1/10 ELECTRIC TOURING CAR

XRAY X4

INSTRUCTION MANUAL

FOR X4'25 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.

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.

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

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E-mail: info@teamxray.com

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Irving, TX 75062
USA
Phone: (214) 744-2400
Fax: (214) 744-2401
E-mail: xray@rcamerica.com

FAILURE TO FOLLOW THESE INSTRUCTIONS WILL BE CONSIDERED AS ABUSE AND/OR NEGLECT.

SAFETY PRECAUTIONS

Contains:
LEAD (CAS 7439-92-1) ANTIMONY (CAS 7440-36-0)
WARNING: This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.
CAUTION: CANCER HAZARD
Contains lead, a listed carcinogen. Lead is harmful if ingested. Wash thoroughly after using. DO NOT use product while eating, drinking or using tobacco products. May cause chronic effects to gastrointestinal tract, CNS, kidneys, and blood. MAY CAUSE BIRTH DEFECTS.

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

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

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

IMPORTANT NOTES – GENERAL

- This product is NOT suitable for children under 16 years of age without the direct supervision of a responsible and knowledgeable adult.
- Carefully read all manufacturers warnings and cautions for any parts used in the construction and use of your model.
- Assemble this kit only in places away from the reach of very small children.
- First-time builders and users should seek advice from people who have building experience in order to assemble the model correctly and to allow the model to reach its performance potential.
- Exercise care when using tools and sharp instruments.
- Take care when building, as some parts may have sharp edges.
- Keep small parts out of reach of small children. Children must NOT be allowed to put any parts in their mouth, or pull vinyl bag over their head.
- Read and follow instructions supplied with paints and/or cement, if used (NOT included in kit).
- Immediately after using your model, DO NOT touch equipment on the model such as the motor and speed controller, because they generate high temperatures. You may seriously burn yourself seriously touching them.
- Follow the operating instructions for the radio equipment at all times.
- DO NOT put fingers or any objects inside rotating and moving parts, as this may cause damage or serious injury as your finger, hair, clothes, etc. may get caught.
- Be sure that your operating frequency is clear before turning on or running your model, and never share the same frequency with somebody else at the same time. Ensure that others are aware of the operating frequency you are using and when you are using it.
- Use a transmitter designed for ground use with RC cars. Make sure that no one else is using the same frequency as yours in your operating area. Using the same frequency at the same time, whether it is driving, flying or sailing, can cause loss of control of the RC model, resulting in a serious accident.
- Always turn on your transmitter before you turn on the receiver in the car. Always turn off the receiver before turning your transmitter off.
- Keep the wheels of the model off the ground when checking the operation of the radio equipment.
- Disconnect the battery pack before storing your model.
- When learning to operate your model, go to an area that has no obstacles that can damage your model if your model suffers a collision.
- Remove any sand, mud, dirt, grass or water before putting your model away.
- If the model behaves strangely, immediately stop the model, check and clear the problem.
- To prevent any serious personal injury and/or damage to property, be responsible when operating all remote controlled models.
- The model car is NOT intended for use on public places and roads or areas where its operation can conflict with or disrupt pedestrian or vehicular traffic.
- Because the model car is controlled by radio, it is subject to radio interference from many sources that are beyond your control. Since radio interference can cause momentary loss of control, always allow a safety margin in all directions around the model in order to prevent collisions.
- DO NOT use your model:
  - Near real cars, animals, or people that are unaware that an RC car is being driven.
  - In places where children and people gather
  - In residential districts and parks
  - In limited indoor spaces
  - In wet conditions
  - In the street
  - In areas where loud noises can disturb others, such as hospitals and residential areas.
  - At night or anytime your line of sight to the model may be obstructed or impaired in any way.

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

IMPORTANT NOTES – ELECTRICAL

- Insulate any exposed electrical wiring (using heat shrink tubing or electrical tape) to prevent dangerous short circuits. Take maximum care in wiring, connecting and insulating cables. Make sure cables are always connected securely. Check connectors for if they become loose. And if so, reconnect them securely. Never use RC models with damaged wires. A damaged wire is extremely dangerous, and can cause short-circuits resulting in fire. Please have wires repaired at your local hobby shop.
- Low battery power will result in loss of control. Loss of control can occur due to a weak battery in either the transmitter or the receiver. Weak running battery may also result in an out of control car if your car's receiver power is supplied by the running battery. Stop operation immediately if the car starts to slow down.
- When NOT using RC model, always disconnect and remove battery.
- DO NOT disassemble battery or cut battery cables. If the running battery short-circuits, approximately 300W of electricity can be discharged, leading to fire or burns. Never disassemble battery or cut battery cables.
- Use a recommended charger for the receiver and transmitter batteries and follow the instructions correctly. Over-charging, incorrect charging, or using inferior chargers can cause the batteries to become dangerously hot. Recharge battery when necessary. Continual recharging may damage battery and, in the worst case, could build up heat leading to fire. If battery becomes extremely hot during recharging, please ask your local hobby shop for check and/or repair and/or replacement.
- Regularly check the charger for potential hazards such as damage to the cable, plug, casing or other defects. Ensure that any damage is rectified before using the charger again. Modifying the charger may cause short-circuit or overcharging leading to a serious accident. Therefore DO NOT modify the charger.
- Always unplug charger when recharging is finished.
- DO NOT recharge battery while battery is still warm. After use, battery retains heat. Wait until it cools down before charging.
- DO NOT allow any metal part to short circuit the receiver batteries or other electrical/electronic device on the model.
- Immediately stop running if your RC model gets wet as may cause short circuit.
- Please dispose of batteries responsibly. Never put batteries into fire.

R/C & BUILDING TIPS

- Make sure all fasteners are properly tightened. Check them periodically.
- Make sure that chassis screws DO NOT protrude from the chassis.
- For the best performance, it is very important that great care is taken to ensure the free movement of all parts.
- Clean all ball-bearings so they move very easily and freely.
- Tap or pre-thread the plastic parts when threading screws.
- Self-tapping screws cut threads into the parts when being tightened. DO NOT use excessive force when tightening the self-tapping screws because you may strip out the thread in the plastic. We recommended you stop tightening a screw when you feel some resistance.
- Ask your local hobby shop for any advice.

Please support your local hobby shop. We at XRAY Model Racing Cars support all local hobby dealers. Therefore we ask you, if at all possible, to purchase XRAY products at your hobby dealer and give them your support like we do. If you have difficulty finding XRAY products, please check out www.teamxray.com to get advice, or contact us via email at info@teamxray.com, or contact the XRAY distributor in your country.

WARRANTY

XRAY guarantees this model kit to be free from defects in both material and workmanship within 30 days of purchase. The total monetary value under warranty will in no case exceed the cost of the original kit purchased. This warranty does NOT cover any components damaged by use or modification or as a result of wear. Part or parts missing from this kit must be reported within 30 days of purchase. No part or parts will be sent under warranty without proof of purchase. Should you find a defective or missing part, contact the local distributor. Service and customer support will be provided through local hobby store where you have purchased the kit, therefore make sure to purchase any XRAY products at your local hobby store. This model racing car is considered to be a high-performance racing vehicle. As such this vehicle will be used in an extreme range of conditions and situations, all which may cause premature wear or failure of any component. XRAY has no control over usage of vehicles once they leave the dealer, therefore XRAY can only offer warranty against all manufacturer's defects in materials, workmanship, and assembly at point of sale and before use. No warranties are expressed or implied that cover damage caused by what is considered normal use, or cover or imply how long any model cars' components or electronic components will last before requiring replacement.

Due to the high performance level of this model car you will need to periodically maintain and replace consumable components. Any and all warranty coverage will NOT cover replacement of any part or component damaged by neglect, abuse, or improper or unreasonable use. This includes but is NOT limited to damage from crashing, chemical and/or water damage, excessive moisture, improper or no maintenance, or user modifications which compromise the integrity of components. Warranty will NOT cover components that are considered consumable on RC vehicles. XRAY does NOT pay nor refund shipping on any component sent to XRAY or its distributors for warranty. XRAY reserves the right to make the final determination of the warranty status of any component or part.

Limitations of Liability
XRAY makes no other warranties expressed or implied. XRAY shall NOT be liable for any loss, injury or damages, whether direct, indirect, special, incidental, or consequential, arising from the use, misuse, or abuse of this product and/or any product or accessory required to operate this product. In no case shall XRAY's liability excess the monetary value of this product.

Take adequate safety precautions prior to operating this model. You are responsible for this model's assembly and safe operation.

Disregard of the any of the above cautions may lead to accidents, personal injury, or property damage. XRAY MODEL RACING CARS assumes no responsibility for any injury, damage, or misuse of this product during assembly or operation, nor any addictions that may arise from the use of this product.

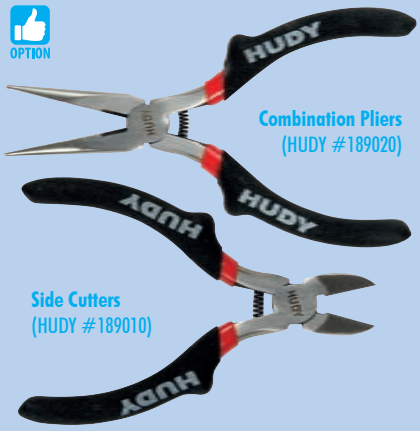
QUALITY CERTIFICATE

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.

TOOLS REQUIRED

OPTION



Combination Pliers (HUDY #189020)

Side Cutters (HUDY #189010)

Pocket Hobby Knife (HUDY #188981)

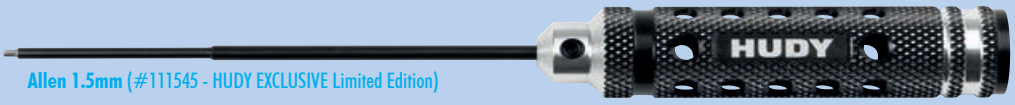
Special Tool for turnbuckles, nuts (HUDY #181090)

Turnbuckle Wrench 4mm (HUDY #181040)

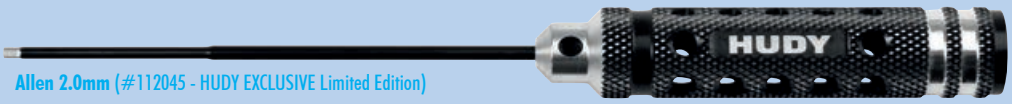
Turnbuckle Wrench 3mm (HUDY #181030)

HUDY Tweezers Straight (HUDY #188970)

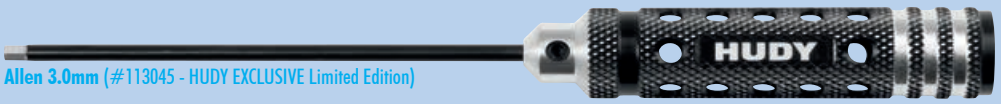
HUDY Tweezers Curved (HUDY #188971)



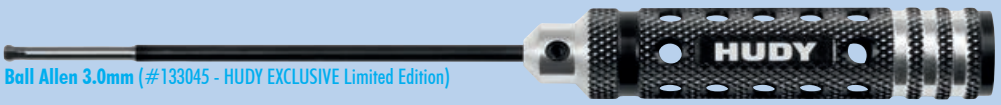
Allen 1.5mm (#111545 - HUDY EXCLUSIVE Limited Edition)



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



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



Ball Allen 3.0mm (#133045 - HUDY EXCLUSIVE Limited Edition)

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

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

Reamer (#107602 - HUDY EXCLUSIVE Limited Edition)

Scissors (HUDY #188990)

Professional Multi Tool (HUDY #183011)

INCLUDED

350cSt (#106335)
HUDY Premium Silicone Oils

SILICONE OIL

5.000cSt (#106450)
HUDY Premium Silicone Oils

SILICONE OIL

(HUDY #106210)
Premium Graphite Grease

GRAPHITE GEASE

EQUIPMENT REQUIRED

Transmitter

Receiver

Speed Controller

Steering Servo

Electric Motor

Pinion Gear with Setscrew

LiPo Battery

Battery Charger

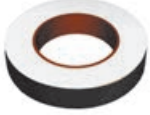
Lexan™ Paint

OPTION Wheels & Tires & Inserts (HUDY #803053 C3-28) (HUDY #803062 A1-36)

190mm Bodyshell

OPTION Double-sided Tape (HUDY #107875)

OPTION Fibre Tape (HUDY #107870)



OPTION Bearing Oil (HUDY #106230)

OIL

Threadlock

CA glue

BUILD TIPS & NOTES

VIDEO TECH TIP

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.

OPTION

SAMPLE OF OPTIONAL PARTS		
#30XXXX	TYPE1	OPTION 1
#30XXXX	TYPE2	OPTION 2
#30XXXX	TYPE	INCLUDED
#30XXXX	TYPE3	OPTION 3

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

COLOR INDICATIONS

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

The part descriptions are color-coded to make it easier for you to identify the source of a part. Here are what the different colors mean:

304911 — **STYLE A** - indicates parts that are included in the bag marked for the section.

301018 — **STYLE B** - indicates parts that are included in the box.

304902 — **STYLE C** - indicates parts that are already assembled from previous steps.

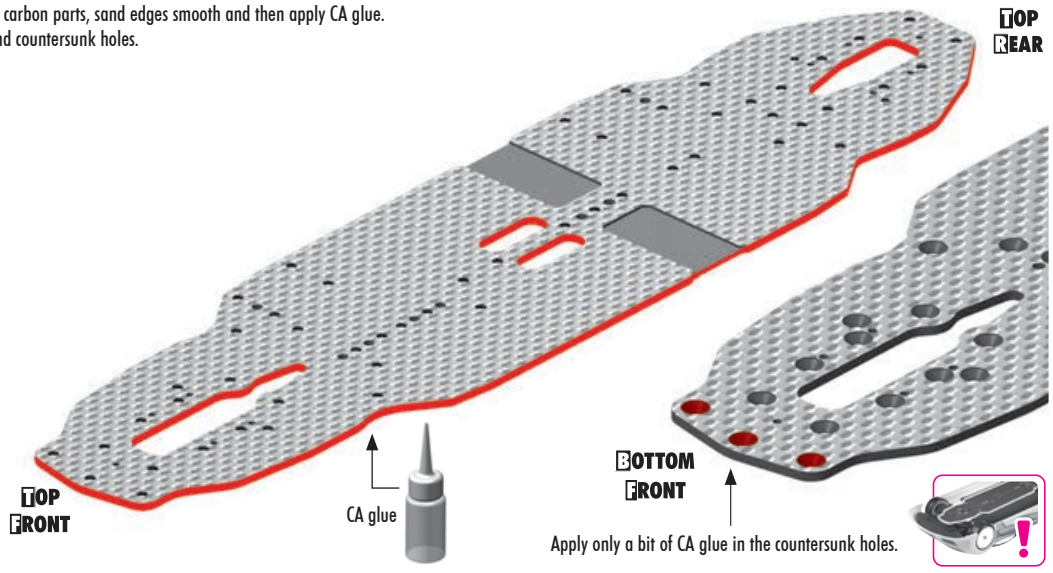
301020 — **STYLE D** - indicates parts that are optional.

CHASSIS PREPARATION

VIDEO TECH TIP

CHASSIS PREPARATION

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.

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 & FRONT SOLID AXLE

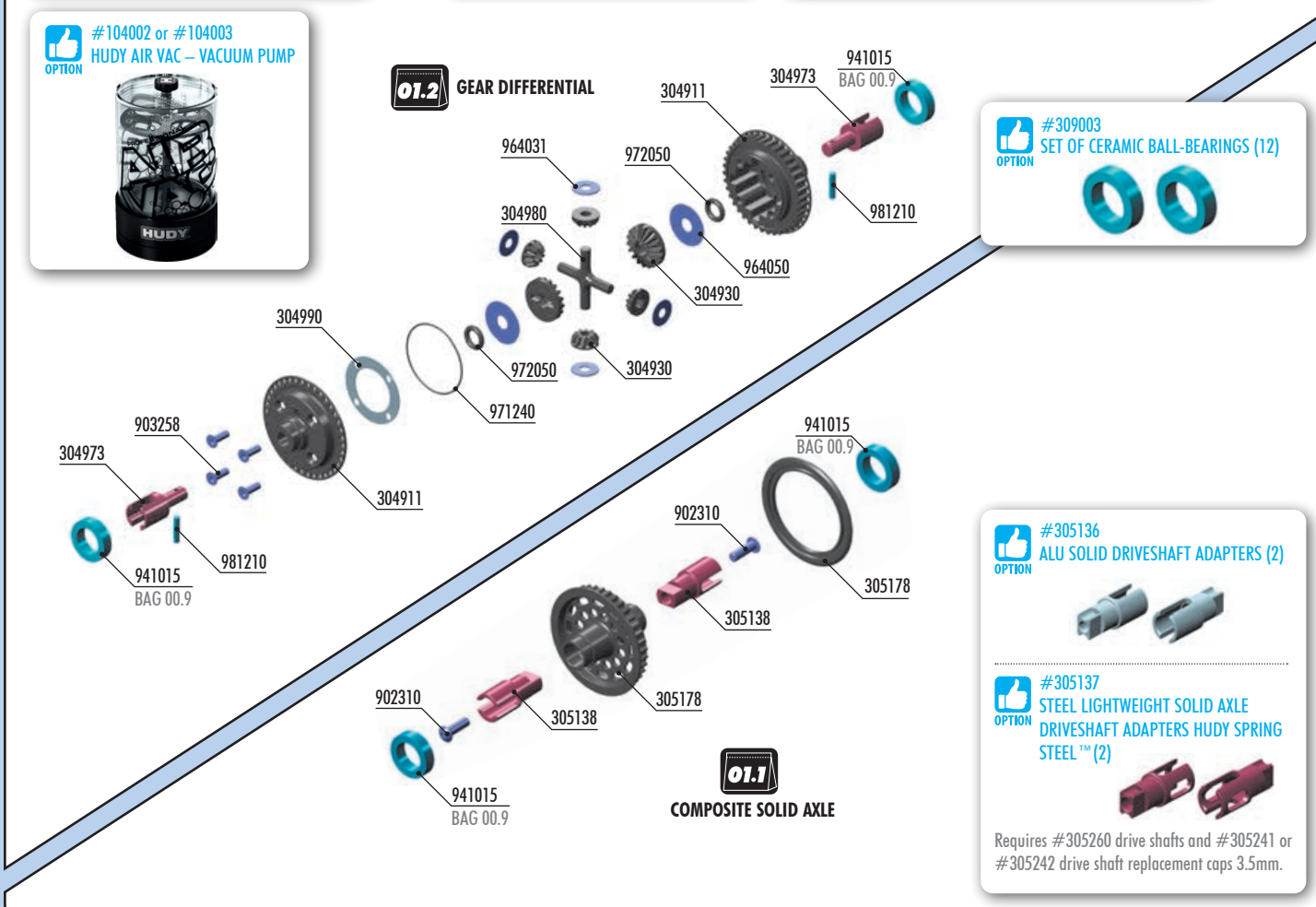
OPTION #304970
ALU GEAR DIFF OUTDRIVE ADAPTER (2)

Requires #305370 drive shafts and #305241 or #305242 drive shaft replacement caps 3.5mm.

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

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

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



OPTION #309003
SET OF CERAMIC BALL-BEARINGS (12)

OPTION #305136
ALU SOLID DRIVESHAFT ADAPTERS (2)

OPTION #305137
STEEL LIGHTWEIGHT SOLID AXLE DRIVESHAFT ADAPTERS HUDY SPRING STEEL™ (2)

Requires #305260 drive shafts and #305241 or #305242 drive shaft replacement caps 3.5mm.

BAG

01.1
01.2

304902	X4 BB GEAR DIFFERENTIAL - SET	902310	HEX SCREW SH M3x10 (10)
304911	X4 COMPOSITE GEAR DIFF. CASE WITH 38T PULLEY & COVER	903258	HEX SCREW SFH M2.5x8 (10)
304930	COMPOSITE GEAR DIFF BEVEL & SATELLITE GEARS (2+4)	941015	BALL-BEARING 10x15x4 RUBBER SEALED - OIL (2)
304973	STEEL GEAR DIFF BB DRIVESHAFT ADAPTER - HUDY SPRING STEEL™ (2)	964031	WASHER S 3.5x10x0.2 (10)
304980	COMPOSITE GEAR DIFF CROSS PIN	964050	WASHER S 5x15x0.3 (10)
304990	DIFF GASKET (4)	971240	SILICONE O-RING 24x0.7 (10)
305138	SOLID AXLE ECS BB DRIVESHAFT ADAPTER - HUDY SPRING STEEL™ (2)	972050	SILICONE O-RING 5x2 (10)
305178	X4 COMPOSITE SOLID AXLE 38T	981210	PIN 2x10 (10)

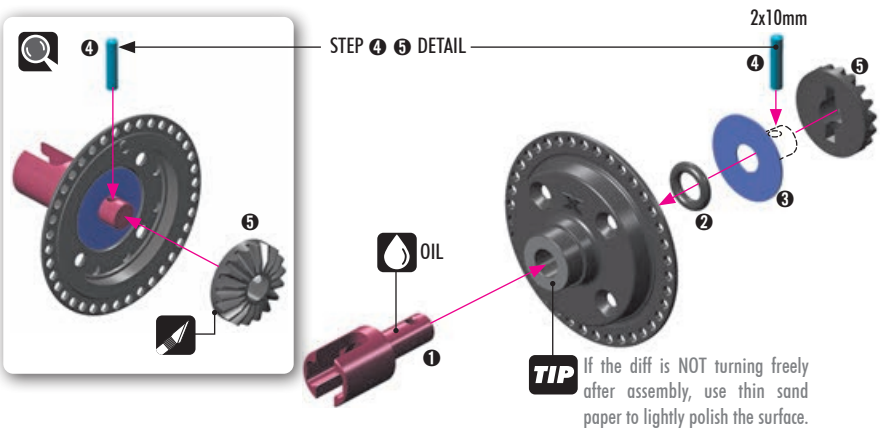
Numbers in parentheses ( ) refer to quantities when purchased separately.

01.2 GEAR DIFFERENTIAL

1x 964050
S 5x15x0.3

1x 972050
O 5x2

1x 981210
P 2x10



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

01.2

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

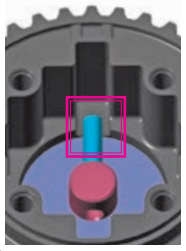
1. GEAR DIFFERENTIAL & FRONT SOLID AXLE

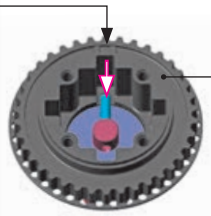
1x 964050 S 5x15x0.3

1x 972050 O 5x2

1x 981210 P 2x10

NOTE ORIENTATION

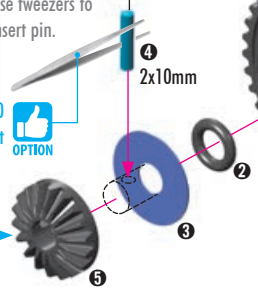




STEP ❹ DETAIL
Use tweezers to insert pin.

❹ 2x10mm

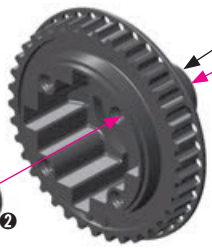
#188970 HUDY Tweezers Straight OPTION



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

OIL

❶

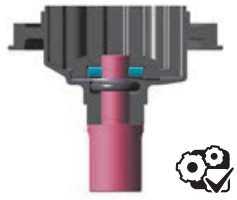


❷

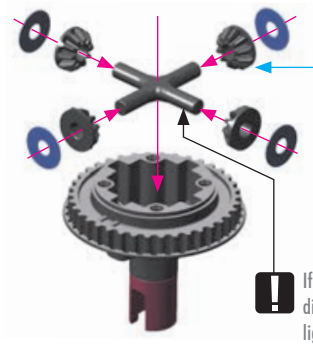
❸

❺

CUTAWAY VIEW



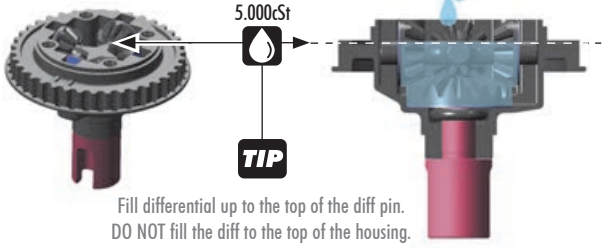
4x 964031 S 3.5x10x0.2



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

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

INITIAL SETTING
5.000cSt



TIP

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

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

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

OIL

12.10g + 1.5g = 13.60g

❶ Put the diff (without oil) on the scale and check the weight (approximately 12.10g).

❷ Slowly pour oil into the diff and watch the weight. Add 1.5g of oil into the diff. The approximate weight of the diff including oil is 13.60g.

TIP TIPS FOR DIFFERENTIALS TIP

LOW TRACTION

1.000cSt	(HUDY #106410)
2.000cSt	(HUDY #106420)
3.000cSt	(HUDY #106430)
4.000cSt	(HUDY #106440)

MEDIUM TRACTION

2.000cSt	(HUDY #106420)
3.000cSt	(HUDY #106430)
4.000cSt	(HUDY #106440)
5.000cSt	(HUDY #106450)
6.000cSt	(HUDY #106460)
7.000cSt	(HUDY #106470)

HIGH TRACTION

8.000cSt	(HUDY #106480)
9.000cSt	(HUDY #106490)
10.000cSt	(HUDY #106510)

VERY-HIGH TRACTION

11.000cSt	(HUDY #106492)
12.000cSt	(HUDY #106512)
15.000cSt	(HUDY #106515)
20.000cSt	(HUDY #106520)

LIGHTER oil increases rear traction, HEAVIER oil increases on-power steering and stability. It is important NOT to use lighter oils in high-traction conditions as this would NOT increase traction, but would make the car loose as the car would become too twitchy.

However, if the oil is too light, it could generate the same effect like the car has no traction. Therefore it is very important to choose the correct oil very carefully. We recommend using lighter oil first, then try heavier oil to better understand the effect on the car's behavior at the track. Choose the oil accordingly.

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

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

TIP TIPS FOR FRONT DIFFERENTIAL

To increase off-power steering and mid-corner steering, the gear diff can also be used in front.

USE THESE OILS FOR FRONT DIFFERENTIAL

500.000cSt	(HUDY #106650)
1 000.000cSt	(HUDY #106692)
2 000.000cSt	(HUDY #106694)

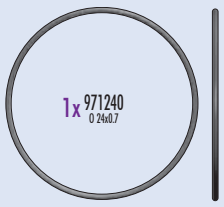
To make the front differential thicker, you can use cleaning gum instead of oil.

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

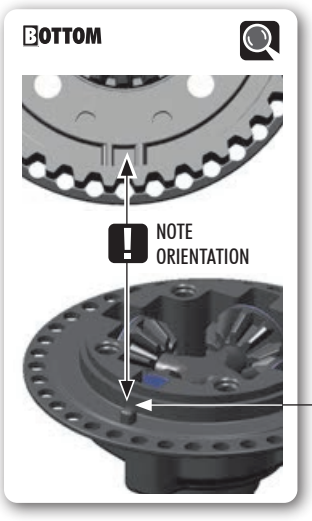
VIDEO TECH TIP

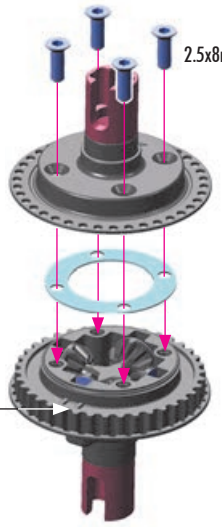
REAR DIFFERENTIAL

1. GEAR DIFFERENTIAL & FRONT SOLID AXLE

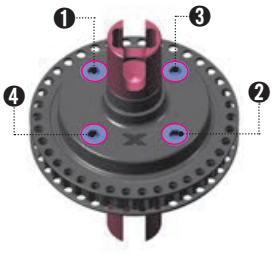


After disassembling the gear diff, the large O-ring may have an increased size and may be more difficult to re-install. We recommend either inserting the old O-ring carefully in the diff cover, or installing a new O-ring if the old one cannot be made to fit properly.

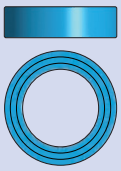


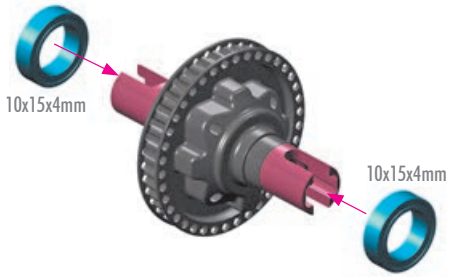


Tighten the screws equally but DO NOT tighten them completely.



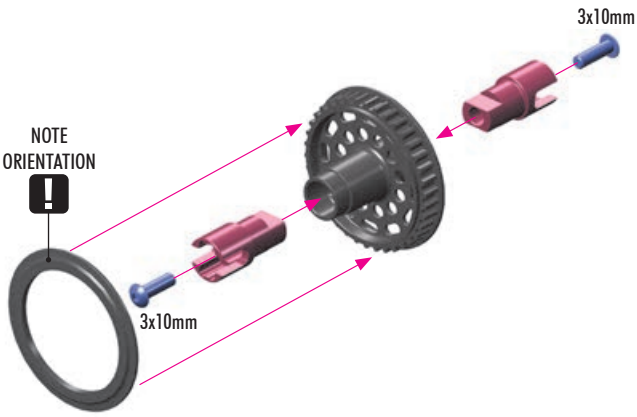
Finish tightening in this order.

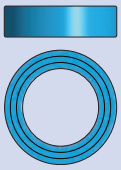


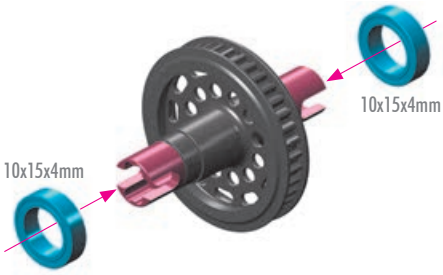


OPTION #309003
SET OF CERAMIC BALL-BEARINGS (12)

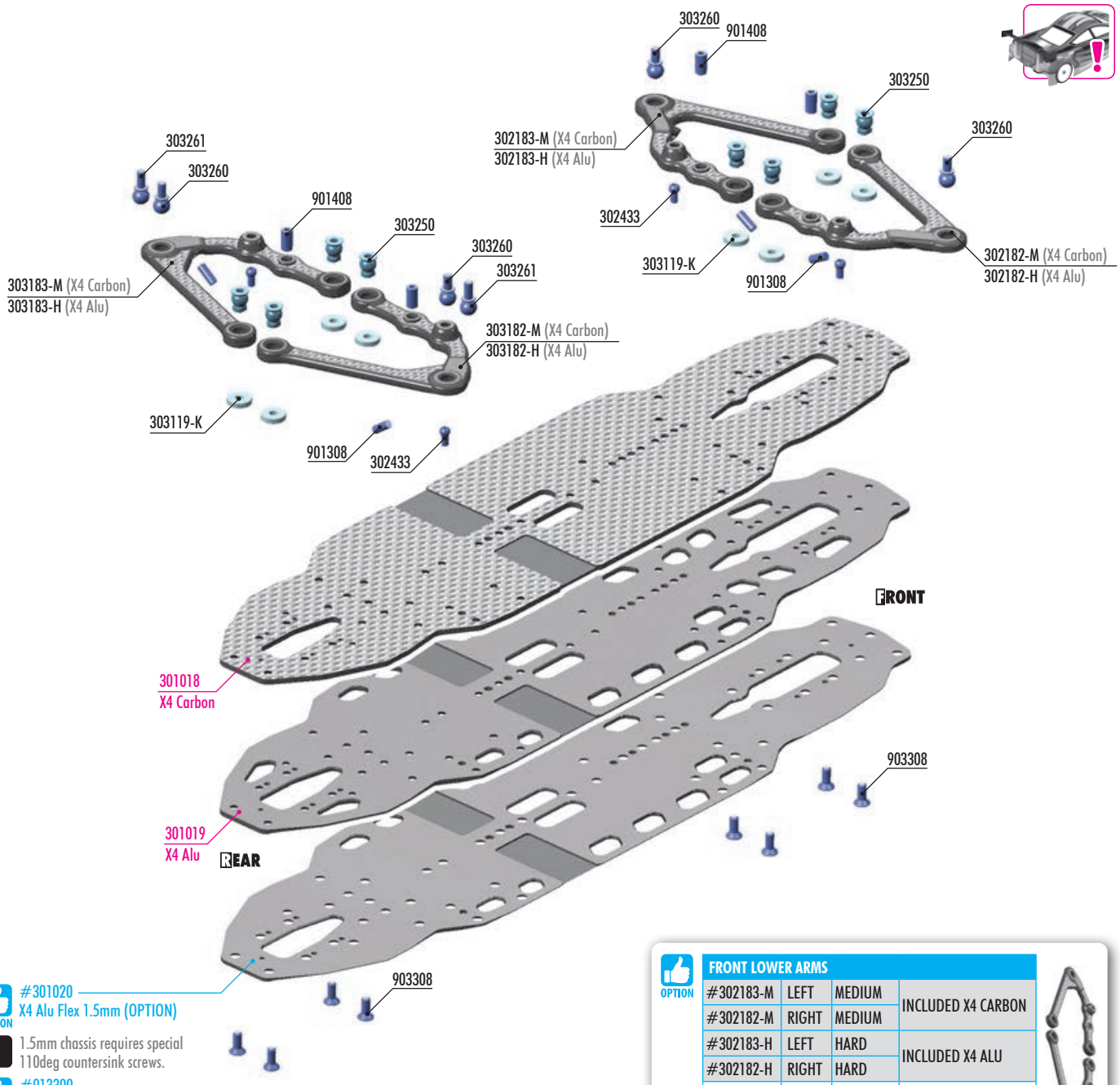
01.1 FRONT SOLID AXLE







OPTION #309003
SET OF CERAMIC BALL-BEARINGS (12)



OPTION #301020
X4 Alu Flex 1.5mm (OPTION)

1.5mm chassis requires special 110deg countersink screws.

OPTION #913300
HEX SCREW 110° FOR 301020 X4 CHASSIS - HUDY SPRING STEEL (33)

OPTION #302121
FRONT ROLL-CENTER SPACER (2)

OPTION #302122
REAR ROLL-CENTER SPACER (2)

OPTION

FRONT LOWER ARMS			
#302183-M	LEFT	MEDIUM	INCLUDED X4 CARBON
#302182-M	RIGHT	MEDIUM	
#302183-H	LEFT	HARD	INCLUDED X4 ALU
#302182-H	RIGHT	HARD	
#302183-G	LEFT	GRAPHITE	OPTION
#302182-G	RIGHT	GRAPHITE	OPTION

OPTION

REAR LOWER ARMS			
#303183-M	LEFT	MEDIUM	INCLUDED X4 CARBON
#303182-M	RIGHT	MEDIUM	
#303183-H	LEFT	HARD	INCLUDED X4 ALU
#303182-H	RIGHT	HARD	
#303183-G	LEFT	GRAPHITE	OPTION
#303182-G	RIGHT	GRAPHITE	OPTION

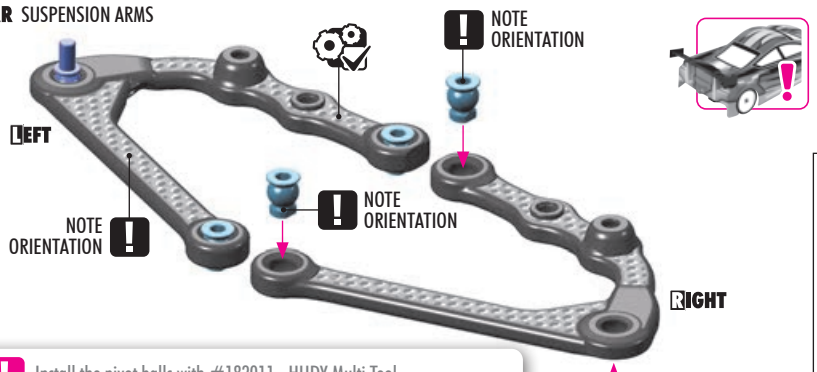
BAG 02

302182-M	X4 CFF™ FRONT LOWER ARM - INNER SHOCK POSITION - MEDIUM - RIGHT
302182-H	X4 CFF™ FRONT LOWER ARM - INNER SHOCK POSITION - HARD - RIGHT
302183-M	X4 CFF™ FRONT LOWER ARM - INNER SHOCK POSITION - MEDIUM - LEFT
302183-H	X4 CFF™ FRONT LOWER ARM - INNER SHOCK POSITION - HARD - LEFT
302433	ANTI-ROLL BAR STEEL BALL END 3.8mm WITH 4mm THREAD (2)
303119-K	ALU SHIM 3x9x2.0mm - BLACK (10)
303182-M	X4 CFF™ REAR LOWER ARM - INNER SHOCK POSITION - MEDIUM - RIGHT
303182-H	X4 CFF™ REAR LOWER ARM - INNER SHOCK POSITION - HARD - RIGHT
303183-M	X4 CFF™ REAR LOWER ARM - INNER SHOCK POSITION - MEDIUM - LEFT
303183-H	X4 CFF™ REAR LOWER ARM - INNER SHOCK POSITION - HARD - 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 - HSS™ (2)
901308	HEX SCREW SB M3x8 (10)
901408	HEX SCREW SB M4x8 (10)
903308	HEX SCREW SFH M3x8 (10)
301018	X4 CARBON CHASSIS 2.2mm
301019	X4 ALU FLEX CHASSIS 2.0mm - SWISS 7075 T6
301020	X4 ALU FLEX CHASSIS 1.5mm - SWISS 7075 T6
913300	HEX SCREW 110° FOR 301020 X4 CHASSIS - HUDY SPRING STEEL (33)

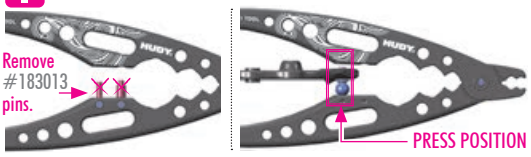
Numbers in parentheses ( ) refer to quantities when purchased separately.

2. FRONT & REAR SUSPENSION

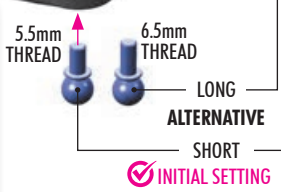
REAR SUSPENSION ARMS



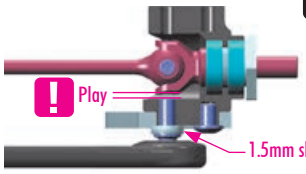
Install the pivot balls with #183011 - HUDY Multi Tool



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.



Pivot ball with M3x6.5mm

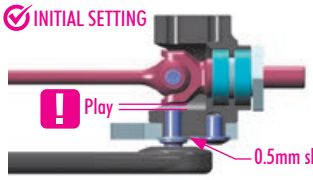


When using more than 1mm shim under the hub, use the #303261 pivot ball with longer 6.5mm thread length to increase durability in serious crashes.

Make sure to check for clearance between the pivot ball threads and CVD pin.

Follow page 30/ step 1

Pivot ball with M3x5.5mm
INITIAL SETTING



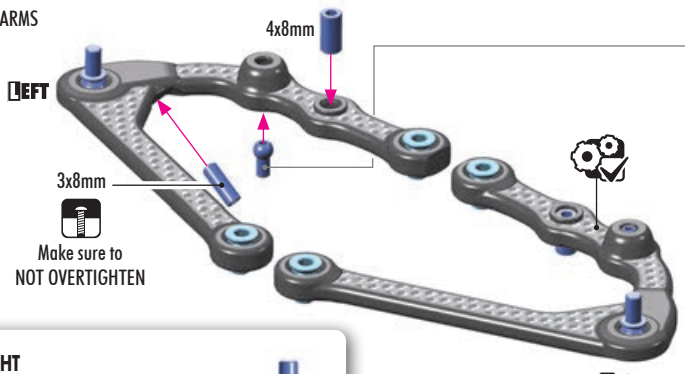
2x 901308 SB M3x8

2x 901408 SB M4x8

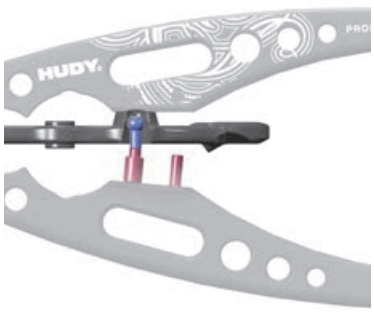
VIDEO TECH TIP

LOWER ARMS

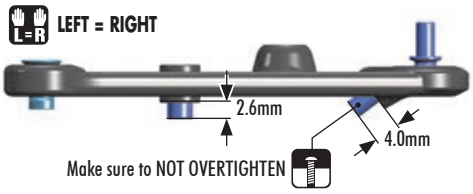
REAR SUSPENSION ARMS



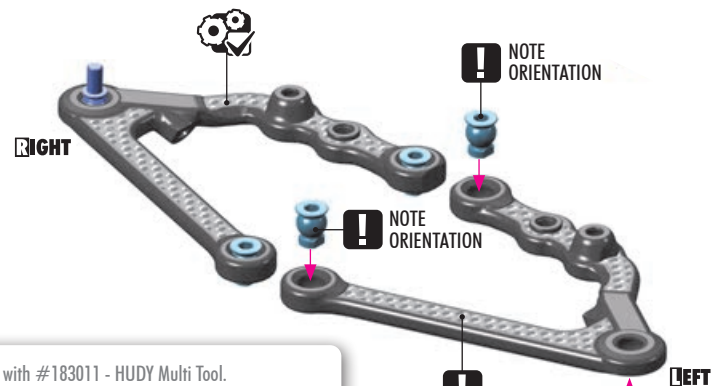
TIP Install the pivot balls with #183011 - HUDY Multi Tool



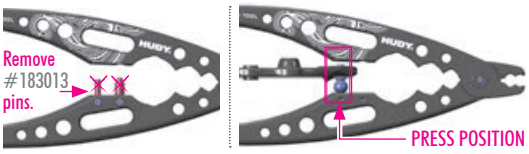
LEFT = RIGHT



FRONT SUSPENSION ARMS

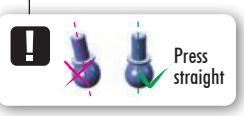


TIP Install the pivot balls with #183011 - HUDY Multi Tool.



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.

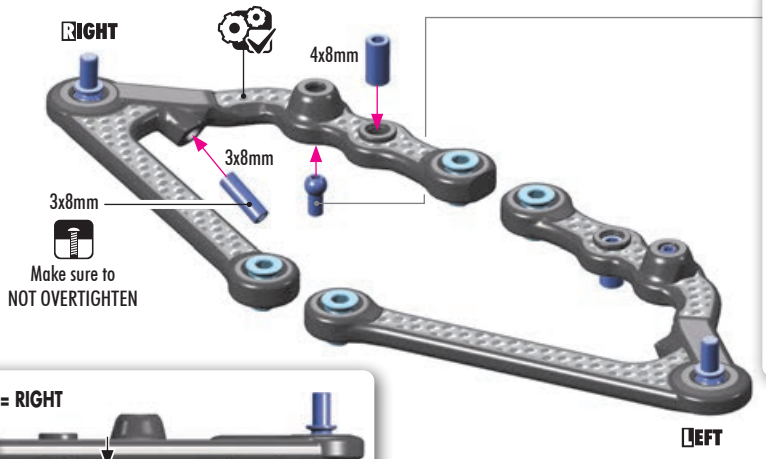
Use only pivot ball with M3x5.5mm thread for front arms.



2x 901308 SB M3x8

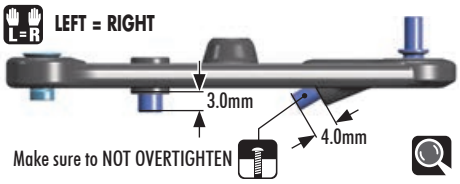
2x 901408 SB M4x8

FRONT SUSPENSION ARMS



TIP Install the pivot balls with #183011 - HUDY Multi Tool.

L=R LEFT = RIGHT



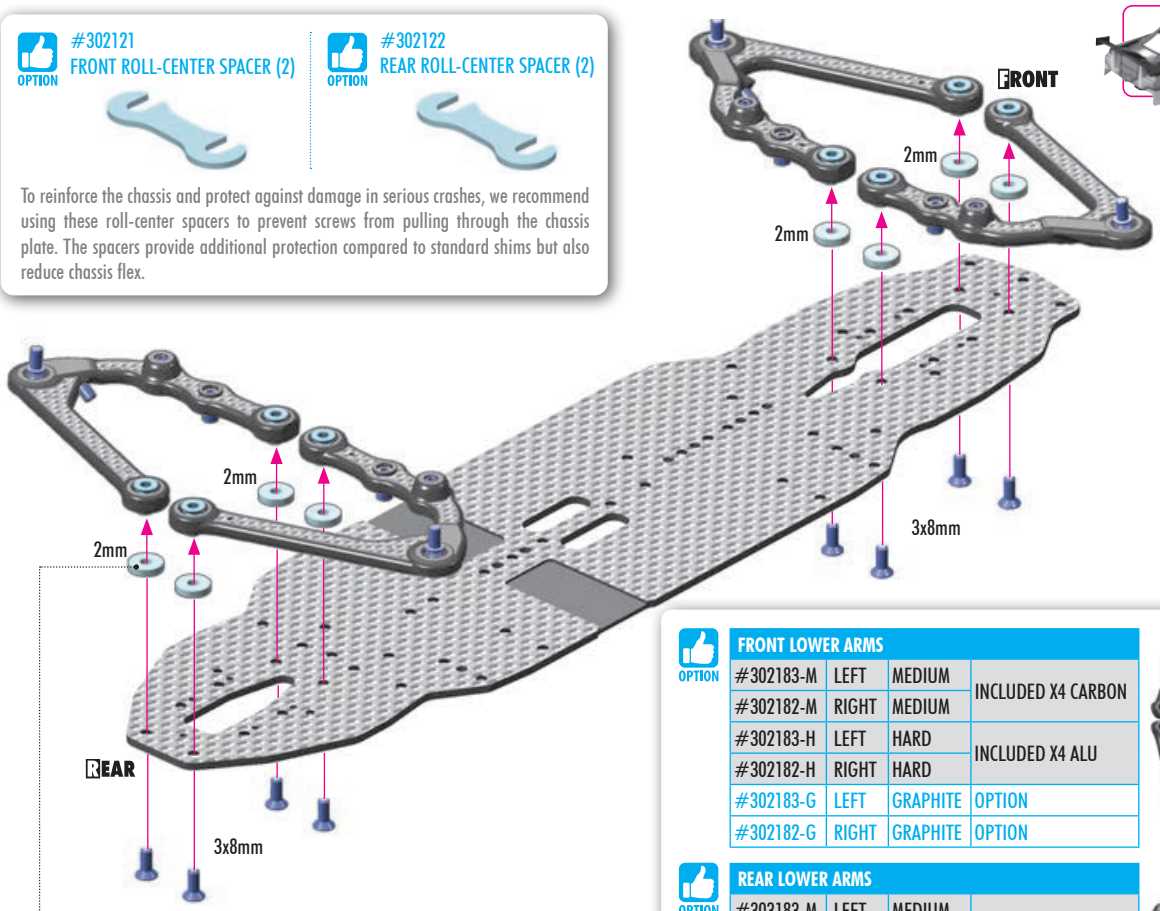
8x 303119-K SHIM 3x9x2

8x 903308 SFH M3x8

OPTION #302121 FRONT ROLL-CENTER SPACER (2)

OPTION #302122 REAR ROLL-CENTER SPACER (2)

To reinforce the chassis and protect against damage in serious crashes, we recommend using these roll-center spacers to prevent screws from pulling through the chassis plate. The spacers provide additional protection compared to standard shims but also reduce chassis flex.



VIDEO TECH TIP

ROLL-CENTER

CHASSIS ALTERNATIVES

OPTION

FRONT LOWER ARMS			
#302183-M	LEFT	MEDIUM	INCLUDED X4 CARBON
#302182-M	RIGHT	MEDIUM	
#302183-H	LEFT	HARD	INCLUDED X4 ALU
#302182-H	RIGHT	HARD	
#302183-G	LEFT	GRAPHITE	OPTION
#302182-G	RIGHT	GRAPHITE	OPTION

OPTION

REAR LOWER ARMS			
#303183-M	LEFT	MEDIUM	INCLUDED X4 CARBON
#303182-M	RIGHT	MEDIUM	
#303183-H	LEFT	HARD	INCLUDED X4 ALU
#303182-H	RIGHT	HARD	
#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.

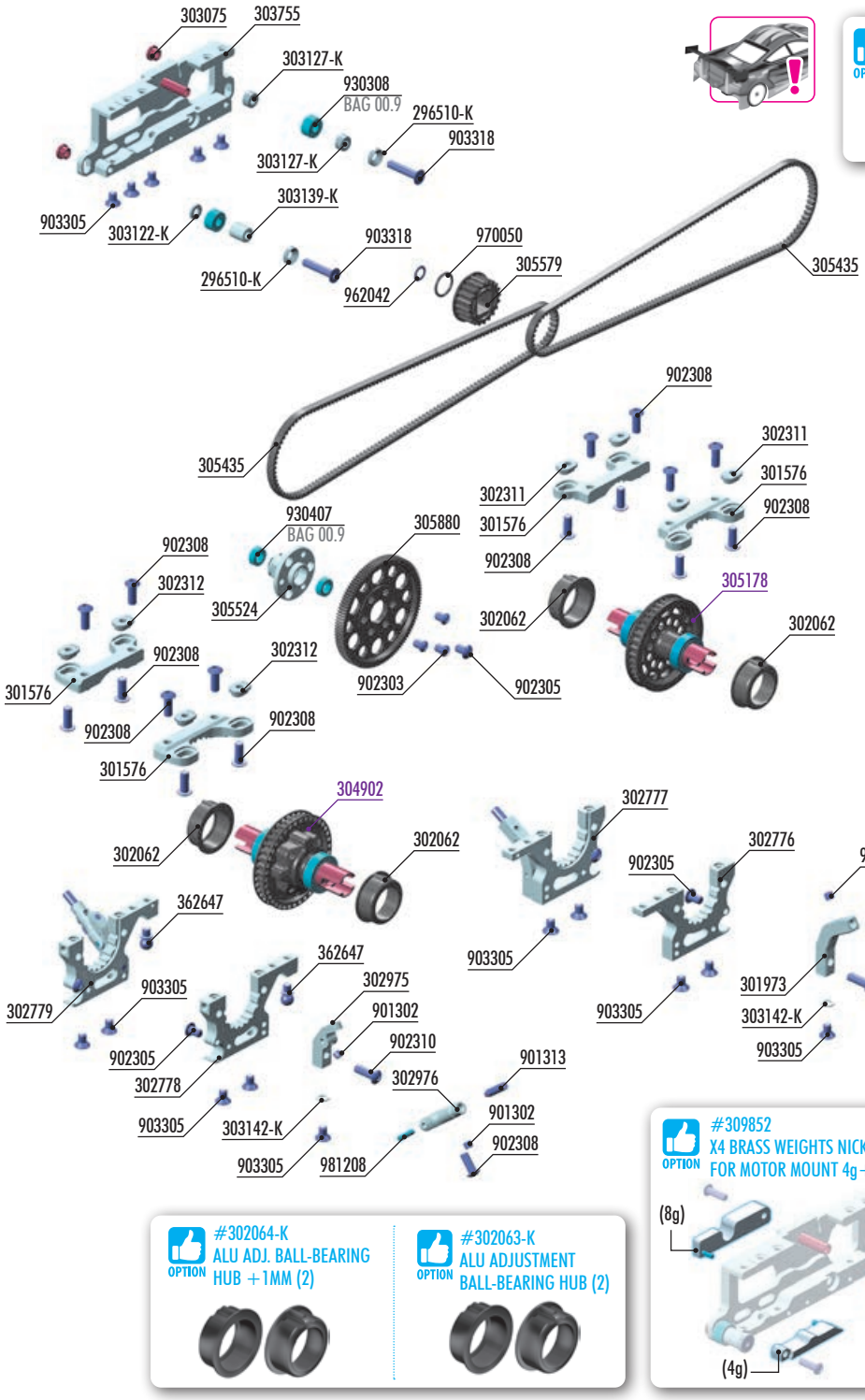
For very high traction conditions both carpet and asphalt, optional **GRAPHITE** arms will help to make the car more stable and easier to drive. Graphite arms should reduce chassis roll, resulting in improved cornering speed.

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.

3. CENTRAL TRANSMISSION



OPTION

ALU CASTER BUSHINGS			
#302310	FRONT 3° / REAR 5.5°	1 Dot	OPTION
#302311	FRONT 4° / REAR 4.5°	2 Dots	INCLUDED
#302312	FRONT 5° / REAR 3.5°	3 Dots	INCLUDED

OPTION #305436
HIGH-PERFORMANCE DRIVE BELT LOW-FRICTION 3x351mm

OPTION #303768
ALU CHASSIS T-BRACE - 7075 T6

OPTION #303767
BRASS CHASSIS T- BRACE - 10g

OPTION

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-O	84T / 48P	OPTION

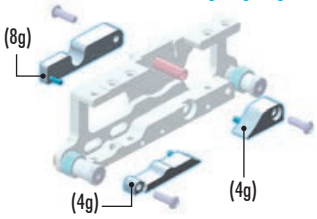
OPTION

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

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

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

OPTION #309852
X4 BRASS WEIGHTS NICKEL COATED FOR MOTOR MOUNT 4g+4g+8g



BAG 03

296510-K	ALU COUNTERSUNK SHIM - BLACK (10)
301576	X4 ALU UPPER CLAMP - INNER SHOCK POSITION - SWISS 7075 T6 (L+R)
301973	X4 ALU SHOCK HOLDER FRONT FIXED - SWISS 7075 T6 (2)
302062	COMPOSITE ADJUSTMENT BALL-BEARING HUB (4)
302311	X4 ALU CASTER BUSHING FRONT 4° / REAR 1.5° - 2 DOTS (4)
302312	X4 ALU CASTER BUSHING FRONT 5° / REAR 2.5°/3.5° - 3 DOTS (4)
302776	X4 ALU LOWER ADJUSTMENT BULKHEAD - FRONT RIGHT
302777	X4 ALU LOWER ADJUSTMENT BULKHEAD - FRONT LEFT
302778	X4 ALU LOWER ADJUSTMENT BULKHEAD - REAR RIGHT
302779	X4 ALU LOWER ADJUSTMENT BULKHEAD - REAR LEFT
302975	X4 ALU SHOCK HOLDER REAR FIXED - SWISS 7075 T6 (2)
302976	X4 ALU SHOCK HOLDER REAR ACTIVE - SWISS 7075 T6 (2)
303075	STEEL NUT (2)
303122-K	ALU SHIM 3x6x1.0mm - BLACK (10)
303127-K	ALU SHIM 3x6x4.0mm - BLACK (10)
303139-K	ALU SHIM 3x6x7.0mm - BLACK (10)
303142-K	ALU SHIM 3x5x0.5mm - BLACK (10)
303755	X4 ALU MOTOR MOUNT WITH 3mm CENTERING PINS
305435	HIGH-PERFORMANCE DRIVE BELT 3x351mm
305524	X4 ALU SOLID LAYSHAFT & BEARINGS
305579	X4 COMPOSITE PULLEY FOR LAYSHAFT 20T
305880	OFFSET SPUR GEAR 110T / 64
362647	BALL END 4.9mm WITH THREAD 3mm (2)
901302	HEX SCREW SB M3x2.5 (10)
901313	HEX SCREW SB M3x12 (10)
902303	HEX SCREW SH M3x4 SMALL HEAD - STAINLESS (10)
902305	HEX SCREW SH M3x5 (10)
902308	HEX SCREW SH M3x8 (10)
902310	HEX SCREW SH M3x10 (10)
903305	HEX SCREW SFH M3x5 (10)
903318	HEX SCREW SFH M3x18 (10)
930308	BALL-BEARING 3x8x4 STEEL SEALED - OIL (2)
930407	BALL-BEARING 4x7x2.5 STEEL SEALED - OIL (2)
962042	WASHER S 4x6x0.1 (10)
970050	O-RING 5x1 (10)
981208	PIN 2x8 (10)
304902	X4 BB GEAR DIFFERENTIAL - SET
305178	X4 COMPOSITE SOLID AXLE 38T

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

4x 902305 SH M3x5

8x 903305 SFH M3x5

VIDEO TECH TIP

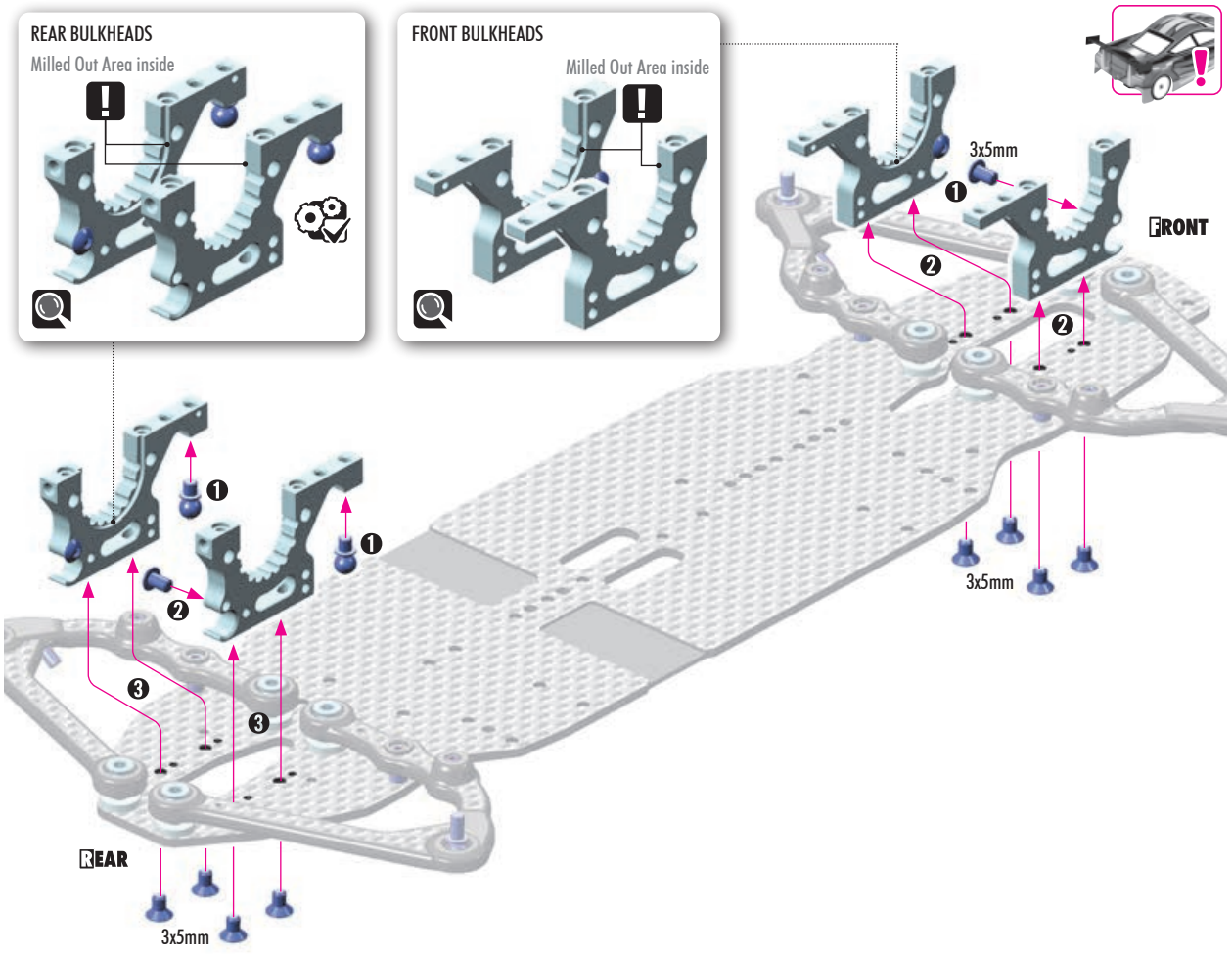
BUILDING THE BULKHEADS

REAR BULKHEADS

Milled Out Area inside

FRONT BULKHEADS

Milled Out Area inside

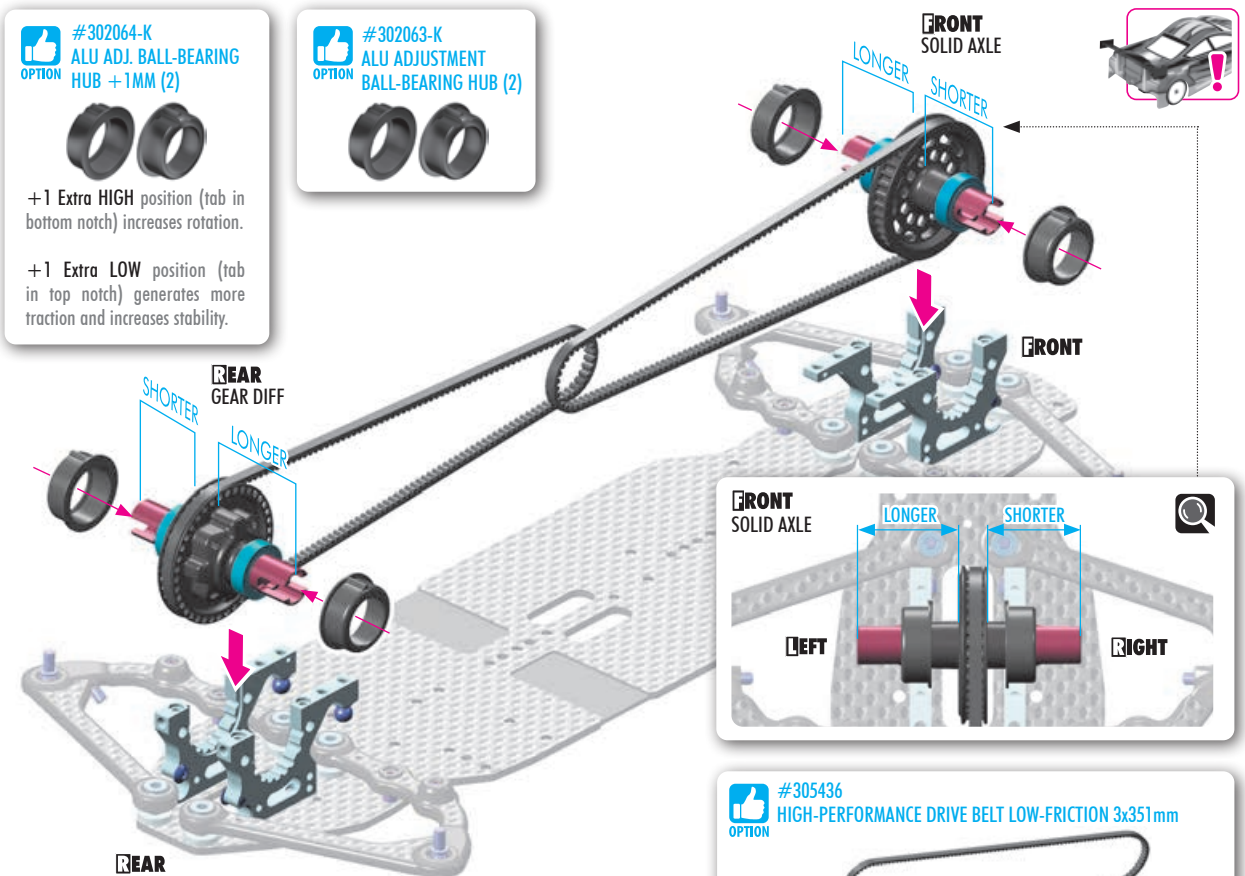


OPTION #302064-K ALU ADJ. BALL-BEARING HUB +1MM (2)

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

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

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



OPTION #305436 HIGH-PERFORMANCE DRIVE BELT LOW-FRICTION 3x351mm

Low-friction belt is very thin and elastic as possible for an extremely effective transmission that dramatically reduces friction and increases performance.

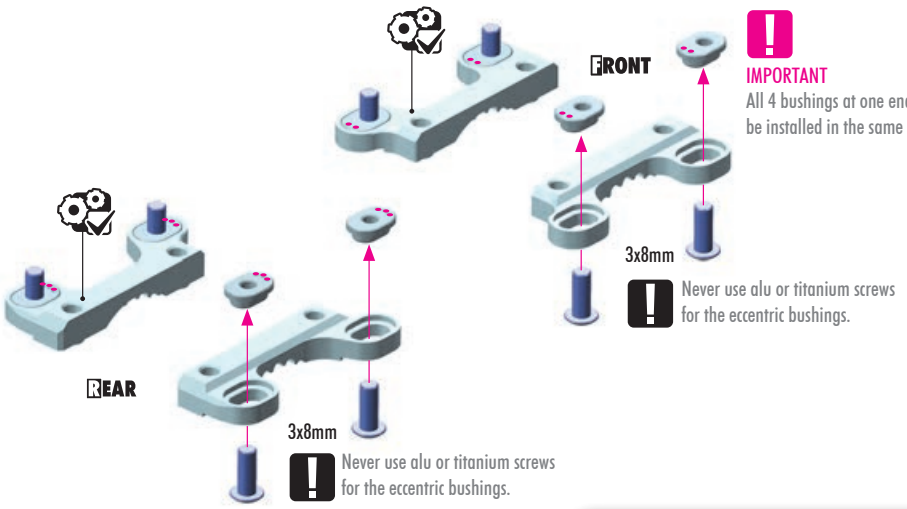
3. CENTRAL TRANSMISSION

8x 902308 SH M3x8

VIDEO TECH TIP

CASTER

NOTE ORIENTATION FOR ALL PARTS



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

Never use alu or titanium screws for the eccentric bushings.

Never use alu or titanium screws for the eccentric bushings.

OPTION

ALU CASTER BUSHINGS			
#302310	FRONT 3° / REAR 5.5°	1 Dot	OPTION
#302311	FRONT 4° / REAR 4.5°	2 Dots	INCLUDED
#302312	FRONT 5° / REAR 3.5°	3 Dots	INCLUDED

CASTER ADJUSTMENT

For most conditions, start with 4.0° front caster. Increasing front caster will increase steering (mainly on-power) but may also become more difficult to drive and more likely to traction roll.

The standard starting point for rear caster is 2.5°. More rear caster will increase initial steering but make the car more nervous to drive. It can increase rear traction in lower traction conditions. Less rear caster helps to increase cornering speed and rotation.

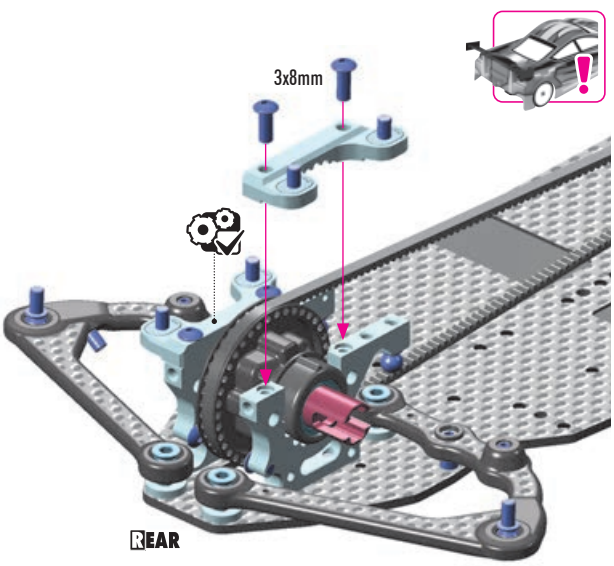
IMPORTANT
All 4 bushings at one end of the car must be installed in the same orientation.

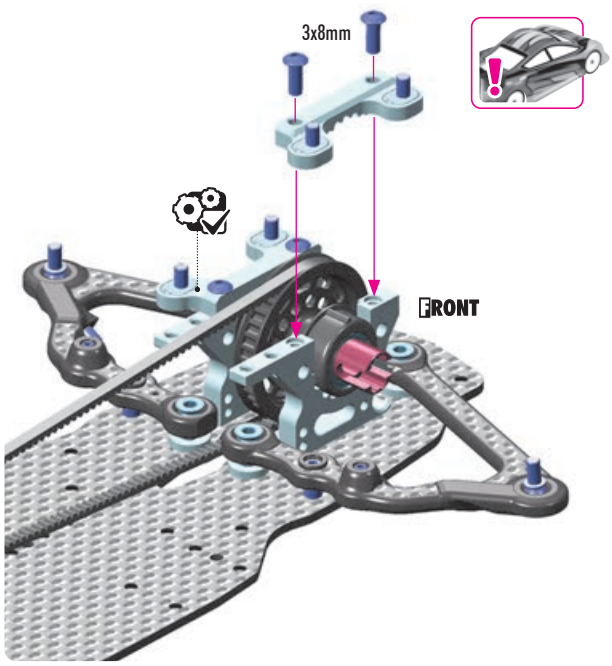
1 Dot = 0.5° Caster
2 Dots = 1.5° Caster
3 Dots = 2.5° Caster
INITIAL SETTING

1 Dot = 5.5° Caster
2 Dots = 4.5° Caster
3 Dots = 3.5° Caster

1 Dot = 3.0° Caster
2 Dots = 4.0° Caster
INITIAL SETTING
3 Dots = 5.0° Caster

8x 902308 SH M3x8

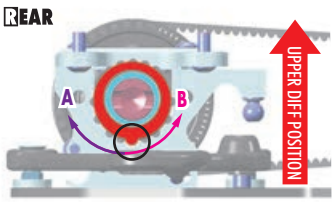




BELT TENSION ADJUSTMENT & DIFFERENTIAL POSITION

REAR diff **UPPER** position - tab in bottom notch - provides **more on-power steering,** but makes the rear **less stable**.

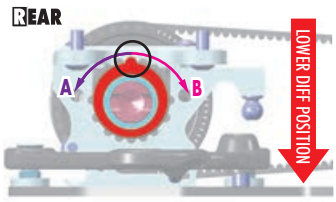
Recommended for **medium-high traction** tracks.



INITIAL POSITION **for ASPHALT**

REAR diff **LOWER** position - tab in top notch - provides **more rear traction** (mainly on-power), makes the car **more stable in chicanes**, but can **cause a push on corner exit.**

Recommended for **low-medium** traction tracks.



INITIAL POSITION **for CARPET**

TO LOOSEN REAR BELT:

Rotate both rear nylon hubs in arrow direction **A**

TO TIGHTEN REAR BELT:

Rotate both rear nylon hubs in arrow direction **B**

VIDEO TECH TIP

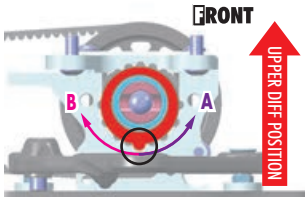
DIFF HEIGHT

BELT TENSION ADJUSTMENT

BELT TENSION ADJUSTMENT & DIFFERENTIAL POSITION

FRONT solid axle **UPPER** position - tab in bottom notch - provides **more steering**, but **less forward traction.**

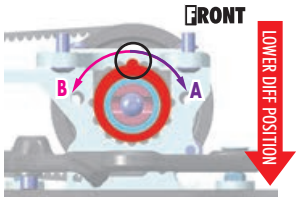
Recommended for **medium-high** traction tracks and technical tracks.



INITIAL POSITION **for ASPHALT**

FRONT solid axle **LOWER** position - tab in top notch - provides **more forward traction,** but makes the car **push on-power.**

Recommended for **low-traction** tracks.



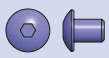
INITIAL POSITION **for CARPET**

TO LOOSEN FRONT BELT:

Rotate both front nylon hubs in arrow direction **A**

TO TIGHTEN FRONT BELT:

Rotate both front nylon hubs in arrow direction **B**



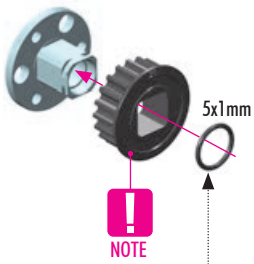
3x 902303 SH M3x4

2x 930407 BB 4x7x2.5

1x 970050 O 5x1

1x 966081 CH-CLIP 8

❶



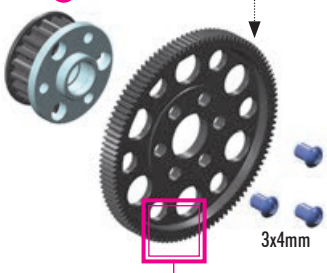
#966081
CH-CLIP 8 (10)
INCLUDED IN THE LAST AID BAG

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.

OPTION
Snap Ring Pliers (HUDY #189040)

❷ ALTERNATIVE 64P OFFSET SPUR GEAR

INITIAL SETTING



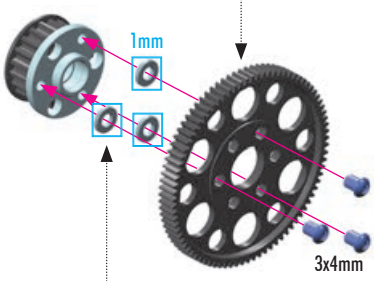
NOTE ORIENTATION

CUTAWAY VIEW

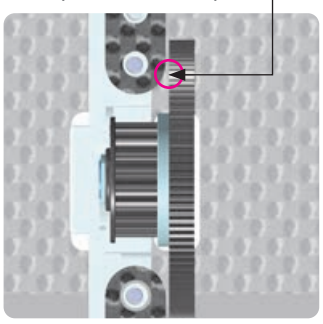
NOTE OFFSET ORIENTATION

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

❷ ALTERNATIVE 48P SPUR GEAR

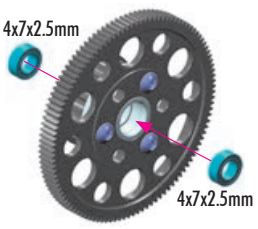


When using XRAY **48P** spur gears or aftermarket spur gears without an offset, use the **3x5x1mm** shims **(#303141 NOT included)** between the gear and layshaft to create the necessary clearance from the top deck.



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

❸



3. CENTRAL TRANSMISSION

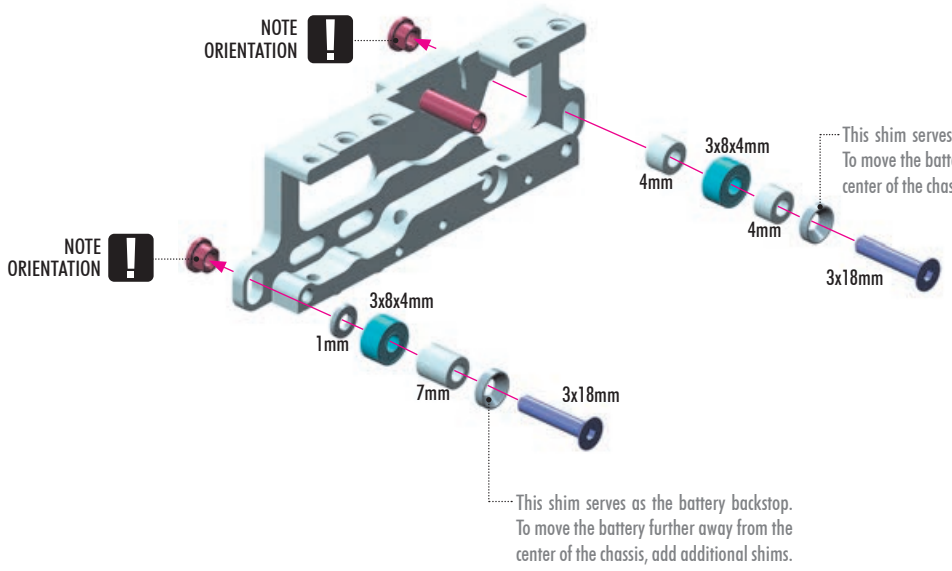
1x 303122-K SHIM 3x6x1

2x 303127-K SHIM 3x6x4

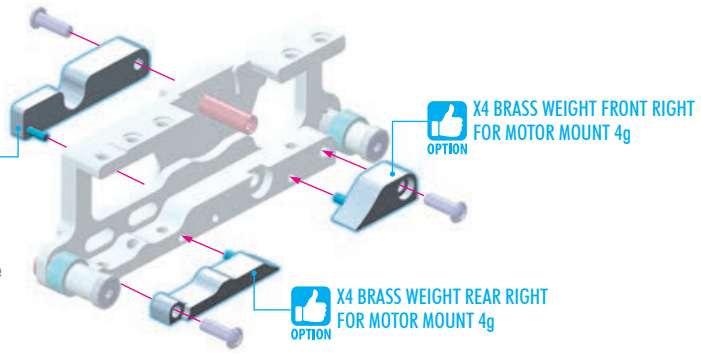
1x 303139-K SHIM 3x6x7

2x 903318 SFH M3x18

2x 930308 BB 3x8x4

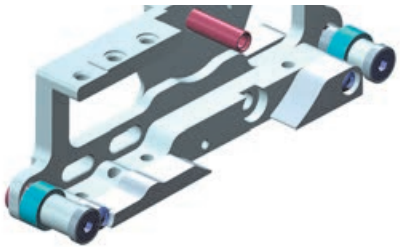


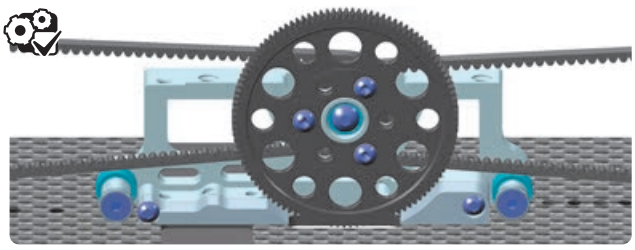
OPTION #309852
X4 BRASS WEIGHTS NICKEL COATED FOR MOTOR MOUNT 4g+4g+8g



MOTOR MOUNT WEIGHT ADJUSTMENT

These optional brass pieces place the extra weight close to the X4 center to minimize the effects on the front-to-rear weight bias.



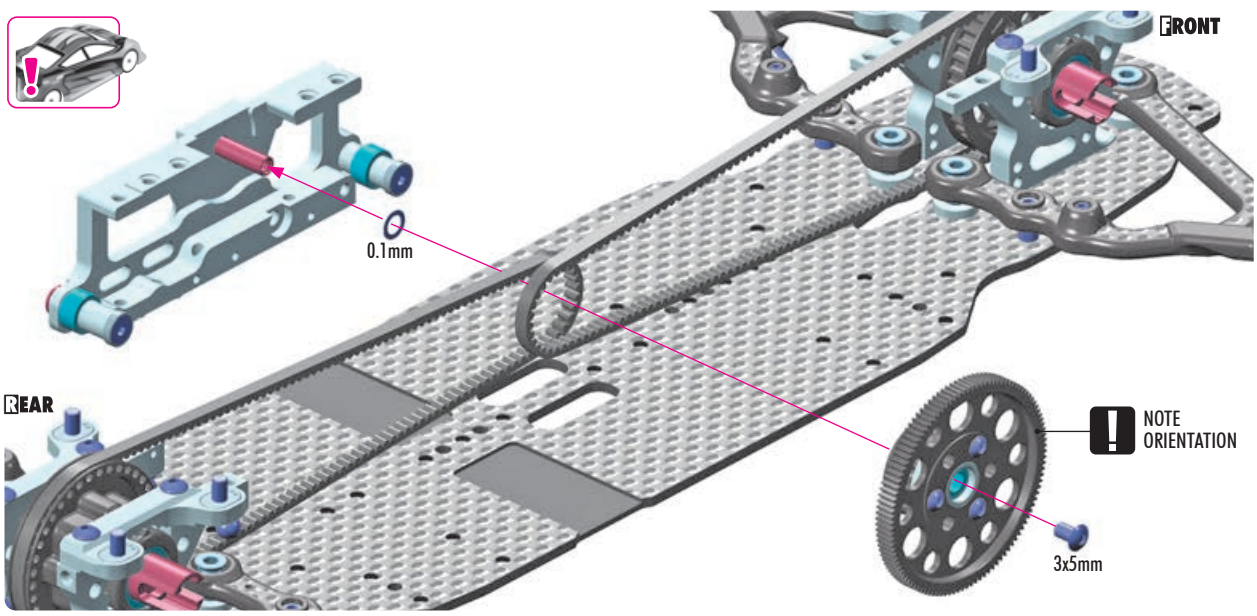


1x 902305 SH M3x5

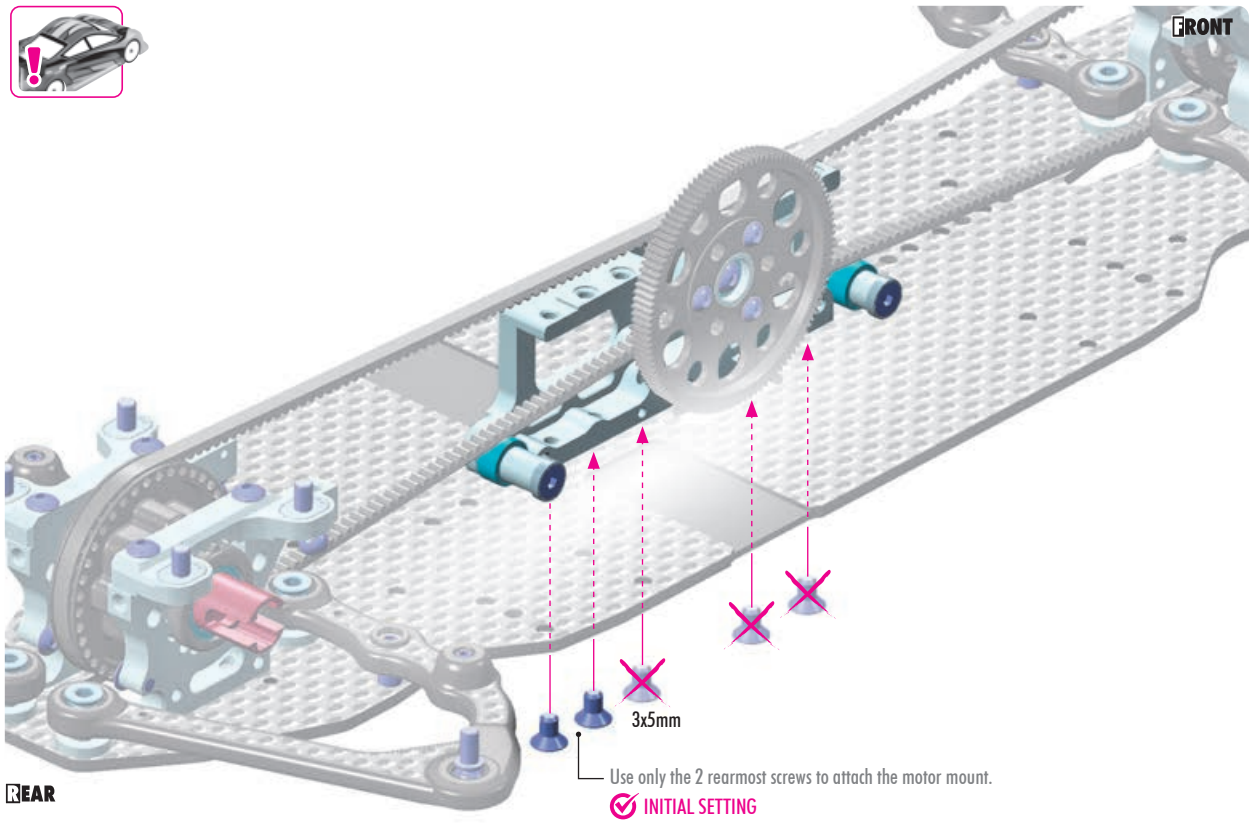
1x 962042 S 4x6x0.1

VIDEO TECH TIP

BELT TENSION ADJUSTMENT



2x 903305 SFH M3x5



2x 903305 SFH M3x5

MOTOR MOUNT FLEX ADJUSTMENT

The motor mount is part of the chassis flex adjustment. Adding or removing screws from the mount will create different flex settings for different tracks and traction levels.

NOTE: When removing screws from the motor mount, the spur gear becomes more susceptible to breakage in crashes.

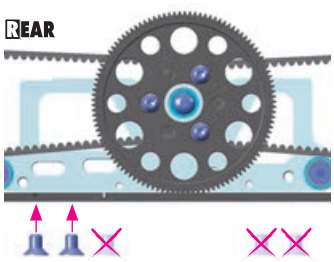
VIDEO TECH TIP MOTOR MOUNT FLEX

SOFT

INITIAL SETTING

LOW & MEDIUM traction conditions.

For use only the 2 rearmost screws to attach the motor mount (as shown). DO NOT install the 3 screws immediately in front of & behind the spur gear. This allows the chassis to flex more in the central area, and will improve traction (especially on-power). Rear traction will be improved through the entire corner, but initial reaction will decrease. This setting is recommended for low- to medium traction conditions, both on carpet and asphalt.

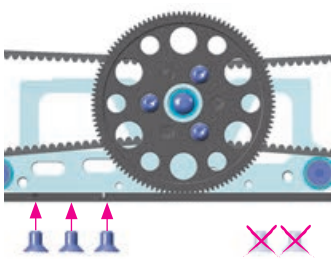


2x 3x5mm

MEDIUM

MEDIUM traction conditions.

For use only the 3 rearmost screws to attach the motor mount (as shown); DO NOT install the screws in front of the spur gear. This provides a good compromise between stability and initial response. The car will have more rear traction than the full stiff setting, but will NOT be as stable as the soft setting.

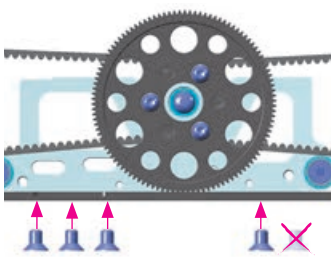


3x 3x5mm

STIFF

HIGH-TRACTION carpet conditions.

For use the 3 rearmost screws and one in front of the spur gear to attach the motor mount (as shown); DO NOT install the very front screw. Will give great steering response, but with reduced mechanical traction. The car will have more cornering speed, but will be more difficult to drive. Mainly recommended for high-traction carpet conditions.

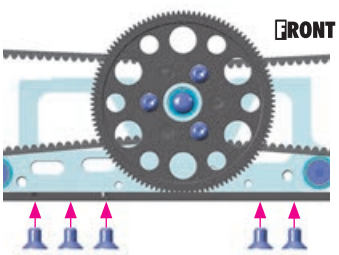


4x 3x5mm

EXTRA STIFF

HIGH-TRACTION US BLACK carpet conditions.

For using all screws to attach the motor mount (as shown) will give the best feeling for US black carpet. This setting provides the best stability and traction for these specific conditions.



5x 3x5mm

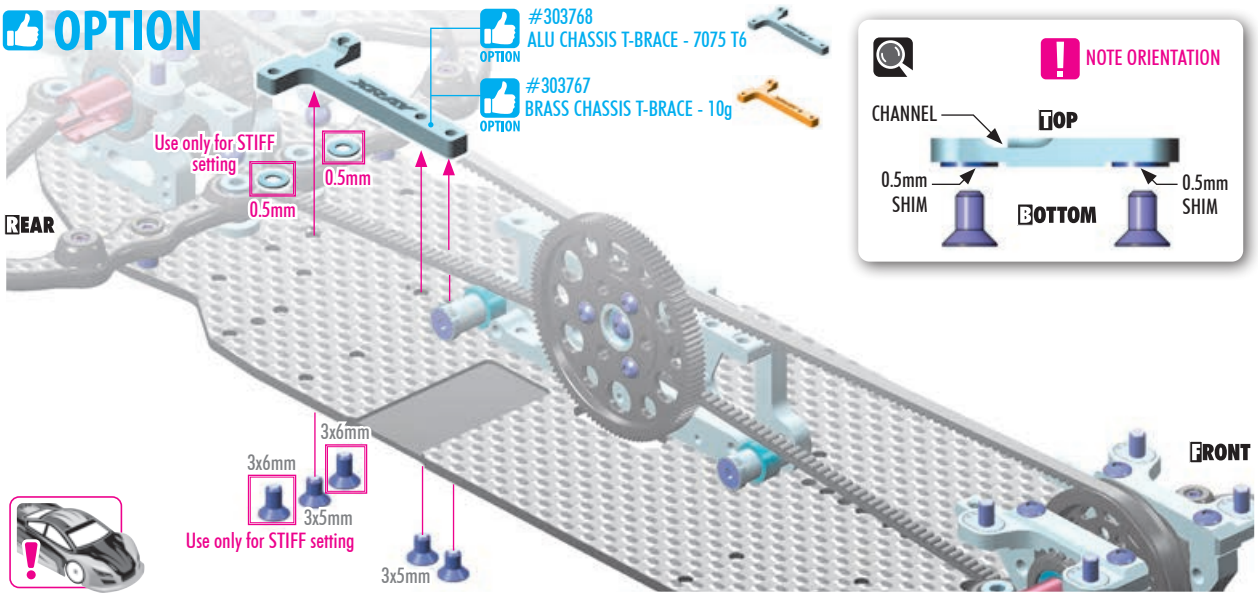
3. CENTRAL TRANSMISSION

2x 303121-K
SHIM 3x6x0.5

3x 903305
SFH M3x5

2x 903306
SFH M3x6

OPTION



CHASSIS FLEX ADJUSTMENT

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

VIDEO TECH TIP

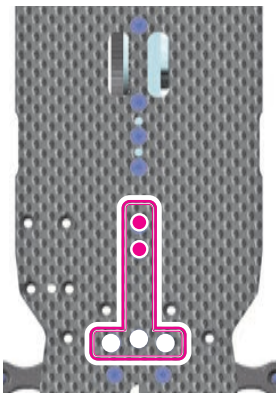
CHASSIS & TOP DECKS

SOFT

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.

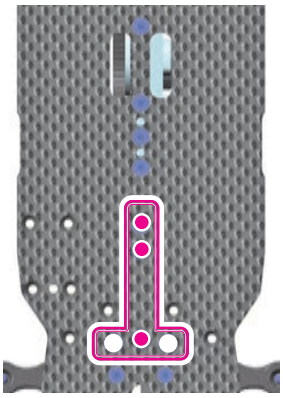
SOFT - MEDIUM

Install the brace using only the 2 forward bottom centerline screws (as shown). (as shown). This provides 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.



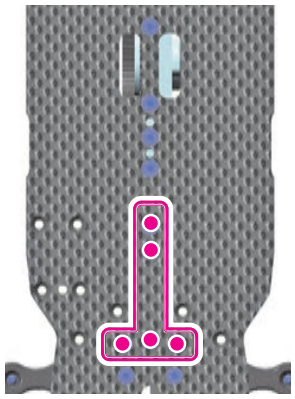
MEDIUM

Install the brace using all 3 bottom centerline screws (as shown). This provides 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.



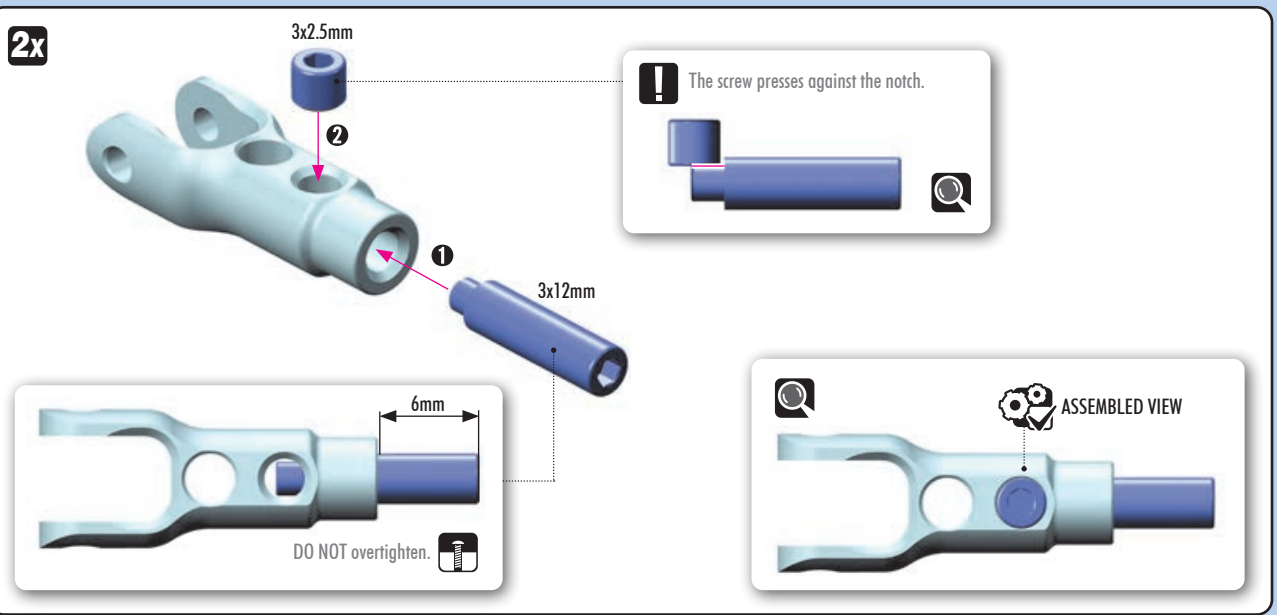
STIFF

In addition to installing all 3 bottom centerline screws, also install the 2 rear side screws but with 0.5mm shims between the brace and the chassis. This setting provides maximum stability.



2x 901302
SB M3x2.5

2x 901313
SB M3x12



2x 901302 SB M3x2.5

2x 981208 P 2x8

2x REAR SHOCK HOLDERS

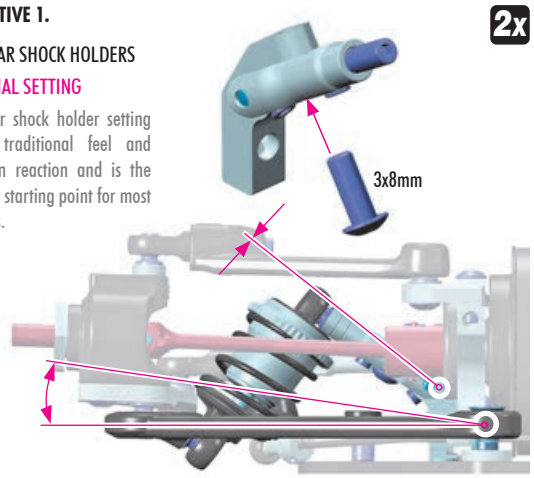
2x 902308 SH M3x8

ALTERNATIVE 1.

FIXED REAR SHOCK HOLDERS

INITIAL SETTING

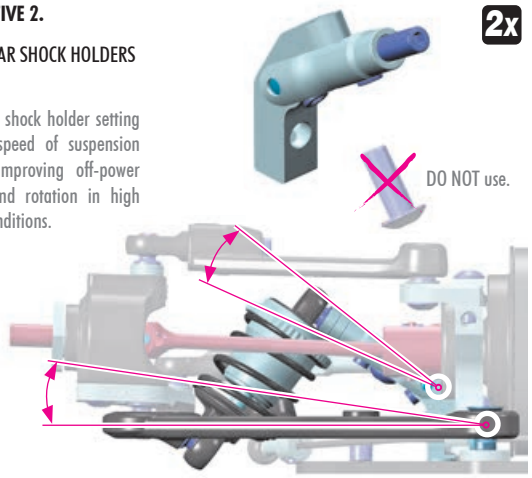
Fixed rear shock holder setting provides traditional feel and suspension reaction and is the suggested starting point for most conditions.



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

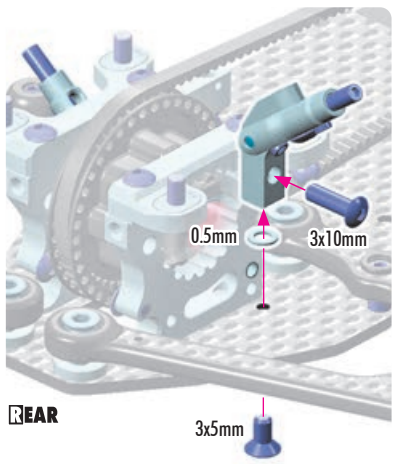
REAR SHOCK HOLDERS FLEX ADJUSTMENT

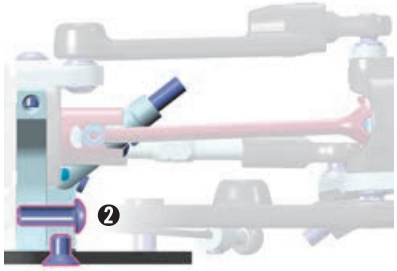
The brace provides chassis flex adjustment possibilities depending on which screws are connected.

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.



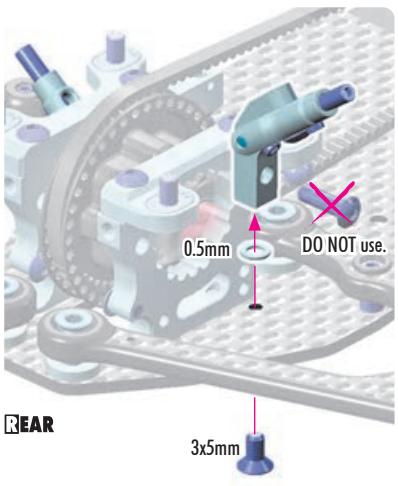


» All screws TIGHTEN GENTLY

» Fully TIGHTEN in this order

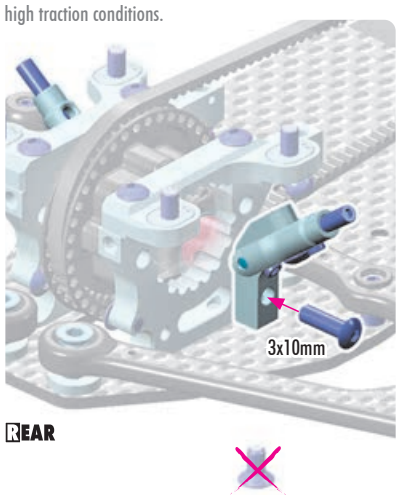
FLEX ALTERNATIVE 2.

Attach the shock holder to only the chassis for maximum mechanical traction. Recommended for low to medium traction tracks.



FLEX ALTERNATIVE 3.

Attach the shock holder to only the bulkhead for more aggressive reaction, but reduced mechanical traction may be more difficult to drive. Recommended for medium to high traction conditions.



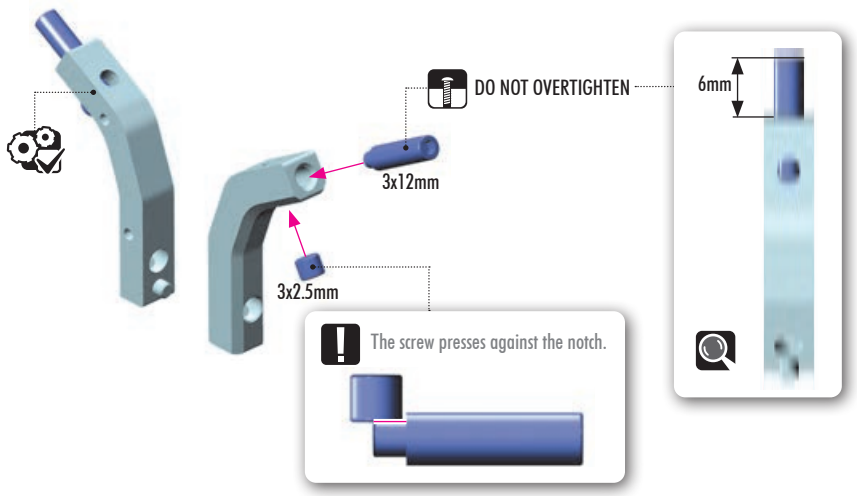
DO NOT use.

3. CENTRAL TRANSMISSION

2x 901302 SB M3x2.5

2x 901313 SB M3x12

2x FRONT SHOCK HOLDERS



2x 303142-K SHIM 3x5x0.5

2x 902310 SH M3x10

2x 903305 SFH M3x5

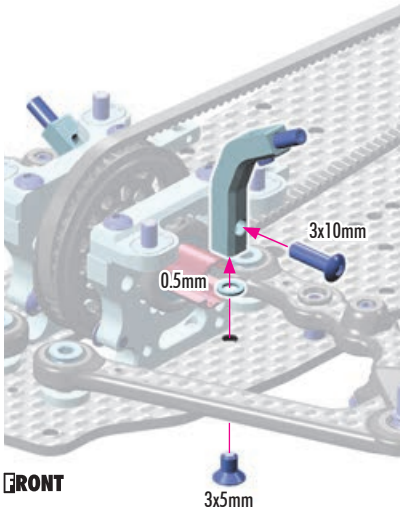
FRONT SHOCK HOLDERS FLEX ADJUSTMENT

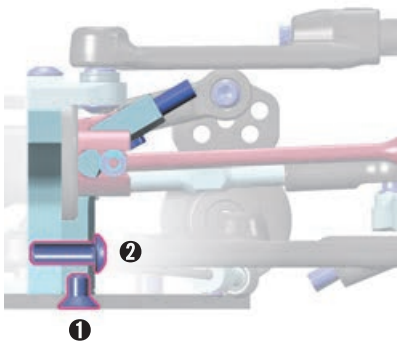
The brace provides chassis flex adjustment possibilities depending on which screws are connected.

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 traction levels.



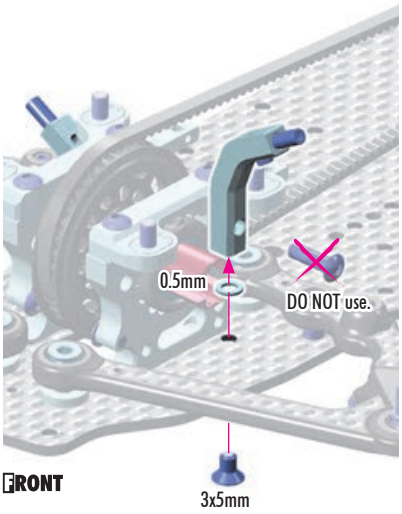


» All screws TIGHTEN GENTLY

» Fully TIGHTEN in this order

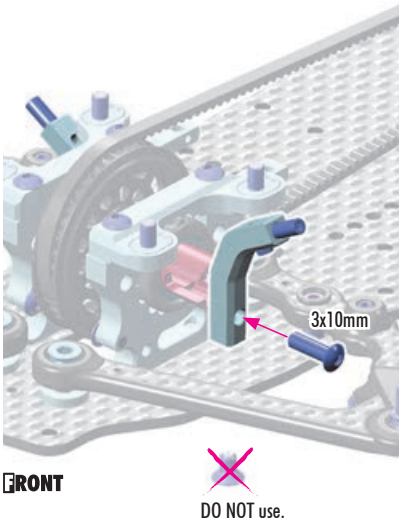
FLEX ALTERNATIVE 2.

Attach the shock holder to only the chassis for maximum mechanical traction. Recommended for low to medium traction tracks.



FLEX ALTERNATIVE 3.

Attach the shock holder to only the bulkhead for more aggressive reaction, but reduced mechanical traction may be more difficult to drive. Recommended for medium to high traction conditions.



(All X4 top decks fit also into X4'25 car)

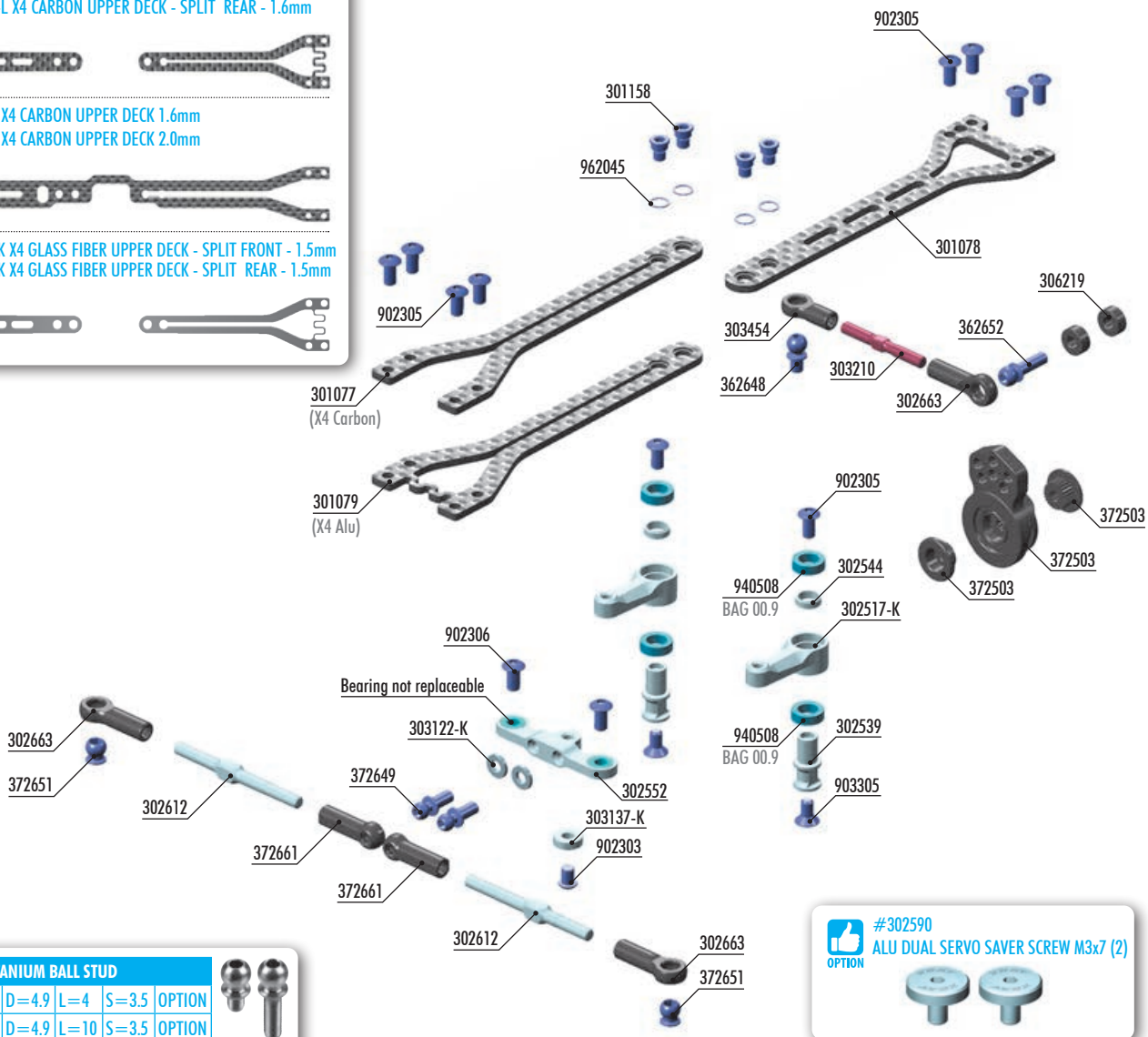
OPTION #301072 X4 CARBON UPPER DECK - SPLIT FRONT - 2.0mm
#301073 X4 CARBON UPPER DECK - SPLIT REAR - 2.0mm

OPTION #301079-L X4 CARBON UPPER DECK - SPLIT FRONT - 1.6mm
#301078-L X4 CARBON UPPER DECK - SPLIT REAR - 1.6mm

OPTION #301071 X4 CARBON UPPER DECK 1.6mm
#301070 X4 CARBON UPPER DECK 2.0mm

OPTION #301079-K X4 GLASS FIBER UPPER DECK - SPLIT FRONT - 1.5mm
#301078-K X4 GLASS FIBER UPPER DECK - SPLIT REAR - 1.5mm

OPTION #302553
ALU STEERING PLATE 7.5mm FOR DUAL SERVO SAVER



OPTION #302590
ALU DUAL SERVO SAVER SCREW M3x7 (2)

OPTION

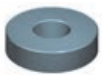
HUDY TITANIUM BALL STUD				
#990004	D=4.9	L=4	S=3.5	OPTION
#990010	D=4.9	L=10	S=3.5	OPTION

OPTION

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

OPTION #302571
X4 CARBON STEERING PLATE SET

OPTION #303138-K or 303138-O
ALU SHIM 3x7x2.0mm (10)



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

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

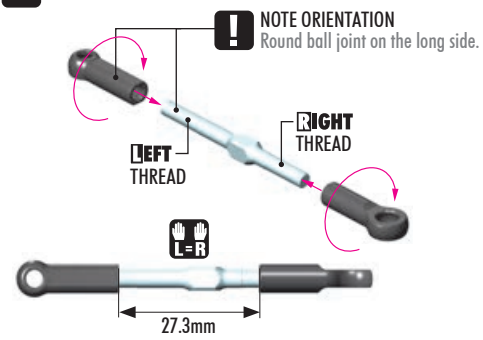
BAG 04

301077	X4 CARBON UPPER DECK - SPLIT FRONT OPEN - 2.0mm
301078	X4 CARBON UPPER DECK - SPLIT REAR - 2.0mm
301079	X4 CARBON UPPER DECK - SPLIT FRONT WAVE - 2.0mm
301158	TOP DECK HEX SCREW M3x5.5 - HUDY SPRING STEEL™ (2)
302517-K	X4 ALU DUAL STEERING ARM - BLACK + BALL-BEARINGS (2)
302539	X4 ALU STEERING POST FOR DUAL SERVO SAVER (2)
302544	ALU SHIM FOR RADIAL PLAY ADJUSTMENT OF STEERING ARM (2)
302552	ALU STEERING PLATE 8.0mm FOR DUAL SERVO SAVER
302612	ALU ADJ. TURNBUCKLE M3 L/R 39mm - SWISS 7075 T6 (2)
302663	COMPOSITE BALL JOINT 5mm - OPEN - V2 (8)
303122-K	ALU SHIM 3x6x1.0mm - BLACK (10)
303137-K	ALU SHIM 3x7.5x2.0mm - BLACK (10)
303210	REAR TURNBUCKLE L/R 26mm - HUDY SPRING STEEL (2)
303454	BALL JOINT 4.9mm - OPEN (4)
306219	COMPOSITE SET OF SERVO SHIMS (4)
362648	BALL END 4.9mm WITH THREAD 4mm (2)
362652	BALL END 4.9mm WITH THREAD 10mm (2)
372503	COMPOSITE SERVO SAVER - X-STIFF - SET - V2
372649	BALL END 4.2mm WITH 4mm THREAD (2)
372651	PIVOT BALL UNIVERSAL 4.9mm - HUDY SPRING STEEL™ (2)
372661	COMPOSITE STEERING BALL-JOINT OPEN 4.2mm (4)
902303	HEX SCREW SH M3x4 SMALL HEAD - STAINLESS (10)
902305	HEX SCREW SH M3x5 (10)
902306	HEX SCREW SH M3x6 (10)
903305	HEX SCREW SFH M3x5 (10)
940508	BALL-BEARING 5x8x2.5 RUBBER-SEALED - OILED (2)
962045	WASHER S 4x5x0.2 (10)

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

4. STEERING

2x STEERING LINKS

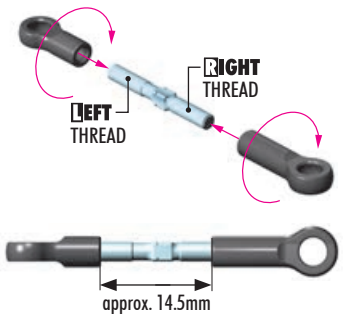


OPTION #302612-O
ALU ADJ. TURNBUCKLE M3 L/R
39mm ORANGE - SWISS 7075 T6 (2)

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

SERVO LINK

Adjust servo link to fit your servo.

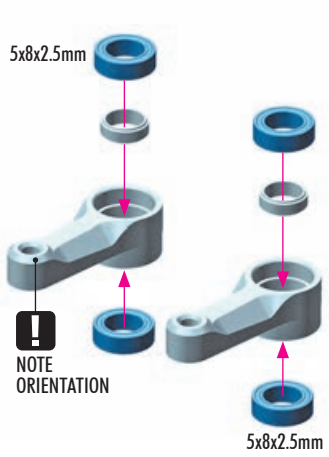


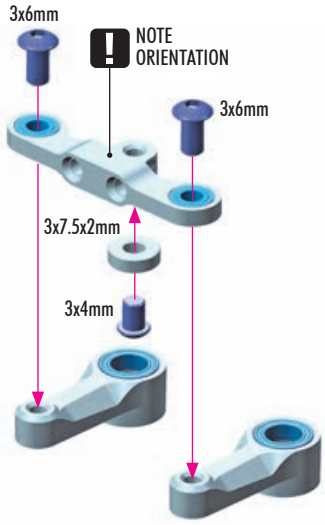
1x 303137-K
SHIM 3x7.5x2

1x 902303
SH M3x4

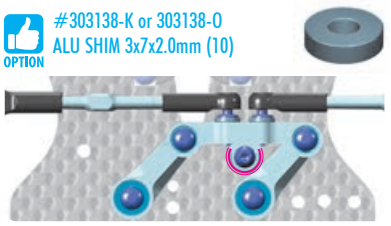
2x 902306
SH M3x6

4x 940508
BB 5x8x2.5





OPTION #303138-K or 303138-O
ALU SHIM 3x7x2.0mm (10)



STEERING LOCK ADJUSTMENT:

The steering lock is adjusted by changing the diameter of the shim attached to the steering plate. The kit includes a 7.5mm OD shim, limiting physical steering lock to approx. 26°.

An optional 7mm shim is available to achieve 28° of steering lock.

Running NO shim will allow up to 29° of steering lock. More steering lock will increase steering, especially in tight corners, but it will also reduce cornering speed and make the car more difficult to drive.

IMPORTANT! When using NO shim, make sure the steering plates are NOT touching the front shocks which can tweak the car.

For VTA class:

Never use more than 25° steering lock otherwise the tire will touch the arm. We recommend to use 25° steering lock for asphalt. For high traction carpet conditions, we recommend to use steering lock between 21° to 23° to avoid traction rolling and to improve cornering speed.

VTA CLASS

VIDEO TECH TIP

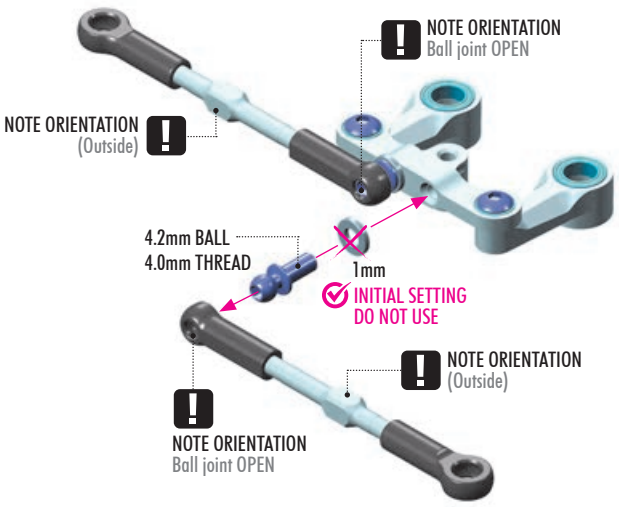
STEERING SYSTEM

OPTION #302553 ALU STEERING PLATE 7.5mm FOR DUAL SERVO SAVER

Optional 7.5mm steering plate improves in-corner steering and steering response. Recommended for lower traction tracks or technical tracks.

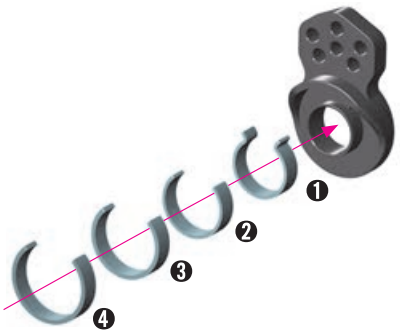
0x 303122-K
SHIM 3x6x1

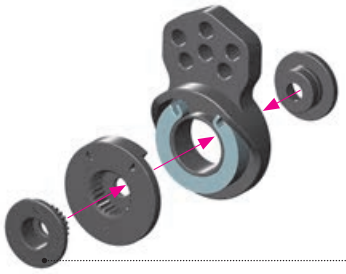
2x L=R



TIP Install the pivot balls with Multi Tool.

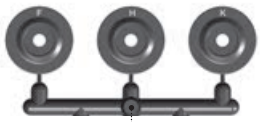
2x 306219
SHIM 3x6x2





Use the adapter that matches the steering servo.

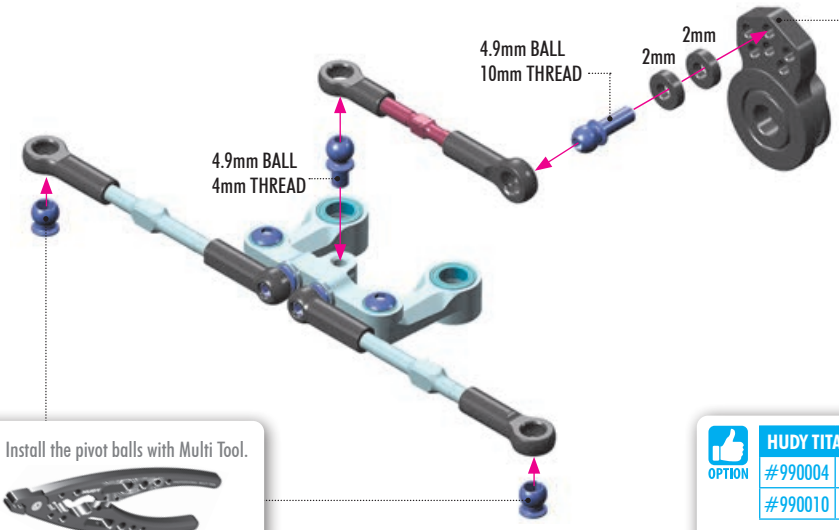
F = 25T H = 24T K = 23T



VIDEO TECH TIP

STEERING SYSTEM

SERVO HORN HEIGHT



INITIAL SETTING

TIP Install the pivot balls with Multi Tool.

OPTION

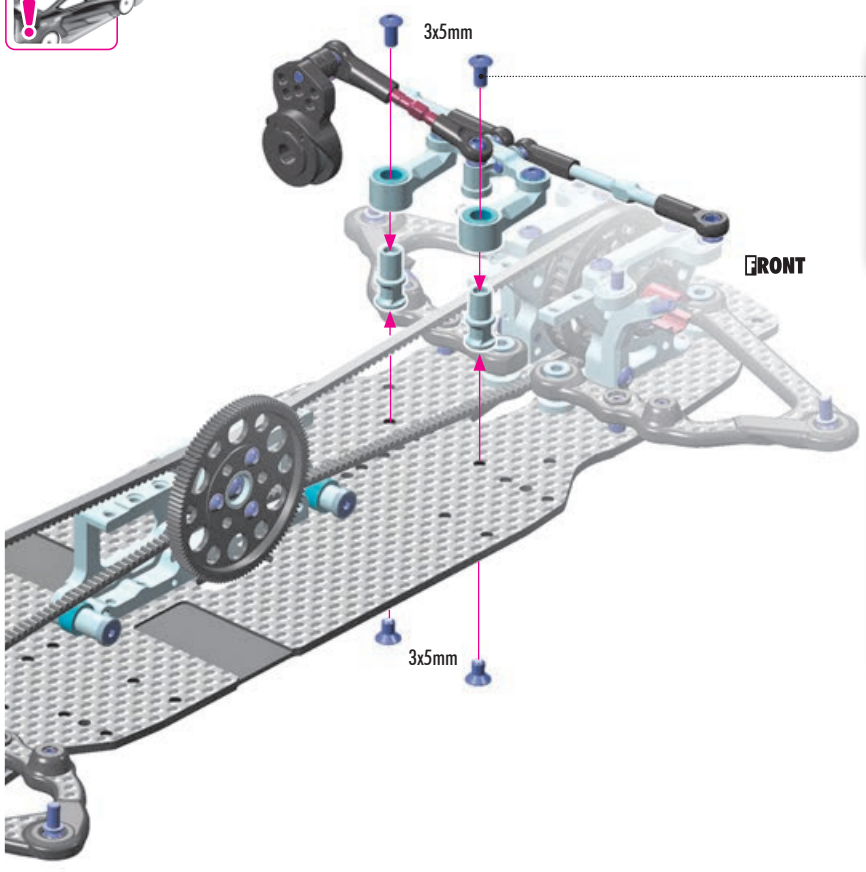
HUDY TITANIUM BALL STUD				
#990004	D=4.9	L=4	S=3.5	OPTION
#990010	D=4.9	L=10	S=3.5	OPTION

OPTION

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

2x 902305
SH M3x5

2x 903305
SFH M3x5



OPTION #302590
ALU DUAL SERVO SAVER SCREW M3x7 (2)

The optional screw removes excessive radial play from the steering.

OPTION #302571
X4 CARBON STEERING PLATE SET

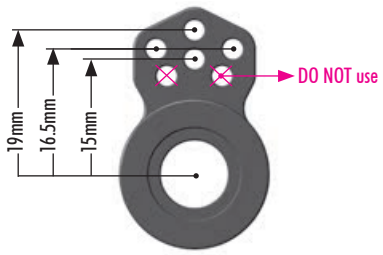
The optional carbon bridge stiffens the steering assembly and improves initial steering response. This option is mainly recommended for medium - to high-traction carpet racing.

The servo horn length has a significant impact on the reaction to steering input. The length can help tune the car for different conditions and driving styles. The length measurement is from center of the servo spline output to the center of the steering link mounting point.

The included XRAY servo saver offers 4 different length choices. The top hole is 19mm, the second row is 16.5mm, the third row is 15mm. The shortest row is NOT used for X4 cars.

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

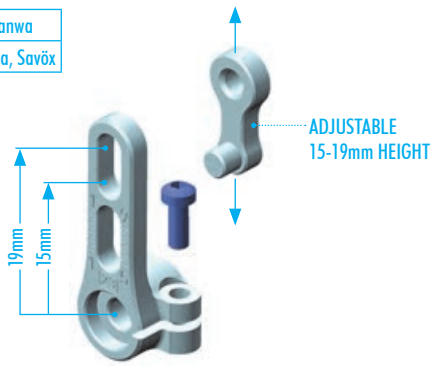
The optional HUDY direct servo horns have several useful variations of offsets and lengths for X4 cars.



OPTION HUDY

HUDY ADJUSTABLE CLAMP SERVO HORNS

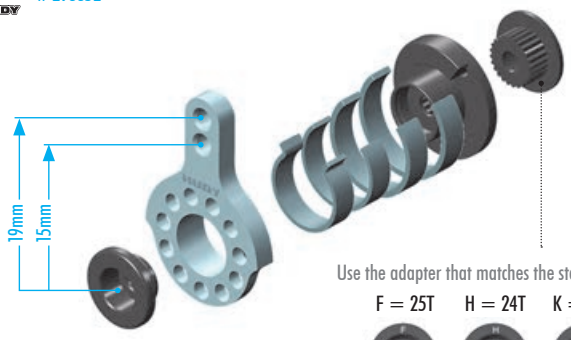
#293414	23T	KO, Sanwa
#293416	25T	Futaba, Savöx



OPTION HUDY

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

#293352



Use the adapter that matches the steering servo.

F = 25T H = 24T K = 23T

OPTION HUDY

ALU SERVO HORNS - OFFSET

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

OPTION HUDY

CLAMP ALU SERVO HORNS - OFFSET

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

OPTION HUDY

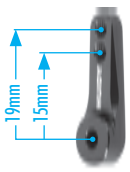
CLAMP ALU SERVO HORNS - OFFSET

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

OPTION HUDY

HUDY ALU SERVO HORNS

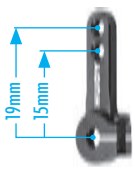
#293497	23T	KO, Sanwa
#293498	24T	Hitec
#293499	25T	Futaba



OPTION HUDY

HUDY CLAMP ALU SERVO HORNS

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



LONGER SERVO HORN LENGTH: Less servo rotation needed to reach the full steering lock, resulting in more responsive and immediate reaction to driver input. A servo horn that is too long can make the car feel nervous to drive. Most XRAY drivers prefer the 19mm length (top row on kit servo saver or 2nd hole on optional 2-hole alum horn).

SHORTER SERVO HORN LENGTH: More servo rotation needed to reach full steering lock; providing improved control and consistency from the more precise feel and may help avoid traction rolling in high traction conditions. A shorter horn length requires an increased radio EPA to maintain the desired steering travel. Using a horn length that is too short can make the car feel lazy.

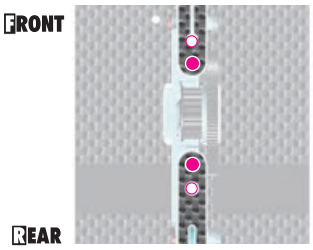
IMPORTANT!

Using an aluminum servo horn DOES NOT provide any servo protection, increasing the risk of servo damage from crashes.

TOP DECK (SPLIT) FLEX ADJUSTMENT

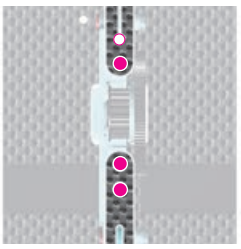
Split top deck provides 3 different flex setting alternatives.

SOFT



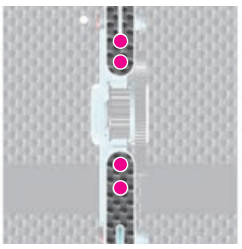
This allows maximum flex and provides maximum steering. However, the car is less stable on-power.

MEDIUM



This setting provides reduced rear flex which increases stability. Rotation is decreased.

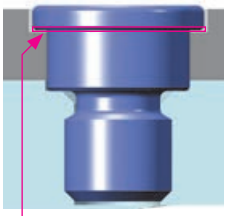
STIFF



This setting provides reduced flex both in front and rear. Mid-corner steering is decreased, rotation is decreased. This setting provides maximum stability.

ALTERNATIVE 1

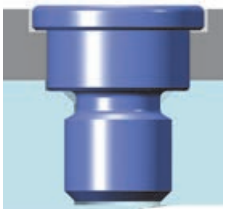
INITIAL SETTING



With 0.2mm shims

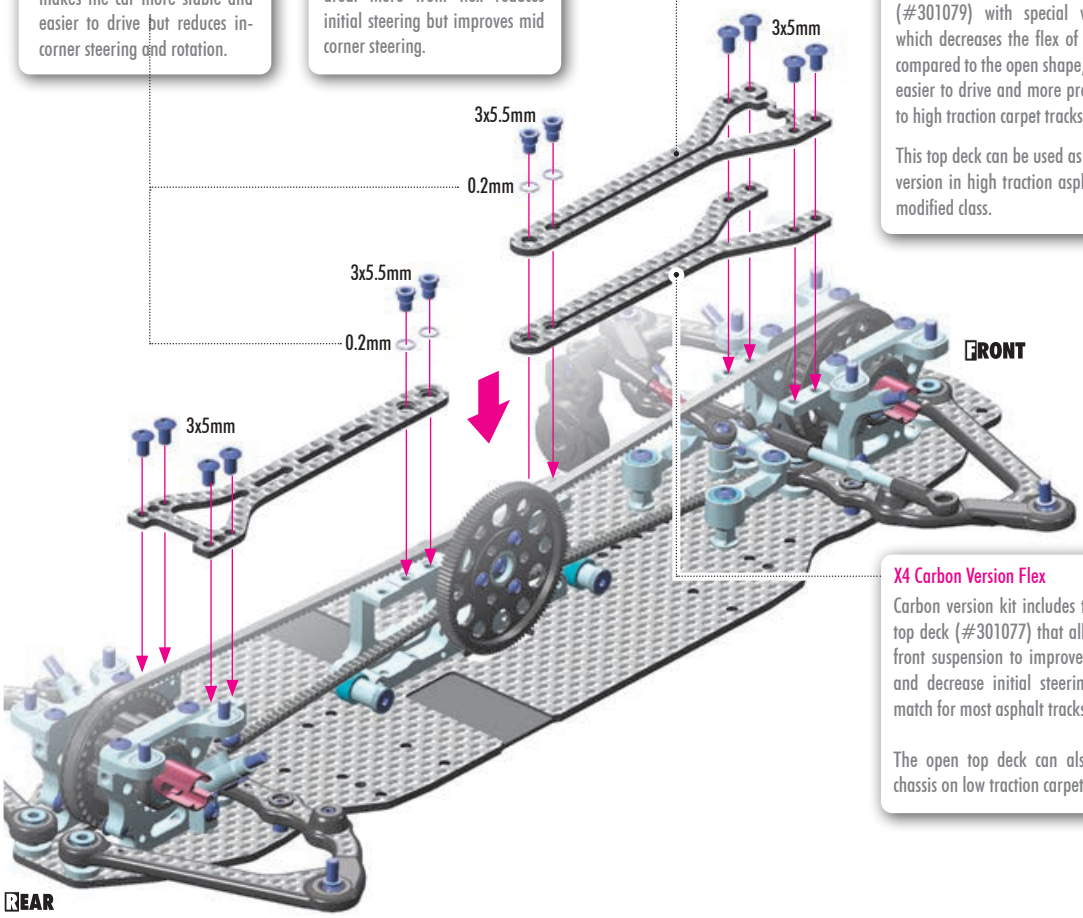
Using the special shims under the top-deck screws eliminates the top-deck flex. This setting makes the car more stable and easier to drive but reduces in-corner steering and rotation.

ALTERNATIVE 2



Without Shims

Not using the special shims under the top-deck screws allows more flex around the motor mount area. More front flex reduces initial steering but improves mid corner steering.



X4 Alu Version Flex

Alu version kit includes the front top deck (#301079) with special wave reinforcement, which decreases the flex of the front suspension compared to the open shape, which makes the car easier to drive and more predictable on medium to high traction carpet tracks.

This top deck can be used as an option for carbon version in high traction asphalt tracks or for the modified class.

X4 Carbon Version Flex

Carbon version kit includes the open shape front top deck (#301077) that allows more flex in the front suspension to improve mid corner steering and decrease initial steering response, a good match for most asphalt tracks.

The open top deck can also be used with alu chassis on low traction carpet conditions.

VIDEO TECH TIP

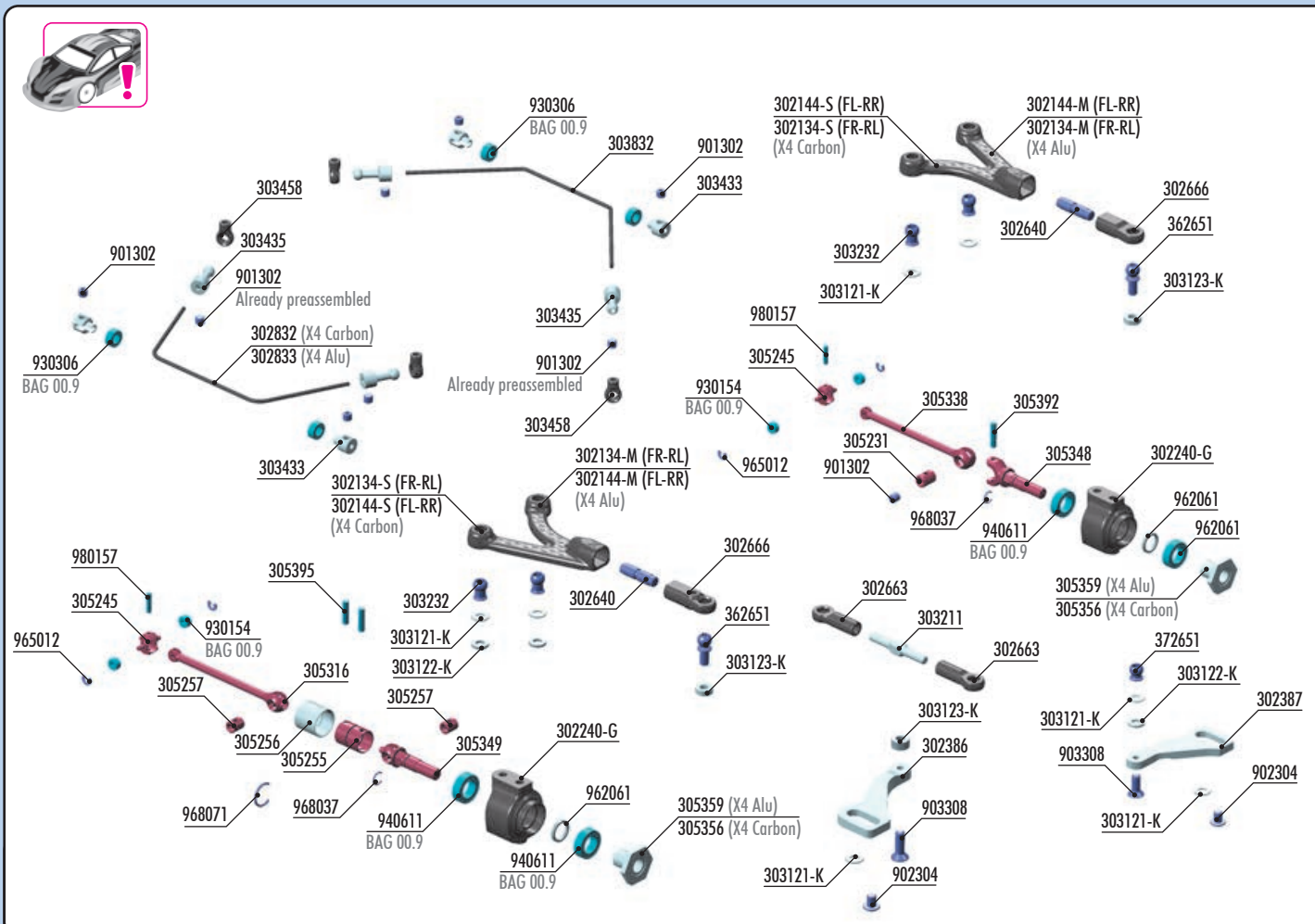
TOP DECK FLEX

4x 301158 SCREW 3x5.5

8x 902305 SH M3x5

4x 962045 S 4x5x0.2

5. FRONT & REAR SUSPENSION

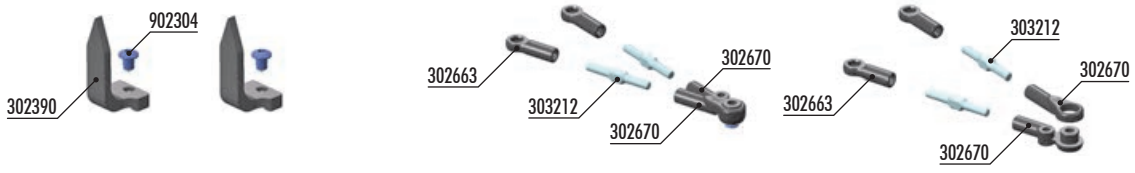


BAG 05

302134-S	X4 CFF™ UPPER ARM - INNER SHOCK POSITION - SOFT - FR/RL
302134-M	X4 CFF™ UPPER ARM - INNER SHOCK POSITION - MEDIUM - FR/RL
302144-S	X4 CFF™ UPPER ARM - INNER SHOCK POSITION - SOFT - FL/RR
302144-M	X4 CFF™ UPPER ARM - INNER SHOCK POSITION - MEDIUM - FL/RR
302240-G	X4 COMPOSITE STEERING BLOCK - GRAPHITE
302386	X4 ALU FRONT STEERING PLATE - INNER SHOCK POSITION - 7075 T6 (L+R)
302387	X4 ALU REAR ARS PLATE - INNER SHOCK POSITION - SWISS 7075 T6 (L+R)
302640	ADJUSTABLE CAMBER SCREW 14mm M4 L/R - HUDY SPRING STEEL™ (2)
302663	COMPOSITE BALL JOINT 4.9mm - OPEN - V2 (8)
302666	COMPOSITE BALL JOINT 4.9mm F+R - OPEN (2+2)
302832	X4 ANTI-ROLL BAR UAM - UNDER ARM MOUNT - FRONT 1.2mm
302833	X4 ANTI-ROLL BAR UAM - UNDER ARM MOUNT - FRONT 1.3mm
303121-K	ALU SHIM 3x6x0.5mm - BLACK (10)
303122-K	ALU SHIM 3x6x1.0mm - BLACK (10)
303123-K	ALU SHIM 3x6x2.0mm - BLACK (10)
303211	ALU ADJUSTABLE TURNBUCKLE L/R 30mm - SWISS 7075 T6 (2)
303232	X4 UPPER ARM BALL UNIVERSAL 4.9mm - HUDY SPRING STEEL™ (2)
303433	ALU ANTI-ROLL BAR BUSHING o1.7mm - 6mm (2)
303435	ALU ANTI-ROLL BAR BALL END 3.9mm - SWISS 7075 T6 (2)
303458	COMPOSITE ANTI-ROLL BAR BALL JOINT 3.9mm (4)
303832	X4 ANTI-ROLL BAR UAM - UNDER ARM MOUNT - REAR 1.2mm
305231	DRIVE SHAFT COUPLING - HUDY SPRING STEEL™
305245	ECS BB DRIVE SHAFT ADAPTER - HUDY SPRING STEEL™ (2)
305255	ECS BB SC DRIVE SHAFT CASE - HUDY SPRING STEEL™
305256	ECS BB SC ALU DRIVE SHAFT SLEEVE - SWISS 7075 T6
305257	ECS BB SC DRIVE SHAFT COUPLING - HUDY SPRING STEEL™
305306	X4 ECS BB DRIVE SHAFT 58mm - HUDY SPRING STEEL™ - SET
305316	X4 ECS BB DRIVE SHAFT 58mm - HUDY SPRING STEEL™ (2)
305335	X4 ECS BB SC DRIVE SHAFT 58mm - HUDY SPRING STEEL™- COMPL. SET
305338	X4 CVD BB DRIVE SHAFT 54mm - HUDY SPRING STEEL™ (2)
305348	X4 CVD DRIVE AXLE - SPRING CLIP - HUDY SPRING STEEL™
305349	X4 ECS DRIVE AXLE - SPRING CLIP - HUDY SPRING STEEL™
305356	X4 ALU WHEEL HUB - SPRING CLIP - SWISS 7075 T6 (2)
305359	X4 ALU WHEEL HUB - SPRING CLIP - OFFSET +0.5MM - SWISS 7075 T6 (2)
305392	DRIVE SHAFT PIN 2 x 10 WITH FLAT SPOT (2)
305395	ECS BB SC DRIVE SHAFT PIN 2 x 8.4 (2)
305408	X4 CVD BB DRIVE SHAFT 54mm - HUDY SPRING STEEL™ - SET
362651	BALL END 4.9mm WITH THREAD 8mm (2)
372651	PIVOT BALL UNIVERSAL 4.9mm - HUDY SPRING STEEL™ (2)
901302	HEX SCREW SB M3x2.5 (10)
902304	HEX SCREW SH M3x4 - STAINLESS (10)
903308	HEX SCREW SFH M3x8 (10)
930154	BALL-BEARING 1.5x4x2 STEEL SEALED - OIL (4)
930306	BALL-BEARING 3x6x2.5 STEEL-SEALED - OILED (2)
940611	BALL-BEARING 6x10x3 RUBBER SEALED - OIL (2)
962061	WASHER S 6x7.5x1.0 (10)
965012	E-CLIP 1.2 (10)
968037	C-CLIP 3.7 (10)
968071	C-CLIP 7.1 (10)
980157	PIN 1.5x7.3 (10)

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

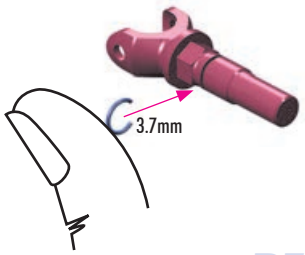
BAG 05.1



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

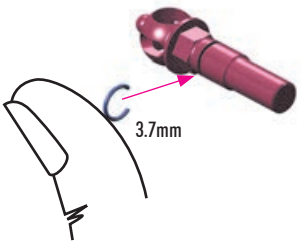
2x 901302 SB M3x2.5
2x 305392 P 2x10
4x 305395 P 2x8.4
4x 968037 C 3.7
2x 968071 C 7.1

2x REAR TRANSMISSION - CVD 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 FRONT TRANSMISSION - ECS DRIVE SHAFT

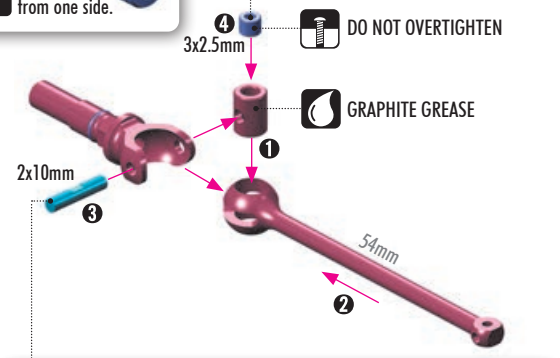


REAR FRONT

1:1 CVD Coupling

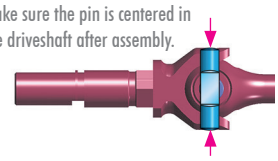
THREAD LOCK

Apply a small amount of thread lock and confirm it does not leak onto other driveshaft parts. After assembly, wait until the thread lock dries and check if the drive shaft and axle can move freely in all directions.



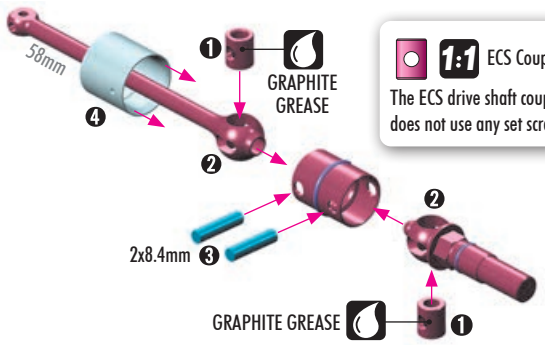
DETAIL STEP 3 4

Make sure the pin is centered in the driveshaft after assembly.



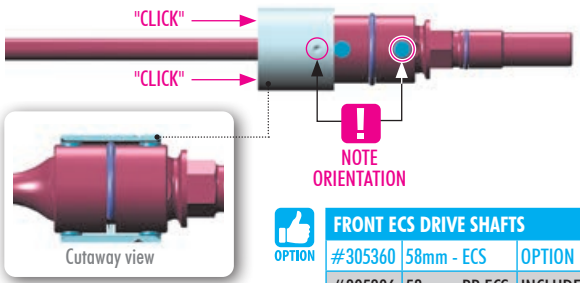
OPTION	REAR CVD DRIVE SHAFTS		
	#305370	54mm - CVD	OPTION
	#305407	52mm - BB CVD	OPTION
	#305408	54mm - BB CVD	INCLUDED

#305407
Shorter 52mm rear drive shafts improve rotation and off power steering but decreases rear traction.
Recommended for small technical tracks and high traction conditions.
#305370
54mm rear drive shafts using 305241 replacement caps generate more rear traction.
Recommended for very low traction conditions. Requires 304970/304971 driveshaft adapters.



1:1 ECS Coupling

The ECS drive shaft coupling does not use any set screw.



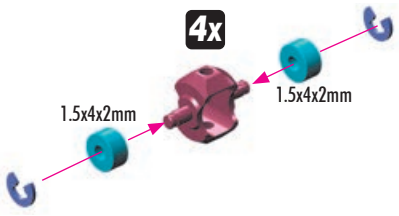
OPTION	FRONT ECS DRIVE SHAFTS		
	#305360	58mm - ECS	OPTION
	#305306	58mm - BB ECS	INCLUDED
	#305307	59mm - BB ECS	OPTION

#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.

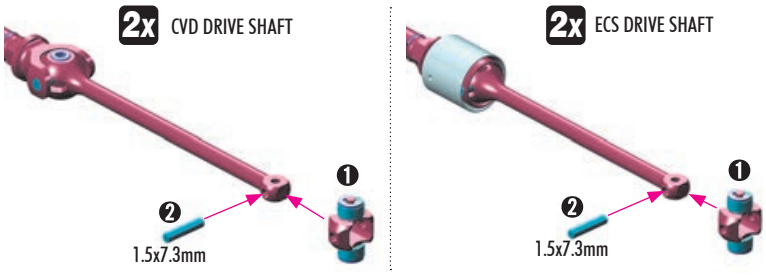
VIDEO TECH TIP

DRIVE SHAFTS

8x 930154 BB 1.5x4x2
8x 965012 E 1.2

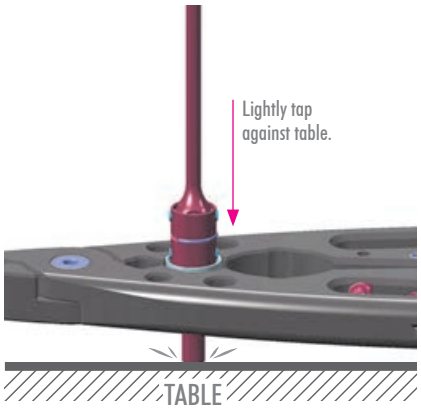


4x 980157 P 1.5x7.3



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.

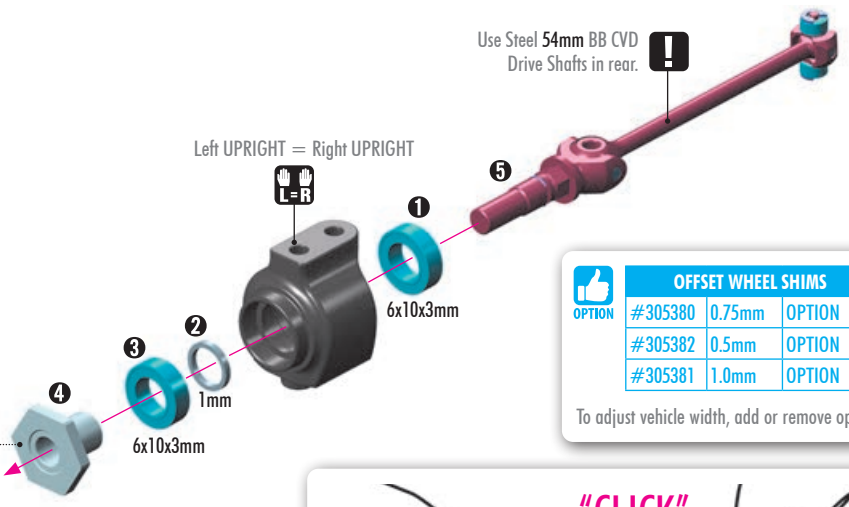


5. FRONT & REAR SUSPENSION

4x 940611 BB 6x10x3

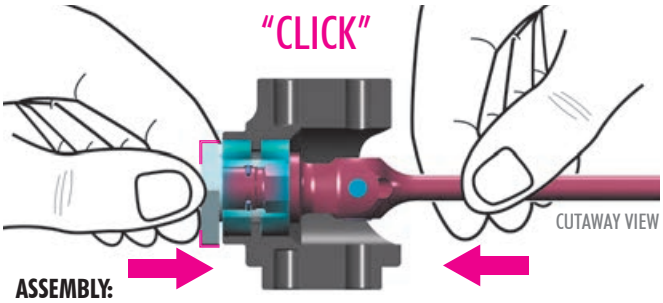
2x 962061 S 6x7.5x1

2x REAR TRANSMISSION



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

To adjust vehicle width, add or remove optional wheel shims.



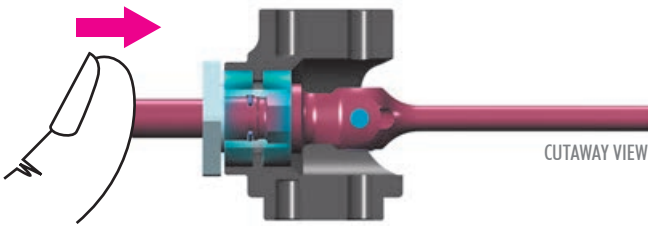
ASSEMBLY:

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.

DISSASEMBLY:

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.



Kit includes two different alu wheel hubs in the carbon and alu version to provide the best performance out of the box.

#305356
ALU WHEEL HUB
(INCLUDED in Carbon Kit Version)

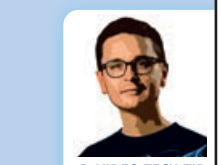
Standard wheel hubs are the best choice for asphalt tracks as they provide great balance between traction and steering in these conditions.

#305359
ALU WHEEL HUB +0.5mm
(INCLUDED in Alu Kit Version)

Wider hubs free up the car, making it more stable and easier to drive. The wide hubs are recommended for carpet tracks.

OPTION #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.



VIDEO TECH TIP

FRONT & REAR UPRIGHTS

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

MEDIUM
Medium hubs generate maximum side traction. Recommended for low traction asphalt conditions in the modified class.

HARD
Hard hubs are recommended for low to medium traction conditions to help generate more traction.

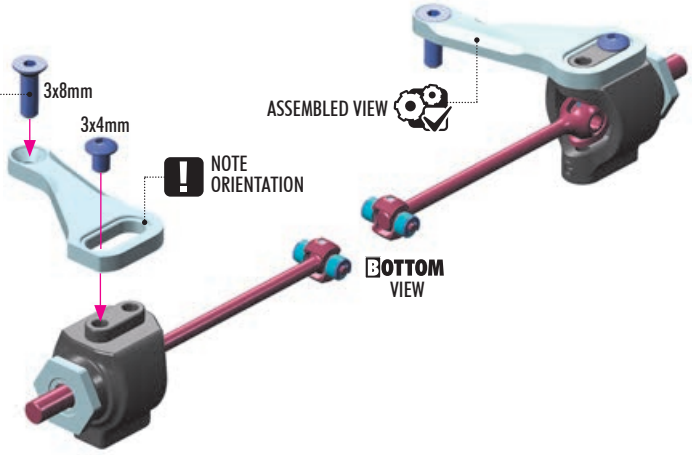
ALU
Alu hubs are recommended for high traction surfaces to improve rotation and free up the car, but they will decrease traction. Alu hubs also improve durability in serious crashes.

2x 902304 SH M3x4

2x 903308 SFH M3x8

2x REAR TRANSMISSION

DO NOT OVERTIGHTEN
The thread in the rear ARS plate is very short; therefore, make sure to tighten the screw gently.

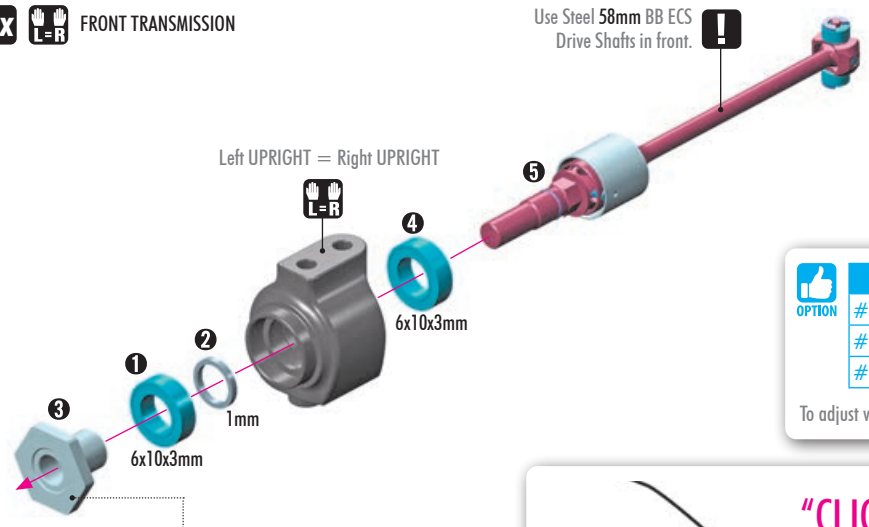


4x 940611 BB 6x10x3

2x 962061 S 6x7.5x1

2x L=R FRONT TRANSMISSION

Use Steel 58mm BB ECS Drive Shafts in front.



OPTION

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

To adjust vehicle width, add or remove optional wheel shims.

X4'25 includes two different alu wheel hubs in the carbon and alu version to provide the best performance out of the box.

#305356
ALU WHEEL HUB
(INCLUDED in Carbon Kit Version)

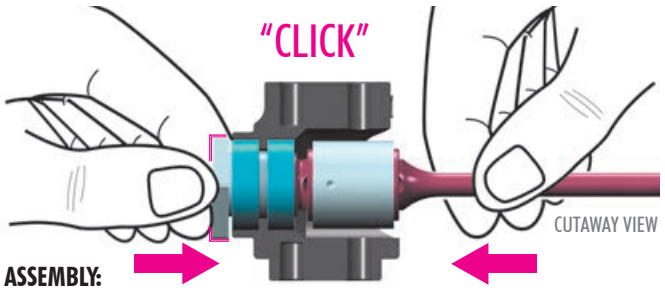
Standard wheel hubs are the best choice for asphalt tracks as they provide great balance between traction and steering in these conditions.

#305359
ALU WHEEL HUB +0.5mm
(INCLUDED in Alu Kit Version)

Wider hubs free up the car, making it more stable and easier to drive. The wide hubs are recommended for carpet tracks.

OPTION #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.



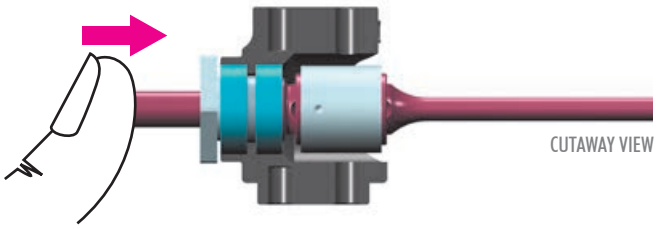
ASSEMBLY:

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.

DISSASEMBLY:

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.



OPTION

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

MEDIUM
Medium hubs generate maximum side traction. Recommended for low traction asphalt conditions in the modified class.

HARD
Hard hubs are recommended for low to medium traction conditions to help generate more traction.

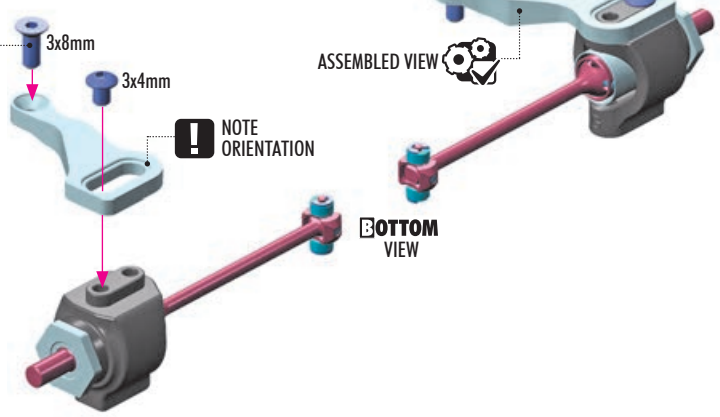
ALU
Alu hubs are recommended for high traction surfaces to improve rotation and free up the car, but they will decrease traction. Alu hubs also improve durability in serious crashes.

2x 902304 SH M3x4

2x 903308 SFH M3x8

2x FRONT TRANSMISSION

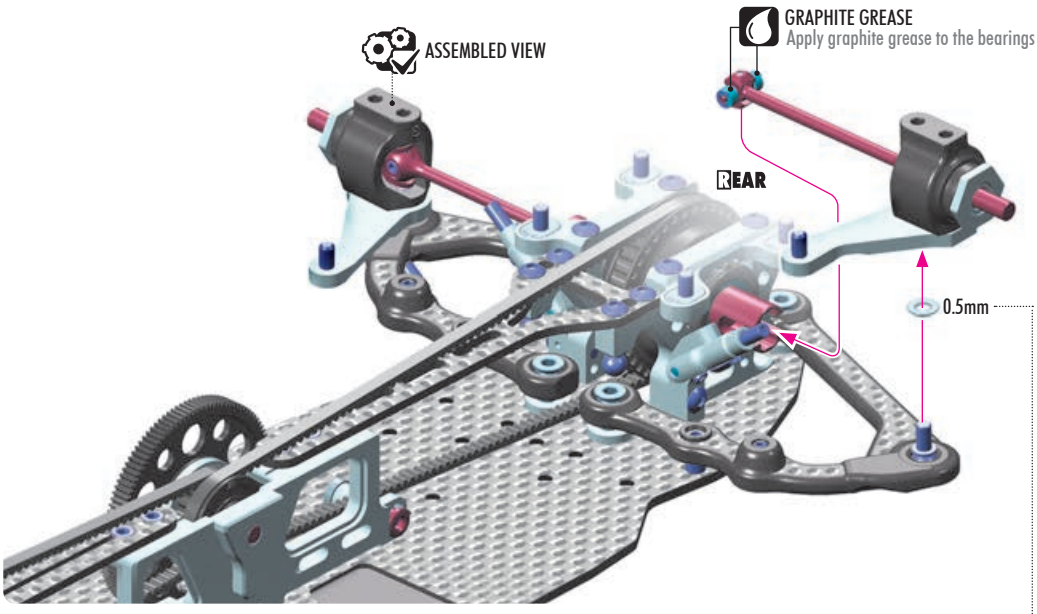
DO NOT OVERTIGHTEN
The threads in the front steering plate are very short; take caution to tighten the screw gently.



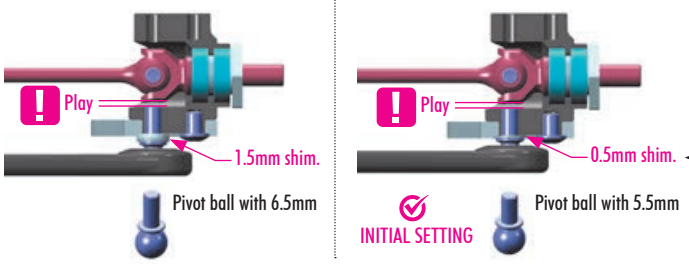
5. FRONT & REAR SUSPENSION

2x 303121-K
SHIM 3x6x0.5

VIDEO TECH TIP
ROLL-CENTER



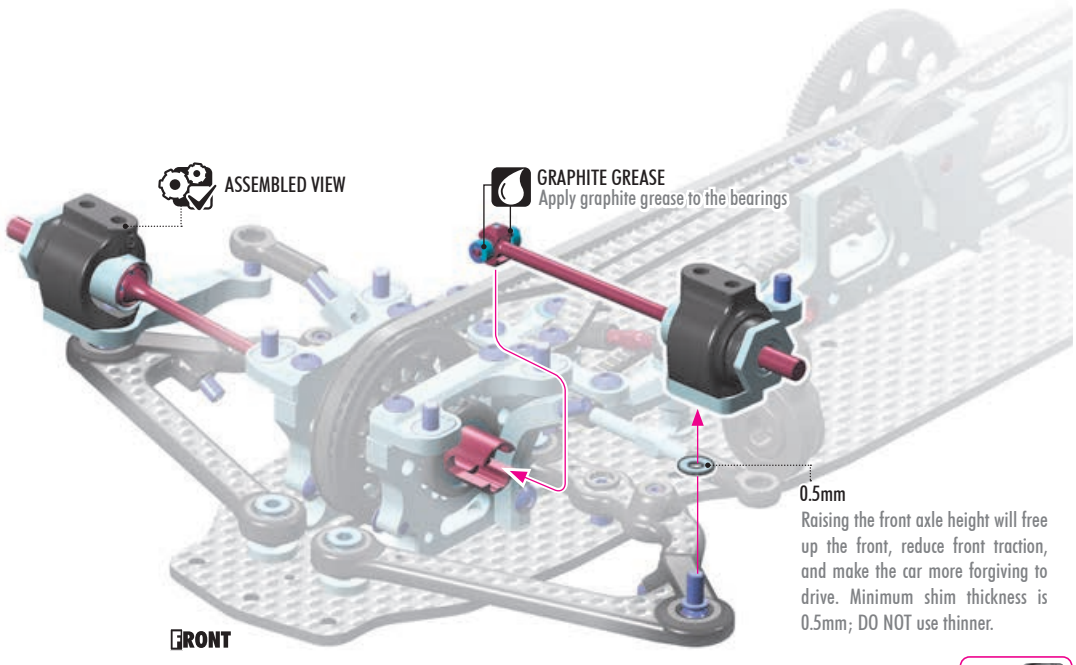
When using more than 1mm shim under the hub, use the #303261 pivot ball with longer 6.5mm thread length to increase durability in serious crashes.
Make sure to check for clearance between the pivot ball threads and CVD pin.



0.5mm SHIMS
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

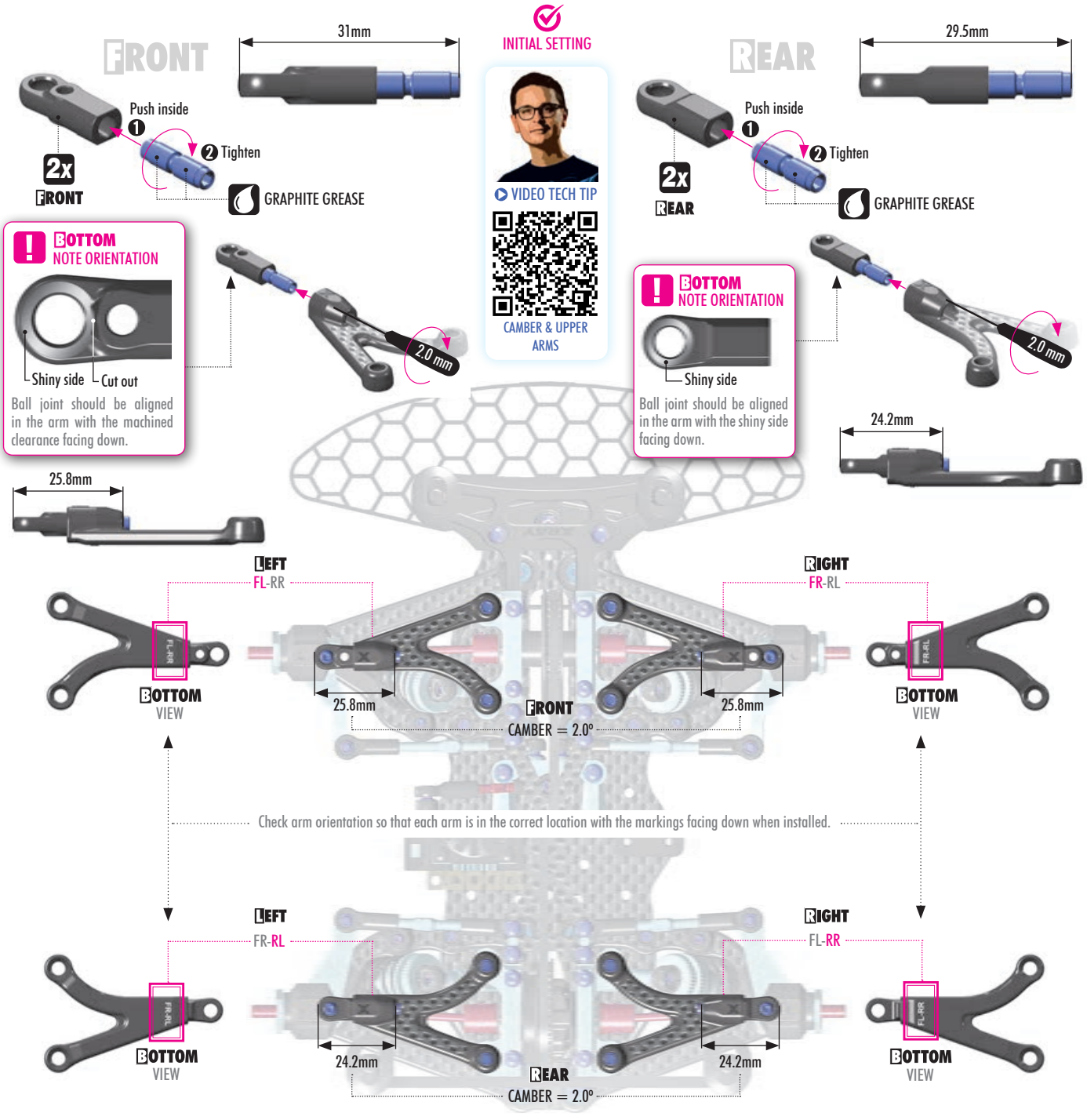


0.5mm
Raising the front axle height will free up the front, reduce front traction, and make the car more forgiving to drive. Minimum shim thickness is 0.5mm; DO NOT use thinner.

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.



OPTION

UPPER ARMS CFF™			
#302144-M	MEDIUM	FL-RR	INCLUDED X4 Alu
#302134-M	MEDIUM	FR-RL	INCLUDED X4 Alu
#302144-S	SOFT	FL-RR	INCLUDED X4 Carbon
#302134-S	SOFT	FR-RL	INCLUDED X4 Carbon

UPPER ARMS CFF™			
#302144-XS	EXTRA-SOFT	FL-RR	OPTION
#302134-XS	EXTRA-SOFT	FR-RL	OPTION
#302144-C	COMPOSITE	FL-RR	OPTION
#302134-C	COMPOSITE	FR-RL	OPTION

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.

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

4x 303121-K SHIM 3x6x0.5

2x 303123-K SHIM 3x6x2

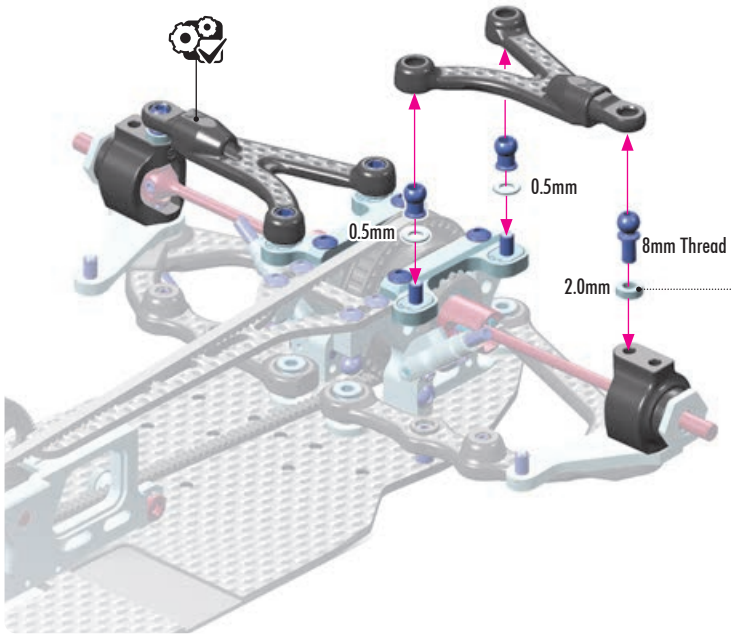
VIDEO TECH TIP

ROLL-CENTER

UPPER ARMS CFF™ ALTERNATIVE

REAR SUSPENSION

INITIAL SETTING



TIP Install the pivot balls with Multi Tool.

TIP

Rear upper arm location affects the rear roll-center and camber gain. Raising the arm with thicker shims on the upper clamps 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.

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 303121-K SHIM 3x6x0.5

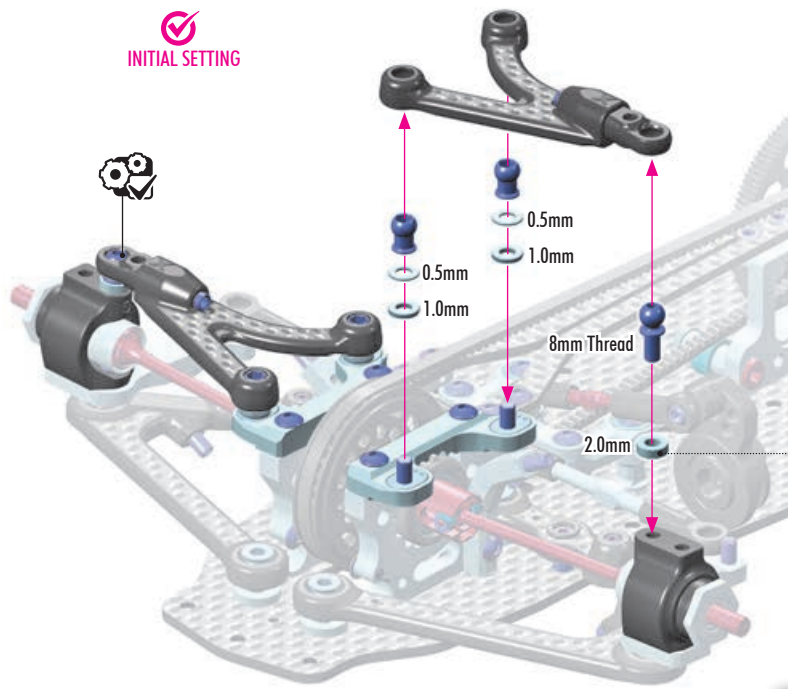
4x 303122-K SHIM 3x6x1

2x 303123-K SHIM 3x6x2

UPPER ARMS CFF™ ALTERNATIVE

FRONT SUSPENSION

INITIAL SETTING



TIP Install the pivot balls with Multi Tool.

TIP

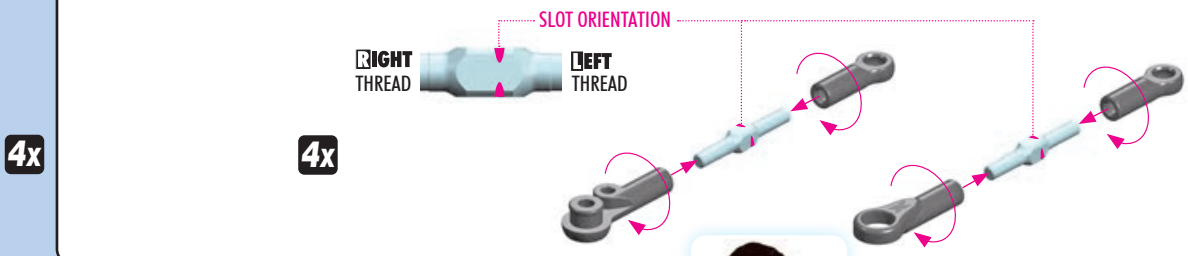
Front upper arm location affects the front roll-center and camber gain. Raising the arms with thicker shims on the upper clamps will lower the front roll-center and decrease camber gain. Reducing the shim height on the upper clamps has the same effect as increasing the shim height on the outside.

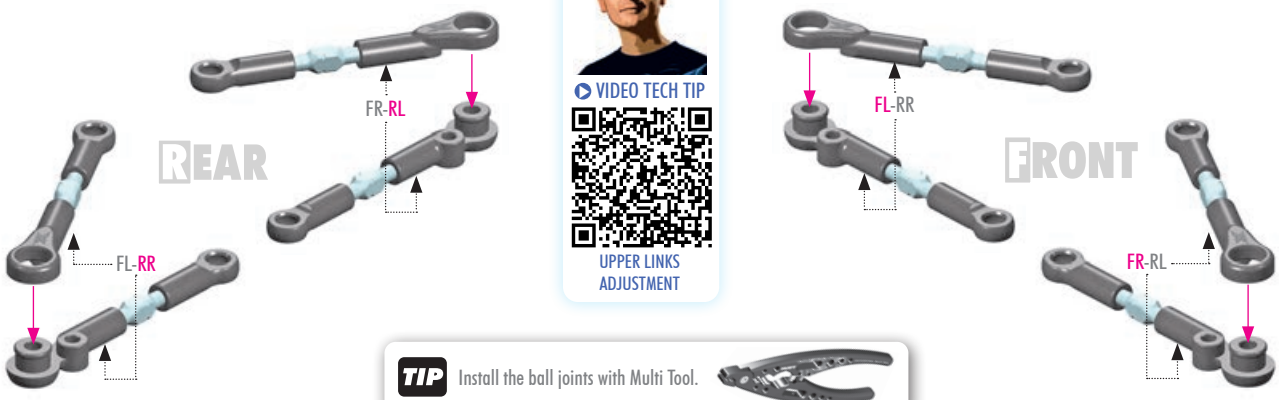
OPTION	HUDY TITANIUM BALL STUD				
	#990008	D=4.9	L=8	S=3.5	OPTION

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

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.

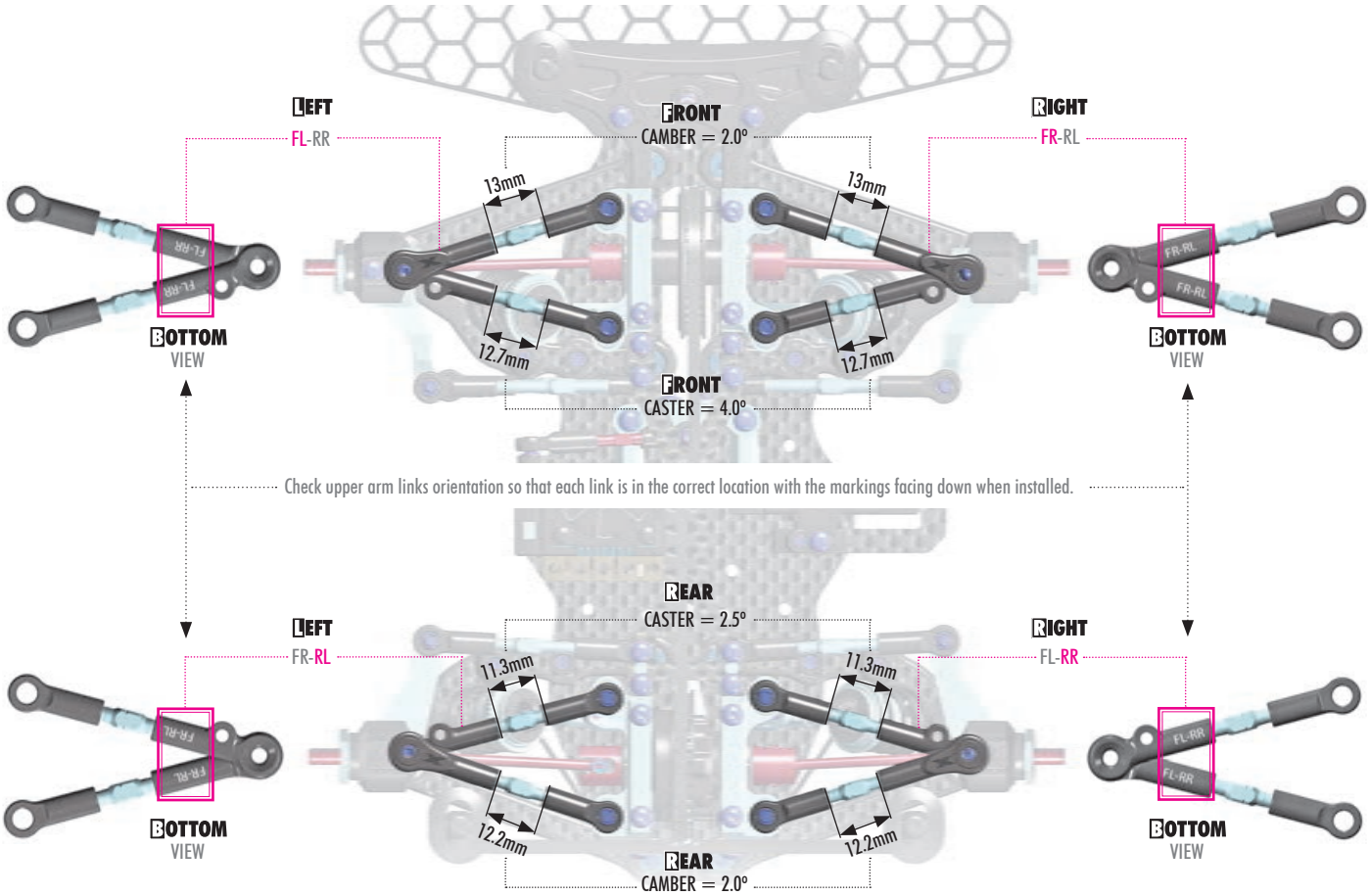
LINK STYLE UPPER ARMS

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 form 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.

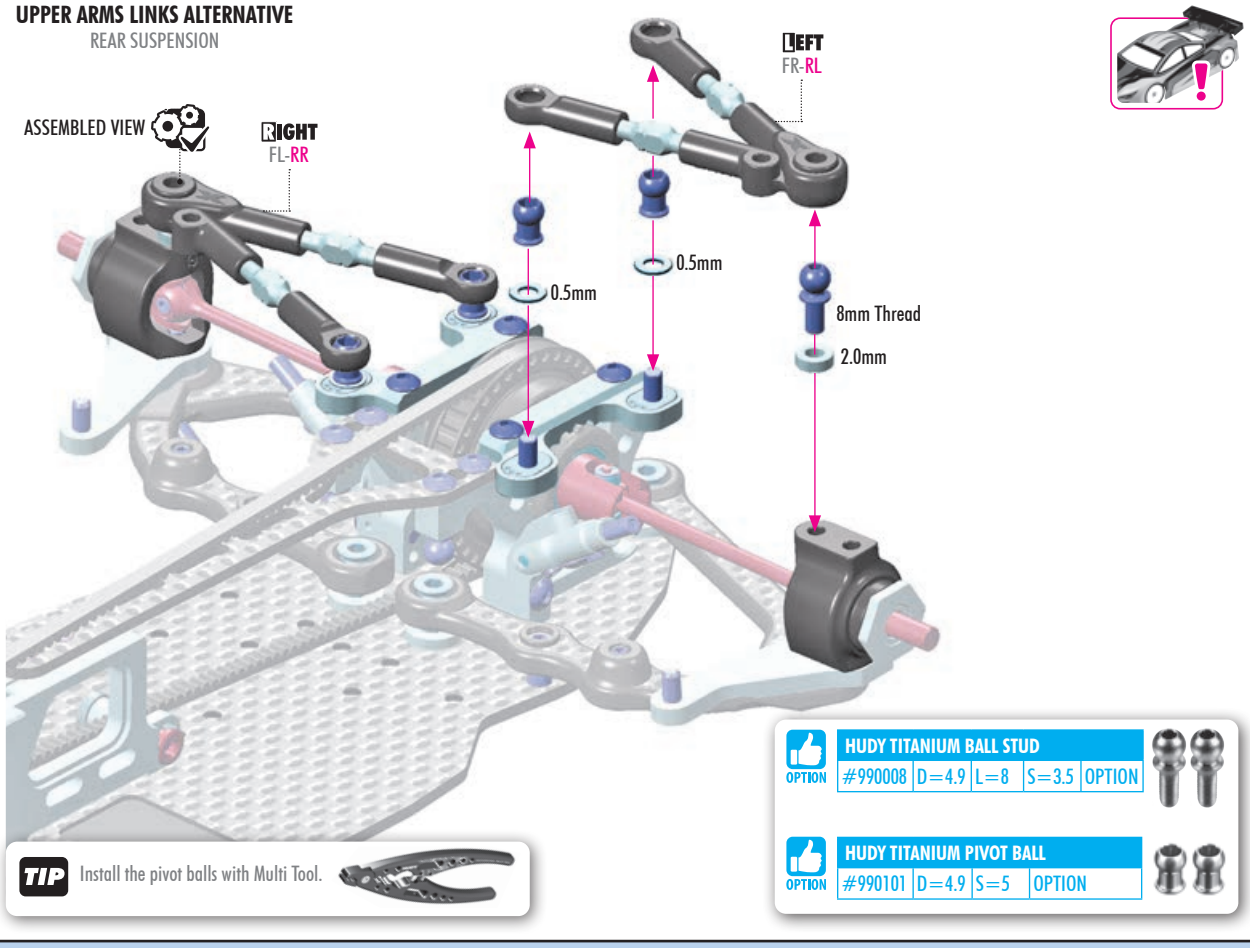
When switching form CFF to Upper Link arms, retain the same caster eccentric insert positions in the upper bulkheads as previously used.



4x 303121-K
SHIM 3x6x0.5

2x 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

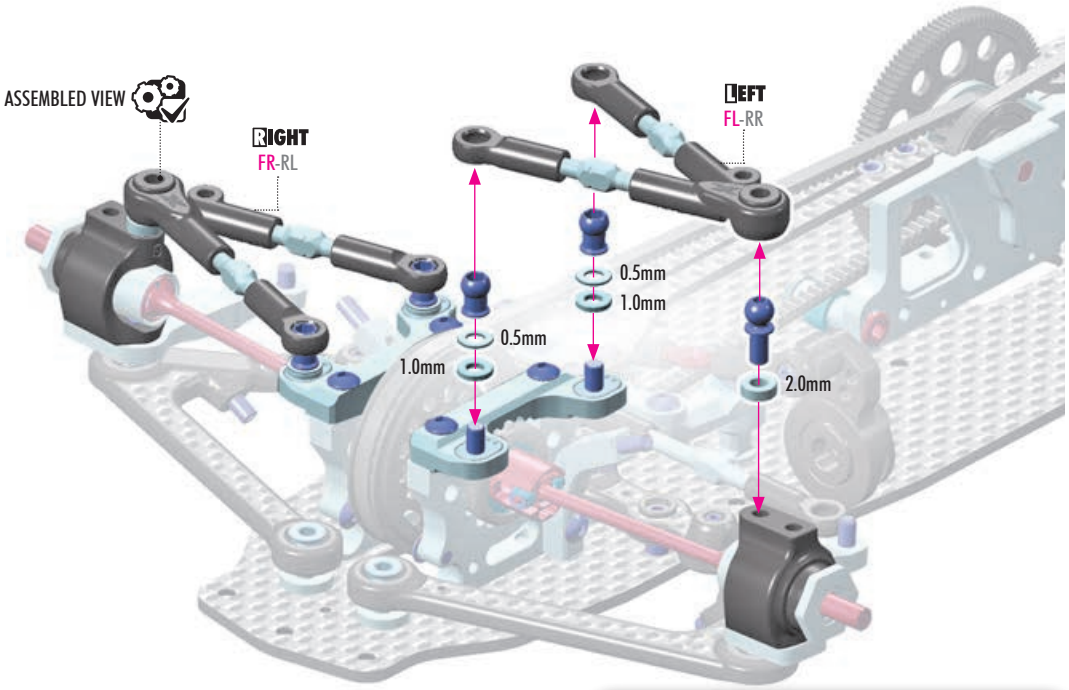
OPTION	HUDY TITANIUM PIVOT BALL			
	#990101	D=4.9	S=5	OPTION

4x 303121-K
SHIM 3x6x0.5

4x 303122-K
SHIM 3x6x1

2x 303123-K
SHIM 3x6x2

UPPER ARMS LINKS ALTERNATIVE
FRONT SUSPENSION

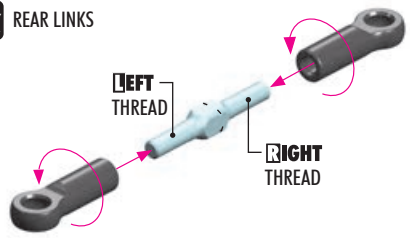


TIP Install the pivot balls with Multi Tool.

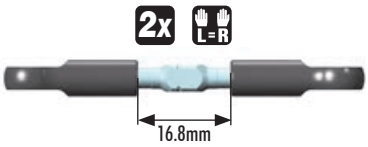
OPTION	HUDY TITANIUM BALL STUD				
	#990008	D=4.9	L=8	S=3.5	OPTION

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

2x REAR LINKS



2x L=R



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

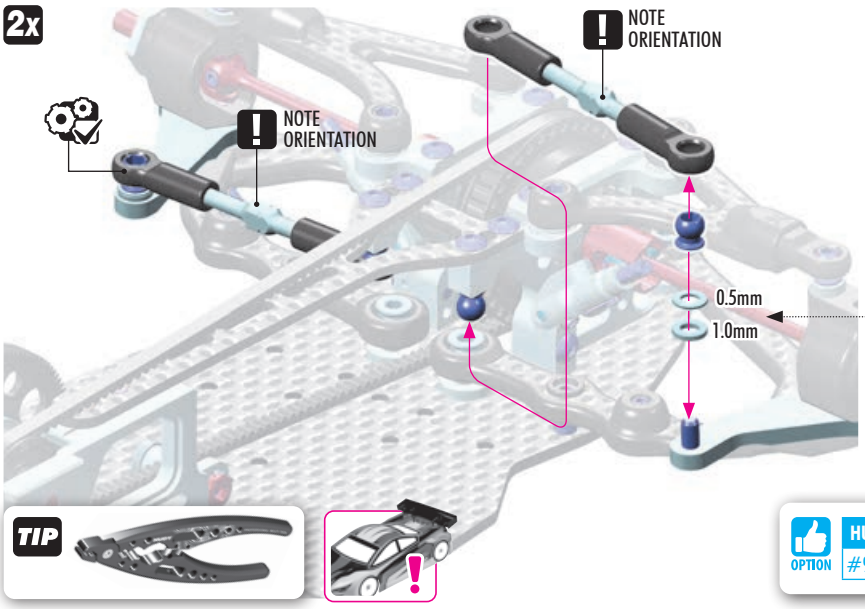
303121-K SHIM 3x6x0.5 2x

303122-K SHIM 3x6x1 2x

VIDEO TECH TIP

REAR TOE-GAIN

2x



MORE SHIMS provides more toe-gain on compression.

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

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

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

The X4'24/25 bulkheads lower the inner ARS link mounting point by 3.5mm compared to the X4 and X4'23. To duplicate previous ARS characteristics, use 3.5mm less shims on the hub's ARS mounting point.

X4'24/25 : 1.5mm Hub Shim = X4'23 5mm Hub Shim

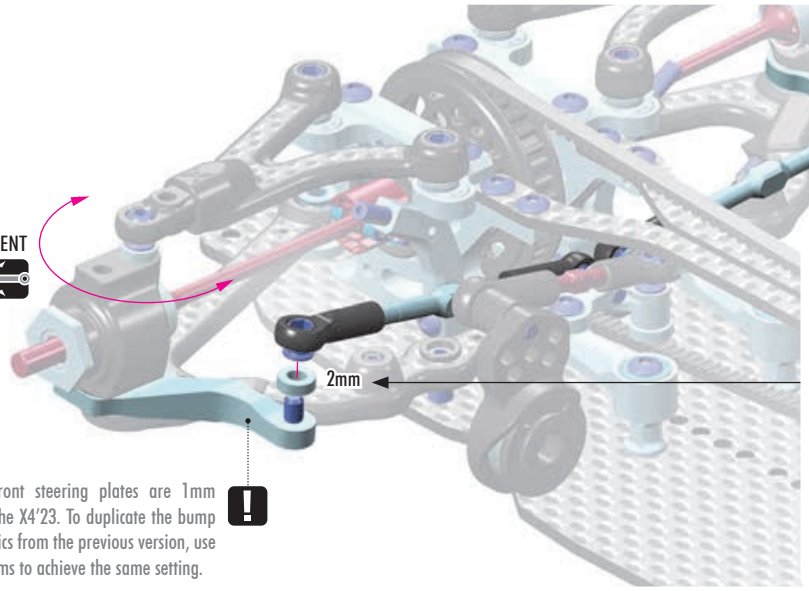
TIP

OPTION

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

2x 303123-K SHIM 3x6x2

2x



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.

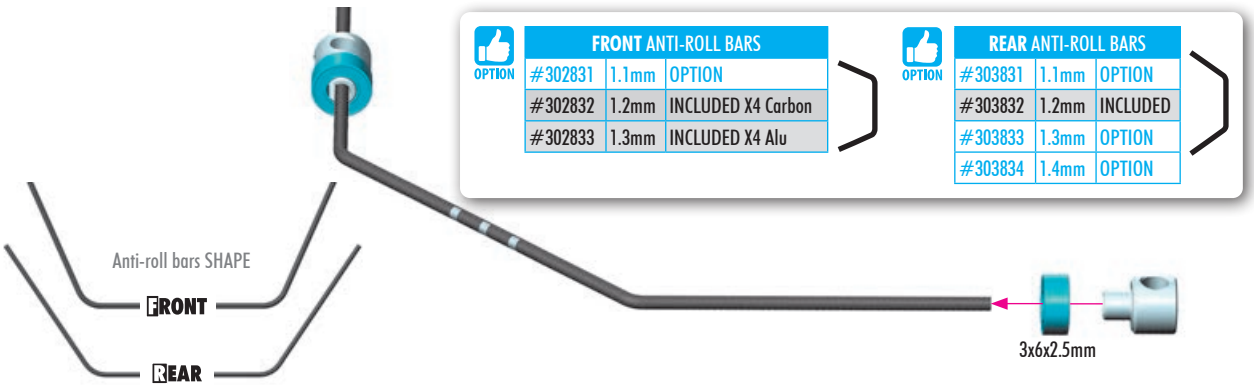
VIDEO TECH TIP

STEERING SYSTEM

TIP

The X4'24/25 front steering plates are 1mm higher than on the X4'23. To duplicate the bump steer characteristics from the previous version, use 1mm thinner shims to achieve the same setting.

4x 930306 BB 3x6x2.5



OPTION

FRONT ANTI-ROLL BARS		
#302831	1.1mm	OPTION
#302832	1.2mm	INCLUDED X4 Carbon
#302833	1.3mm	INCLUDED X4 Alu

OPTION

REAR ANTI-ROLL BARS		
#303831	1.1mm	OPTION
#303832	1.2mm	INCLUDED
#303833	1.3mm	OPTION
#303834	1.4mm	OPTION

VIDEO TECH TIP

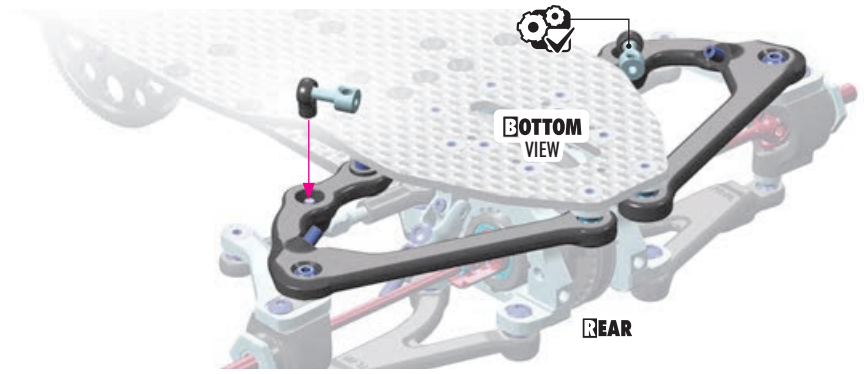
ANTI-ROLL BARS

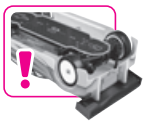
5. FRONT & REAR SUSPENSION

4x

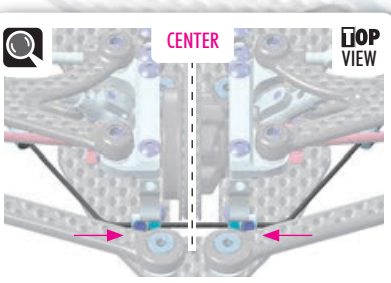
ASSEMBLED VIEW

TIP

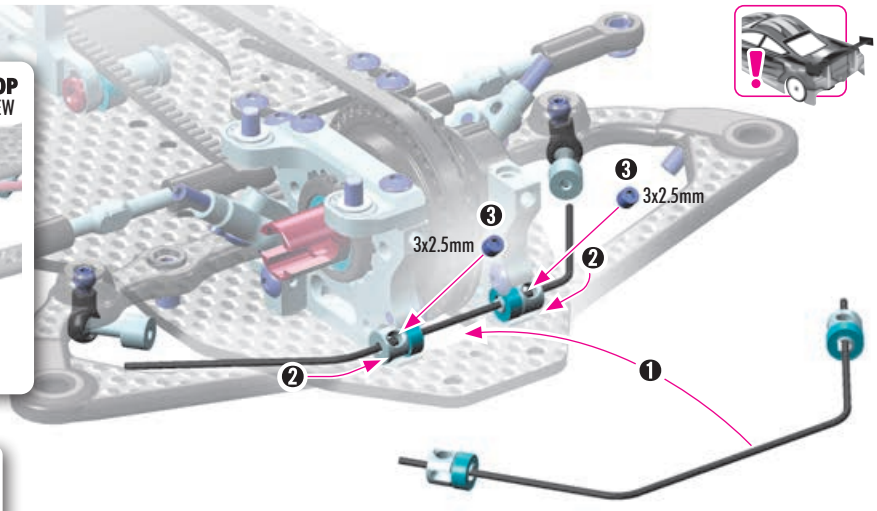




2x 901302 SB M3x2.5



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



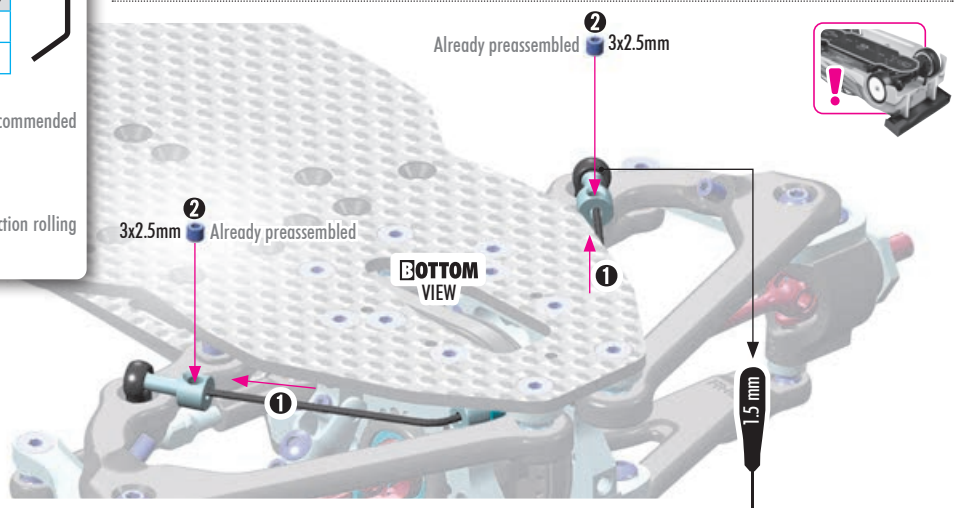
OPTION

REAR ANTI-ROLL BARS		
#303831	1.1mm	OPTION
#303832	1.2mm	INCLUDED
#303833	1.3mm	OPTION
#303834	1.4mm	OPTION

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

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

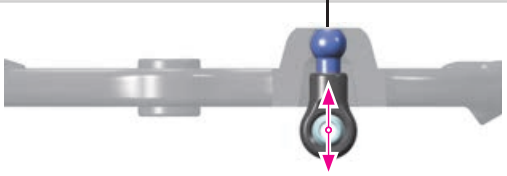
2x 901302 SB M3x2.5



VIDEO TECH TIP

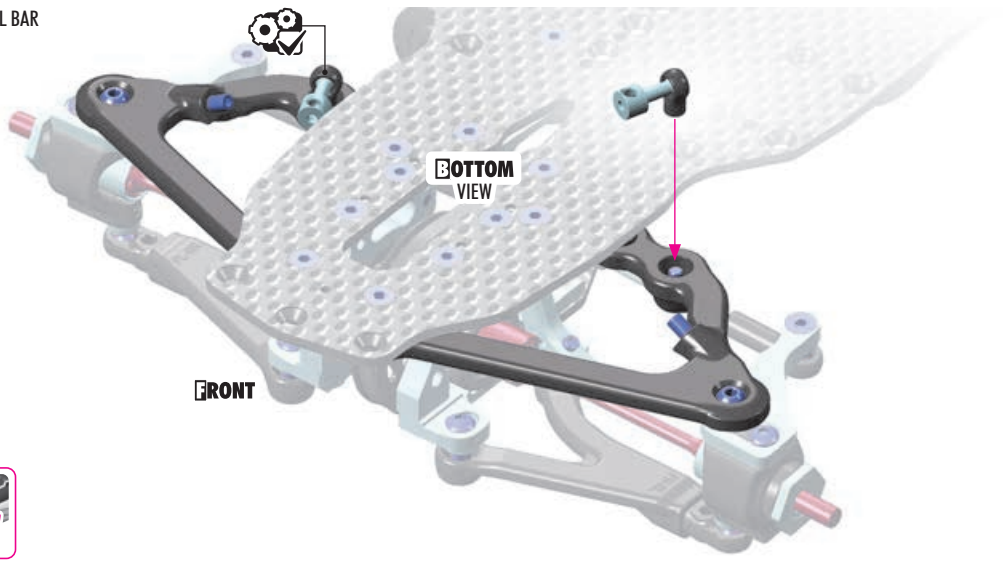
ANTI-ROLL BARS

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.



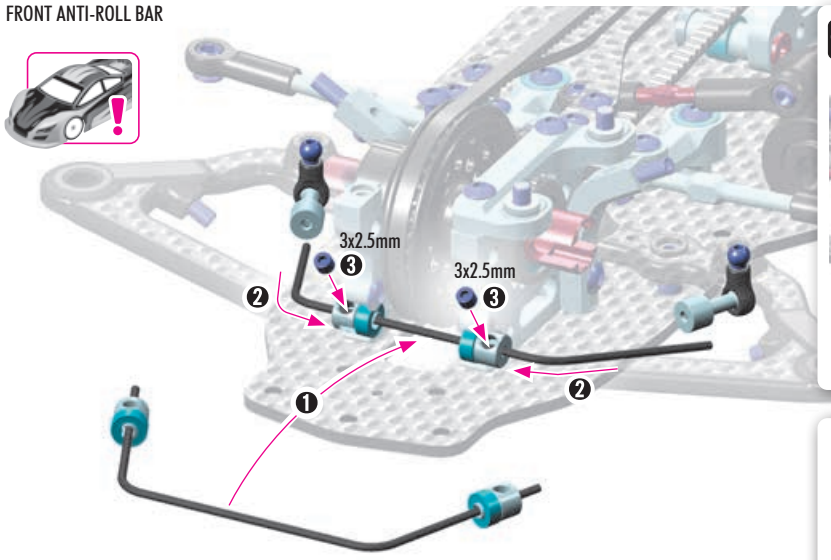
If both sides still DO NOT move at the same time, adjust the length of the bar holders.

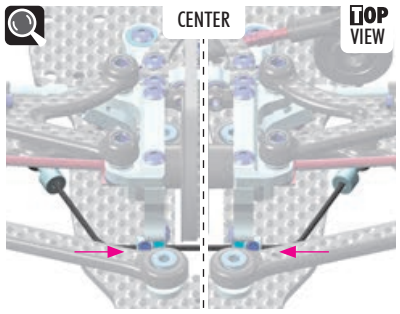
FRONT ANTI-ROLL BAR



2x 901302 SB M3x2.5

FRONT ANTI-ROLL BAR





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

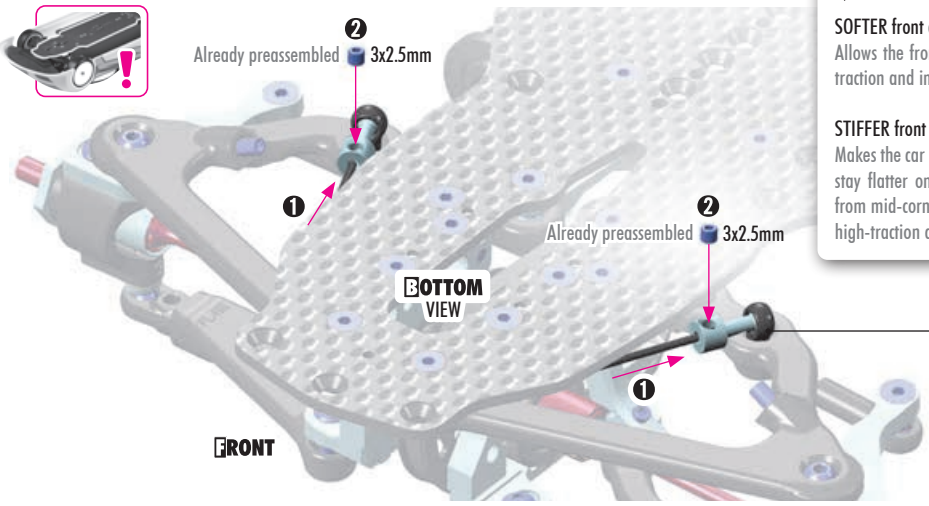
OPTION

FRONT ANTI-ROLL BARS		
#302831	1.1mm	OPTION
#302832	1.2mm	INCLUDED X4 Carbon
#302833	1.3mm	INCLUDED X4 Alu

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

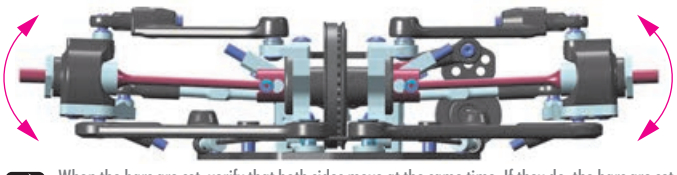
STIFFER front anti-roll bar:
Makes the car initially more responsive, and helps the car stay flatter on fast direction changes. Reduces steering from mid-corner to corner exit. Mainly recommended for high-traction carpet.

2x 901302 SB M3x2.5



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.

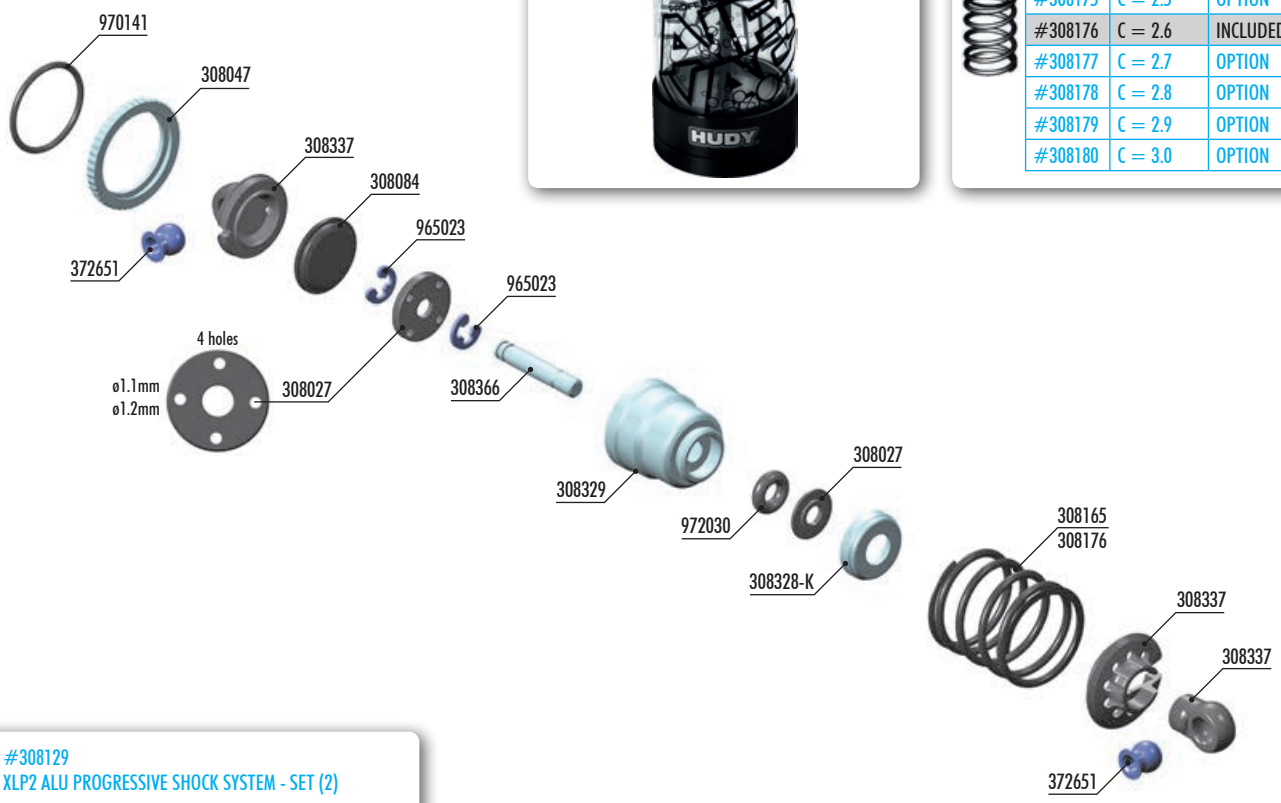
6. SHOCK ABSORBERS

4x

OPTION #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



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.

OPTION #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)		

8x 965023 E 2.3

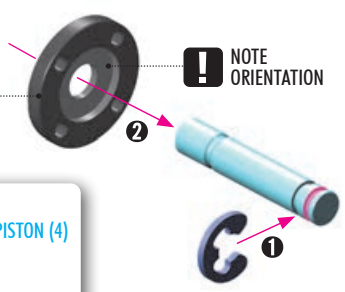
4x

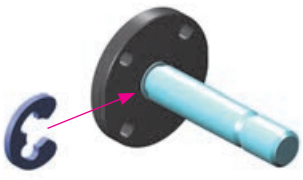
INITIAL SETTING

4 holes

ø1.1mm
ø1.2mm

INITIAL SETTING





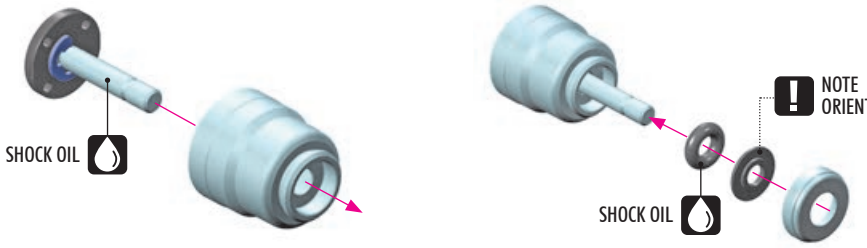
ø0.8mm

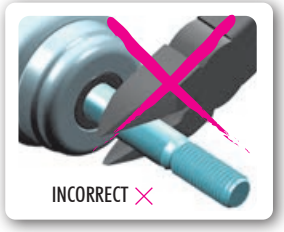
OPTION #308026
XLP COMPOSITE 2-HOLE ø0.8mm PROGRESSIVE PISTON (4)

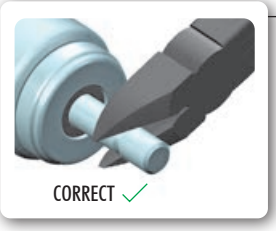
These pistons must be used with optional:
#308129 XLP2 PROGRESSIVE SHOCK INSERTS

4x 972030
O 3x2

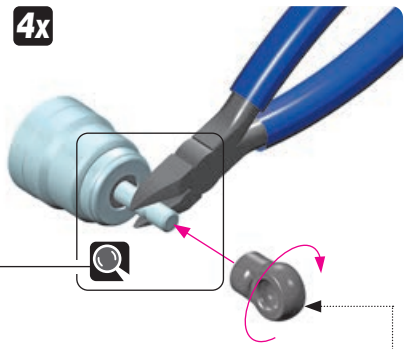
4x







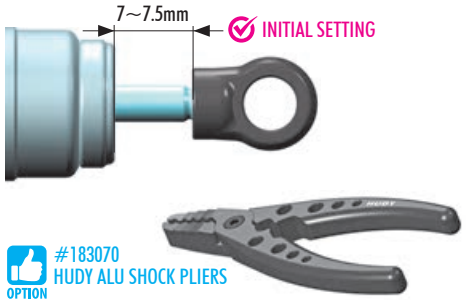
4x



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

Be carefull 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.



OPTION #183070 HUDY ALU SHOCK PLIERS

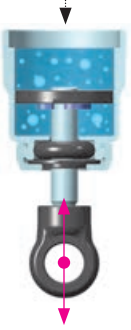
We recommend using HUDY shock pliers when adjusting shock length. These pliers allows super easy and comfortable shock length adjustment.

VIDEO TECH TIP

HUDY AIR-VAC SHOCK BUILD

OIL 350cSt

4x OIL



SHOCK FILLING

1. Fully extend the piston rod so the piston is at the bottom of the shock body.
2. Hold the shock upright and slightly overfill the shock body with shock oil.
3. Let the oil settle and allow air bubbles to rise to the top. Slowly move the piston up and down 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.

OPTION HUDY

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

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

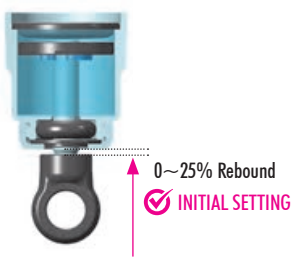
To make sure that all the air is removed from the shock oil, we recommend using the HUDY Air Vac.

REBOUND ADJUSTMENT

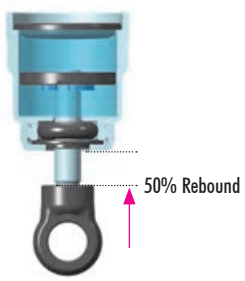
IMPORTANT

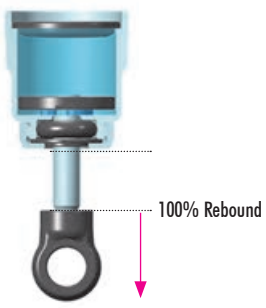
When building the shocks with brand new membranes, some rebound may occur. After a few runs, or letting the shock settle for 24 hours, the membrane will break-in and zero rebound will be possible.

Insert shock membrane.



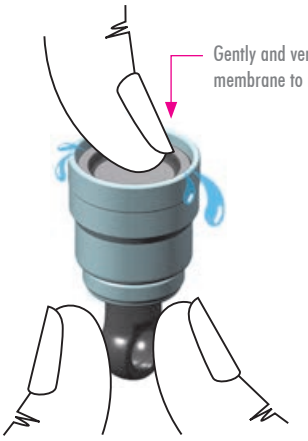
For most conditions, 0-25% rebound is recommended. This is the most forgiving and best to absorb bumps. Cornering speed is generally the best with this setting.





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.

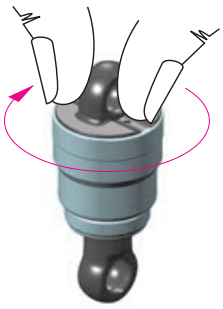
6. SHOCK ABSORBERS



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

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.

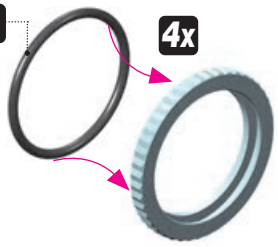
CORRECT

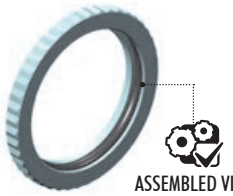


INCORRECT

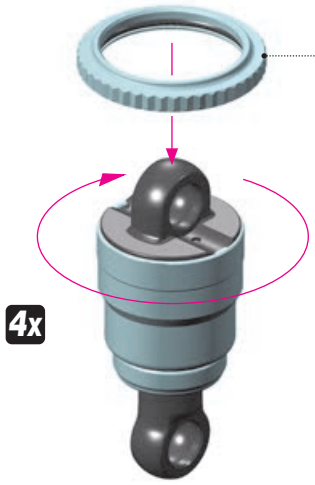
4x 970141
O 14x1.0

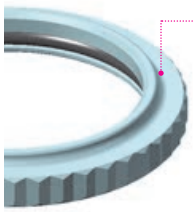
SHOCK OIL





ASSEMBLED VIEW





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

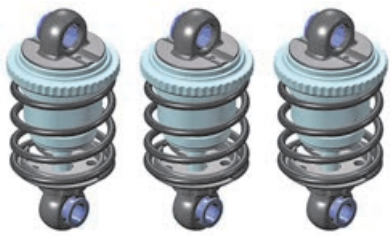
SHOCKS & SPRINGS

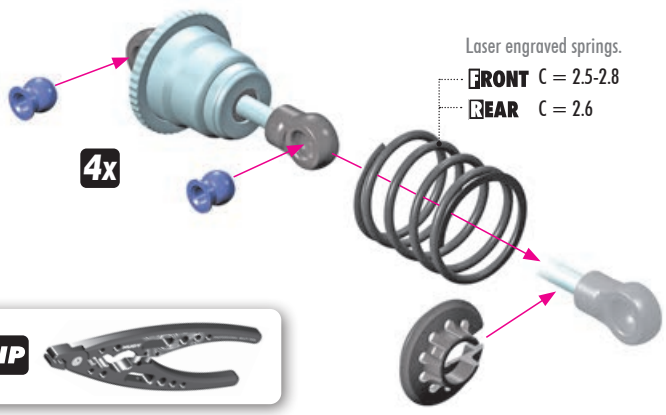
SHOCK LENGTH ADJUSTMENT:

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.

ASSEMBLED VIEW





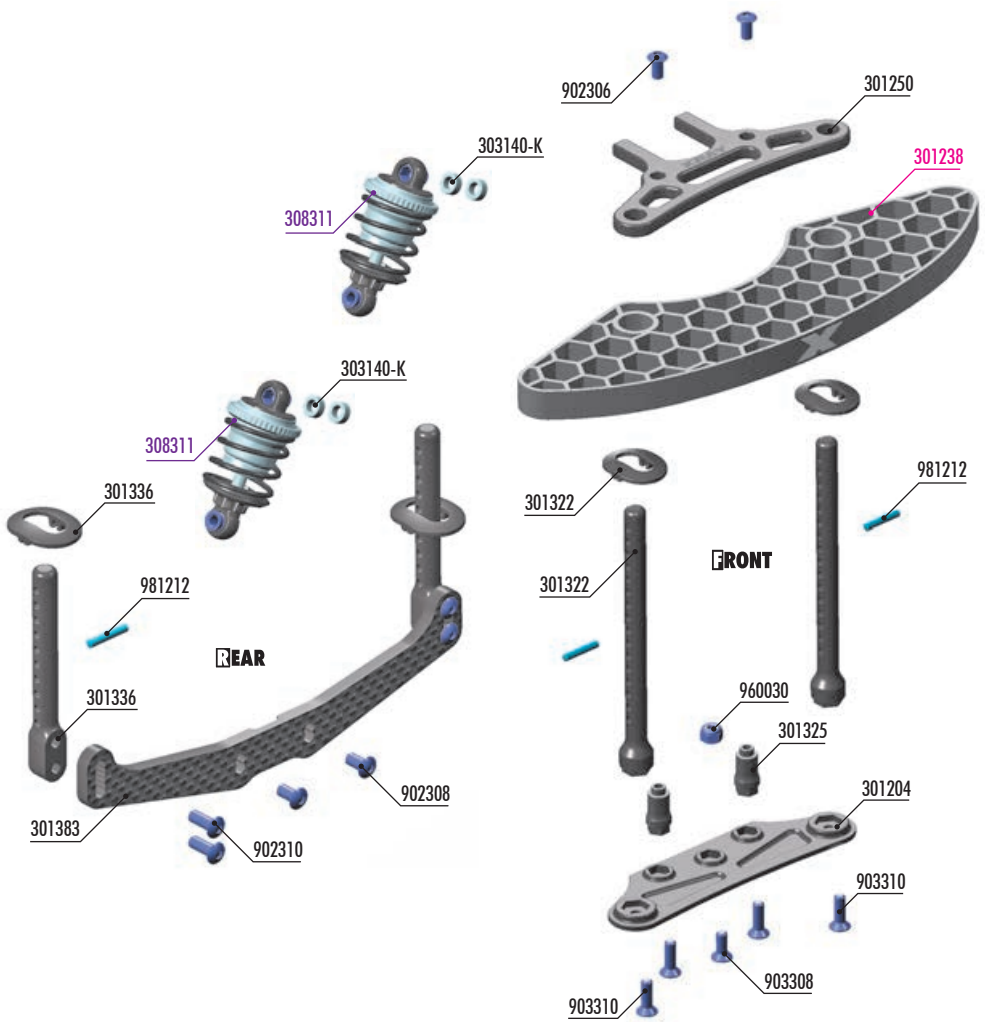
Laser engraved springs.
FRONT C = 2.5-2.8
REAR C = 2.6

TIP

OPTION

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

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



OPTION

REAR BODY MOUNT SET		
#301336	0mm	INCLUDED
#301337	+1mm	OPTION
#301338	+2mm	OPTION

OPTION

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

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

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

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

BAG 07

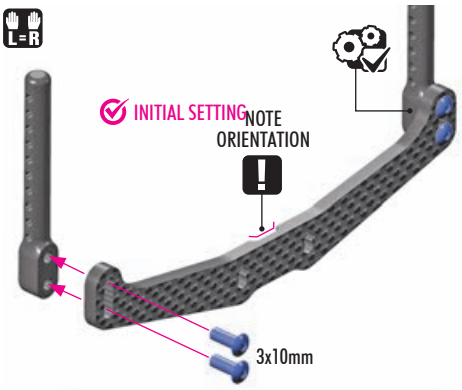
301204	COMPOSITE BUMPER	902310	HEX SCREW SH M3x10 (10)
301250	COMPOSITE UPPER HOLDER FOR BUMPER	903308	HEX SCREW SFH M3x8 (10)
301322	FRONT BODY MOUNT SET	903310	HEX SCREW SFH M3x10 (10)
301325	COMPOSITE BRACE FOR BUMPER - LOW (2)	960030	NUT M3 (10)
301336	REAR BODY MOUNT SET	981212	PIN 2x12 (10)
301383	X4 CARBON BODY POST & BODY POST HOLDER - 1pc - 4.0mm		
303140-K	ALU SHIM 3x5x2.0mm - BLACK (10)	301238	RUBBER BUMPER 3D
902306	HEX SCREW SH M3x6 (10)	308311	XLP2 ALU SHOCK ABSORBER-SET (2)
902308	HEX SCREW SH M3x8 (10)		

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

4x 902310 SH M3x10

2x REAR VERTICAL BODY MOUNTING ALTERNATIVE

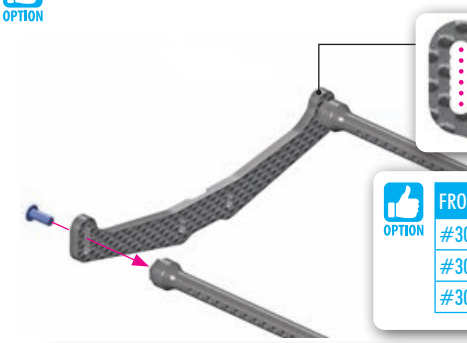
L=R

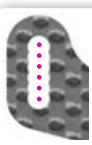


OPTION

REAR BODY MOUNT SET		
#301336	0mm	INCLUDED
#301337	+1mm	OPTION
#301338	+2mm	OPTION

OPTION REAR HORIZONTAL BODY MOUNTING ALTERNATIVE

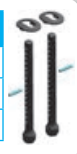




The carbon body post holder has 6 POSITIONS, spaced 1.1mm between each, for precise and easy adjustment.

OPTION

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



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

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 traction conditions, especially on technical tracks, by improving directional changes, steering response and rotation. Note that rear traction is also reduced, so may be useful in Stock or Super Stock spec class racing.

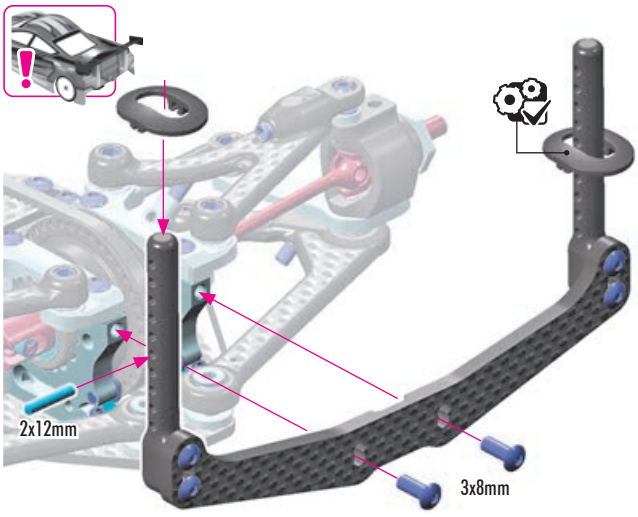
VIDEO TECH TIP

REAR BODY POST MOUNTING

7. FRONT & REAR ASSEMBLY

2x 902308 SH M3x8

2x 981212 P 2x12

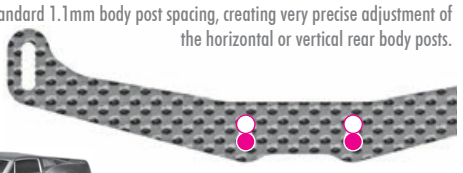


OPTION #301351-0
ALU ADJUSTABLE BODY POST STOP (2)

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

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.

The second mounting position on the body post holder will shift the post locations in between the standard 1.1mm body post spacing, creating very precise adjustment of the horizontal or vertical rear body posts.

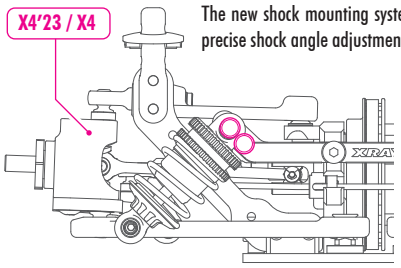


Using the lower position on the body post holder will raise the posts to the heights required for VTA bodies

4x 303140-K SHIM 3x5x2

X4'23 / X4

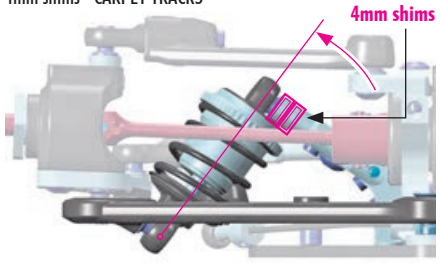
The new shock mounting system uses shims for more precise shock angle adjustment.



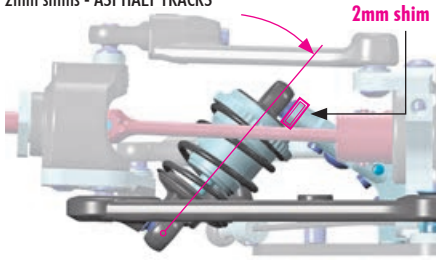
The following settings will duplicate X4/X4'23 shock angles:

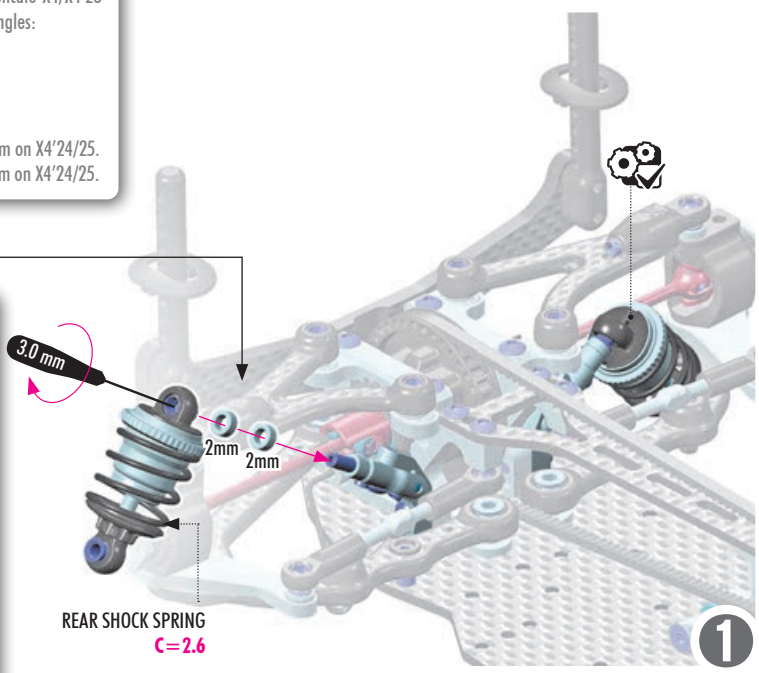
Upper shock mounting position on shock tower on X4'23 = 4mm shim on X4'24/25.
Lower shock mounting position on shock tower on X4'23 = 2mm shim on X4'24/25.

INITIAL SETTING
4mm shims - CARPET TRACKS



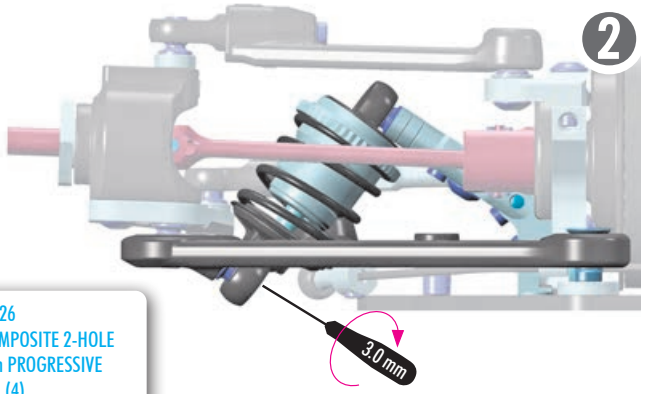
INITIAL SETTING
2mm shims - ASPHALT TRACKS





REAR SHOCK SPRING
C=2.6

1



2

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.

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

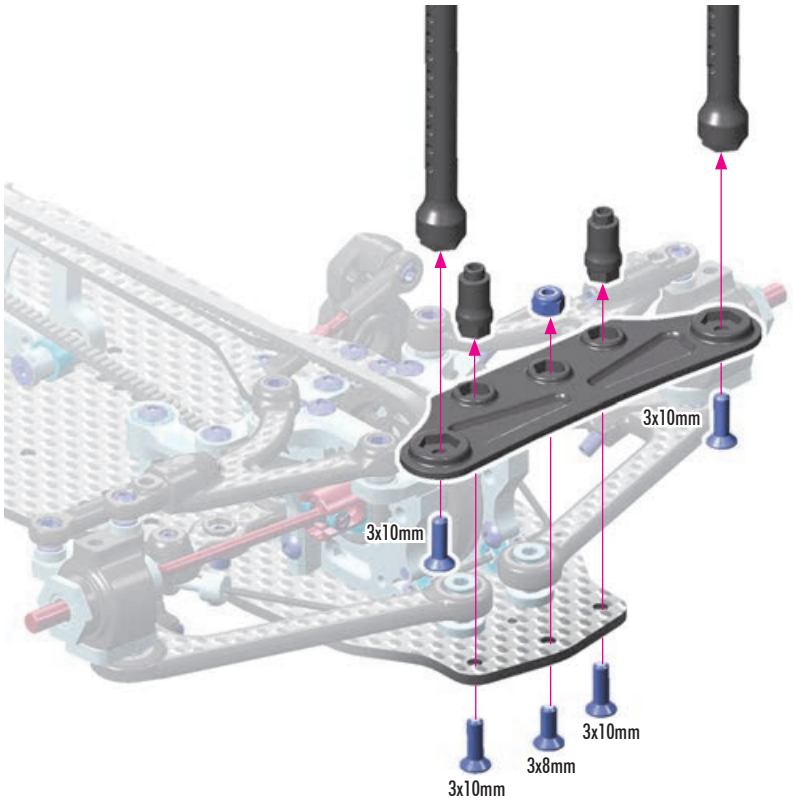
VIDEO TECH TIP

SHOCK SHIMMING TUTORIAL

1x 903308 SFH M3x8

4x 903310 SFH M3x10

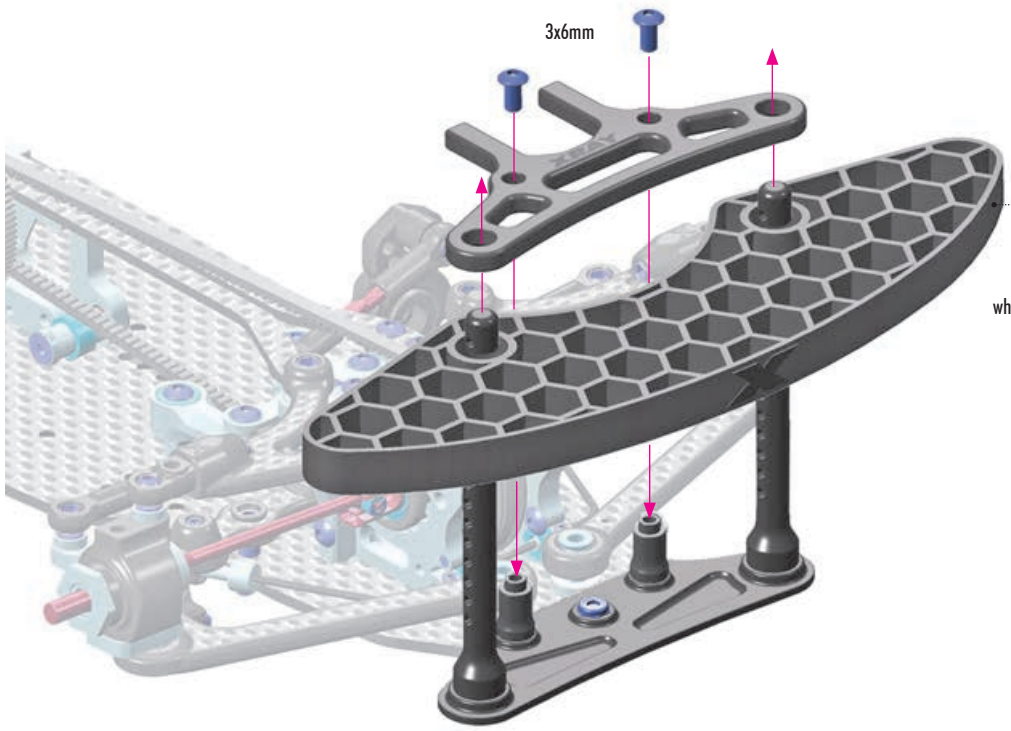
1x 960030 N M3



OPTION

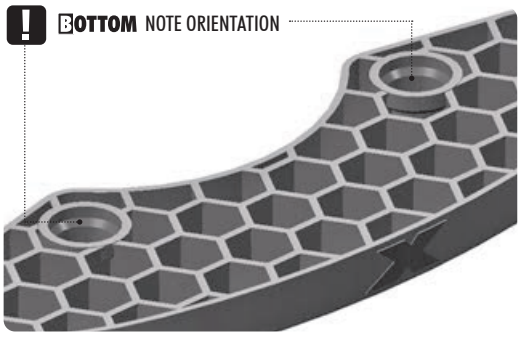
FRONT BODY MOUNT SET		
#301322	0mm	INCLUDED
#301323	+1mm	OPTION
#301324	+2mm	OPTION

2x 902306 SH M3x6

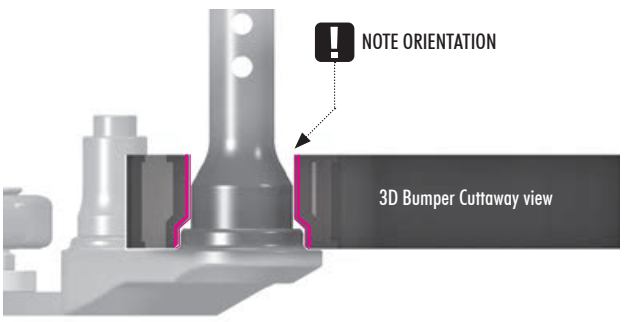


NOTE ORIENTATION
when inserting the bumper

BOTTOM NOTE ORIENTATION



NOTE ORIENTATION



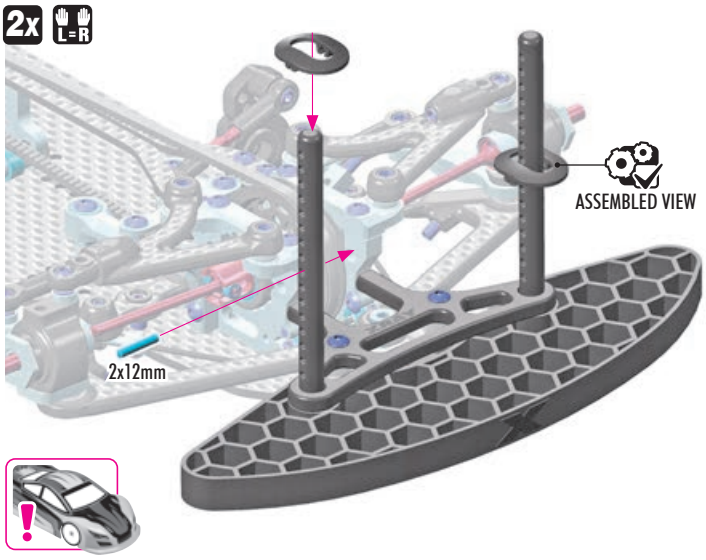
7. FRONT & REAR ASSEMBLY

2x 981212 P 2x12

VIDEO TECH TIP

FRONT BODY UPSTOP SYSTEM

2x L-R



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

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

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.

OPTION

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

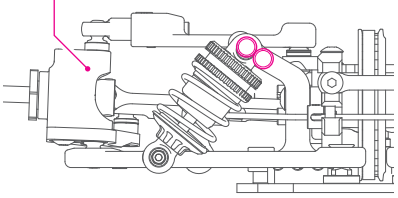
4x 303140-K SHIM 3x5x2

VIDEO TECH TIP

SHOCKS & SPRINGS

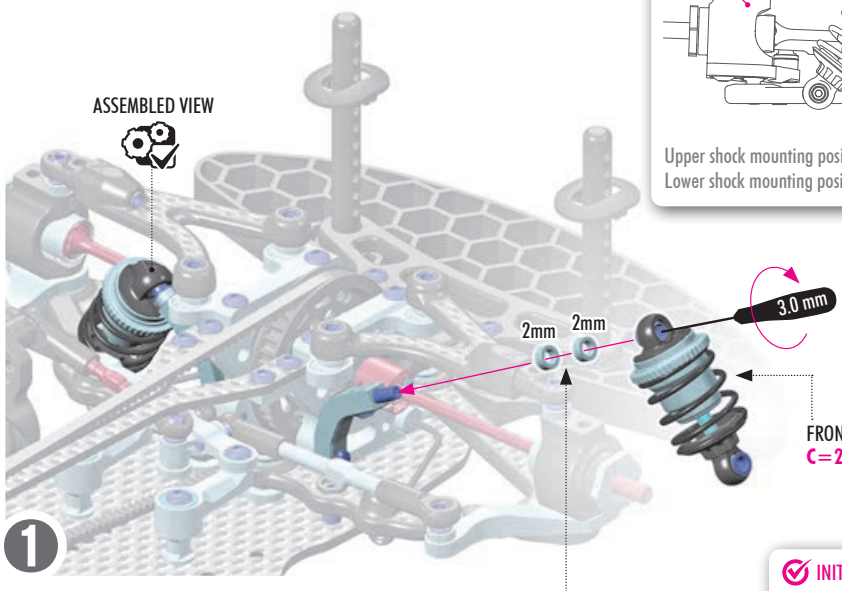
X4'23 / X4

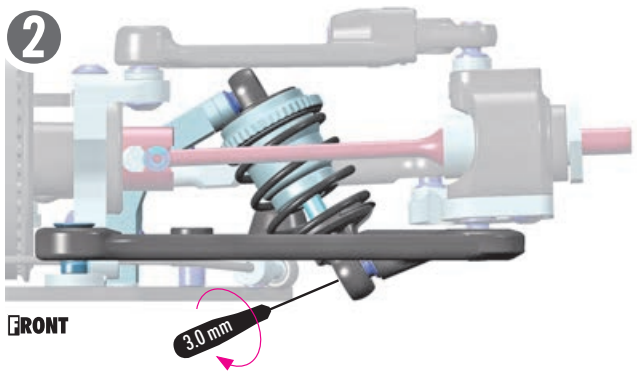
The new shock mounting system uses shims for more precise shock angle adjustment.



The following settings will duplicate X4/X4'23 shock angles:

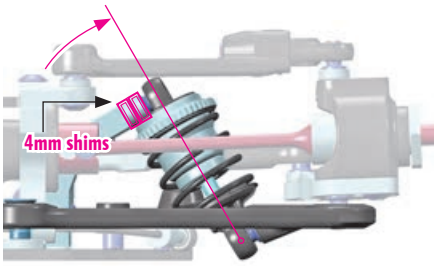
Upper shock mounting position on shock tower on X4'23 = 4mm shim on X4'24/25.
Lower shock mounting position on shock tower on X4'23 = 2mm shim on X4'24/25.





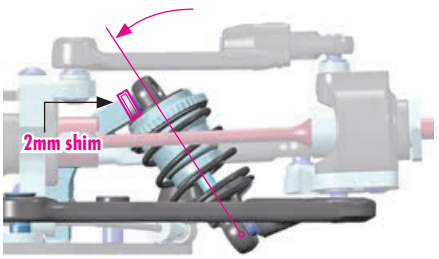
INITIAL SETTING
4mm shims - CARPET TRACKS

L=R



INITIAL SETTING
2mm shim - ASPHALT TRACKS

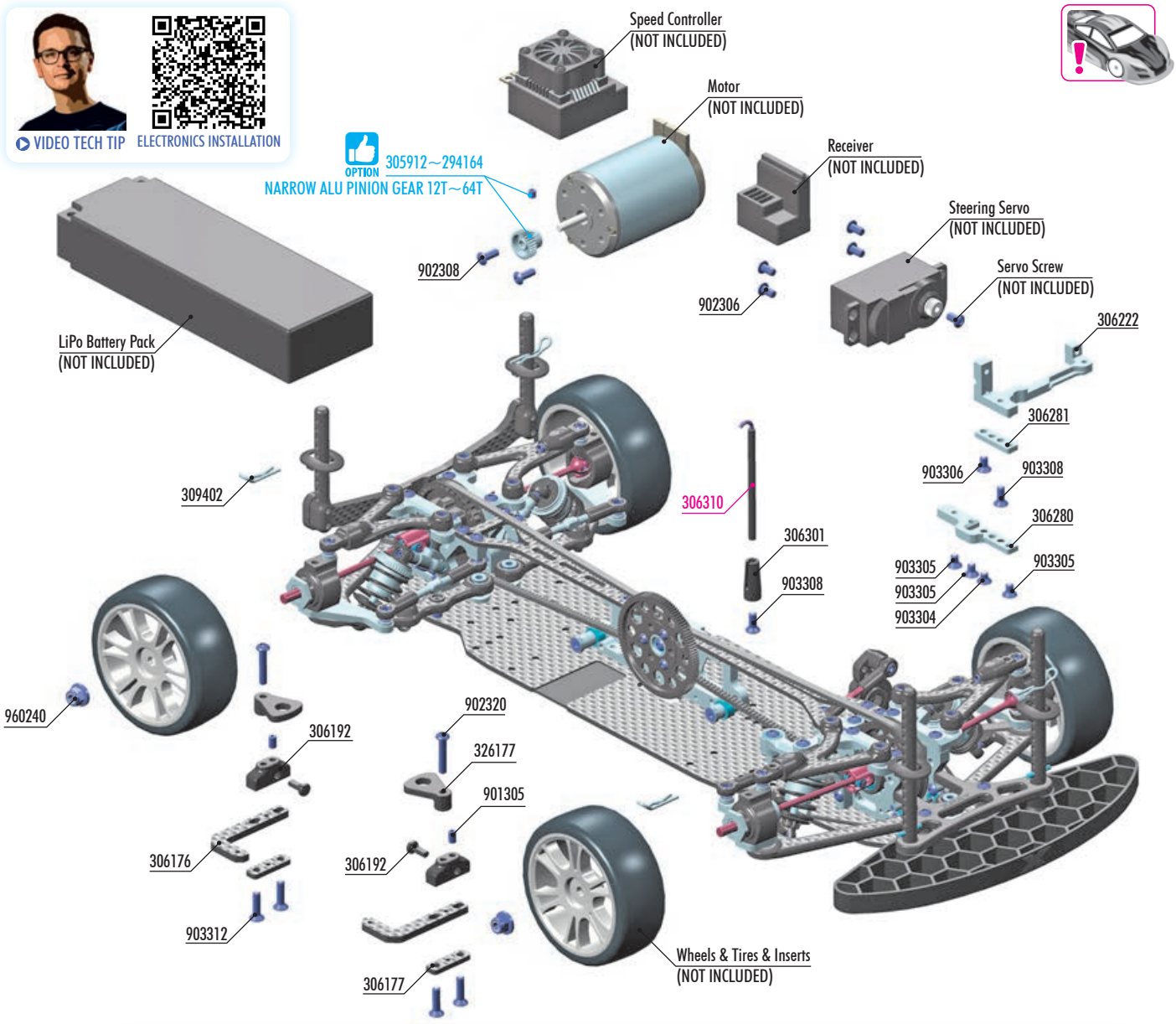
L=R



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.

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



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

OPTION #306410 ALU FAN MOUNT

OPTION #107870 HUDY FIBRE-REINFORCED TAPE

OPTION

ALU REAR WING SHIM			
#353561	SILVER	XRAY	OPTION
#293561	SILVER	HUDY	OPTION
#293561-O	ORANGE	HUDY	OPTION

OPTION TUNGSTEN & STAINLESS STEEL WEIGHTS (on page 43 and 46)

OPTION #306551 XRAY PURE TUNGSTEN CHASSIS WEIGHT 12g

OPTION #306165 CARBON BATTERY STRAP

OPTION #309861 SHORT LIPO BALANCING CHASSIS WEIGHT 40g (2)

BAG 07

306176	CARBON BATTERY ADJ. WIDTH PLATE (2)
306177	CARBON BATTERY PLATE SHIM (2)
306192	COMPOSITE ADJUSTABLE BATTERY HOLDER & BACKSTOP (2+2)
306222	ALU SERVO MOUNT - BLACK - ONE-PIECE - SWISS 7075 T6
306280	ALU SERVO HOLDER - REARWARD - SWISS 7075 T6
306281	ALU SERVO HOLDER - FORWARD - SWISS 7075 T6
306301	ANTENNA MOUNT - THIN
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)
902308	HEX SCREW SH M3x8 (10)
902320	HEX SCREW SH M3x20 (10)
903304	HEX SCREW SFH M3x4 (10)
903305	HEX SCREW SFH M3x5 (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)

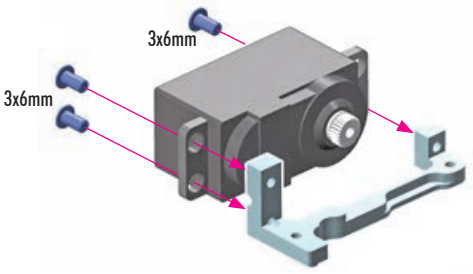
306310 ANTENNA (2)
305912~294164 NARROW ALU PINION GEAR 12T~64T (OPTION)

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

3x 902306 SH M3x6

VIDEO TECH TIP

STEERING SYSTEM



SERVO MOUNT ASSEMBLY ALTERNATIVES

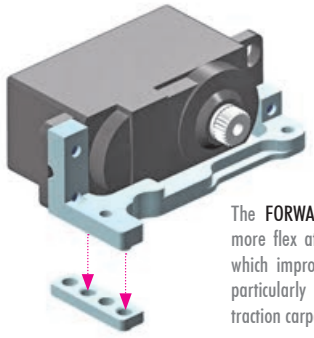
There are 3 alternatives how to mount the servo mount to the chassis and each of them provide different chassis flex and driving characteristics.

ALTERNATIVE 1

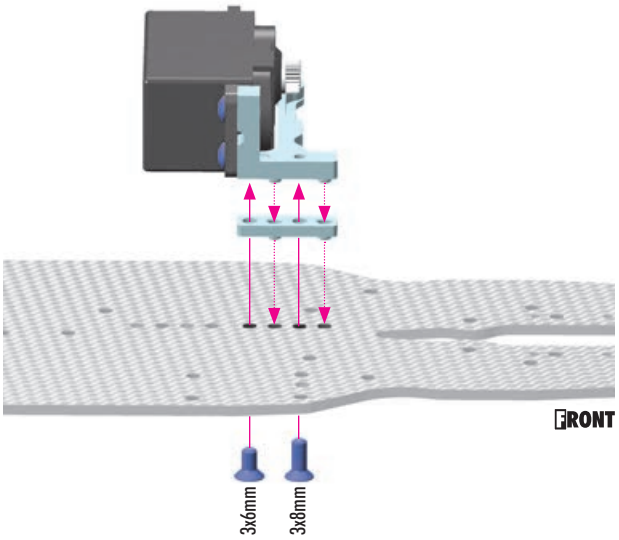
SERVO MOUNT ASSEMBLY - **FORWARD ALTERNATIVE**

1x 903306 SFH M3x6

1x 903308 SFH M3x8



The **FORWARD POSITION** allows for more flex at the front of the chassis, which improves front traction. This is particularly useful on low to medium traction carpet as well as asphalt.

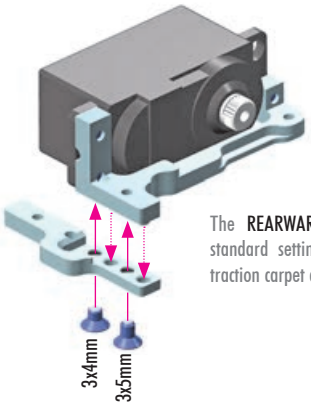


ALTERNATIVE 2

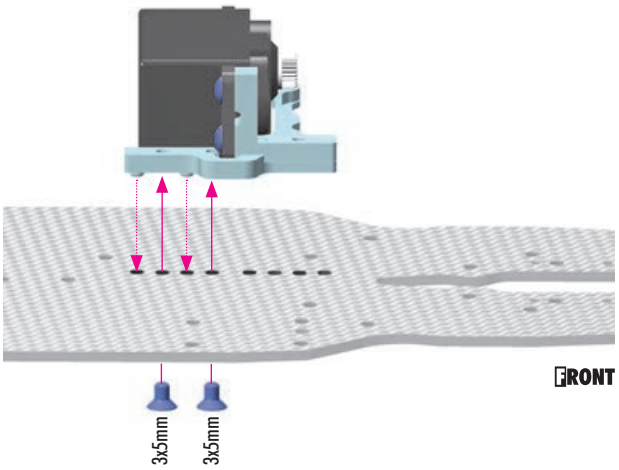
SERVO MOUNT ASSEMBLY - **REARWARD ALTERNATIVE**

1x 903304 SFH M3x4

3x 903305 SFH M3x5



The **REARWARD POSITION** is a good standard setting recommended for high traction carpet conditions.



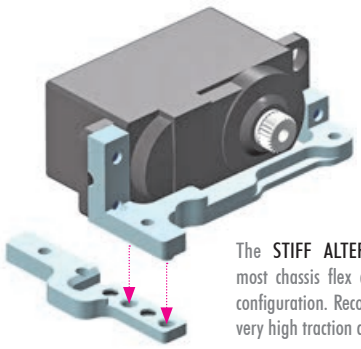
ALTERNATIVE 3

SERVO MOUNT ASSEMBLY - **STIFF ALTERNATIVE**

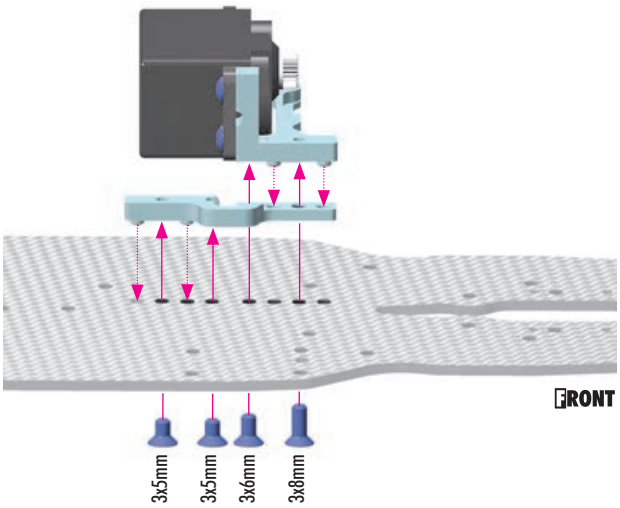
2x 903305 SFH M3x5

1x 903306 SFH M3x6

1x 903308 SFH M3x8



The **STIFF ALTERNATIVE** removes the most chassis flex and is the most stable configuration. Recommended for high and very high traction conditions.



1x 903308 SFH M3x8

VIDEO TECH TIP

WEIGHT BALANCE

ELECTRONICS INSTALLATION

Feed the receiver wire into the antenna tube.

Receiver (NOT INCLUDED)

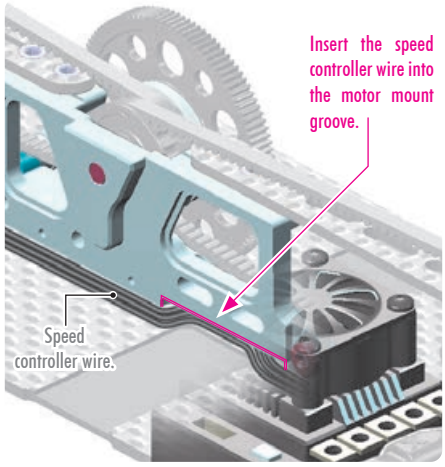
CA GLUE

NOTE: If the antenna tube does NOT hold the antenna properly, apply a small drop of the CA glue to the outside end of the antenna tube while inserting it into the holder. Make sure NOT to apply glue to the inside of the antenna tube, or the antenna wire will get permanently stuck.

Speed Controller (NOT INCLUDED)

OPTION
Double-sided Tape
HUDY #107875
(NOT INCLUDED)

IMPORTANT!
When installing the motor, ensure the speed controller wire can move freely to avoid chassis tweak and potential damage to the speed controller wire.



OPTION #293086
HUDY PURE TUNGSTEN WEIGHT THIN 15g - (24.5x24.5mm)

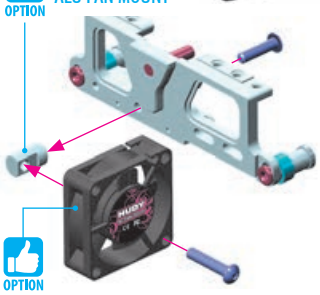
OPTION #293087
HUDY PURE TUNGSTEN WEIGHT THIN 20g - (31x26mm)

For perfect left-to-right balance, we recommend using HUDY pure tungsten weights under your electronics.

2x 902308 SH M3x8

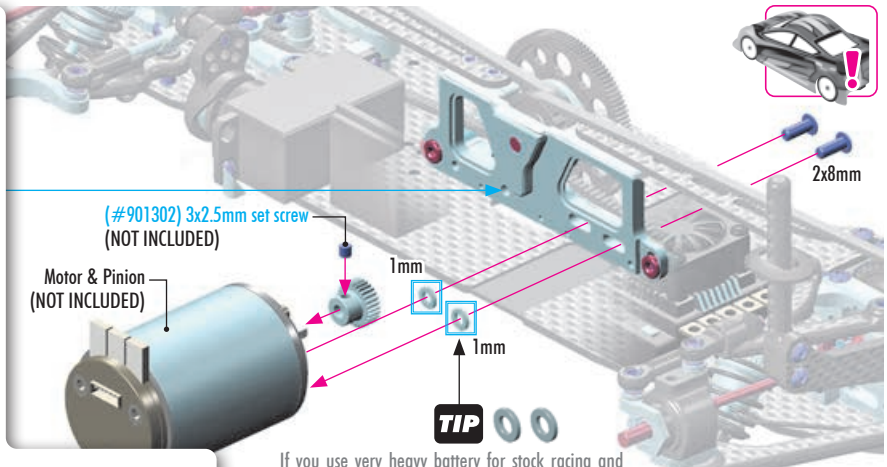
OPTION #293101 HUDY ALU RC FAN 30mm SIDE MOUNT 2 HOLE

OPTION #306410
ALU FAN MOUNT



OPTION

#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

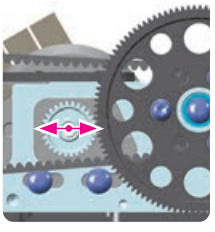


If you use very heavy battery for stock racing and very light speedo and motor, you can use shims between motor and motor mount to move the weight more outside on the motor side which can help to have same weight balance left and right. You can use shims #303122 (3x6x1mm) NOT INCLUDED in kit.

GEAR MESH

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.



OPTION

ALU PINION GEARS (48P)		ALU PINION GEARS (64P)			
#305912 12T / 48P	#294024 24T / 48P	#305968 18T / 64P	#294130 30T / 64P	#294142 42T / 64P	#294154 54T / 64P
#305913 13T / 48P	#305925 25T / 48P	#305969 19T / 64P	#294131 31T / 64P	#294143 43T / 64P	#294155 55T / 64P
#305914 14T / 48P	#305926 26T / 48P	#305970 20T / 64P	#294132 32T / 64P	#294144 44T / 64P	#294156 56T / 64P
#305915 15T / 48P	#305927 27T / 48P	#305971 21T / 64P	#294133 33T / 64P	#294145 45T / 64P	#294157 57T / 64P
#305916 16T / 48P	#305928 28T / 48P	#305972 22T / 64P	#305984 34T / 64P	#294146 46T / 64P	#294158 58T / 64P
#294017 17T / 48P	#305929 29T / 48P	#305973 23T / 64P	#305985 35T / 64P	#294147 47T / 64P	#294159 59T / 64P
#305918 18T / 48P	#294030 30T / 48P	#305974 24T / 64P	#294136 36T / 64P	#294148 48T / 64P	#294160 60T / 64P
#294019 19T / 48P	#305931 31T / 48P	#305975 25T / 64P	#294137 37T / 64P	#294149 49T / 64P	#294162 62T / 64P
#294020 20T / 48P	#305932 32T / 48P	#294126 26T / 64P	#294138 38T / 64P	#294150 50T / 64P	#294164 64T / 64P
#294021 21T / 48P	#294033 33T / 48P	#294127 27T / 64P	#294139 39T / 64P	#294151 51T / 64P	
#294022 22T / 48P	#305934 34T / 48P	#294128 28T / 64P	#294140 40T / 64P	#294152 52T / 64P	
#294023 23T / 48P	#294035 35T / 48P	#294129 29T / 64P	#294141 41T / 64P	#294153 53T / 64P	

US SPEC CLASS

FINAL DRIVE RATIO - GEARING CHART

Spur : Pinion * 1.9 = FDR

PINION GEARS 64P		SPUR GEARS 64P															
		-	-	-	-	-	#305860	#305862	-	#305866	#305869	#305870	-	#305874	#305876	#305878	#305880
		80T	82T	84T	86T	88T	90T	92T	94T	96T	99T	100T	102T	104T	106T	108T	110T
#305970	20T														10.07	10.26	10.45
#305971	21T														9.59	9.77	9.95
#305972	22T													8.98	9.15	9.33	9.50
#305973	23T													8.59	8.76	8.92	9.09
#305974	24T												8.08	8.23	8.39	8.55	8.71
#305975	25T												7.75	7.90	8.06	8.21	8.36
#294126	26T											7.31	7.45	7.60	7.75	7.89	8.04
#294127	27T											7.04	7.18	7.32	7.46	7.60	7.74
#294128	28T										6.72	6.79	6.92	7.06	7.19	7.33	7.46
#294129	29T										6.49	6.55	6.68	6.81	6.94	7.08	7.21
#294130	30T									6.08	6.27	6.33	6.46	6.59	6.71	6.84	6.97
#294131	31T									5.88	6.07	6.13	6.25	6.37	6.50	6.62	6.74
#294132	32T								5.58	5.70	5.88	5.94	6.06	6.18	6.29	6.41	6.53
#294133	33T								5.41	5.53	5.70	5.76	5.87	5.99	6.10	6.22	6.33
#305984	34T							5.14	5.25	5.36	5.53	5.59	5.70	5.81	5.92	6.04	6.15
#305985	35T							4.99	5.10	5.21	5.37	5.43	5.54	5.65	5.75	5.86	5.97
#294136	36T						4.75	4.86	4.96	5.07	5.23	5.28	5.38	5.49	5.59	5.70	5.81
#294137	37T						4.62	4.72	4.83	4.93	5.08	5.14	5.24	5.34	5.44	5.55	5.65
#294138	38T					4.40	4.50	4.60	4.70	4.80	4.95	5.00	5.10	5.20	5.30	5.40	
#294139	39T					4.29	4.38	4.48	4.58	4.68	4.82	4.87	4.97	5.07	5.16	5.26	
#294140	40T				4.09	4.18	4.28	4.37	4.47	4.56	4.70	4.75	4.85	4.94	5.04		
#294141	41T				3.99	4.08	4.17	4.26	4.36	4.45	4.59	4.63	4.73	4.82	4.91		
#294142	42T			3.80	3.89	3.98	4.07	4.16	4.25	4.34	4.48	4.52	4.61	4.70			
#294143	43T			3.71	3.80	3.89	3.98	4.07	4.15	4.24	4.37	4.42	4.51	4.60			
#294144	44T		3.54	3.63	3.71	3.80	3.89	3.97	4.06	4.15	4.28	4.32	4.40				
#294145	45T		3.46	3.55	3.63	3.72	3.80	3.88	3.97	4.05	4.18	4.22	4.31				
#294146	46T	3.30	3.39	3.47	3.55	3.63	3.72	3.80	3.88	3.97	4.09	4.13					
#294147	47T	3.23	3.31	3.40	3.48	3.56	3.64	3.72	3.80	3.88	4.00	4.04					
#294148	48T	3.17	3.25	3.33	3.40	3.48	3.56	3.64	3.72	3.80	3.92						
#294149	49T	3.10	3.18	3.26	3.33	3.41	3.49	3.57	3.64	3.72	3.84						
#294150	50T	3.04	3.12	3.19	3.27	3.34	3.42	3.50	3.57	3.65							
#294151	51T	2.98	3.05	3.13	3.20	3.28	3.35	3.43	3.50	3.58							
#294152	52T	2.92	3.00	3.07	3.14	3.22	3.29	3.36	3.43								
#294153	53T	2.87	2.94	3.01	3.08	3.15	3.23	3.30	3.37								
#294154	54T	2.81	2.89	2.96	3.03	3.10	3.17	3.24									
#294155	55T	2.76	2.83	2.90	2.97	3.04	3.11	3.18									
#294156	56T	2.71	2.78	2.85	2.92	2.99	3.05										

CLASS

- 21.5T TC
- 21.5T / 25.5T OVERLAP
- 25.5T VTA
- US-GT / VTA OVERLAP
- US-GT
- NOT USABLE

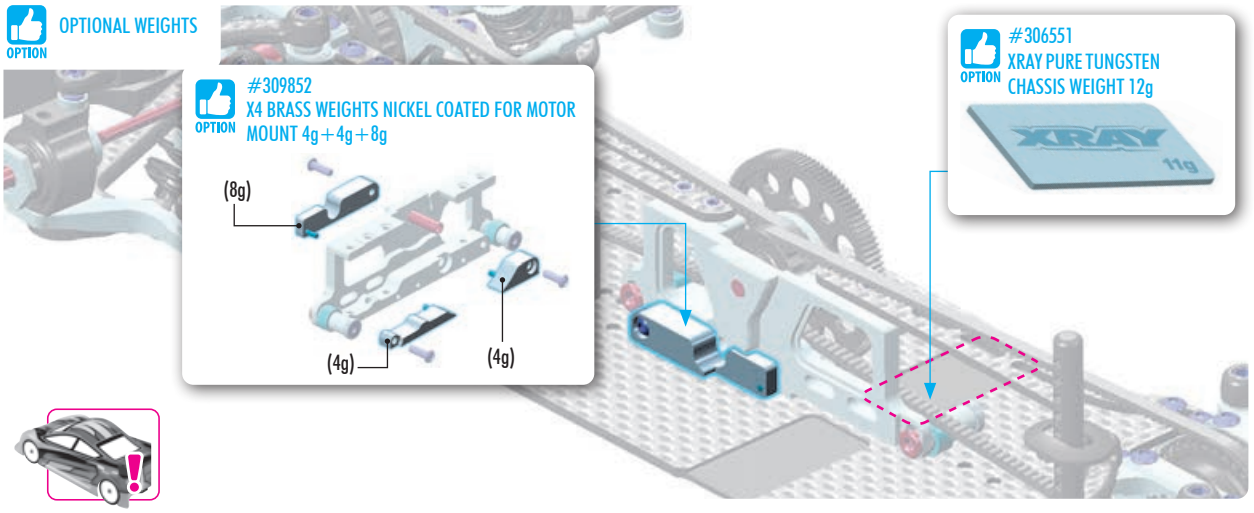
VIDEO TECH TIP

WEIGHT BALANCE

OPTIONAL WEIGHTS

OPTION #309852
X4 BRASS WEIGHTS NICKEL COATED FOR MOTOR MOUNT 4g+4g+8g

OPTION #306551
XRAY PURE TUNGSTEN CHASSIS WEIGHT 12g

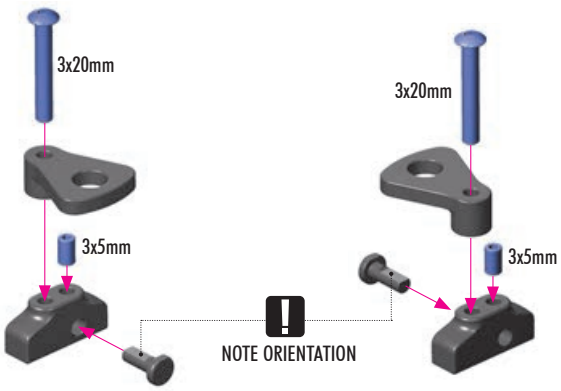


2x 901305 SB M3x5

2x 902320 SH M3x20

VIDEO TECH TIP

BATTERY MOUNTING SYSTEM

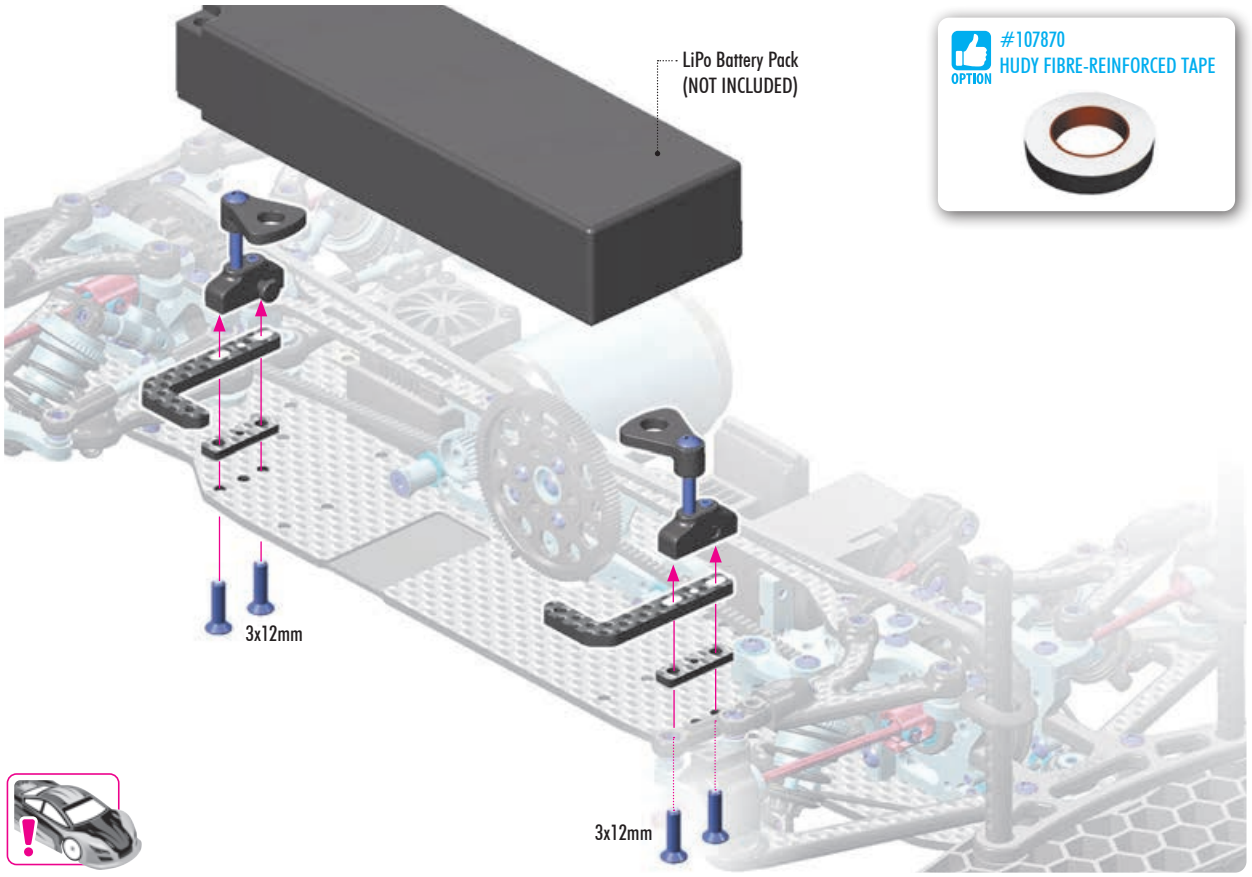


To ensure correct functioning of the battery holder, DO NOT overtighten the screw; the holder must be able to move.

4x 903312
SFH M3x12

VIDEO TECH TIP

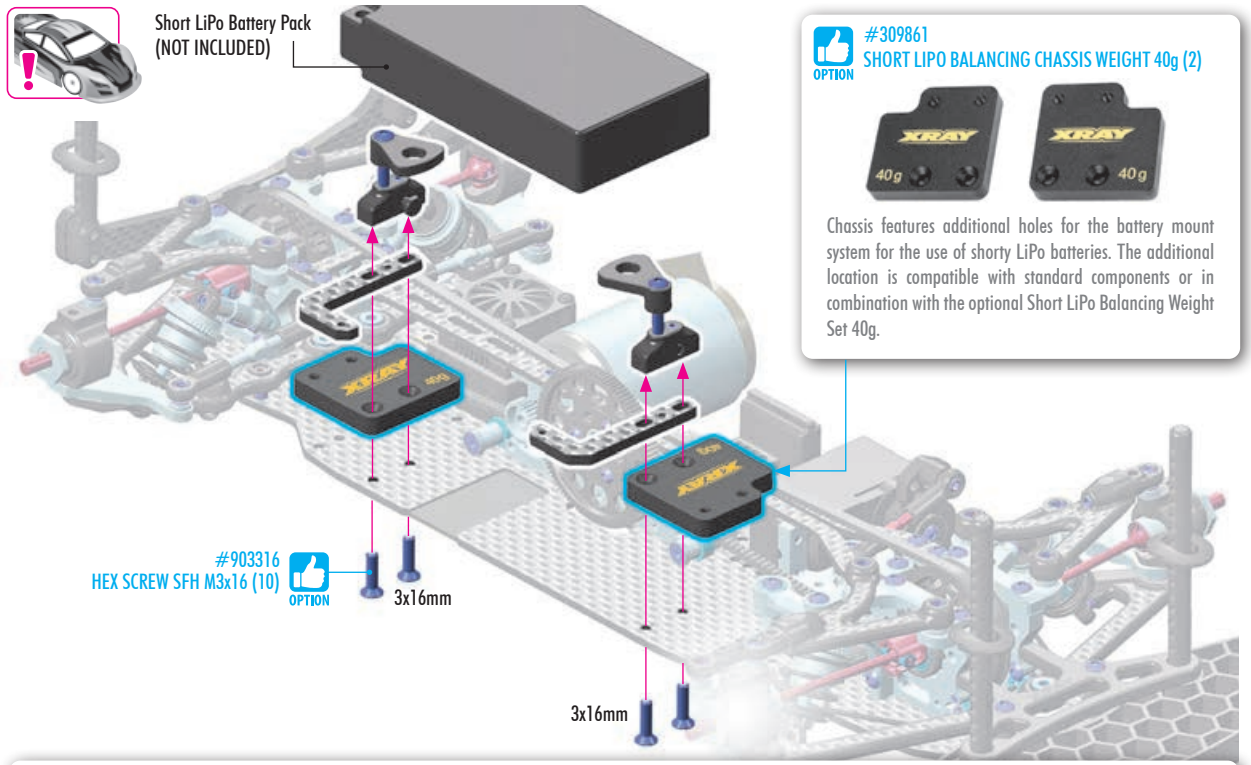
WEIGHT BALANCE



OPTION #107870
HUDY FIBRE-REINFORCED TAPE

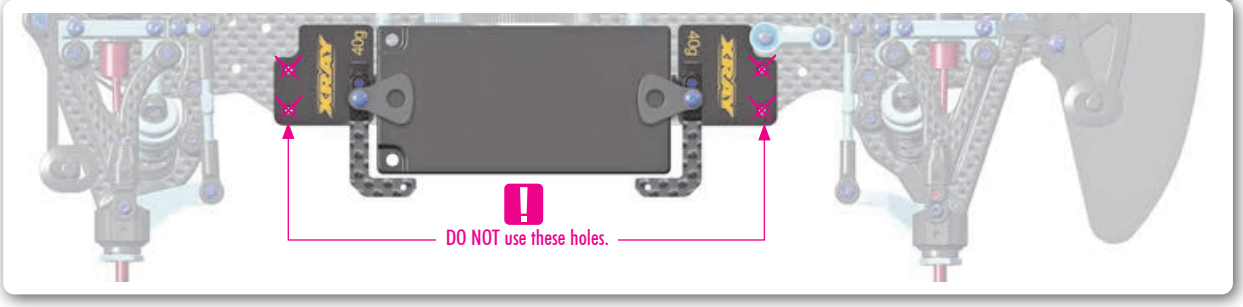
4x 903316
SFH M3x16

OPTION



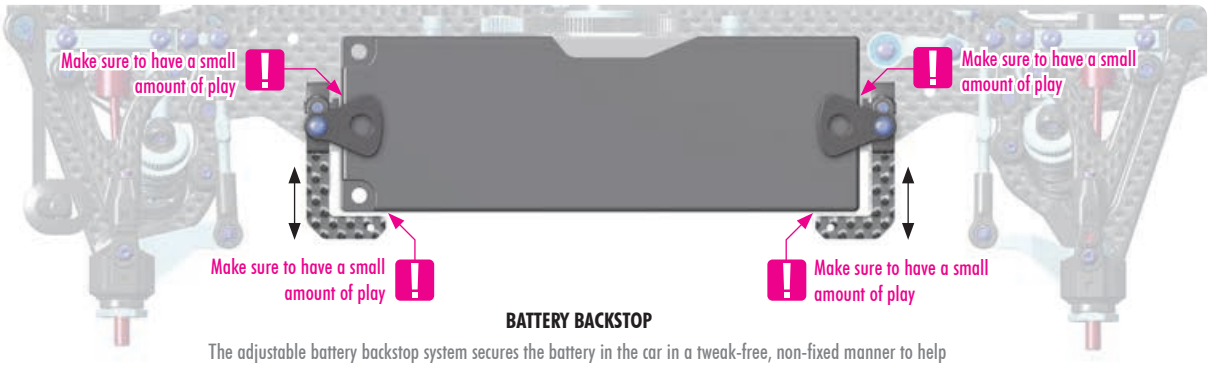
OPTION #309861
SHORT LIPO BALANCING CHASSIS WEIGHT 40g (2)

Chassis features additional holes for the battery mount system for the use of shorty LiPo batteries. The additional location is compatible with standard components or in combination with the optional Short LiPo Balancing Weight Set 40g.



VIDEO TECH TIP

BATTERY MOUNTING SYSTEM



BATTERY BACKSTOP

The 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.

4x 960240 N M4

OPTION WHEELS & TIRES & INSERTS
(HUDY #803053 C3-28)
(HUDY #803062 A1-36)

OPTION

ALU REAR WING SHIM		
#353561	SILVER	OPTION
#293561	SILVER	OPTION
#293561-O	ORANGE	OPTION

OPTION

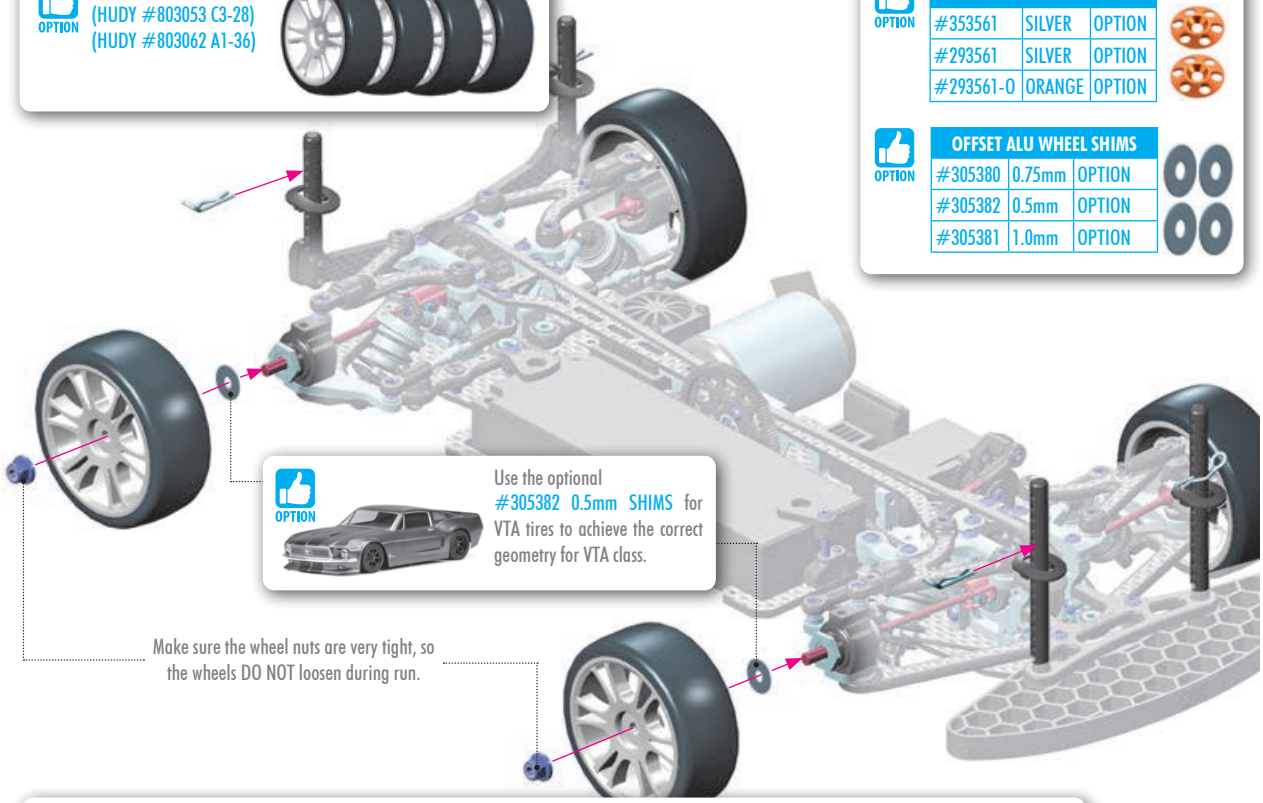
OFFSET ALU WHEEL SHIMS		
#305380	0.75mm	OPTION
#305382	0.5mm	OPTION
#305381	1.0mm	OPTION

VIDEO TECH TIP

TRACK WIDTH (OFFSET)

DOWNSTOP & RIDE HEIGHT

CHASSIS TWEAK



OPTION

Use the optional #305382 0.5mm SHIMS for VTA tires to achieve the correct geometry for VTA class.

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

OPTION #293081
HUDY PURE TUNGSTEN WEIGHT 5g

OPTION #293082
HUDY PURE TUNGSTEN WEIGHT 10g

OPTION #309862
XRAY STAINLESS STEEL WEIGHT FOR NARROW BATTERY PACK 35g

OPTION #326181
STAINLESS STEEL BATTERY WEIGHT 35g

OPTION #293083
HUDY PURE TUNGSTEN WEIGHT 15g

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

BODY STOP SYSTEM

The X4 features an adjustable front body upstop system incorporated into the 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.

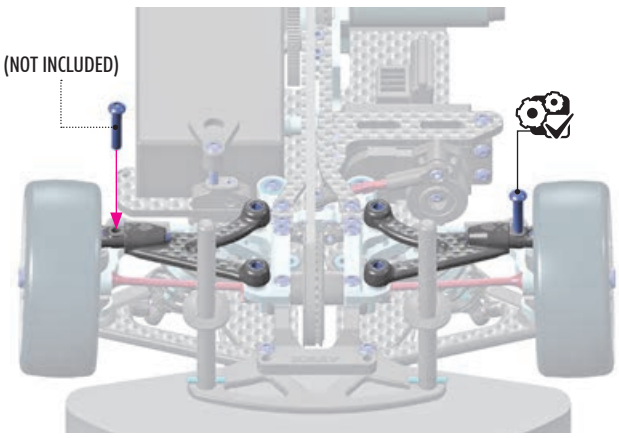
VIDEO TECH TIP

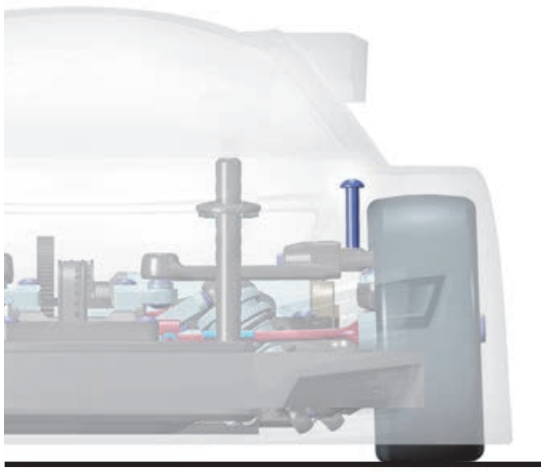
BODY UPSTOPS

OPTION

BODY STOP ALTERNATIVE
with screw
(#902316 SH M3x16mm)

(NOT INCLUDED)



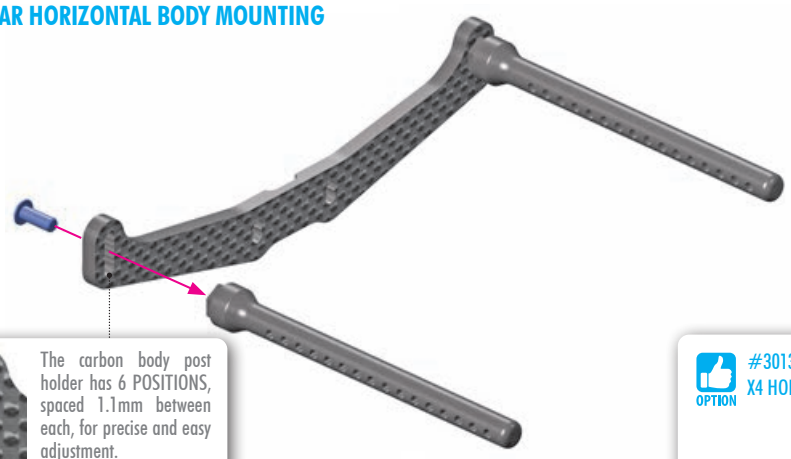


VIDEO TECH TIP

HORIZONTAL BODY MOUNTING

OPTION

REAR HORIZONTAL BODY MOUNTING



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

OPTION

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

OPTION

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

Optional HARD posts eliminate 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.

OPTION

#301349
X4 HORIZONTAL BODY POST MOUNTING GAUGE

Horizontal Body Post Mounting Gauge is special tool designed for X4 that helps to mark the horizontal rear body mounts position on the body shell for a perfect fit on the car and featuring two special scales to check and adjust the proper position of the body. The first scale is used to adjust the rear part of the body and the second scale is used to check the body height around the car. Fits all popular body shells.

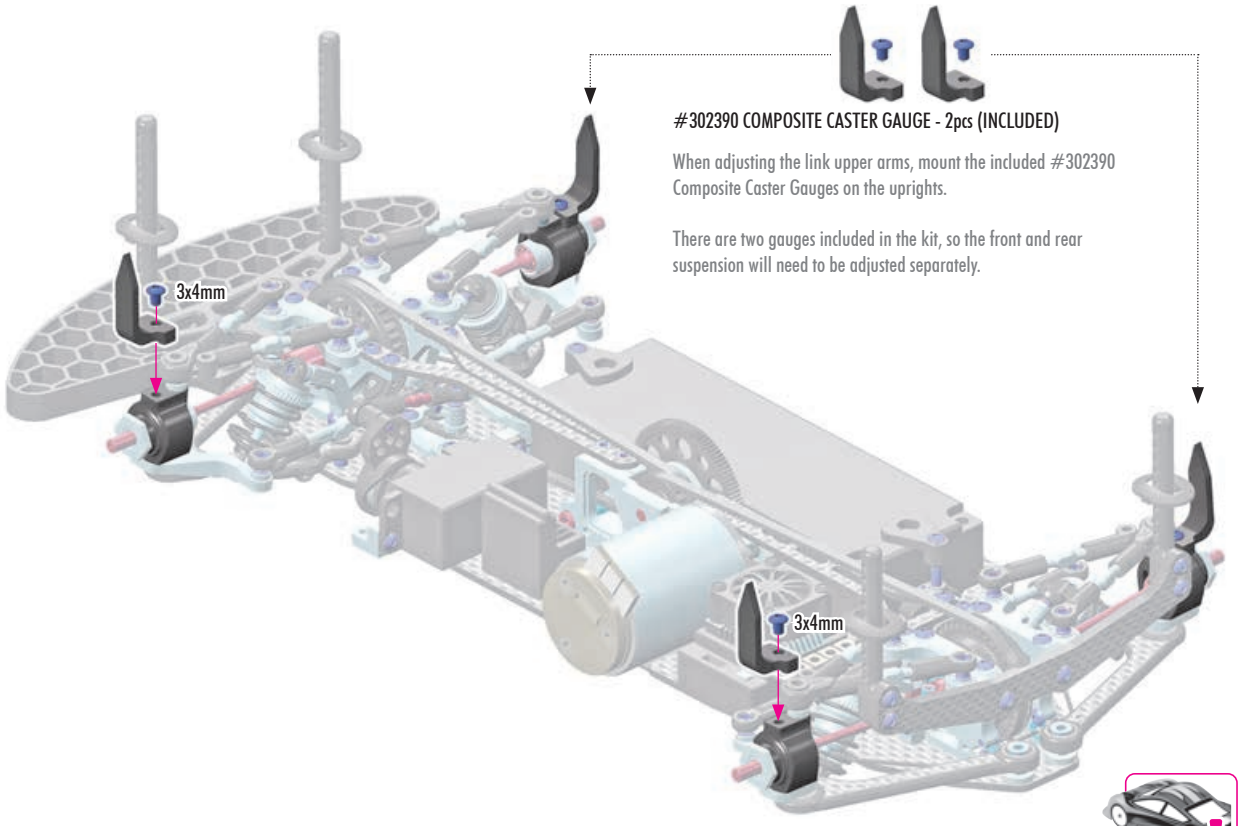
MISTAKES USERS MAKE

COMMON MISTAKES THAT X4 USERS MAKE

Make sure to watch the video of Alexander Hagberg explaining about common mistakes that even experienced drivers make and how to avoid them.

UPPER ARM LINKS ADJUSTMENT

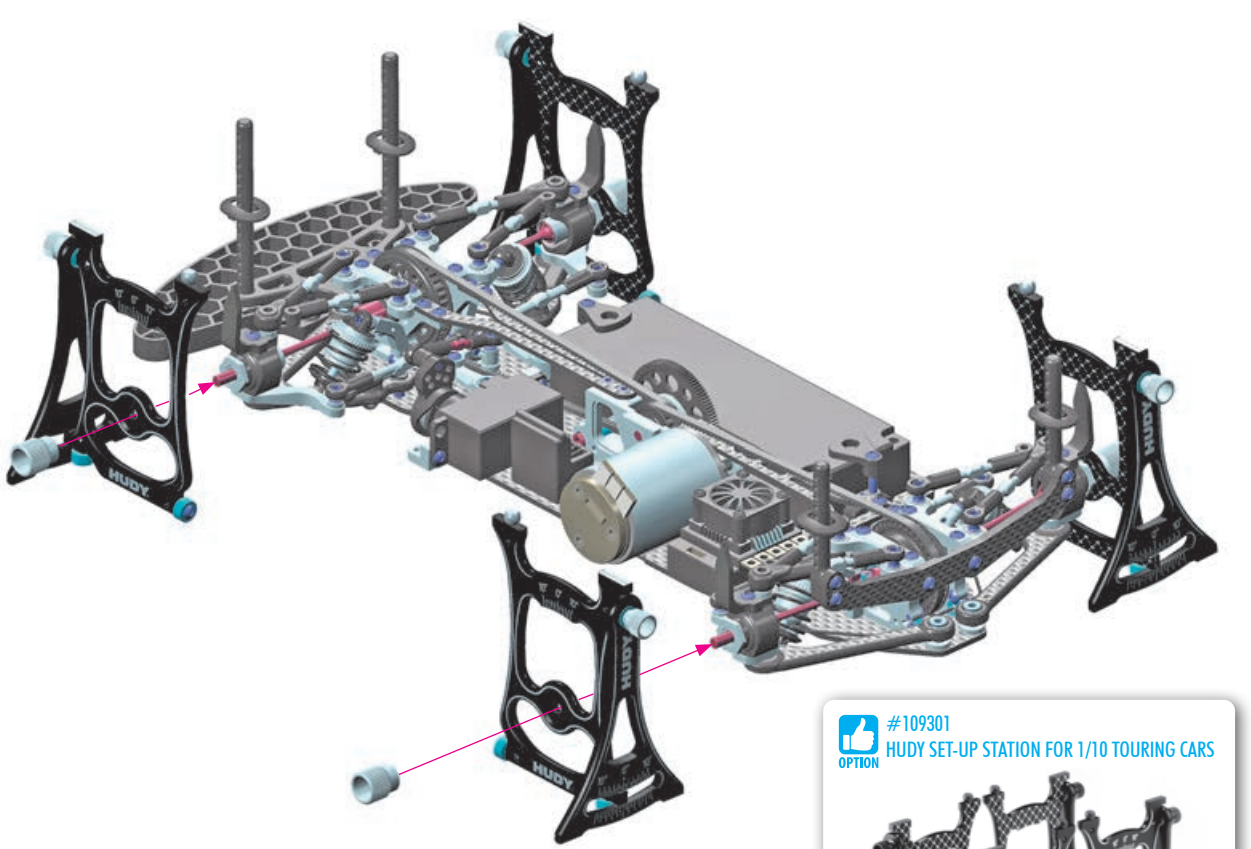
2x 902304 SH M3x4



#302390 COMPOSITE CASTER GAUGE - 2pcs (INCLUDED)

When adjusting the link upper arms, mount the included #302390 Composite Caster Gauges on the uprights.

There are two gauges included in the kit, so the front and rear suspension will need to be adjusted separately.



OPTION #109301
HUDY SET-UP STATION FOR 1/10 TOURING CARS

VIDEO TECH TIP

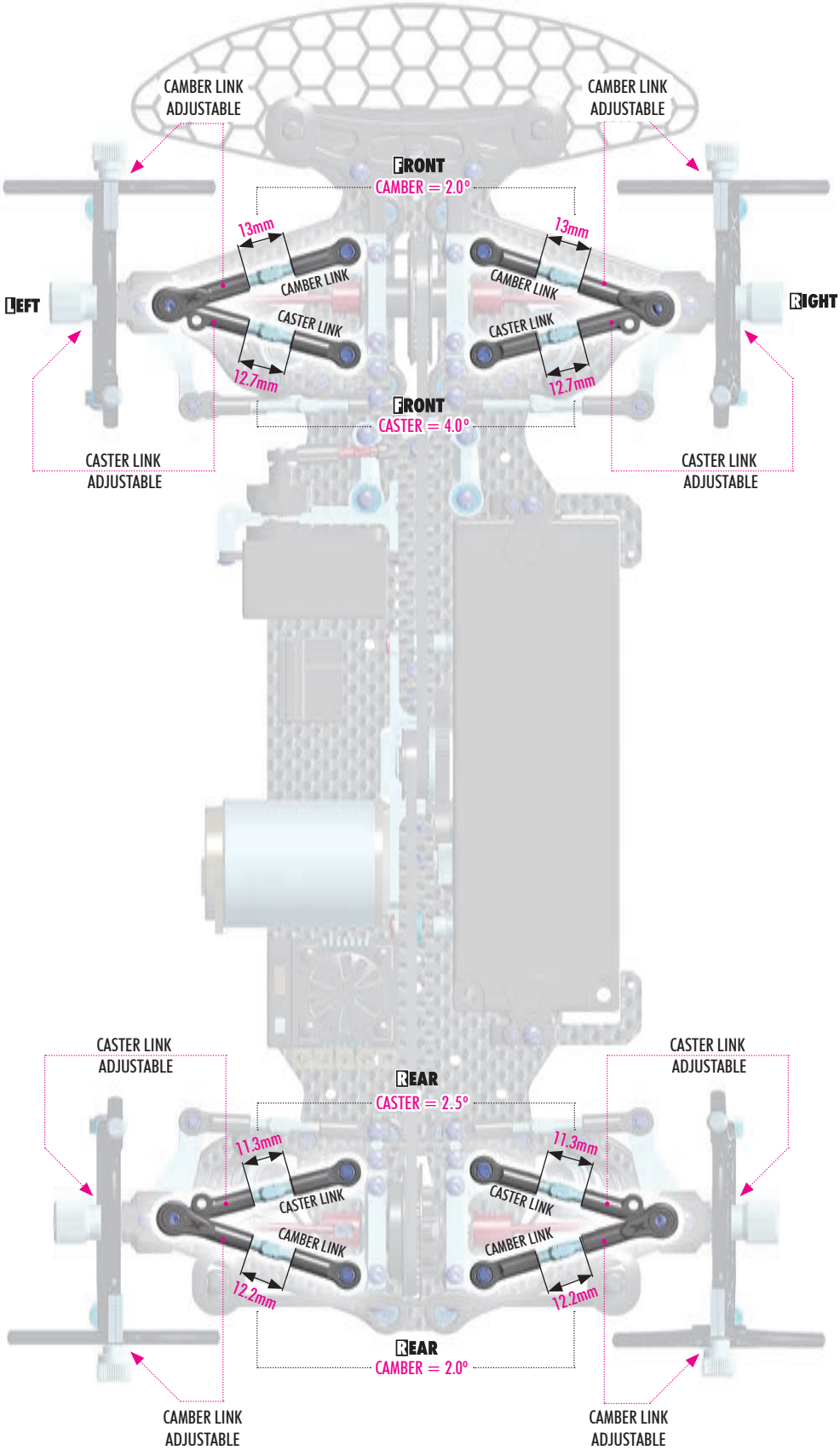
UPPER LINKS ADJUSTMENT

Setting the upper link system caster and camber requires extra attention. It is recommended to start with the kit upper arm lengths and then fine tune from that position.

To adjust caster while retaining the same camber setting, both camber and caster links will be adjusted by equal but opposite amounts. For example, to increase front suspension caster, the caster link is shortened and the camber link is lengthened by the same value.

Utilize the XRAY Composite Caster Gauges (#302390) to fine tune and verify any caster adjustments.

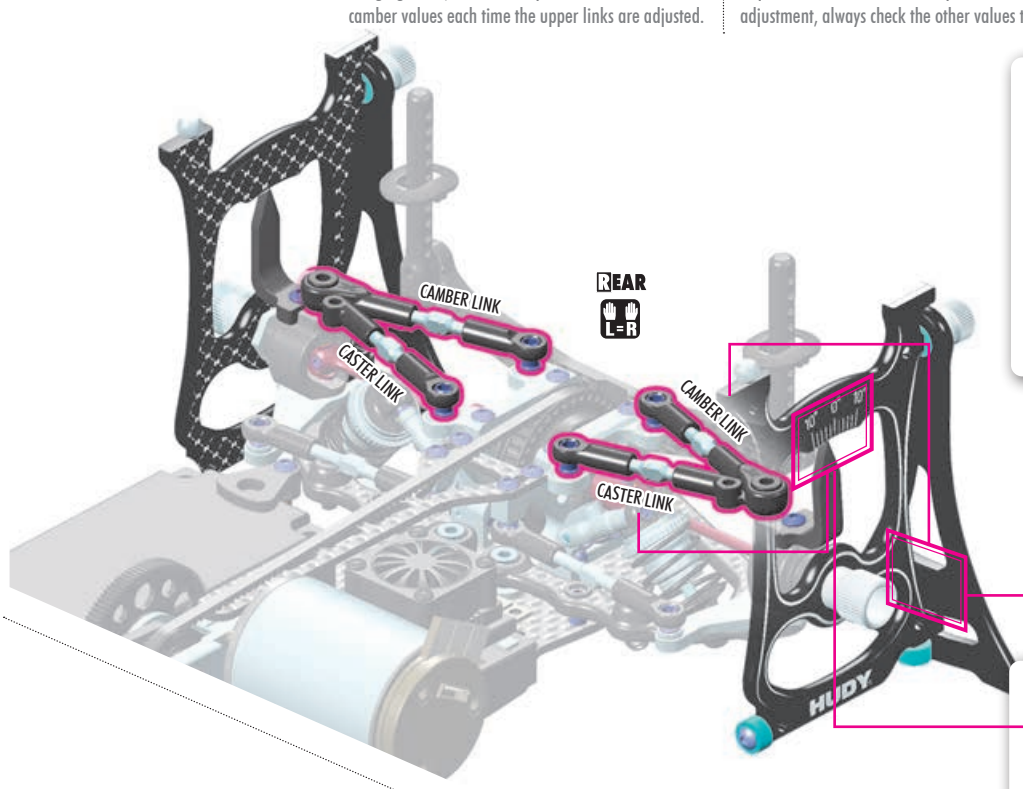
Make sure that all ball cups are straight and aligned over the ball studs after making adjustments to ensure free movement of the upper link arms, and prevent binding during suspension movement.



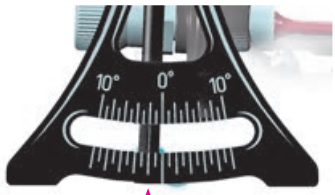
UPPER ARM LINKS ADJUSTMENT

CASTER ADJUSTMENT
When changing caster, it is necessary to check both caster and camber values each time the upper links are adjusted.

CAMBER ADJUSTMENT
Adjustment of caster will directly affect camber and vice-versa. After any adjustment, always check the other values to ensure proper geometry.

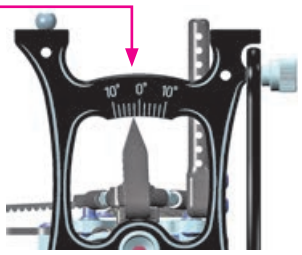


1 LINE ON SET-UP SYSTEM = 1° CAMBER



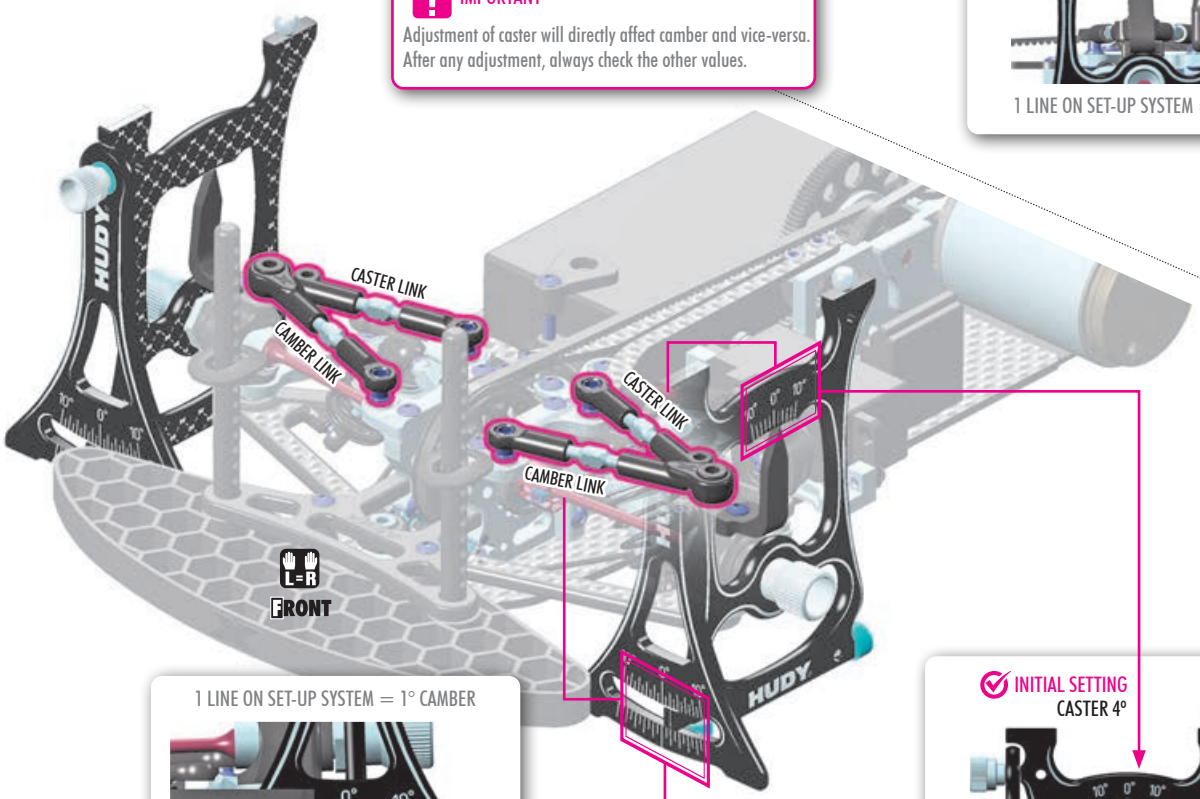
CAMBER 2°
INITIAL SETTING
REAR

INITIAL SETTING
CASTER 2°
REAR

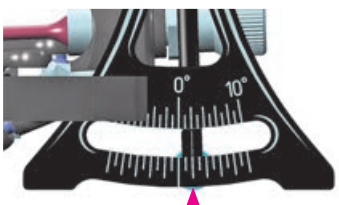


1 LINE ON SET-UP SYSTEM = 2° CASTER

IMPORTANT
Adjustment of caster will directly affect camber and vice-versa. After any adjustment, always check the other values.

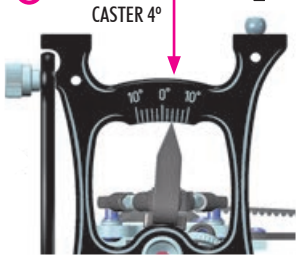


1 LINE ON SET-UP SYSTEM = 1° CAMBER



CAMBER 2°
INITIAL SETTING
FRONT

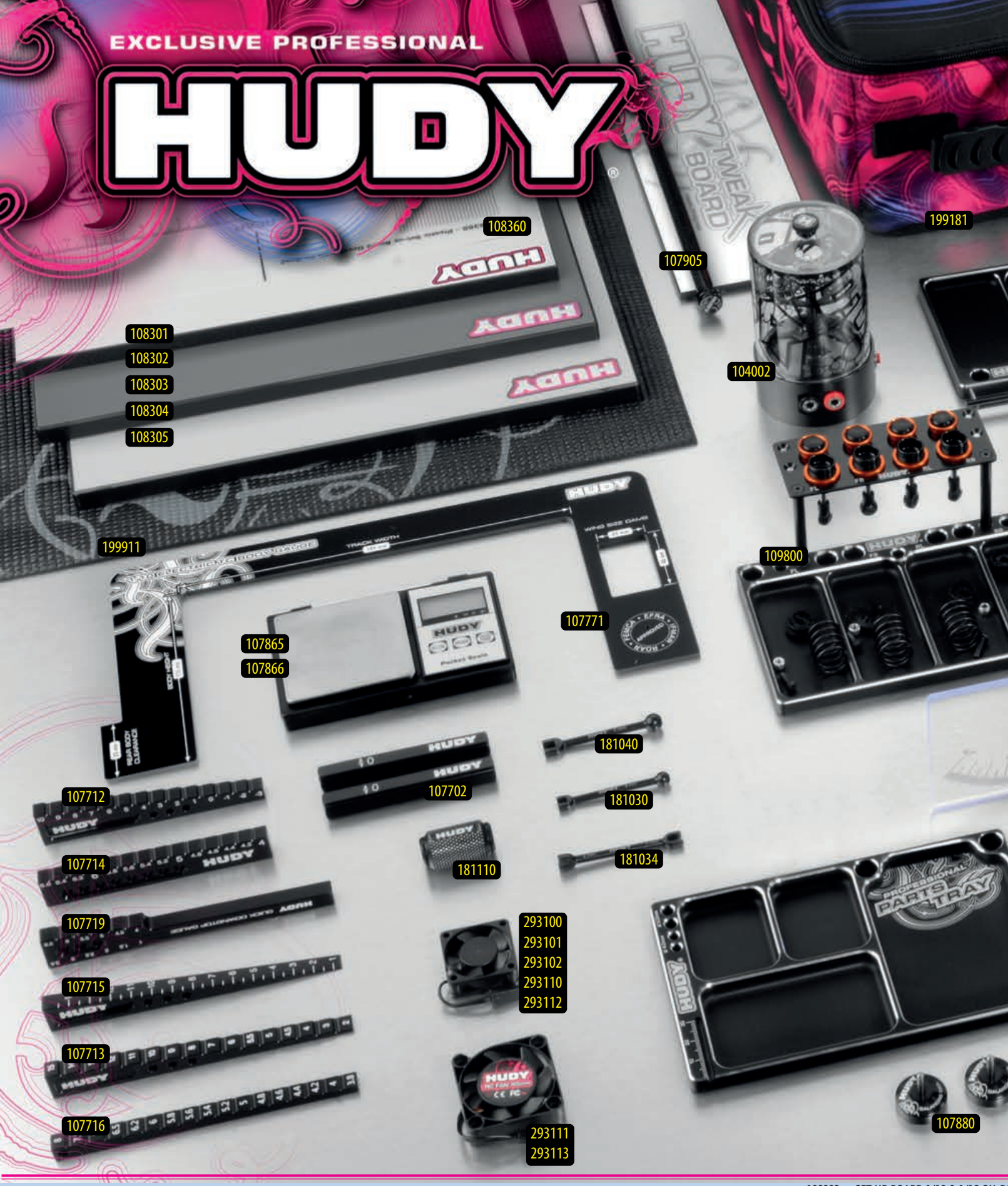
INITIAL SETTING
CASTER 4°
FRONT



1 LINE ON SET-UP SYSTEM = 2° CASTER

EXCLUSIVE PROFESSIONAL

HUDY



104002	HUDY AIR VAC - VACUUM PUMP - ON-ROAD	107750	HUDY CARBON QUICK CAMBER GAUGE 1.5°, 2°, 2.5° FOR 1/10 TC	108303	SET-UP BOARD 1/10 & 1/12 ON-R
106260	HUDY TIRE ADDITIVE - TIRE GRIPPER - 50ML - V2	107771	HUDY BODY GAUGE 1/10 ELECTRIC TOURING CARS	108304	SET-UP BOARD 1/10 & 1/12 ON-R
107090	HUDY BEARING CHECKING TOOL	107855	HUDY PIT LED	108305	SET-UP BOARD 1/10 & 1/12 ON-R
107601	LIMITED EDITION - REAMER FOR BODY 0-9MM + COVER - SMALL	107865	HUDY PROFESSIONAL DIGITAL POCKET SCALE 300G/0.01G	108360	PLASTIC SET-UP BOARD DECAL 28
107643	LIMITED EDITION - ARM REAMER # 3.0MM	107870	HUDY FIBRE-REINFORCED TAPE - BLACK	109301	HUDY SET-UP STATION FOR 1/10 T
107702	CHASSIS DROOP GAUGE SUPPORT BLOCKS FOR 1/10 (2)	107875	HUDY ULTRA DOUBLE-SIDED TAPE	109351	SET-UP STATION & SET-UP TOOLS
107712	CHASSIS DROOP GAUGE -3.0-10MM FOR 1/10 CARS (10MM)	107880	CHASSIS BALANCING TOOL (2)	109360	ALU NUT FOR 1/10 TOURING SET-
107713	CHASSIS RIDE HEIGHT GAUGE STEPPED 2.0-15.0MM	107904	HUDY QUICK-TWEAK STATION 1/10 & 1/12 ON-ROAD	109370	ALU SET-UP WHEEL FOR 1/10 RUB
107714	ULTRA-FINE CHASSIS DROOP GAUGE 4.0-6.6MM	107905	HUDY TWEAK BOARD SET	109800	HUDY ALU TRAY FOR ON-ROAD D
107715	CHASSIS RIDE HEIGHT GAUGE 1.0-15.0MM (BEVELED)	108150	HUDY 1/10 TOURING CAR STAND - V3	109840	HUDY ALU TRAY FOR 1/10 OFF-RO
107716	ULTRA-FINE CHASSIS RIDE HEIGHT GAUGE 3.8-8.0MM	108190	HUDY ALU TRAY FOR PARTS	109860	HUDY ALU TRAY FOR SET-UP SYST
107719	QUICK DOWNSTOP GAUGE TOOL 1.0-6.5MM	108301	SET-UP BOARD 1/10 & 1/12 ON-ROAD-LIGHTWEIGHT-GREY	109880	HUDY ALU TRAY FOR ACCESSORIE
107720	CHASSIS RIDE HEIGHT GAUGE 30-17MM FOR 1/8 & 1/10 OFF-ROAD	108302	SET-UP BOARD 1/10 & 1/12 ON-ROAD-LIGHTWEIGHT-SILVER GREY	111545	LIMITED EDITION - ALLEN WRENC

OAD - LIGHTWEIGHT-DARK GREY
OAD - LIGHTWEIGHT-TITAN
OAD - LIGHTWEIGHT-BLACK
2X386MM - 1/10 TC
TOURING CARS
+ CARRYING BAG 1/10 TC
UP SYSTEM (4)
BER TIRES (4)
FF & SHOCKS
AD DIFF ASSEMBLY
EM
S & PIT LED
H # 1.5MM

112045 LIMITED EDITION - ALLEN WRENCH # 2.0MM
113045 LIMITED EDITION - ALLEN WRENCH # 3.0MM
132045 LIMITED EDITION - ALLEN WRENCH + BALL REPL. TIP # 2.0MM
175535 LIMITED EDITION - SOCKET DRIVER # 5.5MM
177035 LIMITED EDITION - SOCKET DRIVER # 7.0MM
181030 HUDY SPRING STEEL TURNBUCKLE WRENCH 3 MM
181034 TURNBUCKLE WRENCH 3 & 4MM - HUDY SPRING STEEL™
181040 TURNBUCKLE WRENCH 4MM - HUDY SPRING STEEL™
181110 HUDY BALL JOINT WRENCH
183011 HUDY PROFESSIONAL MULTI TOOL
188981 HUDY POCKET HOBBY KNIFE
188990 HUDY PROFESSIONAL BODY SCISSORS
199060 HUDY ALU TOOL STAND

199181 HUDY CAR BAG - 1/10 ON-ROAD - TOURING - PAN CAR
199270 HUDY LIPO SAFETY BAG
199911 HUDY PIT MAT ROLL 750X1200MM WITH PRINTING
293100 HUDY ALU RC FAN 30MM - BOTTOM MOUNT 2 HOLE
293101 HUDY ALU RC FAN 30MM - SIDE MOUNT 2 HOLE
293102 HUDY ALU RC FAN 30MM - TOP/SIDE MOUNT 4 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
298100 HUDY TIN ROUND BOX 80x30MM

For more information about tools, set-up equipment & accessories suitable for your car please visit:
www.hudy.net

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 PROFFESIONAL RACING STOPWATCH XL DISPLAY
106290	HUDY PROFFESIONAL 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
803053	HUDY 1/10 TC CARPET TIRES C3-28 (4)
803062	HUDY 1/10 TC TIRES A1-36 - ASPHALT (4)
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)
293403	ALU CLAMP SERVO HORN - FUTABA, SAVÖX - OFFSET 1-HOLE M3 - 25T
293493	ALU SERVO HORN - FUTABA, SAVÖX - OFFSET 1-HOLE M3 - 25T - V2
294017-35	HUDY ALU ULTRA-LIGHT PINION GEAR - HARD COATED - 23T / 48
294126-64	HUDY ALU ULTRA-LIGHT PINION GEAR - HARD COATED - 40T / 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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www.hudy.net

www.teamxray.com

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