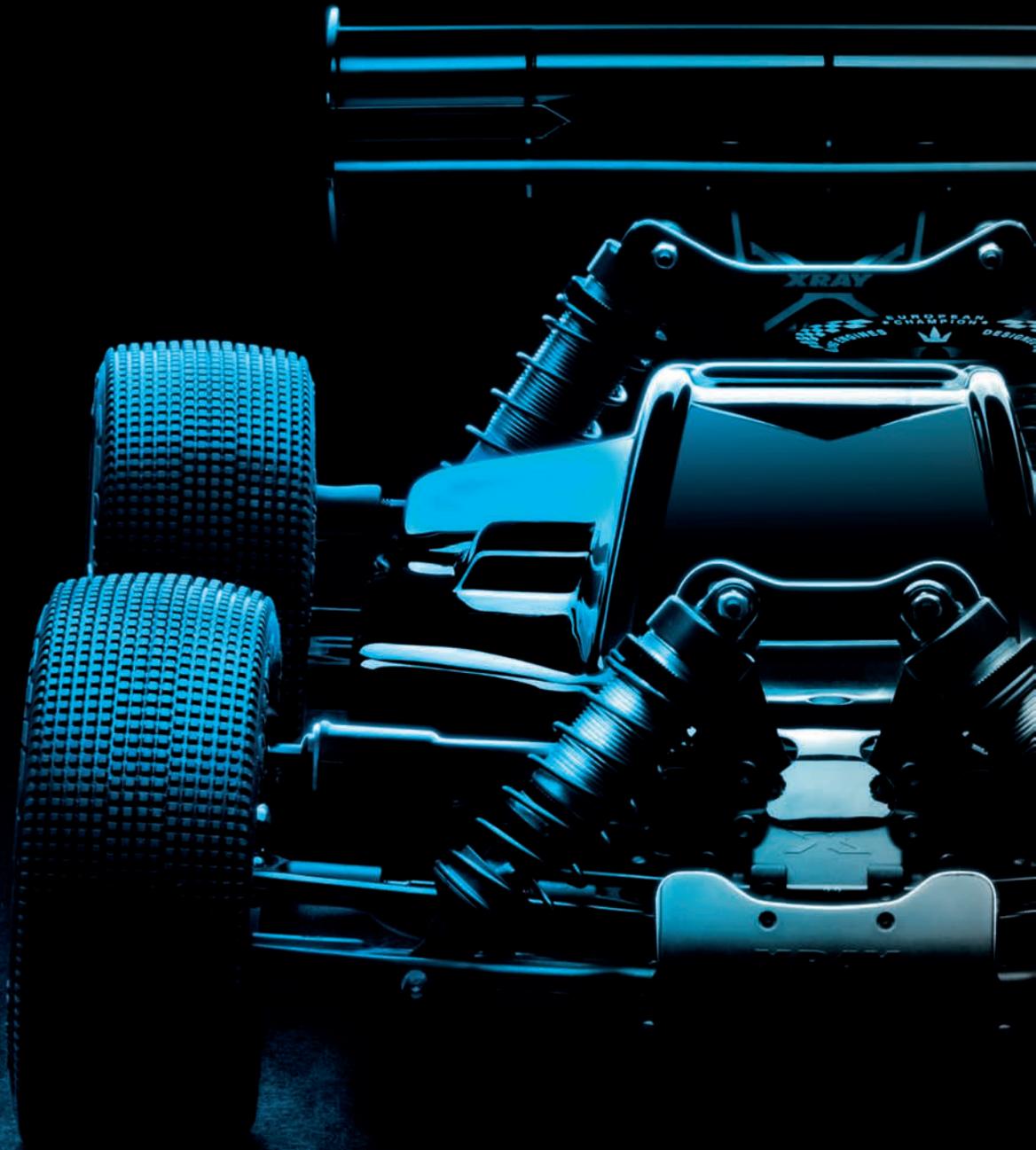


1/8 OFF-ROAD BUGGY

XRAY XB8



INSTRUCTION MANUAL

XRAY XB8'26

BEFORE YOU START

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

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

CUSTOMER SUPPORT

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

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

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

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

XRAY Europe
K Výstavisku 6992
91101 Trenčín
Slovakia, EUROPE
Phone: +421-32-7401100
Fax: +421-32-7401109
Email: info@teamxray.com

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

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

SAFETY PRECAUTIONS

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

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.

IMPORTANT NOTES - NITRO ENGINES

- Always test the brakes and the throttle before starting your engine to avoid losing control of the model.
- Make sure the air filter is clean and oiled.
- Never run your engine without an air filter. Your engine can be seriously damaged if dirt and debris get inside the engine.

- 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 R/C 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

IMPORTANT NOTES – NITRO FUEL

- Handle fuel only outdoors. Never handle nitro fuel indoors, or mix nitro fuel in a place where ventilation is bad.
- Only use nitro fuel for R/C models. DO NOT use gasoline or kerosene in R/C models as it may cause a fire or explosion, and ruin your engine.
- Nitro fuel is highly flammable, explosive, and poisonous. Never use fuel indoors or in places with open fires and sources of heat.
- Always keep the fuel container cap tightly shut.
- Always read the warning label on the fuel container for safety information.
- Nitro-powered model engines emit poisonous vapors and gasses. These vapors irritate eyes and can be highly dangerous to your health. We recommend wearing rubber or vinyl gloves to avoid direct contact with nitro fuel.
- Nitro fuel for RC model cars is made of the combination of the methyl alcohol, castor or

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.

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

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 can NOT guarantee any parts once you start racing the car. Products which have been worn

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.

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.

synthetic oil, nitro methane etc. The flammability and volatility of these elements is very high, so be very careful during handling and storage of nitro fuel.

- Keep nitro fuel away from open flame, sources of heat, direct sunlight, high temperatures, or near batteries.
- Store fuel in a cool, dry, dark, well-ventilated place, away from heating devices, open flames, direct sunlight, or batteries. Keep nitro fuel away from children.
- DO NOT leave the fuel in the carburetor or fuel tank when the model is NOT in use. There is danger that the fuel may leak out.
- Wipe up any spilled fuel with a cloth.
- Be aware of spilled or leaking fuel. Fuel leaks can cause fires or explosions.
- DO NOT dispose of fuel or empty fuel containers in a fire. There is danger of explosion.

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.

distributors for warranty. XRAY reserves the right to make the final determination of the warranty status of any component or part.

Limitations of Liability

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

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

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

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!

TOOLS REQUIRED



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



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



Turnbuckle Wrench 3mm
(HUDY #181030)



Turnbuckle Wrench 4mm
(HUDY #181040)



Turnbuckle Wrench 5mm
(HUDY #181050)



Special Tool for turnbuckles, nuts (HUDY #181090)



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



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



Ball Joint Wrench
(HUDY #181110)



Pocket Hobby Knife (HUDY #188981)



HUDY Tweezers Straight (HUDY #188970)



HUDY Tweezers Curved (HUDY #188971)



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



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



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)



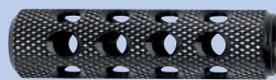
Socket 5.0mm (#175035 - HUDY EXCLUSIVE Limited Edition)
Socket 5.5mm (#175535 - HUDY EXCLUSIVE Limited Edition)



Slotted Screwdriver 3.0mm (#153055 HUDY EXCLUSIVE Limited Edition)
Slotted Screwdriver 4.0mm (#154055 HUDY EXCLUSIVE Limited Edition)



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



Reamer (#107602 - HUDY EXCLUSIVE Limited Edition)



Blade Hobby Knife with Alu Handle (HUDY #188980)

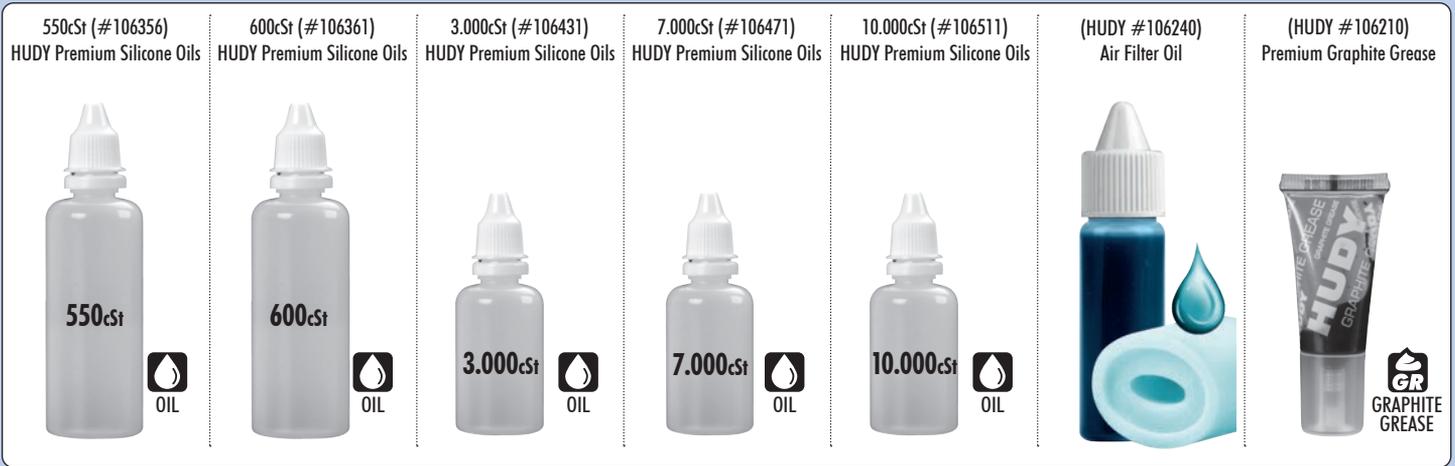


Professional Multi-Tool
(HUDY #183011)



Scissors (HUDY #188990)

EQUIPMENT INCLUDED



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

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

- 351200** **STYLE A** - indicates parts that are included in the bag marked for the section.
- 351190** **STYLE B** - indicates parts that are included in the box.
- 355000** **STYLE C** - indicates parts that are already assembled from previous steps.
- 350910** **STYLE D** - indicates parts that are optional.

EQUIPMENT REQUIRED



MAINTENANCE

SHOCK MAINTENANCE

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

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

SUSPENSION & DRIVETRAIN MAINTENANCE

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

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

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

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

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

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

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

DRIVE SHAFT PIN SERVICING

Regularly check the drive shaft pins (both suspensions and center) and if they show any wear they must be immediately replaced by new pins. Inspect the pins after every 3 hours of runtime. If the car is run with worn out pins, excessive wear on the diff outrives will result. The **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)**.



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**.

BEARING MAINTENANCE

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

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

CLUTCH BEARINGS

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

TECH TIPS

TIP FRONT & REAR DIFF GEAR MESH ADJUSTMENT

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

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

TO CLOSE A WIDE GAP

CLOSE A WIDE GAP

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

insert shim(s) here

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

TO OPEN A NARROW GAP

OPEN A NARROW GAP

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

insert shim(s) here

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

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

HUDY PREMIUM SILICONE OILS



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

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



TIP

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

For pre-oiled ball-bearings, use:

#106230 HUDY Bearing Oil.

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

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

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

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

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

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

1. FRONT & REAR DIFFERENTIALS



XRAY BALL-BEARINGS

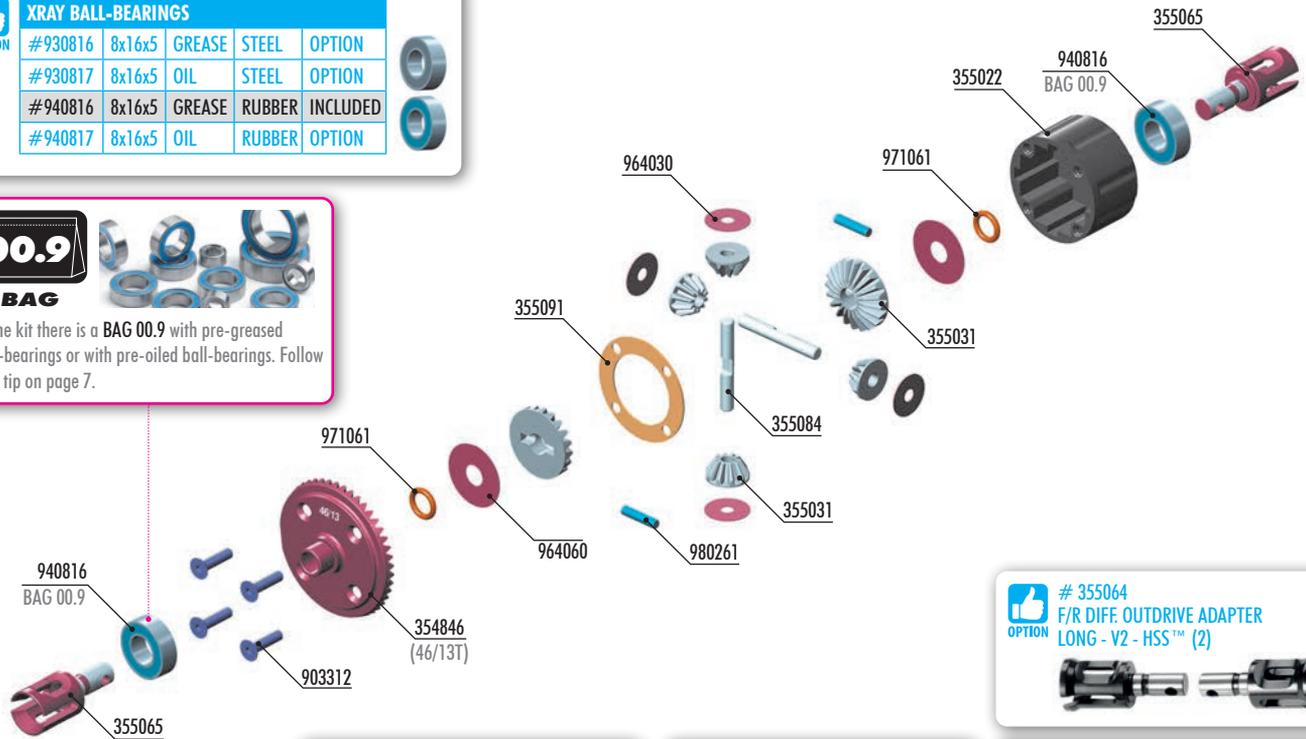
OPTION	Part #	Size	Lubricant	Material	Status
	#930816	8x16x5	GREASE	STEEL	OPTION
	#930817	8x16x5	OIL	STEEL	OPTION
	#940816	8x16x5	GREASE	RUBBER	INCLUDED
	#940817	8x16x5	OIL	RUBBER	OPTION



00.9
BAG



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



#355022-G
DIFFERENTIAL CASE
V2 - GRAPHITE



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



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



#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)

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



2x 940816
BB 8x16x5



2x 964060
S 6x18x0.2



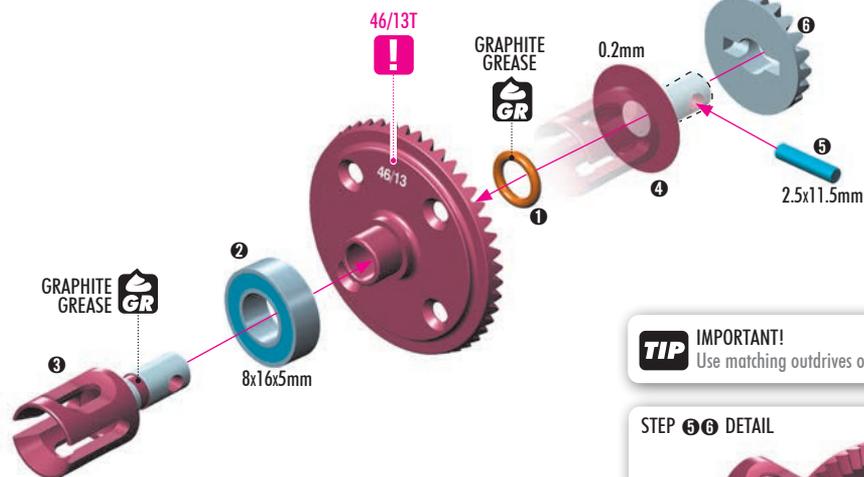
2x 971061
O 6x1.55



2x 980261
P 2.5x11.5

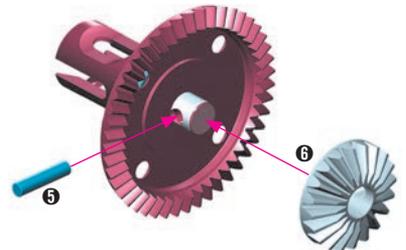
**SET-UP
BOOK**
DIFFERENTIAL GEARS

2x



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

STEP 5 6 DETAIL



XRAY BALL-BEARINGS

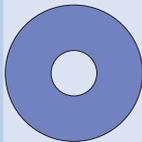
OPTION	Part #	Size	Lubricant	Material	Status
	#930816	8x16x5	GREASE	STEEL	OPTION
	#930817	8x16x5	OIL	STEEL	OPTION
	#940816	8x16x5	GREASE	RUBBER	INCLUDED
	#940817	8x16x5	OIL	RUBBER	OPTION



1. FRONT & REAR DIFFERENTIALS



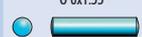
2x 940816
BB 8x16x5



2x 964060
S 6x18x0.2



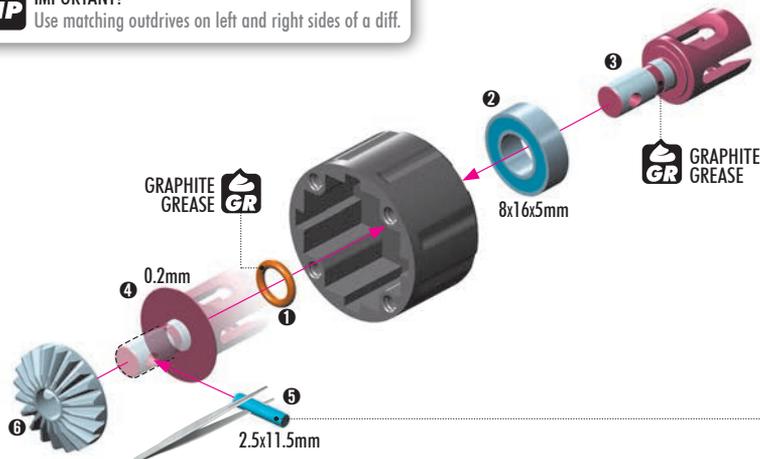
2x 971061
O 6x11.55



2x 980261
P 2.5x11.5

2x

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

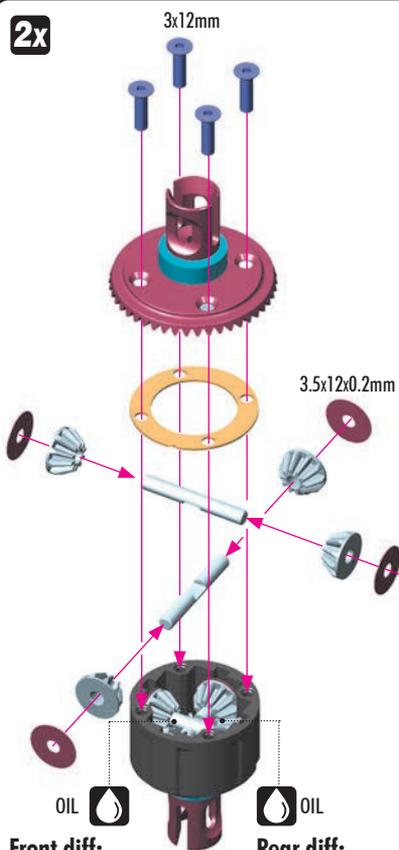


8x 903312
SFH M3x12



8x 964030
S 3.5x12x0.2

2x

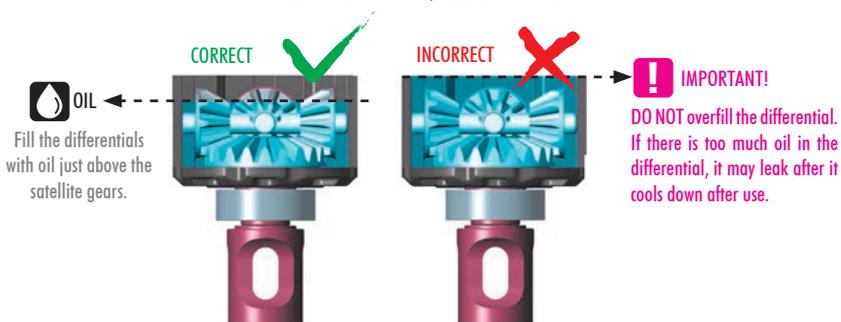


Front diff:
Silicone oil **10.000cSt**
Fill just above the satellite gears.

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: **10.000cSt** / REAR diff: **3.000cSt**



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

OPTION
#107865 HUDY Ultimate Digital Pocket Scale 300g ±0.01g
#107866 HUDY Professional Digital Pocket Scale 3000g/0.1g



1. Put the diff (without oil) on the scale and check the weight:
- 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

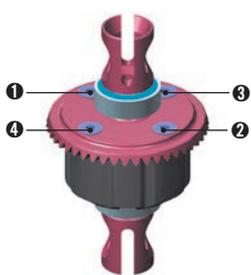
$$\begin{aligned} \text{REAR DIFF } 39.30\text{g} + 2.60\text{g} &= 41.90\text{g} \\ \text{FRONT DIFF } 39.30\text{g} + 2.60\text{g} &= 41.90\text{g} \end{aligned}$$

SET-UP BOOK
DIFFERENTIAL OIL

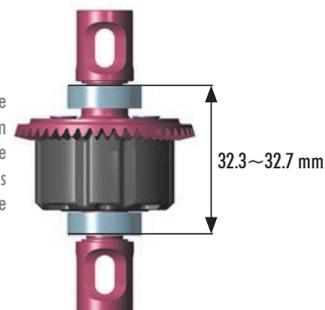
Tighten the screws equally.



Finish tightening in this order:



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



1. CENTER DIFFERENTIAL



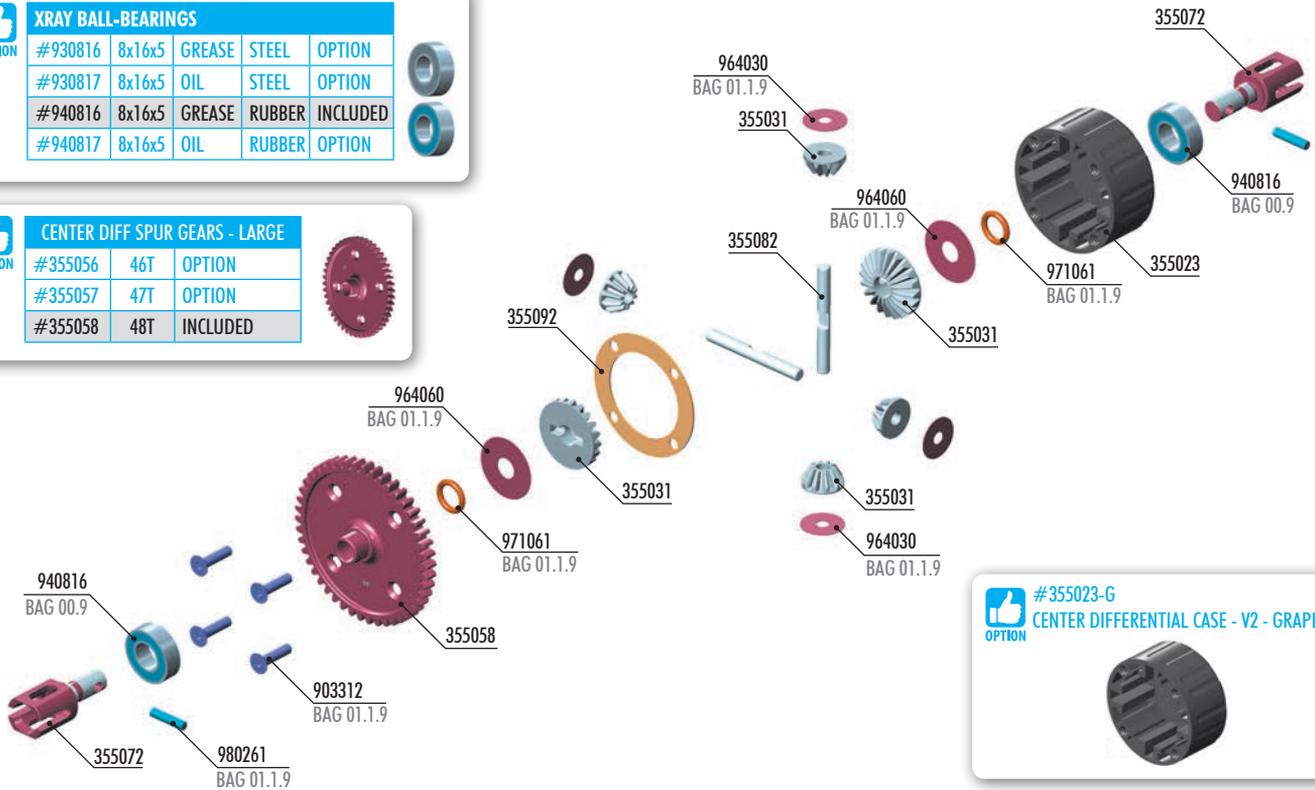
XRAY BALL-BEARINGS

#930816	8x16x5	GREASE	STEEL	OPTION
#930817	8x16x5	OIL	STEEL	OPTION
#940816	8x16x5	GREASE	RUBBER	INCLUDED
#940817	8x16x5	OIL	RUBBER	OPTION



CENTER DIFF SPUR GEARS - LARGE

#355056	46T	OPTION
#355057	47T	OPTION
#355058	48T	INCLUDED



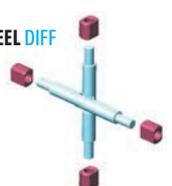
#355023-G CENTER DIFFERENTIAL CASE - V2 - GRAPHITE



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



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



355013	CENTER DIFFERENTIAL - LARGE - SET - V2
355023	CENTER DIFFERENTIAL CASE - V2
355031	STEEL DIFF BEVEL & SATELLITE GEARS - V2 (2+4)
355058	CENTER DIFF SPUR GEAR 48T - LARGE
355072	LARGE CENTER DIFF OUTDRIVE ADAPTER - HUDY STEEL (2)
355082	CENTER DIFF PIN (2)
355092	CENTER DIFF GASKET (2)

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)

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



1x 940816 BB 8x16x5



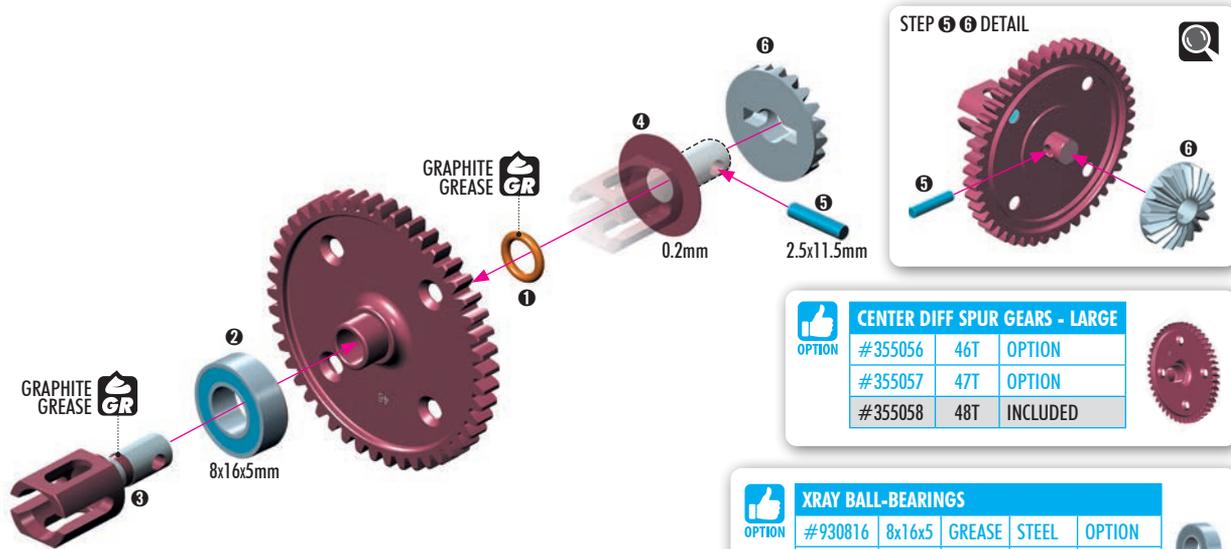
1x 964060 S 6x18x0.2



1x 971061 O 6x1.55



1x 980261 P 2.5x11.5



CENTER DIFF SPUR GEARS - LARGE

#355056	46T	OPTION
#355057	47T	OPTION
#355058	48T	INCLUDED



XRAY BALL-BEARINGS

#930816	8x16x5	GREASE	STEEL	OPTION
#930817	8x16x5	OIL	STEEL	OPTION
#940816	8x16x5	GREASE	RUBBER	INCLUDED
#940817	8x16x5	OIL	RUBBER	OPTION



1. CENTER DIFFERENTIAL



1x 940816
BB 8x16x5



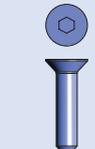
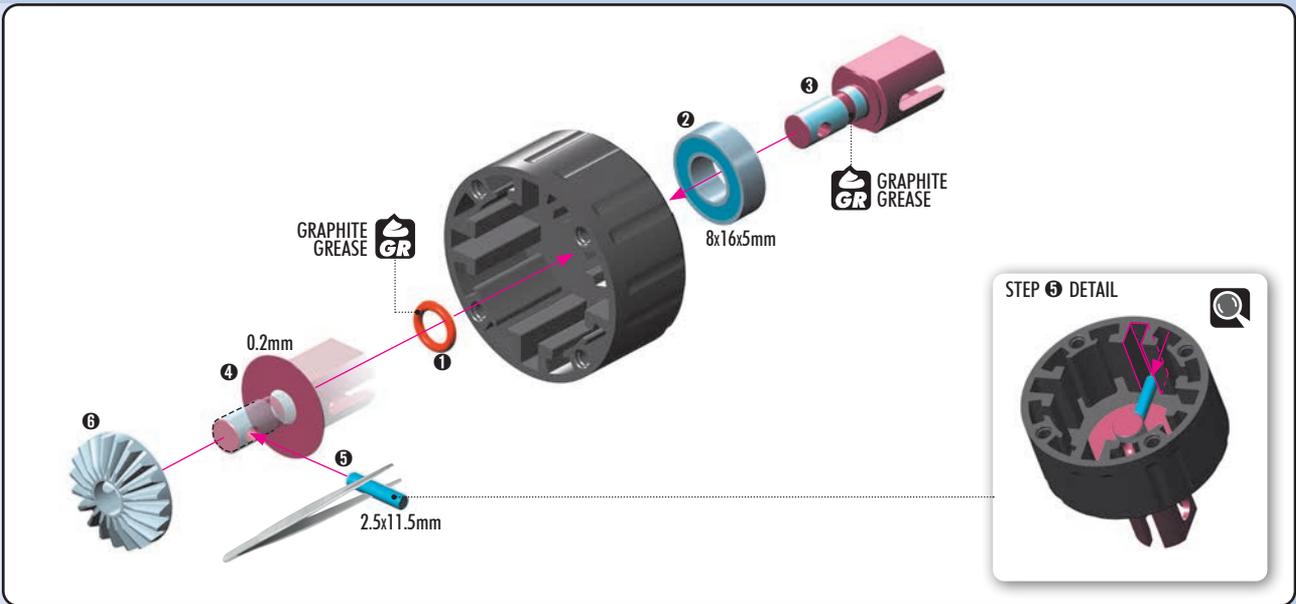
1x 964060
S 6x18x0.2



1x 971061
O 6x1.55



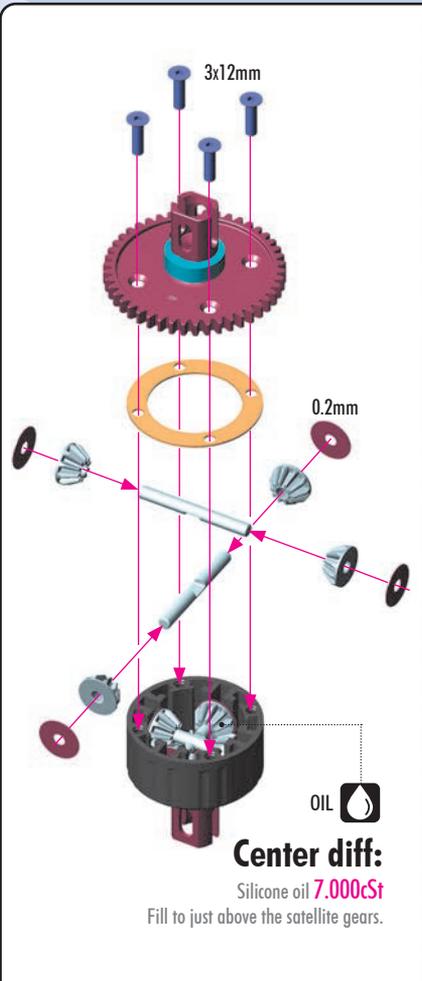
1x 980261
P 2.5x11.5



4x 903312
SFH M3x12



4x 964030
S 3.5x12x0.2

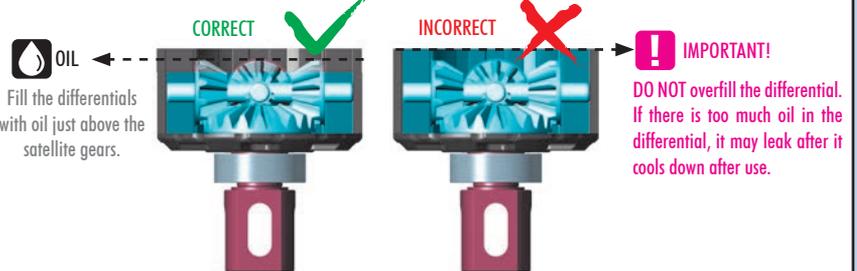


SET-UP BOOK
DIFFERENTIAL OIL

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:

OPTION
#107865 HUDY Ultimate Digital Pocket Scale 300g±0.01g
#107866 HUDY Professional Digital Pocket Scale 3000g/0.1g



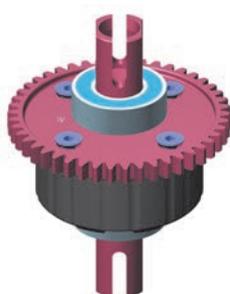
1. Put the diff (without oil) on the scale and check the weight (approximately 42.97g).



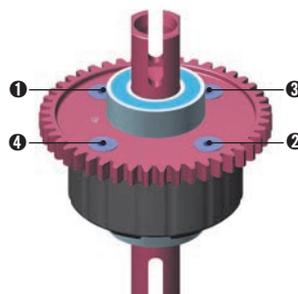
2. Slowly pour oil into the diff and watch the weight. Add 5.20g of oil into the diff. The approximate weight of the diff+oil is 48.17g.

CENTER DIFF 42.97g + 5.20g = 48.17g

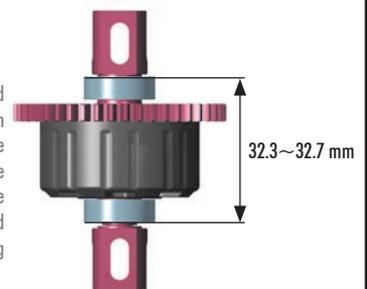
Tighten the screws equally.



Finish tightening in this order:

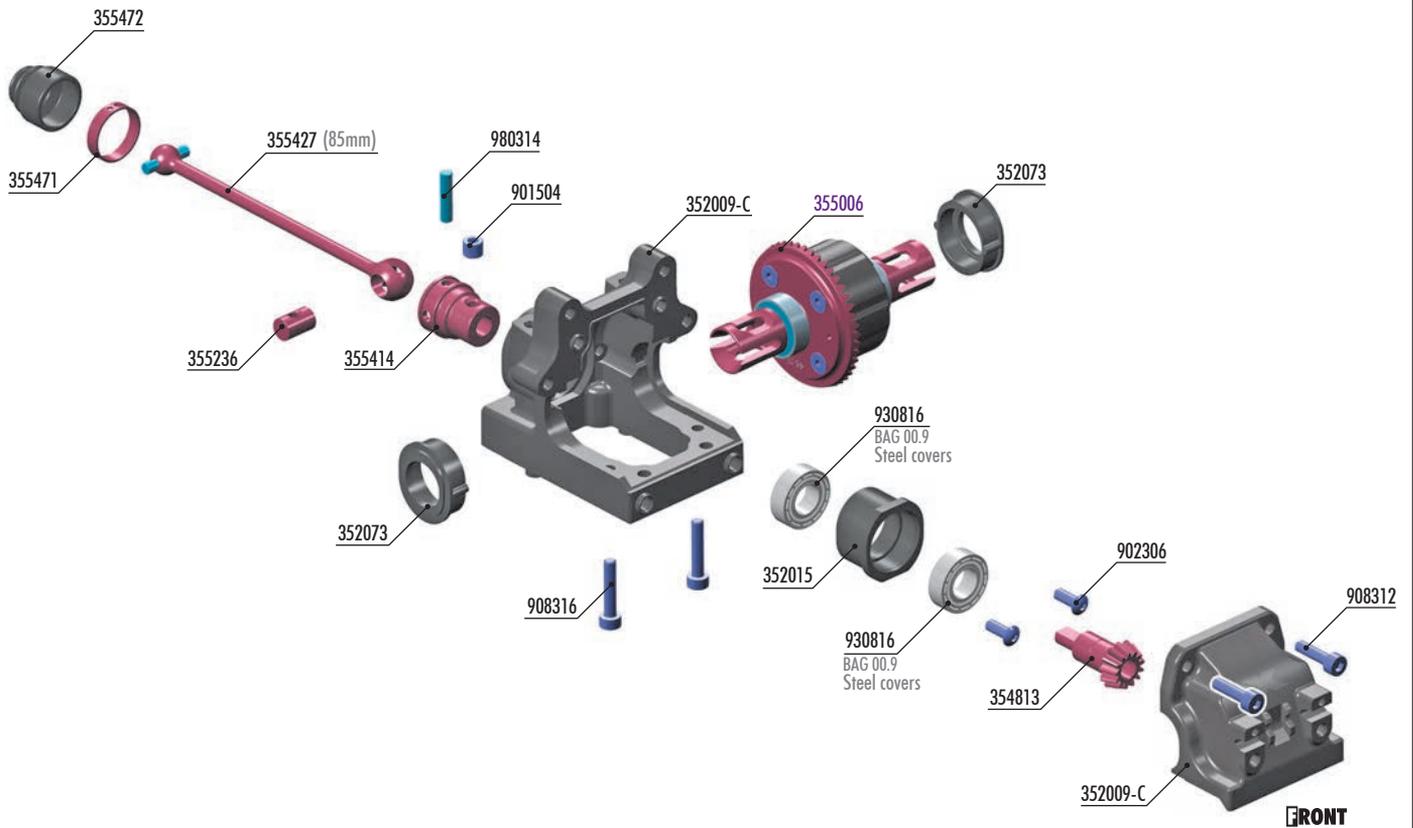


After assembly the differential should have a length of 32.3~32.7mm measured from the ends of the installed ball-bearings. If the differential is longer, check that the gear is properly seated on the case and retighten the 4 screws while holding the spur gear.



2. FRONT TRANSMISSION

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

OPTION #354814 BEVEL DRIVE PINION GEAR 14T
MATCHED FOR 46/13T LARGE BEVEL GEAR



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




BAG
02

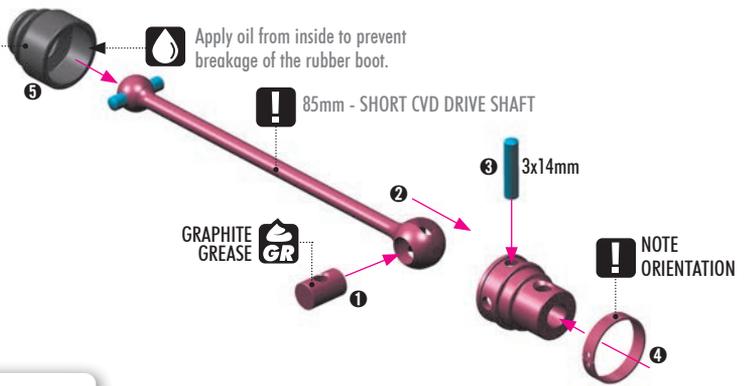
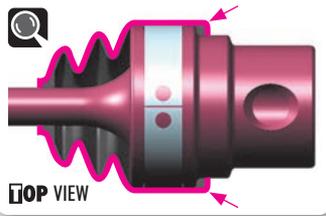
352009-C SEMI-SPLIT DIFF BULKHEAD BLOCK SET FRONT/REAR FOR COLLAR
352015 GEARBOX PINION HEIGHT INSERT (1+1)
352073 GEARBOX DIFF HEIGHT INSERT (2+2)
354813 BEVEL DRIVE PINION GEAR 13T - MATCHED FOR 46T LARGE BEVEL GEAR
355236 CVD DRIVE SHAFT COUPLING - HUDY SPRING STEEL™
355414 CENTRAL CVD SHAFT UNIVERSAL 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

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

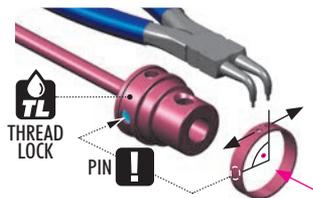
2. FRONT TRANSMISSION

1x 980314
P 3x14



STEP 4 DETAIL

The ring can be assembled by hand, but for easy disassembly we recommend using snap ring pliers.



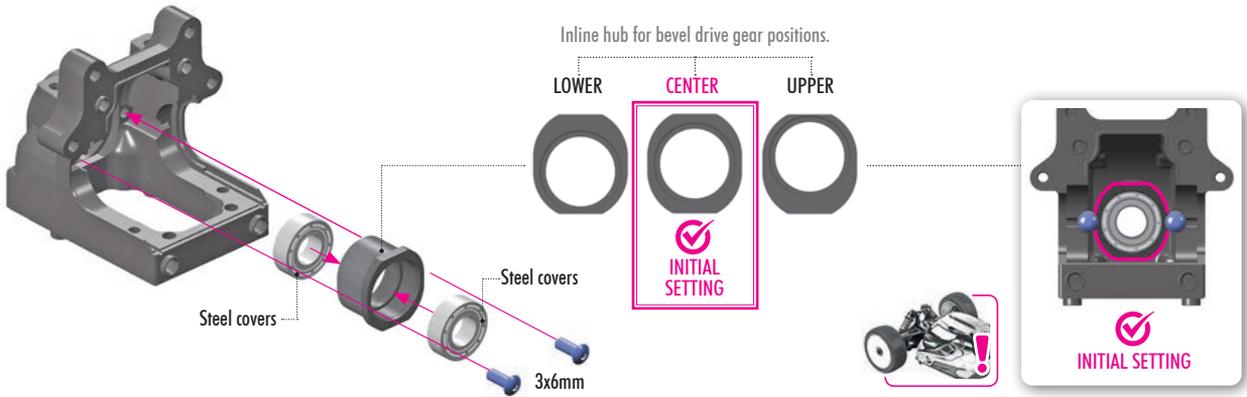
BEFORE inserting the clip on the central CVD shaft joint, apply a small amount of threadlock on the area where the clip goes.

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.

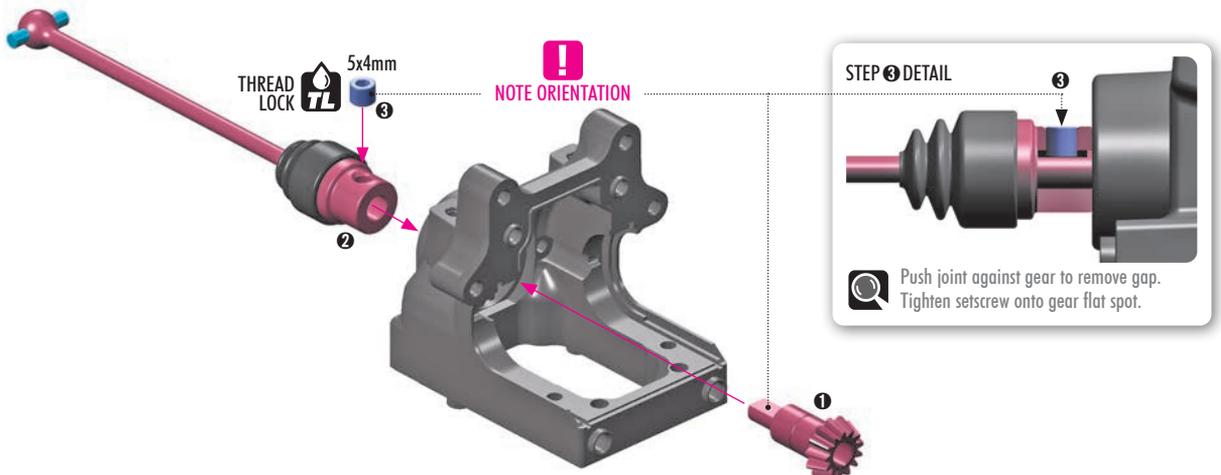
2x 902306
SH M3x6



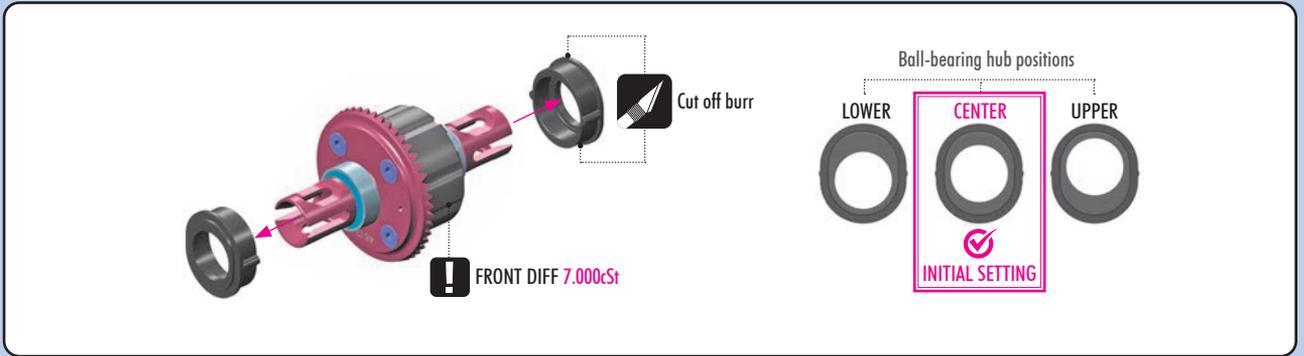
2x 930816
BB 8x16x5
(Steel covers)



1x 901504
SB M5x4



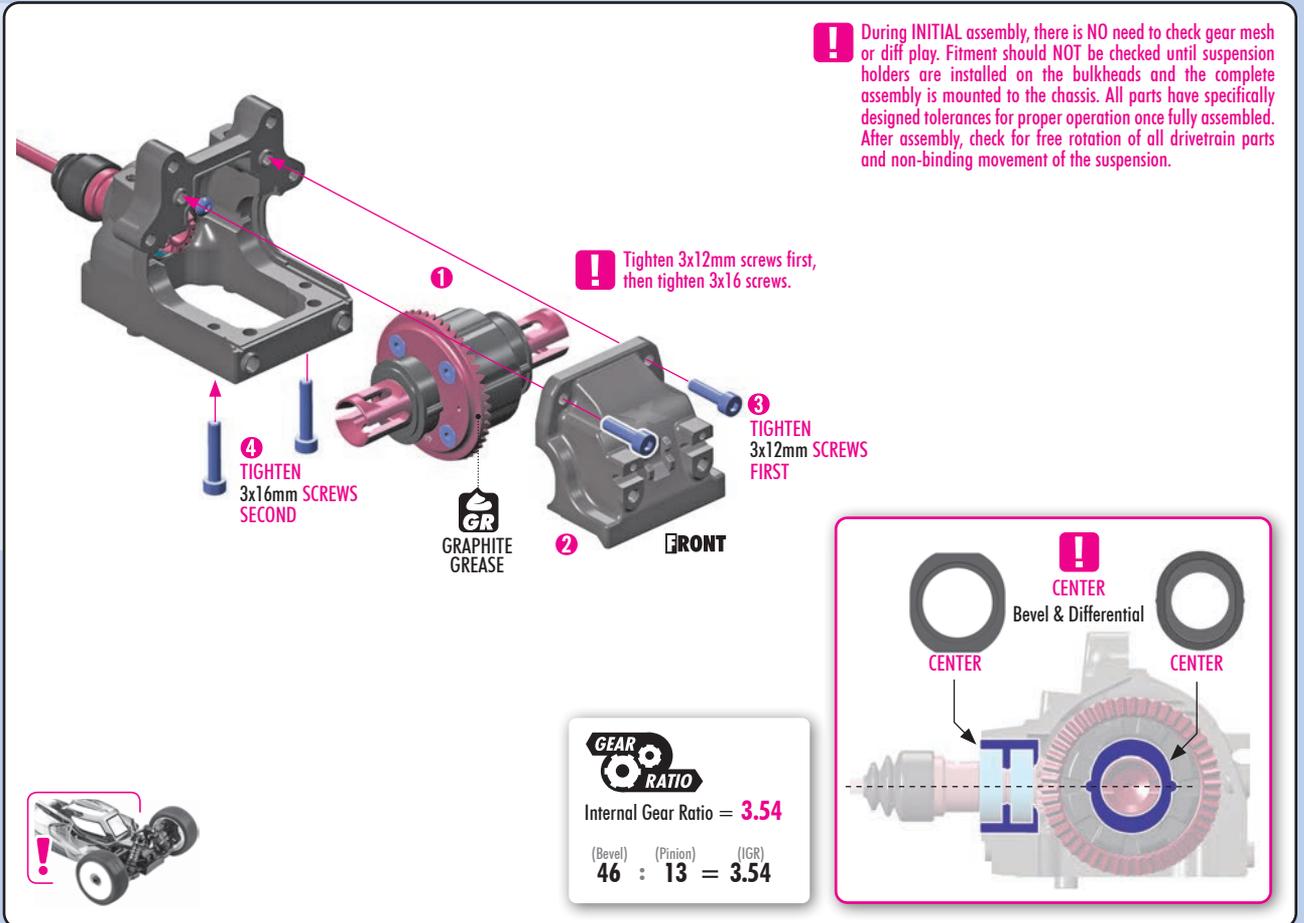
2. FRONT TRANSMISSION



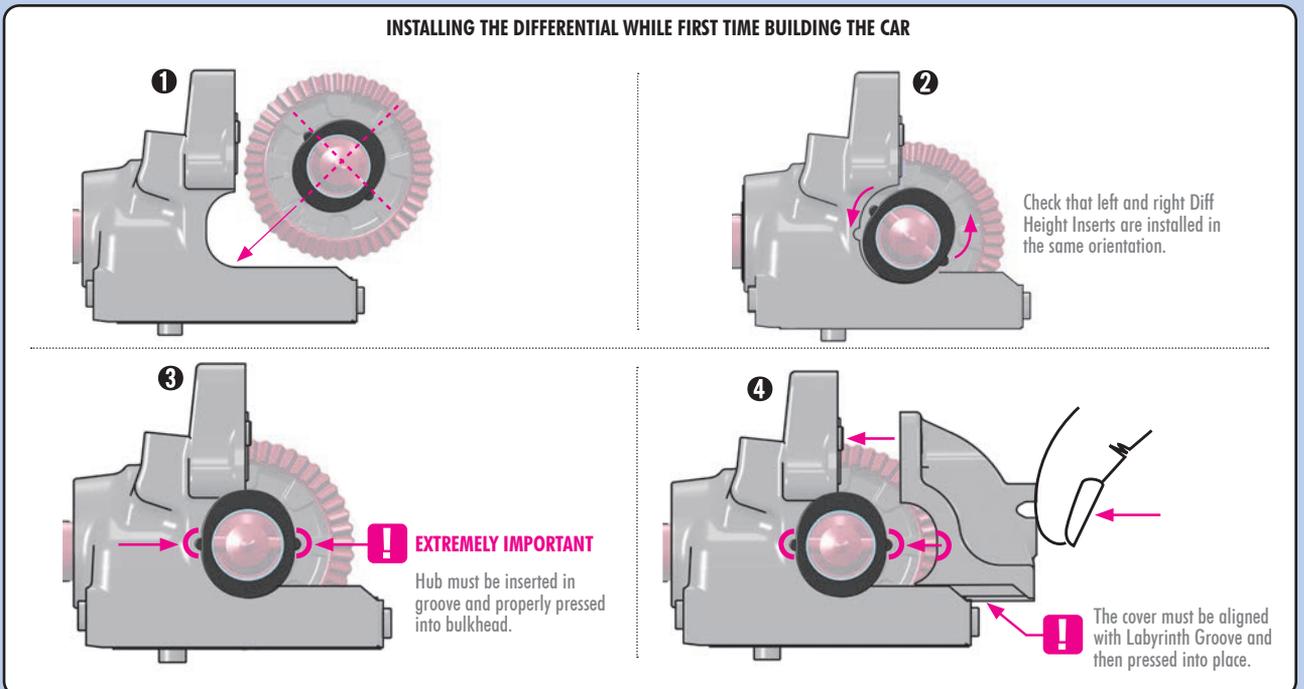
2x 908312
SCH M3x12



2x 908316
SCH M3x16



INSTALLING THE DIFFERENTIAL WHILE FIRST TIME BUILDING THE CAR



2. REAR TRANSMISSION

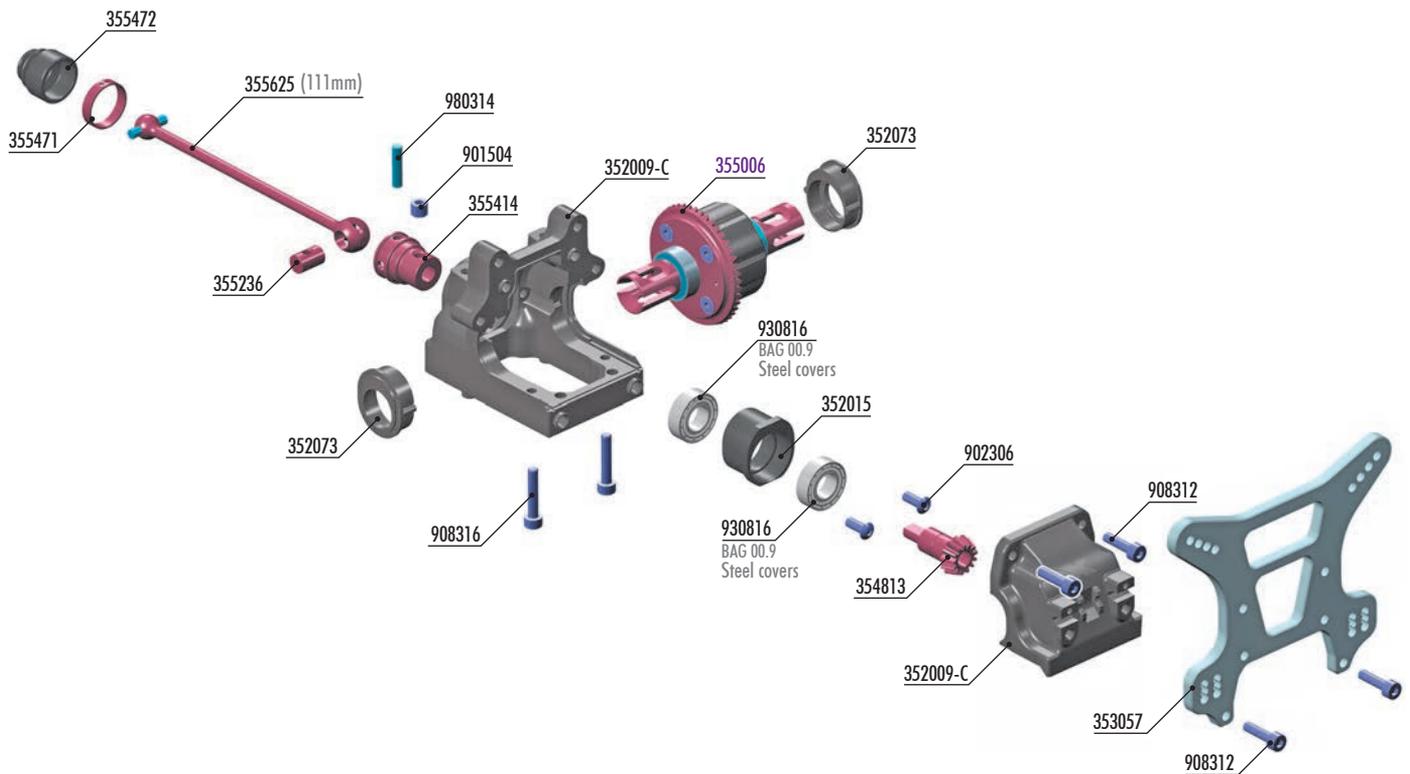


#354814 BEVEL DRIVE PINION GEAR 14T
MATCHED FOR 46/13T LARGE BEVEL GEAR



XRAY BALL-BEARINGS

OPTION	Part #	Size	Lubricant	Material	Status
	#930816	8x16x5	GREASE	STEEL	INCLUDED
	#930817	8x16x5	OIL	STEEL	OPTION



#355415 CENTRAL DOGBONE SHAFT UNIVERSAL JOINT - HUDY SPRING STEEL™ +
#355635 REAR CENTRAL DOGBONE DRIVE SHAFT 111mm - HUDY SPRING STEEL™



BAG

02

352009-C SEMI-SPLIT DIFF BULKHEAD BLOCK SET FRONT/REAR FOR COLLAR
352015 GEARBOX PINION HEIGHT INSERT (1+1)
352073 GEARBOX DIFF HEIGHT INSERT (2+2)
353057 ALU REAR SHOCK TOWER FOR SEMI-SPLIT BULKHEAD - LOWER
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)

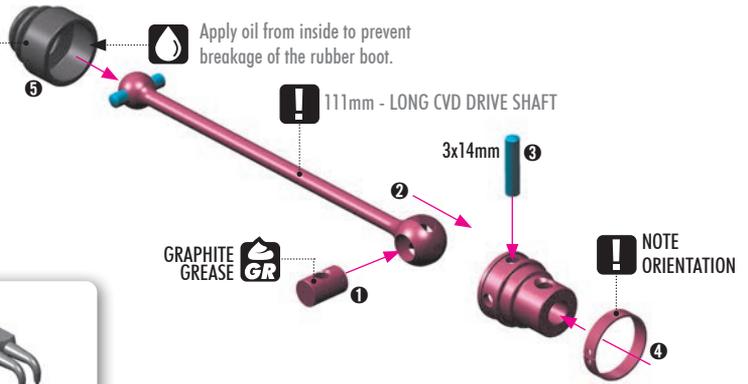
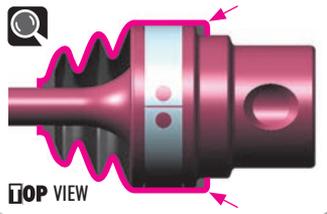
355625 REAR CENTRAL CVD DRIVE SHAFT 111mm - HUDY SPRING STEEL™
901504 HEX SCREW SB M5x4 (10)
902306 HEX SCREW SH M3x6 (10)
908312 HEX SCREW SOCKET HEAD CAP SCH M3x12 (10)
908316 HEX SCREW SOCKET HEAD CAP SCH M3x16 (10)
930816 BALL-BEARING 8x16x5 STEEL SEALED - GREASE (2)
980314 PIN 3x14 (10)

355006 DIFFERENTIAL 46T - MATCHED FOR 13T PINION GEAR - SET

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

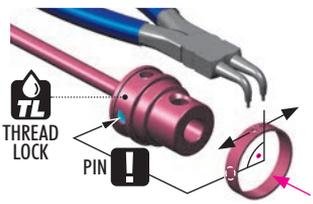
2. REAR TRANSMISSION

1x 980314
P 3x14



STEP 4 DETAIL

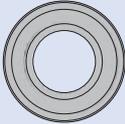
The ring can be assembled by hand, but for easy disassembly we recommend using snap ring pliers.



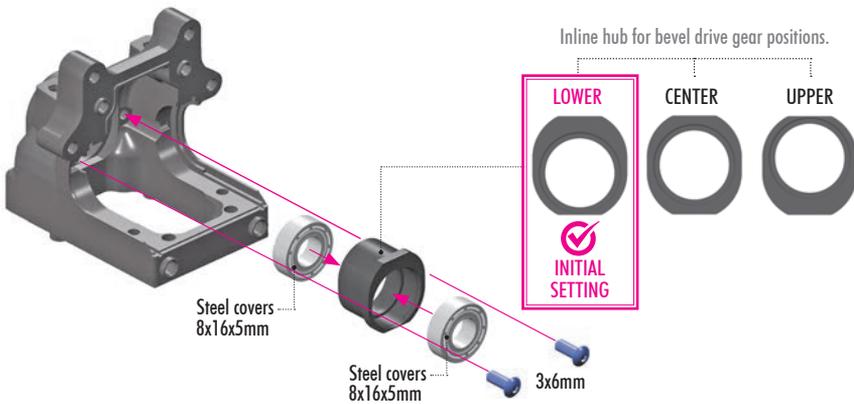
BEFORE inserting the clip on the central CVD shaft joint, apply a small amount of threadlock on the area where the clip goes.

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.

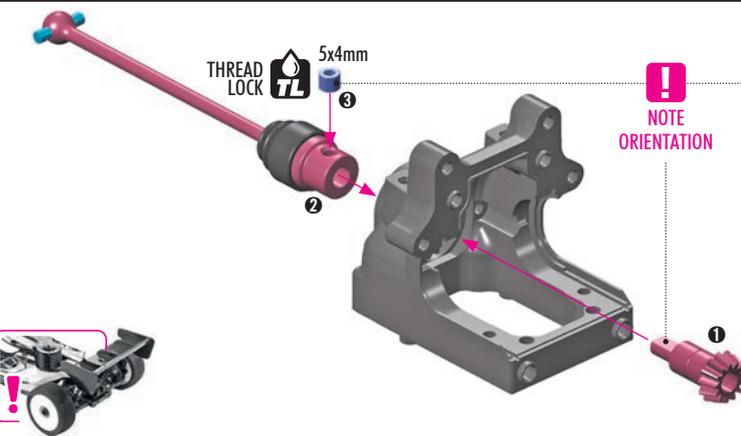
2x 902306
SH M3x6



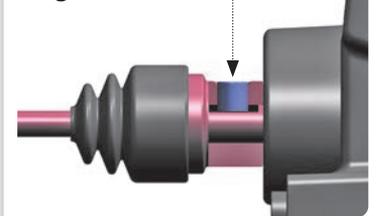
2x 930816
BB 8x16x5
(Steel covers)



1x 901504
SB M5x4



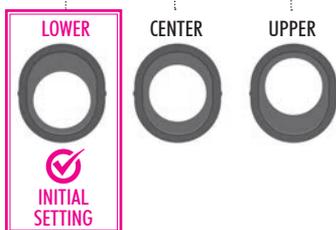
STEP 3 DETAIL



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



Ball-bearing hub positions



2. REAR TRANSMISSION



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

! During INITIAL assembly, there is NO need to check gear mesh or diff play. Fitment should NOT be checked until suspension holders are installed on the bulkheads and the complete assembly is mounted to the chassis. All parts have specifically designed tolerances for proper operation once fully assembled. After assembly, check for free rotation of all drivetrain parts and non-binding movement of the suspension.

1 TIGHTEN 3x12mm SCREWS FIRST

2 GRAPHITE GREASE

3 TIGHTEN 3x16mm SCREWS FIRST

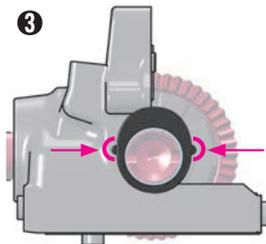
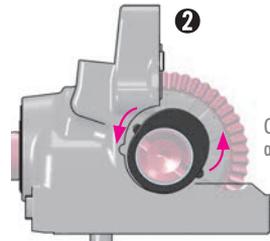
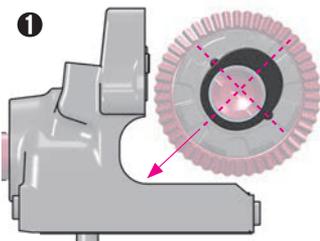
4 TIGHTEN 3x16mm SCREWS SECOND

! LOWER Bevel & Differential

LOWER

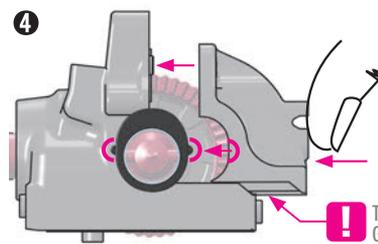
LOWER

INSTALLING THE DIFFERENTIAL WHILE FIRST TIME BUILDING THE CAR



! EXTREMELY IMPORTANT

Hub must be inserted in groove and properly pressed into bulkhead.

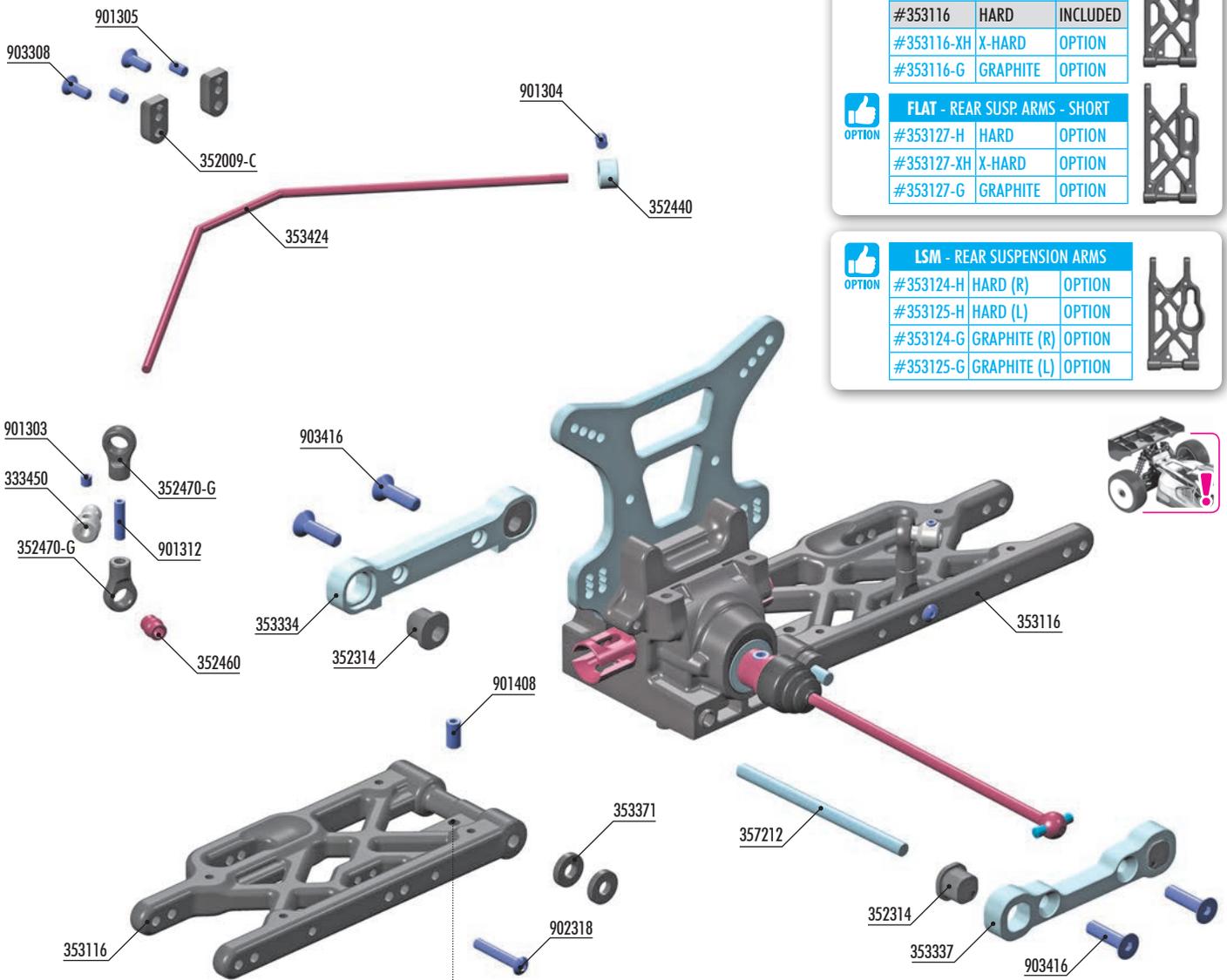


! The cover must be aligned with Labyrinth Groove and then pressed into place.



3x12mm

3. REAR SUSPENSION



OPTION

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



OPTION

FLAT - REAR SUSP. ARMS - SHORT		
#353127-H	HARD	OPTION
#353127-XH	X-HARD	OPTION
#353127-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 #902409
HEX SCREW SH M4x10 WITH HEX FROM BOTTOM (4)

OPTION #333451
ALU ANTI-ROLL BAR PIVOT BALL 5.8mm - 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 5.8mm (2)
- 352009-C SEMI-SPLIT DIFF BULKHEAD BLOCK SET FRONT/REAR FOR COLLAR
- 352314 COMPOSITE ECCENTRIC BUSHINGS - V2 (2)
- 352440 ALU ANTI-ROLL BAR COLLAR 3.5x7.8x4.9mm (2)
- 352460 PIVOT BALL 5.8 (10)
- 352470-G COMPOSITE BALL JOINT 5.8 - GRAPHITE (8)
- 353116 COMPOSITE REAR LOWER SUSPENSION ARM - HARD
- 353334 ALU REAR LOWER SUSP. HOLDER FOR SEMI-SPLIT BULKHEAD - REAR
- 353337 ALU REAR EXTRA LOWER SUSP. HOLDER FOR SEMI-SPLIT BULKHEAD - FRONT
- 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)
- 901304 HEX SCREW SB M3x4 (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)
- 903416 HEX SCREW SFH M4x16 (10)

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

3. REAR SUSPENSION



4x 353371 SHIM 4x10x2



2x 901408 SB M4x8



4x 903416 SFH M4x16



MEDIUM
SUSPENSION ARMS

RR
RF

1° 0.5°

DO NOT use INNER positions.

HARD
SUSPENSION ARMS

RR
RF

1° 0.5°

All positions are available.

X-HARD / GRAPHITE
SUSPENSION ARMS

RR
RF

1° 0.5°

DO NOT use OUTER positions.

GRAPHITE GREASE

4x16mm **RR-D**

Push bushing into suspension holder until flush.

NOTE ORIENTATION

4x8mm

2mm 2mm

NOTE ORIENTATION

GRAPHITE GREASE

4x16mm **RF-C**

NOTE ORIENTATION

For all screws in this step.

Check for free movement.

TOP DOWNSTOP SETTING

L=R

BOTTOM 2.0mm

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

Downstop screw for fine tuning.

#902409
HEX SCREW SH M4x10 WITH HEX FROM BOTTOM (4)

TIP

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

(HUDY #107644)

ARM REAMER

RF

INITIAL SETTING

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 = 1 mm or 1° from center.

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	(°)
		= 1°
		= 2°
		= 0°
		= 2°
		= 1°
		= 3°
		= 0°
		= 1°
		= -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°

Anti-Squat Example:

0(RR) - 0 (RF) = 1°

0(RR) - 0.5 (RF) = 1.5°

0(RR) - 1 (RF) = 2°

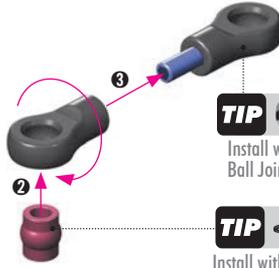
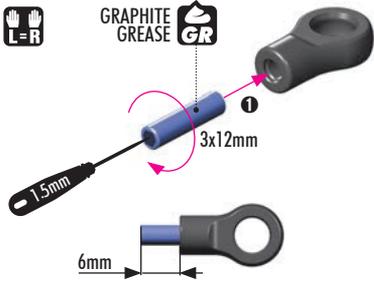
3. REAR SUSPENSION



2x



GRAPHITE GREASE

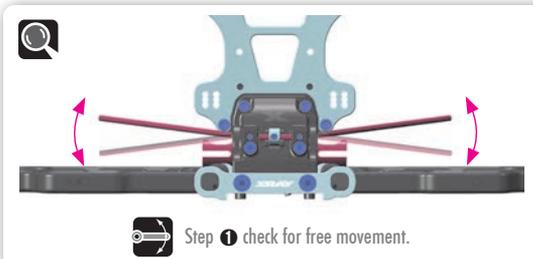
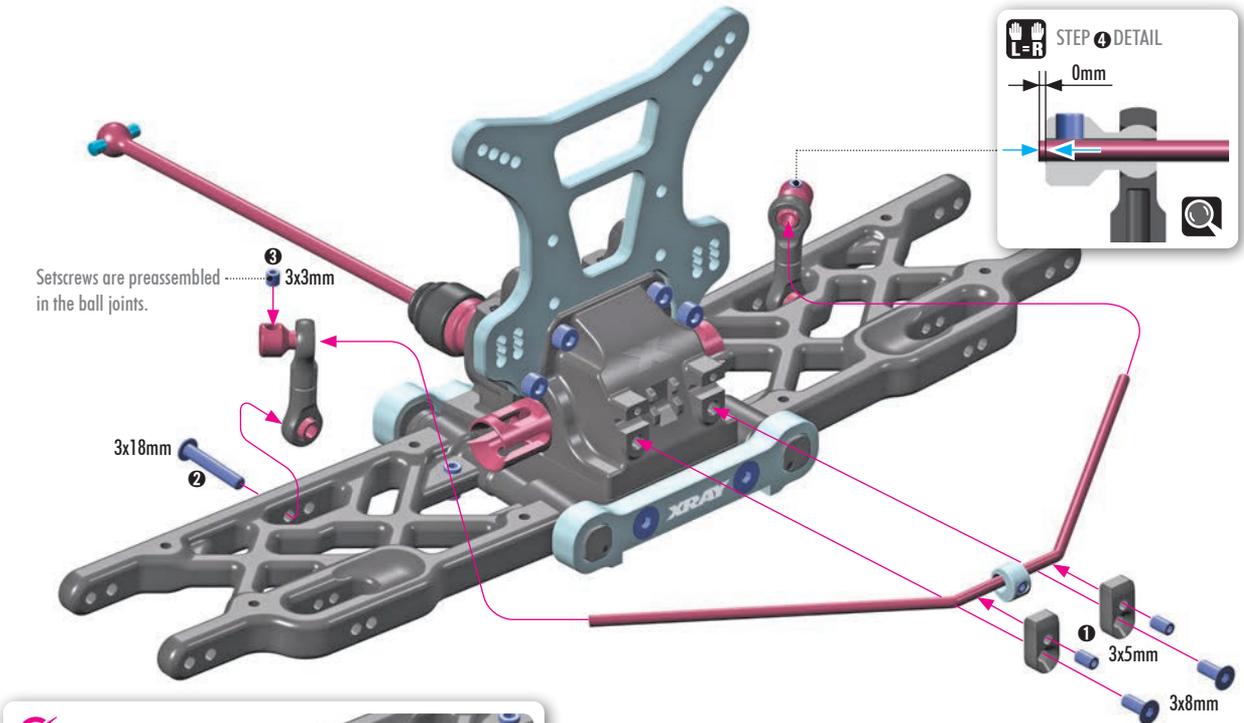
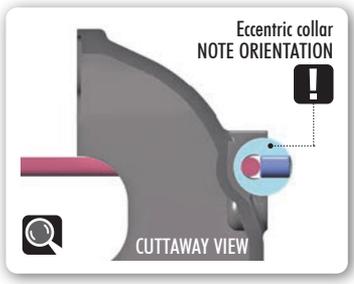
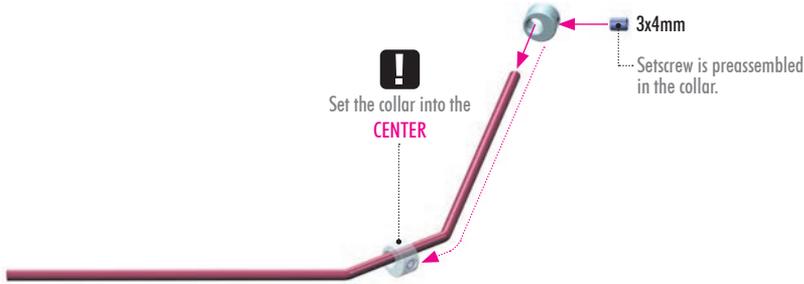


TIP

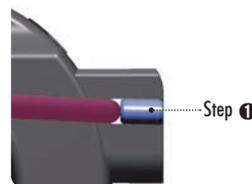
Install with HUDY Ball Joint Wrench

TIP

Install with HUDY Multi Tool.



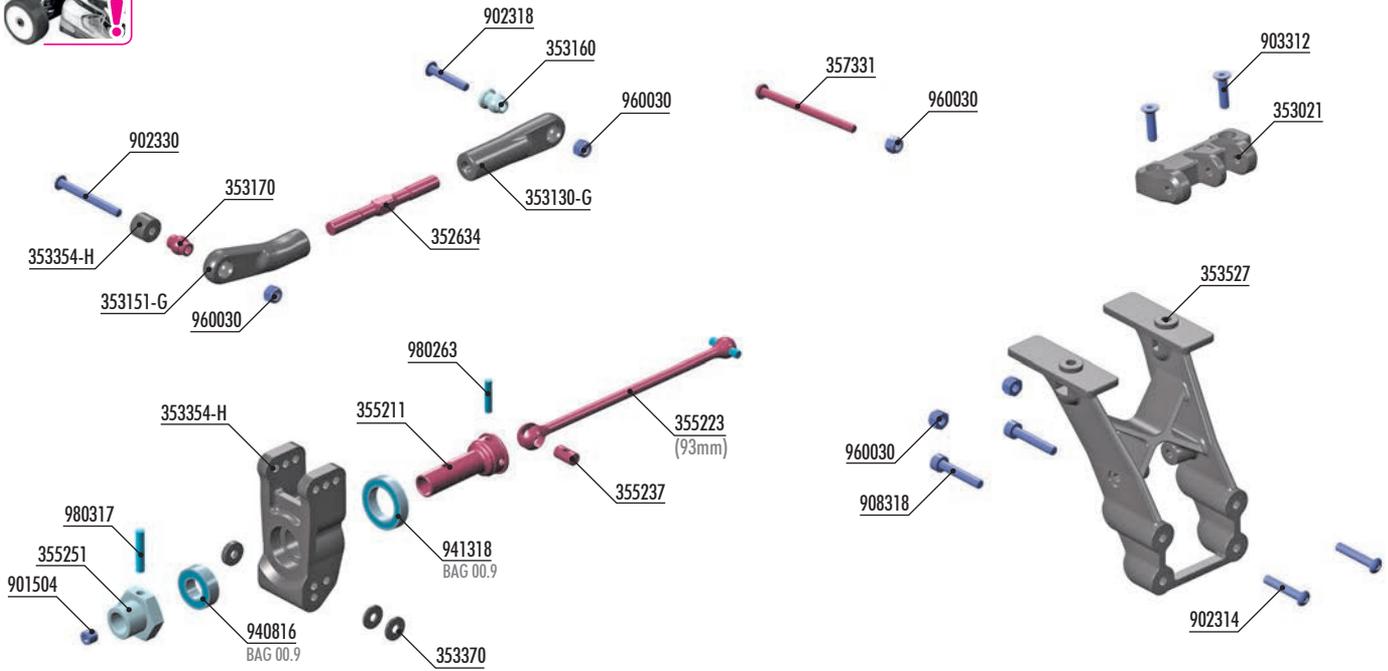
Loosen the 3x5mm setscrew if the anti-roll bar DOES NOT turn freely.



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

SET-UP BOOK
ANTI-ROLL BAR

4. REAR SUSPENSION



OPTION

OFFSET WHEEL AXLES			
#355250	0mm	OPTION	
#355251	+1mm	INCLUDED	
#355252	+2mm	OPTION	
#355253	+3mm	OPTION	
#355254	+4mm	OPTION	

OPTION

REAR UPRIGHTS		
#353354	MEDIUM	OPTION
#353354-H	HARD	INCLUDED
#353354-G	GRAPHITE	OPTION
#350912	ALU-SET	OPTION

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

OPTION #355222
UNIVERSAL DRIVE SHAFT - HUDY SPRING STEEL™

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

OPTION #350912 XB8 ALU REAR UPRIGHTS - MULTI-ADJUSTABLE - SET INCLUDING #353394 CARBON EXTENSION

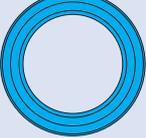


- 352634 ADJ. TURNBUCKLE M5 L/R 50mm - HUDY SPRING STEEL™ (2)
- 353021 COMPOSITE REAR BRACE HOLDER WITH TWO ASSEMBLY POSITIONS
- 353130-G REAR UPPER INNER CAMBER LINK BALL JOINT - GRAPHITE (2)
- 353151-G RELIEF REAR UPPER OUTER CAMBER LINK BALL JOINT - GRAPHITE (2)
- 353160 MOUNTING BALL 6.8 (4)
- 353170 PIVOT BALL 6.8 (4)
- 353354-H COMPOSITE REAR UPRIGHT - HARD
- 353370 SET OF COMPOSITE REAR HUB CARRIER SHIMS
- 353527 COMPOSITE REAR WING HOLDER - EXTENDED SUPPORT AREA
- 355211 CVD DRIVE AXLE - HUDY SPRING STEEL™
- 355223 CVD UNIVERSAL DRIVE SHAFT 93mm - HUDY SPRING STEEL™
- 355237 CVD DRIVE SHAFT COUPLING - HUDY SPRING STEEL™
- 355251 ALU WHEEL AXLE OFFSET "+1mm"- BLACK COATED (2)

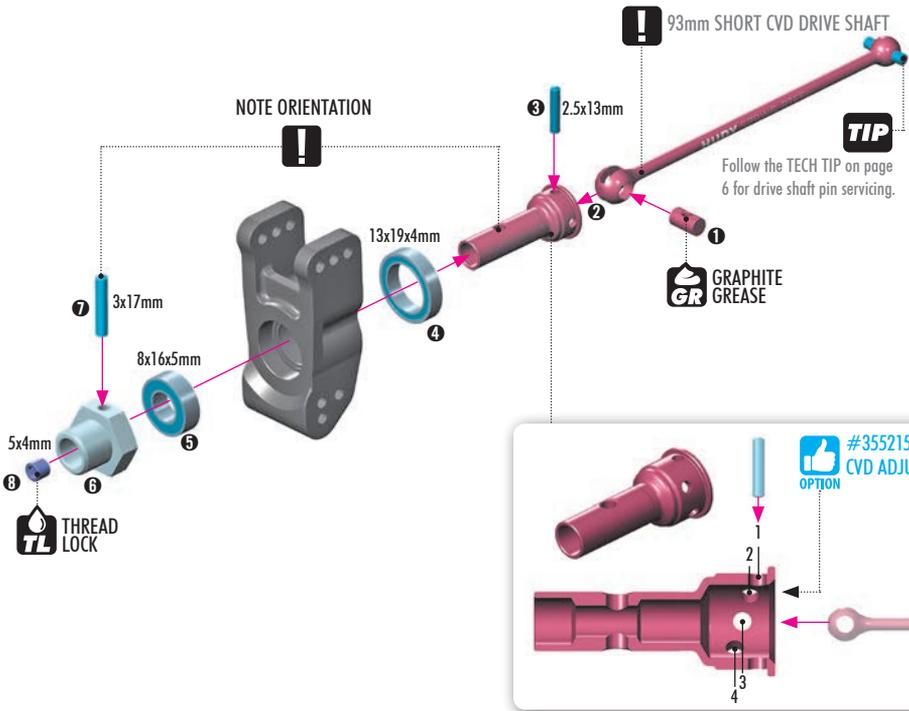
- 357331 REAR LOWER OUTER PIVOT PIN SCREW 3mm (2)
- 901504 HEX SCREW SB M5x4 (10)
- 902314 HEX SCREW SH M3x14 (10)
- 902318 HEX SCREW SH M3x18 (10)
- 902330 HEX SCREW SH M3x30 (10)
- 903312 HEX SCREW SFH M3x12 (10)
- 908318 HEX SCREW SOCKET HEAD CAP SCH M3x18 (10)
- 940816 BALL-BEARING 8x16x5 RUBBER SEALED - GREASE (2)
- 941318 BALL-BEARING 13x19x4 RUBBER SEALED - GREASE (2)
- 960030 NUT M3 (10)
- 980263 PIN 2.5x13 (10)
- 980317 PIN 3x17 (10)

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

4. REAR SUSPENSION

-  2x 901504 SB M5x4
-  2x 940816 BB 8x16x5
-  2x 941318 BB 13x19x4
-  2x 980263 P 2.5x13
-  2x 980317 P 3x17

2x 



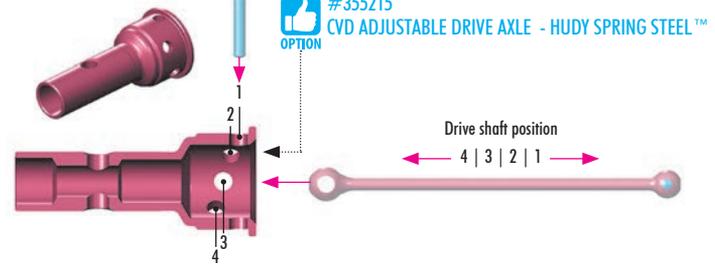
TIP To tighten the setscrew, you can use the HUDY 17mm Wheel Nut Tool #107570.



TIP Be careful NOT to overtighten the setscrew, as excessive tension in the drive axle may cause it to break. Instead, use thread lock to secure the setscrew.

#355215 CVD ADJUSTABLE DRIVE AXLE - HUDY SPRING STEEL™

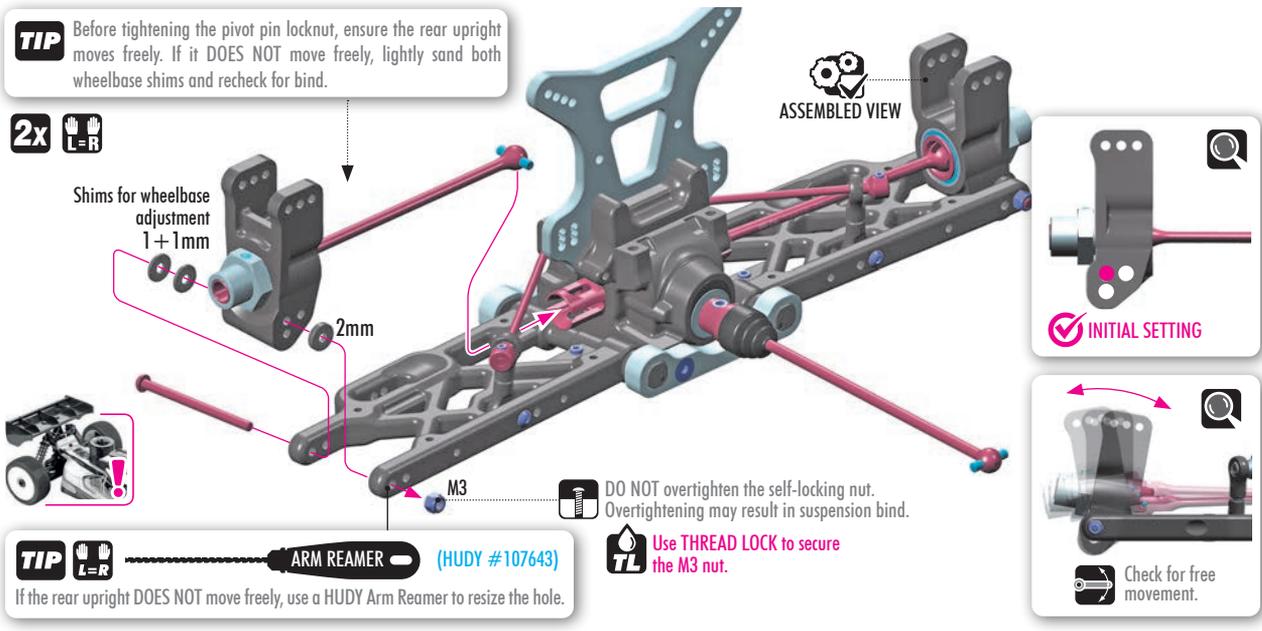
OPTION



-  4x 353370 SHIM 3x9x1
-  2x 353370 SHIM 3x9x2
-  2x 960030 N M3

TIP Before tightening the pivot pin knut, ensure the rear upright moves freely. If it DOES NOT move freely, lightly sand both wheelbase shims and recheck for bind.

2x 



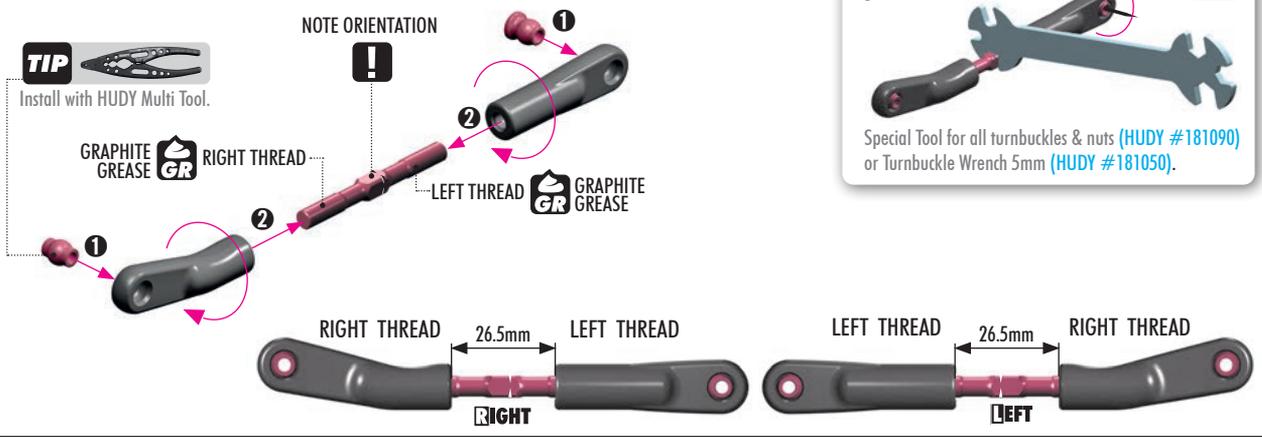
TIP  **ARM REAMER** (HUDY #107643)

If the rear upright DOES NOT move freely, use a HUDY Arm Reamer to resize the hole.

- 1 Install pivot balls with HUDY Multi Tool.
- 2 Install ball joints on turnbuckle.

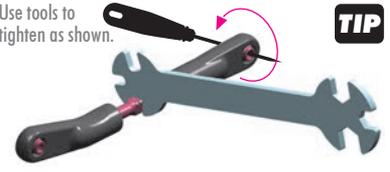
TIP 

Install with HUDY Multi Tool.



Use tools to tighten as shown.

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



SET-UP BOOK
CAMBER

4. REAR SUSPENSION

2x 353354-H
SHIM 3x9x7

2x 902318
SH M3x18

2x 902330
SH M3x30

4x 960030
N M3

2x **L=R**

PIVOT BALL
NOTE ORIENTATION

ASSEMBLED VIEW

7mm

3x18mm

3x30mm

M3

M3

L=R

INITIAL SETTING

INITIAL SETTING

2x 903312
SFH M3x12

3x12mm

2x 902314
SH M3x14

2x 908318
SCH M3x18

2x 960030
N M3

3x14mm

M3

M3

3x18mm

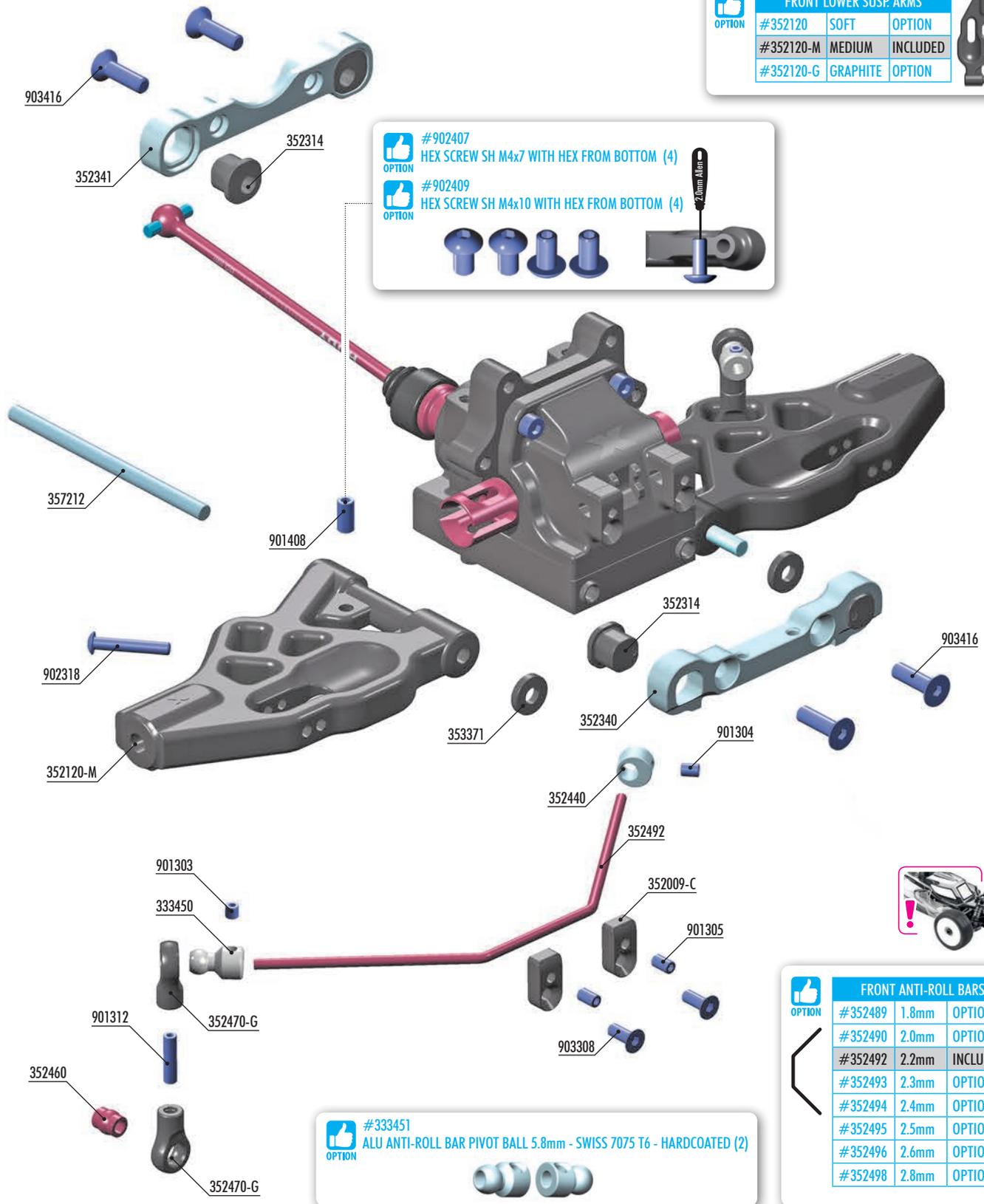
5. FRONT SUSPENSION

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



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

#902409
HEX SCREW SH M4x10 WITH HEX FROM BOTTOM (4)
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

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

BAG
05

- | | | | |
|----------|--|--------|-------------------------------|
| 333450 | ANTI-ROLL BAR BALL JOINT 5.8mm (2) | 357212 | LOWER INNER PIVOT PIN F+R (2) |
| 352009-C | SEMI-SPLIT DIFF BULKHEAD BLOCK SET FRONT/REAR FOR COLLAR | 901303 | HEX SCREW SB M3x3 (10) |
| 352120-M | COMPOSITE FRONT LOWER SUSPENSION ARM - MEDIUM | 901304 | HEX SCREW SB M3x4 (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) |
| 352440 | ALU ANTI-ROLL BAR COLLAR 3.5x7.8x4.9mm (2) | 902318 | HEX SCREW SH M3x18 (10) |
| 352460 | PIVOT BALL 5.8 (10) | 903308 | HEX SCREW SFH M3x8 (10) |
| 352470-G | COMPOSITE BALL JOINT 5.8 - GRAPHITE (8) | 903416 | HEX SCREW SFH M4x16 (10) |
| 352492 | FRONT ANTI-ROLL BAR 2.4mm | | |
| 353371 | SET OF COMPOSITE LOWER ARM SHIMS | | |

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

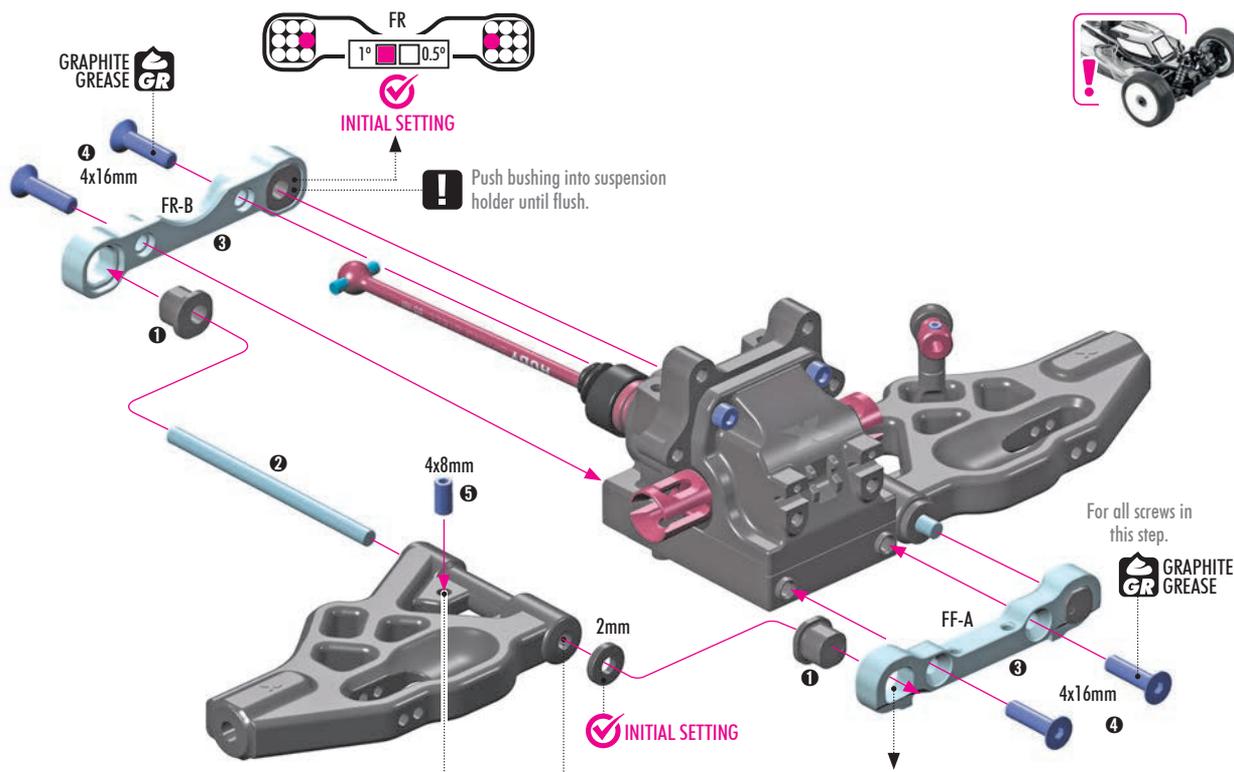
5. FRONT SUSPENSION

10

2x 353371 SHIM 4x10x2

2x 901408 SB M4x8

4x 903416 SFH M4x16



TIP DOWNSTOP SETTING

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

Downstop screw for fine tuning.

#902409 HEX SCREW SH M4x10 WITH HEX FROM BOTTOM (4)

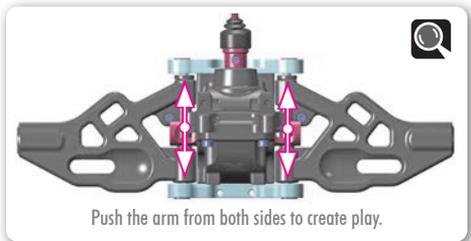
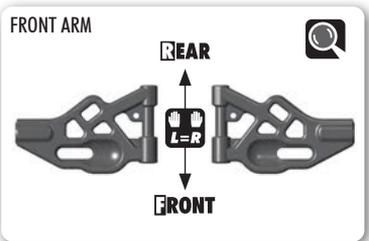
TIP

If suspension arms DO NOT pivot freely after checking eccentric bushings, a HUDY arm reamer can eliminate any remaining bind.

(HUDY #107644) ARM REAMER

INITIAL SETTING

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 = 1 mm or 1° from center

FF	FR	(mm)
		= 308
		= 306
		= 310*

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

The tables above describe the changes to kick-up and front track width when using the 0 and 1mm/1deg offset bushings. The .5mm/.5deg bushings reduce setting changes by half.

* NOT recommended to use this setting.

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

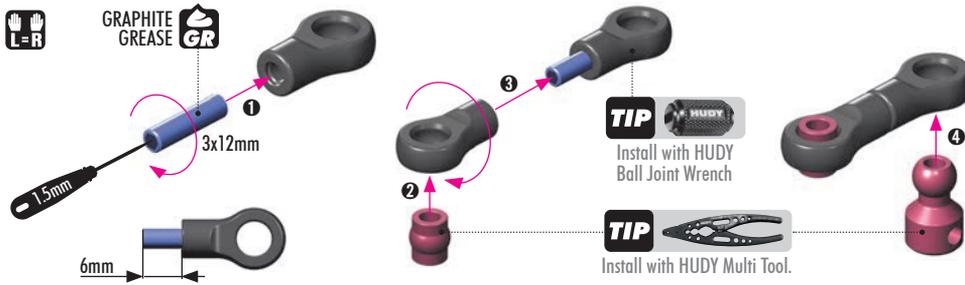
5. FRONT SUSPENSION



2x



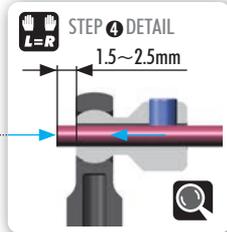
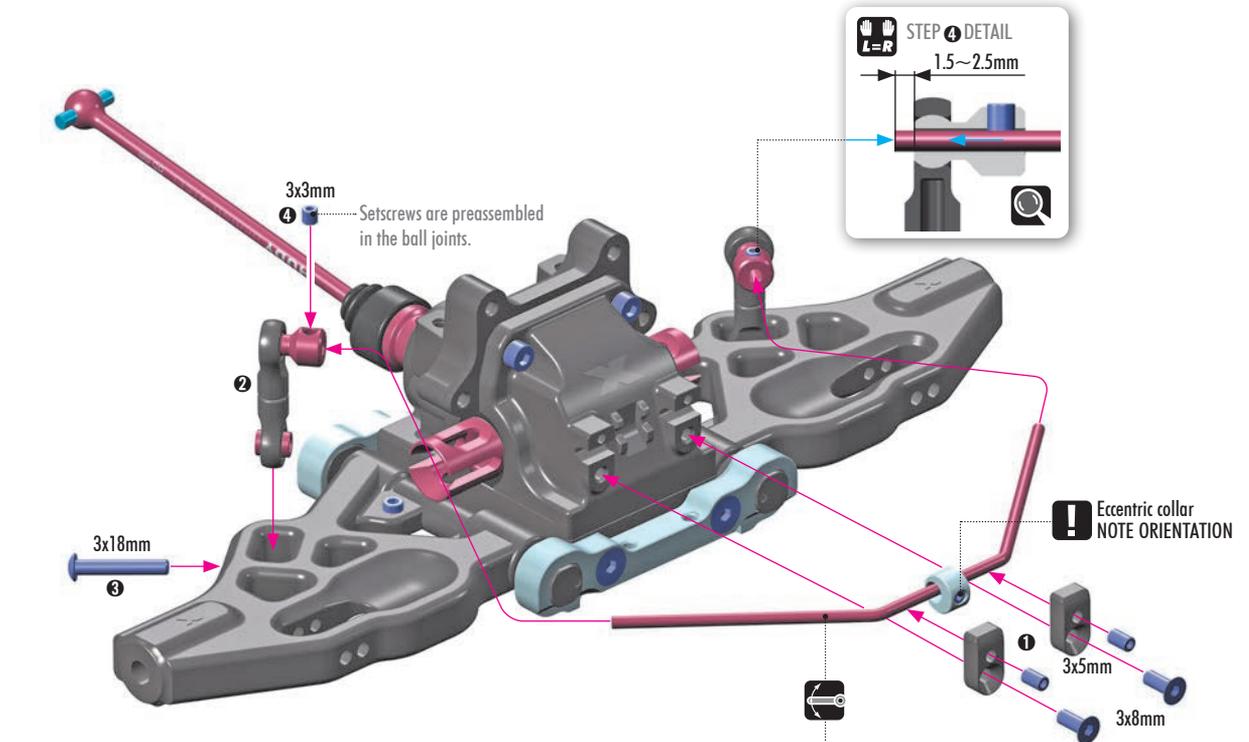
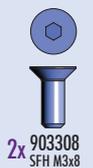
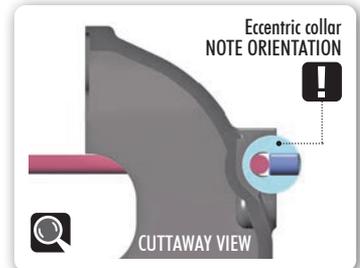
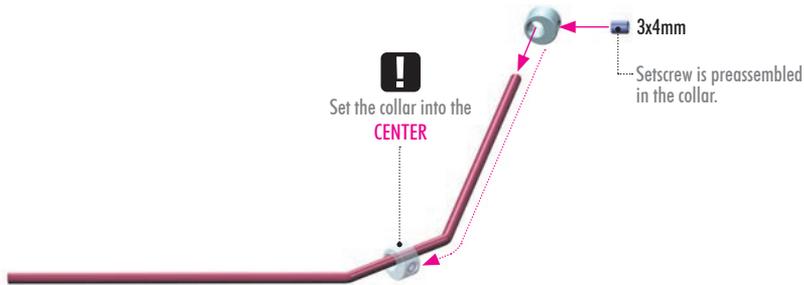
GRAPHITE GREASE GR



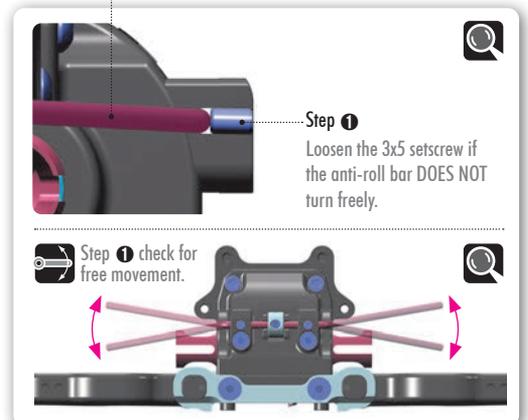
TIP
Install with HUDY Ball Joint Wrench

TIP
Install with HUDY Multi Tool.

ASSEMBLED VIEW



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

6. FRONT SUSPENSION

#357257 PIVOT BALL CAMBER
ALU SHIM 6x13x1.5mm (2)

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

#357253 BRASS ADJUSTING NUT M15x1

OFFSET WHEEL AXLES

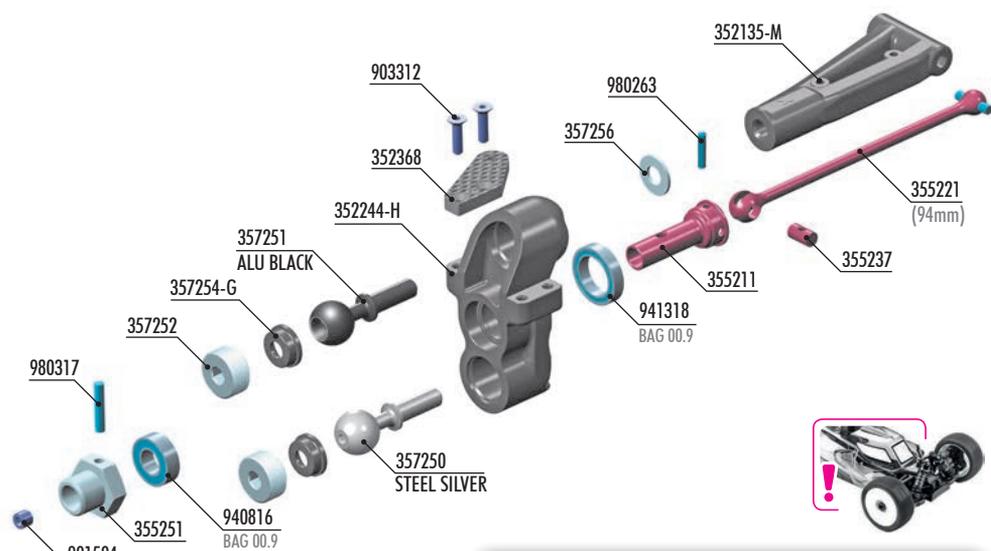
#	Offset	Status
#355250	0mm	OPTION
#355251	+1mm	INCLUDED
#355252	+2mm	OPTION
#355253	+3mm	OPTION
#355254	+4mm	OPTION

FRONT UPPER SUSP. ARMS

#	Material	Status
#352135	SOFT	OPTION
#352135-M	MEDIUM	INCLUDED
#352135-G	GRAPHITE	OPTION

STEERING BLOCKS

#	Material	Status
#352244	MEDIUM	OPTION
#352244-H	HARD	INCLUDED
#352244-G	GRAPHITE	OPTION



STEERING PLATES

#	Configuration	Material	Status
#352366	1 DOT	CARBON	OPTION
#352367	2 DOTS	CARBON	OPTION
#352368	3 DOTS	CARBON	INCLUDED
#352372	1 DOT	ALU	OPTION
#352370	2 DOTS	ALU	OPTION

XRAY BALL-BEARINGS

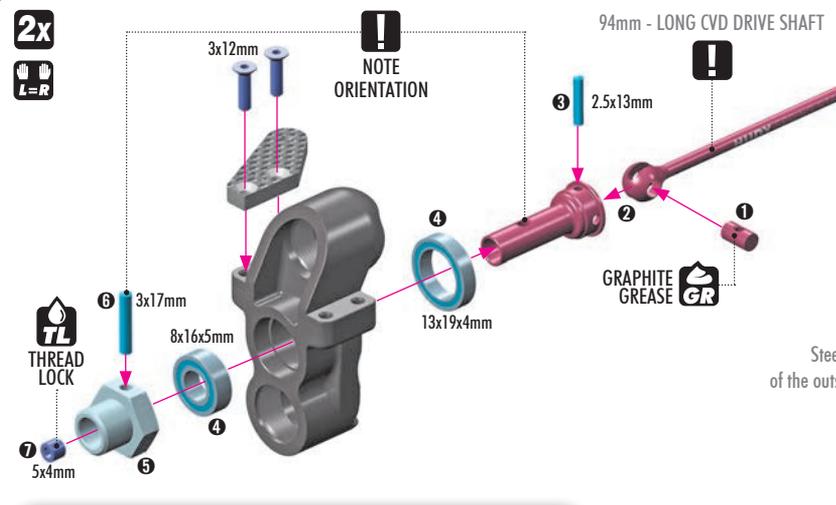
#	Size	Lubricant	Material	Status
#930816	8x16x5	GREASE	STEEL	OPTION
#940816	8x16x5	GREASE	RUBBER	INCLUDED
#931318	13x19x4	GREASE	STEEL	OPTION
#941318	13x19x4	GREASE	RUBBER	INCLUDED
#930817	8x16x5	OIL	STEEL	OPTION
#940817	8x16x5	OIL	RUBBER	OPTION
#931319	13x19x4	OIL	STEEL	OPTION
#941319	13x19x4	OIL	RUBBER	OPTION



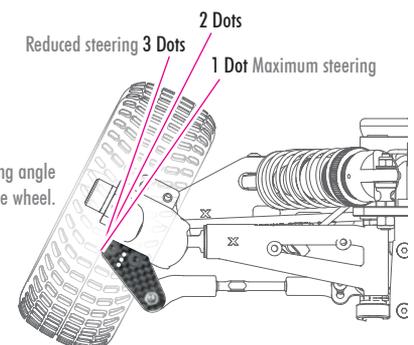
- 352135-M FRONT UPPER ARM - MEDIUM
- 352244-H PB STEERING BLOCK LB - HARD
- 352368 CARBON STEERING PLATE - 3 DOTS (1+1)
- 355211 CVD DRIVE AXLE - HUDY SPRING STEEL™
- 355221 CVD UNIVERSAL DRIVE SHAFT 94mm - HUDY SPRING STEEL™
- 355237 CVD DRIVE SHAFT COUPLING - HUDY SPRING STEEL™
- 355251 ALU WHEEL AXLE OFFSET "+1mm" - HARD COATED (2)
- 357250 STEEL PIVOT BALL 13.7mm (2)
- 357251 ALU PIVOT BALL 13.7mm WITH STEEL SCREW (2)
- 357252 ALU ADJUSTING NUT M15x1 (2)
- 357254-G COMPOSITE BALL CUP 13.9mm - 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)

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

- 2x 901504 SB M5x4
- 2x 940816 BB 8x16x5
- 2x 941318 BB 13x19x4
- 2x 980263 P 2.5x13
- 2x 980317 P 3x17



#355222 UNIVERSAL DRIVE SHAFT - HUDY SPRING STEEL™



TIP

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

Be careful NOT to overtighten the setscrew, as excessive tension in the drive axle may cause it to break. Instead, use thread lock to secure the setscrew.

STEERING PLATES

#	Configuration	Material	Status
#352366	1 DOT	CARBON	OPTION
#352367	2 DOTS	CARBON	OPTION
#352368	3 DOTS	CARBON	INCLUDED
#352372	1 DOT	ALU	OPTION
#352370	2 DOTS	ALU	OPTION

6. FRONT SUSPENSION

2x

! ALU pivot ball
BLACK color

! STEEL pivot ball
SILVER color

TIP Tighten hex nuts using HUDY tool #107581.

#357253
BRASS ADJUSTING NUT M15x1

OPTION

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.

2x **357256**
SHIM 6x13x1

2x

Lexan® Wings (NOT INCLUDED)

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

OPTION

3x6mm

1mm

TIP HUDY Tool Allen 2.5mm

#35257 PIVOT BALL CAMBER
ALU SHIM 6x13x1.5mm (2)

OPTION

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

SET-UP BOOK
CAMBER
TRACK-WIDTH

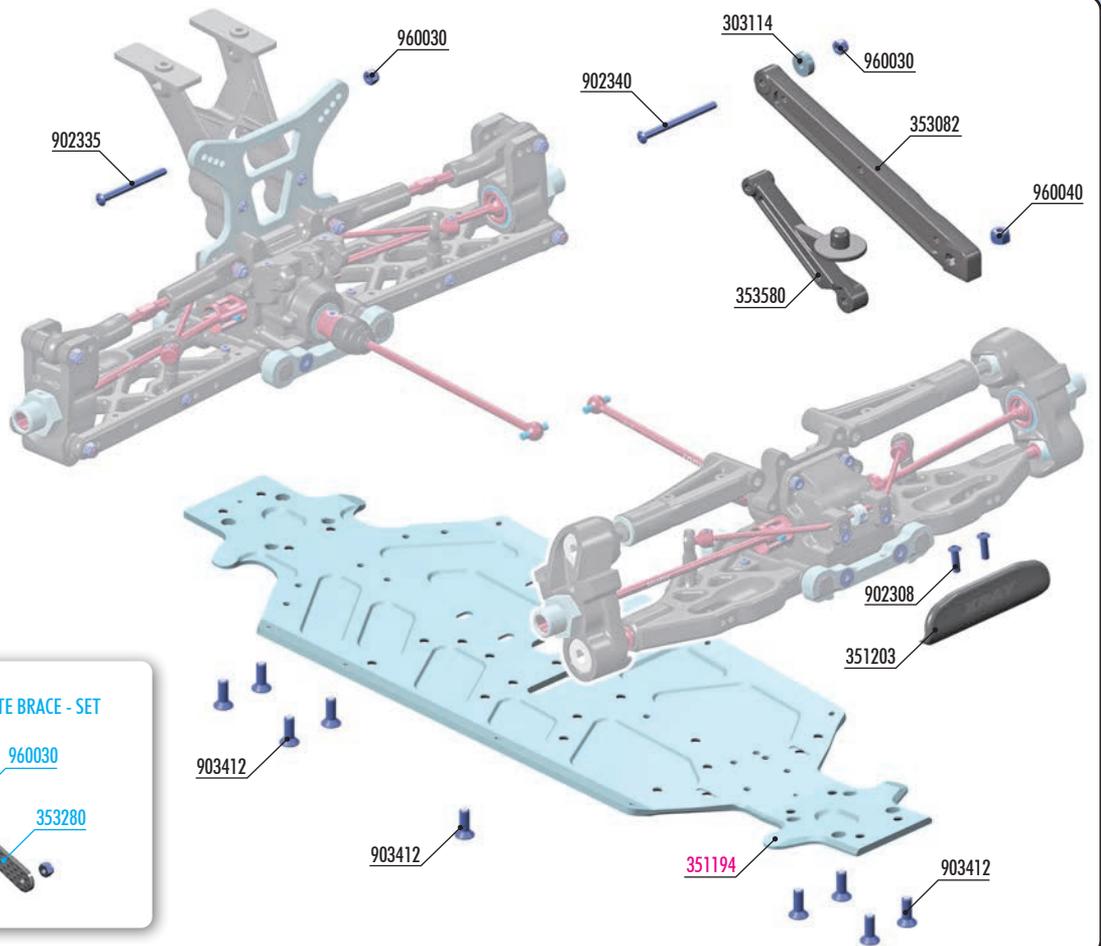
2x

ASSEMBLED VIEW

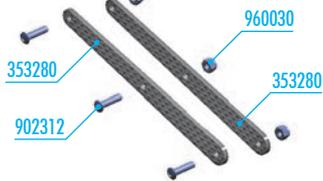
TIP HUDY Tool Allen 2.5mm

SET-UP BOOK
ROLL CENTER

6. FRONT & REAR ASSEMBLY



#353280
CARBON BRACES FOR REAR COMPOSITE BRACE - SET
 OPTION



BAG

06

303114 ALU SHIM 3x10x3mm (10)
 351203 COMPOSITE FRONT BUMPER FOR SEMI-SPLIT BULKHEAD
 353082 COMPOSITE REAR BRACE - MEDIUM - M
 353580 COMPOSITE WING HOLDER BRACE WITH REAR BODY POST

902340 HEX SCREW SH M3x40 (10)
 903412 HEX SCREW SFH M4x12 (10)
 960030 NUT M3 (10)
 960040 NUT M4 (10)

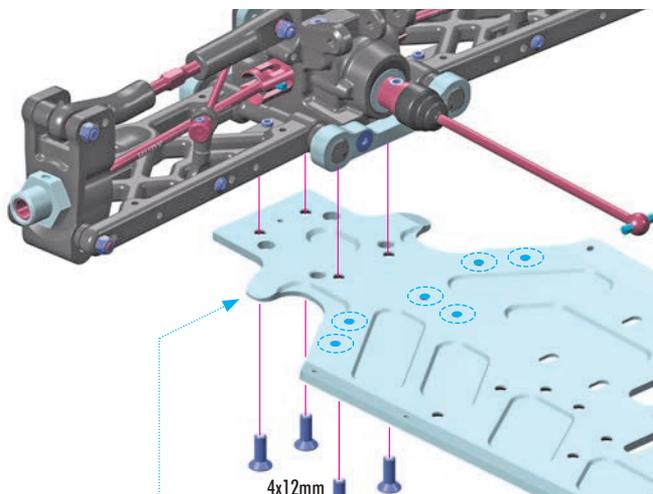
902308 HEX SCREW SH M3x8 (10)
 902335 HEX SCREW SH M3x35 (10)

351194 ALU CHASSIS - SWISS 7075 T6 (3mm)

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



4x 903412
 SFH M4x12



#351236
STAINLESS STEEL CHASSIS PROTECTOR - REAR
 OPTION



GR GRAPHITE GREASE



During INITIAL assembly, there is NO need to check gear mesh or diff play. Fitment should NOT be checked until suspension holders are installed on the bulkheads and the complete assembly is mounted to the chassis. All parts have

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



903308
 SFH M3x8



#293085
HUDY PURE TUNGSTEN WEIGHT - 10g
 OPTION



903305
 SFH M3x5



Locations for weights

specifically designed tolerances for proper operation once fully assembled. After assembly, check for free rotation of all drivetrain parts and non-binding movement of the suspension.

6. FRONT & REAR ASSEMBLY

1x 960030 N M3

1x 902335 SH M3x35

Push the top of the holder together with fingers to insert the brace with body post.

NOTE
Overtightening will deform the composite wing holder, and will NOT allow you to mount the wing as per the instructions on page 52.

1x 303114 SHIM 3x10x3

903412 SFH M4x12 1x

902340 SH M3x40 1x

960040 N M4 1x

1x 960030 N M3

3x40mm

3mm

4x12mm

M3

M4

#353280 CARBON BRACE SET for extra stiffness adjustment. **OPTION**

ASSEMBLED VIEW

2x 902308 SH M3x8

4x 903412 SFH M4x12

FRONT BUMPER ASSEMBLY

3x8mm

PUSH

FRONT

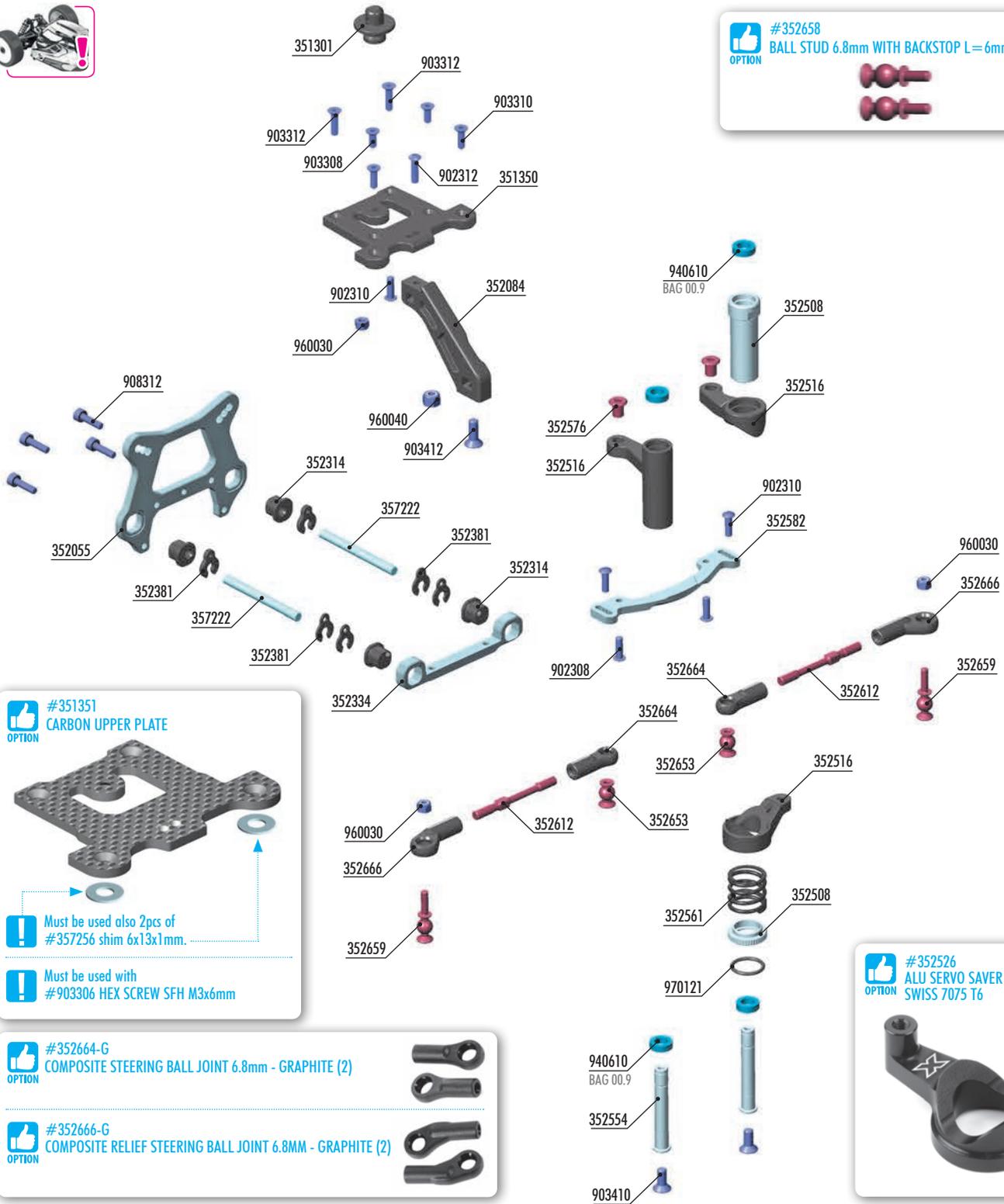
#351221 STAINLESS STEEL CHASSIS PROTECTOR - FRONT **OPTION**

! During INITIAL assembly, there is NO need to check gear mesh or diff play. Fitment should NOT be checked until suspension holders are installed on the bulkheads and the complete assembly is mounted to the chassis. All parts have specifically designed tolerances for proper operation once fully assembled. After assembly, check for free rotation of all drivetrain parts and non-binding movement of the suspension.

7. STEERING



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



#351351
OPTION CARBON UPPER PLATE



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

! Must be used with #903306 HEX SCREW SFH M3x6mm

#352664-G
OPTION COMPOSITE STEERING BALL JOINT 6.8mm - GRAPHITE (2)



#352666-G
OPTION COMPOSITE RELIEF STEERING BALL JOINT 6.8MM - GRAPHITE (2)



#352526
OPTION ALU SERVO SAVER LOWER ARM SWISS 7075 T6



BAG
07

351301	BODY POSTS	352666	COMPOSITE RELIEF STEERING BALL JOINT 6.8mm (2)
351350	COMPOSITE UPPER PLATE WITH TWO BRACE POSITIONS	357222	FRONT UPPER PIVOT PIN 4x45 (2)
352055	ALU FRONT SHOCK TOWER FOR SEMI-SPLIT BULKHEAD - LOWER	902308	HEX SCREW SH M3x8 (10)
352084	COMPOSITE FRONT BRACE	902310	HEX SCREW SH M3x10 (10)
352314	COMPOSITE SQUARE ADJ. ROLL CENTER BUSHINGS - V2 (2)	902312	HEX SCREW SH M3x12 (10)
352334	ALU FRONT UPPER ARM HOLDER FOR SEMI-SPLIT BULKHEAD	903308	HEX SCREW SFH M3x8 (10)
352381	CASTER CLIPS (2)	903310	HEX SCREW SFH M3x10 (10)
352508	SERVO SAVER FOR SEMI-SPLIT BULKHEAD - GRAPHITE - SET	903312	HEX SCREW SFH M3x12 (10)
352516	COMPOSITE SERVO SAVER FOR SEMI-SPLIT BULKHEAD - GRAPHITE	903410	HEX SCREW SFH M4x10 (10)
352554	ALU SERVO SAVER PIVOT SHAFT WITH CHASSIS LOCK (2)	903412	HEX SCREW SFH M4x12 (10)
352561	SERVO SAVER SPRING PROGRESSIVE	908312	HEX SCREW SOCKET HEAD CAP SCH M3x12 (10)
352576	STEERING PLATE BUSHING (2)	940610	BALL-BEARING 6x10x3 RUBBER SEALED - OIL (2)
352582	ALU STEERING PLATE FOR SEMI-SPLIT BULKHEAD - SWISS 7075 T6	960030	NUT M3 (10)
352612	ADJ. TURNBUCKLE M4 L/R 45mm - HUDY SPRING STEEL™ (2)	960040	NUT M4 (10)
352653	BALL STUD 6.8mm WITH BACKSTOP - M3 (2)	970121	O-RING 12.1 x 1.6 (10)
352659	BALL STUD 6.8mm WITH BACKSTOP L=6mm - M3x11 (2)		
352664	COMPOSITE STEERING BALL JOINT 6.8mm - V3 (2)		

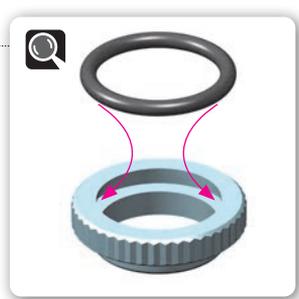
Numbers in parentheses () refer to quantities when purchased separately.

7. STEERING

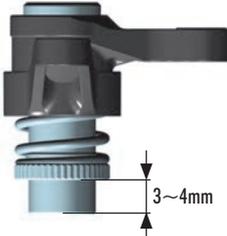


1x 970121
O 12.1x1.6

LARGER diameter on TOP
NOTE SPRING ORIENTATION
SMALLER diameter on BOTTOM



INITIAL PRELOAD SETTING



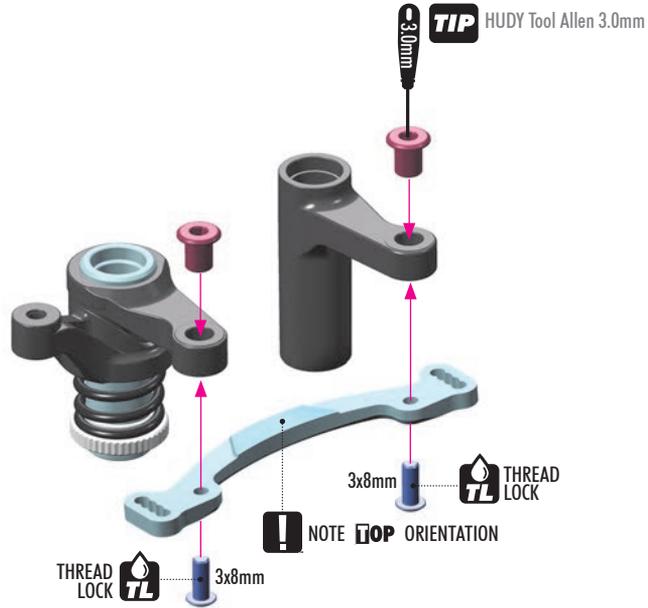
#352526
ALU SERVO SAVER LOWER ARM
OPTION SWISS 7075 T6



SET-UP BOOK
SERVO SAVER



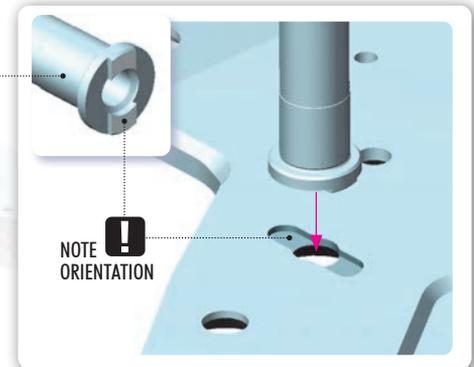
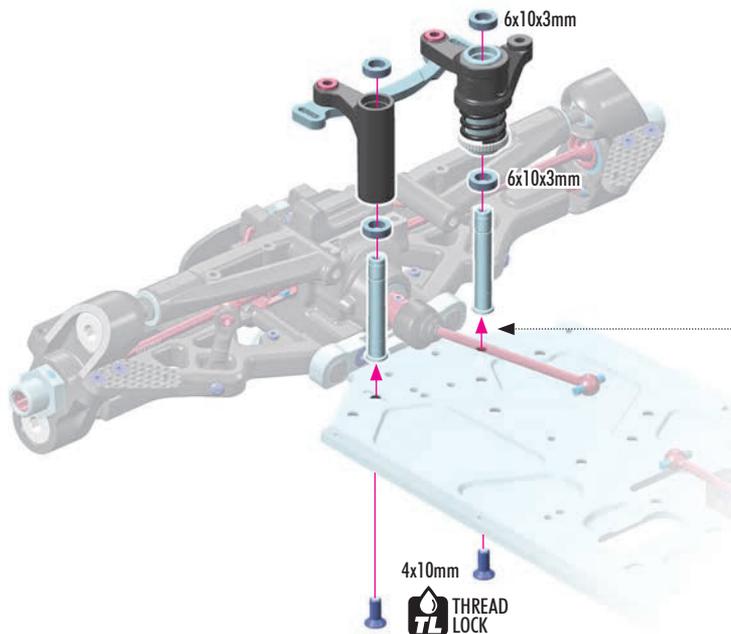
2x 902308
SH M3x8



2x 903410
SFH M4x10



4x 940610
BB 6x10x3



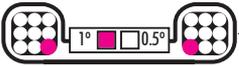
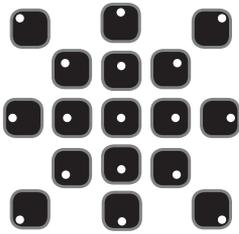


1x 902310
SH M3x10

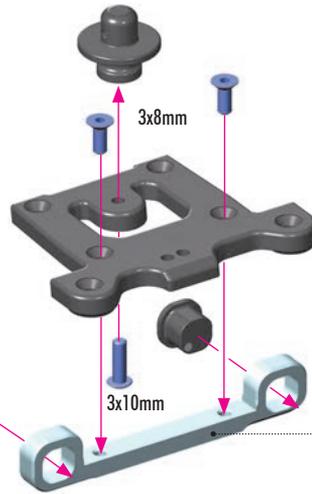


2x 903308
SFH M3x8

All possible mounting alternatives of eccentric bushings.



INITIAL SETTING



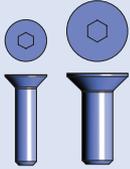
SET-UP BOOK
ROLL CENTER



1x 902312
SH M3x12



2x 903310
SFH M3x10



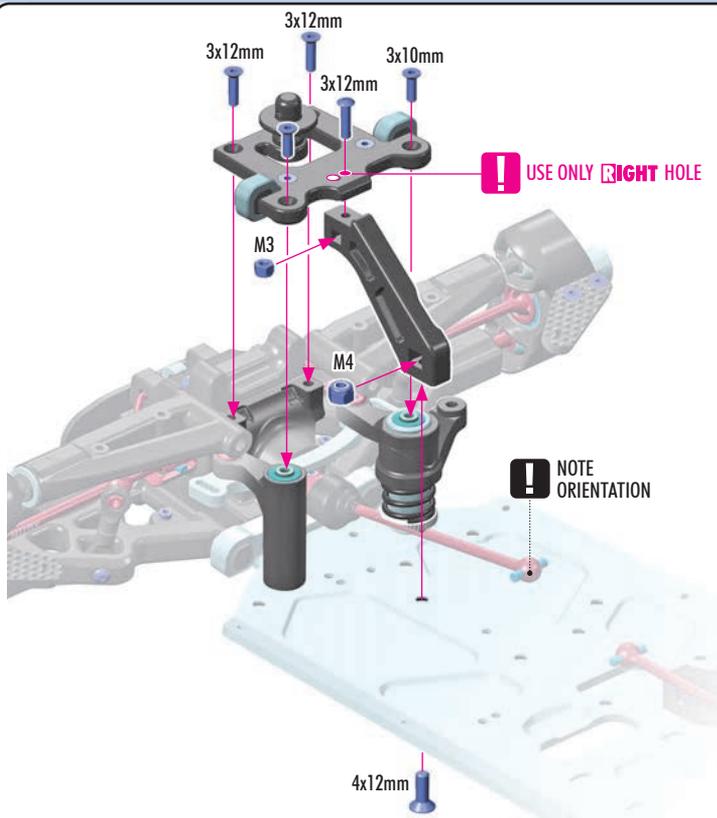
2x 903312 SFH M3x12
1x 903412 SFH M4x12



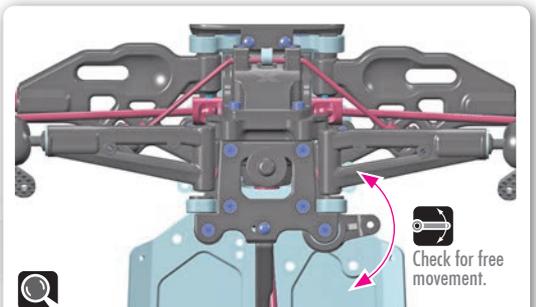
1x 960030
N M3



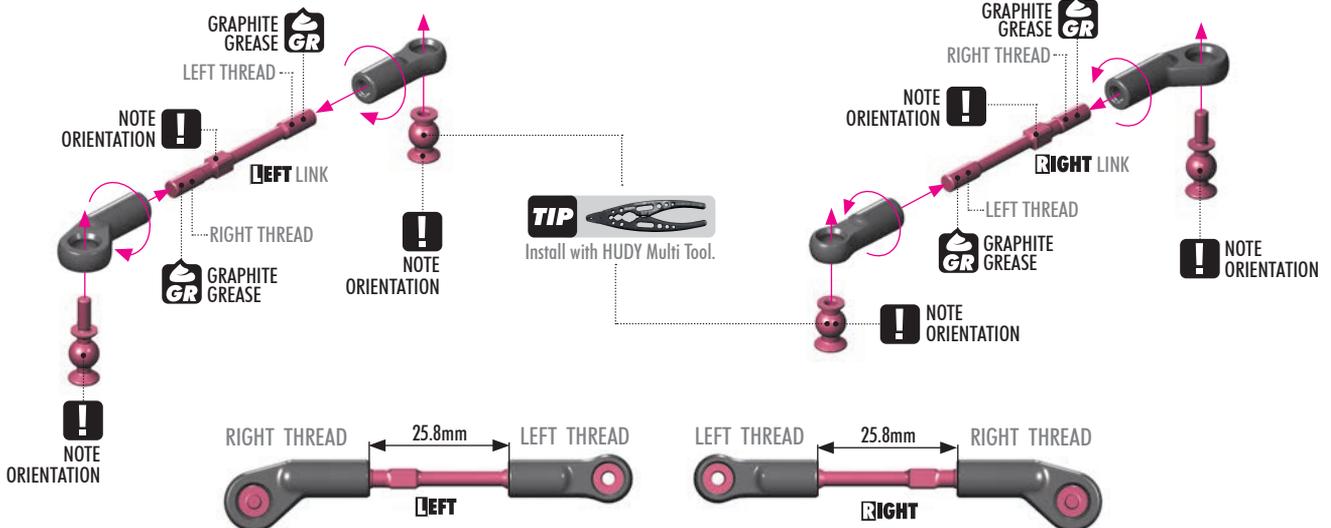
1x 960040
N M4



NOTE ORIENTATION



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



7. STEERING



4x 908312
SCH M3x12

ASSEMBLED VIEW

1+1mm 2mm

1mm 1mm

2mm 3x12mm

! XRAY logo towards the front.

INITIAL SETTING

All possible mounting alternatives of eccentric bushings.

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

UPPER CLIP
Behind arm

LOWER SHIM
Behind arm

CASTER

SET-UP BOOK
ROLL CENTER
CASTER



2x 902310
SH M3x10



2x 960030
N M3

2x **L-R**

INITIAL SETTING

! NOTE ORIENTATION
Adjustment block towards outside.

3x10mm

M3

! NOTE ORIENTATION
Adjustment block towards outside.

Check for free movement.

Check for free movement.

SET-UP BOOK
ACKERMANN
BUMPS STEER
TOE-IN

8. CENTER DIFF & BRAKE

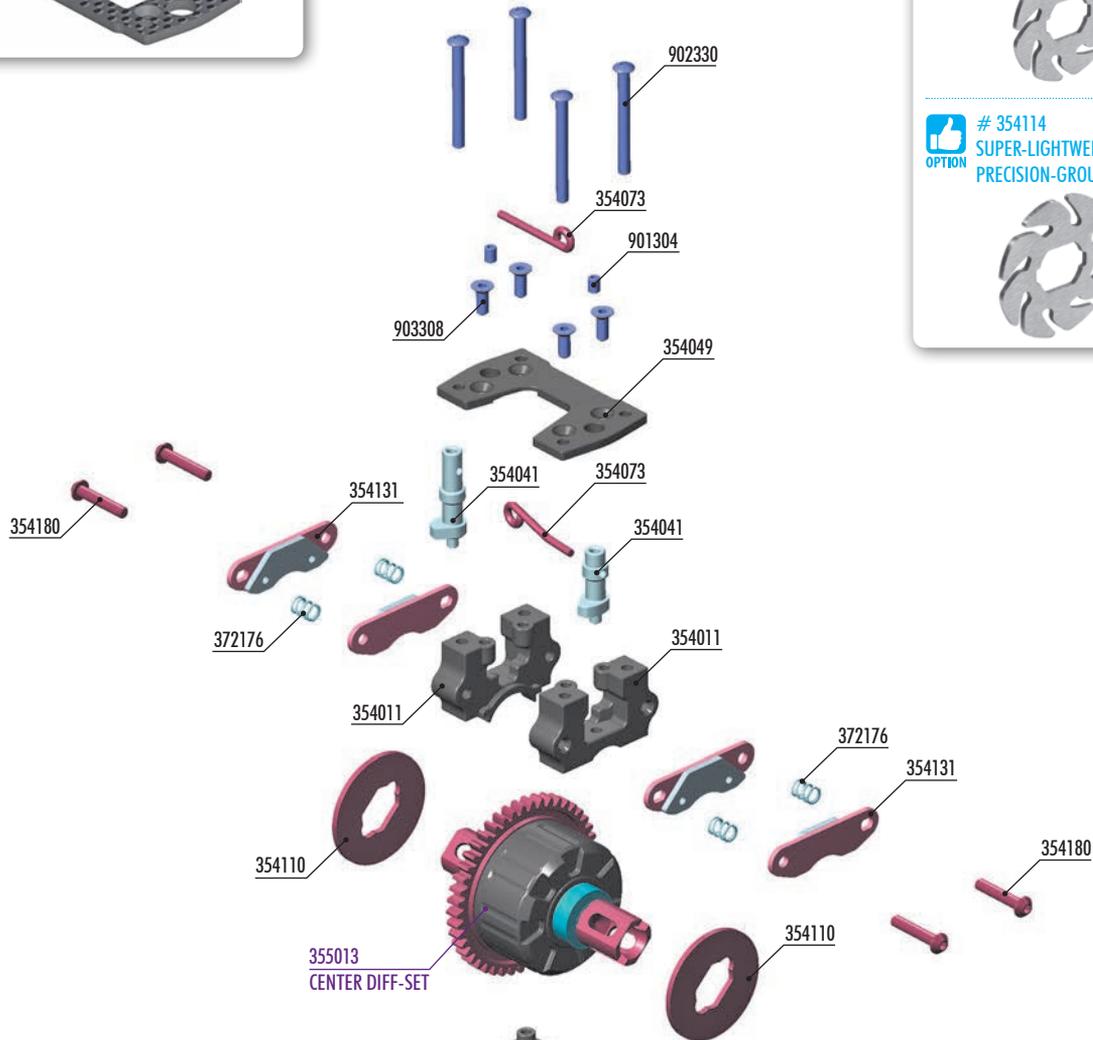
#354057
CARBON CENTER DIFF MOUNTING PLATE
OPTION



#354113
SUPER-LIGHTWEIGHT VENTILATED BRAKE DISK
PRECISION-GROUND (2)



#354114
SUPER-LIGHTWEIGHT VENTILATED BRAKE DISK
PRECISION-GROUND - LARGE (2)



#354011-G
CENTER DIFF MOUNTING PLATE SET
HIGHER - GRAPHITE
OPTION



#354121
STEEL BRAKE PAD - LASER CUT (4)
OPTION



#354130
BRAKE PAD FIBER (4)
OPTION



#354132
BRAKE PAD "SLS" (4)
OPTION



! **CA** It is necessary to glue the brake pad with strong CA glue suitable for steel.

BAG

08

354011 CENTER DIFF MOUNTING PLATE SET - HIGHER
354041 ALU BRAKE CAM POST & ROD (2+2) HARD COATED
354049 COMPOSITE CENTER DIFF MOUNTING PLATE
354073 BRAKE CAME ROD (1+1)
354110 VENTILATED BRAKE DISK - LASER CUT - PRECISION-GROUND
354131 GLUED BRAKE PAD SET - ULTRA-EFFICIENT (4)
354180 STEEL BRAKE PAD GUIDE PIN SCREW (2)
372176 SPRING 4.25 COILS 3.6x6x0.4mm; C=1.5 - GOLD (SOFT) (2)

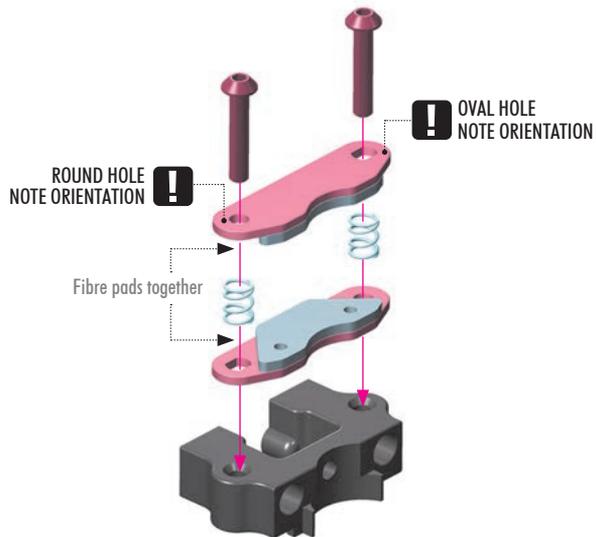
901304 HEX SCREW SB M3x4 (10)
902330 HEX SCREW SH M3x30 (10)
903308 HEX SCREW SFH M3x8 (10)
903412 HEX SCREW SFH M4x12 (10)

355013 CENTER DIFFERENTIAL - LARGE - SET

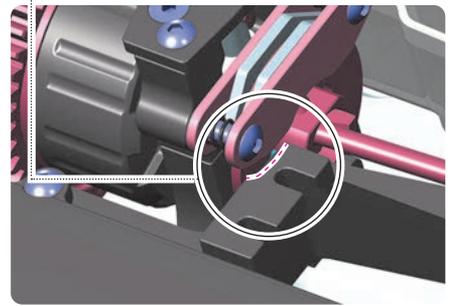
Numbers in parentheses () refer to quantities when purchased separately.

8. CENTER DIFF & BRAKE

2x



When using ultra-efficient brake pads, carefully remove a small amount of material from radio tray as shown.



#354121
STEEL BRAKE PAD - LASER CUT (4)
OPTION



#354130
BRAKE PAD FIBER (4)
OPTION

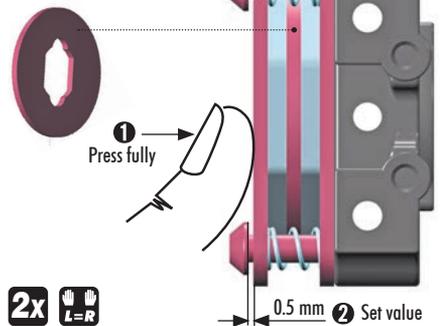


#354132
BRAKE PAD "SLS" (4)
OPTION



It is necessary to glue the brake pad with strong CA glue suitable for steel.

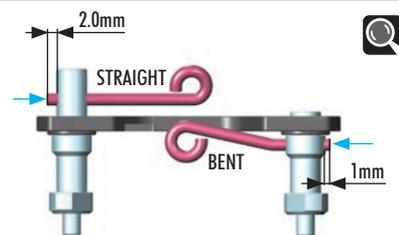
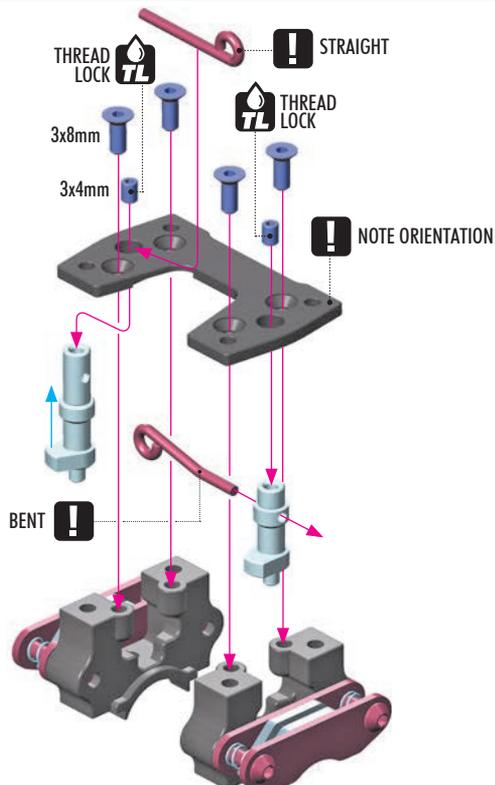
Temporarily insert **BRAKE DISK** between pads to set correct gap.



2x

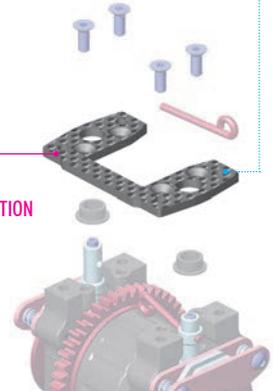
2x 901304
SB M3x4

4x 903308
SFH M3x8



#354057
CARBON CENTER DIFF MOUNTING PLATE
OPTION

REVERT ORIENTATION



8. CENTER DIFF & BRAKE

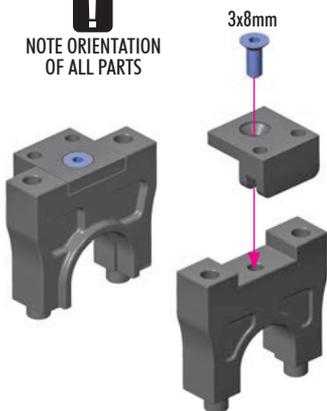


2x 903308
SFH M3x8

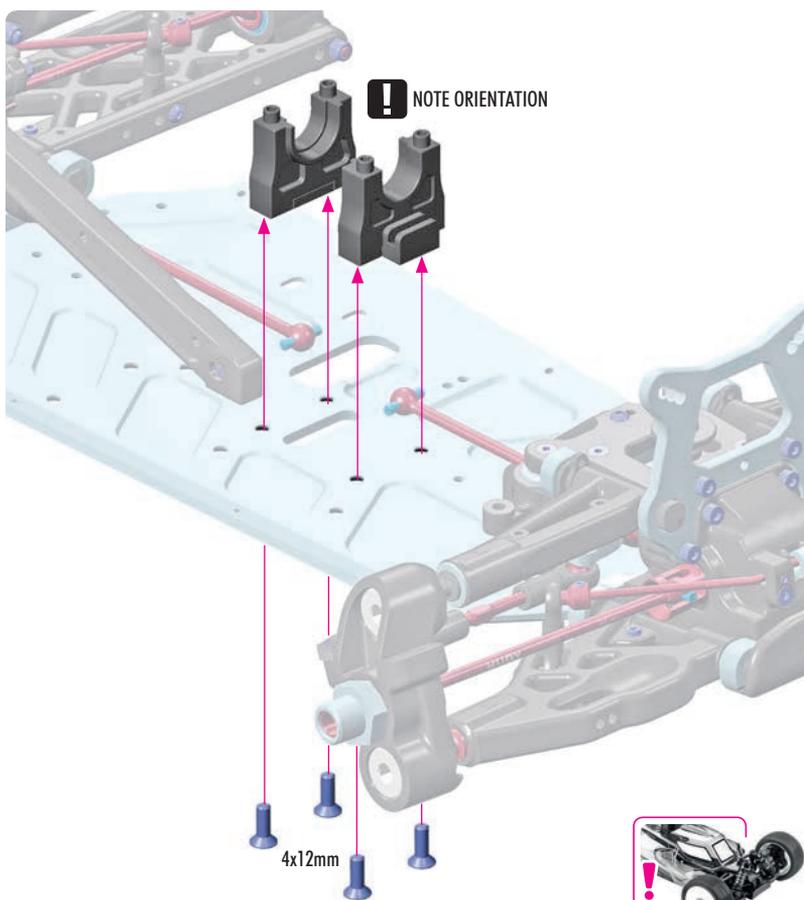


4x 903412
SFH M4x12

! NOTE ORIENTATION
OF ALL PARTS



#354011-G
CENTER DIFF MOUNTING PLATE SET
HIGHER - GRAPHITE



! NOTE ORIENTATION

4x12mm



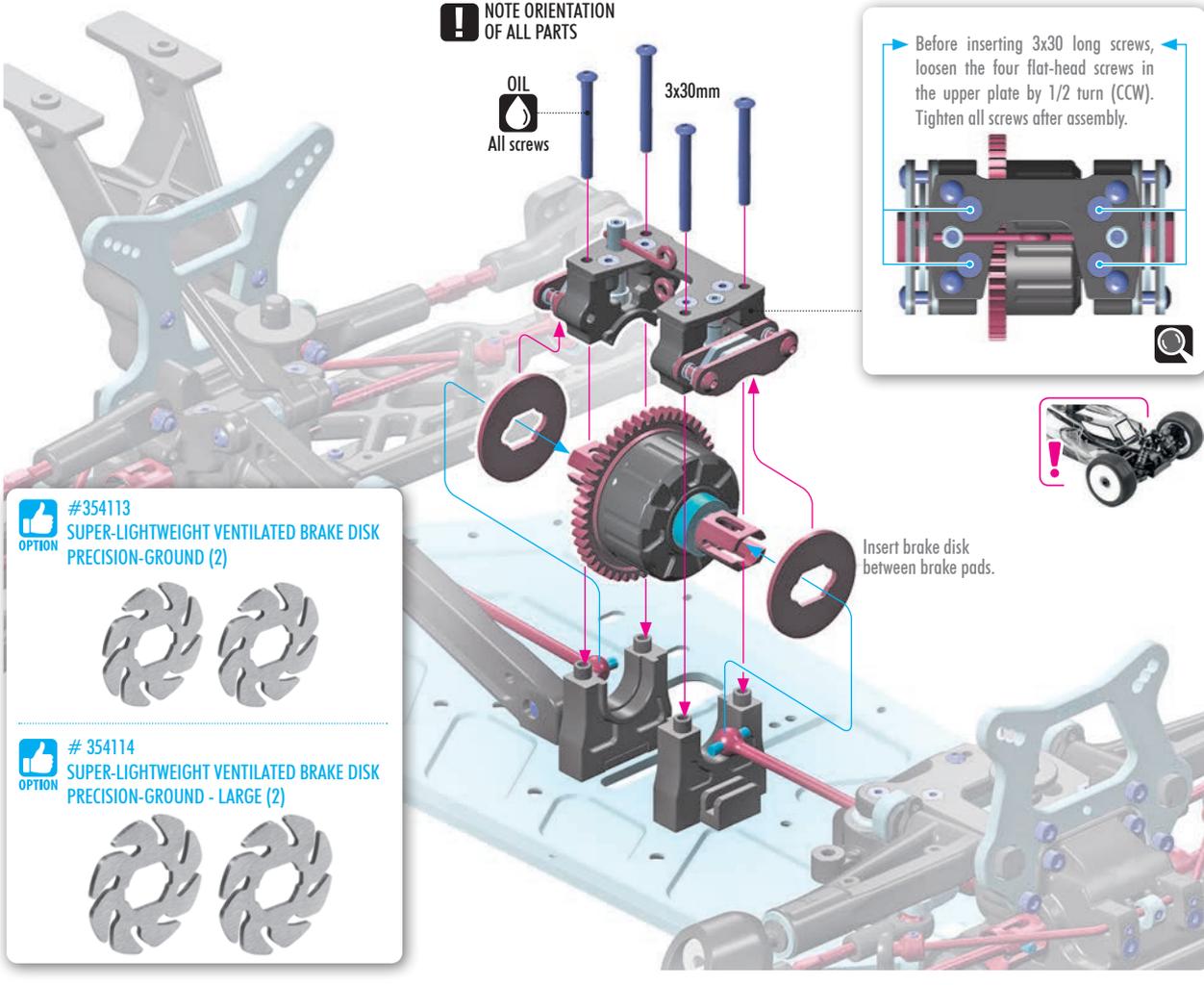
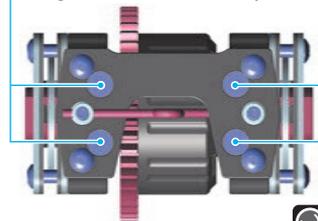
4x 902330
SH M3x30

! NOTE ORIENTATION
OF ALL PARTS



3x30mm

Before inserting 3x30 long screws,
loosen the four flat-head screws in
the upper plate by 1/2 turn (CCW).
Tighten all screws after assembly.



#354113
SUPER-LIGHTWEIGHT VENTILATED BRAKE DISK
PRECISION-GROUND (2)



#354114
SUPER-LIGHTWEIGHT VENTILATED BRAKE DISK
PRECISION-GROUND - LARGE (2)



Insert brake disk
between brake pads.

9. FUEL TANK & ENGINE



#358500
CLUTCH SET - HIGH TORQUE - V2
OPTION



OPTION	CLUTCH SPRINGS (4pcs)	RPM		
#358480	SOFT	GOLD	EARLY	OPTION
#358481	MEDIUM	GREY		INCLUDED
#358482	HARD	SILVER	LATE	OPTION

OPTION	4-SHOE CLUTCH SHOES	GRIP	
#358457	ALU HARD (4)	1.00g	HIGH OPTION
#358456	ALU MED (4)	1.00g	OPTION
#358461	GRAPHITE (4)	1.00g	OPTION
#358460	ALU HARD (4)	1.15g	OPTION
#358459	ALU MEDIUM (4)	1.15g	INCLUDED
#358458	ALU SOFT (4)	1.15g	LOW OPTION

OPTION	CLUTCHBELL 4 SHOE CLUTCH		
#358413	13T		OPTION
#358413-L	13T Lightweight		OPTION
#358414	14T		INCLUDED
#358414-L	14T Lightweight		OPTION

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



#650107
FX K303
OPTION

- 3 PORTS
- DLC
- CERAMIC BEARING
- BALANCED

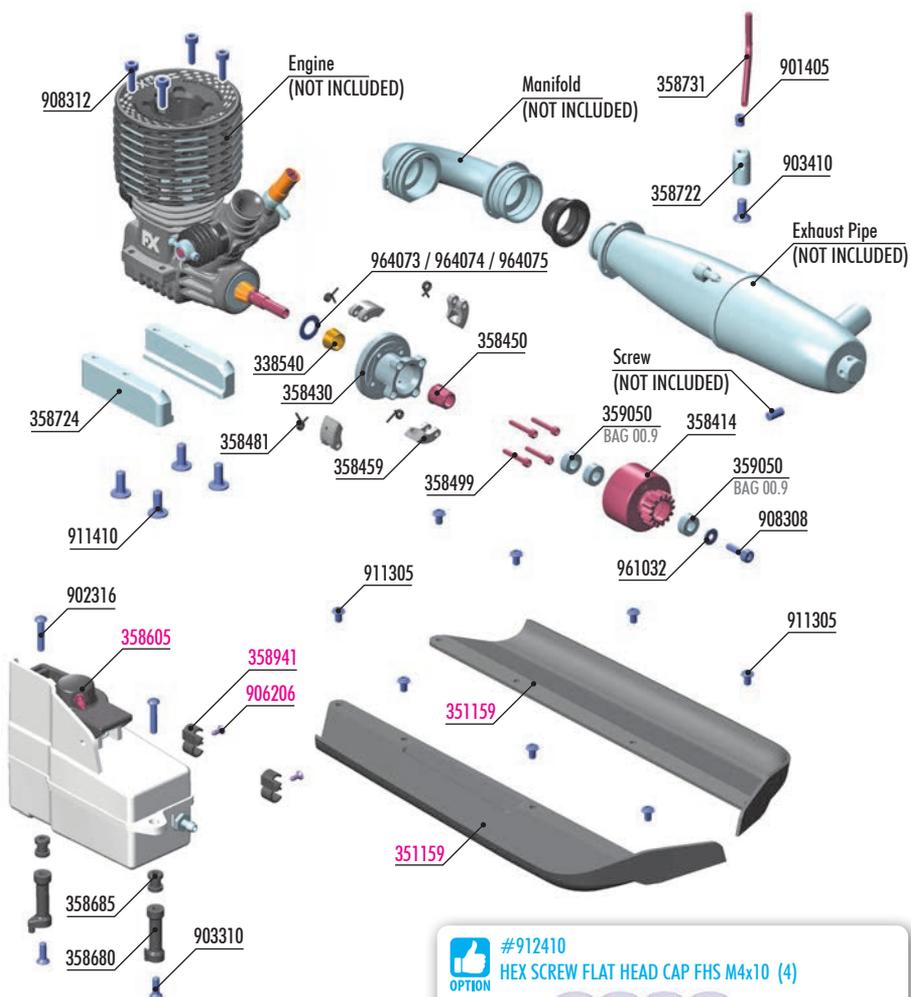


FX EUROPEAN CHAMPION

#659505 FX MUFFLER 3.5CC EFRA 2131 + MANIFOLD M - CHROME
#659558 FX MUFFLER 3.5CC EFRA 2169 + MANIFOLD - MEDIUM
OPTION



FX EUROPEAN CHAMPION



#912410
HEX SCREW FLAT HEAD CAP FHS M4x10 (4)
OPTION



#358660
CARBON 125CC FUEL TANK GUARD
OPTION



#358709
ALU MONOBLOCK ENGINE MOUNT - SWISS 7075 T6
OPTION



#358718
ALU STAND (FX, NOVAROSS, MAX, SIRIO)
OPTION



#358719
ALU STAND (PICCO, REDS, ORION, LRP, OS, ULT. RACING)
OPTION



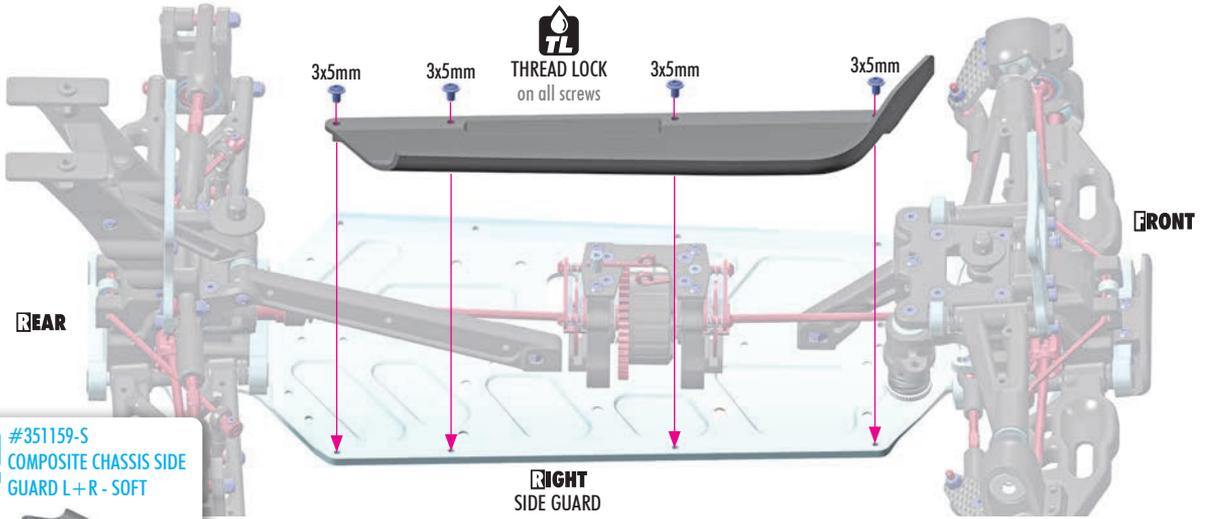
- 338540 FLYWHEEL COLLAR 7MM
- 358414 4-SHOE CLUTCH BELL 14T + 3x BALL-BEARING
- 358430 4-SHOE FLYWHEEL + FLYWHEEL COLAR
- 358450 4-SHOE FLYWHEEL NUT - HUDY SPRING STEEL™
- 358459 4-SHOE ALU CLUTCH SHOE - MEDIUM (4)
- 358481 4-SHOE CLUTCH SPRINGS - GREY - MEDIUM (4)
- 358499 4-SHOE CLUTCH SPRINGS - GREY - MEDIUM (4)
- 358680 FUEL TANK MOUNTING POST (2)
- 358685 FUEL TANK MOUNTING GROMMET (4)
- 358722 EXHAUST WIRE MOUNT SET
- 358724 ALU ENGINE MOUNT - CNC MACHINED (L+R)
- 358731 EXHAUST MOUNTING WIRE - LONG
- 359050 BALL-BEARING 5x10x4 STEEL SEALED - GREASE - V2 (2)
- 901405 HEX SCREW SB M4x5 (10)

- 902316 HEX SCREW SH M3x16 (10)
- 903310 HEX SCREW SFH M3x10 (10)
- 903410 HEX SCREW SFH M4x10 (10)
- 908308 HEX SCREW (CAP HEAD) 3x8 (10)
- 908312 HEX SCREW (CAP HEAD) 3x12 (10)
- 911305 HEX SCREW FLANGED SH M3x5 (10)
- 911410 HEX SCREW FLANGED SH M4x10 (10)
- 961032 WASHER S 3.2 (10)
- 964073 WASHER S 7x10x0.2 (10)
- 964074 WASHER S 7x10x0.3 (10)
- 964075 WASHER S 7x10x0.5 (10)

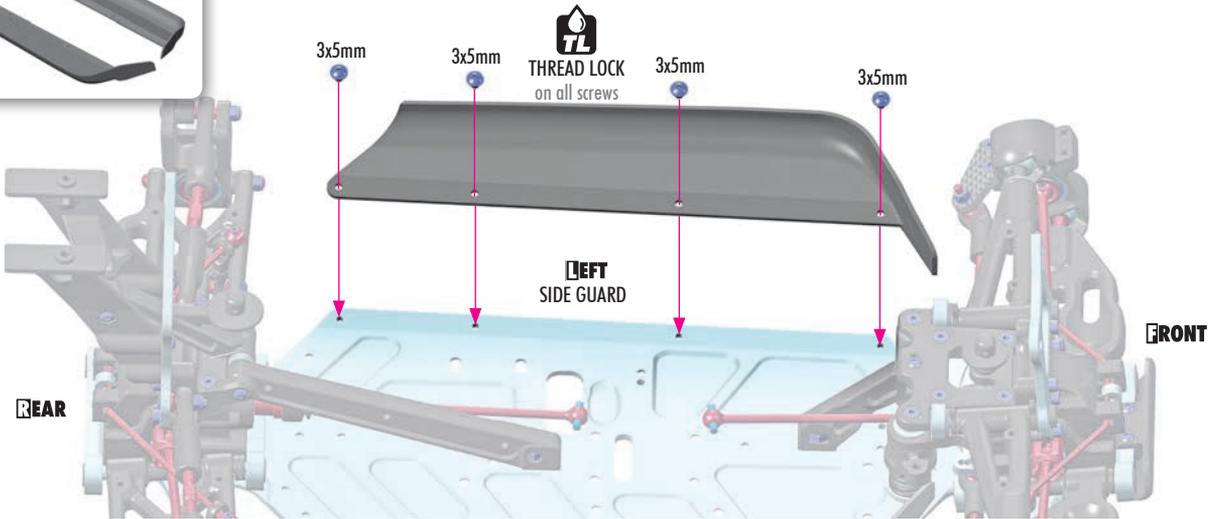
- 351159 CHASSIS SIDE GUARDS L+R
- 358605 FUEL TANK 125CC WITH FLOATING FILTER & TRANSIENT JET
- 358941 COMPOSITE TUBING HOLDER FOR FUEL TANK (2)
- 906206 SCREW PHILLIPS FH 2.2x6 (10)

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

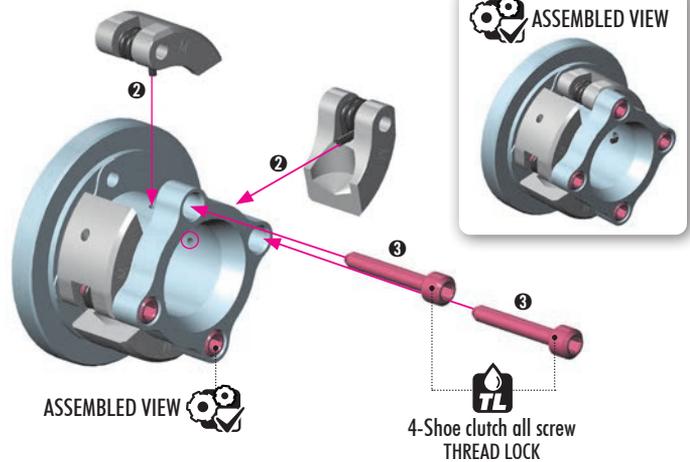
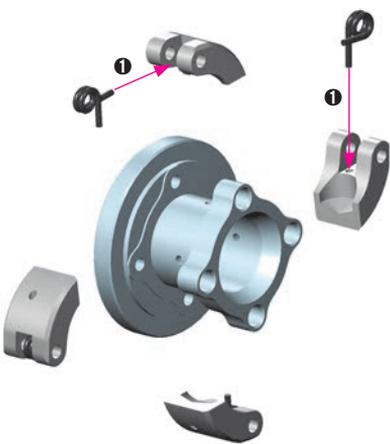
9. FUEL TANK & ENGINE



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



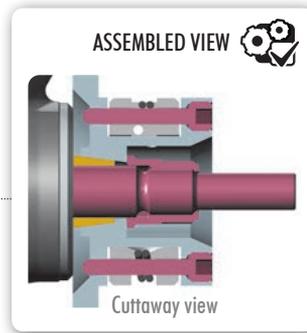
All the different shoes and springs can be combined as desired. Every different combination of shoes and springs has a different effect in performance. For example for low grip tracks it is suggested to use two medium shoes and two graphite shoes. Springs can be combined as well and you can use for example two soft and two medium springs. You need to experience the different combinations to find the proper setting that will be suitable for your track conditions and your racing style.



OPTION	CLUTCH SPRINGS (4pcs)	RPM	
#358480	SOFT GOLD	EARLY	OPTION
#358481	MEDIUM GREY	LATE	INCLUDED
#358482	HARD SILVER		OPTION

OPTION	4-SHOE CLUTCH SHOES	GRIP	
#358457	ALU HARD (4)	1.00g	HIGH OPTION
#358456	ALU MED (4)	1.00g	OPTION
#358461	GRAPHITE (4)	1.00g	OPTION
#358460	ALU HARD (4)	1.15g	OPTION
#358459	ALU MEDIUM (4)	1.15g	INCLUDED
#358458	ALU SOFT (4)	1.15g	LOW OPTION

9. FUEL TANK & ENGINE



Hold the flywheel using HUDY tool #107581  **OPTION**

THREAD LOCK 

Tighten the clutch nut using HUDY tool #107581  **OPTION**

GEAR RATIO Final Drive Ratio

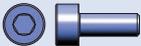
$$(48 : 14) \times 3.54 = 12.14$$

(Center Spur) (Clutchbell) (Internal ratio) (FDR)

SET-UP BOOK
CLUTCH SPRINGS
CLUTCH SHOE



359050
BB 5x10x4



1x 908308
SCH M3x8



1x 961032
S3.2



CLUTCHBELL 4 SHOE CLUTCH			
 OPTION	#358413	13T	OPTION
	#358413-L	13T Lightweight	OPTION
	#358414	14T	INCLUDED
	#358414-L	14T Lightweight	OPTION



TIP Adjust clutch bell clearance using 0.2mm, 0.3mm, or 0.5mm shims as required by the engine type. FX engines DO NOT require any shims.

 **CLUTCH GAP SHIMS**
OPTION
#338584 - 0.2mm
#338585 - 0.3mm
#338586 - 0.5mm



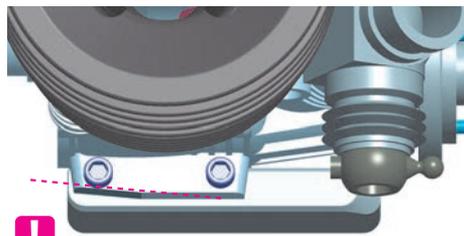
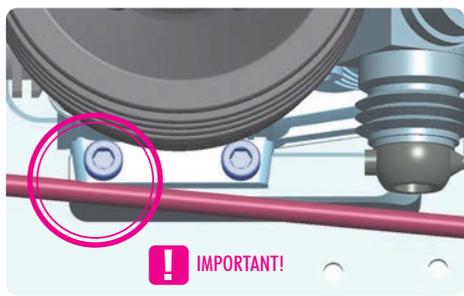
 These bearings must still be regularly serviced and replaced when worn out.

THREAD LOCK 

9. FUEL TANK & ENGINE

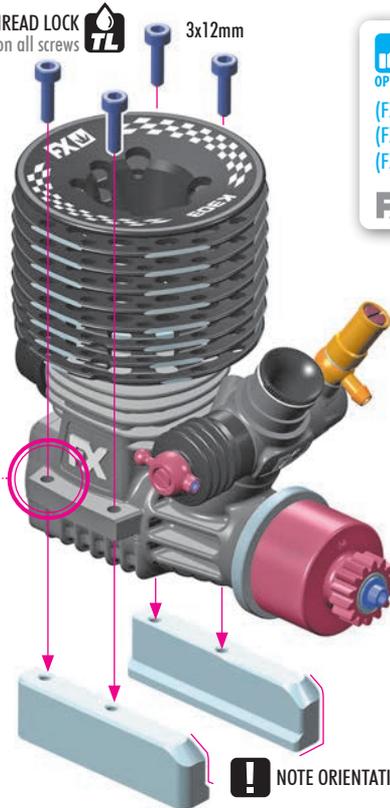


4x 908312
SCH M3x12



When installing the engine, first check that the drive shaft DOES NOT touch the engine. If it does, remove material from the engine case as shown to create clearance between the engine and driveshaft.

THREAD LOCK
on all screws



FX ENGINES
OPTION
(FX K303 #650107)
(FX K303L #650108)
(FX K502 #650304)

FX EUROPEAN CHAMPION



4x 911410
SHF M4x10

#358709 ALU MONOBLOCK ENGINE MOUNT
OPTION
SWISS 7075 T6



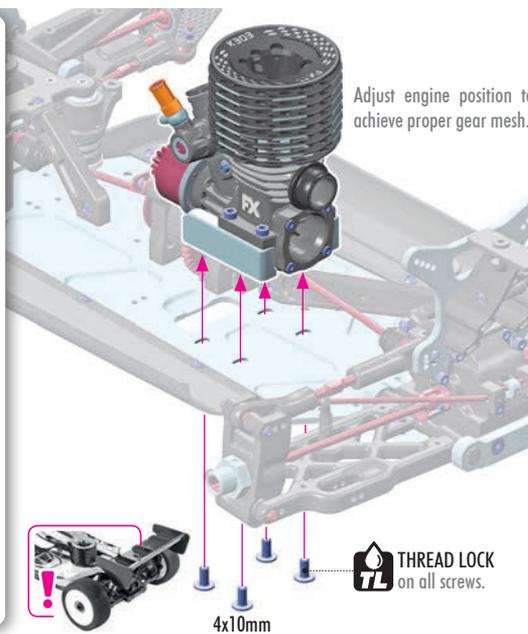
#358718 ALU STAND
OPTION
(FX, NOVAROSS, MAX, SIRIO)



#358719 ALU STAND
OPTION
(PICCO, REDS, ORION, LRP, OS, ULT. RACING)



#912410
OPTION
HEX SCREW FLAT HEAD CAP FHS M4x10 (4)



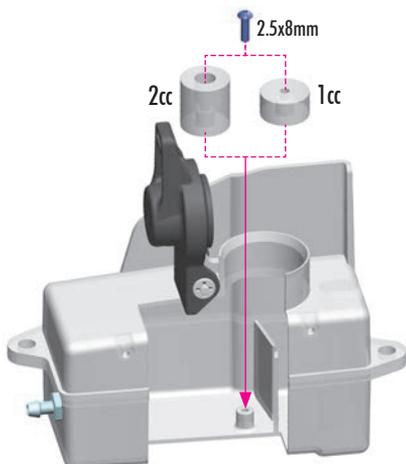
EXTREMELY IMPORTANT

It is very important that your XB8 has properly-adjusted gear mesh. Adjust the gear mesh so there is adequate (or slightly larger) space between the spur gear and clutchbell teeth. Adjust the gear mesh by sliding the engine mounts in the slots of the chassis. You should be able to rock one gear back and forth slightly while holding the other one firmly. Be sure to check the gear mesh all the way around the spur gear. Tighten the screws once the engine alignment and gear mesh are correct, and then re-check the gear mesh to ensure the engine mounts did NOT move.

SET-UP BOOK
GEARING
GEAR MESH ADJ.



1x 907258
SP 2.5x8



The fuel tank volume can be adjusted using the included inserts. The inserts reduce fuel capacity inside the tank to adjust for fuel filter and fuel line capacity and ensure a legal fuel volume for racing.

Tube holders are easily connected to the fuel tank by screws. Using screws is much more secure than using glue to attach the holders to the fuel tank.

2CC FUEL TANK INSERT

The larger insert decreases the fuel tank volume by 2cc, and is recommended for use when the fuel filter is used.



NOTE ORIENTATION



1CC FUEL TANK INSERT

The smaller insert decreases the fuel tank volume by 1cc.



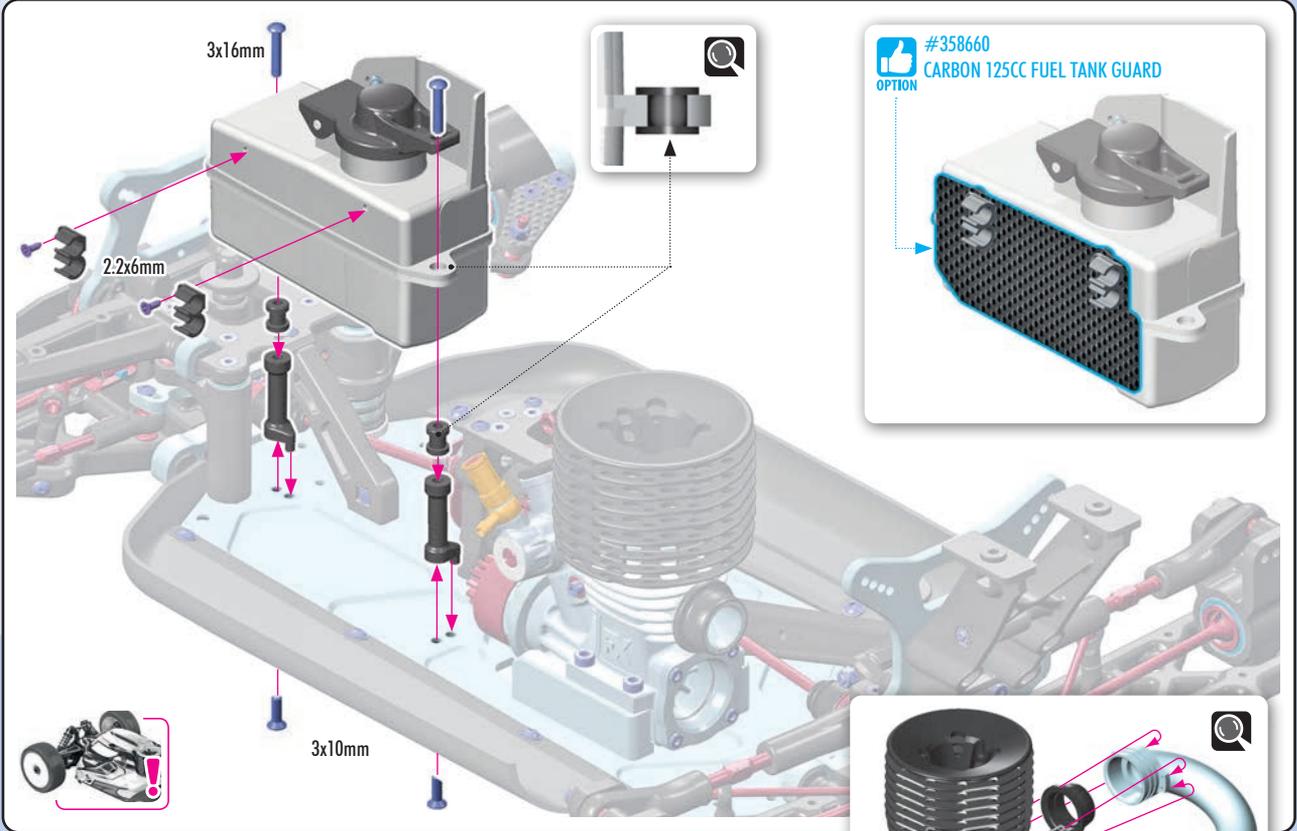
NOTE ORIENTATION



NOTE: The fuel tank insert can be easily mounted to the bottom of the fuel tank using the provided screw, when the fuel tank cap is opened fully.

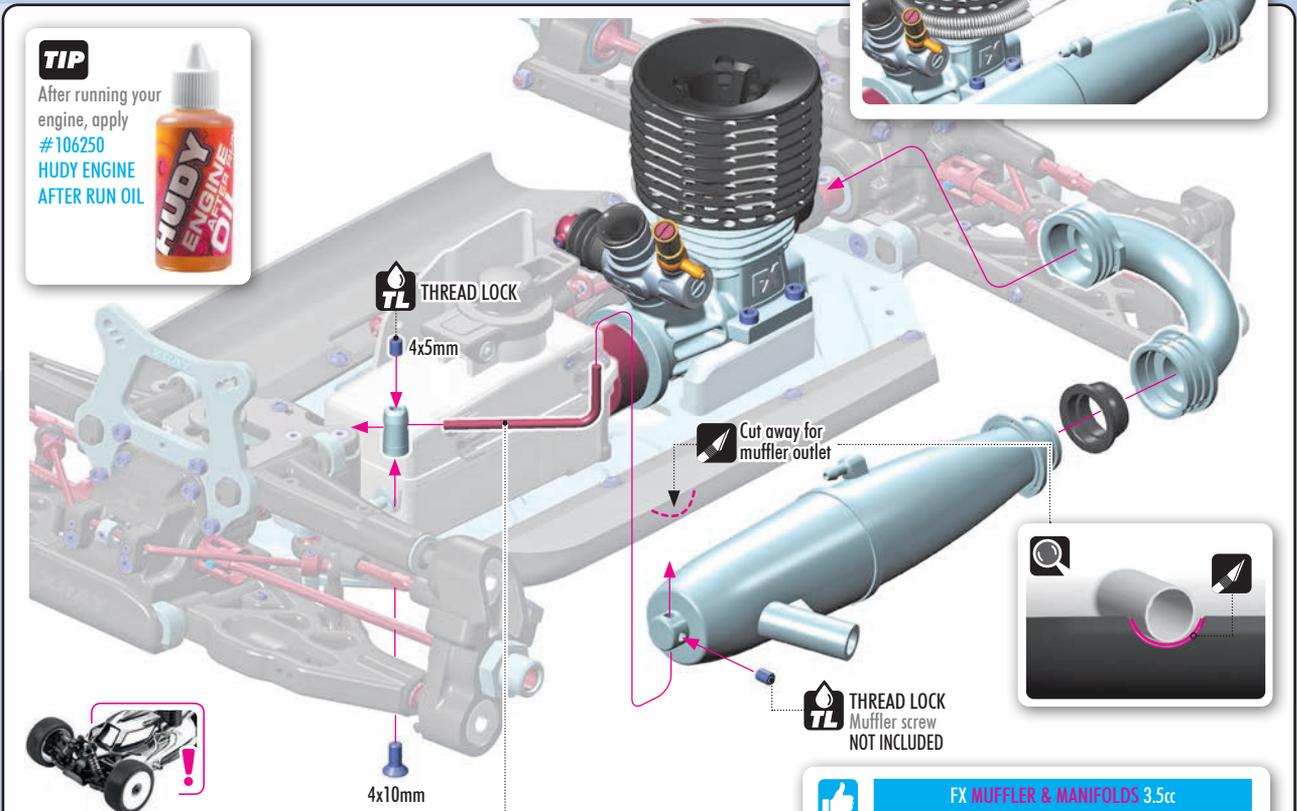
9. FUEL TANK & ENGINE

-  2x 902316 SH M3x16
-  2x 903310 SFH M3x10
-  2x 906206 SFP 2.2x6



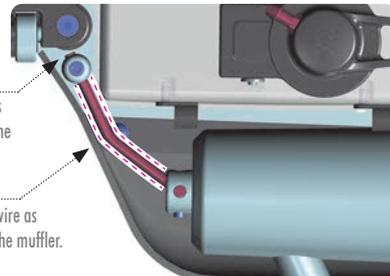
-  1x 901405 SB M4x5
-  1x 903410 SFH M4x10

TIP
After running your engine, apply #106250 HUDY ENGINE AFTER RUN OIL.

 Shorten the wire as appropriate to fit the muffler.

 Bend the exhaust wire as appropriate to fit the muffler.



OPTION

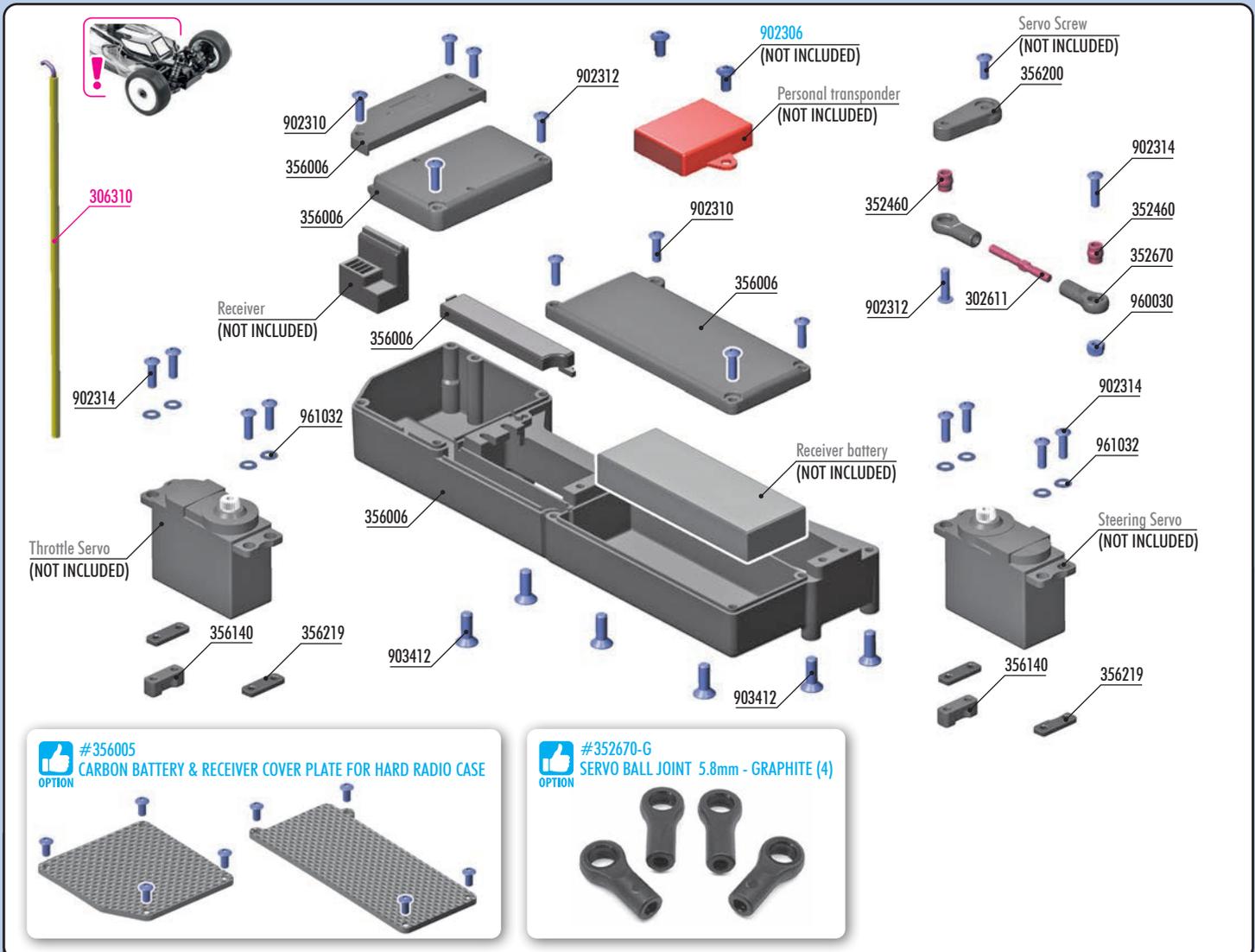
FX MUFFLER & MANIFOLDS 3.5cc				
#659505	EFRA 2131	MEDIUM	CHROME	OPTION
#659506	EFRA 2131	MEDIUM	-	OPTION
#659558	EFRA 2169	MEDIUM	-	OPTION

FX MUFFLER 3.5cc		
#659503	EFRA 2131	OPTION
#659508	EFRA 2169	OPTION

FX MANIFOLDS 3.5cc		
#659704	MEDIUM	OPTION
#659706	SHORT-MEDIUM	OPTION

FX
EUROPEAN CHAMPION

10. RADIO CASE



BAG

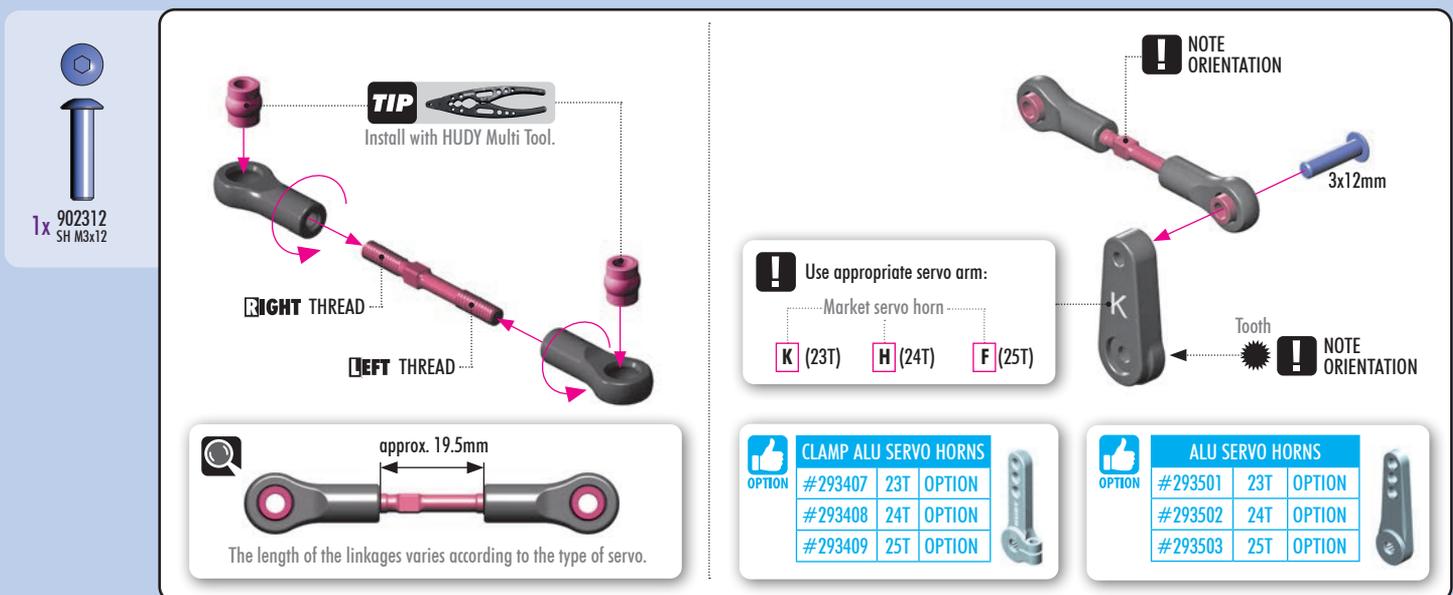
10

- 302611 ADJ. TURNBUCKLE L/R 35mm - HUDY SPRING STEEL™ (2)
- 352460 PIVOT BALL 5.8 (10)
- 352670 SERVO BALL JOINT 5.8mm (4)
- 356006 COMPOSITE RADIO CASE SET - SPLIT
- 356050 BATTERY CABLE WITH SWITCH (OPTION)
- 356140 COMPOSITE SERVO MOUNT - SMALL (2)
- 356200 BRAKE/THROTTLE ARMS & STEERING SERVO ARMS - SET
- 356219 COMPOSITE SERVO SHIMS 1.0, 1.5 & 2.5mm (2+2+2)
- 902306 HEX SCREW SH M3x6 (10) (OPTION)

- 902310 HEX SCREW SH M3x10 (10)
- 902312 HEX SCREW SH M3x12 (10)
- 902314 HEX SCREW SH M3x14 (10)
- 903412 HEX SCREW SFH M4x12 (10)
- 960030 NUT M3 (10)
- 961032 WASHER S 3.2 (10)

- 306310 ANTENNA TUBE (2)

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



10. RADIO CASE



step 1

THREAD LOCK Servo screw (NOT INCLUDED)

3x14mm

NOTE Use the shims only when the servo extends below the bottom of the radio case.

TOP

Plug the connectors into the receiver in Step 2.

NOTE ORIENTATION

BOTTOM



step 2

Use foam to cushion the inside of the radio case so the receiver and battery can NOT vibrate or move.

3x10mm

3x12mm

3x10mm

TIP 2x 907206 SP M2x6

CUT

#356050 SWITCH OPTION

When receiver switch is used, use hobby knife to CAREFULLY remove the material from the cover and mount the switch.



Personal transponder (NOT INCLUDED)
#902306 Screws (NOT INCLUDED)

When the transponder is placed on top of the radio case cover, trim material from the case to allow the transponder wires to enter the case.

ALTERNATIVE 1

When the transponder is placed at the top of the radio box, cut out some material from the radio box in order to allow the transponder wire to come inside.

ALTERNATIVE 2

Place the transponder inside of the radio box by using double-sided tape.

3x6mm (NOT INCLUDED)

3x14mm

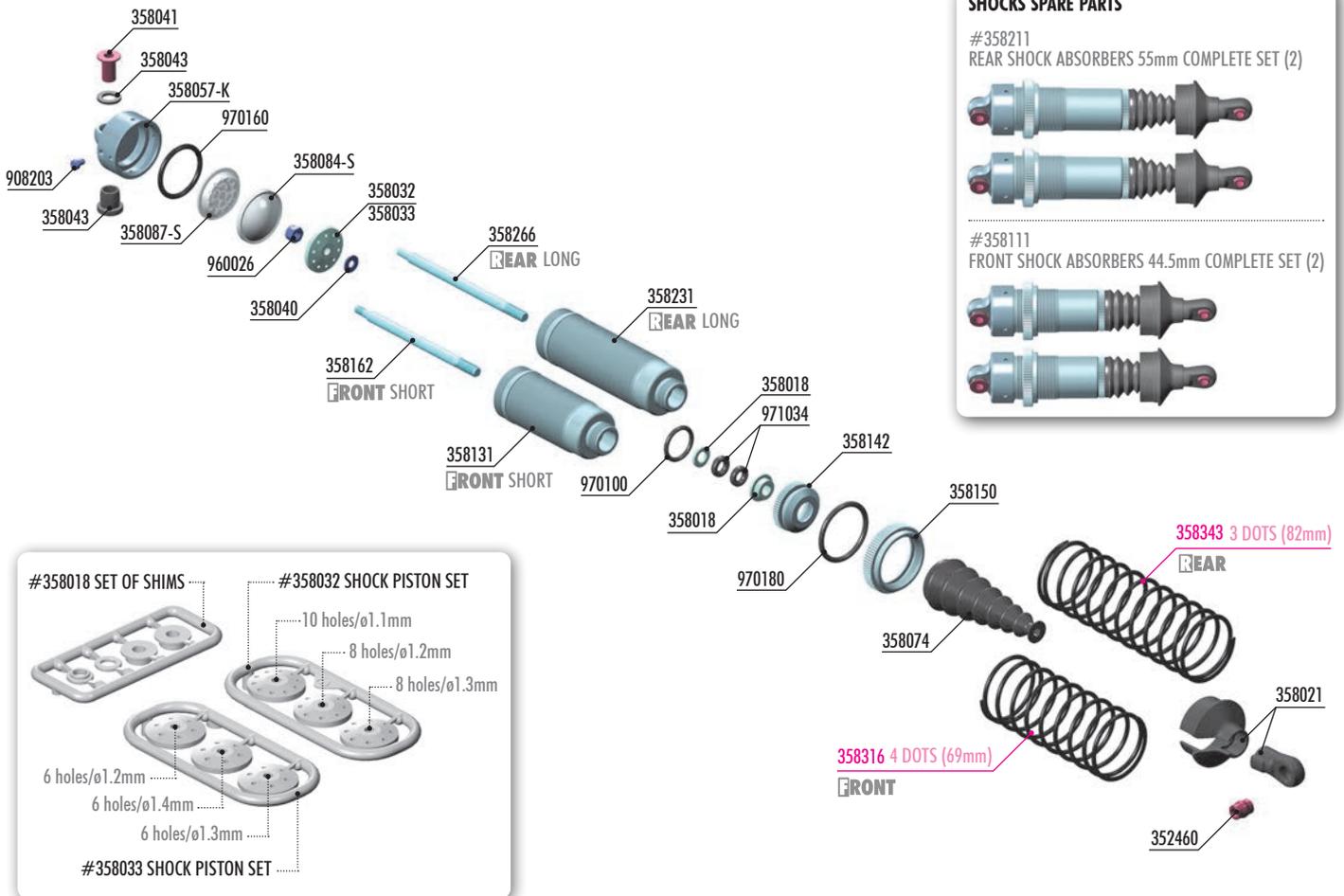
NOTE ORIENTATION of servo arm when servo is at neutral.

4x12mm

M3

4x12mm

11. SHOCK ABSORBERS



SHOCKS SPARE PARTS

#358211
REAR SHOCK ABSORBERS 55mm COMPLETE SET (2)



#358111
FRONT SHOCK ABSORBERS 44.5mm COMPLETE SET (2)



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

SHOCK SPRINGS			
#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)	

SHOCK SPRINGS						
#358315	C=0.77-0.80	3 DOTS	69mm	FRONT	OPTION	
#358316	C=0.80-0.83	4 DOTS	69mm	FRONT	INCLUDED	
#358317	C=0.83-0.86	5 DOTS	69mm	FRONT	OPTION	
#358342	C=0.66-0.68	2 DOTS	82mm	REAR	OPTION	
#358343	C=0.68-0.70	3 DOTS	82mm	REAR	INCLUDED	
#358344	C=0.70-0.73	4 DOTS	82mm	REAR	OPTION	
#358334	C=0.66-0.68	2 DOTS	85mm	REAR	OPTION	
#358335	C=0.68-0.70	3 DOTS	85mm	REAR	OPTION	

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



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 - V3
- 358033 COMPOSITE SHOCK 6-HOLE PISTON SET (1.2; 1.3; 1.4mm) - DELRIN - V3
- 358040 HARDENED SHOCK SHIMS (4)
- 358041 STEEL SHOCK BUSHING (2)
- 358043 COMPOSITE SHOCK BUSHING & SHIM (2+2)
- 358057-K MULTI ADJ. 3-IN-1 ALU SHOCK CAP - SWISS 7075 T6 (2)
- 358074 FOLDING SHOCK BOOT (4)
- 358084-S SHOCK RUBBER MEMBRANE BOTTOM RIBBED - SOFT (4)
- 358087-S SHOCK RUBBER MEMBRANE CELL - SOFT (4)
- 358111 FRONT SHOCK ABSORBERS 44.5mm - COMPLETE SET (2)
- 358131 ALU FRONT SHOCK BODY 44.5mm - SWISS 7075 T6 (2)
- 358142 ALU SHOCK BODY NUT FOR SHOCK BOOT (2)
- 358150 ALU SHOCK BODY ADJ. NUT (2)
- 358162 FRONT SHOCK SHAFT 56mm (2)
- 358211 REAR SHOCK ABSORBERS 55mm - COMPLETE SET (2)

- 358231 ALU REAR SHOCK BODY 55mm - SWISS 7075 T6 (2)
- 358266 REAR SHOCK SHAFT 66.5mm (2)
- 908203 HEX SCREW SOCKET HEAD CAP M2x3 (10)
- 960026 NUT M2.5 - SHORT (10)
- 970100 O-RING 10 x 1.5 (10)
- 970160 O-RING 16 x 2.0 (10)
- 970180 O-RING 18 x 1.8 (10)
- 971034 SILICONE O-RING 3.5x2 (10)

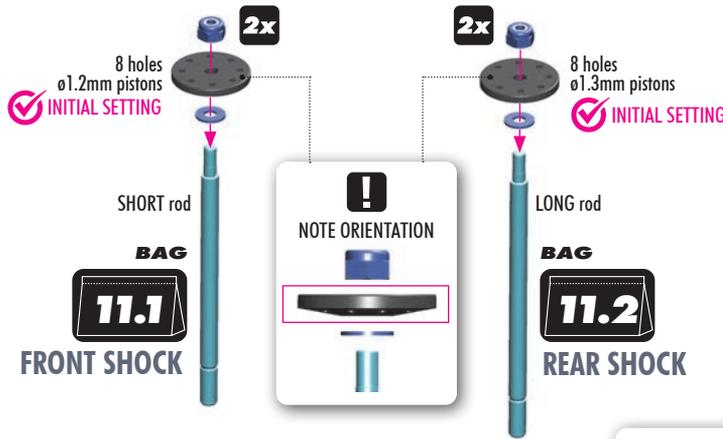
- 358316 XRAY FRONT SPRING 69mm - 4 DOTS (2)
- 358343 XRAY REAR SPRING 82mm - 3 DOTS (2)

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

11. SHOCK ABSORBERS

4x 358040
S 2.5x6x0.5

4x 960026
N M2.5



- 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)

SET-UP BOOK
SHOCK DAMPING
SHOCK PISTONS

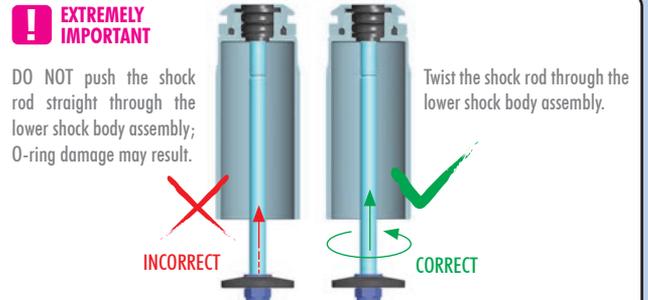
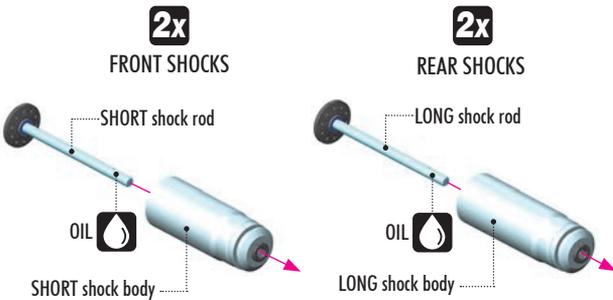
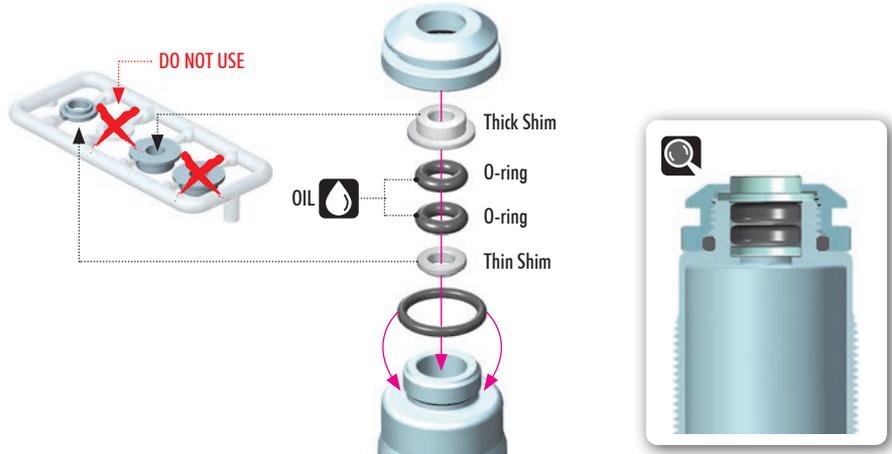


4x 970100
O 10x1.5

8x 971034
O 3.4x2

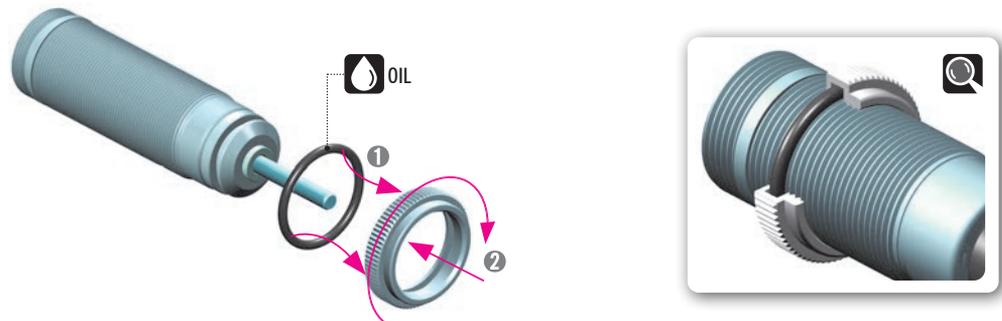
2x FRONT SHOCKS (SHORT)
2x REAR SHOCKS (LONG)

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



4x 970180
O 18x1.8

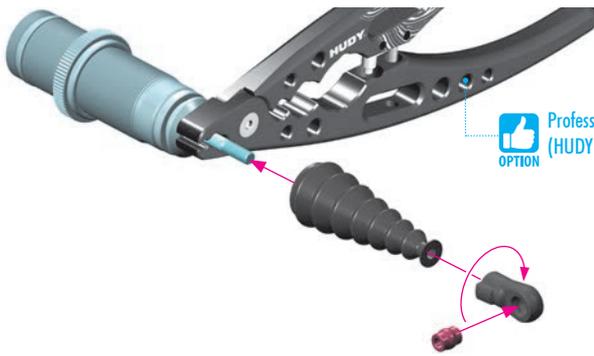
2x FRONT SHOCKS
2x REAR SHOCKS



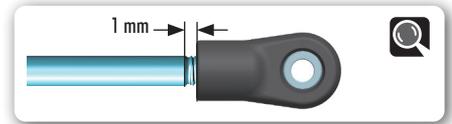
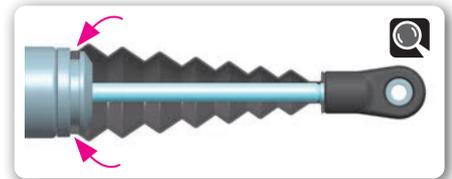
11. SHOCK ABSORBERS

2x FRONT SHOCKS

2x REAR SHOCKS



Professional Multi-Tool
(HUDY #183011).
OPTION



SHOCK TYPE: CELL MEMBRANE

for LOW GRIP

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

Oil level after filling

CORRECT FILLING



INCORRECT FILLING



FRONT (SHORT)
Oil 600cSt
REAR (LONG)
Oil 550cSt

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



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



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

4x 908203
SCH M2x3



Cell Membrane



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

SHOCK CAP
HALF 50% TIGHTEN



5 Gently place the shock cap assembly onto the filled shock body. 2 Slowly compress the shock shaft towards the top of the shock body and hold in this position. Excess oil will be expelled from the shock.

SHOCK CAP
100% TIGHTEN FULLY



6 While still holding the shock shaft in position, fully tighten the shock cap.

SHOCK TYPE: RIBBED MEMBRANE

for BUMPY - HIGH GRIP

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

Oil level after filling

CORRECT FILLING



INCORRECT FILLING



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



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



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

4x 908203
SCH M2x3



Ribbed Membrane



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

SHOCK CAP
HALF 50% TIGHTEN



5 Gently place the shock cap assembly onto the filled shock body. 2 Slowly compress the shock shaft towards the top of the shock body and hold in this position. Excess oil will be expelled from the shock.

SHOCK CAP
100% TIGHTEN FULLY



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

11. SHOCK ABSORBERS

SHOCK TYPE: **EMULSION**

for DEFAULT STANDARD

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



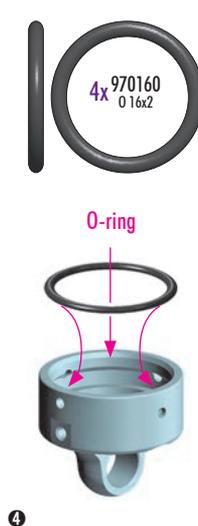
1 Extend the shock shaft completely. Fill the shock body with the shock oil.



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



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



4 Install o-ring in the cap.



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

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

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



GENTLY PUSH

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



9 6x push the shaft up and down.



6x UP & DOWN

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



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



GENTLY PUSH

12 Tighten the screw.



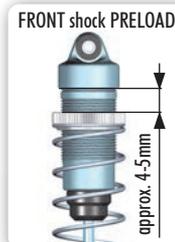
LONG rear shock



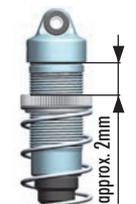
SHORT front shock

LONG spring

SHORT spring



REAR shock PRELOAD



SET-UP BOOK
SPRING RATE
SHOCK PRELOAD
RIDE HEIGHT



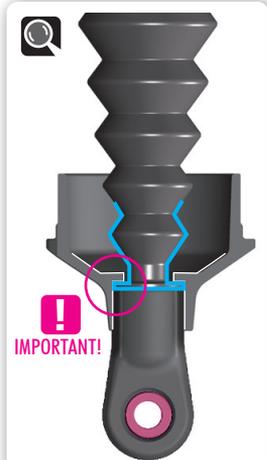
IMPORTANT!

This setting affects the front and rear ride height of the car. Check the ride height once the car is fully assembled and ready to run.



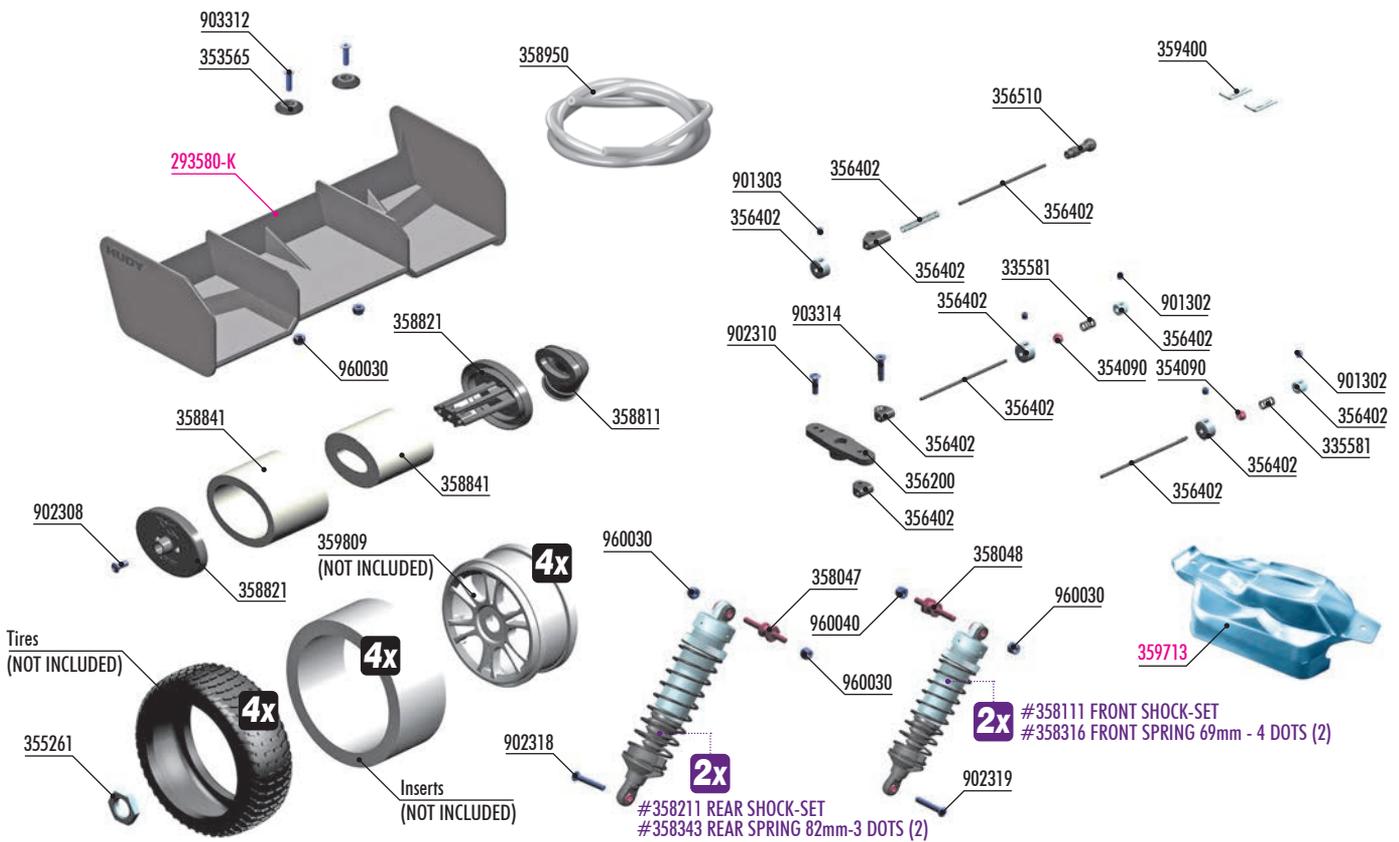
IMPORTANT!

Both front shocks must be the same overall length.



FRONT & REAR SHOCKS

12. FINAL ASSEMBLY



#353562
OPTION CARBON REAR WING SHIM



XB8 BODIES		
OPTION #359713	"Eazy"	INCLUDED
OPTION #359714	"Eazy" LIGHTWEIGHT	OPTION



WINGS			
OPTION #293580-K	BLACK	INCLUDED	
#293580	WHITE	OPTION	
#293580-G	GREEN	OPTION	
#293580-O	ORANGE	OPTION	
#293580-Y	YELLOW	OPTION	



#353512
OPTION LEXAN® REAR WING 1-8 OFF-ROAD



#358048-T
OPTION TITANIUM M4/M3 UPPER SHOCK MOUNT STAND OFF WITH HEX (2)



FRONT

#358047-T
OPTION TITANIUM M3/M3 UPPER SHOCK MOUNT STAND OFF WITH HEX (2)



REAR

#358832
OPTION AIR FILTER RAIN COVER



#353590
OPTION LEXAN® FRONT WING GRIPPER



SERVO BRACE LINK
OPTION



A connecting brace between the throttle servo and the radio box compensates for the softer, more flexible radio box, as well as eliminating throttle servo vibrations to the chassis.

HUDY CLAMP ALU SERVO HORNS

OPTION #293444	23T	OPTION
#293445	24T	OPTION
#293446	25T	OPTION
#293447	23T	OPTION
#293448	24T	OPTION
#293449	25T	OPTION

HUDY ALU SERVO HORNS

OPTION #293504	23T	OPTION
#293505	24T	OPTION
#293506	25T	OPTION
#293507	23T	OPTION
#293508	24T	OPTION
#293509	25T	OPTION

BAG

12

335581 SPRING C=7.8 - MEDIUM - SILVER (2)
353565 COMPOSITE REAR WING SHIM - BLACK (2)
354090 BALL-SHAPED BRAKE SHIM (2)
355261 WHEEL NUT - RIBBED - HARD COATED (2)
356200 BRAKE/THROTTLE ARMS & SERVO ARMS - SET
356402 XB8 BRAKE/THROTTLE SYSTEM - SET - V2
356510 CLOSED BALL JOINT 3.9 (4)
358047 STEEL M3/M3 UPPER SHOCK MOUNT STAND OFF WITH HEX (2)
358048 STEEL M4/M3 UPPER SHOCK MOUNT STAND OFF WITH HEX (2)
358811 AIR FILTER ELBOW - LOW PROFILE
358821 AIR FILTER BODY & CAP - LOW PROFILE
358841 AIR FILTER FOAM & OIL - LOW PROFILE
358950 SILICONE TUBING 1m (2.4 x 5.5mm)
359400 BODY CLIP (10)

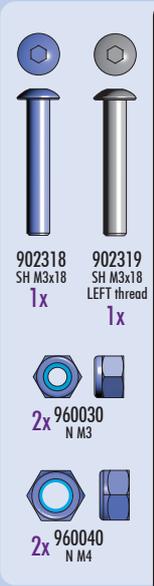
901302 HEX SCREW SB M3x2.5 (10)
901303 HEX SCREW SB M3x3 (10)
902308 HEX SCREW SH M3x8 (10)
902310 HEX SCREW SH M3x10 (10)
902318 HEX SCREW SH M3x18 (10)
902319 HEX SCREW SH M3x18 - LEFT THREAD (10)
903312 HEX SCREW SFH M3x12 (10)
903314 HEX SCREW SFH M3x14 (10)
960030 NUT M3 (10)
960040 NUT M4 (10)

358111 FRONT SHOCK ABSORBERS 44.5mm - COMPLETE SET (2)
358211 REAR SHOCK ABSORBERS 55mm - COMPLETE SET (2)

293580-K HUDY 1/8 OFF-ROAD STRIKE WING - BLACK
359713 XRAY XB8 / XB8E "Eazy" BODY

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

12. FINAL ASSEMBLY



SET-UP BOOK
SHOCK ABSORBERS

FRONT SHOCKS (SHORT)

2x L=R

! FRONT SHOCKS (SHORT)

SHORTER M4 → LONGER M3

NUT M4
HUDY #181090

HUDY #107581

NUT M3
HUDY #175535

Use **STANDARD** M3x18 screw

3x18mm

! On the front right arm use the **SILVER** M3x18mm screw - this screw has **LEFT THREAD**.

! Spring retainer
NOTE ORIENTATION

REAR FRONT

! #358048-T TITANIUM M4/M3 UPPER SHOCK MOUNT STAND OFF WITH HEX (2)

FRONT

! INITIAL SETTING



SET-UP BOOK
SHOCK ABSORBERS

REAR SHOCKS (LONG)

2x L=R

! REAR SHOCKS (LONG)

SHORTER M3 → LONGER M3

NUT M3
HUDY #175535

HUDY #107581

NUT M3
HUDY #175535

Use **STANDARD** M3x18 screw

On the rear left arm use the **SILVER** M3x18mm screw - this screw has **LEFT THREAD**.

! Shock cap
NOTE ORIENTATION

FRONT REAR

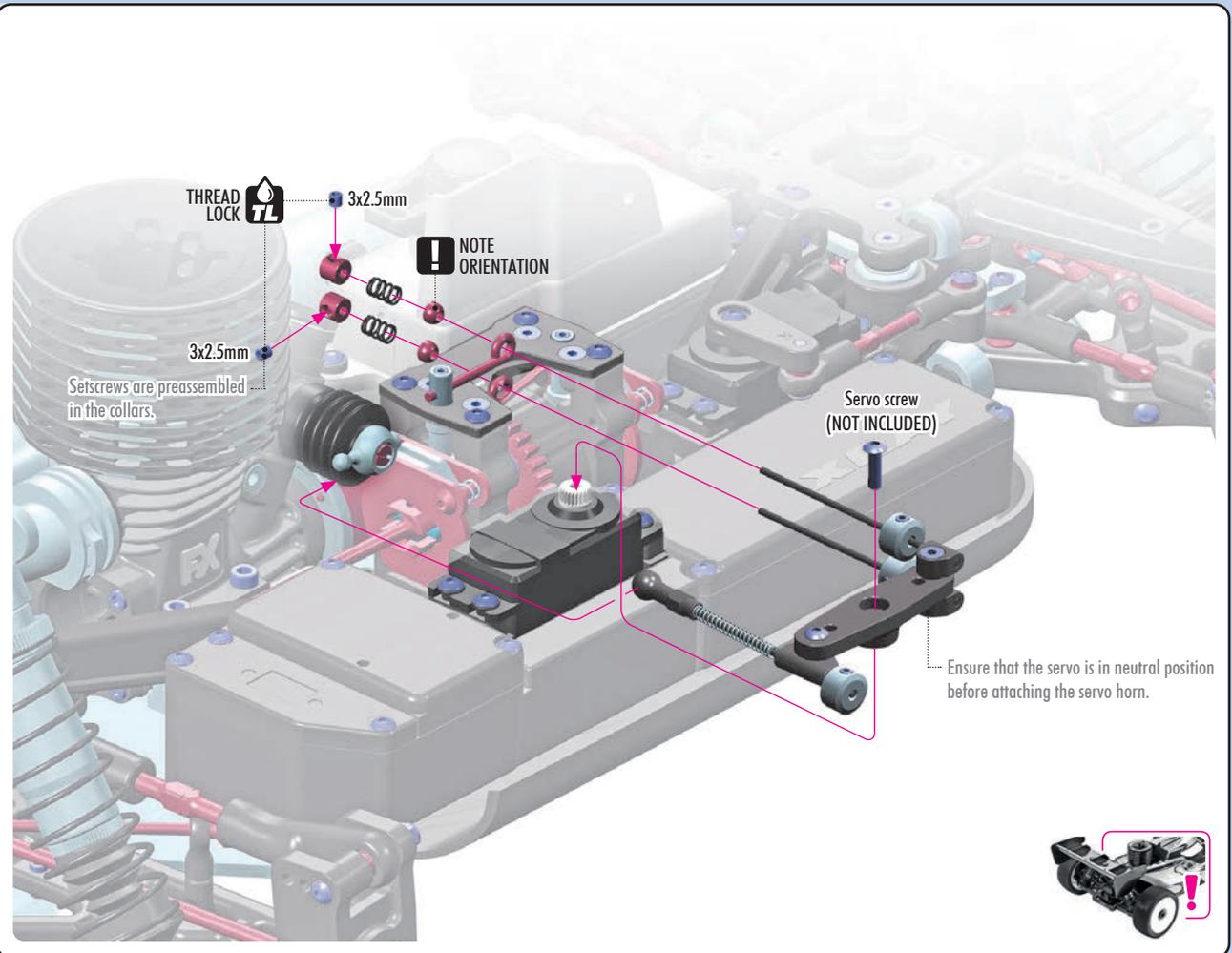
! #358047-T TITANIUM M3/M3 UPPER SHOCK MOUNT STAND OFF WITH HEX (2)

REAR

! INITIAL SETTING

12. FINAL ASSEMBLY

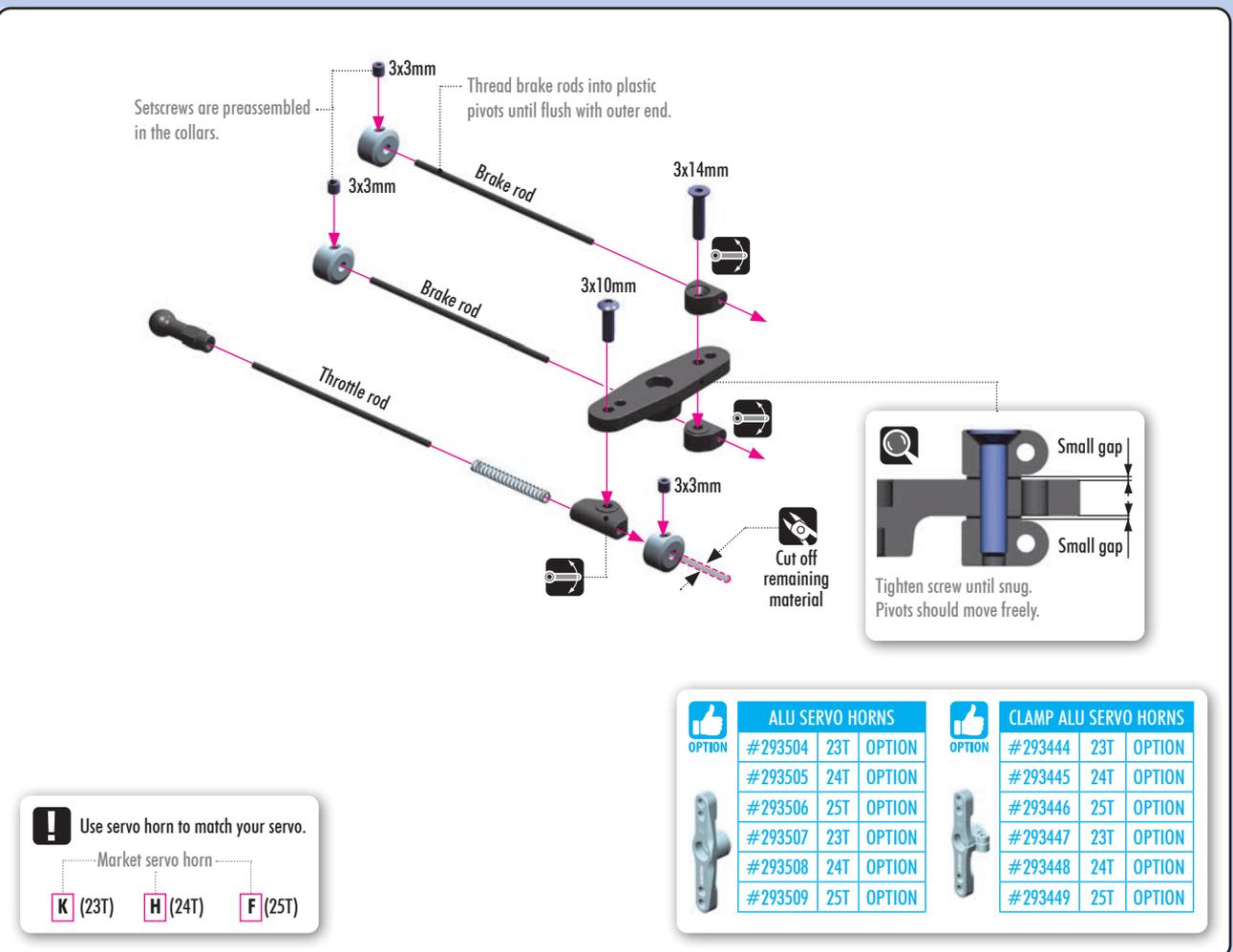
2x 901302
SB M3x2.5



3x 901303
SB M3x3

1x 902310
SH M3x10

1x 903314
SFH M3x14



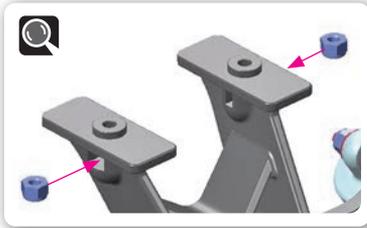
12. FINAL ASSEMBLY



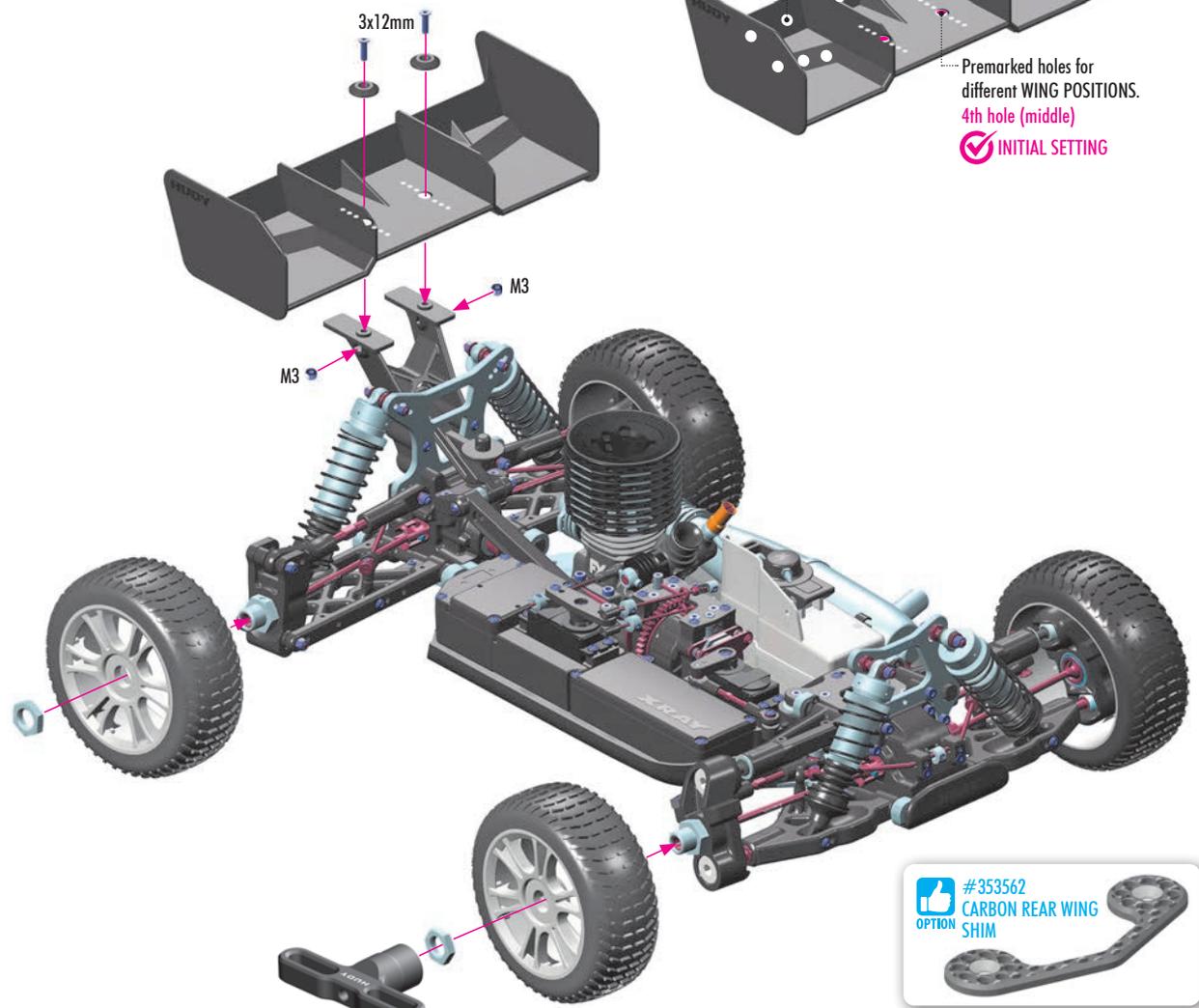
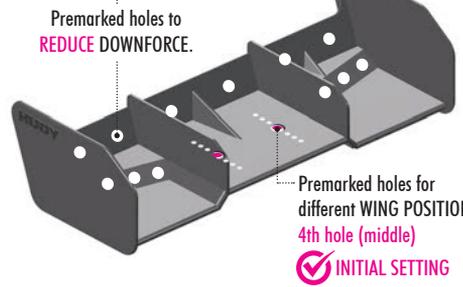
2x 903312 SFH M3x12



2x 960030 N M3



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



TIP 4x

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



WINGS		
OPTION #293580-K	BLACK	INCLUDED
#293580	WHITE	OPTION
#293580-G	GREEN	OPTION
#293580-O	ORANGE	OPTION
#293580-Y	YELLOW	OPTION



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



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



12. FINAL ASSEMBLY



Apply #106240 HUDY air filter oil and follow the engine instructions to service the air filter.

#358832 AIR FILTER RAIN COVER (OPTION)

#106245 HUDY AIR FILTER SEALANT (OPTION)

Cut the silicone tube depending on engine and muffler. Use the plastic clips to hold the tubes together.

SILICONE TUBE MARKED AS BLUE = FROM FUEL TANK TO CARBURETOR

SILICONE TUBE MARKED AS RED = FROM MUFFLER TO FUEL TANK (TOP)

! Keep fuel line away from clutchbell and flywheel.

#358951 SILICONE TUBING 2.4x5.5x1000mm FLUORESCENT YELLOW (OPTION)

BODY PAINTING

- 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.
- Before painting, wash the inside of the body with mild detergent, and then rinse and dry thoroughly.
- Mask all windows.
- Apply paint masks as appropriate.
- Paint the body using paints formulated for polycarbonate bodies.
- When the paint is dry, remove the masking.
- Carefully cut out the body using appropriate scissors or cutting tools.
- When you have finished cutting, peel off the external protective films.

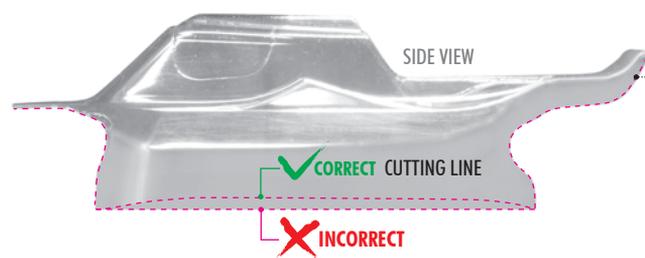


BODY CUTTING

- FRONT HOLE** - mark and cut out the front hole first.
 - The premarked **REAR HOLE** fits older models of the XB8.
- REAR HOLE** - use this marked point as the center of the rear body hole (on the outer line of the premark).
 - approx. 12mm
- REAR HOLE** - Make the rear hole oval front-rear. This will help with clearance in case of chassis flex after a big crash to NOT tear up the hole.

TIP

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



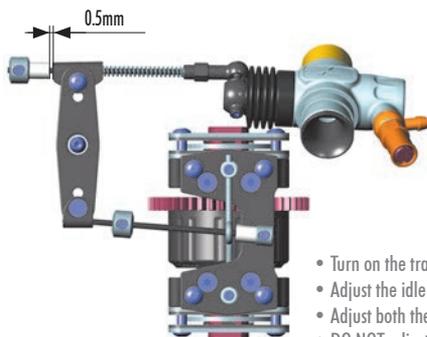
XBB BODIES		
#359713	"EAZY"	INCLUDED
#359714	"EAZY" LIGHTWEIGHT	OPTION



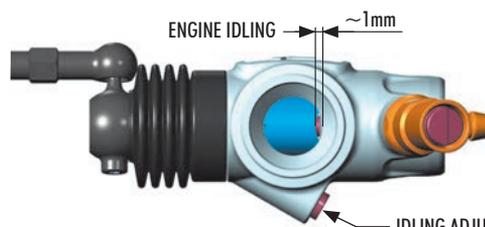
THROTTLE LINKAGE ADJUSTMENT

NEUTRAL (IDLE)

ADJUST INDIVIDUAL LINKAGES SEPARATELY TO AVOID INTERFERING WITH THE OPERATION OF THE OTHERS

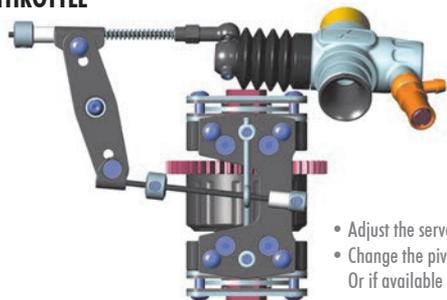


- Turn on the transmitter and receiver and set the engine control servo trim to the neutral position.
- Adjust the idle adjustment screw on the carburetor to open approx. 1mm.
- Adjust both the throttle linkage and brake linkages accordingly.
- DO NOT adjust the linkage with the engine running.



ENGINE IDLING ~1mm
IDLING ADJUSTMENT SCREW.
Use to adjust the idle setting of the carburetor. DO NOT allow carburetor to close to less than 1mm.

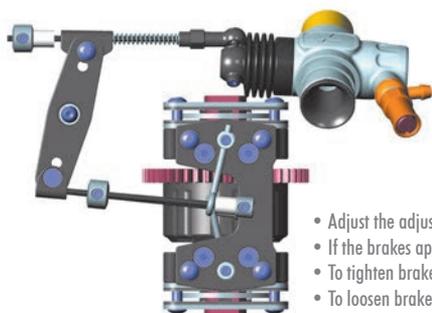
FULL THROTTLE



- Adjust the servo-horn mounting position for the carburetor to open fully.
- Change the pivot mounting position on the servo horn in case the carburetor is not opening fully or if it is opening excessively. Or if available on the transmitter, adjust the throttle high end point.



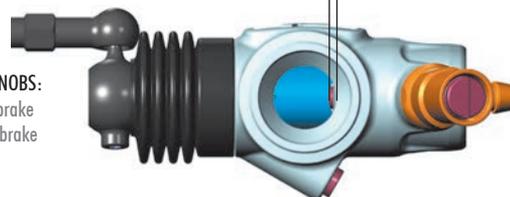
BRAKE



- Adjust the adjustable collars so the brakes work smoothly.
- If the brakes apply too much or not enough, adjust the adjustable collars accordingly. Or if available on the transmitter, adjust the brake endpoint.
- To tighten brakes, turn collar to thread brake rod INTO pivot.
- To loosen brakes, turn collar to thread brake rod OUT of pivot.

ENGINE IDLING cca 1mm

BRAKE ADJUSTING KNOBS:
Upper linkage - rear brake
Lower linkage - front brake

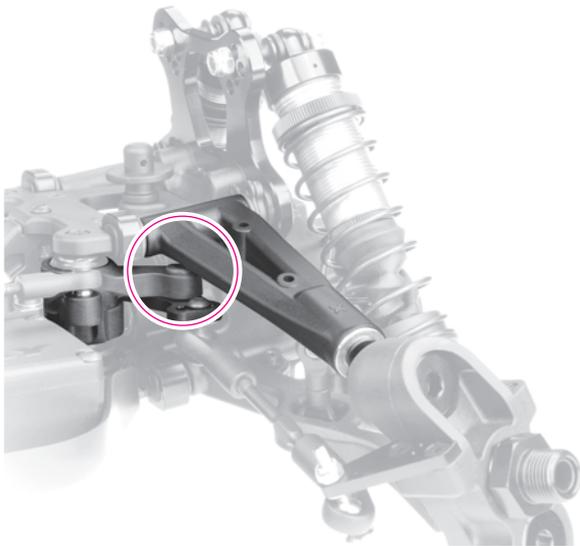


TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	SOLUTION
ENGINE DOES NOT START	<ul style="list-style-type: none"> • Fuel tank is empty or carburetor is not primed • Bad glowplug or dead glowdriver battery • Fuel lines, fuel filter, air cleaner, or muffler is clogged • Engine is flooded due to over-priming • Carburetor is not adjusted properly • Throttle servo linkage not adjusted properly 	<ul style="list-style-type: none"> • Fill fuel tank with fuel and prime • Replace glowplug or recharge/replace glowdriver battery • Clean or replace clogged part(s) • Remove glowplug, turn car over to discharge fuel from cylinder. Test glowplug and replace if defective • Set idle and main/slow needle adjusting screw to standard starting position • Move throttle servo to neutral position and re-adjust linkage(s)
ENGINE STARTS BUT THEN STALLS	<ul style="list-style-type: none"> • Fuel tank is empty • Fuel lines, fuel filter, air cleaner, or muffler is clogged • Carburetor is not adjusted properly • Engine has overheated 	<ul style="list-style-type: none"> • Fill fuel tank with fuel • Clean or replace clogged part(s) • Re-adjust idle and main/slow needle adjusting screw • Allow engine to thoroughly cool down and open main needle adjusting screw 30° turn richer (CCW)
BAD REACTION AND RESPONSE FROM ENGINE	<ul style="list-style-type: none"> • Carburetor is not adjusted properly • Fuel lines, fuel filter, air cleaner, or muffler is clogged • Low fuel pressure from muffler 	<ul style="list-style-type: none"> • Re-adjust main/slow needle adjusting screw • Clean or replace clogged part(s) • Properly install pressure line between muffler and fuel tank
CAR IS HARD TO CONTROL	<ul style="list-style-type: none"> • Weak transmitter and/or receiver batteries • Low reception from radio antennas • Servo linkages not adjusted properly 	<ul style="list-style-type: none"> • Recharge or replace batteries • Fully extend transmitter and receiver antennas • Move servo to neutral then re-adjust linkage(s)
STEERING DOES NOT WORK PROPERLY	<ul style="list-style-type: none"> • Weak transmitter and/or receiver batteries • Bent linkages or driveshafts • Loose steering components • Drivetrain damage 	<ul style="list-style-type: none"> • Recharge or replace batteries • Check tightness of steering components and tighten if necessary • Replace damaged parts
HANDLING PROBLEMS	<ul style="list-style-type: none"> • Shocks are not working properly • Suspension is binding • Improper tires 	<ul style="list-style-type: none"> • Rebuild the shocks and replace worn or broken parts • Make sure suspension moves freely. Replace worn or broken parts • Use different tires
STEERING FEELS SLUGGISH OR VAGUE	<ul style="list-style-type: none"> • Suspension is binding • Damaged steering servo 	<ul style="list-style-type: none"> • Make sure suspension moves freely, and replace worn or broken parts • Check the steering servo for damage and wear, and replace/repair if necessary
THE CAR DOES NOT DRIVE STRAIGHT	<ul style="list-style-type: none"> • Suspension is binding • Steering trim is off-center • Wheels are loose • Damaged steering servo 	<ul style="list-style-type: none"> • Make sure suspension moves freely, and replace worn or broken parts • Adjust steering trim until car drives straight • Check to make sure the wheel nuts are properly tightened • Check the steering servo for damage and wear, and replace/repair if necessary

If more than 104-105mm front droop is used, certain set-up configurations may result in the upper arm contacting the steering bellcranks.

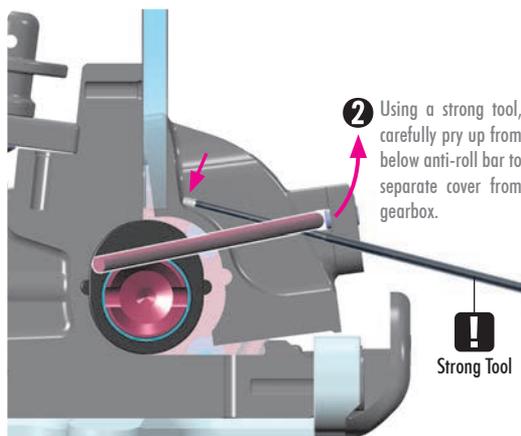
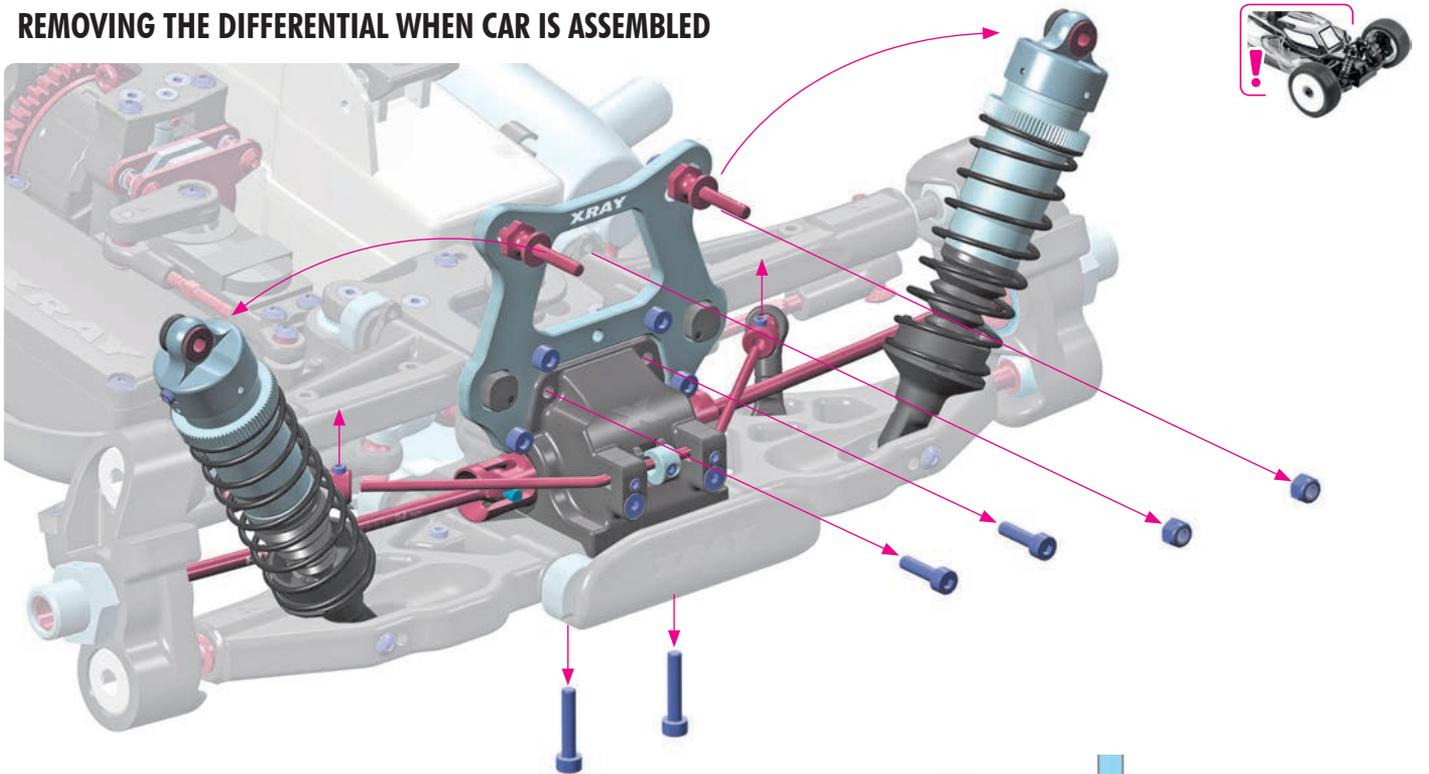
This will have limited impact on handling, but material can be removed from the bottom of the upper arm to avoid contact with the steering assembly if using additional droop.



#107780
 HUDY Adjustable Droop Gauge 80-140mm
 OPTION

DIFF MAINTENANCE

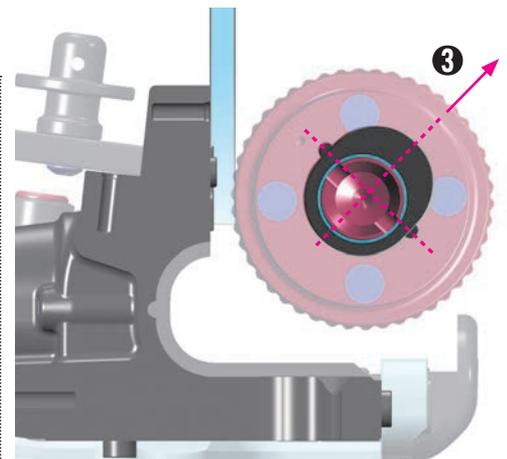
REMOVING THE DIFFERENTIAL WHEN CAR IS ASSEMBLED



2 Using a strong tool, carefully pry up from below anti-roll bar to separate cover from gearbox.

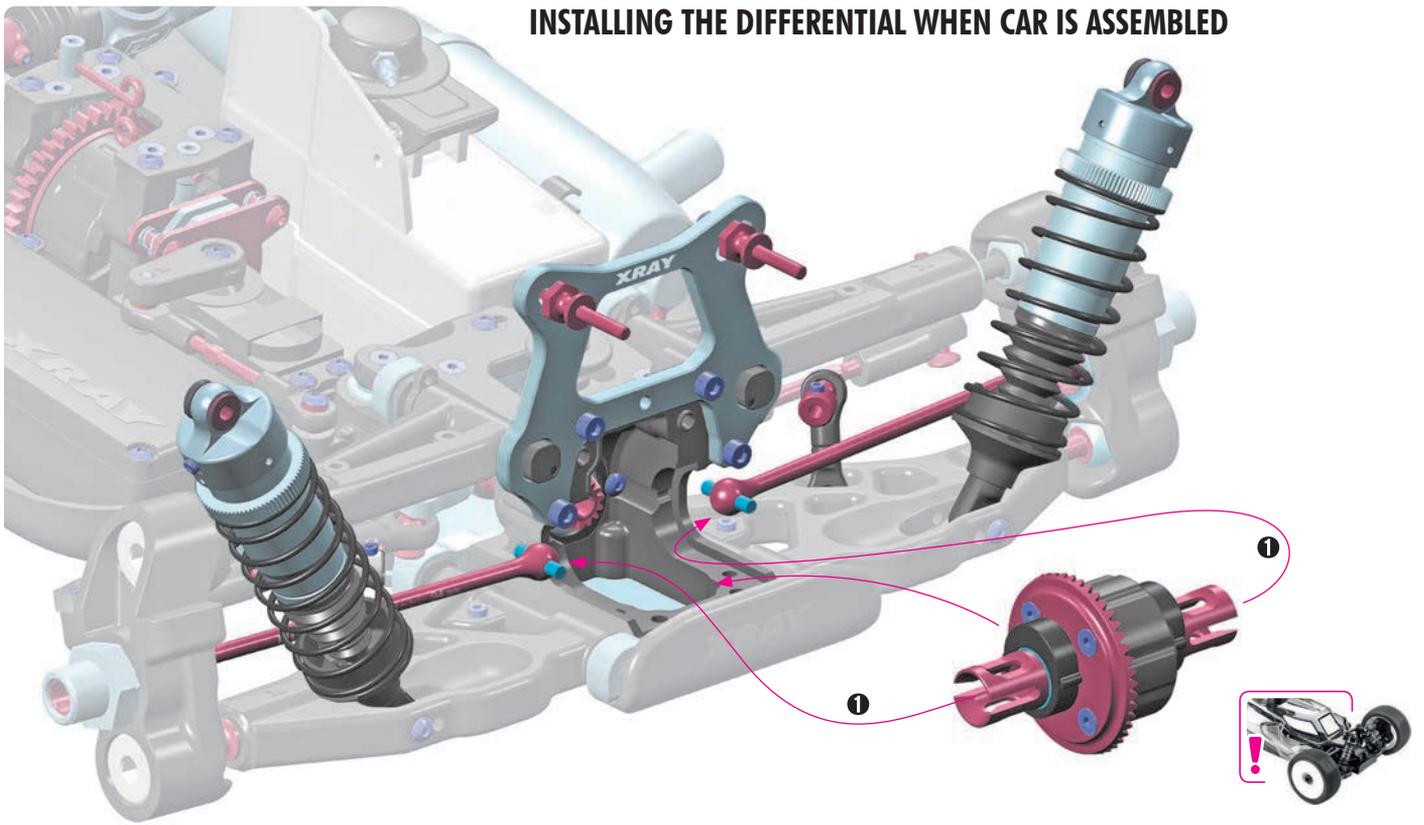
!
 Strong Tool

- FRONT & REAR**
- 1 REMOVE HARDWARE**
- Gearbox Cover Upper Screws (2)
 - Gearbox Cover Lower Screws (2)
 - Shock Absorber Locknuts (2)
 - Disconnect Anti-Roll Bar Linkage



DIFF MAINTENANCE

INSTALLING THE DIFFERENTIAL WHEN CAR IS ASSEMBLED

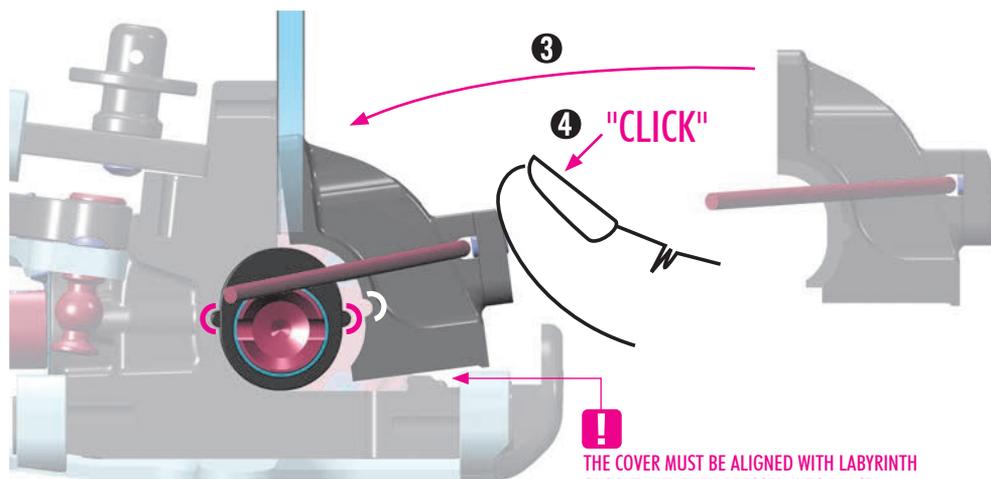
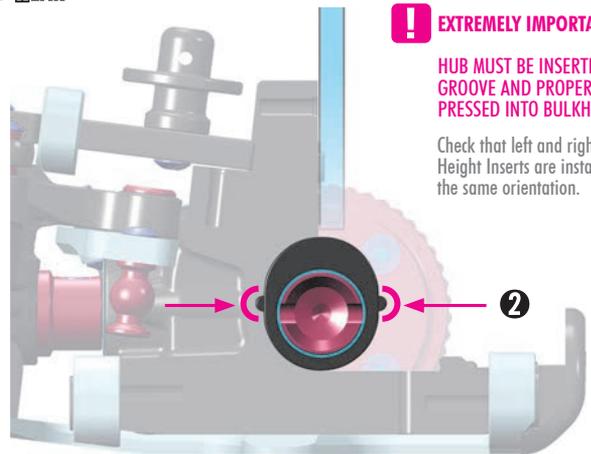
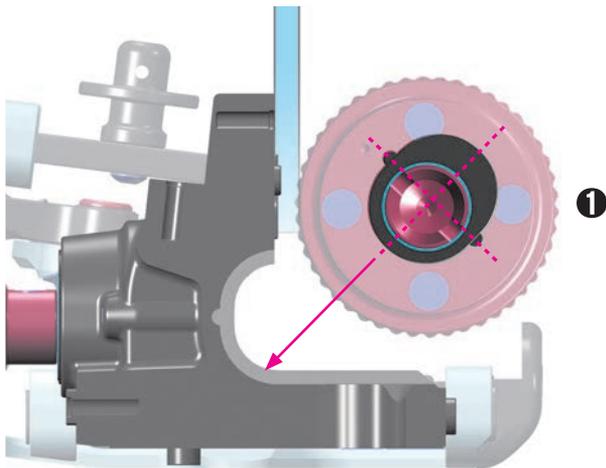


FRONT & REAR

! EXTREMELY IMPORTANT

HUB MUST BE INSERTED IN GROOVE AND PROPERLY PRESSED INTO BULKHEAD.

Check that left and right Diff Height Inserts are installed in the same orientation.



5 RE-INSTALL HARDWARE

- Gearbox Cover Upper Screws (2)
- Gearbox Cover Lower Screws (2)
- Shock Absorber Locknuts (2)
- Reconnect Anti-Roll Bar Linkage

! THE COVER MUST BE ALIGNED WITH LABYRINTH GROOVE AND THEN PRESSED INTO PLACE

XRAY TUNING PARTS

(NOT INCLUDED)



Assembled view

#350912

XB8 Alu Rear Uprights - Multi-Adjustable - Set

- Increases stability
- Ultra strong & durable
- Reduces flex
- Improves consistency
- Multi adjustable roll centers and track width
- Premium Swiss 7075 T6 aluminum



#352366

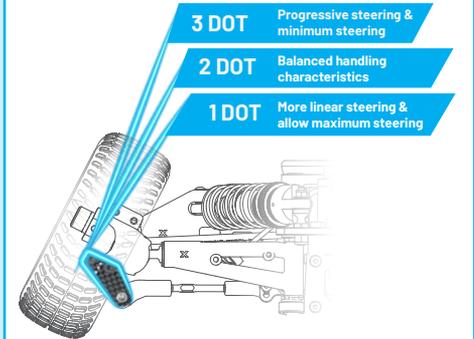
#352367

XB8 Carbon Steering Plate (L+R)

- Adjusts aggressivity of the car
- Increases overall steering
- Easy Ackermann position adjustment
- For all surfaces & track conditions

OTHER VARIANTS:

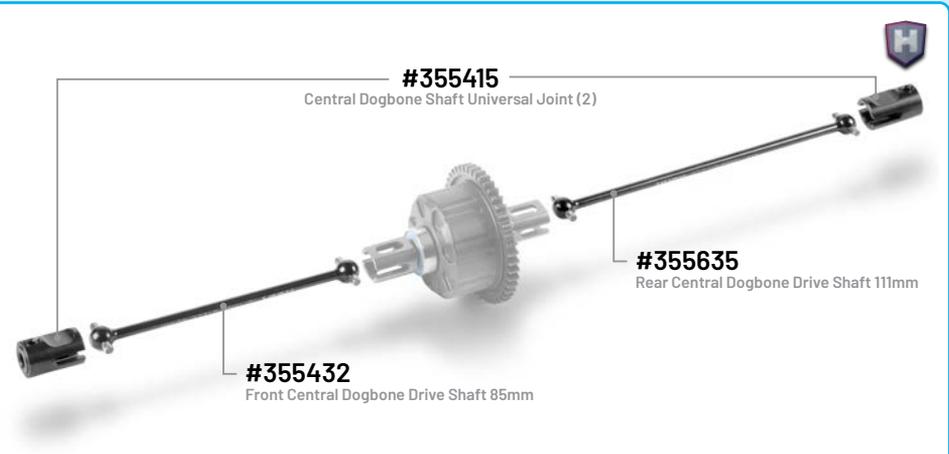
Steering Block Extensions		
Part number	Hardness	Type
#352366	Carbon	1 DOT
#352367	Carbon	2 DOT
#352368	Carbon	3 DOT
#352372	Alu	1 DOT
#352370	Alu	2 DOT



#353396

Graphite Extension Alu Rear Upright - 2mm Lower Camber Link 2 DOT (1+1)

- Carbon extensions for alu rear uprights
- 2mm lower roll center positions
- Allows to keep camber link in same position when uprights rises
- Lightweight
- High-grade carbon material made in USA



#355415

Central Dogbone Shaft Universal Joint (2)

#355635

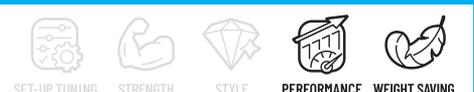
Rear Central Dogbone Drive Shaft 111mm

#355432

Front Central Dogbone Drive Shaft 85mm

Central Drive Train

- Improves forward traction
- Lightweight design
- Easy maintenance
- Longer lifespan
- HUDY Spring Steel™



XRAY TUNING PARTS

(NOT INCLUDED)



Composite Rear Lower Suspension Arm

• Different hardness arms are available for additional turning options

OTHER VARIANTS:

Rear Lower Suspension Arm	
Part number	Hardness
#353115	Medium
#353116-H	Hard
#353116-XH	X-Hard
#353116-G	Graphite

MEDIUM:

For low traction. Generates more traction on rear suspension.

HARD:

Balanced flex. Most versatile for all conditions.

X-HARD:

For medium-high traction. Improves stability.

GRAPHITE:

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

OTHER VARIANTS:

Rear Lower Suspension Arm - Short		
Part number	Size	Hardness
#353127-H	Short	Hard
#353127-XH	Short	X-Hard
#353127-G	Short	Graphite

• increases rotation

HARD:

Balanced flex. Most versatile for all conditions.

X-HARD:

For medium-high traction. Improves stability.

GRAPHITE:

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



Composite Rear Lower Suspension Arm - LSM

• Low Suspension Mounting LSM design
• For very rough & bumpy tracks
• Helps to gain traction & stability
• Consistent handling in rough terrain

HARD:

Balanced flex. Most versatile for all conditions.

GRAPHITE:

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

OTHER VARIANTS:

Rear Lower Suspension Arm - LSM		
Part number	Orientation	Hardness
#353124-H	RIGHT	HARD
#353125-H	LEFT	HARD
#353124-G	RIGHT	GRAPHITE
#353125-G	LEFT	GRAPHITE



XB8 Composite Front Lower Suspension Arm

• Different hardness arms are available for additional turning options

SOFT:

For low traction. Generates more traction and steering.

MEDIUM:

Most versatile for all conditions.

GRAPHITE:

For high traction. Improves stability. More precise steering and less stopping in corners.

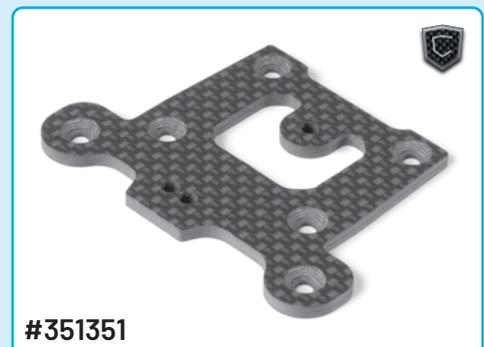
OTHER VARIANTS:

Front Lower Susp. Arms	
Part number	Hardness
#352120	Soft
#352120-M	Medium
#352120-G	Graphite



#353280 Carbon Insert for Medium Rear Composite Brace - Set

• Easy flex adjustment
• Makes rear end of the chassis stiffer
• Decreases flex
• Increases stability on high traction



#351351

Carbon Upper Plate With Two Brace Positions

• Reduces flex
• Enhances steering response
• Increases precision
• Lightweight
• Super lightweight
• High-grade carbon material made in USA



XRAY TUNING PARTS

(NOT INCLUDED)



#358087-M

XB8 Shock Rubber Membrane Cell - Medium (4)

- More rebound than Soft membrane
- Generates more traction
- Improves landings
- Equal damping characteristics



#358084-S Ribbed Membrane

Soft ribbed design with the slowest rebound, generating less traction. Ideal for high-traction or bumpy tracks where slower shock response increases stability.



#358087-S Soft Membrane

Soft cell membrane with faster rebound for more traction and a more responsive feel on low-traction conditions.



#358087-M Medium Membrane

Medium material creates the fastest rebound, generating maximum traction and sharper shock response, improving jumps and landings.



SET-UP TUNING STRENGTH STYLE PERFORMANCE WEIGHT SAVING



2-Way Flow Delrin Shock Pistons Set

- Improves landings
- Increases traction
- Super smooth action
- Rubber valve influences oil flow

OTHER VARIANTS:

Delrin Shock Pistons

Part number	Holes	Ømm	Holes	Ømm
#358027	5	1.5mm	2	1.0mm
#358028	6	1.3mm	2	1.1mm
#358029	6	1.4mm	2	1.1mm
#358030	8	1.2mm	2	1.2mm
#358031	8	1.3mm	2	1.2mm



SET-UP TUNING STRENGTH STYLE PERFORMANCE WEIGHT SAVING



Front & Rear Shock spring - Set

- Laser-engraved for easy identification
- Matched pairs guarantee equal damping characteristics
- Less dots = softer spring
- More dots = stiffer spring
- Softer springs increase traction
- Stiffer springs increase corner speed

OTHER VARIANTS:

Front spring

Part number	Length	Marked
#358315	69mm	3 Dot
#358316	69mm	4 Dot
#358317	69mm	5 Dot

Rear spring

Part number	Length	Marked
#358342	82mm	2 Dot
#358343	82mm	3 Dot
#358344	82mm	4 Dot
#358334	85mm	2 Dot
#358335	85mm	3 Dot



SET-UP TUNING STRENGTH STYLE PERFORMANCE WEIGHT SAVING



Titanium M3/M3 Upper Shock Mount Stand Off with Hex (2)

- Premium titanium material
- Super lightweight design
- Reinforced in mounting area
- High durability
- Lowers CG



SET-UP TUNING STRENGTH STYLE PERFORMANCE WEIGHT SAVING



#359714

Lexan® Eazy Body - Lightweight

- Lightweight
- Reduces chassis roll
- Increases corner speed
- Lower CG



SET-UP TUNING STRENGTH STYLE PERFORMANCE WEIGHT SAVING



#352194

XB8 Lexan® Front Upper Arm Wings IFMAR Legal - Set

- Increases front downforce
- Increases front traction
- Helps to keep the buggy nose down
- Mounts directly on front upper arms
- Lightweight & durable



SET-UP TUNING STRENGTH STYLE PERFORMANCE WEIGHT SAVING

XRAY TUNING PARTS

(NOT INCLUDED)



FRONT BOTTOM VIEW



REAR BOTTOM VIEW



XB8 Stainless Steel Chassis Protector – Front & Rear

- Protects chassis
- Significantly increases chassis lifetime
- Especially useful on abrasive tracks
- Chamfered edges for smoother jumps



XB8 Front Upper Arm for Arm Wing

- Different hardness arms are available for additional turning options

SOFT:

For low traction. Generates more traction and steering.

MEDIUM:

Balanced flex. Most versatile for all conditions

GRAPHITE:

For high traction. Improves stability. More precise steering and less stopping in corners.

OTHER VARIANTS:

Front Upper Arms	
Part number	Hardness
#352135	Soft
#352135-M	Medium
#352135-G	Graphite



#353590

Lexan® Front Wing - Gripper

- Increases front downforce
- Optimized aerodynamics
- Lightweight & durable
- Enhanced control & steering
- Smoother jumps



#353512

Lexan® Rear Wing - 1/8 Off-road

- Super lightweight
- Improves rotation
- Improves stability on high traction
- Pre-cut
- 2-piece design with center fin



#351159-S

Chassis Side Guard L+R - Soft

- Durable Soft composite
- Increases flex
- Improves traction
- Improves consistency on low-traction
- Better bump absorption



XRAY TUNING PARTS

(NOT INCLUDED)



Alu Wheel Axles

- Precision track-width change
- Marked for easy identification
- Lightweight
- Black coated
- Premium Swiss 7075 T6 aluminum

OTHER VARIANTS:

Alu Wheel Axles		
Part number	Size	Slot
#355250	0mm	0 slot
#355251	+1mm	1 slot
#355252	+2mm	2 slot
#355253	+3mm	3 slot
#355254	+4mm	4 slot
#355255	+5mm	5 slot



XB8 PB Steering Block LB

- Different hardness steering blocks are available for additional turning options

MEDIUM:

For low traction. Generates more traction and steering.

HARD:

Balanced flex. Most versatile for all conditions.

GRAPHITE:

For high traction. Improves stability. More precise steering and less stopping in corners.

OTHER VARIANTS:

PB Steering Block LB	
Part number	Hardness
#352244	Medium
#352244-H	Hard
#352244-G	Graphite



XB8 Rear Uprights

- Increases stability
- Ultra strong & durable
- Reduces flex
- Improves consistency
- Multi adjustable roll centers and track width
- Premium Swiss 7075 T6 aluminum

Different hardness rear uprights are available for additional tuning options.

MEDIUM:

For low traction. Generates more traction.

HARD:

Balanced flex. Most versatile for all conditions.

GRAPHITE:

For high traction. Reduced flex to improve stability.

ALUMINIUM:

For maximum precision & rigidity. Delivers consistent geometry on very high-traction and improves stability.

OTHER VARIANTS:

XB8 Rear Uprights		
Part number	Type	Hardness
#353354	Composite	Medium
#353354-H	Composite	Hard
#353354-G	Composite	Graphite
#350912	Set	Alu



Center Diff Mounting Plate Set Higher - Graphite

- Special graphite composite mixture
- Increased strength
- Lower weight
- Extreme heat resistance
- Durable graphite composite



Center Diff Spur Gears - Large

- For larger tracks
- Improves top speed
- Eliminates spinning
- Smooth operation
- HUDY Spring Steel™



Super-Lightweight Ventilated Brake Disks (2)

- Super-lightweight design
- Consistent braking
- Prevents overheating
- Precision-ground
- Vibration-free
- Ultra-cool operation
- Smaller design for lower rotating mass
- Larger design for improved efficiency



XRAY TUNING PARTS

(NOT INCLUDED)



#358709

Alu Monoblock Engine Mount

- Eliminates need for gear mesh re-adjustment
- Increases stiffness
- Extra-long life
- Lightweight & durable
- Premium Swiss 7075 T6 aluminum
- Different stands available for different engine brands

OTHER VARIANTS:

Alu Stands For Engine Mounts		
Part number	Type	Engine
#358718	Stands	FX, Max, Sirio, Novarossi,
#358719	Stands	Picco, Reds, Orion, LRP, OS, Ultimate Racing



#355222

Universal Drive Shaft - HUDY Spring Steel™

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



#354814

Bevel Drive Pinion Gear 14T Matched for 46T Large Bevel Gear

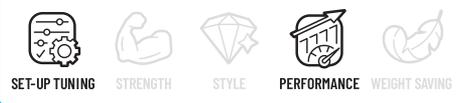
- For larger tracks
- Improves top speed
- Eliminates spinning
- Smooth operation
- Matched for 46T bevel gear #354846



#355064

Front Diff Outdrive Adapter Long - V2 - HUDY Spring Steel™ (2)

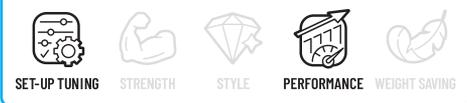
- Longer design
- Prevents drive shaft from falling out during heavy crashes
- CNC-machined
- HUDY Spring Steel™



#355215

CVD Adjustable Drive Axle - HUDY Spring Steel™ (2)

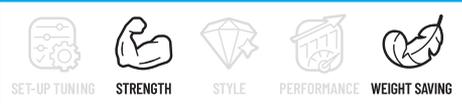
- Unique length adjustment of driveshaft
- Precise fit
- Lightweight & durable
- Positions the driveshaft further outward
- Extra-long lifespan
- HUDY Spring Steel™



#355022-G

Differential Case V2 - Graphite

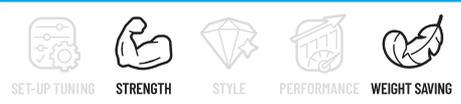
- Durable graphite composite
- Lightweight
- Higher temperature resistance
- Higher wear resistance



#355023-G

Center Differential Case V2 Graphite

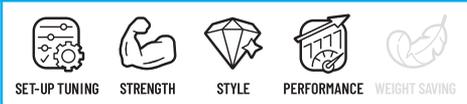
- Durable graphite composite
- Lightweight
- Higher temperature resistance
- Higher wear resistance



#352526

Alu Servo Saver Lower Arm Swiss 7075 T6

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



XRAY TUNING PARTS

(NOT INCLUDED)



4-Shoe Alu Clutch Shoes

- Wide range of shoes & springs for precise clutch settings
- Engagement timing adjustable from early to late
- Allows fine control of traction, acceleration and clutch feel
- Compatible combinations enable ultra-fine engagement settings
- Suitable options for all traction levels

OTHER VARIANTS:

4-Shoe Clutch Shoe			
Part number	Hardness	Weight	RPM Engagement
#358457	Alu Medium	1.00g	High ▲ Low
#358456	Alu Hard	1.00g	
#358461	Graphite	1.00g	
#358460	Alu Hard	1.15g	
#358459	Alu Medium	1.15g	
#358458	Alu Soft	1.15g	

4-Shoe Clutch Springs			
Part number	Hardness	Color	RPM Engagement
#358480	Soft	Gold	Early ▲ Late
#358481	Medium	Gray	
#358482	Hard	Silver	



#358414-L

3BB Clutch Bell 14T - Lightweight + 3x Ball-Bearing

- Lightweight
- Reduces heat build-up
- Increases lifespan
- Reduces rotating mass
- Enhances dust clearance

OTHER VARIANTS:

3BB Clutch Bell		
Part number	Type	Gearing
#358413	Standard	13T
#358413-L	Lightweight	13T

- For shorter tracks
- Improves acceleration
- Enhances drive out of corners
- Wobble-free operation



Extreme Heat Resistant F/R/C Alu & Steel Diff Pin with Inserts

#355085 For XB8 F/R differential

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

#355086 For XB8 F/R differential

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

#355083 & #355087 For XB8 center differential

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

OTHER VARIANTS:

Alu Diff Pins With Inserts			
Part number	Diff	Config.	Material
#355085	Front/Rear	2G	Alu
#355086	Front/Rear	4G	Alu
#355083	Center	4G	Steel
#355087	Center	4G	Alu



#354057

Carbon Center Diff Mounting Plate

- Easy installation
- More reliable
- Extra durable & strong
- CNC-machined
- Lightweight



#356005

Carbon Battery & Receiver Cover Plate

- Carbon radio case plates for XRAY hard radio case
- CNC-machined from bottom for super-lightweight design
- High-grade carbon material
- Set of front & rear covers



#358660

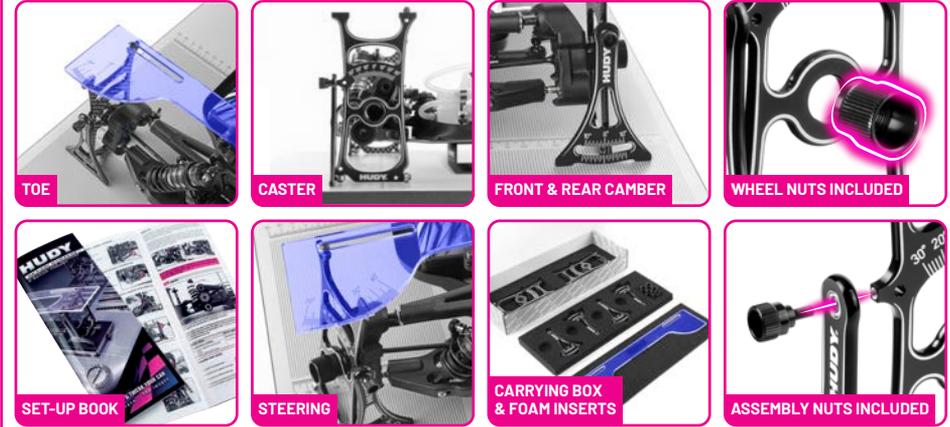
Carbon 125CC Fuel Tank Guard

- Protects fuel tank from heat
- Provides better fuel consistency
- Helps to ensure better engine performance
- CNC-machined
- Strong carbon material



HUDY SET-UP TOOLS & ACCESSORIES

(NOT INCLUDED)



#108801

HUDY Set-Up Station for 1/8 Off-road

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



#108851

HUDY Set-Up Toolset 1/8 Off-road

- Includes all tools for complete geometry adjustment
- Highest precision & superior quality
- Unmatched value
- Must have for every racer
- All components made by HUDY in Europe
- All components are machined from lightweight aircraft aluminum



HUDY Titanium Super-Low Head Screw - Centering Diameter

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

OTHER VARIANTS:

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



HUDY Titanium Flat Head Screw

OTHER VARIANTS:

Part number	Length	Pcs	Image
#903306-T	6mm	10	
#903308-T	8mm	10	
#903310-T	10mm	10	
#903312-T	12mm	10	



HUDY SET-UP TOOLS & ACCESSORIES

(NOT INCLUDED)



#104005

HUDY Air Vac - Vacuum Pump 1/8 Off-Road

- Removes air from shock absorbers & diffs in seconds
- Ultra compact & handy design
- Machined from premium Swiss 7075 T6 aluminum
- Includes holders for shock absorbers & differential
- Included 600mm connecting cable with gold-plated banana plugs
- Premium hard case for safe storage & transport
- Individually assembled & tested
- Works with 12V power supply or 7.2V battery (not included)
- May be used also as a tire additive penetrator



Holders for shock absorbers



Holders for differential



#102405

HUDY Tire Gluing Jig 1/8 Off-Road

- For perfect tire alignment & even glue application
- Secure tire hold for consistent gluing results
- Lightweight & extremely rigid construction
- Durable black-anodized finish with laser-engraved HUDY logo
- Compact & stylish
- Ideal for pit & travel use



#293407 (23T)
#293408 (24T)
#293409 (25T)

Alu Clamp Servo Horns

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



#293501 (23T)
#293502 (24T)
#293503 (25T)

Alu Steering Servo Horn

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

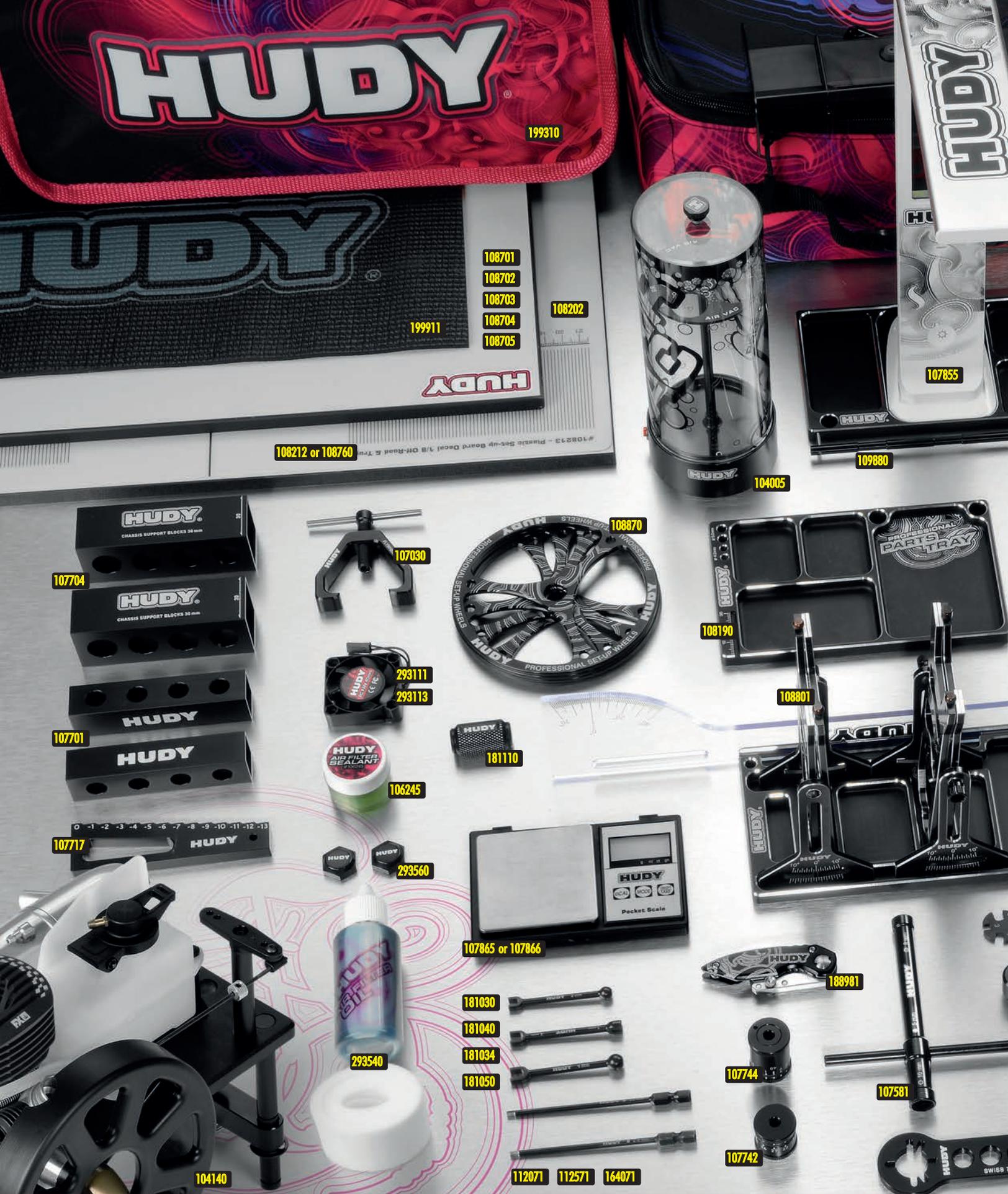


#107763

HUDY Adjustable Ride Height Gauge 5-40mm

- Easy & fast ride height adjustment
- Adjustable gauge in range 5-40mm
- Extremely durable and wear resistant
- 1mm increments
- Small & lightweight





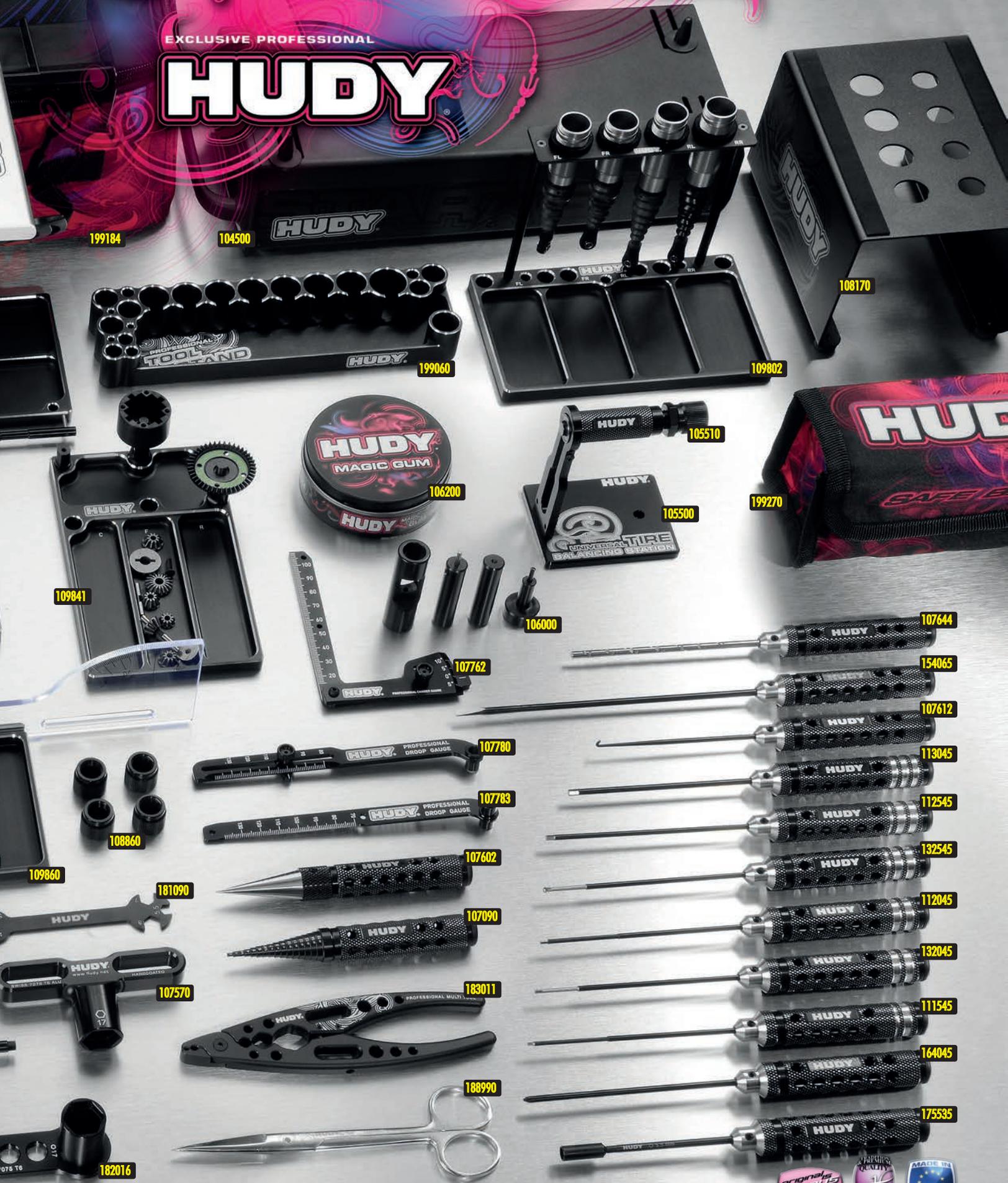
- #104005 HUDDY Air Vac - Vacuum Pump - 1/8 Off-Road
- #104140 HUDDY Engine Break-In Bench
- #104500 HUDDY Star-Box 1/8 Off-Road
- #105500 HUDDY Universal Tire Balancing Station
- #105510 Wheel Adapter for 1/8 Off-Road Cars, Truggy & Rally Game
- #106000 HUDDY Drive Pin Replacement Tool (for 3mm Pins)
- #106200 HUDDY Magic Cleaning Gum
- #106245 HUDDY Air Filter Sealant
- #107030 HUDDY Flywheel Puller
- #107090 HUDDY Bearing Check Tool
- #107570 HUDDY 17mm Off-Road Wheel Nut Tool
- #107581 HUDDY 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 HUDDY Adjustable Ride Height Gauge 20-30mm
- #107744 HUDDY Adjustable Ride Height Gauge 30-45mm
- #107762 HUDDY Adjustable Camber Gauge 110mm
- #107780 HUDDY Adjustable Droop Gauge 80-140mm
- #107783 HUDDY Droop Gauge 70-140mm
- #107855 HUDDY Pit LED
- #107865 HUDDY Ultimate Digital Pocket Scale 300g/0.01g
- #107866 HUDDY Professional Digital Pocket Scale 3000g/0.1g
- #108170 HUDDY Off-Road & Truggy Car Stand
- #108190 HUDDY 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 HUDDY 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 HUDDY Alu Tray for 1/8 Off-Road Diff & Shocks
- #109841 HUDDY 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
- #154065 Limited Edition -Sl. Screwdriver for Engine #4.0mm - Long
- #164045 Limited Edition - Phillips Screwdriver # 4.0mm
- #164071 Power Tool Tip Phillips 4.0 x 90 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 with External Soldering Tabs
- #293113 HUDY Brushless RC Fan 40mm with Internal Soldering Tabs
- #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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