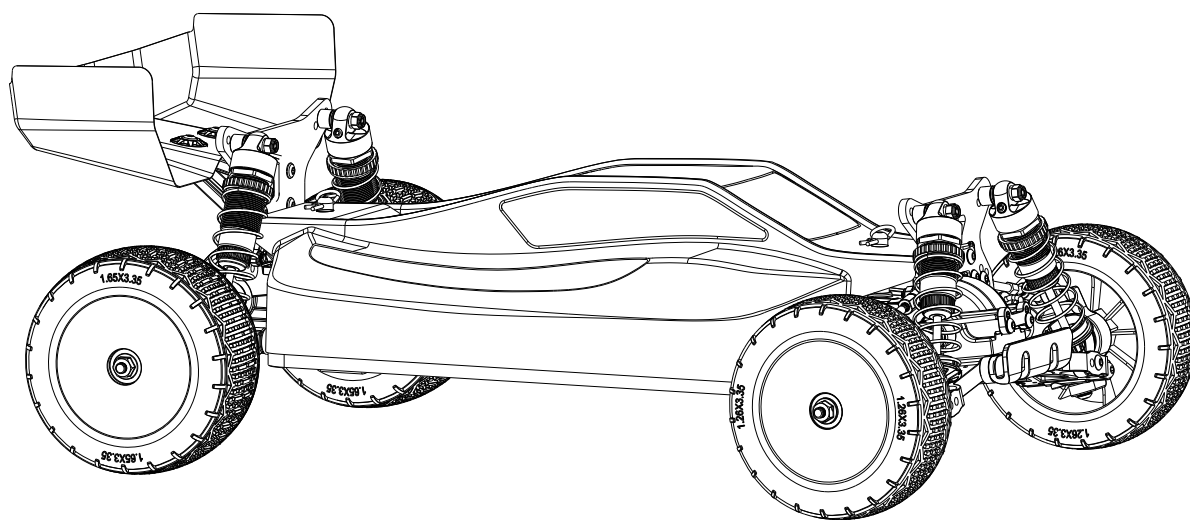


VKB10

1:10 Scale Electric 4WD Buggy

INSTRUCTION MANUAL



» INTRODUCTION

Thank you for purchasing this VKAR racing model. This manual contains instructions on operating and maintaining the VKB10. Please take a moment to read through this manual to familiarize yourself with this model.

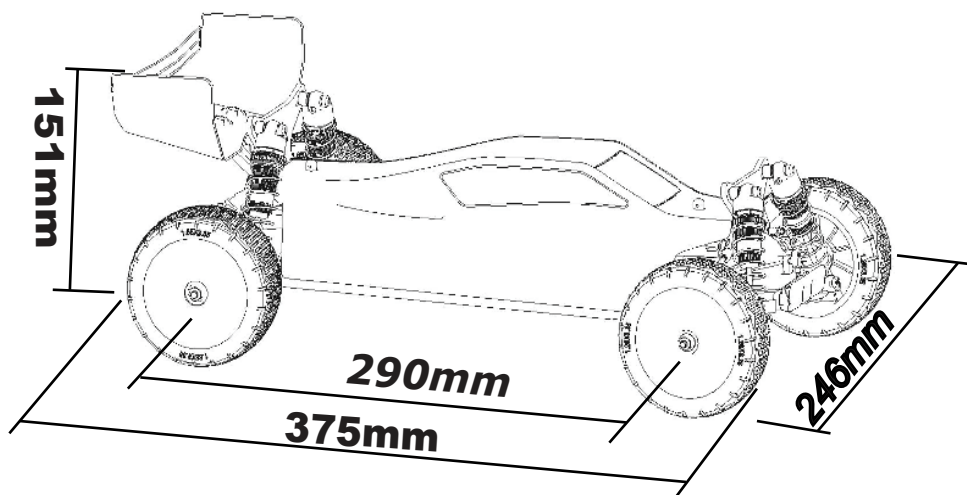
» FEATURES

- Incredible speed.
- Impressive durability.
- Maintenance friendly.
- Metal gear differentials.
- High-performance body.
- Liquid oil diff & high-capacity shocks.
- Ready to run.

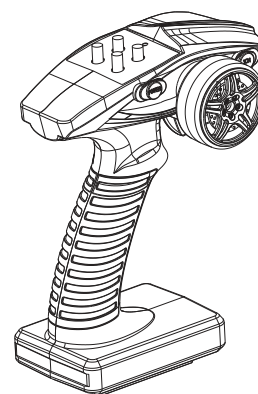
» PRODUCT CONTENTS

Scale: 1/10

Drive System: 4WD

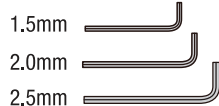


• Transmitter



Tools Included

Hex Key



Requires



**4 PCS AAA Batteries
(For Transmitter)**

» IMPORTANT INFORMATION



The VKB10 is a powerful RC car that will bring much enjoyment. However, improper use can cause damage and bodily injuries. Please read the following information carefully to avoid casualties.

- This product is not a toy. Children under the age of 14 years old must be supervised by an adult.
- Read the instructions carefully to familiarize yourself with the model structure and its operating procedures before operating this model car. If you have never operated an RC car before, we recommend that you obtain someone experienced in operating such systems.
- Please make sure to check that the batteries inside the transmitter and the battery for the RC car are both fully charged before operating.
- Please use a spacious venue to operate this RC car. Avoid highways, bodies of water, or crowded areas.

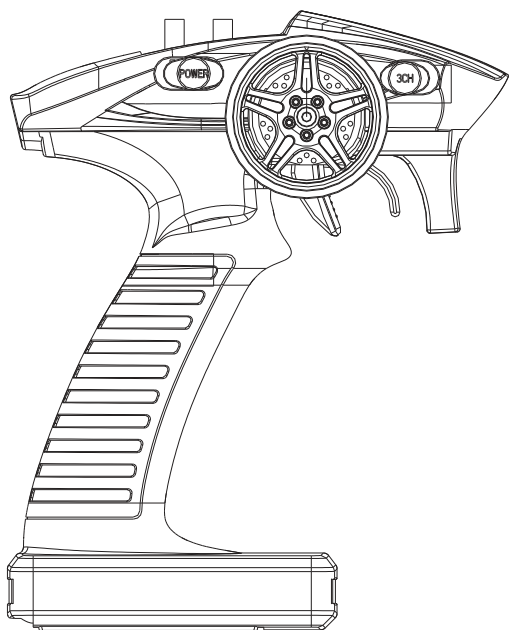
WARNING:

- Make sure to plug the battery in correctly.
- To operate the RC car, make sure to turn on the transmitter (controller) first before turning on the car. When you are done operating the car, make sure to turn off the car first before the transmitter.
- Take out the battery from the car when not in use.
- Check the wires inside the car for any loose connections.
- If you are using a battery that did not come with the car's package, make sure that the battery voltage does not exceed what the ESC can handle. Ask your local retailer for more information if needed.
- Do not touch the car when operating. The ESC and motor inside the car emits high heat when in use. Avoid physical contact until the car has cooled down.

This model can be operated with Ni-MH or Lithium Polymer batteries. Due to the battery's high energy density, please pay attention to the following information to avoid injuries or damages.

- The battery **MUST** be removed from the RC car before charging.
- Wait for the battery to cool down before charging.
- The battery should be stored in a cool and dry place.

SYSTEM INSTRUCTION

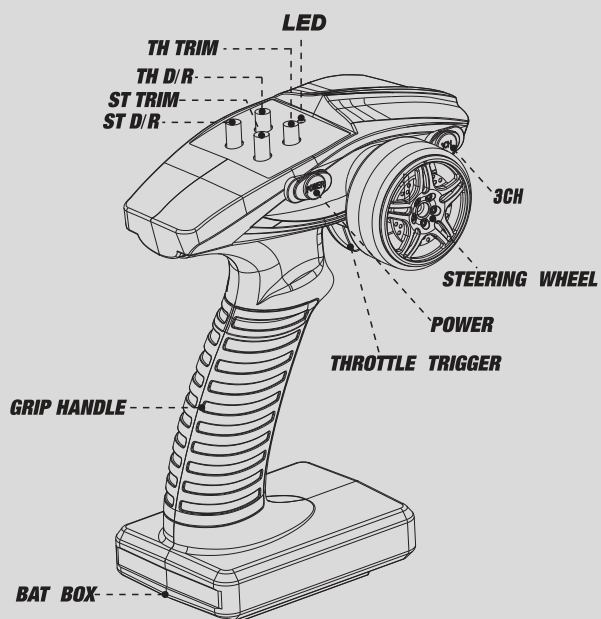
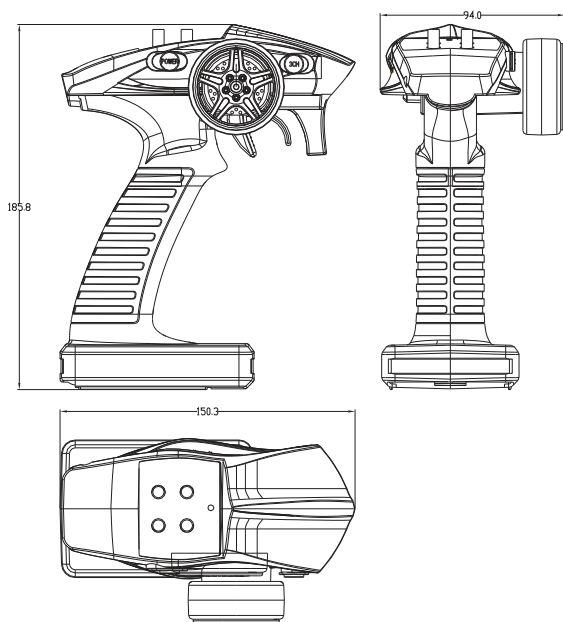


Install the batteries

- (1) Remove the battery compartment cover.
- (2) Replace the used batteries with new AA size batteries.

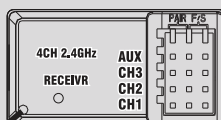
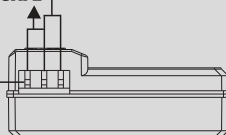
Please replace batteries when the power indicator blinks or the buzzer beeps.

Function

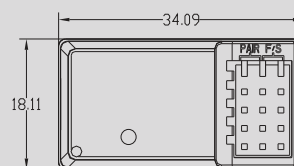
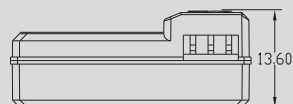


Warning: The Pin header can not connect to the power source.

PAIR
FAIL SAFE

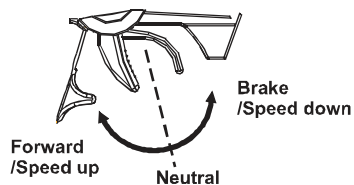


ANTENNA

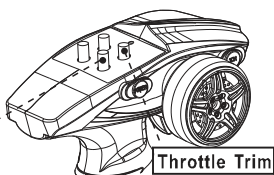


» RADIO SYSTEM SETUP

A. Throttle Trigger



Steering Trim



Throttle Trim

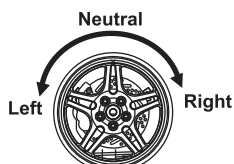


Keep the transmitter and receiver 40cm apart when operating.

Use the REV switches to reverse the steering or throttle operating direction.

1. Push the trigger forward to slow down or brake.
2. Pull the trigger backward to accelerate.

B. Steering Wheel



Throttle Trim: Trim the throttle servo slightly when the trigger is at the neutral position.

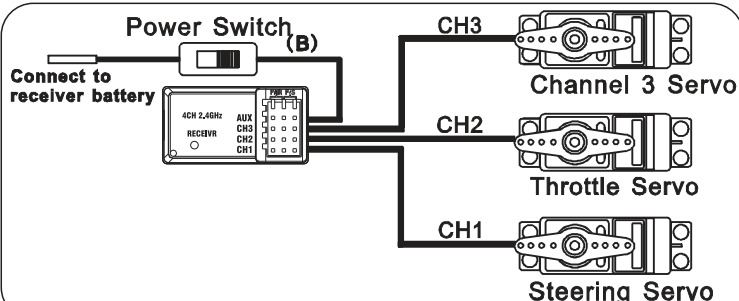
Steering Trim: If the front wheels do not align straight, use the steering trim to adjust.

Operating Procedure

- Before operation: First turn on the transmitter, then the receiver. Lastly, connect the drive battery to the control unit.
- After operation: Disconnect the battery from the control unit. Turn the receiver off, and then the transmitter.

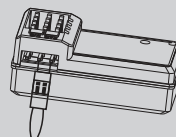
Receiver and servo connection

Gas powered model



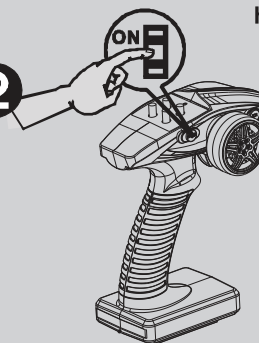
Binding the transmitter and receiver

1



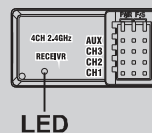
1. After connecting the receiver to the power source, connecting the Bind connector to the "pair" Pin header. The LED on the receiver should start flashing rapidly.

2



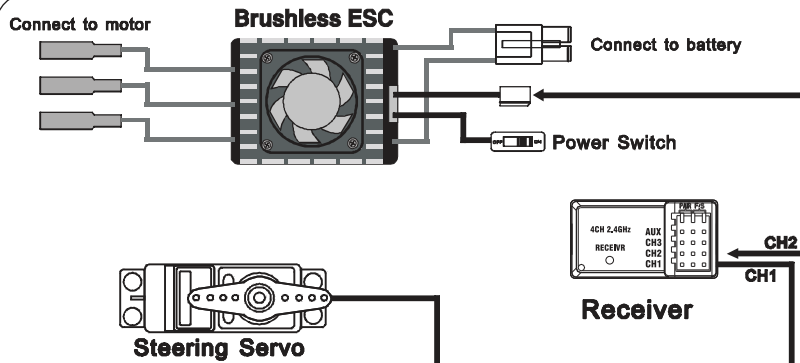
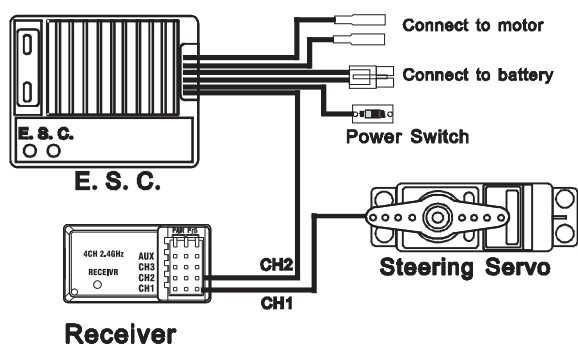
2. Switch on the transmitter, then pull the Bind connector out of the receiver.

3



3. The LED on the receiver should become solid. That is, making the remote control code successfully. (Binding the transmitter and receiver.)

Electrical powered model



» ELECTRONICS SETUP

[BEGIN TO USE THE NEW ESC]

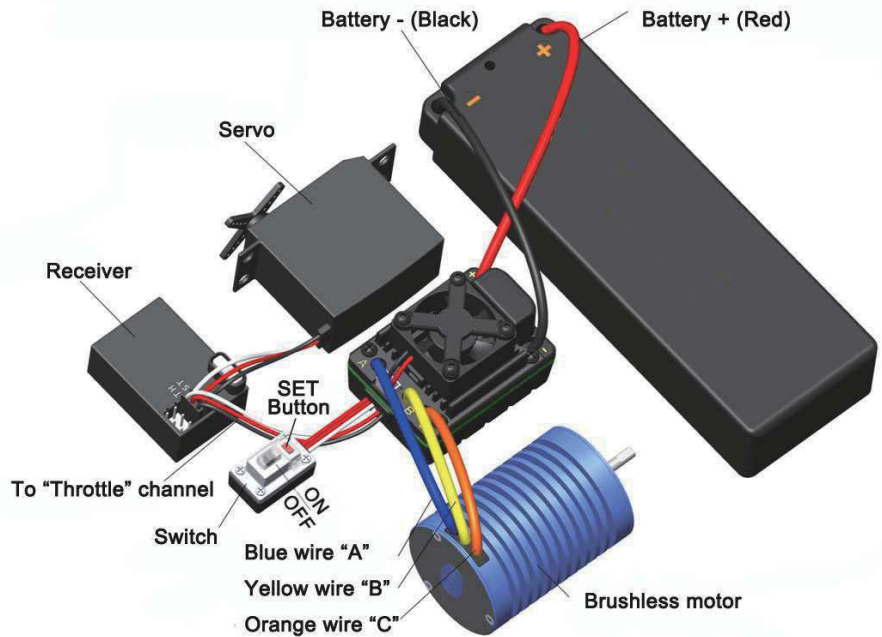
1. Connect the ESC, motor, receiver, battery and servo according to the following diagram

“+” and “-” wires of the ESC are connected with the battery pack, and #A, #B and #C are connected with the motor wires. The “SET” button is used for programming the ESC.

The control cable of the ESC (trio wires with black, red and white color) is connected with the throttle channel of the receiver (Usually CH2).

The #A, #B, #C wires of the ESC can be connected with the motor wires freely (without any order). If the motor runs in the opposite direction, please swap any two wire connections.

Note: You can use the transmitter to set the throttle channel to



the “Reverse” direction, and then the motor will run oppositely. Please calibrate the throttle range again after changing the direction of throttle channel.

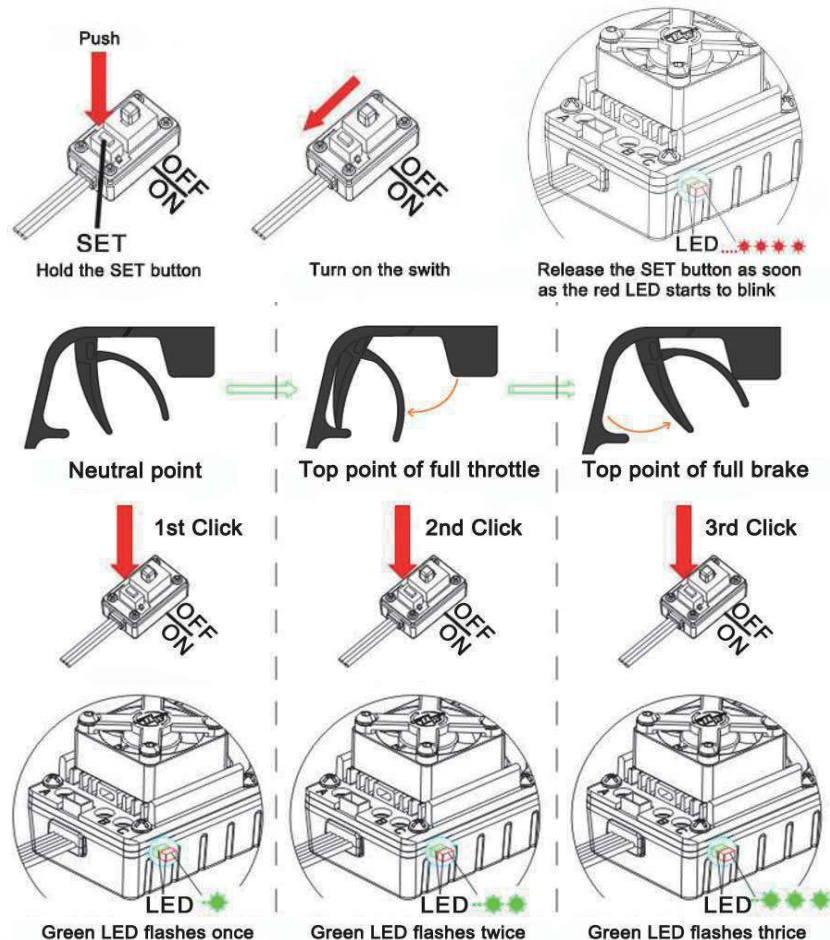
2. Throttle Range Setting (Throttle Range Calibration)

In order to make the ESC match the throttle range, you must calibrate it when you begin to use a new ESC, or a new transmitter, or after changing the settings of the neutral position of throttle channel, ATV or EPA parameters, otherwise the ESC cannot work properly.

There are 3 points need to be set, they are the top point of “forward”, “backward” and the neutral point.

The following pictures show how to set the throttle range with a Futaba™ transmitter.

- Switch off the ESC, turn on the transmitter, set the direction of throttle channel to “REV”, set the “EPA/ATV” value of throttle channel to “100%”, and disable the “ABS” brake function of your transmitter. (*Note2)
- Hold the “SET” key and then switch on the ESC, when the red LED begins to flash, release the key immediately. (Please check the picture on the right side)



Note2: If you don't release the “SET” key after the red LED begins to flash, the ESC will enter the program mode, in such a case, please switch off the ESC and re-calibrate the throttle range again from step A to step D.

» ELECTRONICS SETUP

3. The LED Status in Normal Running

- a) When the throttle stick is in the neutral range, neither the Red LED nor the Green LED lights up.
- b) When the car moves forward, the Red LED solidly lights; the Green LED also lights up when the throttle stick is at the top position (100% throttle).
- c) When the car brakes, the Red LED solidly lights; the Green LED also lights up when the throttle stick is at the bottom position and the maximum brake force is set to 100%.
- d) When the car reverses, the Red LED solidly lights.

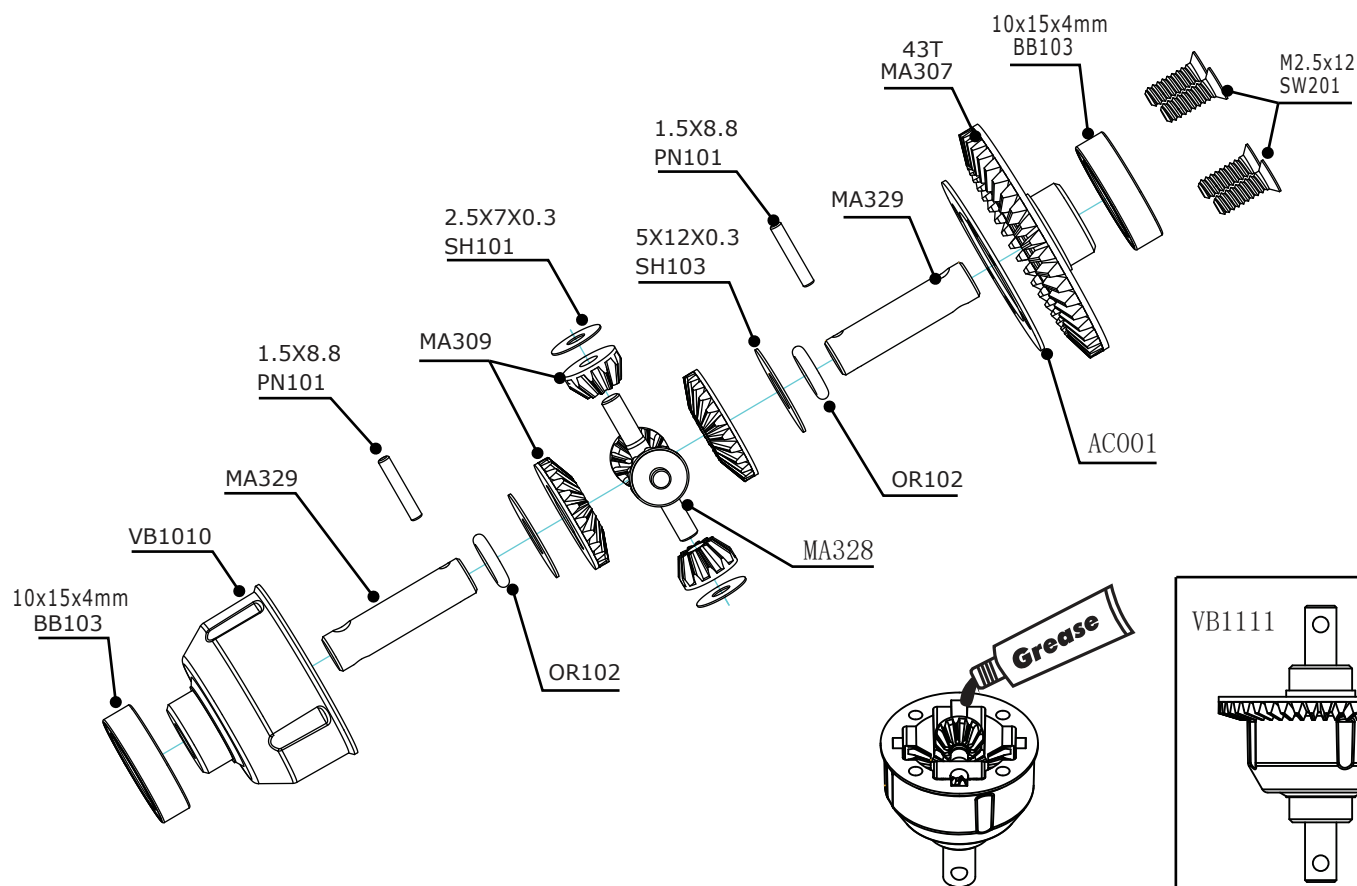
【ALERT TONES】

1. Input voltage abnormal alert tone: The ESC begins to check the input voltage when power on, if it is out of the normal range, such an alert tone will be emitted: “beep-beep-, beep-beep-, beep-beep-” (There is 1 second time interval between every “beep-beep-” tone).
2. Throttle signal abnormal alert tone: When the ESC can't detect the normal throttle signal, such an alert tone will be emitted: “beep-, beep-, beep-” (There is 2 seconds time interval between every “beep-” tone).

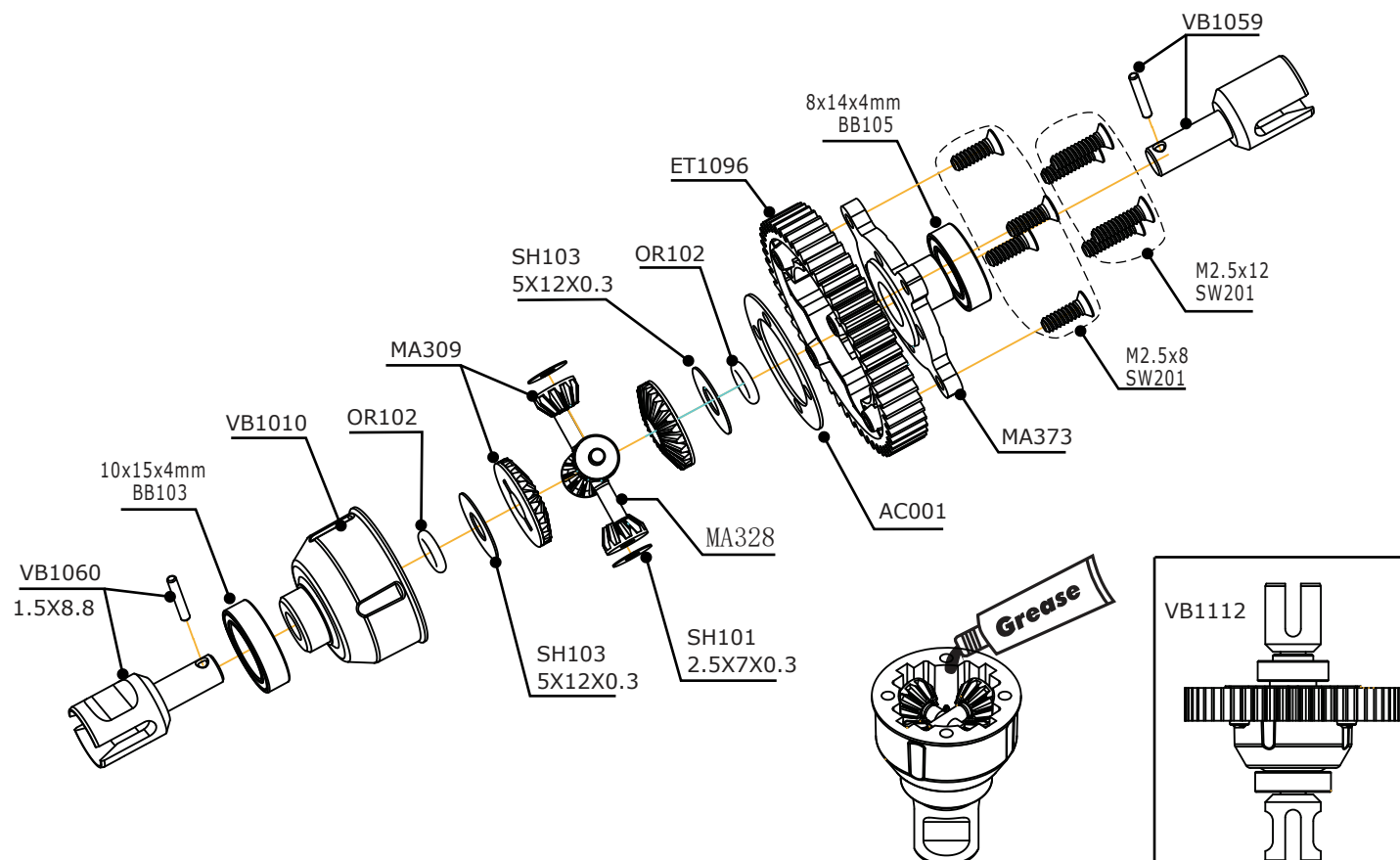
【PROTECTION FUNCTION】

1. Low voltage cut-off protection: If the voltage of a Lipo battery pack is lower than the threshold for 2 seconds, the ESC will cut off the output power. Please note that the ESC cannot be restarted if the voltage of each Lipo cell is lower than 3.5V.
For NiMH battery packs, if the voltage of the whole NiMH battery pack is higher than 9.0V but lower than 12V, it will be considered as a 3S Lipo; If it is lower than 9.0V, it will be considered as a 2S Lipo. For example, if the NiMH battery pack is 8.0V, and the threshold is set to 2.6V/Cell, it is considered as a 2S Lipo, and the low-voltage cut-off threshold for this NiMH battery pack is $2.6 \times 2 = 5.2V$.
2. Over-heat protection: When the temperature of the ESC is over a factory preset threshold for 5 seconds, the ESC will cut off the output power. You can disable the over-heat protection function for competition race.
3. Throttle signal loss protection: The ESC will cut off the output power if the throttle signal is lost for 0.2 second.

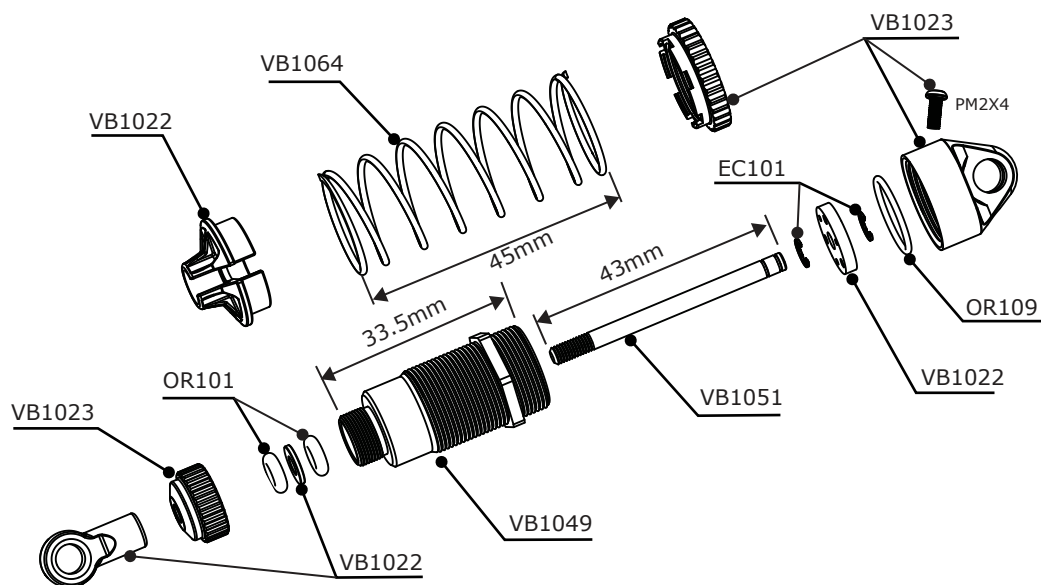
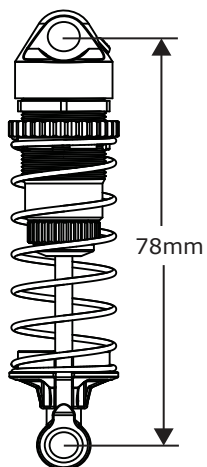
» FRONT & REAR DIFFERENTIAL ASSEMBLY



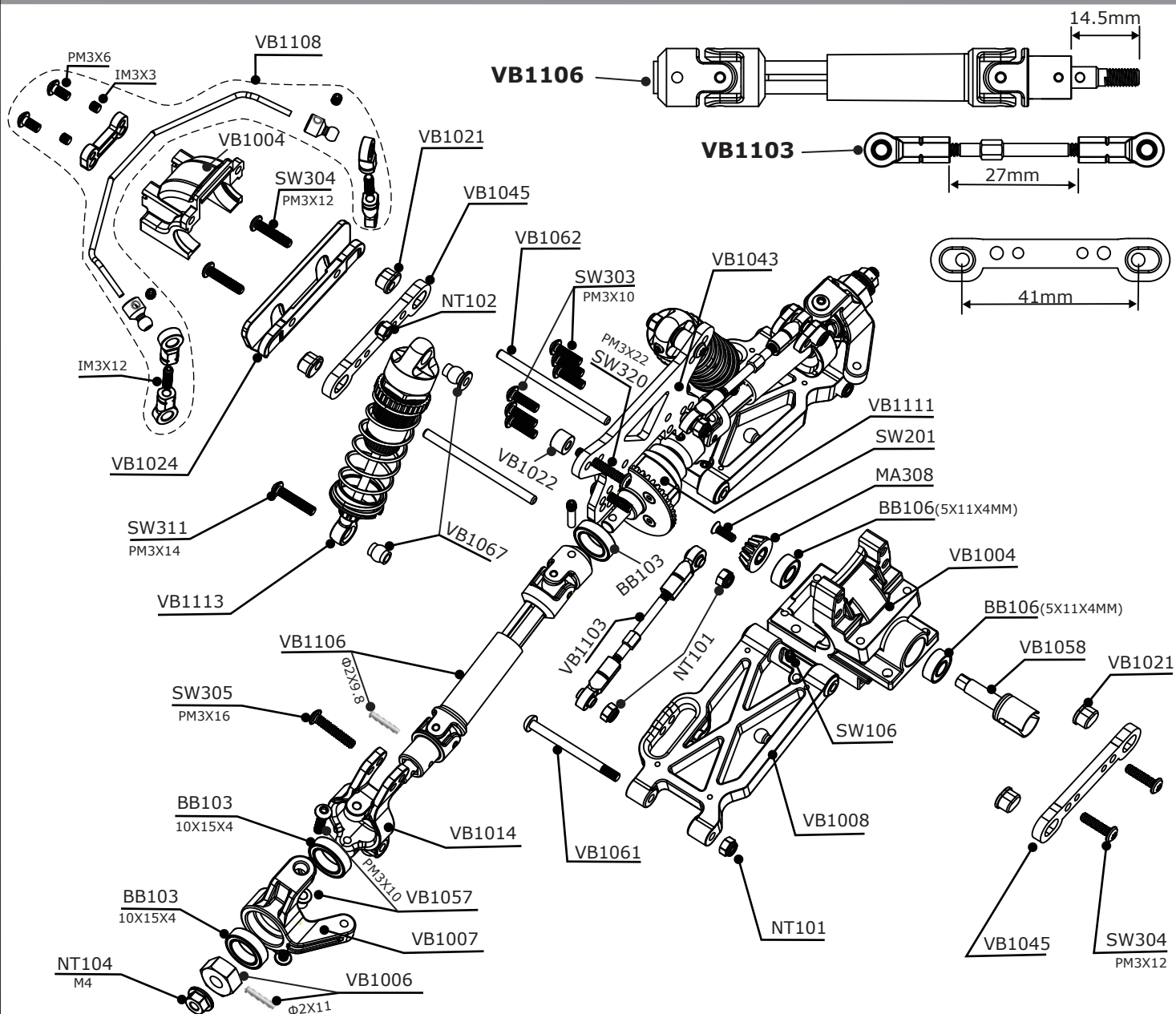
» CENTRAL DIFFERENTIAL ASSEMBLY



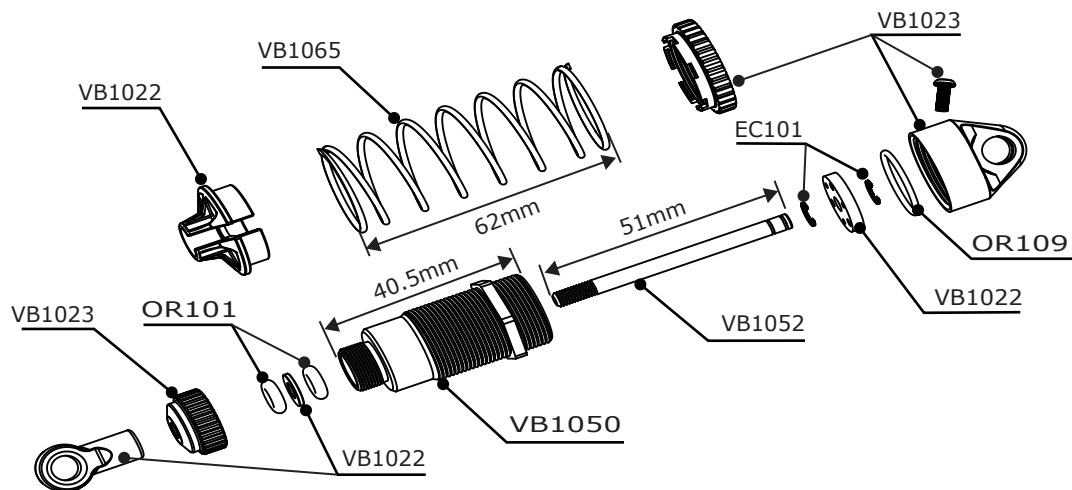
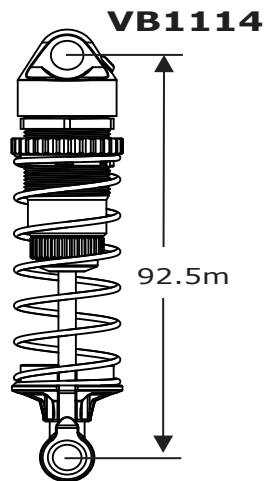
» FRONT SHOCKS ASSEMBLY



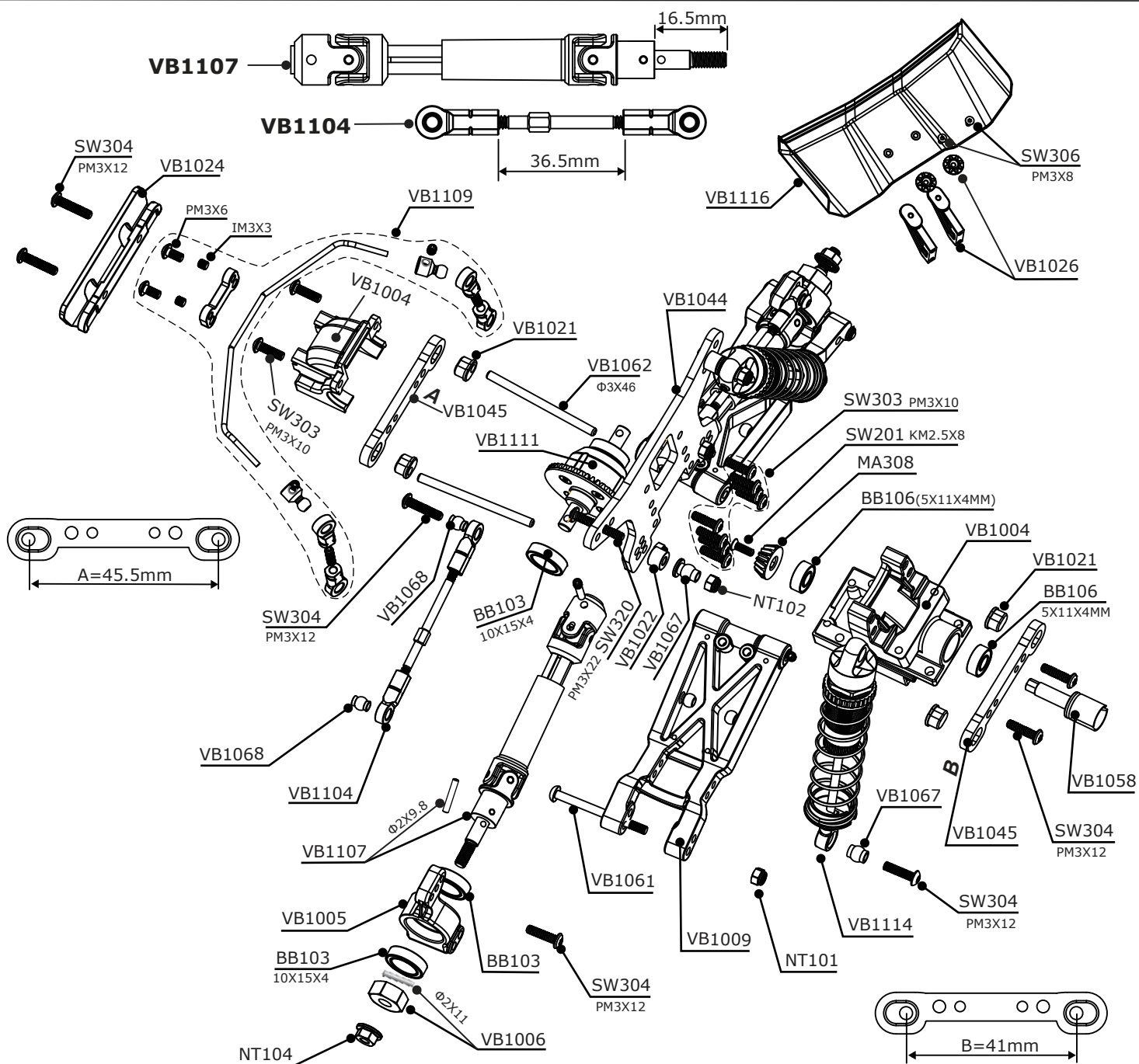
»FRONT COMBO ASSEMBLY



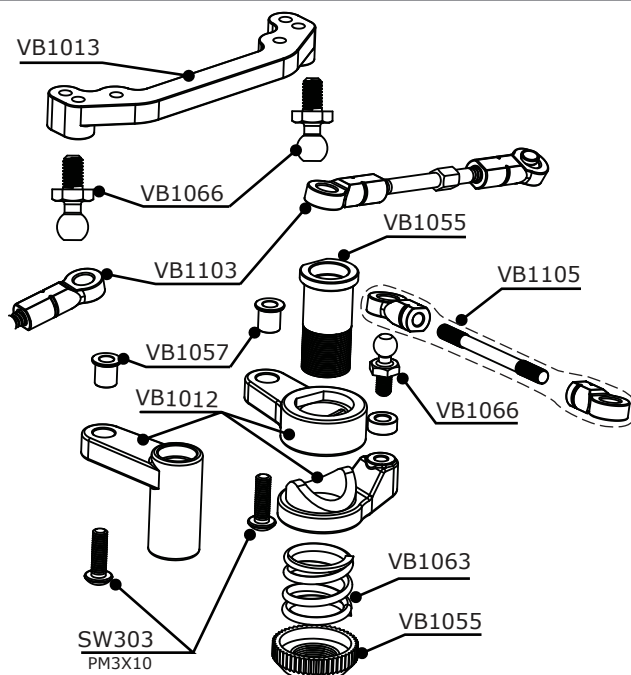
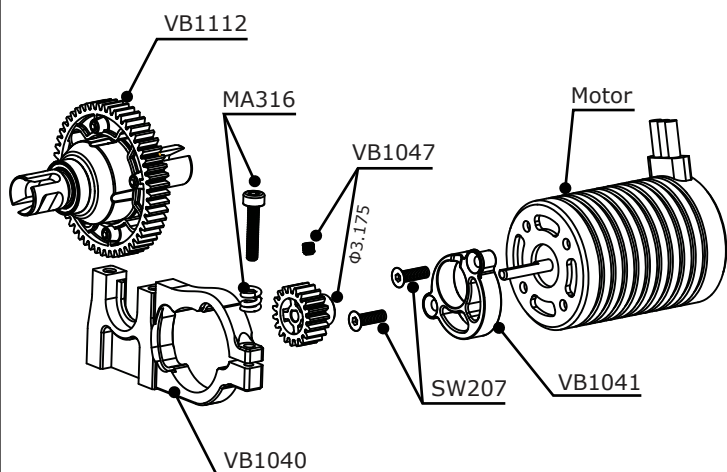
» REAR SHOCKS ASSEMBLY



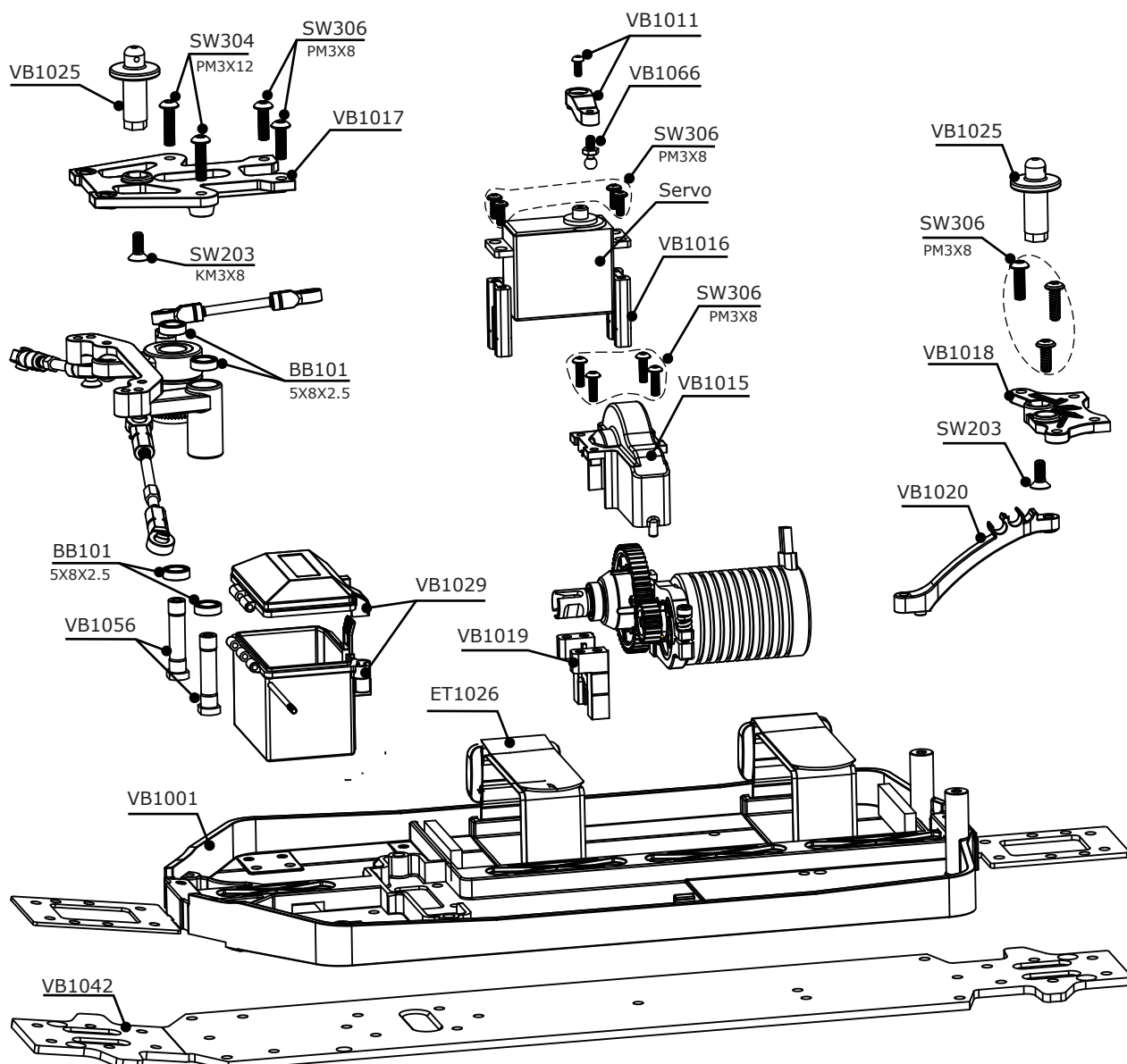
» REAR COMBO ASSEMBLY



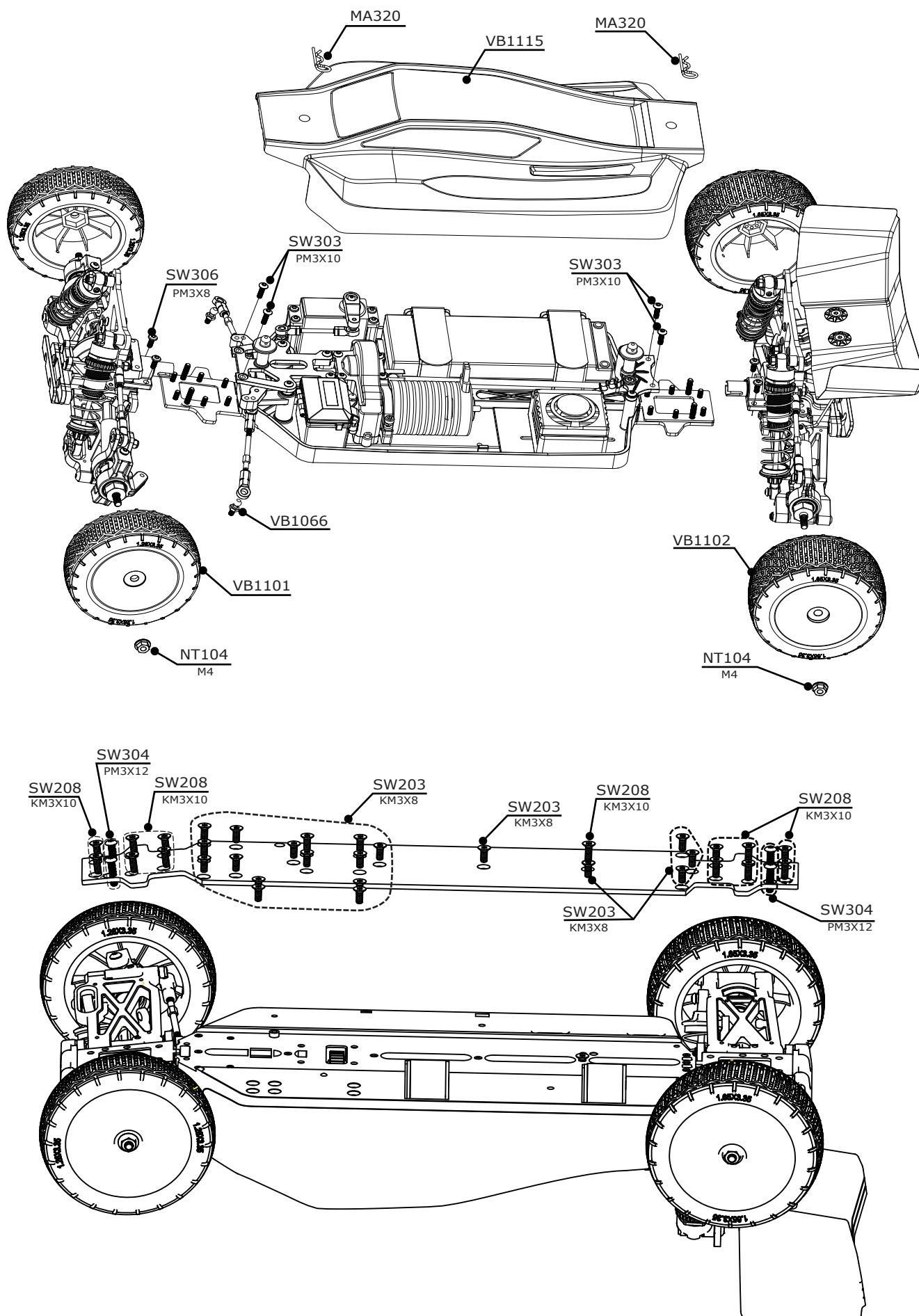
>> MOTOR MOUNT ASSEMBLY >> STEERING ASSEMBLY



>> OTHER ASSEMBLY



)) OTHER ASSEMBLY



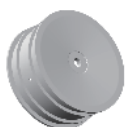
» SPARE PARTS PLASTIC

VB1001



x1

VB1002



Front

x2

VB1003



Rear

x2

VB1004



x1

VB1005



x1

VB1006



2X10.8

x2

VB1007



x1



VB1008



x2

VB1009



x2

VB1010



x2

VB1011



M2.6x6

x1

VB1012



x1

VB1013



x1

VB1014



Left

Right

x1

VB1015



x1

VB1016



x1

VB1017



x1

VB1018



x1

VB1019



x1

VB1020



x1

VB1021



x1

VB1022



x2

VB1023



M2x4

x2

VB1024



x2

VB1025



x1

VB1026



KM3x8

x1

VB1027



Front

x2

VB1028



Rear

x2

VB1029



x1

VB1030



x5



x6

ET1096



KM2.5x8

x1

» SPARE PARTS

VB1040



x1

VB1041



x1

VB1042



x1

VB1043



x1

VB1044



x1

VB1045



x1

MA307



43T **x1**

MA308



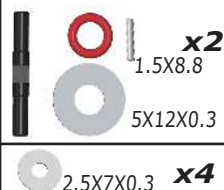
15T **x1**

MA309



x2

VB1046



x2

1.5X8.8

5X12X0.3

2.5X7X0.3 **x4**

VB1047



x1

MA373



x1

MA329



x1

VB1049



Front **x1**

VB1050



Rear **x1**

VB1051



x1

VB1052



x1

VB1053



x1

VB1054



x1

VB1055



x1

VB1056



x1

VB1057



x1

VB1058



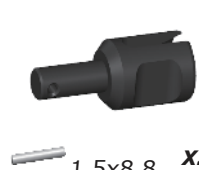
x1

VB1059



x1

VB1060



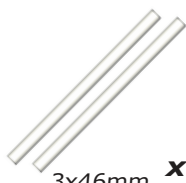
x2

VB1061



x1

VB1062



x1

VB1063



x1

MA316



x1

VB1064



x2

VB1065



x2

VB1066



x1

VB1067

Shock Ball Head



x2

VB1068

Link Ball Head



x6

MA320



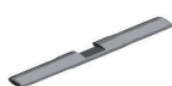
x10

MA335



x5

MA328



x2

ET1026



225mm **x2**

» ELECTRONIC COMPONENTS

MB002



x1

EB001



x1

NH001



battery
NI-MH **x1**

CR001



Charger **x1**

MA707



6KG **x1**

TX001



x1

MBL001



3650
3500KV **x1**

MBL005



3650
5280KV **x1**

EBL001



50A **x1**

EBL003



60A **x1**

LP001



battery LI-PO
7.4vX3000MAH **x1**

MA704



4000MAH
7.4v **x1**

MA706



Charger **x1**

» ASSEMBLY PARTS

VB1101



Front **x2**

VB1102



Rear **x2**

VB1103



Front **x2**

VB1104



Rear **x2**

VB1105



x1

VB1106



Front **x1**

VB1107



Rear **x1**

VB1108



Front **x1**

VB1109



Rear **x1**

VB1111



x1

VB1112



x1

VB1113



Front **x1**

VB1114



Rear **x1**

VB1120-G



Green **x1**

VB1121-G



Green **x1**

VB1122-B



Blue **x1**

VB1123-B



Blue **x1**

VB1124-R



Red **x1**

» OPTIONAL PARTS

VB1125-R



Red **x1**

VB1117



x1

VB1118





































Front **x2**

VB1119



Rear **x2**

» SPARE PARTS

BB101  5x8x2.5 x4	BB106  5x11x4 x4	BB103  10x15x4 x4	BB105  8x14x4 x4	SH100  ID 2.5x7x0.2mm ID 5x7x0.2mm ID 5x12x0.3mm	SW201  KM2.5x8 x10	SW207  KM2.5x12 x10		
SW101  IM3x3 x10	SW106  IM3x4 x10	SW102  IM3x12 x10	EC101  2.5mm x10	SW302  PM2x4 x10	SW306  PM3x8 x10	SW303  PM3x10 x10	SW304  PM3x12 x10	SW316  PM3x14 x10
SW305  PM3x16 x10	SW320  PM3x22 x10	SW203  KM3x8 x10	SW208  KM3x10 x10	SW206  SM3x15 x10	NT101  M3 NYLON x10	NT102  M3 FLANGED NYLON x10	NT104  M4 FLANGED x10	OR101  ID 3.0x1.9mm x10
OR102  ID 4.5x1.5mm x10	OR109  ID 12x1mm x10	PN101  1.5x8.8mm x10	PN102  2.0x9.8mm x10	PN107  2.0x10.8mm x10	SH101  ID 2.5x7x0.2mm x10	SH102  ID 5x7x0.2mm x10	SH103  ID 5x12x0.3mm x10	AC001  x5

Notes



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0769-88039076

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