

IMBER^{RTR}

Instruction & Setup Manual





Thank you for choosing the Team Magic M8ER. The M8ER includes a large selection of the important specialty parts when compared to the previous versions. Before you start building your new M8ER, we suggest you read through the instruction manual first. Be sure to check all assembly and performance tips before you start. We hope you enjoy the building processes.

General Building Tips:


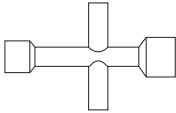
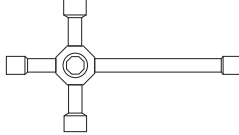
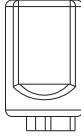
- ▶ Read the instruction manual before building.
- ▶ Clear a work area and try to work on a light color towel to avoid missing dropped parts.
- ▶ Don't over-tighten fasteners. Many assembly problems are caused by over-tightening screws or nuts. Don't use too large a grip. Please go slowly and feel the resistance build. Just snug it up.
- ▶ When it doesn't fit, please double check. If an assembly is not going together correctly, then either there really is a bad fit (e.g. a part is damaged or defective) or a mistake in assembly. Always re-read the instructions when there are any problems. If you cannot figure out what's wrong, always ask dealer, distributor or Team Magic. Don't use force beyond what the instructions call for.
- ▶ Using the right tools makes assembly much easier. The instructions below finely indicate you what tools to get to make things easier. We don't want to scare you by saying that all these tools are required, but you will have a easier time if you have them. Borrow them from a friend to check if necessary.
- ▶ The assembly is arranged so that you will open the bag and finish that bag before you go on to the next bag. Sometimes, you will have parts remaining at the end of a bag. These will become part of the following bags.

A Good Dealer Is Extremely Important!!

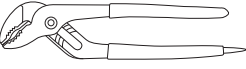




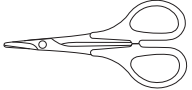

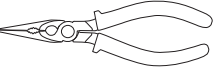



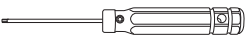



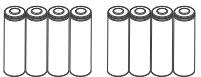
A good hobby dealer can help you with most assembly problems you might encounter. This is the main reason why you should buy your kits from a good dealer rather than from the cheapest dealer. Bring your problematic parts to the dealer and, most likely, you'll walk away soon thereafter with the problem solved. If you think that you really don't have the mechanical skills to complete the assembly, you may pay your dealer to finish the job for you.

! Thank you for purchasing the M8ER. To drive the car, you will need to check the following procedures.

1 Included tools

<p>■ TM Black HC Flare Nut Wrench(2.6, 3.5, 4.5 & 6mm) #117101</p> 	<p>■ Cross Wrench (4mm, 5mm, 5.5mm & 7mm) #116043</p> 	<p>■ Cross Wrench (7, 8, 10, 12 & 17mm) #116025</p> 	<p>■ Shock End Cap Tool (2) #560194</p> 
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2 Required tools and equipments

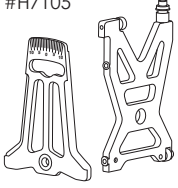
<p>■ Tongue and Groove Pliers</p> 	<p>■ Caliper</p> 	<p>■ Hobby Knife (Warning!! This knife cuts nylon parts and fingers with equal ease. Be careful.)</p> 	<p>■ Double Sided Tape</p> 	<p>■ TM Black HC Body Reamer (0-18mm) #117030</p> 
<p>■ Body Scissors (for body cutting) #116006</p> 	<p>■ Instant Adhesive</p> 	<p>■ Needlenose Pliers</p> 	<p>■ TM Black HC Carb Tuning Slotted Screw Driver (4mm) #117023</p> 	<p>■ TM Black HC Hex Wrench Metric Size 1.5mm #117002-1M</p> 
<p>■ TM Black HC Hex Wrench Metric Size 2.0mm #117002-2M</p> 	<p>■ TM Black HC Hex Wrench Metric Size 2.5mm #117002-3M</p> 	<p>■ TM Black HC Hex Wrench Metric Size 3.0mm #117002-4M</p> 	<p>■ TM Black HC Nut Driver 5.5mm (for 3mm nut) #117010</p> 	<p>■ TM Black HC Nut Driver 6mm (for 3.5mm nut) #117014</p> 
<p>■ AA Alkaline Or Rechargeable Batteries For Transmitter, 8pcs</p> 				

(Please always buy these items in model shops)

3 Helpful Items (suggested)

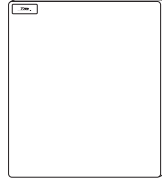
- 1/8 Buggy Cambertoe Setup Gauge

#H7105



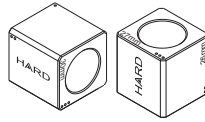
- TM 1/8 Setup Board (500x480mm)

#116052



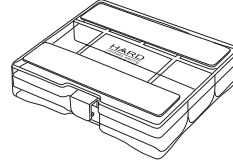
- Support Blocks for Buggy Setup Gauge (25~30mm)

#H7113



- H.A.R.D. Maintenance Standing Box

#H9201



4 Cool Items (It would be good to have these items with the M8)

- TM Cap(Orange)

#119235



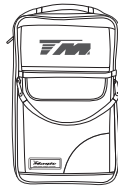
- TM Moisture-Wicking T Shirt (Black)

#119234



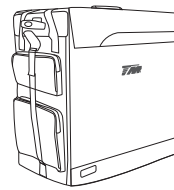
- TM Transmitter Bag (Black)

#119206



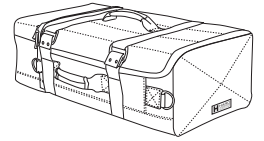
- TM New Formula 8 (F8) Car Bag (for 1/8 cars)

#119220



- H.A.R.D. Magellan Series 1/8 Off Road Car Bag

#H8911



- H.A.R.D. Tool Bag (10 Slots)

#H9001



- H.A.R.D. Neck Strap

#H9010



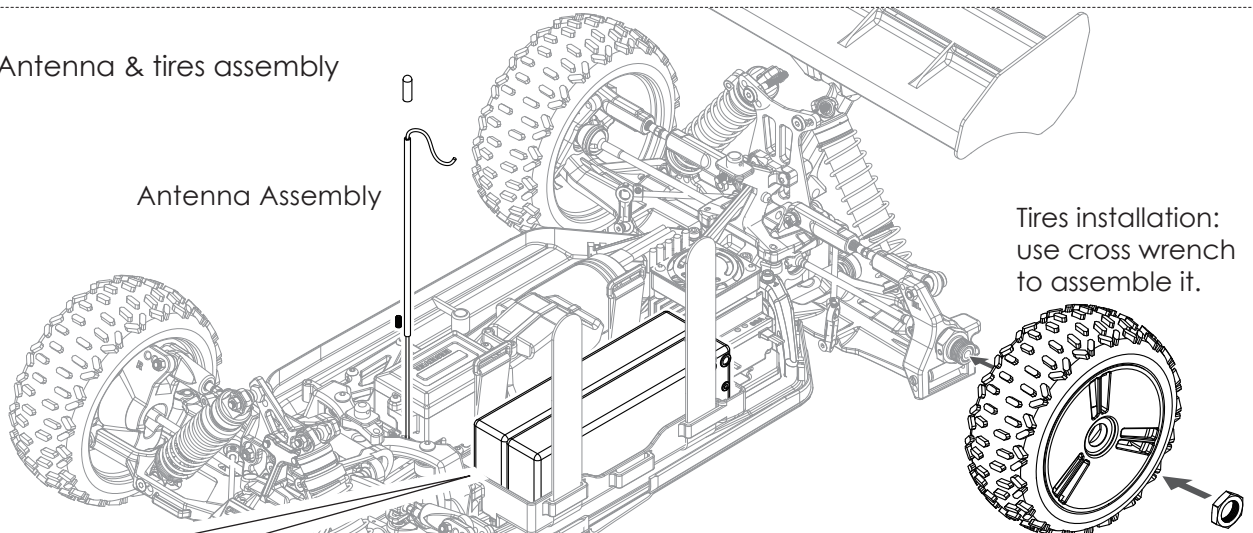
- H.A.R.D. 14 Gauge King Core Silicone Wire (90cm)

#H6701



5 Operating procedure

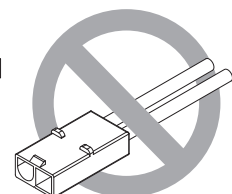
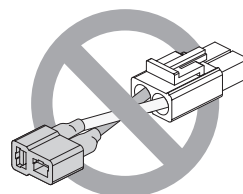
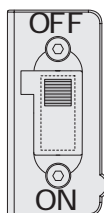
01 Antenna & tires assembly



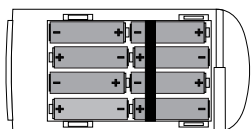
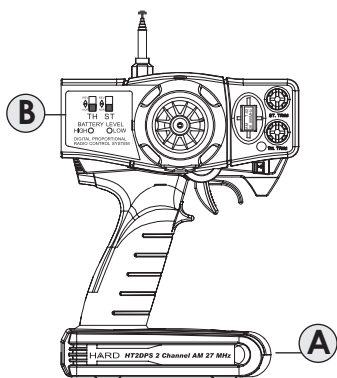
Battery installation

- Input voltage: 7.2V~14.8V DC Ni-Cd / Ni-Mh / Lipo battery
- Turn off the ESC before you connect the plugs.
- Do not use white plastic plug due to the voltage problem, please use ultra plug (T plug) for the safety concern.

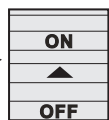
Caution: make sure ESC is turned off before connecting the battery



02 Transmitter batteries installation

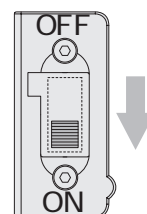
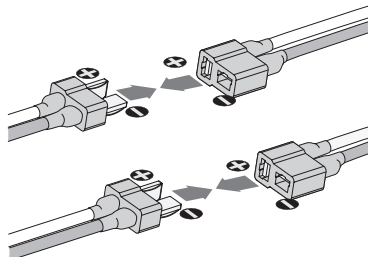
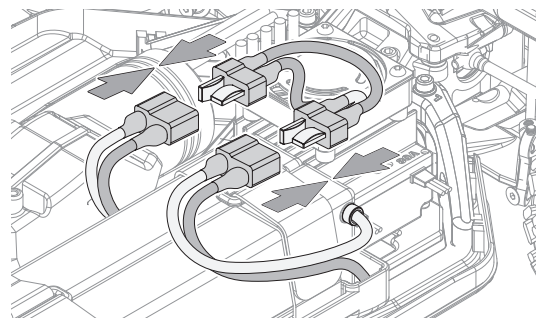


A. Install 8pcs AA batteries to the HARD transmitter.

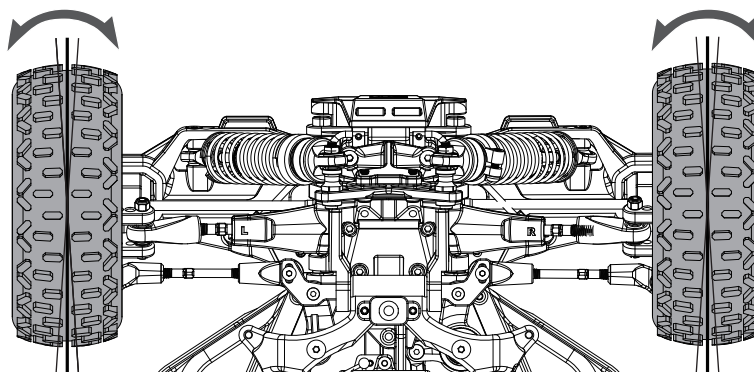
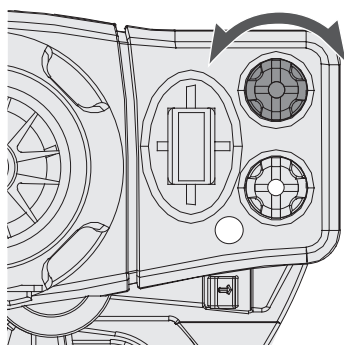


B. Turn on the power

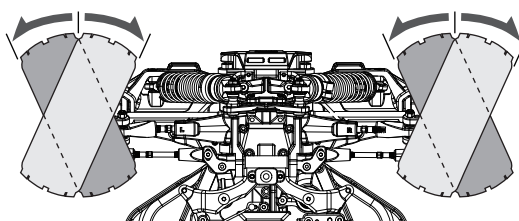
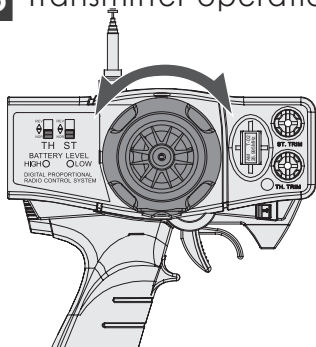
03 Connect the plugs & turn on the ESC.



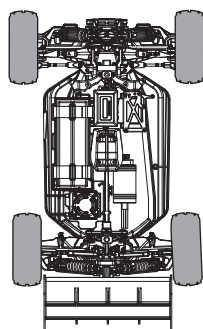
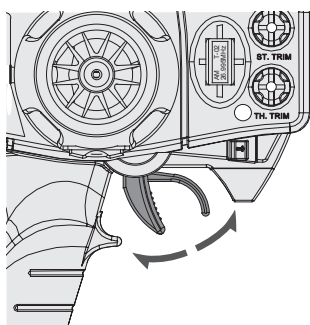
04 Turn the steering trim to the center.



05 Transmitter operation.

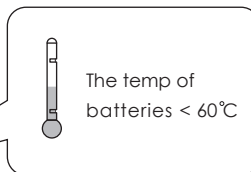
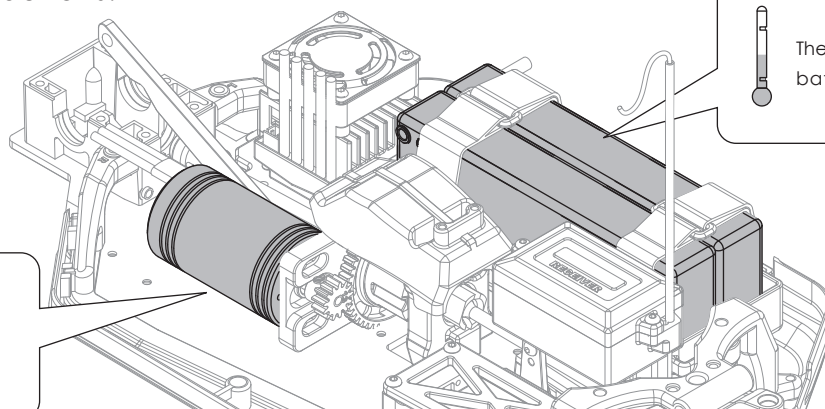
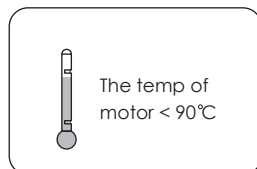


- Turn the steering wheel right to turn the front tires go right.
- Turn the steering wheel left to turn the front tires go left.



- Press the throttle trigger to moving forward the vehicle
- Push forward the throttle trigger to brake and reverse the vehicle

06 Temperature cautions.



07 ESC operating instructions.

1. Install the ESC according to the diagram shown below; Switch on the transmitter, Switch on the ESC power
2. Lift the car with the 4 wheels un-touching. Adjust & make sure the throttle forward direction coincides with the ESC forward direction.
3. Right after turn on the power of the ESC, it will denote a series sound indicating the ESC is starting work. It will then auto-setting the throttle Neutral denoted by LED2 in which fast inter-flashing with yellow & red light. While succeed in setting neutral, It will then denoted by another confirmation sound & the LED2 will slowly inter-flash with yellow & red light. If it is failed setting neutral, there will be no any confirmation sound. Please re-do & re-check the system again starting from step1 of this instruction. This ESC is applicable to the transmitter with the setting of 1/2 throttle & 1/2 brake/reverse.

4. Slowly push the throttle trigger forwards, the LED2 will be slowly flashing in red light. The flashing speed should be proportional to the extent of the throttle acceleration. At the full speed, the LED2 will be in solid red light. If the throttle forward direction does not coincide with the ESC forward direction, the light color will be in yellow not red. Change the throttle reversing switch of the transmitter will correct the non-coincidence problem.

5. Motor rotating direction - Slowly apply throttle to check if the motor is rotating in the correct direction you desired.

To reverse the direction of the motor, switch any two of the motor wire connections. Note : Do not reverse the battery wire connections! Reversing the battery polarity will permanently damage the ESC.

6. 1stly, trial running starting with a small gear motor for 2-3 minutes, measure the temperatures of both Esc & motor. If both temperatures are close with each other, they are at good match. The gear ratio can then be properly adjusted to optimum according to the features of the courses. However, It's very important to always keep both temperatures under 100 ° c, while adjusting the gear ratio. Otherwise the demagnetization of the motor will happen, the motor efficiency will drop dramatically & the temperature will also raise up very quickly. Most battery power is now wasted on heat nothing on motor efficiency.

7. It's ok to replace a higher gear ratio or a higher KV motor while the temperature of the ESC is under 80 °c. But it should be done according to para 6 described, from small to bigger. Unless the kv value of the original motor is very low enough, It should replace a motor with lower kv value when the input battery voltage is changed to a higher level. The ESC will be burnt if the motor doesn't be properly changed while input voltage is changed. See

example below on the current changed inside motor while input voltage is changed;

Input 7.2V, inner resistance 0.18Ω --- 40A (V/R=I 7.2/0.18=40)

Input 11.1V inner resistance 0.18Ω --- 61.6A (V/R=I 11.1/0.18=61.6)

8. Driving forward

Pull throttle trigger forward, the car will be in hard start mode, with very fast initial start, none delay acceleration, using the minimum time to reach the full speed from still. Perfectly respond to the signal of the instantly acceleration. The braking will be actuated by reversing throttle direction while driving forwards. Interval or spot braking can always be controlled perfectly while driving forwards.

9. Driving backwards

By reversing the throttle direction when car is in still, the car will be driving backwards. The braking will be actuated by reversing throttle direction while driving backwards. By reversing throttle direction during driving backwards, it will get only a brief braking action & then reverse to drive forwards instantly. The speed of driving backwards will be responded proportionally to the throttle input.

10. Warning

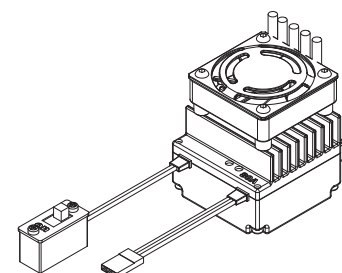
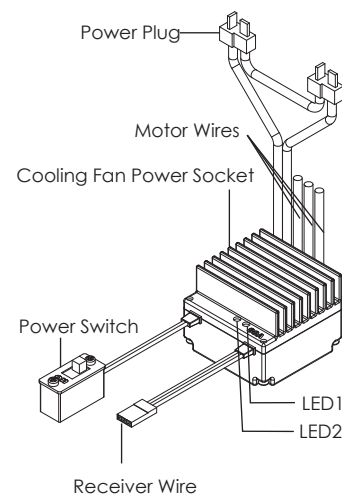
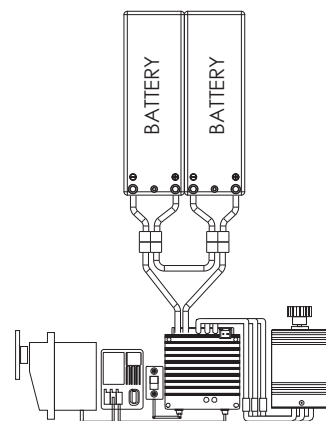
Once the battery pack is connected, handle the model with extreme care, make sure you are clear of all rotating parts.

Connect the batter

y pack just before drive and disconnect it immediately after termination.

Always make sure you are connecting the ESC to a proper power source that has the correct voltage & polarity.

Incorrect voltages or reversed polarity will damage the ESC.

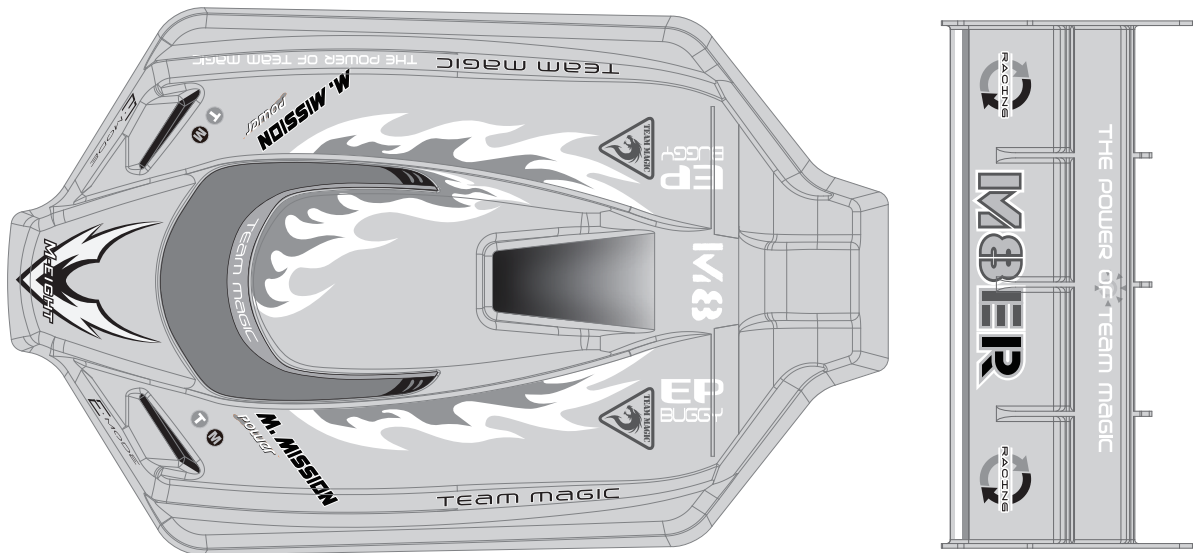


6 Attaching stickers

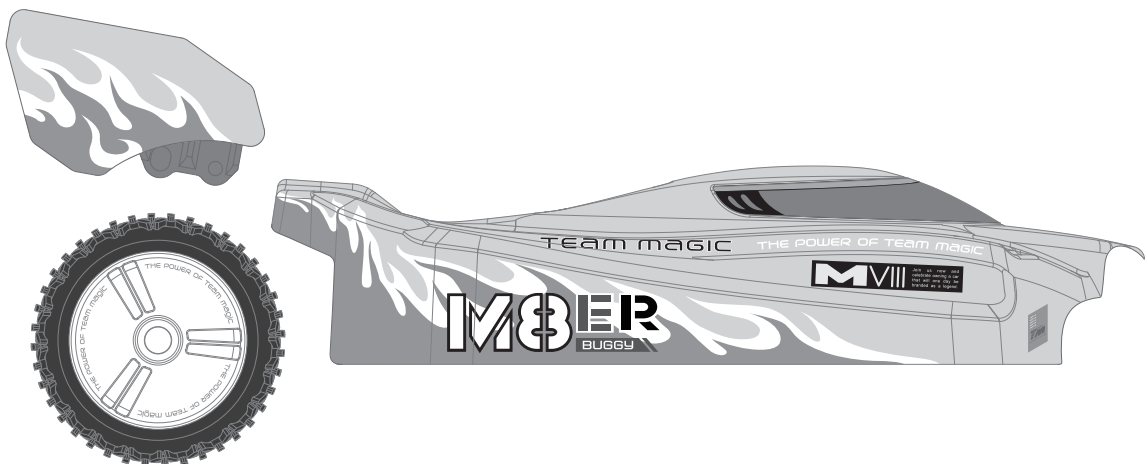
01 Left view

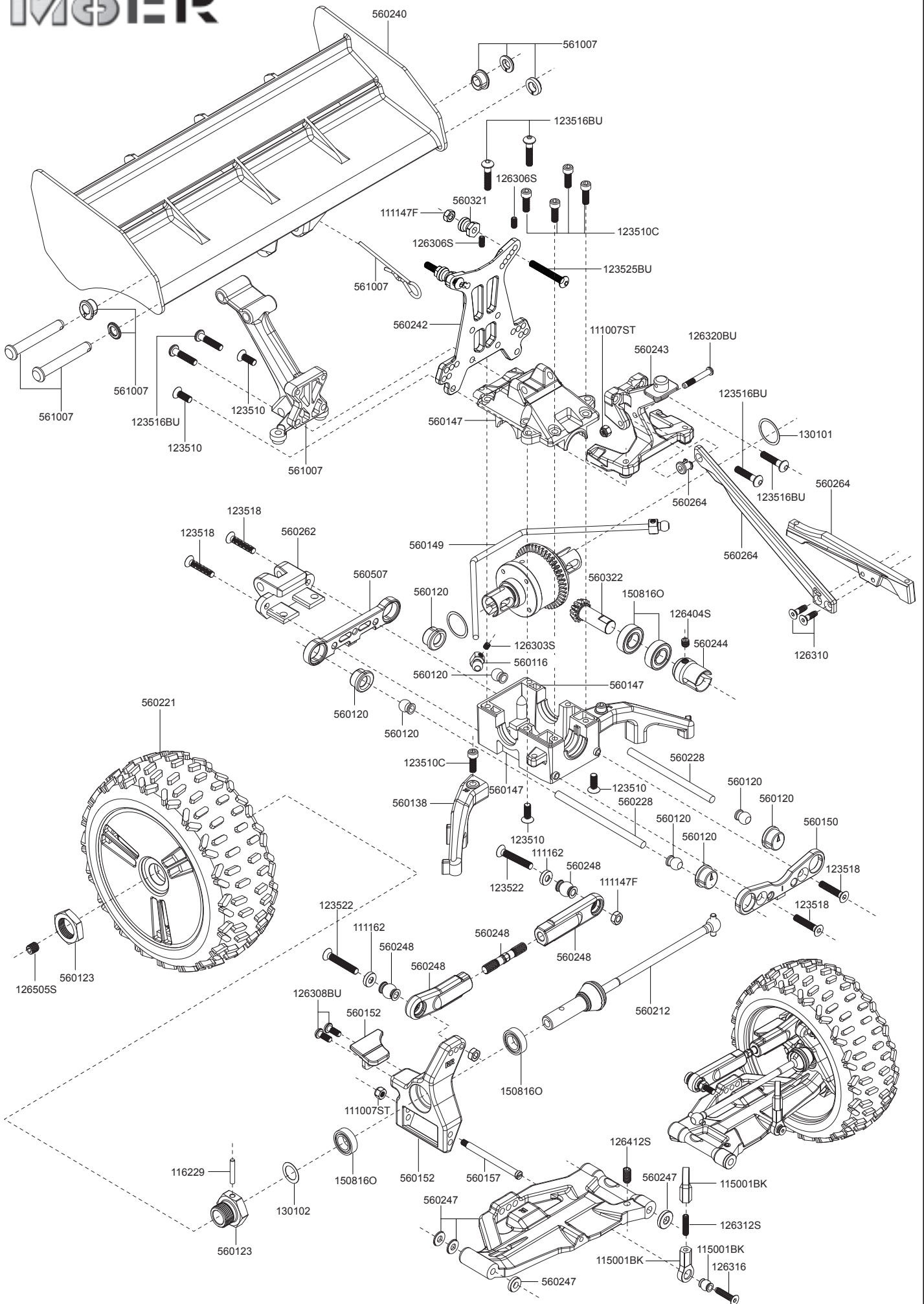


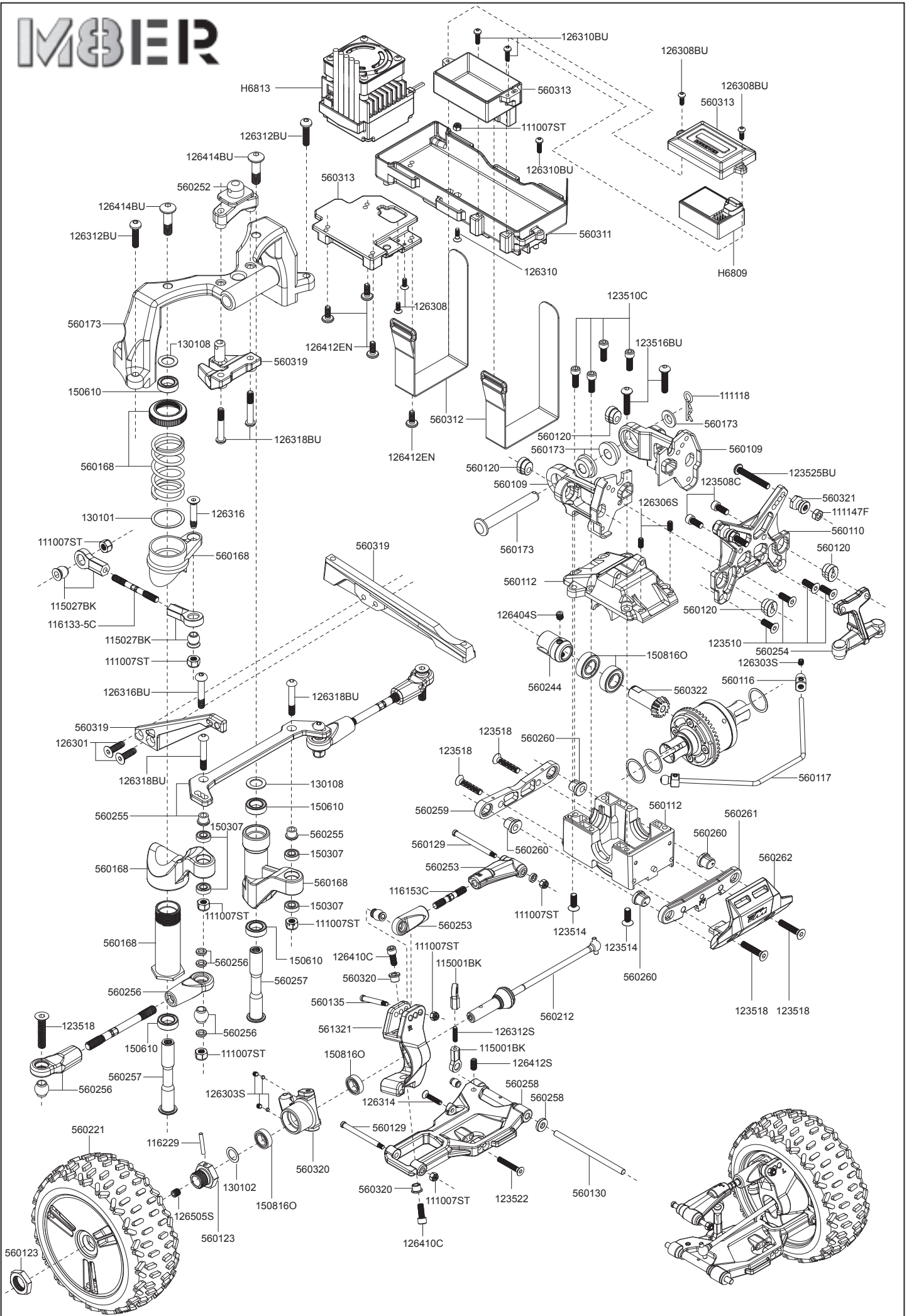
02 Top view

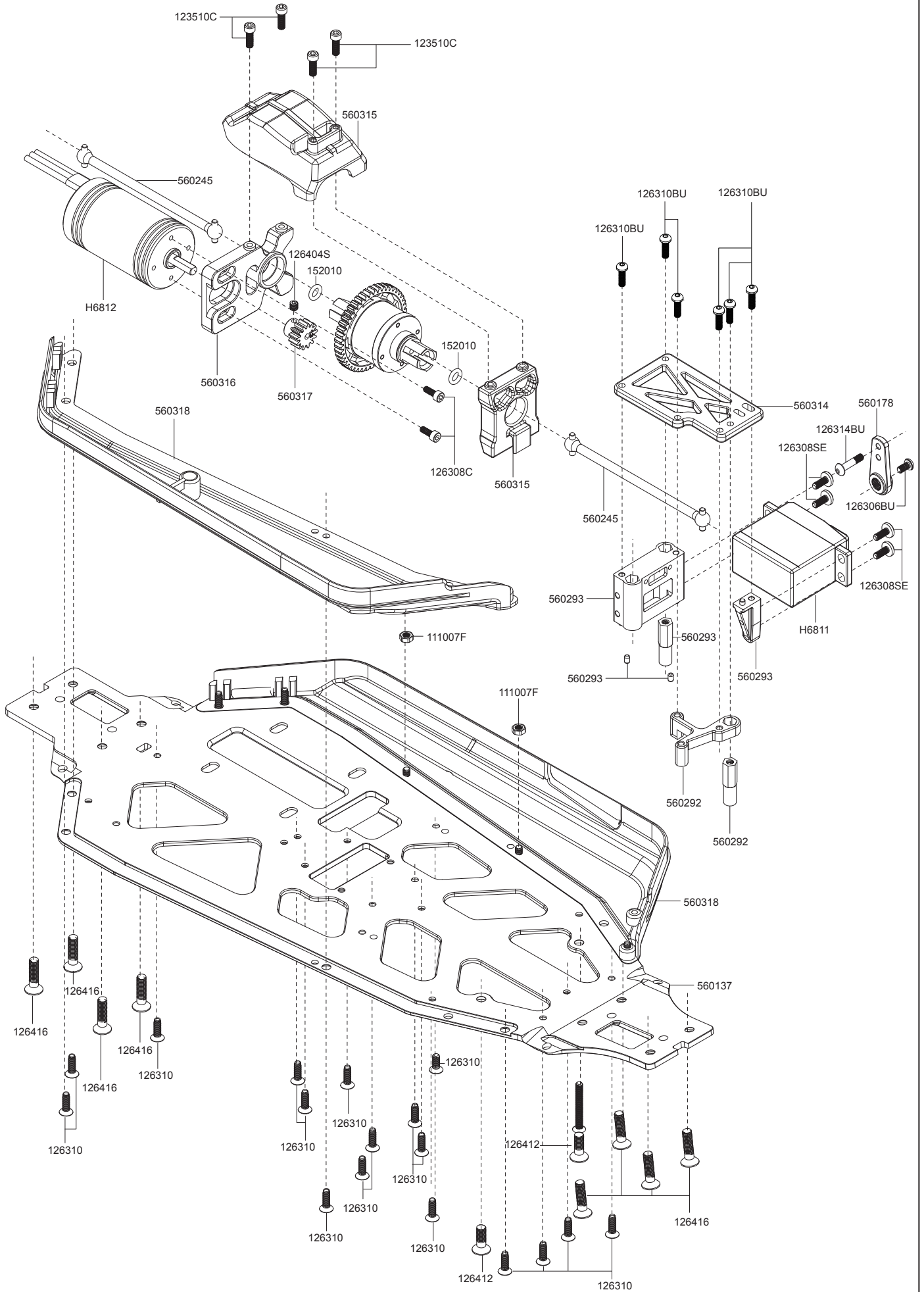


03 Right view









1 PARTS	
Item No.	Item Description
560102	Diff Case Set
560103	Differential Case Gasket (4)
560109	Front Upper Arm Mount (L & R)
560110	Hard Coated 7075 Aluminum Front Shock Tower
560112	Front Gear Box (1 set)
560116	Hard Anodized Aluminum Anti-Roll Bar Ball Stud (4)
560117	Front Anti-Roll Bar 2.4mm
560120	Hinge Pin Nylon Cap & Adjuster Set
560123	Aluminum Wheel Adapter, Pin & Nut (2)
560129	ST Steel 3.5x41.5mm Hinge Pin (for Front Upper/Outside Lower) (2)
560130	ST Steel 4x68.8mm Hinge Pin (for Front Lower) (2)
560137	3mm 7075 Aluminum Chassis
560147	Rear Gear Box (1 set)
560149	Rear Anti-Roll Bar 2.8mm
560150	7075 Aluminum Rear Lower Front (1 & 2 Anti-Squat Degree) Hinge Pin Plate
560152	Rear Hub Carrier & Mud Sweeper (1 pair)
560157	ST Steel 3.5x43.5mm Hinge Pin (for Rear Outside Lower) (2)
560168	Servo Saver Set
560169	ST Steel Center Differential Outdrive (2)
560173	Servo Saver Holder & Front Cushion Stiffener Set
560175	Receiver Battery Pack Box
560178	Servo Arm (Futaba) (2)
560190	ST Steel 4x55.4mm Shock Shaft (2)
560191	Shock Piston 1.5mm x 2 (2)
560192	Shock O-Ring & Washer (4pcs/each)
560193	Shock End Cap Set (2)
560200	Hard Coated Shock Body 47mm (2)
560204	Shock Spring Holder & Spacer Set (2)
560212	Neo-Front Universal Joint 128.8mm (2)
560221	Mounted Tire (2)
560240	Buggy Rear Wing
560242	Rear Alum. 7075 Shock Tower
560243	Rear Body Mount
560244	ST Steel Small Bevel Gear Outdrive (2)
560245	Hard Coated Alum. 7075 Center Drive Shaft (2)
560247	Rear Lower Flying Wing Arm (2)
560248	Rear Upper Linkage Set (2)
560252	Front Body Mount
560253	Front Upper Flying Wing Arm (nylon part only) (2)
560254	Front Shock Tower Stiffener
560255	One Piece Alum. 7075 Steering Linkage Set
560256	Steering Rod Nylon Ball End & Steel Ball Set
560257	Steel Servo Saver Post Set
560258	Front Lower Flying Wing Arm (2)
560259	Alum. 7075 Front Lower Rear Hinge Pin Plate
560260	Front Lower Hinge Pin Nylon Cap & Adjuster Set
560262	Front & Rear Nylon Bumper
560264	Alum. 7075 Rear Chassis Stiffener Set
560265	Aluminum Shock Cap (2)
560266	Differential Bevel Gear Set (for 1 diff)
560267	46T Main Gear
560268	Hard Coated Rear Shock Body (2)
560269	ST Steel 4x65.4mm Shock Shaft (2)
560270	Front 18x66mm Shock Spring (2) White
560271	Rear 18x86mm Shock Spring (2) White
560292	Transponder Mount (Hex Post Included) (for M8JS.JR)
560293	Servo Mount Set (for M8JS.JR)
560311	Battery Holder
560312	Velcro Battery Straps (2)
560313	Receiver Box and ESC Holder
560314	Upper Servo Mount
560315	Center Differential Mount

Item No.	Item Description
560316	Motor Mount
560317	11T Pinion Gear
560318	Chassis Guard & Stiffener (1 pair)
560319	Alum. 7075 Front Chassis Stiffener Rod Set
560320	Steering Block (1 pair)
560321	Shock Ball End, Spring Cap & Hardware Set (2)
560322	Bevel Gear Set 43T & 13T
560323	Steel F/R Differential Outdrive (1 pair)
560324	Body
560507	7075 Aluminum Rear Lower Rear (2.5 & 3.5 Toe Degree) Hinge Pin Plate
561007	Neo-Rear Wing Mount & Holding Set
561202	Neo-Shock Bladder (4)
H6809	HR163JE 2 Channel AM Receiver 27MHz w/o Crystal
H6811	H.A.R.D. HS3306 Steering Servo
H6812	H.A.R.D. Z5 Brushless Motor
H6813	H.A.R.D. P-MAX ESC (w/reverse)
111007F	3mm Flat Locknut (10)
111007ST	3mm Steel Locknut (10)
111118	R5 R-clip (10)
111147F	3.5mm Steel Flat Nut (6)
111162	3.5mm Alum. Flat Head Washer (6)
115001BK	Ball End & Steel Ball (6) BLACK
115027BK	Ball End & 5.8mm Single Flanged Steel Ball (6) Black
116133-5C	3x35mm CR Adjustable Rod (2)
116153C	5x30mm CR Adjustable Rod (2)
116229	2.5x16.8mm PIN(10)
123508C	3.5x8mm Steel Cap Screw (6)
123510	3.5x10mm Steel FH Screw (6)
123510C	3.5x10mm Steel Cap Screw (6)
123514	3.5x14mm Steel FH Screw (6)
123516BU	3.5x16mm Steel BH Screw (6)
123518	3.5x18mm Steel FH Screw (6)
123518C	3.5x18mm Steel Cap Screw (6)
123522	3.5x22mm Steel FH Screw (6)
123525BU	3.5x25mm Steel BH Screw (6)
126303S	3x3mm Set Screw (6)
126306BU	3x6mm Steel Button Head Screw (6)
126308	3x8mm Steel F.H. Screw (6)
126308BU	3x8mm Steel Button Head Screw (6)
126308SE	3x8mm Steel Flat Round Servo Mount Screw (6)
126310	3x10mm Steel F.H. Screw (6)
126310BU	3x10mm Button Head Screw (6)
126312S	3x12mm Set Screw (6)
126314	3x14mm Steel FH Screw (6)
126314BU	3x14mm Button Head Screw (6)
126316	3x16mm Steel F.H. Screw (6)
126316BU	3X16mm BH Screw(10)
126318BU	3X18mm BH Screw(10)
126320BU	3X20mm BH Screw(10)
126404S	4x4mm Set Screw (6)
126410C	4x10mm Steel Cap Screw (6)
126412S	4x12mm Set Screw (6)
126412EN	4mm Steel Flat Round Engine Mount Screw (6)
126414BU	4X14mm BH Screw(10)
126416	4x16mm Steel FH Screw (6)
126505S	5x5mm Set Screw (6)
130102	8.1x12x0.2mm Shim (10)
130108	6.05x9.5x0.5 mm Shim(10)
150307	3x7x3mm Bearing (2)
150610	6x10x3mm Bearing (2)
150816O	8x16x5mm Dust-Resistant Bearing (4) Orange
152010	O-Ring P5(10)

IMBER

Cautions !!

To prevent any serious personal injury or damage to property, please be responsible when operating this radio controlled car. Team Magic and its distributors have no control over damage resulting from shipping, improper construction or improper usage. Team Magic accepts no responsibility for damages resulting from the use of improper building equipment and operations. By the act of assembling or operating this product, the user accepts all liability. If the buyer is not prepared to accept this liability, then he/she should return this product in a new, unassembled and unused condition to the place of purchase.

- ▶ This is not a toy. It is a high speed r/c car for persons age 15 and older.
- ▶ Choose the right place to drive your r/c model
 - Don't run on streets or highways. This could cause serious accidents.
 - Don't run r/c cars near people or animals.
 - Don't run in the house. There is a high risk of fire.
 - Don't run nearby hospitals or schools. Loud noises may disturb others.
- ▶ Always inspect your model before operation
 - Always make sure that no one else is using the same frequency when you are using
 - Always make sure your transmitter and batteries are fully charged to avoid losing control of the model.

Based on continuous product development, the up-to-date specifications of the kit may vary. We reserve all rights to change any specification without prior notice.



THE POWER OF TEAM MAGIC

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