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.

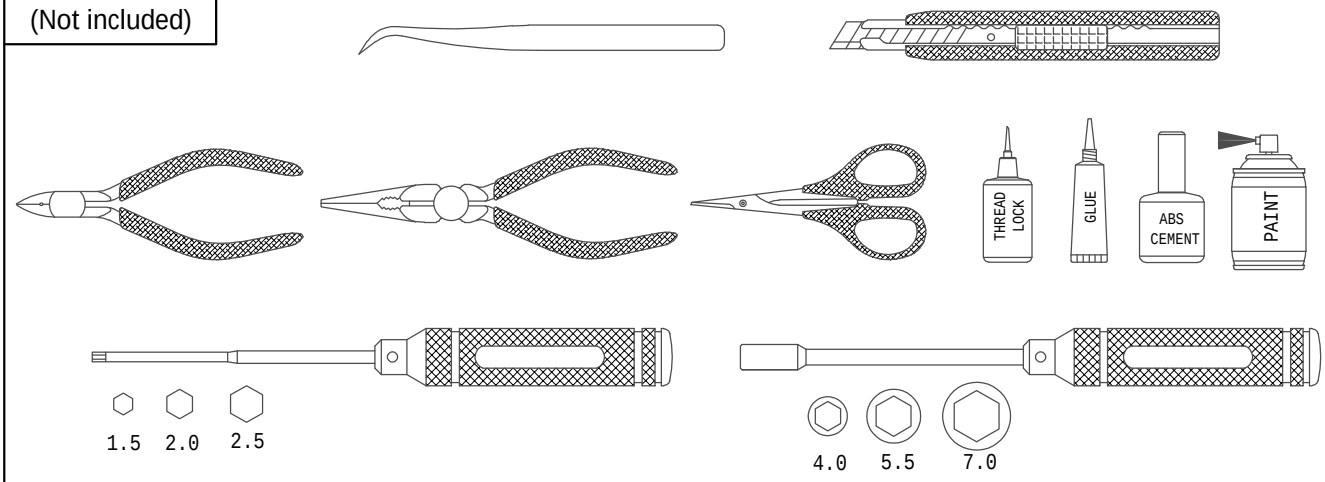
Inspect your radio-controlled model before operation

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.

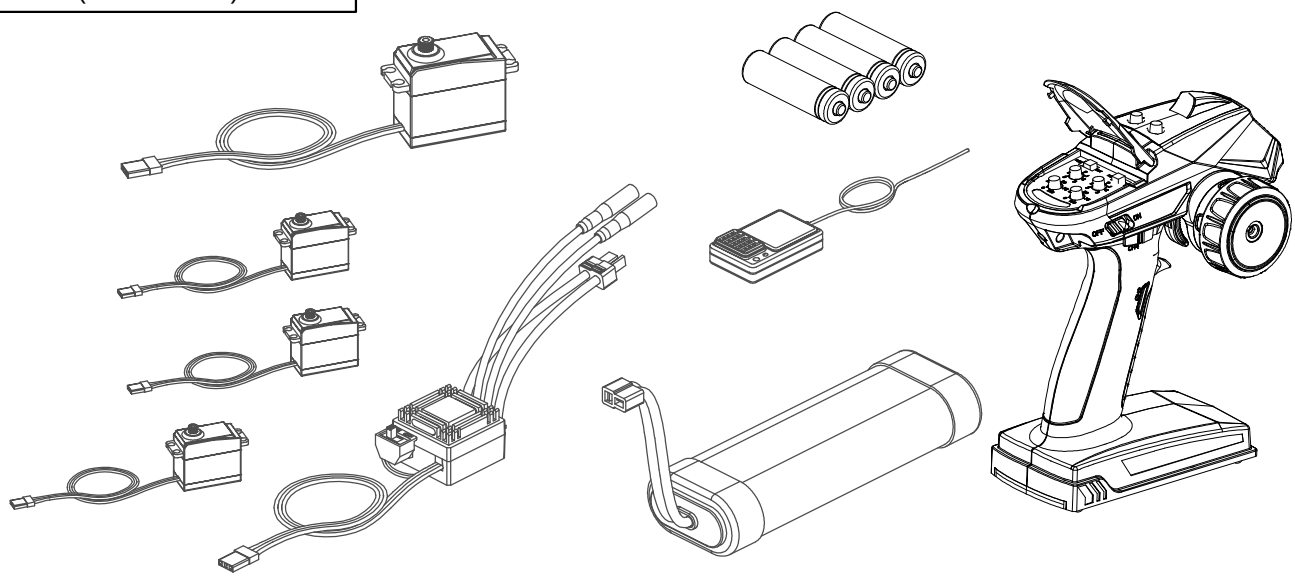
After operating your radio-controlled model

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 X 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.

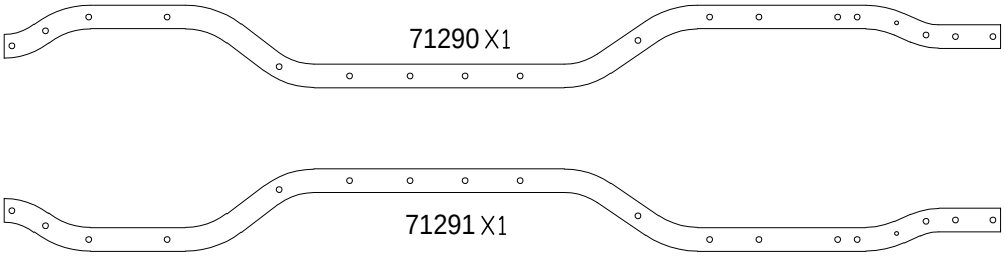
Requirements and recommendations for electronic equipment:

Name	Specifications	Remarks
Remotes controller	6 channels or Up	Waterproof connector is recommended
Servo	Steering servo ≥25KG	High pressure standard Servo in waterproof
	Shift servo ≥3KG x 3	For the size of medium Servo, please refer to the configuration drawing below
ESC	Continuous current ≥ 80A	ESC BEC >3A
Brush motor	Brush motor 560 25T or Up	The Max. Size: Ø39mm*80mm Installation hole spacing: 25mm
Brushless motor	≤2200KV	
Motor gear	M=0.8 Z=16T~20T	M=0.8≠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



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91006 X1

91007 X1

BAG(A)

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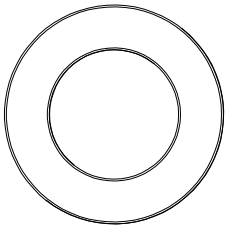

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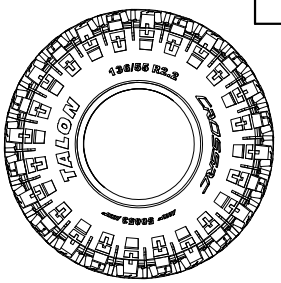

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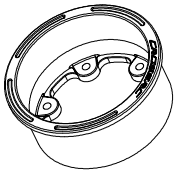

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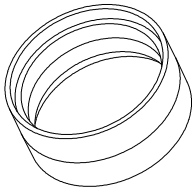

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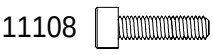

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M3x3 X4

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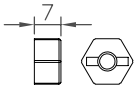
Ø2x10 X4



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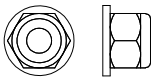

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M4 X4

BAG(B)

EMOX

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91129 X4

215401 X4

Ø7xØ3.5xØ2

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226902 X4

226903 X4

44221 X4

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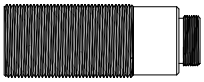

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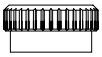

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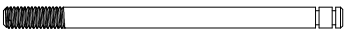
M2x6

14109 X4

Ø4xØ2x0.5 X4



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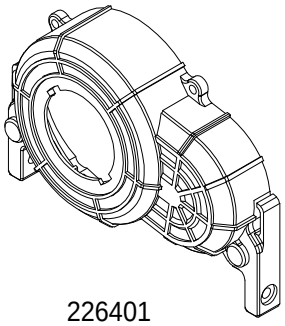
ø2.5xø6x0.4 X8

BAG(C)

EMOX



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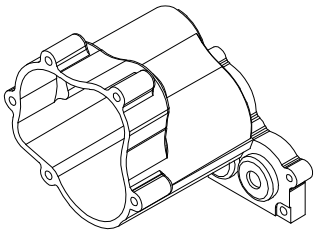

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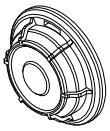

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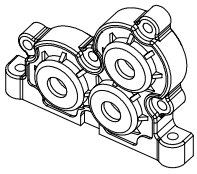

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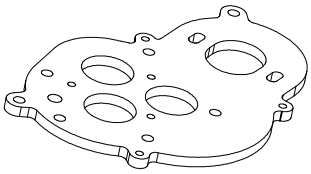

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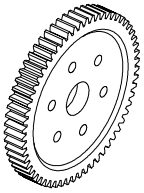

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41768(20T)

41750

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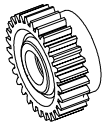

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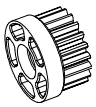

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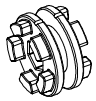

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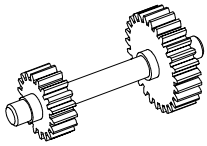

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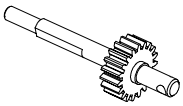

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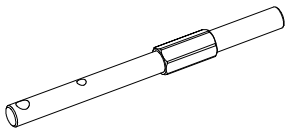

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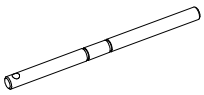

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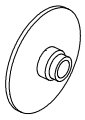

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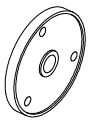

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74016

13001

Ø3xØ7.8x0.5 X2

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ø5.1xø7.5x2.5 X1

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ø5.1xø8x1.5 X2

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ø5xø8x0.3 X9

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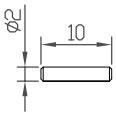
Ø3xØ7x0.5 X2



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M2.5x10 X6

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M3x6 X6

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M3x10 X8

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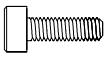

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M3x4 X1

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M2.5x6 X3

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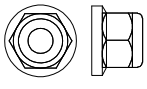

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BAG(D)

EMOX


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33907 X8


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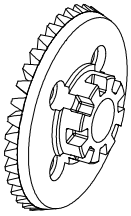
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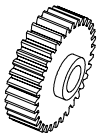
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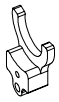
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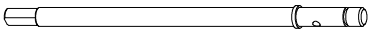
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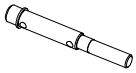
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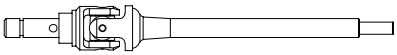
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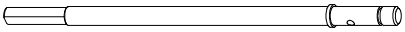
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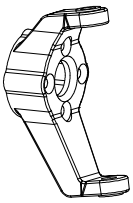
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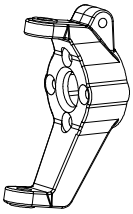
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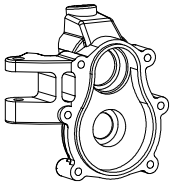
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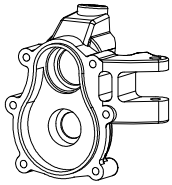
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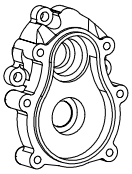
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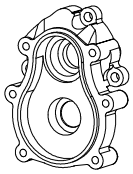
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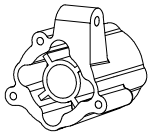
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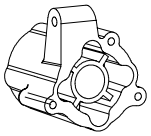
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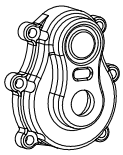
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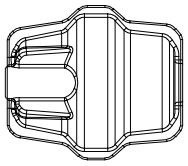
226710 X4


226711 X2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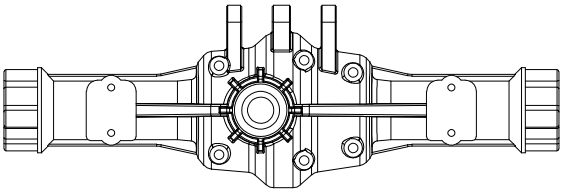
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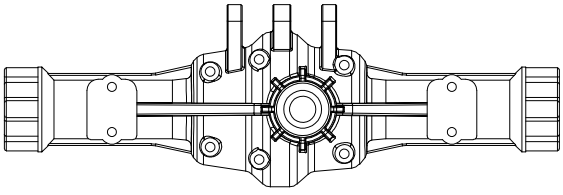
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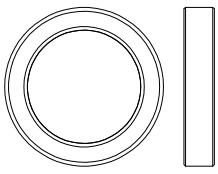
ø15xø21x4 X2

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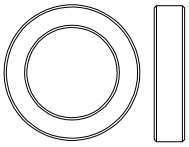
ø12xø18x4 X2

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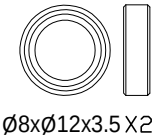
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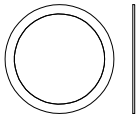
15012


Ø5xØ10x4 X18

75026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Ø5xØ8x0.3 X2

13002


Ø3.8xØ9.2x0.6 X6

11401


M3x4 X4

11227


M2.5x8 X8

11316


M2.5x10 X18

11125

M2.5x10 X38

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42208

M3x10 X4

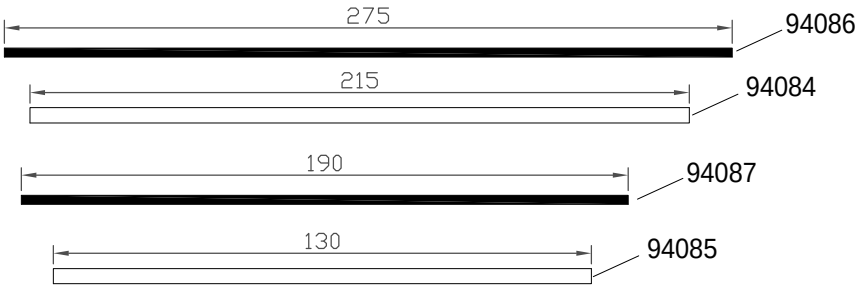
75023

Ø2x14 X2

41259

Ø2x7.5 X8

BAG(E)



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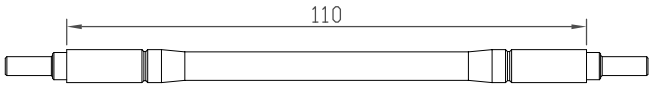

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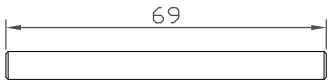

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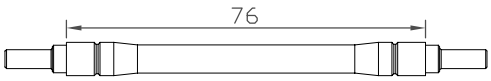

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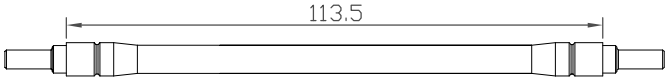

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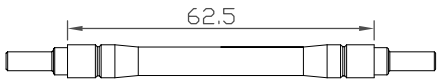

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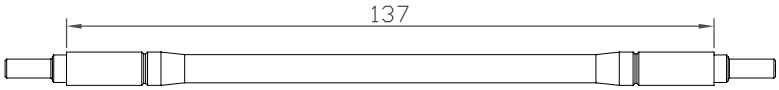

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BAG(G)

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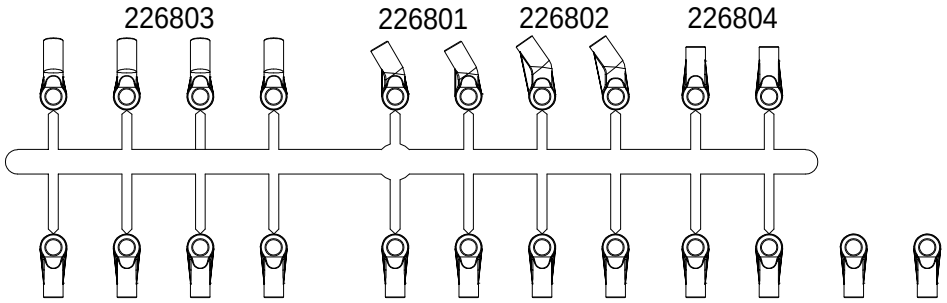
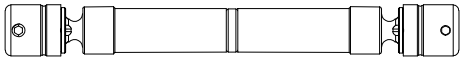


BAG(H)



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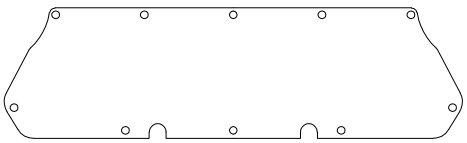
BAG(I)

73096 X2

94061 X4



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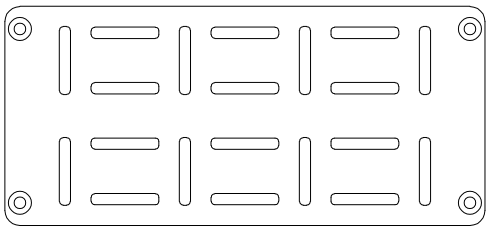

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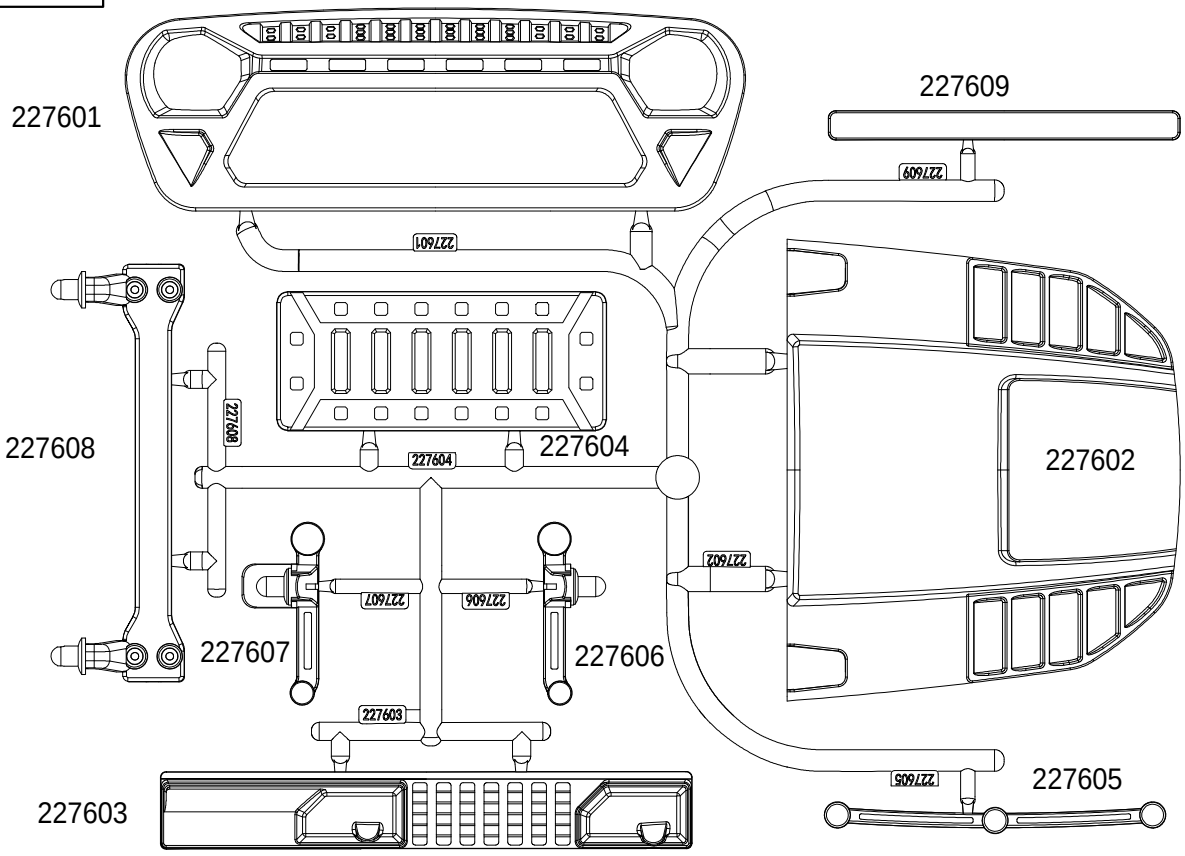
BAG(J)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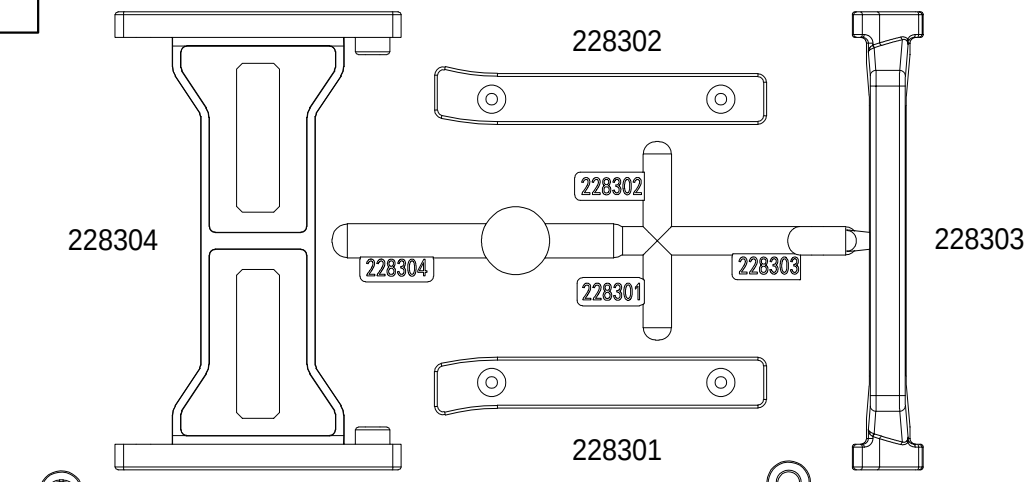
227606
227603
227605

BAG(K)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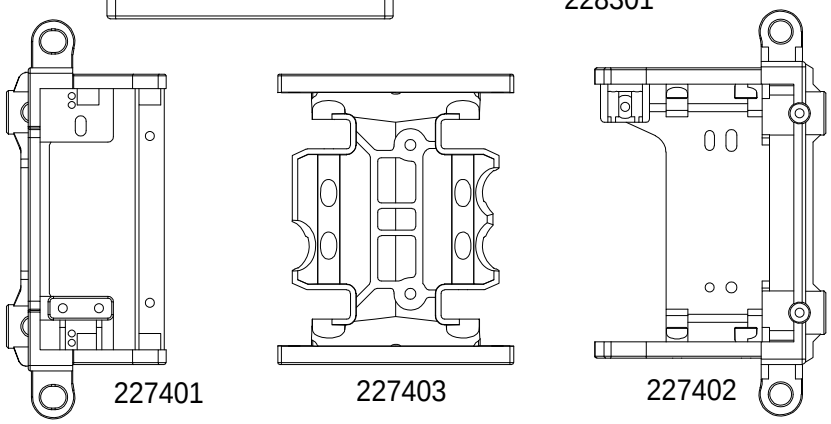
228301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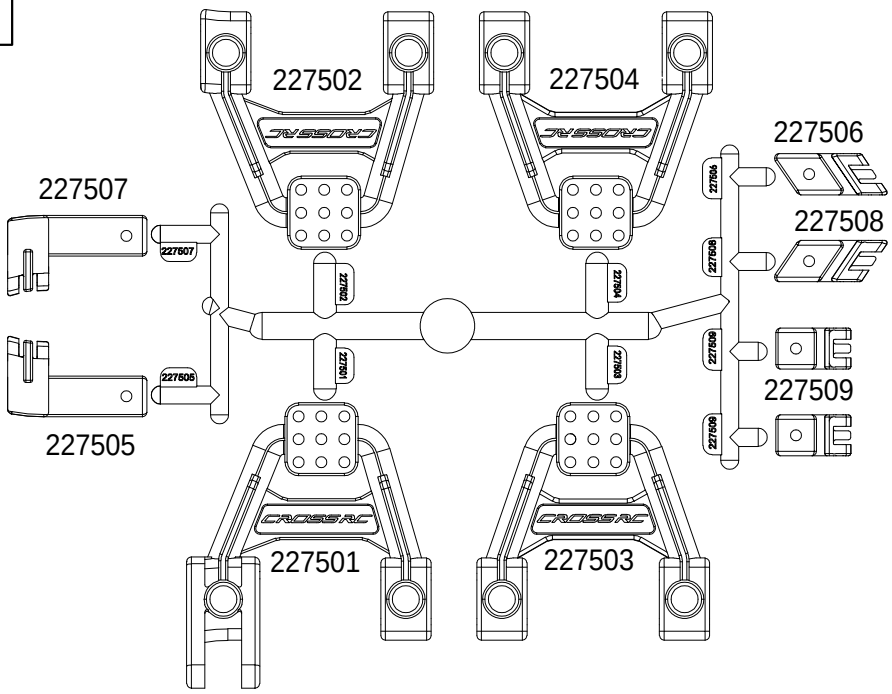
BAG(L)



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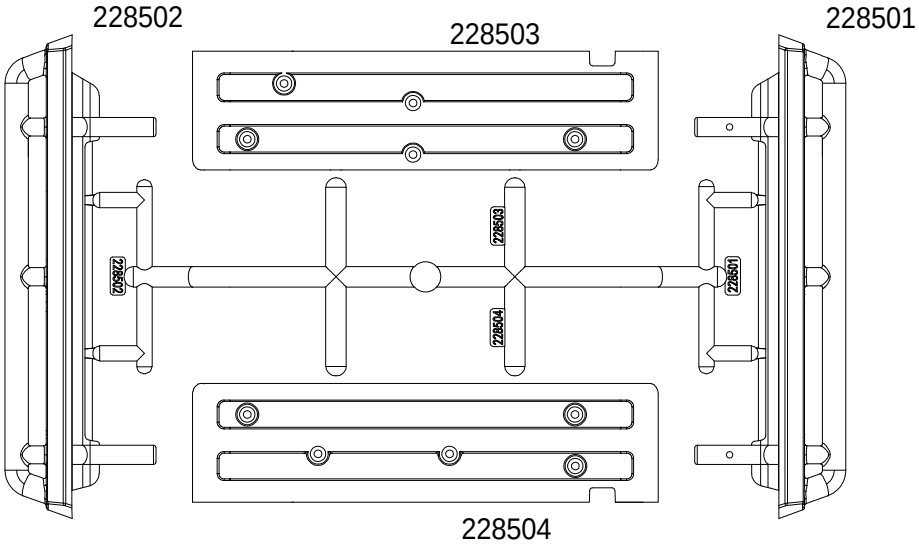

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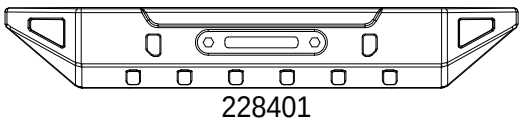

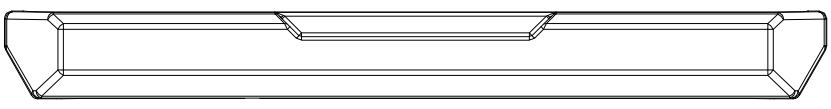

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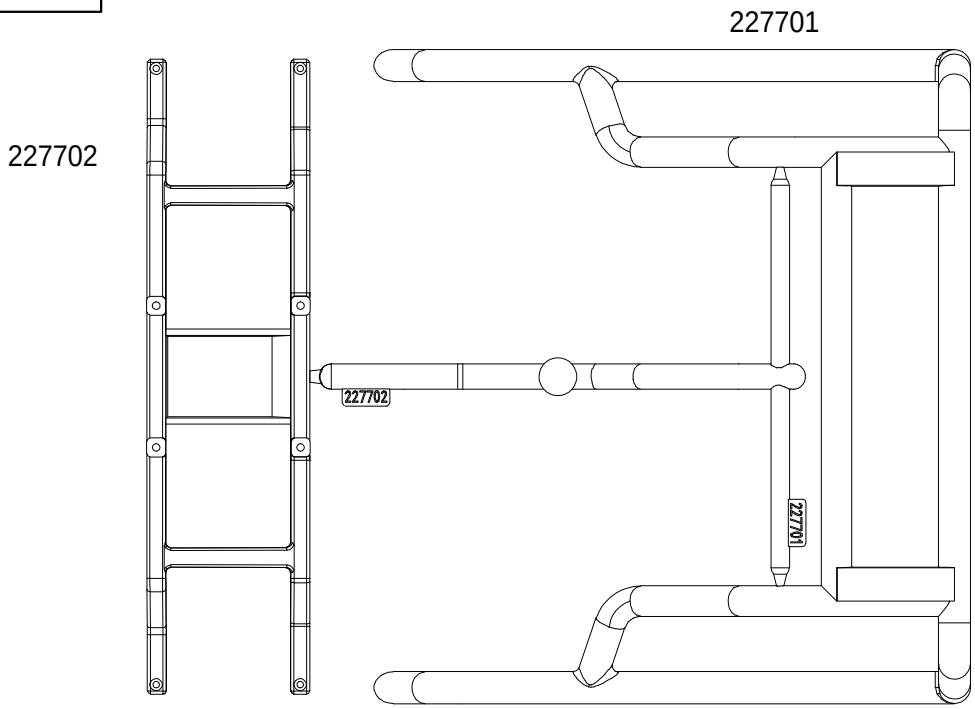
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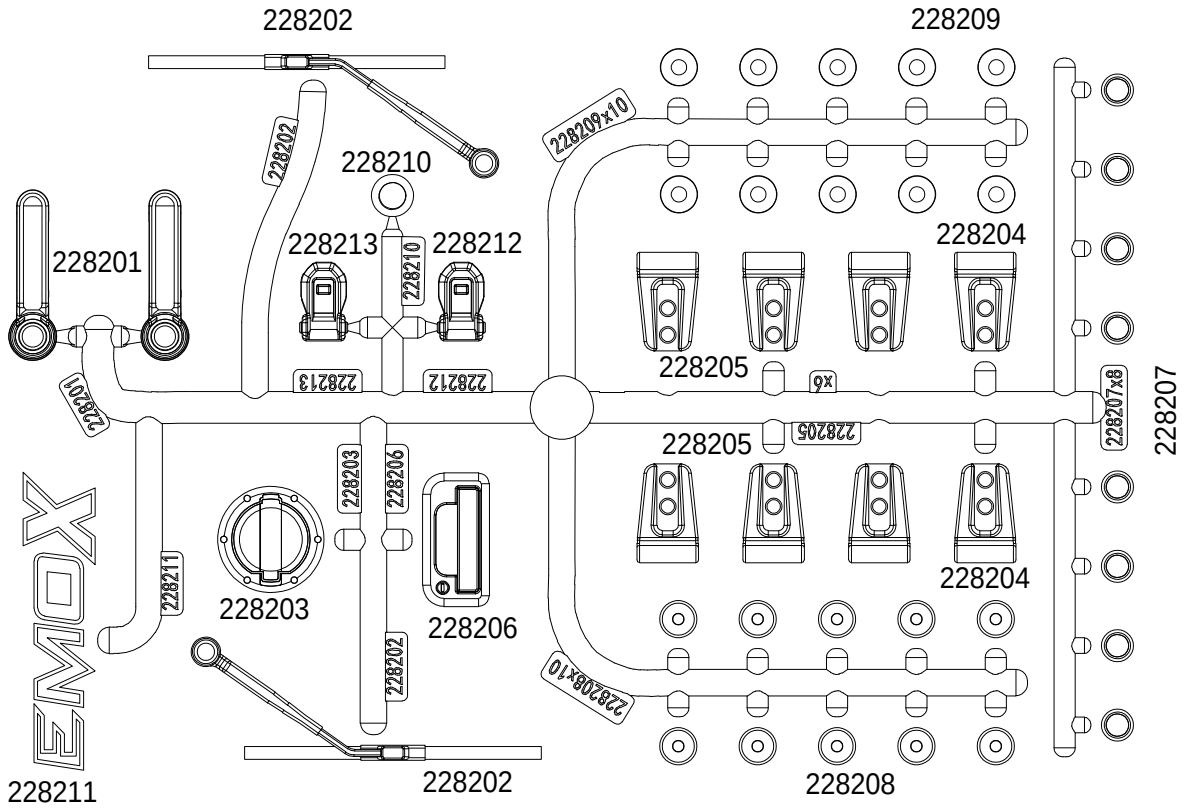
227701

BAG(P)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228210
228201
228213
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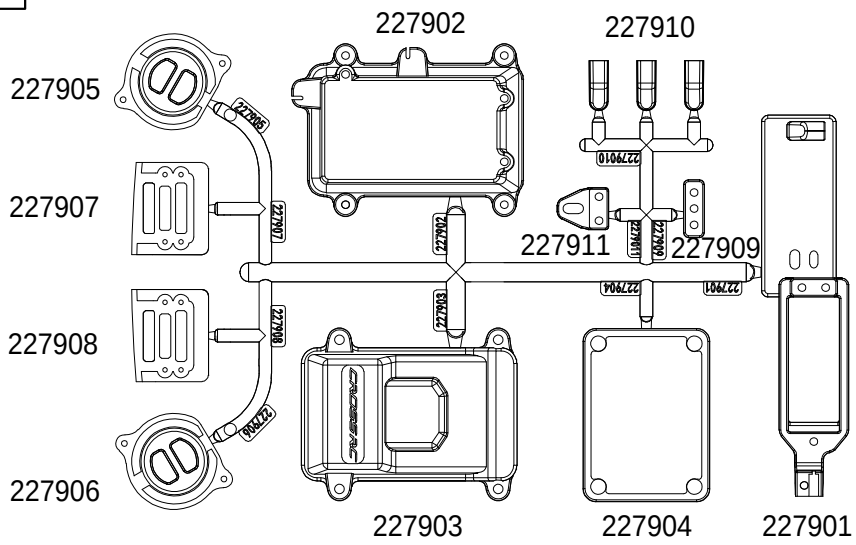
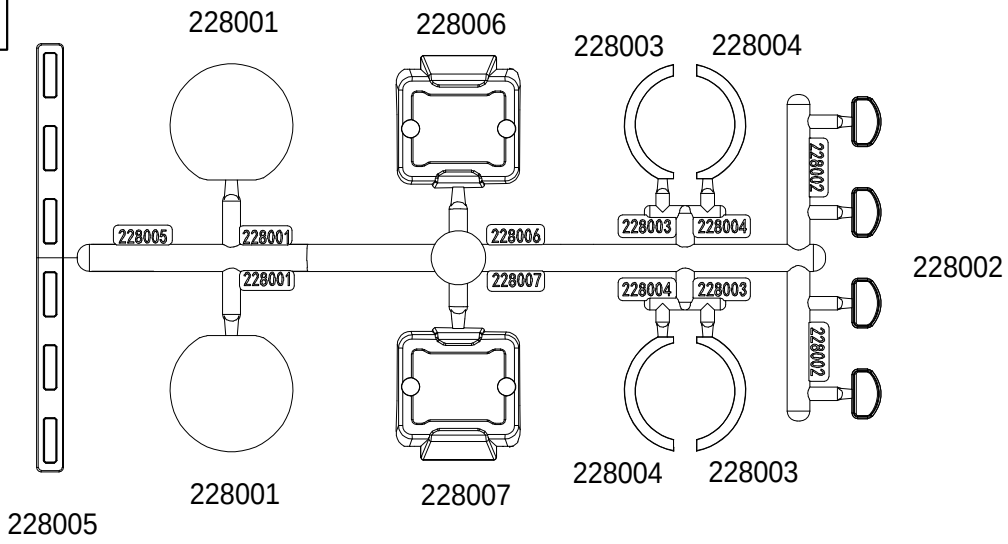
228211
228202
228208
EMOX

BAG(Q)



BAG(R)



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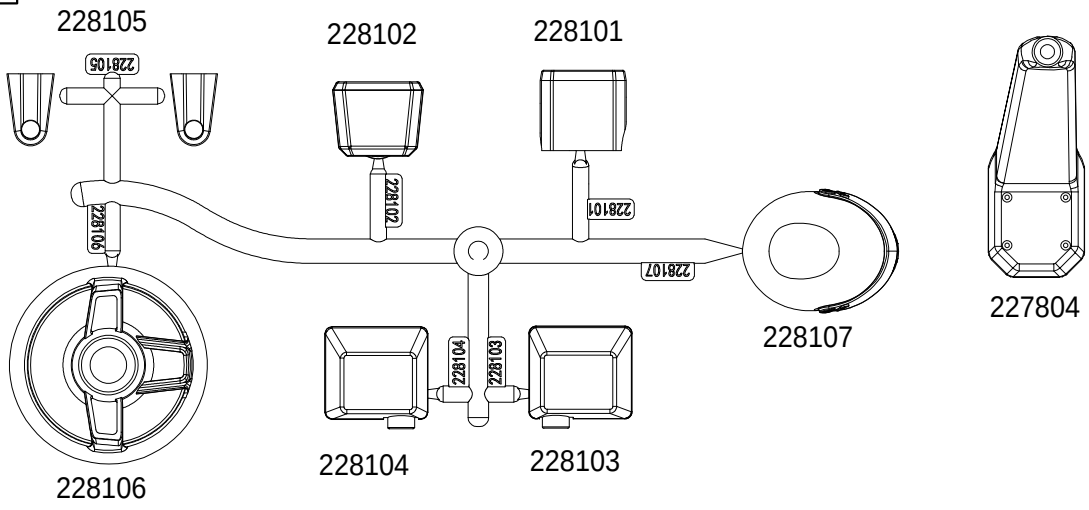

BAG(T)

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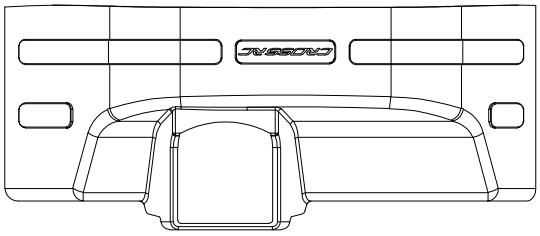

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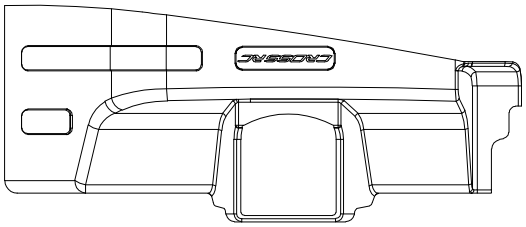

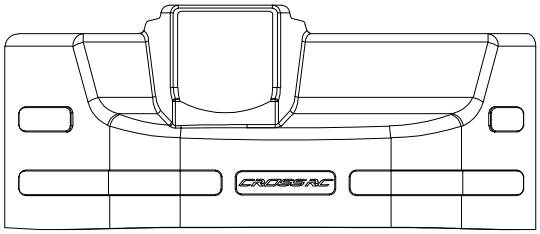

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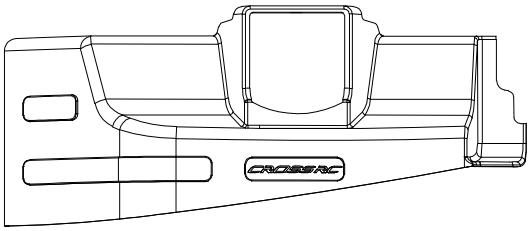

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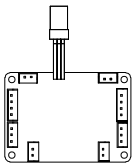

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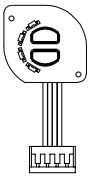

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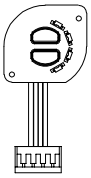

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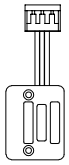

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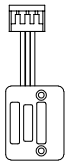

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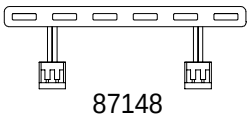

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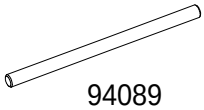

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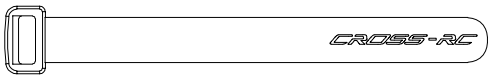
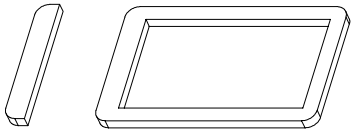


91004 X1



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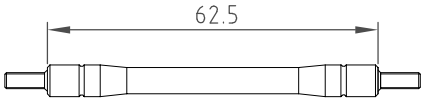
71293

BAG(V)



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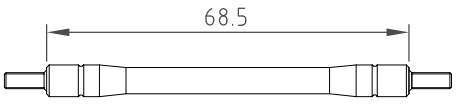


41751

41336 X4

41205

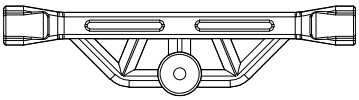
11207 M3x10 X2

11209 M3x14 X5

11211 M3x18 X2

223901 X1

223903 X3



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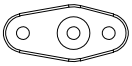

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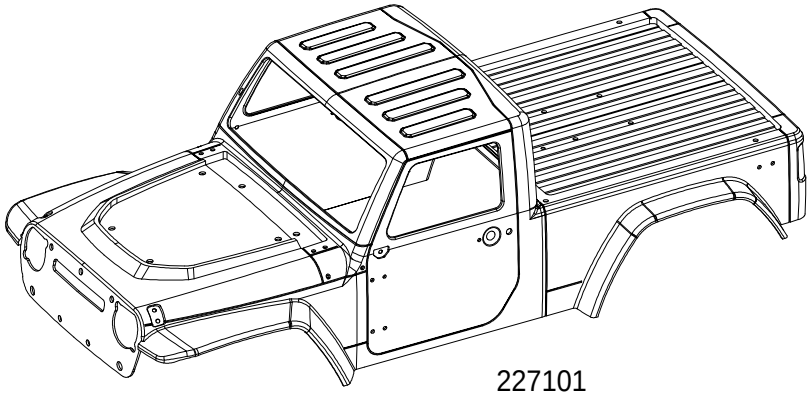

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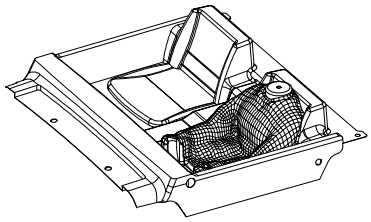


227102

BAG(X)

11102 M2x6 X27

11103 M2x8 X6

11104 M2x10 X8

11126 M2x14 X2

11116 M2.5x12 X4

11205 M3x6 X8

11206 M3x8 X23

11207 M3x10 X41

11209 M3x14 X2

11210 M3x16 X2

11211 M3x18 X1

11212 M3x20 X7

11214 M3x25 X5

11215 M3x28 X4

11223 M3x30 X2

12203 M3 X3

11303 M3x8 X14

11401 M3x4 X1

11416 M3x20 X4

11413 M4x12 X8

14102 Ø3xØ7x0.5 X2

BAG(Y)

91176 X2

42231 X2

11227 M2.5x8 X3

12206 M2 X3

11401 M3x4 X3

44172 X1

91175 X3

41819 X2

94056 X1

BAG(C)

15012

ø5xø10x4 X2

12304

M4 X1

72007

ø5xø8x0.3 X1

11315

M2.5x6 X3

11205

M3x6 X3

15014

ø5xø8x2.5 X4

15012

ø5xø10x4 X3

13001

Ø3xØ7.8x0.5 X2

72007

ø5xø8x0.3 X2

42203

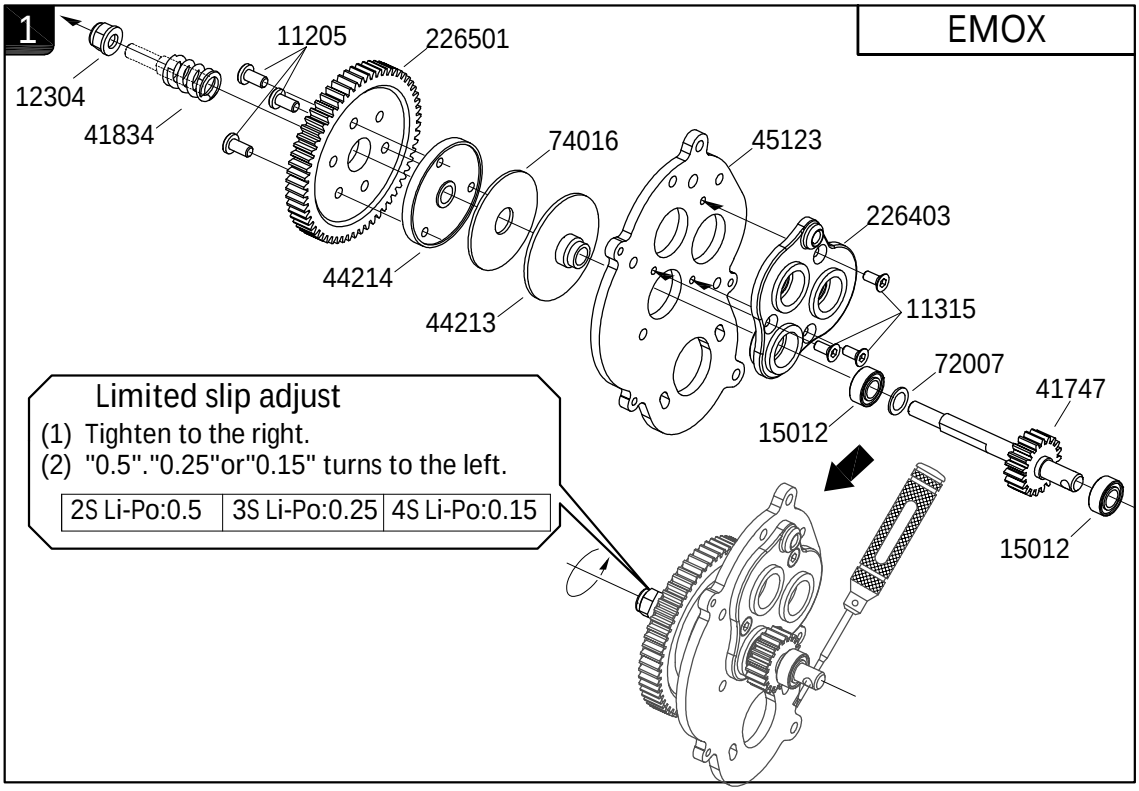
ø5.1xø8x1.5 X2

42236

ø5.1xø7.5x2.5 X1

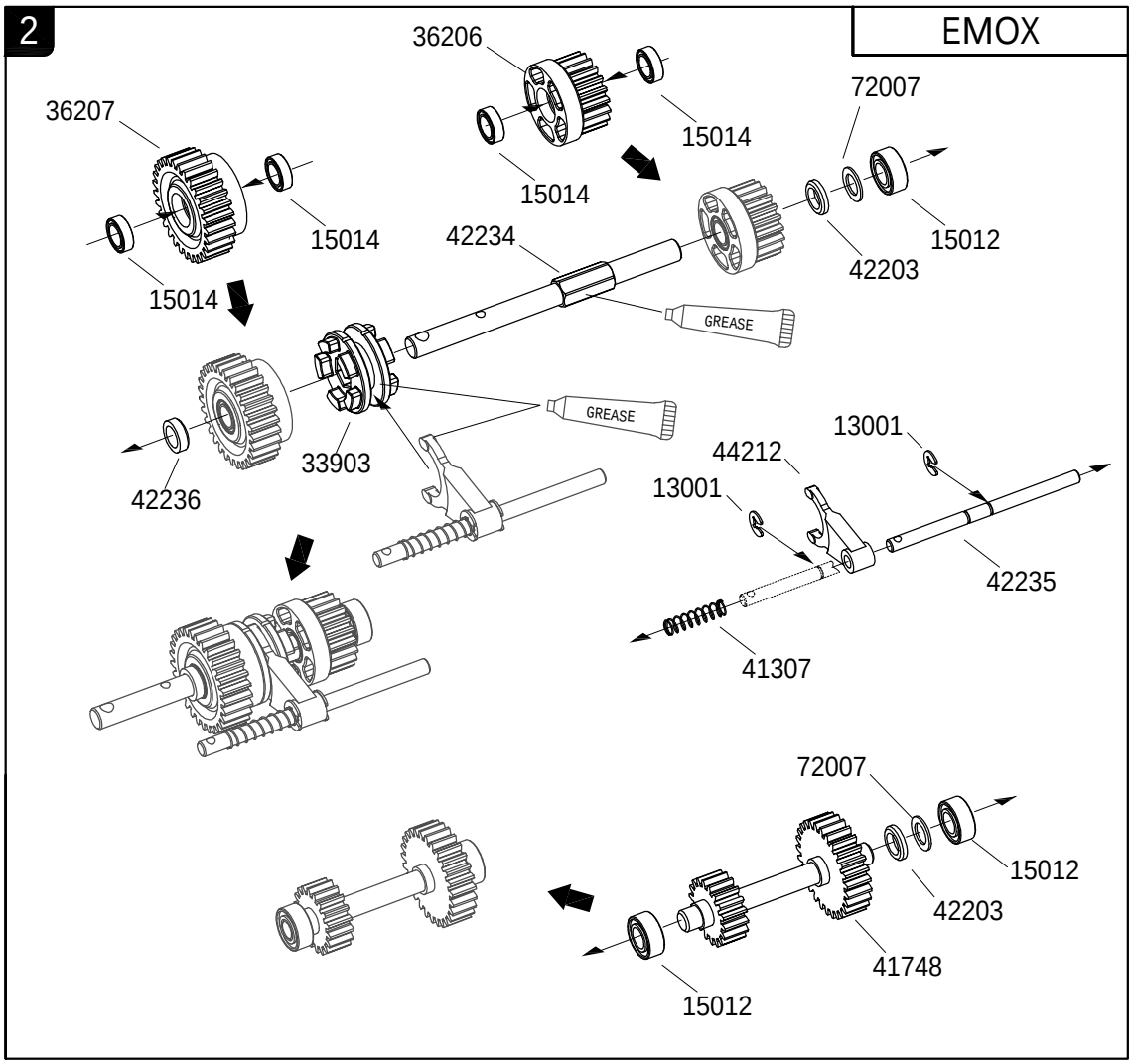
1

EMOX



2

EMOX



3

EMOX

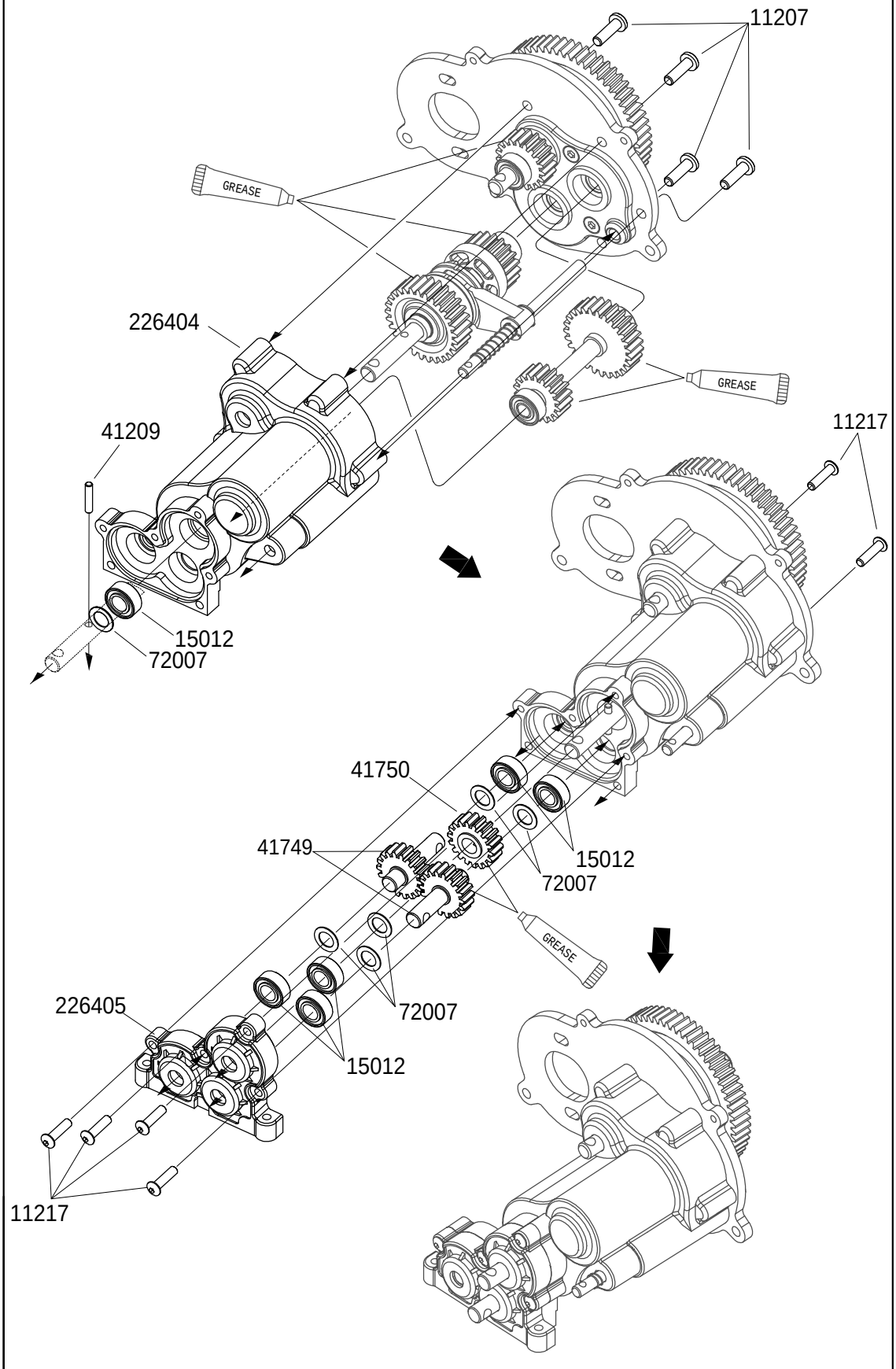
11207
M3x10 X4

11217
M2.5x10 X6

72007
ø5xø8x0.3 X6

15012
ø5xø10x4 X6

ø2 10
41209 X1

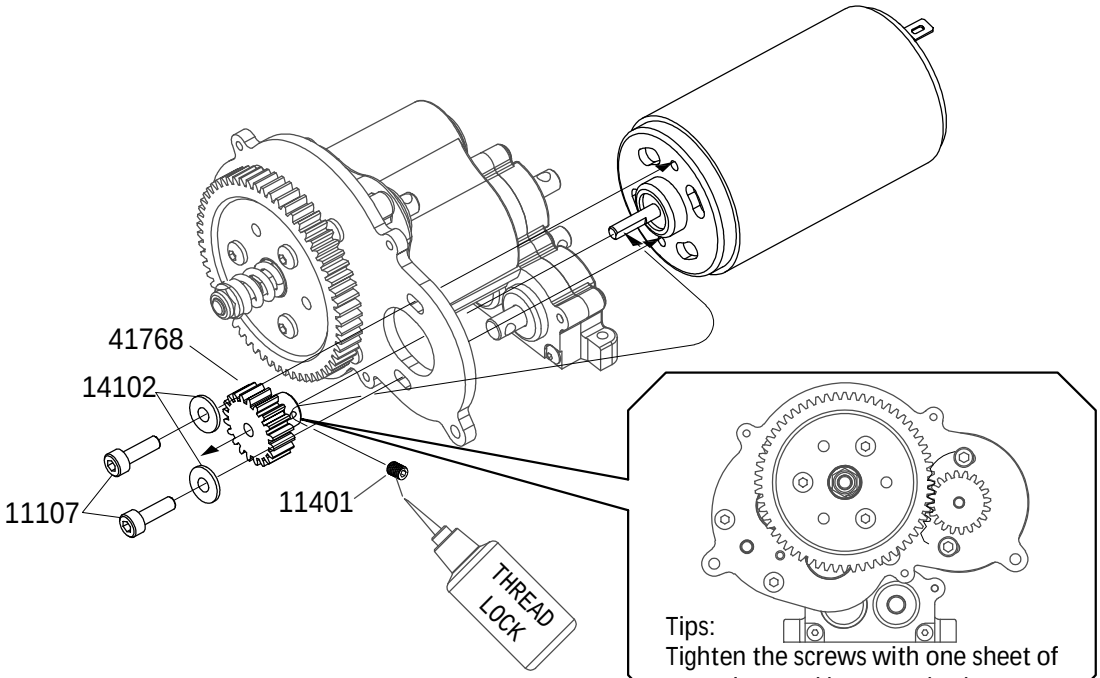


4 EMOX

11401
M3x4 X1

14102
Ø3xØ7x0.5 X2

11107
M3x10 X2



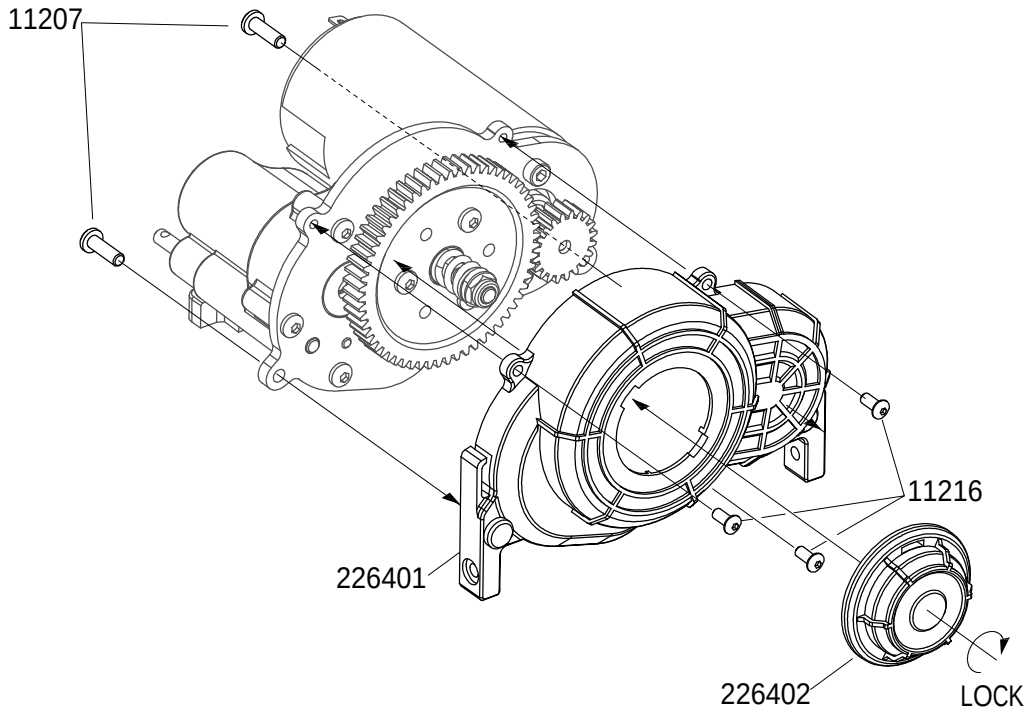
Final reduction ratio

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 EMOX

11207
M3x10 X2

11216
M2.5x6 X3

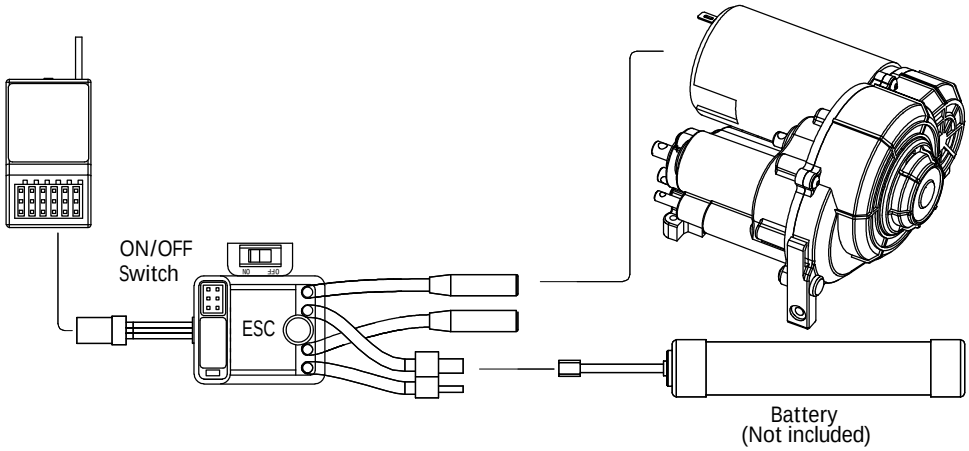


6

EMOX

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.



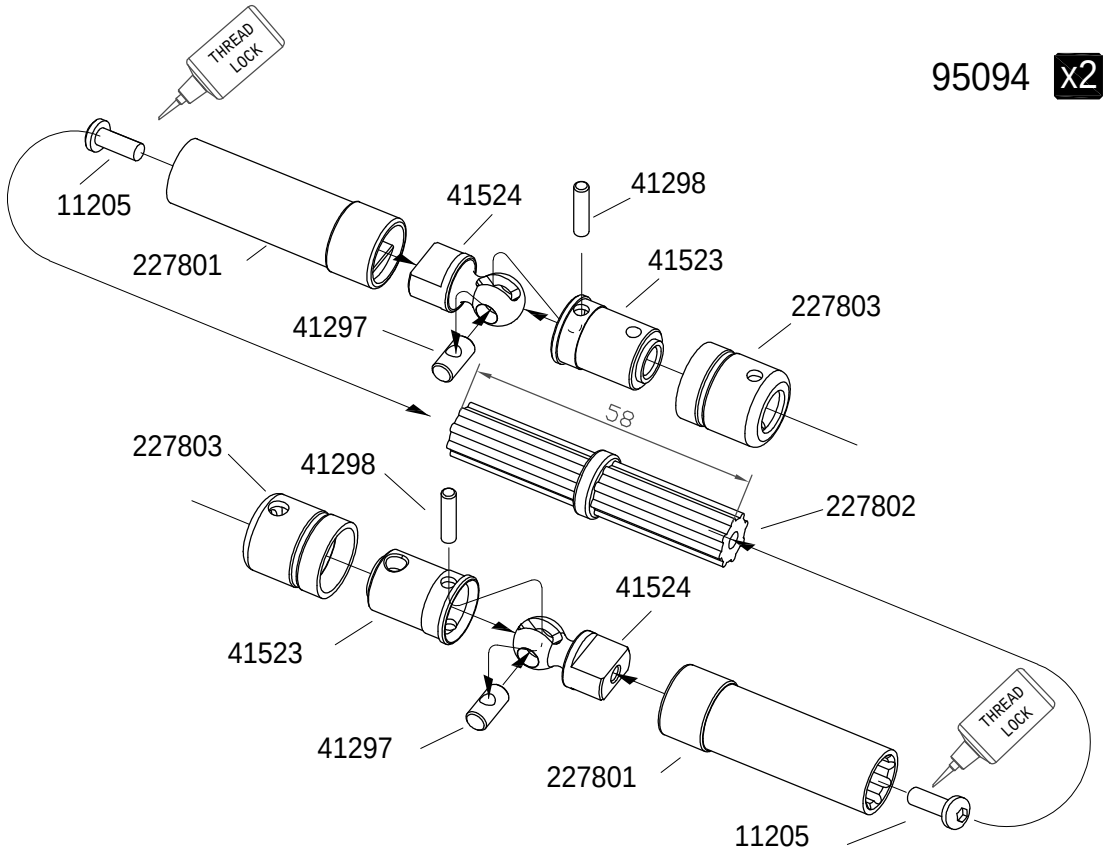
7

EMOX

BAG(X)

11205 M3x6 X4

95094 x2



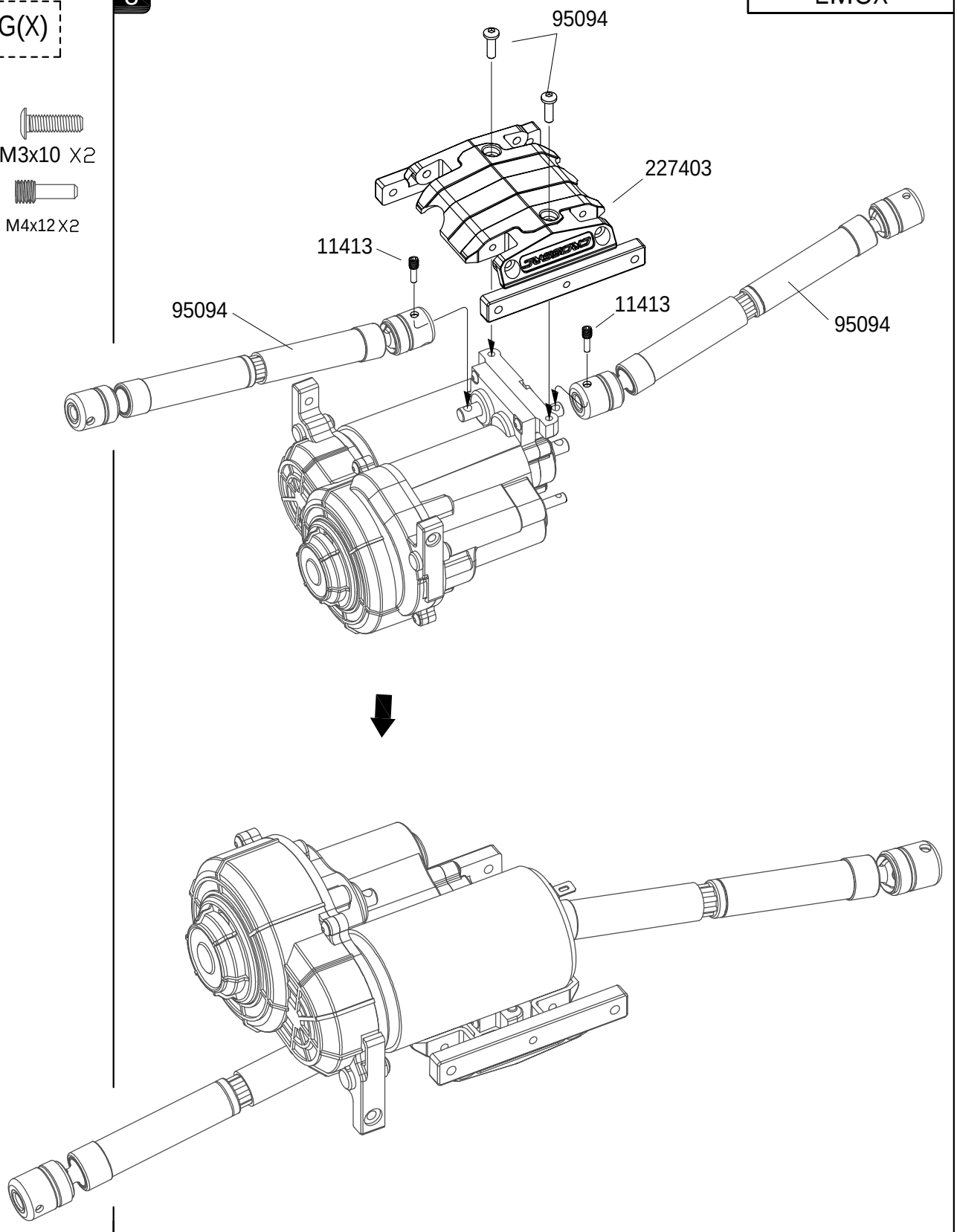
8

EMOX

BAG(X)

11207 M3x10 X2

11413 M4x12 X2



9

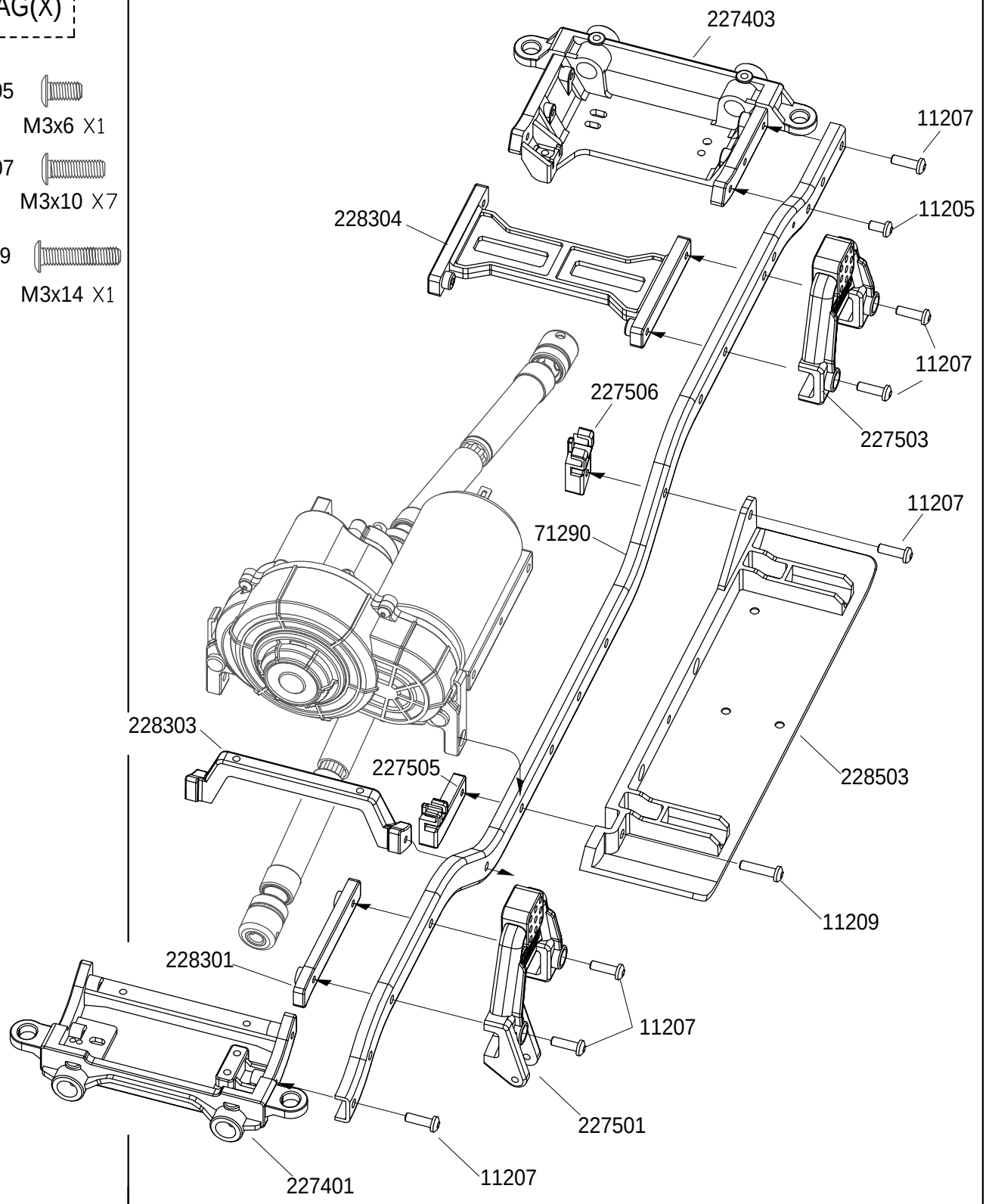
EMOX

BAG(X)

11205 M3x6 X1

11207 M3x10 X7

11209 M3x14 X1



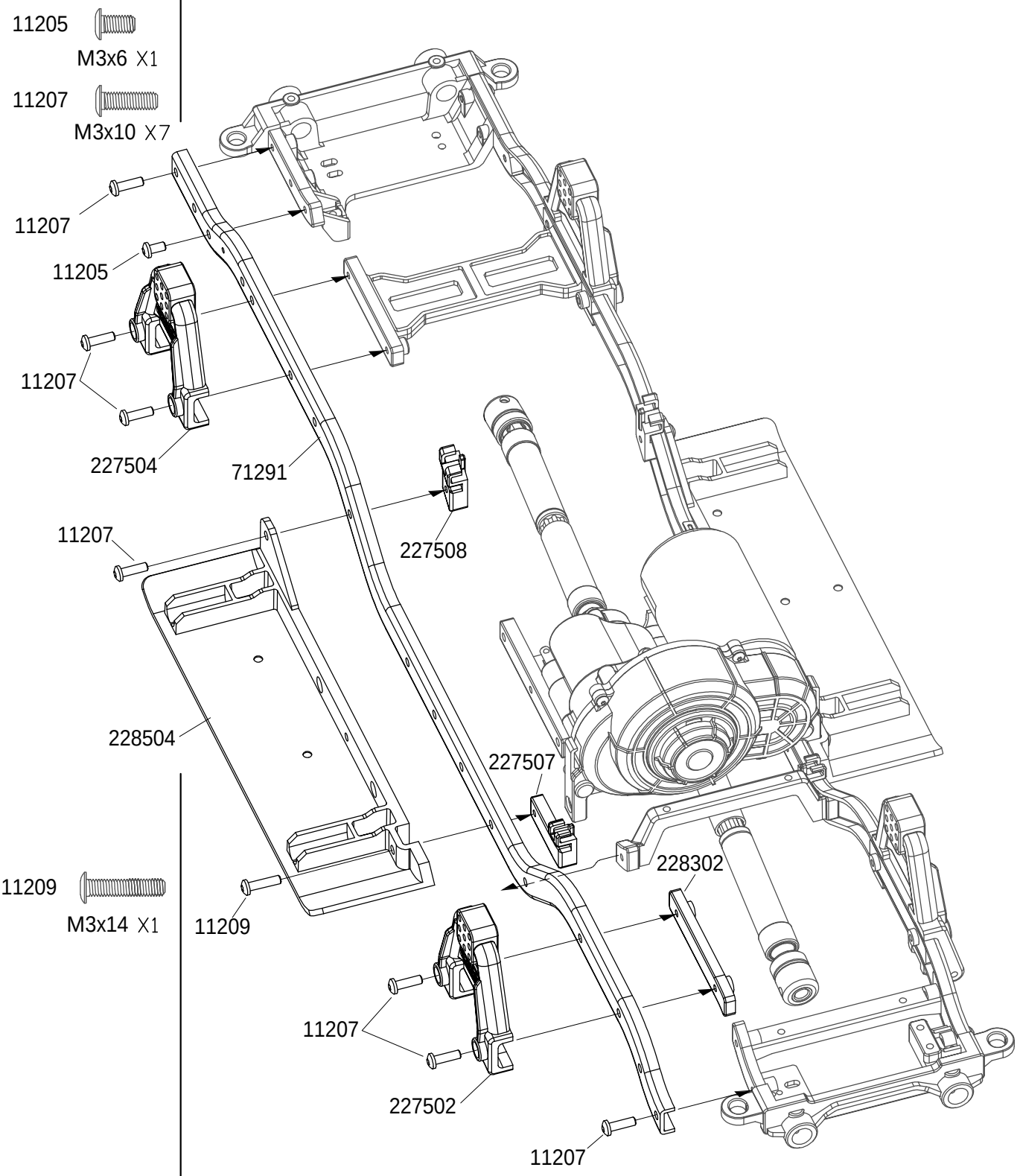
10

EMOX

BAG(X)

11205 M3x6 X1

11207 M3x10 X7

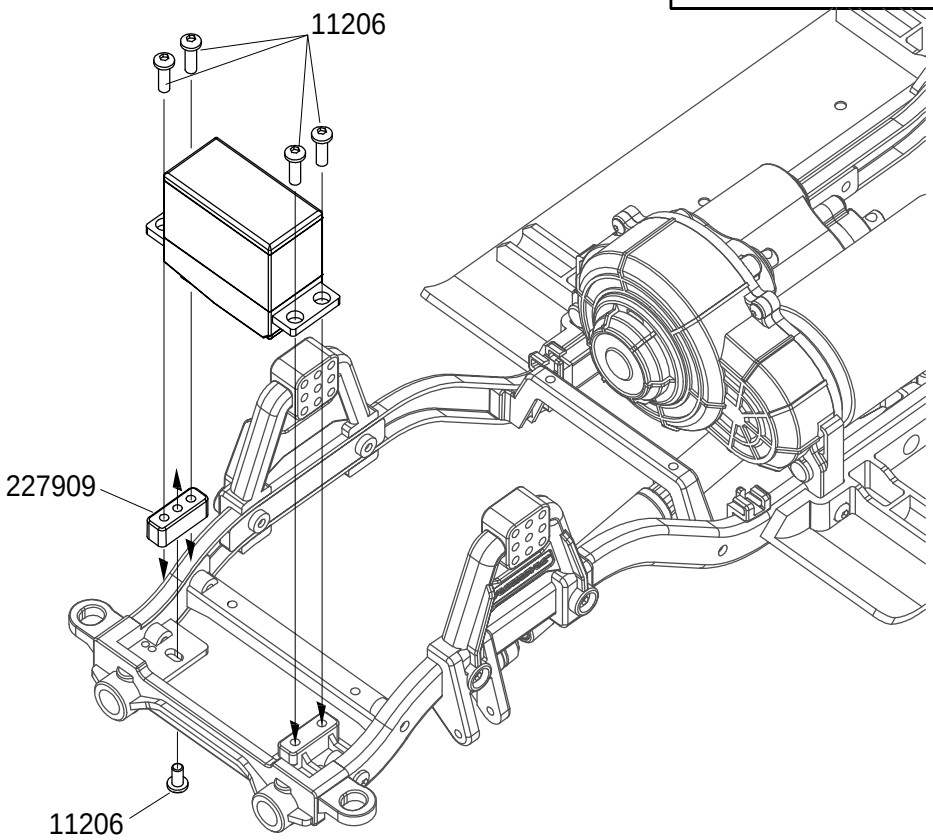


BAG(X)

11206
M3x8 X5

11

EMOX



11206
M3x8 X6

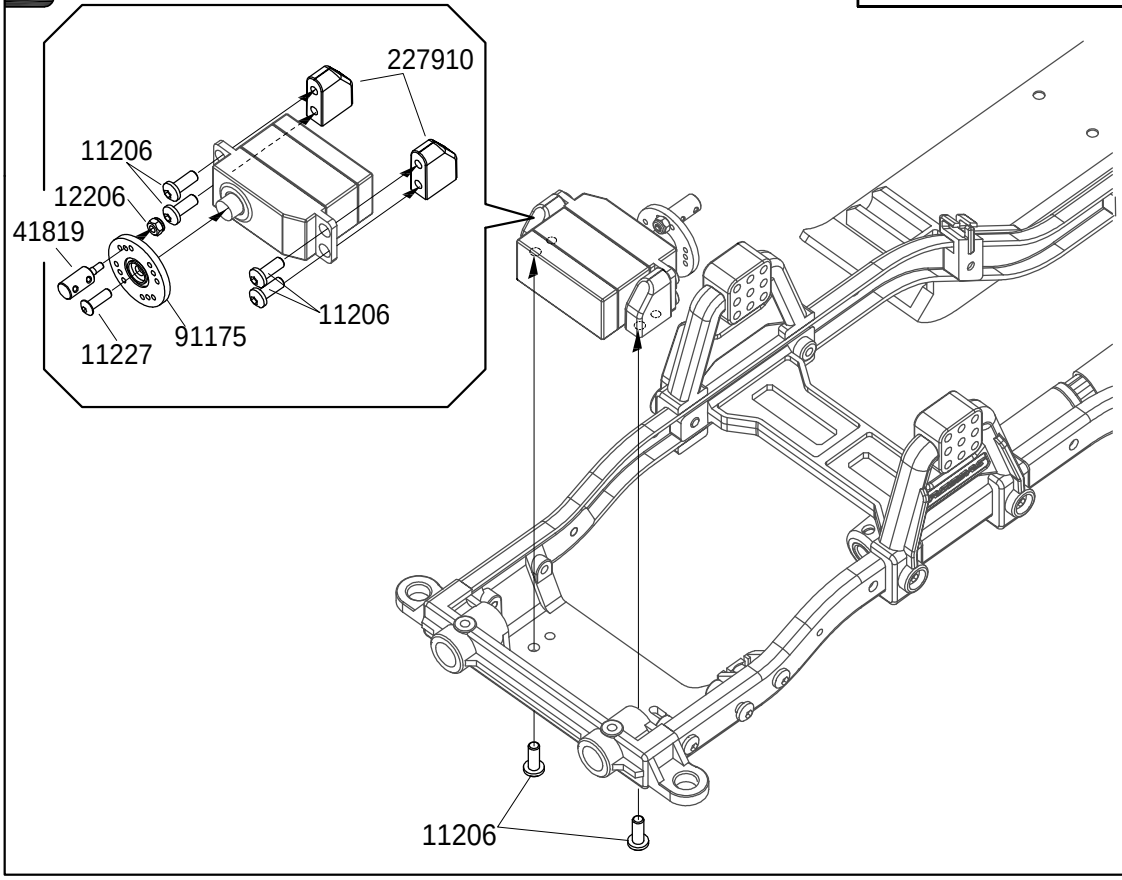
11227
M2.5x8 X1

12206
M2 X1

41819 X1

12

EMOX



BAG(B)

13003
ø2.5xø6x0.4 X8

Ø7xØ3.5xØ2
50021 X8

Ø8xØ6xØ1
17001 X4

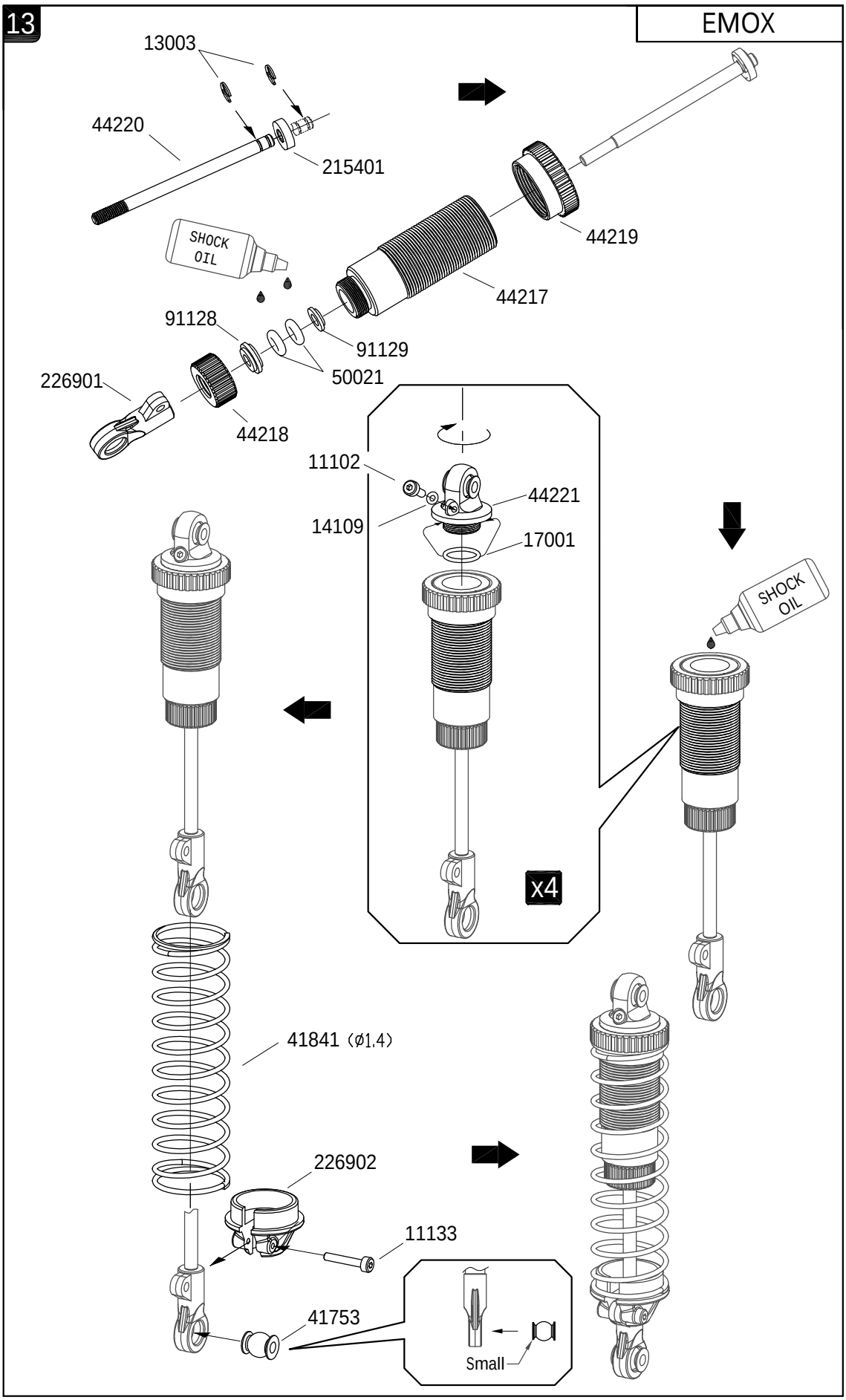
11133
M2x12 X4

11102
M2x6 X4

Ø4xØ2x0.5 X4
14109

41753 X4

41841 X4(ø1.4)

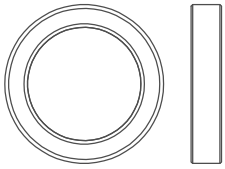


BAG(D)

11316
M2.5x10 X2

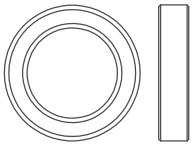
11227
M2.5x8 X8

15015



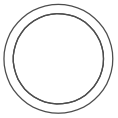
ø15xø21x4 X2

15016



ø12xø18x4 X2

75026



Ø12xØ15x0.2 X2

15012

Ø5xØ10x4 X2

13002

Ø3.8xØ9.2x0.6 X1

72007

Ø5xØ8x0.3 X1

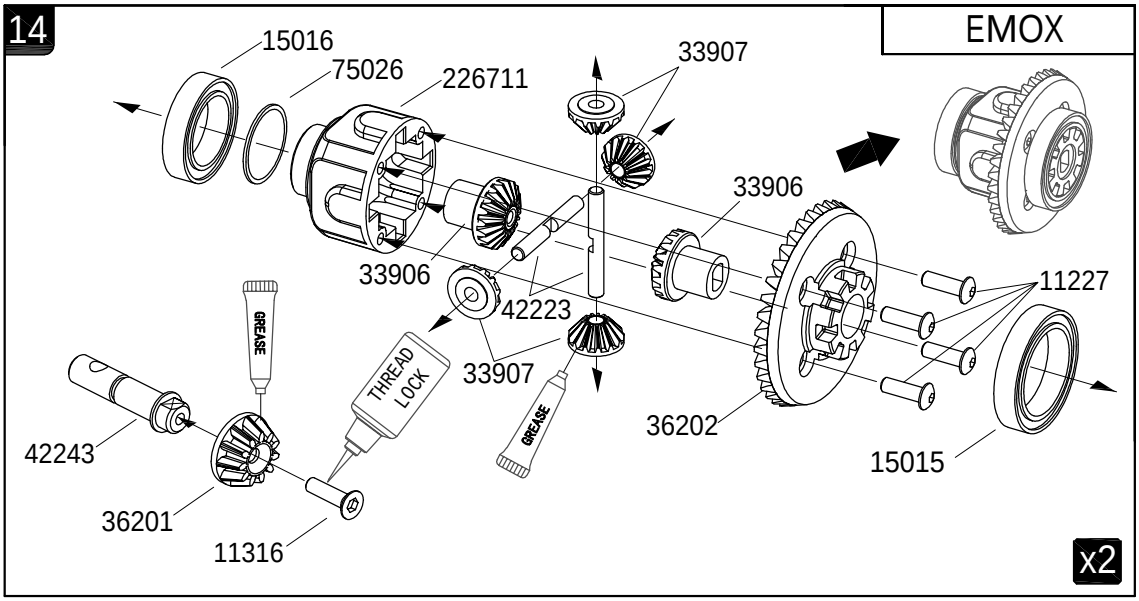
11125

M2.5x10 X4

11316
M2.5x10 X8

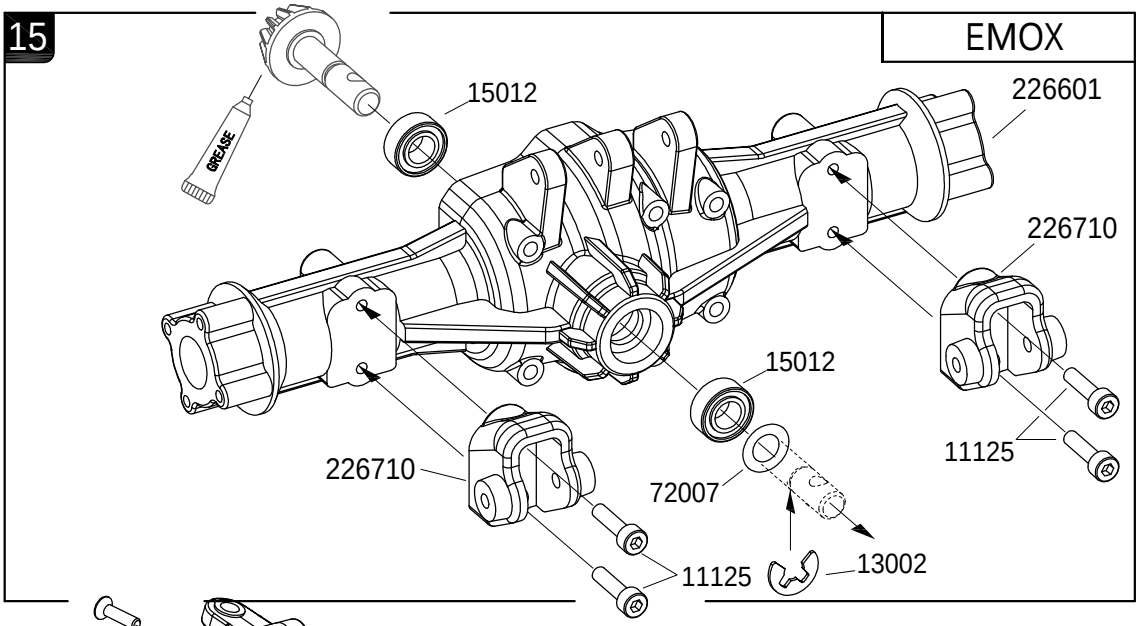
14

EMOX



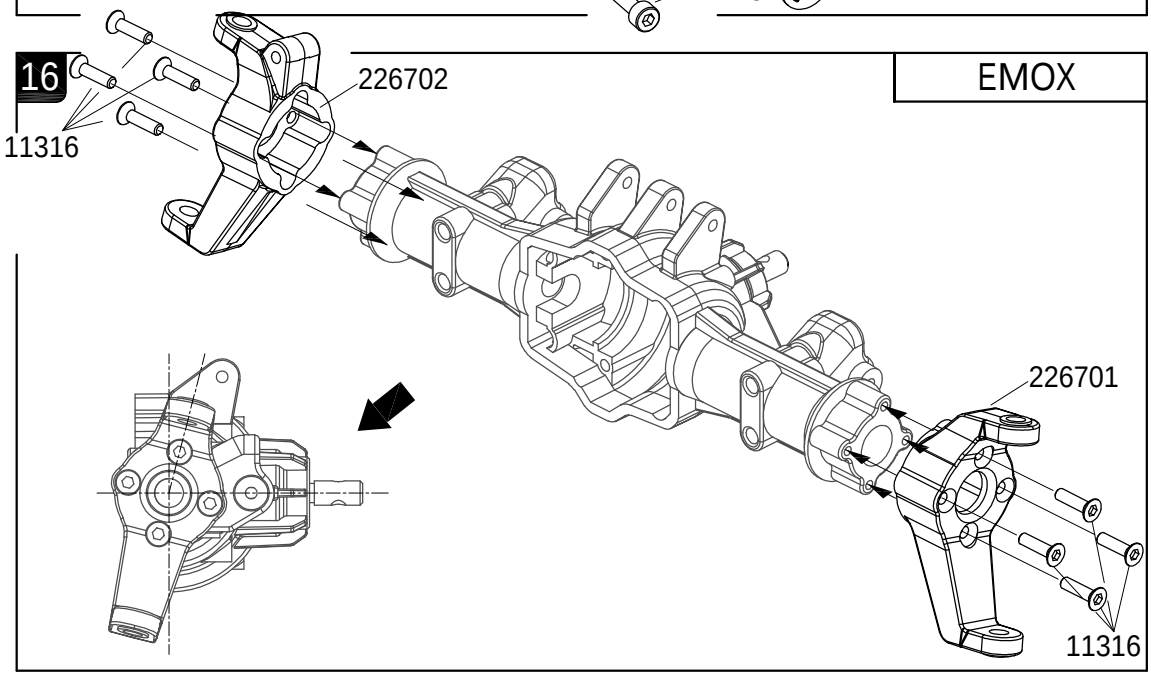
15

EMOX



16

EMOX



BAG(D)

11412
M3x3 X1

11125
M2.5x10 X6

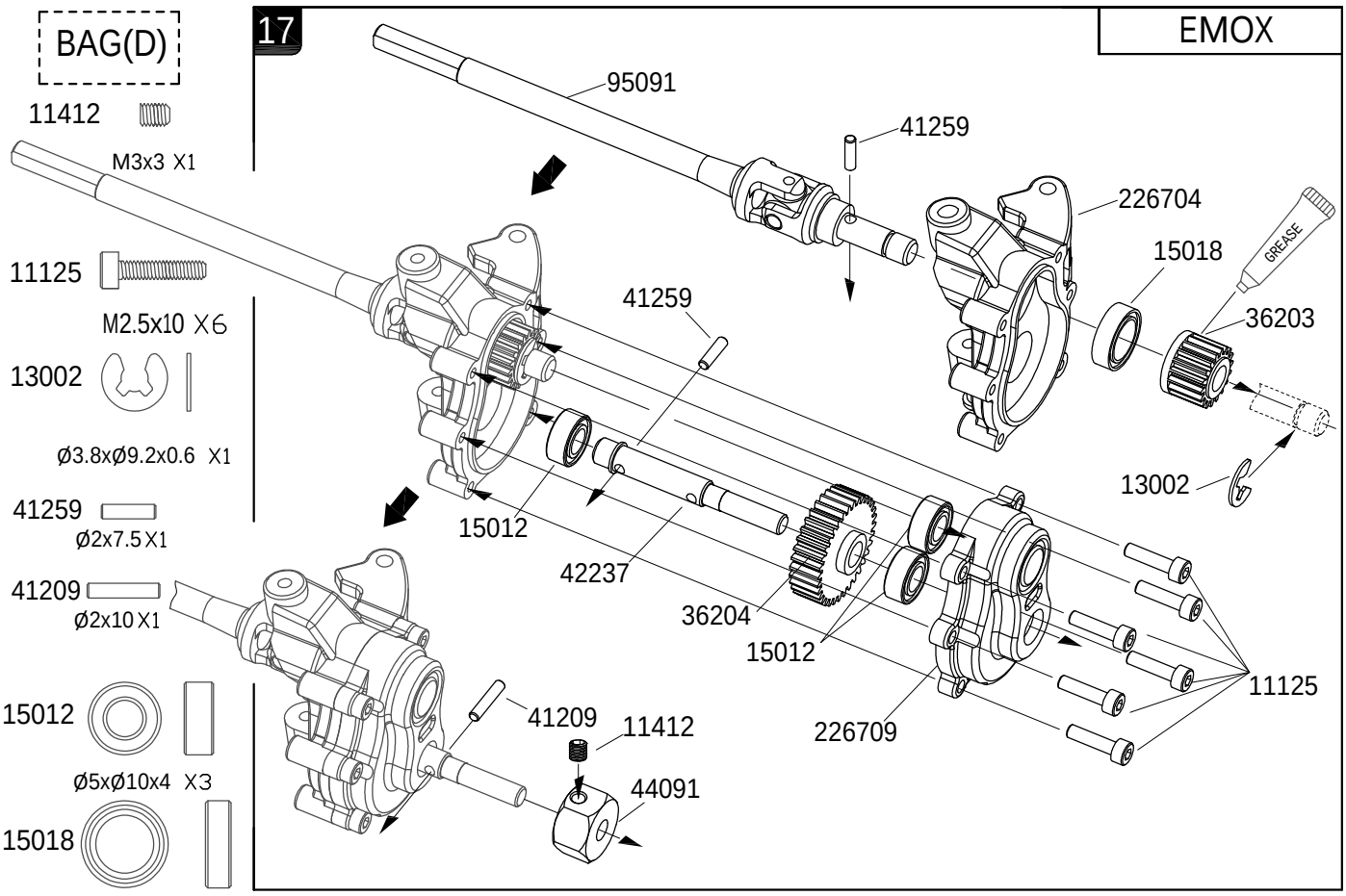
13002
Ø3.8xØ9.2x0.6 X1

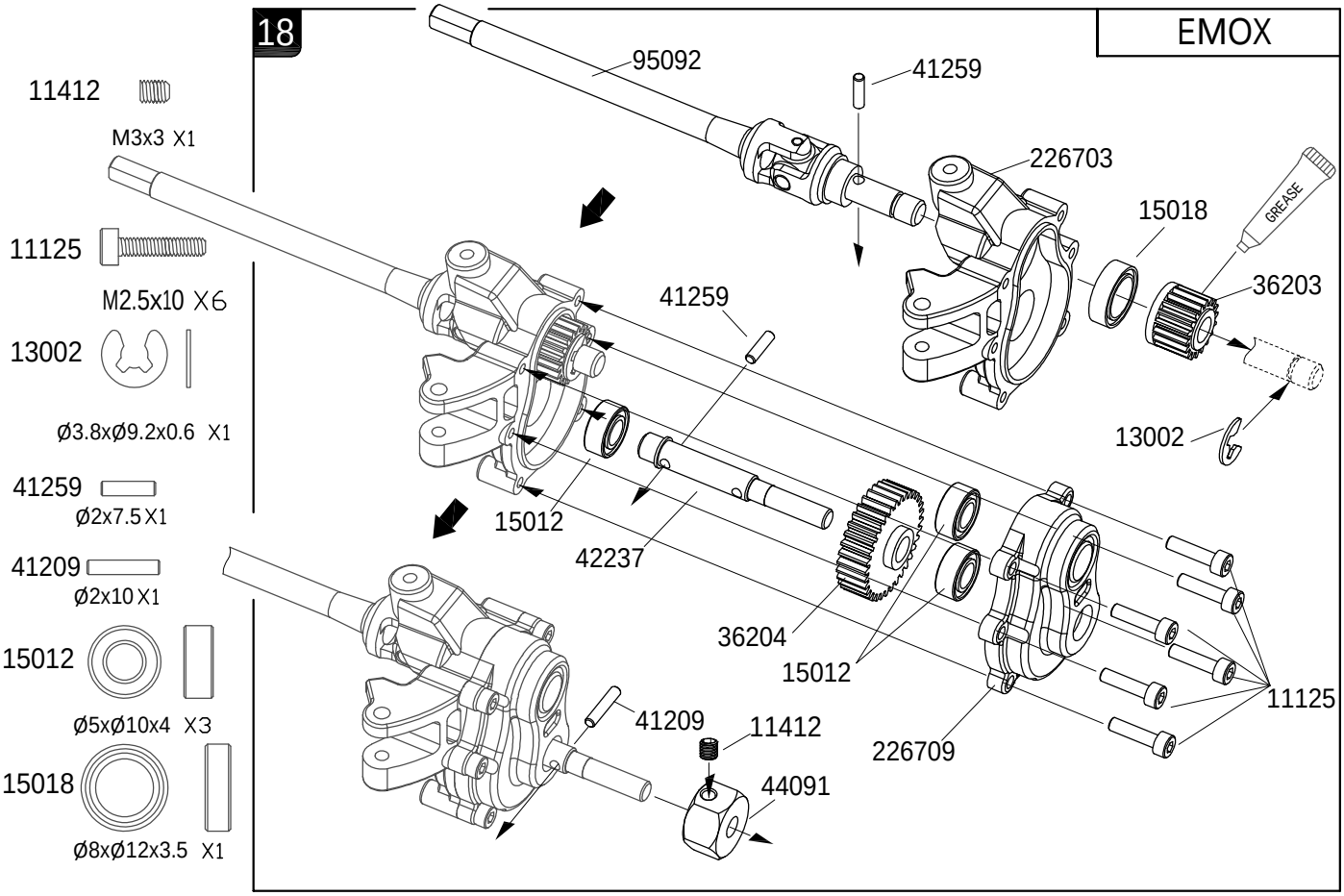
41259
Ø2x7.5 X1

41209
Ø2x10 X1

15012
Ø5xØ10x4 X3

15018
Ø8xØ12x3.5 X1





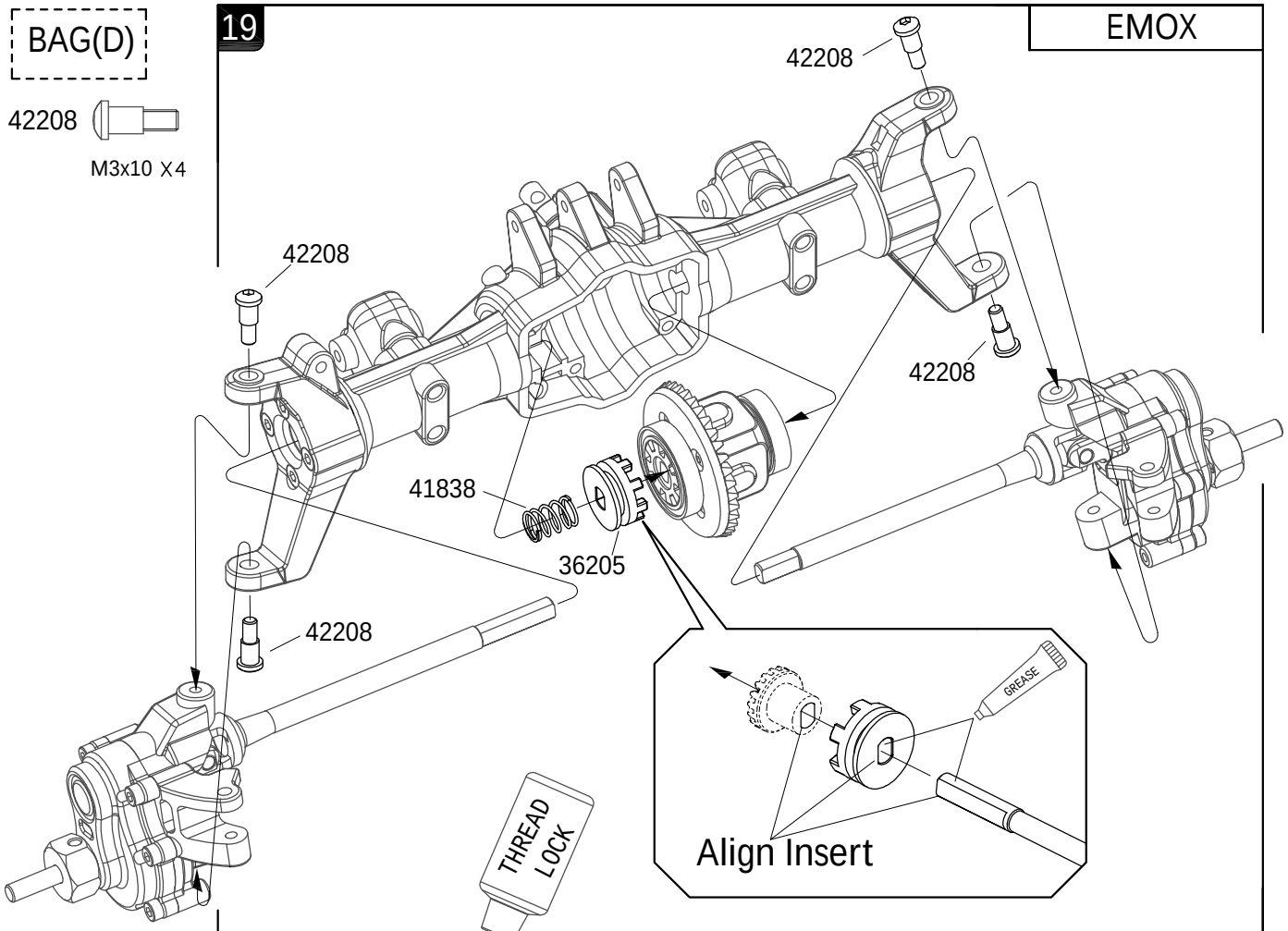
BAG(D)

42208

M3x10 X4

19

EMOX



20

EMOX

11401

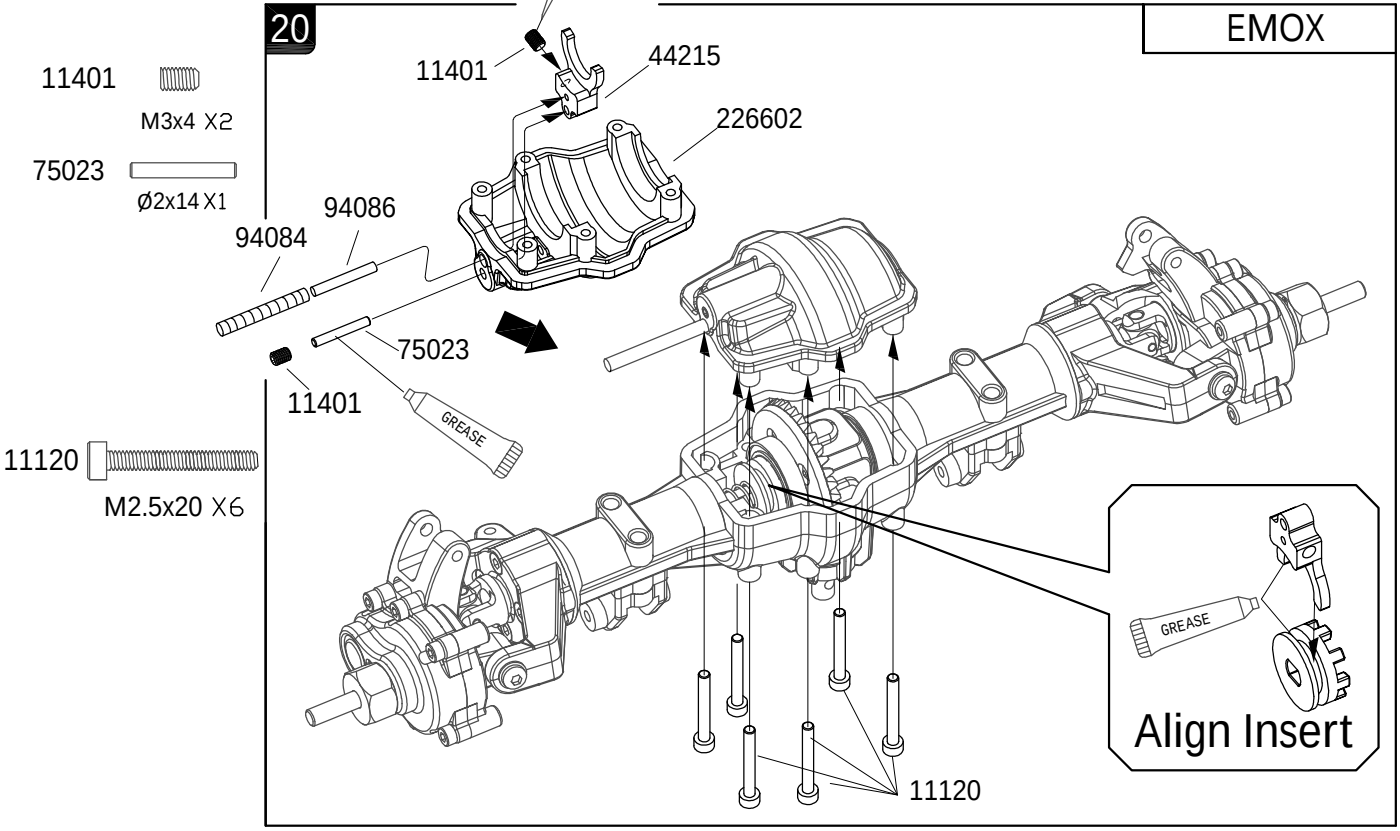
M3x4 X2

75023

Ø2x14 X1

11120

M2.5x20 X6



BAG(D)

15012

Ø5xØ10x4 X2

13002

Ø3.8xØ9.2x0.6 X1

72007

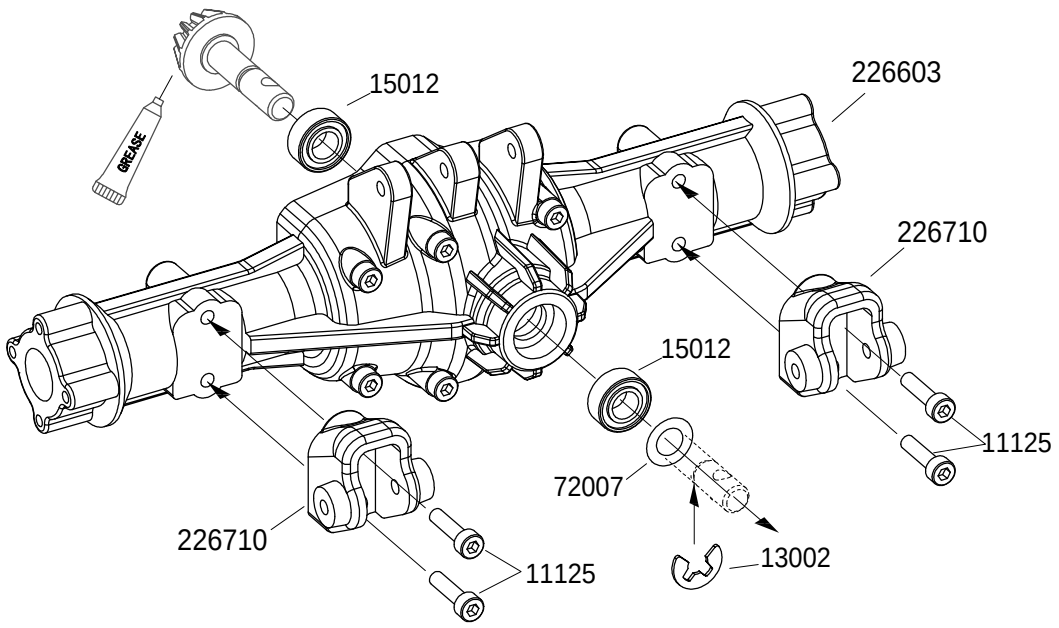
Ø5xØ8x0.3 X1

11125

M2.5x10 X4

21

EMOX

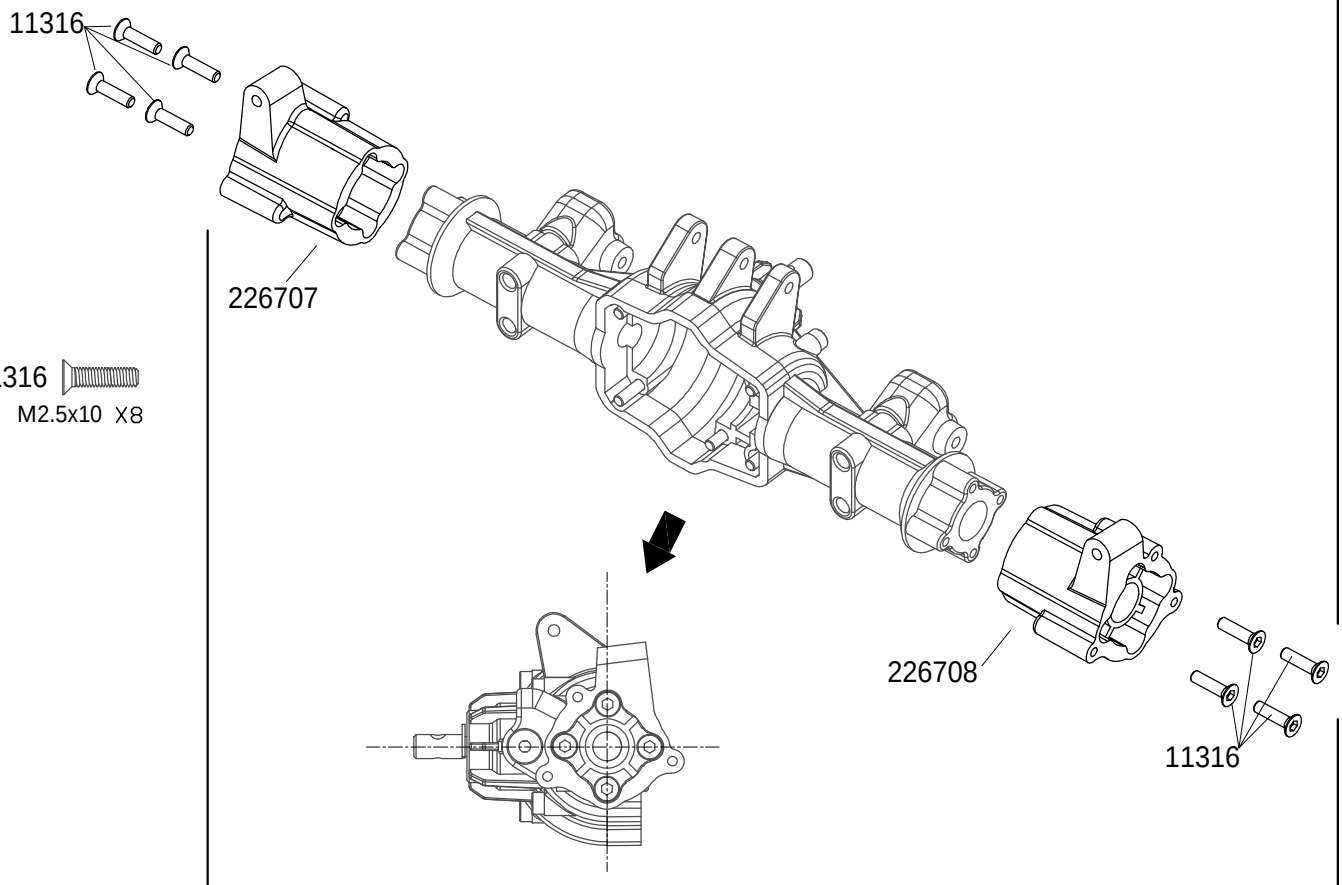


22

EMOX

11316

M2.5x10 X8



BAG(D)

11412
M3x3 X1

15012
Ø5xØ10x4 X4

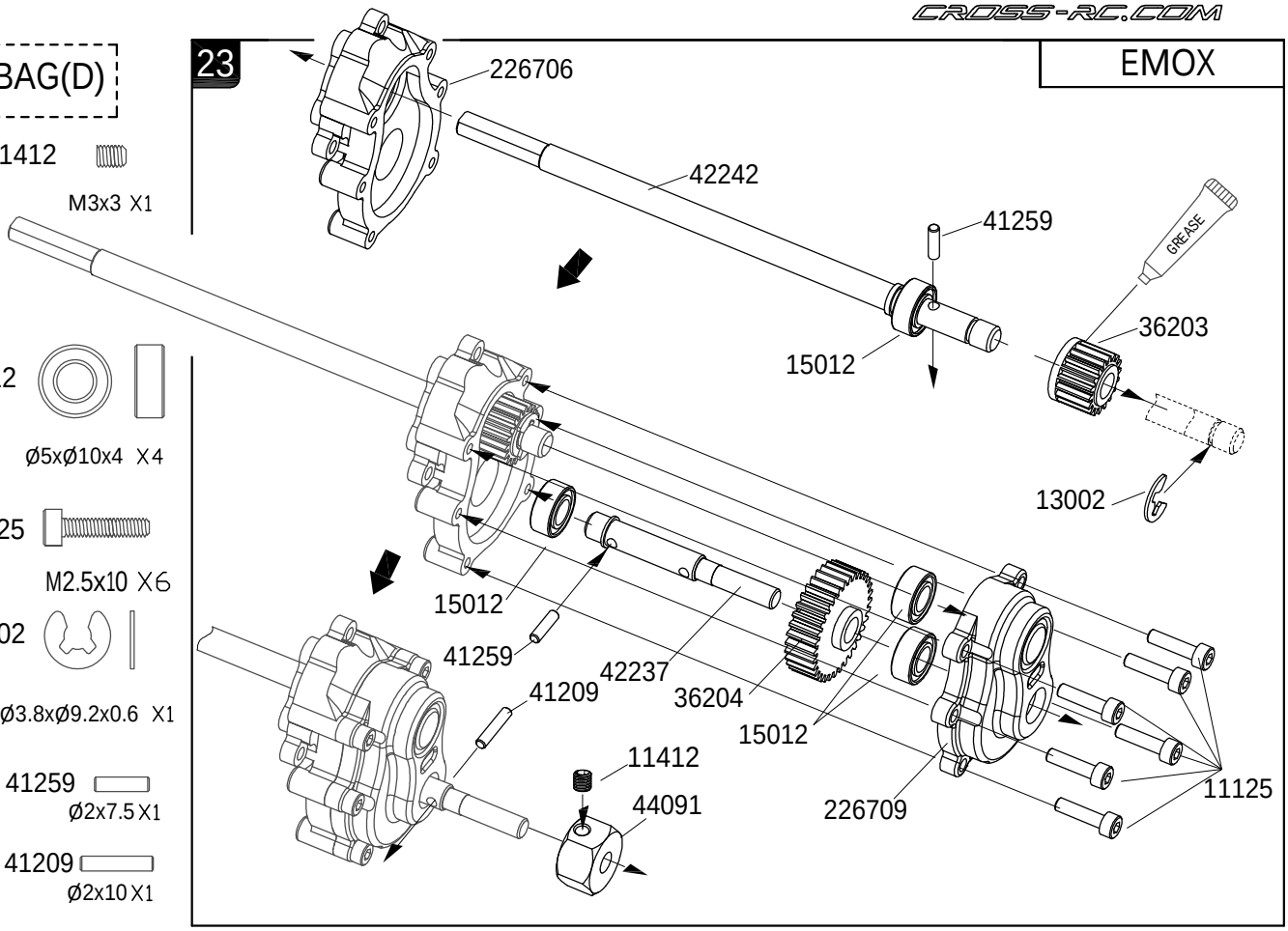
11125
M2.5x10 X6

13002
Ø3.8xØ9.2x0.6 X1

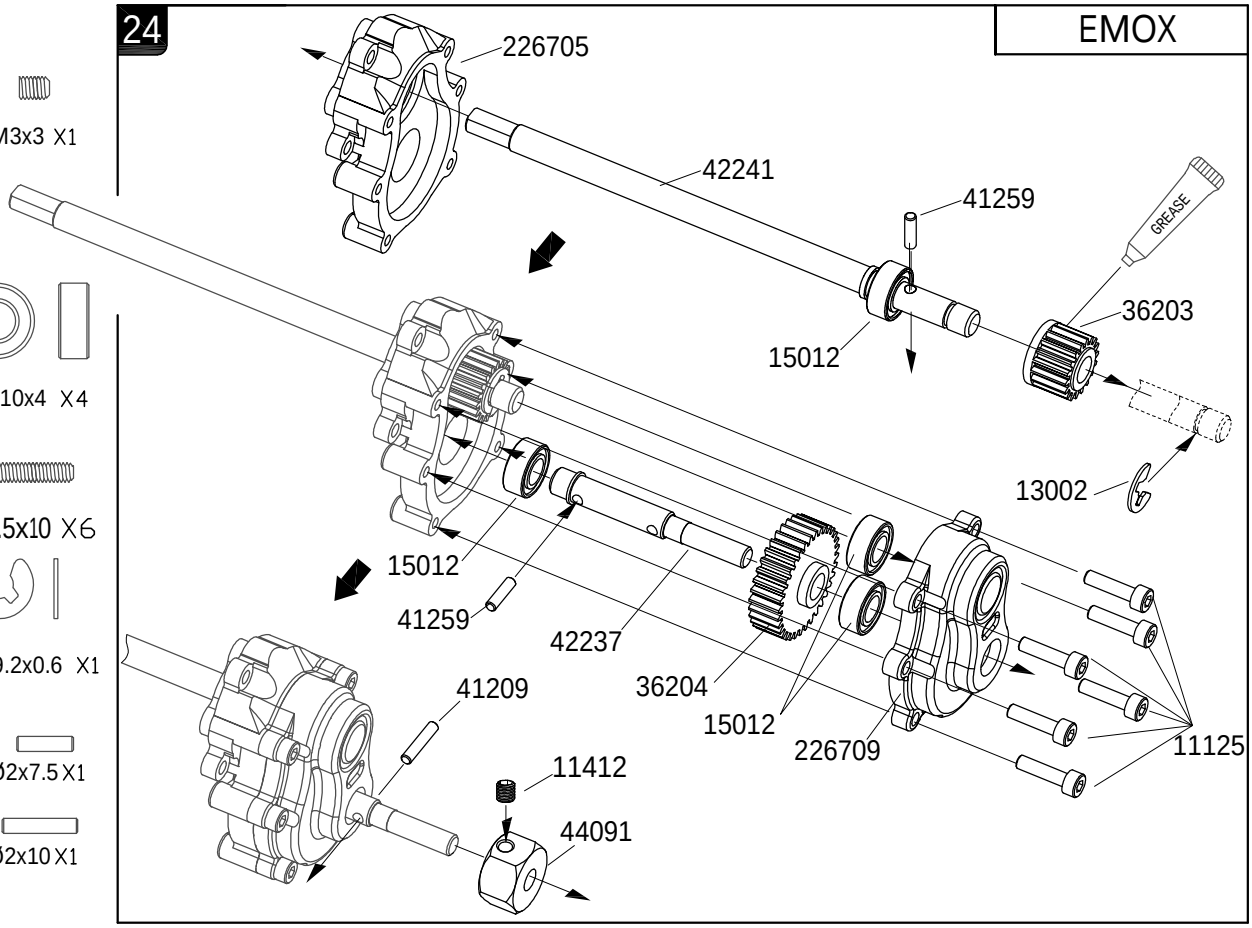
41259
Ø2x7.5 X1

41209
Ø2x10 X1

23 EMOX



24 EMOX



BAG(D)

11125
M2.5x10 X6

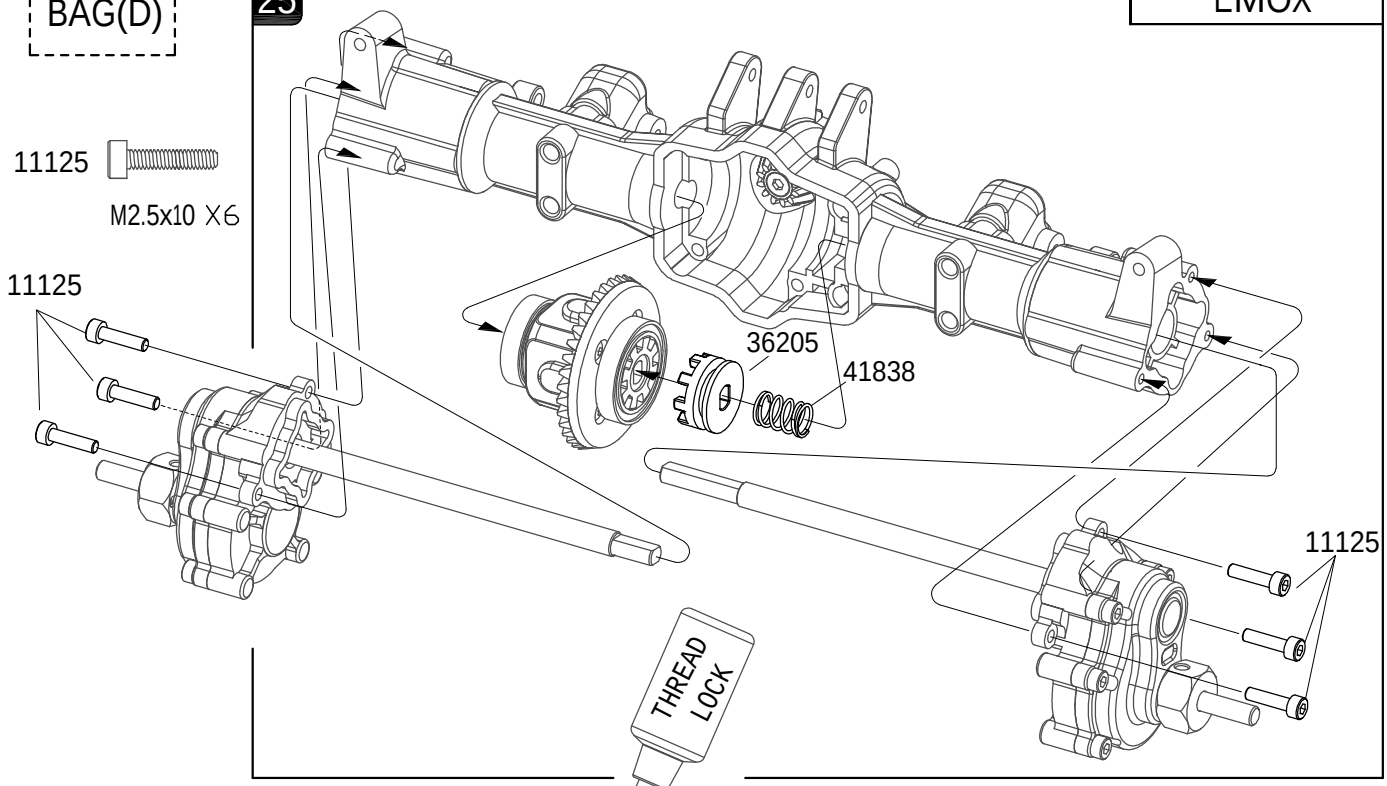
11401
M3x4 X2

75023
Ø2x14 X1

11120
M2.5x20 X6

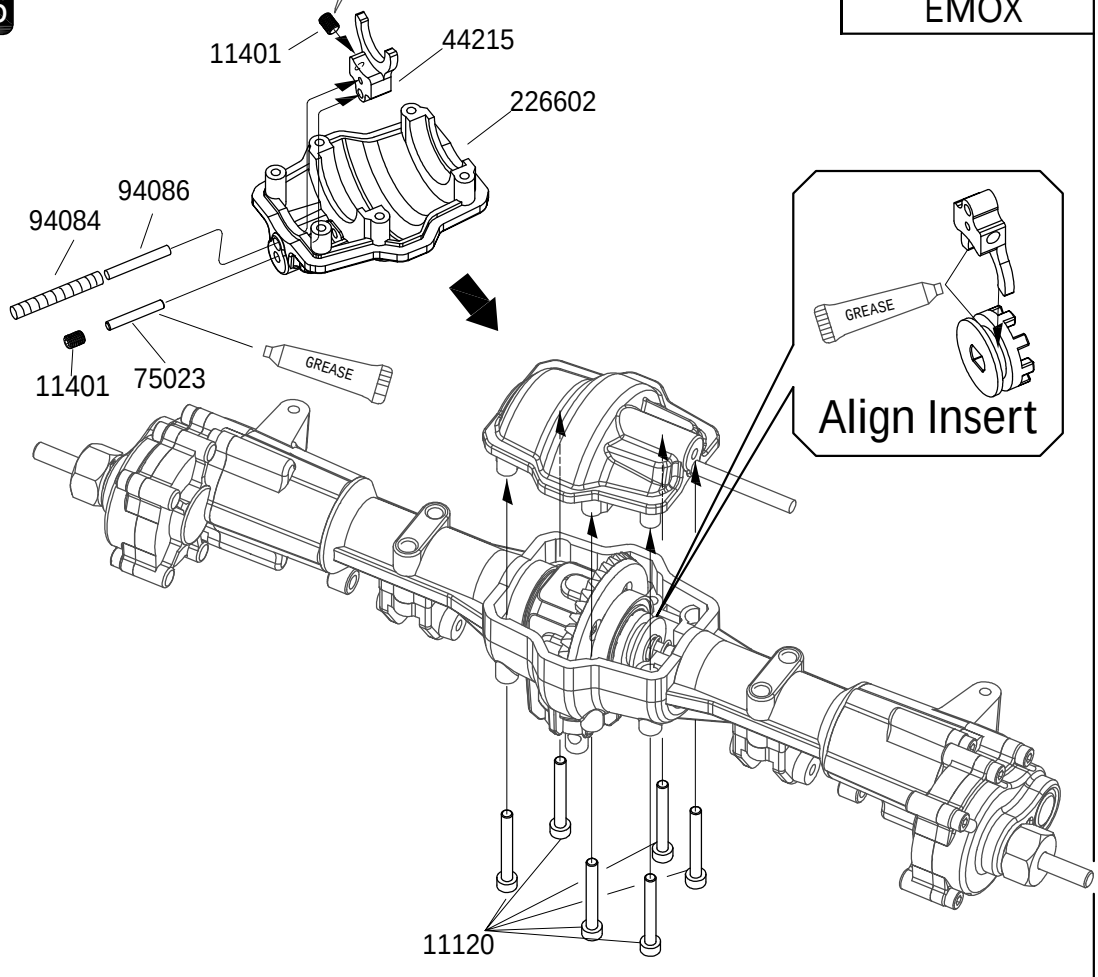
25

EMOX



26

EMOX



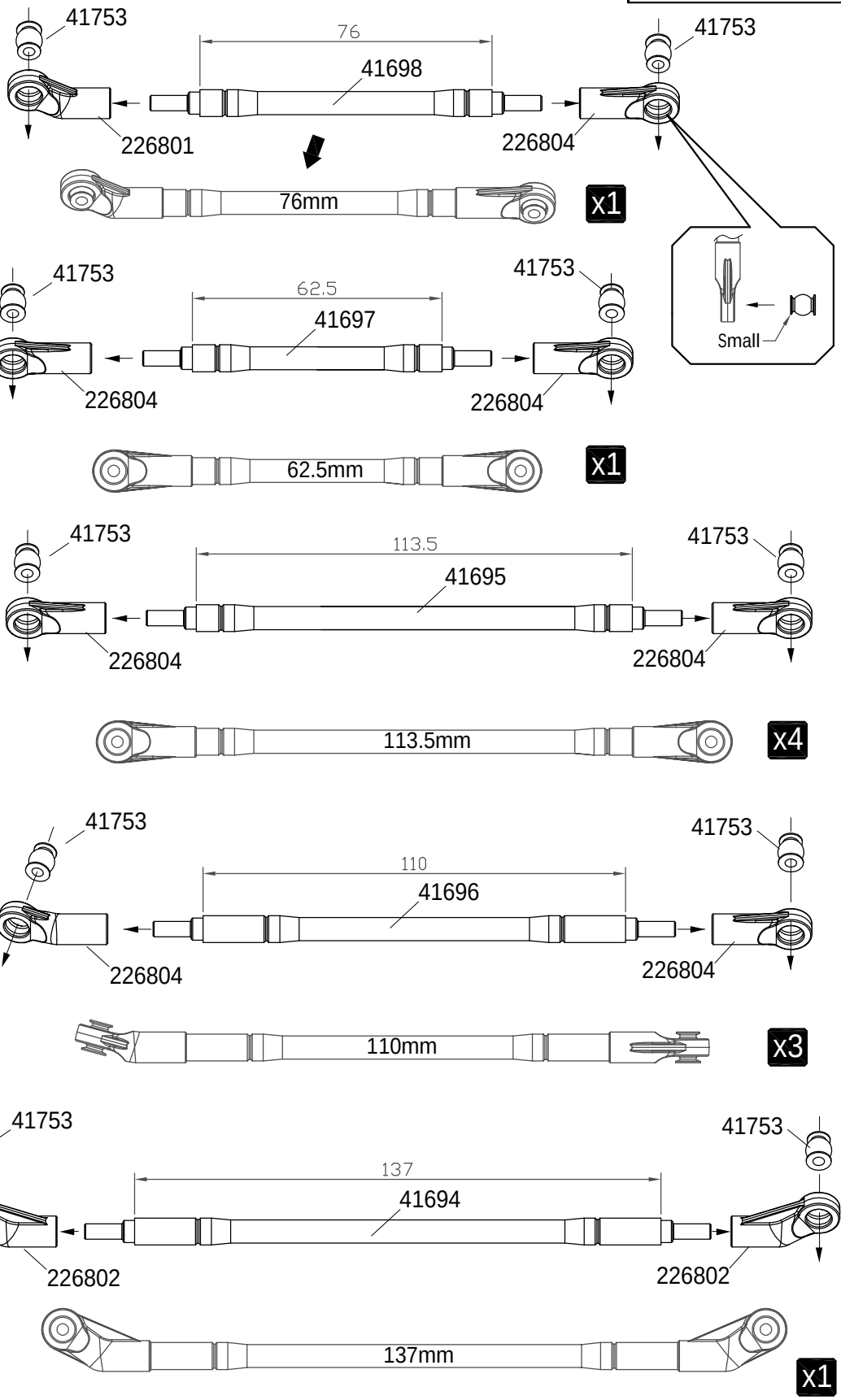
BAG(F)

BAG(G)

41753 X20

27

EMOX



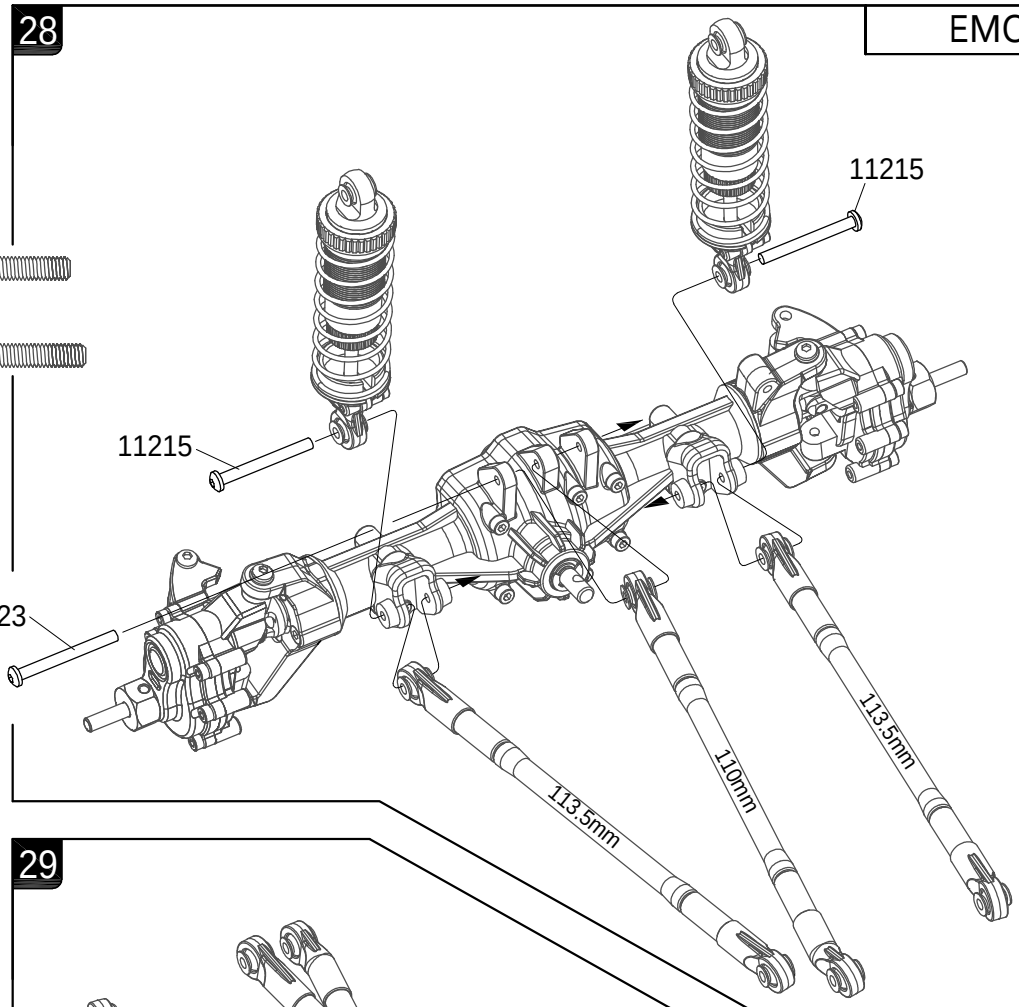
BAG(X)

11215 M3x28 X2

11223 M3x30 X1

28

EMOX



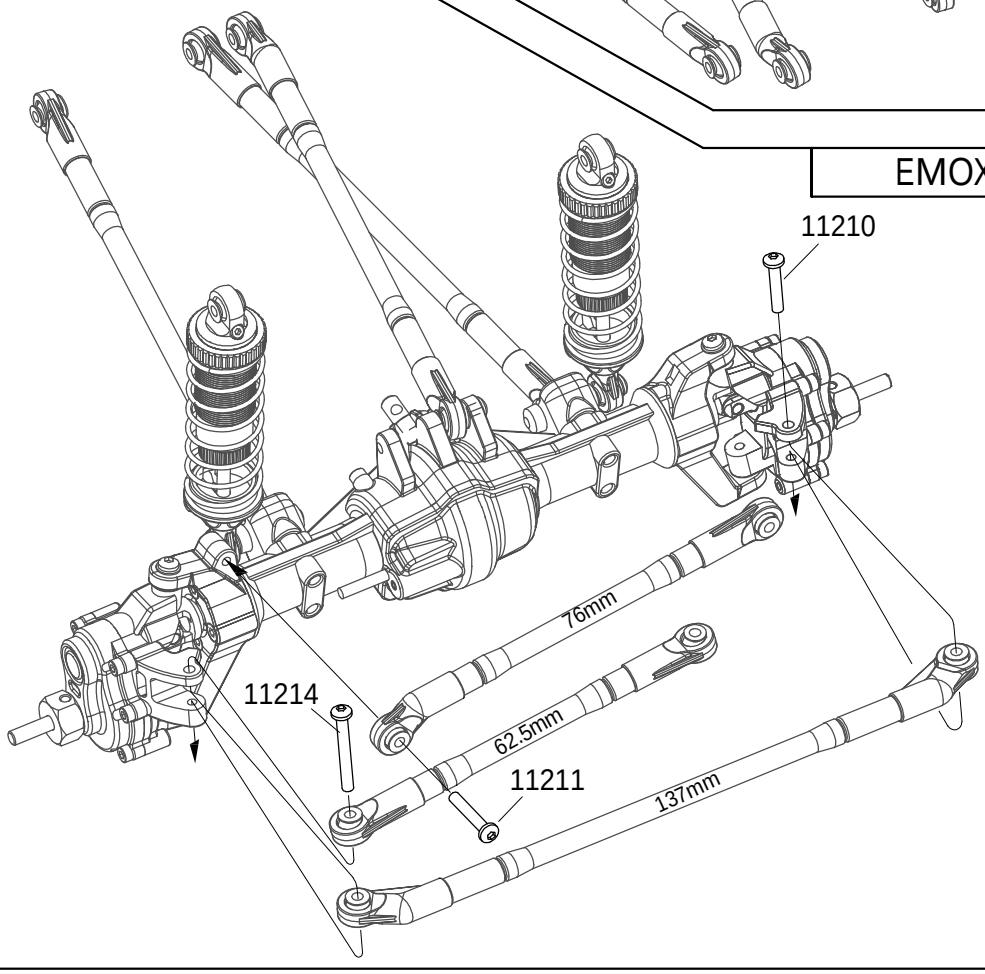
11210 M3x16 X1

11211 M3x18 X1

11214 M3x25 X1

29

EMOX



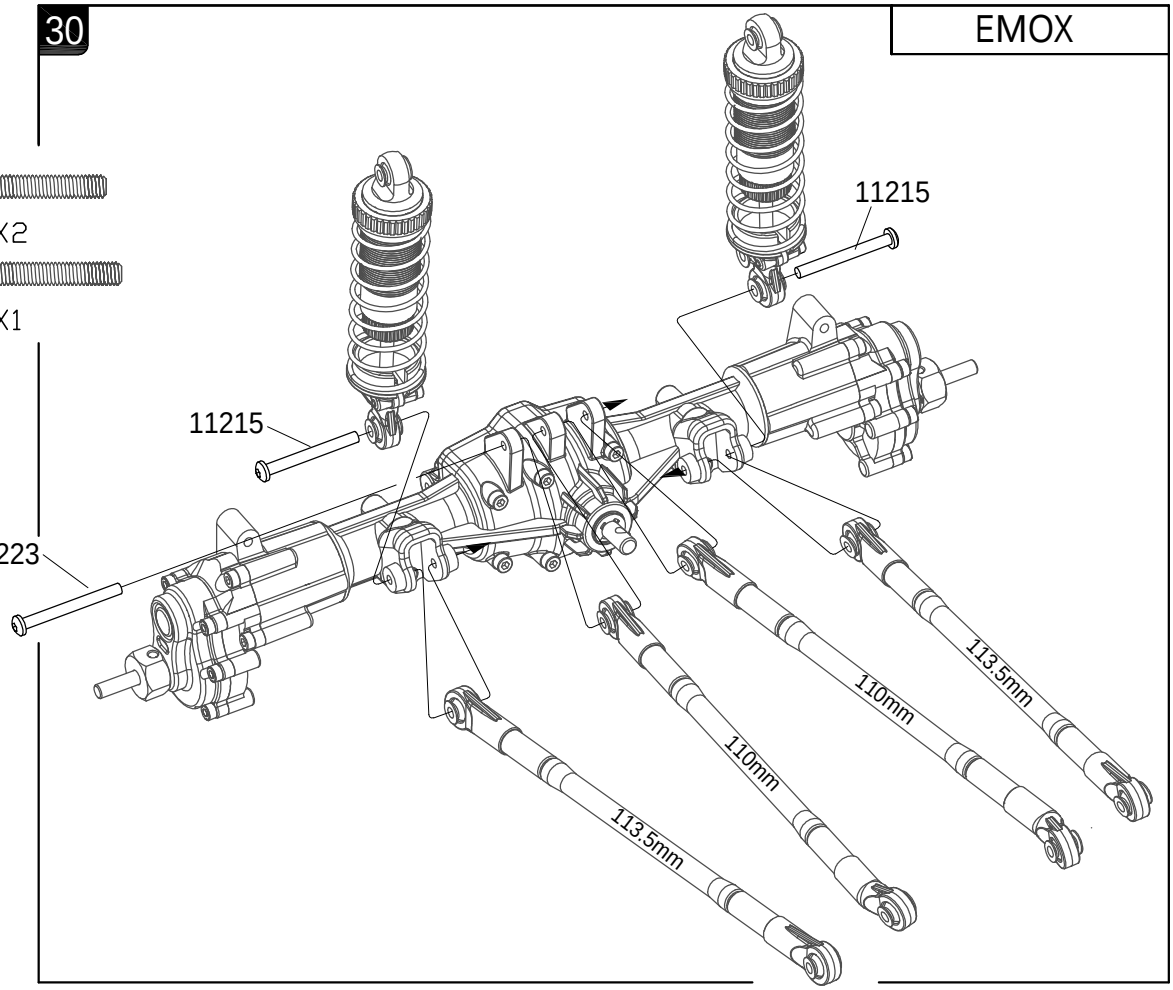
BAG(X)

11215 M3x28 X2

11223 M3x30 X1

30

EMOX



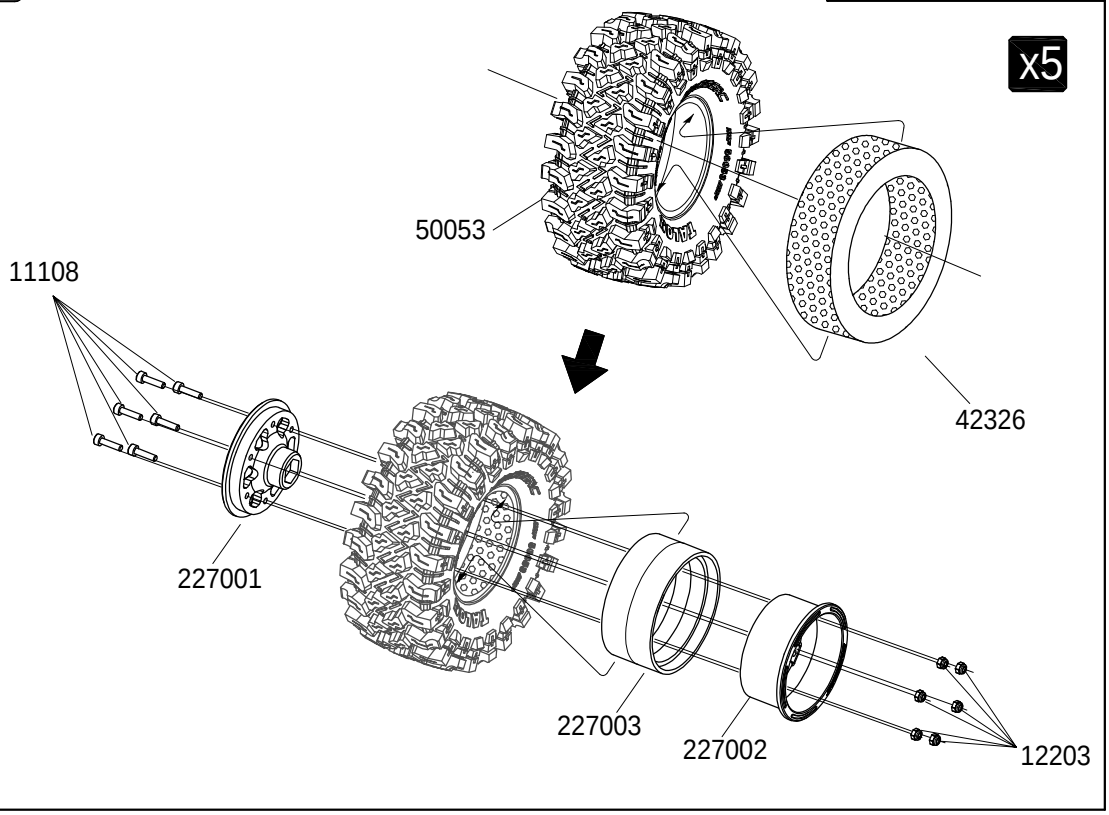
BAG(A)

11108 M3x12 X30

12203 M3 X30

31

EMOX



32

EMOX

BAG(X)

11207 M3x10 X2

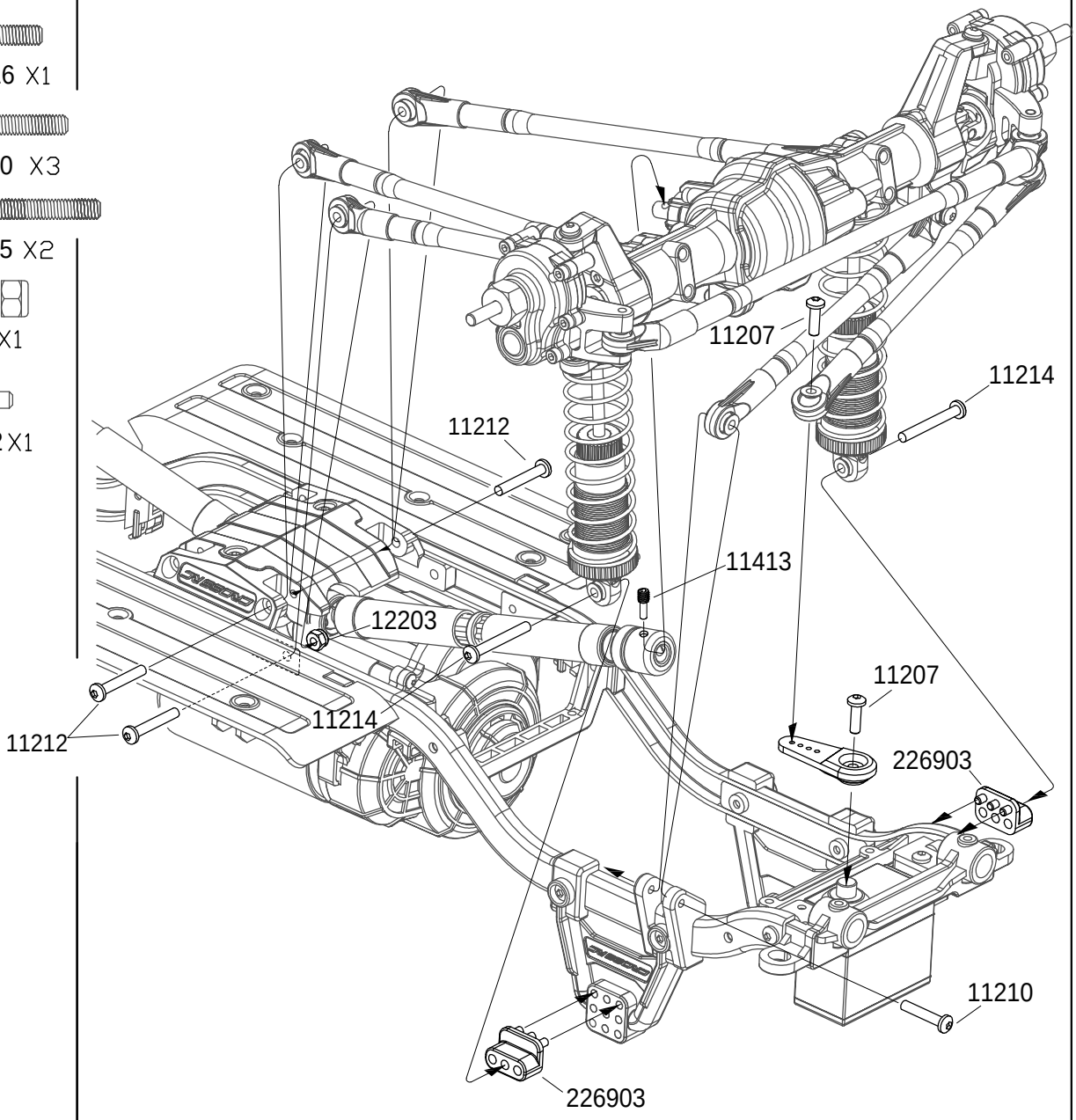
11210 M3x16 X1

11212 M3x20 X3

11214 M3x25 X2

12203 M3 X1

11413 M4x12 X1



33

EMOX

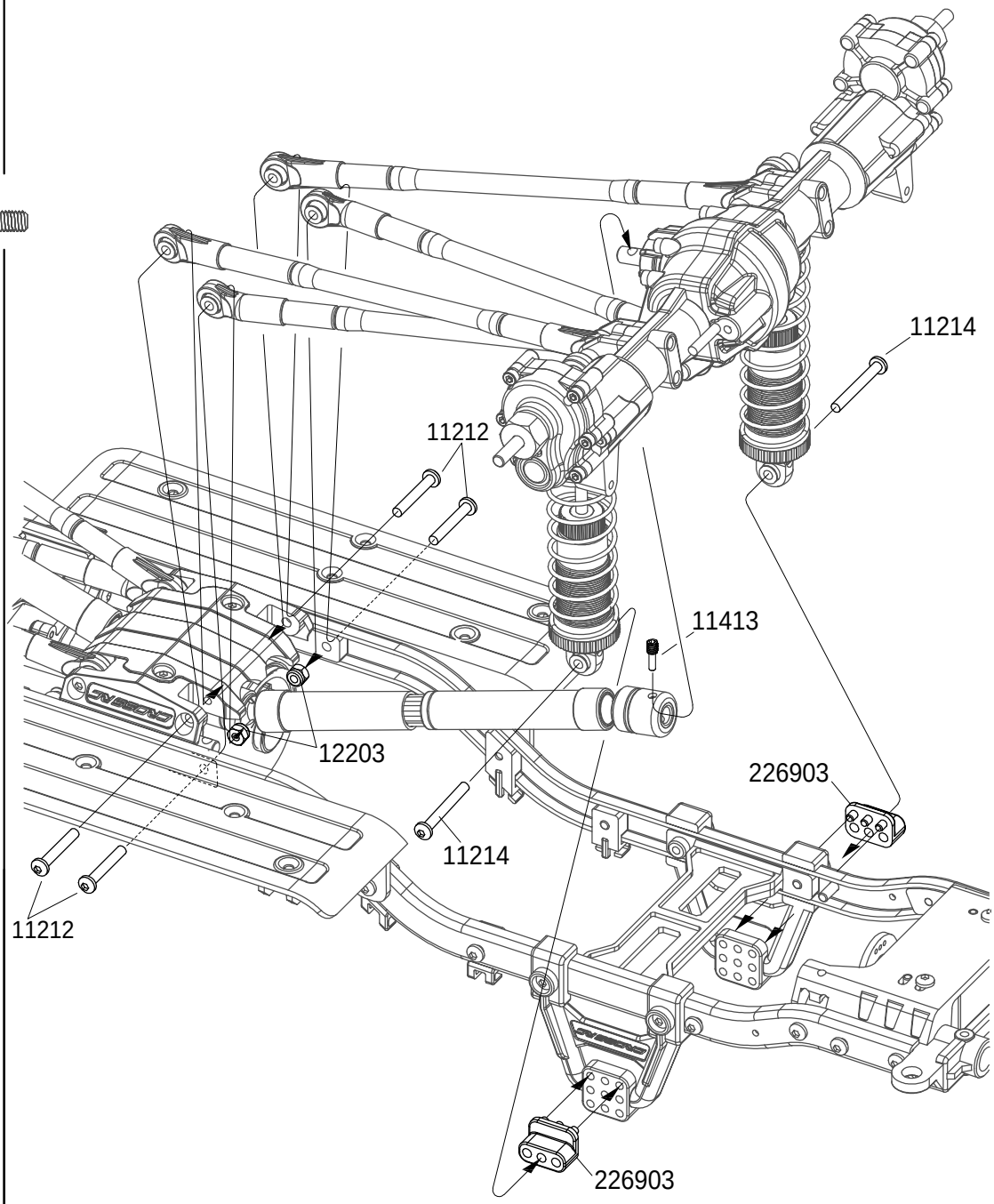
BAG(X)

11212 M3x20 X4

11214 M3x25 X2

12203 M3 X2

11413 M4x12 X1



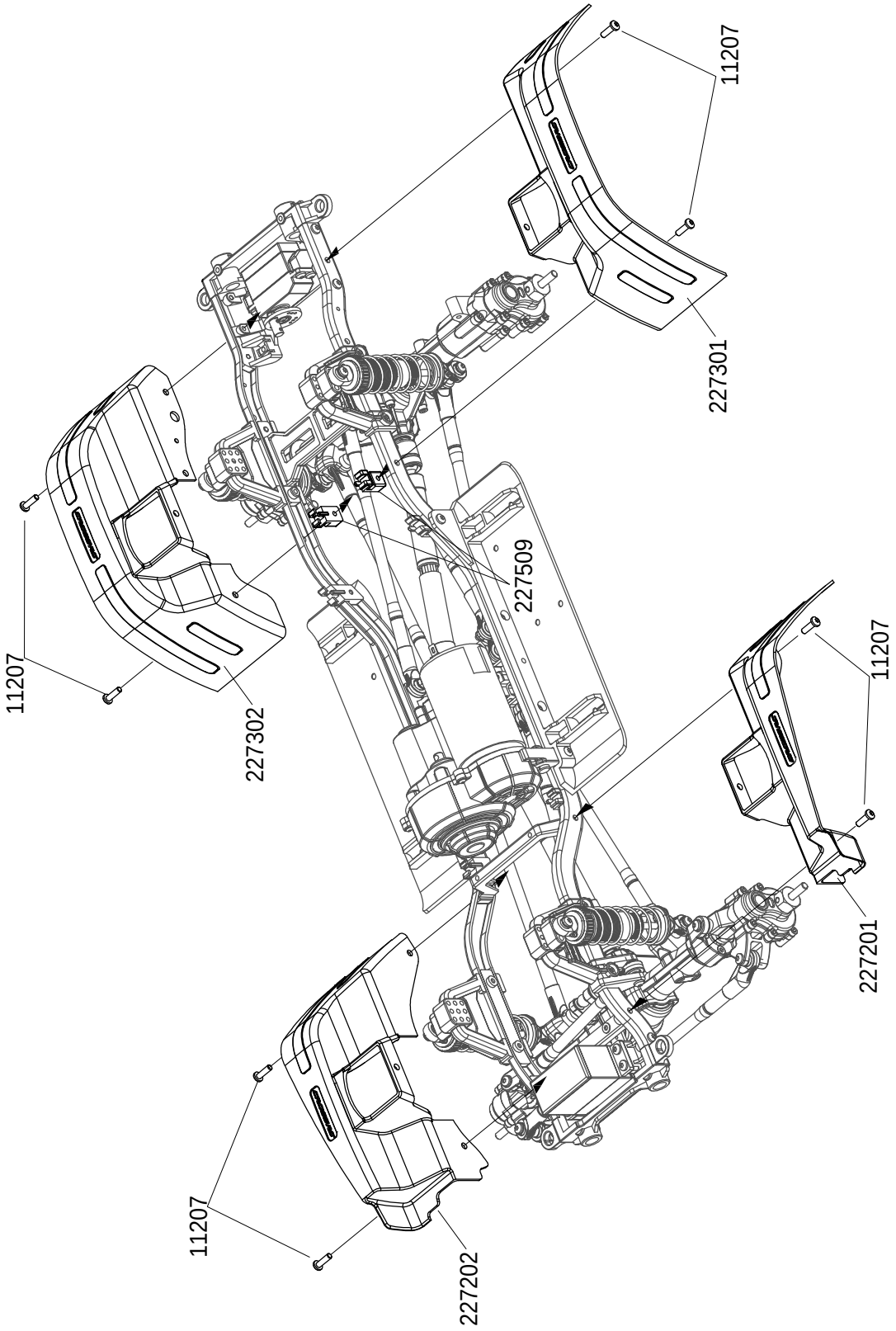
34

EMOX

BAG(X)

11207 

M3x10 X8



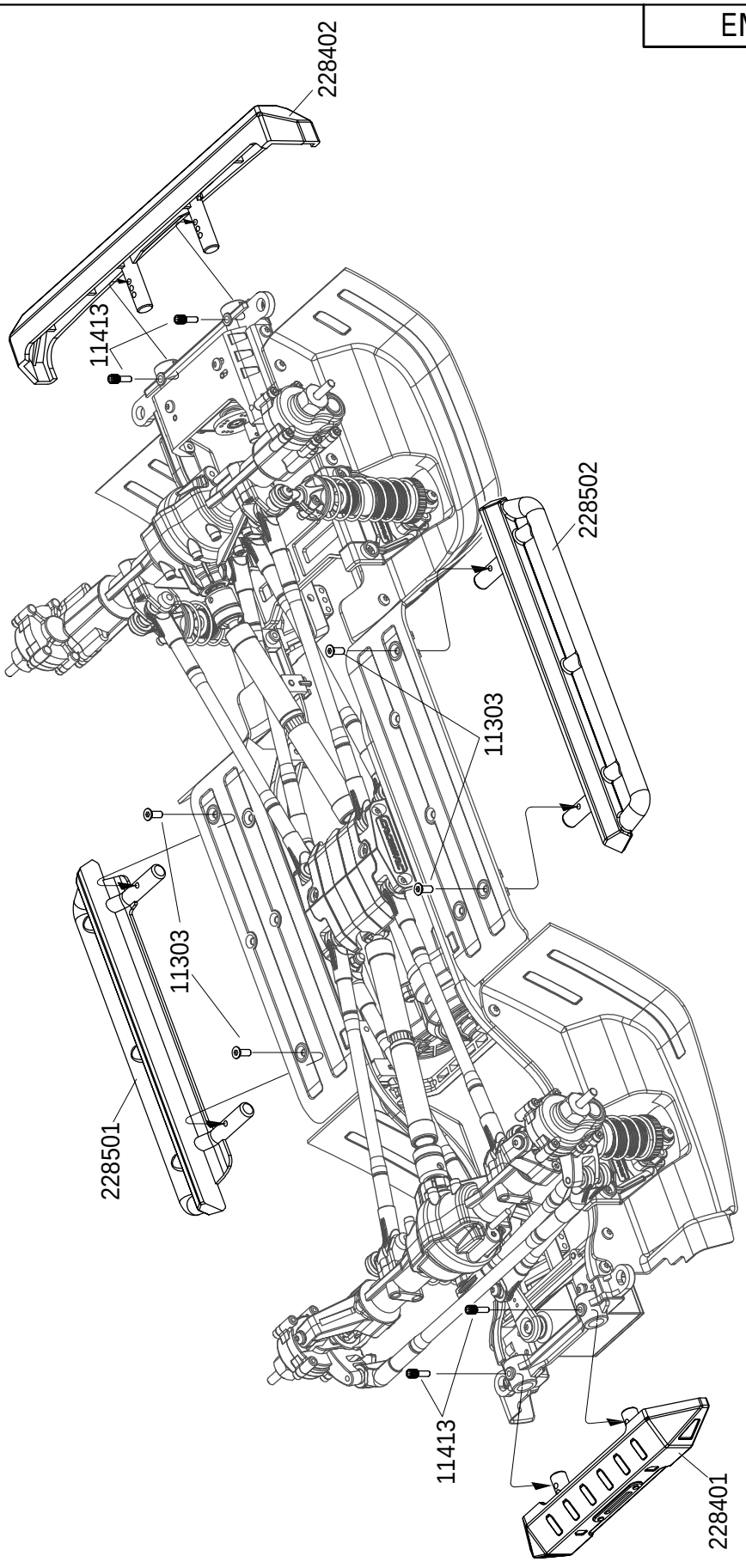
35

EMOX

BAG(X)

11303 M3x8 X4

11413 M4x12 X4



BAG(X)

11206 M3x8 X10

BAG(Y)

11227 M2.5x8 X2

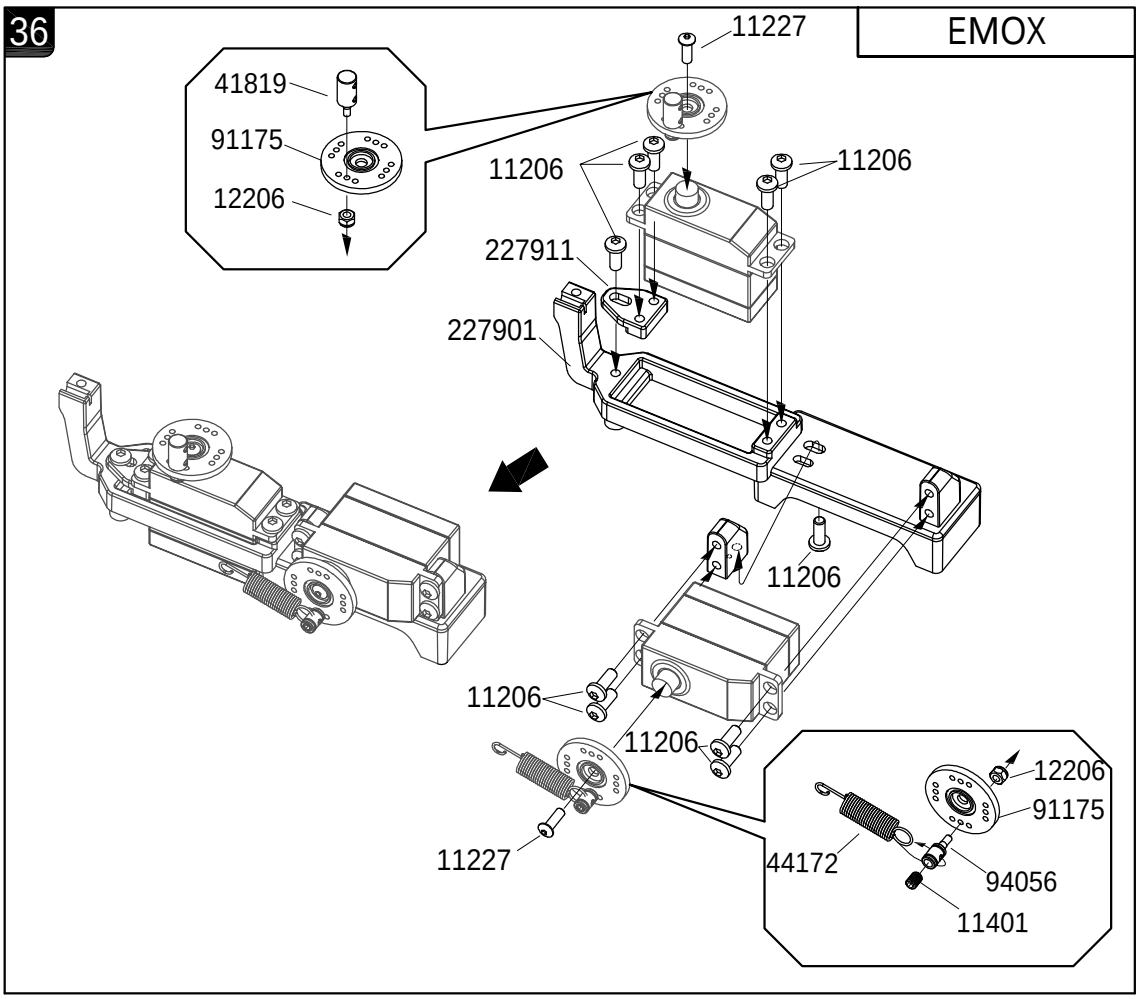
12206 M2 X2

11401 M3x4 X1

44172 X1

41819 X1

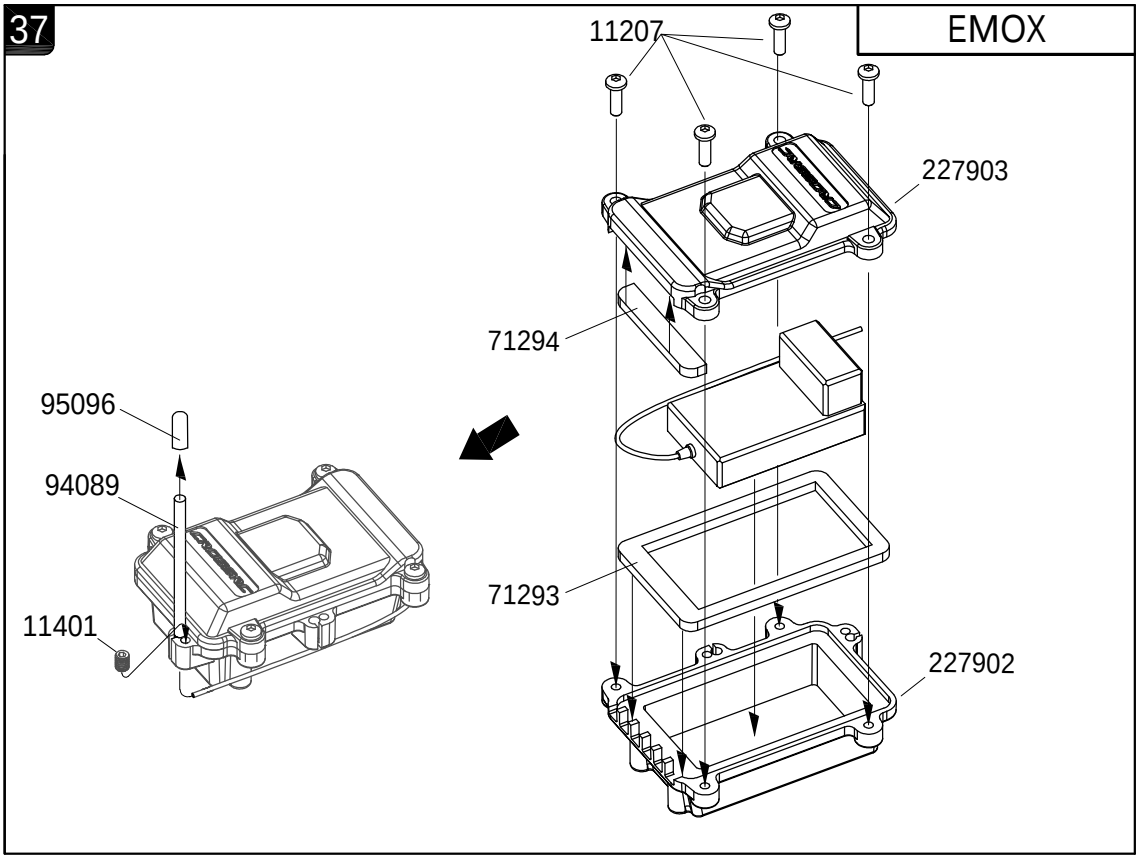
94056 X1



BAG(X)

11401 M3x4 X1

11207 M3x10 X4

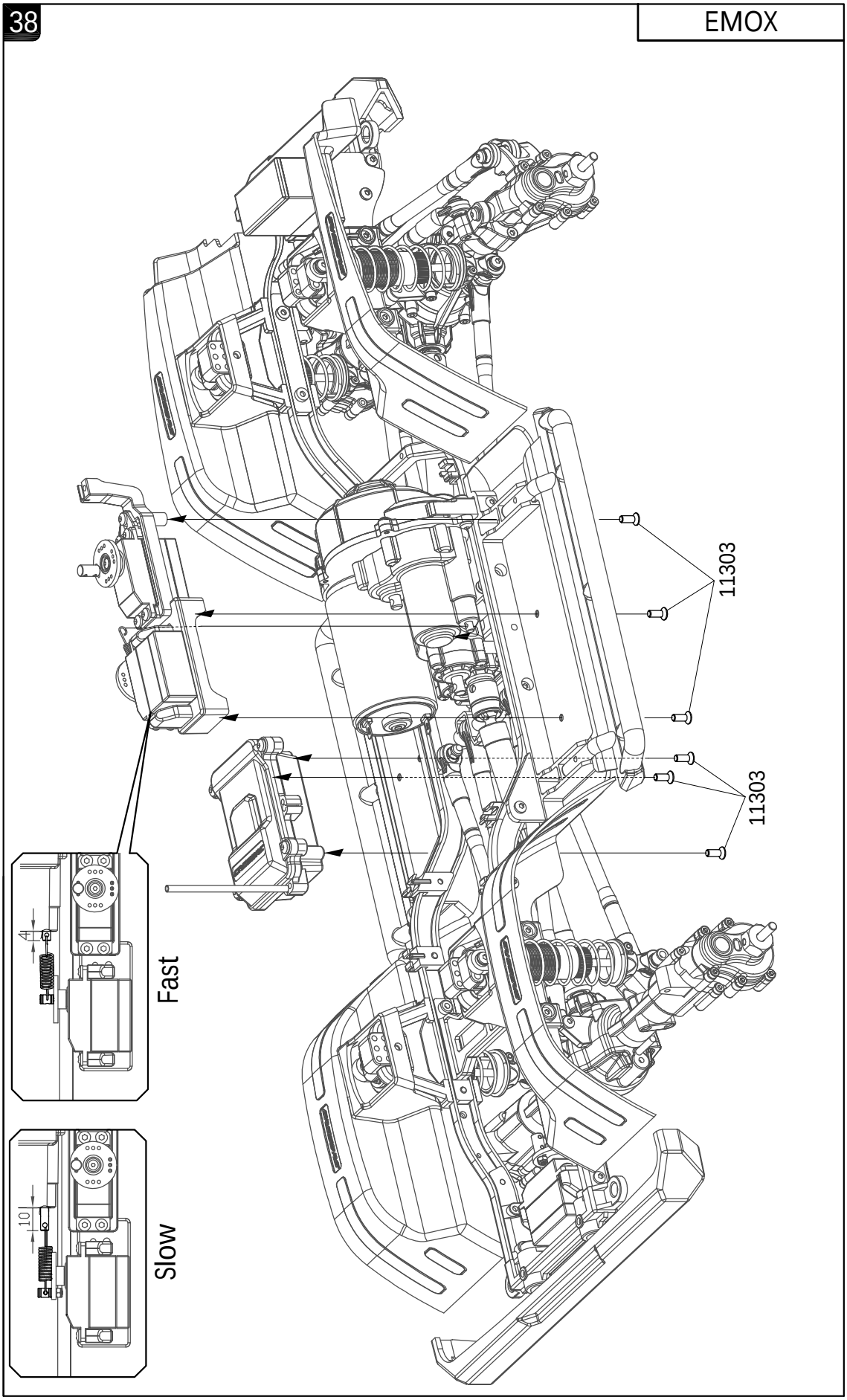


38

EMOX

BAG(X)

11303 M3x8 X6



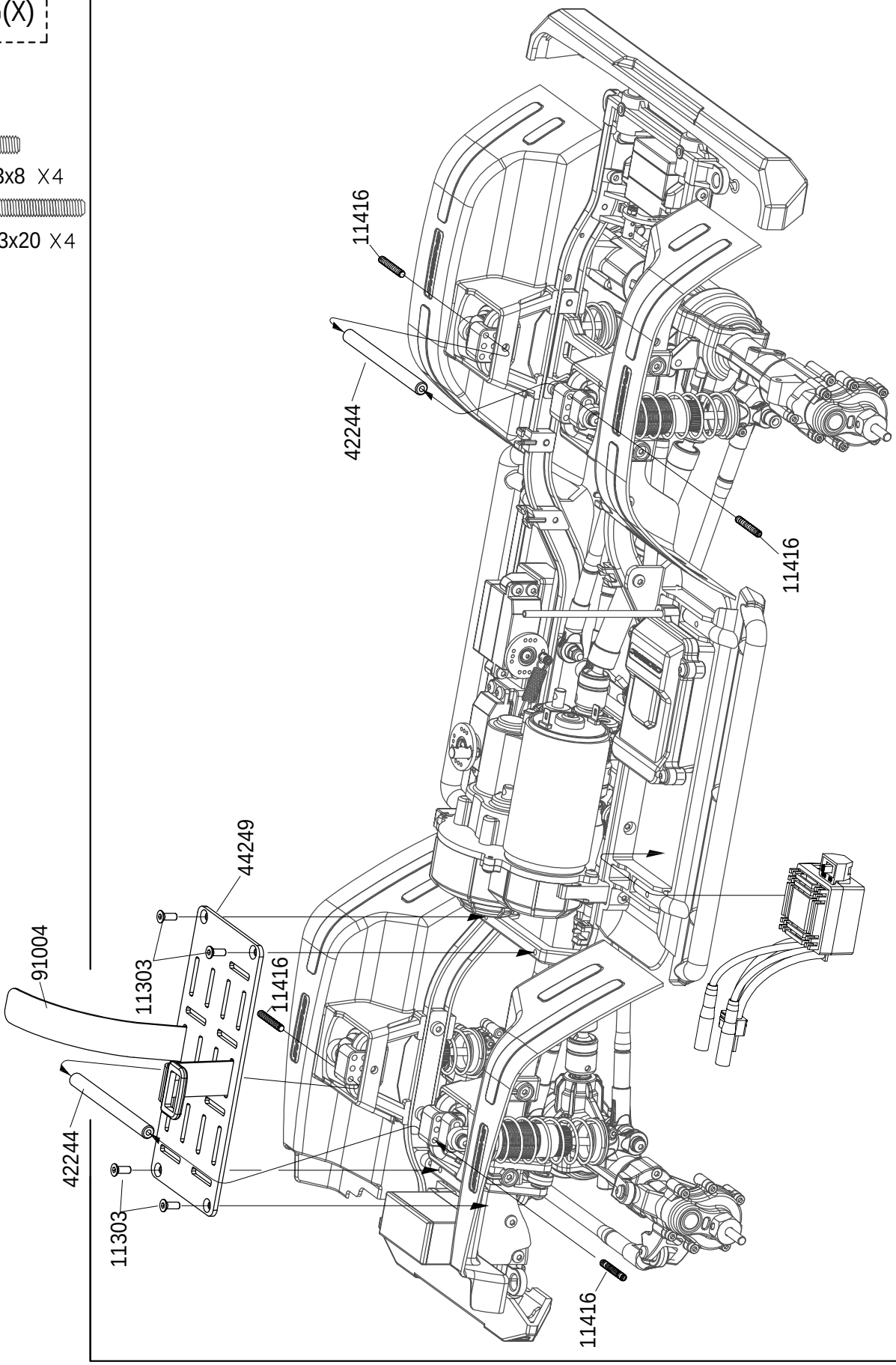
39

EMOX

BAG(X)

11303 M3x8 X4

11416 M3x20 X4



BAG(X)

11206 M3x8 X2

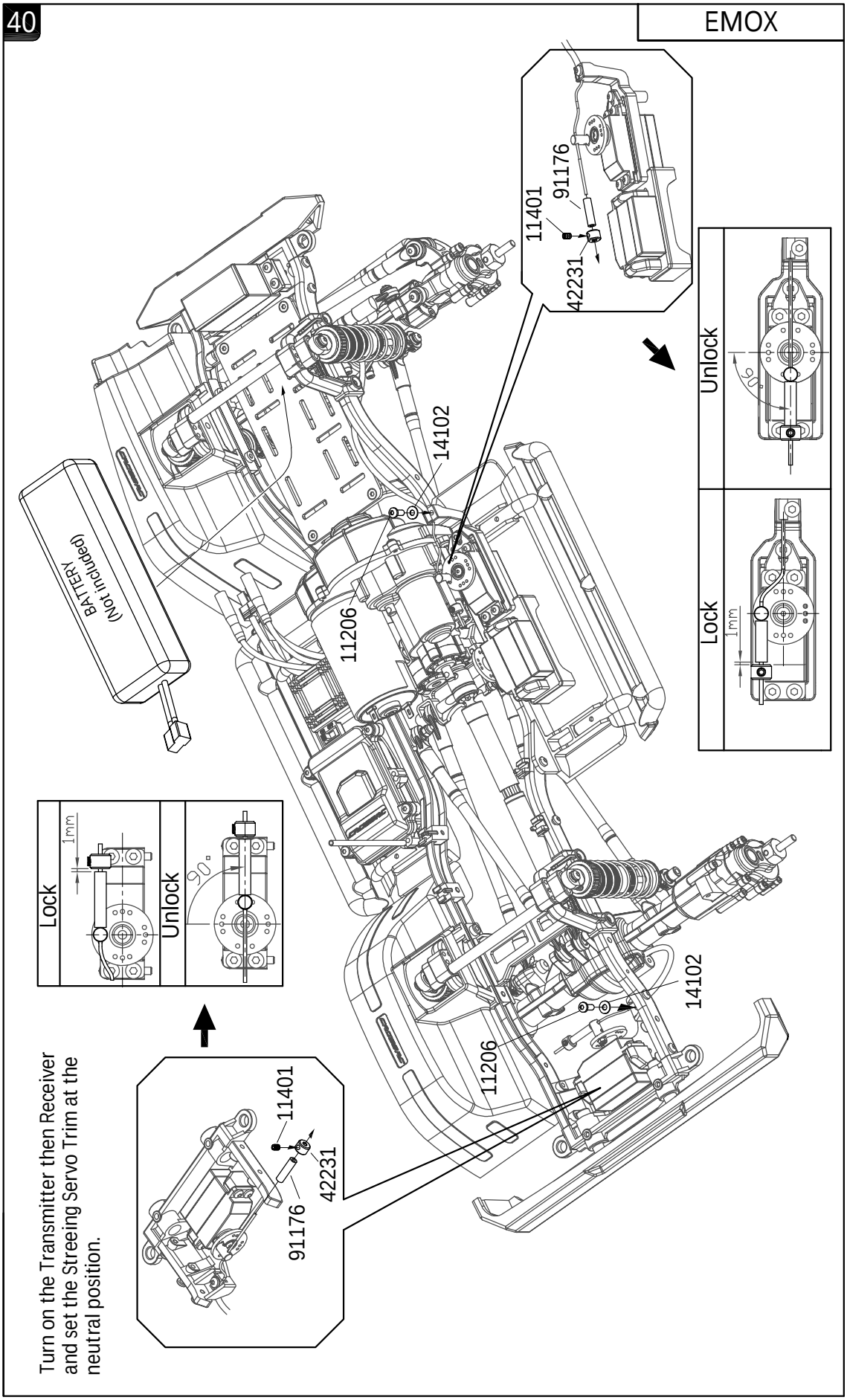
14102 Ø3xØ7x0.5 X2

BAG(Y)

11401 M3x4 X2

42231 X2

91176 X2

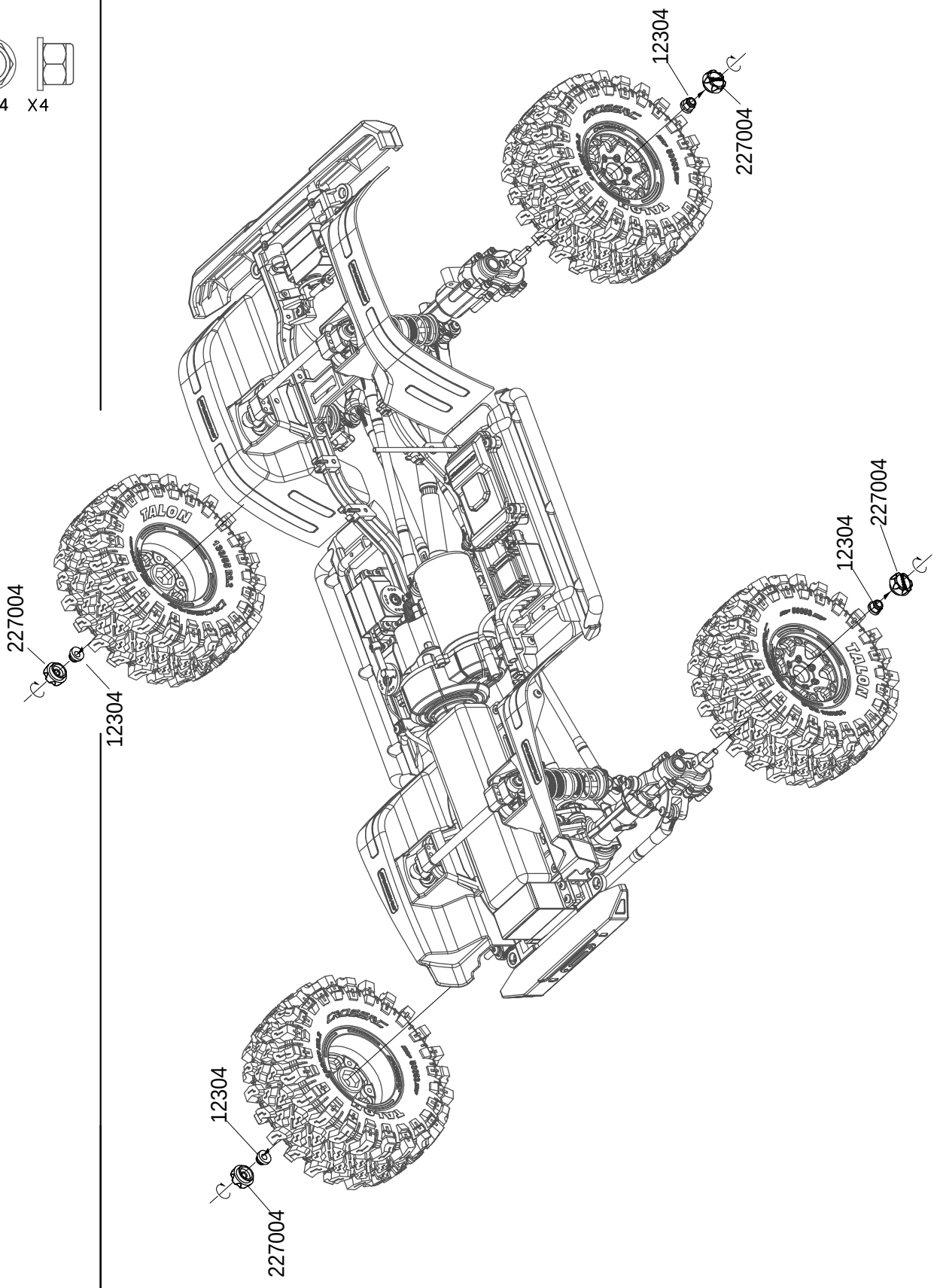


41

EMOX

BAG(A)

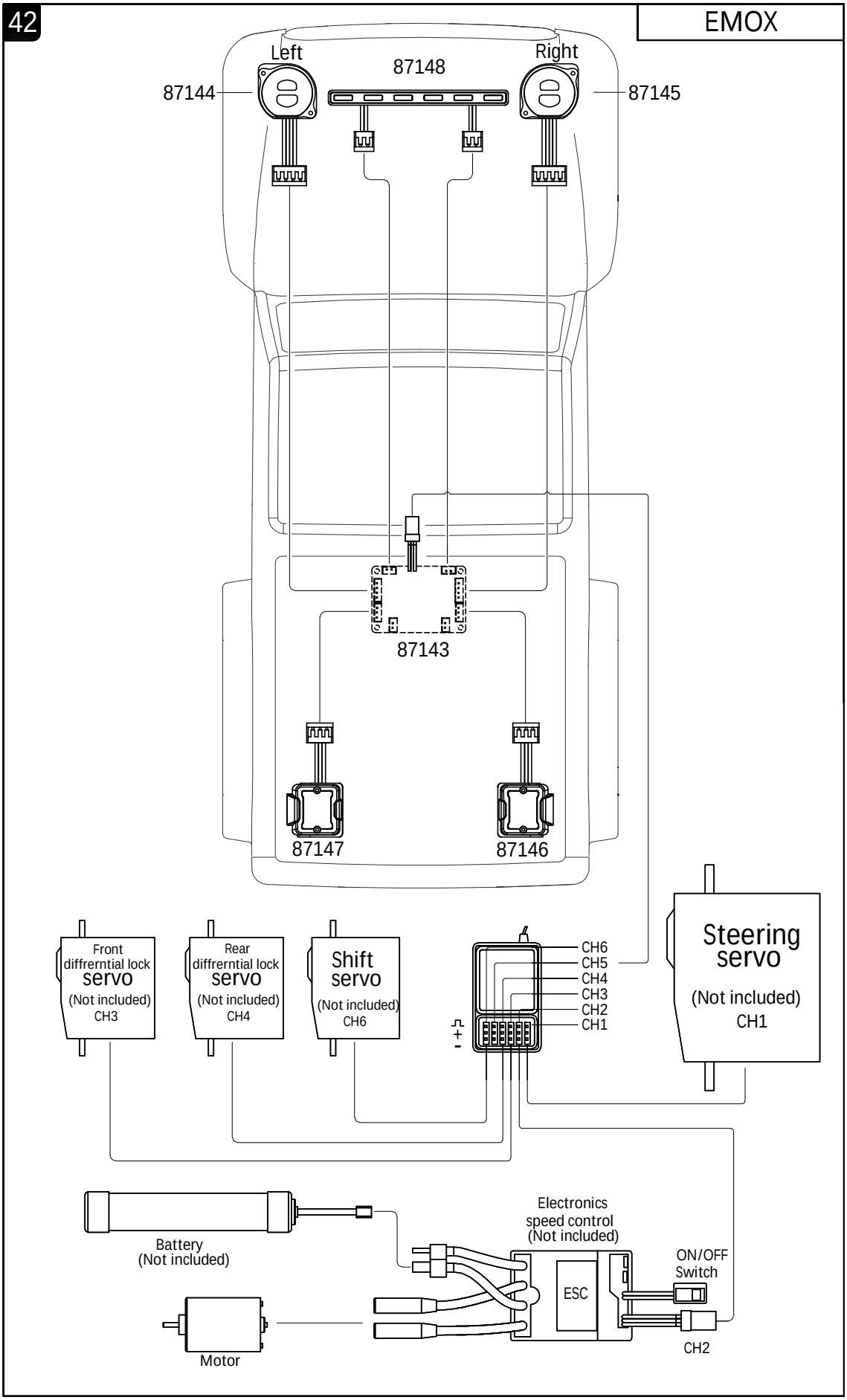
12304 M4 X4



BAG(U)

42

EMOX

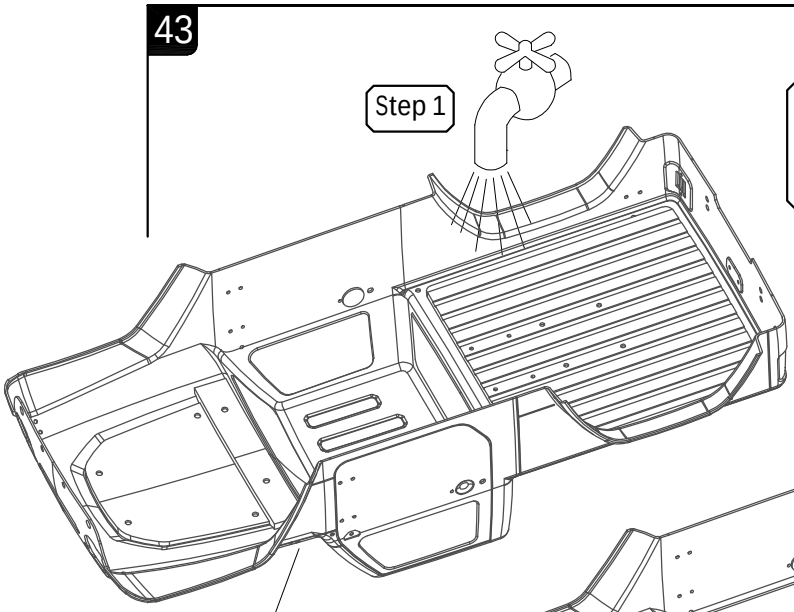

Left
Right
87144
87148
87145
87143
87147
87146
Front diffrerntial lock servo (Not included) CH3
Rear diffrerntial lock servo (Not included) CH4
Shift servo (Not included) CH6
CH6
CH5
CH4
CH3
CH2
CH1
+
-
Steering servo (Not included) CH1
Battery (Not included)
Electronics speed control (Not included)
ESC
ON/OFF Switch
CH2
Motor

43

EMOX

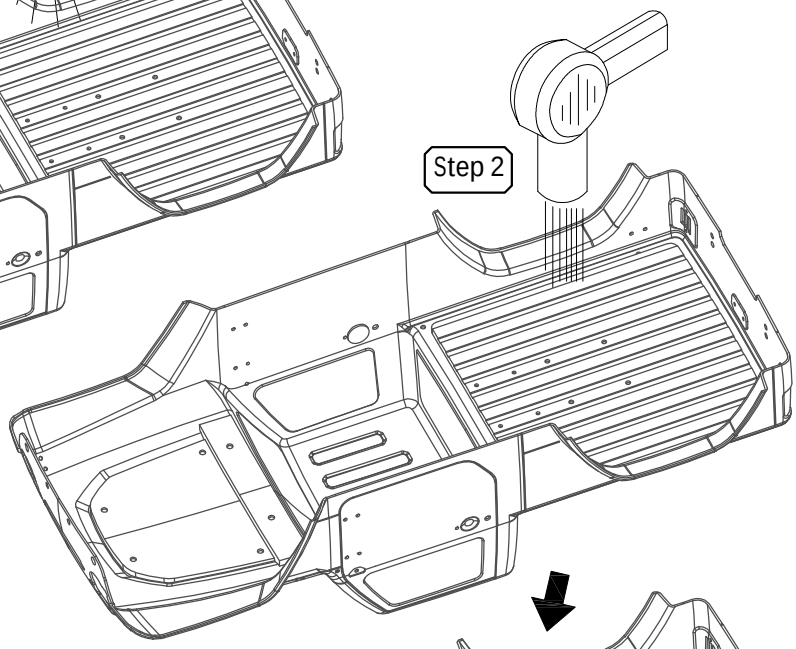
Step 1

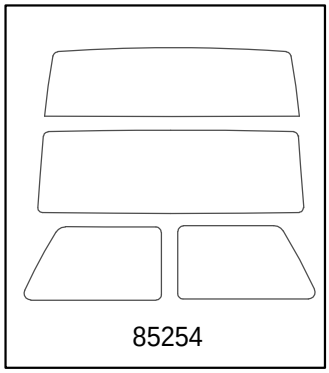
Wash the inside of the body shell with mild detergent, then rinse and dry thoroughly.



227101

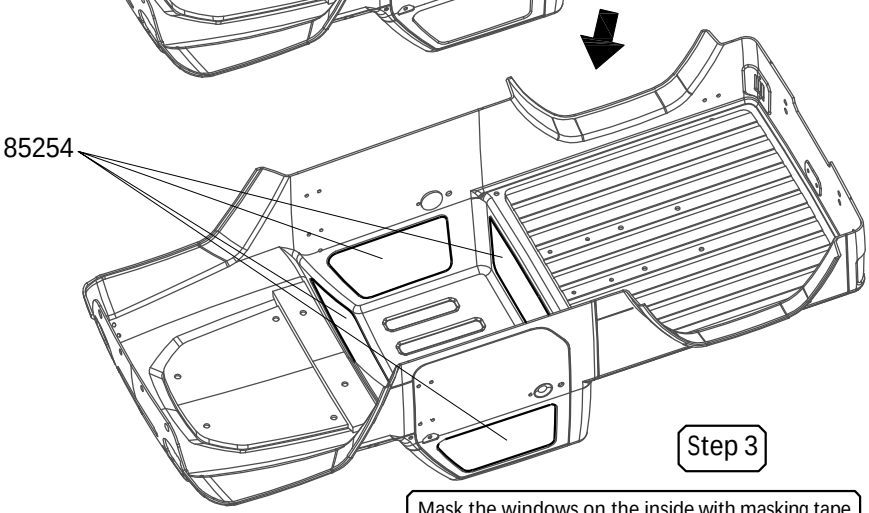
Step 2





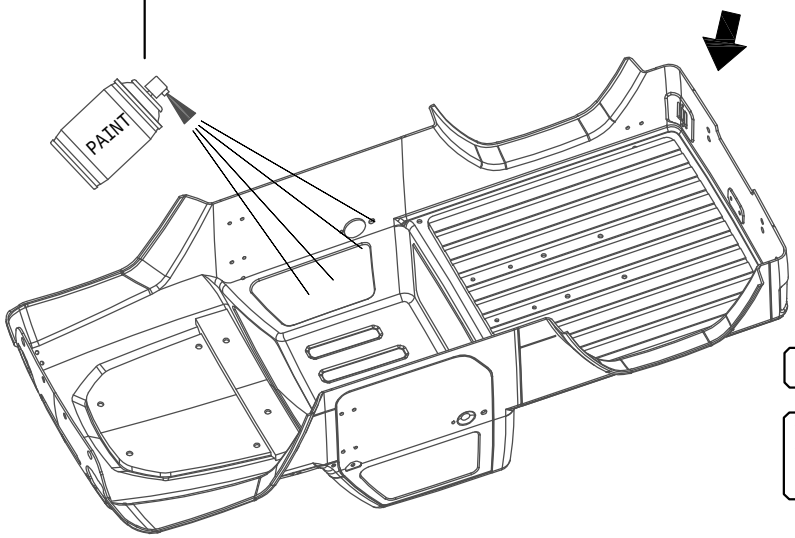
85254

85254



Step 3

Mask the windows on the inside with masking tape.



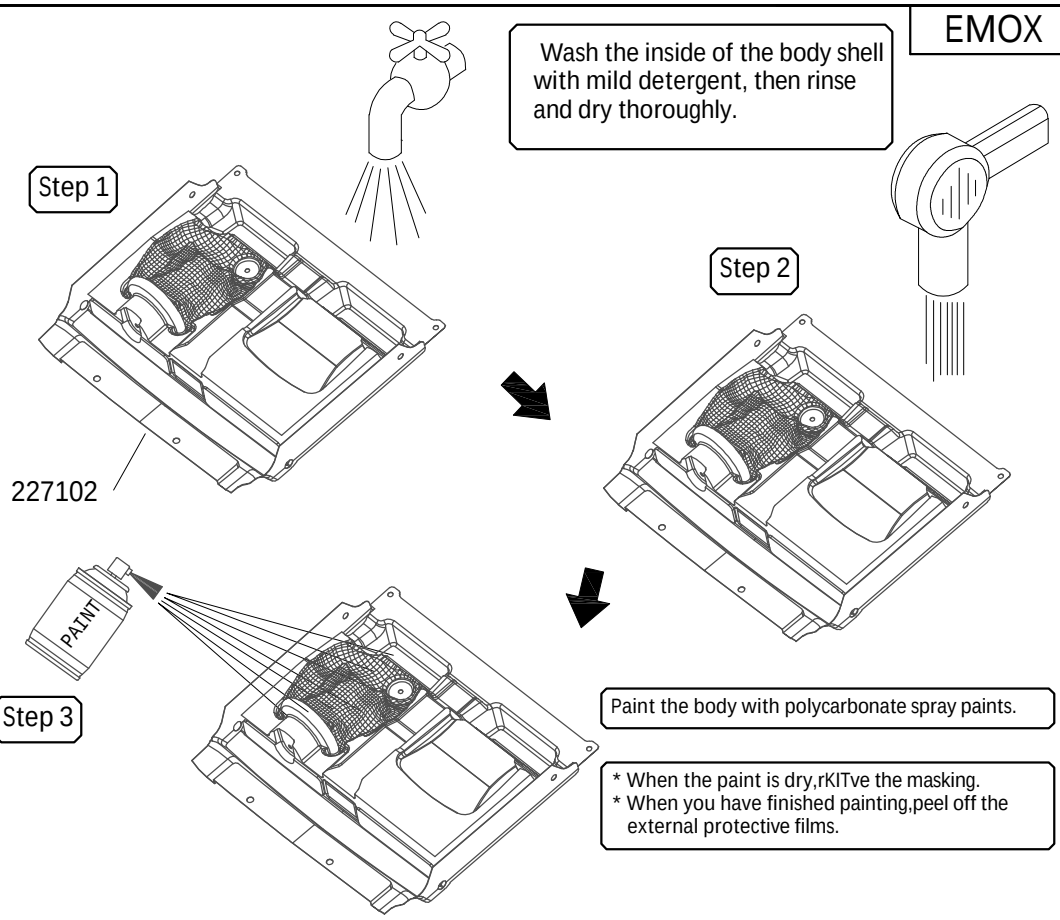
Step 4

Paint the body with polycarbonate spray paints.

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

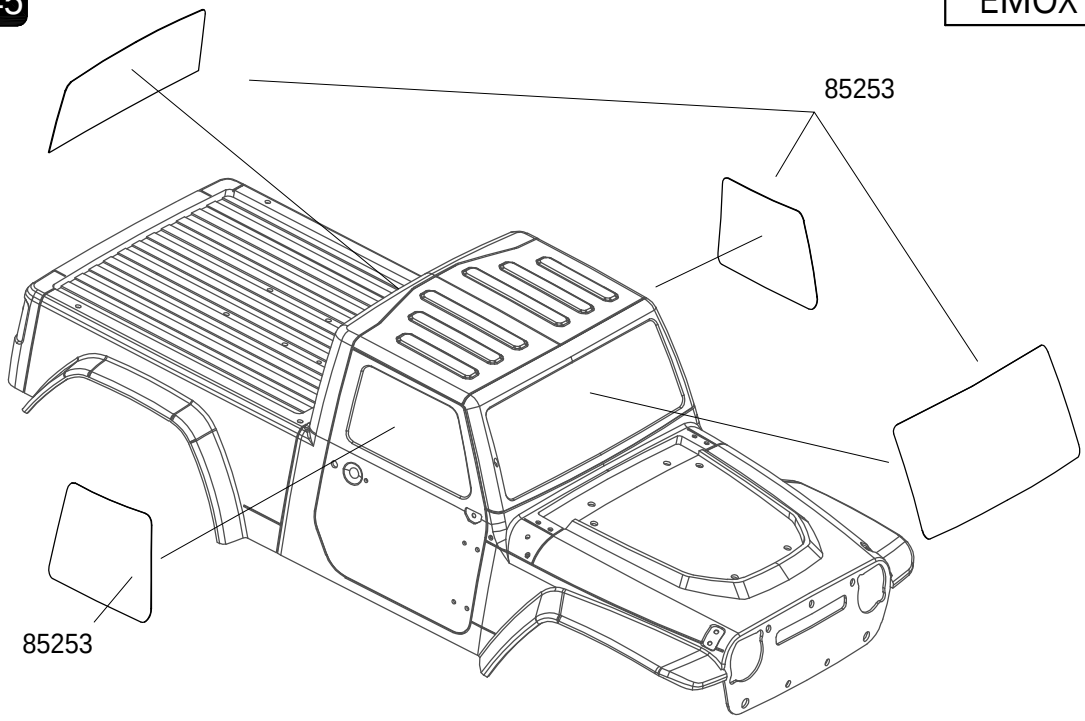
44

EMOX



45

EMOX

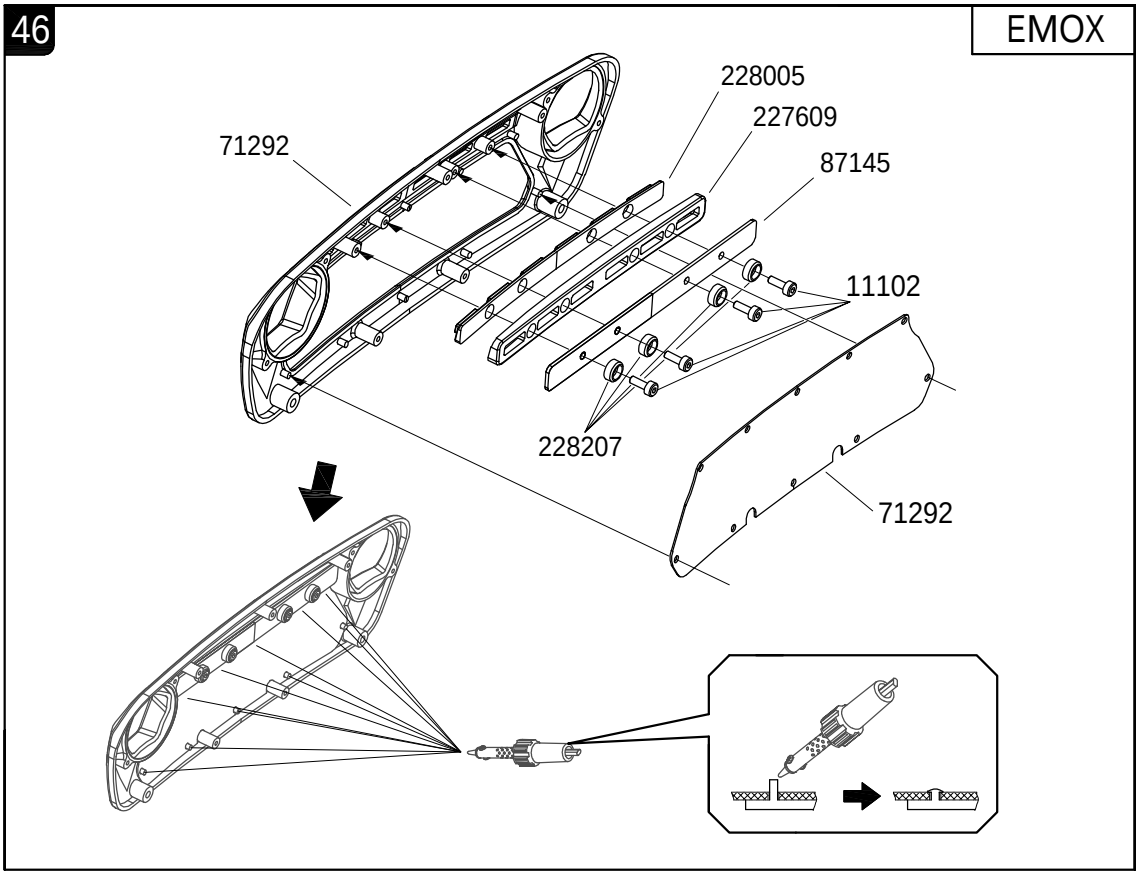


BAG(X)

11102
M2x6 X4

46

EMOX



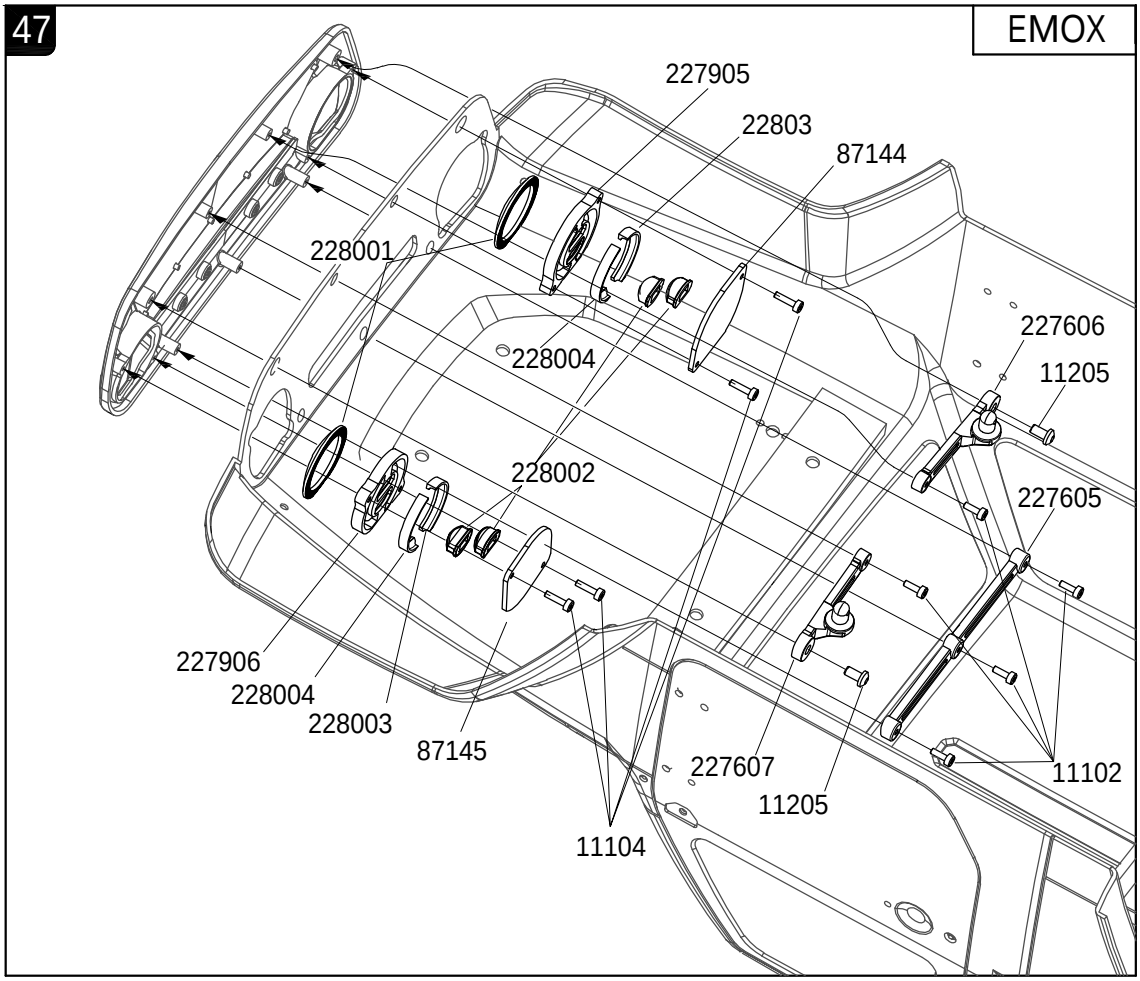
11104
M2x10 X4

11102
M2x6 X5

11205
M3x6 X2

47

EMOX



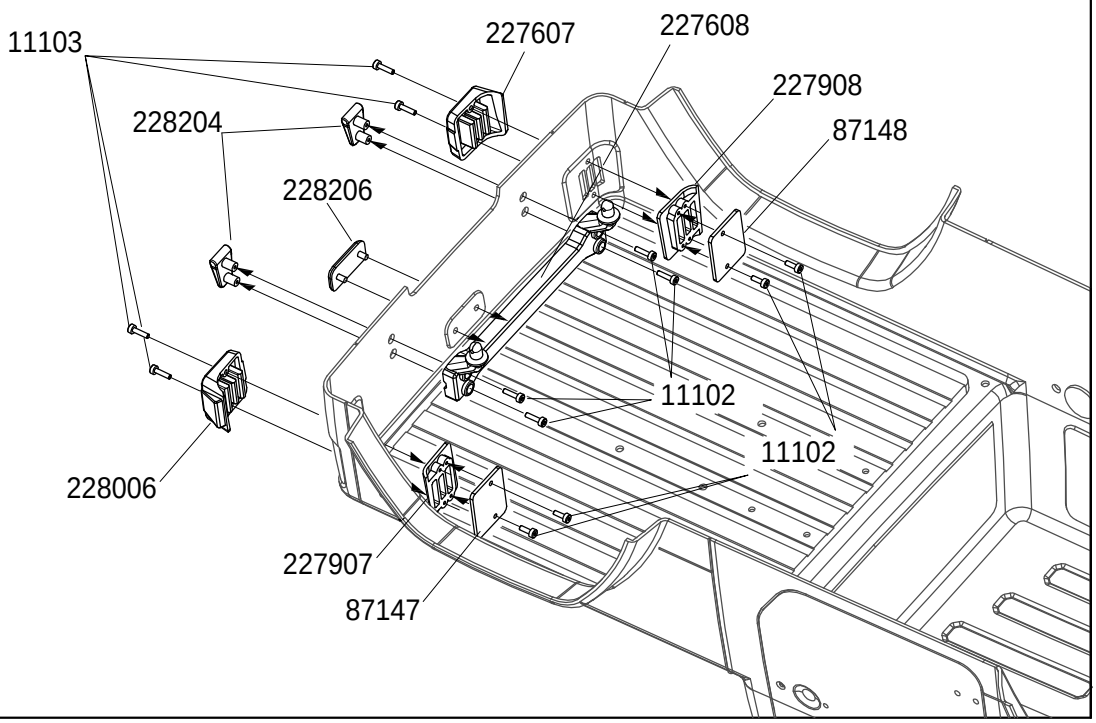
BAG(X)

11102
M2x6 X8

11103
M2x8 X4

48

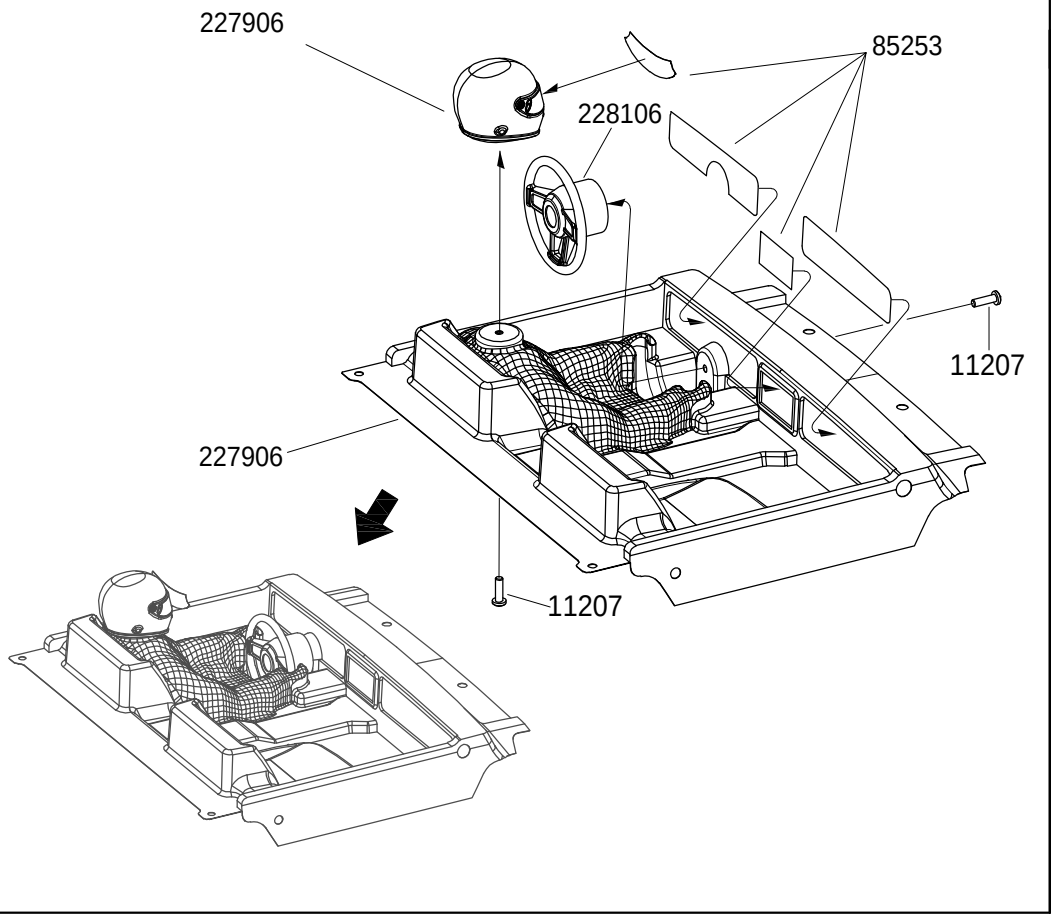
EMOX



11207
M3x10 X2

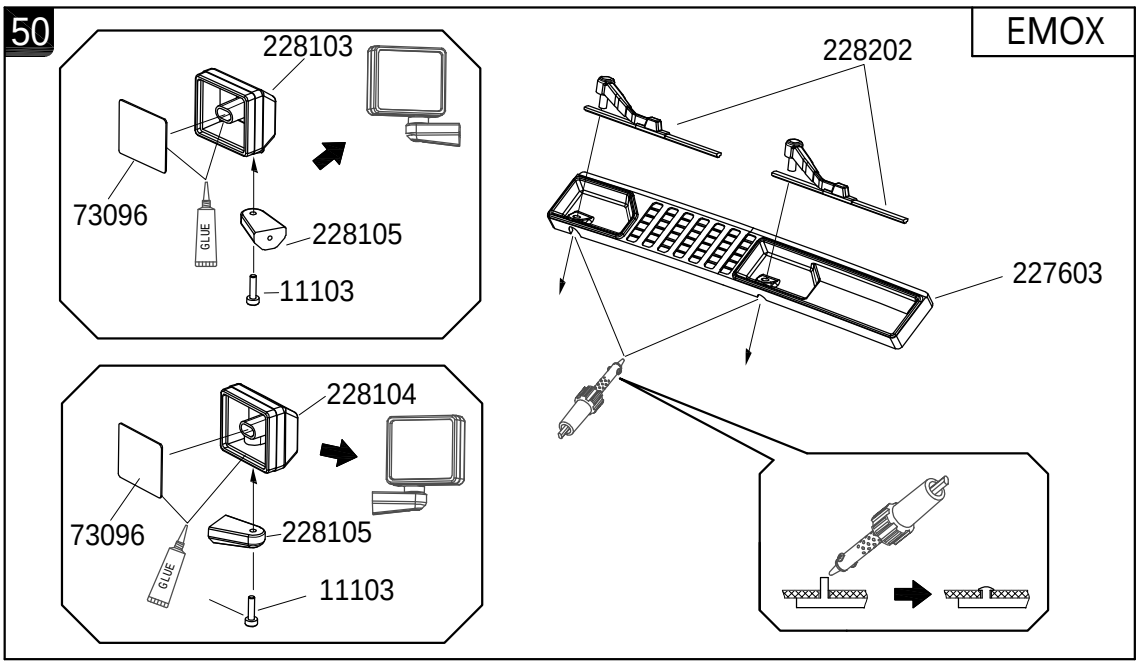
49

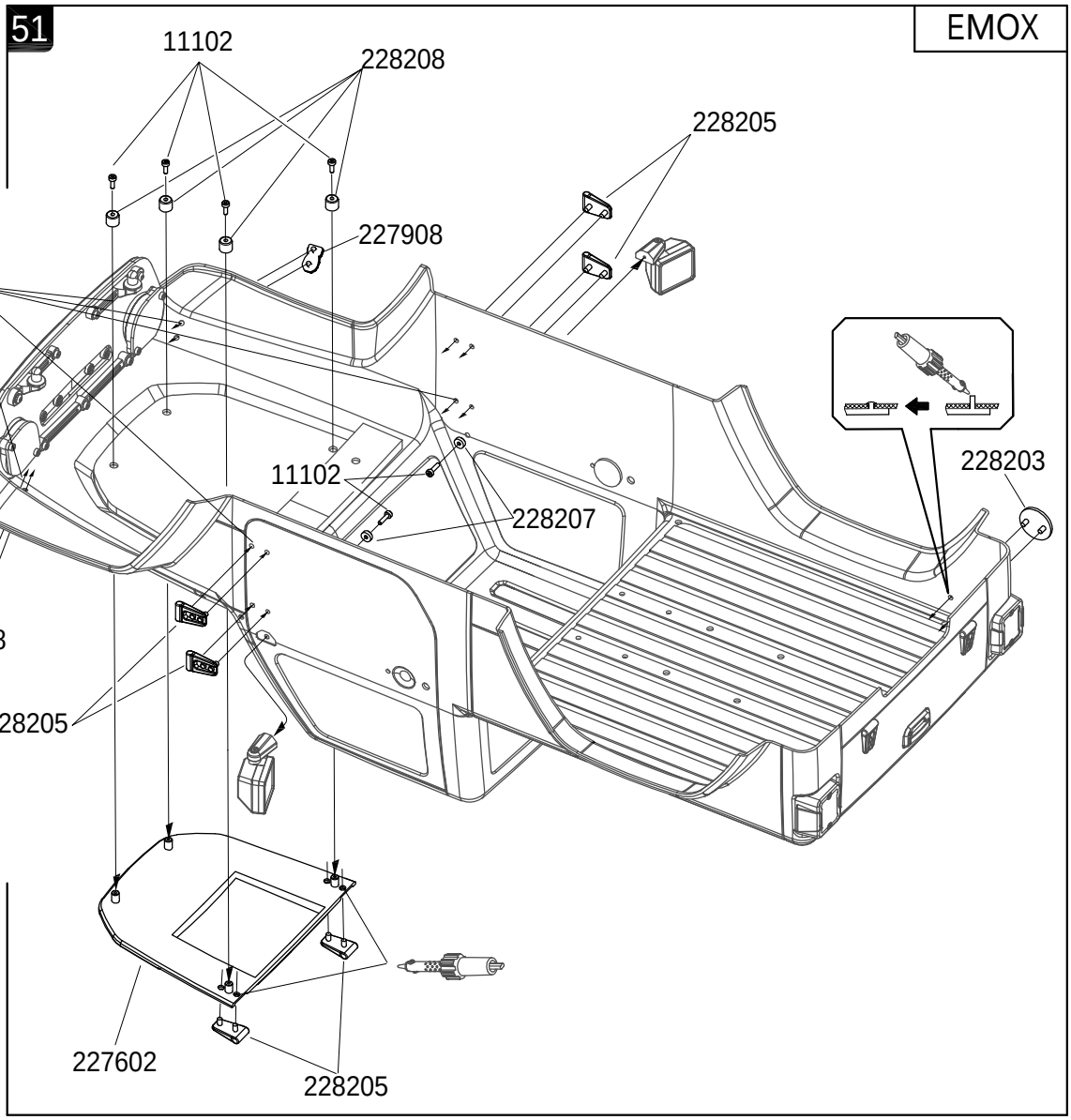
EMOX



BAG(X)

11103
M2x8 X2





11102
M2x6 X6

BAG(X)

11104 M2x10 X4

11102 M2x6 X2

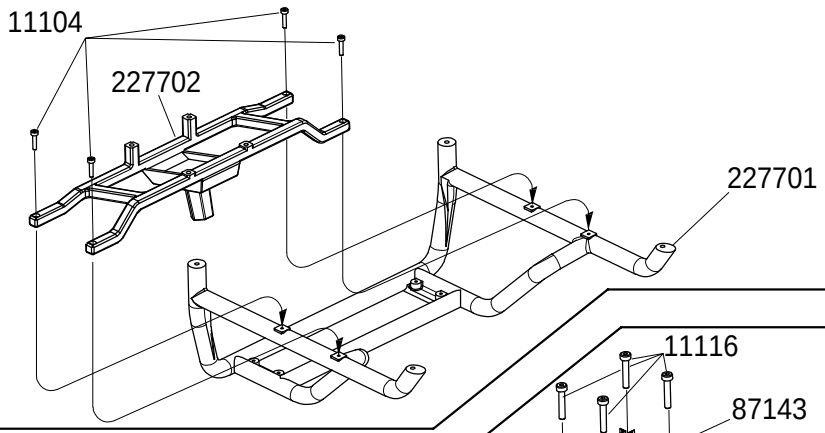
11126 M2x14 X2

11116 M2.5x12 X4

11207 M3x10 X8

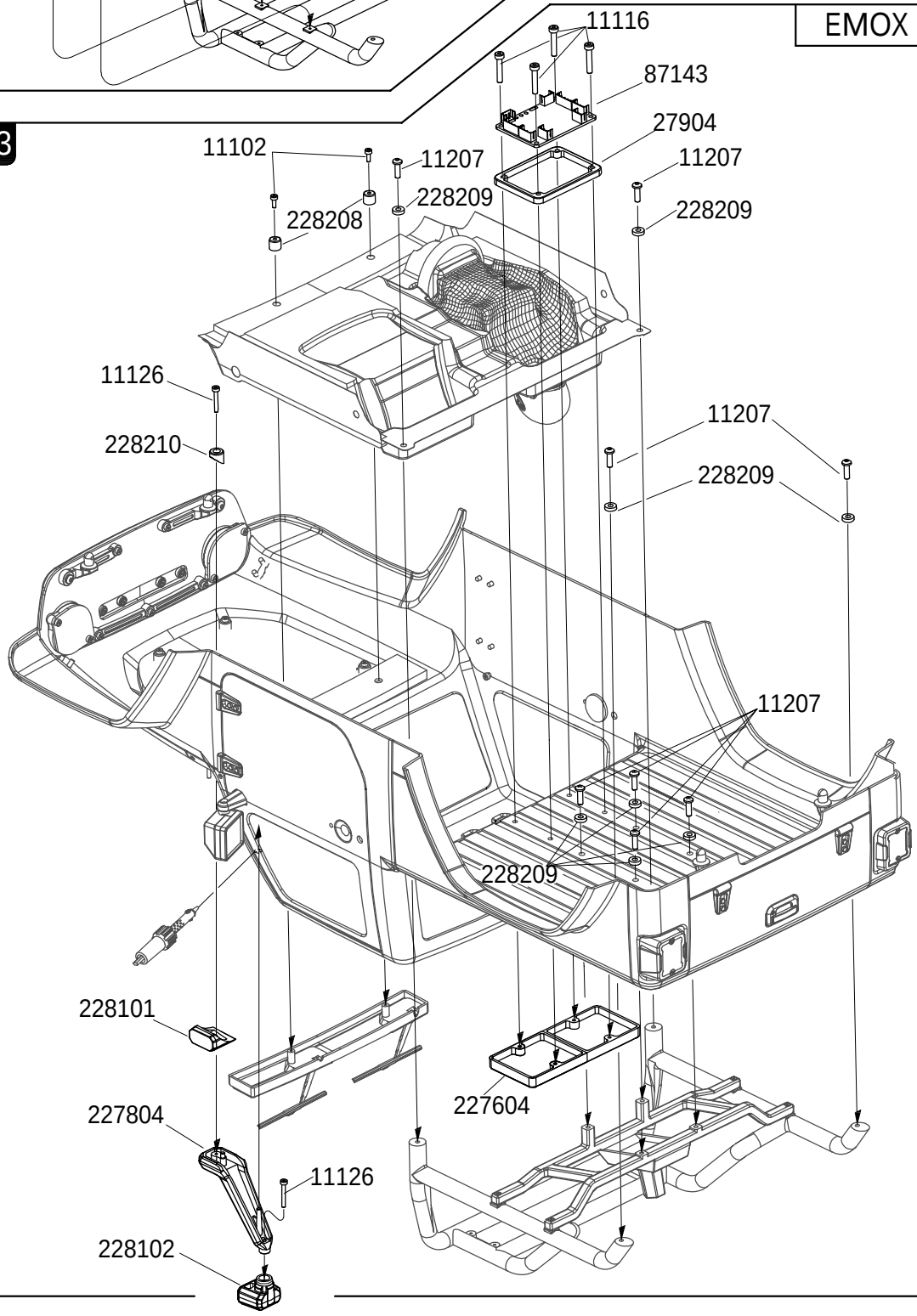
52

EMOX



53

EMOX

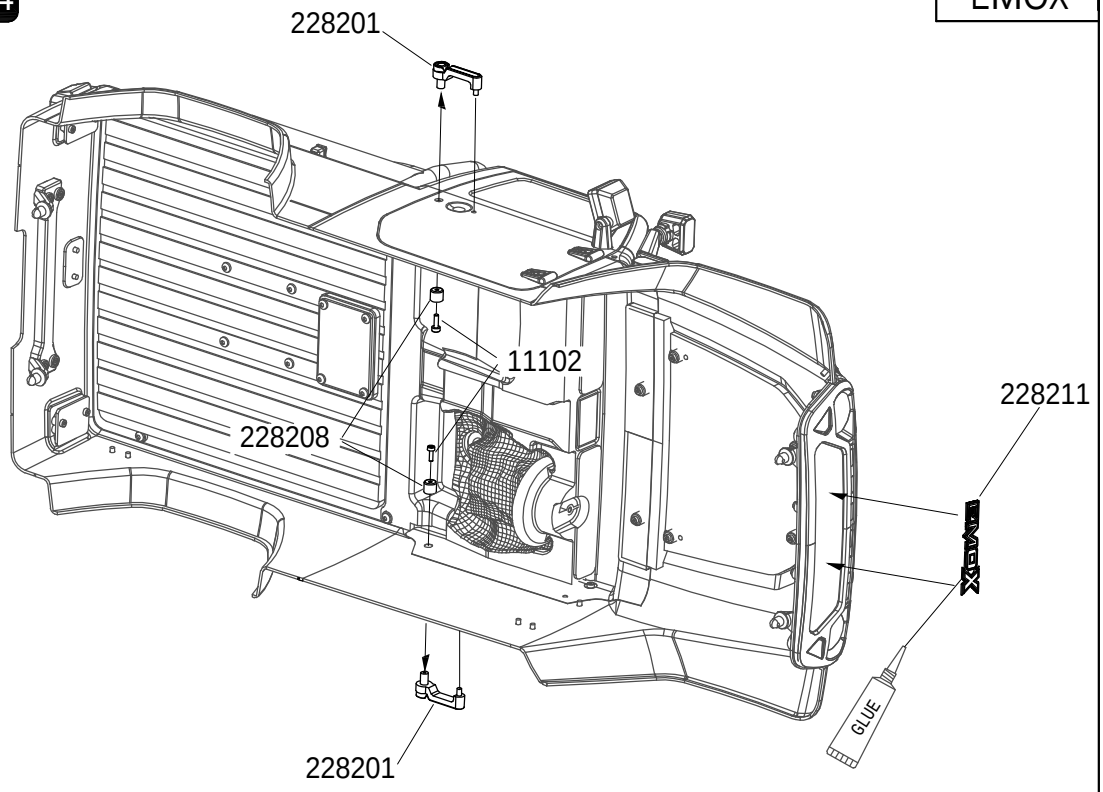


BAG(X)

11102
M2x6 X2

54

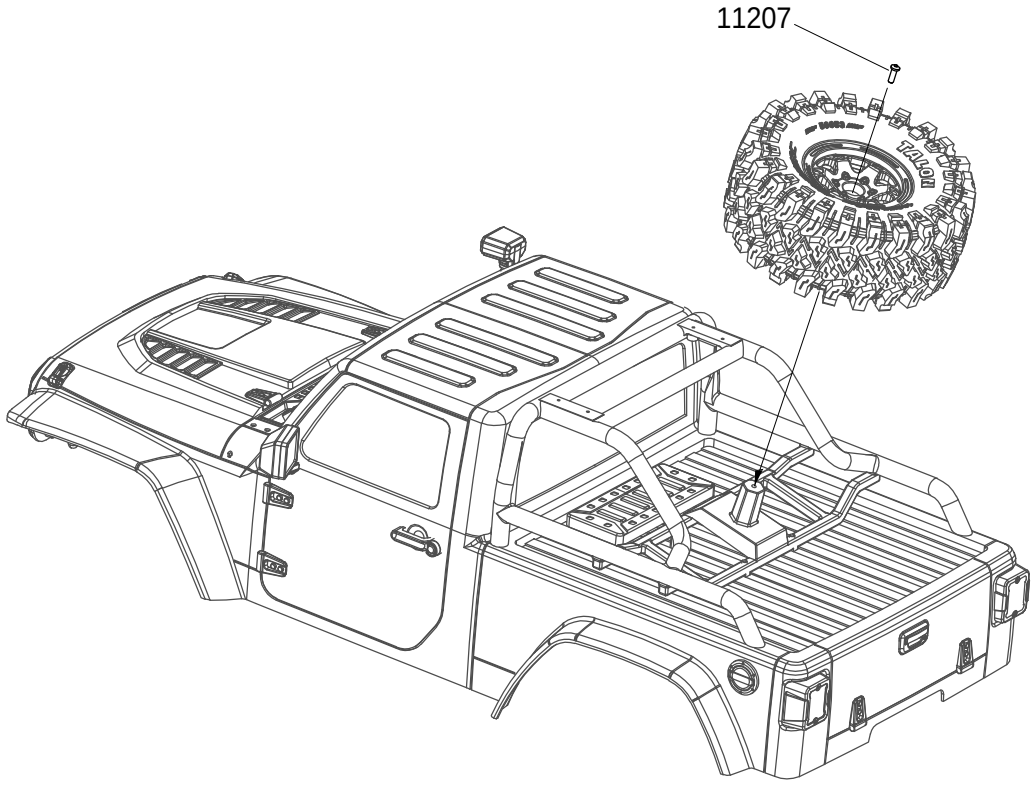
EMOX



11207
M3x10 X1

55

EMOX

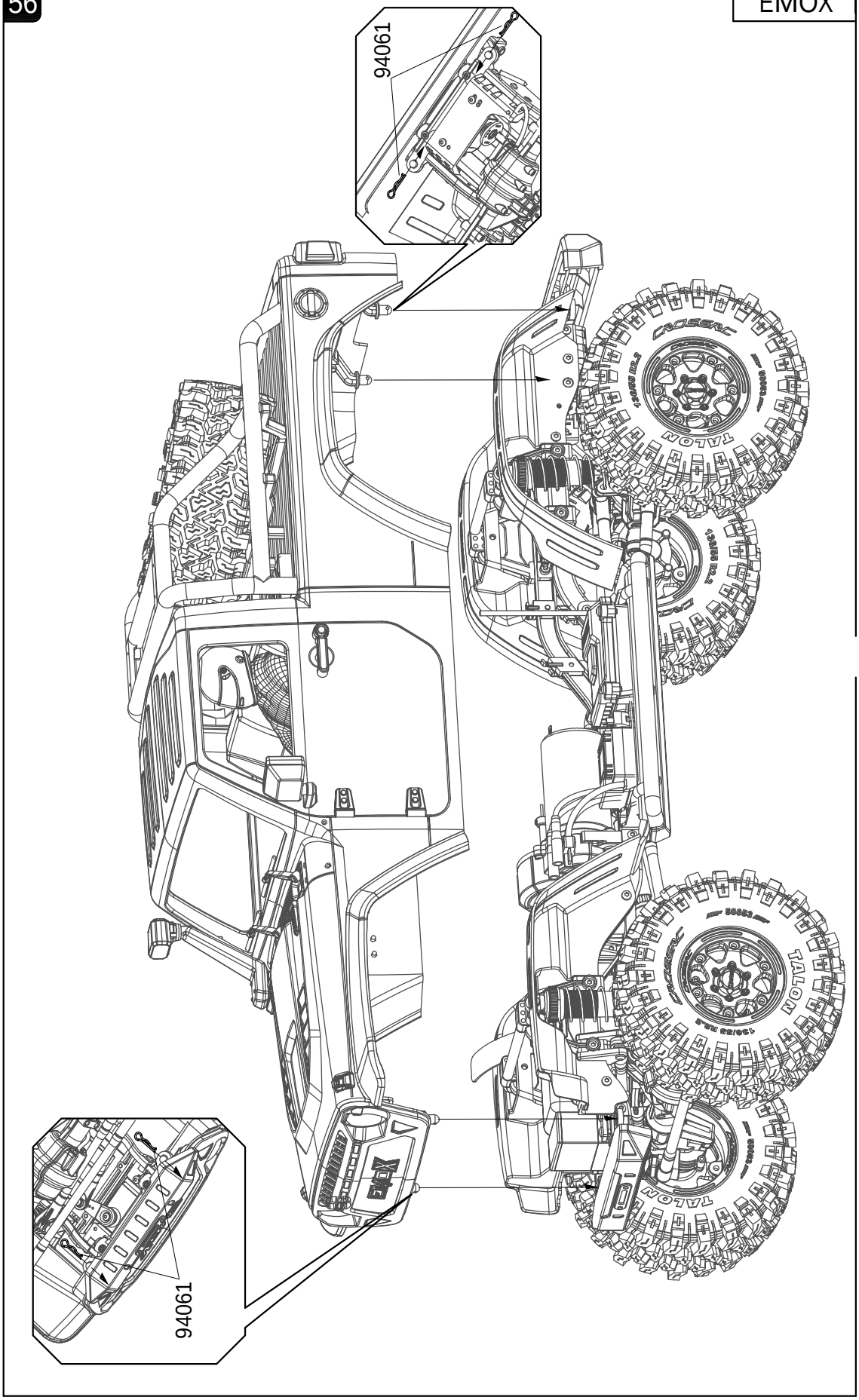


BAG(I)

94061 X 4

56

EMOX

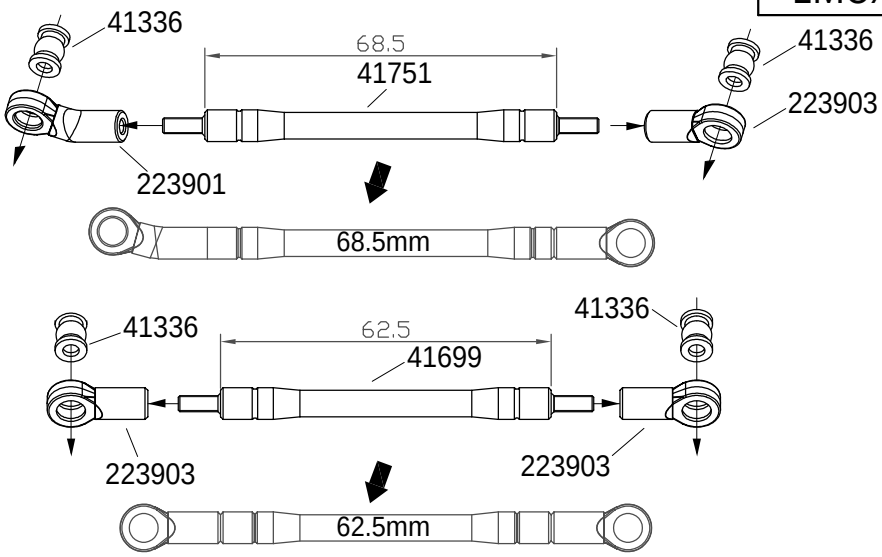


BAG(V)

41336 X4

1

EMOX



2

EMOX

11207 M3x10 X2

11209 M3x14 X5

11211 M3x18 X2

41205