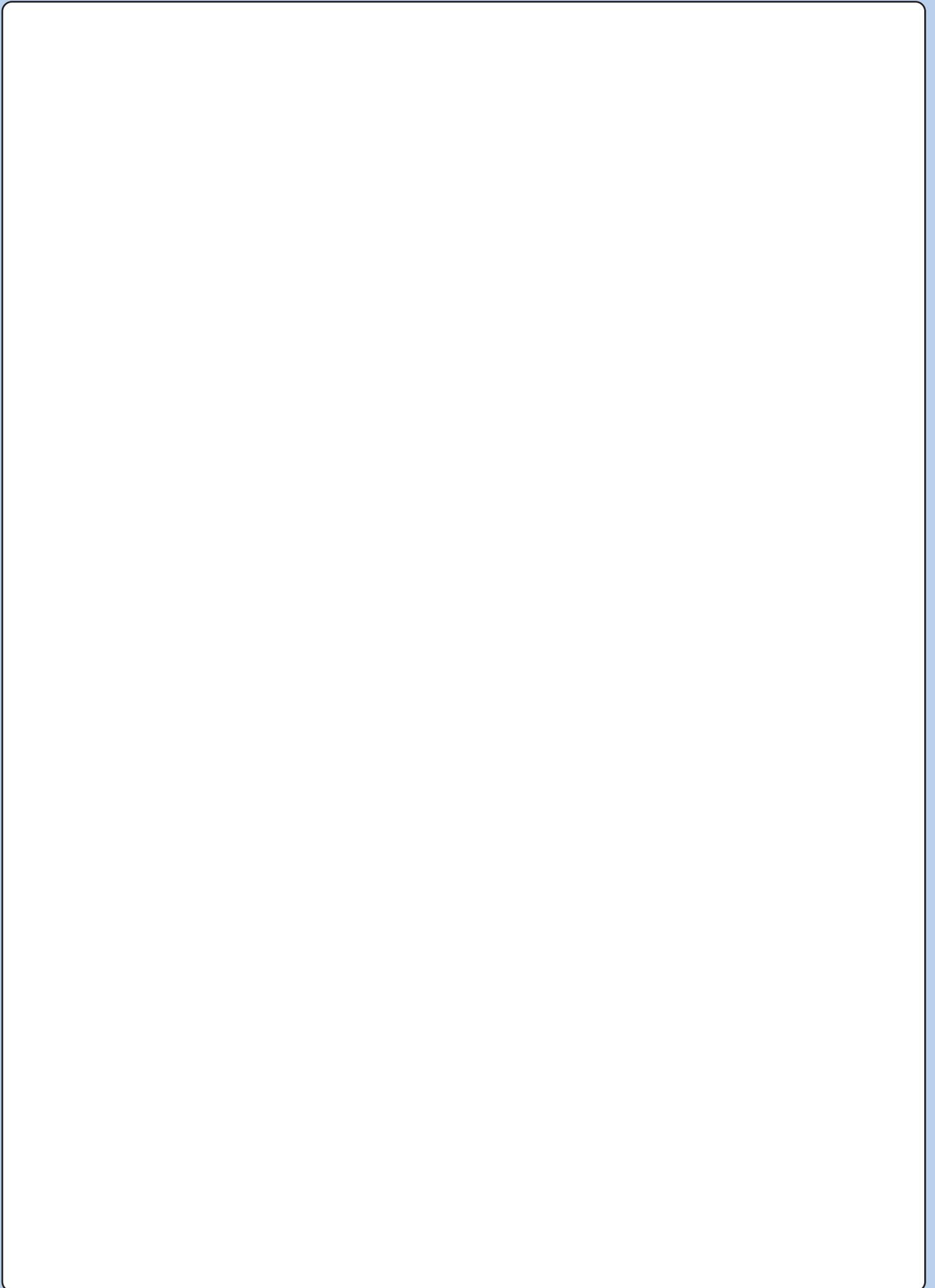


#293081
HUDY PURE TUNGSTEN
WEIGHT 5g



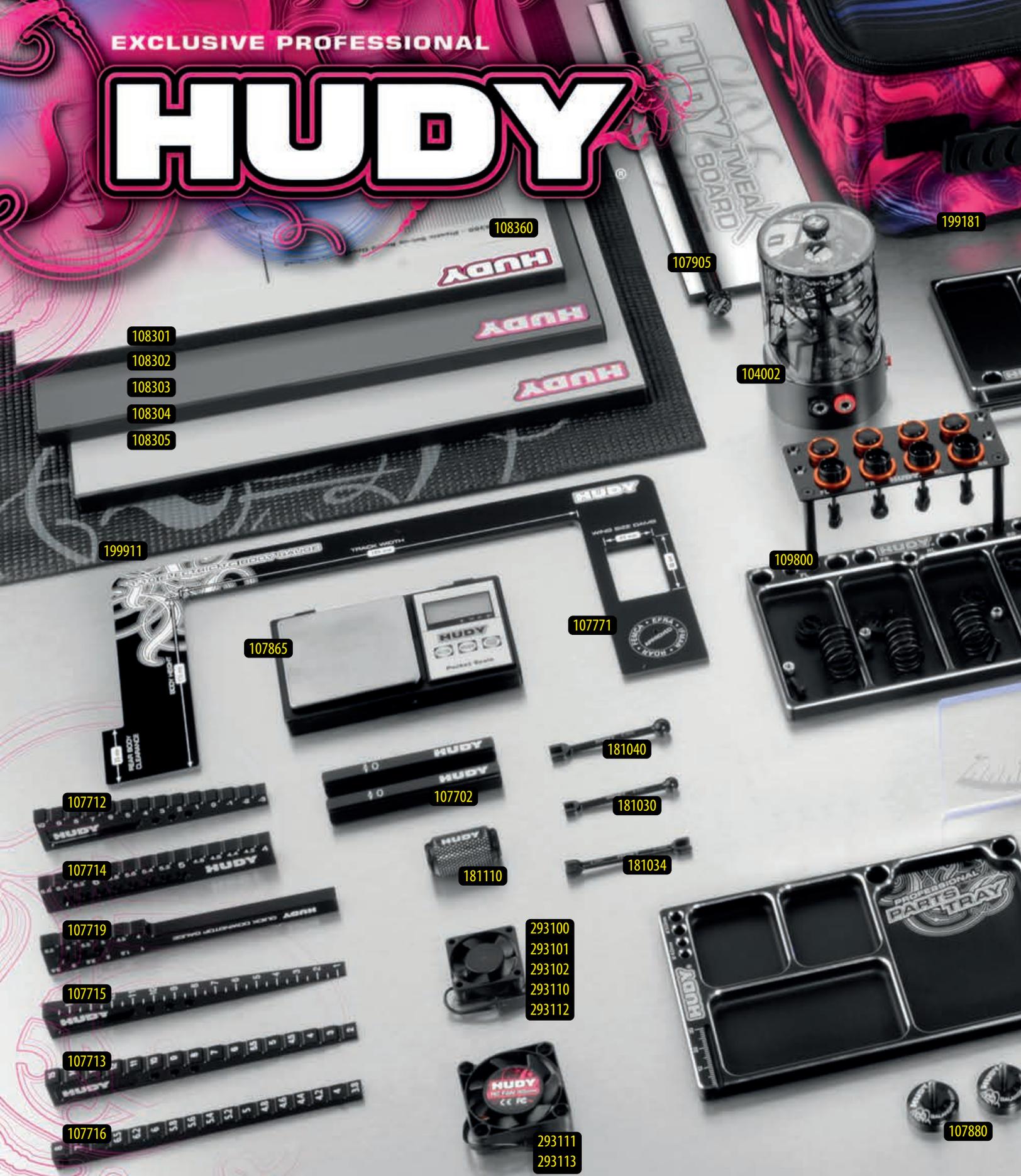
#293082
HUDY PURE TUNGSTEN
WEIGHT 10g





EXCLUSIVE PROFESSIONAL

HUDY



- 104002 HUDY AIR VAC - VACUUM PUMP - ON-ROAD
- 106260 HUDY TIRE ADDITIVE - TIRE GRIPPER - 50ML - V2
- 107090 HUDY BEARING CHECKING TOOL
- 107601 LIMITED EDITION - REAMER FOR BODY 0-9MM + COVER - SMALL
- 107643 LIMITED EDITION - ARM REAMER # 3.0MM
- 107702 CHASSIS DROOP GAUGE SUPPORT BLOCKS FOR 1/10 (2)
- 107712 CHASSIS DROOP GAUGE -3.0-10MM FOR 1/10 CARS (10MM)
- 107713 CHASSIS RIDE HEIGHT GAUGE STEPPED 2.0-15.0MM
- 107714 ULTRA-FINE CHASSIS DROOP GAUGE 4.0-6.6MM
- 107715 CHASSIS RIDE HEIGHT GAUGE 1.0-15.0MM (BEVELED)
- 107716 ULTRA-FINE CHASSIS RIDE HEIGHT GAUGE 3.8-8.0MM
- 107719 QUICK DOWNSTOP GAUGE TOOL 1.0-6.5MM
- 107720 CHASSIS RIDE HEIGHT GAUGE 30-17MM FOR 1/8 & 1/10 OFF-ROAD
- 107750 HUDY CARBON QUICK CAMBER GAUGE 1.5°, 2°, 2.5° FOR 1/10 TC

- 107771 HUDY BODY GAUGE 1/10 ELECTRIC TOURING CARS
- 107855 HUDY PIT LED
- 107865 HUDY PROFESSIONAL DIGITAL POCKET SCALE 300G/0.01G
- 107870 HUDY FIBRE-REINFORCED TAPE - BLACK
- 107875 HUDY ULTRA DOUBLE-SIDED TAPE
- 107880 CHASSIS BALANCING TOOL (2)
- 107904 HUDY QUICK-TWEAK STATION 1/10 & 1/12 ON-ROAD
- 107905 HUDY TWEAK BOARD SET
- 108150 HUDY 1/10 TOURING CAR STAND - V3
- 108190 HUDY ALU PARTS TRAY 160x100MM
- 108192 HUDY ALU PARTS TRAY NARROW 215x50MM
- 108193 HUDY ALU PARTS TRAY LARGE 215x100MM
- 108301 FLAT SET-UP BOARD 1/10 & 1/12 - LIGHTWEIGHT - GREY
- 108302 FLAT SET-UP BOARD 1/10 & 1/12 - LIGHTWEIGHT - SILVER GREY

- 108303 FLAT SET-UP BOARD 1/10 & 1/12 - LIGHTWEIGHT - BLACK
- 108304 FLAT SET-UP BOARD 1/10 & 1/12 - LIGHTWEIGHT - RED
- 108305 FLAT SET-UP BOARD 1/10 & 1/12 - LIGHTWEIGHT - BLUE
- 108360 PLASTIC SET-UP BOARD DEEP
- 109301 HUDY SET-UP STATION FOR 1/10
- 109360 ALU NUT FOR 1/10 TOURING
- 109370 ALU SET-UP WHEEL FOR 1/10
- 109800 HUDY ALU TRAY FOR ON-ROAD
- 109840 HUDY ALU TRAY FOR 1/10 TOURING
- 109860 HUDY ALU TRAY FOR SET-UP
- 109880 HUDY ALU TRAY FOR ACCESSORIES
- 111545 LIMITED EDITION - ALLEN KEY
- 112045 LIMITED EDITION - ALLEN KEY
- 113045 LIMITED EDITION - ALLEN KEY

- 108301
- 108302
- 108303
- 108304
- 108305

199911

107865

107771

107712

181040

107714

107702

181030

107719

181110

107715

- 293100
- 293101
- 293102
- 293110
- 293112

107713

181034

107716

- 293111
- 293113

107880



107855
 109880
 109840
 109301
 109370
 108190
 108192
 108193

132045
 175535
 177035
 181030
 181034
 181040
 181110
 183011
 188981
 188990
 199060
 199181
 199270
 199911

107904
 106260
 199270
 108150
 107875
 107870
 183011
 107090
 107601
 107643
 177035
 175535
 111545
 132045
 112045
 113045

For more information about tools, set-up equipment and accessories suitable for your car please visit:

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EXCLUSIVE PROFESSIONAL

HUDY

HUDY

199295-H

199290-H

106261

106200

803041

107861

107840

107846

107761

105590

293080

106290

293012

293011

293083

293082

293081

293084

294017~294035

294127~294160

- 107761 HUDY ADJUSTABLE CAMBER GAUGE 80MM
- 107772 HUDY PROFESSIONAL 1/10 TC WHEEL ARCH MARKER + WHEEL ADAPTER & NUT
- 106210 HUDY GRAPHITE GREASE
- 106230 HUDY BEARING OIL
- 106200 HUDY MAGIC CLEANING GUM
- 106261 HUDY TIRE ADDITIVE - TIRE GRIPPER RED - 50ML
- 106350 HUDY PREMIUM SILICONE OIL 500 CST - 50ML
- 107861 HUDY PROFESSIONAL RACING STOPWATCH XL DISPLAY
- 106290 HUDY PROFESSIONAL SOLDER 3M LENGTH
- 107840 CLEANING BRUSH LARGE - SOFT
- 107846 CLEANING BRUSH SMALL - SOFT
- 105520 WHEEL ADAPTER FOR 1/10 ON-ROAD & 1/10 OFF-ROAD - 12MM
- 105590 HUDY WHEEL BALANCING PUTTY
- 181090 HUDY SPECIAL TOOL FOR TURNBUCKLES & NUTS
- 181091 HUDY TURNBUCKLE WRENCH 3 & 4MM - V2
- 803041 HUDY 1/10 PRE-CUT SLICK TIRES RIGHT & LEFT (2+2)
- 293011 HUDY STAINLESS STEEL BATTERY WEIGHT 35G
- 293012 HUDY STAINLESS STEEL BATTERY WEIGHT FOR NARROW BATTERY PACK 35G
- 293080 LEAD WEIGHTS 4x5G & 4x10G WITH 3M GLUE
- 293081 HUDY PURE TUNGSTEN WEIGHT 5G
- 293082 HUDY PURE TUNGSTEN WEIGHT 10G
- 293083 HUDY PURE TUNGSTEN WEIGHT 15G
- 293084 PRECISION BALANCING CHASSIS WEIGHT 10G (4)
- 293311 CARBON REAR WING SIDE PLATE 0.5MM - 1/10 ELECTRIC (2)



199280M-H



199296-H



298015



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106310~106694



298017



298012



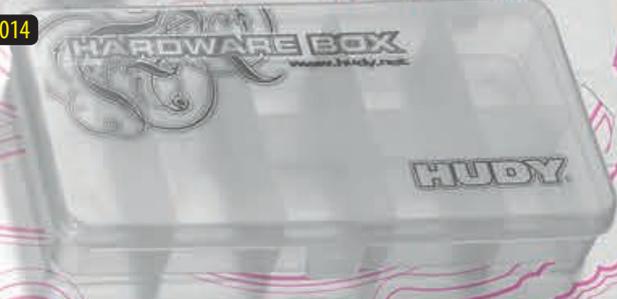
298016



298018



298019



298014



298013



106210



106230

293491~293493

293401~293403

293497~293499

293404~293406

293501~293503

293407~293409



181091



- 293403 ALU CLAMP SERVO HORN - FUTABA, SAVÖX - OFFSET 1-HOLE M3 - 25T
- 293493 ALU SERVO HORN - FUTABA, SAVÖX - OFFSET 1-HOLE M3 - 25T - V2
- 294023 HUDY ALU ULTRA-LIGHT PINION GEAR - HARD COATED - 23T / 48
- 294140 HUDY ALU ULTRA-LIGHT PINION GEAR - HARD COATED - 40T / 64
- 294156 HUDY ALU ULTRA-LIGHT PINION GEAR - HARD COATED - 56T / 64
- 298012 HUDY PARTS BOX - 10-COMPARTMENTS
- 298013 HUDY SPRINGS BOX - 10-COMPARTMENTS
- 298014 HUDY PARTS BOX - 8-COMPARTMENTS
- 298015 HUDY PARTS CASE - 290 x 195MM
- 298016 HUDY TINY HARDWARE BOX - 4-COMPARTMENTS
- 298017 HUDY TINY ONE-PIECE HARDWARE BOX - 8-COMPARTMENTS
- 298018 HUDY TINY HARDWARE BOX - 8-COMPARTMENTS

- 298019 HUDY DIFF BOX - 8-COMPARTMENTS
- 199280M-H HUDY HARD CASE - 140x110x95MM - OIL BAG MEDIUM
- 199290-H HUDY HARD CASE - 235x190x75MM - ACCESSORIES / ENGINE BAG
- 199295-H HUDY HARD CASE - 280x150x85MM - ACCESSORIES BAG LARGE
- 199296-H HUDY HARD CASE - 120x85x46MM - ACCESSORIES / STOP WATCH

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