

MTCE
1/10 ELECTRIC TOURING CAR

MUGEN
seiki

ITEMS REQUIRED FOR OPERATION

- 2CH RADIO SET FOR RC CAR (TRANSMITTER, RECEIVER, SERVO)
- MOTOR
- PINION GEAR
- SPUR GEAR
- ESC (ELECTRONIC SPEED CONTROLLER)
- BATTERIES FOR RC CAR
- CHARGER
- BODYSHELL (190mm)
- TIRES/WHEELS/INSERTS
- SERVO HORN

TOOLS REQUIRED

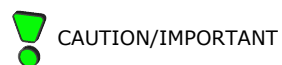
- HEXAGON WRENCHES (1,5mm/2mm/2,5mm)
- BOX WRENCH (7mm)
- NEEDLE NOSE PLIERS
- WIRE CUTTERS
- SHARP HOBBY KNIFE
- SCISSORS
- VERNIER CALIPERS
- SOLDER/SOLDERING IRON
- INSTANT GLUE
- TURNBUCKLE WRENCH

NEUTRAL SETTING OF TRANSMITTER

***BEFORE SETTING, READ THE INSTRUCTIONS ATTACHED TO THE TRANSMITTER AND ESC**

1. TURN ON THE TRANSMITTER
2. SET TRIMS OF TRANSMITTER
3. SET THROTTLE SIDE OF TRANSMITTER ACCORDING TO THE INSTRUCTION MANUAL ESC
4. TURN ON THE ESC ACCORDING TO THE INSTRUCTION MANUAL AND SET THE DEFAULT
5. CHECK THAT THE SERVO MOVES PROPERLY IN ACCORDANCE WITH THE CONTROL FROM TRANSMITTER
6. TURN OFF THE ESC
7. TURN OFF THE TRANSMITTER

SYMBOLS EXPLAINED



CAUTION/IMPORTANT



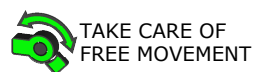
DETAILED VIEW



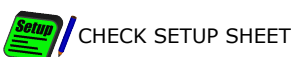
USED KIT BAG#



INFO



TAKE CARE OF FREE MOVEMENT



CHECK SETUP SHEET



ASSEMBLED CORRECTLY



ASSEMBLED WRONGLY

1 2 3 ASSEMBLE IN ORDER



RECOMMENDATION



BUILD SHOWN VALUE



USE GREASE



FRONT LEFT SIDE



REAR LEFT SIDE



USE SCREW LOCK



FRONT RIGHT SIDE



REAR RIGHT SIDE



USE SILICONE OIL

SCREW CHART

THESE ARE THE ACTUAL SIZES OF THE SCREWS & OTHER HARDWARE INCLUDED WITH THIS KIT

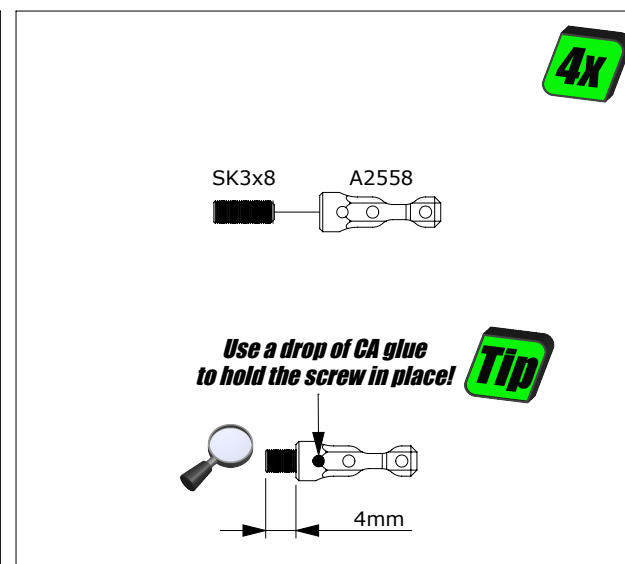
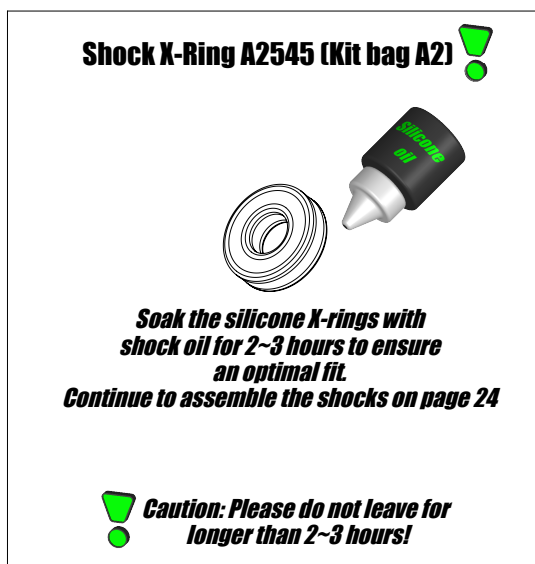
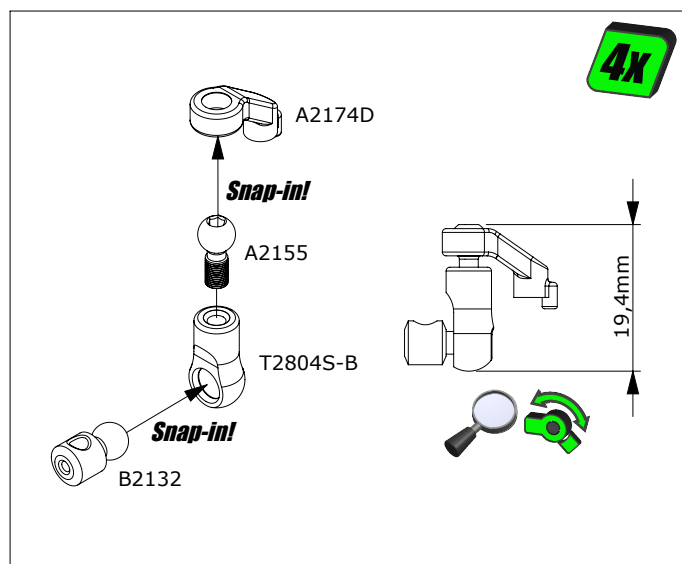
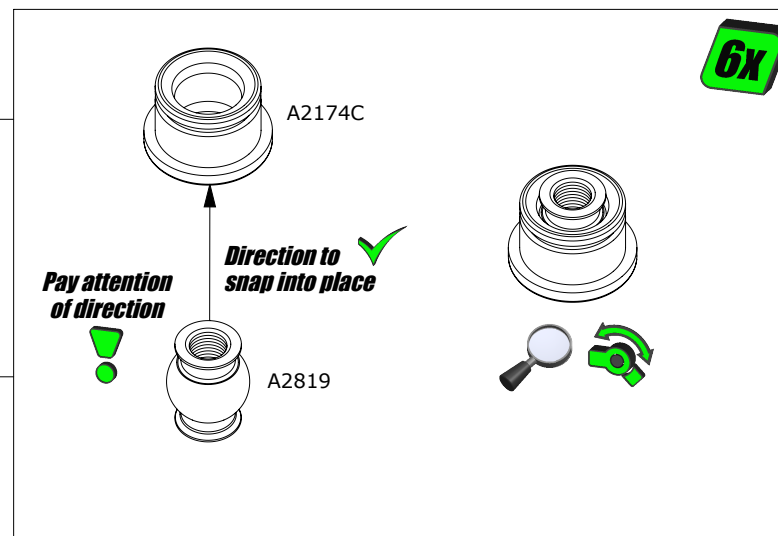
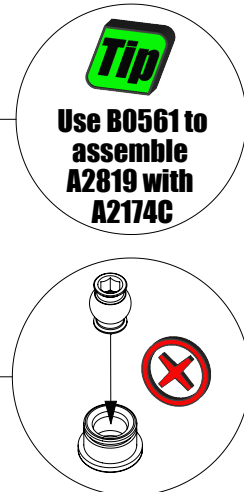
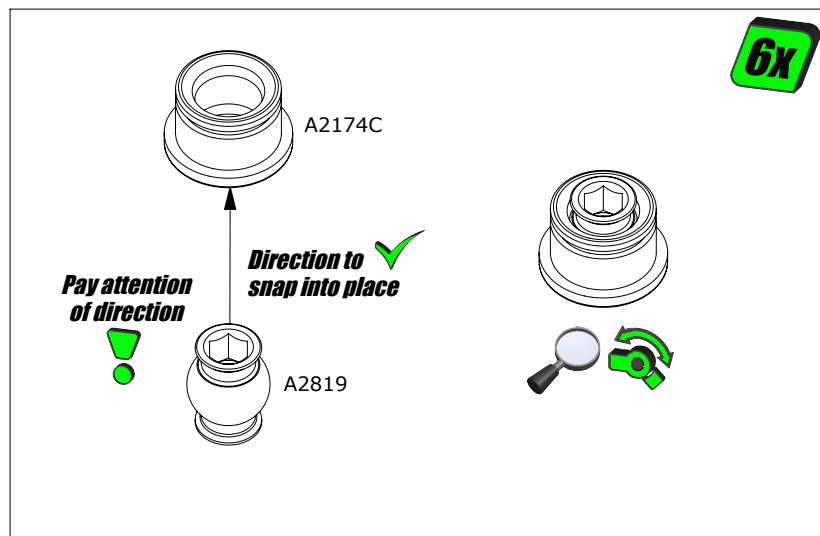
SiG2x3	SiG2x14	SiG3x8	SJG2x6	SJG3x6	SG3x12	SK3x5	CTW-28
SiG2x4	SiG3x4	SiG3x10	SJG2x8	SJG3x8	SG3x16	SK3x6	OE1.2
SiG2x6	SiG3x5	SiG3x12	SJG2x10	SJG3x10	SK3x2.6	SK3x8	OW3x5x0.2
SiG2x12	SiG3x6	SJG2x4	SJG3x5	SJG3x12	SK3x3	SK3x12	

SK3x8 4pcs.

Bag
A1

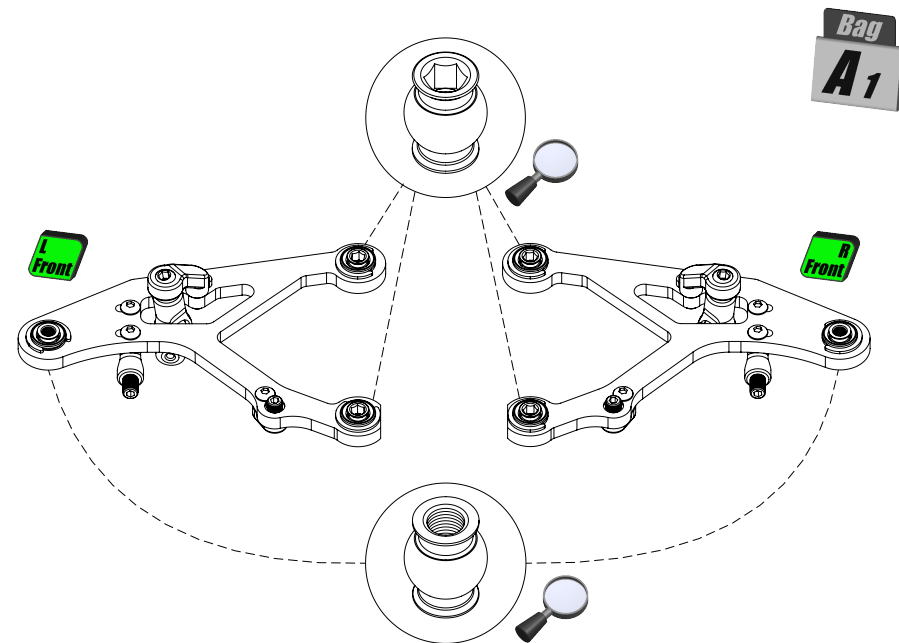
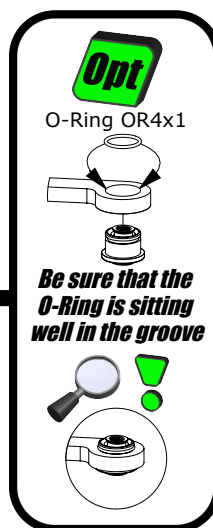
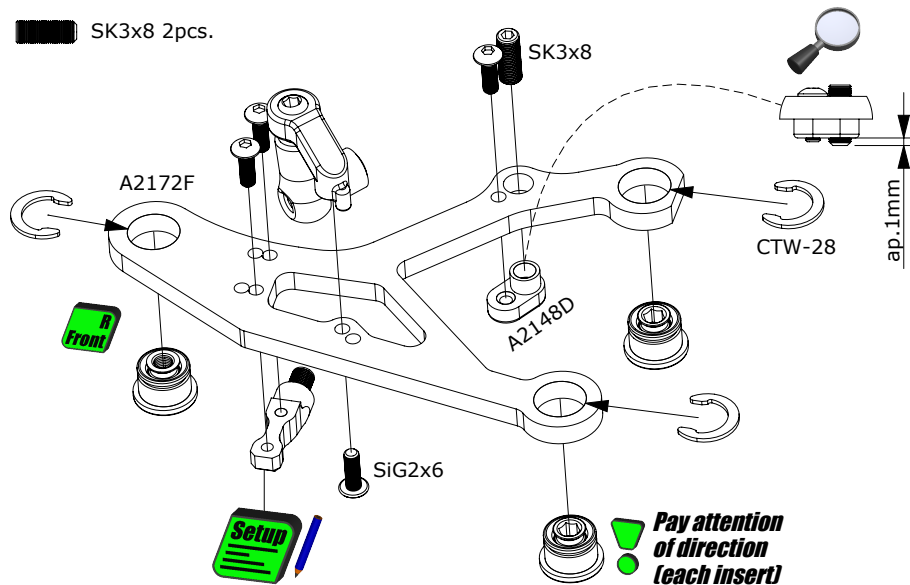
Bag
A2

A2545
(X-Ring)
B0316Z
(Silicone oil)



SiG2x6 8pcs. CTW-28 6pcs.

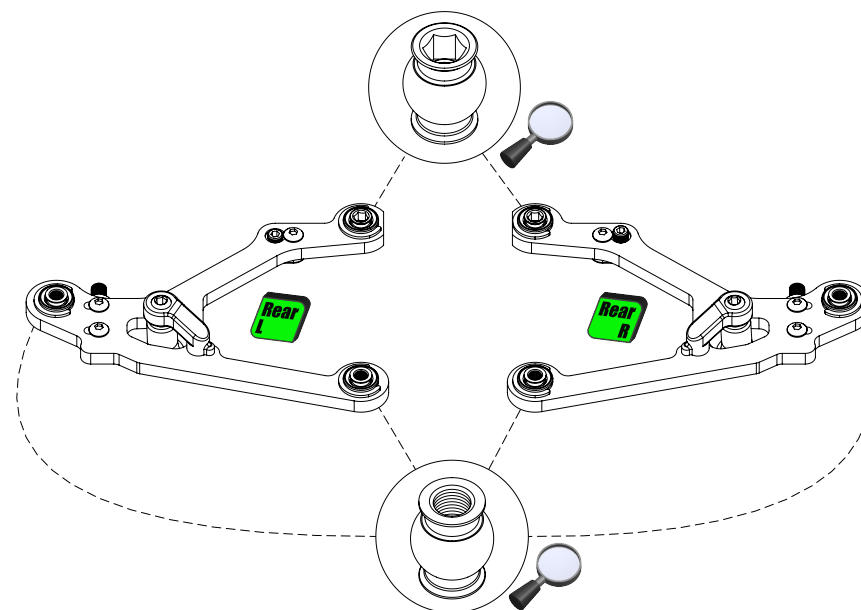
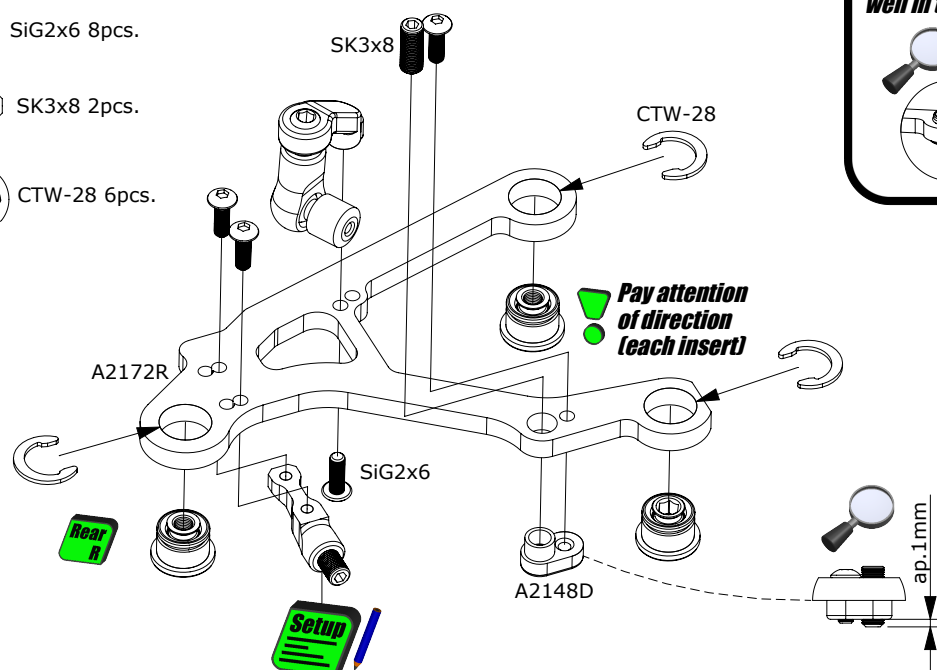
SK3x8 2pcs.




SiG2x6 8pcs.


SK3x8 2pcs.

CTW-28 6pcs.



 OE1.2 2pcs.

 SiG2x6 2pcs.

 SiG3x8 4pcs. **Opt** included in A2820

Pay attention of direction 

A2806-B

RH thread

LH thread

***Pay attention
of direction***



A2171A

A2171B

SiG3x8

SK3x2,6 ***Laser engraving R***

Arrows should point forward

OE1.2

1 Snap-in

***Use a bit of grease
to avoid loosing the
clip (OE1.2)***

Upperlink position

4mm

14,25mm



Bag
A₁



SK3x2,6 2pcs.

SJG3x5 4pcs.

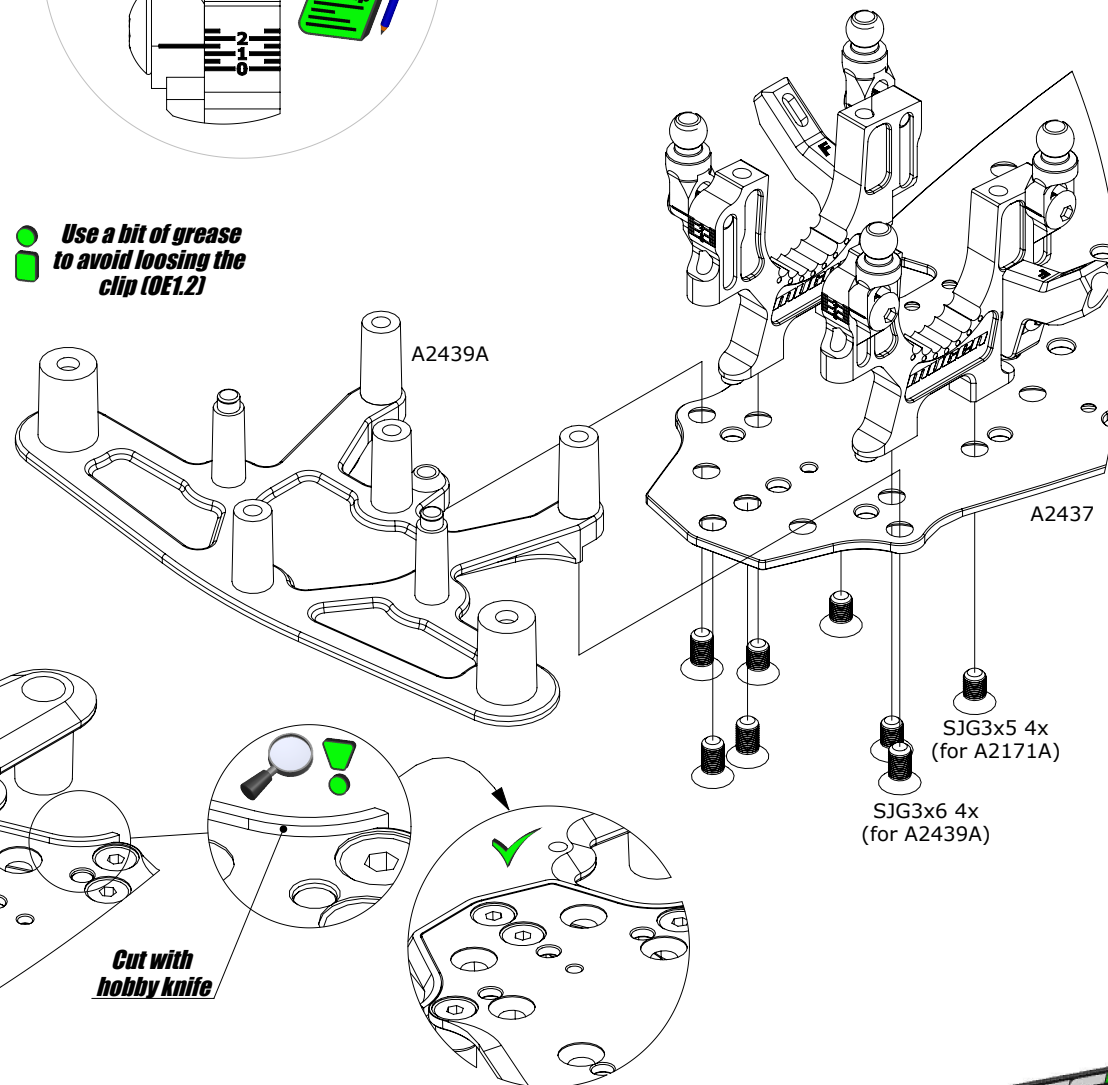
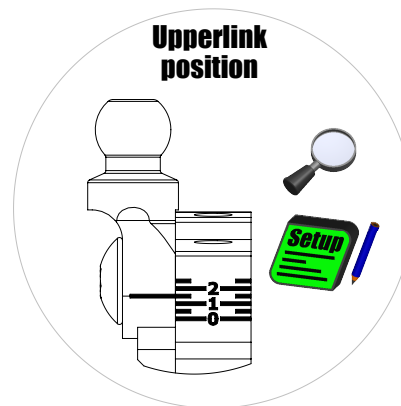
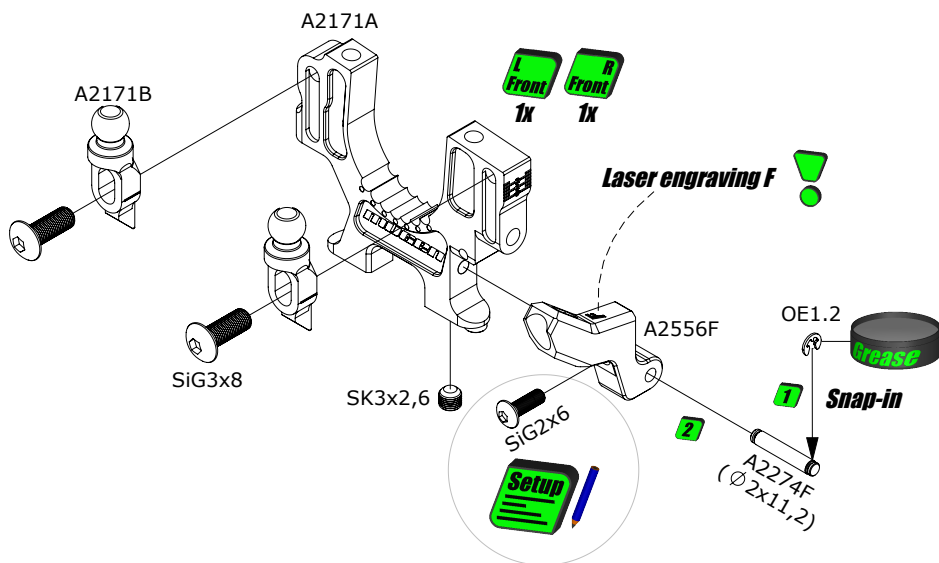
SiG2x6 2pcs.


SJG3x6 4pcs.


SiG3x8 4pcs. **Opt** Included in A2820


OE1.2 2pcs.


Bag
A1
Bag
Chassis



 SJG3x5 4pcs.

 SJG3x6 6pcs.

 SJG3x8 1pc. **Opt** included in A2820

 SiG3x8 2pcs. **Opt** included in A2820

Bag
A1

A2442

SJG3x8


**Pay attention
of direction**

A2439G

SiG3x8

SJG3x5

A2173F

**Pay attention
of direction**



**Pay attention
of direction**


A2173R


SJG3x6

SJG3x6

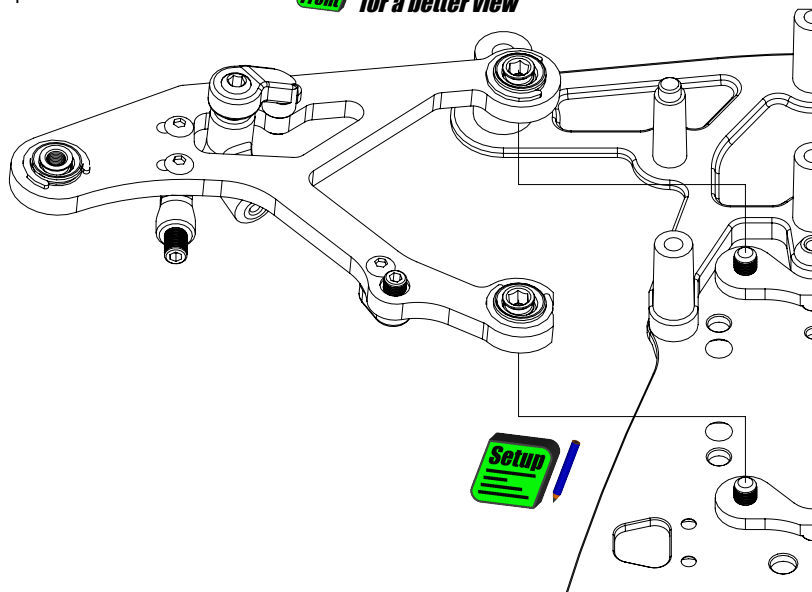
 (Bumper & left bulkhead
hidden for a better view)

 SJG3x10 2pcs.  **Opt** included in A2820

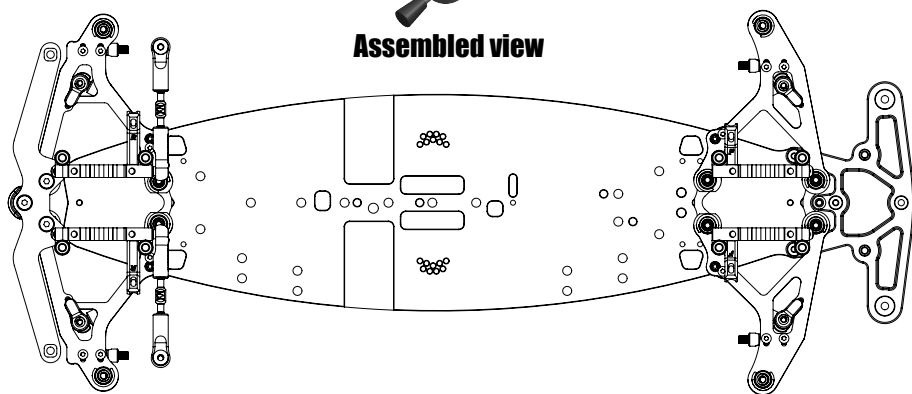
 A2811(0,5mm) 4pcs.

 A2804(2mm) 2pcs.

 **Front** Bulkhead hidden for a better view

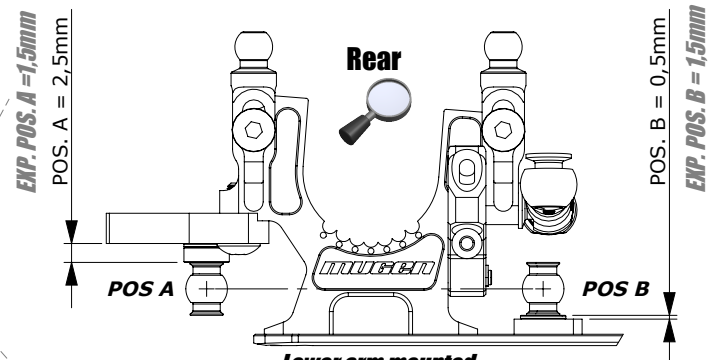
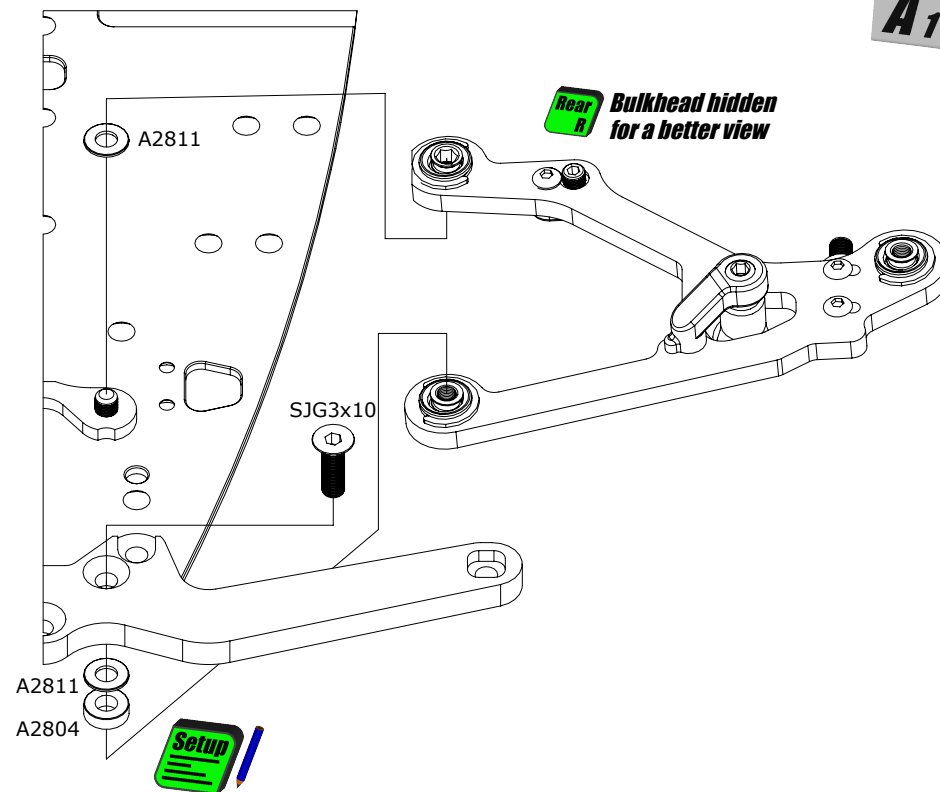


 **Assembled view**



Bag
A1

 **Rear** Bulkhead hidden for a better view



 **Lower arm mounted straight with the values shown above**

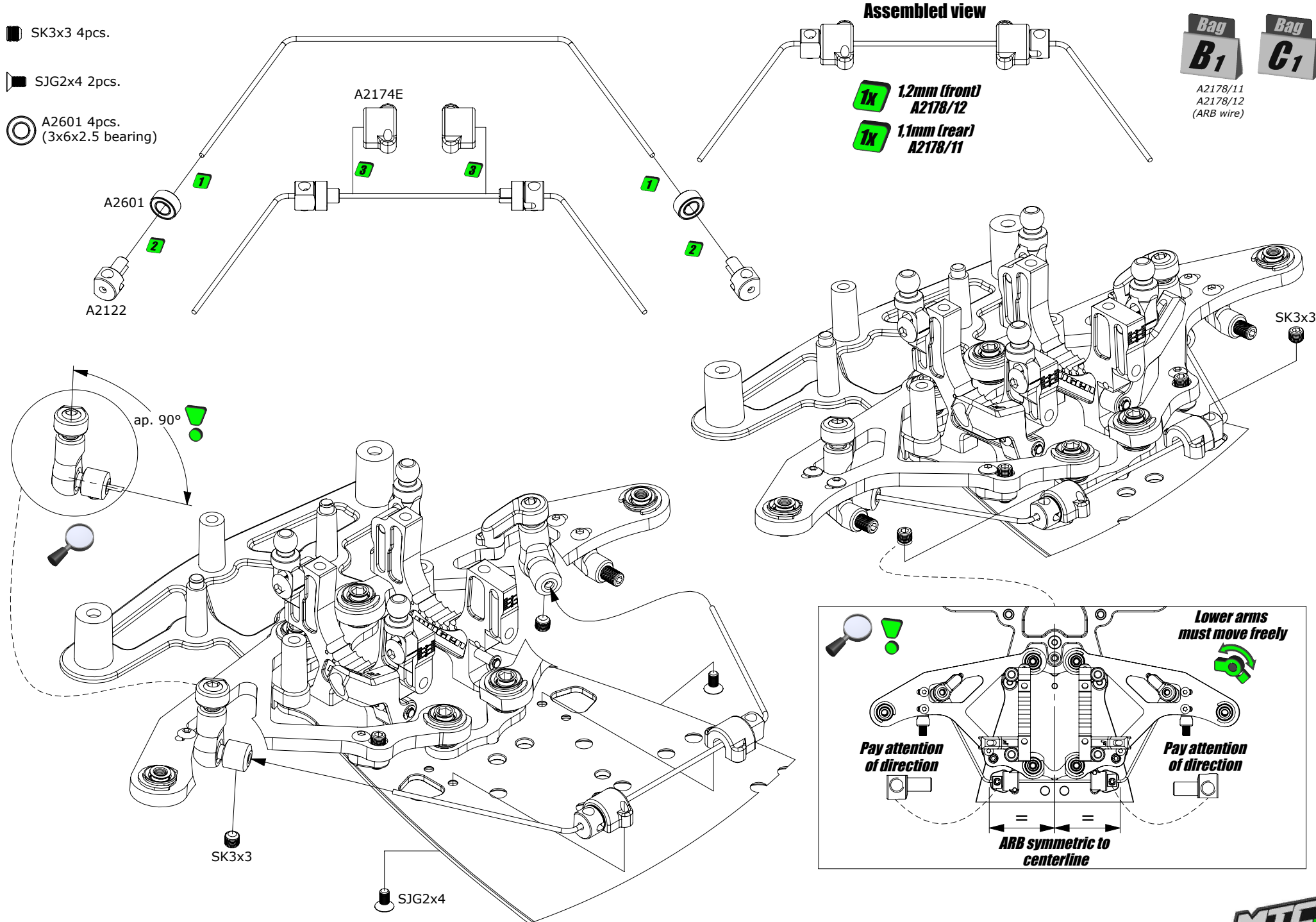
EXP. Raise lower arm height by 1mm

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■ SK3x3 4pcs.

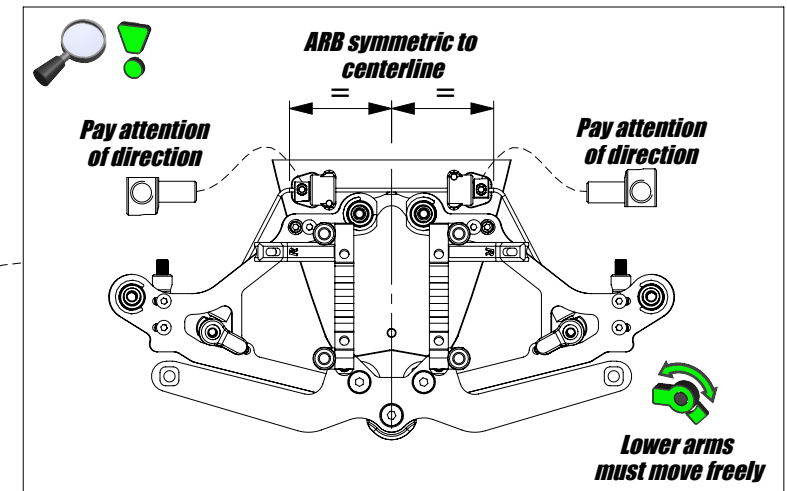
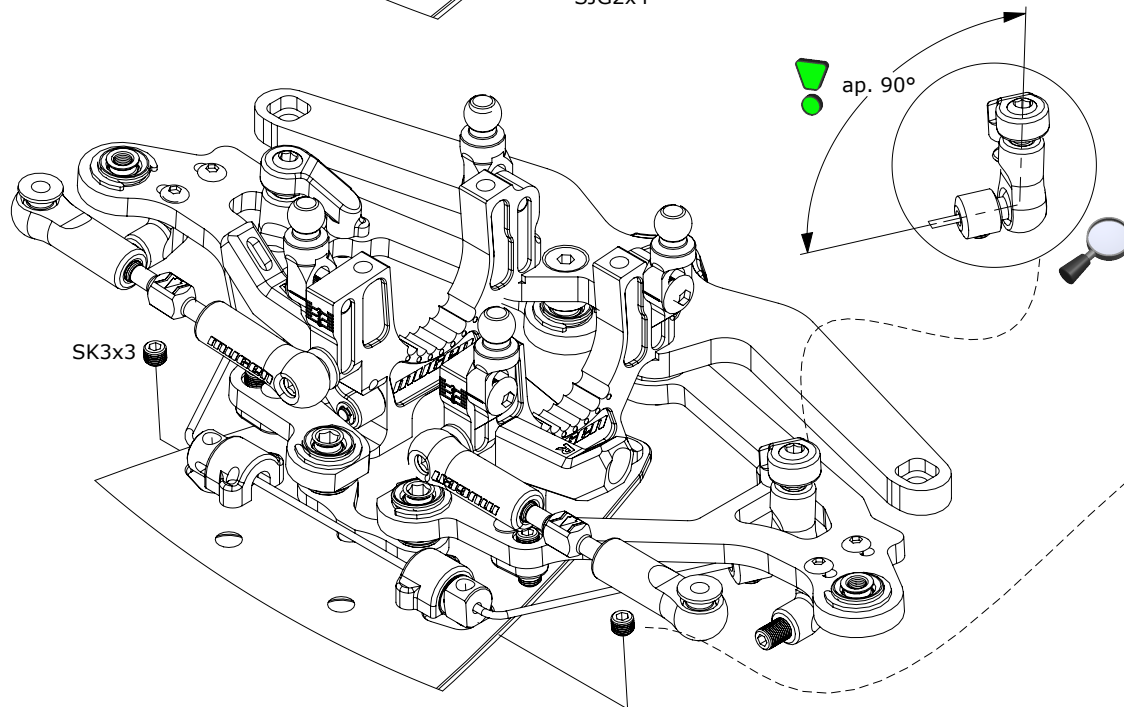
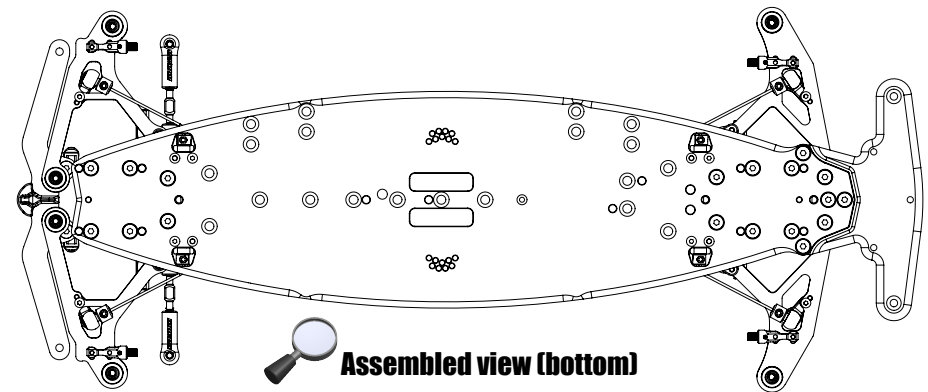
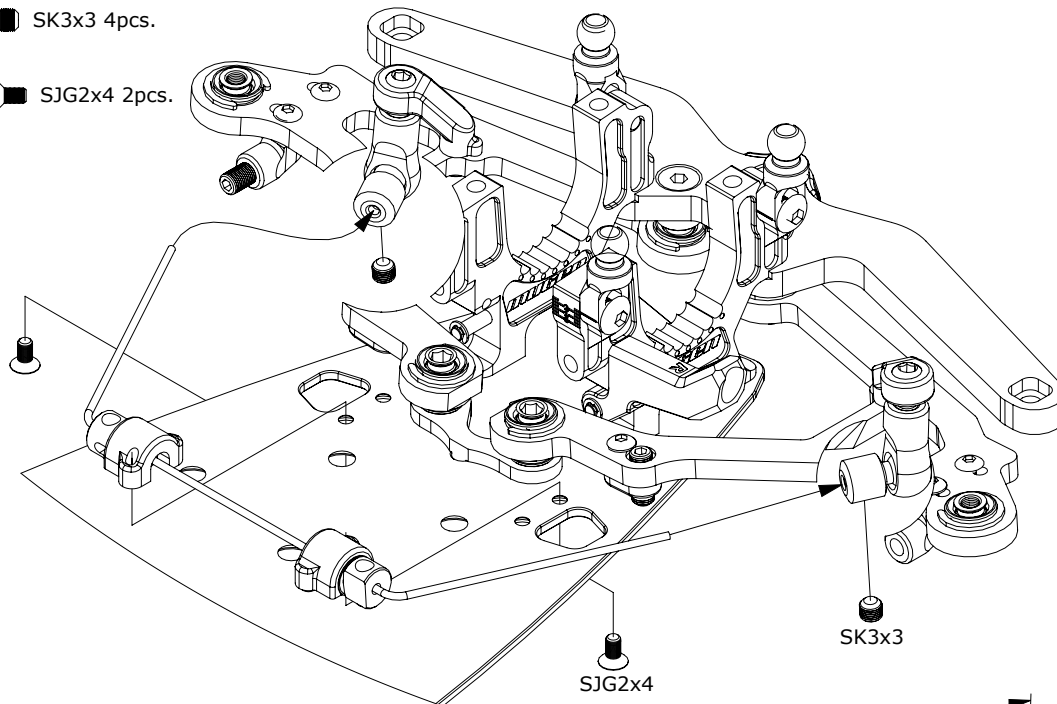
■ SJG2x4 2pcs.

○ A2601 4pcs.
(3x6x2.5 bearing)



SK3x3 4pcs.

SJG2x4 2pcs.



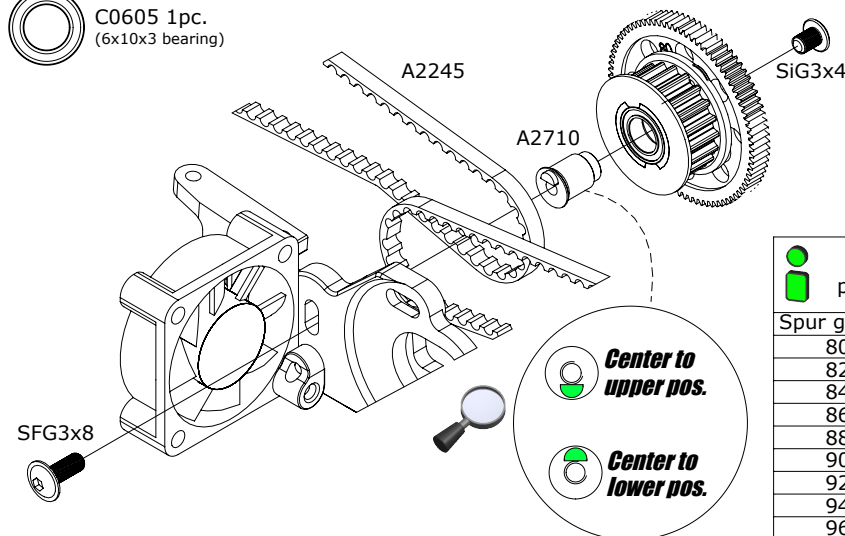
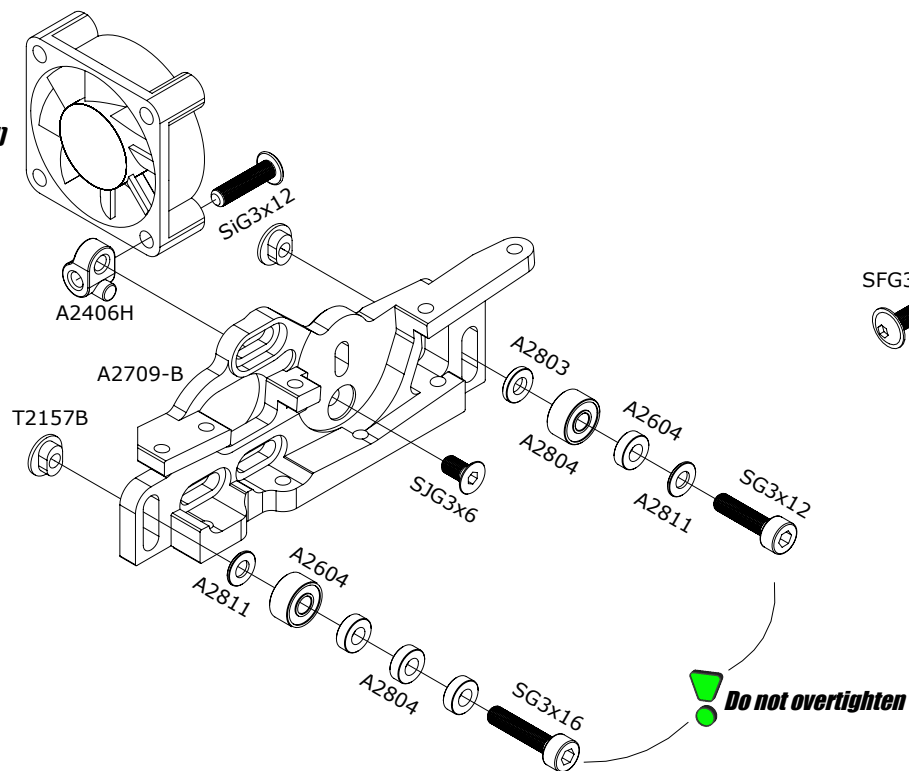
- SiG2x3 4pcs. SFG3x8 1pc. SG3x12 1pc. C0602 1pc. (5x8x2.5 bearing) A2803(1mm) 1pc. A2804(2mm) 4pcs. A2811(0.5mm) 2pcs.
- SJG2x6 2pcs. SiG3x12 1pc. **Opt Included in A2820** SG3x16 1pc. C0605 1pc. (6x10x3 bearing)
- SiG3x4 1pc. **Opt Included in A2820** SJG3x6 1pc. **Opt Included in A2820** A2604 2pcs. (3x8x4 bearing)

Bag
A2

A2245
(belt)

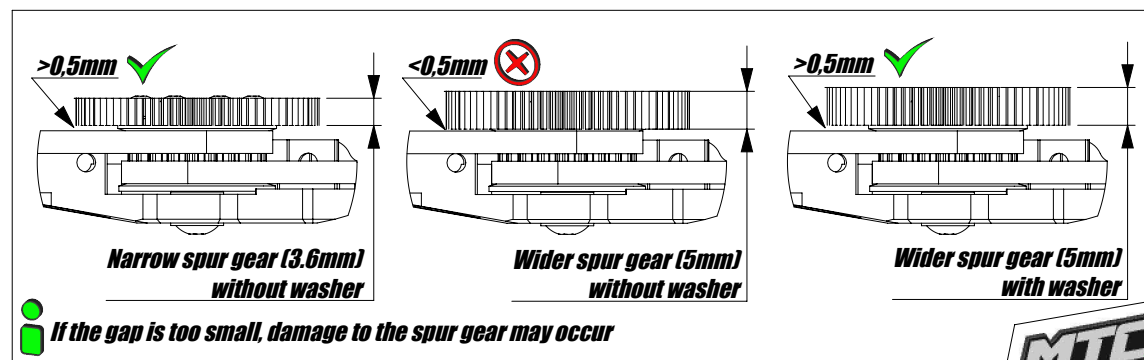
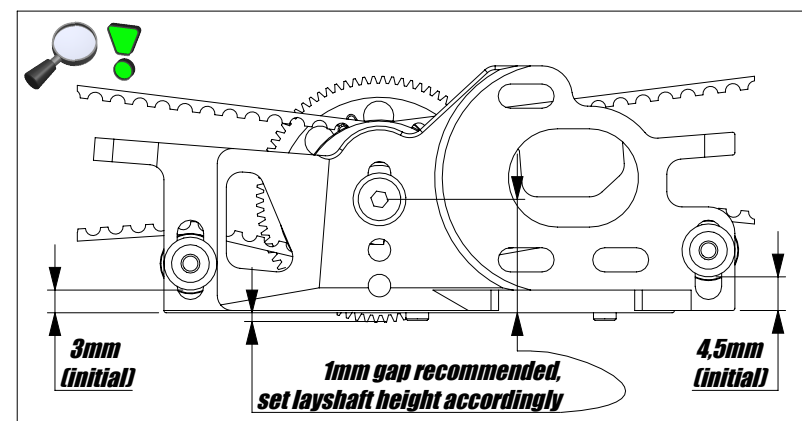
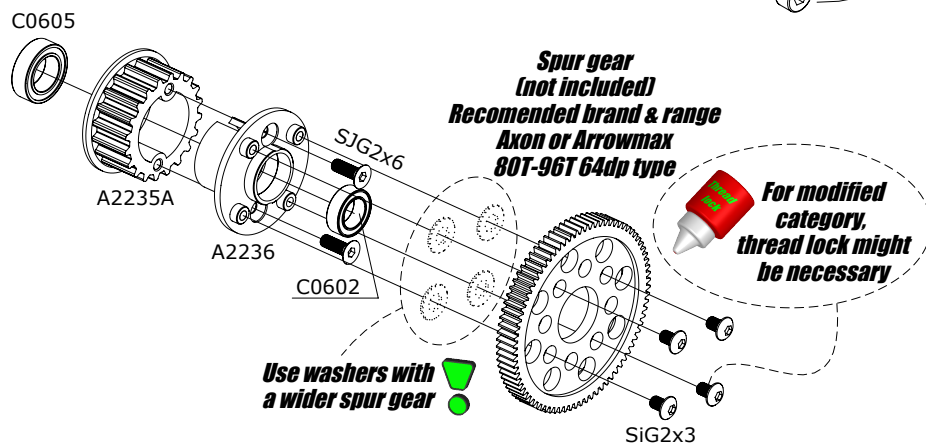
Bag
C1

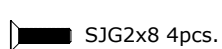
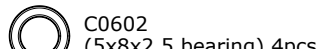
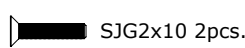
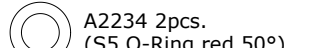
**Cooling fan
(not included)**



● Possible spur & pinion size 64DP
 ■ Possible spur & pinion size 64DP

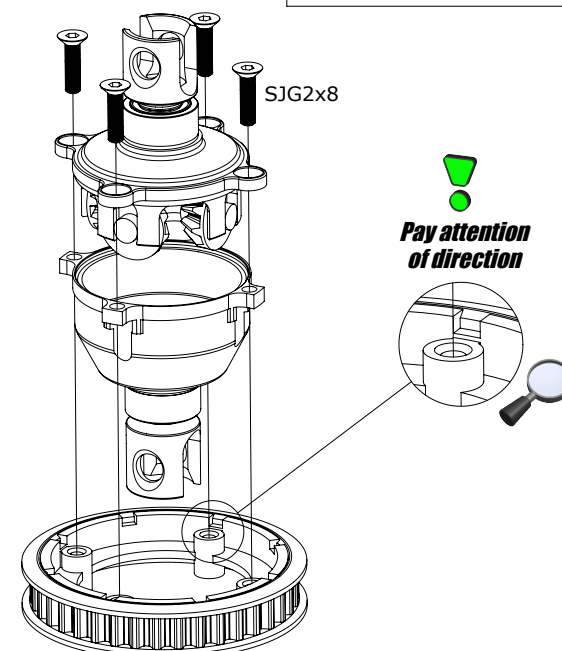
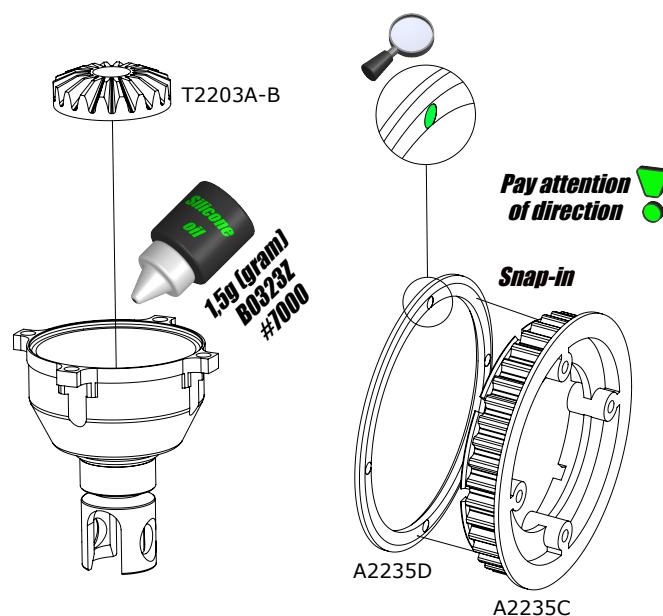
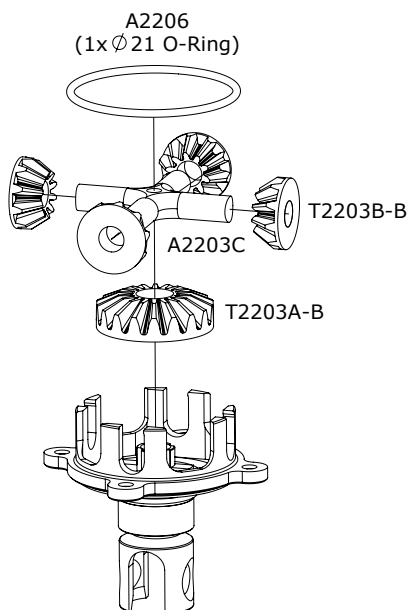
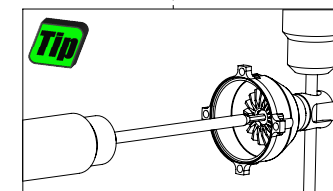
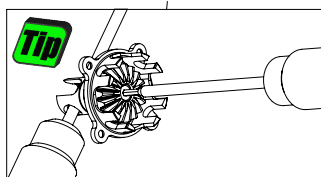
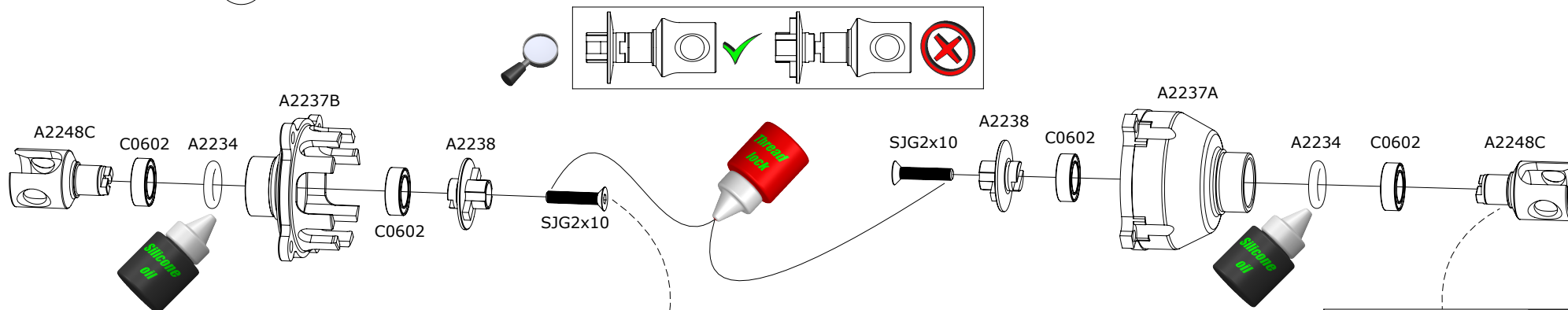
Spur gear T	Pinion T
80	33~58
82	31~56
84	29~54
86	27~52
88	25~50
90	23~49
92	21~47
94	19~45
96	17~43



-  SJG2x8 4pcs.
 C0602 (5x8x2.5 bearing) 4pcs.
 SJG2x10 2pcs.
 A2234 2pcs. (S5 O-Ring red 50°)

 **Be sure everything fits together smoothly**

Bag
D1

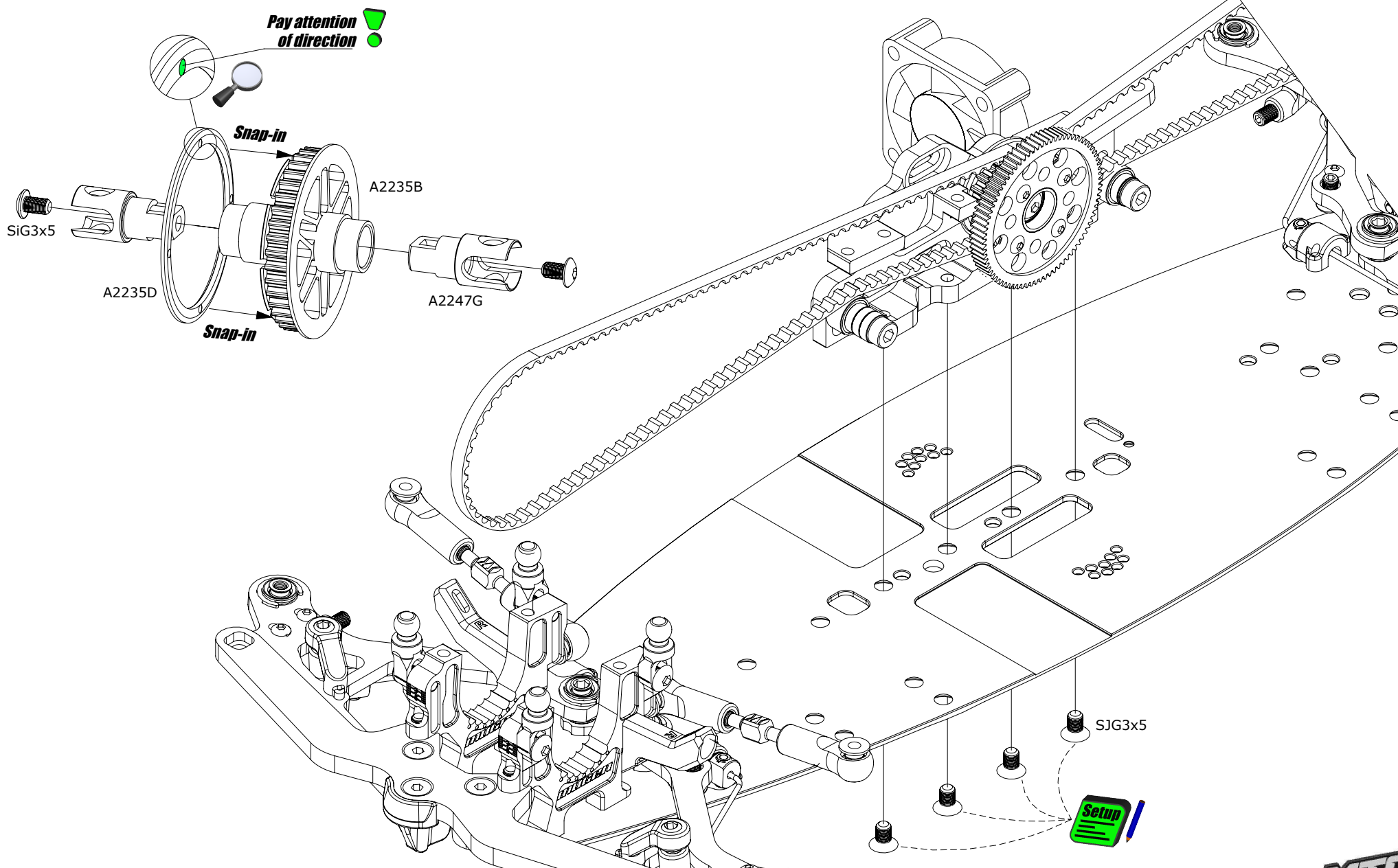


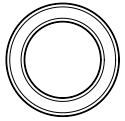
 **The spare part differential set A2249a contains OW3.5x7.5x0.2 washers. Please do not use these!!!**

SiG3x5 2pcs. **Opt** included in A2820

SiG3x5 4pcs.

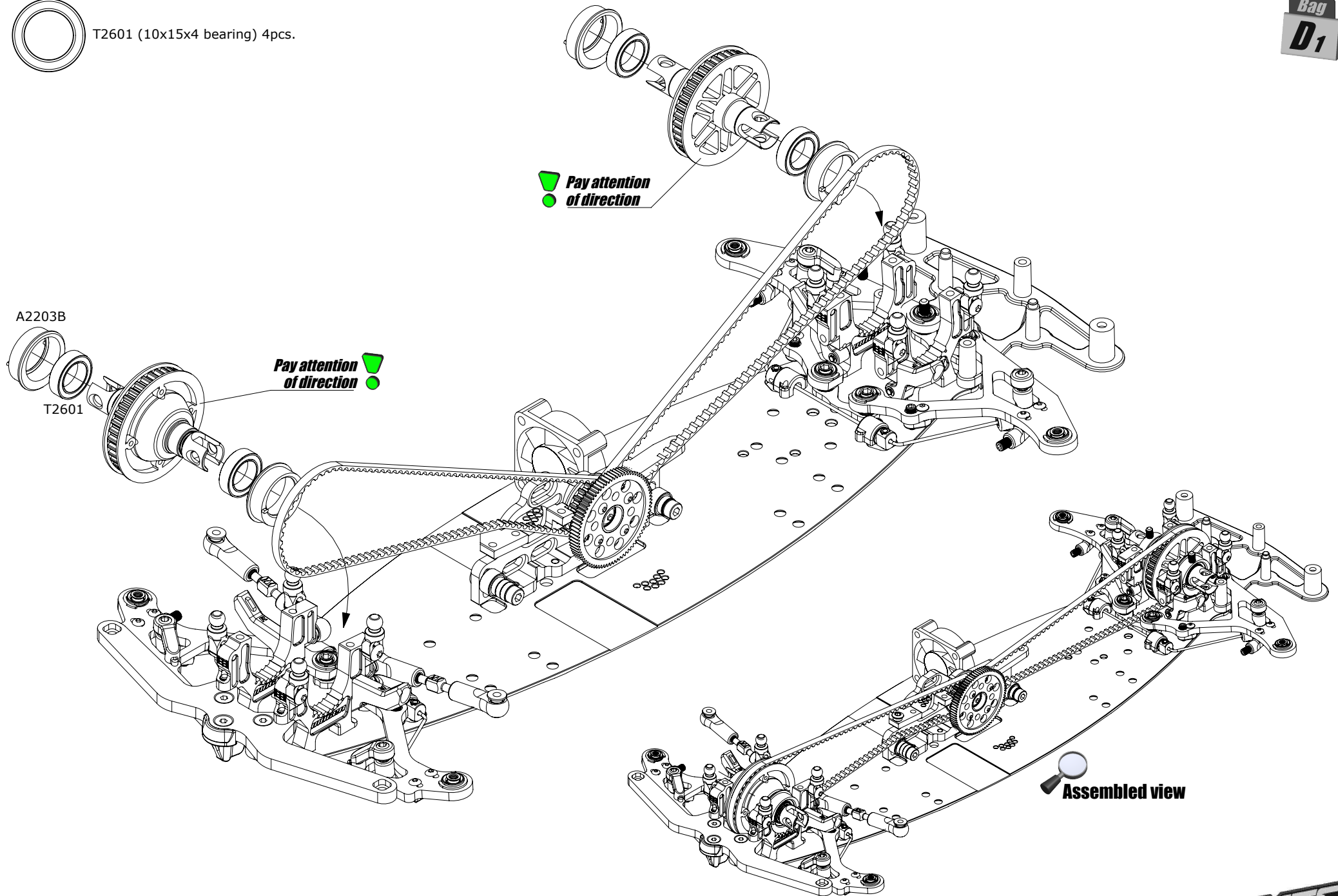
Bag
D1





T2601 (10x15x4 bearing) 4pcs.

Bag
D1



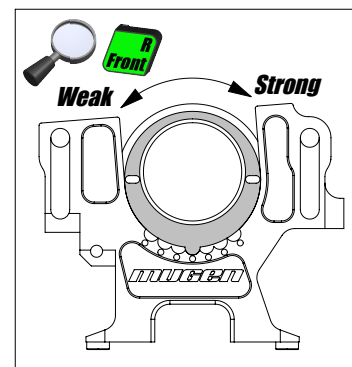
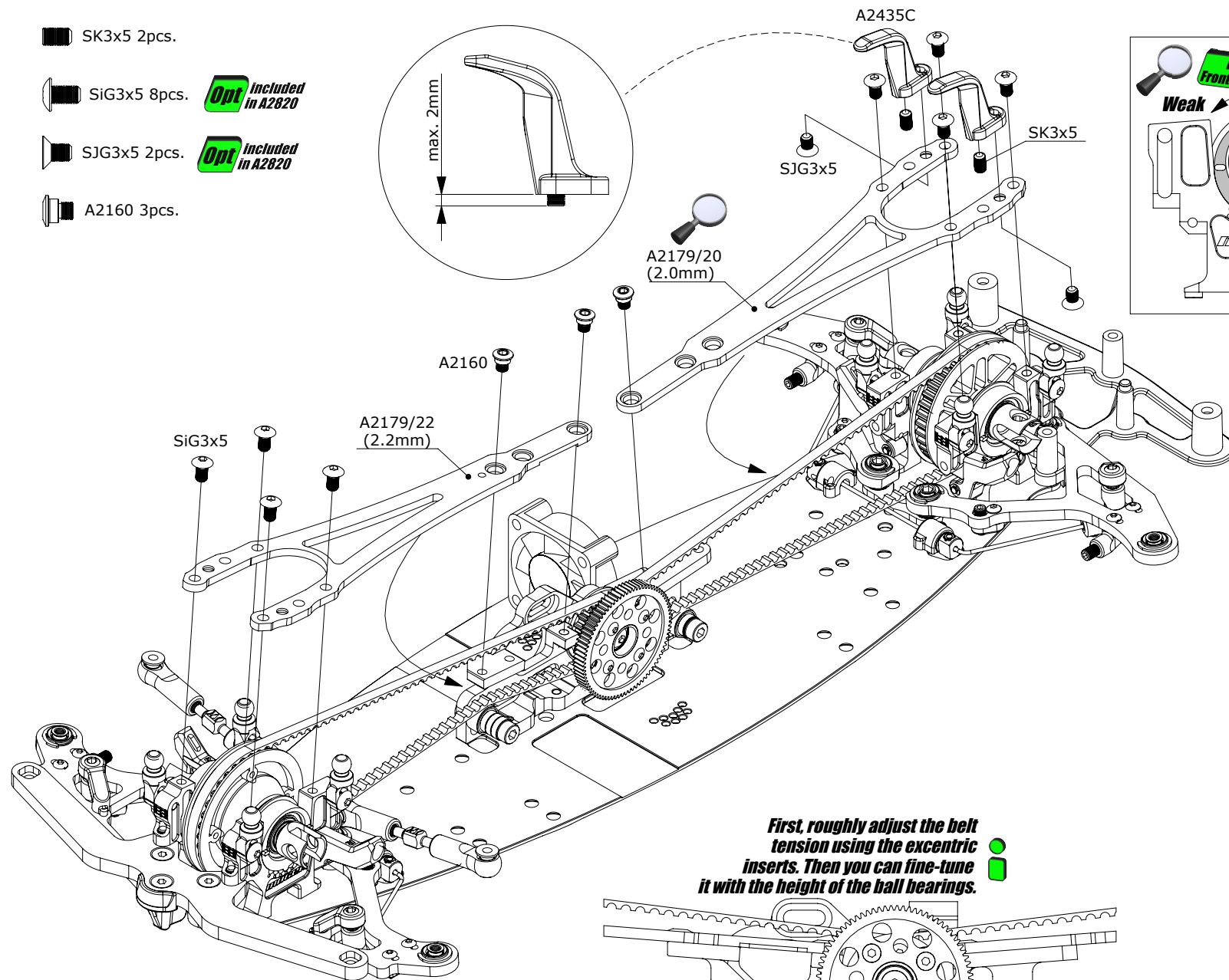
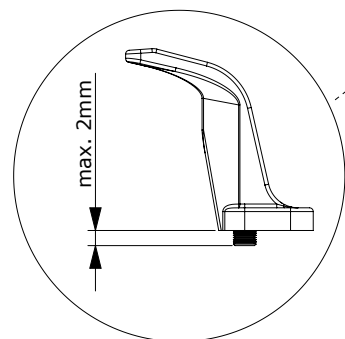
Assembled view

SK3x5 2pcs.

SiG3x5 8pcs. **Opt** Included in A2820

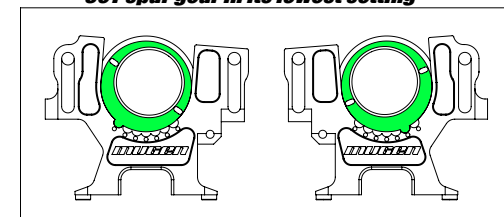
SJG3x5 2pcs. **Opt** Included in A2820

A2160 3pcs.

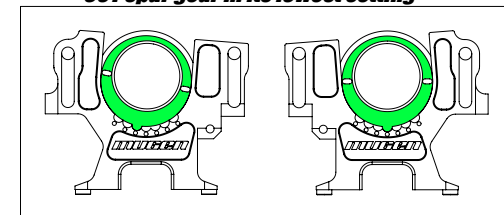


A2179/22
A2179/20
(upperdeck)

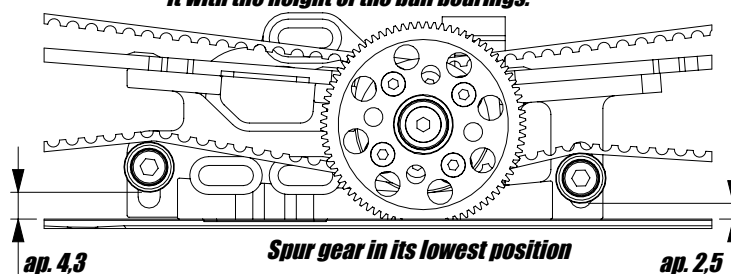
Recommended preset for the 80T spur gear in its lowest setting



Recommended preset for the 90T spur gear in its lowest setting

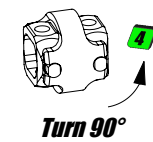
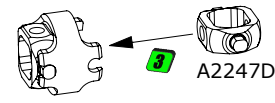
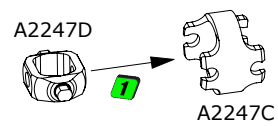


First, roughly adjust the belt tension using the excentric inserts. Then you can fine-tune it with the height of the ball bearings.

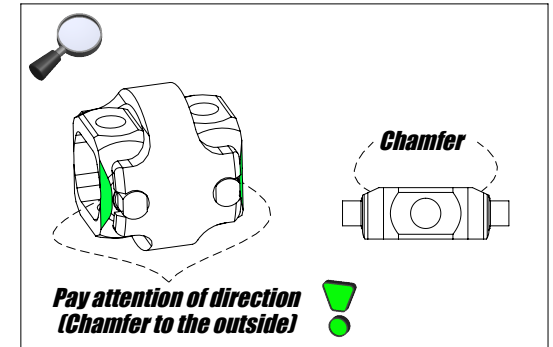
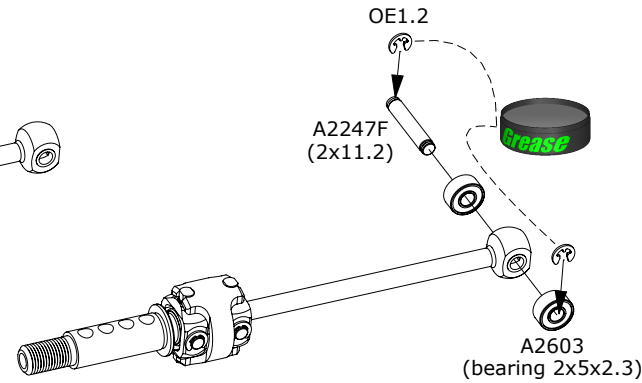
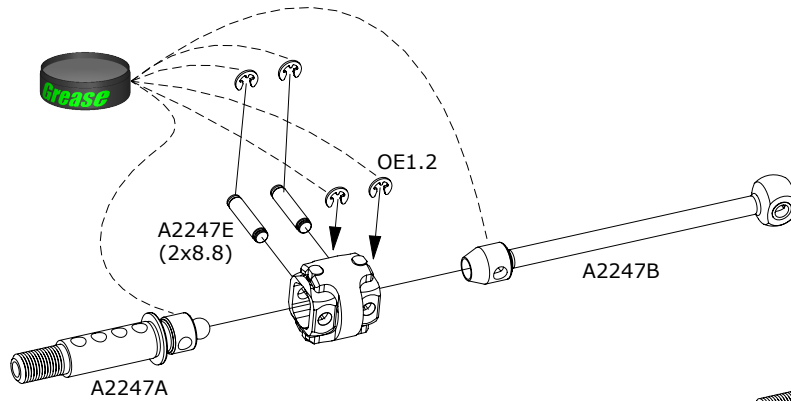


OE1.2 12x

A2603 4x
(bearing 2x5x2.3)

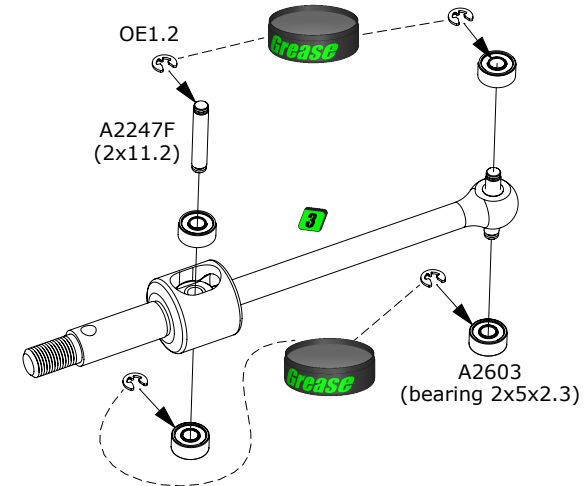
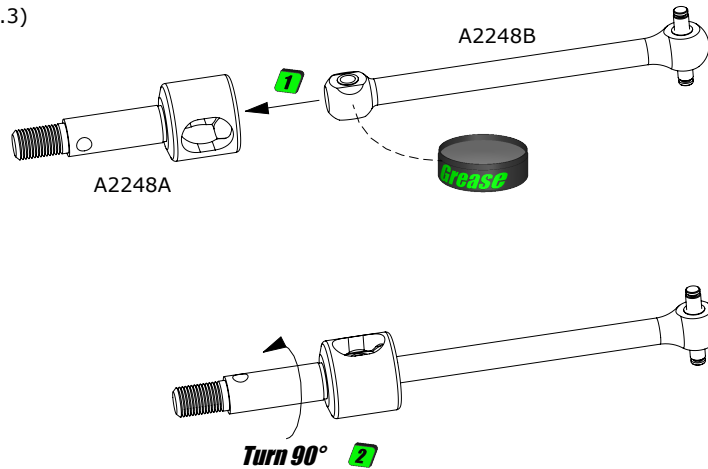


Bag
E1



OE1.2 8x

A2603 8x
(bearing 2x5x2.3)



2x

MTC3
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SiG3x4 4pcs. **Opt** included in A2820

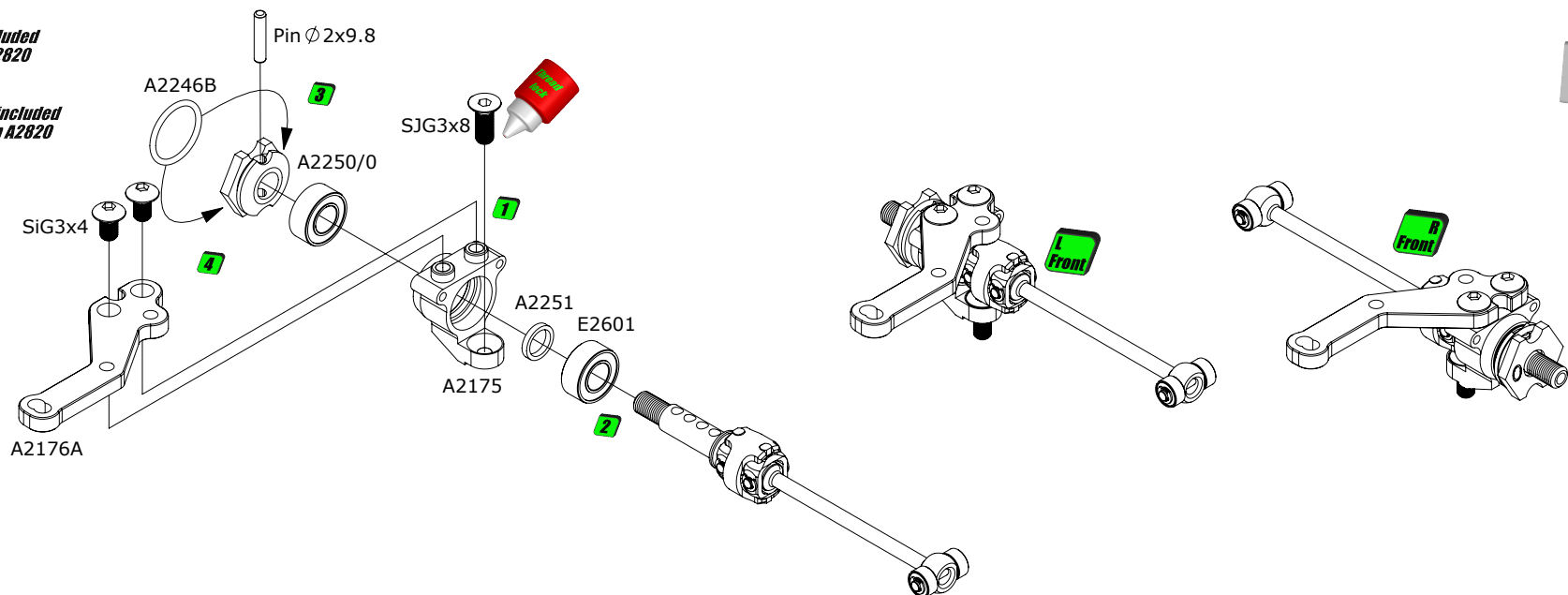
SJG3x8 2pcs. **Opt** included in A2820

Pin \varnothing 2x9.8 2pcs.

E2601 4pcs.
(bearing 5x10x4)

A2246B 2pcs.
(O-Ring \varnothing 9x1)

A2251 2pcs.
(1.1mm spacer)



Front

SiG3x4 4pcs. **Opt** included in A2820

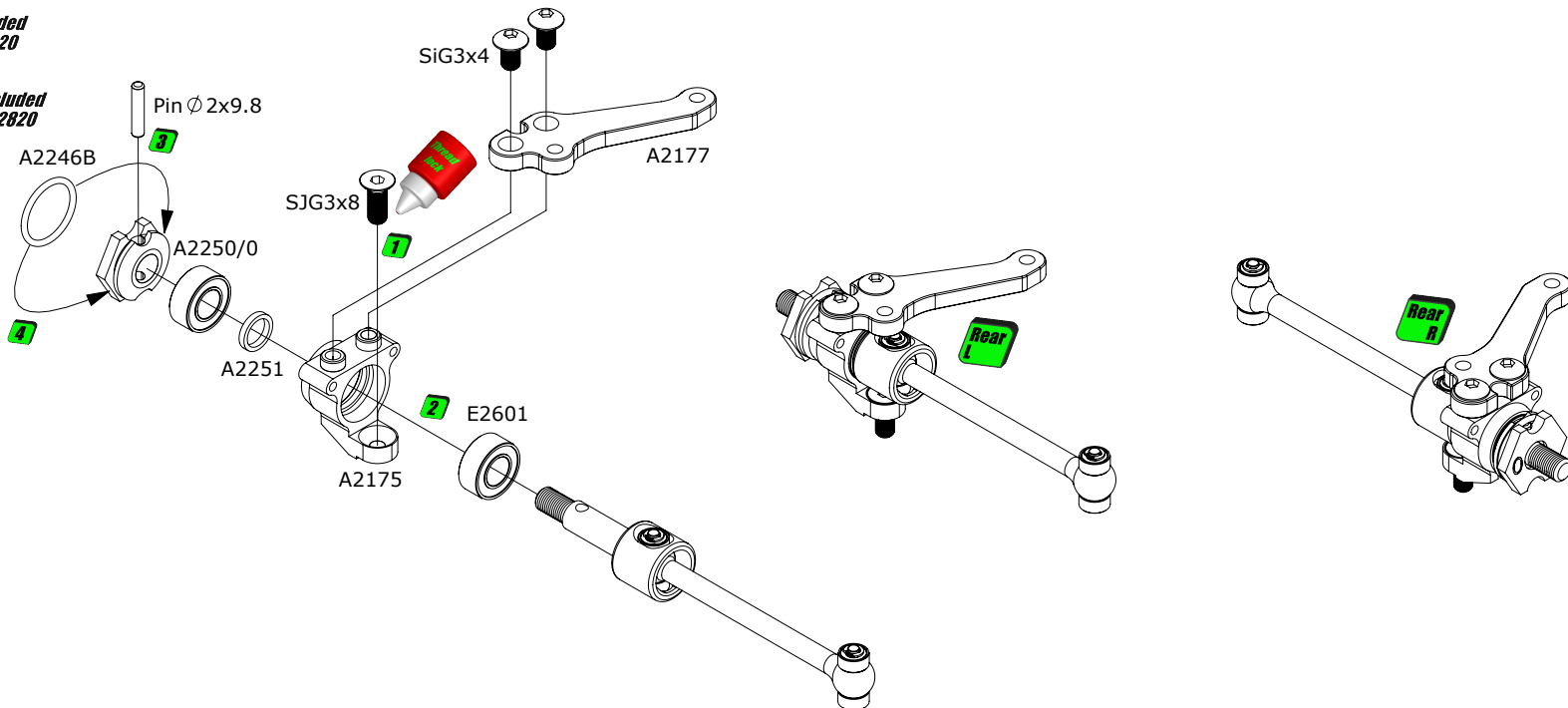
SJG3x8 2pcs. **Opt** included in A2820

Pin \varnothing 2x9.8 2pcs.

E2601 4pcs.
(bearing 5x10x4)

A2246B 2pcs.
(O-Ring \varnothing 9x1)

A2251 2pcs.
(1.1mm spacer)



Rear

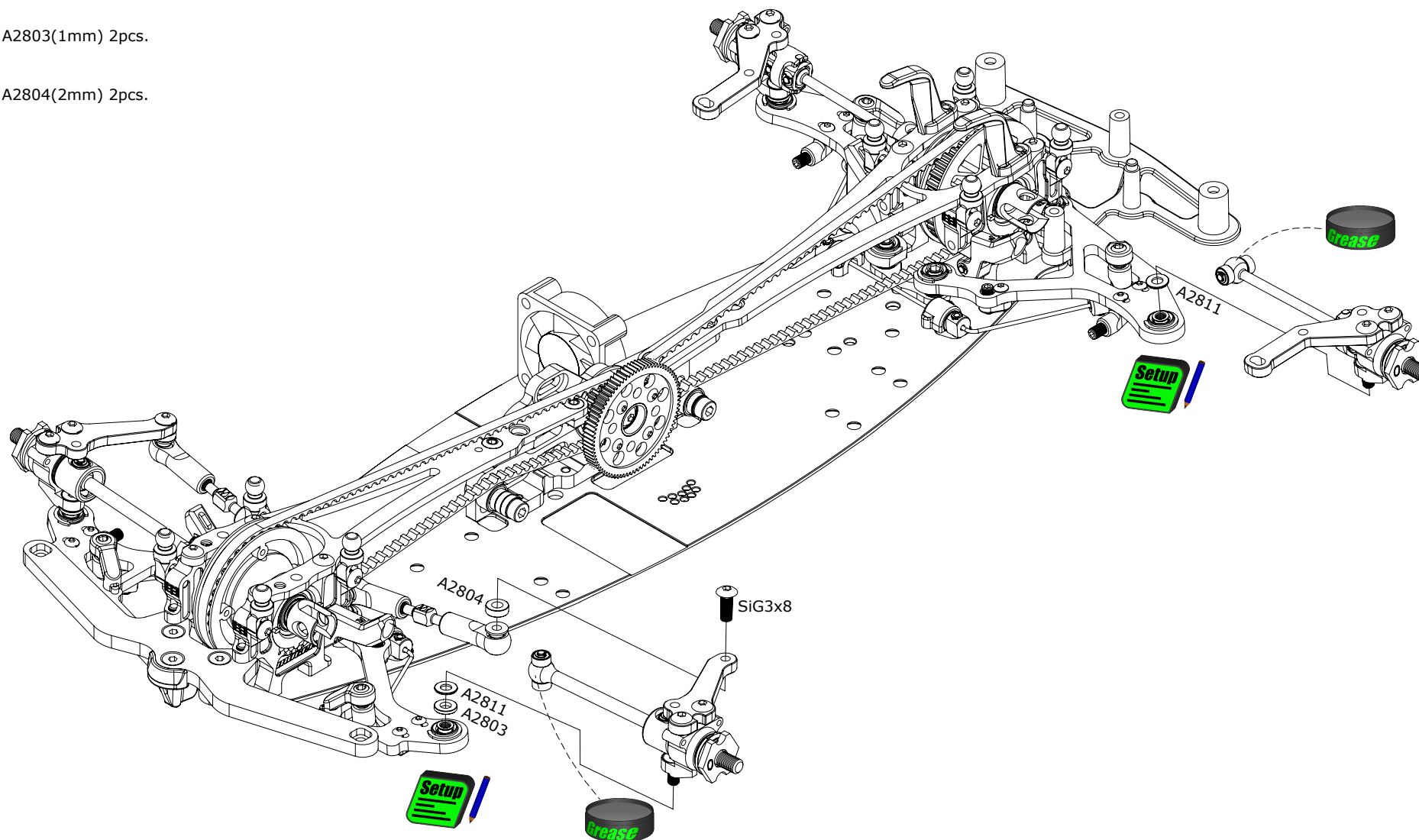
SiG3x8 2pcs. **Opt** Included in A2820

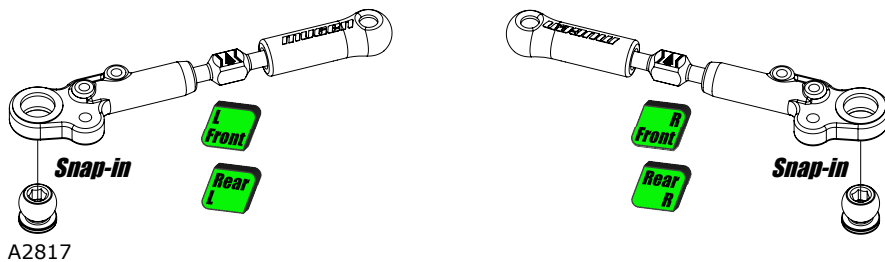
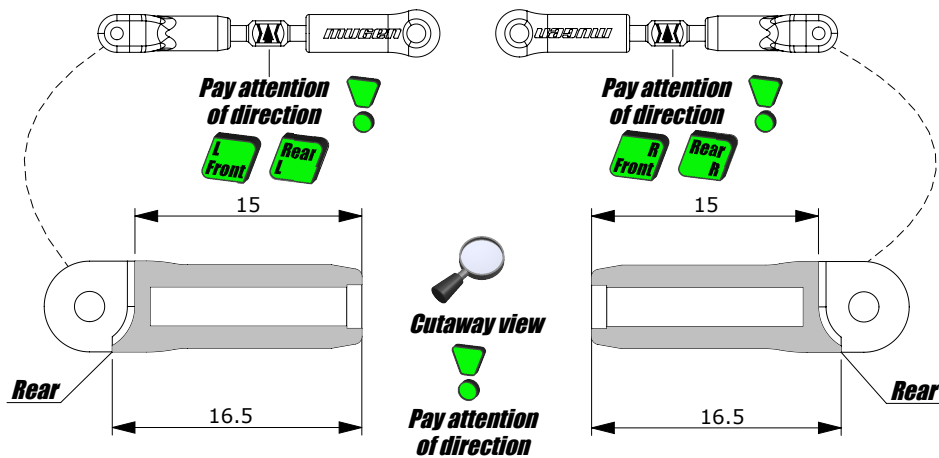
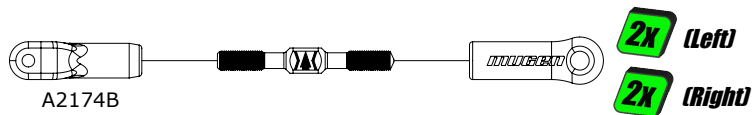
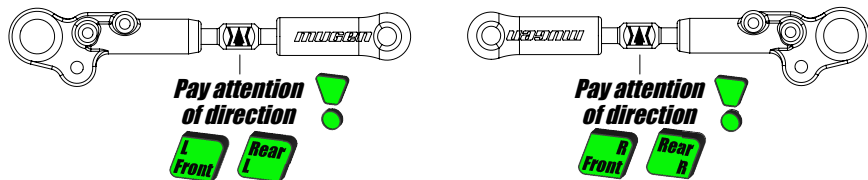
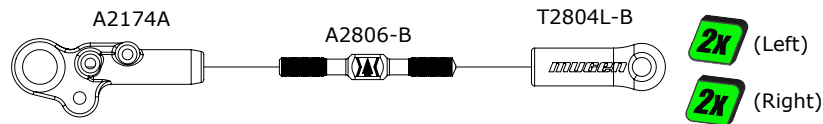
Bag
E1

A2811(0,5mm) 4pcs.

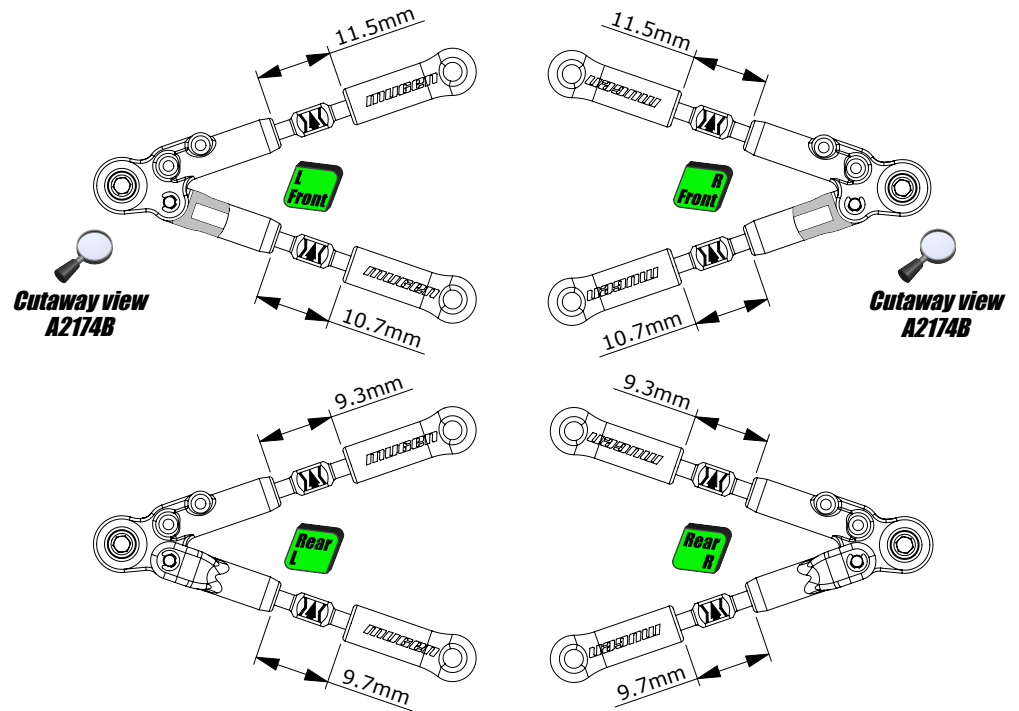
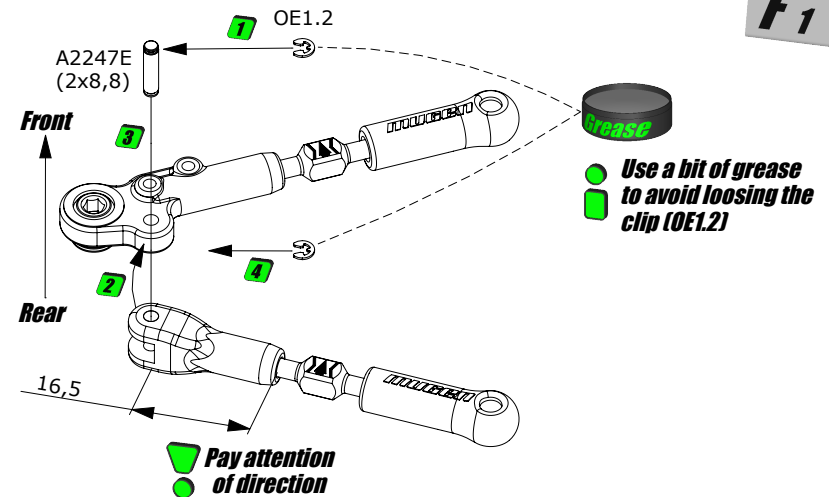
A2803(1mm) 2pcs.

A2804(2mm) 2pcs.





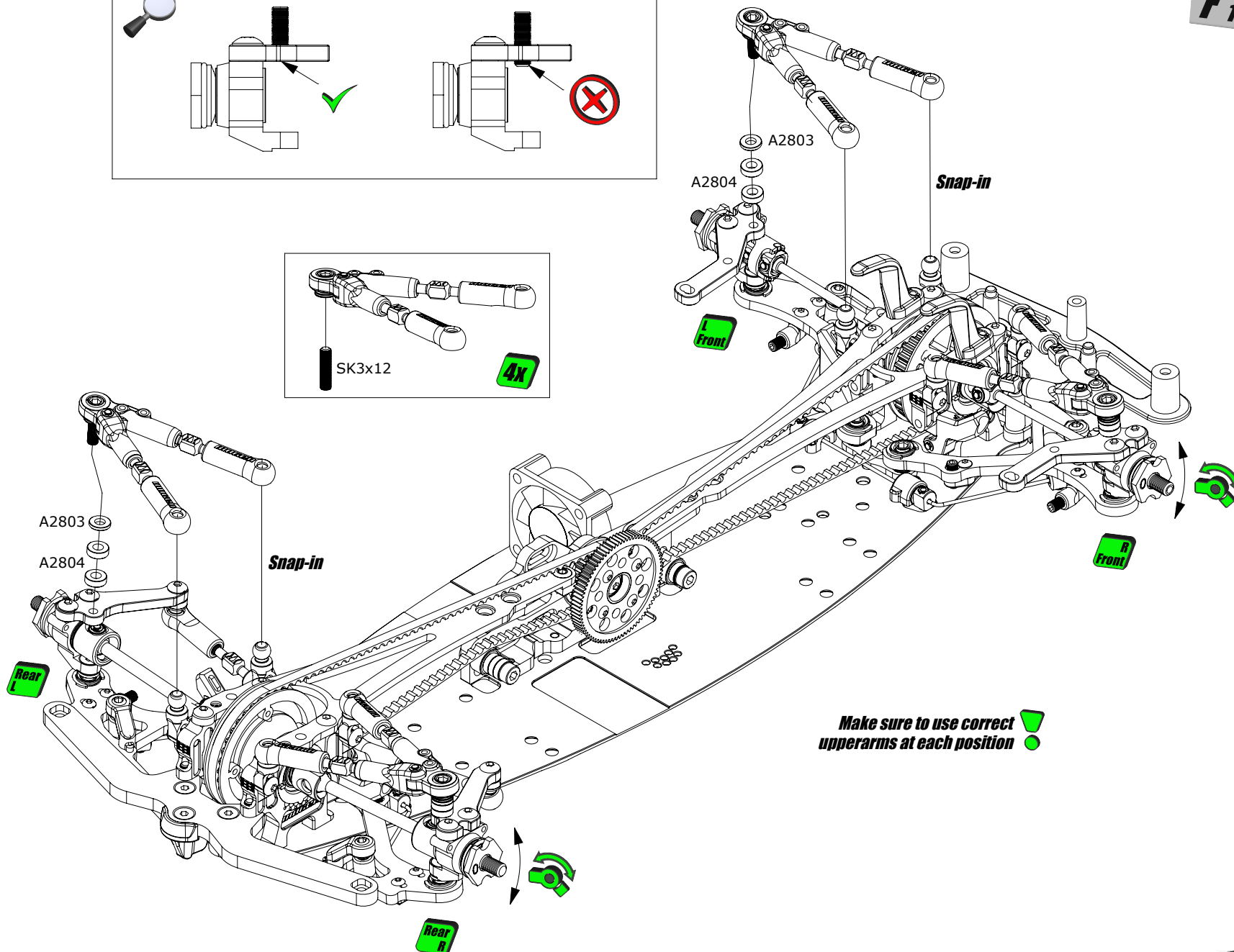
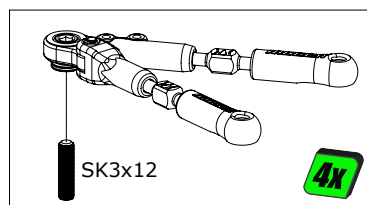
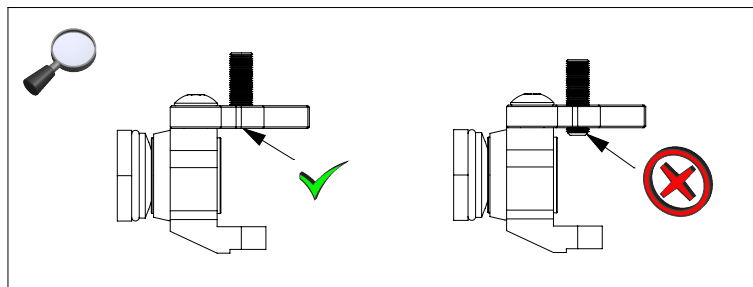
A2817



SK3x12 4pcs.

A2804(2mm) 8pcs.

A2803(1mm) 4pcs.



Make sure to use correct upperarms at each position

SK3x8 1pc.

SJG3x5 2pcs. **Opt** included in A2820

SJG3x12 2pcs. **Opt** included in A2820

SiG3x10 1pc. **Opt** included in A2820

SiG3x12 1pc. **Opt** included in A2820

SiG2x6 1pc.

SN3 3pcs.

OW3x5x0,2 2pcs.

A2811(0,5mm) 1pc.

B2705 3x4,4x1 1pc.

A2601 2pcs.
(3x6x2,5 bearing)

A2813

T2804L-B

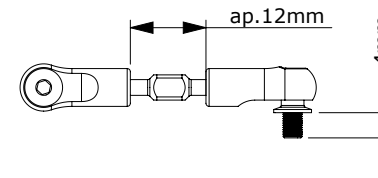
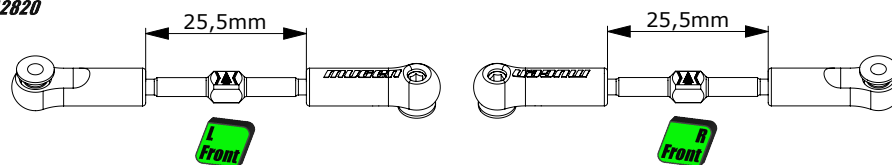
A2805-B

A2802C

**Pay attention
of direction**

A2806-B

SK3x8



Bag
F1

**Servo
(not included)**

**Servo horn
(not included)**

SN3

SiG3x10

A2811
OW3x5x0,2

A2601

B2705
A2601
OW3x5x0,2

SJG3x5

A2318

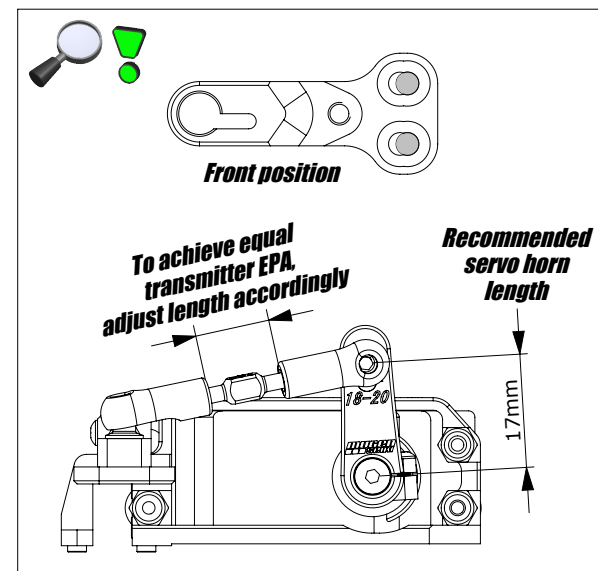
SiG2x6

A2317


SiG3x12


A2302F
or
A2302G

SiG3x12




MTC3
1/10 ELECTRIC TOURING CAR


 SJG3x5 2pcs.


 SJG3x8 4pcs. **Opt** Included in A2820


 SJG3x10 2pcs. **Opt** included in A2820

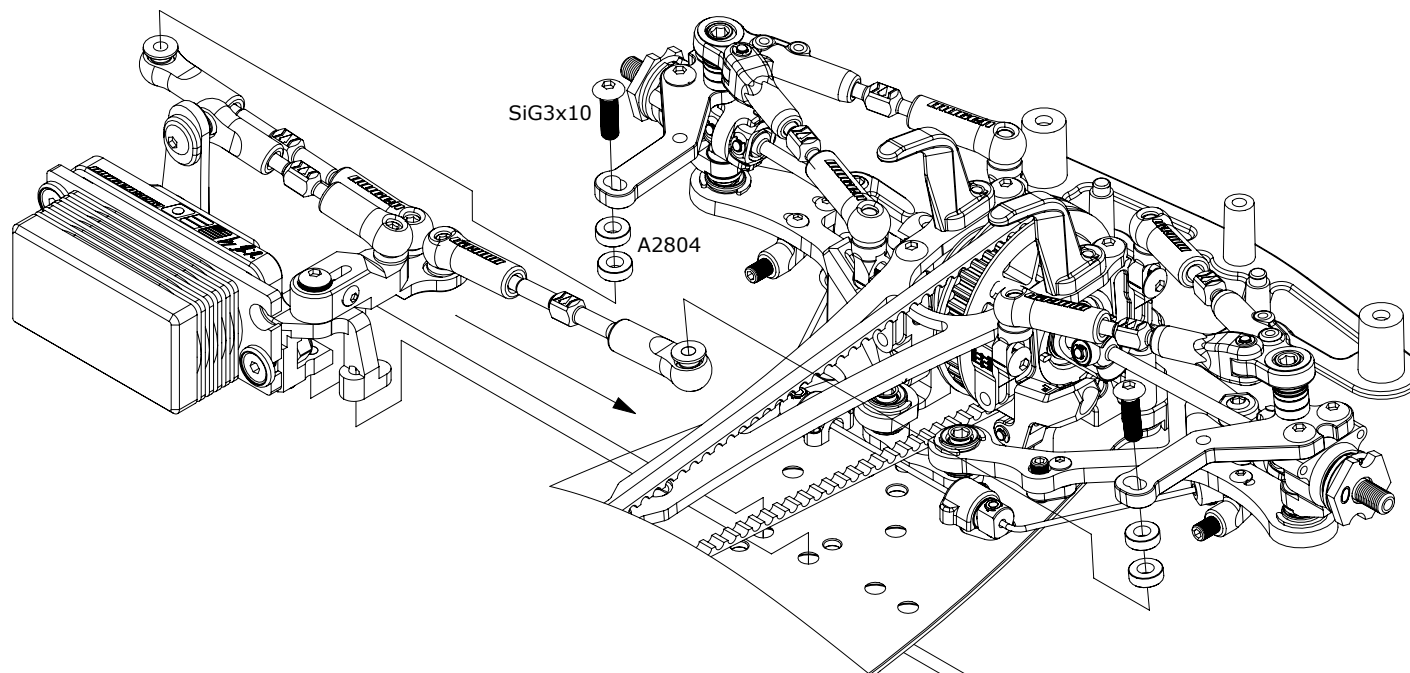
 SJG3x12 6pcs. **Opt** Included in A2820
 (A2820 contains only 2pcs. of SJG3x12T to attach A2406C)

 SiG3x10 2pcs. **Opt** Included in A2820

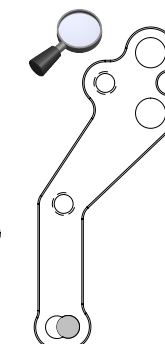
 A2803(1mm) 4pcs.

 A2811(0,5mm) 4pcs.

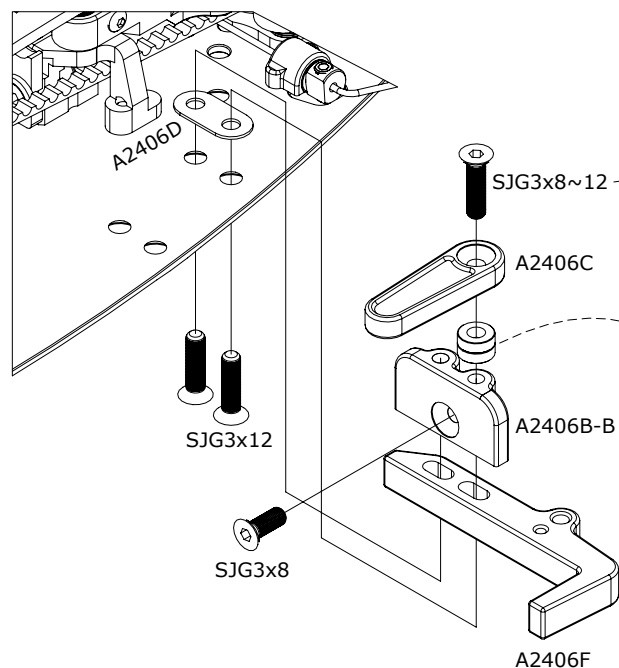
 A2804(2mm) 8pcs.



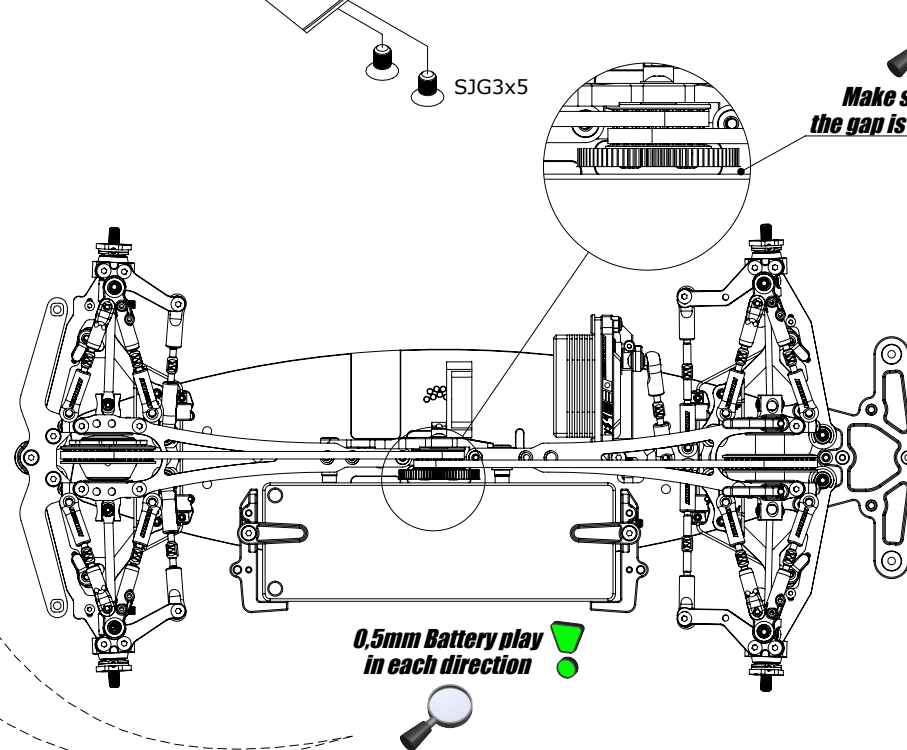
Bag
F1



Outside position



To achieve the recommended play
use the correct amount of shims
depending the battery height



Make sure that
the gap is big enough

0,5mm Battery play
in each direction

MTC3
1/10 ELECTRIC TOURING CAR

SK3x5 1pc.

SiG3x6 3pcs. **Opt** Included in A2820

SJG2x6 1pc.

Receiver & transponder (not included)

Motor (not included)

Install the receiver & transponder with B0406 double sided tape

ESC (not included)

Install ESC with B0406 double sided tape

Pinion (not included)
Recommended brand: Axon Arrowmax

Use all 3 screws

SiG3x6

Antenna mount

B0432

SJG2x6

E2808

SK3x5

A2302H

Tighten the pinion from the bottom

Bag B1
Bag F1
B0406 (double sided tape)

B0316Z
(Silicone oil)

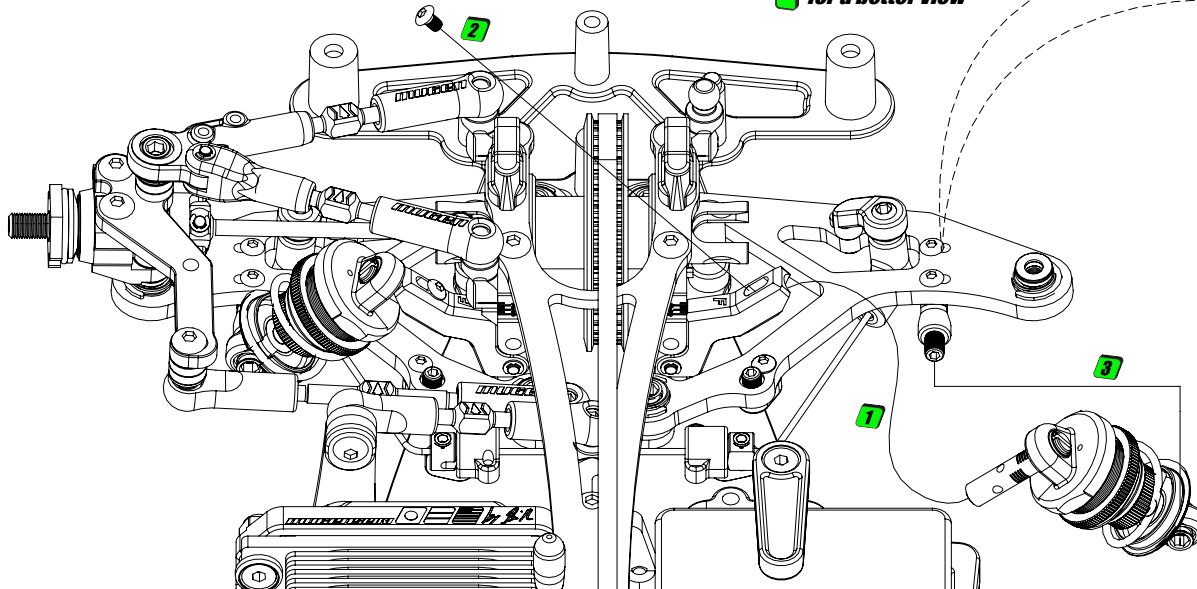


SiG2x4 2pcs.

SiG2x4

Several parts hidden
for a better view

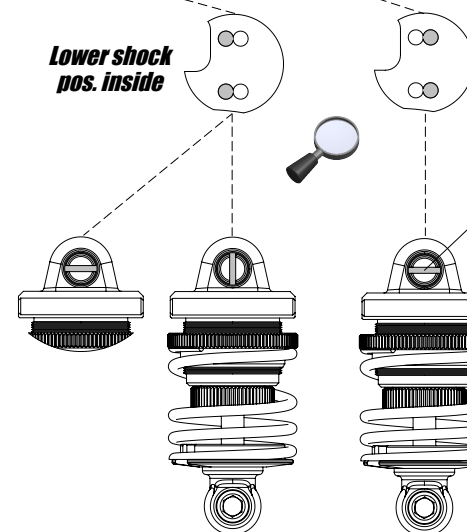
Bag
G1



Lower shock
pos. inside

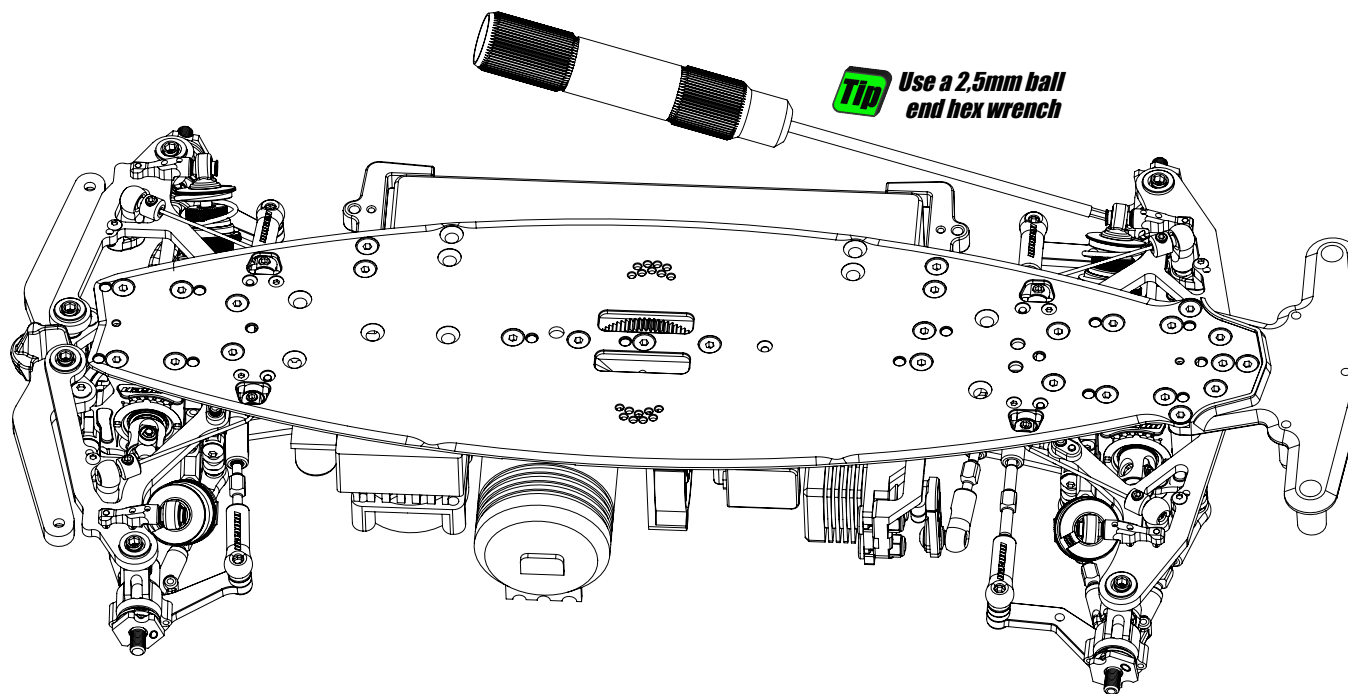
Lower shock
pos. outside

Horizontal only



Inside position = 0
Outside position = 3 (mm)
Default = 2 (mm)

Use a 2.5mm ball
end hex wrench

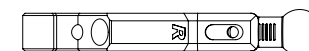
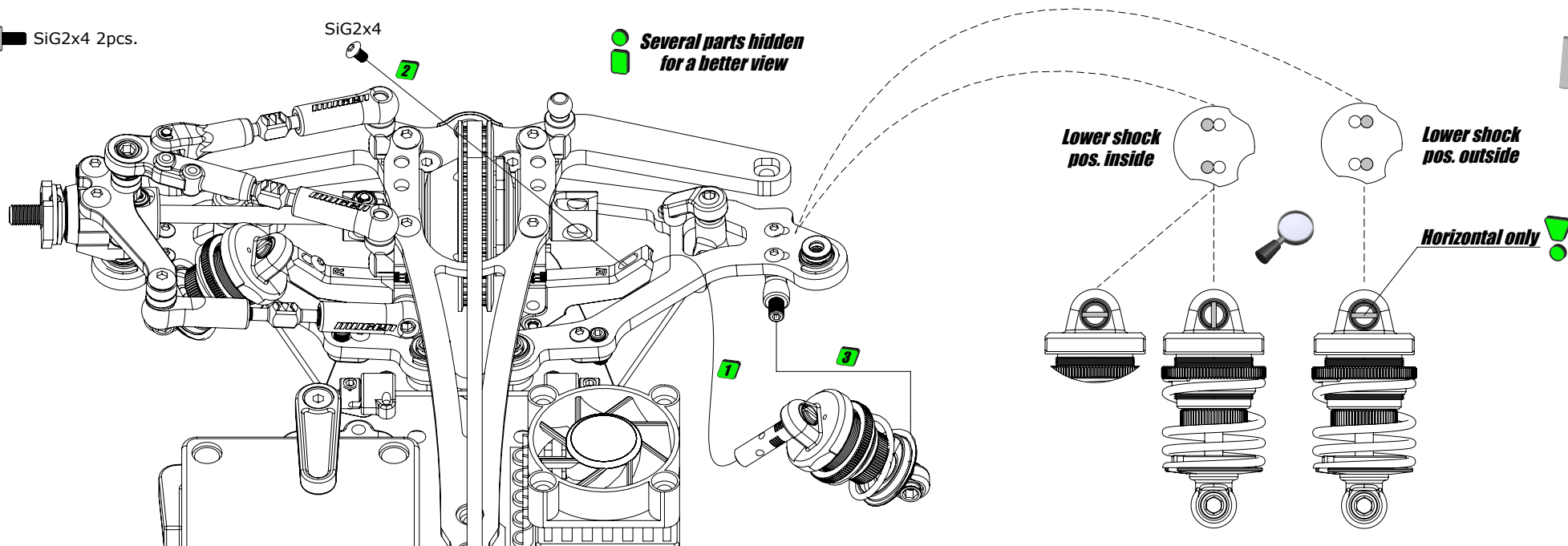


SiG2x4 2pcs.

SiG2x4

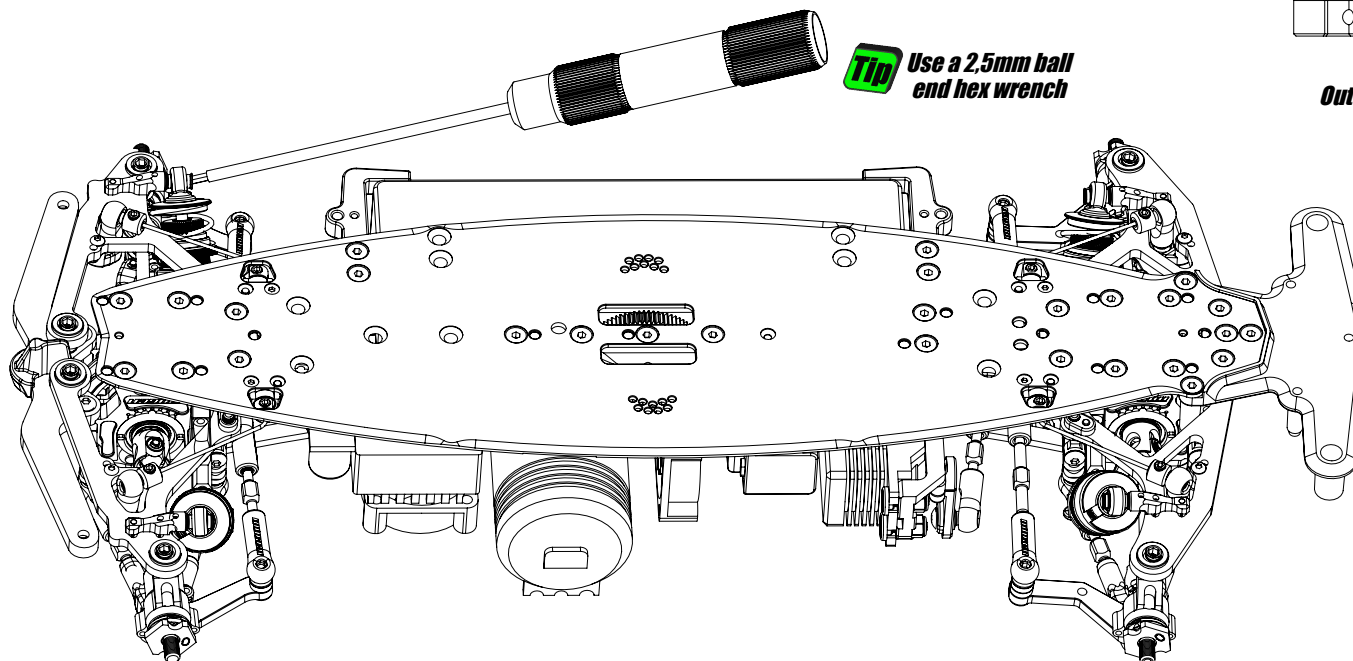
Several parts hidden
for a better view

Bag
G1



Inside position = 0
Outside position = 3 (mm)
Default = 2,5 (mm)

Tip Use a 2,5mm ball
end hex wrench



SK3x6 2pcs.

SiG2x6 2pcs.

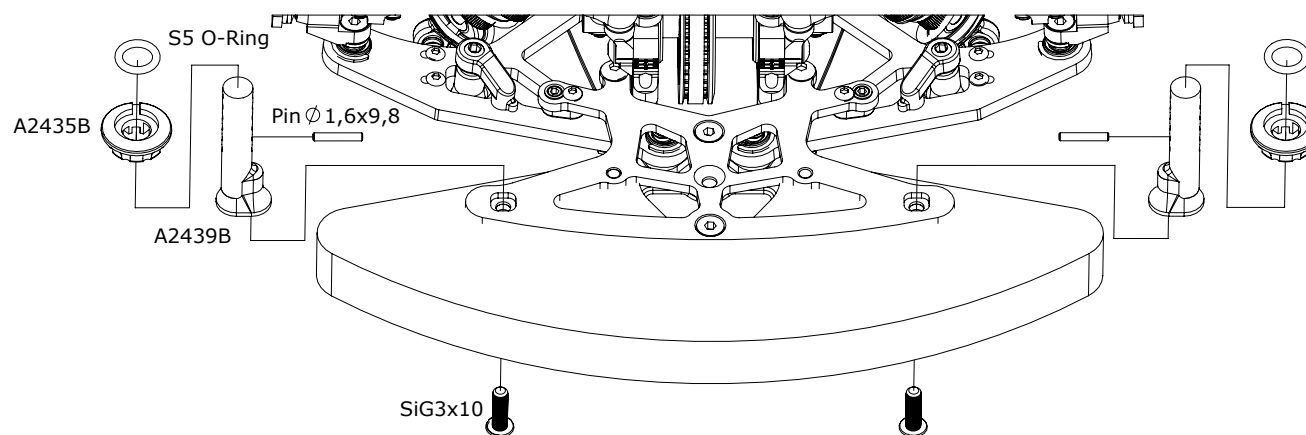
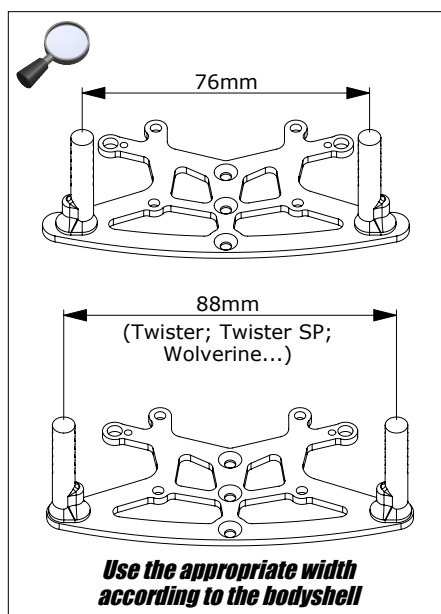
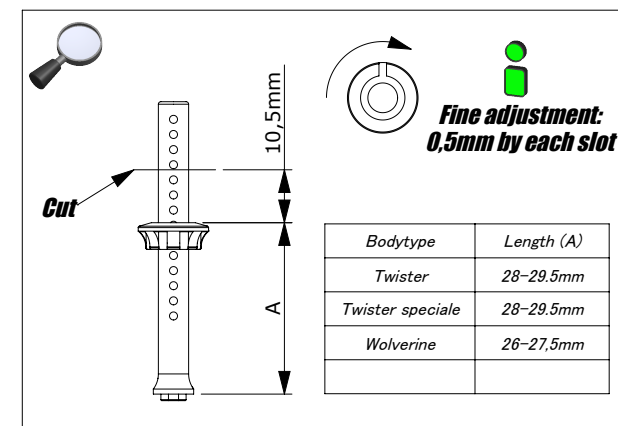
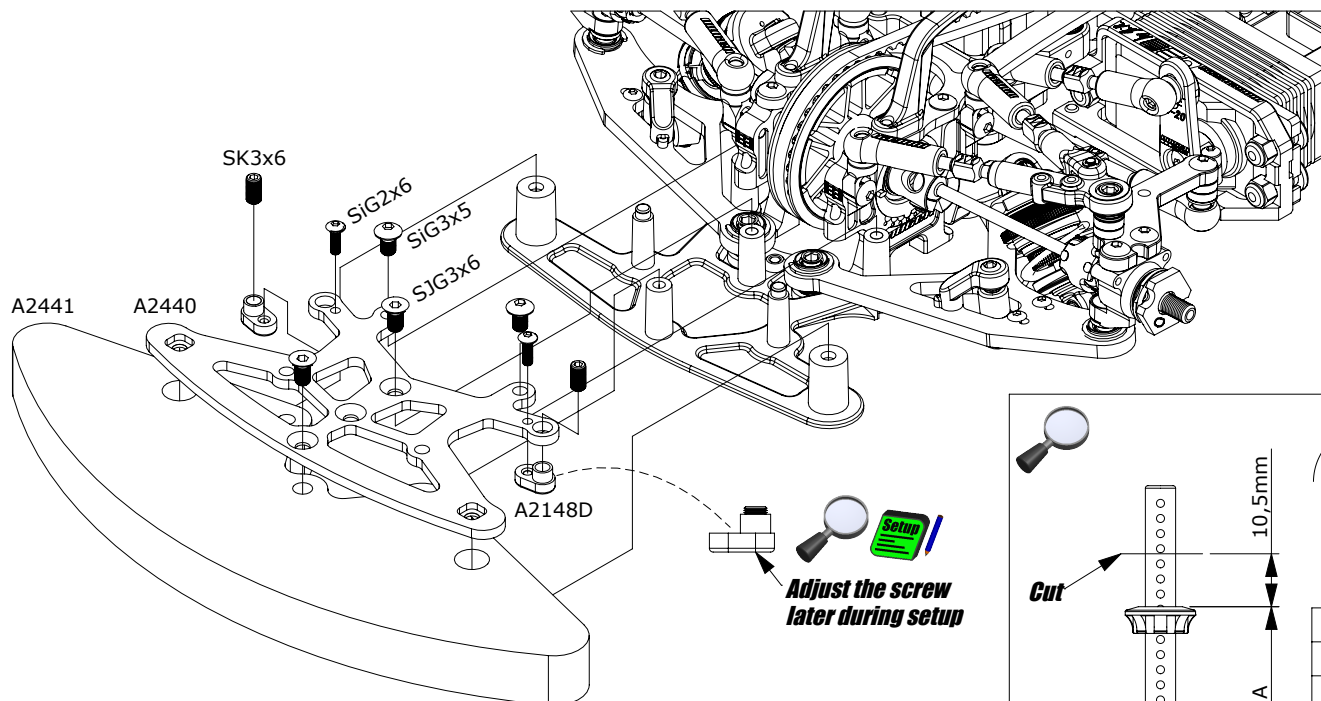
SiG3x5 2pcs. **Opt** Included in A2820

SiG3x10 2pcs. **Opt** Included in A2820

SiG3x6 2pcs. **Opt** Included in A2820

S5 (O-Ring) 2pcs.

Ø 1,6x9,8 (pin) 2pcs.



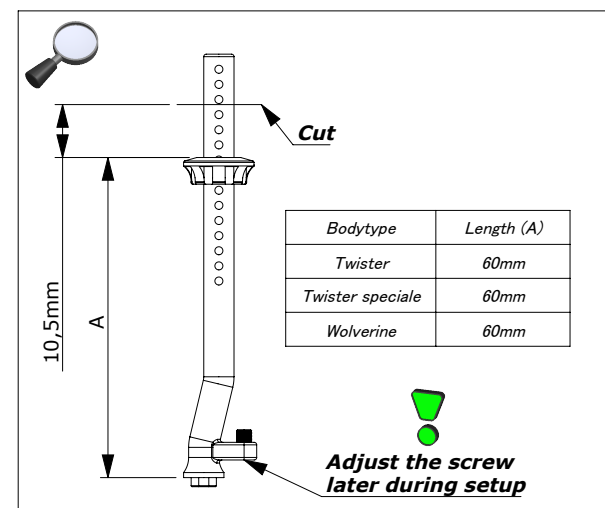
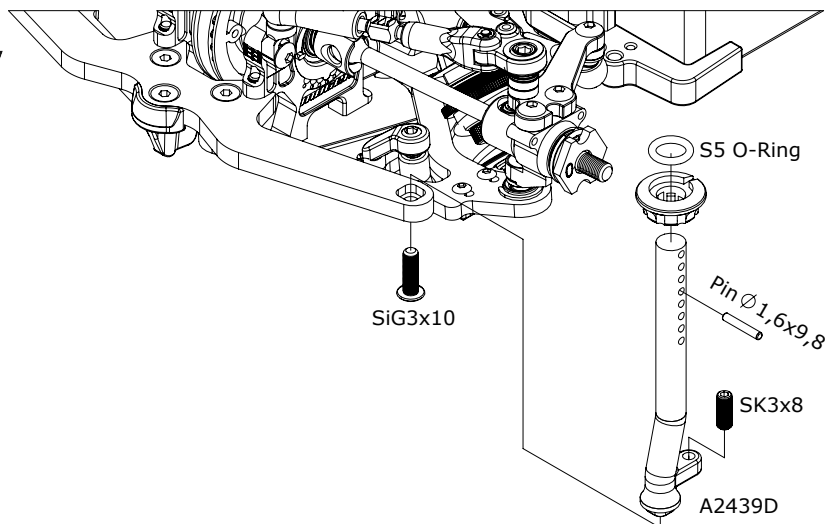
SK3x8 2pcs.

SiG3x10 2pcs. **Opt** Included in A2820

S5 (O-Ring) 2pcs.

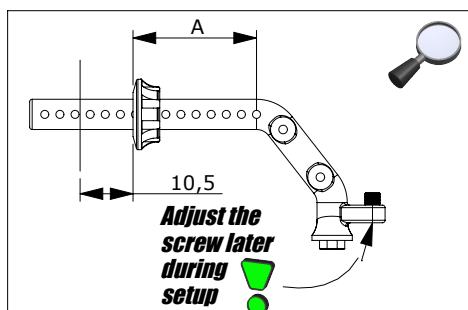
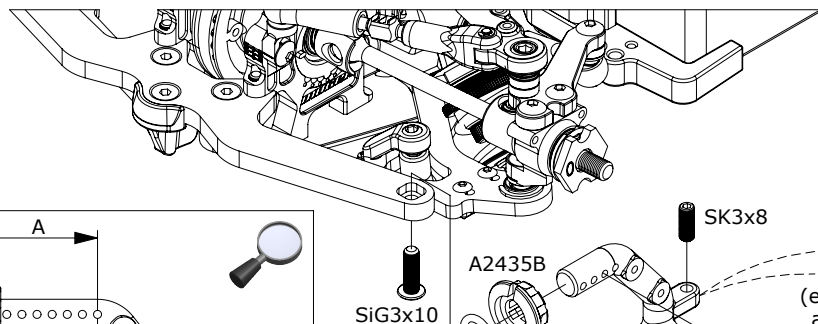
$\varnothing 1,6 \times 9,8$ (pin) 2pcs.

Vertical



Bag
H1

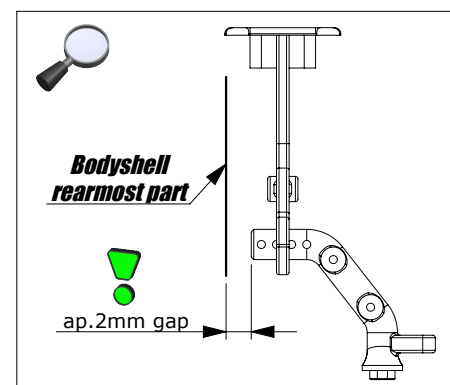
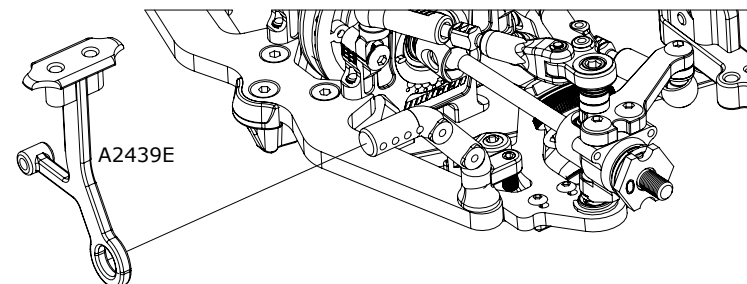
Horizontal



Bodytype	Length (A)	Length (A) with A2439E	Cutting line
Twister	14mm	3,5mm	+10,5mm
Twister speciale	14mm	3,5mm	+10,5mm
Wolverine	14mm	3,5mm	+10,5mm

In combination with A2439E please use the following distances:
Small: Twister; Twister speciale...
Large: Wolverine....

Horizontal + A2439E



Find more info on next page!

SiG3x6 2pcs. **Opt** Included in A2820

SJG3x6 4pcs. **Opt** Included in A2820

SiG3x6

A2803/04/11
according to bodyshell
(not included)

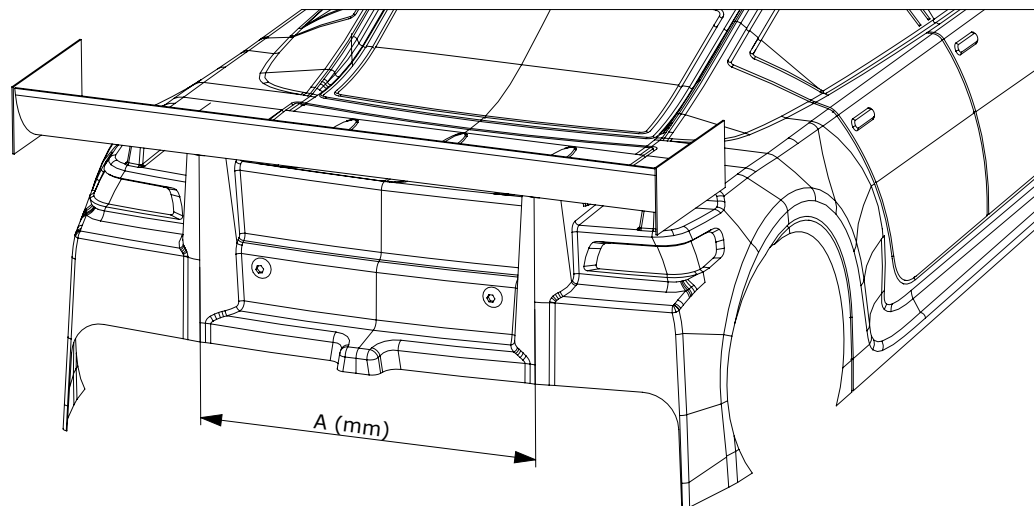
A2439E

H0181A-G
H0181B-G
H0181C-G
H0181D-G
according to preferred
bodyshell height
(not included)

**1mm with Twister
or Twister speciale
is a good starting
point.**

A2439F

SJG3x6



A=97mm
116mm

**116mm
Twister; Twister SP;
...**

A2439C-L

A2439C-R

A=100mm
119mm

**119mm
Wolverine...**

A2439C-R

A2439C-L

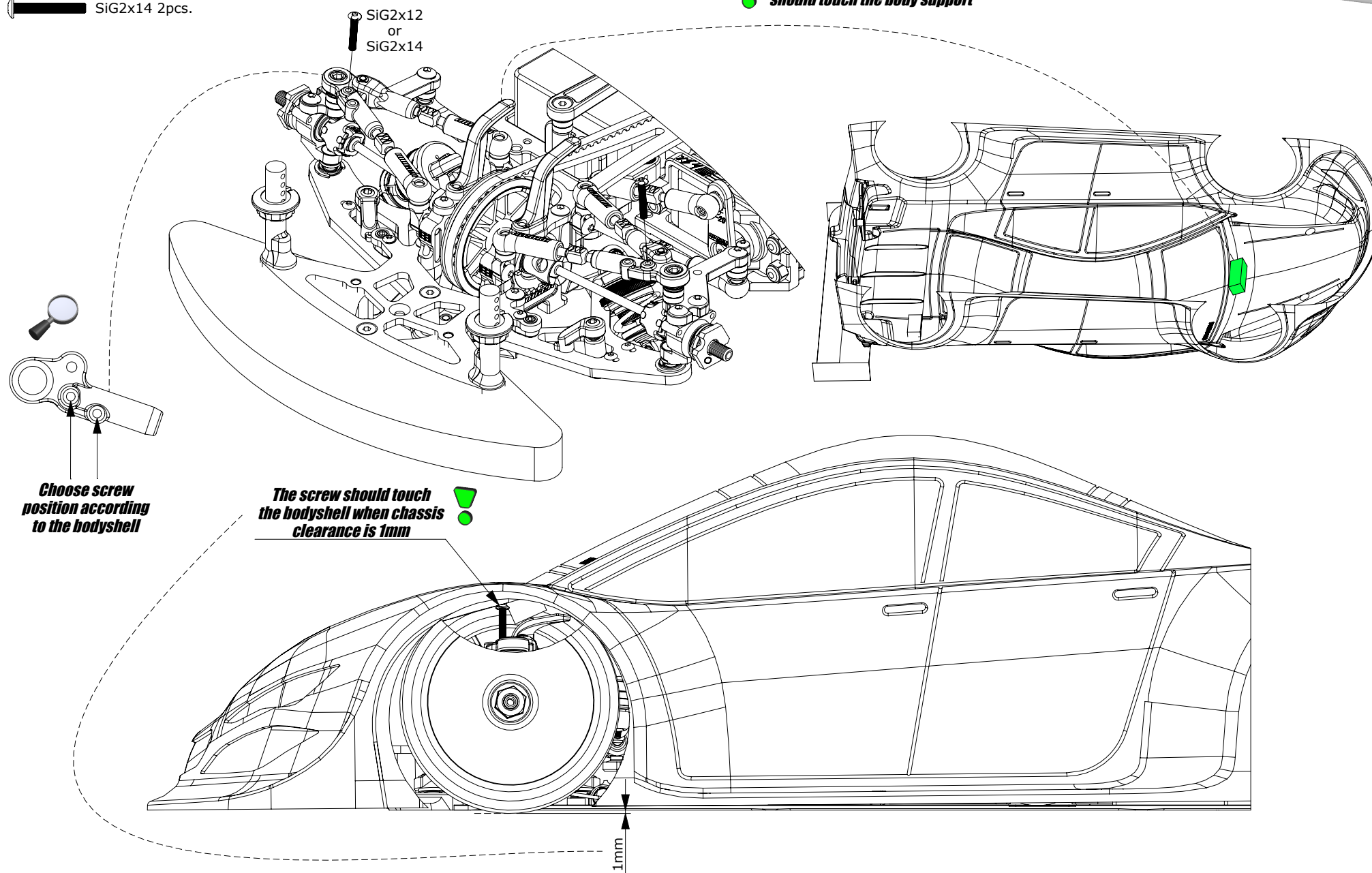
Bag
H1

SiG2x12 2pcs.

SiG2x14 2pcs.

 **The foam taped to the bodyshell
should touch the body support**

Bag
H1

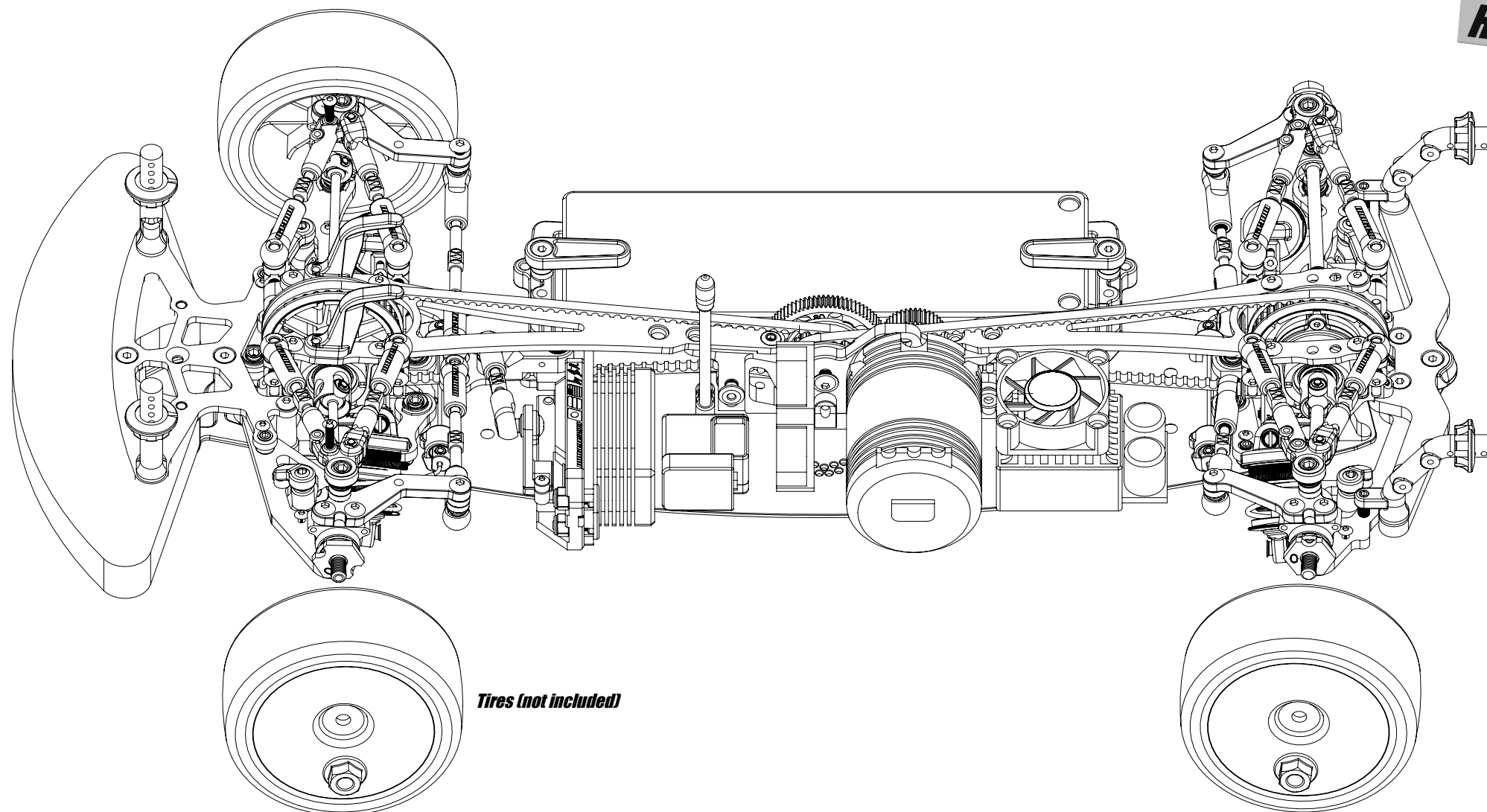


 B0422 4pcs.

 B0716 4pcs.

Bag
A₂

Bag
H₁



Tires (not included)

B0716

Before / After Operating

1. Place the model on a car stand so that the tires are in the air
2. Turn on the transmitter
3. Connect the charged battery and turn on the ESC
4. Check if the model is functioning correctly and make sure that the motor does not rotate in neutral position
5. Check if the steering operates the front tires correctly
6. Start the operation after checking each part of the model moves properly in accordance with the operation of transmitter
7. Always disconnect/remove the batteries when the model is not in use.

Trouble Shooting

PROBLEM	CAUSE	SOLUTION
Model doesn't move	Battery is not charged. The wiring is short-circuited. Motor failure. ESC failure. Assembly mistake in rotation part.	Charge the batter correctly. Insulating and repair the wiring. Repair or exchange the motor. Repair or exchange the ESC. Reassemble it according to the instruction manual.
The model is hard to control	Weak transmitter and or car batteries. Servo linkage is not adjusted properly. Assembly mistake in rotation part, wrong adjustment.	Recharge or replace batteries. Reassemble it according to the instruction manual.

SAFETY PRECAUTIONS *Please read carefully before assembling and operating your model.

- This product is a high performance radio control model car. Follow the rules and enjoy your drive.
- To enjoy this model to its fullest, prepare other necessary equipments and convenient tools for assembly in advance.
- Improper usage of batteries for radio control model car may not only damage the electronics of the car and/or radio, but can cause excess heat and possibly fire, resulting in serious accidents. Be sure to operate the battery safely.

In order to avoid accidents and personal injury, adhere to following instructions:

Handling of radio control car

This model car can exceed very high speed, and cannot be stopped quickly. Operate your model only on designated areas, race tracks, and other spacious areas. Also be sure to operate the model car safely to avoid serious personal injury, property damage, and unforeseen accidents.

Before assembling

Before you begin, read the instruction manual thoroughly. Read the instruction manual supplied with transmitter, ESC, or motor and understand how to use beforehand. Keep out of the reach of children. All tools require careful handling to avoid injury. Painting must be done only in well-ventilated area. Feel free to contact us if you have any questions.

Check before operations

Be sure to tight screws, nuts etc. securely and install all parts. Make sure whether the moveable part works smoothly. Fully charge the batteries of the transmitter and model. Turn on the transmitter and then ESC to check if the steering servo and ESC work properly. With weak batteries, transmission and reception of the radio fall off. Models may become out of control under such condition, which may cause of serious accidents. Stop the model car immediately when the electric wave is interrupted as it is not possible to control.

Cautions during operations

Always use your car with the bodyshell mounted only. Do not put fingers or any objects inside rotating and moving parts (Tire, Shaft, Gear). Stop the model car and check the problem immediately when it behaves strangely or it sounds strangely.

Do not operate in:

Crowded place
Near children
Near residential districts, schools and hospitals
Near roads and railroads
Indoors and limitate space
Nighttime and early morning
Place where running of radio control model car is prohibited

Cautions after operations

Always switch off the speed controller and then transmitter. The car might be loss of control when it makes a mistake in order. Do not touch the motor, ESC, battery because it might be very hot after use. Always disconnect/remove the batteries when the model is not in use. Failure to do so may cause damage to the batteries from excessive discharge and leaking. Do care after running to maintain performance, to notice the damage and the wear, to avoid further trouble. Do not store the model car in hot or humid conditions, or in direct sunlight.

Handling of battery

Be careful of handling to the battery. Properly connect plugs firmly. Never reverse connection nor disassemble batteries. When using rechargeable batteries, carefully read and follow the instructions supplied with the battery and charger unit.

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