

1 / 8 E L E C T R I C G T

XRAY GTXE



INSTRUCTION MANUAL

GTXE '27

BEFORE YOU START

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

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

CUSTOMER SUPPORT

We have made every effort to make these instructions as easy to understand as possible. However, if you have any difficulties, problems, or questions, please DO NOT hesitate to contact the XRAY support team at info@teamxray.com. Also, please visit our Web site at www.teamxray.com to find the latest updates, set-up information, option parts, and many other goodies. We pride ourselves on taking excellent care of our customers.

You can join thousands of XRAY fans and enthusiasts in our online community at: www.teamxray.com

Read carefully and fully understand the instructions before beginning assembly.

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

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

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XRAY USA

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E-mail: xray@rcamerica.com

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

SAFETY PRECAUTIONS

Contains:

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

WARNING: This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm.

CAUTION: CANCER HAZARD

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

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

Take appropriate safety precautions prior to operating this model. You are responsible for this model's assembly and safe operation! Please read the instruction manual before building and operating this model and follow all safety precautions. Always keep the instruction

manual at hand for quick reference, even after completing the assembly. Use only genuine and original authentic XRAY parts for maximum performance. Using any third party parts on this model will void warranty immediately.

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



IMPORTANT NOTES - GENERAL

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

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

IMPORTANT NOTES – ELECTRICAL

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

R/C & BUILDING TIPS

- Make sure all fasteners are properly tightened. Check them periodically.
- Make sure that chassis screws DO NOT protrude from the chassis.
- For the best performance, it is very important that great care is taken to ensure the free movement of all parts.
- Clean all ball-bearings so they move very easily and freely.
- Tap or pre-thread the plastic parts when threading screws.

- Self-tapping screws cut threads into the parts when being tightened. DO NOT use excessive force when tightening the self-tapping screws because you may strip out the thread in the plastic. We recommended you stop tightening a screw when you feel some resistance.
- Ask your local hobby shop for any advice.

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

WARRANTY

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

Due to the high performance level of this model car you will need to periodically maintain and replace consumable components. Any and all warranty coverage will not cover replacement of any part or component damaged by neglect, abuse, or improper or unreasonable use. This includes but is not limited to damage from crashing, chemical and/or water damage, excessive moisture, improper or no maintenance, or user modifications

which compromise the integrity of components. Warranty will not cover components that are considered consumable on RC vehicles. XRAY DOES NOT pay nor refund shipping on any component sent to XRAY or its distributors for warranty. XRAY reserves the right to make the final determination of the warranty status of any component or part.

Limitations of Liability

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

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

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

QUALITY CERTIFICATE

XRAY MODEL RACING CARS uses only the highest quality materials, the best compounds for molded parts and the most sophisticated manufacturing processes of TQM (Total Quality Management). We guarantee that all parts of a newly-purchased kit are manufactured with the highest regard to quality. However, due to the many factors inherent in model racecar competition, we cannot guarantee any parts once you start racing the car. Products which

have been worn out, abused, neglected or improperly operated will not be covered under warranty.

We wish you enjoyment of this high-quality and high-performance RC car and wish you best success on the track!

In line with our policy of continuous product development, the exact specifications of the kit may vary. In the unlikely event of any problems with your new kit, you should contact the model shop where you purchased it, quoting the part number. We do reserve all rights to change any specification without prior notice. All rights reserved.

TOOLS REQUIRED



Power Tool Tip Allen 2.0 x 90mm
(HUDY #112071)



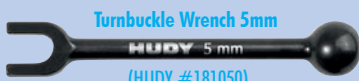
Power Tool Tip Allen 2.5 x 90mm
(HUDY #112571)



Turnbuckle Wrench 3mm
(HUDY #181030)



Turnbuckle Wrench 4mm
(HUDY #181040)



Turnbuckle Wrench 5mm
(HUDY #181050)



Special Tool for turnbuckles, nuts (HUDY #181090)



Wheel Nut Tool 17mm (HUDY #107570)
Flywheel/Wheel Nut Multi-Tool (HUDY #182016)



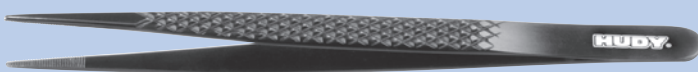
Cross Wrench Glowplug
(HUDY #107581)
• 10mm Socket
• 8mm Socket
• 5mm Hex



Ball Joint Wrench
(HUDY #181110)



Pocket Hobby Knife (HUDY #188981)



HUDY Tweezers Straight (HUDY #188970)



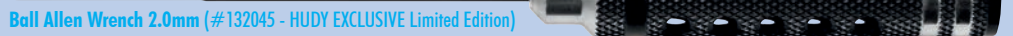
HUDY Tweezers Curved (HUDY #188971)



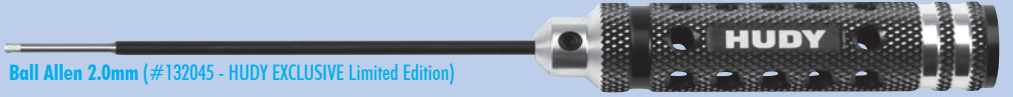
Allen 1.5mm (#111545 - HUDY EXCLUSIVE Limited Edition)



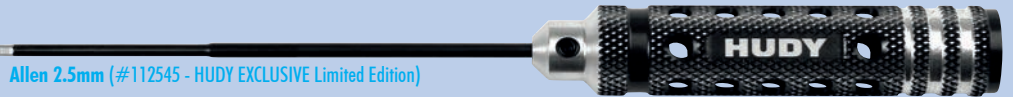
Allen 2.0mm (#112045 - HUDY EXCLUSIVE Limited Edition)



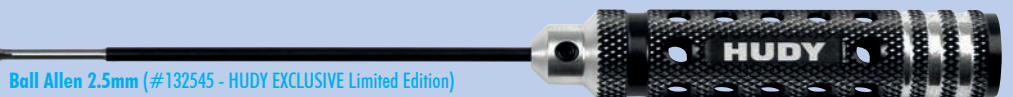
Ball Allen Wrench 2.0mm (#132045 - HUDY EXCLUSIVE Limited Edition)



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



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



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



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



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



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



Socket 5.0mm (#175035 - HUDY EXCLUSIVE Limited Edition)



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



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



Reamer (#107602 - HUDY EXCLUSIVE Limited Edition)



Blade Hobby Knife with Alu Handle (HUDY #188980)











Professional Multi-Tool
(HUDY #183011)



Scissors (HUDY #188990)

EQUIPMENT INCLUDED

<p>800cSt (#106381) HUDY Premium Silicone Oils</p>  <p>800cSt</p>  <p>OIL</p>	<p>50.000cSt (#106551) HUDY Premium Silicone Oils</p>  <p>50K cSt</p>  <p>OIL</p>	<p>500.000cSt (#106650) HUDY Premium Silicone Oils</p>  <p>500K cSt</p>  <p>OIL</p>	<p>(HUDY #106210) Premium Graphite Grease</p>   <p>GR GRAPHITE GREASE</p>
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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:

- 351200** **STYLE A** - indicates parts that are included in the bag marked for the section.
- 351190** **STYLE B** - indicates parts that are included in the box.
- 355000** **STYLE C** - indicates parts that are already assembled from previous steps.
- 359731** **STYLE D** - indicates parts that are optional.

EQUIPMENT REQUIRED

<p>Transmitter</p> 	<p>Receiver</p> 	<p>Speed Controller</p> 	<p>Steering Servo</p> 
<p>Battery Charger</p> 	<p>Electric Motor</p> 	<p> Pinion Gear (XRAY #355819~24) OPTION</p> 	<p>Lexan™ Paint</p> 
<p> Alu RC Fan 40mm (HUDY #293104) OPTION</p> 	<p> Double-sided Tape (HUDY #107875) OPTION</p> 	<p>Tires & Wheels</p> 	<p>CA glue</p>   <p>CA GLUE</p>
<p>LiPo Battery Saddle Pack Short & Mid-pack</p> 	<p> GT BODY (XRAY #359731) OPTION</p> 	<p> Bearing Oil (HUDY #106230) OPTION</p>   <p>OIL</p>	<p>Threadlock</p>   <p>TL THREAD LOCK</p>

MAINTENANCE

SHOCK MAINTENANCE

Correct refilling and bleeding are critical for consistent shock performance. When built correctly, frequent rebuilding is NOT required. Regularly inspect and replace damaged rubber bladders, O-rings, bent shock shafts, and worn or loose ball joints.

- Before each race, check shocks for air inside. Remove the spring, compress the shock fully, and listen for any whistling or squishy sound. If air is present, refill and bleed the shock.
- For high-level competition, refill and bleed shocks before major events.
- When building or pairing shocks, ensure they are equal in length & adjust lower ball joints as required.
- Inspect shocks after each race and replace oil as needed.

SUSPENSION & DRIVETRAIN MAINTENANCE

Check suspension for free movement with the shocks removed during building and operation, especially after running or crashes. The suspension must move freely under its own weight. If it DOES NOT move freely, use the appropriate HUDY Arm Reamer to clean and resize the suspension arm holes, or replace any bent components.

Check suspension free movement with the car ready to run. Always verify ride height. Press the car down and release it, then lift it up and release it. If the suspension is stuck up or down, common causes include dirty or bent suspension pivot pins, bent shock shafts, pivot balls set too tight in the steering blocks, or dirty/worn pivot balls. Clean out or replace damaged/worn parts as necessary.

Check the drivetrain for free movement. There must be no locking, binding, or blocking during

rotation. With the motor/engine dismounted to eliminate drag, spin the wheels by hand and ensure smooth, free rolling. If the drivetrain does not roll freely, inspect all bearings and gears and replace worn or damaged parts as necessary.

Regularly inspect and replace the pins connecting the center driveshafts to the pinion gears, as well as the pins connecting wheel drive shafts to the wheel axles.

Pivot balls and ball joints will wear naturally and over time will develop minor play. If there is excess play, the pivot balls and ball joints should be replaced.

If the car is run in wet conditions, apply WD-40® on all drivetrain parts before the run. After the run, clean and dry the parts again.

DRIVE SHAFT PIN SERVICING

Regularly check the drive shaft pins (both suspensions and center) and if they show any wear they must be immediately replaced by new pins. Inspect the pins after every 3 hours of runtime. If the car is run with worn out pins, excessive wear on the diff outrives will result. The **10600 HUDY Drive Pin Replacement Tool (for 3mm Pins)** is a compact, rugged multi-use tool set for replacing 3mm drive pins in drive shafts. Use the **HUDY X-Hard replacement drive shaft pins 3x14 (#106074)**.



DO NOT use drive shafts when the pins are worn.

Press out the worn pins.

Press in new pins and regularly inspect for wear.



For easy drive pin replacements use **#106001 HUDY Drive Pin Replacement Tool**.



To replace the worn pins use only **X-Hard HUDY drive pins #106074**.

BEARING MAINTENANCE

Ball bearings must be properly maintained to ensure smooth drivetrain operation and long service life. New bearings are factory-greased for durability and may initially feel less free; this is normal.

- Clean and service bearings every 3–4 weeks or before major races.
- Check bearings for smooth operation. Replace any bearing with noise, vibration, or drag.
- Use only motor cleaners that leave no residue.
- Lightly oil bearings after cleaning. Short spin time when hand-tested is normal.
- When running in dirty conditions, it is recommended to use bearing grease after cleaning.

CLUTCH BEARINGS

Regularly check the clutch bearings for smooth operation. Replace the bearings immediately if any wear, noise, or drag is detected.

TECH TIPS

TIP FRONT & REAR DIFF GEAR MESH ADJUSTMENT

If there is too much or too little diff side play, this may create non-optimal gear mesh between the diff gear and the pinion drive gear. This is easily resolved by inserting 1 or 2 of the included thin shims behind a diff outrive ball-bearing, depending on how much play there is.

THE LOCATION OF THE SHIM(S) DEPENDS ON WHETHER YOU ARE TRYING TO CLOSE OR OPEN THE GAP:

TO CLOSE A WIDE GAP

CLOSE A WIDE GAP

To CLOSE a wide gap: add 1 or 2 shims against diff spur gear

insert shim(s) here

WASHER #962131 S 13 x 16 x 0.1 mm (10)
#962130 S 13 x 16 x 0.2 mm (10)

TO OPEN A NARROW GAP

OPEN A NARROW GAP

To OPEN a narrow gap: add 1 or 2 shims on the other side of the diff, away from spur gear

insert shim(s) here

WASHER #962131 S 13x16x0.1mm (10)
#962130 S 13x16x0.2mm (10)

CHECK GEAR MESH AND DIFF PLAY ONLY AFTER THE ENTIRE GEARBOX IS MOUNTED TOGETHER WITH THE SUSPENSION HOLDERS ON THE CHASSIS. ALL PARTS ARE DESIGNED TO HAVE CERTAIN PLAY AND IT IS ALL DESIGNED BY PURPOSE.

HUDY PREMIUM SILICONE OILS



HUDY PREMIUM SILICONE OILS					
FOR GEAR DIFFERENTIAL					
#106411	1.000cSt - 100ml	OPTION	#106518	17.000cSt - 100ml	OPTION
#106421	2.000cSt - 100ml	OPTION	#106521	20.000cSt - 100ml	OPTION
#106431	3.000cSt - 100ml	OPTION	#106531	30.000cSt - 100ml	OPTION
#106441	4.000cSt - 100ml	OPTION	#106541	40.000cSt - 100ml	OPTION
#106451	5.000cSt - 100ml	OPTION	#106551	50.000cSt - 100ml	INCLUDED
#106461	6.000cSt - 100ml	OPTION	#106561	60.000cSt - 100ml	OPTION
#106471	7.000cSt - 100ml	OPTION	#106587	80.000cSt - 100ml	OPTION
#106481	8.000cSt - 100ml	OPTION	#106611	100.000cSt - 100ml	OPTION
#106491	9.000cSt - 100ml	OPTION	#106616	150.000cSt - 100ml	OPTION
#106511	10.000cSt - 100ml	OPTION	#106621	200.000cSt - 100ml	OPTION
#106493	11.000cSt - 100ml	OPTION	#106631	300.000cSt - 100ml	OPTION
#106513	12.000cSt - 100ml	OPTION	#106650	500.000cSt - 50ml	INCLUDED
#106516	15.000cSt - 100ml	OPTION	#106692	1.000.000cSt - 50ml	OPTION

HUDY PREMIUM SILICONE OILS					
FOR SHOCK ABSORBERS					
#106326	250cSt - 100ml	OPTION	#106356	550cSt - 100ml	OPTION
#106331	300cSt - 100ml	OPTION	#106358	575cSt - 100ml	OPTION
#106336	350cSt - 100ml	OPTION	#106361	600cSt - 100ml	OPTION
#106338	375cSt - 100ml	OPTION	#106363	625cSt - 100ml	OPTION
#106341	400cSt - 100ml	OPTION	#106366	650cSt - 100ml	OPTION
#106343	425cSt - 100ml	OPTION	#106368	675cSt - 100ml	OPTION
#106346	450cSt - 100ml	OPTION	#106371	700cSt - 100ml	OPTION
#106348	475cSt - 100ml	OPTION	#106376	750cSt - 100ml	OPTION
#106351	500cSt - 100ml	OPTION	#106381	800cSt - 100ml	INCLUDED
#106353	525cSt - 100ml	OPTION	#106391	900cSt - 100ml	OPTION



TIP

All ball-bearings are factory pre-oiled or pre-greased. The bearings are all packaged in BAG 00.9.

For pre-oiled ball-bearings, use:

#106230 HUDY Bearing Oil.

For pre-greased ball-bearings, use one of these bearing greases:

#106220 - HUDY Bearing Grease - suggested for extremely dusty track conditions.

#106221 - HUDY Bearing Grease "Blue" - suggested for medium dusty track conditions.

#106222 - HUDY Bearing Grease "Red" - suggested for low dusty track conditions.

Replace any bearings that develop a "gritty" feeling to prevent inefficiency and avoid failures.

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 bearing failures and damage to other parts.

1. DIFFERENTIALS

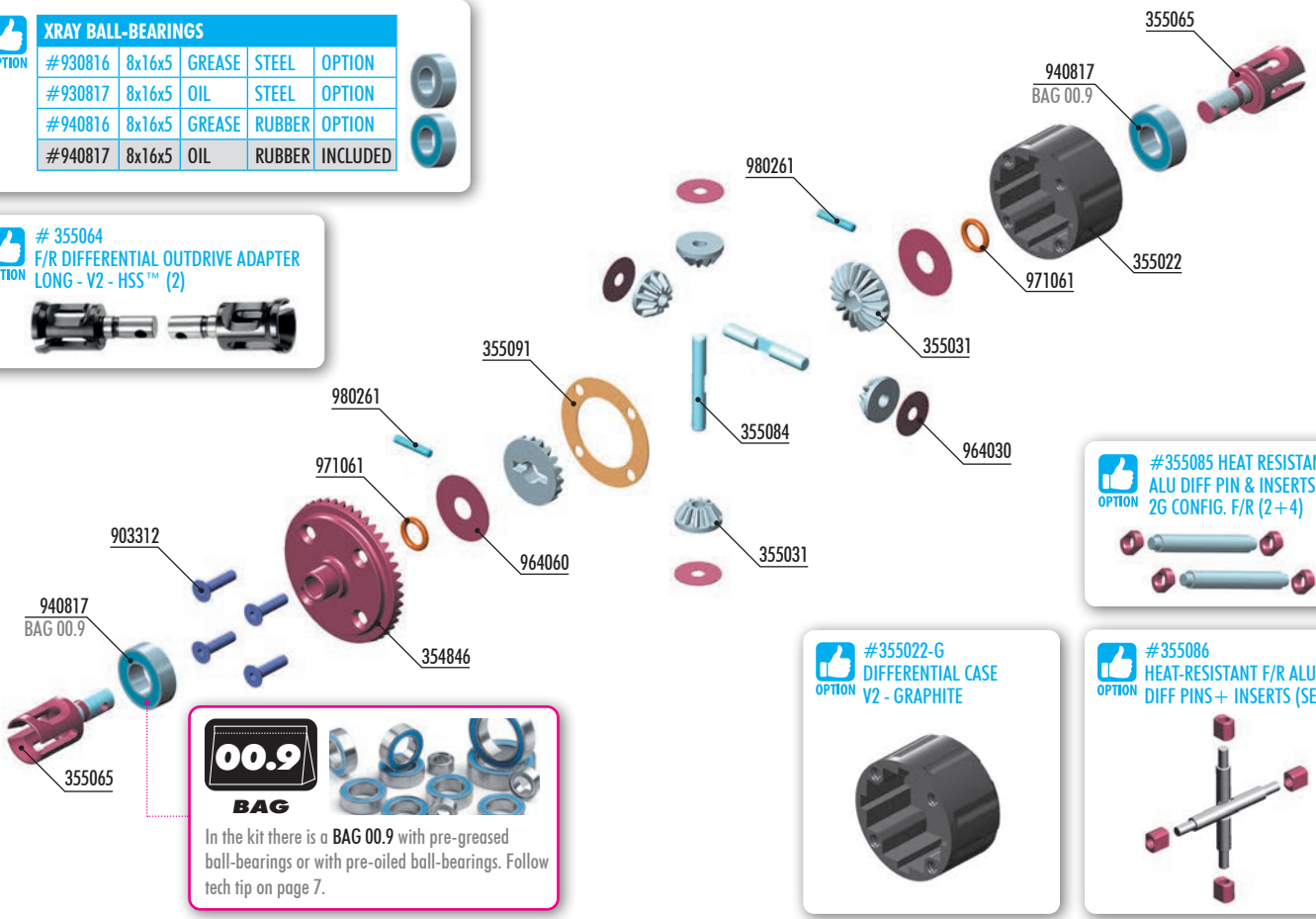


XRAY BALL-BEARINGS

OPTION	#	SIZE	LUBRICATION	MATERIAL	STATUS
	#930816	8x16x5	GREASE	STEEL	OPTION
	#930817	8x16x5	OIL	STEEL	OPTION
	#940816	8x16x5	GREASE	RUBBER	OPTION
	#940817	8x16x5	OIL	RUBBER	INCLUDED



355064
F/R DIFFERENTIAL OUTDRIVE ADAPTER
LONG - V2 - HSS™ (2)



00.9 BAG

In the kit there is a BAG 00.9 with pre-greased ball-bearings or with pre-oiled ball-bearings. Follow tech tip on page 7.

#355085 HEAT RESISTANT ALU DIFF PIN & INSERTS 2G CONFIG. F/R (2+4)

#355022-G DIFFERENTIAL CASE V2 - GRAPHITE

#355086 HEAT-RESISTANT F/R ALU DIFF PINS+ INSERTS (SET)



354846	FR/RE DIFF LARGE BEVEL GEAR 46T - FOR 13T PINION GEAR
355006	DIFFERENTIAL 46T - MATCHED FOR 13T PINION GEAR - SET
355022	DIFFERENTIAL CASE - V2
355031	STEEL DIFF BEVEL & SATELLITE GEARS - V2 (2+4)
355065	DIFF OUTDRIVE ADAPTER - V2 - HUDY SPRING STEEL™ (2)
355084	F/R DIFF PIN (2)
355091	F/R DIFF GASKET (4)

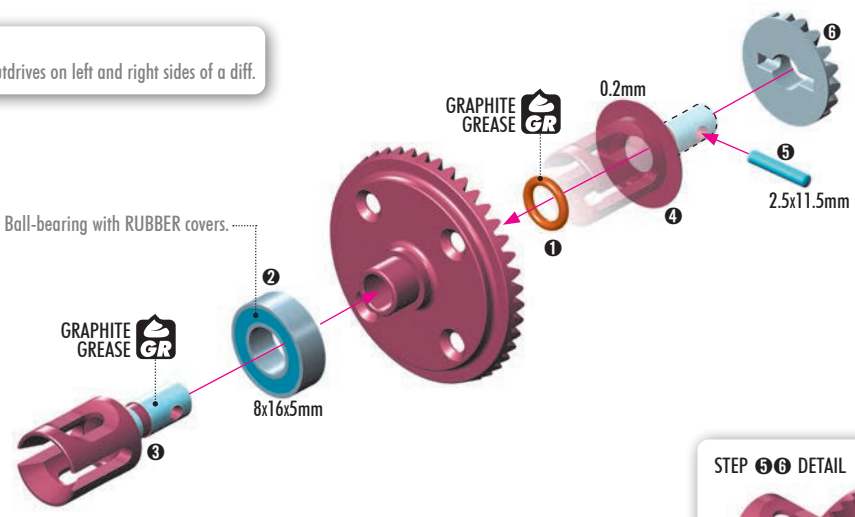
903312	HEX SCREW SFH M3x12 (10)
940817	BALL-BEARING 8x16x5 RUBBER SEALED - OIL (2)
964030	WASHER S 3.5x12x0.2 (10)
964060	WASHER S 6x18x0.2 (10)
971061	SILICONE O-RING 6x1.55 (10)
980261	PIN 2.5x11.5 (10)

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



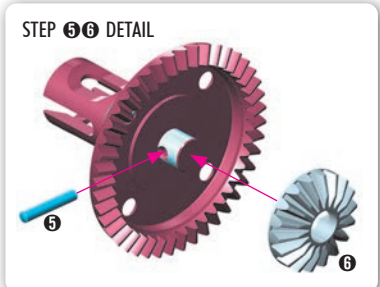
2x

TIP IMPORTANT!
Use matching outdrives on left and right sides of a diff.



XRAY BALL-BEARINGS

OPTION	#	SIZE	LUBRICATION	MATERIAL	STATUS
	#930816	8x16x5	GREASE	STEEL	OPTION
	#930817	8x16x5	OIL	STEEL	OPTION
	#940816	8x16x5	GREASE	RUBBER	OPTION
	#940817	8x16x5	OIL	RUBBER	INCLUDED



SET-UP BOOK
DIFFERENTIAL GEARS



2x 940817
BB 8x16x5



2x 964060
S 6x18x0.2



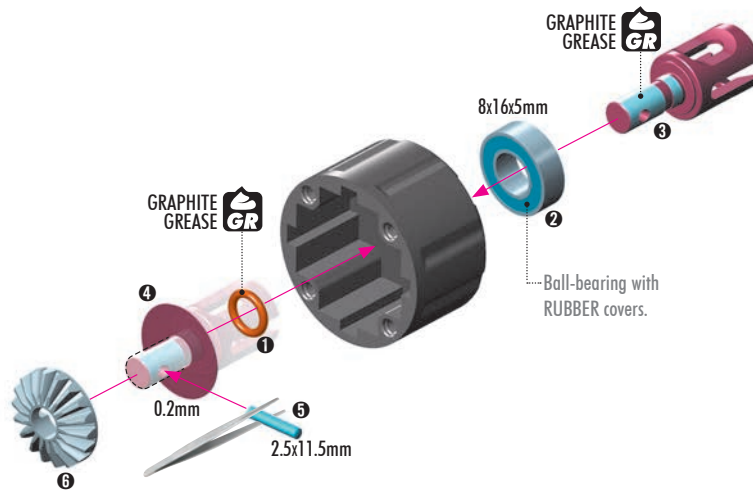
2x 971061
O 6x1.55



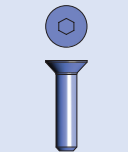
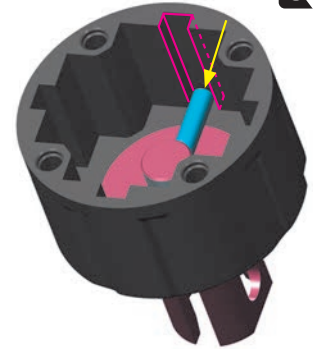
2x 980261
P 2.5x11.5

2x

TIP IMPORTANT!
Use matching outdrives on left and right sides of a diff.



STEP 6 DETAIL



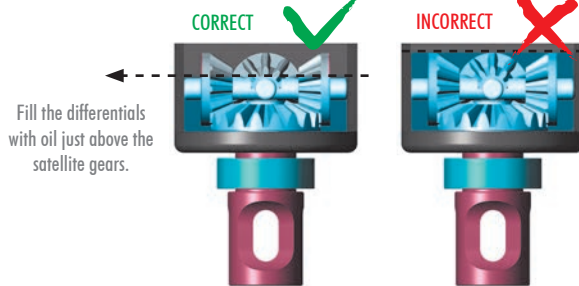
8x 903312
SFH M3x12



8x 964030
S 3.5x12x0.2

VERY IMPORTANT!

Use the following silicone oils included in the kit for initial settings:
FRONT diff: 500.000cSt / REAR diff: 50.000cSt



IMPORTANT!
DO NOT overfill the differential.
If there is too much oil in the differential, it may leak after it cools down after use.

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
#107866 HUDY Professional Digital Pocket Scale 3000g/0.1g

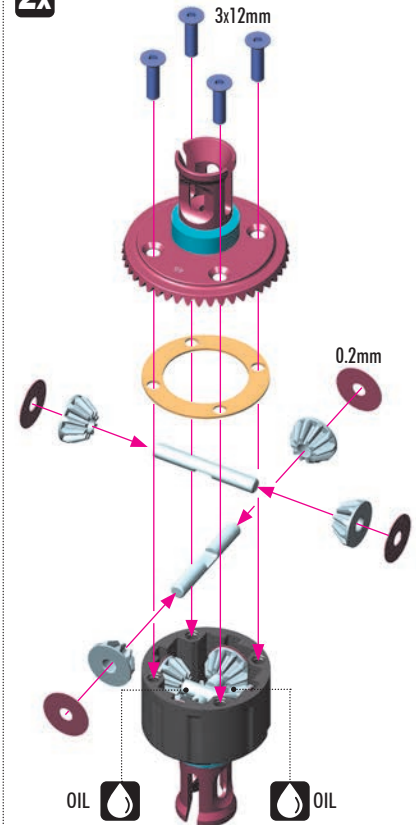


1. Put the diff (without oil) on the scale and check the weight:
- FRONT DIFF approx. 39.10g
- REAR DIFF approx. 39.10g

2. Slowly pour oil into the diff and watch the weight.
The approximate weight of the diff+oil is REAR DIFF approx. 41.10g and FRONT DIFF approx. 41.10g

REAR DIFF	39.10g	+	2.0g	=	41.10g
FRONT DIFF	39.10g	+	2.0g	=	41.10g

2x



Front diff:

Silicone oil 500.000cSt
Fill just above the satellite gears.

Rear diff:

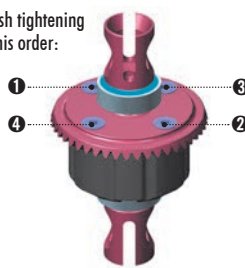
Silicone oil 50.000cSt
Fill just above the satellite gears.

SET-UP BOOK
DIFFERENTIAL OIL

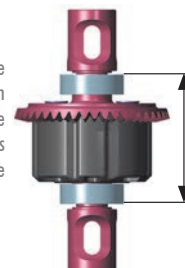
Tighten the screws equally.



Finish tightening in this order:



After assembly the differentials should have a length of 32.3~32.7 mm measured from the ends of the installed ball-bearings. If the differentials are longer, check that the gear is properly seated on the case and retighten the 4 screws while holding the crown gear.



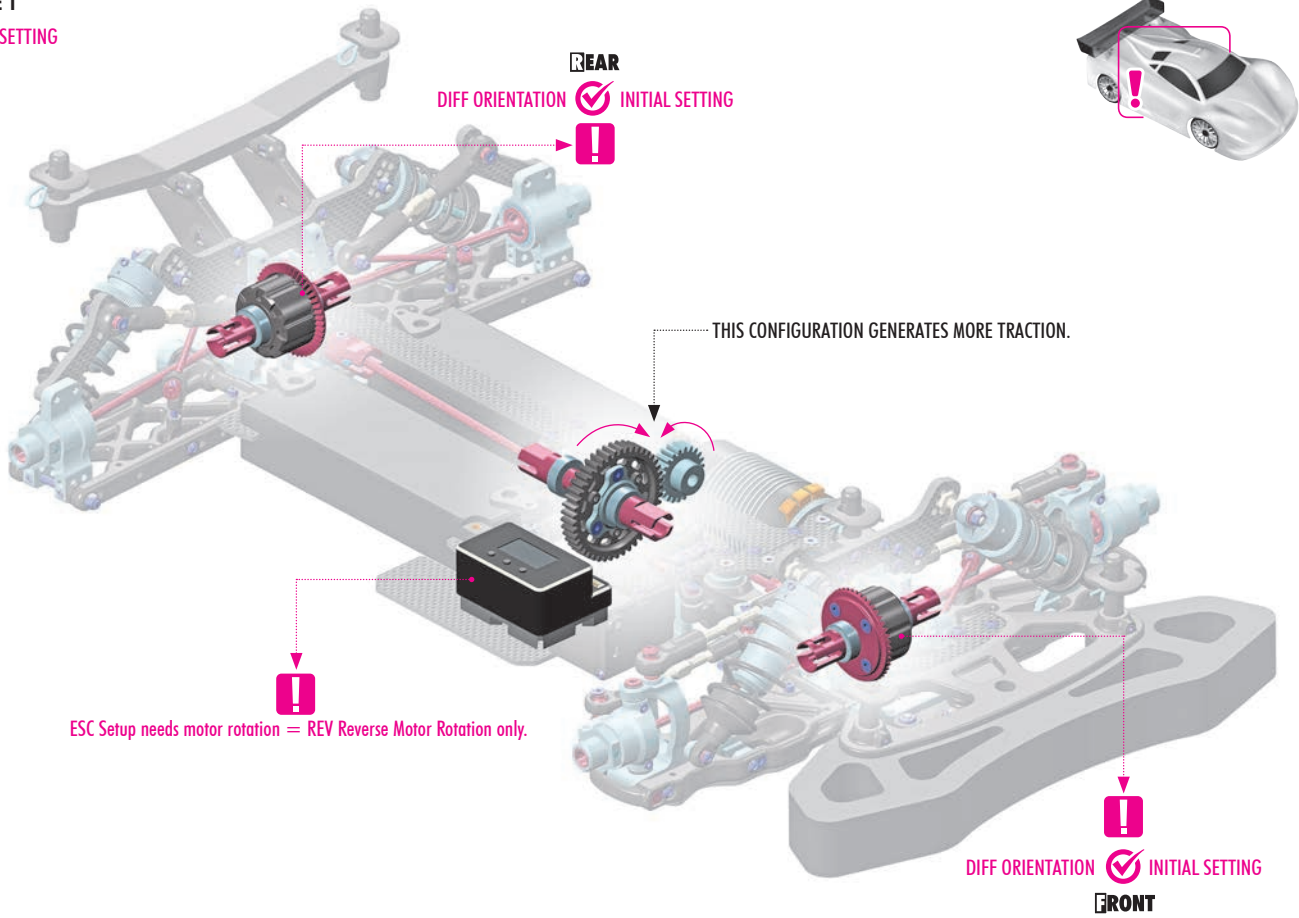
FRONT & REAR DIFF ORIENTATION



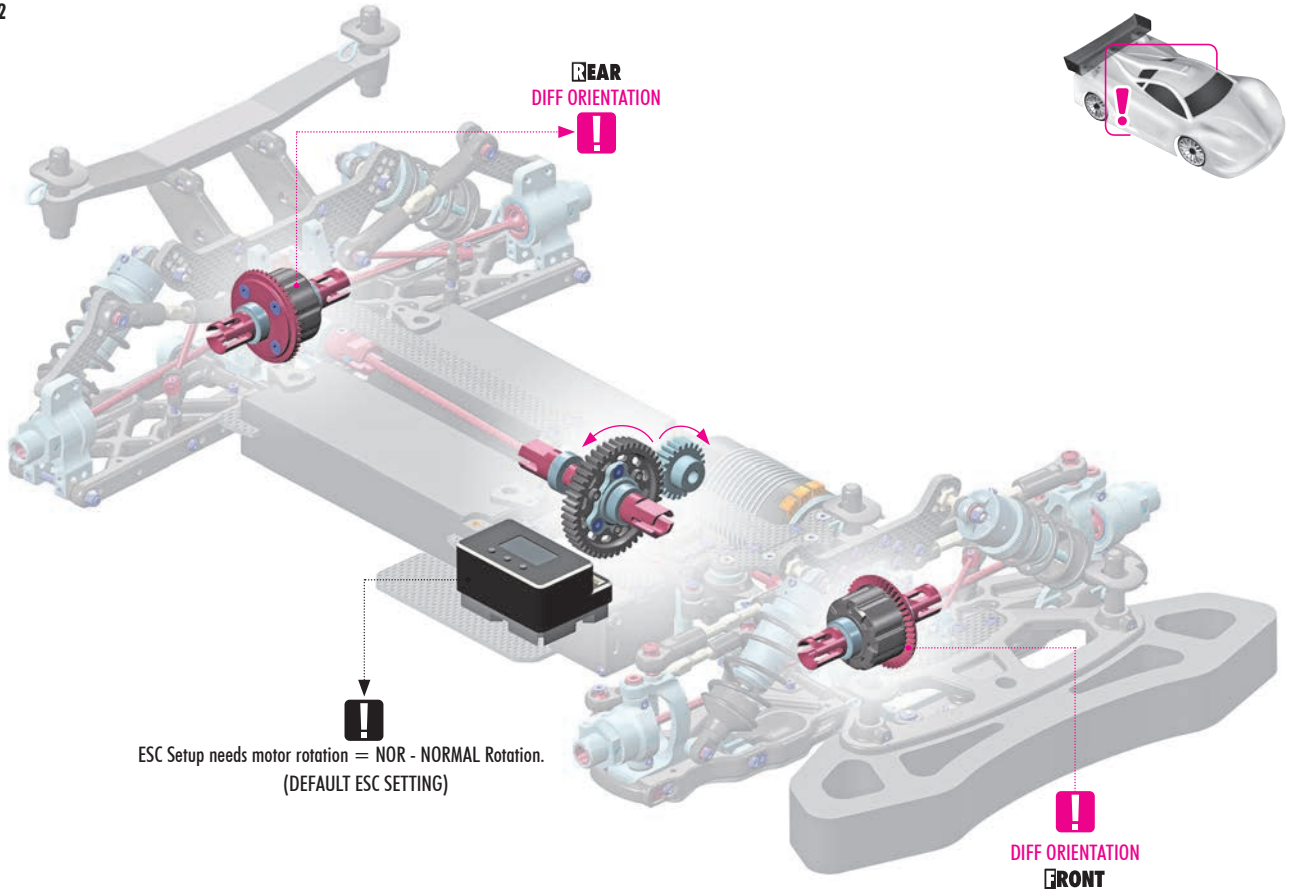
The XRAY XB8E chassis offers two options for mounting the front and rear differentials. To increase traction we recommend using the INITIAL setting, which requires configuring the ESC to rotate in the opposite direction of the motor.

ALTERNATIVE 1

✓ INITIAL SETTING



ALTERNATIVE 2

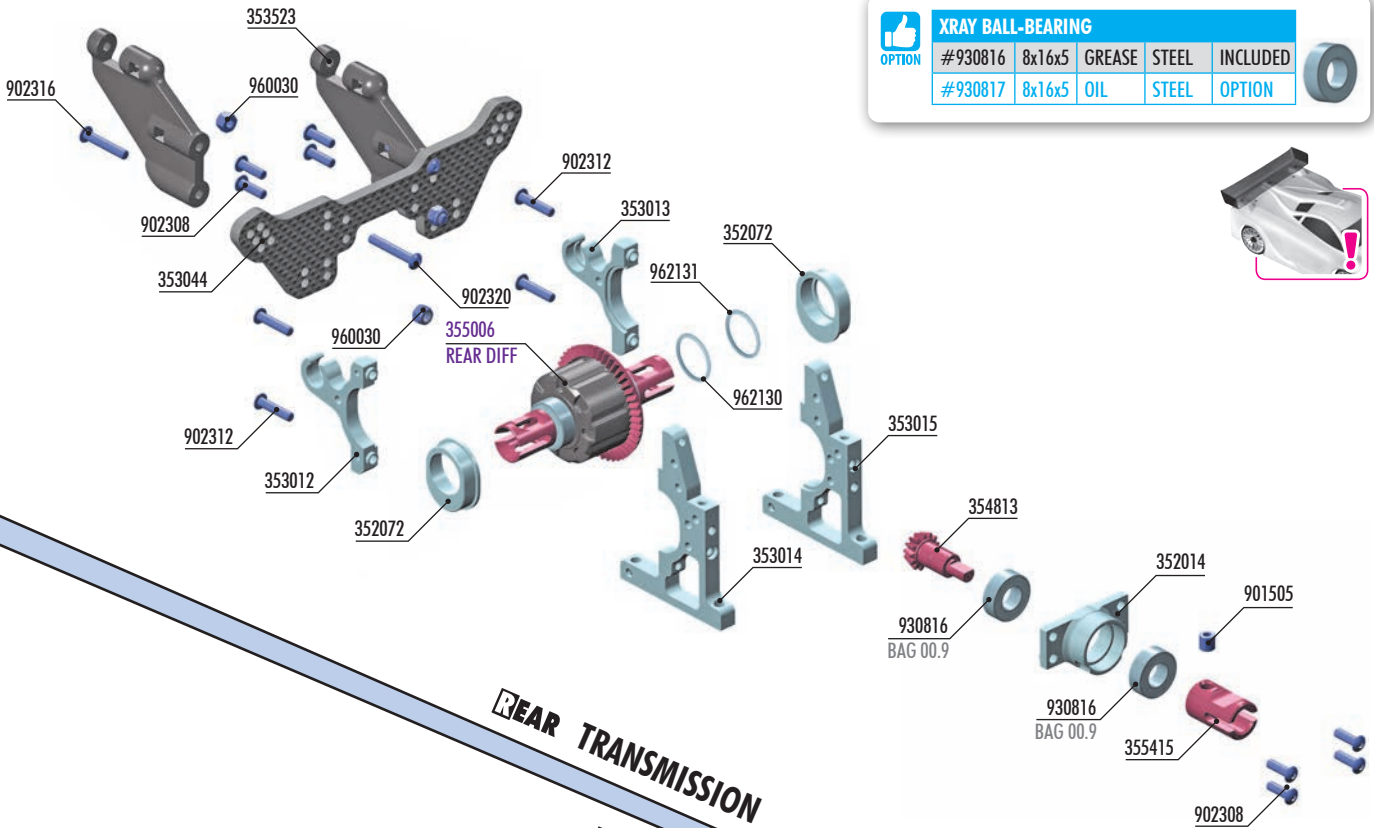


2. FRONT & REAR TRANSMISSION

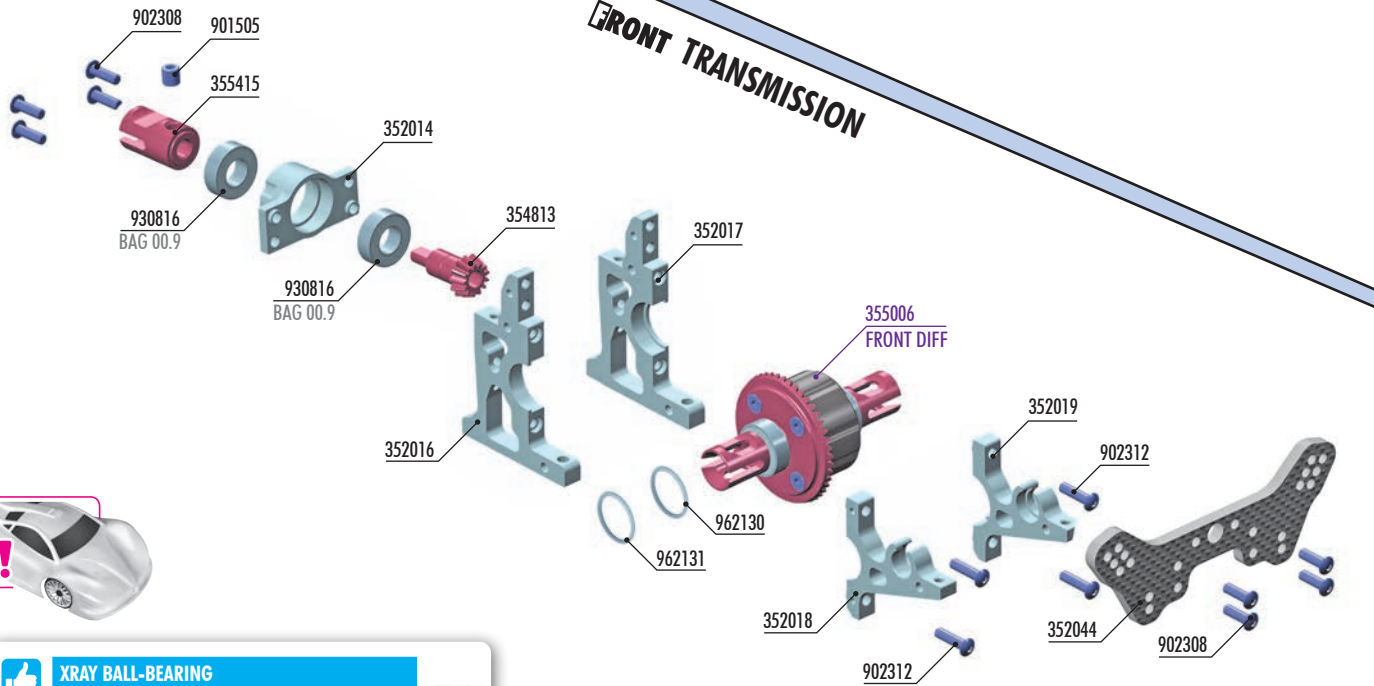


XRAY BALL-BEARING

OPTION	#	SIZE	LUBRICATION	MATERIAL	STATUS
	#930816	8x16x5	GREASE	STEEL	INCLUDED
	#930817	8x16x5	OIL	STEEL	OPTION



REAR TRANSMISSION



FRONT TRANSMISSION



XRAY BALL-BEARING

OPTION	#	SIZE	LUBRICATION	MATERIAL	STATUS
	#930816	8x16x5	GREASE	STEEL	INCLUDED
	#930817	8x16x5	OIL	STEEL	OPTION



BAG

02

- 352014 ALU ADAPTER FOR CENTER JOINT - SWISS 7075 T6
- 352016 ALU FRONT BULKHEAD - RIGHT - SWISS 7075 T6
- 352017 ALU FRONT BULKHEAD - LEFT - SWISS 7075 T6
- 352018 ALU FRONT ANTI-ROLL BAR BULKHEAD - RIGHT - SWISS 7075 T6
- 352019 ALU FRONT ANTI-ROLL BAR BULKHEAD - LEFT - SWISS 7075 T6
- 352044 CARBON FRONT SHOCK TOWER 4mm
- 352072 ALU ADJUSTMENT BALL-BEARING HUB - SWISS 7075 T6 (2)
- 353012 ALU REAR ANTI-ROLL BAR BULKHEAD - RIGHT - SWISS 7075 T6
- 353013 ALU REAR ANTI-ROLL BAR BULKHEAD - LEFT - SWISS 7075 T6
- 353014 ALU REAR BULKHEAD - RIGHT - SWISS 7075 T6
- 353015 ALU REAR BULKHEAD - LEFT - SWISS 7075 T6
- 353044 CARBON REAR SHOCK TOWER 4mm
- 353523 GT COMPOSITE REAR HOLDER POST (2)
- 354813 BEVEL DRIVE PINION GEAR 13T - MATCHED FOR 46T LARGE BEVEL GEAR

- 355415 CENTRAL DOGBONE SHAFT UNIVERSAL JOINT - HUDY SPRING STEEL™ (2)
- 901505 HEX SCREW SB M5x5 (10)
- 902308 HEX SCREW SH M3x8 (10)
- 902312 HEX SCREW SH M3x12 (10)
- 902316 HEX SCREW SH M3x16 (10)
- 902320 HEX SCREW SH M3x20 (10)
- 930816 BALL-BEARING 8x16x5 STEEL SEALED - GREASE (2)
- 960030 NUT M3 (10)
- 962130 WASHER S 13x16x0.2 (10)
- 962131 WASHER S 13x16x0.1 (10)
- 355006 DIFFERENTIAL 46T - MATCHED FOR 13T PINION GEAR - SET

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

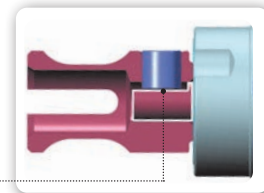
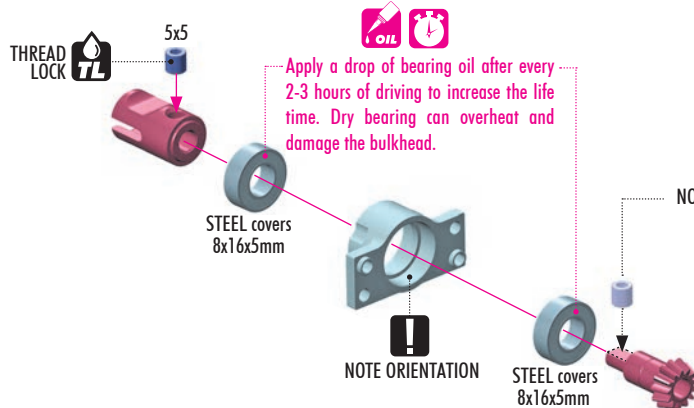
2. FRONT & REAR TRANSMISSION



4x 930816
BB 8x16x5

2x 901505
SB M5x5

2x FRONT & REAR TRANSMISSION



TIP Use HUDY Ball-Bearing Grease or Oil for servicing:

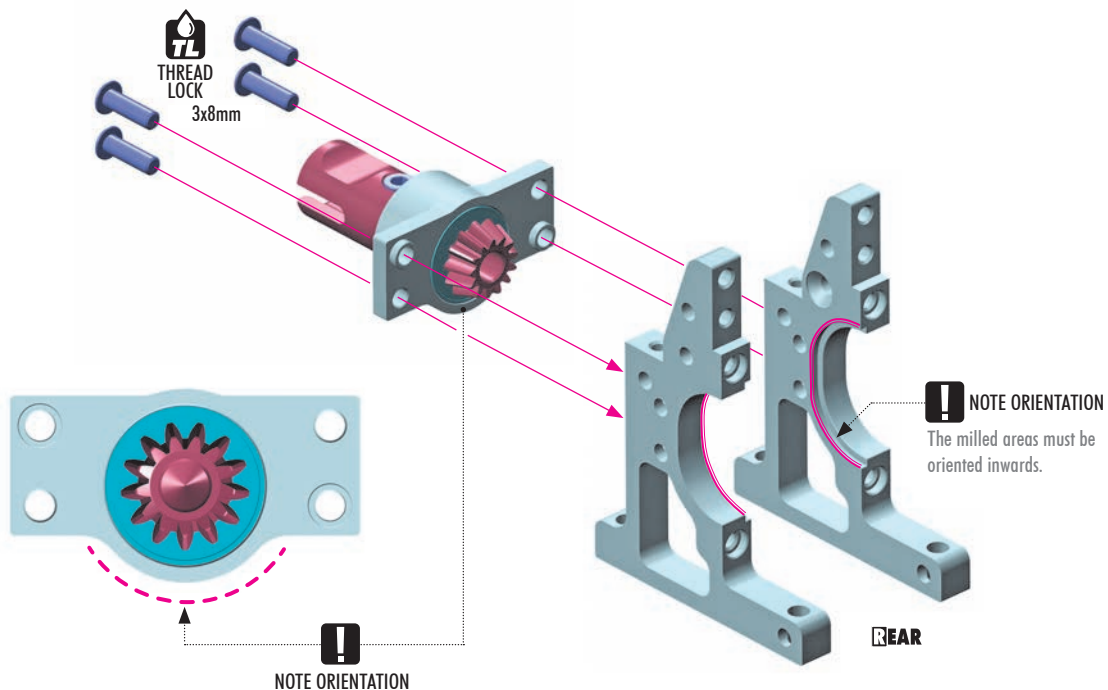
GR #106220 - Standard
#106221 - Extra
#106222 - Premium
#106230 - Bearing Oil

XRAY BALL-BEARING					
OPTION	#930816	8x16x5	GREASE	STEEL	INCLUDED
	#930817	8x16x5	OIL	STEEL	OPTION



4x 902308
SH M3x8

REAR & TRANSMISSION

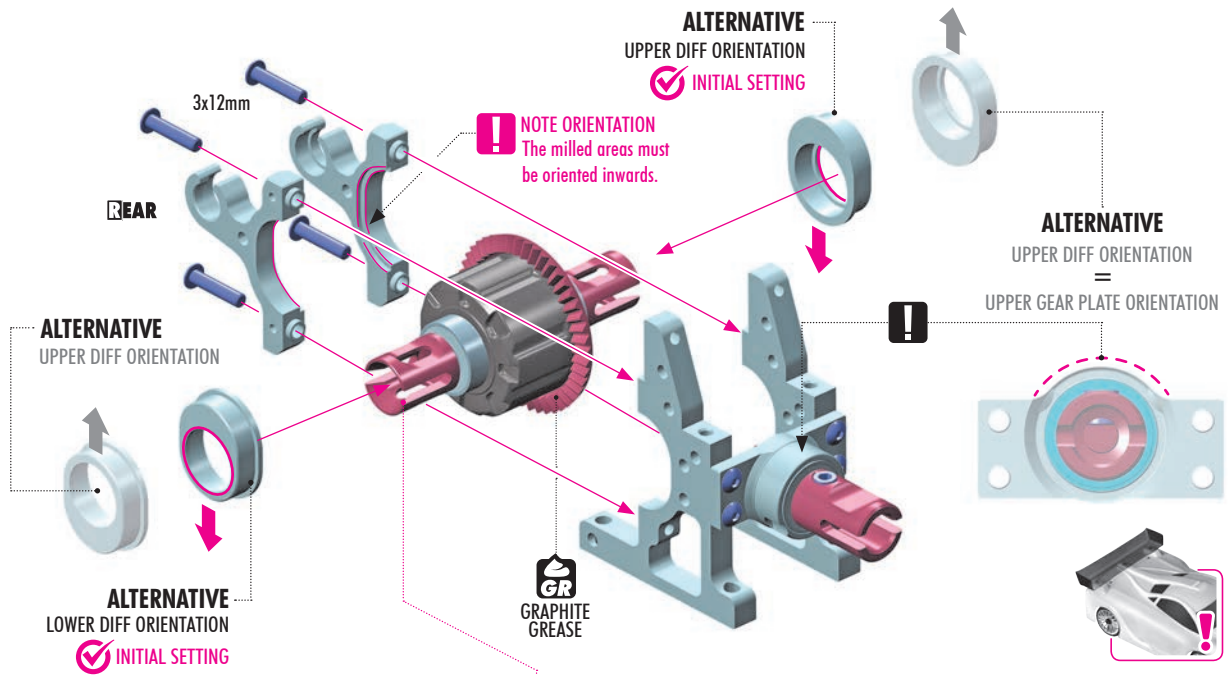


2. FRONT & REAR TRANSMISSION

REAR TRANSMISSION



4x 902312
SH M3x12



REAR DIFF GEAR MESH ADJUSTMENT



Follow TECH TIP on page 6.

INITIAL SETTING

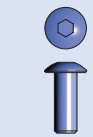
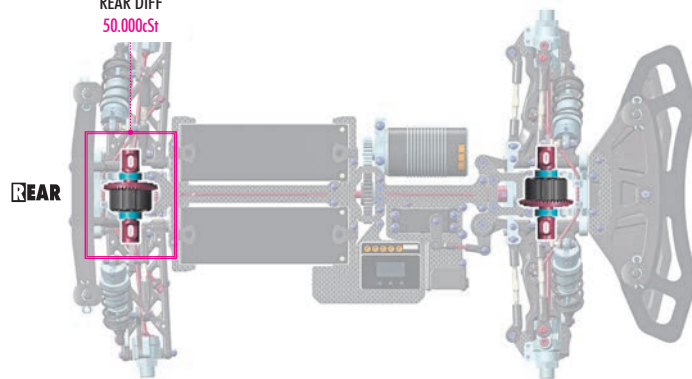
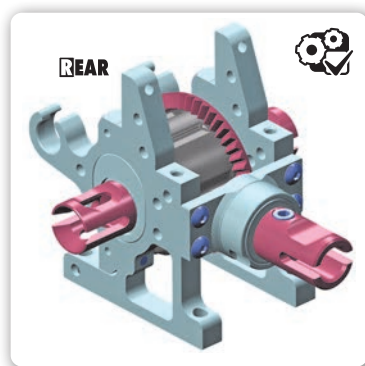
NO SHIMS



962130
S 13x16x0.2



962131
S 13x16x0.1



4x 902308
SH M3x8

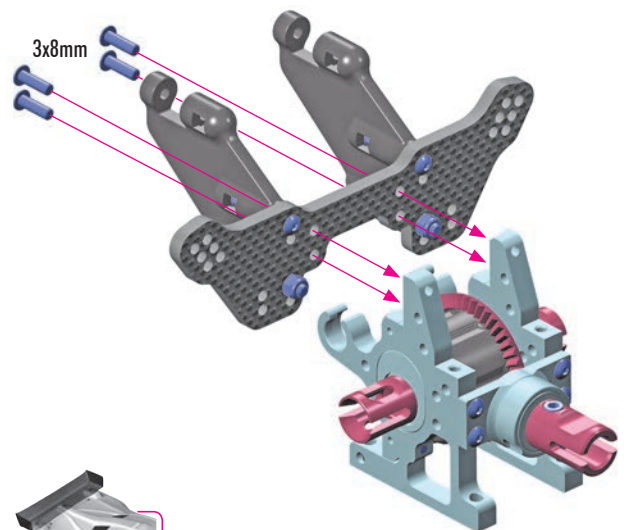
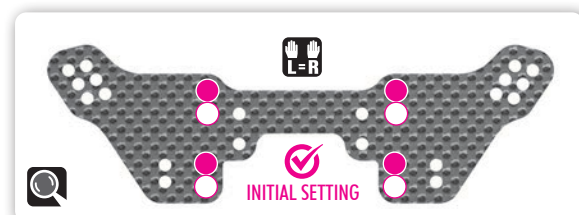
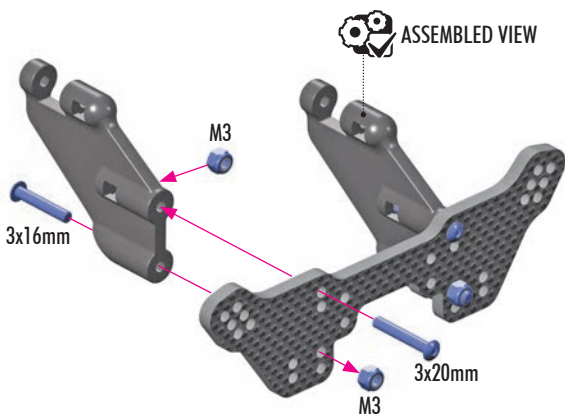


902320 SH M3x20
2x

902316 SH M3x16
2x



4x 960030
N M3

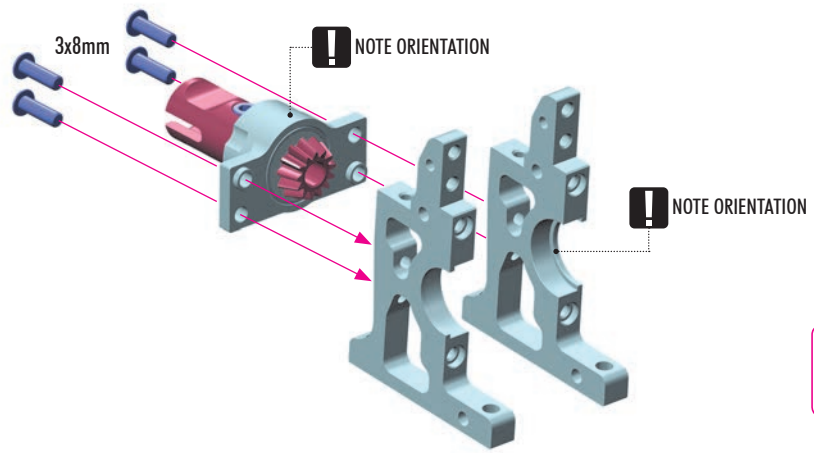


2. FRONT & REAR ORIENTATION TRANSMISSION



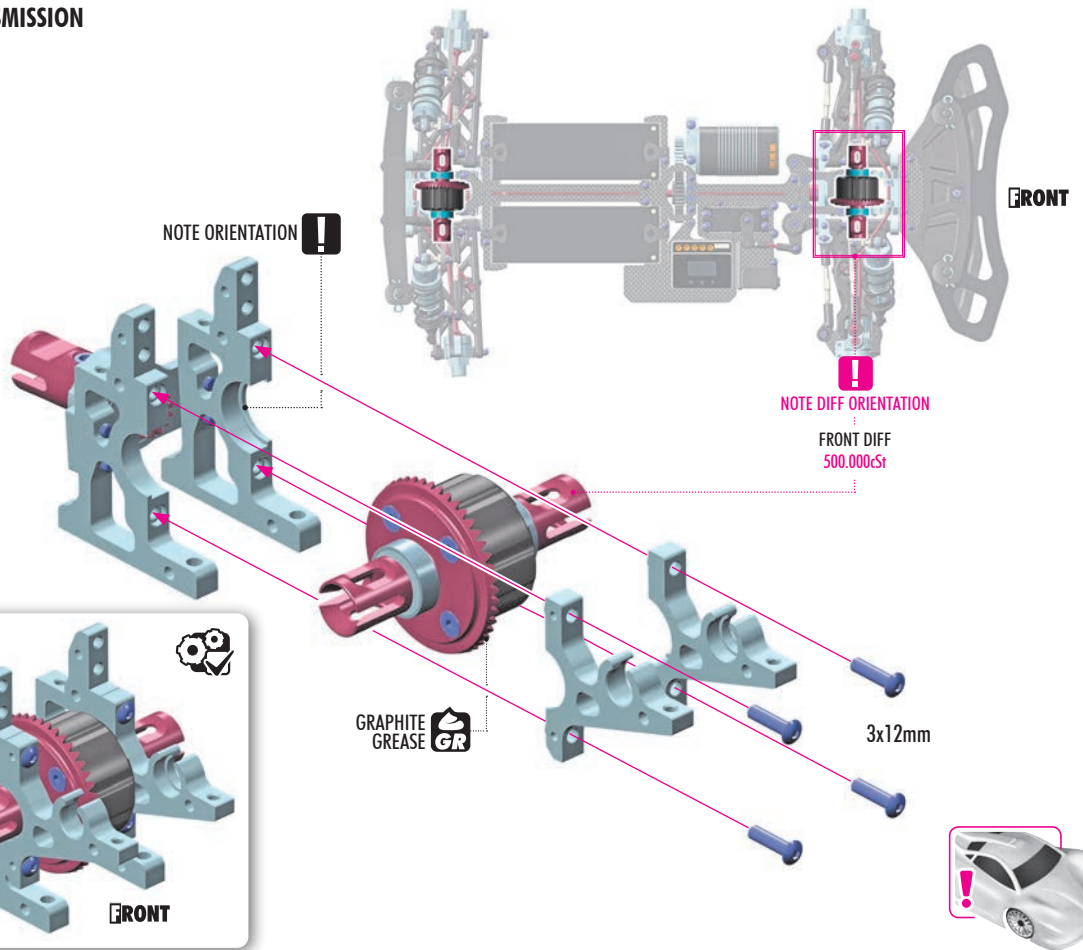
4x 902308
SH M3x8

FRONT TRANSMISSION



4x 902312
SH M3x12

FRONT TRANSMISSION



REAR DIFF GEAR MESH ADJUSTMENT



Follow TECH TIP on page 6.



INITIAL SETTING



NO SHIMS



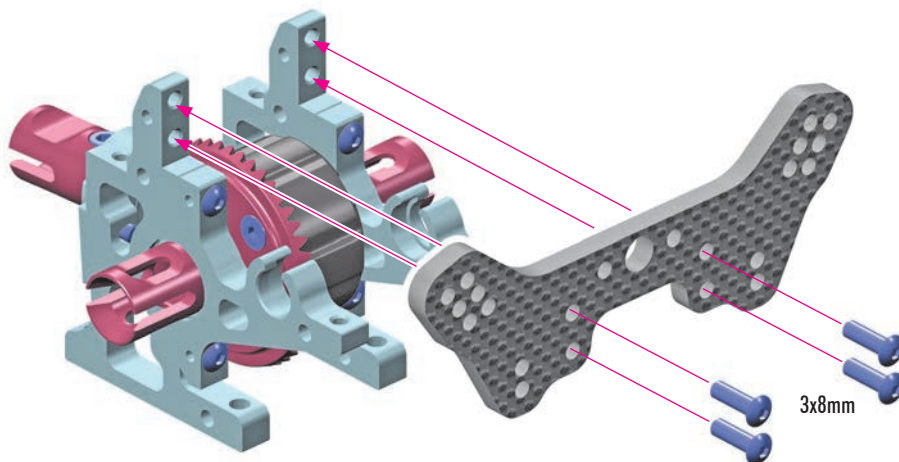
962130
S 13x16x0.2



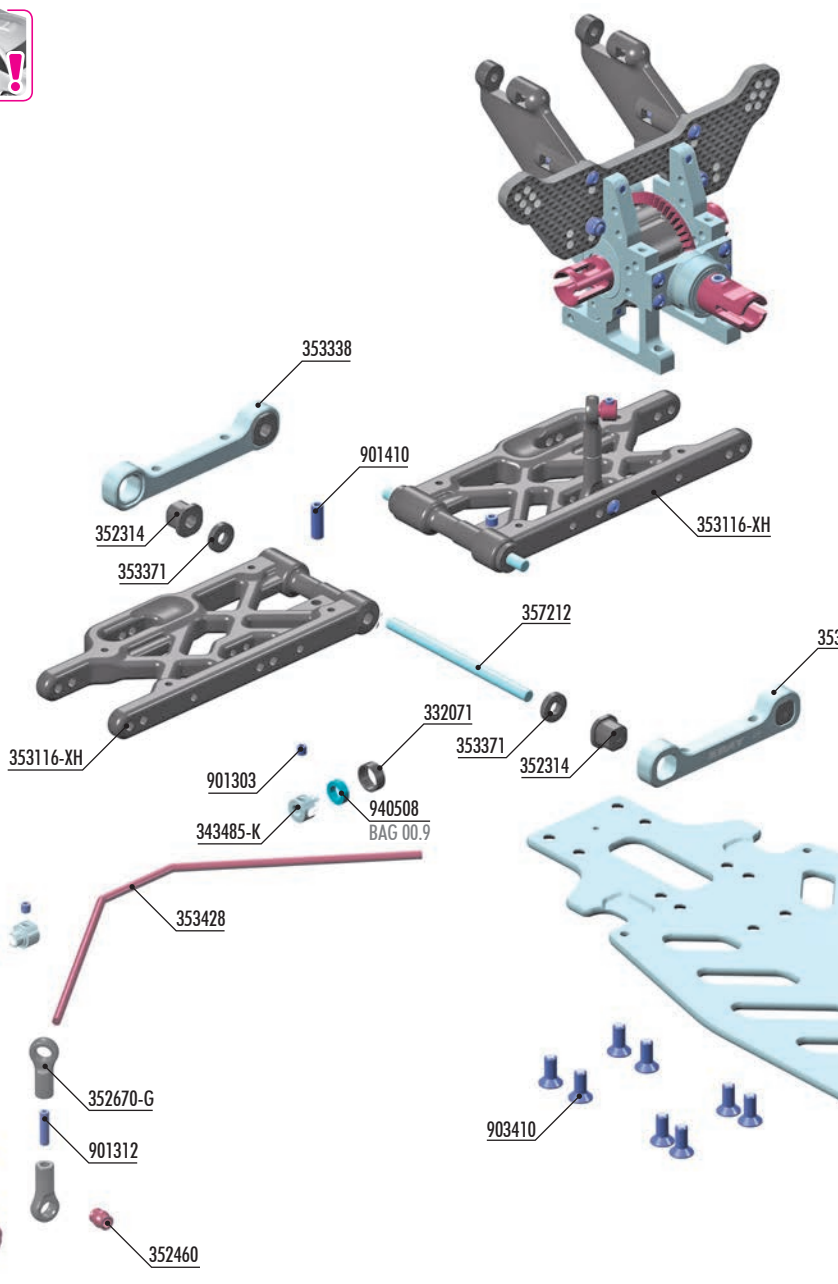
962131
S 13x16x0.1



4x 902308
SH M3x8



3. REAR SUSPENSION



REAR ANTI-ROLL BARS		
#353420	ø2.0mm	OPTION
#353422	ø2.2mm	OPTION
#353424	ø2.4mm	OPTION
#353425	ø2.5mm	OPTION
#353426	ø2.6mm	OPTION
#353428	ø2.8mm	INCLUDED
#353430	ø3.0mm	OPTION
#353432	ø3.2mm	OPTION

ALU ANTI-ROLL BAR COLLAR		
#343483-K	ø2.2mm	OPTION
#343484-K	ø2.4mm	OPTION
#343482-K	ø2.6mm	OPTION
#343485-K	ø2.8mm	INCLUDED
#343481-K	ø3.0mm	OPTION

#333451
 ALU ANTI-ROLL BAR PIVOT BALL 5.8 MM
 - SWISS 7075 T6 - HARDCOATED (2)

#353191
 CARBON REAR LOWER ARM PLATE (2)

REAR SUSPENSION ARMS		
#353115	MEDIUM	OPTION
#353116	HARD	OPTION
#353116-XH	X-HARD	INCLUDED
#353116-G	GRAPHITE	OPTION

BAG
03

- | | | | |
|-----------|---|--------|--|
| 332071 | COMPOSITE BALL-BEARING HUB (4) | 901303 | HEX SCREW SB M3x3 (10) |
| 333450 | ANTI-ROLL BAR BALL JOINT 5.8mm (2) | 901312 | HEX SCREW SB M3x12 (10) |
| 343485-K | ALU CUTTED ANTI-ROLL BAR COLLAR ø2.8 - BLACK (2) | 901410 | HEX SCREW SB M4x10 (10) |
| 352314 | COMPOSITE ECCENTRIC BUSHINGS - V2 (2) | 902318 | HEX SCREW SH M3x18 (10) |
| 352460 | PIVOT BALL 5.8 (10) | 903410 | HEX SCREW SFH M4x10 (10) |
| 352670-G | COMPOSITE BALL JOINT 5.8 - GRAPHITE (8) | 940508 | BALL-BEARING 5x8x2.5 RUBBER SEALED - OIL (2) |
| 353116-XH | COMPOSITE REAR LOWER SUSPENSION ARM - X-HARD | | |
| 353330 | ALU REAR LOWER SUSP. HOLDER - FRONT - SQUARE ADJ. ROLL-C. | 351141 | GTXE'27 ALU CHASSIS - SWISS 7075 T6 (3mm) |
| 353338 | ALU REAR LOWER SUSP. HOLDER - REAR - SQUARE ADJ. ROLL-C. | | |
| 353371 | SET OF COMPOSITE LOWER ARM SHIMS | | |
| 353428 | REAR ANTI-ROLL BAR 2.8mm | | |
| 357212 | LOWER INNER PIVOT PIN F+R (2) | | |

3. REAR SUSPENSION



4x 353371 SHIM 4x10x2



2x 901410 SB M4x10



TOP DOWNSTOP SETTING

2x L=R

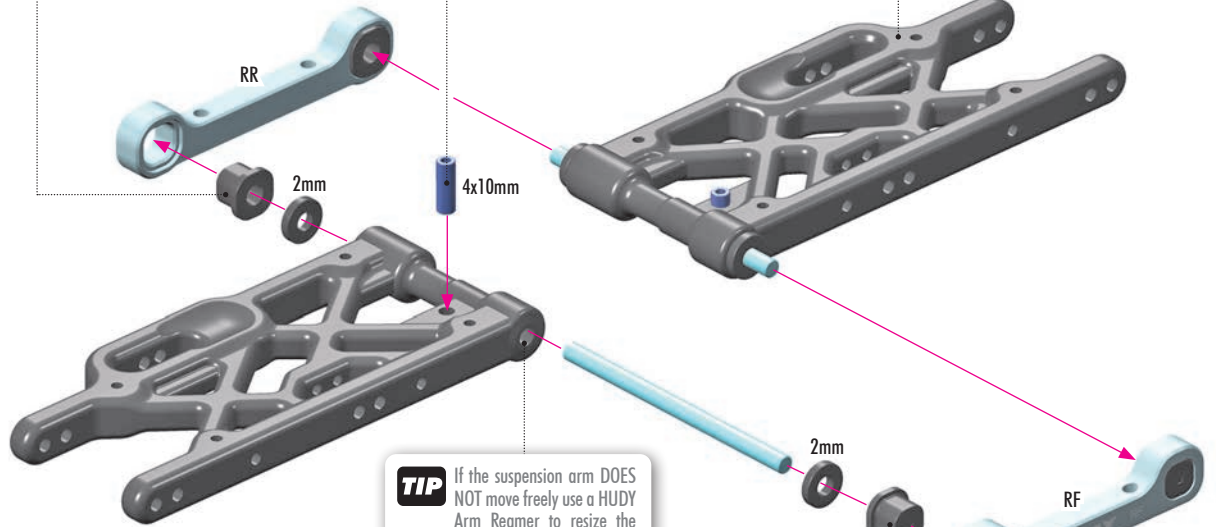
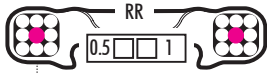


BOTTOM



NOTE ARMS ORIENTATION

INITIAL SETTING RR

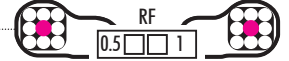


TIP If the suspension arm DOES NOT move freely use a HUDY Arm Reamer to resize the holes of the arms.

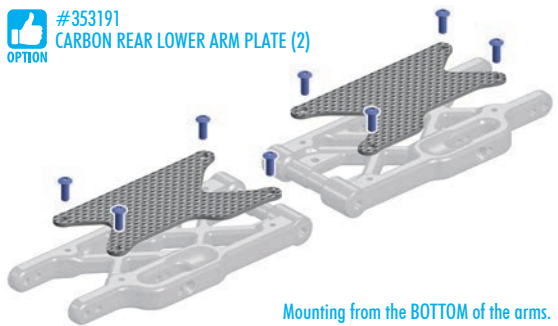


#107634 HUDY ARM REAMER OPTION

INITIAL SETTING RF



#353191 CARBON REAR LOWER ARM PLATE (2) OPTION



Mounting from the BOTTOM of the arms.

OPTION	REAR SUSPENSION ARMS		
#353115	MEDIUM	OPTION	
#353116	HARD	OPTION	
#353116-XH	X-HARD	INCLUDED	
#353116-G	GRAPHITE	OPTION	

TOE-IN			
RR	RF		(°)
0	0	0	= 3°
0	0	1	= 4°
0	0	2	= 2°
0	0	3	= 2°
0	0	4	= 3°
0	0	5	= 1°
0	0	6	= 4°
0	0	7	= 5°
0	0	8	= 3°

The new XRAY rear alu lower suspension holders provide even greater range of adjustment for the rear suspension. Using different combinations of eccentric bushings, fine adjustment of rear anti-squat, rear toe-in, rear roll center, and rear track-width can be obtained. For more information about the influence of rear anti-squat, rear toe-in, rear roll center and rear track width on car handling, please refer to HUDY Off-Road Set-up Book (#209099).

ROLL CENTER			
RR	RF		(mm)
0	0	0	= 0mm
0	0	1	= 1mm
0	0	2	= -1mm

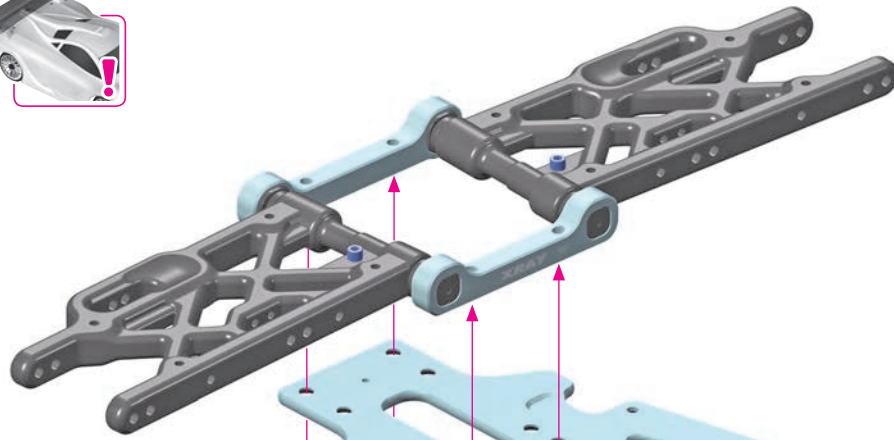
TRACK-WIDTH			
RR	RF		(mm)
0	0	0	= 308
0	0	1	= 306
0	0	2	= 310

The tables describe the amounts of rear anti-squat, rear toe-in, rear track-width change depending on the combinations of eccentric bushings used with 0 and 1mm, 1° off set. The 0.5mm, 0.5° represent the half change.

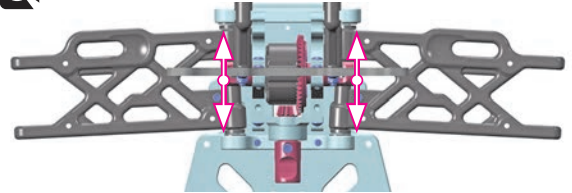
3. REAR SUSPENSION



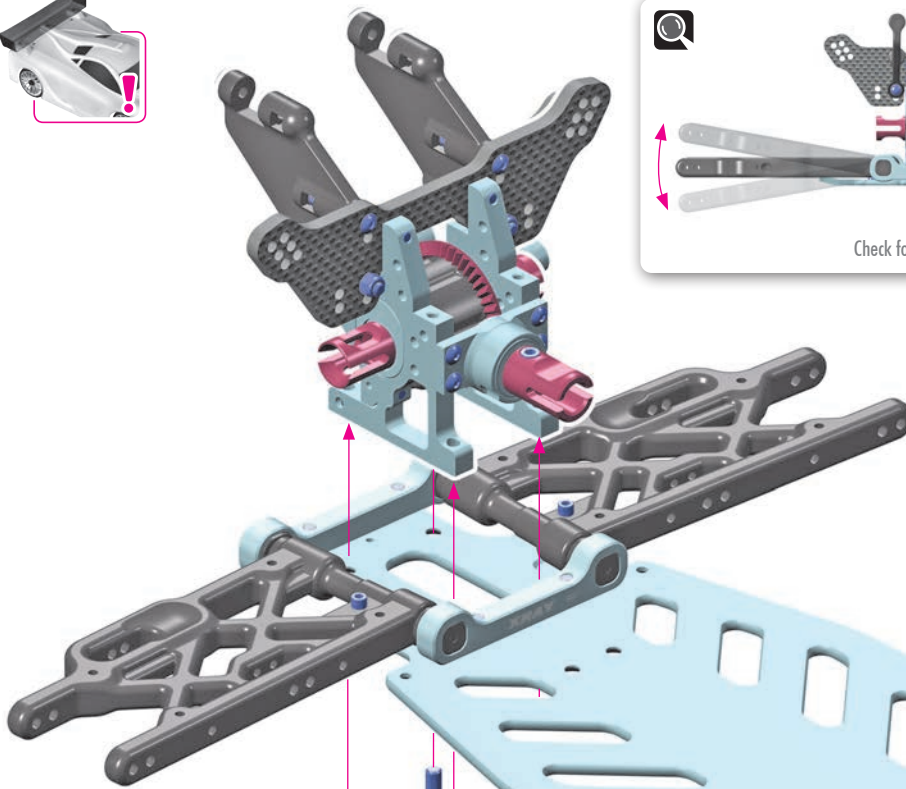
4x 903410
SFH M4x10



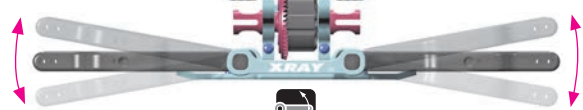
Push the arm from both sides to create play.



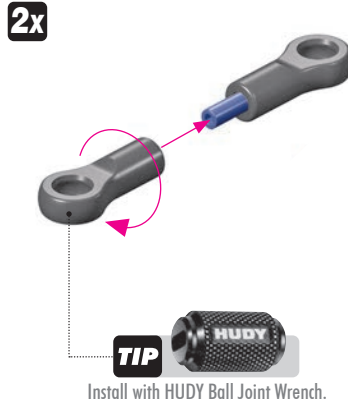
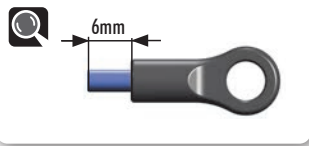
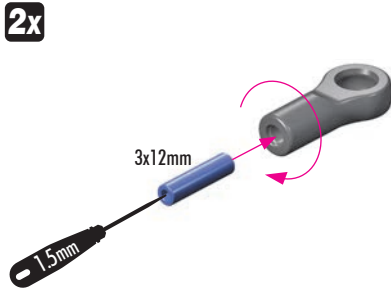
4x 903410
SFH M4x10



Check for free movement.



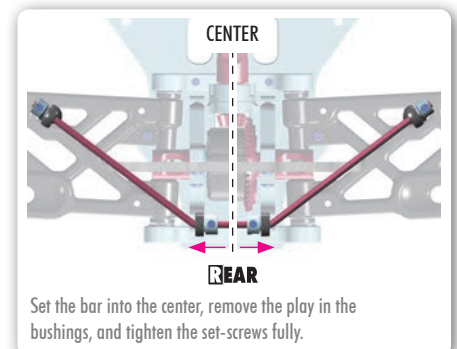
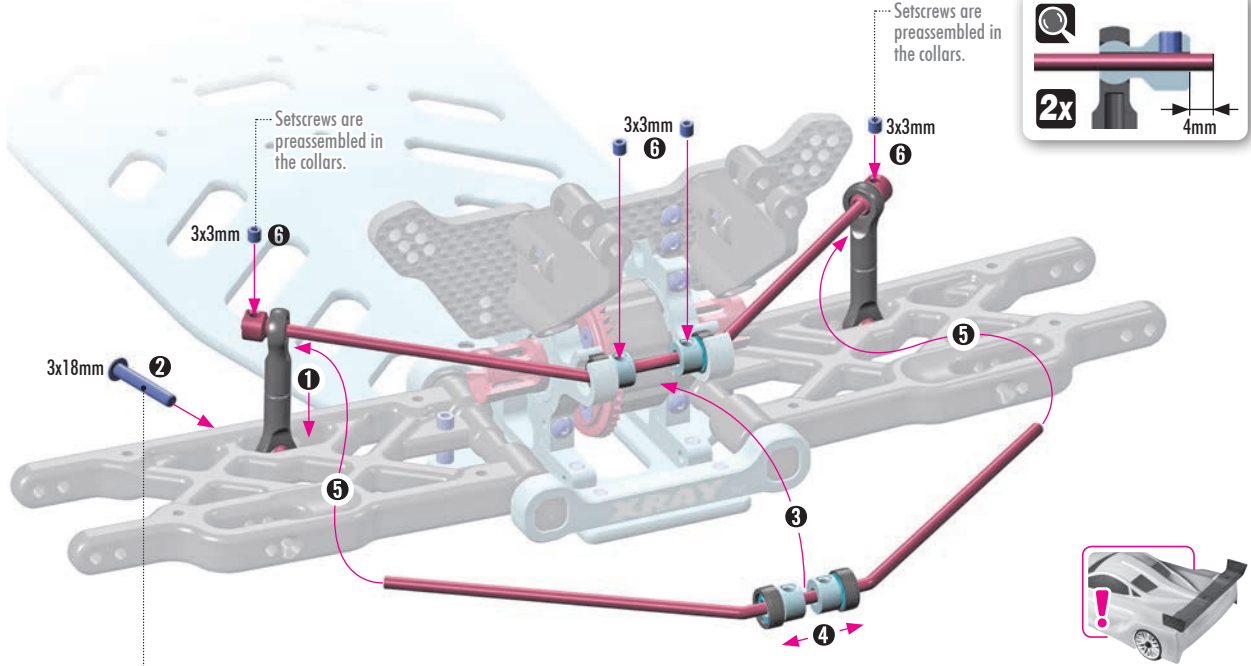
3. REAR SUSPENSION



REAR ANTI-ROLL BARS



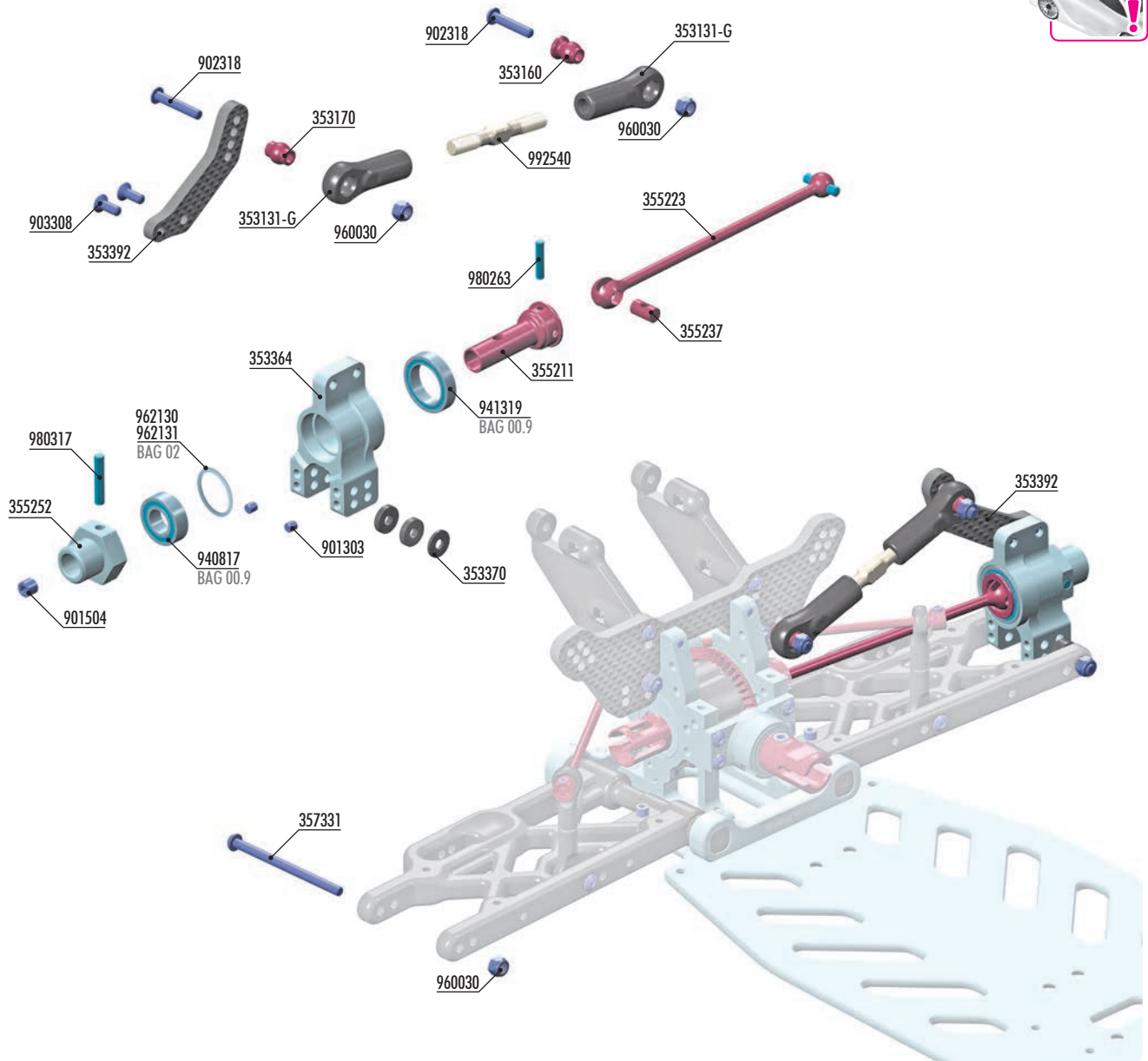
REAR ANTI-ROLL BARS		
OPTION	#353420	ø2.0mm OPTION
	#353422	ø2.2mm OPTION
	#353424	ø2.4mm OPTION
	#353425	ø2.5mm OPTION
	#353426	ø2.6mm OPTION
	#353428	ø2.8mm INCLUDED
	#353430	ø3.0mm OPTION
	#353432	ø3.2mm OPTION



SET-UP BOOK
ANTI-ROLL BAR

4. REAR SUSPENSION

2x



OFFSET WHEEL AXLES			
OPTION	#355250	0mm	OPTION
	#355251	+1mm	OPTION
	#355252	+2mm	INCLUDED

XRAY BALL-BEARING					
OPTION	#930816	8x16x5	GREASE	STEEL	OPTION
	#940816	8x16x5	GREASE	RUBBER	OPTION
	#931318	13x19x4	GREASE	STEEL	OPTION
	#941318	13x19x4	GREASE	RUBBER	OPTION
	#930817	8x16x5	OIL	STEEL	OPTION
	#940817	8x16x5	OIL	RUBBER	INCLUDED
	#931319	13x19x4	OIL	STEEL	OPTION
	#941319	13x19x4	OIL	RUBBER	INCLUDED

BAG
04

- 353131-G REAR UPPER INNER CAMBER LINK BALL JOINT - GRAPHITE (2)
- 353160 MOUNTING BALL 6.8 (4)
- 353170 PIVOT BALL 6.8 (4)
- 353364 GT ALU REAR UPRIGHT - SWISS 7075 T6
- 353370 SET OF COMPOSITE REAR HUB CARRIER SHIMS
- 353392 GT CARBON EXTENSION FOR ALU REAR UPRIGHT (1+1)
- 355211 CVD DRIVE AXLE - HUDY SPRING STEEL™
- 355223 CVD UNIVERSAL DRIVE SHAFT 93mm - HUDY SPRING STEEL™
- 355237 CVD DRIVE SHAFT COUPLING - HUDY SPRING STEEL™
- 355252 ALU WHEEL AXLE OFFSET +2mm - BLACK COATED (2)
- 357331 REAR LOWER OUTER PIVOT PIN SCREW 3mm (2)
- 992540 HUDY TITAN ADJ. TURNBUCKLE M5 L/R 40mm (2)

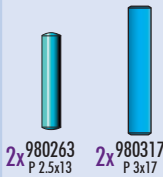
- 901303 HEX SCREW SB M3x3 (10)
- 901504 HEX SCREW SB M5x4 (10)
- 902318 HEX SCREW SH M3x18 (10)
- 903308 HEX SCREW SFH M3x8 (10)
- 940817 BALL-BEARING 8x16x5 RUBBER SEALED - OIL (2)
- 941319 BALL-BEARING 13x19x4 RUBBER SEALED - OIL (2)
- 960030 NUT M3 (10)
- 980263 PIN 2.5x13 (10)
- 980317 PIN 3x17 (10)

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

4. REAR SUSPENSION



2x 940817
BB 8x16x5



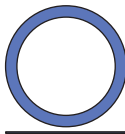
2x 980263 P 2.5x13 2x 980317 P 3x17



2x 901504 SB M5x4

2x L=R

TIP

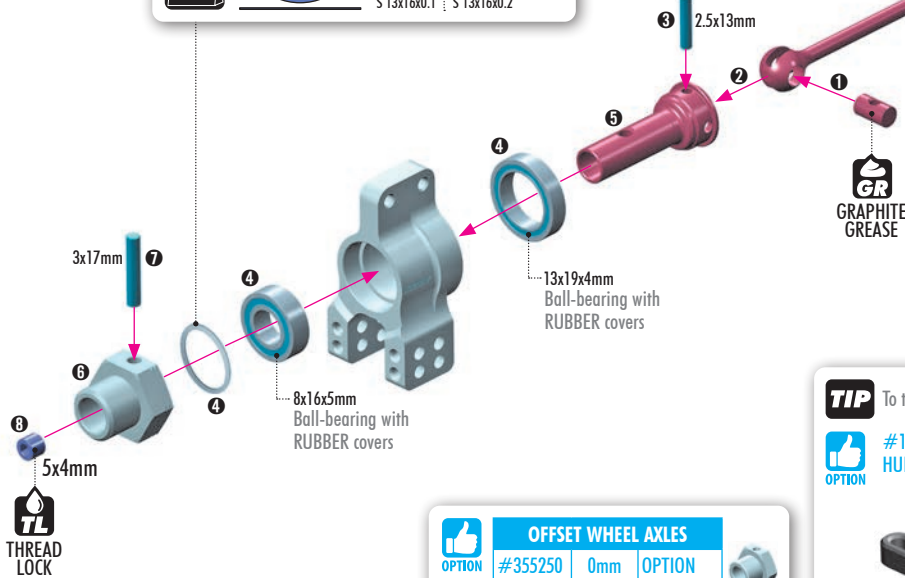


Use a shim 0.1~0.2mm to remove play.

BAG
02

INITIAL SETTING

962131 S 13x16x0.1 962130 S 13x16x0.2



TIP
Follow the TECH TIP on page 6 for drive shaft pin servicing.

TIP To tighten the setscrew you can also use:

OPTION #107570 HUDY 17mm Wheel Nut Tool.



OPTION

OFFSET WHEEL AXLES

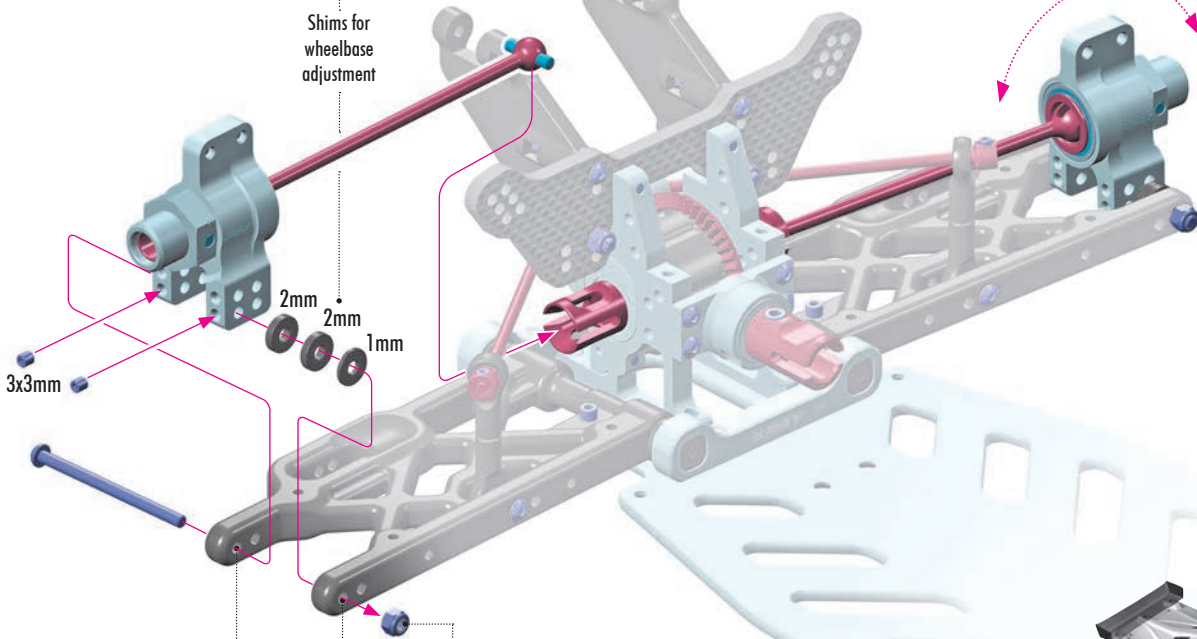
#355250	0mm	OPTION
#355251	+1mm	OPTION
#355252	+2mm	INCLUDED



2x L=R

TIP

Ensure that the rear upright moves freely. If it DOES NOT move freely, use sandpaper to thin both wheelbase adjustment shims.



2x 353370 SHIM 3x9x1



4x 353370 SHIM 3x9x2



2x 960030 N M3



4x 901303 SB M3x3

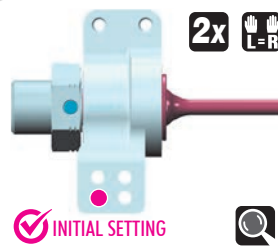


TIP


If the suspension arm DOES NOT move freely use a HUDY Arm Reamer to resize the holes of the arms.

OPTION #107634 HUDY ARM REAMER

ARM REAMER




4. REAR SUSPENSION

2x 


RIGHT THREAD SIDE ← → **LEFT THREAD SIDE**


SLOT ORIENTATION !

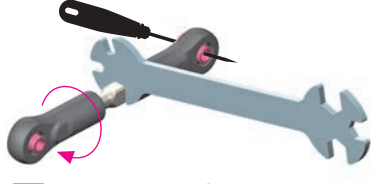
NOTE SHINY SIDE ORIENTATION !


GRAPHITE GREASE 




RIGHT THREAD **LEFT THREAD**

GRAPHITE GREASE 

TIP  Install with HU DY Multi Tool.


TIP Use tools to tighten as shown:

 #181090 Special Tool for turnbuckles & nuts
 #181050 Turnbuckle Wrench 5mm
 OPTION


TIP Use a tool to create a leading edge for the ball joint.

 #107602 - HU DY EXCLUSIVE Limited Edition
 OPTION

18.5mm **2x** 
 **INITIAL SETTING**  **INITIAL SETTING**

SET-UP BOOK
CAMBER

-  **4x** 902318 SH M3x18
-  **4x** 903308 SFH M3x8
-  **4x** 960030 N M3

2x 


ASSEMBLED VIEW 


NOTE ORIENTATION !

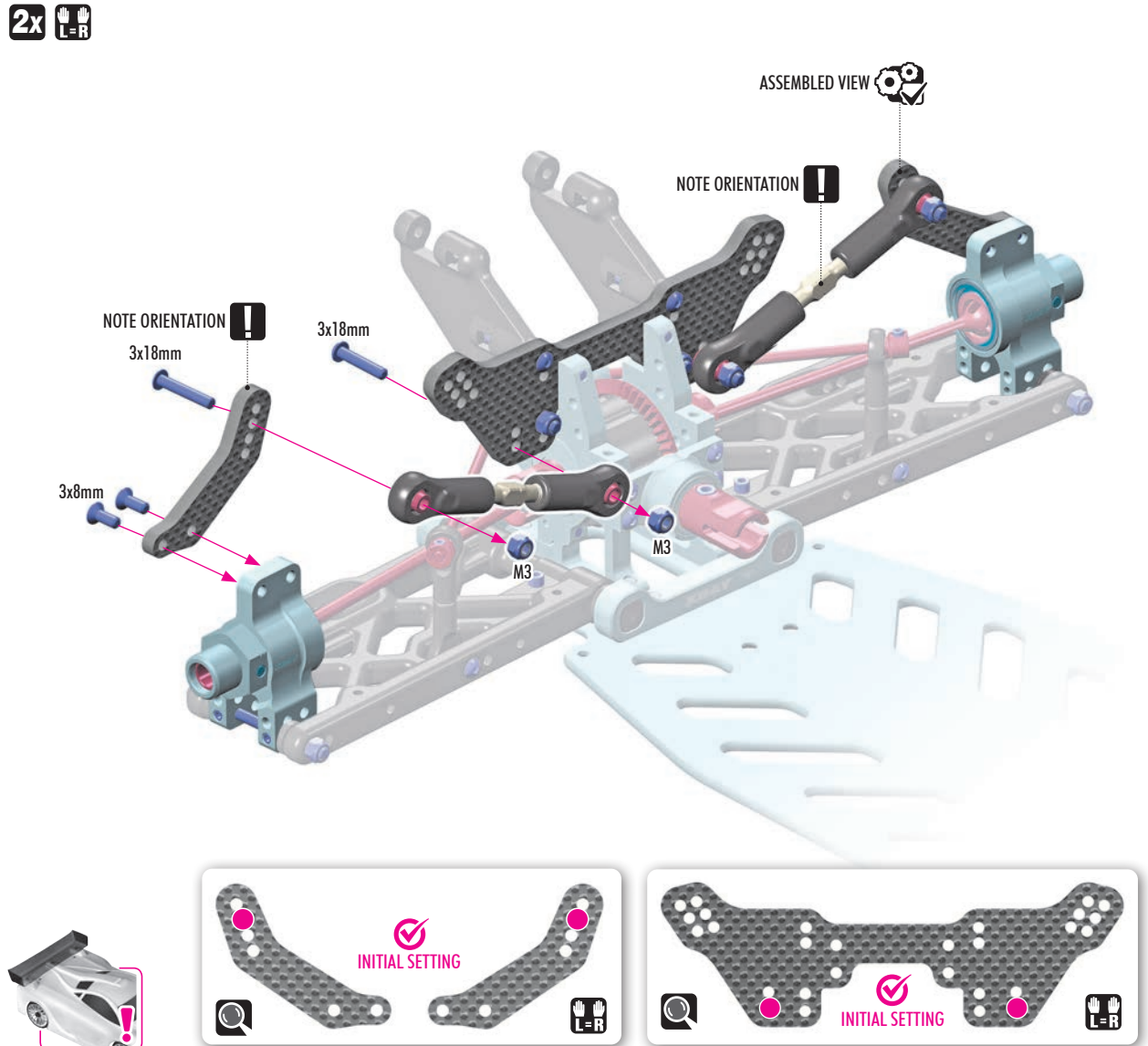
NOTE ORIENTATION !

3x18mm 3x18mm

3x8mm M3 M3

INITIAL SETTING 

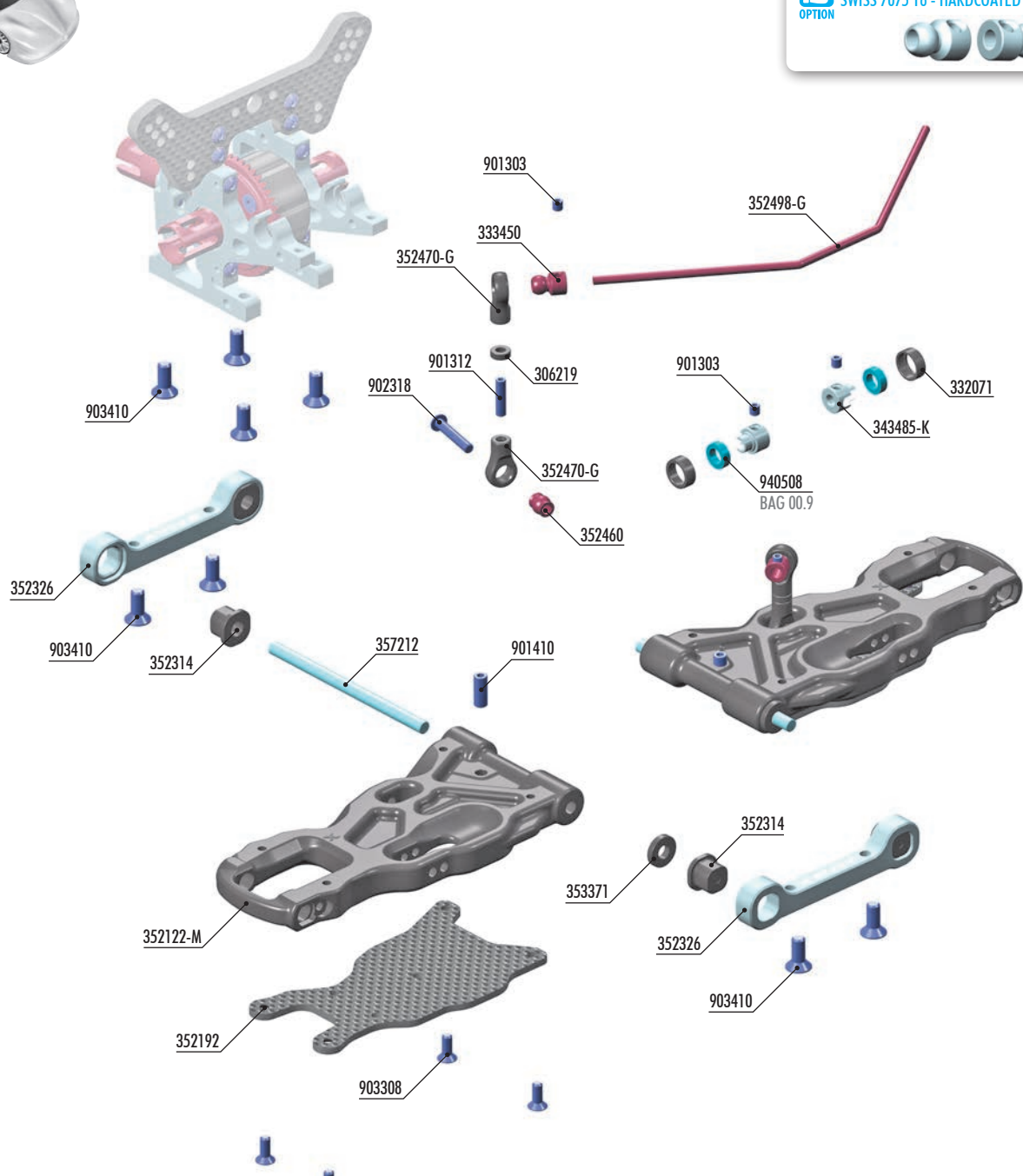
INITIAL SETTING 



5. FRONT SUSPENSION



#333451 ALU ANTI-ROLL BAR PIVOT BALL 5.8mm
OPTION
 SWISS 7075 T6 - HARDCOATED (2)



ALU ANTI-ROLL BAR COLLAR

OPTION	#343483-K	ø2.2mm	OPTION
	#343484-K	ø2.4mm	OPTION
	#343482-K	ø2.6mm	OPTION
	#343485-K	ø2.8mm	INCLUDED
	#343481-K	ø3.0mm	OPTION

FRONT LOWER SUSP. ARMS

OPTION	#352122-M	MEDIUM	INCLUDED
	#352122-G	GRAPHITE	OPTION

FRONT ANTI-ROLL BARS

OPTION	#352496-G	2.6mm	OPTION
	#352498-G	2.8mm	INCLUDED
	#352499-G	3.0mm	OPTION



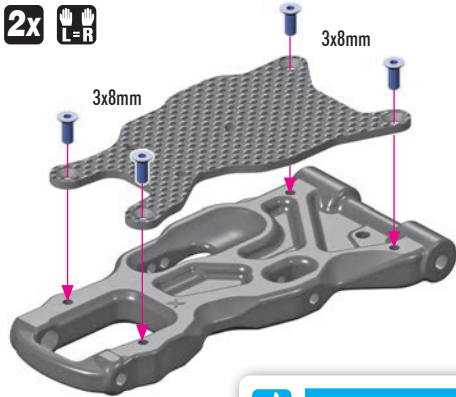
- 306219 COMPOSITE SET OF SHIMS (4)
- 332071 COMPOSITE BALL-BEARING HUB (4)
- 333450 ANTI-ROLL BAR BALL JOINT 5.8mm (2)
- 343485-K ALU CUTTED ANTI-ROLL BAR COLLAR ø2.8 - BLACK (2)
- 352122-M C-HUB COMPOSITE FRONT LOWER SUSPENSION ARM - MEDIUM
- 352192 CARBON FRONT LOWER C-HUB ARM PLATE 2.2mm (2)
- 352314 COMPOSITE SQUARE ADJ. ROLL CENTER BUSHINGS - V2 (2)
- 352326 ALU FRONT LOWER SUSP. HOLDER - SQUARE ADJ. ROLL-CENTER
- 352460 PIVOT BALL 5.8 (10)
- 352470-G COMPOSITE BALL JOINT 5.8 - GRAPHITE (8)
- 352498-G GT FRONT ANTI-ROLL BAR 2.8mm

- 353371 SET OF COMPOSITE LOWER ARM SHIMS
- 357212 LOWER INNER PIVOT PIN F+R (2)
- 901303 HEX SCREW SB M3x3 (10)
- 901312 HEX SCREW SB M3x12 (10)
- 901410 HEX SCREW SB M4x10 (10)
- 902318 HEX SCREW SH M3x18 (10)
- 903308 HEX SCREW SFH M3x8 (10)
- 903410 HEX SCREW SFH M4x10 (10)
- 940508 BALL-BEARING 5x8x2.5 RUBBER SEALED - OIL (2)

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

5. FRONT SUSPENSION

8x 903308 SFH M3x8

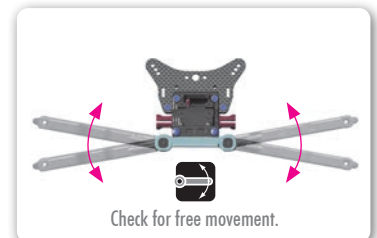
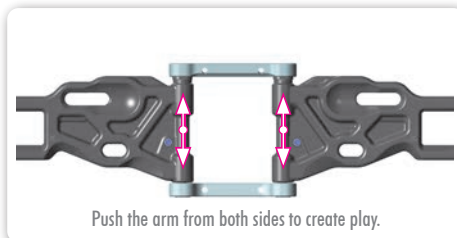
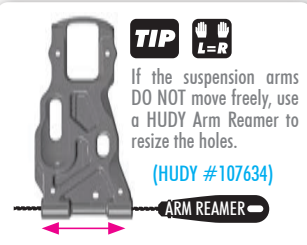
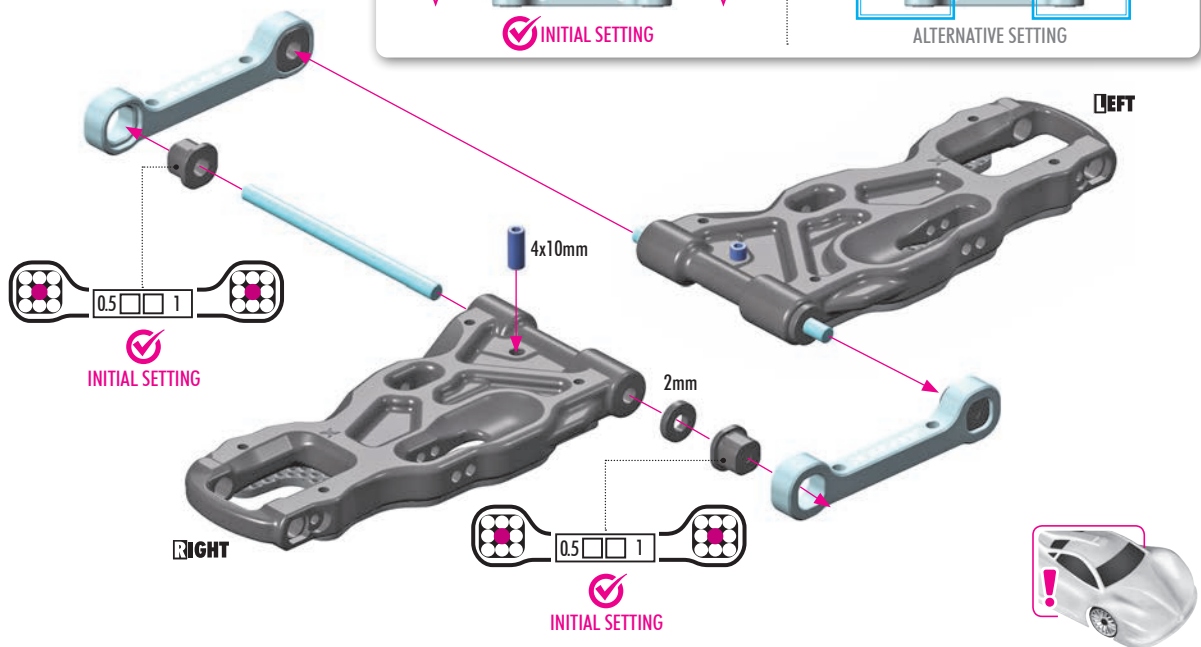
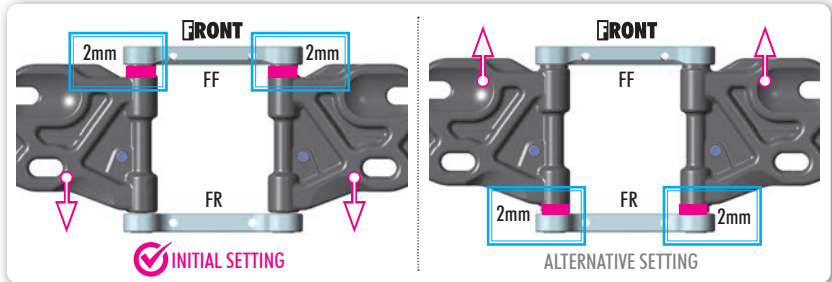


FRONT LOWER SUSP. ARMS			
	#352122-M	MEDIUM	INCLUDED
OPTION	#352122-G	GRAPHITE	OPTION



10x 353371 SHIM 4x10x2

2x 901410 SB M4x10



Eccentric bushings have two different offsets from the center.

- Middle position = 0.5 mm or 0.5° from center
- Outer position = 1 mm or 1° from center

TRACK-WIDTH		
FF	FR	(mm)
		= 308
		= 306
		= 310

ROLL CENTER		
FF	FR	(mm)
		= 1
		= 0
		= -1

The XRAY alu front lower suspension holders provide even greater range of adjustment for the front suspension. Using different combinations of eccentric bushings, fine adjustment of front kick-up, roll center, and front track-width can be obtained. For more information about the influence of kick-up, front track-width, and roll centers on car handling, please refer to HUDY Off-Road Set-up Book (#209099).

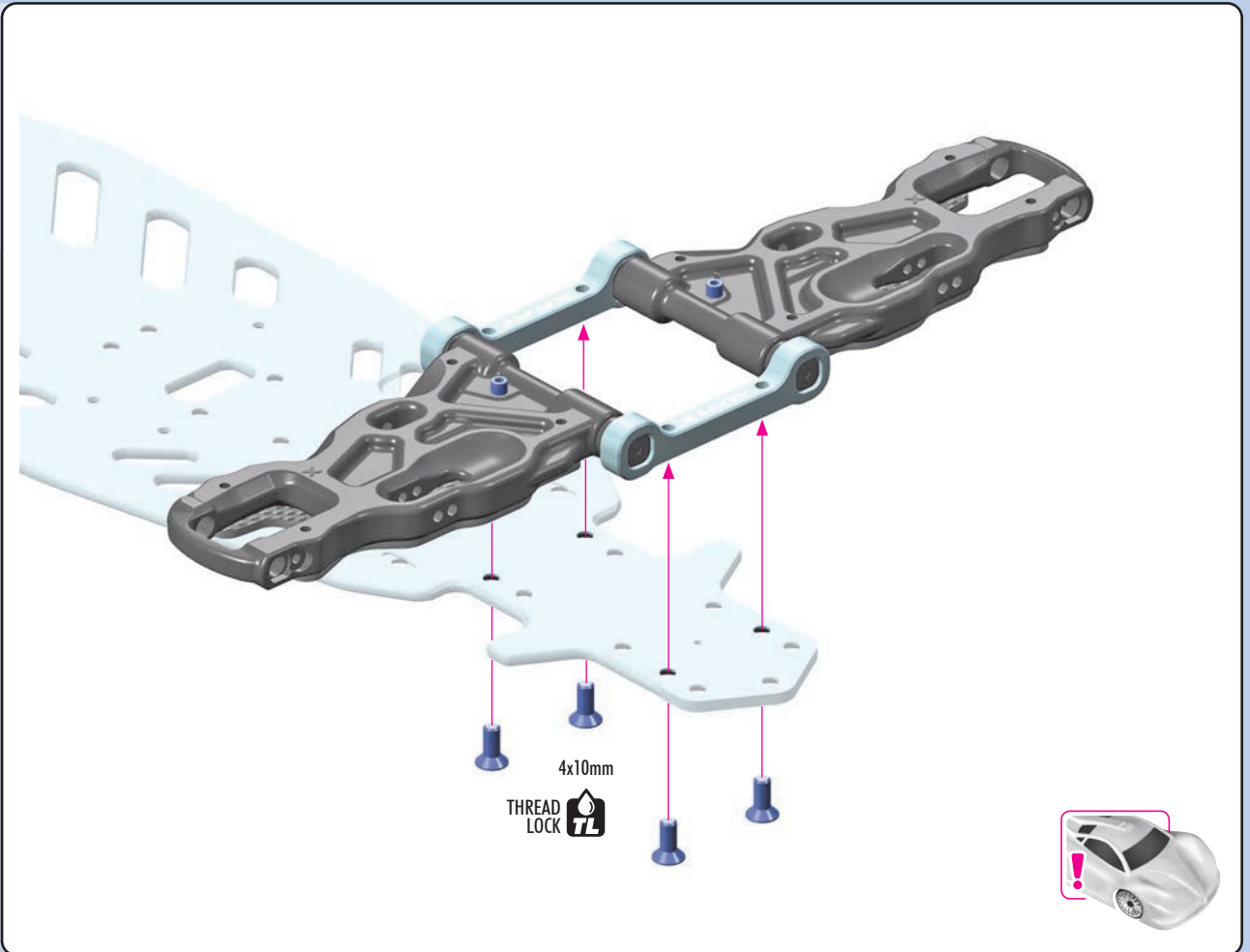
The tables below describe the amounts of kick-up, front track-width change depending on the combinations of eccentric bushings used with 0 and 1mm, 1° offset. The 0.5mm, 0.5° represents the half change.

SET-UP BOOK
KICK UP
ROLL CENTER DOWNSTOP
WHEELBASE
TRACK WIDTH

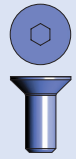
5. FRONT SUSPENSION



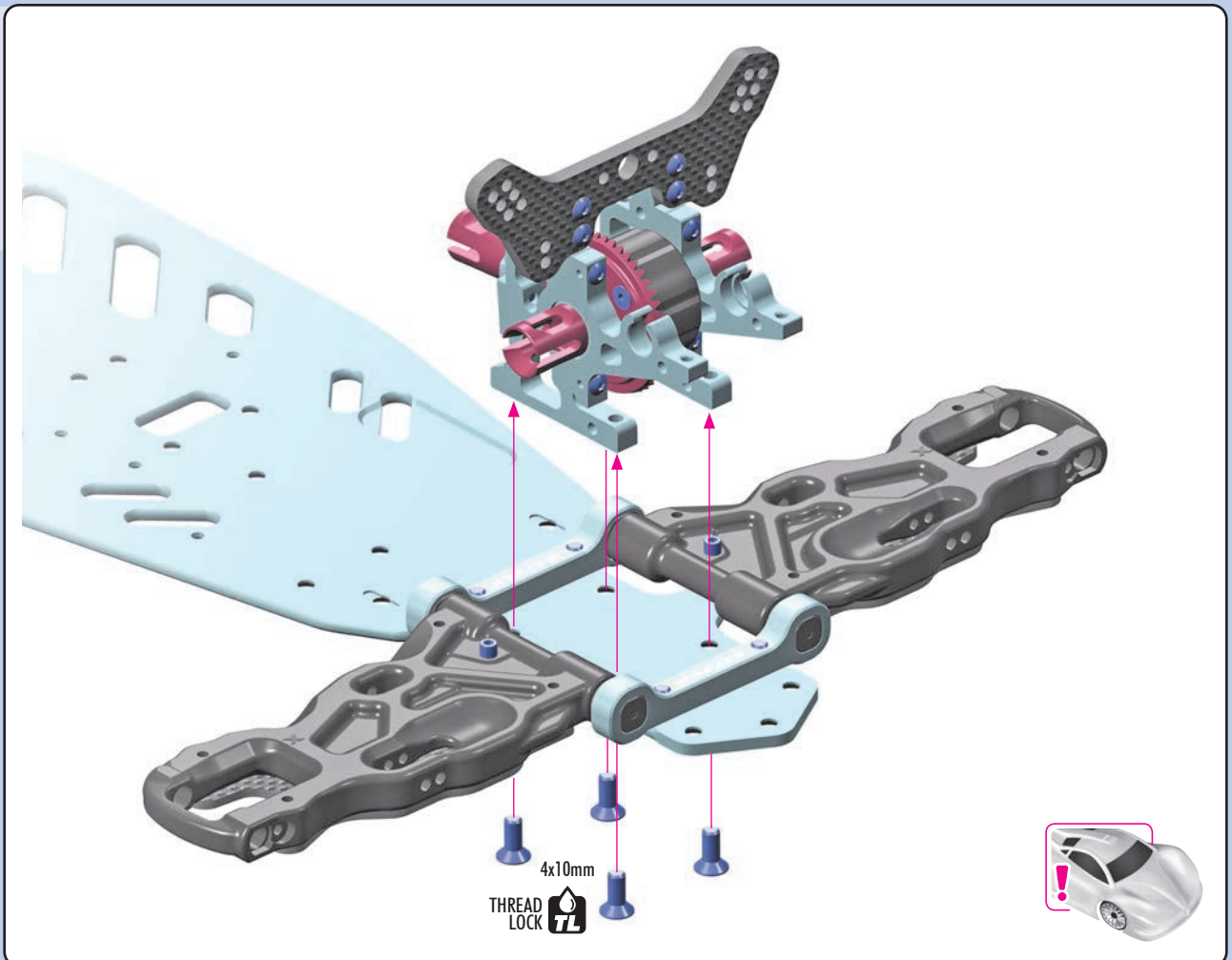
4x 903410
SFH M4x10



4x10mm
THREAD LOCK TL



4x 903410
SFH M4x10



4x10mm
THREAD LOCK TL

5. FRONT SUSPENSION

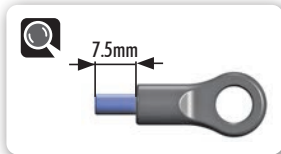
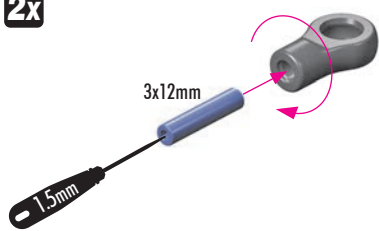


2x 306219 SHIM 3x6x3

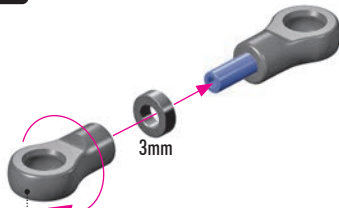


2x 901312 SB M3x12

2x

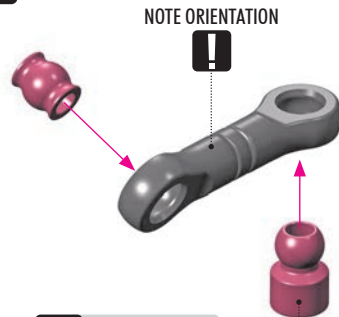


2x



TIP Install with HUDY Ball Joint Wrench.

2x



TIP Install with HUDY Multi Tool.



2x 940508 BB 5x8x2.5

FRONT ANTI-ROLL BARS



ASSEMBLED VIEW



OPTION

ALU ANTI-ROLL BAR COLLAR

#343483-K	ø2.2mm	OPTION
#343484-K	ø2.4mm	OPTION
#343482-K	ø2.6mm	OPTION
#343485-K	ø2.8mm	INCLUDED
#343481-K	ø3.0mm	OPTION



OPTION

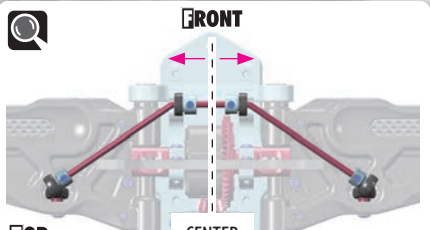
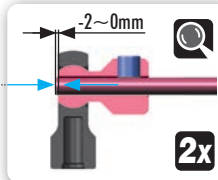
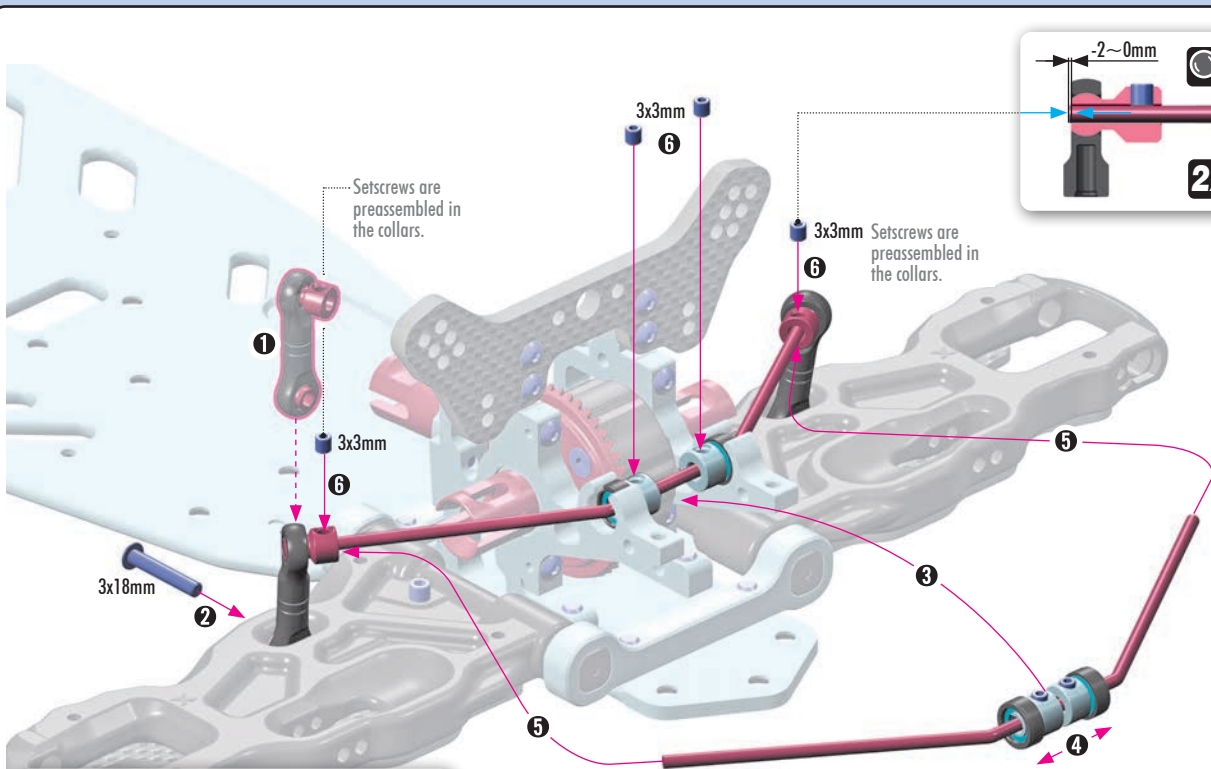
FRONT ANTI-ROLL BARS

#352496-G	2.6mm	OPTION
#352498-G	2.8mm	INCLUDED
#352499-G	3.0mm	OPTION

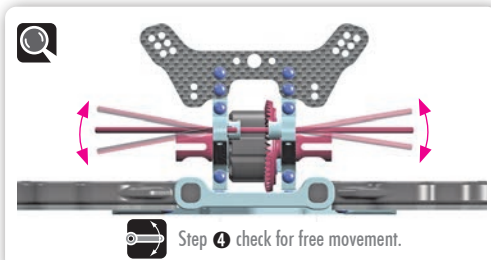
4x 901303 SB M3x3



2x 902318 SH M3x18



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

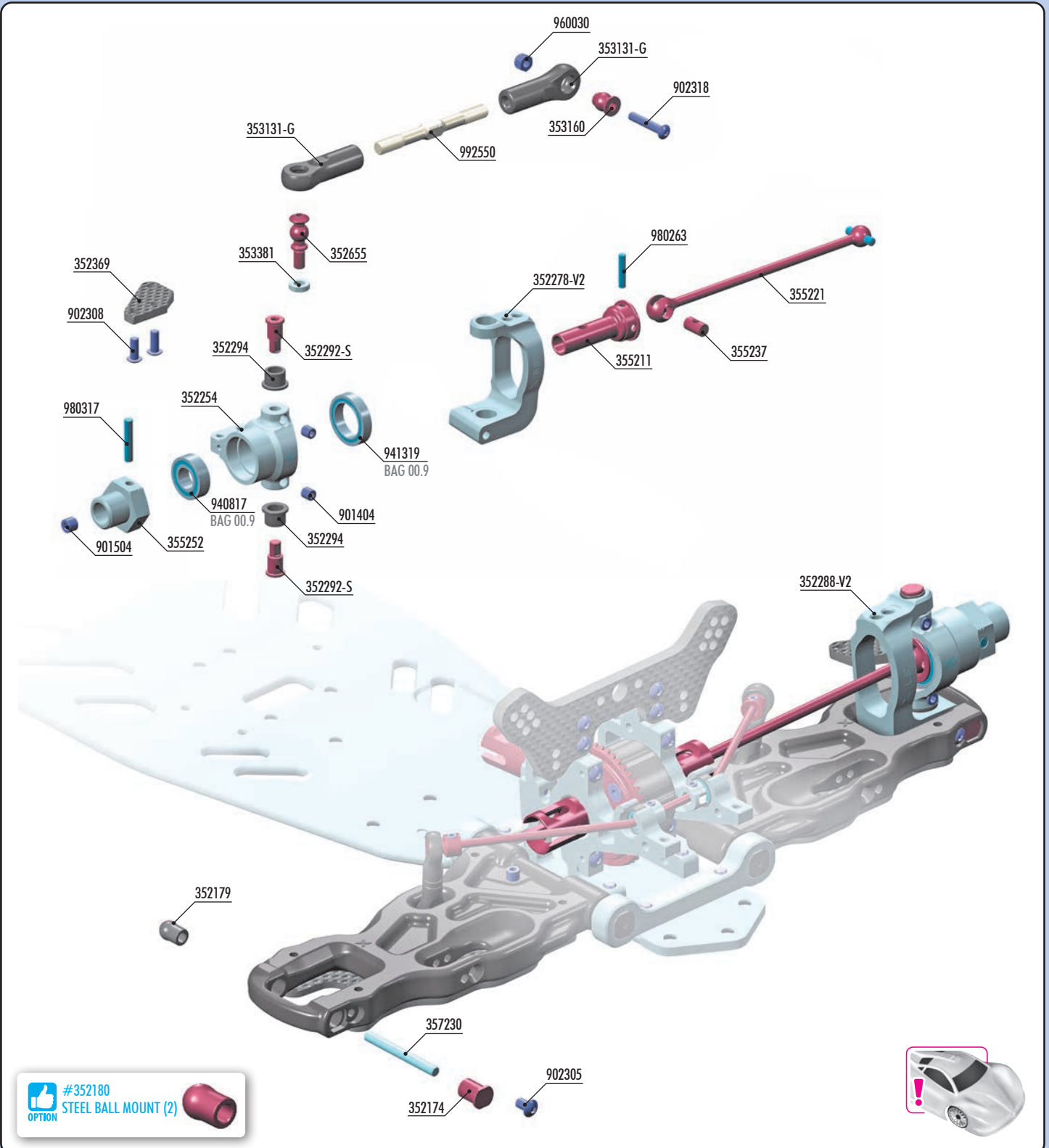


Step 4 check for free movement.



SET-UP BOOK
ANTI-ROLL BAR

6. FRONT SUSPENSION



#352180
OPTION
STEEL BALL MOUNT (2)

BAG
06

352174	STEEL ECCENTRIC BUSHING 1° - V2 (2)	992550	HUDY TITAN ADJ. TURNBUCKLE M5 L/R 50mm (2)
352179	COMPOSITE BUSHING & BALL MOUNT SET (2+2)	901404	HEX SCREW SB M4x4 (10)
352254	ALU STEERING BLOCK - SWISS 7075 T6	901504	HEX SCREW SB M5x4 (10)
352278-V2	ALU CASTER BLOCK 6° RIGHT - SWISS 7075 T6	902305	HEX SCREW SH M3x5 (10)
352288-V2	ALU CASTER BLOCK 6° LEFT - SWISS 7075 T6	902308	HEX SCREW SH M3x8 (10)
352292-S	STEEL STEERING BLOCK PIVOT PIN WITH SET SCREW (2)	902318	HEX SCREW SH M3x18 (10)
352294	COMPOSITE BUSHING FOR ALU CASTER BLOCK (2)	940817	BALL-BEARING 8x16x5 RUBBER SEALED - OIL (2)
352369	CARBON STEERING PLATE (2)	941319	BALL-BEARING 13x19x4 RUBBER SEALED - OIL (2)
352655	BALL STUD 6.8mm WITH BACKSTOP L=6mm - M4 (2)	960030	NUT M3 (10)
353131-G	REAR UPPER INNER CAMBER LINK BALL JOINT - GRAPHITE (2)	980263	PIN 2.5x13 (10)
353160	MOUNTING BALL 6.8 (4)	980317	PIN 3x17 (10)
353381	ALU SHIM 4x7.5x2 (4)		
355211	CVD DRIVE AXLE - HUDY SPRING STEEL™		
355221	CVD UNIVERSAL DRIVE SHAFT 94mm - HUDY SPRING STEEL™		
355237	CVD DRIVE SHAFT COUPLING - HUDY SPRING STEEL™		
355252	ALU WHEEL AXLE OFFSET "+2mm" - HARD COATED (2)		
357230	FRONT LOWER OUTER PIVOT PIN (2)		

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

6. FRONT SUSPENSION

941319
BB 13x19x4
2x

940817
BB 8x16x5
2x

901504
SB M5x4
2x

902308
SH M3x8
4x

980263
P 2.5x13
2x

980317
P 3x17
2x

2x

NOTE ORIENTATION

TIP To tighten the setscrew you can also use the **HUDY 17mm Wheel Nut Tool #107570**.

TIP Follow the **TECH TIP** on page 5 for drive shaft pin servicing.

GR GRAPHITE GREASE

OFFSET WHEEL AXLES

OPTION	OFFSET WHEEL AXLES	OPTION
#35250	0mm	OPTION
#35251	+1mm	OPTION
#35252	+2mm	INCLUDED

901404
SB M4x4
4x

2x

NOTE ORIENTATION

NOTE ORIENTATION

TIP Use M3 screw to remove pivot pin.

ASSEMBLED VIEW

902305
SH M3x5
2x

2x

STEP 1 DETAIL


TIP Press pivot ball into arm until it snaps into place.

TIGHTEN GENTLY

ECCENTRIC BUSHINGS


OPTION	ECCENTRIC BUSHINGS	OPTION
#352170	0° - STEEL	OPTION
#352174	1° - STEEL	INCLUDED
#352175	2° - STEEL	OPTION
#352179	0° - COMP.	OPTION

6. FRONT SUSPENSION

2x 

RIGHT THREAD SIDE **LEFT THREAD SIDE**


TIP Use tools to tighten as shown:



#181090 Special Tool for turnbuckles & nuts
#181050 Turnbuckle Wrench 5mm

TIP Install with HUDY Multi Tool.


SLOT ORIENTATION !

GRAPHITE GREASE 

RIGHT THREAD


NOTE SHINY SIDE ORIENTATION !

LEFT THREAD

GRAPHITE GREASE 

NOTE SHINY SIDE ORIENTATION !


TIP Use a tool to create a leading edge for the ball joint.

OPTION 

Reamer (#107602 - HUDY EXCLUSIVE Limited Edition)


30mm


INITIAL SETTING


2x 


30mm

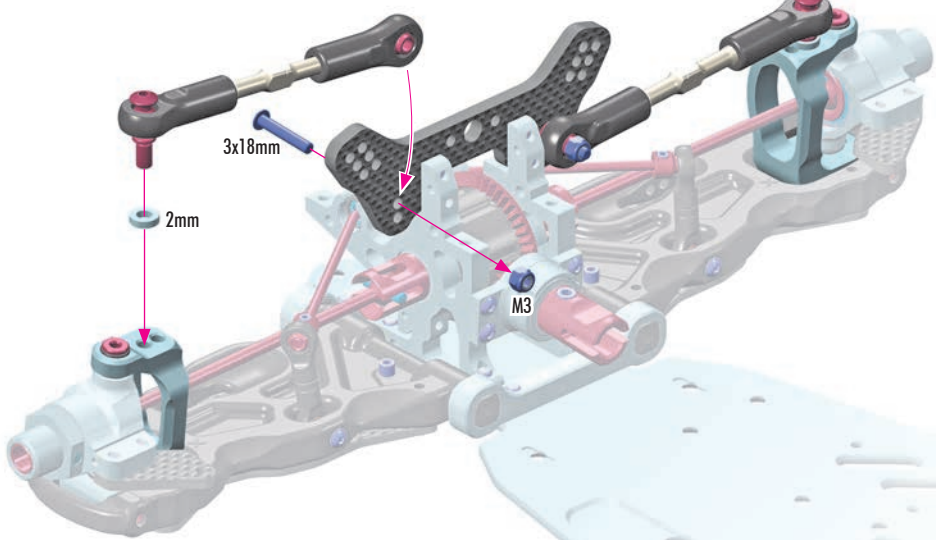
INITIAL SETTING


2x 353381
SHIM 4x7.5x2


2x 902318
SH M3x18

2x 

ASSEMBLED VIEW 

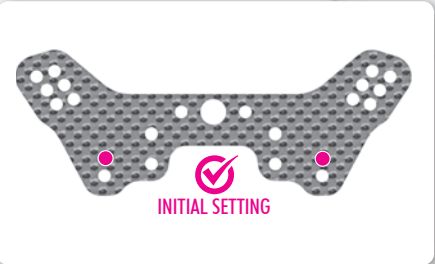


3x18mm

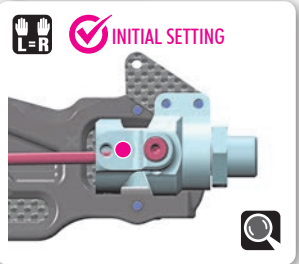
2mm

M3

INITIAL SETTING



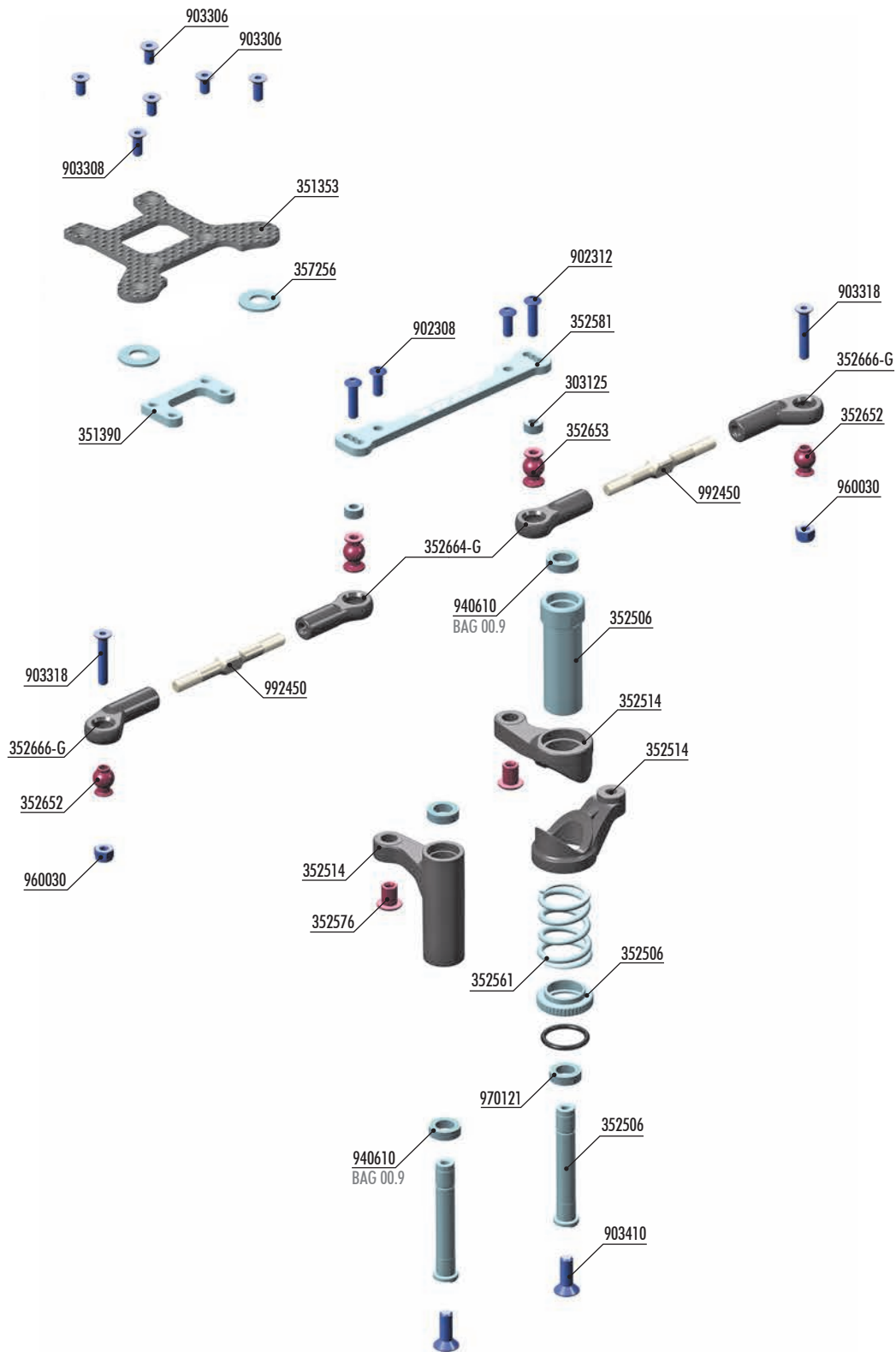
INITIAL SETTING



INITIAL SETTING

SET-UP BOOK
ROLL CENTER

7. STEERING

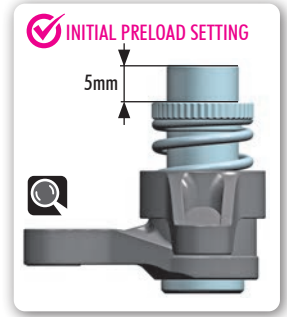
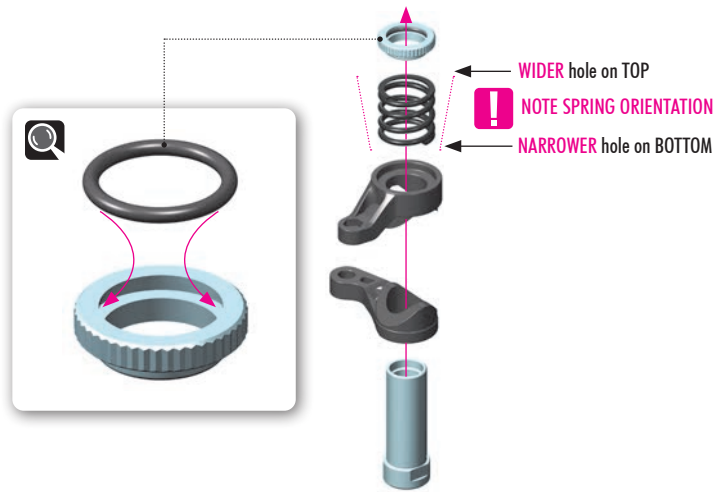


BAG

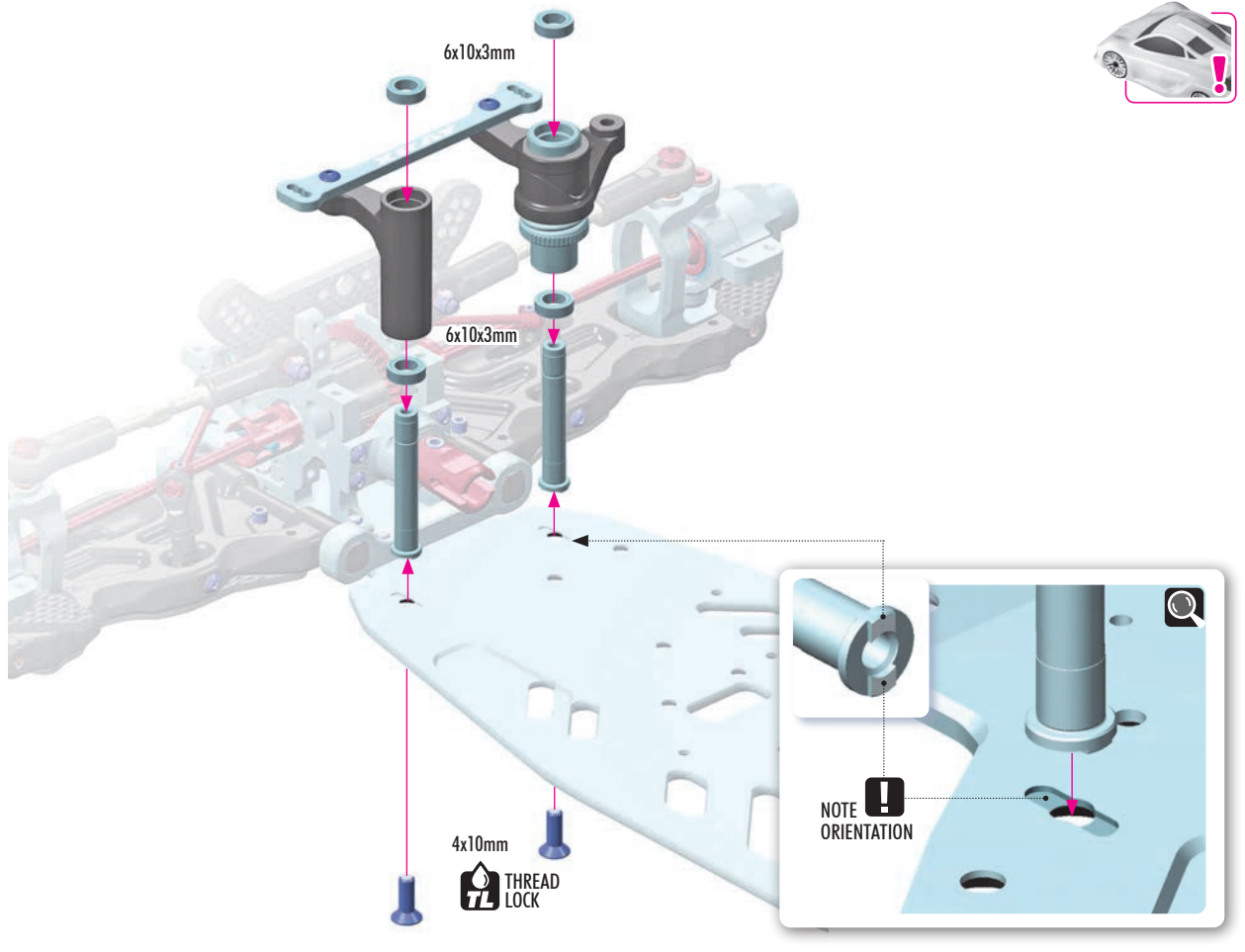
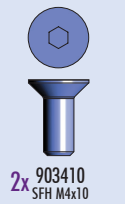
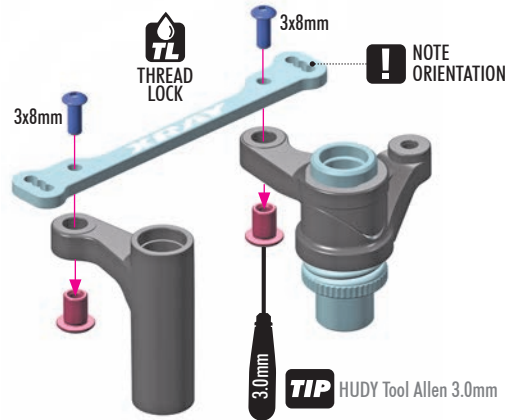
07

303125	ALU SHIM 3x6x3.0mm (10)	902308	HEX SCREW SH M3x8 (10)
351353	CARBON UPPER PLATE	902312	HEX SCREW SH M3x12 (10)
351390	ALU UPPER PLATE HOLDER - SWISS 7075 T6	903306	HEX SCREW SFH M3x6 (10)
352506	SERVO SAVER WITH CHASSIS LOCK & HARD SPRING - G - SET	903308	HEX SCREW SFH M3x8 (10)
352514	COMPOSITE SERVO SAVER - GRAPHITE	903318	HEX SCREW SFH M3x18 (10)
352561	SERVO SAVER SPRING PROGRESSIVE	903410	HEX SCREW SFH M4x10 (10)
352576	STEERING PLATE BUSHING (2)	940610	BALL-BEARING 6x10x3 RUBBER SEALED - OIL (2)
352581	ALU STEERING PLATE - SWISS 7075 T6	960030	NUT M3 (10)
352652	BALL STUD 6.8mm (4)	970121	O-RING 12.1 x 1.6 (10)
352653	BALL STUD 6.8mm WITH BACKSTOP - M3 (2)		
352664-G	COMPOSITE STEERING BALL JOINT 6.8mm - GRAPHITE (2)		
352666-G	COMPOSITE RELIEF STEERING BALL JOINT 6.8mm - GRAPHITE (2)		
357256	ALU SHIM 6x13x1mm (2)		
992450	HUDY TITAN ADJ. TURNBUCKLE M4 L/R 50mm (2)		

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



SET-UP BOOK
SERVO SAVER



7. STEERING



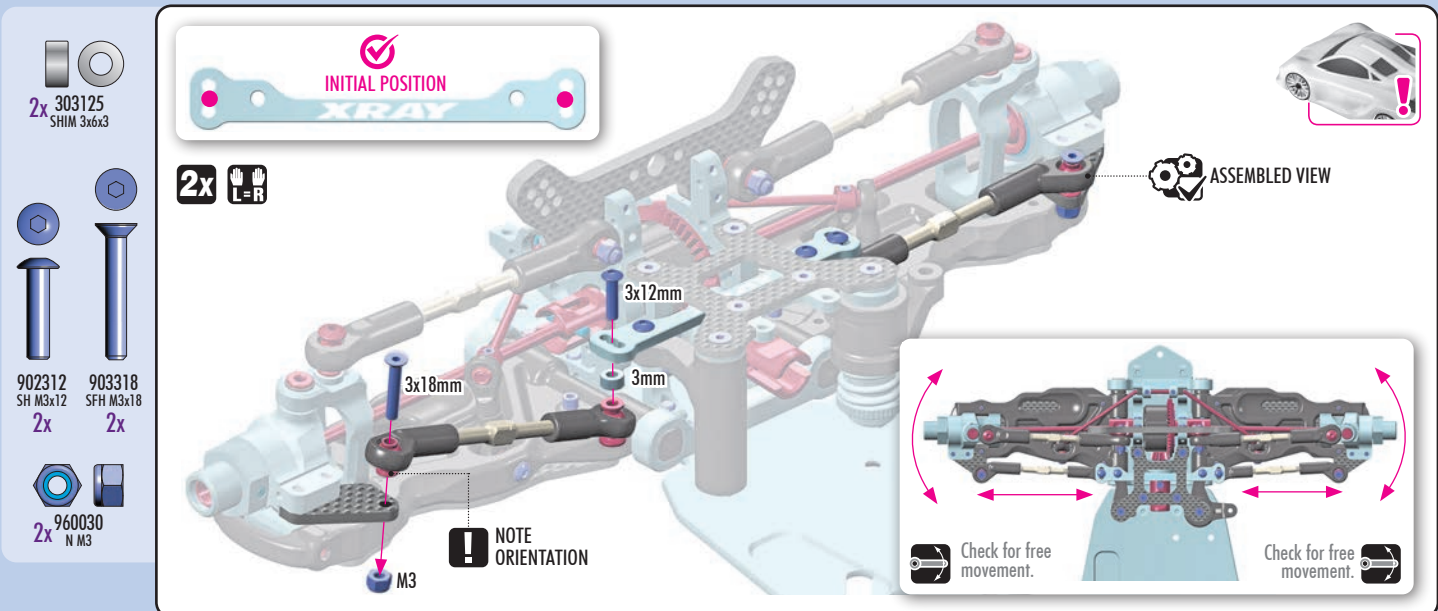
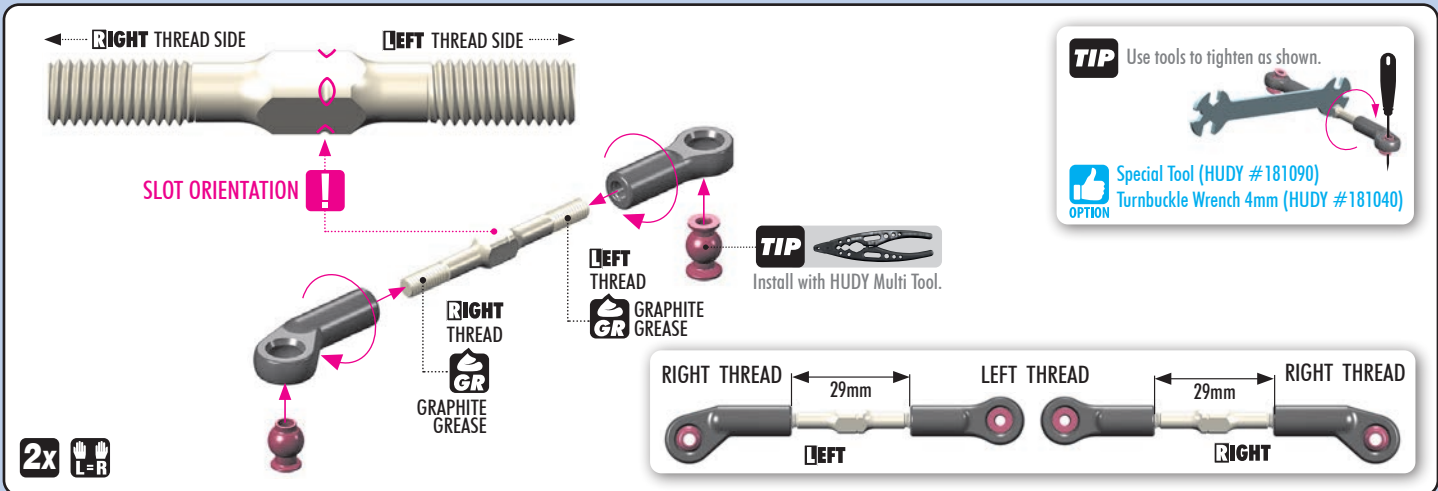
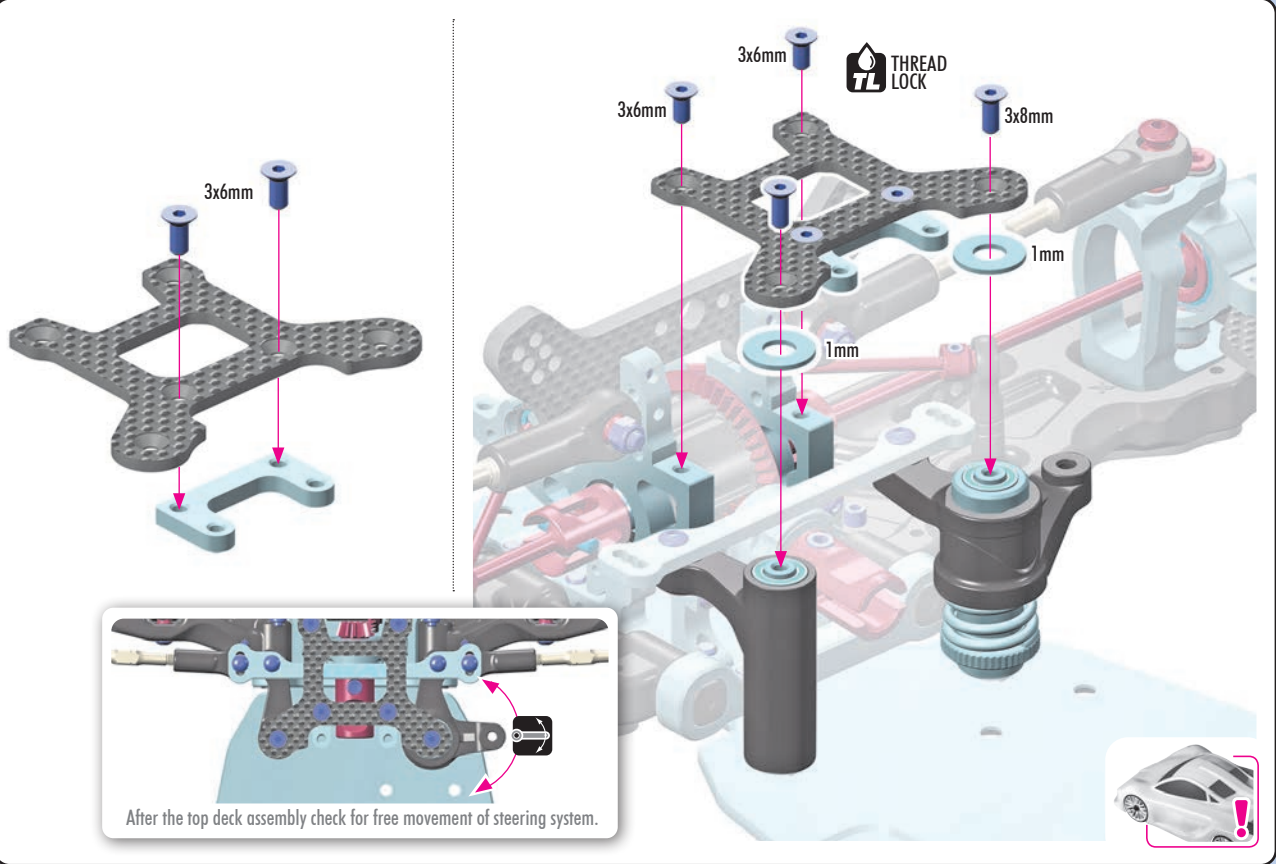
2x 357256 SHIM 6x13x1



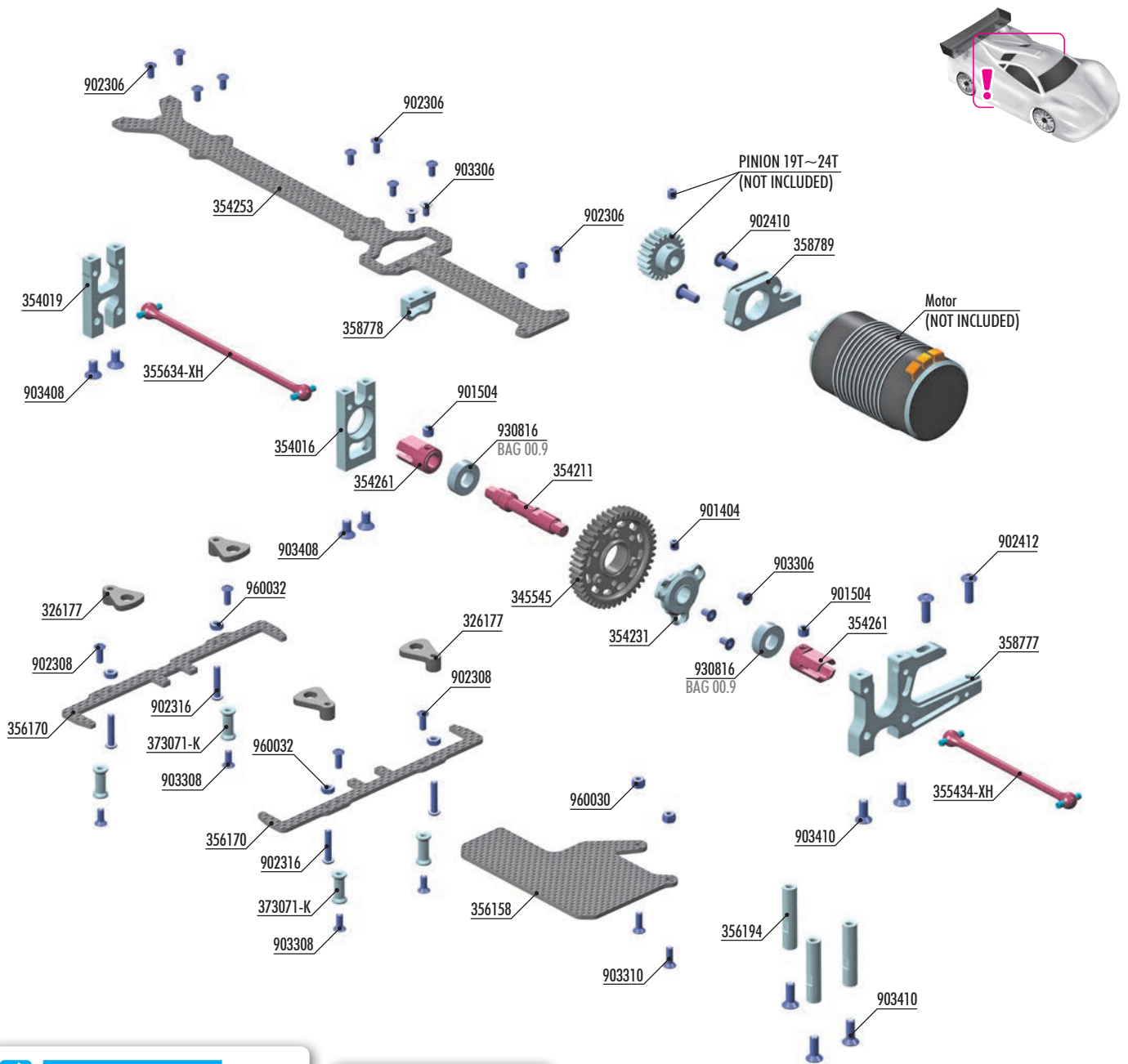
4x 903306 SFH M3x6



2x 903308 SFH M3x8



8. CENTER SOLID SHAFT & MOTOR



COMPOSITE SPUR GEARS

#345545	45T	INCLUDED
#345546	46T	OPTION
#345547	47T	OPTION

GRAPHITE SPUR GEARS

#345645	45T	OPTION
#345646	46T	OPTION
#345647	47T	OPTION



ALU PINION GEAR (M1)

OPTION	#355819	19T	OPTION
WIDE (7mm)	#355820	20T	OPTION
	#355821	21T	OPTION
	#355822	22T	OPTION
	#355823	23T	OPTION
	#355824	24T	OPTION



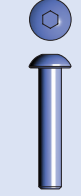
#354253-H CARBON CENTER UPPER PLATE - STIFF





- | | | | |
|-----------|--|--------|---|
| 326177 | COMPOSITE BATTERY CLAMP (2) | 901404 | HEX SCREW SB M4x4 (10) |
| 345545 | COMPOSITE 2-SPEED GEAR 45T (2nd) | 901504 | HEX SCREW SB M5x4 (10) |
| 354016 | ALU CENTER SOLID SHAFT MOUNT - FRONT | 902306 | HEX SCREW SH M3x6 (10) |
| 354019 | ALU CENTER SOLID SHAFT MOUNT - REAR | 902308 | HEX SCREW SH M3x8 (10) |
| 354211 | GTE SOLID SHAFT - HUDY SPRING STEEL™ | 902316 | HEX SCREW SH M3x16 (10) |
| 354231 | ALU CENTER SPUR GEAR COLLAR - 7075 T6 | 902410 | HEX SCREW SH M4x10 (10) |
| 354253 | CARBON CENTER UPPER PLATE | 902412 | HEX SCREW SH M4x12 (10) |
| 354261 | CENTRAL TRANSMISSION OUTDRIVE ADAPTER - HUDY SPRING STEEL™ (2) | 903306 | HEX SCREW SFH M3x6 (10) |
| 355434-XH | FRONT CENTRAL DOGBONE DRIVE SHAFT 80mm - HUDY SPRING STEEL™ | 903308 | HEX SCREW SFH M3x8 (10) |
| 355634-XH | REAR CENTRAL DOGBONE DRIVE SHAFT 105mm - HUDY SPRING STEEL™ | 903310 | HEX SCREW SFH M3x10 (10) |
| 356158 | CARBON SPEEDO PLATE | 903408 | HEX SCREW SFH M4x8 (10) |
| 356170 | CARBON BATTERY BACKSTOP FRONT & REAR | 903410 | HEX SCREW SFH M4x10 (10) |
| 356194 | ALU MOUNT FOR RECEIVER BOX | 930816 | BALL-BEARING 8x16x5 STEEL SEALED - GREASE (2) |
| 358777 | ALU CENTER SOLID SHAFT & MOTOR MOUNT | 960030 | NUT M3 (10) |
| 358778 | ALU MOTOR MOUNT UPPER CLAMP | 960032 | NUT M3 - BLACK (10) |
| 358789 | ALU MOTOR MOUNT PLATE FOR SPLIT DIFF MOUNT | | |
| 373071-K | ALU REAR BRACE MOUNT - BLACK (2) | | |

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

8. CENTER SOLID SHAFT & MOTOR


4x 902316
SH M3x16


4x 960032
N M3


 ASSEMBLED VIEW


M3 BLACK


3x16mm

M3 BLACK

3x16mm

The **screw** is flush with the holder for default setting.
 Make sure to have a **small amount of play**.


4x 902308
SH M3x8


4x 903308
SFH M3x8

3x8mm

3x8mm

3x8mm


3x8mm

3x8mm


3x8mm

NOTE ORIENTATION
OVAL HOLE **REAR**

NOTE ORIENTATION
ROUND HOLE **FRONT**


1x 901404
SB M4x4

NOTE ORIENTATION

 **THREAD LOCK**

4x4mm

8. CENTER SOLID SHAFT & MOTOR

2x 901504
SB M5x4

3x 903306
SFH M3x6

2x 930816
BB 8x16x5

5x4mm

NOTE ORIENTATION

8x16x5mm
STEEL covers

NOTE ORIENTATION

3x6mm

3x6mm

8x16x5mm
STEEL covers

5x4mm

CUTAWAY VIEW

COMPOSITE SPUR GEARS				GRAPHITE SPUR GEARS			
OPTION	#345545	45T	INCLUDED	#345645	45T	OPTION	
	#345546	46T	OPTION	#345646	46T	OPTION	
	#345547	47T	OPTION	#345647	47T	OPTION	

2x 903408
SFH M4x08

2x 903410
SFH M4x10

4x8mm

4x10mm

2x 903310
SFH M3x10

3x 903410
SFH M4x10

2x 960030
N M3

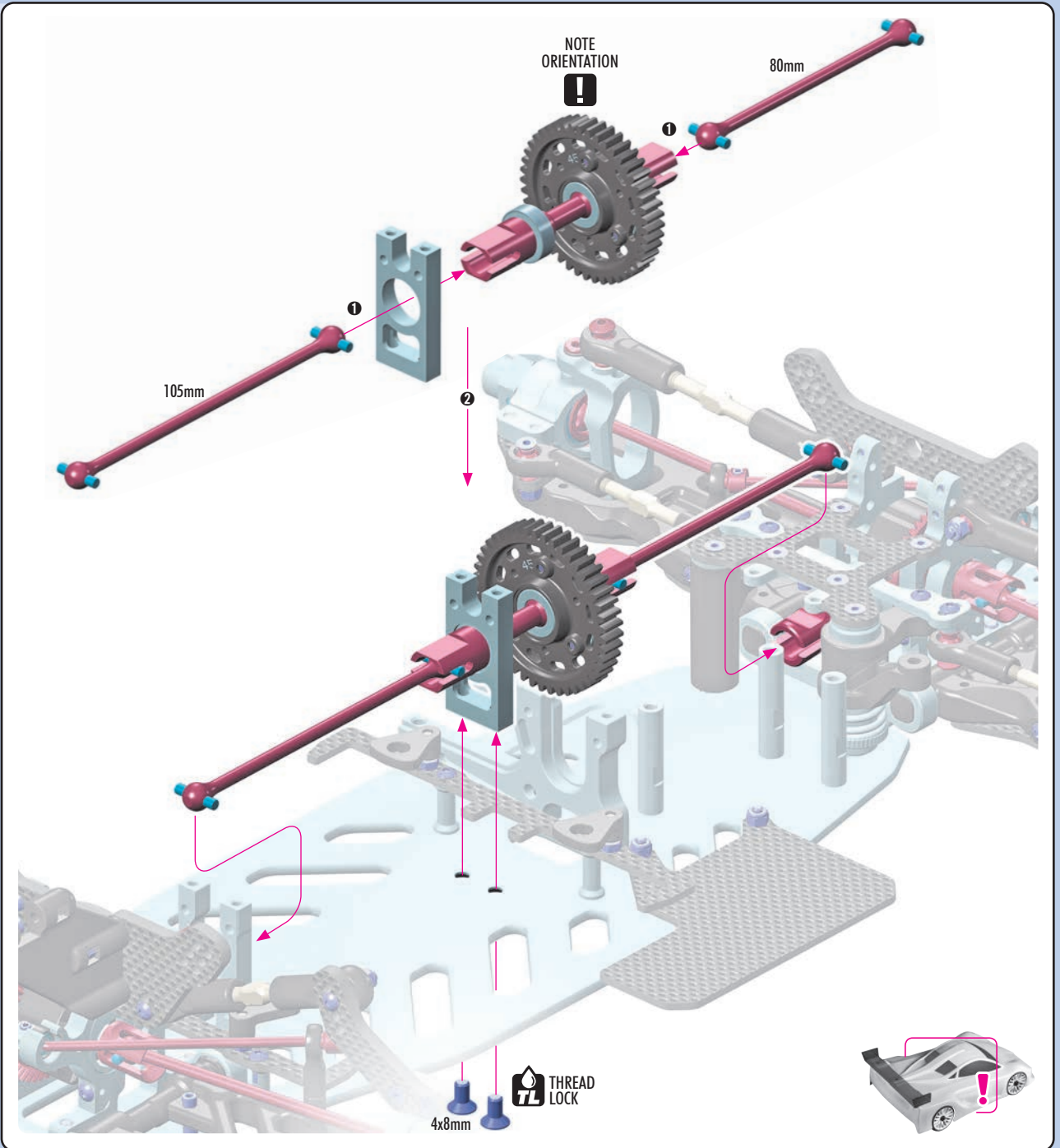
M3

3x10mm

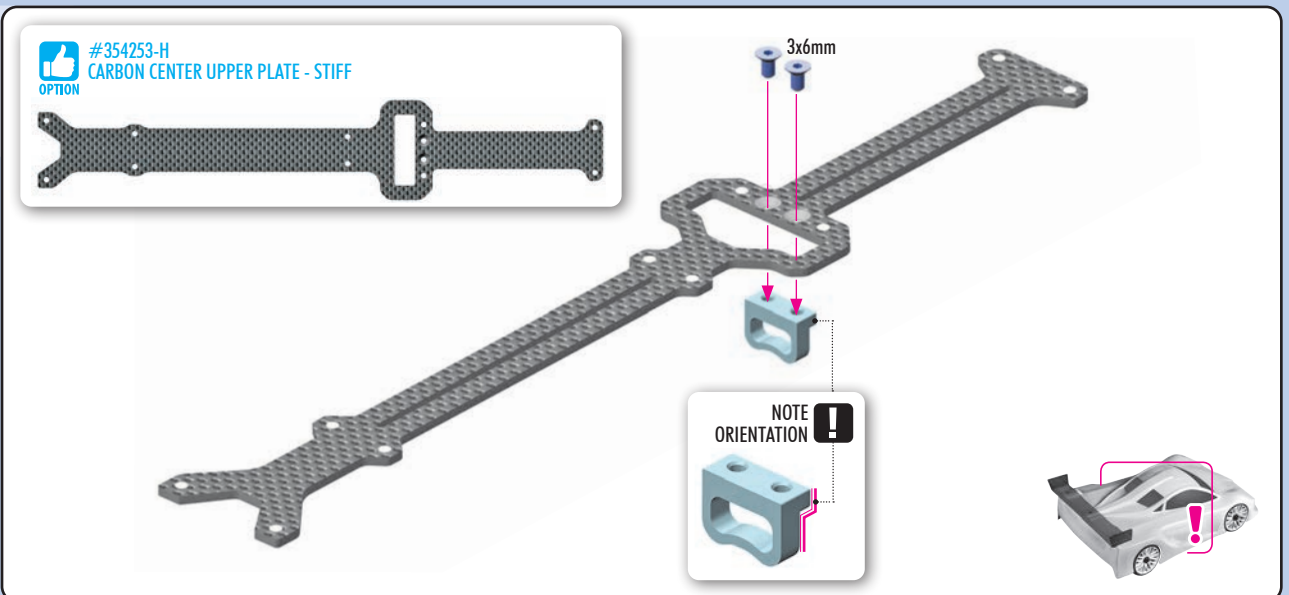
4x10mm

8. CENTER SOLID SHAFT & MOTOR

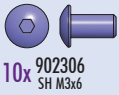
2x 903408
SFH M4x8



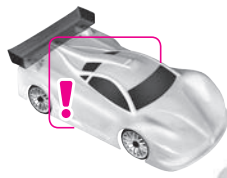
2x 903306
SFH M3x6



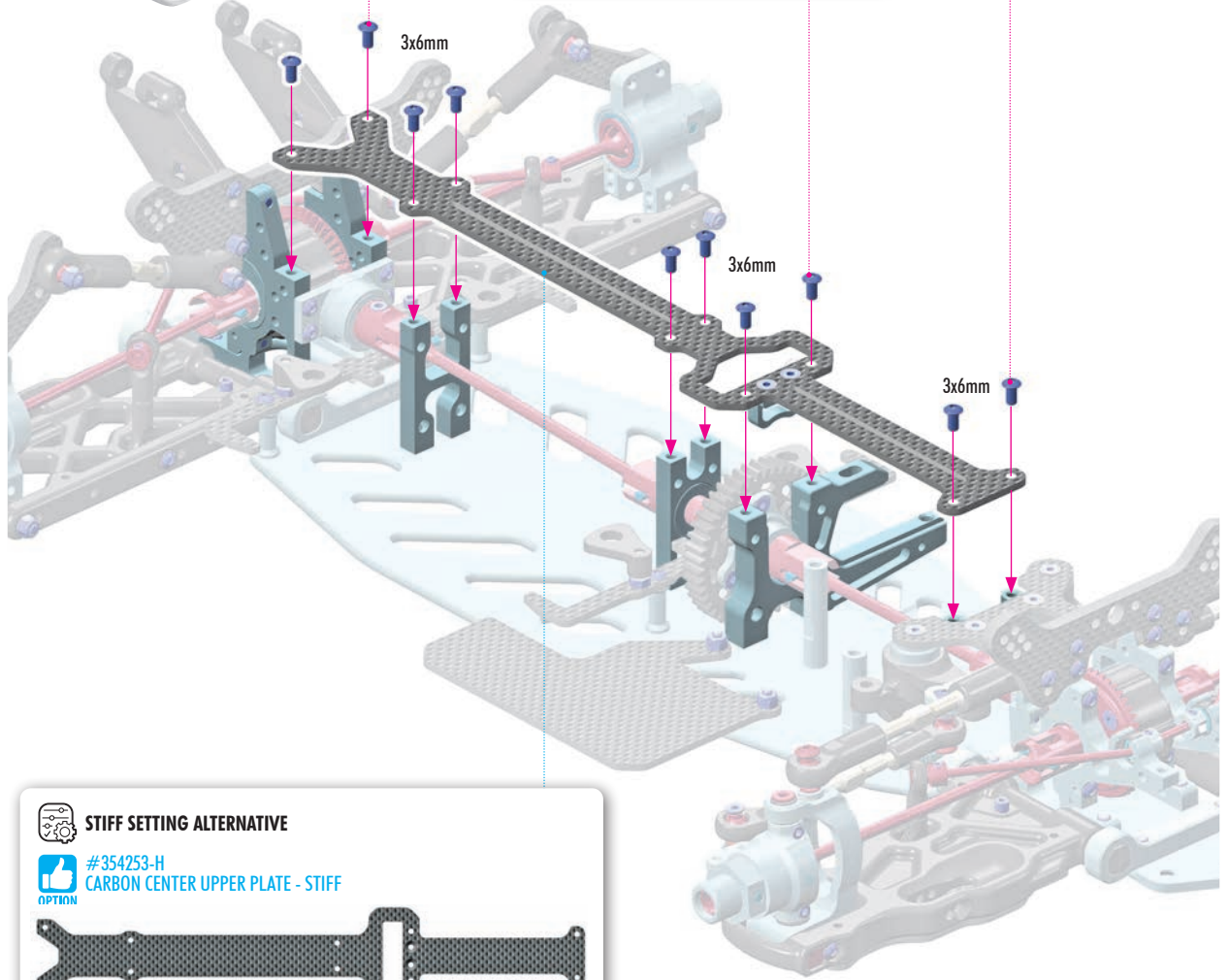
8. CENTER SOLID SHAFT & MOTOR



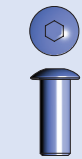
10x 902306
SH M3x6



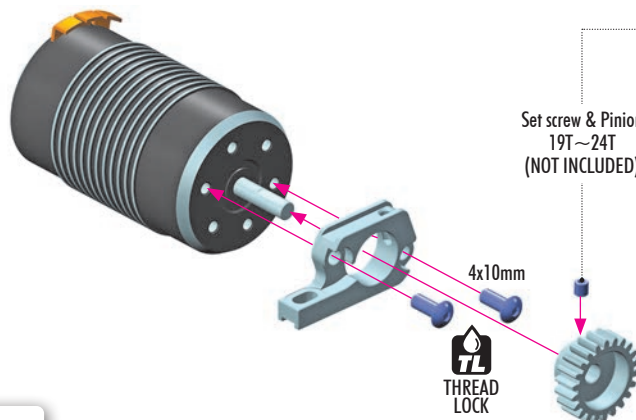
DO NOT fully tighten the screws during assembly.
Fully tighten the screws only after front, center and rear suspension assemblies are mounted to the bulkheads.



STIFF SETTING ALTERNATIVE
#354253-H
CARBON CENTER UPPER PLATE - STIFF
OPTION



2x 902410
SH M4x10



Set screw & Pinion
19T~24T
(NOT INCLUDED)

OPTION	ALL PINION GEAR (M1)	OPTION
#355819	19T	OPTION
#355820	20T	OPTION
#355821	21T	OPTION
#355822	22T	OPTION
#355823	23T	OPTION
#355824	24T	OPTION

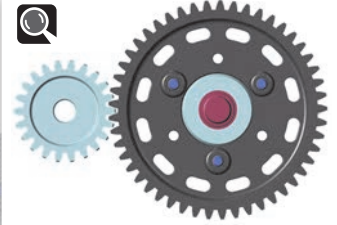
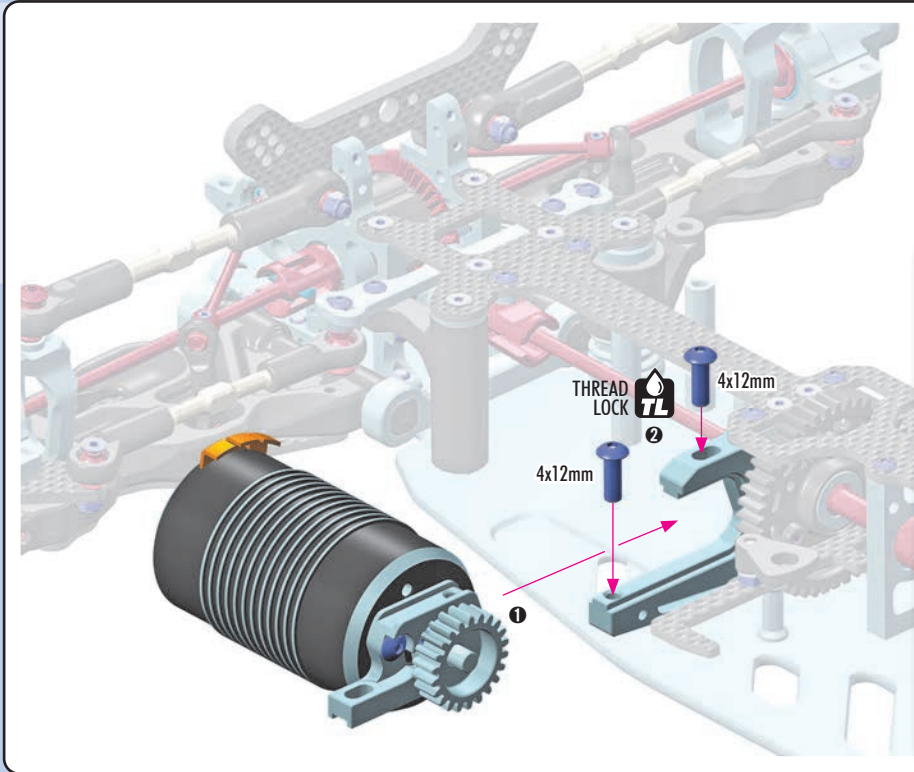
For 2600kV to 2800kV motors, we recommend a 20T pinion gear.

GEAR RATIO Final Drive Ratio
45 : X x 3.54 = **FDR**
(Spur) (Pinion) (IGR)

8. CENTER SOLID SHAFT & MOTOR



2x 902412
SH M4x12



GEAR MESH ADJUSTMENT

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

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

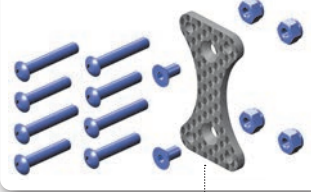
TOO LOOSE gear mesh may result in stripped gears.



OPTION



#293191 CARBON DUAL SIDE FAN EXTENSION



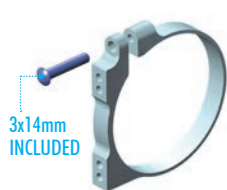
OPTION

#293190 HUDY ALU DUAL MOTOR FAN MOUNT DIA 42mm (2x30mm / 2x40mm)



OPTION

#293192 ALU FAN MOUNT FOR 42mm MOTOR



OPTION

#293104 HUDY ALU RC FAN 40mm BOTTOM/SIDE MOUNT 2 HOLE



OPTION

#293111 HUDY BRUSHLESS RC FAN 40mm WITH EXTERNAL SOLDERING TABS



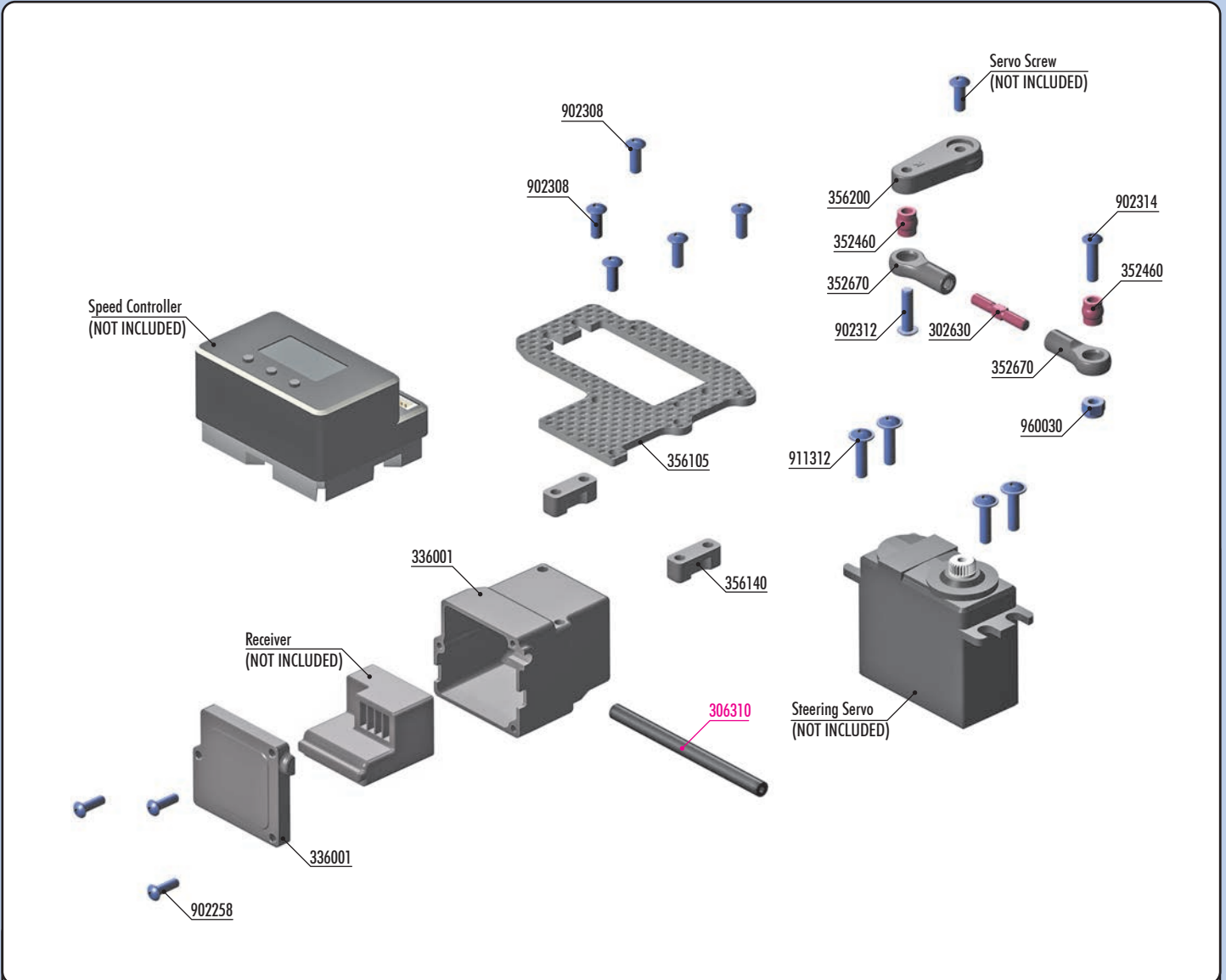
OPTION

#293113 HUDY BRUSHLESS RC FAN 40mm WITH INTERNAL SOLDERING TABS



- 293190 HUDY ALU DUAL MOTOR FAN MOUNT Dia 42mm (2x30mm / 2x40mm)
- 293191 CARBON DUAL SIDE FAN EXTENSION FOR ALU DUAL MOTOR FAN MOUNT
- 293192 ALU FAN MOUNT FOR 42mm MOTOR
- 902314 HEX SCREW SH M3x14 (10)
- 902318 HEX SCREW SH M3x18 (10)
- 960030 NUT M3 (10)

10. ELECTRONICS



BAG 10	302630	ADJ. TURNBUCKLE L/R 20MM - HUDY SPRING STEEL™ (2)	902258	HEX SCREW SH M2.5x8 (10)
	336001	COMPOSITE RECEIVER CASE - COMPACT SIZE	902308	HEX SCREW SH M3x8 (10)
	352460	PIVOT BALL 5.8 (10)	902312	HEX SCREW SH M3x12 (10)
	352670	SERVO BALL JOINT 5.8MM (4)	902314	HEX SCREW SH M3x14 (10)
	356105	CARBON SERVO & RECEIVER HOLDER	911312	HEX SCREW FLANGED SHF M3x12 (10)
	356140	COMPOSITE SERVO MOUNT - SMALL (2)	960030	NUT M3 (10)
	356200	BRAKE/THROTTLE ARMS & STEERING SERVO ARMS - SET	306310	ANTENNA (2)

BAG 09 is NOT existing and NOT included in GTX8E kit.

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

1x 902312 SH M3x12

TIP Install with HUDY Multi Tool.

RIGHT THREAD SIDE **LEFT THREAD SIDE**

! SLOT ORIENTATION

TIP Install with HUDY Ball Joint Wrench.

approx. 8.5mm

The length of the linkages varies according to the type of servo.

! Use appropriate servo arm:

Market servo horn


K (23T) **H** (24T) **F** (25T)

! NOTE ORIENTATION

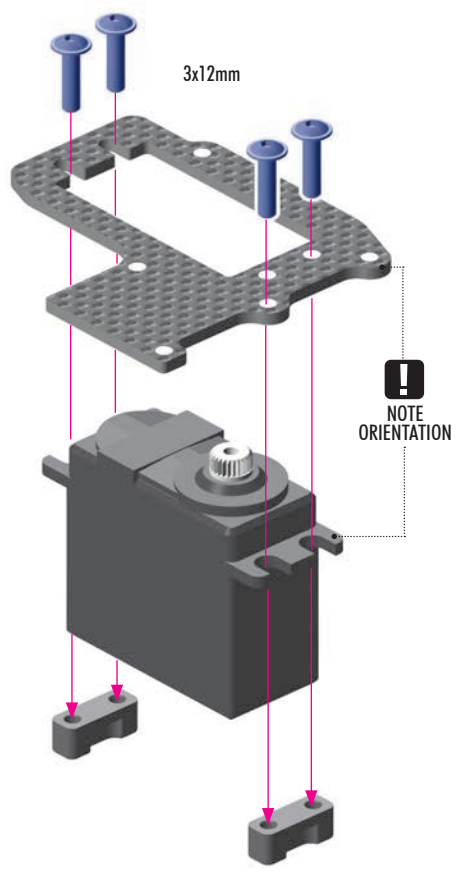
3x12mm

ALU SERVO HORNS		
#293501	23T	OPTION
#293502	24T	OPTION
#293503	25T	OPTION

CLAMP ALU SERVO HORNS		
#293407	23T	OPTION
#293408	24T	OPTION
#293409	25T	OPTION



4x 911312
SHF M3x12

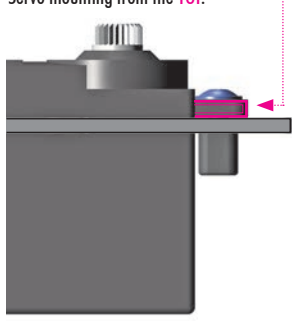


3x12mm

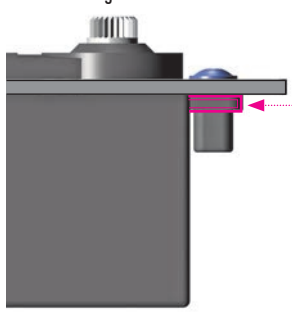
NOTE ORIENTATION

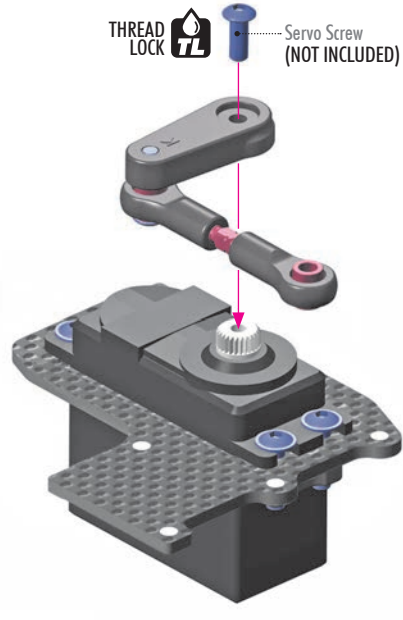
Alternative mounting according to servo type.


ALTERNATIVE 1
Servo mounting from the **TOP**.



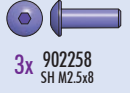
ALTERNATIVE 2
Servo mounting from the **BOTTOM**.






THREAD LOCK 

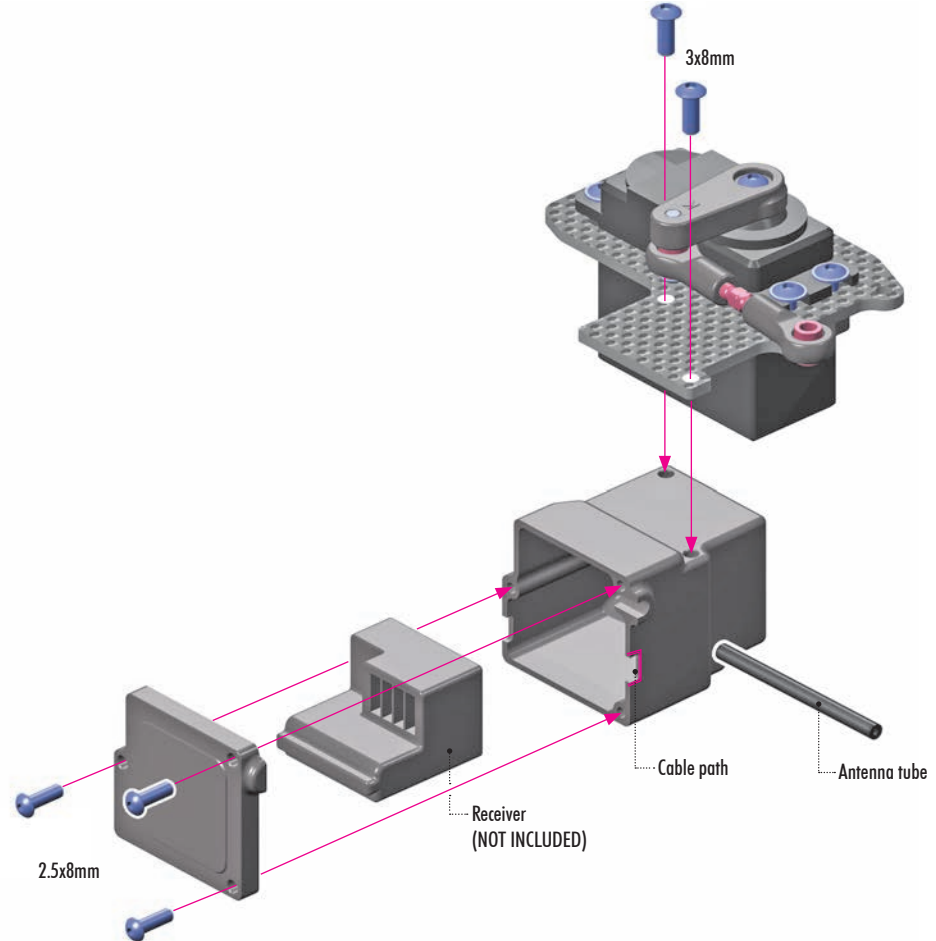
Servo Screw (NOT INCLUDED)



3x 902258
SH M2.5x8



2x 902308
SH M3x8




3x8mm

2.5x8mm


Receiver (NOT INCLUDED)


Cable path


Antenna tube





10. ELECTRONICS


- 



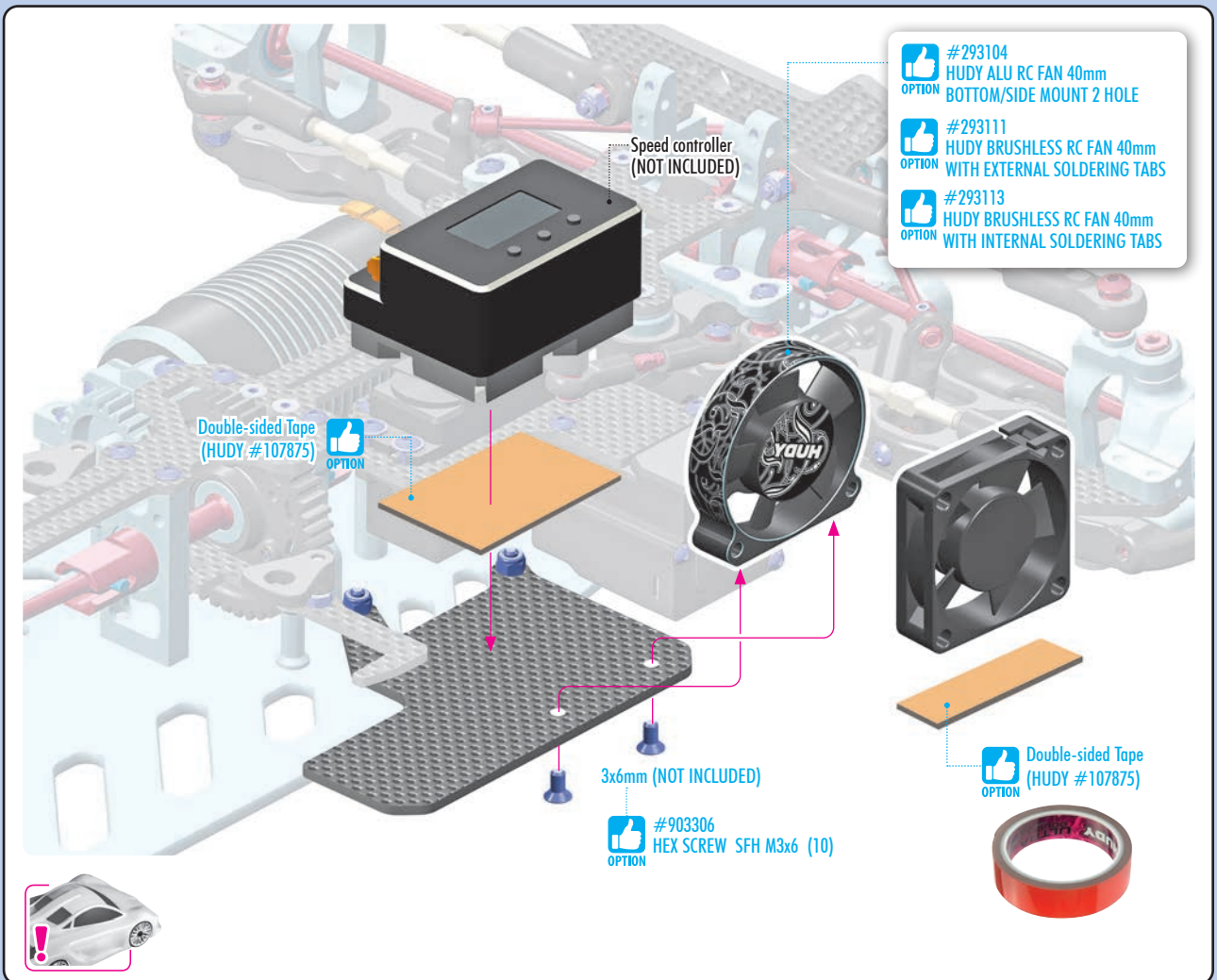
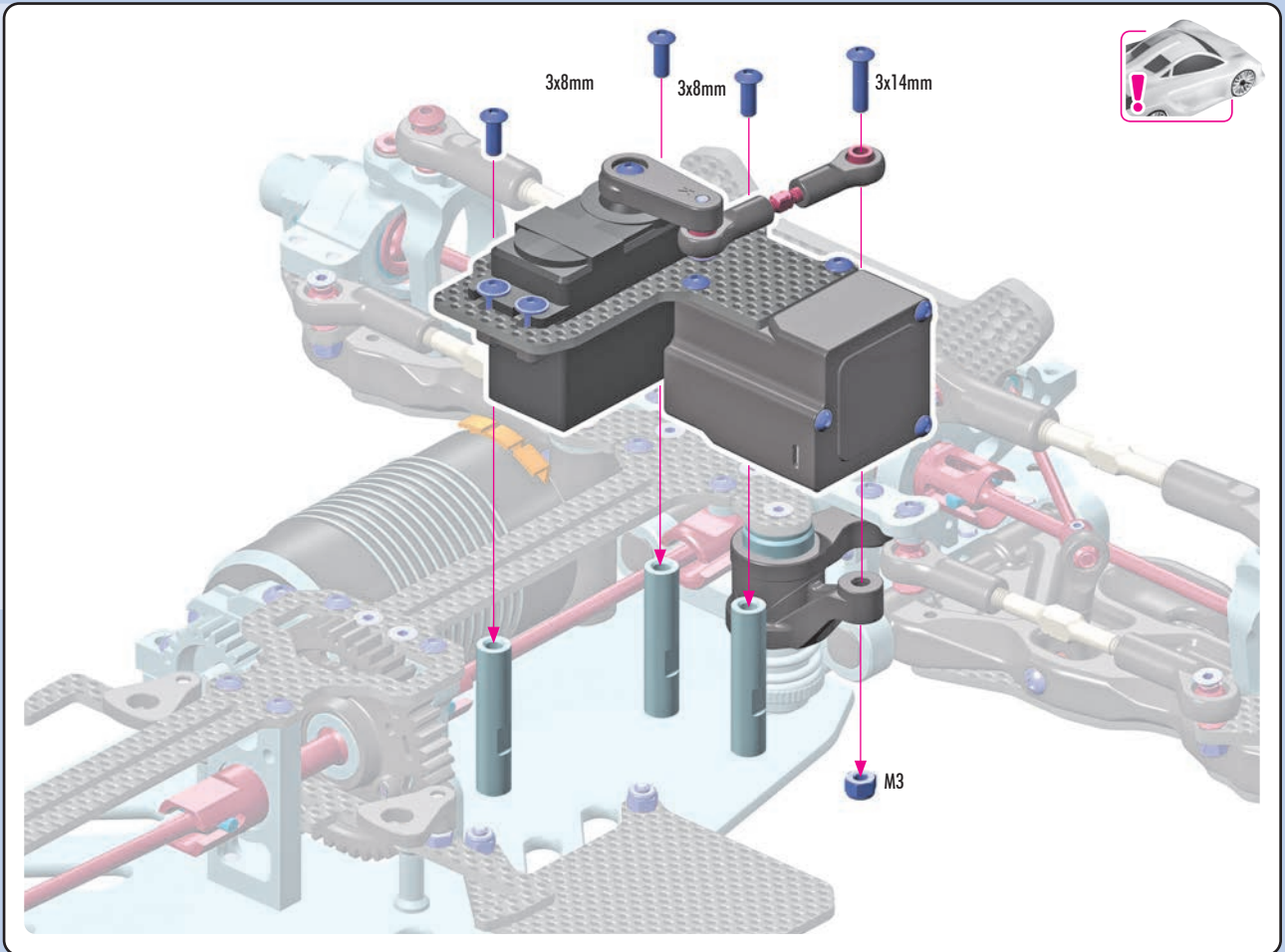
3x 902308
 SH M3x8
- 

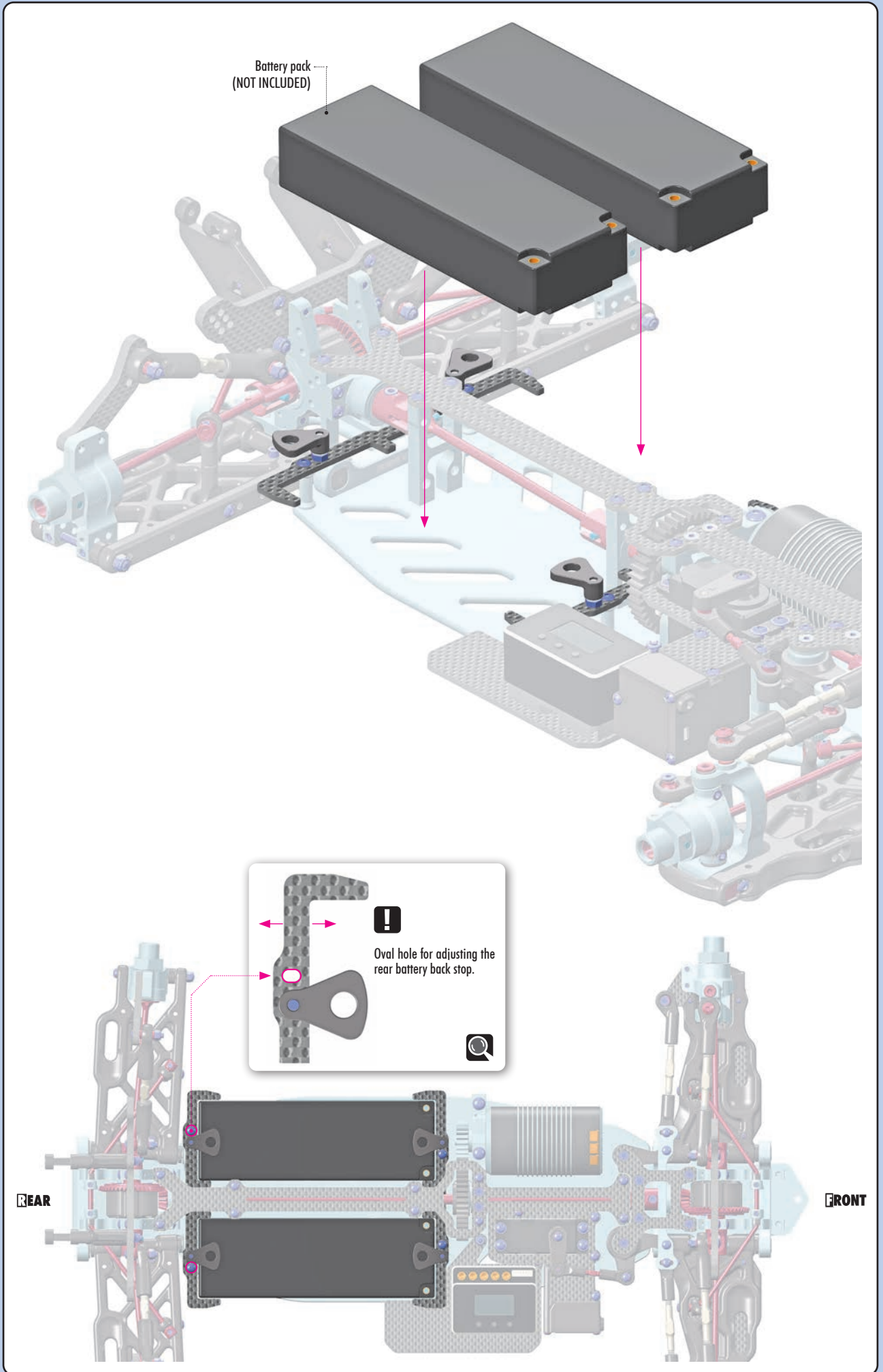


1x 902314
 SH M3x14
- 



1x 960030
 N M3



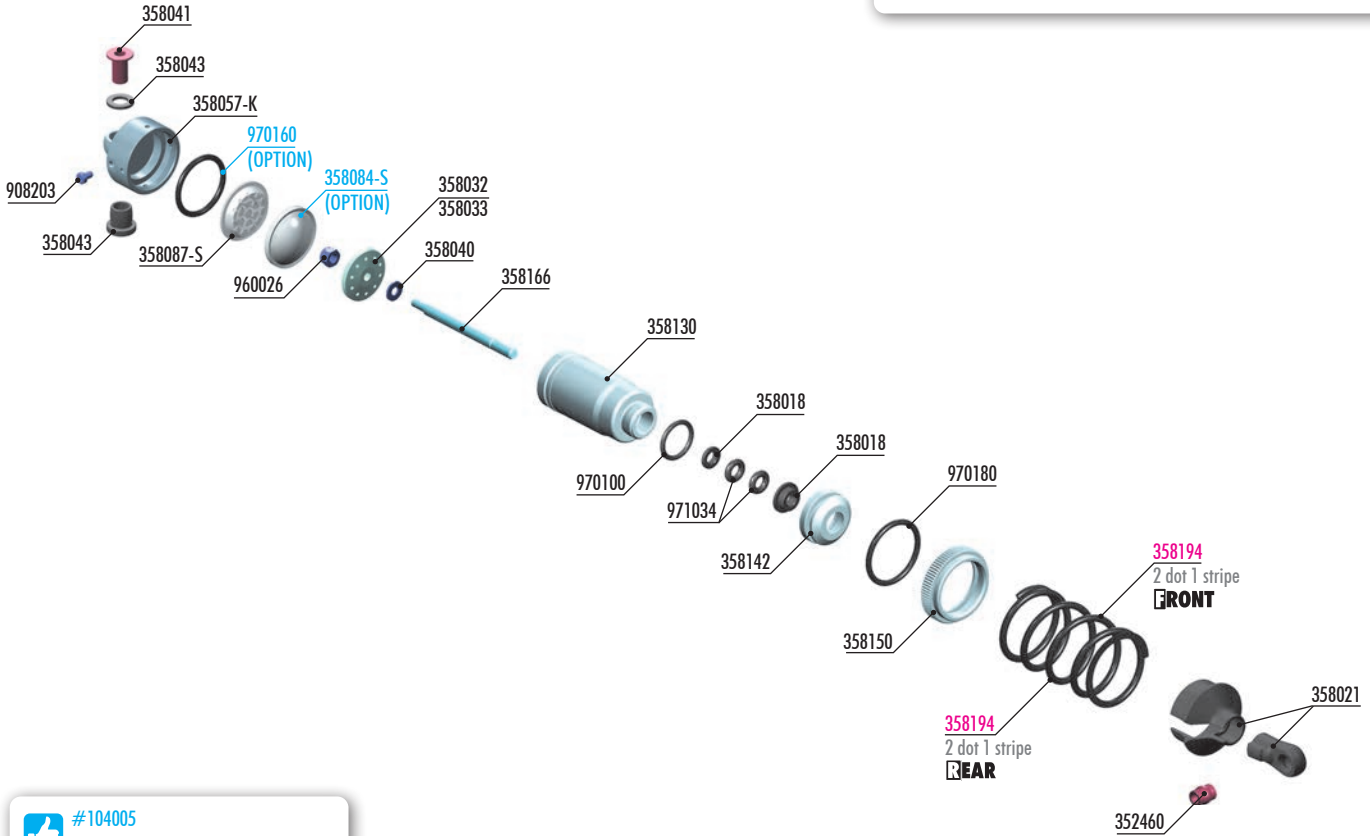
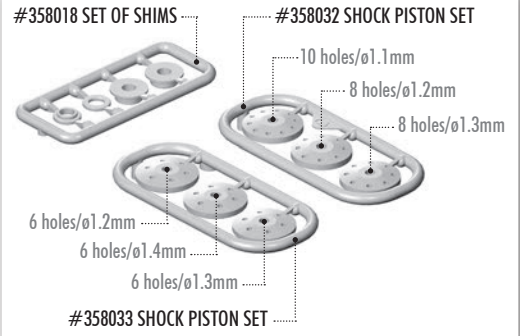


11. SHOCK ABSORBERS

#358195
XRAY GT PROGRESSIVE SPRING SET
 OPTION C=5.2-5.8, 3-DOT & 1-STRIP (2)



#358196
XRAY GT SPRING SET C=6.0, 3 DOT (2)
 OPTION



#104005
HUDY AIR VAC - VACUUM PUMP
 OPTION - 1/8 OFF-ROAD



SHOCK RUBBER MEMBRANE (4)					
OPTION	#358084-S	RIBBED	SOFT	OPTION	
	#358087-S	CELL	SOFT	INCLUDED	
	#358087-M	CELL	MEDIUM	OPTION	

OPTION	#358027	PISTON 5-HOLE (1.5mm) & 2-HOLE (1.0mm)	(4)	
	#358028	PISTON 6-HOLE (1.3mm) & 2-HOLE (1.1mm)	(4)	
	#308029	PISTON 6-HOLE (1.4mm) & 2-HOLE (1.1mm)	(4)	
	#358030	PISTON 8-HOLE (1.2mm) & 2-HOLE (1.2mm)	(4)	
	#358031	PISTON 8-HOLE (1.3mm) & 2-HOLE (1.2mm)	(4)	

BAG
11

- 352460 PIVOT BALL 5.8 - V3 (10)
- 358018 COMPOSITE SET OF SHIMS FOR SHOCKS - V2 (2)
- 358021 COMPOSITE SHOCK PARTS WITH KEYED BALL JOINTS
- 358032 SHOCK PISTON SET 8-HOLE (1.2; 1.3) 10-H. (1.1mm) - DELRIN - V3
- 358033 COMPOSITE SHOCK 6-HOLE PISTON SET (1.2; 1.3; 1.4mm) - DELRIN - V3
- 358041 STEEL SHOCK BUSHING (2)
- 358043 COMPOSITE SHOCK BUSHING & SHIM (2+2)
- 358057-K MULTI ADJ. 3-IN-1 ALU SHOCK CAP - SWISS 7075 T6 (2)
- 358087-S SHOCK RUBBER MEMBRANE CELL - SOFT (4)
- 358130 GT ALU SHOCK BODY - V2 (2)
- 358142 ALU SHOCK BODY NUT FOR SHOCK BOOT (2)
- 358150 ALU SHOCK BODY ADJ. NUT (2)
- 358166 GT SHOCK SHAFT 46mm (2)

- 908203 HEX SCREW SOCKET HEAD CAP M2x3 (10)
- 358040 HARDENED SHOCK SHIMS 2.6x6x0.5 (4)
- 960026 NUT M2.5 - SHORT (10)
- 970100 O-RING 10 x 1.5 (10)
- 970180 O-RING 18 x 1.8 (10)
- 971034 SILICONE O-RING 3.5x2 (10)

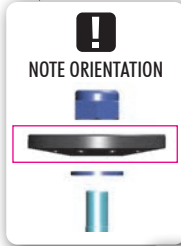
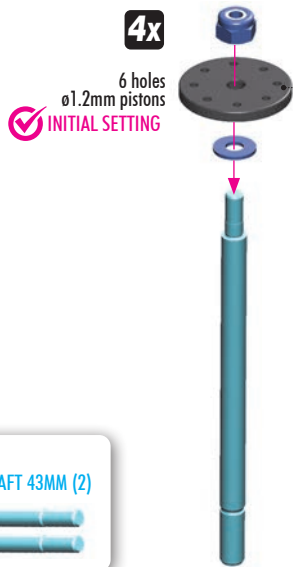
- 358194 XRAY GT PROGRESSIVE SPRING SET C=4.1-4.7, 2-DOTS WITH STRIPE (2)**
- 358084-S SHOCK RUBBER MEMBRANE BOTTOM RIBBED - SOFT (4)**
- 970160 O-RING 16 x 2.0 (10)**

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

11. SHOCK ABSORBERS

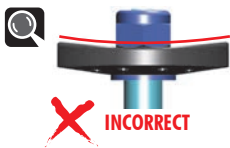
4x 358040
S 2.6x0.5

4x 960026
N M2.5



#358163
OPTION
GT SHOCK SHAFT 43MM (2)

#358027 PISTON 5-HOLE (1.5mm) & 2-HOLE (1.0mm) (4)
#358028 PISTON 6-HOLE (1.3mm) & 2-HOLE (1.1mm) (4)
#308029 PISTON 6-HOLE (1.4mm) & 2-HOLE (1.1mm) (4)
#358030 PISTON 8-HOLE (1.2mm) & 2-HOLE (1.2mm) (4)
#358031 PISTON 8-HOLE (1.3mm) & 2-HOLE (1.2mm) (4)



DO NOT OVERTIGHTEN
The self-locking nut is overtightened, causing distortion of the piston. This will negatively affect the free movement of the piston in the shock body.



TIGHTEN GENTLY
The self-locking nut is gently tightened. The piston remains undistorted and fits inside the shock body perfectly, ensuring smooth movement of the piston.

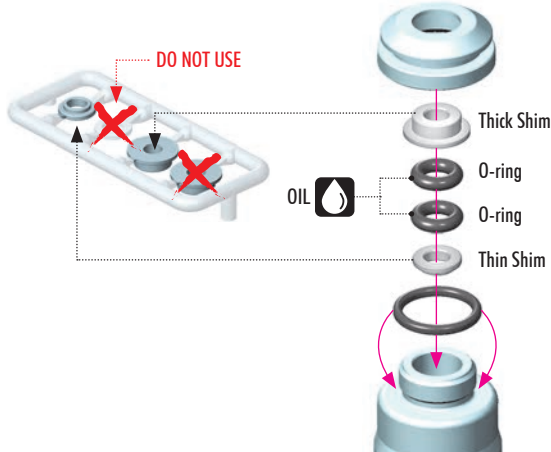
SET-UP BOOK
SHOCK DAMPING
SHOCK PISTONS

4x 970100
O 10x1.5

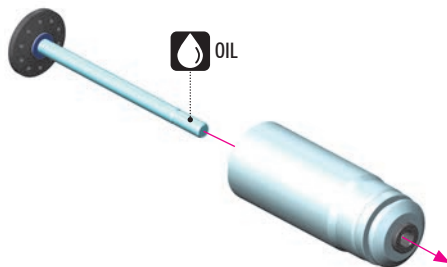
8x 971034
O 3.4x2

4x FRONT & REAR SHOCKS

There are two different thickness shims, use them as shown. Use the same procedure when building both front and rear shocks.

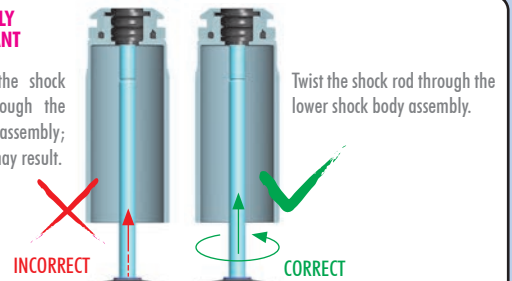


4x FRONT & REAR SHOCKS

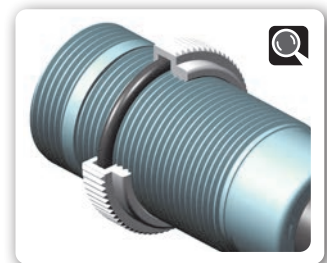
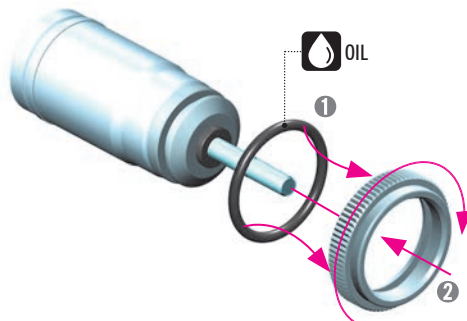


! EXTREMELY IMPORTANT

DO NOT push the shock rod straight through the lower shock body assembly; O-ring damage may result.



4x FRONT & REAR SHOCKS

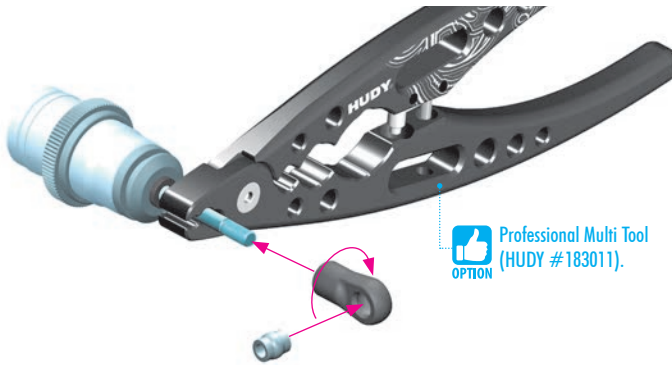


4x 970180
O 18x1.8

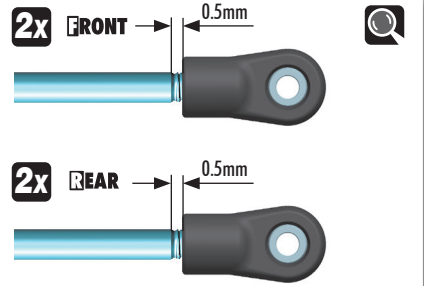
11. SHOCK ABSORBERS

2x FRONT SHOCKS

2x REAR SHOCKS



OPTION Professional Multi Tool (HU DY #183011).



SHOCK TYPE: **CELL MEMBRANE** **INITIAL SETTING**

Follow the steps below to set the shock rebound to the default setting of 0%.

Oil level after filling

OIL **CORRECT FILLING** **INCORRECT FILLING**

FRONT Oil 800cSt
REAR Oil 800cSt

1 Extend the shock shaft completely. Fill the shock body with the shock oil.

2 Move the shock shaft up and down a few times to release the air bubbles trapped beneath the piston.

3 Orient the filled shock vertically for several minutes with the shock shaft fully extended. The remaining air bubbles will release.

4 Install the **CELL** shock membrane and screw into the groove in the upper shock cap.

5 **SHOCK CAP HALF 50% TIGHTEN**
1 Gently place the shock cap assembly onto the filled shock body. **2** Slowly compress the shock shaft towards the top of the shock body and hold in this position. Excess oil will be expelled from the shock.

6 **SHOCK CAP 100% TIGHTEN FULLY**
While still holding the shock shaft in position, fully tighten the shock cap.

4x 908203 SCH M2x3

Cell Membrane

SHOCK TYPE: **RIBBED MEMBRANE** **OPTION**

Follow the steps below to set the shock rebound to the default setting of 0%.

Oil level after filling

OIL **CORRECT FILLING** **INCORRECT FILLING**

FRONT Oil 800cSt
REAR Oil 800cSt

1 Extend the shock shaft completely. Fill the shock body with the shock oil.

2 Move the shock shaft up and down a few times to release the air bubbles trapped beneath the piston.

3 Orient the filled shock vertically for several minutes with the shock shaft fully extended. The remaining air bubbles will release.

4 Install the **RIBBED** shock membrane and screw into the groove in the upper shock cap.

5 **SHOCK CAP HALF 50% TIGHTEN**
1 Gently place the shock cap assembly onto the filled shock body. **2** Slowly compress the shock shaft towards the top of the shock body and hold in this position. Excess oil will be expelled from the shock.

6 **SHOCK CAP 100% TIGHTEN FULLY**
1 Fully tighten the shock cap. **2** Loosen the cap screw. **3** Extend the shock shaft. **4** Slowly compress shock shaft completely into shock body, forcing air from the cap. **5** While still holding the shock shaft in compressed position, re-tighten screw to seal cap.

4x 908203 SCH M2x3

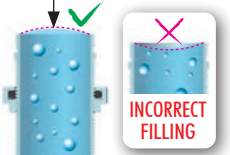
Ribbed Membrane

11. SHOCK ABSORBERS

SHOCK TYPE: **EMULSION** OPTION

Follow the steps below to set the shock rebound to the default setting of 0%.

OIL
Oil level after filling
CORRECT FILLING



FRONT
Oil 800cSt
REAR
Oil 800cSt



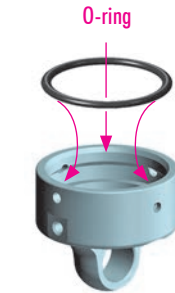
1
Extend the shock shaft completely. Fill the shock body with the shock oil.



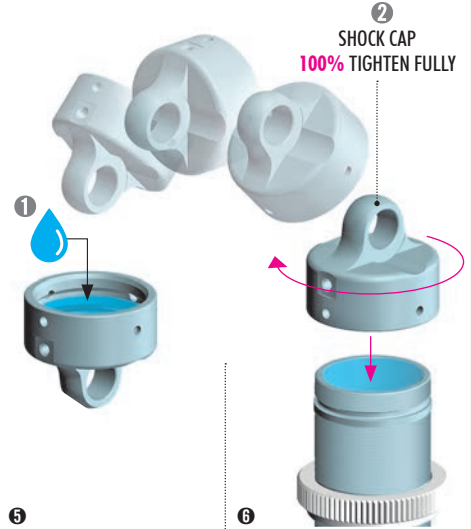
2
Move the shock shaft up and down a few times to release the air bubbles trapped beneath the piston.



3
Orient the filled shock vertically for several minutes with the shock shaft fully extended. The remaining air bubbles will release.



4
Install o-ring in the cap.



5
Fill the shock cap with oil up to the o-ring.

6
Carefully place the shock cap onto the oil filled shock body and tighten the cap. Some oil may spill from the shock during this process.

7
Slowly compress the shock shaft completely into the shock body. Excess oil will flow through the hole in the shock cap.



GENTLY PUSH

8
With the shock shaft still compressed, tighten the screw.



9
6x push the shaft up and down.



10
Slowly push the shock shaft completely into the shock body. Excess oil will flow through the hole in the shock cap.

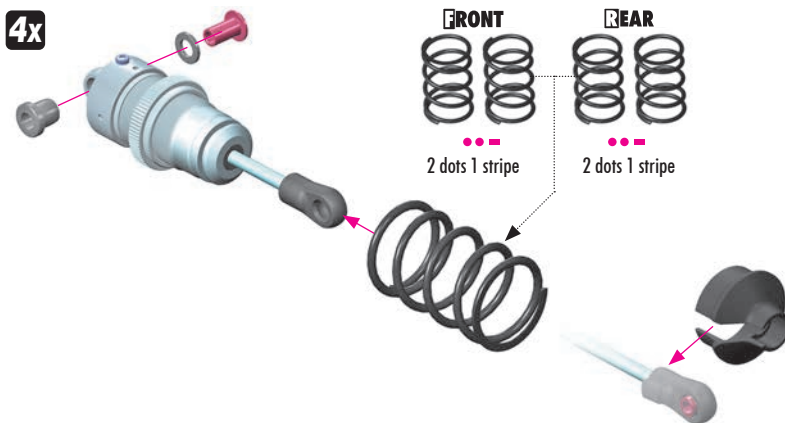


11
Gently push the shock shaft completely into the shock body. Excess oil will flow through the hole in the shock cap.

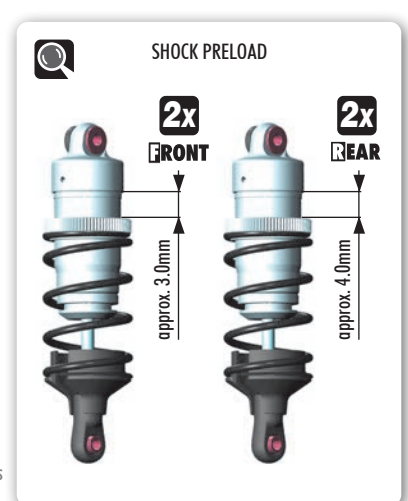


GENTLY PUSH

12
Tighten the screw.








! IMPORTANT!
Both front shocks and rear shocks must be the same overall length.

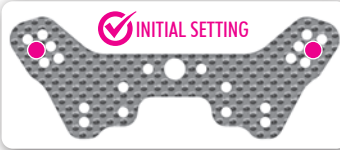
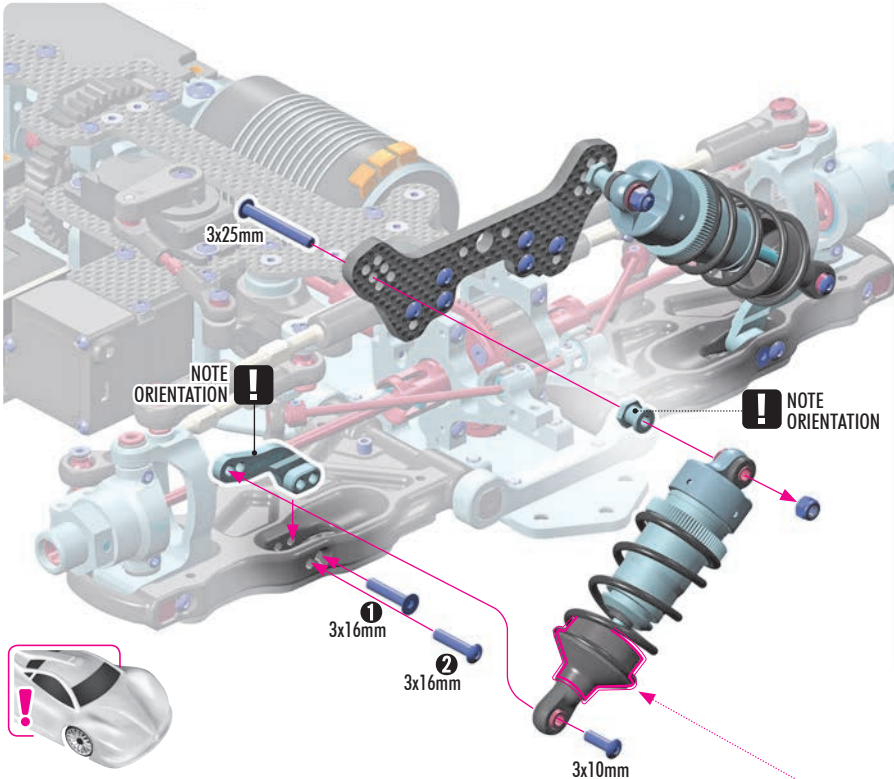


SET-UP BOOK

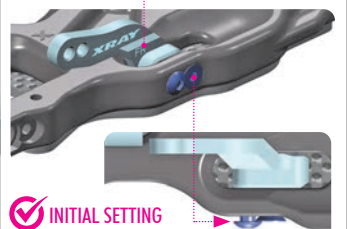
SPRING RATE SHOCK
PRELOAD
RIDE HEIGHT

-  902310 SH M3x10 2x
-  902316 SH M3x16 2x
-  903316 SFH M3x16 2x
-  902325 SH M3x25 2x
-  2x 960030 N M3

2x FRONT

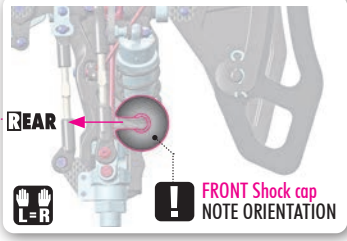
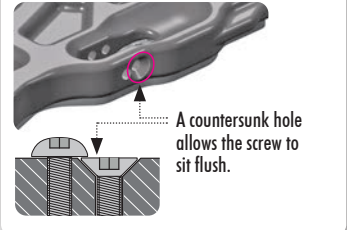


ALU SHOCK PLATE (Front Right) FR ! FL (Front Left)



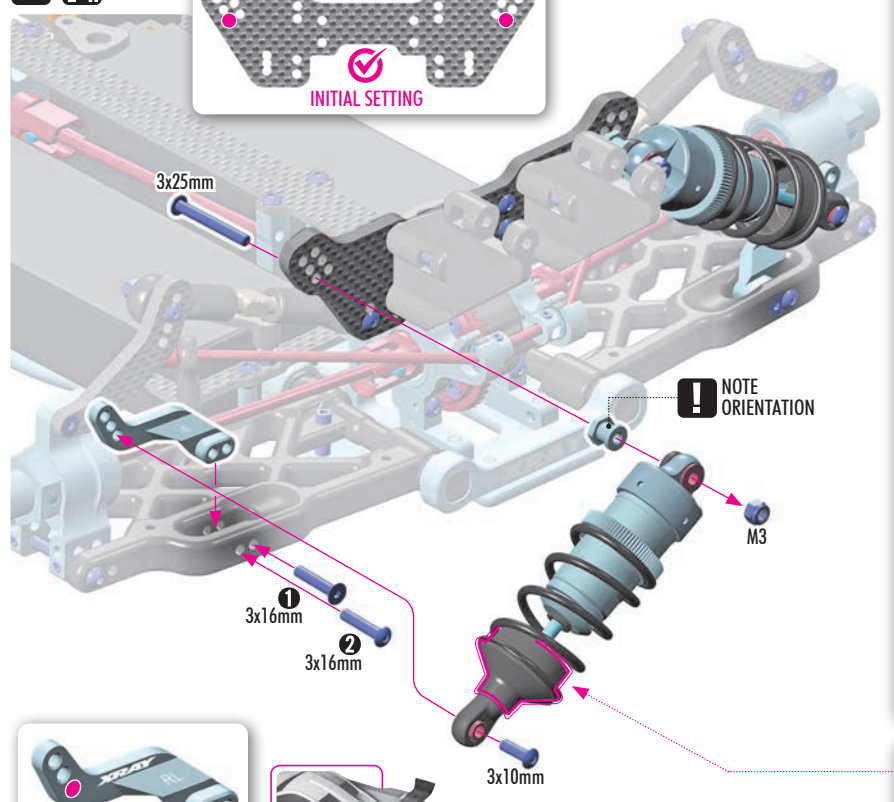
INITIAL SETTING
Mounting hole is NOT countersunk. This is normal and has no effect on performance or durability.

TIP The hole can be countersunk to allow a flush screw fit.

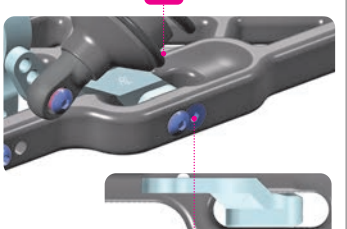


SET-UP BOOK
SHOCK ABSORBERS

2x REAR

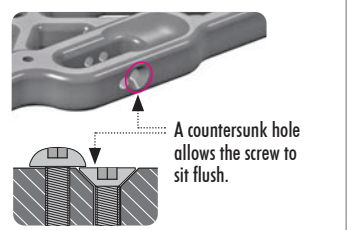


ALU SHOCK PLATE (Rear Left) RL ! RR (Rear Right)



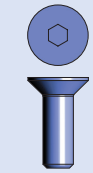
INITIAL SETTING
Mounting hole is NOT countersunk. This is normal and has no effect on performance or durability.

TIP The hole can be countersunk to allow a flush screw fit.



SET-UP BOOK
SHOCK ABSORBERS

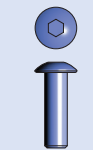
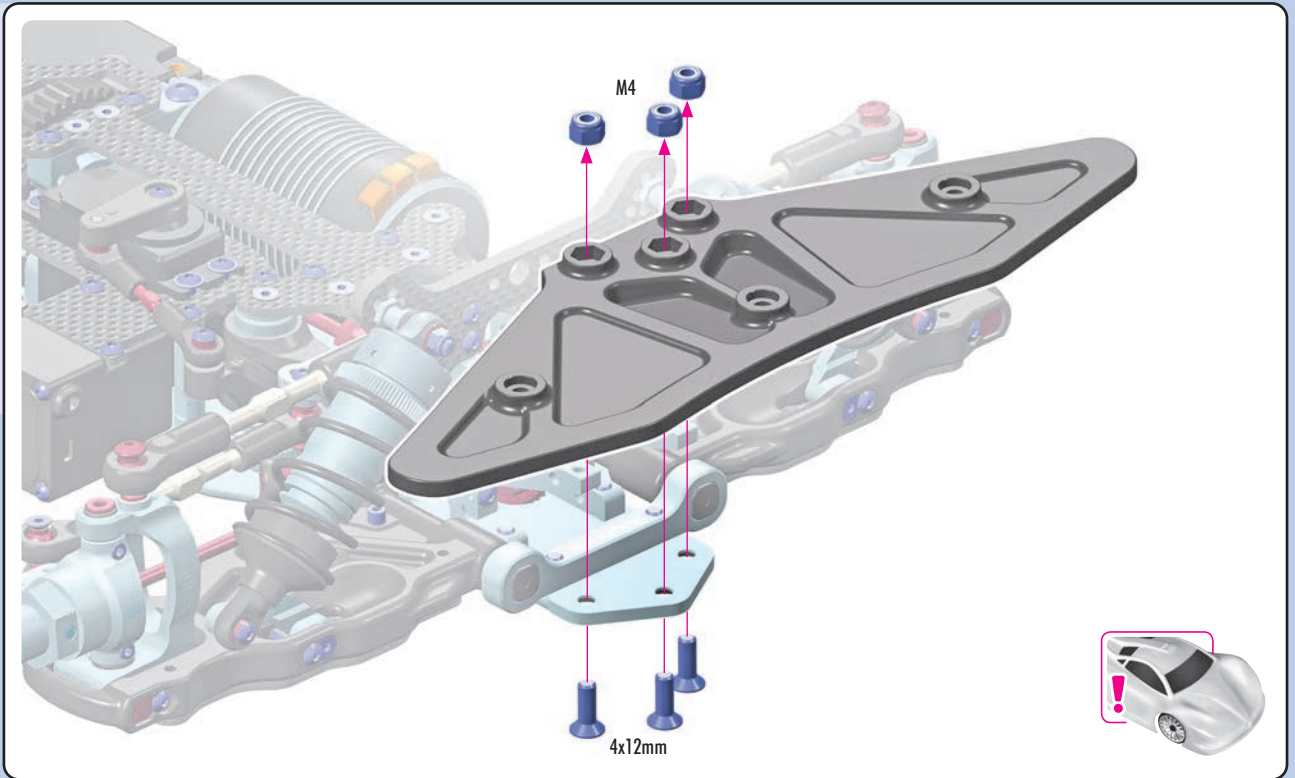
12. FINAL ASSEMBLY



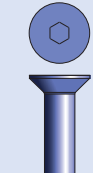
3x 903412
SFH M4x12



3x 960040
N M4



4x 902310
SH M3x10



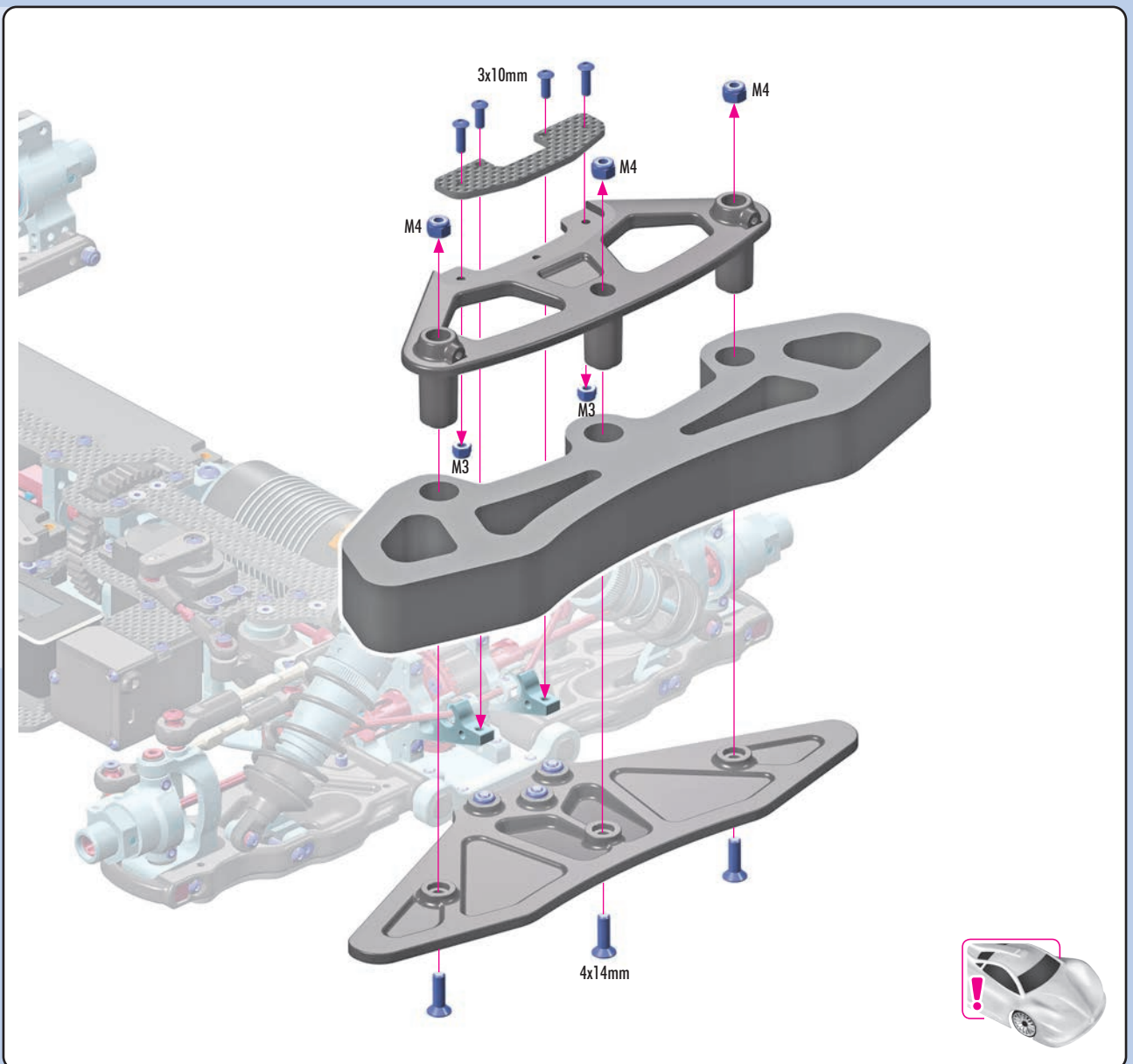
3x 903414
SFH M4x14



2x 960030
N M3

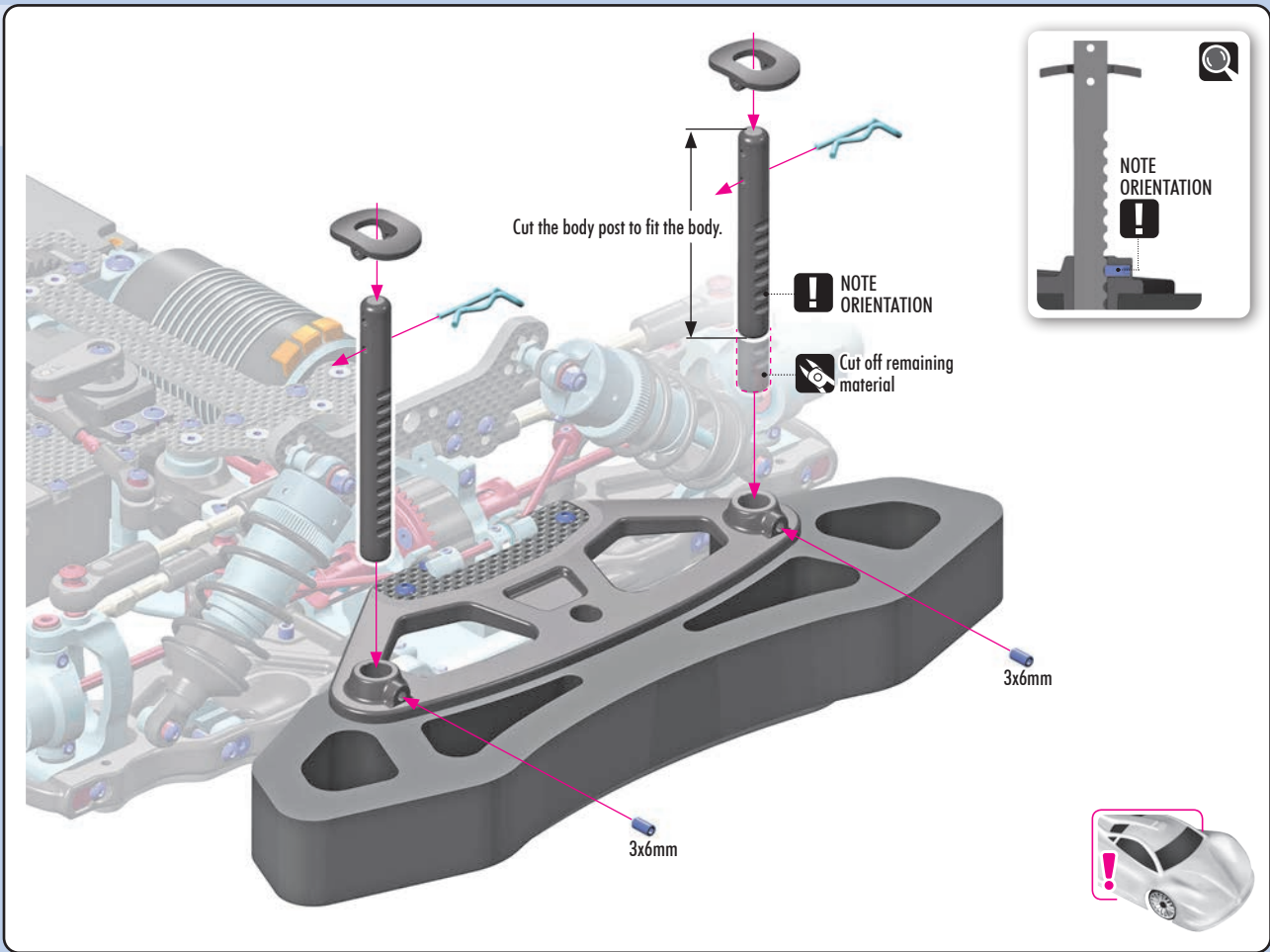


3x 960040
N M4



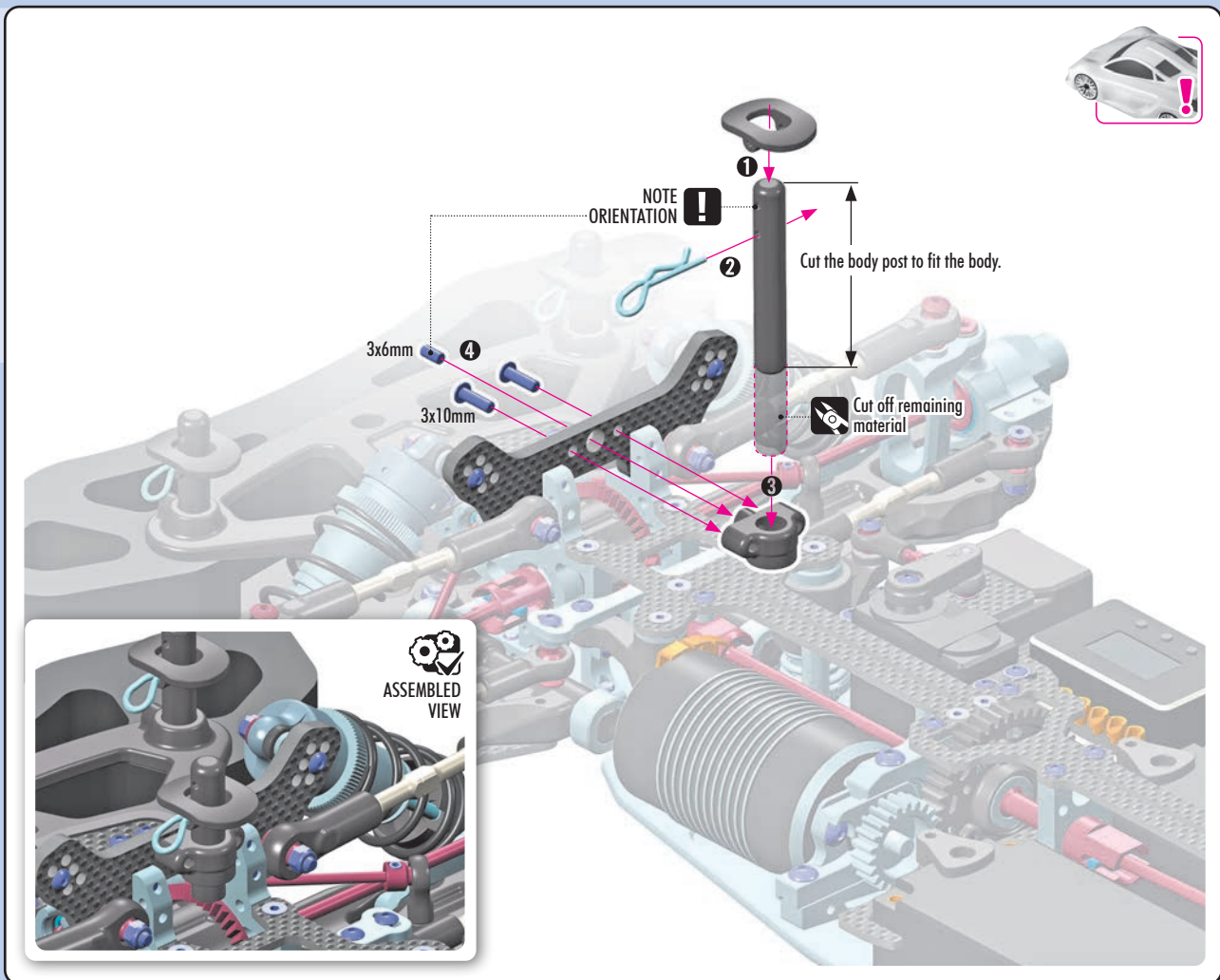
12. FINAL ASSEMBLY

2x 901306
SB M3x6



1x 901306
SB M3x6

2x 902310
SH M3x10



12. FINAL ASSEMBLY



2x 901306
SB M3x6



2x 902325
SH M3x25



2x 960030
N M3

1
2
3
4
5
6
7

Cut the body post to fit the body.

NOTE ORIENTATION

Cut off remaining material

M3
3x6mm
M3
3x25mm

ASSEMBLED VIEW

ASSEMBLED VIEW

NOTE ORIENTATION

!

4x

Wheel & Tire (NOT INCLUDED)

NOTE ORIENTATION

NOTE ORIENTATION

Wheel & Tire (NOT INCLUDED)

TIP To tighten the screw you can also use the #107570 HUDY 17mm Wheel Nut Tool.





WHEEL NUTS			
OPTION	#355261	OPEN	INCLUDED
	#293560	COVERED	OPTION
	#355265	COVERED	OPTION

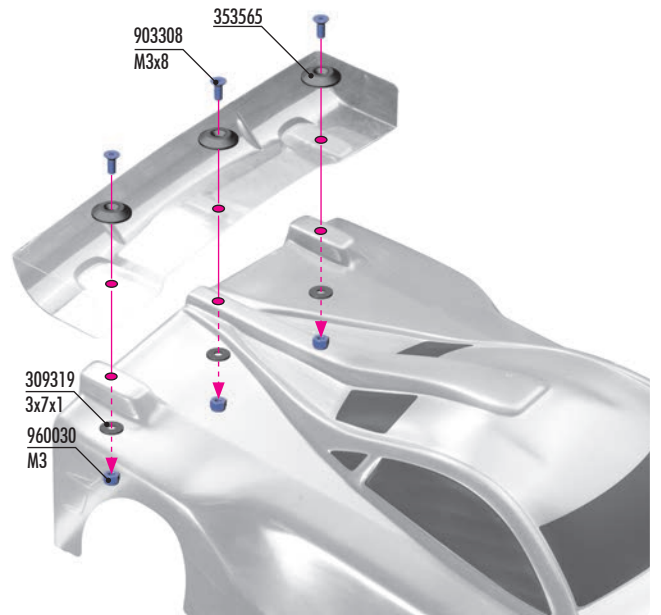
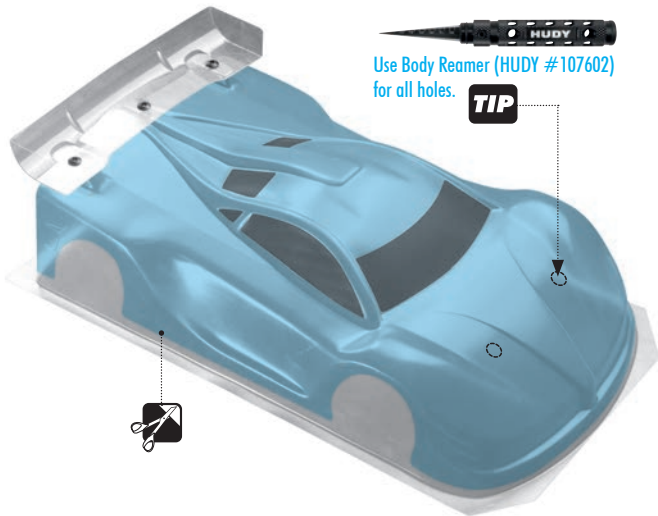
12. FINAL ASSEMBLY

#359731 GTX BODY (NOT INCLUDED) OPTION

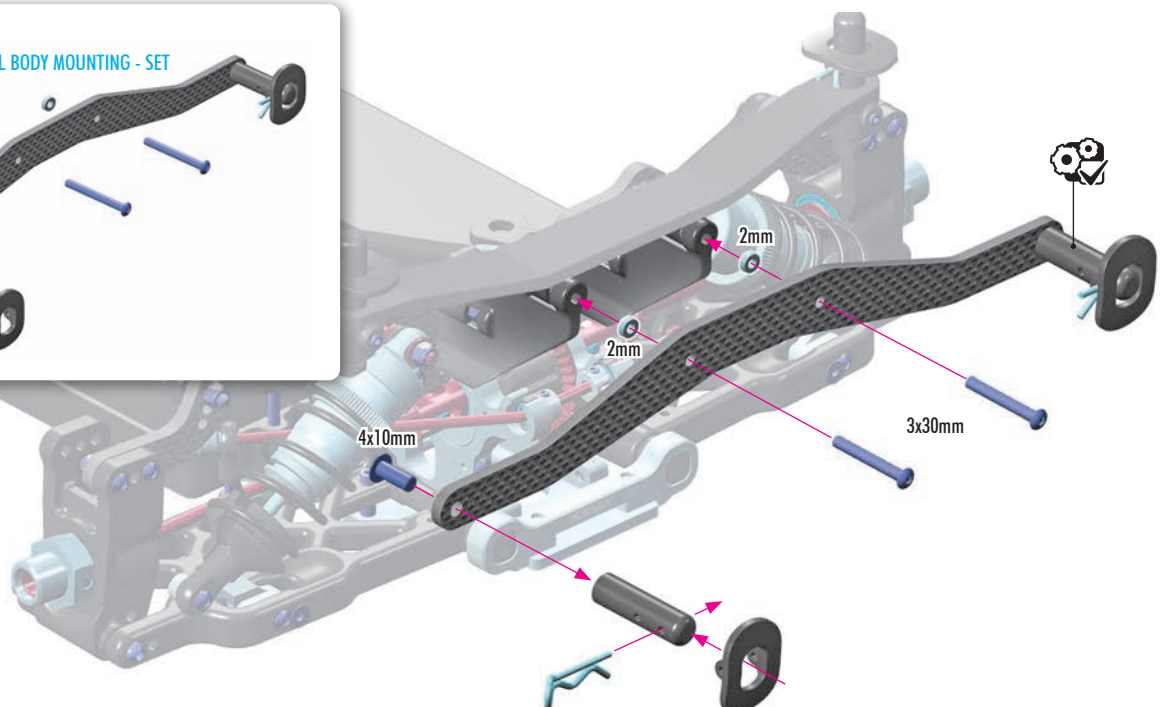
- 1 Before cutting and making holes on the body, put the unpainted body on the chassis to confirm the mounting position and location for holes and cutouts.
- 2 Before painting, wash the inside of the body with mild detergent, and then rinse and dry thoroughly.
- 3 Mask all windows.
- 4 Apply paint masks as appropriate.
- 5 Paint the body using paints formulated for polycarbonate bodies.
- 6 When the paint is dry, remove the masking.
- 7 Carefully cut out the body using appropriate scissors or cutting tools.
- 8 When you have finished cutting, peel off the external protective films.

TIP To reinforce the body or to fix broken body use #106280 HUDY BODY FIX.

WING SHIMS			
 OPTION	#353565	COMPOSITE	INCLUDED
	#293561	ALU	OPTION
	#293561-K	ALU	OPTION
	#293561-O	ALU	OPTION
	#353561	ALU	OPTION



#351460 GT HORIZONTAL BODY MOUNTING - SET OPTION



HUDY SET-UP TOOLS & ACCESSORIES

(NOT INCLUDED)



#109601

HUDY Set-Up Station for 1/8 On-road GT

- Must-have set-up tool for a complete suspension geometry adjustment
- Quick and straight-forward "one screw" assembly/disassembly
- Backlash-free, wobble-free mounting
- Fully ball-bearing equipped set-up stands (12 high-precision ball-bearings)
- Ultra-smooth, ultra-precise movement and operation
- CNC-machined from high-grade premium Swiss 7075 T6 aluminum
- CNC-machined upside measure plate from tough acrylic plastic
- All components have precision engraving for instant & reliable readings
- Carrying box with foam inserts for safe storage & transportation
- High-quality, super precision & long life
- Industry standard for set-up tools since 1992



Alu Clamp Servo Horns

- Increase reliability & strength
- Clamp design
- Easy to access set screw from top
- Maximum steering control
- Drilled & tapped for 3mm linkage
- Zero flex
- Black coated
- Premium Swiss 7075 T6 aluminum



Alu Steering Servo Horn

- Increase reliability & strength
- Easy to access set screw from top
- Maximum steering control
- Drilled & tapped for 3mm linkage
- Zero flex
- Black coated
- Premium Swiss 7075 T6 aluminum



HUDY Titanium Super-Low Head Screw - Centering Diameter

- Titanium material
- Super lightweight
- Centering Diameter on Super-Low Head Screws
- Ultra-precise
- Long life
- High durability
- Made by HUDY
- Made in Europe

OTHER VARIANTS:

Part number	Length	Pcs	Image
#908305-T	5mm	10	
#908306-T	6mm	10	
#908308-T	8mm	10	
#908310-T	10mm	10	
#908312-T	12mm	10	
#908314-T	14mm	4	
#908316-T	16mm	4	
#908318-T	18mm	4	
#908325-T	25mm	4	



HUDY Titanium Flat Head Screw

OTHER VARIANTS:

Part number	Length	Pcs	Image
#903306-T	6mm	10	
#903308-T	8mm	10	
#903310-T	10mm	10	
#903312-T	12mm	10	
#903314-T	14mm	4	
#903320-T	20mm	4	
#903325-T	25mm	4	



XRAY TUNING PARTS

(NOT INCLUDED)



Composite Rear Lower Suspension Arms

• Different hardness arms are available for additional turning options

OTHER VARIANTS:

Rear Lower Suspension Arm

Part number	Hardness
#353115	Medium
#353116-H	Hard
#353116-XH	X-Hard
#353116-G	Graphite

MEDIUM:

For low traction. Generates more traction on rear suspension.

HARD:

Balanced flex. Most versatile for all conditions.

X-HARD:

For medium-high traction. Improves stability.

GRAPHITE:

For very high-traction. Improves stability and corner speed.

OTHER VARIANTS:

Rear Lower Suspension Arm - Short

Part number	Size	Hardness
#353127-H	Short	Hard
#353127-XH	Short	X-Hard
#353127-G	Short	Graphite

• increases rotation

HARD:

Balanced flex. Most versatile for all conditions.

X-HARD:

For medium-high traction. Improves stability.

GRAPHITE:

For very high-traction. Improves stability and corner speed.



#353191

Carbon Rear Lower Arm Plate

- For stiffer the rear arms
- Makes the car more stable
- Easier to drive under high-traction conditions
- The plate can be easily mounted/dismounted
- CNC-machined
- Strong carbon material



#352526

Alu Servo Saver Lower Arm Swiss 7075 T6

- Servo saver lower arm
- Improves durability
- Reduces flex in steering assembly
- Improves performance in all conditions
- Hard coated for increased lifespan
- Premium Swiss 7075 T6 aluminum



#355022-G

Differential Case V2 - Graphite

- Durable graphite composite
- Lightweight
- Higher temperature resistance
- Higher wear resistance



#355222

Universal Drive Shaft - HUDY Spring Steel™

- Makes car more free
- Reduced resistance at full steering angle
- Increases corner speed
- For front & rear suspension
- HUDY Spring Steel™



#355086

Extreme Heat Resistant F/R Alu Diff Pin with Inserts (2+4)

- For extreme heat conditions
- Lightweight & durable
- Increases lifetime
- Smoother and more stable handling on high traction
- Heat-resistant inserts for consistent performance



#355085

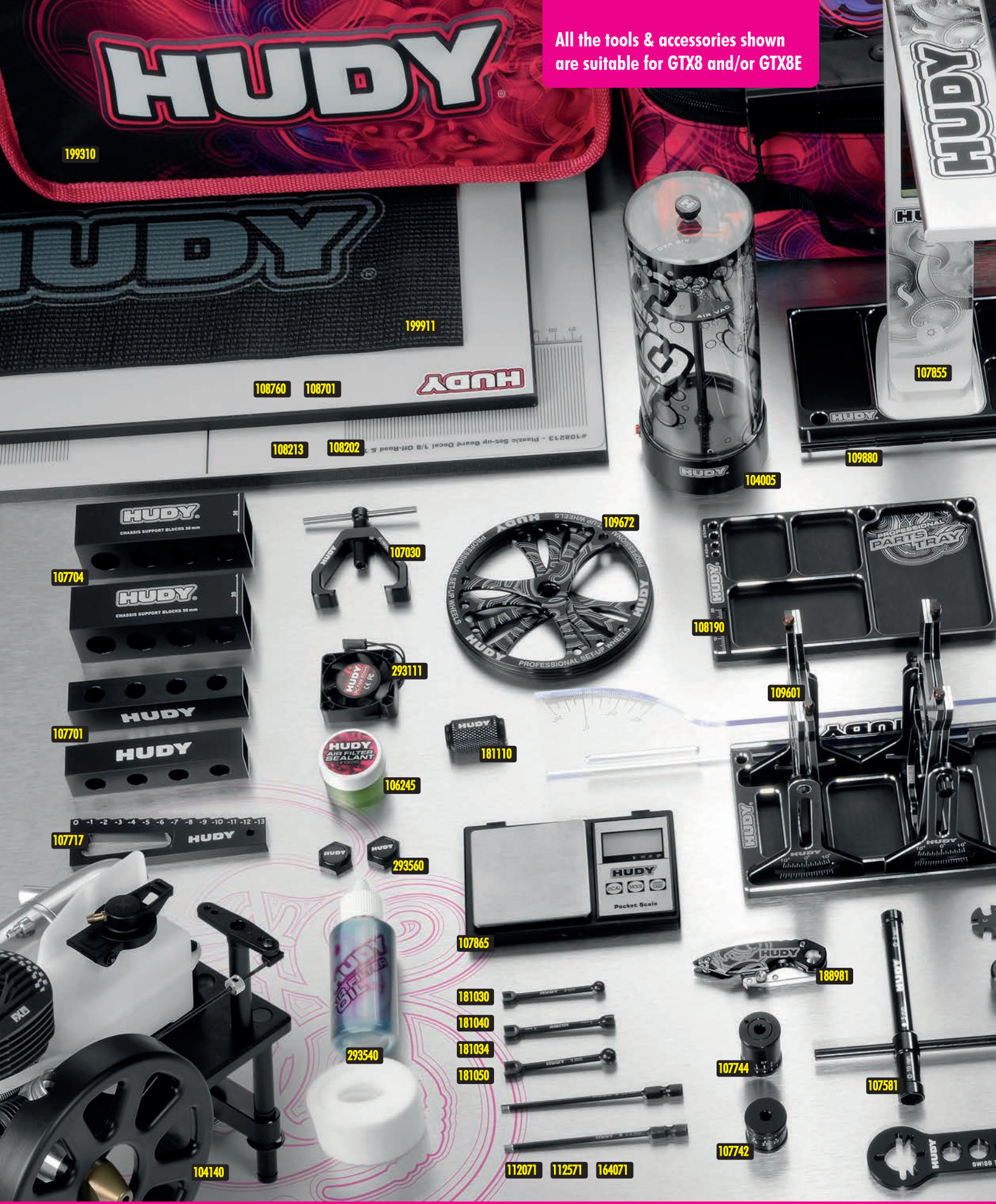
Heat Resistant Alu Diff Pin & Inserts - 2G Config. F/R (2+4)

- Designed for 2-gear differential configuration
- Lightweight & durable
- Smoother and more stable handling on high traction
- No flat spot pin design for improved durability
- Heat-resistant inserts for consistent performance



HUDY

All the tools & accessories shown are suitable for GTX8 and/or GTX8E



- #104005 HUDY Air Vac - Vacuum Pump - 1/8 Off-Road
- #104140 HUDY Engine Break-In Bench
- #104500 HUDY Star-Box 1/8 Off-Road
- #105500 HUDY Universal Tire Balancing Station
- #105510 Wheel Adapter for 1/8 Off-Road Cars, Truggy & Rally Game
- #106000 HUDY Drive Pin Replacement Tool (for 3mm Pins)
- #106200 HUDY Magic Cleaning Gum
- #106245 HUDY Air Filter Sealant
- #107030 HUDY Flywheel Puller
- #107090 HUDY Bearing Check Tool
- #107570 HUDY 17mm Off-Road Wheel Nut Tool
- #107581 HUDY Cross Wrench Glowplug # 8mm / Clutchnut # 10mm
- #107602 Limited Edition - Reamer for Body 0-18mm + Cover - Large

- #107612 Limited Edition - Exhaust Spring / Caster Clip Remover
- #107644 Limited Edition - Arm Reamer # 4.0mm
- #107701 Chassis Droop Gauge Support Blocks 20mm for 1/8 - LW(2)
- #107704 Chassis Droop Gauge Support Blocks 30mm 1/8 Off-Road - LW (2)
- #107717 Chassis Droop Gauge 0 to -13 mm for 1/8 Off-Road
- #107742 HUDY Adjustable Ride Height Gauge 20-30mm
- #107744 HUDY Adjustable Ride Height Gauge 30-45mm
- #107762 HUDY Adjustable Camber Gauge 110mm
- #107780 HUDY Adjustable Droop Gauge 80-140mm
- #107783 HUDY Droop Gauge 70-140mm
- #107855 HUDY Pit LED
- #107865 HUDY Ultimate Digital Pocket Scale 300g/0.01g
- #108170 HUDY Off-Road & Truggy Car Stand

- #108190 HUDY Alu Tray for Parts
- #108202 Flat Set-Up Board for 1/8 Off-Road & Truggy
- #108213 Plastic Set-up Board Decal for 1/8 Off-Road & Truggy
- #108701 Flat Set-Up Board for 1/8 Off-Road & GT - Lightweight
- #108760 Plastic Set-Up Board Decal 399x545mm - 1/8 Off-Road & GT
- #109601 HUDY Set-Up Station for 1/8 GT
- #108860 Alu Nut for 1/8 Off-Road System (4)
- #109672 Alu Set-Up Wheel for 1/8 GT (4)
- #109802 HUDY Alu Tray for 1/8 Off-Road Diff & Shocks
- #109841 HUDY Alu Tray for 1/8 Off-Road Diff Assembly
- #109860 HUDY Alu Tray for Set-Up System
- #109880 HUDY Alu Tray for Accessories & Pit LED
- #111545 Limited Edition - Allen Wrench # 1.5mm

EXCLUSIVE PROFESSIONAL

HUDY



- #112045 Limited Edition - Allen Wrench # 2.0mm
- #112071 Power Tool Tip Allen 2.0 x 90 mm
- #112545 Limited Edition - Allen Wrench # 2.5mm
- #112571 Power Tool Tip Allen 2.5 x 90 mm
- #113045 Limited Edition - Allen Wrench # 3.0mm
- #132045 Limited Edition - Allen Wrench + Ball Repl. Tip # 2.0mm
- #132545 Limited Edition - Allen Wrench + Ball Repl. Tip # 2.5mm
- #154060 Long Slotted Screwdriver 4.0 mm - for Engine Adjust. - SPC - V2
- #164045 Limited Edition - Phillips Screwdriver # 4.0mm
- #164071 Power Tool Tip Phillips 4.0 x 90 mm
- #170050 Socket Driver 5.0 mm
- #175535 Limited Edition - Socket Driver # 5.5mm
- #181030 HUDY Spring Steel Turnbuckle Wrench 3 mm

- #181034 HUDY Spring Steel Turnbuckle Wrench 3 & 4mm
- #181040 HUDY Spring Steel Turnbuckle Wrench 4 mm
- #181050 HUDY Spring Steel Turnbuckle Wrench 5 mm
- #181090 HUDY Special Tool For Turnbuckles & Nuts
- #181110 HUDY Ball Joint Wrench
- #182016 Wheel Nut & 3/4 Shoe Flywheel Multi-Toll 1/8 GT
- #183011 HUDY Professional Multi Tool
- #188981 HUDY Pocket Hobby Knife
- #188990 HUDY Professional Body Scissors
- #199060 HUDY Alu Tool Stand
- #199186 HUDY Car Bag - 1/8 On-Road GT
- #199270 HUDY LiPo Safety Bag
- #199310 HUDY Pit Bag - Compact

- #199911 HUDY Pit Mat Roll 750x1200mm with Printing
- #293111 HUDY Brushless RC Fan 40mm
- #293540 Air Filter Foam & Oil (10) - XRAY XB8 Low Profile Style
- #293560 HUDY Alu Wheel Nut with Cover - Ribbed (2)

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

www.hudy.net



www.teamxray.com

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XRAY USA

RC AMERICA, 2030 Century Center Blvd #15, Irving, TX 75062, USA
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/XrayRacing