

#### **BEFORE YOU START**

The X12 is a high-quality, 1/12-pan 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 car 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 X12, YOU MUST read through all of the operating instructions and instruction manual and fully understand them to get the maximum enjoyment and prevent unnecessary damage. Read carefully and fully understand the instructions before beginning assembly. Make sure you review this entire manual and examine all details carefully. If for some reason you decide the X12 is not what you wanted or expected, do not continue any further. Your hobby dealer cannot accept your X12 kit for return or exchange after it has been partially or fully assembled.

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

#### **CUSTOMER SUPPORT**

We have made every effort to make these instructions as easy to understand as possible. However, if you have any difficulties, problems, or questions, please do not hesitate to contact the XRAY support team at <a href="mailto:info@teamxray.com">info@teamxray.com</a>. Also, please visit our Web site at <a href="www.teamxray.com">www.teamxray.com</a> 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

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Failure to follow these instructions will be considered as abuse and/or neglect.

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

#### SYMBOLS USED

Part bags used

Assemble in the specified order Assemble left and right sides the same way

Pay attention here

Assemble as many times as specified (here twice)

Apply CA glue

Apply oil

Apply grease

Ensure smooth non-bindina movement



Follow Set-up Book



23



2x







## **EQUIPMENT INCLUDED**

**XRAY Premium** Silicone Oil 700cSt (#359270) & Silicone Oil 3000cSt (#359303)



Diff Grease (HUDY #106211)



### **TOOLS REQUIRED**









## **TOOLS REQUIRED**

**Pliers** (HUDY #189020)



Scissors (HUDY #188990)



Side Cutters (HUDY #189010)









Turnbuckle 3mm (HUDY #181030)



Turnbuckle 4mm (HUDY #181040)



Reamer (HUDY #107600)



# **EOUIPMENT REOUIRED**

Transmitter



Receiver



Steering Servo



Speed Controller



Electric Motor



Pinion Gear and Setscrew







LiPo Battery Pack



**Battery Charger** 



Front & Rear Tires



Tire Truer (HUDY #102003)



Bearina Oil (HUDY #106230)



Fibre Tape (HUDY #107870)



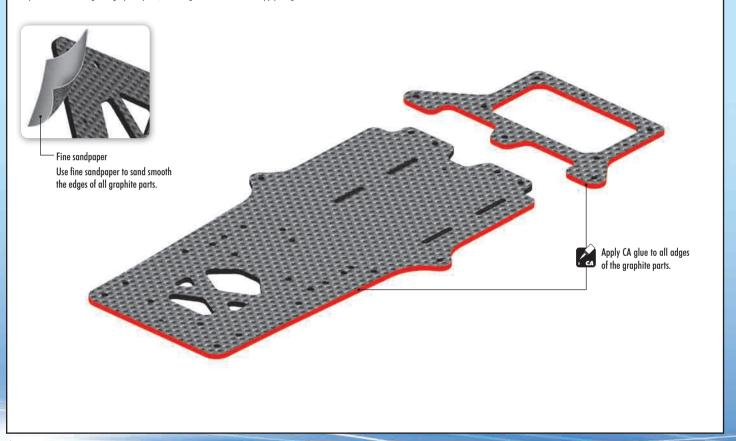
Lexan™ Paint



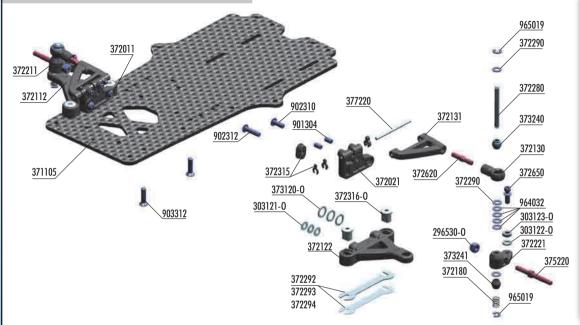
# GRAPHITE PART PREPARATION

### PREPARE ALL GRAPHITE PARTS

To protect and seal edges of graphite parts, sand edges smooth and then apply CA glue.



### 1. FRONT SUSPENSION



SUSPENSIO	N ARMS
#372112	RIGHT - HARD
#372113	RIGHT - GRAPHITE
#372122	LEFT - HARD
#372123	LEFT - GRAPHITE

UPPER ARN	I MOUNTS
#372010	RIGHT - STANDARD
#372011	RIGHT - HARD
#372012	RIGHT - GRAPHITE
#372020	LEFT - STANDARD
#372021	LEFT - HARD
#372022	LEFT - GRAPHITE

FRONT COIL	SPRINGS
#372180	C=3.5 - GOLD
#372181	C=4.0 - SILVER
#372182	C=5.0 - BLACK
#372183	C=6.0 - GREY

ALU ECCENTRIC BUSHINGS		
#372316-0	OMM - STANDARD	
#372317	0.5MM - OPTION	
#372318	1.0MM - OPTION	

BAG



303122-0	ALU SHIM 3x6x1.0MM - ORANGE (10)
303123-0	ALU SHIM 3x6x2.0MM - ORANGE (10)
371105	X12'15 CHASSIS - 2.5MM GRAPHITE
372011	COMPOSITE FRONT UPPER ARM MOUNT - RIGHT - HARD
372021	COMPOSITE FRONT UPPER ARM MOUNT - LEFT - HARD
372112	COMPOSITE SUSPENSION ARM FRONT LOWER - RIGHT - HARD
372122	COMPOSITE SUSPENSION ARM FRONT LOWER - LEFT - HARD
372130	COMPOSITE FRONT UPPER SUSPENSION ARM & BALL JOINT
372131	COMPOSITE FRONT UPPER SUSPENSION ARM - HARD
372180	FRONT COIL SPRING $3.6x6x0.5MM$ ; $C=3.5 - GOLD$ (2)
372211	COMPOSITE STEERING BLOCK - RIGHT - HARD - V2
372221	COMPOSITE STEERING BLOCK - LEFT - HARD - V2

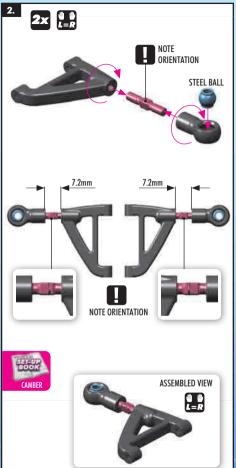
303121-0 ALU SHIM 3x6x0.5MM - ORANGE (10)

37 2200	KINO FIN (2)
372290	ALU SHIM 3.2x4.8x0.5 (4)
372292	STEEL SHIM 0.2MM - SÌLÝER (2)
372293	STEEL SHIM 0.4MM - BLACK (2)
372294	STEEL SHIM 0.6MM - GOLD (2)
372315	COMPOSITE ECCENTRIC BUSHINGS + CASTER CLIPS (2)
372316-0	ALU ECCENTRIC BUSHING 0.0MM - ORANGE (2)
372620	ADJ. TURNBUCKLE M3x17 MM - HUDY SPRING STEEL™ (2)
372650	BALL-END 4.2MM - THREADED - HUDY SPRING STEEL™ (2)
373120-0	ALU SHIM 5.3x7.8x0.5MM - ORANGE (10)
373240	PIVOTBALL UNIVERSAL 6.0 MM - HUDY SPRING STEEL™ (2)
373241	COMPOSITE PIVOTBALL 6.0 MM (2)
375220	FRONT WHEEL AXLE (2)
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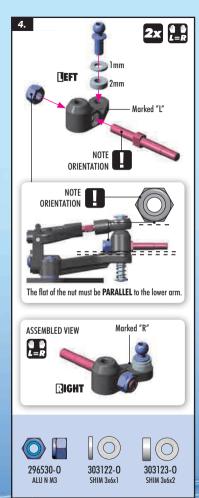
372280 KING PIN (2)

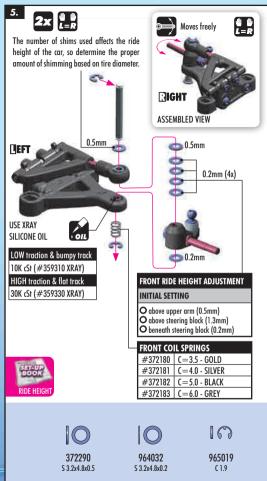
377220 FRONT UPPER PIVOT PIN 2x31MM (2)
296530-0 ALU NUT M3 - ORANGE (10)
901304 HEX SCREW SB M3x4 (10)
902310 HEX SCREW SH M3x10 (10)
902312 HEX SCREW SH M3x12 (10)
903312 HEX SCREW SH M3x12 (10)
964032 WASHER S 3.2 x 4.8 x 0.2 (10)
965019 E-CLIP 1.9 (10)

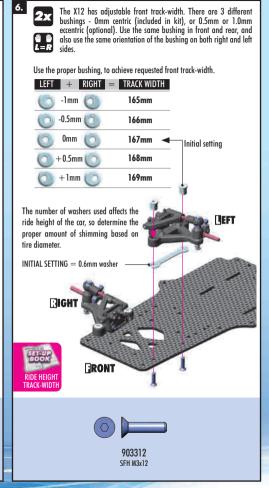


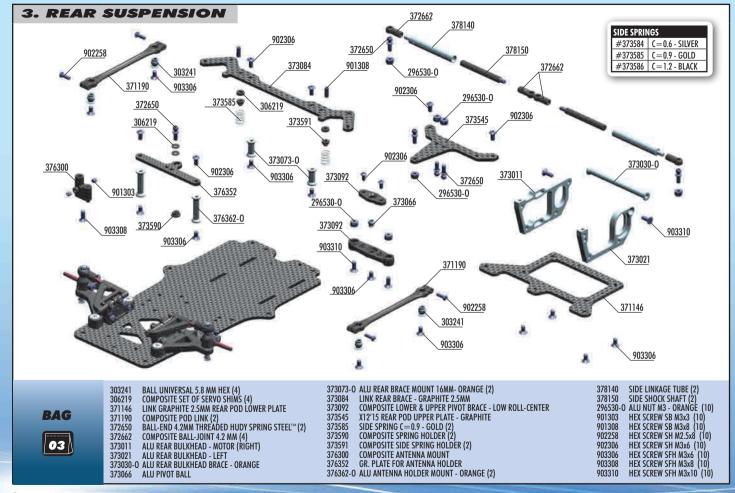


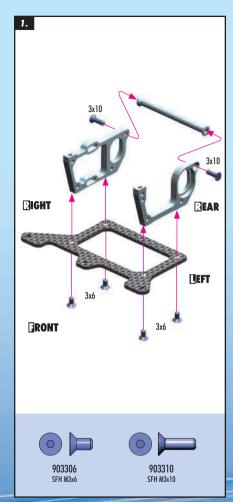


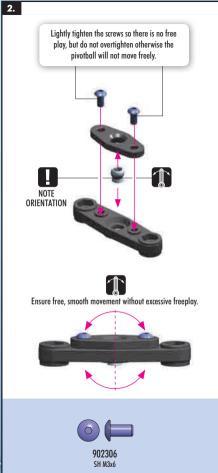


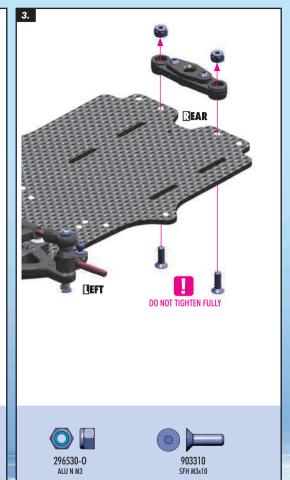


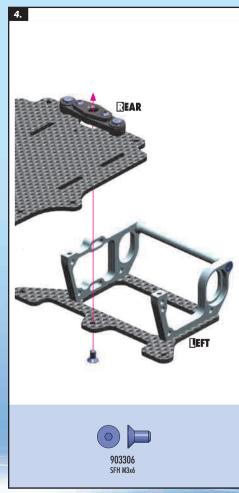


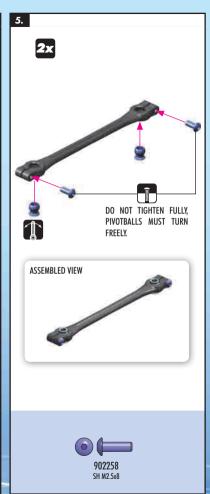


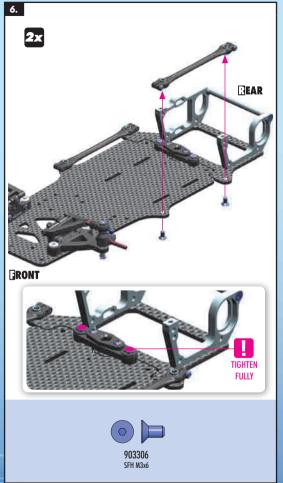


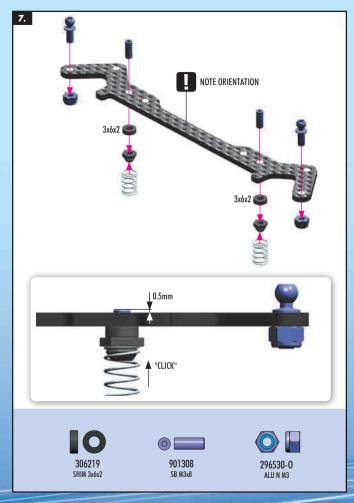


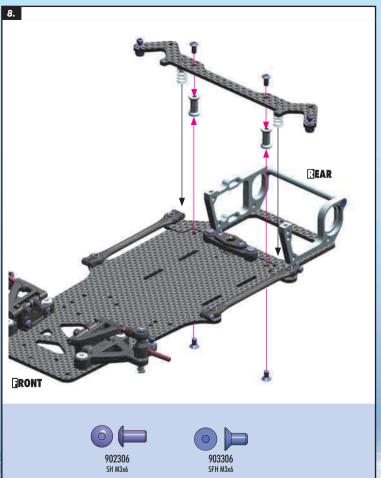


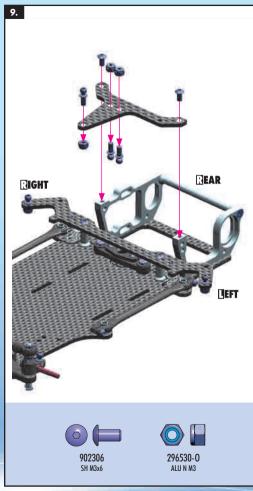


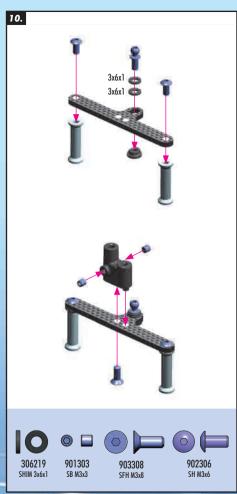


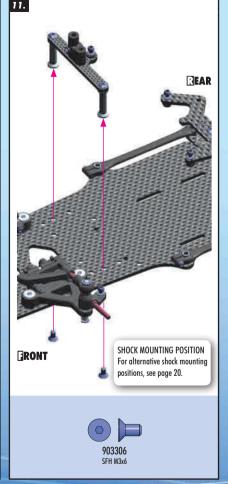


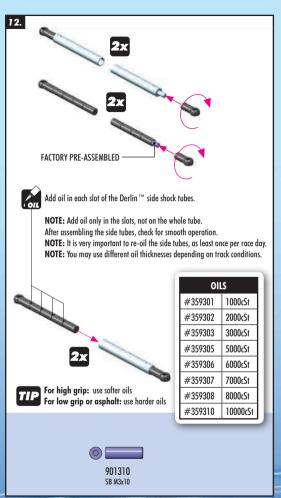


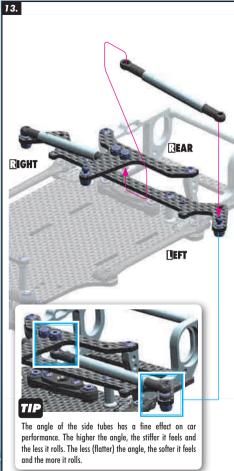










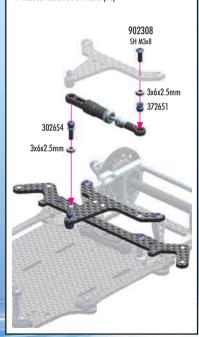


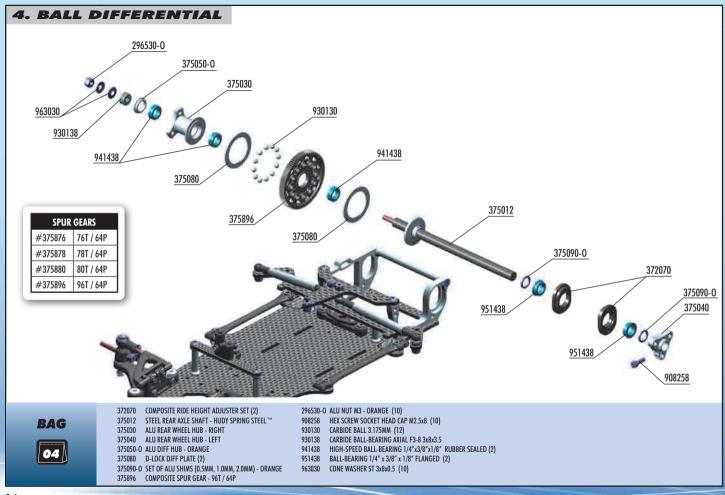
#### OPTIONAL SIDE SHOCK

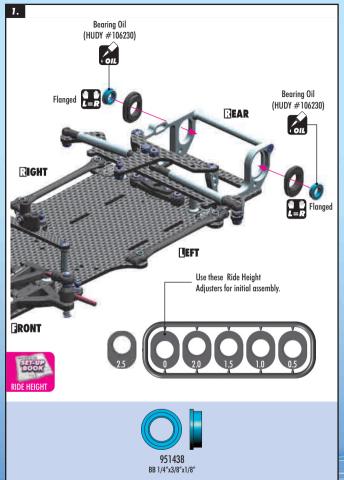
Optional side shock can be used to improve traction in low- and medium-ario conditions.

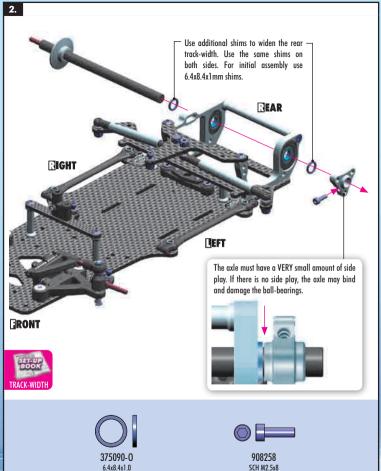
#### **OPTIONAL PARTS** (not included):

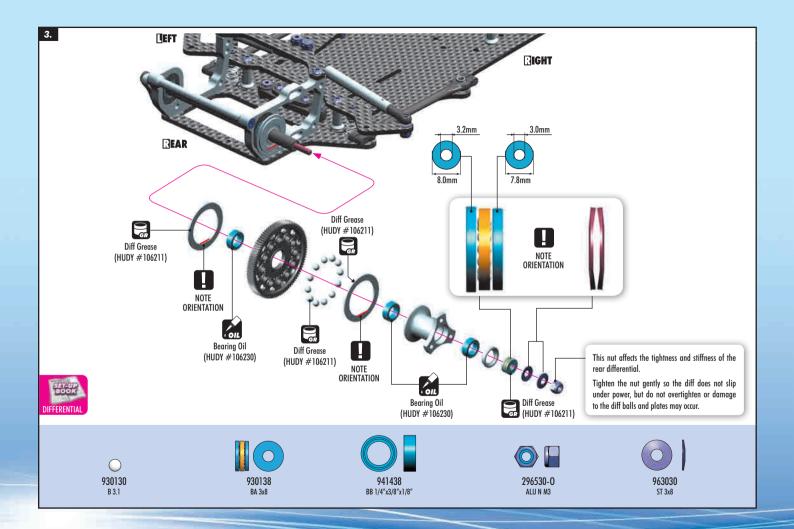
- #378100 Side Shock Absorber Set
- #302654 Ball End 4.9mm with 8mm Thread V2 (2)
- #303120 Set of Alu Shims (0.5mm, 1.5mm, 2.5mm) #372651 Ball Universal 4.9mm - HUDY Spring Steel™ (2)
- #902308 Hex Screw SH M3x8 (10)











#### 5. SHOCK ABSORBER SHOCK SPRINGS #378092 C=1.5 - SILVER #378093 C=1.8 - GOLD 378011 #378094 C=2.1 - BLACK 378011 378050-0 378061 378080 971022 965015 378030-0 378020 378093 378011 901303 **SHOCK OILS** #359210 100cSt #359250 500cSt 378040-0 #359215 150cSt #359255 550cSt 378071-0 200cSt #359220 #359260 600cSt 378011 #359270 700cSt #359225 250cSt #359230 300cSt #359280 800cSt 378070-0 #359235 350cSt #359290 900cSt #359240 400cSt #359301 1000cSt #359245 450cSt #359302 2000cSt



378001 SHOCK ABSORBER SET 378011 COMPOSITE SHOCK PAI

378011 COMPOSITE SHOCK PARTS - FRAME 378020 ALU THREADED SHOCK BODY - HARDCOATED

378030-0 ALU SHOCK BODY CAP - LOWER - ORANGE

378050-0 ALU SHOCK BODY CAP - UPPER - ORANGE

378061 SHOCK SHAFT

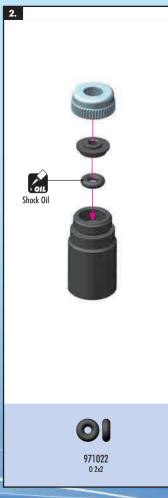
378070-0 ALU SHOCK SPRING COLLAR - ORANGE

378071-0 ALU SHOCK ADAPTER - ORANGE 378080 SHOCK RUBBER MEMBRANE (2)

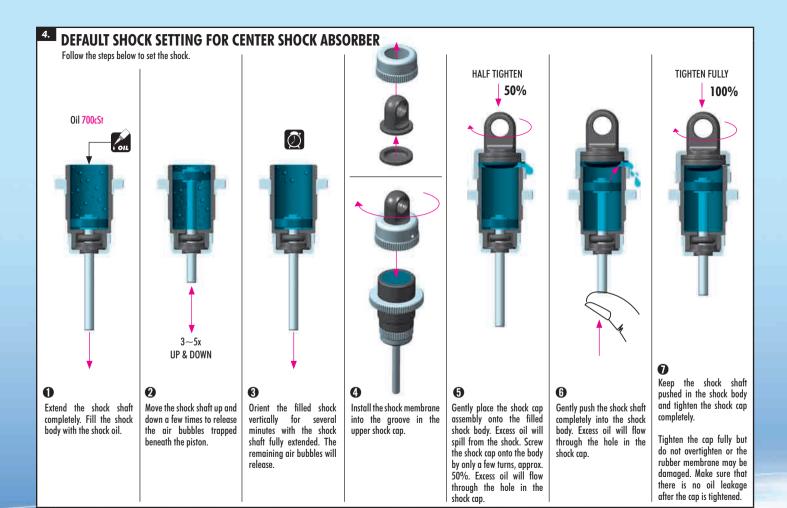
378080 SHOCK RUBBER MEMBRANE ( 378093 SHOCK SPRING - GOLD 901303 HEX SCREW SB M3x3 (10) 965015 E-CLIP 1.5 (10)

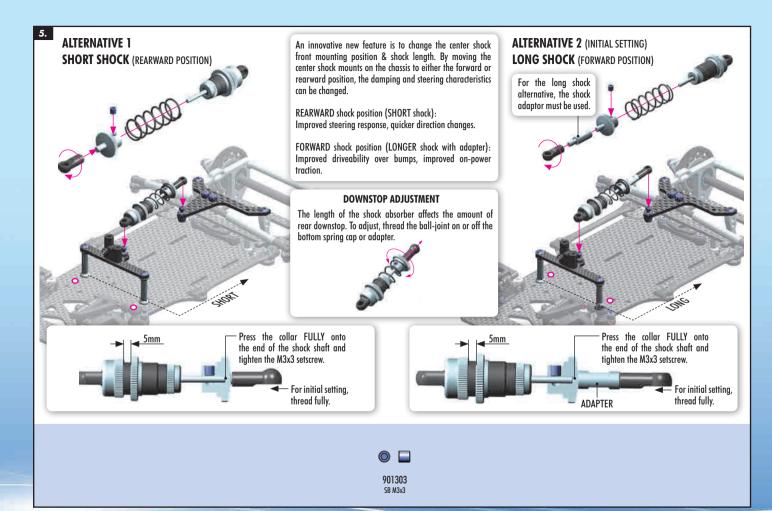
971022 SILICONE O-RING 2x2 (10)

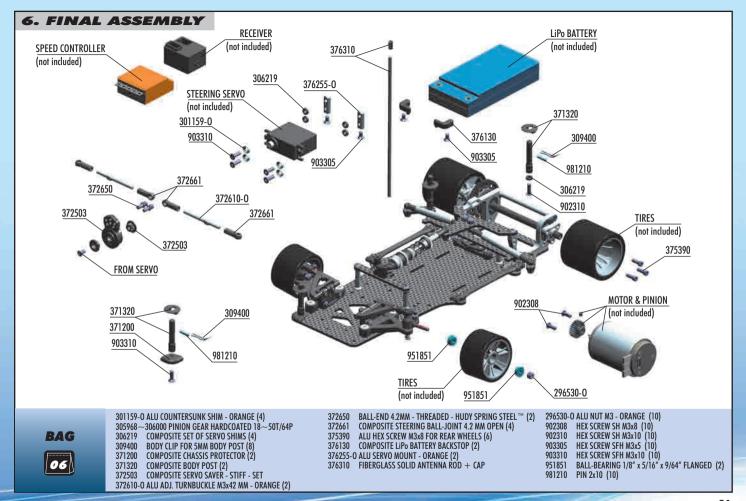


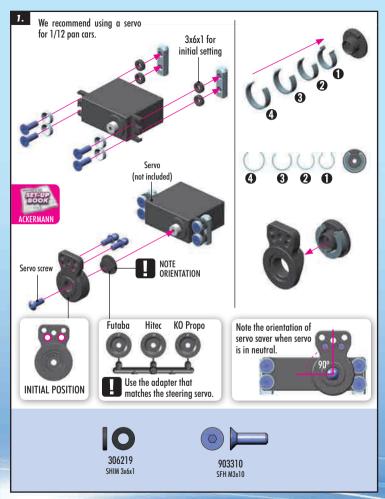


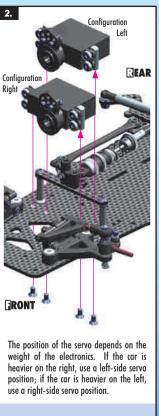


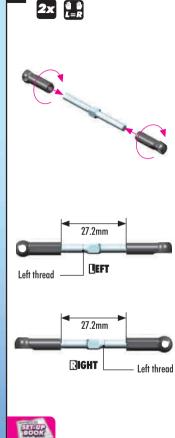




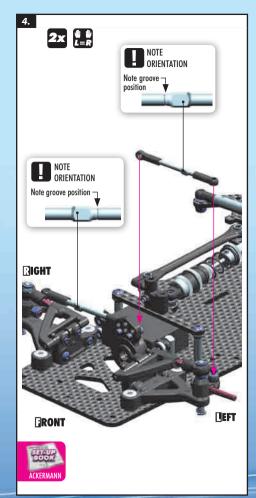


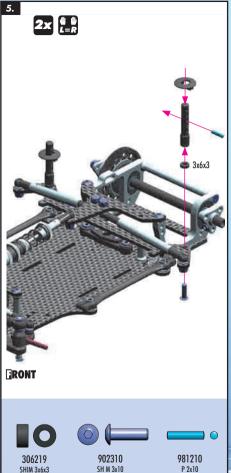


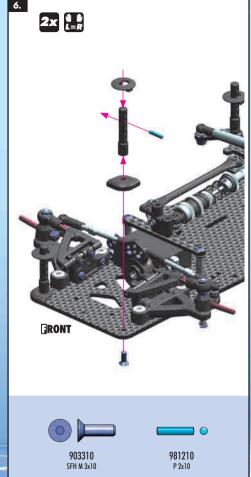


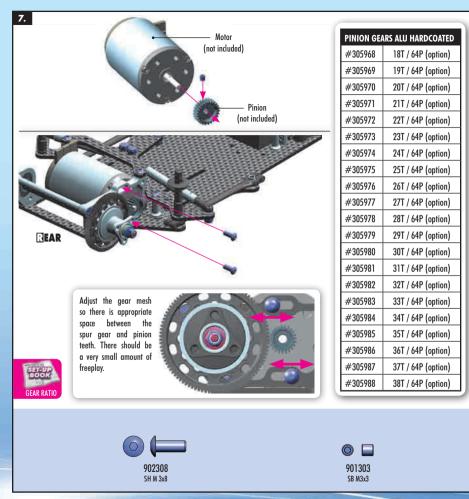


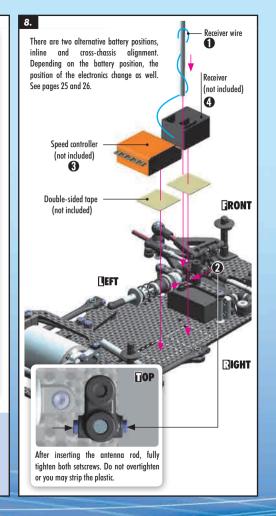
SFH M3x5







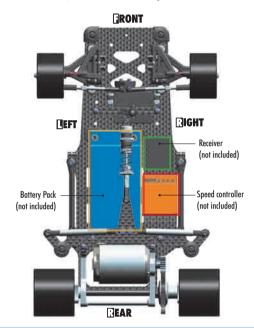


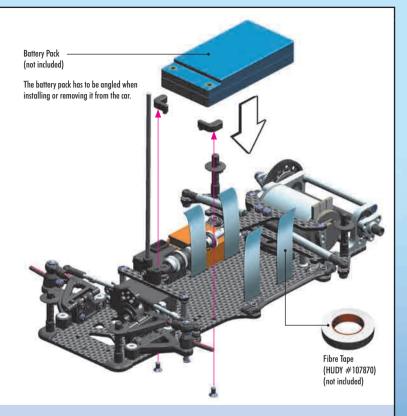


# LIPO BATTERY CONFIGURATION 1 Inline alignment:

### INITIAL ASSEMBLY

Inline battery alignment improves cornering speed and reduces the chance that the rear of the car will "diff out." Recommended for high-traction conditions.





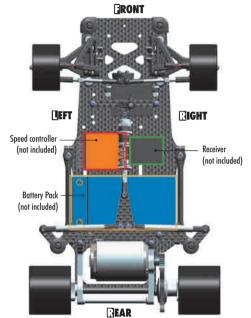


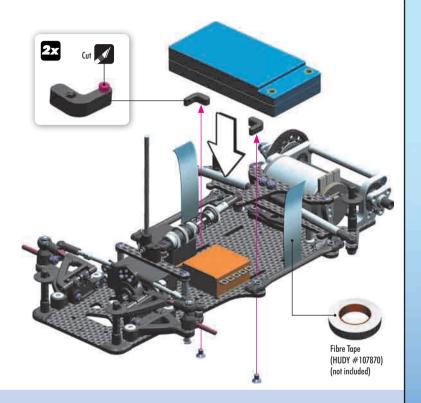


903305 SFH M3x5

# LIPO BATTERY CONFIGURATION 2 **Cross-chassis alignment:**

Cross-chassis alignment provides more neutral handling, making the car less sensitive to set-up changes and gives reduced steering responsive. Recommended for low- and medium-traction conditions.

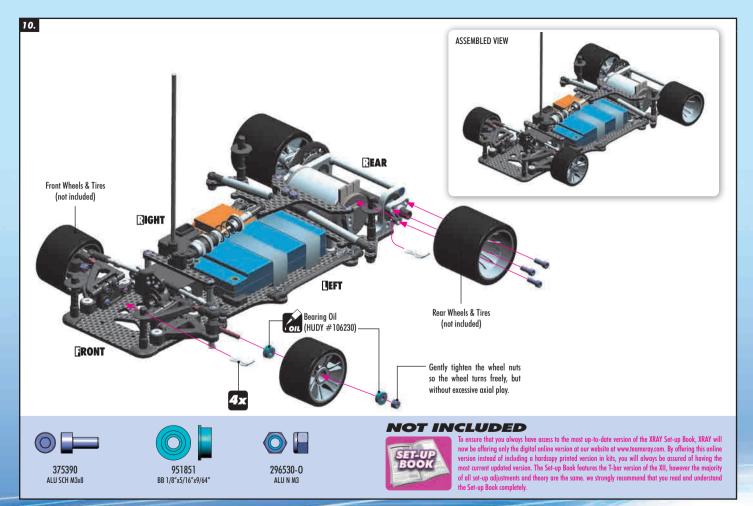












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