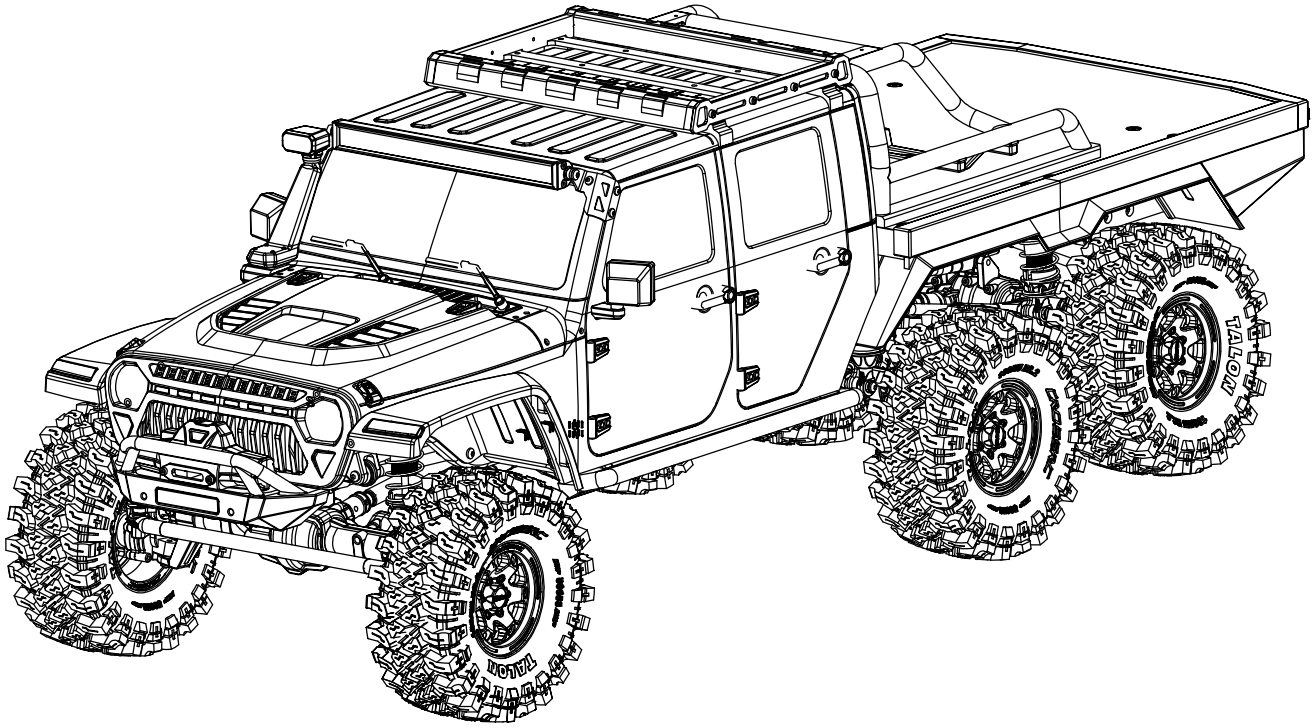


EMOXL2

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.

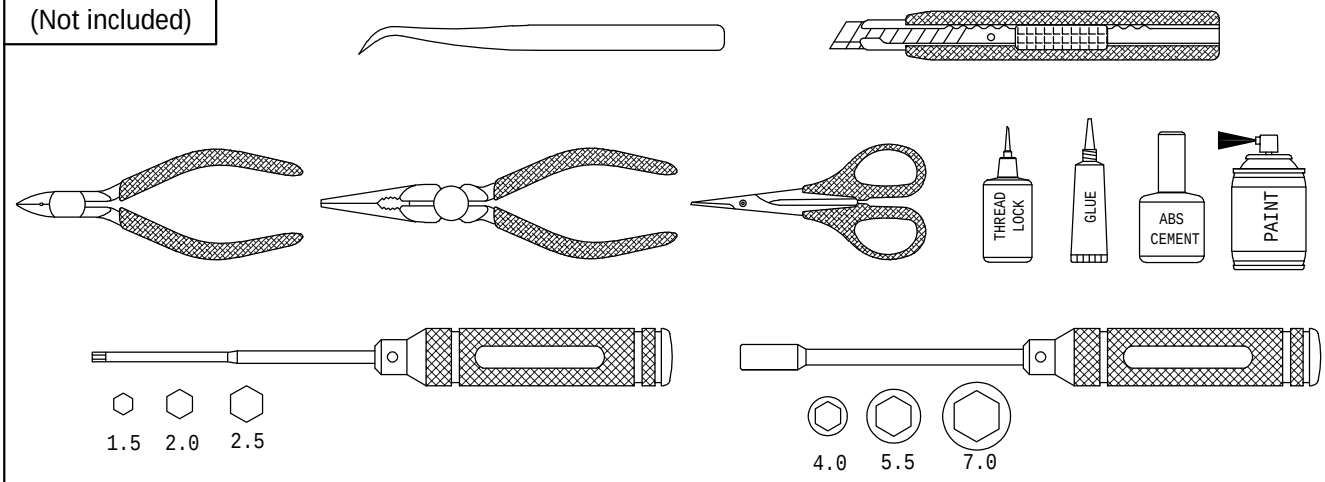
Inspect your radio-controlled model before operation

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.

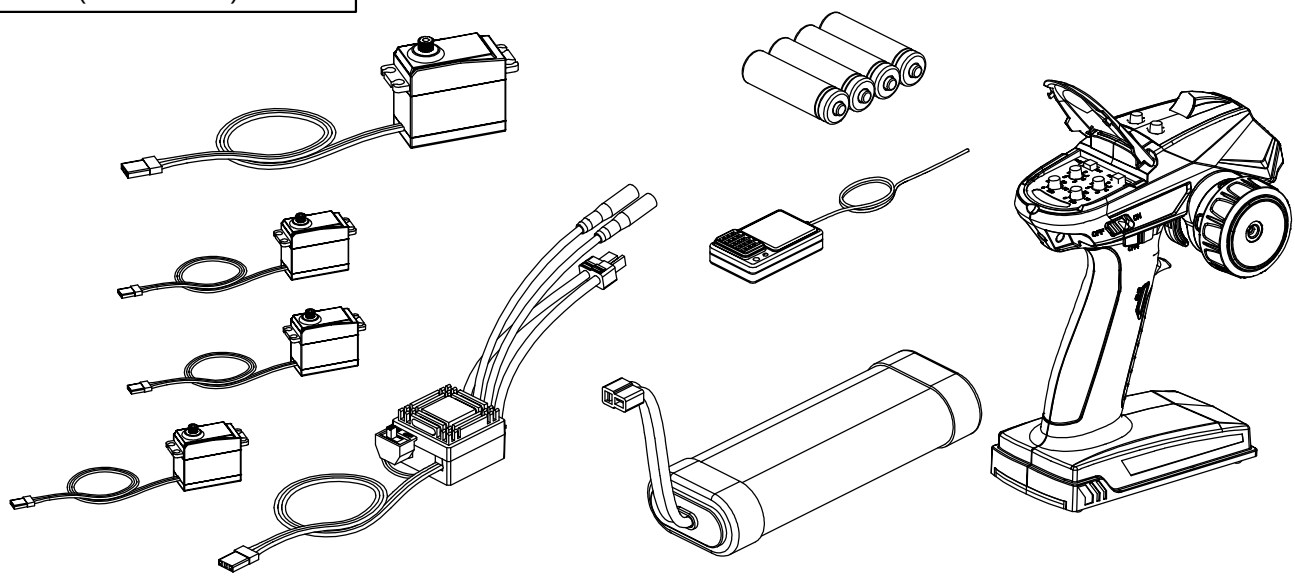
After operating your radio-controlled model

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)



注意

为避免造成严重人身伤害和财产损失，请按照本文所述，规范、负责任地操作所有遥控模型。

● 安全注意事项

1.1 本遥控模型并非玩具，仅适用于 14 周岁及以上人群使用。
1.2 请勿在危险地形操控车辆，时刻留意周边环境状况。
1.3 严禁在公共道路、行人活动区域、动物周边或运转的机械设备附近操控车辆。
1.4 远离高压线与大功率无线电设备，减少射频信号干扰。
1.5 本模型含有细小零件，低龄儿童有误吞窒息风险。请将车辆及所有备用零件放置在幼儿接触不到的地方。

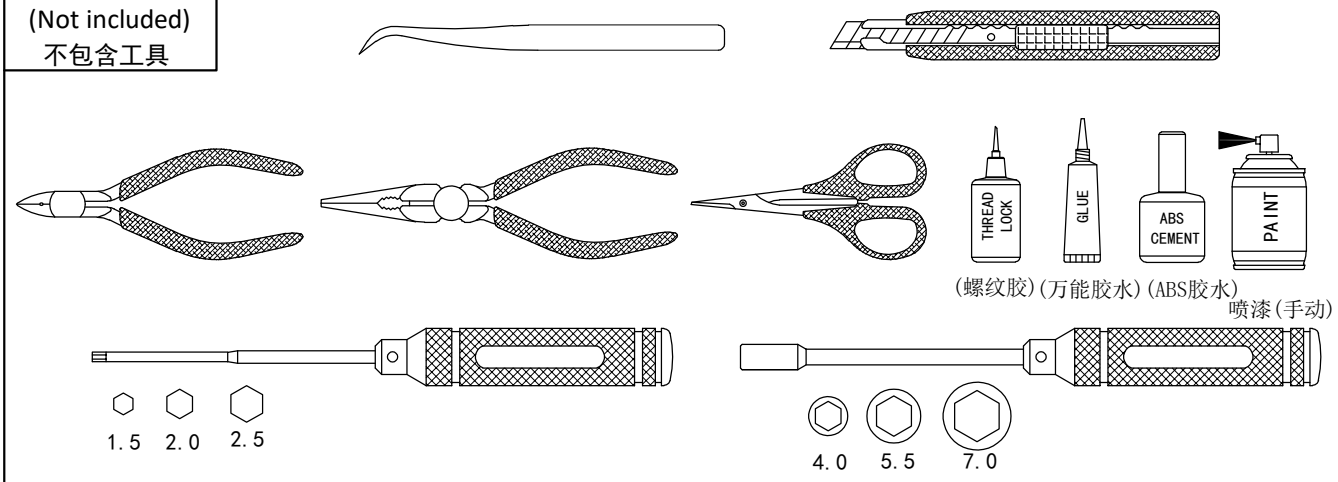
● 操控前检查遥控模型

2.1 确保所有螺丝均拧紧到位；金属相互接触部位请使用螺丝胶加固，尤其是承受扭矩的零部件（舵机固定座、电机座、传动轴紧定螺丝等）。
2.2 每次操控前，务必检查遥控器与车辆电池电压。遥控器常备电量充足的电池，车辆每次运行前均使用满电电池组。
2.3 开机前检查电机、舵机运转顺滑，转向方向正常；若发现零件卡滞，需及时更换配件，防止零部件、舵机损坏。
2.4 开机顺序：先开启遥控器电源，再接通车辆接收机电源。

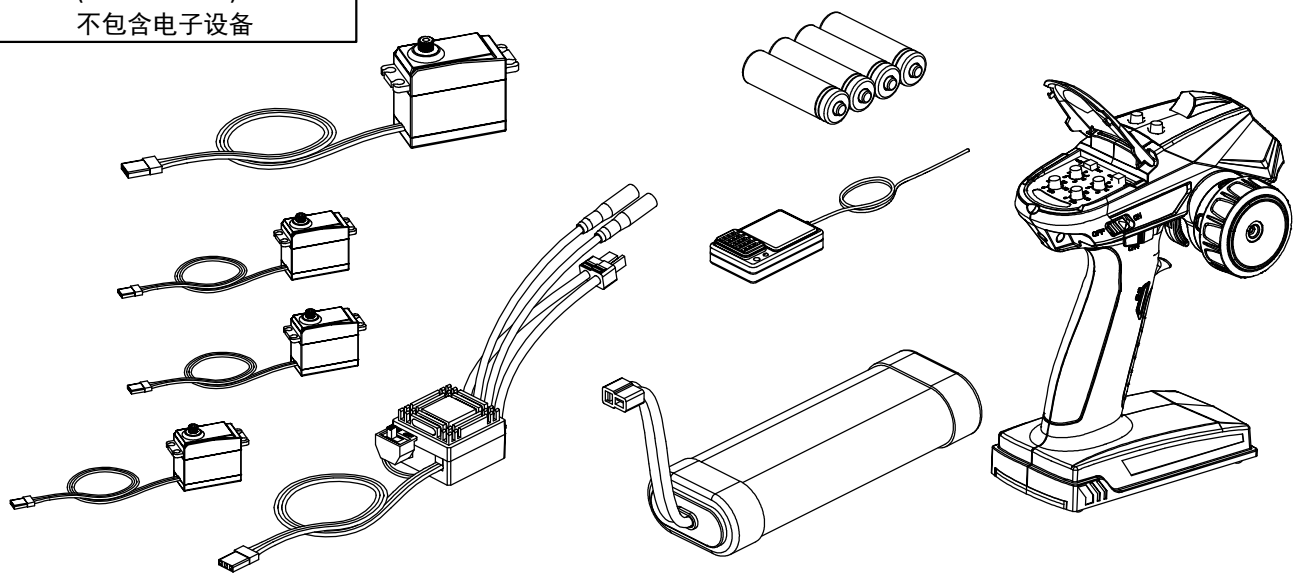
● 操控完成后操作规范

3.1 关闭车辆电源顺序：先关闭车辆接收机电源，再关闭遥控器电源。
3.2 触碰车身零部件时务必小心，电调、电机运行后会处于高温状态，谨防烫伤。
3.3 禁止使用外壳凹陷或存在破损的电池组；确保电线绝缘层完好、接头焊接牢固。锂电池使用不当极易引发火灾。

TOOLS
(Not included)
不包含工具



Electronic equipment
(Not included)
不包含电子设备



EMO XL2 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 67 of the manual; Please conduct power commissioning when the wheels are suspended.
4. This product is a high-precision model. Please read this manual carefully before assembly and assemble in strict accordance with this manual.
5. Screw thread sealant shall be used during assembly. Please noted that the screw thread sealant shall not have any contact with the shell parts. The screw thread sealant and ABS materials will produce chemical reaction, which will embrittle and crack the shell.
6. It is recommended to use professional tools for installation. Please pay attention to the safety when use tools.

Requirements and recommendations for electronic equipment:

Name	Specifications	Remarks
Remotes controller	6 channels or Up	Waterproof connector is recommended
Servo	Steering servo ≥25KG	High pressure standard Servo in waterproof
	Shift servo ≥3KG x 3	For the size of medium Servo, please refer to the configuration drawing below
ESC	Continuous current ≥ 80A	ESC BEC >3A
Brush motor	Brush motor 560 25T or Up	The Max. Size: Ø39mm*80mm Installation hole spacing: 25mm
Brushless motor	⩽2200KV	
Motor gear	M=0.8 Z=16T~20T	M=0.8≠32P

Battery box size	Motor gear	Total reduction ratio	Environment
135*50*40	20T	High speed 1:17.8 Low speed 1:38.9	Suitable for crossing and climbing

Gear reduction ratio range reference

	16T	17T	18T	19T	20T
High speed	1:22.1	1:20.8	1:19.6	1:18.6	1:17.8
Low speed	1:48.3	1:45.4	1:42.9	1:40.6	1:38.9

EMO XL2 组装注意事项

1. 车身喷漆、粘接作业必须在通风环境下进行，且需佩戴防护口罩。

2. 粘接或喷漆前，请先进行预组装，确定各零部件的装配顺序。

3. 电子设备接线图请查阅说明书第67页；通电调试时需将车轮悬空。

4. 本产品为高精度模型，组装前请仔细阅读本说明书，并严格按照说明书步骤完成组装。

5. 组装过程中需使用螺丝胶。请注意：螺丝胶不可接触外壳零件，螺丝胶与 ABS 塑料会发生化学反应，导致外壳变脆、开裂。

6. 建议使用专业工具进行装配，使用工具时请注意操作安全。

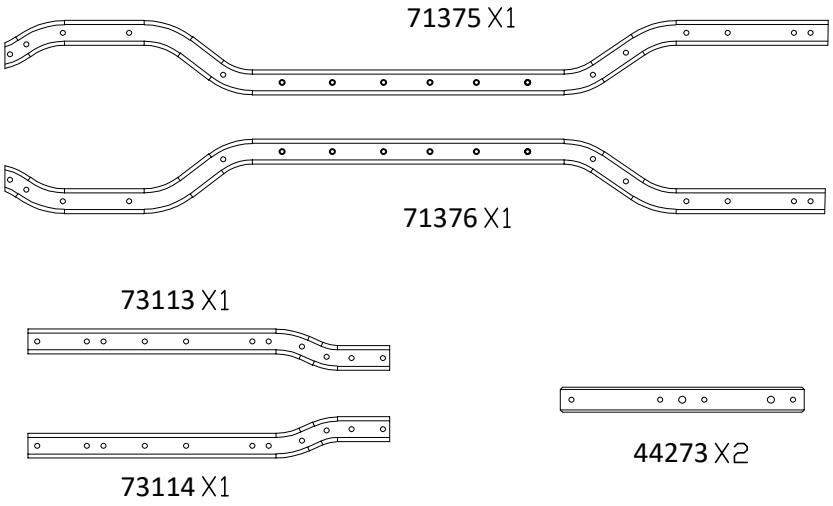
电子设备安装要求与建议：

名称	规格参数	备注
遥控器	6通道或以上	建议采用防水接收机
舵机	转向舵机 ≥25KG	防水型高压标准舵机
	换档舵机 ≥3KG x 3	中型舵机尺寸请参考下方配置图纸
电调	持续电流 ≥ 80A	ESC BEC输出 > 3A
有刷电机	560 25T 或以上的有刷电机	最大尺寸：直径39mm*80mm 安装孔距：25mm
无刷电机	≤2200KV	
电机齿	模数:0.8 齿数:16T~20T	M=0.8≠32P

电池仓尺寸	电机齿轮	总减速比	适应场合
135*50*40	20T	高速档:1:17.8 低速档:1:38.9	适合越野、攀爬场合

齿轮减速比参考范围

	16T	17T	18T	19T	20T
高速档	1:22.1	1:20.8	1:19.6	1:18.6	1:17.8
低速档	1:48.3	1:45.4	1:42.9	1:40.6	1:38.9



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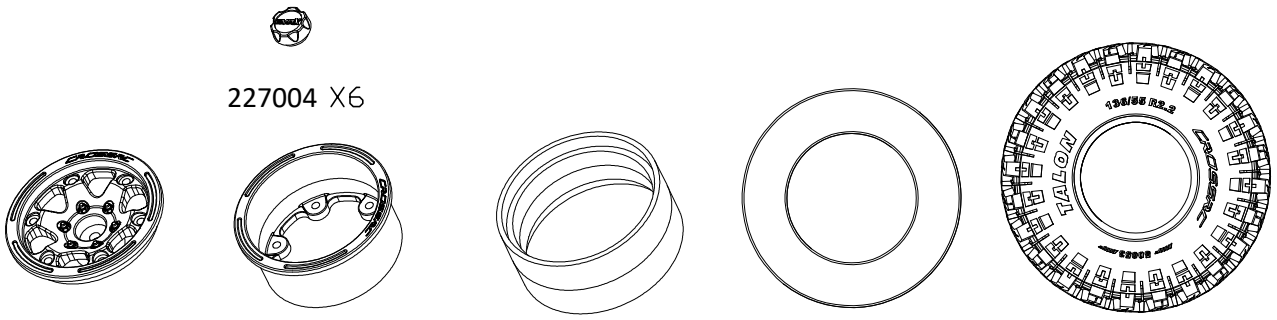

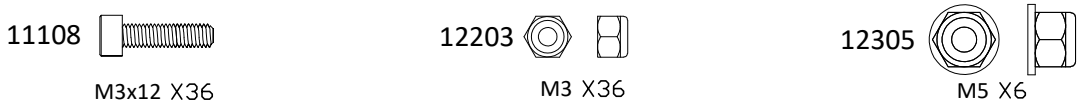

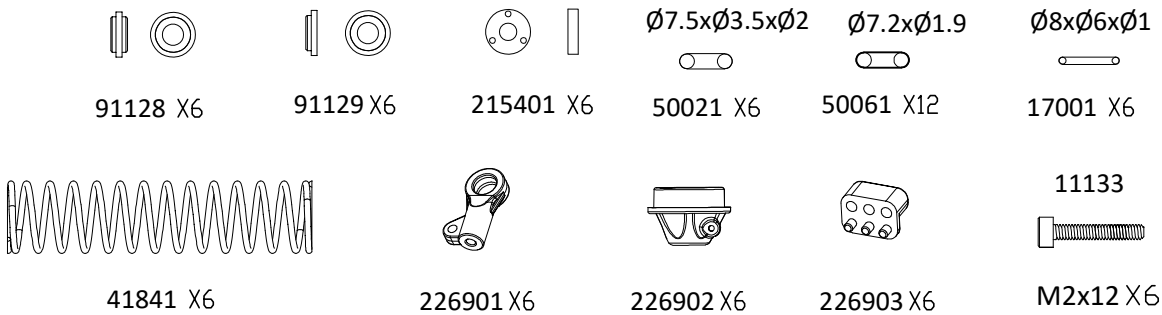

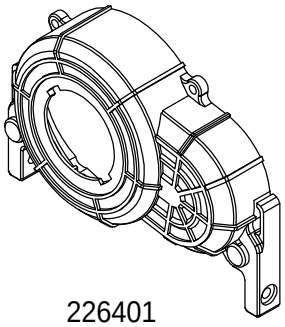

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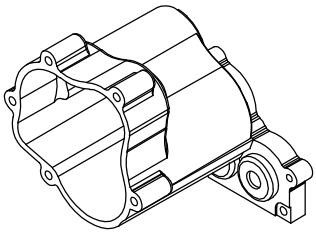

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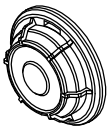

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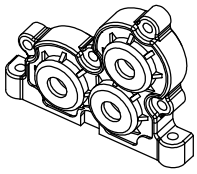

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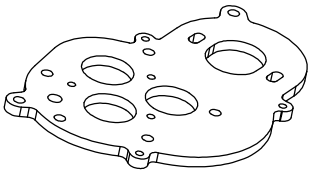

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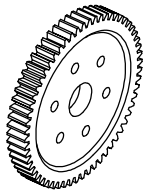

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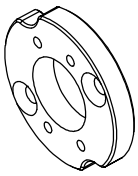

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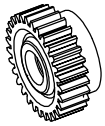

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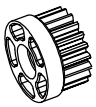

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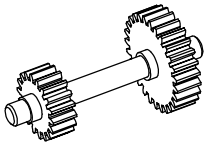

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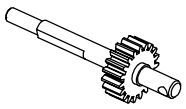

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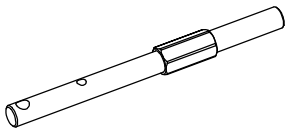

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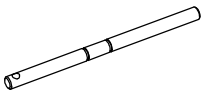

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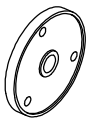

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ø5.1xø7.5x2.5 X1

42203

ø5.1xø8x1.5 X2

72007

ø5xø8x0.3 X11

14102

Ø3xØ7x0.5 X2

41209

Ø2x10 X1

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M2.5x10 X6

11216

M2.5x6 X3

11205

M3x6 X3

11207

M3x10 X7

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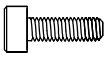

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M4x10 X2

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M4x4 X1

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M2.5x6 X3

12304

M4 X1

41834 X1

44309 X1

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ø5xø10x4 X11

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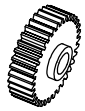
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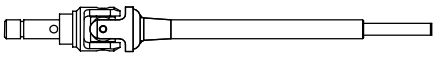
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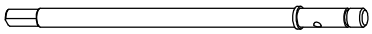
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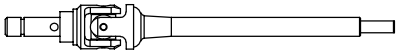
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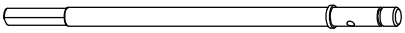
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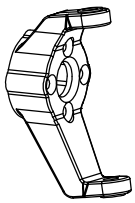
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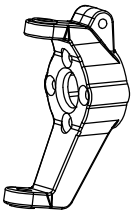
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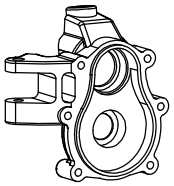
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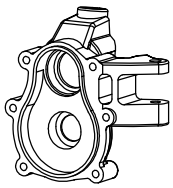
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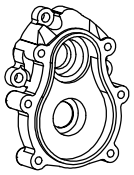
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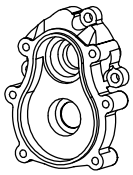
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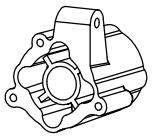
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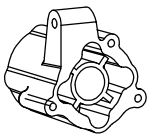
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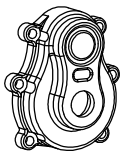
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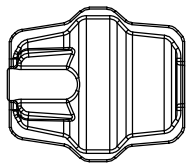
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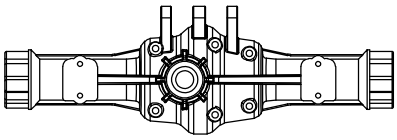
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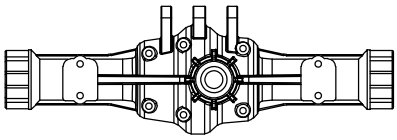
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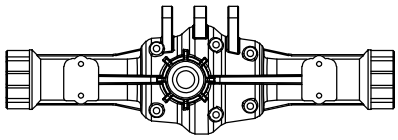
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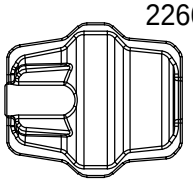
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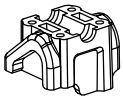
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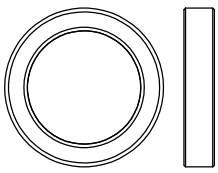
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Ø12xØ15x0.2 X3

15022

Ø7xØ13x4 X6

11401

M3x4 X12

11227

M2.5x8 X12

11316

M2.5x10 X27

11125

M2.5x10 X60

11120

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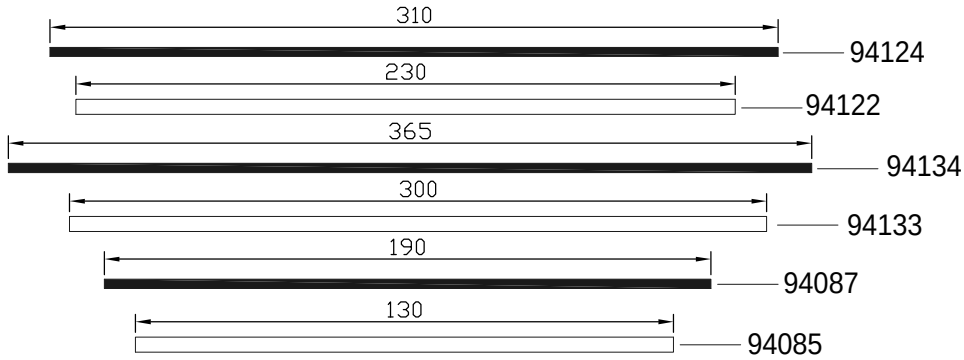

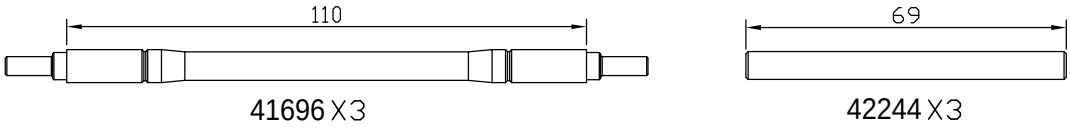

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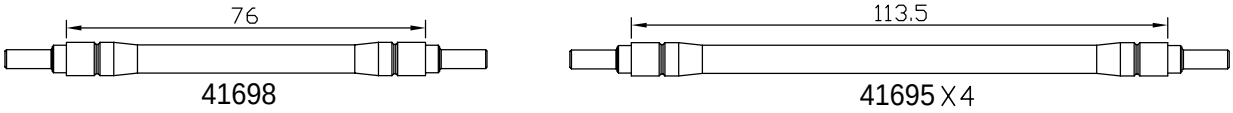

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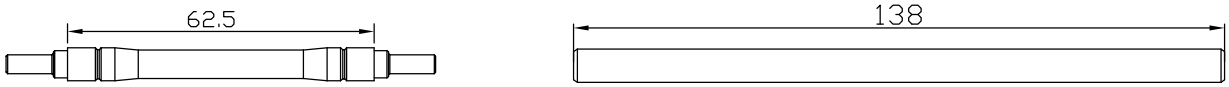

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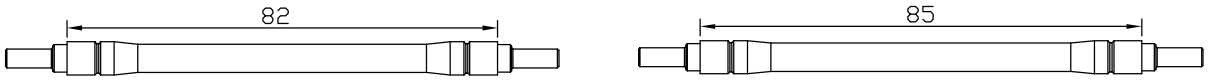

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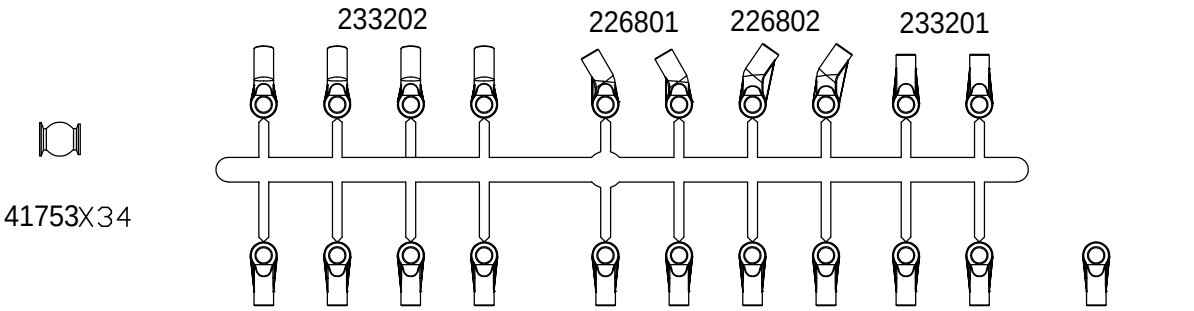
41787 X2



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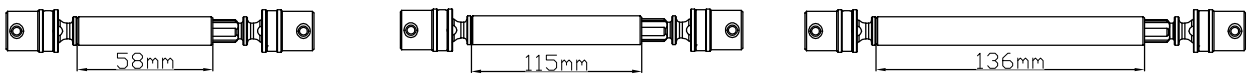

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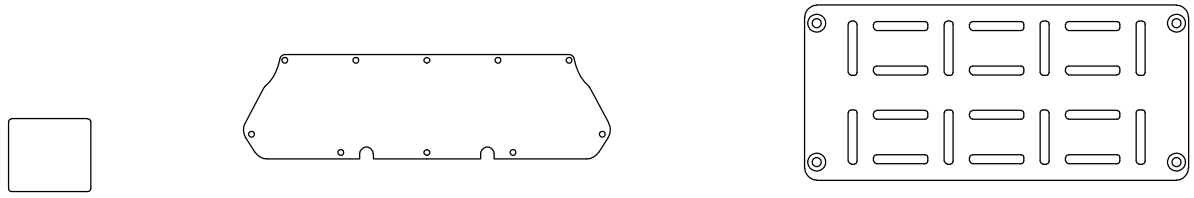

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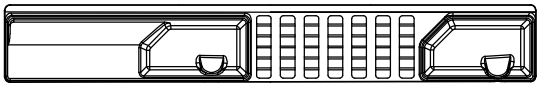

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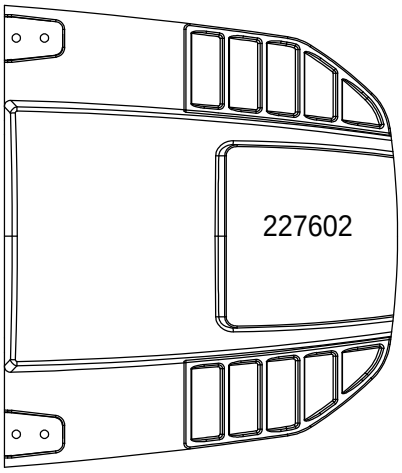

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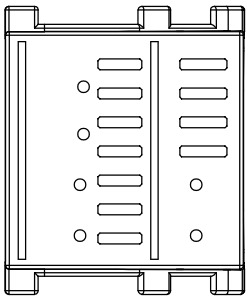

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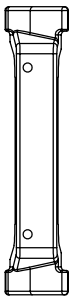

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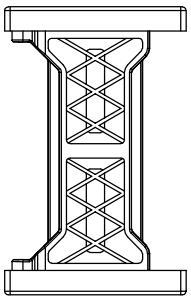

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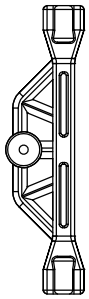

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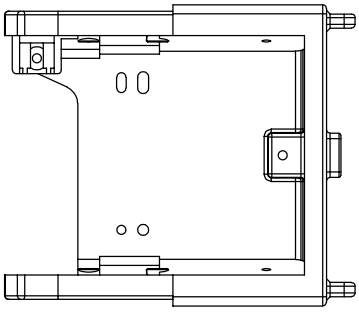

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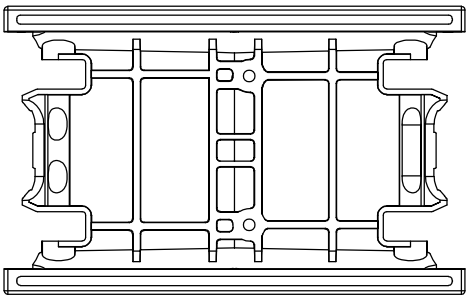

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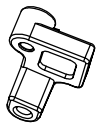

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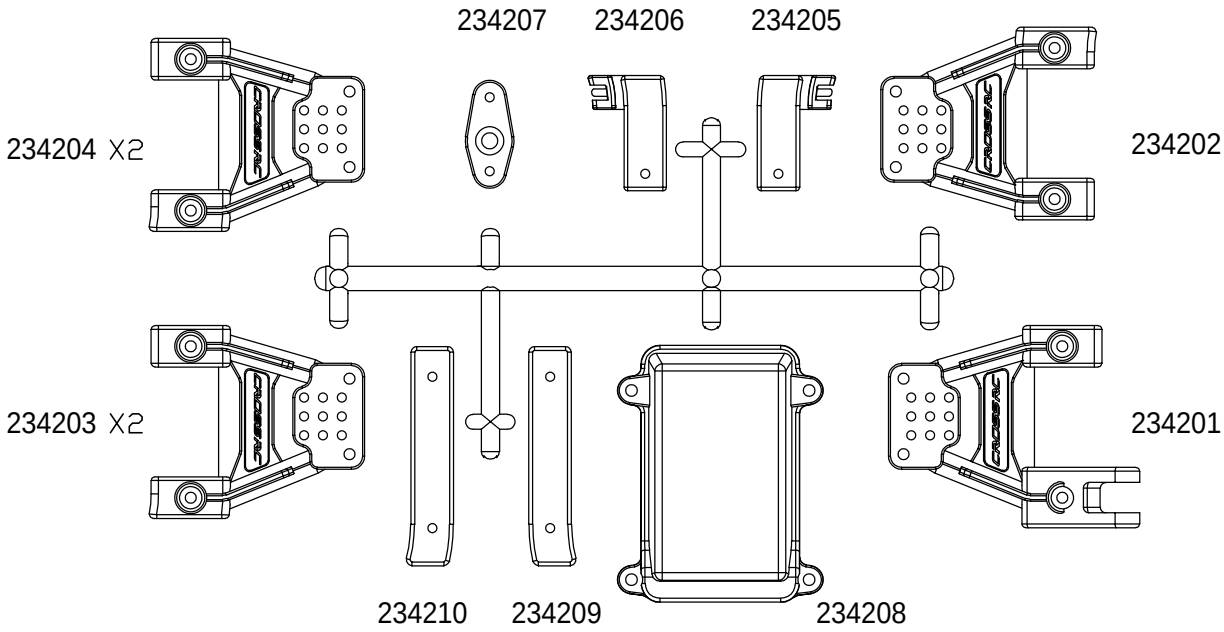

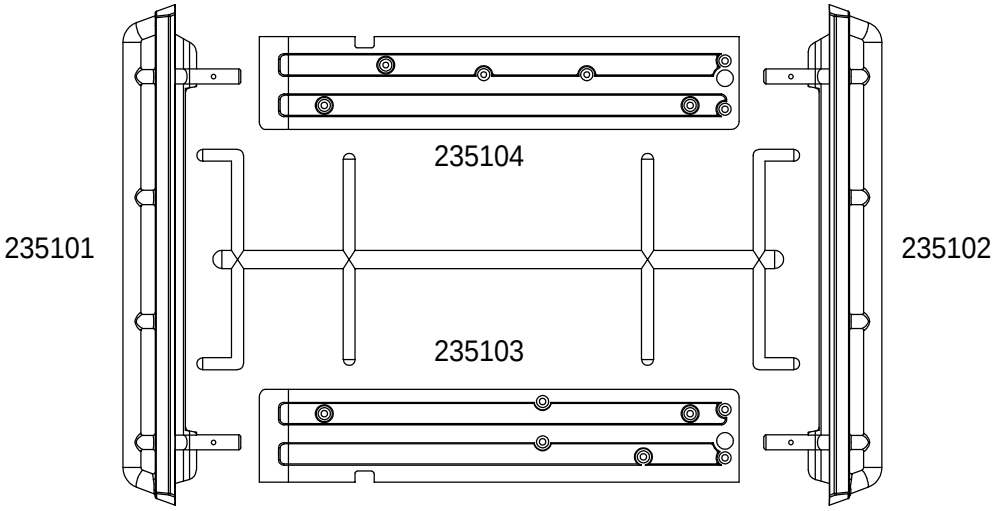

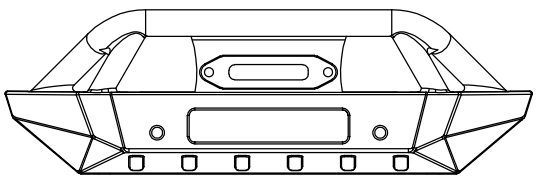
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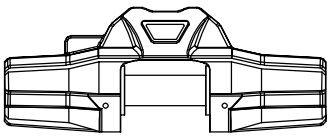
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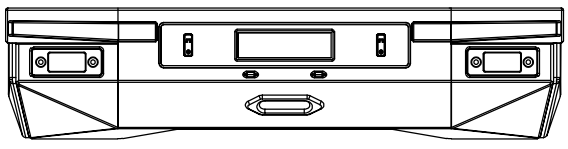
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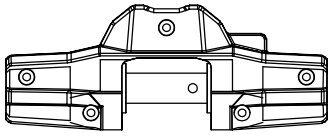
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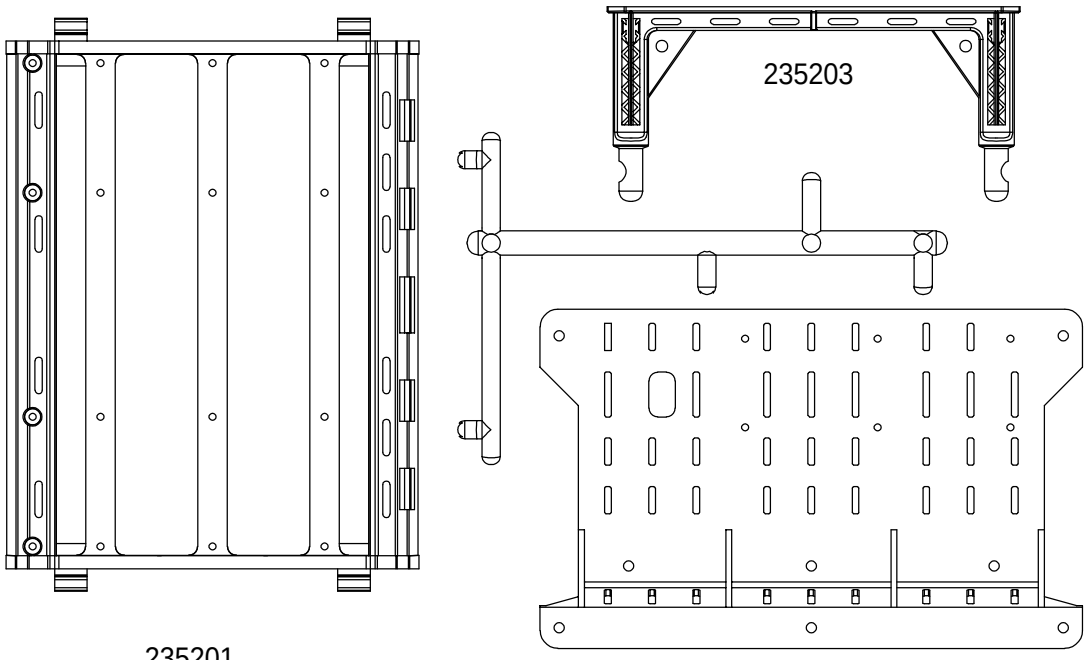
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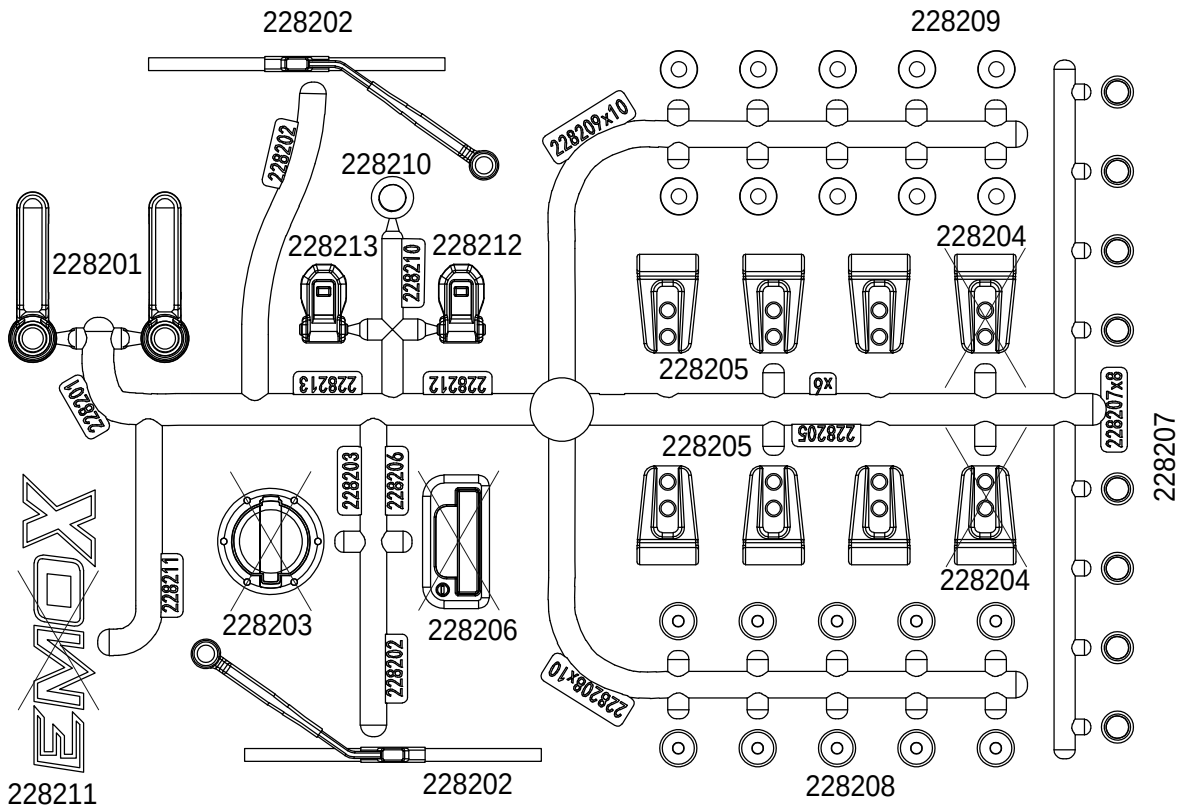
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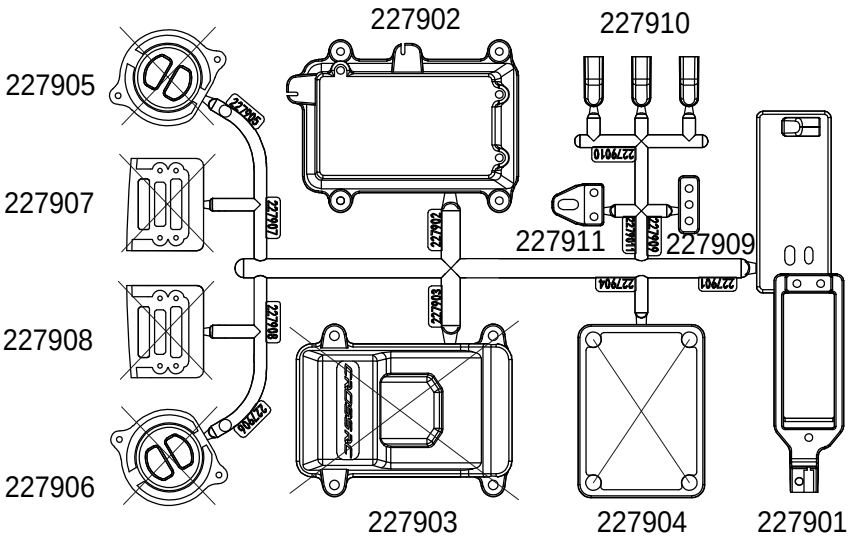
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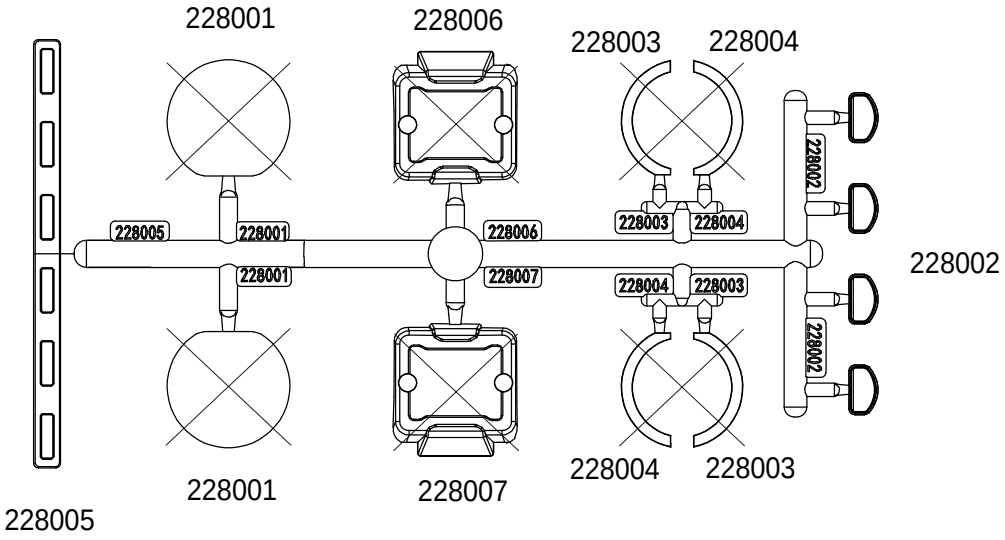
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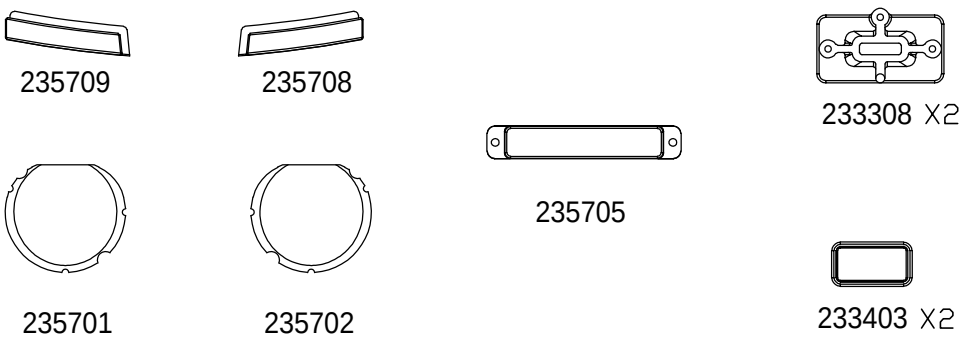
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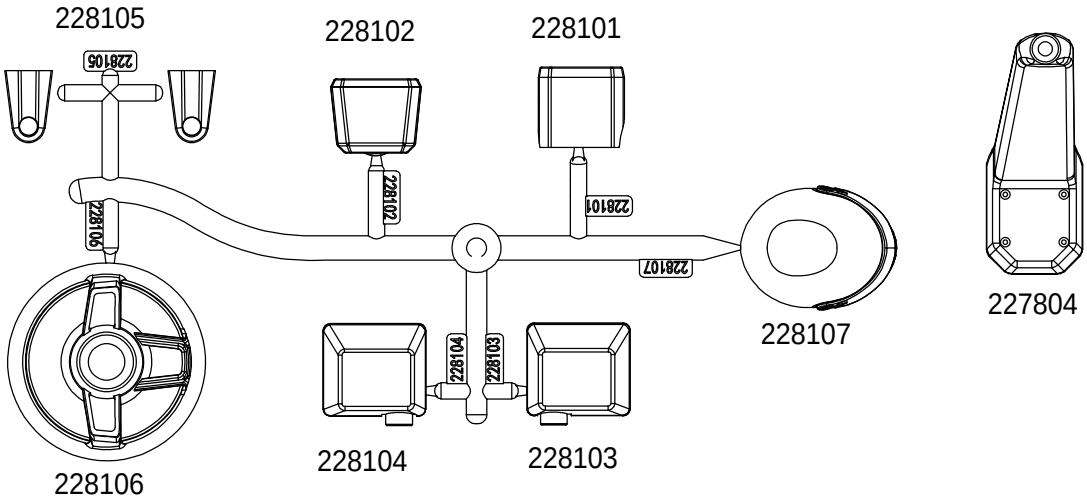
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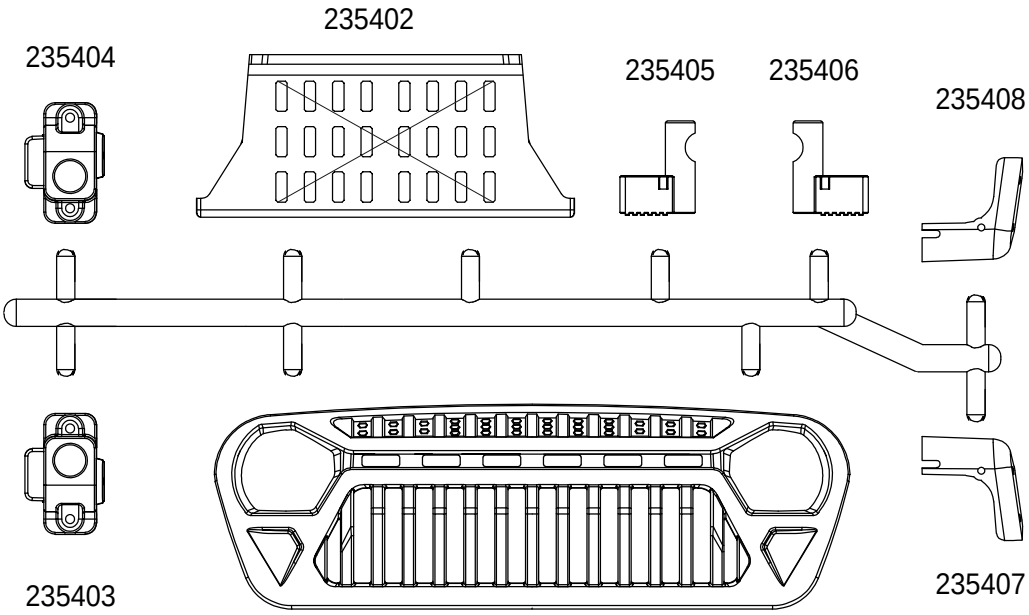
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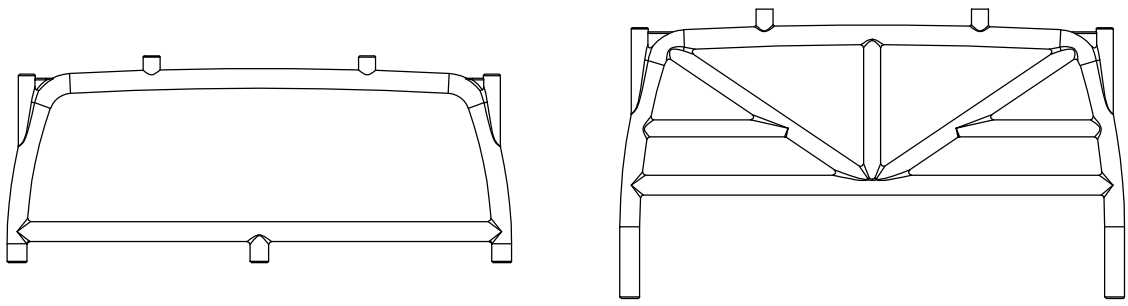
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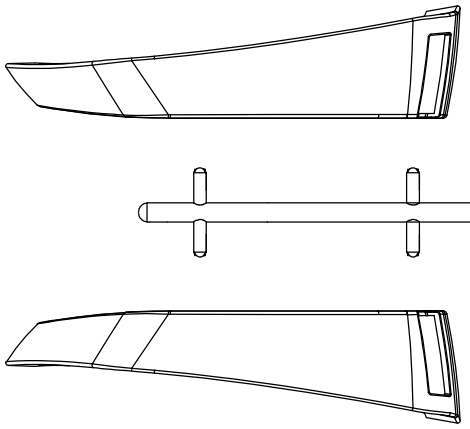

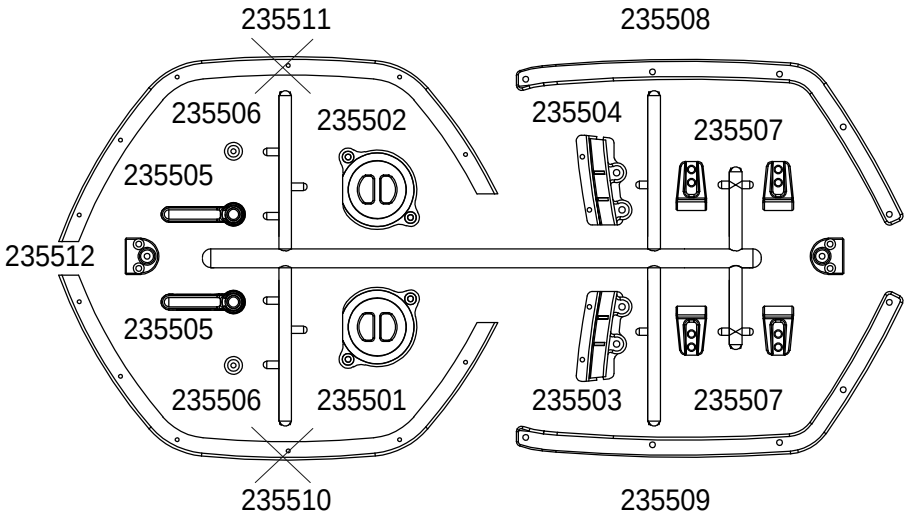

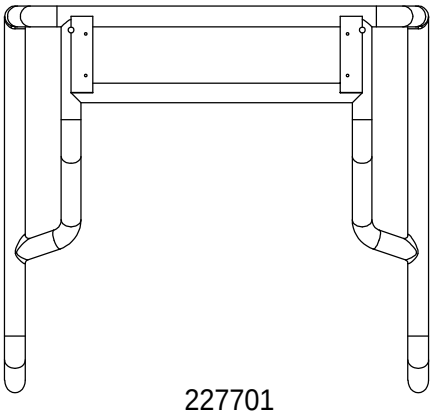
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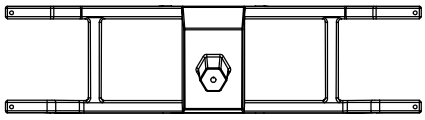
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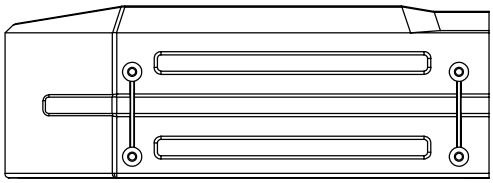

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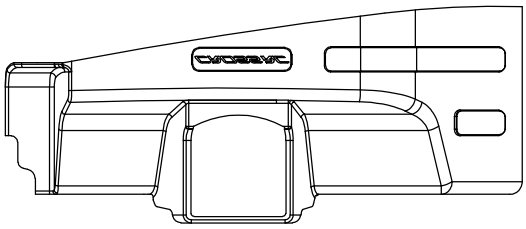

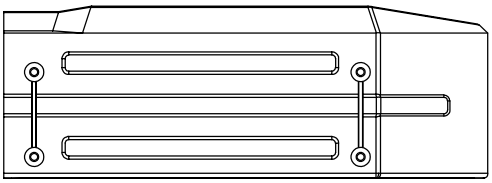

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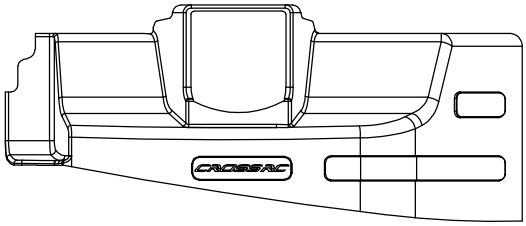

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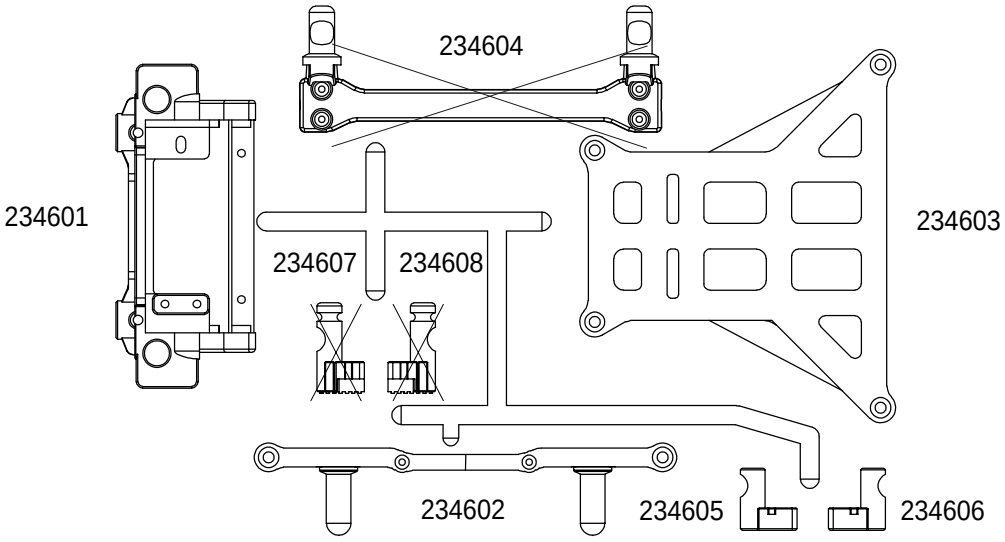

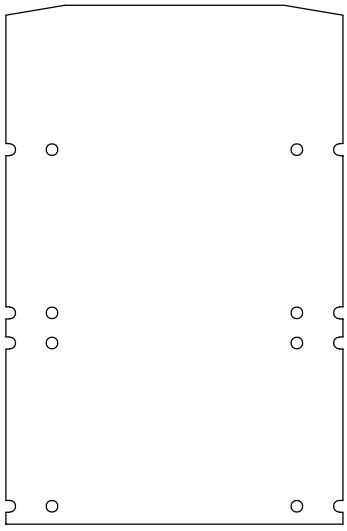

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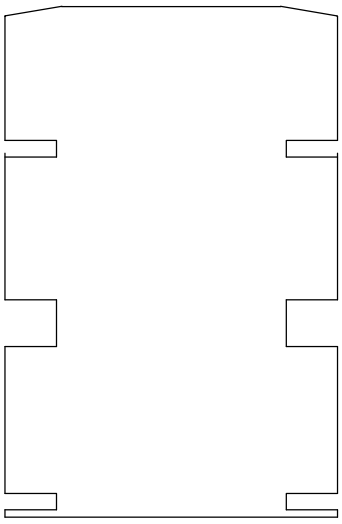

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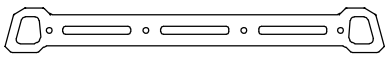

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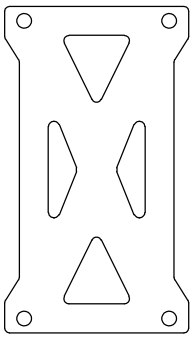

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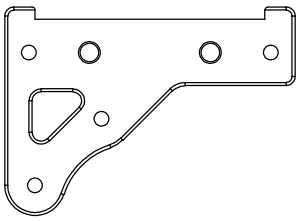
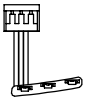


44272 X2



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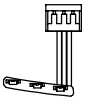

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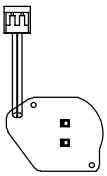

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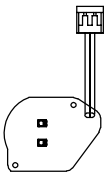

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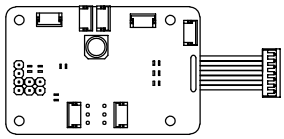

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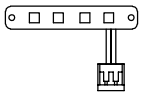

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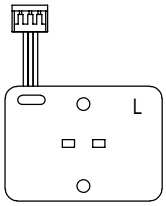

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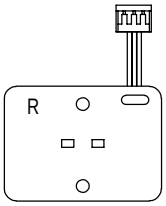

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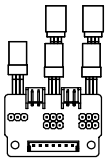

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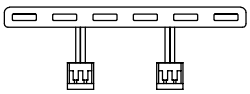

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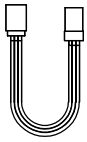

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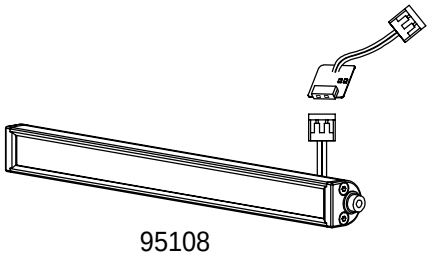

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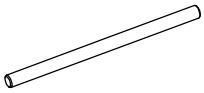
73117

73118

95096



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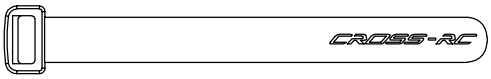
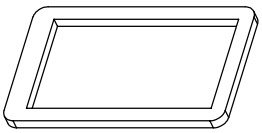


91004 X1

30411 X2

30402 X2

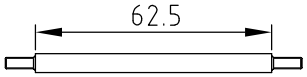
71294



71293

41336 X4

41205



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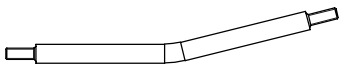

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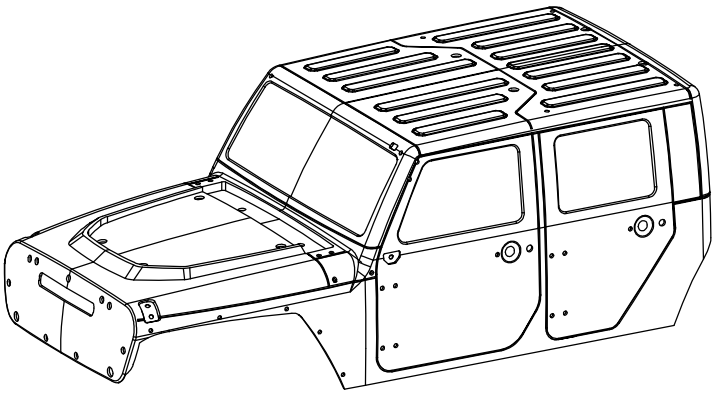
223903 X4



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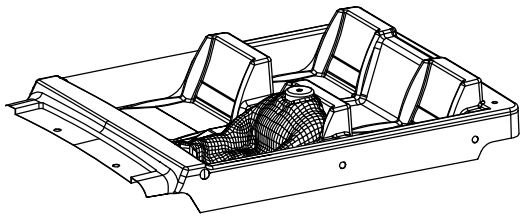


239301

11401 M3x4 X1

11205 M3x6 X4

11149 M1.6x6 X4

11106 M3x8 X1

11222 M2.5x18 X4

11216 M2.5x6 X6

11217 M2.5x10 X4

11409 M4x11 X10

11102 M2x6 X40

11206 M3x8 X28

11239 M3x8 X24

11303 M3x8 X18

11306 M3x10 X16

11207 M3x10 X26

11208 M3x12 X19

11209 M3x14 X9

11242 M3x14 X6

11210 M3x16 X12

11211 M3x18 X11

11212 M3x20 X2

11213 M3x22 X2

11214 M3x25 X7

14102 Ø3xØ7x0.5 X4

11215 M3x28 X6

11223 M3x30 X3

11233 M3x50 X1

11425 M4x20 X2

11103 M2x8 X16

11104 M2x10 X10

11133 M2x12 X1

11126 M2x14 X1

11130 M2x20 X2

12307 M3 X3

91176 X3

42231 X3

11227 M2.5x8 X3

12206 M2 X4

11401 M3x4 X5

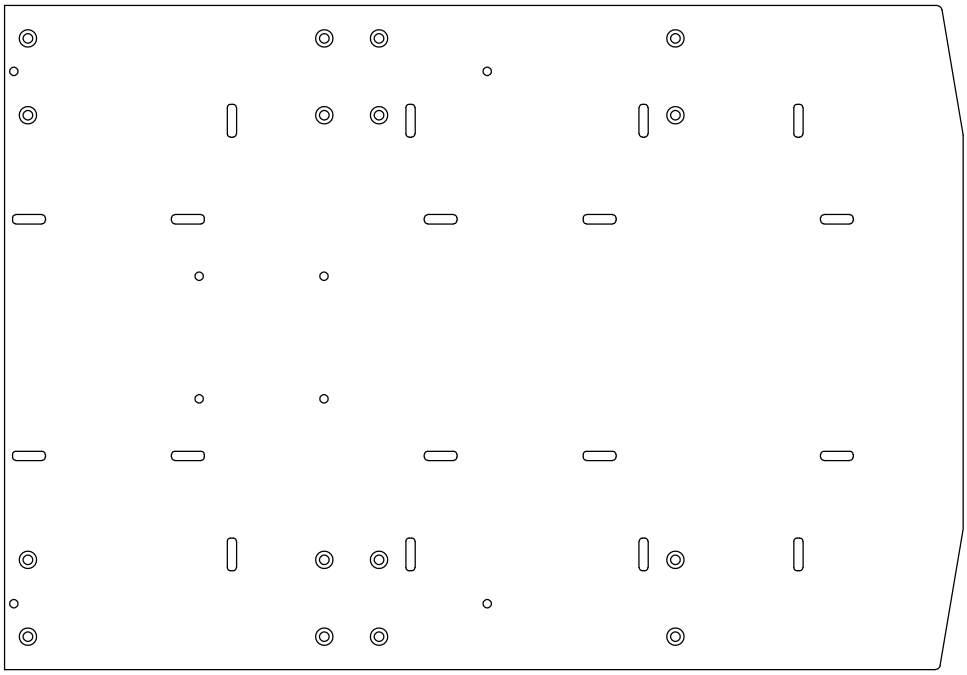
44172 X1

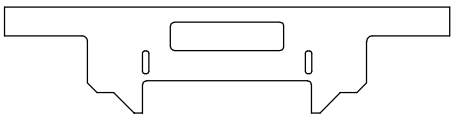
91175 X3

41819 X3

94056 X1

67200





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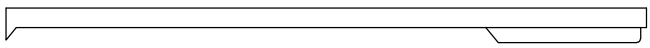

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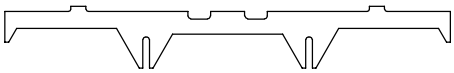

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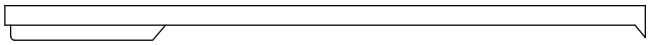

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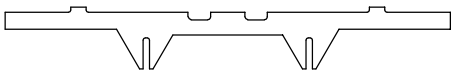
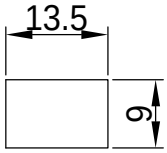
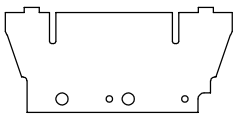


67205 X3

67206 X2



67211 X2



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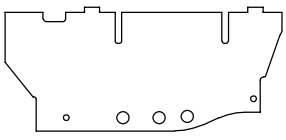

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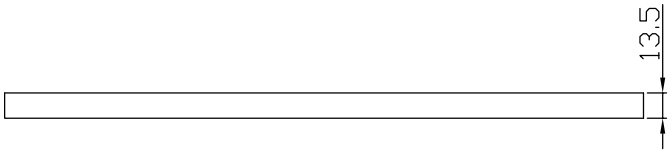
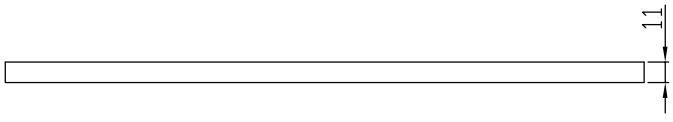
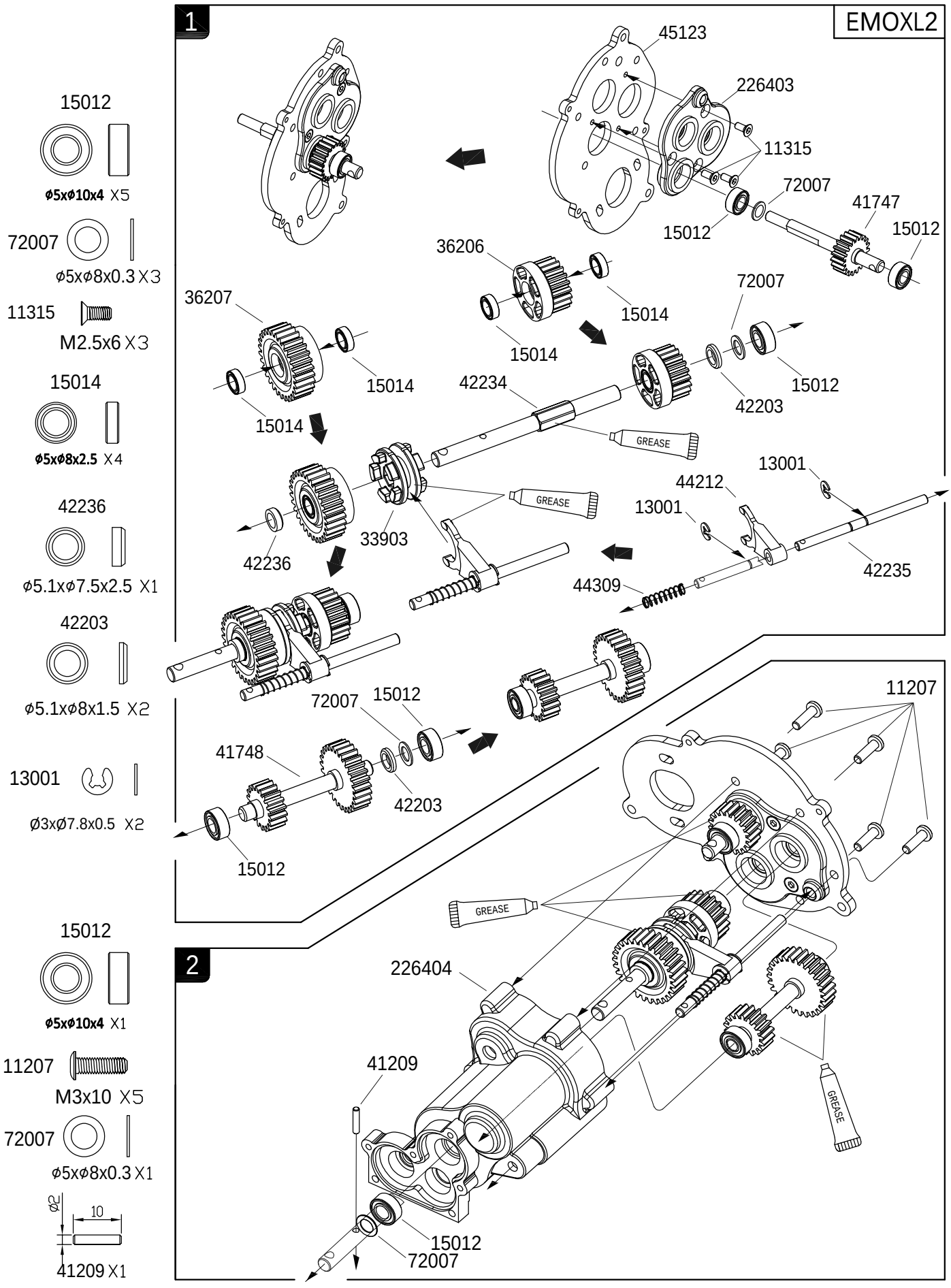


67209 X2

67212 X2



67210 X2


EMOXL2
1
2
15012
ø5xø10x4 X5
72007
ø5xø8x0.3 X3
11315
M2.5x6 X3
15014
ø5xø8x2.5 X4
42236
ø5.1xø7.5x2.5 X1
42203
ø5.1xø8x1.5 X2
13001
Ø3xØ7.8x0.5 X2
15012
ø5xø10x4 X1
11207
M3x10 X5
72007
ø5xø8x0.3 X1
ø2
10
41209 X1
45123
226403
11315
72007
41747
15012
15012
36206
15014
72007
36207
15014
15014
15014
42234
42203
15012
GREASE
13001
44212
13001
GREASE
33903
42236
42235
44309
11207
72007
15012
41748
42203
15012
GREASE
226404
41209
GREASE
15012
72007

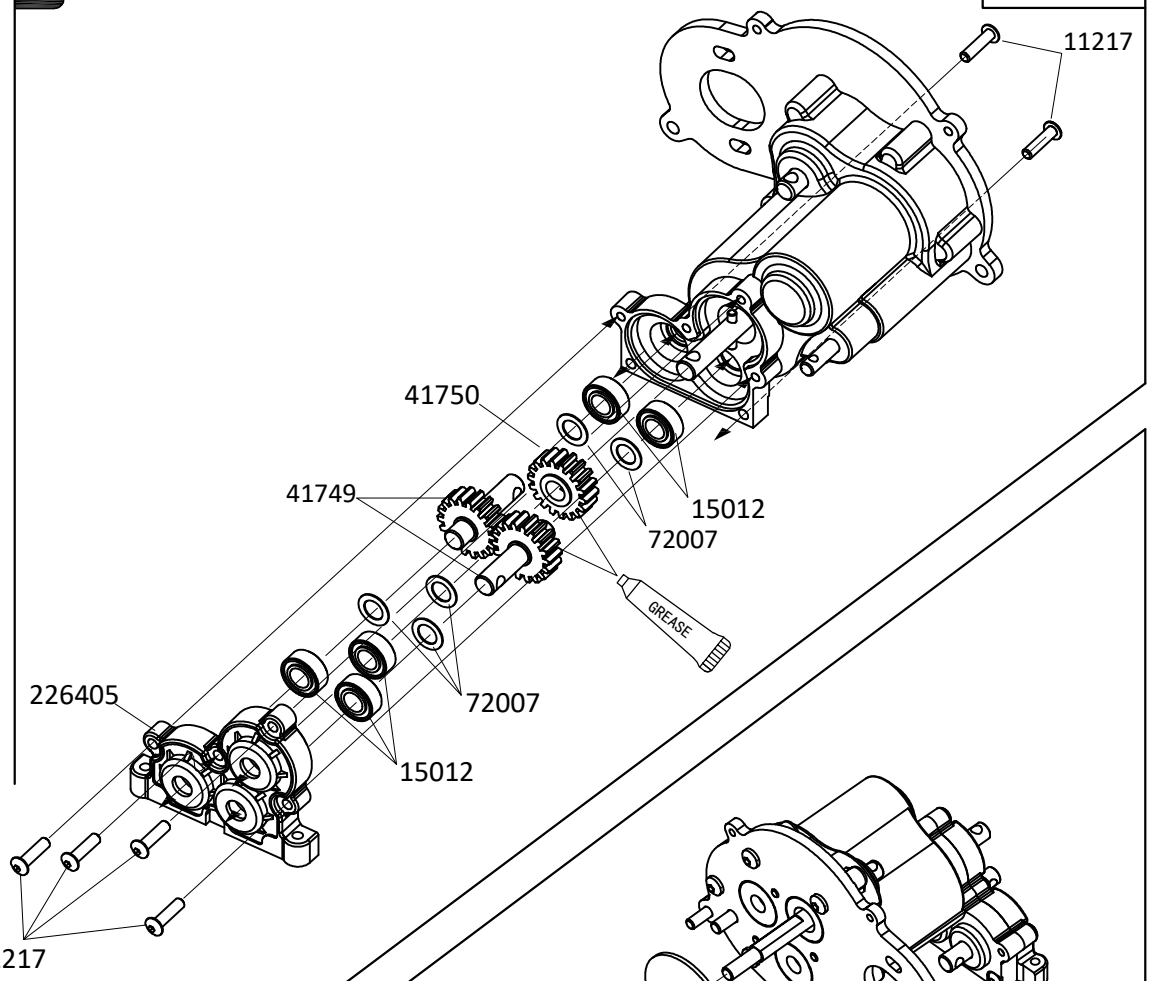
EMOXL2

3

11217 M2.5x10 X6

72007 ø5xø8x0.3 X5

15012 ø5xø10x4 X5

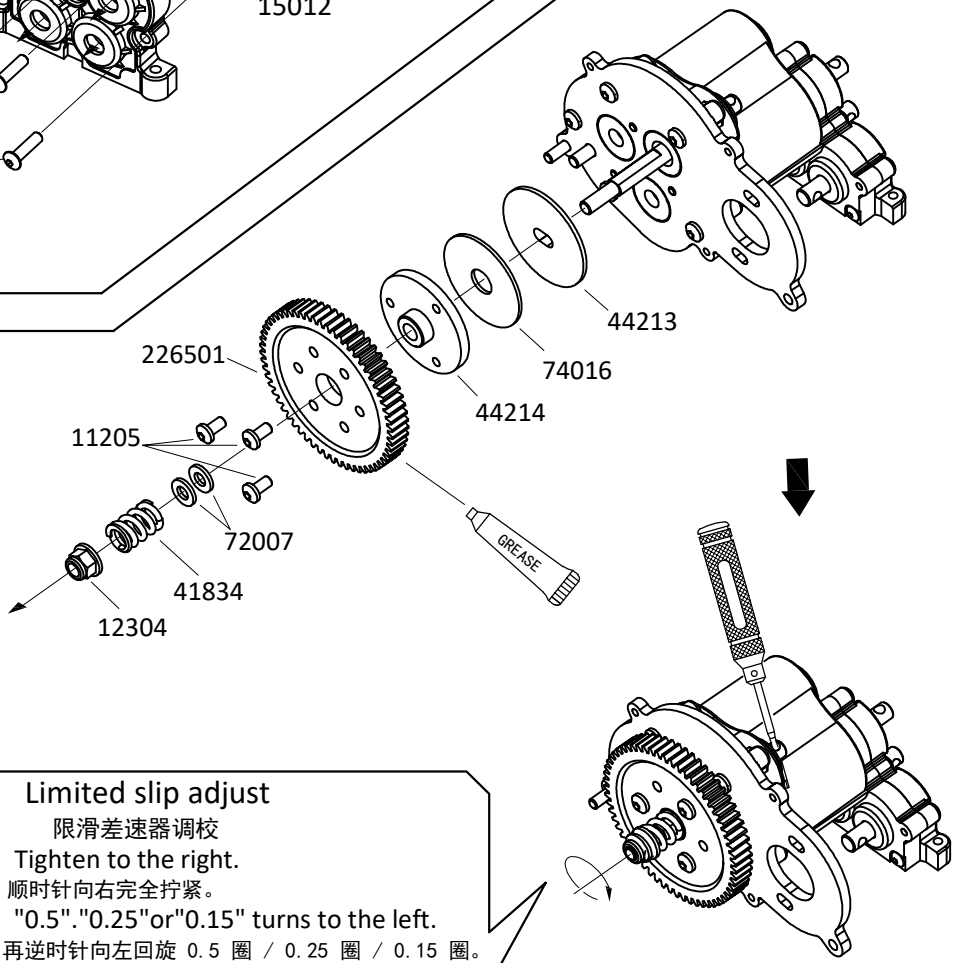


4

12304 M4 X1

72007 ø5xø8x0.3 X2

11205 M3x6 X3



Limited slip adjust

限滑差速器调校

(1) Tighten to the right.

顺时针向右完全拧紧。

(2) "0.5"."0.25"or"0.15" turns to the left.

再逆时针向左回旋 0.5 圈 / 0.25 圈 / 0.15 圈。

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

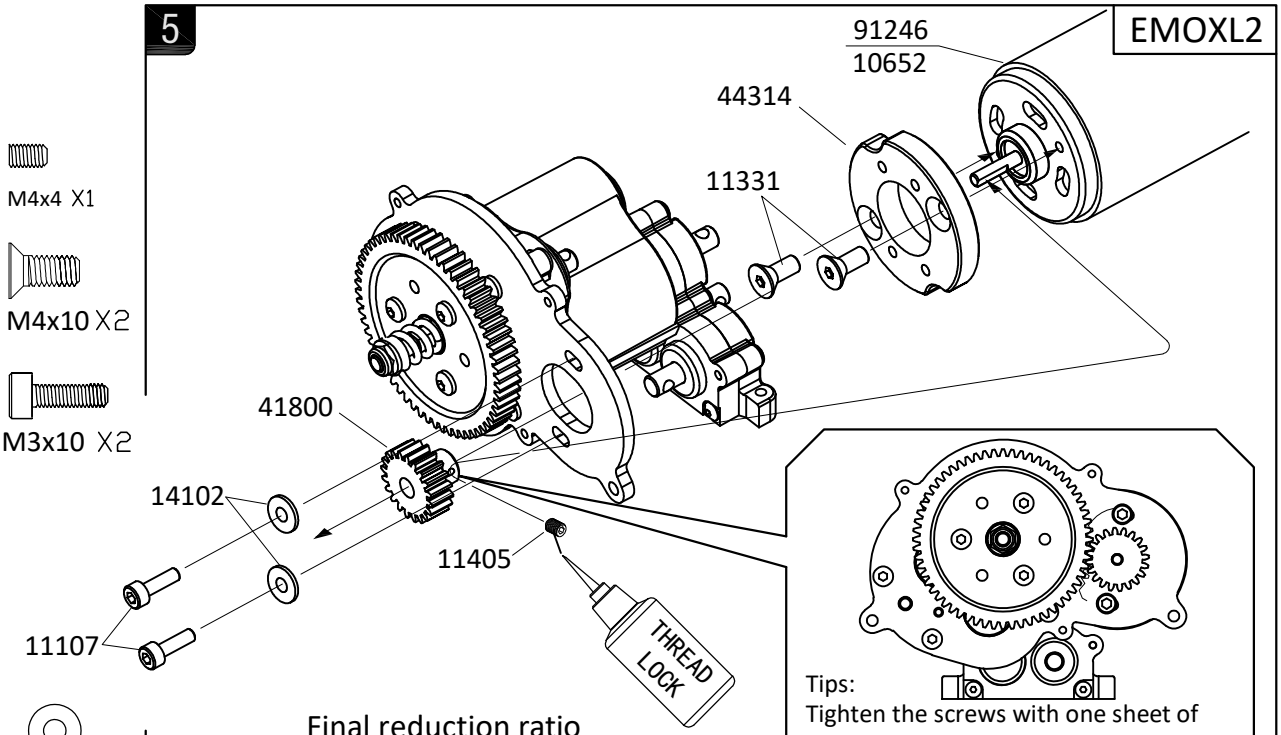
5 EMOXL2

11405 M4x4 X1

11331 M4x10 X2

11107 M3x10 X2

14102 Ø3xØ7x0.5 X2



Tips:
Tighten the screws with one sheet of paper inserted between both gears.
小贴士：
在两个齿轮之间夹入一张纸，再拧紧螺丝。

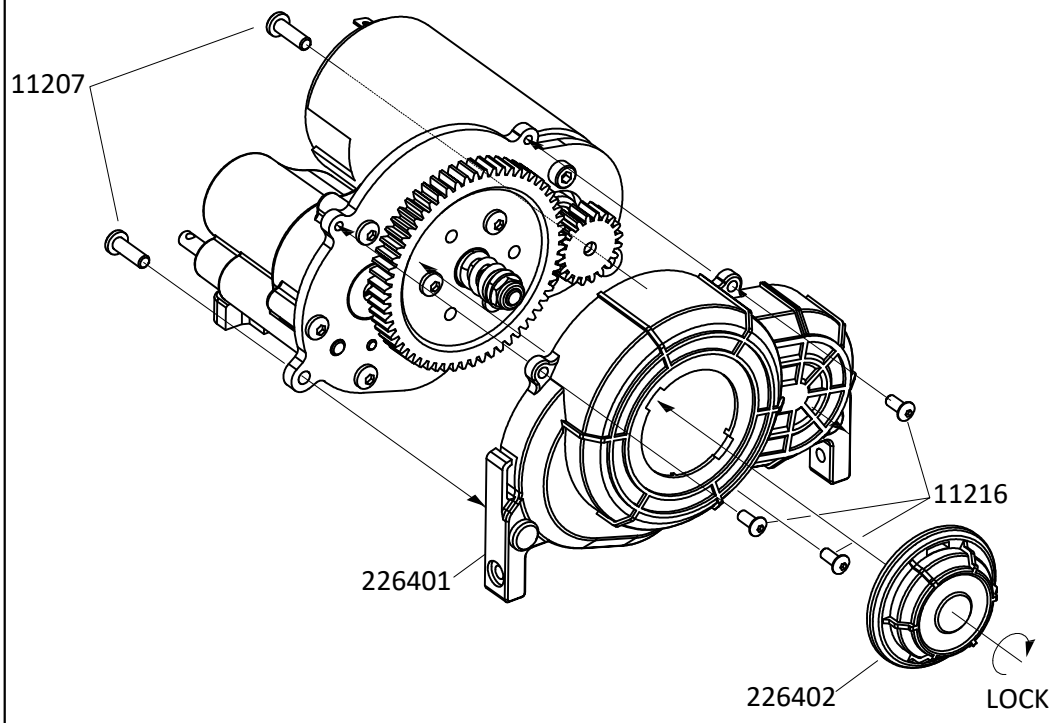
Final reduction ratio
总传动减速比

Motor gear 电机齿轮	16T	17T	18T	19T	20T	21T
Fast (快)	22.1	20.8	19.6	18.6	17.8	17
Slow (慢)	48.3	45.4	42.9	40.6	38.9	37

6 EMOXL2

11207 M3x10 X2

11216 M2.5x6 X3



7 EMOXL2

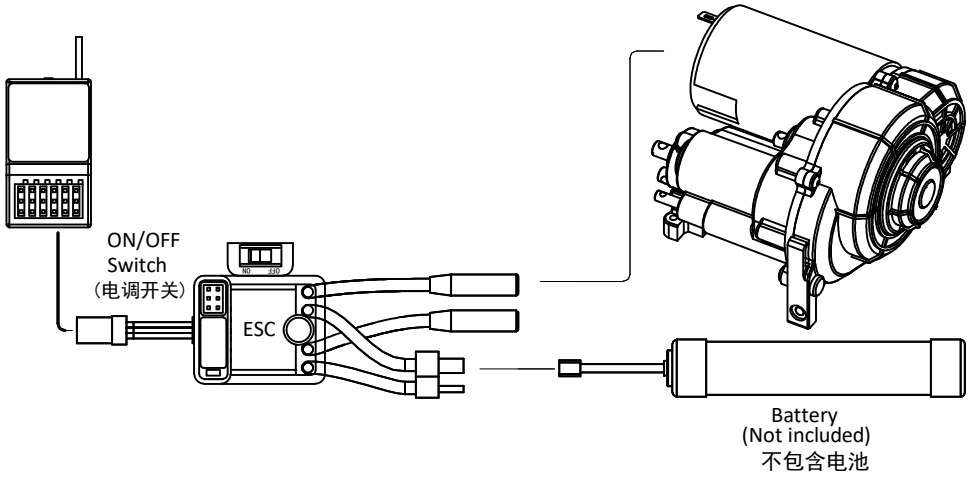
Tips:

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.

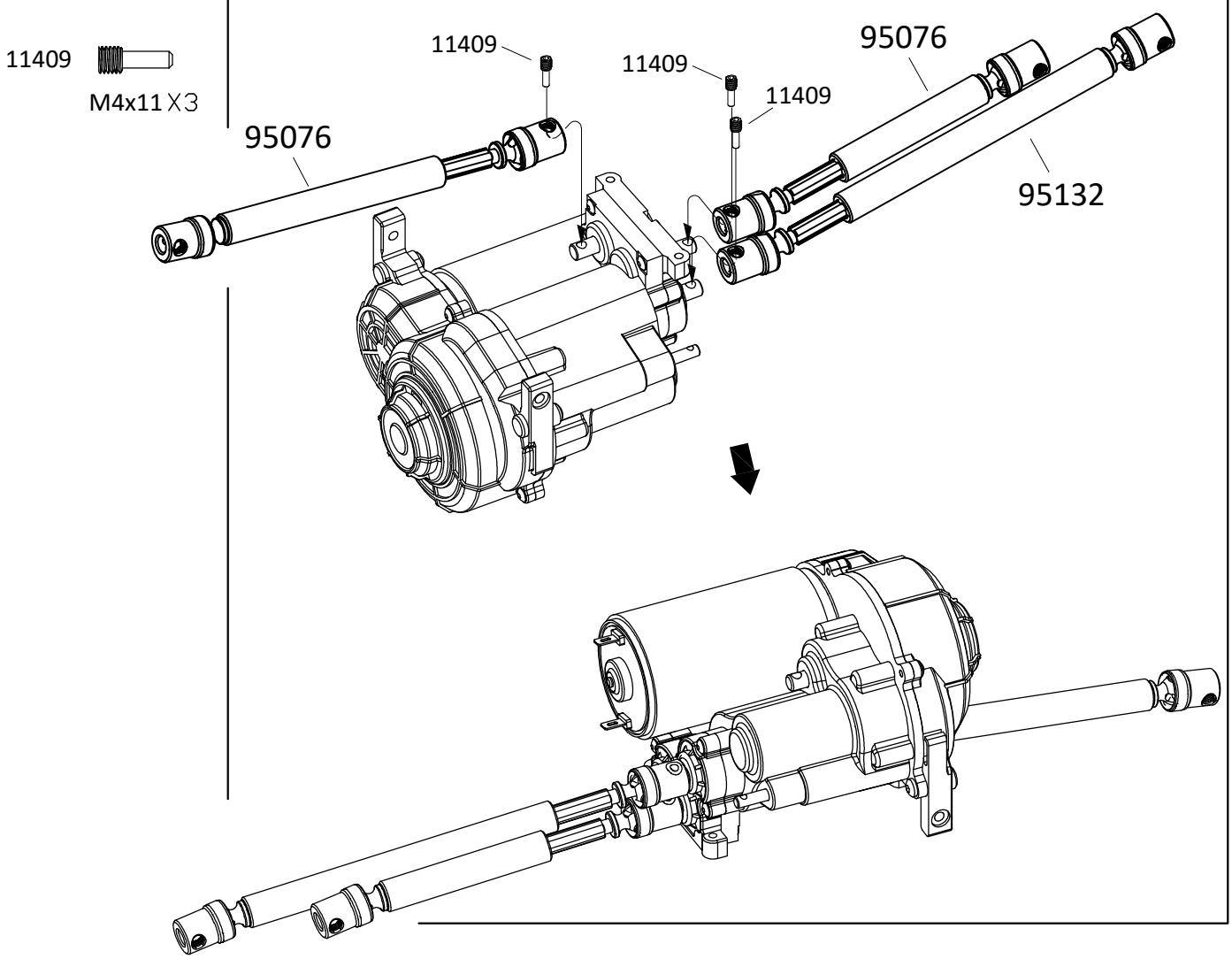
小贴士：

将电调与电机、齿轮箱总成接通电源，测试齿轮啮合状态。

若齿轮箱运转不顺畅、噪音过大，请先检查齿轮啮合间隙，再进行后续步骤。



8 EMOXL2



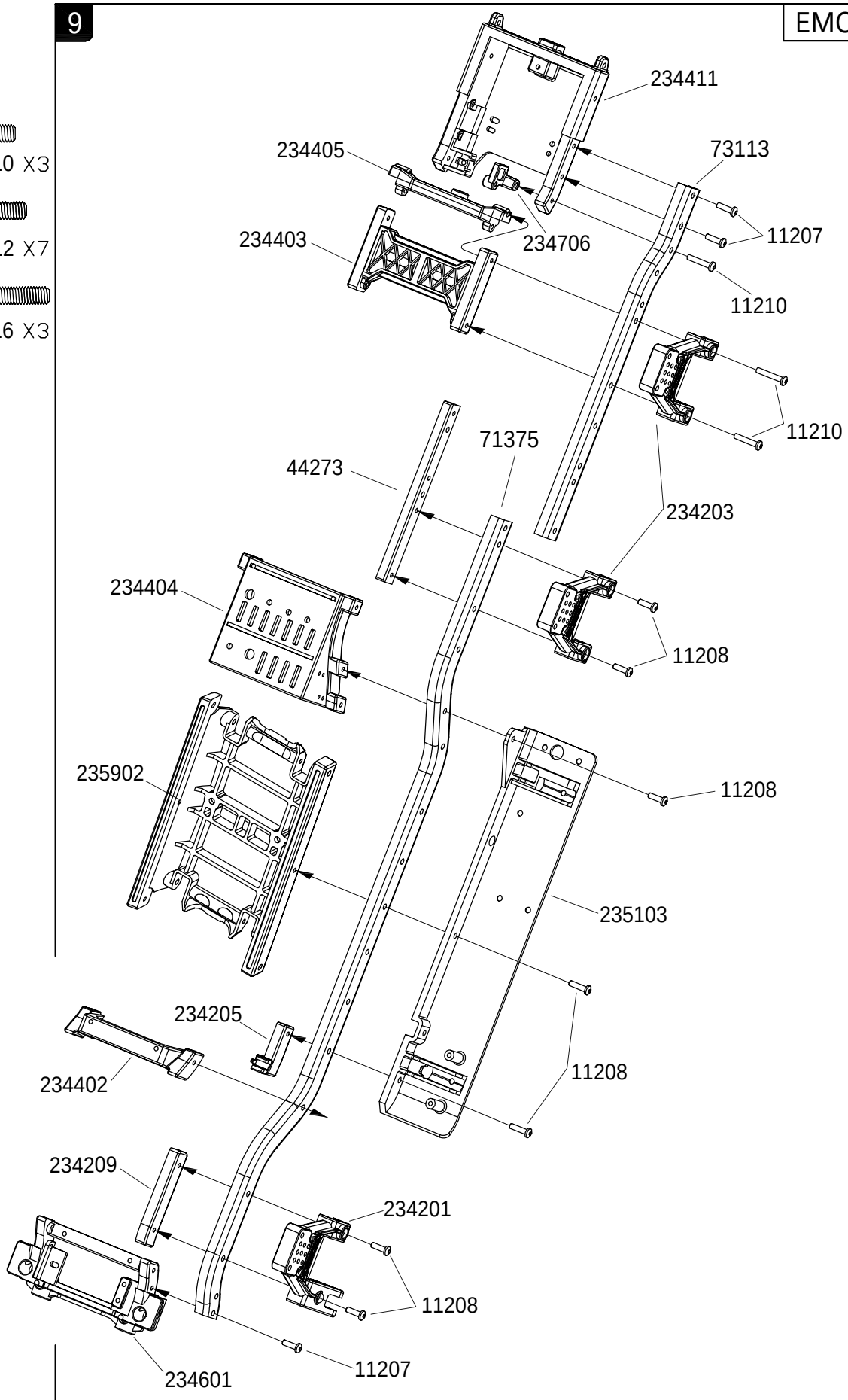
9

EMOXL2

11207 M3x10 X3

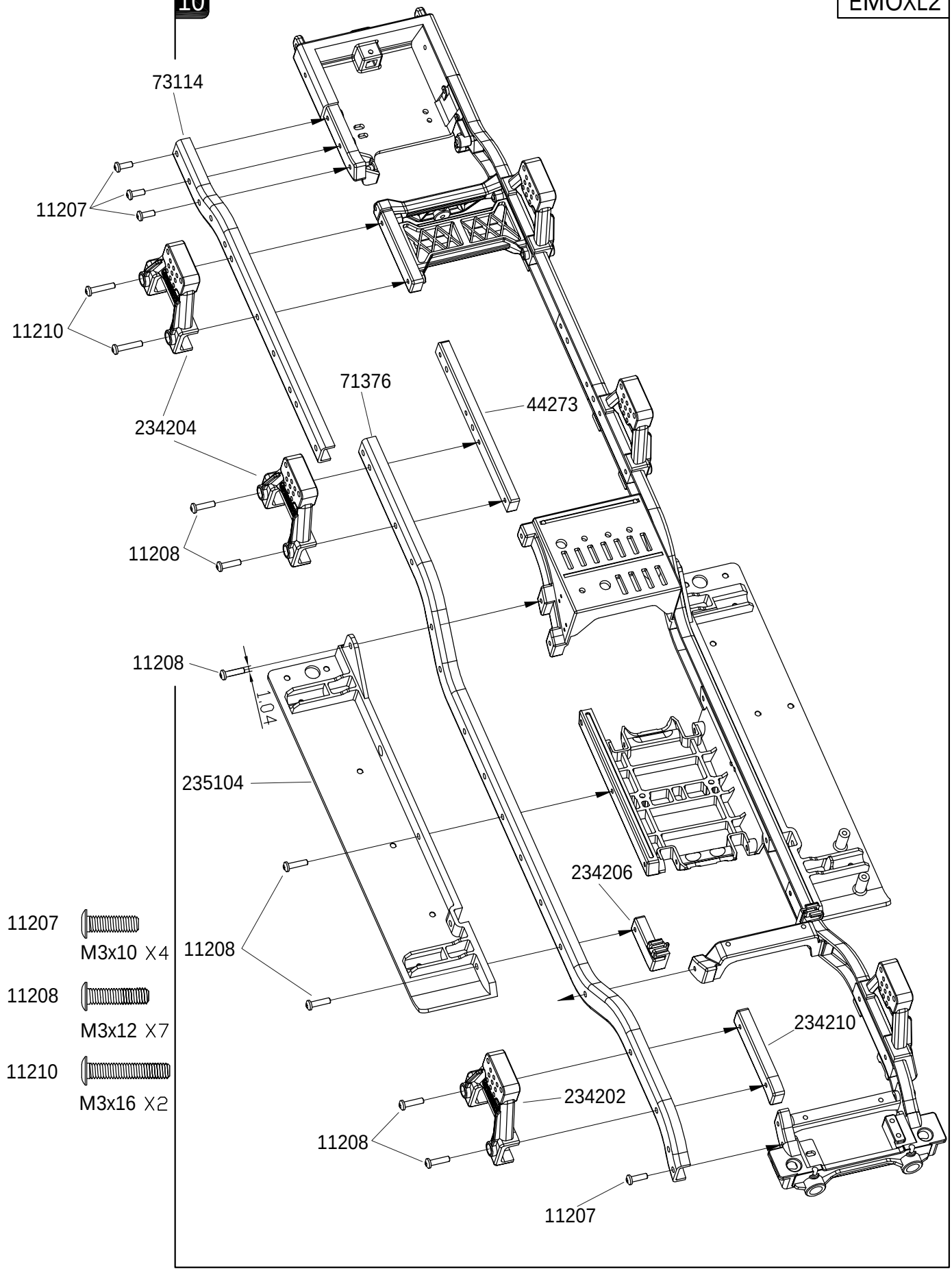
11208 M3x12 X7

11210 M3x16 X3



10

EMOXL2



11207 M3x10 X4

11208 M3x12 X7

11210 M3x16 X2

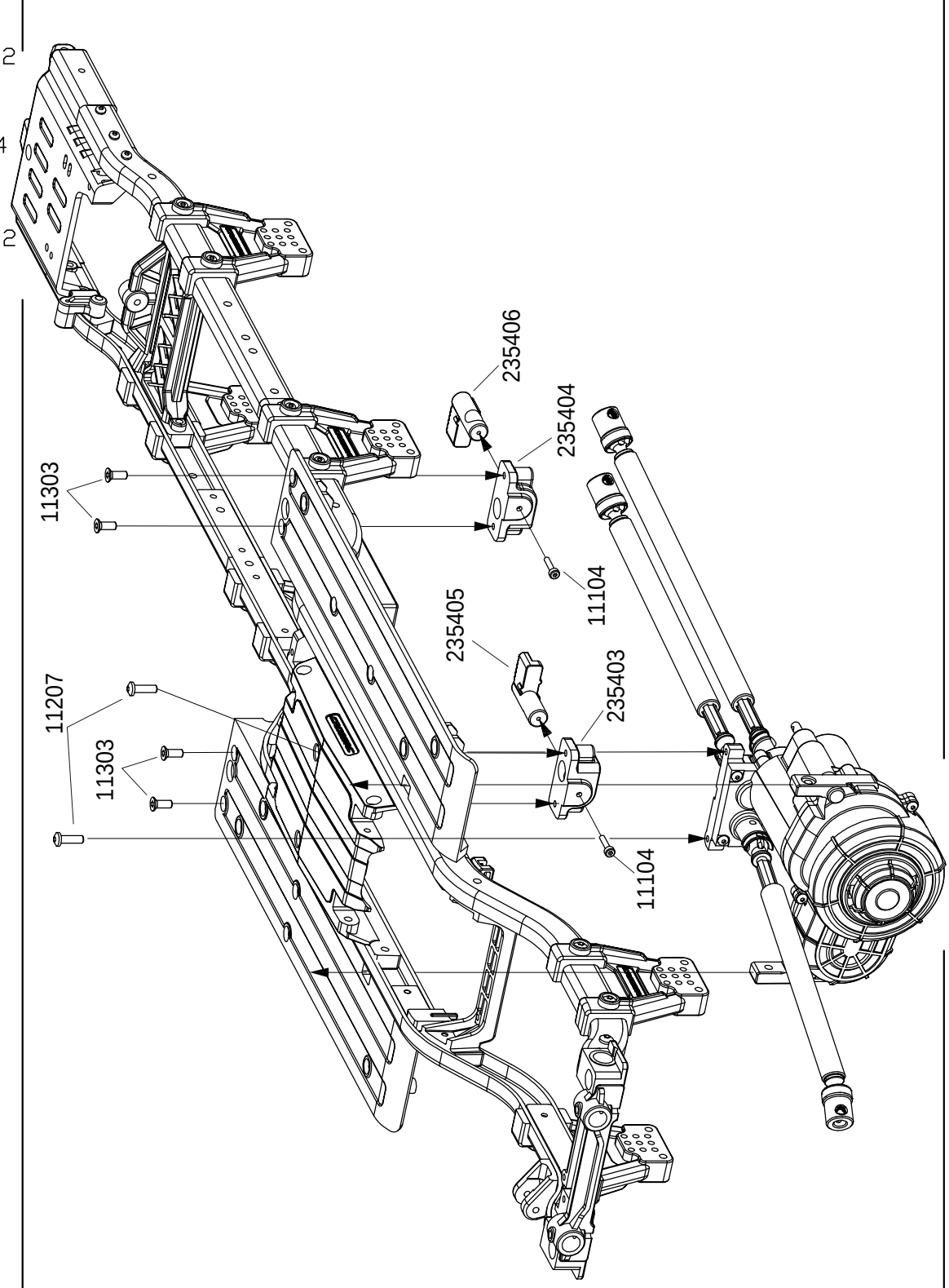
11

EMOXL2

11207 M3x10 X2

11303 M3x8 X4

11104 M2x10 X2

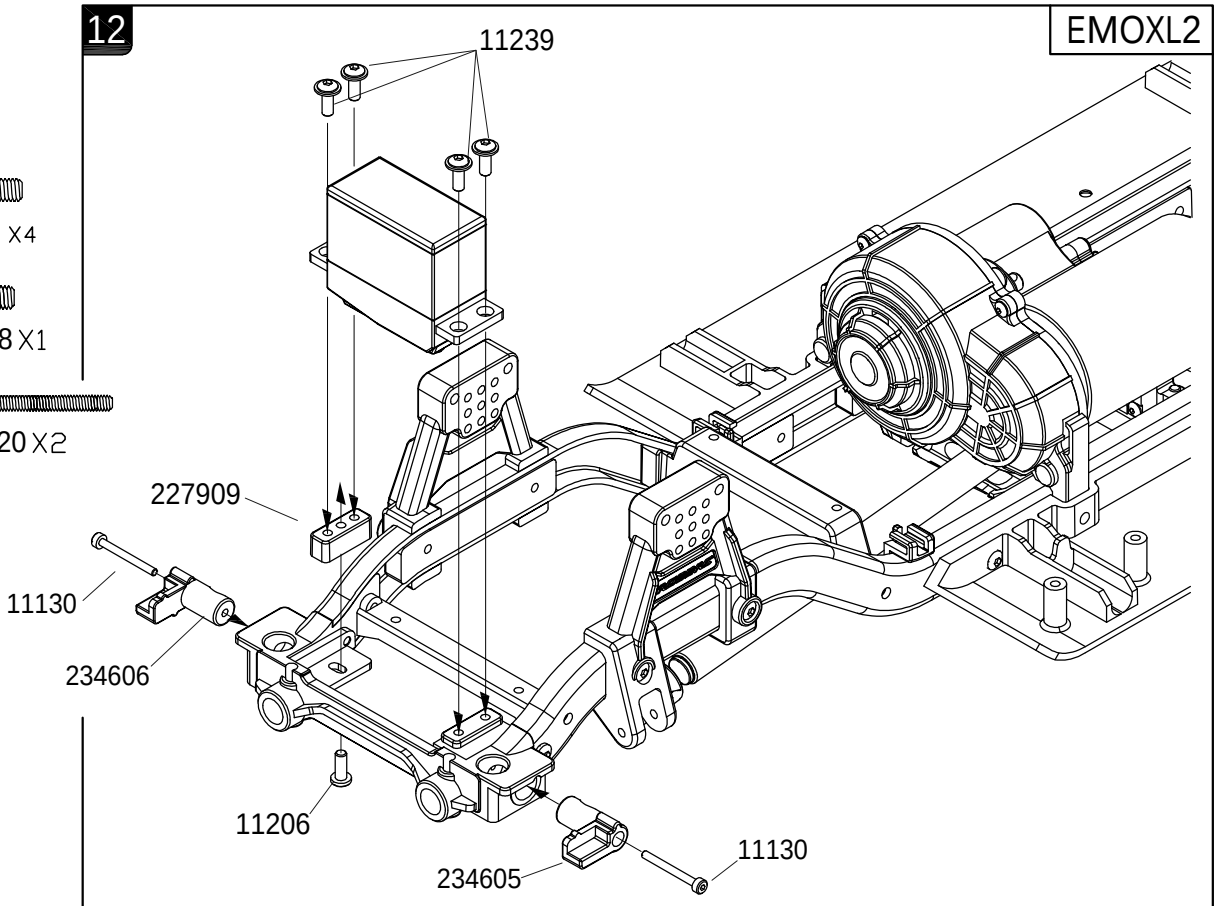


12 EMOXL2

11239
M3x8 X4

11206
M3x8 X1

11130
M2x20 X2



13 EMOXL2

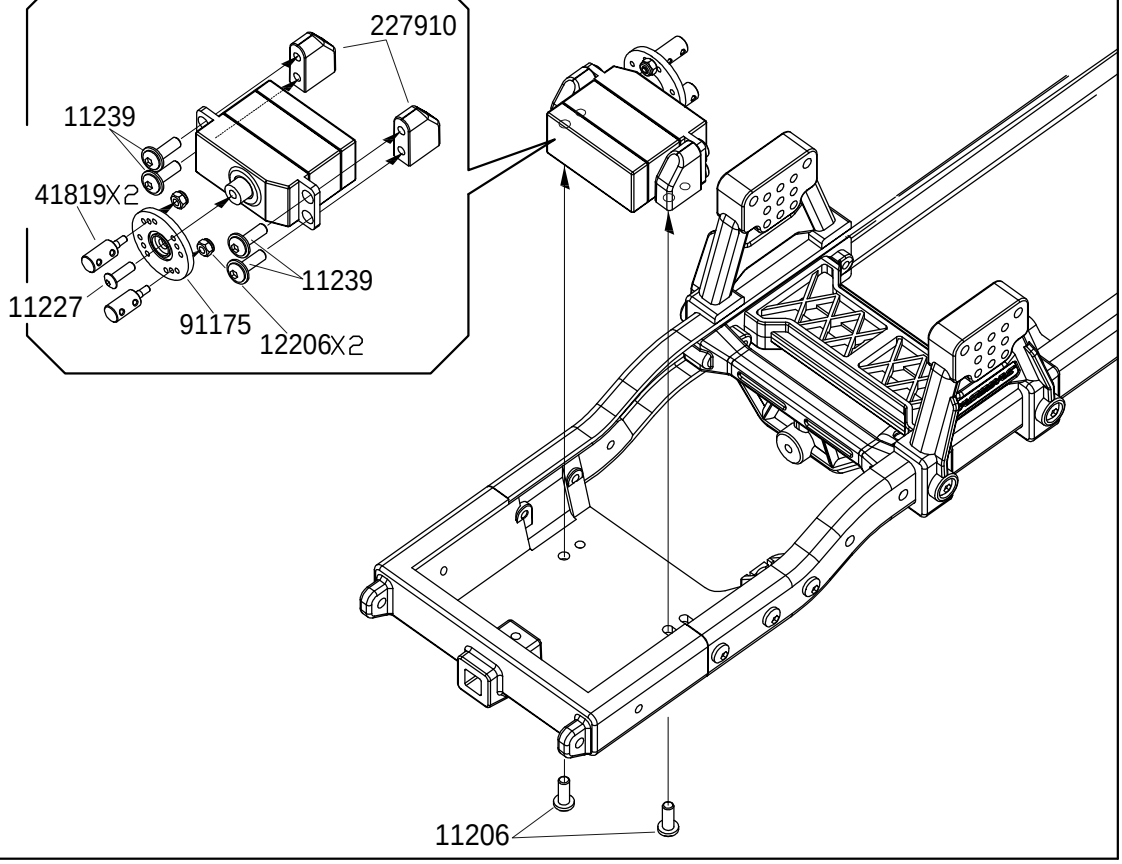
11206
M3x8 X2

11227
M2.5x8 X1

12206
M2 X2

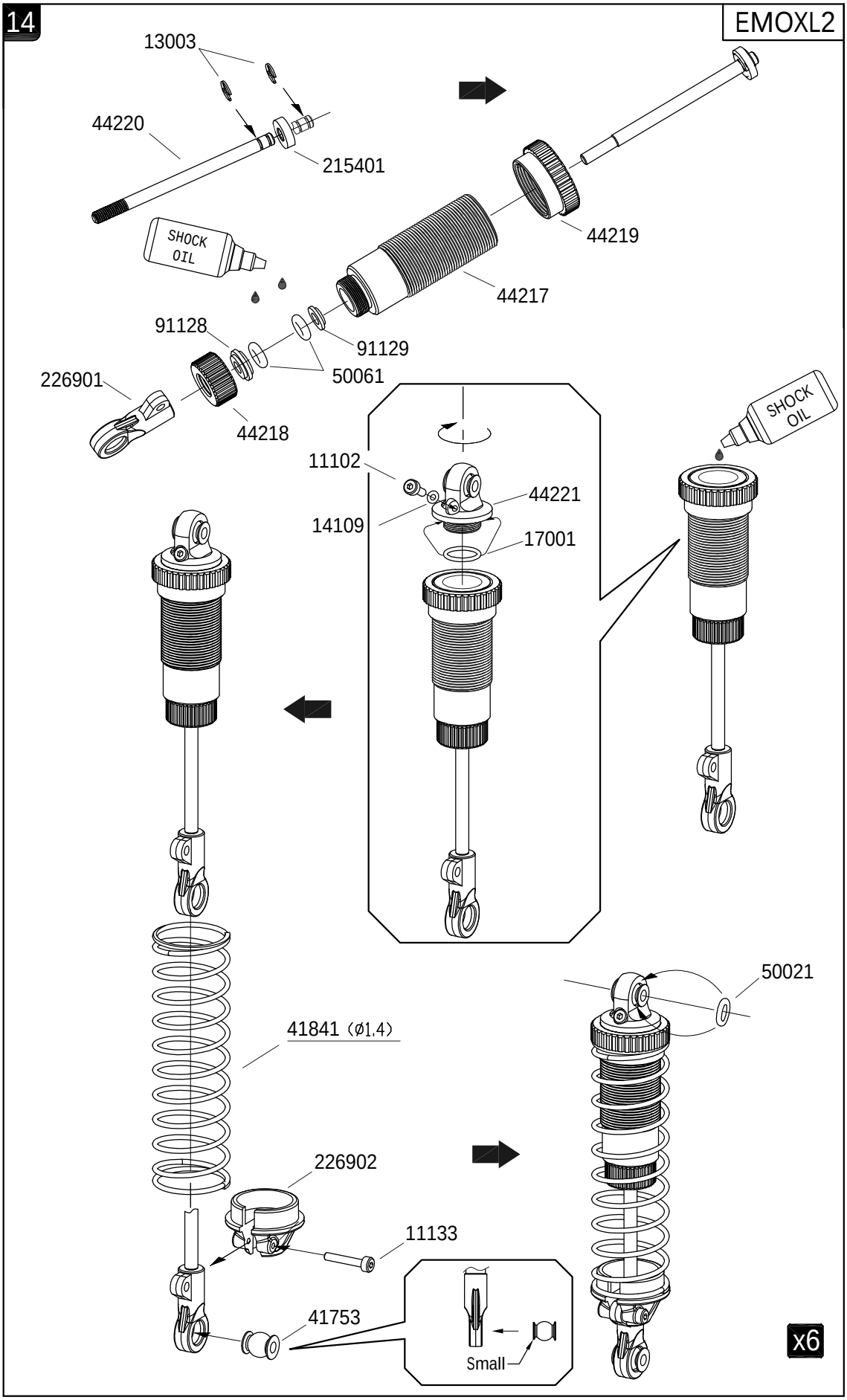
41819 X2

11239
M3x8 X4



14

EMOXL2



13003 ø2.5xø6x0.4 X12

14109 Ø4xØ2x0.5 X6

50021 X6 Ø7.2xØ3.4xØ1.9

17001 X6 Ø8xØ6xØ1

50061 X12 Ø7.5xØ2

11133 M2x12 X6

11102 M2x6 X6

41753 X6

41841 X6(ø1.4)

11125
M2.5x10 X4

11316
M2.5x10 X3

11227
M2.5x8 X12

15015
ø15xø21x4 X3

15016
ø12xø18x4 X3

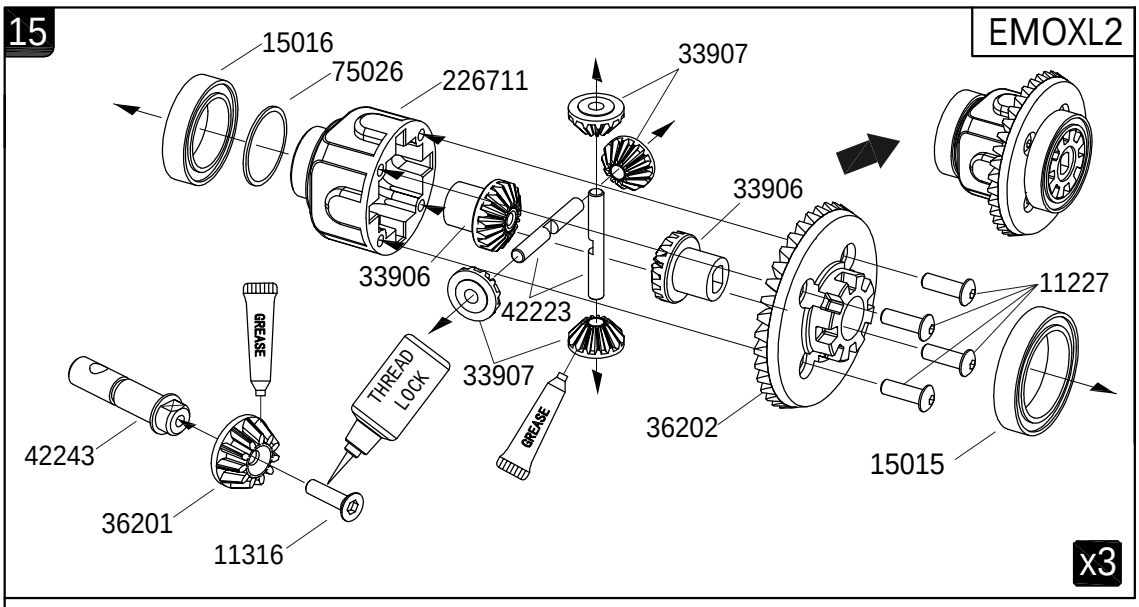
75026
Ø12xØ15x0.2 X3

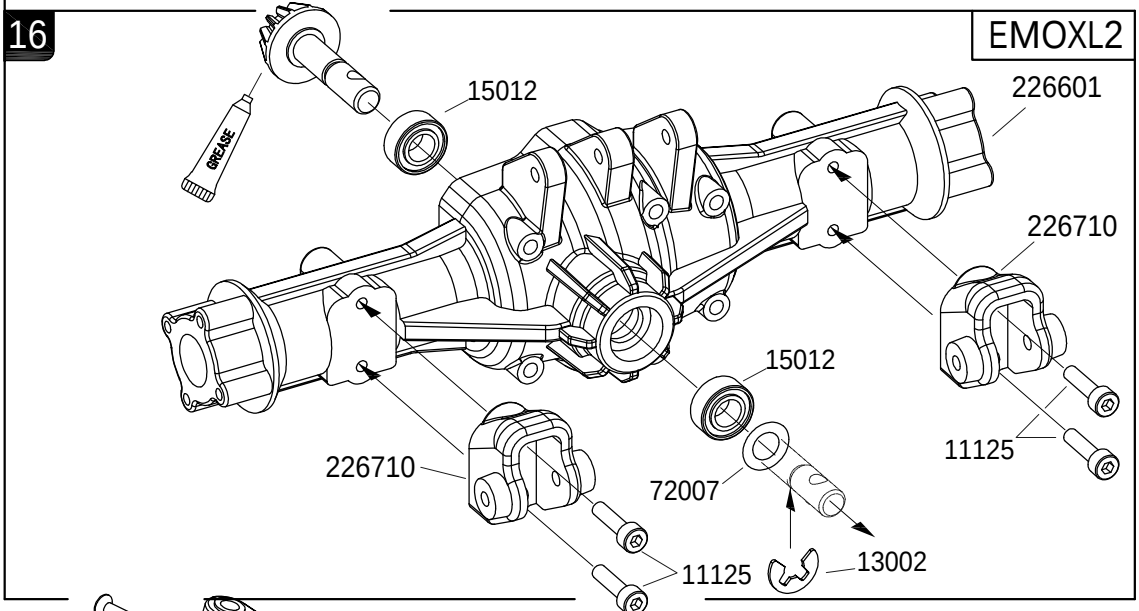
15012
Ø5xØ10x4 X2

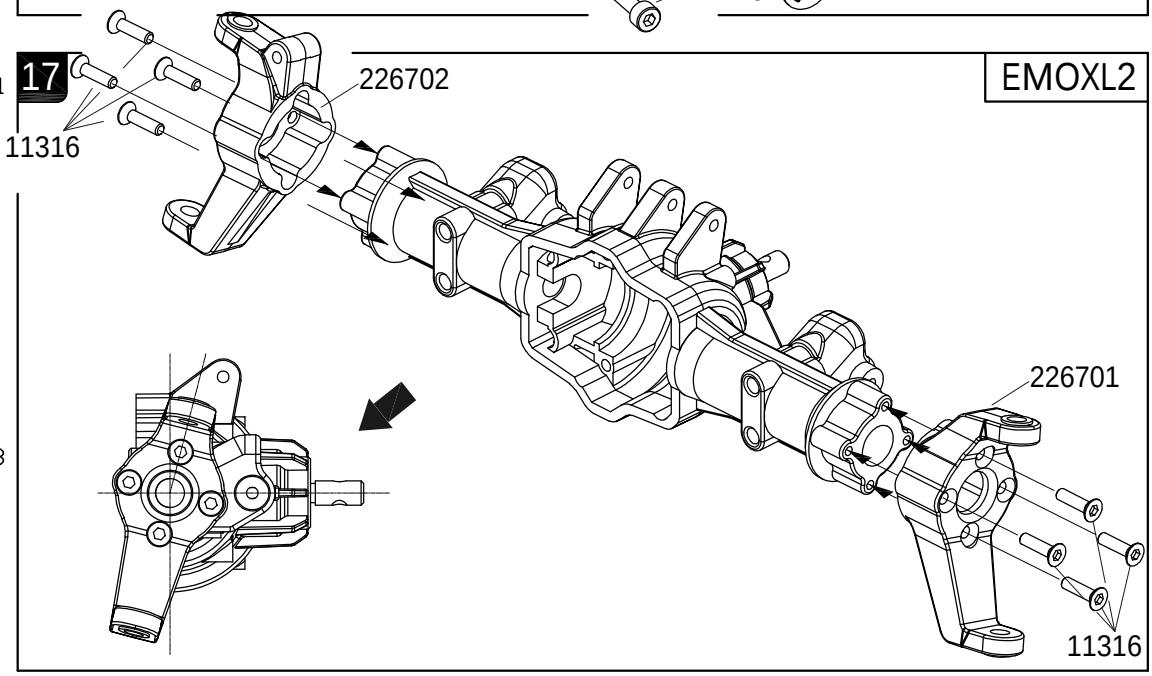
13002
Ø3.8xØ9.2x0.6 X1

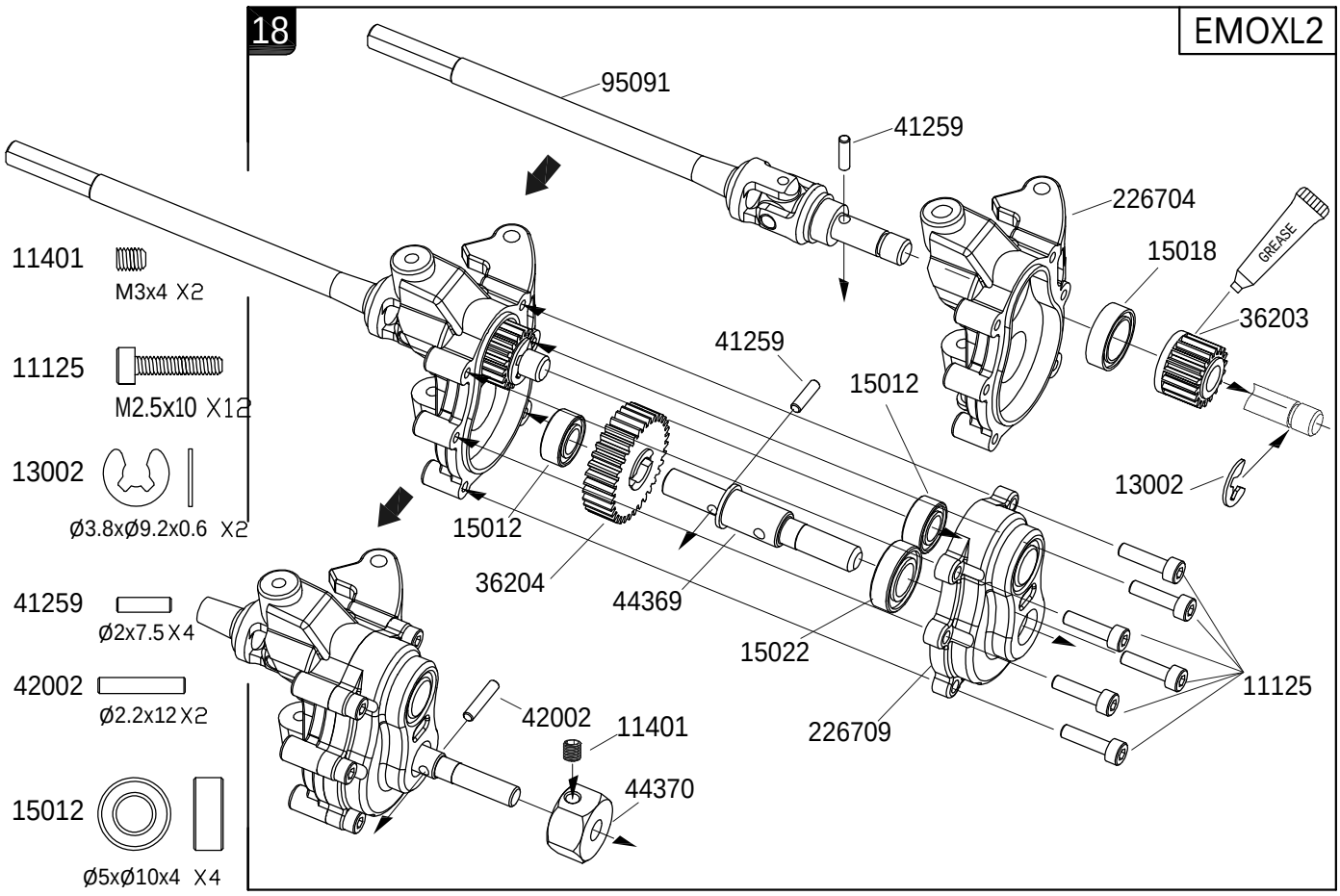
72007
Ø5xØ8x0.3 X1

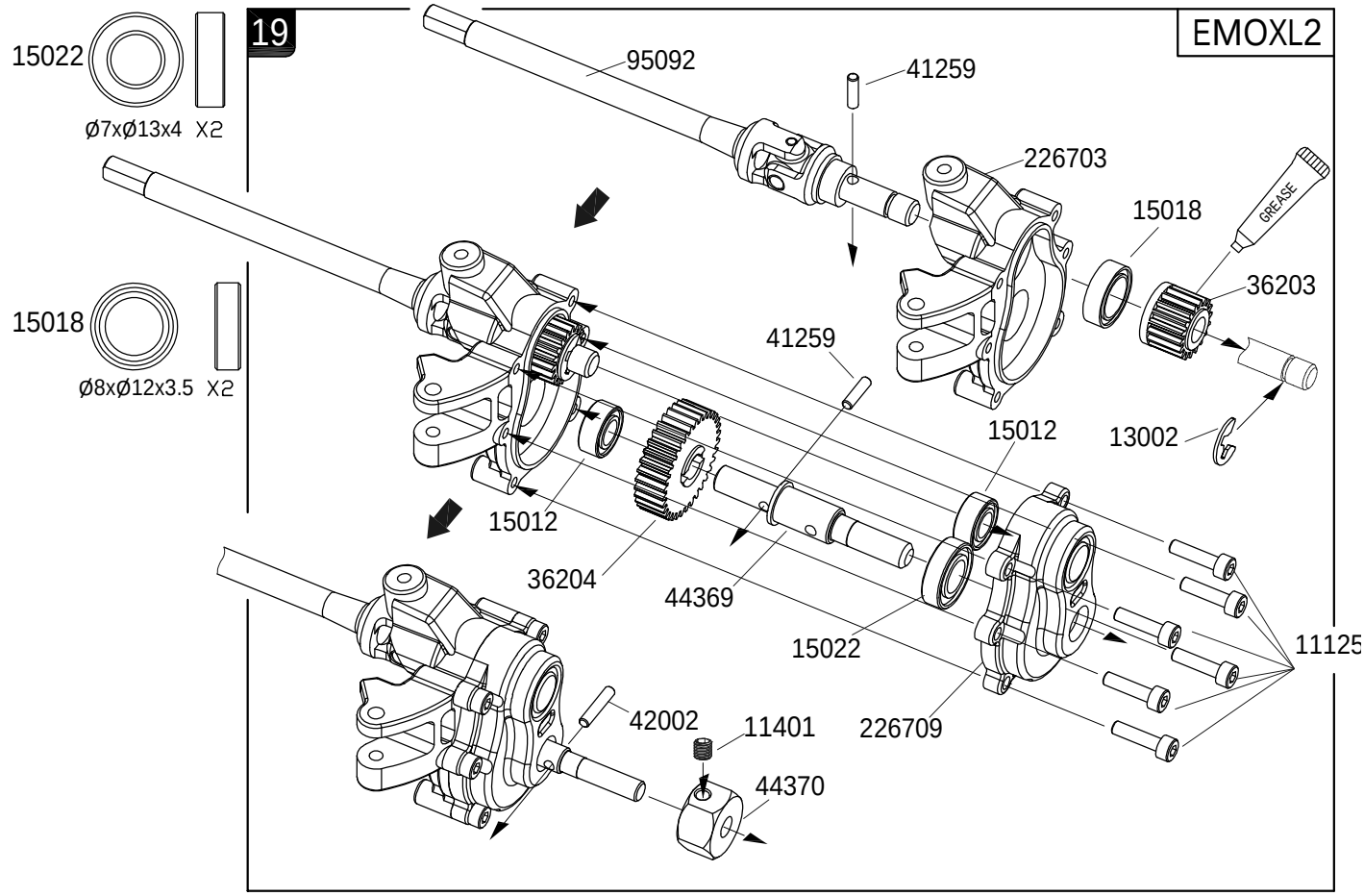
11316
M2.5x10 X8

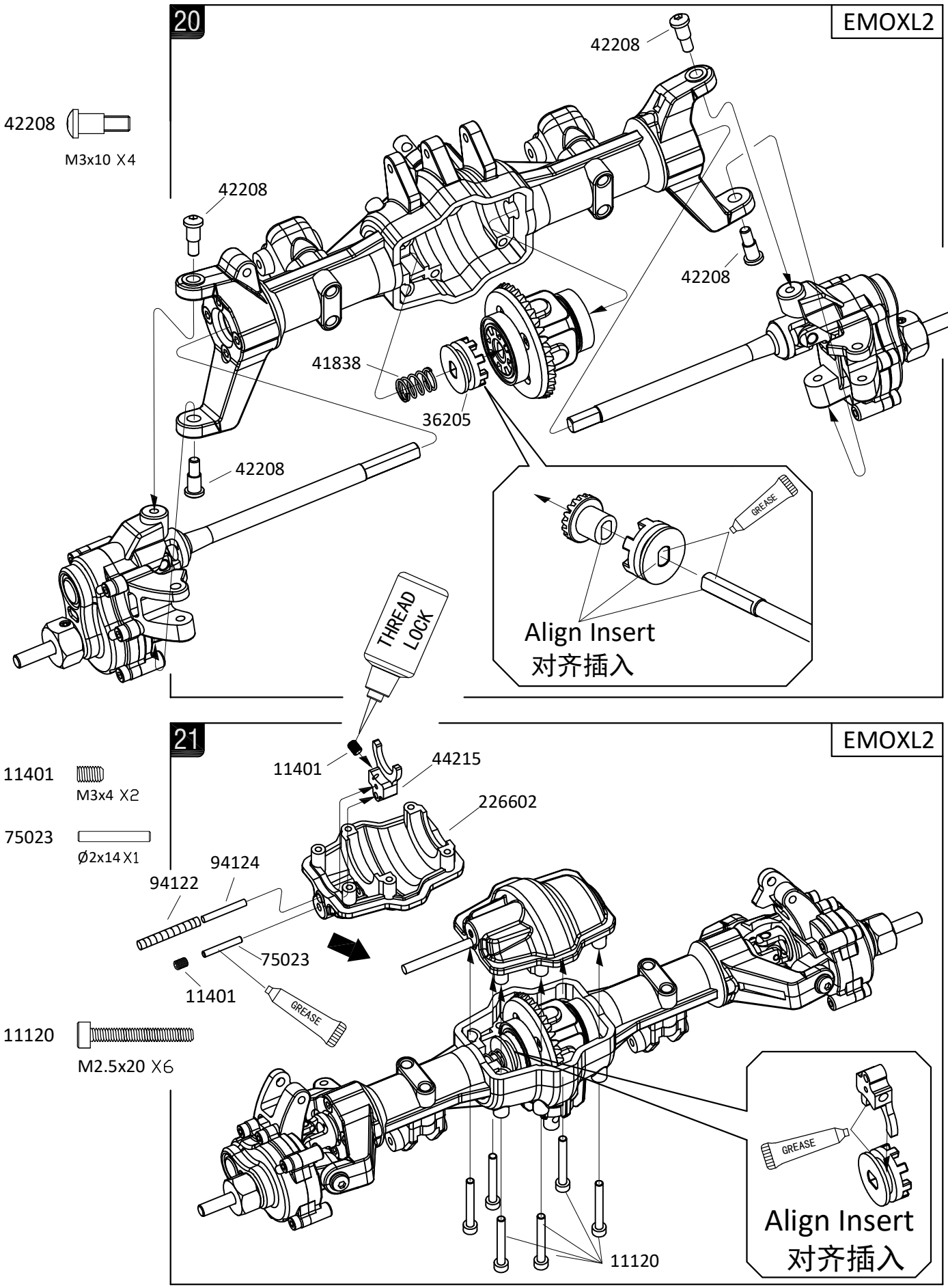







18
EMOXL2
95091
41259
226704
GREASE
15018
36203
11401
M3x4 X2
11125
M2.5x10 X12
13002
Ø3.8xØ9.2x0.6 X2
41259
Ø2x7.5 X4
42002
Ø2.2x12 X2
15012
Ø5xØ10x4 X4
41259
15012
13002
15012
36204
44369
15022
11125
42002
11401
226709
44370


19
EMOXL2
15022
Ø7xØ13x4 X2
15018
Ø8xØ12x3.5 X2
95092
41259
226703
15018
GREASE
36203
41259
15012
13002
15012
36204
44369
15022
11125
42002
11401
226709
44370


20
EMOXL2
42208
M3x10 X4
42208
42208
42208
41838
36205
42208
GREASE
Align Insert
对齐插入
THREAD LOCK
21
EMOXL2
11401
M3x4 X2
75023
Ø2x14 X1
11120
M2.5x20 X6
11401
44215
226602
94124
94122
75023
11401
GREASE
11120
GREASE
Align Insert
对齐插入

22

EMOXL2

15012

Ø5xØ10x4 X2

13002

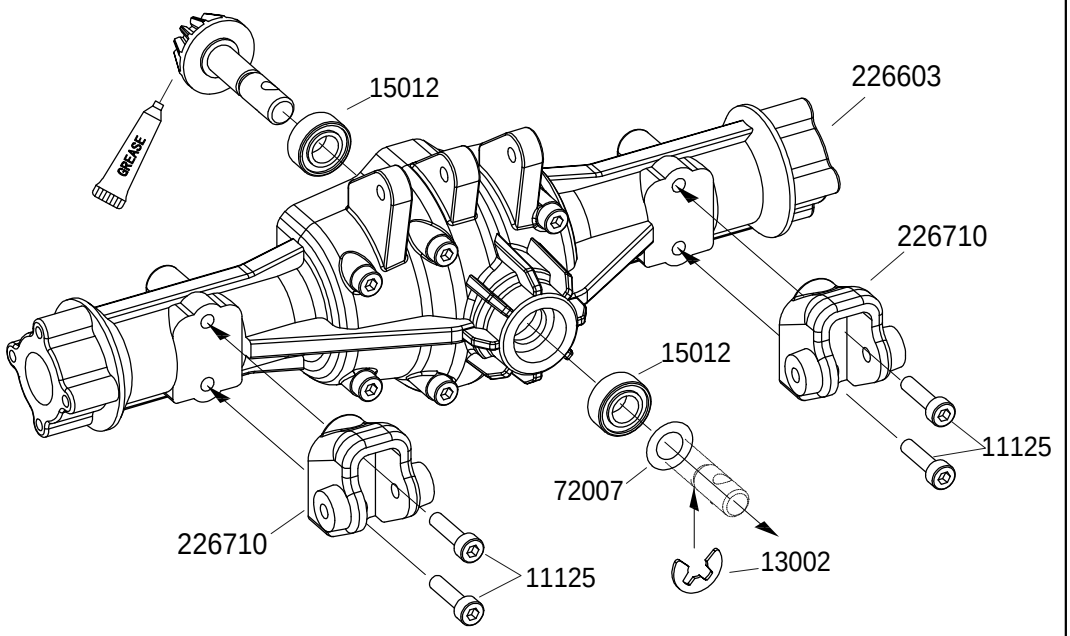
Ø3.8xØ9.2x0.6 X1

72007

Ø5xØ8x0.3 X1

11125

M2.5x10 X4

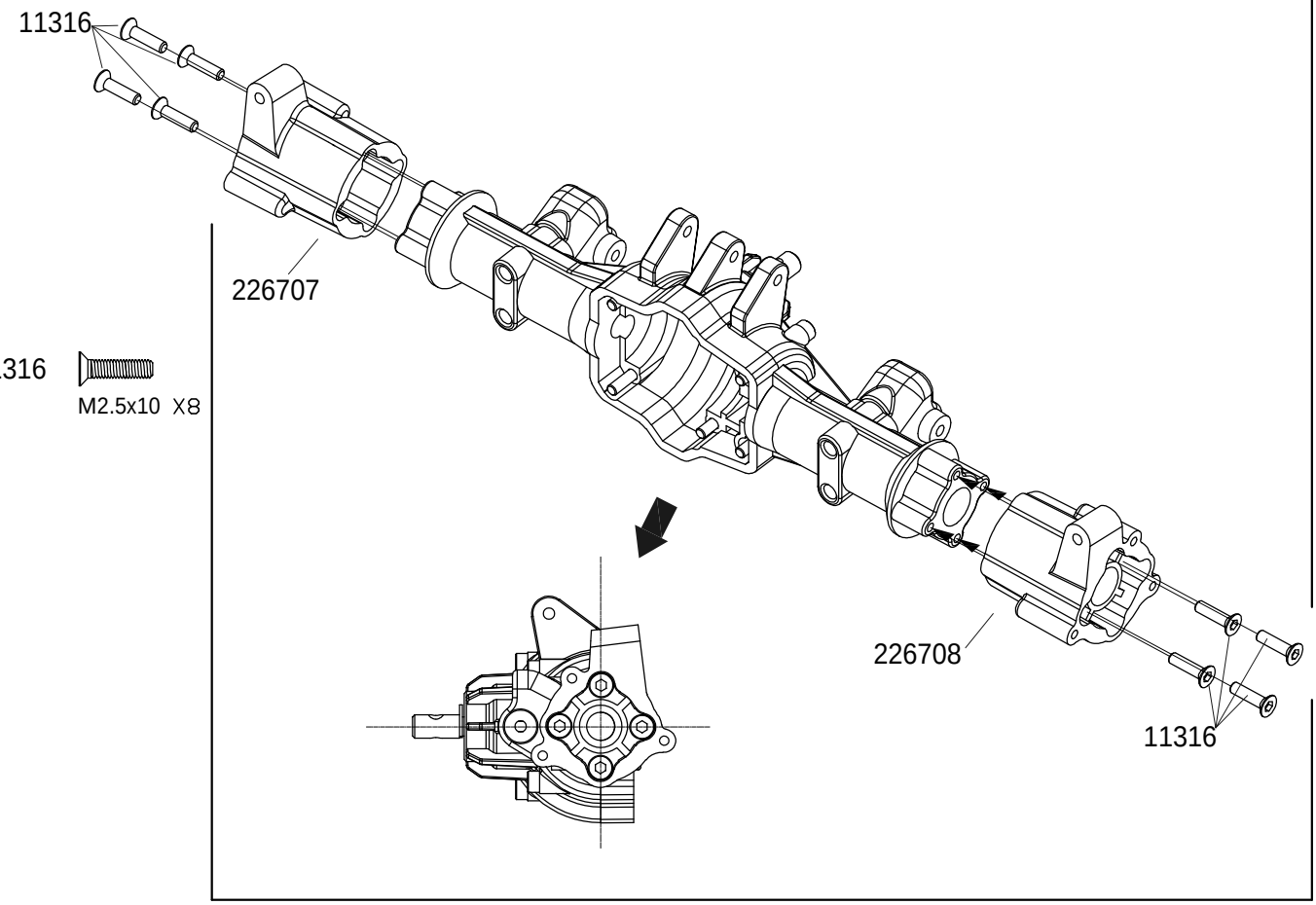


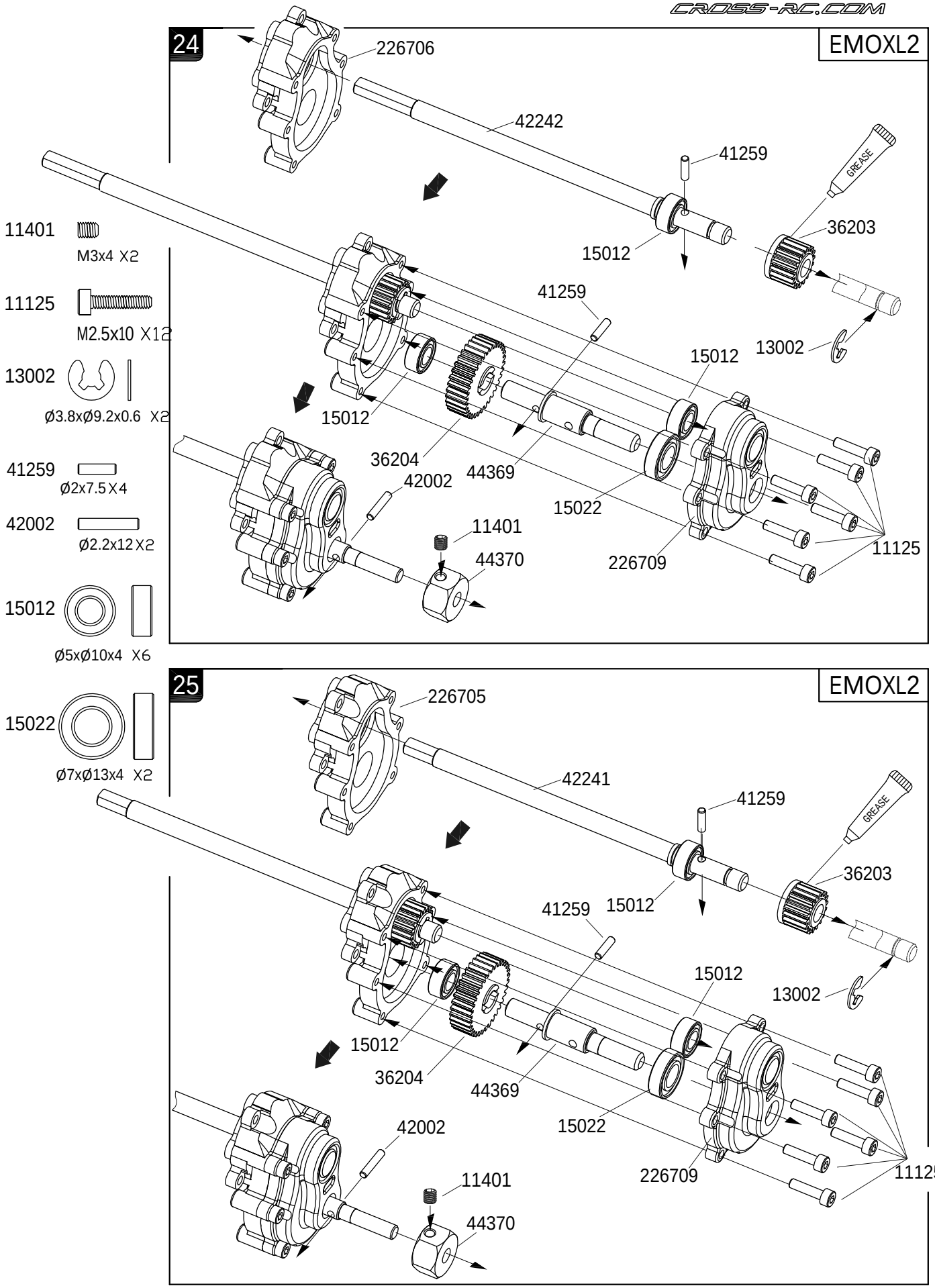
23

EMOXL2

11316

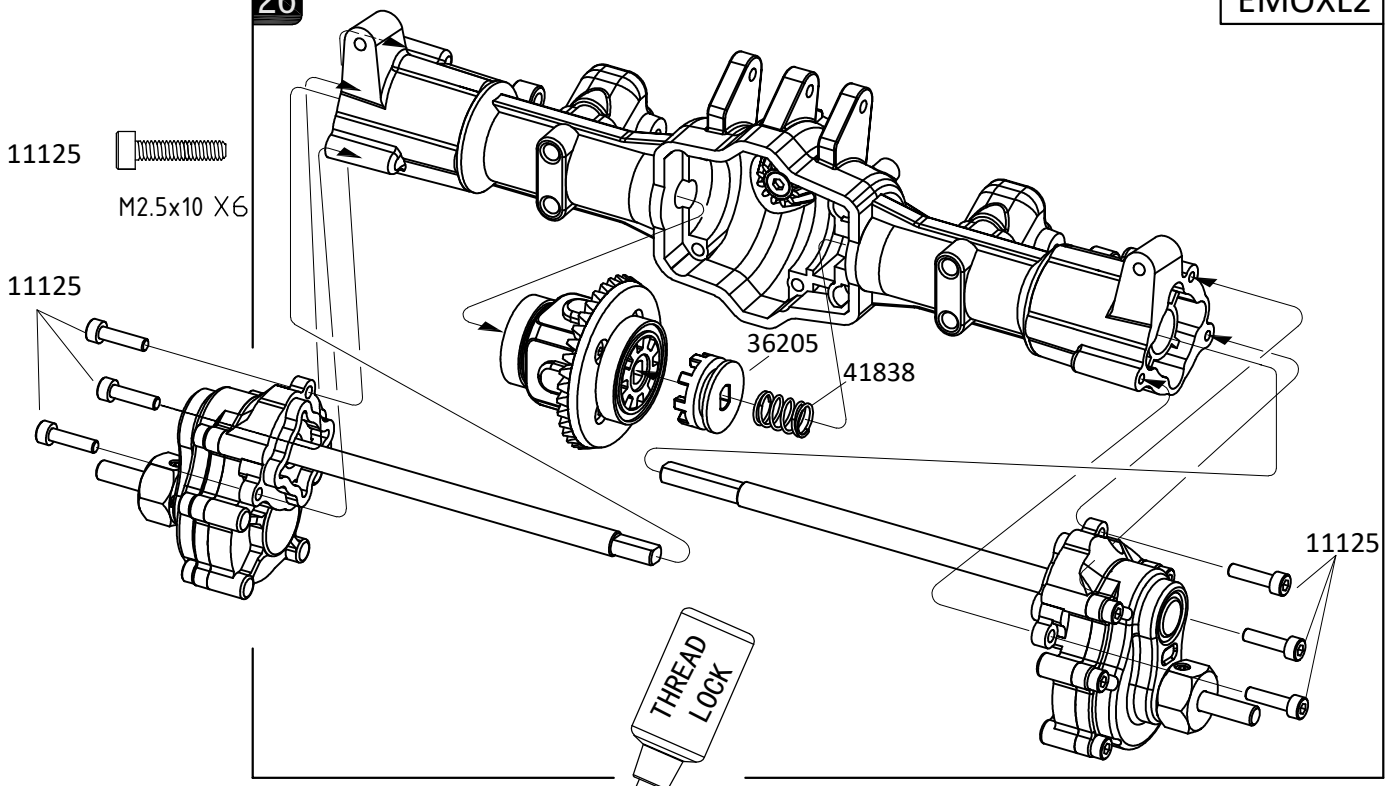
M2.5x10 X8




24
EMOXL2
226706
42242
41259
GREASE
36203
15012
41259
13002
15012
15012
36204
44369
42002
15022
11401
44370
226709
11125
11401
M3x4 X2
11125
M2.5x10 X12
13002
Ø3.8xØ9.2x0.6 X2
41259
Ø2x7.5 X4
42002
Ø2.2x12 X2
15012
Ø5xØ10x4 X6
15022
Ø7xØ13x4 X2
25
EMOXL2
226705
42241
41259
GREASE
36203
41259
15012
15012
13002
15012
36204
44369
42002
15022
11401
44370
226709
11125

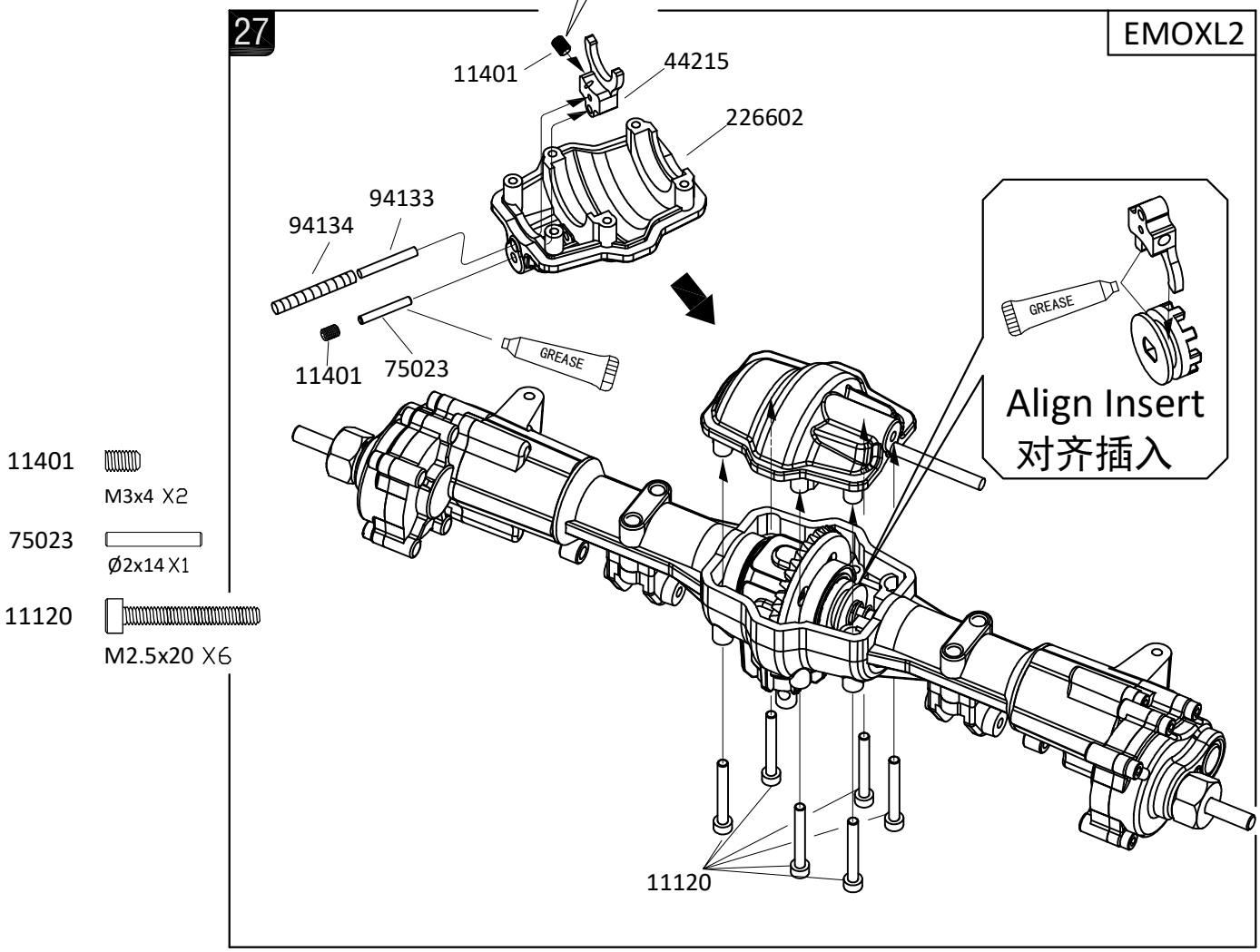
26

EMOXL2



27

EMOXL2



11401 M3x4 X2

75023 Ø2x14 X1

11120 M2.5x20 X6

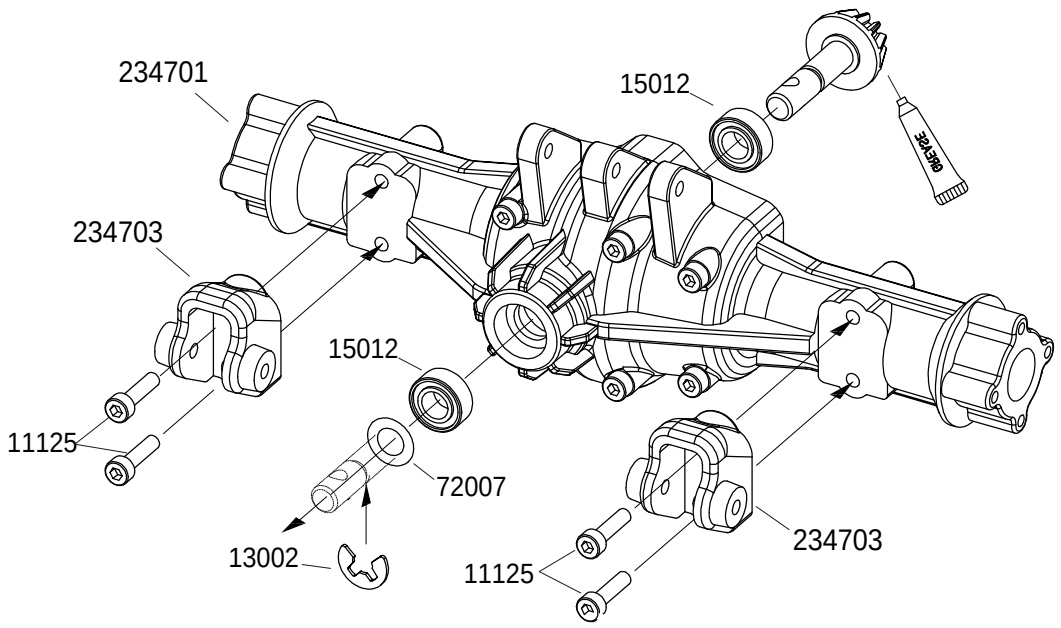
28 EMOXL2

15012
Ø5xØ10x4 X2

13002
Ø3.8xØ9.2x0.6 X1

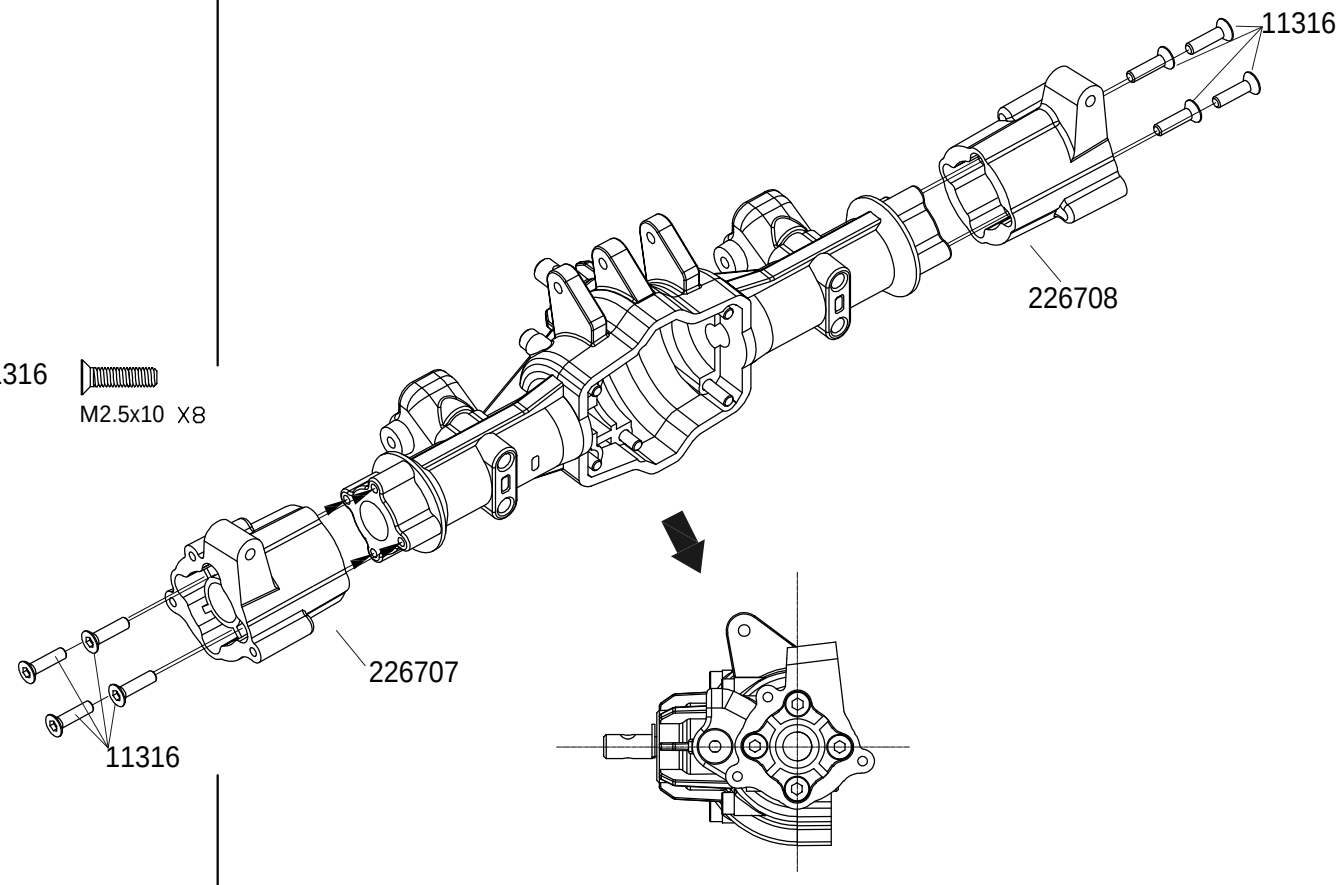
72007
Ø5xØ8x0.3 X1

11125
M2.5x10 X4

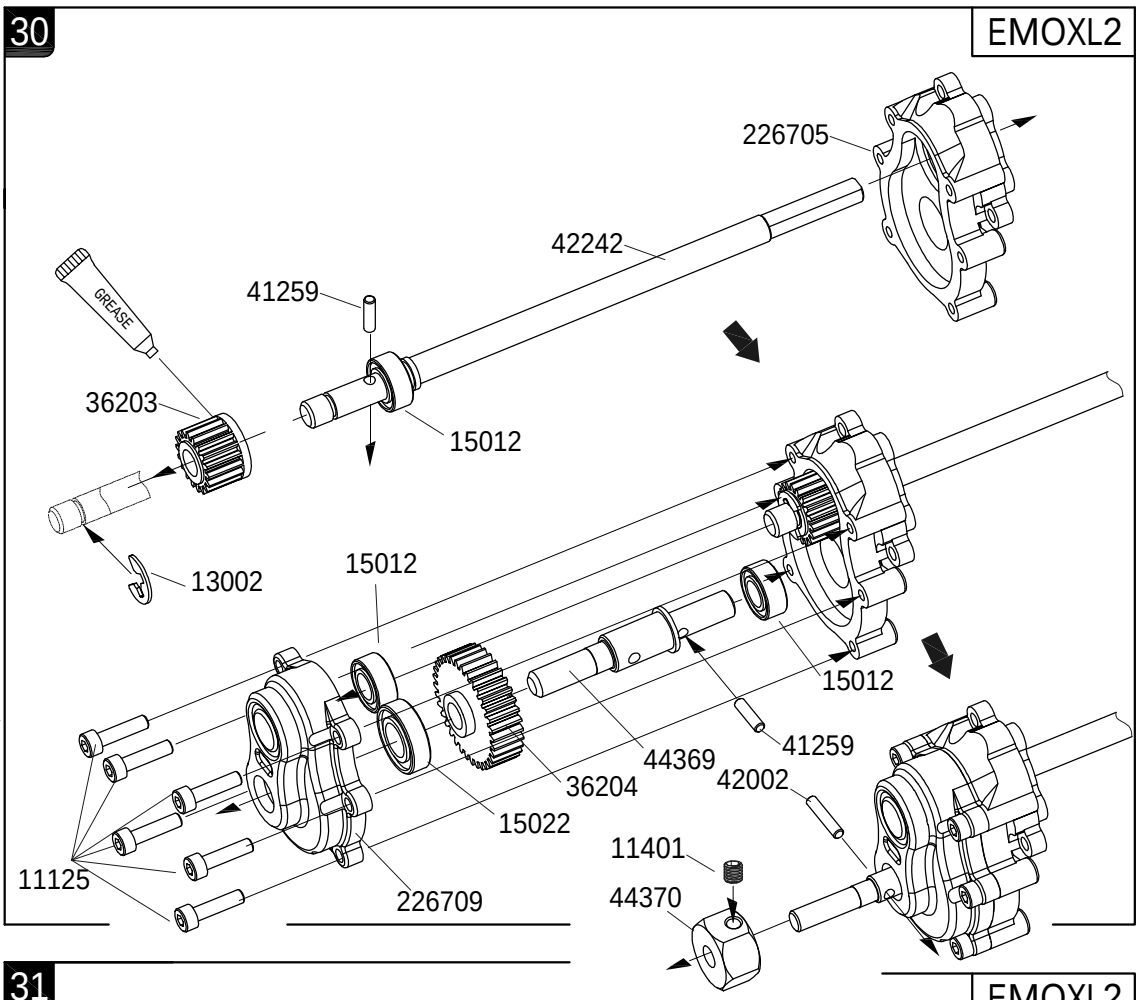


29 EMOXL2

11316
M2.5x10 X8



30 EMOXL2



11401 M3x4 X1

11125 M2.5x10 X6

15012 Ø5xØ10x4 X3

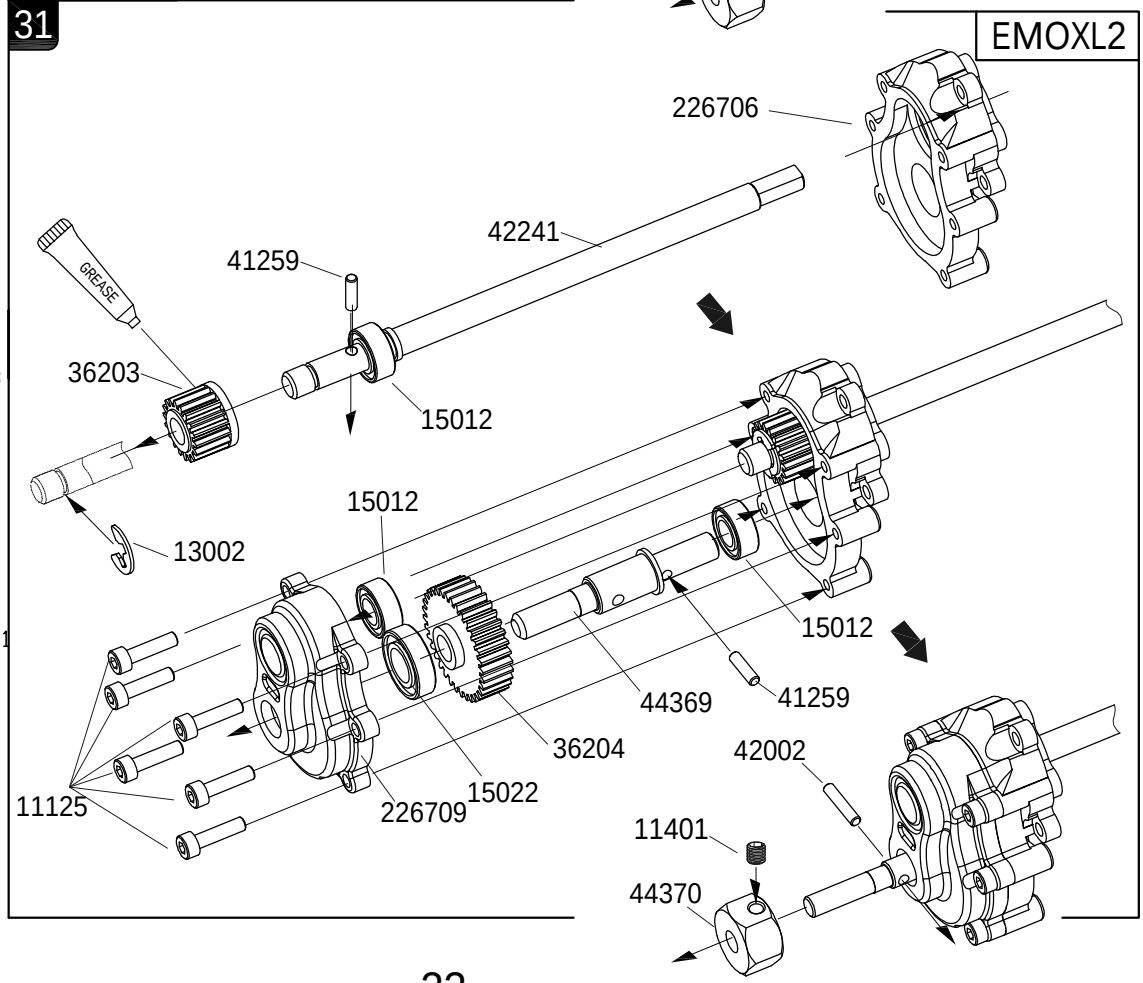
15022 Ø7xØ13x4 X2

13002 Ø3.8xØ9.2x0.6 X1

41259 Ø2x7.5 X2

42002 Ø2.2x12 X1

31 EMOXL2



11401 M3x4 X1

15012 Ø5xØ10x4 X3

11125 M2.5x10 X6

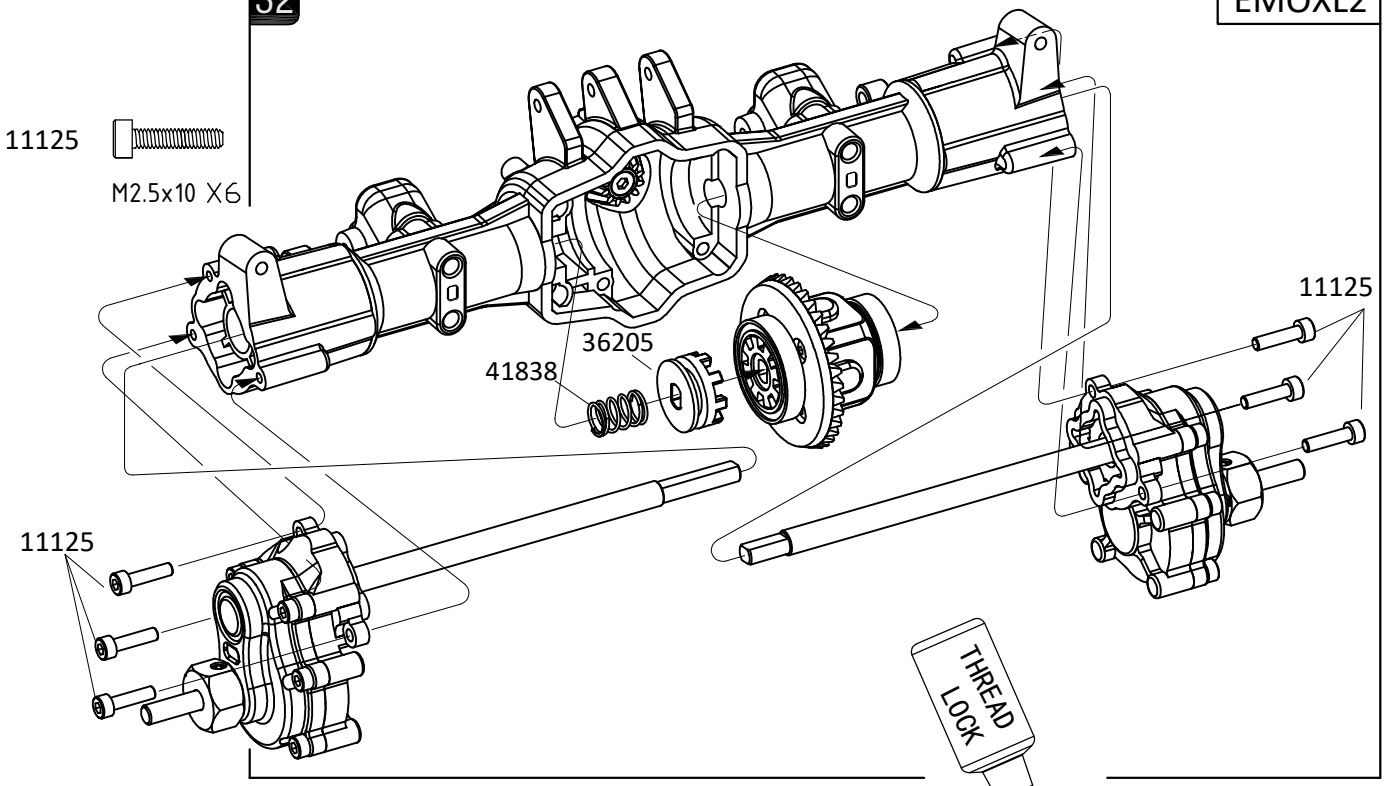
13002 Ø3.8xØ9.2x0.6 X1

41259 Ø2x7.5 X2

42002 Ø2.2x12 X1

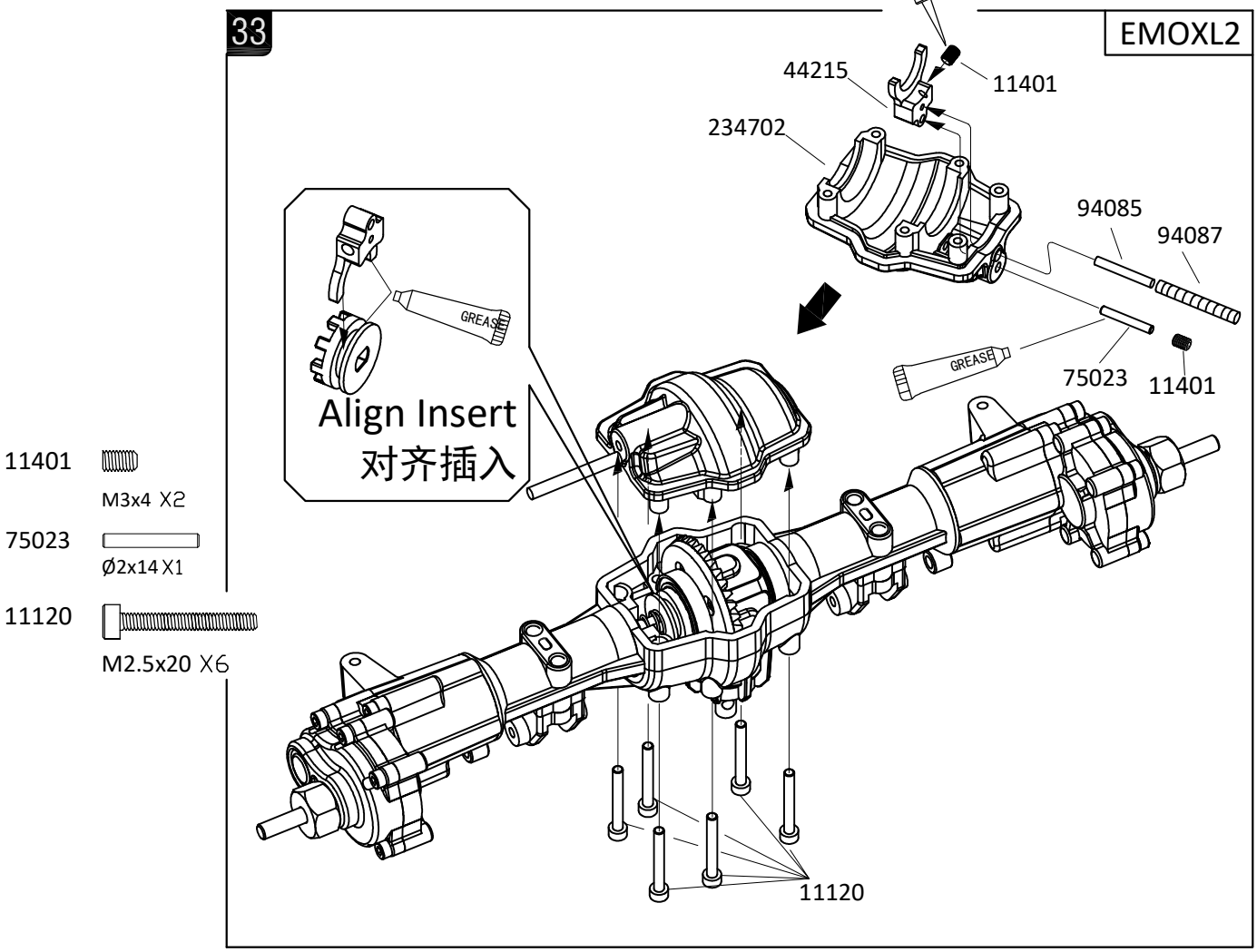
32

EMOXL2



33

EMOXL2



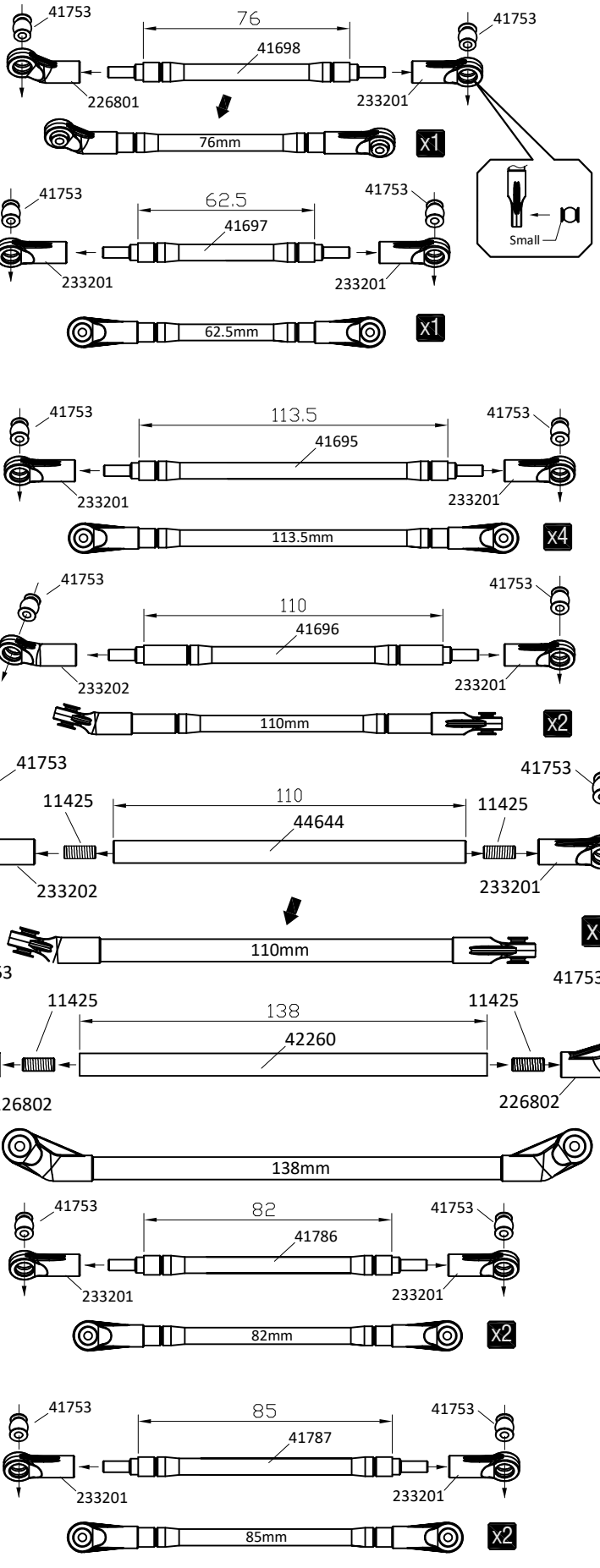
34

EMOXL2

41753 X28

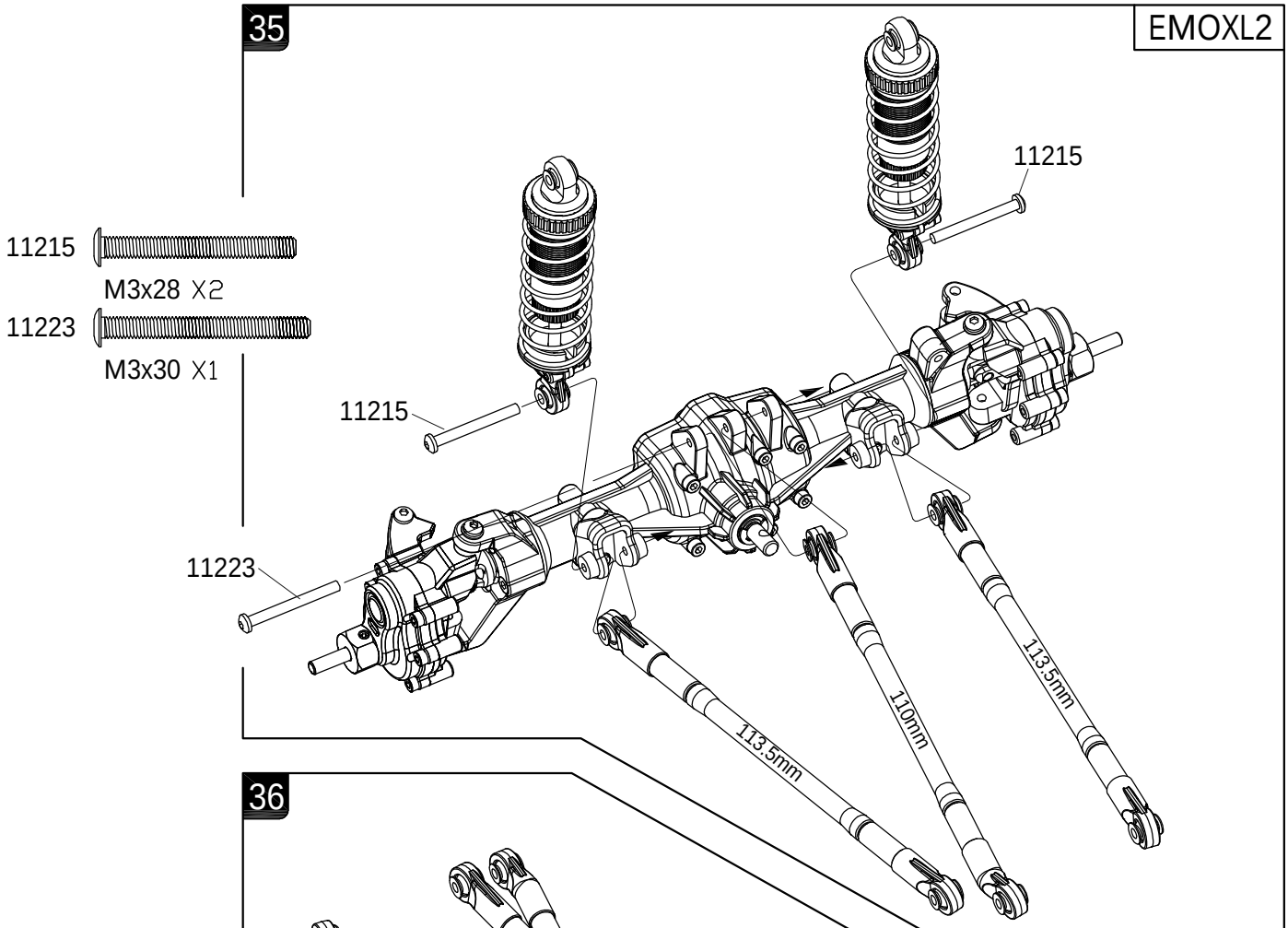
11425

M4x20 X4



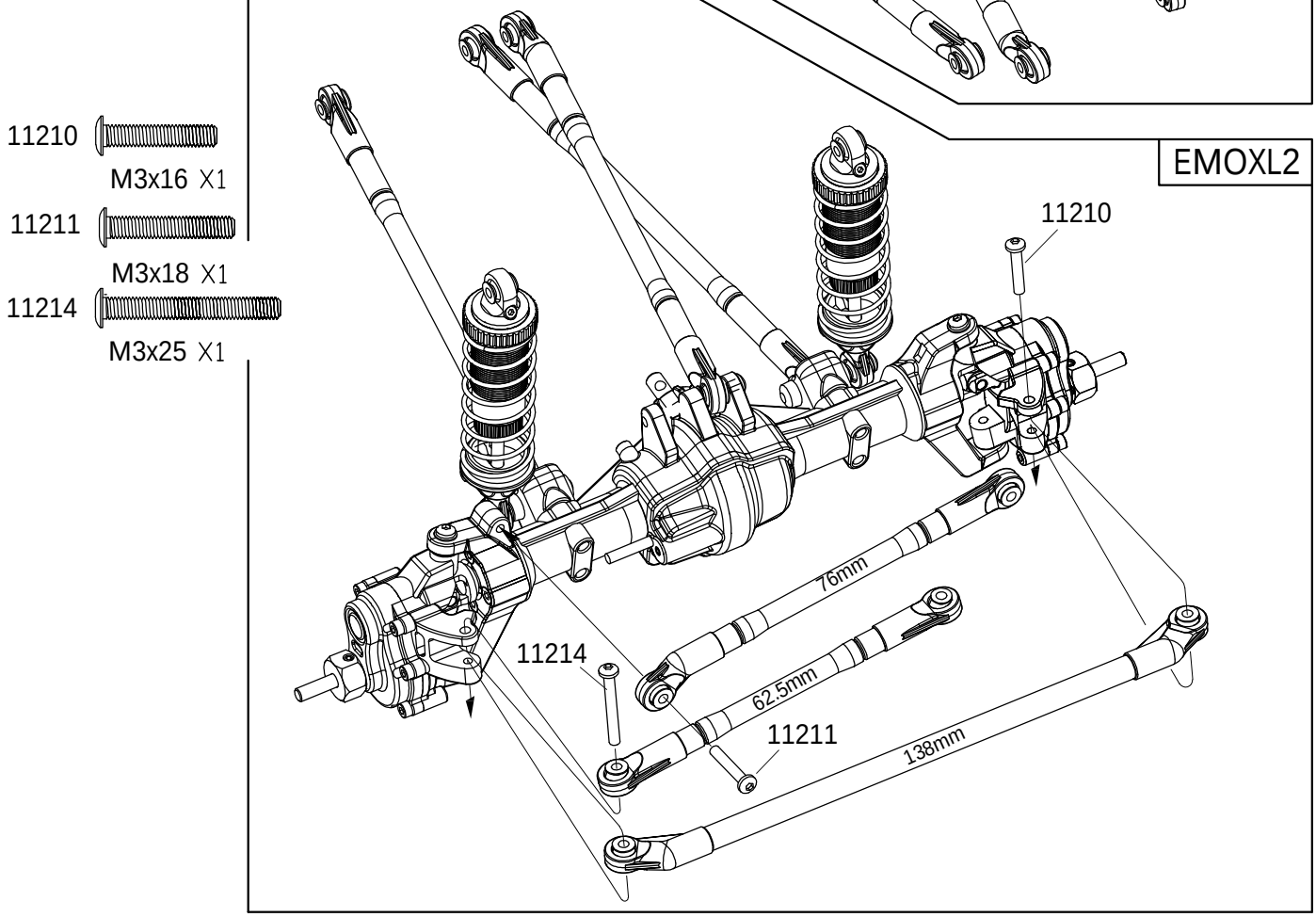
35

EMOXL2



36

EMOXL2

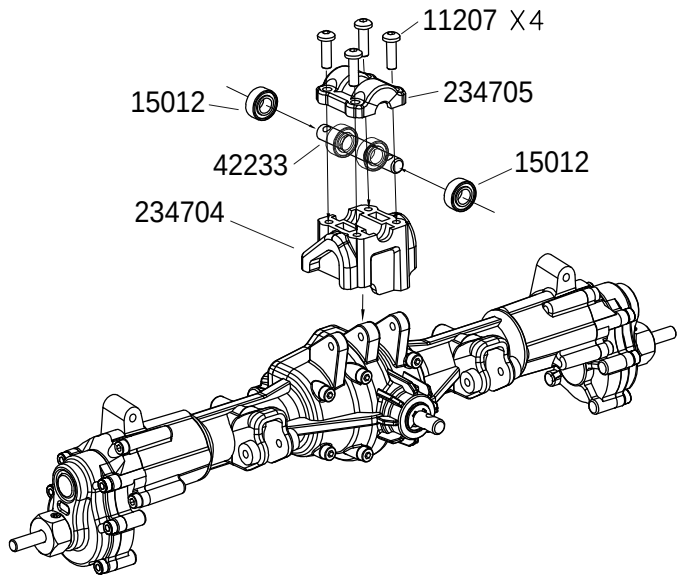


37

EMOXL2

11207 M3x10 X4

15012 Ø5xØ10x4 X2



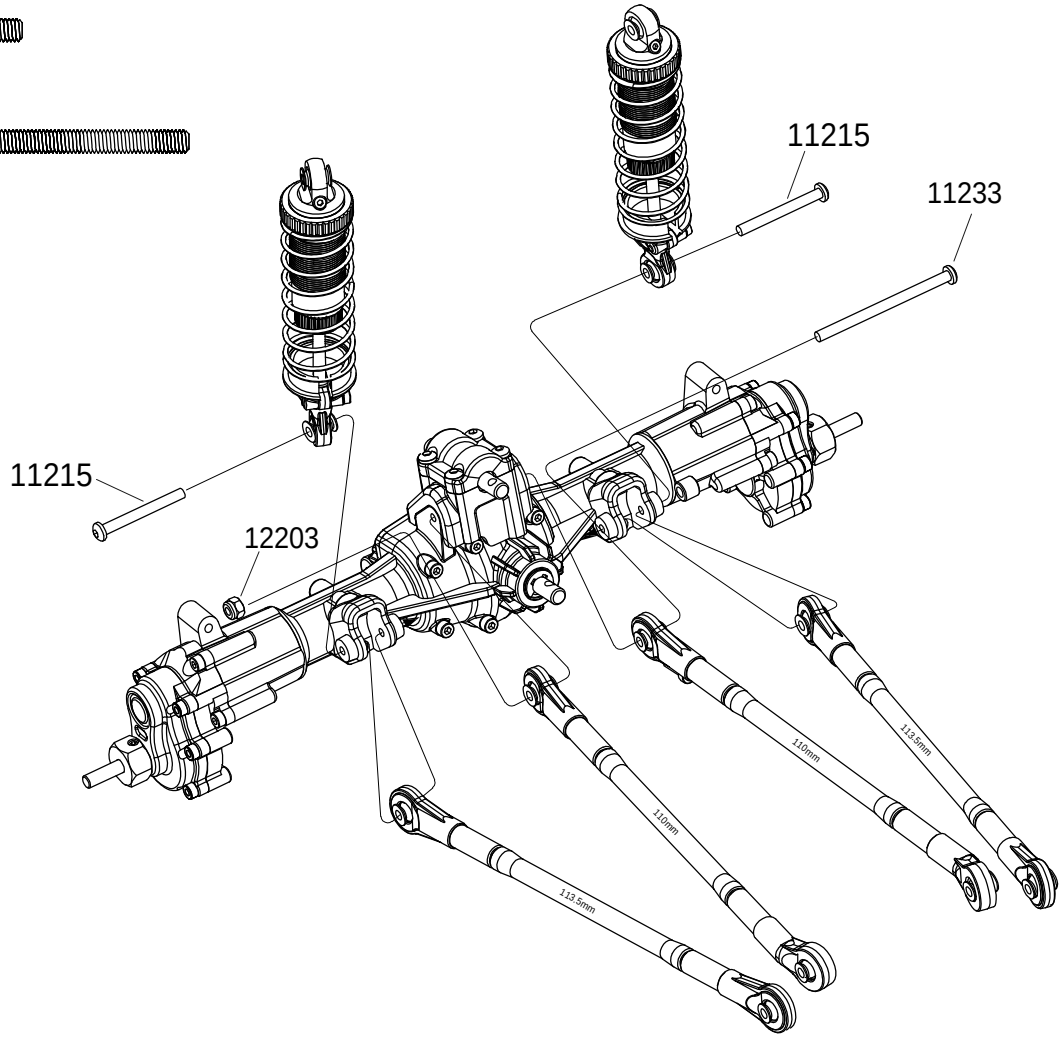
38

EMOXL2

11215 M3x28 X2

11233 M3x50 X1

12203 M3 X1



39

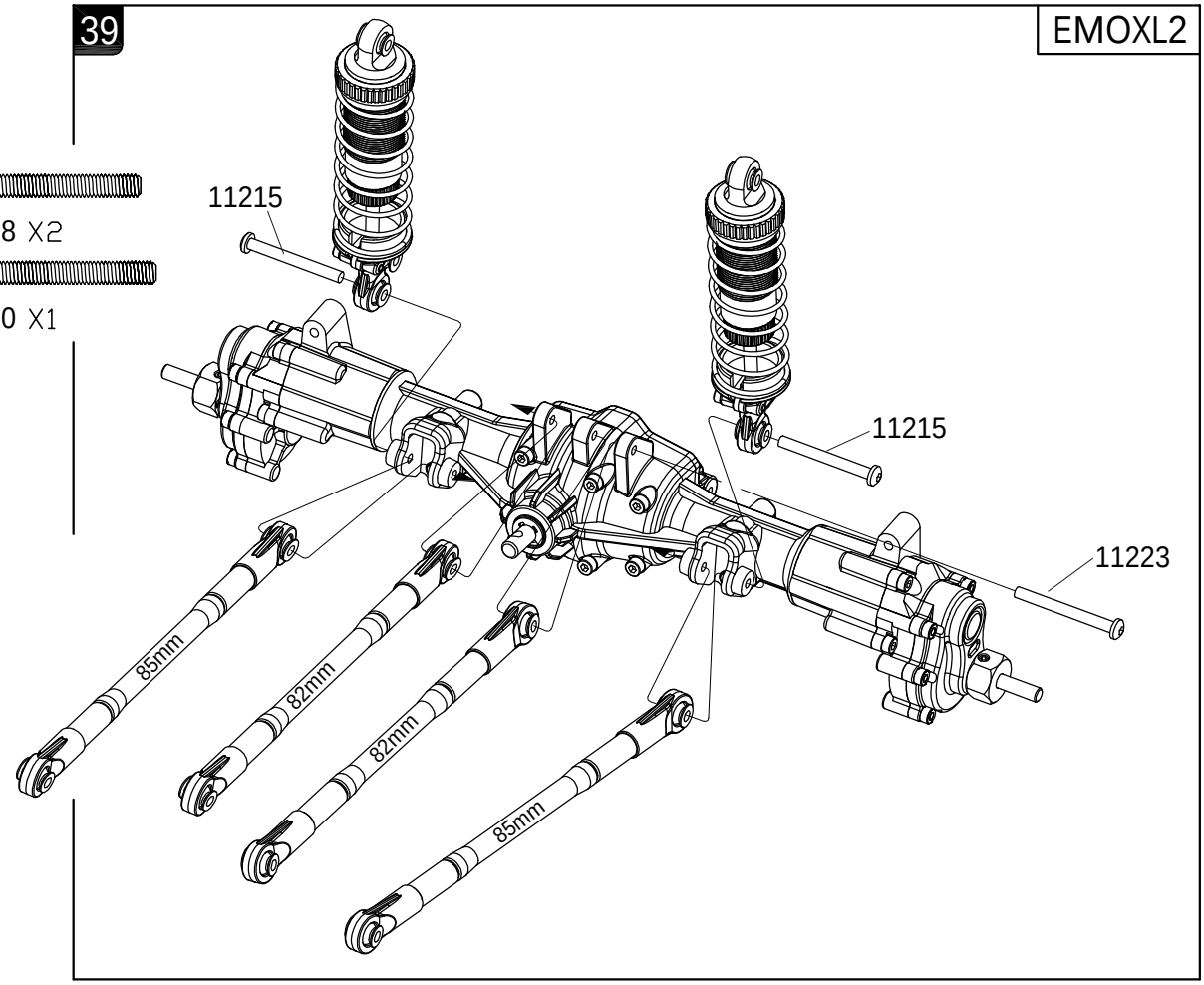
EMOXL2

11215

M3x28 X2

11223

M3x30 X1



40

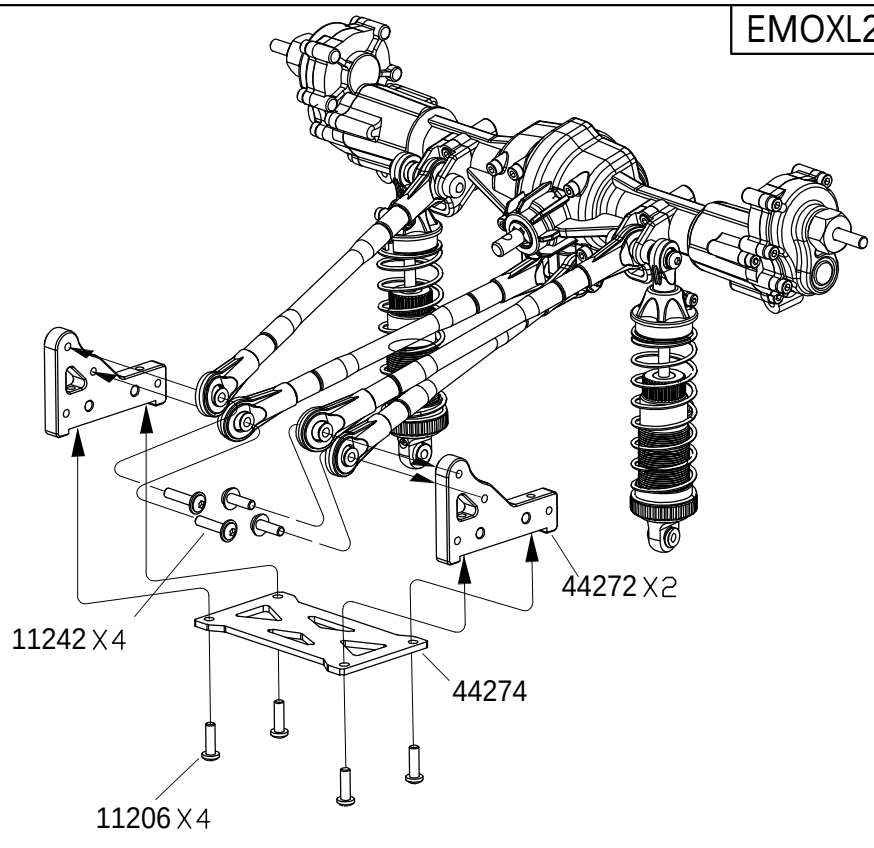
EMOXL2

11206

M3x8 X4

11242

M3x14 X4



41

EMOXL2

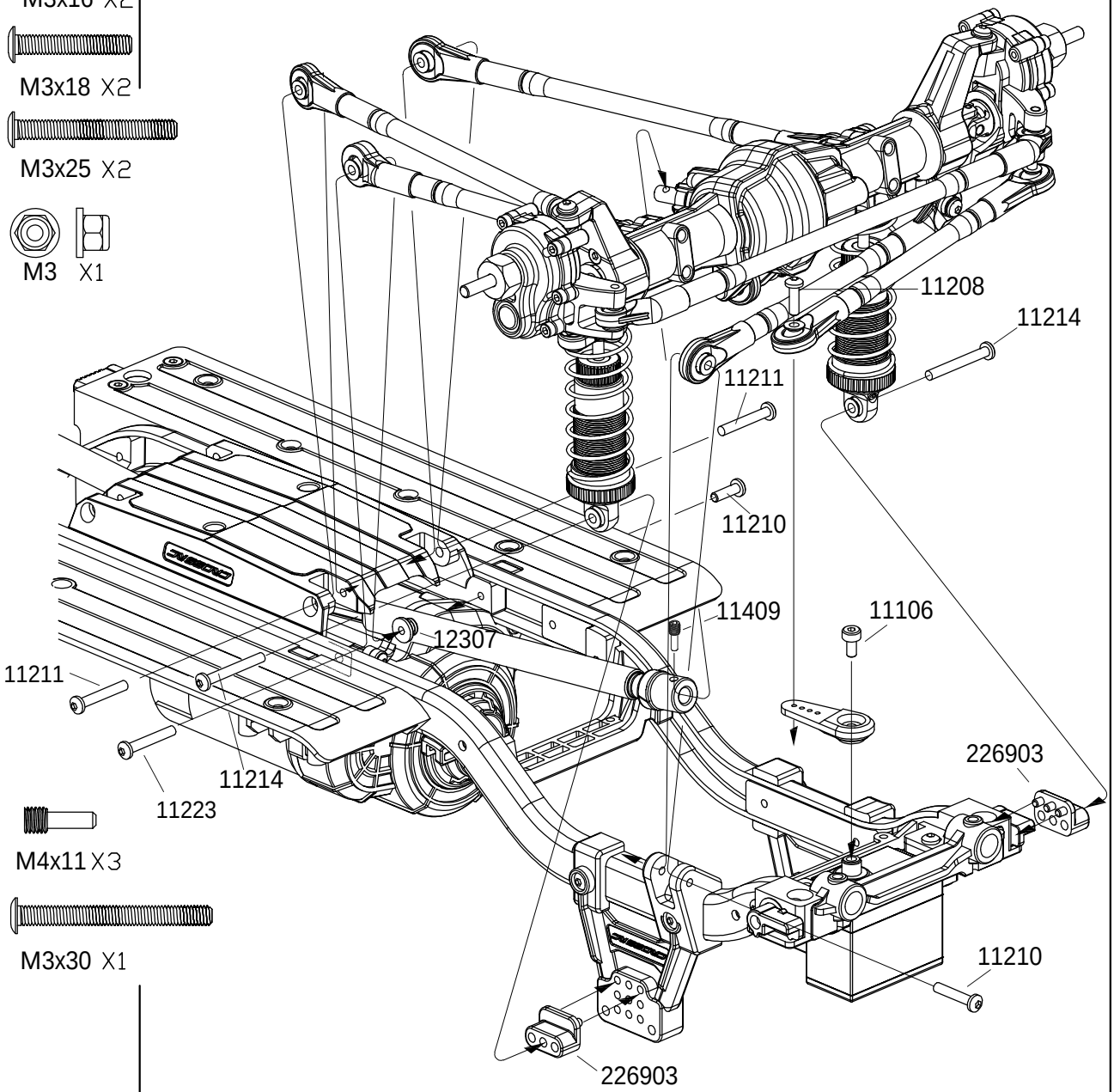
11106
M3x8 X1

11210
M3x16 X2

11211
M3x18 X2

11214
M3x25 X2

12307
M3 X1



11409
M4x11 X3

11223
M3x30 X1

11208
M3x12 X1

42

EMOXL2

11212

M3x20 X2

11213

M3x22 X2

11214

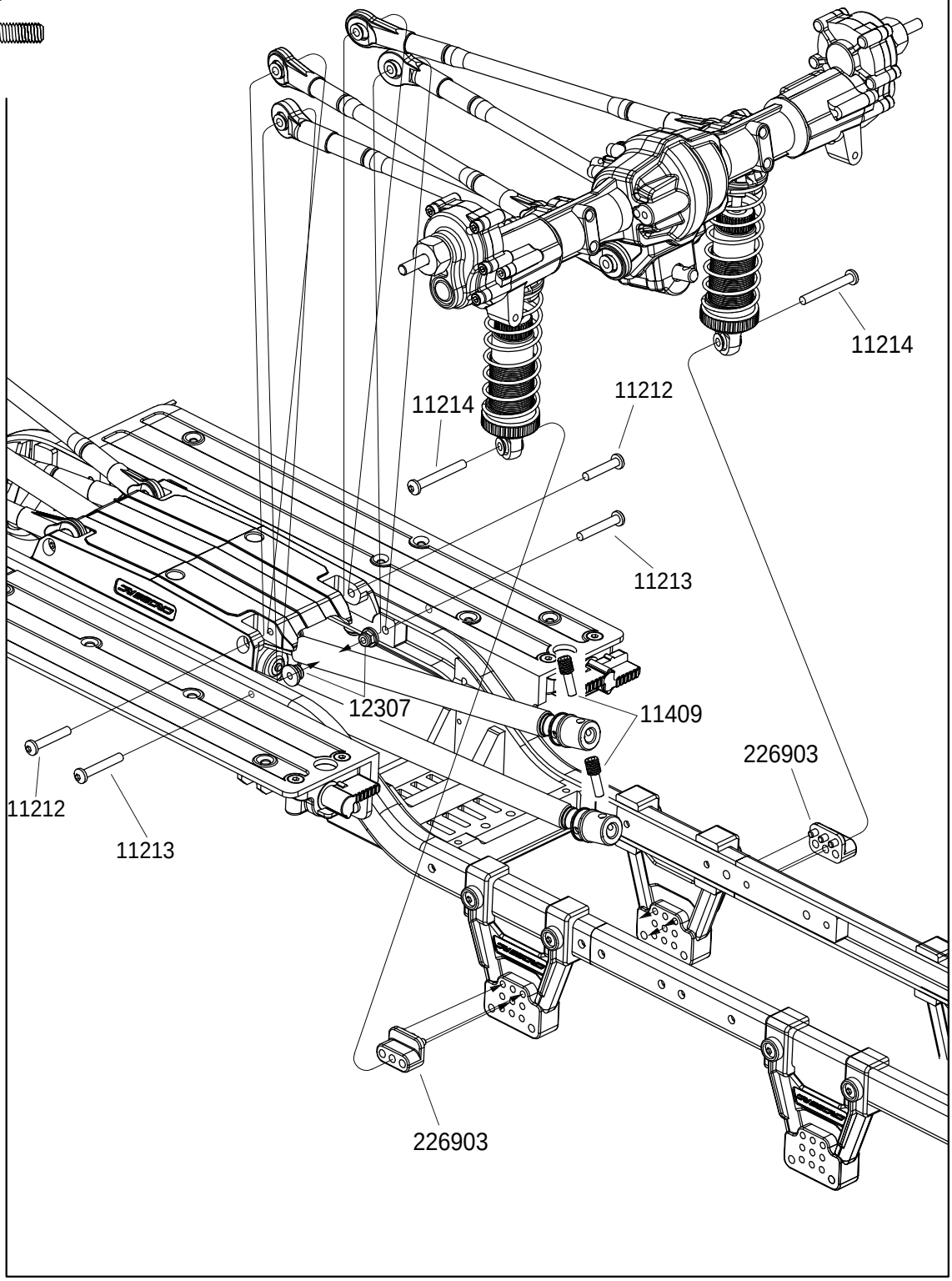
M3x25 X2

12307

M3 X2

11409

M4x11 X2



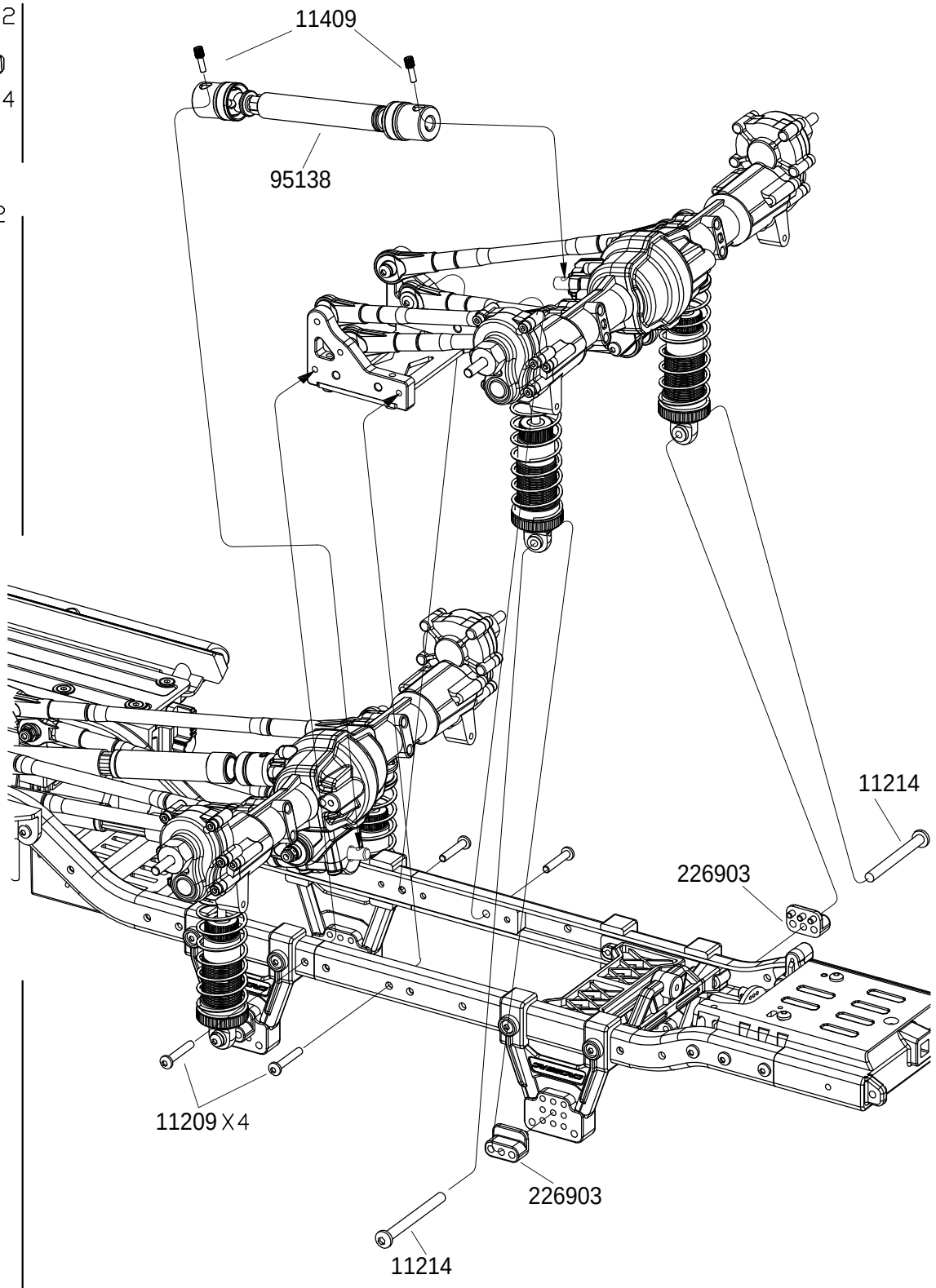
43

EMOXL2

11214
M3x25 X2

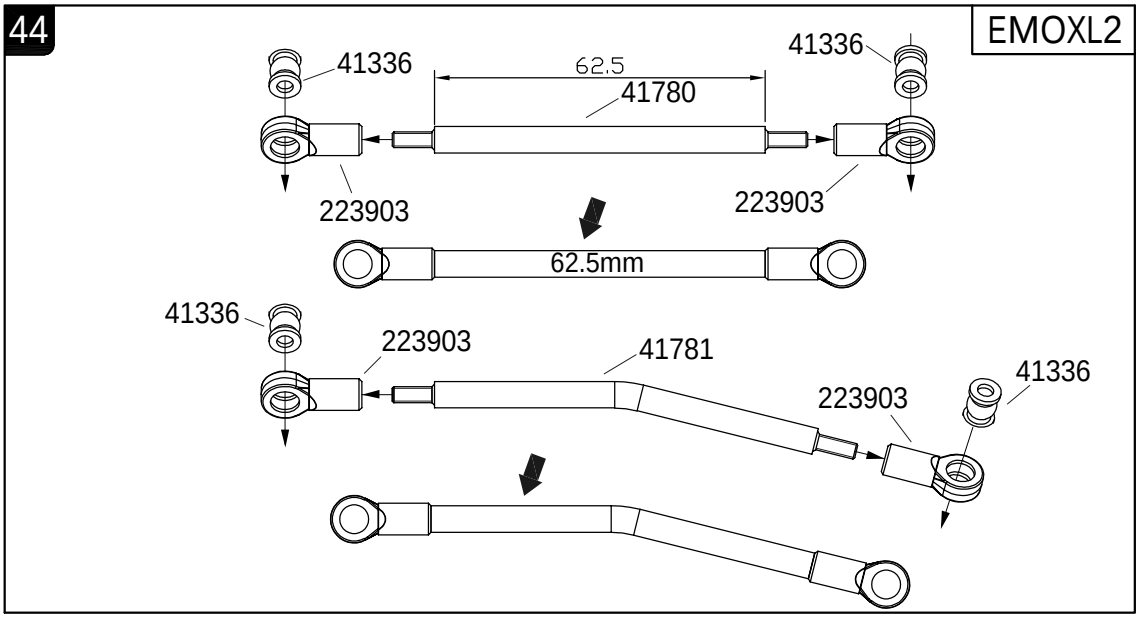
11209
M3x14 X4

11409
M4x11 X2

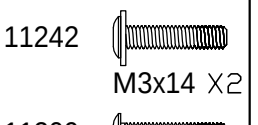


44 EMOXL2

41336 X4



45 EMOXL2

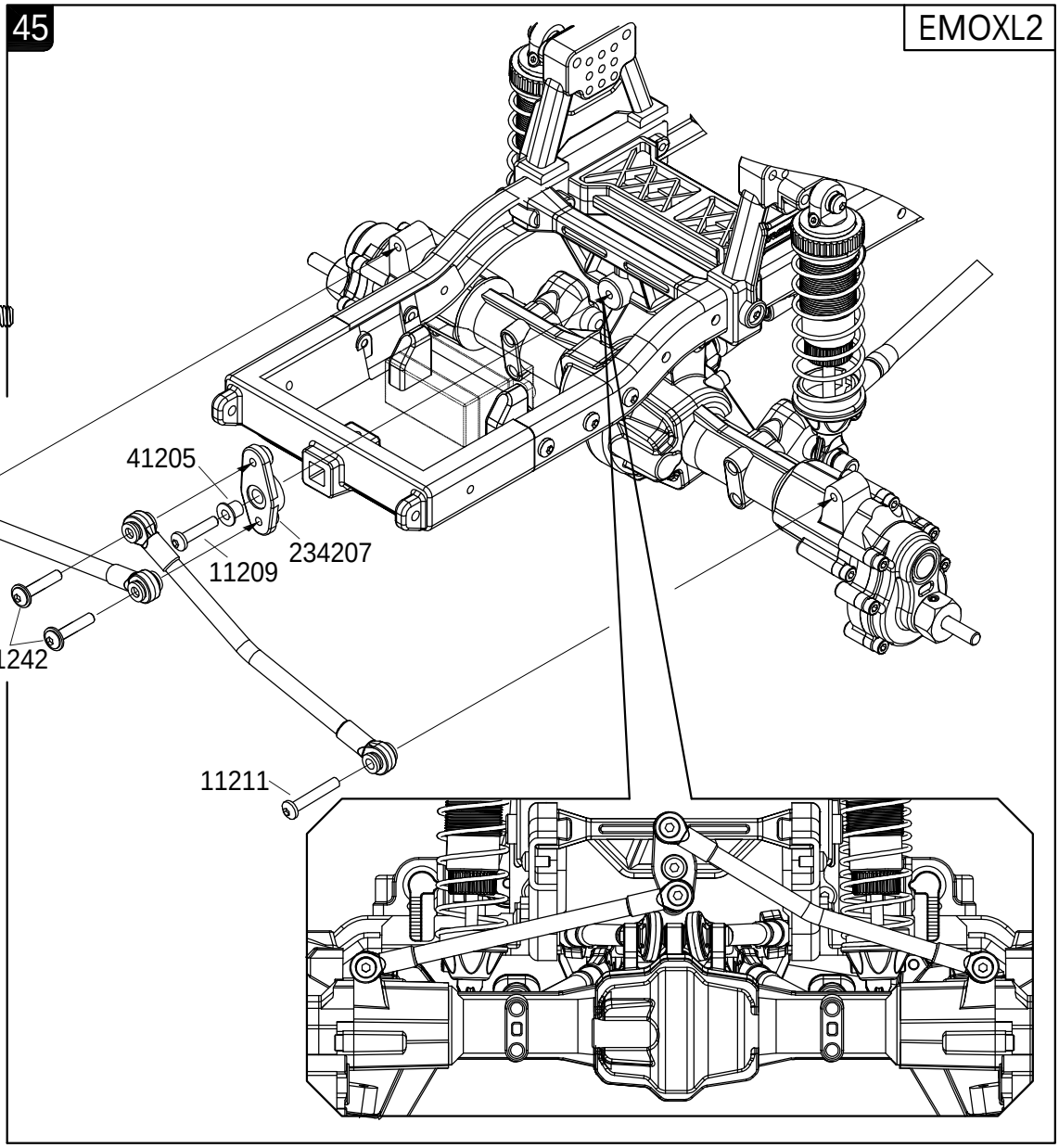


11242 M3x14 X2

11209 M3x14 X1

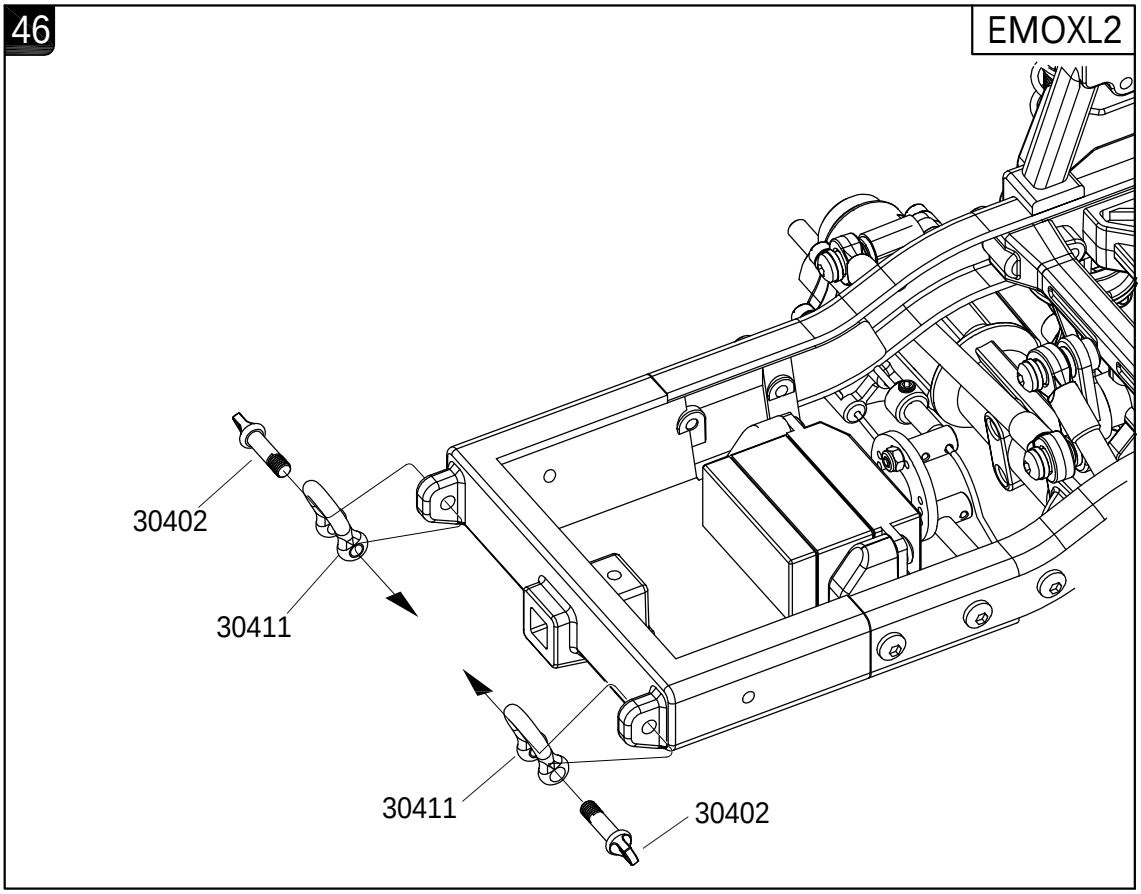
11211 M3x18 X2

41205 X1



46

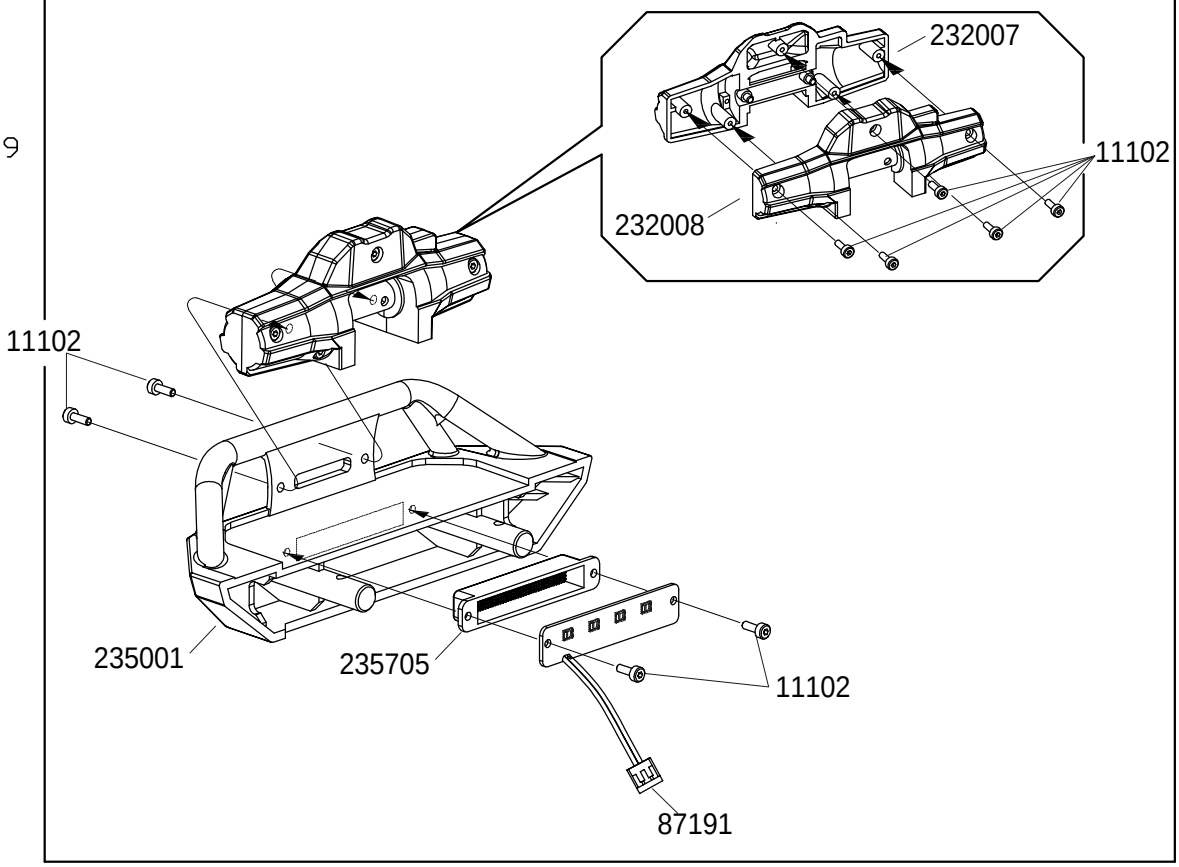
EMOXL2



47

EMOXL2

11102 M2x6 X9



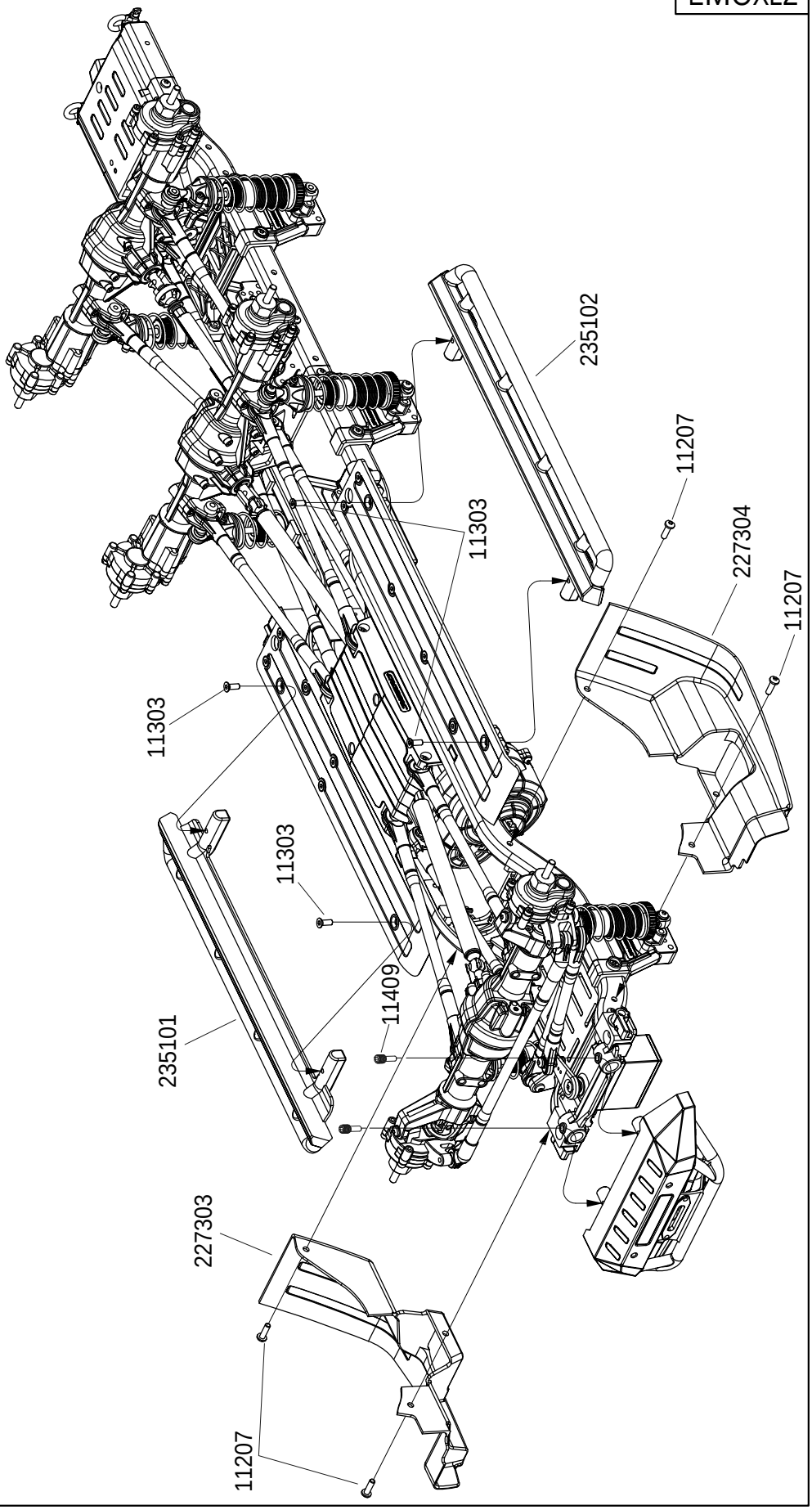
48

EMOXL2

11303
M3x8 X4

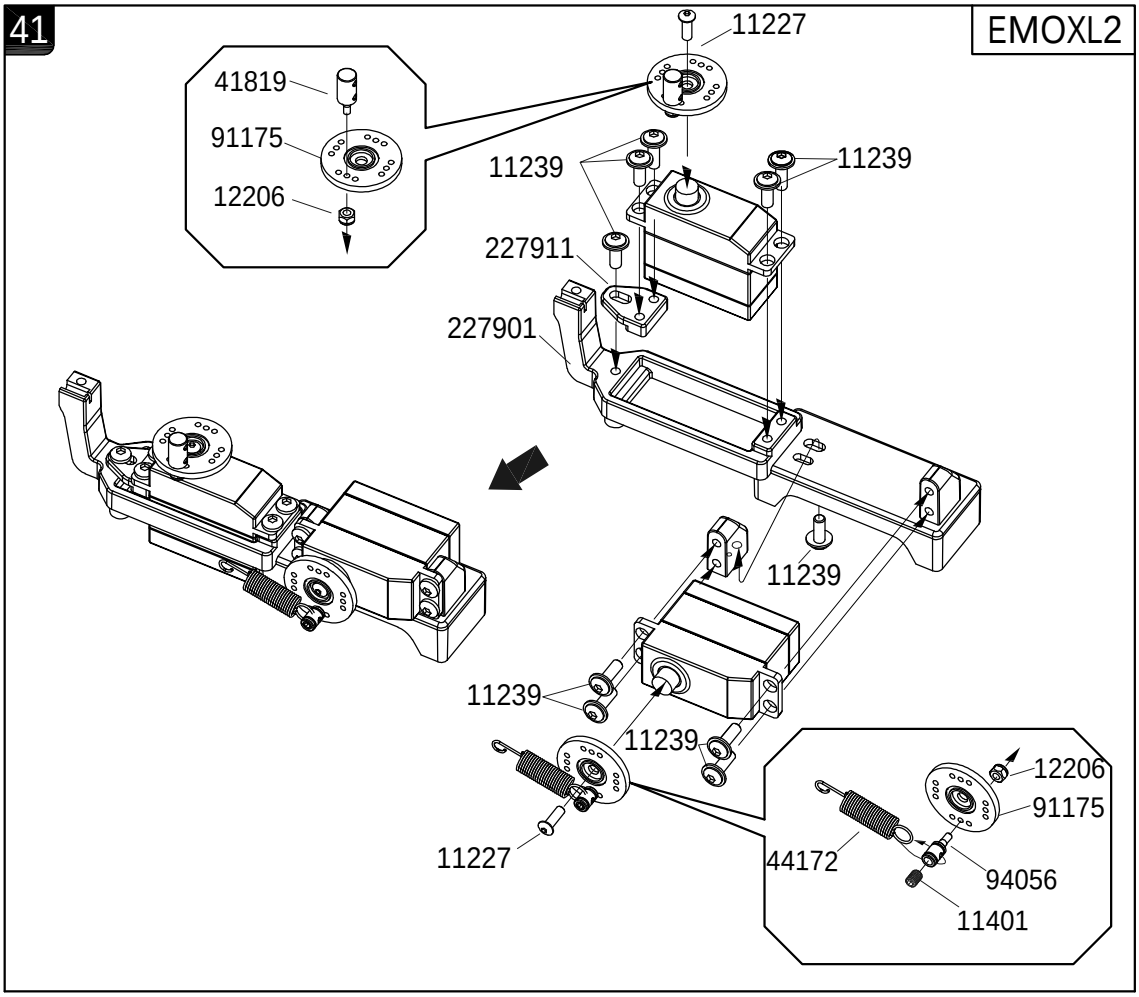
11409
M4x11 X2

11207
M3x10 X4



41

EMOXL2



11239 M3x8 X10

11227 M2.5x8 X2

12206 M2 X2

11401 M3x4 X1

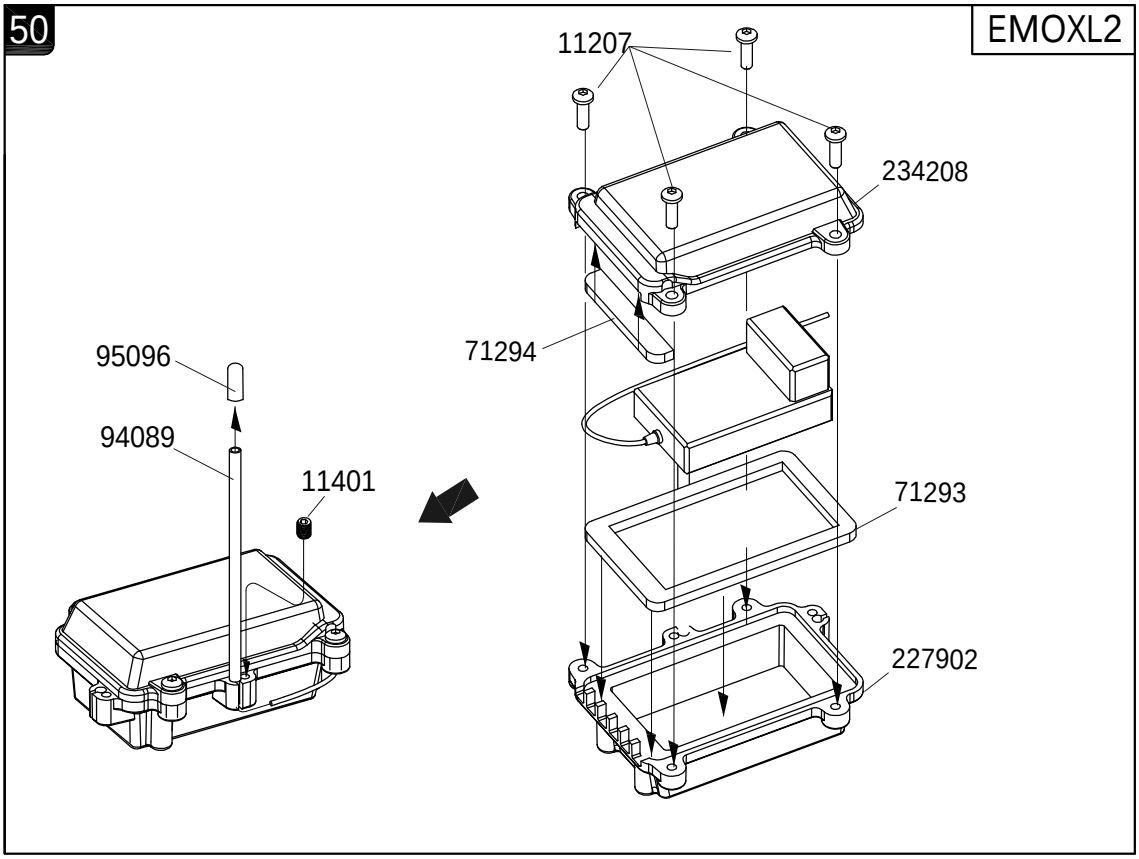
44172 X1

41819 X1

94056 X1

50

EMOXL2



11401 M3x4 X1

11207 M3x10 X4

51

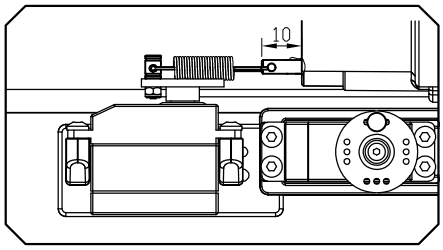
EMOXL2

11303

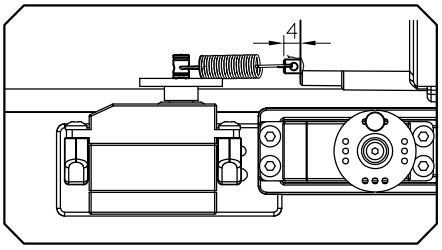
M3x8 X3

11239

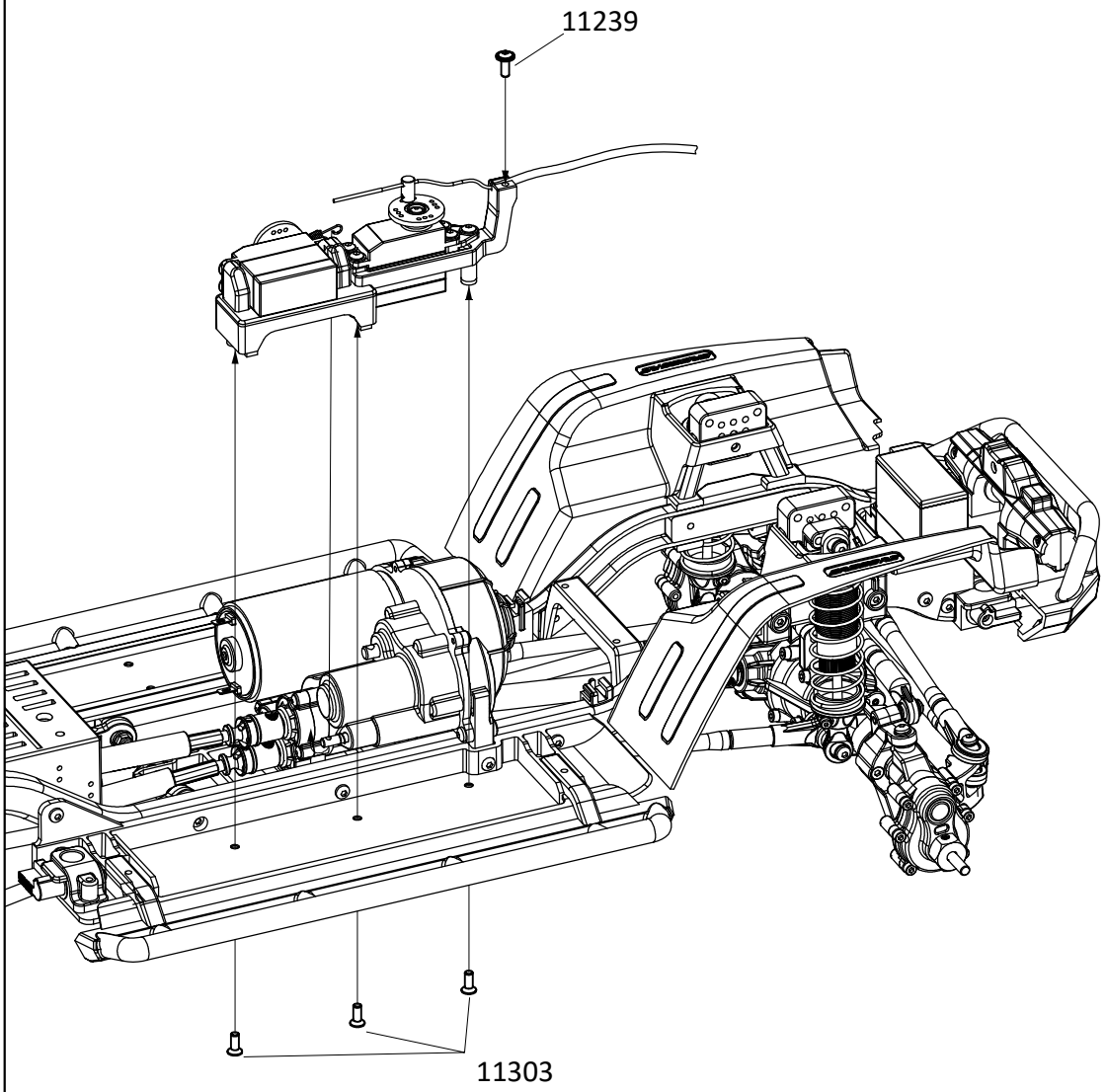
M3x8 X1



Slow(慢）



Fast(快）



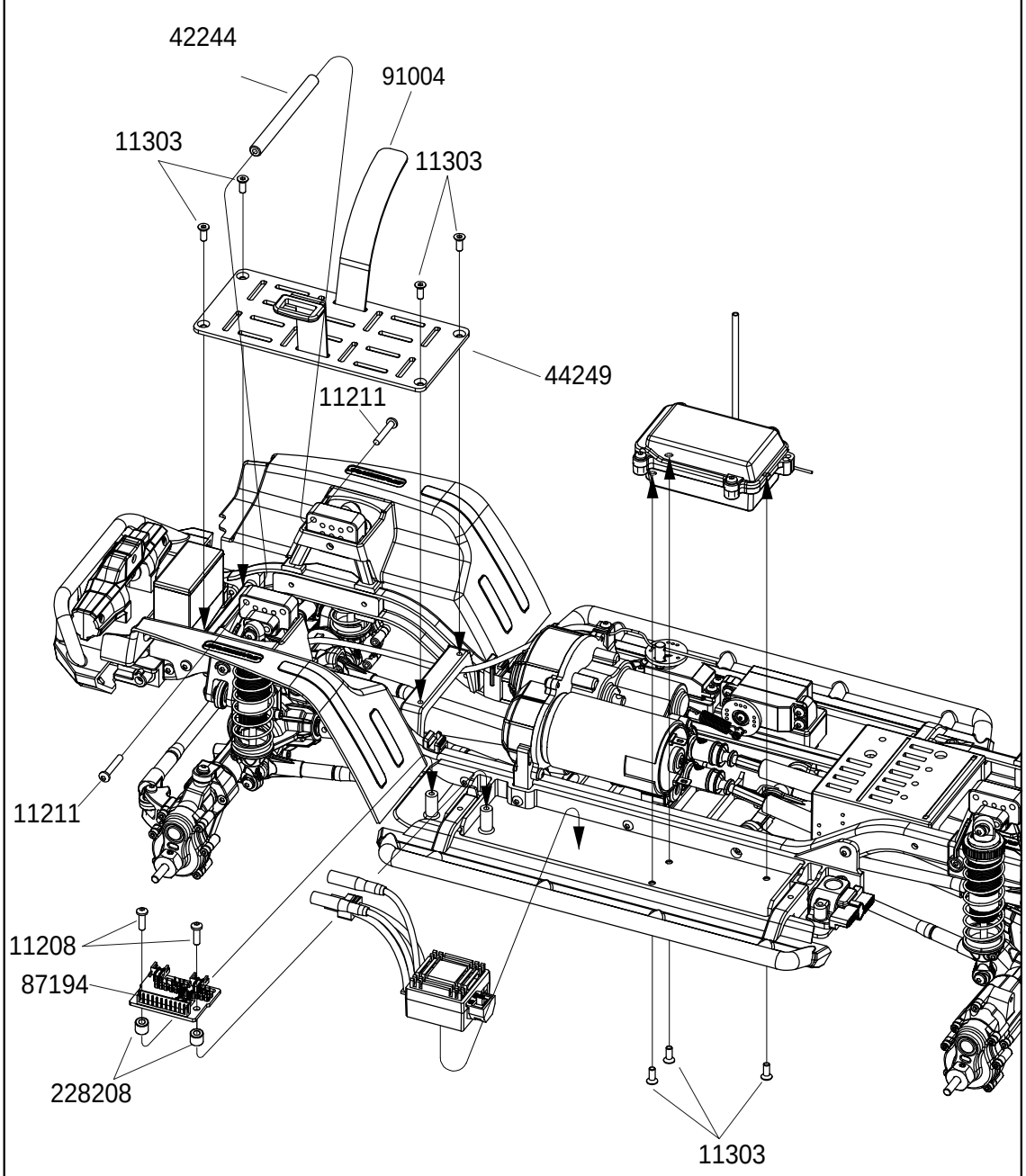
52

EMOXL2

11303
M3x8 X7

11208
M3x12 X2

11211
M3x18 X2



53

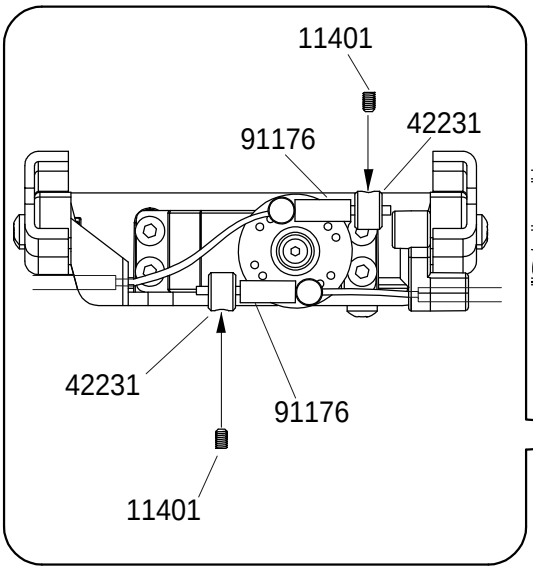
EMOXL2

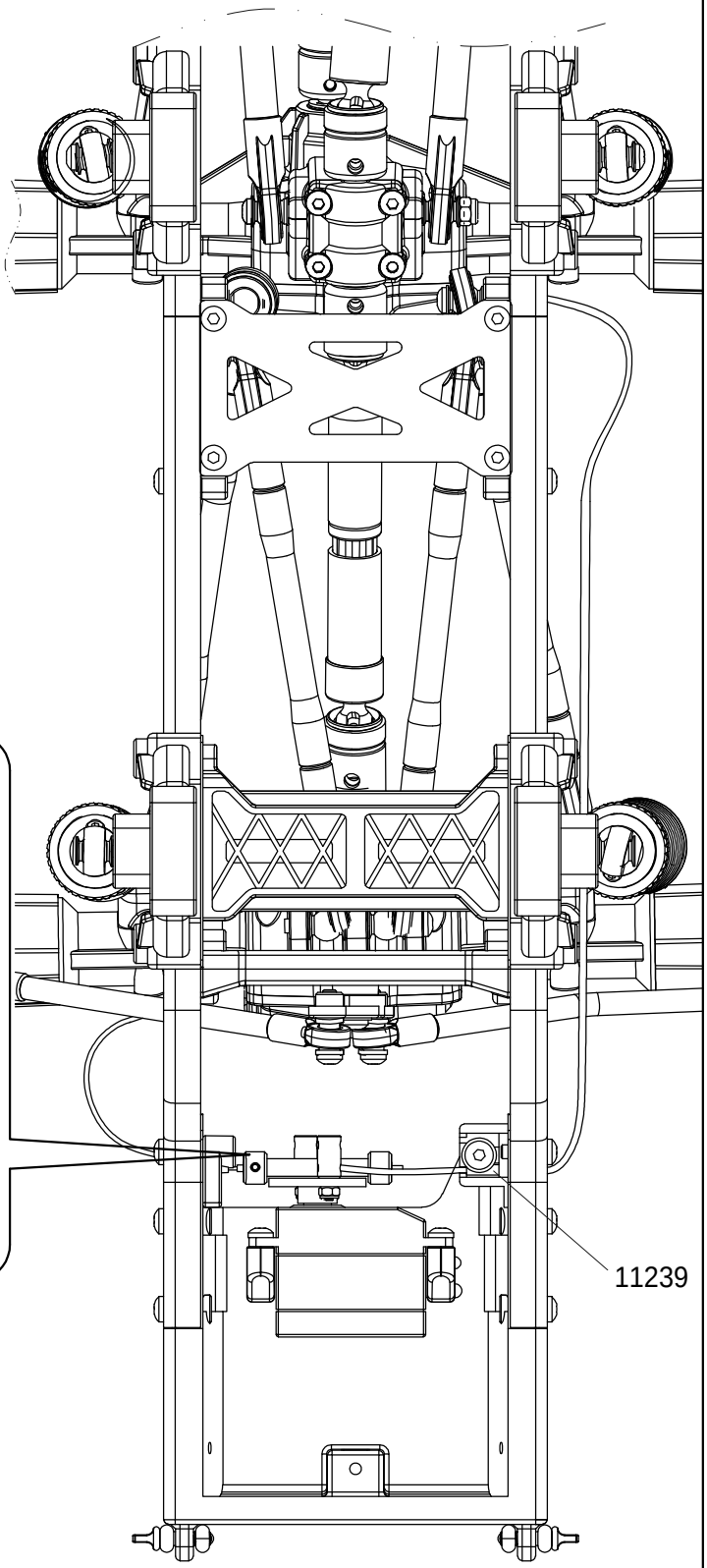
11239 M3x8 X1

11401 M3x4 X2

42231 X2

91176 X2





54

EMOXL2

11211

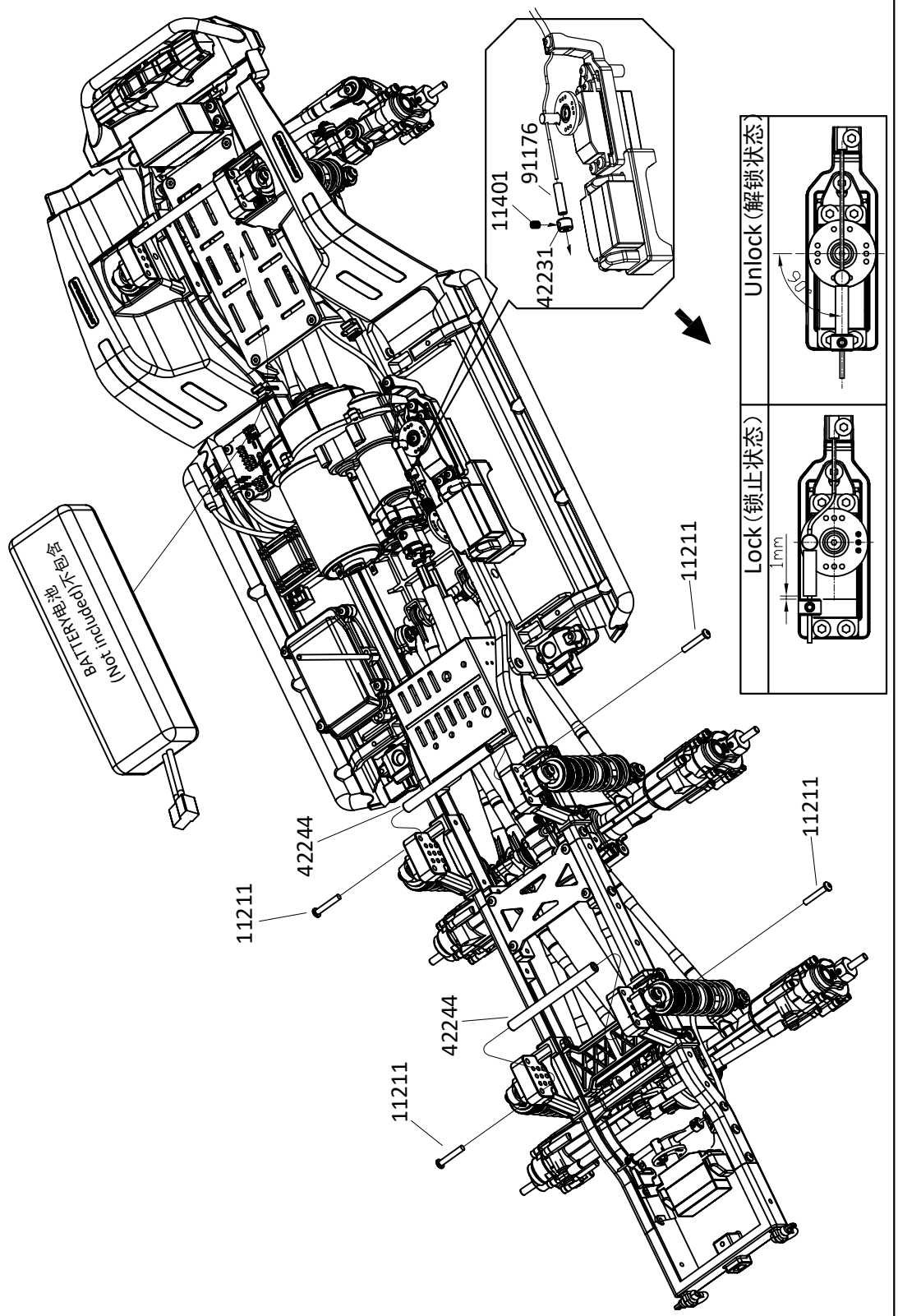
M3x18 X4

11401

M3x4 X2

42231 X1

91176 X1



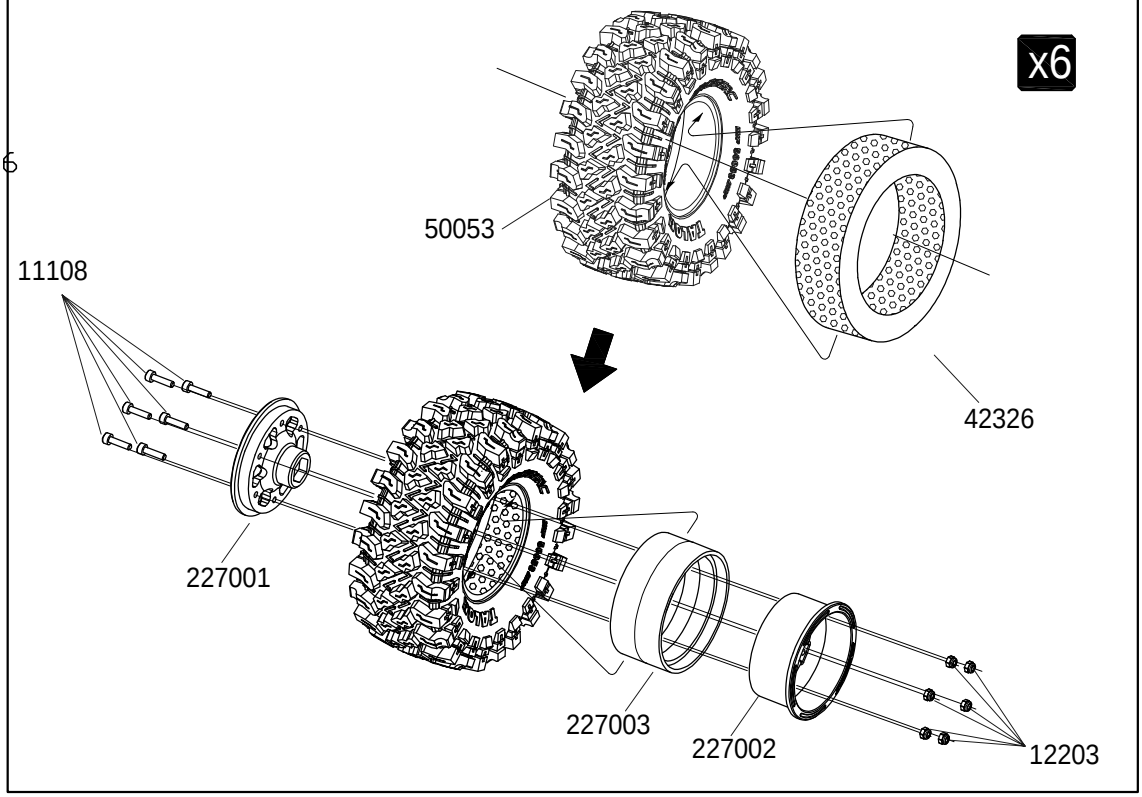
55

EMOXL2

11108 M3x12 X36

12203 M3 X36

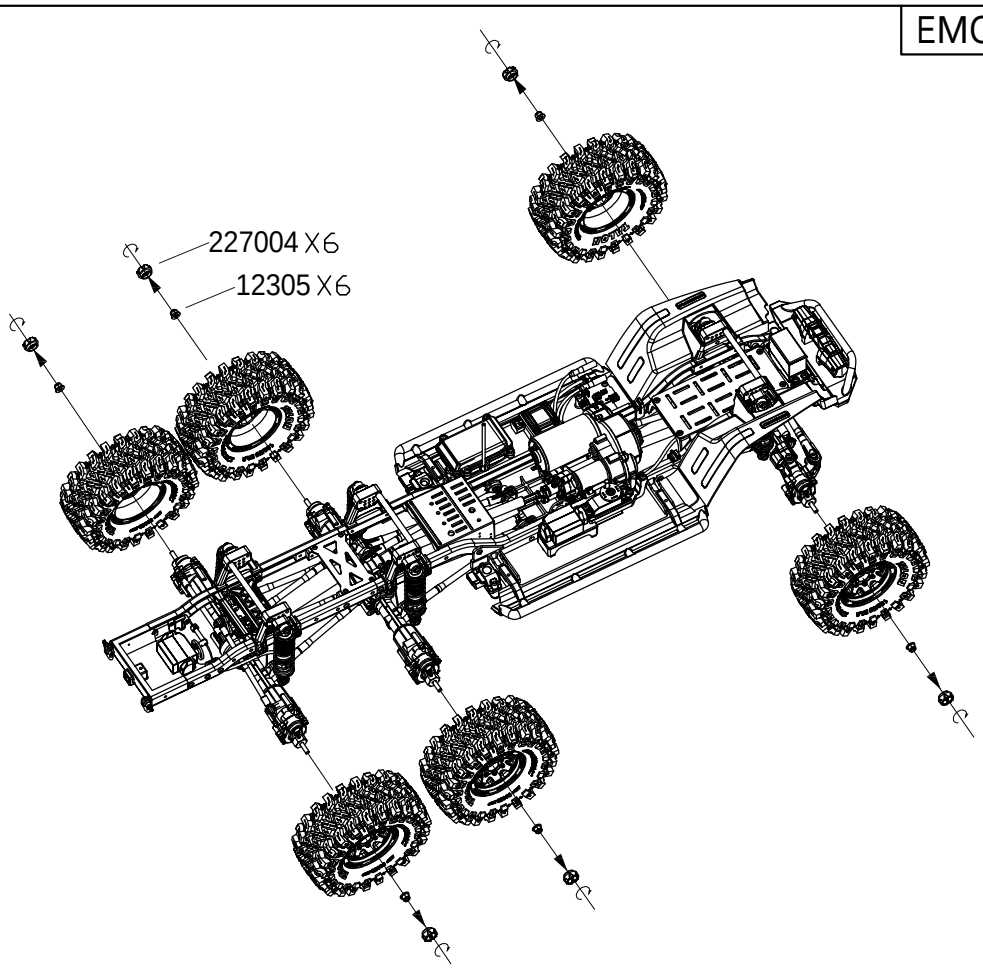
x6

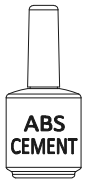


56

EMOXL2

12305 M5 X6





57

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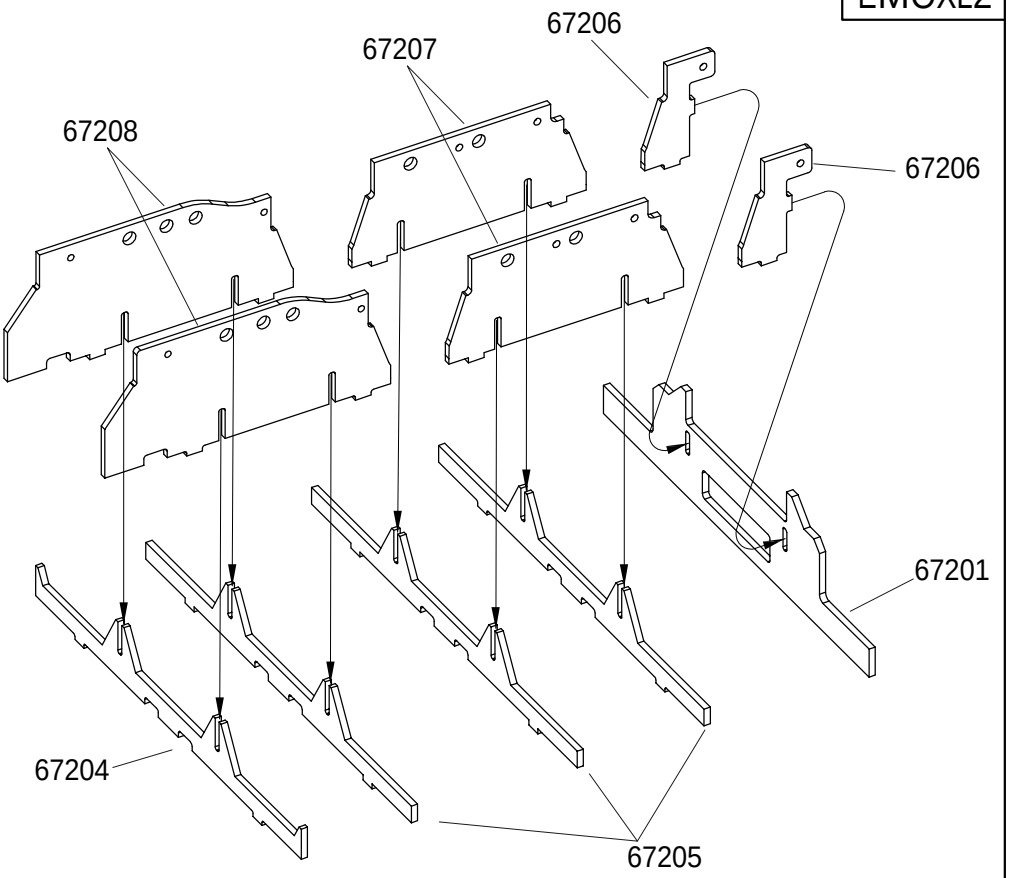

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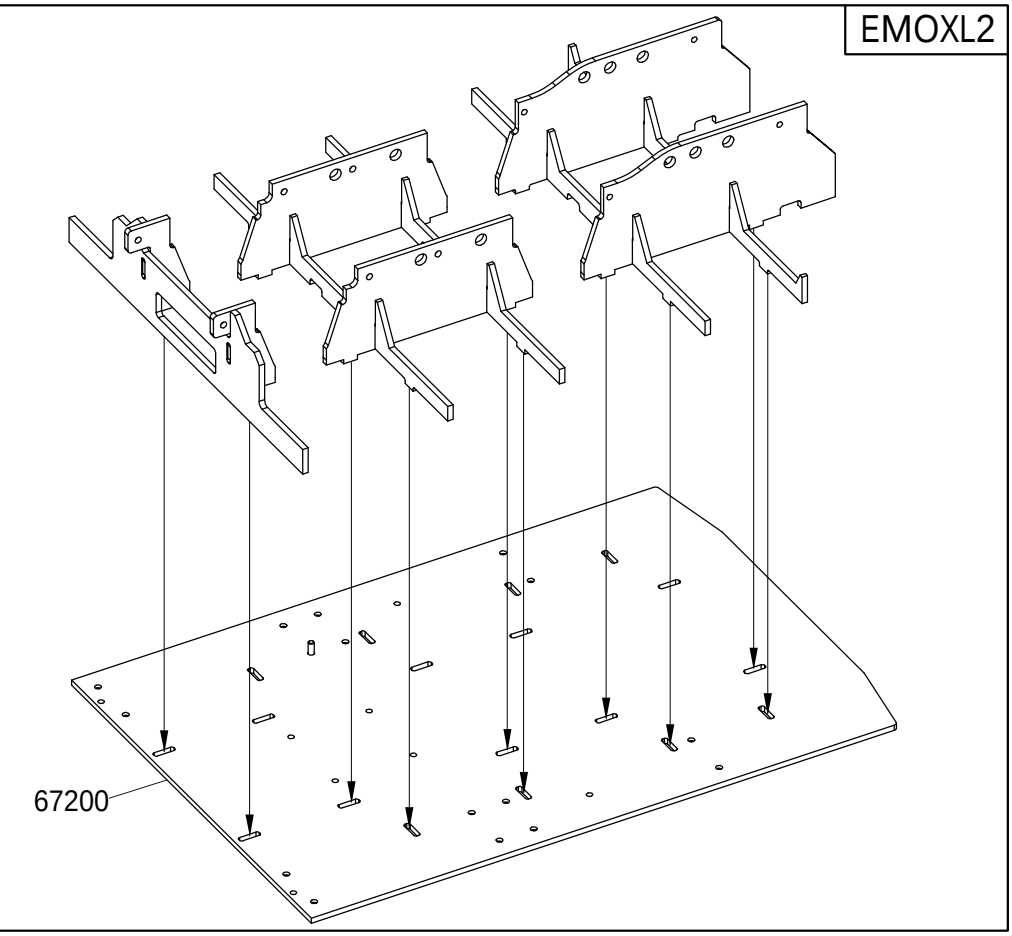

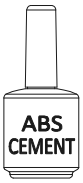

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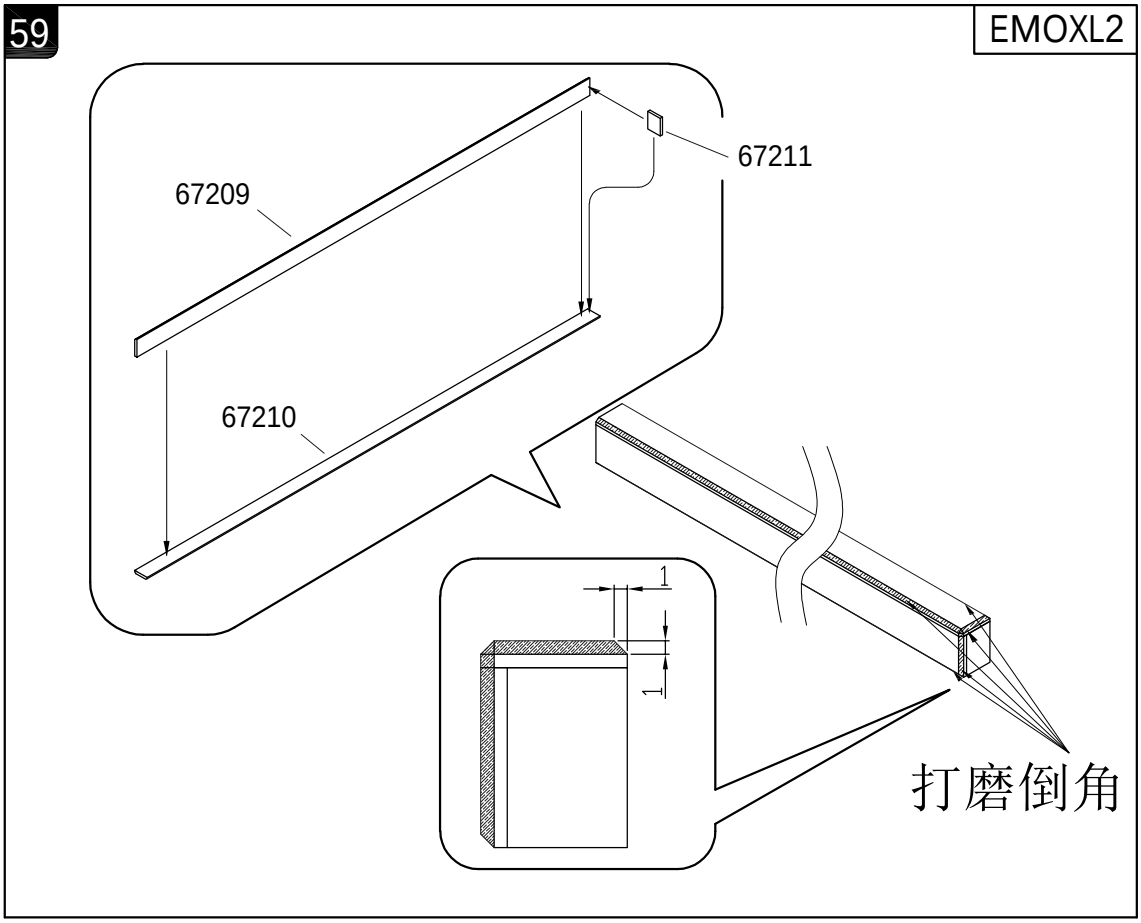

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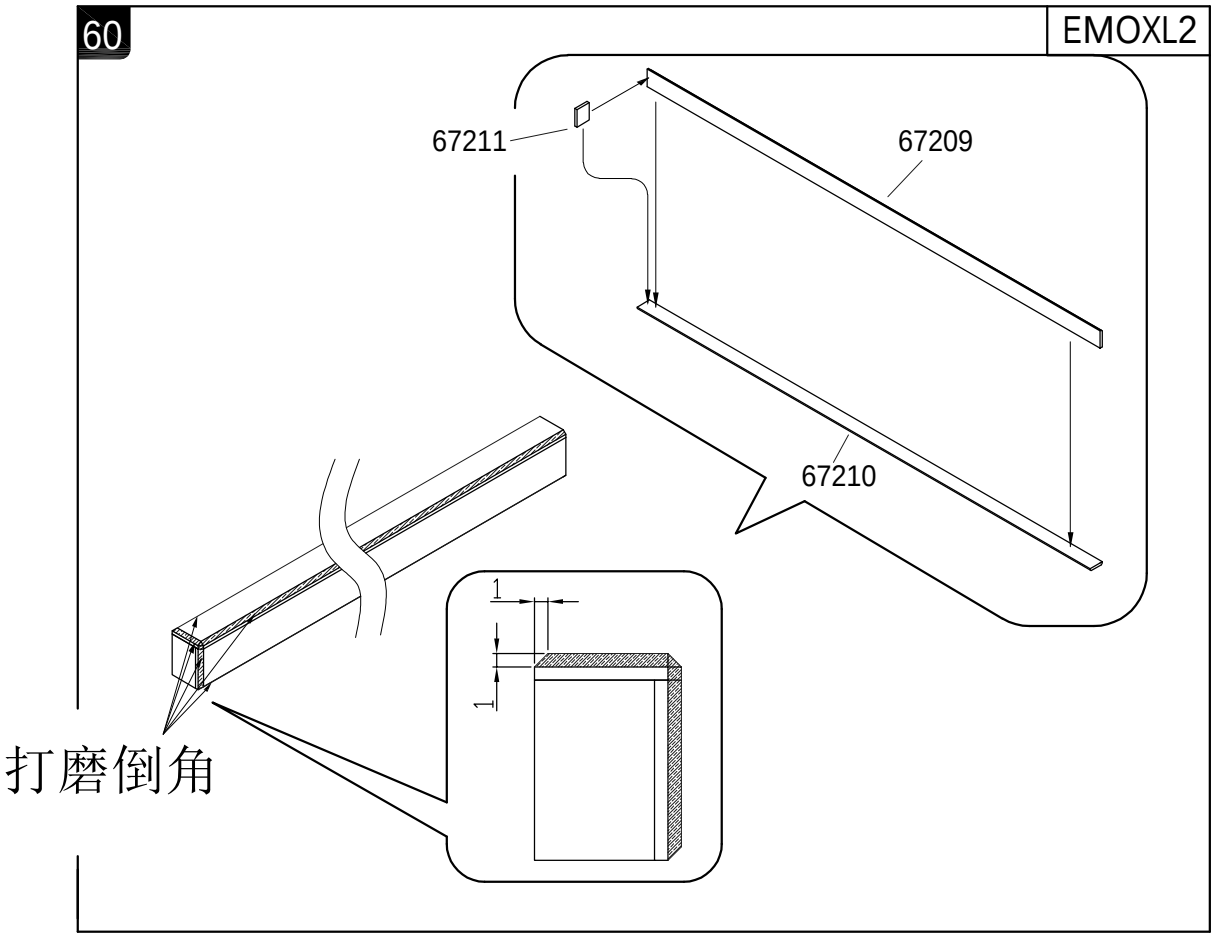

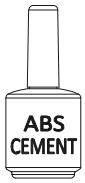

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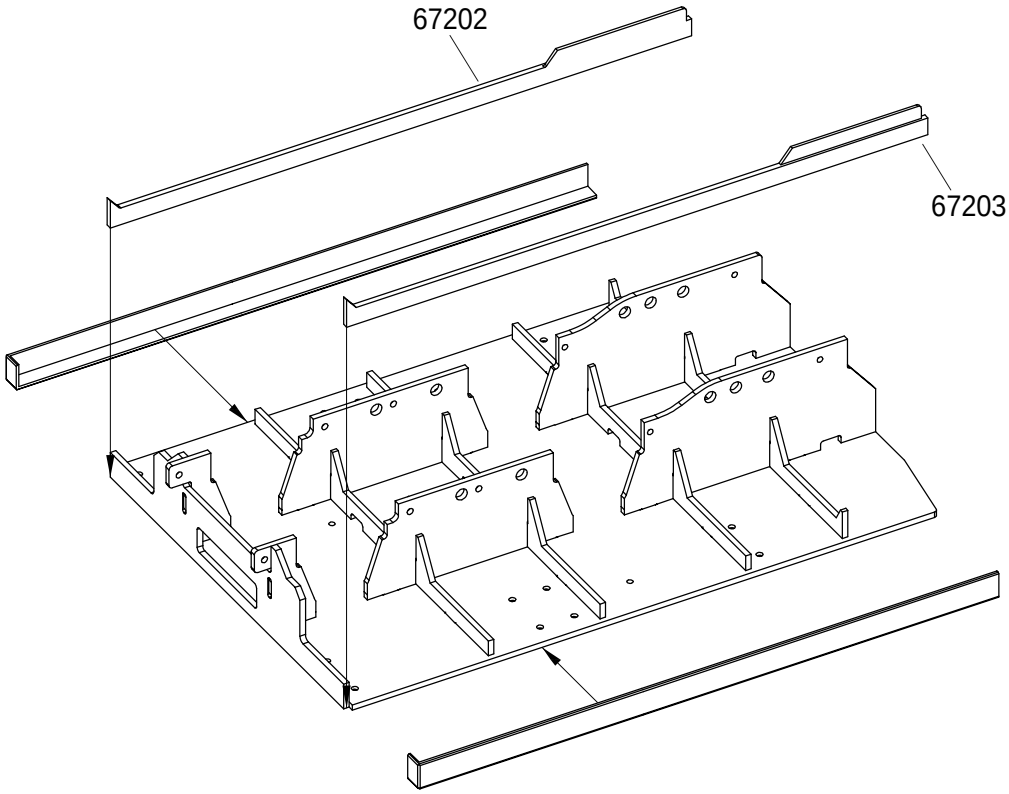
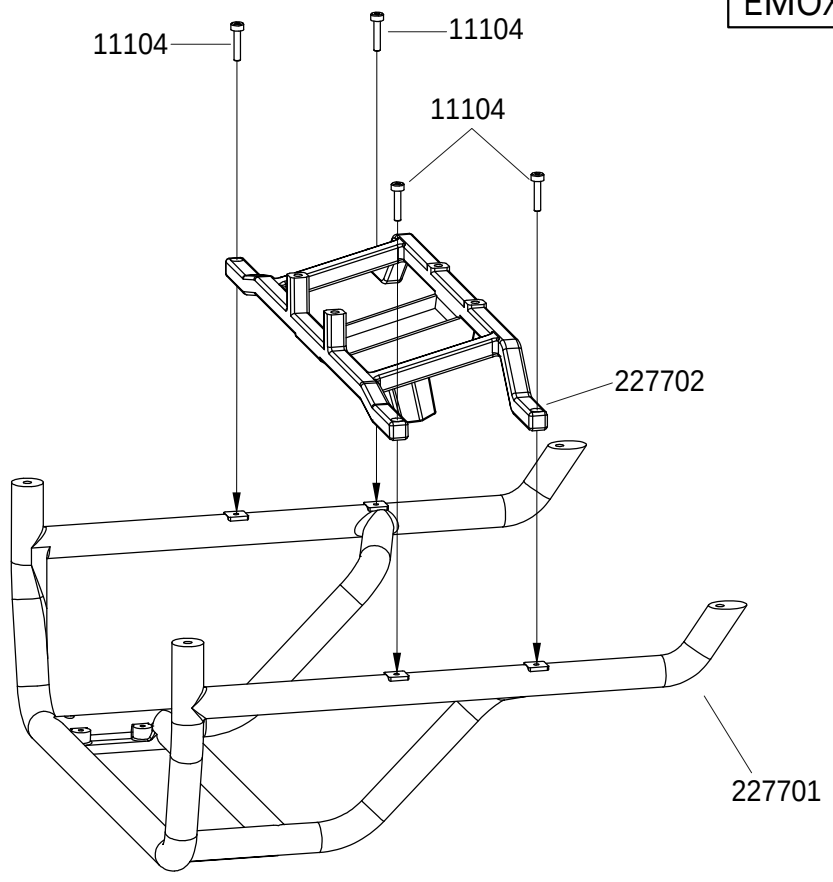


62

EMOXL2

11104

M2x10 X4

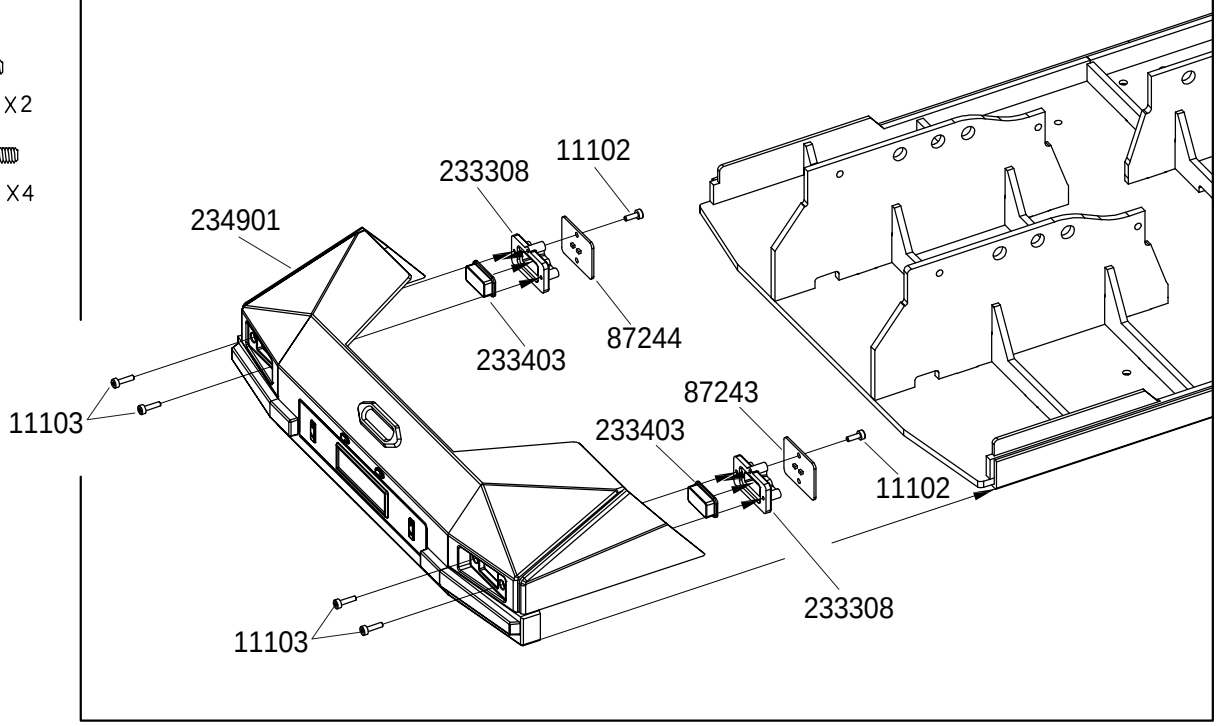


63

EMOXL2

11102 M2x6 X2

11103 M2x8 X4

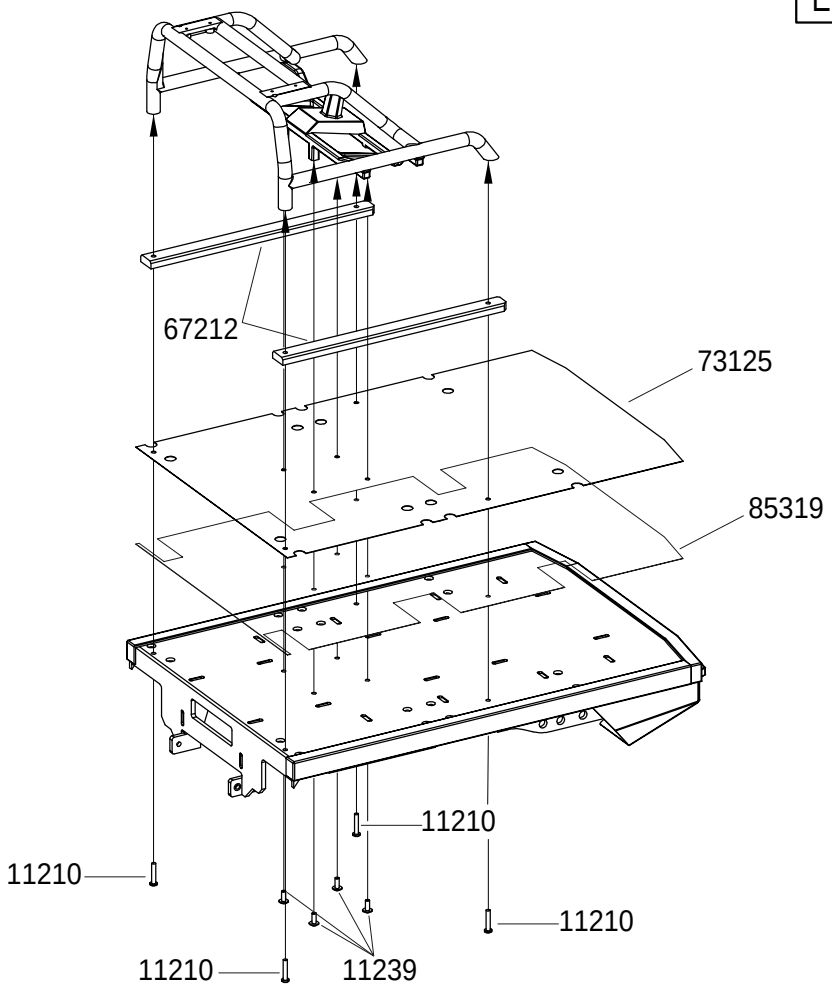


64

EMOXL2

11239 M3x8 X4

11210 M3x16 X4



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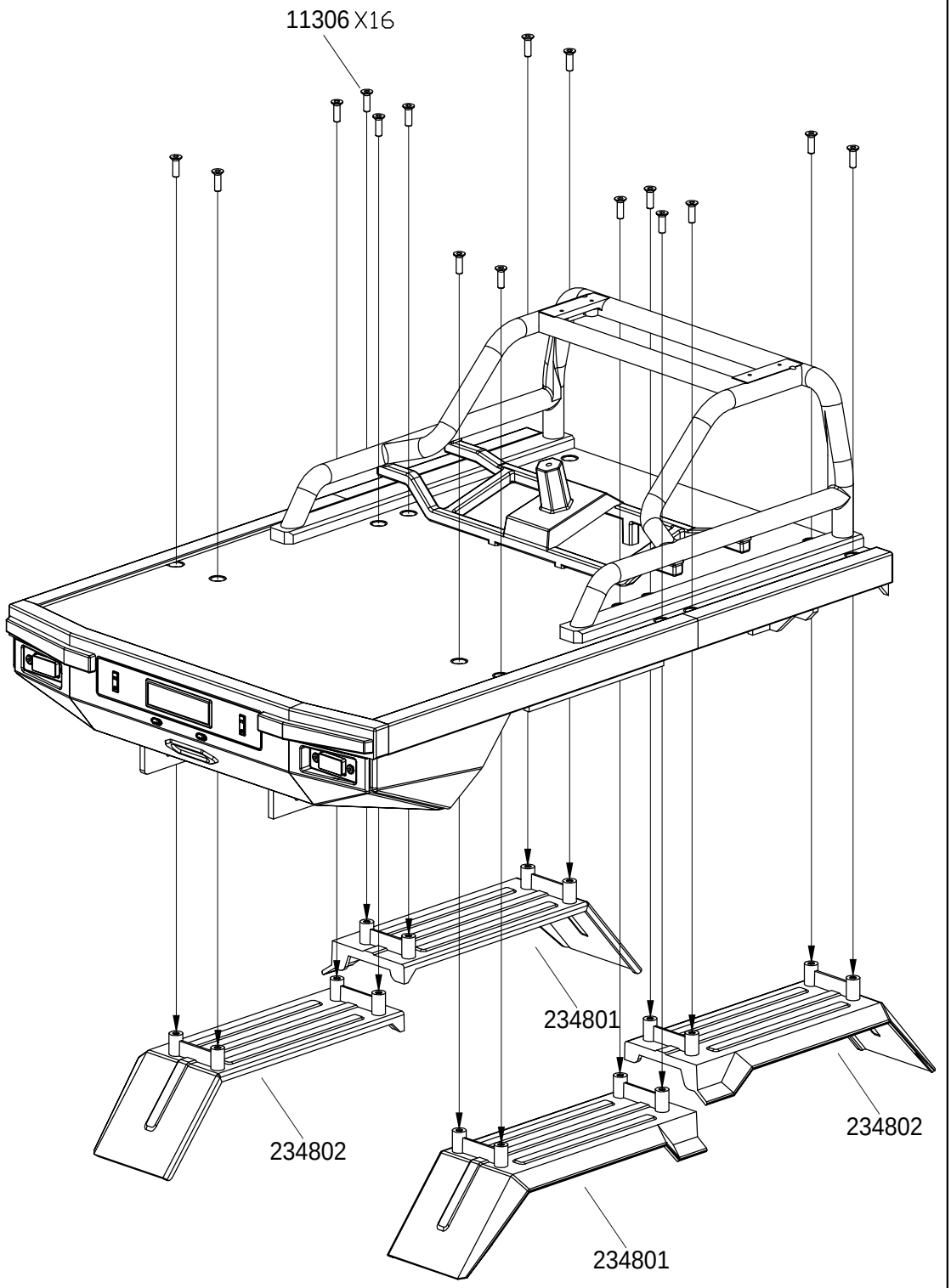
EMOXL2

11306

M3x10 X16

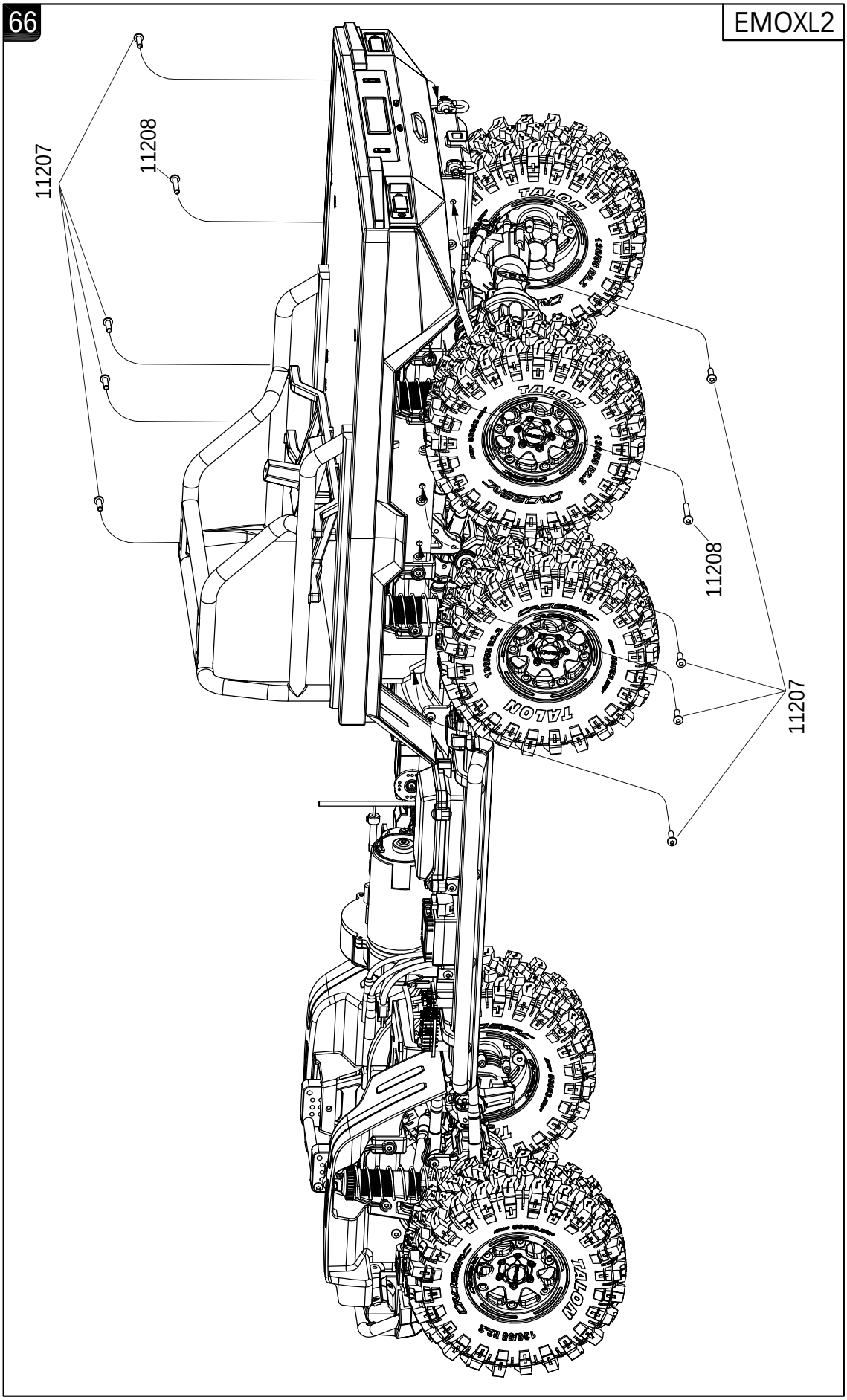


66

EMOXL2

11207 M3x10 X8

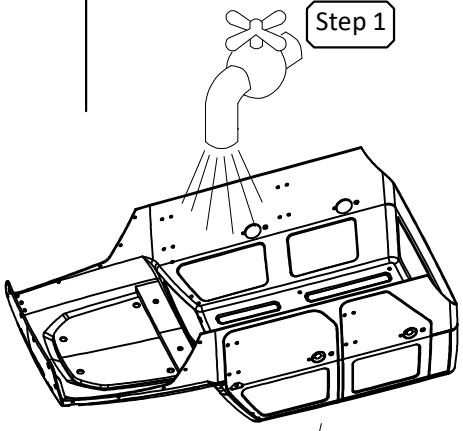
11208 M3x12 X2



67

EMOXL2

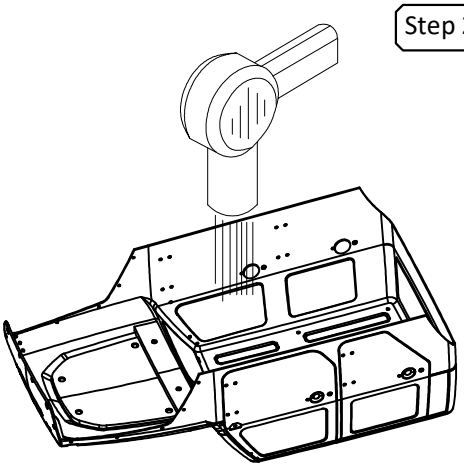
Step 1

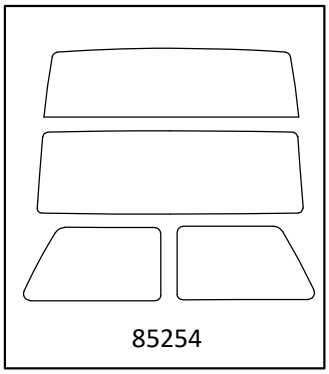


239101

Wash the inside of the body shell with mild detergent, then rinse and dry thoroughly.
用温和中性洗涤剂清洗车壳内壁，随后冲洗干净，并彻底晾干。

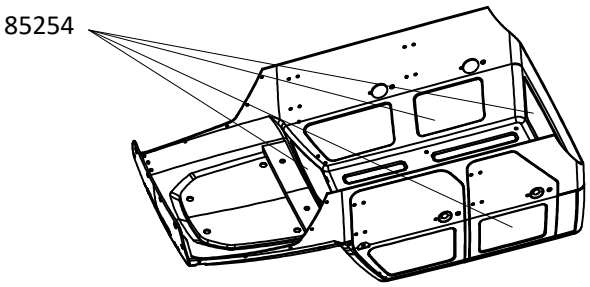
Step 2





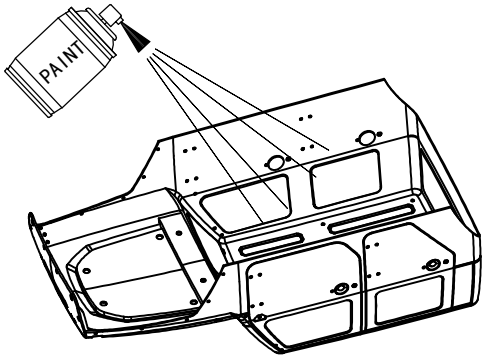
85254

85254



Step 3

Mask the windows on the inside with masking tape.
用美纹纸胶带在车壳内侧把车窗区域遮蔽封住。

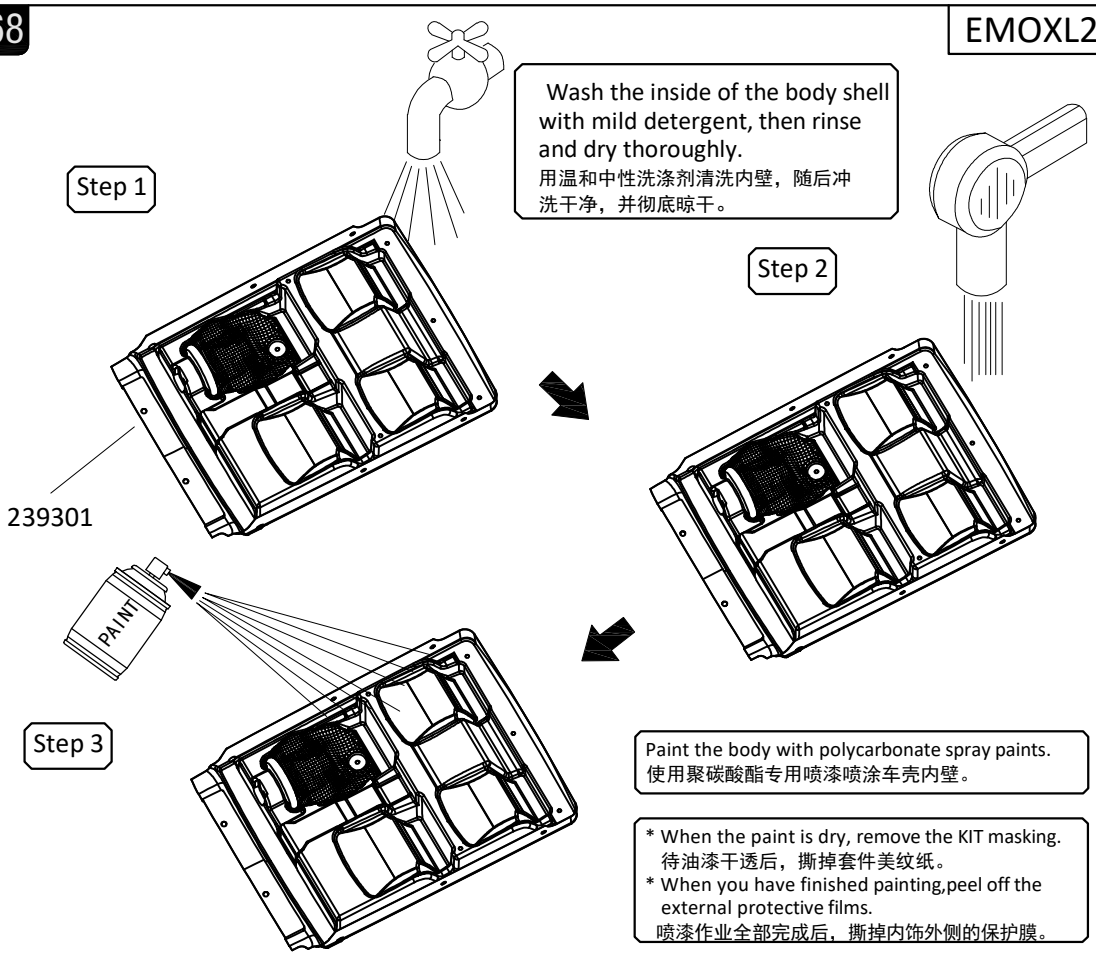


Step 4

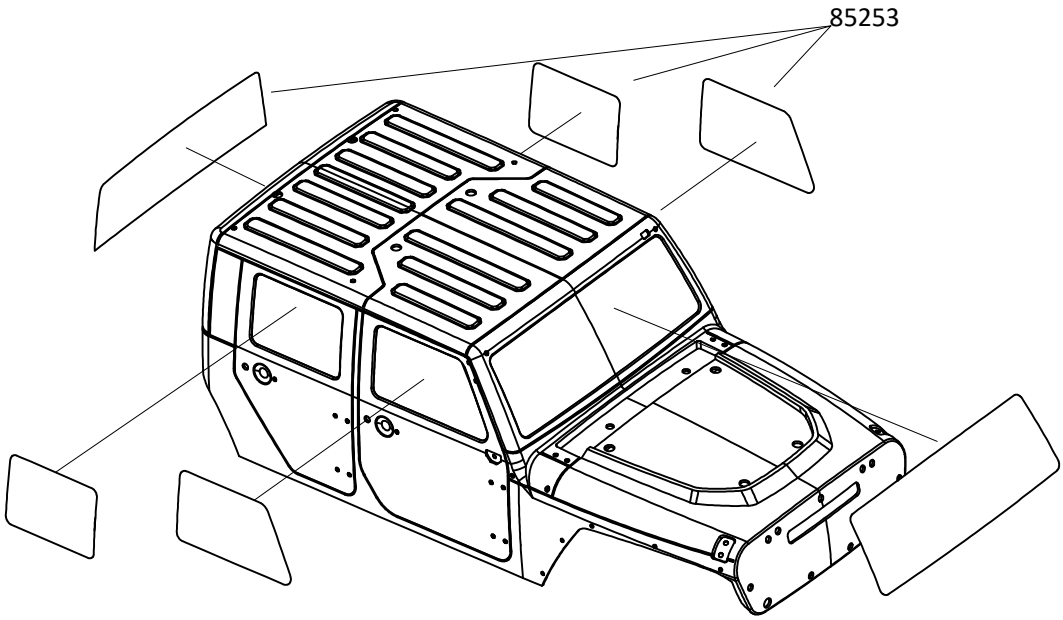
Paint the body with polycarbonate spray paints.
使用聚碳酸酯专用喷漆喷涂车壳内壁。

* When the paint is dry, remove the KIT masking.
  待油漆干透后，撕掉套件美纹纸。
* When you have finished painting,peel off the external protective films.
  喷漆作业全部完成后，撕掉车壳外侧的保护膜。

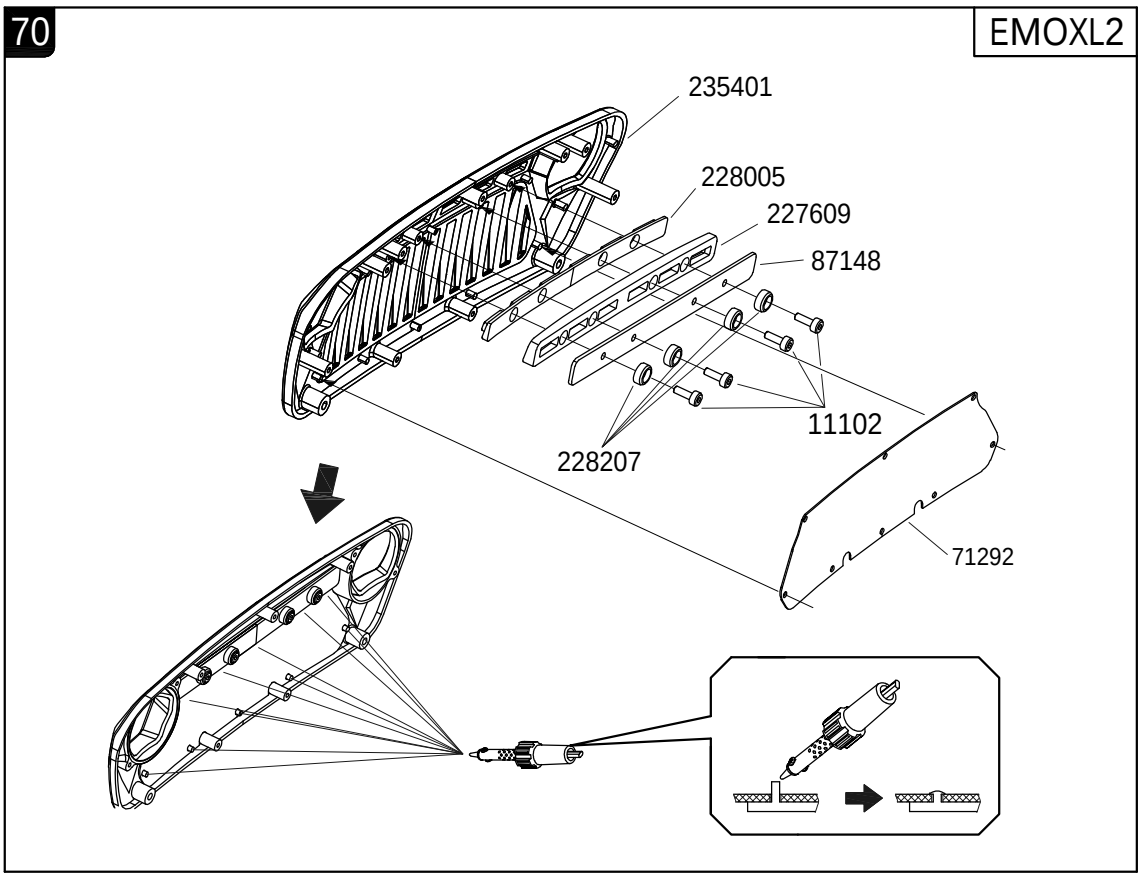
68 EMOXL2



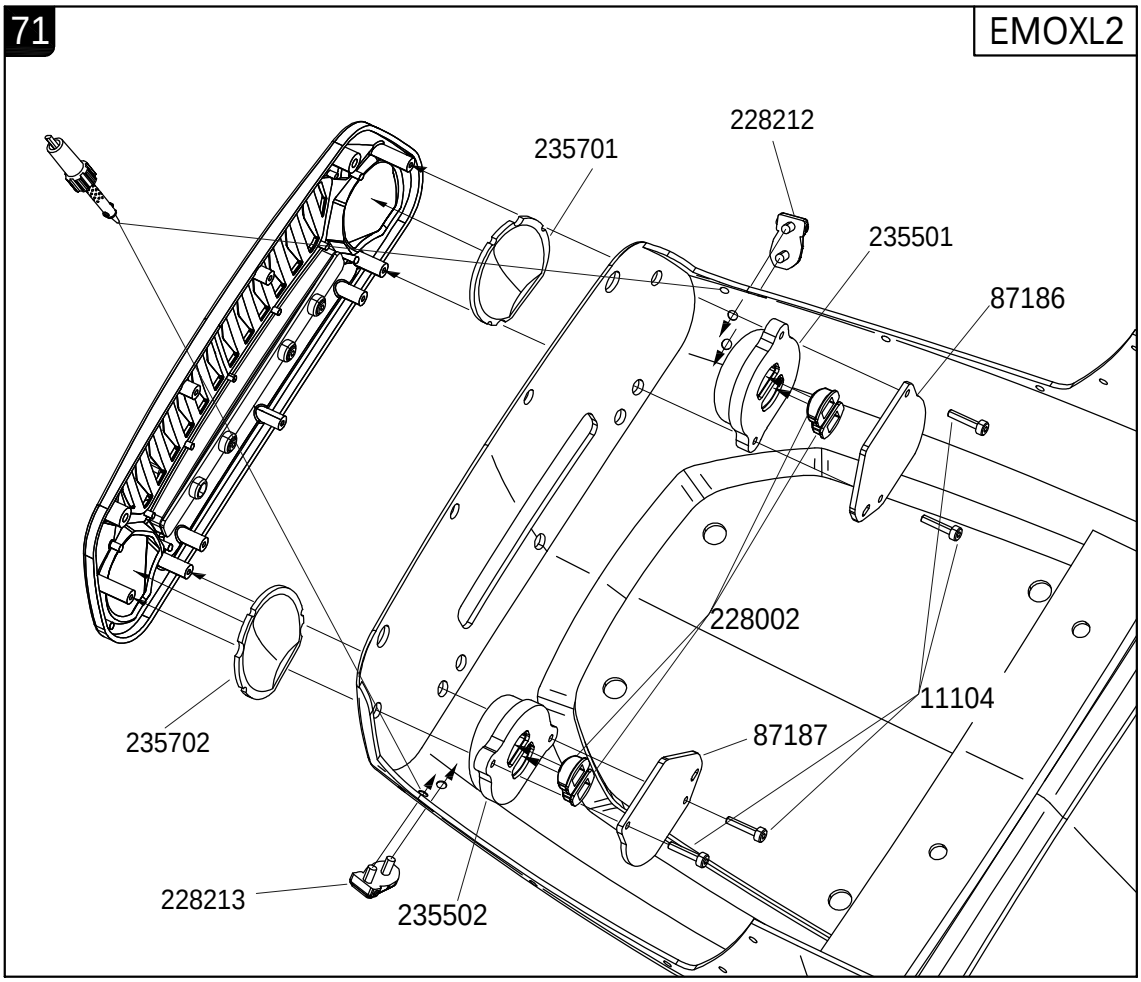
69 EMOXL2



11102 M2x6 X4



11104 M2x10 X4



72

EMOXL2

11206

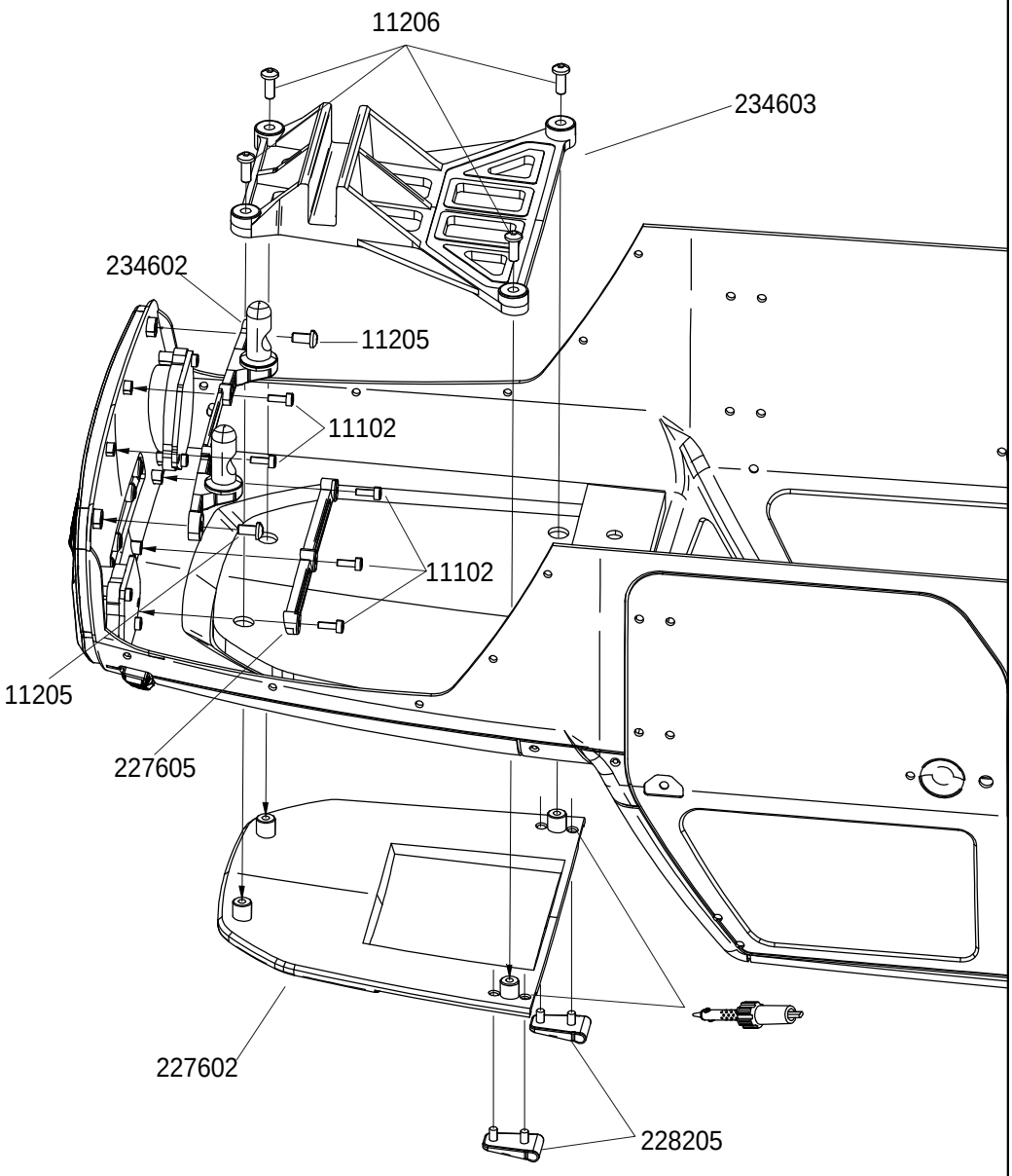
M3x8 X4

11102

M2x6 X5

11205

M3x6 X2

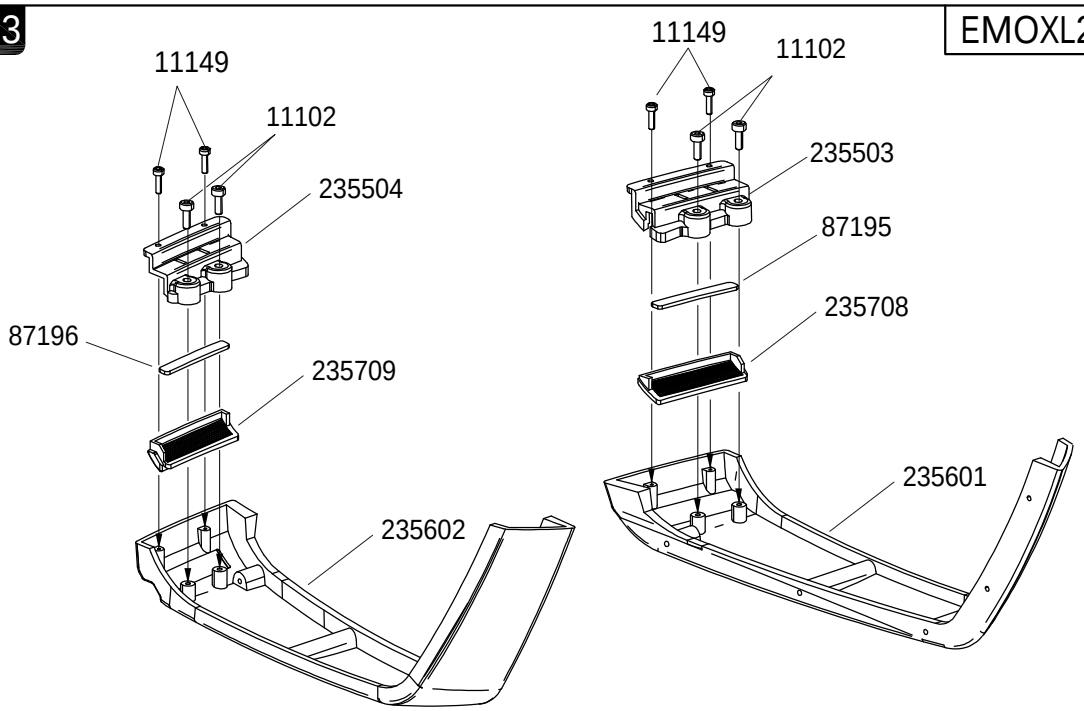


73

EMOXL2

11149 M1.6x6 X4

11102 M2x6 X4

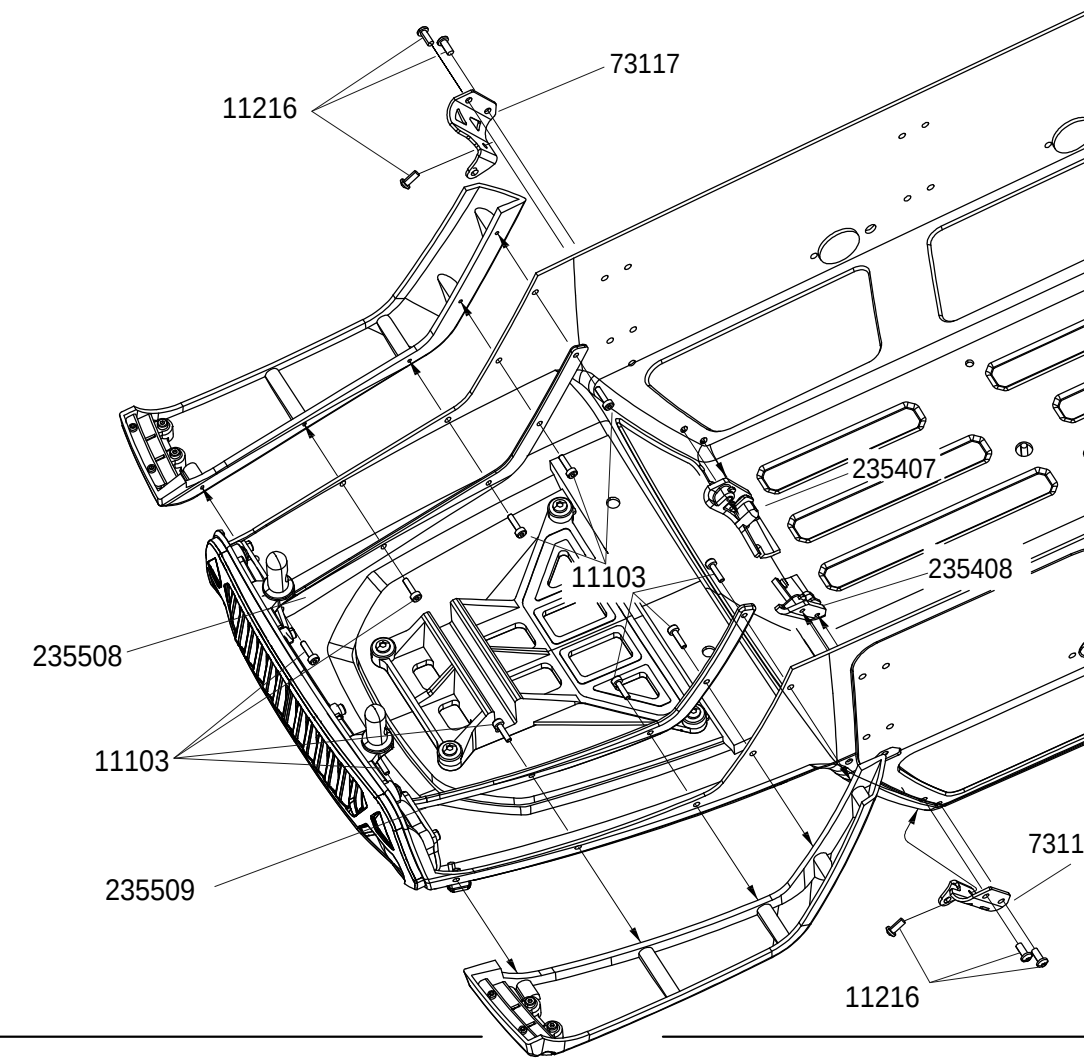


74

EMOXL2

11216 M2.5x6 X6

11103 M2x8 X10



75

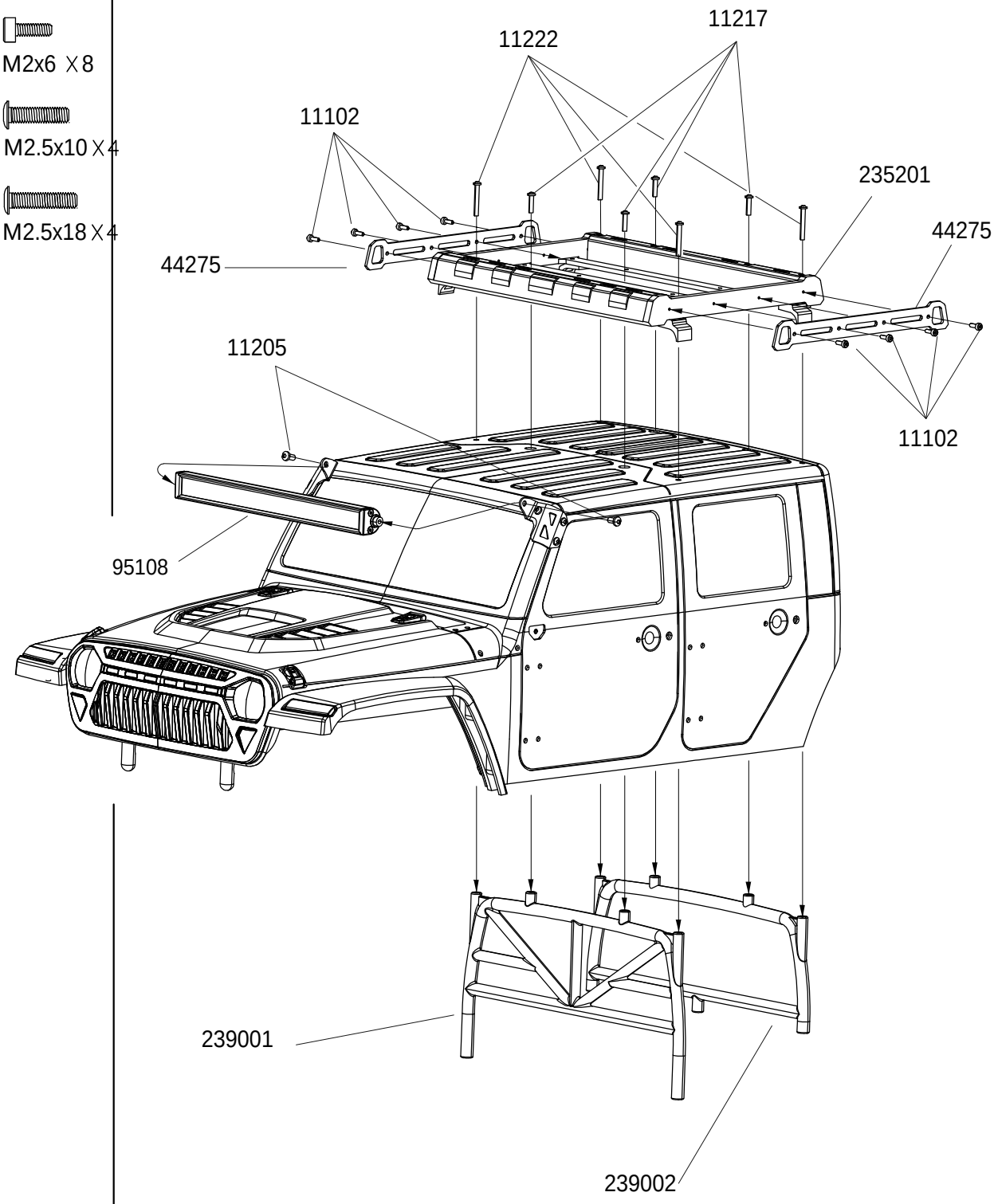
EMOXL2

11205 M3x6 X2

11102 M2x6 X8

11217 M2.5x10 X4

11222 M2.5x18 X4

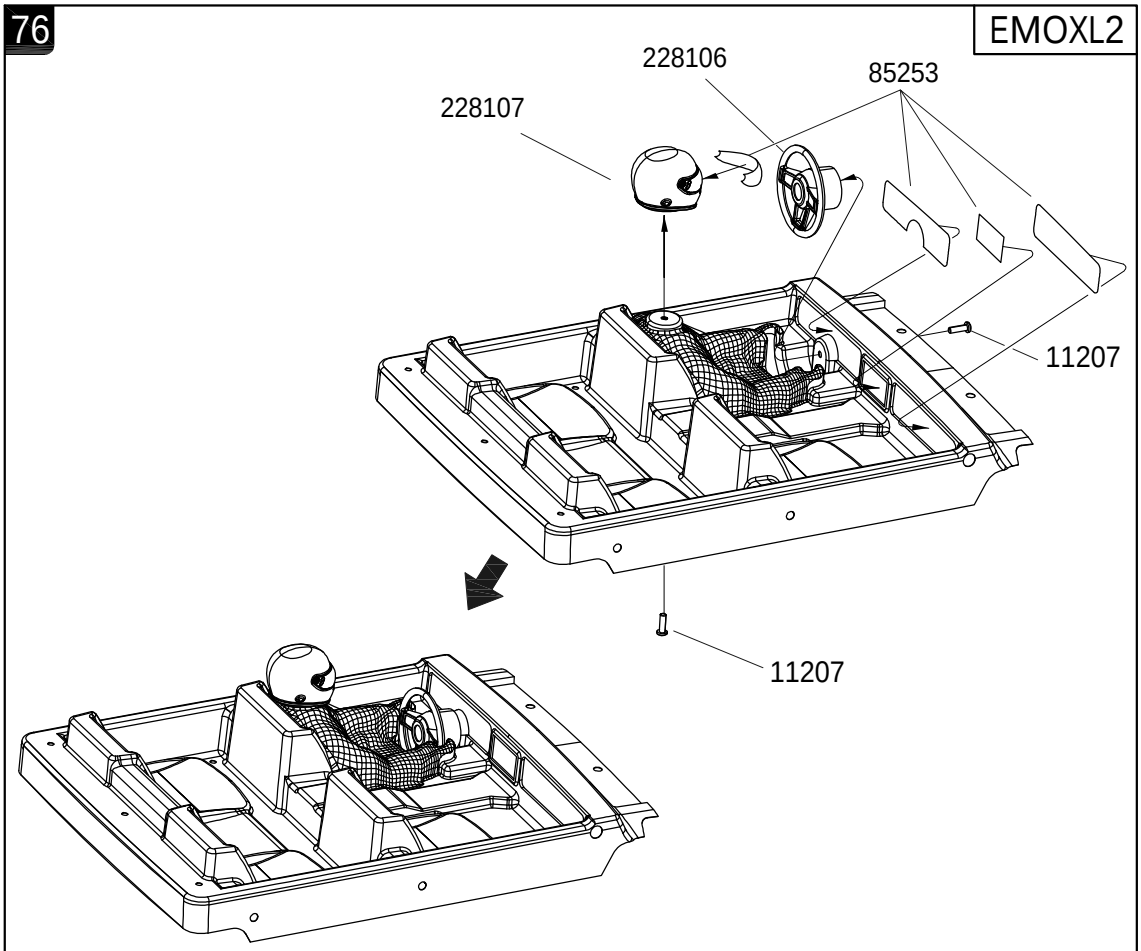


76

EMOXL2

11207

M3x10 X2

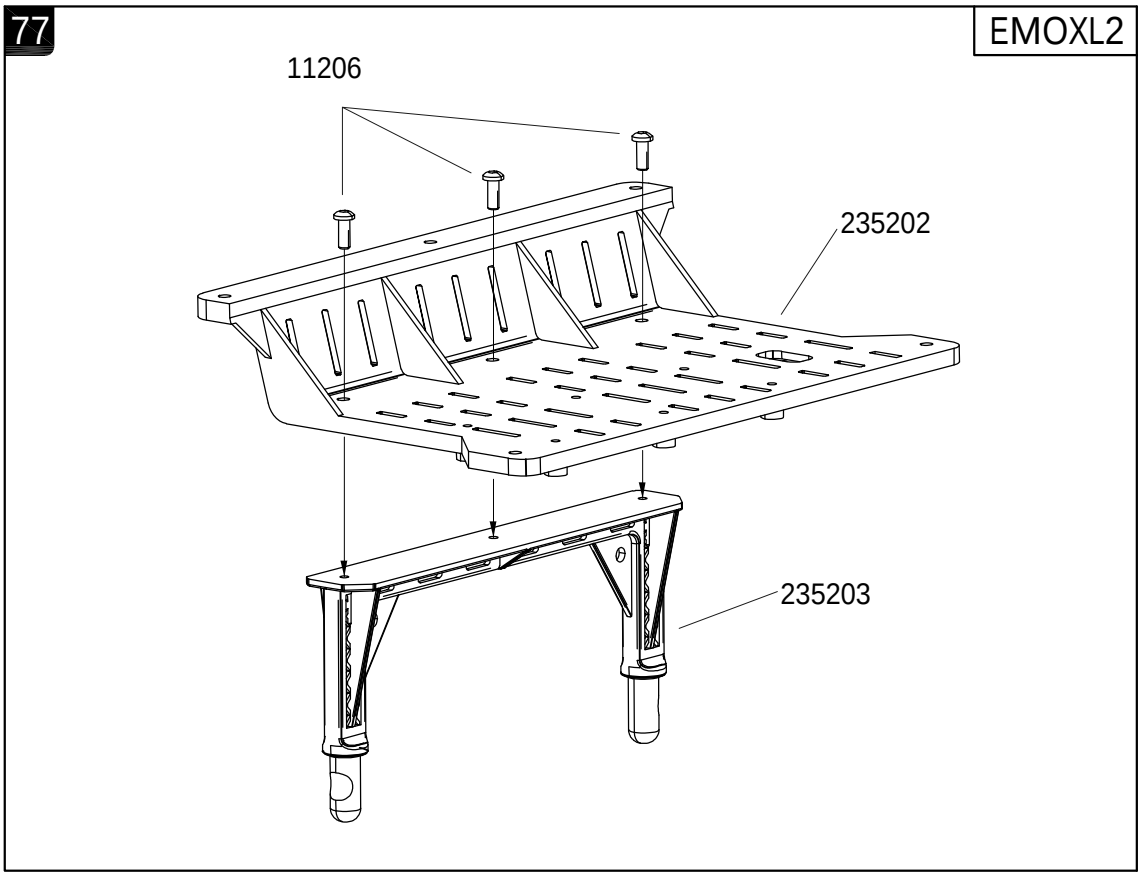


77

EMOXL2

11206

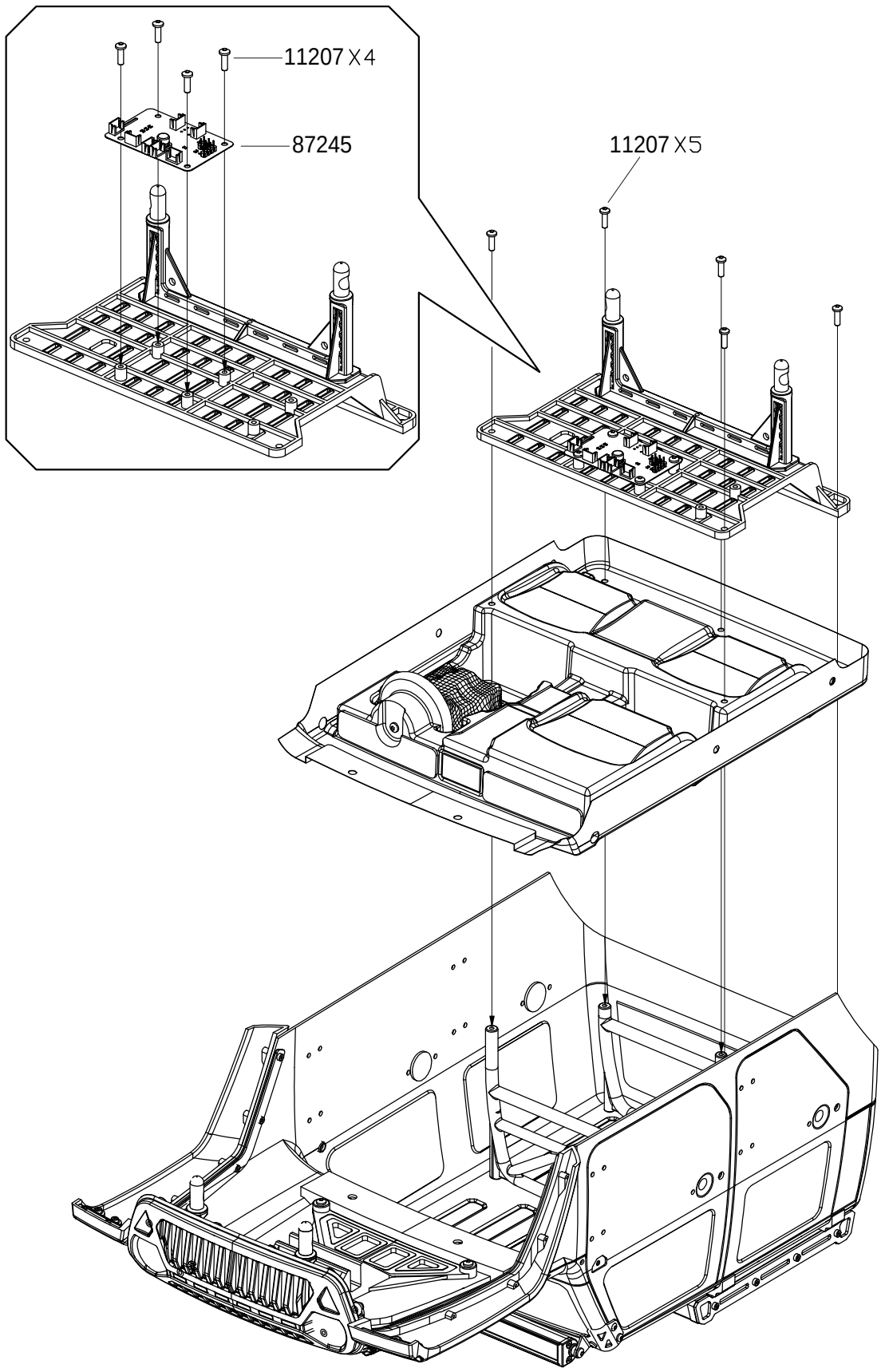
M3x8 X3



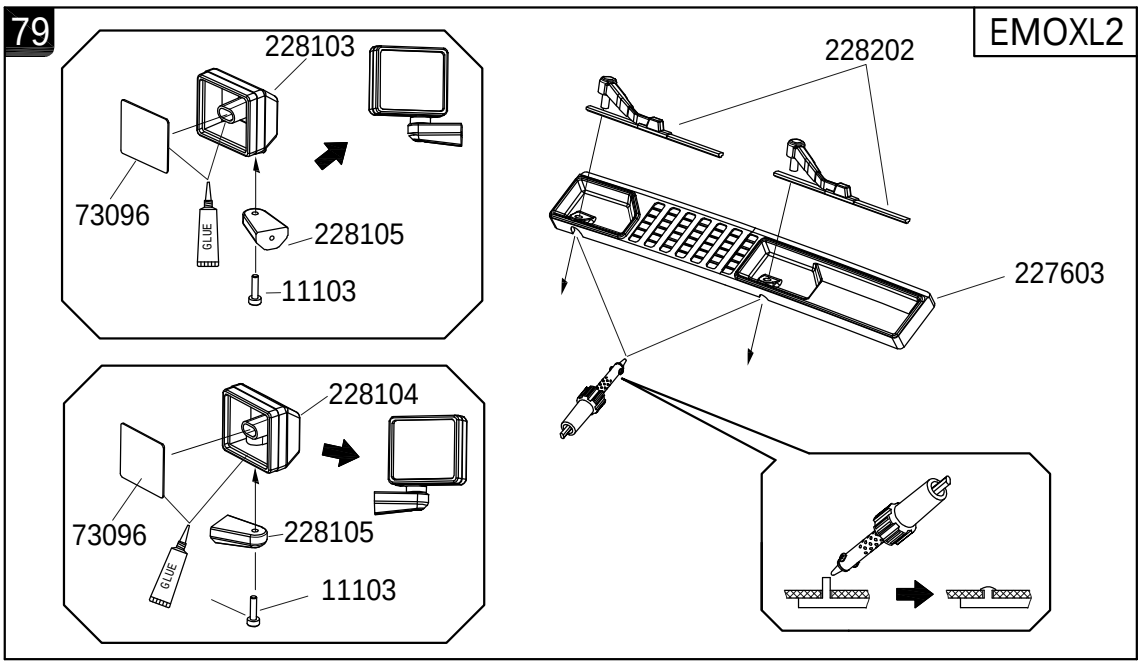
78

EMOXL2

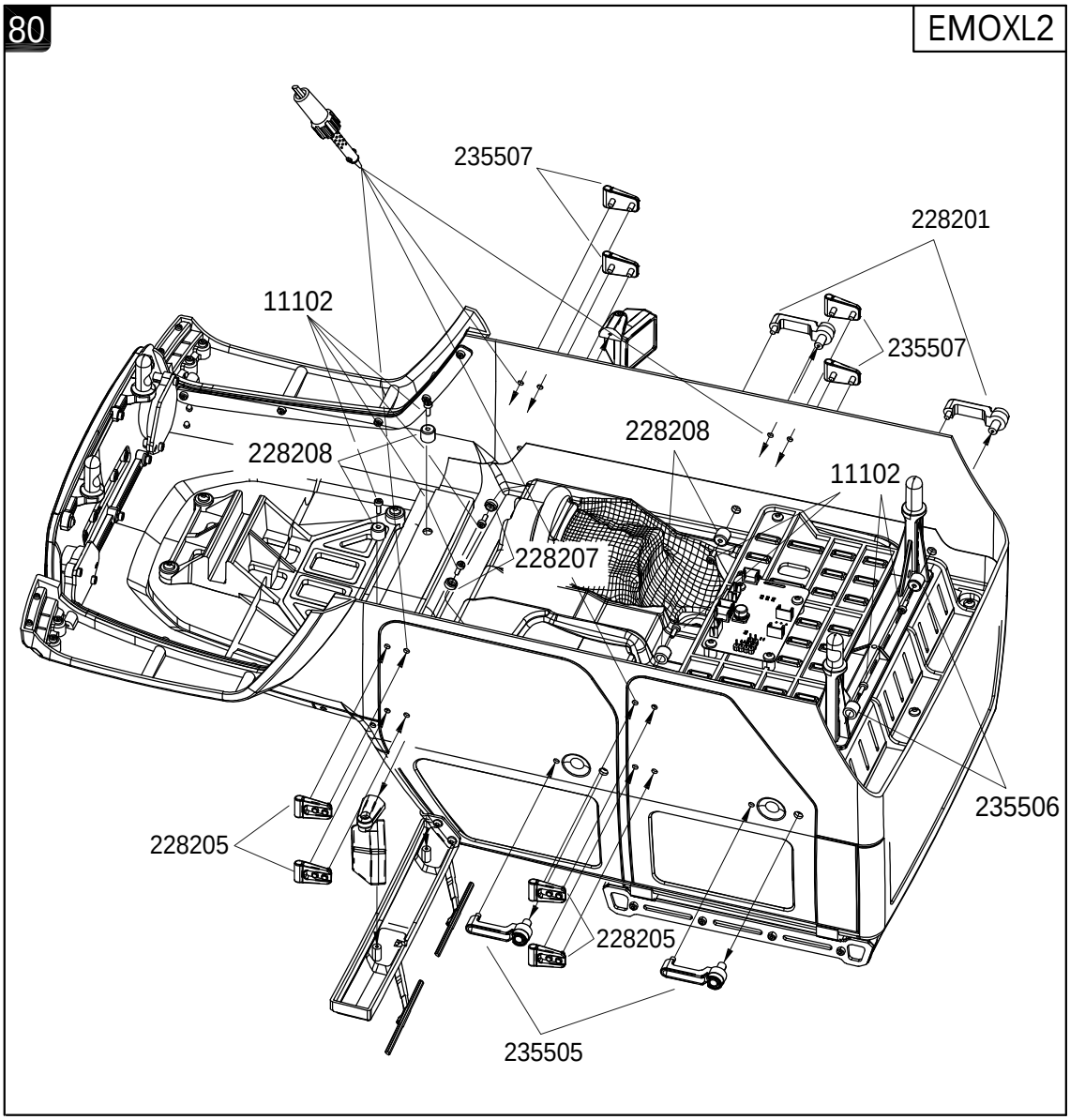
11207 M3x10 X9



11103 M2x8 X2



11102 M2x6 X8



81

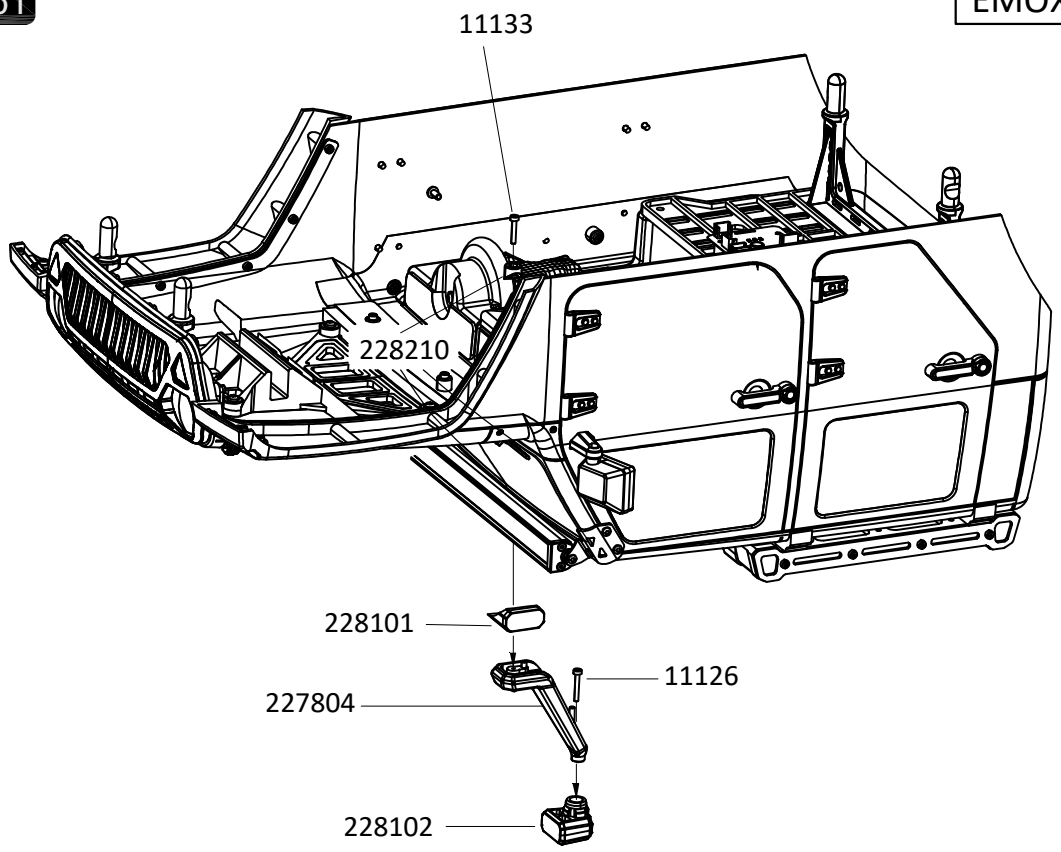
EMOXL2

11133

M2x12 X1

11126

M2x14 X1



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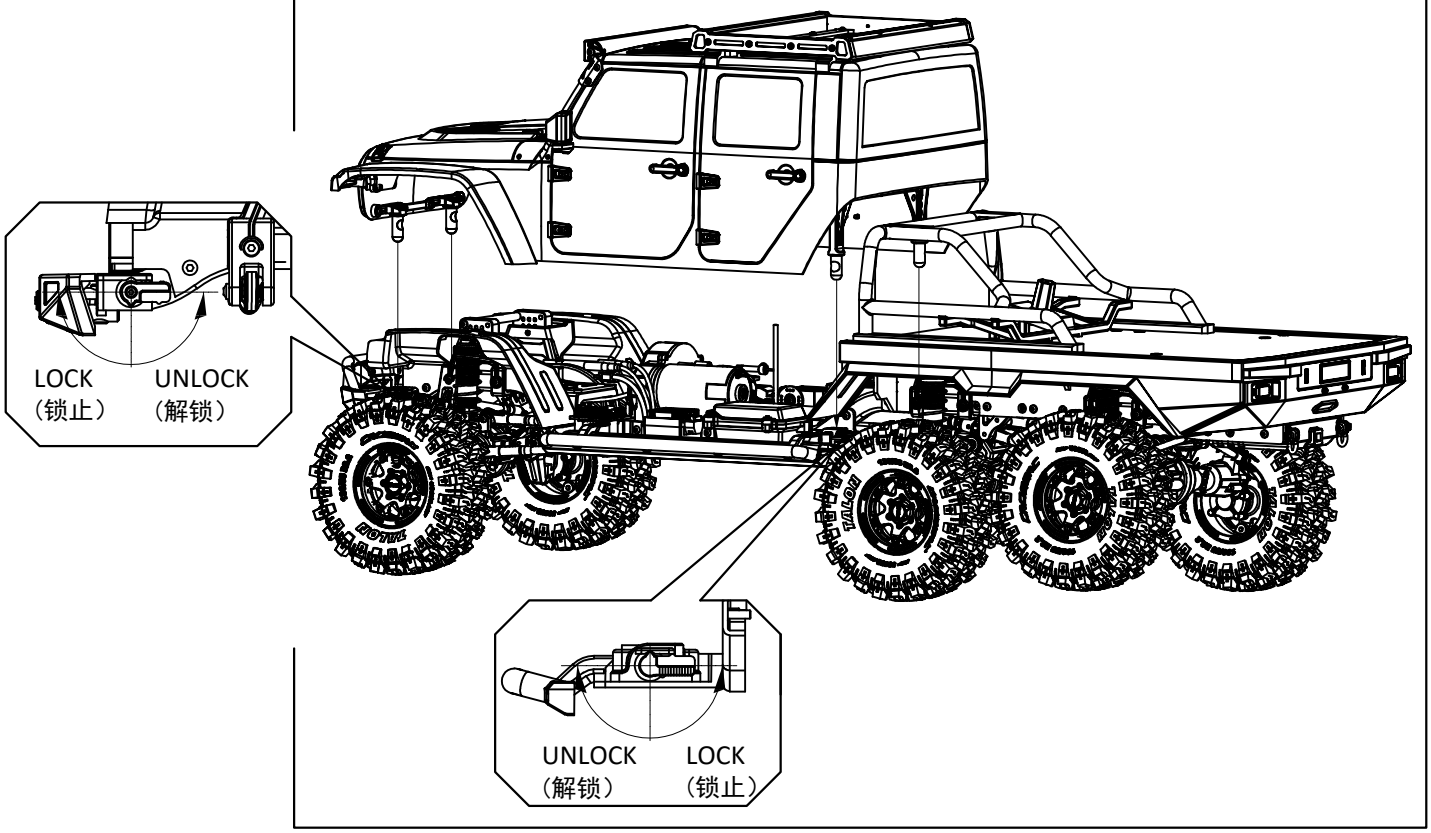

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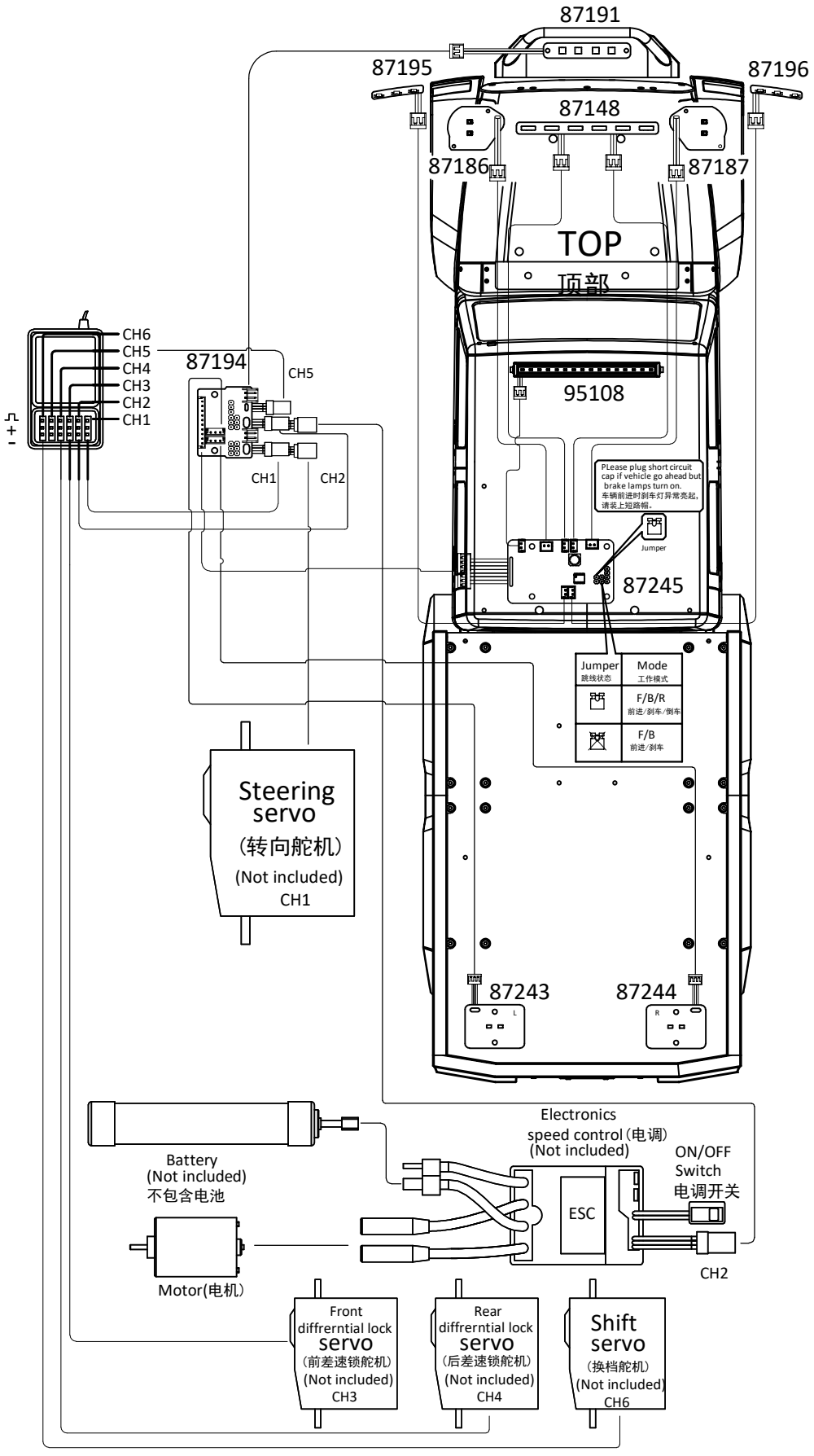
87191
87195
87196
87148
87186
87187
TOP
顶部
95108
CH6
CH5
CH4
CH3
CH2
CH1
87194
CH5
CH1
CH2
Please plug short circuit cap if vehicle go ahead but brake lamps turn on.
车辆前进时刹车灯异常亮起，请装上短路帽。
Jumper
87245
Jumper 跳线状态
Mode 工作模式
F/B/R 前进/刹车/倒车
F/B 前进/刹车
Steering servo
（转向舵机）
(Not included)
CH1
87243
87244
Electronics speed control（电调）
(Not included)
ON/OFF Switch
电调开关
Battery
(Not included)
不包含电池
ESC
CH2
Motor(电机)
Front diffrerntial lock servo
（前差速锁舵机）
(Not included)
CH3
Rear diffrerntial lock servo
（后差速锁舵机）
(Not included)
CH4
Shift servo
（换档舵机）
(Not included)
CH6