# INSTRUCTION MANUAL

# 1/10 SCALE GAS POWERED 4WD OFF-ROAD TRUCK



Before Beginning Assembly, Please Read The Instruction Thoroughly.

#### Feature:

Fuel tank with vast capacity, easily to refuel with super calibre, prevent overflowing and leaking.

Front/rear umbrella gear differential and differential box with leak protection.

With 13.8g super-light-weight flywheel, make the engine smaller in load.

Adrustable-bounce, make spring buffered.

Differential with 5pcs of screw Only, fixing/disasembling is easy.

The all-metal disc type brakes and super thick asbestos brake block.

Flexuose 6061 aluminum chassis, thickness:2.5mm

Aluminum alloy in 6061, Anodic heavy-duty adjustor.

Variable shockproof spring

Double sponge filter, dustproof result is better.

7.5 mm oversize gas vent, 56 mm resonance.

# Can be upgraded:

Carbon fibr upper plate

All-metal oil pressure type shockproof device.

Cross-linked universal drive shaft.

All-metal exhaust pipe.

Ball bearing for whole vehicle

Exhausting backward engine (need to match platform starter or bacilliform starter).

## TECHNICAL DATA

Length: 400mm
Width: 310mm
Height: 185mm
Wheelbase: 275mm

Ground Clearance: 30mm
Gear Ratio: 13.34:1
Engine: 18exp

Diameter Of Wheel: #120\*60mm

Thack: 150mm

#### 1/10 SCALE TRUCK UPGRADE PARTS

02115-Metal upper plate

02124-Metal exhaust pipe

02154-Engines(japan

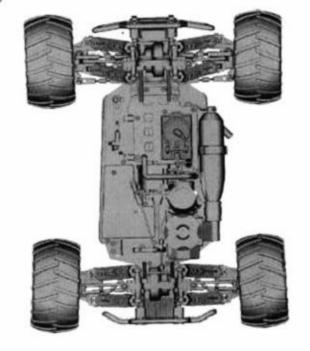
18CXP)

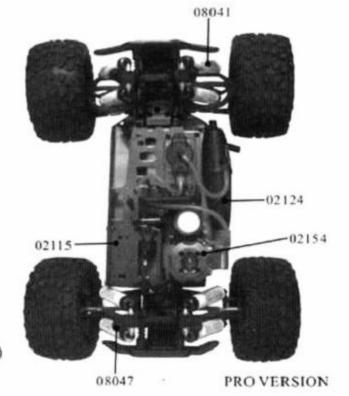
08047-Aluminium rear

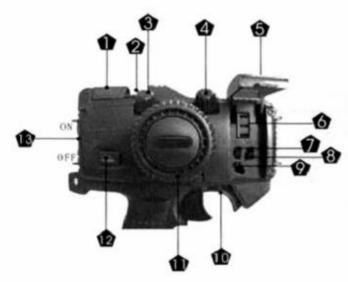
axle mount

08041-Metal shock absorber

(Please referrence to parts make list in last pages)

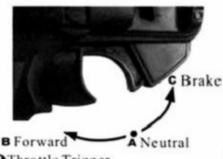






- 1. Antenna Cap
- 2.Antenna
- 3. Throttle Inching Control
- 4. Steering Inching Control
- 5.Protective Housing
- 6. Working Indicator Lamp
- 7. Reverse Direction Switch

- 8. Throttle Reverse Direction Switch
- 9. Throttle Adjustment Switch
- 10. Throttle Trigger
- 11.Steering Wheel
- 12.Crystal
- 13. Power Supply Switch



OThrottle Trigger

A. Neutral B. Forward C. Brake

OSteering Wheel

To control forward speed and brake To control steering wheel right/left

A. Neutral B. Left C. Right

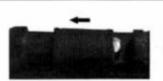
Brake **c**Right

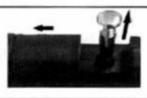


- 1 Throttle Trim To precisely adjust the neutral position
- OSteering Trim To precisely adjust the neutral position

G Transmitter Antenna To transmit radio waves







Loading batteries

! Caution!

If the batteries are loaded with improper terminals, the batteries may leak. Do not mix different batteries. Always use same kind and fresh new batteries.

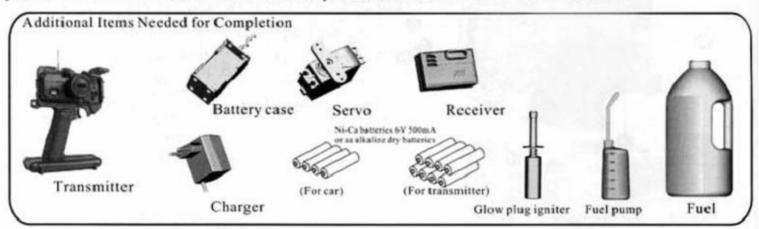
To avoid uncontrollability, Please do not use chargeable battery in 1.2Volt, alkaline battery in 1.5 Volt is more better.



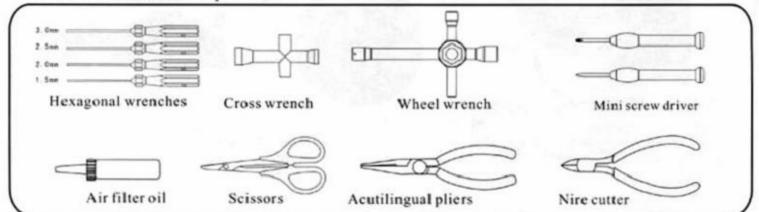


Following tiems are necessory for completition for the vehicle. They are not included in this kit (expect for those we noted), and should be purchased from local hobby shop. (Specified by which kind of vehicle you purchase.). Be sure to read the instructions completely before assembling.

Note: The engine of the vehicle need properly adjusting under condition of idle position before operating your vehicle. Otherwise, both the life and the performance of the vehicle will be affected.

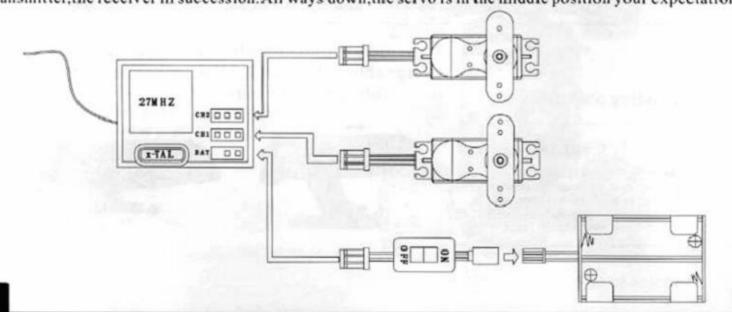


#### Tools Needed For Assembly



## 2-channal Radio Transmitting System

Please read the instructions provided with your radio system carefully before running your vehicle. The servo need to be set at the center position before assembling. To set the servo at the idle position switch on the transmitter and the receiver. Set the servo trim arm at the center position, and turn off the transmitter, the receiver in succession. All ways down, the servo is in the middle position your expectation.



# Pre-Run Check

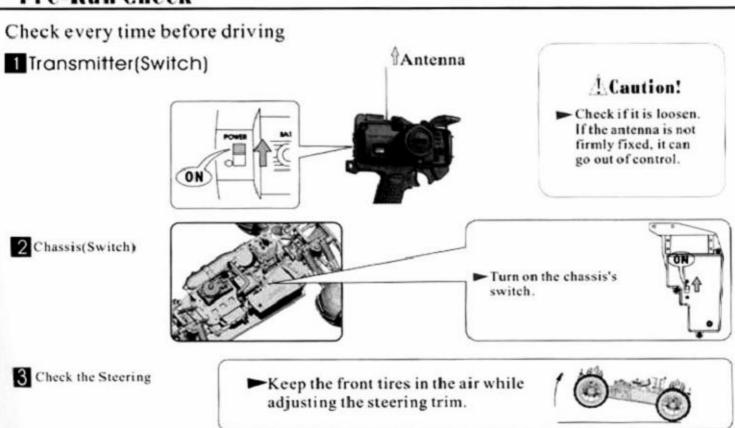
Neutral

Right

Left

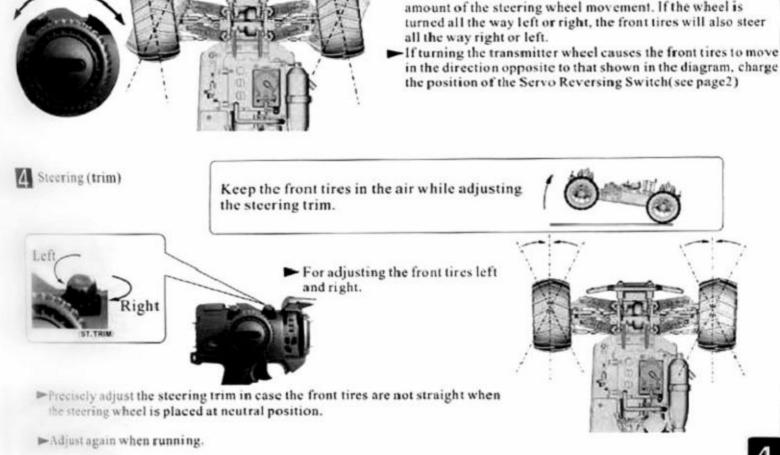
Left

Right



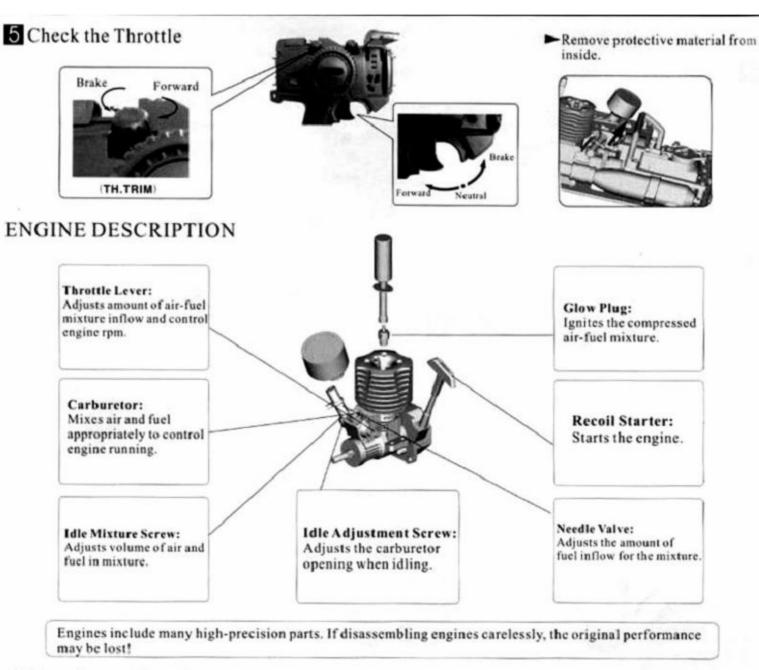
Operate the steering wheel to check if the front tires move correctly.

\*Amount of front tire the movement varies according to the



Right

Left



## Adjust the needle valve

 Gently screw in the needle valve (clockwise rotation)

## Idle Mixture Screw Position

#### CHECHLIST BEFORE RUNNING

- Ensure all screws are securely tightened.
- Ensure all moving parts move without binding.

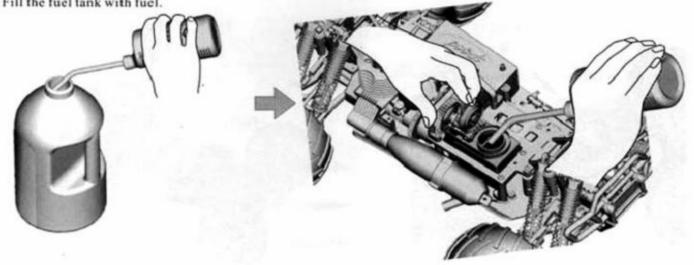
  Are they greased for non-binding movement?
- Install an air cleaner. Ensure it is clean and not clogged.
- Ensure the fuel lining is proof. With no cracks. Ensure it is not clogged.
- Ensure the muffler and exhaust are damage-free.
- Ensure the radio batteries are fresh. Are they securely installed?
- Ensure servo's and linkages move without binging.
- Ensure the area of operation is safe.
  - Ensure nobody is on your frequency at the same time.

Refer to the engine instruction manual and unscrew the needle valve as specified (counter clockwise rotation)

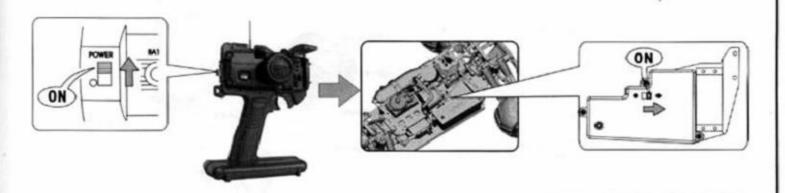
0.5mm



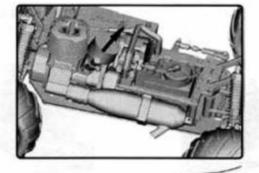
II Fill the fuel tank with fuel.



2 Switch ON the Transmitter, than the Receiver.



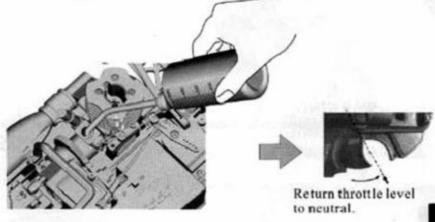
3 Remove the Air Filter.



Open the throttle fully, and put 2-3drops of fuel into the carburetor.

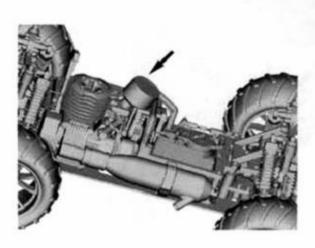


**Biggest accelerator** 



#### 5 Attach the Air Filter

## 6 Connect the glow plug heater to the glow plug.

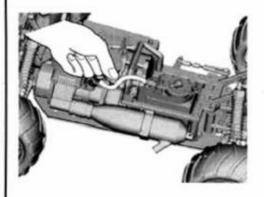


7 Hold the car steady, then pull the recoil starer cord.

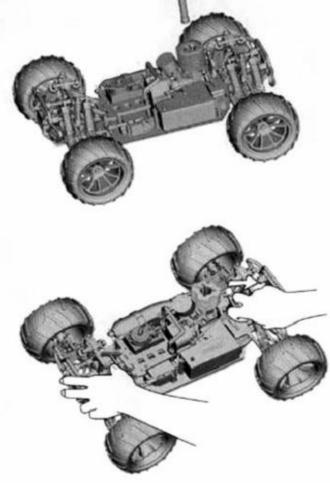


►Do not pull starter cord too hard.

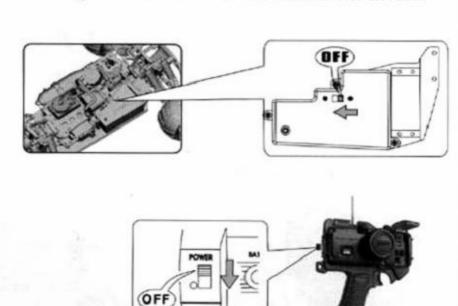
#### STOPPING THE ENGINE

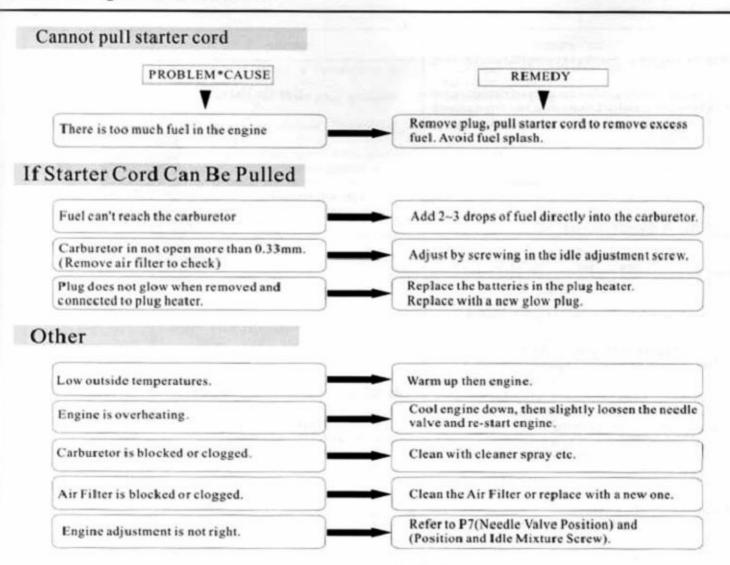


WARNING
The engine and muffler get
hot! Do not touch them
right after operation



2 Turn off receiver and transmitter in turn.





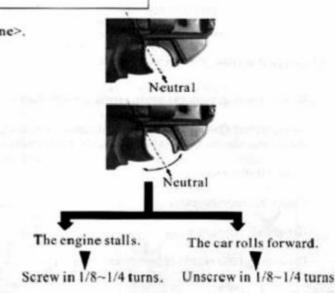
## BREAK IN

The break-in is necessary to "prepare" brandnew engines to regular and smooth running! If you fail to break-in an engine,
the lubricating oil inside does not circulate and the engine will the engine will be caked with burns; running becomes
difficult and engine life is shorted.

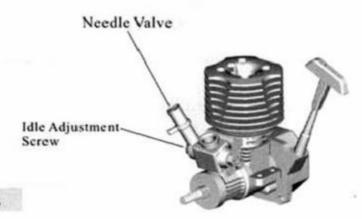
A Caution During the break-in, do not operation the engine with high rpm! Serious damage may be the result.

- I Start the engine as specified in the chapter < Way of Starting Engine>.
  - Move the throttle control to slow.
- 2 Idle Adjustment Screw(Idle Rpm Adjustment)
  - ➤ Adjust with throttle control in neutral.
  - ➤ When the throttle control is in neutral, the car does speed off even!
- Next, continue performing the break-in while running the car. Always screw in the needle valve 10~20 at a time in order not to damage the engine.

At this moment, do not tighten the needle valve any further.



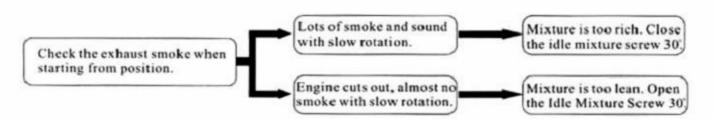
- 4 Run the engine 2-3 tanks to complete the break-in.
- The needle valve setting for normal engine running lies between 1 and 1/2 turns unscrew from closed position. Screwing it further in, excessive heat may be generated.



## Engine Adjustment

- Adjust in the order and and once the break-in is completed.
- Needle Valve Adjustment (Maximum Rpm Adjustment)
- O Start the engine as explained in the chapter < Way of Starting Engine > and run your car.
- Watch the speed of your car running down a straight with the throttle control moved to high. When screwing in the needle valve 10~20', speed increase. When your car's speed reaches the peak, the needle valve setting is optimal.
- Adjusting the idle mixture.

- When screwing the needle valve further in, exhausts become in-visible and rpm decrease. Running the engine with this setting damages the engine. Immediately unscrew the needle valve. Note that for normal running, the needle valve is screwed out 10~20' from the valve's optimal setting position!
- Adjusting for acceleration from low speed.



#### Maintenance

- Before putting your car aside, draw out any fuel from the tank. Next, restart the engine to combust remaining fuel. Leaving fuel inside the engine will make engine start difficult.
- Wipe off dirt and oil.
- Check all moving parts.
- Grease all moving parts.
- Disconnect the receiver batteries.

PROBLEM	CAUSE	SOLUTION
ENGINE DOES NOT START.	<ol> <li>Puel tank is empty or carburetor is not primed.</li> <li>Bad glow plug or dead plug booster battery.</li> <li>Puel lines, air cleaner, or muffler is clogged.</li> <li>Engine is flooded due to over-priming.</li> <li>Carburetor not adjusted properly.</li> <li>Servo linkage not adjusted properly.</li> </ol>	1.Fill fuel tank with fuel and prime throttle. 2.Replace glow plug and recharge battery. 3.Clean or replace clogged part(s). 4.Remove glow plug and discharge fuel. Also test glow plug. Replace if defective. 5.Set idle and main/slow needle adjusting screw to standard starting position. 6.Move servo to neutral then re-adjust.
ENGINE START BUT THEN STALLS.	<ol> <li>Puel tank is empty.</li> <li>Puel lines, air cleaner, or muffler is clogged.</li> <li>Carburetor not adjusted properly.</li> <li>Engine is overheated.</li> </ol>	1.Fill fuel tank with fuel. 2.Clean or replace clogged part(s). 3.Re-adjust idle and main/slow needle adjusting screw. 4.Allow engine to thoroughly cool down and open main needle adjusting screw 30 degree turn.
BAD REACTION AND RESPONSE FROM ENGINE	1.Carburetor not adjusted properly. 2.Low fuel pressure from muffler.	1.Re-adjust main/slow needle adjusting screw.     2.Properly install pressure line from muffler to fuel tank.
CAR IS HARD TO CONTROL	1.Weak transmitter and/or receiver batteries.     2.Low reception from radio antennas.     3.Servo linkage not adjusted properly.	1.Recharge or replace batteries. 2.Pully extend transmitter and receiver antennas. 3.Move servo to neutral, then re-adjust.

#### SAFETY PRECAUTIONS

- · Always run your cau with the body shell mounted!
- Avoik changing the running direction too often and too abruptly.
- . Do not run your car on ground:
- It may happen that changing the running direction is difficult c specially when driving up a steep
   Way or running on bumpy ground. This, however, does not indicats any trouble.
- Check all screws, nuts, etc. on a regular basis for looseness.

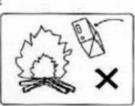
WARNING: In order to avoid accidents and personal injury, be sure to observe the following:

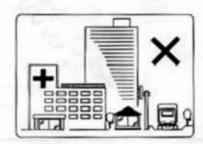
#### Handling fuel safely:

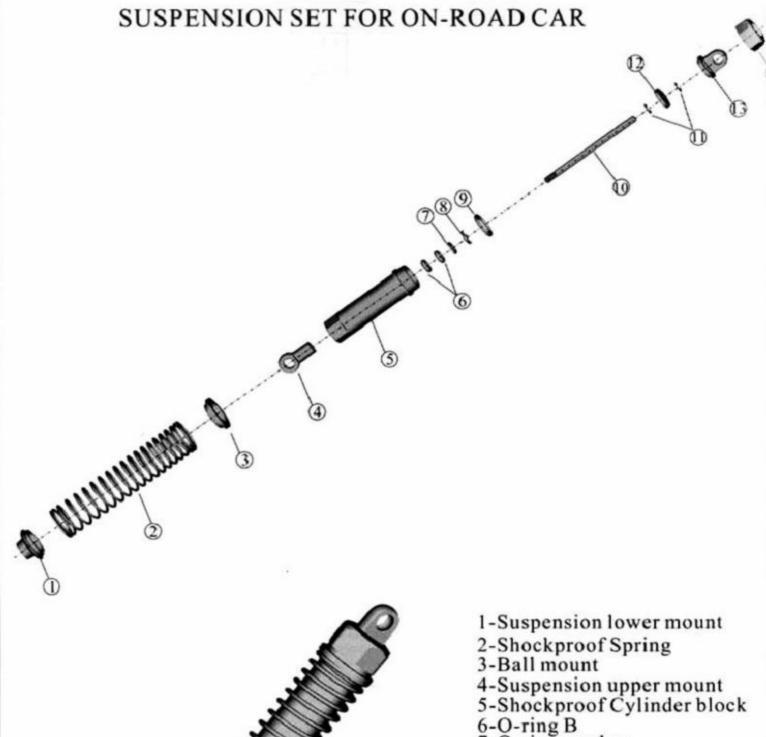
- Handle fuel ONLY outdoors!
- ONLY use glow fuel for radio control models!
- NEVER use fuel indoors or in places with open fires and sources of heat!
- NEVER swallow fuel or let it into your eyes!
- Store fuel ONLY in cool, dry and dark places out of children's reach! Tightly shut the cap!
- Do not dispose of empty fuel cans into a fire!
   There is danger of explosion!
- Do not put fingers or any objects inside rotating and moving parts!
- Right after use, do not touch the engine and muffler!
  Danger of burning yourself!

#### OPERATING PRECAUTIONS

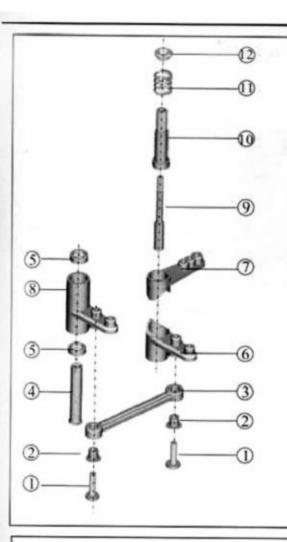
- · Operating yore model safely.
- WARNING:do not operate your model in the following places and situations: (non-observance may lead to accidents!)
- Operate your model ONLY in spacious areas with no people around!Do NOT operate it:
  - 1. On roads!
  - 2. In places where children and many people gather together!
  - 3. In residential and pards!
  - 4. Indoors and in limited space!
- Non- observance may lead to injury to personnel and damage to property!
- · Always check the radio batteries !
- With weak dry batteries, transmission and reception of the radio fall off. You may lose control If your model when operating it under such condition. This may also lead to serious accidents.
- Keep in mind that people around you may also operate a radio control model!
- Never share the same frequency with somebody else at the same time!
   Signals will be mixed and you will lose control of your model. This may also lead to accidents!
- When the model is behaving strangely, immediately stop the model and check the reason. As long as the problem is not cleared, do not operate it! This may lead to further trouble and unforeseen acciderts!



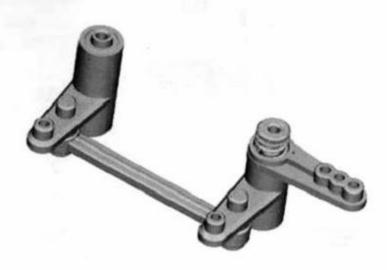




5-Shockproof Cylinder block 6-O-ring B 7-O-ring washer 8-6pcs of teeth Clip 9-O-ring A 10-Main axles of suspension 11-E-clip 12-Piston 13-Ball of shockproof 14-Cap of shockproof



# STEERING SET



1-BT 3\*14 BH Screw

2-Steering liner

3-Steering shaft

4-axes of buffer A

5-Bear φ8\*5\*3

6-Lower of buffer

7-Upper of buffer

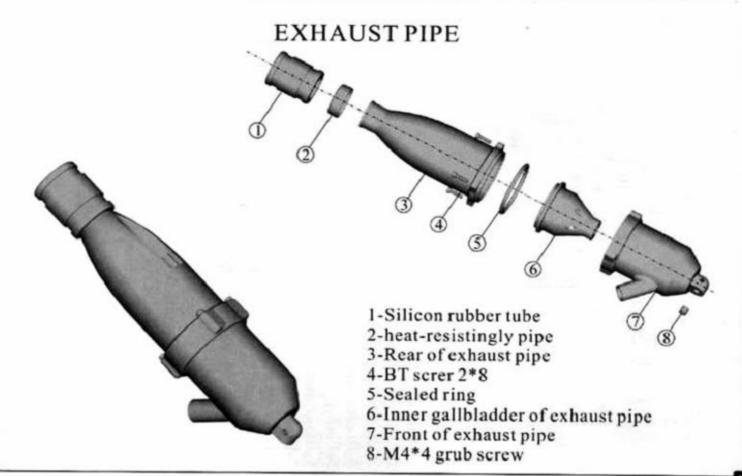
8-Translatiion arm

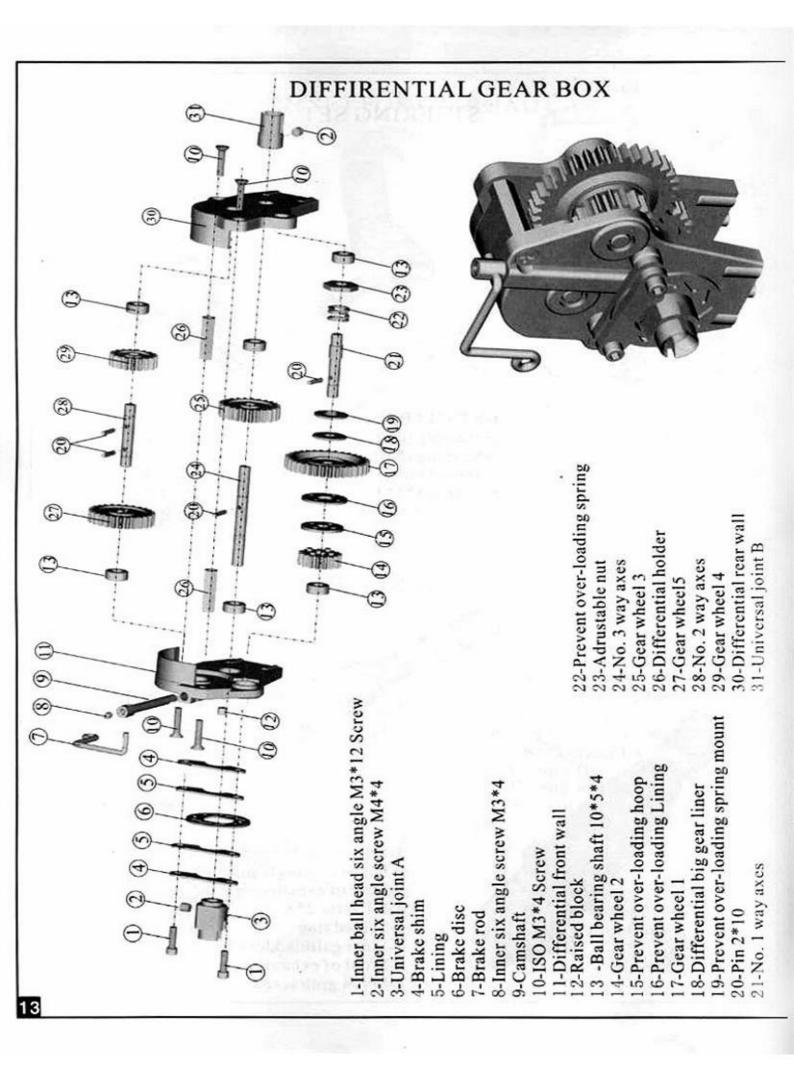
9-Main axes of buffer

10-axes of buffer B

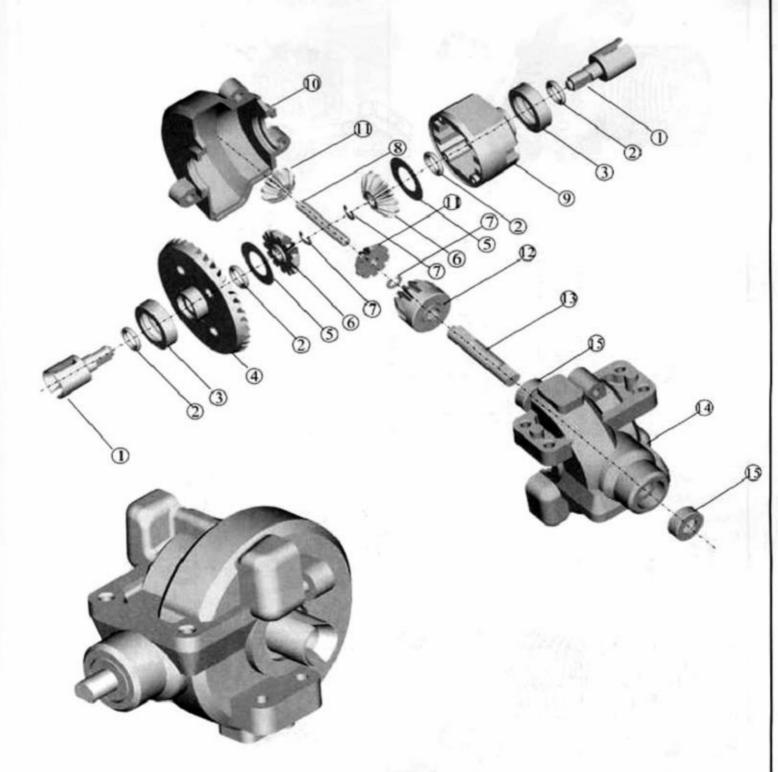
11-Spring of buffer

12-Adrustable ring of buffer





# **GEAR BOX**



1-Universal joint C

5-Steel washer

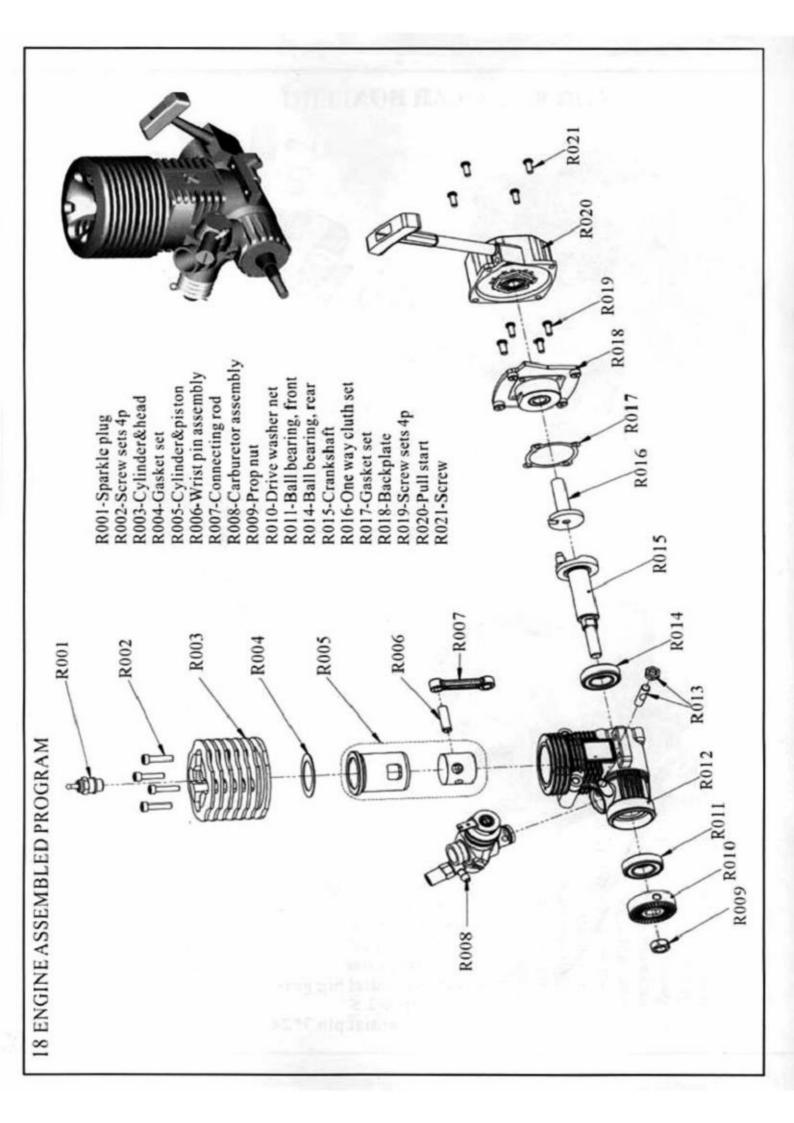
6-Defferential big gear 7-E-clip Φ2.5 8-Defferential pin 3\*24

9-Defferential box

2-O-ring 10-Front of Gear box
3-Sliding bearing 15\*10\*4 11-Defferential small gear
4-Driven gear 12-Driver gear

12-Driver gear 13-Driver shaft

14-Rear of gear box 15-Bearing 10\*5\*4



02003- Universal lever 61 mm*2pcs	02004-Fuel Tank complete set	02011-Handle rod	02013-Rear axes holder
		5	
02014-steering arm	02015-Door type mounts 2pcs	02016-Universal joint B	02017-Arm's strengthen
A A	E 103	00	6 1 3
02021-Rear arm holder	02022-Front arm holder	02107-Engine gear set	02024-Differential gear set
02025-Steering A	02026-Exhaust pipe	02027-Heat-resistingly pipe	02028-Air filter w/ sponge
		0	
02029-Differential big steel gear	02030-Driver gear	02031-Exhaust connector	02032-Universal joint C
			13/19
02033-Axle	02034-Universal joint A	02036-Front lower shaft pin A 2pcs	02037-E-clip 12pcs (Φ7. Φ4.Φ2.5,Φ2.3)
00	13		3333
-	-		

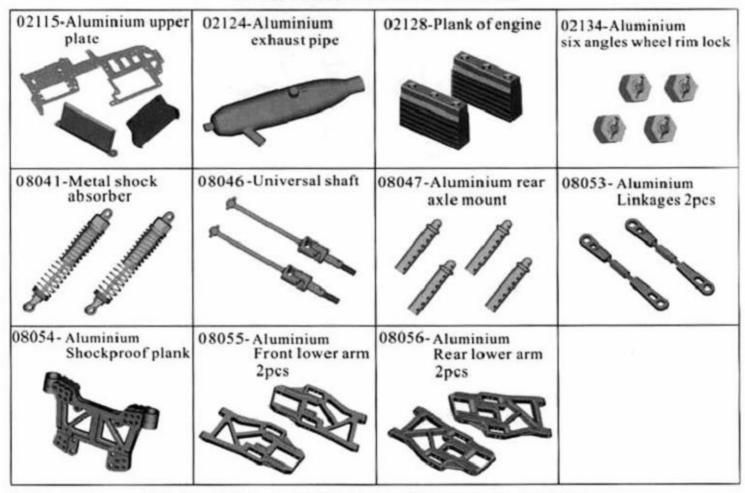


02073-Servo	02074-Steering connecting rod	02075-Steering B	02078-O-Ring 12pcs
			0000
02079-Oil bearing	02080-Oil bearing φ5*φ10*4-8pcs	02081-BT 3*8 BH Screw 6pcs 7 7 7	02082-BT 3*10 BH Screw 10pcs
02083-BT 3*12 BH	02084-BT 3*18 BH	02085-BT 2*8BH Screw 8pcs	02086-BT 2*10 BH
Screw 6pcs	Screw 4pcs		Screw 10pcs
02087-TPF 3*10 FH	02088-TPE 3*14 FH	02089-TPE 3*15 FH	02090-TPE 3*25 FH
Screw 15pcs	Screw 13pcs	Screw 9pcs	Screw 4pcs
02092-ISO 3*10 Screw	02093-M 3*10 Cap	02094-M 3*28 Cap	02095-M 3*8 Cap screw
8pcs	screw 5pcs	screw 4pcs	
02096- 3*10 cap screw	02097-3*14 cap screw 6pcs	02098-M3*3 grub screw	02099-M 4*4 grub
6pcs		8pcs	screw 10pcs

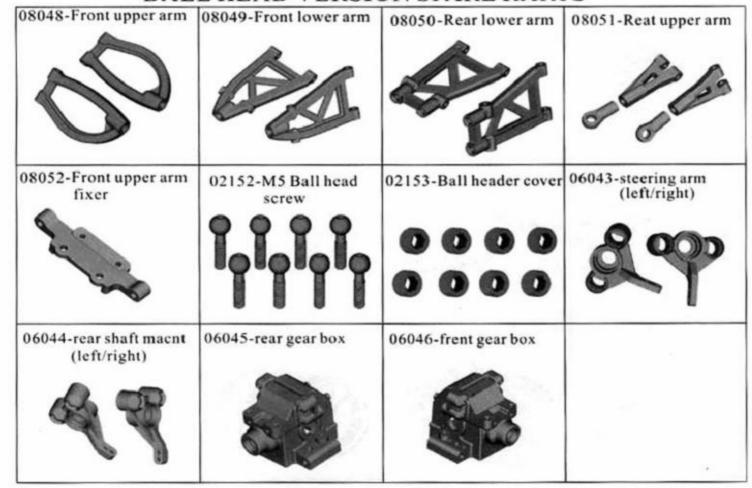




## UPGRADE SPARE PARTS



# BALL HEAD VERSION SPARE RARTS



# OTHER NEED TOOLS OR PARTS

