

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

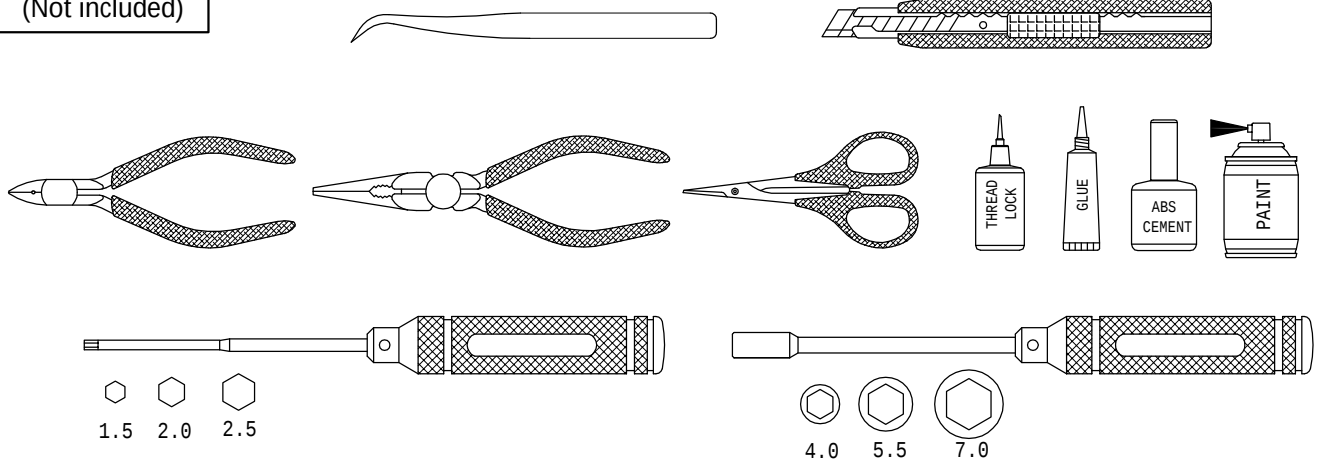
- 2.1 Ensure that all screws are properly tightened. Use thread-lock to secure any metal to metal contacts- especially for components designed to withstand torque (servo mounts, motor mount, drive shaft grub screws etc.).
- 2.2 Always check the battery voltage for both the transmitter and vehicle prior 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.

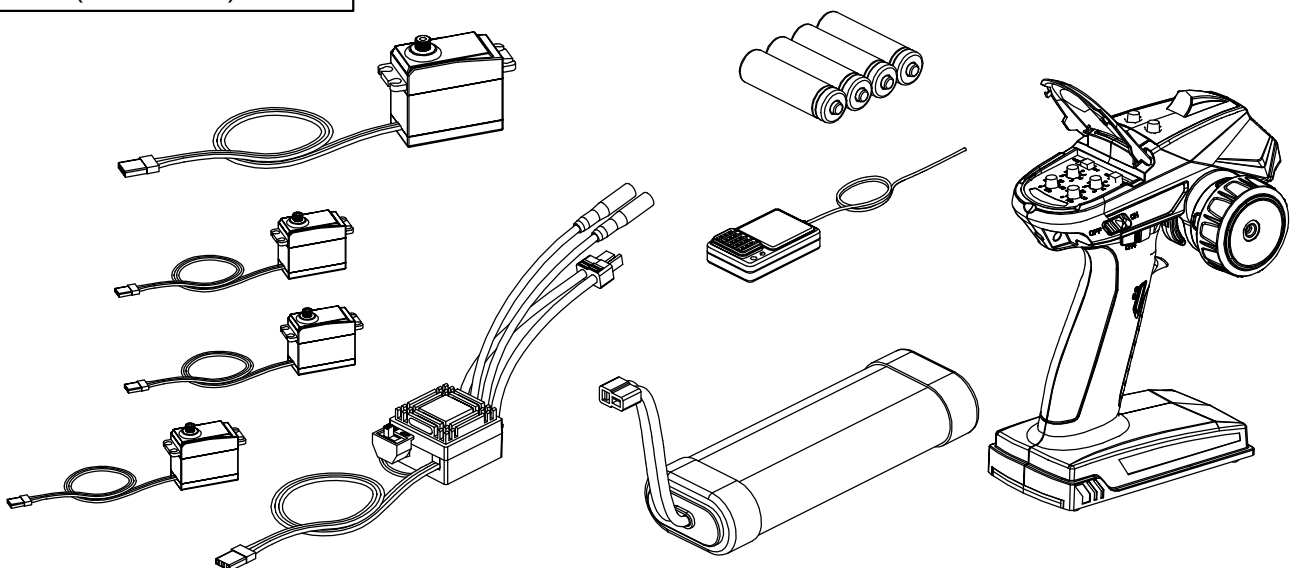
TOOLS

(Not included)



Electronic equipment

(Not included)



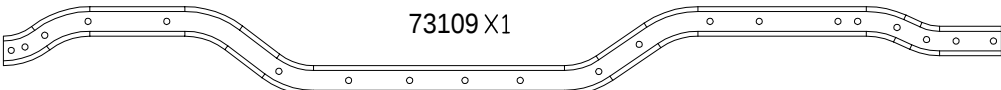
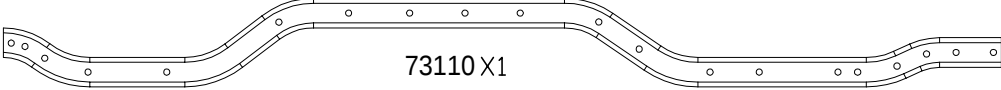
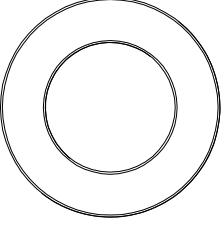
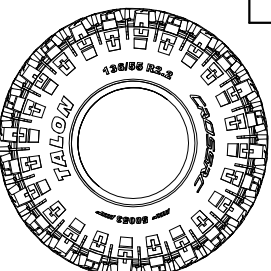
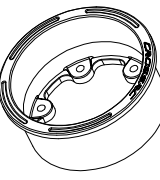
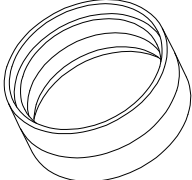
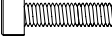
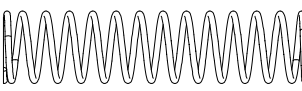
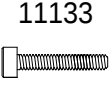
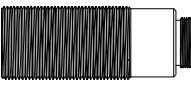
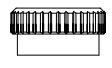
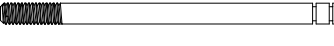
EMO X Assembly Remind

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 41 of the manual; Please conduct power commissioning when the wheels are suspended.
4. This product is a high-precision model. Please read this manual carefully before assembly and assemble in strict accordance with this manual.
5. Screw thread sealant shall be used during assembly. Please noted that the screw thread sealant shall not have any contact with the shell parts. The screw thread sealant and ABS materials will produce chemical reaction, which will embrittle and crack the shell.
6. It is recommended to use professional tools for installation. Please pay attention to the safety when use tools.

Requirements and recommendations for electronic equipment:

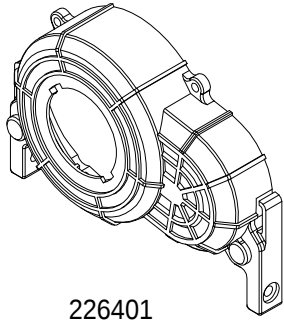
Name	Specifications	Remarks
Remotes controller	6 channels or Up	Waterproof connector is recommended
Servo	Steering servo $\geq 25\text{KG}$	High pressure standard Servo in waterproof
	Shift servo $\geq 3\text{KG} \times 3$	For the size of medium Servo, please refer to the configuration drawing below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

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

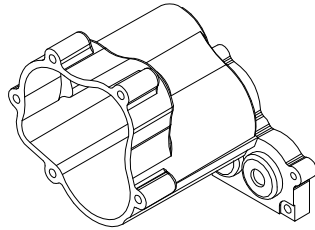
 73109 X1  73110 X1		 SHOCK OIL 91006 X1  GREASE 91007 X1
BAG(A)		EMOX1
 227004 X4  227001 X5		 42326 X5  50053 X5  227002 X5  227003 X5
 11108 M3x12 X30  11401 M3x4 X4  42002 Ø2.2x12 X4  44370 X4  12203 M3 X30  12305 M5 X4		
BAG(B)		EMOX1
 41841 X4  226901 X4  226902 X4  226903 X4  11133 M2x12 X4		 91128 X4  91129 X4  215401 X4  50021 X4  50061 X8  17001 X4
 44221 X4  44218 X4  44217 X4  44219 X4		 11102 X4 M2x6  14109 X4 Ø4xØ2x0.5  44220 X4  13003 Ø2.5xØ6x0.4 X8

BAG(C)

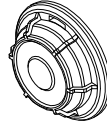
EMOX1



226401



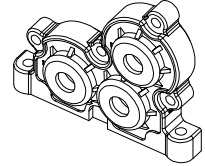
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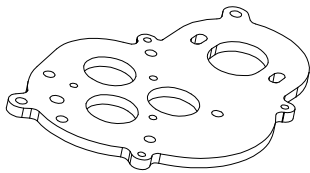
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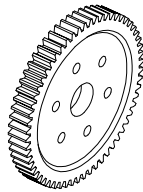
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226405



45123



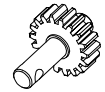
226501(60T)



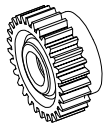
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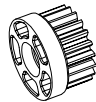
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41749 X2



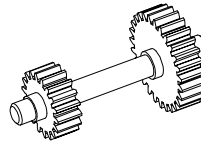
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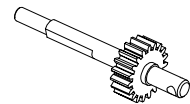
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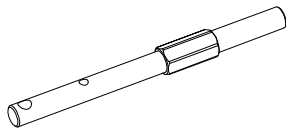
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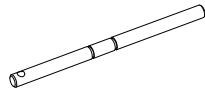
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41747



42234



42235



44212



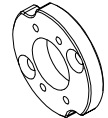
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44214



74016



44314

13001

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

42236

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

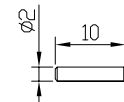
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 $\varnothing 5.1 \times \varnothing 8 \times 1.5$ X2

72007

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

14102

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

41209 X1

11217



M2.5x10 X6

11216



M2.5x6 X3

11205



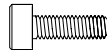
M3x6 X6

11207



M3x10 X7

11107



M3x10 X2

11405



M4x4 X1

11315



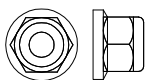
M2.5x6 X3

11331



M4x10 X2

12304



M4 X1



41834 X1



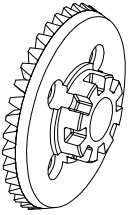
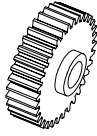
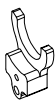
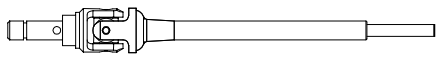
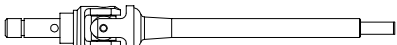
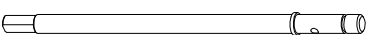
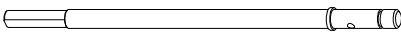
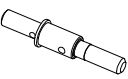
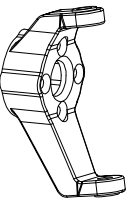
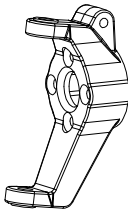
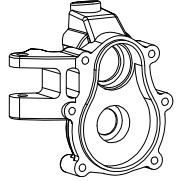
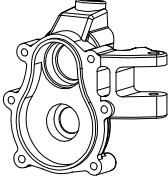
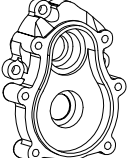
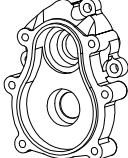
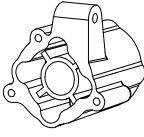
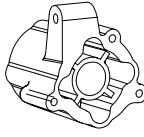
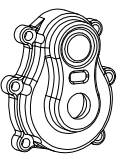
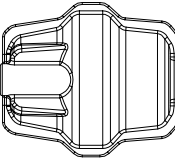
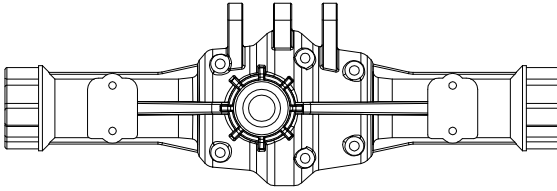
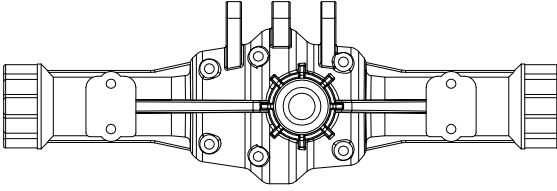
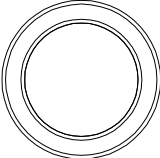
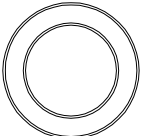
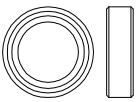
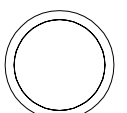
41307 X1

15012

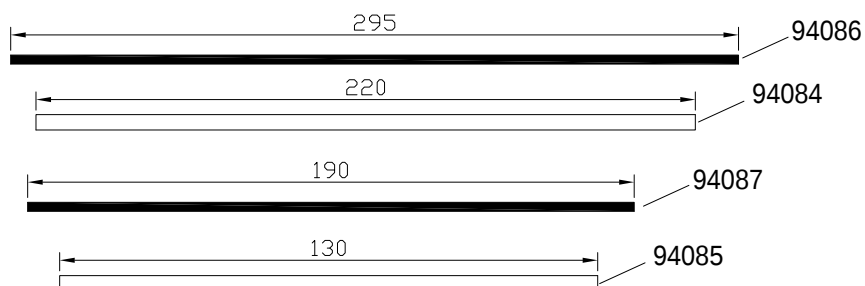
 $\varnothing 5 \times \varnothing 10 \times 4$ X11

15014

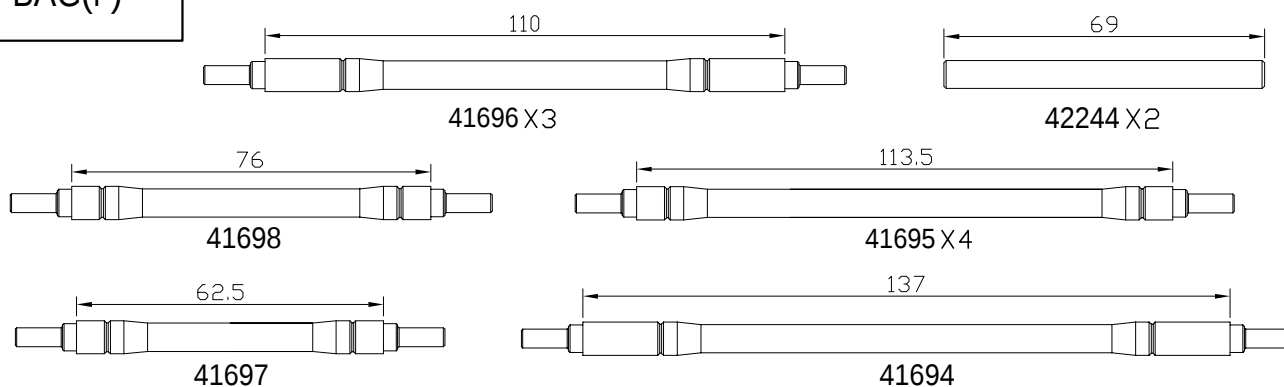
 $\varnothing 5 \times \varnothing 8 \times 2.5$ X4

BAG(D)	EMOX1							
 33906 X4	 33907 X8	 36201 X2	 36202 X2	 36203 X4	 36204 X4	 36205 X2	 44215 X2	 41838 X2
 95091	 95092	 42241	 42242	 42243 X2	 42223 X4	 44369 X4		
 226701	 226702	 226703	 226704	 226705	 226706	 226707	 226708	 226709 X4
 226710 X4	 226711 X2	 226602 X2						
 226601				 226603				
 15015 ø15xø21x4 X2	 15016 ø12xø18x4 X2	 15018 ø8xø12x3.5 X2	 15012 ø5xø10x4 X14	 15022 ø7xø13x4 X4	 75026 ø12xø15x0.2 X2	 72007 ø5xø8x0.3 X2		
 13002 ø3.8xø9.2x0.6 X6	 11227 M2.5x8 X8	 11316 M2.5x10 X18	 11125 M2.5x10 X38	 11120 M2.5x20 X12	 42208 M3x10 X4	 75023 ø2x14 X2	 41259 ø2x7.5 X8	

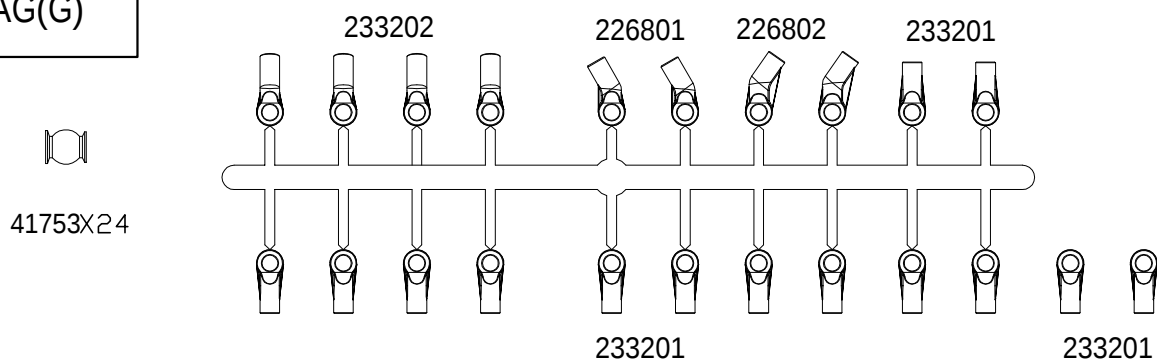
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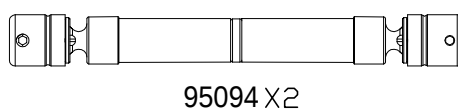
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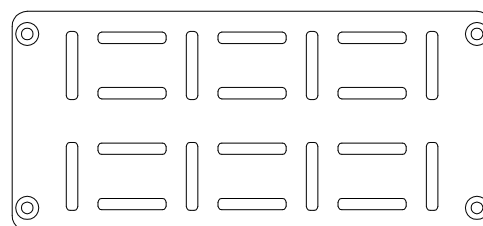
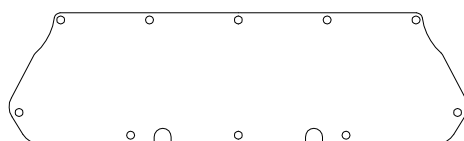
BAG(G)



BAG(H)

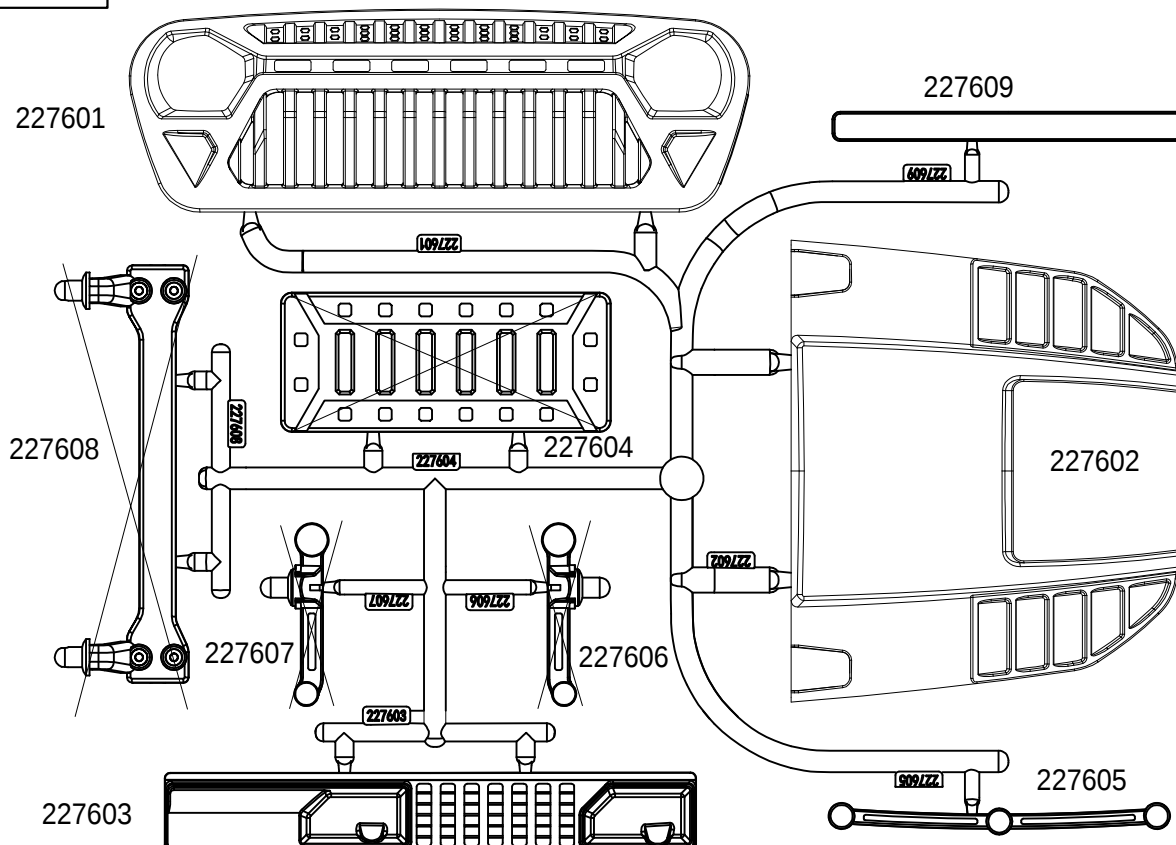


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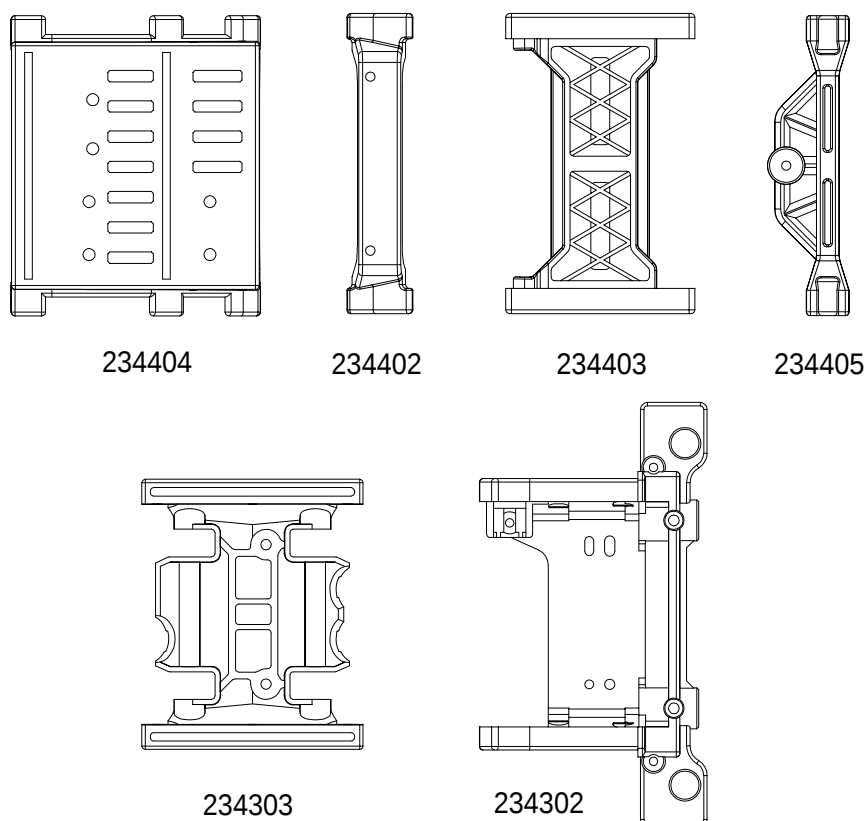


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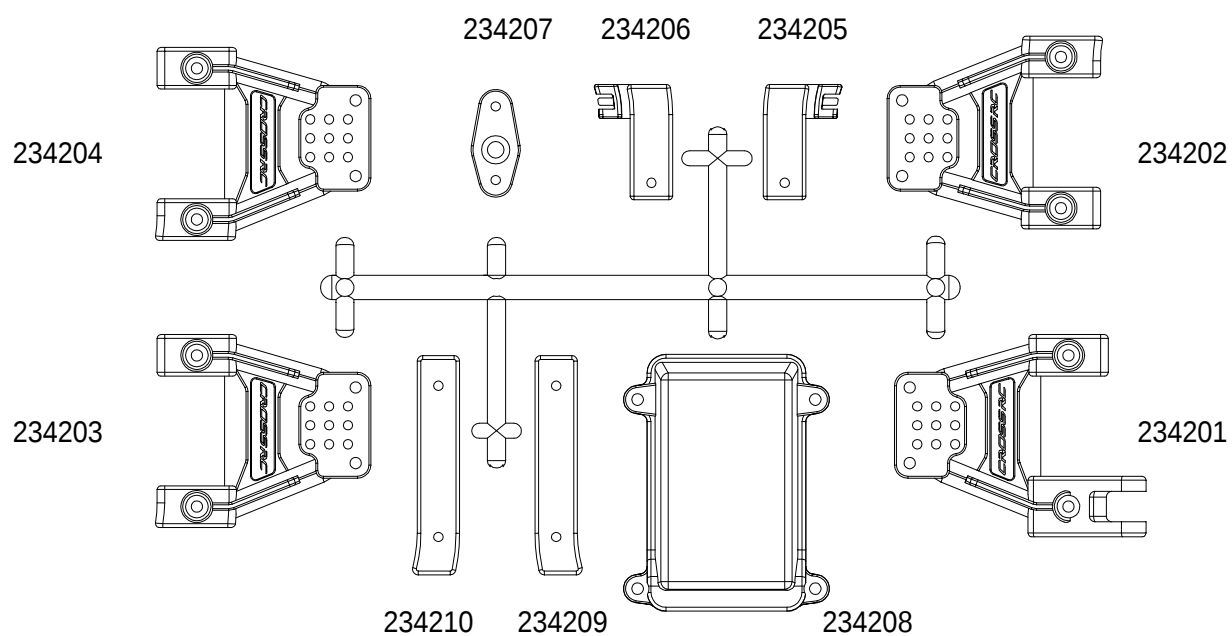
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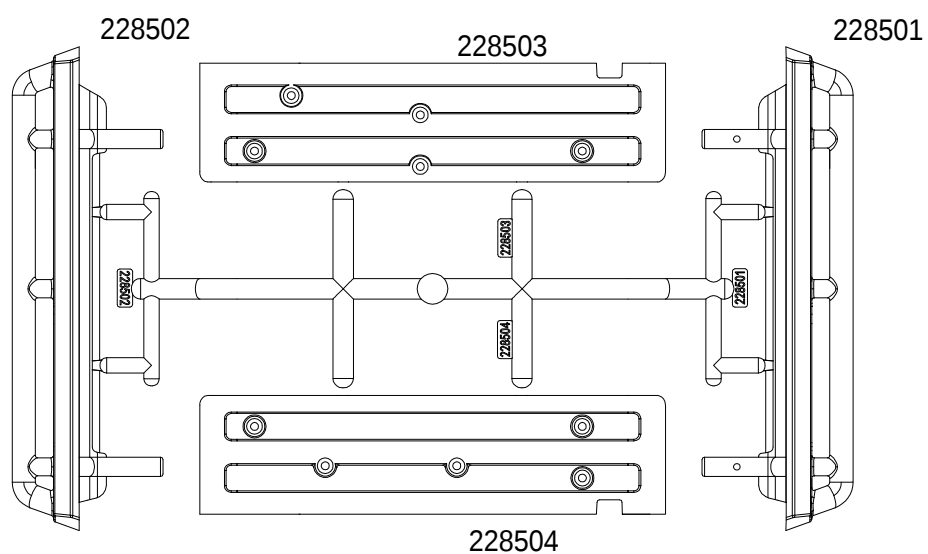
BAG(K)



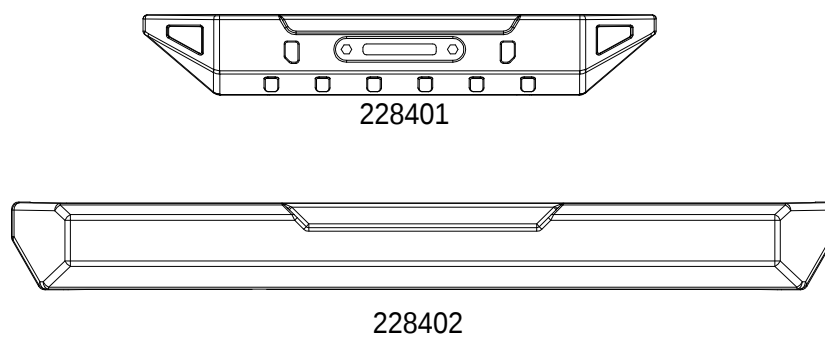
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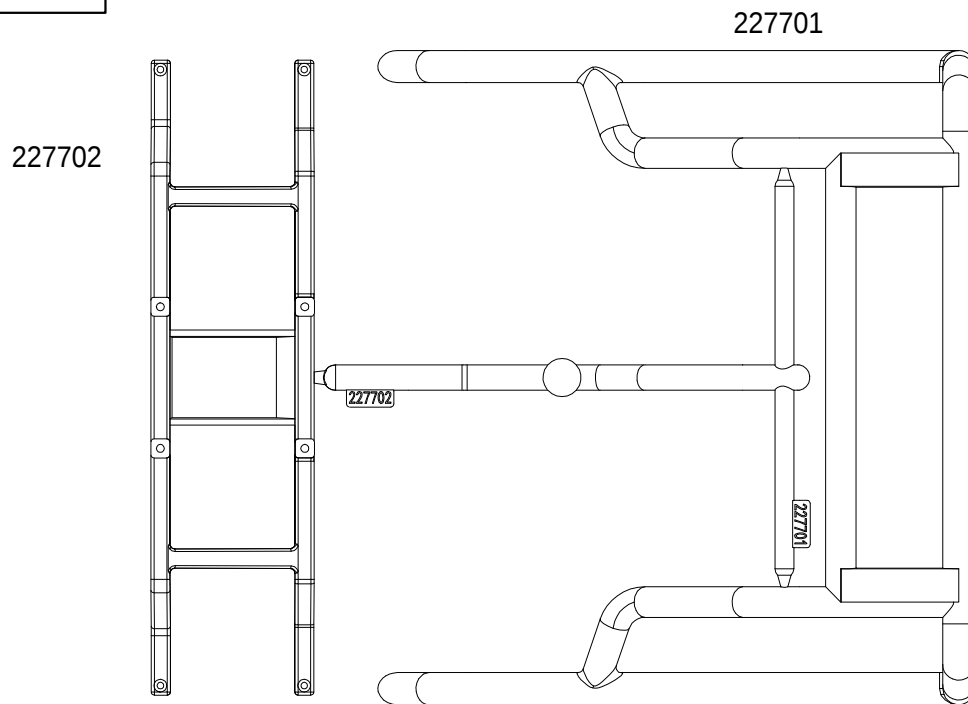
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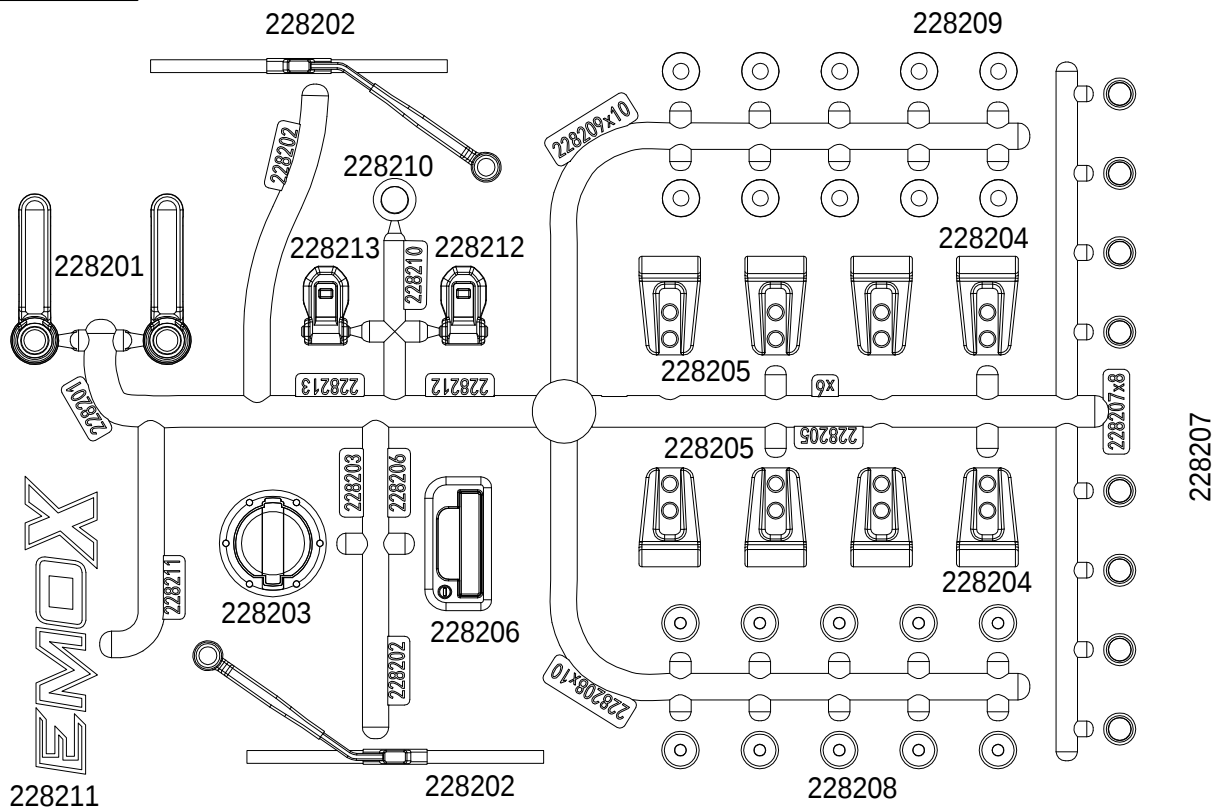
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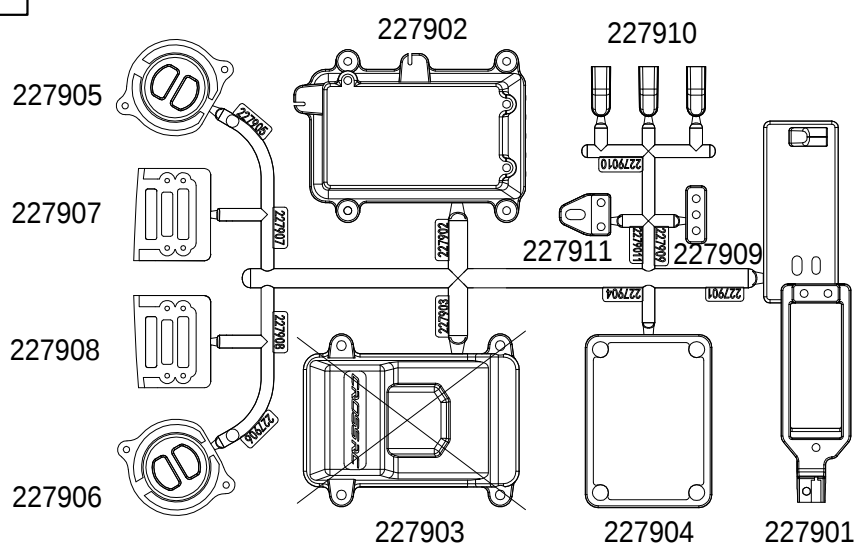
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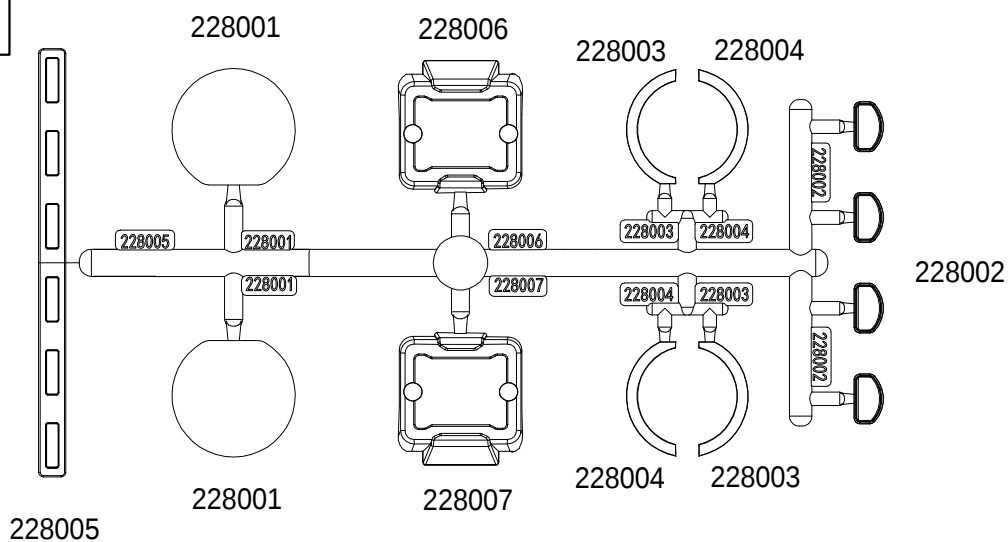
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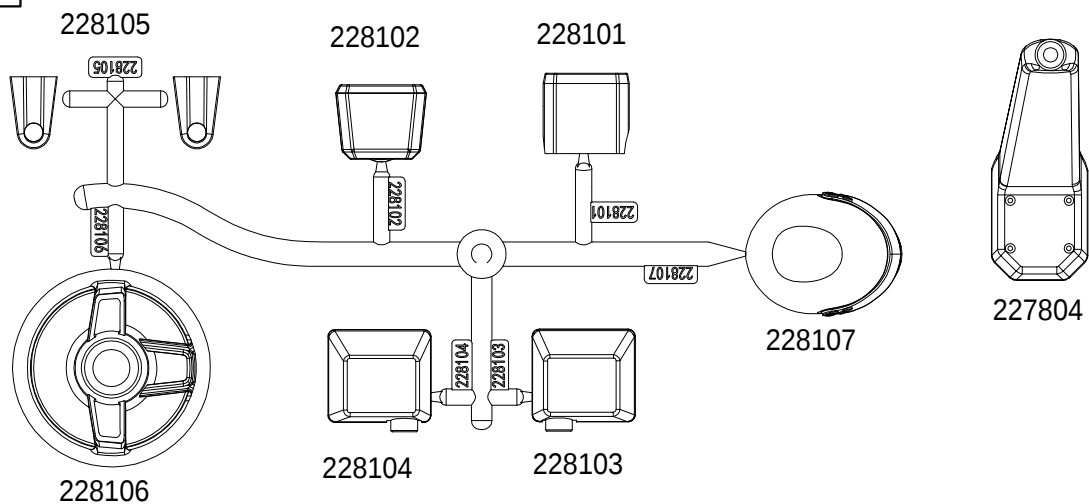
BAG(Q)



BAG(R)



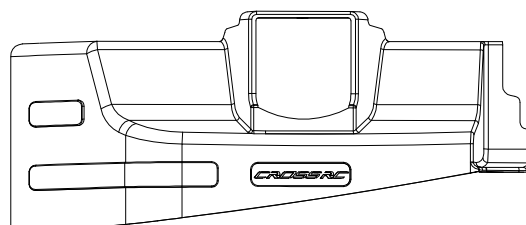
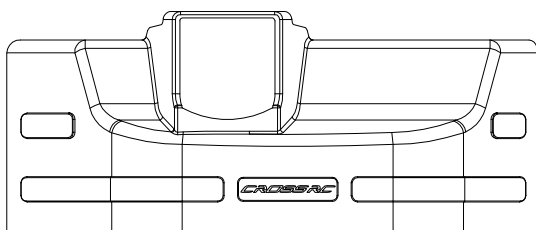
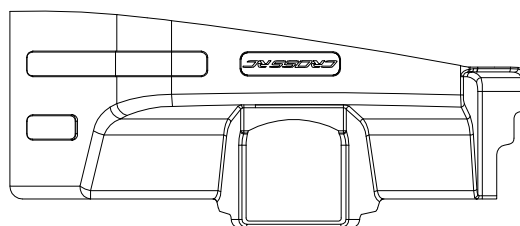
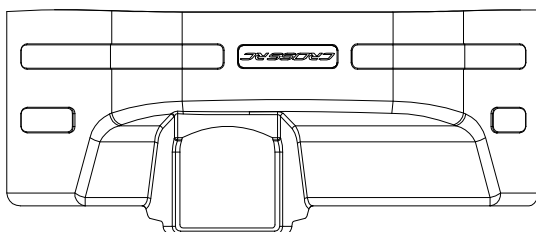
BAG(S)



BAG(T)

227302

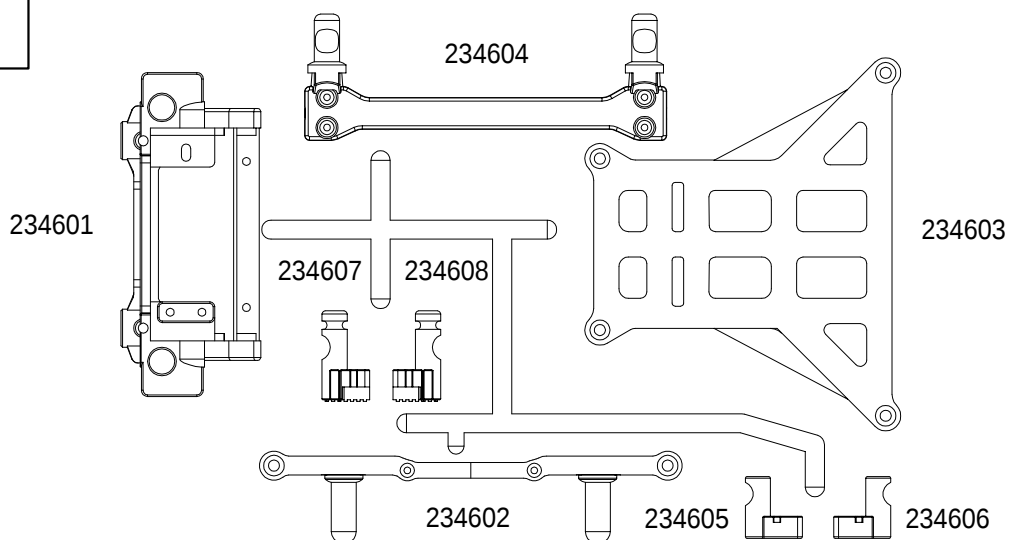
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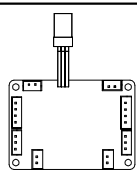
227301

227202

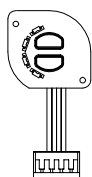
BAG(U)



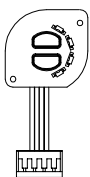
BAG(V)



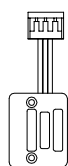
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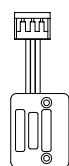
87144



87145



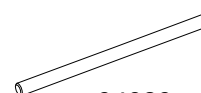
87146



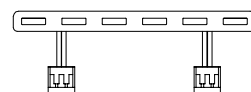
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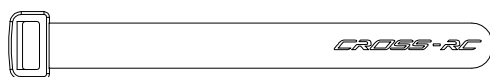
95096



94089

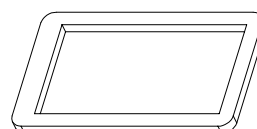


87148



91004 X1

71294



71293

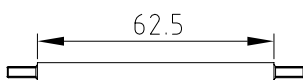
BAG(W)



41336 X4



41205



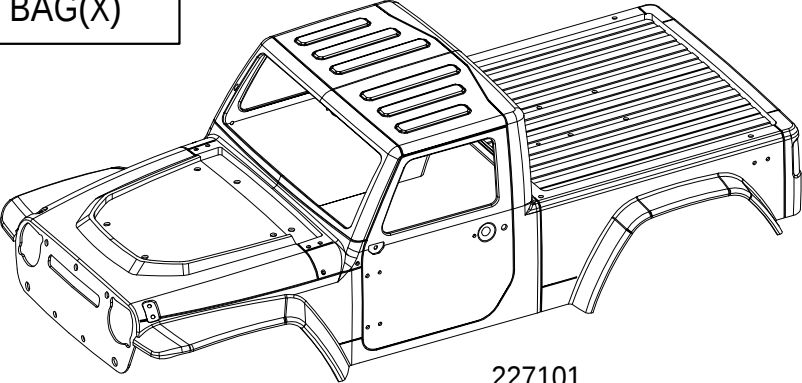
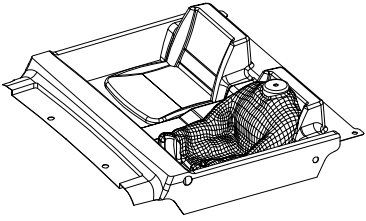
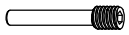
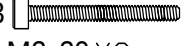
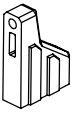
41780



41781



223903 X4

BAG(X)	  227101 227102				
BAG(Y)	11205  M3x6 X2 11211  M3x18 X11 11106  M3x8 X1 11401  M3x4 X1 11102  M2x6 X27 11206  M3x8 X11 11212  M3x20 X4 11239  M3x8 X20 11413  M4x13.5 X8 11103  M2x8 X10 11207  M3x10 X31 11213  M3x22 X3 11303  M3x8 X14 42209  X2 11104  M2x10 X4 11208  M3x12 X10 11214  M3x25 X5 14102  $\varnothing 3 \times \varnothing 7 \times 0.5$ X2 12203  M3 X1 11126  M2x14 X2 11209  M3x14 X2 11215  M3x28 X4 11133  M2x20 X2 11242  M3x14 X2 11116  M2.5x12 X4 11210  M3x16 X10 11223  M3x30 X2 12307  M3 X4				
BAG(Z)	  11227  M2.5x8 X3 12206  M2 X3 11401  M3x4 X3 91176  X2 42231  X2 44172  X1 91175  X3 41819  X2 94056  X1				
BAG(AA)	11206  M3x8 X2 11210  M3x16 X2 14103  $\varnothing 3.2 \times \varnothing 9 \times 1$ X2 201602  X2				

EMOX1

BAG(C)

15012

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

72007

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

11315



M2.5x6 X3

15014

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

42236

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

42203

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

13001

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

15012

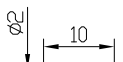
 $\phi 5 \times \phi 10 \times 4$ X1

11207

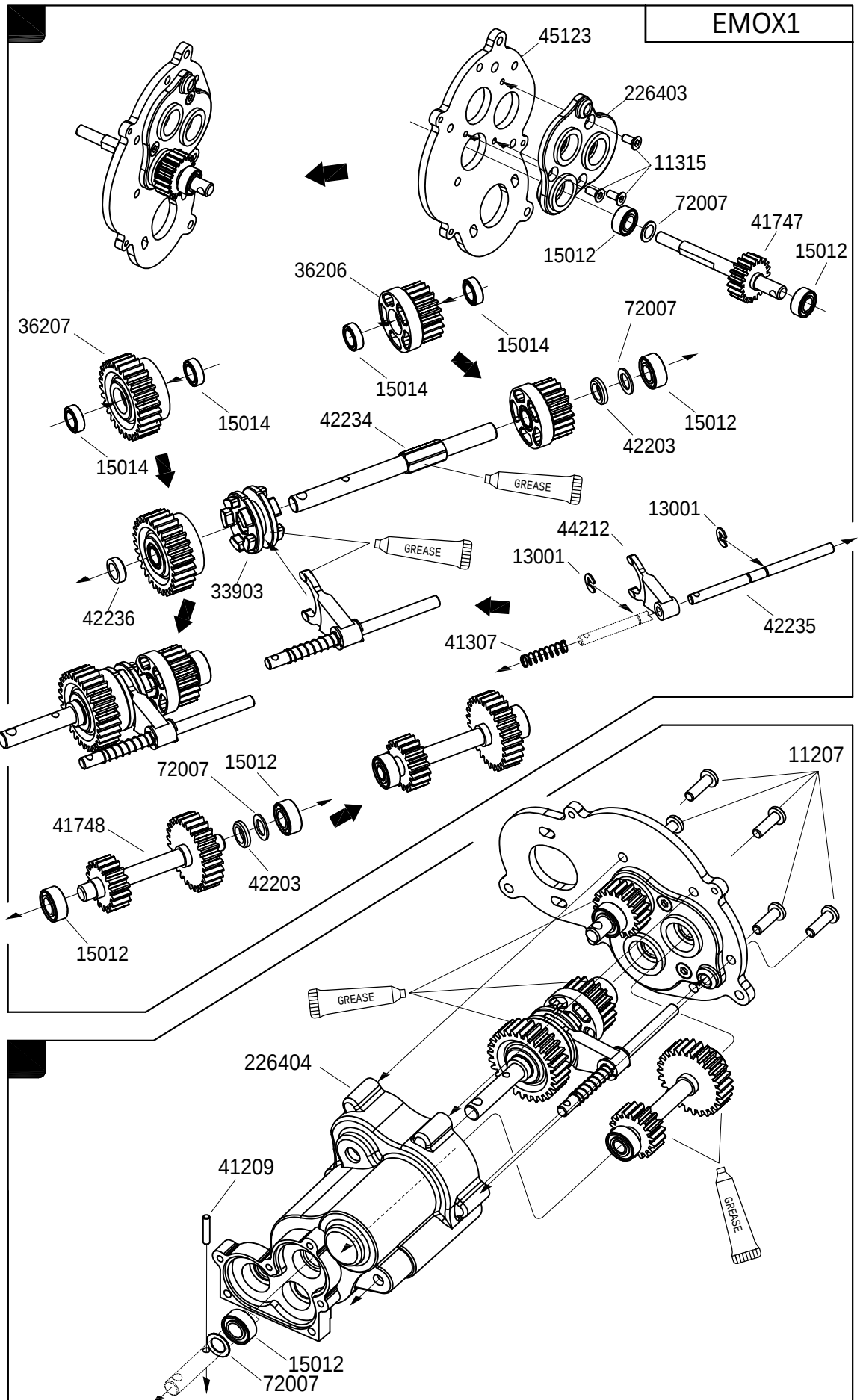


M3x10 X5

72007

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

41209 X1



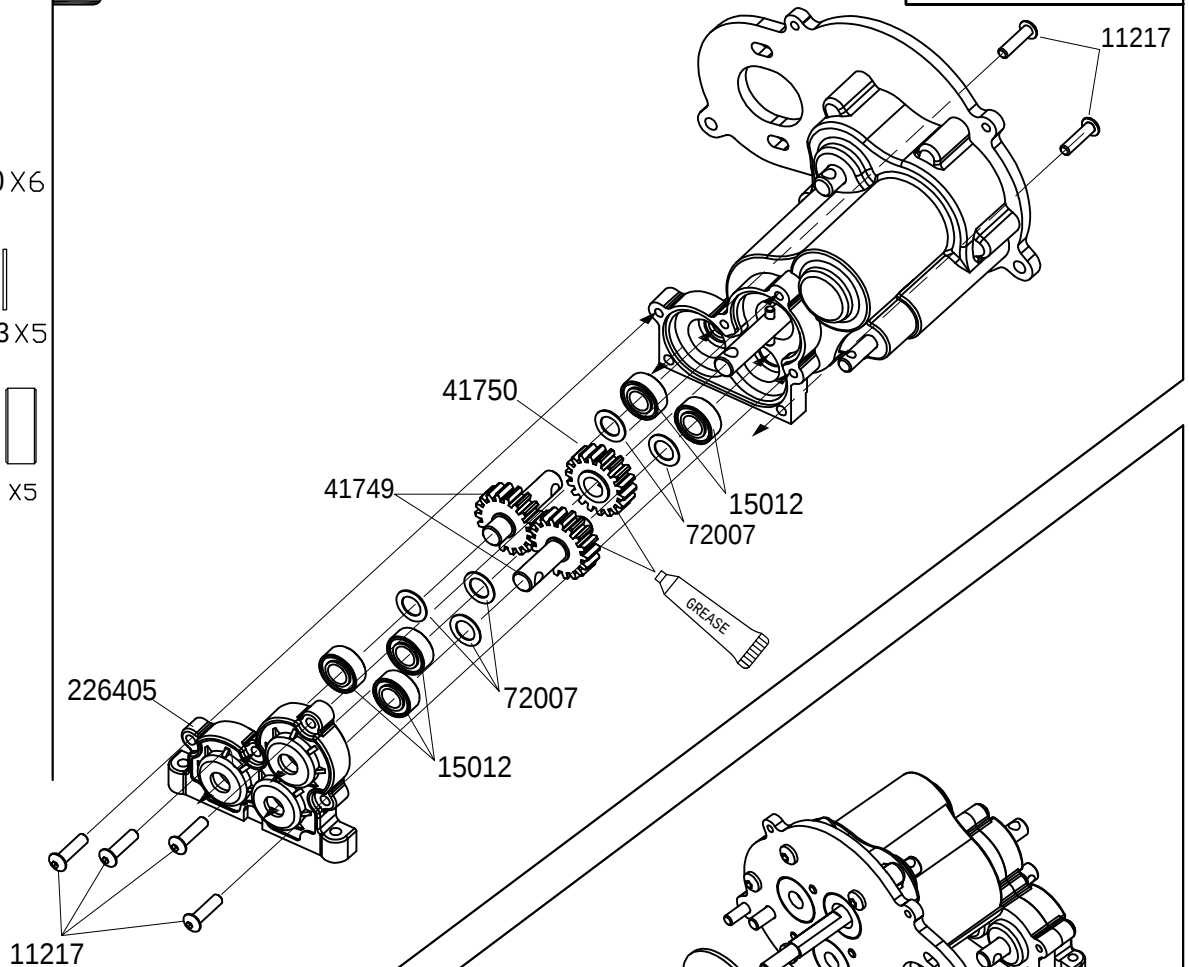
EMOX1

BAG(C)

11217 
M2.5x10 X6

72007 
ø5xø8x0.3 X5

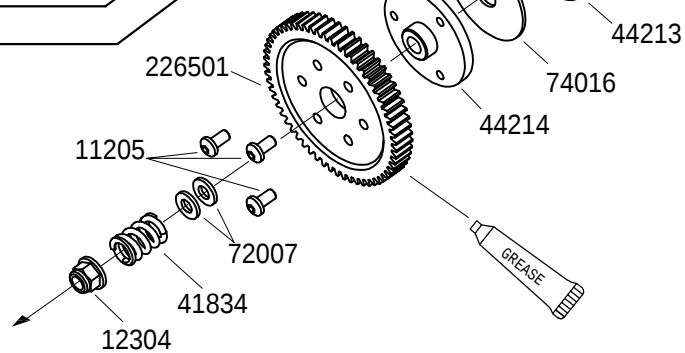
15012 
ø5xø10x4 X5



12304 
M4 X1

72007 
ø5xø8x0.3 X2

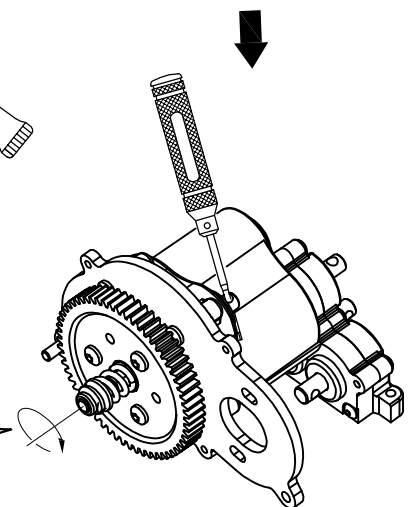
11205 
M3x6 X3



Limited slip adjust

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

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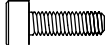


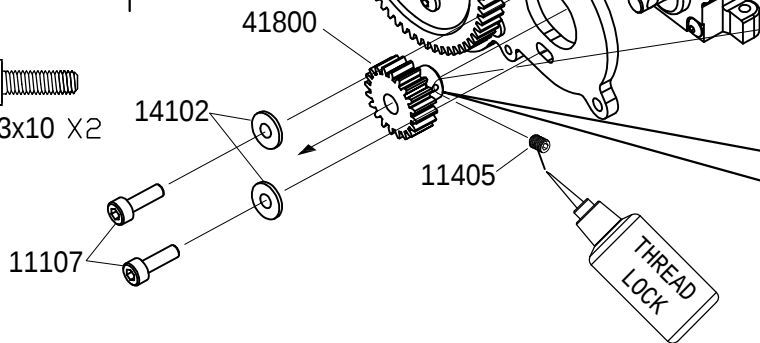
EMOX1

BAG(C)

11405 
M4x4 X1

14102 
ø3xø7x0.5 X2

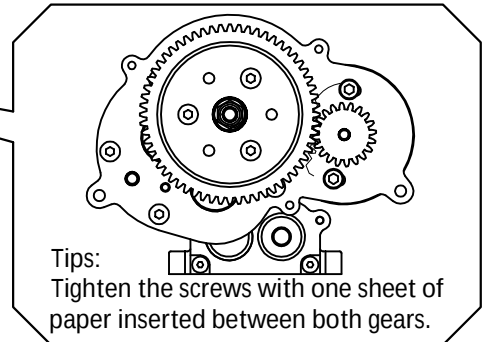
11107 
M3x10 X2



11331 
M4x10 X2

Final reduction ratio

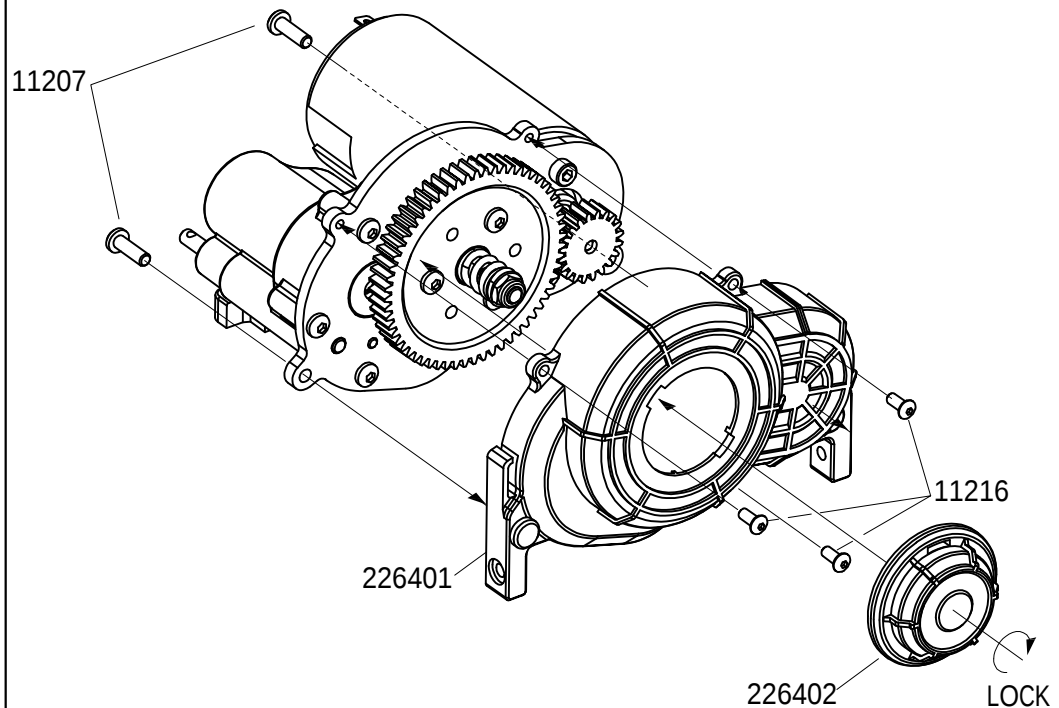
Motor gear	16T	17T	18T	19T	20T	21T
Fast	22.1	20.8	19.6	18.6	17.8	17
Slow	48.3	45.4	42.9	40.6	38.9	37



EMOX1

11207 
M3x10 X2

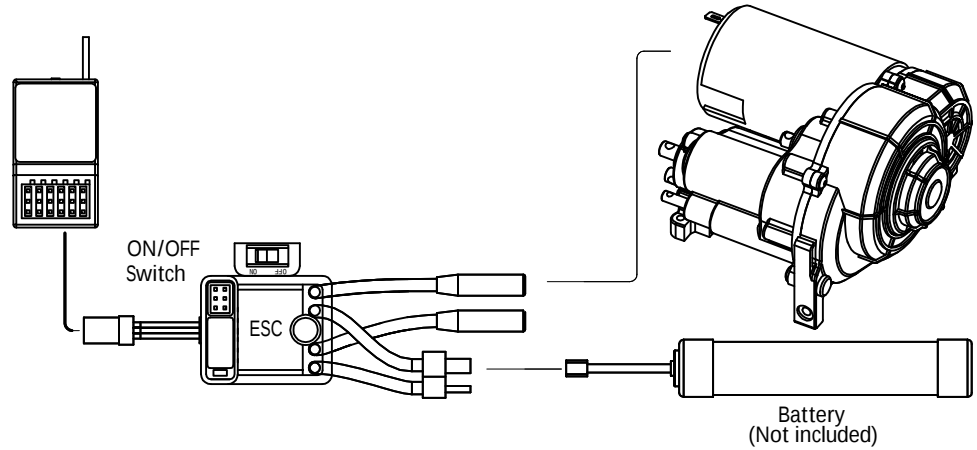
11216 
M2.5x6 X3



EMOX1

Tips:

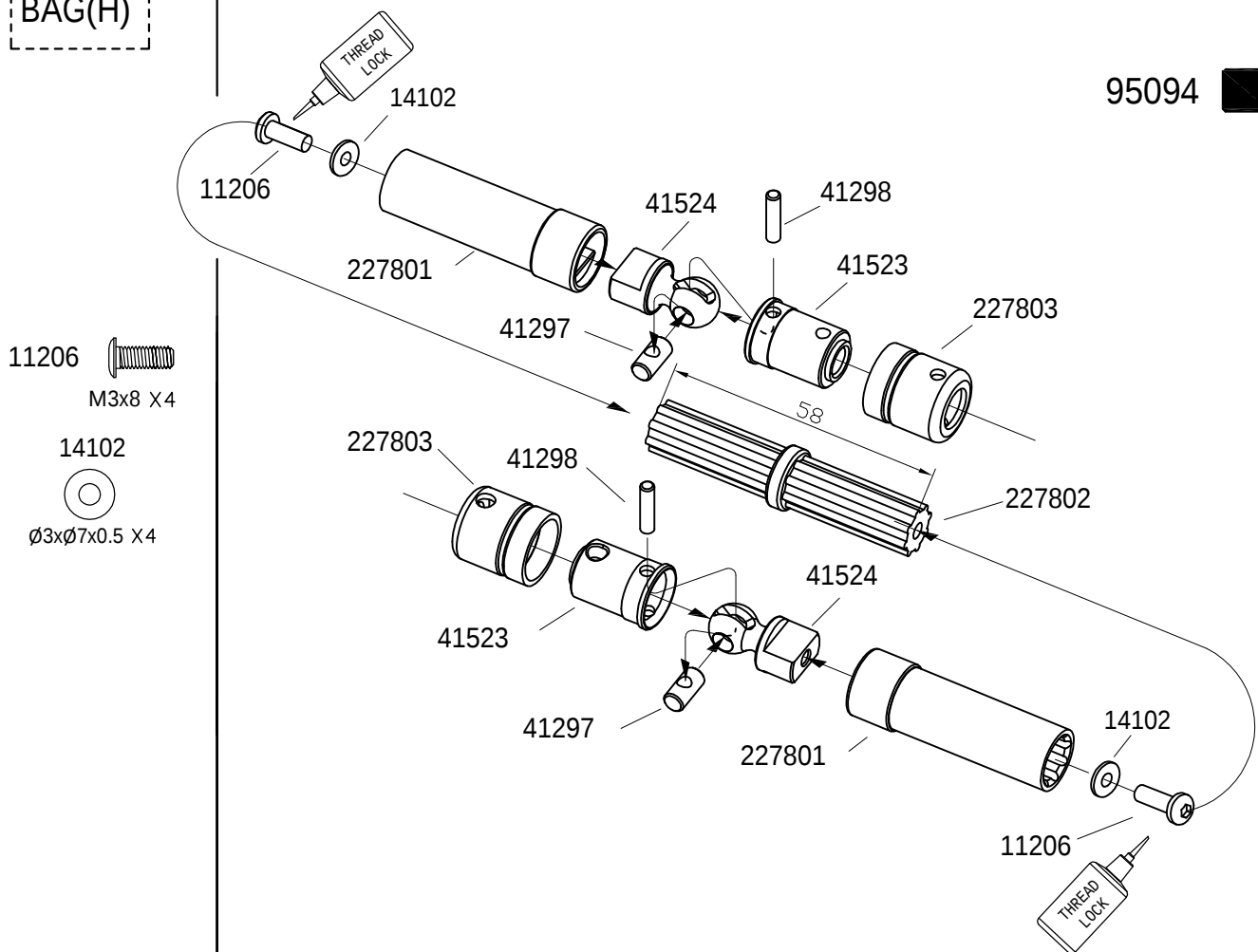
Test the gear mesh by connecting the ESC to the motor/gearbox assembly. If the gearbox is not operating smoothly or is creating excess noise, check the gear mesh prior to proceeding to the next step.



BAG(H)

EMOX1

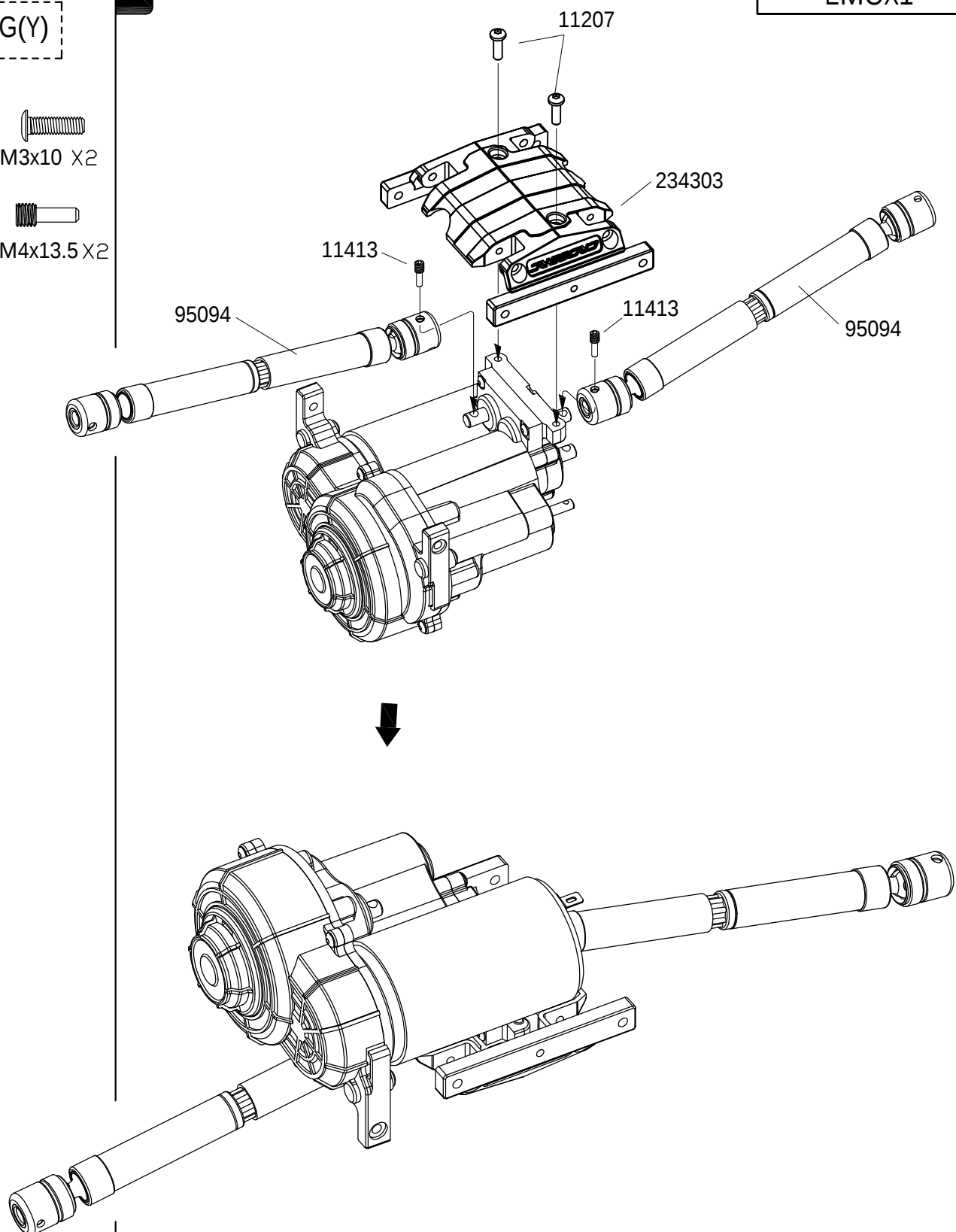
95094



BAG(Y)

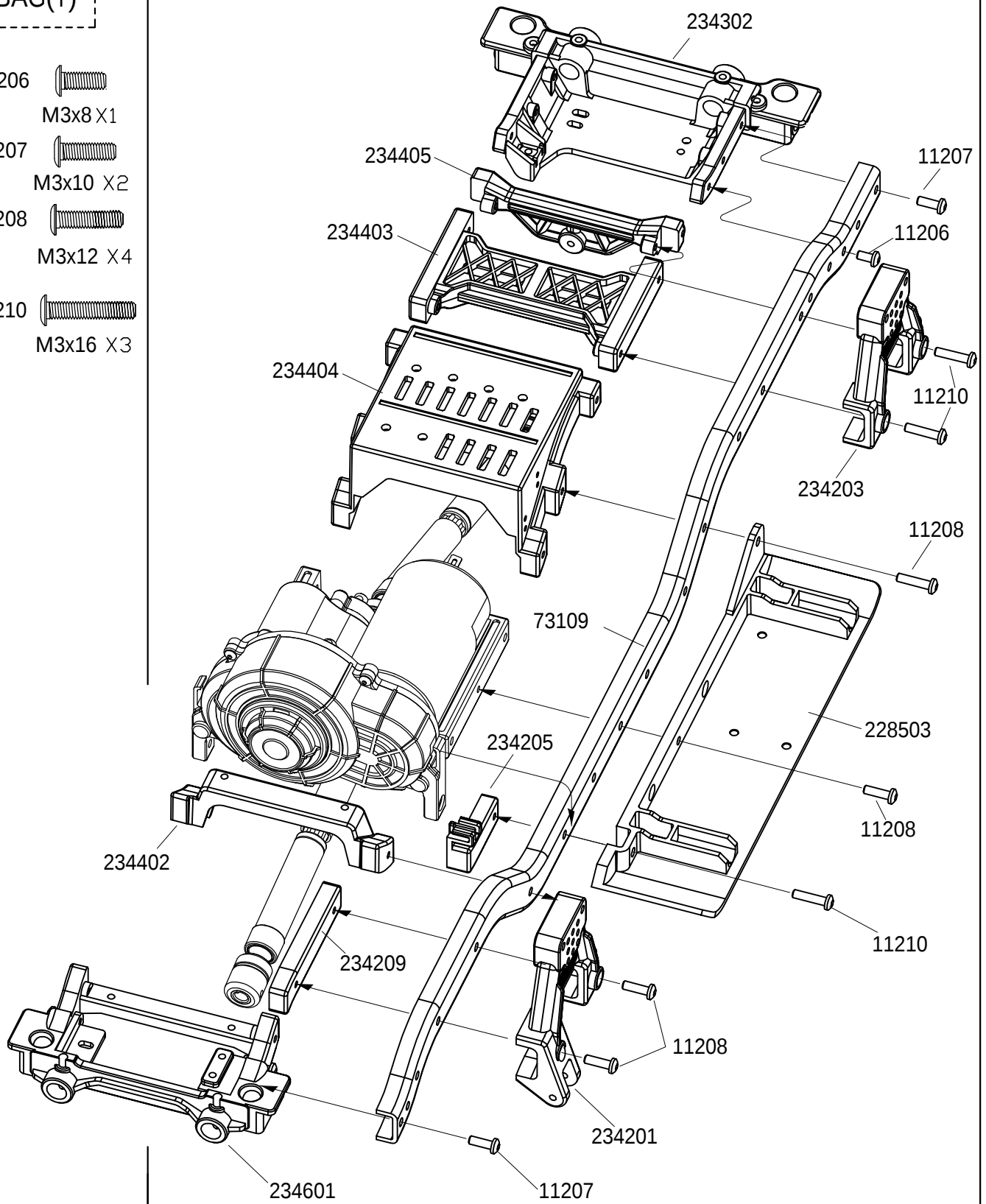
11207 
M3x10 X2

11413 
M4x13.5 X2



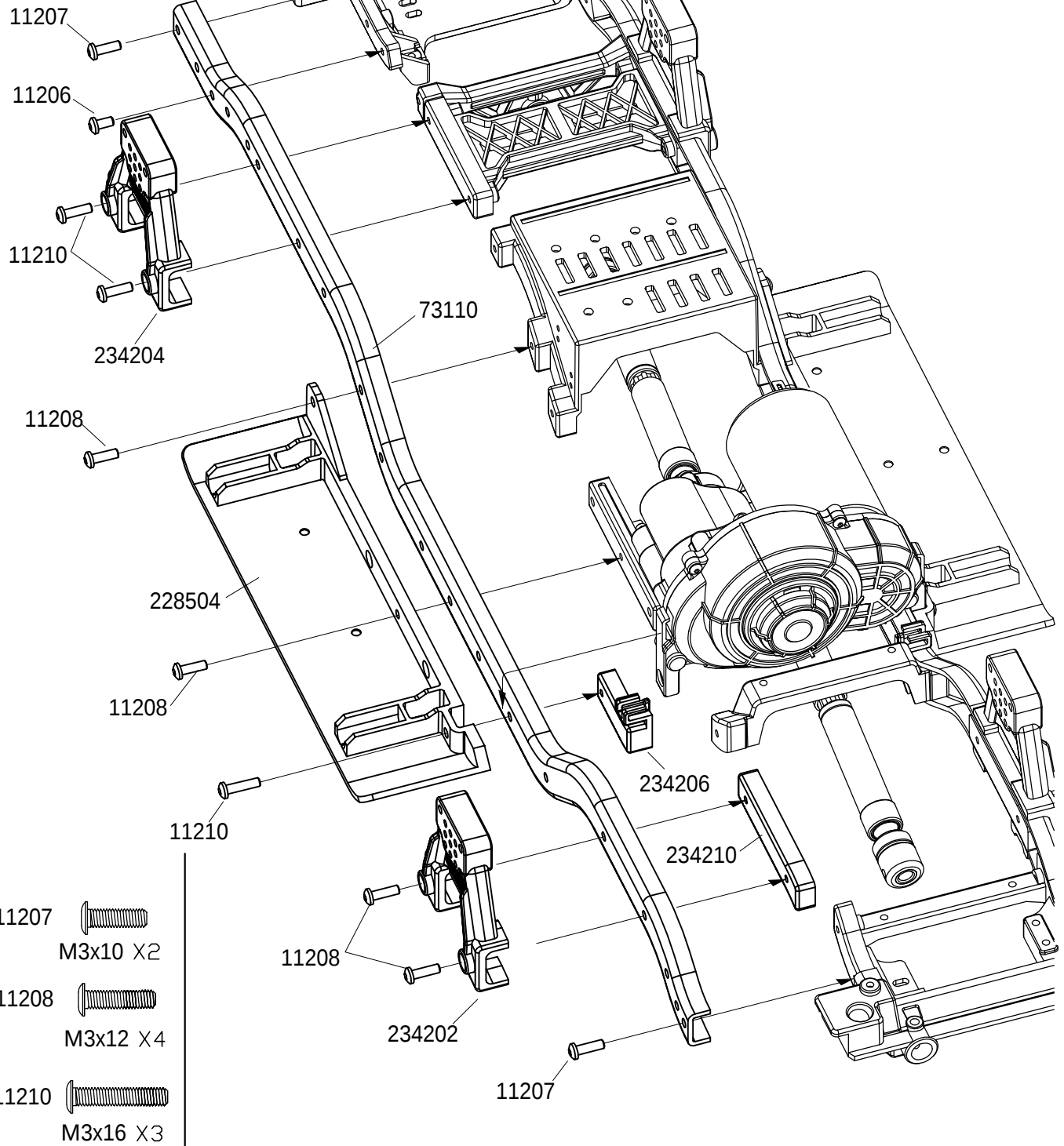
BAG(Y)

- 11206  M3x8 X1
- 11207  M3x10 X2
- 11208  M3x12 X4
- 11210  M3x16 X3



BAG(Y)

11206 
M3x8 X1



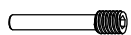
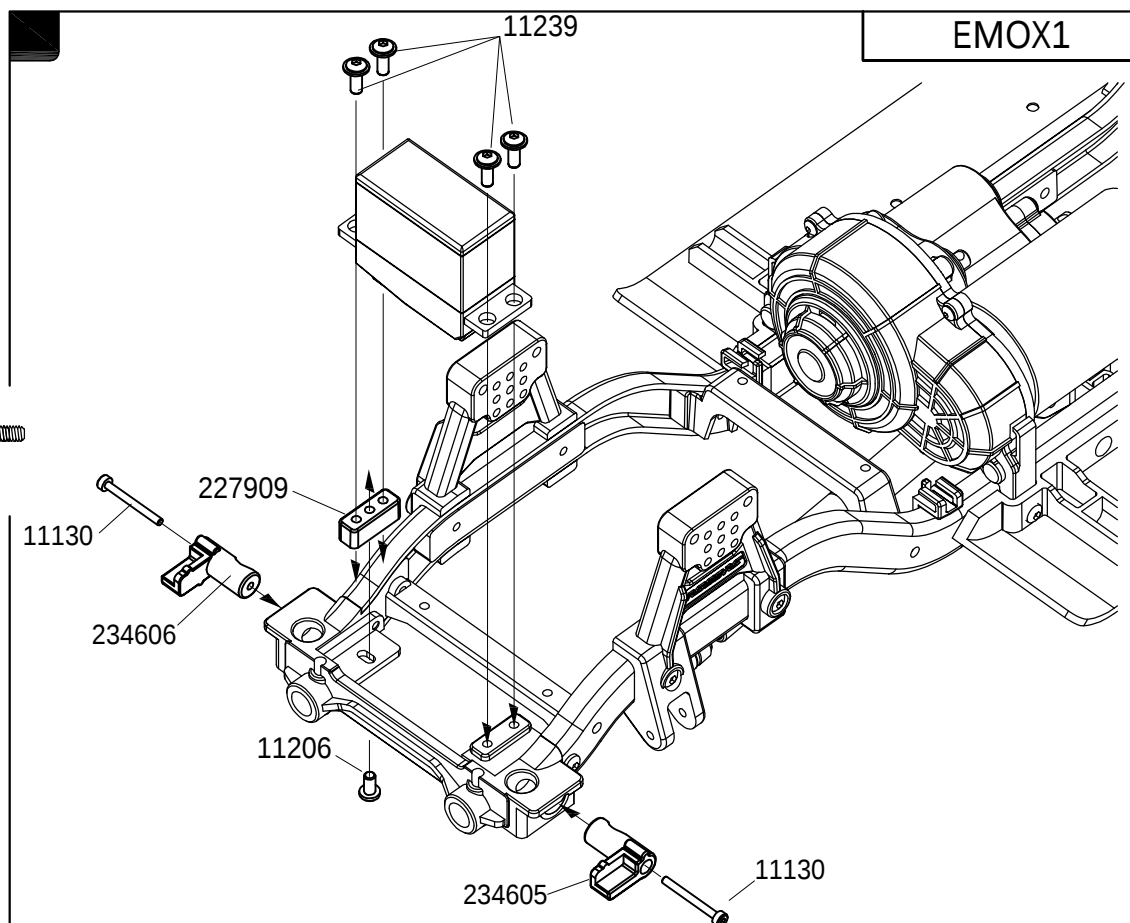
BAG(Y)

11239 
M3x8 X4

11206 
M3x8 X1

11130 
M2x20 X2

EMOX1



42209 X2

11206 
M3x8 X2

11239 
M3x8 X4

BAG(Z)

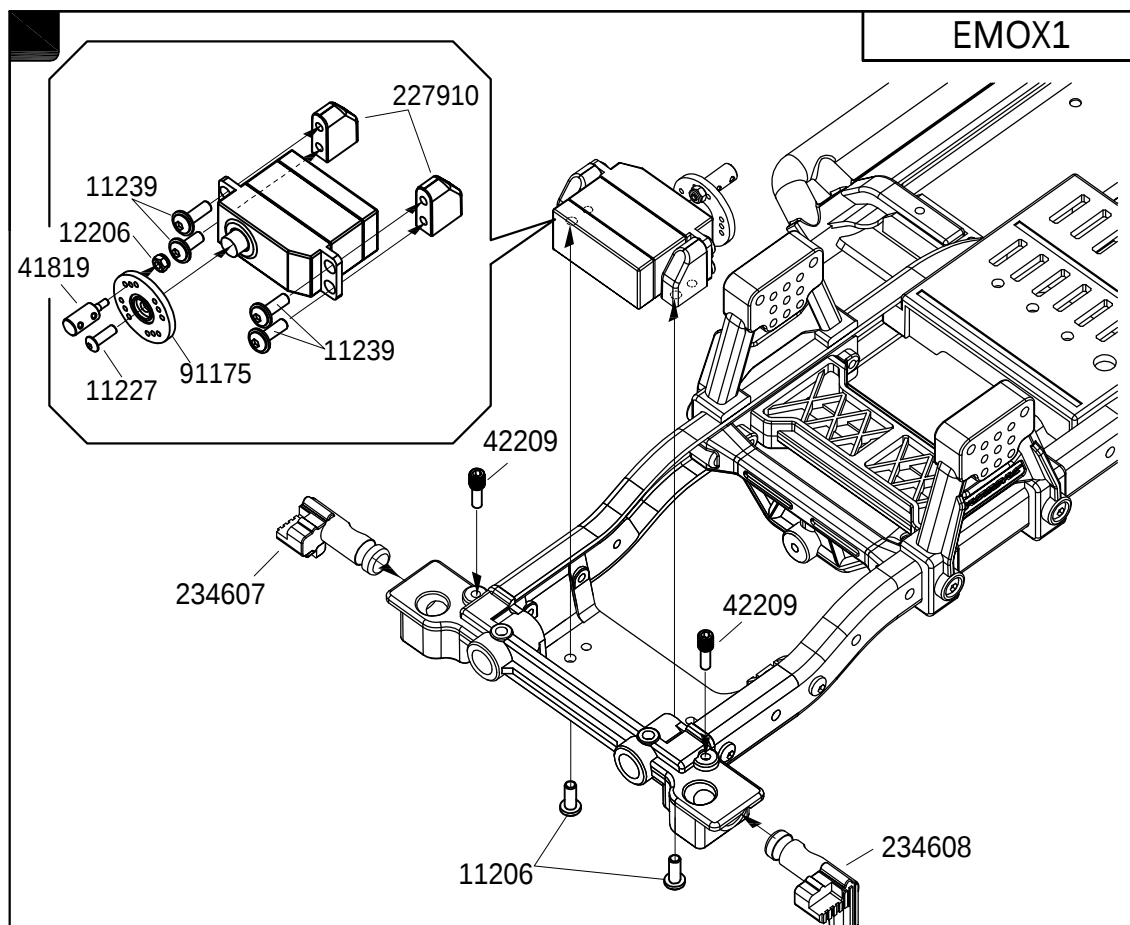
11227 
M2.5x8 X1

12206 
M2 X1



41819 X1

EMOX1



EMOX1

BAG(B)

13003  $\phi 2.5 \times \phi 6 \times 0.4 \times 8$

14109  $\phi 4 \times \phi 2 \times 0.5 \times 4$

50021 X4  $\phi 7.5 \times \phi 3.5 \times \phi 2$

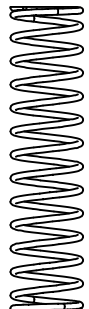
17001 X4  $\phi 8 \times \phi 6 \times \phi 1$

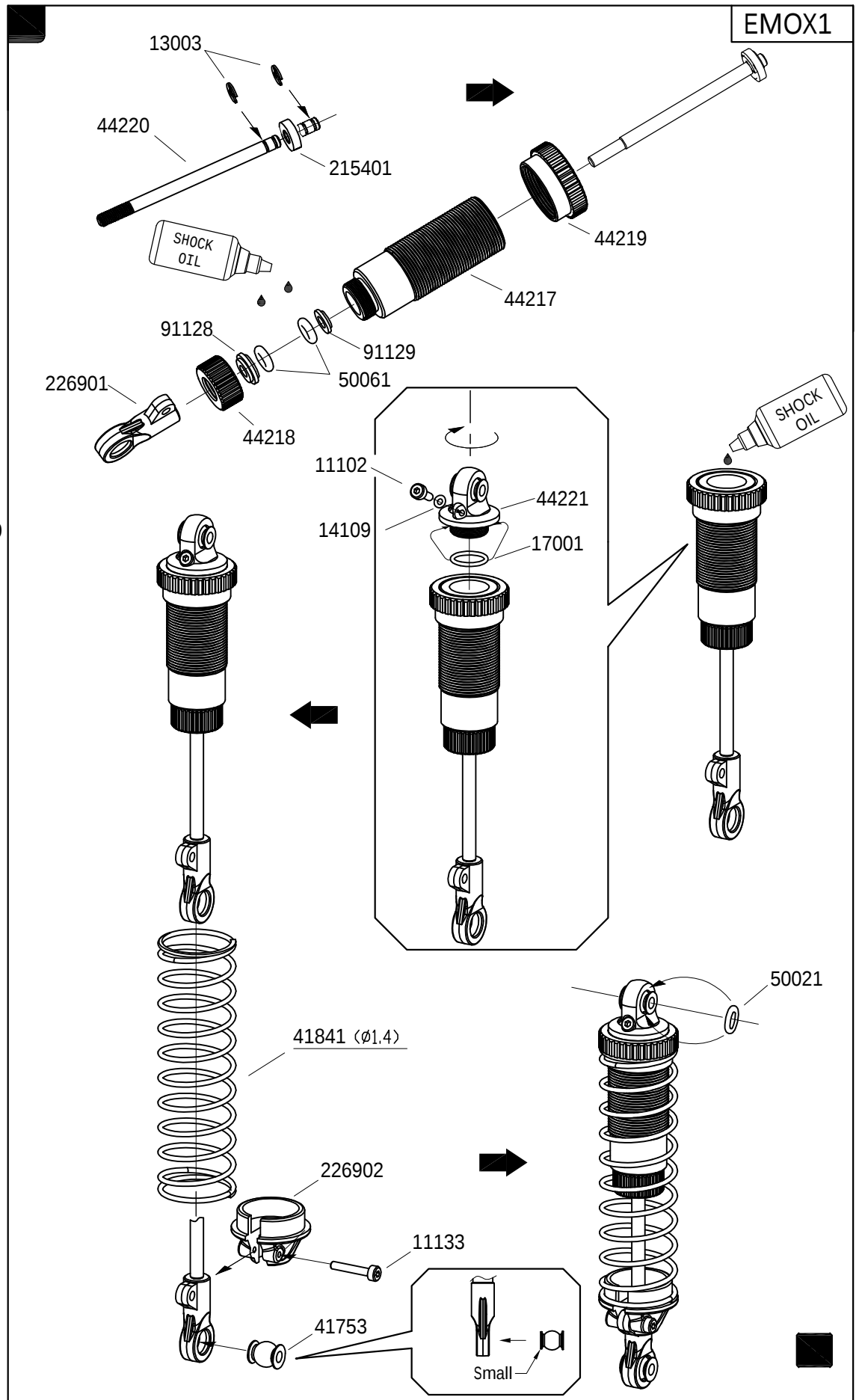
50061 X8  $\phi 7.2 \times \phi 3.4 \times \phi 1.9$

11133  M2x12 X4

11102  M2x6 X4

41753 X4 


41841 X4($\phi 1.4$)

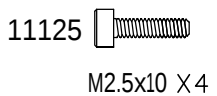
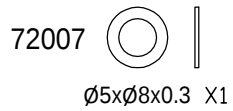
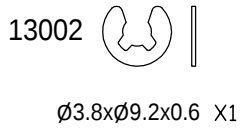
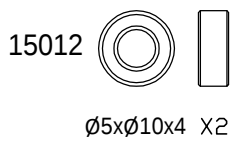
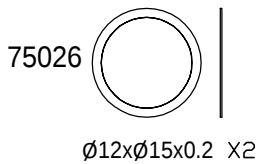
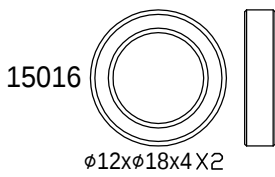
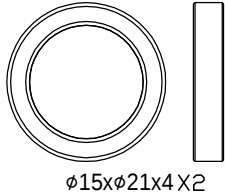


BAG(D)

11316  M2.5x10 X2

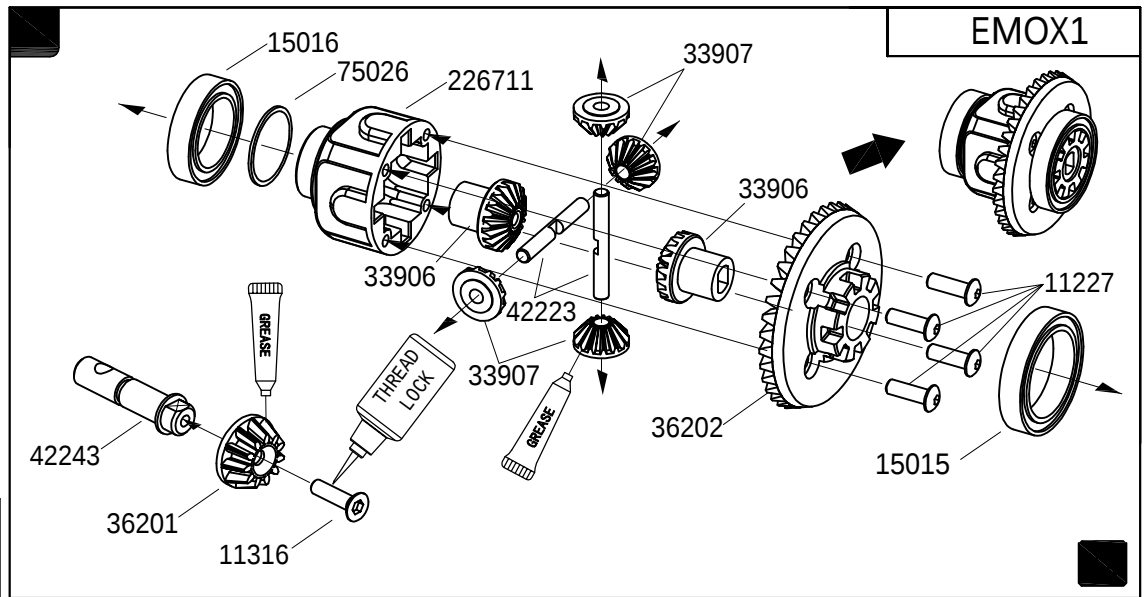
11227  M2.5x8 X8

15015

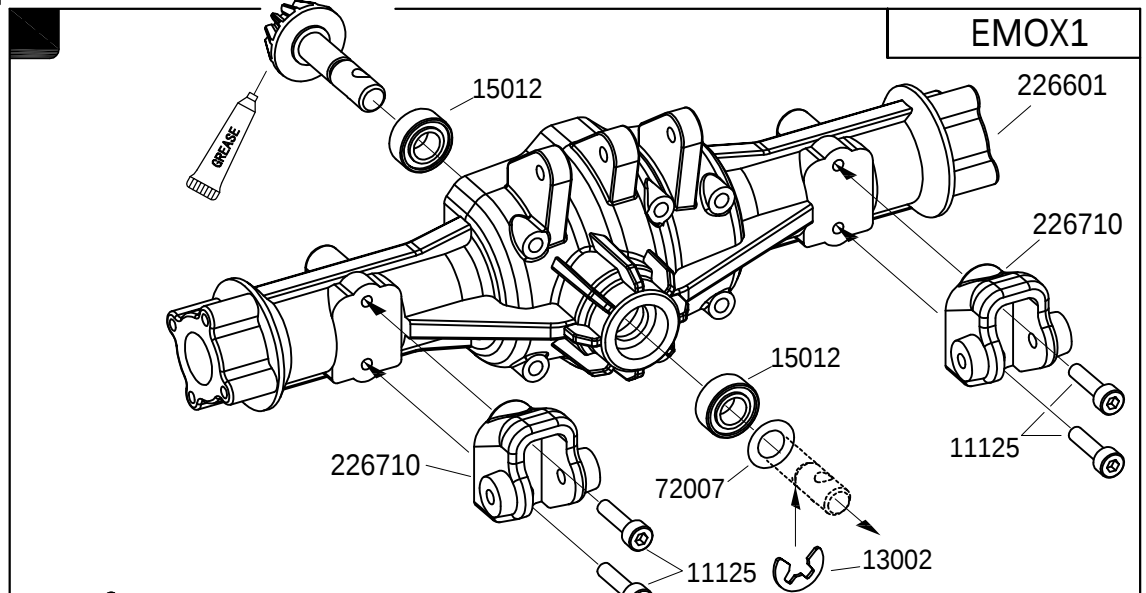


11316  M2.5x10 X8

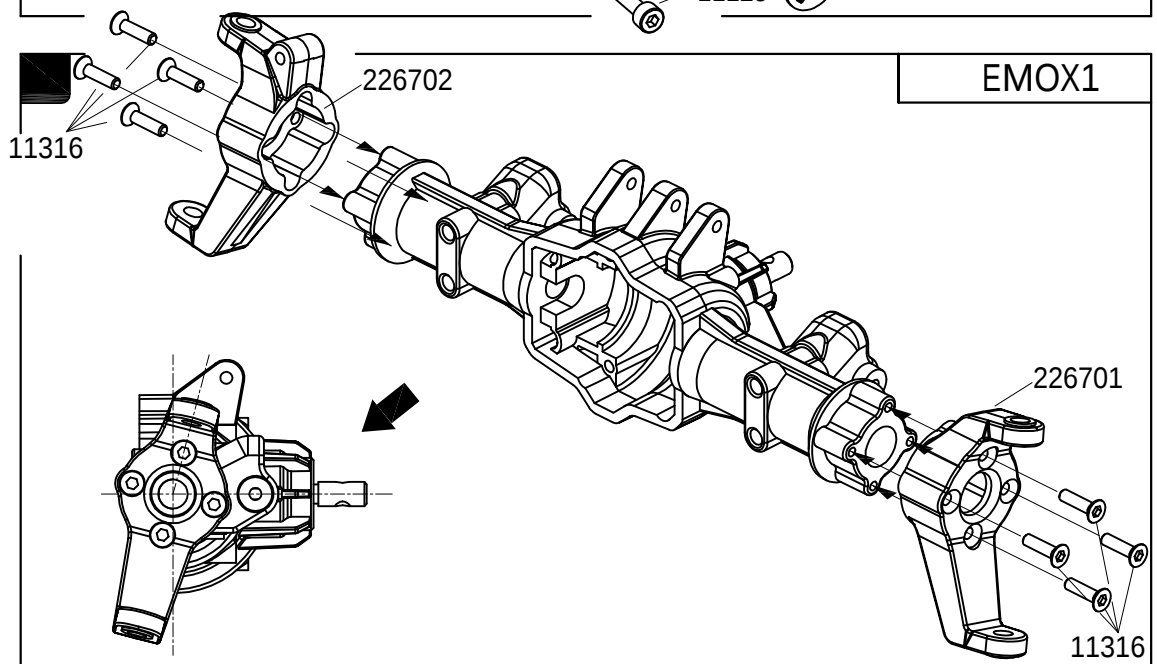
EMOX1



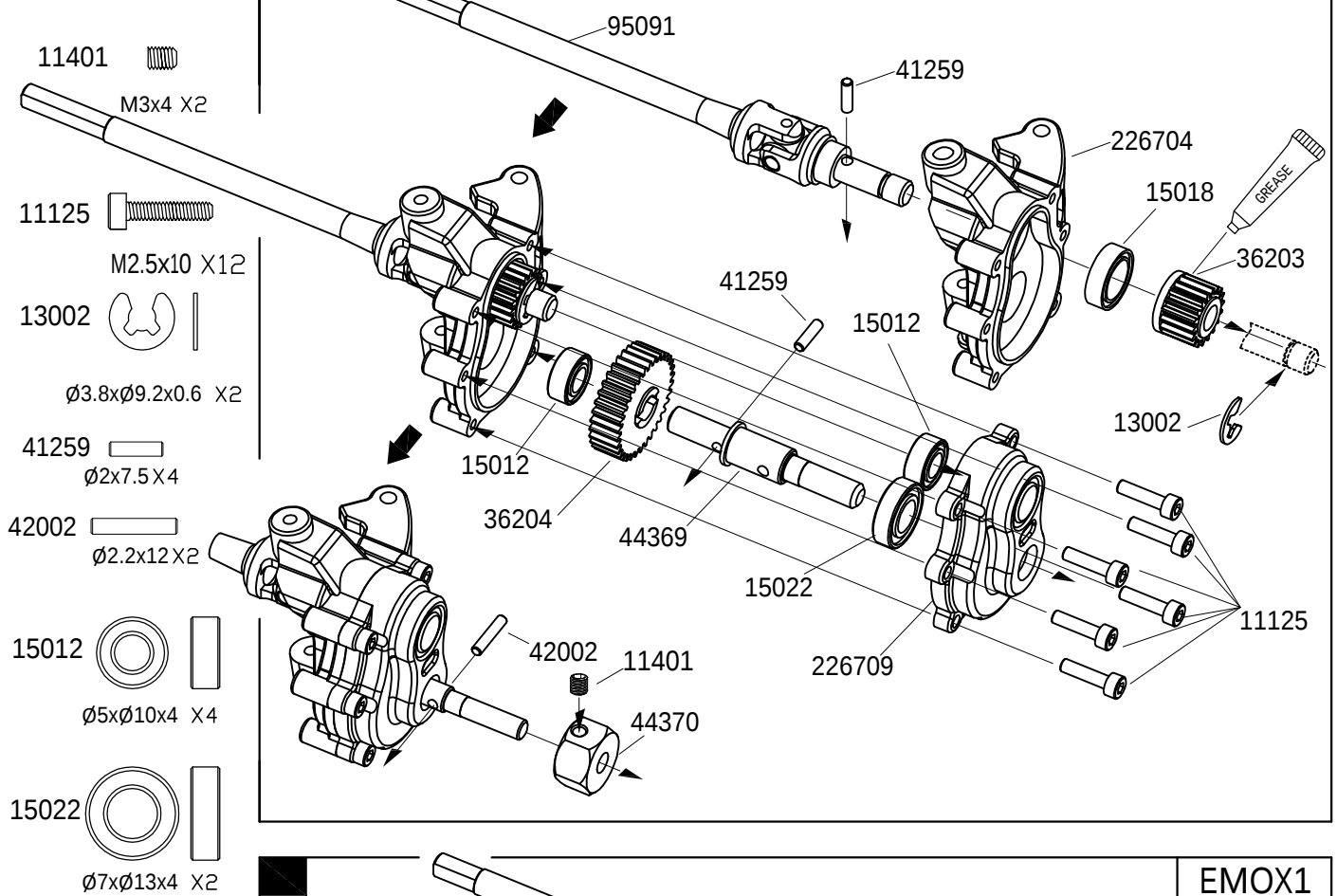
EMOX1



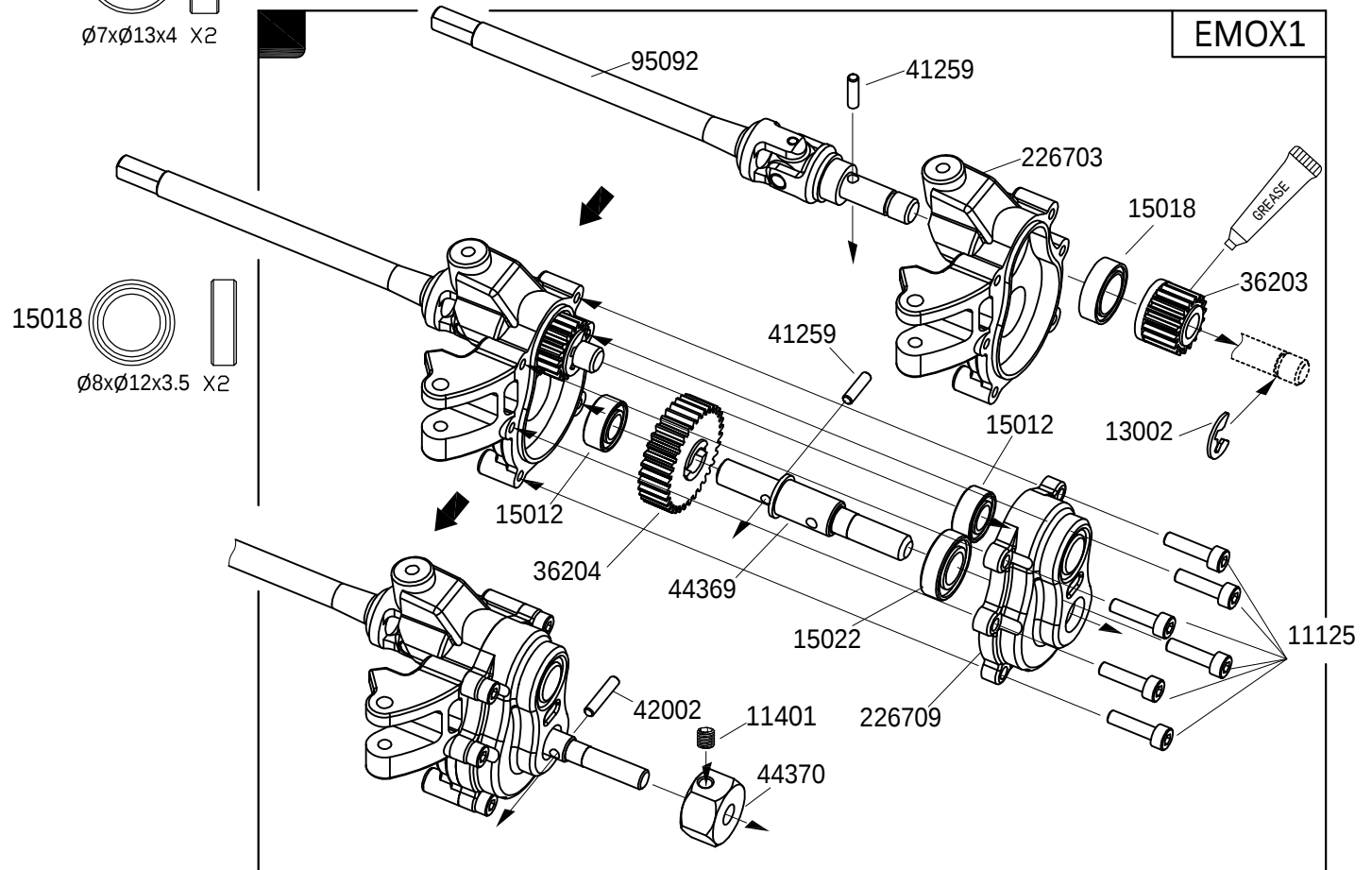
EMOX1



EMOX1

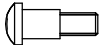


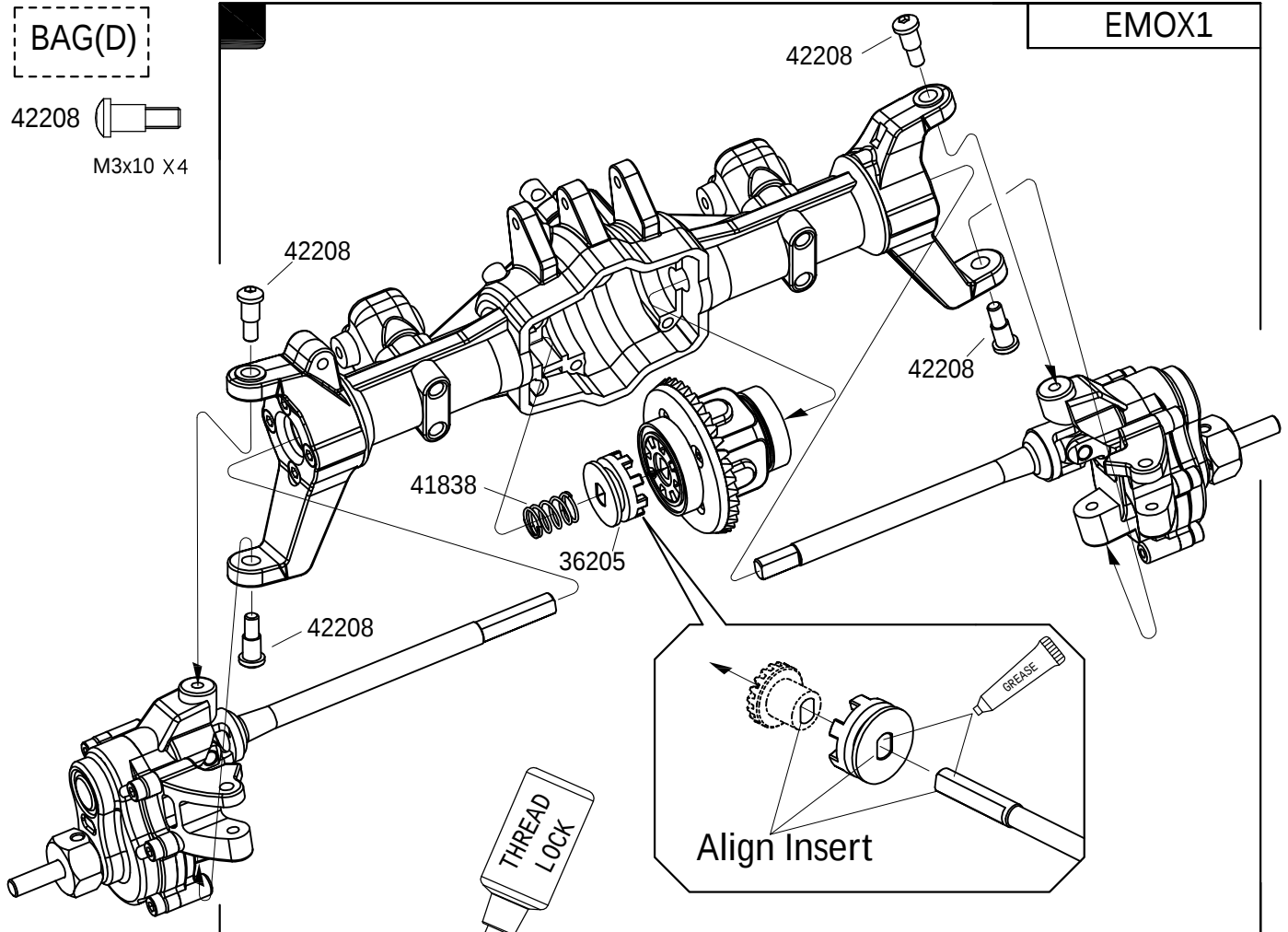
EMOX1



EMOX1

BAG(D)

42208 
M3x10 X4

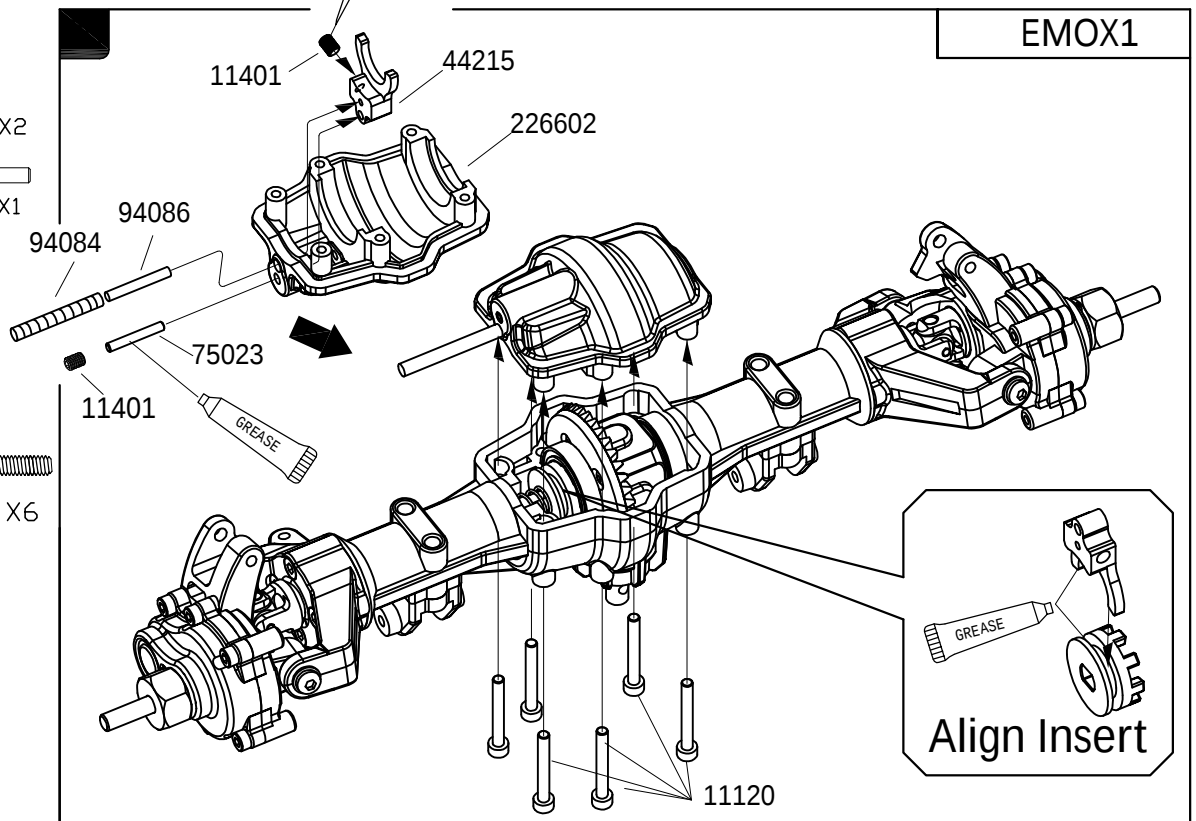


EMOX1

11401 
M3x4 X2

75023 
Ø2x14 X1

11120 
M2.5x20 X6

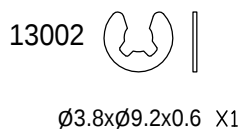


EMOX1

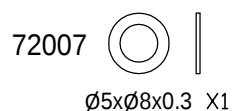
BAG(D)



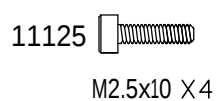
15012
 $\varnothing 5 \times \varnothing 10 \times 4$ X2



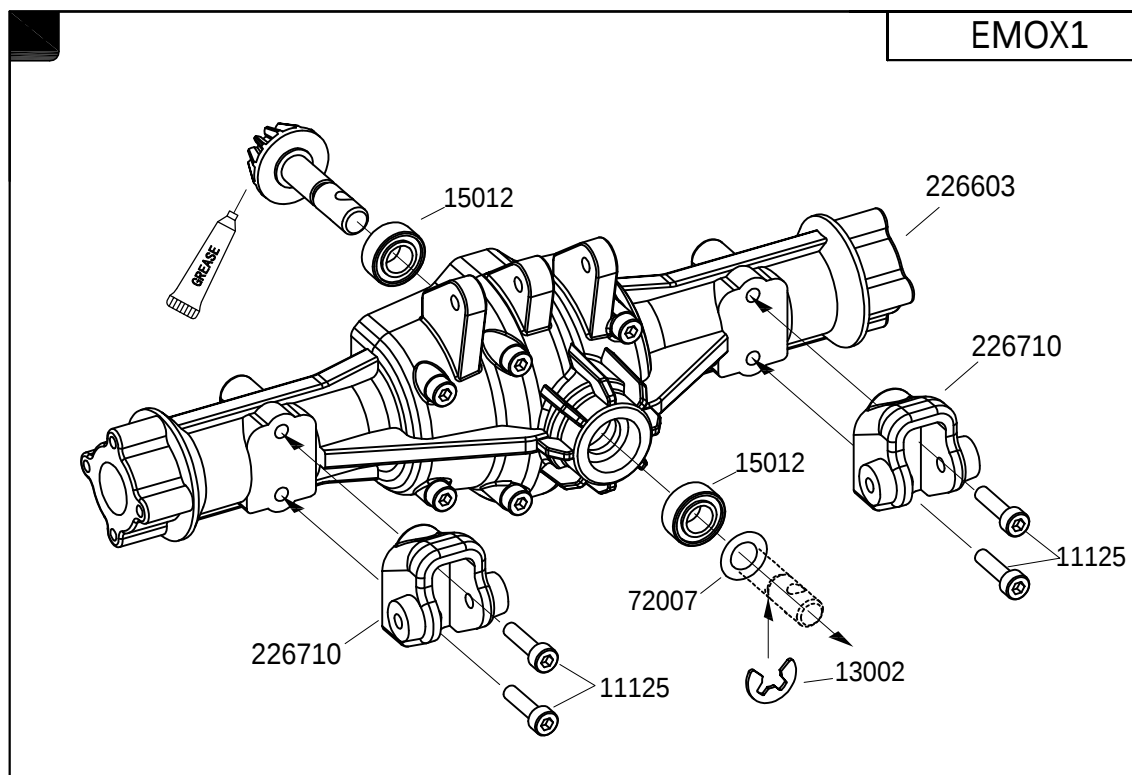
13002
 $\varnothing 3.8 \times \varnothing 9.2 \times 0.6$ X1



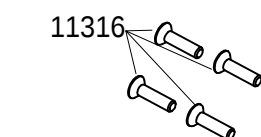
72007
 $\varnothing 5 \times \varnothing 8 \times 0.3$ X1



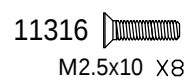
11125
 M2.5x10 X4



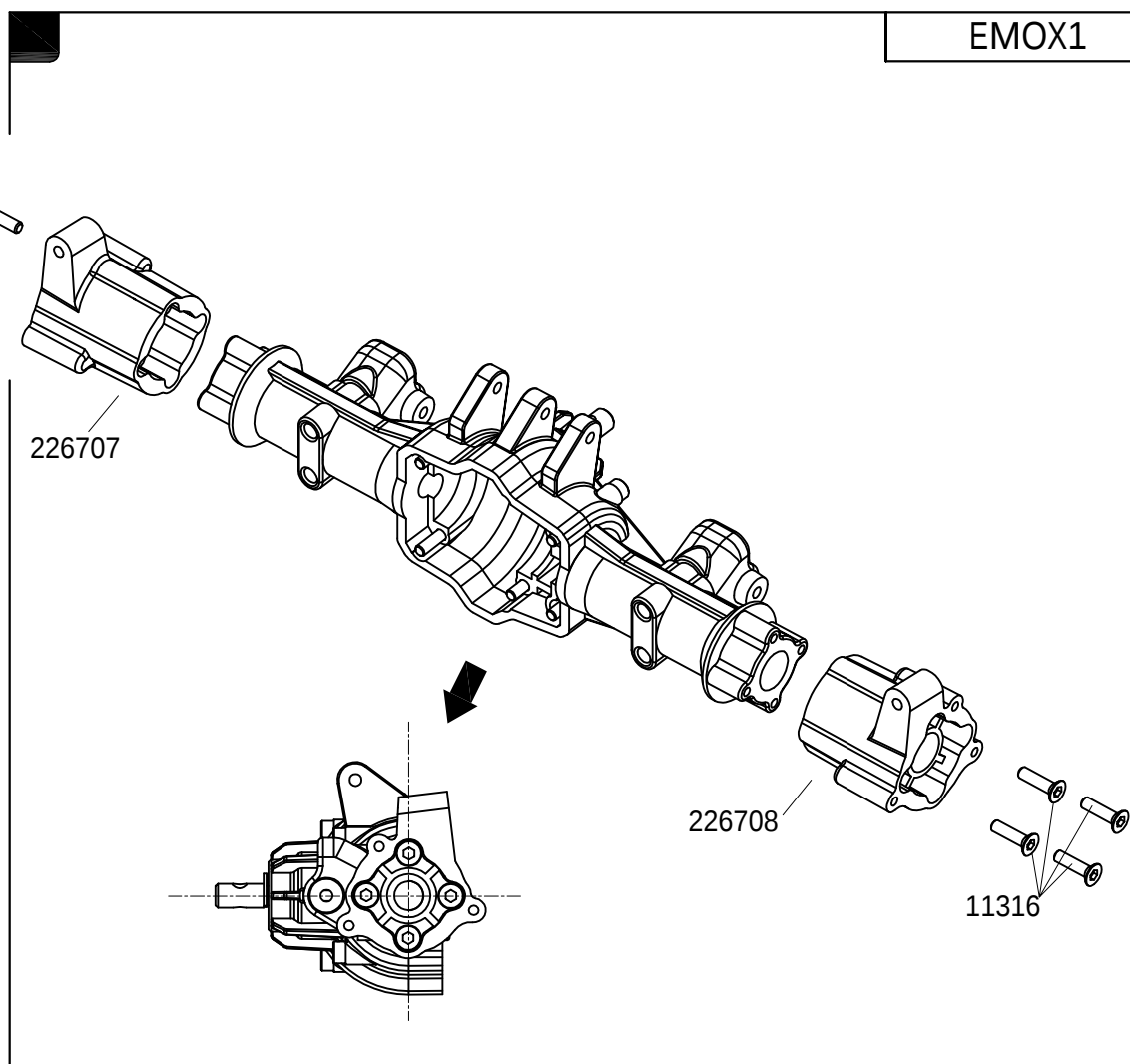
EMOX1



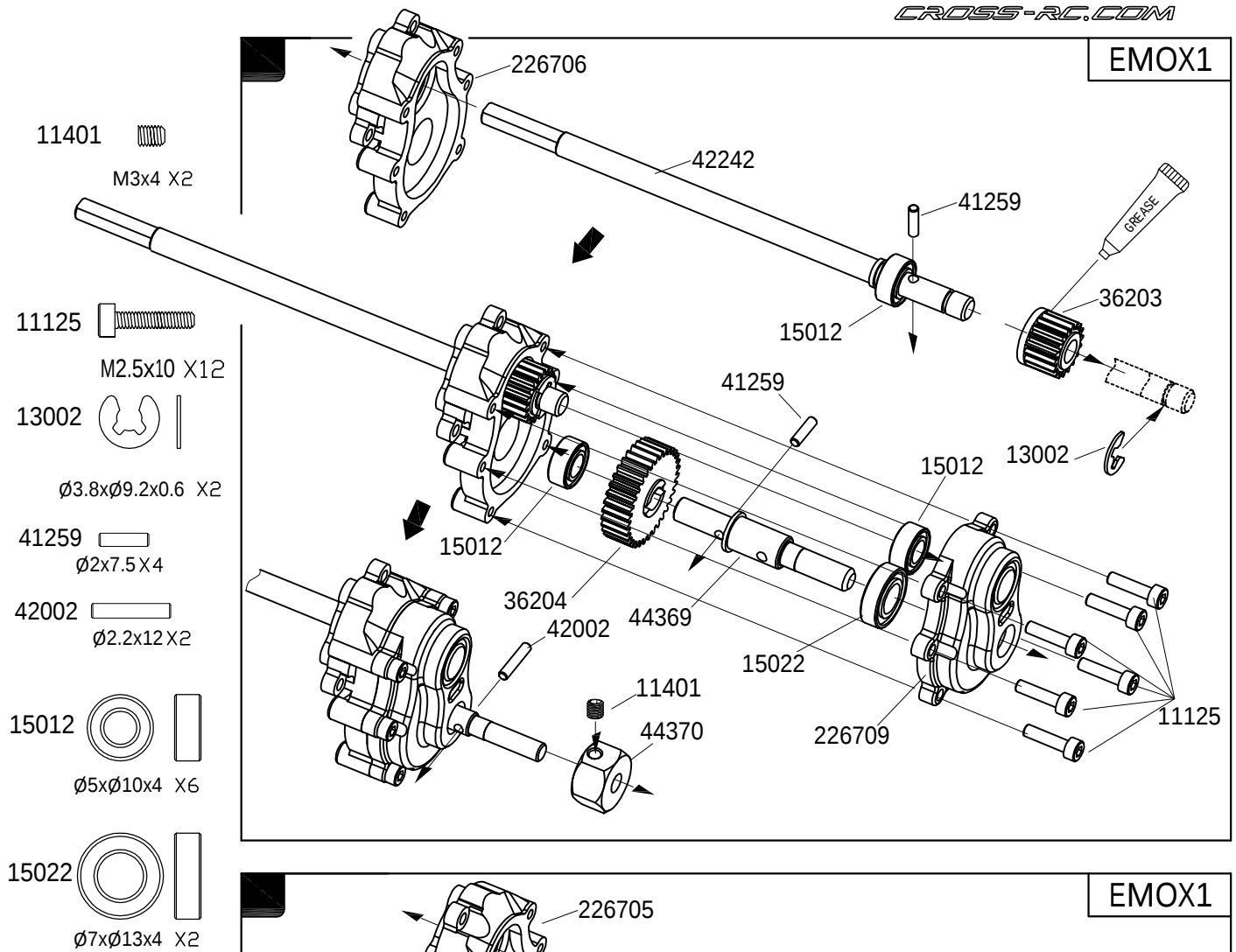
11316
 M2.5x10 X8



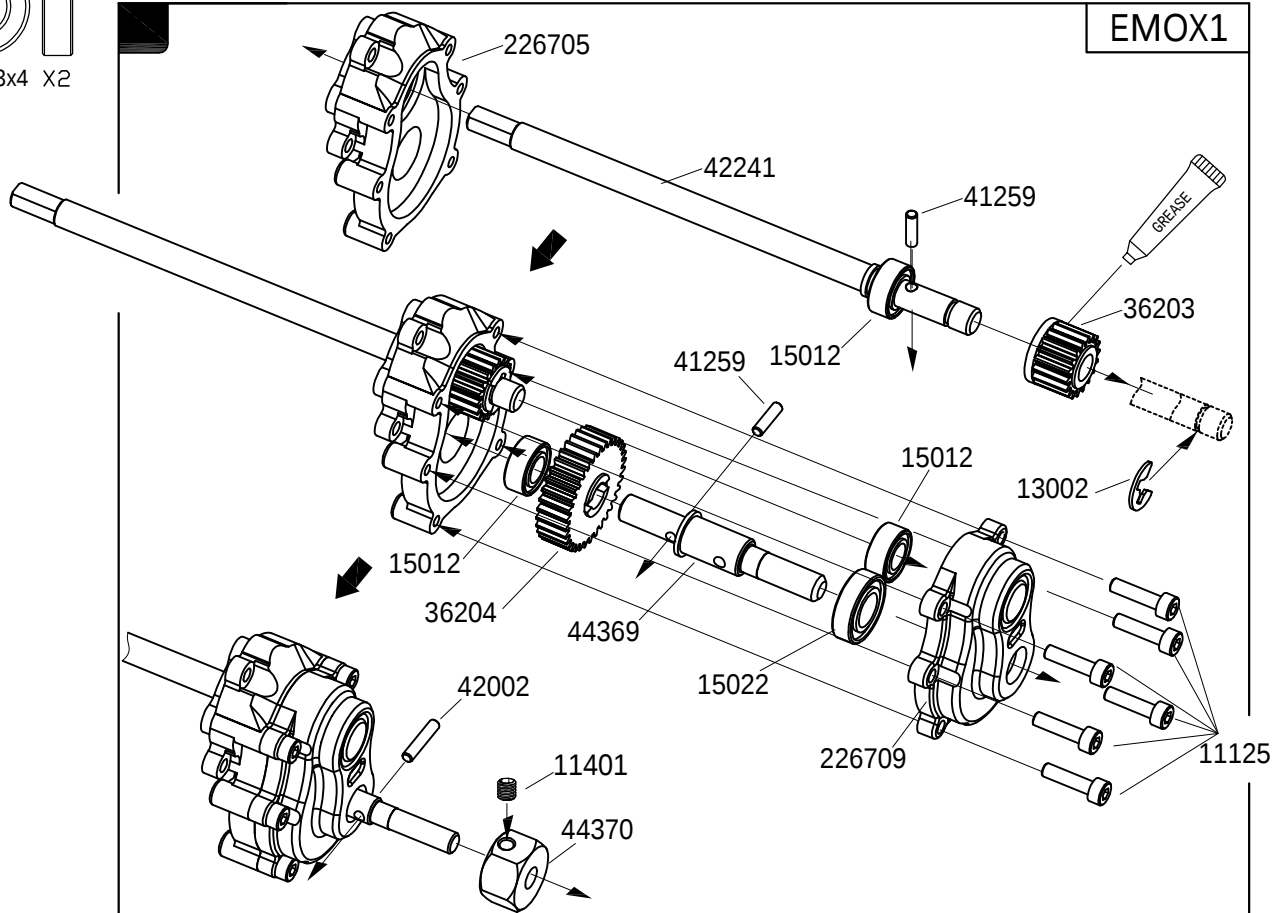
11316
 M2.5x10 X8



EMOX1



EMOX1

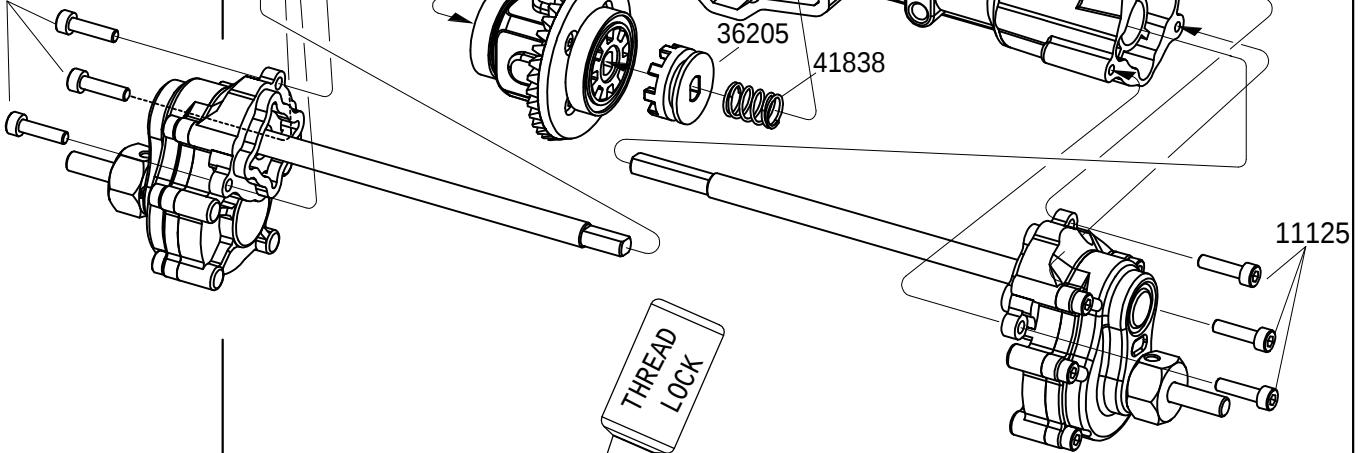


EMOX1

BAG(D)

11125  M2.5x10 X6

11125



EMOX1

11401

44215

226602

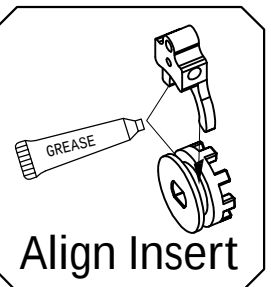
94085

94087

11401

75023

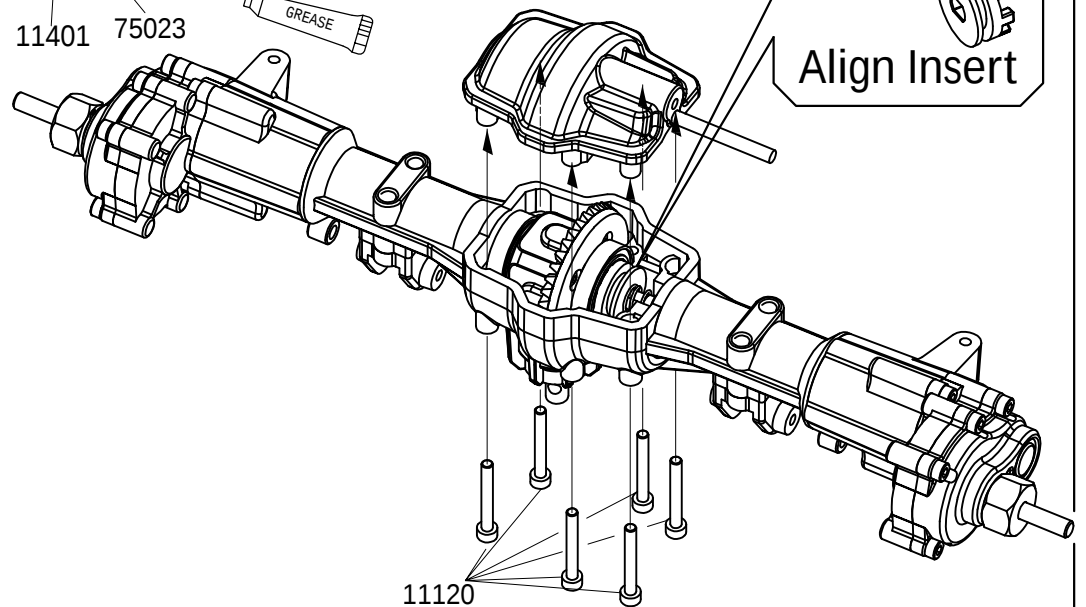
GREASE



11401  M3x4 X2

75023  Ø2x14 X1

11120  M2.5x20 X6



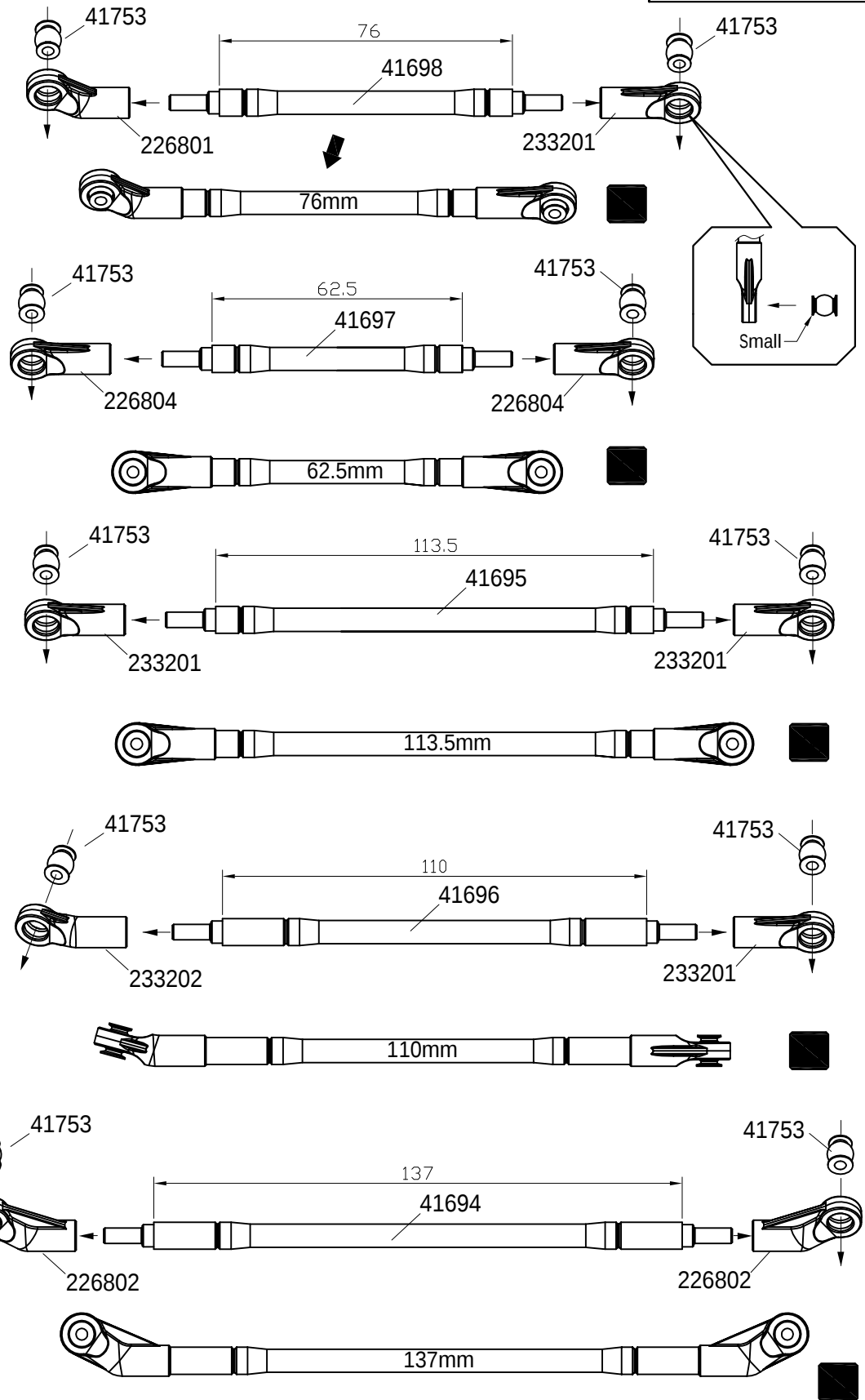
EMOX1

BAG(F)

BAG(G)



41753 X20



EMOX1

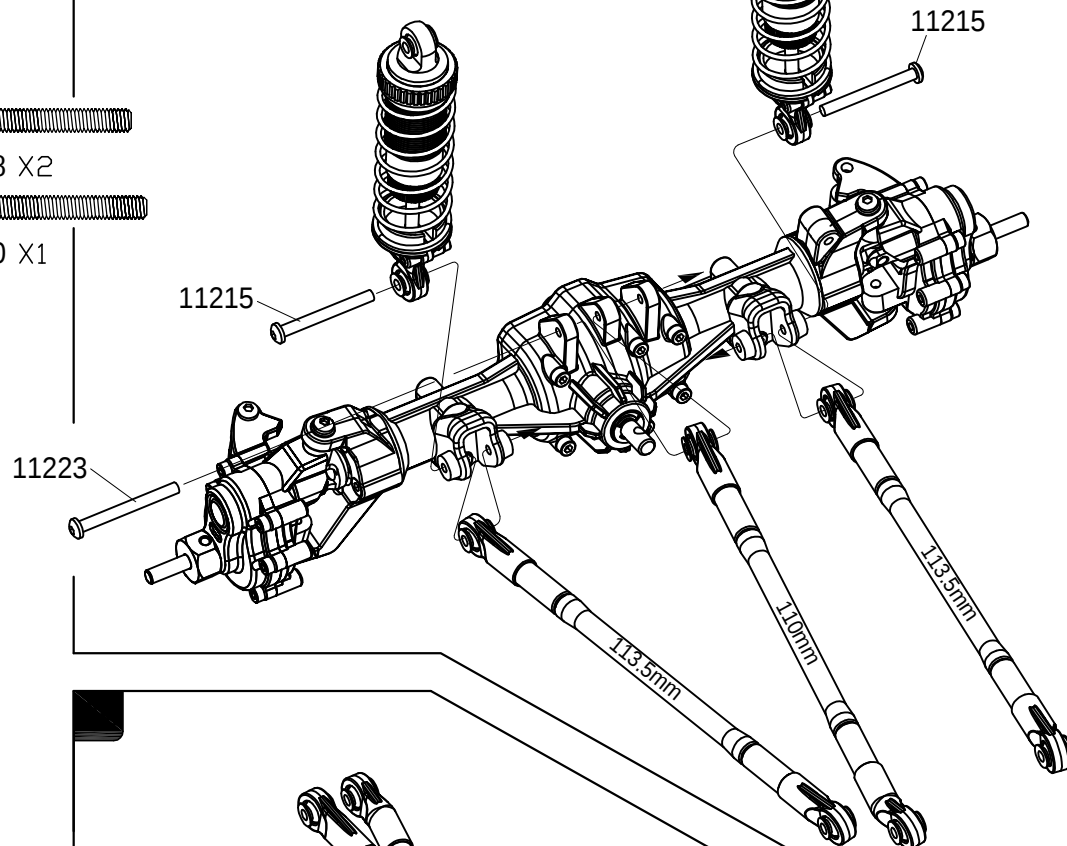
BAG(Y)

11215 

M3x28 X2

11223 

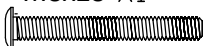
M3x30 X1

11210 

M3x16 X1

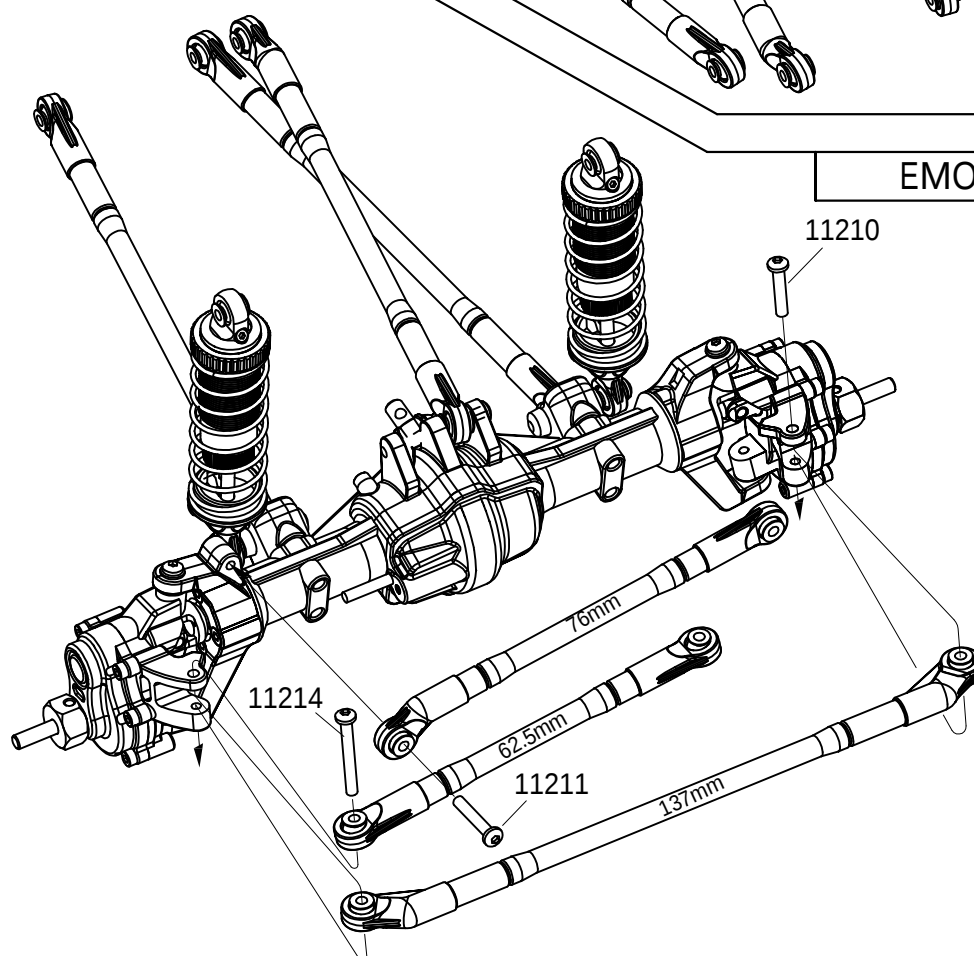
11211 

M3x18 X1

11214 

M3x25 X1

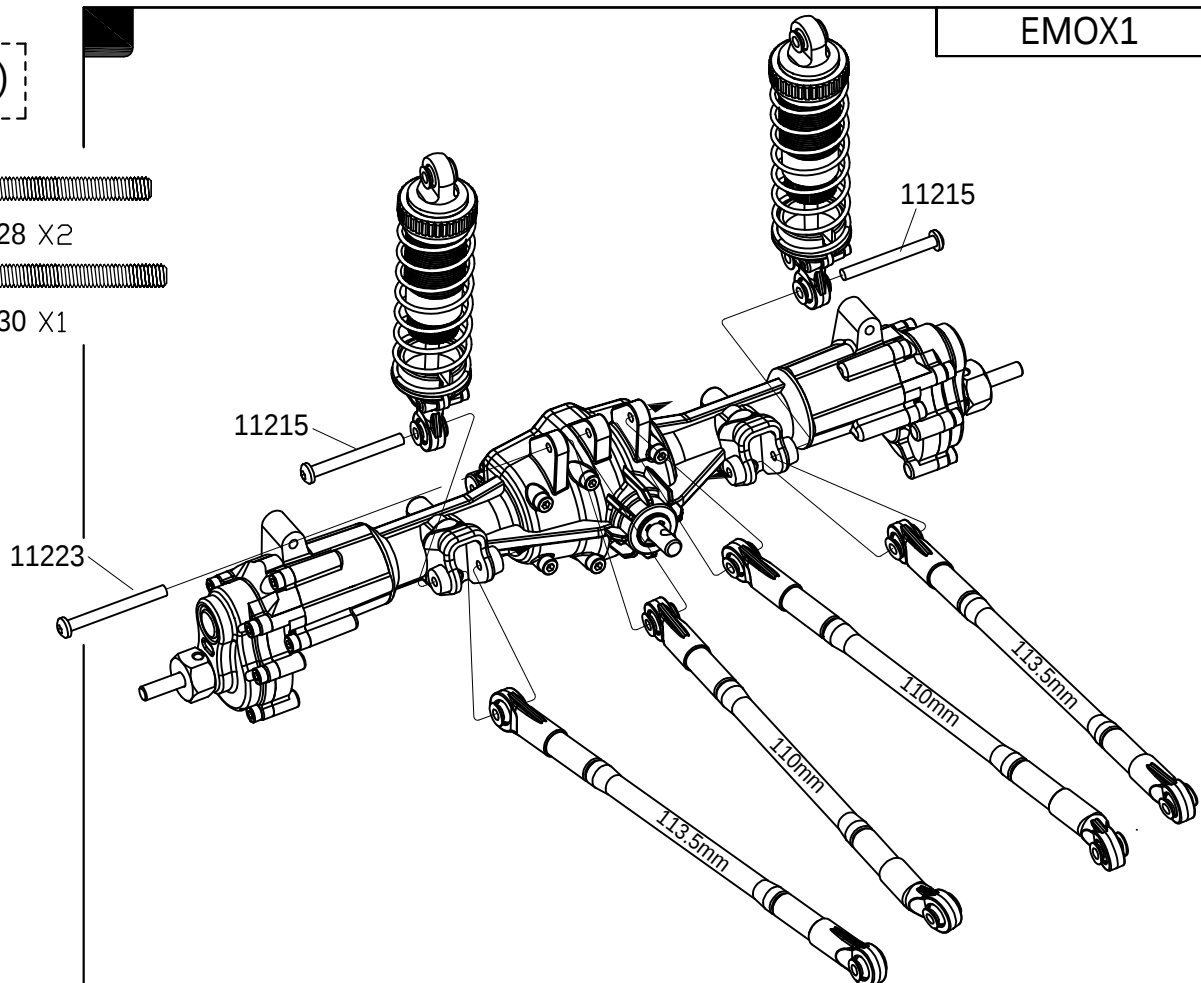
EMOX1



EMOX1

BAG(Y)

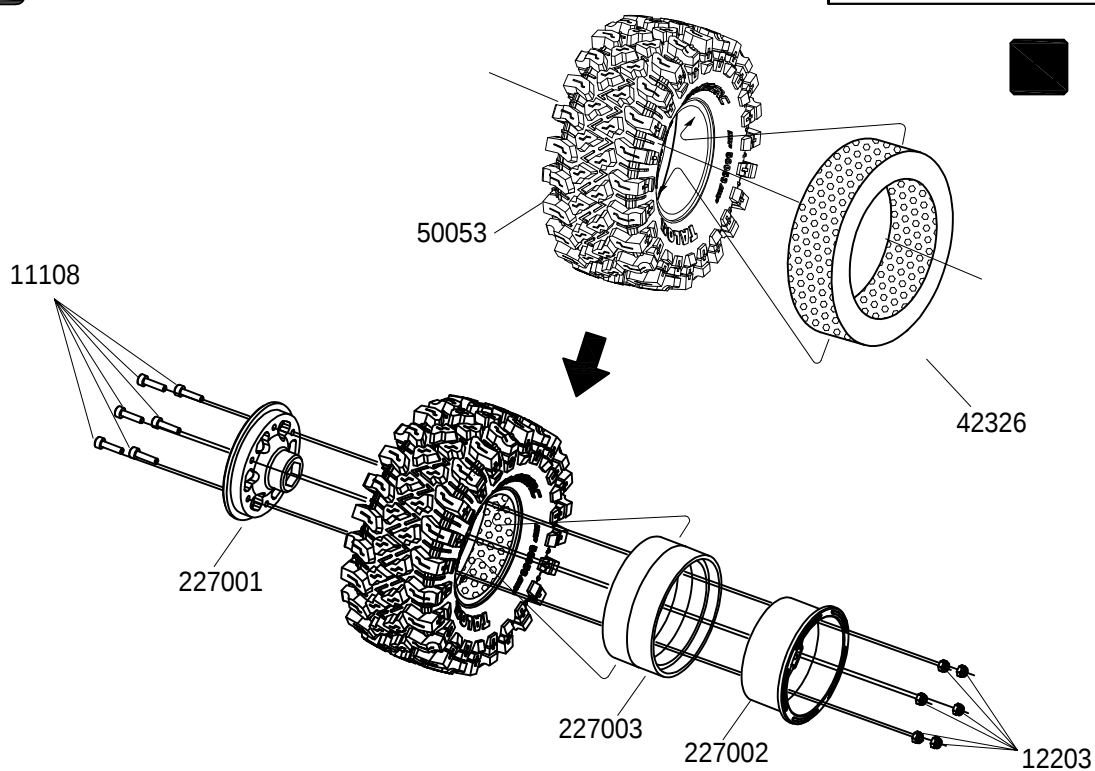
- 11215  M3x28 X2
- 11223  M3x30 X1



EMOX1

BAG(A)

- 11108  M3x12 X30
- 12203   M3 X30



This technical diagram illustrates the exploded view of the EMOX1 rear suspension system. The components are labeled with part numbers:

- 11211**: Upper control arm
- 11209**: Coil spring
- 12303**: Shock absorber
- 11213**: Lower control arm
- 11214**: Rear axle housing
- 11413**: Rear axle assembly
- 11208**: Rear wheel hub
- 11214**: Rear wheel hub (also labeled)
- 11106**: Rear wheel hub (also labeled)
- 226903**: Rear wheel hub (also labeled)
- 11210**: Rear wheel hub (also labeled)

The diagram shows the assembly of the rear suspension, including the upper and lower control arms, coil spring, shock absorber, rear axle housing, rear axle assembly, rear wheel hub, and rear wheel hub (also labeled).

BAG(Y)

11211 

M3x18 X2

11213 

M3x22 X2

11214 

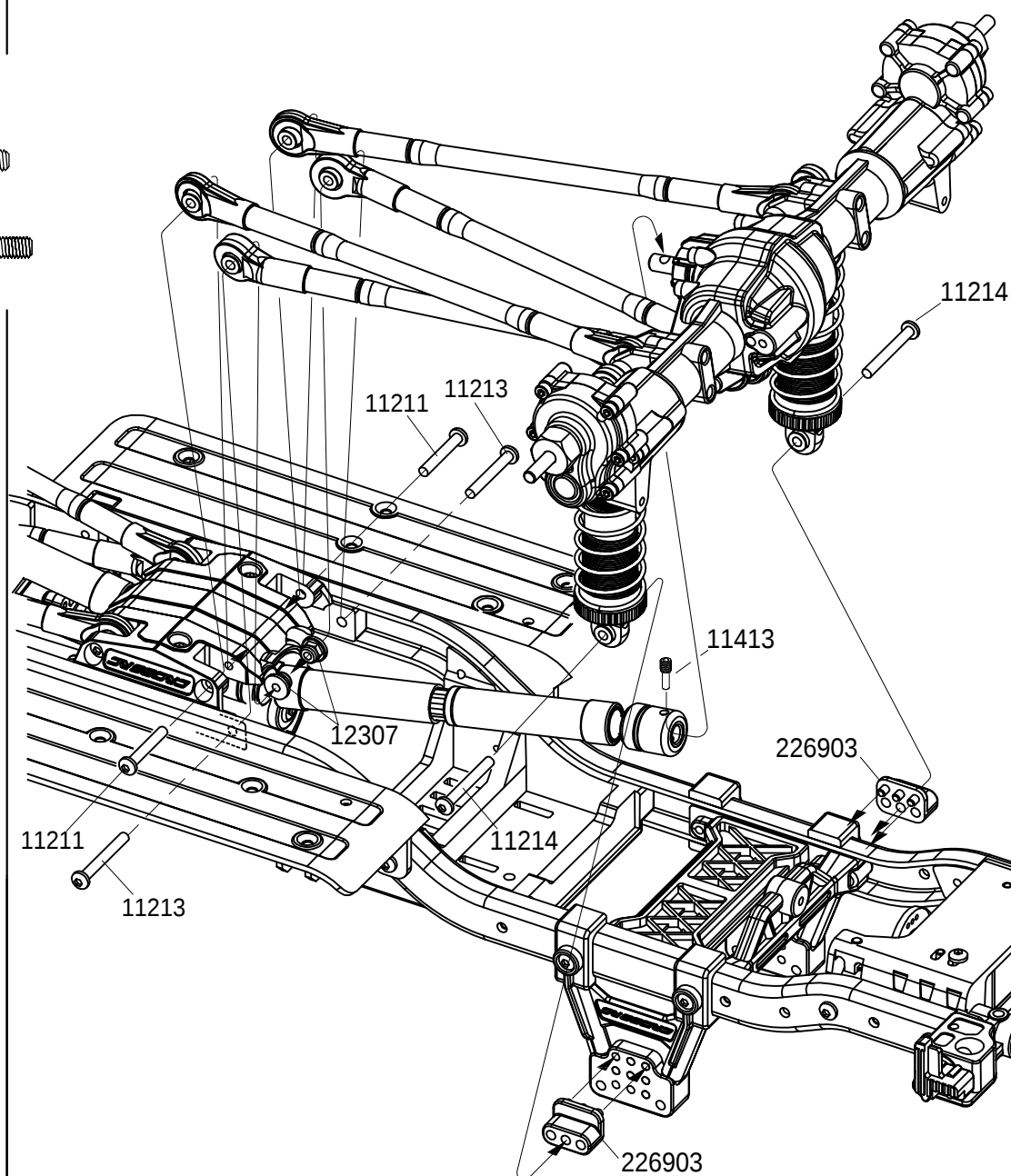
M3x25 X2

12307 

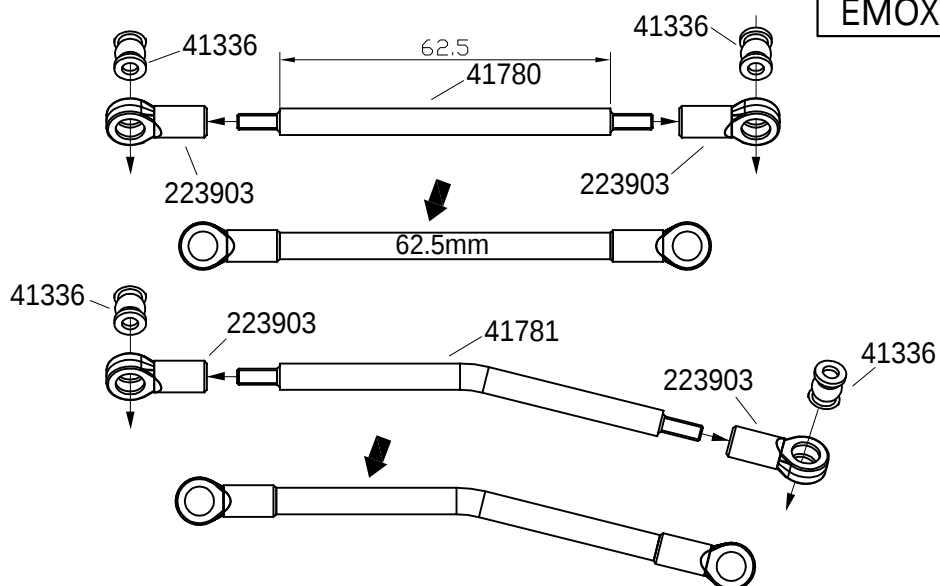
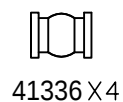
M3 X2

11413 

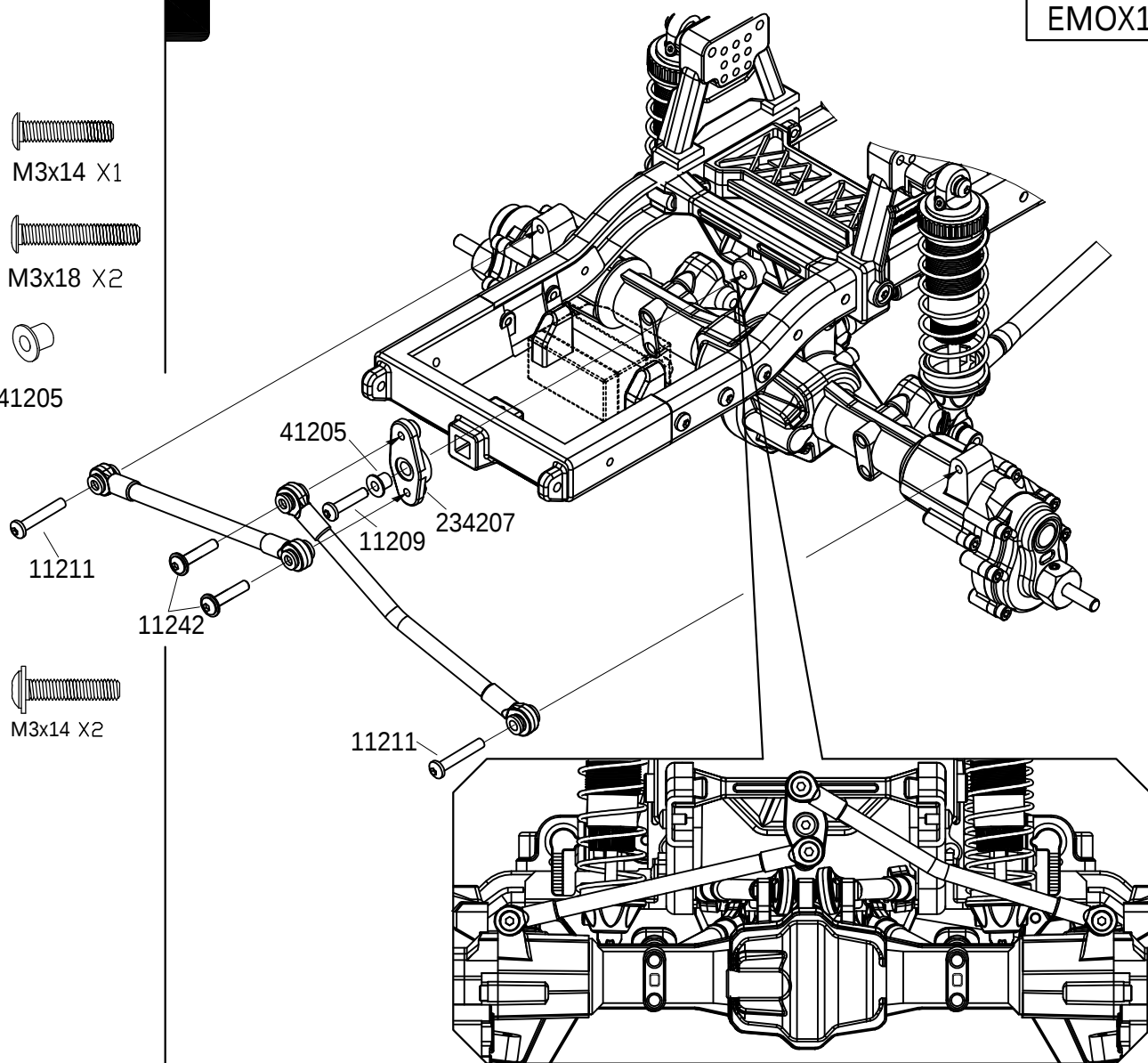
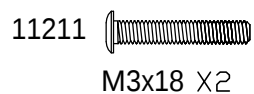
M4x13.5 X1



EMOX1

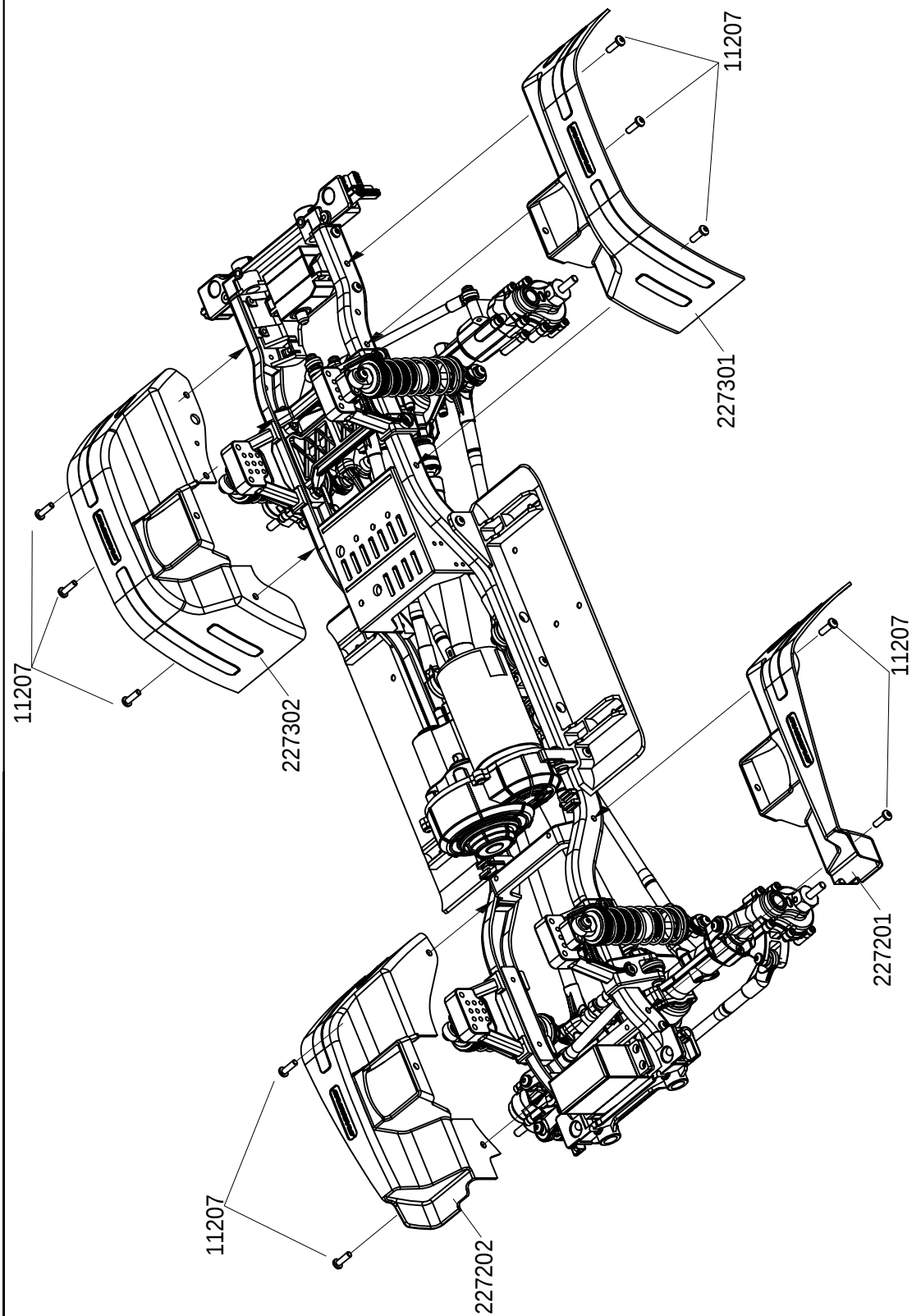


EMOX1



BAG(Y)

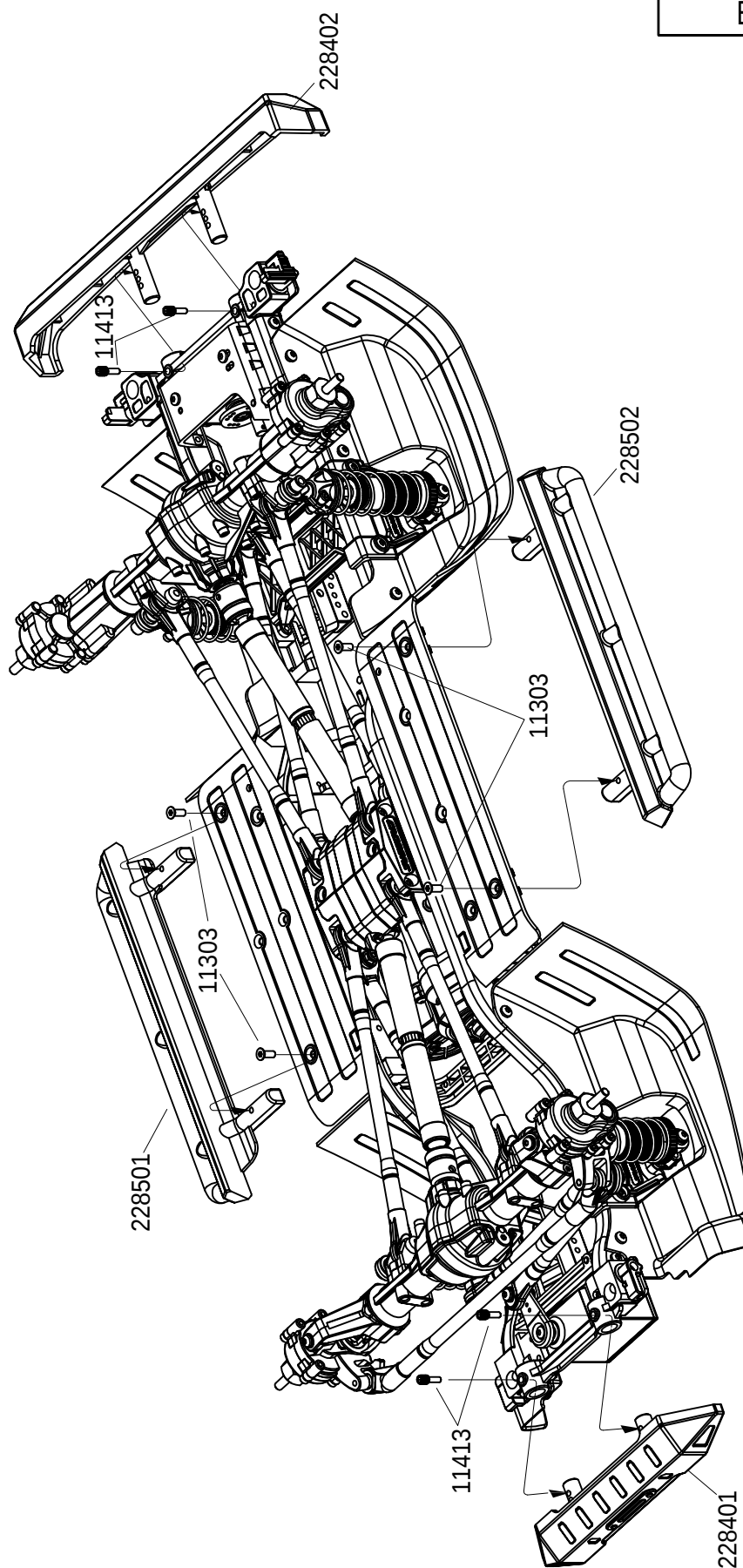
11207 
M3x10 X10



BAG(Y)

11303 
M3x8 X4

11413 
M4x13.5 X4



EMOX1

BAG(Y)

11239 
M3x8 X10

BAG(Z)

11227 
M2.5x8 X2

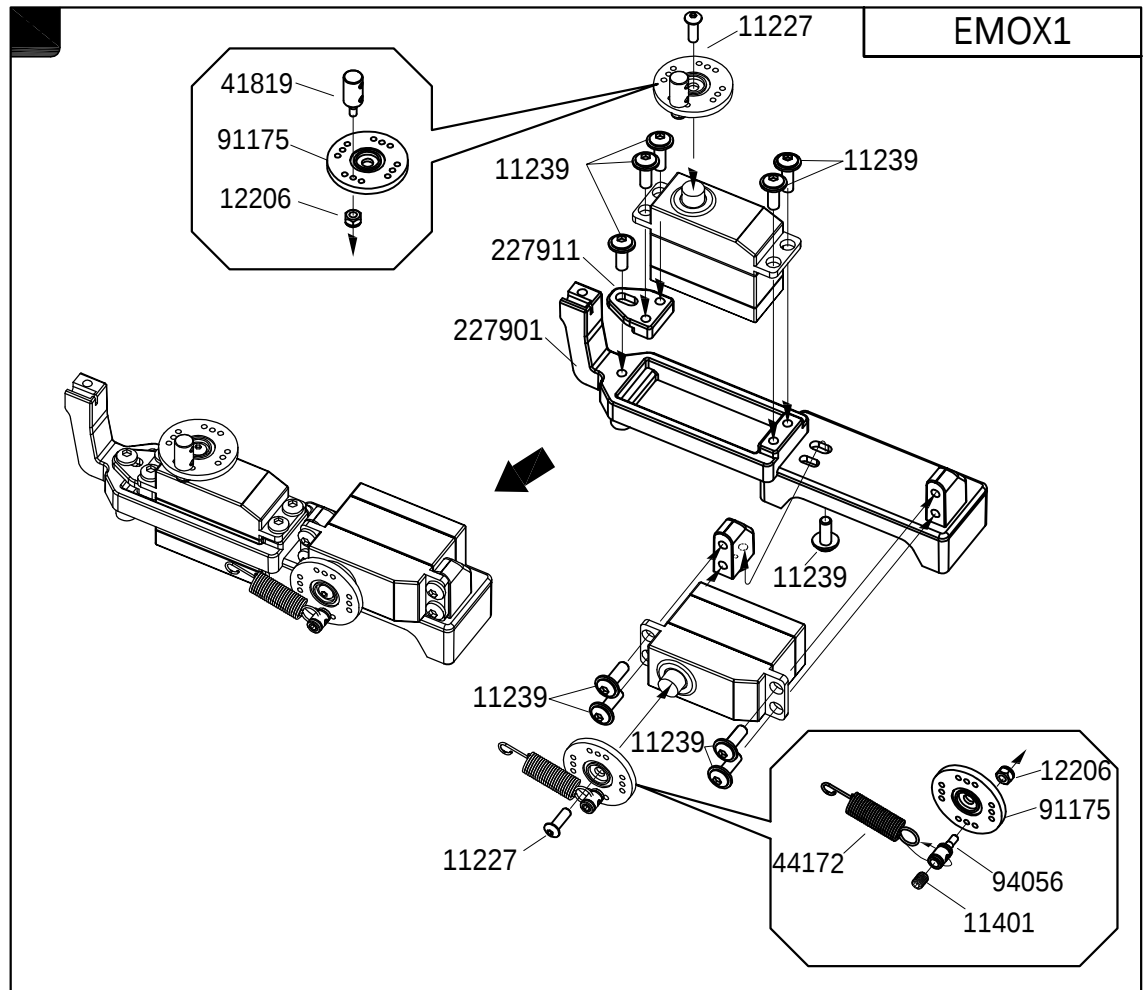
12206 
M2 X2

11401 
M3x4 X1


44172 X1


41819 X1


94056 X1

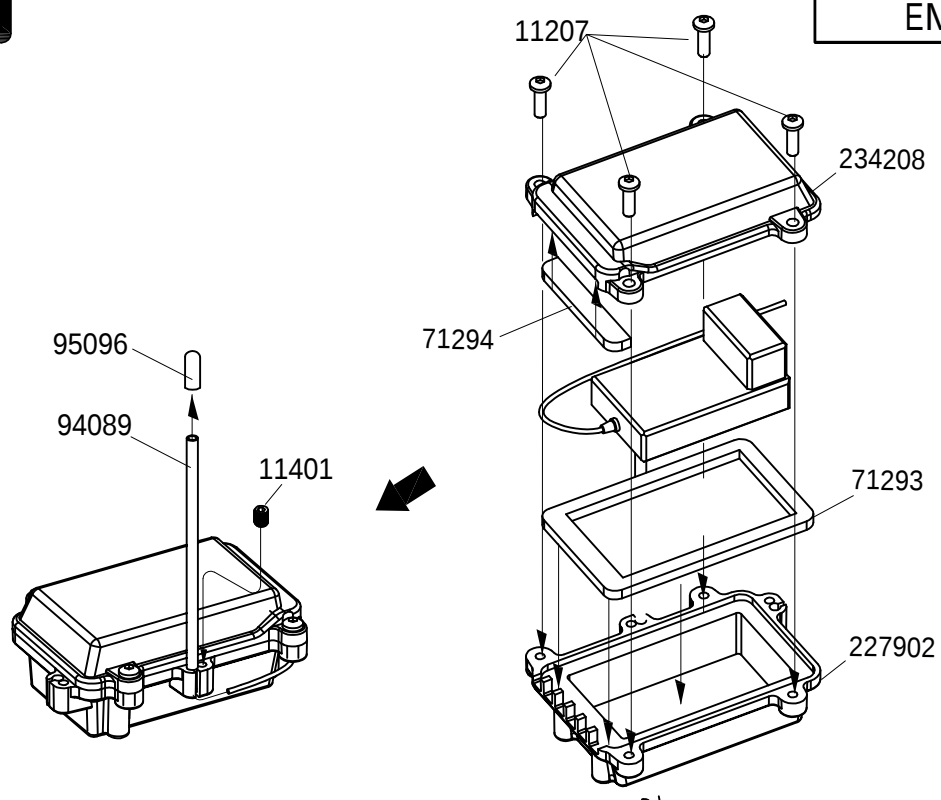


EMOX1

BAG(Y)

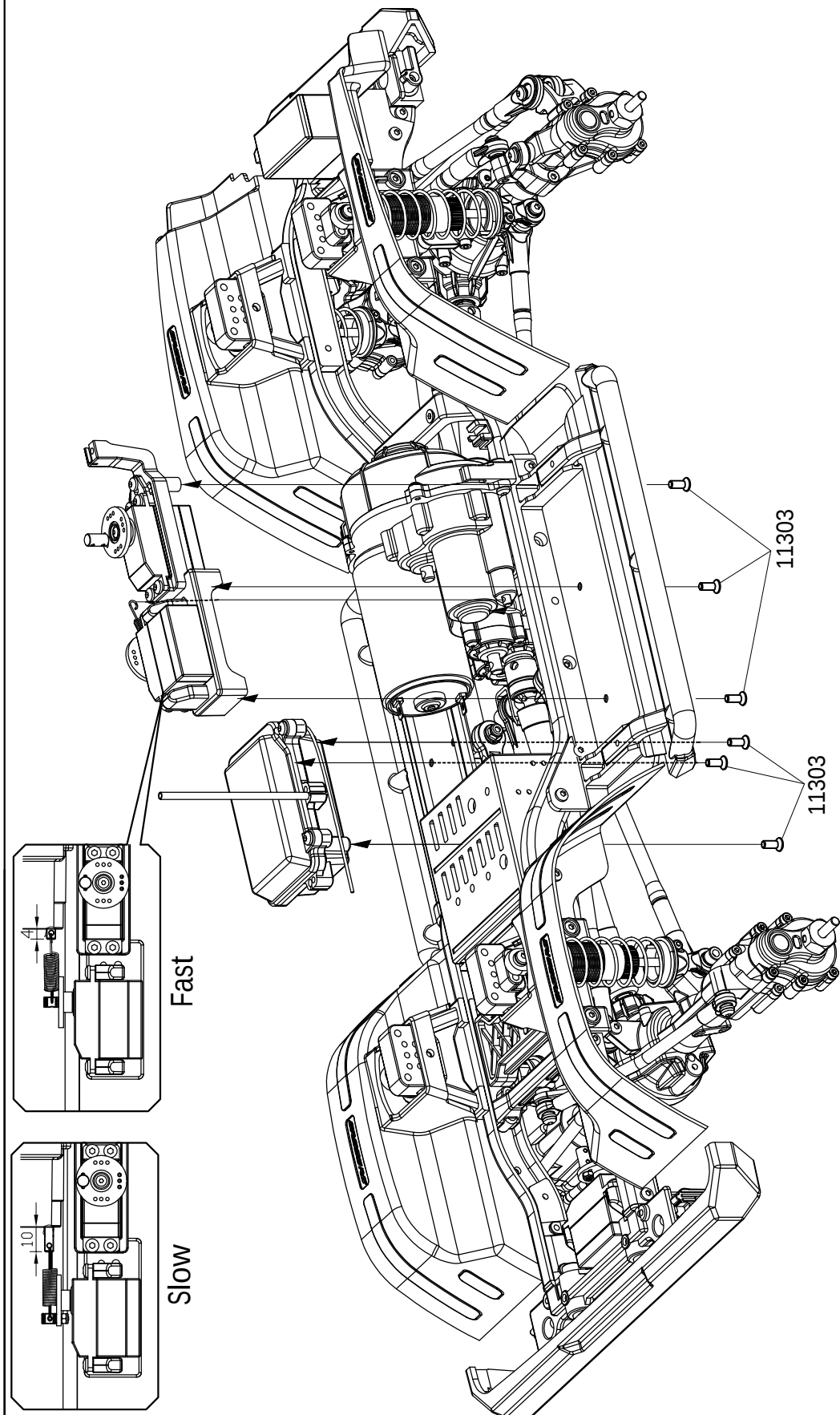
11401 
M3x4 X1

11207 
M3x10 X4



BAG(Y)

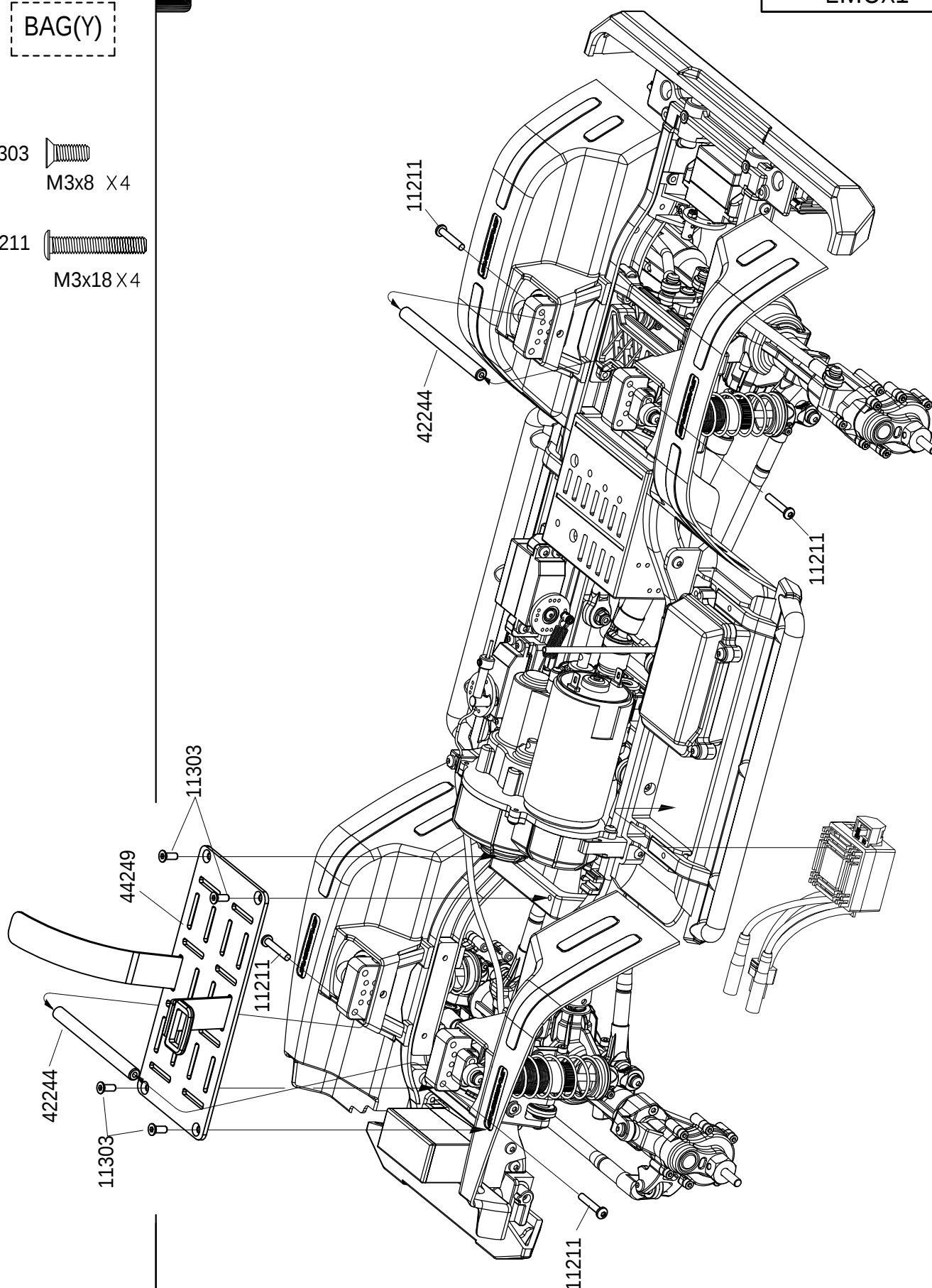
11303 
M3x8 X6



BAG(Y)

11303 
M3x8 X4

11211 
M3x18 X4



EMOX1

BAG(Y)

11239 
M3x8 X1

BAG(Z)

11401 
M3x4 X2

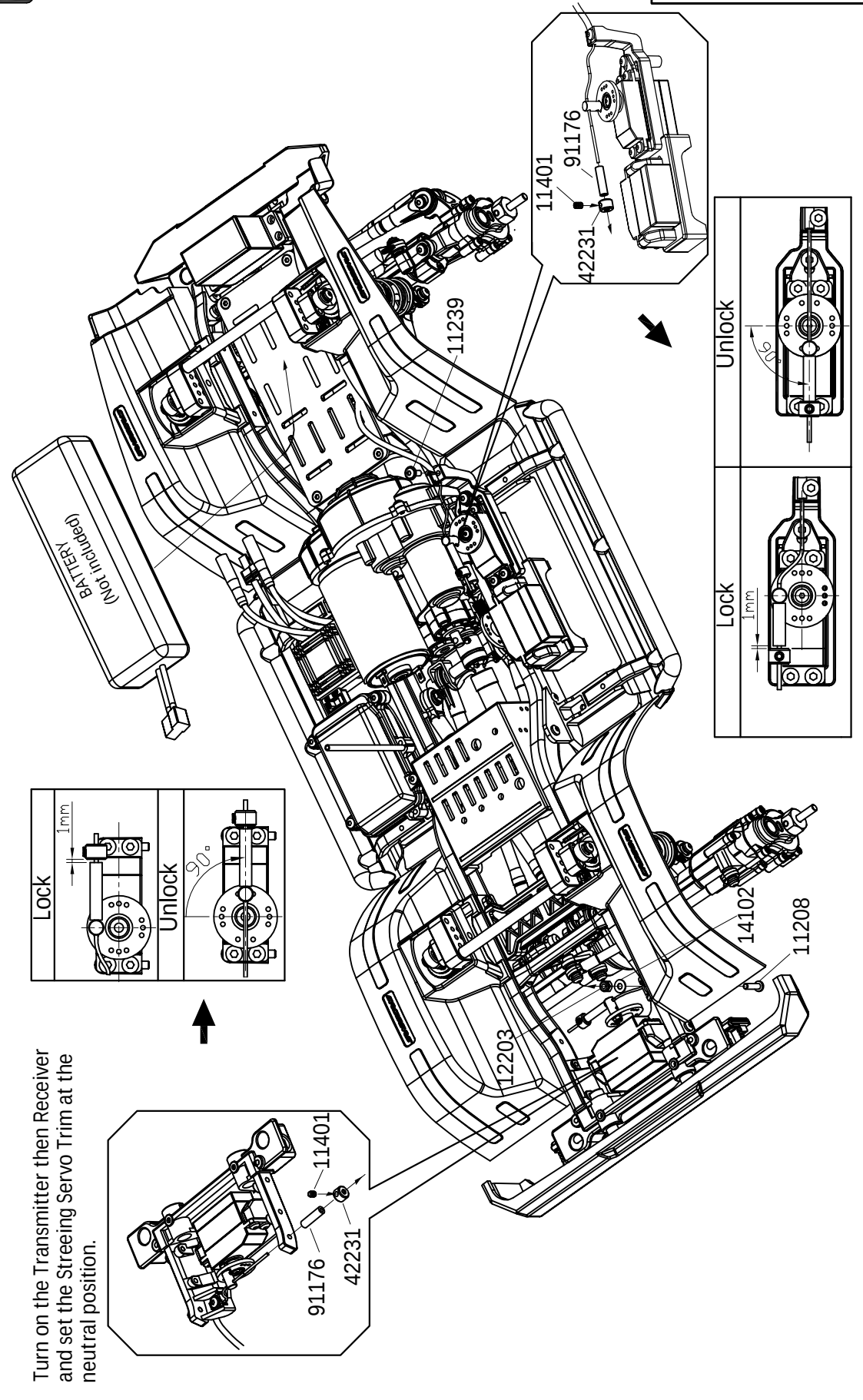

42231 X2


91176 X2

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

12203  
M3 X1

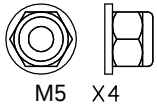
11208 
M3x12 X1



EMOX1

BAG(A)

12305



227004

12305

12305

227004

12305

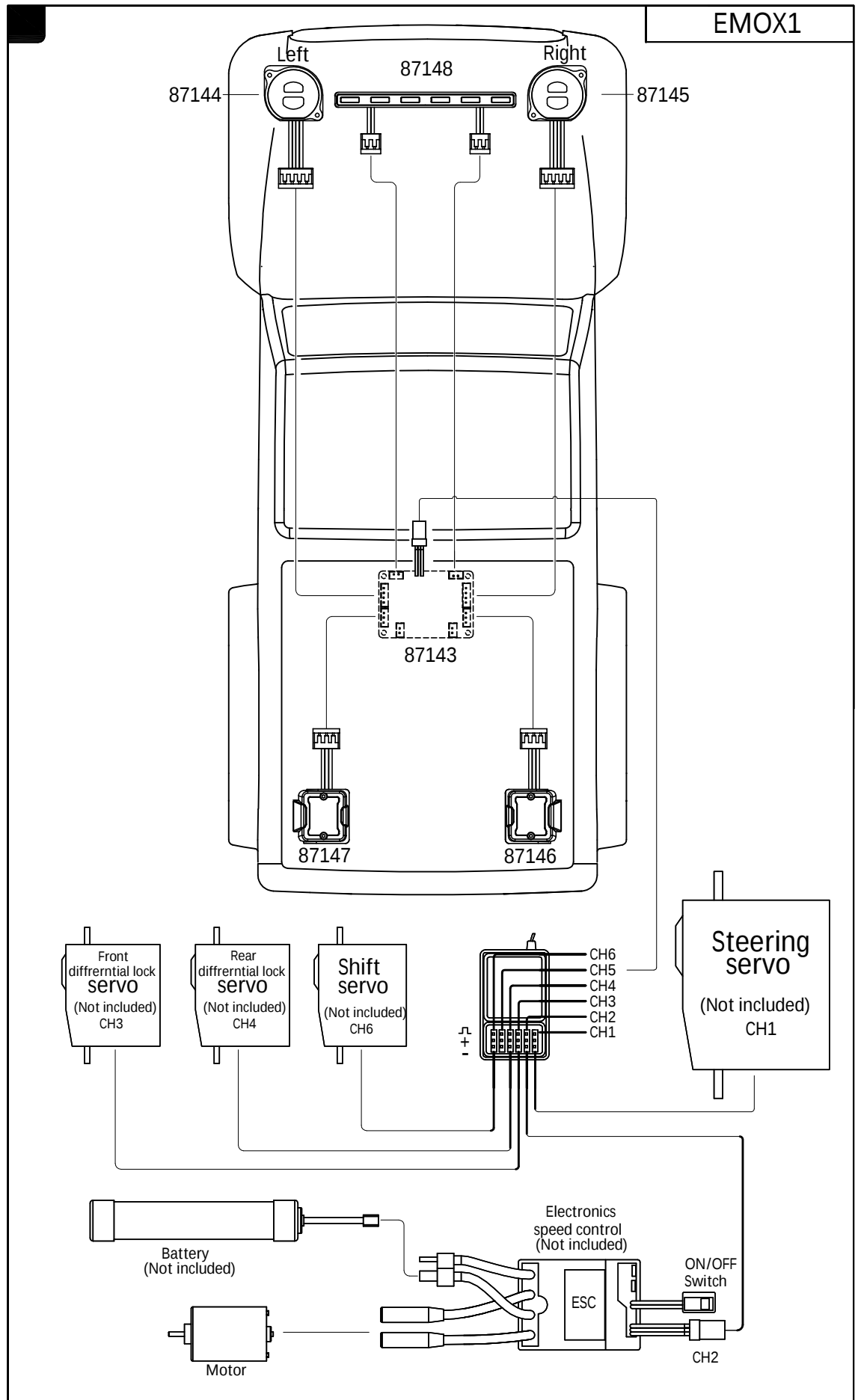
227004

12305

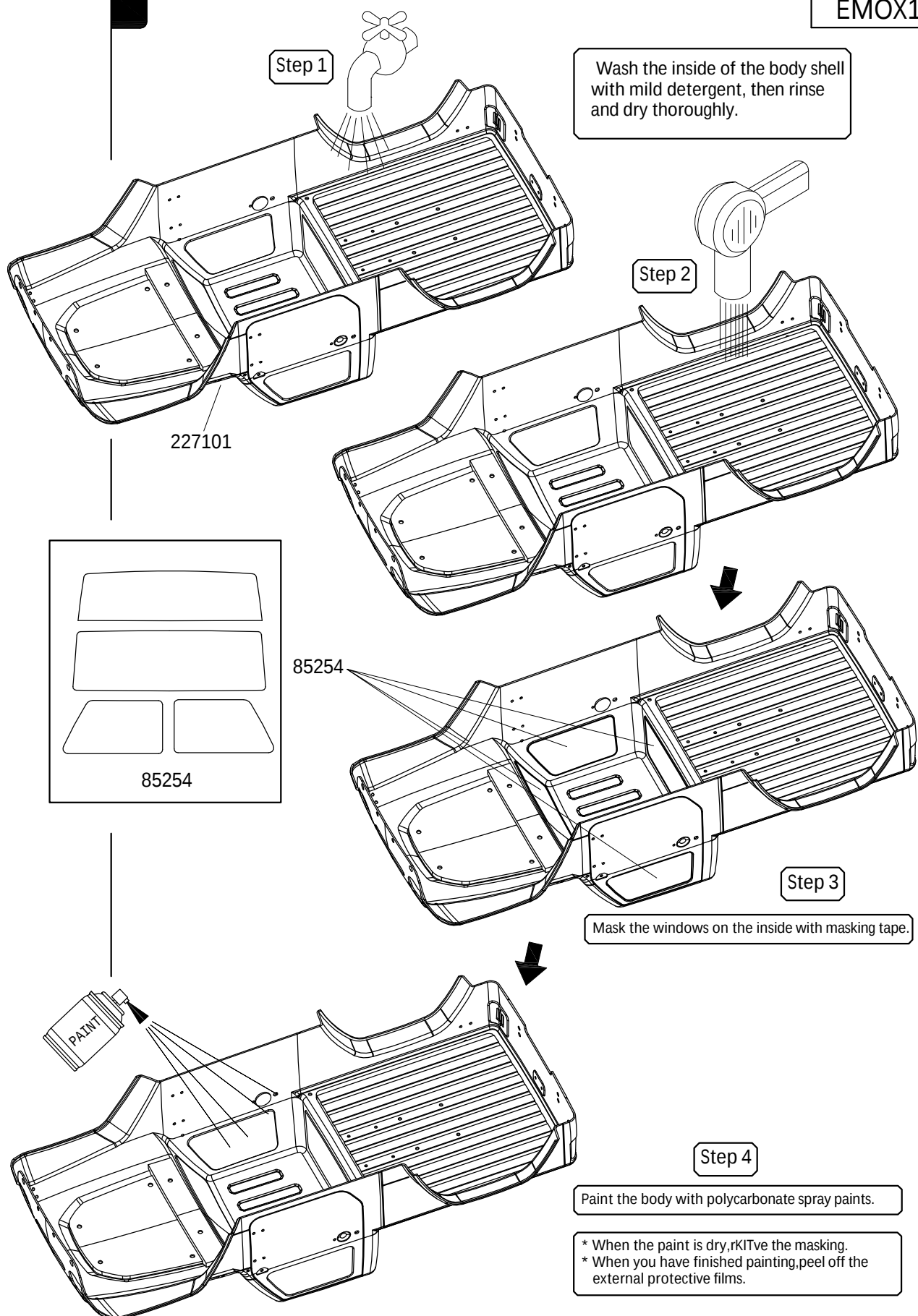
227004

EMOX1

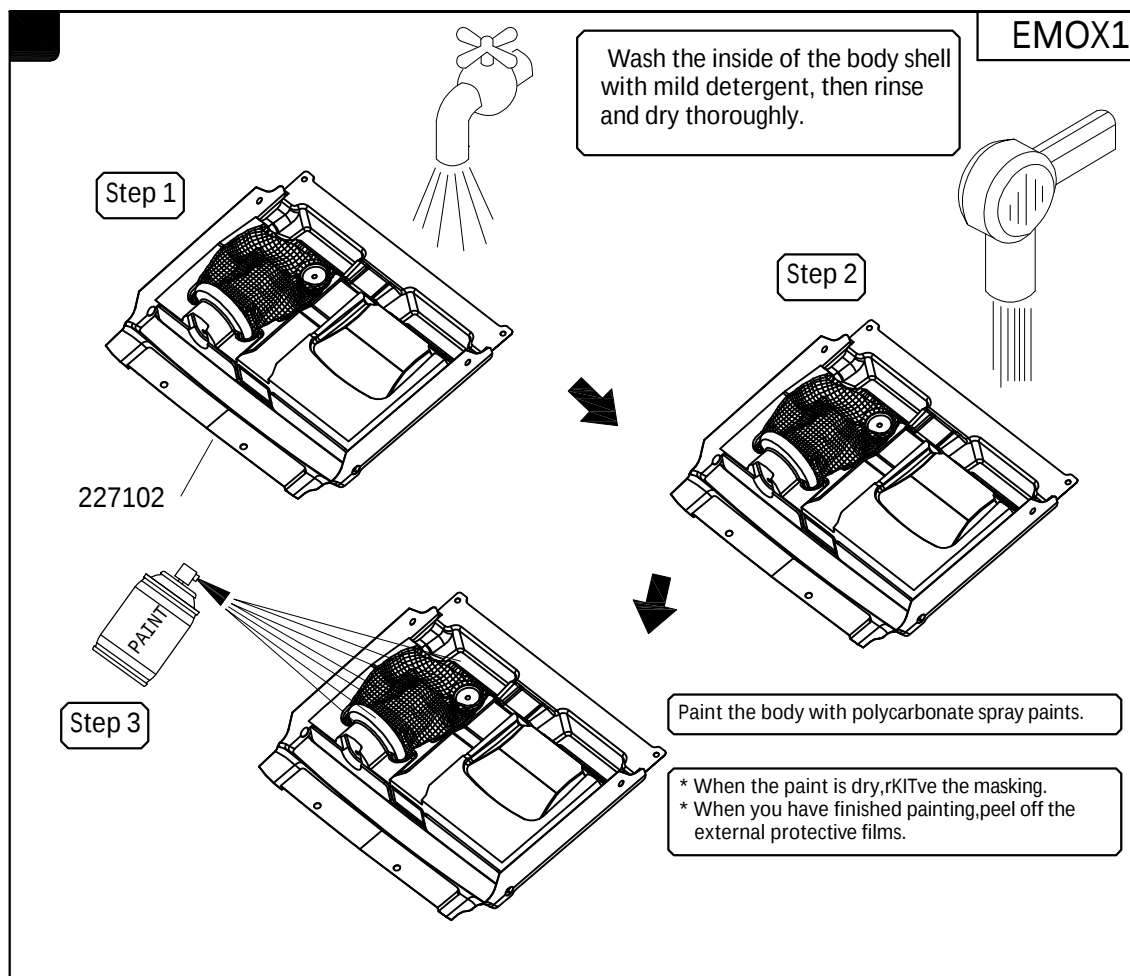
BAG(V)



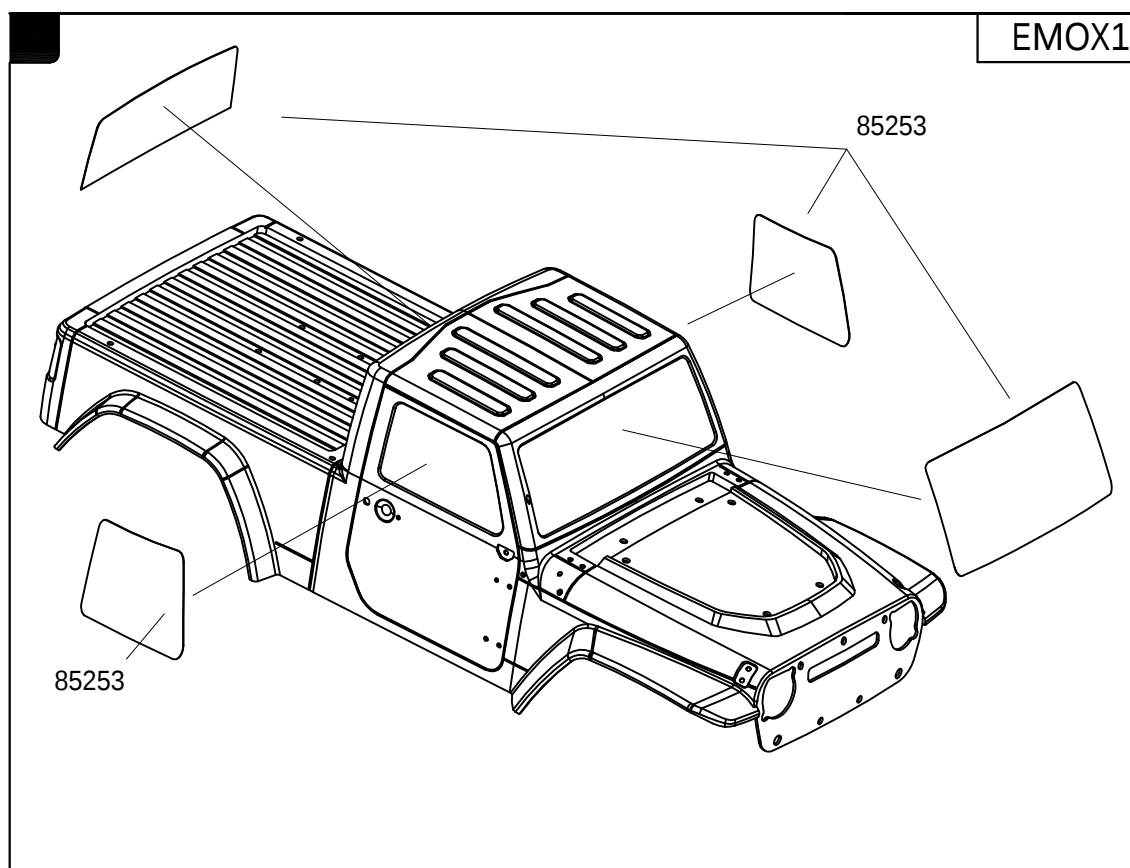
EMOX1



EMOX1



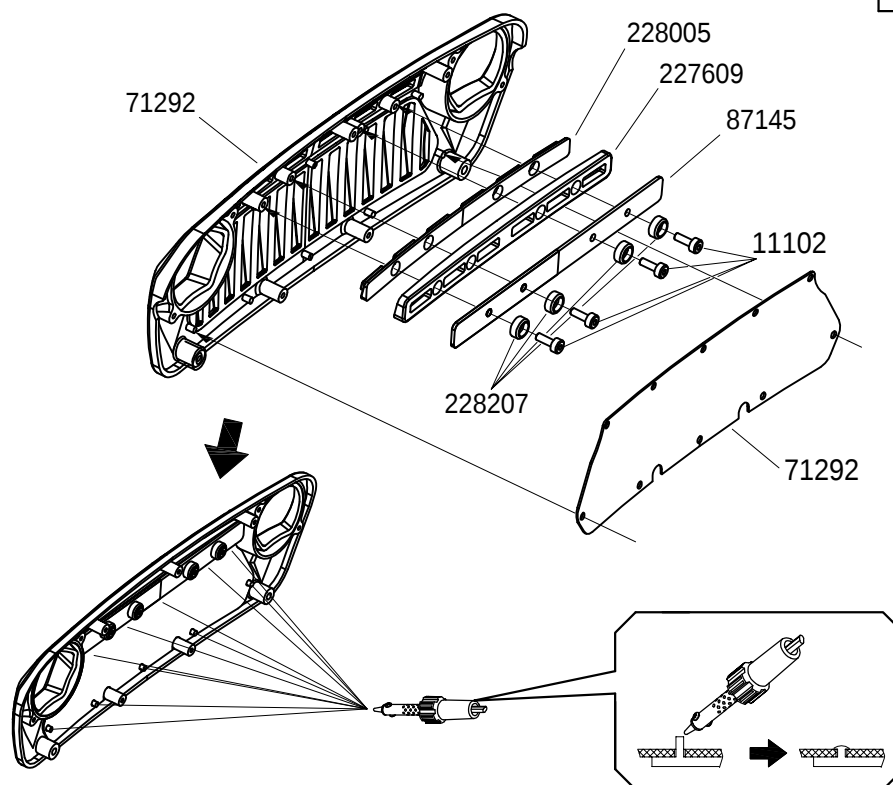
EMOX1



EMOX1

BAG(Y)

11102 
M2x6 X4

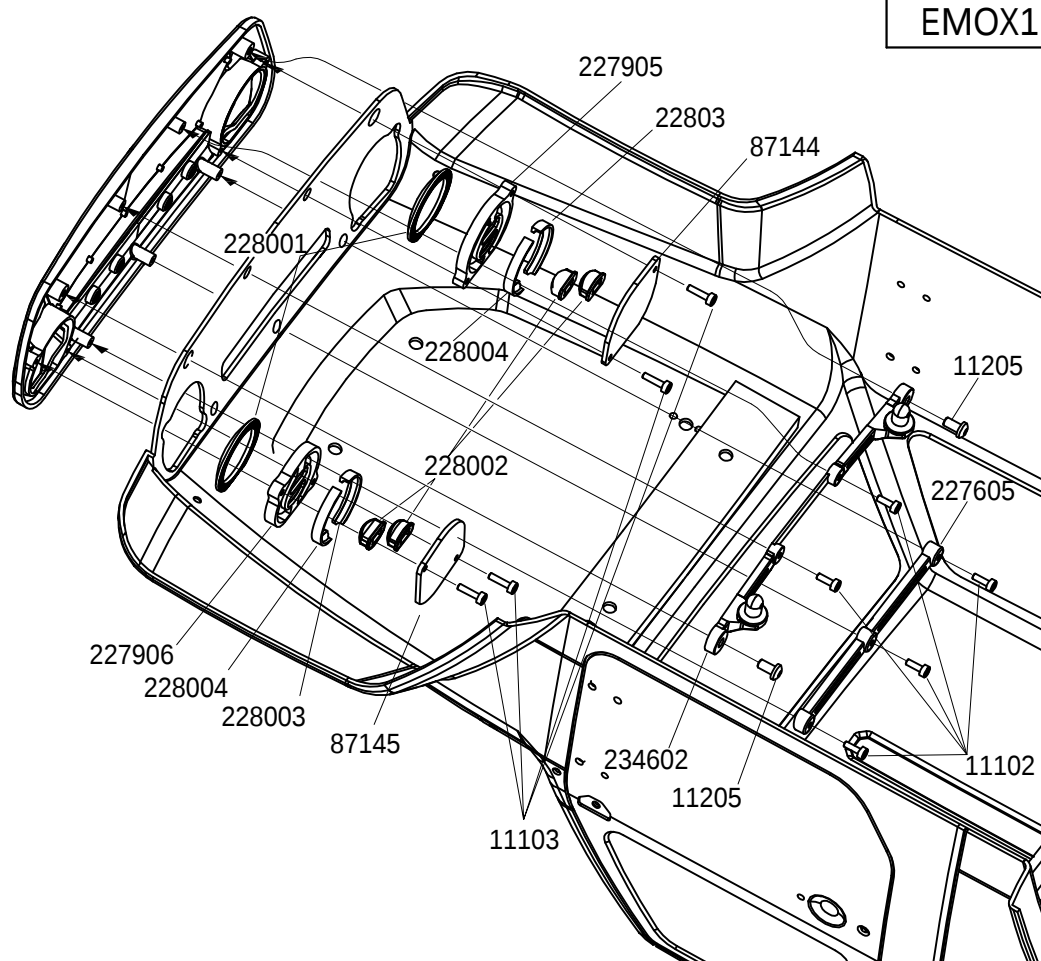


EMOX1

11103 
M2x8 X4

11102 
M2x6 X5

11205 
M3x6 X2

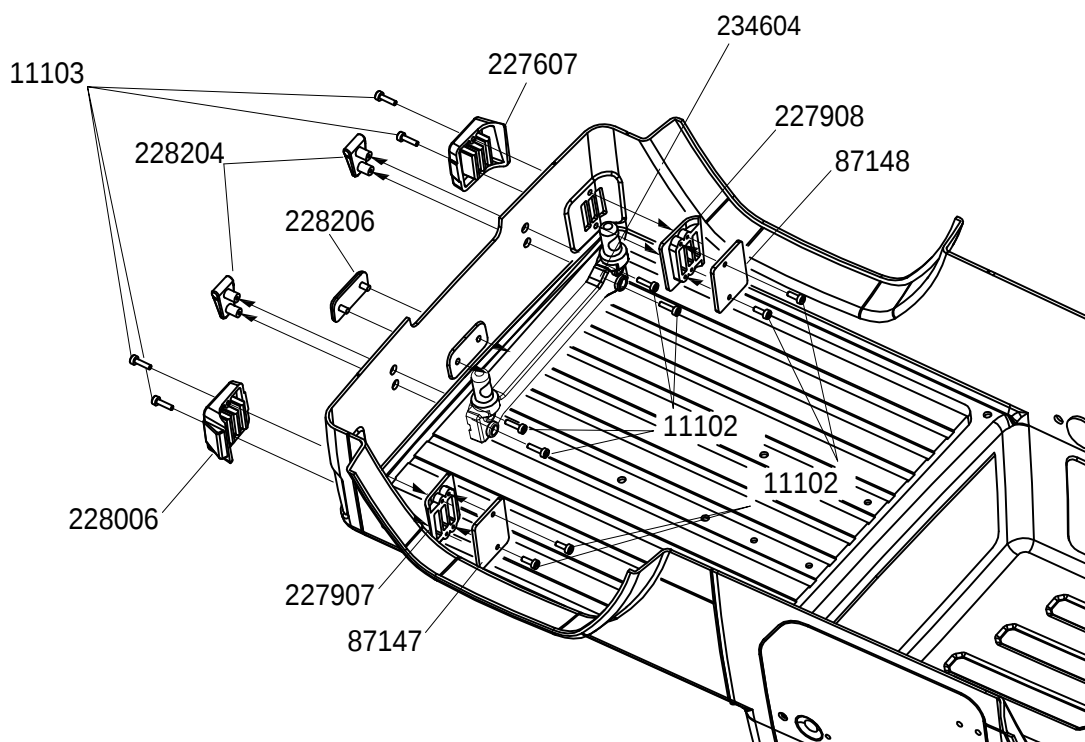


EMOX1

BAG(Y)

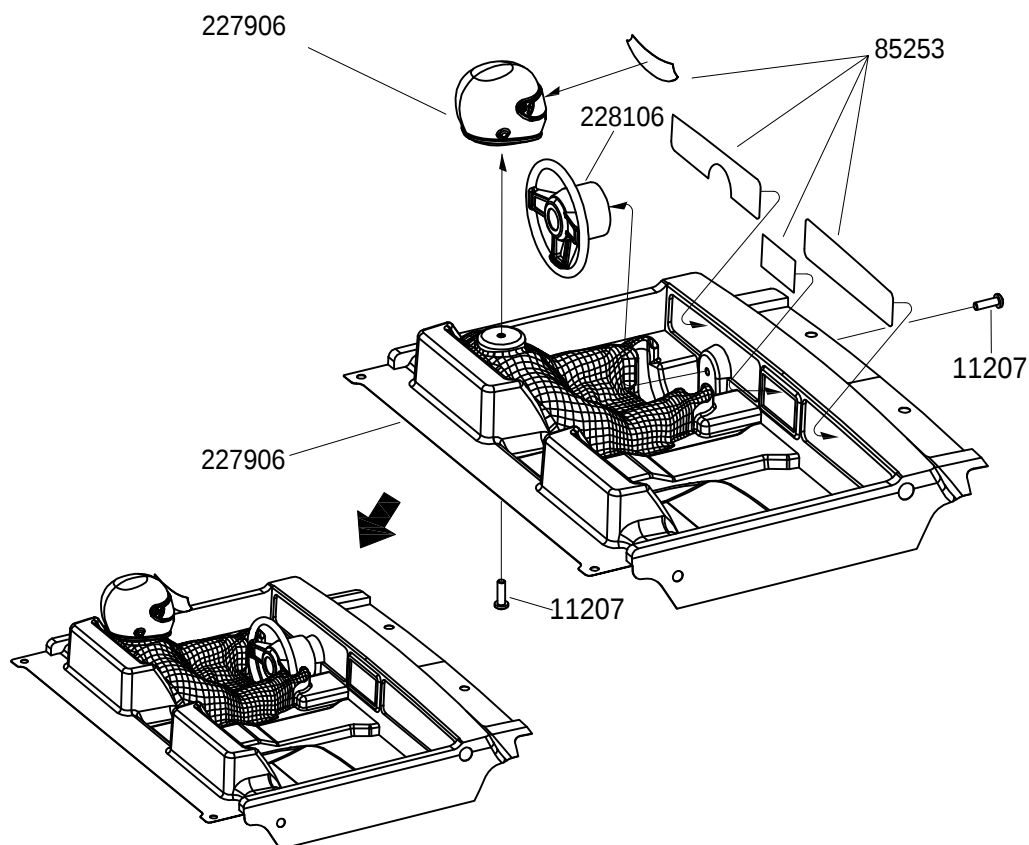
11102 
M2x6 X8

11103 
M2x8 X4



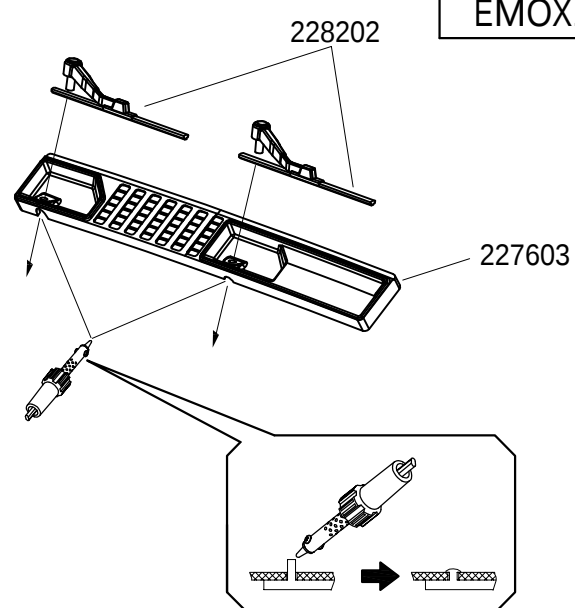
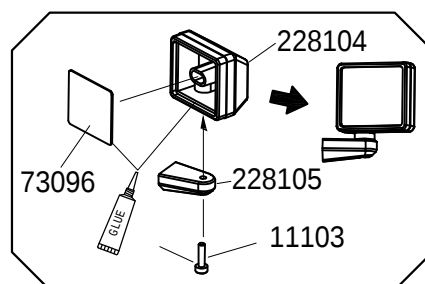
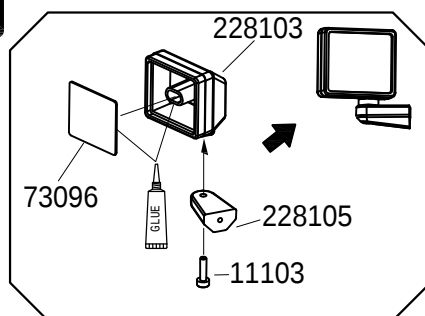
EMOX1

11207 
M3x10 X2



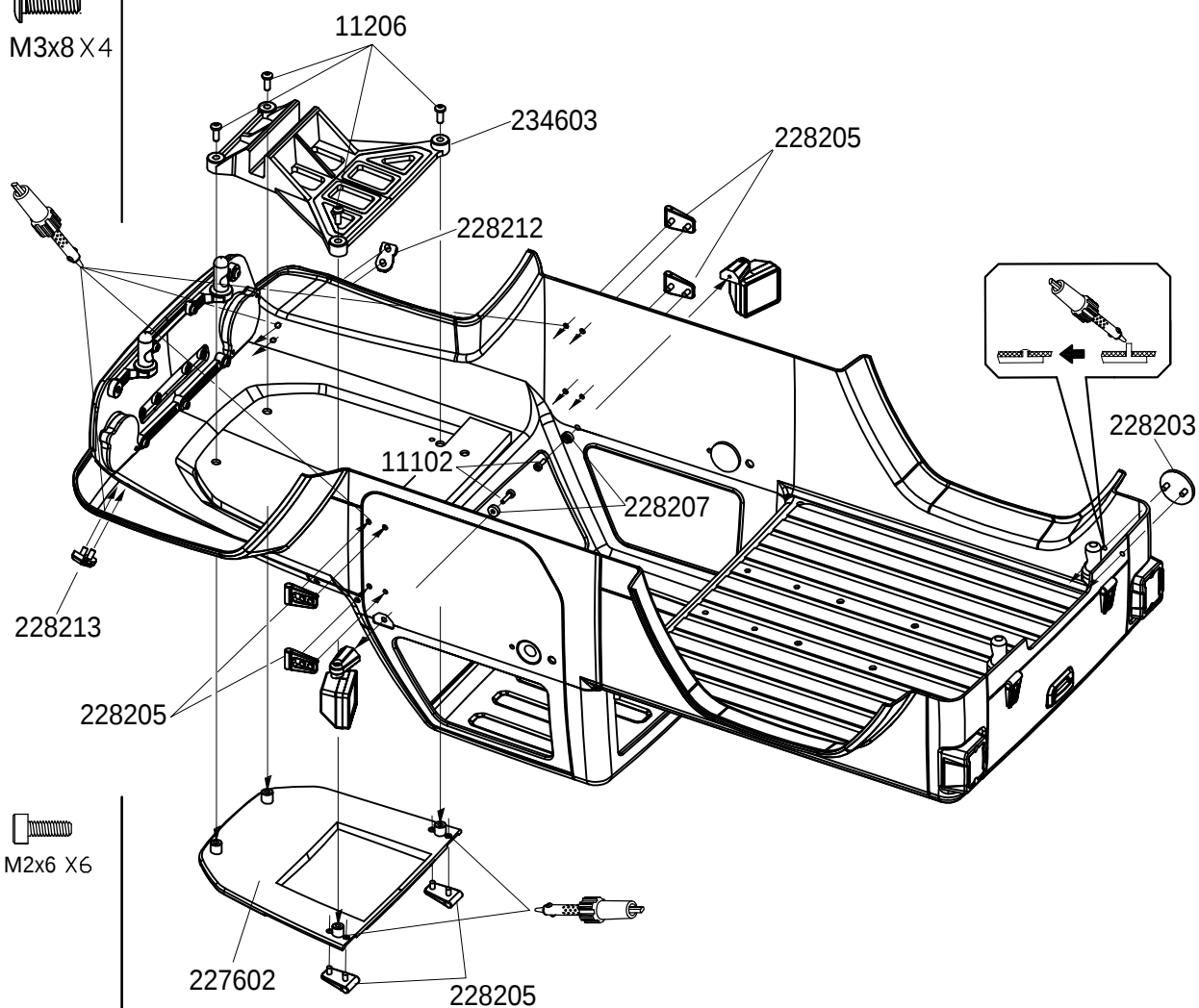
BAGY)

11103 
M2x8 X2



EMOX1

11206 
M3x8 X4



EMOX1

11102 
M2x6 X6

11104

227702

227701

EMOX1

Exploded view diagram of a vehicle chassis assembly. The diagram shows the following components and their part numbers:

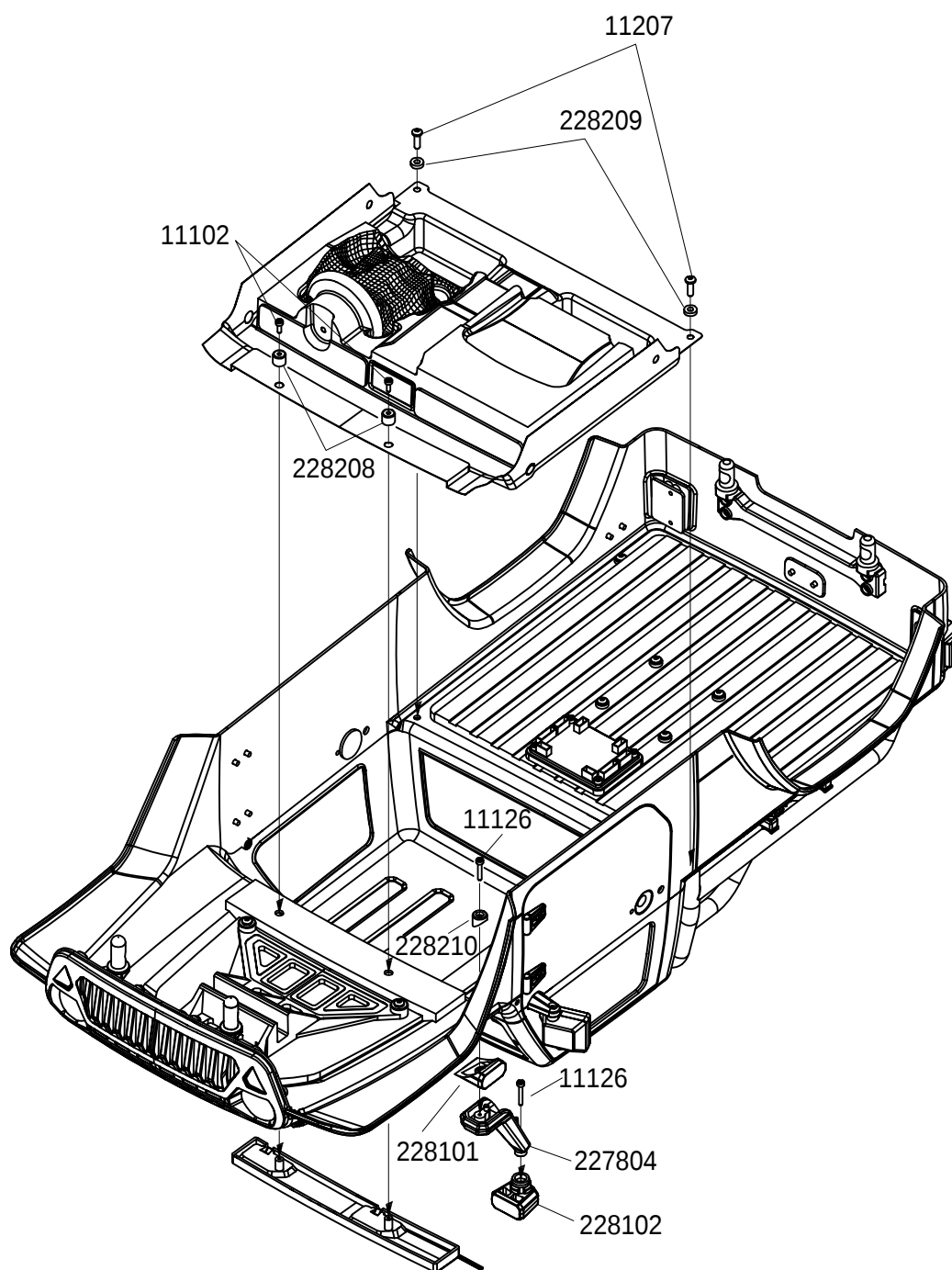
- 11116: Top mounting bracket
- 87143: Mounting plate
- 27904: Mounting plate
- 11207: Mounting bracket
- 228209: Mounting bracket
- 11207: Mounting bracket
- 11207: Mounting bracket
- 228209: Mounting bracket
- 14103: Mounting bracket
- 11206: Mounting bracket
- 14103: Mounting bracket
- 228209: Mounting bracket
- 227604: Mounting bracket
- 201602: Mounting bracket
- 11210: Mounting bracket
- 201602: Mounting bracket

BAG(Y)

11207 
M3x10 X2

11102 
M2x6 X2

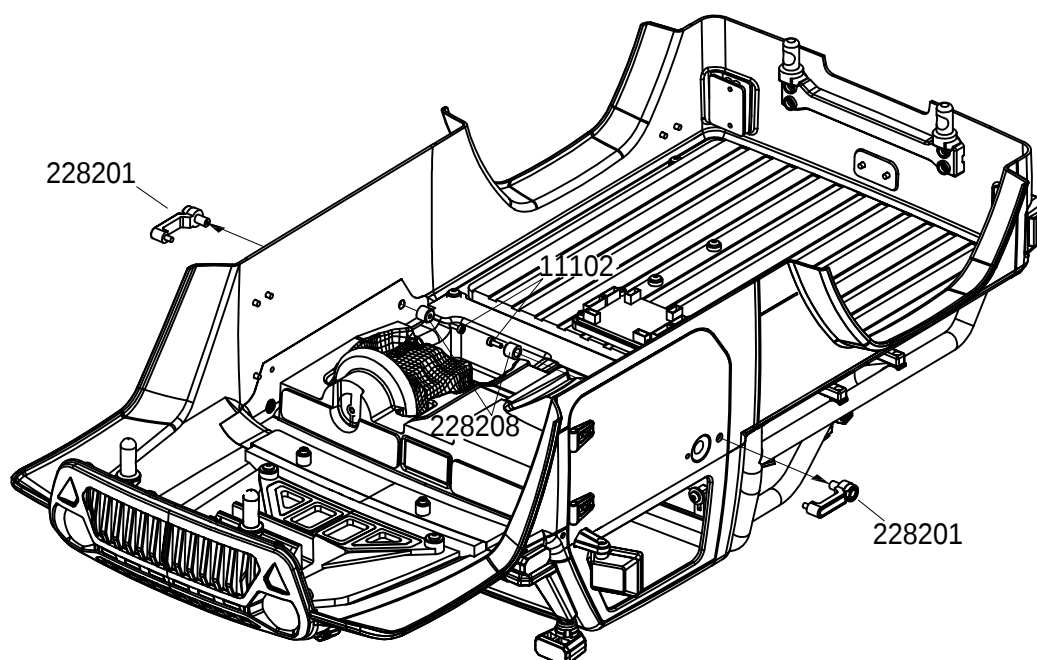
11126 
M2x14 X2



EMOX1

BAG(Y)

11102 
M2x6 X2



EMOX1

11207 
M3x10 X1

14102 
Ø3xØ7x0.5 X2

