RIVERHOBBY

INSTRUCTION MANUAL

1/5 Scale RC Gas Powered Car

Ready To Run!

Model No. RH511/RH509

Hurricane V2

Adustable width of double fork susp. System

Stiff and sturdy 4.0mm alum chassis and side plate

Large Size Oil filled shock absorber

Gear covers for all gear transmission

Disc break system

RH509(4WD)

700cc fuel tank

738mm

585mm

360mm

531mm

416/466mm



Features

Fully assembled ready to run chassis Powerful CY27cc or CN28.5cc gasoline engine with slide carburretor pull starter Stiff alum. roll cage and shock towers High Torque steering servo & throttle servo Diff. With built-in rear bevel gear

Specifications RH511(2WD)

Length: 738mm Width: 585mm Height: 360mm Wheelbase: 531mm Tread(front/rear): 416/466mm

Weight: 12.5kgs 13.5kgs

CY27cc or CN28.5cc CY27cc or CN28.5cc Engine:

Gear Ratio: 9.0:1 9.0:1

Drive System: 2WD 4WD shaft drive

Throttle Servo: 15kg/cm 13kg/cm Steering servo: 20kg/cm 30kg/cm

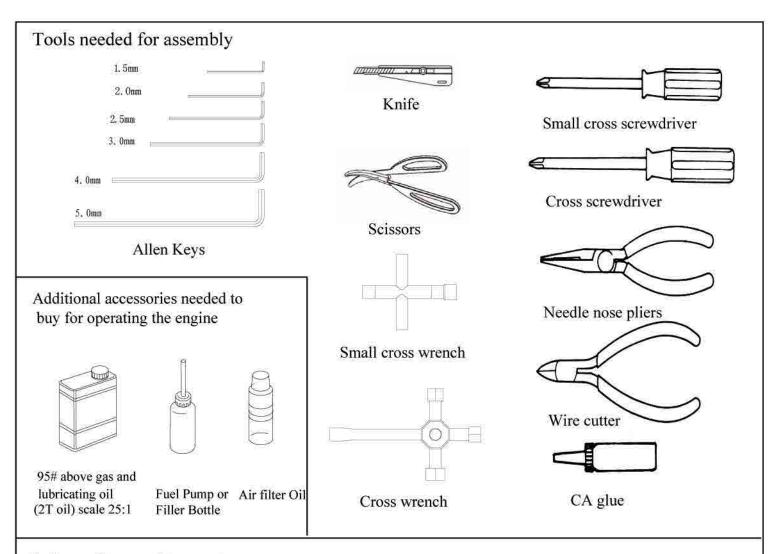
In order to improve the quality and performance, we may change the content without notice.

Notice before assembly

In addition to the tools included with the vehicle, you will require the following.

Caution: Before operating the vehicle for the first time, ensure the engine idle position is set correctly.

Otherwise, both life & performance of the vehicle will be comprimised.



2 channel transmitter system

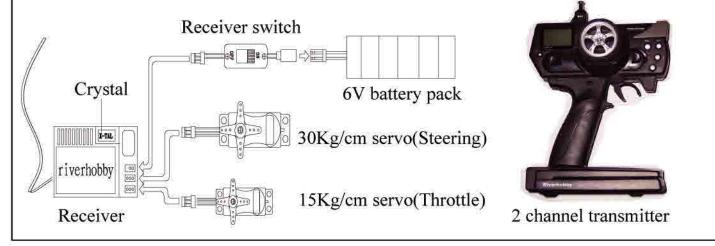
Please read the radio instruction manual carefully before use.

Install the Receiver & Transmitter batteries. (Never mix old batteries with new batteries)

Adjust the servo center positions before final assembly.

To adjust the servo center, turn on the transmitter & receiver & make sure all trims are centered.

Remove the center screw on the servo horn and reposition the horn until it is centered. Re-install the retaining screw.



Maintaintenance Instruction

Problem	Reason	Solution
Engine Hard To Start	 Check fuel lines for kinks, blockages or breaks. Spark plug lead loose or shorted. Spark plug dirty with carbon. 	 Clean or replace fuel lines. Refit or replace spark plug lead. Clean or replace spark plug.
Engine Flame out	 Fuel tank empty. Kink in fuel line, dirty air cleaner or blocked muffler. Poor carburettor adjustment. Engine temperature too hot. Carbon build up on spark plug. 	 Put fuel in tank. Clean out or replace blocked parts. Adjust carburettor needles to obtain best operation. Allow engine to cool down. Clean or replace spark plug.
Poor Engine Performance	 Poor carburettor adjustment. Damaged engine or components. Carbon build up or damaged spark plug. Ignition system failure. 	 Adjust carburettor needles to obtain best operation. Replace damaged engine parts. Clean or replace spark plug. Check ignition system & rectify fault.
Car difficult to control	 Low battery power in receiver or transmitter. Receiver operation comprimised. Poor servo pushrod adjustment. 	

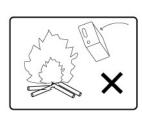
Safty instruction

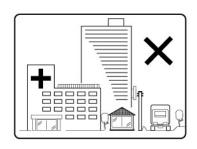
- Play the car after carbody fixed
- Avoid frequently and suddenly change the steering direction
- Run on below situation grass road, slosh,sandy or stony road
- The vehicle possibly can have the situation which very difficult to make a turn, especially when it climb the hill or run unsmooth ground, which do not indicate it has problem. Besides the screws, check the nuts frequently to see whether they become loose.

Warning: In order to avoid accident and person injury, pls do following issues:

- Use fuel safty
- Only use fuel out-of-doors
- Only use professional fuel:Zink Alkyl(Above 95#)l gasoline and Highly lubricating oil (2T machine oil), proportion: 25:1.
- Do not use oil in doors or at places where have fire sources or heat resources.
- Do not eat oil or in eyes
- Put oil in places where is cool, dry without sunshine, children could not reach, put cap tightly
- Do not throw into fire! Otherwise it explode
- Do not finger in running parts

- Do not touch engine or muffler after you play prevent scald
- Do not play cars under below situation: (no observe possibly lead accident)
 - Road or railway
 - Children or people play at same places
 - · Park, living places, hospital or airport
 - In door or limited places
- Check the power of bettery for receiver or radio controller, if the power is weak, the car possilbly lose control
- Avoid play cars with same frequency with others
 The car appear abnormal, please stop using immediately to check, otherwise, it will lead to an accident.

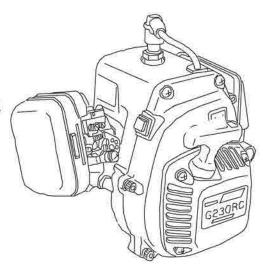




Engine Instructions.

Please read the following instructions carefully before starting the engine.

- 1. Running in process before driving the car.
- For running in the engine, run 1-2 tanks of fuel with the car running slowly, then run another 1-2 tanks of fuel at medium speeds. Once this has been done, the run in process is complete.
- NOTES: Due to the affect of external enviornment, you should clean the air filter after running your car more than 1-2 hours. Otherwise, it may affect performance or shorten your car's life.

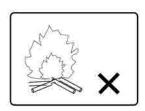


2.Fill the fuel

- Fill fuel tank with the specified fuel mix. The fuel mix should be 25:1, 95 Octane petrol and high quality 2 stroke oil.
- Close the fuel lid.

NOTICE:

 Never use alcohol based fuels or other flammable liquids. Otherwise rubber components in the fuel & carburettor system will be damaged.



- Petrol is very flammable, do not smoke near petrol.
- To avoid abnormal operation, ensure Fuel Filter, Air Cleaner & Fuel Lines are kept clean.



Starting the engine

- Push the priming valve until fuel is consistantly flowing out the excess tube.
- Close the choke valve & make sure throttle is set to a fast idle on the transmitter.
- Pull the pull start until the engine fires briefly.
- Open the Choke valve.
- Pull the pull start until engine runs.
- Allow engine to warm up for a minute before driving car.

NOTICE:

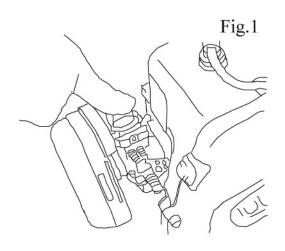
- It may not be necessary to re-choke the engine if the engine is already warmed up.
- The engine may become hard to start if the engine is over choked, the spark plug will become too wet.
- When replacing the spark plug after drying, pull the pull start several times to let excess fuel out of the cylinder.

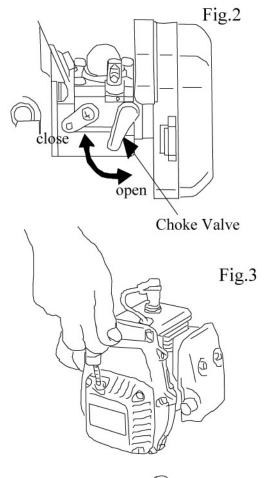
Stopping the engine:

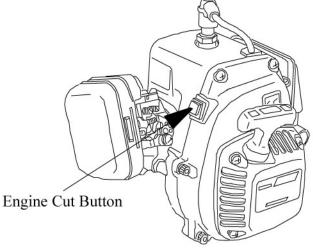
 Press the red engine cut button located on the pull start housing to stop the engine.

Engine Maintenance:

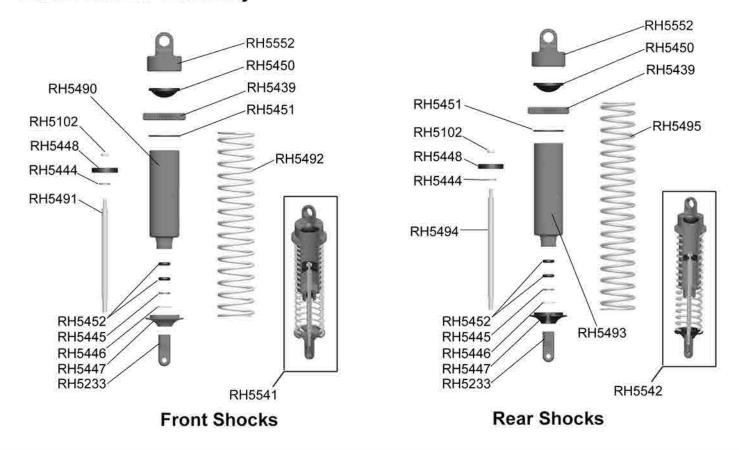
- Keep the air cleaner clean at all times.
- Regularly check the condition of the spark plug.
- Keep the engine clean to avoid engine overheating.



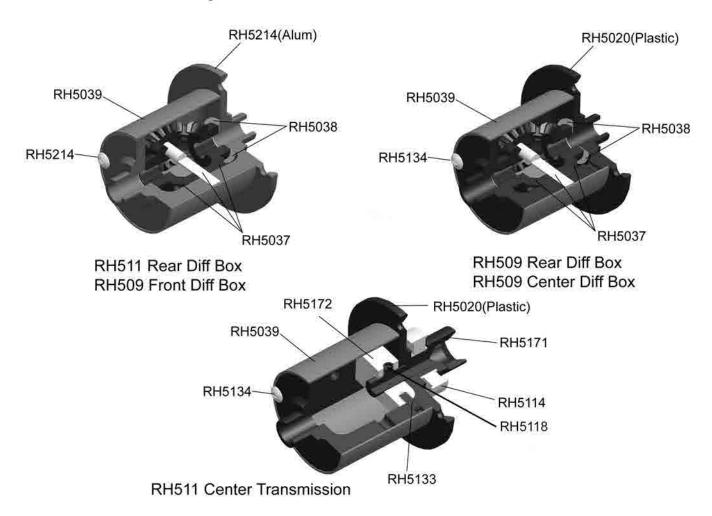


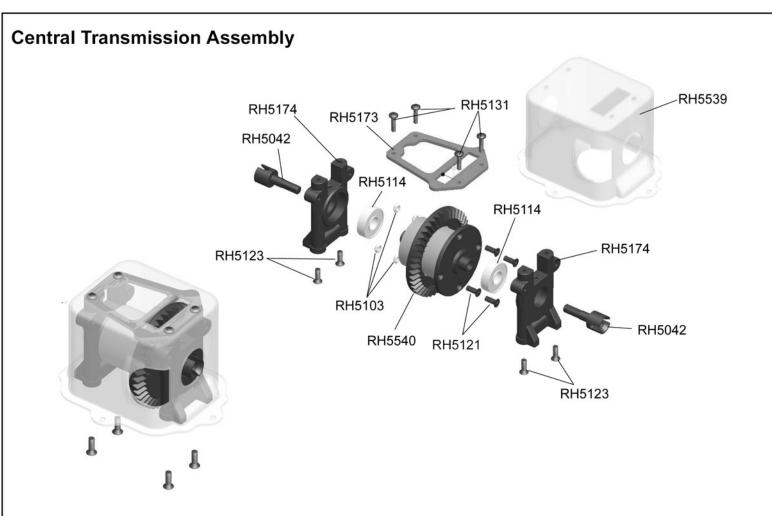


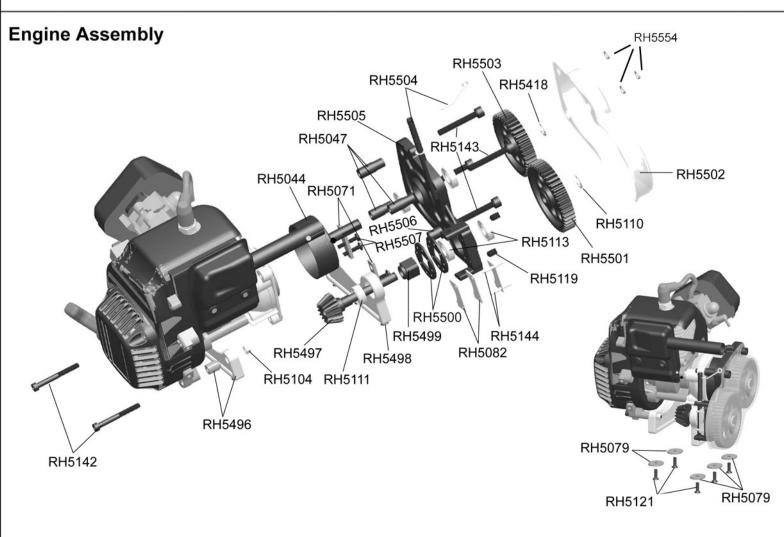
Shock Absorber Assembly

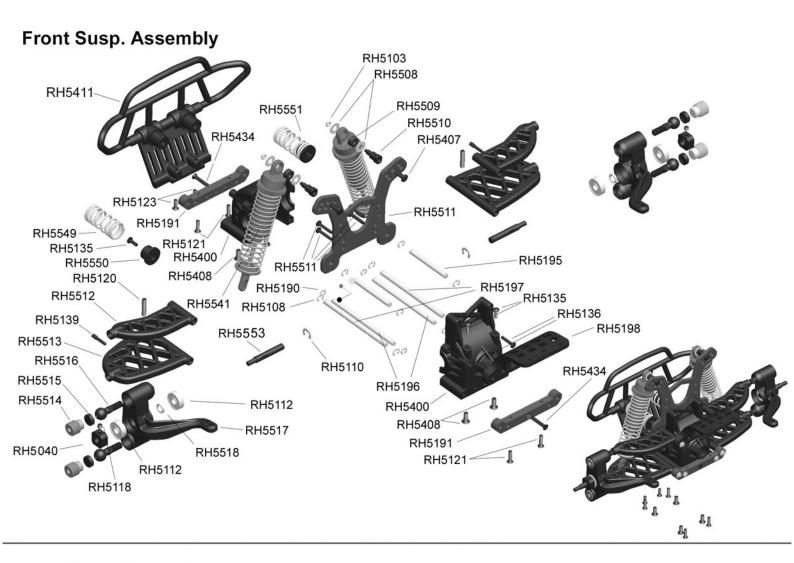


Diff Gear Box Assembly

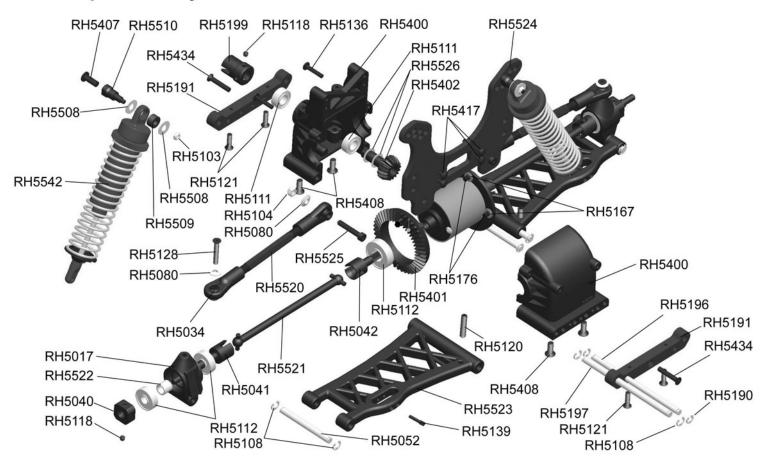


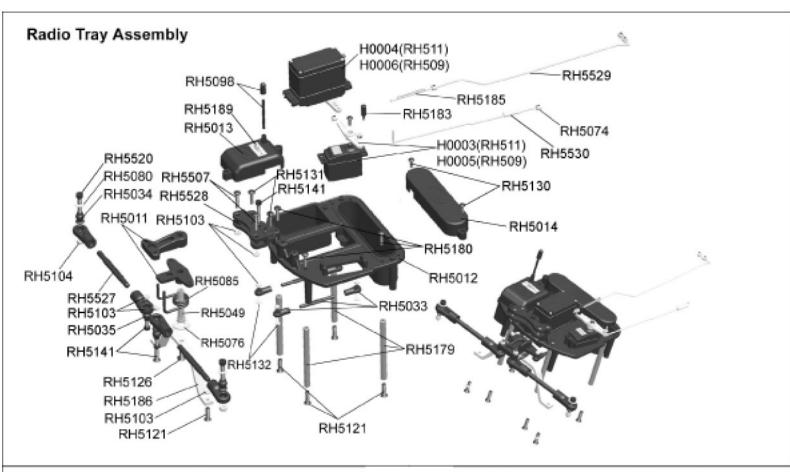


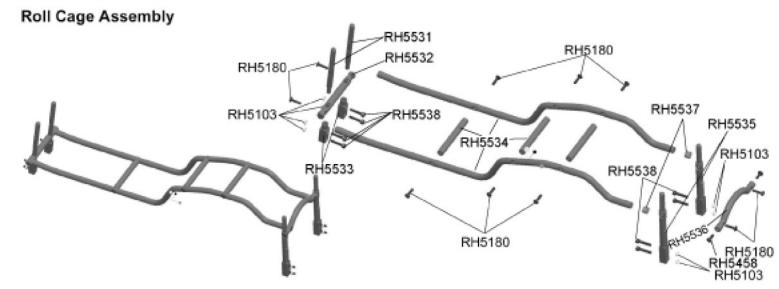




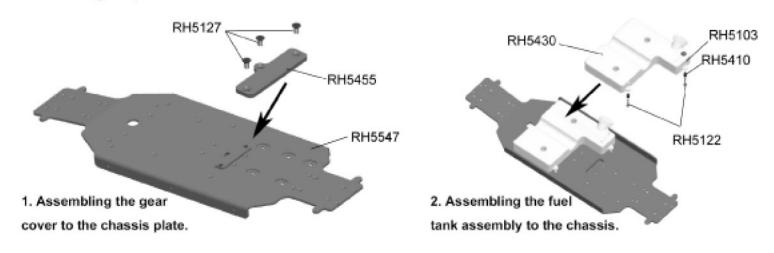
Rear Susp. Assembly

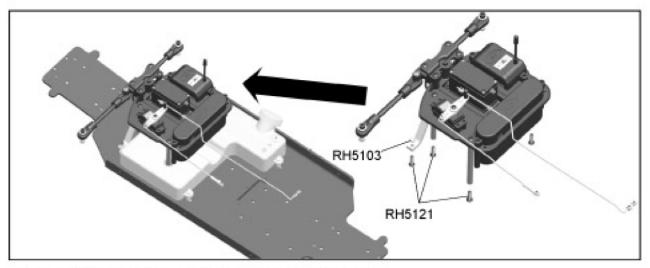




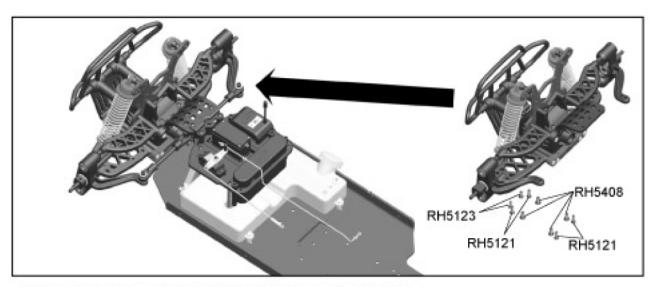


Assembling Steps

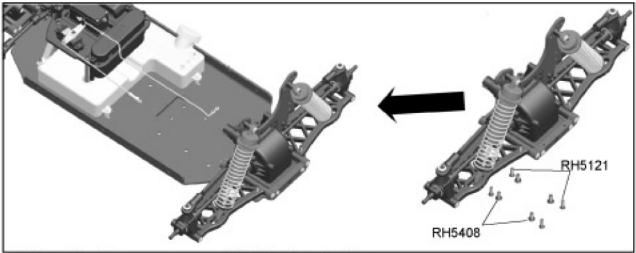




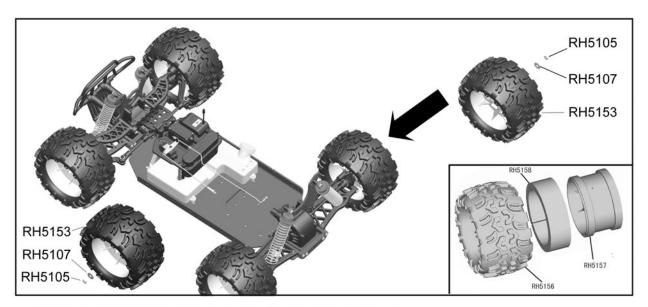
3. Assembling the radio assembly to the chassis with screws.



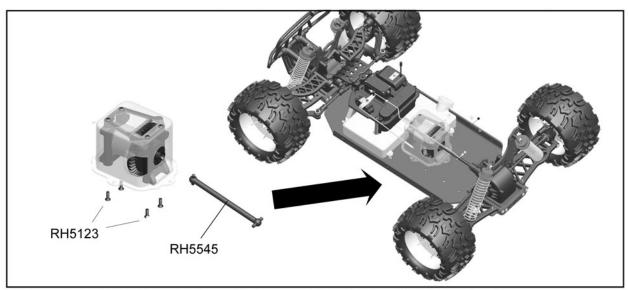
4. Assembling the front susp. assembly to the chassis with screws.



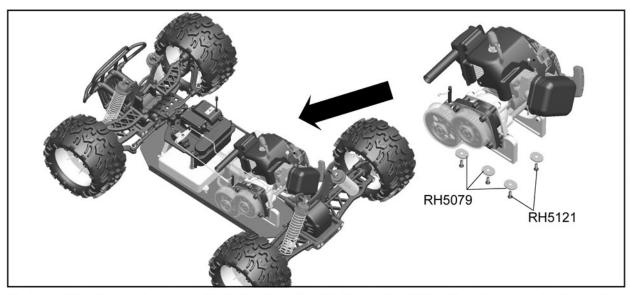
5. Assembling the rear susp. assembly to the chassis with screws.



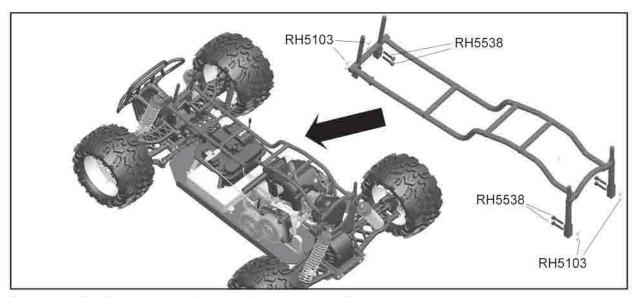
6. Assembling the tyre sets to the chassis with washers and nuts.



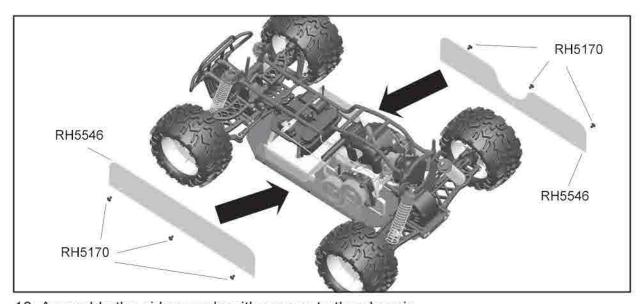
7. Assembling the 2WD center transmission assembly and drive shaft to the chassis.



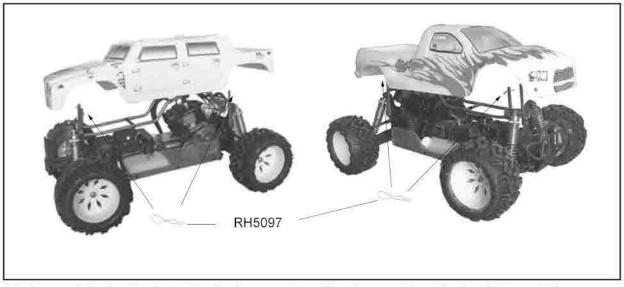
8. Assembling the engine assembly to the chassis adjusting and matching the pinion gear to the center transmission. Please make sure the gears transmission run smoothly before tightening the screws.



9. Assemble the alum. roll cage with screws to the chassis.



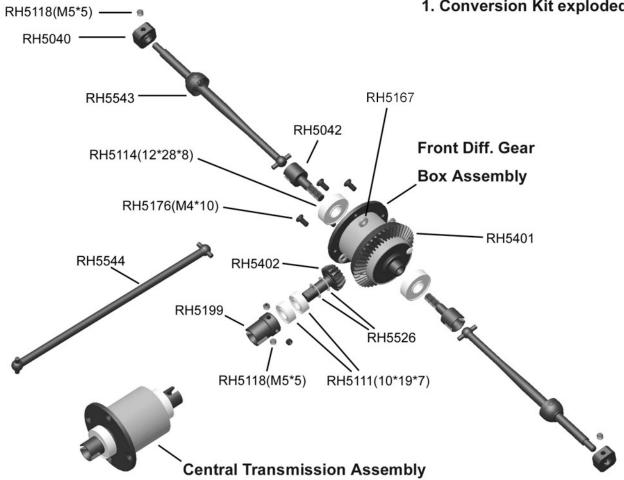
10. Assemble the side guards with screws to the chassis.



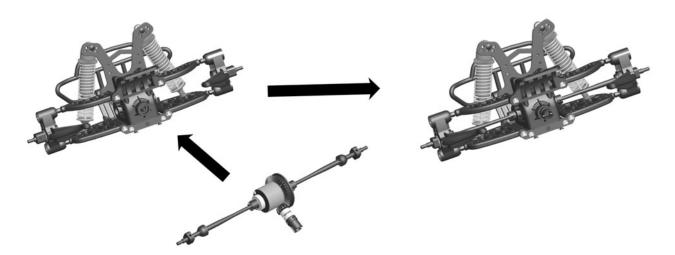
11. Assemble the body to the body mounts with clips, cutting the body to suit the chassis.

Converted Your Truck to 4WD

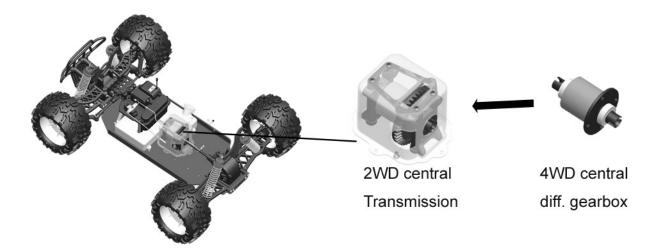




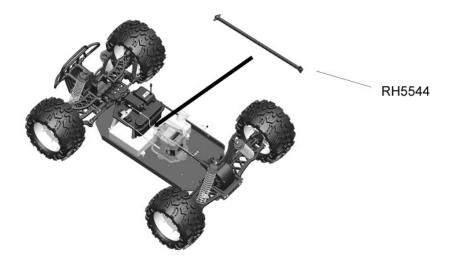
2. How to convert the 2WD truck to 4WD truck



Firstly install the front diff. gearbox inside the gearbox housing and install the front universal shafts.



Remove the 2WD central transmission assmbly from the chasis and change the central diff. gear box set with the 4WD central diff box.



Remember to attach the center front drive shaft when reinstall the 4WD central transmission back to the chassis. And please make sure the gear run smoothly before tighten central transmission to chassis by screw glue.



Steering Servo

We strongly suggest consumer to upgrade the steering servo to our H0006 30kg/cm steering servo when he upgrades the 2WD system to 4WD system.

RH5011-Steering Unit	RH5012-Servo Bearer 1pc	RH5013-Receiver Case	RH5014-Battery Case	RH5017-Rear Axle Sleeve Unit 1set
				Side Ver of his 1set
RH5019-Susp Arm Fixed Holder 8pcs	RH5020-Diff Gearbox 1pc	RH5033-Connect Rod for Servo 2sets "	RH5034-Ball End for Susp. Arm 4pcs " "	RH5035 -Steering Ball End 4pcs "
8888			2 <u>2</u> <u>2 <u>2</u></u>	99
RH5036-Ball End for Servo 4pcs	RH5037-Driven Diff. Gear w/Shaft 1set	RH5038-Drive Diff. Gear 1set	RH5039-Outer Diff. Case Cover 1pc	RH5040-Wheel Rim Coupler Short 2pcs
8888	00			00
RH5041-Rear Wheel Shaft 2pcs	RH5042-Diff Speed Shaft of Rear Wheel 2pcs	RH5044-Fly wheel 1set	RH5049-Steering Fixed Rod 1pc	RH5052-Rear Rim Fixing Shaft 2pcs
44	July 1	0		
RH5071-Fixing Plate 1set	RH5074-Set collar2.1 4pcs	RH5076-Steering Rod Washer 8.5*19.6*1.2	RH5077-Steering Rod Washer 6.2*18*1.5 4pcs	RH5080-Washer 4pcs
13	00	2pcs	00	00
RH5082-Brake Disc Clamp Slice 3pcs	RH5085-Spring of Servo Saver 1pcs	RH5096-6V Battery Pack 1pcs(Option)	RH5098-Antenna Pipe 4sets	RH5099-Oil pipe 1set
3		MIN		
RH5102-Nylon Lock Nut M3 6pcs	RH5103-Nylon Lock Nut M4 6pcs	RH5104-Nylon Lock Nut M5 6pcs	RH5105-Nylon Lock Nut M6 6pcs	RH5108-E-ring 5mm 6pcs
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RH5109-E-ring 6mm 6pcs	RH5110-E-ring 7mm 6pcs	RH5111-Ball Bearing 10*19*7 2pcs	RH5112-Ball Bearing 8*22*7 2pcs	RH5113-Ball Bearing 10*22*6 2pcs
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RH5114-Ball Bearing 12*28*8 2pcs	RH5116-Inner Hex Grub Screw M3*3 6pcs		RH5118-Grub Screw M5*5 6pcs	RH5119-Grub Screw M4*8 6pcs
RH5120-Grub Screw M5*25 2pcs	RH5121-FH Screw M4*16 6pcs	RH5122-FH Screw M4*25 6pcs	RH5123-FH Screw 4*16 6pcs ••••	RH5126-FH Screw M5*10 6pcs
RH5127-FH Screw M4*8 6Pcs	RH5128-FH Screw M5x27 6pcs	RH5130-RH Self Tapping Screw 3*12 6pcs	RH5131-RH Screw 4*16 6pcs	RH5132-RH Screw M3*15 6pcs
		111	111	T T T
RH5134-Umbrella Head Screw 3*6 6pcs	RH5135-RH Self Tapping Screw 4*12 6pcs	RH5136-RH Self Tapping Screw 4*20 6pcs	RH5138-Flange Head Self tapping screw M2.6*15 6pcs	RH5139-Shock Absorber Fixing Screw 6pcs
111	7 7 7	111	T T T	
RH5140-RH Screw M4*20 6pcs	RH5142-RH Screw M4*45 6pcs	RH5143-RH Screw M6*40 6pcs	RH5144-Fixed Pin of Brake Slice Unit 2pcs	RH5153-Tire Units 2sets
111	111			
RH5156-Tire and Sponge 2sets	RH5157-Wheel Rim 2pcs	RH5158-Truck Tire Sponge 2pcs	RH5160-Spark Plug 1pcs	RH5161-Clutch Assy 1set
RH5170-RH Self Tapping Screw M4*6 6pcs		RH5174-Central Gear Bracket 2pcs	RH5175-Gear 56T 1pcs	RH5176-FH Screw M4*106pcs
RH5179-Radio Tray Post 4pcs	RH5180-RH Screw M4*16 6pcs	RH5183-Brake Post 2pcs	RH5184-Brake Tube 2pcs	RH5186-Steering Fixed Rod Holder 1pcs
	777			

RH5189-Receiver Switch	RH5190-E-ring M4 6pcs	RH5191-Lower Susp. Arm Bracket 2pcs	RH5195-Pin for Front Upper Sus. Arm 2pcs	RH5196-Pin for Lower Susp. Arm Bracket 2pcs
	9 9 9 9 9 9	6		
RH5197-Pin for Front Lower Sus. Arm 2pcs2P	RH5198-Front Bulkhead 1pcs	RH5199-Front Diff Drive Cup 1pcs	RH5400-Gear Box Housing 1set	RH5401-Diff. Bevel Gear B. 1pcs
	Ziiii.			
RH5402-Diff. Bevel Gear S. 1pcs	RH5407-BH Screw M5*15 6pcs	RH5408-FH Screw 5*16 6pcs	RH5410-Fuel Tank Mount 4pcs	RH5411-Front Bumper 1pcs
	111			
RH5417-RH Screw 4*23 6pcs	RH5418-Clip 4pcs	RH5430-Fuel Tank 1set	RH5432-Wrench 1pc	RH5434-FH Screw 4*25 6pcs
111	0 0 0	P. P.		
RH5436-Upper Cover of Shock Absorber 4pcs	RH5439-Adjusting Ring for Shock Absorber 4pcs	RH5444-Shocks Absorbe Gasket 4pcs	RH5445-Spacer for Shock Absorbers 4pcs	RH5446-Shock Absorber Clip 4pcs
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RH5447-Fixing of Shock Spring	RH5448-Large Size Shock Piston 4pcs	RH5450-Shock Piston Sealing Cap 4pcs	RH5451-Shock O-ring 4pcs	RH5452-Shock Absorbers O-ring 8pcs
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RH5455-Gear Cover 1pc	RH5458-RH Screw M4*12 6pcs	H0005-Throttle Servo 15kg/cm 1pcs	H0006-Steering Servo 30kg/cm 1pc	R0004-Printed Body 1pc
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R0005-Printed Body 1pc	R0009-Fail safe(Option)	P0002-CY27cc Engine 1pc(Option)	P0003-CY29cc Engine 1pc(Option)	P0004-CN28.5cc Engine 1pc
	-3			

RH5490-Front shock body 2pcs	RH5491-Front shock axle 2pcs	RH5492-Front shock spring 2pcs	RH5493-Rear shock body 2pcs	RH5494-Rear shock axle 2pcs
RH5495-Rear shock spring 2pcs	RH5496-Engine mount (right) 1pc	RH5497-Gear 14T 1pc	RH5498-Engine mount (left) 1pc	RH5499-Fixed brake Block 2pcs
RH5501-Gear 46T 1pc	RH5502-Gear cover 1pc	RH5503-Gear 42T 1pc	RH5504-Brake post 1set	RH5505-Gear mount 1pc
RH5506-Spacer Sleeve	RH5507-RH Screw	RH5508-Washer 14.5*	RH5509-Spacer 4pcs	RH5510-Shock upper holder 4pcs
2pcs	M4*20 6pcs	6.5*0.8 6pcs		TIOICCI 4pcs
•		000	• •	20
RH5511-Front shock tower 1pc	RH5512-Front upper sus. arm 2pc	RH5513-Front lower sus. arm 2pc	RH5514-Pivot ball nut 4pcs	RH5515-Pivot ball spacer 4pcs
M				000
RH5516-Pivot balls 4pcs	RH5517-Steering arm 2pc	RH5518-Washer 12* 8.5*2.0 4pcs	RH5520-Rear Susp. arm 2set	RH5521-Rear drive shaft 2pcs
20 20	2	0 0		
RH5522-Rim stop ring 4pcs	RH5523-Rear susp. arm 2pcs	RH5524-Rear shock tower 1pc	RH5525-M5*28 Round head screw 6pcs	RH5526-Washer 15* 10.1*0.2 6pcs
		4		
RH5527-Steering rod 2set	RH5528-Upper plate linkage 1pcs	RH5529-Throttle linkage 1set	RH5530-Brake linkage 1set	RH5531-Front body mount 2pcs
		No.		

		raits List		
RH5532-Roll cage front linkage 1pc	RH5533-Front body mount bracket 2pcs	RH5534-Roll cage main 1set	RH5535-Rear body mount 2pcs	RH5536-Roll cage rear linkage 1pc
	4 4	THE		
RH5537-Foam spacers 6pcs	RH5538 M4*20 screw 6pcs	RH5539-Central trans- mission cover 1pc	RH5540-Gear 42T 1pc	RH5541-Front shock 2set
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RH5541-Rear shock 2set	RH5543-Front universal joint shaft 2pcs	RH5544-Central front drive shaft 1pc	RH5545-Center rear drive shaft 1pc	RH5546-Side Plate 1set
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RH5547-Chassis plate	RH5549-Bumper spring 2pcs	RH5550-Bumper spring holder r. 2pcs	RH5551-Bumper spring set	RH5552-Shock cap 4pcs
	ace ace	4 4		5 5
RH5500-Brake disc 2pcs	RH5172-Bracket for center trans. drive cup	RH5487-Round head screw M4*10 6pcs	RH5553-Front Wheel shaft 2pcs	RH5167-Spacer for Shock Absorbers 4pcs
		777		
RH5554-Gear case				
washer 3pcs				
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Upgraded Parts List

RH5206-Steering units 1set	RH5214-Diff gear box 1pc	RH5217-Rear axle sleeve unit 1set	RH5220-Alum muffler 1pc	RH5222-Air cleaner 1set
		10-QI	4	
RH5224-Chromed buggy rims 2pcs	RH5225-Chromed truck rim 2pcs	RH5231-Center gear box mount 2pcs	RH5233-Lower holder for shock aborber 4pcs	RH5248-Alum steering arm 2pcs
			000	-16
RH5249-Front upper susp. arm(alum.) 2pcs	RH5250-Front lower susp. arm(alum.) 2pcs	RH5251-Rear lower susp. arm(alum.) 2pcs	RH5252-Alum front shock tower 1pc	RH5253-Alum rear shock tower 1pc
RH5254-Alum gear mount 1pc				