

1-24TH SCALE ELECTRIC ROCK CRAWLER

INSTRUCTION MANUAL

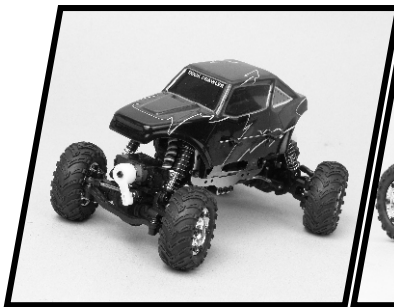


2.4GHz LCD 3-CHANNEL RADIO
4 WHEEL STEERING



SUMO CRAWLER

Rock Crawler



▷ This manual is subject to change without prior notice.

▷ This production is not a toy. It is not intended for persons under 14 years of age, unless closely supervised by adults.

GETTING FAMILIAR WITH YOUR ROCK CRAWLER-1

This small rock crawler is only 1/24th scale one, which never fails to provide you enjoyment in crawling on any indoor or outdoor track (even on a small table, over the keyboard)...

SPECIFICATIONS:

Length: 170 mm, Width: 105 mm, Height: 70 mm (w/o body), Wheelbase: 120mm , Gear Ratio: 1: 65 , Wheel Width: 20mm, Wheel Dia.: 46 mm , Ground Clearance: 70 mm, Servo: 9kg, Battery: AAA size, 4pcs (not supplied)

This data is subject to change without prior notice.

MAIN FEATURE:

- Four wheel drive system
- 2 wheel steering or 4 wheel steering
- Anodized aluminum TVP chassis
- 4-link suspension (Bent links or straight links)
- RTR without battery and charger as provided at factory(unless specified)
- Integrated receiver/ESC board
- Single servo installed for 2 wheel steering (two servos installed for 4 wheel steering)
- Powered by 4pcs of AAA size batteries (not supplied)
- 2.4GHz radio system (LCD 3-channel 2.4GHz radio for 4 wheel steering version)



Never attempt to re-assemble the motor, ESC, and receiver. These have been carefully calibrated at the factory. Any malfunction incurred by contrived upgrading and modification will void warranty.

GETTING FAMILIAR WITH YOUR ROCK CRAWLER-2



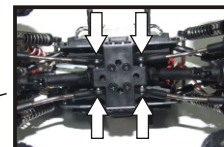
Quick servo response



Integrated receiver /ESC board



Twin Vertical Side Plate With Shock Relocation Mount Holes

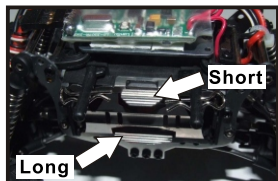


Updated 4-link suspension (bent linkage bar)

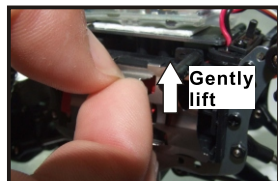


BATTERY INSTALLATION

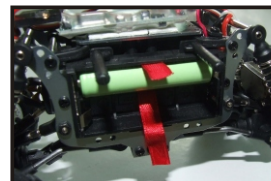
(This product requires 4pcs of AAA size battery, not supplied in the package. We warmly recommend users to use with rechargeable batteries of high quality.)



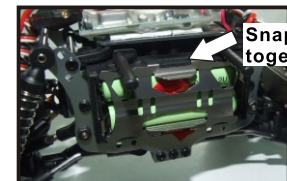
Do not install the battery cover reversed. The short tab is on the top and the long tab is on the bottom.



Gently lift the short tab to unlock the battery cover as show. (Do not force upon the tab as this will deform it.)



Install AAA size battery correctly. (We offer the battery strap with which you can easy remove the batteries when not in use.)



Install the battery cover again. It is not secured until it snaps together with the battery compartment as shown.

USE OF THE RADIO TO CONTROL THE ROCK CRAWLER



1	2.4GHz Radio Antenna
2	LCD screen
3	Steering Control Wheel
4	Steering Trim / Reverse Switch
5	Throttle Trim
6	Power Switch (Slide it to turn on/off)
7	Steering Dual Rate Control Dial (D/R)
8	Trim Switch (for rear wheels)
9	Trigger
10	Steering Mode Switch
11	SEL function button(Bind button)
12	Charging Jack

NOTES:

1. Please use batteries of same types. Never mix new and old batteries. The radio uses with 4pcs of batteries only.
2. Please remove batteries from the compartment if not in use a long period of time.
3. Incorrect battery installment will cause leak. Dispose of exhausted batteries into a recycle bin.
4. Please clean the rust and/or the dirt with a knife if they are founded on the battery contacts.
5. You can charge your rechargeable batteries by using a matched charger(DC9.6V 250mA). Switch off transmitter power first before performing charging. Never charge your batteries unattended.

USE OF THE RADIO TO CONTROL THE ROCK CRAWLER

Your rock crawler comes with a special programmable radio transmitter that has several important settings.

The following steps must be followed in order to properly program the transmitter. Keep it handy and use it for reference if you need to make adjustments in the future.

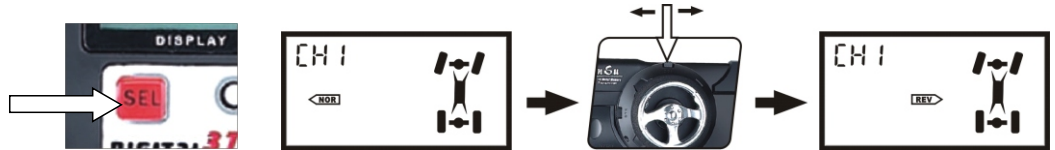
We strongly recommend you check all of these settings before you run your vehicle. If these settings are not adjusted properly, you may cause damage to your rock crawler (such as the servos, the ESC...) and void the warranty.

SEL (SELECT SETTINGS)

The SEL button is located on front of radio.

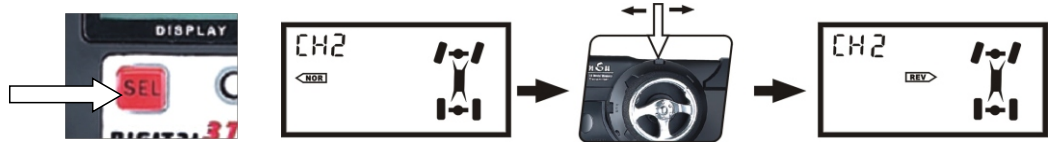
1) Press SEL (Select Button) on your radio once, the LCD will display CH1 (NOR.) Push the DT1 switch above the steering wheel left or right to change from NOR to REV.

Channel 1 : Steering Channel



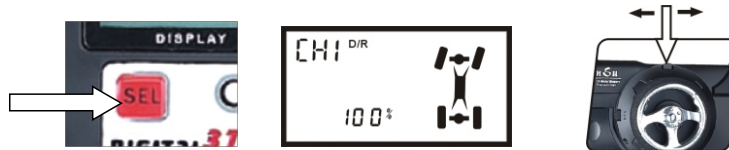
2) Press SEL (Select Button) on your radio a second time, the LCD will display CH2 (NOR.) Push the DT1 switch above the steering wheel left or right to change NOR into REV if needed.

Channel 2 : Throttle Channel



2) Press SEL (Select Button) on your radio a second time, the LCD will display CH2 (NOR.) Push the DT1 switch above the steering wheel left or right to change NOR into REV if needed.

Channel 2 : Throttle Channel



USE OF THE RADIO TO CONTROL THE ROCK CRAWLER

Quick Access

Press it (Steering Dual Rate Control Dial) once as shown when the Radio just be turned on and SEL button is not activated.

Turning it (Steering Dual Rate Control Dial) can also increase or Decrease the volume range from 0% - 100%.
If you want a small steering radius please decrease the volume.



LCD DISPLAY APPEARS:



4) Press SEL (select Button) on your radio a fourth time, the LCD will display CH2 D/R.

Ch2 D/R adjusts of throttle. The adjustable range is from 5%- 100%.

Push the DT1 switch above the steering wheel left or right to increase or decrease the volume as shown.

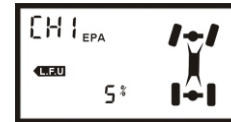


5) Press SEL (select Button) on your radio a fifth time, the LCD will display CH1 EPA (L.F.U.)

CH1 EPA (L.F.U.) adjusts the left steering radius Separately from CH1 D/R which adjusts both left and right steering at the same time. CH1 EPA (L.F.U.) ranges from 5%-120%.

Never adjust this setting beyond 100% as this will damage your servo and void your warranty.

Turn the SWITCH (Steering Trim /Reverse Switch) to increase Or Decrease the volume as shown.



USE OF THE RADIO TO CONTROL THE ROCK CRAWLER

6) Press SEL (select Button) on your radio a sixth time, the LCD will display CH1 EPA (R.B.D.)

CH1 EPA (R.B.D.) adjusts the right steering radius separately from CH1 D/R which adjusts both left and right steering at the same time.

Ch1 EPA (R.B.D.) ranges from 5%-120%. **Never adjust this setting beyond 100% as this will damage your servo and void your warranty.** Push the DT1 switch above the steering wheel left or right to increase or decrease the volume as shown .



7) Press SEL (select Button) on your radio a seventh time, the LCD will display CH2 EPA (L.F.U.)

Ch2 EPA (L.F.U.) adjusts the forward speed.

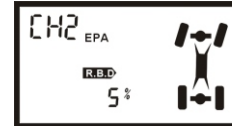
Ch2 EPA (L.F.U.) ranges from 5%-120%. Push the Dt1 switch above the steering wheel left or right to increase or decrease the volume as shown .



8) Press SEL (select Button) on your radio an eighth time, the LCD will display CH2 EPA (R.B.D.)

CH2 EPA (R.B.D.) adjusts the reverse speed.

Ch2 EPA (R.B.D.) ranges from 5%-120%. Turn the SWITCH (Steering Trim /Reverse Switch) to increase or decrease the Volume as shown .



USE OF THE RADIO TO CONTROL THE ROCK CRAWLER

Special Trim Switch For Rear Wheel



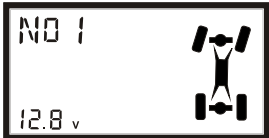
This dial centers the rear wheels. The range is from 0-100% on the left or right rear wheel. Turn it to increase or decrease the volume As show in the LCD display.

FOURWHEEL STEERING

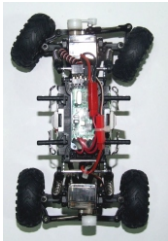


Every press of this button will change 4 wheel steering mode.

LCD Screen on your radio controller



← MODE 1

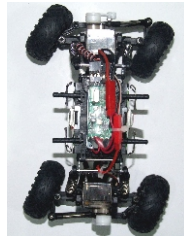


Front wheel steering

LCD Screen on your radio controller

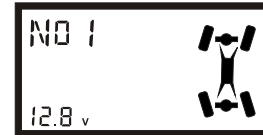


← MODE 2

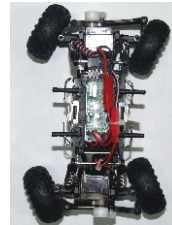


Front /rear wheel steering
(In the same direction)

LCD Screen on your radio controller

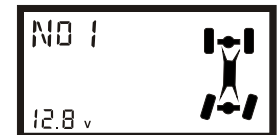


← MODE 3



Front /rear wheel steering
(In the opposite direction)

LCD Screen on your radio controller



← MODE 4



Rear wheel steering

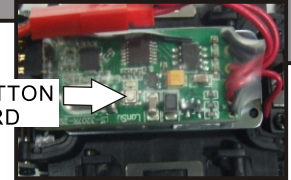
TO BIND YOUR 2.4GHz SYSTEM

Please bind your 2.4GHz system before using.
This has been fulfilled at factory. The following steps
Instruct you to perform it again if necessary.

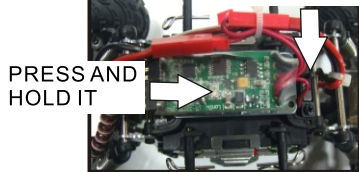
BIND BUTTON
ON RADIO



BIND BUTTON
ON BOARD



SWITCH ON



PRESS AND
HOLD IT



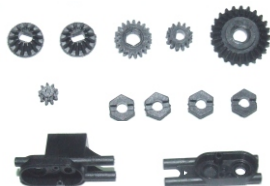
SWITCH ON

1) Press and hold the BIND button on the
ESC/receiver board, switching on the power.
The indicator on the board becomes flashing.

2) Press and hold the SEL(BIND) button on
your radio, switching on the power.
The system will get bound automatically.

SPARE PART LIST

24701



Gears+Centre Gears Mount+Wheel Hex.

24702



Front Gear Box Housing + Rear Gear Box Housing

24703



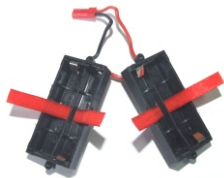
Steering Hubs+Centre Bottom Mount +TVP Mount

24704



Shock Top Mount+ Wheel Hub Carriers

24705



Battery Case With Connector Welded

24706



Servo Mount+Servo Retainer+Steering Plates+Shock Bottom Mount+Body Posts +Shock Bodies+Pads

24707



Centre Front /Rear Drive Shafts + Pivot Balls+ Centre Outdrives

24708



Linkage Rod Ends (long+short, 8pcs each)
Long ones for bent linkage (Part Number: 24739), short ones for straight linkage (Part Number: 24720,24721 and 24723)

24709



Wheel Rims + Wheel Frames + Cap Head Hex. Self Tapping Screw 1.5*4mm(24PC)

24710



2PCS

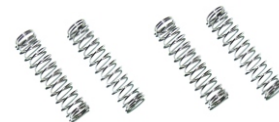
V-tread Rock Crawler Tyres

88014A



Servo Saver Kit

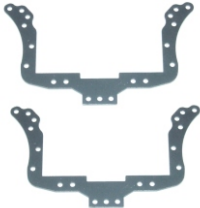











24712



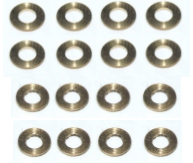

4PCS

Shock Spring Coils




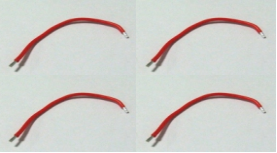



SPARE PART LIST

<p>24713</p>  <p>TVP chassis (aluminum)</p>	<p>24714</p>  <p>Top Mount Plate (aluminum)</p>	<p>24715</p>  <p>4PCS</p> <p>Drive Shafts</p>	<p>24716</p>  <p>2PCS</p> <p>Front/rear Spur Gear Shafts</p>
<p>24717</p>  <p>2PCS</p> <p>Pinion Gear Shafts</p>	<p>24718</p>  <p>4PCS</p> <p>Wheel Shafts</p>	<p>24719</p>  <p>4PCS</p> <p>TVP Post (L=29mm)</p>	<p>24720</p>  <p>4PCS</p> <p>Lower Suspension Linkage Bars M2.2*39mm (straight)</p>
<p>24721</p>  <p>2PCS</p> <p>Steering Linkage Bars M2.2*25mm</p>	<p>24722</p>  <p>2PCS</p> <p>Centre Spur Gear Shafts</p>	<p>24723</p>  <p>4PCS</p> <p>Upper Linkage Bars</p>	<p>24724</p>  <p>2PCS</p> <p>Battery Brace</p>

SPARE PART LIST

<p>24725</p>  <p>4PCS Centre Idle Gear Pin ϕ 1.5*9.5mm</p>	<p>24726</p>  <p>4PCS Wheel Hex. Pin ϕ 1.5*6.9mm</p>	<p>24727</p>  <p>Copper Bushes Complete A) ϕ 2*5*2.5mm (4P) , B) ϕ 3*6*2.5mm(9P) C) ϕ 3*7*3mm (2P), D) ϕ 4*7*2.5mm(2P) E) ϕ 4*8*3mm (2P)</p>	<p>24728</p>  <p>8PCS Steering Ball Stud. (ϕ 3.8mm)</p>
<p>24005</p>  <p>8PCS Ball Stud. ϕ 3.8*7.6mm</p>	<p>24729</p>  <p>12PCS Sleeve Bush (ϕ 4*3.5mm)</p>	<p>24730</p>  <p>8PCS M2 Lock Nut</p>	<p>24731</p>  <p>16P Shims(ϕ 3.1*6*0.5mm)</p>
<p>24732</p>  <p>4PCS Body Clips</p>	<p>88013</p>  <p>Servo (9g)</p>	<p>24734</p>  <p>PCB (receiver and ESC integrated)</p>	<p>24735</p>  <p>Motor</p>

SCREWS REQUIRED

<p>H021</p>  <p>12PCS</p> <p>Body Clip A/B- Small</p>	<p>24736</p>  <p>Battery Case Connector (L=57mm)</p>	<p>24737</p>  <p>Motor Connector (L=56mm)</p>	<p>24738</p>  <p>4PCS</p> <p>Battery Wires (L=20mm)</p>
<p>24739</p> <p>Optional</p>  <p>Lower Suspension Linkage Bars (bent) - optional</p>	<p>H017</p>  <p>6PCS</p> <p>Lock Nut M2.5</p>	<p>24740</p> <p>Optional</p>  <p>Shock Spring Coils (Softer)</p>	

SPARE PART LIST

<p>24750</p>  <p>12PCS</p> <p>Washer Head Self Tapping Screw 2*8mm (12PCS)</p>	<p>24751</p>  <p>12PCS</p> <p>Washer Head Self Tapping Screw 1.8*4.5mm(12PCS)</p>	<p>24752</p>  <p>12PCS</p> <p>Washer Head Self Tapping Screw 1.4*2.3mm(12PCS)</p>	<p>24753</p>  <p>4PCS</p> <p>Washer Head Screw 2*18mm (4PCS)</p>
<p>24754</p>  <p>12PCS</p> <p>Washer Head Screw 2*10mm (12PCS)</p>	<p>24755</p>  <p>12PCS</p> <p>Washer Head Screw 2*8mm (12PCS)</p>	<p>24756</p>  <p>12PCS</p> <p>Washer Head Screw 2*6mm (12PCS)</p>	<p>24757</p>  <p>12PCS</p> <p>Washer Head Screw 2*4mm (12PCS)</p>
<p>24758</p>  <p>12PCS</p> <p>Washer Head Screw 1.5*6mm (12PCS)</p>	<p>24759</p>  <p>12PCS</p> <p>Washer Head Screw 1.5*3mm(12PCS)</p>	<p>24760</p>  <p>12PCS</p> <p>Countersunk Self Tapping Screw 2*6mm(12PCS)</p>	<p>24761</p>  <p>12PCS</p> <p>Countersunk Self Tapping Screw 2*4mm(12PCS)</p>

SPARE PART LIST

24762



12PCS

Cap Head Hex. Self Tapping
Screw 1.5*4mm(12PC)

24763

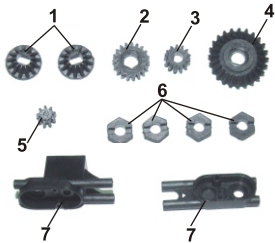


12PCS

Cap Head Hex. Self Tapping
Screw 1.5*5mm(12PC)

MORE INFORMATION ABOUT THE PARTS IN BIG PACKAGES

24701

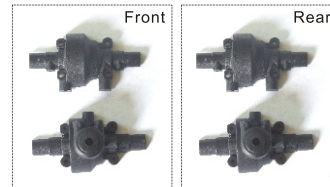


Gears+Centre Gears Mount+Wheel
Hex.



1. Pinion Gear
2. Centre Spur Gear
3. Motor Pinion
4. Front/Rear Spur Gear
5. Centre Idle Gear
6. Wheel Hex.
7. Centre Gears Mount

24702



Front Gear Box Housing + Rear
Gear Box Housing



Gear Box Housing (for front and rear
gear box in common)

MORE INFORMATION ABOUT THE PARTS IN BIG PACKAGES

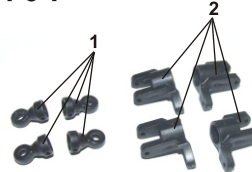
24703



Steering Hubs+Centre Bottom Mount
+TVP Mount

- 1. Steering Hub
- 2. TVP (Twin Vertical Plate) Mount
- 3. Centre Bottom Mount

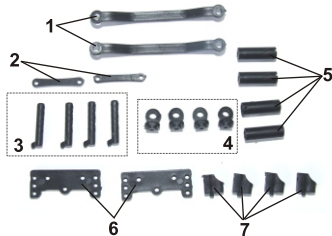
24704



Shock Top Mount+ Wheel Hub
Carriers

- 1. Shock Top Mount
- 2. Wheel Hub Carriers (left/right)

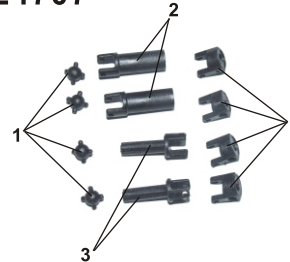
24706



Servo Mount+Servo Retainer+Steering
Plates+Shock Bottom Mount+Body Posts
+Shock Bodies+Pads

- 1. Steering Ackerman Plate
- 2. Rear Steering Lock Plate
- 3. Body Post
- 4. Shock Bottom Mount
- 5. Shock Body
- 6. Servo Mount
- 7. Servo Retainer

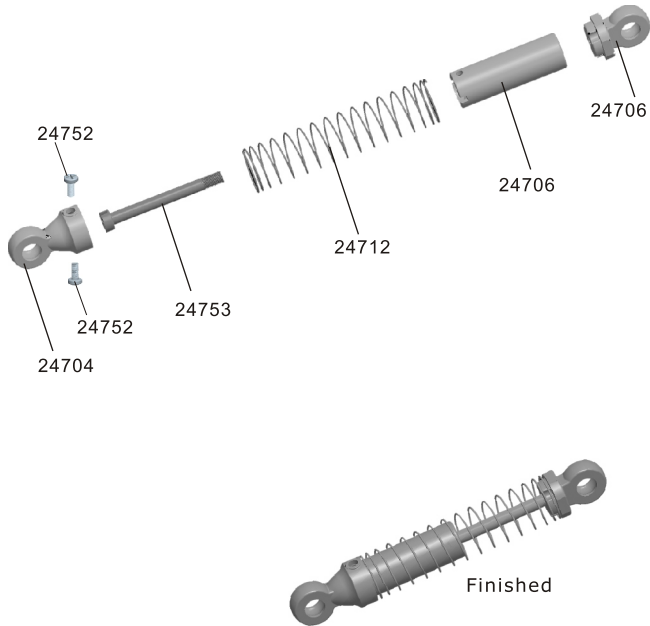
24707



Centre Front /Rear Drive Shafts +
Pivot Balls+ Centre Outdrives

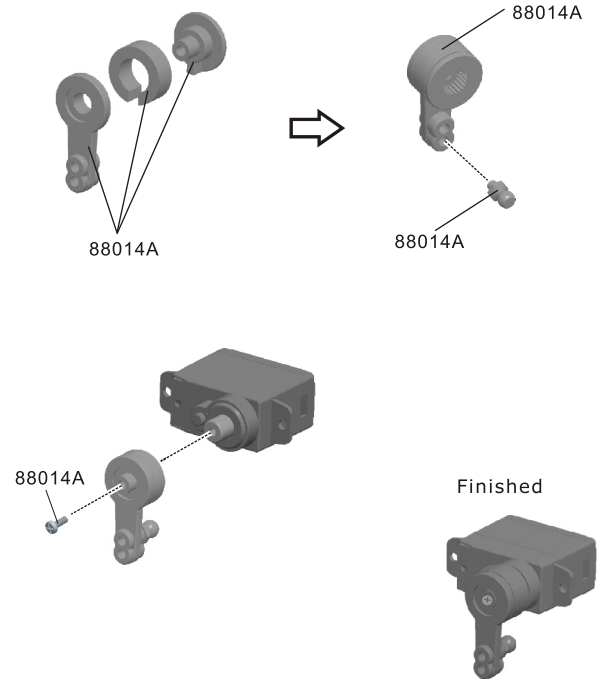
- 1. Centre Front/rear Drive Pivot Ball
- 2. Centre Front/rear Drive Shaft
Holder
- 3. Centre Front/rear Drive Shaft
- 4. Centre Outdrives

SHOCK SET ASSEMBLY



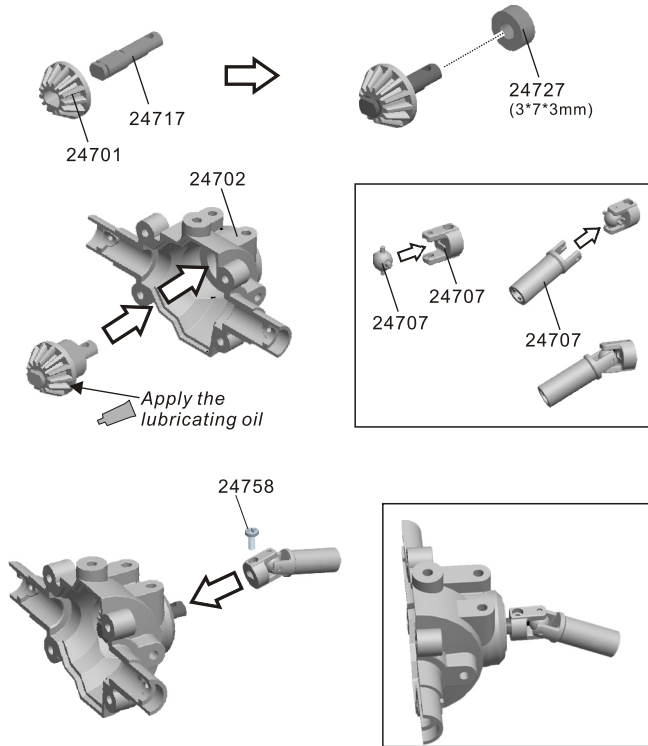
Note: The illustration might vary from the actual part.

SERVO SET ASSEMBLY



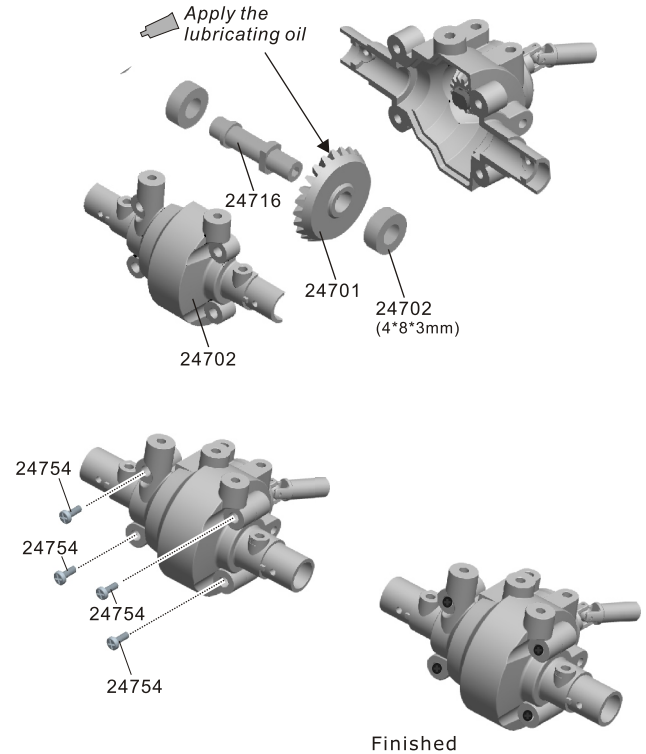
Note: The illustration might vary from the actual part.

FRONT/REAR AXIAL/ GEAR BOX ASSEMBLY-1



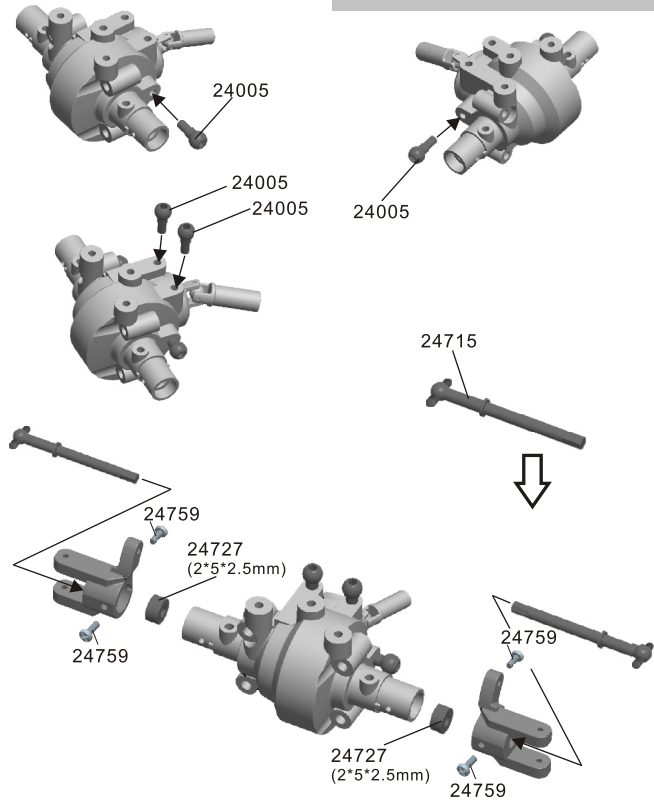
Note: The illustration might vary from the actual part.

FRONT/REAR AXIAL/ GEAR BOX ASSEMBLY-2



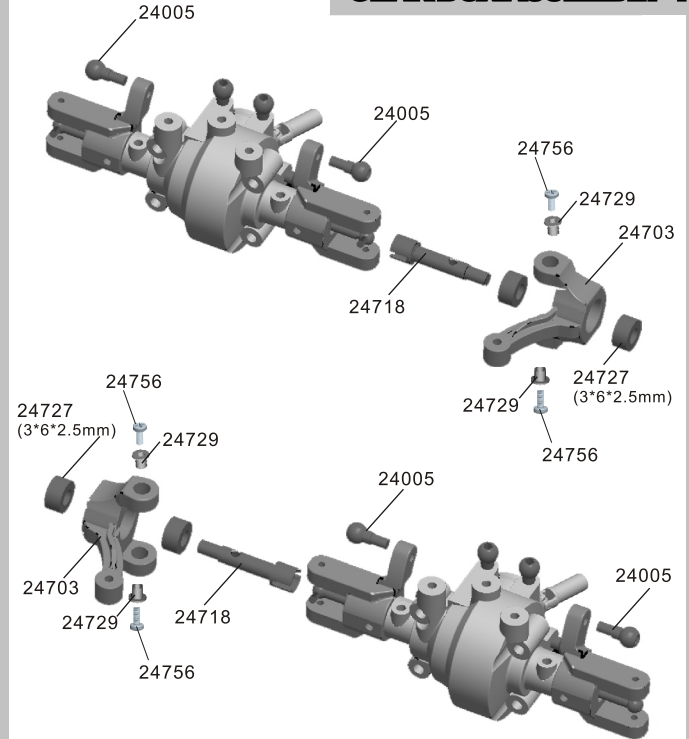
Note: The illustration might vary from the actual part.

FRONT/REAR AXIAL/ GEAR BOX ASSEMBLY-3



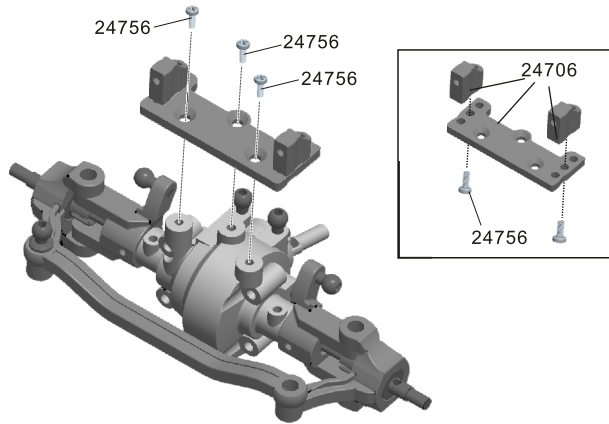
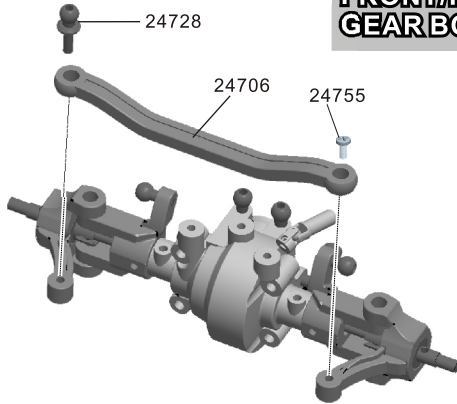
Note: The illustration might vary from the actual part.

FRONT/REAR AXIAL/ GEAR BOX ASSEMBLY-4



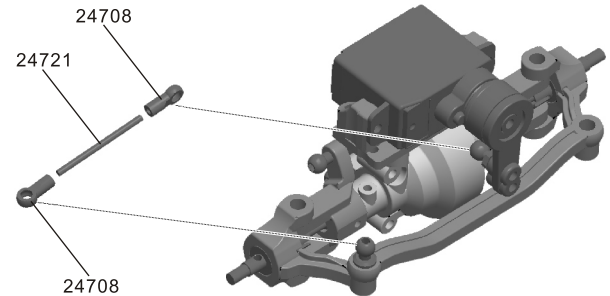
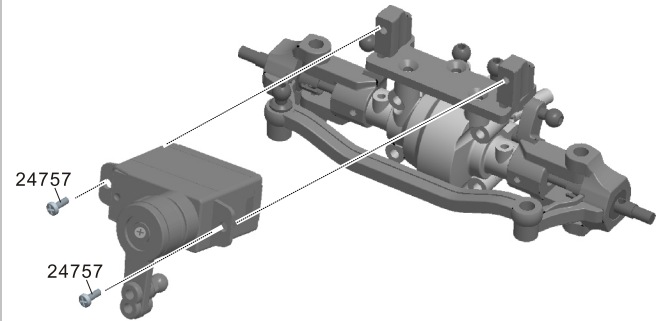
Note: The illustration might vary from the actual part.

FRONT/REAR AXIAL/ GEAR BOX ASSEMBLY-5



Note: The illustration might vary from the actual part.

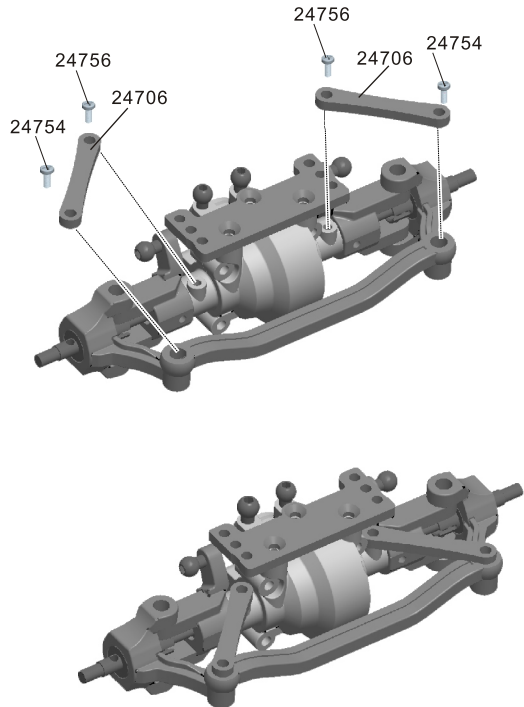
FRONT/REAR AXIAL/ GEAR BOX ASSEMBLY-6



Tip: If your rock crawler is of four wheel steering, both front servo and rear servo demand being installed in the same way.

Note: The illustration might vary from the actual part.

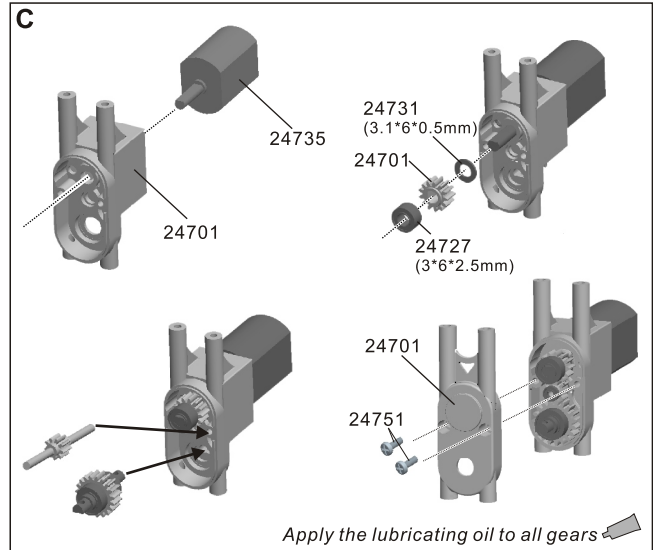
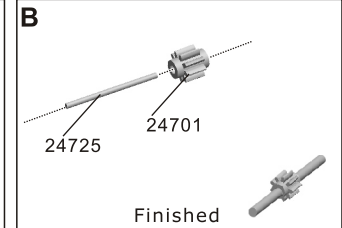
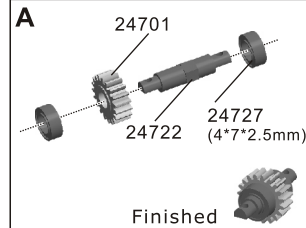
FRONT/REAR AXIAL/ GEAR BOX ASSEMBLY-7



Tip: If your rock crawler is of two wheel steering, perform the installation on the rear as shown above.

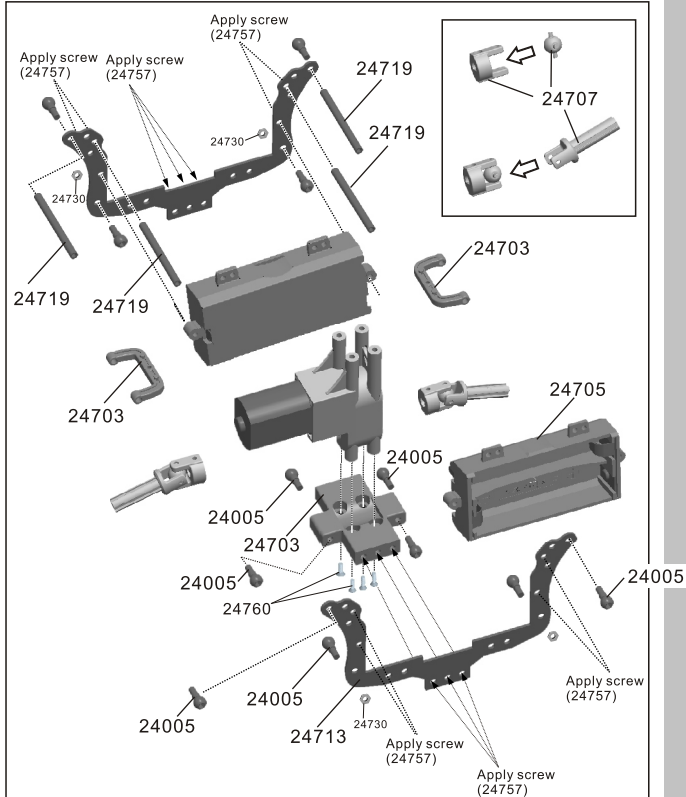
Note: The illustration might vary from the actual part.

CENTRE GEARBOX ASSEMBLY



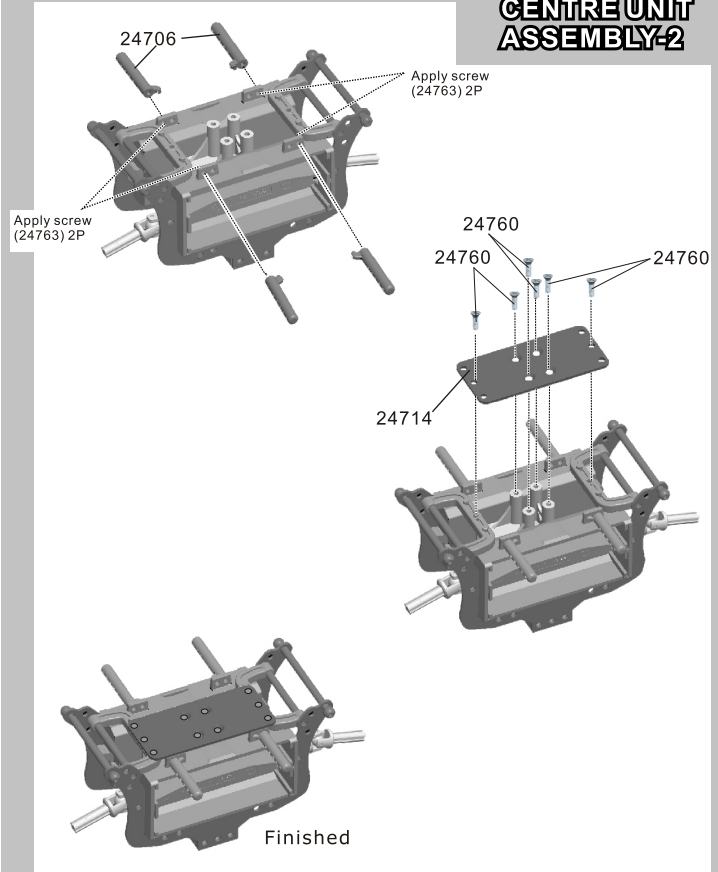
Note: The illustration might vary from the actual part.

CENTRE UNIT ASSEMBLY-1



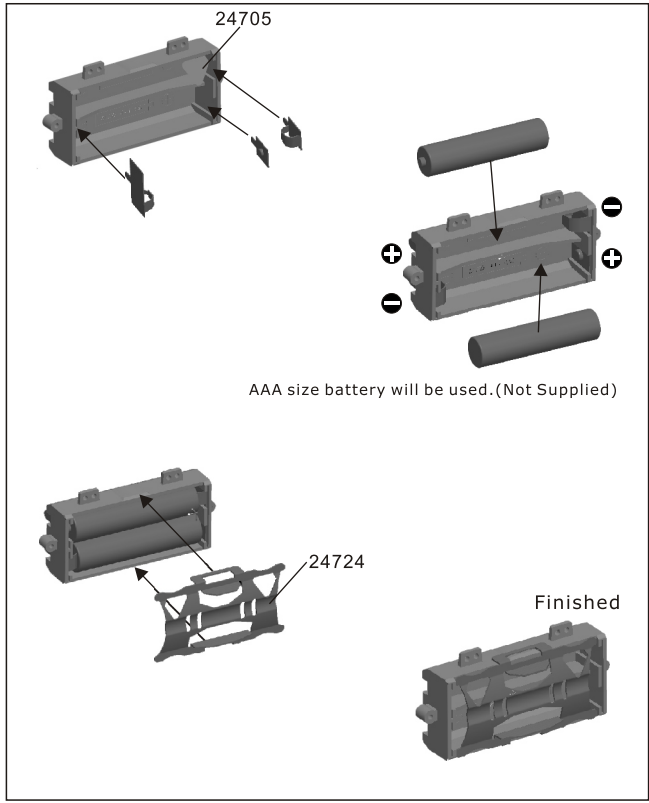
Note: The illustration might vary from the actual part.

CENTRE UNIT ASSEMBLY-2



Note: The illustration might vary from the actual part.

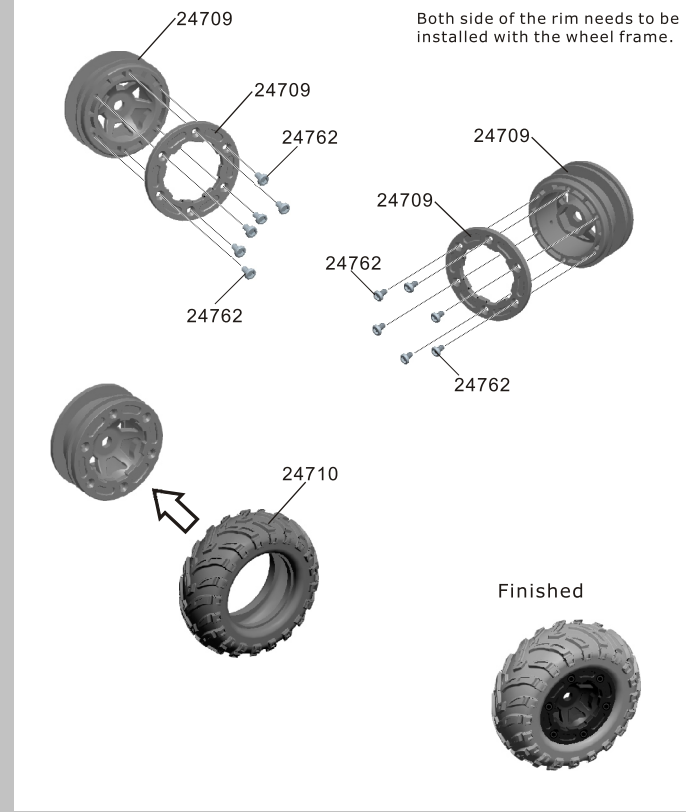
BATTERY COMPARTMENT ASSEMBLY



AAA size battery will be used. (Not Supplied)

Note: The illustration might vary from the actual part.

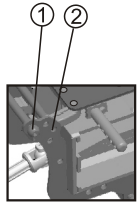
WHEEL ASSEMBLY



Both side of the rim needs to be installed with the wheel frame.

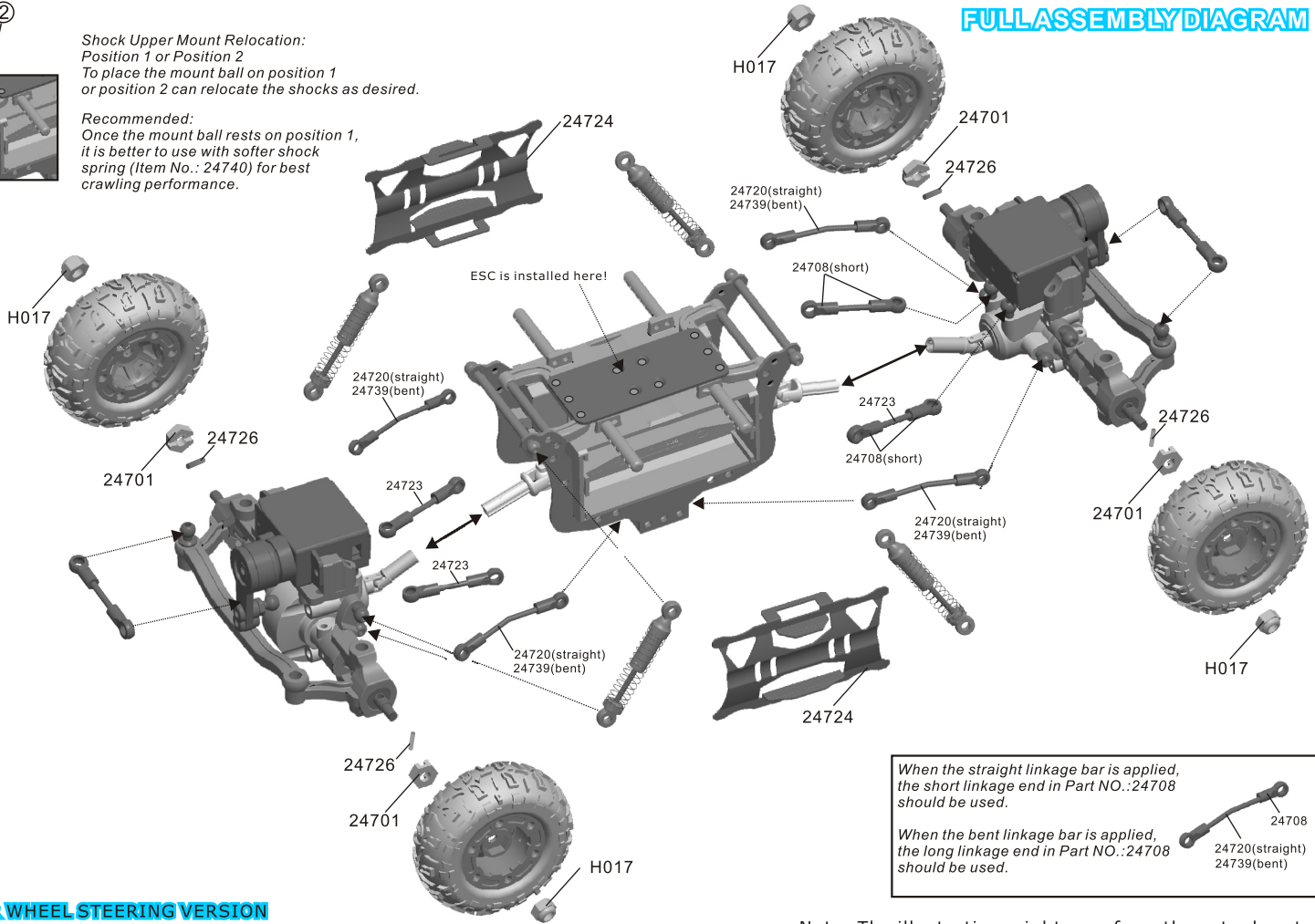
Note: The illustration might vary from the actual part.

FULL ASSEMBLY DIAGRAM



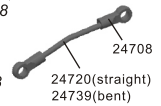
Shock Upper Mount Relocation:
 Position 1 or Position 2
 To place the mount ball on position 1 or position 2 can relocate the shocks as desired.

Recommended:
 Once the mount ball rests on position 1, it is better to use with softer shock spring (Item No.: 24740) for best crawling performance.



When the straight linkage bar is applied, the short linkage end in Part NO.:24708 should be used.

When the bent linkage bar is applied, the long linkage end in Part NO.:24708 should be used.



- Please read and understand all instructions in the manual before running and assembling or disassembling this product. A novice user should seek help from experienced hobby operators or local hobby shop staff.
- Always disconnect your battery pack before attempting to re-install your radio system.
- Keep away from children when you are assembling or disassembling the vehicle as it contains many small parts that might be dangerous to children.
- Always turn off your radio when it is not in use for a long period of time.
- In order to prevent battery leakage please remove all battery from your radio if not in use.
- Do not share the same frequency with somebody else when they are using RC products. If it is the case, keep away from them. Otherwise, it will cause signal confusion and do damage to your models and/or your body.
- For better radio performance fully extend the antenna on your radio controller.
- Never charge your rechargeable battery pack unattended.
- Always dispose of damaged parts into the recycle center.



1-24TH SCALE ELECTRIC ROCK CRAWLER

This small rock crawler is only 1/24th scale one, which never fails to provide you enjoyment in crawling on any indoor or outdoor track (even on a small table, over the keyboard)...