

1/10 ELECTRIC OFF-ROAD BUGGY 2WD

XRAY XB2



INSTRUCTION MANUAL

FOR XB2C'26 & XB2D'26 EDITION

BEFORE YOU START

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

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

CUSTOMER SUPPORT

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

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

Read carefully and fully understand the instructions before beginning assembly.

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

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

XRAY Europe

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XRAY USA

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Fax: (214) 744-2401
E-mail: xray@rcamerica.com

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

SAFETY PRECAUTIONS

Contains:

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

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

CAUTION: CANCER HAZARD

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

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

Take appropriate safety precautions prior to operating this model. You are responsible for this model's assembly and safe operation! Please read the instruction manual before building and operating this model and follow all safety precautions. Always keep the instruction manual at hand for quick reference, even after completing the assembly. Use only genuine and original

authentic XRAY parts for maximum performance. Using any third party parts on this model will void warranty immediately.

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



IMPORTANT NOTES – GENERAL

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

IMPORTANT NOTES – ELECTRICAL

- Insulate any exposed electrical wiring (using heat shrink tubing or electrical tape) to prevent dangerous short circuits. Take maximum care in wiring, connecting and insulating cables. Make sure cables are always connected securely. Check connectors for if they become loose. And if so, reconnect them securely. Never use RC models with damaged wires. A damaged wire is extremely dangerous, and can cause short-circuits resulting in fire. Please have wires repaired at your local hobby shop.
- Low battery power will result in loss of control. Loss of control can occur due to a weak battery in either the transmitter or the receiver. Weak running battery may also result in an out of control car if your car's receiver power is supplied by the running battery. Stop operation immediately if the car starts to slow down.
- When NOT using RC model, always disconnect and remove battery.
- DO NOT disassemble battery or cut battery cables. If the running battery short-circuits, approximately 300W of electricity can be discharged, leading to fire or burns. Never disassemble battery or cut battery cables.
- Use a recommended charger for the receiver and transmitter batteries and follow the instructions correctly. Over-charging, incorrect charging, or using inferior chargers can

cause the batteries to become dangerously hot. Recharge battery when necessary. Continual recharging may damage battery and, in the worst case, could build up heat leading to fire. If battery becomes extremely hot during recharging, please ask your local hobby shop for check and/or repair and/or replacement.

- Regularly check the charger for potential hazards such as damage to the cable, plug, casing or other defects. Ensure that any damage is rectified before using the charger again. Modifying the charger may cause short-circuit or overcharging leading to a serious accident. Therefore DO NOT modify the charger.
- Always unplug charger when recharging is finished.
- DO NOT recharge battery while battery is still warm. After use, battery retains heat. Wait until it cools down before charging.
- DO NOT allow any metal part to short circuit the receiver batteries or other electrical/electronic device on the model.
- Immediately stop running if your RC model gets wet as may cause short circuit.
- Please dispose of batteries responsibly. Never put batteries into fire.

R/C & BUILDING TIPS

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

- Ask your local hobby shop for any advice.

Please support your local hobby shop. We at XRAY Model Racing Cars support all local hobby dealers. Therefore we ask you, if at all possible, to purchase XRAY products at your hobby dealer and give them your support like we do.

If you have difficulty finding XRAY products, please check out www.teamxray.com to get advice, or contact us via email at info@teamxray.com, or contact the XRAY distributor in your country.

WARRANTY

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

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

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

LIMITATIONS OF LIABILITY.

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

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

Disregard of the any of the above cautions may lead to accidents, personal injury, or property damage.

XRAY MODEL RACING CARS assumes no responsibility for any injury, damage, or misuse of this product during assembly or operation, nor any addictions that may arise from the use of this product.

All rights reserved.

QUALITY CERTIFICATE

XRAY MODEL RACING CARS uses only the highest quality materials, the best compounds for molded parts and the most sophisticated manufacturing processes of TQM (Total Quality Management). We guarantee that all parts of a newly-purchased kit are manufactured with the highest regard to quality. However, due to the many factors inherent in model racecar

competition, we cannot guarantee any parts once you start racing the car. Products which have been worn out, abused, neglected or improperly operated will NOT be covered under warranty. We wish you enjoyment of this high-quality and high-performance RC car and wish you best success on the track!

In line with our policy of continuous product development, the exact specifications of the kit may vary. In the unlikely event of any problems with your new kit, you should contact the model shop where you purchased it, quoting the part number.

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

TOOLS REQUIRED

Short Socket Wrench # 5.5mm
(HUDY #170004)

Side Cutters
(HUDY #189010)

Pocket Hobby Knife (HUDY #188981)

Special Tool for turnbuckles, nuts (HUDY #181090)

Turnbuckle Wrench 3.5mm (HUDY #181035)

Turnbuckle Wrench 3.5mm (HUDY #181036)

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)

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

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

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

Reamer (#107602 - HUDY EXCLUSIVE Limited Edition)

Scissors (HUDY #188990)

Professional Multi Tool
(HUDY #183011)

Ball Joint Wrench (HUDY #181110)

EQUIPMENT INCLUDED

300cSt (#106330)
HUDY Premium Silicone Oils

50.000cSt (#106550)
HUDY Premium Silicone Oils

(HUDY #106212)
Super Diff Grease

!
MIX THOROUGHLY
BEFORE USE.

(HUDY #106210)
Premium Graphite Grease

!
MIX THOROUGHLY
BEFORE USE.

EQUIPMENT REQUIRED

<p>Transmitter</p>	<p>Receiver</p>	<p>Speed Controller</p>	<p>Steering Servo</p>	<p>Electric Motor & Pinion Gear with Setscrew</p>	<p>LiPo Battery</p>
<p>Battery Charger</p>	<p>Double-sided Tape (HUDY #107875) OPTION</p>	<p>Lexon™ Paint</p>	<p>Tires & Inserts OPTION</p>	<p>Bearing Oil (HUDY #106230) OPTION</p>	<p>Threadlock</p>
					<p>CA glue</p>

NOT INCLUDED



SAMPLE OF OPTIONAL PARTS		
#32XXXX	TYPE1	OPTION 1
#32XXXX	TYPE2	OPTION 2
#32XXXX	TYPE	INCLUDED

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

COLOR INDICATIONS

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

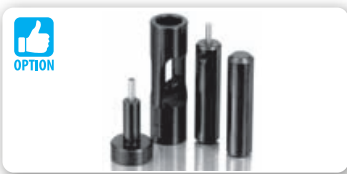
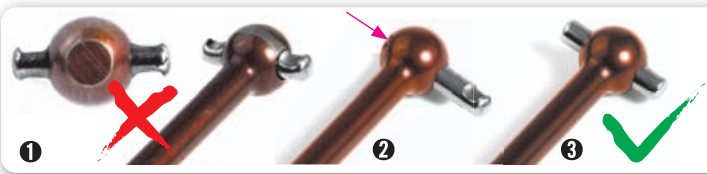
The part descriptions are color-coded to make it easier for you to identify the source of a part. Here are what the different colors mean:

- 321200 **STYLE A** - indicates parts that are included in the bag marked for the section.
- 321100 **STYLE B** - indicates parts that are included in the box.
- 324900 **STYLE C** - indicates parts that are already assembled from previous steps.
- 325100 **STYLE D** - indicates parts that are OPTIONAL.

TECH TIPS

TIP DRIVE SHAFT PIN SERVICING

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



For quick & easy drive pin replacements use #106000 HUDY Drive Pin Replacement Tool together with #106036 Ejector Pivot Pin & Alternating Pivot 2.5mm.



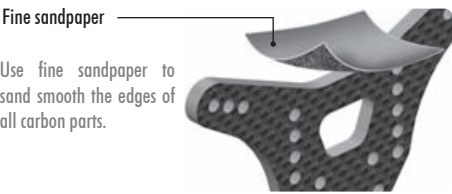
To replace the worn pins use only premium HUDY drive pins (#106053 2.5mm dia x 10mm length)

CARBON PARTS PREPARATION

Follow this Tech Tip to prepare the carbon parts. Sand the edges with sandpaper, and then seal the edges with CA glue to reinforce them and help prevent delamination.

Prepare all Carbon Parts:

- Front shock tower
- Rear shock tower



MANUAL PAGE MARKING

MANUAL STEPS ONLY FOR DIRT

1. BALL DIFFERENTIAL

DIRT

SAG

MANUAL STEPS ONLY FOR CARPET

1. GEAR DIFFERENTIAL

CARPET

SAG

MANUAL DUAL STEPS FOR CARPET AND DIRT

3. REAR DRIVETRAIN

CARPET

DIRT

TIP

All ball-bearings are factory pre-oiled or pre-greased. The bearings of each type are packaged separately; there is a BAG 00.9 with pre-greased ball-bearings and a separate bag with pre-oiled ball-bearings.

For pre-oiled ball-bearings, use:

#106230 HUDY Bearing Oil.

For pre-greased ball-bearings with rubber covers, 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.



HUDY PREMIUM SILICONE OILS

TIP

TIPS FOR GEAR DIFFERENTIAL

LOW-MEDIUM TRACTION	30.000cSt
MEDIUM-HIGH TRACTION	50.000cSt
HIGH TRACTION	80.000cSt

Softer oil increases rear traction, harder oil increases on-power forward traction.

HUDY PREMIUM SILICONE OILS

FOR SHOCK ABSORBERS

#	Viscosity	Option
#106321	200cSt - 100ml	OPTION
#106326	250cSt - 100ml	OPTION
#106331	300cSt - 100ml	INCLUDED
#106336	350cSt - 100ml	OPTION
#106338	375cSt - 100ml	OPTION
#106341	400cSt - 100ml	OPTION
#106343	425cSt - 100ml	OPTION
#106346	450cSt - 100ml	OPTION
#106348	475cSt - 100ml	OPTION
#106351	500cSt - 100ml	OPTION
#106353	525cSt - 100ml	OPTION
#106356	550cSt - 100ml	OPTION
#106358	575cSt - 100ml	OPTION
#106361	600cSt - 100ml	OPTION

SILICONE OILS for GEAR DIFF

#	Viscosity	Option
#106510	10.000cSt - 50ml	OPTION
#106492	11.000cSt - 50ml	OPTION
#106512	12.000cSt - 50ml	OPTION
#106513	13.000cSt - 50ml	OPTION
#106515	15.000cSt - 50ml	OPTION
#106517	17.000cSt - 50ml	OPTION
#106520	20.000cSt - 50ml	OPTION
#106530	30.000cSt - 50ml	OPTION
#106540	40.000cSt - 50ml	OPTION
#106550	50.000cSt - 50ml	INCLUDED
#106560	60.000cSt - 50ml	OPTION
#106580	80.000cSt - 50ml	OPTION
#106610	100.000cSt - 50ml	OPTION
#106615	150.000cSt - 50ml	OPTION

HUDY TITANIUM 5.4mm BALL STUDS



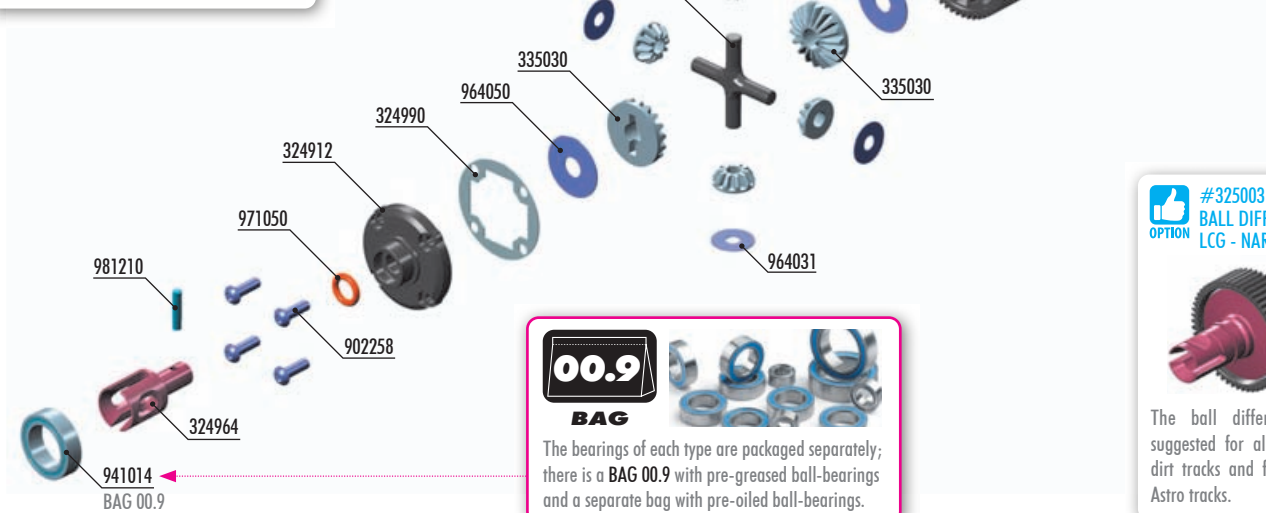
HUDY TITANIUM 4.9mm BALL STUDS



**TITANIUM MATERIAL SUPER LIGHTWEIGHT ULTRA-PRECISE
LONG LIFE HIGH DURABILITY MADE BY HUDY
MADE IN EUROPE**



#335031
DIFF BEVEL & SATELLITE GEARS FOR
O-RINGS - SET



00.9
BAG

The bearings of each type are packaged separately; there is a **BAG 00.9** with pre-greased ball-bearings and a separate bag with pre-oiled ball-bearings.

#325003
BALL DIFFERENTIAL
LCG - NARROW - SET



The ball differential is suggested for all types of dirt tracks and for bumpy Astro tracks.



GEAR DIFF CASES		
#324912	HARD	INCLUDED
#324912-G	GRAPHITE	OPTION
GEAR DIFF PULLEYS		
#324955	HARD	INCLUDED
#324955-G	GRAPHITE	OPTION



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



#335080
STEEL DIFFERENTIAL PIN HARDCOATED (2)



#335081
ALU DIFFERENTIAL PIN HARDCOATED (2)



#325101 XRAY XB2 ACTIVE DIFF NARROW SET INCLUDING
#325127 ACTIVE DIFF SEGMENT 120°

Adjustable Active Diff improves speed and handling. Different angled segments allow the diff gears to engage on-power to increase the forward traction, making it faster and easier to drive.



ACTIVE DIFF ON - AND OFF-POWER ACTION

ACTION	EFFECT
OFF-POWER	The Active Diff behaves the same as a standard gear differential. Adjustments are made using different viscosities of silicone oils; thinner oils resulting in more off-power steering with a more aggressive feel.
ON-POWER	The main advantage of the Active Diff is felt on-power. The diff action become heavier when throttle is applied, increasing forward drive and stability upon corner exit.

ACTIVE DIFF SEGMENTS			LOCK ON-POWER	TRACK CONDITIONS
#325123	60°	OPTION		LOW
#325125	90°	OPTION		MEDIUM
#325127	120°	INCLUDED		HIGH

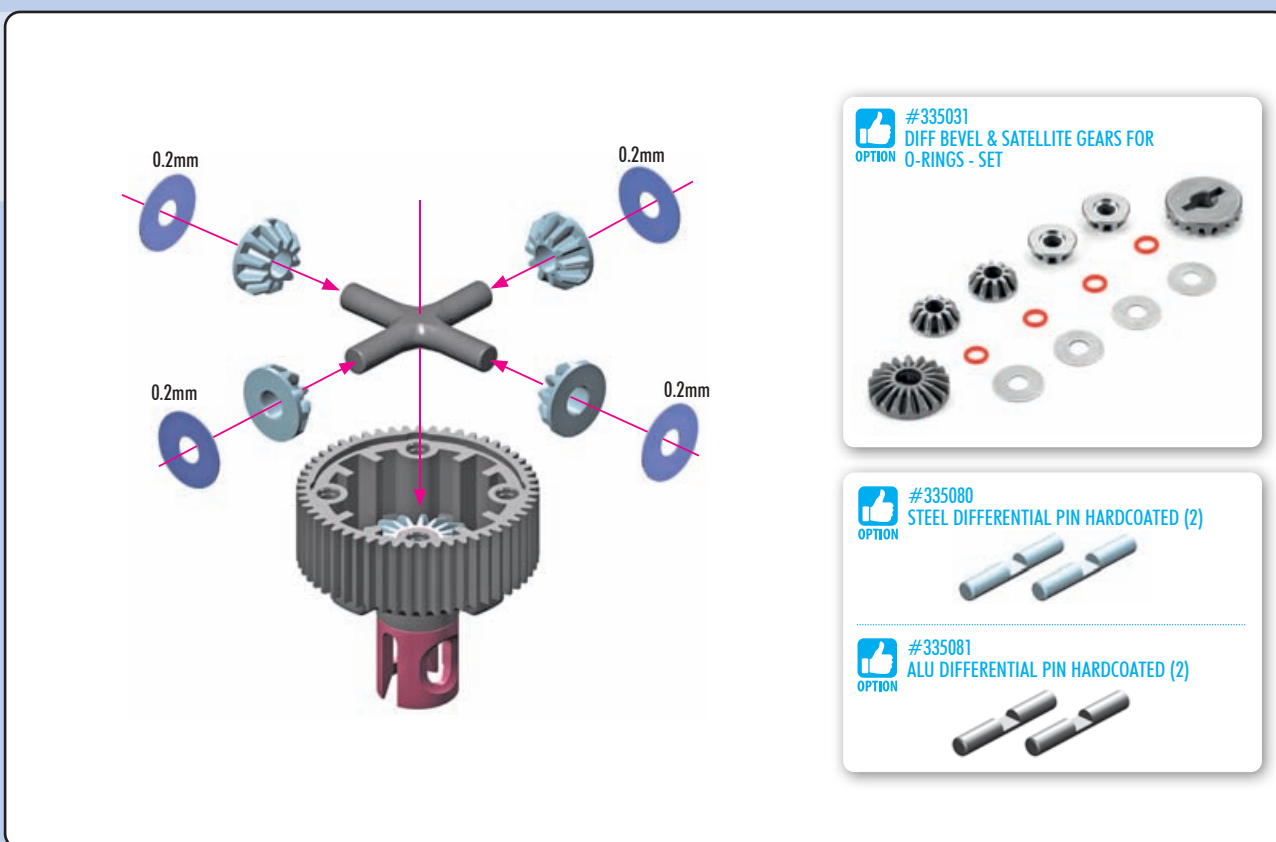
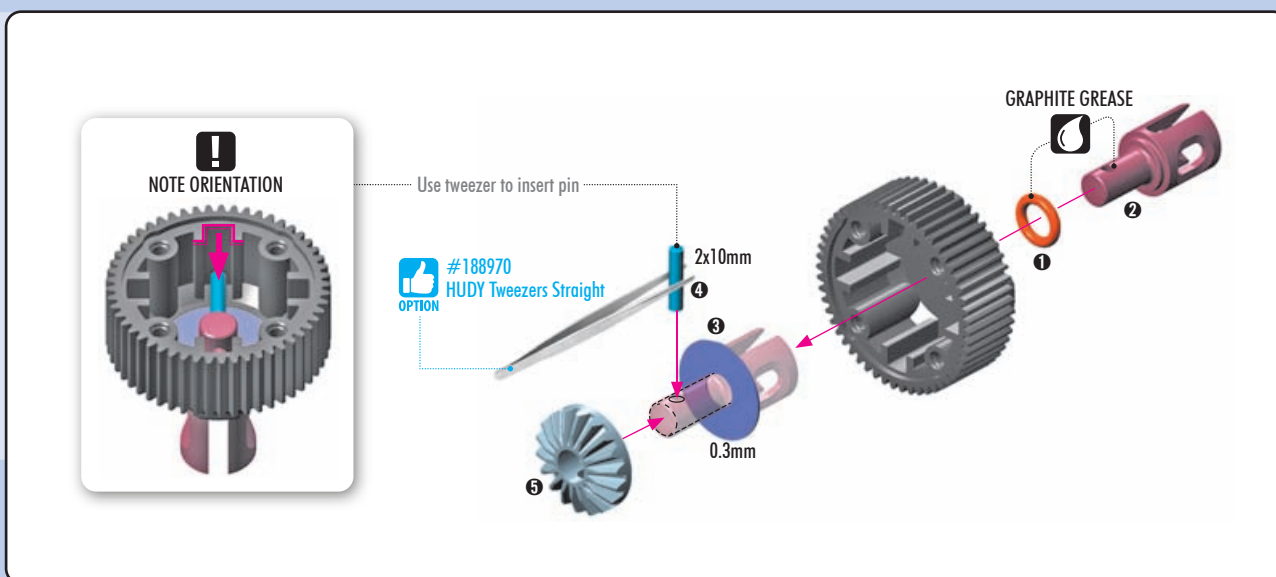
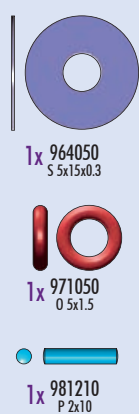
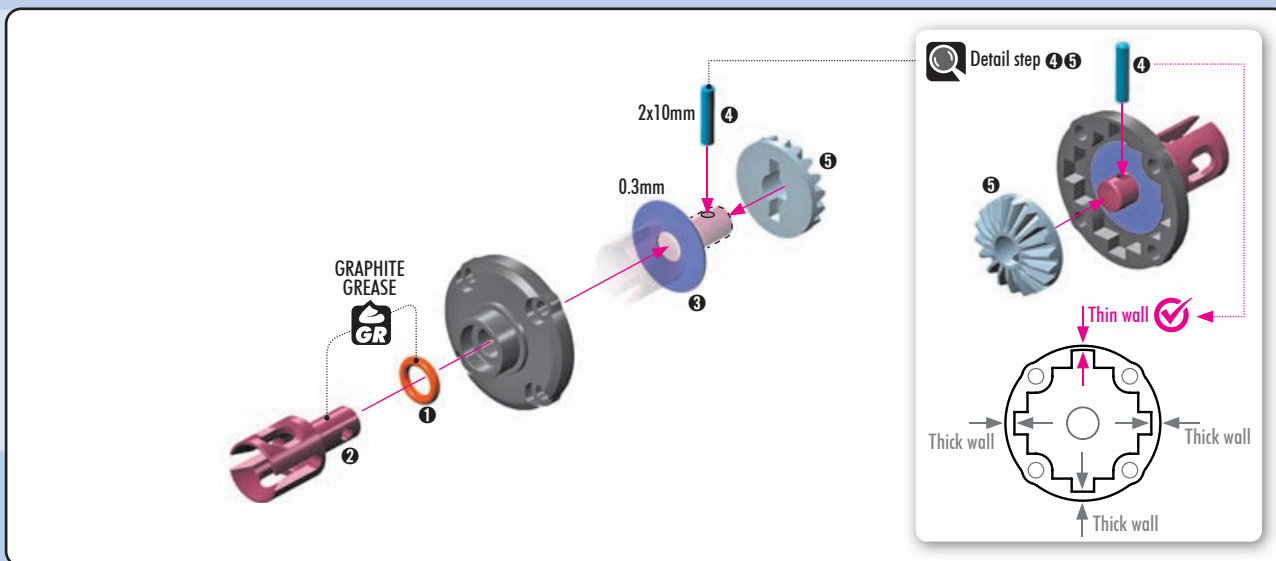
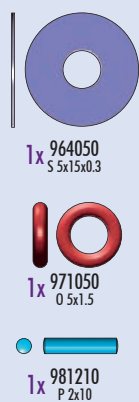
BAG

01

- 304980 COMPOSITE GEAR DIFF CROSS PIN
- 324903-L GEAR DIFFERENTIAL - LCG - NARROW - SET
- 324912 COMPOSITE GEAR DIFFERENTIAL COVER - LCG - NARROW
- 324955 COMPOSITE GEAR DIFFERENTIAL CASE WITH PULLEY 53T - LCG - NARROW
- 324964 GEAR DIFF OUTDRIVE ADAPTER - LCG - FOR NARROW DIFF - HSS™ (2)
- 324990 DIFF GASKET (4)
- 335030 STEEL DIFF BEVEL & SATELLITE GEARS (2+4)

- 902258 HEX SCREW SH M2.5x8 (10)
- 941014 BALL-BEARING 10x15x4 RUBBER SEALED - GREASE (2)
- 964031 WASHER S 3.5x10x0.2 (10)
- 964050 WASHER S 5x15x0.3 (10)
- 971050 SILICONE O-RING 5x1.5 (10)
- 981210 PIN 2x10 (10)

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

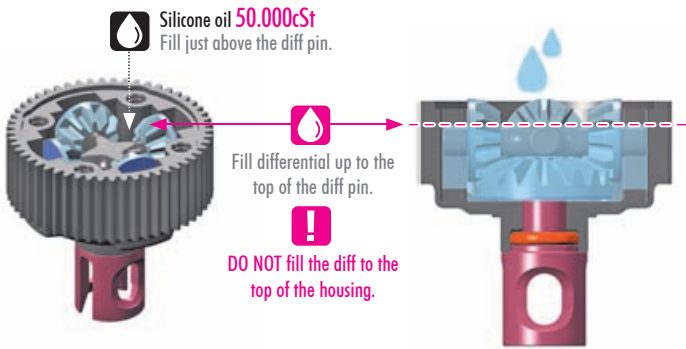


1. GEAR DIFFERENTIAL

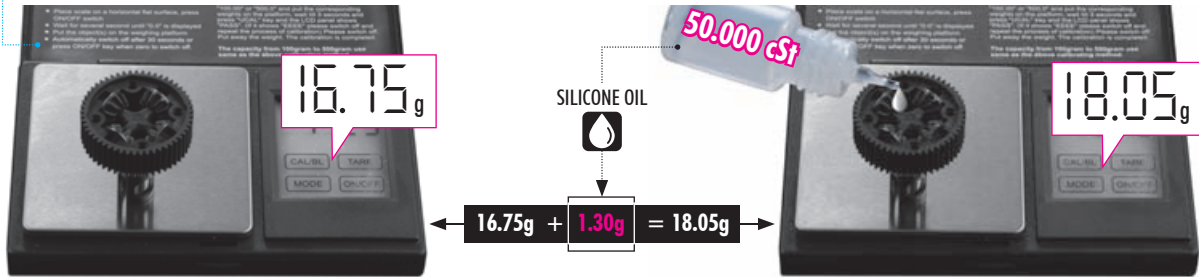
USE PROPER AMOUNT OF OIL IN THE DIFF

Use a digital scale to measure the exact amount of oil in the diff. Remember that during operation the diff gets hotter and the heat may allow the oil to expand. If there is too much oil inside it may interfere with the diff operation and damage the internal gears.

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



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



- 1 Put the diff (without oil) on the scale and check the weight (approximately 16.75g)
- 2 Slowly pour oil into the diff and watch the weight. Add 1.30g of oil into the diff. The approximate weight of the diff including oil is 18.05g.

TIP TIPS FOR GEAR DIFFERENTIAL

- LOW-MEDIUM TRACTION 30.000cSt
- MEDIUM-HIGH TRACTION 50.000cSt
- HIGH TRACTION 80.000cSt

Softer oil increases rear traction, harder oil increases on-power forward traction.



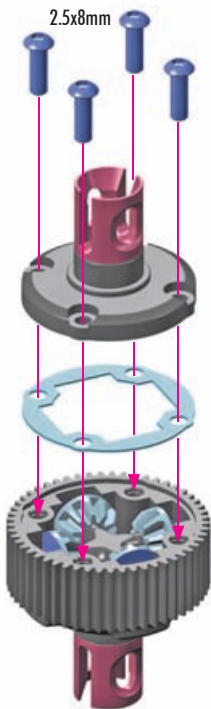
HUDY ULTIMATE SILICONE OILS

#106510	10.000cSt - 50ml
#106492	11.000cSt - 50ml
#106512	12.000cSt - 50ml
#106515	15.000cSt - 50ml
#106517	17.000cSt - 50ml
#106520	20.000cSt - 50ml
#106530	30.000cSt - 50ml

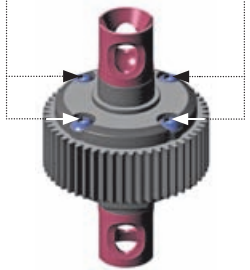
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#106540	40.000cSt - 50ml	OPTION
#106550	50.000cSt - 50ml	INCLUDED
#106560	60.000cSt - 50ml	OPTION
#106580	80.000cSt - 50ml	OPTION
#106610	100.000cSt - 50ml	OPTION
#106615	150.000cSt - 50ml	OPTION

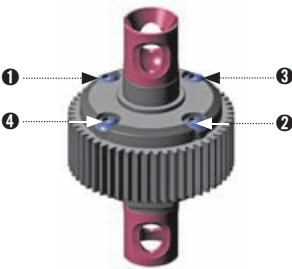
- 4x 902258
SH M2.5x8
- 2x 941014
BB 10x15x4



Install the screws equally but DO NOT tighten them completely.



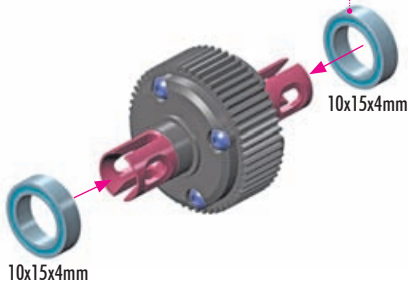
Finish tightening in this order.



00.9 BAG



The bearings of each type are packaged separately; there is a BAG 00.9 with pre-greased ball-bearings and a separate bag with pre-oiled ball-bearings.



1. BALL DIFFERENTIAL

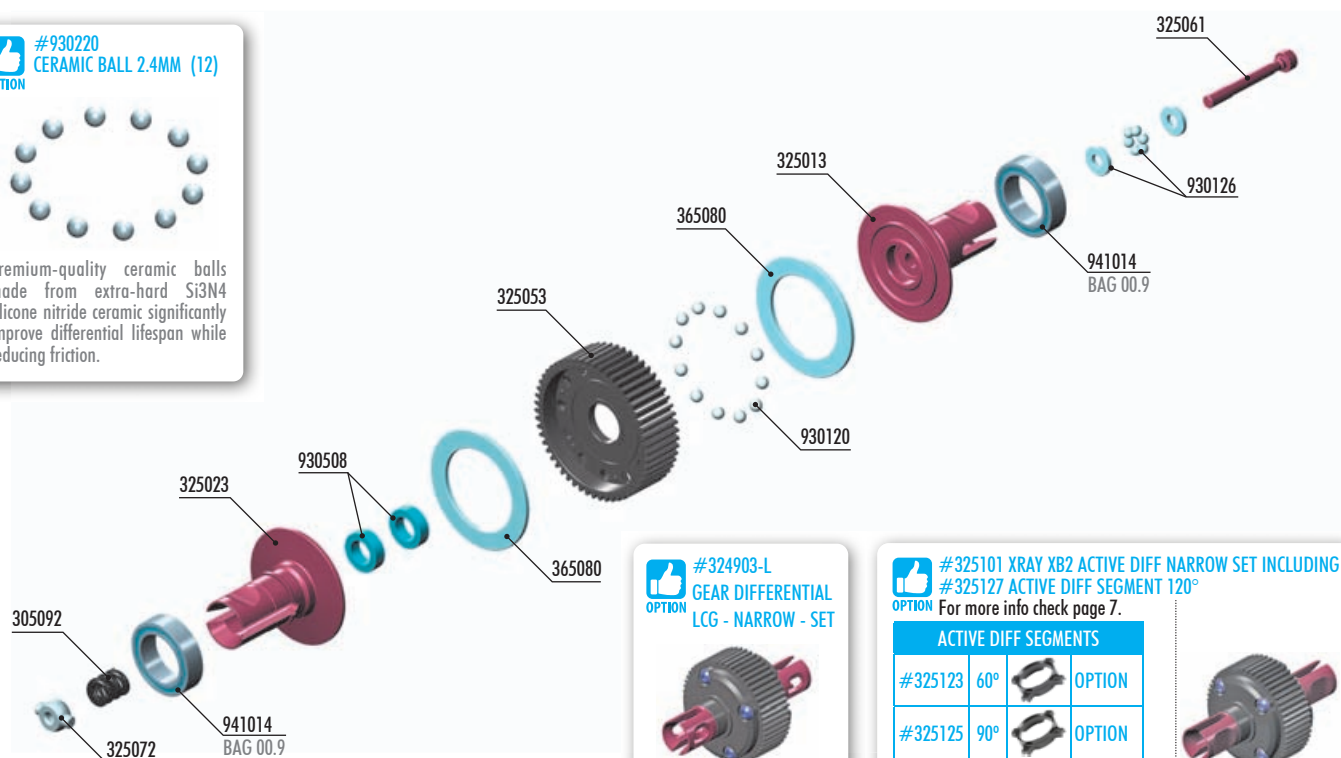
DIRT



#930220
CERAMIC BALL 2.4MM (12)



Premium-quality ceramic balls made from extra-hard Si3N4 silicone nitride ceramic significantly improve differential lifespan while reducing friction.



#324903-L
GEAR DIFFERENTIAL
LCG - NARROW - SET



The gear differential is suggested for medium to high traction conditions as it increases on-power steering.



#325101 XRAY XB2 ACTIVE DIFF NARROW SET INCLUDING
#325127 ACTIVE DIFF SEGMENT 120°
OPTION For more info check page 7.

ACTIVE DIFF SEGMENTS			
#325123	60°		OPTION
#325125	90°		OPTION
#325127	120°		OPTION



Adjustable Active Front Diff improves speed and handling. Different angled segments allow the diff gears to engage on-power to increase the forward traction, making it faster and easier to drive.

BAG

01

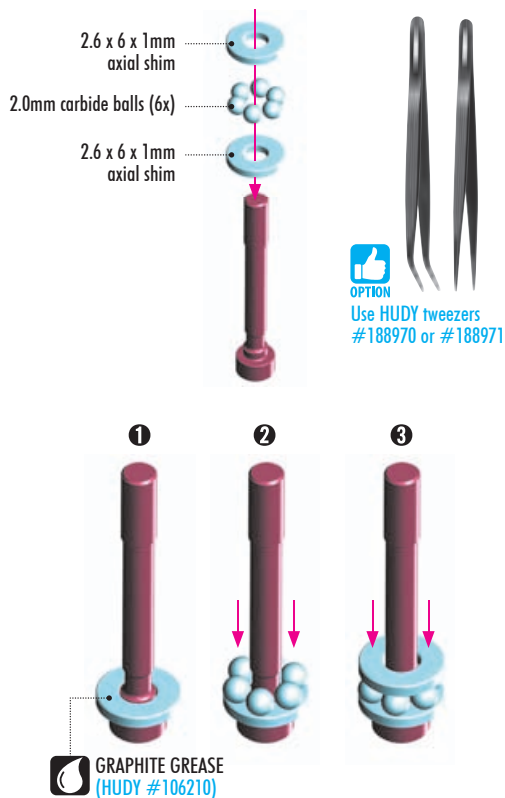
- 305092 BALL DIFFERENTIAL SPRING
- 325003 BALL ADJUSTABLE DIFFERENTIAL - LCG - SET - HUDY SPRING STEEL™
- 325013 BALL DIFFERENTIAL SHORT OUTPUT SHAFT - LCG - HUDY SPRING STEEL™
- 325023 BALL DIFFERENTIAL LONG OUTPUT SHAFT - LCG - HUDY SPRING STEEL™
- 325053 COMPOSITE BALL DIFFERENTIAL GEAR 53T
- 325061 SCREW FOR BALL DIFF ADJUSTMENT - SPRING STEEL™

- 325072 ALU BALL DIFFERENTIAL NUT
- 365080 DIFF WASHER 17 x 24.5 x 1 (2)
- 930120 CARBIDE BALL 2.4mm FOR BALL DIFF (12)
- 930126 CARBIDE BALL-BEARING AXIAL 2.6x6x1
- 930508 BALL-BEARING 5x8x2.5 STEEL SEALED - OIL (2)
- 941014 BALL-BEARING 10x15x4 RUBBER SEALED - GREASE (2)

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



1x 930126
BA 2.6x6x1

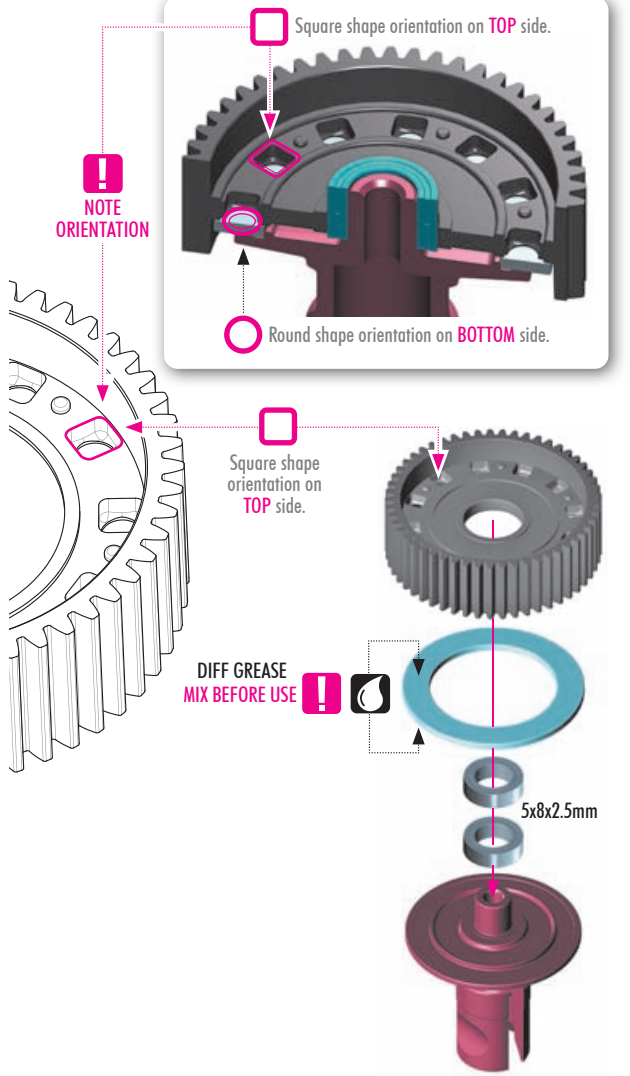


1. BALL DIFFERENTIAL

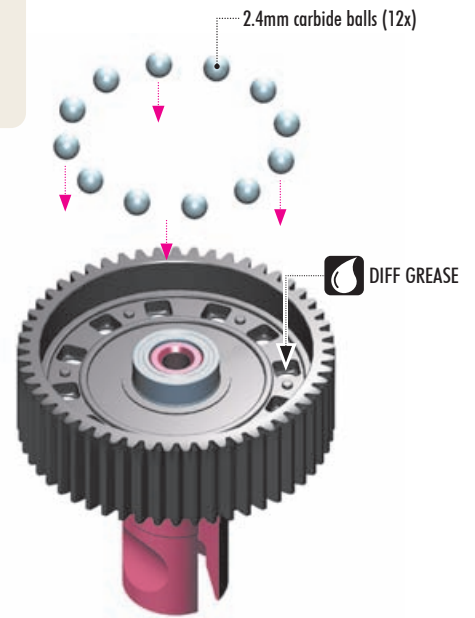
DIRT



2x 930508
BB 5x8x2.5



12x 930120
B 2.4



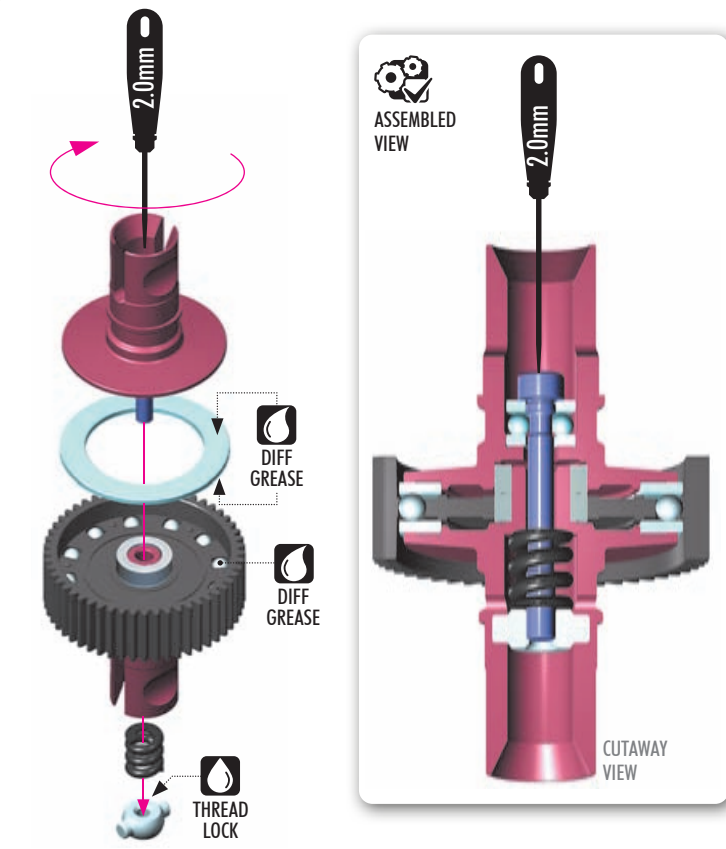
#930220
CERAMIC BALL 2.4MM (12)
OPTION



Premium-quality ceramic balls made from extra-hard Si₃N₄ silicon nitride ceramic significantly improve differential lifespan while reducing friction.

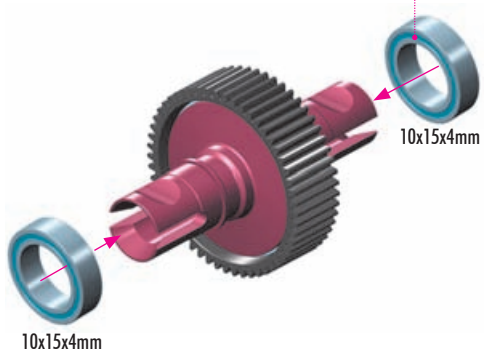


2x 941014
BB 10x15x4



00.9
BAG

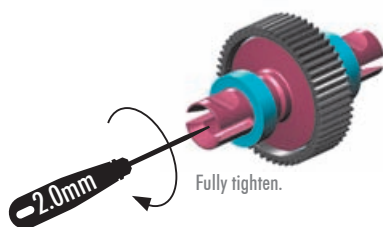
The bearings of each type are packaged separately; there is a BAG 00.9 with pre-greased ball-bearings and a separate bag with pre-oiled ball-bearings.



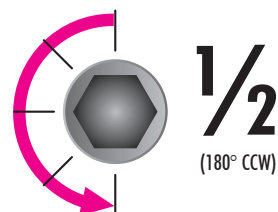
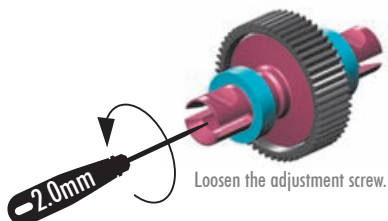


BEFORE RACING, follow these steps

1

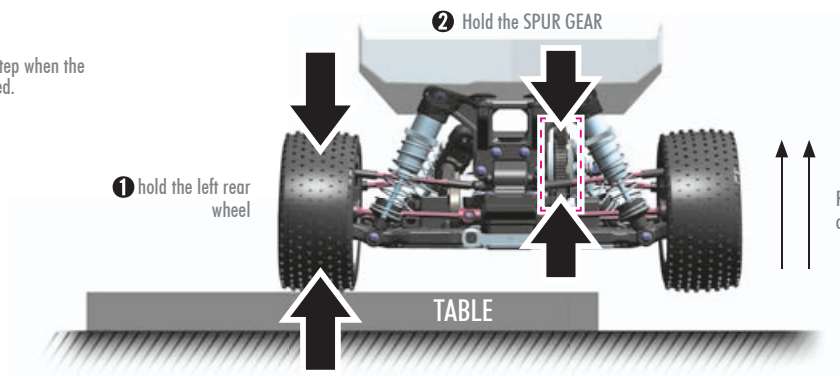


2 Loosen the adjustment screw 1/2 turn (180° CCW).

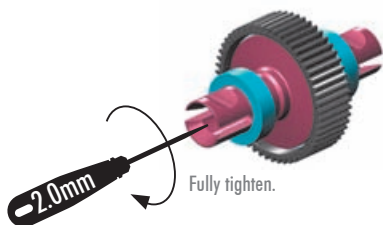


3

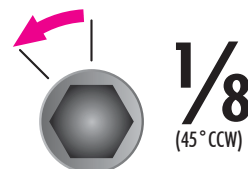
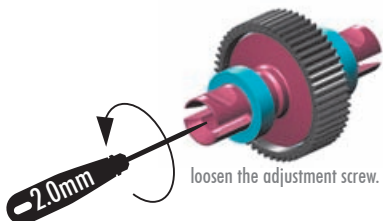
Continue with this step when the car is fully assembled.



4



5 Loosen the adjustment screw 1/8 turn (45° CCW).



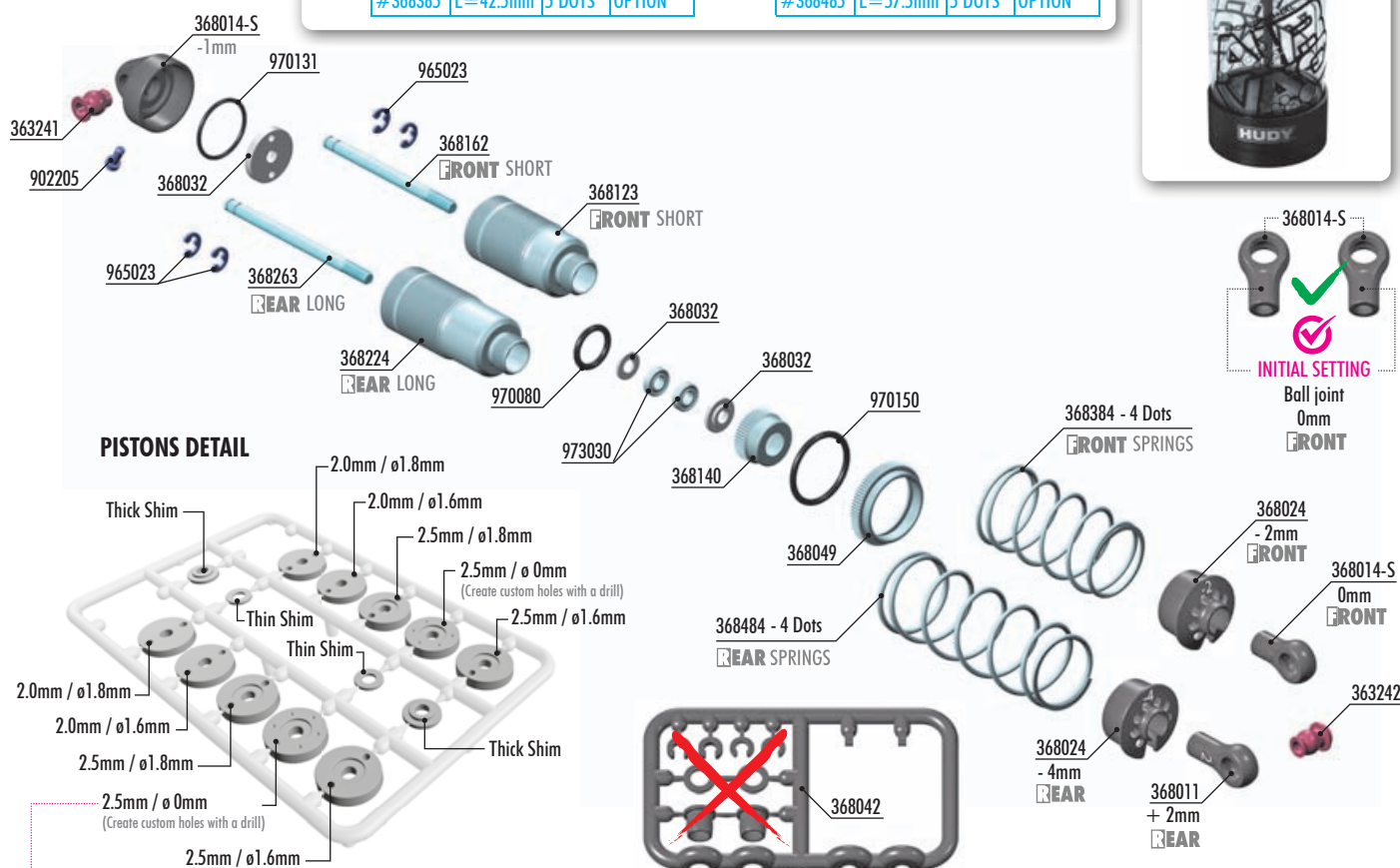
INITIAL SETTING



Ball differential is now ready.

CARPET

#368481	L=57.5mm	1 DOT	OPTION
#368482	L=57.5mm	2 DOTS	OPTION
#368482	L=57.5mm	2 DOTS	OPTION
#368483	L=57.5mm	3 DOTS	OPTION
#368484	L=57.5mm	4 DOTS	INCLUDED
#368485	L=57.5mm	5 DOTS	OPTION



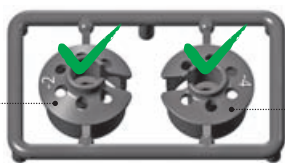
! Do NOT use C- shims & shock cap bushings for initial setting.

02

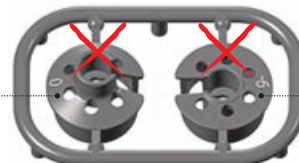
- | | |
|----------|---|
| 363241 | BALL UNIVERSAL 5.75mm WITH BACKSTOP (2) |
| 363242 | PIVOT BALL 5.8mm ECCENTRIC (2) |
| 368014-S | COMP SHOCK CAP, SPRING COLLAR & BALL JOINT - BIG BORE (2) |
| 368032 | SHOCK PISTONS - COMPLETE SET - DELRIN - BIG BORE |
| 368042 | COMPOSITE SHOCK BUSHING & SHIM (2+2) |
| 368049 | ALU SHOCK ADJUSTABLE NUT - BIG BORE (2) |
| 368102-S | FRONT SHOCK ABSORBERS 30mm - BIG BORE - SET (2) |
| 368123 | ALU FRONT SHOCK BODY 30mm - BIG BORE (2) |
| 368140 | ALU LOWER SHOCK BODY CAP (2) |
| 368162 | FRONT HARDENED SHOCK SHAFT 40mm (2) |

- | | |
|----------|--|
| 368202-5 | REAR SHOCK ABSORBERS 35.5mm - BIG BORE - SET (2) |
| 368224 | ALU REAR SHOCK BODY 35.5mm - BIG BORE (2) |
| 368263 | REAR HARDENED SHOCK SHAFT 45mm (2) |
| 902205 | HEX SCREW SH M2x5 (10) |
| 965023 | E-CLIP 2.3 (10) |
| 970080 | O-RING 8x1 (10) |
| 970131 | O-RING 13 x 1.0 (10) |
| 970150 | O-RING 15 x 1.5 (10) |
| 973030 | SILICONE X-RING PRE-OILED 3x2 (8) |

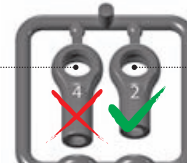
INITIAL SETTING
Retaining collar
-2mm
FRONT



INITIAL SETTING
Retaining collar
-4mm
REAR



DO NOT use
Retainig collar
for initial setting
0mm



**DO NOT use
ball joint
for initial setting
+4mm**

 **INITIAL SETTING**
Ball joint
+2mm
REAR

02.1

368011	COMPOSITE SHOCK BALL JOINT +2mm & +4mm (2+2)
368024	COMPOSITE SPRING COLLAR -2mm & -4mm - BIG BORE (2+2)
368028	COMPOSITE SPRING COLLAR 0mm & -6mm - BIG BORE (2+2)

- 368384 FRONT CONICAL SPRING-SET L=42.5mm - 4 DOTS (2)
368484 REAR CONICAL SPRING-SET L=57.5mm - 4 DOTS (2)

XB2'26

2. SHOCK ABSORBERS

DIRT



FRONT SPRINGS

#	Length	DOT	INCLUDED
#368381	L=42.5mm	1 DOT	INCLUDED
#368382	L=42.5mm	2 DOTS	OPTION
#368382	L=42.5mm	2 DOTS	OPTION
#368383	L=42.5mm	3 DOTS	OPTION
#368384	L=42.5mm	4 DOTS	OPTION
#368385	L=42.5mm	5 DOTS	OPTION

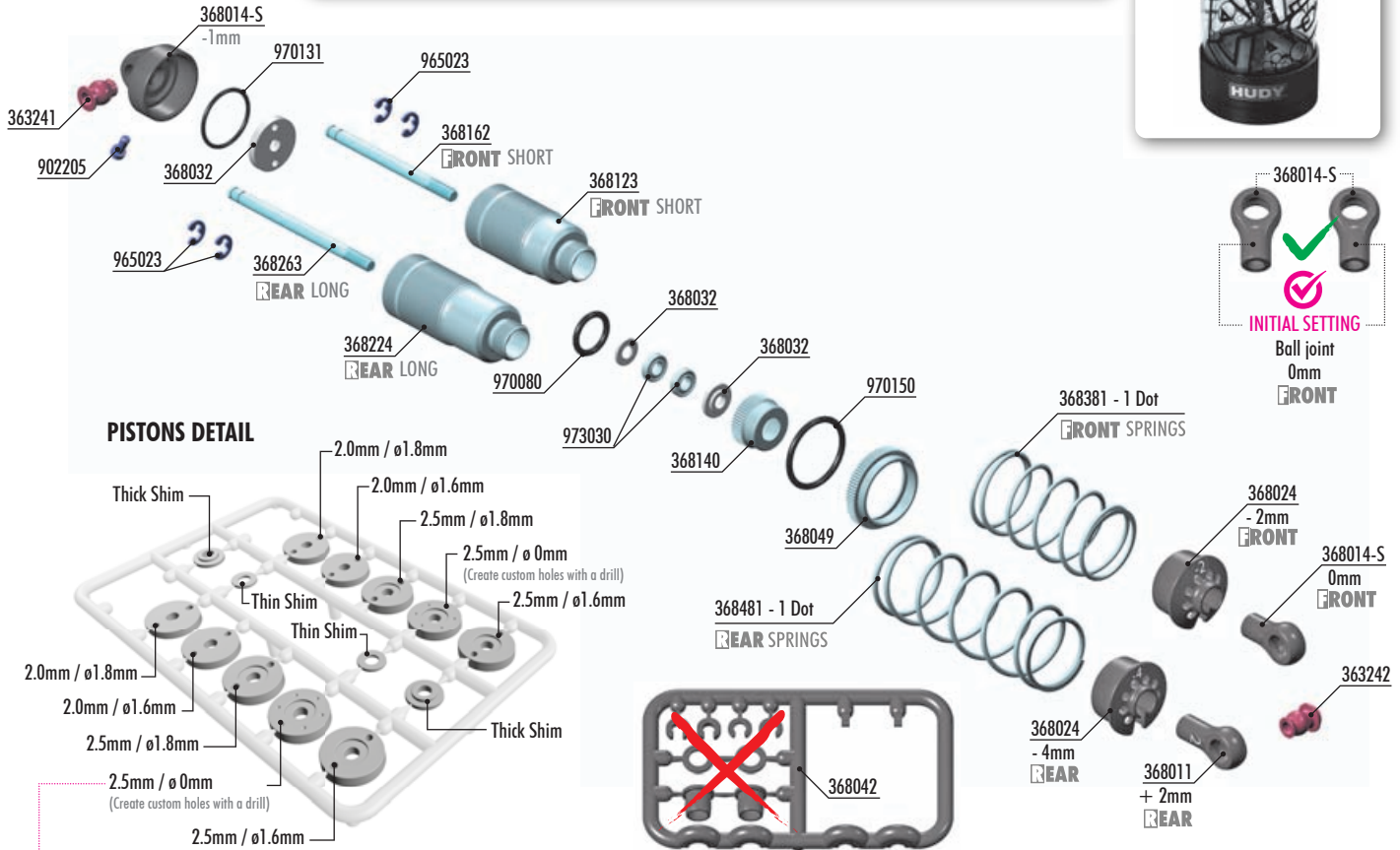


REAR SPRINGS

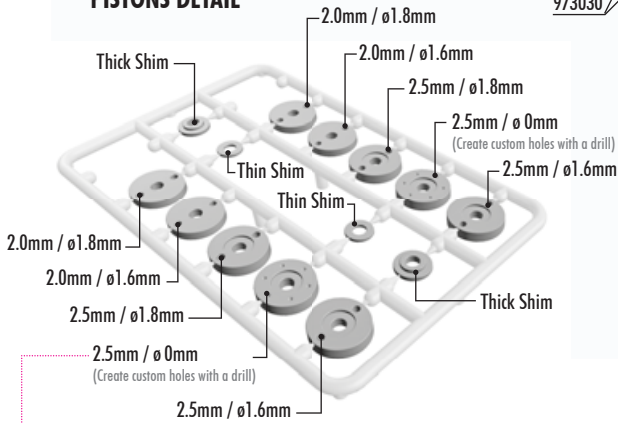
#	Length	DOT	INCLUDED
#368481	L=57.5mm	1 DOT	INCLUDED
#368482	L=57.5mm	2 DOTS	OPTION
#368482	L=57.5mm	2 DOTS	OPTION
#368483	L=57.5mm	3 DOTS	OPTION
#368484	L=57.5mm	4 DOTS	OPTION
#368485	L=57.5mm	5 DOTS	OPTION



#104004
HUDY AIR VAC - VACUUM
PUMP - 1/10 OFF-ROAD



PISTONS DETAIL



! To use these custom pistons you **HAVE TO** drill custom holes by yourself.

! Do NOT use C- shims & shock cap bushings for initial setting.



INITIAL SETTING
Ball joint
0mm
FRONT

BAG

02

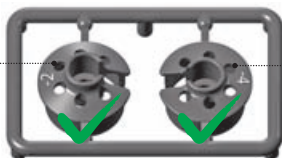
- 363241 BALL UNIVERSAL 5.75mm WITH BACKSTOP (2)
- 363242 PIVOT BALL 5.8mm ECCENTRIC (2)
- 368014-S COMP. SHOCK CAP, SPRING COLLAR & BALL JOINT - BIG BORE (2)
- 368032 SHOCK PISTONS - COMPLETE SET - DELRIN - BIG BORE
- 368042 COMPOSITE SHOCK BUSHING & SHIM (2+2)
- 368049 ALU SHOCK ADJUSTABLE NUT - BIG BORE (2)
- 368102-S FRONT SHOCK ABSORBERS 30mm - BIG BORE - SET (2)
- 368123 ALU FRONT SHOCK BODY 30mm - BIG BORE (2)
- 368140 ALU LOWER SHOCK BODY CAP (2)
- 368162 FRONT HARDENED SHOCK SHAFT 40mm (2)

- 368202-S REAR SHOCK ABSORBERS 35.5mm - BIG BORE - SET (2)
- 368224 ALU REAR SHOCK BODY 35.5mm - BIG BORE (2)
- 368263 REAR HARDENED SHOCK SHAFT 45mm (2)
- 902205 HEX SCREW SH M2x5 (10)
- 965023 E-CLIP 2.3 (10)
- 970080 O-RING 8x1 (10)
- 970131 O-RING 13 x 1.0 (10)
- 970150 O-RING 15 x 1.5 (10)
- 973030 SILICONE X-RING PRE-OILED 3x2 (8)

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

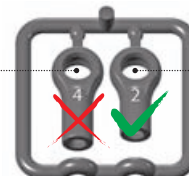


INITIAL SETTING
Retaining collar
-2mm
FRONT



INITIAL SETTING
Retaining collar
-4mm
REAR

DO NOT use ball joint
for initial setting
+4mm



INITIAL SETTING
Ball joint
+2mm
REAR

BAG

02.1

XB2 SHOCK ASSEMBLY SET

- 368011 COMPOSITE SHOCK BALL JOINT +2mm & +4mm (2+2)
- 368024 COMPOSITE SPRING COLLAR -2MM & -4MM - BIG BORE (2+2)

- 368381 FRONT CONICAL SPRING-SET L=42.5mm - 1 DOT (2)
- 368481 REAR CONICAL SPRING-SET L=57.5mm - 1 DOT (2)

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

XRAY

2. SHOCK ABSORBERS

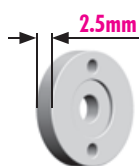
CARPET

DIRT

PISTONS ALTERNATIVE 1

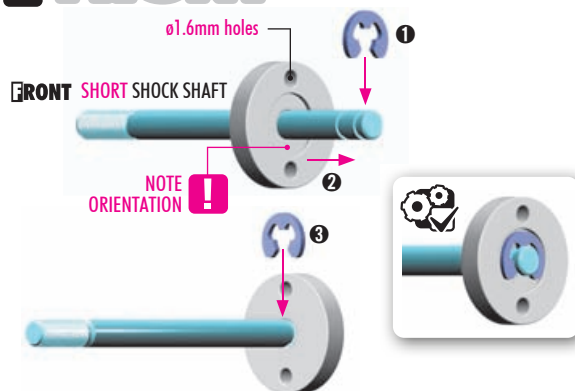
We recommend for these types of surfaces and traction levels:

CARPET

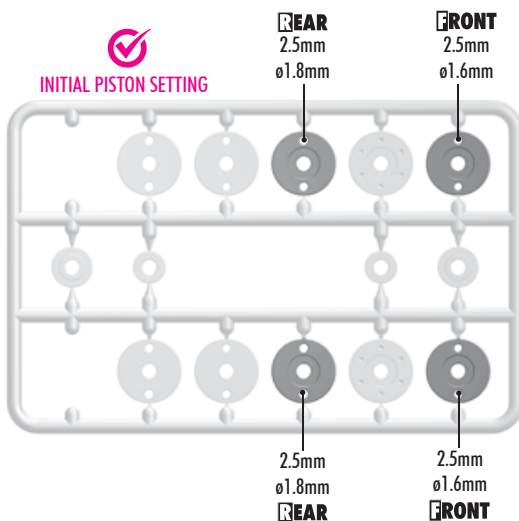


CARPET
INITIAL PISTON
SETTING

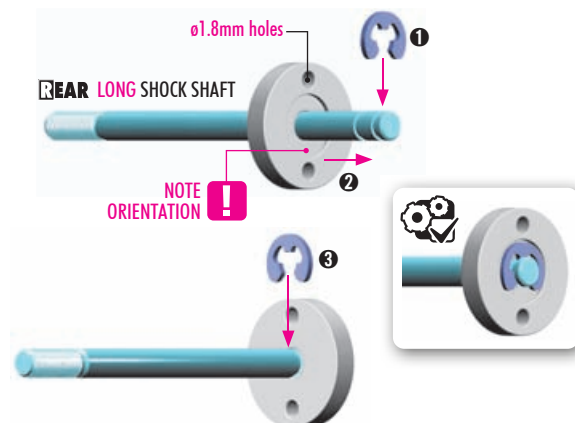
2x FRONT



INITIAL PISTON SETTING



2x REAR



#368033
PRECISION GROUND SHOCK PISTON BLANKS 2.5mm - BIG BORE (4)
OPTION



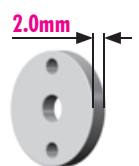
Use drill bits to create your own piston holes

Big Bore piston blanks 2.0mm or 2.5mm thick for individual custom modification. All pistons are made from Delrin and are molded using ultra-high precision moulds and afterwards precisely ground for perfectly finished surface for smoother operation.

PISTONS ALTERNATIVE 2

We recommend for these types of surfaces and traction levels:

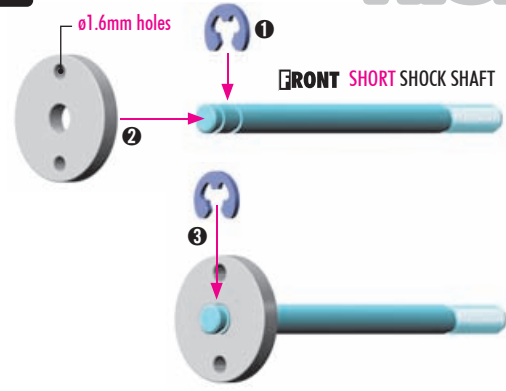
ASTRO
DIRT



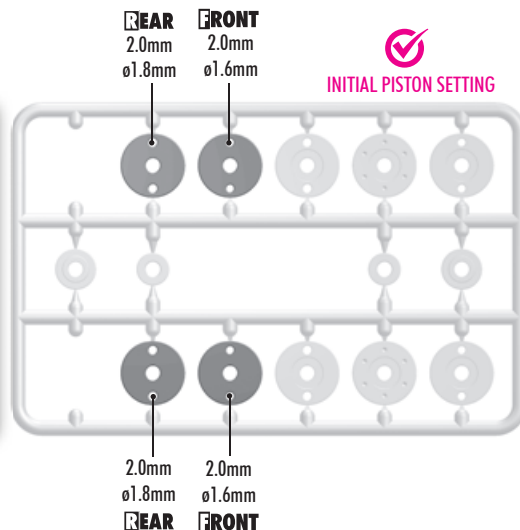
DIRT
INITIAL PISTON
SETTING

2x

FRONT

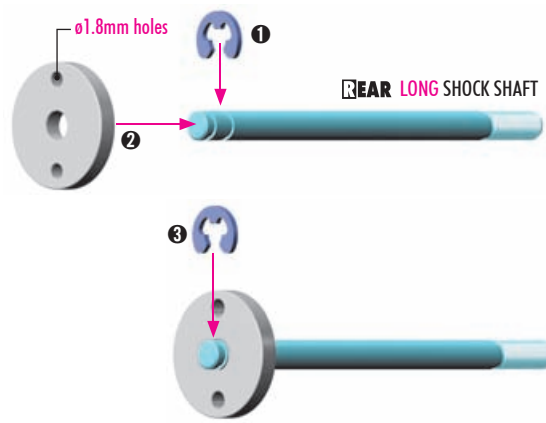


INITIAL PISTON SETTING



2x

REAR



#368034
PRECISION GROUND SHOCK PISTON BLANKS 2.0mm - BIG BORE (4)
OPTION



Use drill bits to create your own piston holes

Big Bore piston blanks 2.0mm or 2.5mm thick for individual custom modification. All pistons are made from Delrin and are molded using ultra-high precision moulds and afterwards precisely ground for perfectly finished surface for smoother operation.

8x 965023
C2.3

**SET-UP
BOOK**

SHOCK DAMPING
SHOCK PISTONS

2. SHOCK ABSORBERS

CARPET

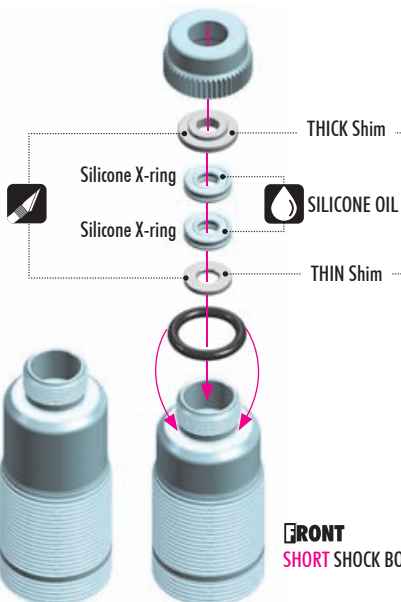
DIRT



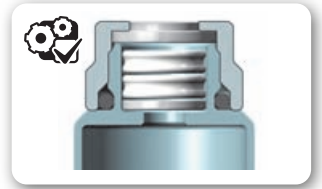
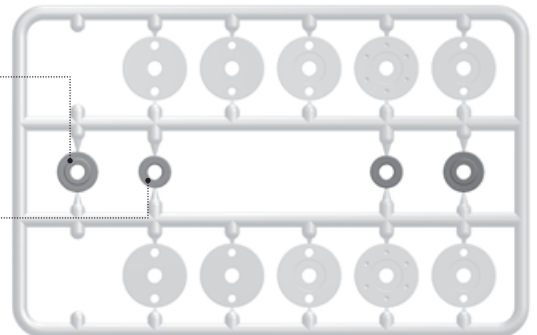
2x FRONT

2x REAR

Carefully remove the shock piston from the frame, and remove all excess plastic flash.



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



2x

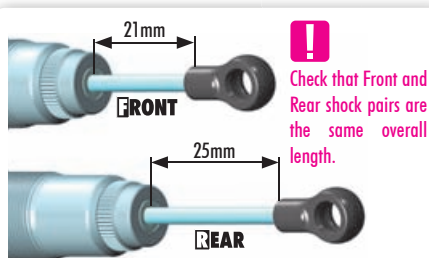
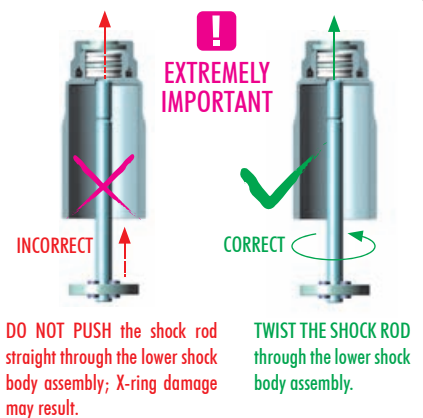


2x



FRONT
SHORT SHOCK BODY

REAR
LONG SHOCK BODY

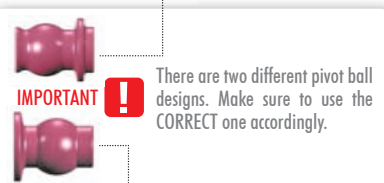


Install the pivot balls with #183011 HUDY Multi Tool

REAR 2x +2mm

FRONT 2x 0mm

IMPORTANT
ECCENTRIC PIVOT BALL IN LOWER Ball Joint

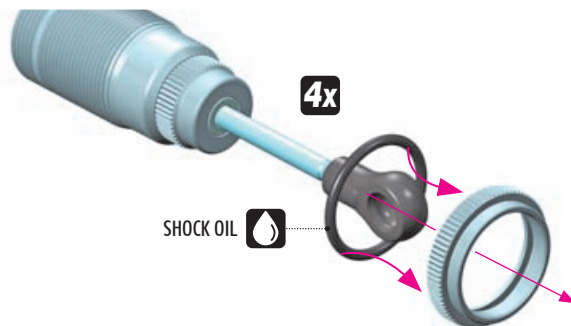


TIP
Install with HUDY Multi Tool.

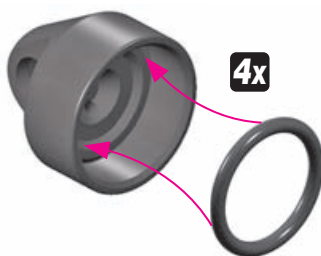




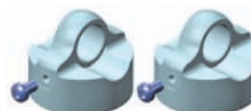
4x 970150
Ø 15x1.5



4x 970131
Ø 13x1



#368054
ALU SHOCK CAP-NUT - BIG BORE - 1mm (2)



Alu upper shock cap ensure increased durability and extended life time. Machined from premium Swiss 7075 T6 aluminum and additionally black coated. The shock caps feature vent hole.



4x 902205
SH M2x5

FRONT SHORT
Oil 300cSt
CARPET
DIRT
✓ INITIAL SETTING

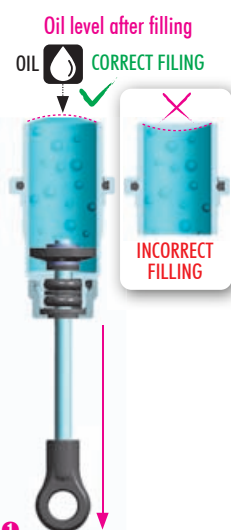
REAR LONG
Oil 300cSt
CARPET
DIRT
✓ INITIAL SETTING

INITIAL SHOCK REBOUND SETTING 0% REBOUND

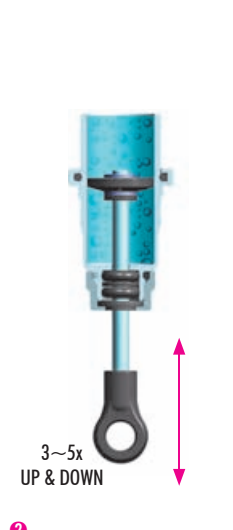
✓ INITIAL SETTING

4x

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. For the **FRONT** shocks (short) use 300cSt oil. For the **REAR** shocks (long) use 300cSt 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.



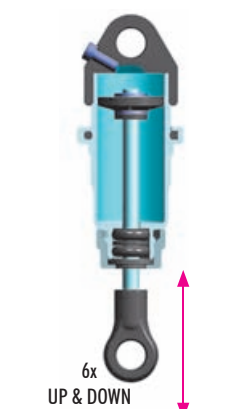
4 Gently place the shock cap onto the filled shock body and start to tighten the cup. Tighten the cap fully.



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



6 Keep the shock shaft pushed in the shock body and insert the screw into the shock cap. Tighten gently.



7 6x push the shaft up and down.



8 Untighten the screw.

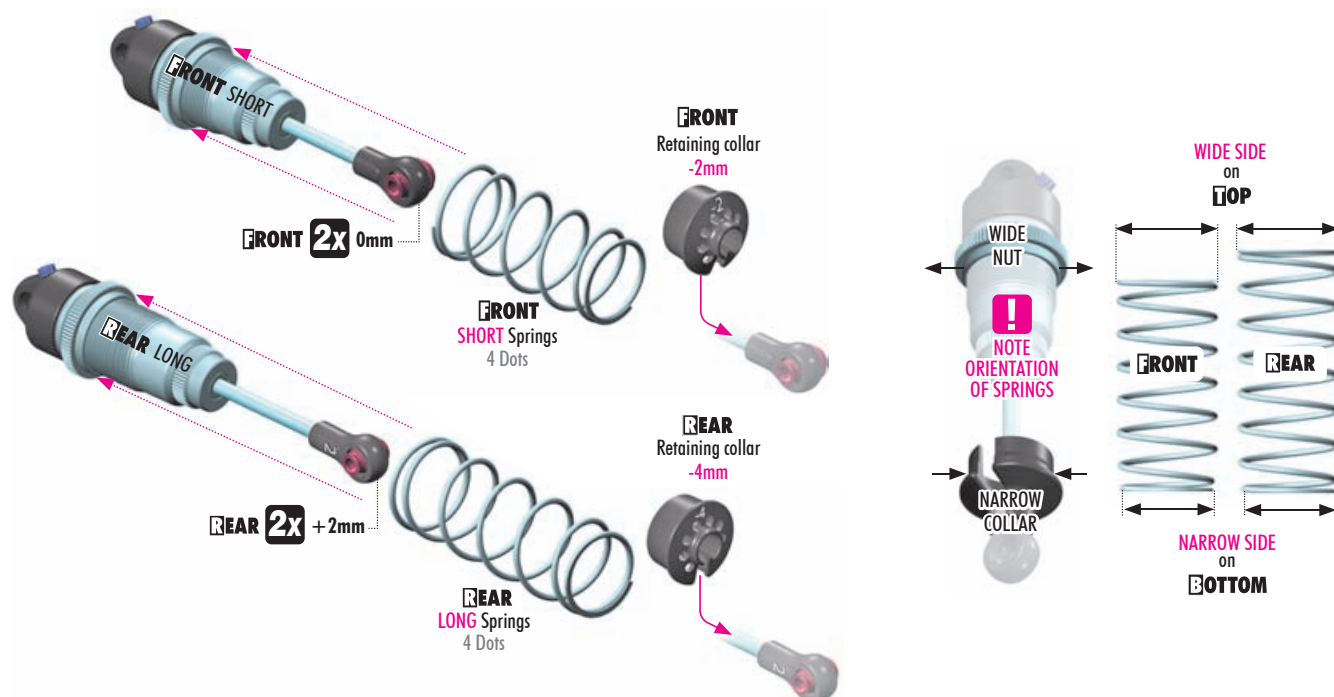


9 Gently push the shock shaft completely into the shock body. Excess oil will flow through the hole in the shock cap.



10 Tighten the screw. The rebound will be at approx. 0%.

CARPET INITIAL PARTS CONFIGURATION



ALUMINUM SHOCK COLLARS

Set of lower aluminum shock collars for increased reliability. Stylish and lightweight collars are CNC-machined from premium Swiss 7075 T6 aluminum and are strategically lightened. Set of four.

#368021
ALU SHOCK SPRING RET. COLLAR (4)



#368022
ALU SHOCK SPRING RET. COLLAR -2mm (4)



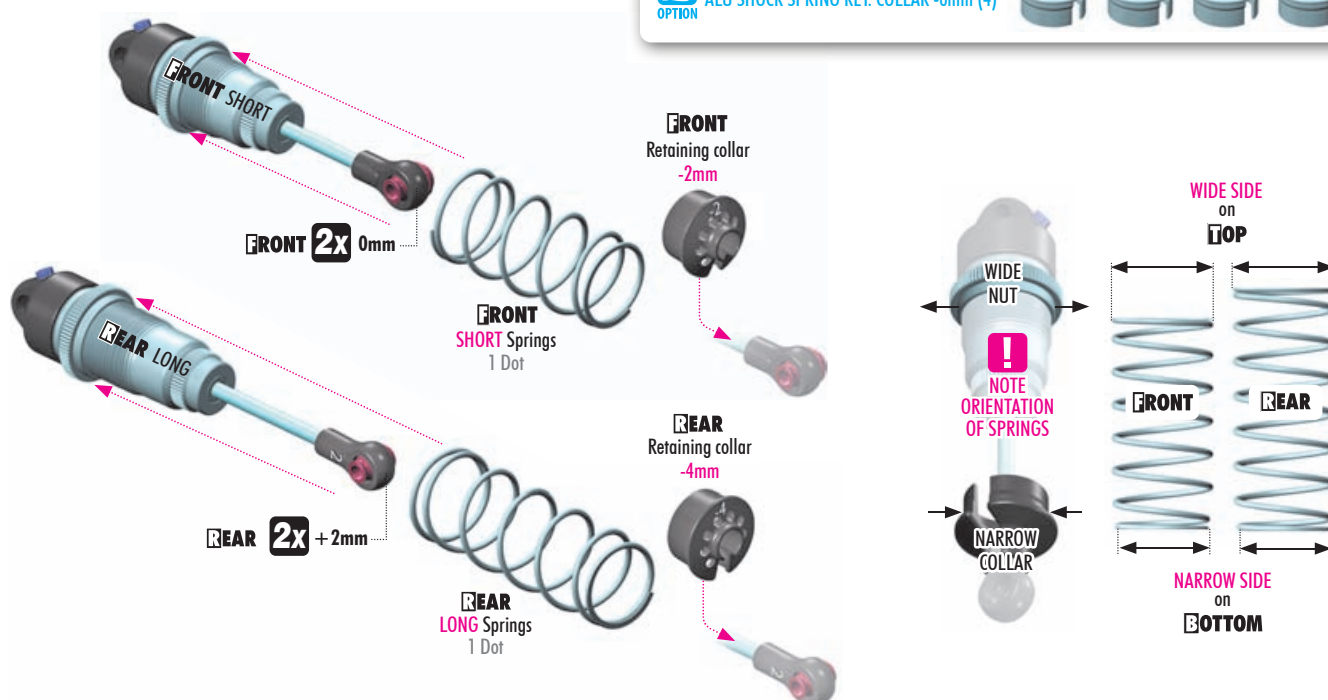
#368023
ALU SHOCK SPRING RET. COLLAR -4mm (4)

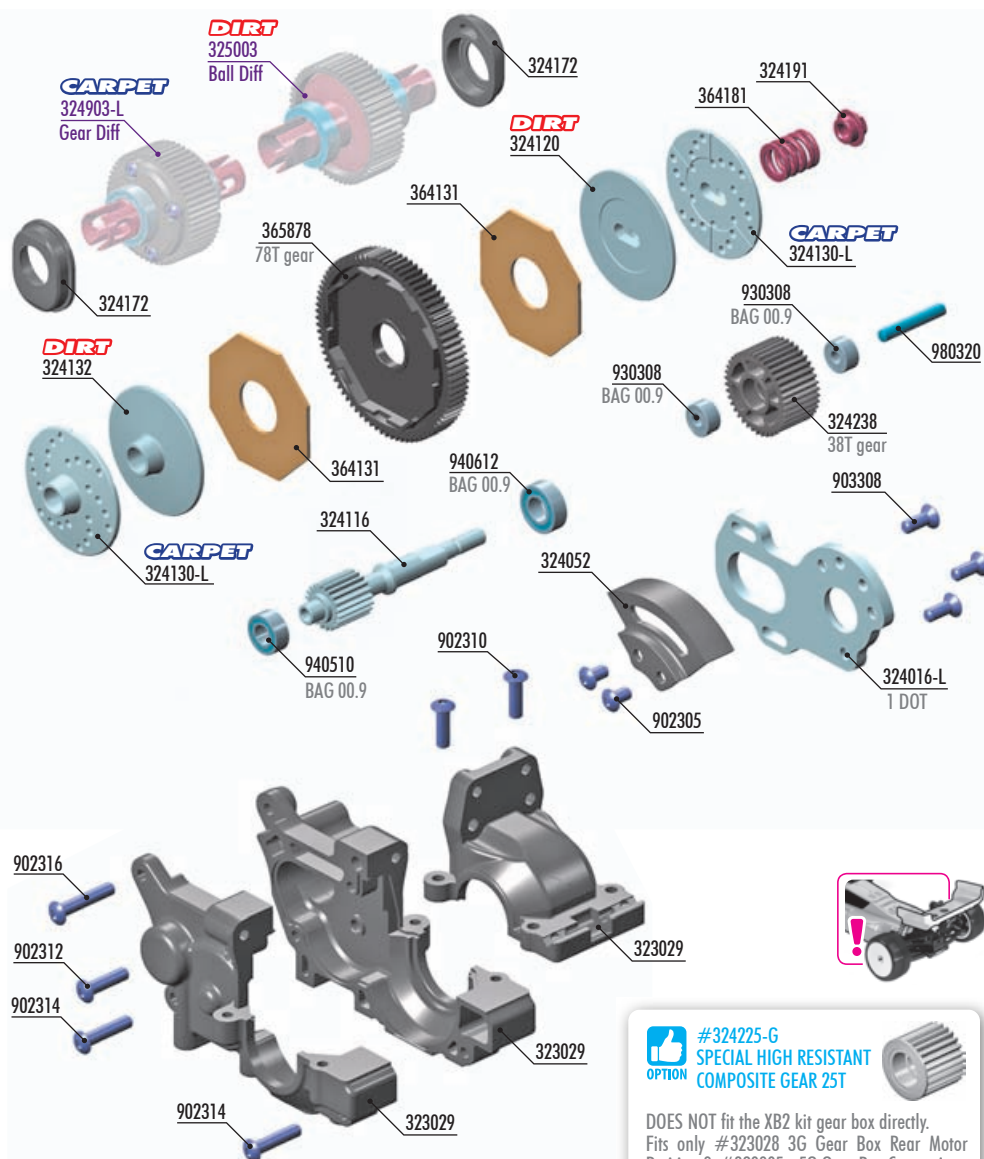


#368027
ALU SHOCK SPRING RET. COLLAR -6mm (4)

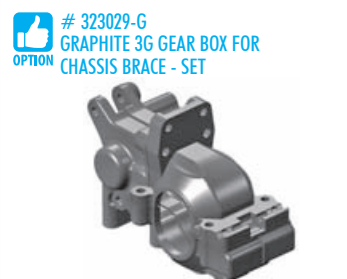


DIRT INITIAL PARTS CONFIGURATION

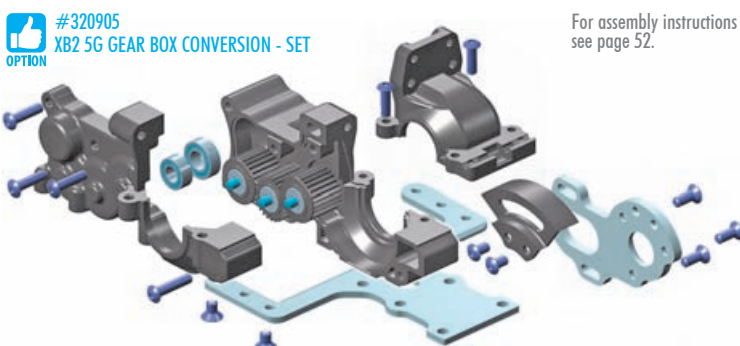
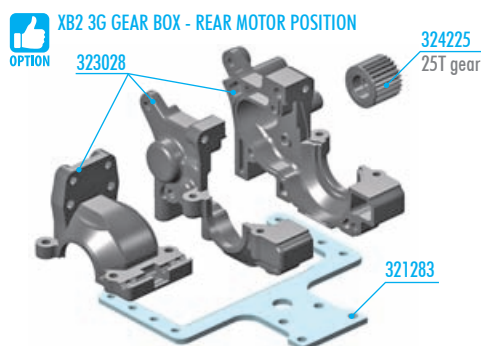




SPUR GEARS	CARPET	DIRT
#365872 72T	OPTION	OPTION
#365875 75T	OPTION	OPTION
#365878 78T	INCLUDED	INCLUDED
#365881 81T	OPTION	OPTION



DOES NOT fit the XB2 kit gear box directly.
Fits only #323028 3G Gear Box Rear Motor Position & #320905 - 5G Gear Box Conversion



BAG

03

323029 COMPOSITE 3G GEAR BOX FOR CHASSIS BRACE - SET
324016-L ALU MOTOR PLATE FOR 3G GEAR BOX - 1mm - 1-DOT - SWISS 7075 T6
324052 COMPOSITE GEAR COVER - LCG
324116 ALU 2-PAD TOP SHAFT 20T - LCG - ULTRA-LIGHTWEIGHT - SHORT
324172 COMPOSITE ADJUSTMENT BALL-BEARING HUB (2)
324191 STEEL SLIPPER CLUTCH NUT - HUDY SPRING STEEL™
324238 COMPOSITE GEAR 38T - LCG - GRAPHITE
364131 SLIPPER CLUTCH PAD SLS - SOFT (3)
364181 SLIPPER CLUTCH SPRING C=45 - BLACK
365878 COMPOSITE 3-PAD SLIPPER CLUTCH SPUR GEAR 78T / 48

902305 HEX SCREW SH M3x5 (10)
902310 HEX SCREW SH M3x10 (10)
902312 HEX SCREW SH M3x12 (10)
902314 HEX SCREW SH M3x14 (10)


902316 HEX SCREW SH M3x16 (10)
903308 HEX SCREW SFH M3x8 (10)
930308 BALL-BEARING 3x8x4 STEEL SEALED - OIL (2)
940510 BALL-BEARING 5x10x4 RUBBER SEALED - OIL (2)
940612 BALL-BEARING 6x12x4 RUBBER SEALED - OIL (2)
980320 PIN 3x20 (10)

CARPET


324903-L GEAR DIFFERENTIAL - LCG - NARROW - SET
324130-L ALU 2-PAD SLIPPER CLUTCH PLATES - VENTILATED - SET

DIRT


325003 BALL ADJUSTABLE DIFFERENTIAL - LCG - SET - HUDY SPRING STEEL™
324120 ALU 3-PAD SLIPPER CLUTCH PLATE - SWISS 7075 T6 - HARD COATED
324132 ALU 2-PAD SLIPPER CLUTCH PLATE 31MM WITH ADAPTER - LCG



2x 930308
BB 3x8x4



1x 940612
BB 6x12x4



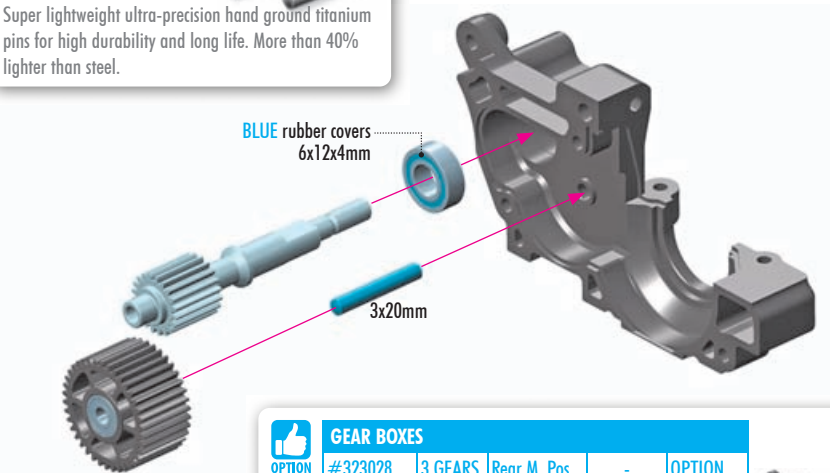
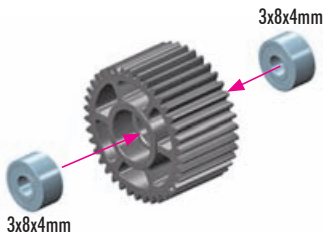
1x 980320
P 3x20



#980320-T
TITANIUM PIN 3x20 (2)



Super lightweight ultra-precision hand ground titanium pins for high durability and long life. More than 40% lighter than steel.



BLUE rubber covers
6x12x4mm

3x20mm



GEAR BOXES

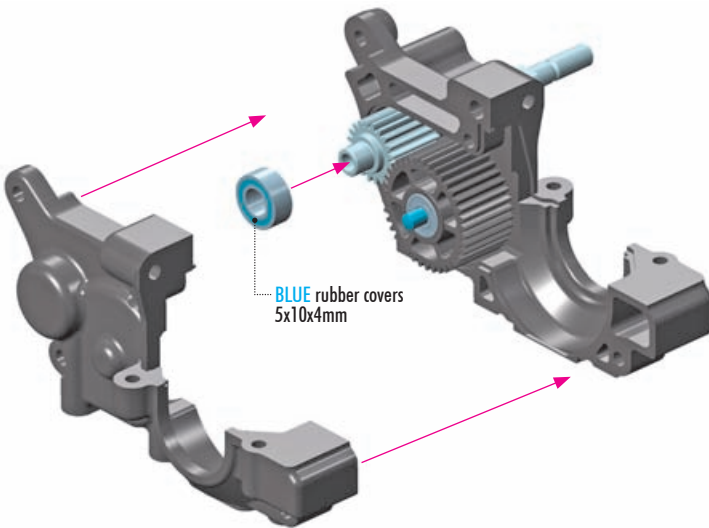
#323028	3 GEARS	Rear M. Pos.	-	OPTION
#323029	3 GEARS	Front M. Pos.	-	INCLUDED
#323029-G	3 GEARS	Front M. Pos.	GRAPHITE	OPTION
#320905	5 GEARS	Front M. Pos.	-	OPTION
#323026-G	5 GEARS	Front M. Pos.	GRAPHITE	OPTION



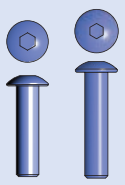
! #323028 3G Rear Motor Position fits only Short & Extra Short chassis. Find all information about chassis on page 23.




1x 940510
BB 5x10x4



BLUE rubber covers
5x10x4mm

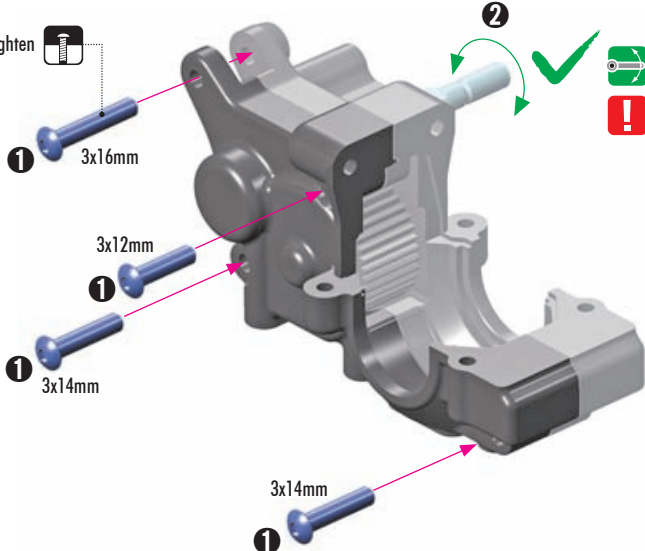


902312 SH M3x12 1x
902314 SH M3x14 2x



1x 902316 SH M3x16

DO NOT overtighten



2



AFTER ASSEMBLY, check for free rotation of all drivetrain parts.

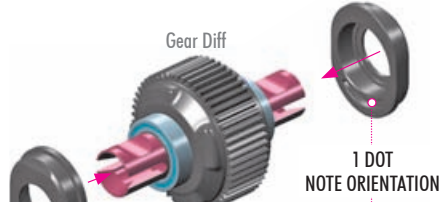
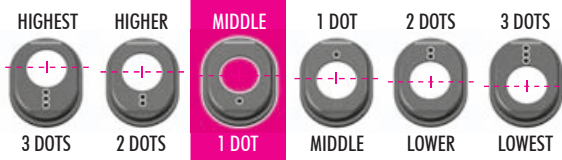


The proper gear mesh will be achieved after final assembly on the chassis.

CARPET INITIAL PARTS CONFIGURATION

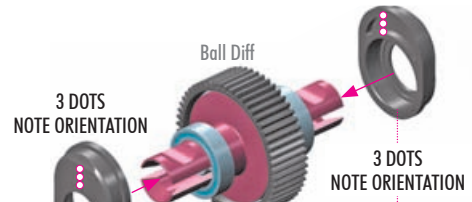
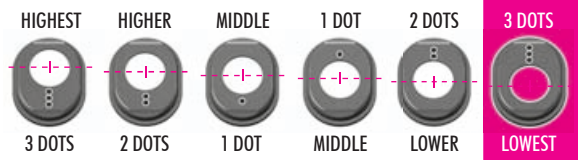
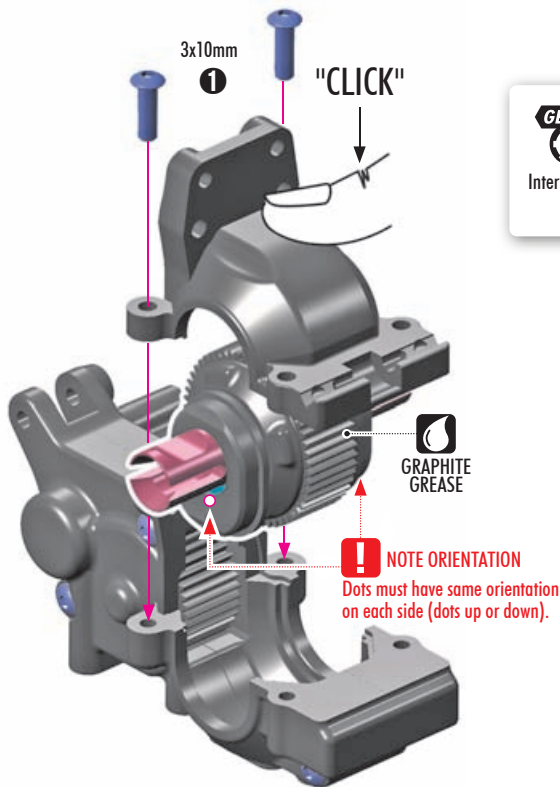
DIFFERENTIAL HEIGHT ADJUSTMENT

DIRT INITIAL PARTS CONFIGURATION

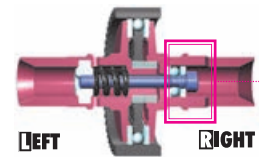


✓ 2 After assembly, check for free rotation of all drivetrain parts.

! The proper gear mesh will be achieved after final assembly on the chassis.



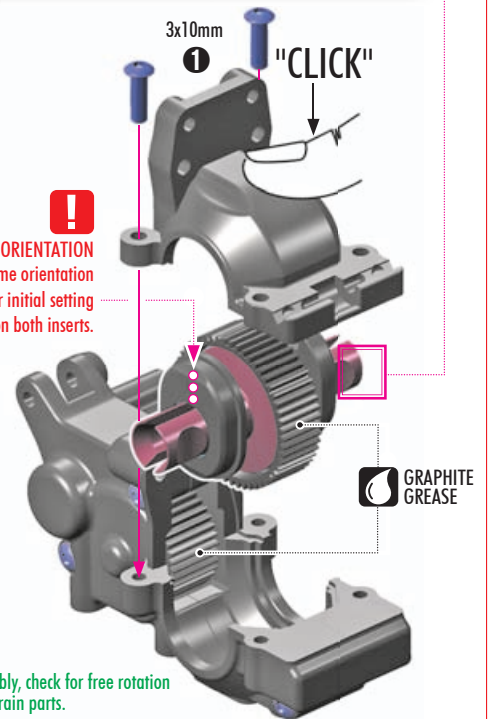
! NOTE DIFF ORIENTATION



Ball differential must always be oriented with the screw on the right side. If the ball differential is oriented with the screw on the left side, the ball diff will become loose when the car is running.

GEAR RATIO
Internal Gear Ratio
2.65

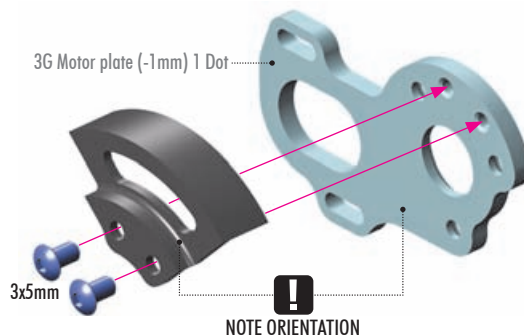
! NOTE ORIENTATION
Dots must have same orientation on each side. For initial setting dots must be UP on both inserts.



✓ 2 After assembly, check for free rotation of all drivetrain parts.

! The proper gear mesh will be achieved after final assembly on the chassis.

2x 902310 SH M3x10



#324017 CARBON MOTOR PLATE LCG

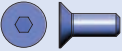
Lightweight carbon motor plate helps to reduce CG and absorbs vibrations from the motor.



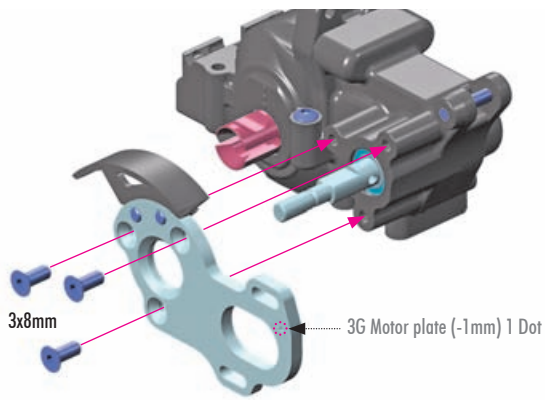
3. REAR TRANSMISSION

CARPET

DIRT

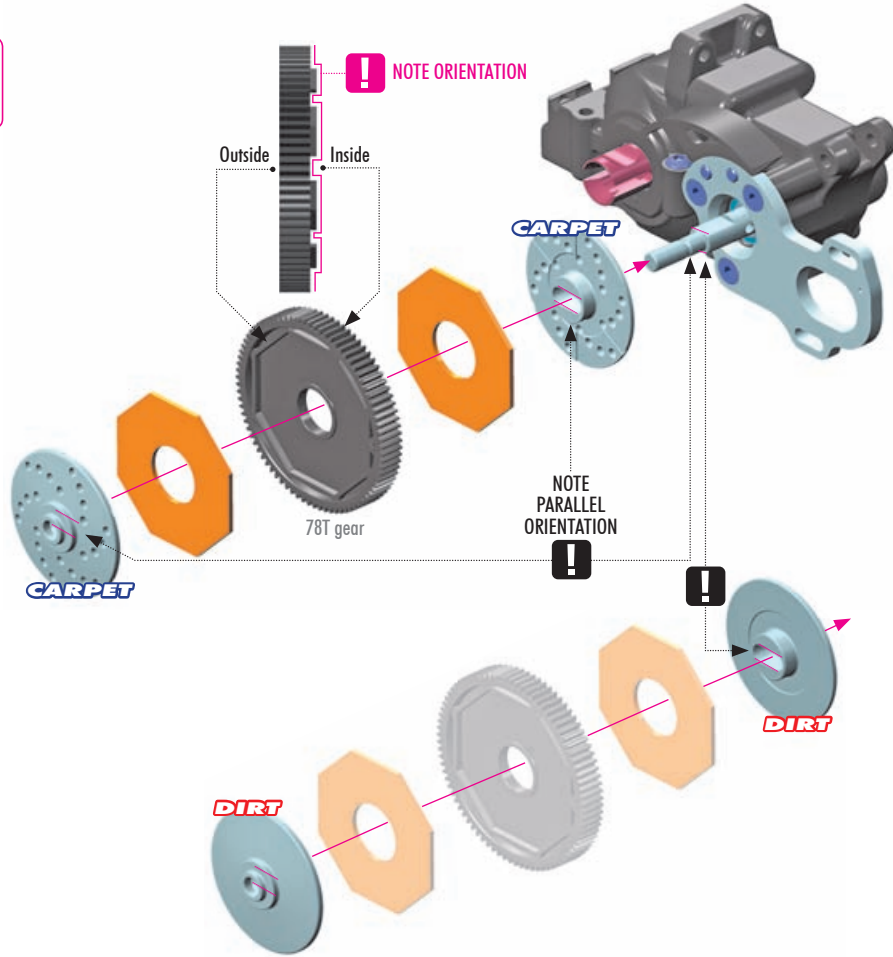


3x 903308
SFH M3x8



3x8mm

3G Motor plate (-1mm) 1 Dot



NOTE ORIENTATION

Outside

Inside

78T gear

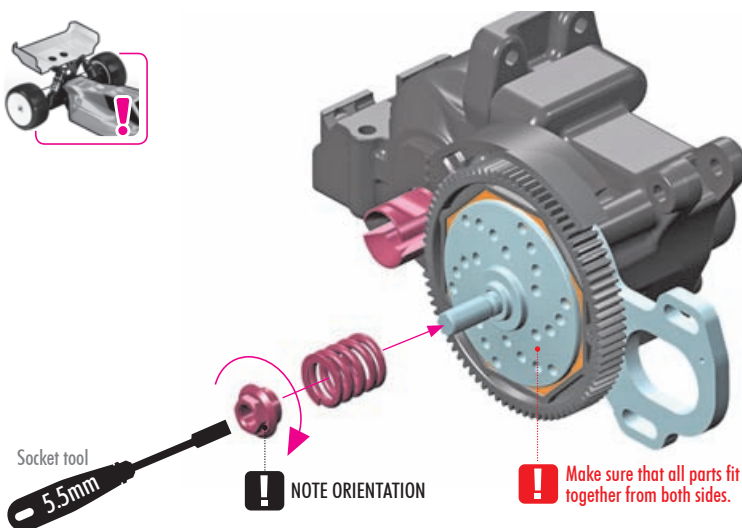
CARPET

NOTE PARALLEL ORIENTATION

CARPET

DIRT

DIRT

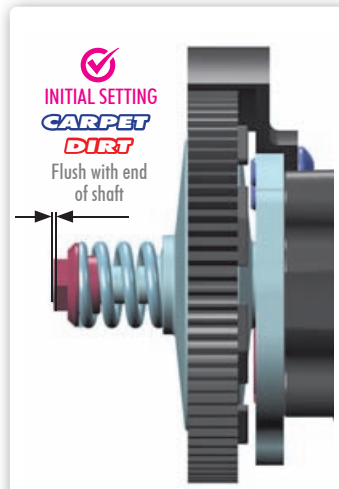


Socket tool

5.5mm

NOTE ORIENTATION

Make sure that all parts fit together from both sides.



INITIAL SETTING

CARPET

DIRT

Flush with end of shaft

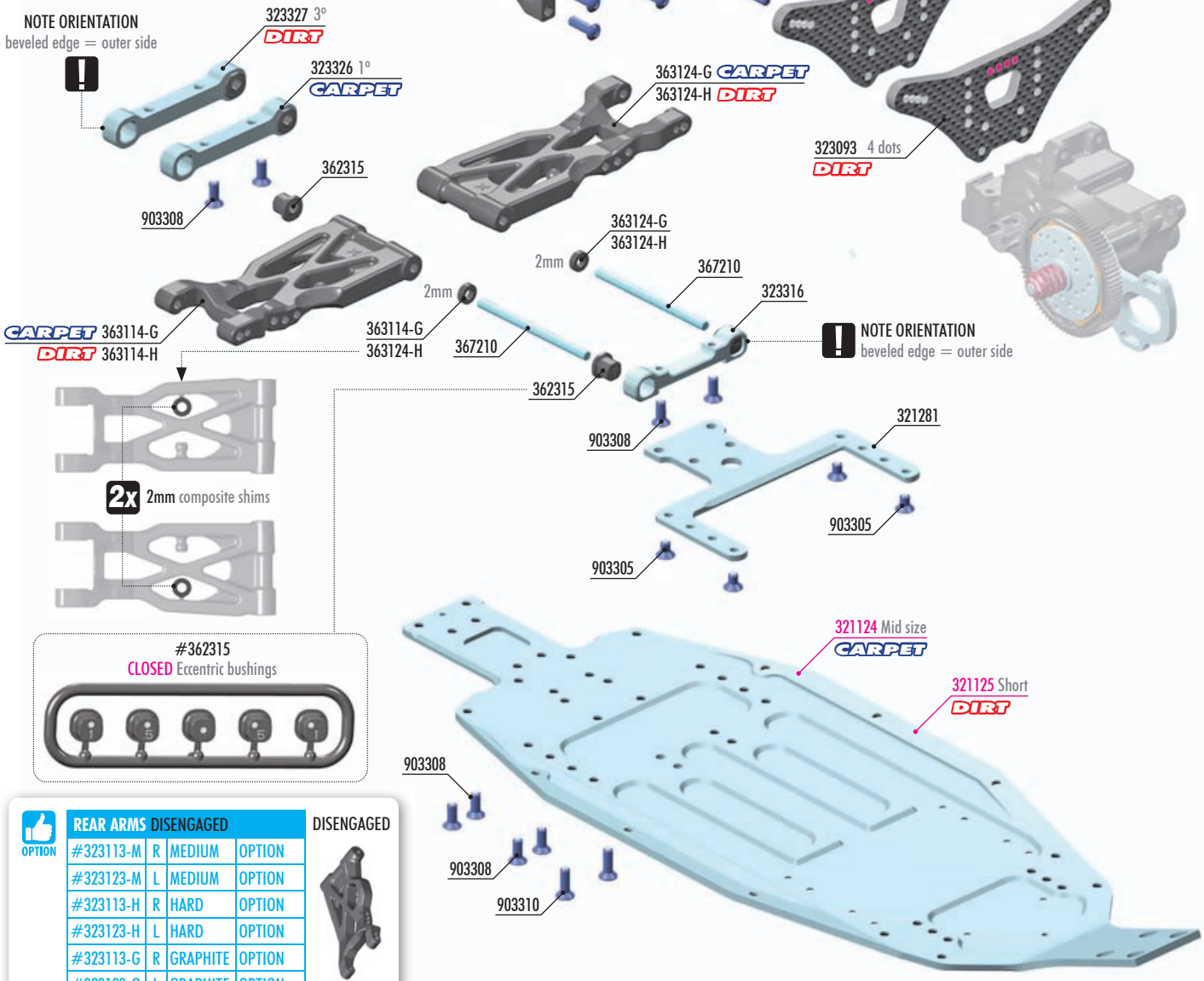
4. REAR SUSPENSION

CARPET

DIRT



NOTE ORIENTATION
beveled edge = outer side



2x 2mm composite shims

#362315
CLOSED Eccentric bushings



REAR ARMS DISENGAGED

#323113-M	R	MEDIUM	OPTION
#323123-M	L	MEDIUM	OPTION
#323113-H	R	HARD	OPTION
#323123-H	L	HARD	OPTION
#323113-G	R	GRAPHITE	OPTION
#323123-G	L	GRAPHITE	OPTION

DISENGAGED



REAR ARMS STANDARD

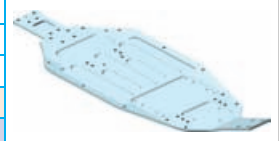
#363114-M	R	MEDIUM	OPTION
#363124-M	L	MEDIUM	OPTION
#363114-H	R	HARD	INCLUDED
#363124-H	L	HARD	INCLUDED
#363114-G	R	GRAPHITE	INCLUDED
#363124-G	L	GRAPHITE	INCLUDED

STANDARD



XB2 ALU CHASSIS

#321122	MID SIZE	2.0mm	OPTION
#321123	SHORT	2.0mm	OPTION
#321126	EXTRA SHORT	2.0mm	OPTION
#321125	SHORT	2.5mm	INCLUDED
#321124	MID-SIZE	2.5mm	INCLUDED



BAG

04

321281	ALU CHASSIS BRACE FOR GEAR BOX BLOCK - 3 GEAR
323316	ALU REAR LOWER SUSPENSION HOLDER FOR CHASSIS BRACE - FRONT
362315	ECCENTRIC BUSHING SET - CLOSED (2)
363520	REAR WING POST (2)
367210	REAR SUSPENSION PIVOT PIN (2)
902310	HEX SCREW SH M3x10 (10)
902316	HEX SCREW SH M3x16 (10)
903305	HEX SCREW SFH M3x5 (10)
903308	HEX SCREW SFH M3x8 (10)
903310	HEX SCREW SFH M3x10 (10)

CARPET

321124	XB2 ALU CHASSIS 1-PIECE - 2.5mm - MID-SIZE - SWISS 7075 T6
363114-G	COMPOSITE SUSP. ARM REAR LOWER RIGHT - 3-HOLE - GRAPHITE
363124-G	COMPOSITE SUSP. ARM REAR LOWER LEFT - 3-HOLE - GRAPHITE
323326	ALU REAR LOWER SUSPENSION HOLDER 1° - REAR
323094	CARBON SHOCK TOWER - 6-DOTS - REAR

DIRT

321125	XB2 ALU CHASSIS 1-PIECE - 2.5mm - SHORT - SWISS 7075 T6
363114-H	COMPOSITE SUSP. ARM REAR LOWER RIGHT - 3-HOLE - HARD
363124-H	COMPOSITE SUSP. ARM REAR LOWER LEFT - 3-HOLE - HARD
323327	ALU REAR LOWER SUSPENSION HOLDER 3° - WIDER - REAR
323093	CARBON SHOCK TOWER - 4-DOTS - REAR

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

10
2x From Rear Arm
SHIM 3x6.5x2

4x 903305
SFH M3x5

4x 903308
SFH M3x8



(TOE IN = 3° / ANTI-SQUAT = 2°)



INITIAL SETTING

(TOE IN = 2° / ANTI-SQUAT = 2°)



INITIAL SETTING

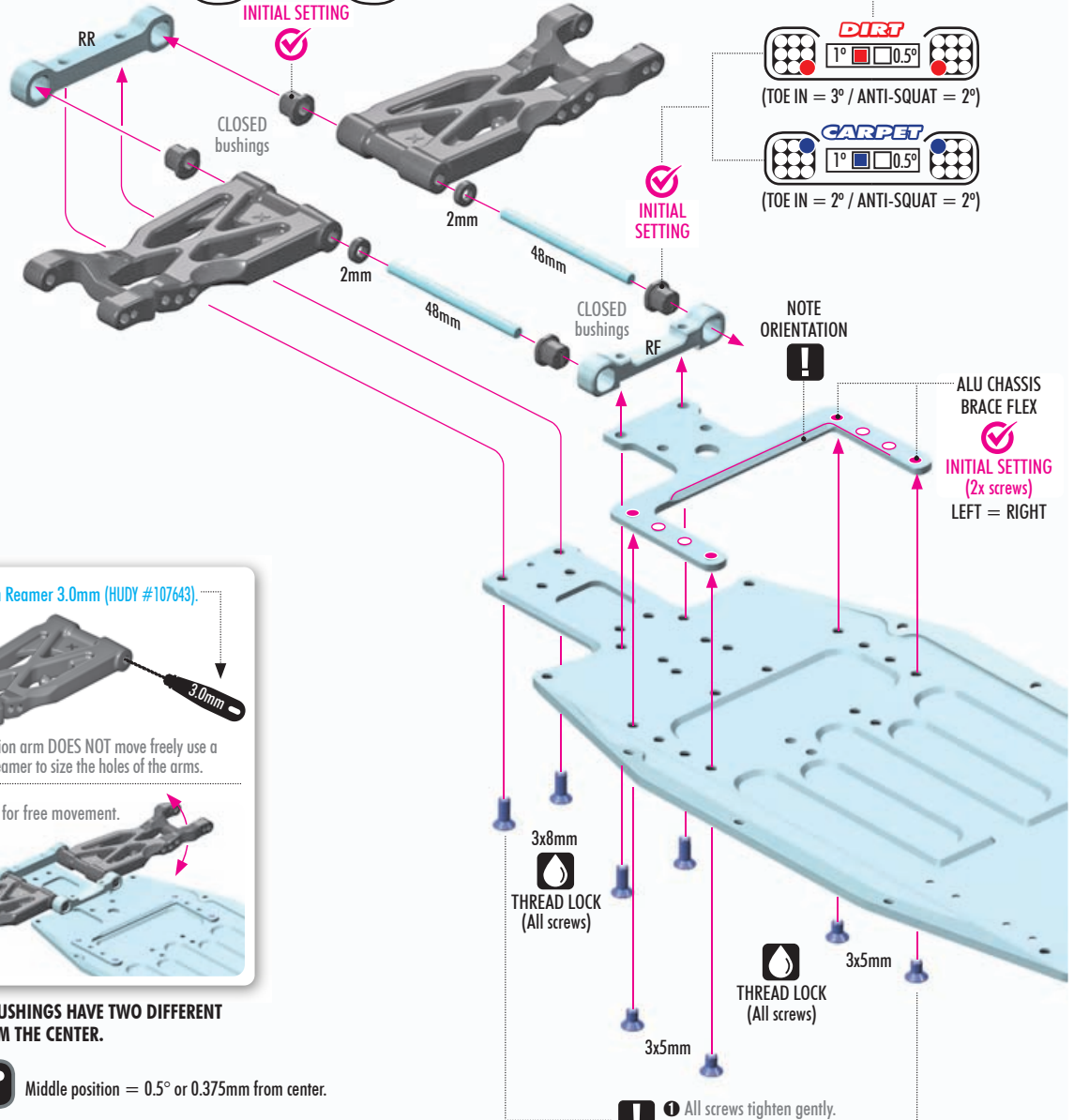
CLOSED Eccentric bushings



(TOE IN = 3° / ANTI-SQUAT = 2°)



(TOE IN = 2° / ANTI-SQUAT = 2°)



TIP Arm Reamer 3.0mm (HUDY #107643).



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

Check for free movement.



ECCENTRIC BUSHINGS HAVE TWO DIFFERENT OFFSETS FROM THE CENTER.

Middle position = 0.5° or 0.375mm from center.

Outer position = 1° or 0.75mm from center.

1 All screws tighten gently.
2 All screws fully tighten.

The XRAY rear alu lower suspension holders provide great range of adjustments 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 Set-up Book (#209100).

ANTI-SQUAT			
RR	RF		(°)
○	○	○	= 2.0°
○	○	○	= 3.0°
○	○	○	= 1.0°
○	○	○	= 3.0°
○	○	○	= 2.0°
○	○	○	= 4.0°
○	○	○	= 1.0°
○	○	○	= 2.0°
○	○	○	= 1.0°

ROLL CENTER			
RR	RF		(mm)
○	○	○	= +0.75mm
○	○	○	= 0mm
○	○	○	= -0.75mm

TRACK-WIDTH			
RR	RF		(mm)
○	○	○	= +1.5mm
○	○	○	= 0mm
○	○	○	= -1.5mm

The track-width is directly influenced by the size of the wheels and tires used.

The tables describe the amounts of adjustment using the center and outside positions of the eccentric bushings. The middle position eccentric bushings allow for finer adjustment increments.

ANTI-SQUAT Example:

0(RR) - 0 (RF) = 2.0°

0(RR) - 0.5 (RF) = 2.5°

0(RR) - 1 (RF) = 3.0°

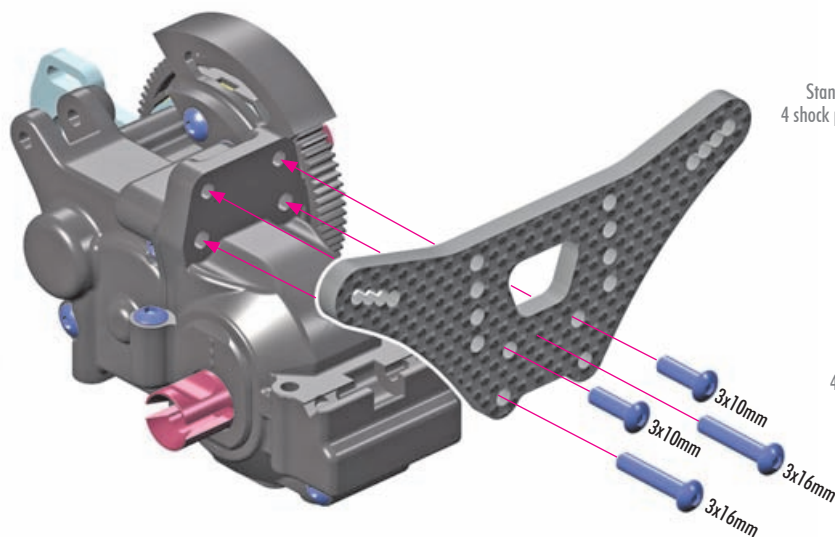
TOE-IN CARPET			
RR	RF		(°)
○	○	○	= 1°
○	○	○	= 2°
○	○	○	= 3°

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

4. REAR SUSPENSION

CARPET

DIRT



DIRT INCLUDED

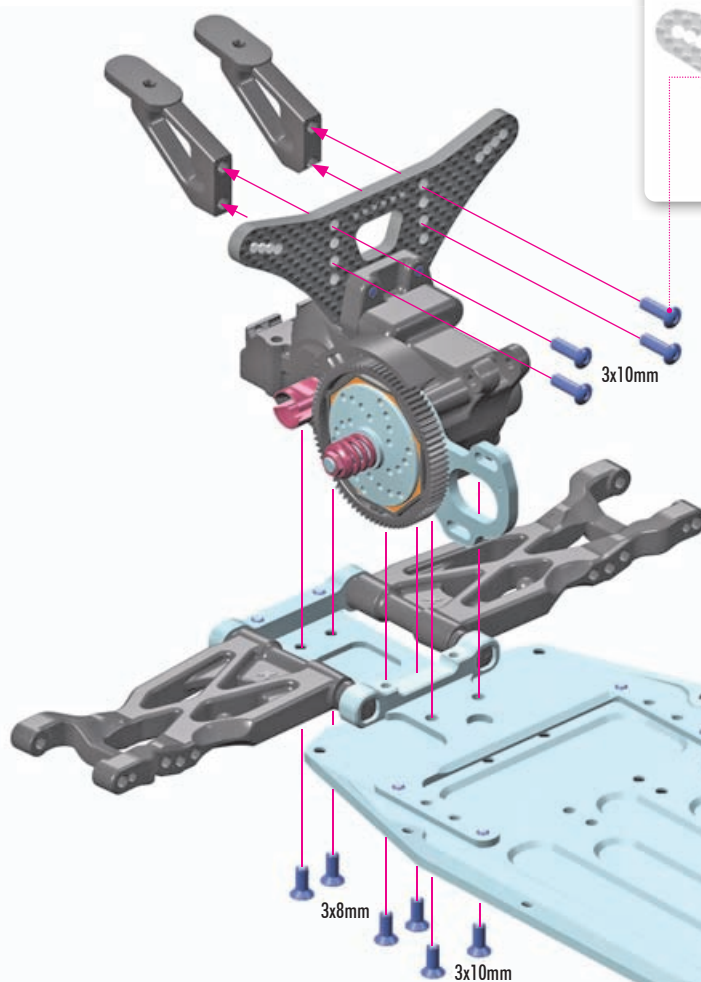
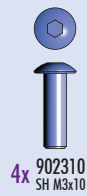
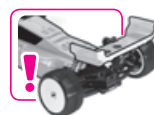
Standard 4 shock positions

CARPET INCLUDED

Lower 4 shock positions

REAR SHOCK TOWER			
OPTION	#323093	4 DOTS	INCLUDED
	#323094	6 DOTS	INCLUDED

DIRT CARPET



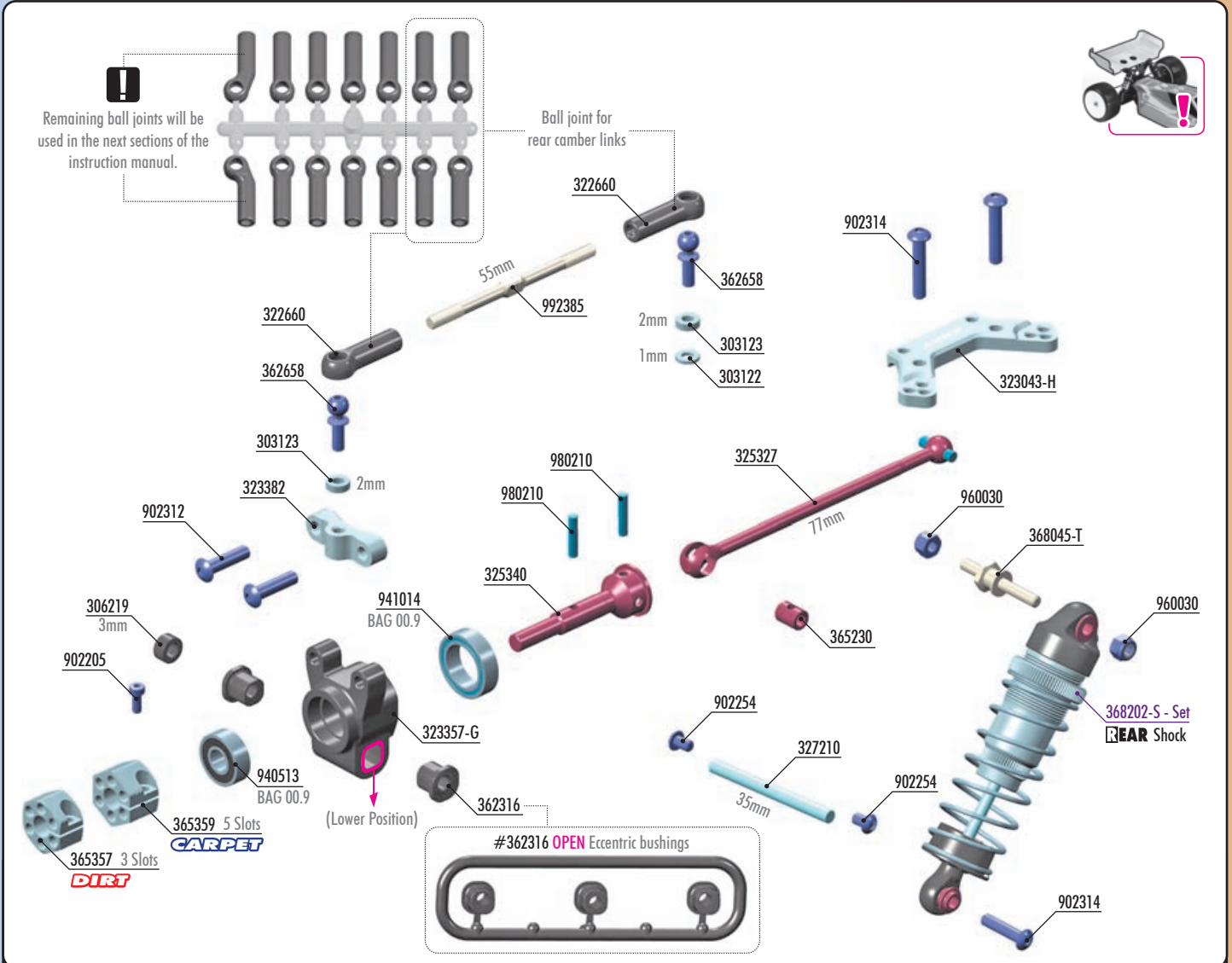
INITIAL SETTING

UP

DOWN

UP





BAG

05

- 303122 ALU SHIM 3x6x1.0mm (10)
- 303123 ALU SHIM 3x6x2.0mm (10)
- 306219 COMPOSITE SET OF SHIMS (4)
- 322660 COMPOSITE BALL JOINT 5.4mm (12+1+1)
- 323043-H ALU REAR ROLL-CENTER HOLDER FOR ANTI-ROLL BAR COLLAR - 7075 T6
- 323357-G COMPOSITE UPRIGHT REAR - LOWER POSITION - GRAPHITE
- 323382 ALU REAR HUB PLATE FOR MULTI ADJ. UPRIGHT - 1-HOLE - SWISS 7075 T6
- 325327 REAR DRIVE SHAFT 77mm WITH 2.5mm PIN - HUDY SPRING STEEL™
- 325340 REAR DRIVE AXLE LB - HUDY SPRING STEEL™
- 327210 SUSPENSION PIVOT PIN (2)
- 362316 ECCENTRIC BUSHING SET - OPEN (2)
- 362658 HARD STEEL BALL END 5.4mm WITH 8mm THREAD - NICKEL COATED (2)
- 365230 DRIVE SHAFT COUPLING - HUDY SPRING STEEL™
- 368045-T XRAY TITANIUM SHOCK STANDOFFS (2)
- 992385 HUDY TITANIUM ADJUSTABLE TURNBUCKLE 55mm M3.5 L/R (2)

- 902205 HEX SCREW SH M2x5 (10)
- 902254 HEX SCREW SH M2.5x4 (10)
- 902312 HEX SCREW SH M3x12 (10)
- 902314 HEX SCREW SH M3x14 (10)
- 940513 BALL-BEARING 5x12x4 RUBBER SEALED - GREASE (2)
- 941014 BALL-BEARING 10x15x4 RUBBER SEALED - GREASE (2)
- 960030 NUT M3 (10)
- 980210 PIN 2x9.8 (10)

CARPET

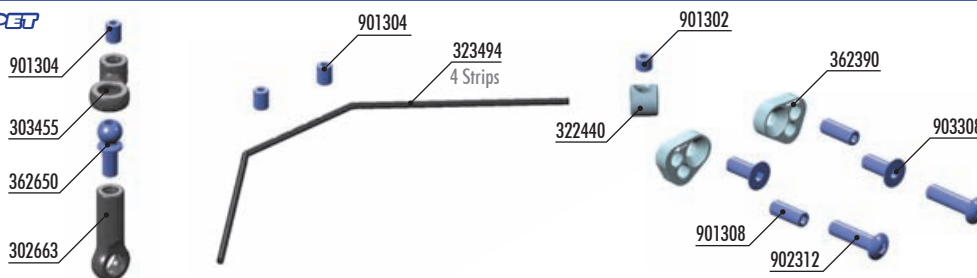
365359 ALU WHEEL HUB 12mm - 5 SLOTS - OFFSET "+3.75mm" (2)

DIRT

365357 ALU WHEEL HUB 12mm - 3 SLOTS - OFFSET "+2.25mm" (2)

368202-S REAR SHOCK ABSORBERS 30mm - BIG BORE - SET (2)

CARPET



REAR ANTI-ROLL BARS

#	THICKNESS	STATUS
#323490	1.0mm	OPTION
#323491	1.1mm	OPTION
#323492	1.2mm	OPTION
#323493	1.3mm	OPTION
#323494	1.4mm	INCLUDED
#323496	1.6mm	OPTION

CARPET

BAG

05.1

XB2 REAR ANTI-ROLL BAR SET

- 302663 COMPOSITE BALL JOINT 4.9mm - OPEN - V2 (8)
- 303455 COMPOSITE ANTI-ROLL BAR BALL JOINT 4.9mm (4)
- 322440 ALU ANTI-ROLL BAR COLLAR
- 323494 ANTI-ROLL BAR REAR - SHORT - 1.4mm
- 362390 ALU REAR SHOCK ABSORBER ADAPTER (1+1) - SET

362650 BALL END 4.9mm WITH THREAD 6mm (2)

- 901302 HEX SCREW SB M3x2.5 (10)
- 901304 HEX SCREW SB M3x4 (10)
- 901308 HEX SCREW SB M3x8 (10)
- 902312 HEX SCREW SH M3x12 (10)
- 903308 HEX SCREW SFH M3x8 (10)

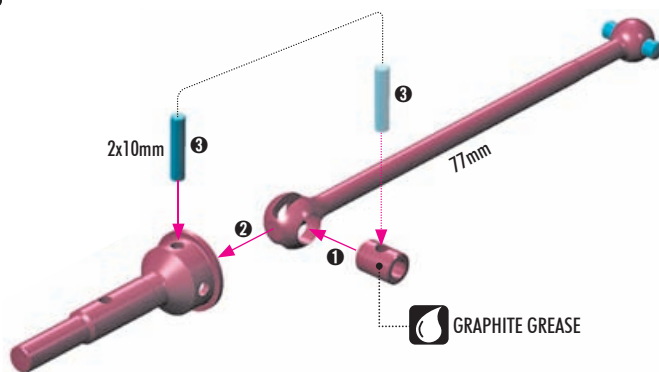
Numbers in parentheses () refer to quantities when purchased separately.

i

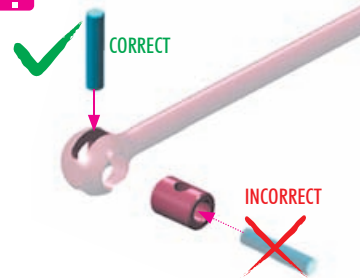
2x 980210
P 2x10

2x  LEFT = RIGHT

1 2 3 SPECIFIC ORDER STEPS



EXTREMELY IMPORTANT

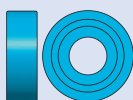


 #325341 REAR ADJ. DRIVE AXLE LB - HUDY SPRING STEEL™
#325390 ALU SHIM 10x12x2mm (2)



Drive shaft length adjustment uses 4 different connecting hole positions at the drive axle end to allow changes to overall driveshaft length.

2x 902205
SH M2x5



2x 940513
BB 5x12x4

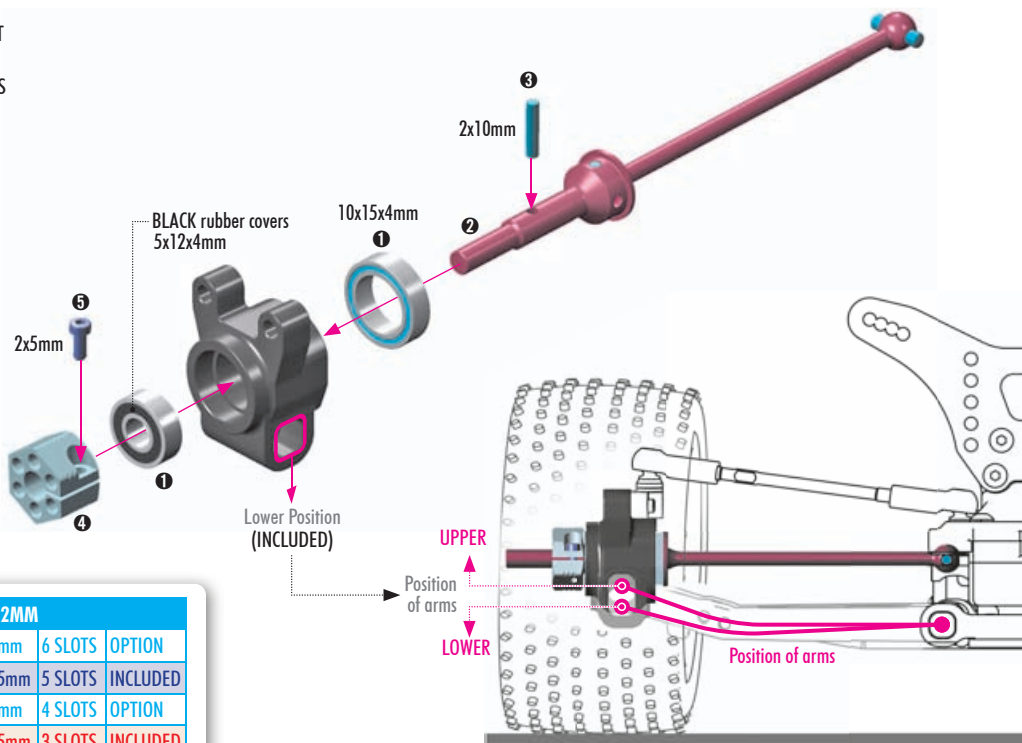


2x 941014
BB 10x15x4



2x 980210
P 2x10

2x  LEFT = RIGHT


SPECIFIC ORDER STEPS

WHEEL HUBS 12MM

#365360	+4.5mm	6 SLOTS	OPTION
#365359	+3.75mm	5 SLOTS	INCLUDED
#365358	+3.0mm	4 SLOTS	OPTION
#365357	+2.25mm	3 SLOTS	INCLUDED
#365356	+1.5mm	2 SLOTS	OPTION
#365355	+0.75mm	1 SLOT	OPTION
#365353	0mm	0 SLOTS	OPTION
#365354	-0.75mm	Lightw.	OPTION
#365361	-1.25mm	Lightw.	OPTION

OPTIONAL HEX HUB EFFECTS

Different offset hex hubs are used to increase or decrease the track-width.

LESS OFFSET

Rear - more traction

Front - more steering

MORE OFFSET

Rear - less traction

Front - less steering



XRAY BALL-BEARINGS

#940512	5x12x4	OIL	OPTION
#941015	10x15x4	OIL	OPTION
#940513	5x12x4	GREASE	INCLUDED
#941014	10x15x4	GREASE	INCLUDED



REAR UPRIGHTS

#323354-M	MEDIUM	UPPER	OPTION
#323357-M	MEDIUM	LOWER	OPTION
#323354-H	HARD	UPPER	OPTION
#323354-G	GRAPHITE	UPPER	OPTION
#323357-G	GRAPHITE	LOWER	INCLUDED
#323355	ALU HIGH	UPPER	OPTION
#323356	ALU LOW	LOWER	OPTION



UPPER position

We recommend for these types of surfaces and traction:

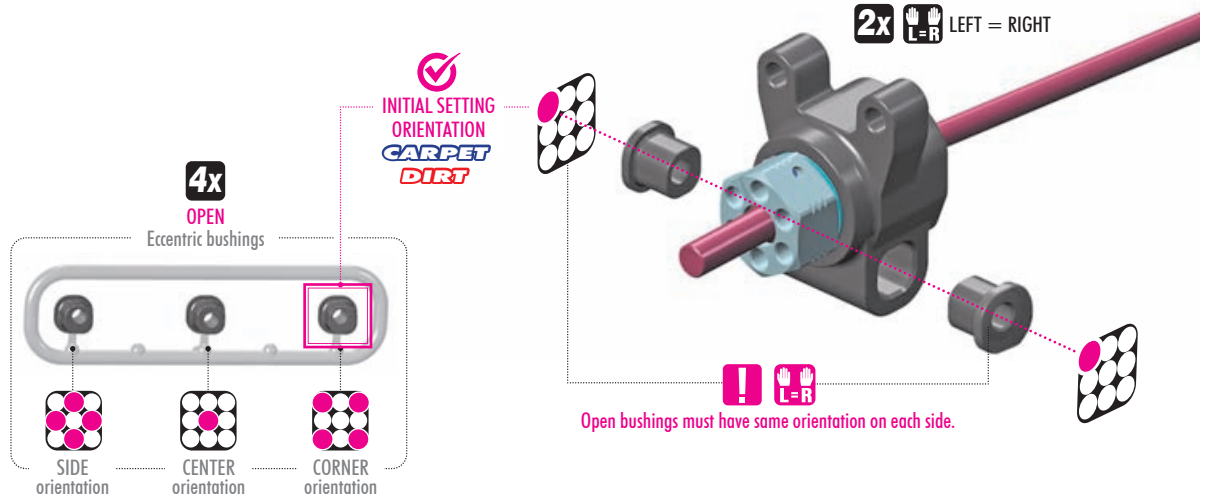
- DIRT low & high traction
- Wet ASTRO

LOWER position

We recommend for these types of surfaces and traction:

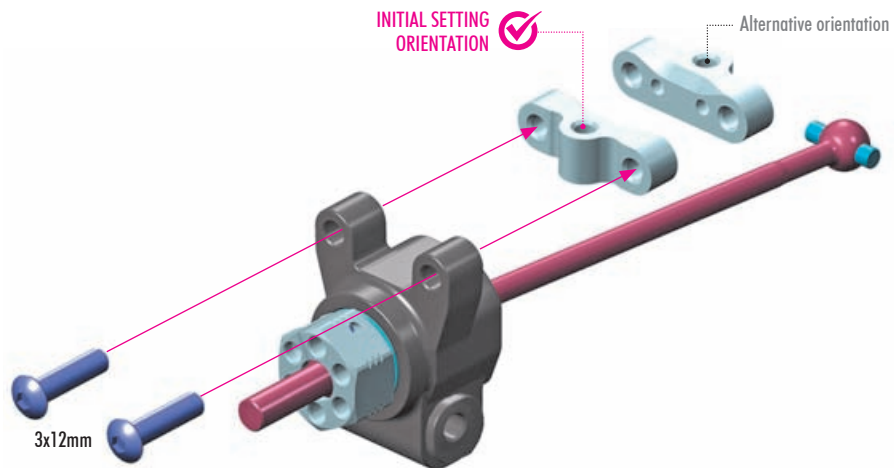
- CARPET
- Dry ASTRO
- DIRT very high traction

2x LEFT = RIGHT



4x 902312
SH M3x12

2x LEFT = RIGHT



CARPET
BAG

05.1

! **CARPET** Step only for Carpet edition.

LEFT = RIGHT

2x Ball ø 4.9mm
Thread 6mm

TIP
Install with HUDY Multi Tool.



HUDY TITAN BALL ENDS 4.9mm
#990006 6mm LONG **OPTION**

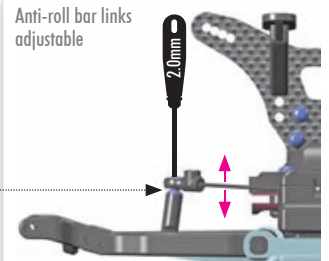


✗ **SHORTER** Ball joint
DO NOT USE for rear anti-roll bar links.

✓ **LONGER** Ball joint



Anti-roll bar links adjustable

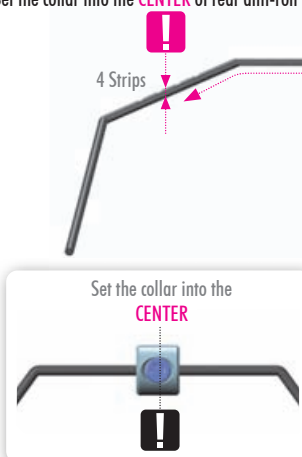


1x 901302
SB M3x2.5

2x 901304
SB M3x4

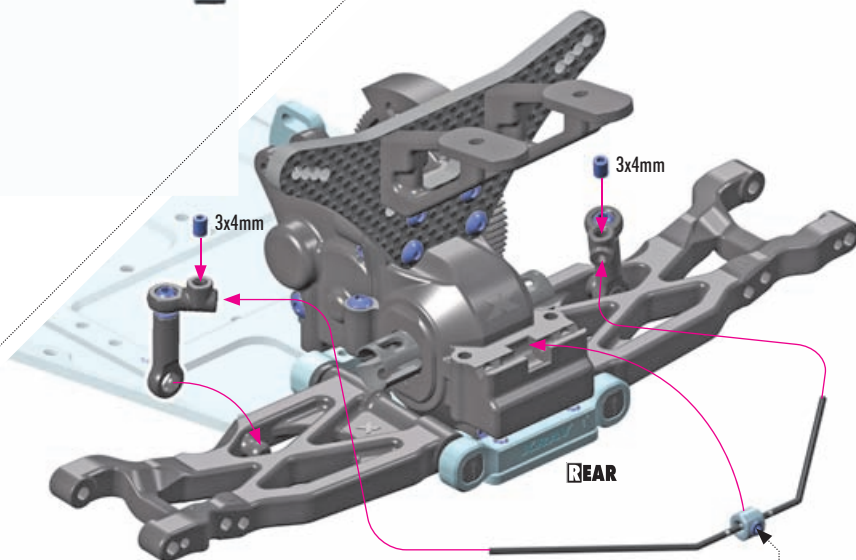
! **CARPET** Step only for Carpet edition.

Set the collar into the **CENTER** of rear anti-roll bar.



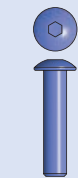
REAR ANTI-ROLL BARS

#323490	1.0mm	OPTION
#323491	1.1mm	OPTION
#323492	1.2mm	OPTION
#323493	1.3mm	OPTION
#323494	1.4mm	INCLUDED
#323496	1.6mm	OPTION



!
NOTE ORIENTATION
of Set screw

2x 901304
SB M3x4

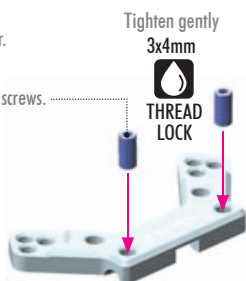


2x 902314
SH M3x14

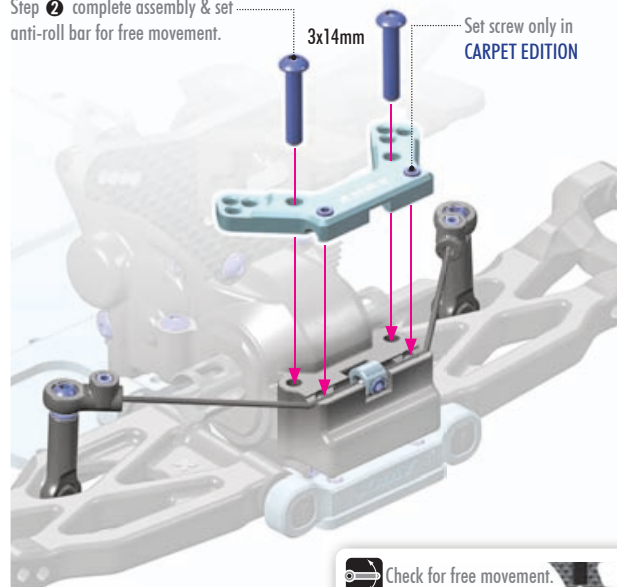
CARPET

Assembly with anti-roll bar.

Step 1 pre-assemble set screws.

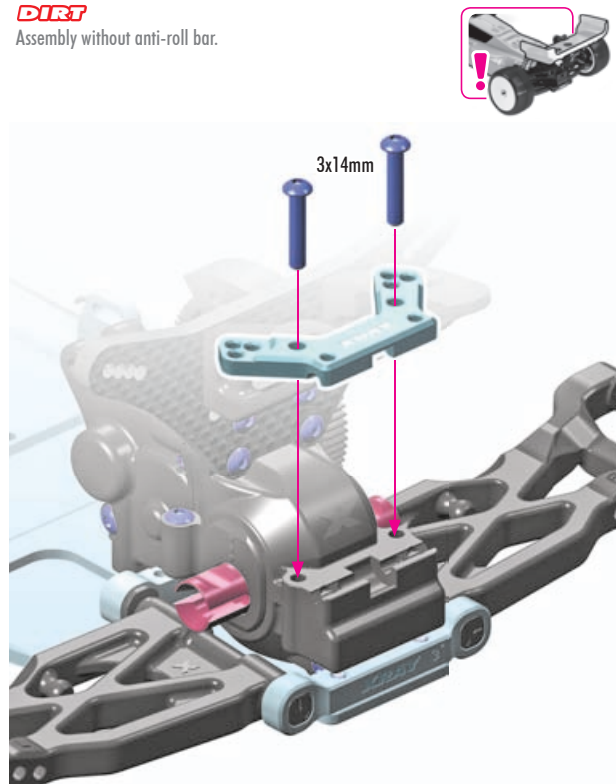


Step 2 complete assembly & set anti-roll bar for free movement.

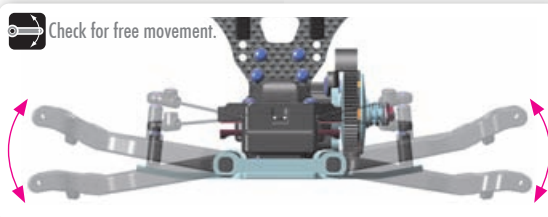


DIRT

Assembly without anti-roll bar.



Check for free movement.



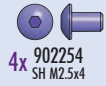
REAR ROLL CENTER HOLDERS

#323044	HARD	OPTION
#323044-G	GRAPHITE	OPTION
#323043-H	ALU	INCLUDED



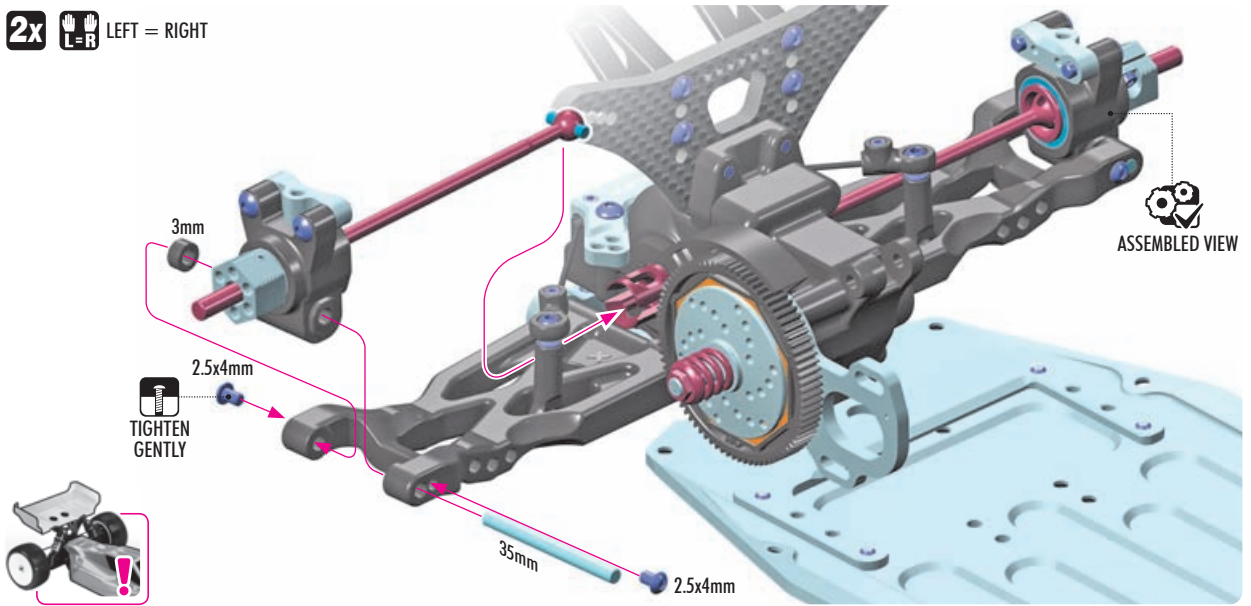


2x 306219
SHIM 3x6x3

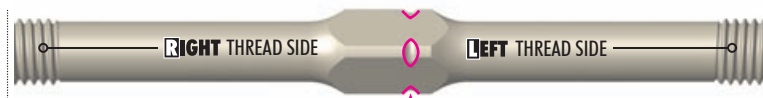


4x 902254
SH M2.5x4

2x LEFT = RIGHT



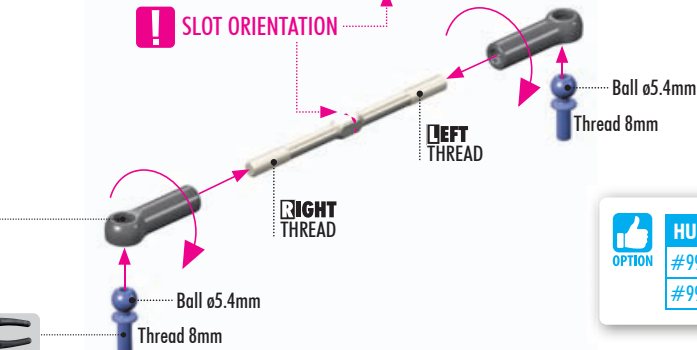
2x LEFT = RIGHT



SLOT ORIENTATION

TIP Install with HUDY Ball Joint Wrench

TIP Install with HUDY Multi Tool.



HUDY TITAN BALL ENDS 5.4mm		
#990016	6mm LONG	OPTION
#990018	8mm LONG	OPTION



2x 303122
SHIM 3x6x1

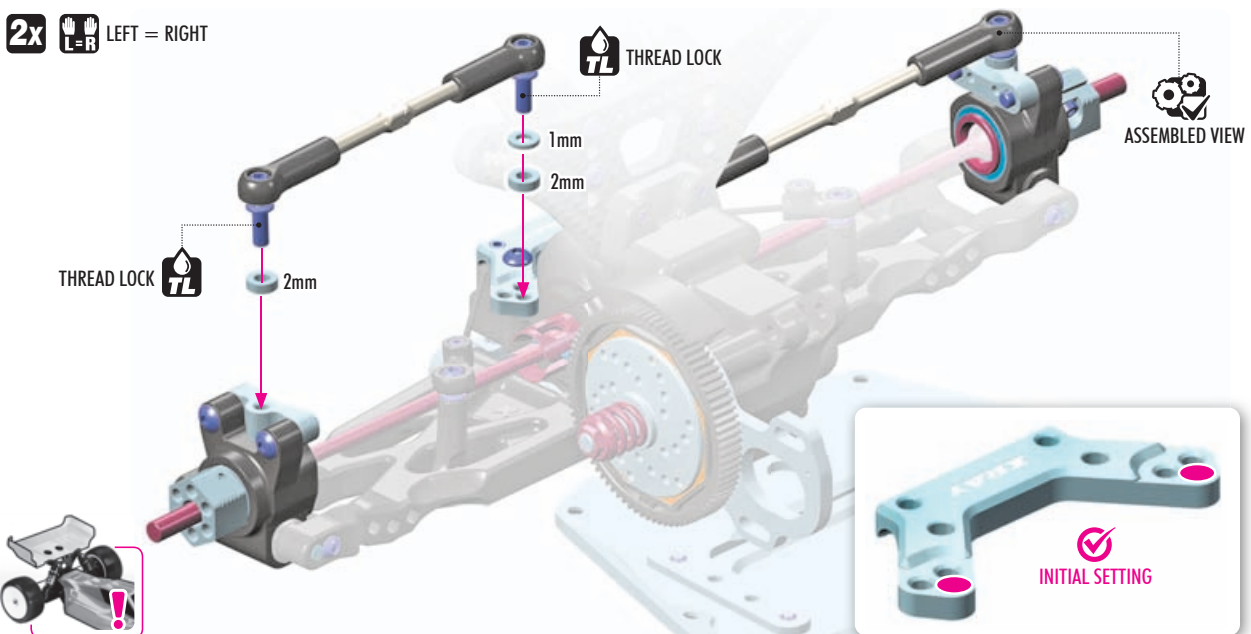


4x 303123
SHIM 3x6x2

2x LEFT = RIGHT

THREAD LOCK

THREAD LOCK



INITIAL SETTING



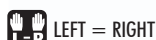
2x 901308
SB M3x8



2x 903308
SFH M3x8

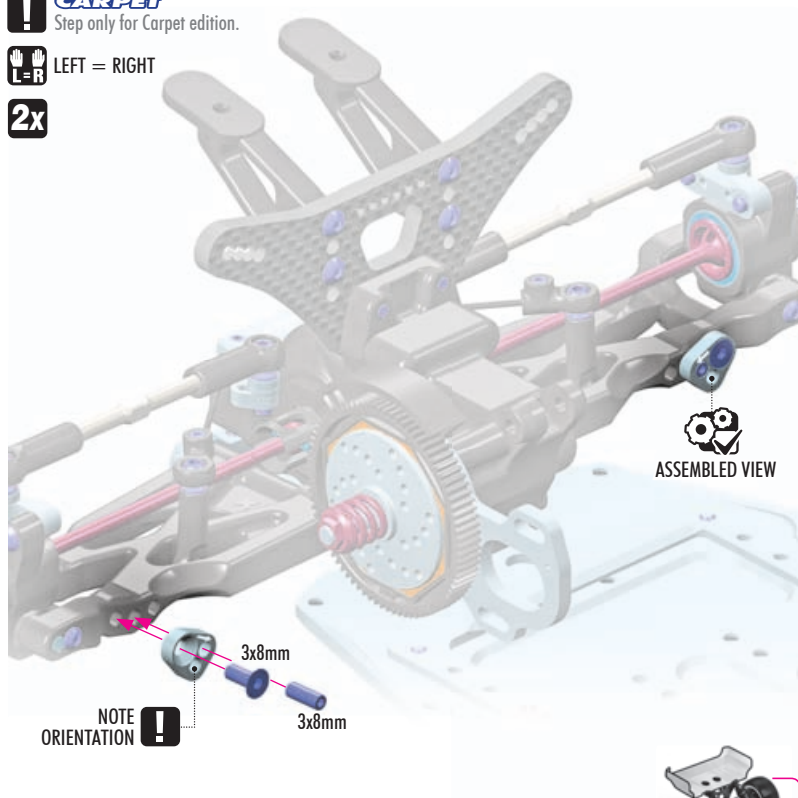


CARPET
Step only for Carpet edition.



LEFT = RIGHT

2x



ASSEMBLED VIEW

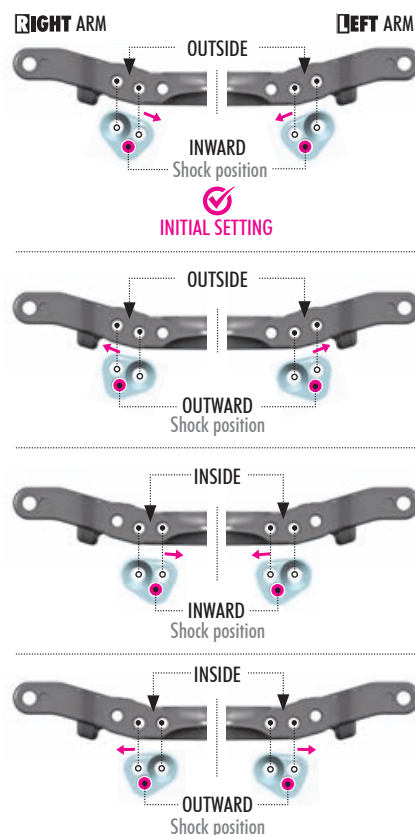
NOTE ORIENTATION

3x8mm

3x8mm

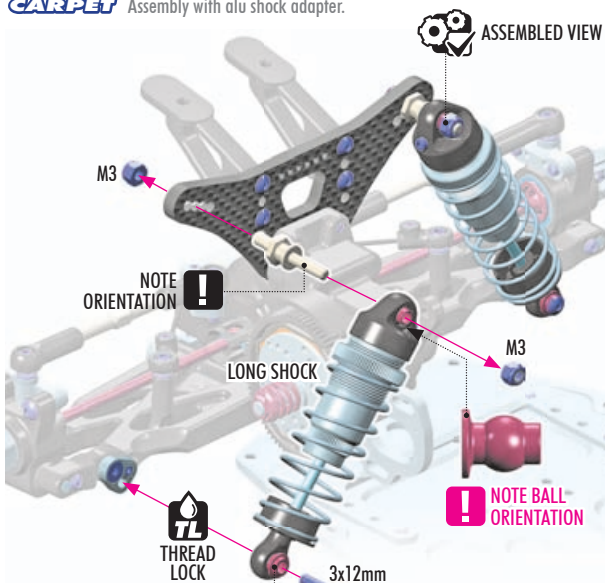


SHOCK POSITION ALTERNATIVES



CARPET Assembly with alu shock adapter.

ASSEMBLED VIEW

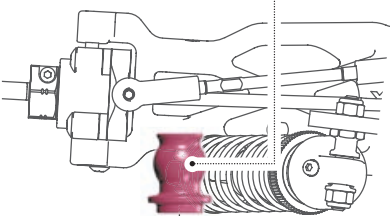


NOTE ORIENTATION

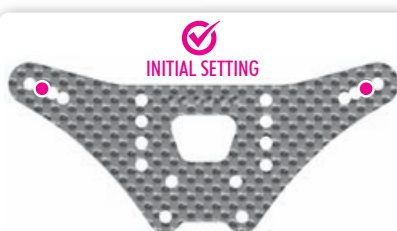
LONG SHOCK

THREAD LOCK

If #362390 Alu Rear Shock Absorber Adapters will NOT be used then 3x14mm screw must be used.

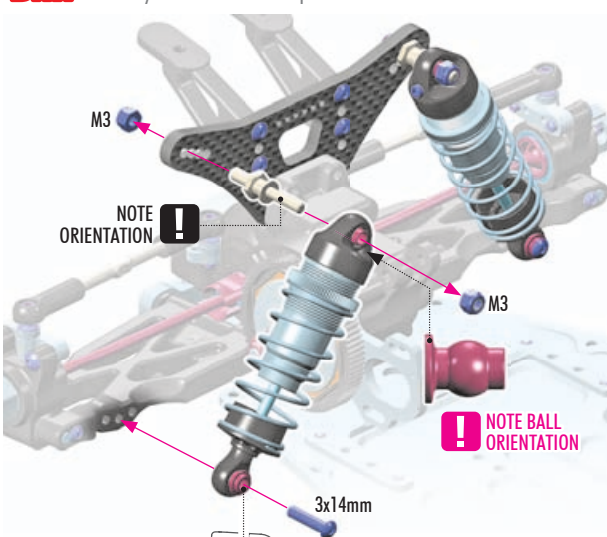


NOTE ECCENTRIC BALL ORIENTATION



INITIAL SETTING

DIRT Assembly without alu shock adapter.



NOTE ORIENTATION

NOTE BALL ORIENTATION

3x14mm

NOTE ECCENTRIC BALL ORIENTATION



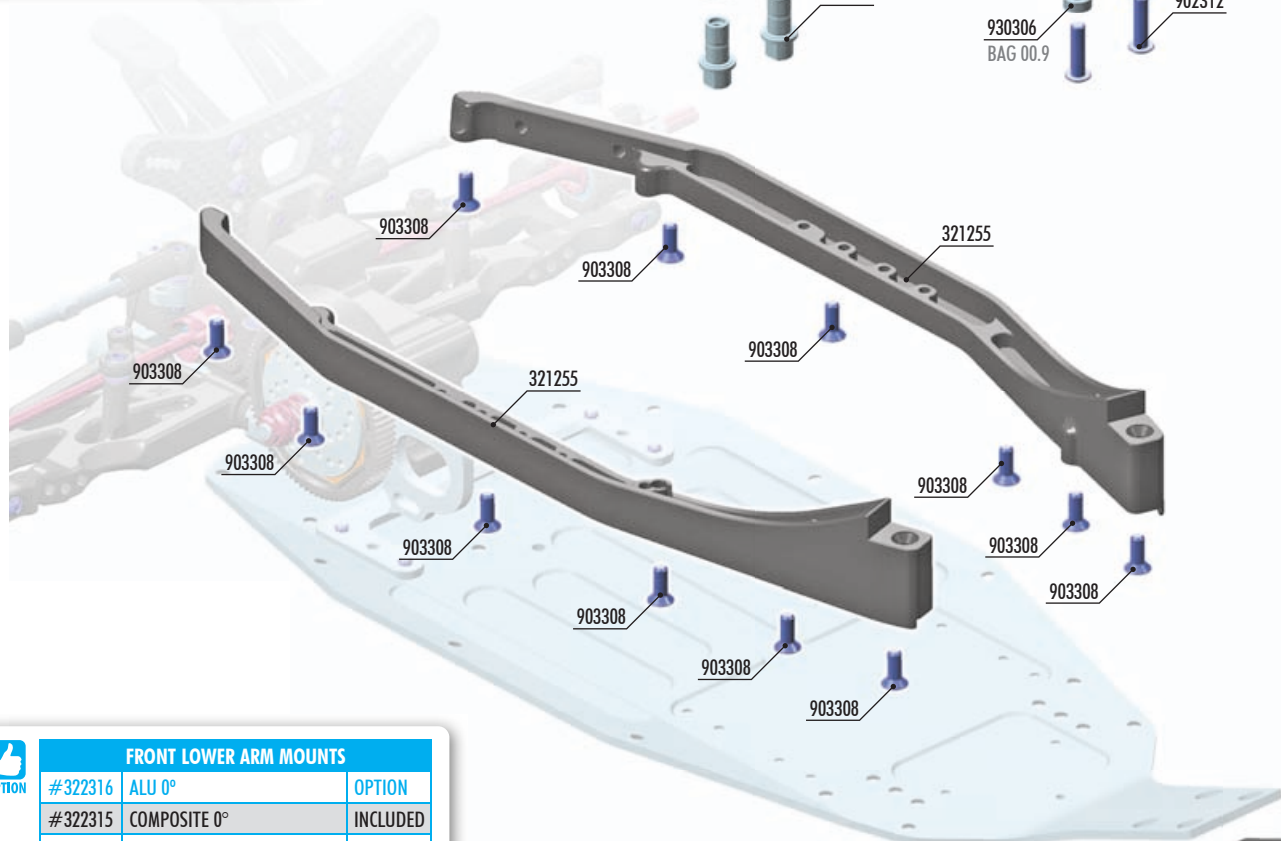
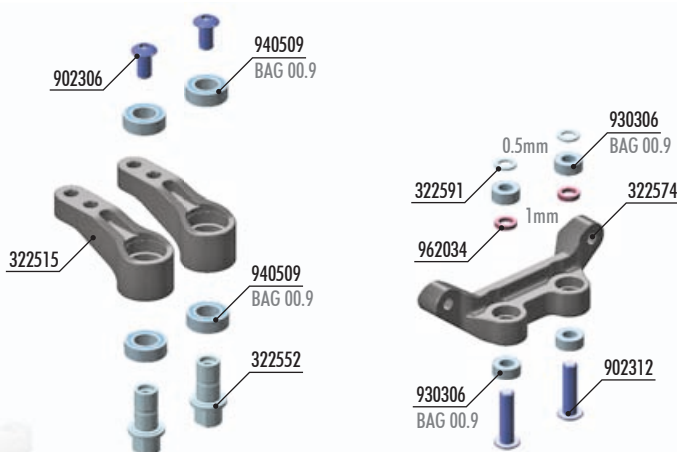
INITIAL SETTING



#322575
ALU STEERING PLATE FOR 1-PIECE
CHASSIS - SET



#322516
ALU STEERING ARM FOR 1-PIECE
CHASSIS - SWISS 7075 T6 (2)



FRONT LOWER ARM MOUNTS

#322316	ALU 0°	OPTION
#322315	COMPOSITE 0°	INCLUDED
#322312	BRASS 0°	OPTION
#322317	ALU +3°/-3°	OPTION
#321211	SUSP. HOLDER BRACE +3°/-3°	OPTION



ARM MOUNTS - WEIGHT			
Composite	BRASS	ALU	ALU + Tungsten
6g	46g	13.5g	23.5g

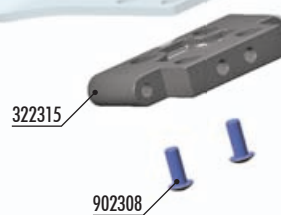
COMPOSITE - Generates more traction in front.
ALU - Makes car more stable.
BRASS - Adds more weight in front, less weight transfer.



The alu arm mounts can be used with optional weight:
#293085 HUDY Pure Tungsten Weight - 10g.



#321255-G
COMPOSITE ELEVATED SIDE BRACES
L+R - LONG - GRAPHITE



BAG

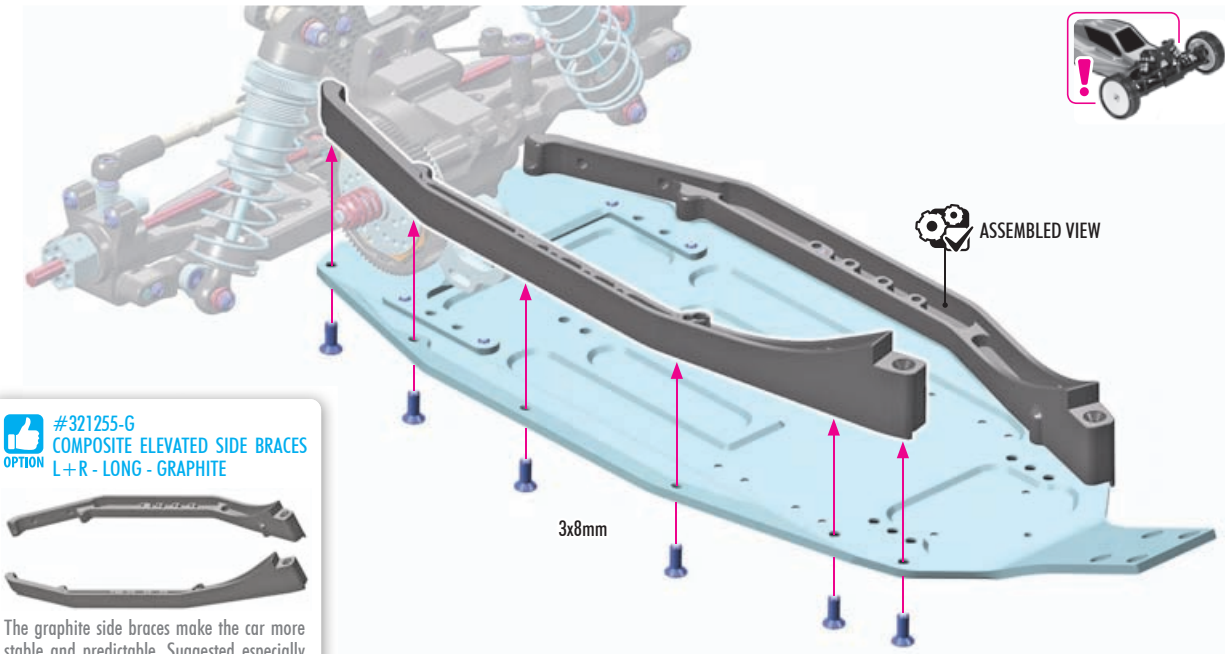
06

- 321255 COMPOSITE ELEVATED SIDE BRACES L+R - LONG
- 322315 COMPOSITE FRONT LOWER ARM MOUNT FOR 1-PIECE CHASSIS
- 322515 COMPOSITE STEERING ARM FOR 1-PIECE CHASSIS (2)
- 322552 ALU STEERING PIVOT SHAFT 14.8mm - SWISS 7075 T6 (2)
- 322574 COMPOSITE STEERING PLATE FOR 1-PIECE CHASSIS
- 322591 ALU SHIM 3x4.7x0.5mm (10)

- 902306 HEX SCREW SH M3x6 (10)
- 902308 HEX SCREW SH M3x8 (10)
- 902312 HEX SCREW SH M3x12 (10)
- 903308 HEX SCREW SFH M3x8 (10)
- 930306 BALL-BEARING 3x6x2.5mm STEEL SEALED - OIL (2)
- 940509 BALL-BEARING 5x9x3mm RUBBER SEALED - OIL (2)
- 962034 STEEL WASHER S 3x4.7x1 (10)

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

12x 903308
SFH M3x8



#321255-G
COMPOSITE ELEVATED SIDE BRACES
L+R - LONG - GRAPHITE



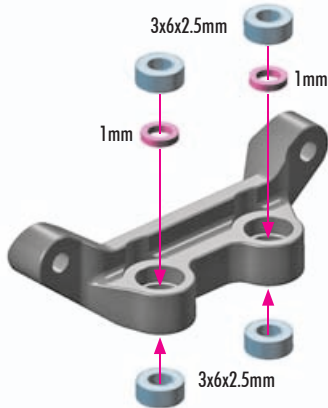
The graphite side braces make the car more stable and predictable. Suggested especially for high-traction conditions.

3x8mm

ASSEMBLED VIEW

2x 962034
S 3x4.7x1

4x 930306
BB 3x6x2.5



OPTION

STEERING PLATES

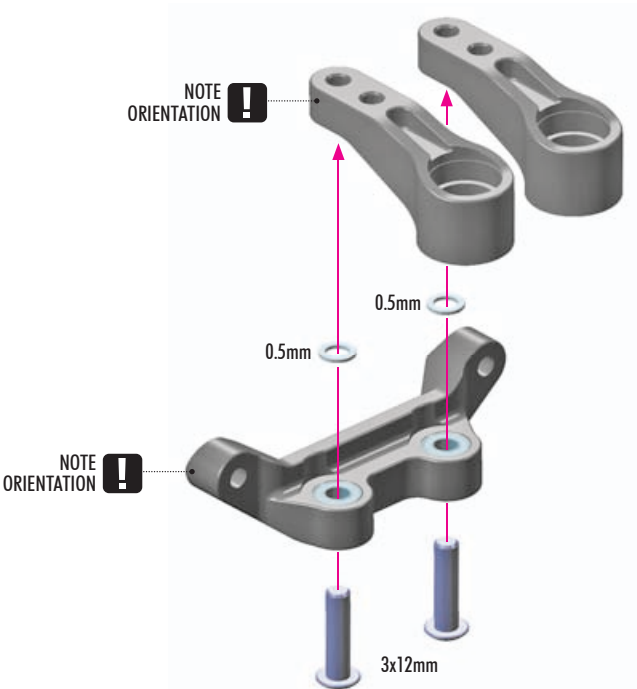
#322574	HARD	INCLUDED
#322575	ALU	OPTION



Alu steering plate increases strength and reliability as well improves precision and steering feel. There is also increased clearance around the system for easier maintenance & set-up adjustments.

2x 322591
SHIM 3x4.7x0.5

2x 902312
SH M3x12



OPTION

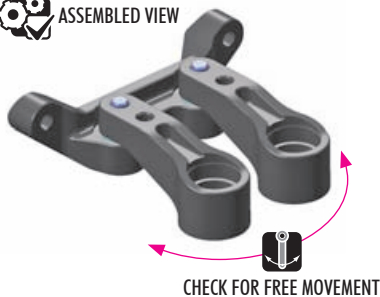
STEERING ARMS

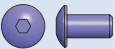
#322515	HARD	INCLUDED
#322516	ALU	OPTION



Alu steering arms increase strength and reliability as well improve precision and steering feel.

ASSEMBLED VIEW

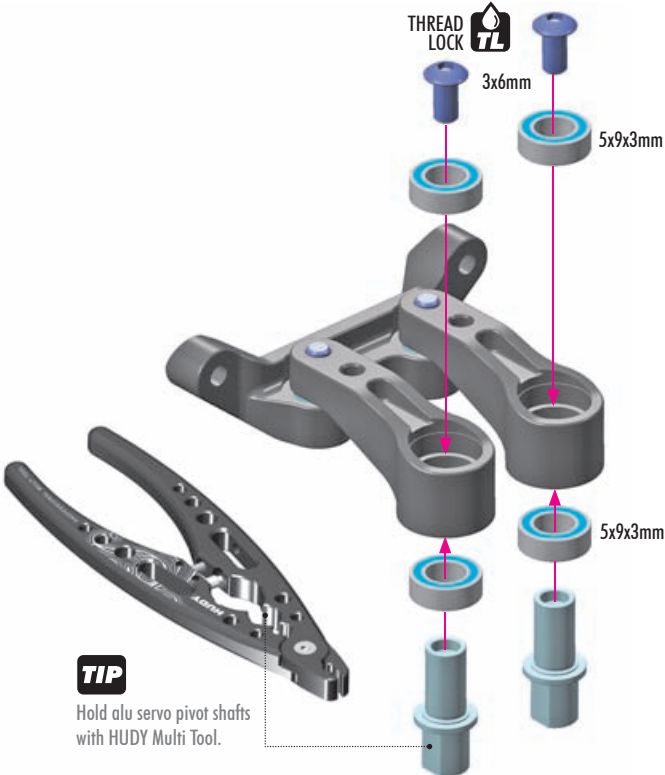




2x 902306
SH M3x6



4x 940509
BB 5x9x3

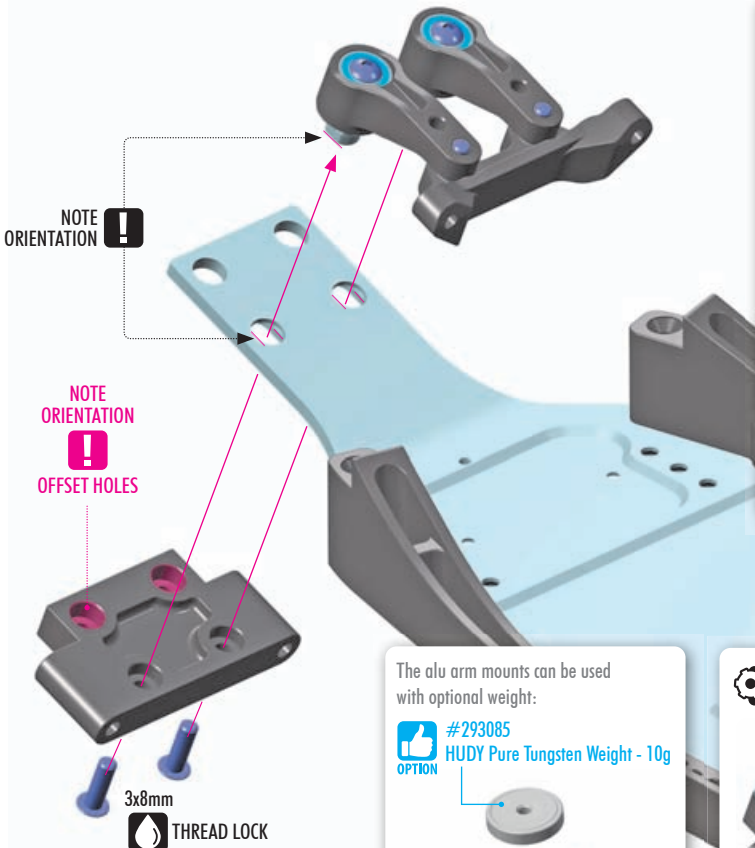


TIP

Hold alu servo pivot shafts
with HUDY Multi Tool.

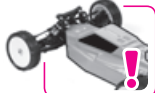


2x 902308
SH M3x8



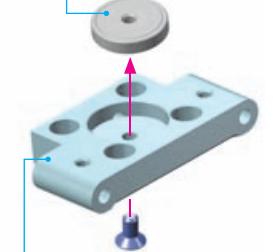
NOTE
ORIENTATION

NOTE
ORIENTATION
OFFSET HOLES



The alu arm mounts can be used
with optional weight:

#293085
HUDY Pure Tungsten Weight - 10g



**ALU FRONT LOWER
ARM MOUNTS**



FRONT LOWER ARM MOUNTS		
#322316	ALU 0°	OPTION
#322315	COMPOSITE 0°	INCLUDED
#322312	BRASS 0°	OPTION
#322317	ALU +3°/-3°	OPTION
#321211	SUSP. HOLDER BRACE +3°/-3°	OPTION

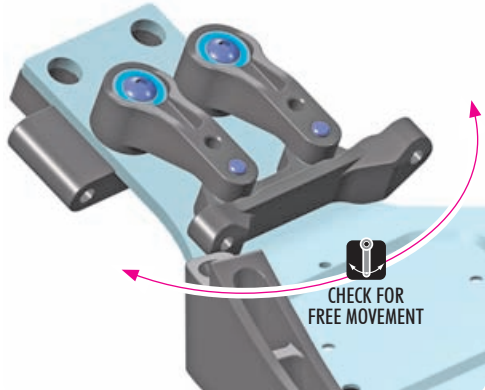


ARM MOUNTS - WEIGHT			
Composite	BRASS	ALU	ALU + Tungsten
6g	46g	13.5g	23.5g

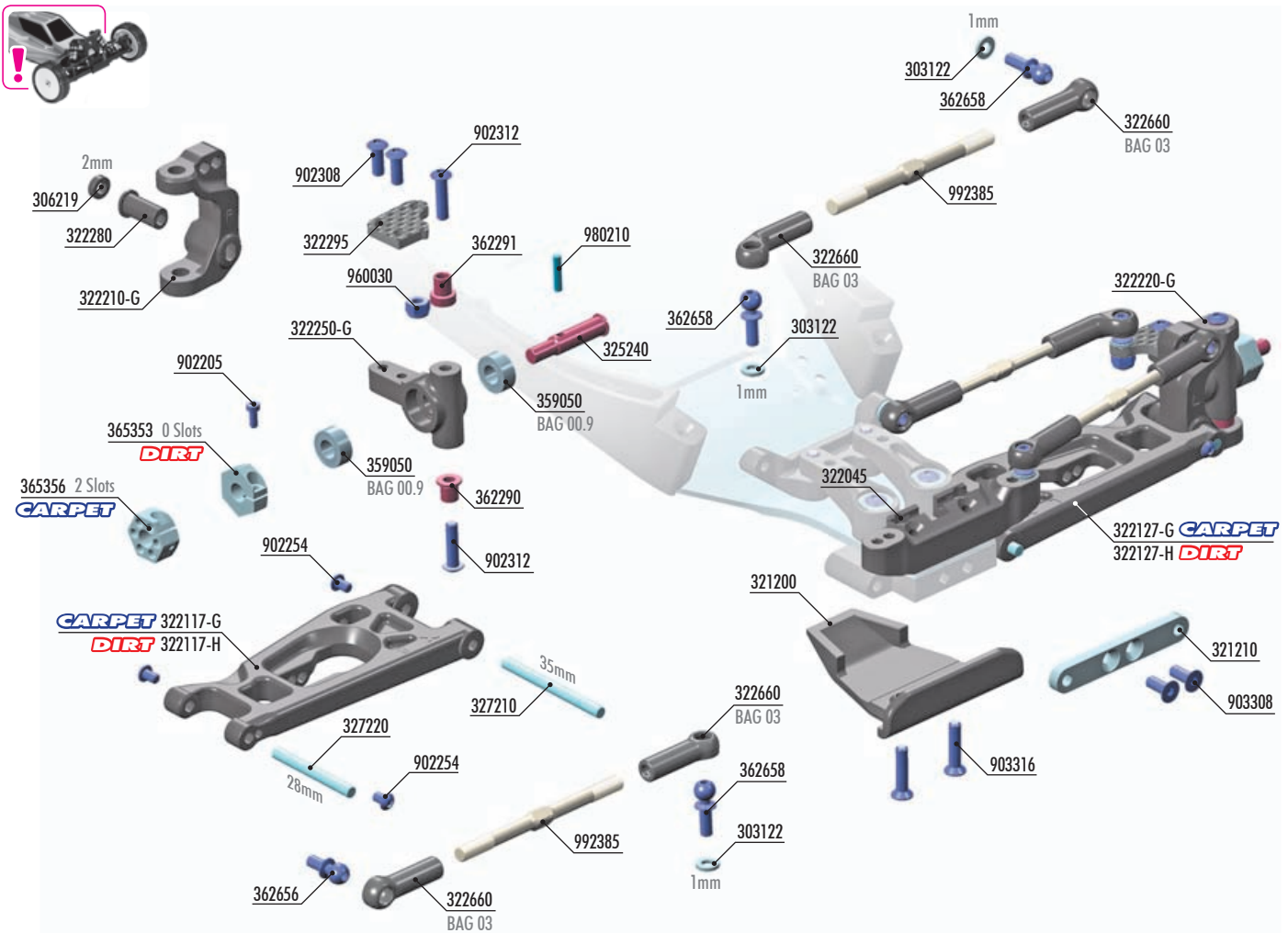
COMPOSITE - Generates more traction in front.
ALU - Makes car more stable.
BRASS - Adds more weight in front, less weight transfer.



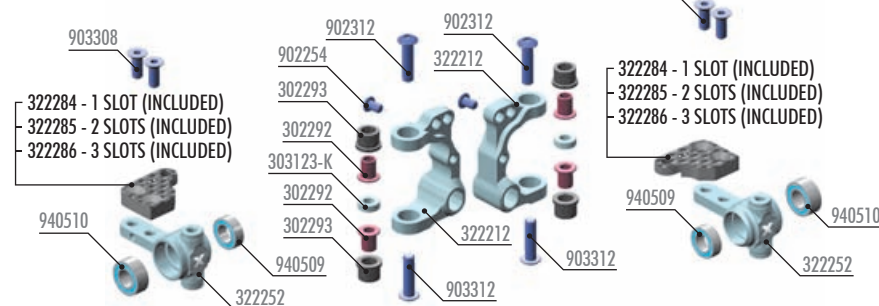
ASSEMBLED VIEW



CHECK FOR
FREE MOVEMENT



#320904
XB2 ALU STEERING BLOCKS & C-HUBS - SET
For assembly instructions see page 55.



ASSEMBLED VIEW



BAG

07

303122 ALU SHIM 3x6x1.0mm (10)
306219 COMPOSITE SET OF SERVO SHIMS (4)
321200 COMPOSITE FRONT BUMPER
321210 ALU SUSPENSION HOLDER BRACE - SWISS 7075 T6 (3mm)
322045 COMPOSITE FRONT ROLL-CENTER HOLDER FOR BRIDGE UPPER DECK
322210-G COMPOSITE C-HUB 0° DEG. RIGHT - GRAPHITE
322220-G COMPOSITE C-HUB 0° DEG. LEFT - GRAPHITE
322250-G COMPOSITE STEERING BLOCK - GRAPHITE
322280 COMPOSITE CASTER ECCENTRIC BUSHING (2+2+2)
322295 CARBON EXTENSION FOR STEERING BLOCK - 2 DOTS (2)
322660 COMPOSITE BALL JOINT 5.4mm (12+1+1)
325240 FRONT DRIVE AXLE - HUDY SPRING STEEL™
327210 FRONT SUSPENSION PIVOT PIN 3x35mm (2)
327220 FRONT ARM PIVOT PIN 3x28mm (2)
362290 STEEL STEERING BUSHING - SHORT (2)
362291 STEEL STEERING BUSHING - LONG (2)
362656 BALL ENDS 5.4mm WITH THREAD 6mm (2)
362658 BALL ENDS 5.4mm WITH THREAD 8mm (2)
992385 HUDY TITANIUM ADJUSTABLE TURNBUCKLE 55mm M3.5 L/R (2)

359050 BALL-BEARING 5x10x4 STEEL SEALED - GREASE (2)
902205 HEX SCREW SH M2x5 (10)
902254 HEX SCREW SH M2.5x4 (10)
902308 HEX SCREW SH M3x8 (10)
902312 HEX SCREW SH M3x12 (10)
903308 HEX SCREW SFH M3x8 (10)
903316 HEX SCREW SFH M3x16 (10)
960030 NUT M3 (10)
980210 PIN 2x9.8 (10)

CARPET

322117-G SUSPENSION ARM FRONT - LSM - RIGHT - SHORT - GRAPHITE
322127-G SUSPENSION ARM FRONT - LSM - LEFT - SHORT - GRAPHITE
365356 ALU WHEEL HUB 12mm - 2 SLOTS - OFFSET +1.50mm (2)

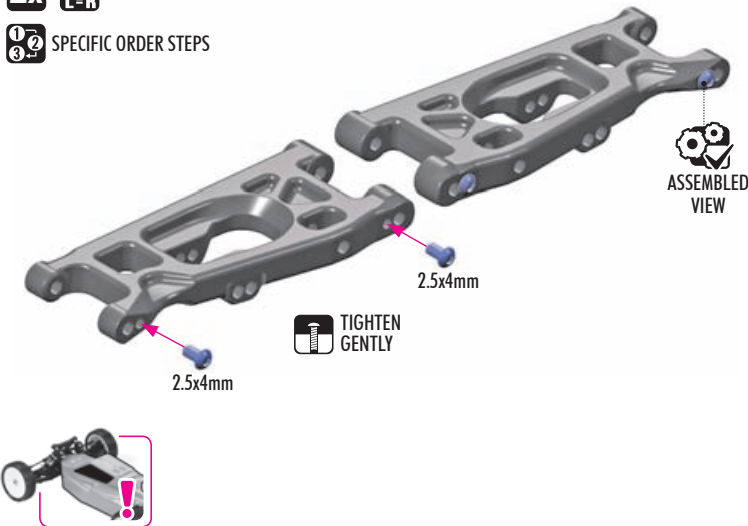
DIRT

322117-H SUSPENSION ARM FRONT - LSM - RIGHT - SHORT - HARD
322127-H SUSPENSION ARM FRONT - LSM - LEFT - SHORT - HARD
365353 ALU WHEEL HUB 12mm - 0 SLOTS (2)

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



2x LEFT = RIGHT
1 2 3 SPECIFIC ORDER STEPS



FRONT LSM SUSPENSION ARMS - LONG

#322113-M	RIGHT	MEDIUM	OPTION
#322123-M	LEFT	MEDIUM	OPTION
#322113-H	RIGHT	HARD	OPTION
#322123-H	LEFT	HARD	OPTION
#322113-G	RIGHT	GRAPHITE	OPTION
#322123-G	LEFT	GRAPHITE	OPTION

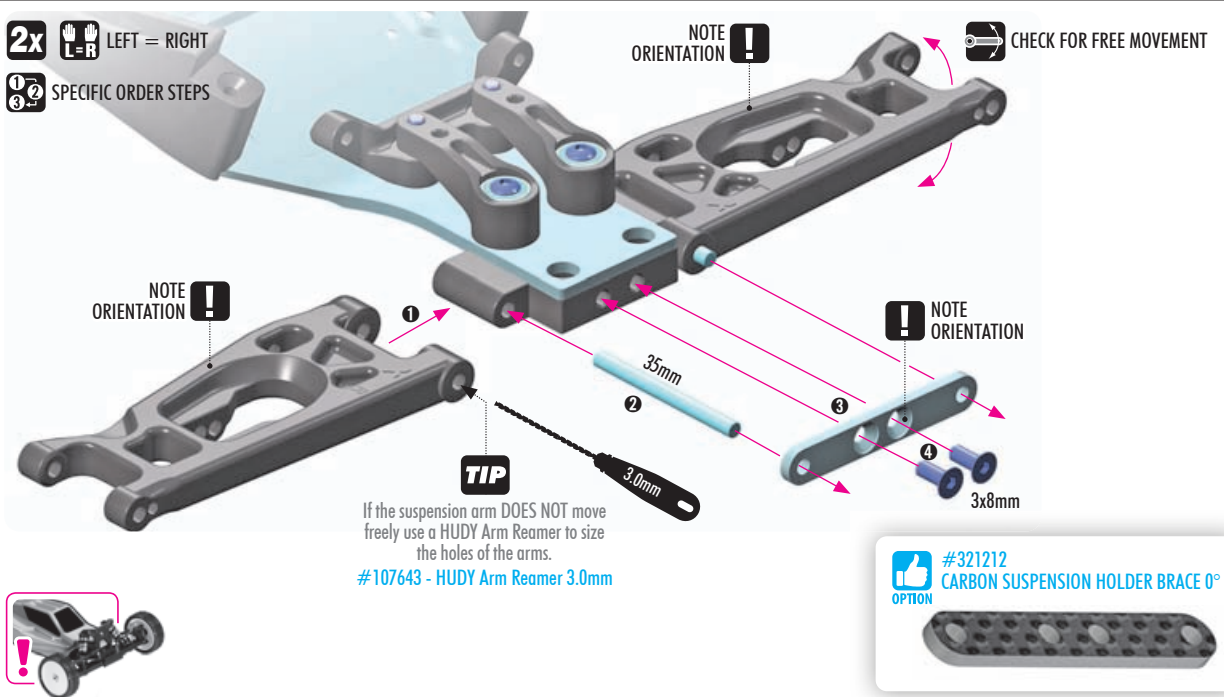


FRONT LSM SUSPENSION ARMS - SHORT

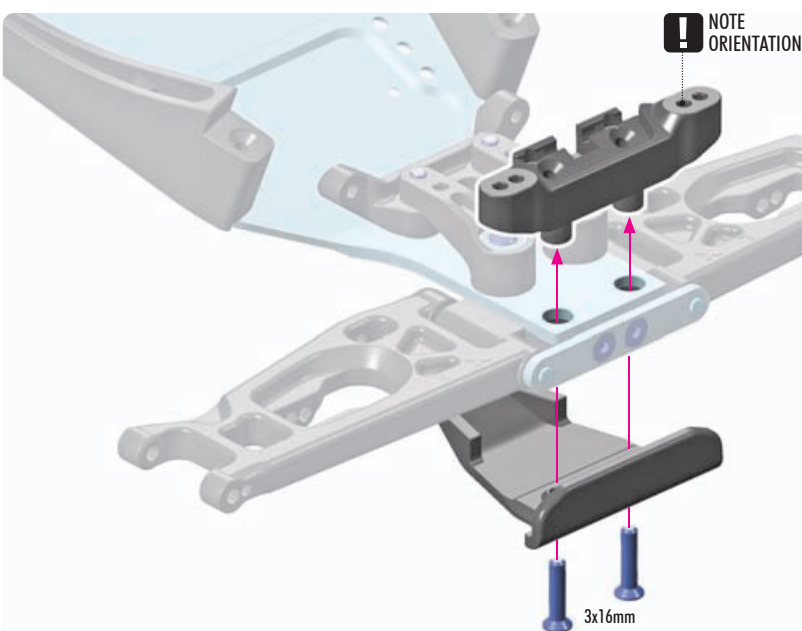
#322117-M	RIGHT	MEDIUM	OPTION
#322127-M	LEFT	MEDIUM	OPTION
#322117-H	RIGHT	HARD	INCLUDED
#322127-H	LEFT	HARD	INCLUDED
#322117-G	RIGHT	GRAPHITE	INCLUDED
#322127-G	LEFT	GRAPHITE	INCLUDED



2x LEFT = RIGHT
1 2 3 SPECIFIC ORDER STEPS



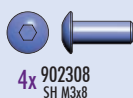
#321212 CARBON SUSPENSION HOLDER BRACE 0°



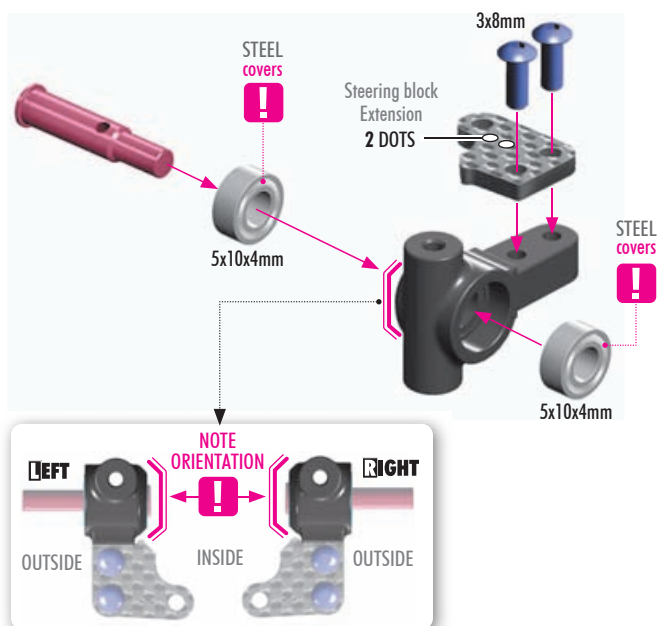
#322046 ALU FRONT ROLL-CENTER HOLDER FOR BRIDGE UPPER DECK



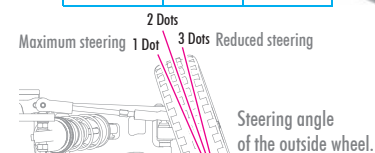
Alu front roll-center holder increases strength, reliability and makes the handling more precise and more forgiving.



2x LEFT = RIGHT
1 2 3 SPECIFIC ORDER STEPS



STEERING BLOCK EXTENSIONS			
#322294	1 DOT	OPTION	
#322295	2 DOTS	INCLUDED	
#322296	3 DOTS	OPTION	

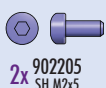


STEERING BLOCKS		
#322250-M	MEDIUM	OPTION
#322250-H	HARD	OPTION
#322250-G	GRAPHITE	INCLUDED

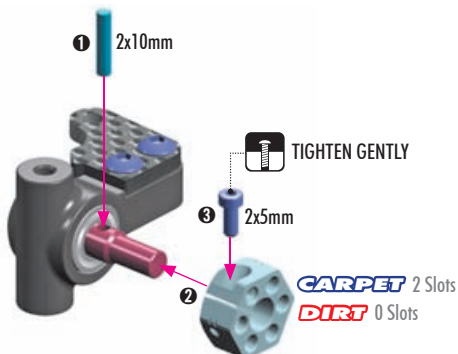
MEDIUM - More steering on low traction.
HARD - More free in corner on high traction.
GRAPHITE - Less stopping in corner on high traction.



XRAY BALL-BEARINGS			
#940510	5x10x4	OIL	OPTION
#359050	5x10x4	GREASE	INCLUDED



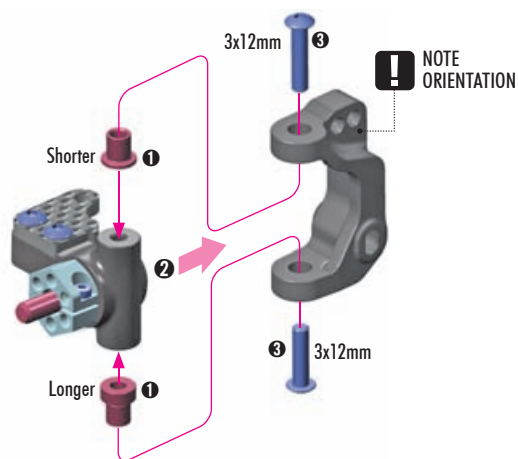
2x LEFT = RIGHT
1 2 3 SPECIFIC ORDER STEPS



WHEEL HEX HUBS 12MM			
#365360	+4.5mm	6 SLOTS	OPTION
#365359	+3.75mm	5 SLOTS	OPTION
#365358	+3.0mm	4 SLOTS	OPTION
#365357	+2.25mm	3 SLOTS	OPTION
#365356	+1.5mm	2 SLOTS	INCLUDED
#365355	+0.75mm	1 SLOT	OPTION
#365353	0mm	0 SLOTS	INCLUDED
#365354	-0.75mm	Lightw.	OPTION
#365361	-1.25mm	Lightw.	OPTION



2x LEFT = RIGHT
1 2 3 SPECIFIC ORDER STEPS

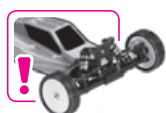


#320904
ALU STEERING BLOCKS & C-HUBS WITH BACKSTOP - SET



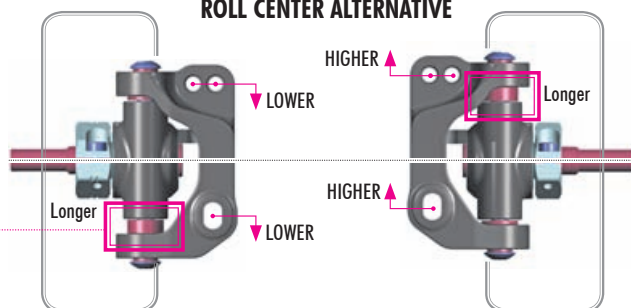
C-HUBS			
#322210-M	RIGHT	MEDIUM	OPTION
#322210-H	RIGHT	HARD	OPTION
#322210-G	RIGHT	GRAPHITE	INCLUDED
#322220-M	LEFT	MEDIUM	OPTION
#322220-H	LEFT	HARD	OPTION
#322220-G	LEFT	GRAPHITE	INCLUDED

MEDIUM - For low traction. More steering on low traction.
HARD - For medium traction. More steering, more free in corners.
GRAPHITE - For high traction. More precise steering, less stopping in corners.



INITIAL SETTING
BOTTOM = LONGER bushing
TOP = SHORTER bushing
Recommended for smooth tracks to gain more steering.

ROLL CENTER ALTERNATIVE

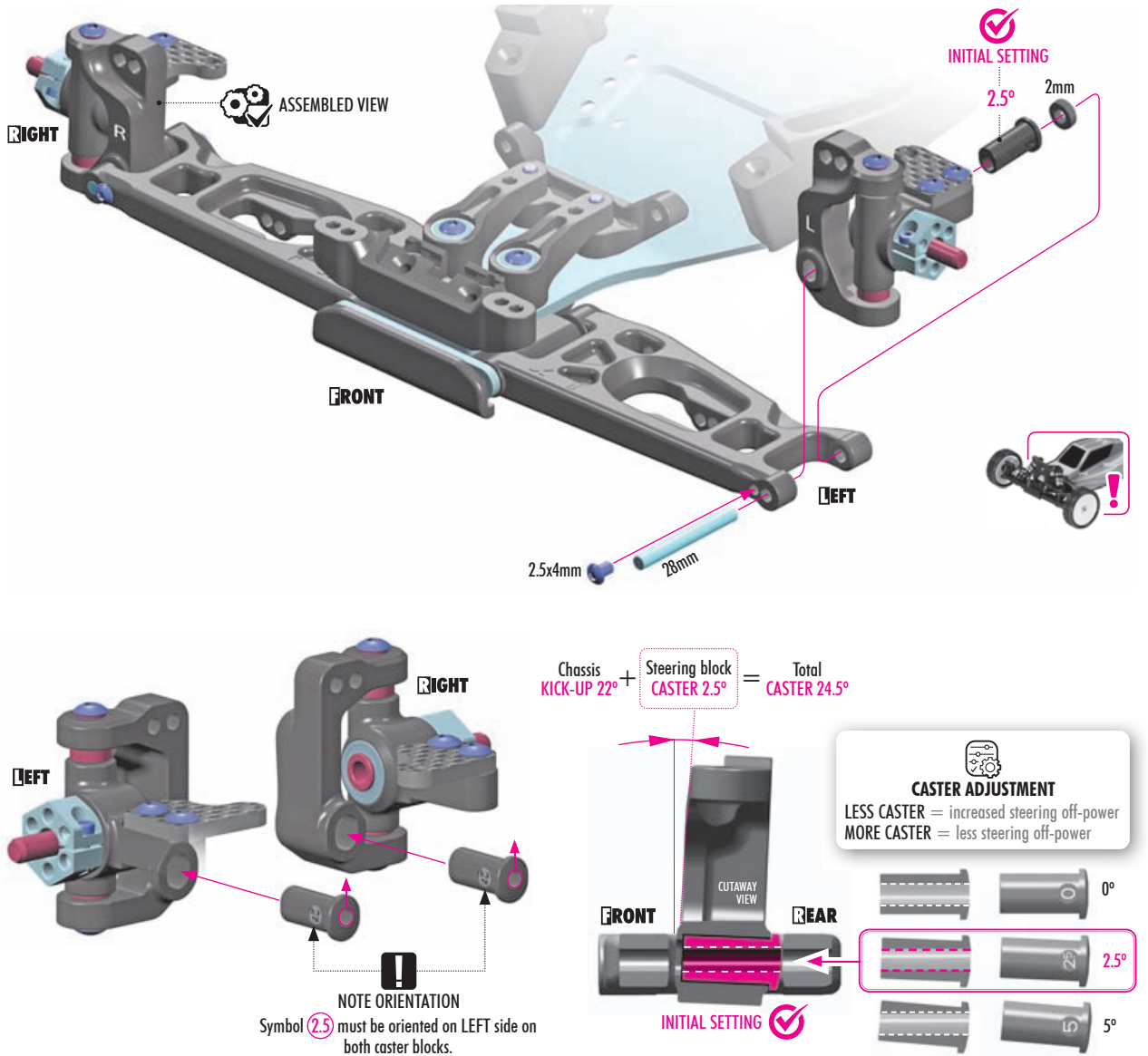


IO

2x 306219
SHIM 3x6x2

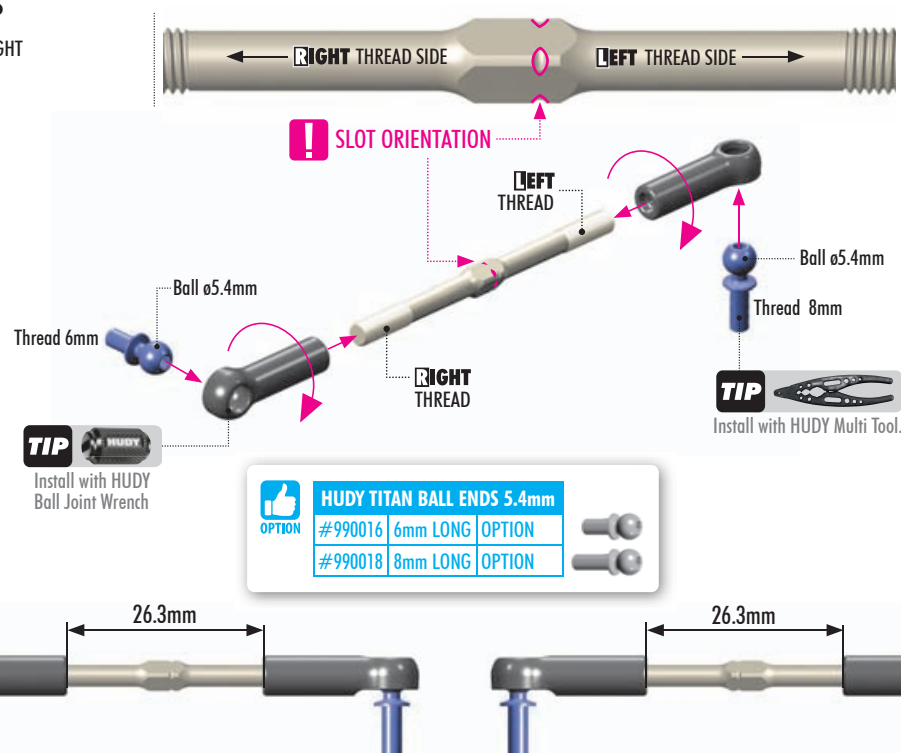


2x 902254
SH M2.5x4



ROLL CENTER LINKS

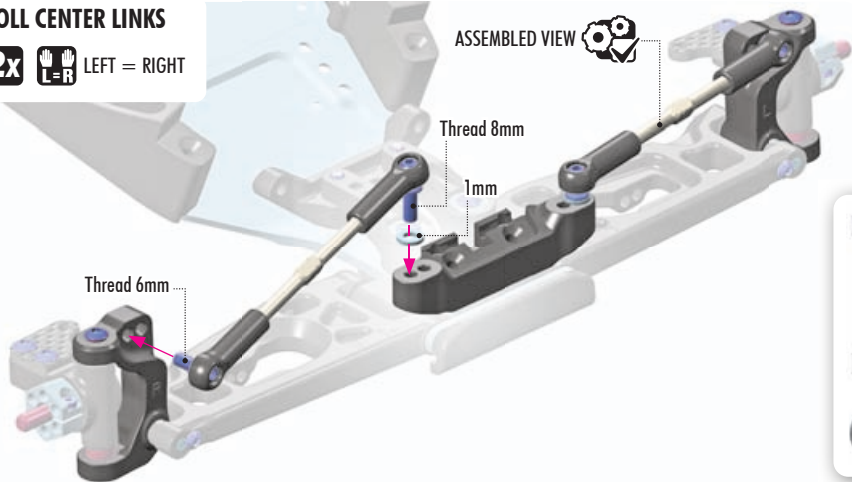
2x **L=R** LEFT = RIGHT



2x 303122 SHIM 3x6x1

ROLL CENTER LINKS

2x LEFT = RIGHT

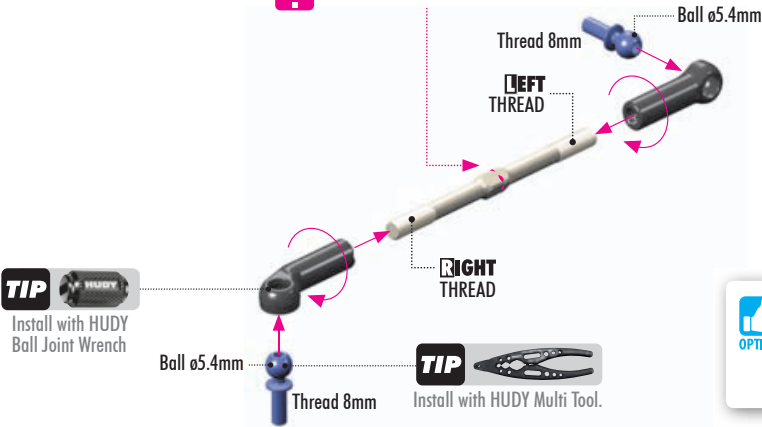


STEERING LINKS

2x LEFT = RIGHT



! SLOT ORIENTATION



HUDY TITAN BALL ENDS 5.4mm			
#990016	6mm LONG	OPTION	
#990018	8mm LONG	OPTION	



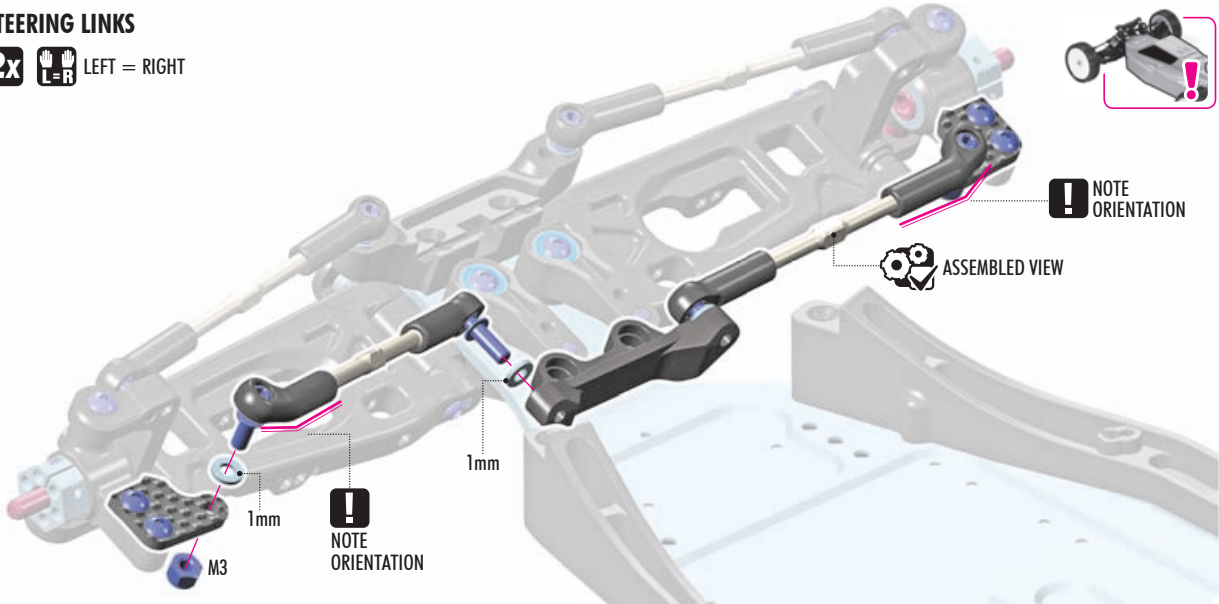
4x 303122 SHIM 3x6x1



2x 960030 NUT M3

STEERING LINKS

2x LEFT = RIGHT



DIRT



08

- ## 368102-S FRONT SHOCK ABSORBERS 30mm BIG BORE - SET (2)

CARPET



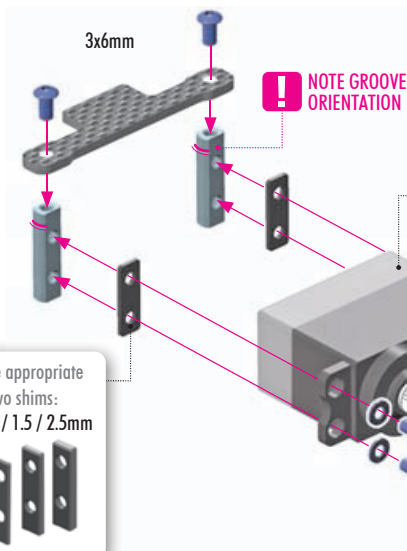
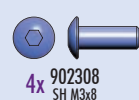
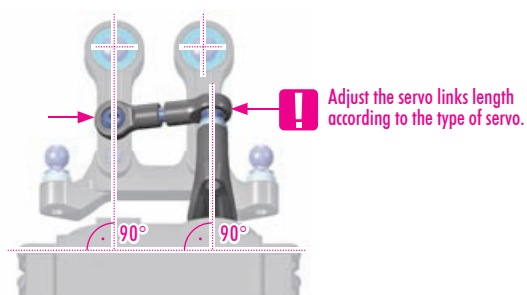
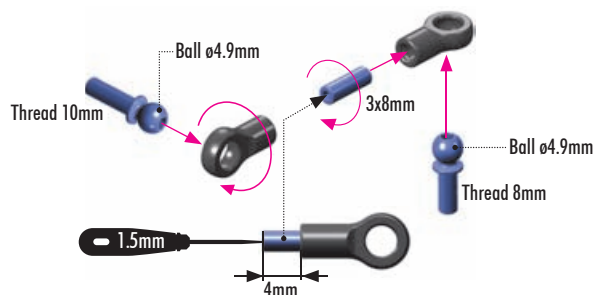
901302 HEX SCREW SB M3x2.5 (10)
901304 HEX SCREW SB M3x4 (10)
902312 HEX SCREW SH M3x12 (10)

XRAY

8. FINAL ASSEMBLY

CARPET

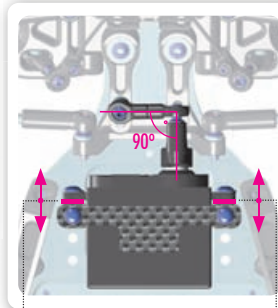
DIRT



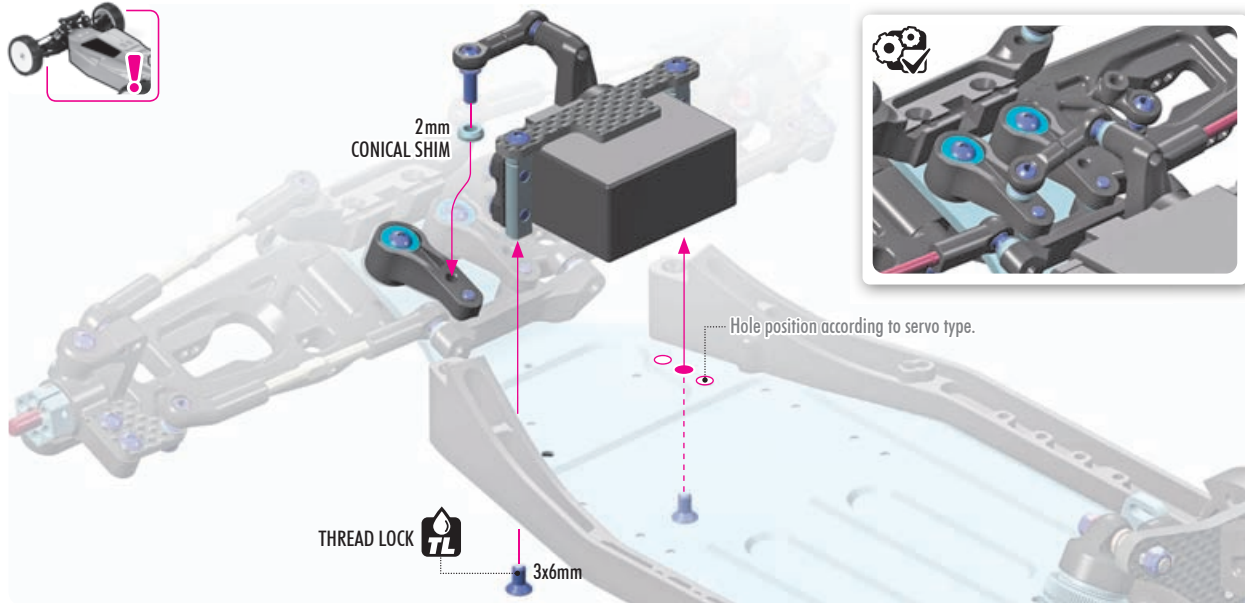
#293421
ALU CLAMP STEER. SERVO HORN
EXTENDED 8mm - 23T

#293422
ALU CLAMP STEER. SERVO HORN
EXTENDED 8mm - 25T

Alu clamp steer. servo horn increase reliability & strength.



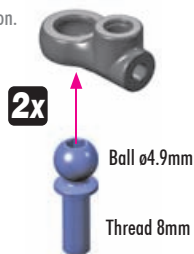
Use appropriate
servo shims:
1.0 / 1.5 / 2.5mm



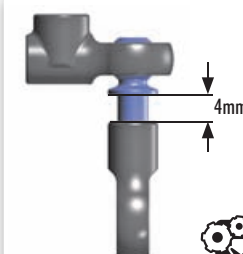
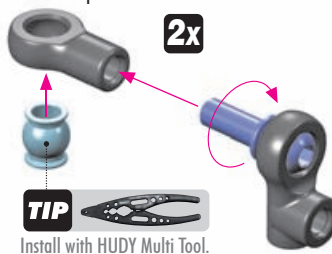
BAG

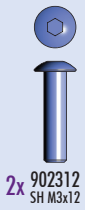
05.1

CARPET
Step only for Carpet edition.

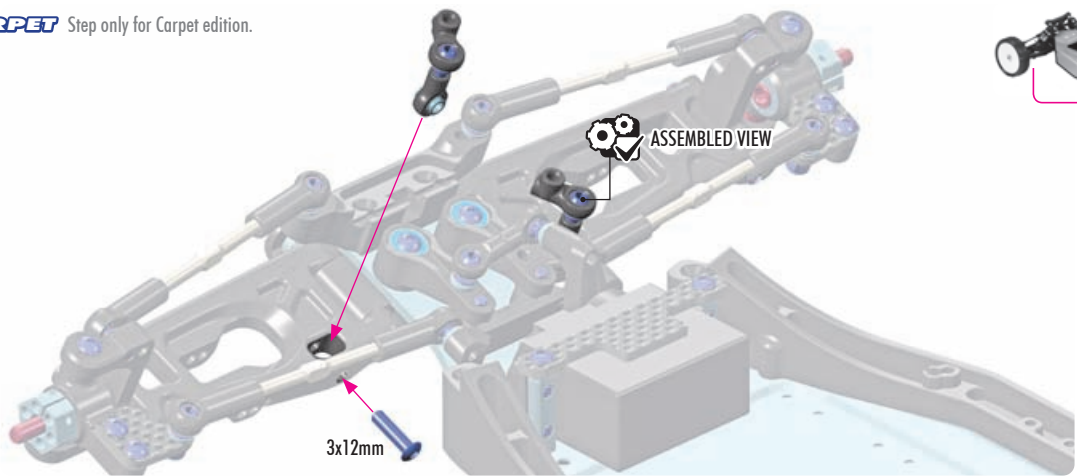


SHORTER ball joint





! **CARPET** Step only for Carpet edition.

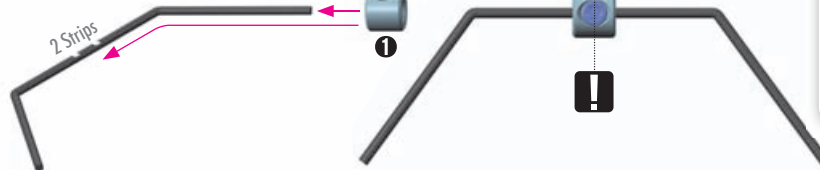


! **CARPET** Step only for Carpet edition.

Setscrew is already threaded in collar



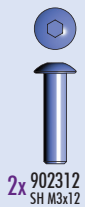
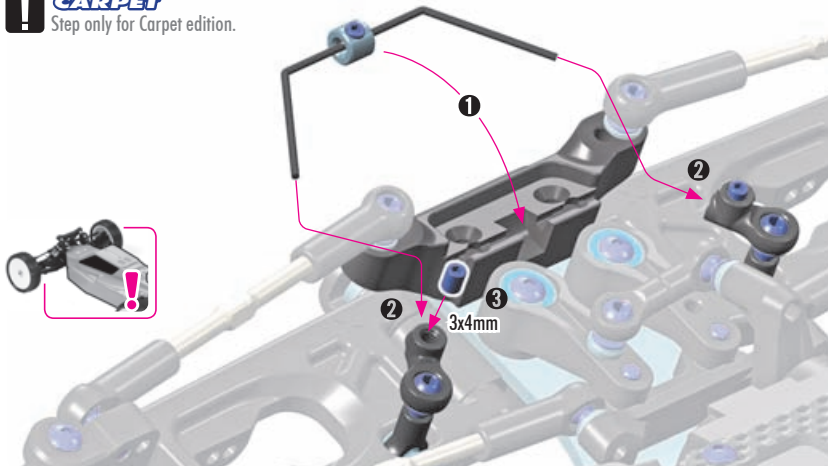
Set the collar into the CENTER



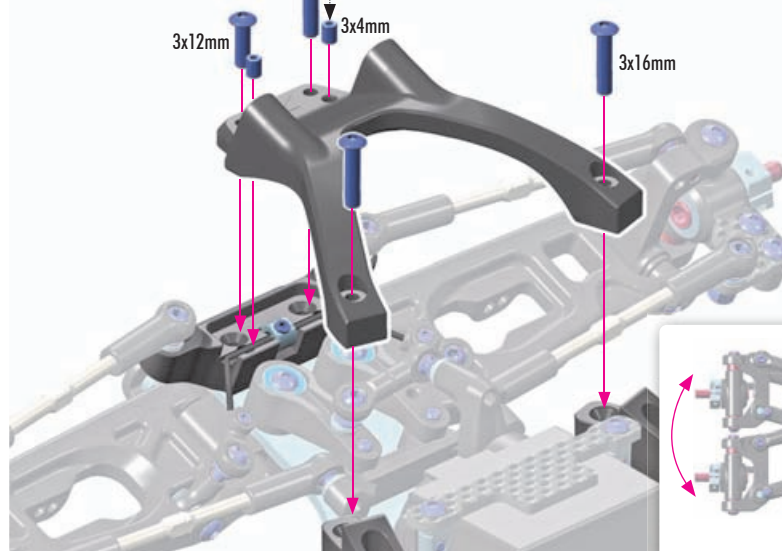
OPTION	FRONT ANTI-ROLL BARS	OPTION
#322489	0.8mm	OPTION
#322490	1.0mm	OPTION
#322491	1.1mm	OPTION
#322492	1.2mm	INCLUDED
#322493	1.3mm	OPTION



! **CARPET** Step only for Carpet edition.




! **CARPET** Set anti-roll bar for free movement. 3x4mm Setscrew - only for Carpet edition.

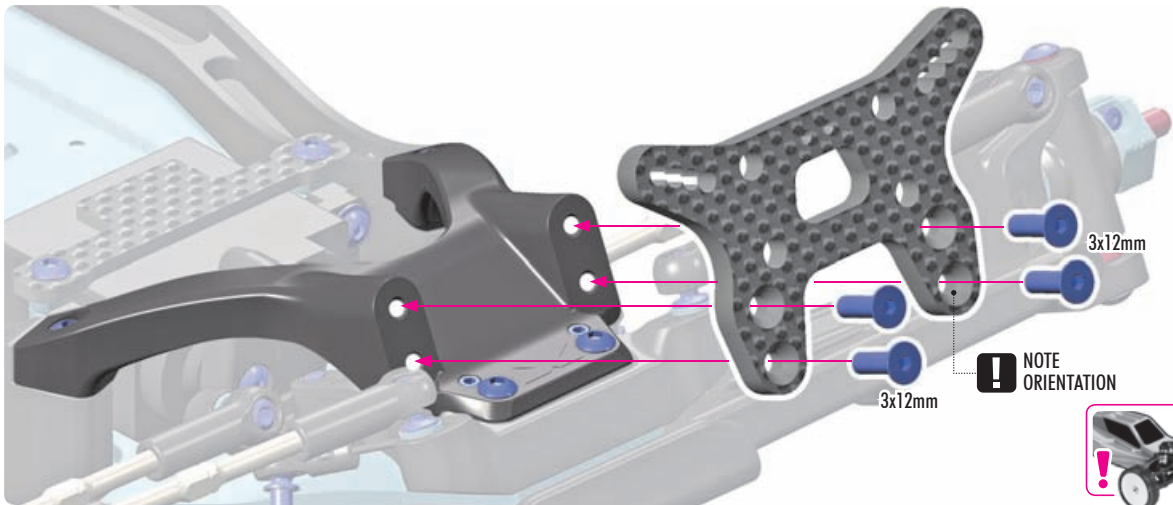


8. FINAL ASSEMBLY

CARPET DIRT




4x 903312 SFH M3x12




3x12mm

3x12mm


NOTE ORIENTATION



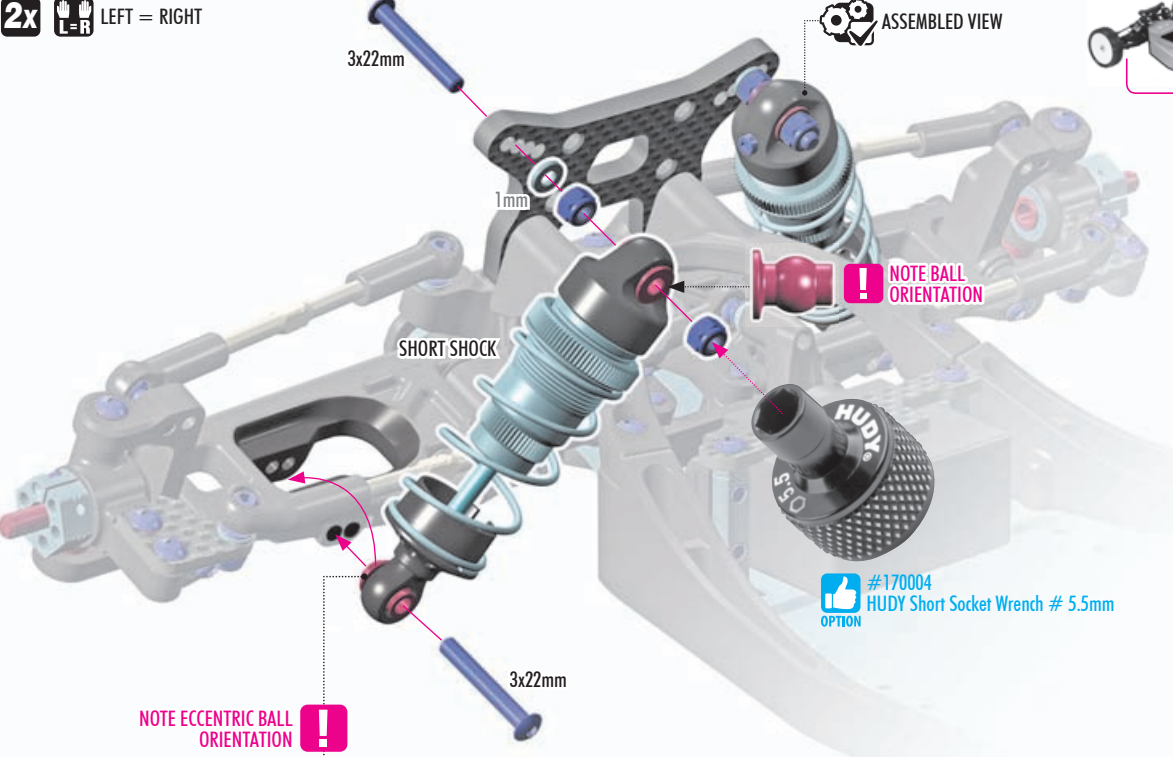
2x 303122 SHIM 3x6x1



4x 902322 SH M3x22



4x 960030 NUT M3



2x LEFT = RIGHT

3x22mm

1mm


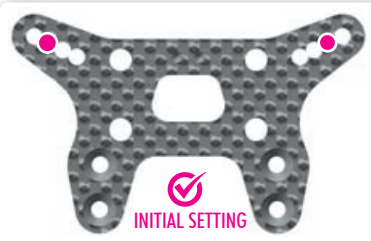
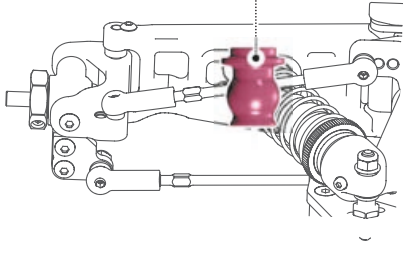
SHORT SHOCK


NOTE ECCENTRIC BALL ORIENTATION

NOTE BALL ORIENTATION


ASSEMBLED VIEW

HUDY #170004 HUDY Short Socket Wrench # 5.5mm OPTION



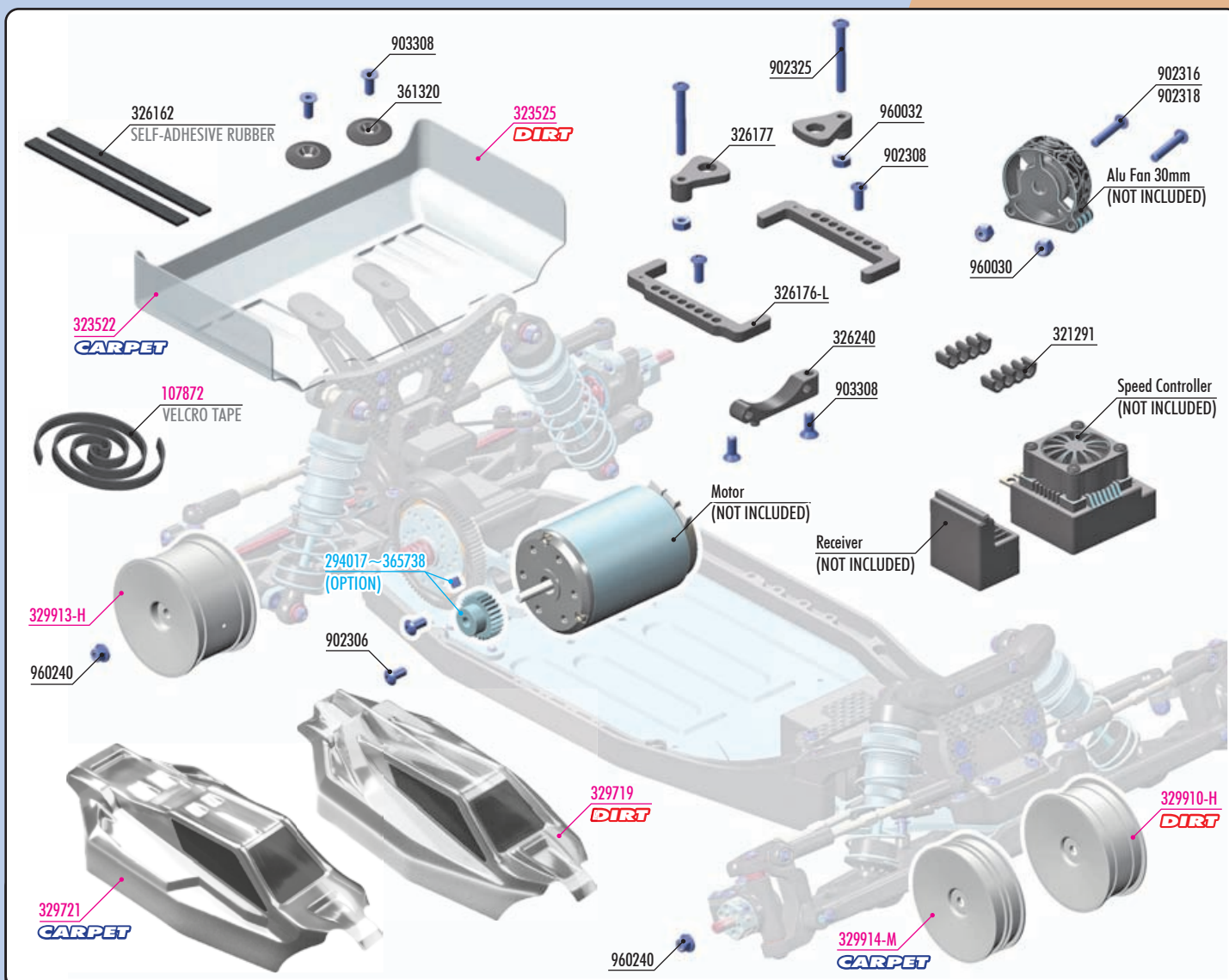


2x 902256 SH M2.5x6



TIGHTEN GENTLY

2.5x6mm



BAG

08

294017~365738 PINION GEAR HARDCOATED 18~38T/48P (OPTION)

321291 COMPOSITE 5-WIRES HOLDER - SET
 326162 SELF-ADHESIVE RUBBER 1.5x6.5x155mm (2)
 326176-L COMPOSITE LIPO BATTERY HOLDER - LONG (2+2)
 326177 COMPOSITE BATTERY CLAMP (2)
 326240 COMPOSITE FAN HOLDER
 361320 BODY MOUNT, BATTERY MOUNT - V2 & WING SHIM (2)

902306 HEX SCREW SH M3x6 (10)
 902308 HEX SCREW SH M3x8 (10)
 902316 HEX SCREW SH M3x16 (10)
 902318 HEX SCREW SH M3x18 (10)
 902325 HEX SCREW SH M3x25 (10)
 903308 HEX SCREW SFH M3x8 (10)
 960030 NUT M3 (10)

960032 NUT M3 (10)
 960240 NUT M4 WITH SERRATED FLANGE (10)

107872 VELCRO TAPE WITH DOUBLE SIDED TAPE 8x500mm
 329913-H REAR WHEEL AERODISK WITH 12MM HEX IFMAR - WHITE - HARD (2)

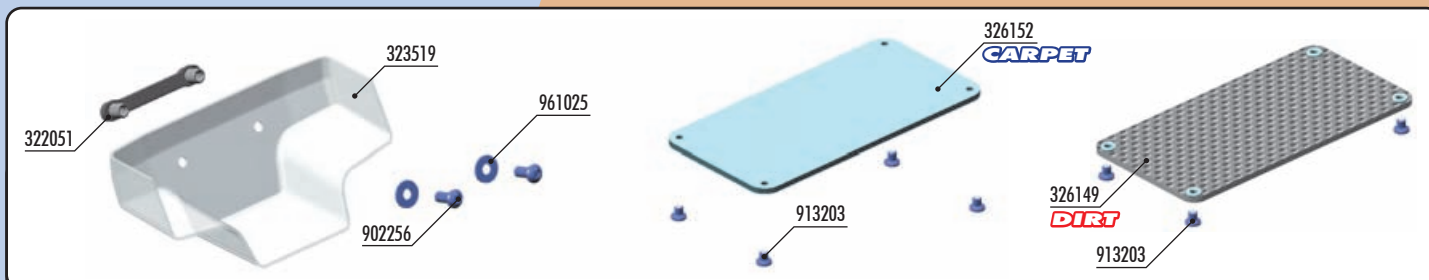
CARPET

323522 LEXAN REAR WING - LUSH
 329721 BODY FOR 1/10 2WD OFF-ROAD BUGGY - EPSILON 2C - LIGHT
 329914-M 1/10 OFF-ROAD WHEEL - 2WD - FRONT - NARROW - WHITE (2)

DIRT

323525 LEXAN REAR WING - LUSH - WIDE
 329719 BODY FOR 1/10 2WD OFF-ROAD BUGGY - EPSILON 2D - LIGHT
 329910-H 1/10 OFF-ROAD WHEEL - 2WD - FRONT - WHITE (2)

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



BAG

08.1

XB2 FINAL ASSEMBLY SET

322051 COMPOSITE FRONT SHOCK TOWER INSERT (2)
 323519 LEXAN FRONT WING - WIDE - RIBBED

902256 HEX SCREW SH M2.5x6 (10)
 913203 HEX SCREW 110° SFH M2x3 (10)
 961025 WASHER S 2.5 (10)

CARPET


326152 STAINLESS STEEL WEIGHT FOR ELECTRONICS 1-PIECE CHASSIS 30G

DIRT

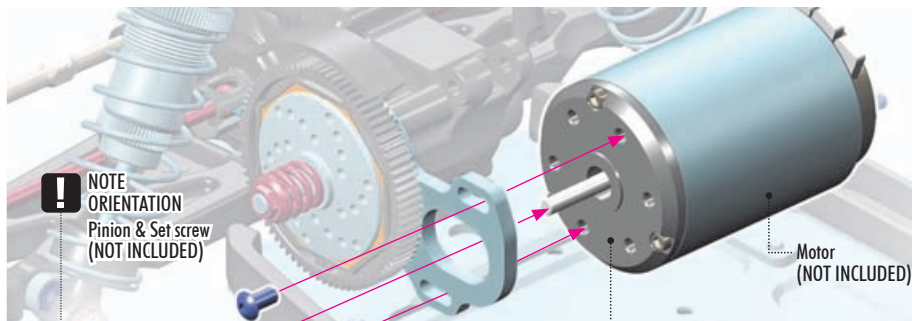
326149 CARBON PLATE FOR ELECTRONICS FOR 1-PIECE CHASSIS - SET

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

8. FINAL ASSEMBLY



2x 902306
SH M3x6



NOTE ORIENTATION
Pinion & Set screw
(NOT INCLUDED)

3x6mm

Motor
(NOT INCLUDED)

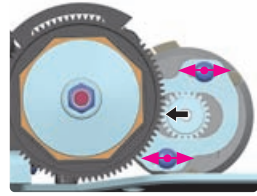
Check page 51 for
OPTIONAL PINIONS table

GEAR RATIO Final Drive Ratio

$$78 : X \times 2.65 = \text{FDR}$$


(Spur) (Pinion) (IGR)

Motor	+	Spur	+	Pinion	=	Ratio
4.5T		78T		21T		9.84
5.5T		78T		22T		9.39
6.5T		78T		23T		8.98
7.5T		78T		24T		8.61
8.5T		78T		25T		8.26
13.5T		72T		28T		6.81
17.5T		72T		32T		5.96

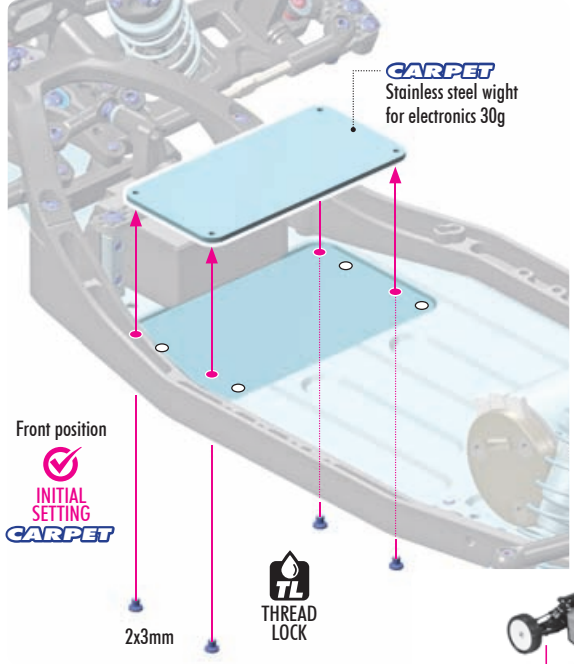


GEAR MESH
Adjust the motor so the pinion meshes with the spur gear properly. Make sure the gear mesh is NOT too tight.

There should be a small amount of play between the teeth of the pinion gear and the spur gear.



4x 913203
SFH M2x3



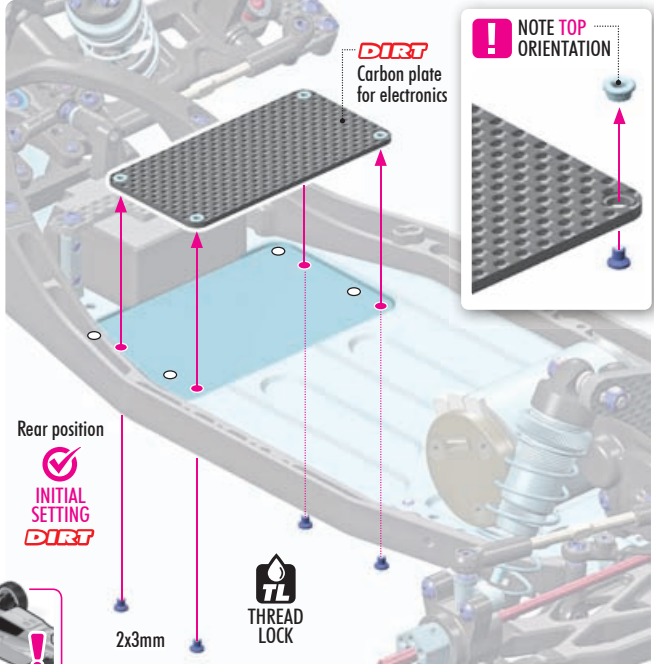
CARPET
Stainless steel wight for electronics 30g

Front position

INITIAL SETTING
CARPET

2x3mm

THREAD LOCK



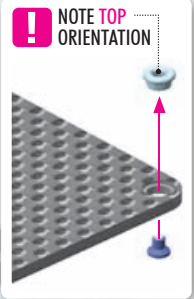
DIRT
Carbon plate for electronics

Rear position

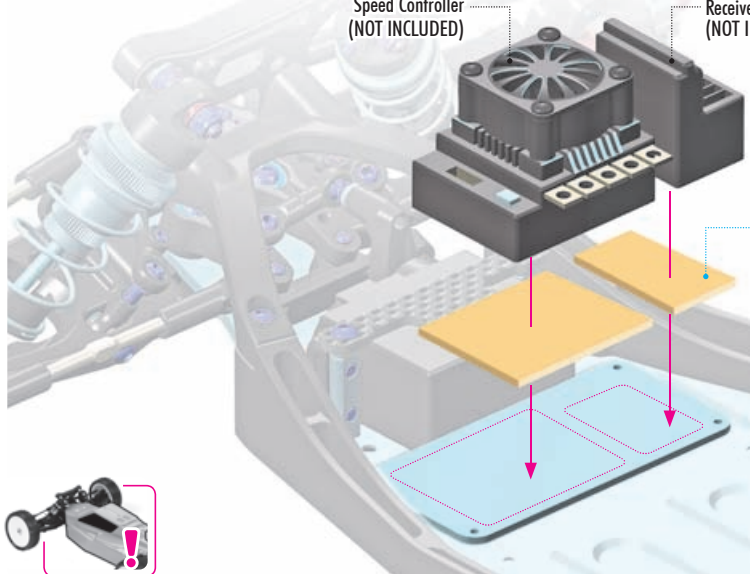
INITIAL SETTING
DIRT

2x3mm

THREAD LOCK



NOTE TOP ORIENTATION





Speed Controller
(NOT INCLUDED)

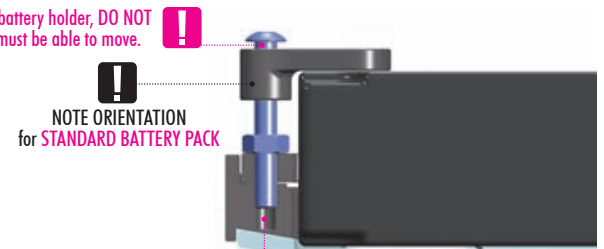
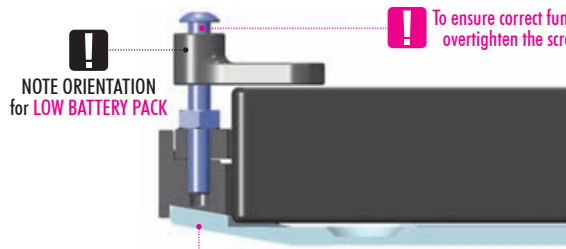
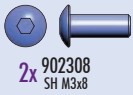
Receiver
(NOT INCLUDED)

HUDY #107876
OPTION HUDY ULTRA THIN DOUBLE-SIDED TAPE - SINGLE STRIP (5)

HUDY #107875
OPTION DOUBLE-SIDED TAPE





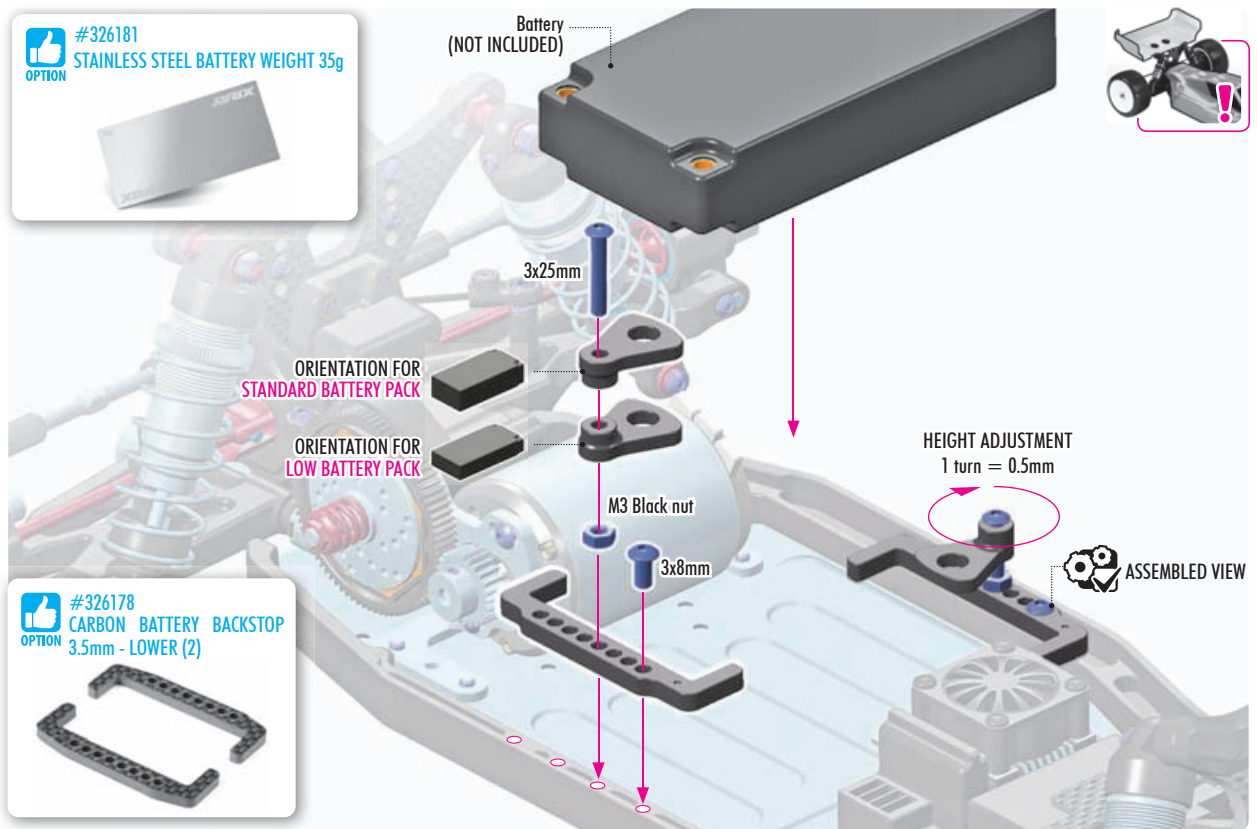


DO NOT overtighten the screw to avoid side guard damage.

#326181
STAINLESS STEEL BATTERY WEIGHT 35g
OPTION



Battery
(NOT INCLUDED)



#326178
CARBON BATTERY BACKSTOP
3.5mm - LOWER (2)
OPTION



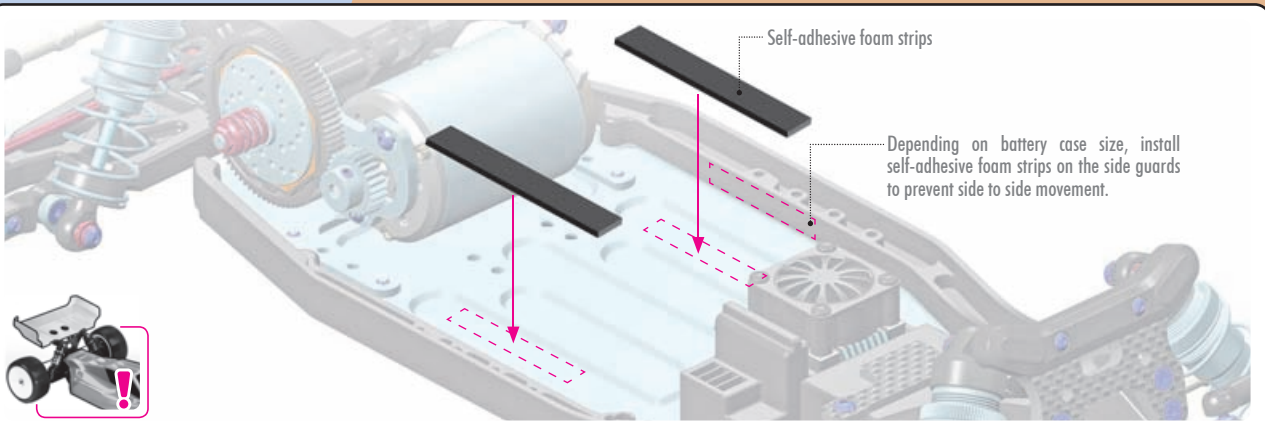
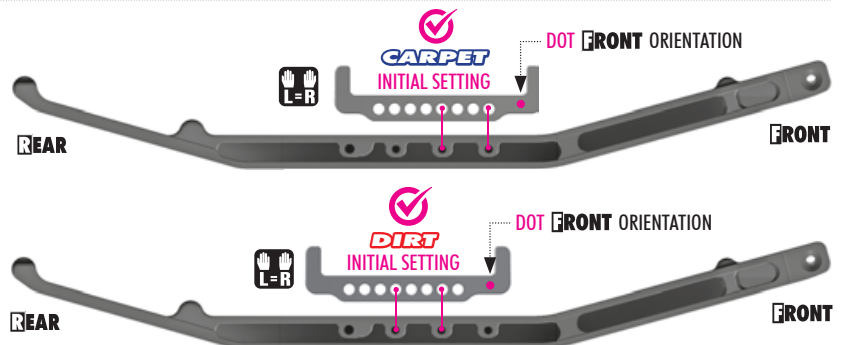
BATTERY POSITION SETTING

CARPET

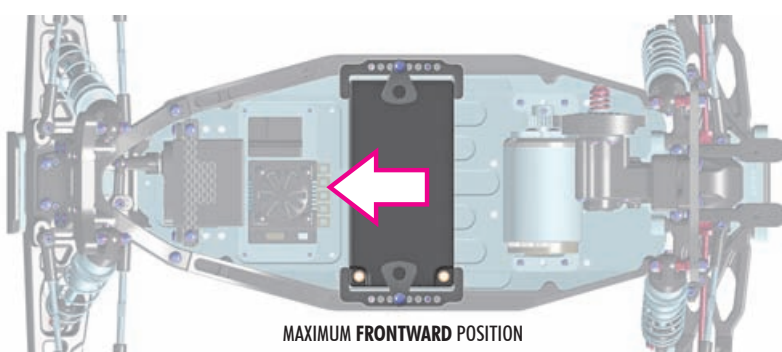
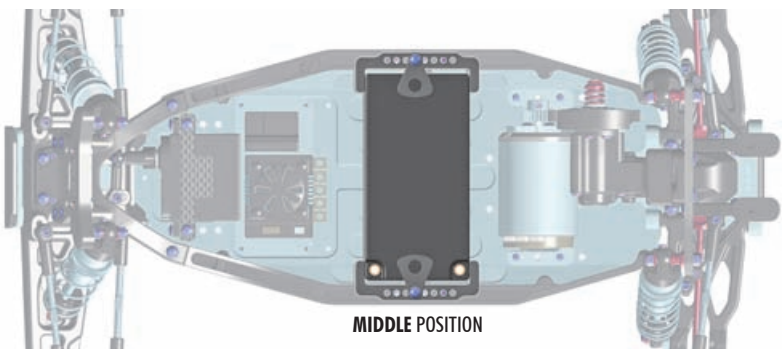
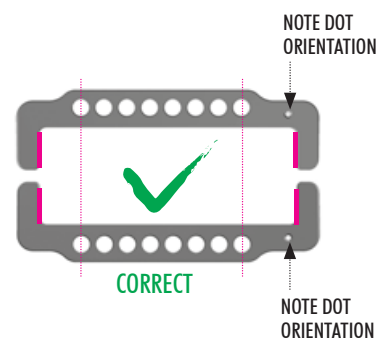
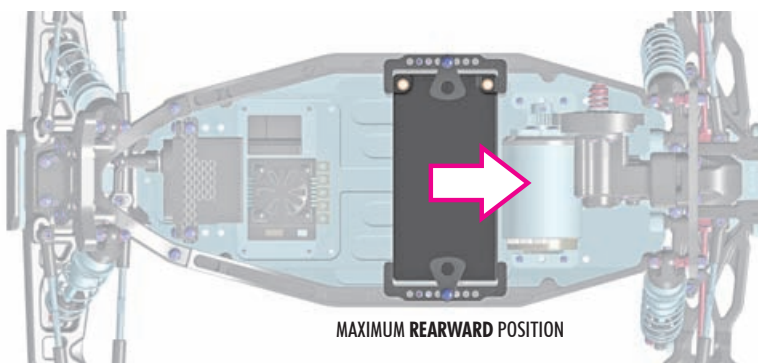
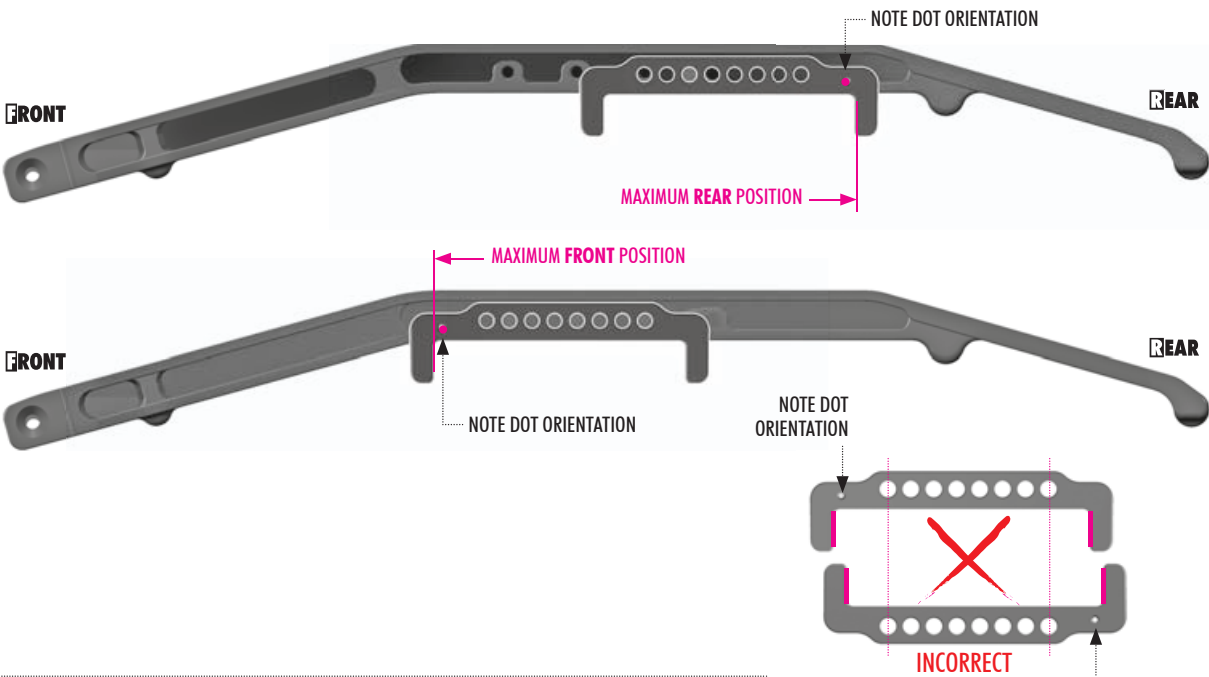
For **INITIAL SETTING** place battery in maximum FORWARD location.

DIRT

For **INITIAL SETTING** place battery in maximum REARWARD location.



BATTERY WEIGHT BALANCE ADJUSTMENT



ALTERNATIVE 1

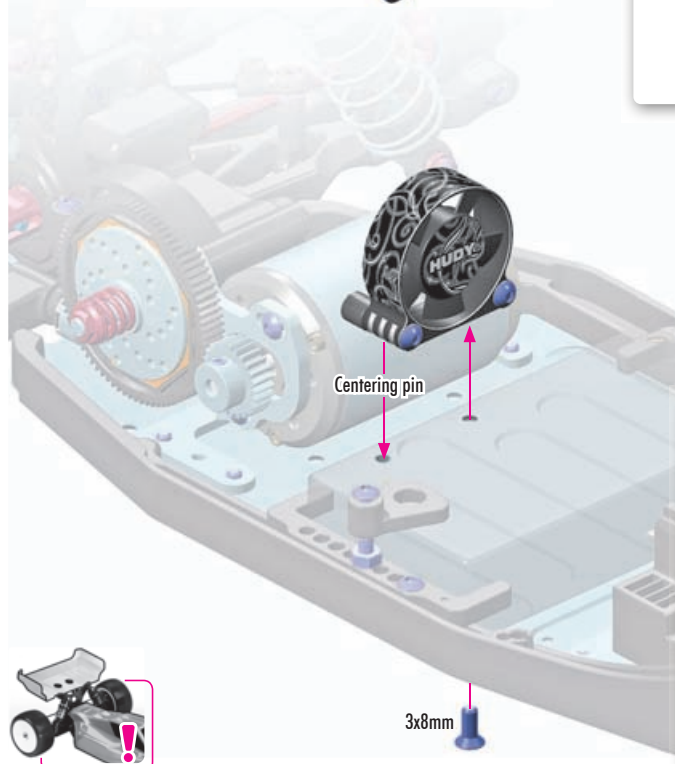
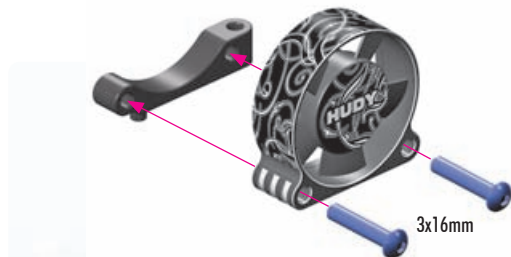
FAN ASSEMBLY BETWEEN BATTERY & MOTOR



2x 902316
SH M3x16



1x 903308
SFH M3x8

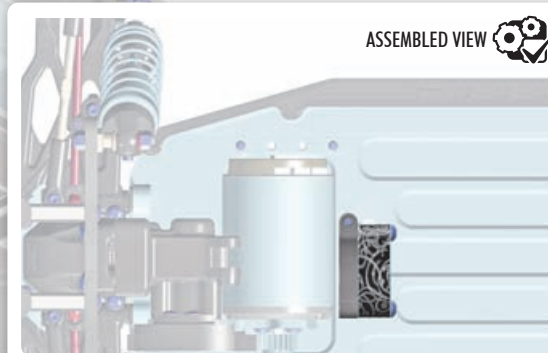


#293101
HUDY ALU RC FAN 30MM
SIDE MOUNT 2 HOLE



#293112
HUDY BRUSHLESS RC FAN 30MM
WITH INTERNAL SOLDERING TABS

#293110
HUDY BRUSHLESS RC FAN 30MM
WITH EXTERNAL SOLDERING TABS



ASSEMBLED VIEW

ALTERNATIVE 2

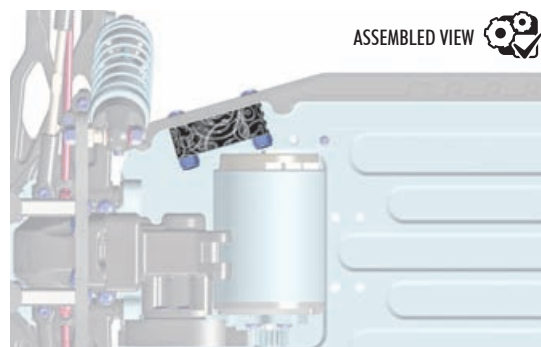
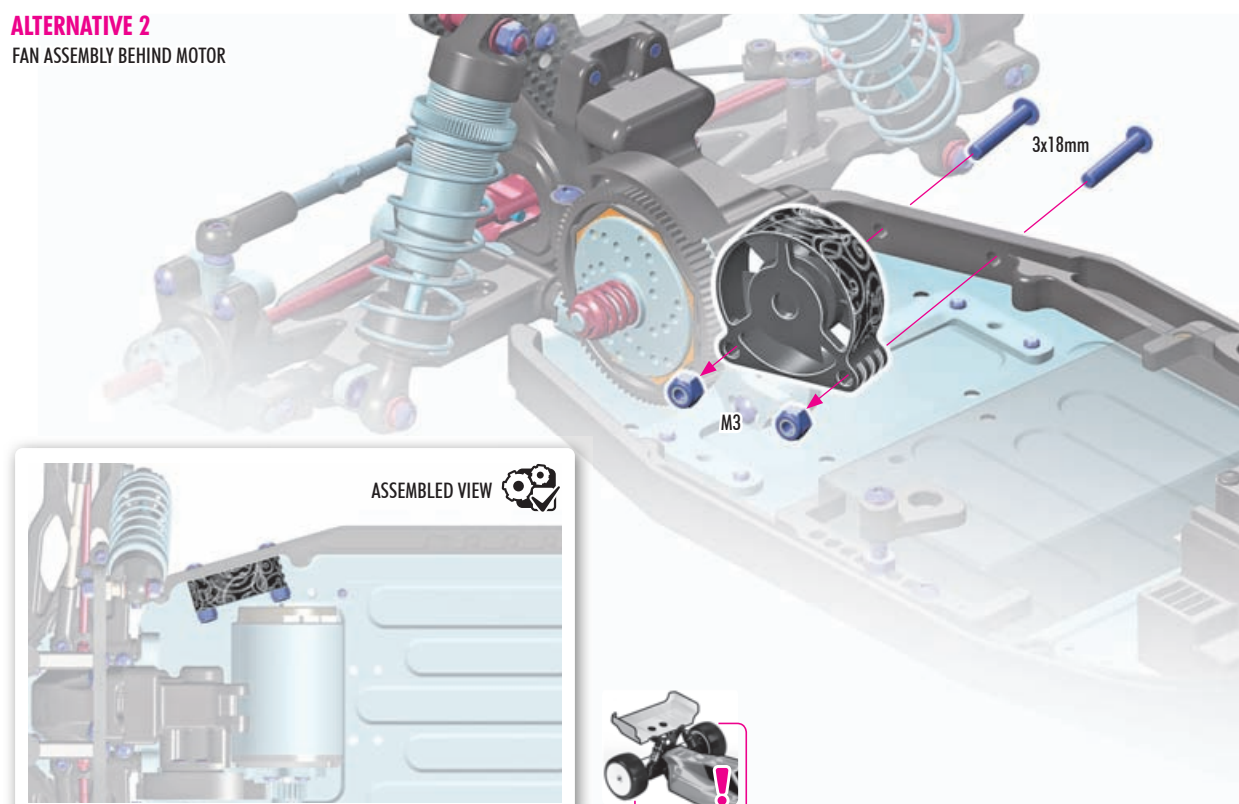
FAN ASSEMBLY BEHIND MOTOR



2x 902318
SH M3x18



2x 960030
NUT M3



ASSEMBLED VIEW

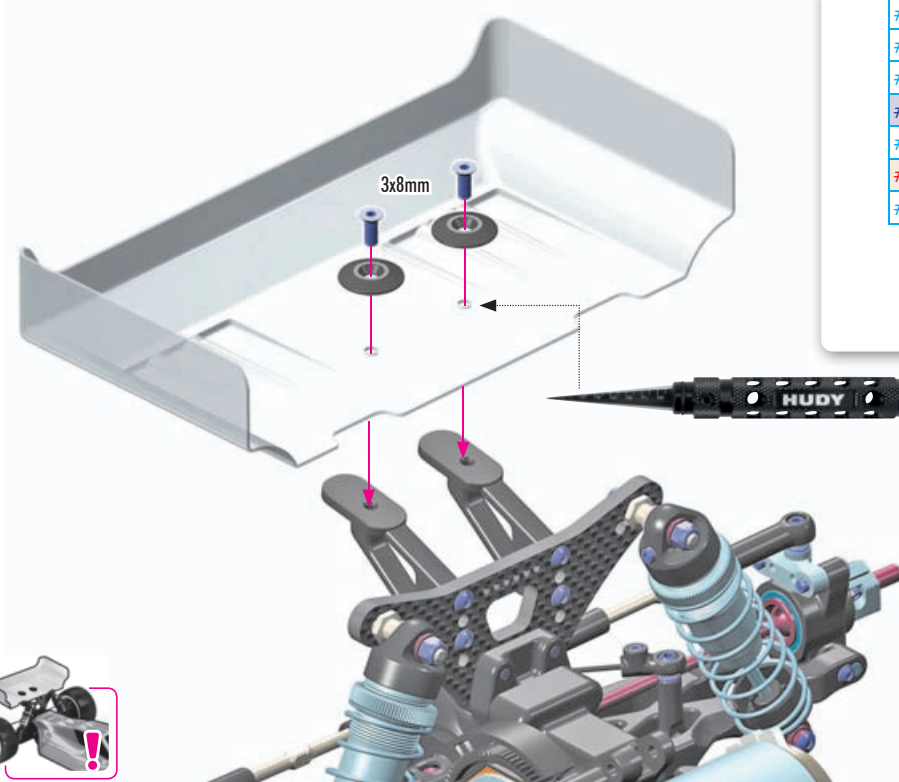


8. FINAL ASSEMBLY

CARPET DIRT



2x 903308
SFH M3x8



XRAY LEXAN REAR WINGS			
#323510	THIN		OPTION
#323511	THICK		OPTION
#323513	THIN	RANK	OPTION
#323517	THIN	TEC	INCLUDED
#323522	THIN	LUSH	INCLUDED
#323523	THICK	LUSH	OPTION
#323525	THIN	LUSH WIDE	INCLUDED
#323526	THICK	LUSH WIDE	OPTION



#107602
Reamer - HUDY EXCLUSIVE



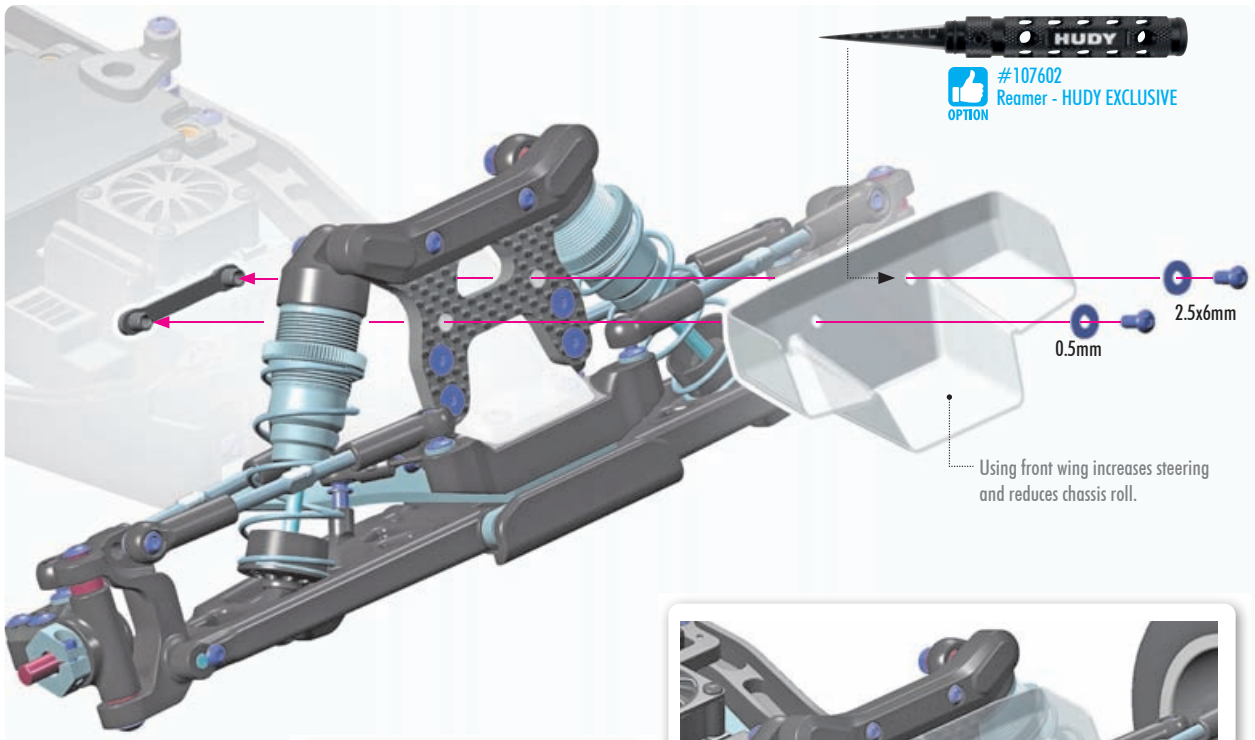
#323560
CARBON REAR WING SHIM



2x 902256
SH M2.5x6



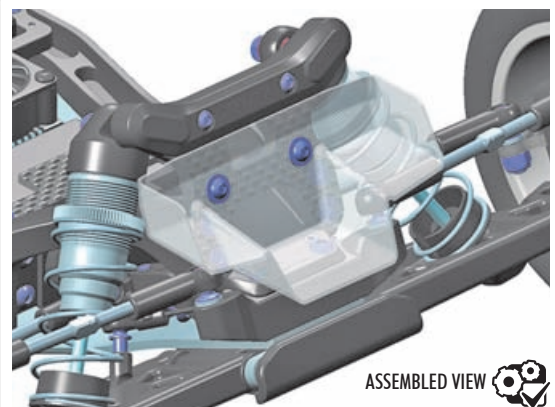
2x 961025
S 2.5



#107602
Reamer - HUDY EXCLUSIVE

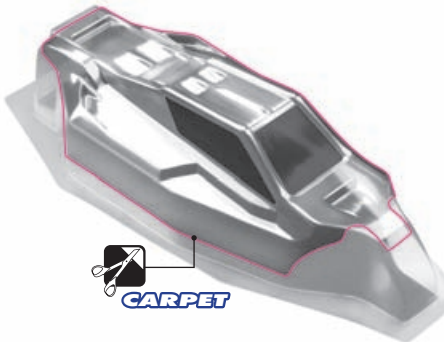
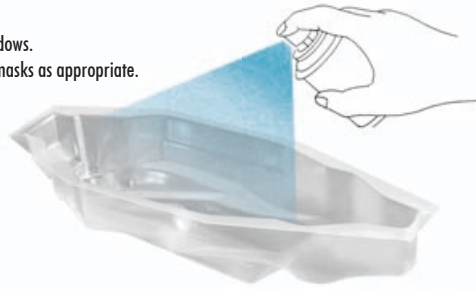


XRAY LEXAN FRONT WINGS		
#323518	WIDE	OPTION
#323519	WIDE-RIBBED	INCLUDED



ASSEMBLED VIEW

- ❶ Before cutting and making holes on the BODY, put the unpainted body on the chassis to confirm the mounting position and location for holes and cutouts. Before cutting and making holes on the WING, put the unpainted wing on the wing holders to confirm the mounting position and location for holes and cutouts.
- ❷ Before painting, wash the inside of the body with mild detergent, and then rinse and dry thoroughly.
- ❸ Mask all windows.
Apply paint masks as appropriate.



- ❹ Paint the body using paints formulated for polycarbonate bodies.
- ❺ When the paint is dry, remove the masking.
- ❻ Carefully cut out the body using appropriate scissors or cutting tools.
- ❼ When you have finished cutting, peel off the external protective films.

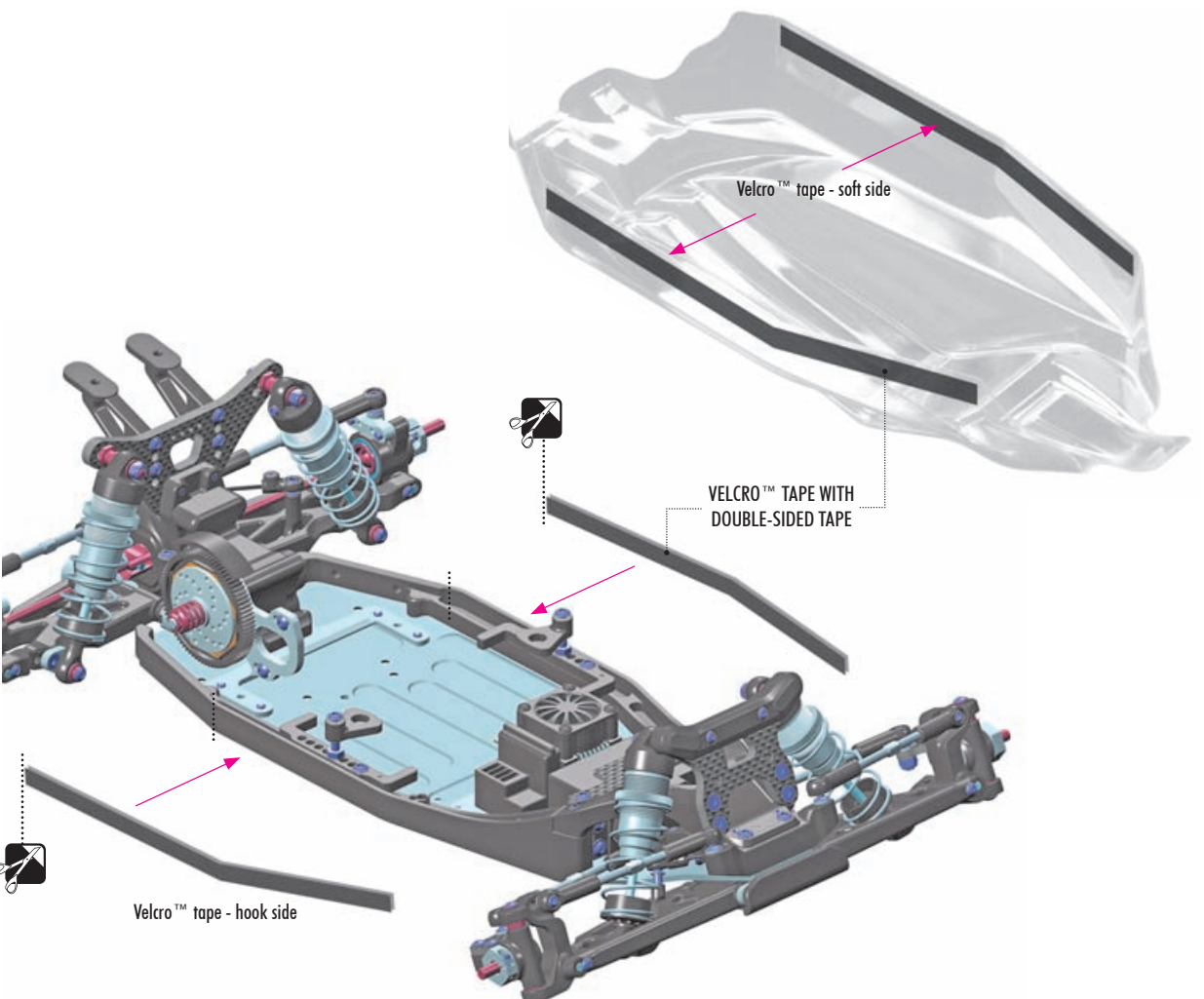


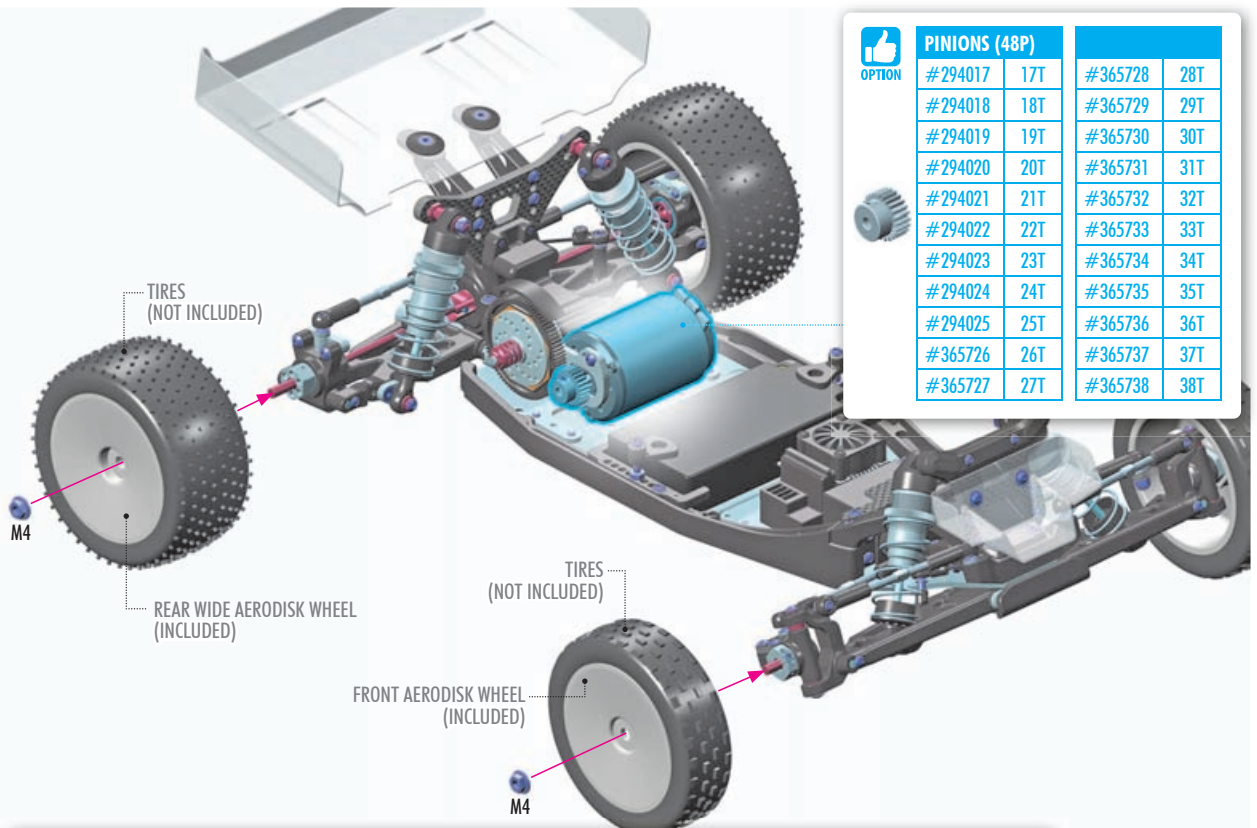
XRAY LEXAN BODY

#329718	THICK	PSILON 2D	OPTION
#329719	THIN	EPSILON 2DL	INCLUDED
#329720	THICK	EPSILON 2C	OPTION
#329721	THIN	EPSILON 2CL	INCLUDED



#106281
HUDY Body Fix 28g-1oz





PINIONS (48P)

#294017	17T	#365728	28T
#294018	18T	#365729	29T
#294019	19T	#365730	30T
#294020	20T	#365731	31T
#294021	21T	#365732	32T
#294022	22T	#365733	33T
#294023	23T	#365734	34T
#294024	24T	#365735	35T
#294025	25T	#365736	36T
#365726	26T	#365737	37T
#365727	27T	#365738	38T



XRAY FRONT AERODISK WHEELS

#329900-M	MEDIUM	WHITE	10pcs	OPTION
#329900-H	HARD	WHITE	10pcs	OPTION
#329900-Y	HARD	YELLOW	10pcs	OPTION
#329904-M	MEDIUM	SLIM WHITE	10pcs	OPTION
#329904-Y	MEDIUM	SLIM YELLOW	10pcs	OPTION



XRAY REAR AERODISK WHEELS

#329901-H	HARD	WHITE	10pcs	OPTION
#329901-Y	HARD	YELLOW	10pcs	OPTION



XRAY FRONT AERODISK WHEELS

#329910-M	MEDIUM	WHITE	2pcs	OPTION
#329910-H	HARD	WHITE	2pcs	INCLUDED
#329910-Y	HARD	YELLOW	2pcs	OPTION
#329914-M	MEDIUM	SLIM WHITE	2pcs	INCLUDED
#329914-Y	MEDIUM	SLIM YELLOW	2pcs	OPTION



XRAY REAR AERODISK WHEELS

#329913-H	HARD	WHITE	2pcs	INCLUDED
#329913-Y	HARD	YELLOW	2pcs	OPTION

HUDY FONT & REAR AERODISK WHEELS



803210	HUDY 1/10 OFF-ROAD WHEEL - 2WD FRONT WHITE (2)
803210-G	HUDY 1/10 OFF-ROAD WHEEL - 2WD FRONT GREEN (2)
803210-O	HUDY 1/10 OFF-ROAD WHEEL - 2WD FRONT ORANGE (2)
803210-Y	HUDY 1/10 OFF-ROAD WHEEL - 2WD FRONT YELLOW (2)
803211	HUDY 1/10 OFF-ROAD WHEEL - 2WD FRONT WHITE (10)
803211-G	HUDY 1/10 OFF-ROAD WHEEL - 2WD FRONT GREEN (10)
803211-O	HUDY 1/10 OFF-ROAD WHEEL - 2WD FRONT ORANGE (10)
803211-Y	HUDY 1/10 OFF-ROAD WHEEL - 2WD FRONT YELLOW (10)
803220	HUDY 1/10 OFF-ROAD WHEEL - 2WD FRONT NARROW WHITE (2)
803220-G	HUDY 1/10 OFF-ROAD WHEEL - 2WD FRONT NARROW GREEN (2)
803220-O	HUDY 1/10 OFF-ROAD WHEEL - 2WD FRONT NARROW ORANGE (2)
803220-Y	HUDY 1/10 OFF-ROAD WHEEL - 2WD FRONT NARROW YELLOW (2)
803221	HUDY 1/10 OFF-ROAD WHEEL - 2WD FRONT NARROW WHITE (10)
803221-G	HUDY 1/10 OFF-ROAD WHEEL - 2WD FRONT NARROW GREEN (10)
803221-O	HUDY 1/10 OFF-ROAD WHEEL - 2WD FRONT NARROW ORANGE (10)
803221-Y	HUDY 1/10 OFF-ROAD WHEEL - 2WD FRONT NARROW YELLOW (10)

HUDY FONT & REAR AERODISK WHEELS



803230	HUDY 1/10 OFF-ROAD WHEEL - 4WD FRONT WHITE (2)
803230-G	HUDY 1/10 OFF-ROAD WHEEL - 4WD FRONT GREEN (2)
803230-O	HUDY 1/10 OFF-ROAD WHEEL - 4WD FRONT ORANGE (2)
803230-Y	HUDY 1/10 OFF-ROAD WHEEL - 4WD FRONT YELLOW (2)
803231	HUDY 1/10 OFF-ROAD WHEEL - 4WD FRONT WHITE (10)
803231-G	HUDY 1/10 OFF-ROAD WHEEL - 4WD FRONT GREEN (10)
803231-O	HUDY 1/10 OFF-ROAD WHEEL - 4WD FRONT ORANGE (10)
803231-Y	HUDY 1/10 OFF-ROAD WHEEL - 4WD FRONT YELLOW (10)
803240	HUDY 1/10 OFF-ROAD WHEEL - 2WD/4WD REAR WHITE (2)
803240-G	HUDY 1/10 OFF-ROAD WHEEL - 2WD/4WD REAR GREEN (2)
803240-O	HUDY 1/10 OFF-ROAD WHEEL - 2WD/4WD REAR ORANGE (2)
803240-Y	HUDY 1/10 OFF-ROAD WHEEL - 2WD/4WD REAR YELLOW (2)
803241	HUDY 1/10 OFF-ROAD WHEEL - 2WD/4WD REAR WHITE (10)
803241-G	HUDY 1/10 OFF-ROAD WHEEL - 2WD/4WD REAR GREEN (10)
803241-O	HUDY 1/10 OFF-ROAD WHEEL - 2WD/4WD REAR ORANGE (10)
803241-Y	HUDY 1/10 OFF-ROAD WHEEL - 2WD/4WD REAR YELLOW (10)



#209200

HUDY CHASSIS PROTECTOR VINYL STICKER 360x125mm



XRAY TUNING PARTS - ASSEMBLY DETAILS

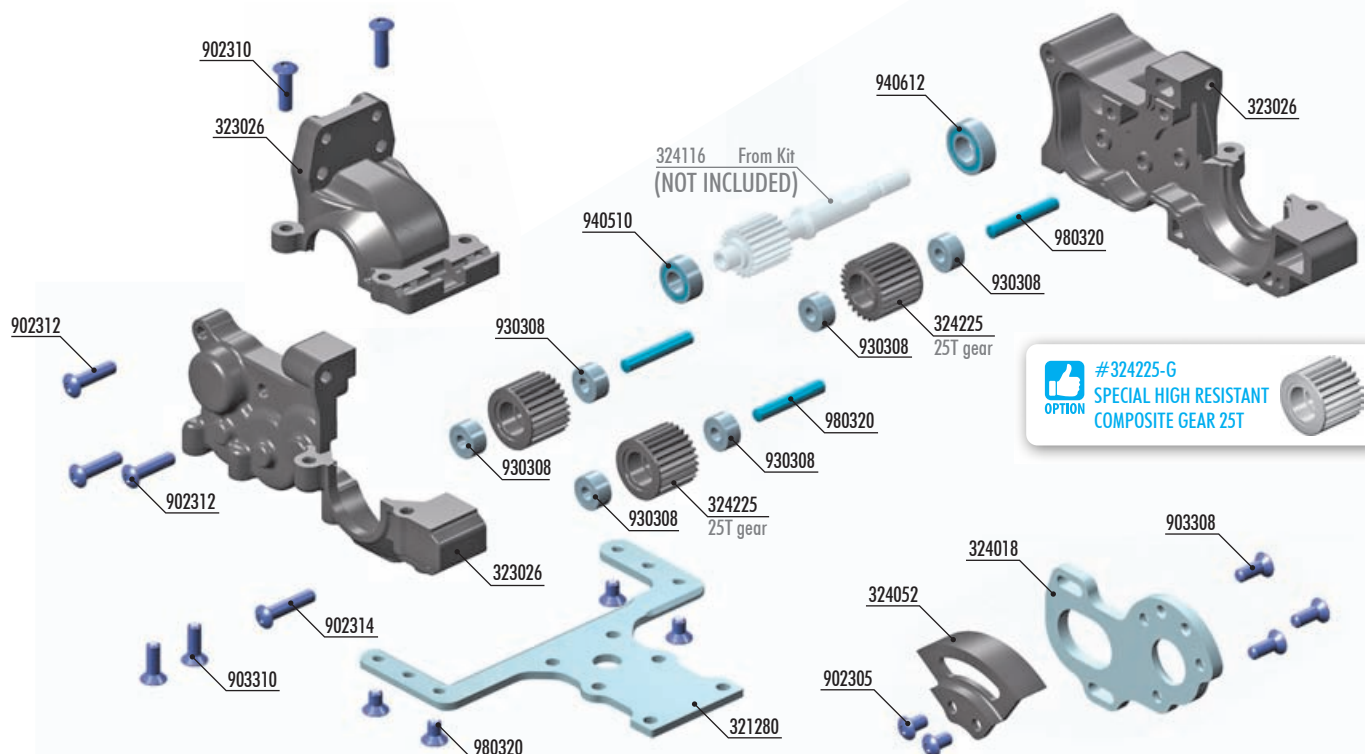
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#320905

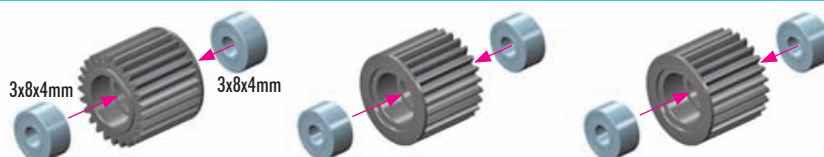
OPTION

XB2 5G GEAR BOX CONVERSION SET

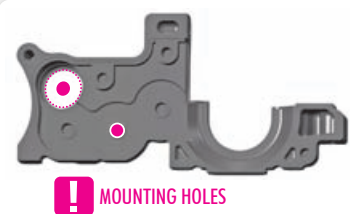
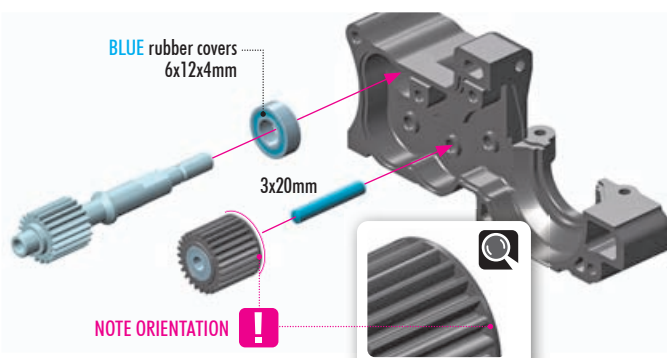


6x 930308
BB 3x8x4

3x



1x 940612
BB 6x12x4



! MOUNTING HOLES



#323026-G

COMPOSITE 5G GEAR BOX - GRAPHITE - SET

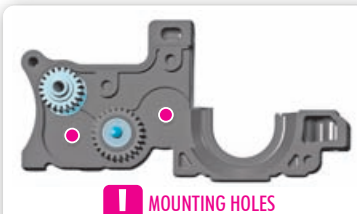
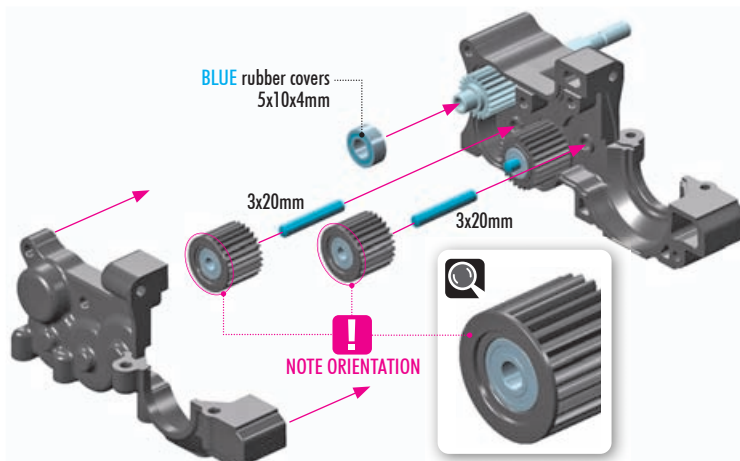
OPTION



1x 940510
BB 5x10x4



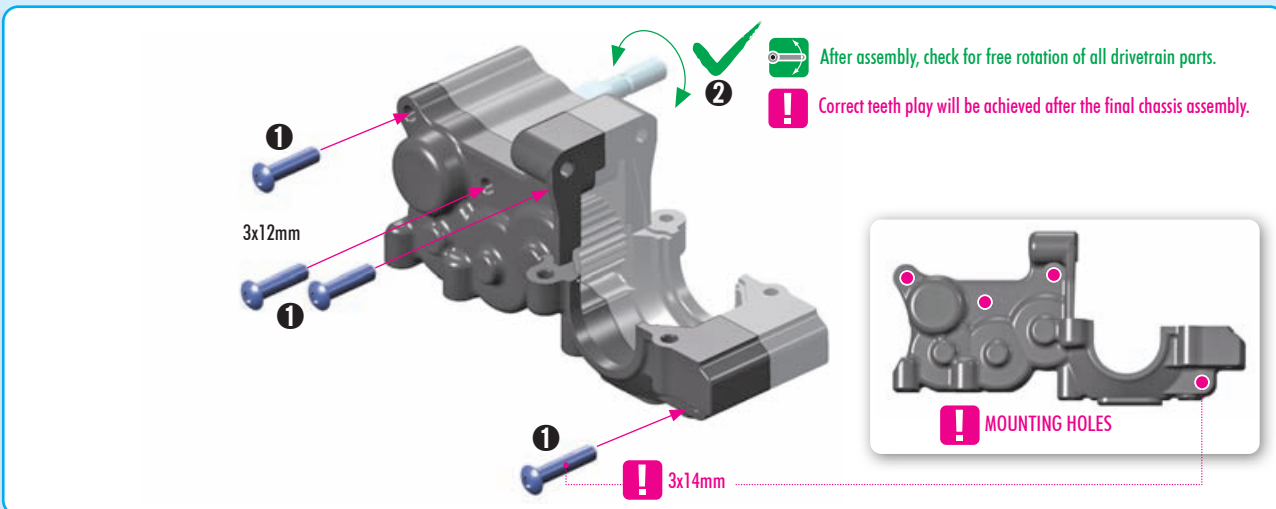
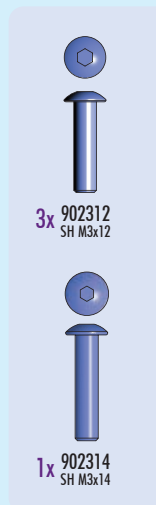
2x 980320
P 3x20



! MOUNTING HOLES

XRAY TUNING PARTS - ASSEMBLY DETAILS

(NOT INCLUDED)



! Next follow the 5G Gear Box assembly instructions following these pages and steps:

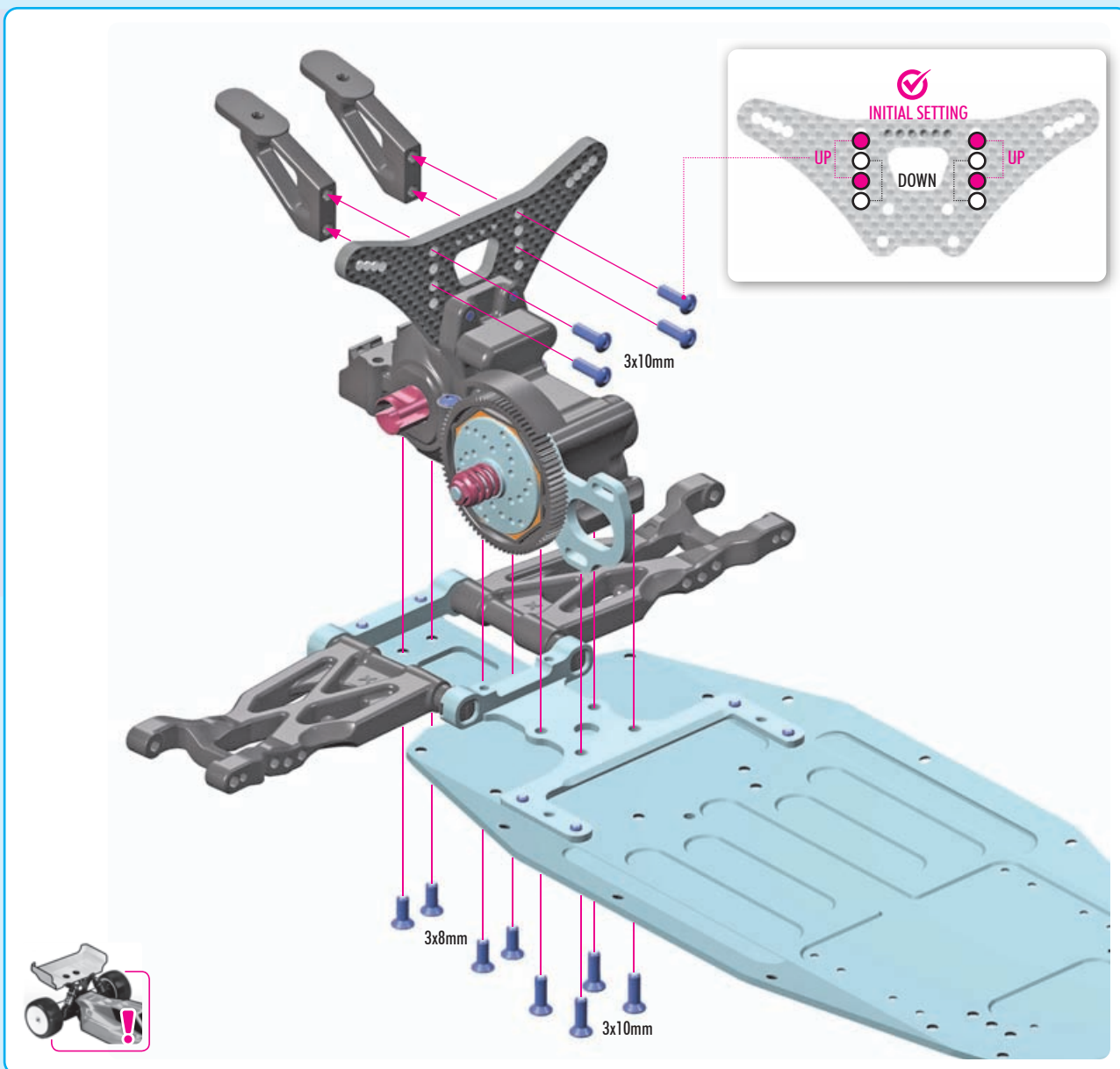
Page 11 / step 1

Page 22 / step 1 + step 2 + step 3

Page 24 / step 1

Page 25 / step 1 + step 2

! Some of the screws must be used from the kit.



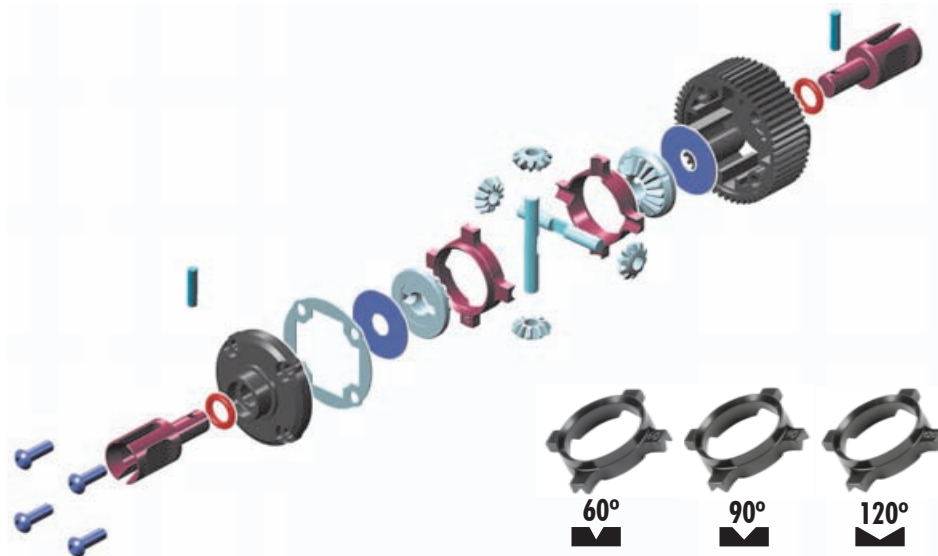
XRAY TUNING PARTS - ASSEMBLY DETAILS

(NOT INCLUDED)



#325101

XRAY XB2 ACTIVE DIFF - NARROW - SET



ACTIVE DIFF ON - AND OFF-POWER ACTION

ACTION	EFFECT
OFF-POWER	The Active Diff behaves the same as a standard gear differential. Adjustments are made using different viscosities of silicone oils; thinner oils resulting in more off-power steering with a more aggressive feel.
ON-POWER	The main advantage of the Active Diff is felt on-power. The diff action become heavier when throttle is applied, increasing forward drive and stability upon corner exit.

ACTIVE DIFF SEGMENTS	LOCK ON-POWER	TRACK CONDITIONS
#325123 60°	OPTION	LOW
#325125 90°	OPTION	MEDIUM
#325127 120°	INCLUDED	HIGH



#335080

STEEL DIFFERENTIAL PIN HARDCOATED (2)



#335081

ALU DIFFERENTIAL PIN HARDCOATED (2)



#304932

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



GEAR DIFF. CASES

#324912	HARD	INCLUDED
#324912-G	GRAPHITE	OPTION

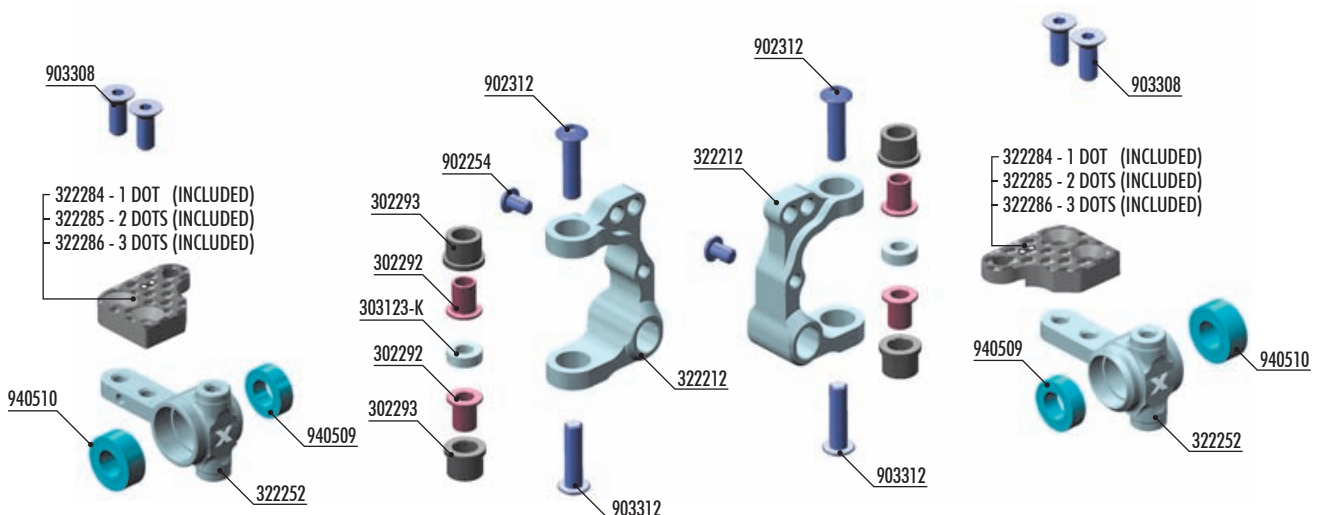
GEAR DIFF. PULLEYS

#324955	HARD	INCLUDED
#324955-G	GRAPHITE	OPTION

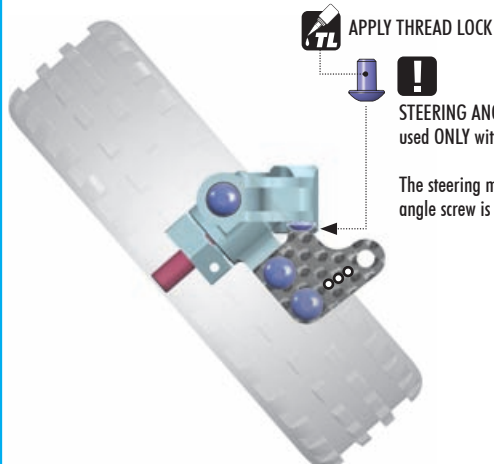
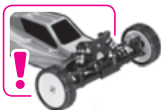
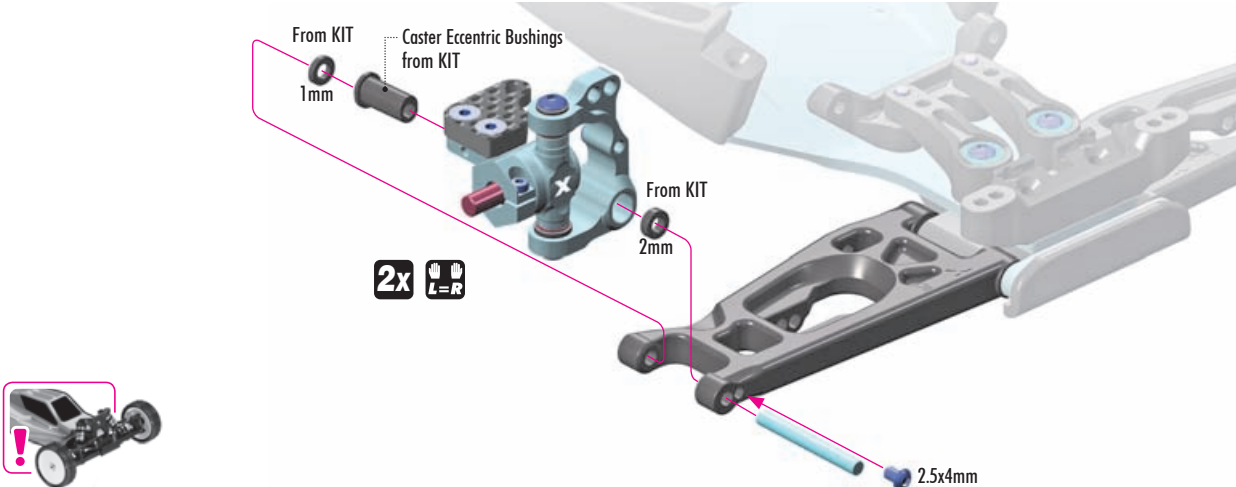
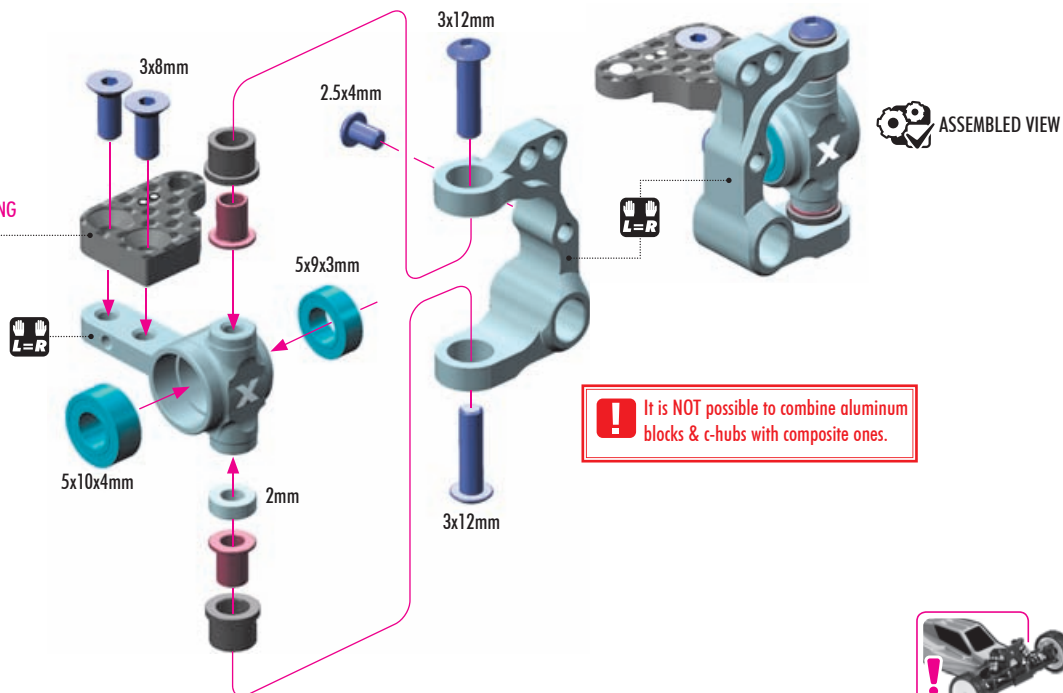


#320904

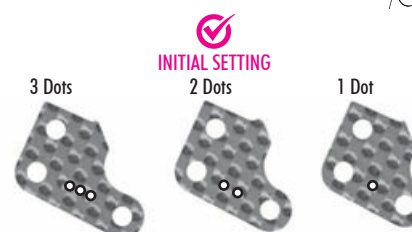
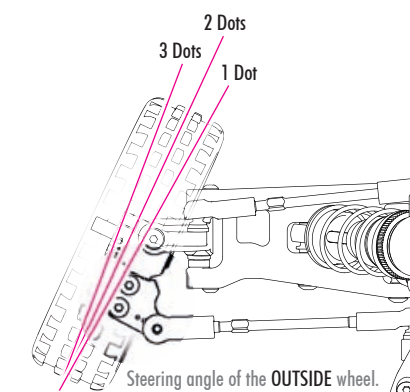
ALU STEERING BLOCKS & C-HUBS WITH BACKSTOP - SET



(NOT INCLUDED)



Steering angle of the **INSIDE** wheel.



XRAY TUNING PARTS

(NOT INCLUDED)

3G Rear Motor Position



- #323028 Composite 3G Gear Box For Chassis Brace - Set
- #321283 Alu Flat Chassis Brace for 3G Rear Motor Gear Box
- #324225 Composite Gear 25T - Graphite

3G Front Motor Position

CARPET included
DIRT included



- #323029 Composite 3G Gear Box For Chassis Brace - Set
- #321281 Alu Flat Chassis Brace for 3G Gear Box

5G Front Motor Position



33 parts included

- #320905 5G Gear Box Conversion - Set

XB2 Gear Box & Chassis Alternatives

Chassis Compatibility:



Alu Chassis		
Part number	Length	thickness
#321122	Mid Size	2.0mm
#321123	Short	2.0mm
#321126	Extra Short	2.0mm
#321125	Short	2.5mm
#321124	Mid-Size	2.5mm

Chassis Compatibility:



Alu Chassis		
Part number	Length	thickness
#321122	Mid Size	2.0mm
#321123	Short	2.0mm
#321126	Extra Short	2.0mm
#321125	Short	2.5mm
#321124	Mid-Size	2.5mm

Chassis Compatibility:



Alu Chassis		
Part number	Length	thickness
#321122	Mid Size	2.0mm
#321123	Short	2.0mm
#321126	Extra Short	2.0mm
#321125	Short	2.5mm
#321124	Mid-Size	2.5mm

XB2 Gear Box Graphite Composite Mixture Alternatives



Composite 3G Gear Box Rear motor position
Graphite composite mixture - (NOT AVAILABLE)



Graphite composite mixture

- #323029-G Composite 3G Gear Box - Graphite - Set



Graphite composite mixture

- #323026-G Composite 5G Gear Box - Graphite - Set



SET-UP TUNING



STRENGTH



STYLE



PERFORMANCE



WEIGHT SAVING



#322046

Alu Front Roll-Center Holder for Bridge Upper Deck - Swiss 7075 T6

- Increases strength & reliability
- Increases precision and feeling
- Features two-roll center positions
- Premium Swiss 7075 T6 aluminum



SET-UP TUNING



STRENGTH



STYLE



PERFORMANCE



WEIGHT SAVING



#322575

Alu Steering Plate for 1-Piece Chassis - Set

- More precise steering
- Increased strength & reliability
- Premium Swiss 7075 T6 aluminum
- Black coated



SET-UP TUNING



STRENGTH



STYLE



PERFORMANCE



WEIGHT SAVING



#322516

Alu Steering Arm for 1-Piece Chassis - Swiss 7075 T6 (2)

- More precise steering
- Increased strength & reliability
- Premium Swiss 7075 T6 aluminum
- Black coated



SET-UP TUNING



STRENGTH



STYLE



PERFORMANCE



WEIGHT SAVING

XRAY TUNING PARTS
(NOT INCLUDED)

#321124 **CARPET** included
#321125 **DIRT** included



XB2 Alu Chassis

- CNC-machined one-piece chassis - Premium Swiss 7075 T6 aluminum
- Integrated Flat Chassis Brace allows adjustable chassis flex tuning
- Optimized layout for lower CG and improved weight distribution
- Available in five different chassis types to suit any track condition
- Fits the latest battery types
- Universal for both Dirt & Carpet edition

OTHER VARIANTS:

XB2 Alu Chassis		
Part number	Length	Size
#321122	Mid Size	2.0mm
Chassis with increased flex designed for high-traction conditions where increased stability is required, primarily for carpet tracks.		
#321123	Short	2.0mm
Chassis with increased flex, designed for medium traction conditions, primarily for dirt surfaces.		
#321126	Extra Short	2.0mm
This chassis is specifically designed for use on ultra low-traction and highly slippery track conditions, primarily on dirt surface.		
#321125	Short	2.5mm
Chassis designed for medium - traction conditions, primarily for dirt surfaces.		
#321124	Mid-Size	2.5mm
Chassis designed for high-traction conditions where increased stability is required, primarily for carpet tracks.		

#320904

Alu Steering Blocks & C-hubs with Backstop - Set

- Complete set of alu steering blocks and C-hubs
- Ultra-strong construction
- Reduces flex
- Improves consistency
- Premium Swiss 7075 T6 aluminum

- Long life
- Durable
- For all track conditions

#325341

Alu shim

#325390

Rear Adjustable Drive Axle LB
HUDY Spring Steel™

- Unique length adjustment
 - Precise fit
 - Highly durable
 - Lightweight
- Extra-long lifespan
 - HUDY Spring Steel™

#980320-T

Titanium Pin 3x20 (2)

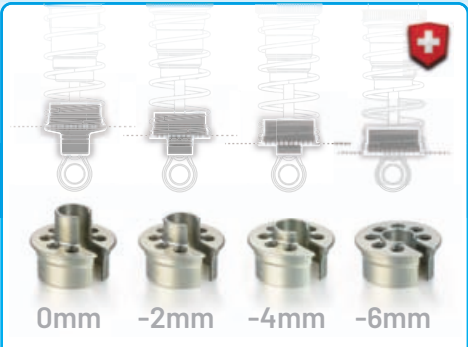
- Ultra-precision hand ground for high durability
- Long life
- More than 40% lighter compared to standard steel pins
- Fits all XB2 gear boxes
- Set of 2

#321211

Alu Front Lower Arm Mount +3°/-3°
Kick-Up Brace - 7075 T6 (3MM)

- Integrated +3°/-3° kick-up brace
- For use with #322317, #322313 or #322314 arm mounts
- Two different alternatives
- Premium Swiss 7075 T6 aluminum

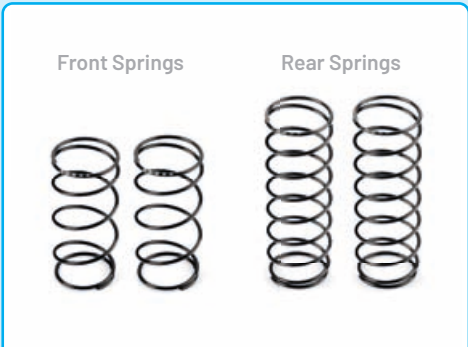
XRAY TUNING PARTS
(NOT INCLUDED)



Alu Shock Spring Retaining Collar (4)

- CNC-machined shock spring retaining collars
- Premium Swiss 7075 T6 aluminum
- Lowers ride height and center of gravity
- Improves vehicle stability and handling
- Set includes 4 pieces

ALUMINUM SHOCK COLLARS
Set of lower aluminum shock collars for increased reliability. Stylish and lightweight collars are CNC machined from premium Swiss 7075 T6 aluminum and are strategically lightened. Set of four.



Front & Rear Shock Spring-Set

- Conical springs for big bore shocks
- Manually measured, selected & matched
- Laser engraved
- Matched pairs guarantee equal damping characteristics

OTHER VARIANTS:

Front Springs		
Part number	Length	Marked
#368381	L=42.5mm	1 Dots
#368382	L=42.5mm	2 Dots
#368383	L=42.5mm	3 Dots
#368384	L=42.5mm	4 Dots
#368385	L=42.5mm	5 Dots

Rear Springs		
Part number	Length	Marked
#368481	L=57.5mm	1 Dots
#368482	L=57.5mm	2 Dots
#368483	L=57.5mm	3 Dots
#368484	L=57.5mm	4 Dots
#368485	L=57.5mm	5 Dots



Alu Multi Adjustable Rear Uprights Swiss 7075 T6

- Alu rear upright with lower or upper arm mounting
- Multi adjustable roll centers and track width
- Increases stability
- Premium Swiss 7075 T6 aluminum
- For high & very high traction tracks where increased stability is needed

OTHER VARIANTS:

Rear Uprights		
Part number	Length	Position
#323354-M	Medium	Upper
#323357-M	Medium	Lower
#323354-H	Hard	Upper
#323354-G	Graphite	Upper
#323357-G	Graphite	Lower
#323355	Alu High	Upper
#323356	Alu Low	Lower

- UPPER position**
We recommend for these types of surfaces and traction:
• DIRT low & high traction
• Wet ASTRO
- LOWER position**
We recommend for these types of surfaces and traction:
• CARPET
• Dry ASTRO
• DIRT very high traction



Alu Shock Cap-Nut With Vent Hole - Big Bore (2)

- Alu upper shock caps for big bore shocks
- Features vent hole
- Increased durability
- Extended life time
- Includes shims for uptravel adjustment
- Premium Swiss 7075 T6 aluminum



Precision Ground Shock Piston Blanks 2.5mm - Big Bore (4)

- Precisely grounded for perfectly finished surface for smoother operation
- Made from Delrin
- Shock Piston Blanks for big bore shocks



Precision Ground Shock Piston Blanks 2.0mm - Big Bore (4)

- Precisely grounded for perfectly finished surface for smoother operation
- Made from Delrin
- Shock Piston Blanks for big bore shocks



#324103
72T included in set

Slipper Eliminator - LCG
Ultra-Lightweight - Set

- Eliminates slipper effect
Specially designed for stock class
Reduces maximum rotation mass
Increases acceleration
Reduces weight of drivetrain
 - Ultra lightweight
Includes 72T spur gear
Premium Swiss 7075 T6 aluminum
- Recommended for stock motor classes. Reduces rotating mass, reduces vehicle weight, and maximizes power throughput by eliminating the slipper clutch.
- With the Slipper Eliminator, motor output & driveline impacts are transferred directly through the transmission gears, increasing the potential for transmission gear damage.

OTHER VARIANT:

#325869
Slipper Eliminator Spur Gear 69T / 48P

SET-UP TUNING STRENGTH STYLE PERFORMANCE WEIGHT SAVING

Composite C-Hubs

Composite C-Hubs

- Durable
Reliable
Increased stability
More predictable handling
For all traction alternatives
- MEDIUM:
For low traction. More steering on low traction.
- HARD:
For medium traction. More steering, more free in corners.
- GRAPHITE:
For high traction. More precise steering, less stopping in corners.

OTHER VARIANTS:

C-Hubs		
Part number	Orientation	Hardness
#322210-M	Right	Medium
#322210-H	Right	Hard
#322210-G	Right	Graphite
#322220-M	Left	Medium
#322220-H	Left	Hard
#322220-G	Left	Graphite

SET-UP TUNING STRENGTH STYLE PERFORMANCE WEIGHT SAVING

Alu Wheel Hex Hubs 12mm

Alu Wheel Hex Hubs 12mm

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

OTHER VARIANTS:

Alu Wheel Hex Hubs 12mm		
Part number	Size	Slots
#365360	+4,5mm	6
#365359	+3,75mm	5
#365358	+3.0mm	4
#365357	+2,25mm	3
#365356	+1,5mm	2
#365355	+0,75mm	1
#365353	+0mm	0
#365354	-0.75mm	Lightweight
#365361	-1,25mm	Lightweight

SET-UP TUNING STRENGTH STYLE PERFORMANCE WEIGHT SAVING

#326178

Graphite Battery Backstop
3.5mm - Lower (2)

- Higher strength
Lightweight design
Premium-grade graphite material
Direct replacement for composite backstop
- SET-UP TUNING STRENGTH STYLE PERFORMANCE WEIGHT SAVING

#324017

Graphite Motor Plate - LCG 3.0mm

- Ultra-lightweight for better handling
Thickness: 3.0 mm
Low Center of Gravity (LCG) layout
Naturally absorbs vibrations from the motor
- SET-UP TUNING STRENGTH STYLE PERFORMANCE WEIGHT SAVING

#364132

Slipper Clutch Pad Black
Medium (2)

- Provides stronger and more consistent slip control under power
Ideal for carpet, turf, and grooved clay where grip is high
Reduces wheel spin and allows better throttle modulation
Handles longer runs without glazing or fading
- SET-UP TUNING STRENGTH STYLE PERFORMANCE WEIGHT SAVING

XRAY TUNING PARTS
(NOT INCLUDED)



Rear Suspension Arms

- Additional inside shock mounting position to expand set-up options
- Shock mounting set-up alternatives for every condition
- Different hardness available for additional tuning options

Standard Rear Arms		
Part number	Orientation	Hardness
#363114-M	Right	Medium
#363124-M	Left	Medium
#363114-H	Right	Hard
#363124-H	Left	Hard
#363114-G	Right	Graphite
#363124-G	Left	Graphite

Disengaged Rear Arms		
Part number	Orientation	Hardness
#323113-M	Right	Medium
#323123-M	Left	Medium
#323113-H	Right	Hard
#323123-H	Left	Hard
#323113-G	Right	Graphite
#323123-G	Left	Graphite



Front Suspension Arms

- Improves the strength to avoid crash related failures
- Different hardness arms are available for additional turning options

Front LSM Suspension Arms - SHORT		
Part number	Orientation	Hardness
#323113-M	Right	Medium
#323123-M	Left	Medium
#323113-H	Right	Hard
#323123-H	Left	Hard
#323113-G	Right	Graphite
#323123-G	Left	Graphite

Front LSM Suspension Arms - LONG		
Part number	Orientation	Hardness
#322117-M	Right	Medium
#322127-M	Left	Medium
#322117-H	Right	Hard
#322127-H	Left	Hard
#322117-G	Right	Graphite
#322127-G	Left	Graphite

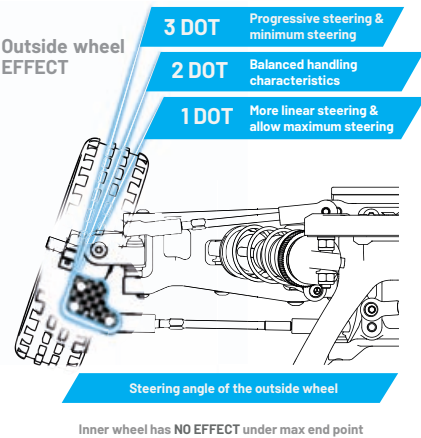


Carbon Extension for Steering Block

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

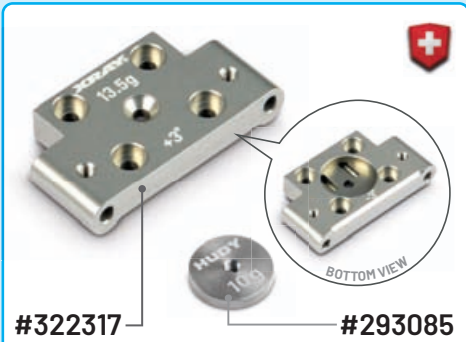
OTHER VARIANTS:

Steering Block Extensions	
#322294	1 Dot
#322296	3 Dots



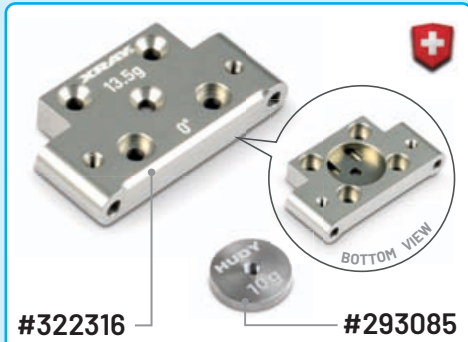
Brass 46g Front Lower Arm Mount 0° - V2

- 46g adds weight
- Integrated kick-up
- Fine set-up adjustment
- Optional front arm mounts



Alu Front Lower Arm Mount +3° / -3° - Swiss 7075 T6

- Makes the car more stable
- Increases on-power steering
- Allows to increase or decrease the kick-up
- Two different alternatives
- Premium SWISS 7075 T6 aluminum



Alu Front Lower Arm Mount 0° - Swiss 7075 T6

- Makes the car more stable
- Increases on-power steering
- Two different alternatives
- Premium SWISS 7075 T6 aluminum



XRAY TUNING PARTS
(NOT INCLUDED)



#325101

XRAY XB2 Active Differential - Narrow - Set

- Improves speed
- Improves handling
- Increases the forward traction
- Improves stability
- Makes the car easier to drive

SET-UP TUNING

STRENGTH

STYLE

PERFORMANCE

WEIGHT SAVING



#335031

DIFF BEVEL & SATELLITE GEARS FOR O-RINGS - SET

- Diff gears with self-locking effect
- Improved consistency
- Suitable for higher traction tracks
- More forward traction

SET-UP TUNING

STRENGTH

STYLE

PERFORMANCE

WEIGHT SAVING



#324912-G

Composite Gear Differential Cover - LCG - Narrow - Graphite

- Special graphite composite mixture
- For the narrower LCG differential
- Lightweight
- More durable
- Higher temperature resistance
- Higher wear resistance

SET-UP TUNING

STRENGTH

STYLE

PERFORMANCE

WEIGHT SAVING



#324955-G

Gear Diff Case with 53T Pulley LCG - Narrow - Graphite

- Special graphite composite mixture
- For the narrower LCG differential
- Lightweight
- More durable
- Higher temperature resistance
- Higher wear resistance

SET-UP TUNING

STRENGTH

STYLE

PERFORMANCE

WEIGHT SAVING



#304932

Graphite Gear Diff Bevel & Satellite Gears (2+4) - Low

- Graphite differential gears 2 bevel + 4 satellite gears
- Made from lightweight
- Ultra-strong graphite composite material
- Enhances drivetrain efficiency and reduces gear wear
- Minimizes risk of tooth stripping or breakage under stress

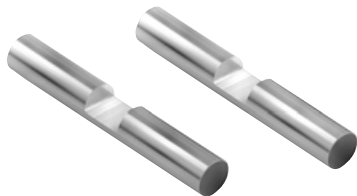
SET-UP TUNING

STRENGTH

STYLE

PERFORMANCE

WEIGHT SAVING



#335080

Steel Differential Pin (2)

- Long life
- Extra durable
- CNC-machined

SET-UP TUNING

STRENGTH

STYLE

PERFORMANCE

WEIGHT SAVING



#335081

Alu Differential Pin - Hardcoated (2)

- Long life
- Extra durable
- CNC-machined
- Alu hard coated pins
- Light
- Strong
- Premium Swiss 7075 T6 aluminum

SET-UP TUNING

STRENGTH

STYLE

PERFORMANCE

WEIGHT SAVING



#930220

Ceramic Ball 2.4mm (12)

- Significant improvement of differential lifespan
- Extra-hard Si3N4 silicone nitride
- Reduces friction & vibration
- Premium-quality
- Higher RPM capabilities

SET-UP TUNING

STRENGTH

STYLE

PERFORMANCE

WEIGHT SAVING

XRAY TUNING PARTS

(NOT INCLUDED)

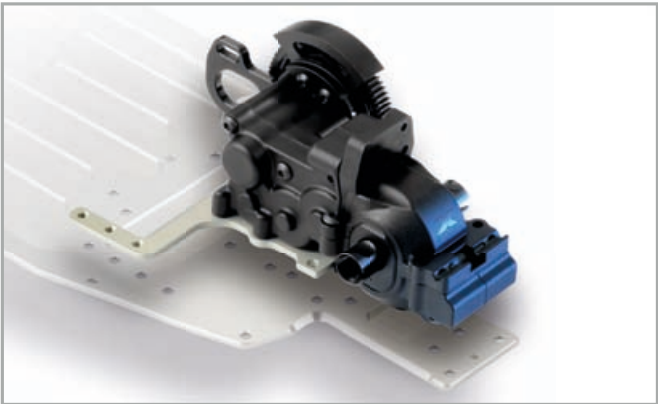
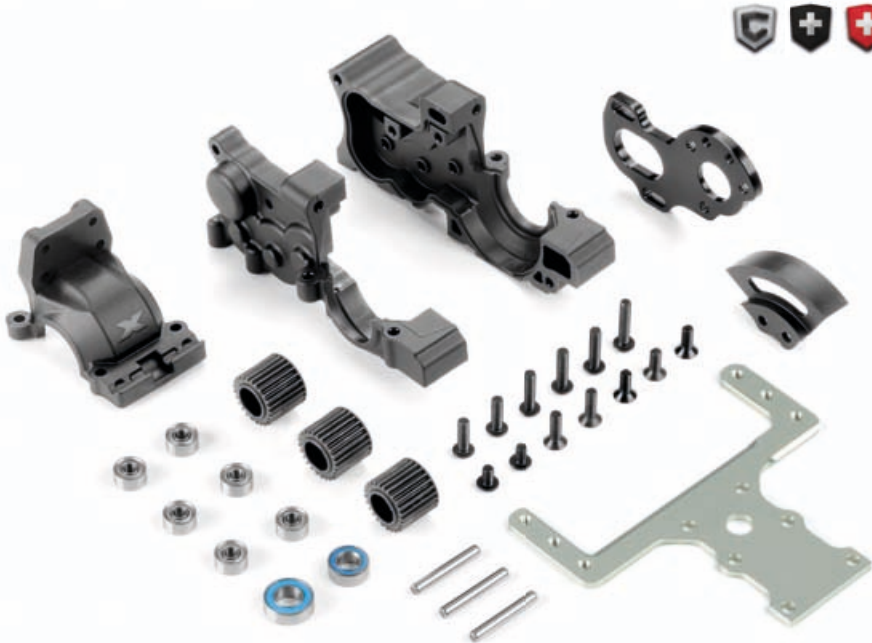


Composite 3-Pad Slipper Clutch Spur Gear - 48P

- Exclusive secret blend of composite material
- Precision-molded
- Extra-strong
- Lightweight
- Stamped for easy identification

OTHER VARIANTS:

Composite Spur Gears	
Part number	Gearing
#365872	72T
#365875	75T
#365878	78T
#365881	81T



#320905

XB2 5G Gear Box Conversion Set

SET-UP TUNING

STRENGTH

STYLE

PERFORMANCE

WEIGHT SAVING

- Huge improvement in performance & handling in middle to high traction conditions
- Incredible handling making the car flatter & easier to drive
- Increases speed in & out of the corners
- Increases rotation which provides 20% more steering
- Lowers CG

SET-UP TUNING

STRENGTH

STYLE

PERFORMANCE

WEIGHT SAVING



#321255-G

Composite Elevated Side Braces L+R - Long - Graphite

- Specially-formulated graphite composite mixture
- For high-traction conditions
- Improves stability
- Makes car more predictable

SET-UP TUNING

STRENGTH

STYLE

PERFORMANCE

WEIGHT SAVING



#326153

Stainless Steel Weight under Servo 1-Piece Chassis 13g

- Stainless steel weight under servo
- Including hex screws 110 SFH M2x3mm (#913203)
- Easy installation
- Stainless steel weights 13g

SET-UP TUNING

STRENGTH

STYLE

PERFORMANCE

WEIGHT SAVING



#326181

Stainless Steel Battery Weight 35g

- 35g Added weight
- Stainless steel material
- Inserted under battery directly on chassis
- Easier to drive
- Improves landing
- Lower cg

SET-UP TUNING

STRENGTH

STYLE

PERFORMANCE

WEIGHT SAVING

HUDY SET-UP TOOL & ACCESSORIESS

(NOT INCLUDED)



TOE

CASTER

FRONT & REAR CAMBER

WHEEL NUTS INCLUDED

SET-UP BOOK

STEERING

CARRYING BOX & FOAM INSERTS


ASSEMBLY NUTS INCLUDED

#108901

HUDY Set-Up Station for 1/10 Off-road

- Precision track-width change
 - 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 form tough acrylic plastic
 - All components have prevision 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





#293421(23T) #293422 (25T)

Alu Clamp Steering Servo Horn
Extended 8mm

- Increase reliability & strength
 - Extended 8mm mounting arm
 - More precise steering
 - Clamp design for easy assembly
 - Eliminates usage of additional shims
- Drilled & tapped with 3mm thread
 - Premium Swiss 7075 T6 aluminum





#104004

HUDY Air Vac - Vacuum Pump
1/10 Off-Road - V2

- Removes air from shock absorbers & diffs in seconds
- Ultra compact & handy design
- Includes holders for shock absorbers & differential
- Included 600mm connecting cable with gold-plated banana plugs
- Premium hard case for safe storage & transport



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	
#908320-T	20mm	4	
#908322-T	22mm	4	
#908325-T	25mm	4	



HUDY Titanium Flat Head Screw

OTHER VARIANTS:

Part number	Length	Pcs	Image
#903305-T	5mm	10	
#903306-T	6mm	10	
#903308-T	8mm	10	
#903310-T	10mm	10	
#903312-T	12mm	10	
#903316-T	16mm	4	



EXCLUSIVE PROFESSIONAL

HUDY

108601 - Grey

108603 - Dark Gray

108602 - Silver Gray

108604 - Titan

108605-Black

199183

104004

107701

106000 + 106036

109801

181090

107740

107742

293100

293101

293110

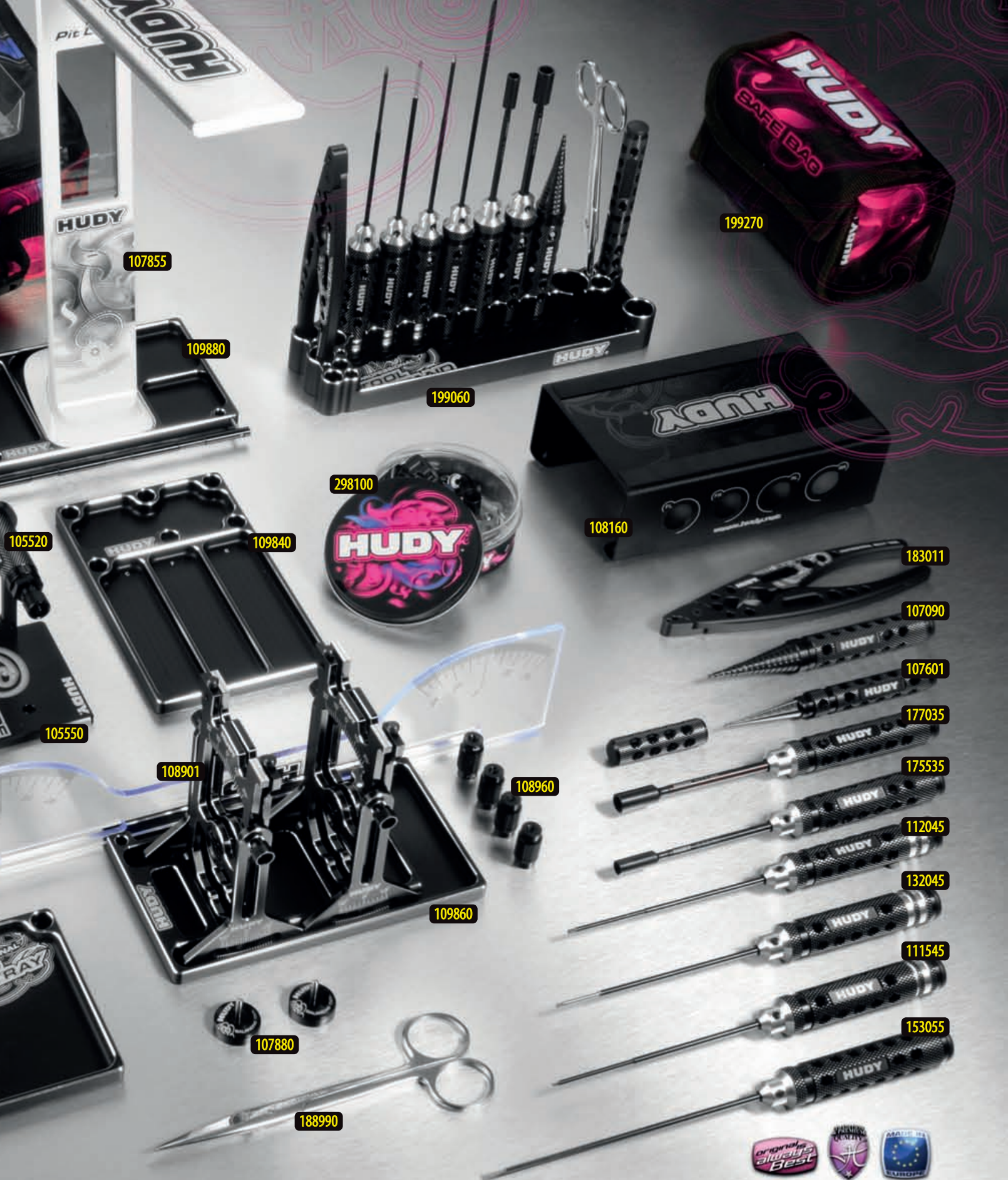
293112

181030

108190

104004 HUDY AIR VAC - VACUUM PUMP - 1/10 OFF-ROAD
105500 HUDY UNIVERSAL TIRE BALANCING STATION
105520 WHEEL ADAPTER FOR 1/10 TOURING CARS - 12MM
106000 HUDY DRIVE PIN REPLACEMENT TOOL (FOR 3MM PINS)
106036 EJECTOR PIVOT PIN & ALTERNATING PIVOT 2.5MM FOR #106000
107090 HUDY BEARING CHECKING TOOL
107601 LIMITED EDITION - REAMER FOR BODY Ø-9MM + COVER - SMALL
107701 CHASSIS DROOP GAUGE SUPPORT BLOCKS 20MM FOR 1/8 - LW(2)
107740 HUDY ADJUSTABLE RIDE HEIGHT GAUGE 14-20MM
107742 HUDY ADJUSTABLE RIDE HEIGHT GAUGE 20-30MM
107855 HUDY PIT LED
107880 CHASSIS BALANCING TOOL (2)

108160 HUDY 1/10 OFF-ROAD CAR STAND - V2
108190 HUDY ALU TRAY FOR PARTS
108601 FLAT SET-UP BOARD FOR 1/10 OFF-ROAD - LIGHTWEIGHT - GREY
108602 FLAT SET-UP BOARD FOR 1/10 OFF-ROAD - LIGHTWEIGHT - SILVER GREY
108603 FLAT SET-UP BOARD FOR 1/10 OFF-ROAD - LIGHTWEIGHT - DARK GREY
108604 FLAT SET-UP BOARD FOR 1/10 OFF-ROAD - LIGHTWEIGHT - TITAN
108605 FLAT SET-UP BOARD FOR 1/10 OFF-ROAD - LIGHTWEIGHT - BLACK
108901 HUDY SET-UP STATION FOR 1/10 OFF-ROAD CARS
108960 ALU NUT FOR 1/10 OFF-ROAD SET-UP SYSTEM (4)
109801 HUDY ALU TRAY FOR 1/10 OFF-ROAD DIFF & SHOCKS
109840 HUDY ALU TRAY FOR 1/10 OFF-ROAD DIFF ASSEMBLY
109860 HUDY ALU TRAY FOR SET-UP SYSTEM



109880 HUDY ALU TRAY FOR ACCESSORIES & PIT LED
 111545 LIMITED EDITION - ALLEN WRENCH # 1.5MM
 112045 LIMITED EDITION - ALLEN WRENCH # 2.0MM
 132045 LIMITED EDITION - ALLEN WRENCH + BALL REPL. TIP # 2.0MM
 153055 LIMITED EDITION - SLOTTED SCREWDRIVER # 3.0MM - LONG
 175535 LIMITED EDITION - SOCKET DRIVER # 5.5MM
 177035 LIMITED EDITION - SOCKET DRIVER # 7.0MM
 181030 HUDY SPRING STEEL TURNBUCKLE WRENCH 3 MM
 181090 HUDY SPECIAL TOOL FOR TURNBUCKLES & NUTS
 183011 HUDY PROFESSIONAL MULTI TOOL

188990 HUDY PROFESSIONAL BODY SCISSORS
 199060 HUDY ALU TOOL STAND
 199183 HUDY CAR BAG - 1/10 OFF-ROAD
 199270 HUDY LIPO SAFETY BAG
 298100 HUDY TIN ROUND BOX 80X30MM
 293100 HUDY ALU RC FAN 30MM - BOTTOM MOUNT 2 HOLE
 293101 HUDY ALU RC FAN 30MM - SIDE MOUNT 2 HOLE
 293110 HUDY BRUSHLESS RC FAN 30MM - WITH EXTERNAL SOLDERING TABS
 293112 HUDY BRUSHLESS RC FAN 30MM - WITH INTERNAL SOLDERING TABS

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

www.hudy.net

SHOCK MAINTENANCE

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

- For club racing, it is recommended to check the shocks for air inside before each race and only re-fill and bleed them if necessary. Before each race day, make sure you take the spring off of each shock, hold it up to your ear, and quickly compress the shock rod fully into the body while listening for any air making a "whistling" or "squishy" sound as it passes through the piston holes. If you hear any air, refill and bleed your shocks. For high-competition racing, it is recommended that the shocks be re-filled and bled before a large event.
- If building or pairing new shocks, always make sure they are the same length using a shock length measuring tool and adjust the lower ball joints as needed.
- During regular shock operation, oil naturally gets on the shock shaft and drop-by-drop slightly gets out of the shock body. Shocks should be inspected regularly after each race, and oil replaced as required.

BEARING MAINTENANCE

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

The ball-bearings are degreased and are lubricated with HUDY Bearing Oil. The following procedures are recommended to clean all of the bearings in your off-road car. For high-competition racing, we recommended doing this every 3-4 weeks, or before a major race.

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

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

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

RECOMMENDED PRODUCTS

- Use correct oil or grease to lubricate the bearings:
#106230 HUDY Bearing Oil
#106220 HUDY Bearing Grease - Standard
#106221 HUDY Bearing Grease - Blue
#106222 HUDY Bearing Grease - Red



SUSPENSION & DRIVETRAIN MAINTENANCE

- Check suspension for free movement during building and operation, and especially after running and if you have crashed the car. If the suspension DOES NOT move freely, use the appropriate HUDY Arm Reamer to clean and resize the holes of the suspension arms.
- Regularly check the drive shaft pins and if they show any wear must be immediately replaced by new pins. If the car is run with worn pins, excessive wear on the diff outdrives will result. The #106000 HUDY Drive Pin Replacement Tool (for 3mm Pins) is a compact, rugged multi-use tool set for replacing 3mm drive pins in drive shafts. Use the HUDY replacement drive shaft pins 3x12 (#106051).
- Regularly inspect and replace the pins that connect the wheel drive shafts with wheel axles. Use HUDY Graphite Grease to lubricate the drive shaft connecting joints and the diff gears.
- Pivot balls and ball-joints will naturally wear for some time and will generate play. If there is too much play the pivot balls and ball joints need to be replaced.
- If the car is run in wet conditions, apply WD-40® on all drivetrain parts before the run. After the run, clean and dry the parts again.



HUDY SPRING STEEL™

The HUDY Spring Steel™ used in the car is the strongest and most durable steel material on the RC market. While items made from HUDY Spring Steel™ are still subject to wear, the lifespan is considerably longer than any other material. As parts made from HUDY Spring Steel™ wear, the

brown color will fade (get lighter) but it will NOT affect the strength of the material. The brown color is only a surface treatment and if the brown color will wear the durability of the part will be still strong.

NOTE

www.teamxray.com

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