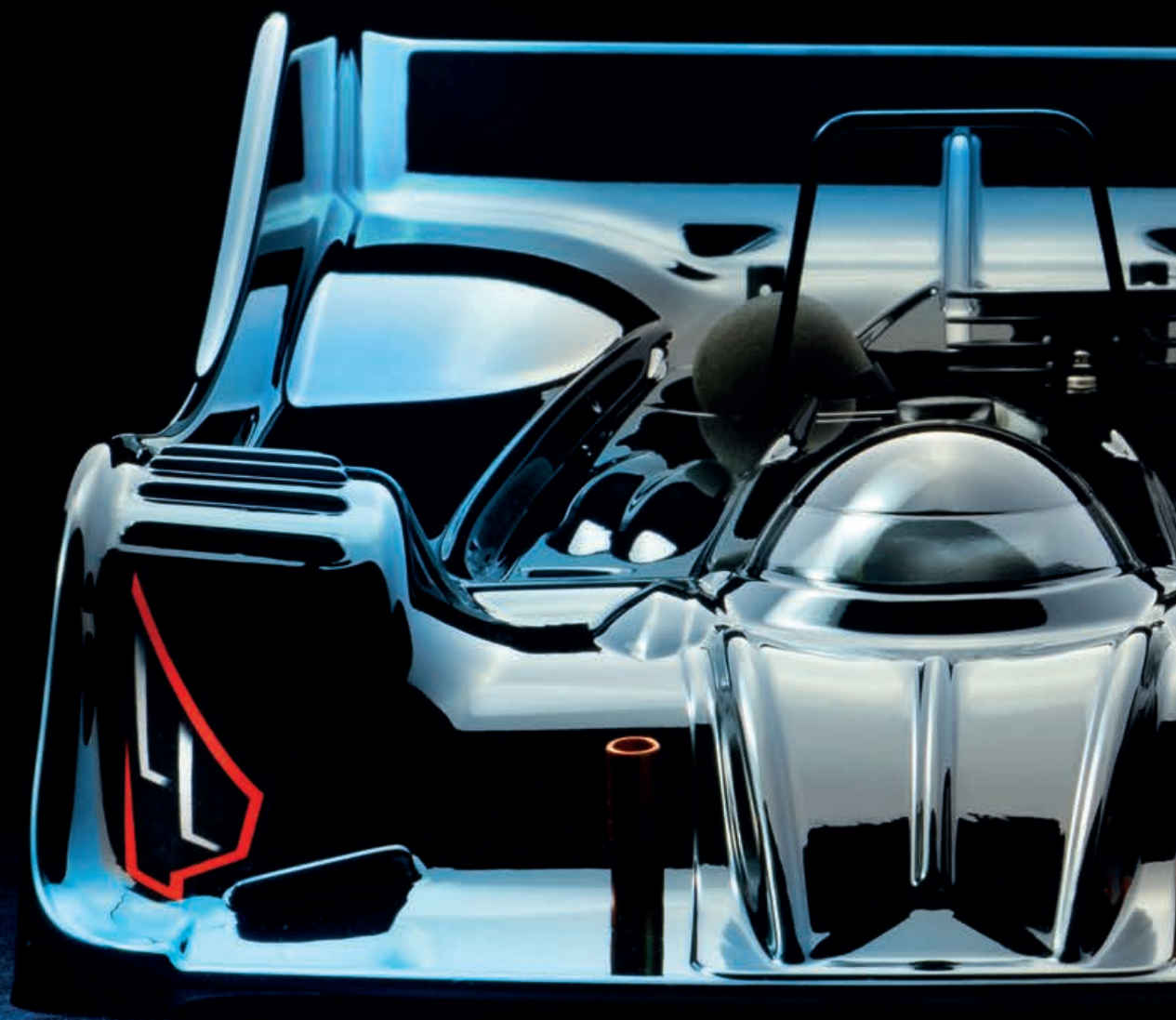


1/8 NITRO ON-ROAD CAR

# XRAY RX8



INSTRUCTION MANUAL

XRAY RX8'26

## BEFORE YOU START

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

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

## CUSTOMER SUPPORT

We have made every effort to make these instructions as easy to understand as possible. However, if you have any difficulties, problems, or questions, please do not hesitate to contact the XRAY support team at [info@teamxray.com](mailto:info@teamxray.com). Also, please visit our Web site at [www.teamxray.com](http://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](http://www.teamxray.com)**

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

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

### XRAY Europe

K Výstavisku 6992  
91101 Trenčín  
Slovakia, EUROPE  
Phone: +421-32-7401100  
Fax: +421-32-7401109  
Email: [info@teamxray.com](mailto:info@teamxray.com)

### XRAY USA

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

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

## SAFETY PRECAUTIONS

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

**CAUTION: CANCER HAZARD**

Wash thoroughly after using. DO NOT use product while eating, drinking or using tobacco products. May cause chronic effects to gastrointestinal tract, CNS, kidneys, and blood. MAY CAUSE BIRTH DEFECTS.

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

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



## IMPORTANT NOTES - GENERAL

- This product is not suitable for children under 16 years of age without the direct supervision of a responsible and knowledgeable adult.
- Carefully read all manufacturers warnings and cautions for any parts used in the construction and use of your model.
- Assemble this kit only in places away from the reach of very small children.
- First-time builders and users should seek advice from people who have building experience in order to assemble the model correctly and to allow the model to reach its performance potential.
- Exercise care when using tools and sharp instruments.
- Take care when building, as some parts may have sharp edges.
- Keep small parts out of reach of small children. Children must not be allowed to put any parts in their mouth, or pull vinyl bag over their head.
- Read and follow instructions supplied with paints and/or cement, if used (not included in kit).
- Immediately after using your model, do NOT touch equipment on the model such as the motor and speed controller, because they generate high temperatures. You may seriously burn yourself seriously touching them.
- Follow the operating instructions for the radio equipment at all times.
- Do not put fingers or any objects inside rotating and moving parts, as this may cause damage or serious injury as your finger, hair, clothes, etc. may get caught.
- Be sure that your operating frequency is clear before turning on or running your model, and never share the same frequency with somebody else at the same time. Ensure that others are aware of the operating frequency you are using and when you are using it.
- Use a transmitter designed for ground use with RC cars. Make sure that no one else is using the same frequency as yours in your operating area. Using the same frequency at the same time, whether it is driving, flying or sailing, can cause loss of control of the RC model, resulting in a serious accident.
- Always turn on your transmitter before you turn on the receiver in the car. Always turn off the receiver before turning your transmitter off.
- Keep the wheels of the model off the ground when checking the operation of the radio equipment.



## IMPORTANT NOTES - NITRO ENGINES

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

- Disconnect the battery pack before storing your model.
- When learning to operate your model, go to an area that has no obstacles that can damage your model if your model suffers a collision.
- Remove any sand, mud, dirt, grass or water before putting your model away.
- If the model behaves strangely, immediately stop the model, check and clear the problem.
- To prevent any serious personal injury and/or damage to property, be responsible when operating all remote controlled models.
- The model car is not intended for use on public places and roads or areas where its operation can conflict with or disrupt pedestrian or vehicular traffic.
- Because the model car is controlled by radio, it is subject to radio interference from many sources that are beyond your control. Since radio interference can cause momentary loss of control, always allow a safety margin in all directions around the model in order to prevent collisions.
- Do not use your model:
  - Near real cars, animals, or people that are unaware that an RC car is being driven.
  - In places where children and people gather
  - In residential districts and parks
  - In limited indoor spaces
  - In wet conditions
  - In the street
  - In areas where loud noises can disturb others, such as hospitals and residential areas.
  - At night or anytime your line of sight to the model may be obstructed or impaired in any way.

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



## IMPORTANT NOTES – ELECTRICAL

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

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.



## IMPORTANT NOTES – NITRO FUEL

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

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

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

## 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](http://www.teamxray.com) to get advice, or contact us via email at [info@teamxray.com](mailto: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.**

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

## QUALITY CERTIFICATE

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

abused, neglected or improperly operated will not be covered under warranty.

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

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

**RX8'26**



# TOOLS REQUIRED



Side Cutters  
(HUDY #189010)



Pocket Hobby Knife (HUDY #188981)



Cross Wrench 5mm (HUDY #107581)



HUDY Ball Joint Wrench  
(HUDY #181110)



Clutch Spring Tool (HUDY #182005)



Turnbuckle Wrench 3mm  
(HUDY #181030)



Turnbuckle Wrench 3mm  
(HUDY #181031)



Special Tool for turnbuckles, nuts (HUDY #181090)



HUDY Professional Tweezers Straight (HUDY #188970)



HUDY Professional Tweezers Curved (HUDY #188971)



Scissors (HUDY #188990)



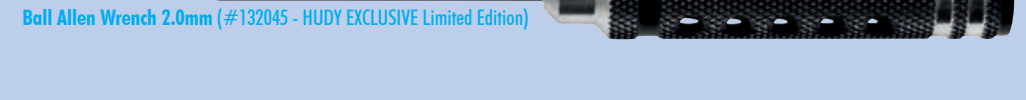
Alu RX8 Pinion Gear Tool  
(XRAY #349903)



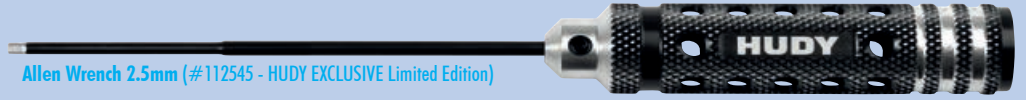
Allen 1.5mm (#111545 - HUDY EXCLUSIVE Limited Edition)



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



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



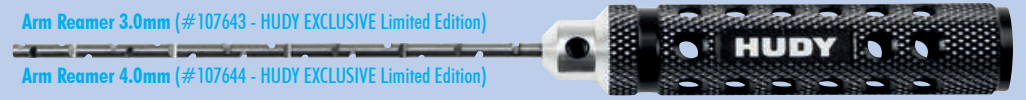
Allen Wrench 2.5mm (#112545 - HUDY EXCLUSIVE Limited Edition)



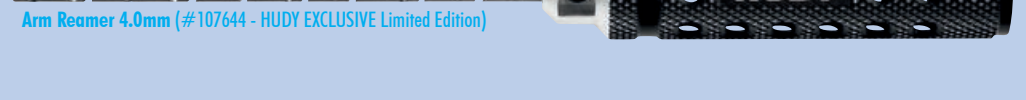
Ball Allen Wrench 2.5mm (#132545 - HUDY EXCLUSIVE Limited Edition)



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



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



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



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



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



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



Camber Tool (#107615)



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



Reamer (#107602 - HUDY EXCLUSIVE Limited Edition)



Professional Multi Tool  
(HUDY #183011)



Flywheel/Clutch Multi-Tool (HUDY #182010)



## EQUIPMENT INCLUDED



600cSt (#106360)  
HUDY Premium Silicone Oils



(HUDY #106210)  
Premium Graphite Grease



## SYMBOLS USED

Apply threadlock	Ensure smooth non-binding movement	Detail	Assembled in the specified order	Part bags used
Apply oil	Cut off remaining material	Pay attention here	Assembled view	Assembled left and right sides the same way
Apply grease	Assembled as many times as specified	Follow tip here	Optional parts	Assembled with pliers

## 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:

341135

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

341134

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

345001

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

346132

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

## EQUIPMENT REQUIRED

Transmitter & Receiver



Engine  
(FX R900 #660201)



Exhaust & Manifold - Set  
(FX #669550)



Starter Box & Battery Pack  
(HUDY #104500)



Glow Plug Igniter



Steering and Throttle Servos



Double-sided Tape  
(HUDY #107875)



Lexan™ Paint



Fuel + Fuel Bottle  
(HUDY #104200)



Bodyshell



Battery Charger



Receiver Pack



Wheels & Tires



Tire Truer  
(HUDY #102003)



Threadlock



Engine After Run Oil  
(HUDY #106250)



One-Way Lube  
(HUDY #106231)



Air Filter Oil  
(HUDY #106240)



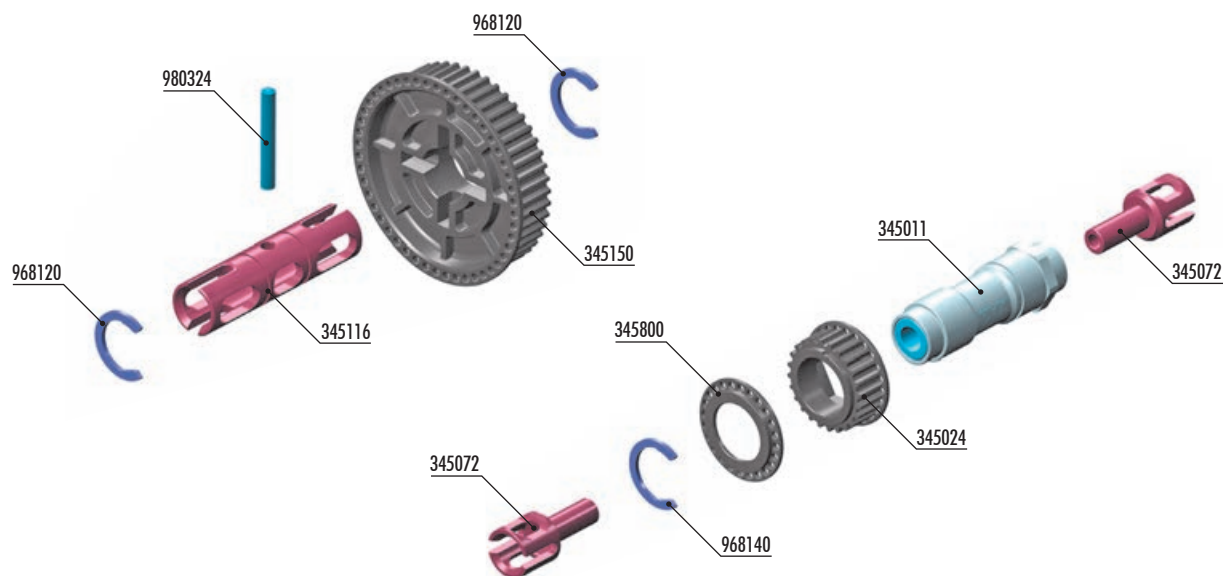
Bearing Oil  
(HUDY #106230)



CA glue



# 1. FRONT ONE-WAY & REAR SOLID AXLE



**BAG**

**01**

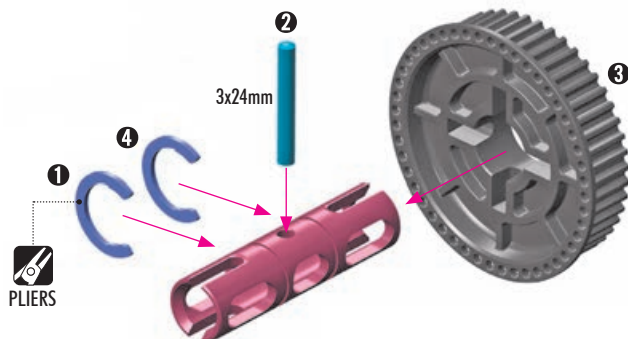
345001 FRONT ONE-WAY - HARDCOATED + LIGHTWEIGHT ADAPTERS  
 345011 FRONT ONE-WAY AXLE - BLACK COATED  
 345024 COMPOSITE FRONT ONE-WAY AXLE PULLEY 24T  
 345072 FRONT ONE-WAY AXLE OUTDRIVE ADAPTER - LIGHTWEIGHT - HUDY SPRING STEEL™ (2)  
 345116 REAR SOLID AXLE SHAFT - LIGHTWEIGHT - HUDY SPRING STEEL™  
 345150 COMPOSITE REAR SOLID AXLE PULLEY 48T  
 345800 COMPOSITE BELT PULLEY COVER SET

968120 C-CLIP 12 (10)  
 968140 C-CLIP 14 (10)  
 980324 PIN 3x24 (10)

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



## REAR SOLID AXLE

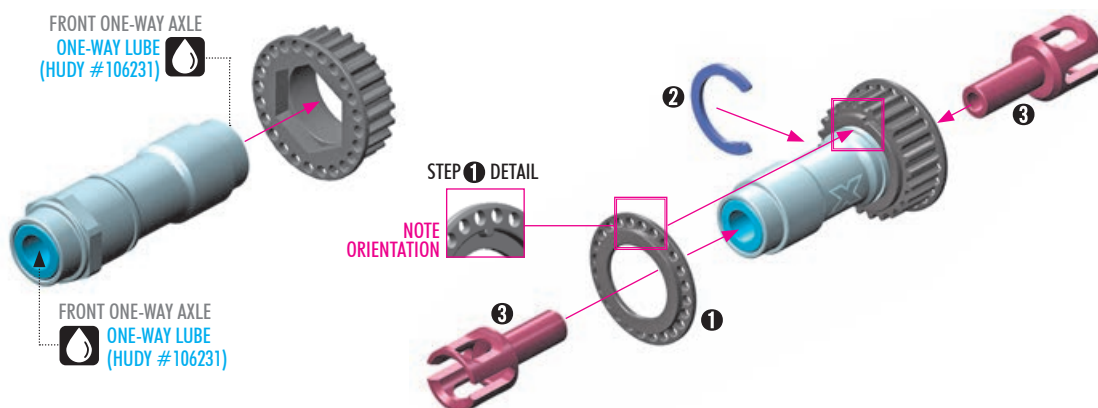


ASSEMBLED VIEW

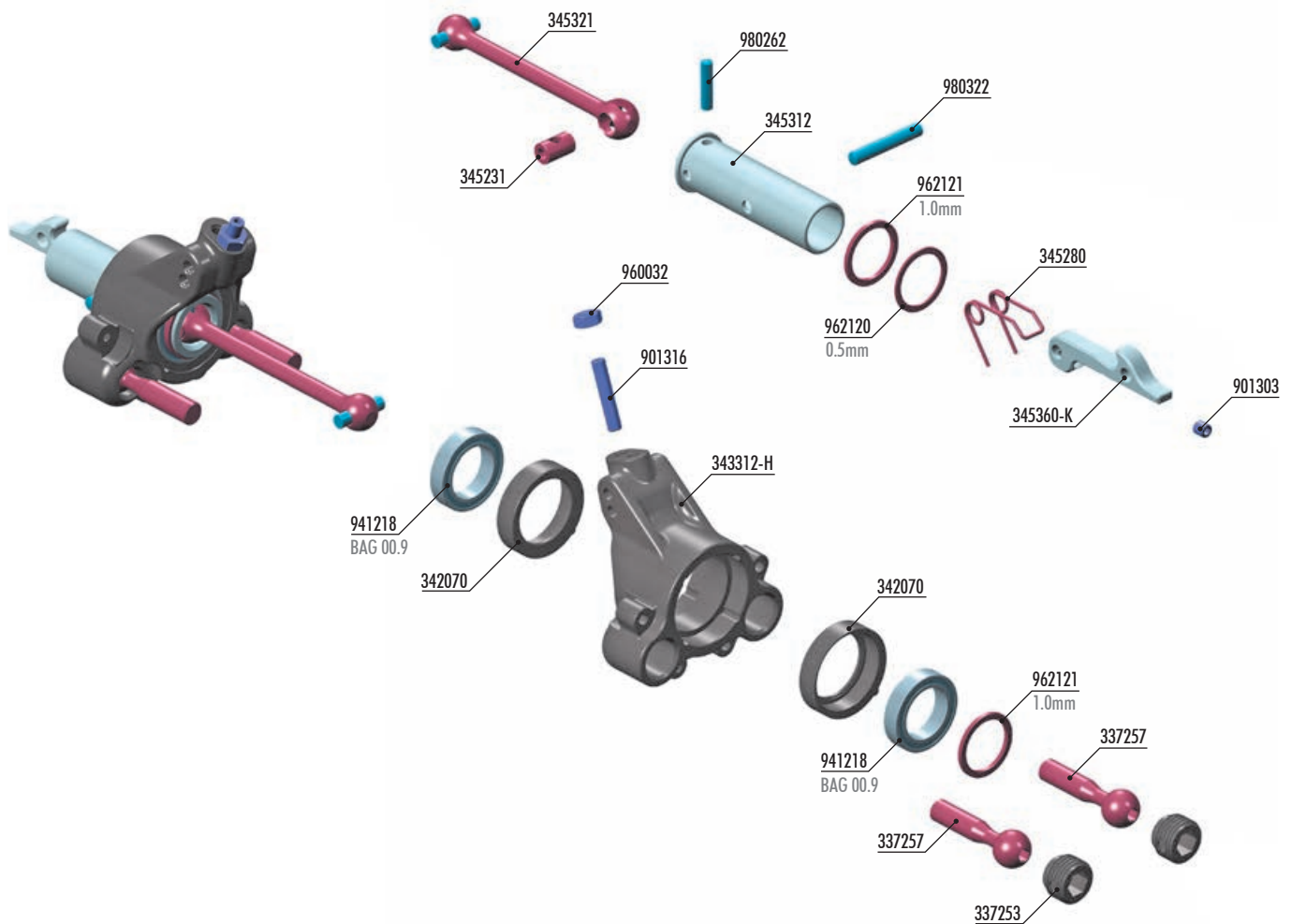
CUTAWAY VIEW



## FRONT ONE-WAY AXLE



## 2. REAR SUSPENSION



**#980322-T**  
TITAN PIN 3x22 (2)



**#345290**  
ALU SHIM 12x15x1.0mm (4)



**#345291**  
ALU SHIM 12 x 15 x 1.5mm (4)

REAR UPRIGHTS		
#343312-H	HARD	INCLUDED
#343312-G	GRAPHITE	OPTION



**#345370**  
CARBON REAR AERO DISC  
1.6mm - SET



**#345310**  
REAR WHEEL AXLE -  
HUDY SPRING STEEL™



ADJUSTING NUT		
#337253	COMPOSITE	INCLUDED
#337252	ALU	OPTION



\*The alu nut must be used together with  
#337254 – Composite Ball Cup 8.4mm.

**BAG**

**02**

337253 COMPOSITE ADJUSTING NUT M10x1 (4)  
337257 STEEL PIVOT BALL 8.4mm (2)  
342070 COMPOSITE SET OF BUSHINGS (2)  
343312-H COMPOSITE UPRIGHT REAR FOR AERO DISC - MODIFIED - HARD  
345231 DRIVE SHAFT COUPLING - HUDY SPRING STEEL™  
345280 WHEEL SPRING (2)  
345312 ALU REAR CVD DRIVE AXLE - SWISS 7075 T6 - HARD COATED  
345321 REAR CVD DRIVE SHAFT 61mm - HUDY SPRING STEEL™  
345360-K ALU REAR WHEEL LOCK - SWISS 7075 T6 - BLACK (2)

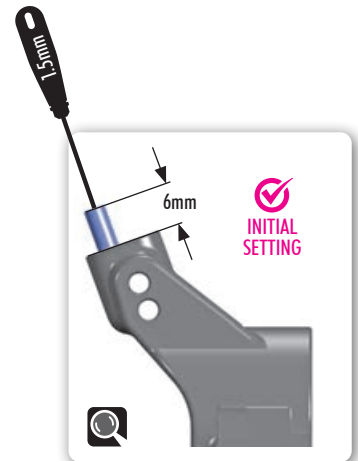
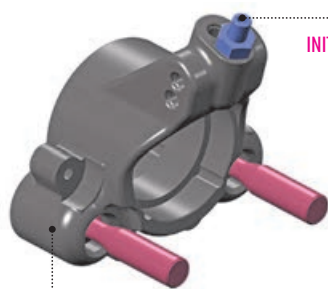
901303 HEX SCREW SB M3x3 (10)  
901316 HEX SCREW SB M3x16 (10)  
941218 BALL-BEARING 12x18x4 RUBBER SEALED - OIL (2)  
960032 NUT M3 - BLACK (10)  
962120 WASHER S 12x15x0.5 (10)  
962121 WASHER S 12x15x1.0 (10)  
980262 PIN 2.5x12 (10)  
980322 PIN 3x22 (10)



## 2. REAR SUSPENSION



2x L=R



**#345370**  
CARBON REAR AERO  
DISC 1.6mm - SET



ADJUSTING NUT		
#337253	COMPOSITE	INCLUDED
#337252	ALU	OPTION

\*The alu nut must be used together with  
#337254 - Composite Ball Cup 8.4mm.

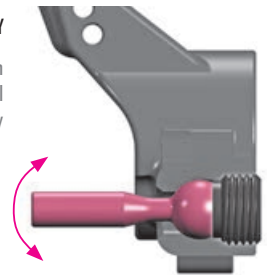
REAR UPRIGHTS		
#343312-H	HARD	INCLUDED
#343312-G	GRAPHITE	OPTION



Tighten composite hex nuts using  
HUDY tool #107581. **TIP**

**PIVOT BALLS MUST MOVE FREELY**

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

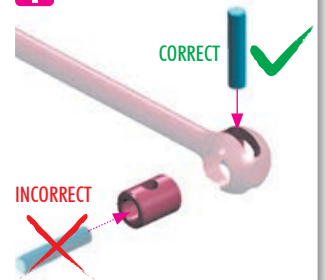


2x L=R 1 2 3 SPECIFIC ORDER STEPS



GRAPHITE GREASE **GR**

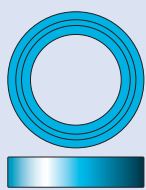
**EXTREMELY IMPORTANT**



**#345310**  
REAR WHEEL AXLE -  
HUDY SPRING STEEL™



## 2. REAR SUSPENSION



4x 941218  
BB 12x18x4

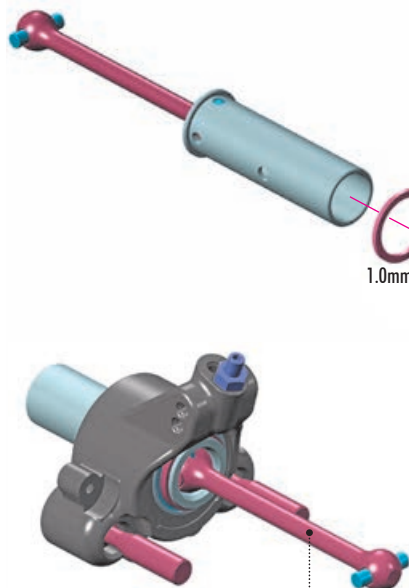


2x 962120  
S 12x15x0.5



4x 962121  
S 12x15x1.0

2x L=R



ASSEMBLED VIEW

**TIP** Please refer to page 57 for information on the service & maintenance of ball-bearings.

SHIMS	
IN	OUT
1+1	0.5
1+0.5	INITIAL SETTING
1	1+0.5
0.5	1+1
0	1+1+0.5

1.0mm  
0.5mm  
12x18x4mm

COMPOSITE SET OF BUSHINGS

12x18x4mm

1.0mm

#345290  
OPTION ALU SHIM 12x15x1.0mm (4)

#345291  
OPTION ALU SHIM 12 x 15 x 1.5mm (4)



INITIAL SETTING  
CONCENTRIC

ECCENTRIC

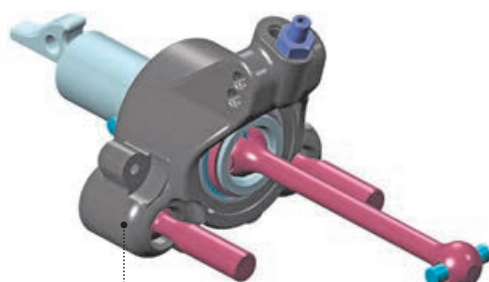
NOTE ORIENTATION

When using eccentric bushings, both bushings must be in same position.

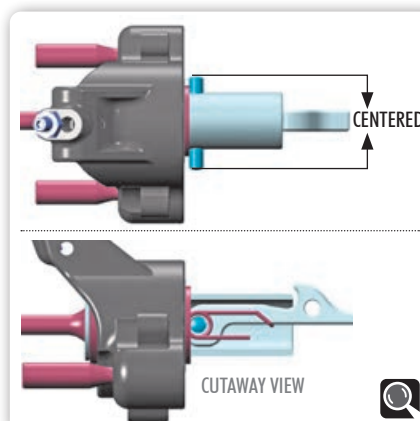
2x L=R

1 2 3

SPECIFIC ORDER STEPS



ASSEMBLED VIEW



CUTAWAY VIEW

4 3x22mm

3

2

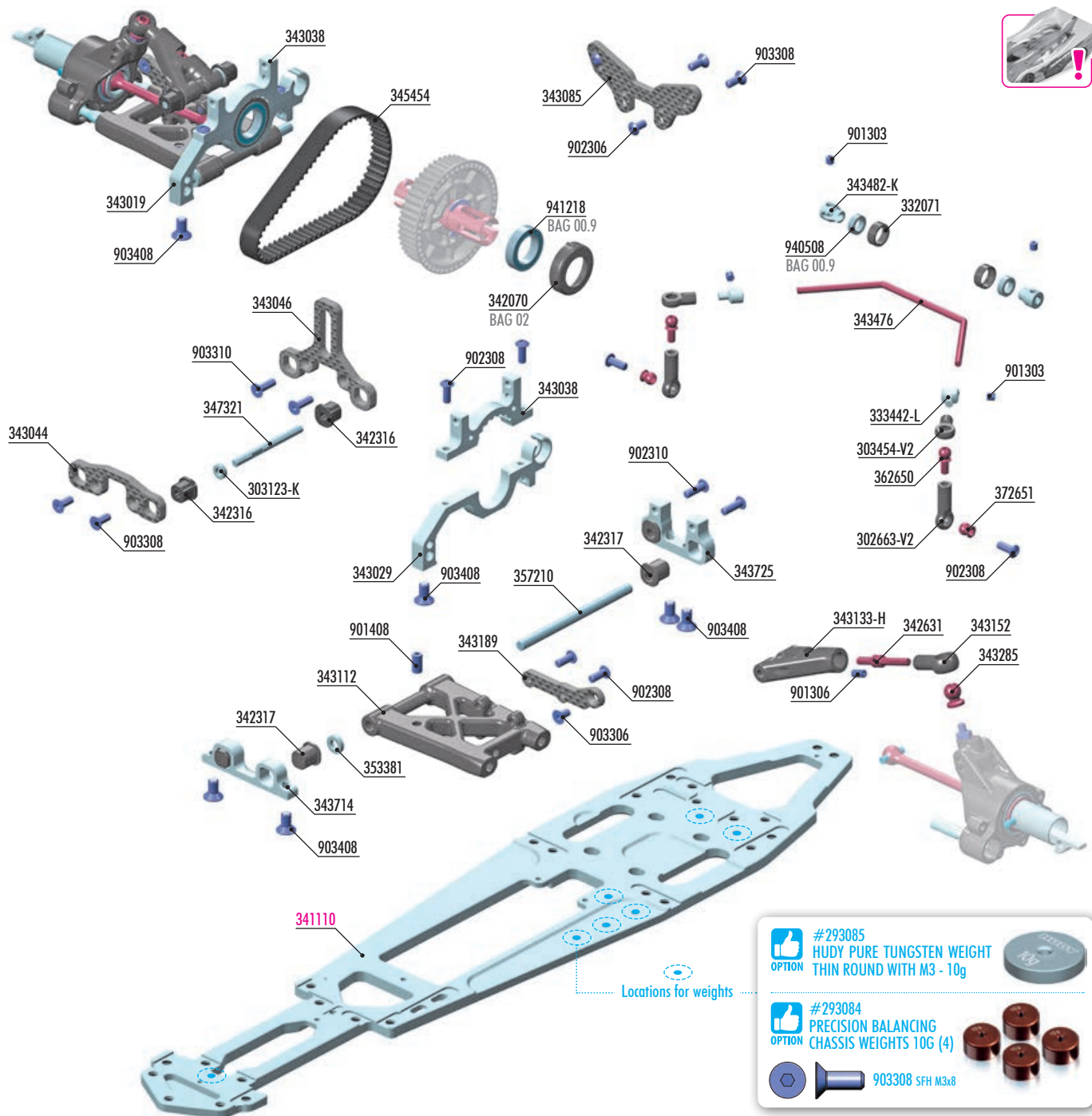
#980322-T  
OPTION TITAN PIN 3x22 (2)



3x3mm

1 TIGHTEN GENTLY  
5 TIGHTEN FULLY

### 3. REAR SUSPENSION - ASSEMBLY



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

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

**903308 SFH M3x8**

#### BAG

03

303123-K	ALU SHIM 3x6x2.0mm - BLACK (10)	343725	ALU REAR LOWER SUSPENSION HOLDER M4 - REAR - RR - BLACK
302663-V2	COMPOSITE BALL JOINT 4.9mm - OPEN (8)	345454	PUR® REINFORCED DRIVE BELT REAR 9.0 x 201mm
303454-V2	COMPOSITE BALL JOINT 4.9mm - OPEN (4)	347321	REAR UPPER INNER PIVOT PIN WITH FLAT SPOT (2)
332071	COMPOSITE BALL-BEARING HUB (4)	353381	ALU SHIM 4x7.5x2 (4)
333442-L	ALU ANTI-ROLL BAR COLLAR ø2.6 - LIGHTWEIGHT (2)	357210	REAR LOWER INNER PIVOT PIN (2)
342070	COMPOSITE SET OF BUSHINGS (2)	362650	BALL END 4.9mm WITH 6mm THREAD (2)
342316	COMPOSITE REAR UPPER SUSP. ECCENTRIC BUSHING (4)	372651	PIVOT BALL UNIVERSAL 4.9mm - HUDY SPRING STEEL™ (2)
342317	COMPOSITE REAR LOWER SUSP. ECCENTRIC BUSHING (4)		
342631	ADJ. TURNBUCKLE L/R 28mm - HUDY SPRING STEEL™ (2)	901303	HEX SCREW SB M3x3 (10)
343019	ALU LOWER BULKHEAD FRONT - SWISS 7075 T6 - RIGHT	901306	HEX SCREW SB M3x6 (10)
343029	ALU LOWER BULKHEAD FRONT - SWISS 7075 T6 - LEFT	901408	HEX SCREW SB M4x8 (10)
343038	ALU UPPER CLAMP REAR - SWISS 7075 T6 - (L+R)	902306	HEX SCREW SH M3x6 (10)
343044	CARBON REAR UPPER ARM HOLDER - FRONT	902308	HEX SCREW SH M3x8 (10)
343046	CARBON REAR UPPER ARM HOLDER & BODY MOUNT GUIDE	902310	HEX SCREW SH M3x10 (10)
343085	CARBON SHOCK TOWER REAR - WIDE	903306	HEX SCREW SFH M3x6 (10)
343285	PIVOT BALL 6.8mm (2)	903308	HEX SCREW SFH M3x8 (10)
343112	SUSPENSION ARM FOR EXTENSION - REAR LOWER - HARD	903310	HEX SCREW SFH M3x10 (10)
343133-H	COMPOSITE LONGER SUSPENSION ARM REAR UPPER - HARD	903408	HEX SCREW SFH M4x8 (10)
343152	UPPER BALL JOINT 5.8mm - SHORT & LONG (2+2)	940508	BALL-BEARING 5x8x2.5 RUBBER SEALED - OIL (2)
343189	CARBON EXTENSION FOR REAR SUSPENSION ARM - 2-DOT (L+R)	941218	BALL-BEARING 12x18x4 RUBBER SEALED - OIL (2)
343476	ANTI-ROLL BAR REAR 2.6mm		
343482-K	ALU CUTTED ANTI-ROLL BAR COLLAR ø2.6 - BLACK - V2 (2)	341110	ALU CHASSIS 5MM - CNC MACHINED - SWISS 7075 T6
343714	ALU REAR LOWER SUSPENSION HOLDER - FRONT - RF - BLACK		

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

XRAY



### 3. REAR SUSPENSION - ASSEMBLY



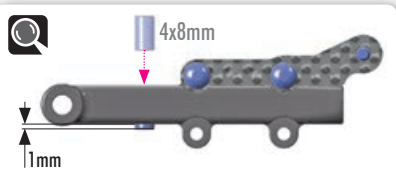
2x 901408  
SB M4x8



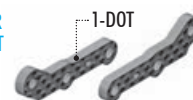
4x 902308  
SH M3x8



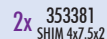
2x 903306  
SEH M3x6



 #343188 EXTENSION FOR  
SUSPENSION ARM - 1-DOT  
OPTION (L+R)

 **SUSPENSION LOWER ARMS**

OPTION	#343111	MEDIUM	OPTION
	#343112	HARD	INCLUDED
	#343113	GRAPHITE	OPTION



2x 353381  
SHIM 4x7.5x2



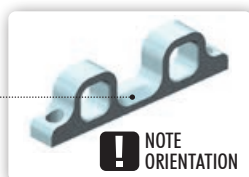
4x 903408  
SEH M4x8



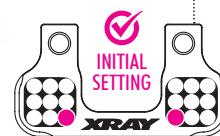
### Composite eccentric bushings



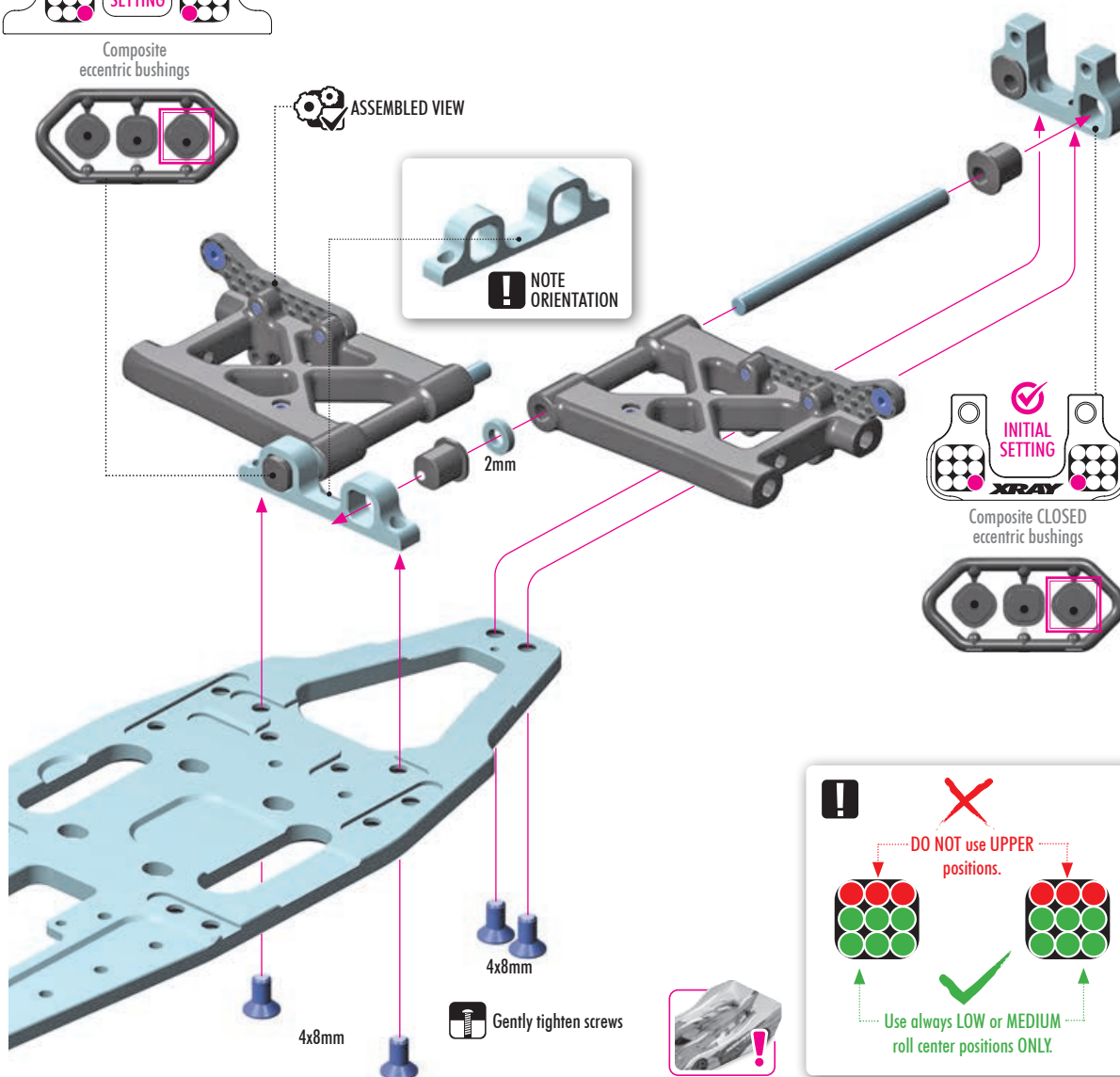
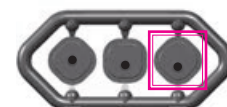
↓ ASSEMBLED VIEW



**NOTE**  
**ORIENTATION**



Composite CLOSED  
eccentric bushings



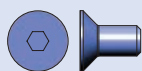
... DO NOT use UPPER ...  
positions.



... Use always LOW or MEDIUM  
roll center positions ONLY.



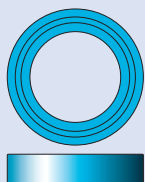
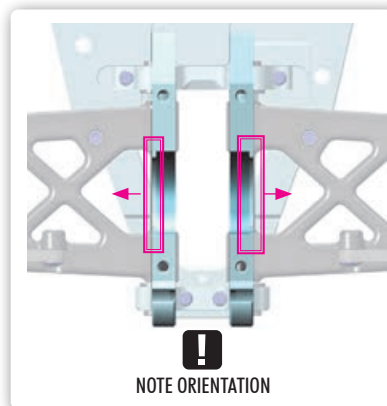
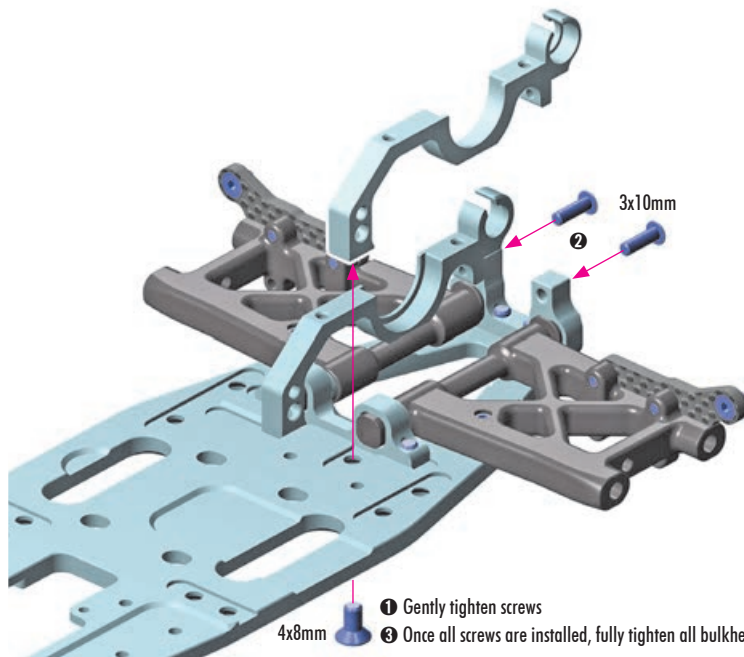
### 3. REAR SUSPENSION - ASSEMBLY



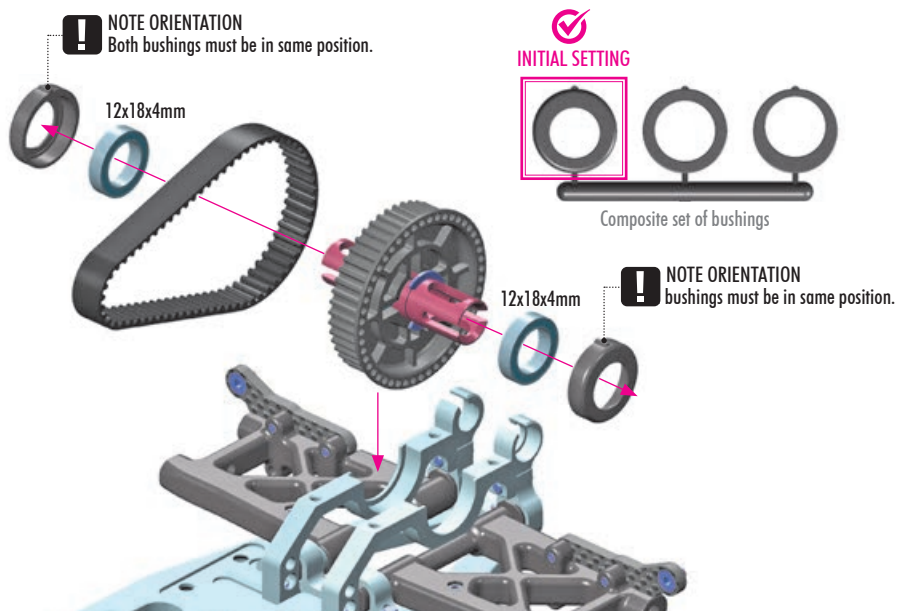
2x 903408  
SFH M4x8



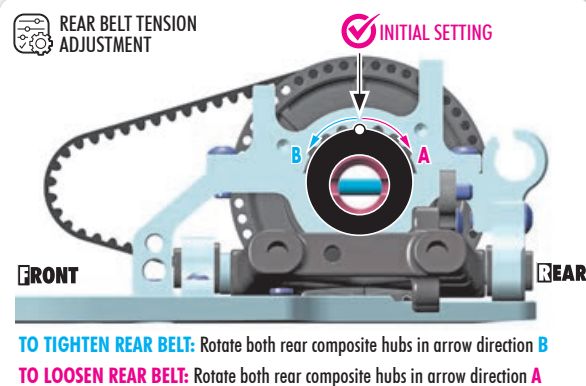
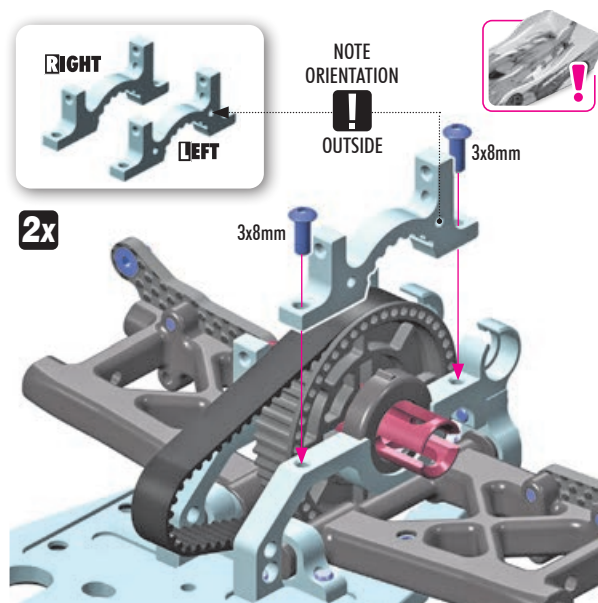
2x 902310  
SH M3x10



2x 941218  
BB 12x18x4



4x 902308  
SH M3x8



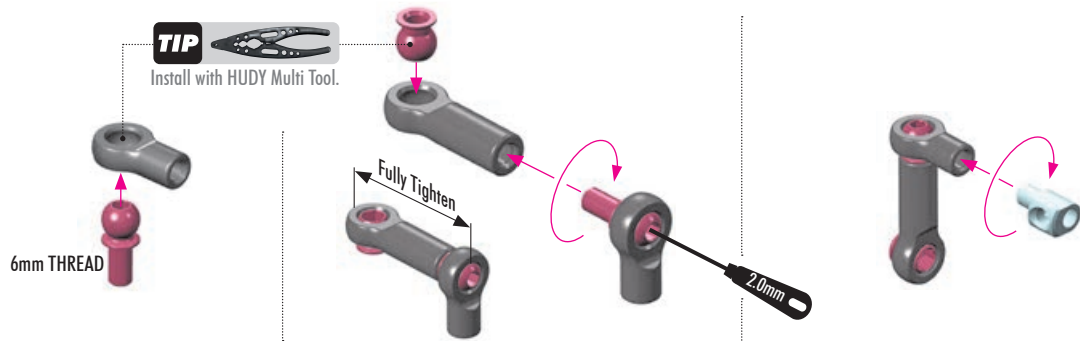
#### TIP COMPOSITE BUSHING

Use white mark on tab for better visibility of composite hub position.

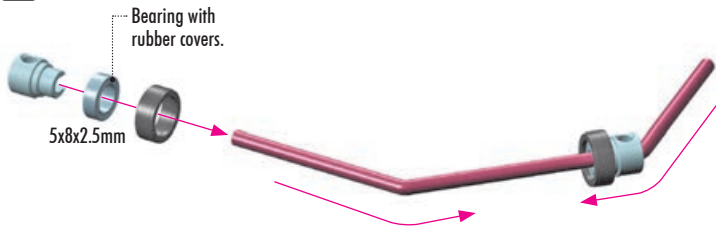


### 3. REAR SUSPENSION - ASSEMBLY

2x



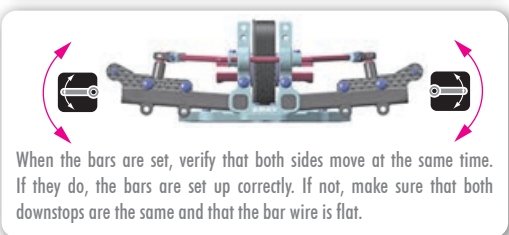
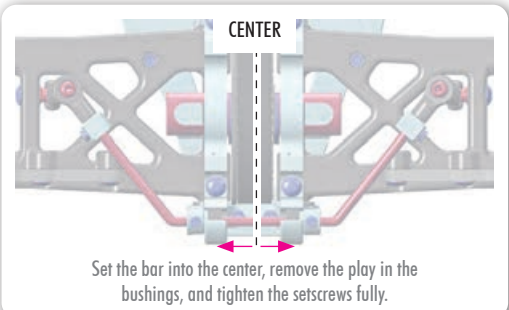
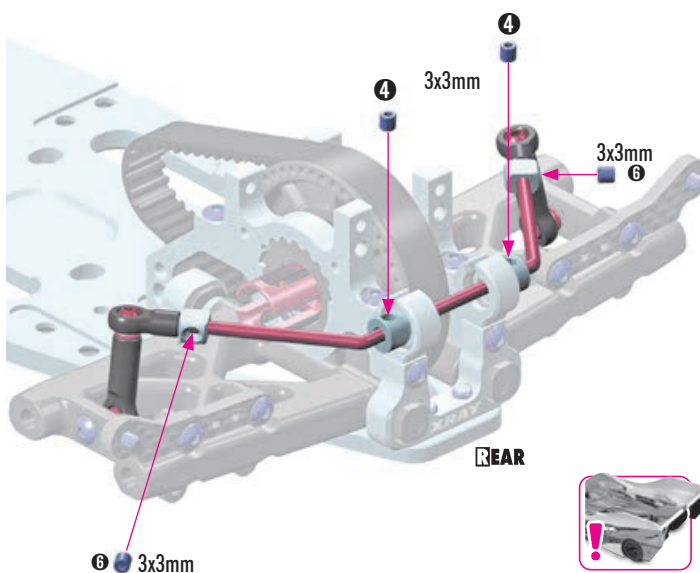
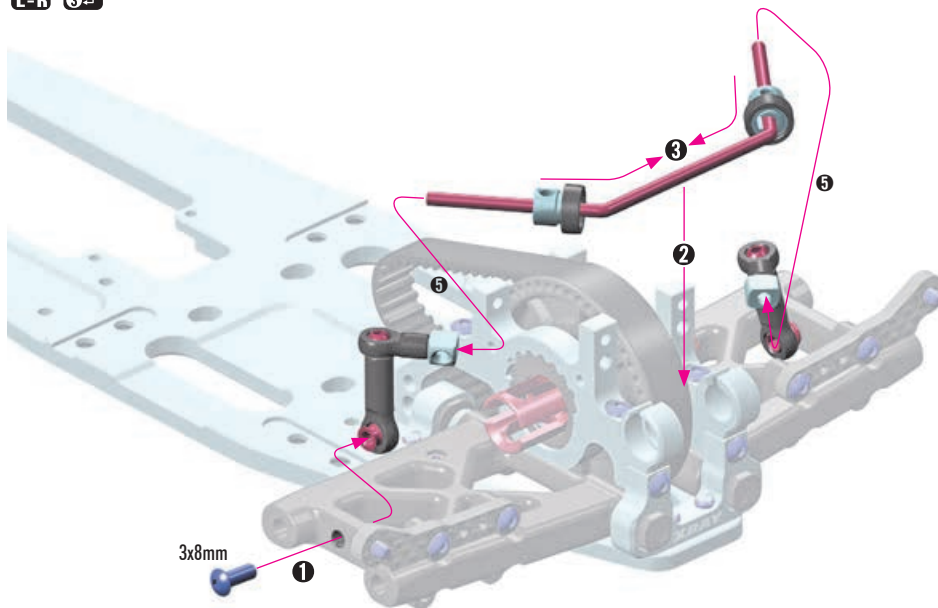
2x



REAR ANTI-ROLL BARS			COLLARS	
OPTION				
#343476	2.6mm	INCLUDED	#333442 + 343482-K	INCLUDED
#343478	2.8mm	OPTION	#333441 + 343485-K	OPTION
#343479	3.0mm	OPTION	#333441 + 343481-K	OPTION

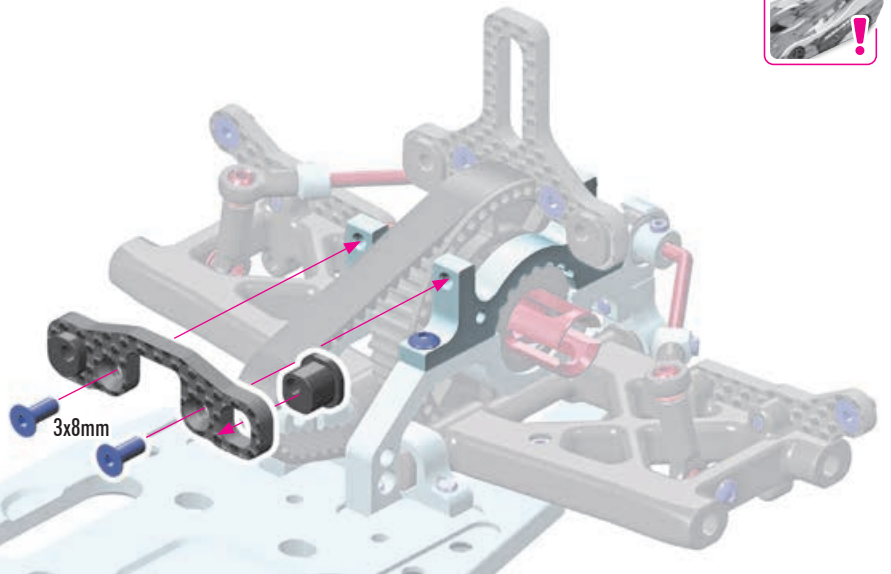
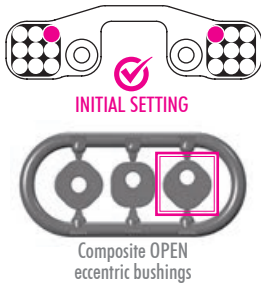
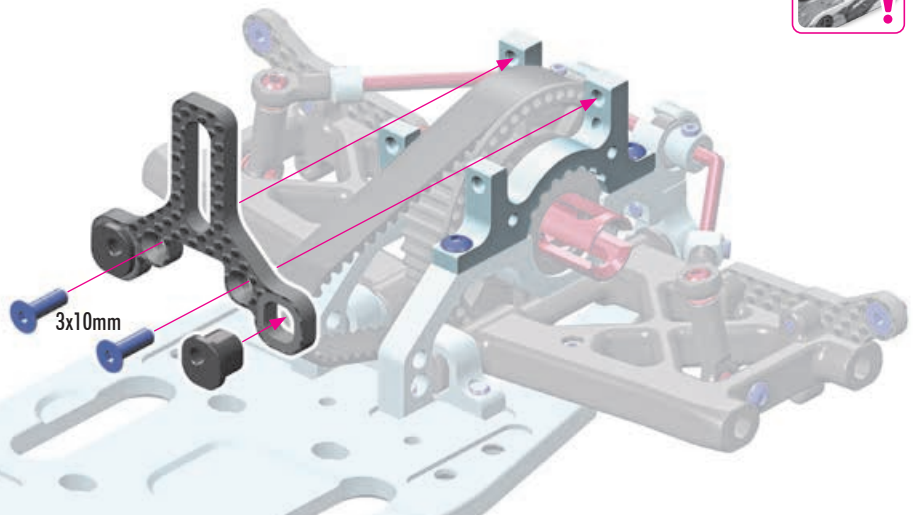
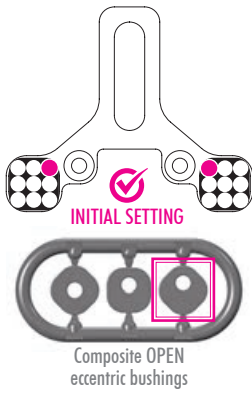


**1 2** SPECIFIC ORDER STEPS



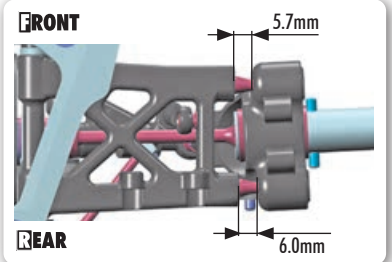
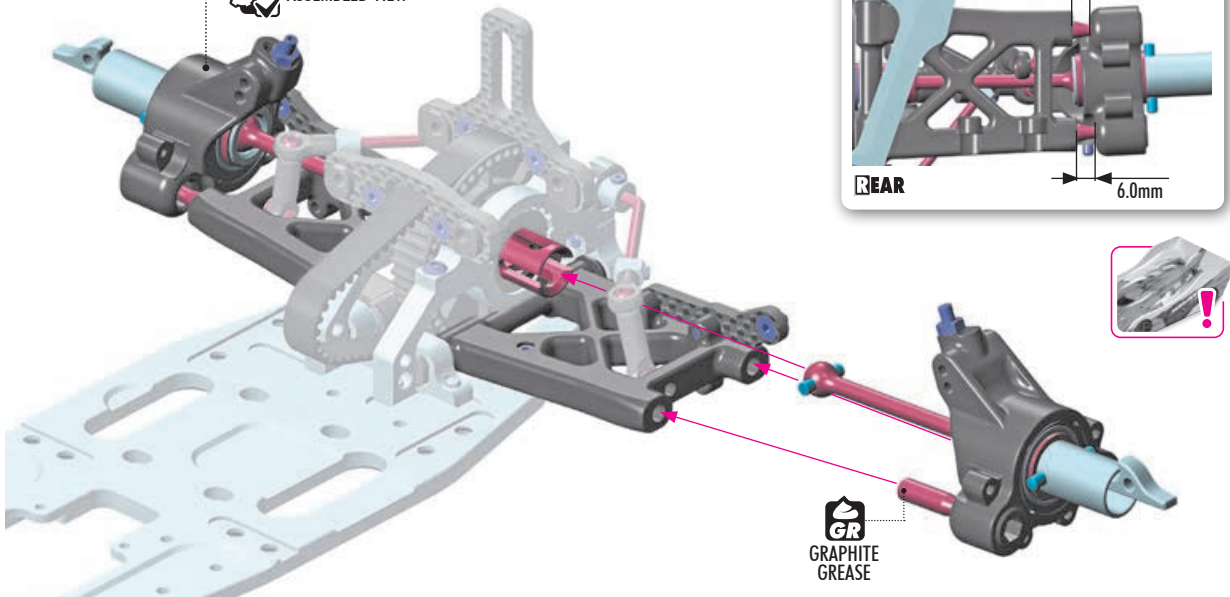


### 3. REAR SUSPENSION - ASSEMBLY



2x L-R

ASSEMBLED VIEW

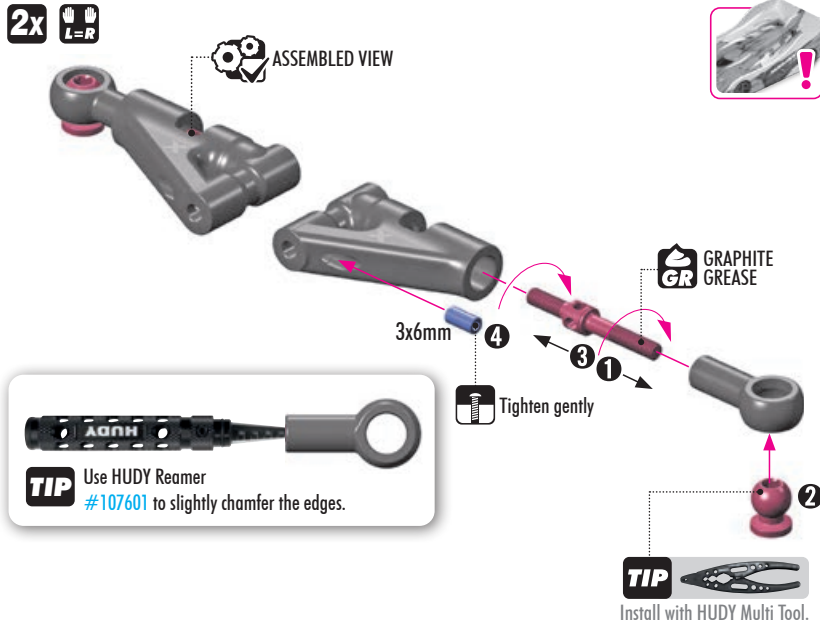


GRAPHITE GREASE

### 3. REAR SUSPENSION - ASSEMBLY

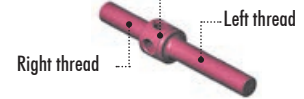
2x 901306  
SB M3x6

2x L=R

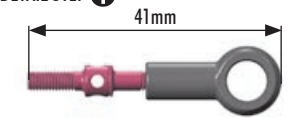


2x

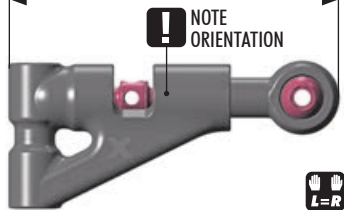
**NOTE ORIENTATION**



**DETAIL STEP 1**



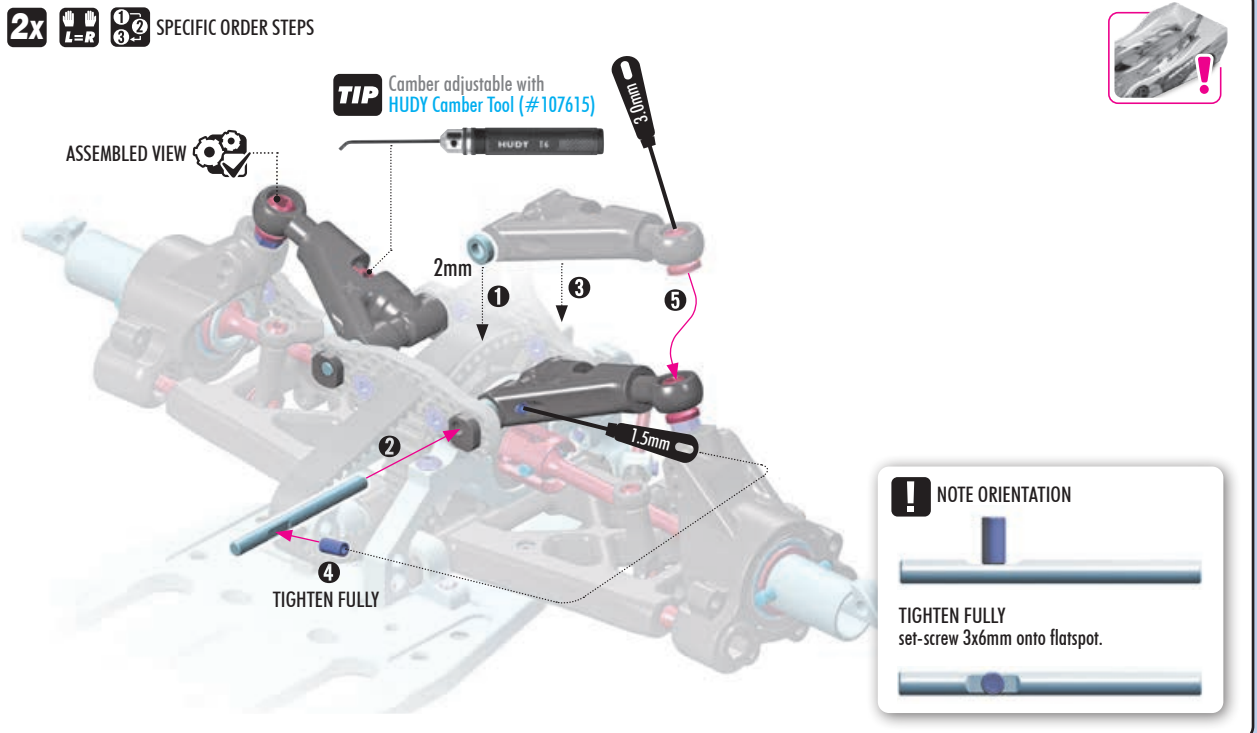
48mm



2x 303123-K  
SHIM 3x6x2

2x L=R

**SPECIFIC ORDER STEPS**



2x 902306  
SH M3x6

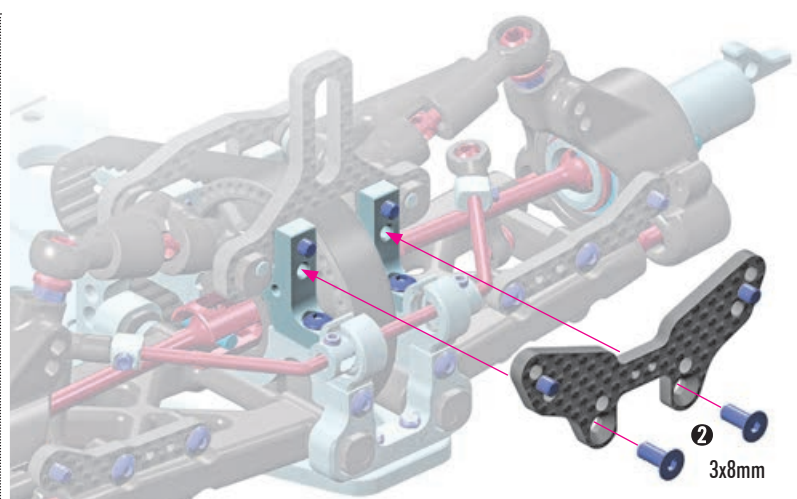
2x 903308  
SFH M3x8

**SPECIFIC ORDER STEPS**

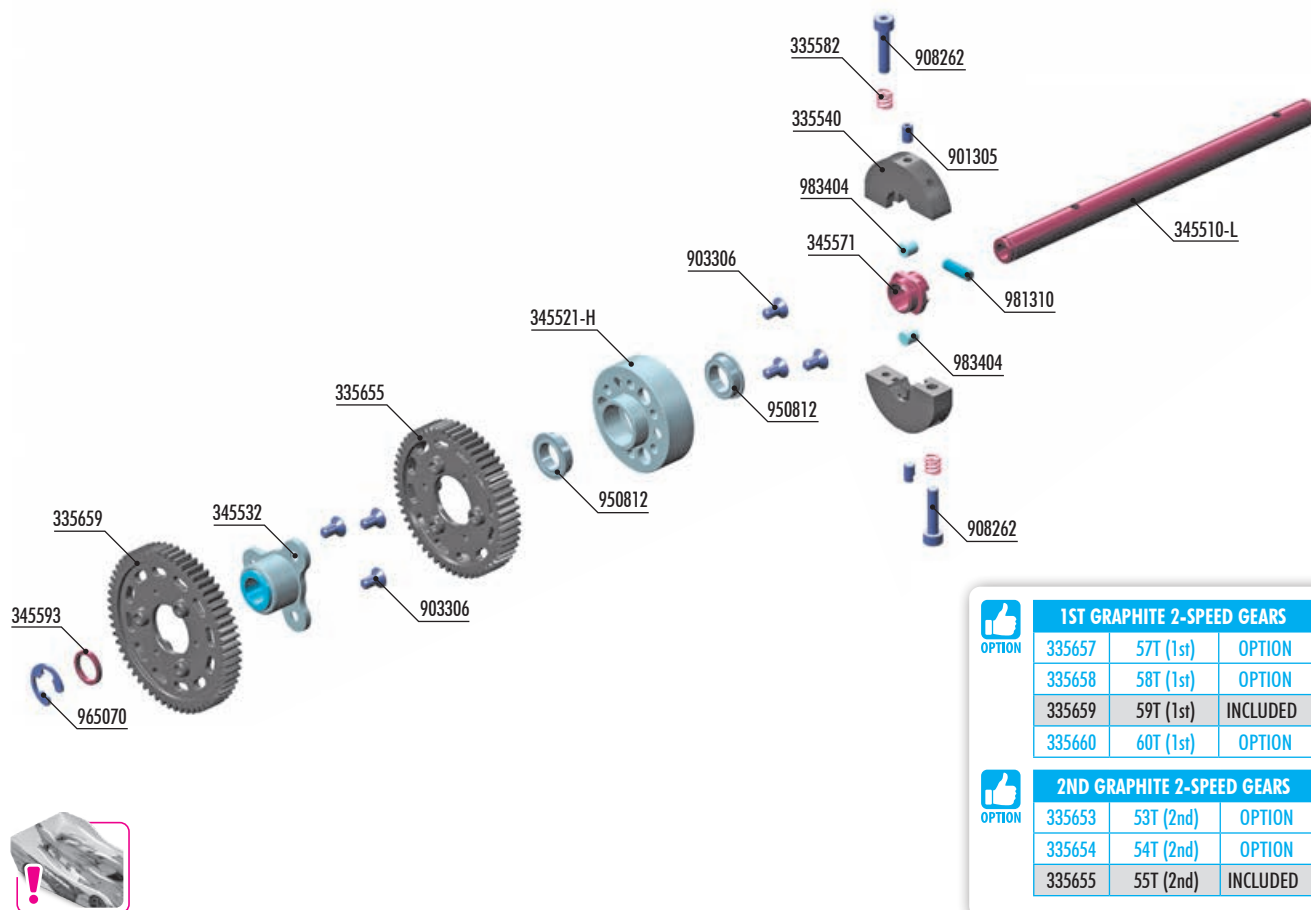
3x6mm



**NOTE ORIENTATION**



## 4. REAR TRANSMISSION



## 04

- |        |  |
|--------|--|
| 901305 | HEX SCREW SB M3x5 (10)                                 |
| 903306 | HEX SCREW SFH M3x6 (10)                                |
| 908262 | HEX SCREW SOCKET HEAD CAP M2.5x12 (10)                 |
| 950812 | BALL-BEARING 8x12x3.5 FLANGED - STEEL SEALED - OIL (2) |
| 965070 | E-CLIP 7 (10)  |
| 981310 | PIN 3x10 (10)  |
| 983404 | ROLLER PIN 4x4mm (2)                                   |

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



2x 901305  
SB M3x5

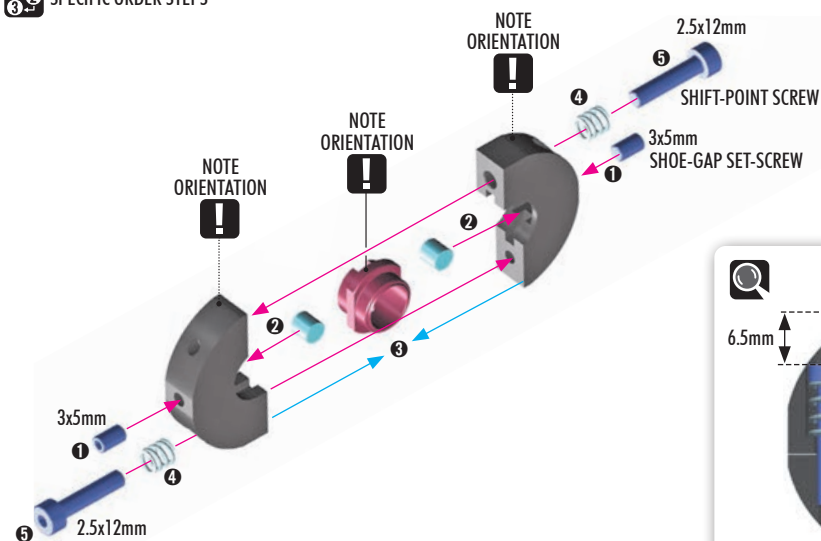


2x 908262  
SCH M2.5x12



2x 983404  
RP 4x4

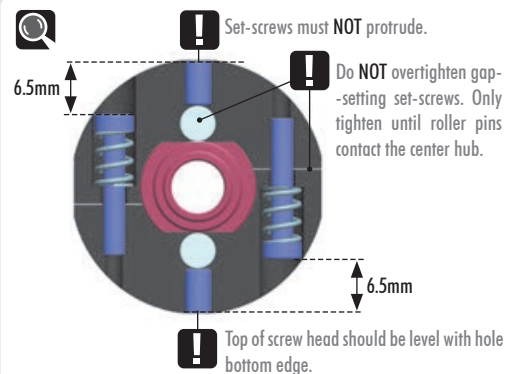
### SPECIFIC ORDER STEPS



**TIP**

This will allow you to identify the two different screws:

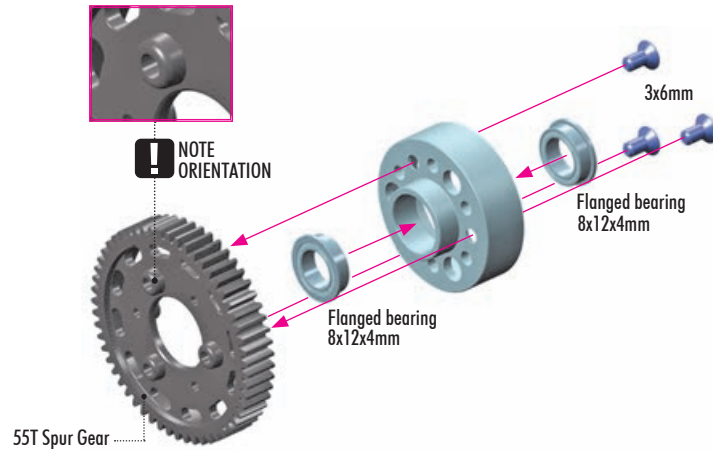
- ONE WHITE
  - ONE DARK
- when you are adjusting the shift point.



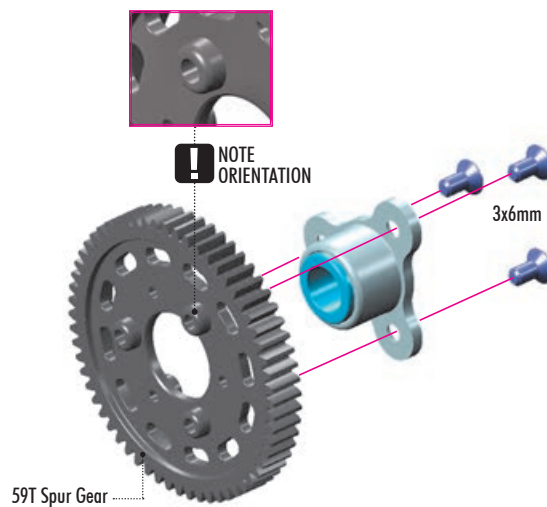


## 4. REAR TRANSMISSION

### 2ND GEAR



### 1ST GEAR



#### 1ST GRAPHITE 2-SPEED GEARS

335657	57T (1st)	OPTION
335658	58T (1st)	OPTION
335659	59T (1st)	INCLUDED
335660	60T (1st)	OPTION

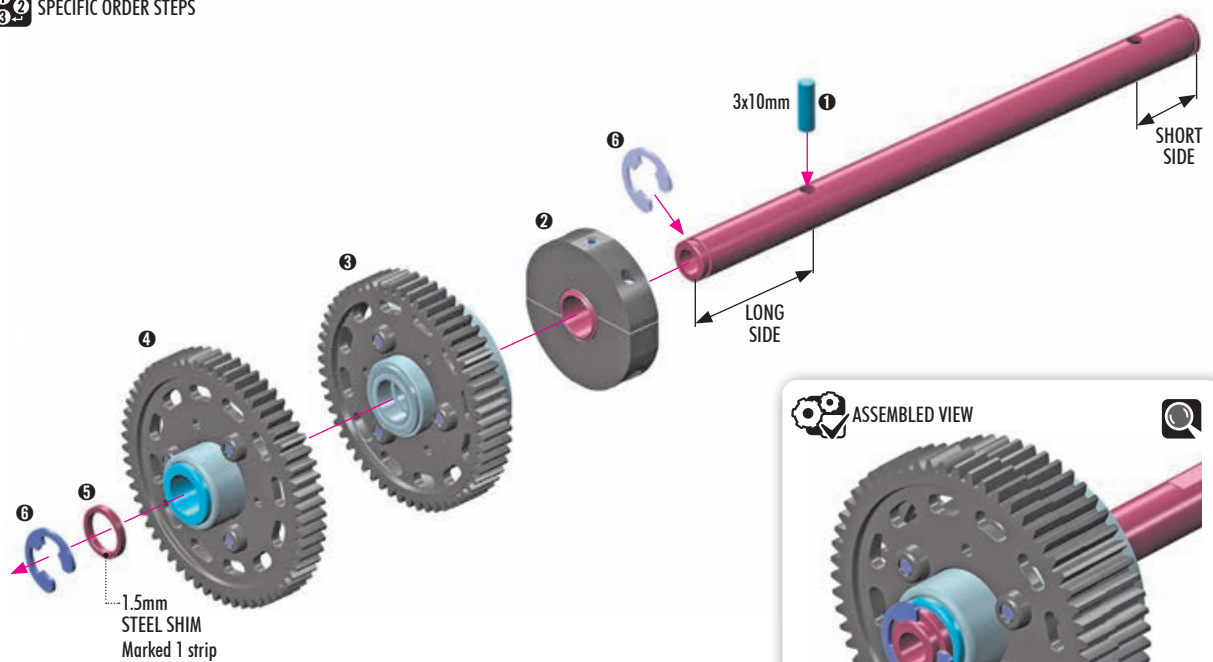


#### 2ND GRAPHITE 2-SPEED GEARS

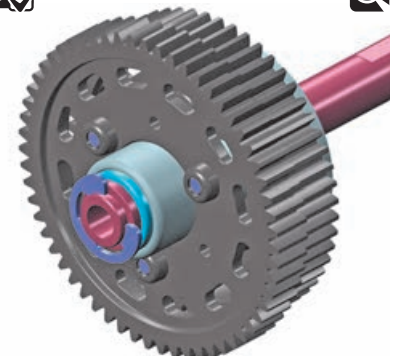
335653	53T (2nd)	OPTION
335654	54T (2nd)	OPTION
335655	55T (2nd)	INCLUDED



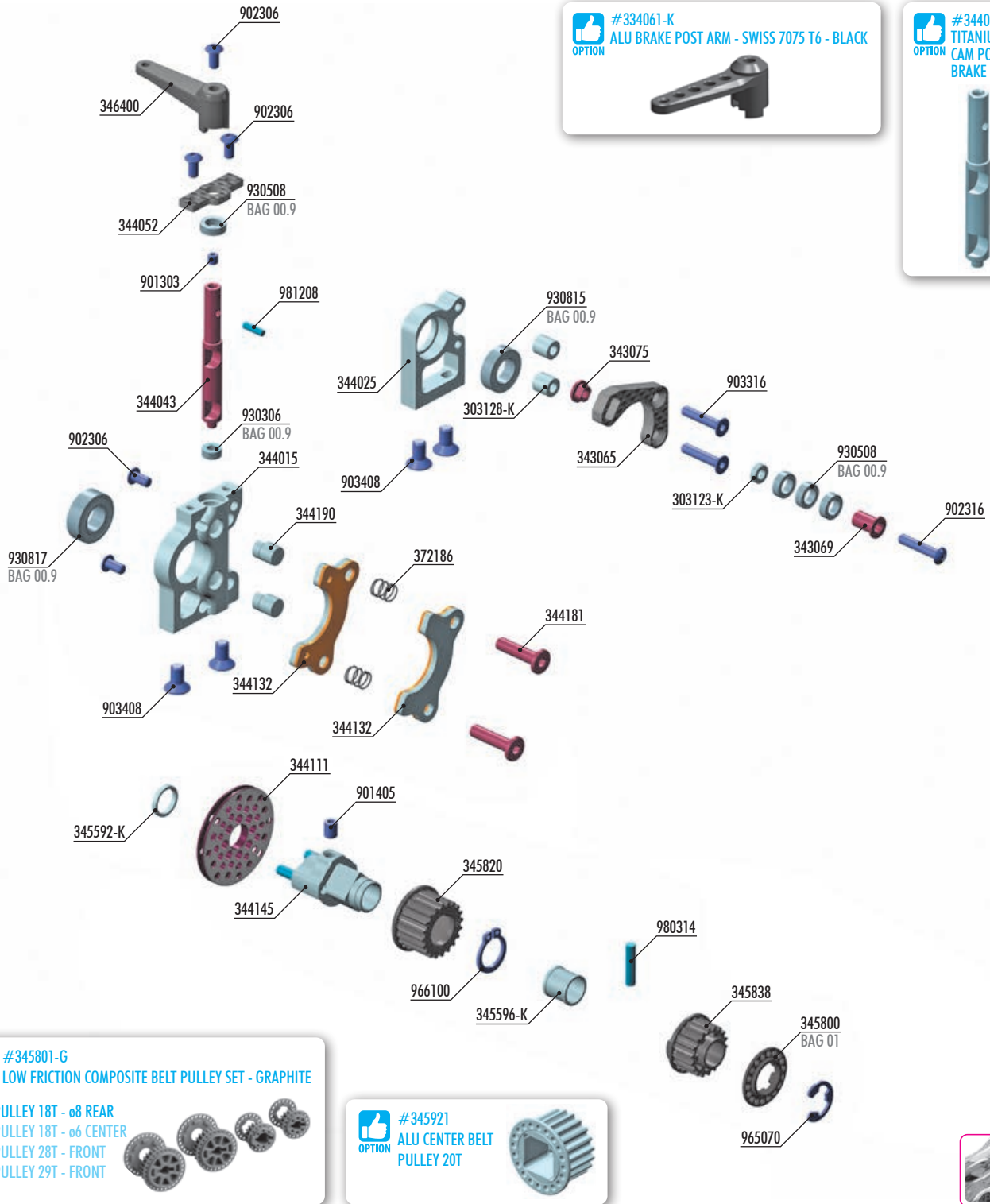
### 1 2 3 SPECIFIC ORDER STEPS



#### ASSEMBLED VIEW



## 5. BRAKE SYSTEM



#345801-G  
LOW FRICTION COMPOSITE BELT PULLEY SET - GRAPHITE

BELT PULLEY 18T - ø8 REAR  
BELT PULLEY 18T - ø6 CENTER  
BELT PULLEY 28T - FRONT  
BELT PULLEY 29T - FRONT



#345921  
ALU CENTER BELT PULLEY 20T



**BAG**

**05**

303123-K ALU SHIM 3x6x2.0mm - BLACK (10)  
303128-K ALU SHIM 3x6x6.0mm - BLACK (10)  
343065 RX8 CARBON BELT TENSIONER HOLDER - REAR  
343069 STEEL BUSHING (2)  
343075 STEEL NUT WITH GUIDE (2)  
344015 ALU BRAKE STAND FOR ALU BRAKE ROLLERS - SWISS 7075 T6  
344025 ALU 2-SPEED SHAFT STAND - SWISS 7075 T6  
344043 ALU BRAKE CAM POST FOR BRAKE ROLLERS - BLACK - SWISS 7075 T6  
344052 CARBON BRAKE UPPER PLATE  
344111 VENTILATED BRAKE DISC - PRECISION-GROUND - LIGHTWEIGHT  
344132 GLUED BRAKE PAD SET FOR BRAKE ROLLERS - RED (2)  
344145 BRAKE DISK ADAPTER FOR BRAKE ROLLER SYSTEM - HARD COATED  
344181 BRAKE GUIDE PIN 4x16mm M3 - HUDY SPRING STEEL™ (2)  
344190 ALU BRAKE ROLLER - BLACK - SWISS 7075 T6 (2)  
345592-K ALU 2-SPEED SHAFT SHIM - BLACK (2)  
345596-K ALU COLLAR 8x9.8x9mm - BLACK  
345800 COMPOSITE BELT PULLEY COVER SET  
345820 COMPOSITE 2-SPEED BELT PULLEY 20T - CENTER

345838 COMPOSITE SIDE BELT PULLEY 18T ø8 - REAR  
346400 THROTTLE & BRAKE LINKAGE SET  
372186 FRONT COIL SPRING FOR 4MM PIN C=1.5-1.7 - GOLD (2)

901303 HEX SCREW SB M3x3 (10)  
901405 HEX SCREW SB M4x5 (10)  
902306 HEX SCREW SH M3x6 (10)  
902316 HEX SCREW SH M3x16 (10)  
903316 HEX SCREW SFH M3x16 (10)  
903408 HEX SCREW SFH M4x8 (10)  
930306 BALL-BEARING 3x6x2.5 STEEL SEALED - OIL (2)  
930508 BALL-BEARING 5x8x2.5 STEEL SEALED - OIL (2)  
930815 BALL-BEARING 8x14x4 STEEL SEALED - OIL (2)  
930817 BALL-BEARING 8x16x5 STEEL SEALED - OIL (2)  
965070 E-CLIP 7 (10)  
966100 CH-CLIP 10 (10)  
980314 PIN 3x14 (10)  
981208 PIN 2x8 (10)

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

**XRAY**



1x 901303  
SB M3x3



3x 902306  
SH M3x6



1x 930306  
BB 3x6x2.5

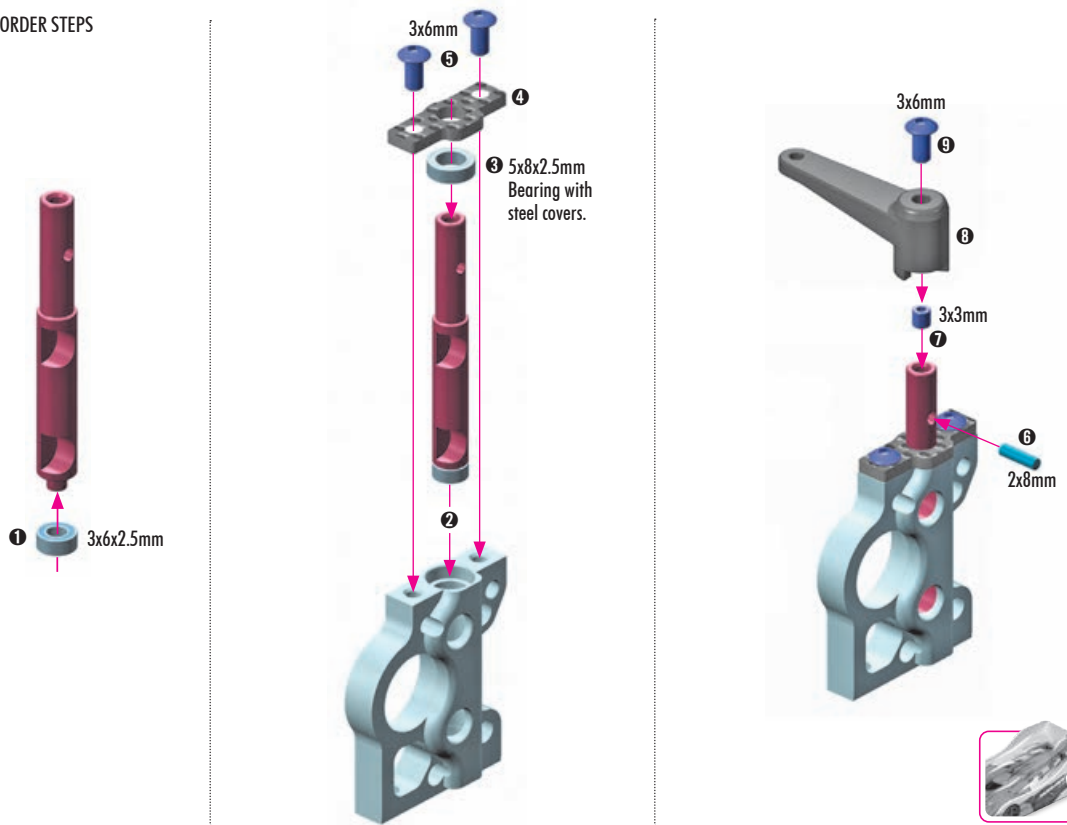


1x 930508  
BB 5x8x2.5



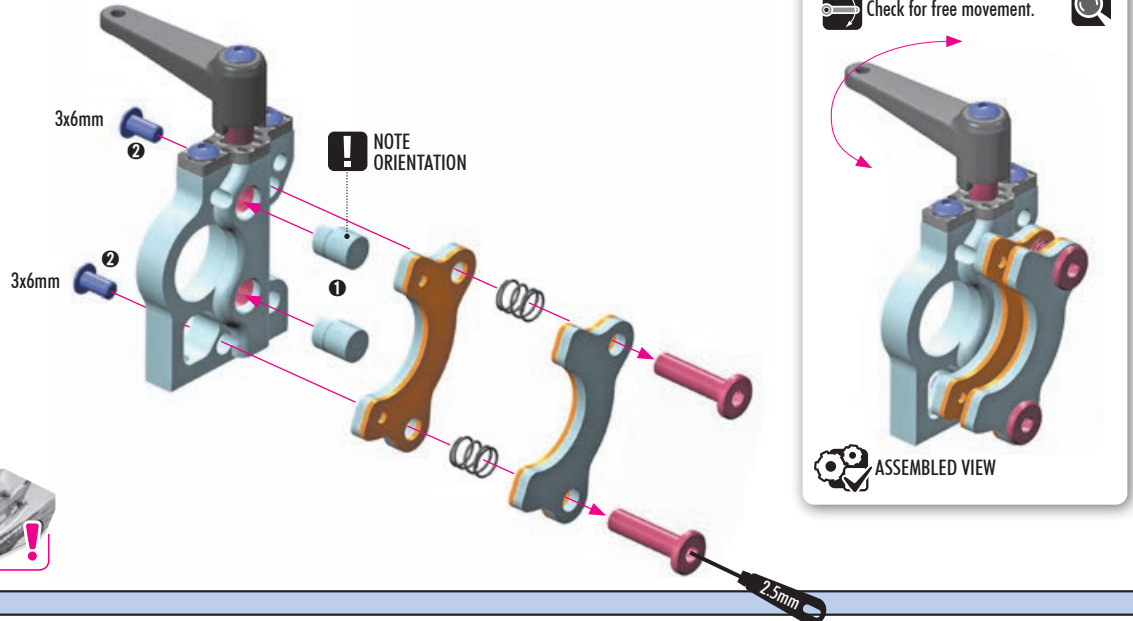
1x 981208  
P 2x8

## 1 2 3 SPECIFIC ORDER STEPS



2x 902306  
SH M3x6

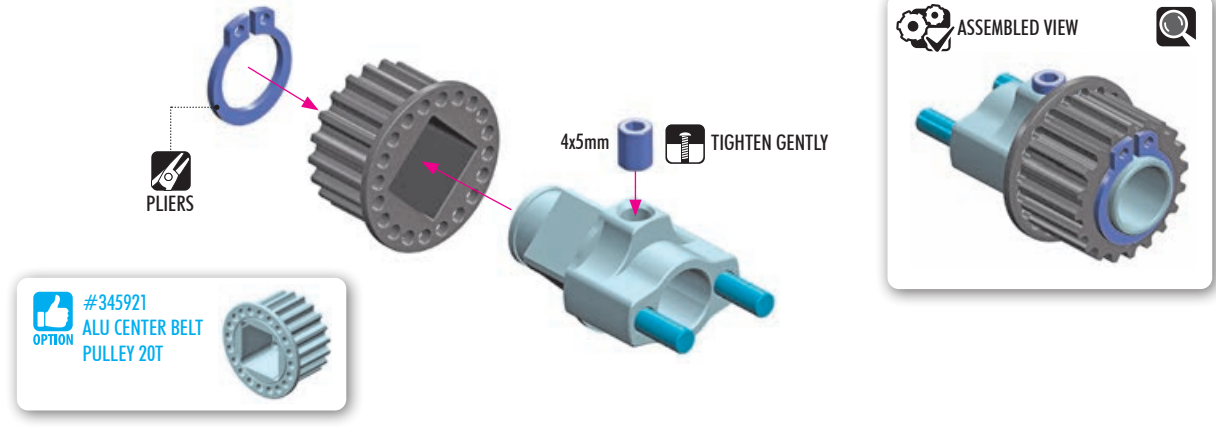
## 1 2 3 SPECIFIC ORDER STEPS



1x 901405  
SB M4x5

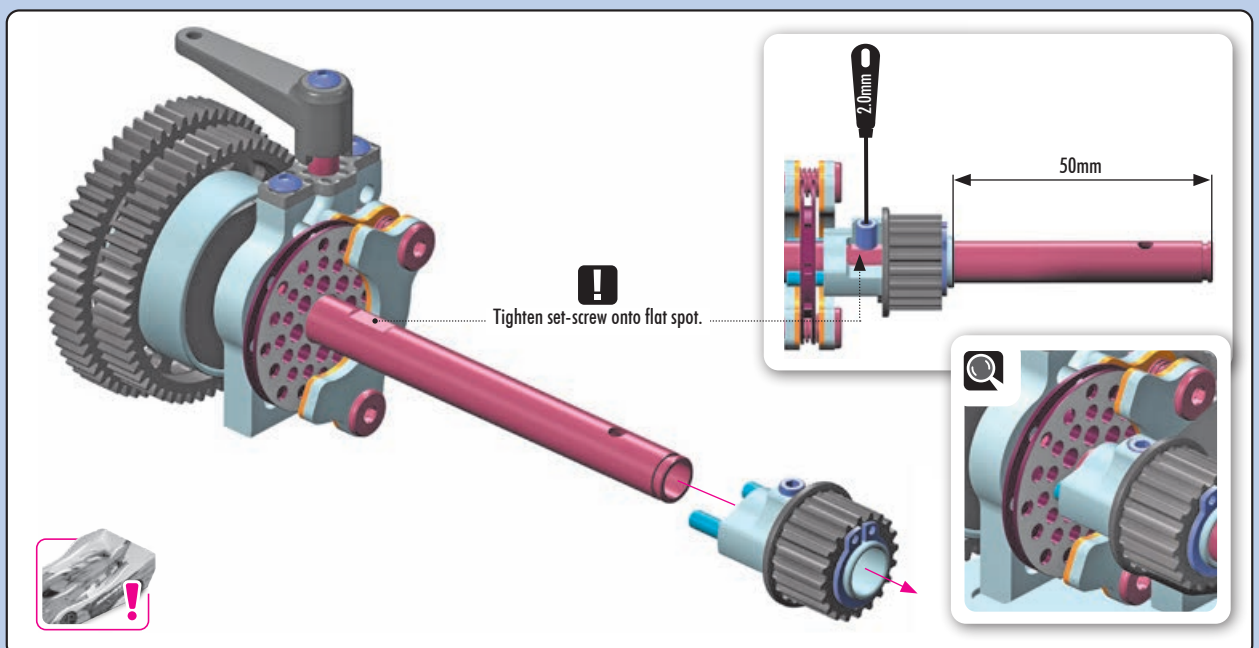
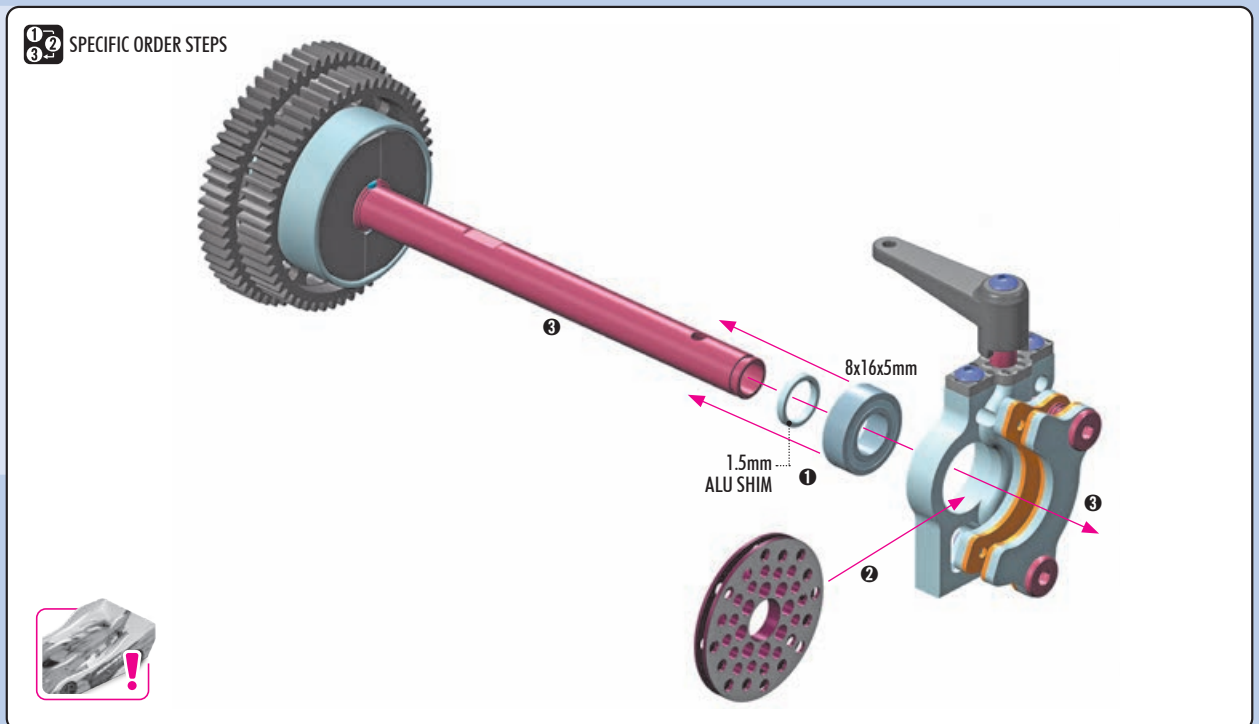
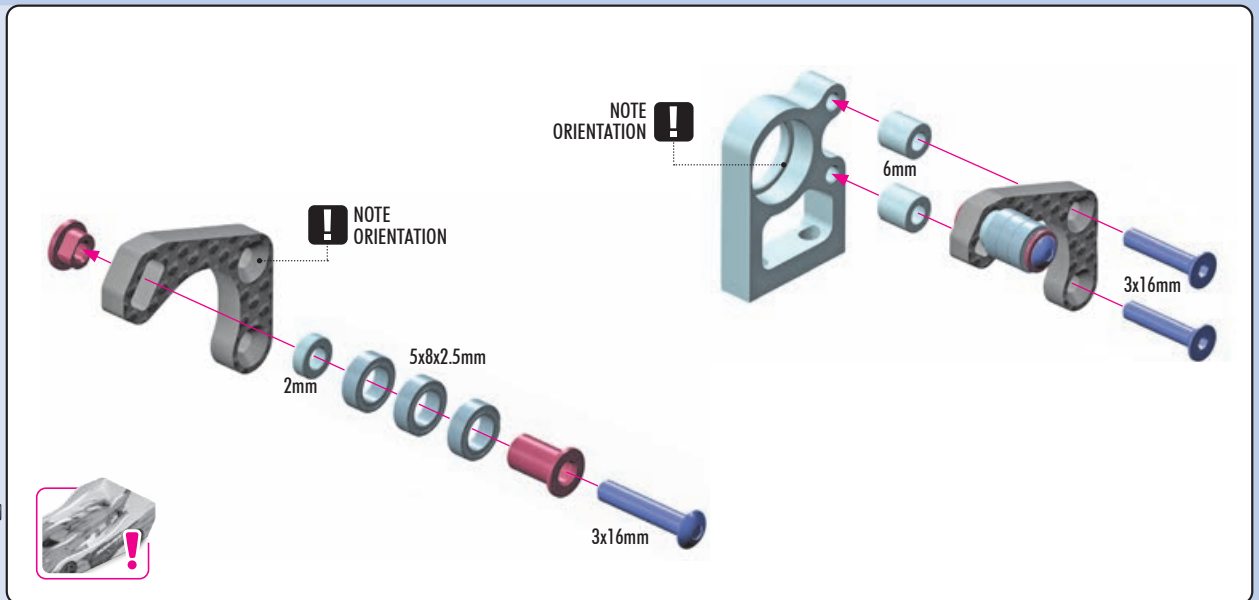
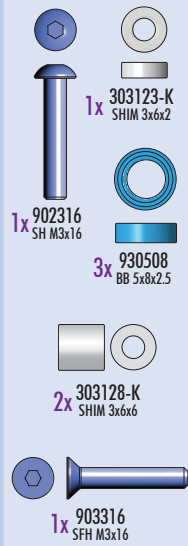


1x 966100  
CH 10





## 5. BRAKE SYSTEM



## 5. BRAKE SYSTEM

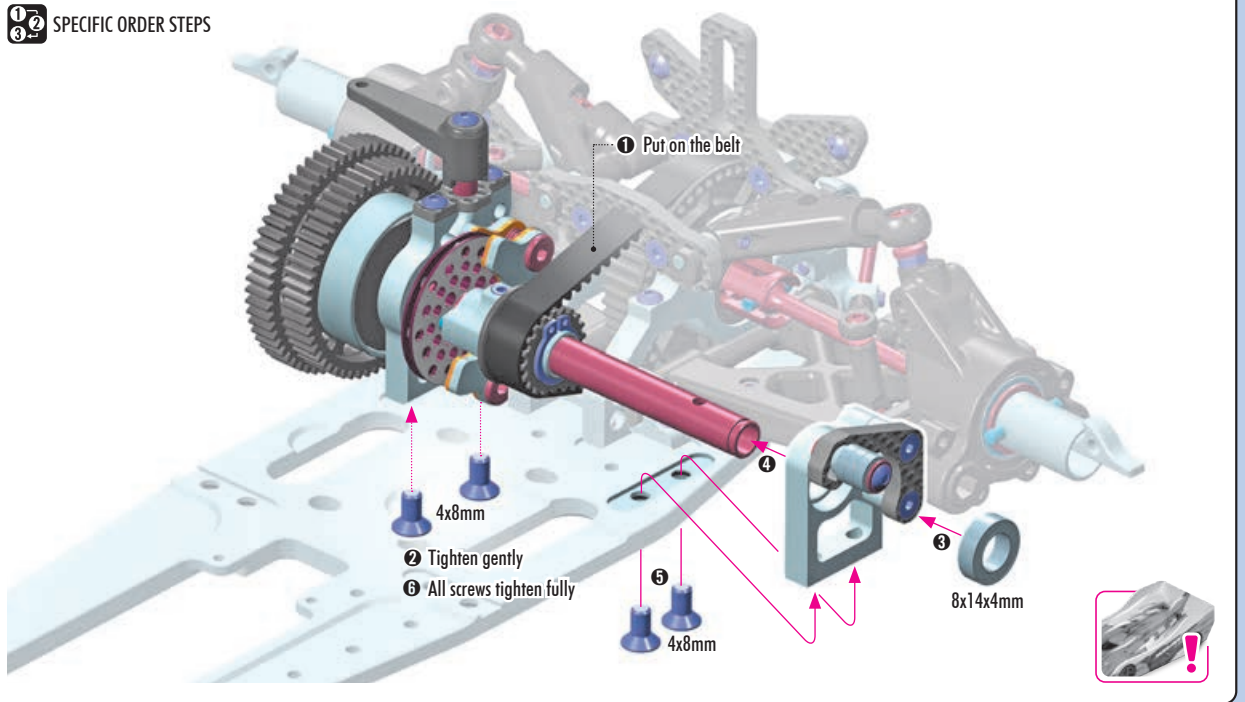


4x 903408  
SFH M4x8



1x 930815  
BB 8x14x4

### SPECIFIC ORDER STEPS

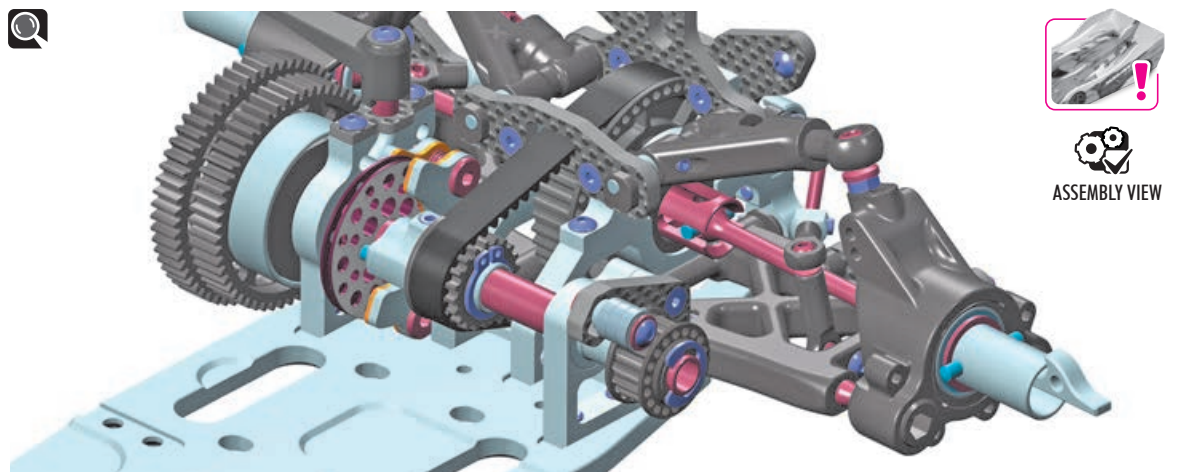
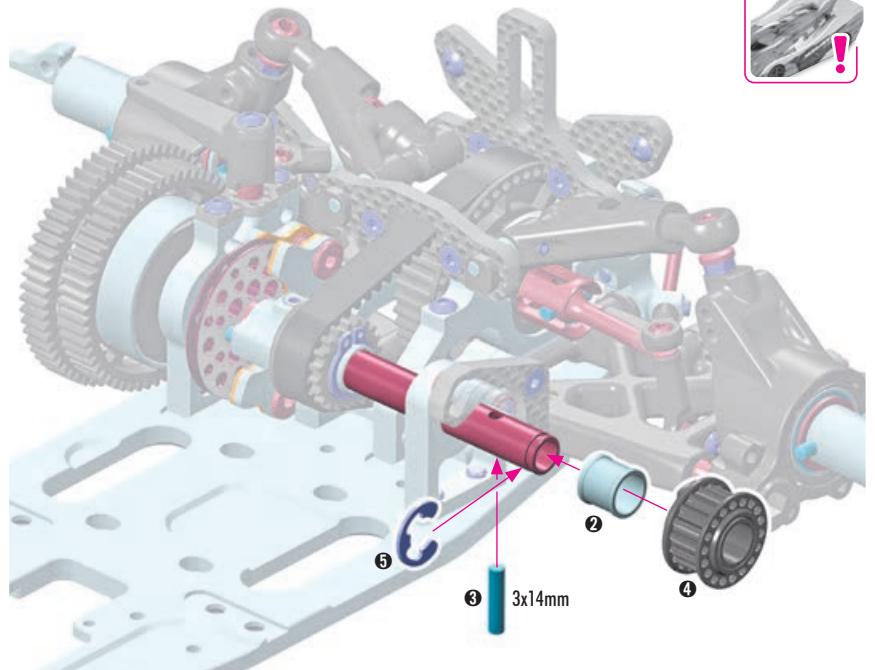
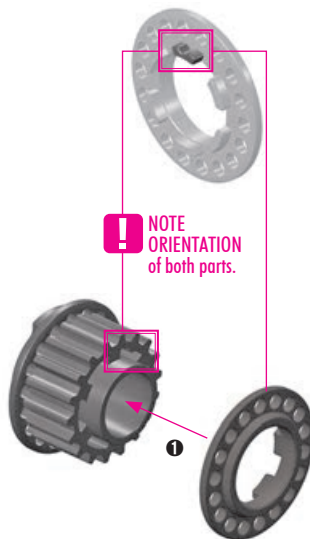


1x<sup>965070</sup>  
C7



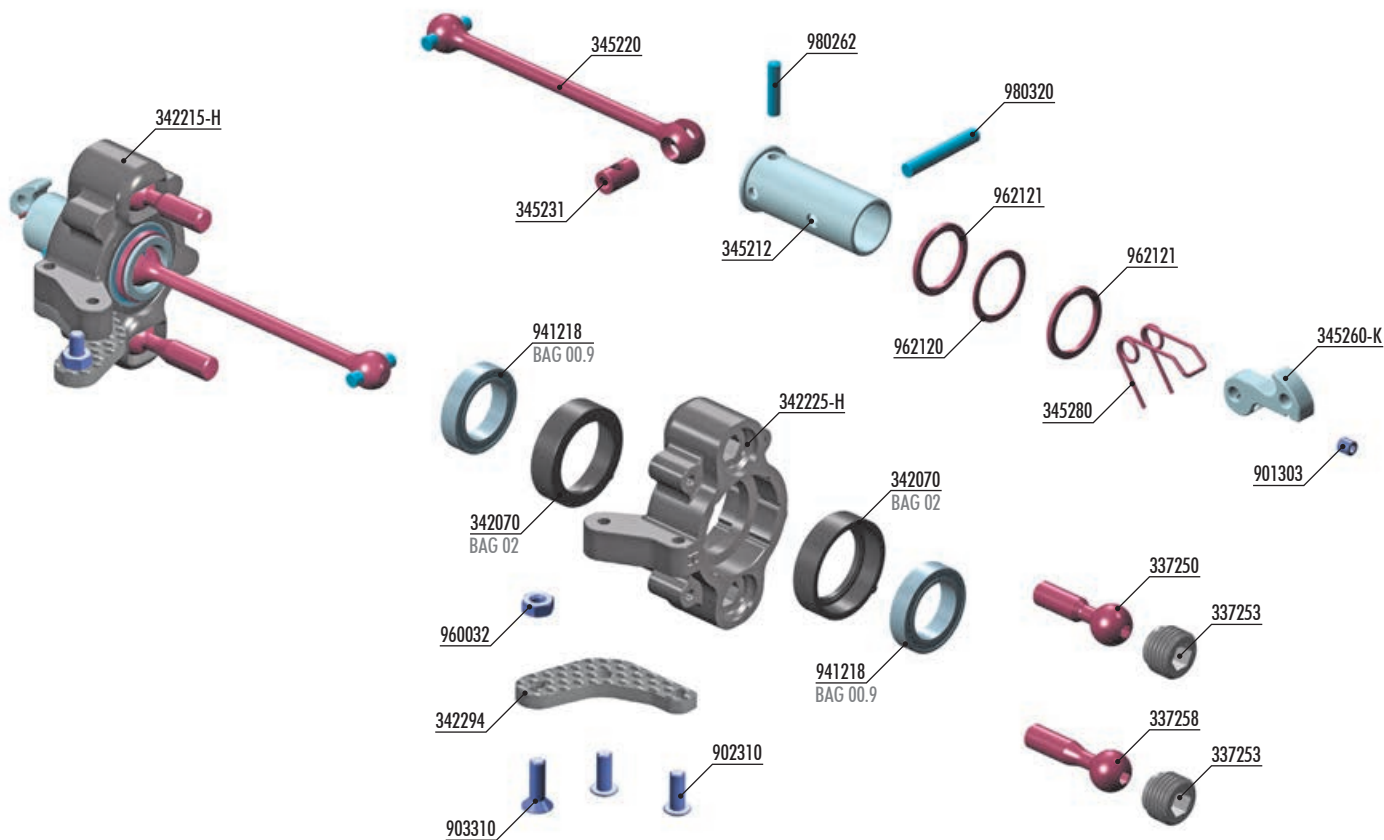
1x 980314  
P 3x14

**SPECIFIC ORDER STEPS**



ASSEMBLY VIEW

## 6. FRONT SUSPENSION



### ADJUSTING NUT

#	MATERIAL	INCLUDED
#337253	COMPOSITE	INCLUDED
#337252	ALU	OPTION

\*The alu nut must be used together with #337254 – Composite Ball Cup 8.4mm.



### STEERING BLOCKS

#	TYPE	MATERIAL	INCLUDED
#342215	R	MEDIUM	OPTION
#342215-H	R	HARD	INCLUDED
#342215-G	R	GRAPHITE	OPTION
#342225	L	MEDIUM	OPTION
#342225-H	L	HARD	INCLUDED
#342225-G	L	GRAPHITE	OPTION



### #345210 FRONT WHEEL AXLE HUDY SPRING STEEL™



### #345270 GRAPHITE FRONT AERODYNAMIC DISC 1.6mm - SET



### #980320-T TITAN PIN 3x20 (2)

### BAG

06

337250	STEEL PIVOT BALL 8.4mm (2)
337253	COMPOSITE ADJUSTING NUT M10x1 (4)
337258	STEEL PIVOT BALL 8.4mm ø3.3 L=25mm (2)
342070	COMPOSITE SET OF BUSHINGS (2)
342215-H	EXTRA ECCENTRIC STEERING BLOCK FOR AERO DISC - RIGHT - HARD
342225-H	EXTRA ECCENTRIC STEERING BLOCK FOR AERO DISC - LEFT - HARD
342294	CARBON EXTENSION FOR STEERING BLOCK - 2-DOT (L+R)
345212	ALU FRONT CVD DRIVE AXLE - SWISS 7075 T6 - HARD COATED
345220	FRONT CVD DRIVE SHAFT 63mm - HUDY SPRING STEEL™
345231	DRIVE SHAFT COUPLING - HUDY SPRING STEEL™
345260-K	ALU FRONT WHEEL LOCK - SWISS 7075 T6 - BLACK (2)
345280	WHEEL SPRING (2)

901303	HEX SCREW SB M3x3 (10)
902310	HEX SCREW SH M3x10 (10)
903310	HEX SCREW SFH M3x10 (10)
941218	BALL-BEARING 12x18x4 RUBBER SEALED - OIL (2)
960032	NUT M3 (10)
962120	WASHER S 12x15x0.5 (10)
962121	WASHER S 12x15x1.0 (10)
980262	PIN 2.5x12 (10)
980320	PIN 3x20 (10)

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



## 6. FRONT SUSPENSION

**2x**

Short Ball

Long Ball

5mm

Tighten composite hex nuts using HUDY tool #107581. **TIP**

**PIVOT BALLS MUST MOVE FREELY**

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

**ADJUSTING NUT**

OPTION	Part Number	Material	Status
	#337253	COMPOSITE	INCLUDED
	#337252	ALU	OPTION

\*The alu nut must be used together with #337254 – Composite Ball Cup 8.4mm.

**STEERING BLOCKS**

OPTION	Part Number	Side	Material	Status
	#342215	R	MEDIUM	OPTION
	#342215-H	R	HARD	INCLUDED
	#342215-G	R	GRAPHITE	OPTION
	#342225	L	MEDIUM	OPTION
	#342225-H	L	HARD	INCLUDED
	#342225-G	L	GRAPHITE	OPTION

**2x**

Hole ø2.5mm

M3

3x10mm

3x10mm

ASSEMBLED VIEW

**4x** 902310 SH M3x10

**2x** 903310 SFH M3x10

**2x** 960032 N M3

**2x**

**SPECIFIC ORDER STEPS**

1. Apply GRAPHITE GREASE to the ball joint.
2. Insert the ball joint into the steering block.
3. Tighten the nut to the specified torque.

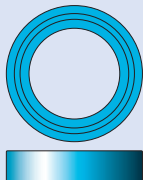
**ASSEMBLED VIEW**

**EXTREMELY IMPORTANT**

**CORRECT** (Green checkmark)

**INCORRECT** (Red X)

## 6. FRONT SUSPENSION



4x 941218  
BB 12x18x4

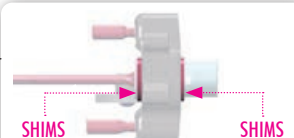
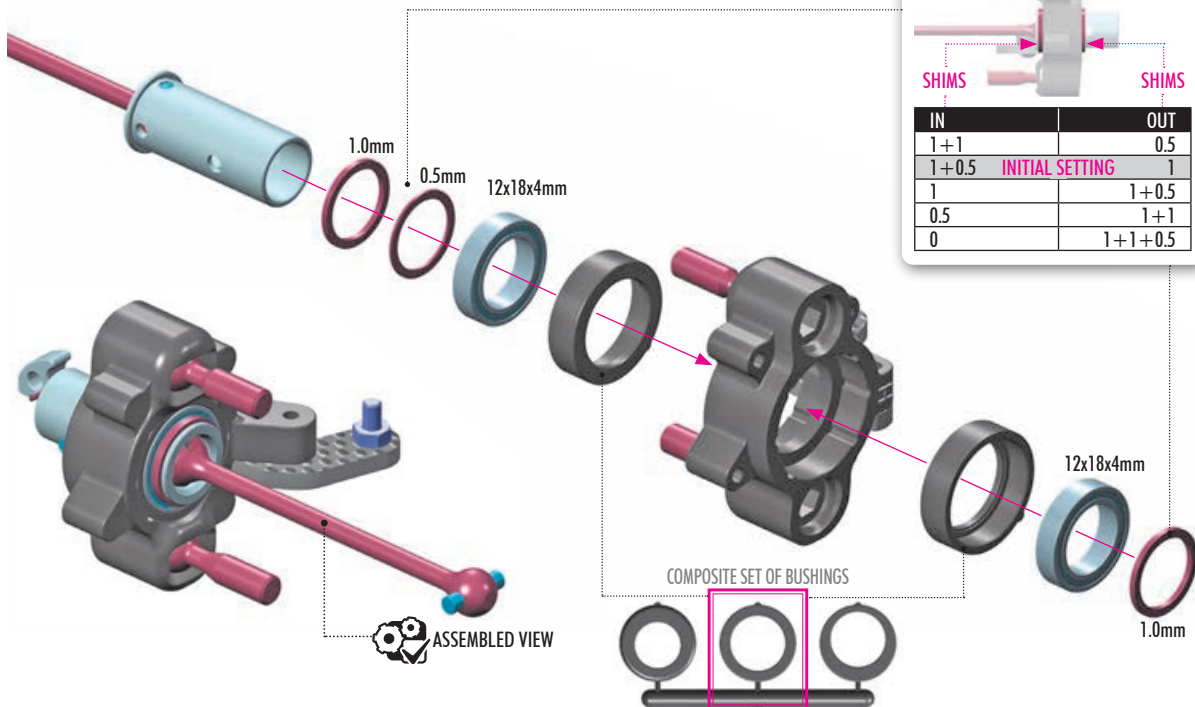


2x 962120  
S 12x15x0.5



4x 962121  
S 12x15x1.0

2x L=R



IN	OUT
1+1	0.5
1+0.5	INITIAL SETTING 1
1	1+0.5
0.5	1+1
0	1+1+0.5



#345210  
FRONT WHEEL AXLE  
HUDY SPRING STEEL™



#345290  
ALU SHIM 12x15x1.0mm (4)

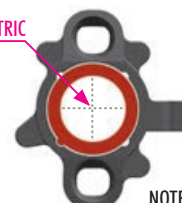


#345291  
ALU SHIM 12 x 15 x 1.5mm (4)

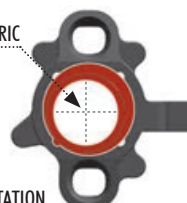


INITIAL SETTING

CONCENTRIC



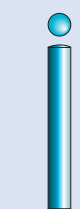
EXCENTRIC



NOTE ORIENTATION

When using excentric bushings, both bushings must be in same position.

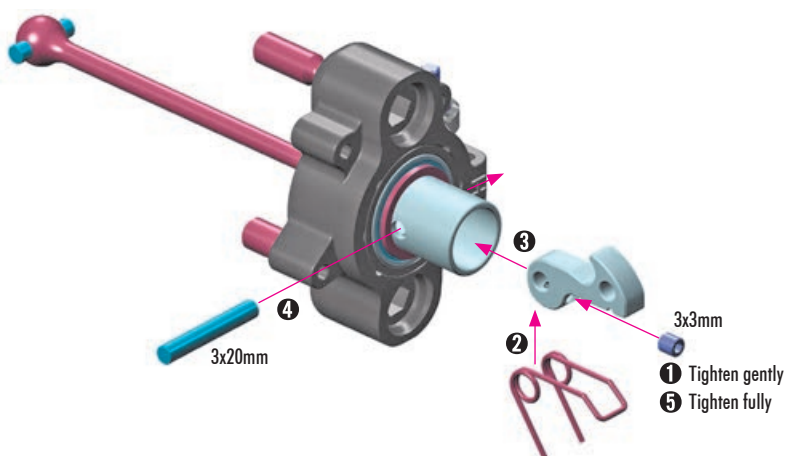
2x 901303  
SB M3x3



2x 980320  
P 3x20

2x L=R

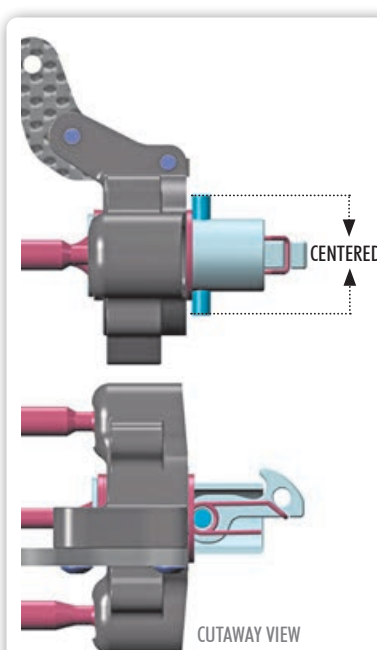
1 2 3 SPECIFIC ORDER STEPS



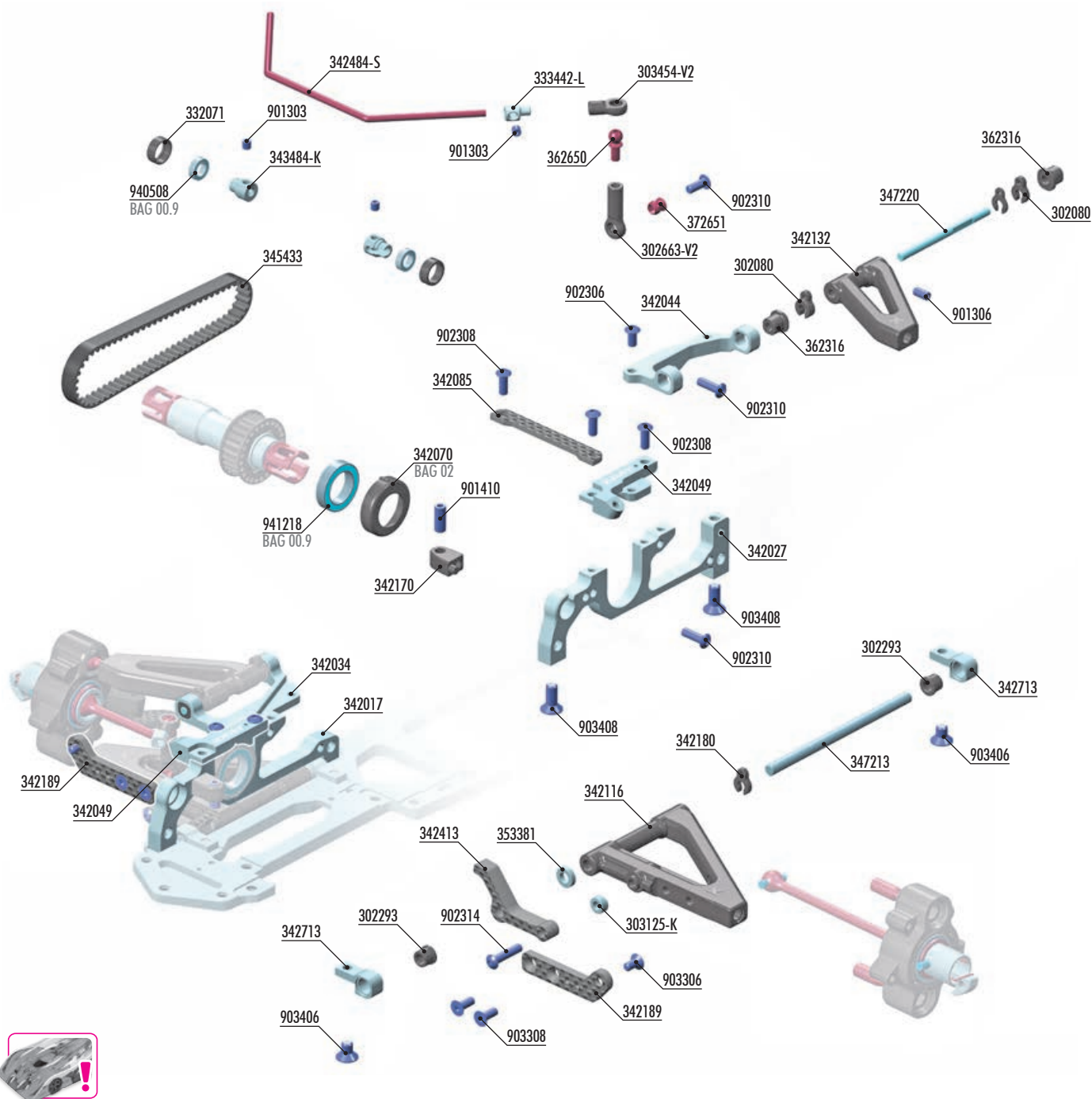
#345270  
GRAPHITE FRONT  
AERODYNAMIC DISC  
1.6mm - SET



#980320-T  
TITAN PIN 3x20 (2)



## 7. FRONT SUSPENSION



### BAG

07

303125-K	ALU SHIM 3x6x3.0mm - BLACK (10)	343484-K	ALU CUTTED ANTI-ROLL BAR COLLAR ø2.4 - BLACK (2)
302080	COMPOSITE CASTER CLIPS SET 4+3+2+1mm (2)	345433	LOW FRICTION DRIVE BELT FRONT 6.0 x 207mm
302293	C-HUB BUSHING COMPOSITE - V2 (4)	347213	PIVOT PIN 4x72mm (2)
302663-V2	COMPOSITE BALL JOINT 4.9mm - OPEN - V3 (8)	347220	PIVOT PIN WITH FLAT SPOT (2)
303454-V2	BALL JOINT 4.9mm - OPEN - V2 (4)	353381	ALU SHIM 4x7.5x2 (4)
332071	COMPOSITE BALL-BEARING HUB (4)	362316	COMPOSITE OPEN ECCENTRIC BUSHING SET (2)
333442-L	ALU ANTI-ROLL BAR COLLAR ø2.6 - LIGHTWEIGHT (2)	362650	BALL END 4.9mm WITH THREAD 6mm (2)
342017	ALU LOWER BULKHEAD FRONT - SWISS 7075 T6 - RIGHT	372651	PIVOT BALL UNIVERSAL 4.9mm - HUDY SPRING STEEL (2)
342027	ALU LOWER BULKHEAD FRONT - SWISS 7075 T6 - LEFT		
342034	ALU UPPER ARM HOLDER RIGHT - SWISS 7075 T6 - SET	901303	HEX SCREW SB M3x3 (10)
342044	ALU UPPER ARM HOLDER LEFT - SWISS 7075 T6 - SET	901306	HEX SCREW SB M3x6 (10)
342049	ALU UPPER CLAMP FRONT - SWISS 7075 T6 - (L+R)	901410	HEX SCREW SB M4x10 (10)
342070	COMPOSITE SET OF BUSHINGS (2)	902306	HEX SCREW SH M3x6 (10)
342085	CARBON FRONT BRACE	902308	HEX SCREW SH M3x8 (10)
342116	SUSPENSION ARM FOR WIRE ANTI-ROLL BAR - FRONT LOWER - HARD	902310	HEX SCREW SH M3x10 (10)
342132	COMPOSITE SUSPENSION ARM FRONT UPPER - SHORT - HARD	902314	HEX SCREW SH M3x14 (10)
342170	COMPOSITE SUSPENSION ARM DOWNSTOP (2)	903306	HEX SCREW SFH M3x6 (10)
342180	COMPOSITE LOWER SUSP. ARM CLIPS (2)	903308	HEX SCREW SFH M3x8 (10)
342189	CARBON EXTENSION FOR FRONT SUSPENSION ARM - 2-DOT (L+R)	903406	HEX SCREW SFH M4x6 (10)
342413	CARBON FRONT DOWNSTOP BACKSTOP (2)	903408	HEX SCREW SFH M4x8 (10)
342484-S	ANTI-ROLL BAR FRONT 2.4mm - SHORT	940508	BALL-BEARING 5x8x2.5 RUBBER SEALED - OIL (2)
342713	ALU LOWER FRONT SUSPENSION HOLDER (1) - BLACK - 7075 T6	941218	BALL-BEARING 12x18x4 RUBBER SEALED - OIL (2)

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



## 7. FRONT SUSPENSION



2x L=R

ASSEMBLED VIEW



### FRONT SUSPENSION UPPER ARMS

#342131	MEDIUM	OPTION
#342132	HARD	INCLUDED
#342133	GRAPHITE	OPTION
#342134	SOFT	OPTION



### FRONT SUSPENSION LOWER ARMS

#342114	MEDIUM	OPTION
#342116	HARD	INCLUDED
#342115	GRAPHITE	OPTION

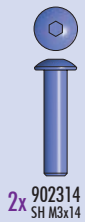


#342188  
CARBON EXTENSION FOR  
FRONT SUSPENSION ARM  
1-DOT (L+R)



3x8mm

3x6mm



2x L=R

ASSEMBLED VIEW

2mm

2mm

3mm

3x14mm



2x L=R

ASSEMBLED VIEW

4x6mm

4x6mm



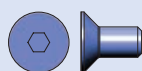
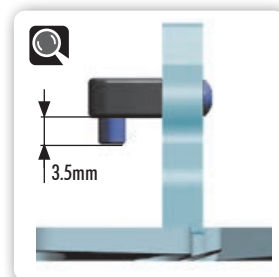
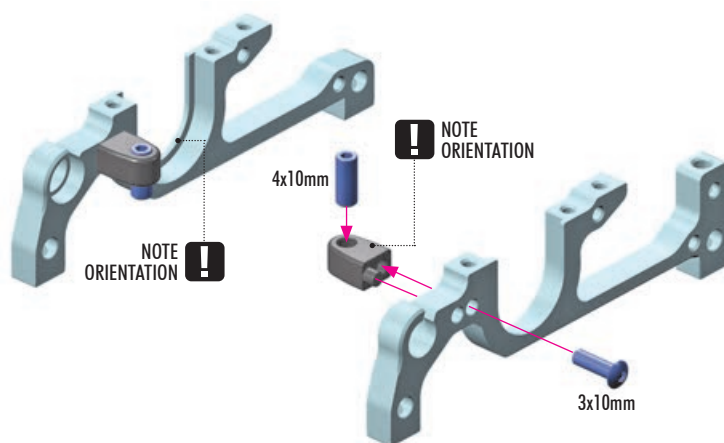
## 7. FRONT SUSPENSION



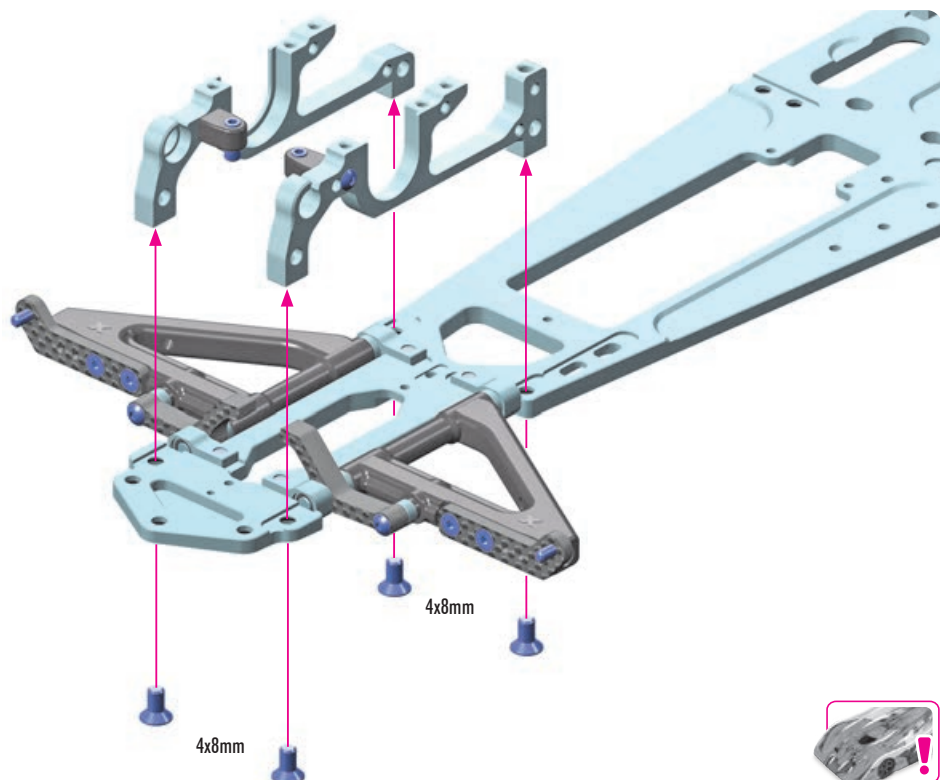
2x 901410  
SB M4x10



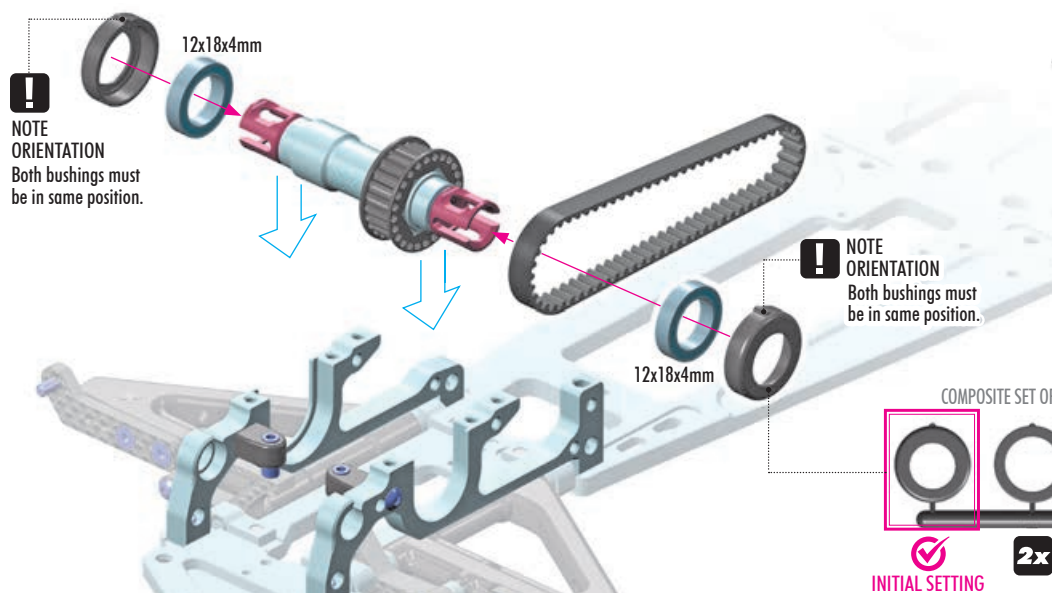
2x 902310  
SH M3x10



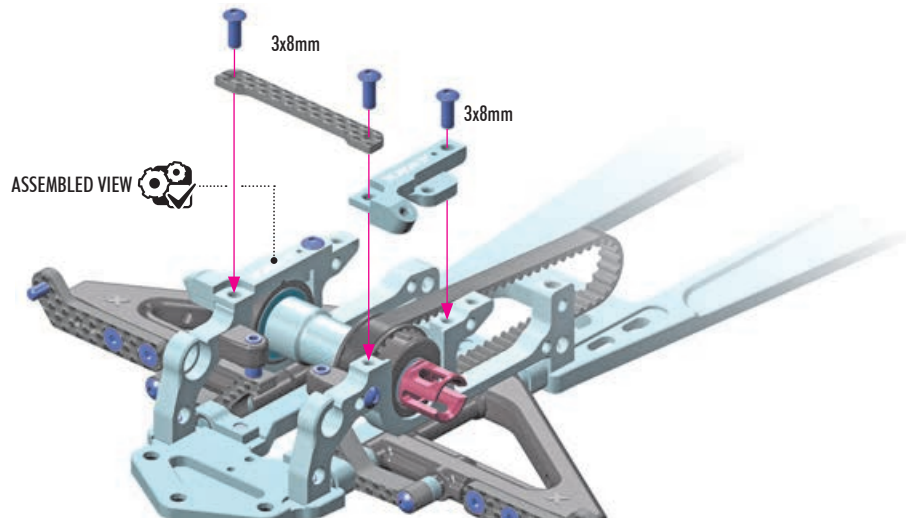
4x 903408  
SFH M4x8



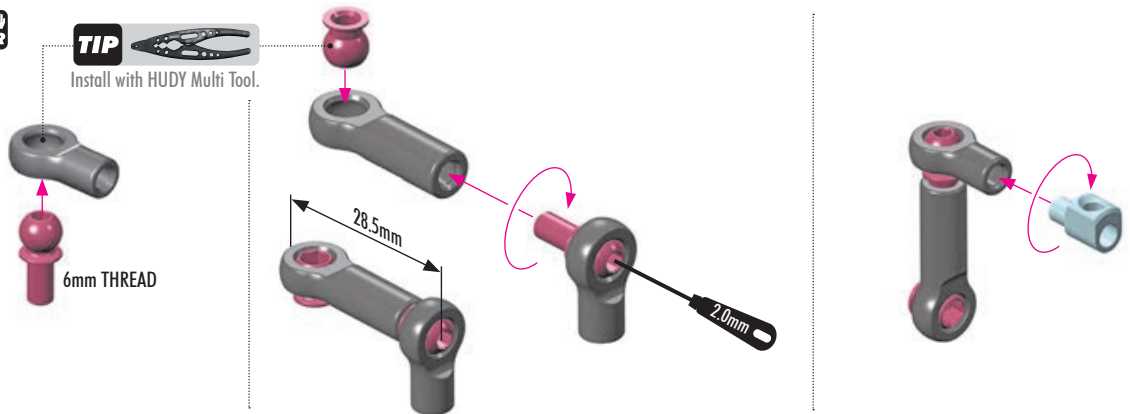
2x 941218  
BB 12x18x4



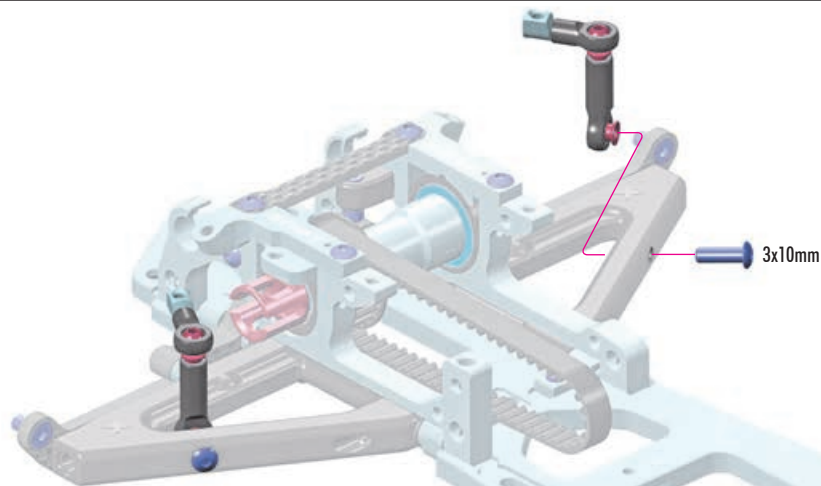
## 7. FRONT SUSPENSION



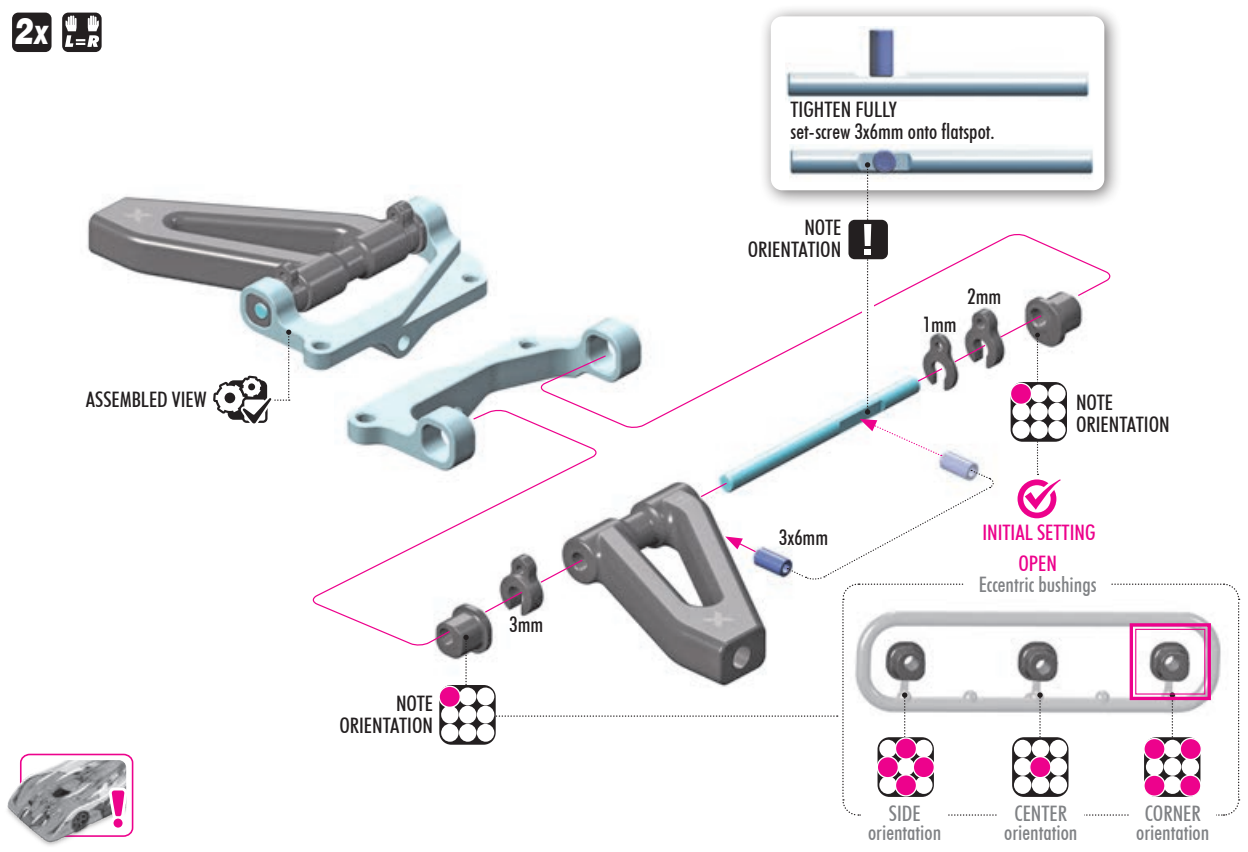
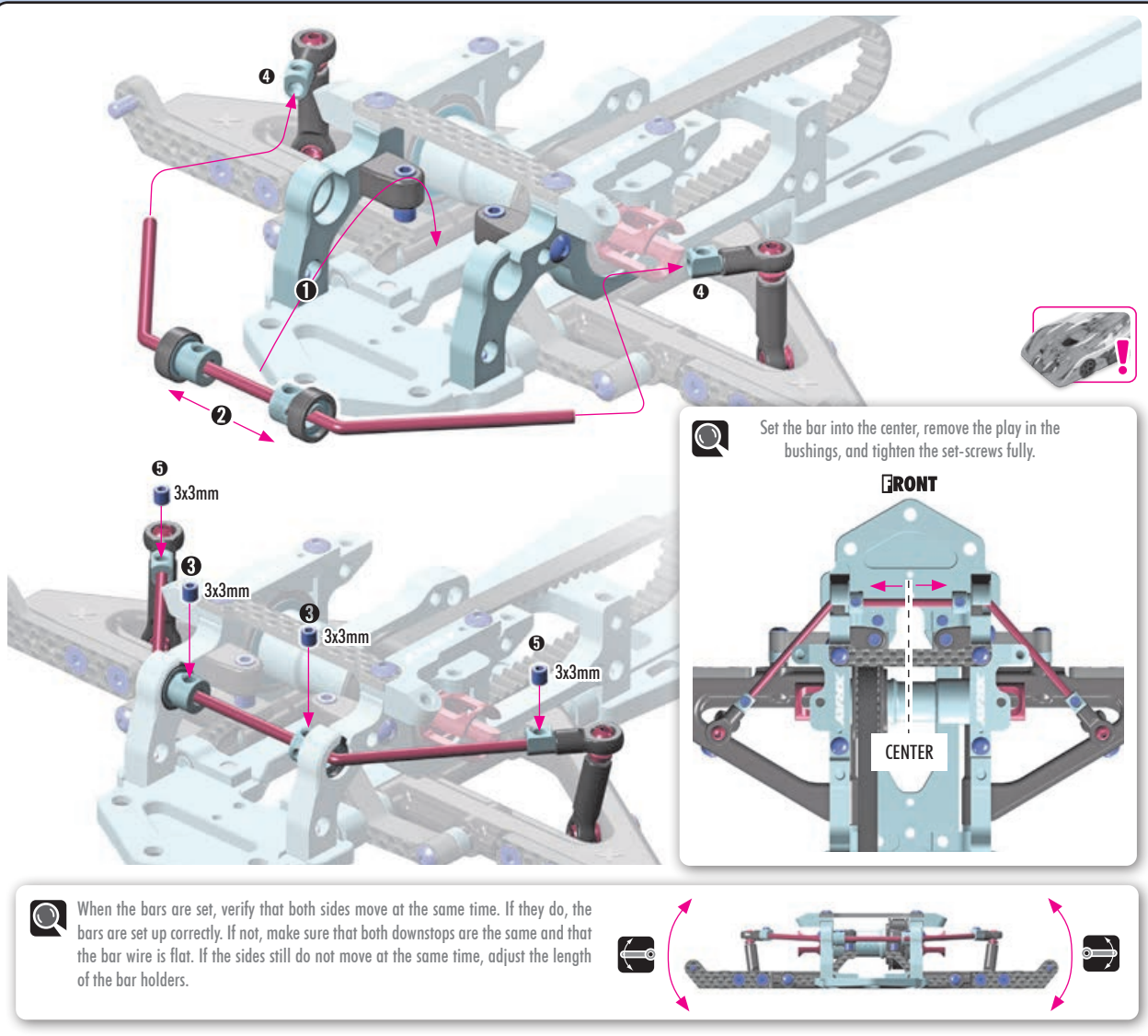
**TIP** Install with HUDY Multi Tool.



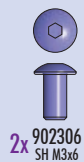
FRONT ANTI-ROLL BARS			COLLARS	
			+	
#342480-S	2.0mm	OPTION	#333443 + 343483-K	OPTION
#342482-S	2.2mm	OPTION	OPTION	
#342483-S	2.3mm	OPTION	#333442 + 343484-K	OPTION
#342484-S	2.4mm	INCLUDED	INCLUDED	
#342485-S	2.5mm	OPTION	#333442 + 343482-K	OPTION
#342486-S	2.6mm	OPTION	OPTION	
#342488-S	2.8mm	OPTION	#333441 + 343485-K	OPTION





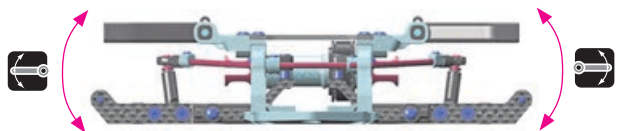
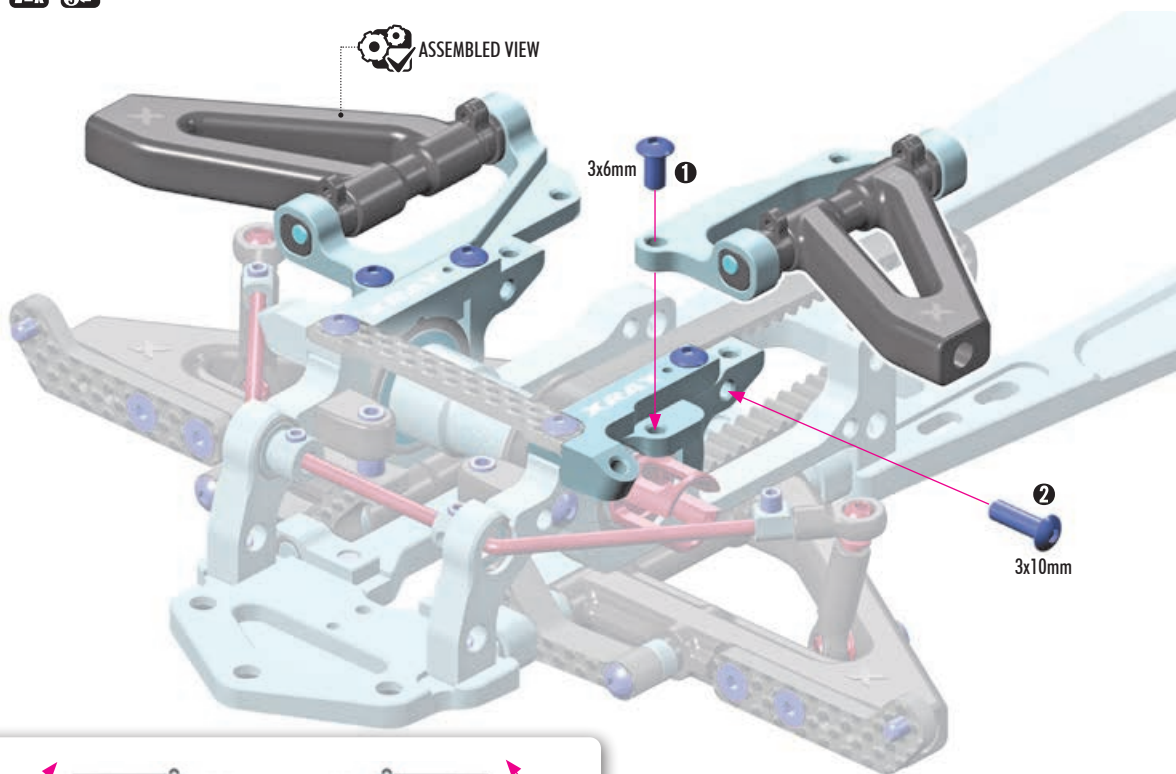


# 7. FRONT SUSPENSION



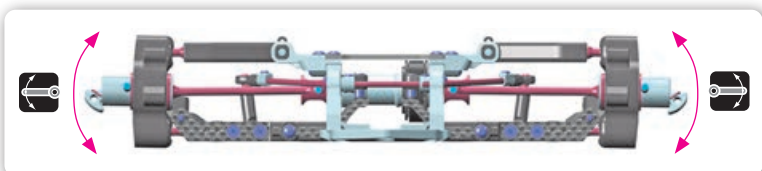
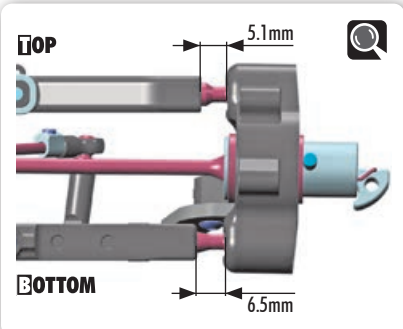
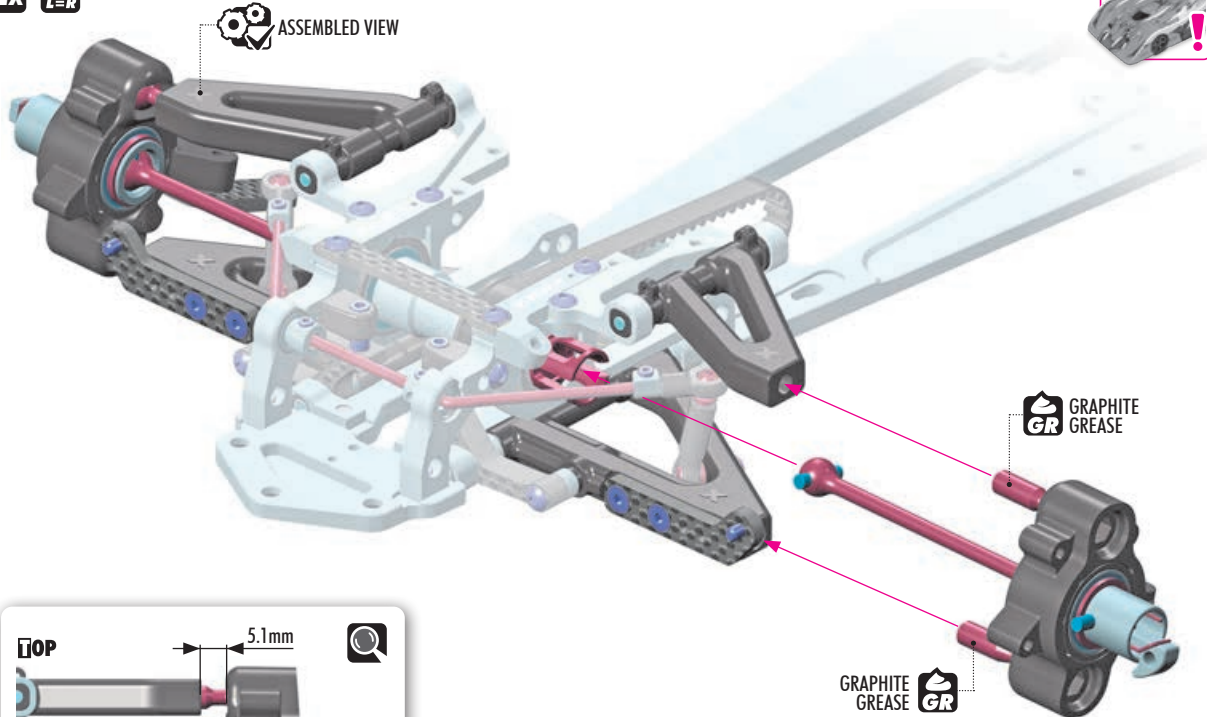
2x SPECIFIC ORDER STEPS

ASSEMBLED VIEW



2x

ASSEMBLED VIEW

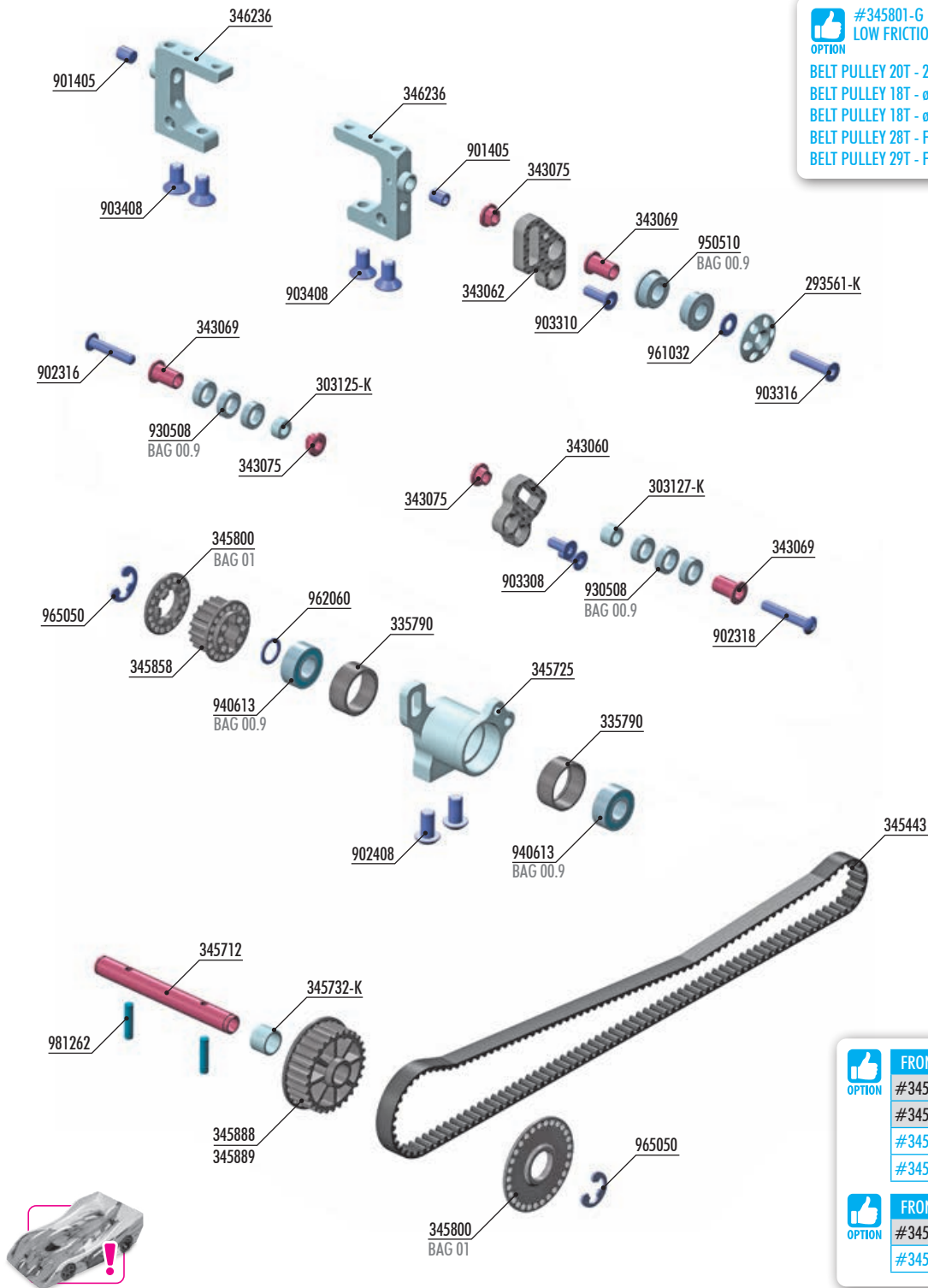


# 8. CENTER TRANSMISSION



#345801-G  
LOW FRICTION COMPOSITE BELT PULLEY SET - GRAPHITE

BELT PULLEY 20T - 2-SPEED CENTER  
BELT PULLEY 18T - Ø8 REAR  
BELT PULLEY 18T - Ø6 CENTER  
BELT PULLEY 28T - FRONT  
BELT PULLEY 29T - FRONT



## FRONT SIDE BELT PULLEY

#345888	28T	COMP.	INCLUDED
#345889	29T	COMP.	INCLUDED
#345988	28T	ALU	OPTION
#345990	30T	ALU	OPTION



## FRONT BELT PULLEY CENTER

#345858	18T	COMP.	INCLUDED
#345958	18T	ALU	OPTION



BAG

08

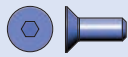
293561-K HUDY ALU REAR WING SHIM - BLACK (2)  
303125-K ALU SHIM 3x6x3.0mm - BLACK (10)  
303127-K ALU SHIM 3x6x4.0mm - BLACK (10)  
335790 COMPOSITE BALL-BEARING BUSHING FOR MIDDLE SHAFT (2)  
343060 CARBON BELT TENSIONER HOLDER - FRONT  
343062 CARBON BELT TENSIONER HOLDER - MIDDLE  
343069 STEEL BUSHING (2)  
343075 STEEL NUT (2)  
345443 LOW FRICTION DRIVE BELT SIDE 6.0 x 435mm  
345712 FRONT MIDDLE SHAFT - LIGHTWEIGHT - HUDY SPRING STEEL™  
345725 ALU FRONT MIDDLE SHAFT STAND - BLACK - SWISS 7075 T6  
345732-K ALU MIDDLE SHAFT LOCATING COLLAR - SHORT - BLACK  
345800 COMPOSITE BELT PULLEY COVER SET  
345858 COMPOSITE FRONT BELT PULLEY 18T Ø6 - CENTER  
345888 COMPOSITE SIDE BELT PULLEY 28T - FRONT  
345889 COMPOSITE SIDE BELT PULLEY 29T - FRONT  
346236 ALU MOUNT WITH M4 FOR RADIO PLATE - BLACK - SWISS 7075 T6 (2)

901405 HEX SCREW SB M4x5 (10)  
902316 HEX SCREW SH M3x16 (10)  
902318 HEX SCREW SH M3x18 (10)  
902408 HEX SCREW SH M4x8 (10)  
903308 HEX SCREW SFH M3x8 (10)  
903310 HEX SCREW SFH M3x10 (10)  
903316 HEX SCREW SFH M3x16 (10)  
903408 HEX SCREW SFH M4x8 (10)  
930508 BALL-BEARING 5x8x2.5 STEEL SEALED - OIL (2)  
940613 BALL-BEARING 6x13x5 RUBBER SEALED - OIL (2)  
950510 BALL-BEARING 5x10x4 FLANGED - STEEL SEALED - OIL (2)  
961032 WASHER S 3.2 (10)  
962060 WASHER S 6x8x0.5 (10)  
965050 E-CLIP 5 (10)  
981262 PIN 2.5x12 (10)

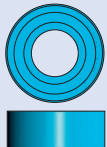
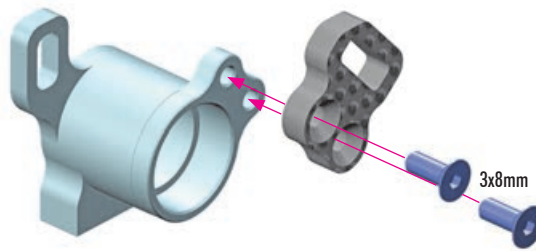
Numbers in parentheses ( ) refer to quantities when purchased separately.



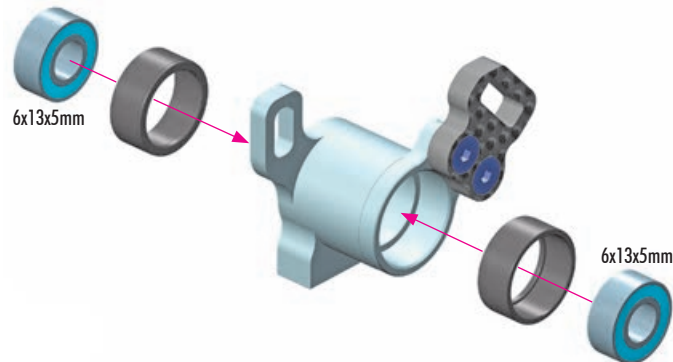
## 8. CENTER TRANSMISSION



2x 903308  
SFH M3x8



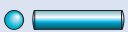
2x 940613  
BB 6x13x5



1x 962060  
SHIM 6x8x0.5

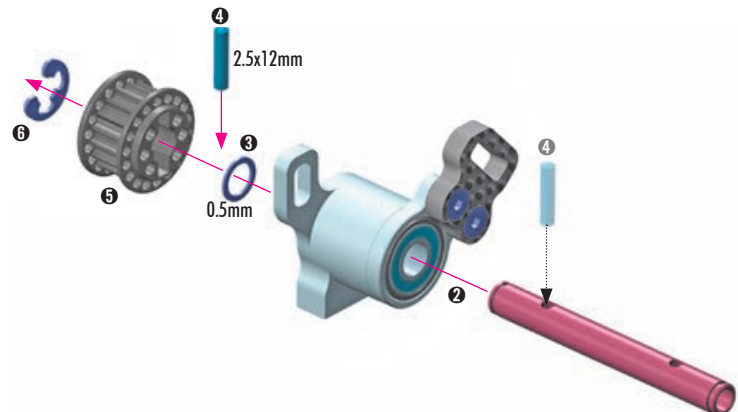
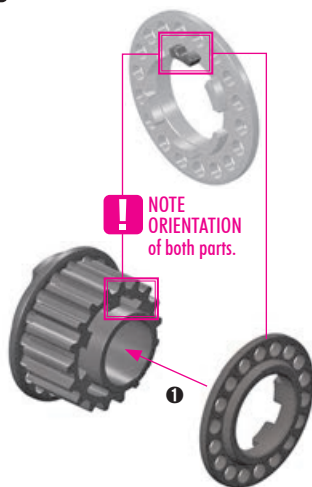


1x 965050  
C5

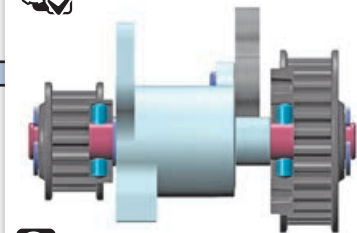


1x 981262  
P 2.5x12

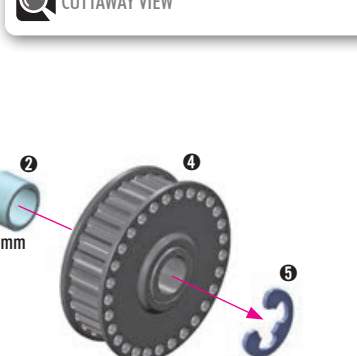
### 1 2 3 SPECIFIC ORDER STEPS



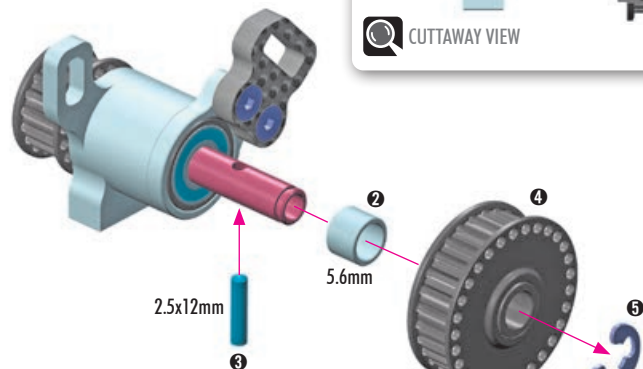
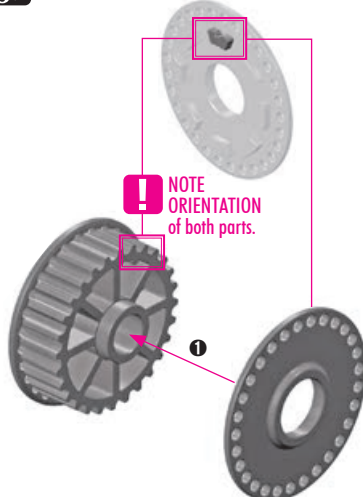
### ASSEMBLED VIEW



### CUTTAWAY VIEW



### 1 2 3 SPECIFIC ORDER STEPS



## 8. CENTER TRANSMISSION



1x 303125-K  
SHIM 3x6x3



1x 303127-K  
SHIM 3x6x4



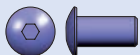
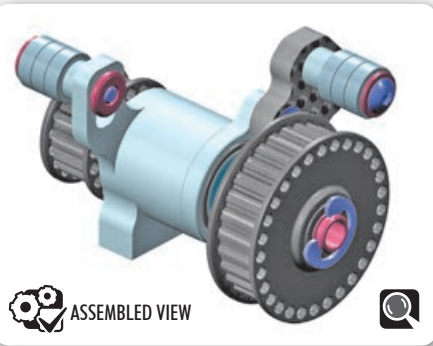
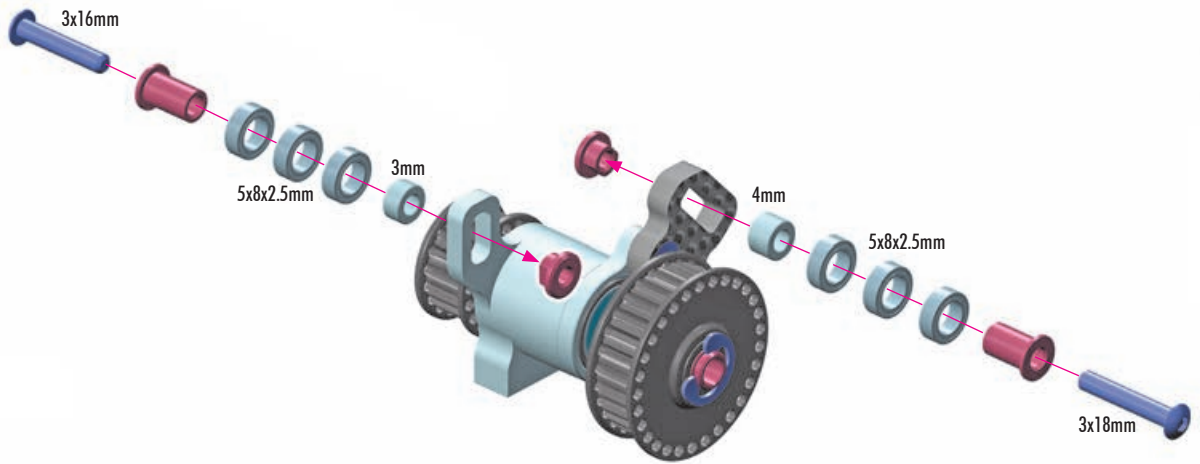
1x 902316  
SH M3x16



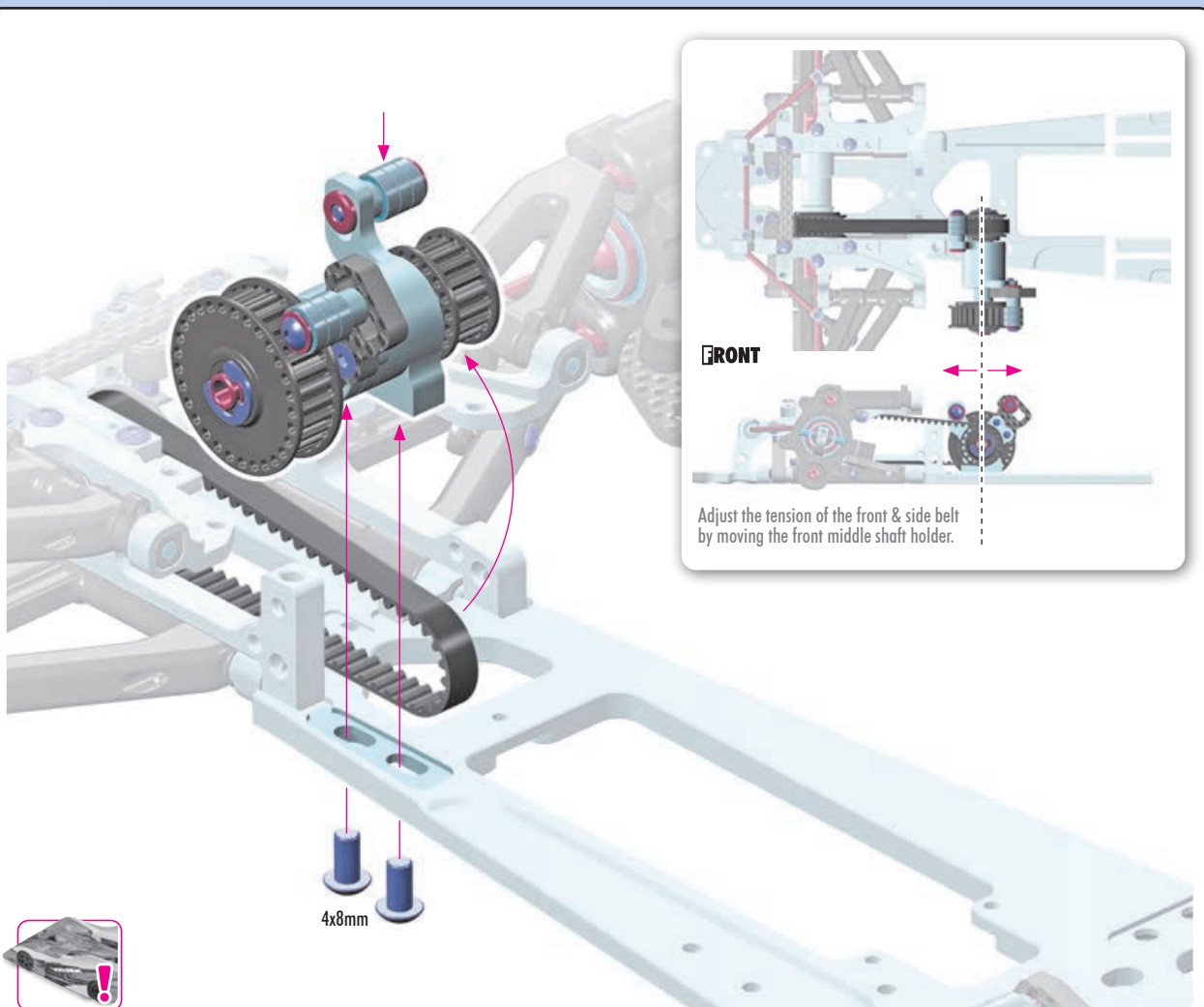
1x 902318  
SH M3x18



6x 930508  
BB 5x8x2.5



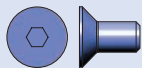
2x 902408  
SH M4x8



## 8. CENTER TRANSMISSION

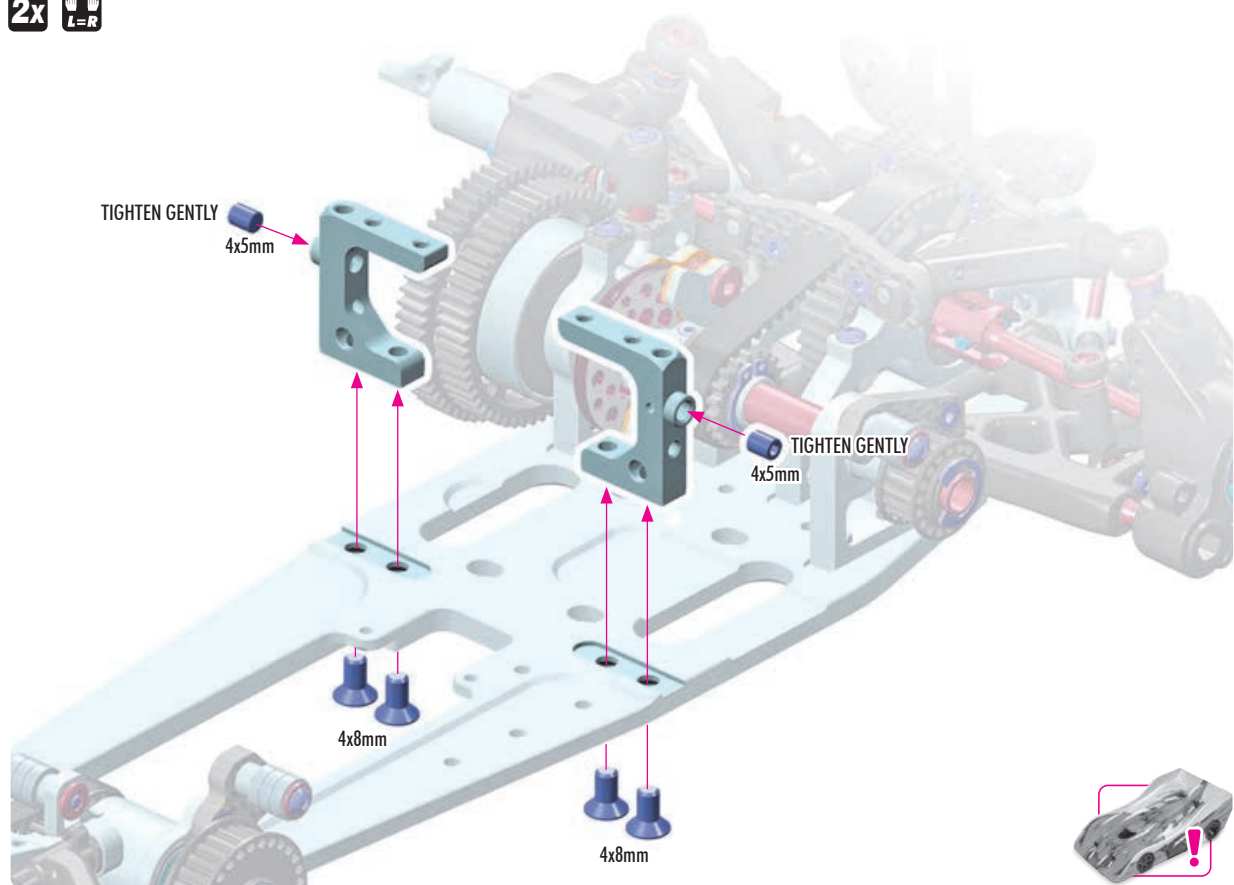


2x 901405  
SB M4x5



4x 903408  
SFH M4x8

2x L=R



1x 961032  
S3.2



1x 903310  
SFH M3x10

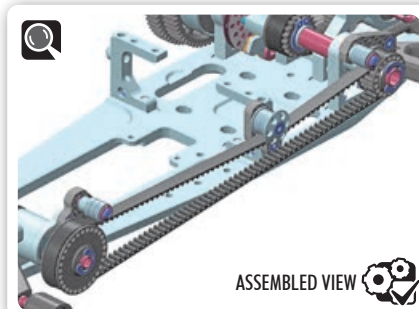
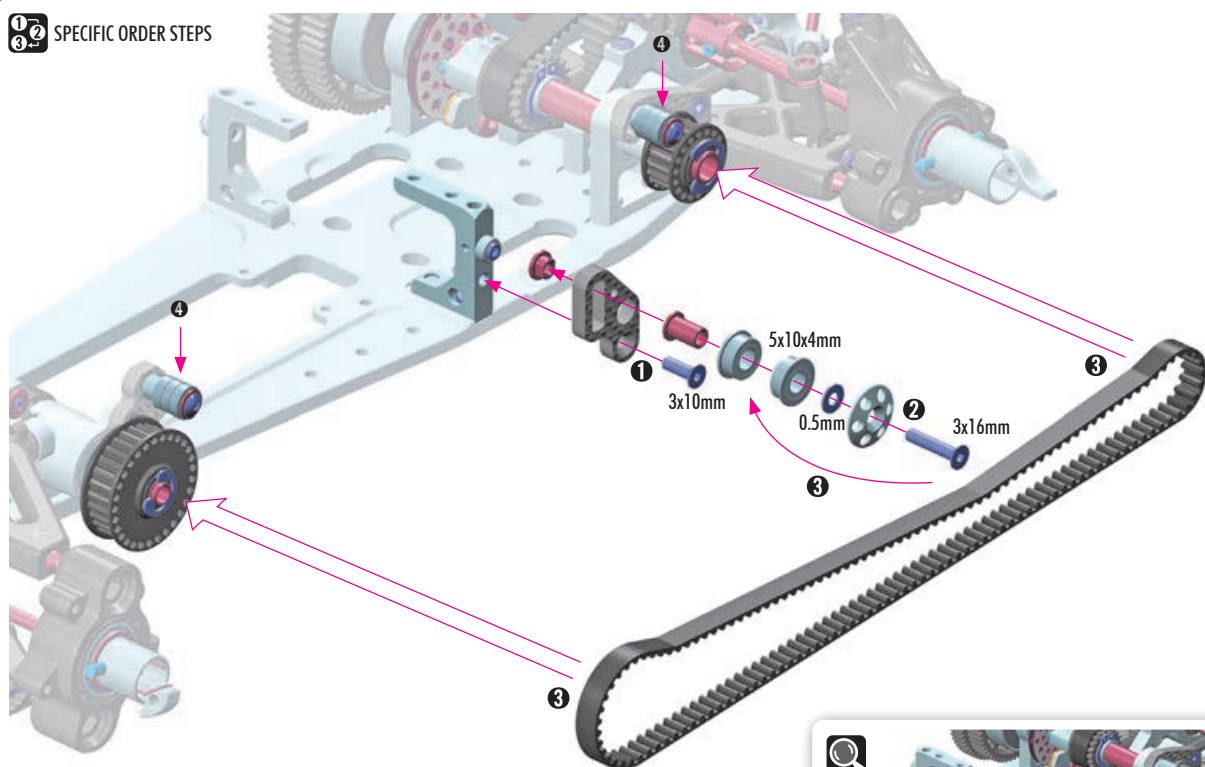


1x 903316  
SFH M3x16



2x 950510  
BB 5x10x4

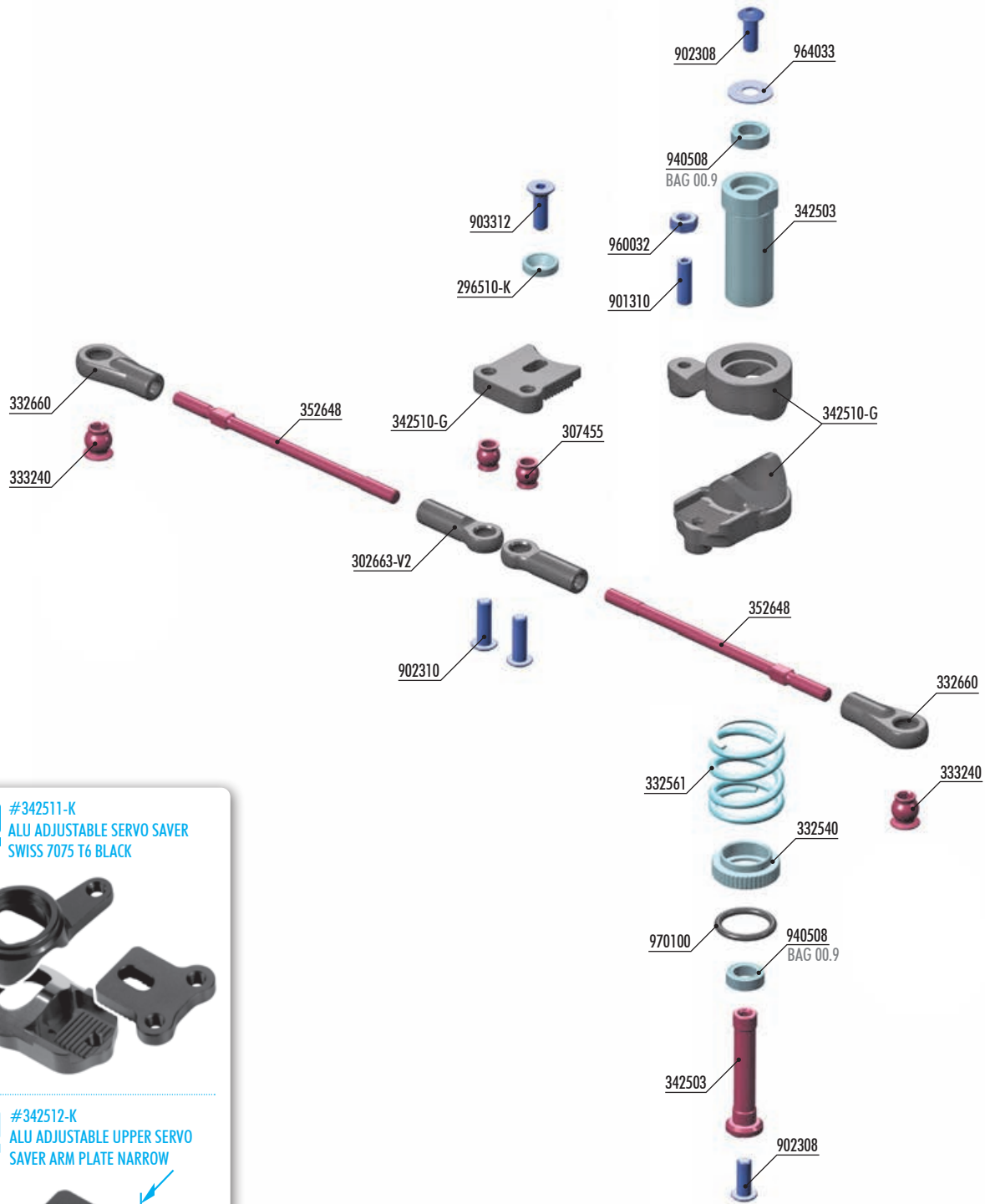
SPECIFIC ORDER STEPS



ASSEMBLED VIEW



## 9. SERVO SAVER & STEERING



#342511-K  
ALU ADJUSTABLE SERVO SAVER  
SWISS 7075 T6 BLACK



#342512-K  
ALU ADJUSTABLE UPPER SERVO  
SAVER ARM PLATE NARROW



**BAG**

**09**

296510-K ALU COUNTERSUNK SHIM - BLACK (4)  
302663-V2 COMPOSITE BALL JOINT 4.9mm - OPEN - V2 (8)  
307455 PIVOT BALL 4.9mm DOUBLE BEVEL SHOULDERS (10)  
332540 ALU SERVO SAVER ADJUSTABLE NUT  
332561 SERVO SAVER SPRING C=14  
332660 COMPOSITE STEERING & SERVO BALL JOINT 5.8mm (4+2)  
333240 BALL UNIVERSAL 5.8mm HEX (4)  
342503 SERVO SAVER COMPLETE SET - LOWER - GRAPHITE  
342510-G COMPOSITE SERVO SAVER - GRAPHITE  
352648 ADJ. TURNBUCKLE M3 L/R 62mm - HUDY SPRING STEEL (2)

901310 HEX SCREW SB M3x10 (10)  
902308 HEX SCREW SH M3x8 (10)  
902310 HEX SCREW SH M3x10 (10)  
903312 HEX SCREW SFH M3x12 (10)  
940508 BALL-BEARING 5x8x2.5 RUBBER SEALED - OIL (2)  
960032 NUT M3 - BLACK (10)  
964033 WASHER S 3.5x10x0.3 (10)  
970100 O-RING 10 x 1.5 (10)



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

## 9. SERVO SAVER & STEERING



1x 901310  
SB M3x10



1x 903312  
SFH M3x12



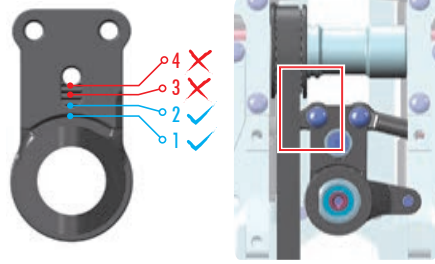
1x 960032  
N M3



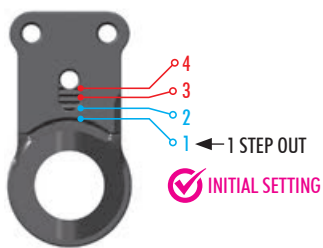
1x 970100  
O 10x1.5



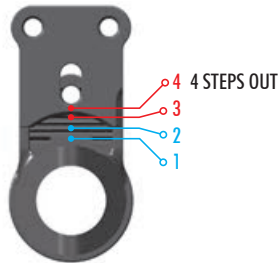
**USE ONLY ACKERMANN POSITIONS 1 OR 2.**  
Ackermann positions 3 or 4 require modifying the ball joint and one-way pulley for added clearance, but may reduce reliability.



THERE ARE 4 DIFFERENT ACKERMANN SETTINGS POSSIBLE WITH THE QUICK-SAVER™  
For initial Ackermann setting, use Step 1 (2nd shortest length).



**STEP 1** gives the most Ackermann and makes the car understeer more into & out of corners. It offers good cornering speed and creates very good traction mainly in chicanes, because the car will be more stable.  
Recommended for tracks with long sweepers where a lot of cornering speed is needed.



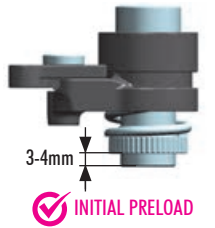
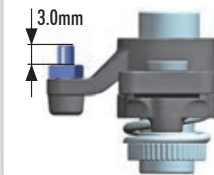
**STEP 4** gives the least Ackermann and creates a lot of steering into & out of corners. However, the car is more difficult to drive in chicanes because there is less traction and stability.  
Recommended for tracks where a lot of in-corner steering is needed.



STEP 1 DETAIL



**INITIAL SETTING**



2x L=R

RIGHT THREAD

LEFT THREAD

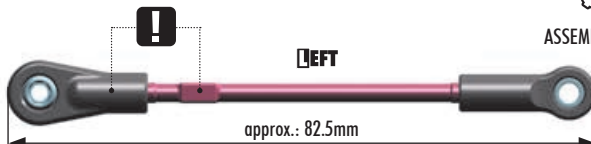
**TIP**  
Install with HUDY Ball Joint Tool.

LEFT THREAD

RIGHT THREAD

**TIP**  
Install with HUDY Multi Tool.

NOTE ORIENTATION

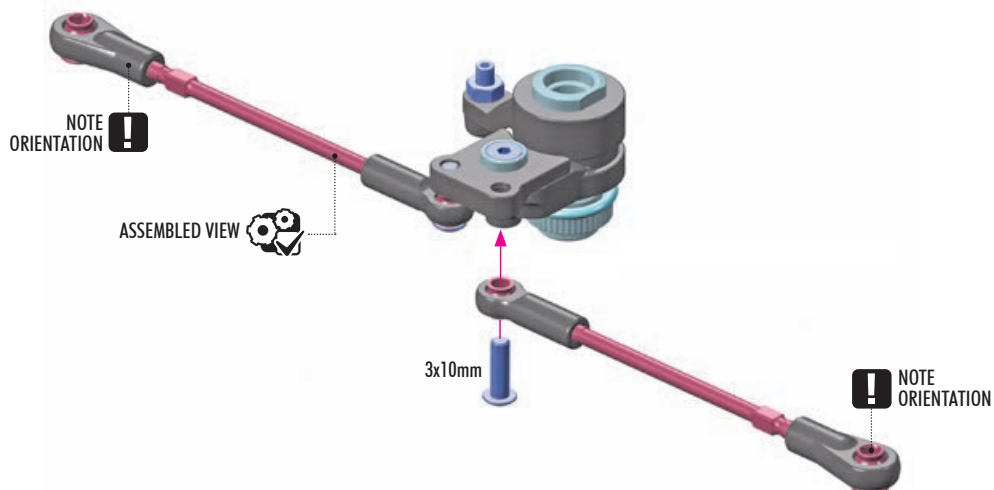


ASSEMBLED VIEW

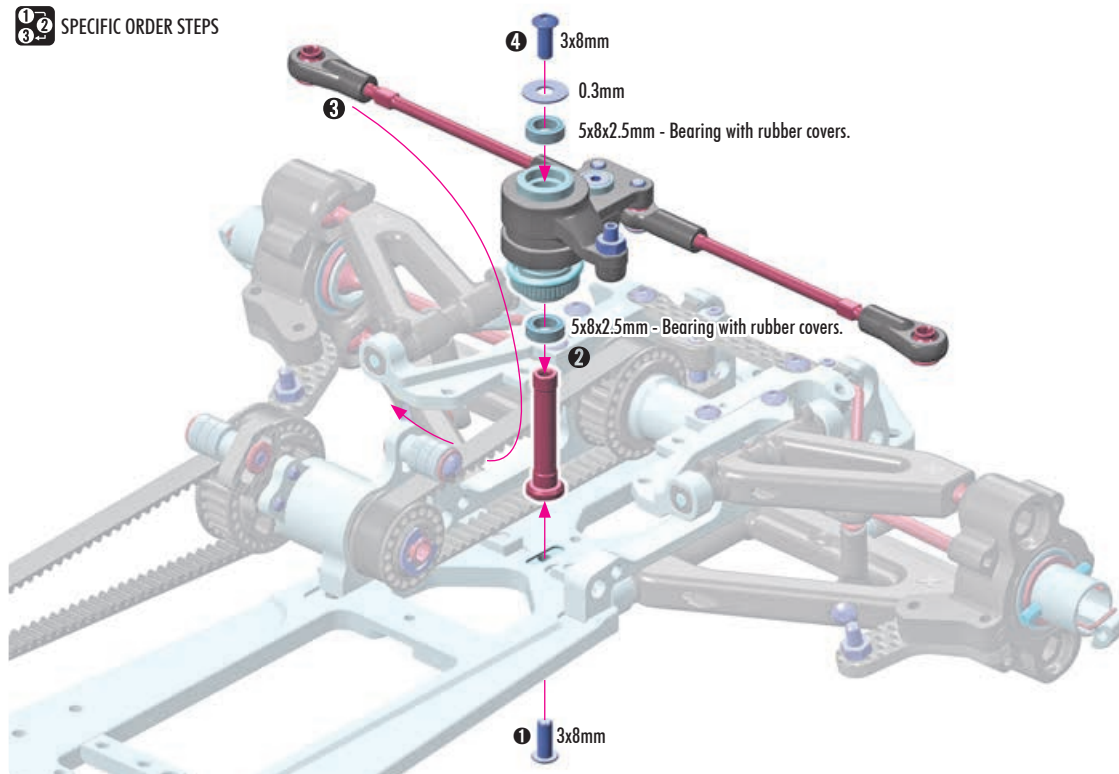
NOTE ORIENTATION



## 9. SERVO SAVER & STEERING

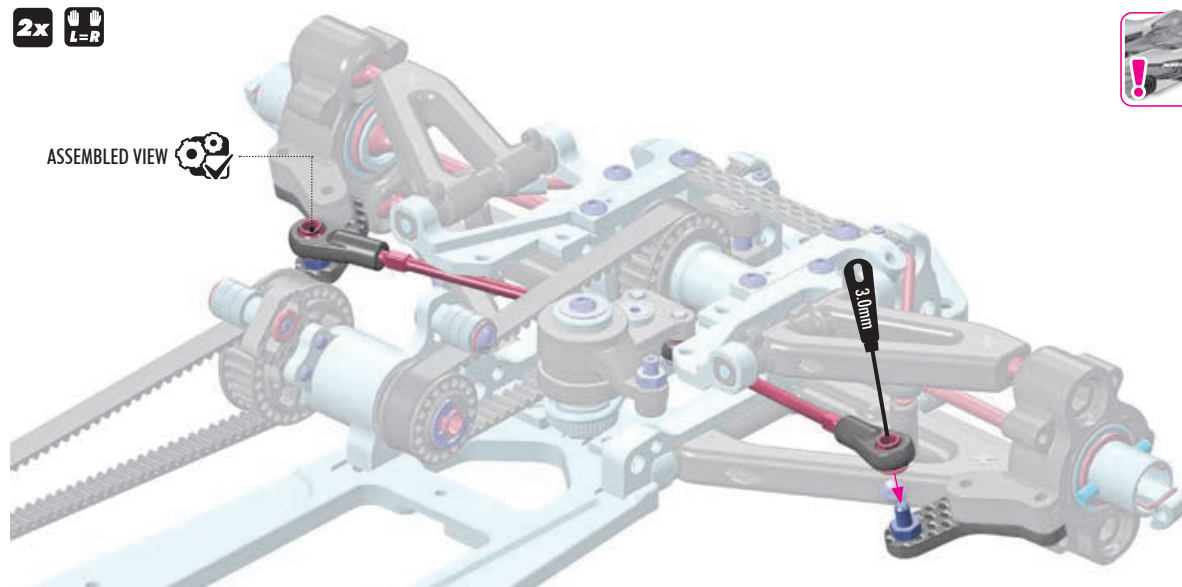


### 1 2 3 SPECIFIC ORDER STEPS



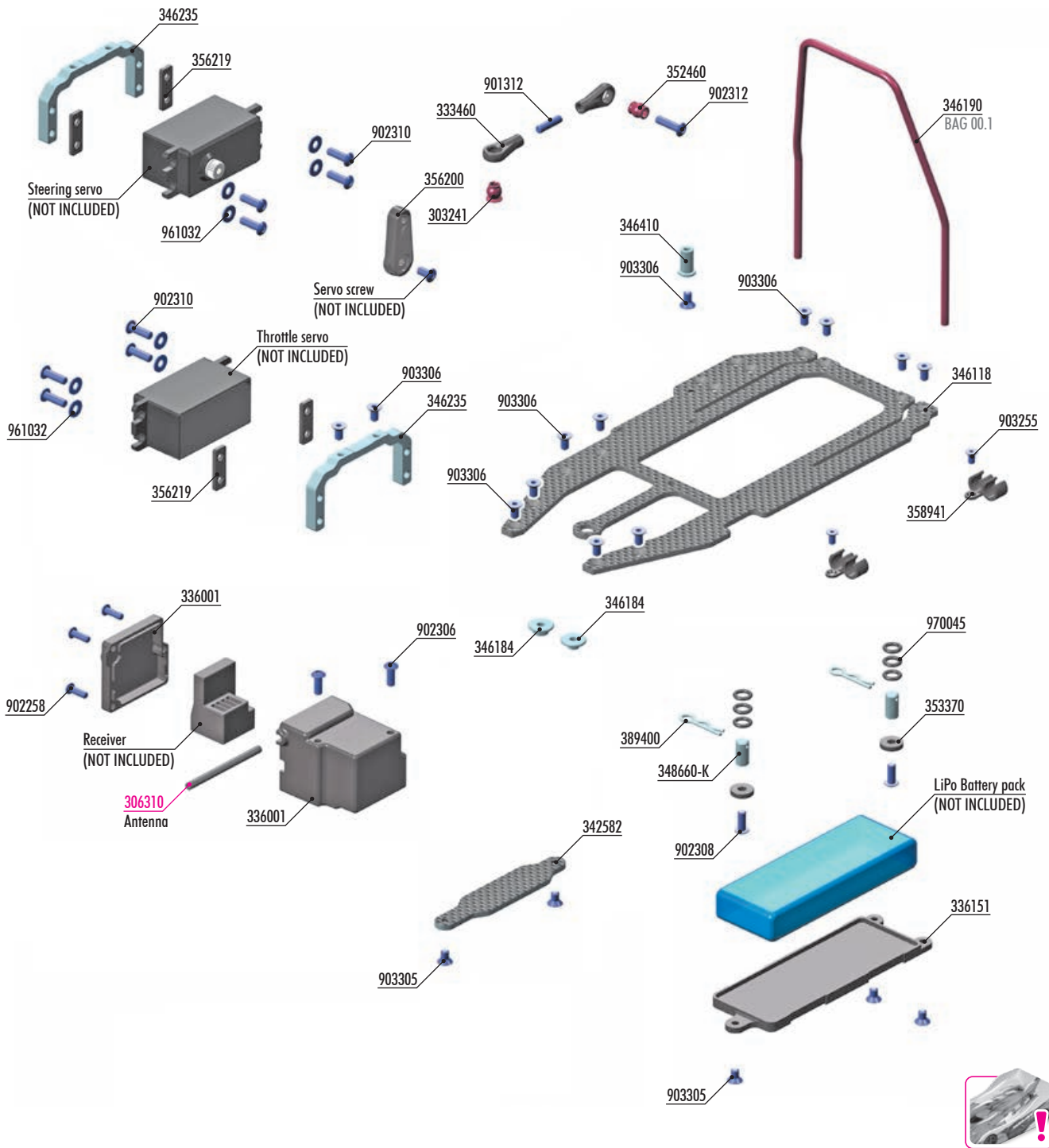
### 2x L=R

#### ASSEMBLED VIEW





# 10. ELECTRONICS



## BAG

10

303241	BALL UNIVERSAL 5.8mm HEX (4)
333460	COMPOSITE BALL JOINT 5.8mm (4)
336001	COMPOSITE RECEIVER CASE - COMPACT SIZE
336151	COMPOSITE BATTERY PLATE
342582	CARBON FRONT CHASSIS PLATE
346118	RX8 CARBON RADIO PLATE WITH MULTI-FLEX SETTING
346184	ALU BUSHING FOR RADIO PLATE FLEX - HARD COATED (1 + 1)
346190	ROLL-OVER BAR
346235	ALU MONOBLOCK SERVO HOLDER - SWISS 7075 T6
346410	ALU STAND FOR RADIO PLATE - BLACK - SWISS 7075 T6
348660-K	ALU FUEL TANK MOUNT - BLACK (2)
352460	PIVOT BALL 5.8 (10)
353370	SET OF COMPOSITE REAR HUB CARRIER SHIMS
356200	BRAKE/THROTTLE ARMS & STEERING SERVO ARMS - SET
356219	COMPOSITE SERVO SHIMS 1.0, 1.5 & 2.5mm (2 + 2 + 2)
358941	COMPOSITE TUBING HOLDER FOR FUEL TANK (2)

389400	MICRO BODY CLIP (10)
901312	HEX SCREW SB M3x12 (10)
902258	HEX SCREW SH M2.5x8 (10)
902306	HEX SCREW SH M3x6 (10)
902308	HEX SCREW SH M3x8 (10)
902310	HEX SCREW SH M3x10 (10)
902312	HEX SCREW SH M3x12 (10)
903255	HEX SCREW SFH M2.5x5 (10)
903305	HEX SCREW SFH M3x5 (10)
903306	HEX SCREW SFH M3x6 (10)
961032	WASHER S 3.2 (10)
970045	O-RING 4.5x1.5 (10)

306310 ANTENNA TUBE (2)

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

XRAY

## 10

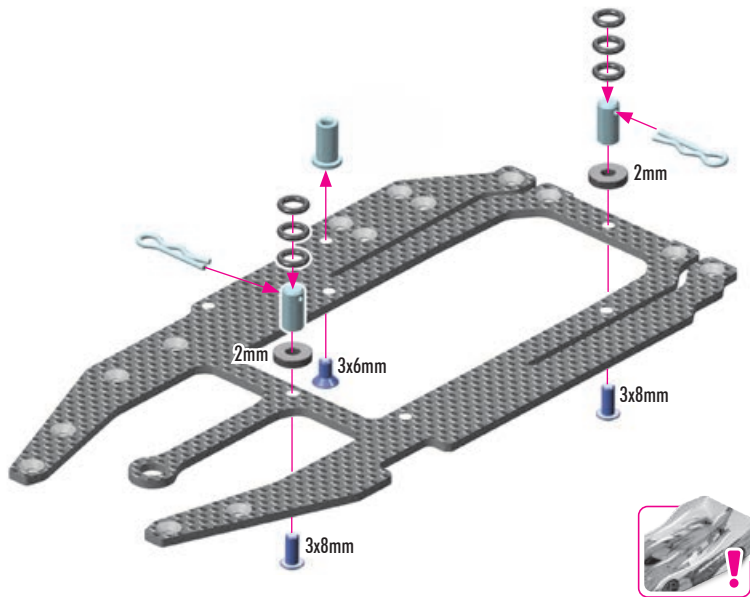
2x 353370  
SHIM 3.2x9x2

2x 902308  
SH M3x8

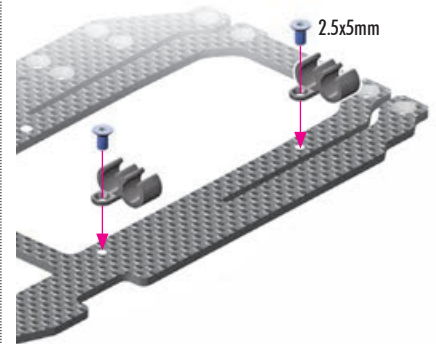
1x 903306  
SFH M3x6

2x 903255  
SFH M2.5x5

6x 970045  
0.45x1.5



ALTERNATIVE holders for SILICONE TUBING

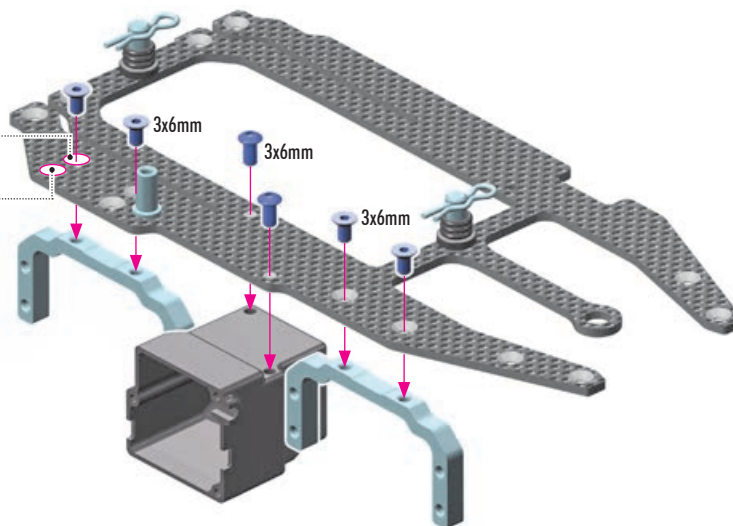


2x 902306  
SH M3x6

4x 903306  
SFH M3x6

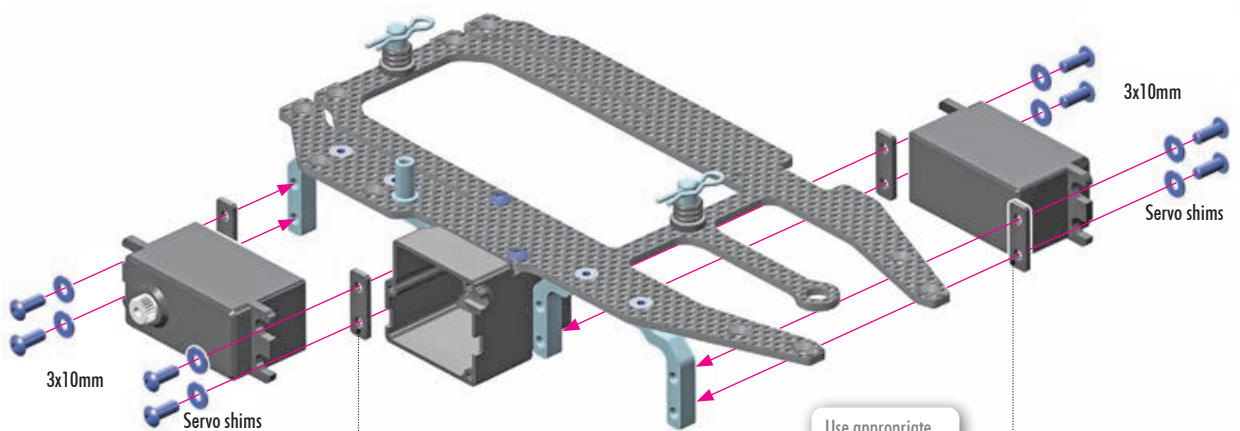
INNER POSITION  
(for Low Profile servo)

OUTSIDE POSITION  
(for Standard servo)



8x 902310  
SH M3x10

8x 961032  
S 3.2

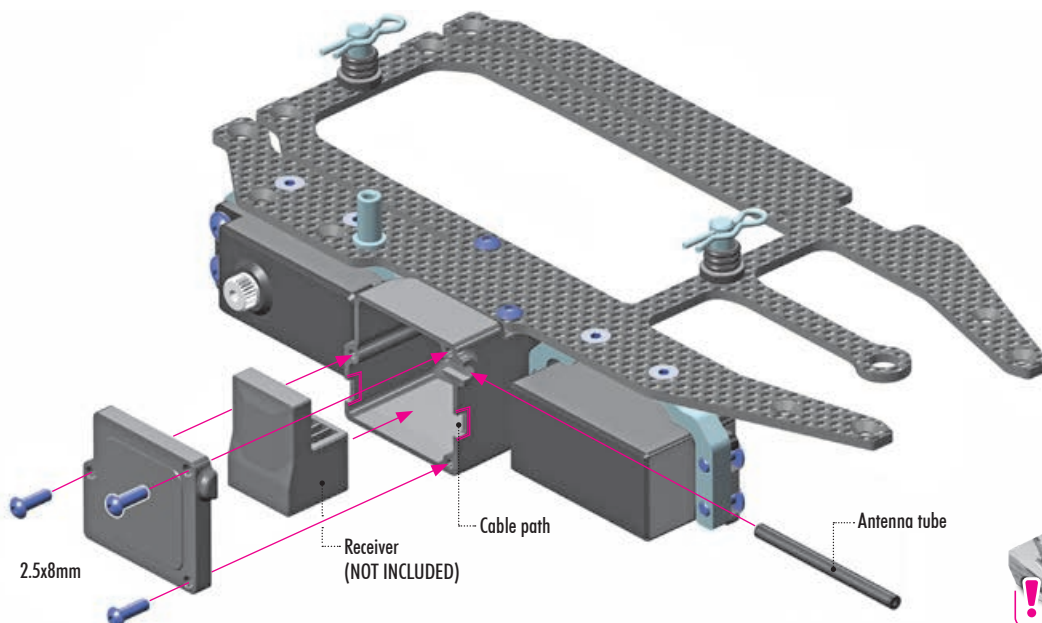


Use appropriate  
servo shims:  
1.0 / 1.5 / 2.5mm

# 10. ELECTRONICS

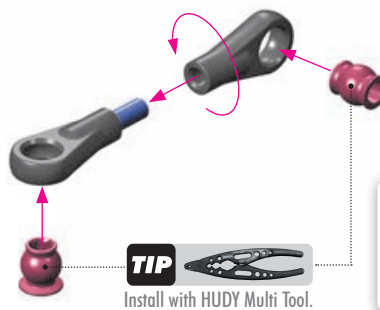
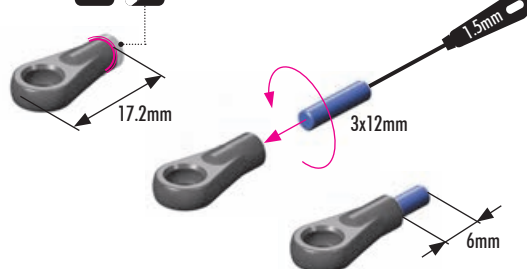


3x 902258  
SH M2.5x8

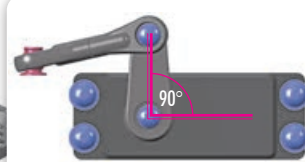
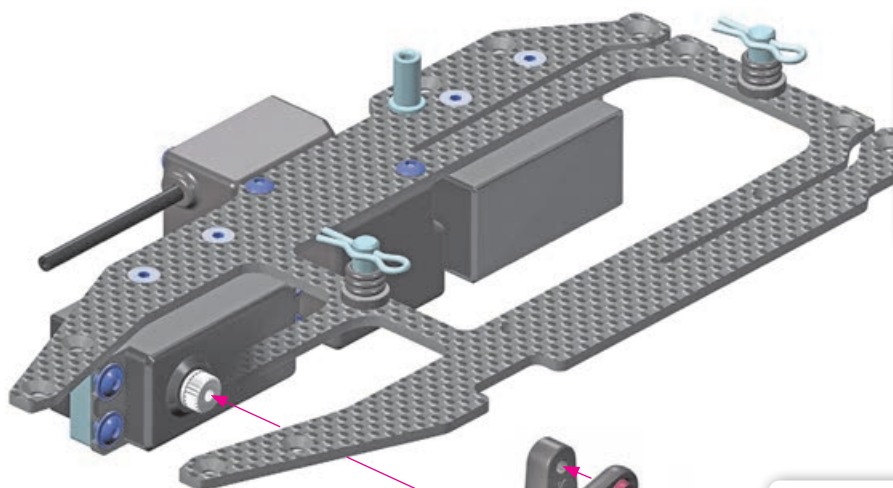


1x 901312  
SB M3x12

1x Shorten ONLY ONE ball joint.



1x 902312  
SH M3x12



Servo arm must be perpendicular to linkage when servo is in neutral.

Use appropriate servo arm:  
K - (23T) = KO, JR, Airtronics  
H - (24T) = Hitec  
F - (25T) = Savox, Futaba

Servo screw (NOT INCLUDED)



## HUDY CLAMP ALU SERVO HORNS

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



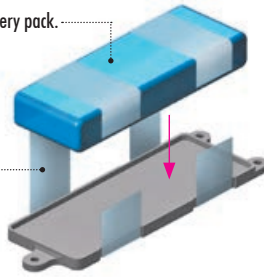
## HUDY ALU SERVO HORNS

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





Use an appropriate receiver battery pack. --  
(NOT INCLUDED)

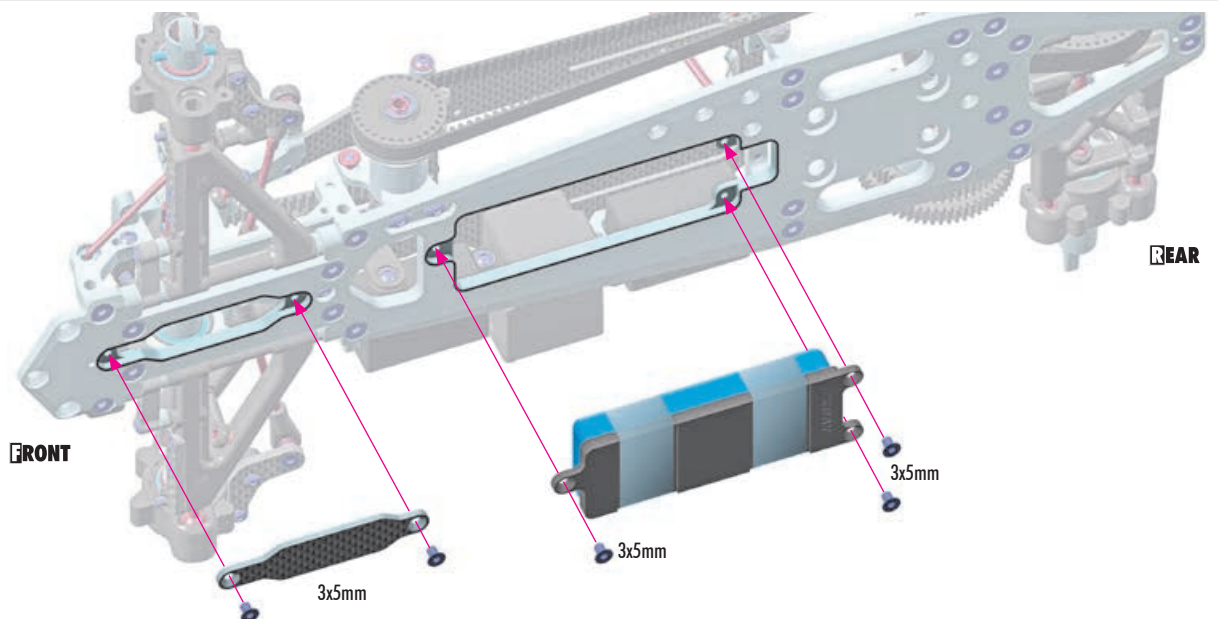
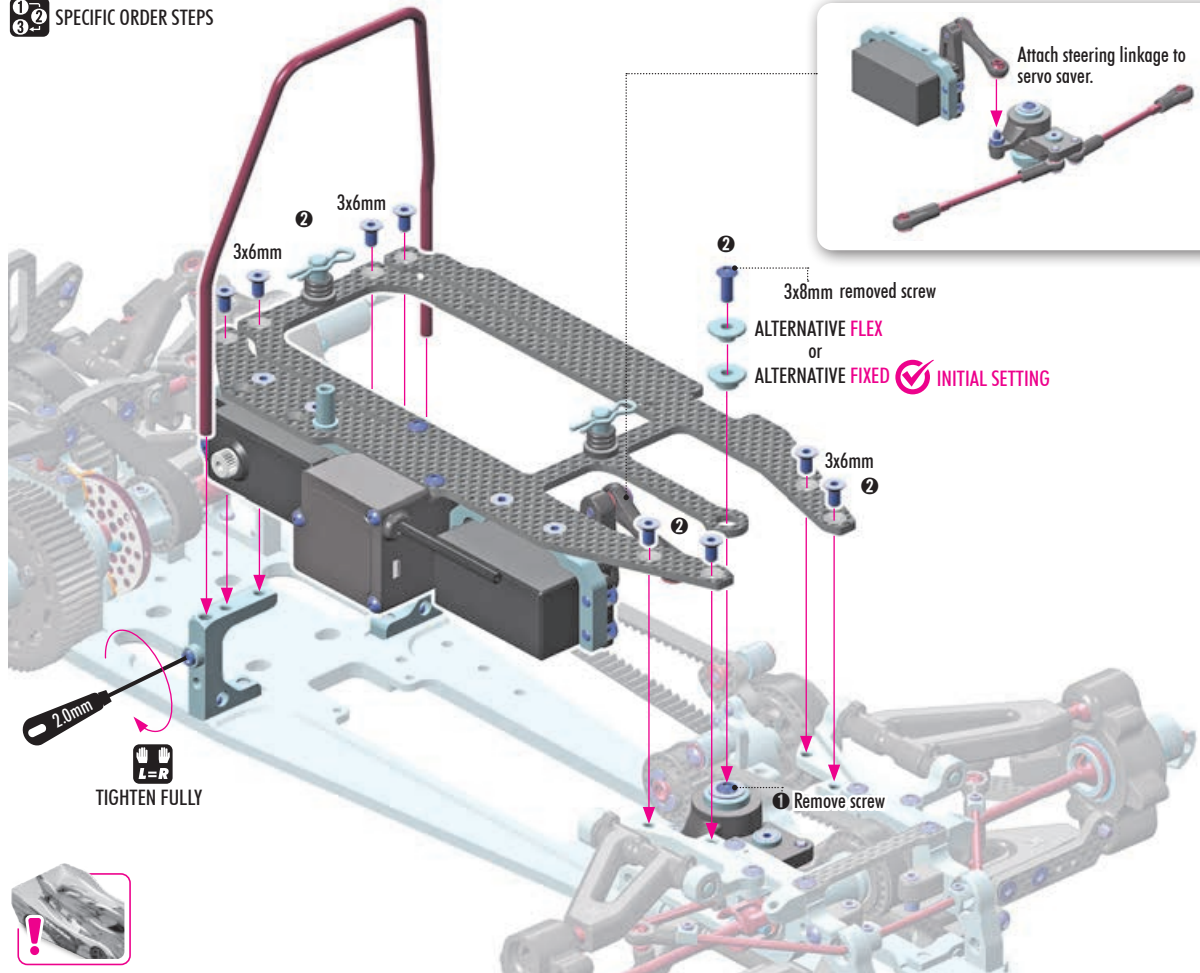
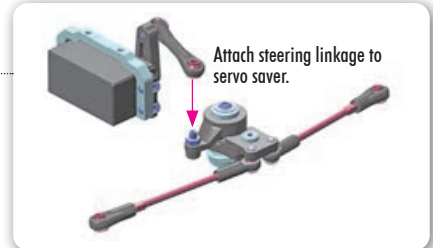


## BATTERY PLATE

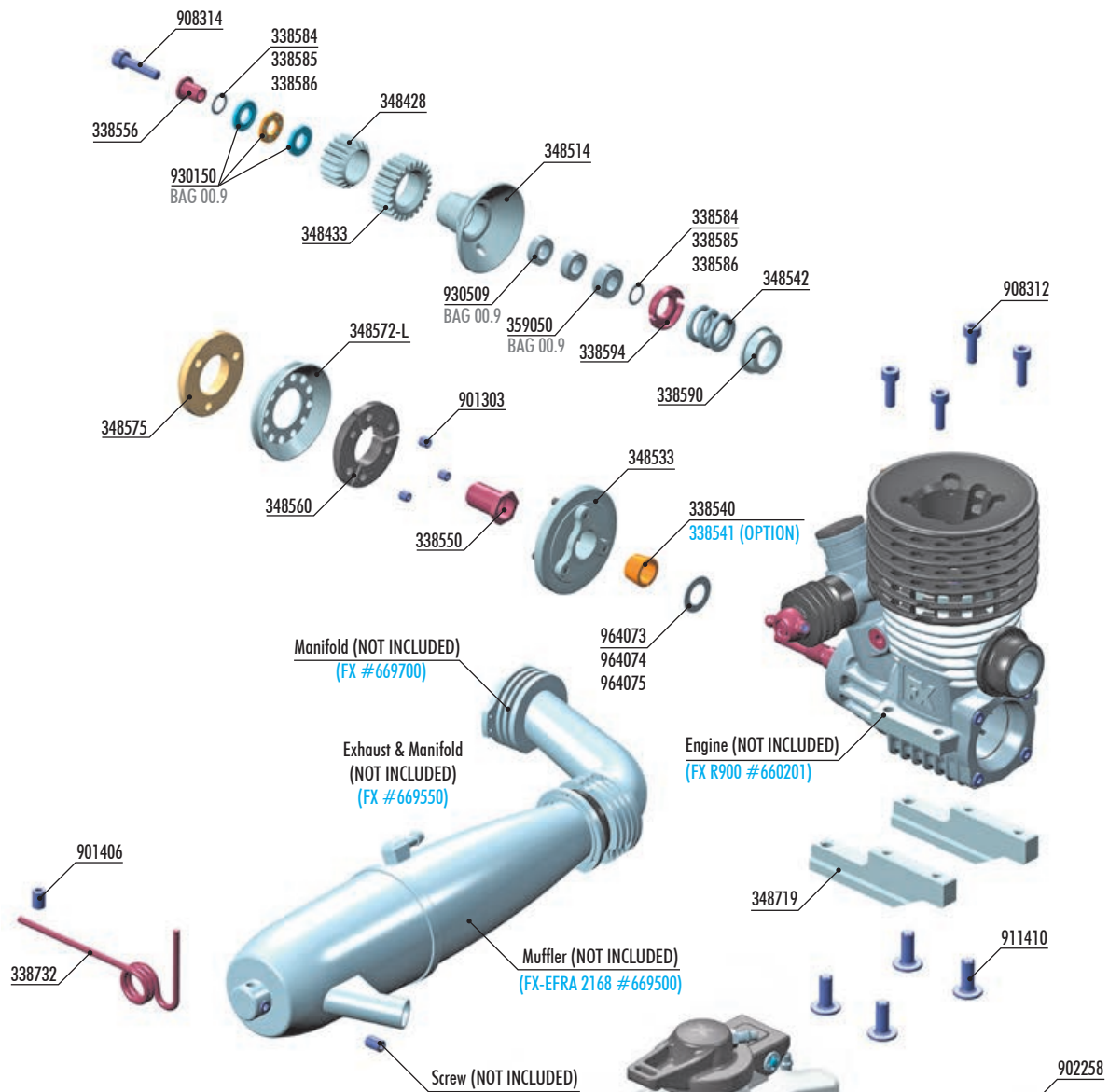
#336151	COMPOSITE	INCLUDED
#336155	CARBON	OPTION
#346157	BRASS	OPTION



**1 2 3** SPECIFIC ORDER STEPS



# 11. ENGINE & CLUTCH



## 1ST PINION GEAR

#348427	17T (1st)	OPTION
#348428	18T (1st)	INCLUDED
#348429	19T (1st)	OPTION



## 2ND PINION GEAR

#348432	22T (2nd)	OPTION
#348433	23T (2nd)	INCLUDED
#348434	24T (2nd)	OPTION



#348576  
CLUTCH SHOE - RED



## BAG

11

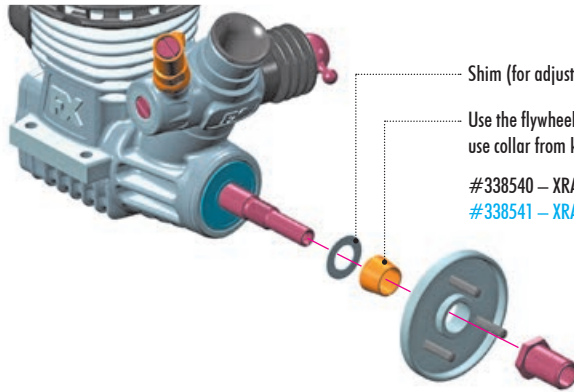
338540	FLYWHEEL COLLAR 7mm - FX, MAX, OS
338541	FLYWHEEL COLLAR 6mm - PICCO (OPTION)
338550	FLYWHEEL NUT - HUDY SPRING STEEL™
338556	THRUSTBEARING COLLAR - HUDY SPRING STEEL™
338590	ALU CLUTCH SPRING CUP - SWISS 7075 T6
338594	CLUTCH PRELOAD ADJ. NUT - HUDY SPRING STEEL™
338732	EXHAUST MOUNTING WIRE - EXTRA-LONG
348428	ALU BBB PINION GEAR 18T (1ST) - SWISS 7075 T6 - HARD COATED
348433	ALU BBB PINION GEAR 23T (2ND) - SWISS 7075 T6 - HARD COATED
348503	XRAY BBB (BIG BALL BEARING) CLUTCH SET
348514	ALU HARD NICKEL COATED CLUTCHBELL FOR BBB CLUTCH
348533	ALU FLYWHEEL - FLAT - HARDCOATED
348542	CLUTCH SPRING - 2x8.2x10 GRINDED INSIDE
348560	CLUTCH FLYWEIGHT SET
348572-L	ALU CLUTCH DISK - CONICAL - LIGHTWEIGHT - SWISS 7075 T6
348575	CLUTCH SHOE - YELLOW
348719	ALU ENGINE MOUNT - REINFORCED - SWISS 7075 T6 (2)

338584	SHIM 5x7x0.2 (10)
338585	SHIM 5x7x0.3 (10)
338586	SHIM 5x7x0.5 (10)
359050	CLUTCH BELL BALL-BEARING 5x10x4 (2)
901303	HEX SCREW SB M3x3 (10)
901406	HEX SCREW SB M4x6 (10)
902258	HEX SCREW SH M2.5x8 (10)
908312	HEX SCREW SOCKET HEAD CAP M3x12 (10)
908314	HEX SCREW SOCKET HEAD CAP M3x14 (10)
911410	HEX SCREW FLANGED SH M4x10 (10)
930150	CARBIDE AXIAL THRUSTBEARING F5-10 5x10x4
930509	BALL-BEARING 5x9x3 STEEL SEALED - OIL (2)
964073	WASHER S 7x10x0.2 (10)
964074	WASHER S 7x10x0.3 (10)
964075	WASHER S 7x10x0.5 (10)

348604 FUEL TANK 125CCM - SET - V2

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

XRAY



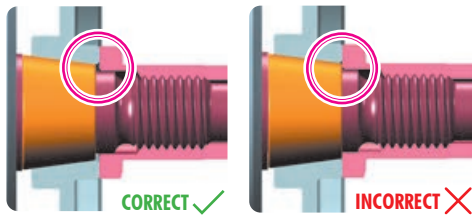
Shim (for adjusting flywheel distance)

Use the flywheel collar that comes with your engine, or use collar from kit or optional XRAY collar:

#338540 – XRAY flywheel collar for ø7mm crankshafts

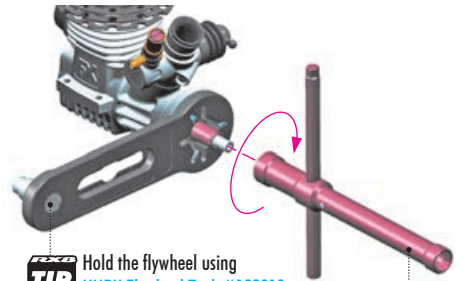
#338541 – XRAY flywheel collar for ø6mm crankshafts

**CUTAWAY VIEW**



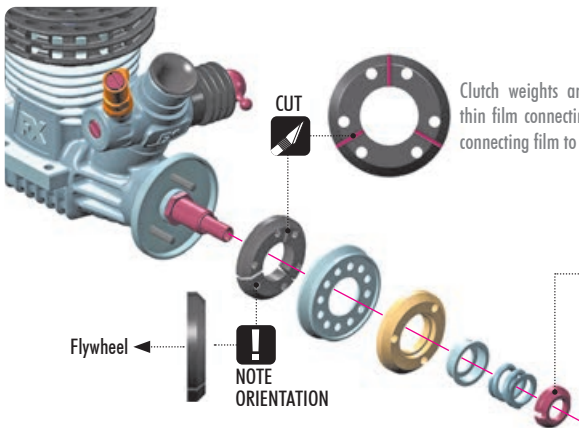
The flywheel collar must stay inside the flywheel.

If the flywheel collar is too long, if it flushes with the flywheel or protrudes slightly, remove a small amount of material from the end of the collar, or use an XRAY collar.



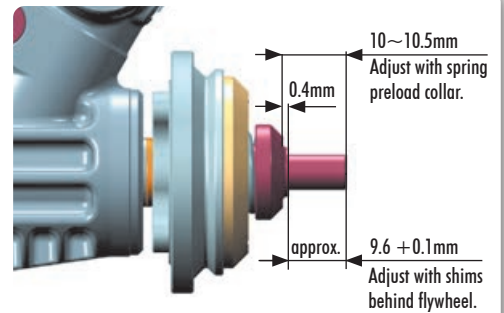
**TIP** Hold the flywheel using HUDY Flywheel Tool #182010.

Tighten the clutch nut using HUDY tool #107581. **TIP**



Clutch weights are machined as 1 piece, with thin film connecting the pieces together. Cut the connecting film to separate the 3 shoes.

**#182005**  
HUDY CLUTCH SPRING TOOL  
**OPTION**



**INITIAL SETTING**  
for  
FLYWHEEL PINS



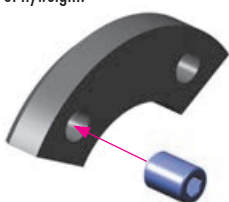
**#348576**  
CLUTCH SHOE - RED  
**OPTION**

## EXTRA BOTTOM-END POWER

For extra bottom-end power, thread a M3x3 set-screw (#901303) into each clutch flyweight as shown. The set-screw will add more weight to the end of the flyweight which will cause the flyweight to open harder, giving more bottom-end power. This is recommended for high-traction tracks where bottom-end power is required.

**IMPORTANT!**  
Install set-screw into free (non-pivot) end of flyweight.

After inserting the set-screw, some excess material may come out of the hole. REMOVE this excess material with a knife.



**3x** 901303  
SB M3x3

**CUTAWAY VIEW**



## TIP TECH TIP FOR RX8 CLUTCH SHOE

To ensure that the RX8 clutch shoe works properly and for a long time, it is very important to run in the clutch shoe.

Please follow these run-in steps to help ensure proper clutch operation:



- 1 Install clutch according to manual.
- 2 Check that the spring preload is not too much; for run-in process use less preload.
- 3 When you start the engine, the clutch should start to engage under low RPM. If the clutch engages only under high RPM, stop the engine and loosen the spring preload collar. Repeat until the clutch engages under low RPM.
- 4 Run in the clutch shoe on the track, or on the starter box if you have only limited time. (We recommend running it in on the track).
- 5 Run in the clutch shoe for 1 tank of fuel using a soft preload setting, and then after that slightly tighten the spring preload. DO NOT run in the clutch shoe under high RPM.
- 6 Continue this process until the clutch shoe is properly run in; this will be indicated by a dark and glossy surface colour on the top of the clutch shoe.



# 11. ENGINE & CLUTCH

- 1x 338584  
S 5x7x0.2
- 1x 338585  
S 5x7x0.3
- 1x 338586  
S 5x7x0.5
- 1x 359050  
BB 5x10x4
- 1x 908314  
SCH M3x14
- 1x 930150  
BA 5x10
- 2x 930509  
BB 5x9x3

**DO NOT INSTALL** this bearing when setting clutch gap.

**INSTALL** this bearing when setting endplay.

**! IMPORTANT**  
Degrease this bearing with standard bearing cleaner, and then lubricate with light bearing oil.

**TIP**  
**ENDPLAY SHIMS**  
These shims are used to adjust clutchbell endplay.

**GRAPHITE GREASE GR**

**CLUTCH GAP SHIMS**  
These shims are used to adjust clutch gap.

**TIP**  
To measure the clutch gap (0.6~0.7mm) you can also use **HUDY Flywheel Tool #182010**.

## ADJUSTING THE CLUTCH GAP

**1** Install the clutchbell, outer ball-bearing (small), and thrustbearing assembly on the engine crankshaft. DO NOT install the inner ball-bearing or internal shims. Push the clutchbell onto the clutch shoe and measure distance A as indicated.

**2** Pull the clutchbell away from the clutch shoe and measure distance B as indicated.

**3** The clutch gap is A - B; the correct gap is 0.6~0.7mm. If the clutch gap is greater than this, you can easily calculate the thickness of shims required to set correct gap: Thickness of shims required (in mm) = A-B-0.7  
For example, using the values A=5.5mm, B=4.5mm  
Shim thickness = 5.5-4.5-0.7=0.3mm  
Place shims on the small collar, outside the thrustbearing assembly.

## ADJUSTING THE ENDPLAY

Measure endplay with this bearing installed.

Apply shims on crankshaft to set endplay to 0.05~0.15mm.

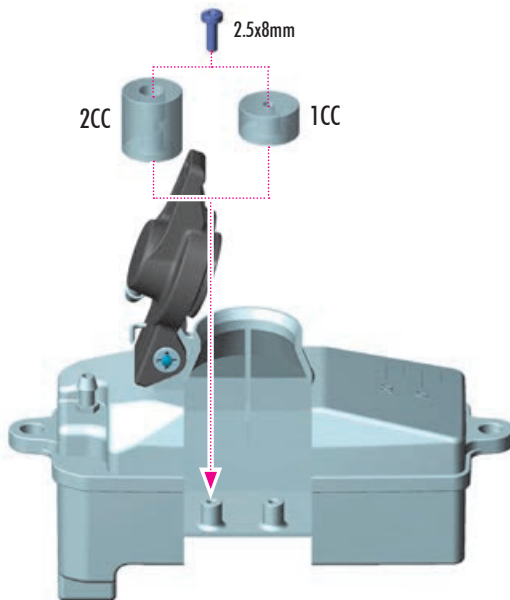
Insert **ENDPLAY SHIMS** here. (approximately 0.7~1.0mm)

**! NOTE ORIENTATION**

**1** 23T

**2** 18T

To tighten the pinion gear, use the **XRAY Alu Pinion Gear Tool #349903**

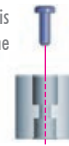


The fuel tank has a larger fuel volume and includes OPTIONAL tank inserts for decreasing the volume of the tank. Using the inserts allows you to adjust the volume of fuel inside the tank; this works in conjunction with variables such as fuel filter capacity and/or length of fuel line to ensure you have the legal fuel volume limit for racing.

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

## 2CC FUEL TANK INSERT

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



NOTE ORIENTATION !

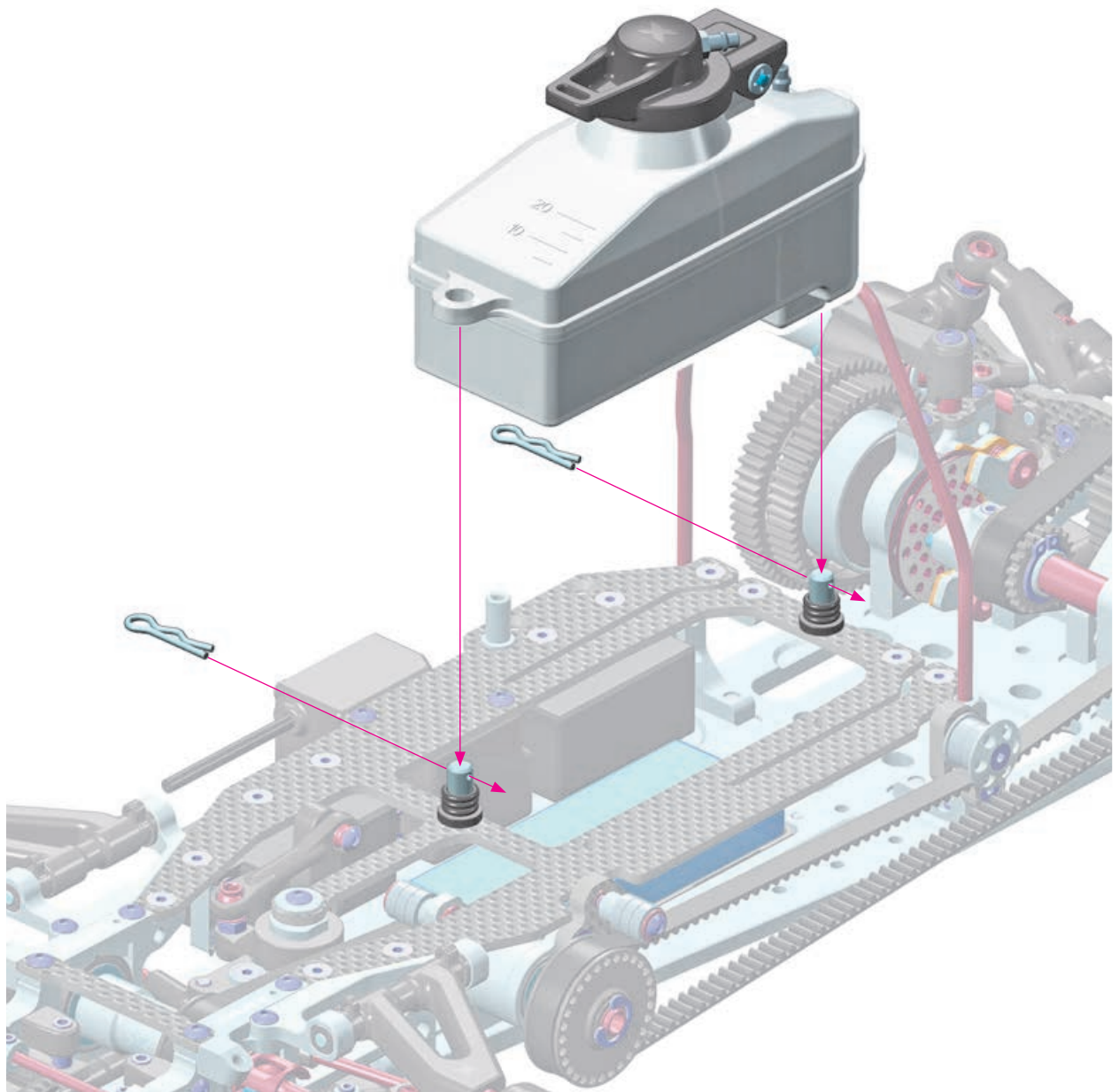
## 1CC FUEL TANK INSERT

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



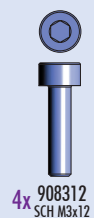
! NOTE ORIENTATION

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





# 11. ENGINE & CLUTCH

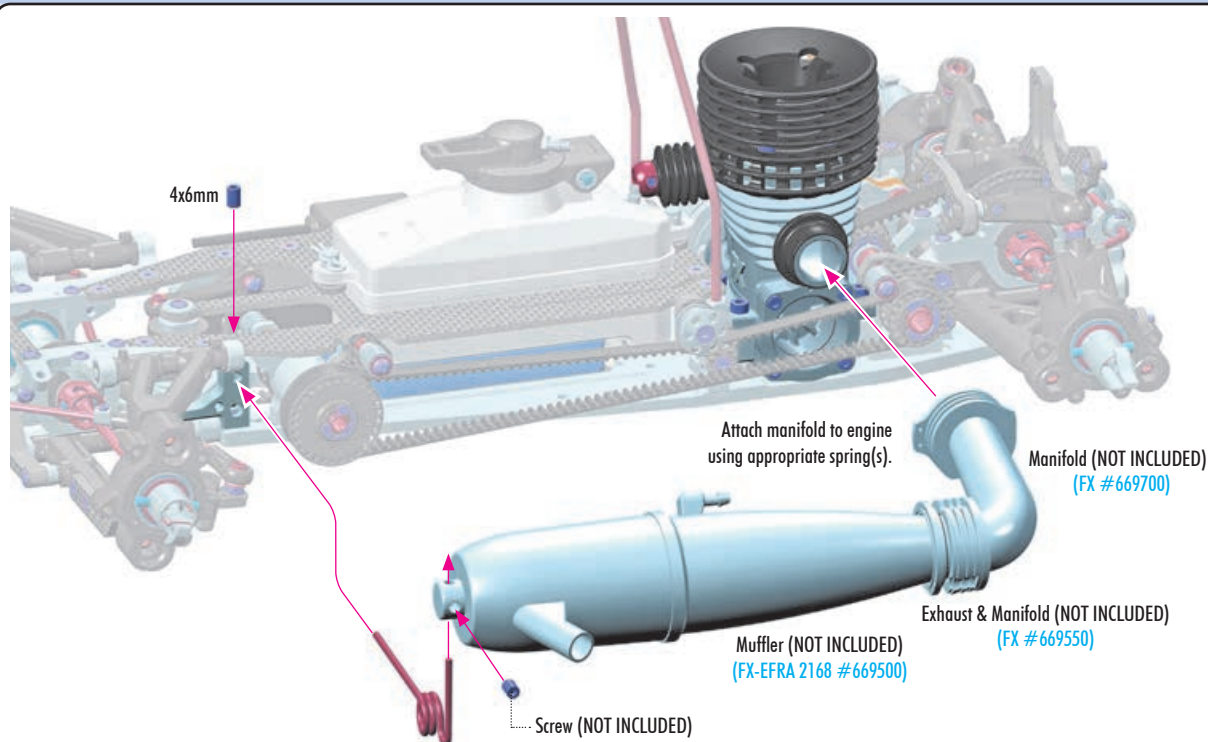
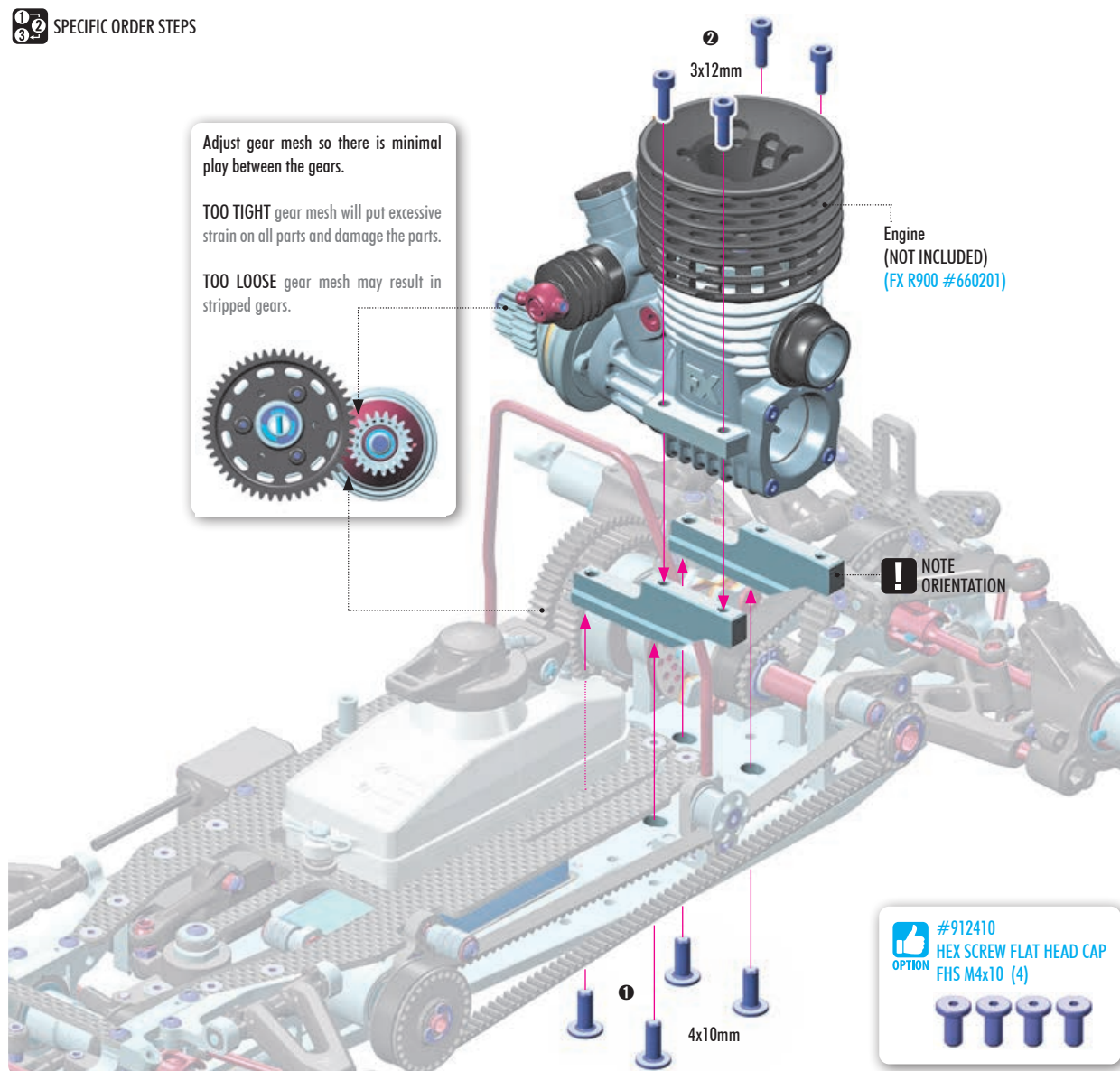
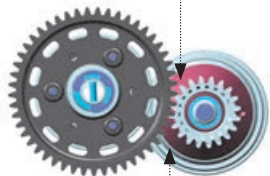


## 1 2 3 SPECIFIC ORDER STEPS

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

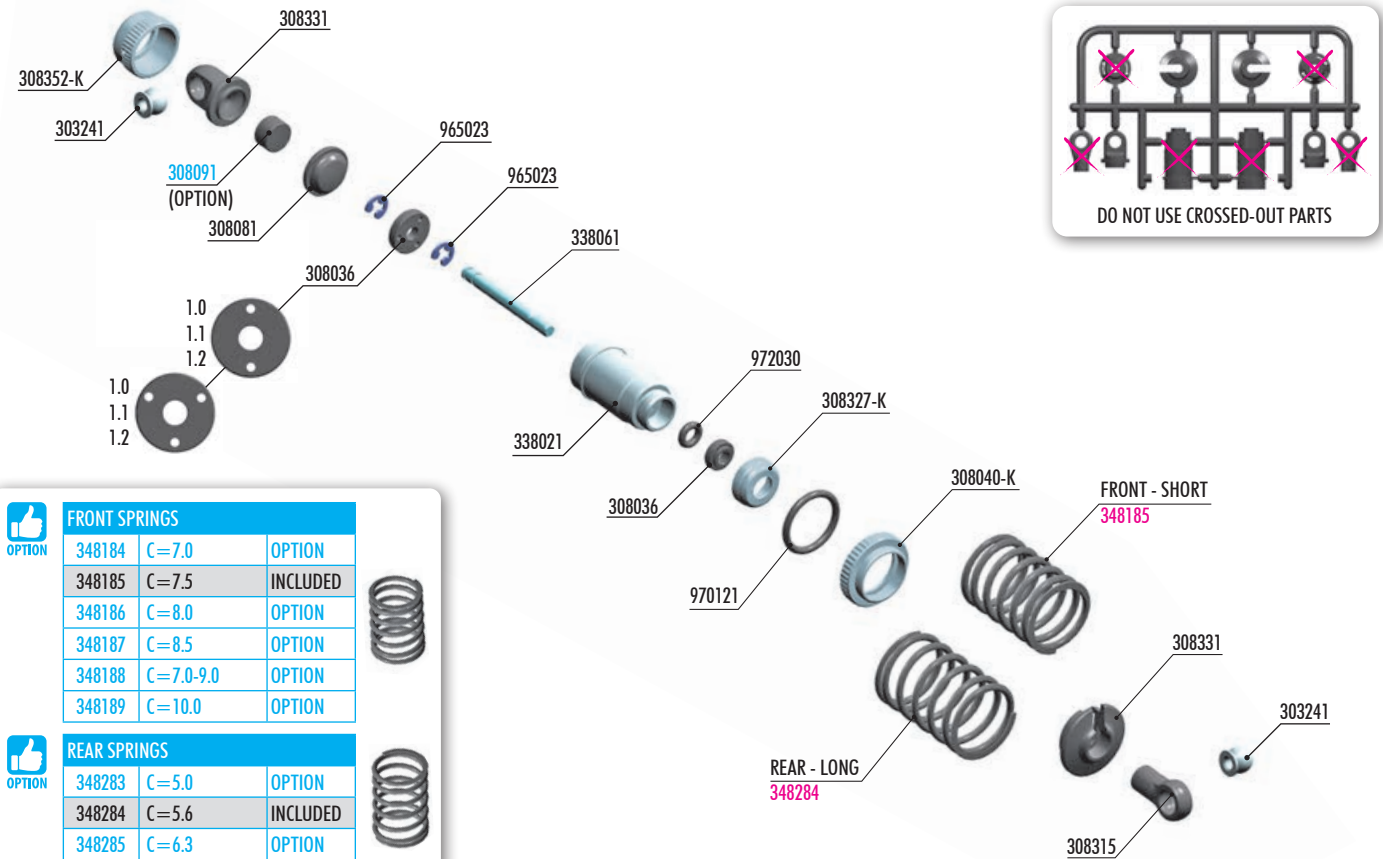
**TOO TIGHT** gear mesh will put excessive strain on all parts and damage the parts.

**TOO LOOSE** gear mesh may result in stripped gears.





## 12. SHOCK ABSORBERS



**BAG**

**12**

303241 BALL UNIVERSAL 5.8mm HEX (4)  
 308036 COMPOSITE NON-ADJUSTABLE PISTONS - DELRIN™ - V3  
 308040-K SHOCK ADJ. NUT ALU + O-RING - BLACK (4)  
 308081 SHOCK ABSORBER MEMBRANE - LOW (4)  
 308091 SHOCK FOAM INSERTS - LOW (4) (OPTION)  
 308315 COMPOSITE SHOCK BALL JOINT - LONG (4)  
 308327-K ALU CAP FOR XRAY SHOCK BODY - BLACK (2)  
 308331 COMPOSITE FRAME SHOCK PARTS 4-STEP - SHORT  
 308352-K ALU SHOCK CAP-NUT WITH HOLE - BLACK (2)  
 338001-K ALU SHOCK ABSORBER-SET - BLACK (2)

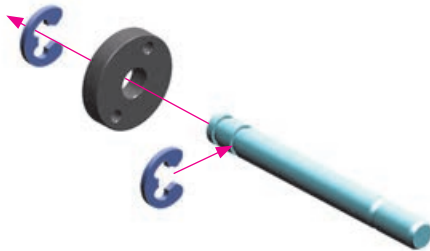
338021 ALU SHOCK BODY (2)  
 338061 HARDENED SHOCK SHAFT (2)  
 965023 E-CLIP 2.3 (10)  
 970121 O-RING 12.1x1.6 (10)  
 972030 SILICONE O-RING 3x2 (10)

348185 XRAY SPRING-SET C=7.5 - FRONT (2)  
 348284 XRAY SPRING-SET C=5.6 - REAR (2)

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

8x 965023  
C 2.3

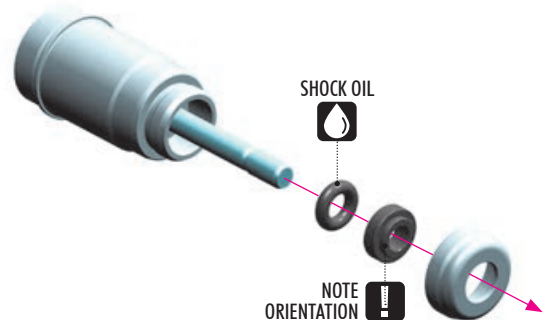
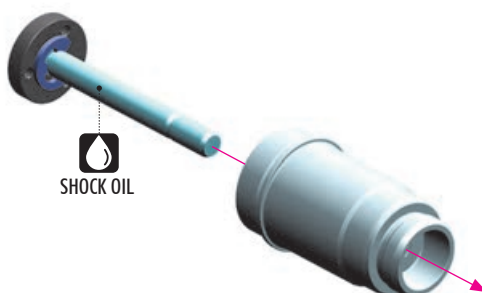
**4x**



FRONT		1.0	✓ INITIAL SETTING
		1.1	
		1.2	
REAR		1.0	
		1.1	✓ INITIAL SETTING
		1.2	

4x 972030  
O 3x2

**4x**

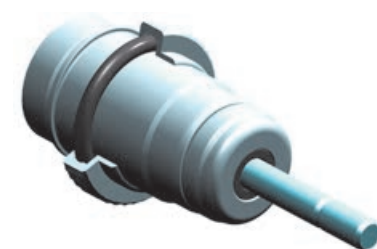
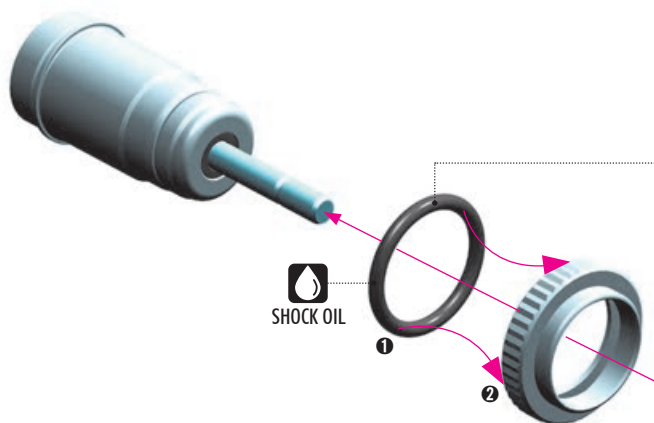


## 12. SHOCK ABSORBERS

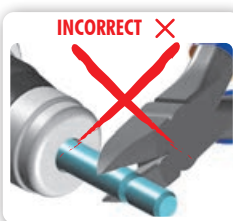


4x 970121  
0 12.1x1.6

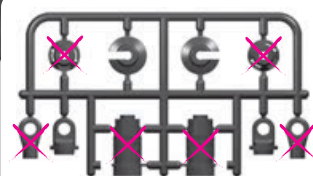
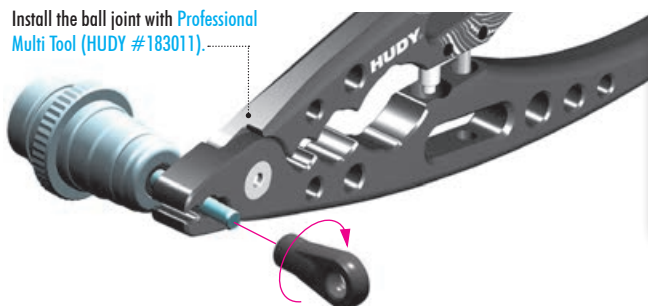
4x



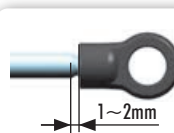
Be careful not to cross-thread the collar on the shock body.



Install the ball joint with Professional Multi Tool (HUDY #183011).



DO NOT USE CROSSED-OUT PARTS

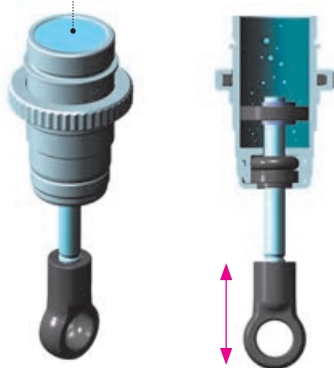


**HINT:** Pre-thread the ball joint using an M3 screw.

**WARNING!** Be careful not to pre-thread too far, since the ball joint may split or the plastic threads may strip out.

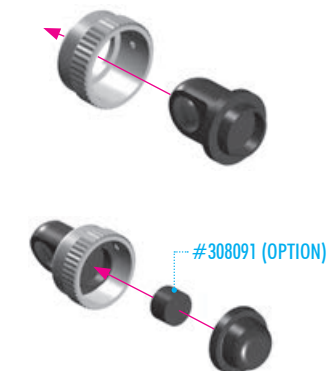
4x

SHOCK OIL



### SHOCK FILLING

- 1 Fully extend the piston rod so the piston is at the bottom of the shock body.
- 2 Hold the shock upright and slightly overfill the shock body with shock oil.
- 3 Let the oil settle and allow air bubbles to rise to the top. Slowly move the piston up and down until no more air bubbles appear. Add shock oil as necessary.
- 4 Pull the piston rod most of the way out of the shock body. Let the shock rest for 5 minutes to allow the air bubbles to escape.



CUTAWAY VIEW



After you insert the membrane ensure that it sits properly all around the alu cup properly.



When installing the shock cap assembly on the shock body, some oil will leak out... this is normal.

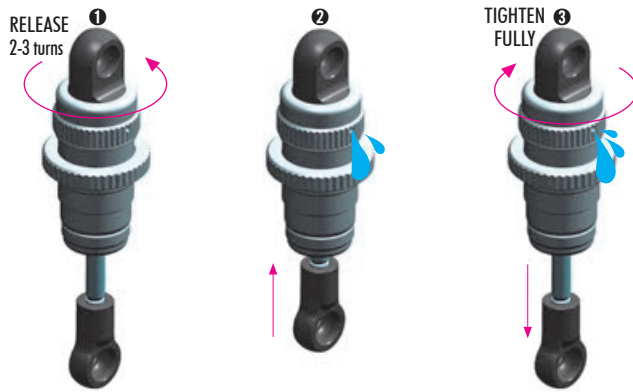
Fully tighten the cap and clean off any excess oil.

After the shock is assembled, the shock rod will push itself out of the shock body fairly quickly.

Follow the next procedure to adjust the rebound.

## 12. SHOCK ABSORBERS

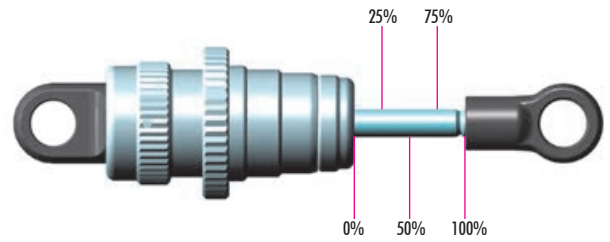
4x



### REBOUND ADJUSTMENT

AFTER THE SHOCK IS ASSEMBLED YOU HAVE TO SET THE SHOCK REBOUND.

- ❶ Release the shock cap by 2-3 turns.
- ❷ Push the shock shaft fully up. For the first time the extra oil will release through the hole in the alu cap-nut.
- ❸ Tighten the shock cup. When tightening the shock cap, extra oil will again release through the hole in the alu cap - nut. When tightening, the shock shaft will push out from the shock body.

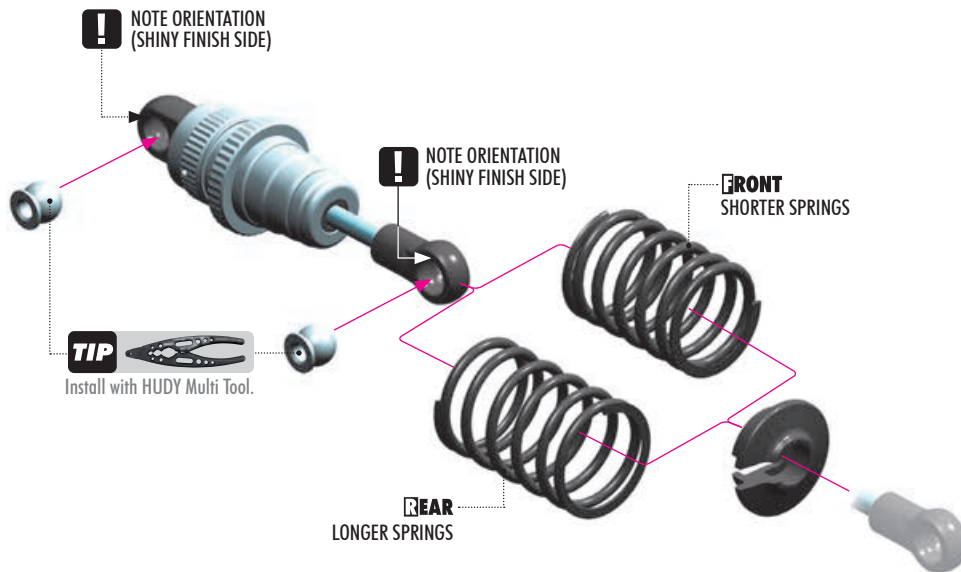


### REBOUND CHECK

It is very important to push the shock shaft into the shock body slowly otherwise air can come into the shock body which would create bubbles.

- 100% rebound - repeat step 2 and 3 two - three times
- 75% rebound - repeat step 2 and 3 until the shock shaft will push out 75% of its length
- 50% rebound - repeat step 2 and 3 until the shock shaft will push out 50% of its length
- 25% rebound - repeat step 2 and 3 until the shock shaft will push out 25% of its length
- 0% rebound - repeat step 2 and 3 until the shock shaft will push out 0% of its length

If the shock shaft does not rebound enough, you will have to refill the shock with shock oil, and then repeat the bleeding and rebound adjustment procedure.



### SHOCK SPRING RETAINING COLLAR

#308031	ALU - SILVER	OPTION
#308031-O	ALU - ORANGE	OPTION
#308031-K	ALU - BLACK	OPTION
#308331	COMPOSITE	INCLUDED



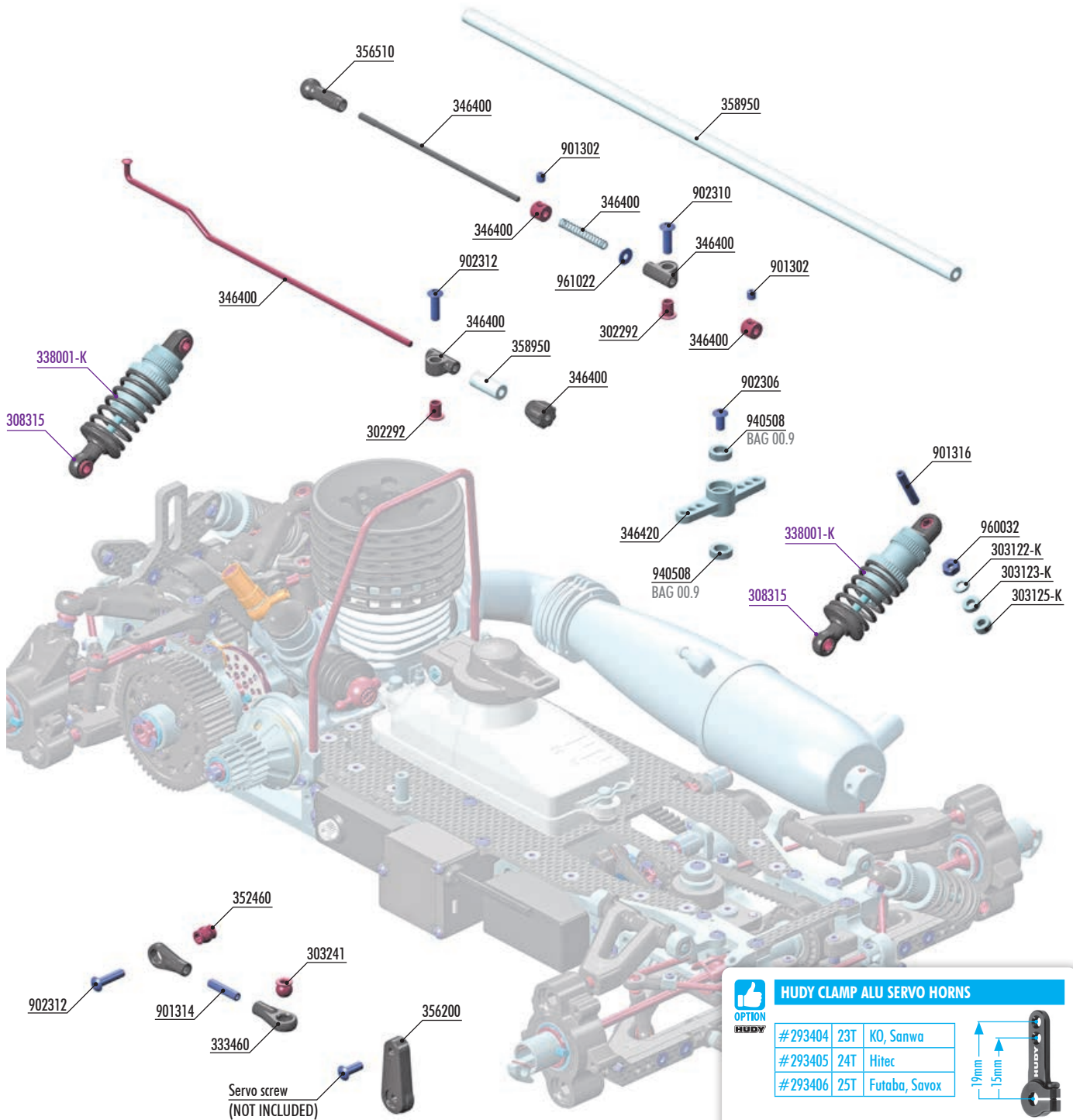
### SHOCK LENGTH ADJUSTMENT

It is VERY important that all shocks are equal length.

Fully extend the shock absorber and measure the end-to-end length; we recommend using digital calipers to give an accurate measurement. If a shock absorber is shorter or longer than others, adjust the shock length by tightening or loosening the ball joint on the shock rod.



# 13. THROTTLE & BRAKE LINKAGE



**HUDY CLAMP ALU SERVO HORNS**

#293404	23T	KO, Sanwa
#293405	24T	Hi-tec
#293406	25T	Futaba, Savox

**HUDY ALU SERVO HORNS**

#293497	23T	KO, Sanwa
#293498	24T	Hi-tec
#293499	25T	Futaba, Savox

## BAG

13

- 302292 STEEL STEERING BUSHING LONG (4)
- 303122-K ALU SHIM 3x6x1.0mm - BLACK (10)
- 303123-K ALU SHIM 3x6x2.0mm - BLACK (10)
- 303125-K ALU SHIM 3x6x3.0mm - BLACK (10)
- 303241 BALL UNIVERSAL 5.8mm HEX (4)
- 333460 COMPOSITE ANTI-ROLL BAR BALL JOINT 5.8mm (4)
- 346400 THROTTLE & BRAKE LINKAGE SET
- 346420 ALU THROTTLE & BRAKE LINKAGE CAM - SWISS 7075 T6
- 352460 PIVOT BALL 5.8 (10)
- 356200 BRAKE/THROTTLE ARMS & STEERING SERVO ARMS - SET
- 356510 CLOSED BALL JOINT 3.9 (4)
- 358950 SILICONE TUBING 1M (2.4 x 5.5mm)

- 901302 HEX SCREW SB M3x2.5 (10)
- 901314 HEX SCREW SB M3x14 (10)
- 901316 HEX SCREW SB M3x16 (10)
- 902306 HEX SCREW SH M3x6 (10)
- 902310 HEX SCREW SH M3x10 (10)
- 902312 HEX SCREW SH M3x12 (10)
- 940508 BALL-BEARING 5x8x2.5 RUBBER SEALED - OIL (2)
- 960032 NUT M3 (10)
- 961022 WASHER S 2.2 (10)

- 308315 SHOCK BALL JOINT - LONG (4)
- 338001-K ALU SHOCK ABSORBER-SET - BLACK (2)

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

XRAY

# 13. THROTTLE & BRAKE LINKAGE



0x 303122-K  
SHIM 3x6x1



2x 303123-K  
SHIM 3x6x2



0x 303125-K  
SHIM 3x6x3

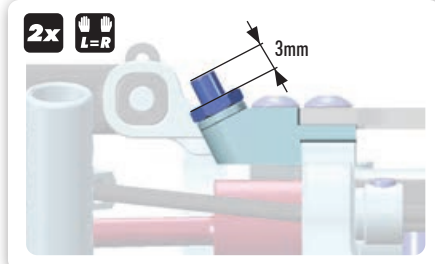
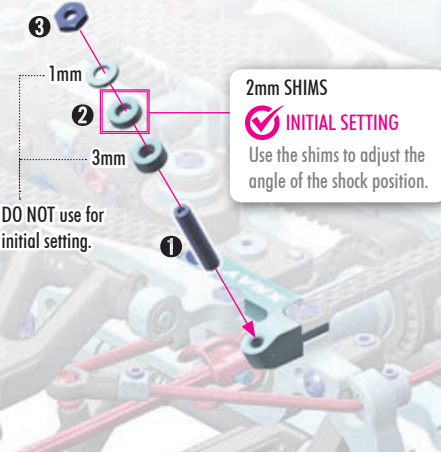


2x 901316  
SB M3x16

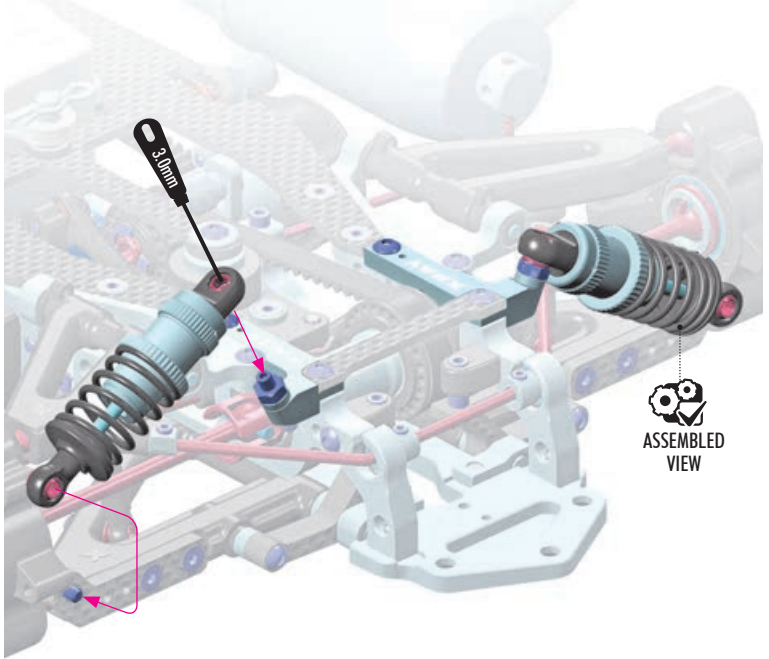


2x 960032  
N M3

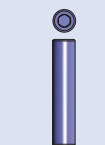
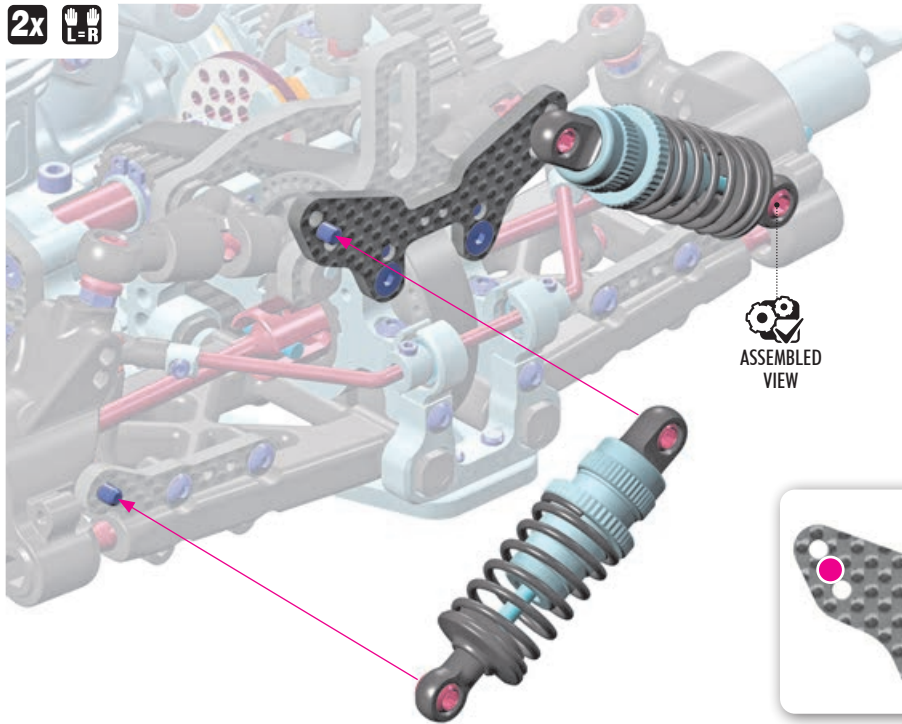
2x L=R SPECIFIC ORDER STEPS



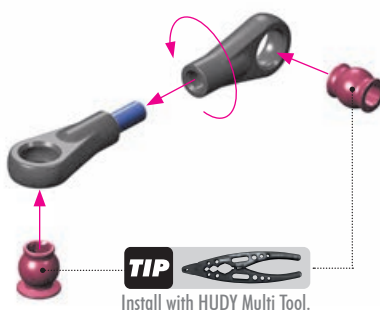
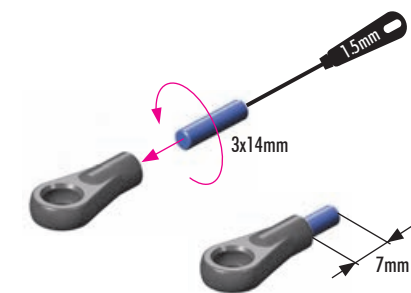
2x L=R



2x L=R



1x 901314  
SB M3x14





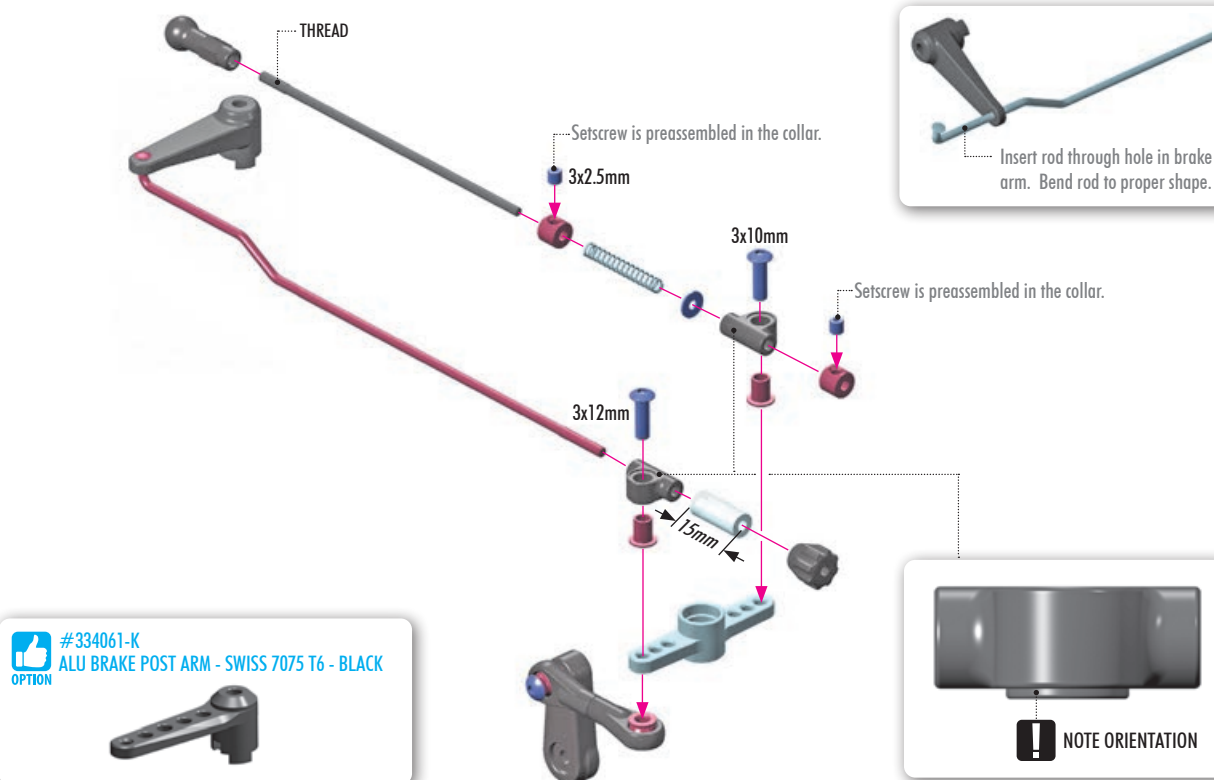
# 13. THROTTLE & BRAKE LINKAGE

2x 901302  
SB M3x2.5

1x 902310  
SH M3x10

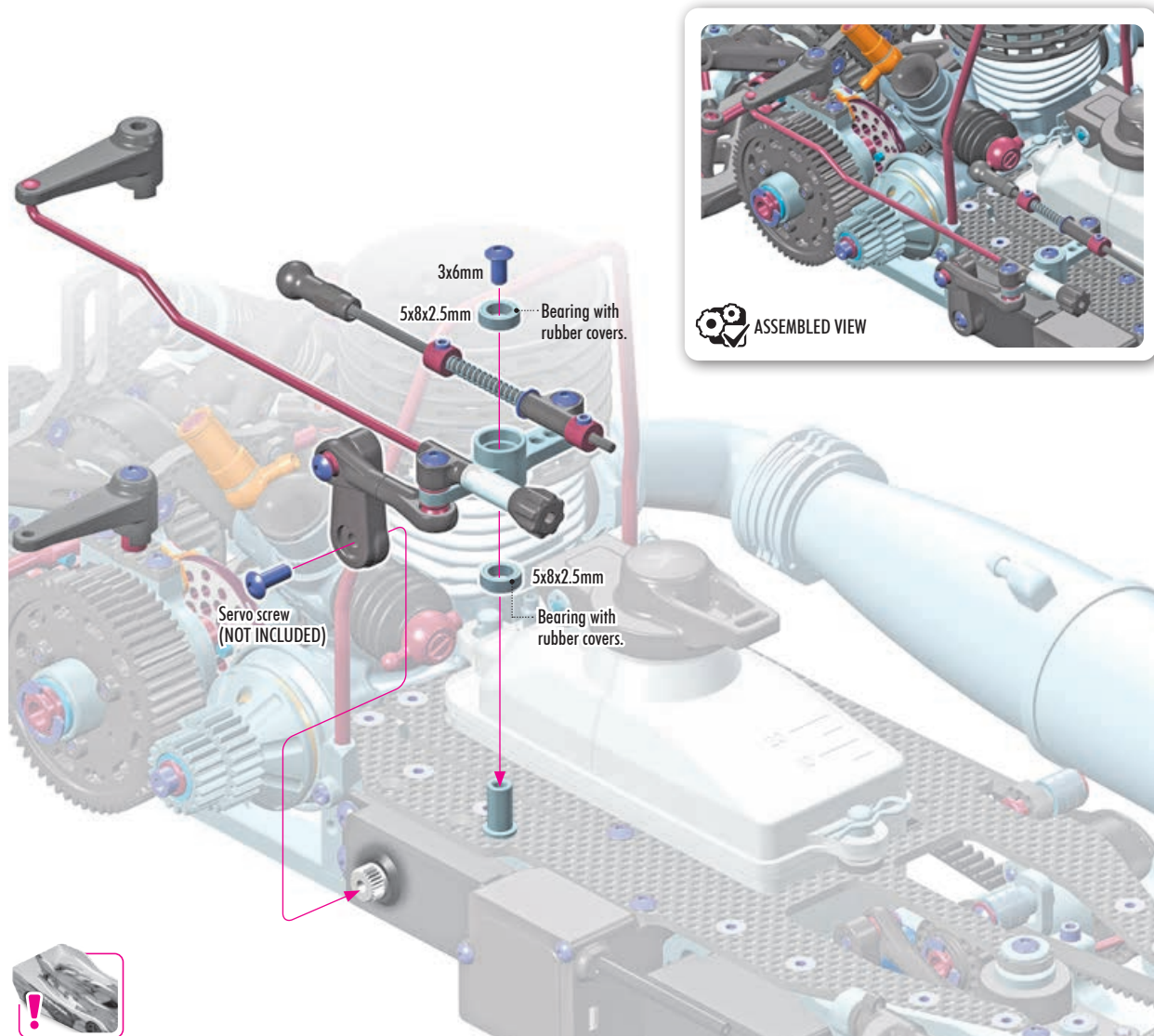
1x 902312  
SH M3x12

1x 961022  
S22



1x 902306  
SH M3x6

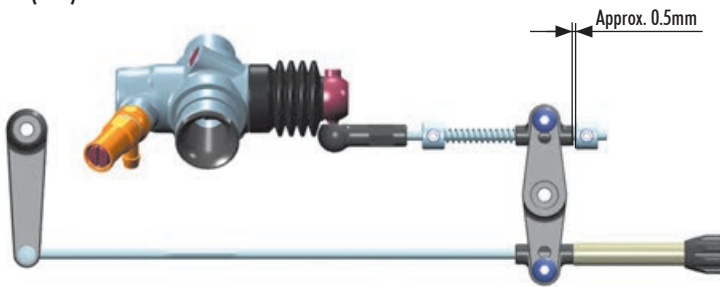
2x 940508  
BB 5x8x2.5





# CARB LINKAGE ADJUSTMENT

## NEUTRAL (IDLE)

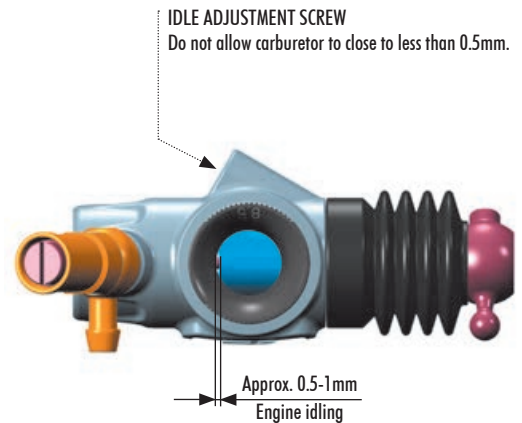


Turn on transmitter and receiver and set the throttle servo trim to the neutral position.

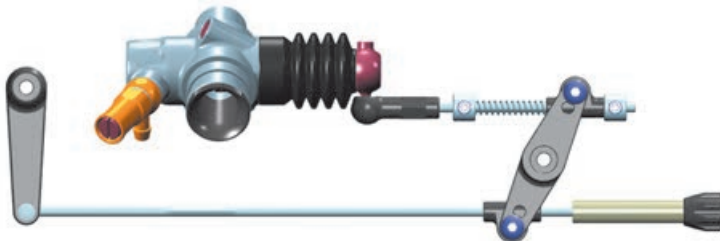
Adjust the idle adjustment screw on the carburetor to open approx. 0.5-1mm.

Adjust both collars on the carb and brake linkages accordingly. The carb linkage must have approximately 0.5mm of preload on the spring at neutral.

DO NOT ADJUST while the engine is running.



## FULL THROTTLE



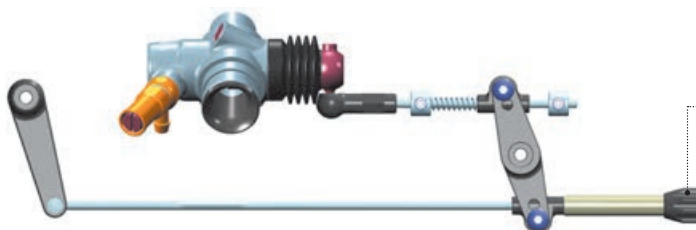
With the engine NOT RUNNING but the receiver turned ON, apply full throttle at the transmitter.

Adjust the transmitter's throttle servo high-end point so that the servo horn fully opens the carburetor when the transmitter's throttle control (e.g., throttle trigger) is at 95% of full throttle. The servo should not have excessive strain when at full throttle, or throttle/carb damage will result.

If the transmitter does not have throttle high-end point adjustment, adjust the throttle linkage pivot position on the servo horn until full throttle is obtained.



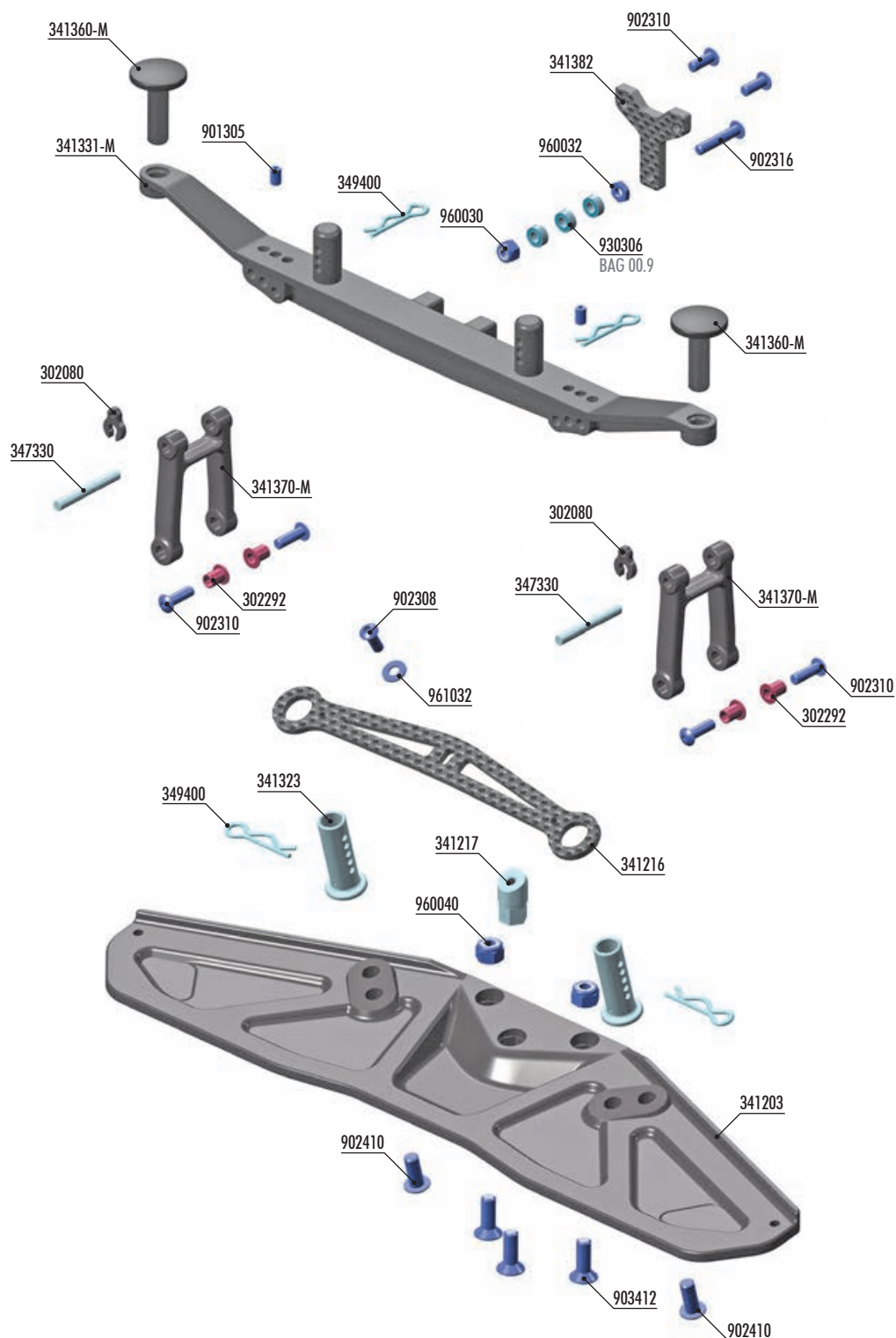
## BRAKE



Adjust the composite collar on the brake linkage so the brakes work smoothly.

If the brakes apply too much or not enough, adjust the collar accordingly. If your transmitter has throttle servo low-end point adjustment (or brake adjustment), use that to set the appropriate amount of throttle servo horn throw.

## 14. FINAL ASSEMBLY

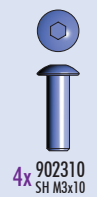
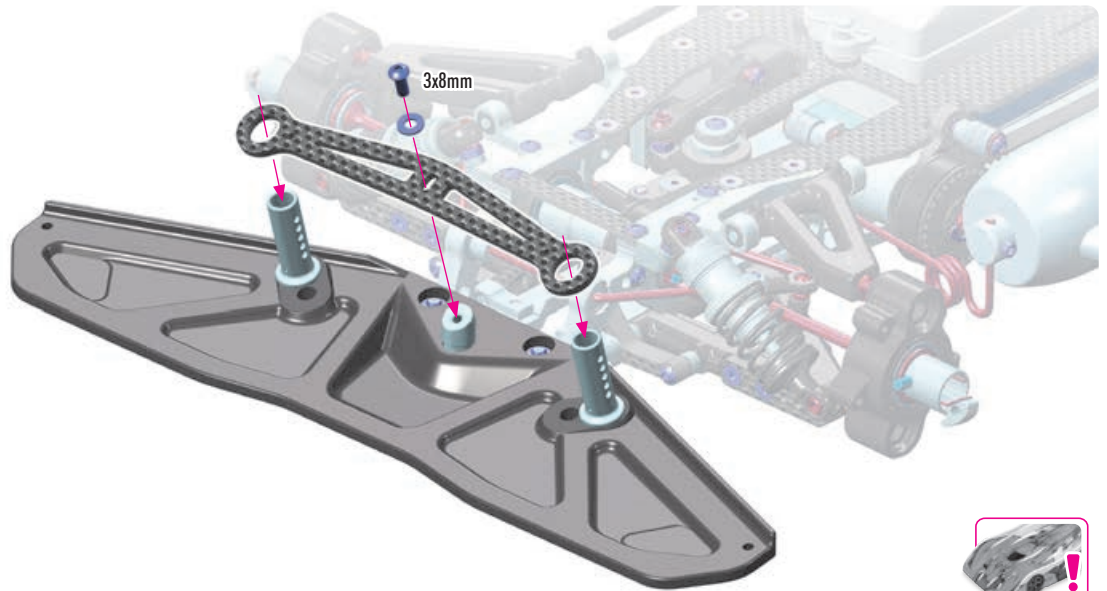
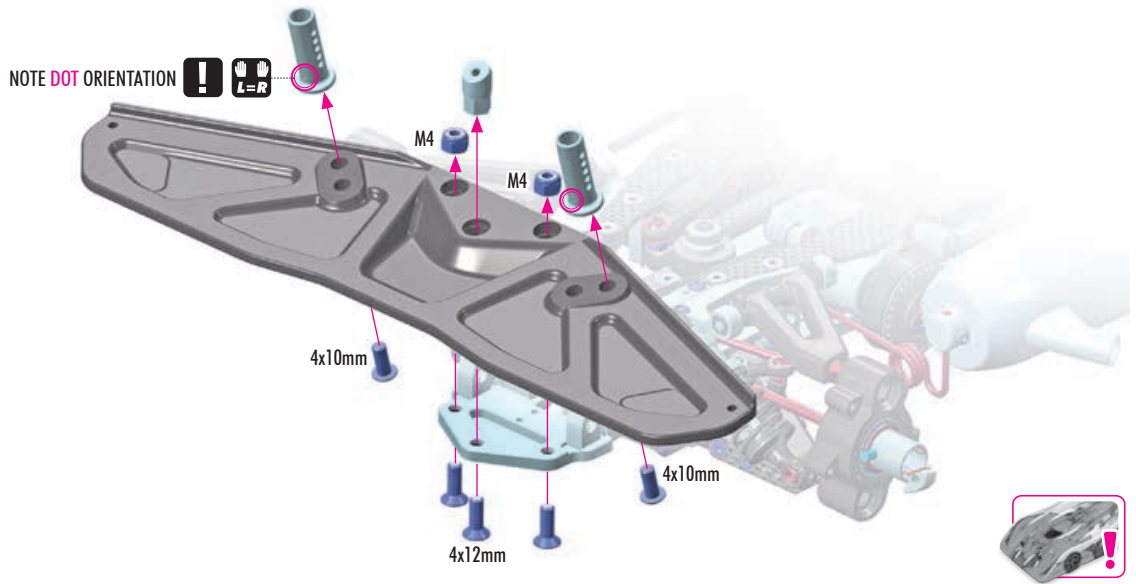
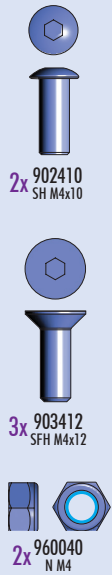


### BAG

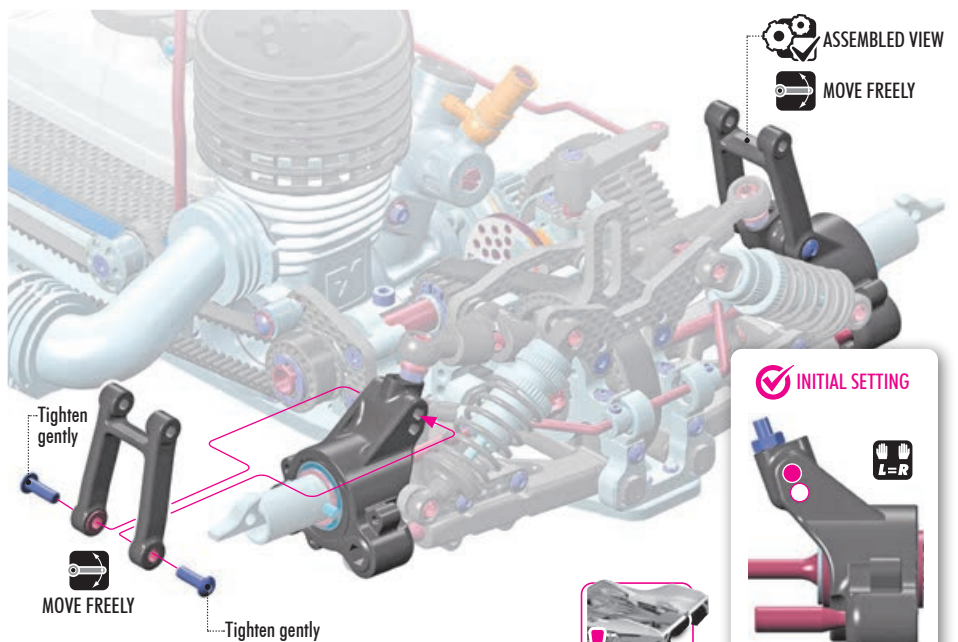
14

302080	CASTER CLIPS SET 4+3+2+1mm (2)	901305	HEX SCREW SB M3x5 (10)
302292	STEEL STEERING BUSHING LONG (4)	902308	HEX SCREW SH M3x8 (10)
341203	COMPOSITE BUMPER - DOWNFORCE	902310	HEX SCREW SH M3x10 (10)
341216	CARBON BRACE FOR FRONT BODY POSTS	902316	HEX SCREW SH M3x16 (10)
341217	CARBON HOLDER FOR FRONT BODY POSTS & ALU HOLDER - SET	902410	HEX SCREW SH M4x10 (10)
341323	ALU FRONT BODY POST - SHORT - SWISS 7075 T6 (2)	903412	HEX SCREW SFH M4x12 (10)
341331-M	COMPOSITE REAR BODY HOLDER - HIGHER - MEDIUM	930306	BALL-BEARING 3x6x2.5 STEEL SEALED - OIL (2)
341360-M	COMPOSITE REAR BODY HOLDER SCREW - MEDIUM (2)	960030	NUT M3 (10)
341370-M	COMPOSITE REAR BODY HOLDER ARM - MEDIUM	960032	NUT M3 - BLACK (10)
341382	CARBON REAR BODY CENTERING PLATE W. BALL-BEARINGS - SET	960040	NUT M4 (10)
347330	REAR BODY HOLDER ARM PIN (2)	961032	WASHER S 3.2 (10)
349400	BODY CLIP (10)		

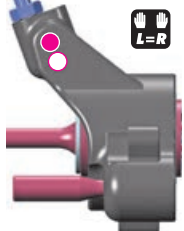
# 14. FINAL ASSEMBLY



2x L=R




INITIAL SETTING



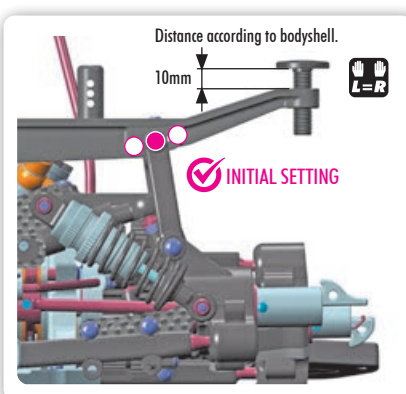
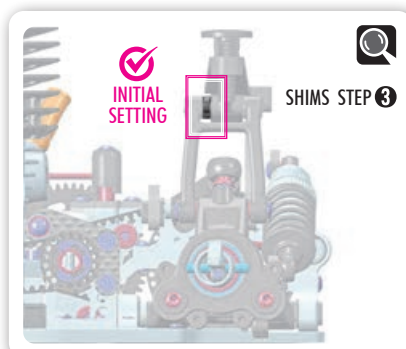
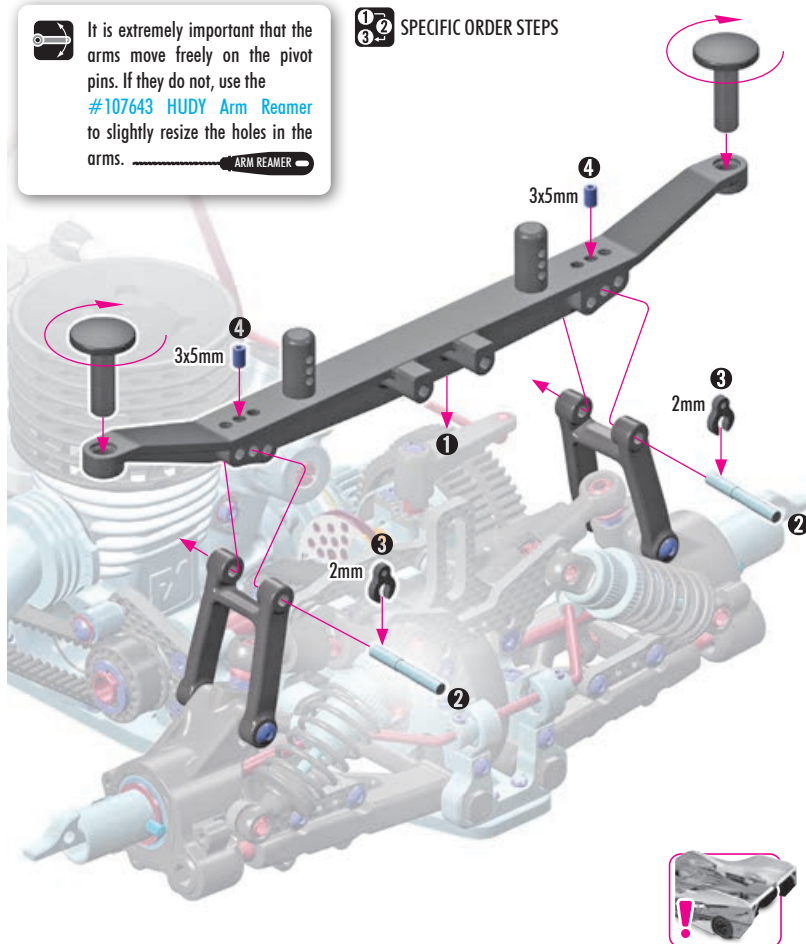


# 14. FINAL ASSEMBLY

2x 901305  
SB M3x5

It is extremely important that the arms move freely on the pivot pins. If they do not, use the #107643 HUDY Arm Reamer to slightly resize the holes in the arms. 

1 2 SPECIFIC ORDER STEPS



2x 902310  
SH M3x10

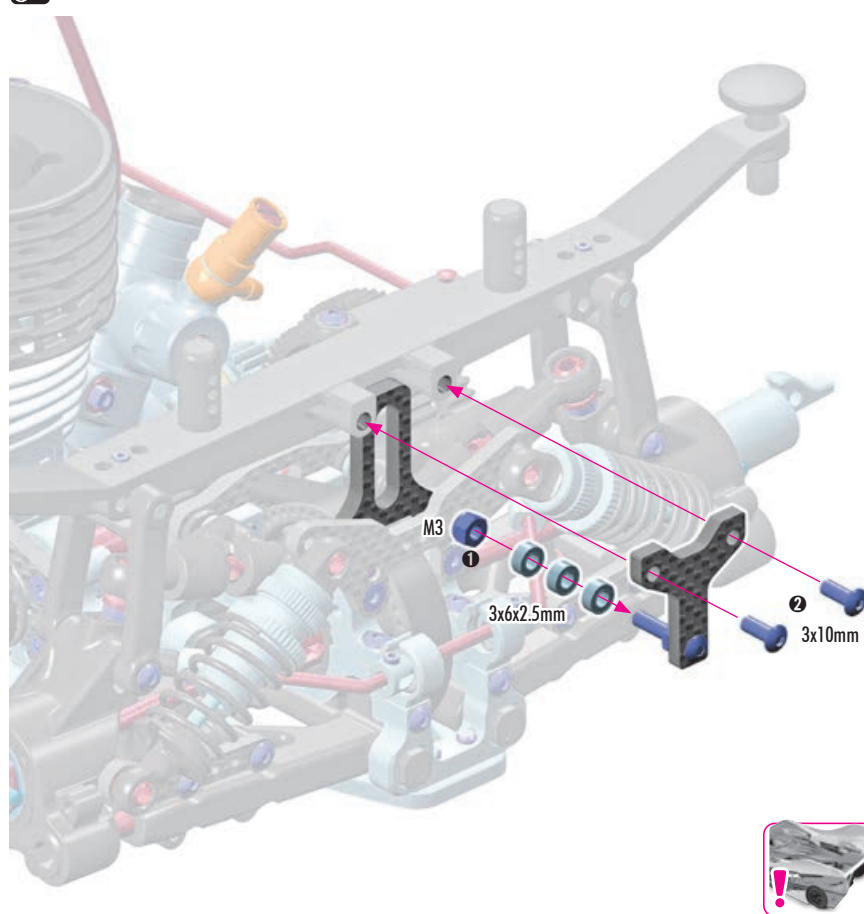
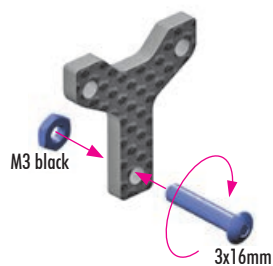
1x 902316  
SH M3x16

1x 960030  
N M3

1x 960032  
N M3

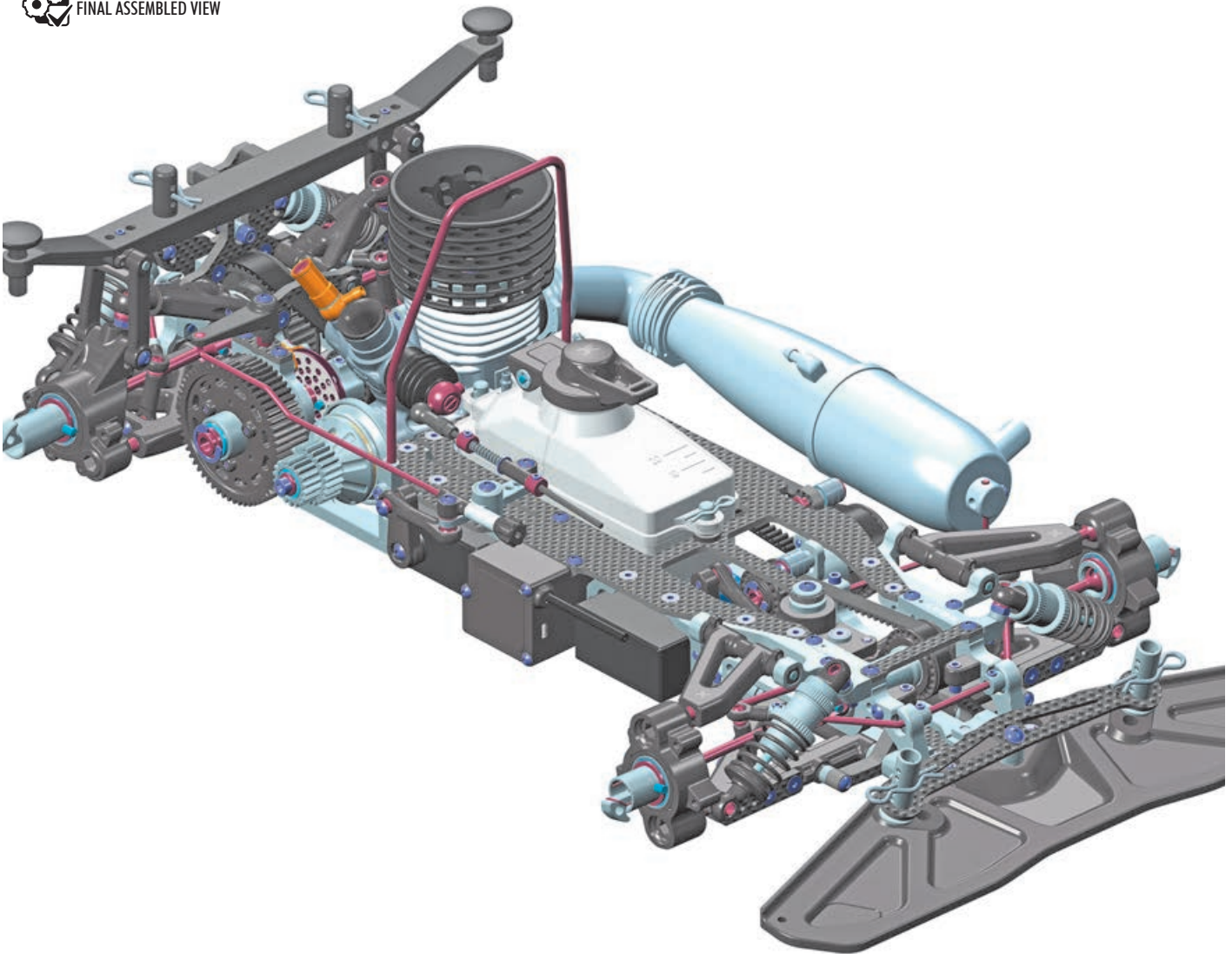
3x 930306  
BB 3x6x2.5

1 2 SPECIFIC ORDER STEPS





FINAL ASSEMBLED VIEW



## TIP

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

For pre-oiled ball-bearings, use:  
#106230 HUDY Bearing Oil.

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.







#108001  
HUDY SET-UP STATION FOR 1/8 ON-ROAD CARS



#102362  
WHEEL ADAPTER 1/8 ON-ROAD CARS

#102003  
HUDY EXCELLENT TIRE TRUER - FULLY AUTOMATIC 1/8, 1/10, 1/12 - FULL OPTION



#107030  
UNIVERSAL FLYWHEEL PULLER



#104002  
HUDY AIR VAC - VACUUM PUMP  
ON-ROAD 1/8, 1/10, 1/12



#107051  
HUDY PROFESSIONAL ENGINE TOOL KIT FOR .21 ENGINE



#107701  
CHASSIS DROOP GAUGE SUPPORT BLOCKS  
(20mm) FOR 1/8 - LW (2)



#107711  
CHASSIS DROOP GAUGE -3 TO 10MM  
FOR 1/8 CARS (20mm)



#106000  
HUDY DRIVE PIN REPLACEMENT TOOL  
(FOR 3mm PINS)



#107713  
CHASSIS RIDE HEIGHT GAUGE 2mm  
TO 15mm (1mm STEPPED)



#106200  
HUDY MAGIC CLEANING GUM



#107880  
CHASSIS BALANCING SIMPLE TOOL - V2 (2)



#108150  
HUDY TOURING CAR STAND - V3



#108190  
HUDY ALU PARTS TRAY 160x100mm



#199060  
HUDY ALU TOOL STAND

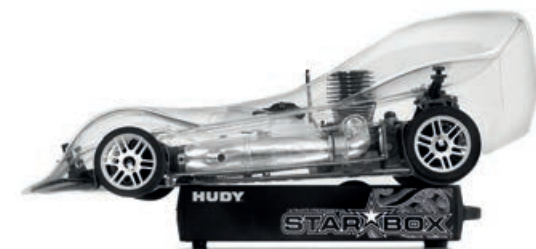




#108070  
ALU SET-UP WHEEL FOR 1/8 ON-ROAD (2+2)



#293085  
HUDY PURE TUNGSTEN WEIGHT THIN  
ROUND 15mm WITH M3 - 10g



#104400  
HUDY STAR-BOX ON-ROAD 1/10 & 1/8 - LIPO VERSION



#293084  
BALANCING CHASSIS WEIGHT 10g (4)



#108504 FLAT SET-UP BOARD 1/8 ON-ROAD - LIGHTWEIGHT - TITANIUM  
#108501 FLAT SET-UP BOARD 1/8 ON-ROAD - LIGHTWEIGHT - GREY  
#108502 FLAT SET-UP BOARD 1/8 ON-ROAD - LIGHTWEIGHT - SILVER GREY  
#108503 FLAT SET-UP BOARD 1/8 ON-ROAD - LIGHTWEIGHT - DARK GREY  
#108505 FLAT SET-UP BOARD 1/8 ON-ROAD - LIGHTWEIGHT - BLACK



#199310  
HUDY PIT BAG - COMPACT

\* Accessories not included



#107903  
HUDY QUICK-TWEAK STATION 1/8 & 1/10 ON-ROAD



#104140  
HUDY ENGINE BREAK-IN BENCH



#199185  
HUDY CAR BAG - 1/8 ON-ROAD



#104200  
HUDY FUEL BOTTLE WITH ALUMINUM NECK



#105110  
HUDY TIRE STICK 1/8 ON-ROAD,  
1/8 OFF-ROAD & 1/8 GT (4)



#990006  
HUDY TITANIUM BALL STUD  
D=4.9 / L=6 / S=3.5 / 2MM HEX (2)



#106205  
HUDY WASH BOX



#903306-T  
HUDY TITANIUM HEX FLAT HEAD SCREW  
SFH M3x6 (10)



#908306-T  
HUDY TITANIUM HEX SUPER LOW HEAD  
SCREW SLH M3x6 (10)



#106213  
HUDY JOINT GREASE

#106210  
HUDY GRAPHITE GREASE



#199911  
HUDY PIT MAT ROLL 750x1200mm



#107843  
HUDY CLEANING BRUSH  
CHEMICAL RESISTANT - 2.0"



#106281  
HUDY BODY FIX 2 - 28g/1oz

**[www.teamxray.com](http://www.teamxray.com)**

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