

**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.

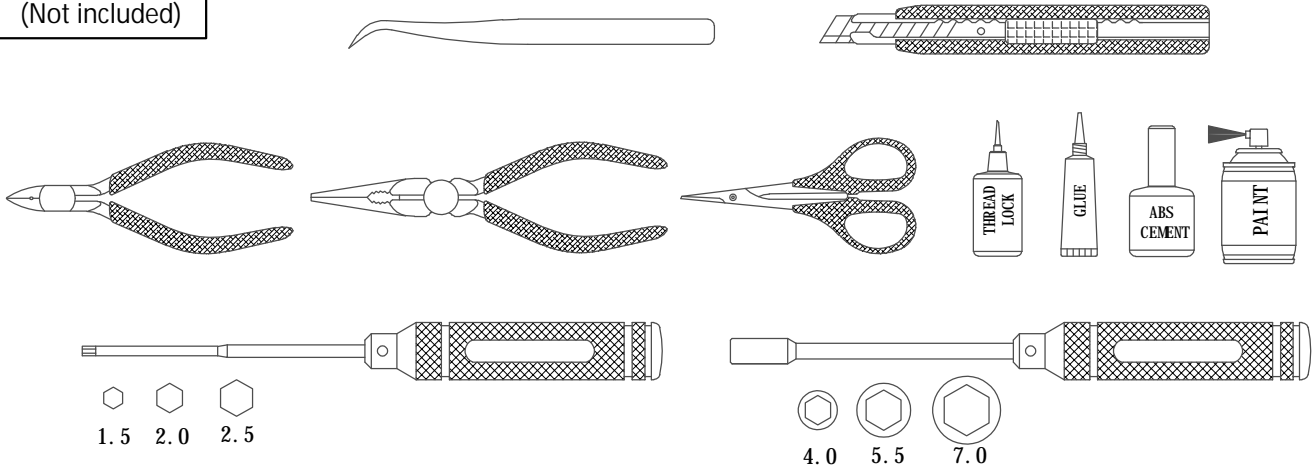
● **Inspect your radio-controlled model before operation**

- 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.

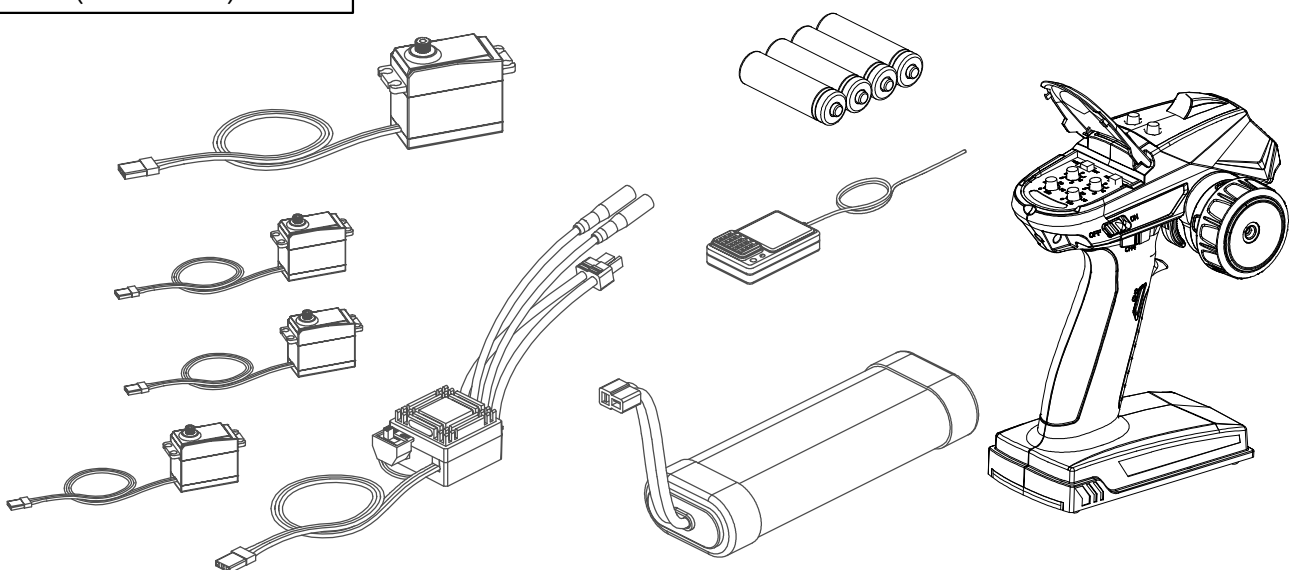
● **After operating your radio-controlled model**

- 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)



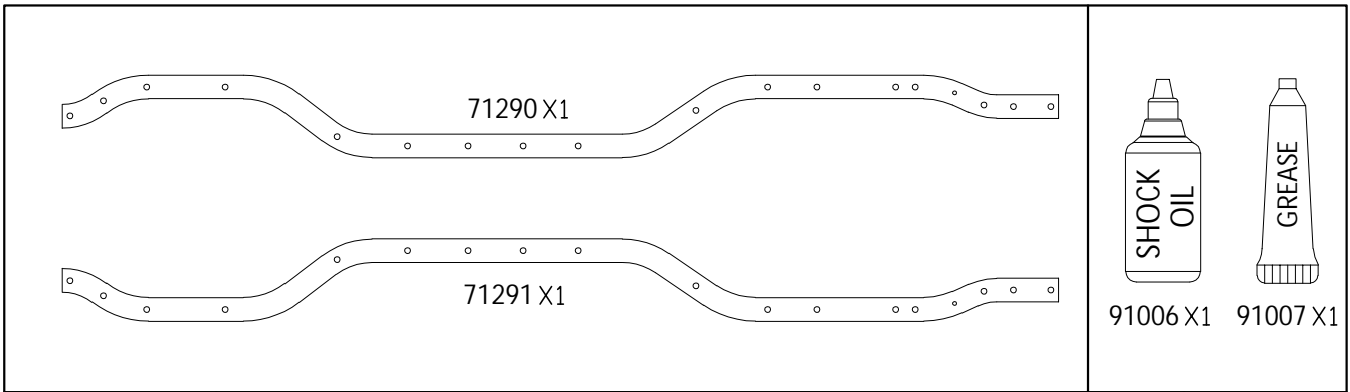
## EMO X Assembly Remind

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:

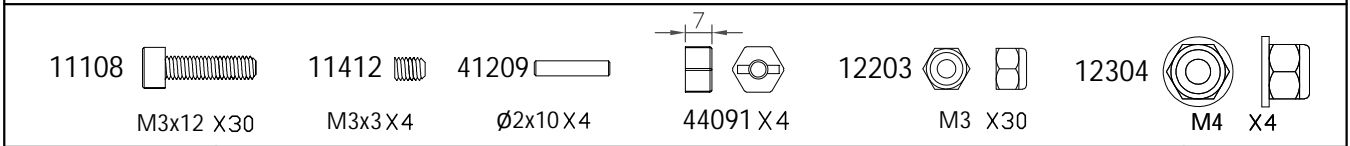
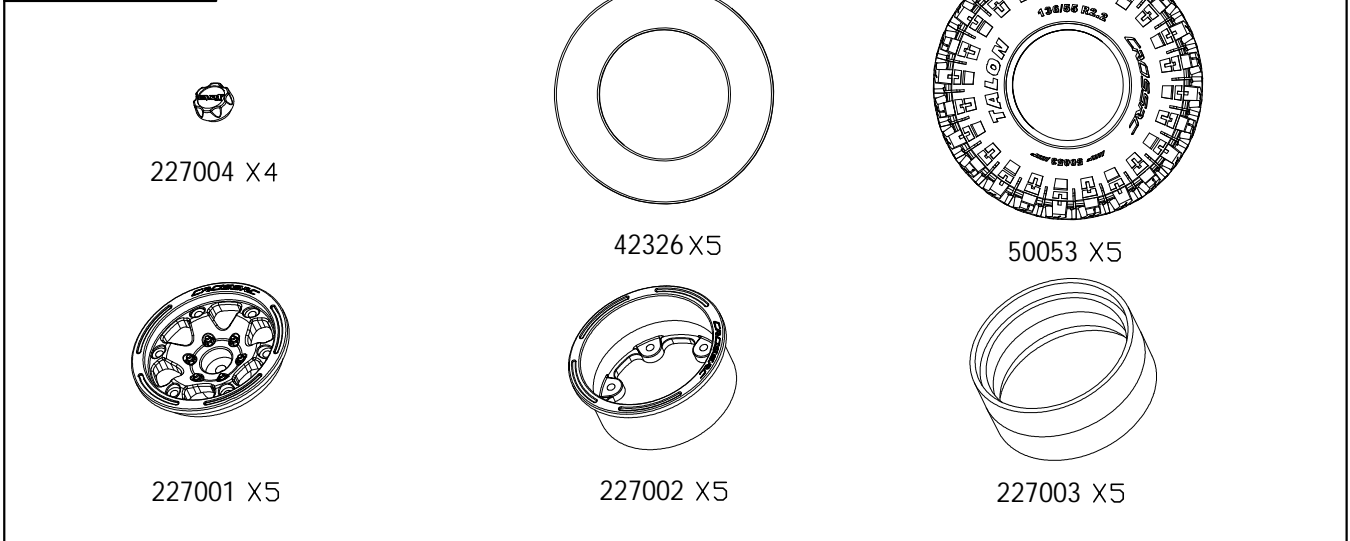
Name	Specifications	Remarks
Remotes controller	6 channels or Up	Waterproof connector is recommended
Servo	Steering servo $\geq 25\text{KG}$	High pressure standard Servo in waterproof
	Shift servo $\geq 3\text{KG} \times 3$	For the size of medium Servo, please refer to the configuration drawing below
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#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



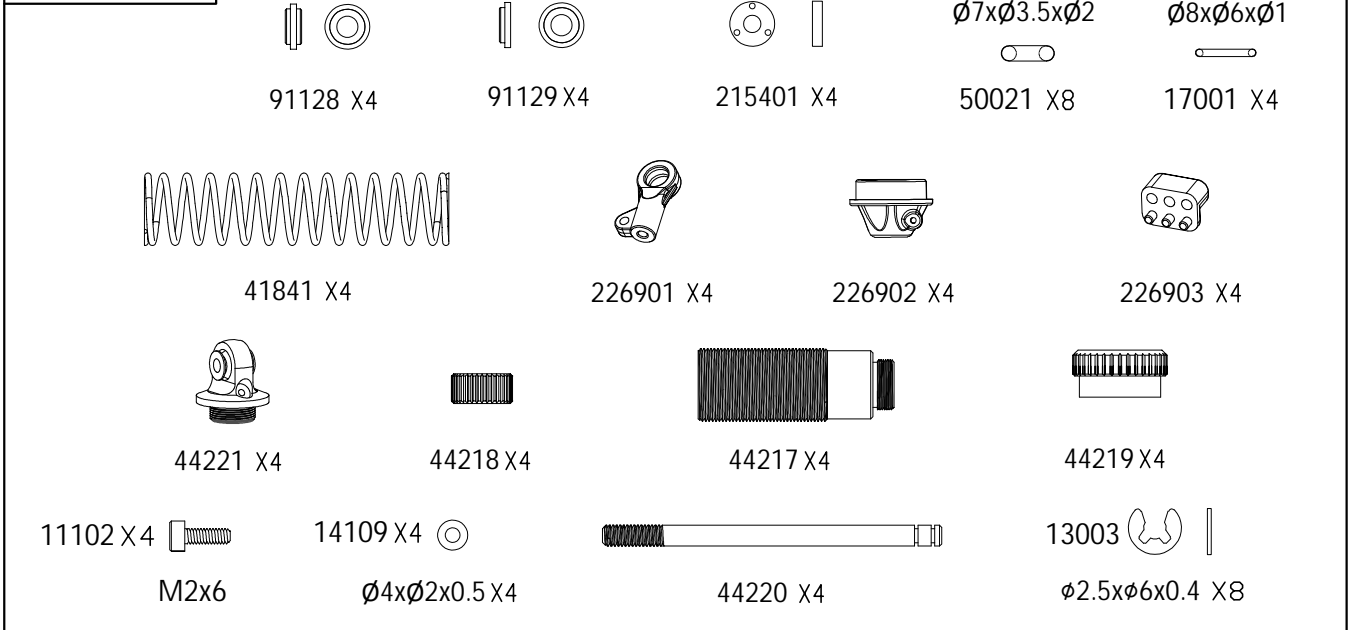
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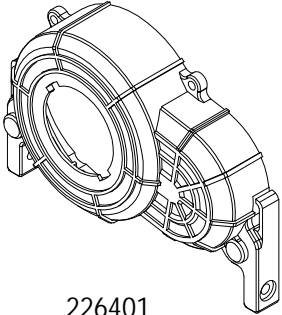
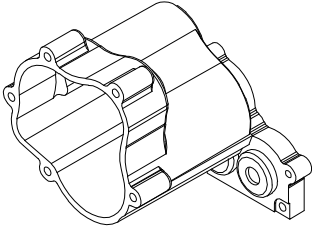
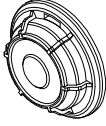

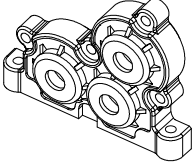
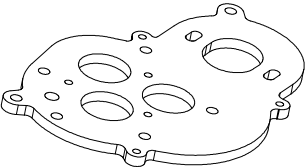
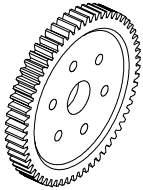



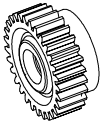
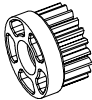

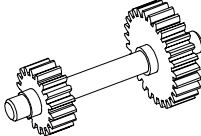
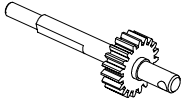
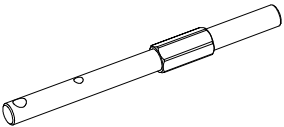
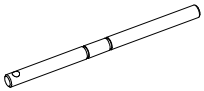


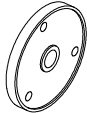






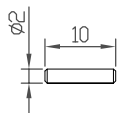



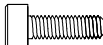


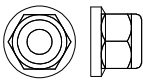




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


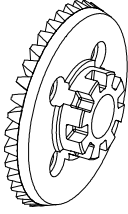

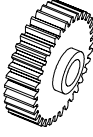




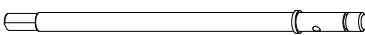


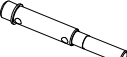
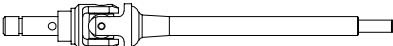
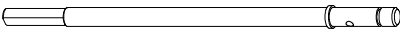


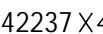
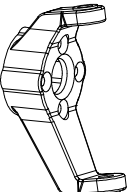
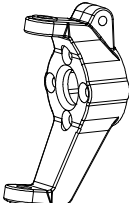
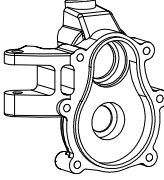
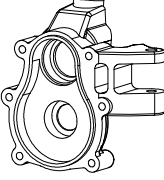
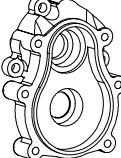
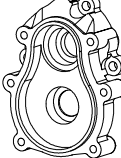
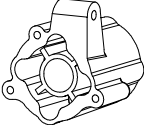
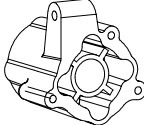
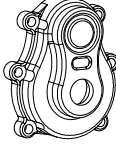


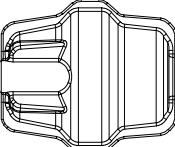
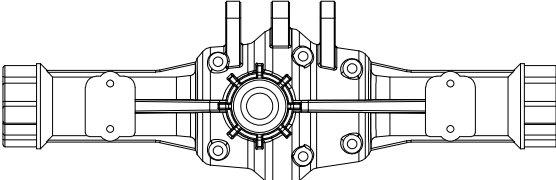
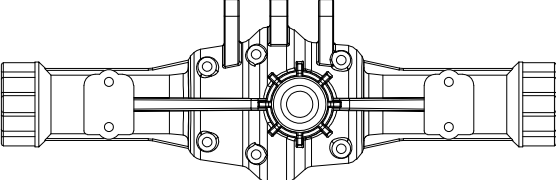
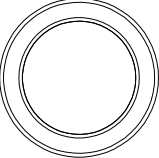
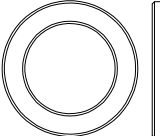
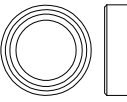

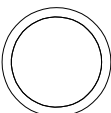










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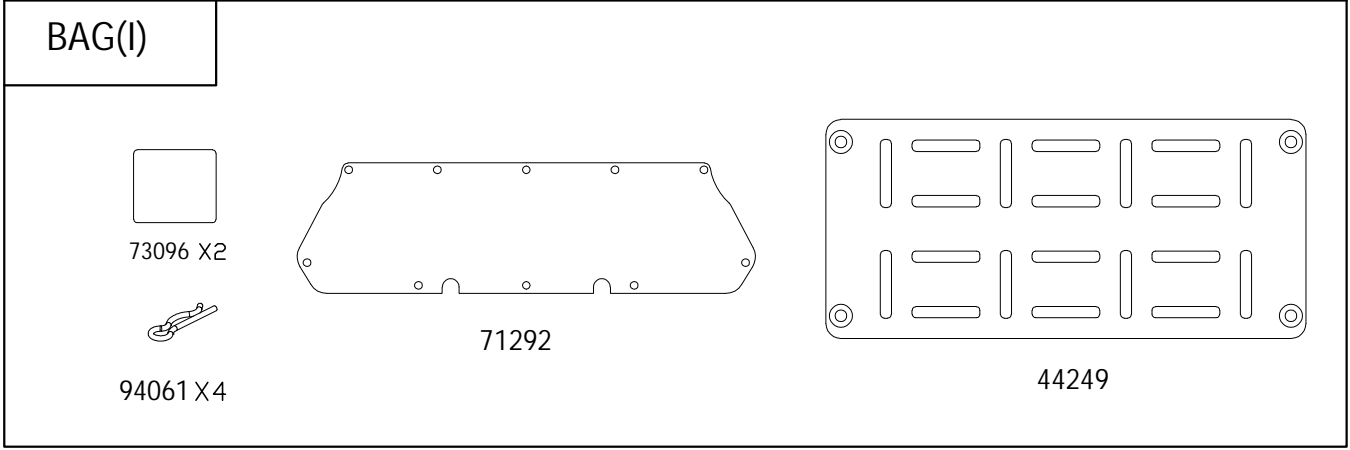
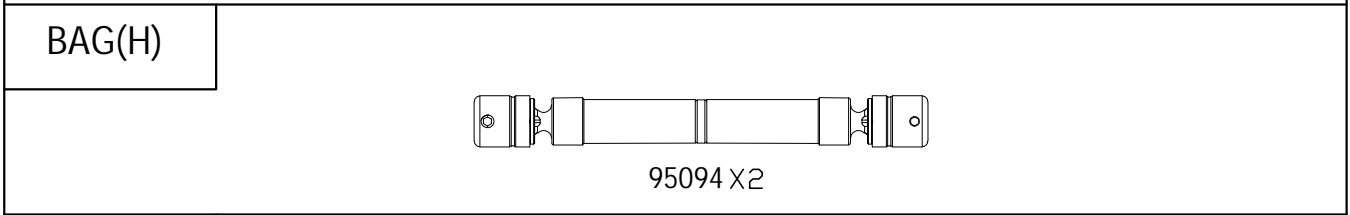
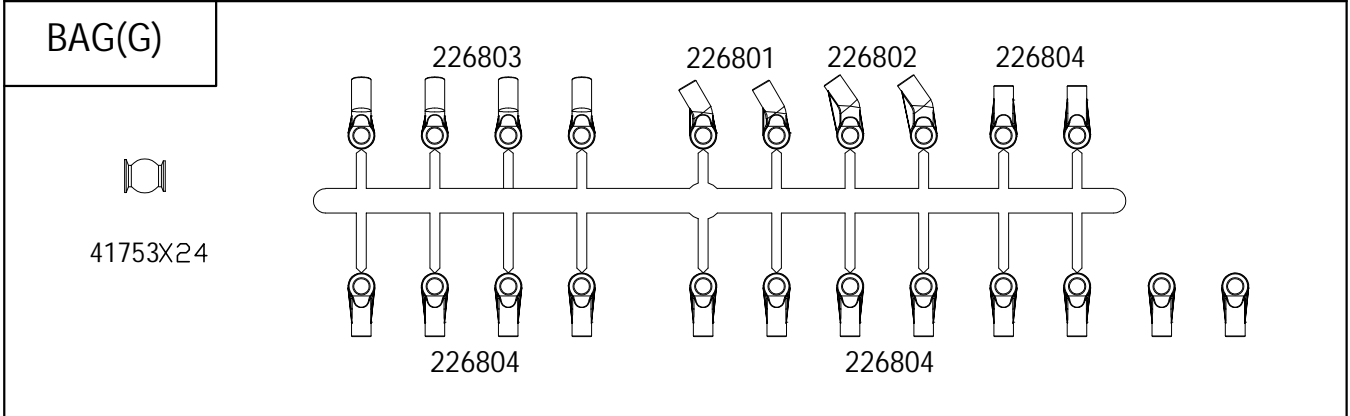
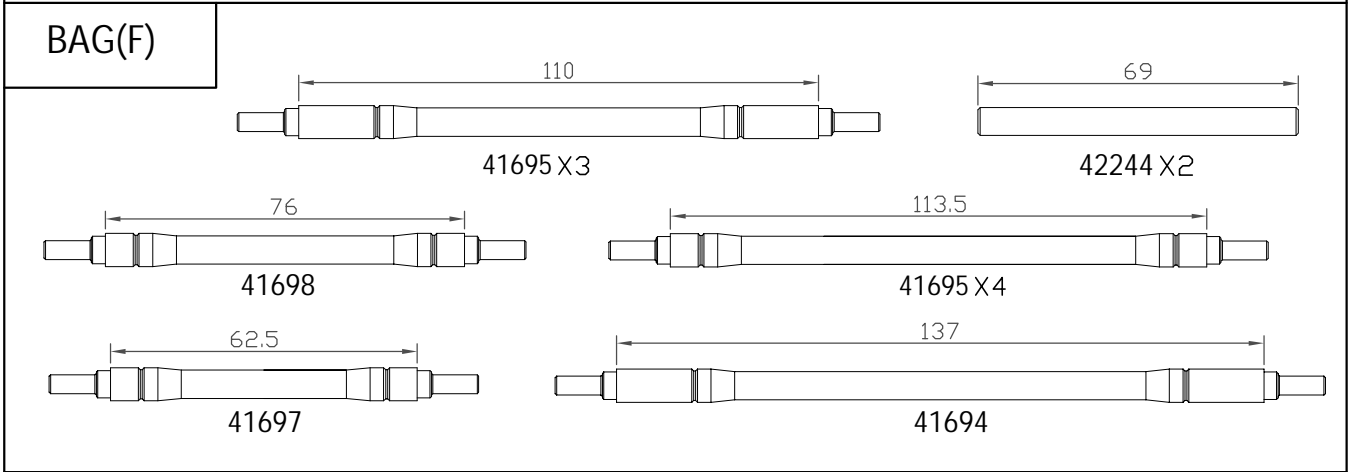
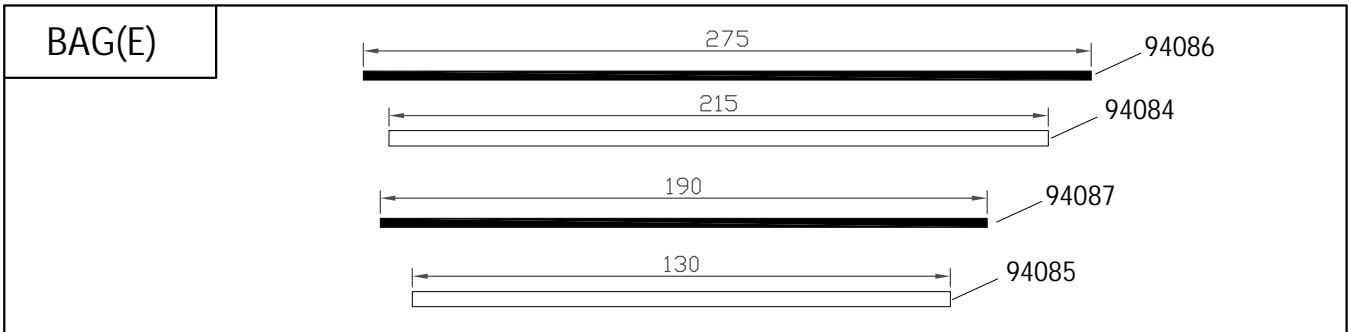
EMOX



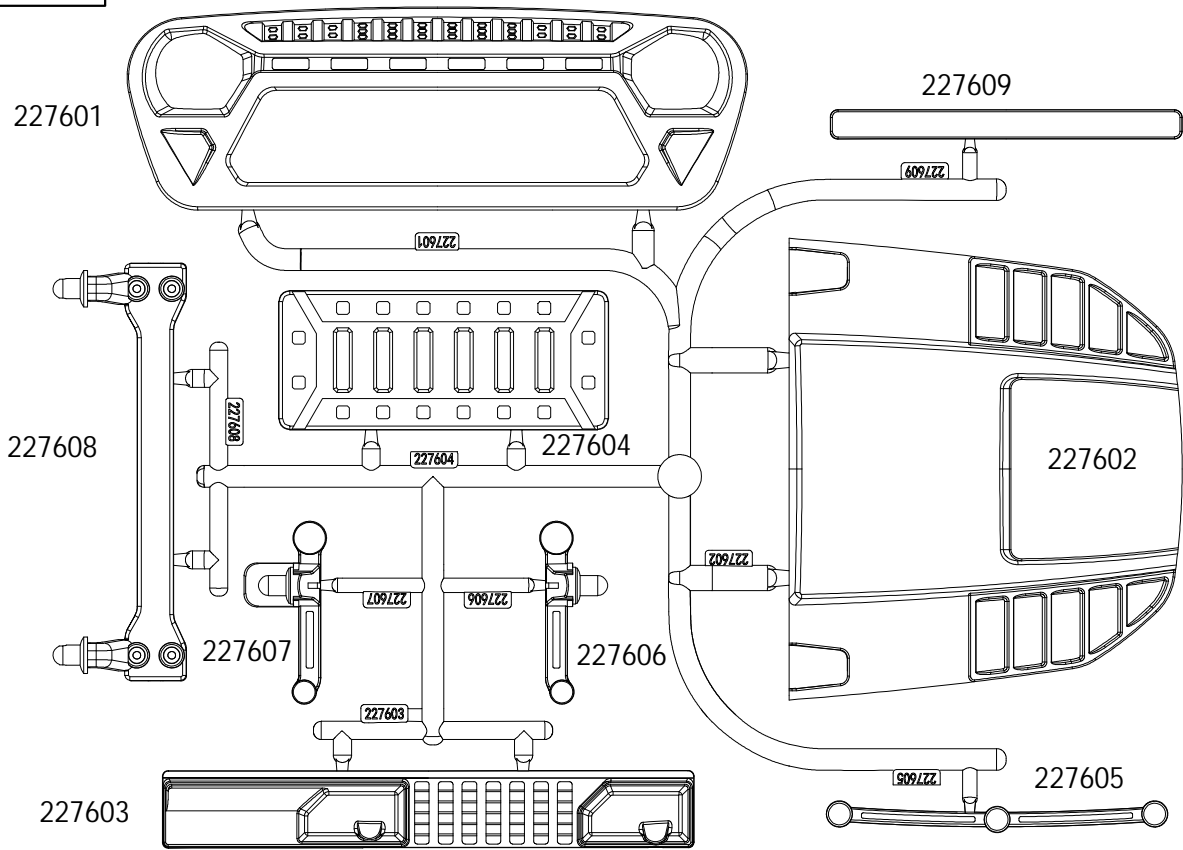
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45123	226501(60T)	41768(20T)	41750	41749X2	
					
36207	36206	33903	41748		41747
					
42234	42235	44212	44213	44214	74016
					
13001	42236	42203	72007	14102	$\begin{matrix} \phi 2 \\ 10 \\ \hline \end{matrix}$ 41209X1
$\phi 3 \times \phi 7.8 \times 0.5$ X2	$\phi 5.1 \times \phi 7.5 \times 2.5$ X1	$\phi 5.1 \times \phi 8 \times 1.5$ X2	$\phi 5 \times \phi 8 \times 0.3$ X9	$\phi 3 \times \phi 7 \times 0.5$ X2	
					
M2.5x10 X6	M3x6 X6	M3x10 X8	M3x10 X2	M3x4 X1	M2.5x6 X3
					
M4 X1	41834 X1	41307 X1	$\phi 5 \times \phi 10 \times 4$ X11		$\phi 5 \times \phi 8 \times 2.5$ X4



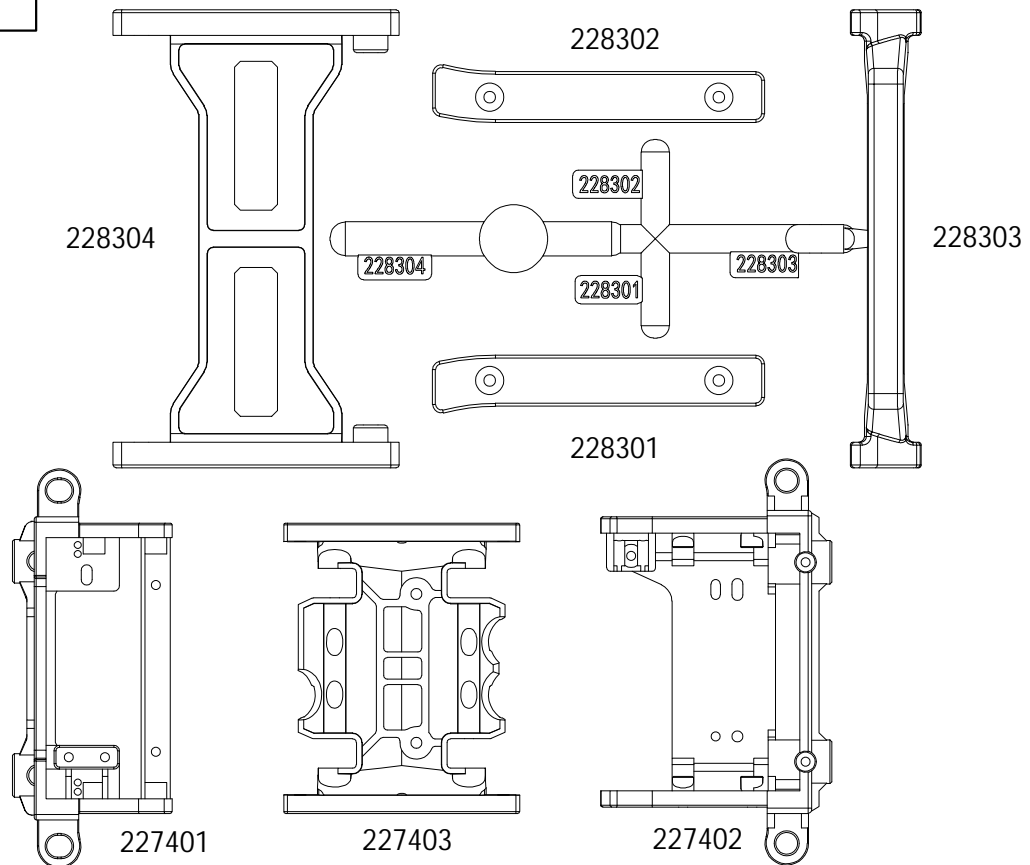
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33906 X4	33907 X8	36201 X2	33202 X2	36203 X4	36204 X4	36205 X2	44215 X2	41838 X2
								
95091	42241							
								
95092	42242			42243 X2	42223 X4	42237 X4		
								
226701	226702	226703	226704	226705	226706			
								
226707	226708	226709 X4	226710 X4	226711 X2	226602 X2			
								
226601			226603					
								
15015	15016	15018	15012	75026	72007	13002		
$\phi 15 \times \phi 21 \times 4 \times 2$	$\phi 12 \times \phi 18 \times 4 \times 2$	$\phi 8 \times \phi 12 \times 3.5 \times 2$	$\phi 5 \times \phi 10 \times 4 \times 18$	$\phi 12 \times \phi 15 \times 0.2 \times 2$	$\phi 5 \times \phi 8 \times 0.3 \times 2$	$\phi 3.8 \times \phi 9.2 \times 0.6 \times 6$		
								
11401	11227	11316	11125	11120	42208	75023	41259	
M3x4 X4	M2.5x8 X8	M2.5x10 X18	M2.5x10 X38	M2.5x20 X12	M3x10 X4	$\phi 2 \times 14 \times 2$	$\phi 2 \times 7.5 \times 8$	



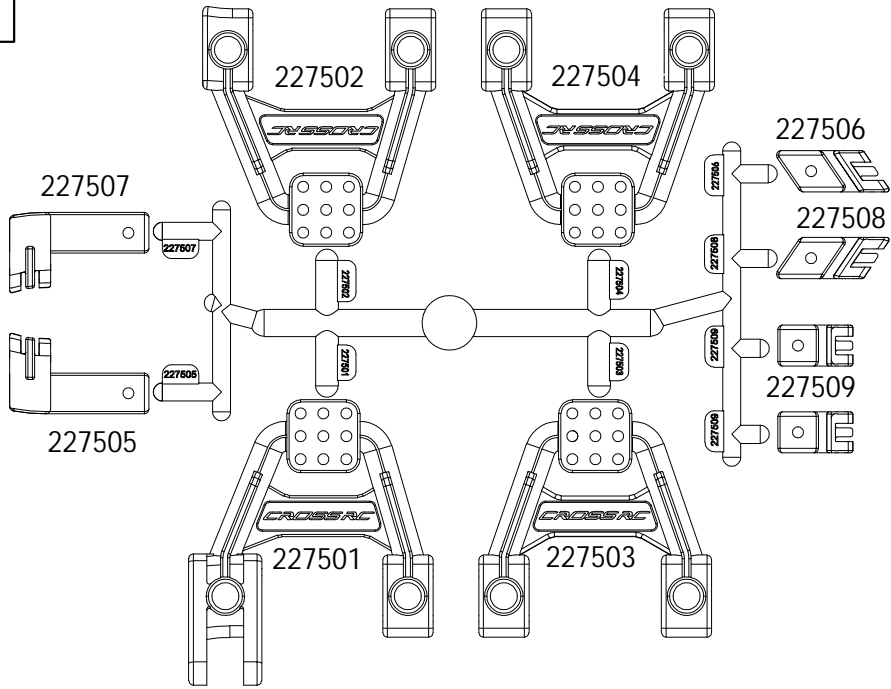
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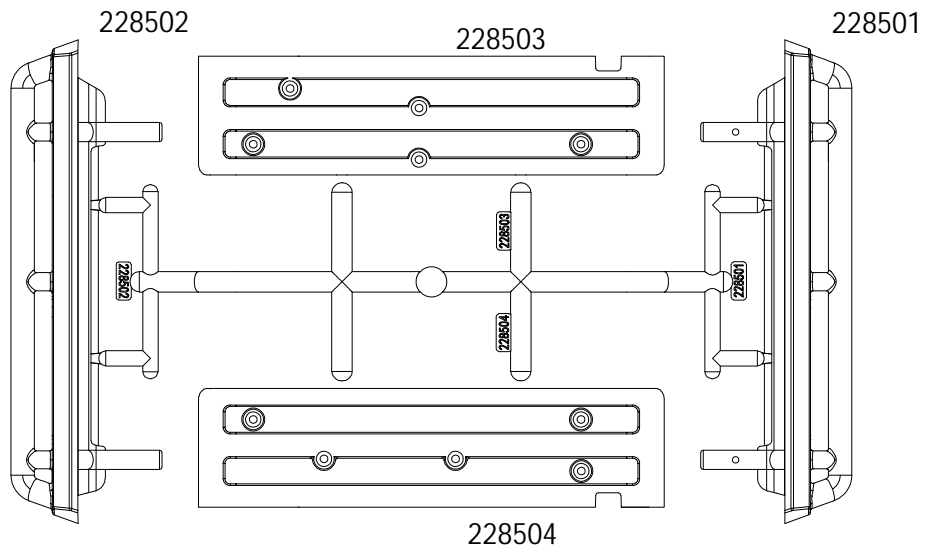
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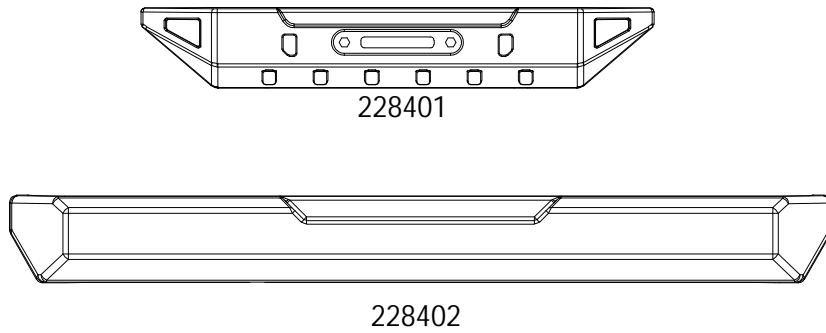
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BAG(M)



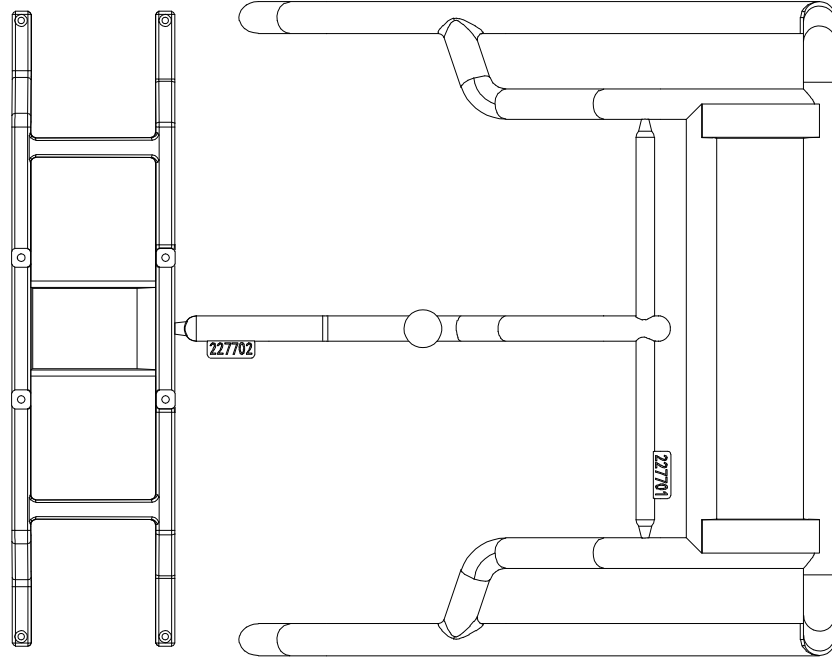
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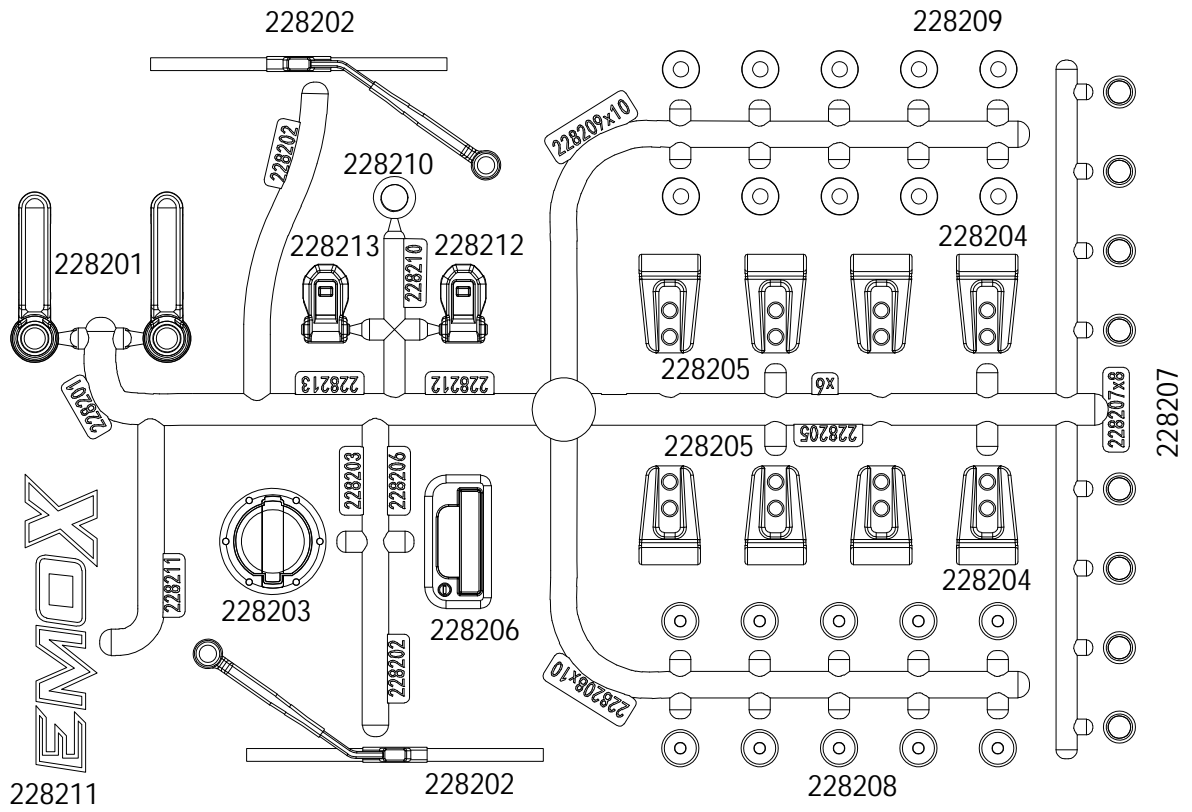
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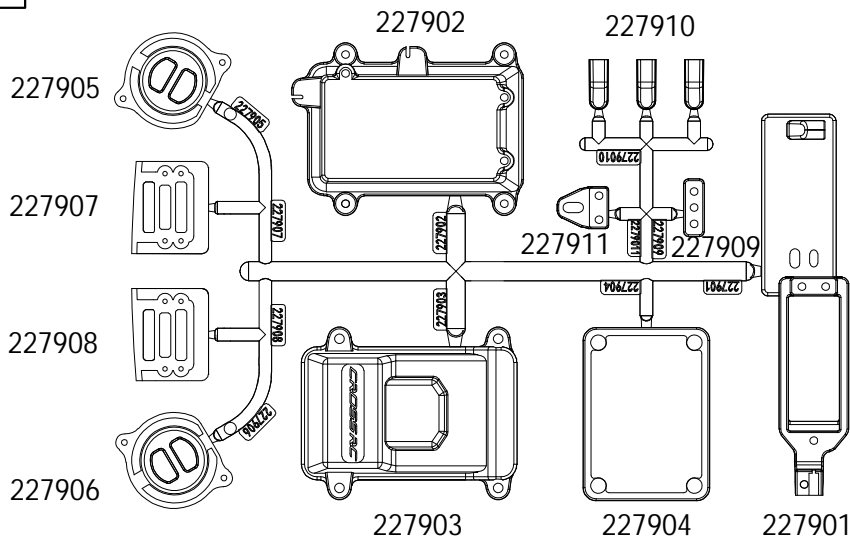
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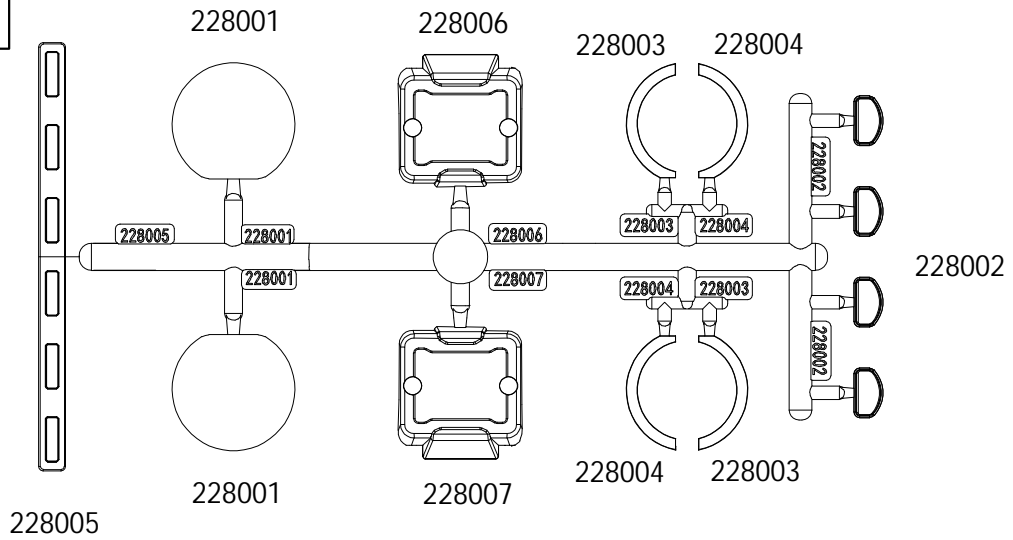
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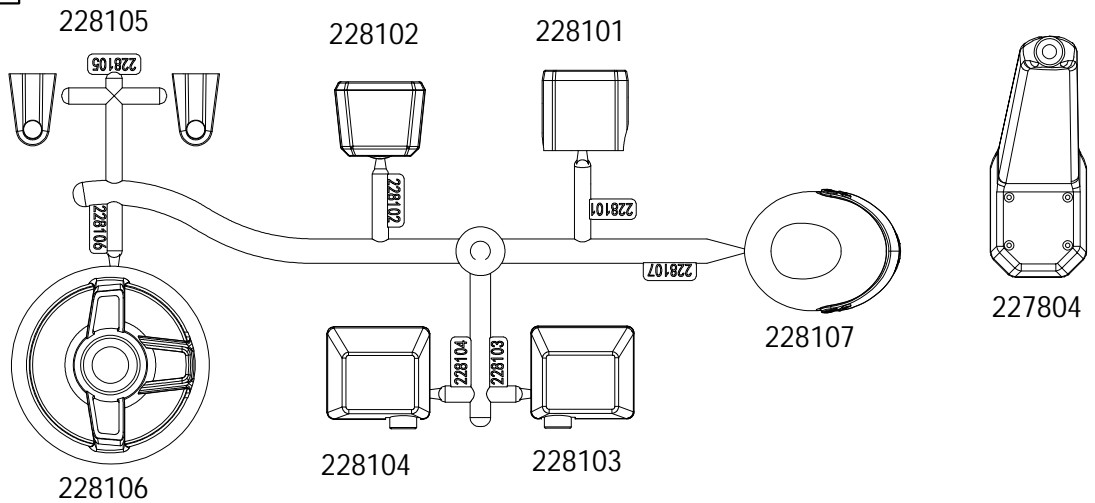
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BAG(R)

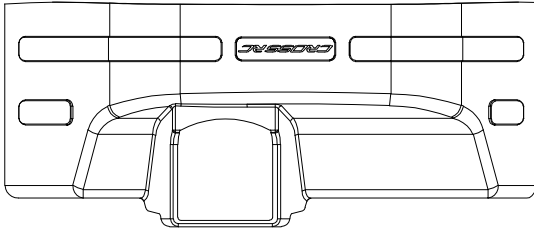


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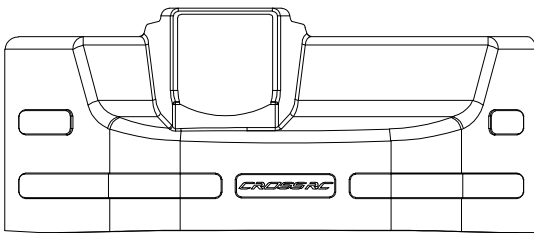
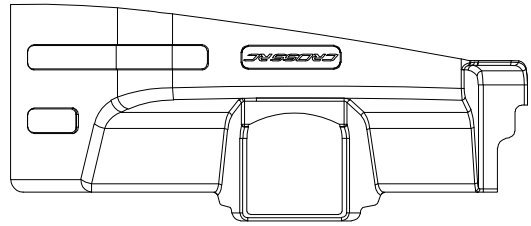


BAG(T)

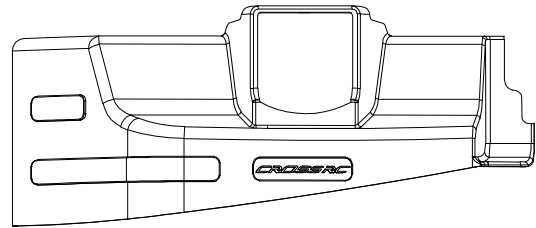
227302



227201

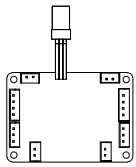


227301

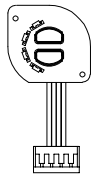


227202

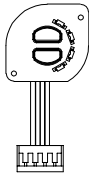
BAG(U)



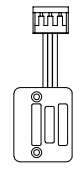
87143



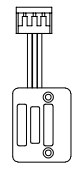
87144



87145



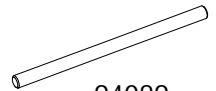
87146



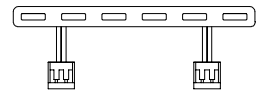
87147



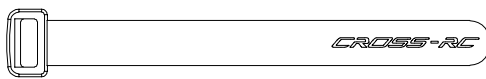
95096



94089

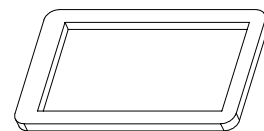


87148



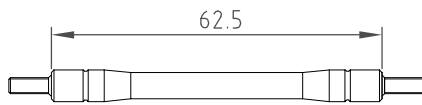
91004 X1

71294

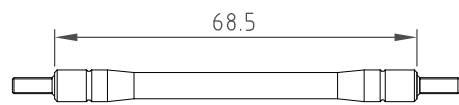


71293

BAG(V)



41699



41751



41336 X4



41205



11207 M3x10 X2



11209 M3x14 X5



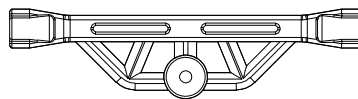
11211 M3x18 X2



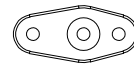
223901 X1



223903 X3

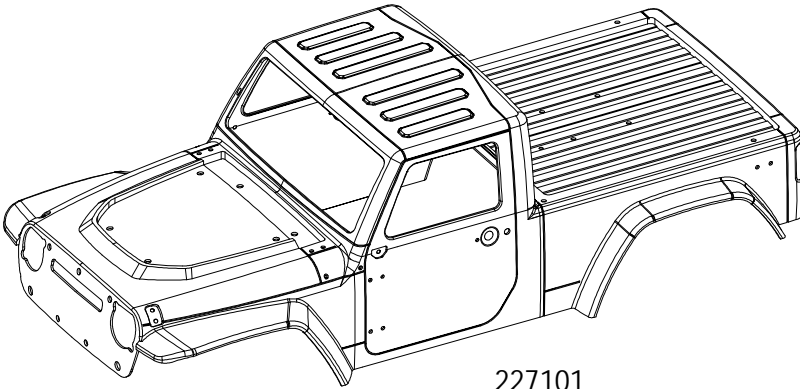


228403

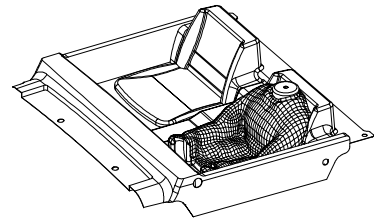


228404

BAG(W)





227101






227102


BAG(X)


11102  M2x6 X27

11205  M3x6 X8

11211  M3x18 X1


12203   M3 X3


11103  M2x8 X6

11206  M3x8 X23


11212  M3x20 X7


11303  M3x8 X14


11104  M2x10 X8


11207  M3x10 X41


11214  M3x25 X5


11401  M3x4 X1


11126  M2x14 X2


11209  M3x14 X2


11215  M3x28 X4


11416  M3x20 X4

11116  M2.5x12 X4

11210  M3x16 X2

11223  M3x30 X2

11413  M4x12 X8

14102   $\varnothing 3 \times \varnothing 7 \times 0.5$  X2

BAG(Y)

 44172 X1

 91175 X3



91176 X2




41819 X2




42231 X2



94056 X1

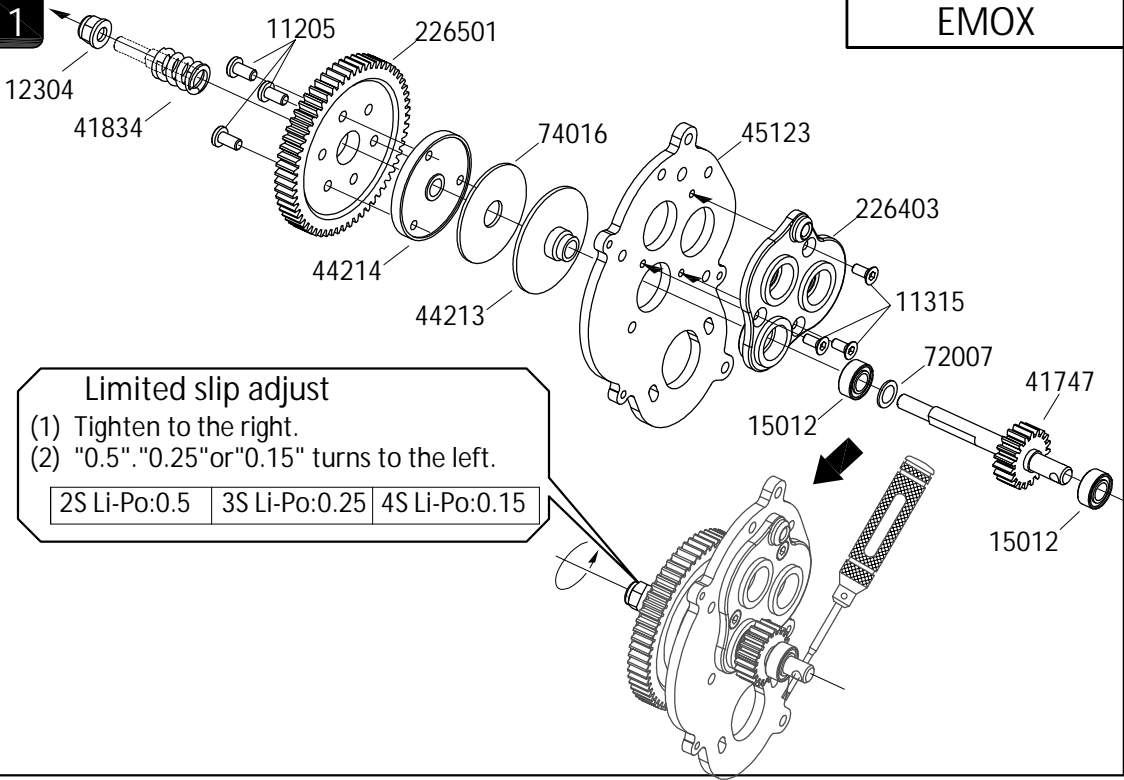
11227  M2.5x8 X3

12206  M2 X3

11401  M3x4 X3



EMOX

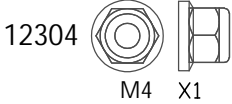


BAG(C)

15012



ø5xø10x4 X2



12304

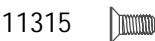
M4

X1

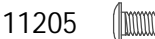


72007

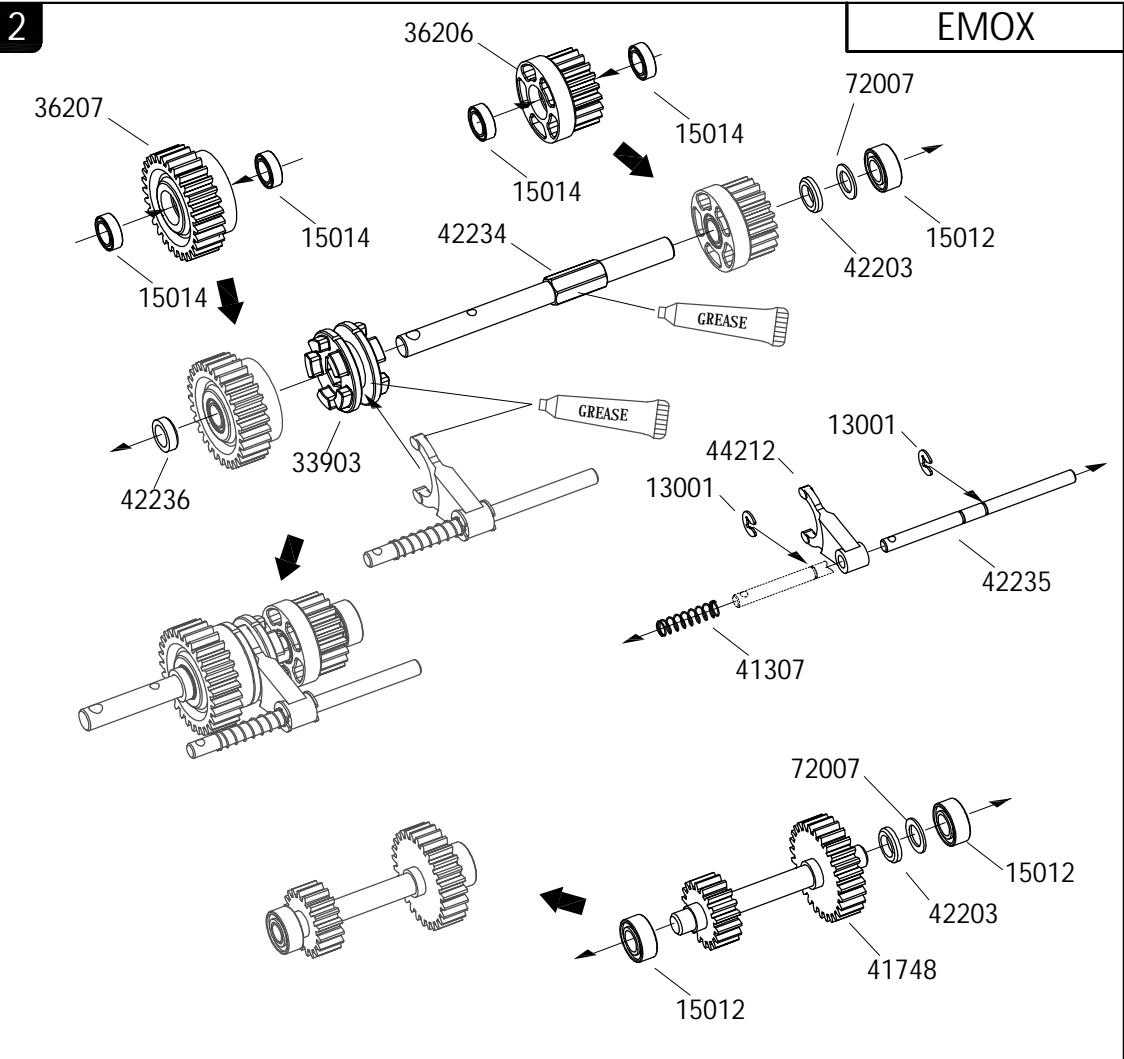
ø5xø8x0.3 X1



M2.5x6 X3



M3x6 X3



EMOX

2

15014



ø5xø8x2.5 X4

15012



ø5xø10x4 X3



13001

ø3xø7.8x0.5 X2



72007

ø5xø8x0.3 X2

42203

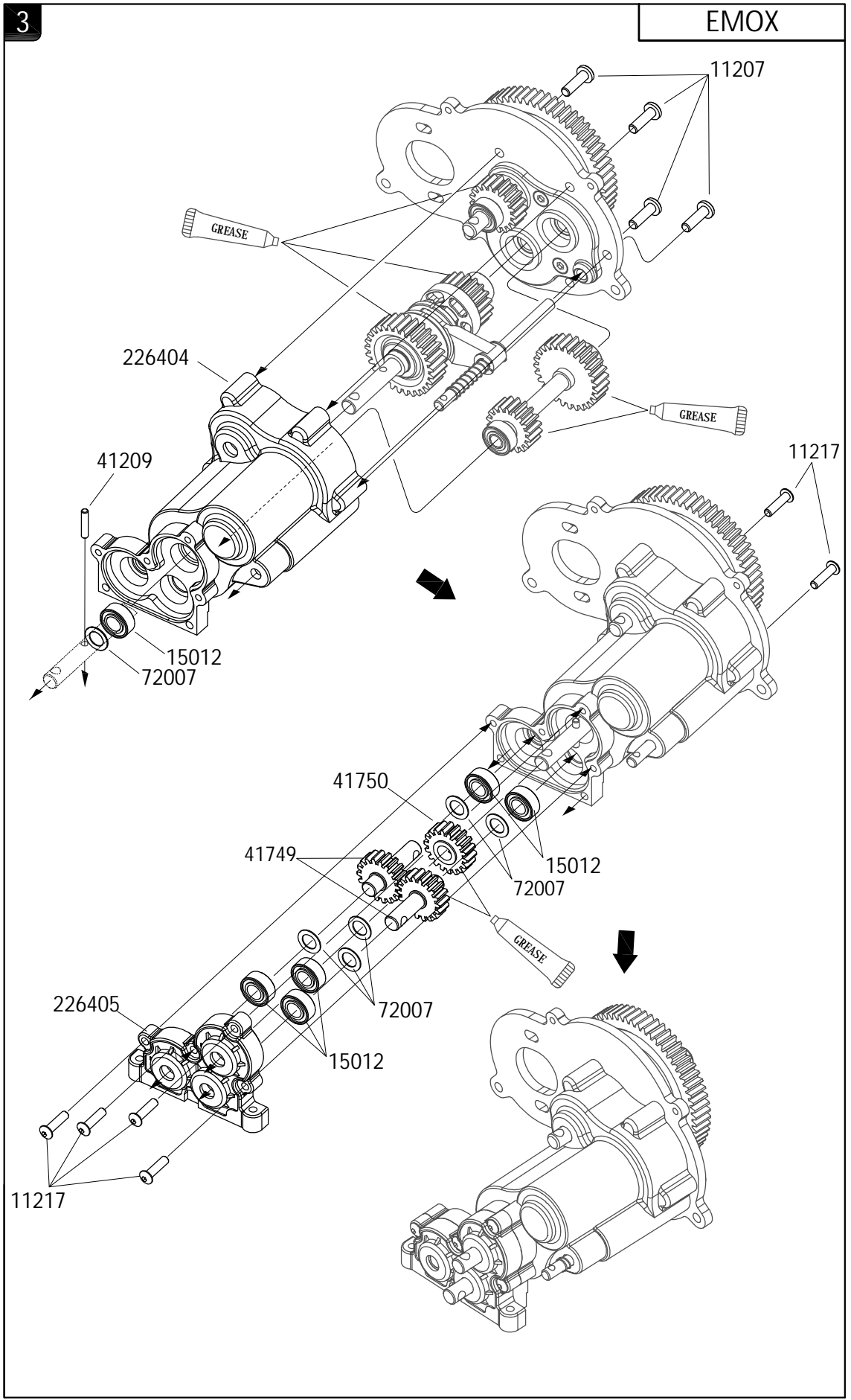


ø5.1xø8x1.5 X2

42236



ø5.1xø7.5x2.5 X1



3

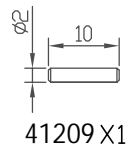
EMOX

11207 M3x10 X4

11217 M2.5x10 X6


72007  $\phi 5 \times \phi 8 \times 0.3 \times 6$


15012  $\phi 5 \times \phi 10 \times 4 \times 6$




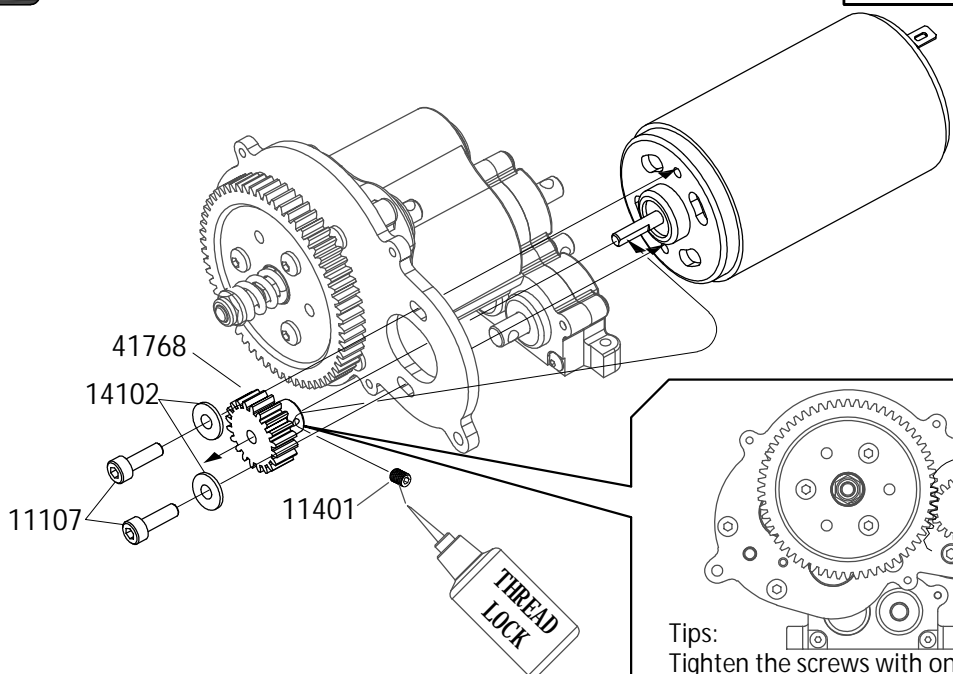
4

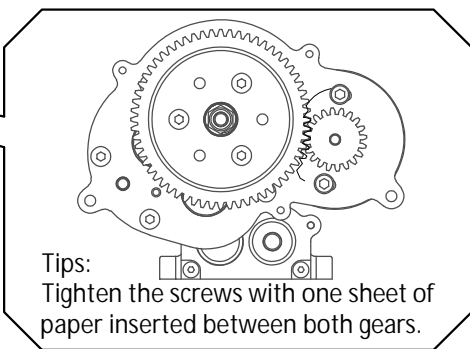
EMOX

11401   
M3x4 X1

14102   
∅3x∅7x0.5 X2

11107   
M3x10 X2






Tips:  
Tighten the screws with one sheet of paper inserted between both gears.


Final reduction ratio

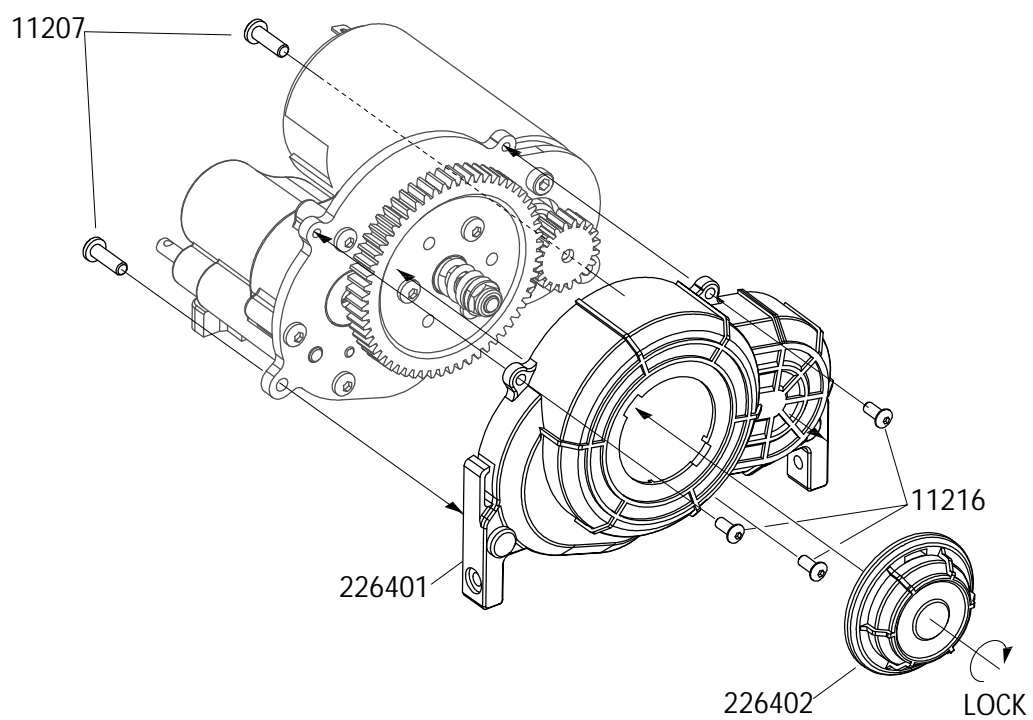
Motor gear	16T	17T	18T	19T	20T
Fast	22.1	20.8	19.6	18.6	17.8
Slow	48.3	45.4	42.9	40.6	38.9

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.

Battery  
(Not included)

BAG(X)

11205   
 M3x6 X4

**7** **EMOX**



95094 **x2**

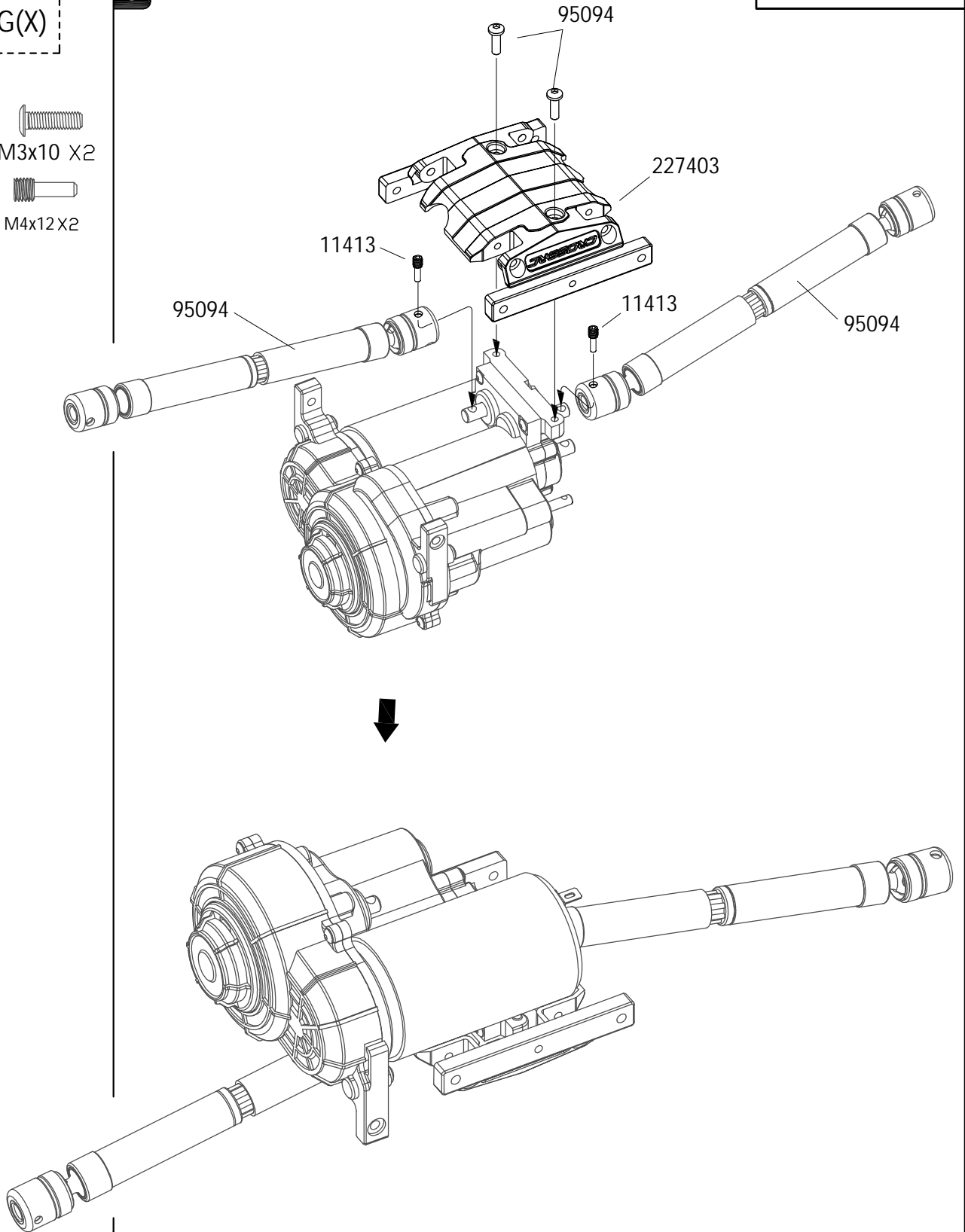
58

8

EMOX

BAG(X)




- 11207  M3x10 X2
- 11413  M4x12X2

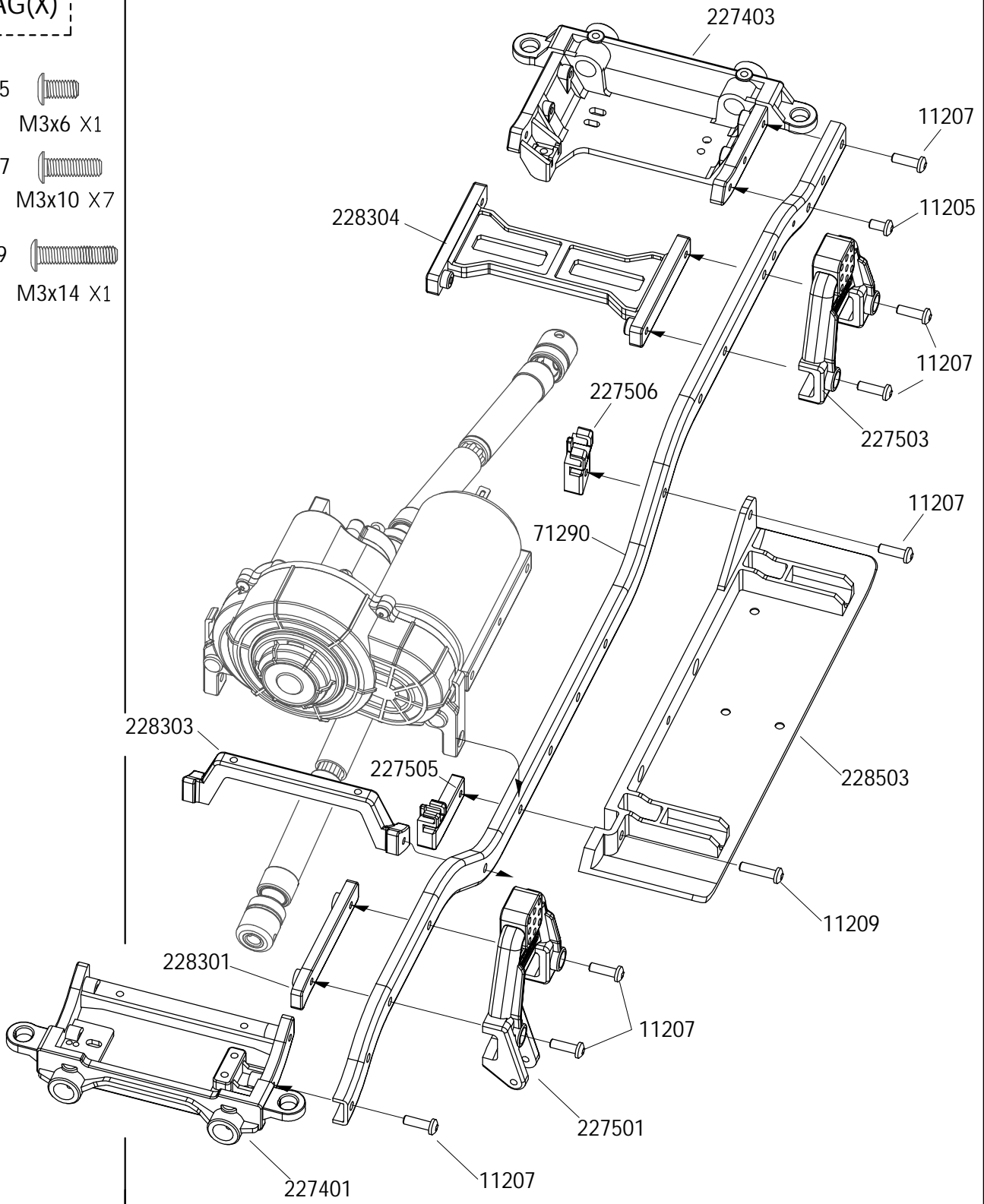


9

EMOX

BAG(X)


- 11205  M3x6 X1
- 11207  M3x10 X7
- 11209  M3x14 X1





10

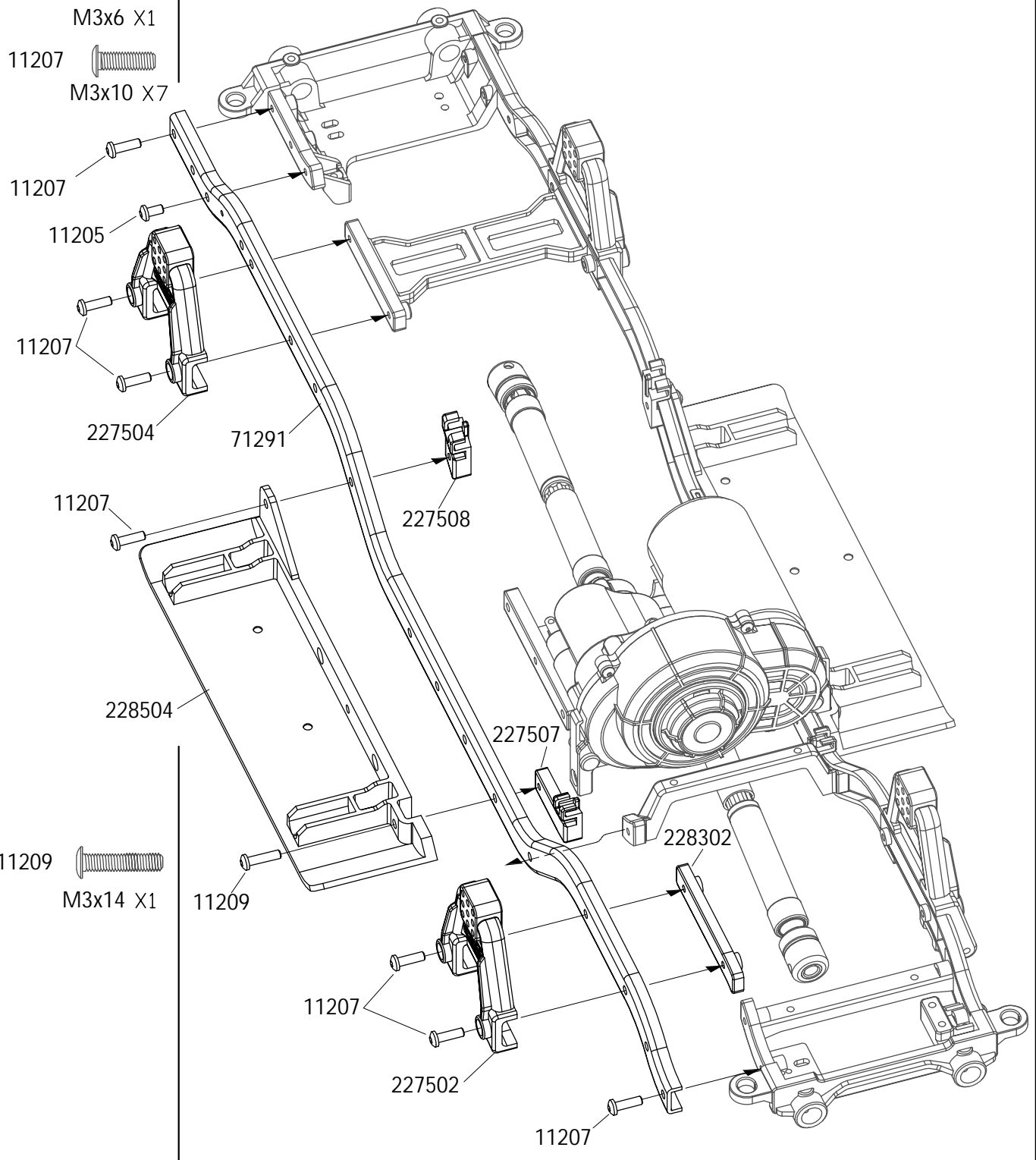
EMOX

BAG(X)

11205   
M3x6 X1

11207   
M3x10 X7


11209   
M3x14 X1

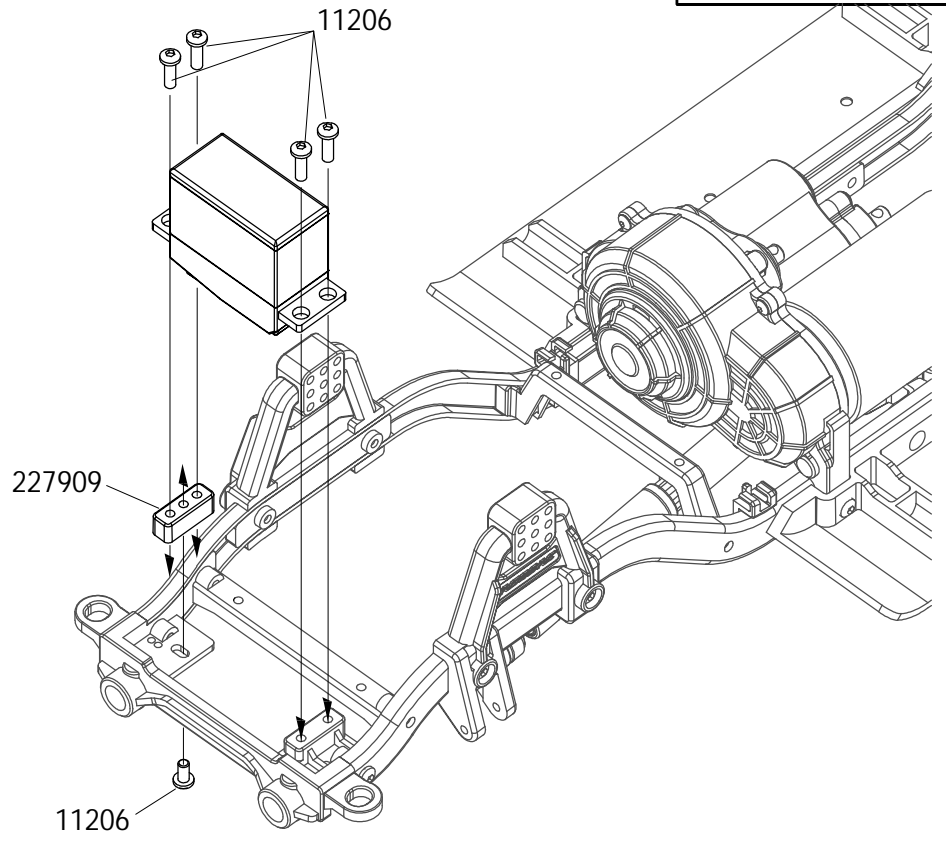


BAG(X)

11


EMOX


11206   
M3x8 X5




12

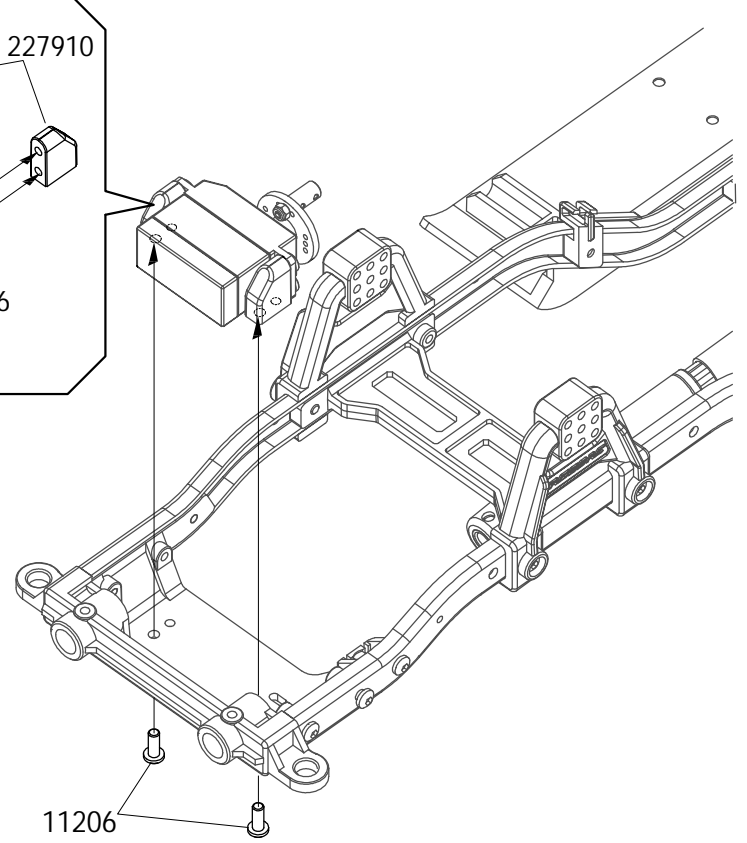
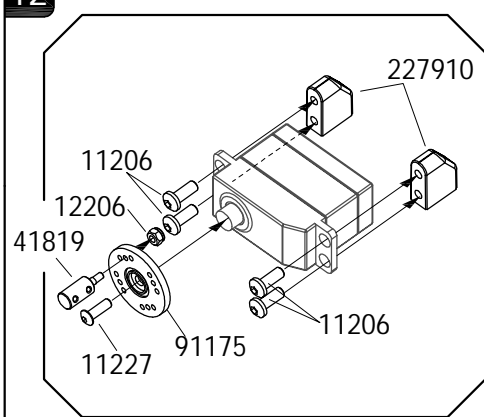
EMOX

11206   
M3x8 X6

11227   
M2.5x8 X1


12206   
M2 X1

  
41819 X1





BAG(B)

13003  |  
 ø2.5xø6x0.4 X8

ø7xø3.5xø2




50021 X8

ø8xø6xø1



17001 X4


11133  |  
 M2x12 X4

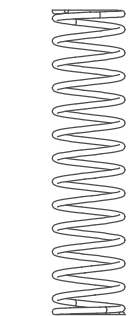
11102  |  
 M2x6 X4

ø4xø2x0.5 X4

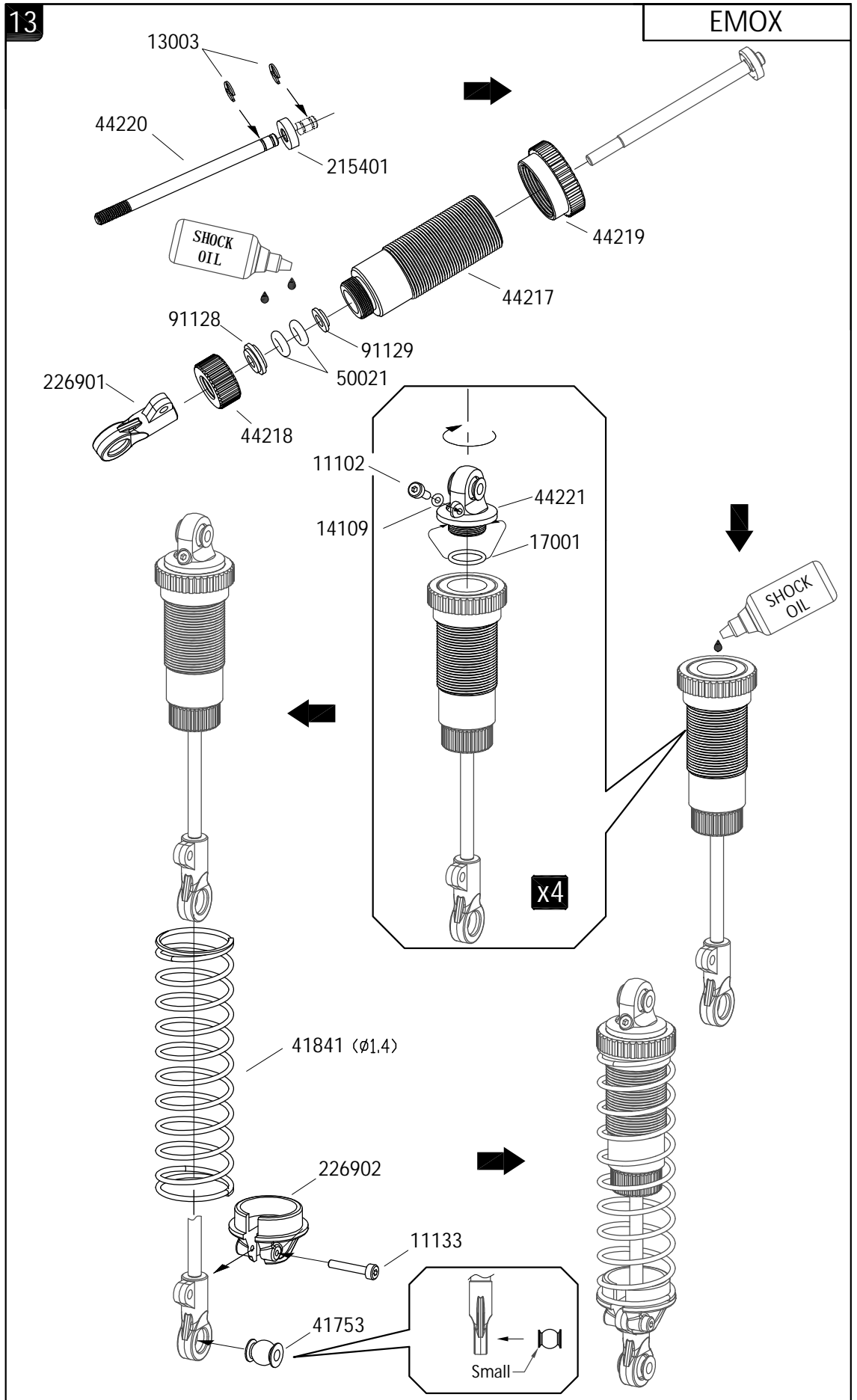


14109


 |  
 41753 X4




41841 X4(ø1.4)

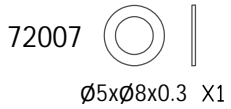
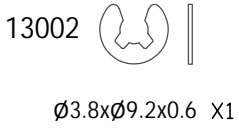
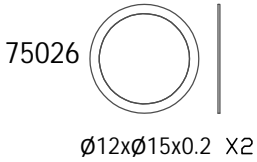
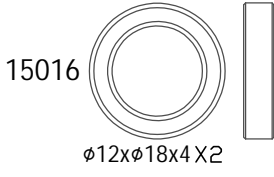
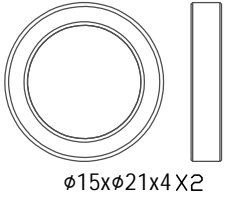



**BAG(D)**


11316  M2.5x10 X2

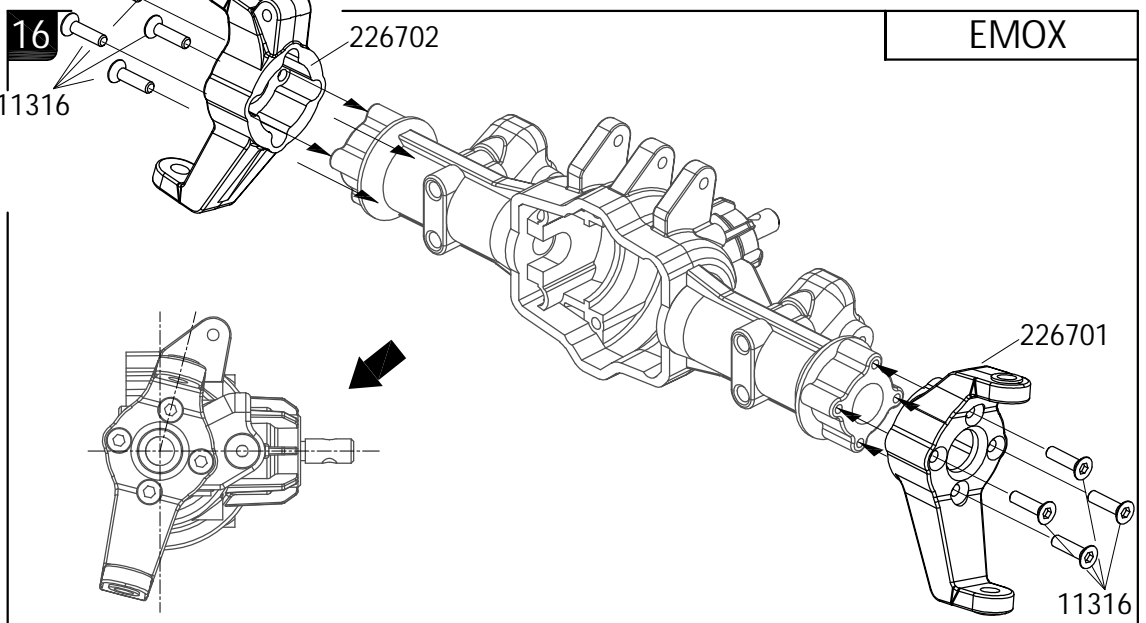
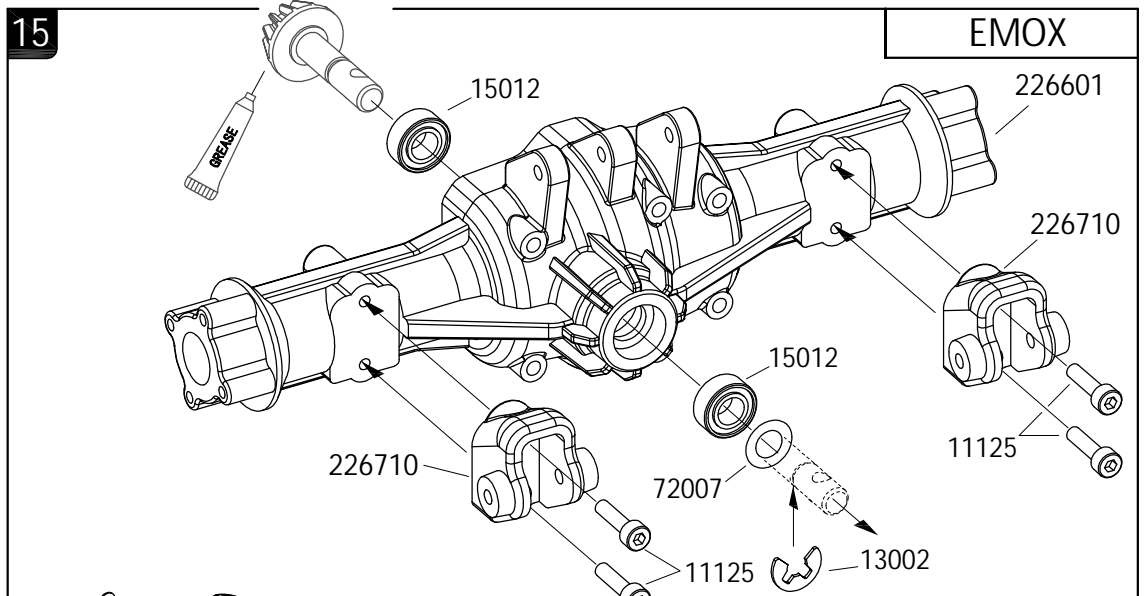
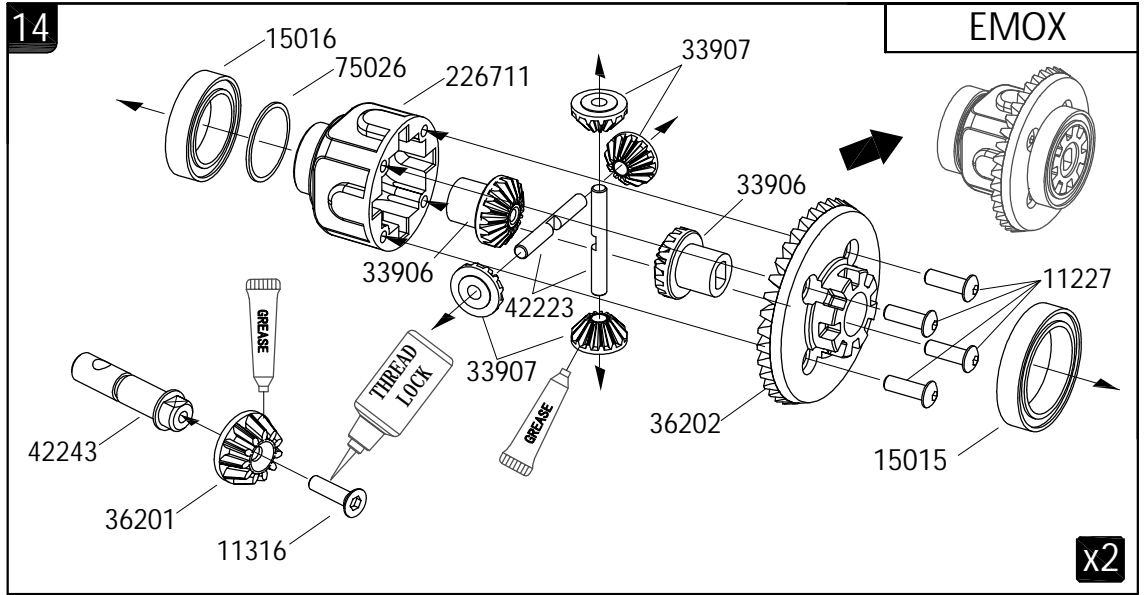
11227  M2.5x8 X8

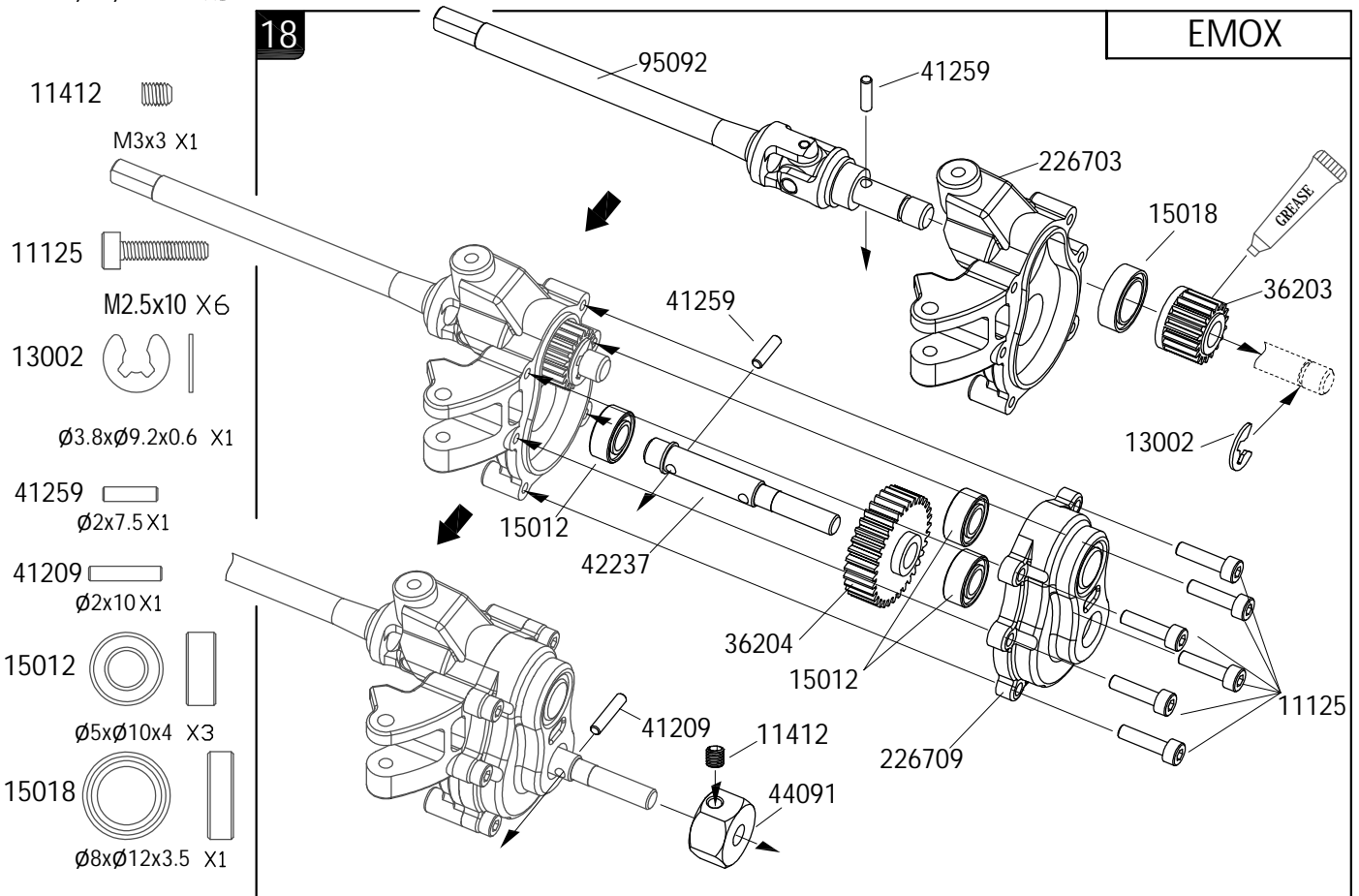
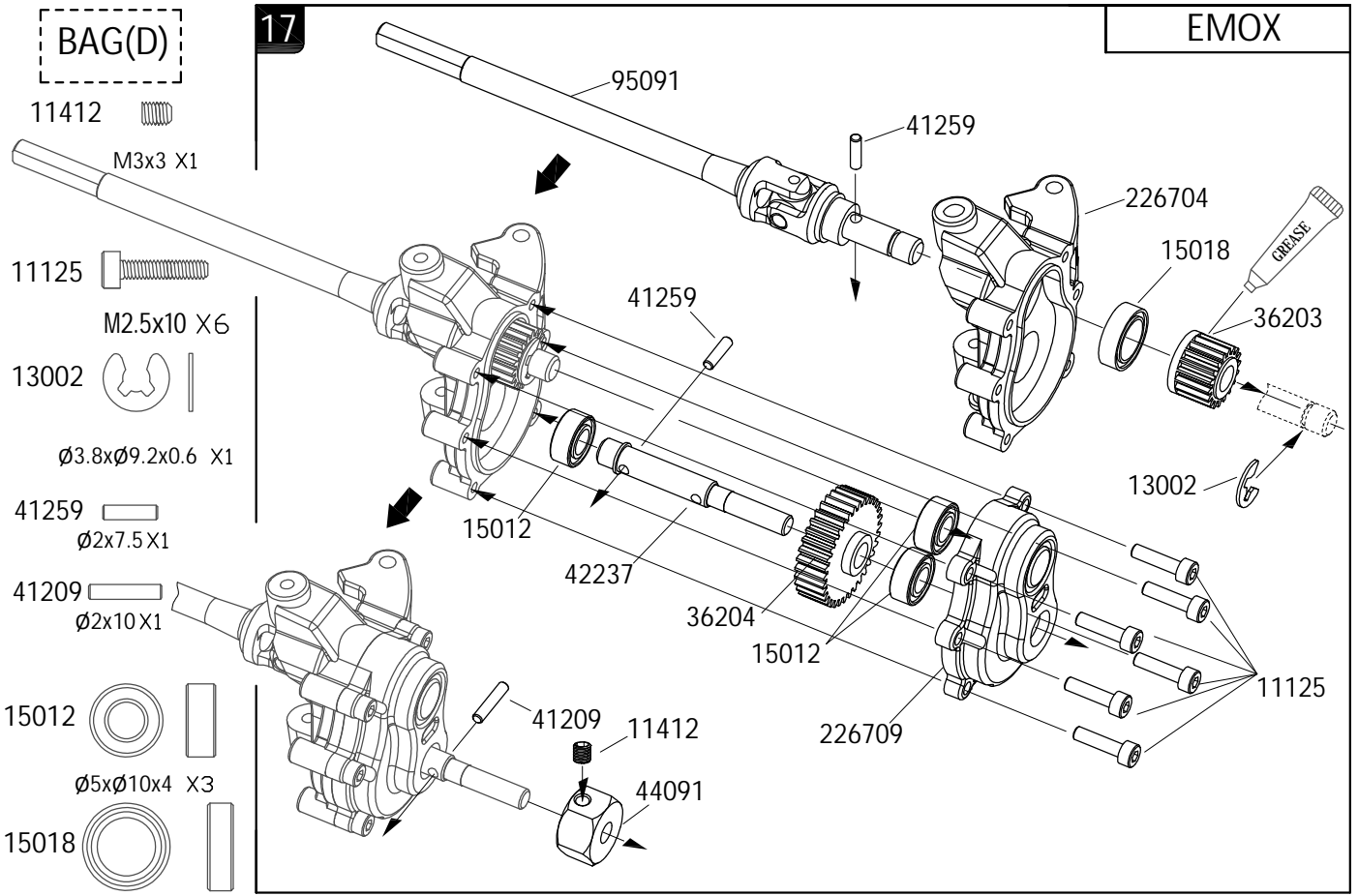
15015



11125  M2.5x10 X4

11316  M2.5x10 X8



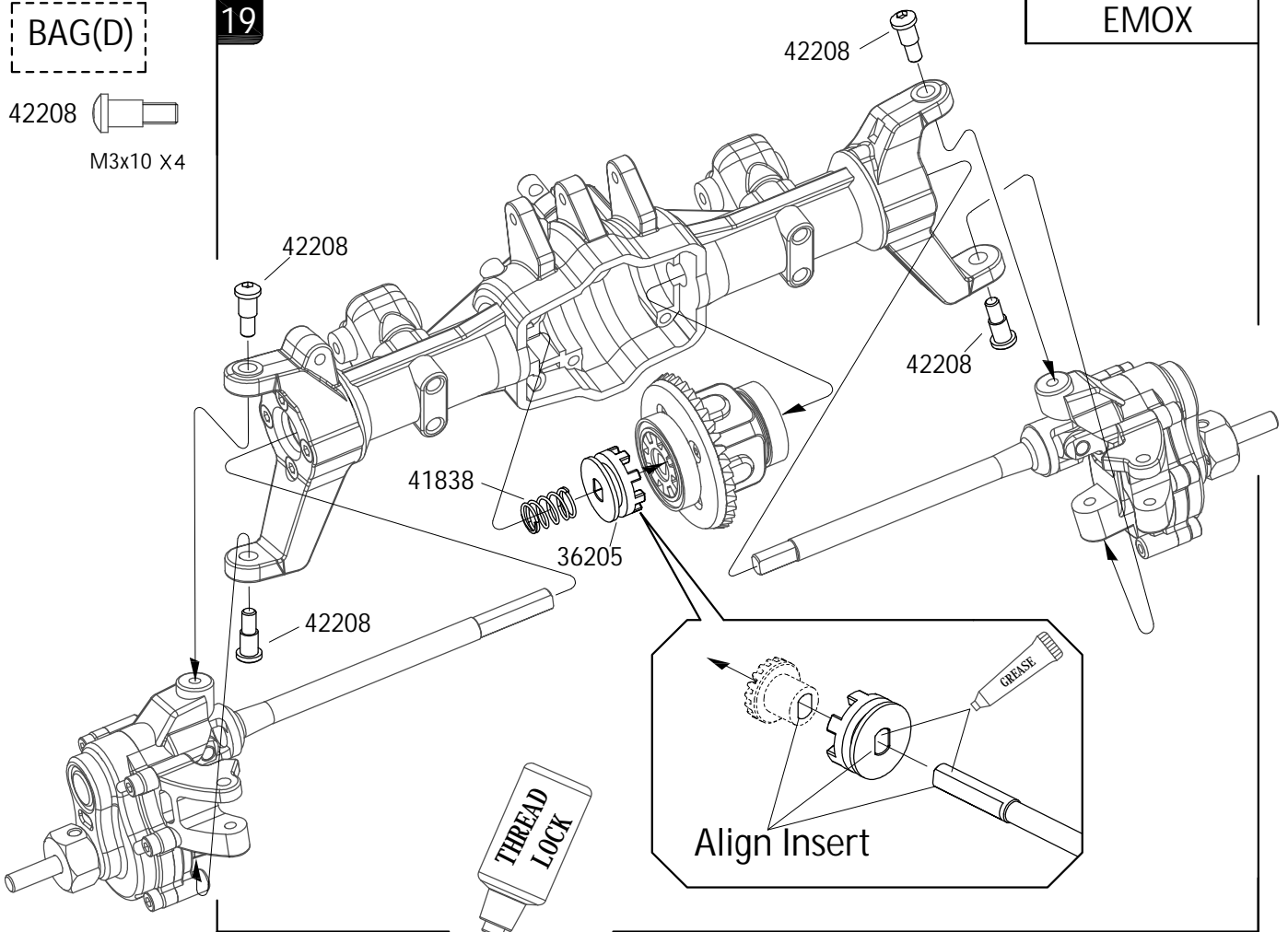


EMOX

19


BAG(D)


42208   
M3x10 X4




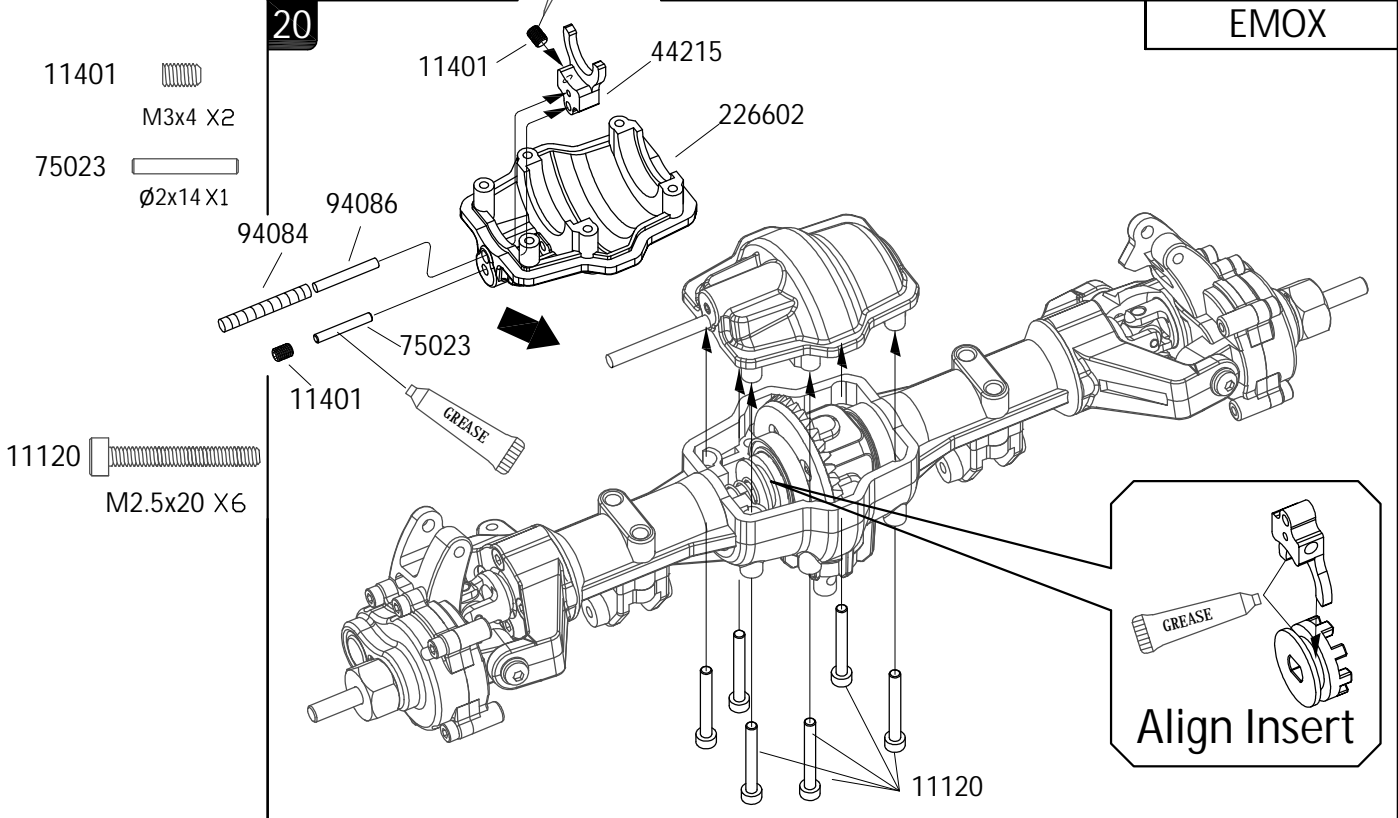
EMOX

20

11401   
M3x4 X2

75023   
Ø2x14 X1




11120   
M2.5x20 X6

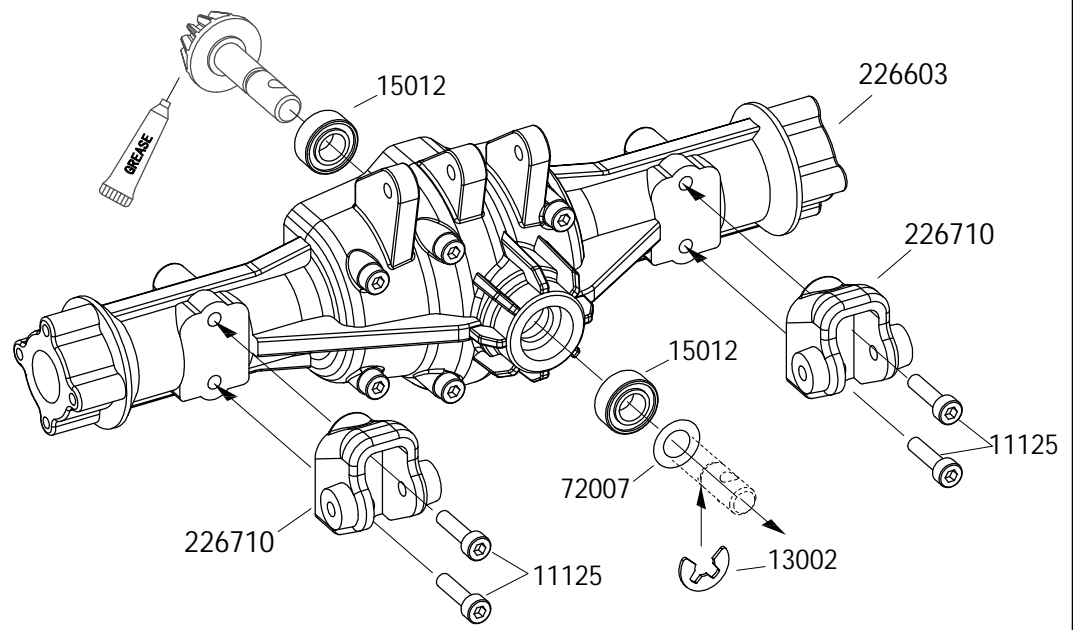


EMOX

21

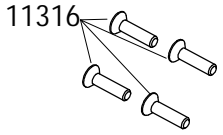
BAG(D)


- 15012   $\varnothing 5 \times \varnothing 10 \times 4$  X2
- 13002   $\varnothing 3.8 \times \varnothing 9.2 \times 0.6$  X1
- 72007   $\varnothing 5 \times \varnothing 8 \times 0.3$  X1
- 11125  M2.5x10 X4

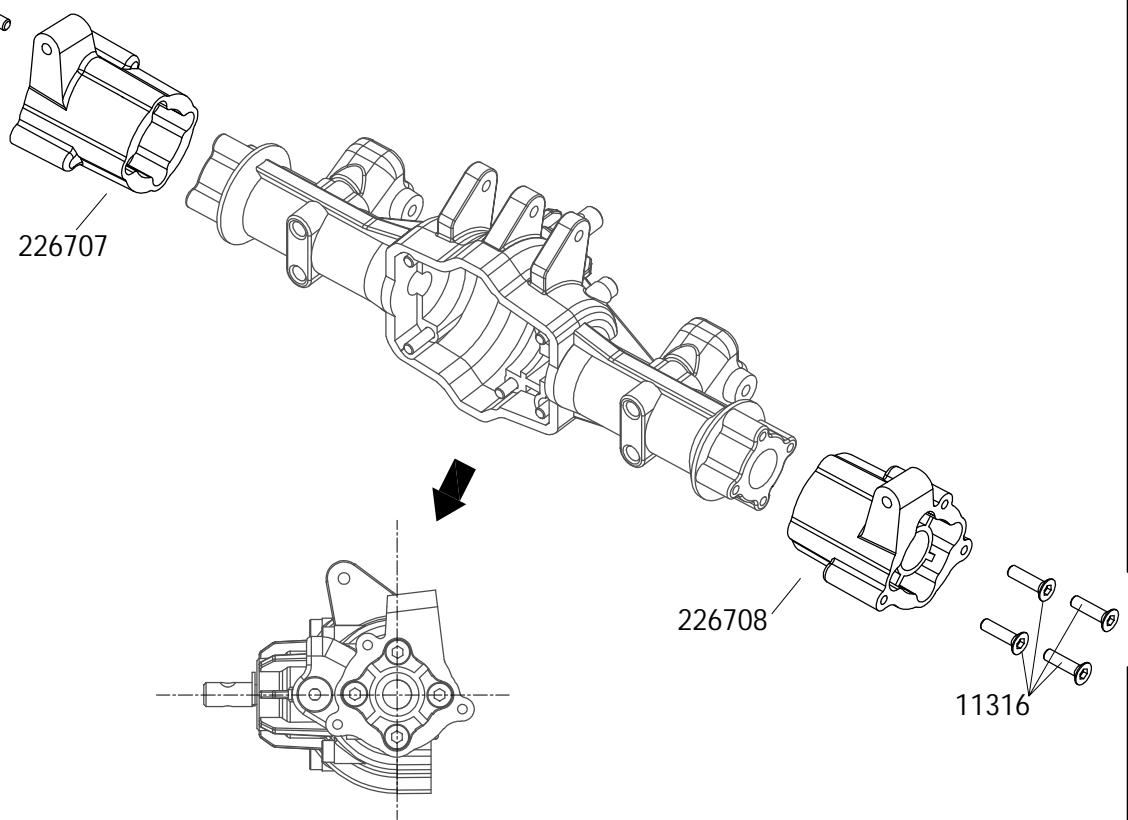


22

EMOX




- 11316  M2.5x10 X8




EMOX


23


BAG(D)


11412  M3x3 X1

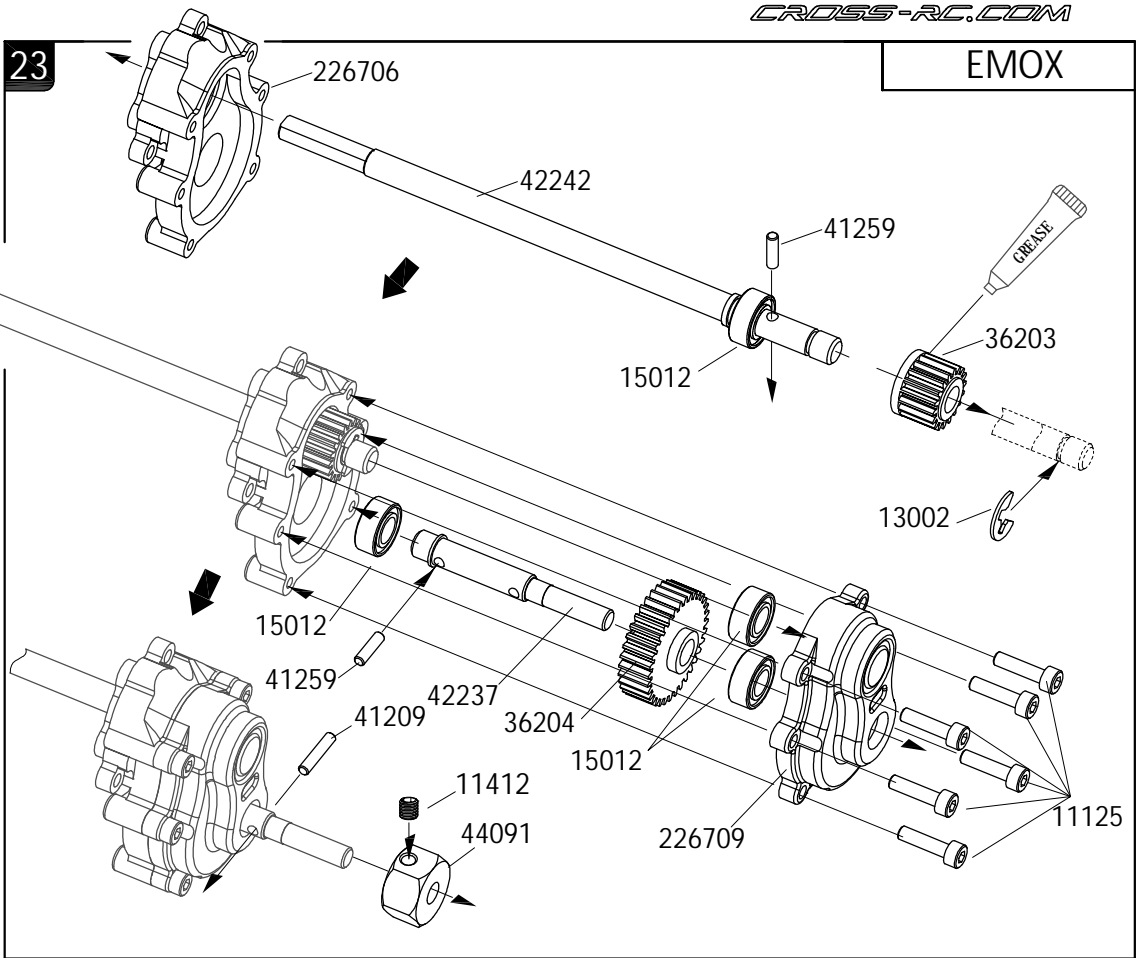
15012   Ø5xØ10x4 X4

11125  M2.5x10 X6

13002  Ø3.8xØ9.2x0.6 X1


41259  Ø2x7.5 X1


41209  Ø2x10 X1

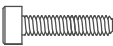



24


EMOX


11412  M3x3 X1

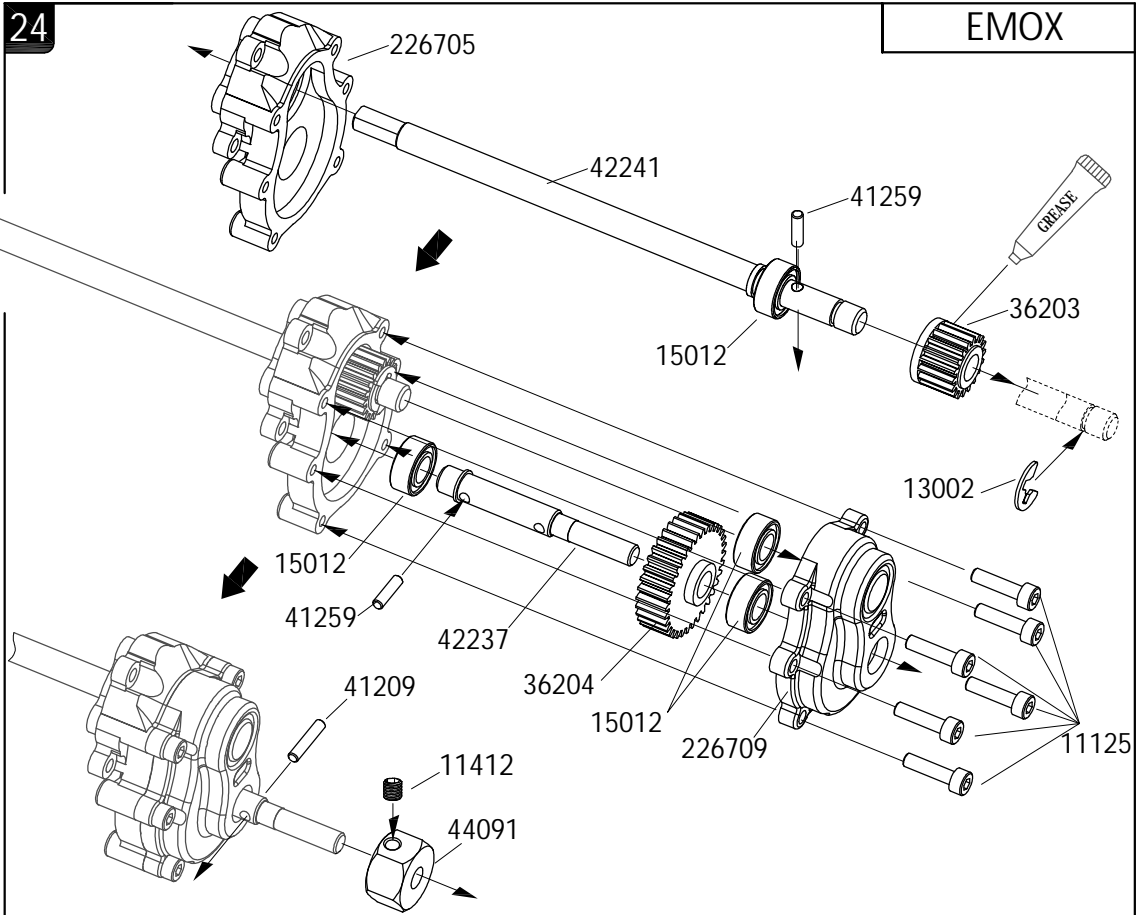
15012   Ø5xØ10x4 X4

11125  M2.5x10 X6

13002  Ø3.8xØ9.2x0.6 X1

41259  Ø2x7.5 X1

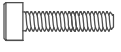
41209  Ø2x10 X1



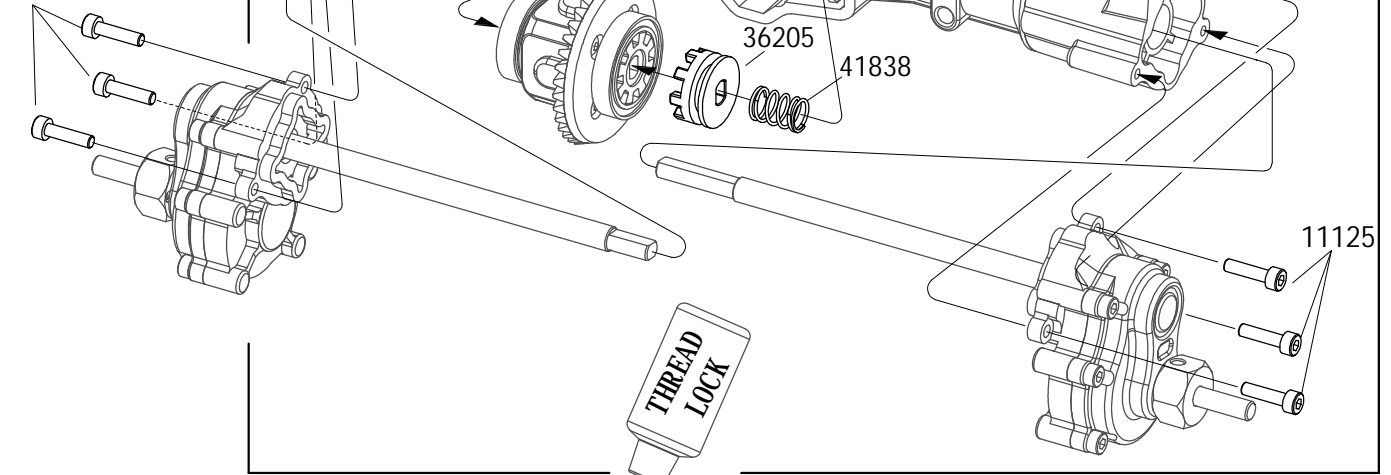
EMOX

25

BAG(D)

11125   
M2.5x10 X6

11125



EMOX

26

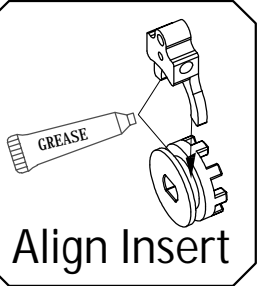
11401 44215


226602


94084 94086


11401 75023

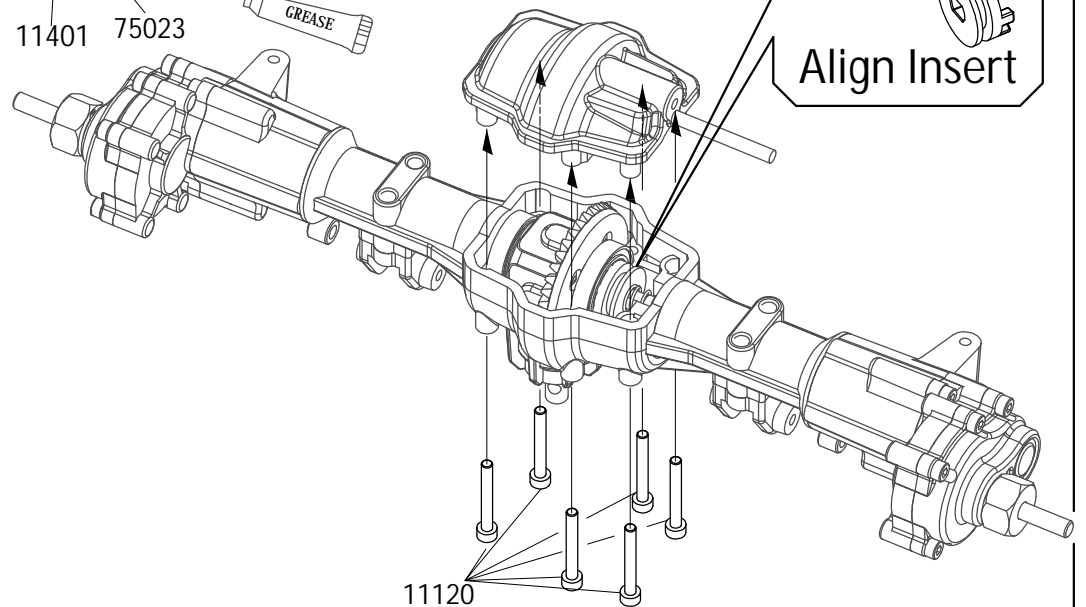
GREASE



11401   
M3x4 X2

75023   
Ø2x14 X1


11120   
M2.5x20 X6

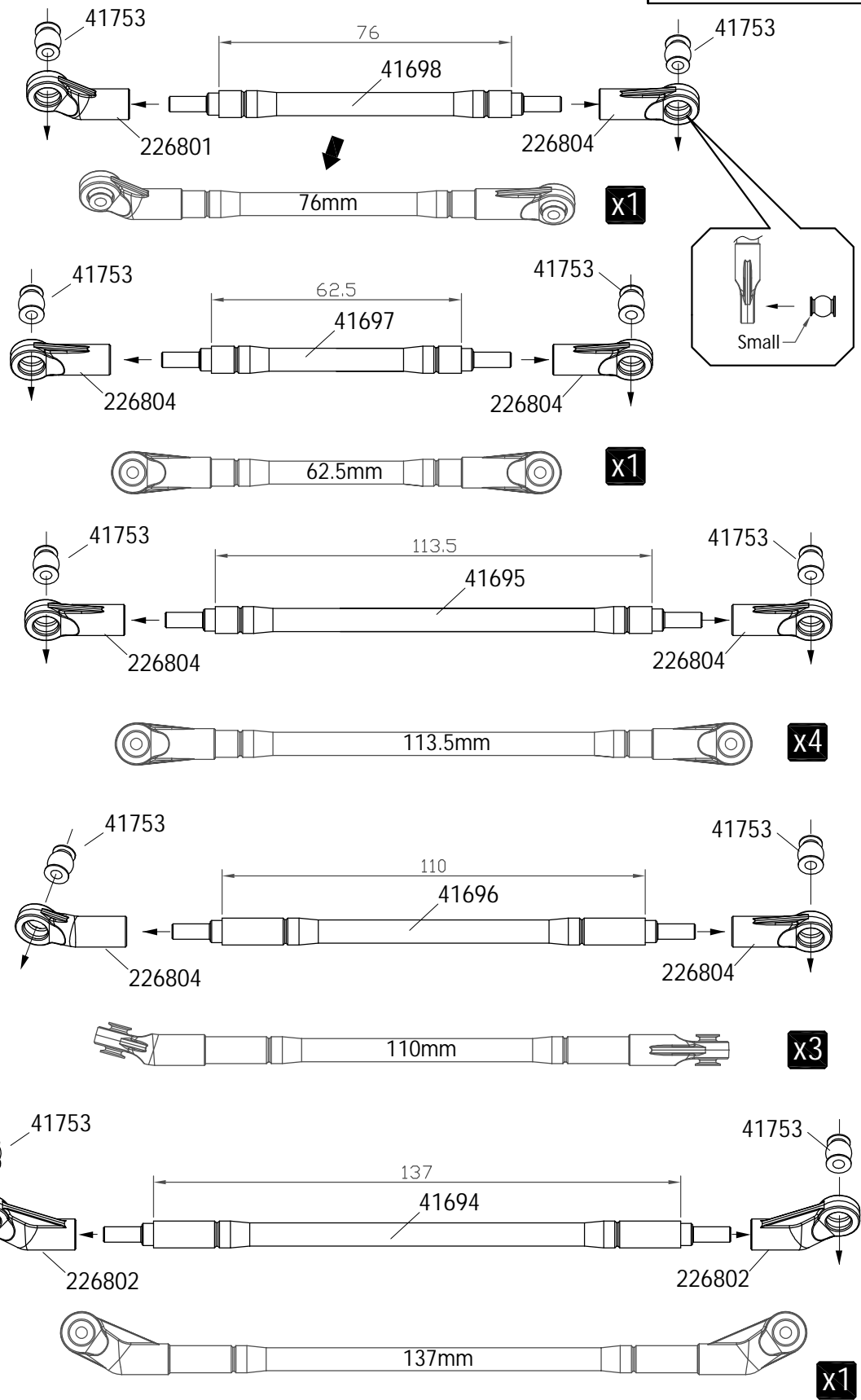


27

EMOX

BAG(F)  
BAG(G)

  
41753 X20





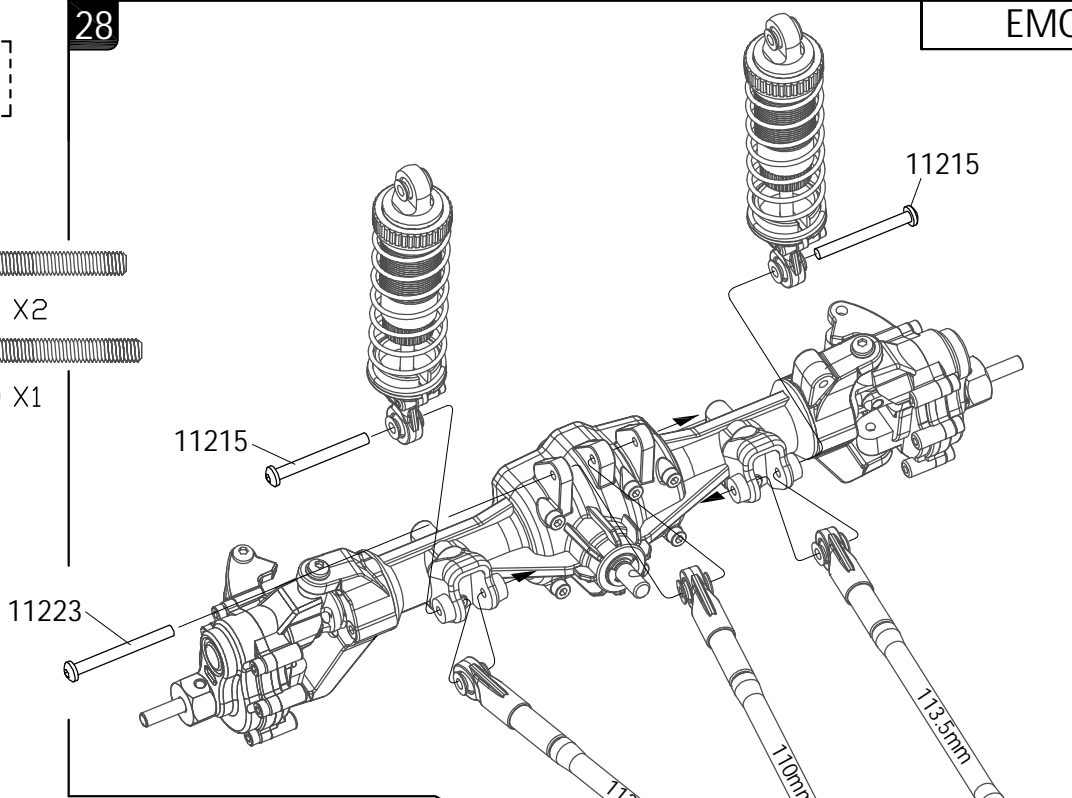


28

EMOX



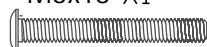
BAG(X)

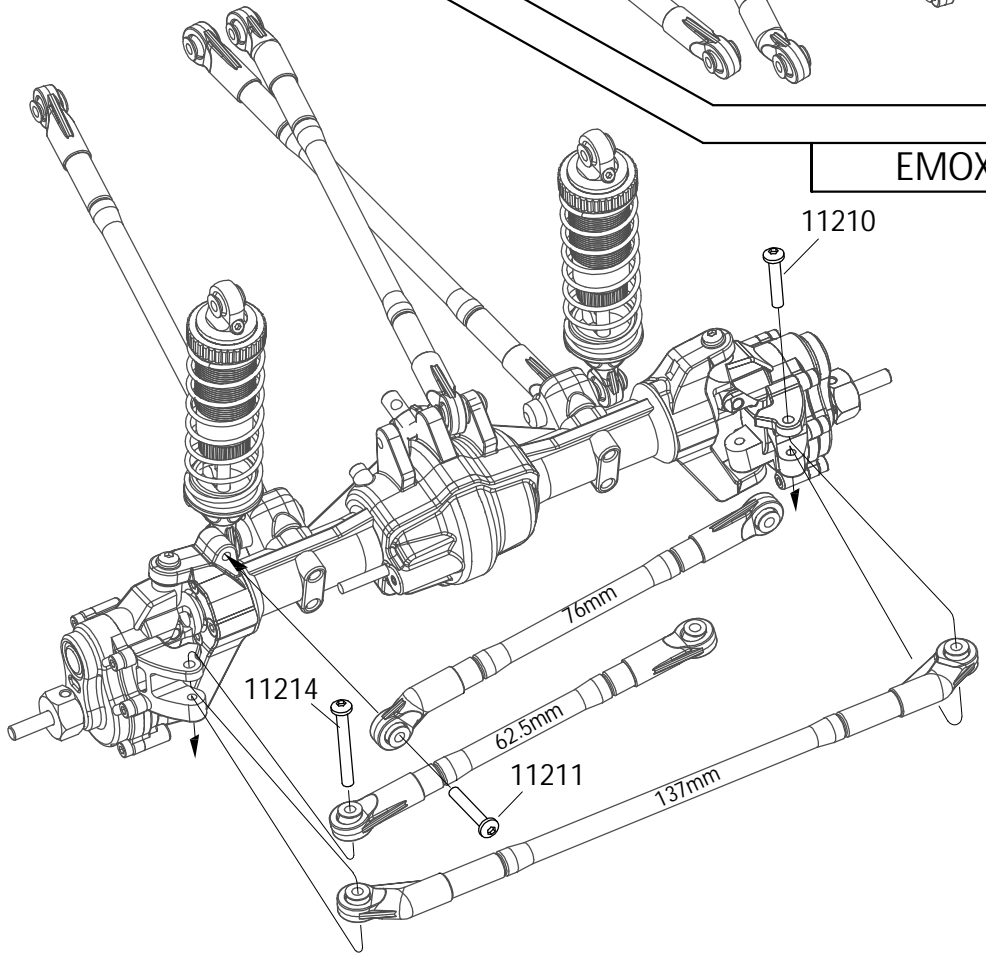
- 11215  M3x28 X2
- 11223  M3x30 X1



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EMOX

- 11210  M3x16 X1
- 11211  M3x18 X1
- 11214  M3x25 X1

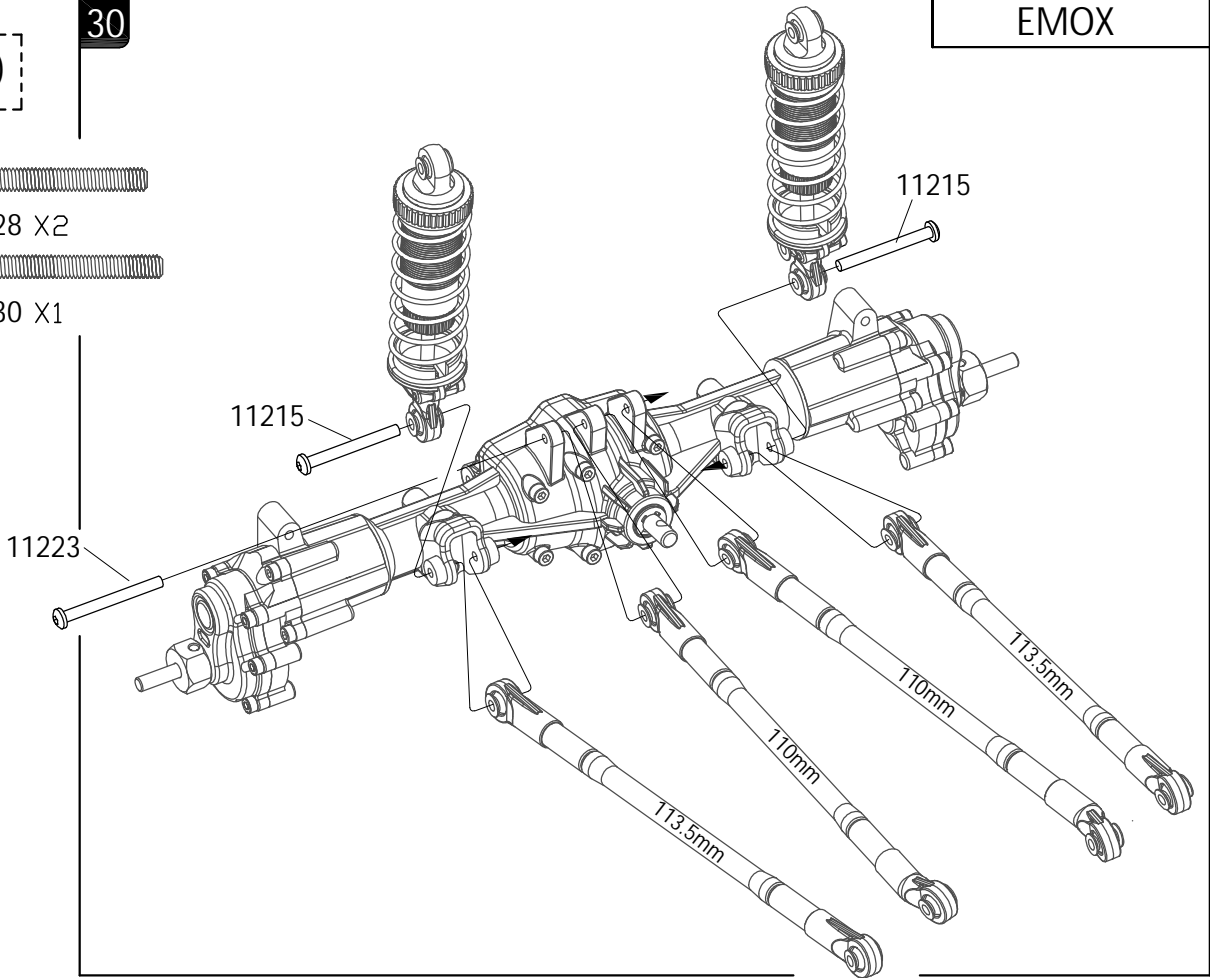


30

EMOX

BAG(X)

- 11215 M3x28 X2
- 11223 M3x30 X1

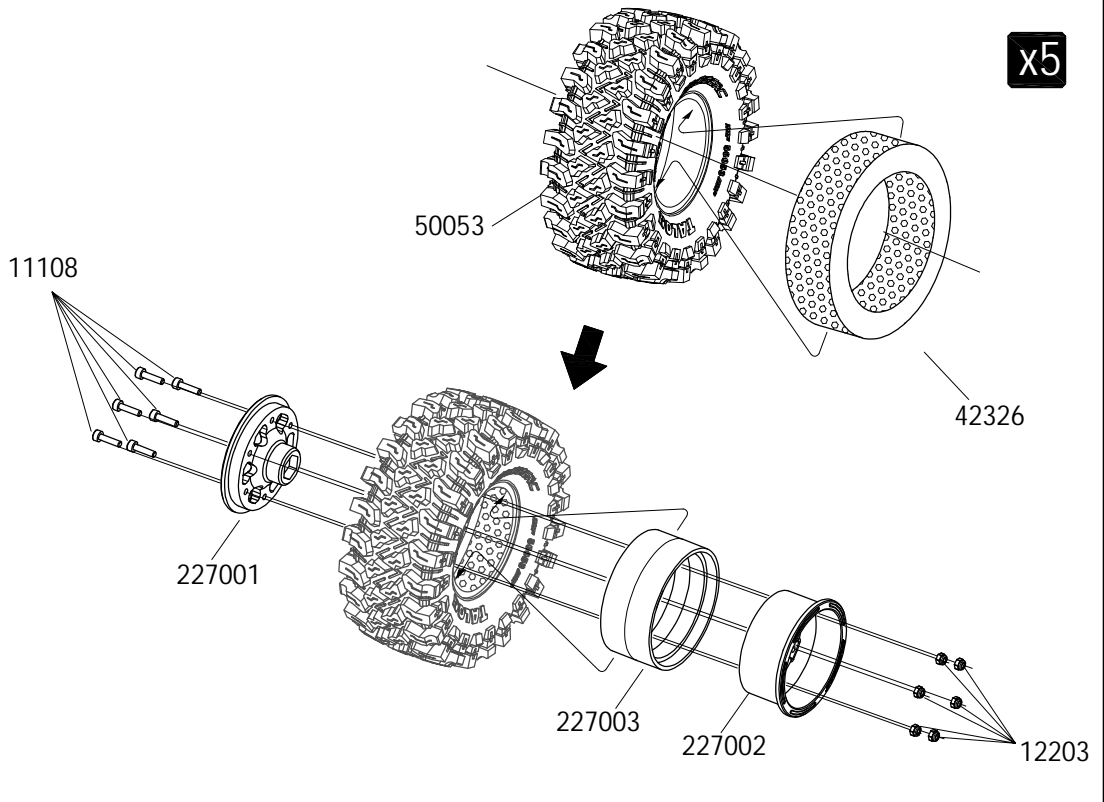


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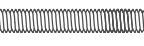



EMOX

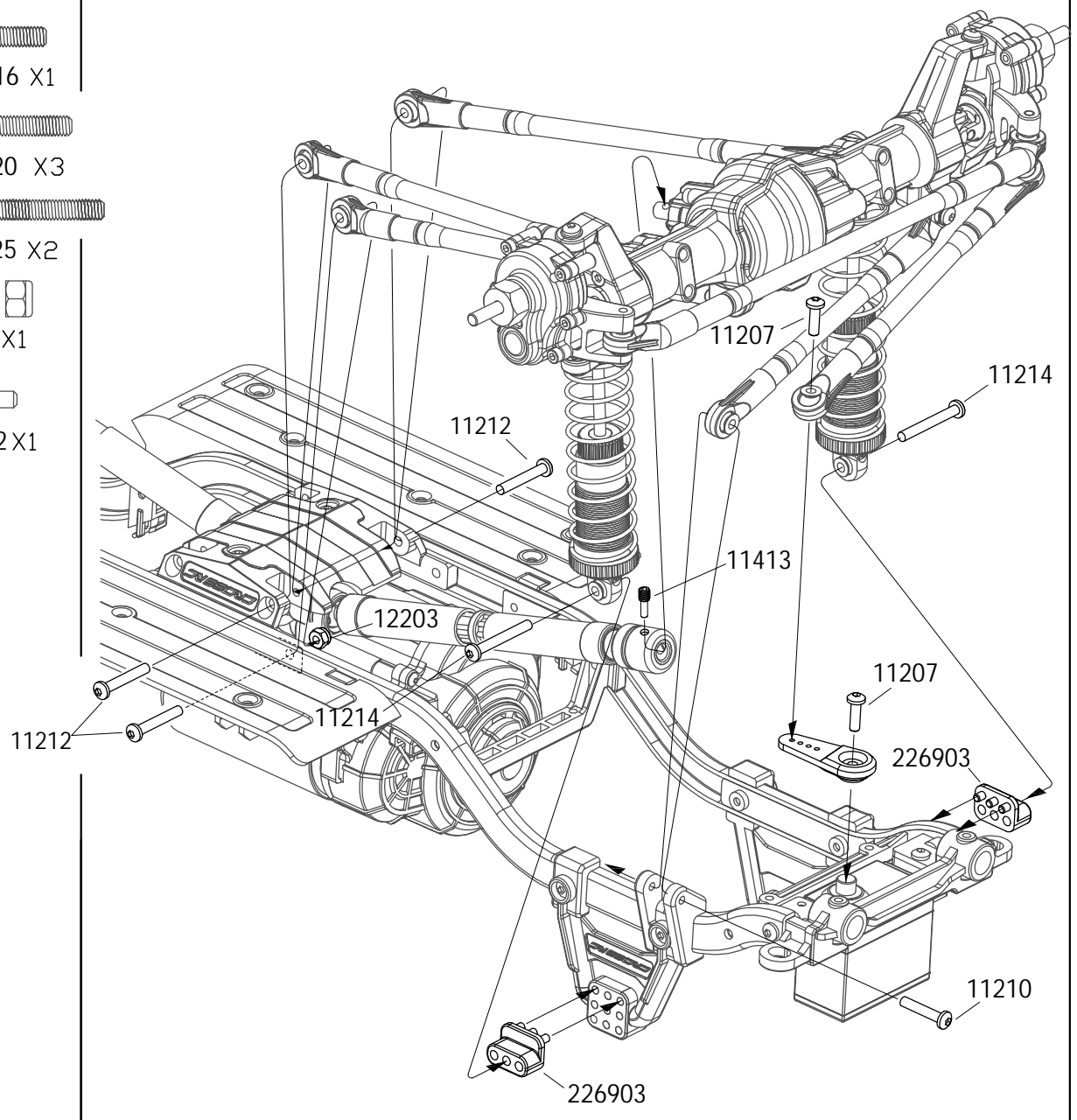
BAG(A)

- 11108 M3x12 X30
- 12203 M3 X30



BAG(X)


- 11207  M3x10 X2
- 11210  M3x16 X1
- 11212  M3x20 X3
- 11214  M3x25 X2
- 12203  M3 X1
- 11413  M4x12 X1




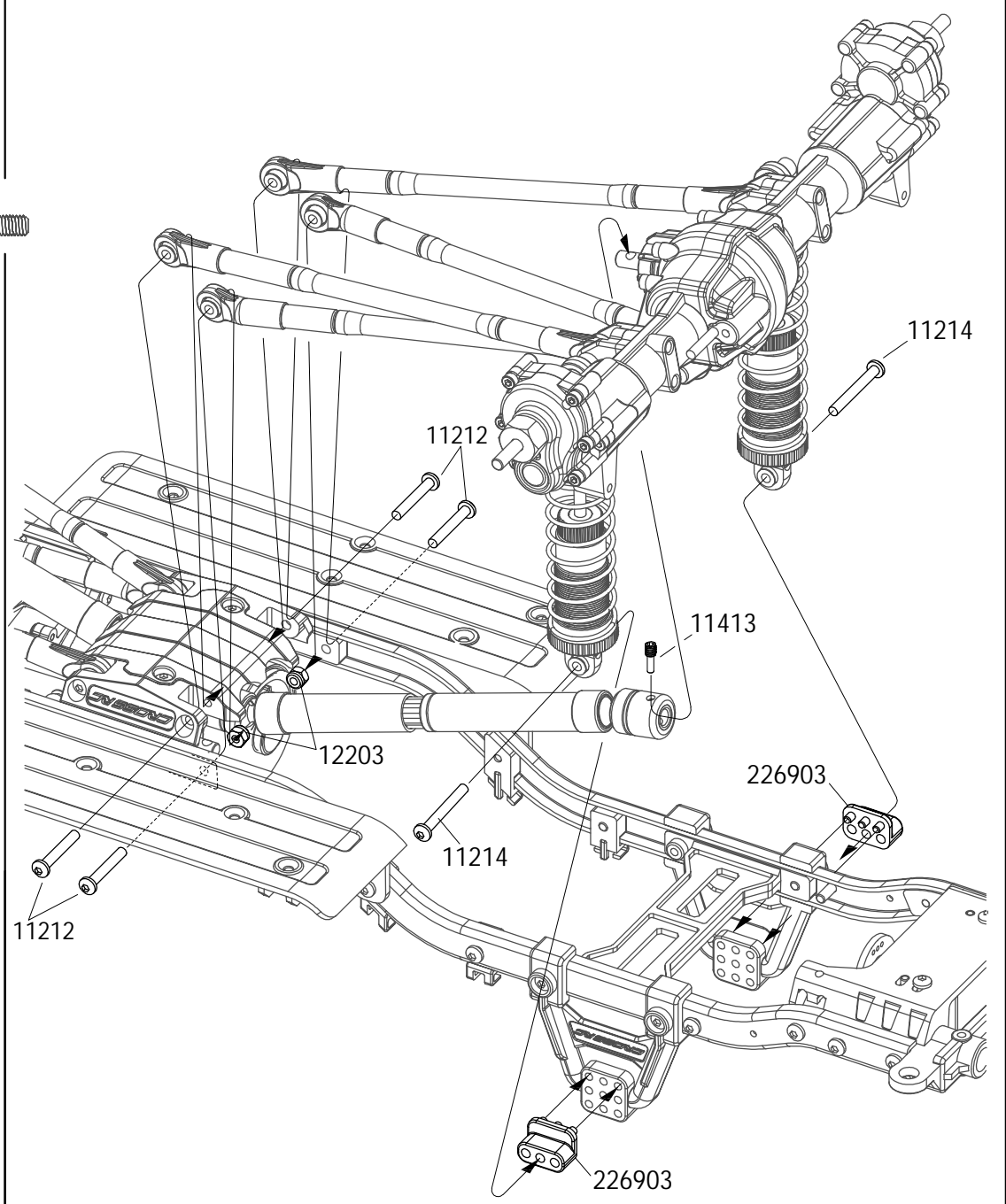
BAG(X)

11212   
M3x20 X4


11214   
M3x25 X2

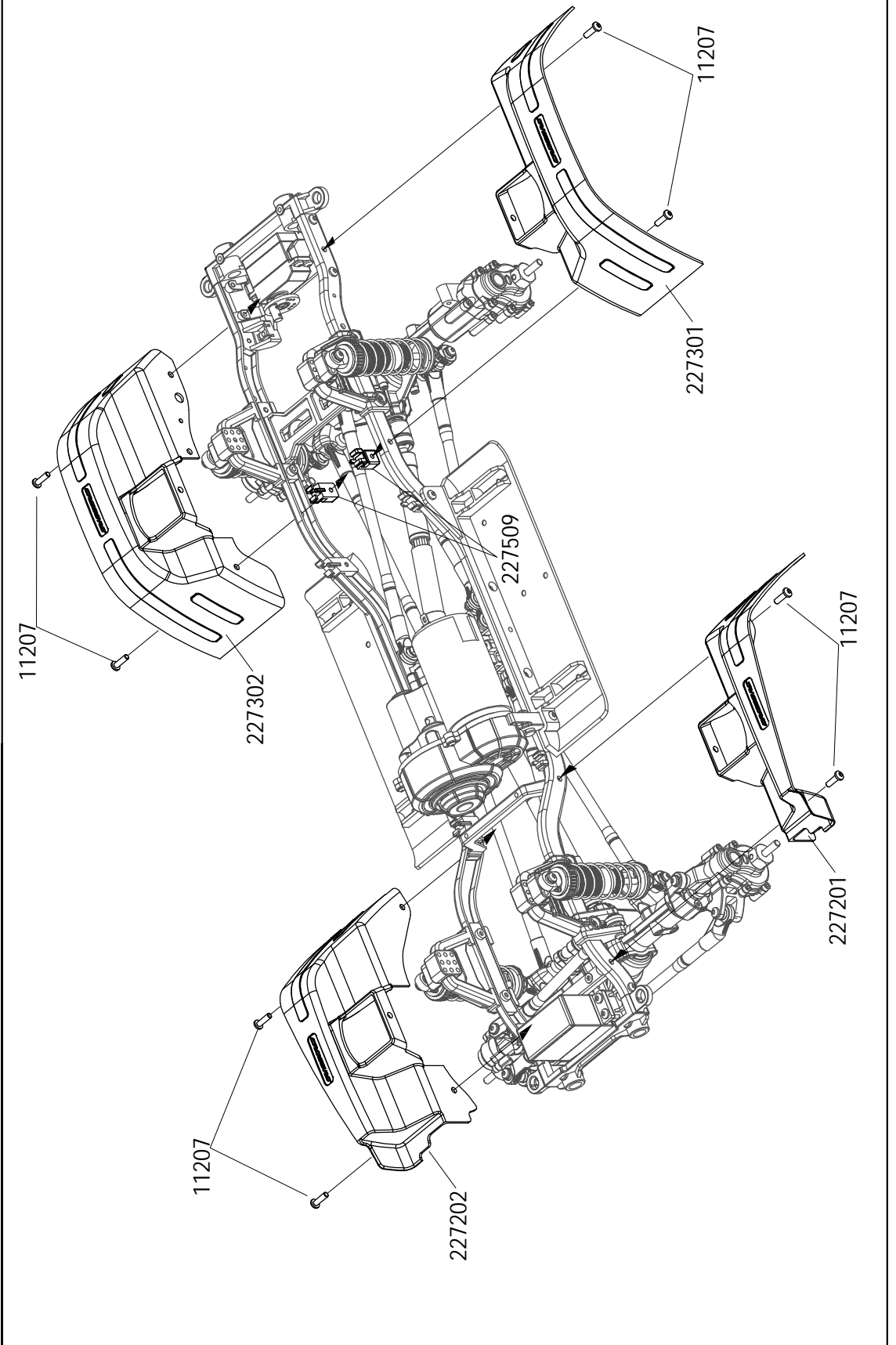
12203   
M3 X2

11413   
M4x12 X1





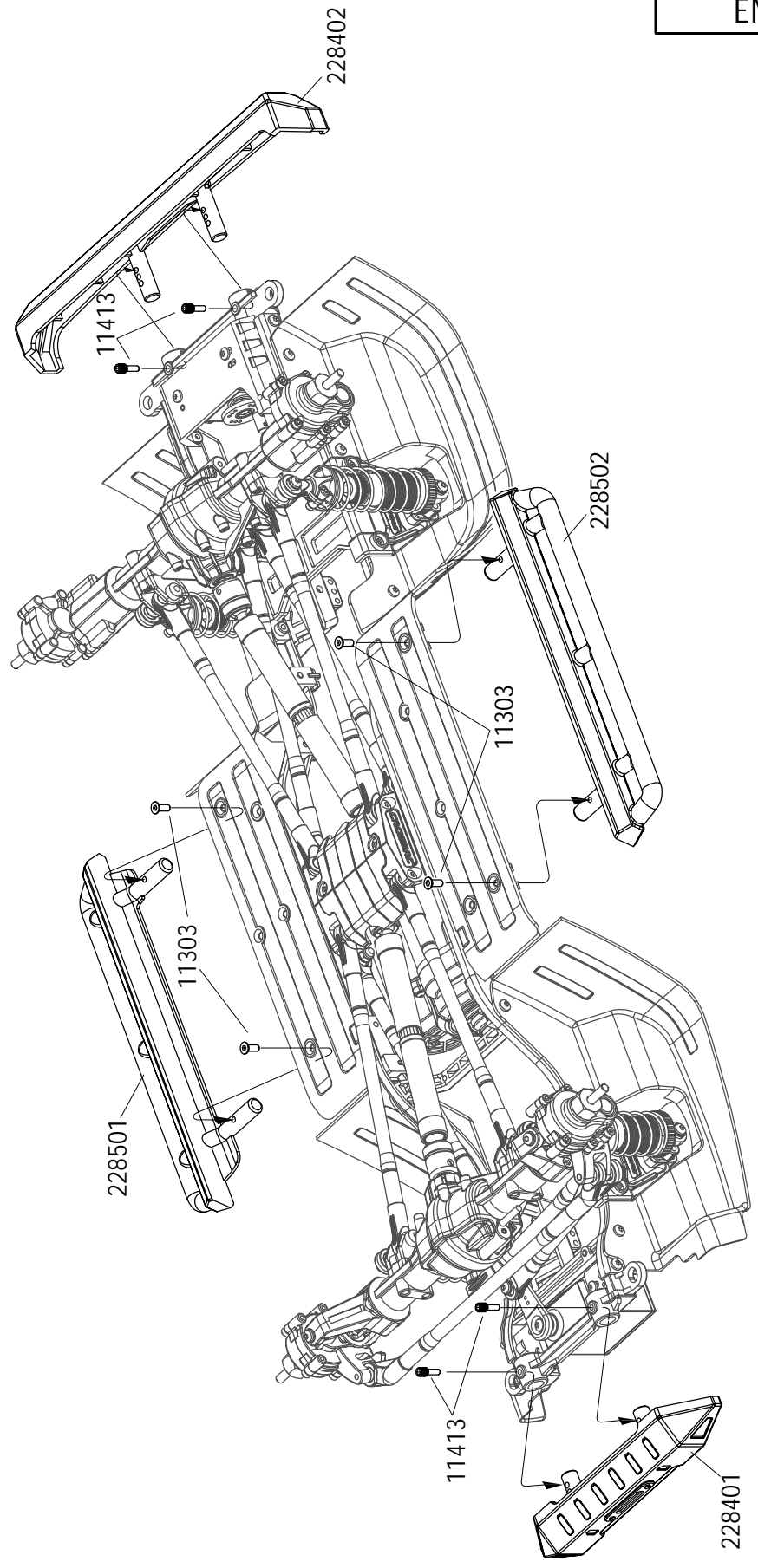
BAG(X)

11207   
M3x10 X8



BAG(X)


- 11303  M3x8 X4
- 11413  M4x12X4




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EMOX


BAG(X)

11206  M3x8 X10

BAG(Y)

11227  M2.5x8 X2

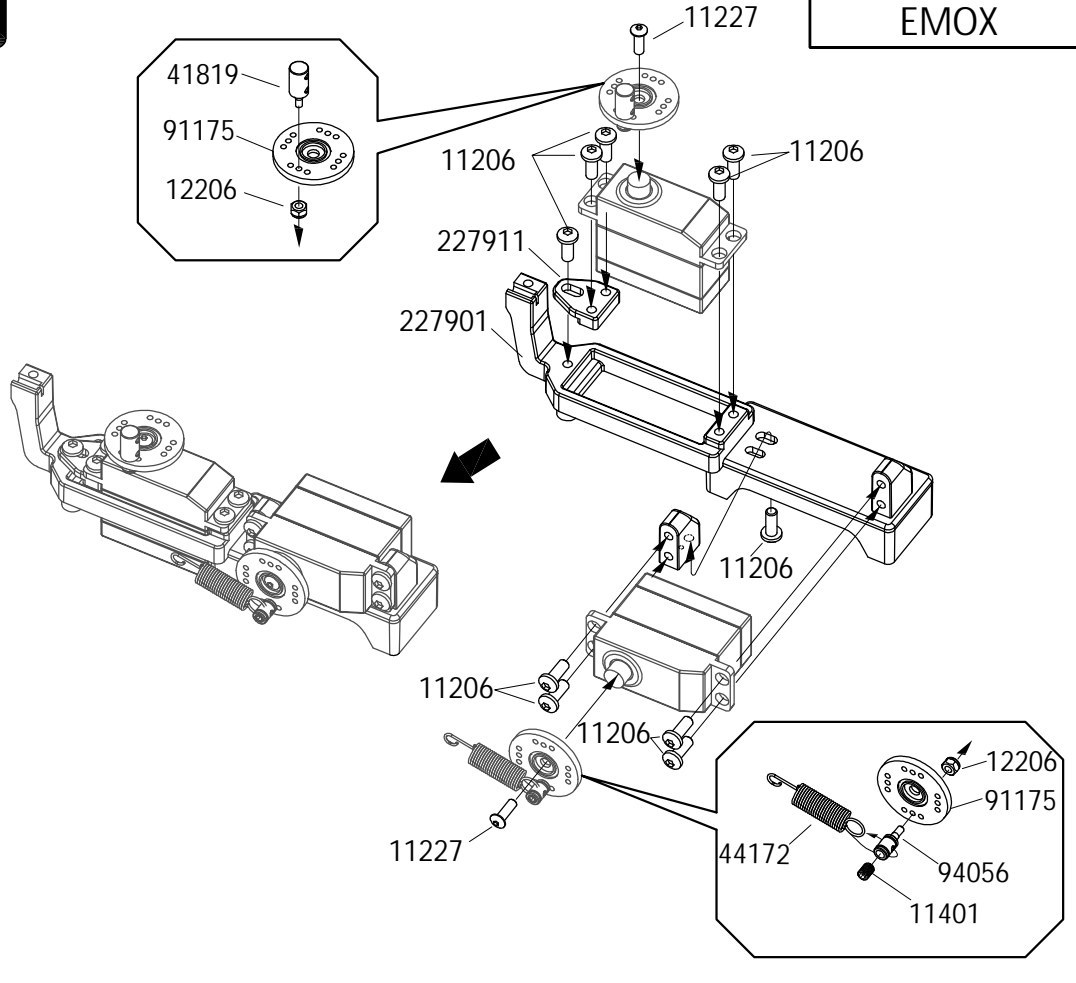
12206  M2 X2

11401  M3x4 X1

44172 X1 

41819 X1 

94056 X1 




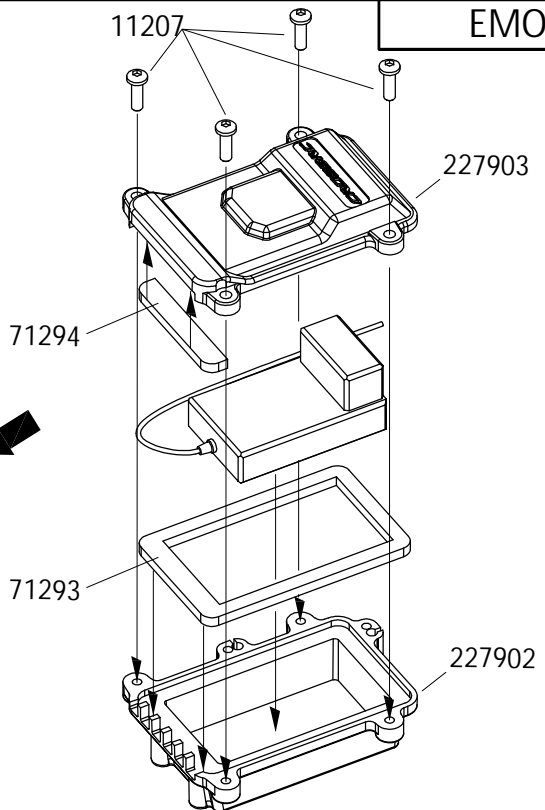
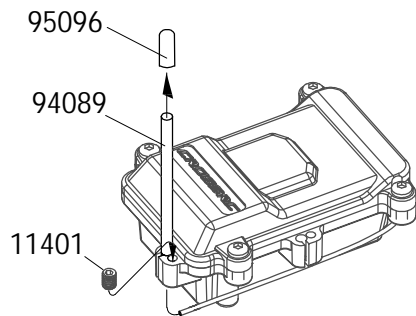
37

EMOX


BAG(X)

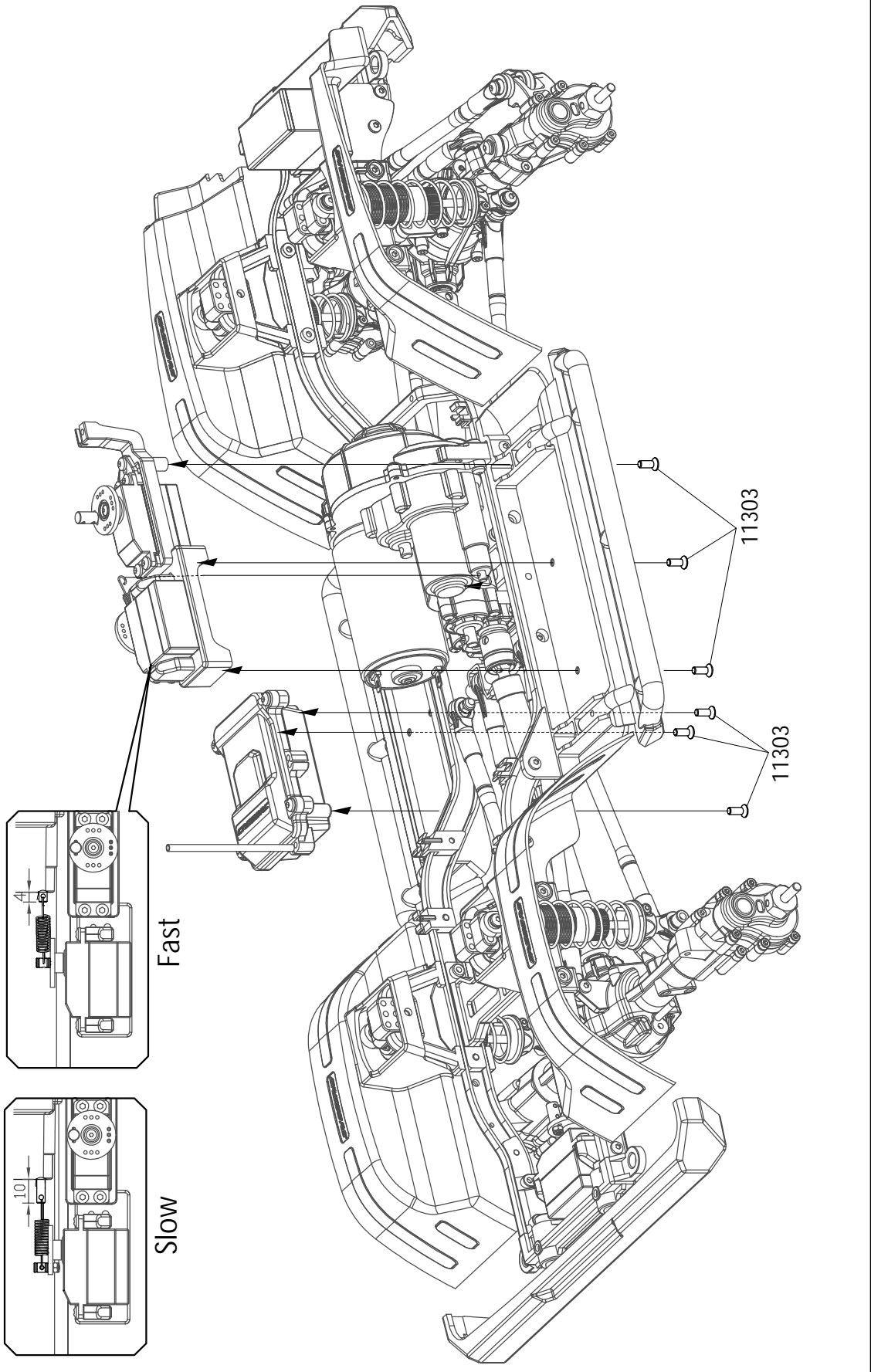
11401  M3x4 X1

11207  M3x10 X4





BAG(X)

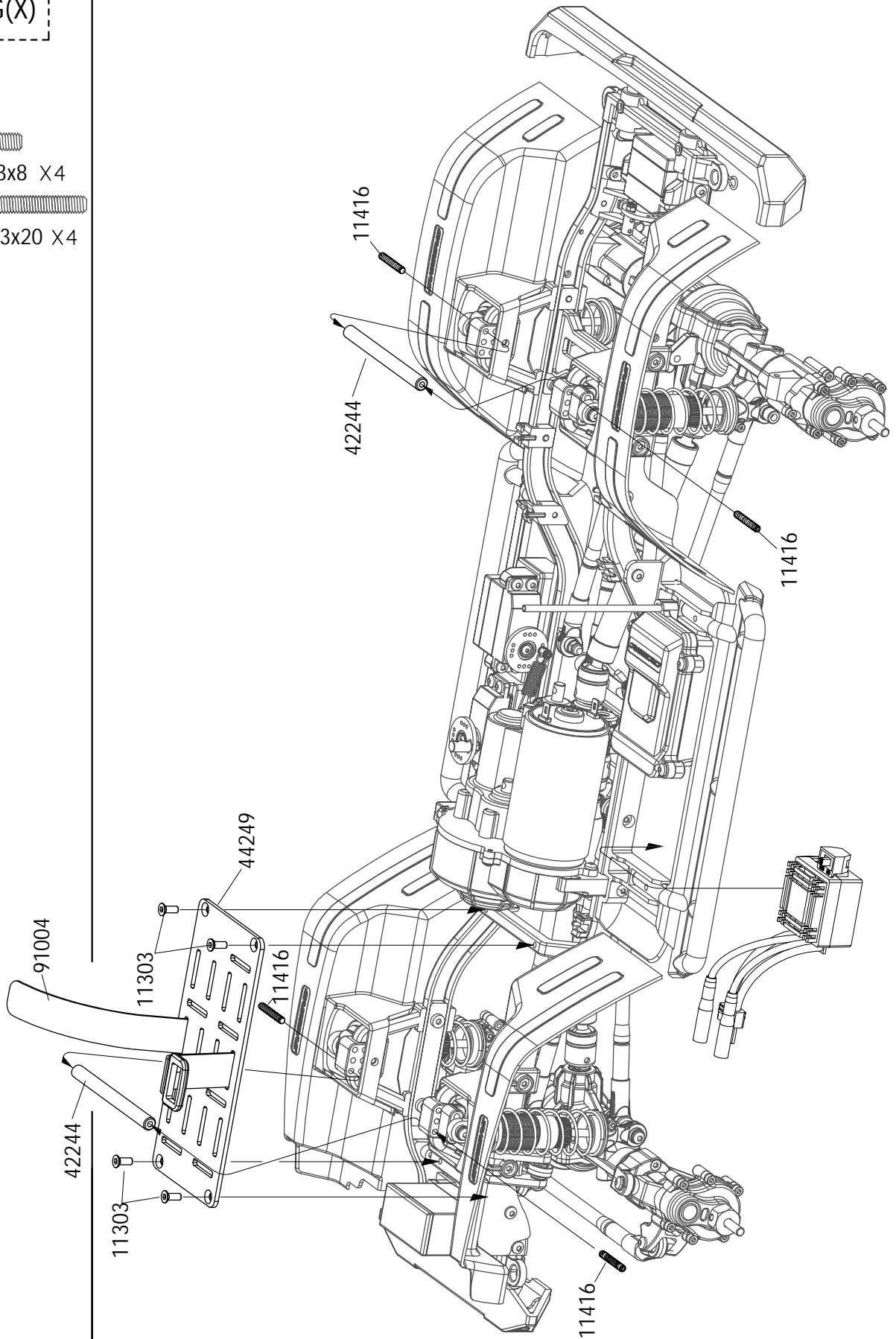
11303   
M3x8 X6





BAG(X)


- 11303  M3x8 X4
- 11416  M3x20 X4




40


EMOX

BAG(X)


11206  M3x8 X2

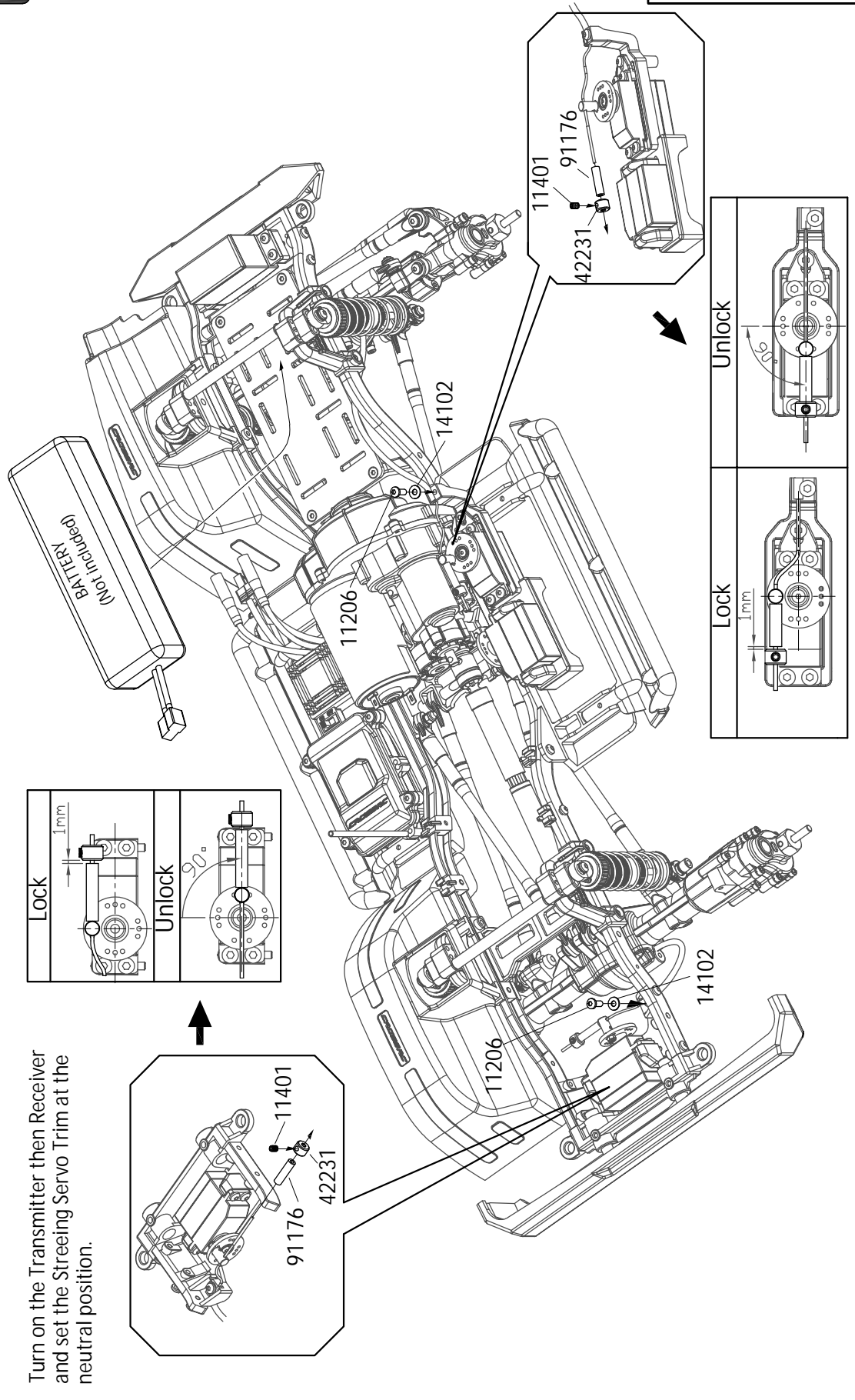
14102  Ø3xØ7x0.5 X2

BAG(Y)

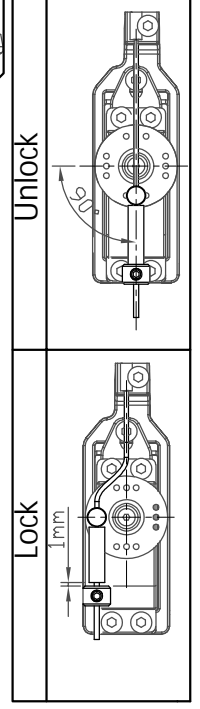
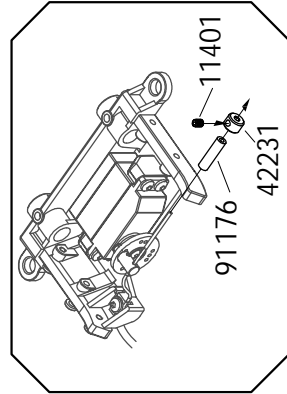
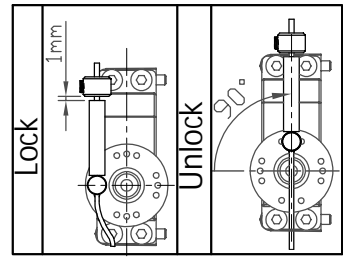
11401  M3x4 X2

42231 X2 

91176 X2 



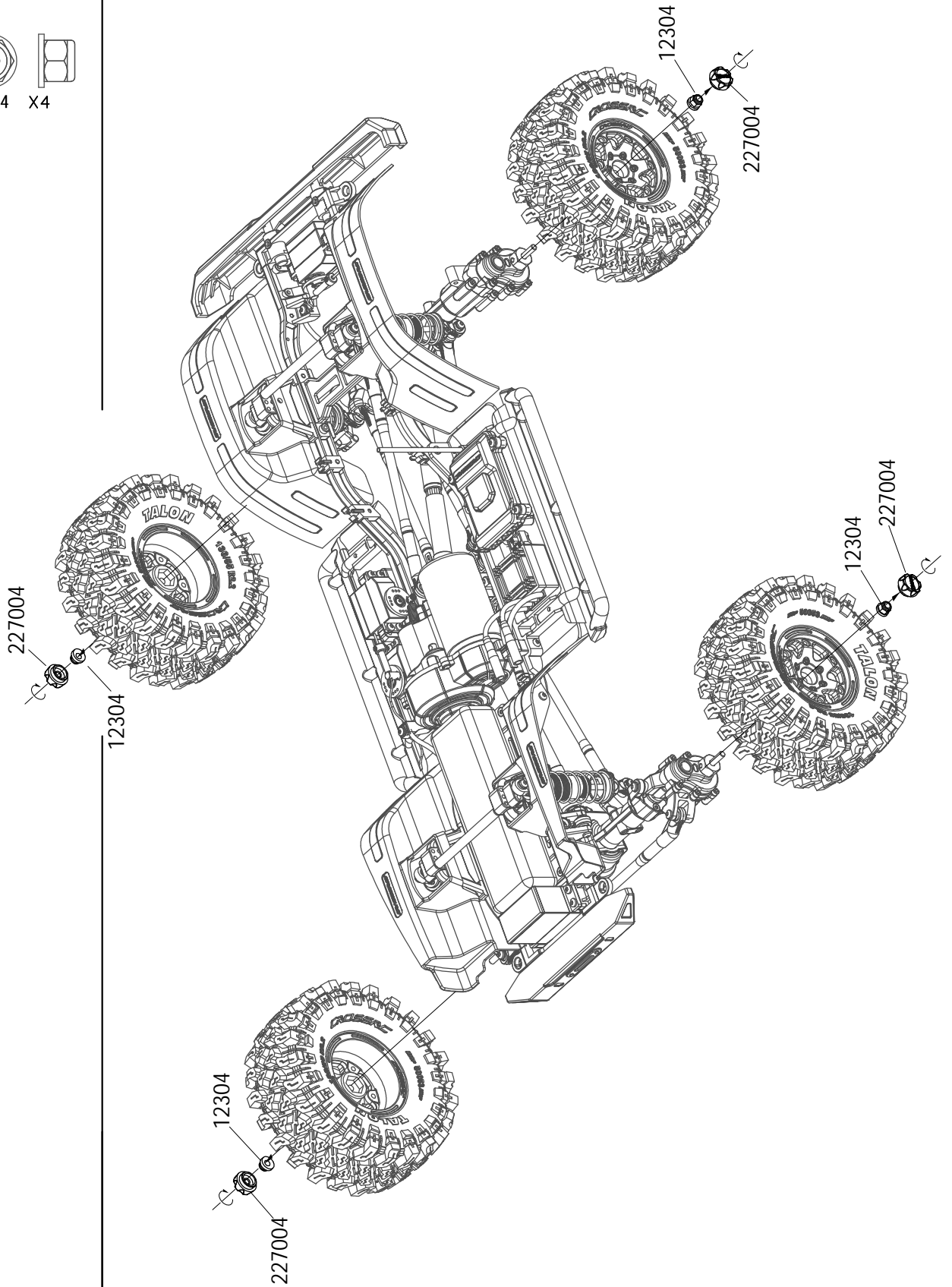
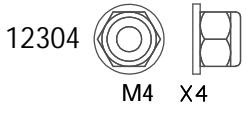
Turn on the Transmitter then Receiver and set the Steering Servo Trim at the neutral position.



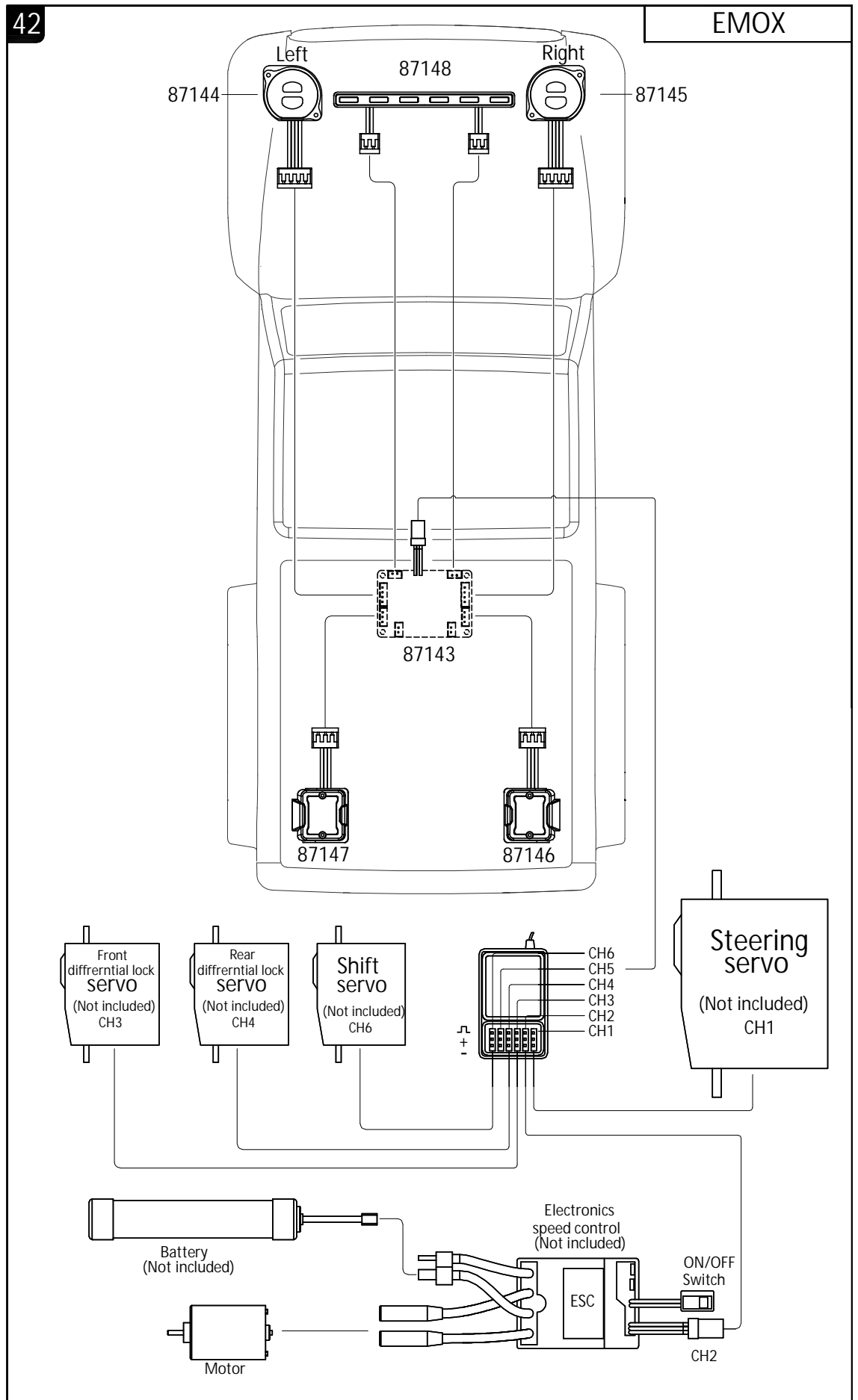
41

EMOX

BAG(A)

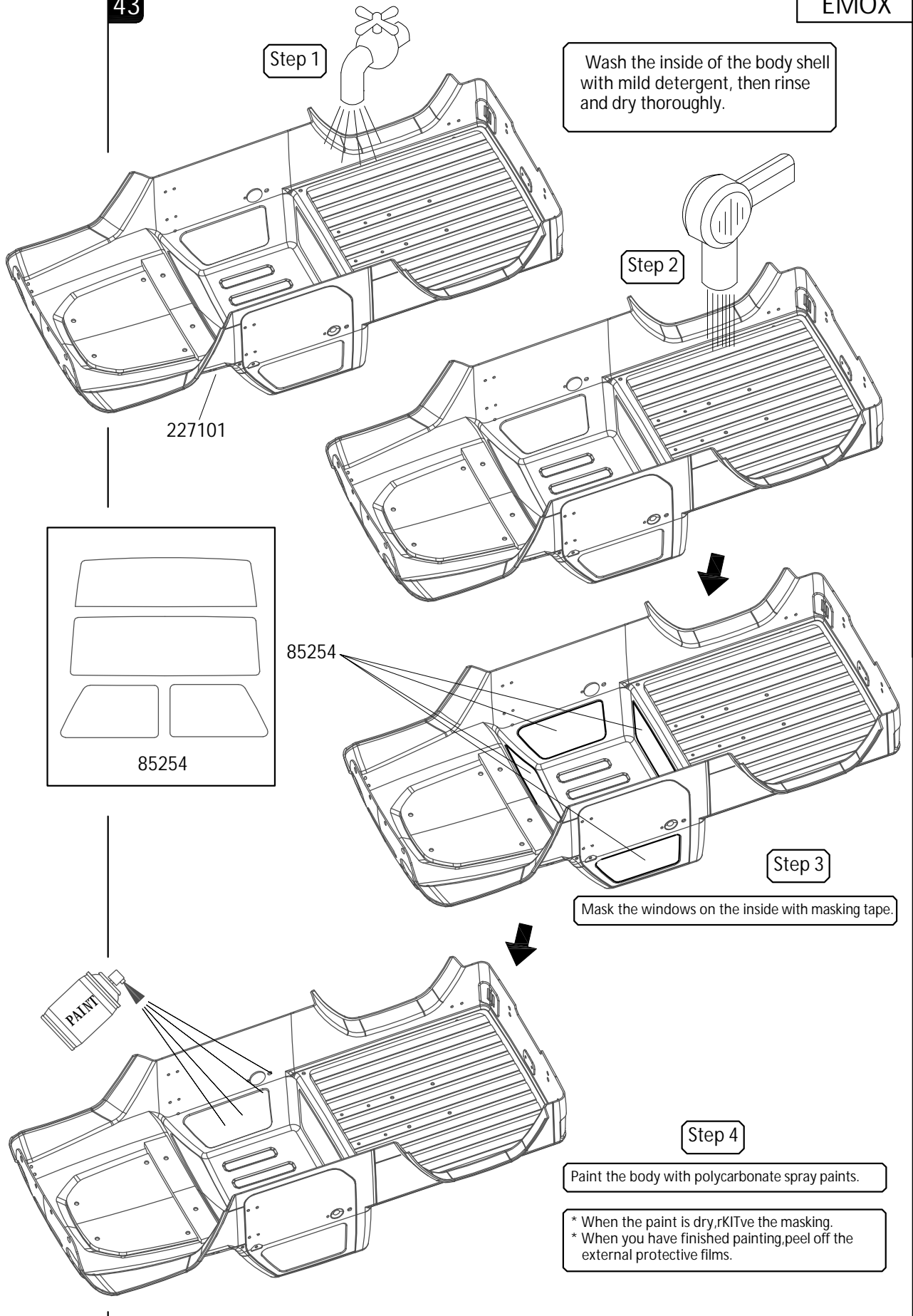


BAG(U)



43

EMOX



**44** **EMOX**

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

**Step 1**

227102

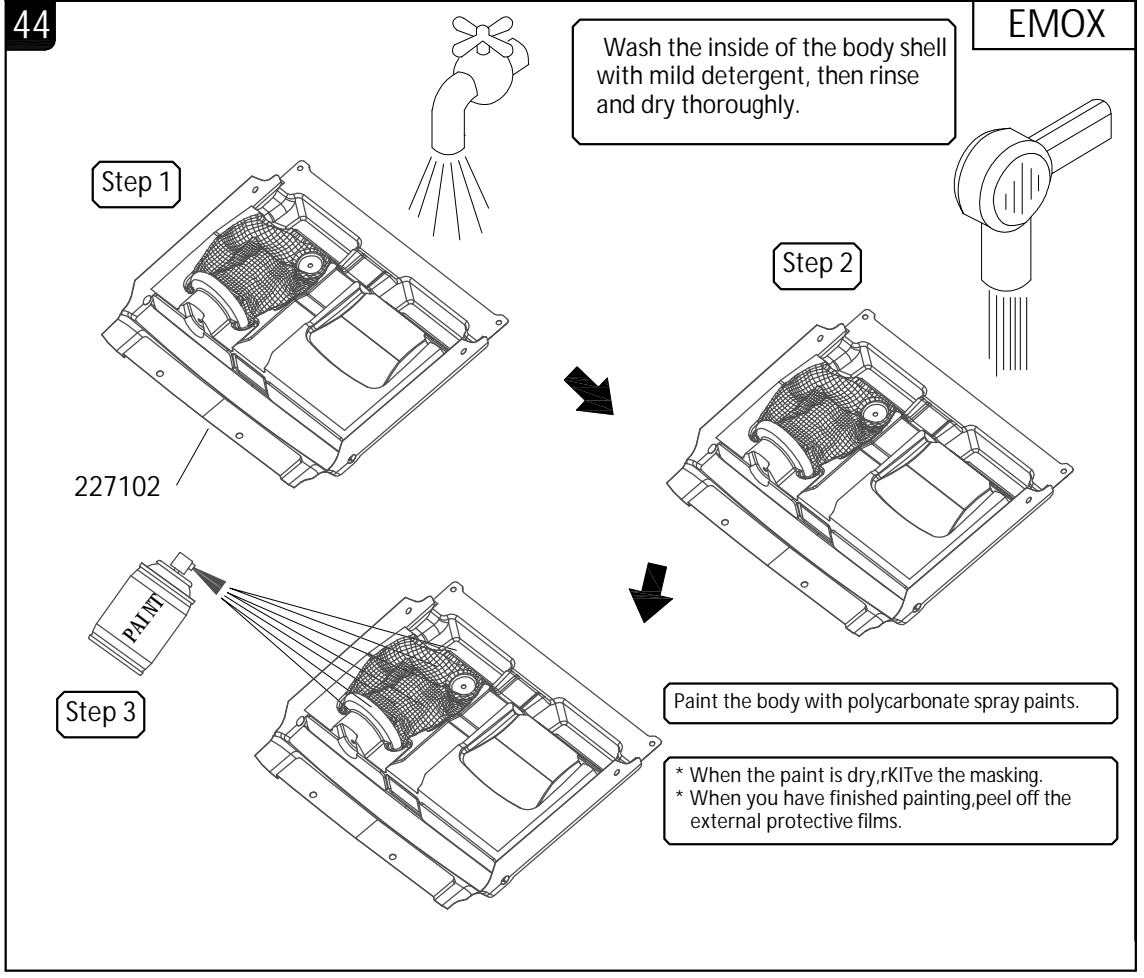
**Step 2**

**Step 3**

PAINT

Paint the body with polycarbonate spray paints.

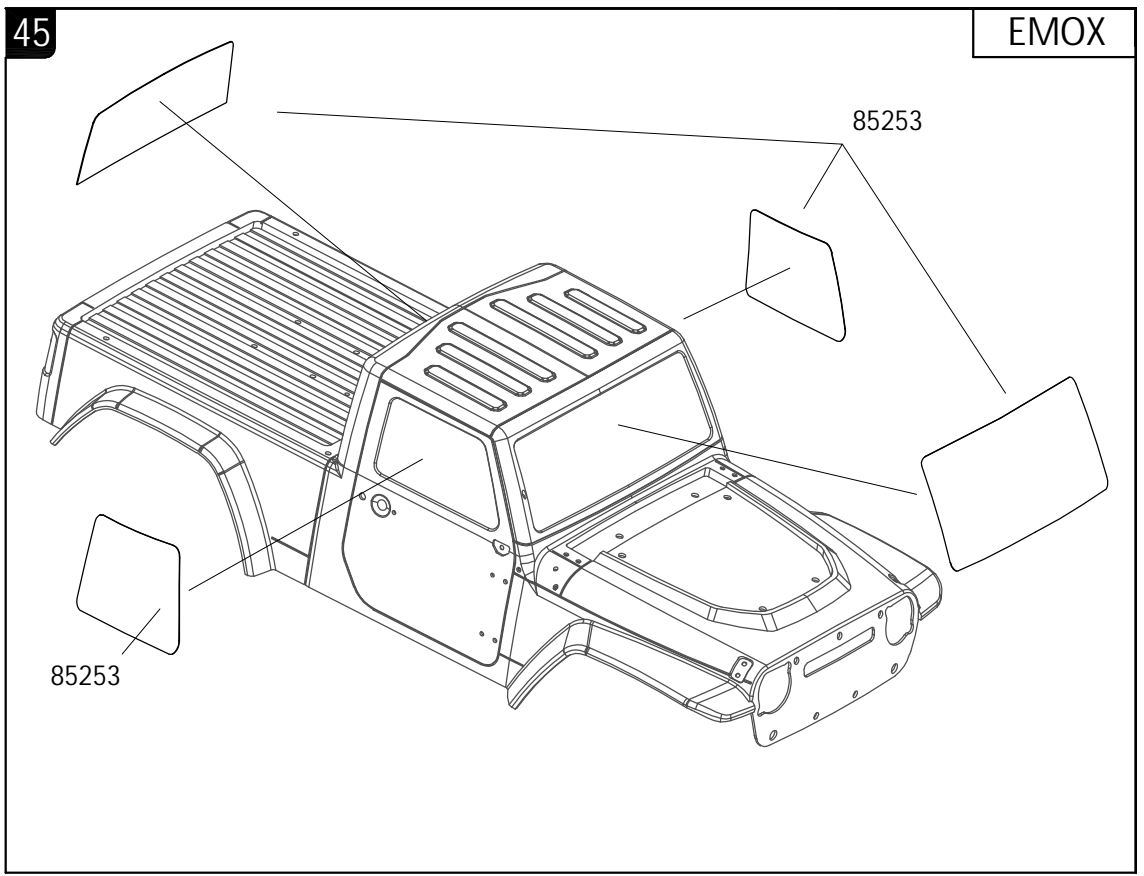
\* When the paint is dry, rKITve the masking.  
\* When you have finished painting, peel off the external protective films.



**45** **EMOX**

85253

85253

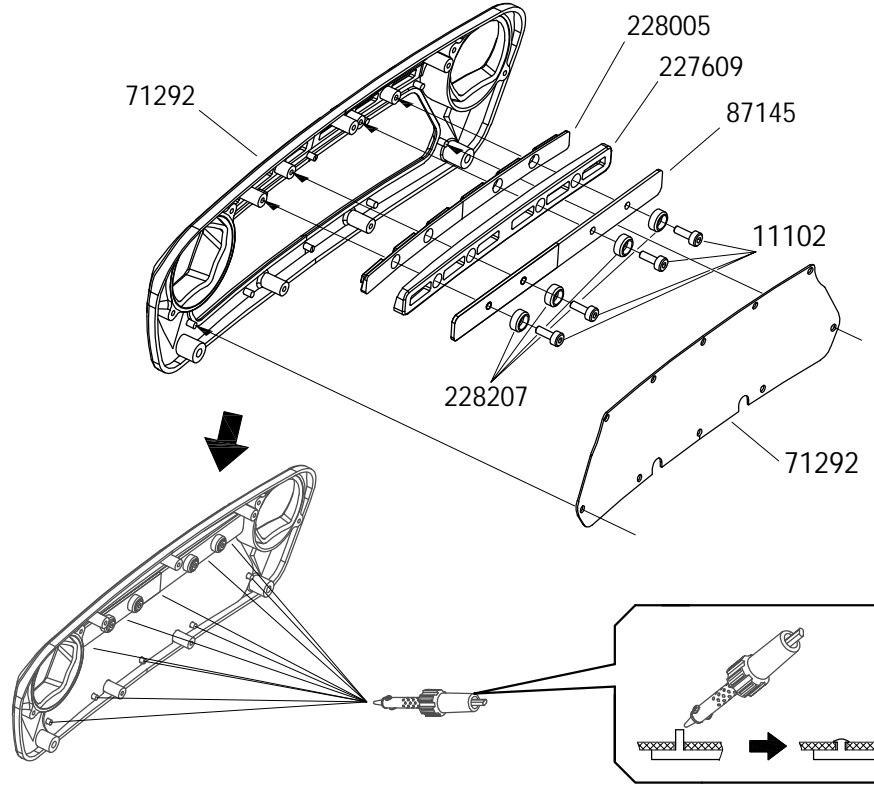


BAG(X)

46

EMOX

11102 M2x6 X4



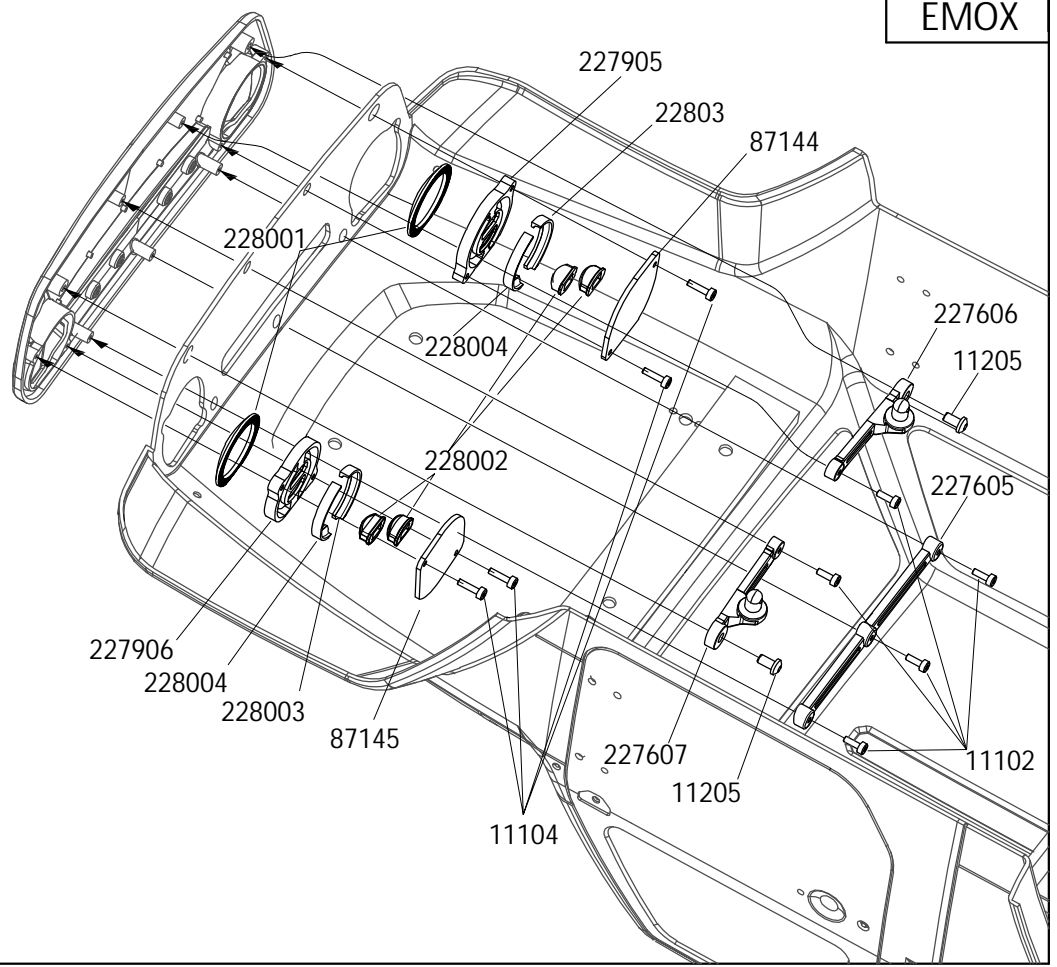
47

EMOX

11104 M2x10 X4

11102 M2x6 X5

11205 M3x6 X2

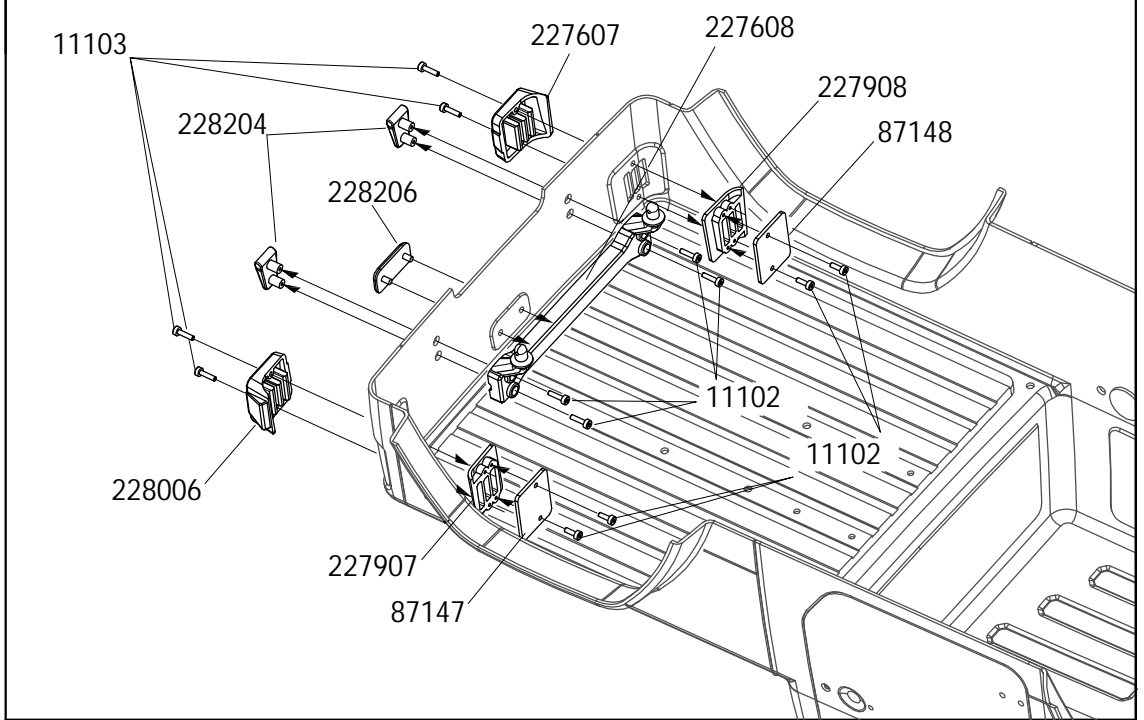


BAG(X)

48

EMOX

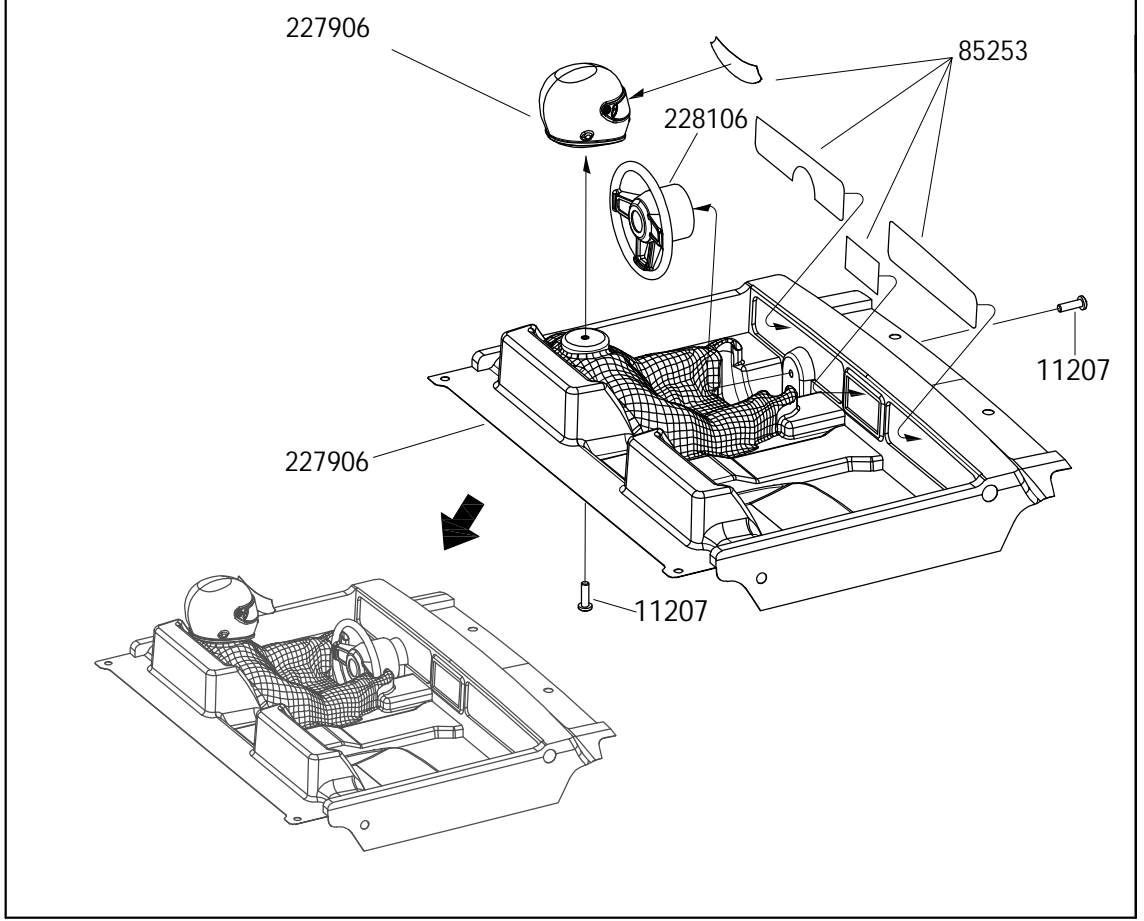
- 11102 M2x6 X8
- 11103 M2x8 X4



49

EMOX

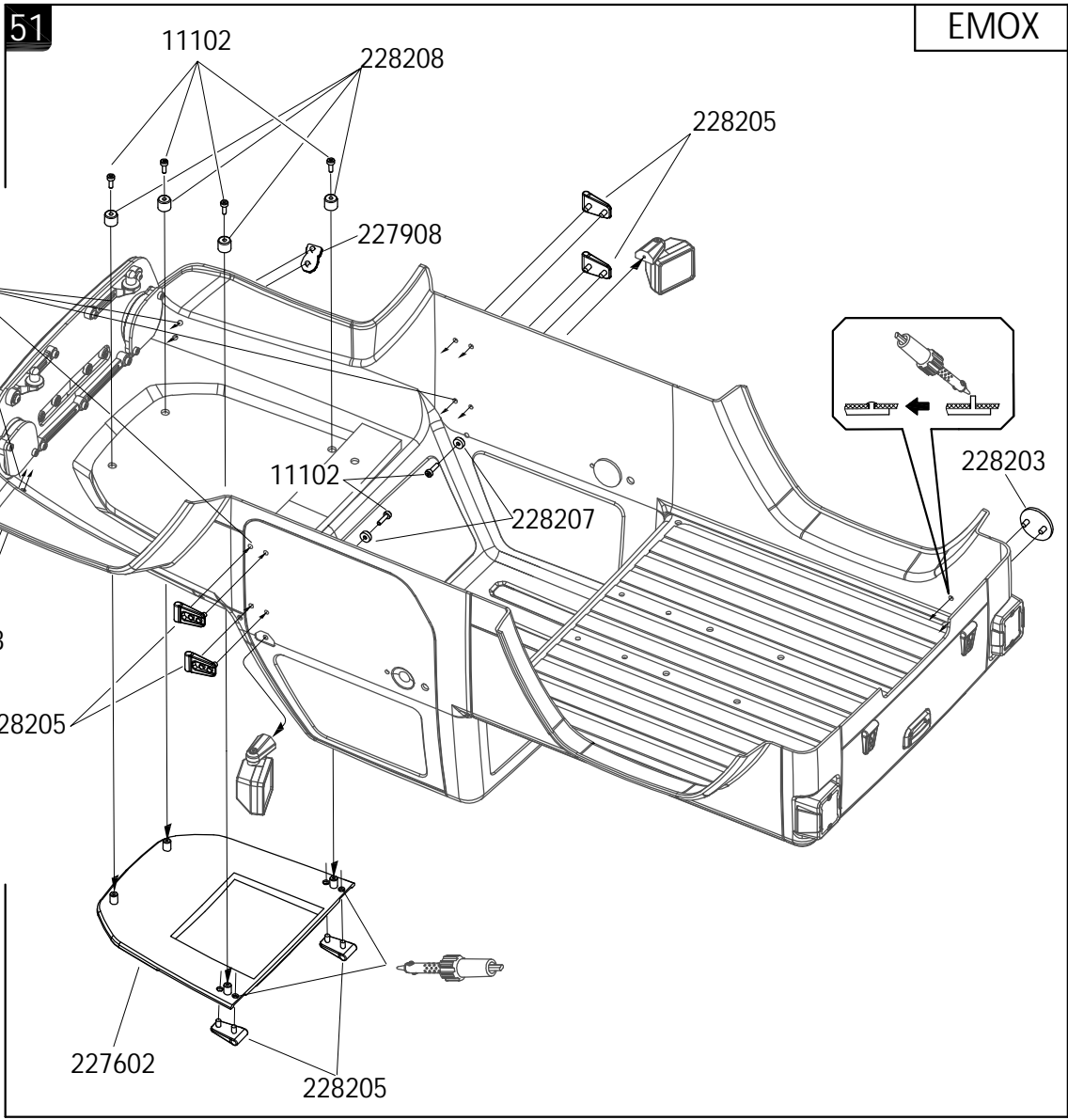
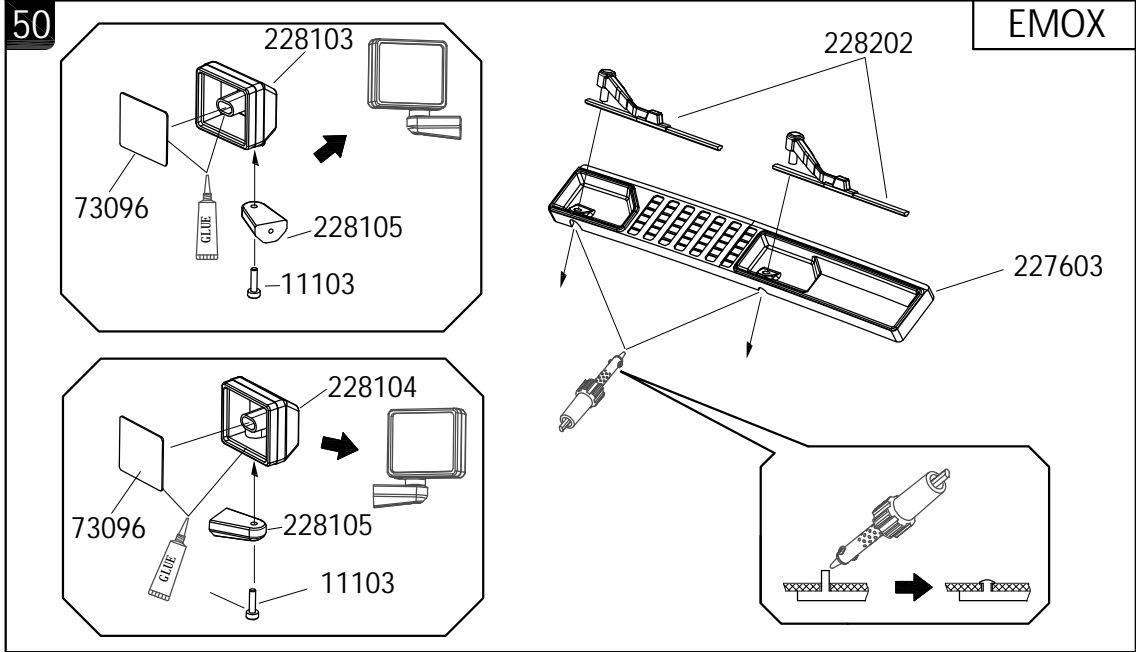
- 11207 M3x10 X2



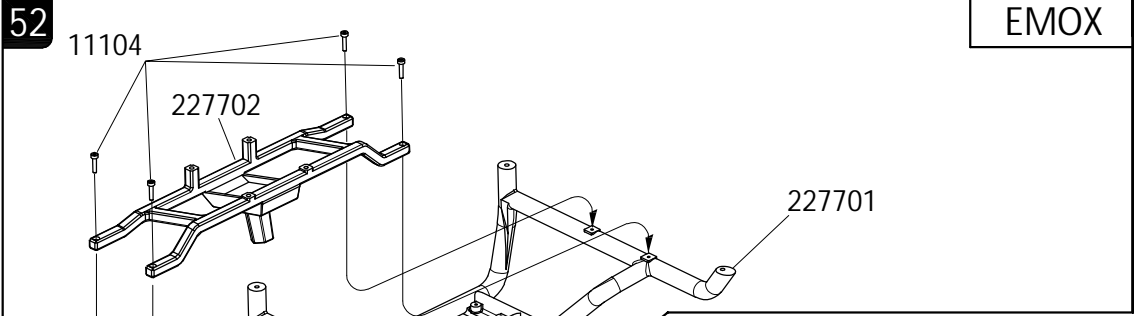


BAG(X)

11103 M2x8 X2

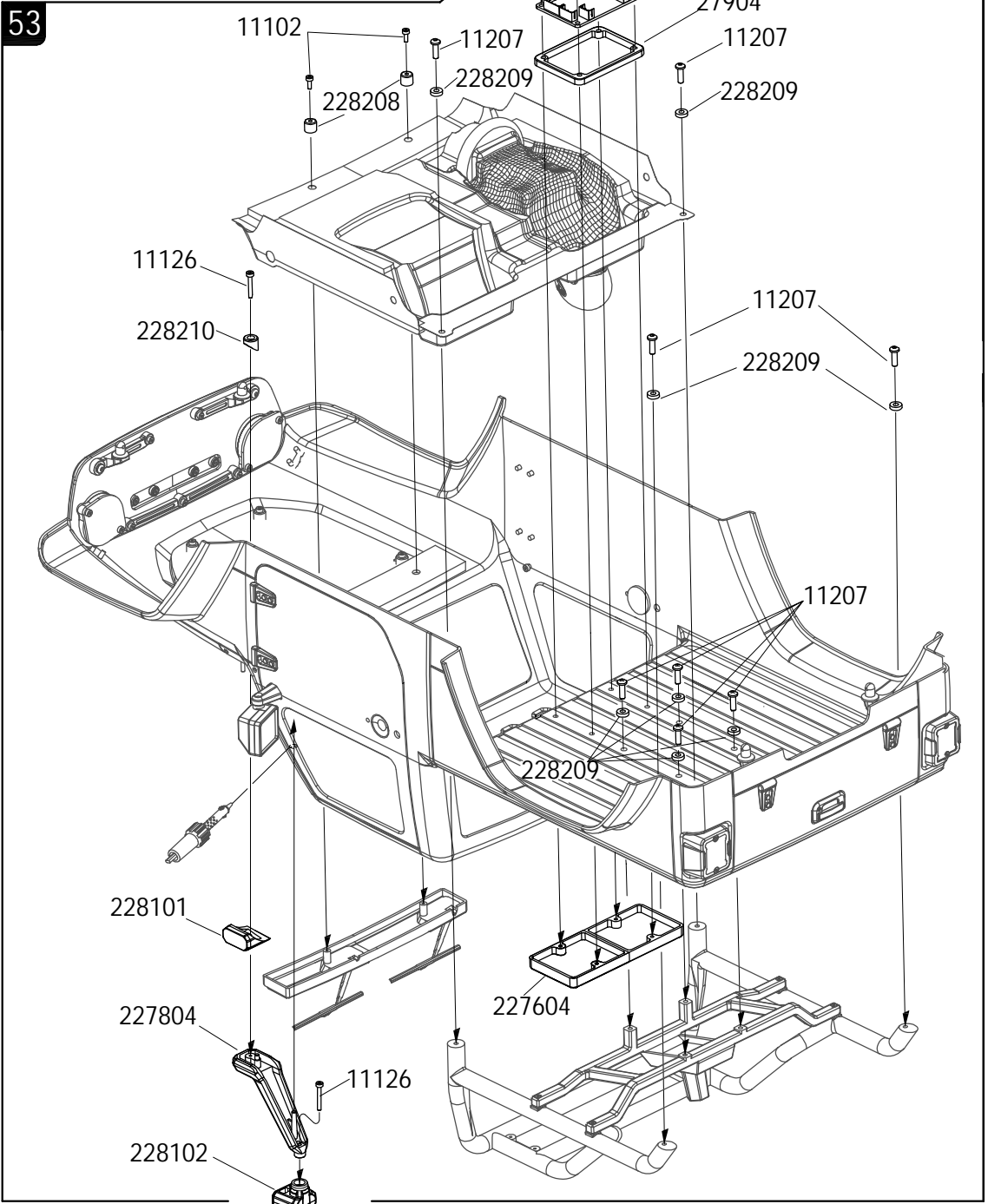
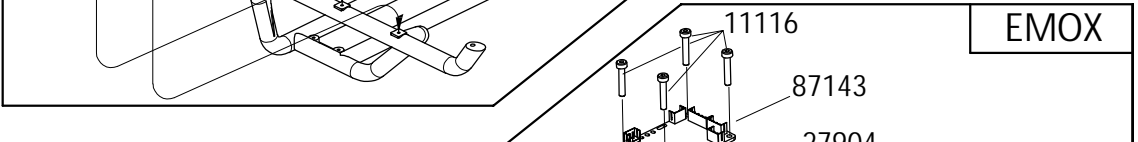


11102 M2x6 X6



BAG(X)

11104 M2x10 X4



11102 M2x6 X2

11126 M2x14 X2


11116 M2.5x12 X4

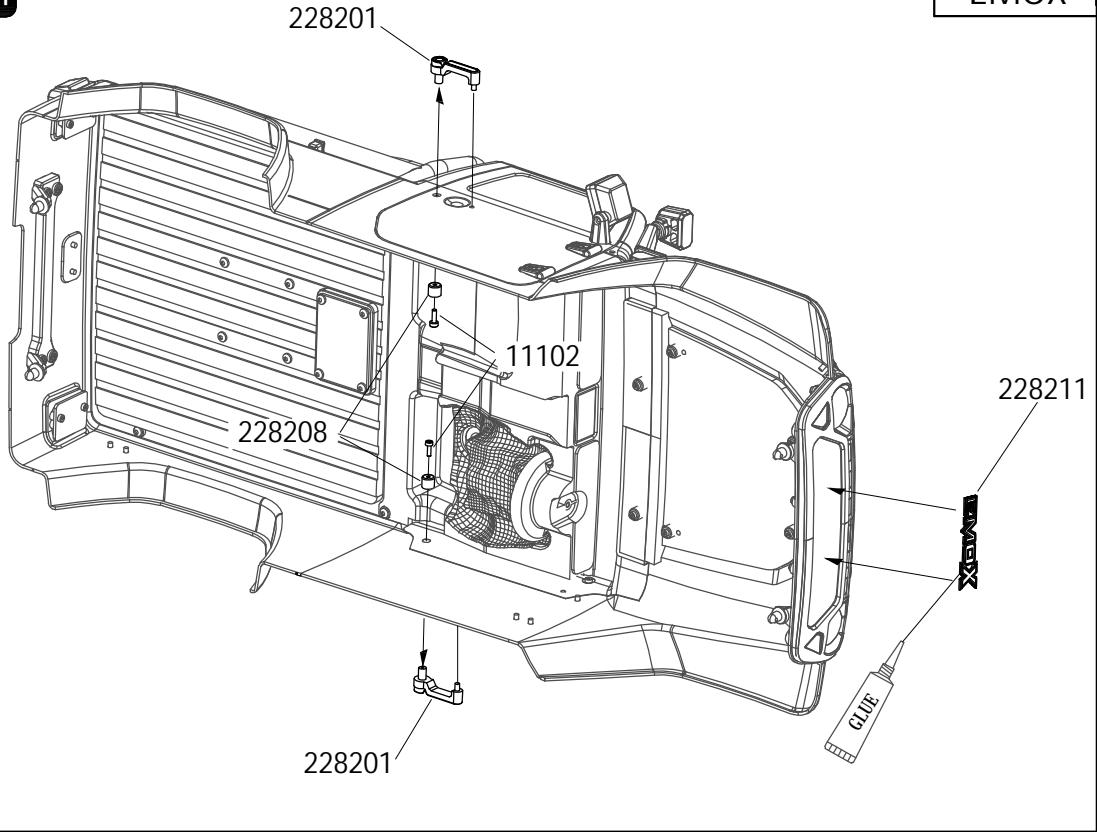
11207 M3x10 X8

54

EMOX


BAG(X)

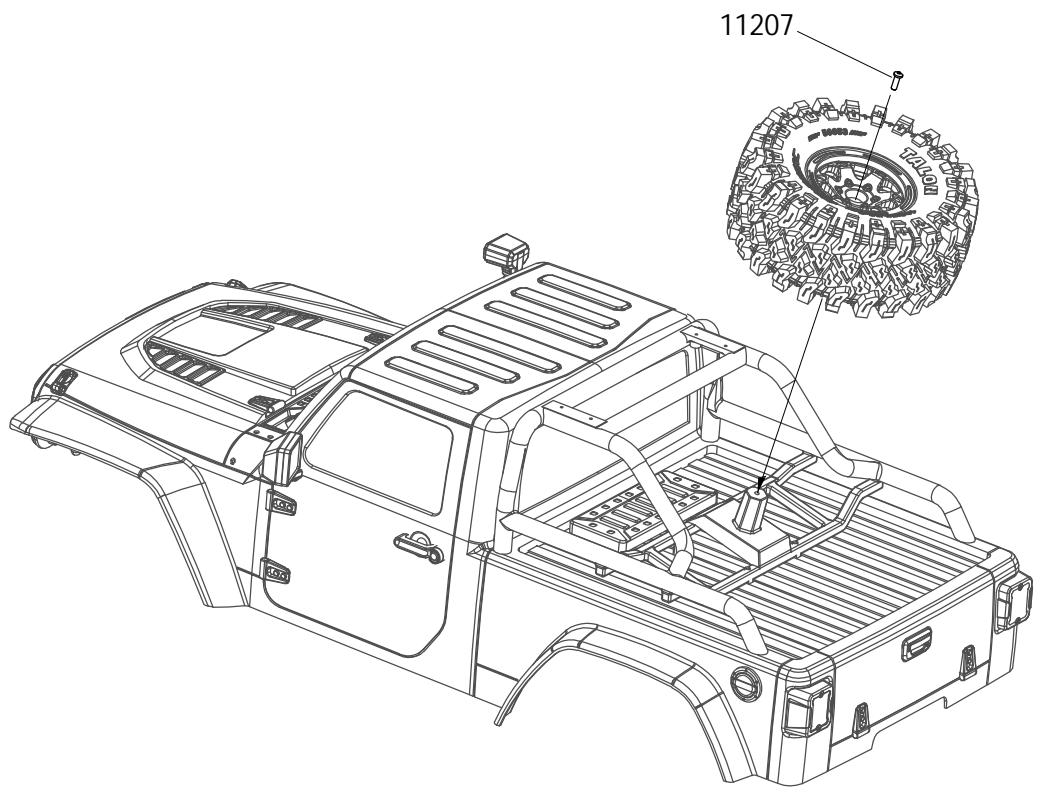
11102   
M2x6 X2



55

EMOX

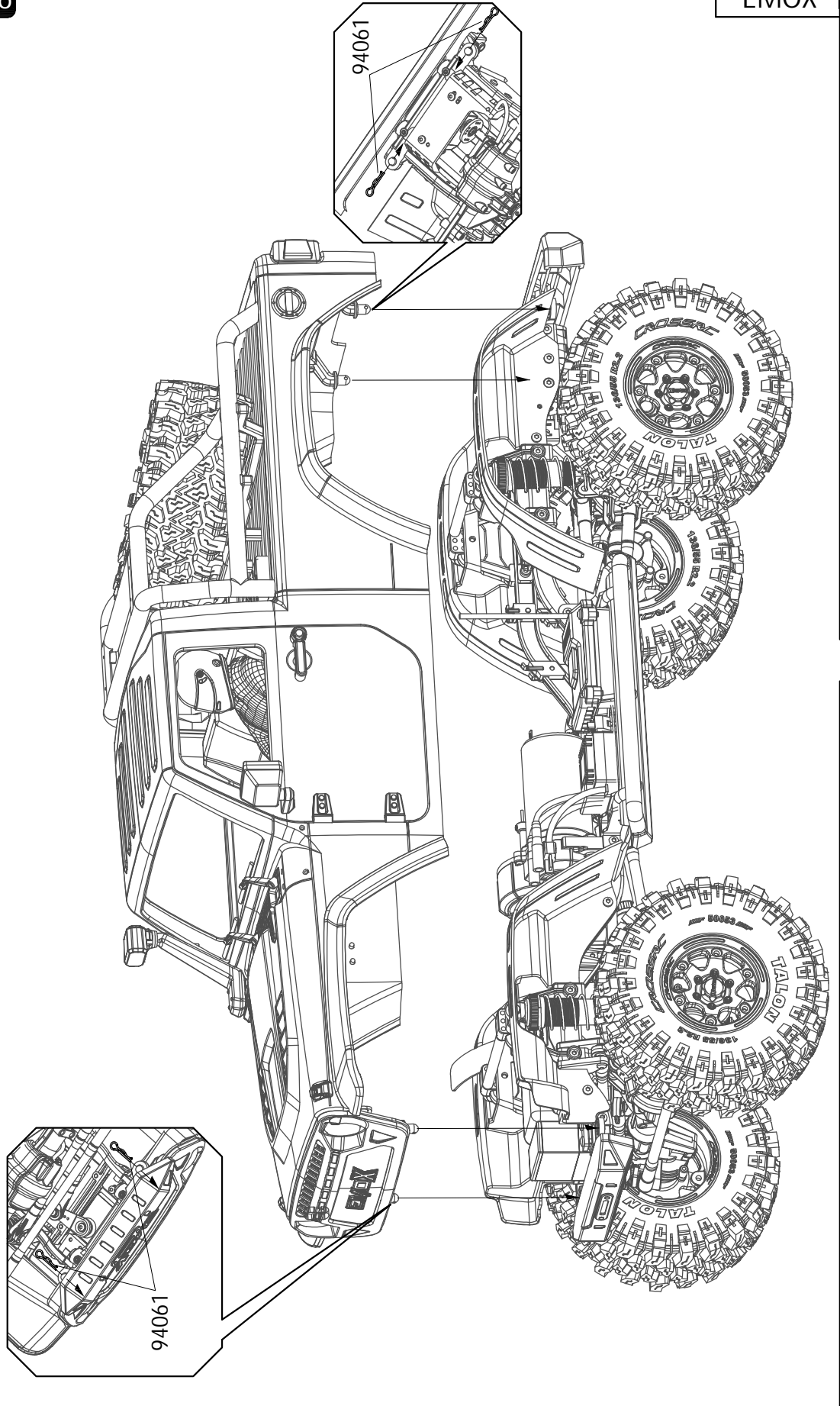
11207   
M3x10 X1



BAG(I)



94061 X 4



BAG(V)



41336 X 4

