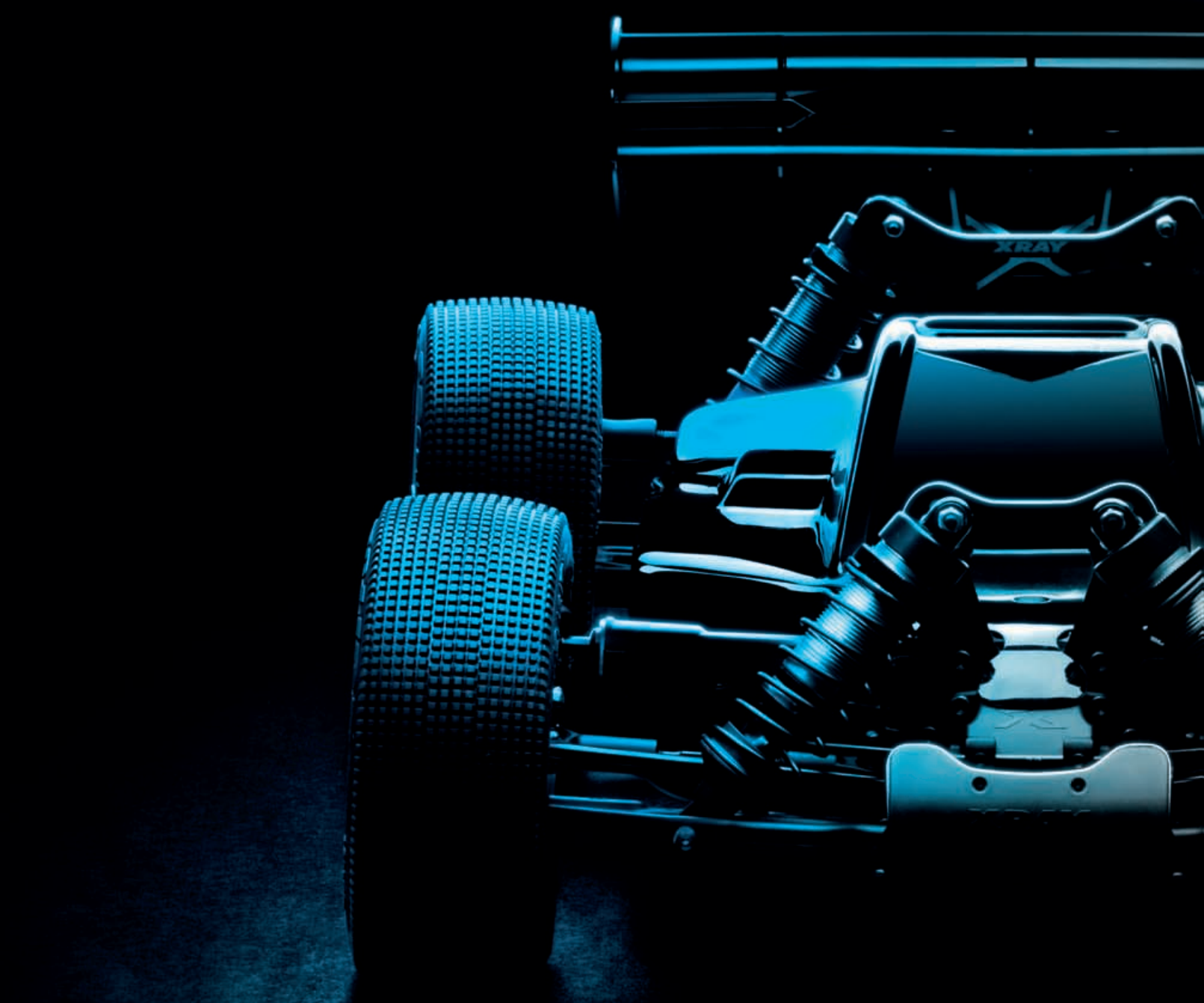
1/8 LUXURY ELECTRIC OFF-ROAD BUGGY

XRAY XB8E



INSTRUCTION MANUAL

XRAY XB8E'23

BEFORE YOU START

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

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

Read carefully and fully understand the instructions before beginning assembly.

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

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

CUSTOMER SUPPORT

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

You can join thousands of XRAY fans and enthusiasts in our online community at:

www.teamxray.com

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

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

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

SAFETY PRECAUTIONS

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

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

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

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

IMPORTANT NOTES – GENERAL

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

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

IMPORTANT NOTES – ELECTRICAL

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

R/C & BUILDING TIPS

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

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

WARRANTY

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

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

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

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

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

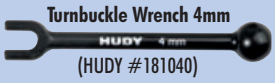
Combination Pliers (HUDY #189020)

Side Cutters (HUDY #189010)

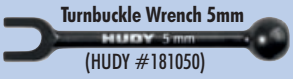
Pocket Hobby Knife (HUDY #188981)

Special Tool for turnbuckles, nuts (HUDY #181090)

Turnbuckle Wrench 3mm (HUDY #181030)



Turnbuckle Wrench 4mm (HUDY #181040)



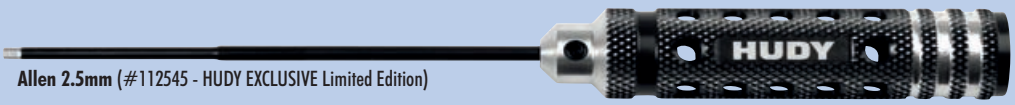
Turnbuckle Wrench 5mm (HUDY #181050)

Tweezers

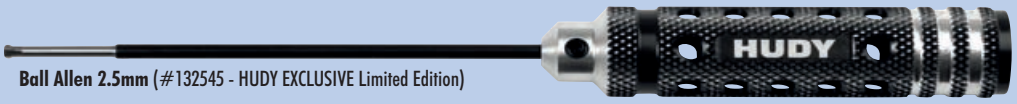
Scissors (HUDY #188990)

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

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

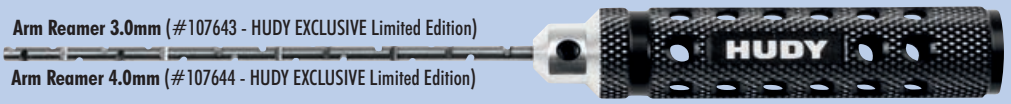


Allen 2.5mm (#112545 - HUDY EXCLUSIVE Limited Edition)



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)

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

Wheel Nut Tool 17mm (HUDY #107570)

Professional Multi-Tool (HUDY #183011)

EQUIPMENT REQUIRED

Transmitter

Receiver

Speed Controller

Steering Servo

Battery Charger

Electric Motor

Pinion Gear

Lexan™ Paint

LiPo Battery Saddle Pack (Short)

Double-sided Tape (HUDY #107875)

Tires & Wheels

Bearing Oil (HUDY #106230)

Threadlock

CA glue

EQUIPMENT INCLUDED

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

550cSt (#106356)
HUDY Premium Silicone Oils

600cSt (#106361)
HUDY Premium Silicone Oils

3.000cSt (#106431)
HUDY Premium Silicone Oils

7.000cSt (#106471)
HUDY Premium Silicone Oils

(HUDY #106210)
Premium Graphite Grease

At the beginning of each section is an exploded view of the parts to be assembled. There is also a list of all the parts and part numbers that are related to the assembly of that section. The part descriptions are color-coded to make it easier for you to identify the source of a part. Here are what the different colors mean:

STYLE A - indicates parts that are included in the bag marked for the section.
STYLE B - indicates parts that are included in the box.
STYLE C - indicates parts that are already assembled from previous steps.

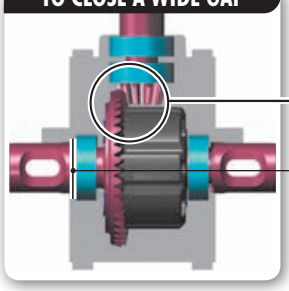
XB8 TECH TIPS

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 outdrive ball-bearing, depending on how much play there is.

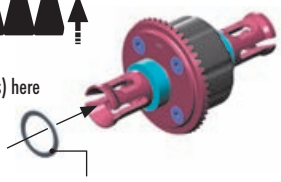
THE LOCATION OF THE SHIM(S) DEPENDS ON WHETHER YOU ARE TRYING TO CLOSE OR OPEN THE GAP:

TO CLOSE A WIDE GAP



CLOSE A WIDE GAP

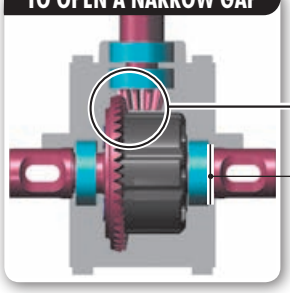
To CLOSE a wide gap: add 1 or 2 shims against diff spur gear



insert shim(s) here

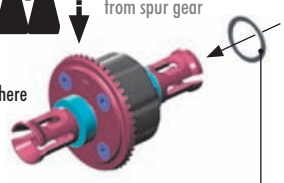
WASHER #962131 S 13 x 16 x 0.1 mm (10)
#962130 S 13 x 16 x 0.2 mm (10)

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.**

SUSPENSION & DRIVETRAIN MAINTENANCE

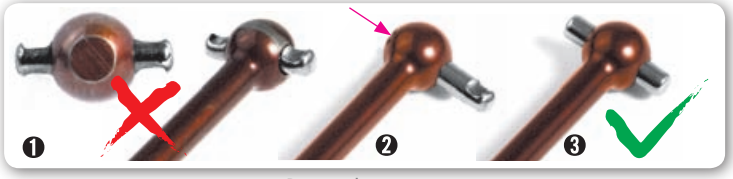
- Check suspension for free movement during building and operation, and especially after running and if you have crashed the car. If the suspension does not move freely, use the appropriate HUDY Arm Reamer to clean and resize the holes of the suspension arms.
- Regularly check the drive shaft pins (both side and center) and if they show any wear they must be immediately replaced by new pins. If the car is run with worn pins, excessive wear on the diff outdrives will result. The 106000 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 replacement drive shaft pins 3x14 (#106050).
- Regularly inspect and replace the connecting pins which connect the center drive shafts with the pinion gear, and also the pins that connect the wheel drive shafts with wheel axles. Use HUDY Graphite Grease to lubricate the drive shaft connecting joints and the diff gears.
- Pivot balls and ball-joints will naturally wear for some time and will generate play. If there is too much play the pivot balls and ball joints need to 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.

HUDY SPRING STEEL™

The HUDY Spring Steel™ used in the car is the strongest and most durable steel material on the RC market. While items made from HUDY Spring Steel™ are still subject to wear, the lifespan is considerably longer than any other material. As parts made from HUDY Spring Steel™ wear, the brown color will after some time "go down" but it will not affect the strength of the material. The brown color is only a surface treatment and if the brown color will wear the durability of the part will be still strong.

TIP DRIVE SHAFT PIN SERVICING

To enjoy the longest possible lifespan of the drive shafts and diff outdrives, it is extremely important to properly service the drive shaft pins.
Inspect the pins after every 3 hours of runtime. If the pins show any wear, replace them with new pins.



DO NOT use drive shafts when the pins are worn.

Press out the worn pins.

Press in new pins and regularly inspect for wear.

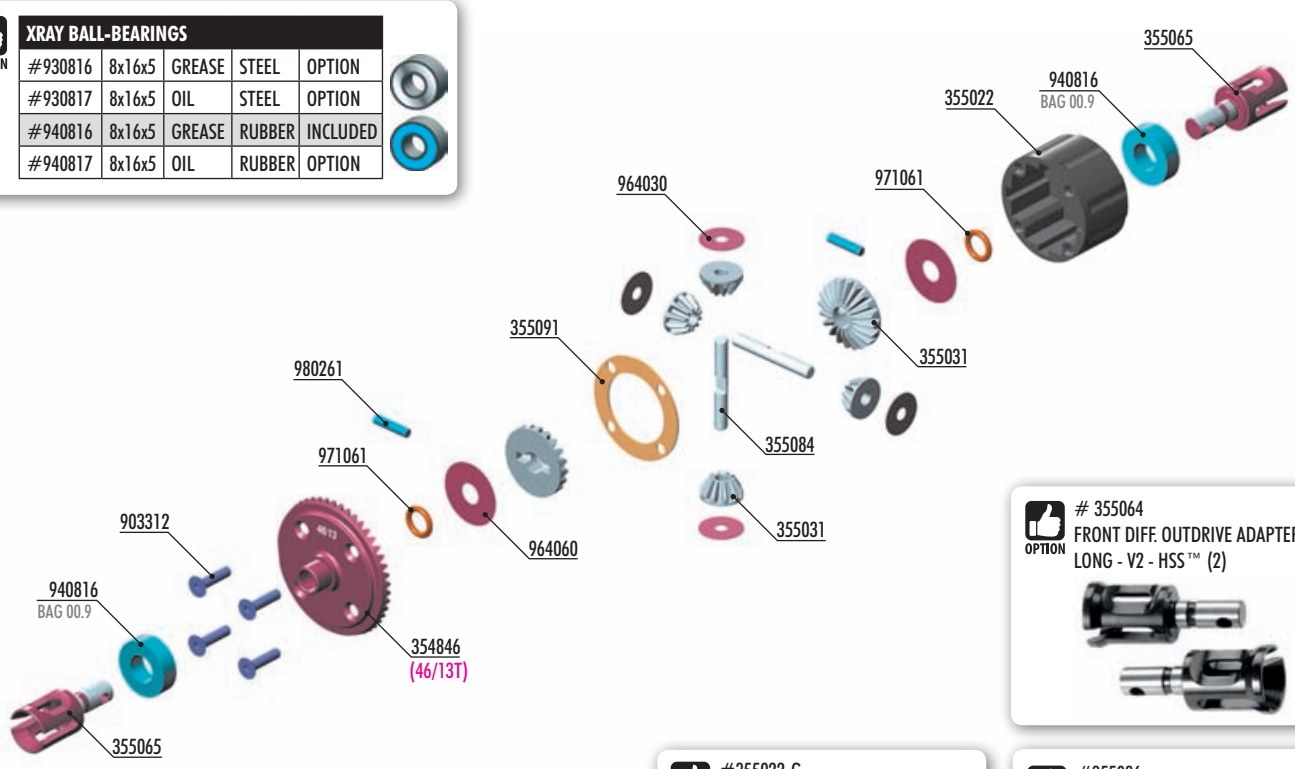
For easy drive pin replacements use #106000 HUDY Drive Pin Replacement Tool.

To replace the worn pins use only premium HUDY drive pins #106050.

1. FRONT & REAR DIFFERENTIALS

OPTION

XRAY BALL-BEARINGS				
#930816	8x16x5	GREASE	STEEL	OPTION
#930817	8x16x5	OIL	STEEL	OPTION
#940816	8x16x5	GREASE	RUBBER	INCLUDED
#940817	8x16x5	OIL	RUBBER	OPTION



OPTION # 355064
FRONT DIFF. OUTDRIVE ADAPTER LONG - V2 - HSS™ (2)

OPTION #355022-G
DIFFERENTIAL CASE - V2 - GRAPHITE

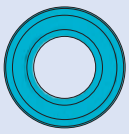
OPTION #355086
HEAT-RESISTANT F/R ALU DIFF PINS+ INSERTS (SET)

BAGS

01.1

2x

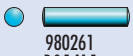
354846	F/R DIFF LARGE BEVEL GEAR 46T - MATCHED FOR 13T PINION GEAR
355006	DIFFERENTIAL 46T - MATCHED FOR 13T PINION GEAR - SET
355022	DIFFERENTIAL CASE - V2
355031	STEEL DIFF BEVEL & SATELLITE GEARS - V2 (2+4)
355065	DIFF OUTDRIVE ADAPTER - V2 - HUDY SPRING STEEL™ (2)
355084	F/R DIFF PIN (2)
355091	F/R DIFF GASKET (4)
903312	HEX SCREW SFH M3x12 (10)
940816	BALL-BEARING 8x16x5 RUBBER SEALED - GREASE (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)



940816
BB 8x16x5

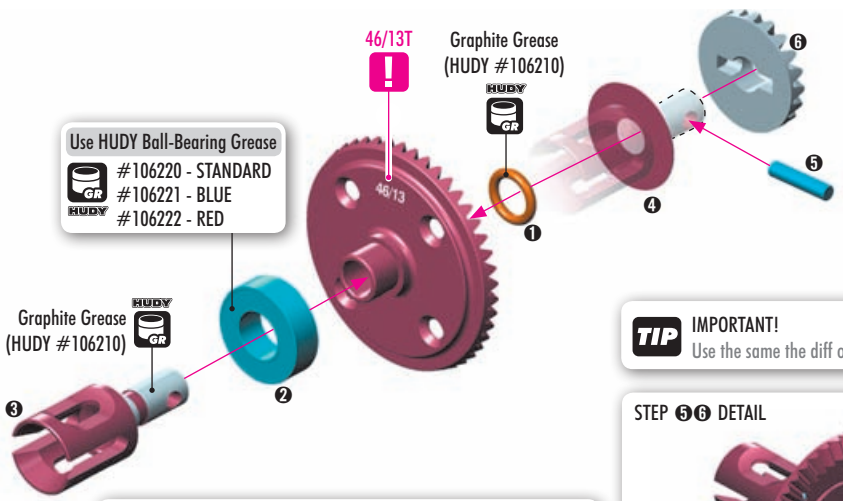
964060
S 6x18x0.2

971061
O 6x1.55



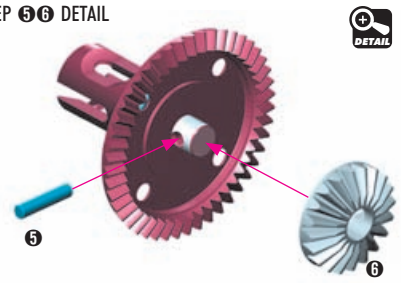
980261
P 2.5x11.5

2x F=R



TIP IMPORTANT!
Use the same the diff outdrives on both ends of a diff.

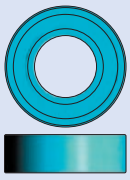
STEP 5 6 DETAIL



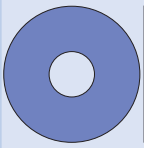
OPTION

XRAY BALL-BEARINGS				
#930816	8x16x5	GREASE	STEEL	OPTION
#930817	8x16x5	OIL	STEEL	OPTION
#940816	8x16x5	GREASE	RUBBER	INCLUDED
#940817	8x16x5	OIL	RUBBER	OPTION

SET-UP BOOK
DIFFERENTIAL GEARS

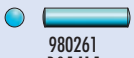


940816
BB 8x16x5



964060
S 6x18x0.2

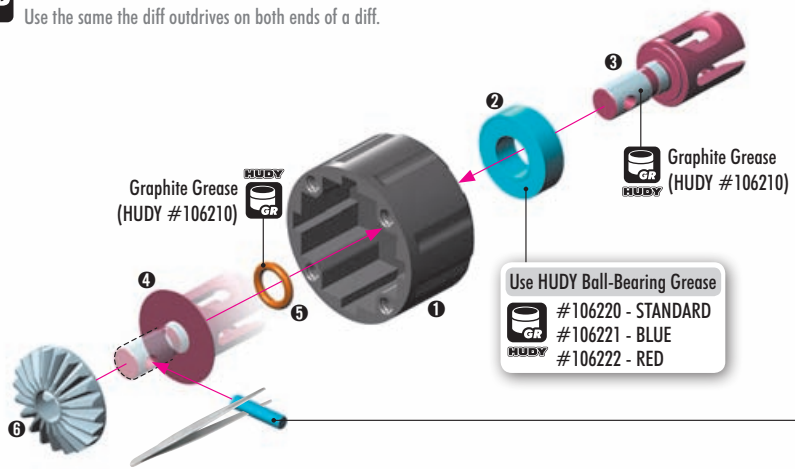
971061
O 6x1.55



980261
P 2.5x11.5

2x F=R

TIP IMPORTANT!
Use the same the diff outdrives on both ends of a diff.

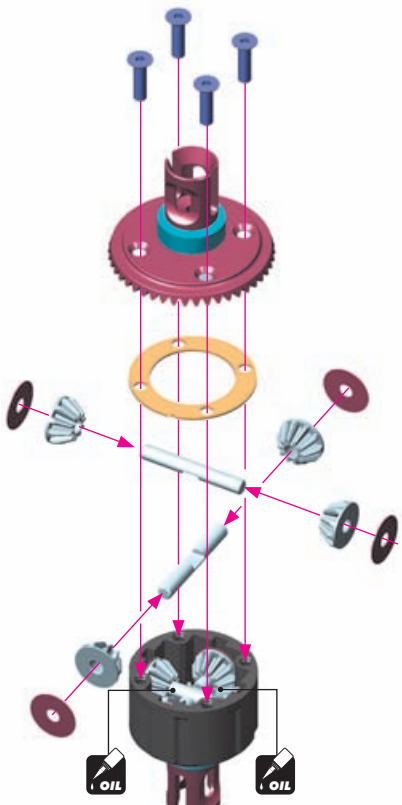


STEP ❺ DETAIL

903312
SFH M3x12

964030
S 3.5x12x0.2

SET-UP BOOK
DIFFERENTIAL OIL



Front diff:
Silicone oil 7.000cSt
Fill just above the satellite gears.

Rear diff:
Silicone oil 3.000cSt
Fill just above the satellite gears.

VERY IMPORTANT!
Use the following silicone oils included in the kit for initial settings:
FRONT diff: 7.000cSt / REAR diff: 3.000cSt

Fill the differentials with oil just above the satellite gears.

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:

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

1. Put the diff (without oil) on the scale and check the weight:
- REAR DIFF approx. 39.30g
- FRONT DIFF approx. 39.30g

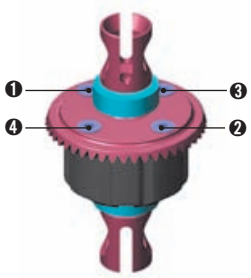
2. Slowly pour oil into the diff and watch the weight. Add 2.60g of oil into the diff. The approximate weight of the diff+oil is approx. 41.90g.

OIL

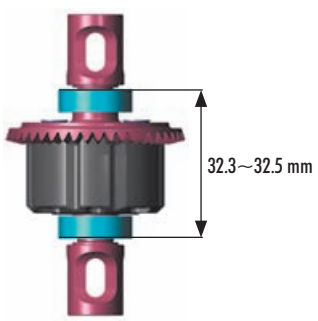
REAR DIFF	39.30g +	2.60g	= 41.90g
FRONT DIFF	39.30g +	2.60g	= 41.90g

Tighten the screws equally.

Finish tightening in this order:



After assembly the differentials should have a length of 32.3~32.5 mm measured from the ends of the installed ball-bearings. If differentials are longer, retighten the 4 screws holding the crown gears.



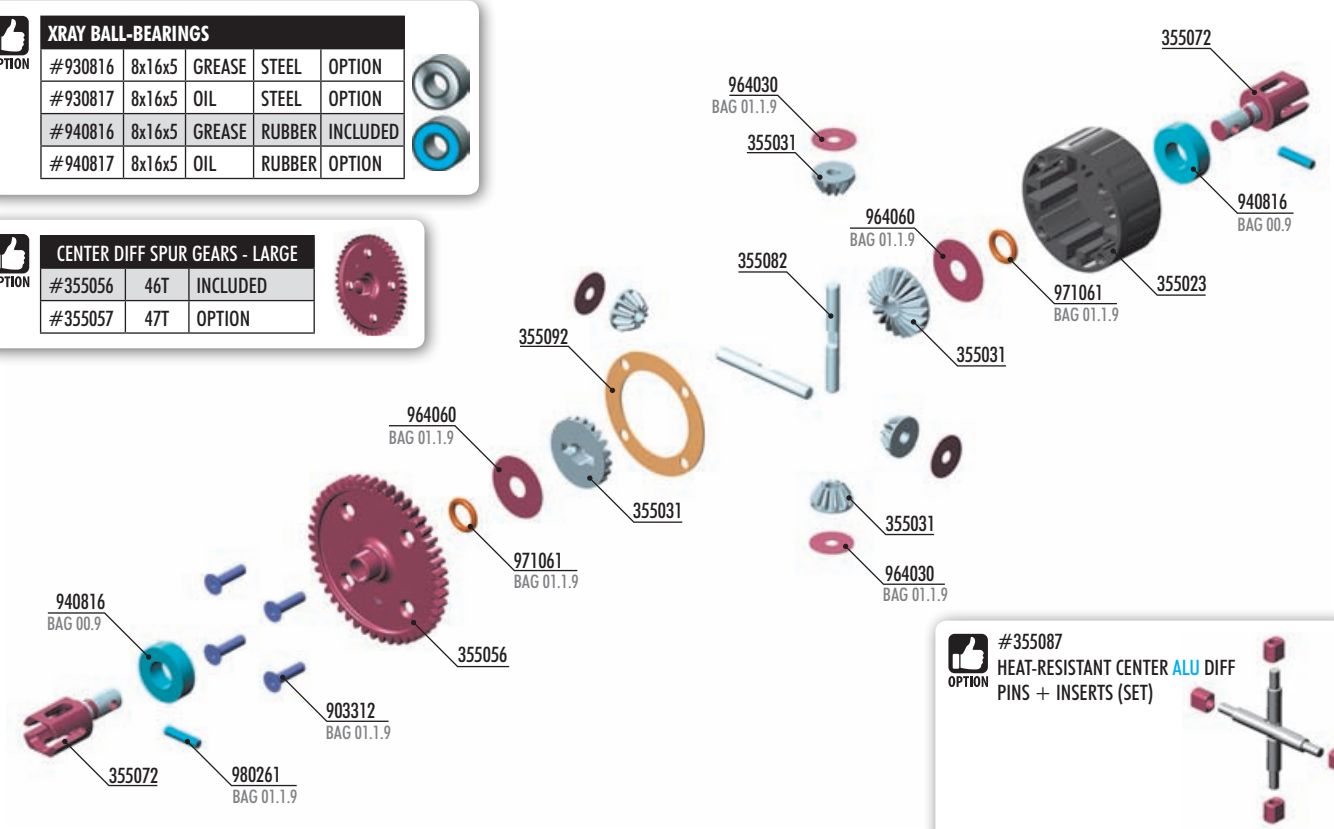
1. CENTER DIFFERENTIAL

OPTION

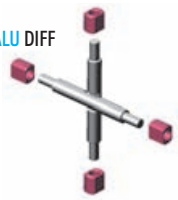
XRAY BALL-BEARINGS				
#930816	8x16x5	GREASE	STEEL	OPTION
#930817	8x16x5	OIL	STEEL	OPTION
#940816	8x16x5	GREASE	RUBBER	INCLUDED
#940817	8x16x5	OIL	RUBBER	OPTION

OPTION

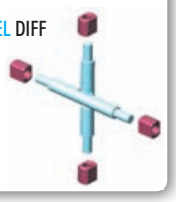
CENTER DIFF SPUR GEARS - LARGE		
#355056	46T	INCLUDED
#355057	47T	OPTION



OPTION #355087
HEAT-RESISTANT CENTER ALU DIFF PINS + INSERTS (SET)



OPTION #355083
HEAT-RESISTANT CENTER STEEL DIFF PIN + INSERTS (SET)

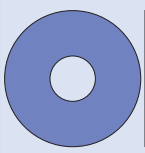


OPTION #355023-G
CENTER DIFFERENTIAL CASE - V2 - GRAPHITE

BAG 01.3

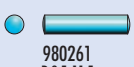
355013	CENTER DIFFERENTIAL - LARGE - SET - V2	903312	HEX SCREW SFH M3x12 (10)
355023	CENTER DIFFERENTIAL CASE - V2	940816	BALL-BEARING 8x16x5 RUBBER SEALED - GREASE (2)
355031	STEEL DIFF BEVEL & SATELLITE GEARS - V2 (2+4)	964030	WASHER S 3.5x12x0.2 (10)
355056	CENTER DIFF SPUR GEAR 46T - LARGE	964060	WASHER S 6x18x0.2 (10)
355072	LARGE CENTER DIFF OUTDRIVE ADAPTER - HUDY STEEL (2)	971061	SILICONE O-RING 6x1.55 (10)
355082	CENTER DIFF PIN (2)	980261	PIN 2.5x11.5 (10)
355092	CENTER DIFF GASKET (2)		

940816
BB 8x16x5

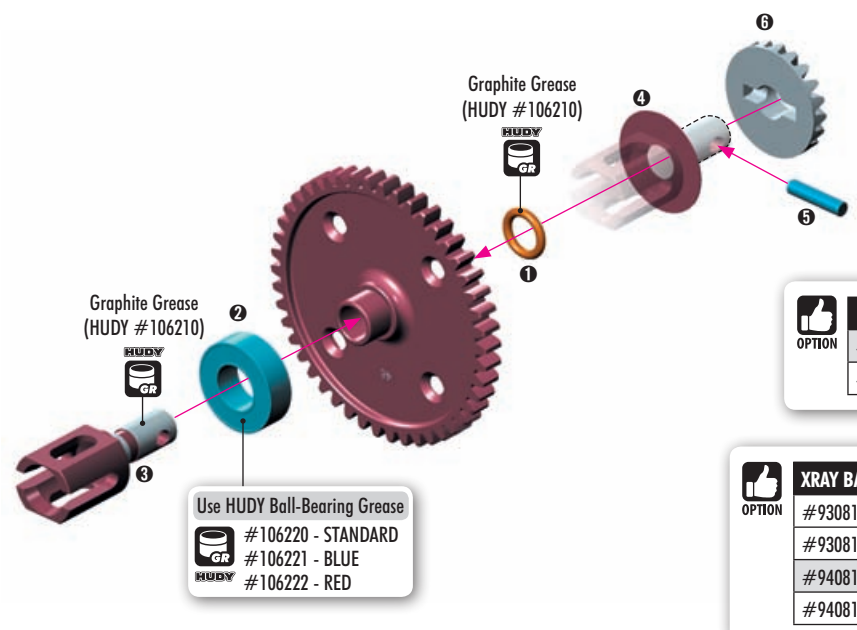


964060
S 6x18x0.2

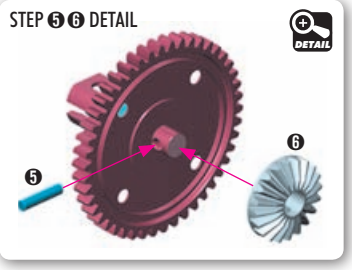
971061
O 6x1.55



980261
P 2.5x11.5



STEP ❺❻ DETAIL

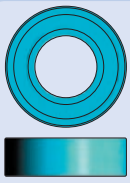


OPTION

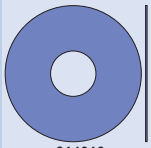
CENTER DIFF SPUR GEARS - LARGE		
#355056	46T	INCLUDED
#355057	47T	OPTION

OPTION

XRAY BALL-BEARINGS				
#930816	8x16x5	GREASE	STEEL	OPTION
#930817	8x16x5	OIL	STEEL	OPTION
#940816	8x16x5	GREASE	RUBBER	INCLUDED
#940817	8x16x5	OIL	RUBBER	OPTION



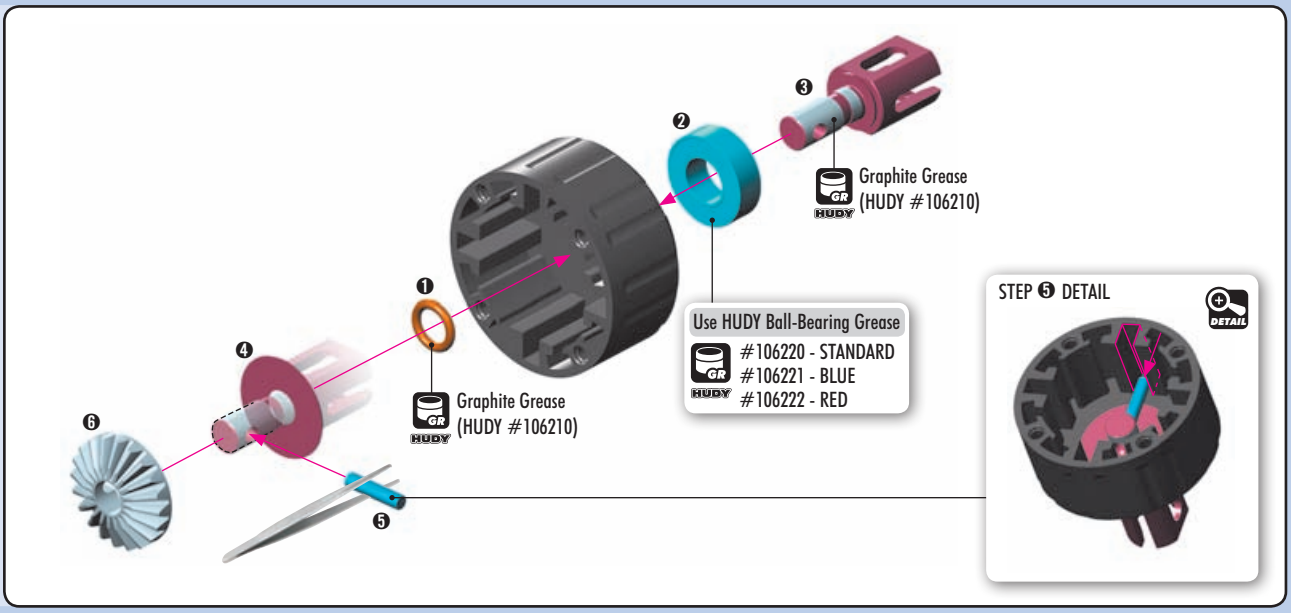
940816
BB 8x16x5



964060
S 6x18x0.2

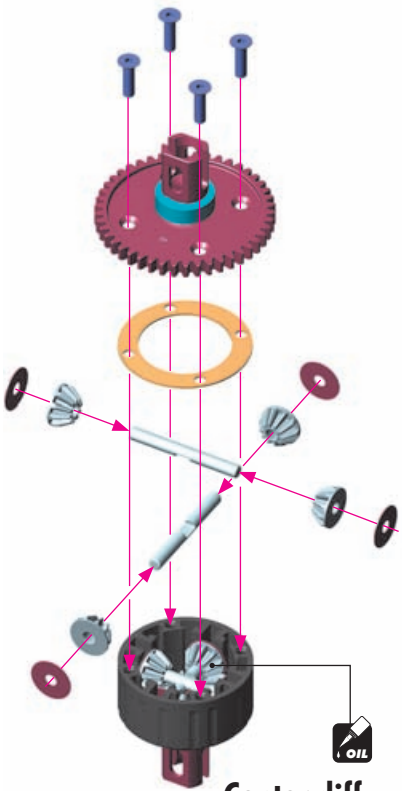
971061
O 6x1.55

980261
P 2.5x11.5



903312
SFH M3x12

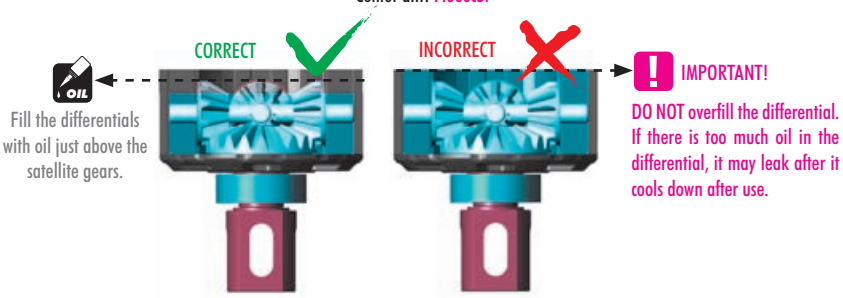
964030
S 3.5x12x0.2



Center diff:
Silicone oil 7.000cSt
Fill to just above the satellite gears.

VERY IMPORTANT!

Use the following silicone oil included in the kit for initial setting:
Center diff: 7.000cSt



To ensure you have the same amount of oil from rebuild to rebuild, do the following:

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

1. Put the diff (without oil) on the scale and check the weight (approximately 42.97g).

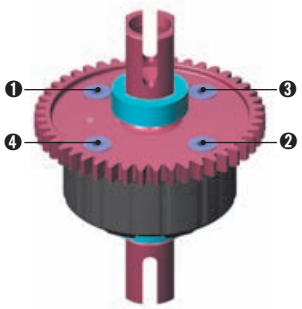
2. Slowly pour oil into the diff and watch the weight. Add 5.20g of oil into the diff. The approximate weight of the diff+oil is 48.17g.

OIL

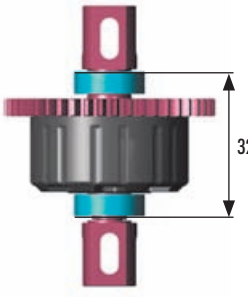
CENTER DIFF 42.97g + 5.20g = 48.17g

Tighten the screws equally.

Finish tightening in this order:



After assembly the differential should have a length of 32.3~32.5 mm measured from the ends of the installed ball-bearings. If differential is longer, retighten the 4 screws holding the spur gear.

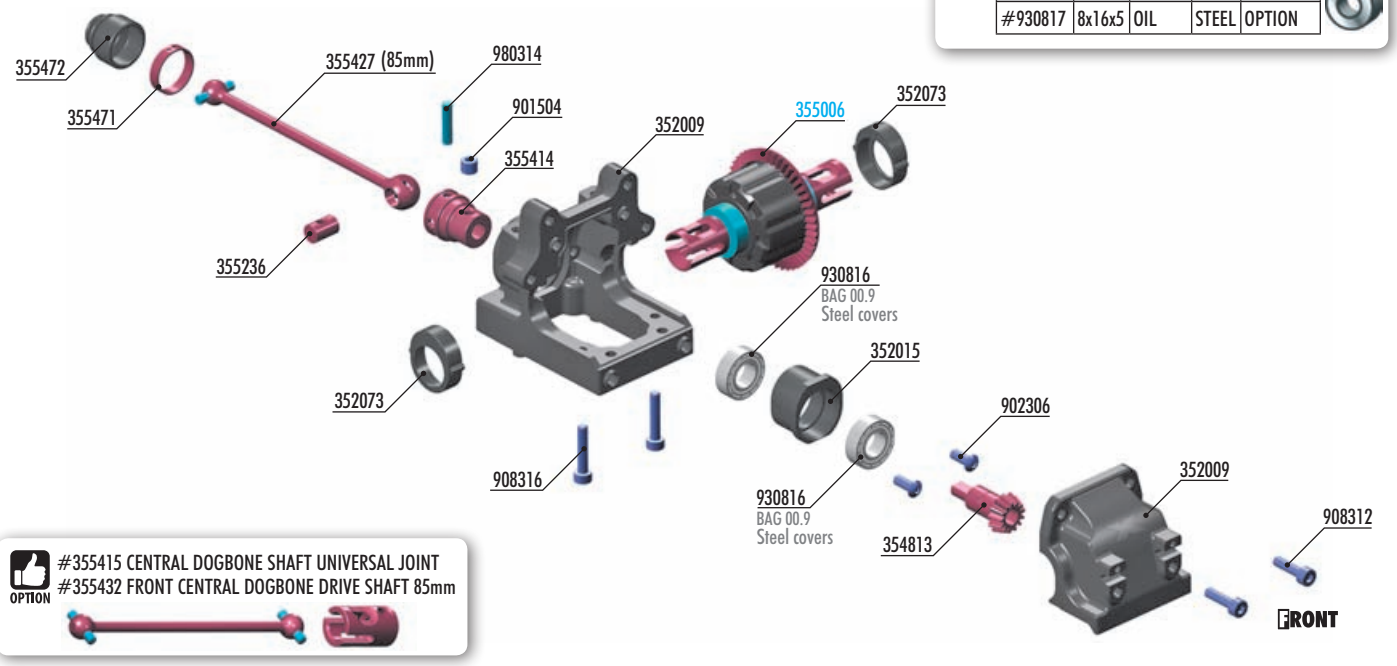


SET-UP BOOK
DIFFERENTIAL OIL

2. FRONT TRANSMISSION

OPTION

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

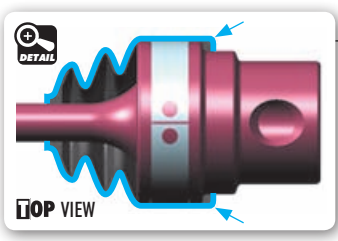


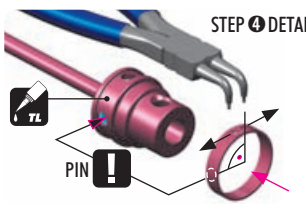
OPTION #355415 CENTRAL DOGBONE SHAFT UNIVERSAL JOINT
#355432 FRONT CENTRAL DOGBONE DRIVE SHAFT 85mm

BAG 02

352009	SEMI-SPLIT DIFF BULKHEAD BLOCK SET FRONT/REAR
352015	XB8 GEARBOX PINION HEIGHT INSERT (1+1)
352073	XB8 GEARBOX DIFF HEIGHT INSERT (2+2)
354813	BEVEL DRIVE PINION GEAR 13T - MATCHED FOR 46T LARGE BEVEL GEAR
355236	CVD DRIVE SHAFT COUPLING - HUDY SPRING STEEL™
355414	CENTRAL CVD SHAFT UNIVERSAL JOINT - HUDY SPRING STEEL™
355427	FRONT CENTRAL CVD DRIVE SHAFT 85MM - HUDY SPRING STEEL™
355471	DRIVE SHAFT LOCKING RING (2)
355472	DRIVE SHAFT BOOT (2)
901504	HEX SCREW SB M5x4 (10)
902306	HEX SCREW SH M3x6 (10)
908312	HEX SCREW SOCKET HEAD CAP SCH M3x12 (10)
908316	HEX SCREW SOCKET HEAD CAP SCH M3x16 (10)
930816	BALL-BEARING 8x16x5 STEEL SEALED - GREASE (2)
980314	PIN 3x14 (10)
355006	DIFFERENTIAL 46T - MATCHED FOR 13T PINION GEAR - SET

980314
P 3x14

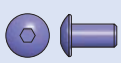




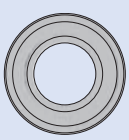
The ring can be assembled by hand, but for easy disassembly we recommend using snap ring pliers (HUDY #189040).

BEFORE inserting the clip on the central CVD shaft joint, apply a small amount of threadlock on the area where the clip goes.

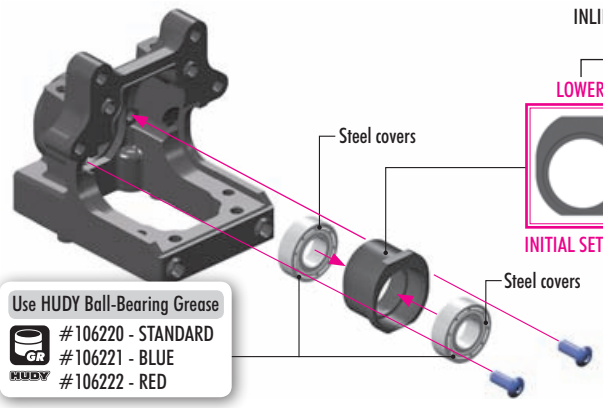
AFTER inserting the clip on the central CVD shaft joint, turn the clip so that the slot is 90° from the pin. This will prevent the pin from opening the clip.

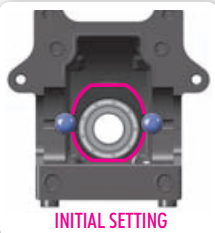


902306
SH M3x6



930816
BB 8x16x5
(Steel covers)



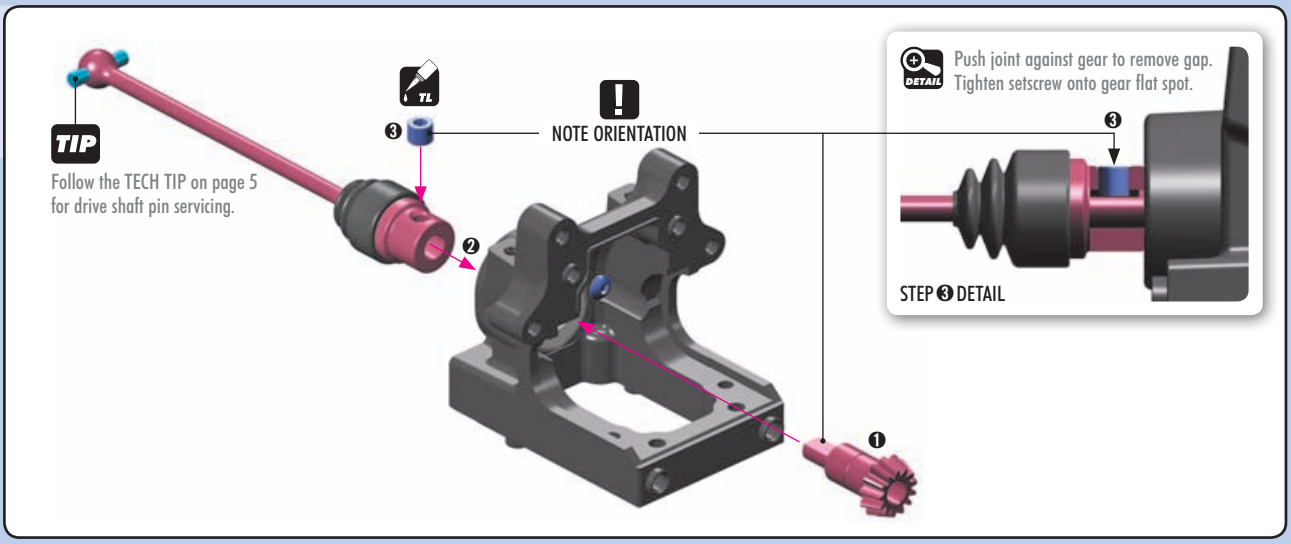


Use HUDY Ball-Bearing Grease
GR HUDY
#106220 - STANDARD
#106221 - BLUE
#106222 - RED

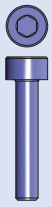
OPTION

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

901504
SB M5x4

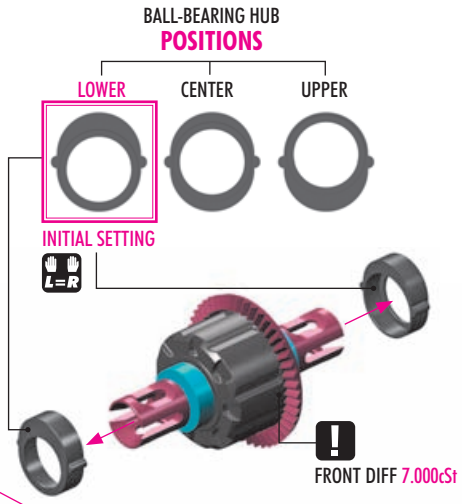


908312
SCH M3x12

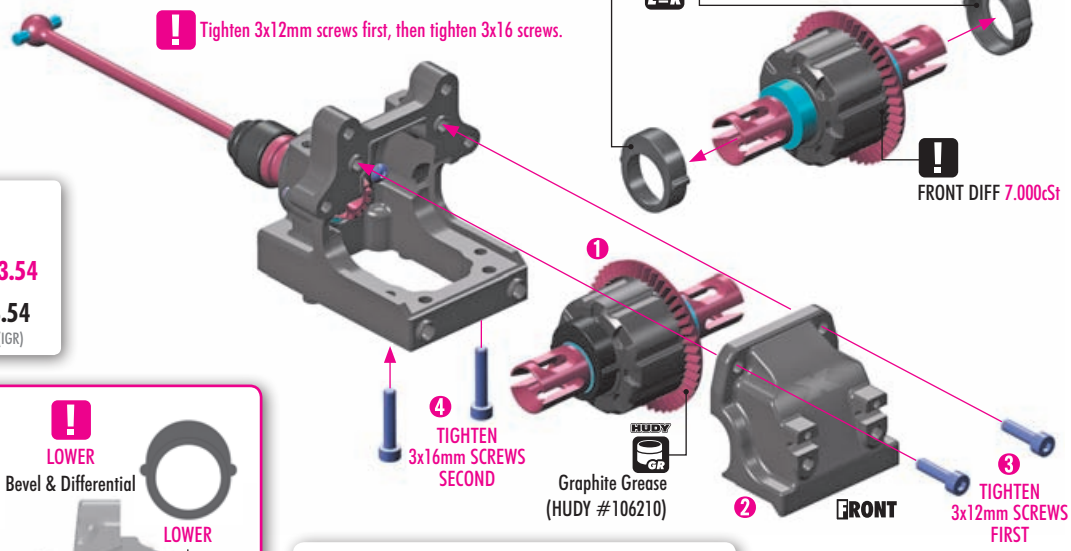


908316
SCH M3x16

During assembly, there is no need to check gear mesh or diff play. In particular, DO NOT check gear mesh and diff play when the differential is installed only in the gear box without the suspension holders and without being mounted to the chassis. All parts have specifically designed play, and only when the car is fully assembled will it have the proper amount of play where necessary. Only once you build the entire car, then you can check for free movement of all rotational parts and drivetrain as well a free non-binding operation of suspension parts.



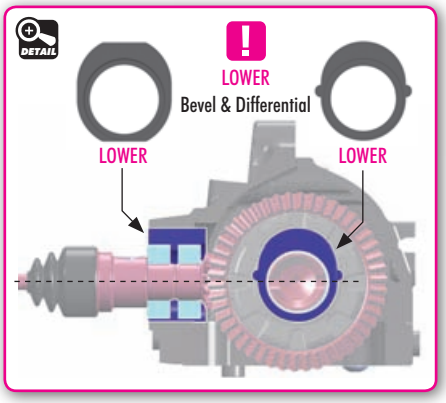
Tighten 3x12mm screws first, then tighten 3x16 screws.

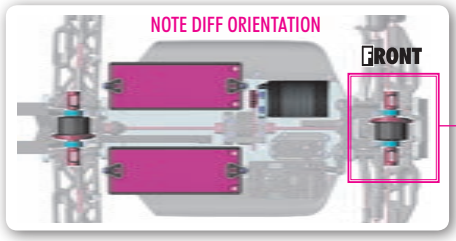


GEAR RATIO

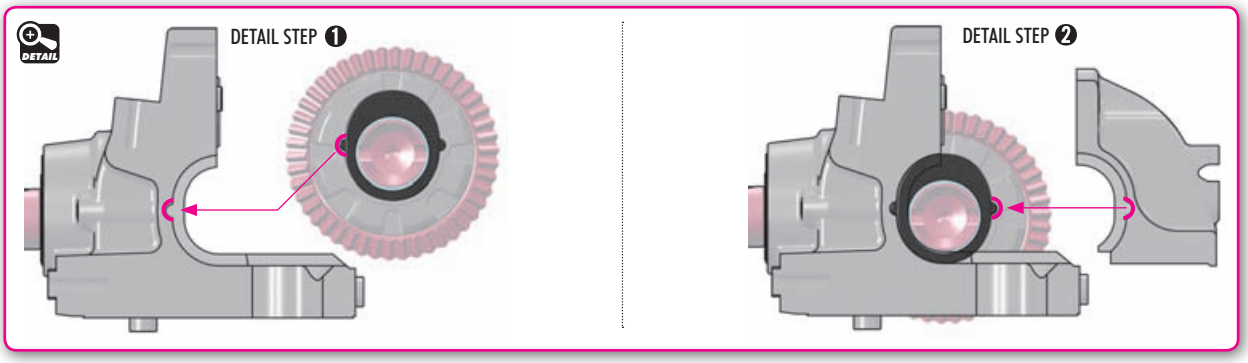
Internal Gear Ratio = **3.54**

46 : **13** = **3.54**
(Bevel) (Pinion) (IGR)

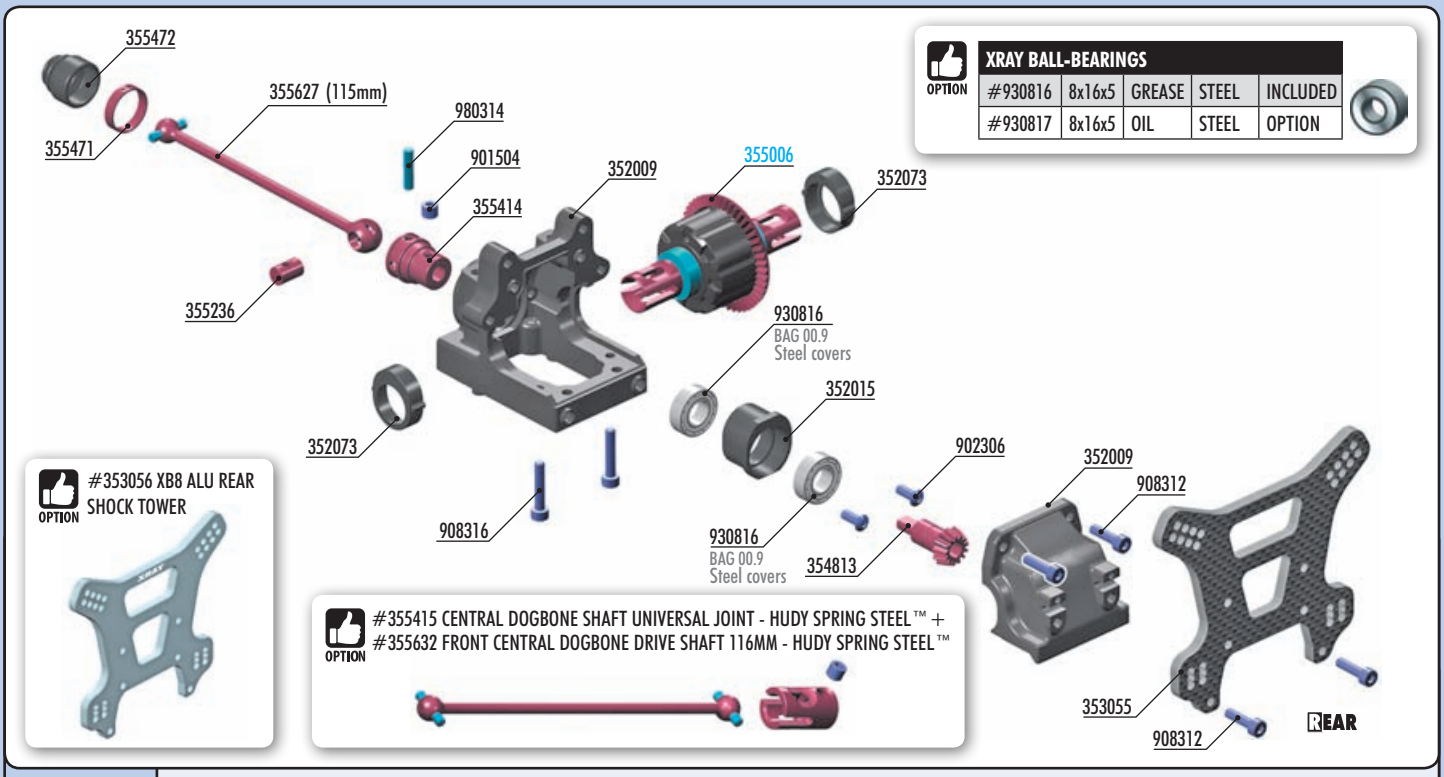




NOTE DIFF ORIENTATION



2. REAR TRANSMISSION



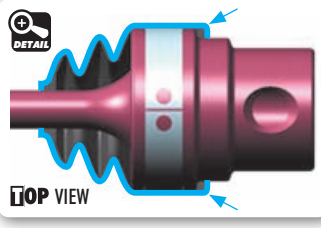
OPTION

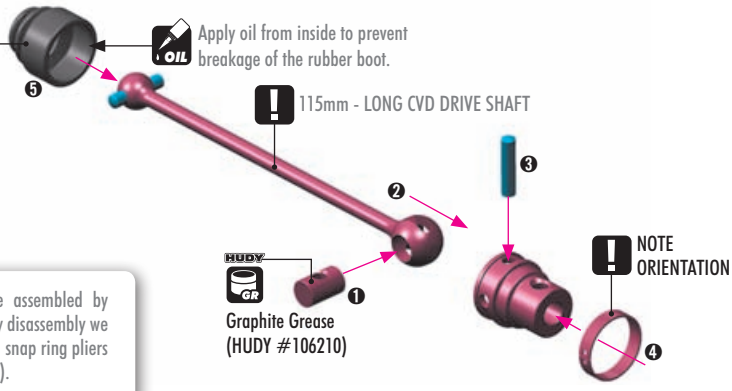
XRAY BALL-BEARINGS				
#930816	8x16x5	GREASE	STEEL	INCLUDED
#930817	8x16x5	OIL	STEEL	OPTION

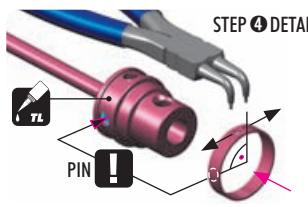
BAG 02

352009	SEMI-SPLIT DIFF BULKHEAD BLOCK SET FRONT/REAR
352015	XB8 GEARBOX PINION HEIGHT INSERT (1+1)
352073	XB8 GEARBOX DIFF HEIGHT INSERT (2+2)
353055	GRAPHITE REAR SHOCK TOWER FOR SEMI-SPLIT BULKHEAD 4MM
354813	BEVEL DRIVE PINION GEAR 13T - MATCHED FOR 46T LARGE BEVEL GEAR
355236	CVD DRIVE SHAFT COUPLING - HUDY SPRING STEEL™
355414	CENTRAL CVD SHAFT UNIVERSAL JOINT - HUDY SPRING STEEL™
355471	DRIVE SHAFT LOCKING RING (2)
355472	DRIVE SHAFT BOOT (2)
355627	REAR CENTRAL CVD DRIVE SHAFT 115MM - HUDY SPRING STEEL™
901504	HEX SCREW SB M5x4 (10)
902306	HEX SCREW SH M3x6 (10)
908312	HEX SCREW SOCKET HEAD CAP SCH M3x12 (10)
908316	HEX SCREW SOCKET HEAD CAP SCH M3x16 (10)
930816	BALL-BEARING 8x16x5 STEEL SEALED - GREASE (2)
980314	PIN 3x14 (10)
355006	DIFFERENTIAL 46T - MATCHED FOR 13T PINION GEAR - SET

980314
P 3x14





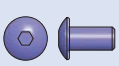


STEP ❹ DETAIL

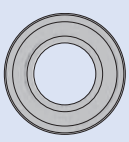
The ring can be assembled by hand, but for easy disassembly we recommend using snap ring pliers (HUDY #189040).

BEFORE inserting the clip on the central CVD shaft joint, apply a small amount of threadlock on the area where the clip goes.

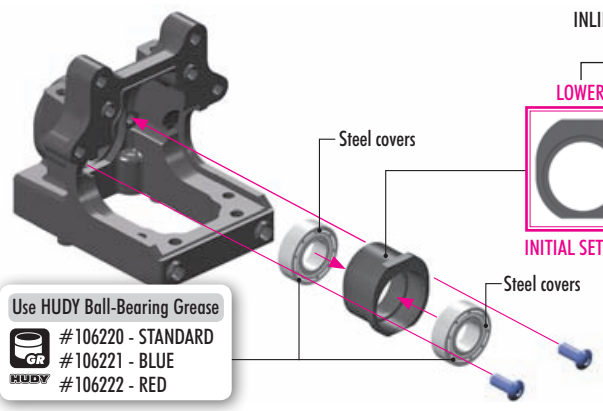
AFTER inserting the clip on the central CVD shaft joint, turn the clip so that the slot is 90° from the pin. This will prevent the pin from opening the clip.



902306
SH M3x6



930816
BB 8x16x5
(Steel covers)

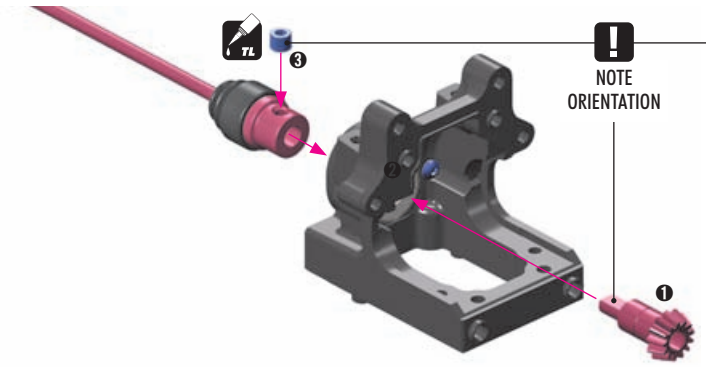


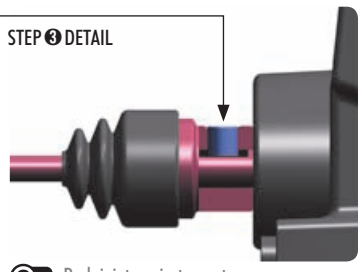
Use HUDY Ball-Bearing Grease
#106220 - STANDARD
#106221 - BLUE
#106222 - RED

OPTION

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

901504
SB M5x4



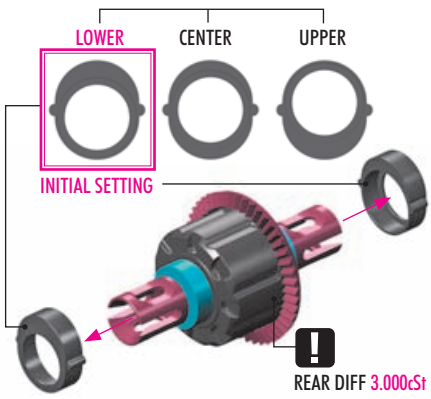


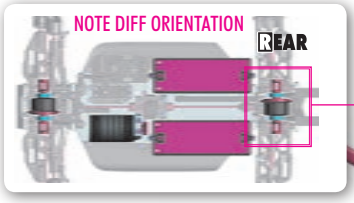
DETAIL Push joint against gear to remove gap. Tighten setscrew onto gear flat spot.

908312
SCH M3x12

908316
SCH M3x16

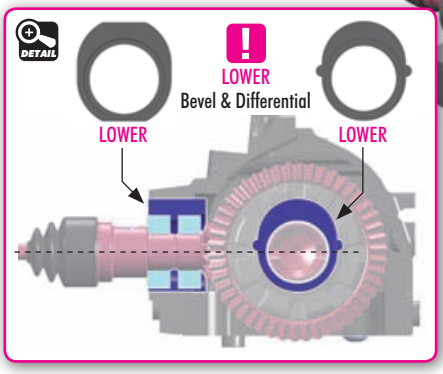
During assembly, there is no need to check gear mesh or diff play. In particular, DO NOT check gear mesh and diff play when the differential is installed only in the gear box without the suspension holders and without being mounted to the chassis. All parts have specifically designed play, and only when the car is fully assembled will it have the proper amount of play where necessary. Only once you build the entire car, then you can check for free movement of all rotational parts and drivetrain as well a free non-binding operation of suspension parts.

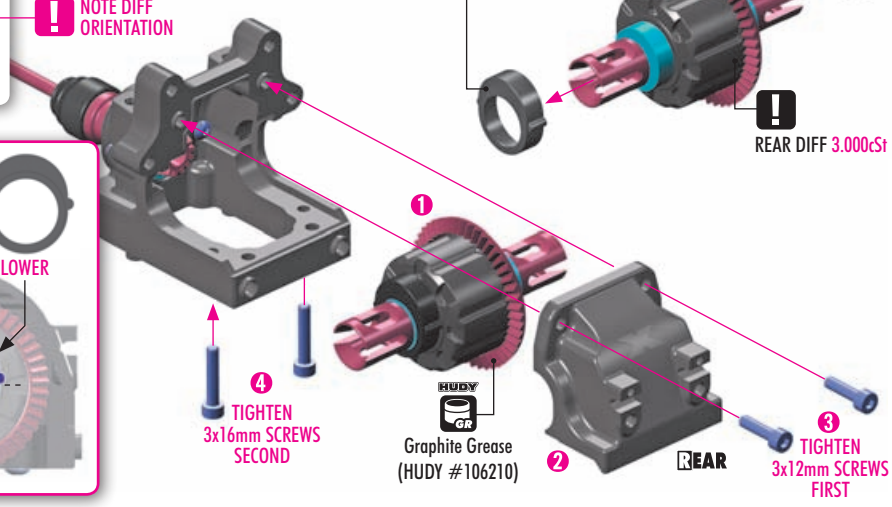


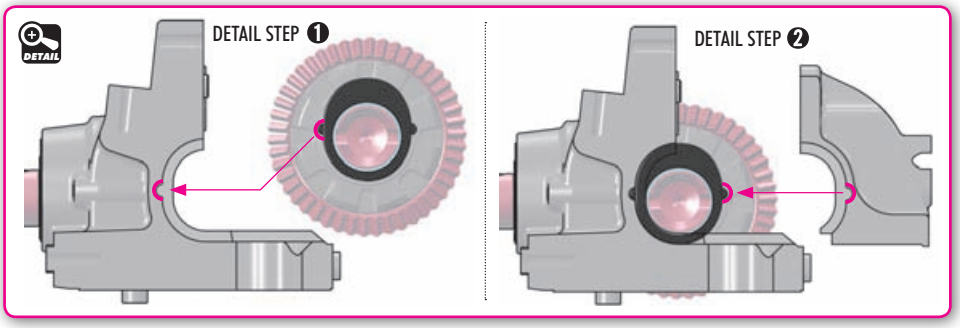


NOTE DIFF ORIENTATION

Tighten 3x12mm screws first, then tighten 3x16 screws.



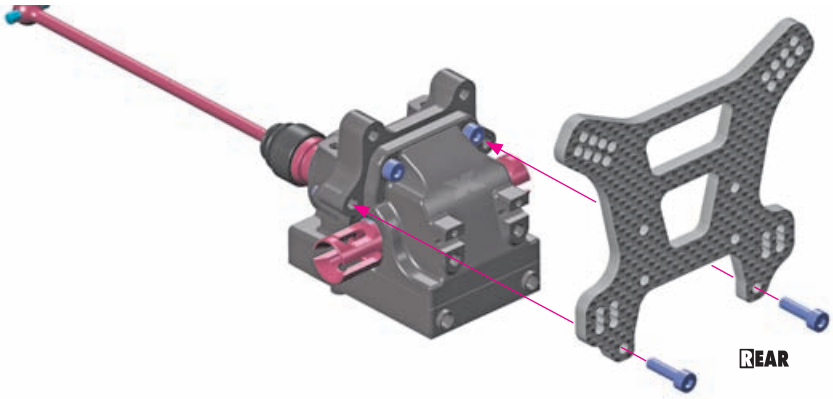




GEAR RATIO
Internal Gear Ratio = 3.54

46 : 13 = 3.54
(Bevel) (Pinion) (IGR)

908312
SCH M3x12

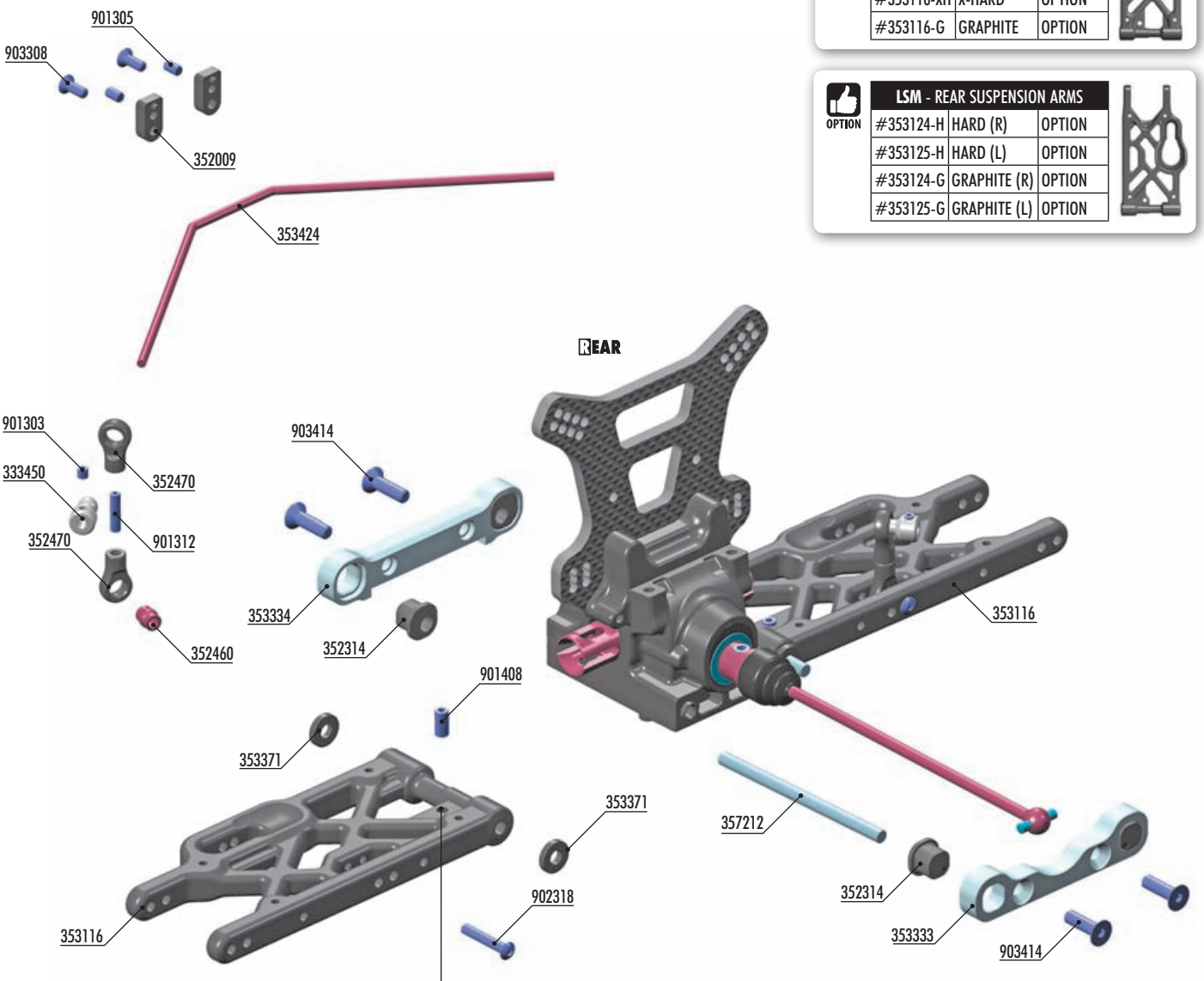


OPTION #353056 XB8 ALU REAR SHOCK TOWER

3. REAR SUSPENSION

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

OPTION	LSM - REAR SUSPENSION ARMS		
	#353124-H	HARD (R)	OPTION
	#353125-H	HARD (L)	OPTION
	#353124-G	GRAPHITE (R)	OPTION
	#353125-G	GRAPHITE (L)	OPTION



OPTION

#902407
HEX SCREW SH M4x7 WITH HEX FROM BOTTOM (4)

OPTION

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

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

BAG 03

333450	ANTI-ROLL BAR BALL JOINT 5.8 MM (2)
352009	SEMI-SPLIT DIFF BULKHEAD BLOCK SET FRONT/REAR
352314	COMPOSITE ECCENTRIC BUSHINGS - V2 (2)
352460	PIVOT BALL 5.8 (10)
352470	BALL JOINT 5.8 (8)
353116	COMPOSITE REAR LOWER SUSPENSION ARM - HARD
353333	ALU REAR LOWER SUSP. HOLDER FOR SEMI-SPLIT BULKHEAD - FRONT
353334	ALU REAR LOWER SUSP. HOLDER FOR SEMI-SPLIT BULKHEAD - REAR
353371	SET OF COMPOSITE LOWER ARM SHIMS
353424	REAR ANTI-ROLL BAR 2.4MM
357212	LOWER INNER PIVOT PIN F+R (2)

901303	HEX SCREW SB M3x3 (10)
901305	HEX SCREW SB M3x5 (10)
901312	HEX SCREW SB M3x12 (10)
901408	HEX SCREW SB M4x8 (10)
902318	HEX SCREW SH M3x18 (10)
903308	HEX SCREW SFH M3x8 (10))
903414	HEX SCREW SFH M4x14 (10))

353371
SHIM 4x10x2

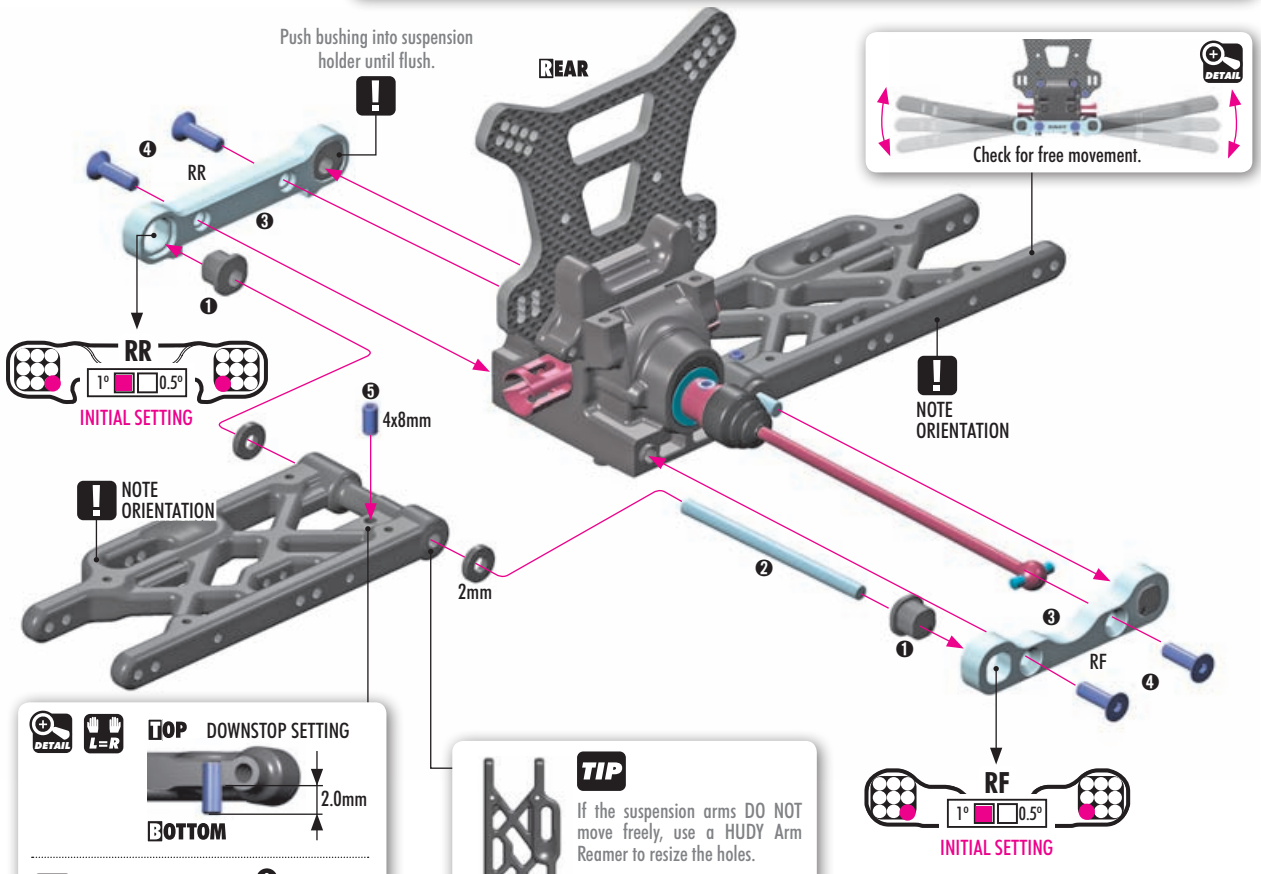
901408
SB M4x8

903414
SFH M4x14

MEDIUM
SUSPENSION ARMS
RR 1° □□ 0.5°
RF 1° □□ 0.5°
DO NOT use INNER positions.

HARD
SUSPENSION ARMS
RR 1° □□ 0.5°
RF 1° □□ 0.5°
All positions are available.

X-HARD / GRAPHITE
SUSPENSION ARMS
RR 1° □□ 0.5°
RF 1° □□ 0.5°
DO NOT use OUTER positions.



DETAIL L=R
TOP DOWNSTOP SETTING
2.0mm
BOTTOM

OPTION #902407

Downstop screw for fine tuning.

2.0mm Allen

TIP
If the suspension arms DO NOT move freely, use a HUDY Arm Reamer to resize the holes.
(HUDY #107644)
ARM REAMER
DETAIL

All possible mounting alternatives of eccentric bushings.

ECCENTRIC BUSHINGS HAVE TWO DIFFERENT OFFSETS FROM THE CENTER.

Middle position = 0.5 mm or 0.5° from center.

Outer position = 1mm or 1° from center.

SET-UP BOOK
TOE-IN
ANTI-SQUAT
ROLL CENTER DOWNSTOP
WHEELBASE
TRACK WIDTH

The 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).

ANTI-SQUAT RR	RF	(°)
		=3°
		=4°
		=2°
		=4°
		=3°
		=5°
		=2°
		=3°
		=1°

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

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

TOE-IN RR	RF	(°)
		=3°
		=4°
		=2°
		=2°
		=3°
		=1°
		=4°
		=5°
		=3°

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° offset. The 0.5mm, 0.5° represents the half change.

Anti-Squat Example:

0(RR) - 0 (RF) = 3° = 3°

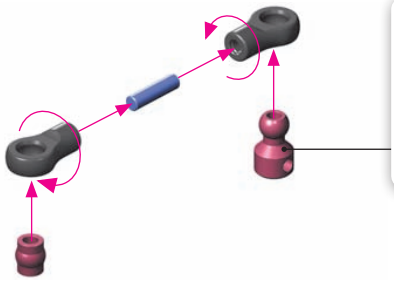
0(RR) - 0.5 (RF) = 3.5° = 3.5°

0(RR) - 1 (RF) = 4° = 4°

3. REAR SUSPENSION

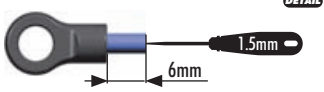
901312
SB M3x12

2x L=R



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

DETAIL

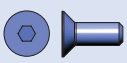


L=R

901303
SB M3x3

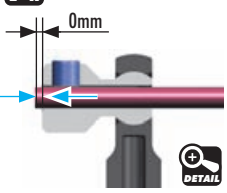
901305
SB M3x5

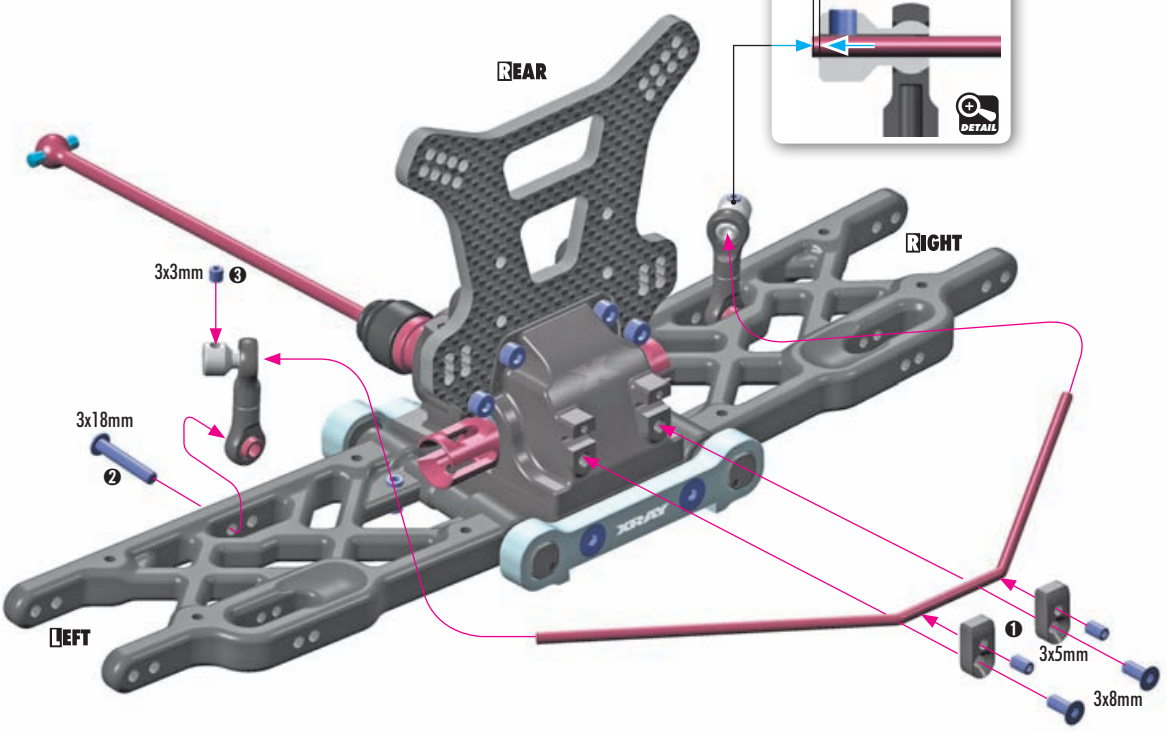
902318
SH M3x18



903308
SFH M3x8

L=R STEP ❹ DETAIL

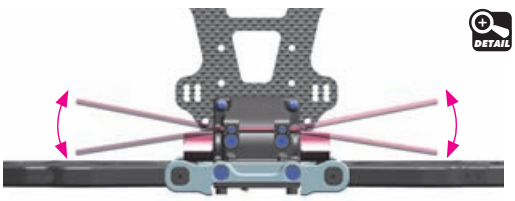




SET-UP BOOK
ANTI-ROLL BAR

INITIAL SETTING

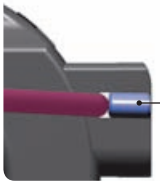
DETAIL



DETAIL

Step ❶ check for free movement.

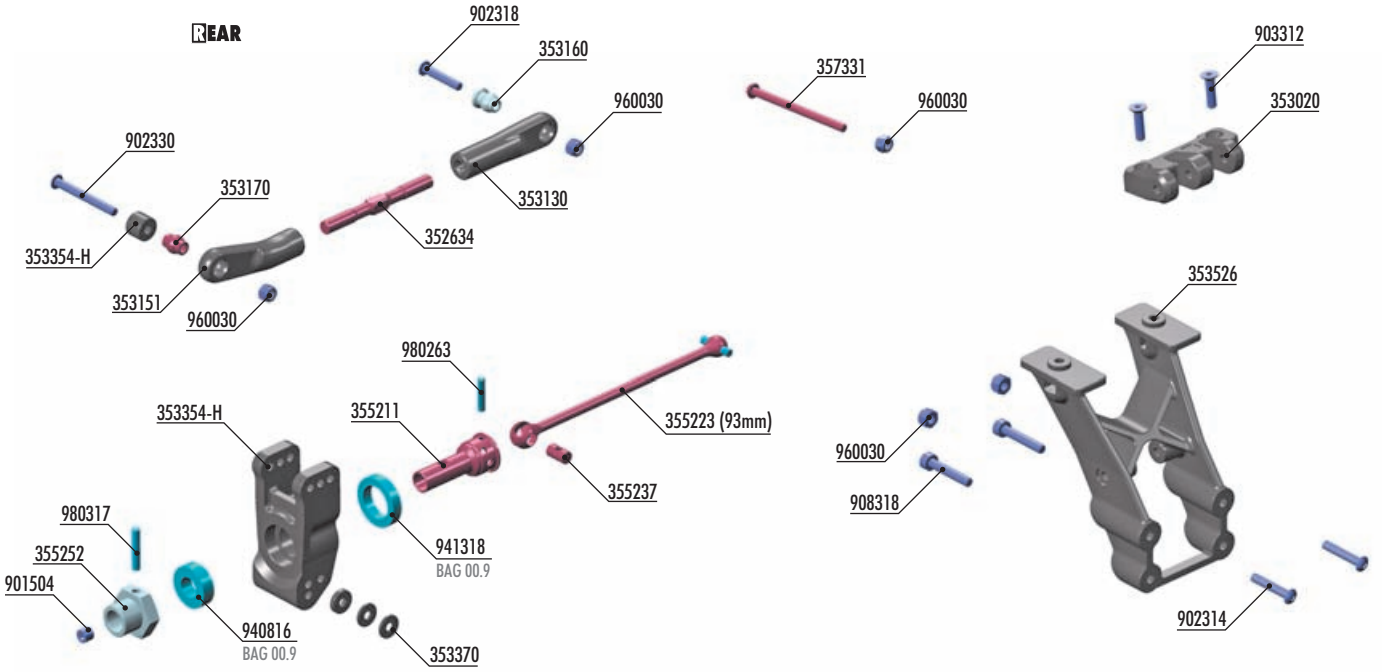
DETAIL Loosen the 3x5 setscrew if the anti-roll bar does NOT turn freely.



Step ❶

OPTION

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



OPTION

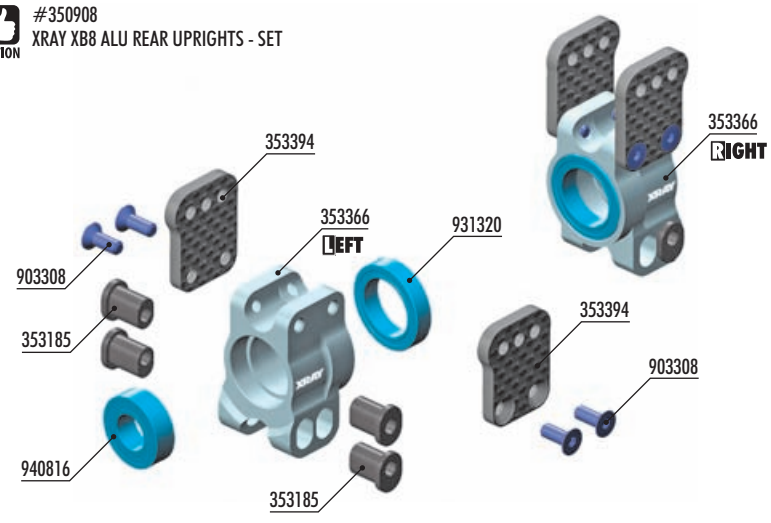
REAR UPRIGHTS		
#353354	MEDIUM	OPTION
#353354-H	HARD	INCLUDED
#353354-G	GRAPHITE	OPTION
#350908	ALU-SET	OPTION

OPTION

#355215
CVD ADJUSTABLE DRIVE AXLE - HUDY SPRING STEEL™

OPTION

#350908
XRAY XB8 ALU REAR UPRIGHTS - SET



OPTION

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

BAG 04

352634	ADJ. TURNBUCKLE M5 L/R 50 MM - HUDY SPRING STEEL™ (2)
353020	COMPOSITE REAR BRACE HOLDER
353130	REAR UPPER INNER CAMBER LINK BALL JOINT (2)
353151	RELIEF REAR UPPER OUTER CAMBER LINK BALL JOINT (2)
353160	MOUNTING BALL 6.8 (4)
353170	PIVOT BALL 6.8 (4)
353354-H	COMPOSITE REAR UPRIGHT - HARD
353370	SET OF COMPOSITE REAR HUB CARRIER SHIMS
353526	COMPOSITE REAR WING HOLDER FOR SEMI-SPLIT BULKHEAD
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)
901504	HEX SCREW SB M5x4 (10)
902314	HEX SCREW SH M3x14 (10)
902318	HEX SCREW SH M3x18 (10)
902330	HEX SCREW SH M3x30 (10)
903312	HEX SCREW SFH M3x12 (10)
908318	HEX SCREW SOCKET HEAD CAP SCH M3x18 (10)
940816	BALL-BEARING 8x16x5 RUBBER SEALED - GREASE (2)
941318	BALL-BEARING 13x19x4 RUBBER SEALED - GREASE (2)
960030	NUT M3 (10)
980263	PIN 2.5x13 (10)
980317	PIN 3x17 (10)

4. REAR SUSPENSION

901504
SB M5x4

940816
BB 8x16x5

941318
BB 13x19x4

980263
P 2.5x13

980317
P 3x17

2x L=R

NOTE ORIENTATION

93mm
- SHORT CVD DRIVE SHAFT

2.5x13mm

13x19x4mm

3x17mm

8x16x5mm

Graphite Grease
(HUDY #106210)

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

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

Use HUDY Ball-Bearing Grease
#106220 - STANDARD
#106221 - BLUE
#106222 - RED

OPTION

REAR UPRIGHTS		
#353354	MEDIUM	OPTION
#353354-H	HARD	INCLUDED
#353354-G	GRAPHITE	OPTION
#350908	ALU-SET	OPTION

OPTION

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

OPTION #355215
CVD ADJUSTABLE DRIVE AXLE - HUDY SPRING STEEL™

Drive shaft position
4 | 3 | 2 | 1

353370
SHIM 3x9x1

353370
SHIM 3x9x2

960030
N M3

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.

REAR

LEFT

Shims for wheelbase adjustment
2+1+1mm

RIGHT

DO NOT overtighten the self-locking nut. Overtightening may result in suspension binding.

INITIAL SETTING

Check for free movement.

TIP L=R ARM REAMER (HUDY #107643)
If the rear upright does not move freely, use a HUDY Arm Reamer to resize the hole.

2x L=R

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

NOTE ORIENTATION

OIL RIGHT THREAD

LEFT THREAD OIL

NOTE ORIENTATION

Use tools to tighten as shown.

Special Tool for all turnbuckles & nuts (HUDY #181090) or Turnbuckle Wrench 5mm (HUDY #181050).

LEFT THREAD 26.5mm RIGHT THREAD
RIGHT

RIGHT THREAD 26.5mm LEFT THREAD
LEFT

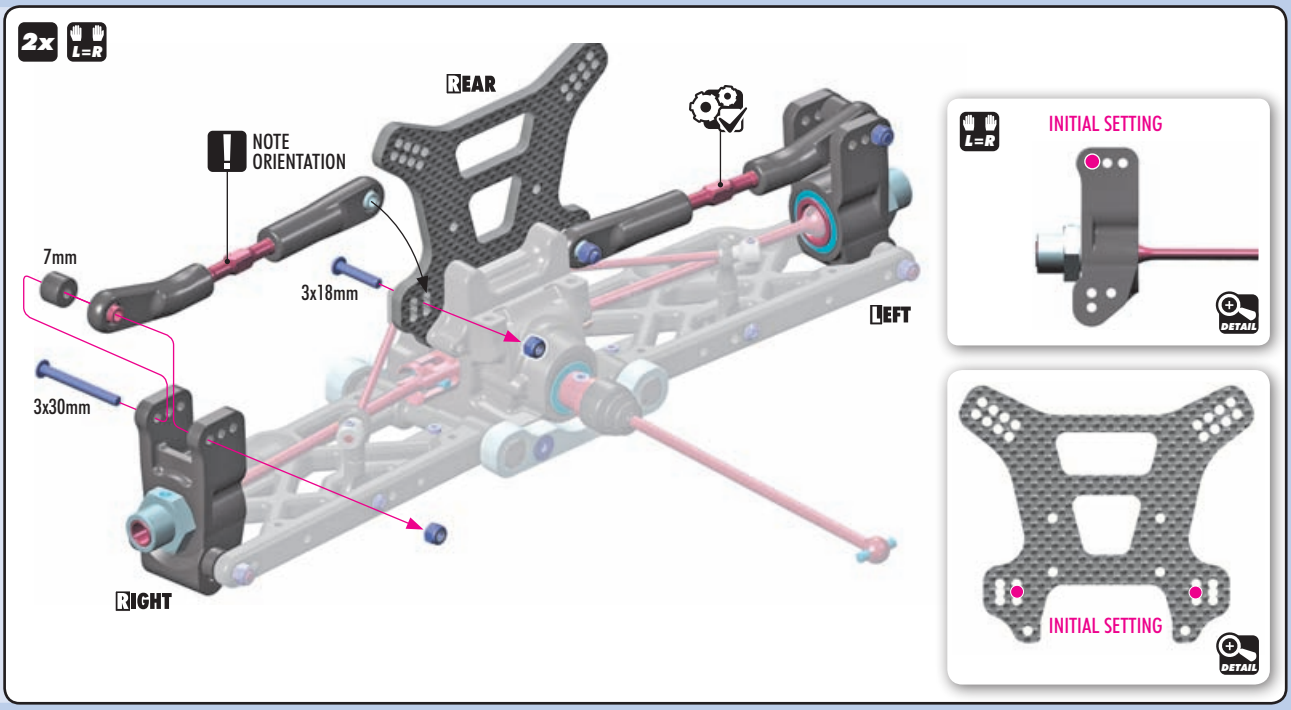
SET-UP BOOK
CAMBER

353354-H
SHIM 3x9x7

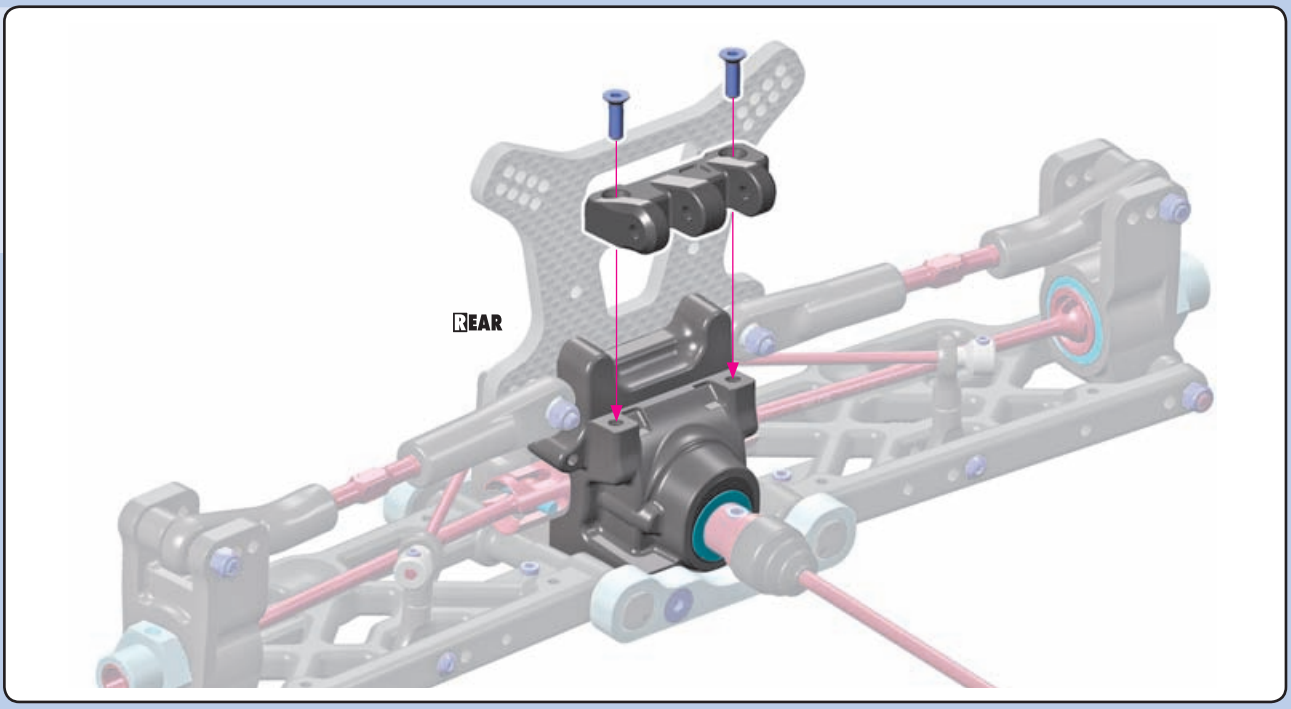
902318
SH M3x18

902330
SH M3x30

960030
N M3



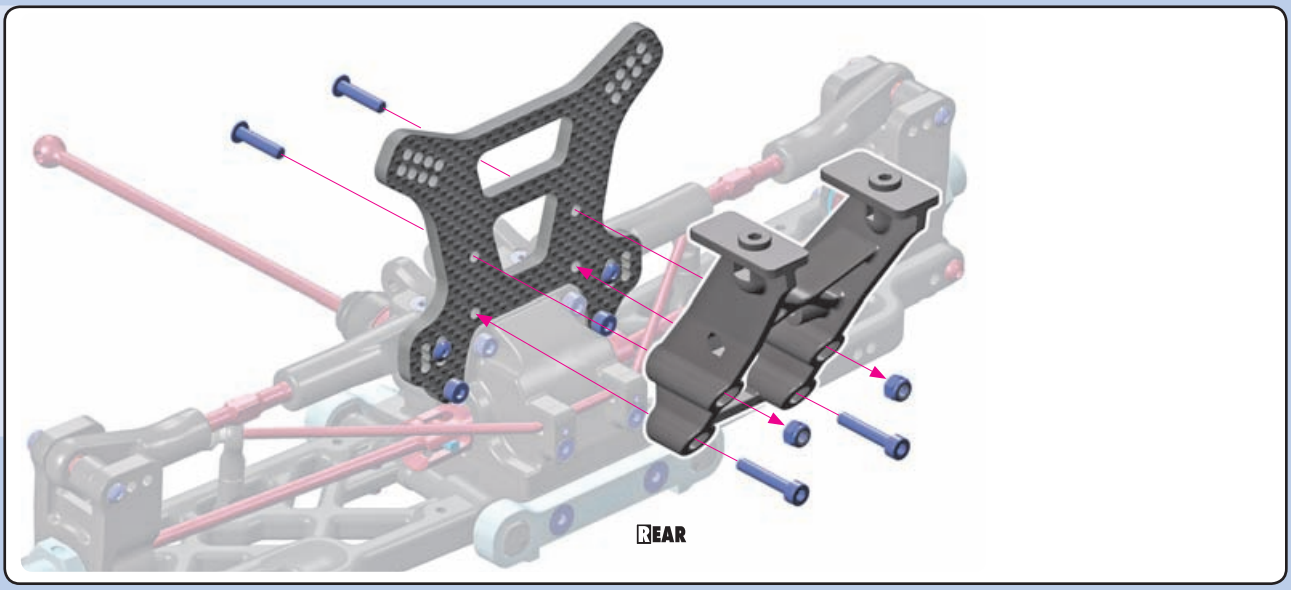
903312
SFH M3x12



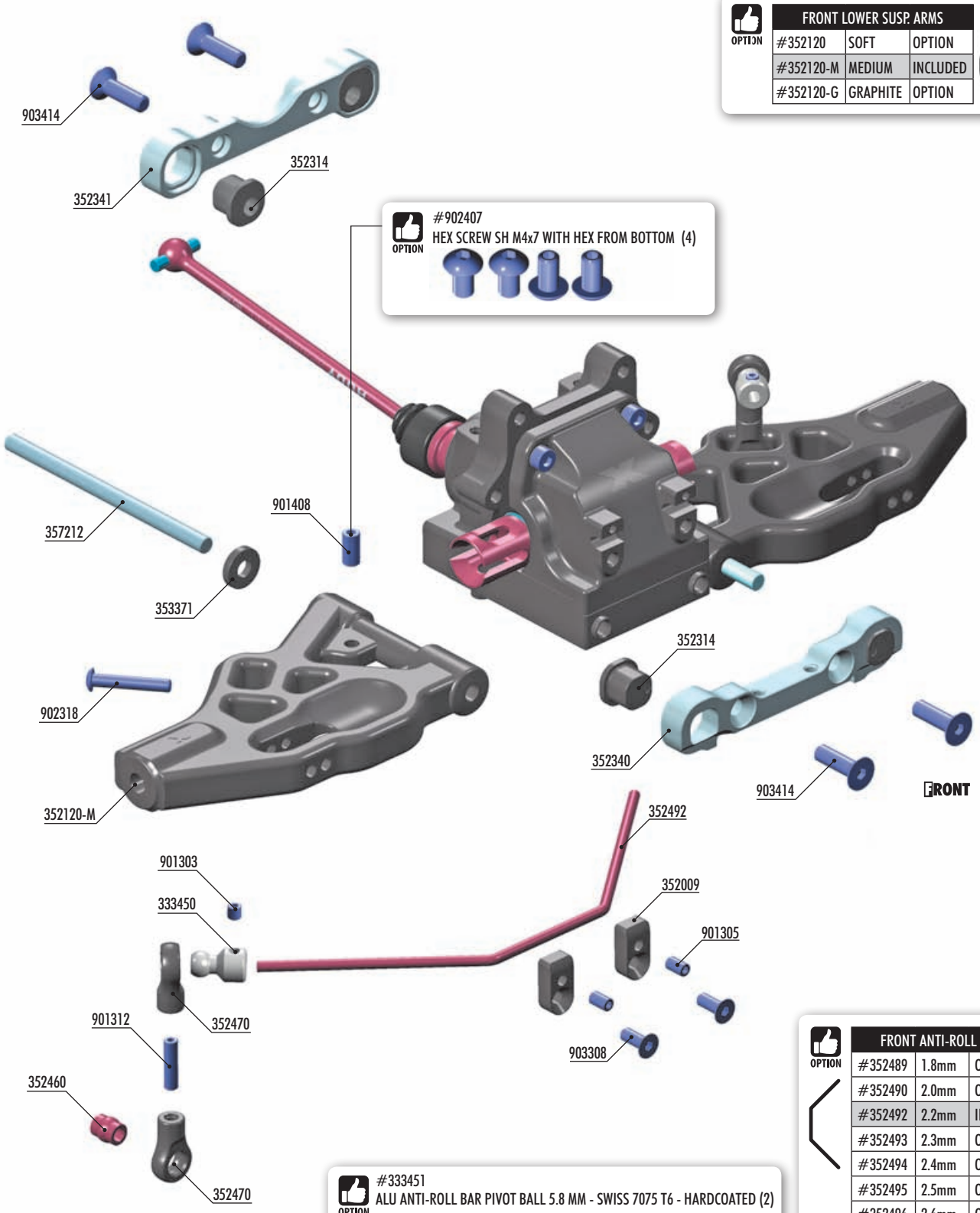
902314
SH M3x14

908318
SCH M3x18

960030
N M3



5. FRONT SUSPENSION



OPTION

FRONT LOWER SUSP. ARMS		
#352120	SOFT	OPTION
#352120-M	MEDIUM	INCLUDED
#352120-G	GRAPHITE	OPTION

OPTION

FRONT ANTI-ROLL BARS		
#352489	1.8mm	OPTION
#352490	2.0mm	OPTION
#352492	2.2mm	INCLUDED
#352493	2.3mm	OPTION
#352494	2.4mm	OPTION
#352495	2.5mm	OPTION
#352496	2.6mm	OPTION
#352498	2.8mm	OPTION

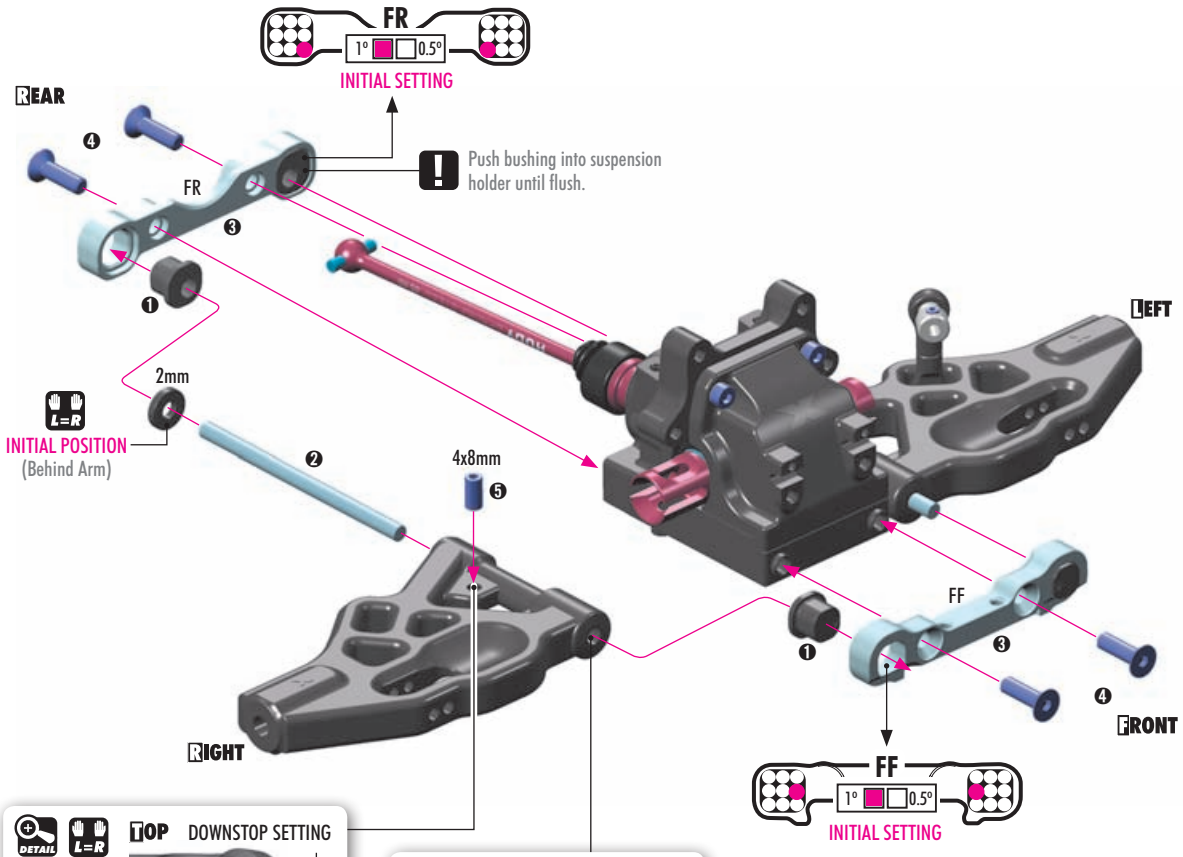
BAG 05

333450	ANTI-ROLL BAR BALL JOINT 5.8 MM (2)	357212	LOWER INNER PIVOT PIN F+R (2)
352009	SEMI-SPLIT DIFF BULKHEAD BLOCK SET FRONT/REAR		
352120-M	COMPOSITE FRONT LOWER SUSPENSION ARM - MEDIUM	901303	HEX SCREW SB M3x3 (10)
352314	COMPOSITE SQUARE ADJ. ROLL CENTER BUSHINGS - V2 (2)	901305	HEX SCREW SB M3x5 (10)
352340	ALU FRONT LOWER SUSP. HOLDER FOR SEMI-SPLIT BULKHEAD - FRONT	901312	HEX SCREW SB M3x12 (10)
352341	ALU FRONT LOWER SUSP. HOLDER FOR SEMI-SPLIT BULKHEAD - REAR	901408	HEX SCREW SB M4x8 (10)
352460	PIVOT BALL 5.8 (10)	902318	HEX SCREW SH M3x18 (10)
352470	BALL JOINT 5.8 (8)	903308	HEX SCREW SFH M3x8 (10))
352492	FRONT ANTI-ROLL BAR 2.4MM	903414	HEX SCREW SFH M4x14 (10))
353371	SET OF COMPOSITE LOWER ARM SHIMS		

353371
SHIM 4x10x2

901408
SB M4x8

903414
SFH M4x14



DETAIL L=R TOP DOWNSTOP SETTING

BOTTOM 0.0mm

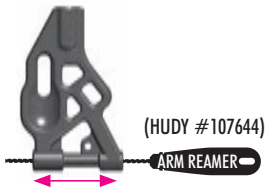
OPTION #902407

2.0mm Allen

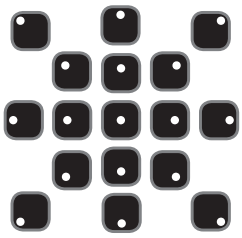
Downstop screw for fine tuning.

TIP L=R DETAIL

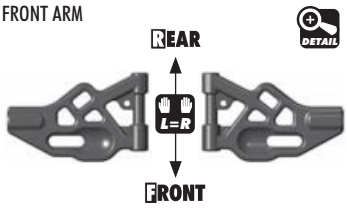
If the suspension arms DO NOT move freely, use a HUDY Arm Reamer to resize the holes.



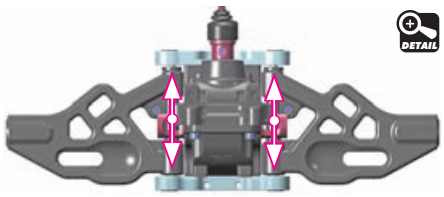
All possible mounting alternatives of eccentric bushings.



FRONT ARM



DETAIL



Push the arm from both sides to create play.

DETAIL

Check for free movement.

Eccentric bushings have two different offsets from the center.

Middle position = 0.5 mm or 0.5° from center

Outer position = 1mm or 1° from center

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).

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

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

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.

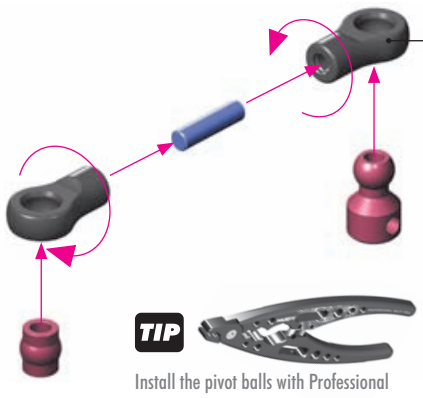
* NOT recommended to use this setting.

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

5. FRONT SUSPENSION

901312
SB M3x12

2x L=R



TIP

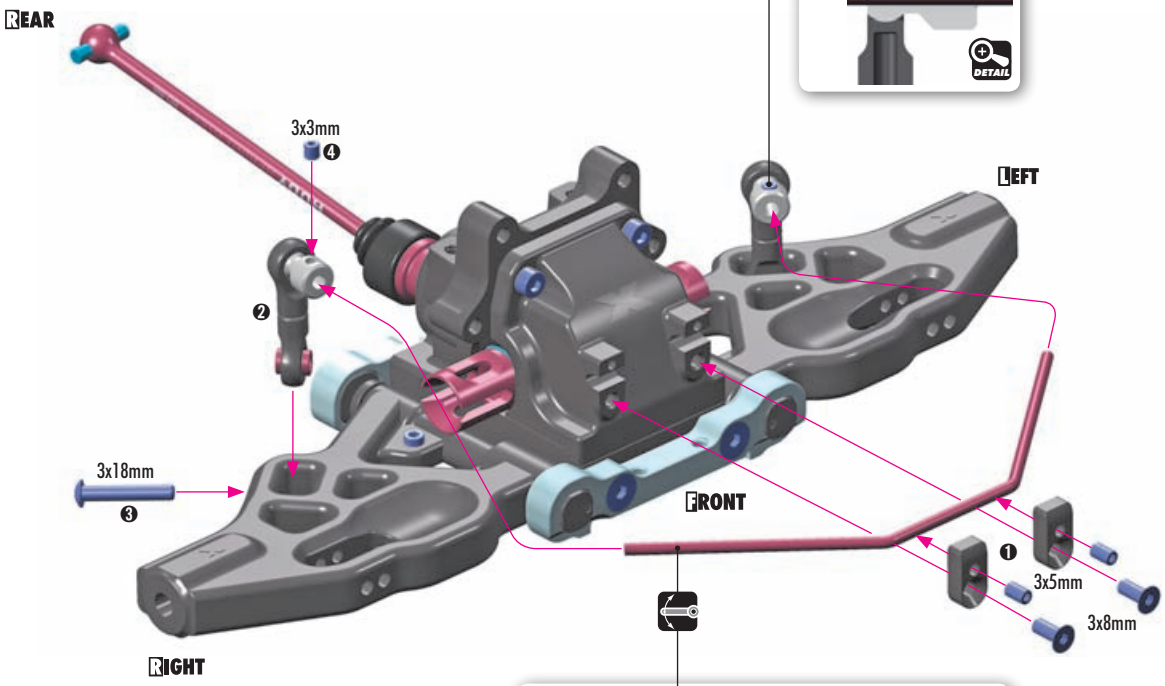
Install the pivot balls with Professional Multi-Tool (HUDY #183011).

901303
SB M3x3

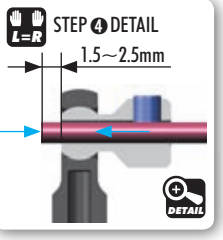
901305
SB M3x5

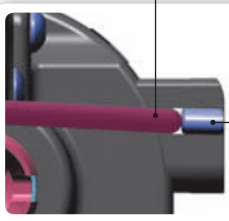
902318
SH M3x18

903308
SFH M3x8



L=R STEP 4 DETAIL





DETAIL

Step 1
Loosen the 3x5 setscrew if the anti-roll bar does NOT turn freely.

DETAIL

Step 1 check for free movement.

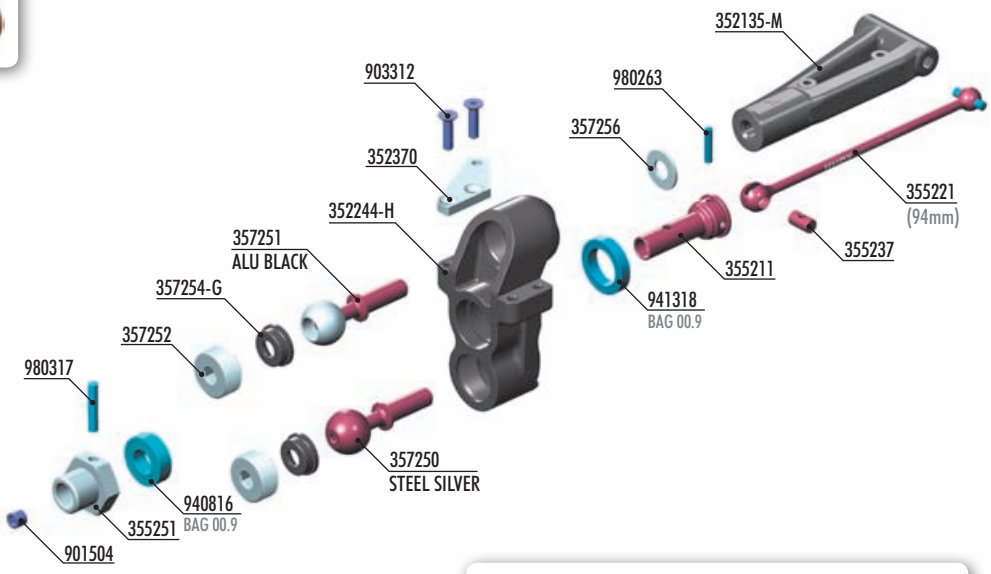
OPTION

FRONT ANTI-ROLL BARS		
#352489	1.8mm	OPTION
#352490	2.0mm	OPTION
#352492	2.2mm	INCLUDED
#352493	2.3mm	OPTION
#352494	2.4mm	OPTION
#352495	2.5mm	OPTION
#352496	2.6mm	OPTION
#352498	2.8mm	OPTION

SET-UP BOOK
ANTI-ROLL BAR

OPTION #357253
BRASS ADJUSTING NUT M15x1

OPTION #350910
C-HUB FRONT SUSPENSION CONVERSION SET



OPTION

FRONT UPPER SUSP. ARMS		
#352135	SOFT	OPTION
#352135-M	MEDIUM	INCLUDED
#352135-G	GRAPHITE	OPTION

OPTION

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

OPTION

STEERING BLOCKS		
#352244	MEDIUM	OPTION
#352244-H	HARD	INCLUDED
#352244-G	GRAPHITE	OPTION

OPTION

FRONT ARM WINGS		
#352194	LEXAN®	OPTION
#352195	CARBON	OPTION

OPTION

ALU STEERING PLATE		
#352372	1 DOTS	OPTION
#352370	2 DOTS	INCLUDED

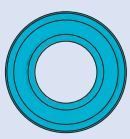
OPTION

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

BAG 06

352135-M	FRONT UPPER ARM - MEDIUM
352244-H	PB STEERING BLOCK LB - HARD
352370	ALU STEERING PLATE - SWISS 7075 T6 (L+R)
355211	CVD DRIVE AXLE - HUDY SPRING STEEL™
355221	CVD UNIVERSAL DRIVE SHAFT 94MM - HUDY SPRING STEEL™
355237	CVD DRIVE SHAFT COUPLING - HUDY SPRING STEEL™
355251	ALU WHEEL AXLE OFFSET "+1MM" - HARD COATED (2)
357250	STEEL PIVOT BALL 13.7 MM (2)
357251	ALU PIVOT BALL 13.7 MM WITH STEEL SCREW (2)
357252	ALU ADJUSTING NUT M15x1 (2)
357254-G	COMPOSITE BALL CUP 13.9 MM - GRAPHITE (2)
357256	ALU SHIM 6x13x1 (2)
901504	HEX SCREW SB M5x4 (10)
903312	HEX SCREW SFH M3x12 (10)
940816	BALL-BEARING 8x16x5 RUBBER SEALED - GREASE (2)
941318	BALL-BEARING 13x19x4 RUBBER SEALED - GREASE (2)
980263	PIN 2.5x13 (10)
980317	PIN 3x17 (10)

901504
SB M5x4



940816
BB 8x16x5

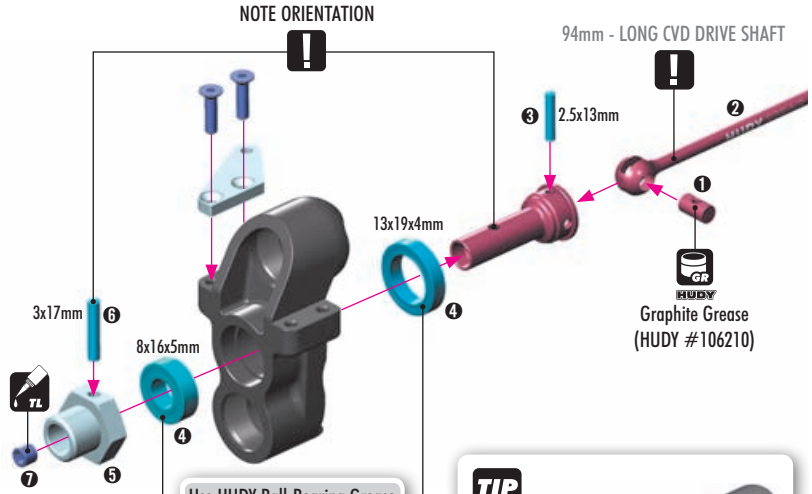
941318
BB 13x19x4

980263
P 2.5x13

980317
P 3x17

2x L=R

NOTE ORIENTATION



Use HUDY Ball-Bearing Grease
#106220 - STANDARD
#106221 - BLUE
#106222 - RED

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

OPTION #355222
UNIVERSAL DRIVE SHAFT - HUDY SPRING STEEL™

OPTION

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

OPTION

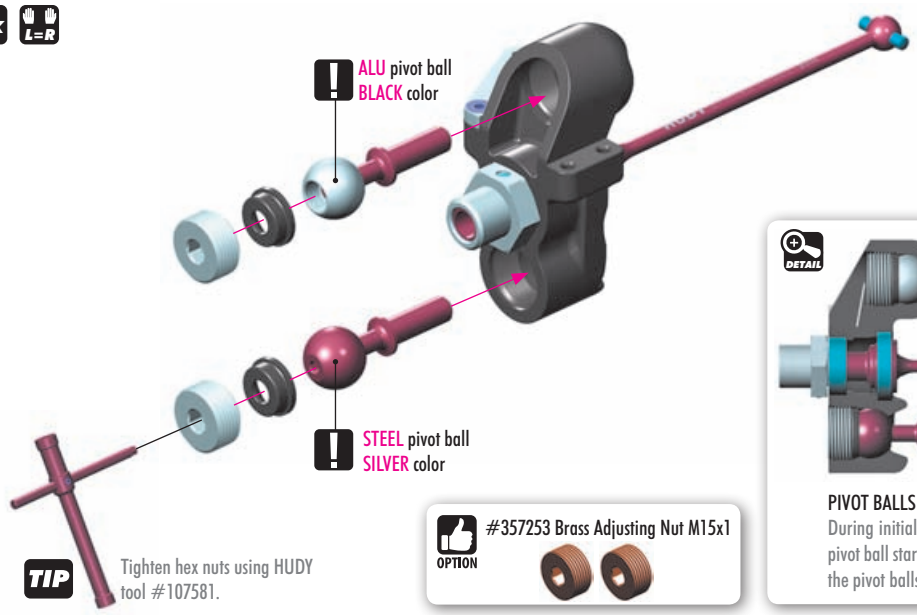
STEERING BLOCKS		
#352244	MEDIUM	OPTION
#352244-H	HARD	INCLUDED
#352244-G	GRAPHITE	OPTION

OPTION

ALU STEERING PLATE		
#352372	1 DOTS	OPTION
#352370	2 DOTS	INCLUDED

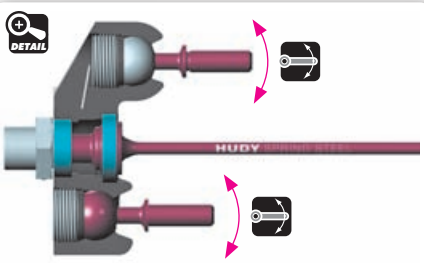
6. FRONT SUSPENSION

2x L=R



TIP Tighten hex nuts using HUDY tool #107581.

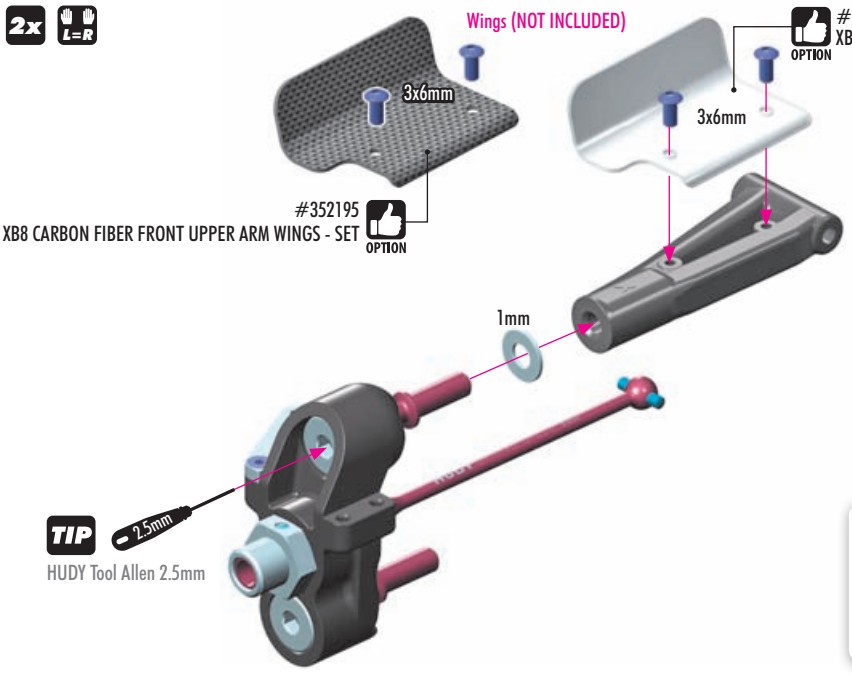
OPTION #357253 Brass Adjusting Nut M15x1



PIVOT BALLS MUST MOVE FREELY
During initial assembly, tighten each hex nut until the pivot ball starts to bind, then loosen slightly. Verify that the pivot balls move freely.

357256
SHIM 6x13x1

2x L=R



#352195
XB8 CARBON FIBER FRONT UPPER ARM WINGS - SET
OPTION

OPTION #352194
XB8 LEXAN® FRONT UPPER ARM WINGS **IFMAR** LEGAL - SET

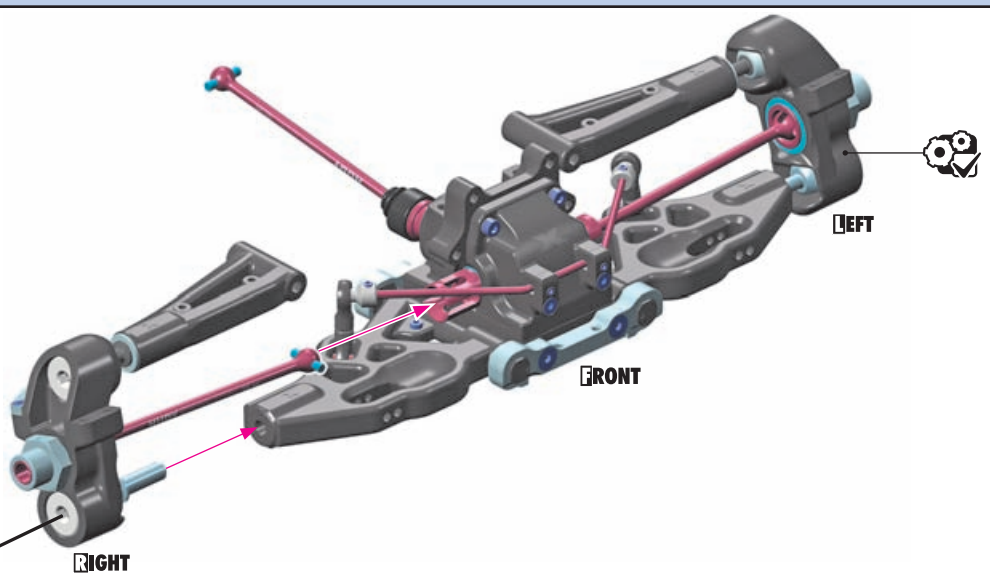
TIP HUDY Tool Allen 2.5mm

OPTION

FRONT UPPER SUSP. ARMS		
#352135	SOFT	OPTION
#352135-M	MEDIUM	INCLUDED
#352135-G	GRAPHITE	OPTION

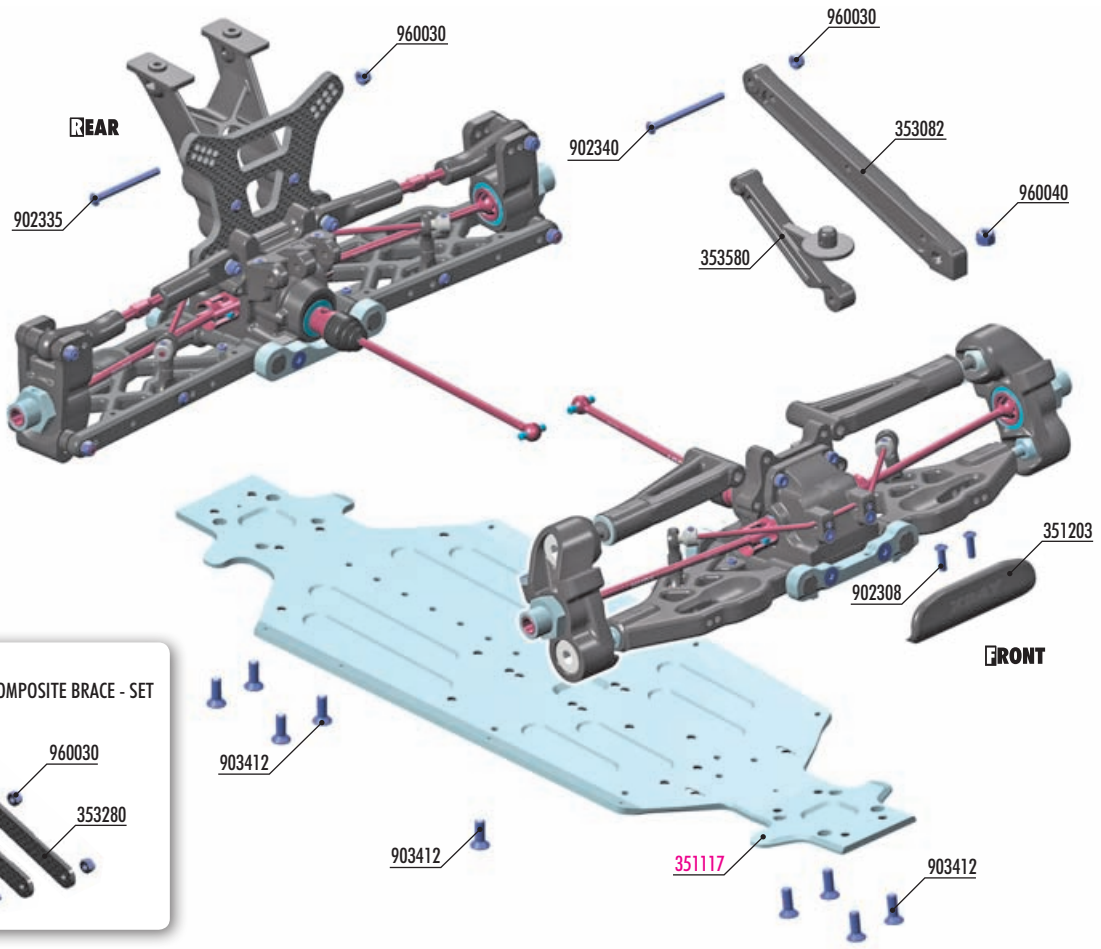
SET-UP BOOK
CAMBER
TRACK-WIDTH

2x L=R

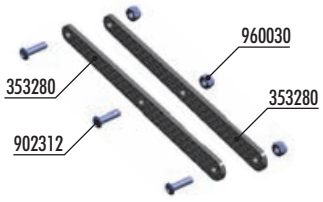


TIP HUDY Tool Allen 2.5mm

SET-UP BOOK
ROLL CENTER

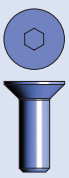


OPTION #353280
GRAPHITE BRACES FOR REAR COMPOSITE BRACE - SET

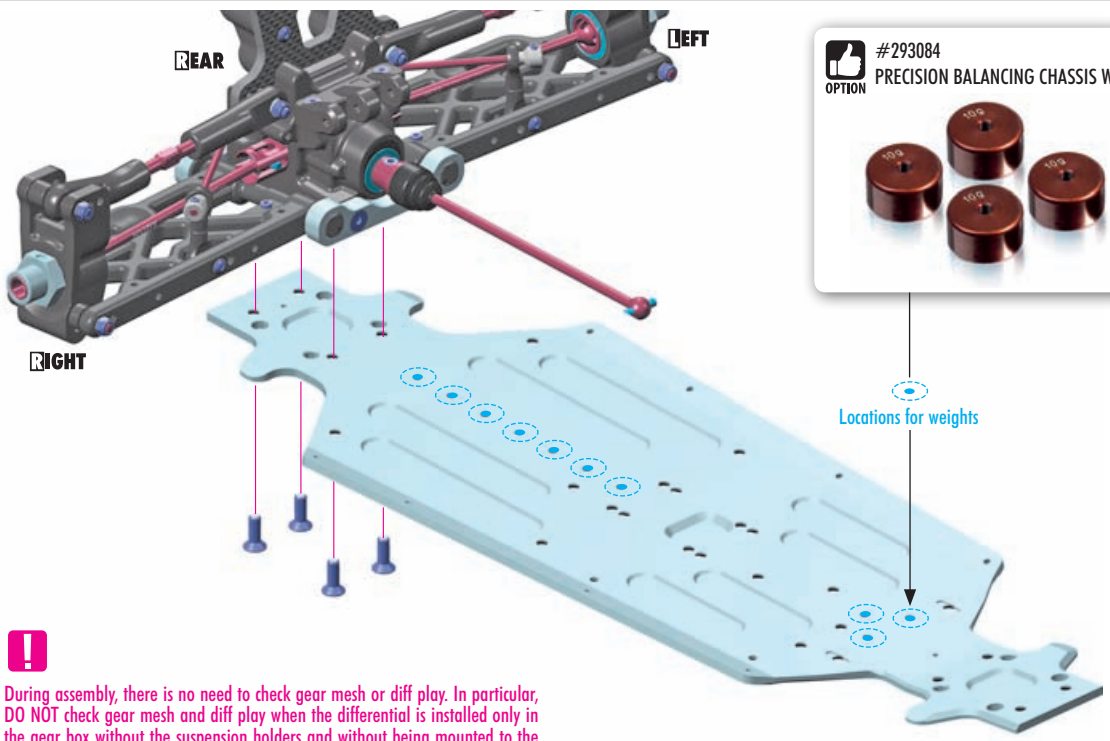


BAG 06

351203	FRONT BUMPER	902340	HEX SCREW SH M3x40 (10)
353082	COMPOSITE REAR BRACE - MEDIUM - M	903412	HEX SCREW SFH M4x12 (10)
353580	COMPOSITE WING HOLDER BRACE WITH REAR BODY POST	960030	NUT M3 (10)
		960040	NUT M4 (10)
902308	HEX SCREW SH M3x8 (10)		
902335	HEX SCREW SH M3x35 (10)	351117	XB8E ALU CHASSIS - SWISS 7075 T6 (3MM)



903412
SFH M4x12



OPTION #293084
PRECISION BALANCING CHASSIS WEIGHTS 10G (4)

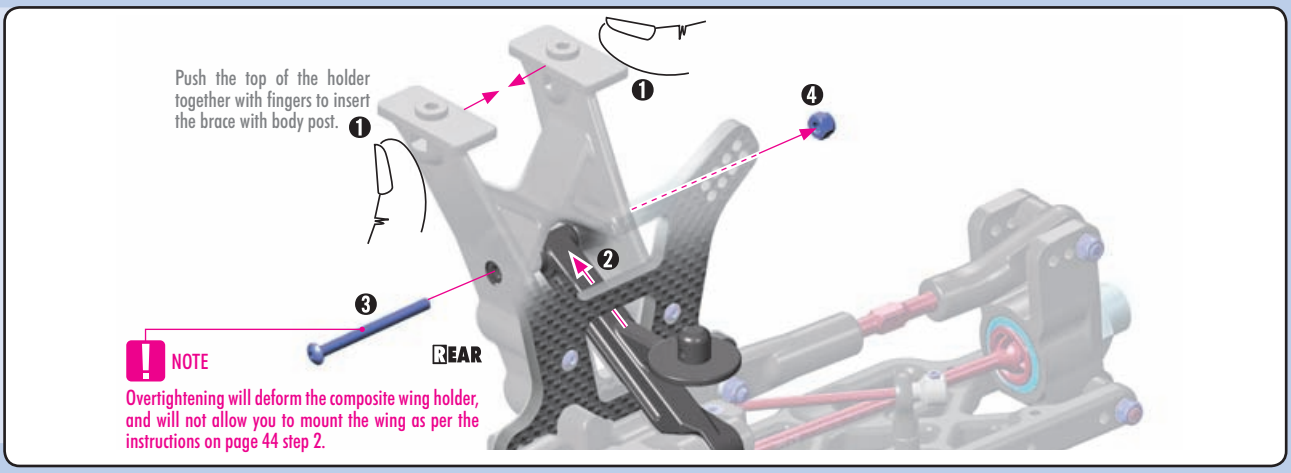
903308
SFH M3x8

During assembly, there is no need to check gear mesh or diff play. In particular, DO NOT check gear mesh and diff play when the differential is installed only in the gear box without the suspension holders and without being mounted to the chassis. All parts have specifically designed play, and only when the car is fully assembled will it have the proper amount of play where necessary. Only once you build the entire car, then you can check for free movement of all rotational parts and drivetrain as well a free non-binding operation of suspension parts.

6. FRONT & REAR ASSEMBLY

902335
SH M3x35

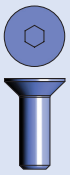
960030
N M3



NOTE

Overtightening will deform the composite wing holder, and will not allow you to mount the wing as per the instructions on page 44 step 2.

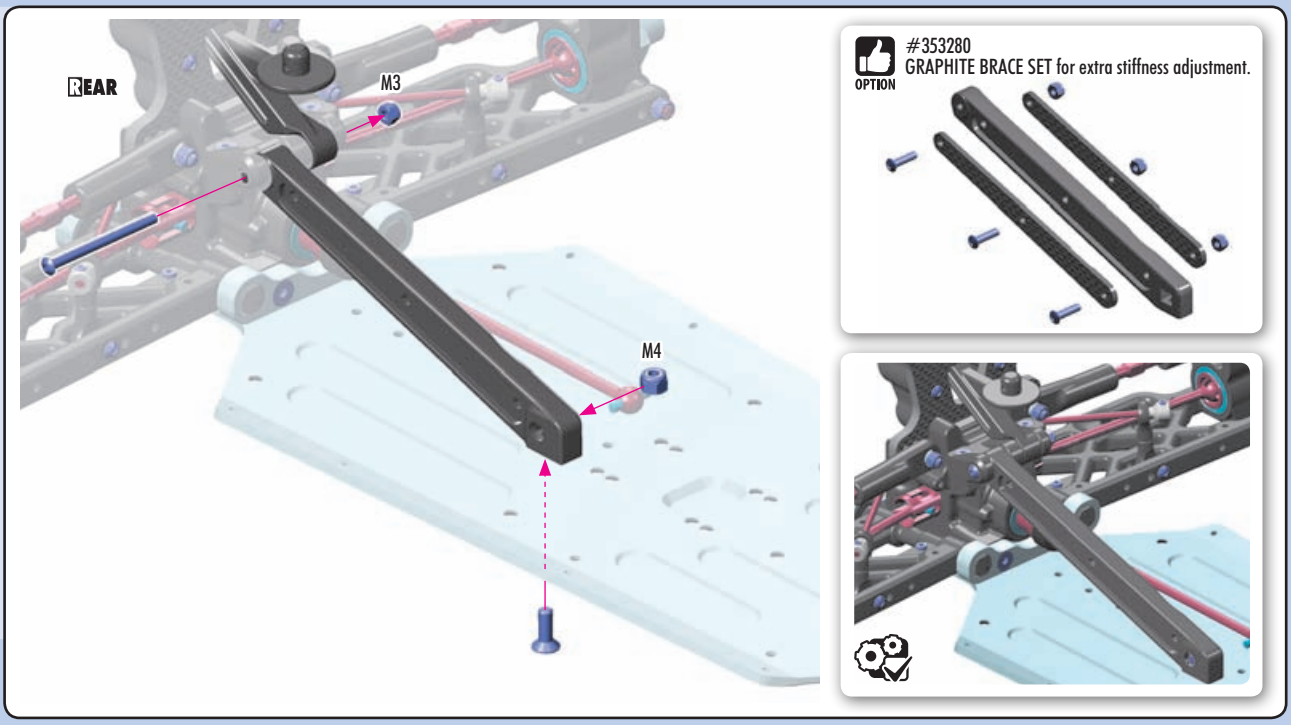
902340
SH M3x40



903412
SFH M4x12

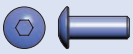
960030
N M3

960040
N M4



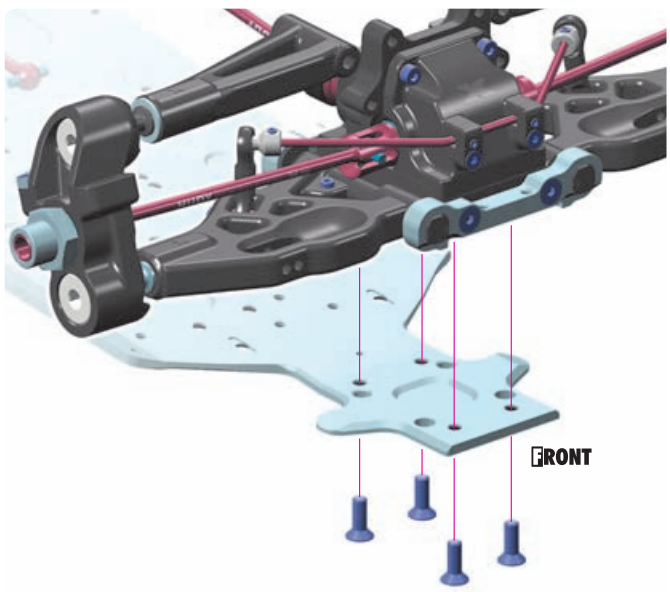
OPTION

#353280
GRAPHITE BRACE SET for extra stiffness adjustment.

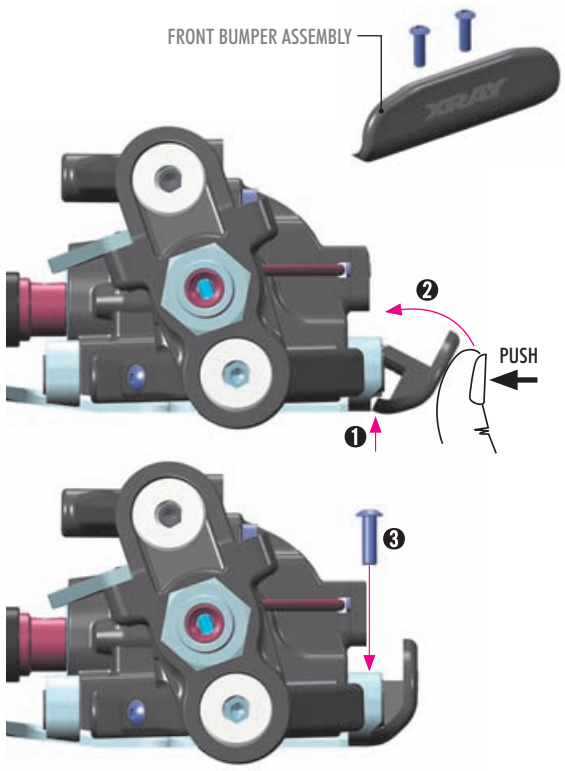


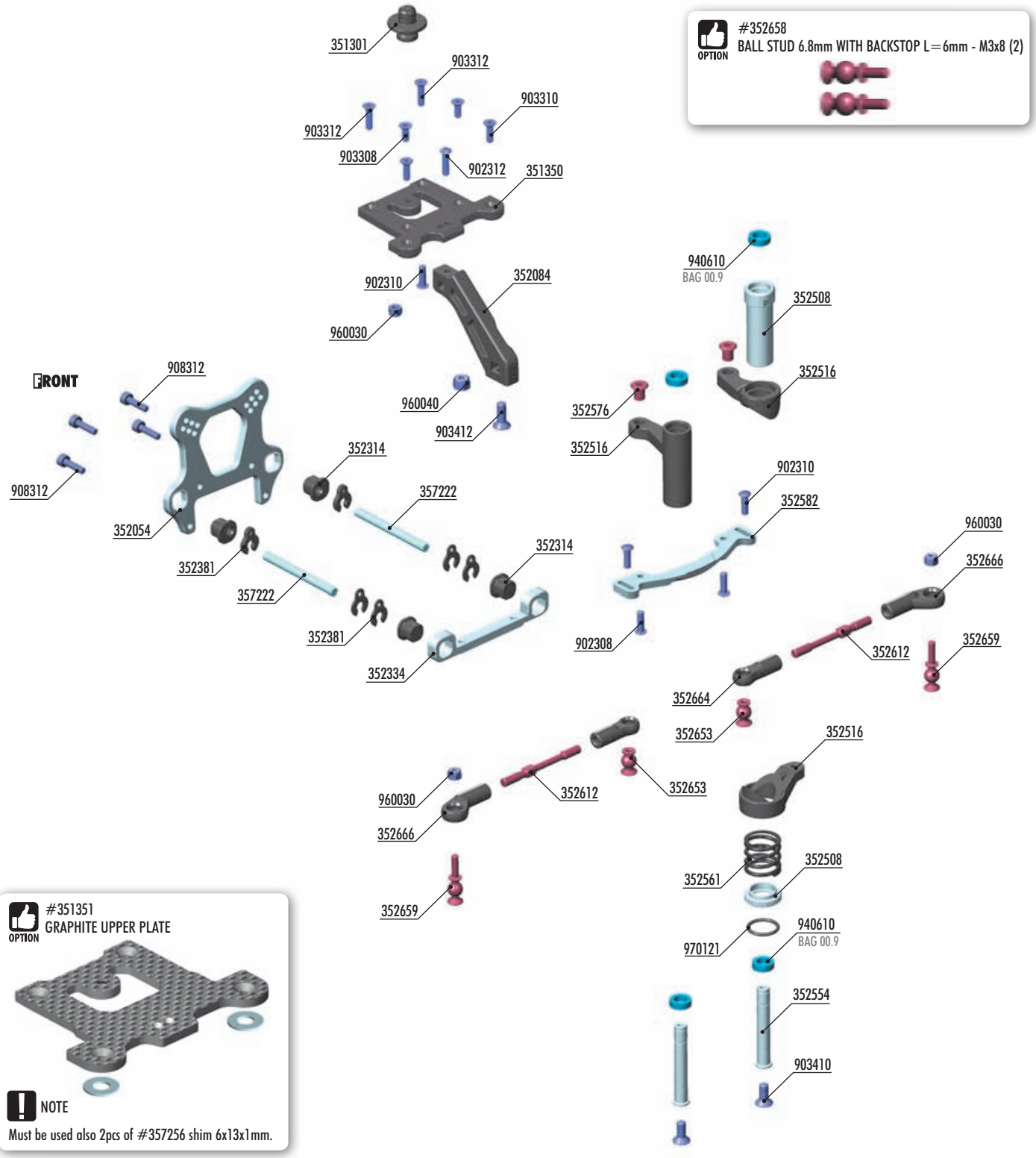
902308
SH M3x8

903412
SFH M4x12



During assembly, there is no need to check gear mesh or diff play. In particular, DO NOT check gear mesh and diff play when the differential is installed only in the gear box without the suspension holders and without being mounted to the chassis. All parts have specifically designed play, and only when the car is fully assembled will it have the proper amount of play where necessary. Only once you build the entire car, then you can check for free movement of all rotational parts and drivetrain as well a free non-binding operation of suspension parts.





OPTION #352658
BALL STUD 6.8mm WITH BACKSTOP L=6mm - M3x8 (2)

OPTION #351351
GRAPHITE UPPER PLATE

NOTE
Must be used also 2pcs of #357256 shim 6x13x1mm.

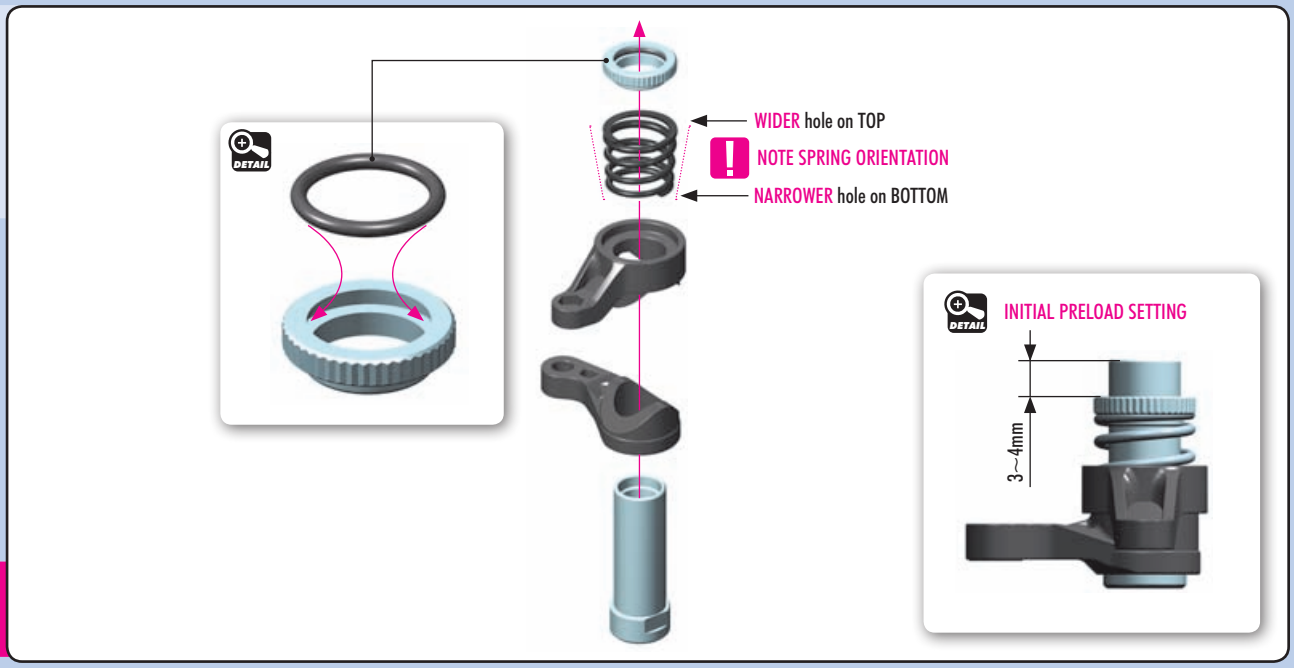
BAG 07

351301	BODY POSTS
351350	COMPOSITE UPPER PLATE WITH TWO BRACE POSITIONS
352054	ALU FRONT SHOCK TOWER FOR SEMI-SPLIT BULKHEAD (4MM)
352084	COMPOSITE FRONT BRACE
352314	COMPOSITE SQUARE ADJ. ROLL CENTER BUSHINGS - V2 (2)
352334	ALU FRONT UPPER ARM HOLDER FOR SEMI-SPLIT BULKHEAD
352381	CASTER CLIPS (2)
352508	SERVO SAVER FOR SEMI-SPLIT BULKHEAD - GRAPHITE - SET
352516	COMPOSITE SERVO SAVER FOR SEMI-SPLIT BULKHEAD - GRAPHITE
352554	ALU SERVO SAVER PIVOT SHAFT WITH CHASSIS LOCK (2)
352561	SERVO SAVER SPRING PROGRESSIVE
352576	STEERING PLATE BUSHING (2)
352582	ALU STEERING PLATE FOR SEMI-SPLIT BULKHEAD - SWISS 7075 T6
352612	ADJ. TURNBUCKLE M4 L/R 45 MM - HUDY SPRING STEEL™ (2)
352653	BALL STUD 6.8MM WITH BACKSTOP - M3 (2)
352659	BALL STUD 6.8MM WITH BACKSTOP L=6MM - M3x11 (2)
352664	COMPOSITE STEERING BALL JOINT 6.8MM - V3 (2)
352666	COMPOSITE RELIEF STEERING BALL JOINT 6.8MM (2)
357222	FRONT UPPER PIVOT PIN 4x45 (2)
902308	HEX SCREW SH M3x8 (10)
902310	HEX SCREW SH M3x10 (10)
902312	HEX SCREW SH M3x12 (10)
903308	HEX SCREW SFH M3x8 (10)
903310	HEX SCREW SFH M3x10 (10)
903312	HEX SCREW SFH M3x12 (10)
903410	HEX SCREW SFH M4x10 (10)
903412	HEX SCREW SFH M4x12 (10)
908312	HEX SCREW SOCKET HEAD CAP SCH M3x12 (10)
940610	BALL-BEARING 6x10x3 RUBBER SEALED - OIL (2)
960030	NUT M3 (10)
960040	NUT M4 (10)
970121	O-RING 12.1 x 1.6 (10)

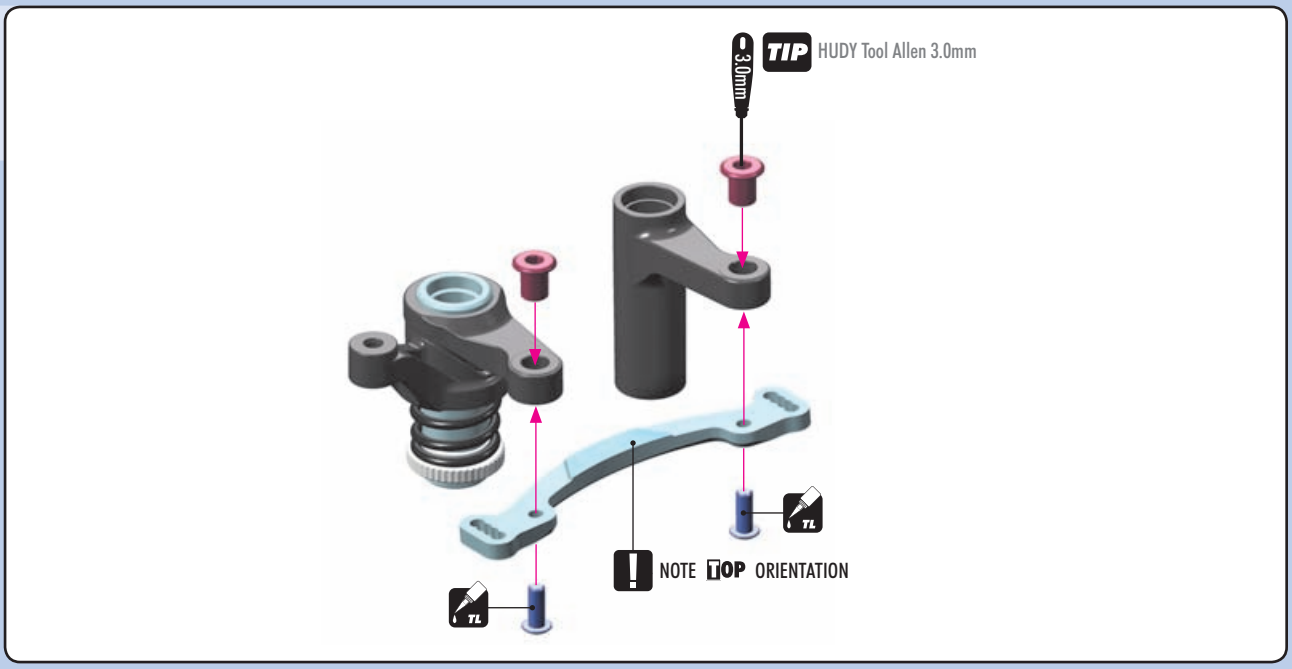
7. STEERING

970121
O 12.1x1.6

SET-UP BOOK
SERVO SAVER

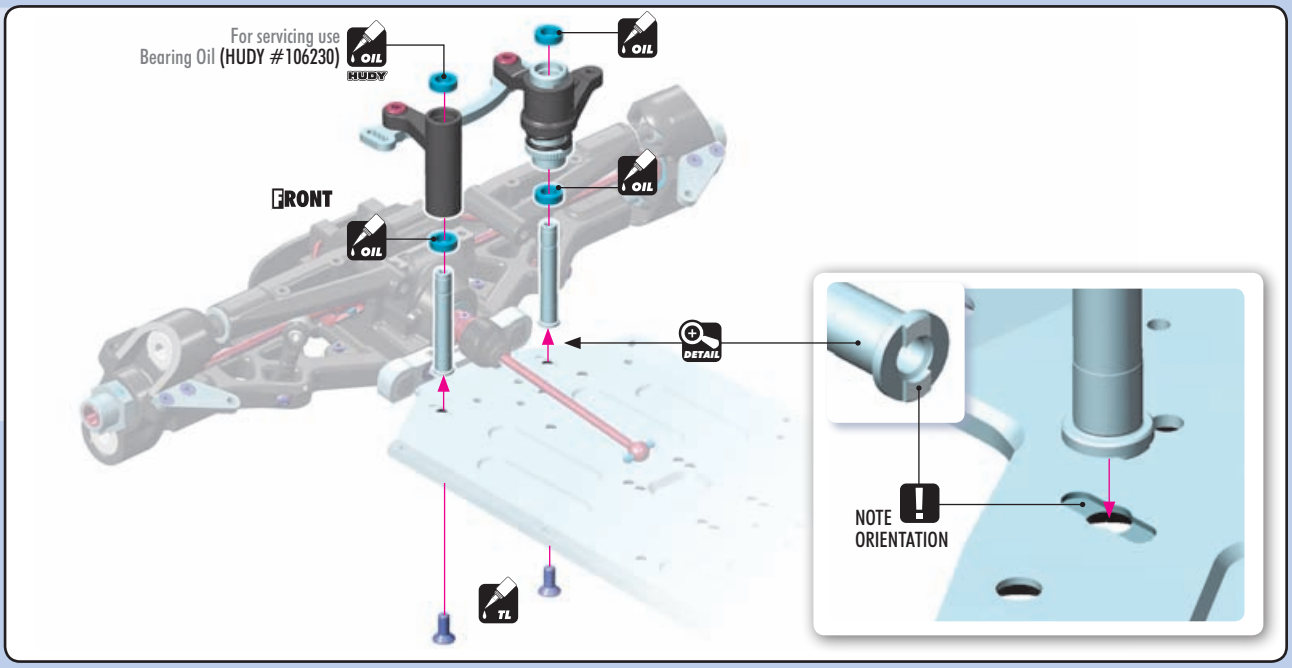


902308
SH M3x8



903410
SFH M4x10

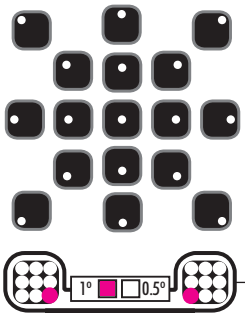
940610
BB 6x10x3



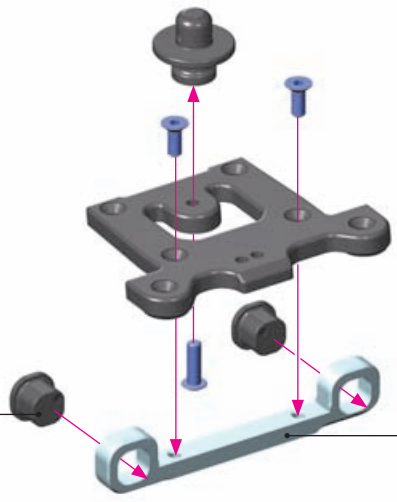
902310
SH M3x10

903308
SFH M3x8

All possible mounting alternatives of eccentric bushings.



INITIAL SETTING



NOTE ORIENTATION

SET-UP BOOK
ROLL CENTER

902312
SH M3x12

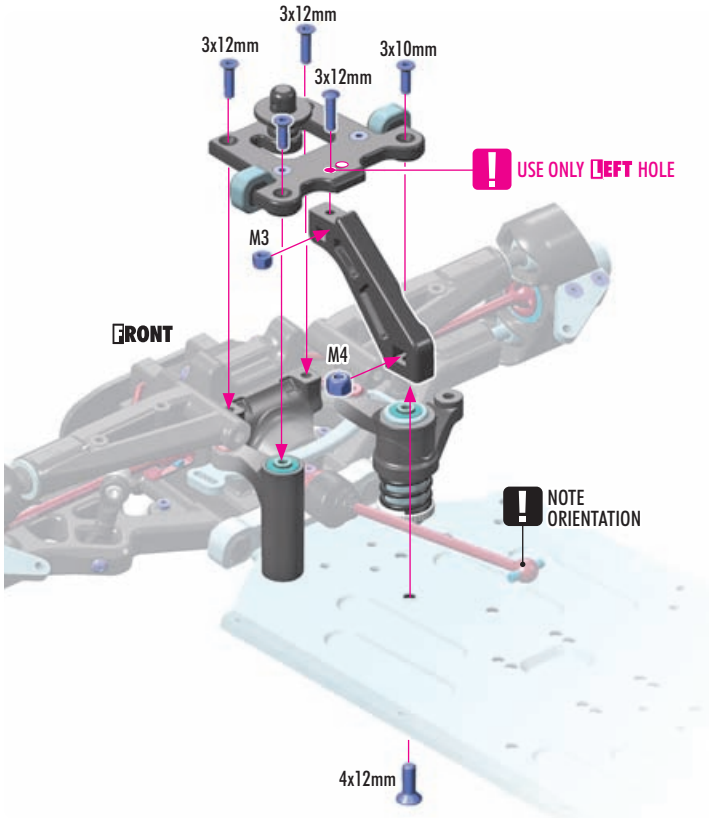
903310
SFH M3x10

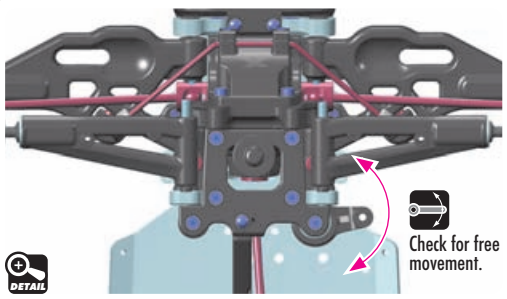
903312
SFH M3x12

903412
SFH M4x12

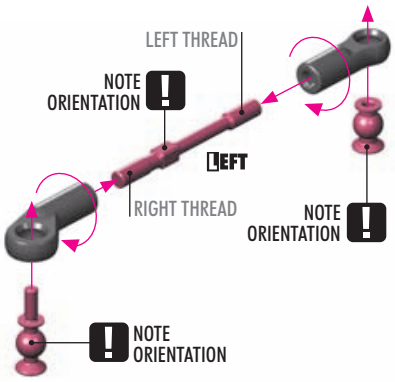
960030
N M3

960040
N M4

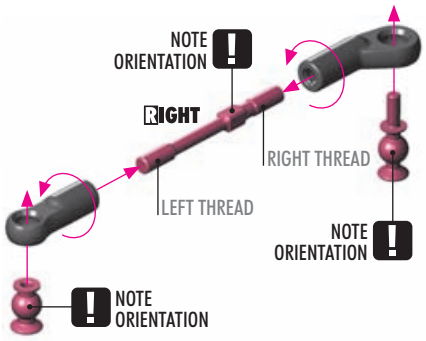


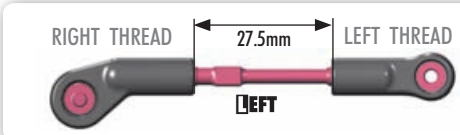


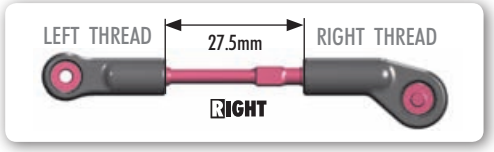
After the top deck assembly check for free movement of steering system.



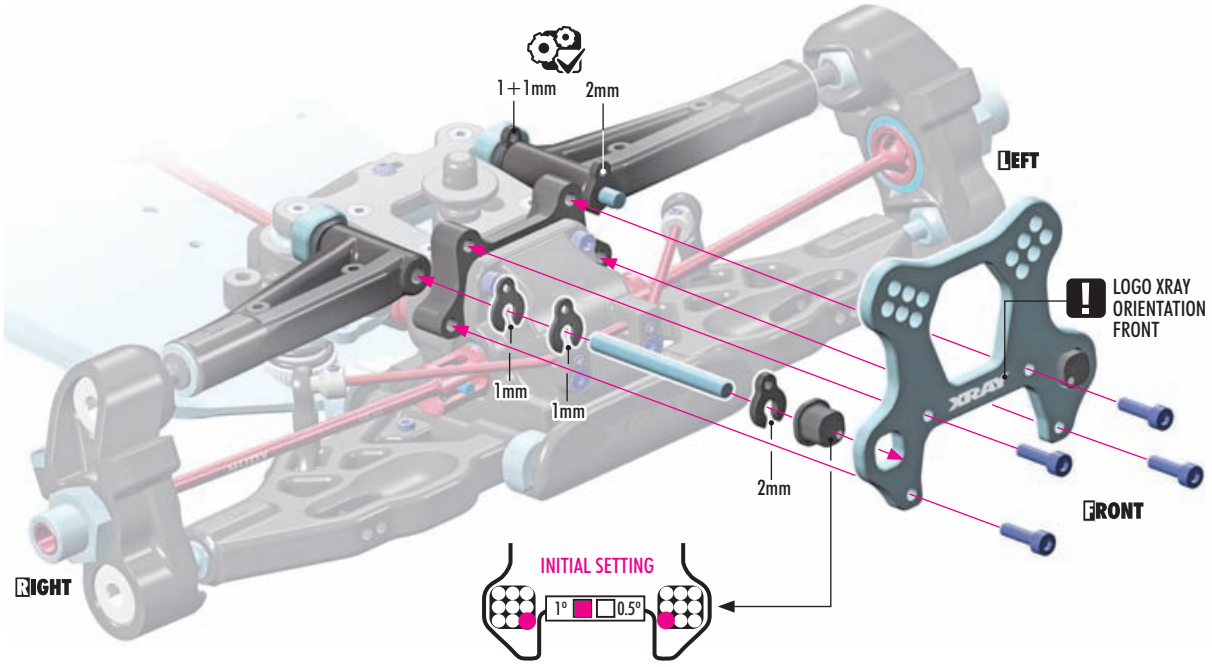
TIP Install the pivot balls with Professional Multi-Tool (HUDY #183011).



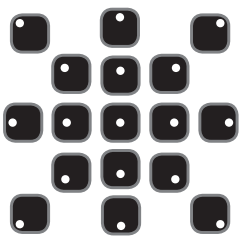


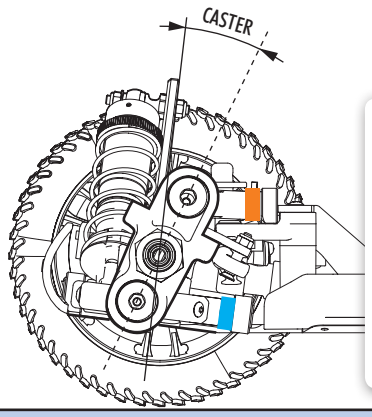


908312
SCH M3x12

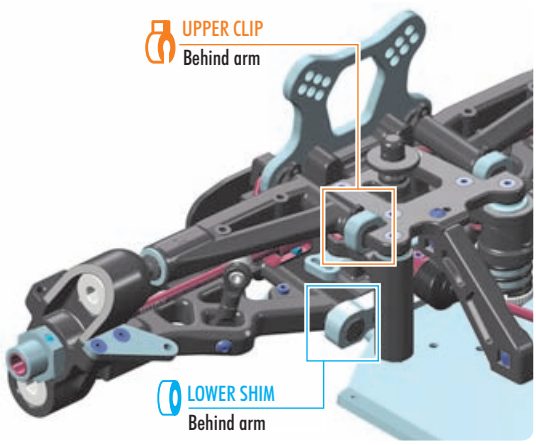


All possible mounting
alternatives of eccentric bushings.





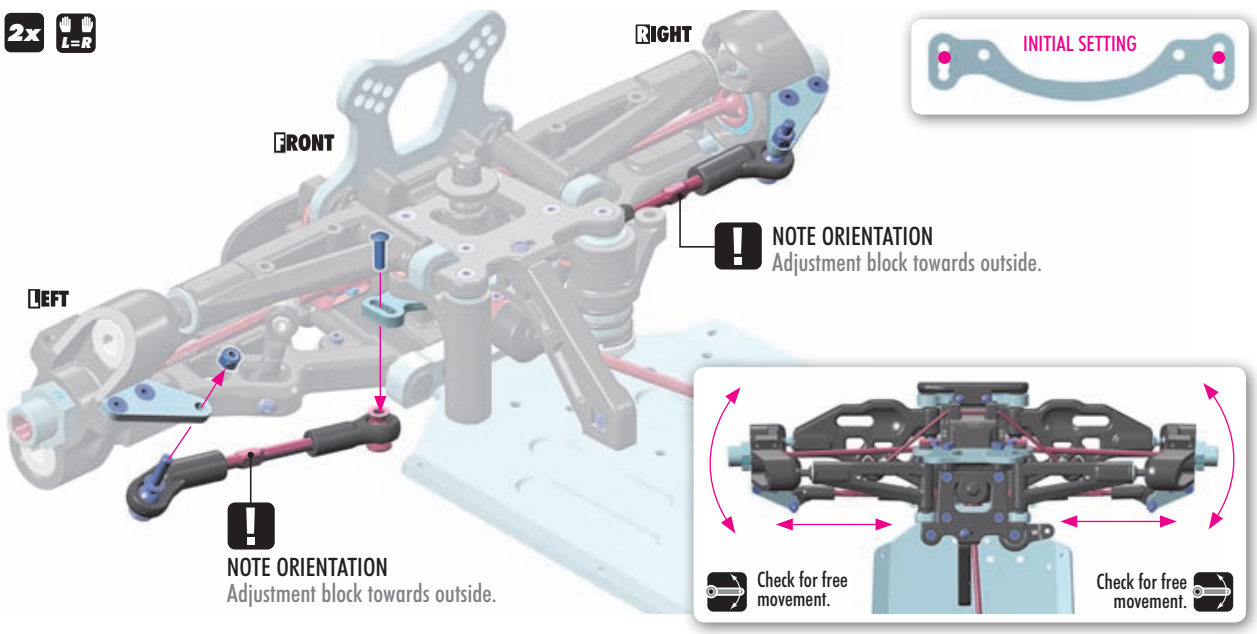
CASTER	
UPPER CLIP (Behind arm)	LOWER SHIM (Behind arm)
	2mm
4mm	21°
3mm	22.5°
2mm	24°
1mm	25.5°
0	27°



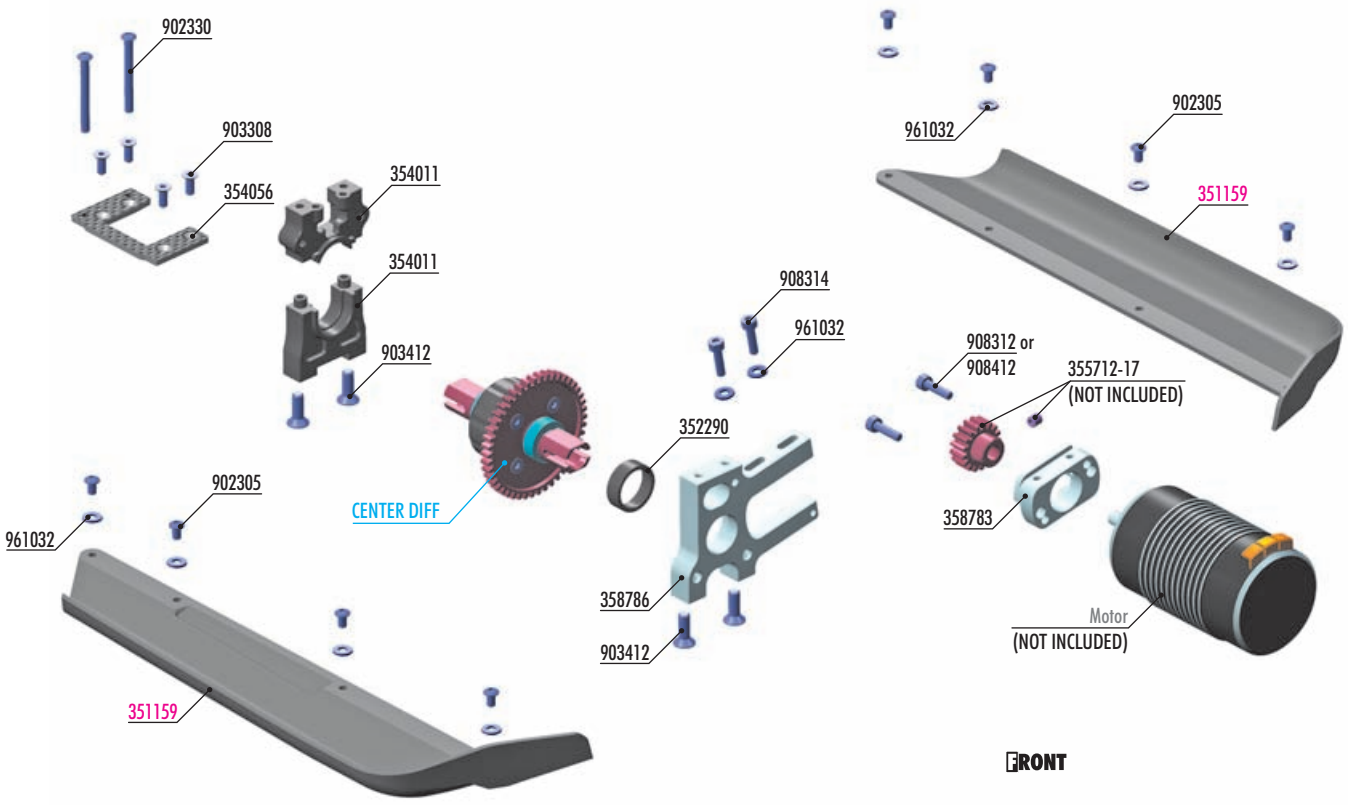
SET-UP BOOK
ROLL CENTER
CASTER

902310
SH M3x10

960030
N M3



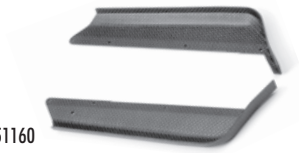
SET-UP BOOK
ACKERMANN
BUMP STEER
TOE-IN



OPTION

XRAY PINION GEAR		
#355712	12T	OPTION
#355713	13T	OPTION
#355714	14T	OPTION
#355715	15T	OPTION
#355716	16T	OPTION
#355717	17T	OPTION

OPTION #351159-S
COMPOSITE CHASSIS SIDE GUARD L+R - SOFT

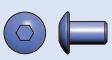


OPTION #351160
CARBON FIBER CHASSIS SIDE GUARD L+R

OPTION #353250
XB8 GRAPHITE BRACE FOR CHASSIS SIDE GUARDS - SET

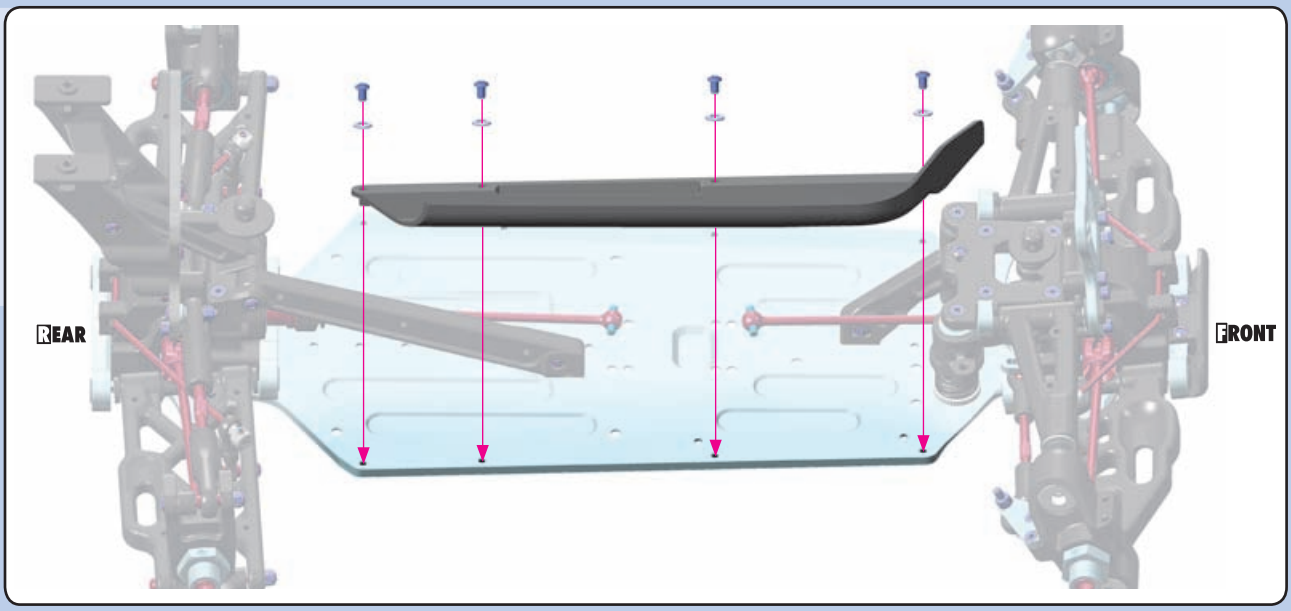
BAG 08

352290	COMPOSITE BUSHING FOR ALU STEERING BLOCK (4)	903308	HEX SCREW SFH M3x8 (10)
354011	CENTER DIFF MOUNTING PLATE SET - HIGHER	903412	HEX SCREW SFH M4x12 (10)
354056	GRAPHITE CENTER DIFF MOUNTING PLATE	908312	HEX SCREW SOCKET HEAD CAP M3x12 (10)
355712~17	XRAY 12~17T PINION GEAR (OPTION)	908314	HEX SCREW SOCKET HEAD CAP M3x14 (10)
358783	ALU MOTOR MOUNT PLATE - V2	908412	HEX SCREW SOCKET HEAD CAP M4x12 (10)
358786	XB8E/XT8E ALU MOTOR MOUNT	961032	WASHER S 3.2 (10)
902305	HEX SCREW SH M3x5 (10)		
902330	HEX SCREW SH M3x30 (10)	351159	CHASSIS SIDE GUARDS L+R



902305
SH M3x5

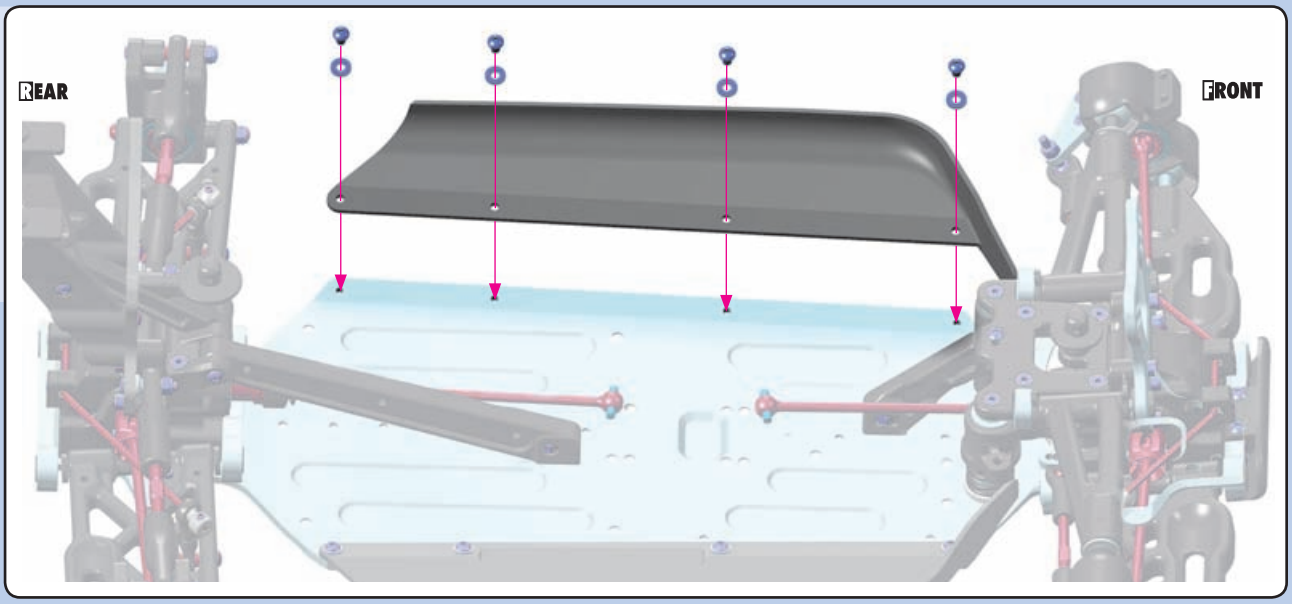
961032
S 3.2

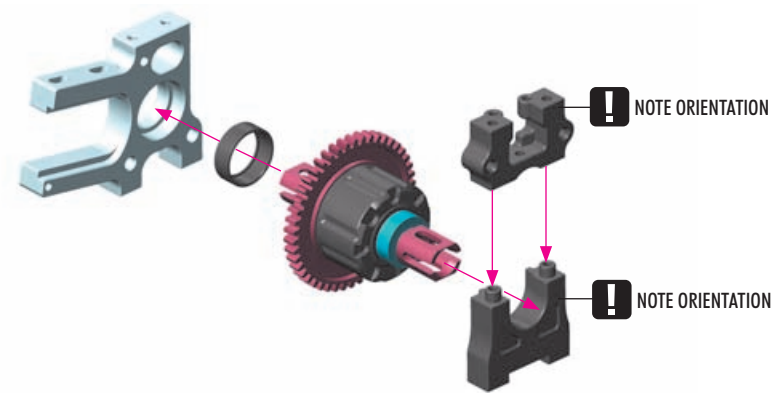


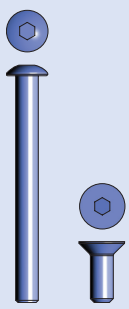
8. CENTER DIFF & BRAKE

902305
SH M3x5

961032
S 3.2

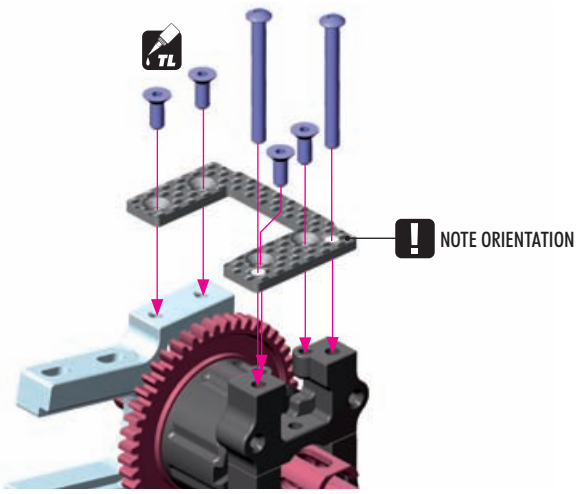


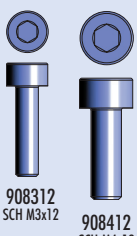




902330
SH M3x30

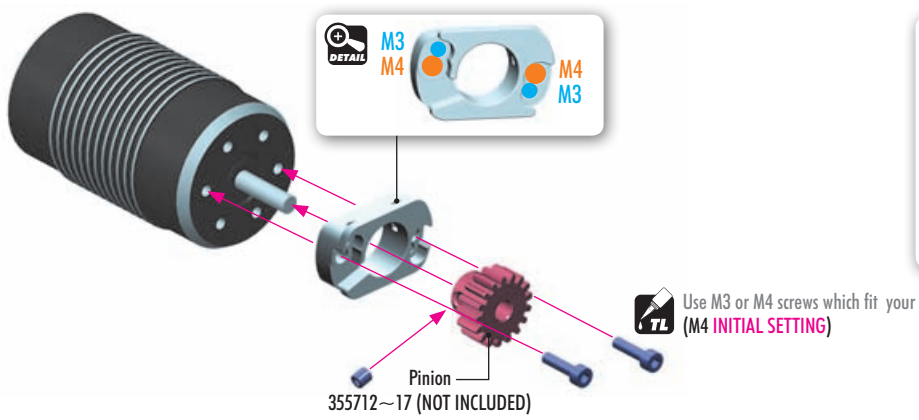
903308
SFH M3x8





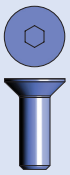
908312
SCH M3x12

908412
SCH M4x12

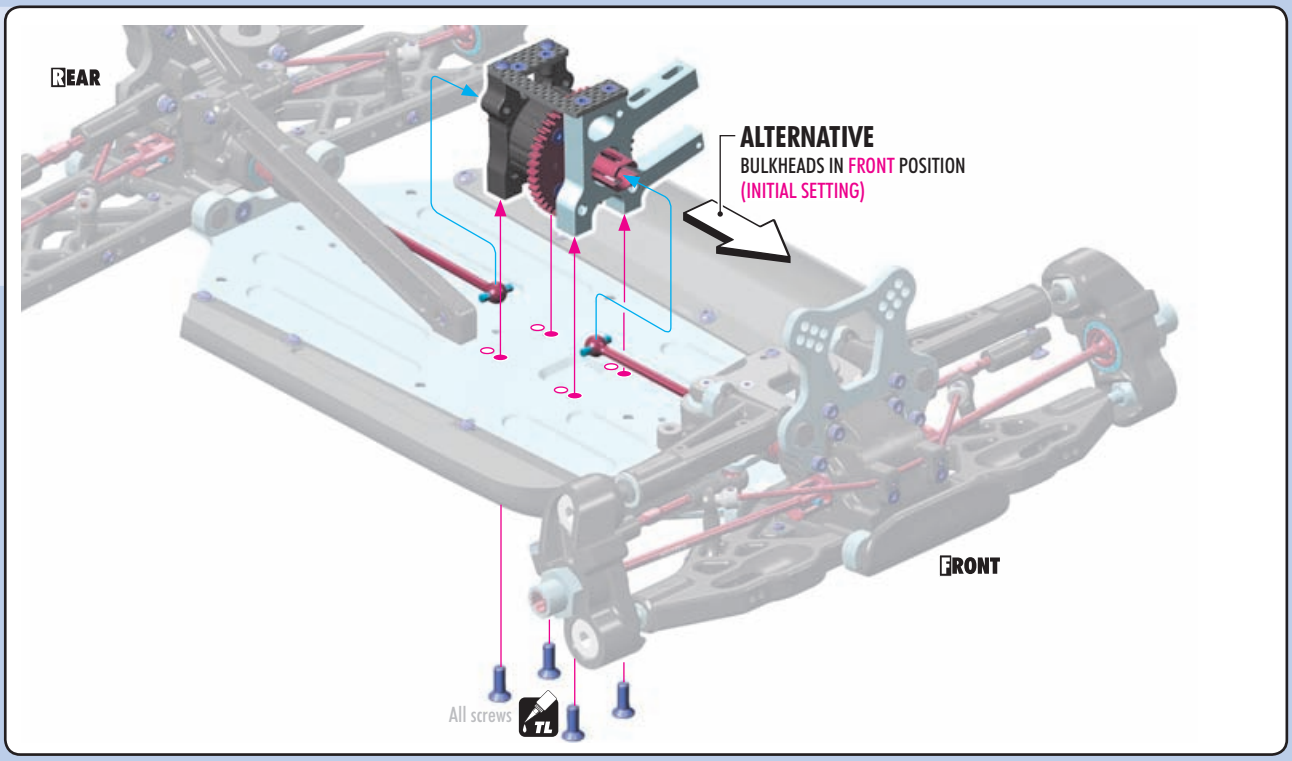


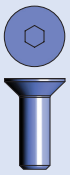
OPTION

XRAY PINION GEAR		
#355712	12T	OPTION
#355713	13T	OPTION
#355714	14T	OPTION
#355715	15T	OPTION
#355716	16T	OPTION
#355717	17T	OPTION

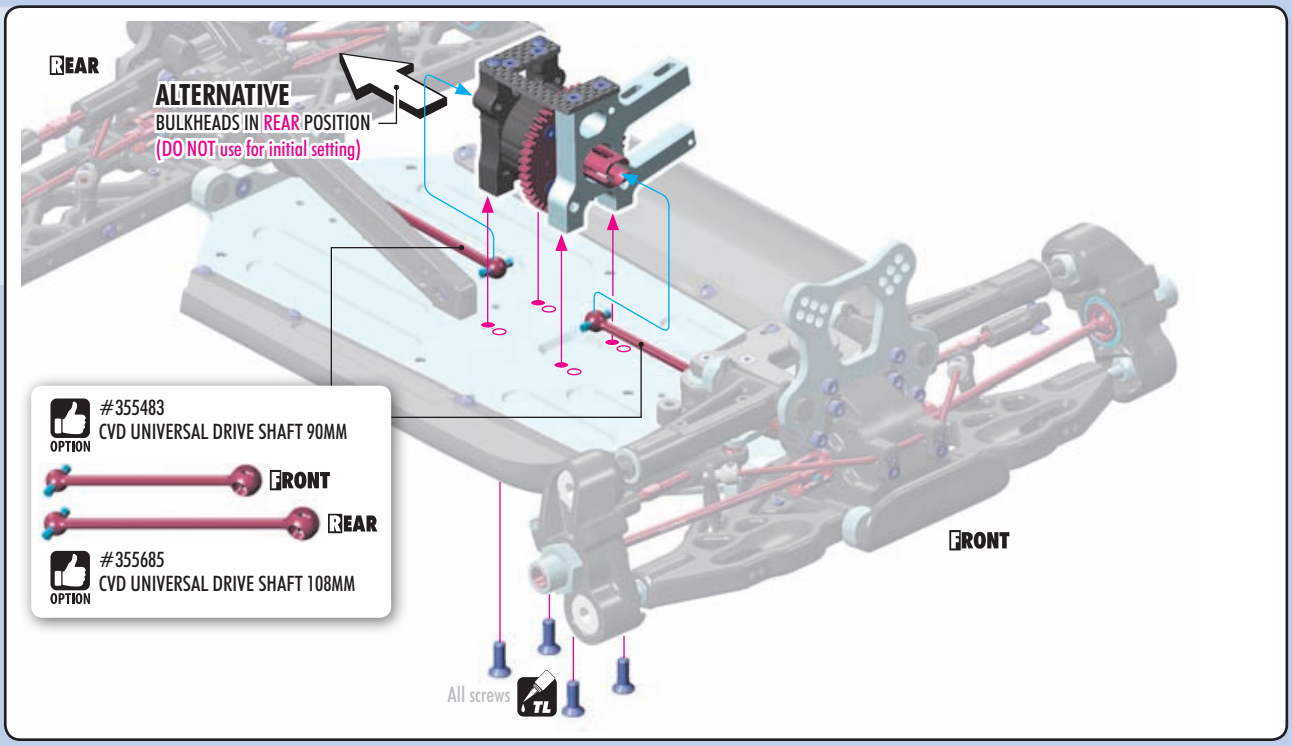


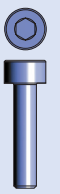
903412
SFH M4x12





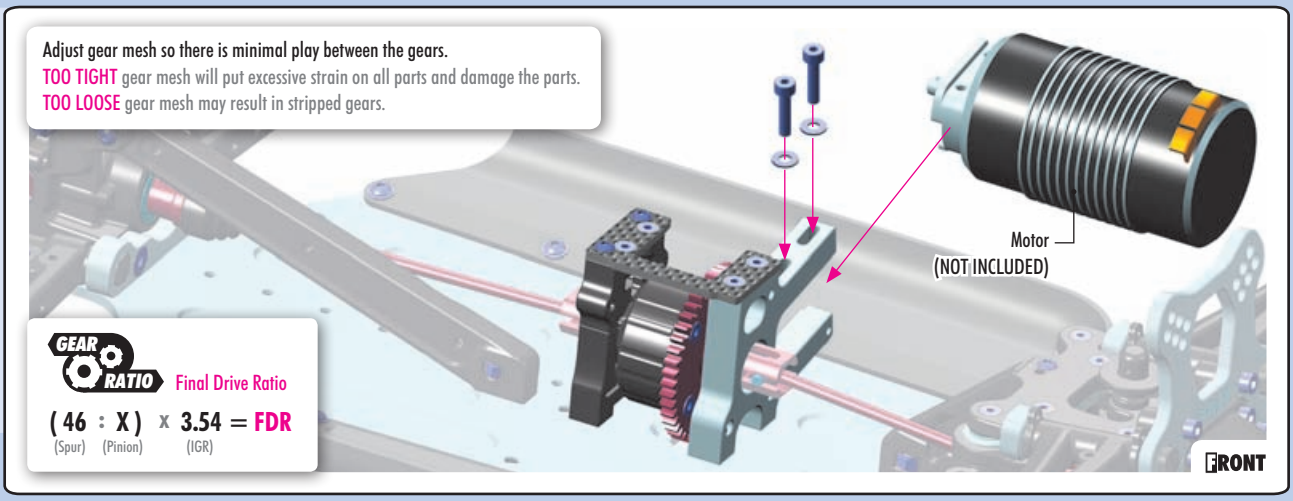
903412
SFH M4x12



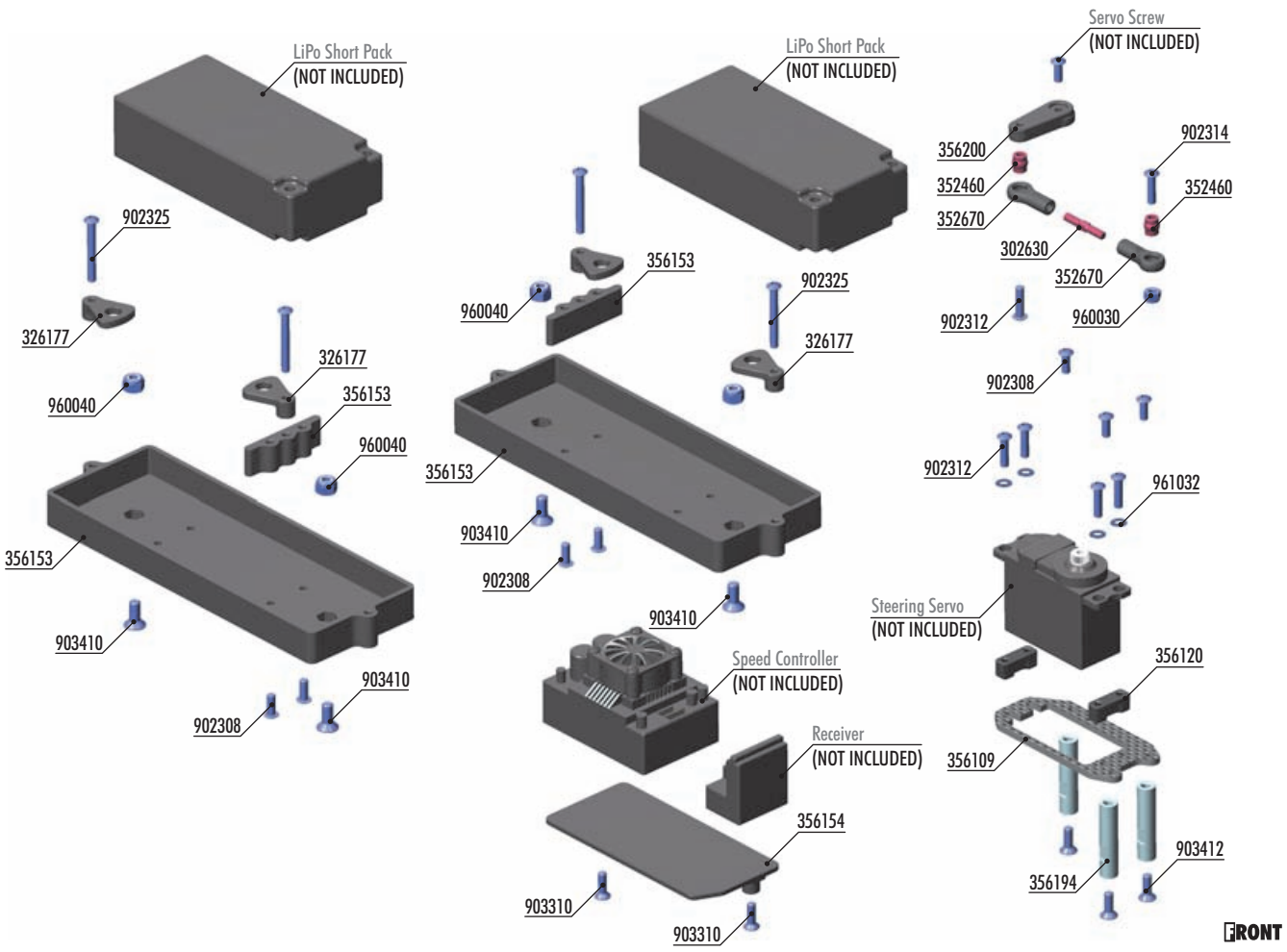


908314
SCH M3x14

961032
S 3.2



10. RADIO CASE



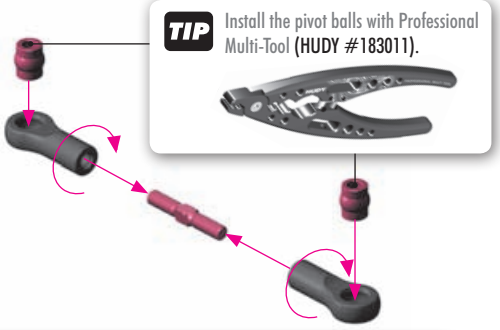
BAG 10.1

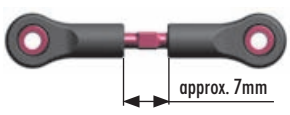
302630	ADJ. TURNBUCKLE L/R 20 MM - HUDY SPRING STEEL™ (2)	902308	HEX SCREW SH M3x8 (10)
352460	PIVOT BALL 5.8 (10)	902312	HEX SCREW SH M3x12 (10)
352670	SERVO BALL JOINT 5.8MM (4)	902314	HEX SCREW SH M3x14 (10)
356120	STEERING SERVO MOUNT - SET	903412	HEX SCREW SFH M4x12 (10)
356194	ALU MOUNT FOR RECEIVER BOX	960030	NUT M3 (10)
356200	BRAKE/THROTTLE ARMS & STEERING SERVO ARMS - SET	961032	WASHER S 3.2 (10)

BAG 10.2

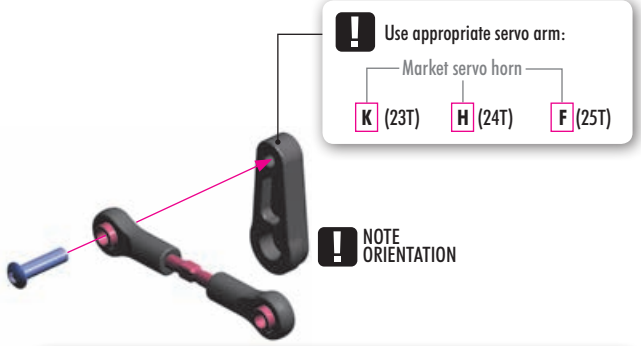
326177	COMPOSITE BATTERY CLAMP (2)	902308	HEX SCREW SH M3x8 (10)
356109	XB8E/GTXE/XT8E SADDLE PACK GRAPHITE SERVO HOLDER	902325	HEX SCREW SH M3x25 (10)
356153	XB8E/GTXE/XT8E BATTERY BOX FOR STANDARD & SHORT BATTERY PACK (2)	903310	HEX SCREW SFH M3x10 (10)
356154	COMPOSITE SPEEDO PLATE	903410	HEX SCREW SFH M4x10 (10)
		960040	NUT M4 (10)

902312
SH M3x12





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



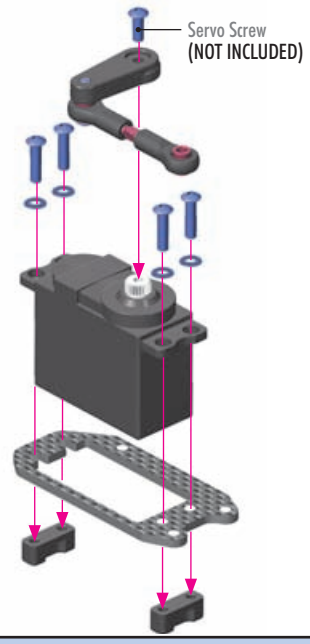
OPTION HUDY

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

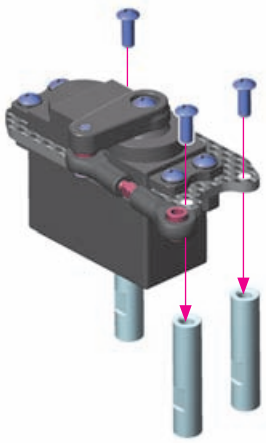
CLAMP ALU SERVO HORNS		
#293407	23T	OPTION
#293408	24T	OPTION
#293409	25T	OPTION

902312
SH M3x12

961032
S 3.2



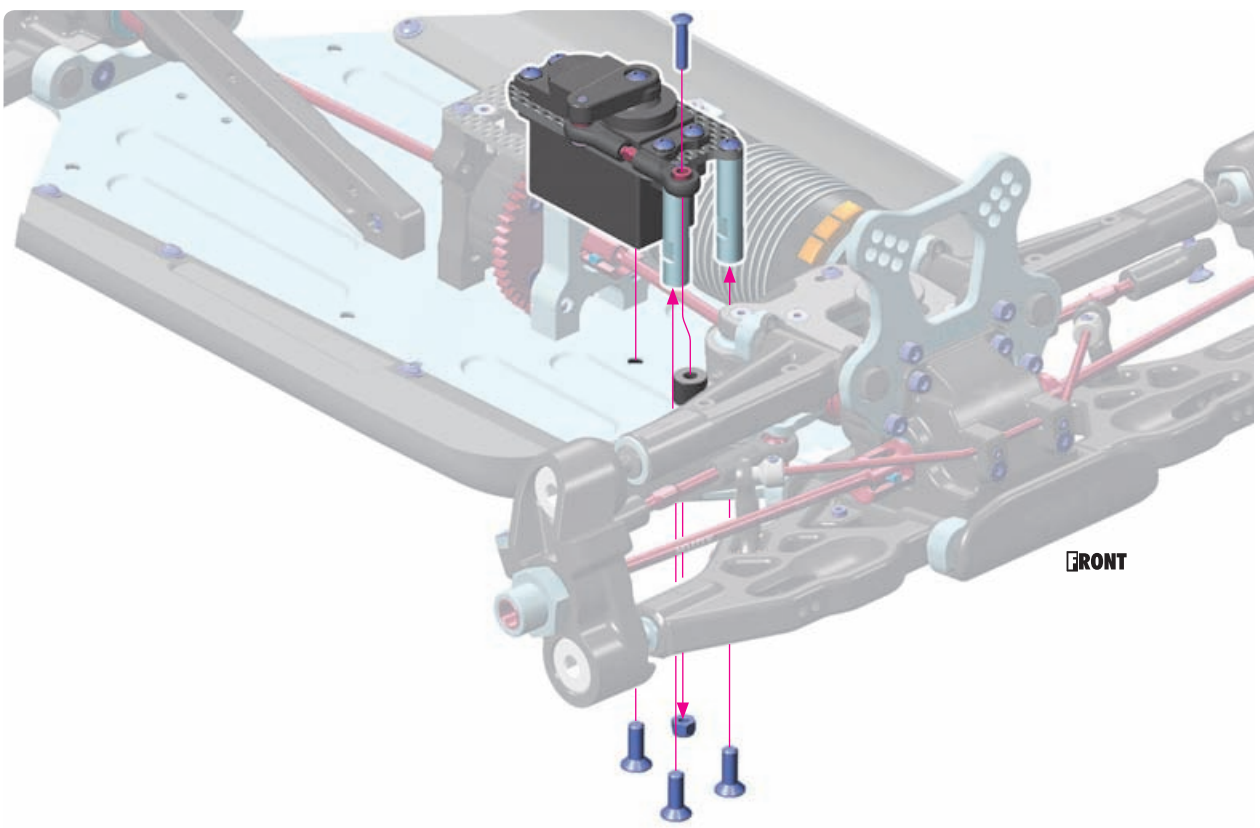
902308
SH M3x8



902314
SH M3x14

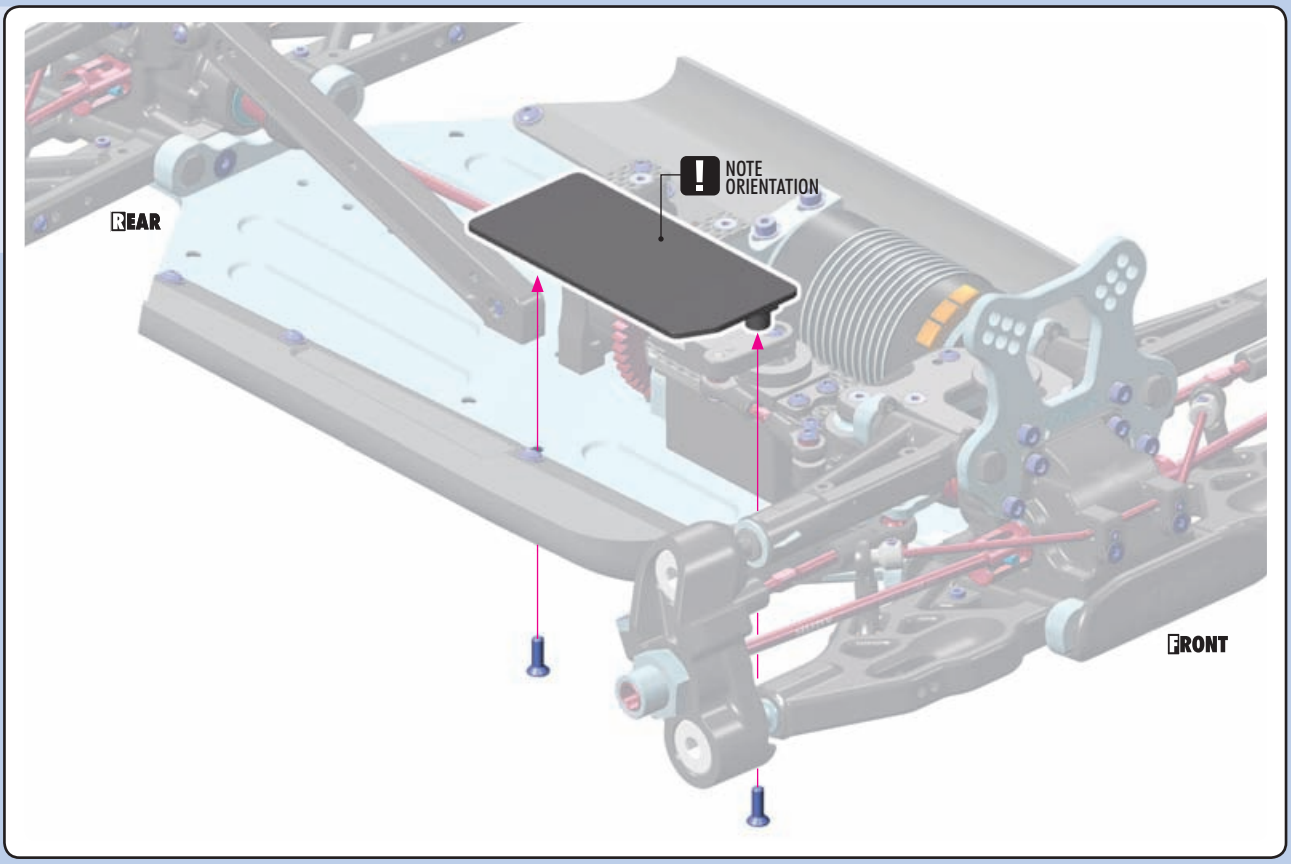
903412
SFH M4x12

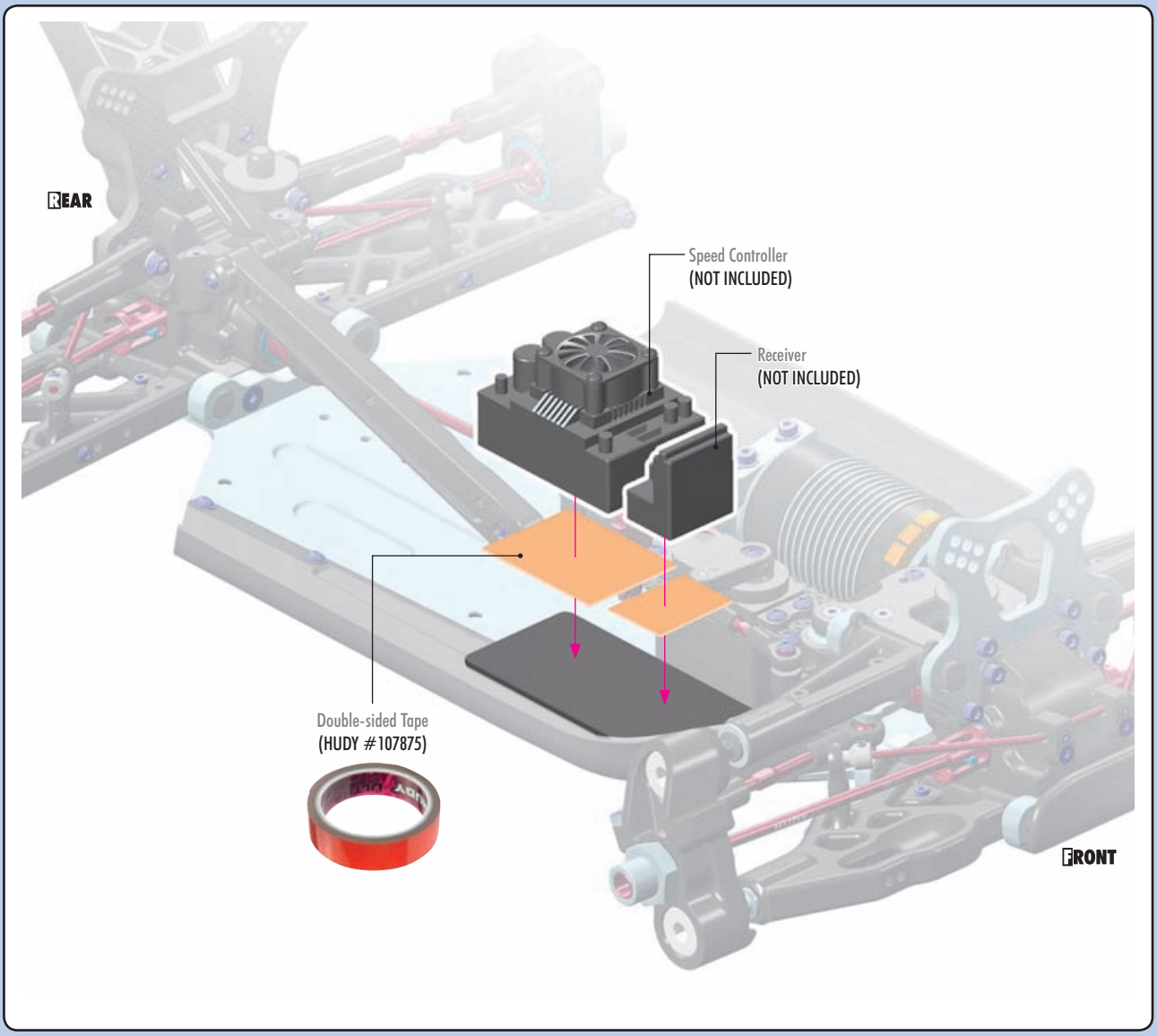
960030
N M3



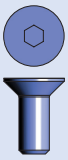
10. RADIO CASE

903310
SFH M3x10





902325
SH M3x25

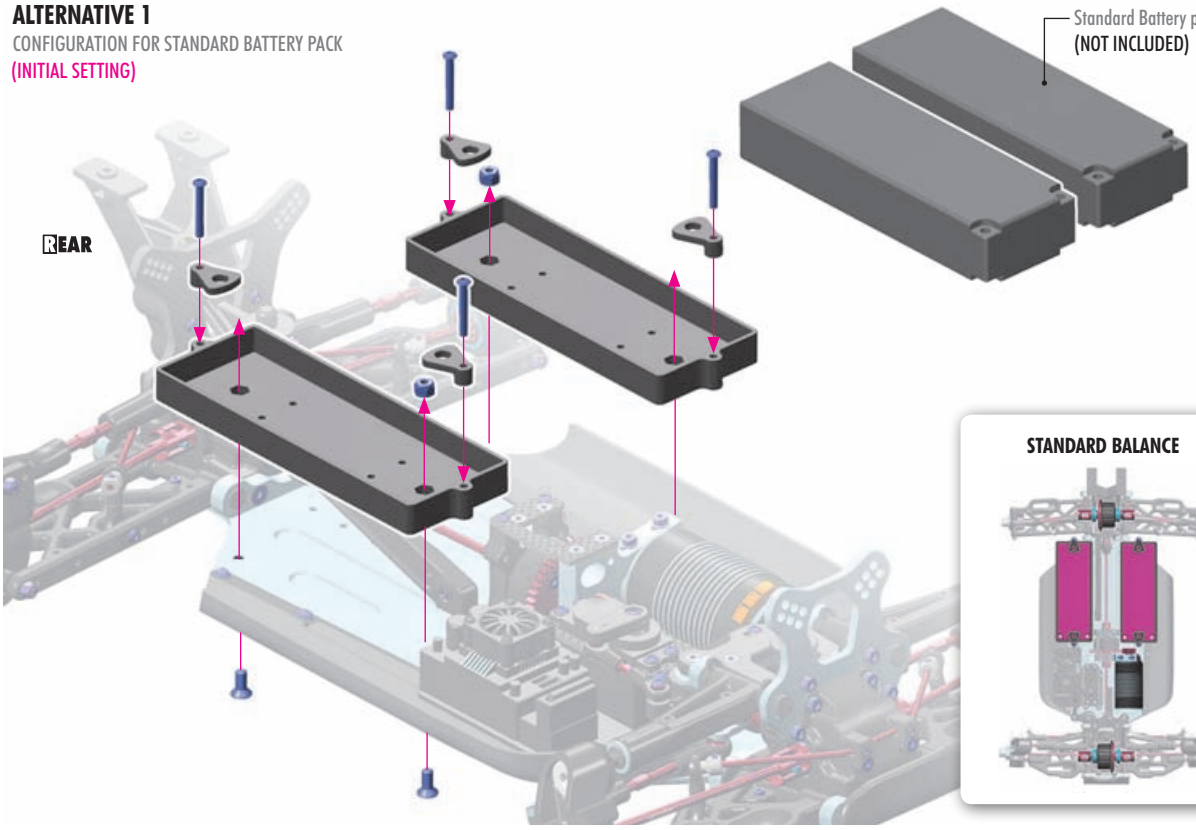


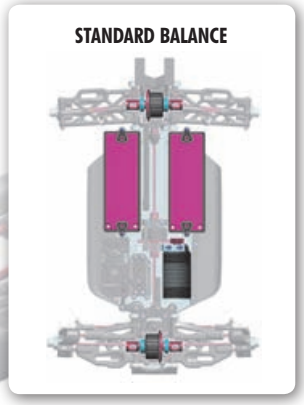
903410
SFH M4x10

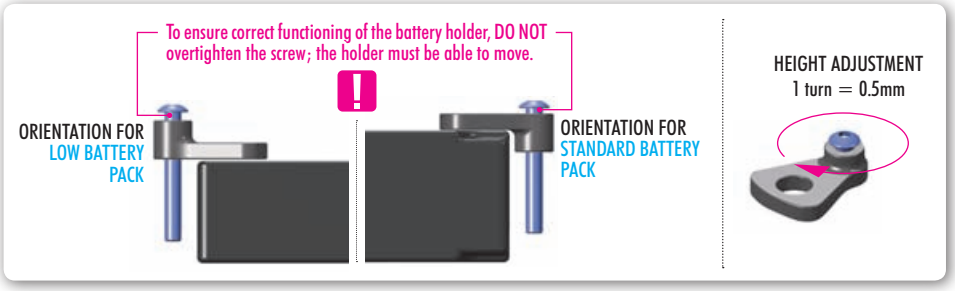
960040
N M4

ALTERNATIVE 1

CONFIGURATION FOR STANDARD BATTERY PACK
(INITIAL SETTING)

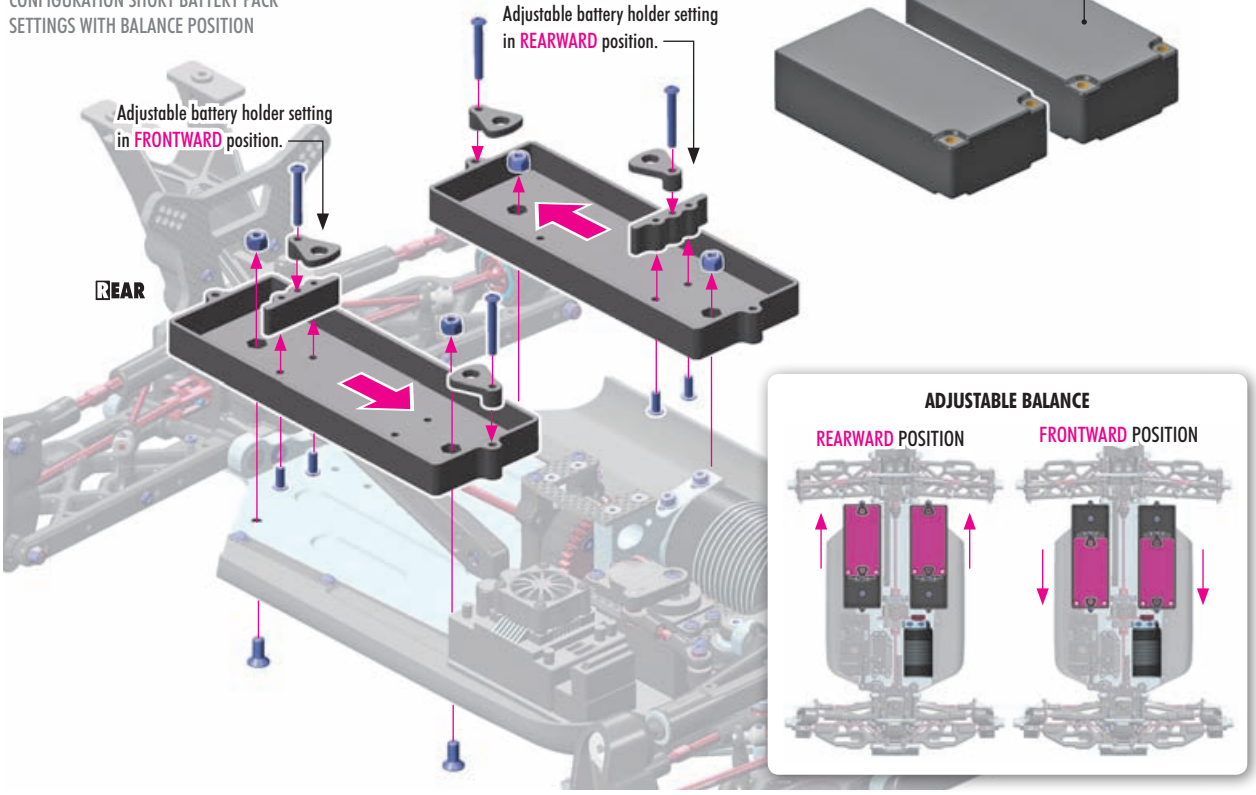




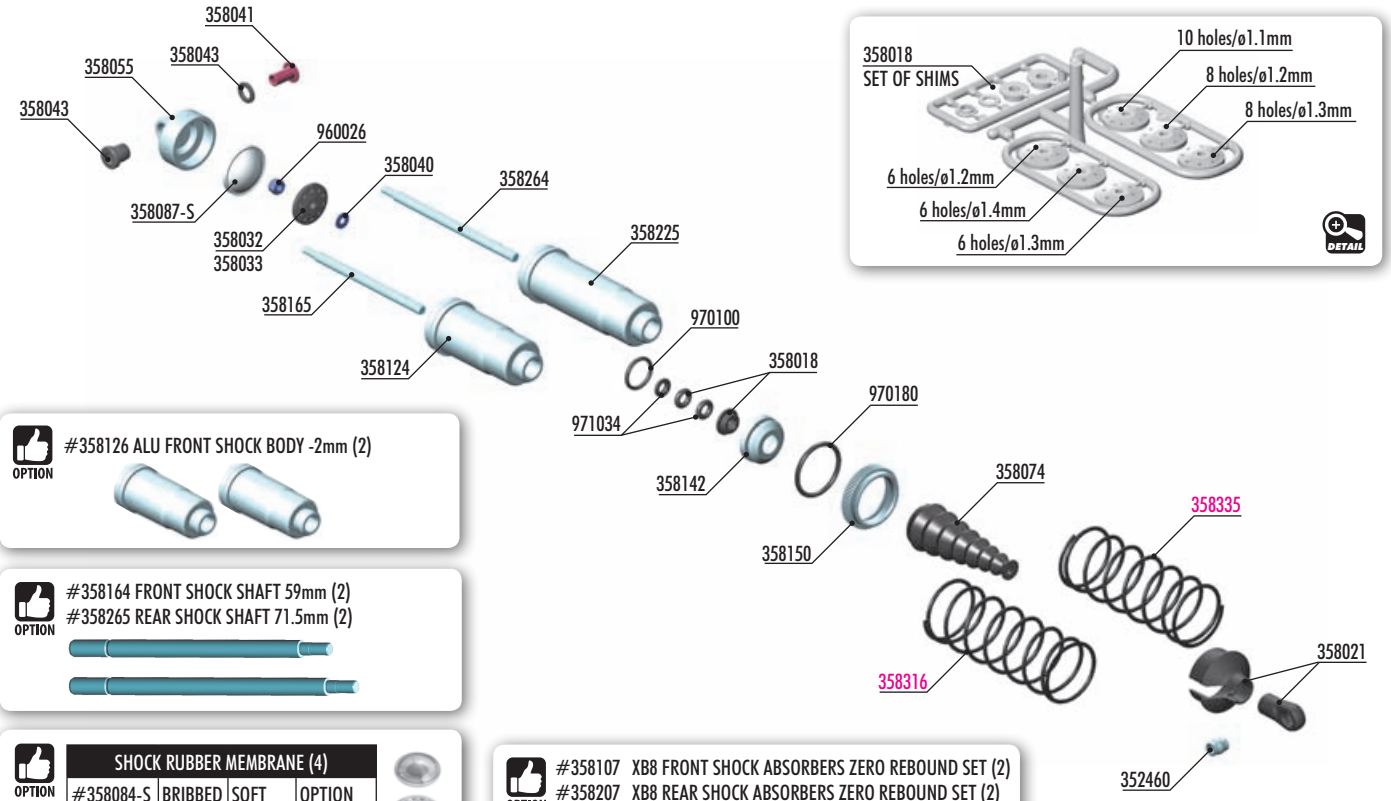


ALTERNATIVE 2

CONFIGURATION SHORT BATTERY PACK
SETTINGS WITH BALANCE POSITION



11. SHOCK ABSORBERS



OPTION

#358126 ALU FRONT SHOCK BODY -2mm (2)

OPTION

#358164 FRONT SHOCK SHAFT 59mm (2)
#358265 REAR SHOCK SHAFT 71.5mm (2)

OPTION

SHOCK RUBBER MEMBRANE (4)			
#358084-S	BRIBBED	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)

OPTION

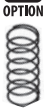
#358107 XB8 FRONT SHOCK ABSORBERS ZERO REBOUND SET (2)
#358207 XB8 REAR SHOCK ABSORBERS ZERO REBOUND SET (2)

FRONT COMPLETE SET (2)

REAR COMPLETE SET (2)

OPTION

FRONT LINEAR SPRINGS				
#358183	C=0.70	Grey	SHORT	OPTION
#358184	C=0.75	Silver	SHORT	OPTION
#358185	C=0.80	Grey-Blue	SHORT	OPTION



REAR LINEAR SPRINGS				
#358282	C=0.47	White	LONG	OPTION
#358283	C=0.50	Grey	LONG	OPTION
#358284	C=0.53	Silver	LONG	OPTION
#358285	C=0.57	Grey-Blue	LONG	OPTION
#358287	C=0.65	Violet	LONG	OPTION
#358288	C=0.70	Purple	LONG	OPTION

OPTION

SHOCK SPRINGS				
#358315	C=0.77-0.80	3 DOTS	FRONT	OPTION
#358316	C=0.80-0.83	4 DOTS	FRONT	INCLUDED
#358317	C=0.83-0.86	5 DOTS	FRONT	OPTION
#358334	C=0.66-0.68	2 DOTS	REAR	OPTION
#358335	C=0.68-0.70	3 DOTS	REAR	INCLUDED
#358336	C=0.70-0.73	4 DOTS	REAR	OPTION

OPTION

FRONT & REAR PROGRESSIVE SPRINGS				
#358174	C=0.7-0.8	Grey	SHORT	OPTION
#358274	C=0.5-0.6	Grey	MEDIUM	OPTION
#358275	C=0.65-0.7	1 STRIPE	MEDIUM	OPTION
#358276	C=0.7-0.75	2 STRIPES	MEDIUM	OPTION

REAR PROGRESSIVE SPRINGS				
#358279	C=0.55-0.63	2 STRIPES	LONG	OPTION
#358280	C=0.6-0.68	3 STRIPES	LONG	OPTION
#358281	C=0.65-0.7	4 STRIPES	LONG	OPTION

OPTION

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

OPTION

#358054-K
XB8 ALU SHOCK CAP NUT WITH VENT HOLE - BLACK COATED (2)

BAGS

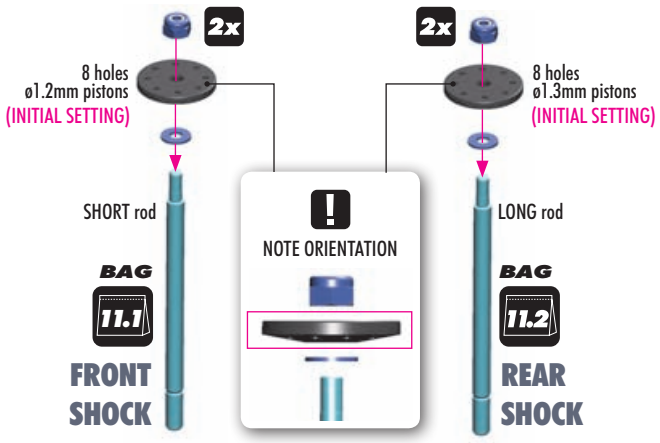
11.1

11.2

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 - V2
358033	COMPOSITE SHOCK 6-HOLE PISTON SET (1.2; 1.3; 1.4MM) - DELRIN - V2
358040	HARDENED SHOCK SHIMS (4)
358041	STEEL SHOCK BUSHING (2)
358043	COMPOSITE SHOCK BUSHING & SHIM (2+2)
358055	ALU SHOCK CAP NUT WITH 4 VENT HOLES - BLACK COATED (2)
358074	FOLDING SHOCK BOOT (4)
358087-S	SHOCK RUBBER MEMBRANE CELL - SOFT (4)
358124	ALU FRONT SHOCK BODY - HARD COATED - V2 (2)
358142	ALU SHOCK BODY NUT FOR SHOCK BOOT (2)
358150	ALU SHOCK BODY ADJ. NUT (2)
358165	FRONT SHOCK SHAFT 61mm (2)
358225	ALU REAR SHOCK BODY - HARD COATED - V2 (2)
358264	REAR SHOCK SHAFT 67.5mm (2)
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)
358316	XRAY FRONT SPRING 69MM - 4 DOTS (2)
358335	XRAY REAR SPRING 85MM - 3 DOTS

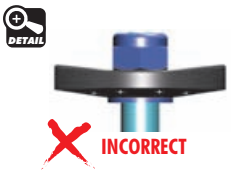
358040
S 2.5x6x0.5

960026
N M2.5



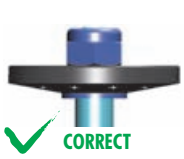
OPTION
#358265
REAR SHOCK SHAFT 71.5mm (2)

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)



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

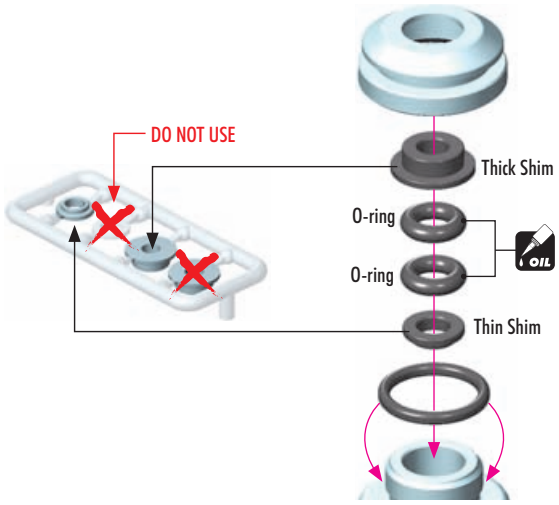
970100
O 10x1.5

971034
O 3.4x2

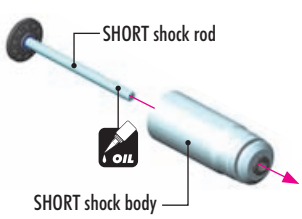
2x FRONT SHOCKS (SHORT)

2x REAR SHOCKS (LONG)

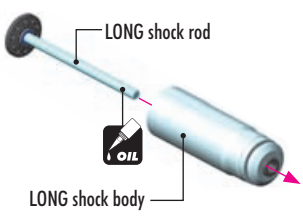
There are two different thickness shims, use them as shown. Use the same procedure when building both front and rear shocks.



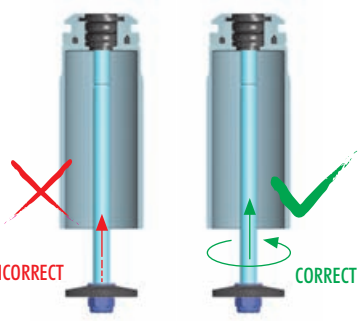
2x FRONT SHOCKS



2x REAR SHOCKS



EXTREMELY IMPORTANT



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

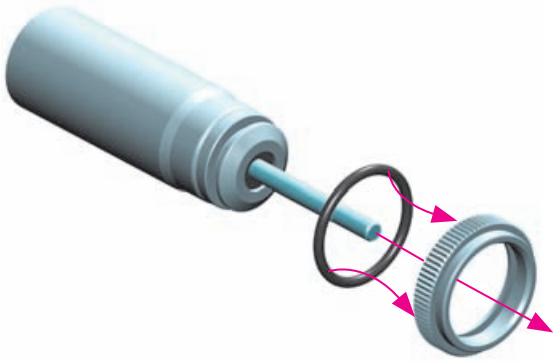
Twist the shock rod through the lower shock body assembly.

11. SHOCK ABSORBERS

970180
O 18x1.8

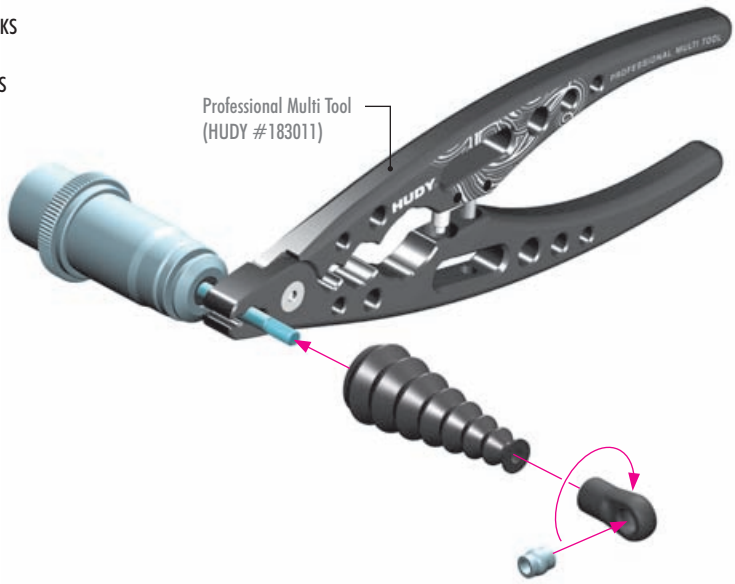
2x FRONT SHOCKS

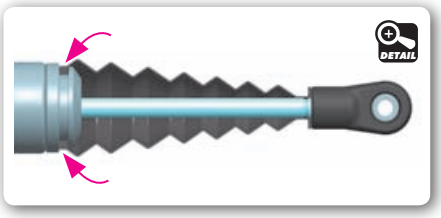
2x REAR SHOCKS

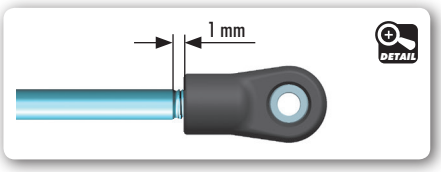


2x FRONT SHOCKS

2x REAR SHOCKS







DEFAULT SHOCK REBOUND SETTING 0% (LOW REBOUND)

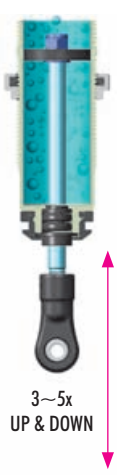
Follow the steps below to set the shock rebound to the default setting of 0%.

2x FRONT (SHORT)
Oil 550cSt

2x REAR (LONG)
Oil 600cSt

SET-UP BOOK
SHOCK OIL

❶ Extend the shock shaft completely. Fill the shock body with the shock oil. For the FRONT shocks (short) use 550cSt oil. For the REAR shocks (long) use 600cSt oil.

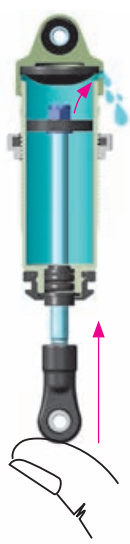


❷ Move the shock shaft up and down a few times to release the air bubbles trapped beneath the piston.

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

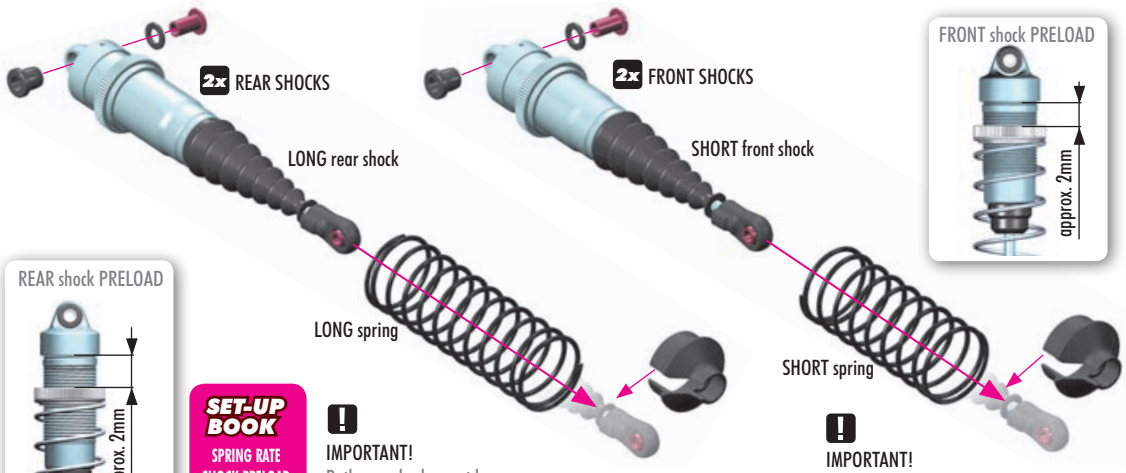
❹ Install the shock membrane into the groove in the upper shock cap.

❺ Gently place the shock cap assembly onto the filled shock body. Excess oil will spill from the shock. Screw the shock cap onto the body by only a few turns.



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

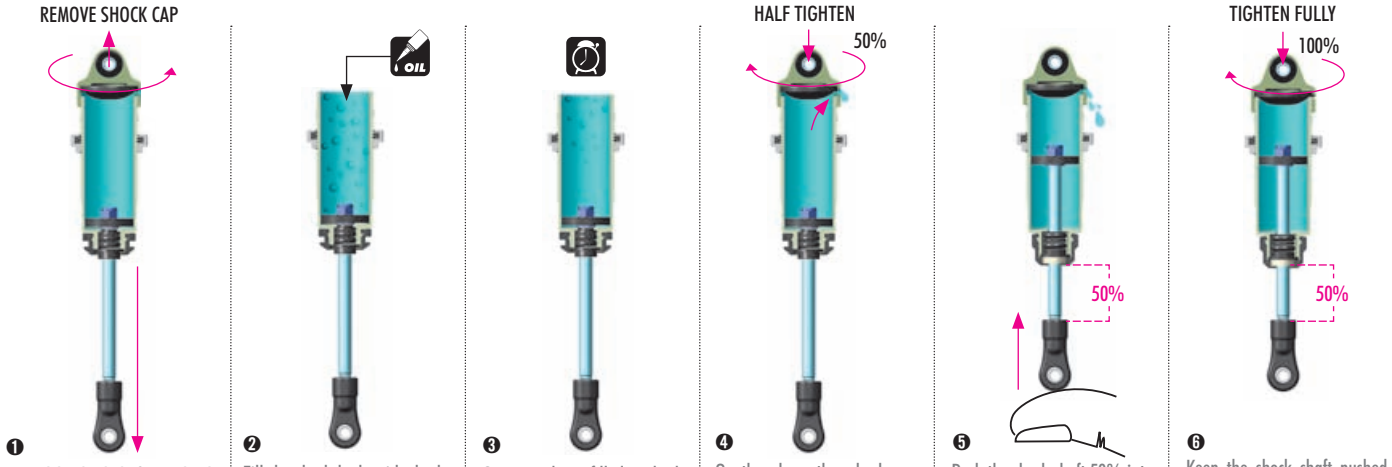
❼ Keep the shock shaft pushed in the shock body and tighten the shock cap completely.
The rebound will be at approximately 0%.



TIP ALTERNATE SHOCK REBOUND SETTING (50% AND 100%)

The default shock rebound setting is 0% (as described on page 40).
Alternatively, you may set the shock rebound setting to 50% or 100% as described below. Remove the shock springs before performing shock rebound adjustment.

SETTING THE SHOCK REBOUND TO 50% (MEDIUM REBOUND)



❶ Extend the shock shaft completely and remove the shock cap.

❷ Fill the shock body with shock oil up to the top. Make sure to use same viscosity shock oil as is in the shock.

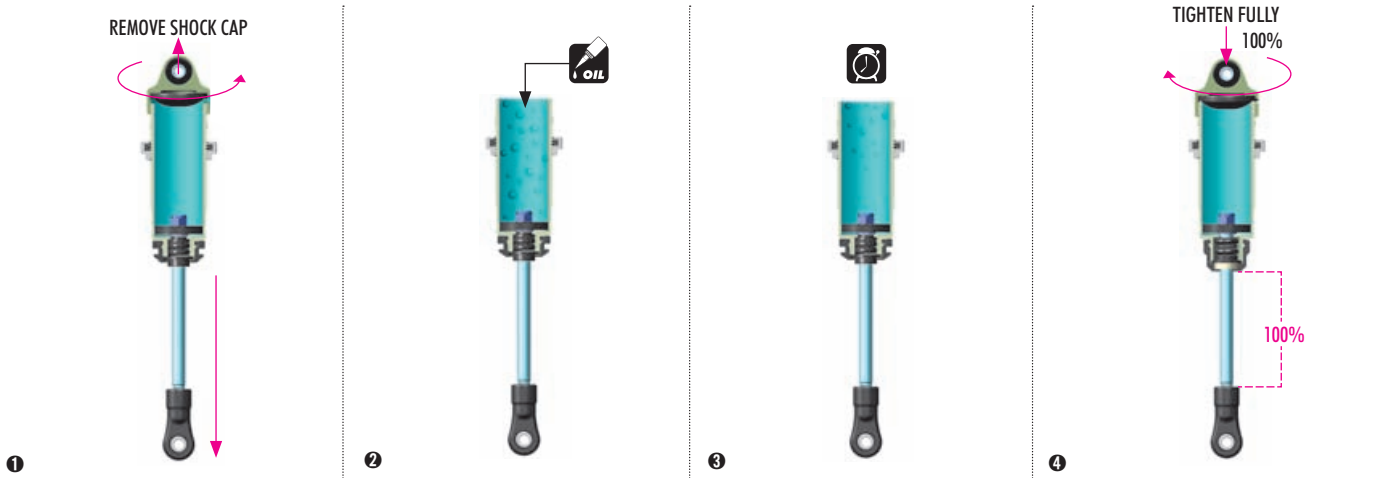
❸ Orient the filled shock vertically for several minutes with the shock shaft fully extended. The remaining air bubbles will release.

❹ Gently place the shock cap assembly onto the filled shock body. Excess oil will spill from the shock.

❺ Push the shock shaft 50% into the shock body. Excess oil will bleed thgrough the hole in the shock cap.

❻ Keep the shock shaft pushed 50% into the shock body and tighten the shock cap completely.
The rebound will be at approximately 50%.

SETTING THE SHOCK REBOUND TO 100% (HIGH REBOUND)



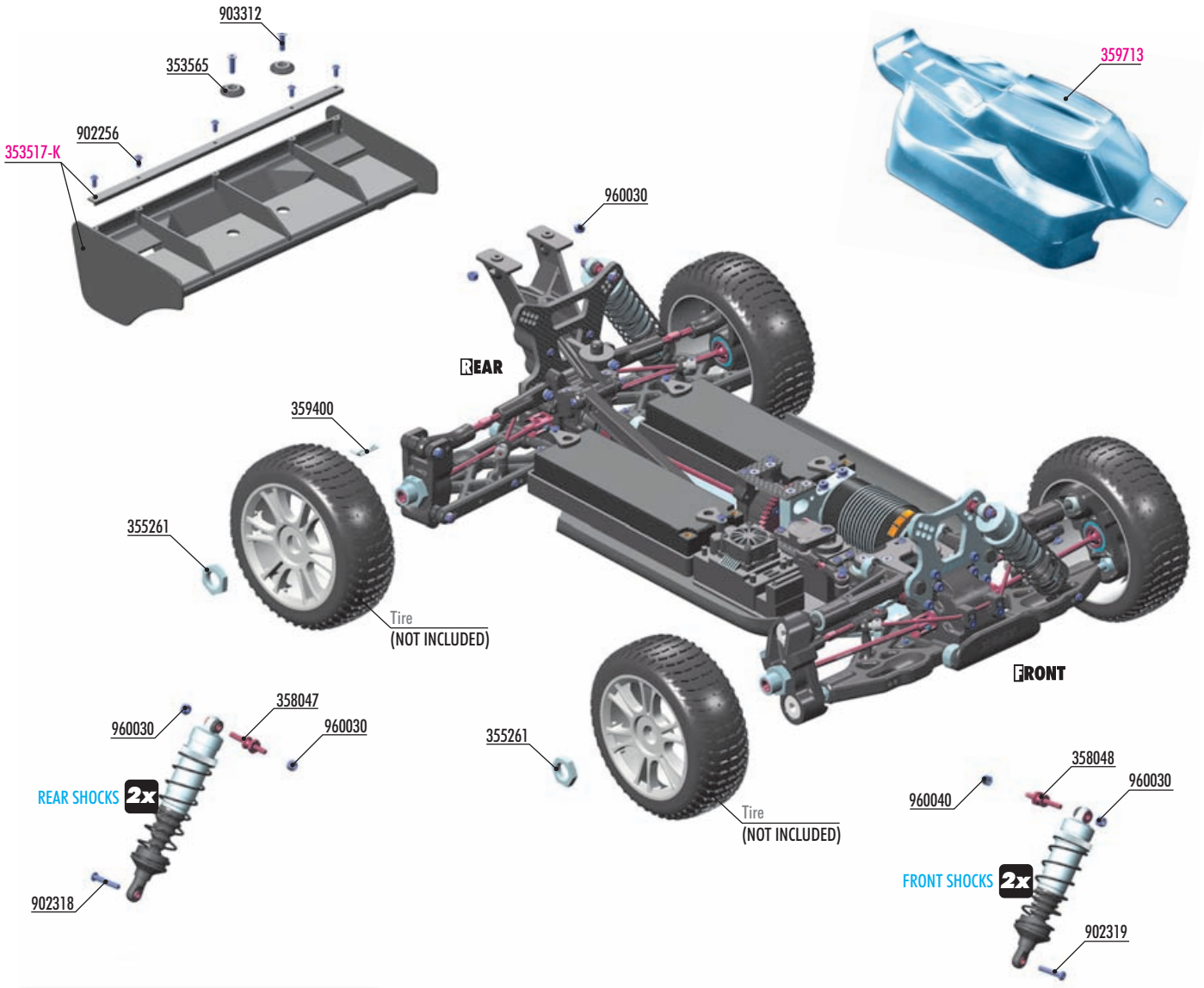
❶ Extend the shock shaft completely and remove the shock cap.

❷ Fill the shock body with shock oil up to the top. Make sure to use same viscosity shock oil as is in the shock.

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

❹ Gently place the shock cap assembly onto the filled shock body. Keep the shock shaft extended 100% from the shock body and tighten the shock cap completely. The rebound will be at approximately 100%.

12. FINAL ASSEMBLY



OPTION

XRAY STARBURST WHEELS		
#359808	Pink	OPTION
#359809	Yellow	OPTION

OPTION

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

OPTION

WINGS		
#353517-K	BLACK	INCLUDED
#353517	WHITE	OPTION
#353517-Y	YELLOW	OPTION
#353512	LEXAN®	OPTION

OPTION

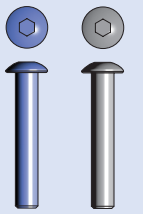
HUDY REAR WING SHIM		
#293561	SILVER	OPTION
#293561-O	ORANGE	OPTION
#293561-K	BLACK	OPTION
#353561	SILVER	OPTION

OPTION

XB8 BODIES		
#359711	HIGH-SPEED	OPTION
#359712	HIGH-SPEED LIGHTWEIGHT	OPTION
#359713	"EAZY"	INCLUDED
#359714	"EAZY" LIGHTWEIGHT	OPTION

BAG 10

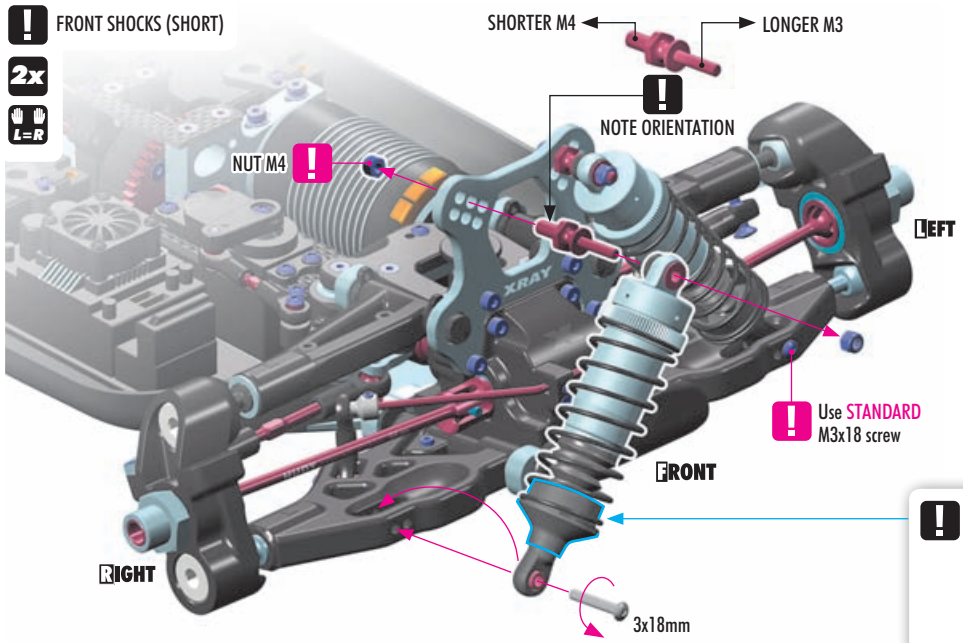
353565	COMPOSITE REAR WING SHIM - BLACK (2)
355261	WHEEL NUT - RIBBED - HARD COATED (2)
358047	STEEL SCREW SHOCK PIVOT BALL WITH HEX (2)
358048	STEEL M4/M3 UPPER SHOCK MOUNT STAND OFF WITH HEX (2)
359400	BODY CLIP (10)
902256	HEX SCREW SH M2.5x6 (10)
902318	HEX SCREW SH M3x18 (10)
902319	HEX SCREW SH M3x18 - LEFT THREAD (10)
903312	HEX SCREW SFH M3x12 (10)
960030	NUT M3 (10)
960040	NUT M4 (10)
353517-K	WICKERBILL REAR WING - BLACK
359713	XRAY XB8 / XB8E "EAZY" BODY



FRONT SHOCKS (SHORT)

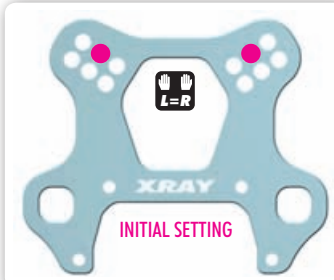
2x

L=R

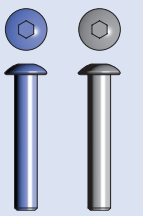


On the front right arm use the SILVER M3x18 screw - this screw has LEFT THREAD.

Shock cap
NOTE ORIENTATION



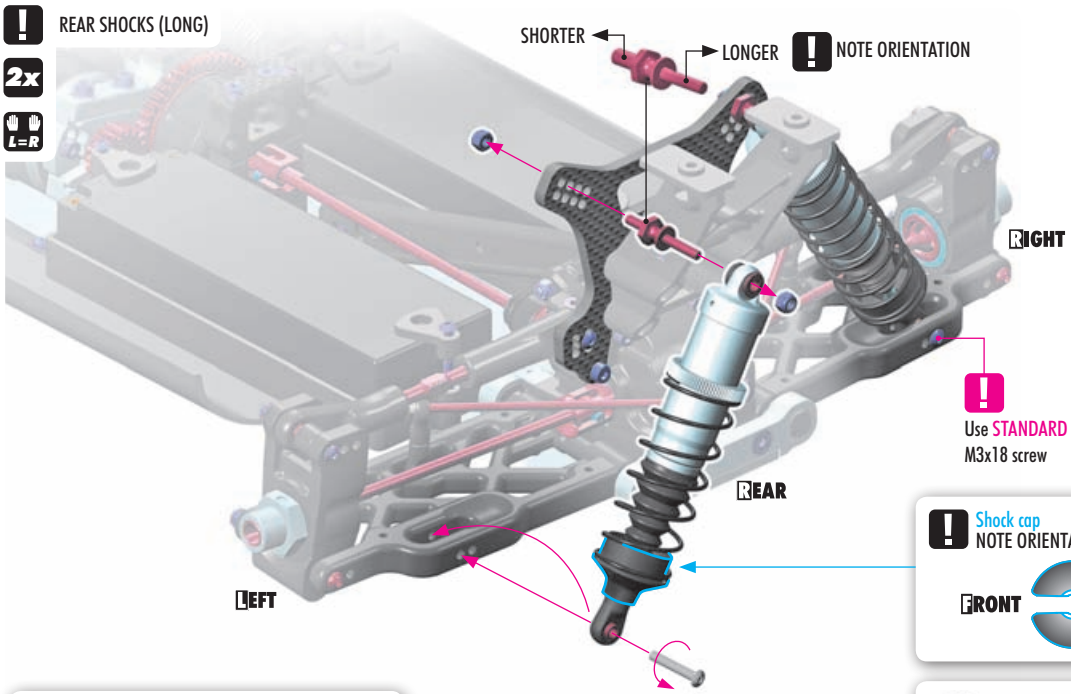
SET-UP BOOK
SHOCK ABSORBERS



REAR SHOCKS (LONG)

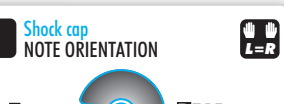
2x

L=R



On the rear left arm use the SILVER M3x18 screw - this screw has LEFT THREAD.

Shock cap
NOTE ORIENTATION



SET-UP BOOK
SHOCK ABSORBERS

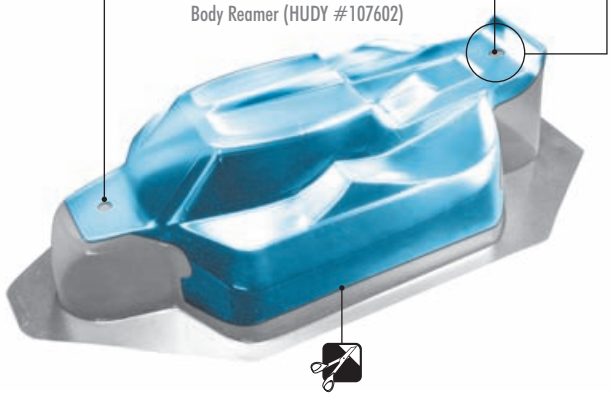
12. FINAL ASSEMBLY

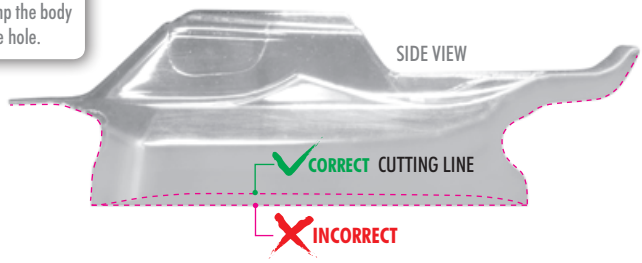
❶ Before cutting and making holes on the body, put the unpainted body on the chassis to confirm the mounting position and location for holes and cutouts.
❷ Before painting, wash the inside of the body with mild detergent, and then rinse and dry thoroughly.
❸ Mask all windows.
❹ Apply paint masks as appropriate.
❺ Paint the body using paints formulated for polycarbonate bodies.
❻ When the paint is dry, remove the masking.
❼ Carefully cut out the body using appropriate scissors or cutting tools.
❽ When you have finished cutting, peel off the external protective films.

Be sure to make this rear body mount hole oval so in the case of chassis flex after a big jump the body mount will not tear up the hole.

TIP To reinforce the body or to fix broken body use #106281 HUDY BODY FIX.

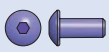
Body Reamer (HUDY #107602)





OPTION

XB8 BODIES		
#359711	HIGH-SPEED	OPTION
#359712	HIGH-SPEED LIGHTWEIGHT	OPTION
#359713	"EAZY"	INCLUDED
#359714	"EAZY" LIGHTWEIGHT	OPTION

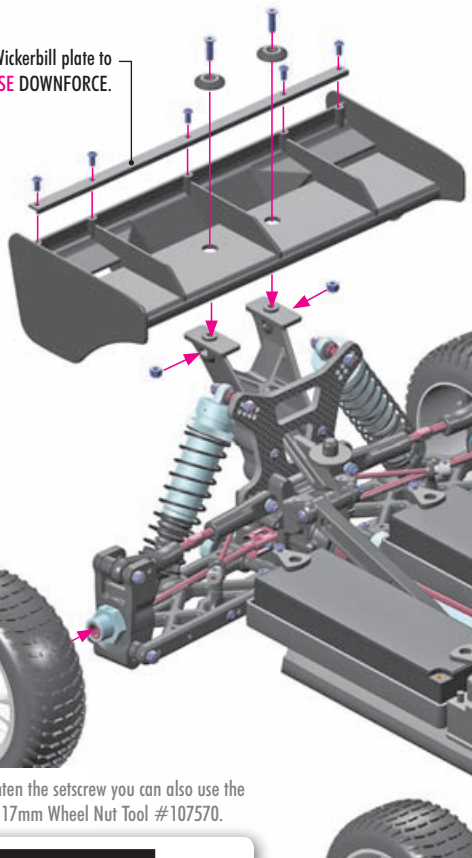


902256
SH M2.5x6

903312
SFH M3x12

960030
N M3

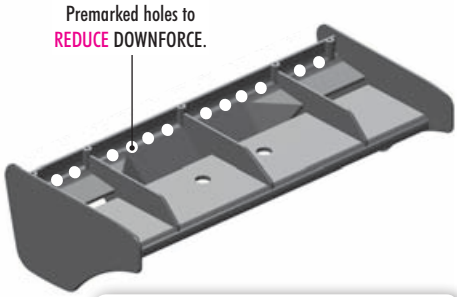
Wickerbill plate to INCREASE DOWNFORCE.



TIP 4x To tighten the setscrew you can also use the HUDY 17mm Wheel Nut Tool #107570.

#107602 HUDY Reamer for Body 0-18mm + Cover - Large
#107601 HUDY Reamer for Body 0-9mm + Cover - Small

Premarked holes to REDUCE DOWNFORCE.



OPTION

WINGS		
#353517-K	BLACK	INCLUDED
#353517	WHITE	OPTION
#353517-Y	YELLOW	OPTION
#353512	LEXAN®	OPTION

OPTION

HUDY REAR WING SHIM		
#293561	SILVER	OPTION
#293561-O	ORANGE	OPTION
#293561-K	BLACK	OPTION
#353561	SILVER	OPTION

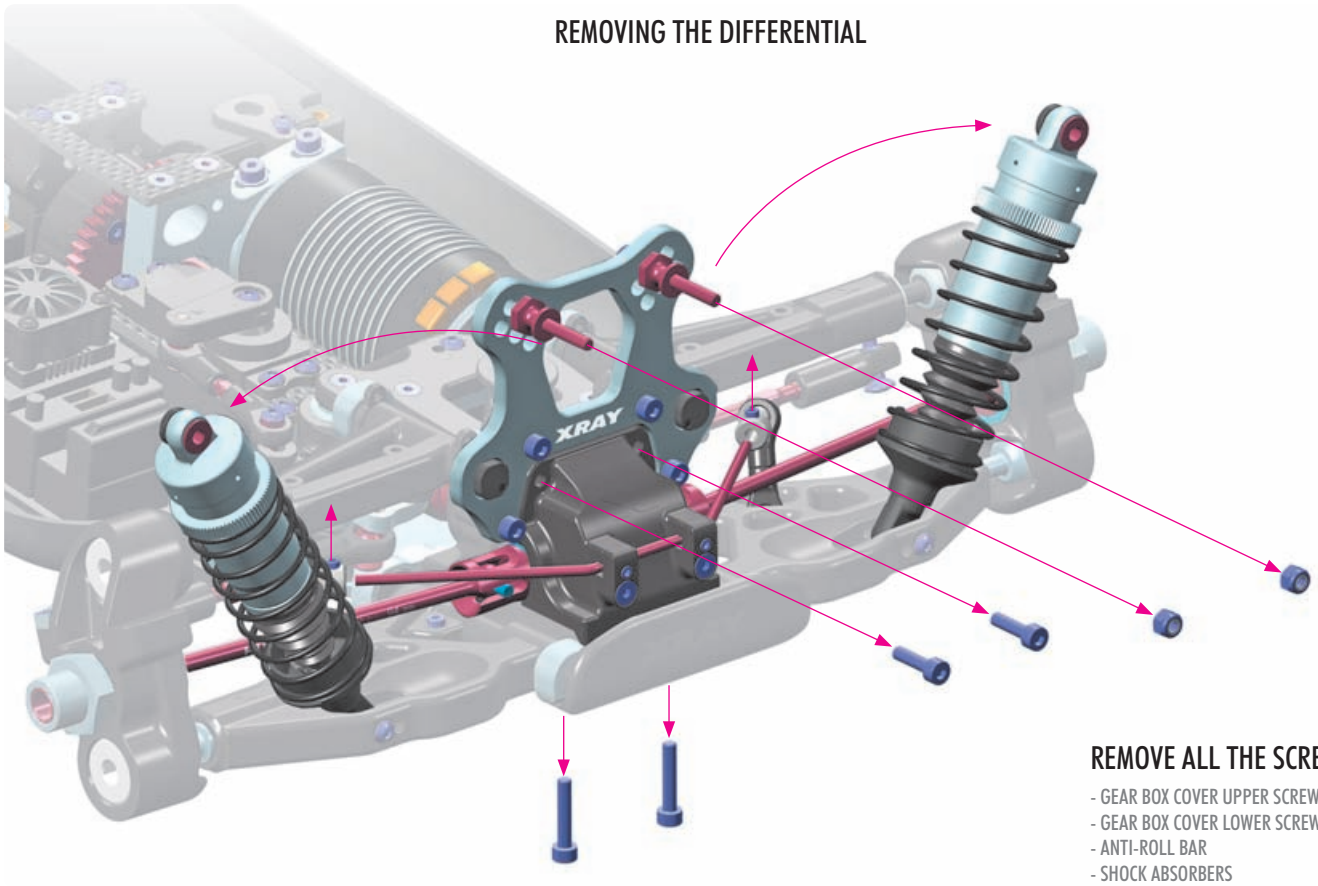
OPTION

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

OPTION

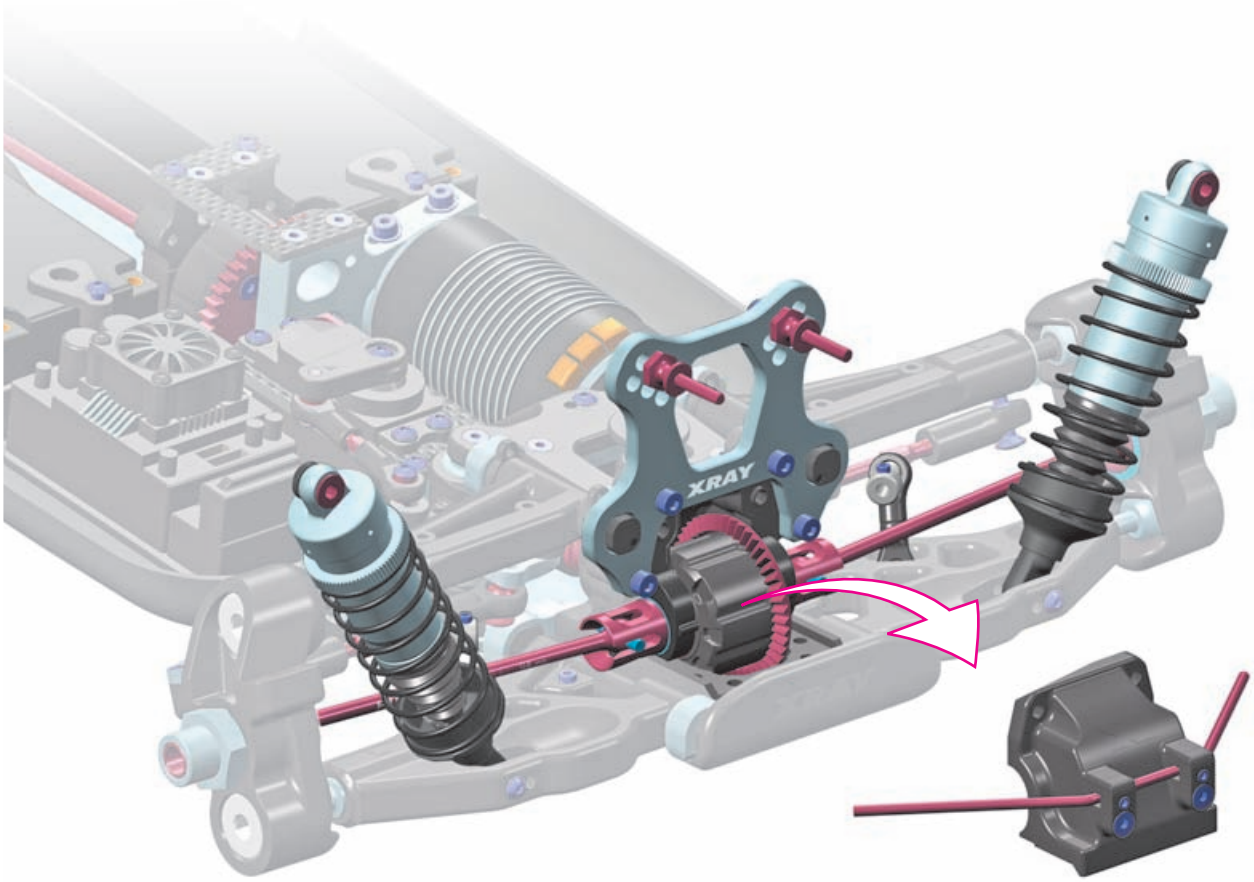
XRAY STARBURST WHEELS		
#359808	Pink	OPTION
#359809	Yellow	OPTION

REMOVING THE DIFFERENTIAL

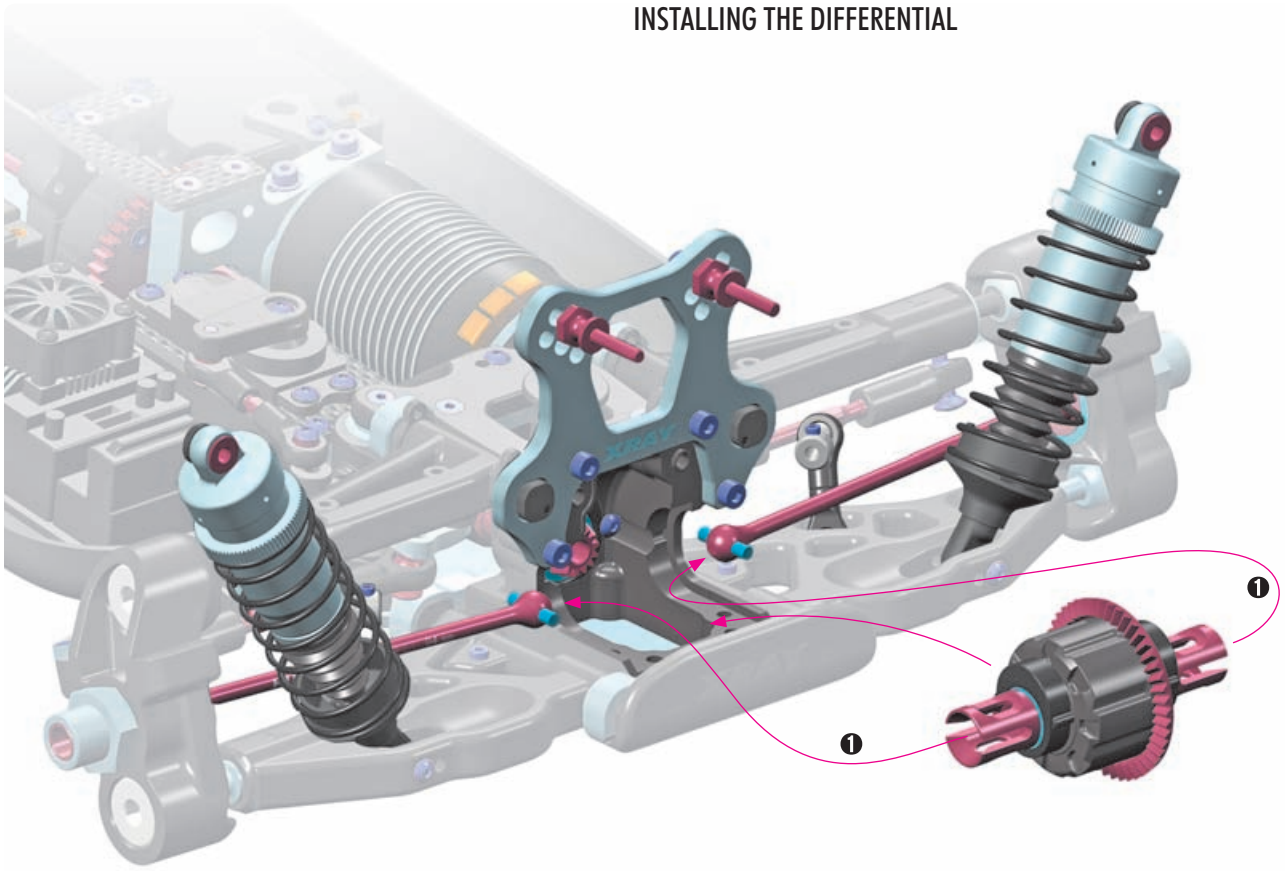


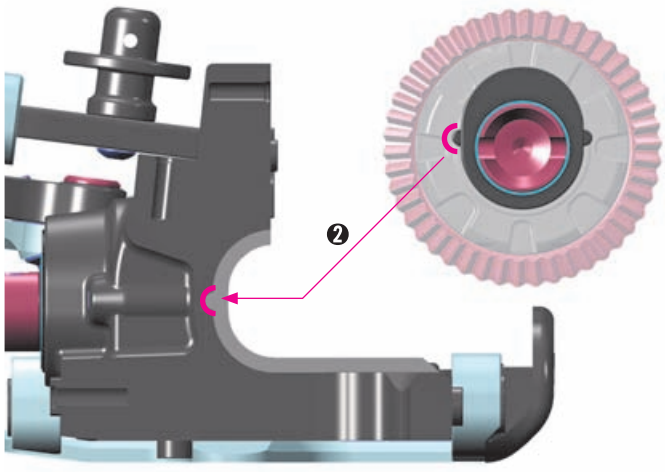
REMOVE ALL THE SCREWS

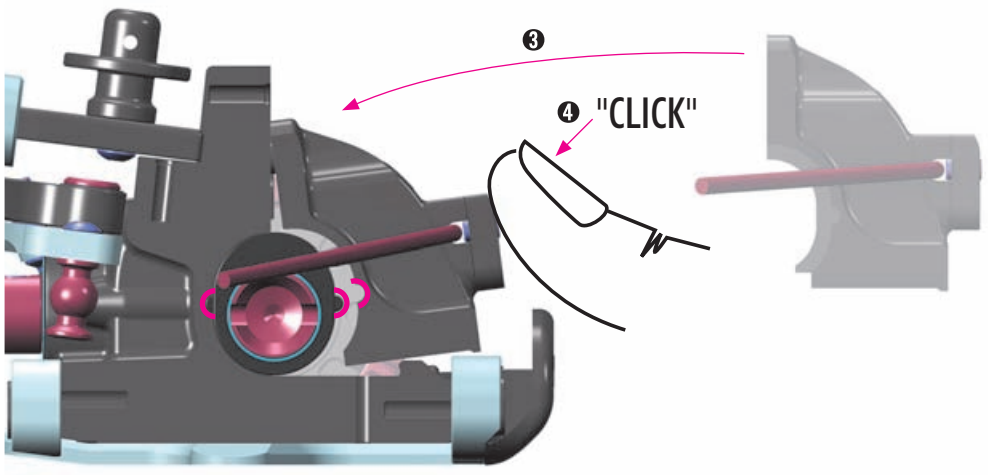
- GEAR BOX COVER UPPER SCREWS
- GEAR BOX COVER LOWER SCREWS
- ANTI-ROLL BAR
- SHOCK ABSORBERS



INSTALLING THE DIFFERENTIAL





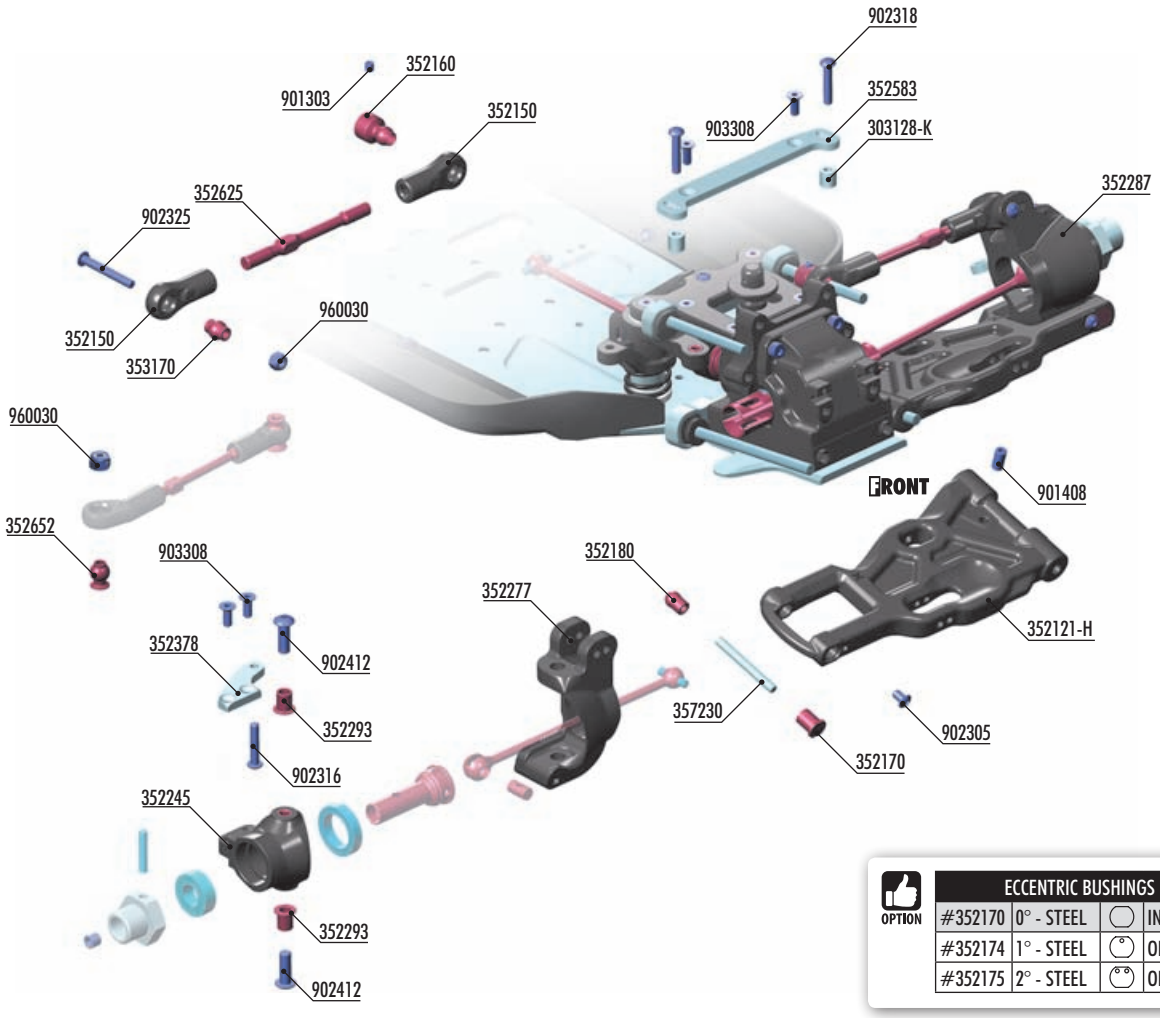


❺ TIGHTEN ALL THE SCREWS

- GEAR BOX COVER UPPER SCREWS
- GEAR BOX COVER LOWER SCREWS
- ANTI-ROLL BAR
- SHOCK ABSORBERS

#350910 FRONT C-HUB SUSPENSION - SET

OPTION

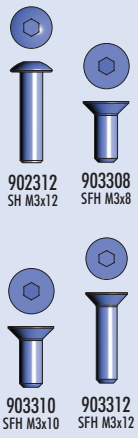


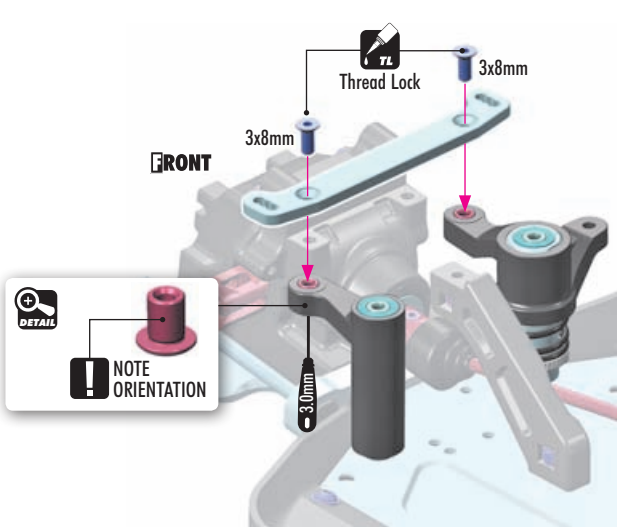
OPTION	ECCENTRIC BUSHINGS		
#352170	0° - STEEL	◯	INCLUDED
#352174	1° - STEEL	◯	OPTION
#352175	2° - STEEL	◯	OPTION

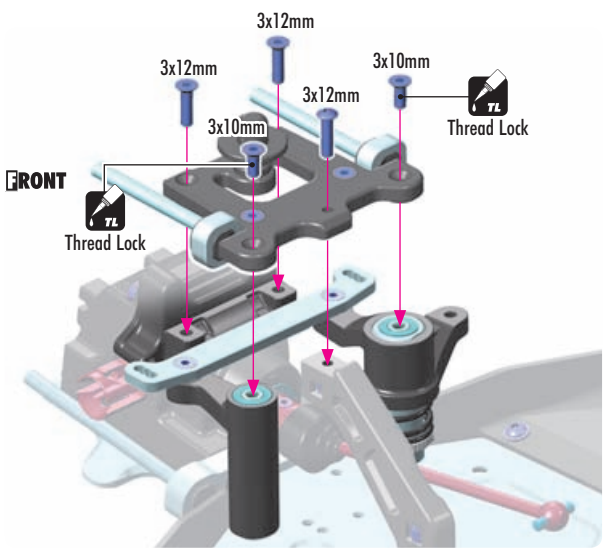
303128-K ALU SHIM 3x6x6MM (10)
352121-H COMPOSITE FRONT LOWER SUSPENSION ARM - HARD
352150 FRONT UPPER ARM BALL JOINT (2)
352160 STEEL MOUNTING BALL 6.8MM (2)
352170 STEEL ECCENTRIC BUSHING 0° (2)
352180 BALL MOUNT (2)
352245 STEERING BLOCK
352277 COMPOSITE CASTER BLOCK 16° RIGHT
352287 COMPOSITE CASTER BLOCK 16° LEFT

352293 STEEL BUSHING FOR CASTER BLOCK (2)
352378 ALU STEERING PLATE - SWISS 7075 T6 (L+R)
352583 ALU STEERING PLATE - SWISS 7075 T6
352625 ADJ. TURNBUCKLE M5 L/R 46 MM (2)
352652 BALL STUD 6.8MM (4)
353170 PIVOT BALL 6.8 (4)
357230 FRONT LOWER OUTER PIVOT PIN (2)

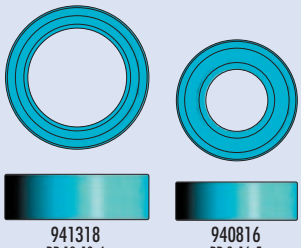
901303 HEX SCREW SB M3x3 (10)
901408 HEX SCREW SB M4x8 (10)
902305 HEX SCREW SH M3x5 (10)
902316 HEX SCREW SH M3x16 (10)
902318 HEX SCREW SH M3x18 (10)
902325 HEX SCREW SH M3x25 (10)
902412 HEX SCREW SH M4x12 (10)
903308 HEX SCREW SFH M3x8 (10)
960030 NUT M3 (10)

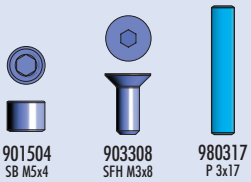


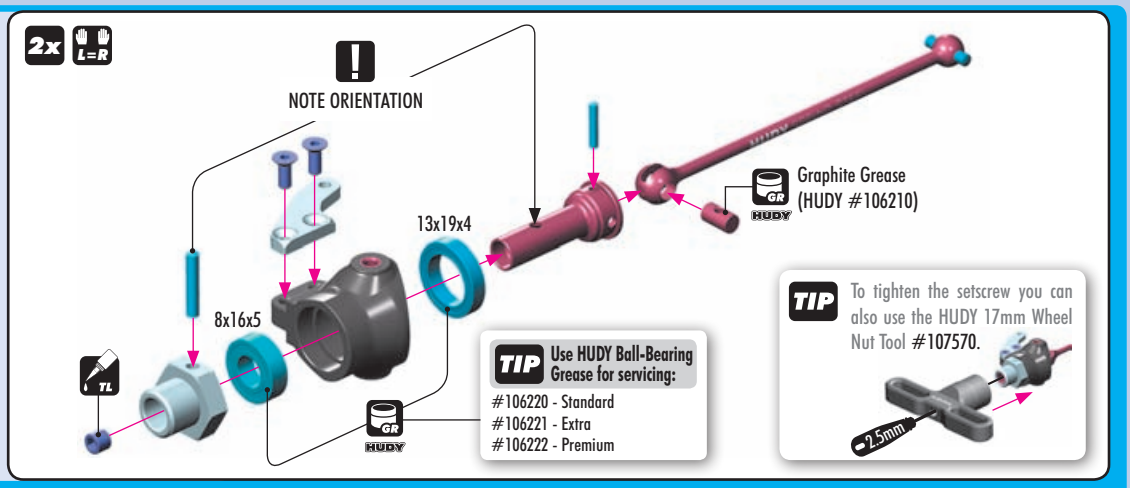


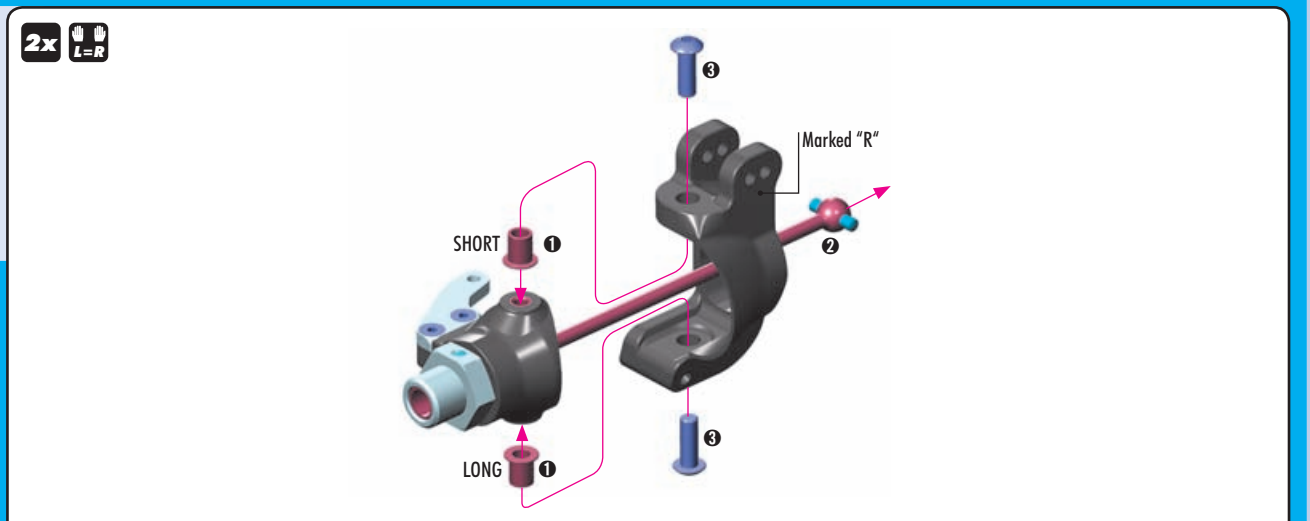


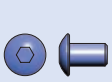
FRONT C-HUB SUSPENSION

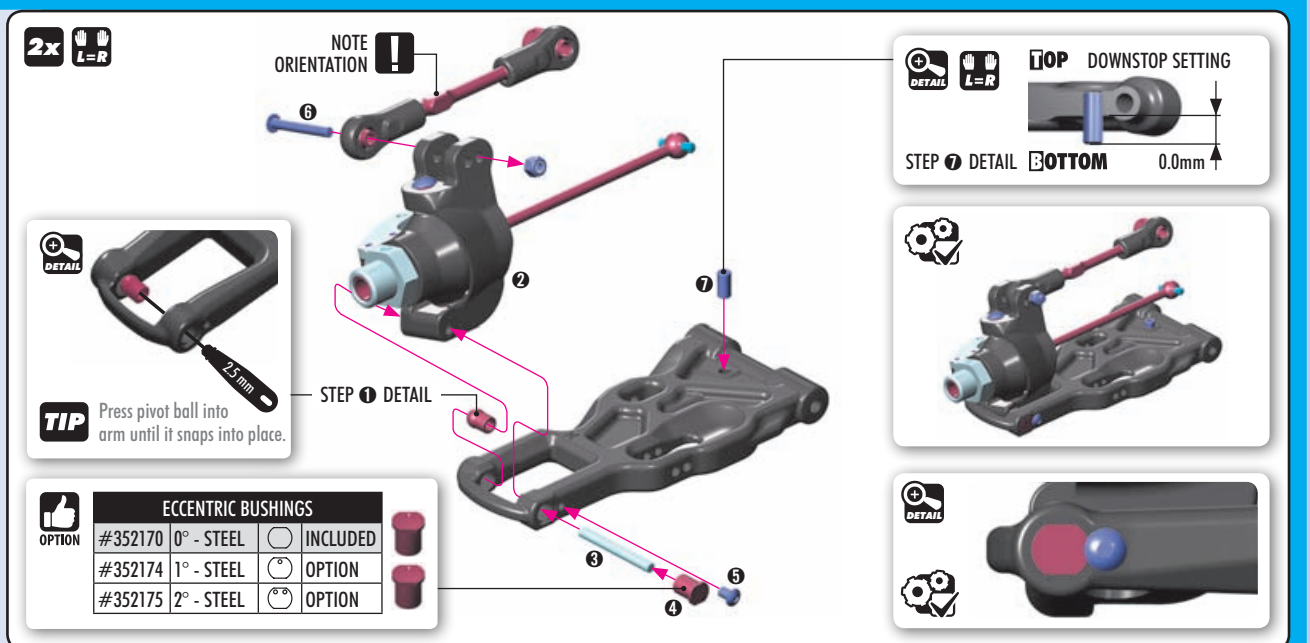






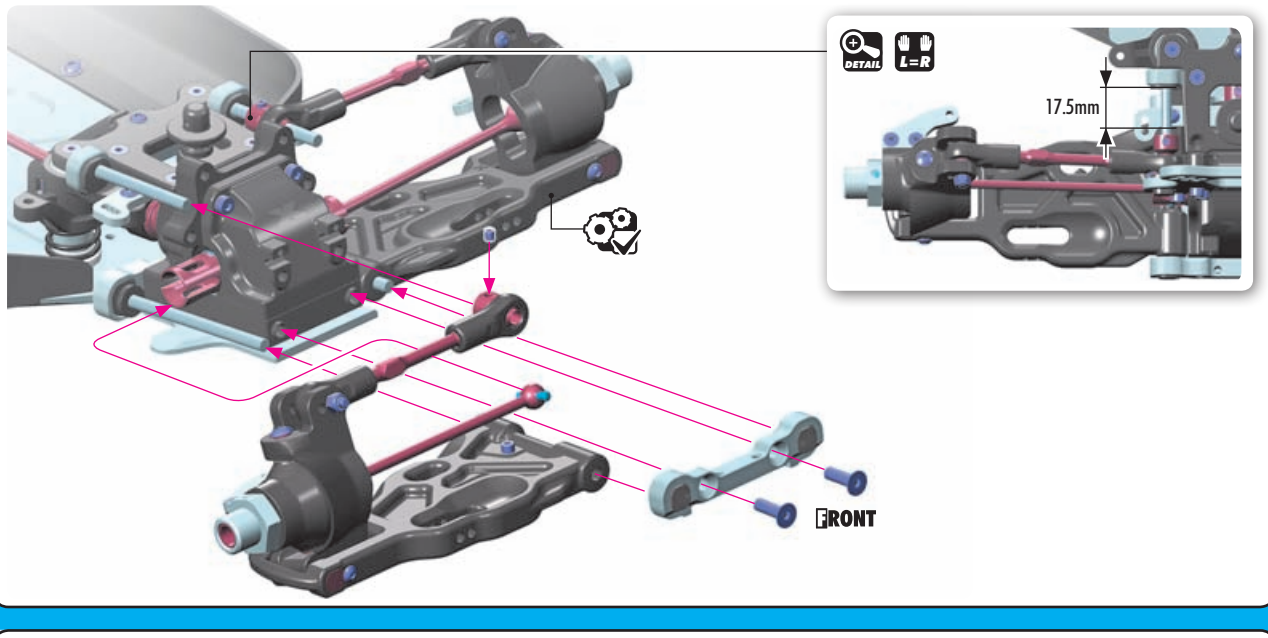




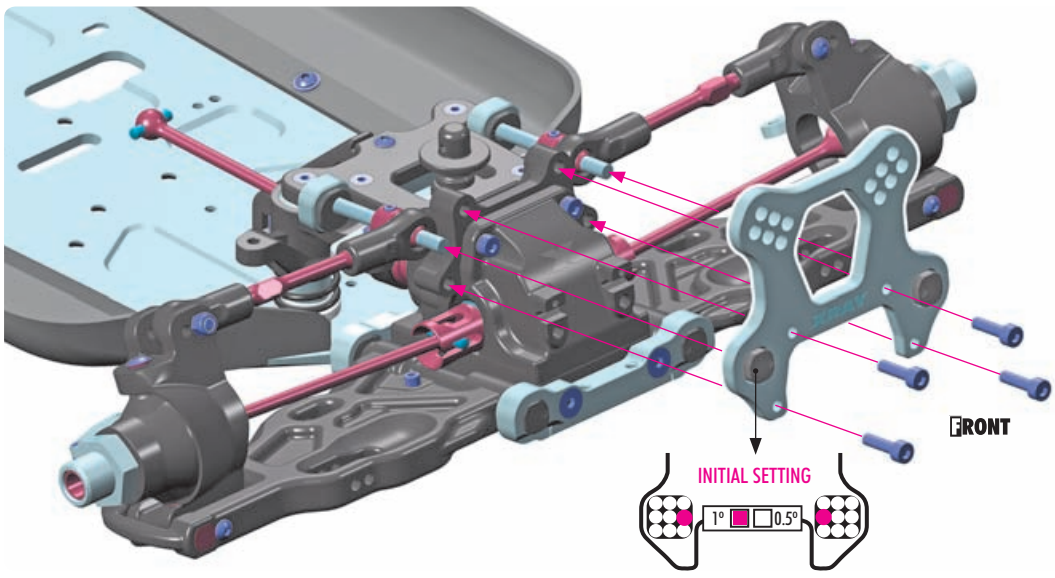


901303
SB M3x3

903414
SFH M4x14



908312
SCH M3x12

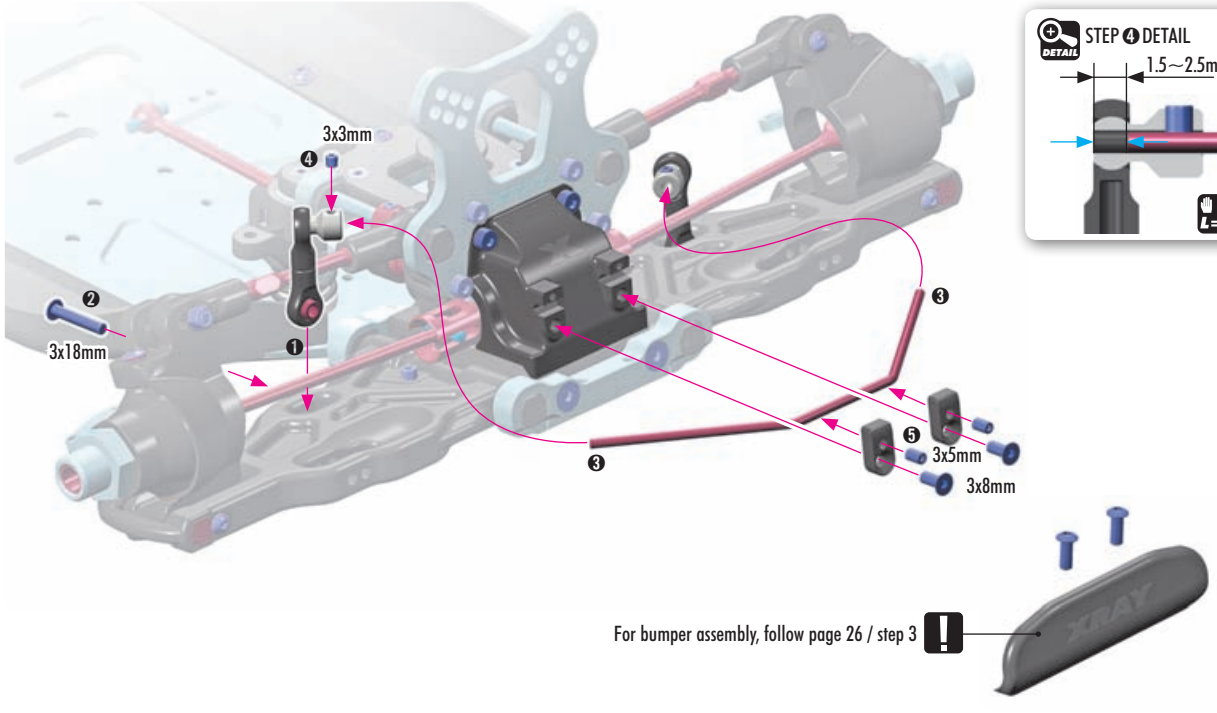


901303
SB M3x3

901305
SB M3x5

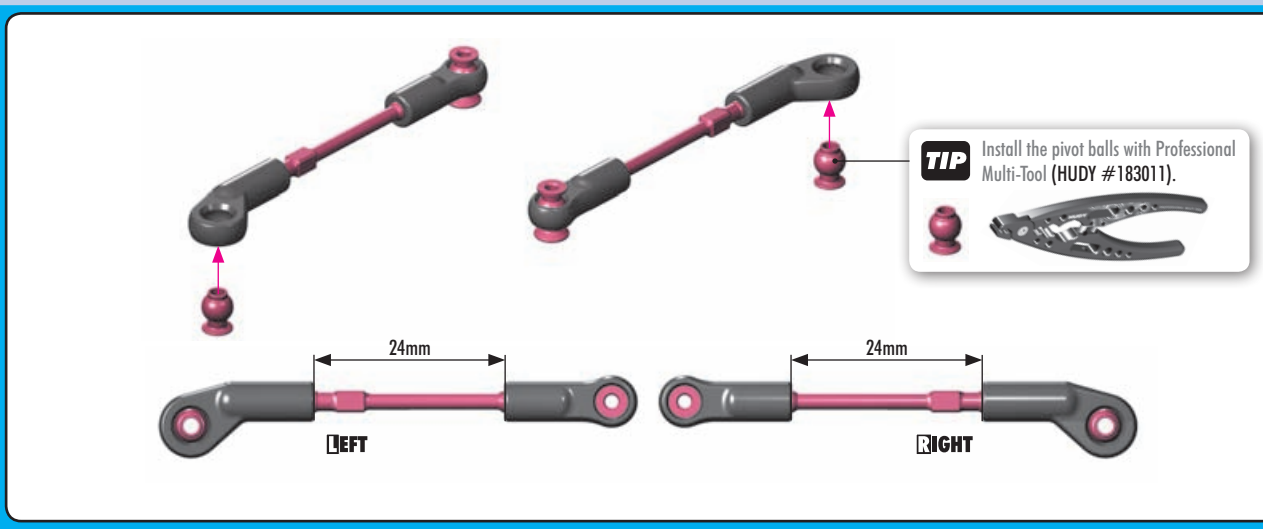
902318
SH M3x18

903308
SFH M3x8



For bumper assembly, follow page 26 / step 3

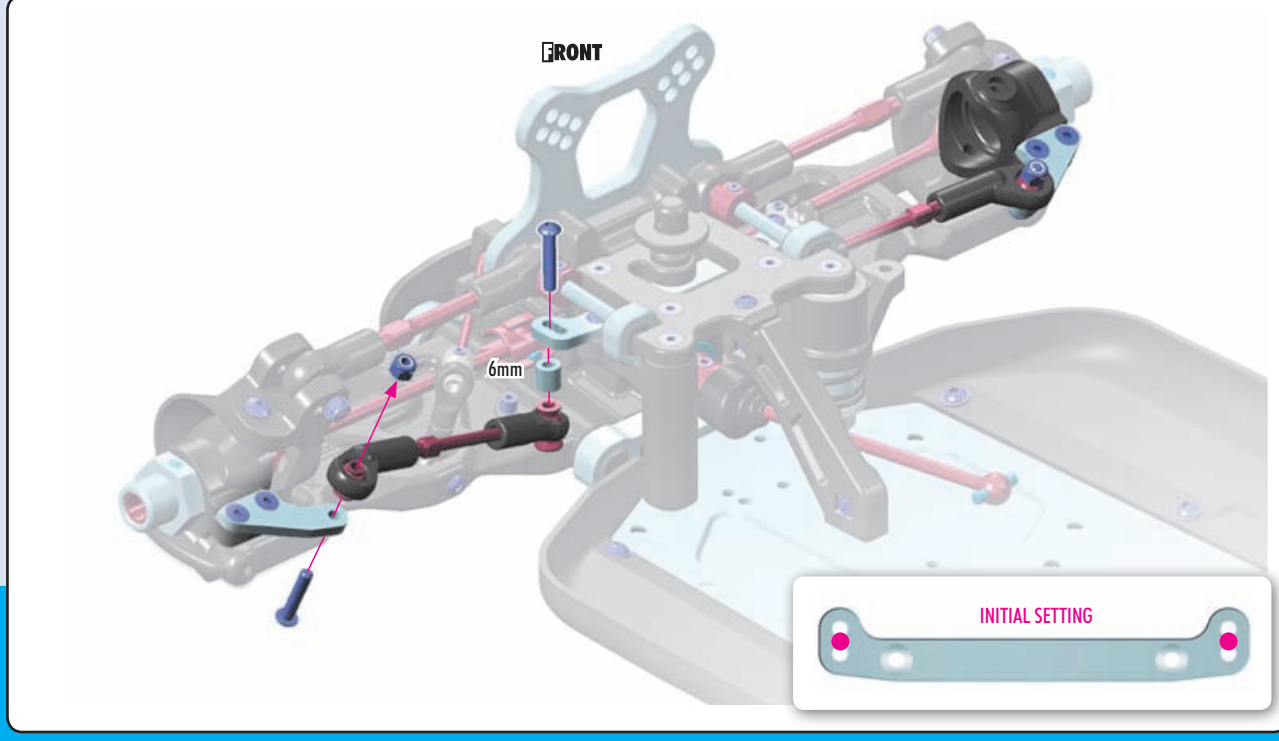
FRONT C-HUB SUSPENSION



303128-K
SHIM 3x6x6

902318
SH M3x18

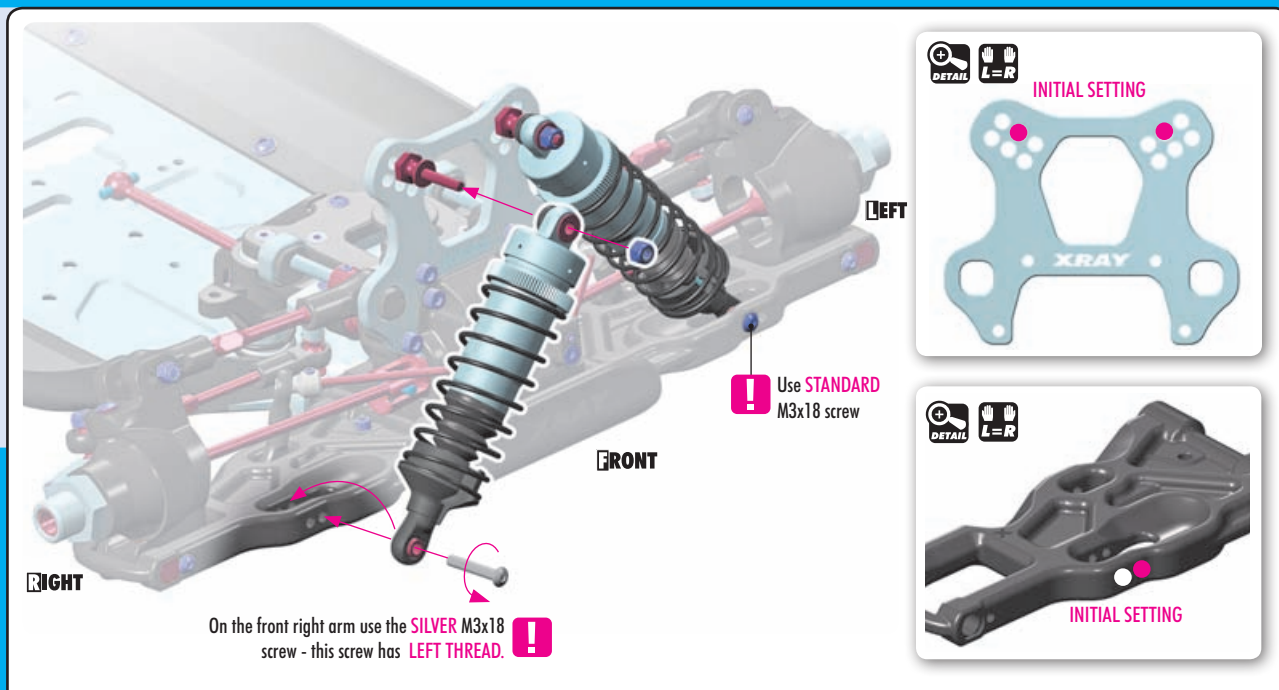
960030
N M3



902318
SH M3x18

902319
SH M3x18
LEFT thread

960030
N M3



SHOCK MAINTENANCE

The most important maintenance task for keeping consistent shock performance is refilling and bleeding them correctly. If built correctly, it will NOT be necessary to re-build them often. Replacing warped/hard rubber bladders and o-rings, scarred piston rods, or shaved/split/loose composite upper and lower ball joints are also important.

- For club racing, it is recommended to check the shocks for air inside before each race and only re-fill and bleed them if necessary. Before each race day, make sure you take the spring off of each shock, hold it up to your ear, and quickly compress the shock rod fully into the body while listening for any air making a "whistling" or "squishy" sound as it passes through the piston holes. If you hear any air, refill and bleed your shocks. For high-competition racing, it is recommended that the shocks be re-filled and bled before a large event.
- If building or pairing new shocks, always make sure they are the same length using a shock length measuring tool and adjust the lower ball joints as needed.
- If installing new rubber bladders, carefully trim the thin excess rubber from the edges of their lips. Curved body scissors work the best.
- Regularly inspect the amount of dirt on the felt protector in the shocks (if present) and regularly replace with a new one.
- During regular shock operation, oil naturally gets on the shock shaft and drop-by-drop slightly gets out of the shock body. Shocks should be inspected regularly after each race, and oil replaced as required.

BEARING MAINTENANCE

Ball-bearings in an off-road car or truggy must be properly maintained for smooth operation and long lifespan.

Typically, the ball-bearings included in new cars are greased for highest lifespan and as such the drivetrain may not seem to be as free as with lightly-oiled ball-bearings. However, when the car is run the ball-bearings will become more free and the drivetrain will become very efficient.

There are several types of bearings discussed here: bearings which already come greased from the factory, bearings which must be lubricated using the HUDY Bearing Grease, and then there are also bearings in the steering system which need to be lubricated with HUDY Bearing Oil.

The following procedures are recommended to clean all of the bearings in your off-road car or truggy. For high-competition racing, we recommended doing this every 3-4 weeks, or before a major race.

1. Remove the seals on both sides of the bearing (if present). If the seals bend a little and you can see a kink, carefully flatten the kink out by hand.
2. Spray the seals with motor cleaner and blow dry with compressed air.
3. Spray the bearing on both sides with motor cleaner.
4. Spin the bearing while it is still wet to dislodge any particles with the cleaner.
5. Spray the bearing on both sides again.
6. Blow both sides of the bearing dry with compressed air to make sure particles come out.
7. Hold the inner part of the bearing with my left thumb/forefinger and spin it to make sure it spins free without any abnormal vibrations or sounds.
8. Place one drop of bearing oil into each side of the bearing.
9. Replace both seals at the same time by lining them up on each side of the bearing and lightly pressing them in all the way around the bearings circumference with your thumb and forefinger. DO NOT press too hard or use any type of tool, such as a wrench tip, to push the blue seals in as they will push in too far, bend and cause drag.

If you spin test the bearing after you have re-oiled and sealed it, it will NOT spin freely for an extended period of time. The lightest of oils may allow it to spin for 1-2 seconds. This is normal and once you have mounted the bearings in the car again, the drive train will spin freely.

Make sure you use a motor cleaner that does not leave a residue after it dries as this may cause drag and wear in the bearings.

CLUTCH BEARINGS

To prolong the lifespan of the clutch bearings, they must be regularly cleaned and lubricated (preferably after each run) using a high-quality grease such as HUDY Bearing Grease. However, after some time the clutch bearings must be replaced with new ones.

RECOMMENDED PRODUCTS

- Use HUDY Bearing Grease to regularly lubricate grease-bearing ball-bearings.
- Use HUDY Bearing Oil to lubricate the bearings of the steering system.
- Use HUDY Bearing Grease to regularly lubricate the clutch bearings.

HUDY #106230

HUDY #106213

HUDY #106220

HUDY #106222

HUDY #106221

SET-UP SHEET

SET-UP VER.01 ©XRAY

XRAY XB8E'23 PIVOT BALL

RACE

TRACK

NAME DATE

TEMPERATURE AIR TEMPERATURE TRACK

LAPS	FINAL POSITION	BEST LAPTIME	RACE LENGTH
		/sec	/min

TRACKS

SIZE ☐ OPEN ☐ MEDIUM ☐ TIGHT

TRACTION ☐ LOW ☐ MEDIUM ☐ HIGH

SURFACE ☐ SMOOTH ☐ MEDIUM ☐ BUMPY

TYPE ☐ HARD PACKED ☐ SOFT DIRT ☐ CLAY ☐ BLUE GROVE ☐ ASTRO TURF ☐ GRASS

CONDITION ☐ DRY ☐ DUSTY ☐ WET ☐ MUD

DIFFERENTIAL

	FRONT	CENTER	REAR	
CASE MATERIAL				CASE MATERIAL
OIL				OIL
CROWN GEAR				CROWN GEAR

GEARING

MOTOR PINION /T /T SPUR GEAR

SHOCKS

FRONT		REAR
	TYPE	
	SPRINGS	
	MEMBRANE	
/cSt	OIL	/cSt

PISTONS

☐ 6 HOLES	☐	1.1 mm	☐	6 HOLES ☐	
☐ 8 HOLES	☐	1.2 mm	☐	8 HOLES ☐	
☐ 10 HOLES	☐	1.3 mm	☐	10 HOLES ☐	
☐	☐	1.4 mm	☐	☐	
☐		OTHER		☐	

VALVE PISTONS

5+2 HOLES ☐	1.5 mm	☐	5+2 HOLES	
6+2 HOLES ☐	1.3 mm	☐	6+2 HOLES	
	1.4 mm			
8+2 HOLES ☐	1.2 mm	☐	8+2 HOLES	
	1.3 mm			

ANTI-ROLL BAR

FRONT	THICKNESS	REAR
/mm		/mm

TIRES

FRONT		REAR
	BRAND	
	COMPOUND	
	INSERTS	
	WHEELS	

ELECTRONICS

MOTOR	
SPEEDO	
BATTERY TYPE	

☐ STANDARD BATTERY ☐ STANDARD BATTERY

FRONT ☐ SHORT BATTERY ☐ SHORT BATTERY REAR

BODY OTHER

EAZY ☐ EAZY LIGHT ☐

TOTAL WEIGHT /g

FRONT

STEERING BLOCK: MEDIUM ☐ HARD ☐ GRAPHITE ☐

UPPER ARM SHIM /mm: 0 ☐ 1 ☐ 1.5 ☐ 2 ☐

SHOCK TOWERS: FRONT ALU ☐ ☐ GRAPHITE ☐ ☐ REAR ALU

UPPER ARM WING: NONE ☐ LEXAN ☐ CARBON ☐

UPPER SHOCK POSITION

PIVOT BALLS: UP STEEL ☐ ☐ ALU; DOWN STEEL ☐ ☐ ALU

OFFSET: 0 ☐ +1 ☐ +2 ☐

PIVOT NUT: ALU ☐ BRASS ☐

FRONT LOWER SHOCK POSITION

FRONT DROOP

MEASURE UNDER WHEEL AXLE

#107717 GAUGE

LOWER ARM SHIM: 0 ☐ 1mm ☐ 2mm ☐

#107703 SUPPORT BLOCKS

REAR

ANTI-ROLL BAR 1 2

M ☐ H ☐ XH ☐ G ☐ FLAT ☐ LSM ☐

UPRIGHT: MEDIUM ☐ HARD ☐ GRAPHITE ☐ ALU ☐

UPRIGHT ROLL CENTER 1 2 3

REAR ROLL CENTER

LOWER ROLL CENTER

REAR DROOP

#107717 GAUGE

MEASURE UNDER WHEEL AXLE

OFFSET: 0 ☐ +1 ☐ +2 ☐

FRONT

FRONT: 1° ☐ ☐ 0.5°

UPPER ROLL CENTER

1° ☐ ☐ 0.5°

STEERING BLOCK

CENTER

TRAILING

FF

FR

FF 1° ☐ ☐ 0.5°

FR 1° ☐ ☐ 0.5°

INCREASE DONFORCE

YES ☐ WICKERBILL PLATE ☐ NO

Ø REDUCE DONFORCE CUT OUT HOLES

CASTER SHIM: 0 ☐ 1.0 ☐ 1.0 ☐ 2.0 ☐

UPPER ARM POSITION

BUMP STEER SHIM: STEERING PLATE /mm; STEERING BLOCK /mm

SHIMS PLACE ALWAYS UNDER

WHEELBASE SHIM POSITION: 0mm ☐ 2mm ☐ 4mm ☐

SHIMS BEHIND FRONT ARM

REAR

REAR WING: COMPOSITE ☐ LEXAN ☐ OTHER ☐; FRONT ☐ MIDDLE ☐ REAR ☐

GRAPHITE BRACE: WITHOUT ☐ 1-PIECE ☐ 2-PIECES ☐

WING HOLDER: FRONT ☐ REAR ☐

RF

RR

WHEELBASE SHIM POSITION: 0mm ☐ 2mm ☐ 4mm ☐

SHIMS IN FRONT OF REAR ARM

RF 1° ☐ ☐ 0.5°

RR 1° ☐ ☐ 0.5°

FRONT LOWER ROLL CENTER REAR

ECCENTRIC BUSHINGS

FRONT

FRONT TOE OUT

STEERING PLATE: 1 DOTS ☐ 2 DOTS ☐

SIDE GUARD: SOFT ☐ MEDIUM ☐ GRAPHITE ☐

WHEELBASE: 0mm ☐ 1mm ☐ 2mm ☐ 3mm ☐ 4mm ☐

SHIMS IN FRONT OF UPRIGHT

#355215 ADJ. DRIVE AXLE

SERVO SAVER: TIGHT ☐ MEDIUM ☐ SOFT ☐

FRONT DRIVE SHAFT: CVD ☐ UNIVERSAL ☐; LENGTH /mm

ACKERMANN POSITION

TOP DECK: COMPOSITE ☐ GRAPHITE ☐

DRIVE SHAFT: CVD ☐ DOGBONE ☐

REAR

REAR TOE IN

GRAPHITE BRACE: YES ☐ ☐ NO

REAR DRIVE SHAFT: CVD ☐ UNIVERSAL ☐; LENGTH /mm

FRONT ☐ BULKHEADS ☐ REAR

DRIVE SHAFT: CVD ☐ DOGBONE ☐

FRONT

FRONT CAMBER

/mm FULL TRAVEL SHOCKS LENGTH /mm

REAR CAMBER

LENGTH mm

LENGTH /mm

UPPER ARM: SOFT ☐ MEDIUM ☐ GRAPHITE ☐

FRONT DIFF HEIGHT

REAR DIFF HEIGHT

LOWER ARM: SOFT ☐ MEDIUM ☐ GRAPHITE ☐

RIDE HEIGHT /mm

#107717 RIDE HEIGHT GAUGE

/mm RIDE HEIGHT

SET-UP SHEET

SET-UP VER.01 ©XRAY

XRAY XB8E'23 C-HUB

RACE

TRACK

NAME DATE

TEMPERATURE AIR TEMPERATURE TRACK

LAPS	FINAL POSITION	BEST LAPTIME	RACE LENGTH
		/sec	/min

TRACKS

SIZE ☐ OPEN ☐ MEDIUM ☐ TIGHT

TRACTION ☐ LOW ☐ MEDIUM ☐ HIGH

SURFACE ☐ SMOOTH ☐ MEDIUM ☐ BUMPY

TYPE ☐ HARD PACKED ☐ SOFT DIRT ☐ CLAY ☐ BLUE GROVE ☐ ASTRO TURF ☐ GRASS

CONDITION ☐ DRY ☐ DUSTY ☐ WET ☐ MUD

DIFFERENTIAL

	FRONT	CENTER	REAR	
CASE MATERIAL				CASE MATERIAL
OIL				OIL
CROWN GEAR				CROWN GEAR

GEARING

MOTOR PINION /T /T SPUR GEAR

SHOCKS

FRONT		REAR
	TYPE	
	SPRINGS	
	MEMBRANE	
/cSt	OIL	/cSt

PISTONS

☐ 6 HOLES	☐	1.1 mm	☐	6 HOLES ☐	
☐ 8 HOLES	☐	1.2 mm	☐	8 HOLES ☐	
☐ 10 HOLES	☐	1.3 mm	☐	10 HOLES ☐	
	☐	1.4 mm	☐		
☐	OTHER			☐	

VALVE PISTONS

5+2 HOLES	1.5 mm	5+2 HOLES		
6+2 HOLES	1.3 mm	6+2 HOLES		
	1.4 mm			
8+2 HOLES	1.2 mm	8+2 HOLES		
	1.3 mm			

ANTI-ROLL BAR

FRONT	THICKNESS	REAR
/mm		/mm

TIRES

FRONT		REAR
	BRAND	
	COMPOUND	
	INSERTS	
	WHEELS	

ELECTRONICS

MOTOR	
SPEEDO	
BATTERY TYPE	

☐ STANDARD BATTERY ☐ SHORT BATTERY FRONT

☐ STANDARD BATTERY ☐ SHORT BATTERY REAR

BODY

OTHER

EAZY ☐ EAZY LIGHT ☐

TOTAL WEIGHT

/g

FRONT / REAR

STEERING BLOCK: COMPOSITE ☐ ALU ☐

C-HUB: COMPOSITE ☐ ALU ☐

CASTER: 16° ☐

FRONT SHOCK TOWERS REAR: ALU ☐ ☐ GRAPHITE ☐ ☐ ALU

ANTI-ROLL BAR: 1 2

UPRIGHT: MEDIUM ☐ HARD GRAPHITE ☐ ALU ☐

OFFSET: 0 ☐ +1 ☐ +2 ☐

CASTER BUSHINGS: +2° ☐ +1° ☐ 0° ☐ -1° ☐ -2° ☐

CAMBER LINK 2 1

UPPER SHOCK POSITION 6 5 4 3 2 1 / 5 6 7 8 1 2 3 4

M ☐ H ☐ XH ☐ G ☐ FLAT ☐ LSM ☐

UPRIGHT ROLL CENTER 1 2 3

REAR ROLL CENTER 3 2 1 / 6 5 4

FRONT LOWER SHOCK POSITION 2 1

LOWER ROLL CENTER 3 2 1

FRONT DROOP

MEASURE UNDER WHEEL AXLE #107717 GAUGE

HUDY #107703 SUPPORT BLOCKS

#107717 GAUGE MEASURE UNDER WHEEL AXLE REAR DROOP

OFFSET: 0 ☐ +1 ☐ +2 ☐

FRONT / REAR

FRONT: 1° ☐ ☐ 0.5°

UPPER ROLL CENTER

INCREASE DONFORCE YES ☐ WICKERBILL PLATE ☐ NO

REAR WING: COMPOSITE ☐ LEXAN ☐ OTHER ☐ FRONT ☐ MIDDLE ☐ REAR ☐

Ø REDUCE DONFORCE CUT OUT HOLES

GRAPHITE BRACE: WITHOUT ☐ 1-PIECE ☐ 2-PIECES ☐

WING HOLDER: FRONT ☐ REAR ☐

BUMP STEER SHIM: STEERING PLATE /mm STEERING BLOCK /mm

SHIMS PLACE ALWAYS UNDER

FF FR RF RR

WHEELBASE SHIM POSITION: 0mm ☐ 2mm ☐ 4mm ☐

SHIMS BEHIND FRONT ARM

SHIMS IN FRONT OF REAR ARM

FF 1° ☐ ☐ 0.5°

FR 1° ☐ ☐ 0.5°

RF 1° ☐ ☐ 0.5°

RR 1° ☐ ☐ 0.5°

FRONT LOWER ROLL CENTER REAR

ECCENTRIC BUSHINGS

FRONT / REAR

FRONT TOE OUT

STEERING PLATE 1 DOTS ☐ ☐ 2 DOTS

SIDE GUARD: SOFT ☐ MEDIUM ☐ GRAPHITE ☐

WHEELBASE: 0mm ☐ 1mm ☐ 2mm ☐ 3mm ☐ 4mm ☐ SHIMS IN FRONT OF UPRIGHT

REAR TOE IN

#355215 ADJ. DRIVE AXLE 4 3 2 1

SERVO SAVER: TIGHT ☐ MEDIUM ☐ SOFT ☐

GRAPHITE BRACE: YES ☐ ☐ NO

FRONT DRIVE SHAFT: CVD ☐ UNIVERSAL ☐ LENGTH /mm

ACKERMANN POSITION 4 3 2 1

REAR DRIVE SHAFT: CVD ☐ UNIVERSAL ☐ LENGTH /mm

FRONT ☐ BULKHEADS ☐ REAR

TOP DECK: COMPOSITE ☐ GRAPHITE ☐

DRIVE SHAFT: CVD ☐ DOGBONE ☐

DRIVE SHAFT: CVD ☐ DOGBONE ☐

FRONT / REAR

FRONT CAMBER

/mm FULL TRAVEL SHOCKS LENGTH /mm

REAR CAMBER

LENGTH mm

LENGTH /mm

FRONT DIFF HEIGHT

REAR DIFF HEIGHT

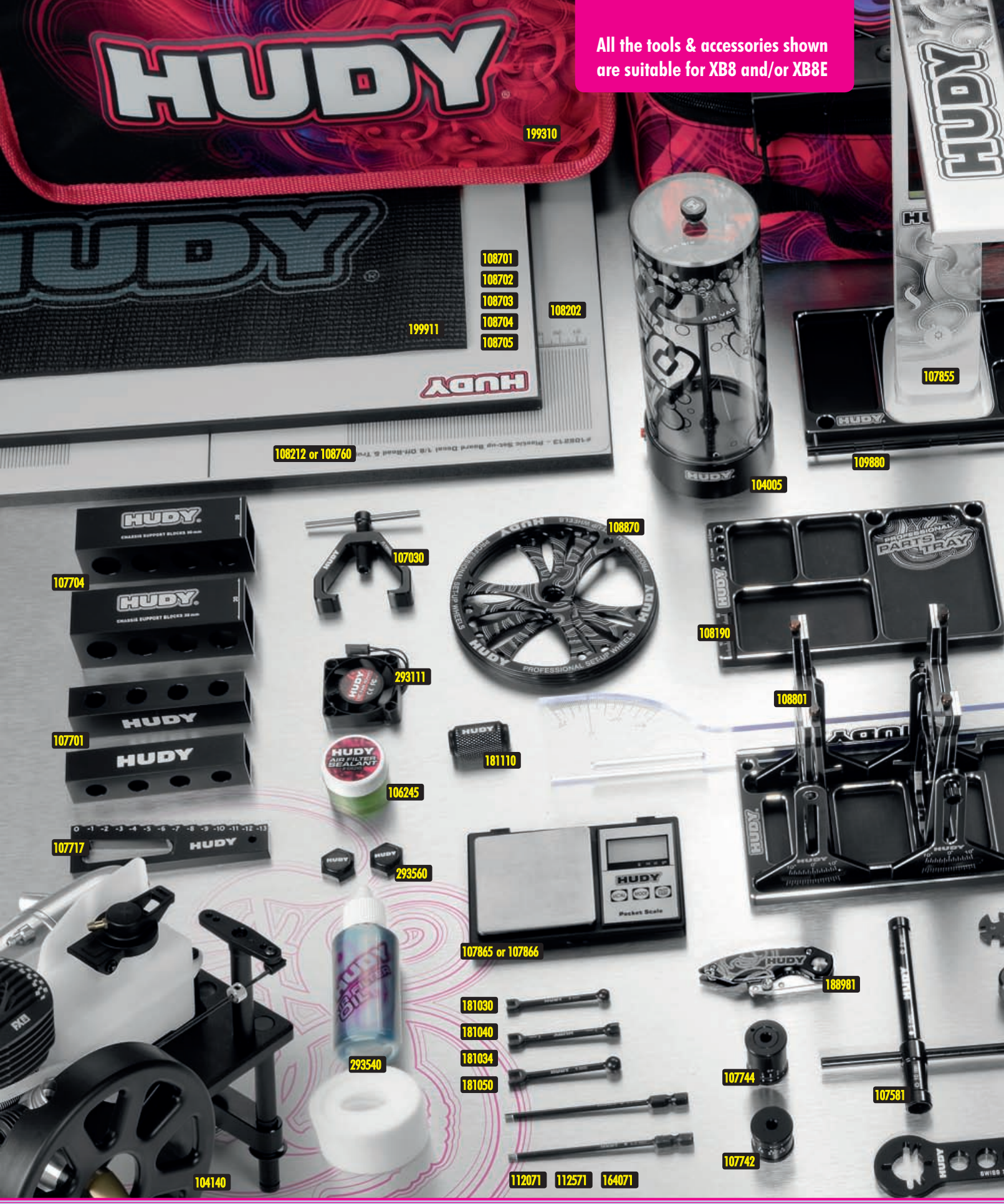
LOWER ARM: SOFT ☐ MEDIUM ☐ GRAPHITE ☐

RIDE HEIGHT /mm

#107717 RIDE HEIGHT GAUGE

/mm RIDE HEIGHT

All the tools & accessories shown are suitable for XB8 and/or XB8E



#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
#107866 HUDY Professional Digital Pocket Scale 3000g/0.1g
#108170 HUDY Off-Road & Truggy Car Stand
#108190 HUDY Alu Tray for Parts

#108202 Flat Set-Up Board for 1/8 Off-Road & Truggy
#108212 Plastic Set-up Board Decal for 1/8 Off-Road & Truggy
#108701 Flat Set-Up Board 1/8 Off-Road & GT - Lightweight - Grey
#108702 Flat Set-Up Board 1/8 Off-Road & GT - Lightw. - Silver Grey
#108703 Flat Set-Up Board 1/8 Off-Road & GT - Lightw. - Dark Grey
#108704 Flat Set-Up Board 1/8 Off-Road & GT - Lightweight - Titan
#108705 Flat Set-Up Board 1/8 Off-Road & GT - Lightweight - Black
#108760 Plastic Set-Up Board Decal 399x545mm - 1/8 Off-Road & GT
#108801 HUDY Set-Up Station for 1/8 Off-Road Cars & Truggy
#108841 Upside Measure Plate for 1/8 Truggy
#108860 Alu Nut for 1/8 Off-Road System (4)
#108870 Alu Set-up Wheel for 1/8 Off-Road Cars - V2 (4)
#109802 HUDY Alu Tray for 1/8 Off-Road Diff & Shocks
#109841 HUDY Alu Tray for 1/8 Off-Road Diff Assembly

EXCLUSIVE PROFESSIONAL

HUDY

#109860	HUDY Alu Tray for Set-Up System
#109880	HUDY Alu Tray for Accessories & Pit LED
#111545	Limited Edition - Allen Wrench # 1.5mm
#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	HUDY Wheel Nut & 3/4 Shoe Flywheel MultiTool 1/8 Buggy
#183011	HUDY Professional Multi Tool
#188981	HUDY Pocket Hobby Knife
#188990	HUDY Professional Body Scissors
#199060	HUDY Alu Tool Stand
#199184	HUDY Car Bag - 1/8 & 1/10 Off-Road
#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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