

CAUTION

To prevent serious personal injury and/or property damage, operate all remotely controlled models in a responsible manner as outlined herein.

● Safety Precautions

- 1.1 This radio-controlled model is not a toy, it is designed for persons 14 years of age or older.
- 1.2 Do not operate your vehicle on unsafe terrain; always pay attention to your surroundings.
- 1.3 Never operate your vehicle on public roadways, around moving people, animals, or operating machinery.
- 1.4 Keep clear of power lines and high-powered radio equipment to minimize radio frequency interference.
- 1.5 Since this vehicle contains small components, it may be a choking hazard for small children. Keep the vehicle and any spare parts out of reach of small children.

● Inspect your radio-controlled model before operation

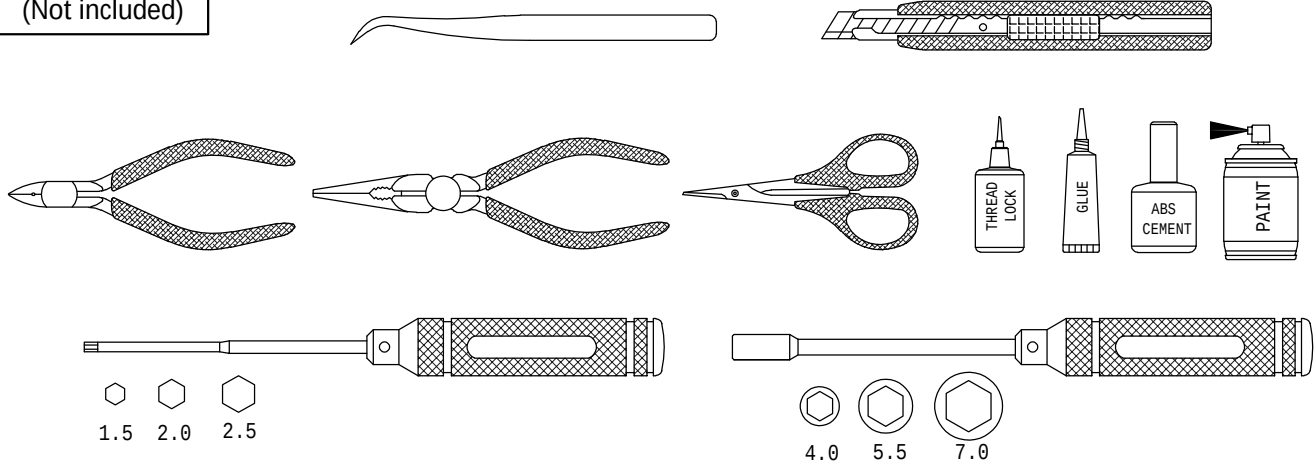
- 2.1 Ensure that all screws are properly tightened. Use thread-lock to secure any metal to metal contacts- especially for components designed to withstand torque (servo mounts, motor mount, drive shaft grub screws etc.).
- 2.2 Always check the battery voltage for both the transmitter and vehicle prior to operating your vehicle. Keep the batteries fresh in the transmitter and always begin your vehicle runs with a fully charged battery pack.
- 2.3 Always check that the motor and servo are operating smoothly and in the right direction prior to operation. If binding between components is observed, replace parts as necessary to reduce possibility of component or servo damage.
- 2.4 To turn on your vehicle, always power on your transmitter first, then power on your receiver.

● After operating your radio-controlled model

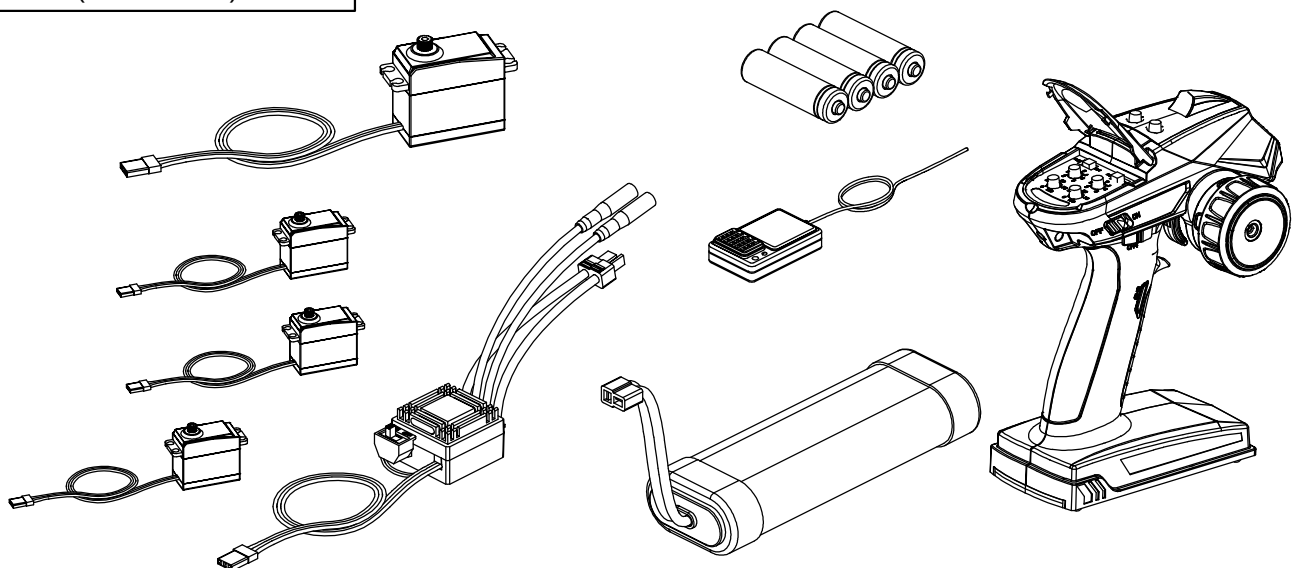
- 3.1 To turn off the vehicle, always power off your receiver prior to powering off your transmitter.
- 3.2 Use caution when handling the vehicle- components, especially the ESC and motor which will be hot after operation.
- 3.3 Never use battery packs which are dented or otherwise damaged. Ensure that the wire insulation is intact and that connectors are properly soldered. Lithium batteries can become fire hazards if mishandled.

TOOLS

(Not included)

**Electronic equipment**

(Not included)



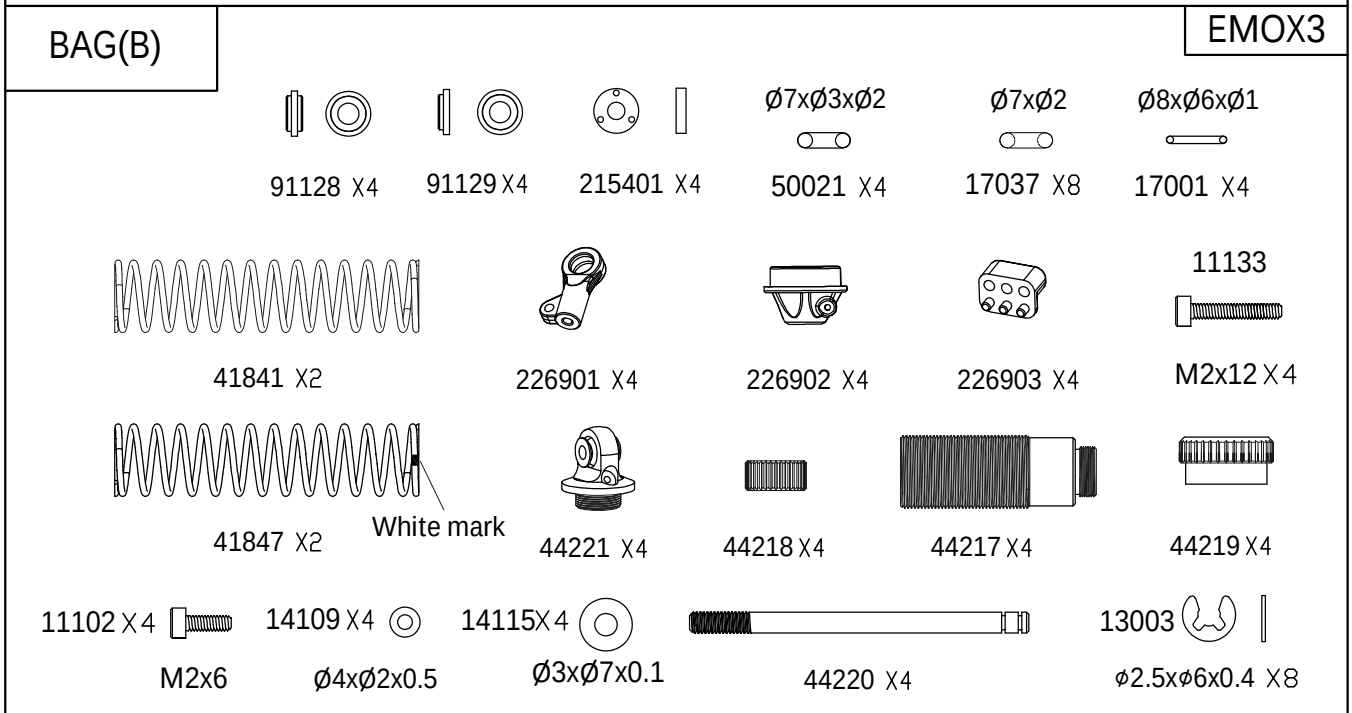
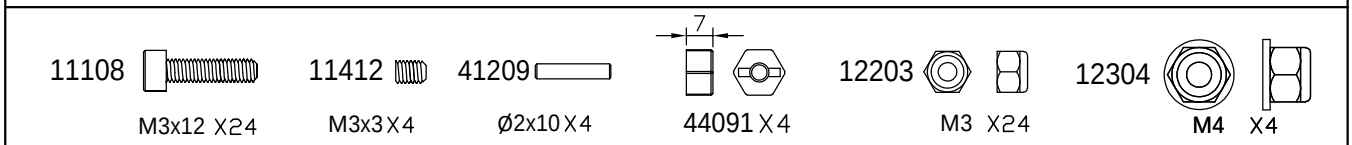
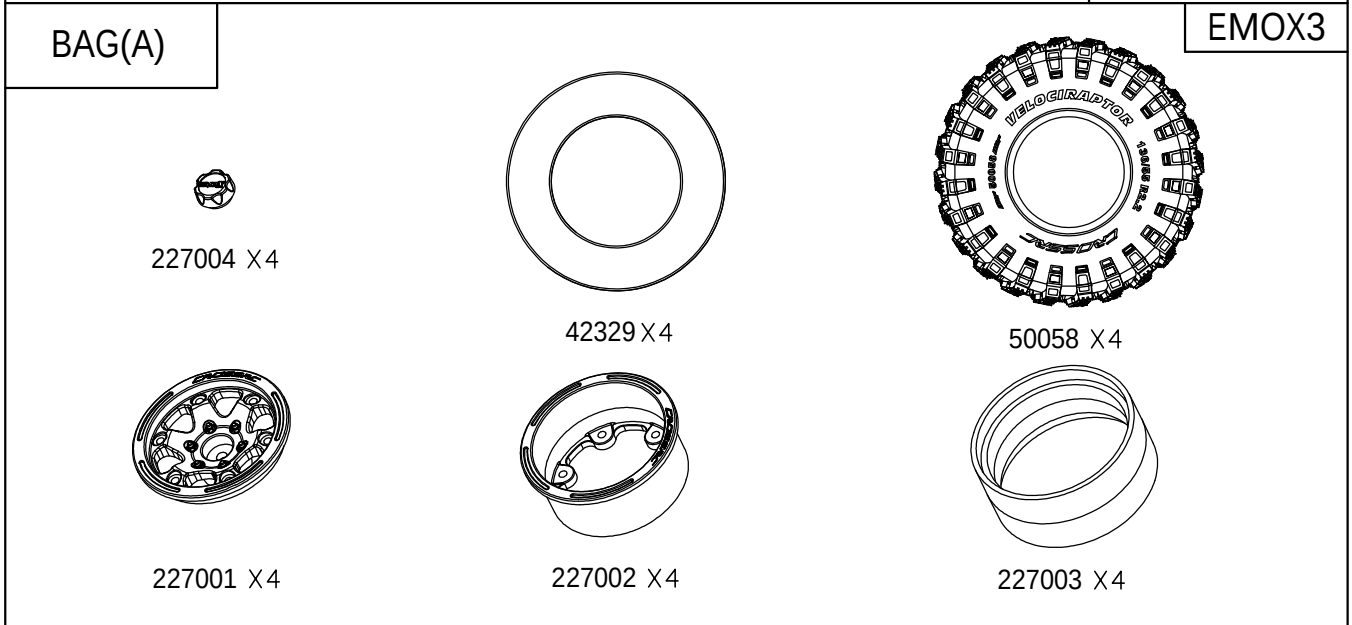
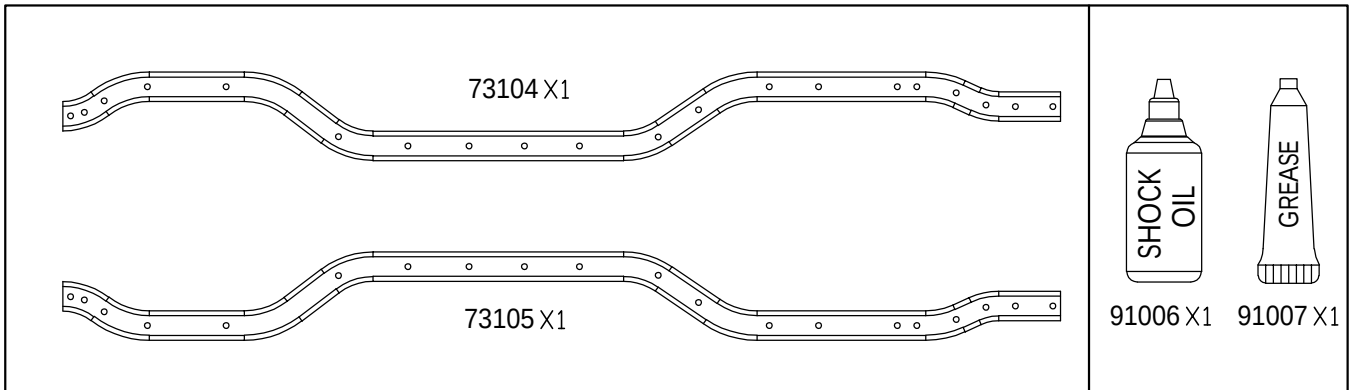
EMO X3 Assembly Remind

1. The spraying and bonding process to body shall be carried out in a ventilated place, and safety masks shall be worn.
2. Please conduct simulated assembly to determine the sequence of component before bonding or spraying.
3. For the wiring diagram of electronic equipment, please refer to the description on page 40 of the manual;
Please conduct power commissioning when the wheels are suspended.
4. This product is a high-precision model. Please read this manual carefully before assembly and assemble in strict accordance with this manual.
5. Screw thread sealant shall be used during assembly. Please noted that the screw thread sealant shall not have any contact with the shell parts. The screw thread sealant and ABS materials will produce chemical reaction, which will embrittle and crack the shell.
6. It is recommended to use professional tools for installation. Please pay attention to the safety when use tools.

Requirements and recommendations for electronic equipment:

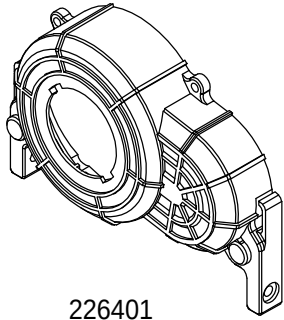
Name	Specifications	Remarks
Remotes controller	6 channels or Up	Waterproof connector is recommended
Servo	Steering servo $\geq 25\text{KG}$	High pressure standard Servo in waterproof
	Shift servo $\geq 3\text{KG} \times 3$	For the size of medium Servo, please refer to the configuration drawing below
ESC	Continuous current $\geq 80\text{A}$	ESC BEC $> 3\text{A}$
Brush motor	Brush motor 560 25T or Up	The Max. Size: $\varnothing 39\text{mm} \times 80\text{mm}$ Installation hole spacing: 25mm
Brushless motor	$\leq 2200\text{KV}$	
Motor gear	M=0.8 Z=16T~20T	M=0.8 $\neq$ 32P

Battery box size	Motor gear	Total reduction ratio		Environment	
135*50*40	20T	High speed 1:17.8 Low speed 1:38.9	Suitable for crossing and climbing		
Gear reduction ratio range reference					
	16T	17T	18T	19T	20T
High speed	1:22.1	1:20.8	1:19.6	1:18.6	1:17.8
Low speed	1:48.3	1:45.4	1:42.9	1:40.6	1:38.9

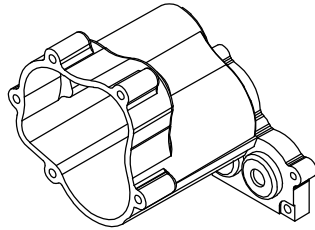


BAG(C)

EMOX3



226401



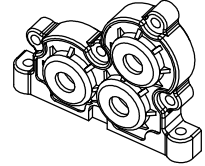
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226402



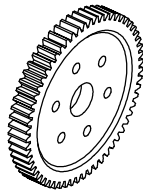
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226405



45123



226501(60T)



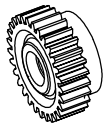
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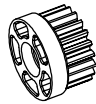
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41749 X2



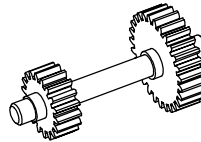
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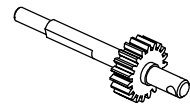
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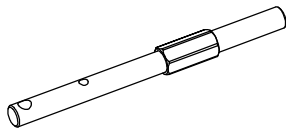
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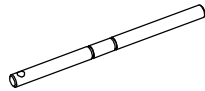
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41747



42234



42235



44212



44213



44214



74016

13001

 $\varnothing 3 \times \varnothing 7.8 \times 0.5$ X2

42236

 $\varnothing 5.1 \times \varnothing 7.5 \times 2.5$ X1

42203

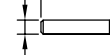
 $\varnothing 5.1 \times \varnothing 8 \times 1.5$ X2

72007

 $\varnothing 5 \times \varnothing 8 \times 0.3$ X11

14102

 $\varnothing 3 \times \varnothing 7 \times 0.5$ X2



41209 X1

11217



M2.5x10 X6

11216



M2.5x6 X3

11205



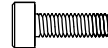
M3x6 X6

11207



M3x10 X7

11107



M3x10 X2

11401



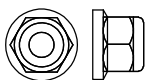
M3x4 X1

11315



M2.5x6 X3

12304



M4 X1



41834 X1



41307 X1

15012

 $\varnothing 5 \times \varnothing 10 \times 4$ X11

15014

 $\varnothing 5 \times \varnothing 8 \times 2.5$ X4

BAG(D)

EMOX3



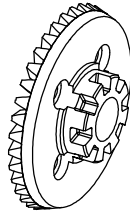
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33907 X8



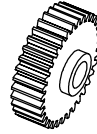
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36202 X2



36203 X4



36204 X4



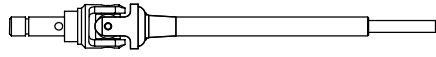
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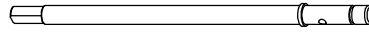
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41838 X2



95091



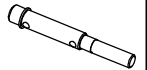
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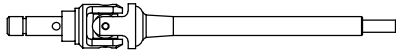
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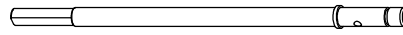
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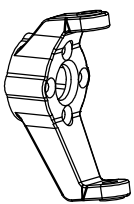
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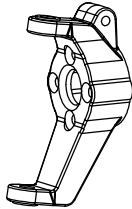
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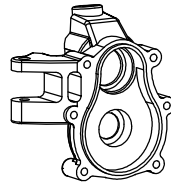
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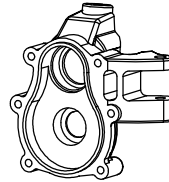
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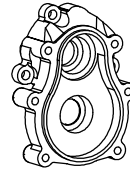
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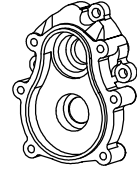
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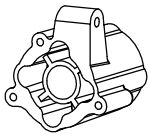
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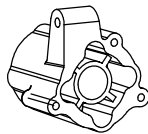
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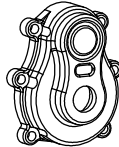
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226707



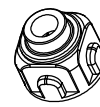
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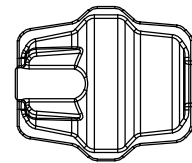
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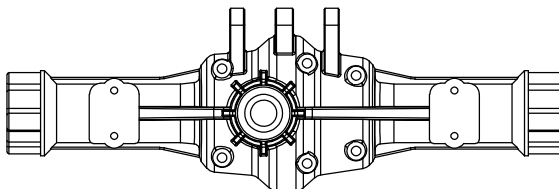
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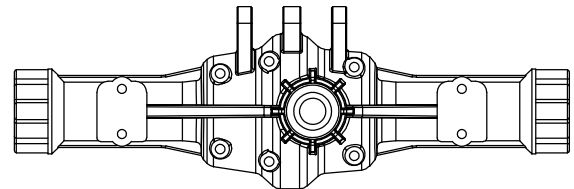
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226602 X2

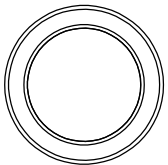


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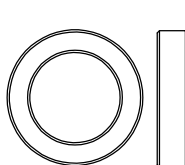


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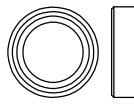
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 $\varnothing 15 \times \varnothing 21 \times 4 \times 2$

15016

 $\varnothing 12 \times \varnothing 18 \times 4 \times 2$

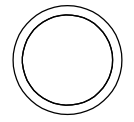
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 $\varnothing 8 \times \varnothing 12 \times 3.5 \times 2$

15012

 $\varnothing 5 \times \varnothing 10 \times 4 \times 18$

75026

 $\varnothing 12 \times \varnothing 15 \times 0.2 \times 2$

72007

 $\varnothing 5 \times \varnothing 8 \times 0.3 \times 2$

13002

 $\varnothing 3.8 \times \varnothing 9.2 \times 0.6 \times 6$

11401



M3x4 X4

11227



M2.5x8 X8

11316



M2.5x10 X18

11125



M2.5x10 X38

11120



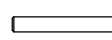
M2.5x20 X12

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M3x10 X4

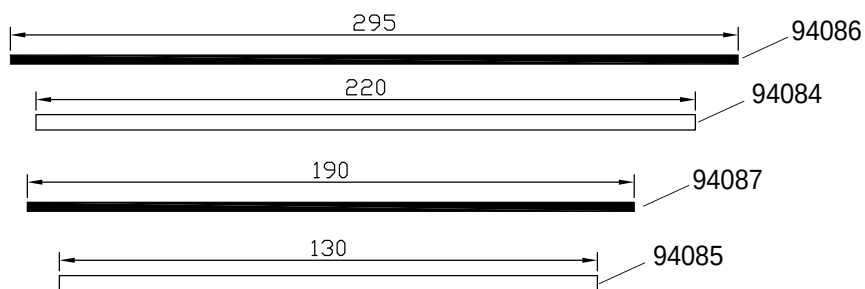
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 $\varnothing 2 \times 14 \times 2$

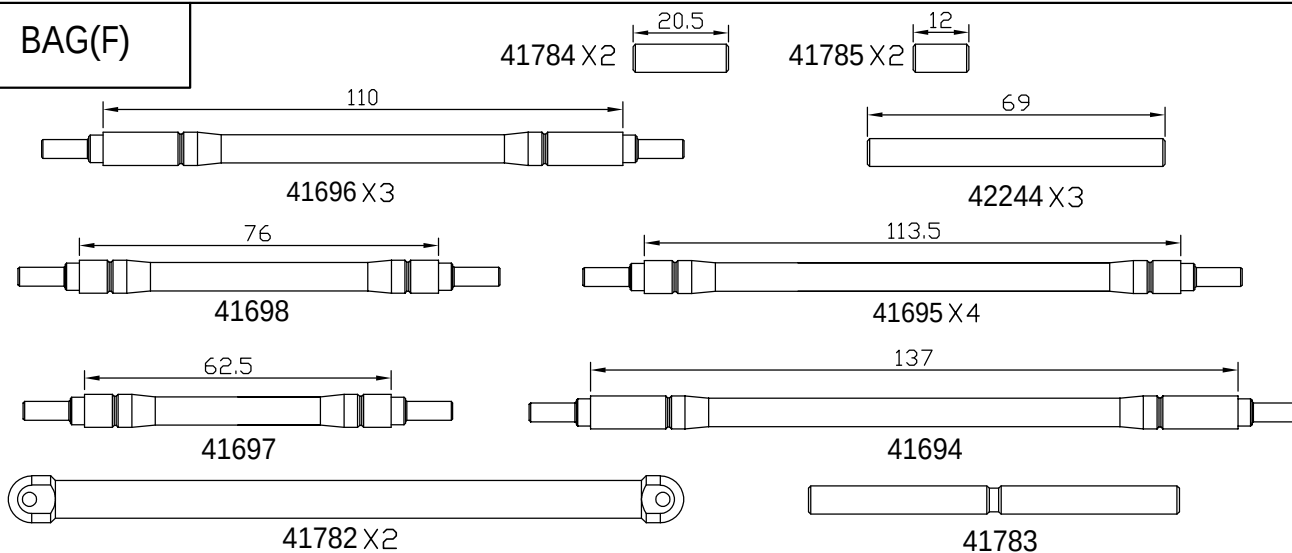
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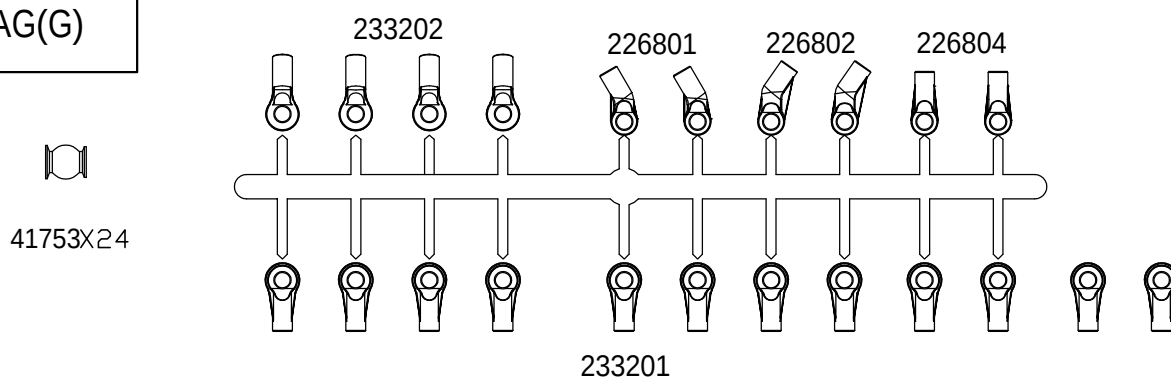
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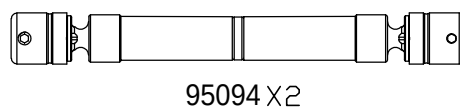
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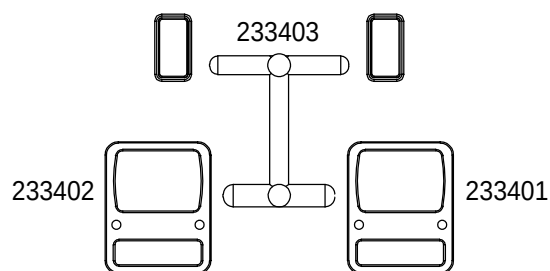
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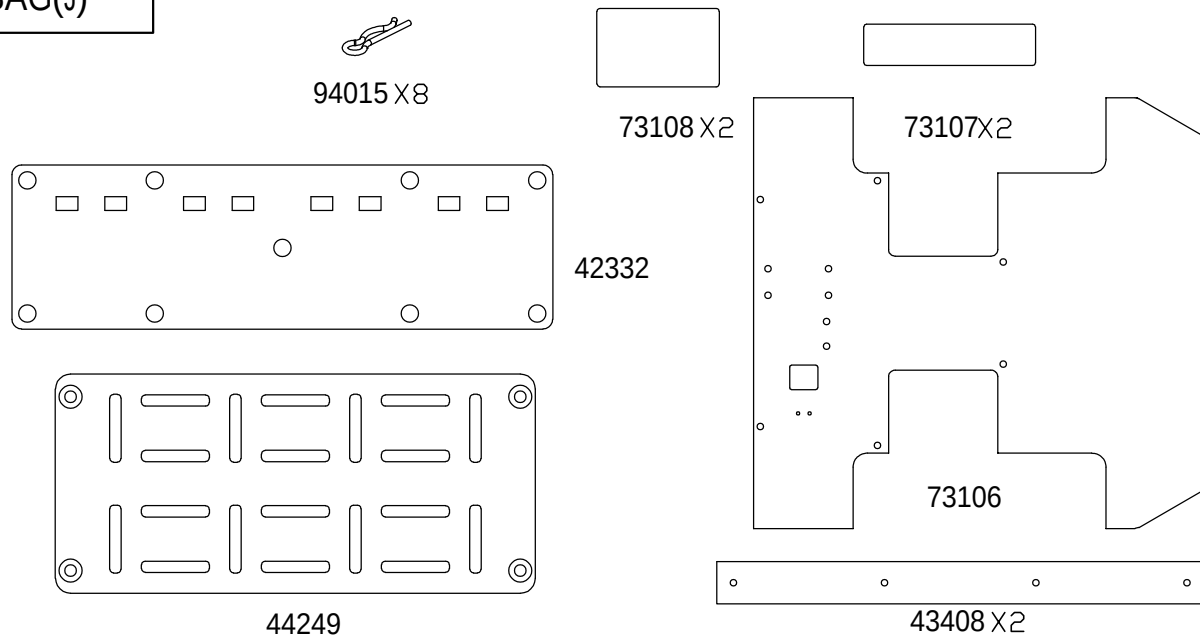
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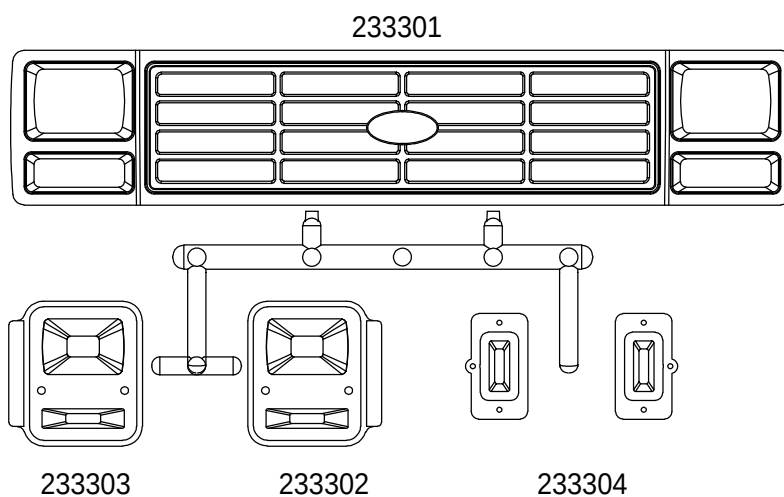
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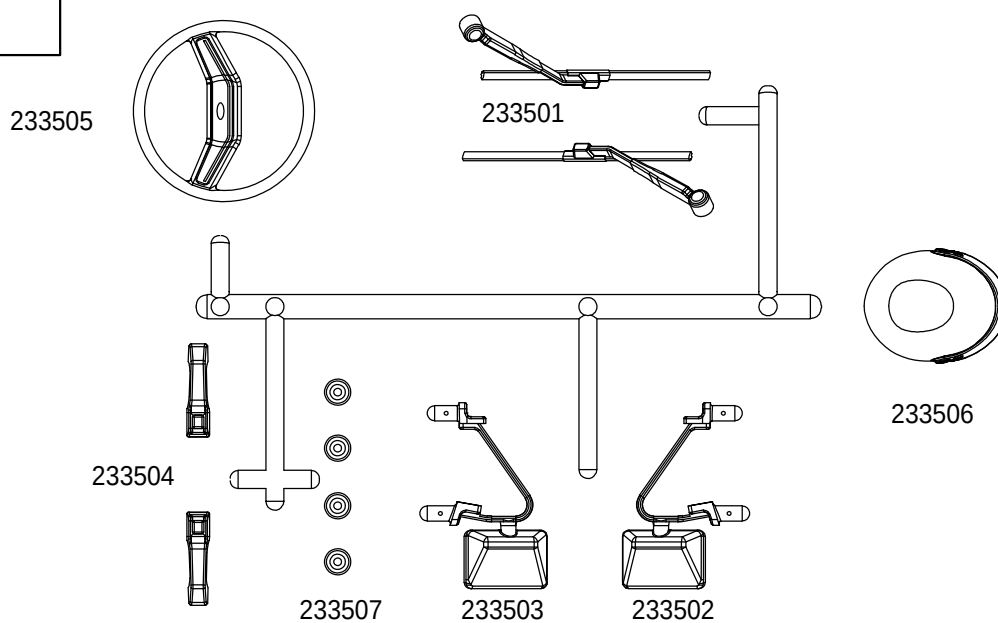
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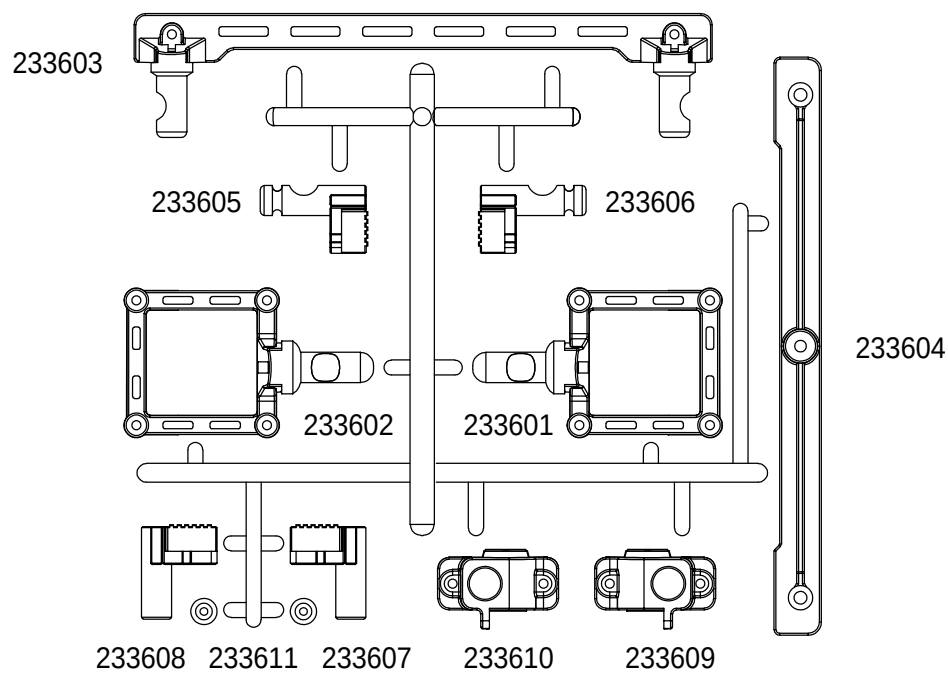
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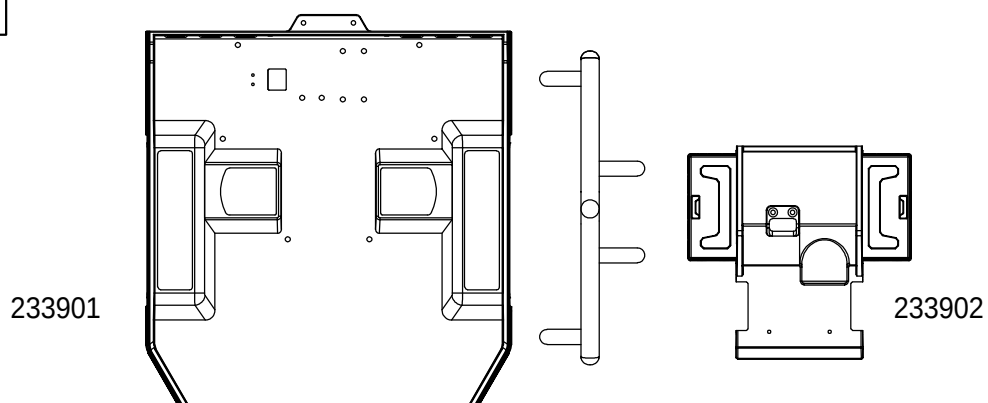
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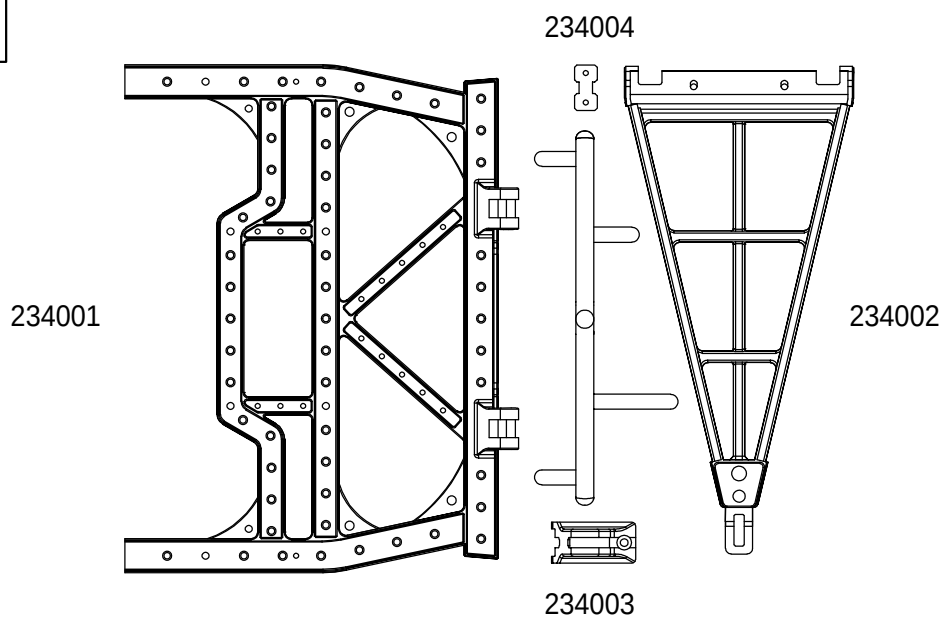
BAG(M)



BAG(N)

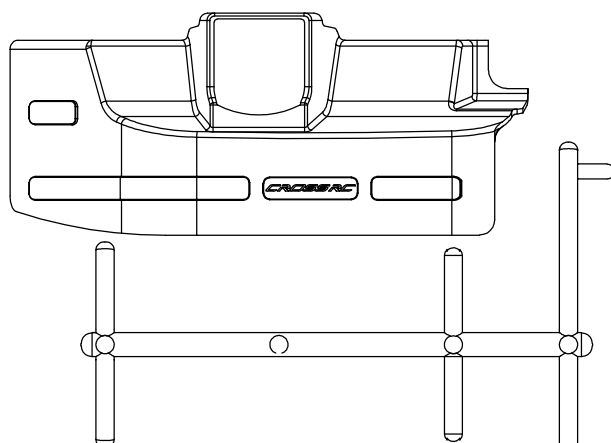


BAG(O)



BAG(P)

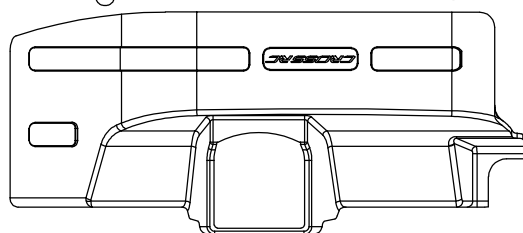
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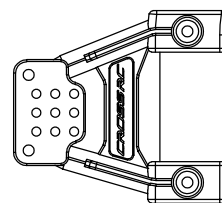
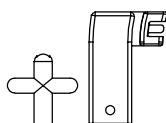
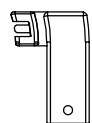
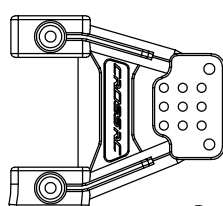
BAG(Q)

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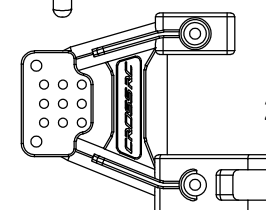
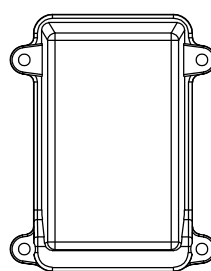
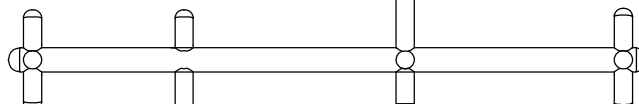
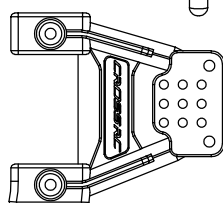
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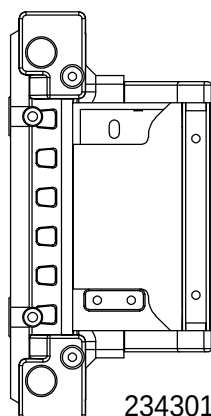
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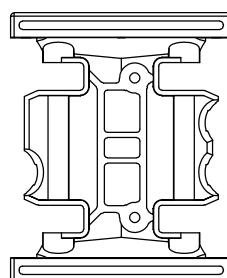
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BAG(R)



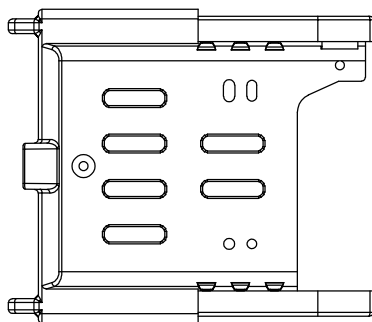
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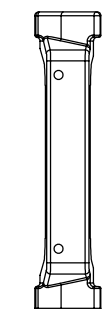
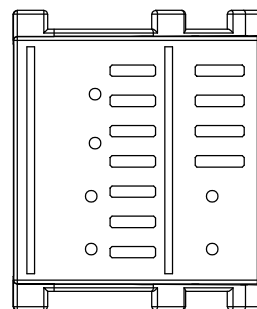
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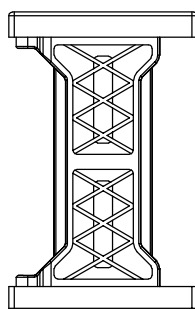
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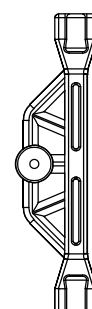
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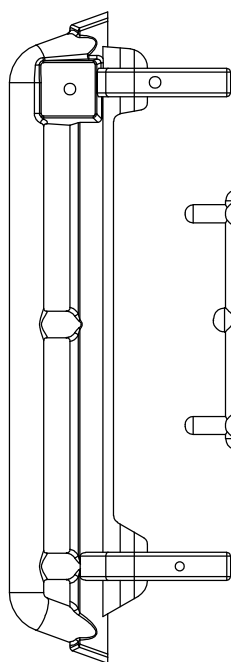


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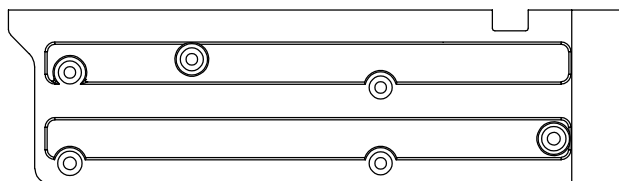


234405

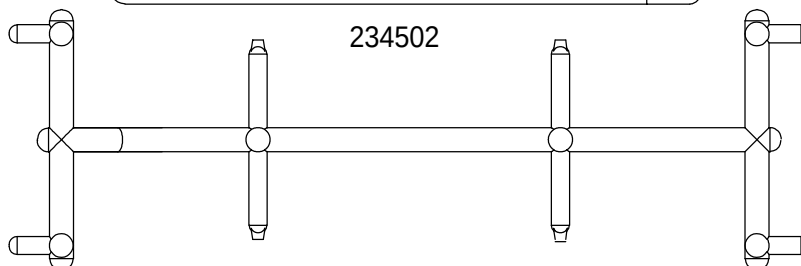
BAG(T)



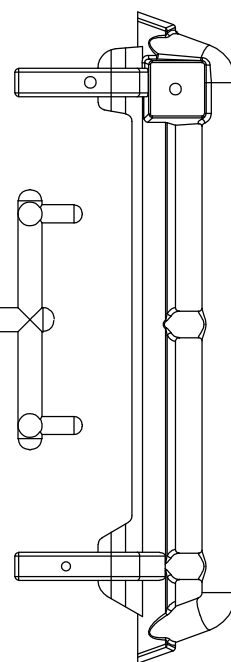
234504



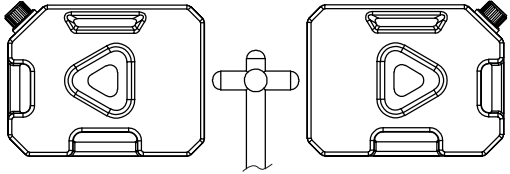
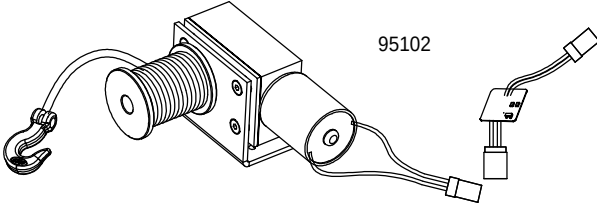
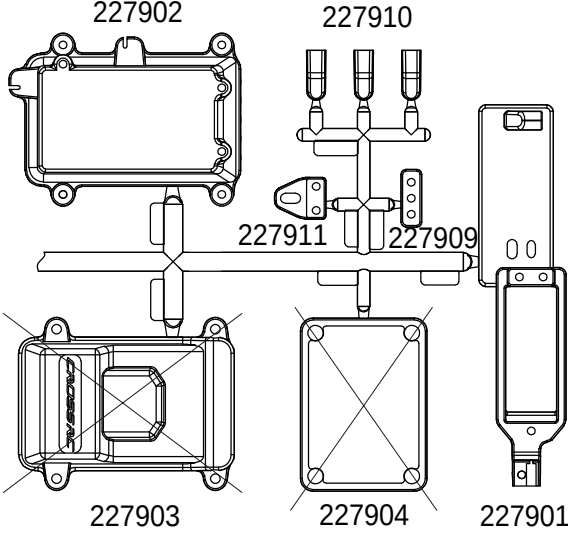
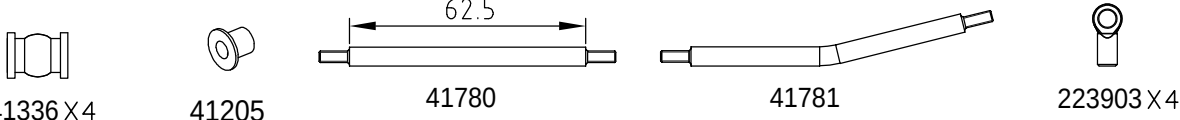
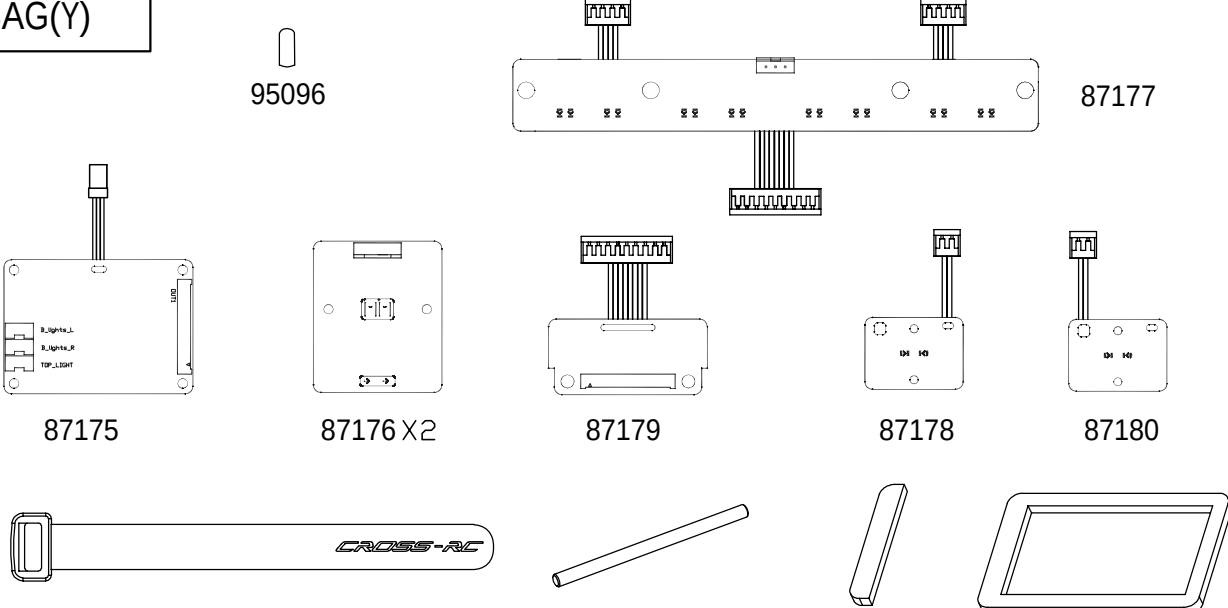
234502



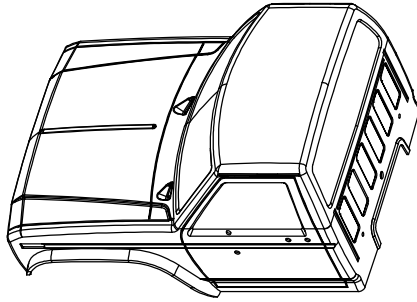
234501



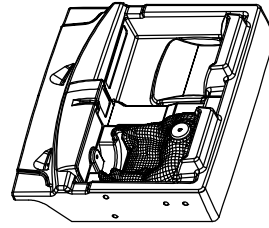
234503

BAG(U)	 232203 232202 x4	 95102
BAG(W)	 227902 227910 227911 227909 227903 227904 227901	
BAG(X)	 41336 X4 41205 41780 41781 223903 X4 62.5	
BAG(Y)	 95096 87177 87175 87176 X2 87179 87178 87180 91004 X1 94089 71294 71293	

BAG(Z)



237001



238001

BAG(AA)



44172 X1



91175 X3



91176 X2



41819 X2



42231 X2



94056 X1

11227



M2.5x8 X3

12206



M2 X3

11401



M3x4 X3

BAG(BB)

11413



M4x13.5 X6

11227



M2.5x8 X4

11211



M3x18 X5



30411 X2

11102



M2x6 X18

11206



M3x8 X25

11212



M3x20 X4



30402 X2

11106



M3x8 X1

11207



M3x10 X33

11213



M3x22 X4



M3 X4

11303



M3x8 X4

11208



M3x12 X25

11214



M3x25 X13



94114 X2

11306



M3x10 X9

11209



M3x14 X6

11215



M3x28 X4

12203

11313



M3x20 X4

11210



M3x16 X17

11223



M3x30 X2

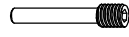


M3 X2

11401

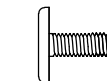


M3x4 X1



42209 X2

11238



M3x8x10 X2

14102



Ø3xØ7x0.5X20

EMOX3

1

BAG(C)

15012

 $\phi 5 \times \phi 10 \times 4$ X5

72007

 $\phi 5 \times \phi 8 \times 0.3 \times 3$

11315



M2.5x6 X3

15014

 $\phi 5 \times \phi 8 \times 2.5$ X4

42236

 $\phi 5.1 \times \phi 7.5 \times 2.5$ X1

42203

 $\phi 5.1 \times \phi 8 \times 1.5$ X2

13001

 $\phi 3 \times \phi 7.8 \times 0.5$ X2

15012

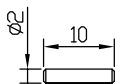
 $\phi 5 \times \phi 10 \times 4$ X1

11207

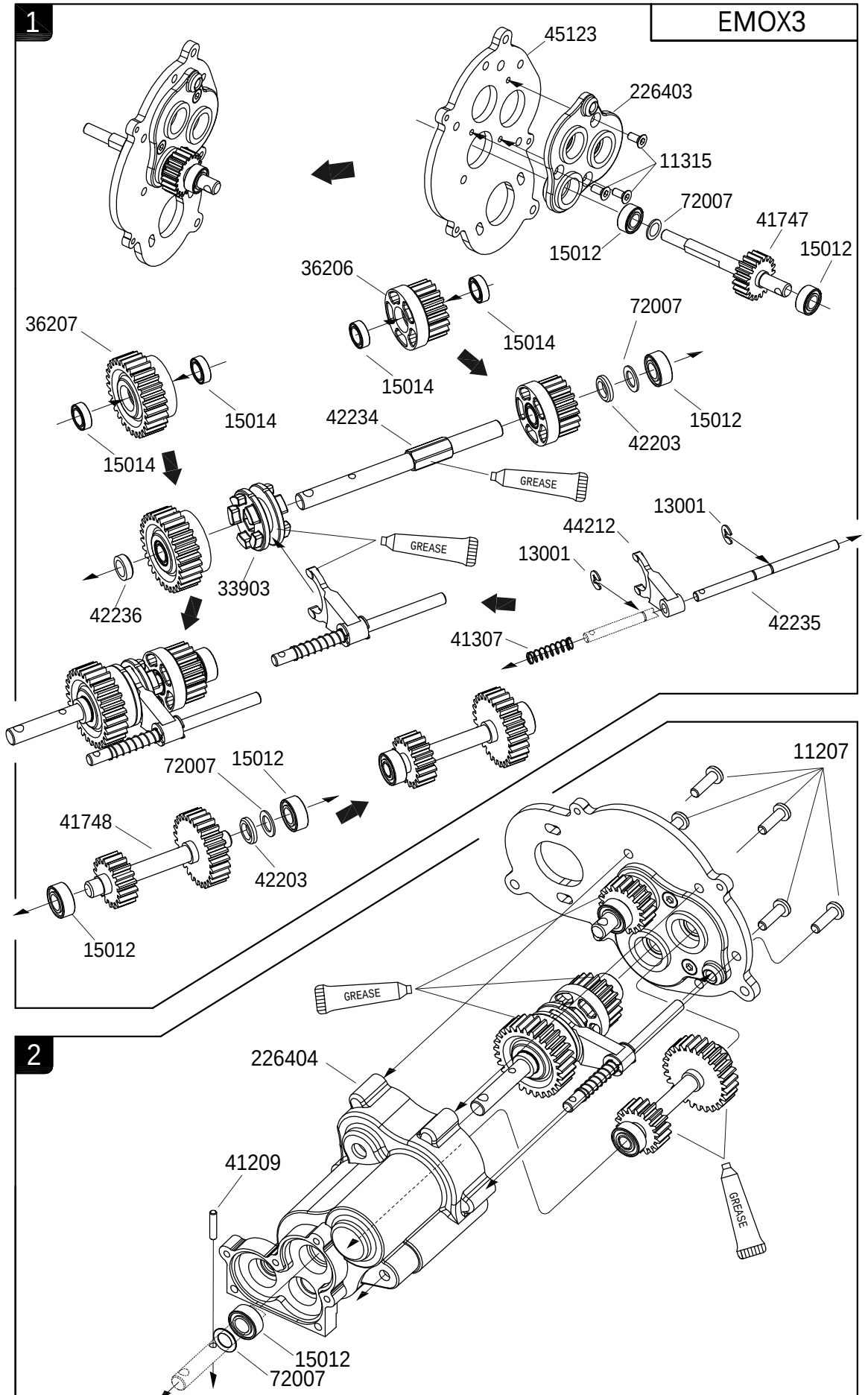


M3x10 X5

72007

 $\phi 5 \times \phi 8 \times 0.3 \times 1$ 

41209 X1



3

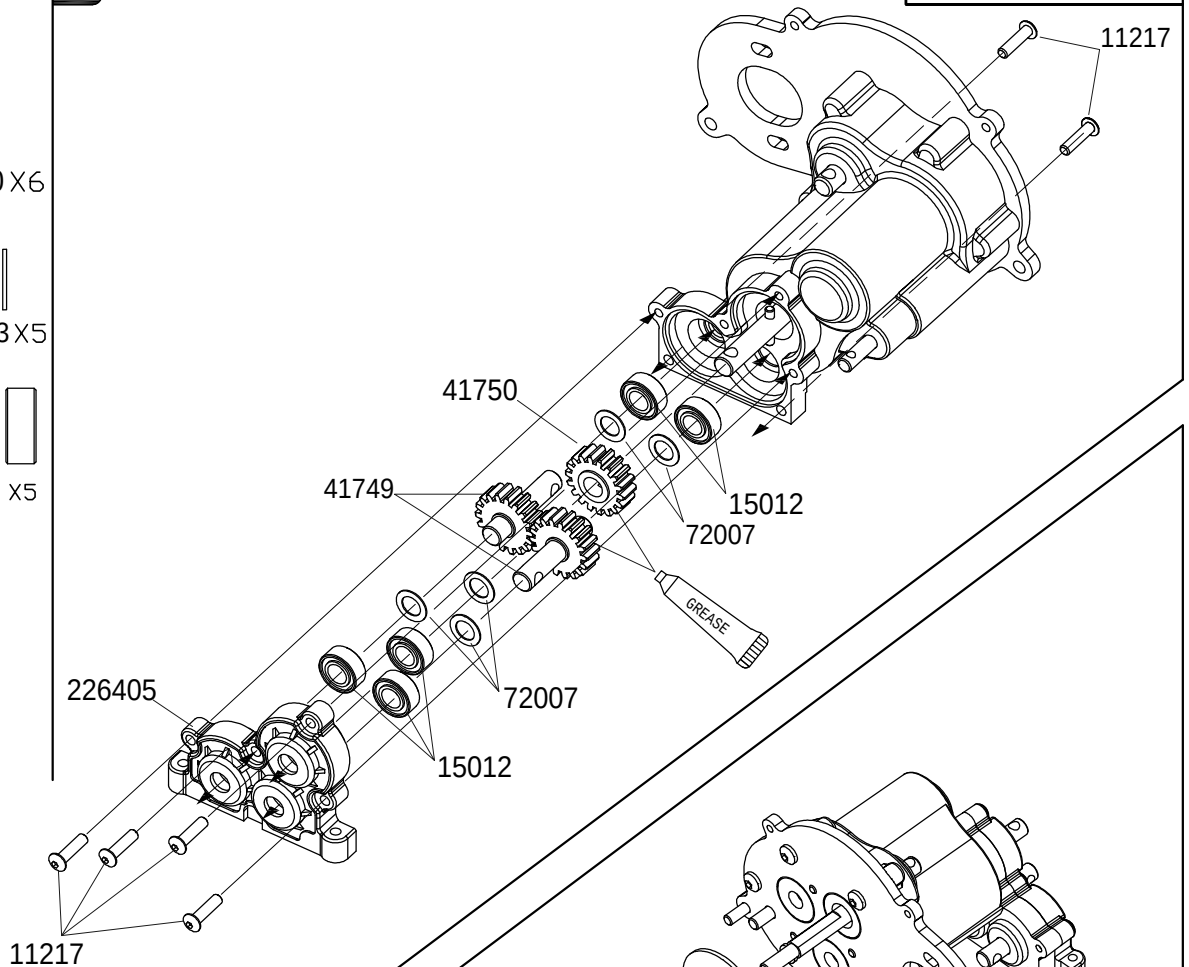
EMOX3

BAG(C)

11217 
M2.5x10 X6

72007 
ø5xø8x0.3 X5

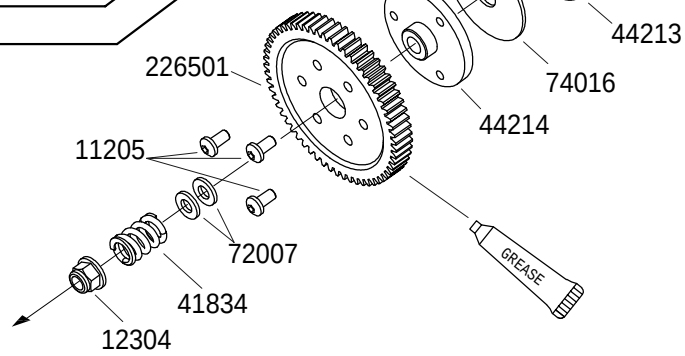
15012 
ø5xø10x4 X5



12304 
M4 X1

72007 
ø5xø8x0.3 X2

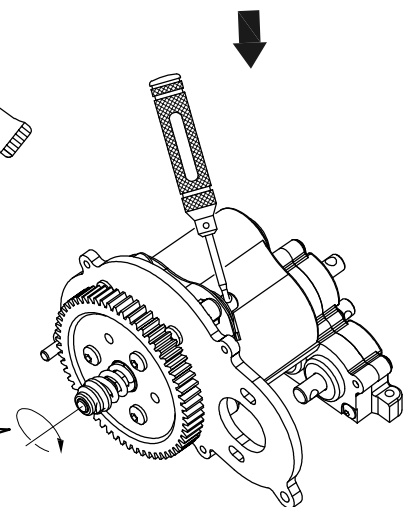
11205 
M3x6 X3



Limited slip adjust

- (1) Tighten to the right.
- (2) "0.5"."0.25"or"0.15" turns to the left.

2S Li-Po:0.5 3S Li-Po:0.25 4S Li-Po:0.15



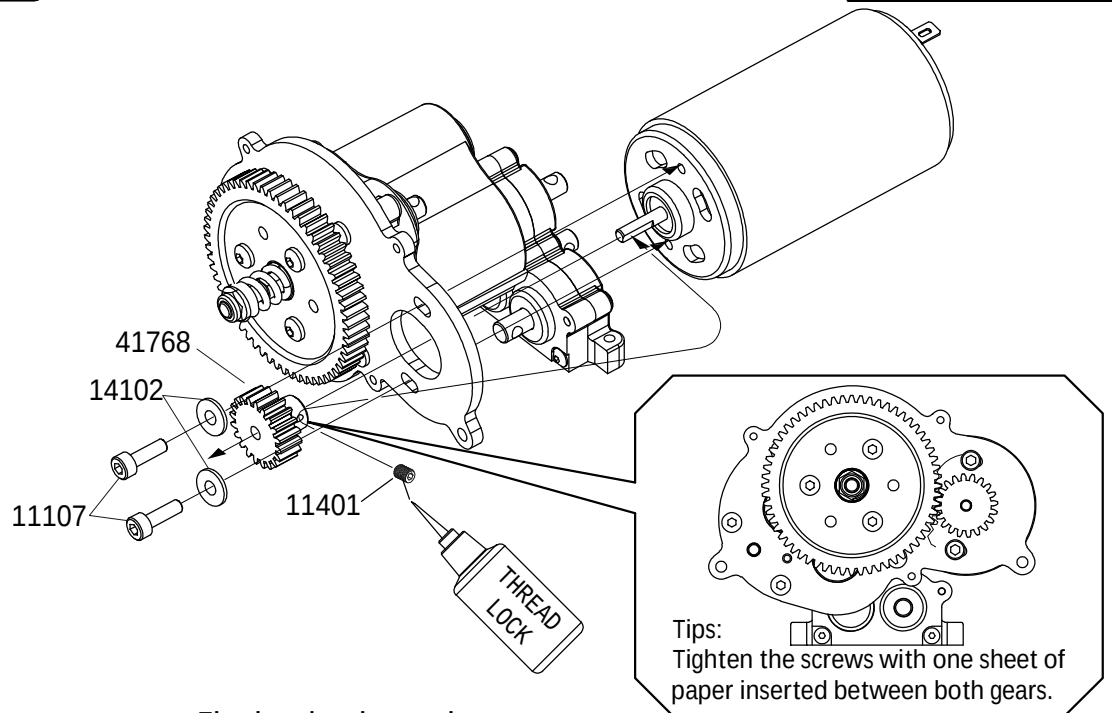
4

EMOX3

11401 
M3x4 X1

14102 
Ø3xØ7x0.5 X2

11107 
M3x10 X2



Final reduction ratio

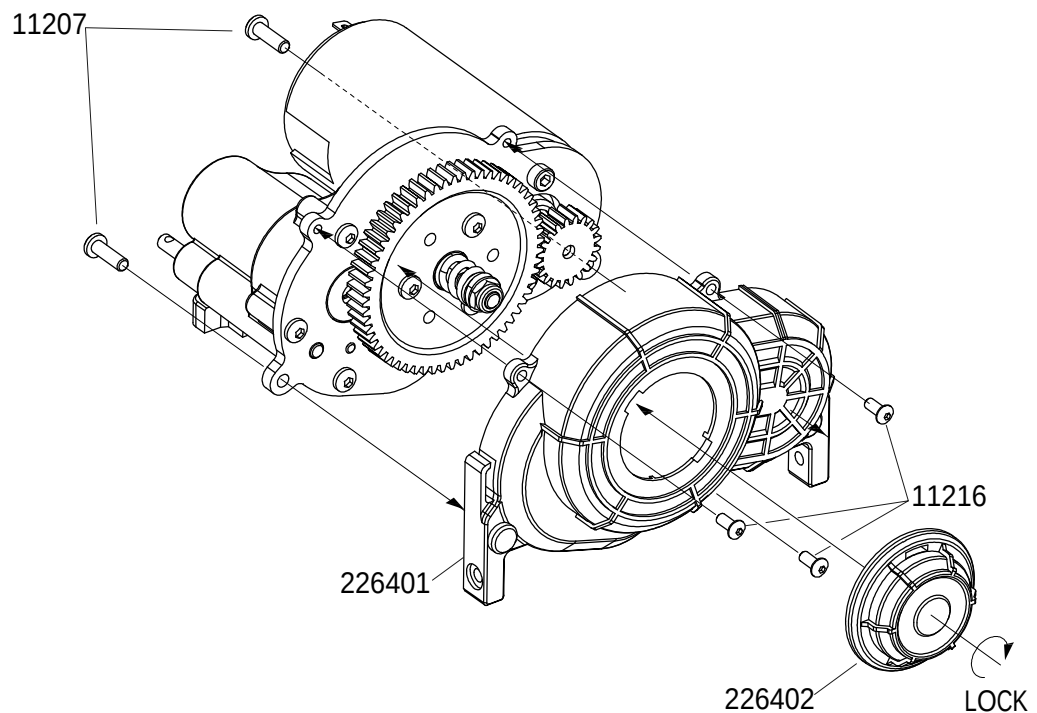
Motor gear	16T	17T	18T	19T	20T
Fast	22.1	20.8	19.6	18.6	17.8
Slow	48.3	45.4	42.9	40.6	38.9

5

EMOX3

11207 
M3x10 X2

11216 
M2.5x6 X3

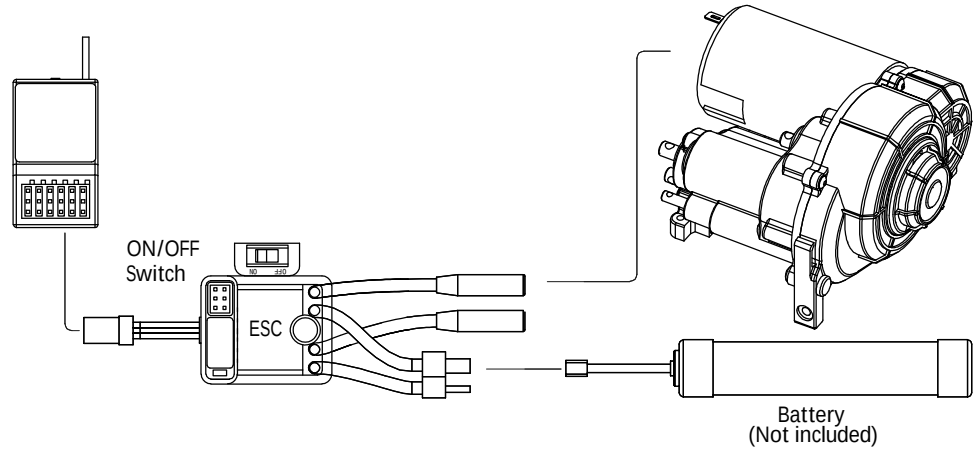


6

EMOX3

Tips:

Test the gear mesh by connecting the ESC to the motor/gearbox assembly. If the gearbox is not operating smoothly or is creating excess noise, check the gear mesh prior to proceeding to the next step.



7

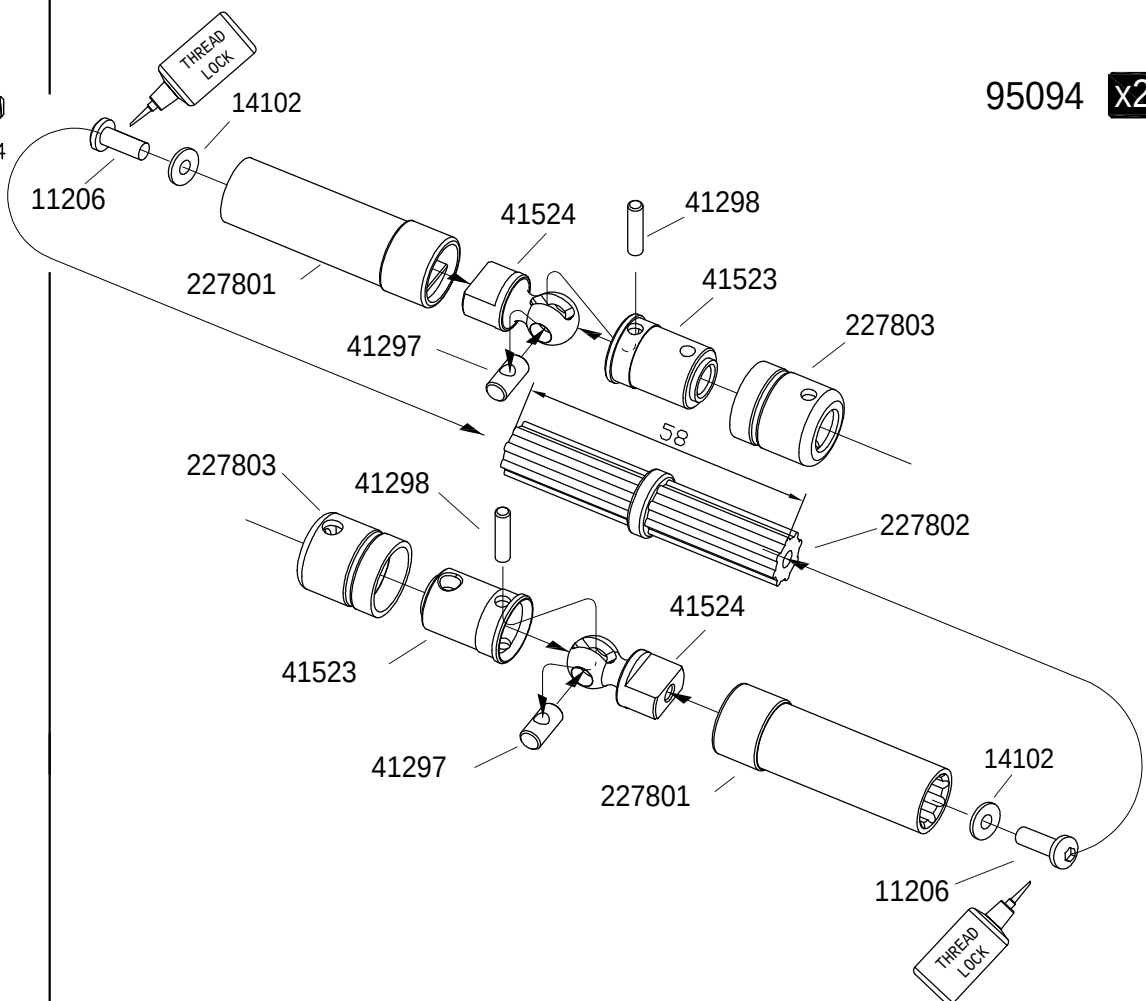
EMOX3

BAG(H)

95094 **x2**

11206 
M3x8 X4

14102 
Ø3xØ7x0.5 X4



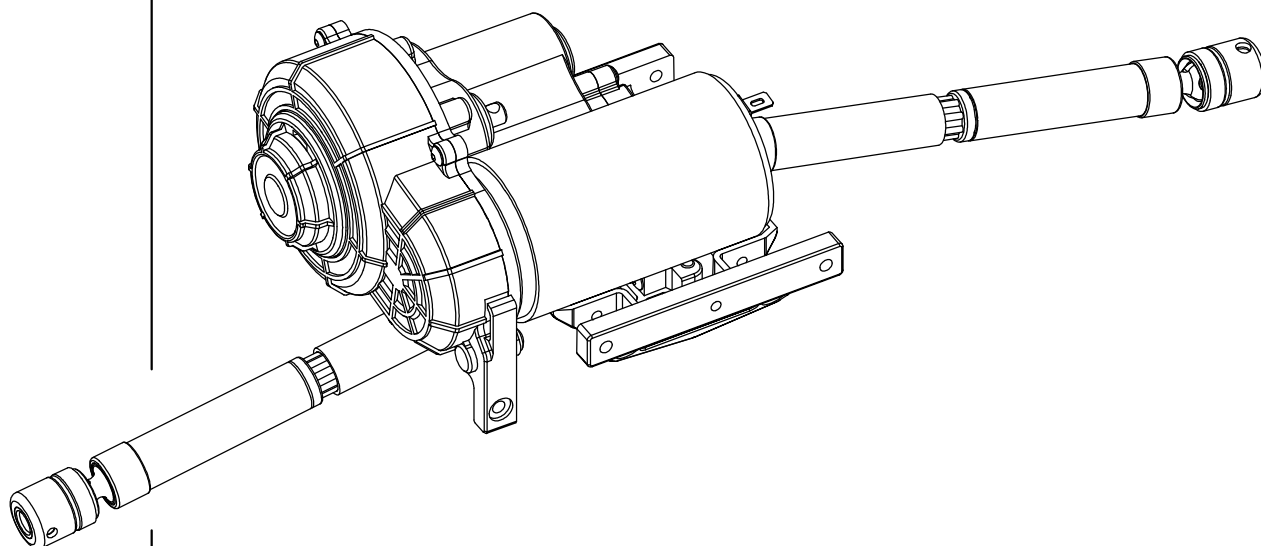
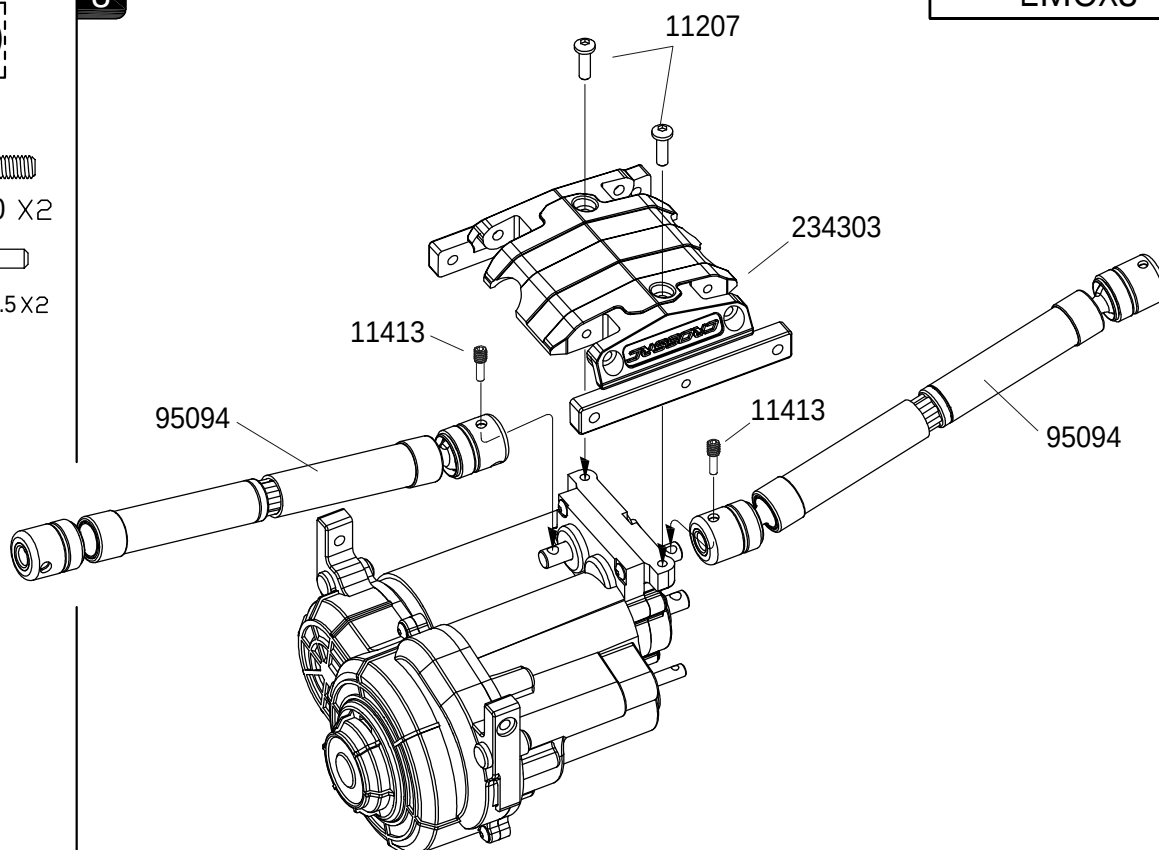
8

EMOX3

BAG(BB)

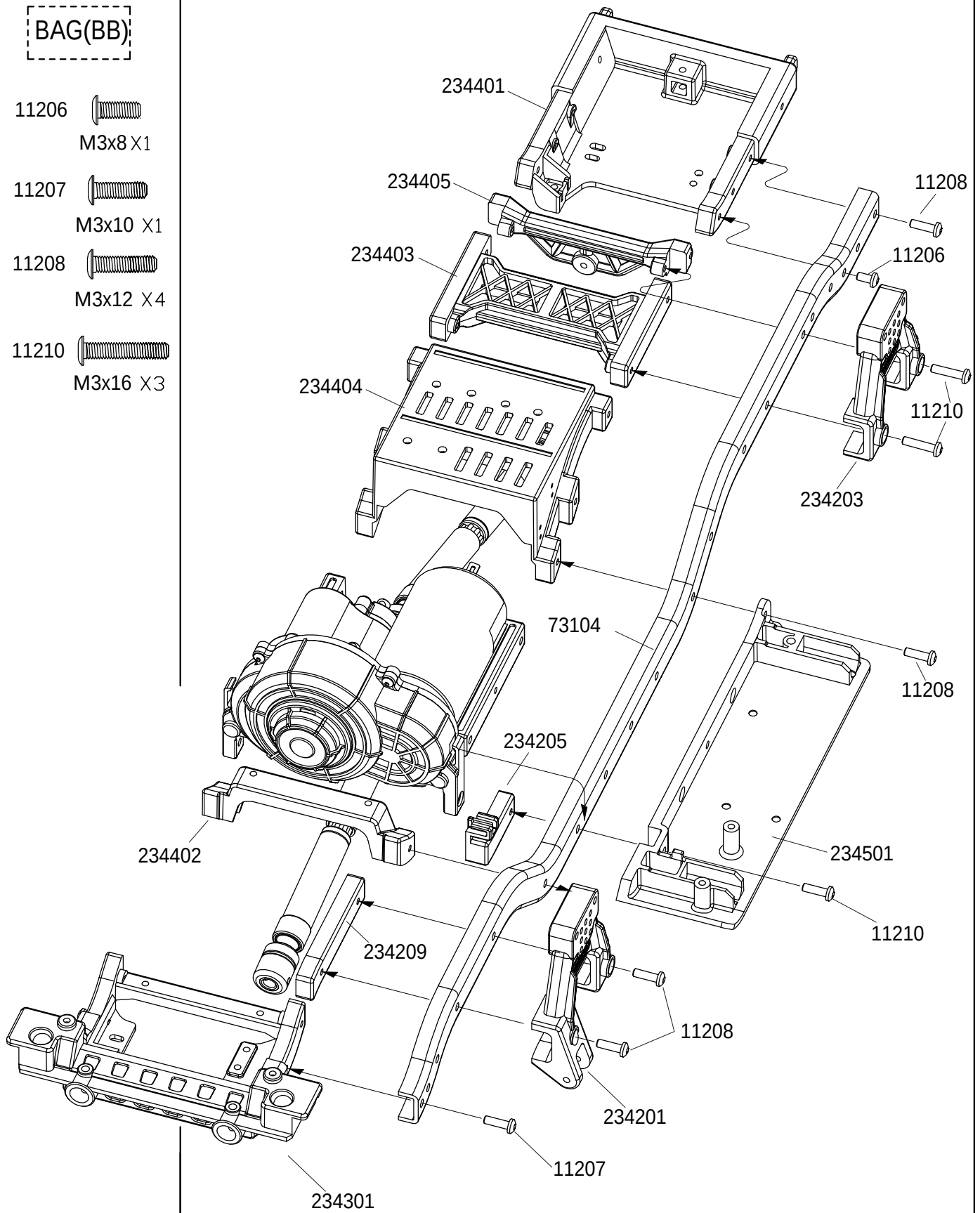
11207 
M3x10 X2

11413 
M4x13.5 X2



BAG(BB)

- 11206 
M3x8 X1
- 11207 
M3x10 X1
- 11208 
M3x12 X4
- 11210 
M3x16 X3



BAG(BB)

11206 
M3x8 X1

11208

11206

11210

73105

11208

11207 
M3x10 X1

11208 
M3x12 X4

11210 
M3x16 X3

234502

11210

11208

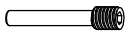
234206

234210

11207

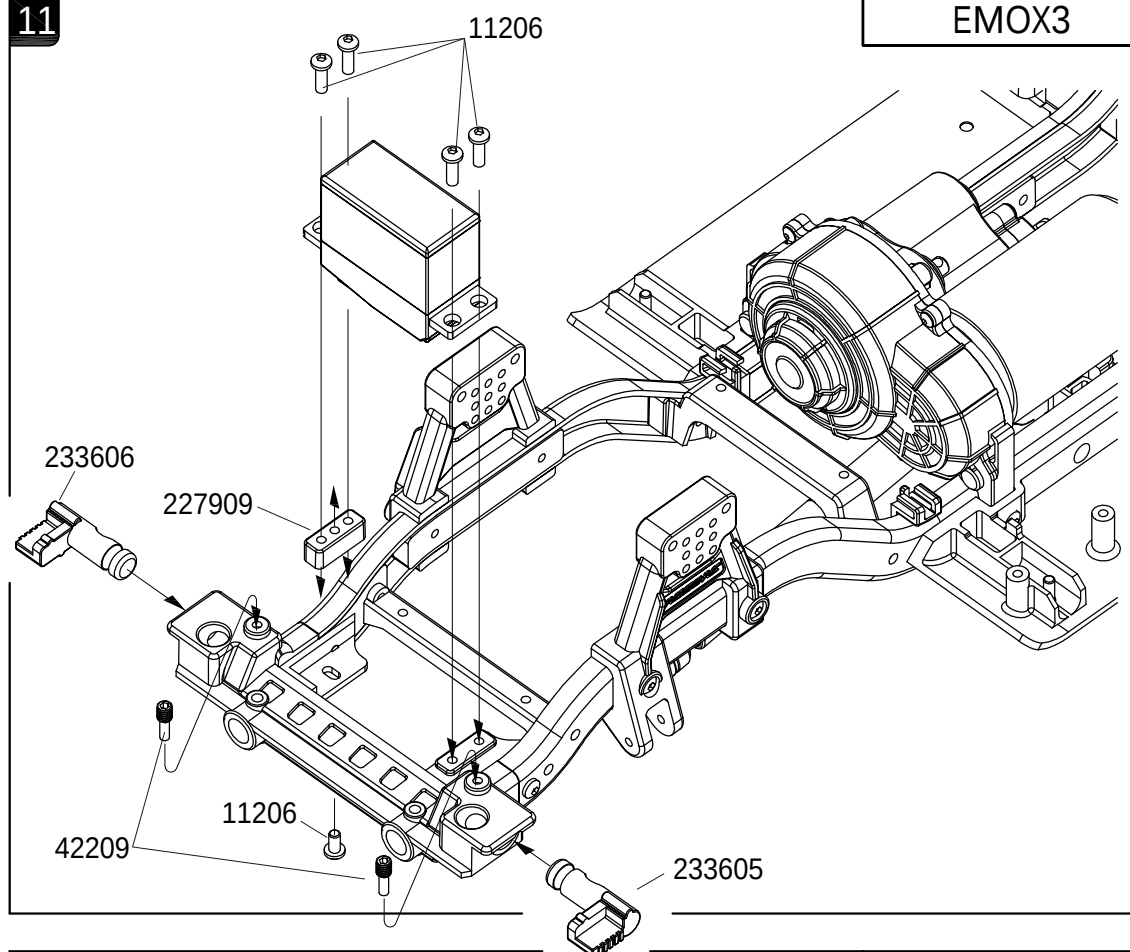
BAG(BB)

11206 
M3x8 X5


42209 X2

11

EMOX3



12

EMOX3

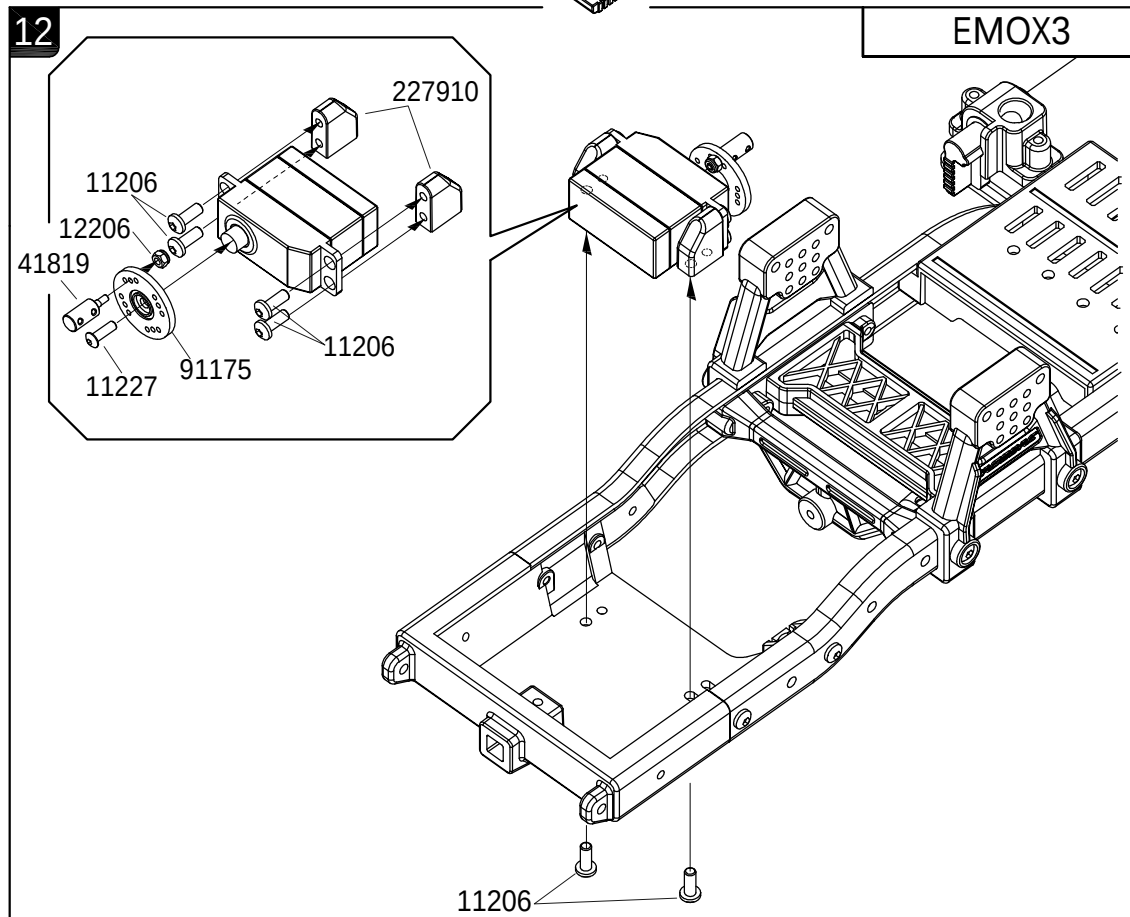
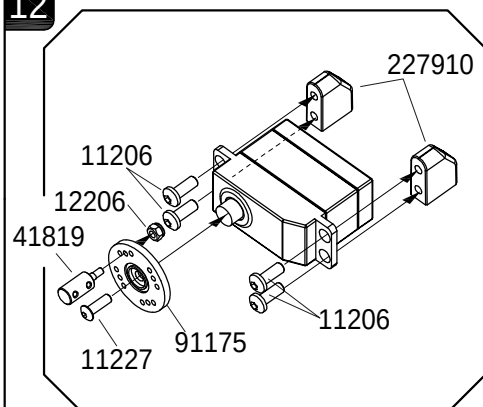
11206 
M3x8 X6

BAG(AA)

11227 
M2.5x8 X1

12206 
M2 X1


41819 X1



13

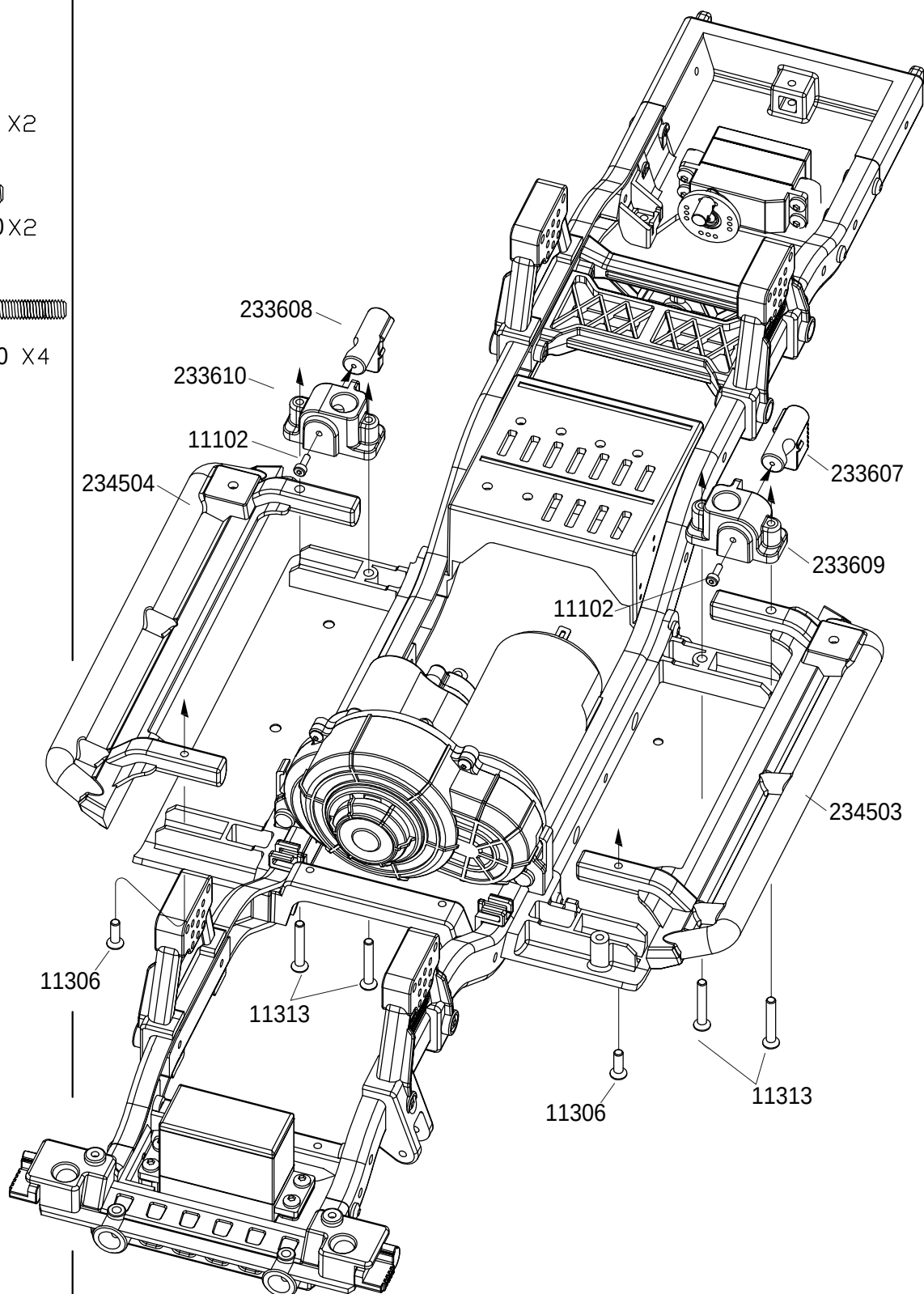
EMOX3

BAG(BB)

11102 
M2x6 X2

11306 
M3x10 X2

11313 
M3x20 X4



EMOX3

14

BAG(B)

13003 

$\phi 2.5 \times \phi 6 \times 0.4 \times 8$
 $\phi 7 \times \phi 2$

17037 X8

14115 
 $\phi 3 \times \phi 7 \times 0.1 \times 4$

 $\phi 7 \times \phi 3 \times \phi 2$

50021 X4

 $\phi 8 \times \phi 6 \times \phi 1$

17001 X4

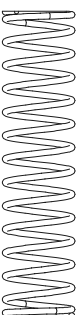
11133 
 M2x12 X4

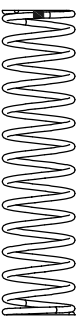
11102 
 M2x6 X4

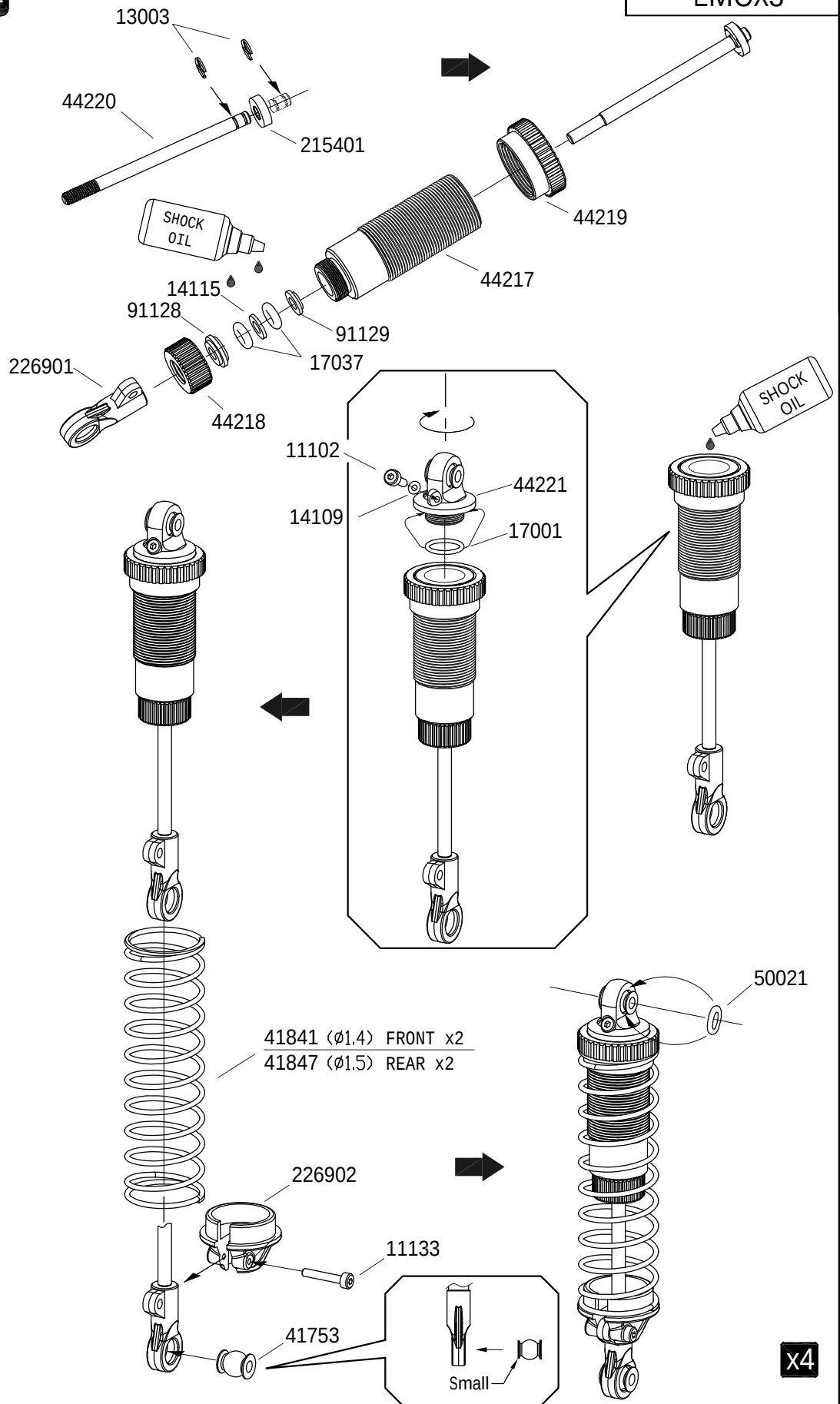
 $\phi 4 \times \phi 2 \times 0.5 \times 4$


 14109


 41753 X4


 41841 X2($\phi 1.4$)


 41847 X2($\phi 1.5$)
 White mark



BAG(D)

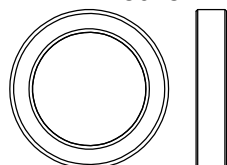
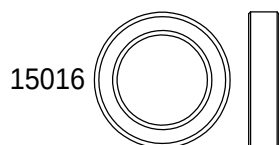
11316

M2.5x10 X2

11227

M2.5x8 X8

15015

 $\phi 15 \times \phi 21 \times 4$ X2 $\phi 12 \times \phi 18 \times 4$ X2

75026

 $\phi 12 \times \phi 15 \times 0.2$ X2

15012

 $\phi 5 \times \phi 10 \times 4$ X2

13002

 $\phi 3.8 \times \phi 9.2 \times 0.6$ X1

72007

 $\phi 5 \times \phi 8 \times 0.3$ X1

11125

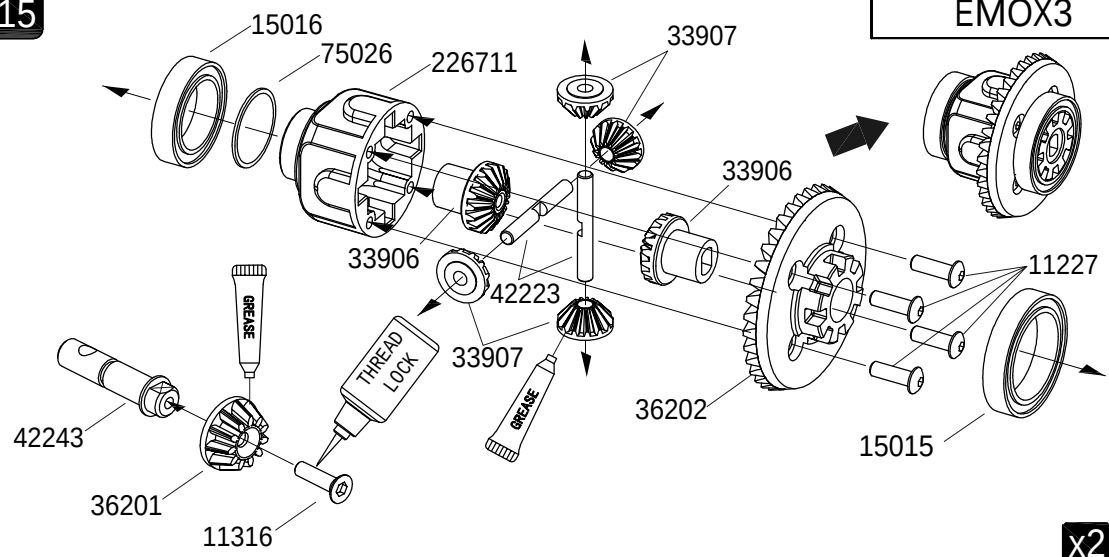
M2.5x10 X4

11316

M2.5x10 X8

15

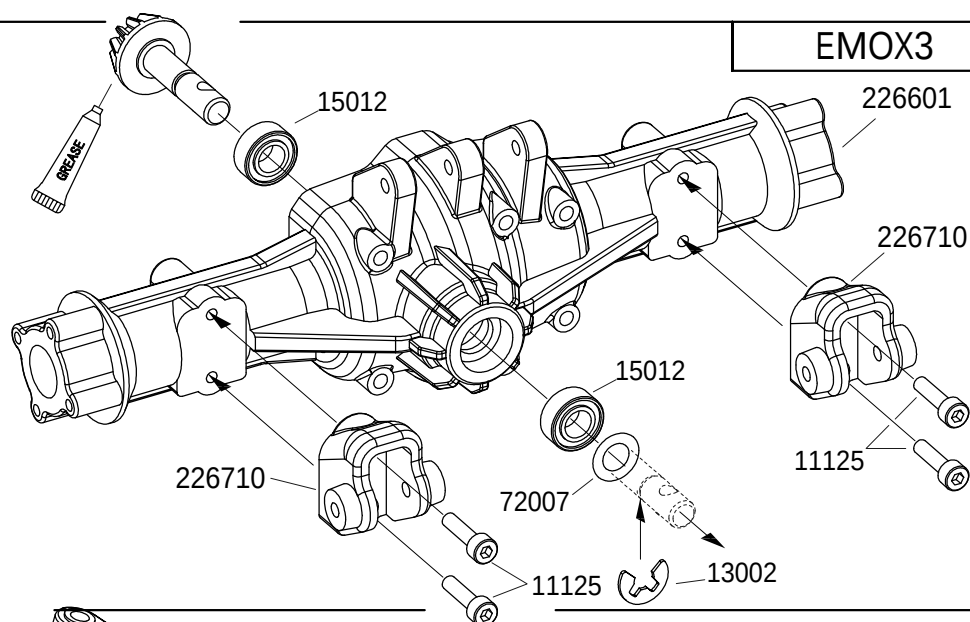
EMOX3



x2

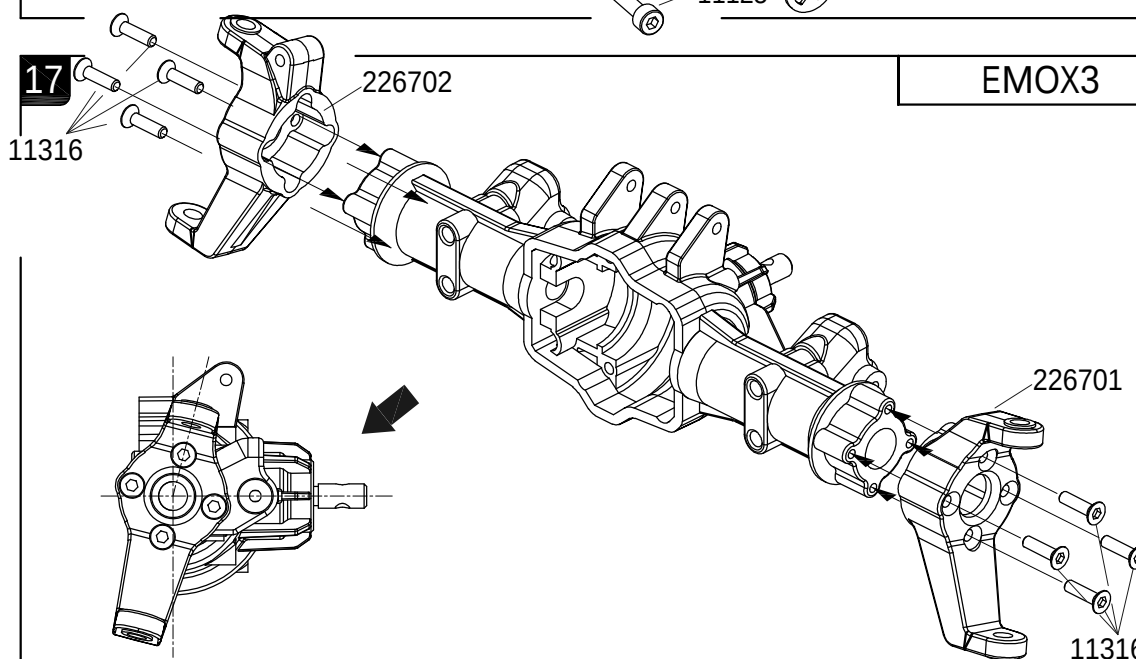
16

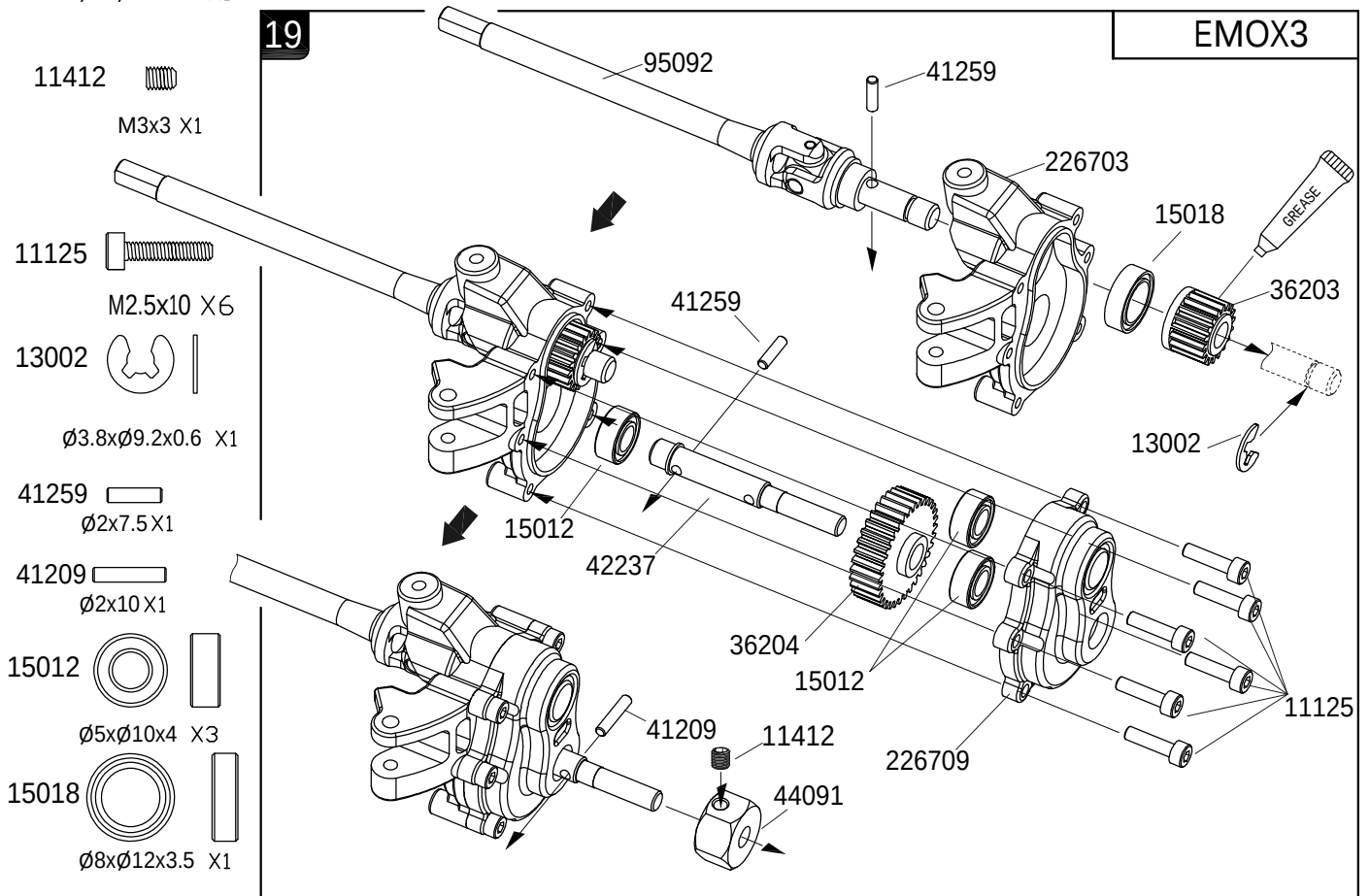
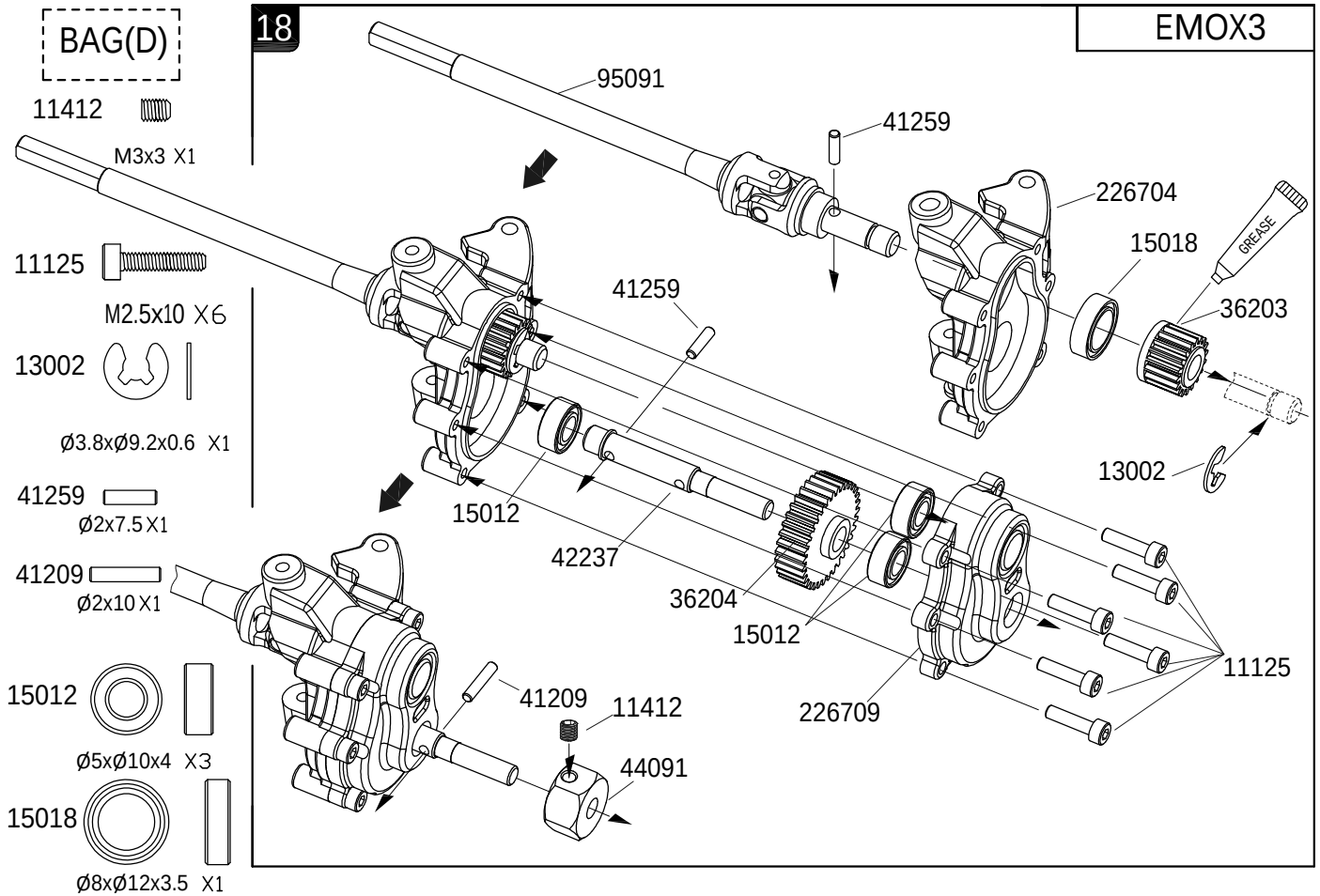
EMOX3



17

EMOX3



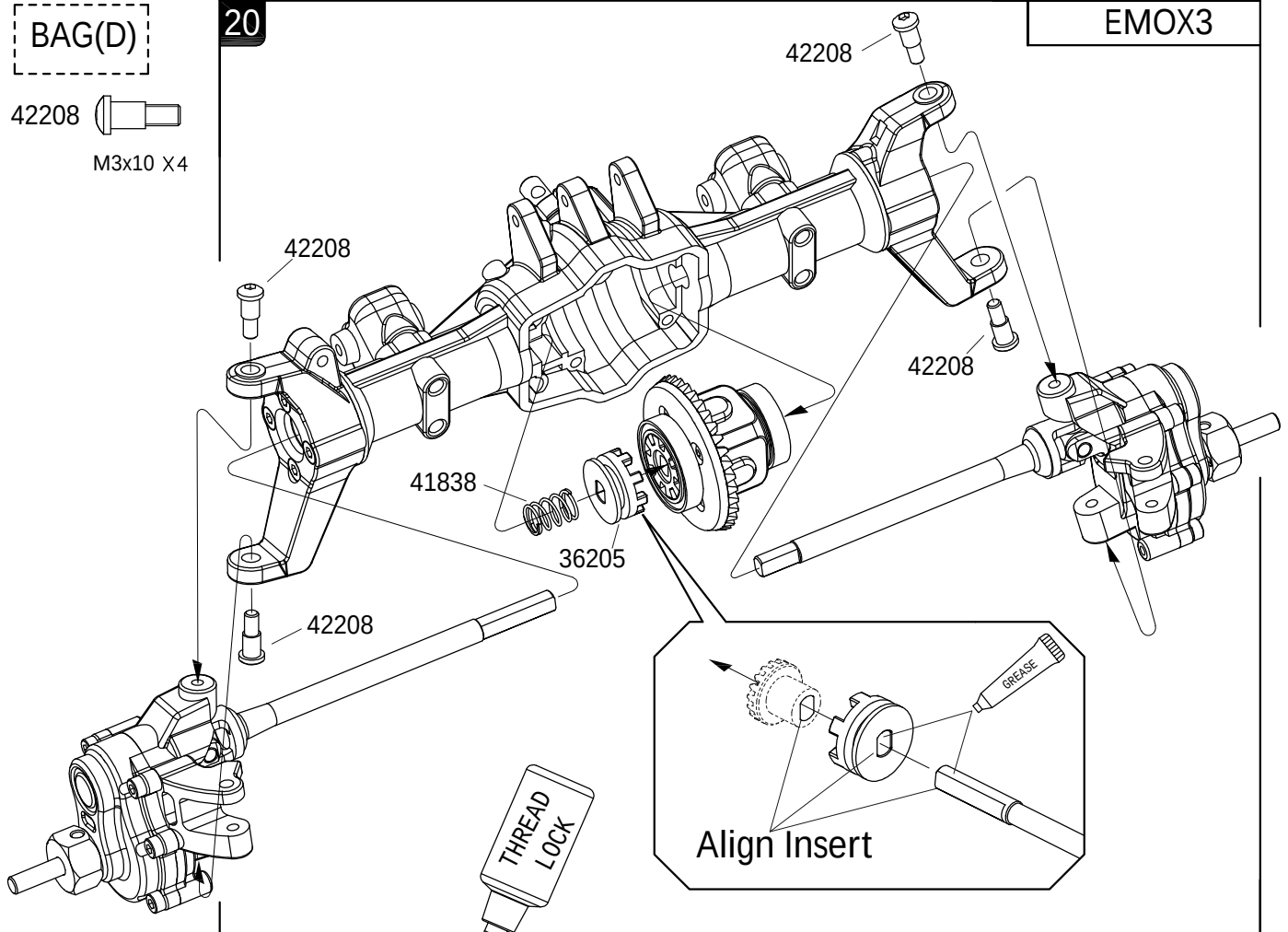


EMOX3

20

BAG(D)

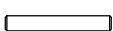
42208 
M3x10 X4



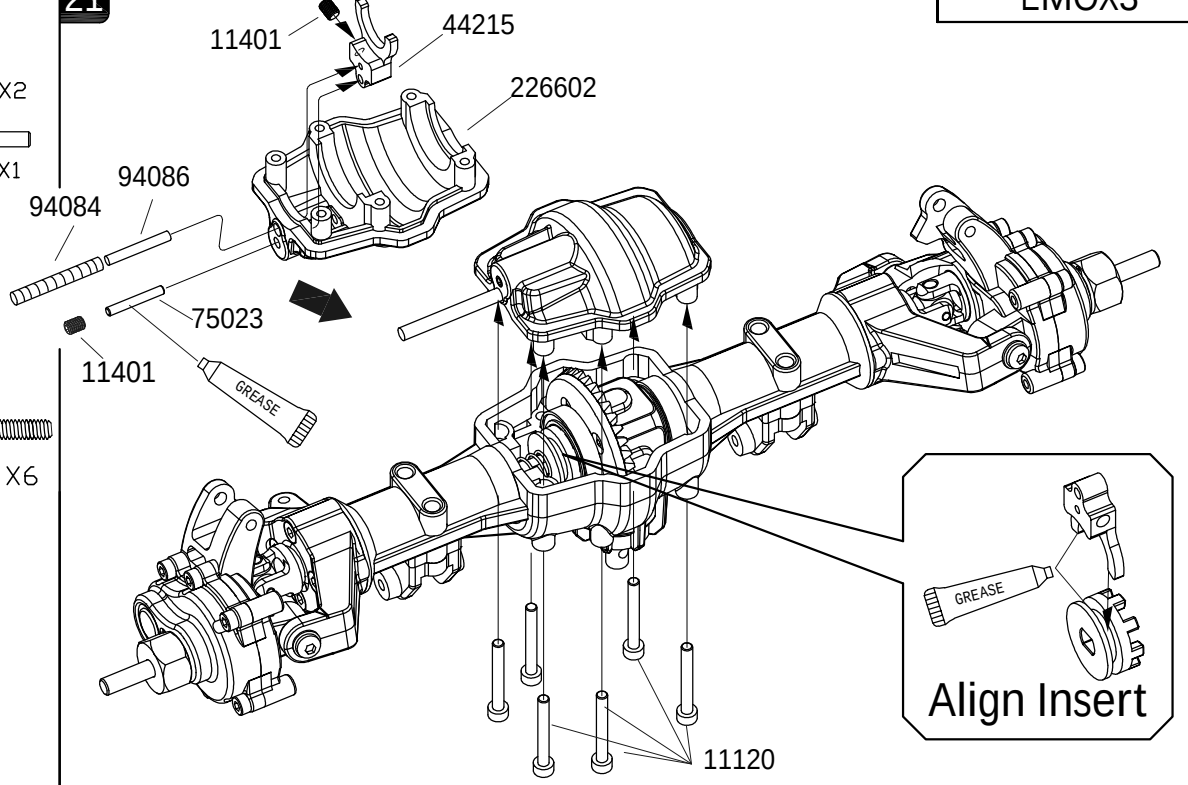
EMOX3

21

11401 
M3x4 X2

75023 
Ø2x14 X1

11120 
M2.5x20 X6



BAG(D)

22

EMOX3



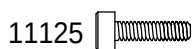
15012
Ø5xØ10x4 X2



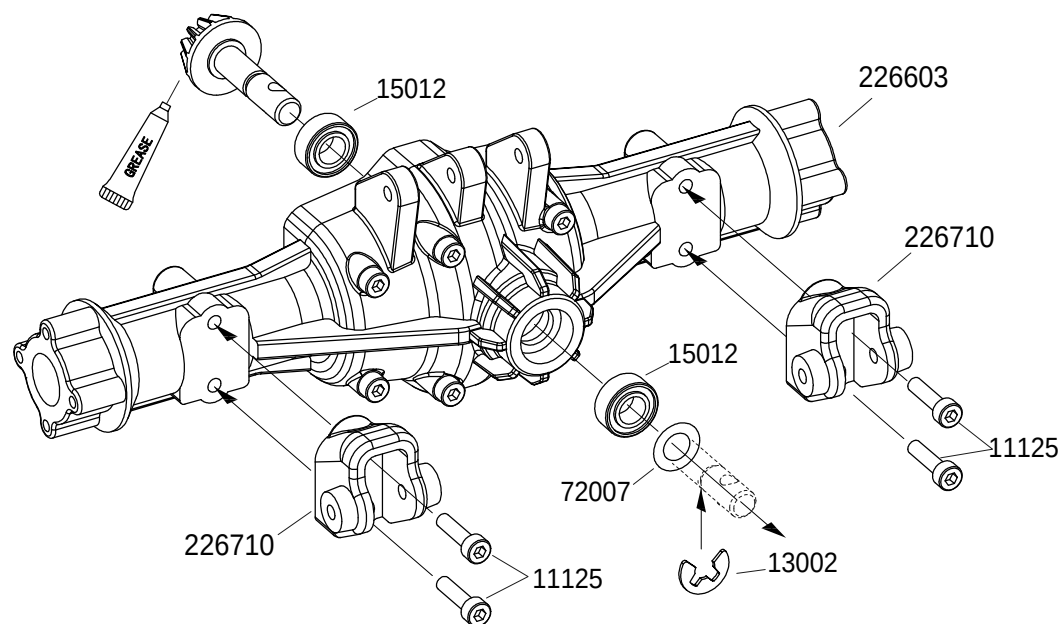
13002
Ø3.8xØ9.2x0.6 X1



72007
Ø5xØ8x0.3 X1

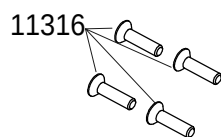


11125
M2.5x10 X4



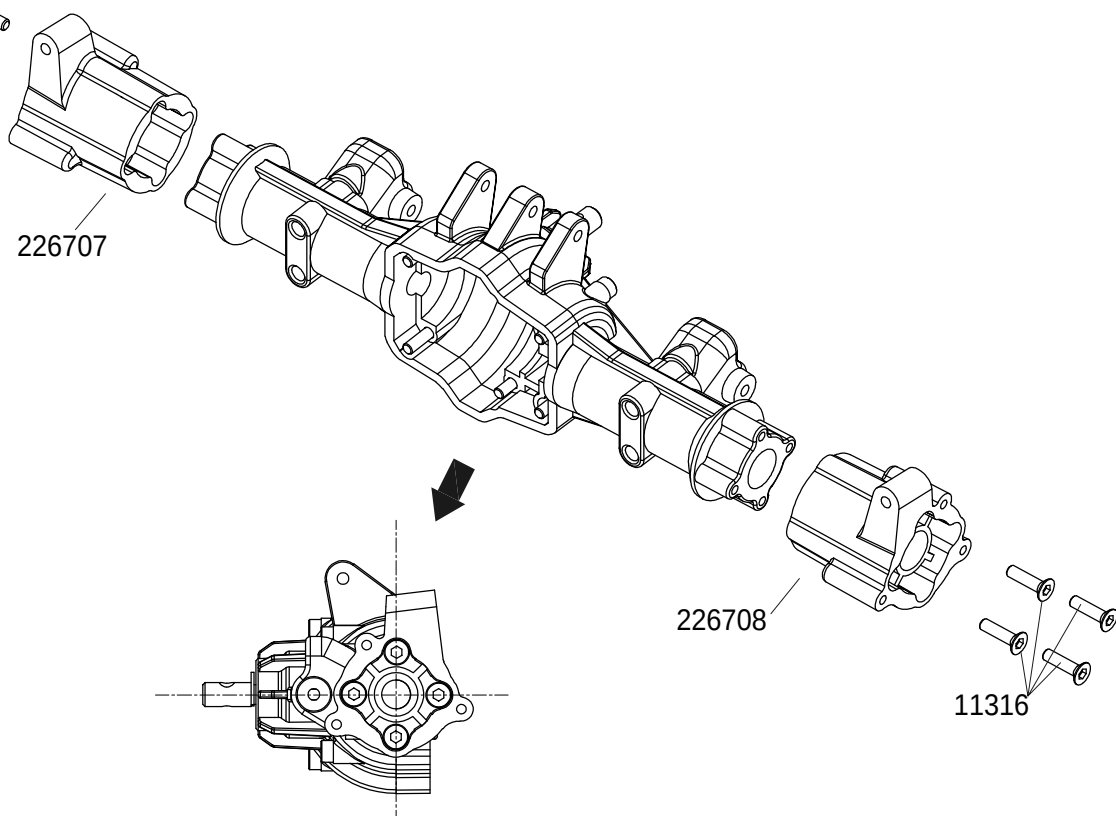
23

EMOX3



11316

11316
M2.5x10 X8

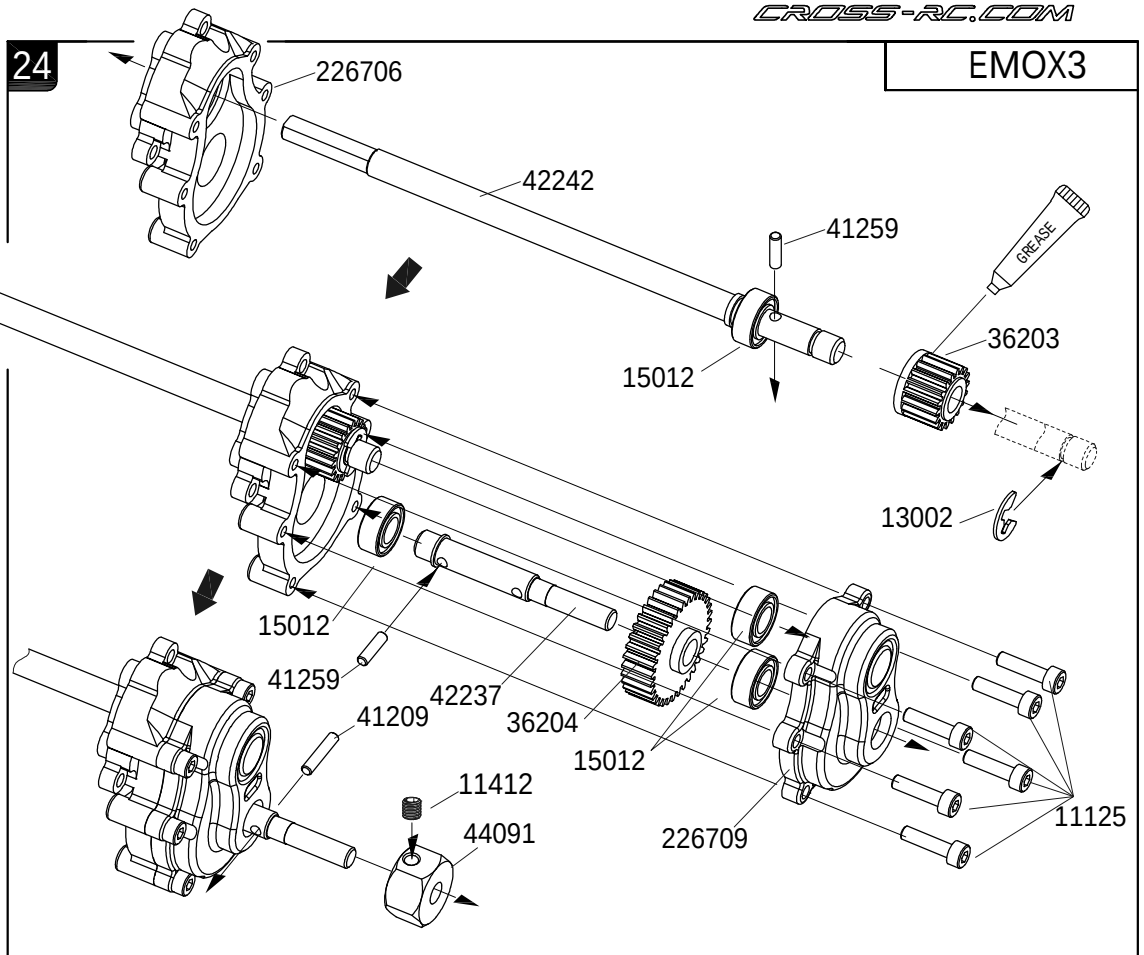


BAG(D)

24

EMOX3

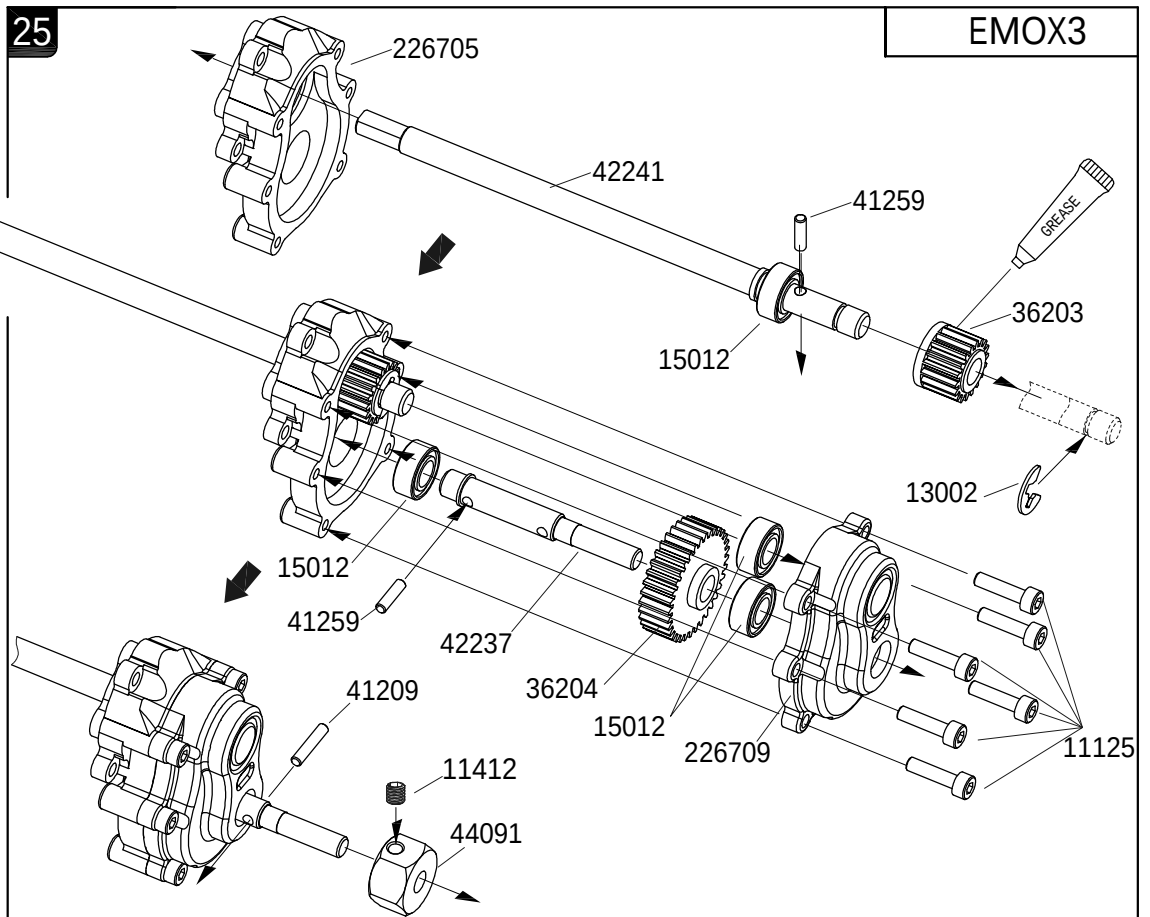
- 11412  M3x3 X1
- 15012   Ø5xØ10x4 X4
- 11125  M2.5x10 X6
- 13002  Ø3.8xØ9.2x0.6 X1
- 41259  Ø2x7.5 X1
- 41209  Ø2x10 X1



25

EMOX3

- 11412  M3x3 X1
- 15012   Ø5xØ10x4 X4
- 11125  M2.5x10 X6
- 13002  Ø3.8xØ9.2x0.6 X1
- 41259  Ø2x7.5 X1
- 41209  Ø2x10 X1



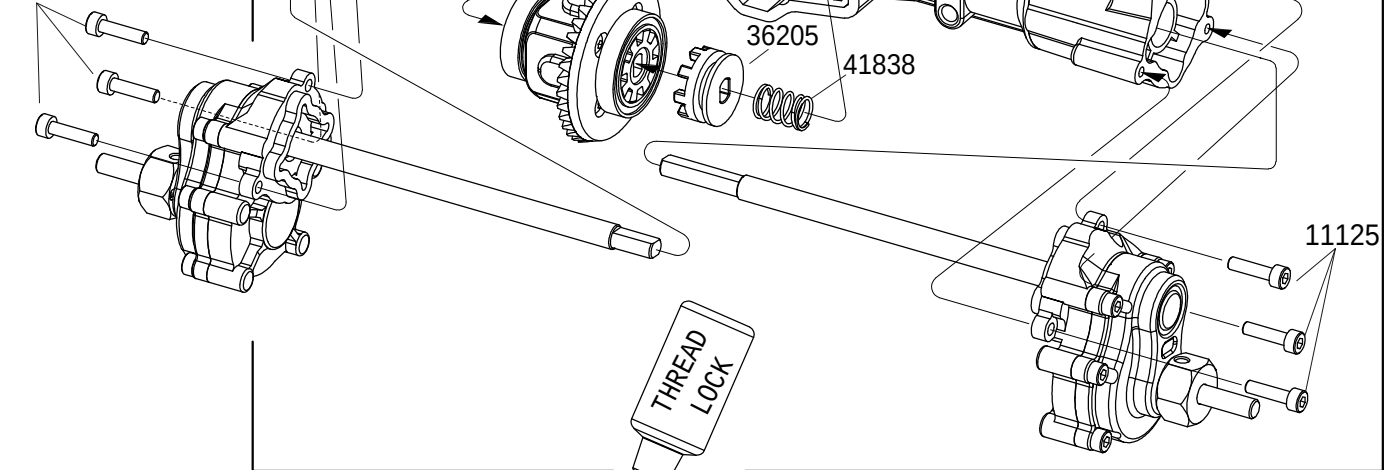
BAG(D)

26

EMOX3

11125  M2.5x10 X6

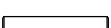
11125



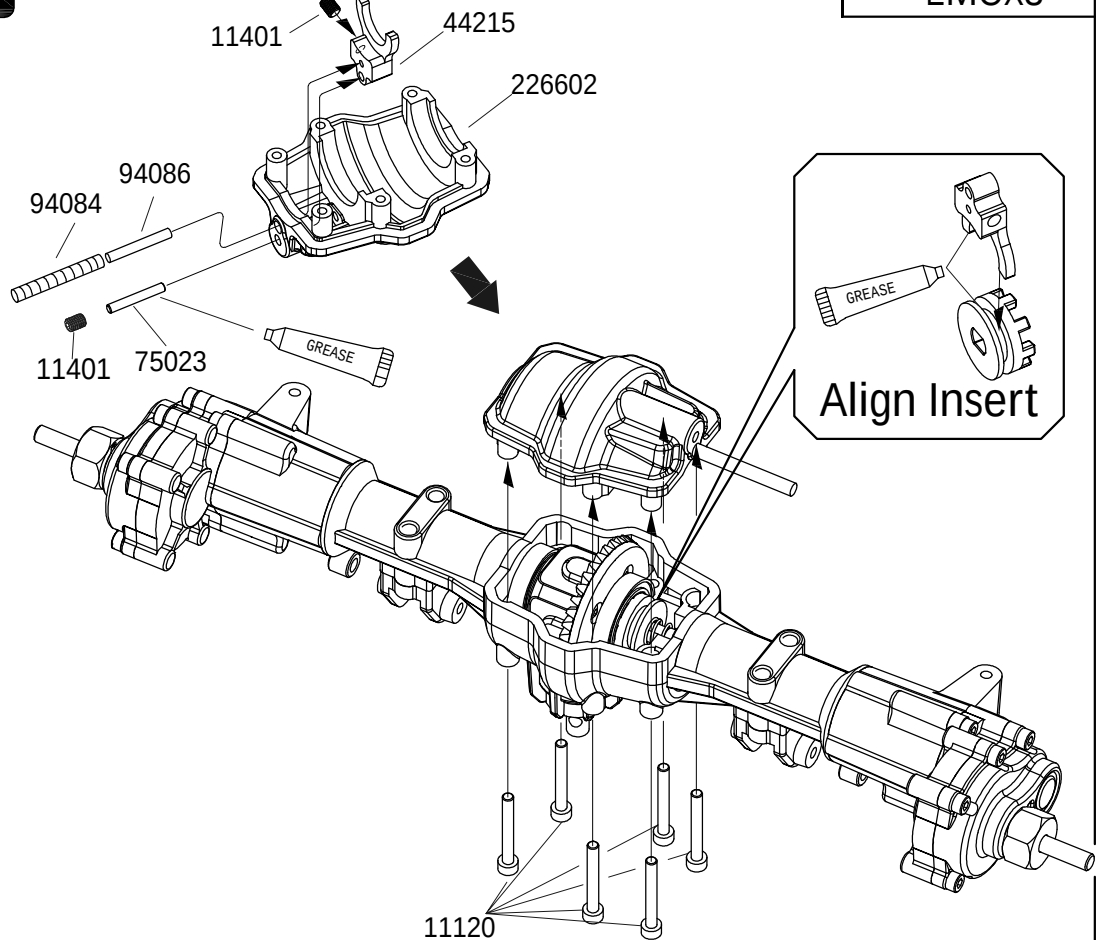
27

EMOX3

11401  M3x4 X2

75023  Ø2x14 X1

11120  M2.5x20 X6



28

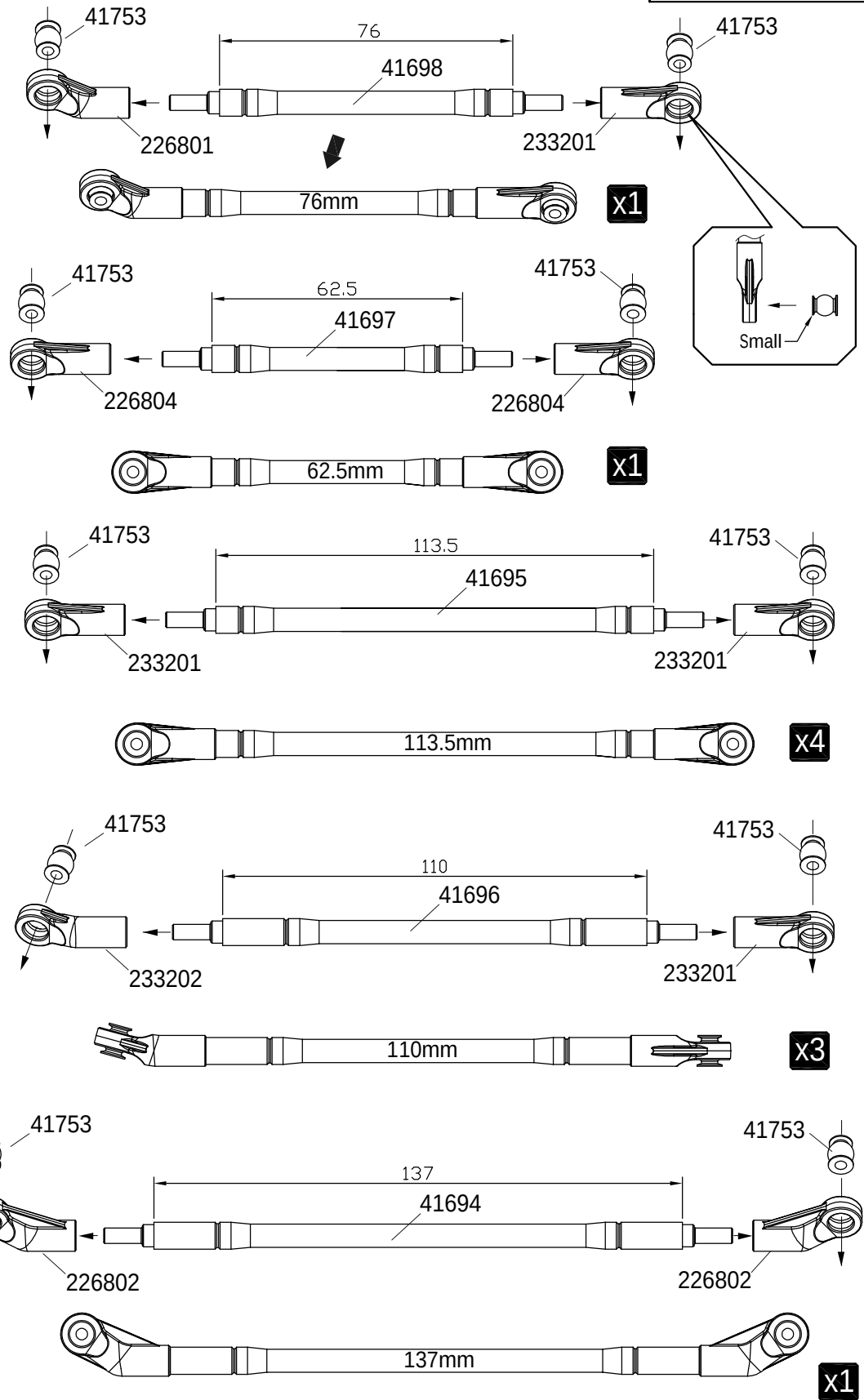
EMOX3

BAG(F)

BAG(G)



41753 X20

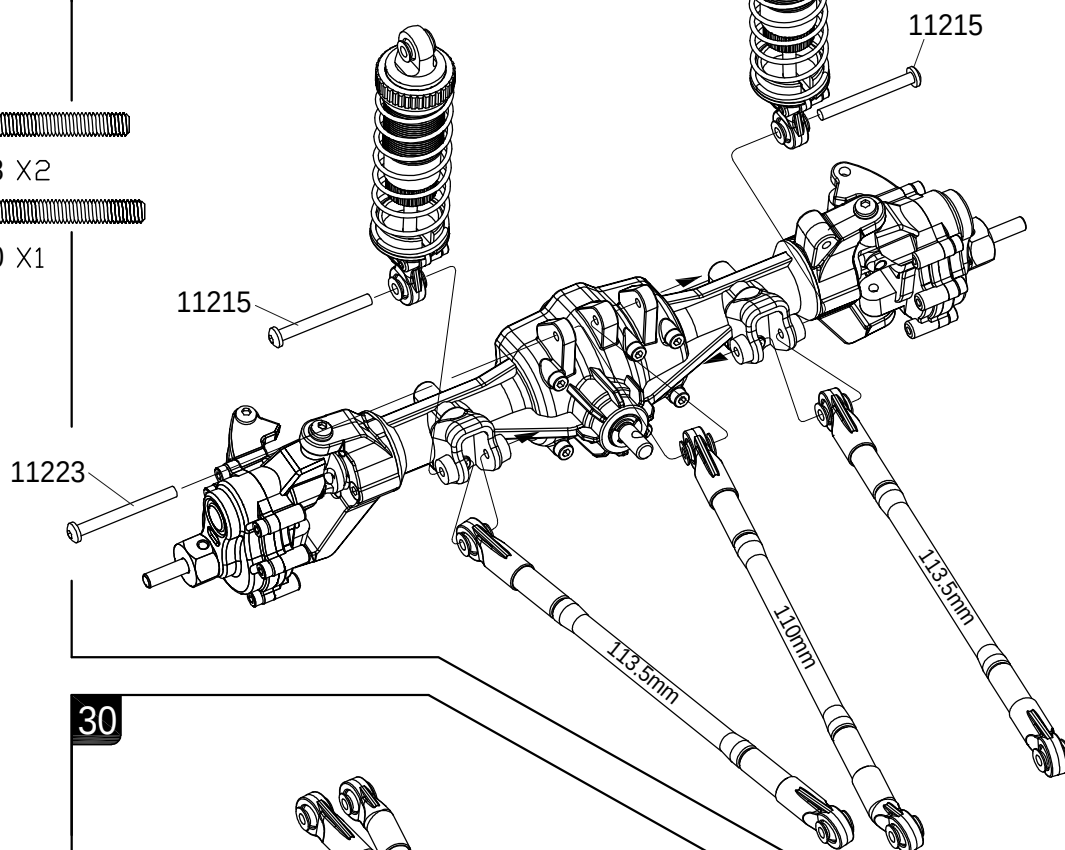


29

EMOX3

BAG(BB)

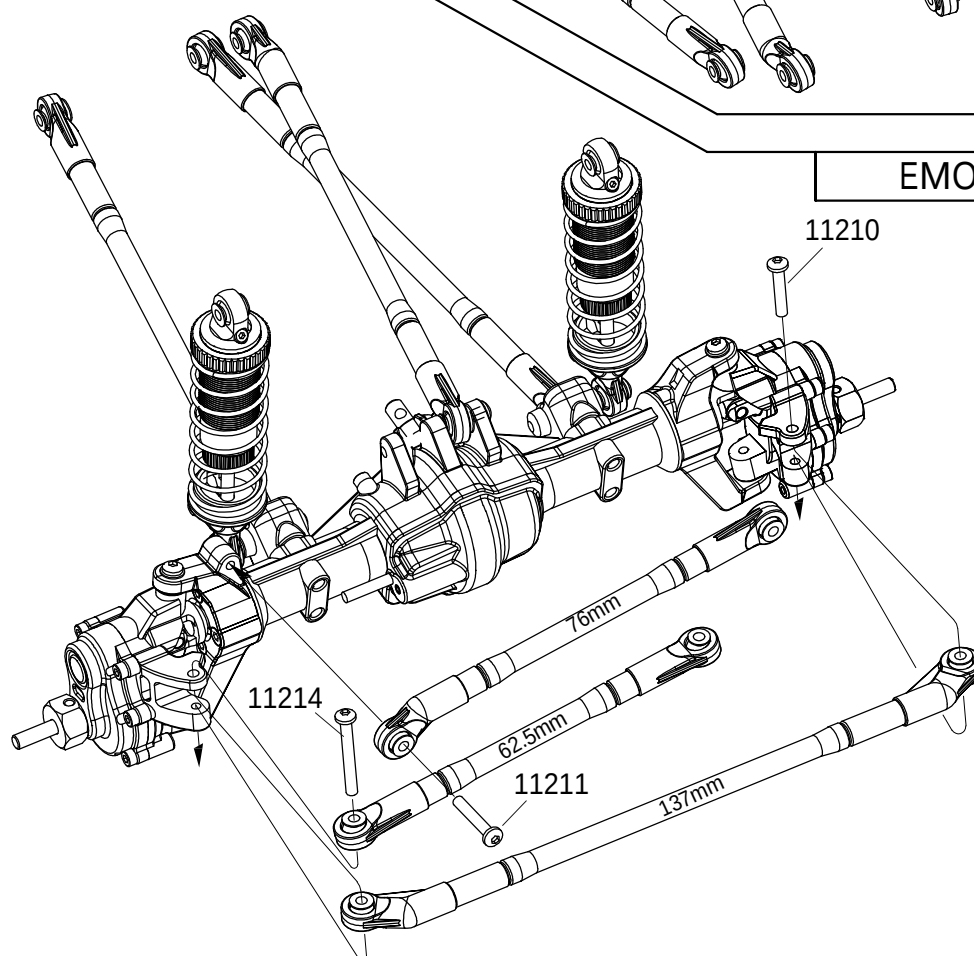
- 11215  M3x28 X2
 11223  M3x30 X1



30

EMOX3

- 11210  M3x16 X1
 11211  M3x18 X1
 11214  M3x25 X1

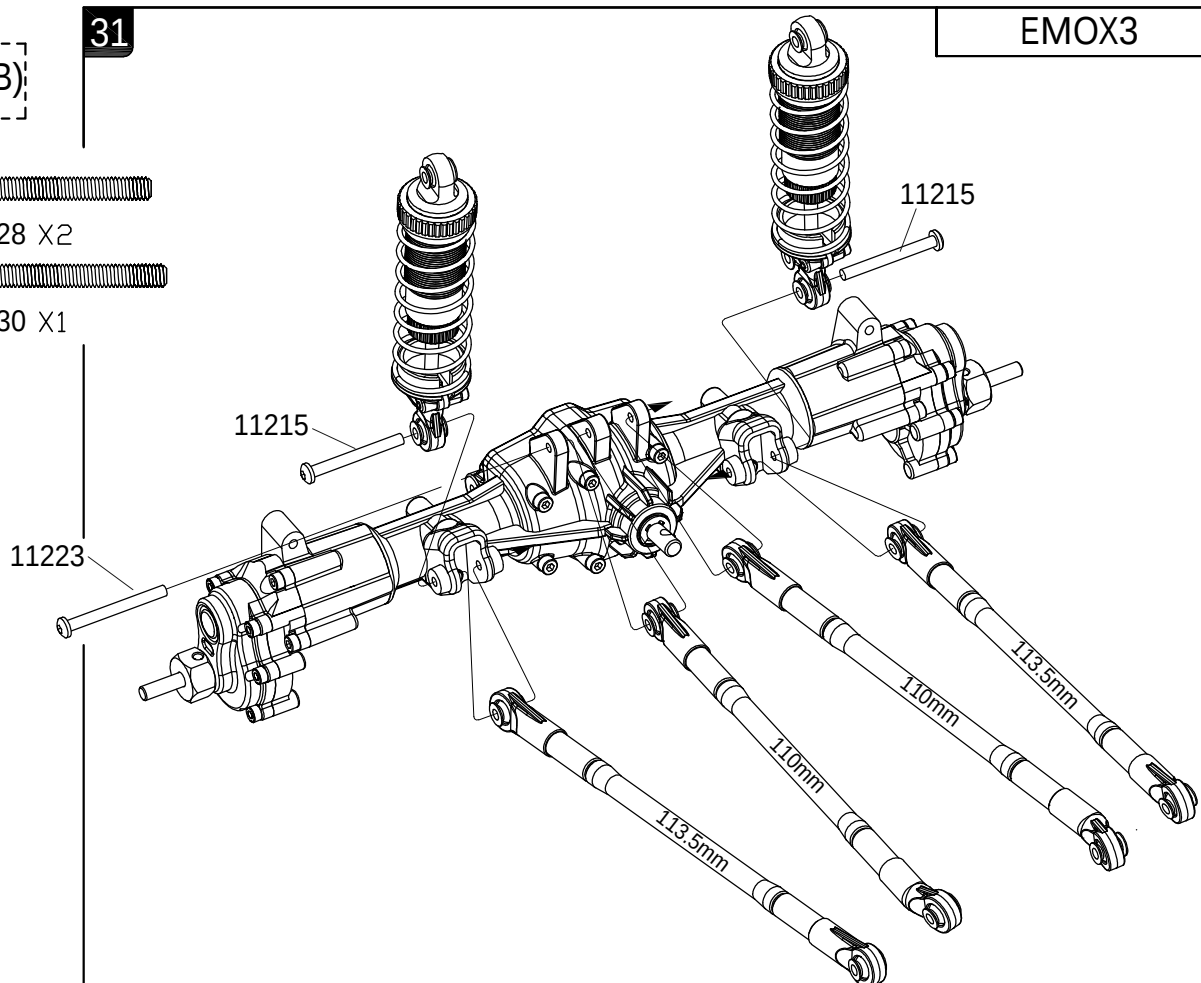


31

EMOX3

BAG(BB)

- 11215  M3x28 X2
- 11223  M3x30 X1

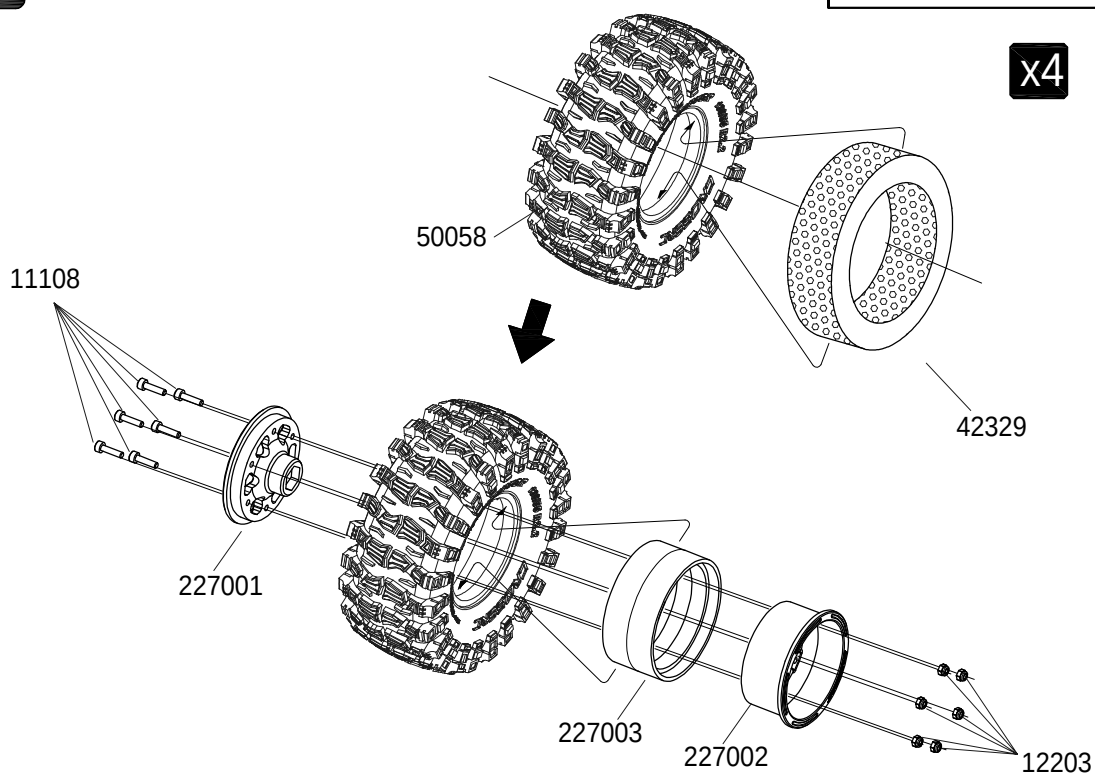


32

EMOX3

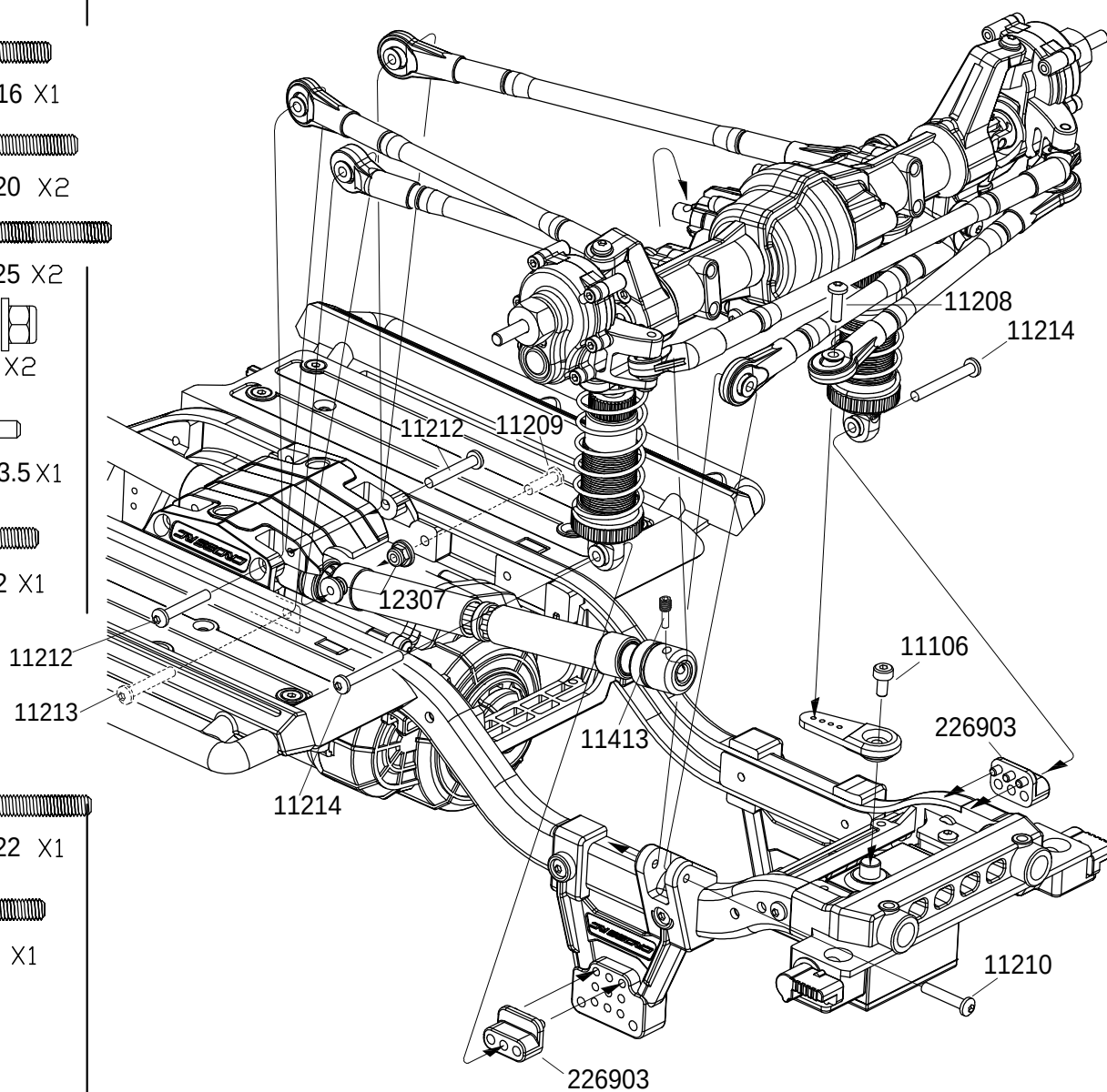
BAG(A)

- 11108  M3x12 X24
- 12203   M3 X24



BAG(BB)

- 11106 
M3x8 X1
- 11210 
M3x16 X1
- 11212 
M3x20 X2
- 11214 
M3x25 X2
- 12307 
M3 X2
- 11413 
M4x13.5 X1
- 11208 
M3x12 X1
- 11213 
M3x22 X1
- 11209 
M3x14 X1



34

EMOX3

BAG(BB)

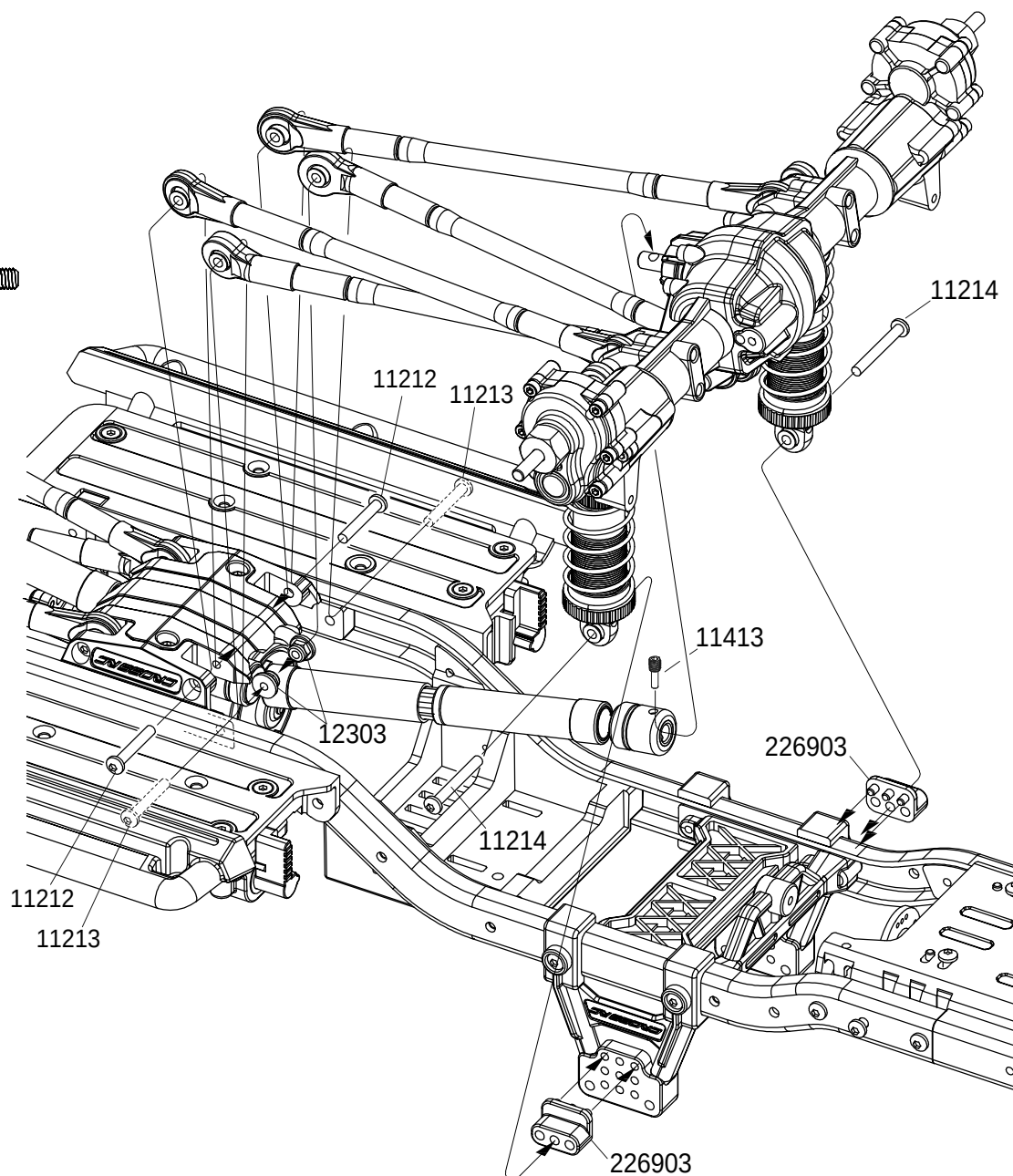
11212 
M3x20 X2

11213 
M3x22 X2

11214 
M3x25 X2

12303 
M3 X2

11413 
M4x13.5 X1



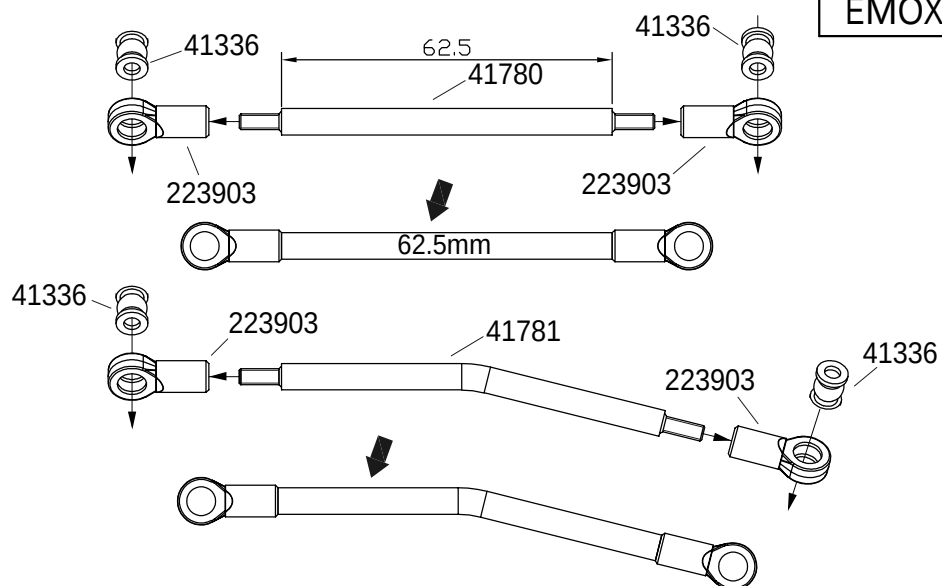
BAG(X)



41336 X 4

35

EMOX3



36

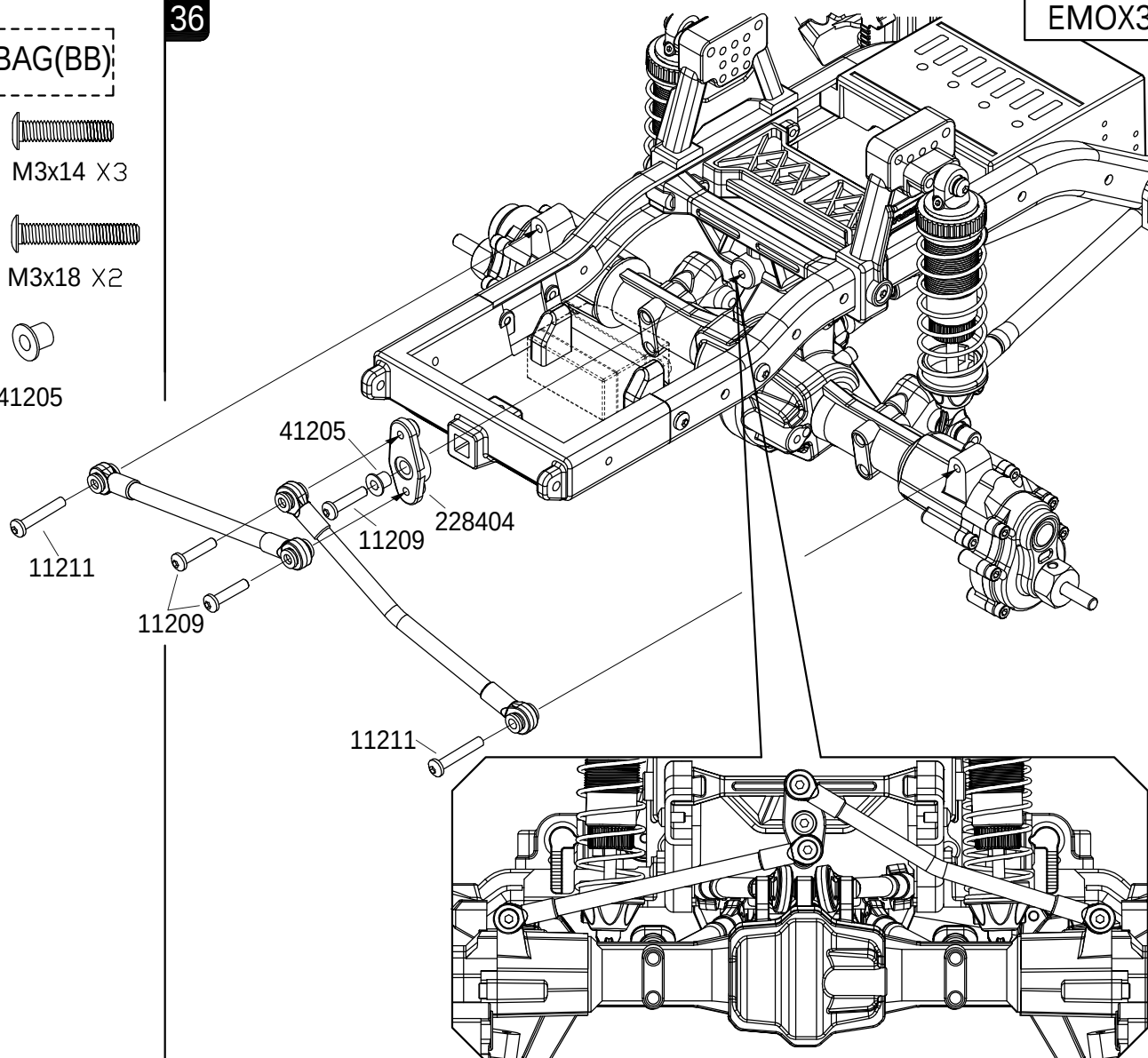
EMOX3

BAG(BB)

11209 M3x14 X3

11211 M3x18 X2

41205 41205



BAG(BB)

BAG(AA)

12206  
M2 X2



44172 X1



41819 X1


94056 X1

This exploded perspective view shows the front assembly of the device. It includes a front plate (11206) with a central opening, a front plate bracket (227901) with a latch (227911), and a front plate hinge (11227). A large black arrow points from the front plate towards the front plate bracket, indicating the assembly direction. The front plate bracket is shown with a latch (227911) and a front plate hinge (11227). The front plate hinge (11227) is shown with a spring (44172) and a front plate hinge (11227).

Exploded view diagram of the front suspension assembly. The components shown are:

- 44172: Coil spring
- 12206: Nut
- 91175: Disc brake rotor
- 94056: Hub assembly
- 11401: Wheel bearing

38

$$\text{BAG}(\text{BB})$$

11401  M3x4 X1

11207  M3x10 X4

39

Turn on the Transmitter then Receiver and set the Steering Servo Trim at the neutral position.

EMOX3**BAG(BB)**

11206  M3x8 X1

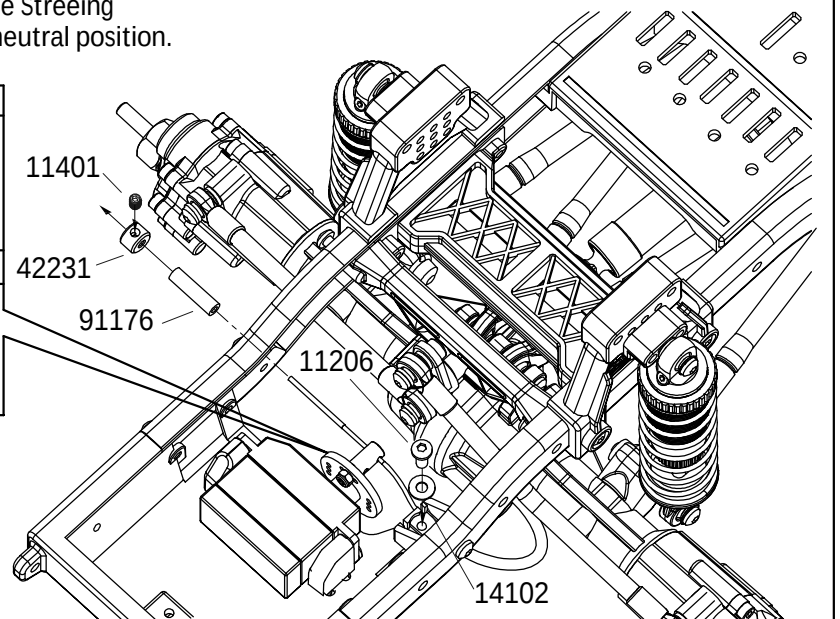
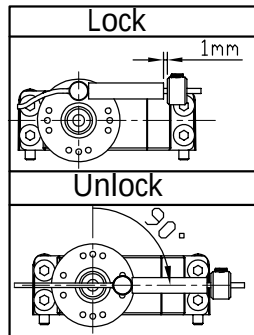
14102  $\varnothing 3 \times \varnothing 7 \times 0.5$ X1

BAG(AA)

11401  M3x4 X1

 42231 X1

 91176 X1

**40****EMOX3****BAG(BB)**

11206  M3x8 X1

14102  $\varnothing 3 \times \varnothing 7 \times 0.5$ X1

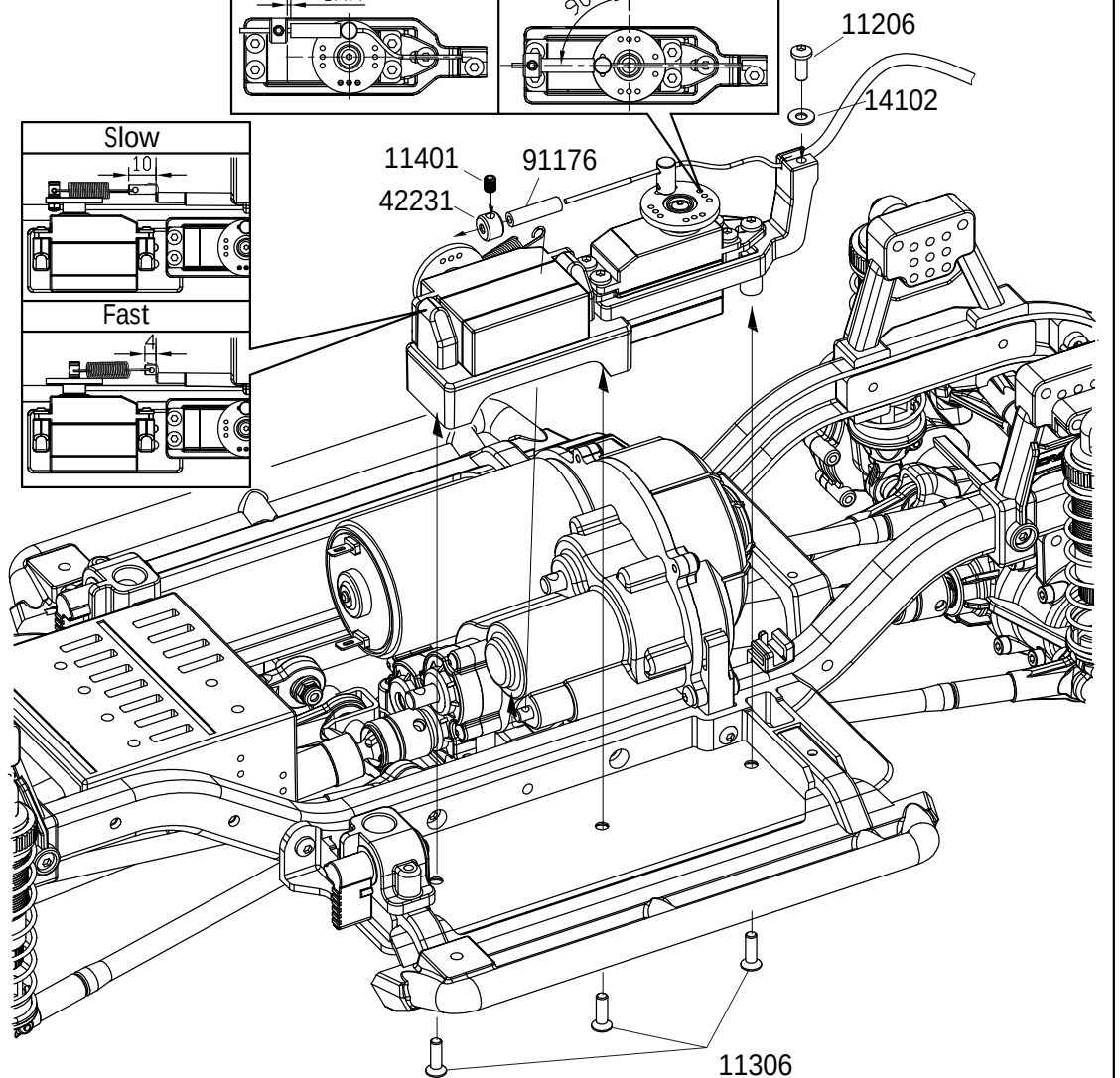
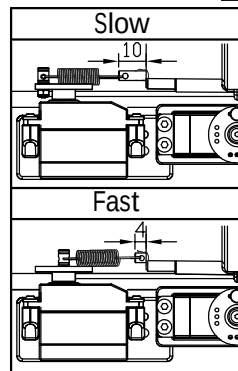
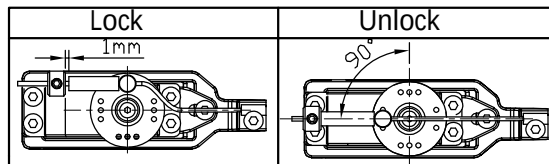
11306  M3x10 X3

BAG(AA)

11401  M3x4 X1

 42231 X1

 91176 X1

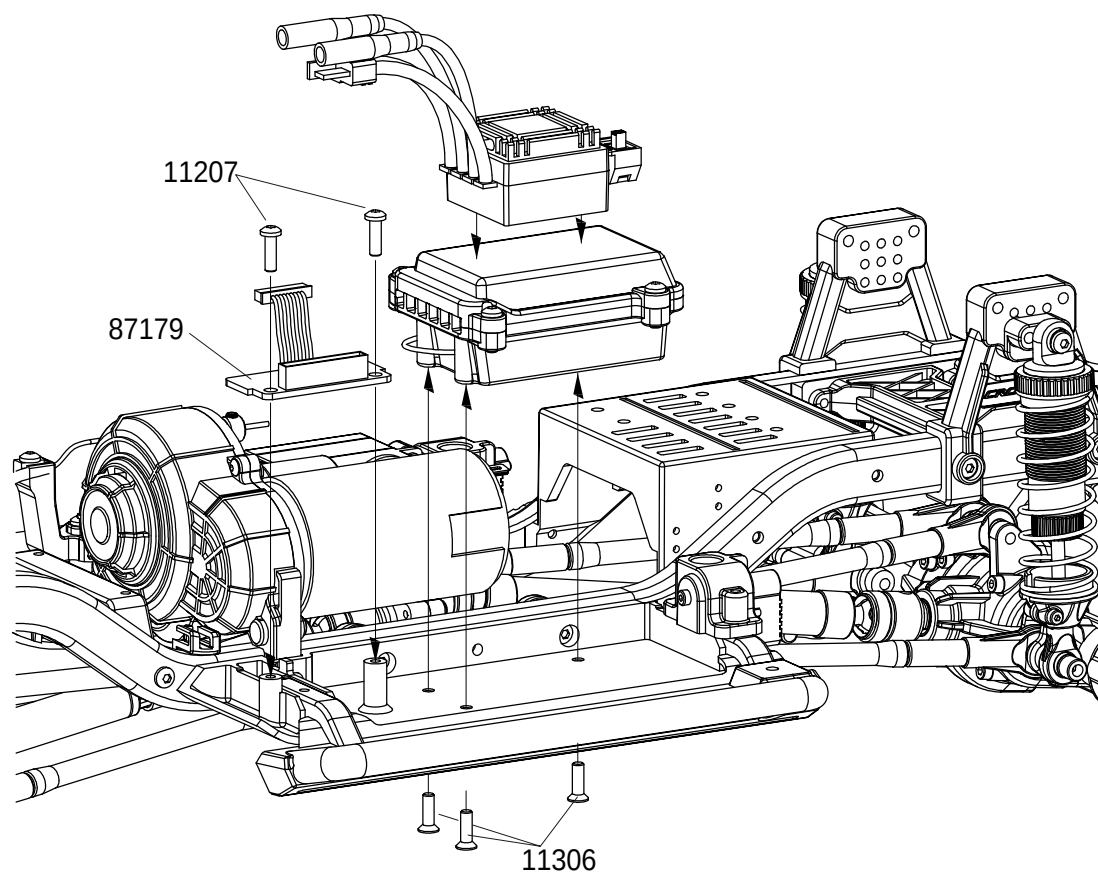


41

EMOX3

BAG(BB)

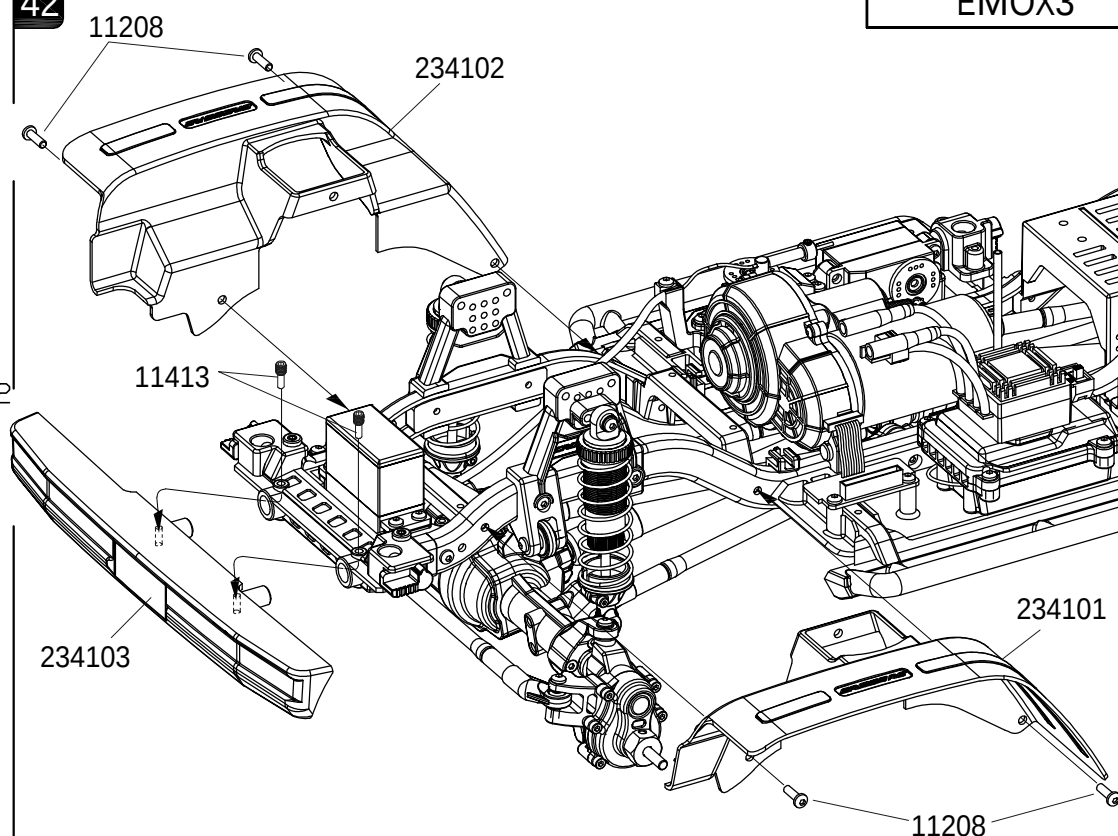
- 11207 
M3x10 X2
- 11306 
M3x10 X3



42

EMOX3

- 11208 
M3x12 X4
- 11413 
M4x13.5 X2

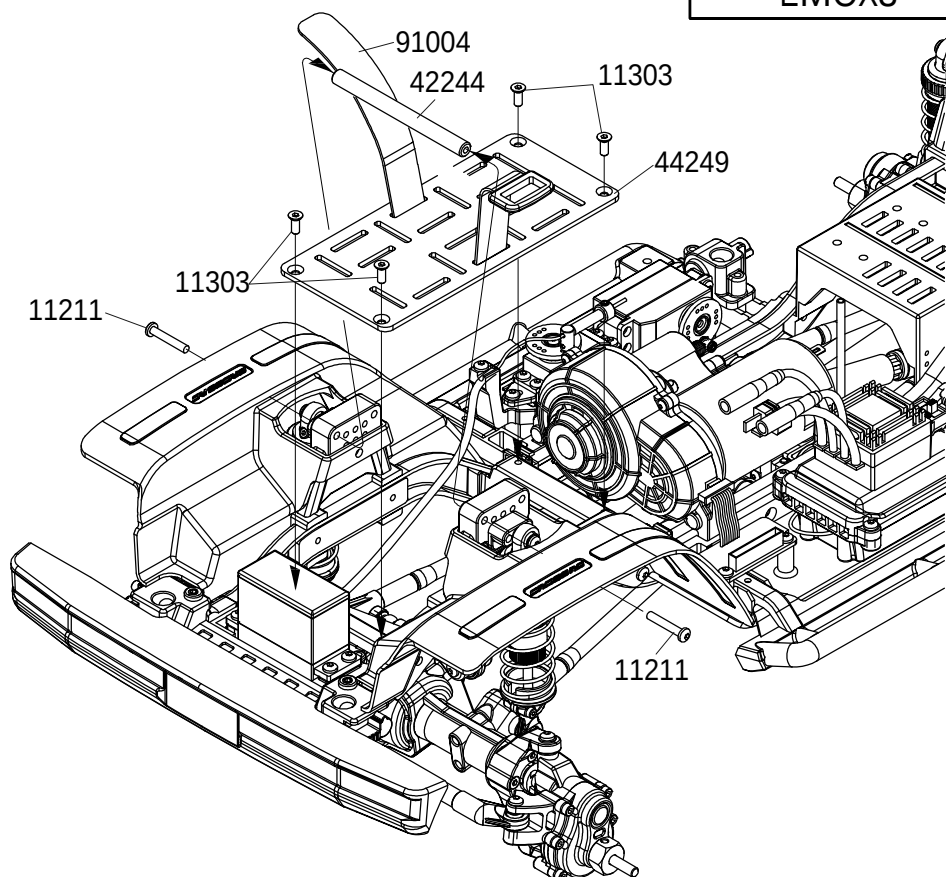


BAG(BB)

43

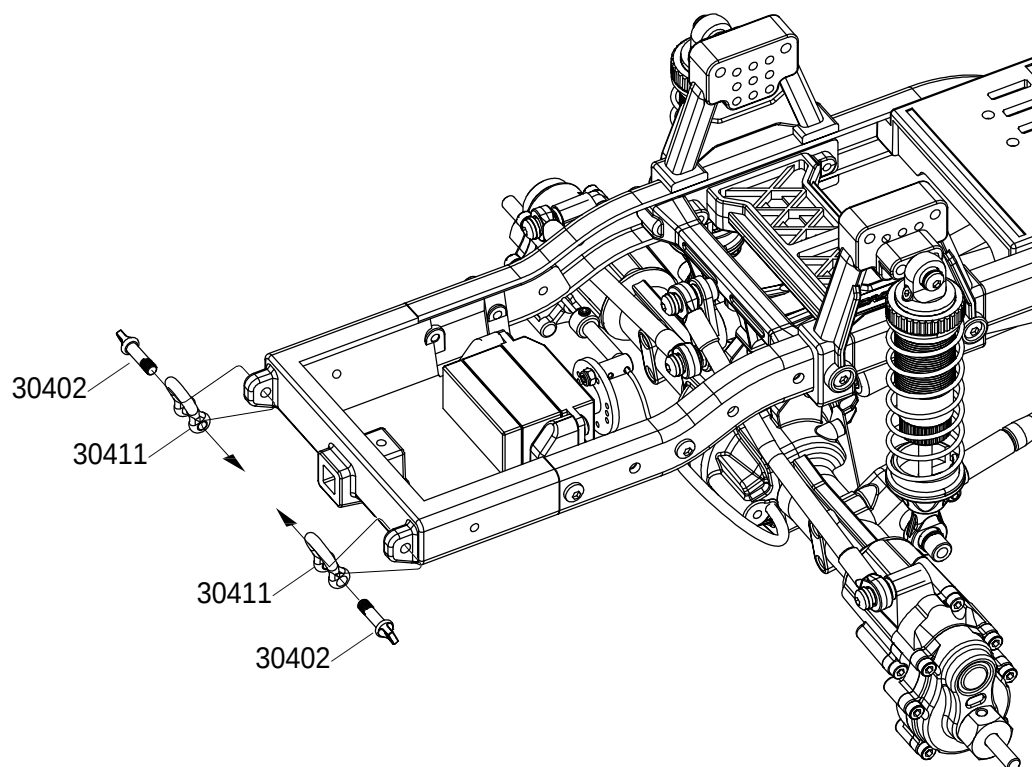
EMOX3

- 11303  M3x8 X4
- 11211  M3x18 X2

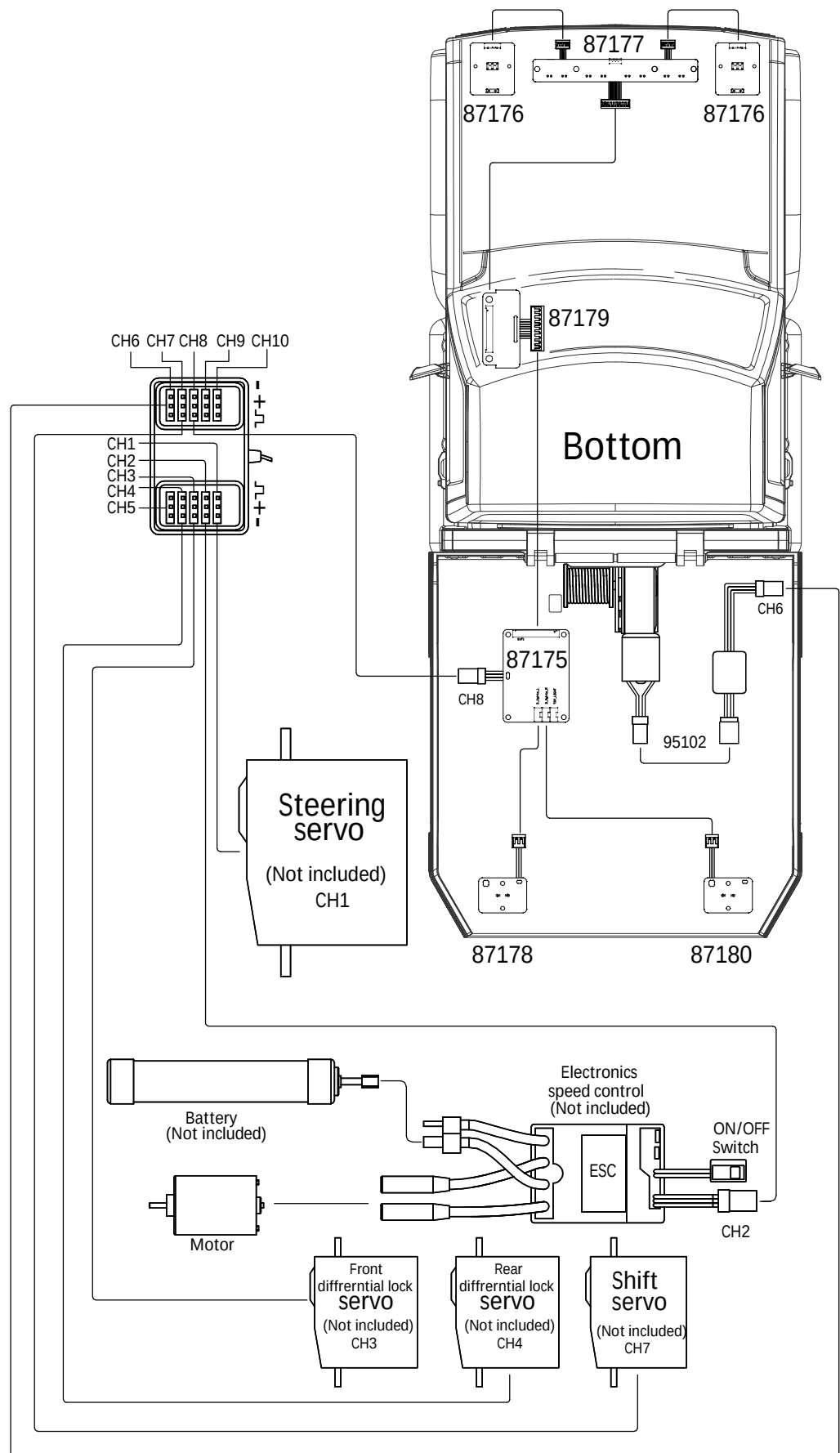


44

EMOX3



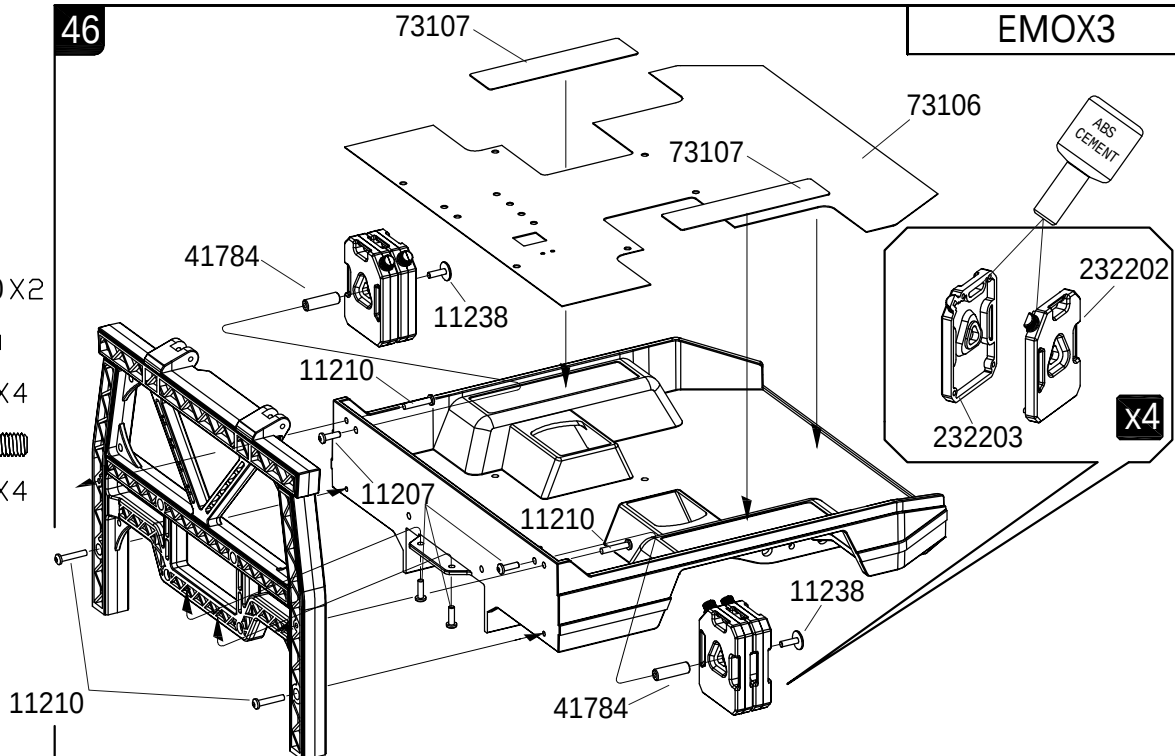
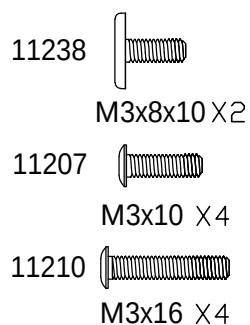
BAG(Y)



BAG(BB)

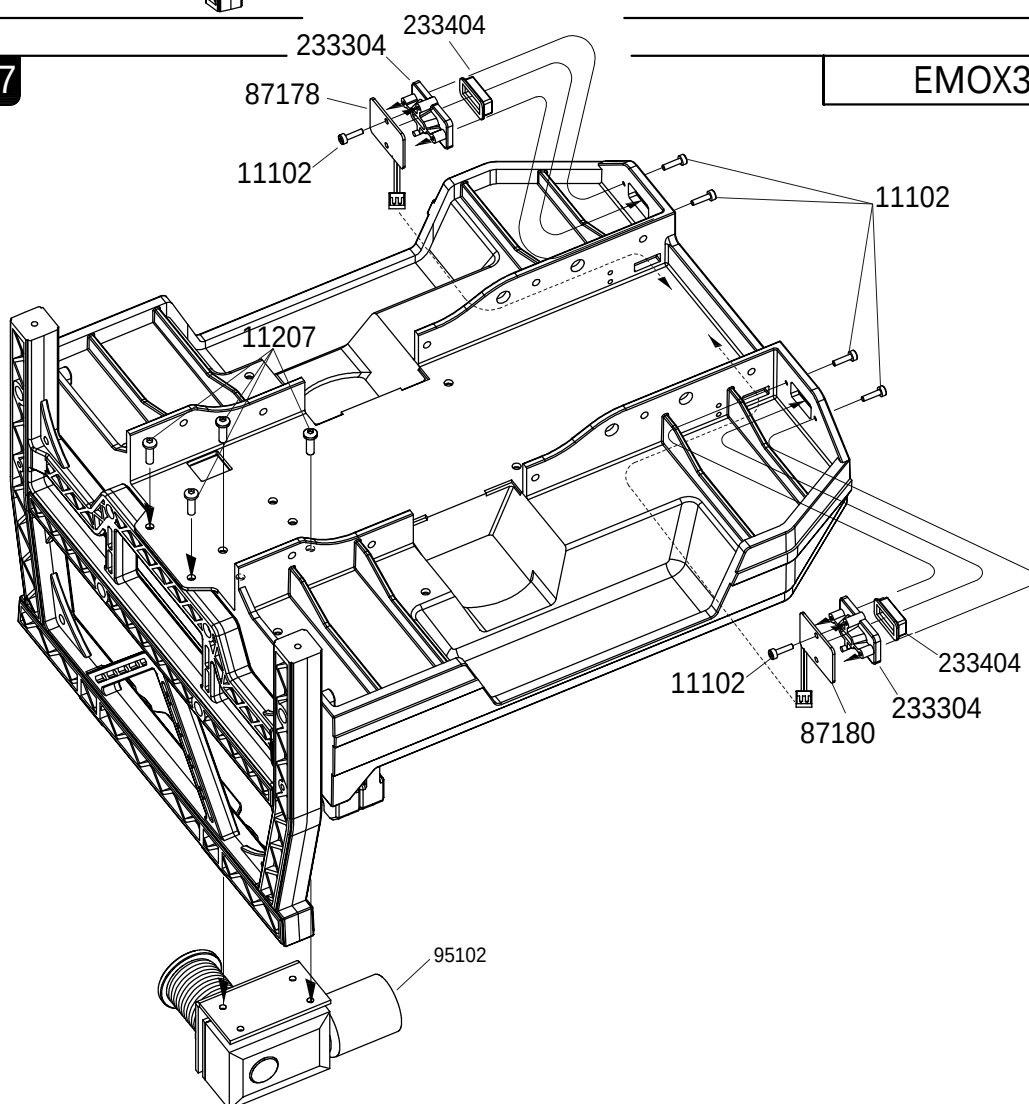
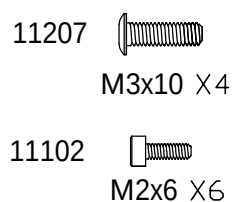
46

EMOX3



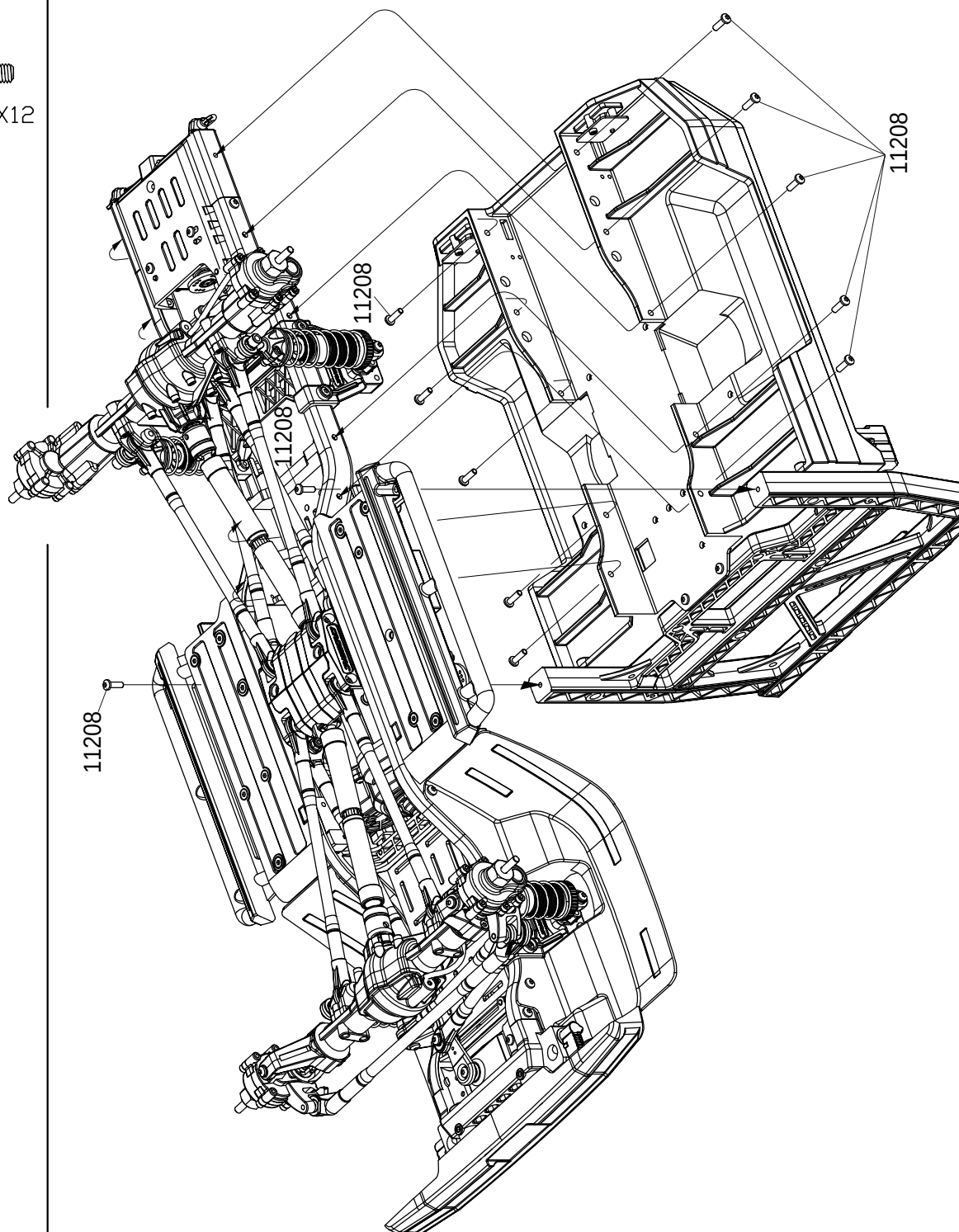
47

EMOX3



BAG(BB)

11208 
M3x12 X12



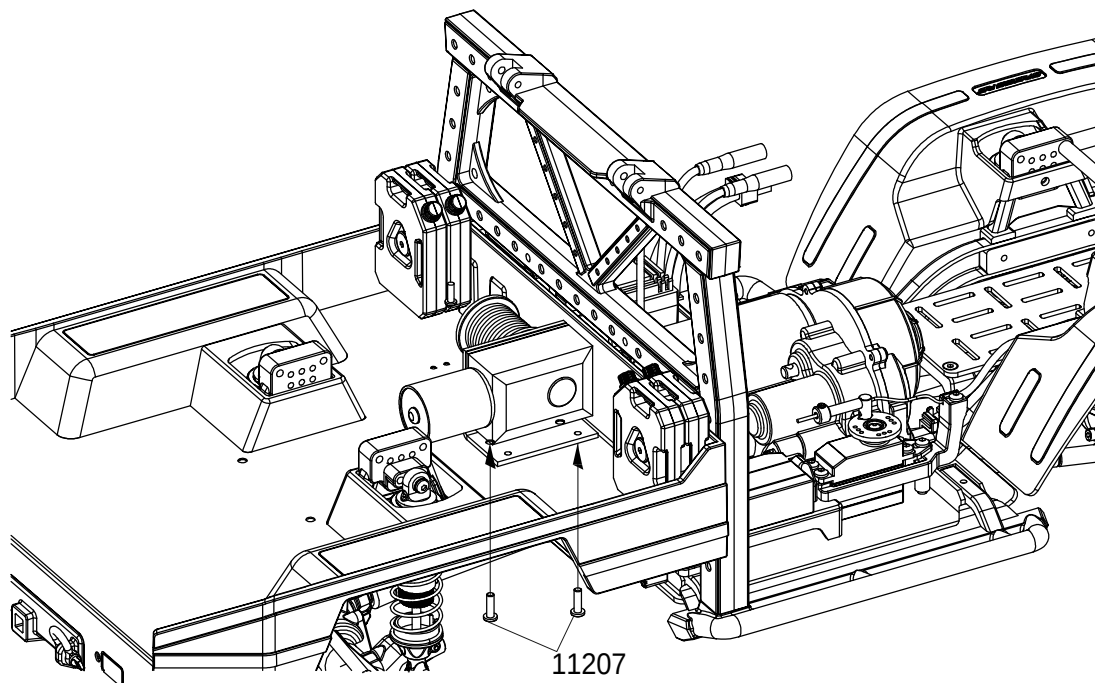
49

EMOX3

BAG(BB)

95102

11207 
M3x10 X2



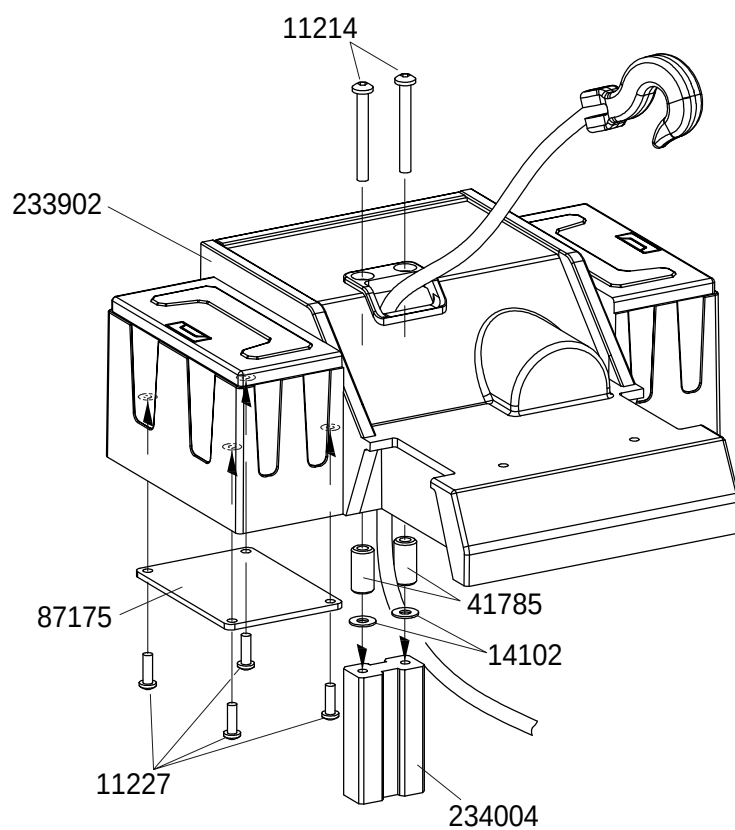
50

EMOX3

11227 
M2.5x8 X4

11214 
M3x25 X2

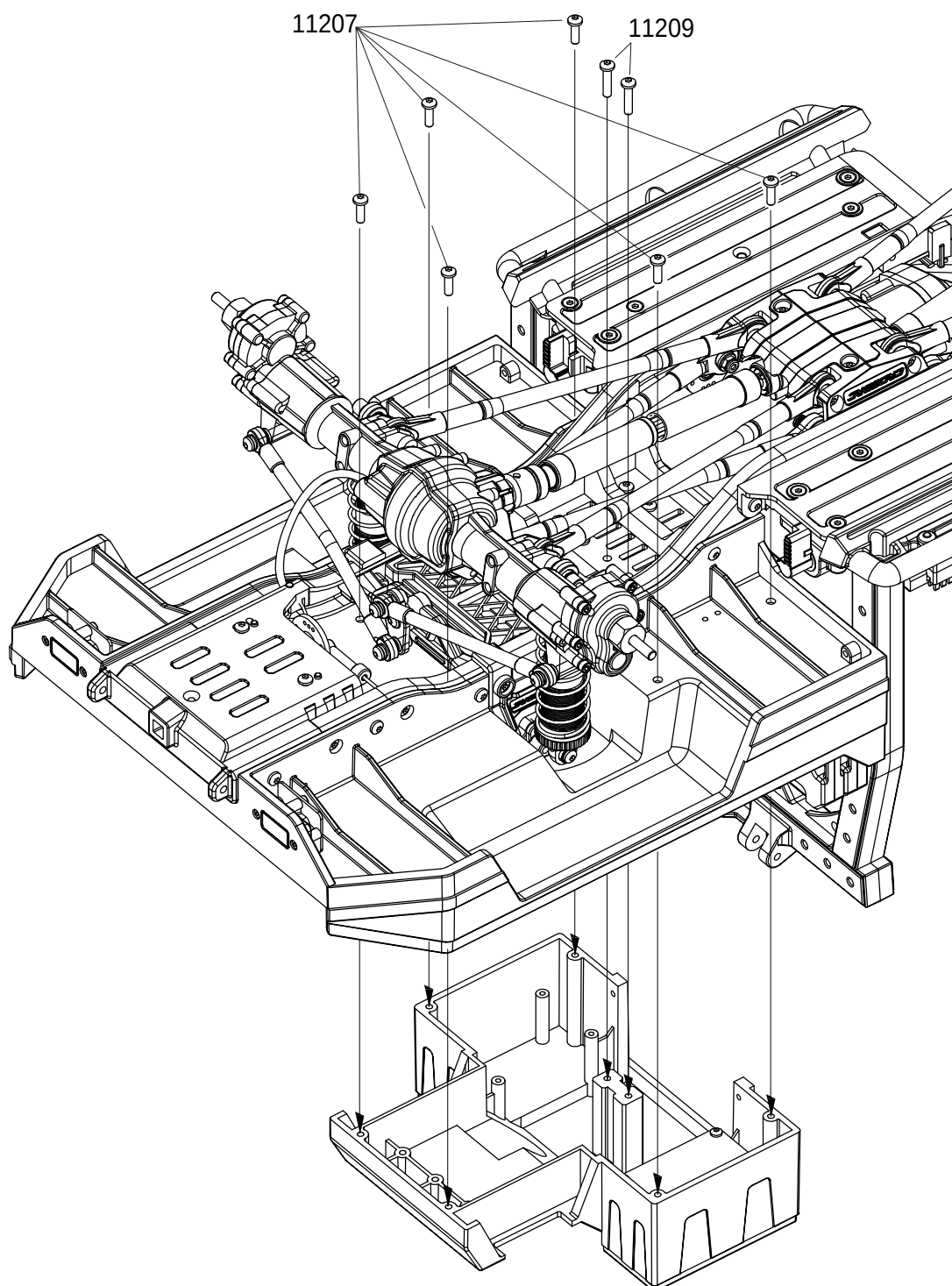
14102 
 $\varnothing 3 \times \varnothing 7 \times 0.5 \times 2$



BAG(BB)

11207 
M3x10 X6

11209 
M3x14 X2

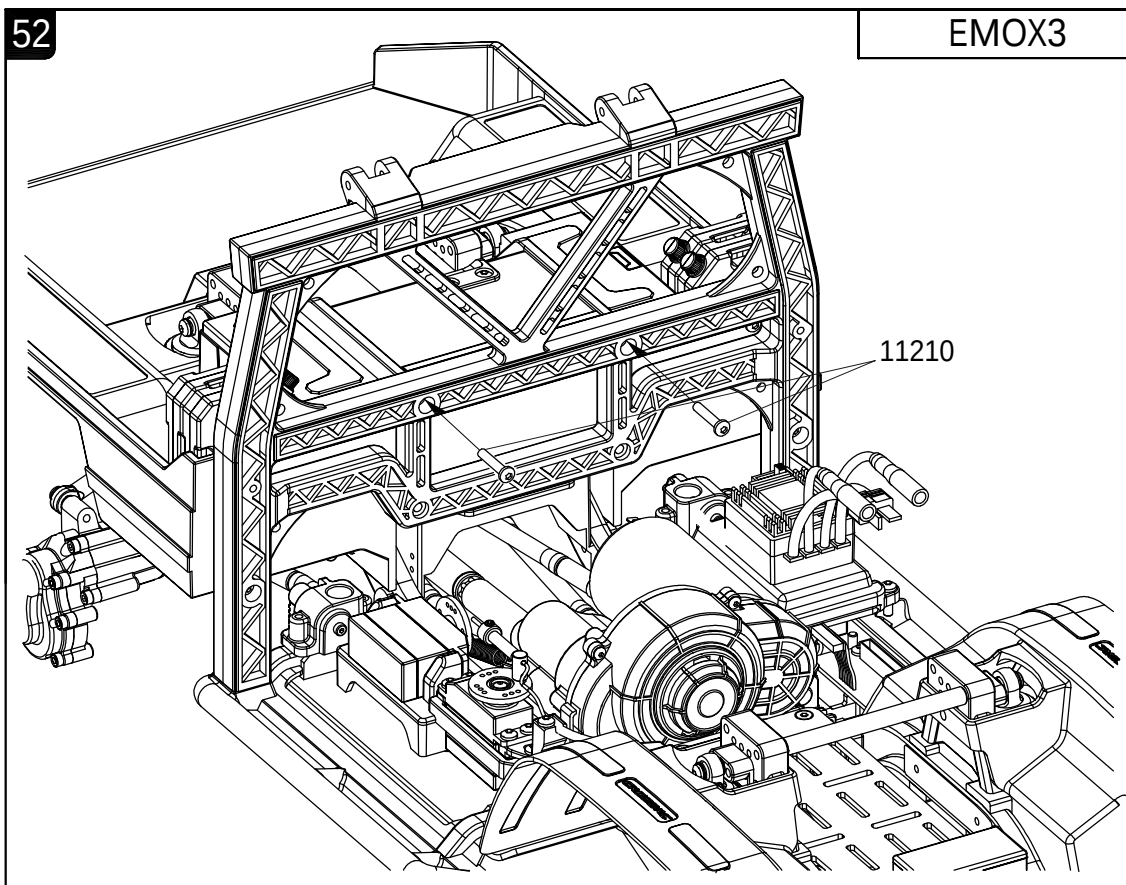


BAG(BB)

52

EMOX3

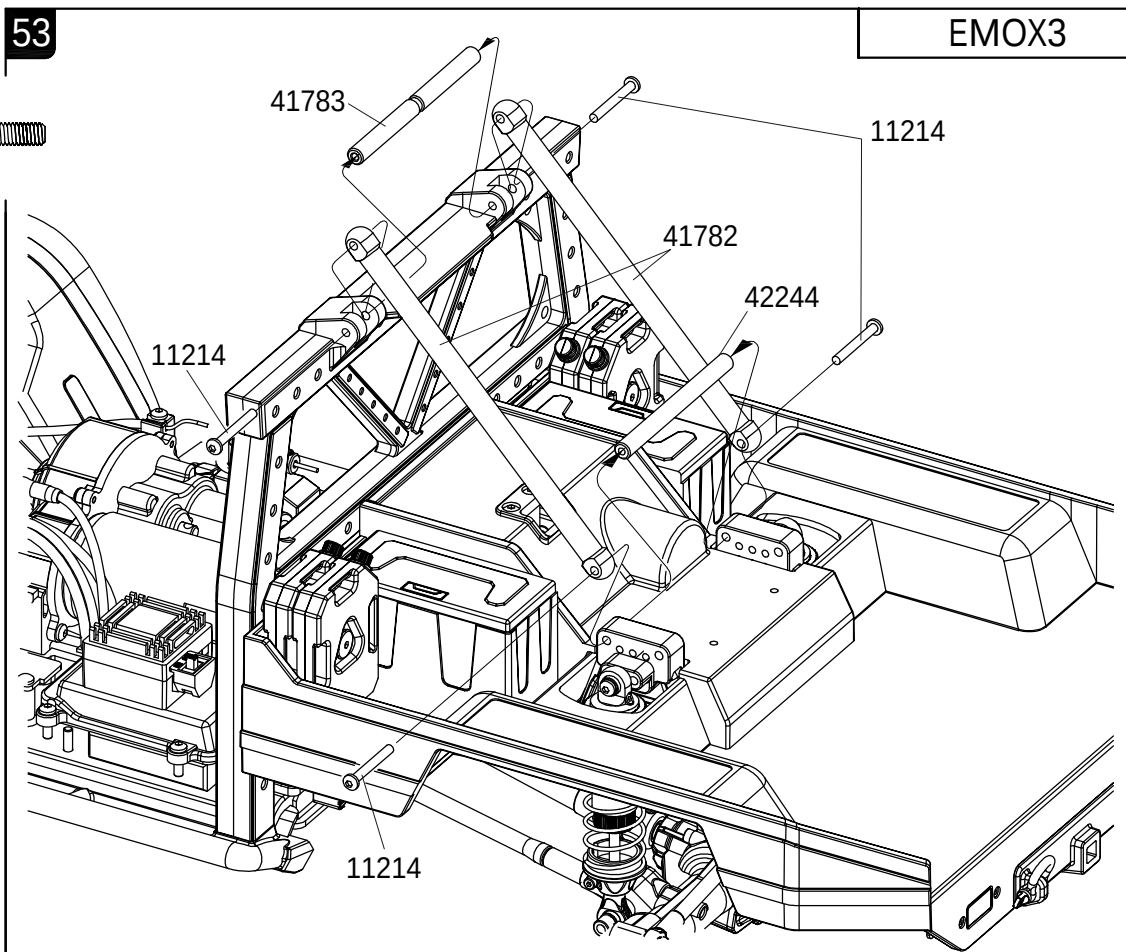
11210 
M3x16 X2



53

EMOX3

11214 
M3x25 X4



54

EMOX3

BAG(BB)

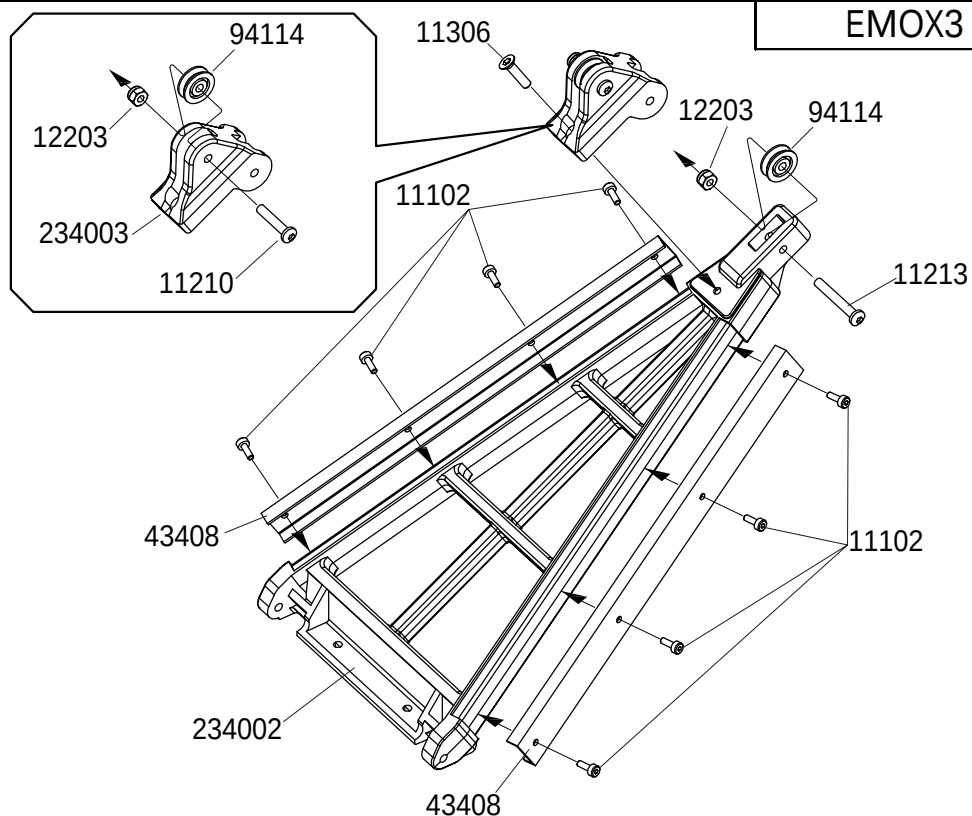
11210  M3x16 X1

12203  M3 X2

11306  M3x10 X1

11213  M3x22 X1

11102  M2x6 X8

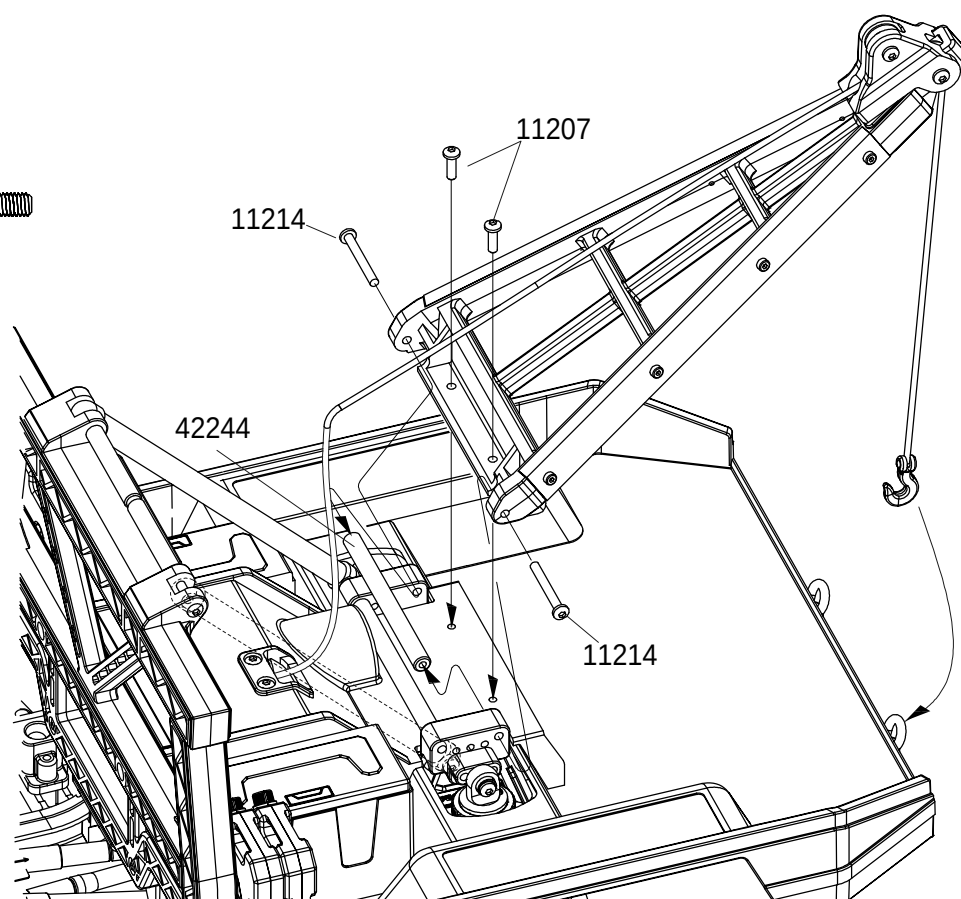


55

EMOX3

11207  M3x10 X2

11214  M3x25 X2

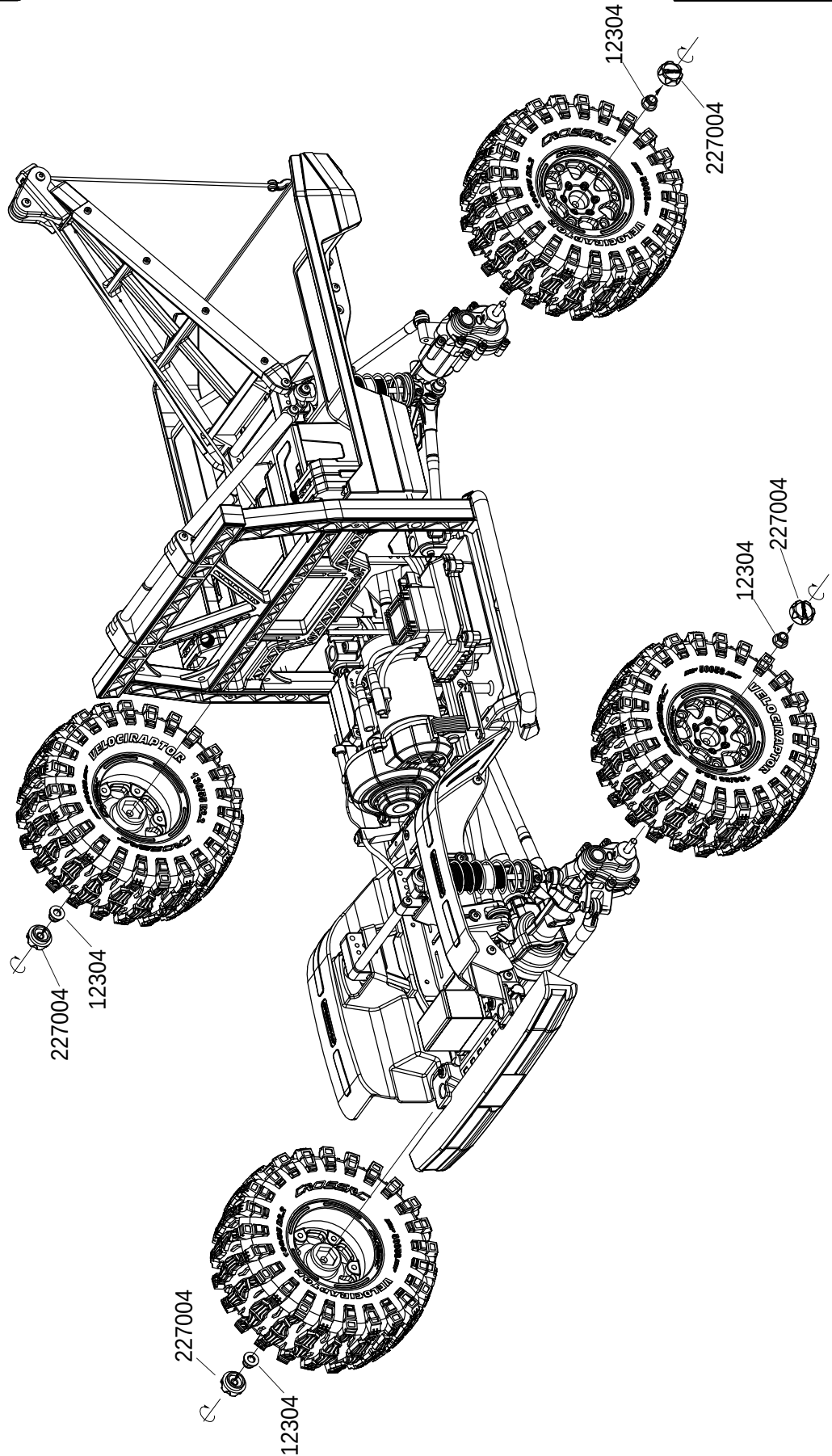
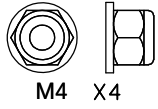


56

EMOX3

BAG(A)

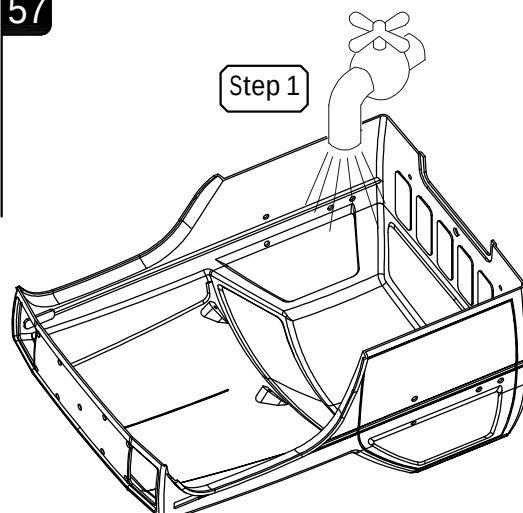
12304



57

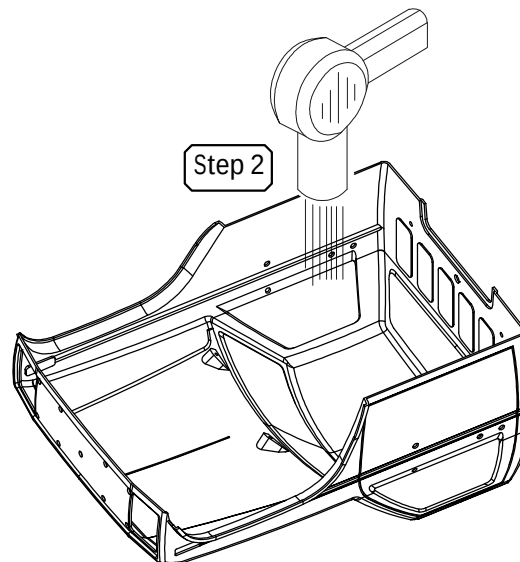
EMOX3

Step 1



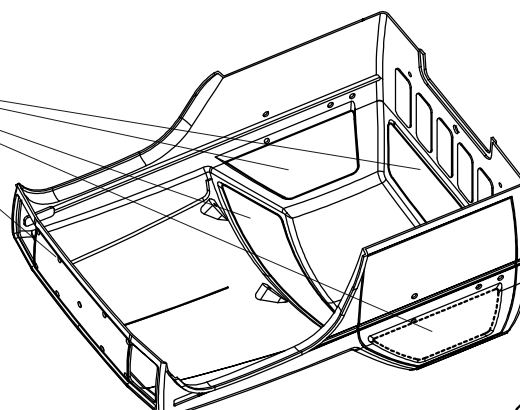
Wash the inside of the body shell with mild detergent, then rinse and dry thoroughly.

Step 2



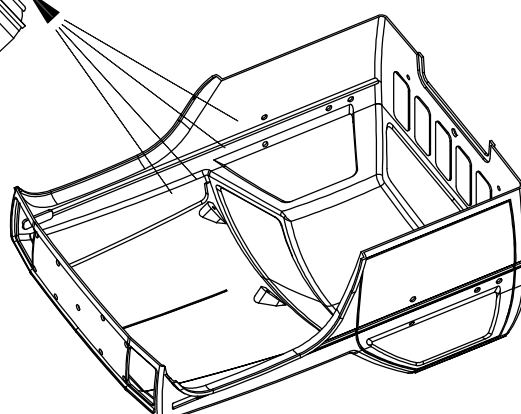
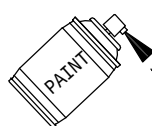
237001

85278



Step 3

Mask the windows on the inside with masking tape.



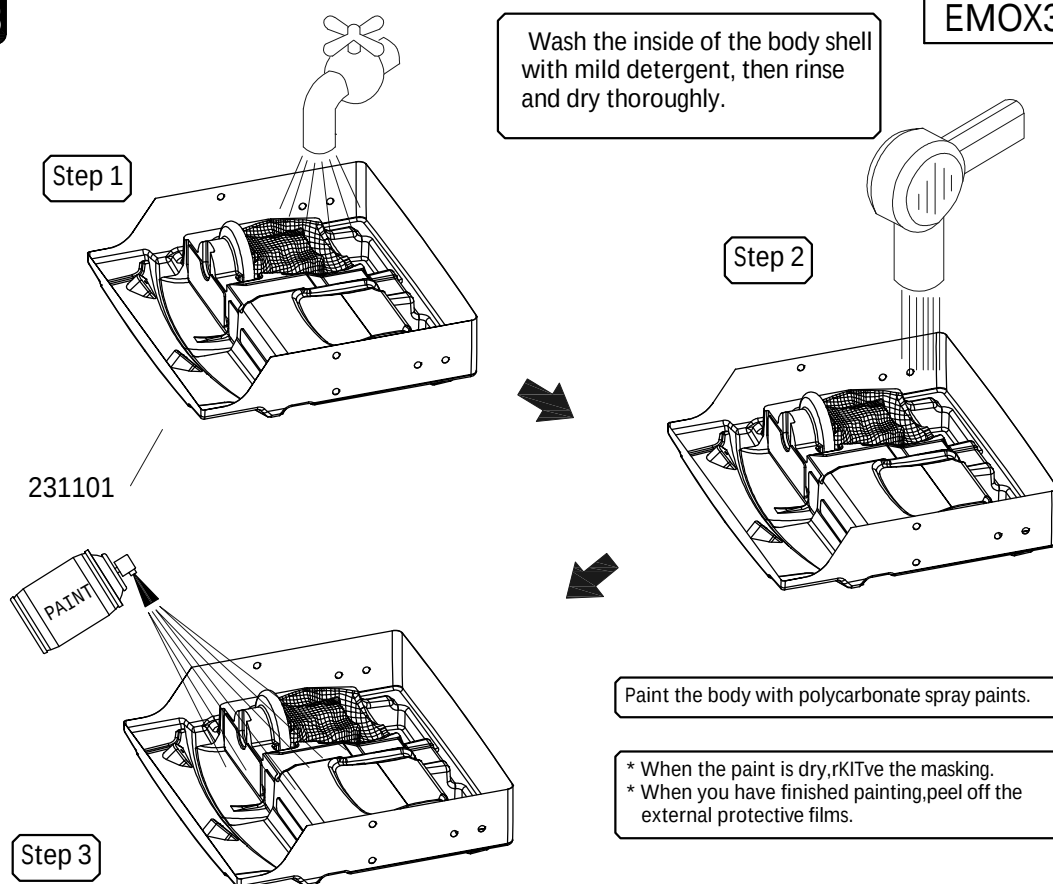
Step 4

Paint the body with polycarbonate spray paints.

* When the paint is dry, remove the masking.
* When you have finished painting, peel off the external protective films.

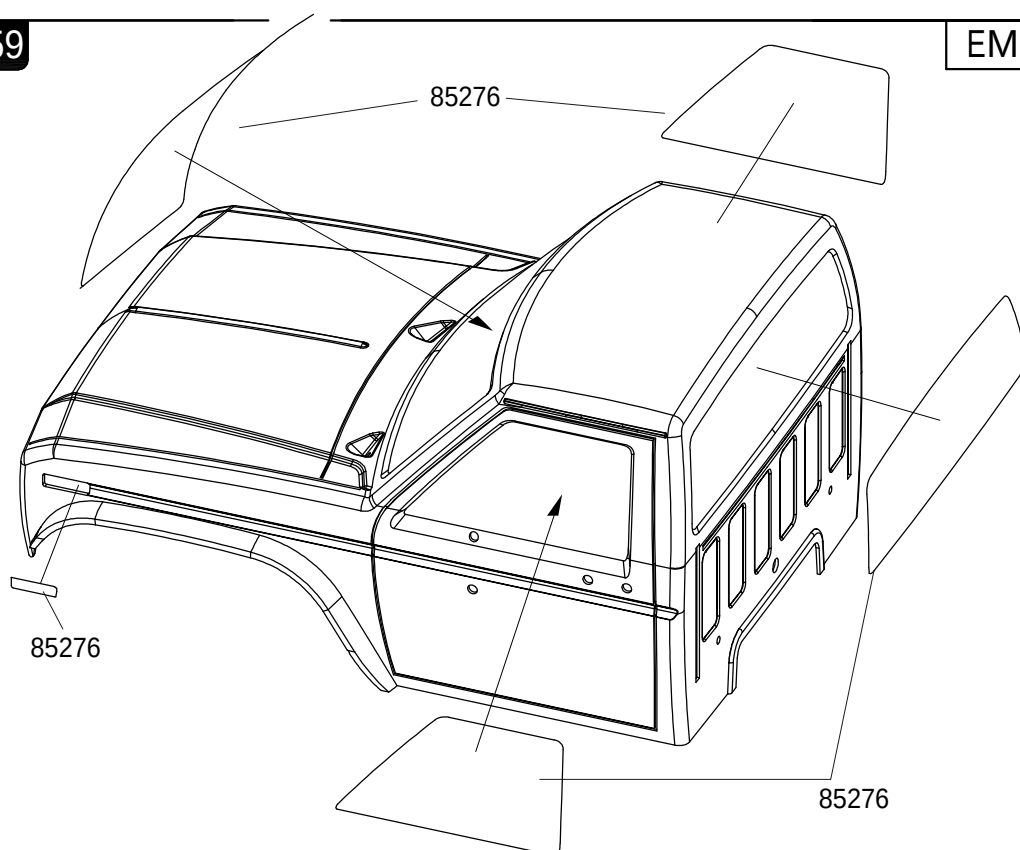
58

EMOX3



59

EMOX3



BAG(J)

60

EMOX3

233301

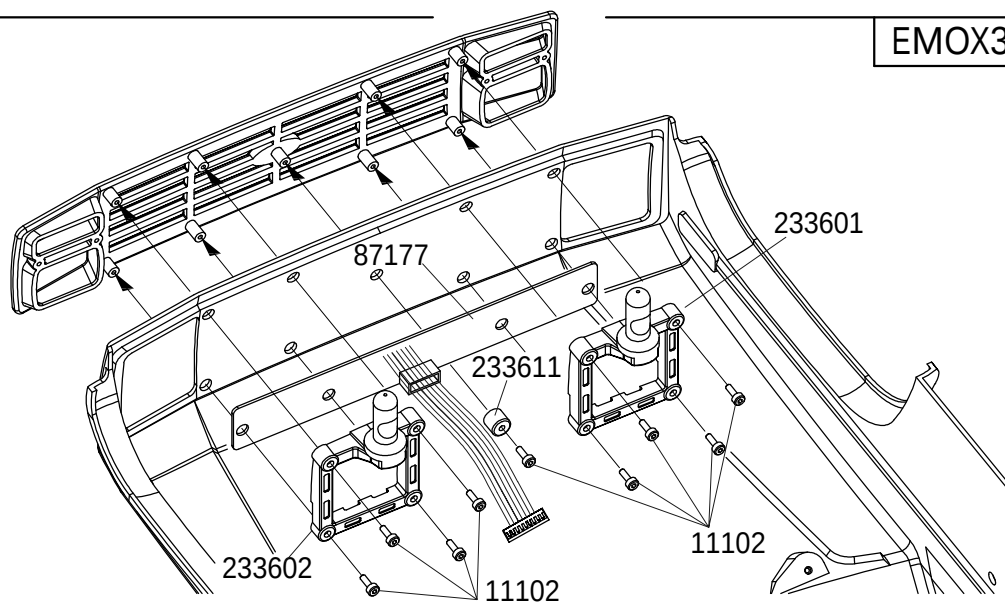
42332

61

EMOX3

BAG(BB)

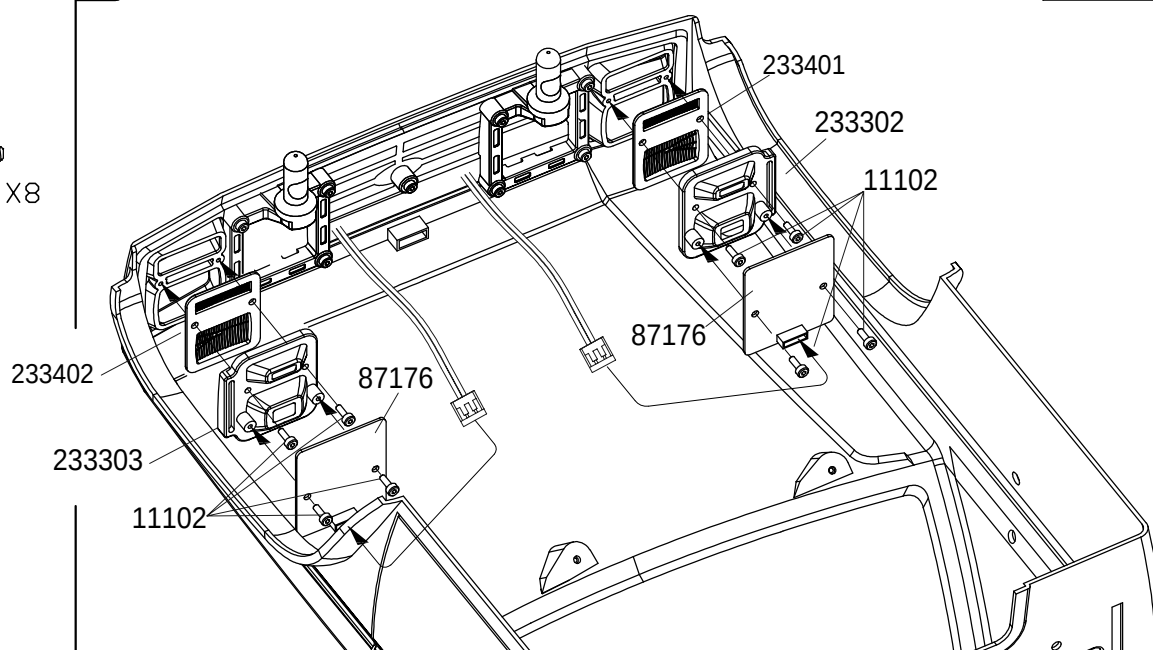
11102 
M2x6 X9



62

EMOX3

11102 
M2x6 X8

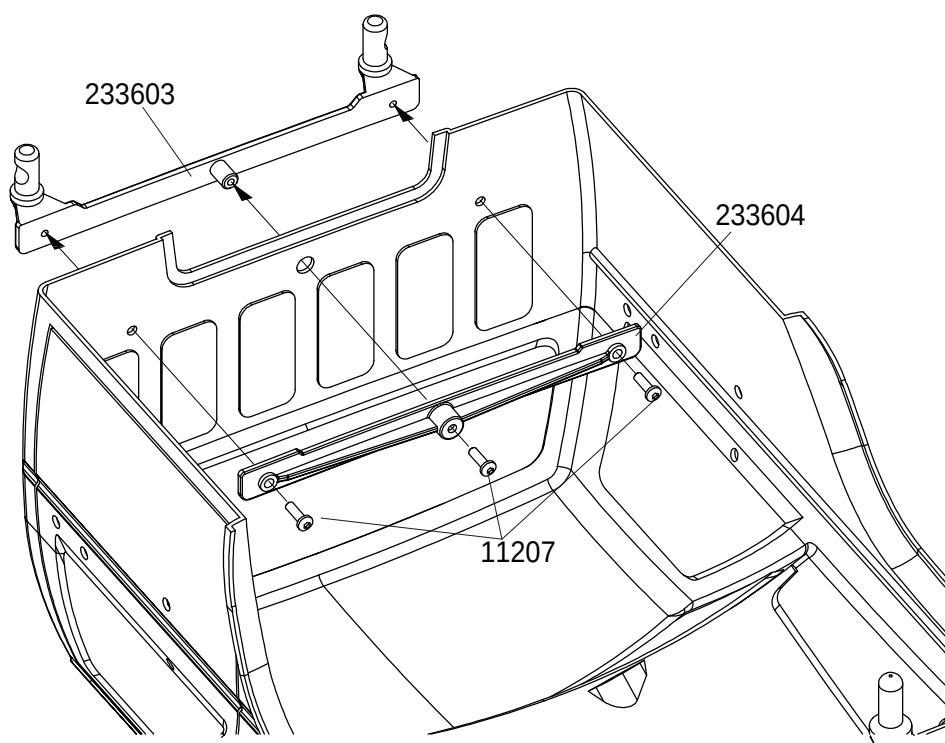


63

EMOX3

BAG(BB)

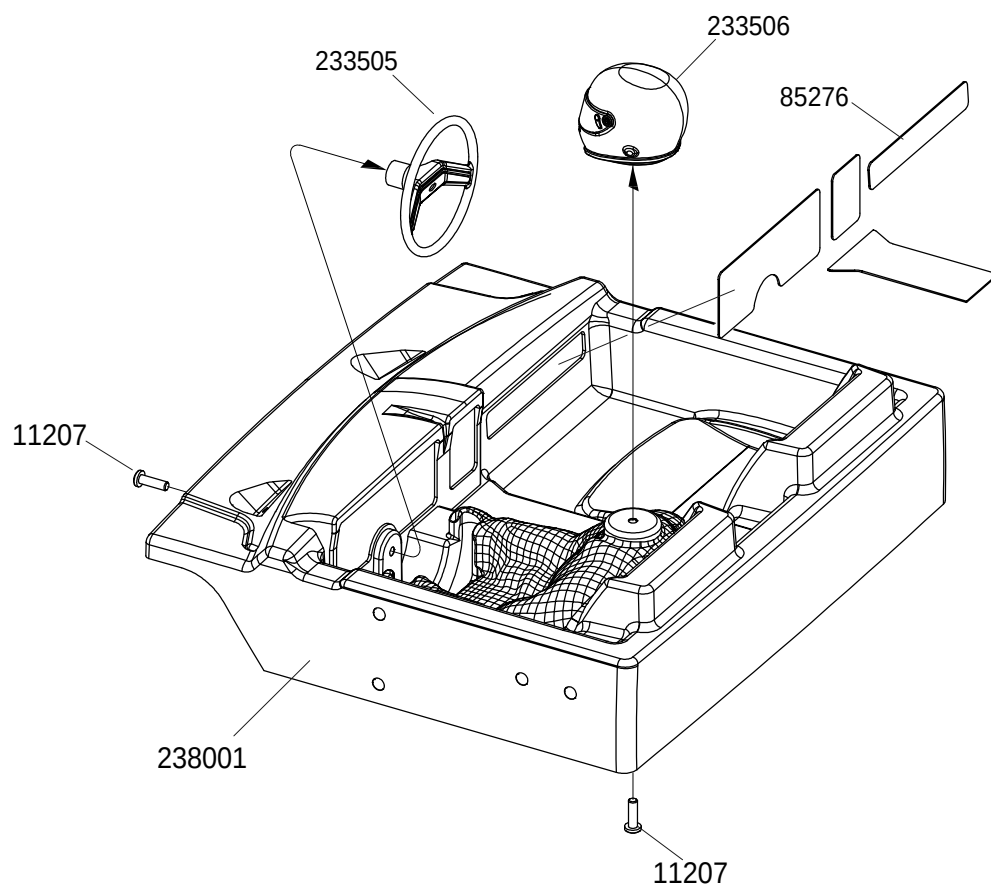
11207 
M3x10x3



64

EMOX2

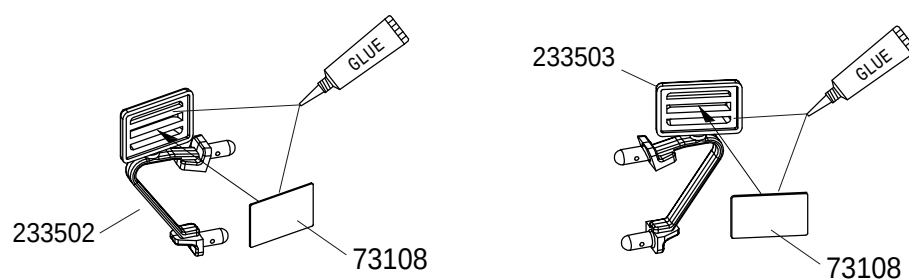
11207 
M3x10x2



BAG(J)

65

EMOX3



BAG(BB)

66

EMOX3

11102  M2x6 X2

 94015 X8

