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# 1/14 Scale Earth Hauler 797F Hydraulic Mining Truck (VV-JD00020)



1. Truck size: Length 1015MM, Width 685MM and Height 560MM.
2. Truck weight: 100KG, Remote control 0.5KG
3. Main materials include Alloy aluminum, metal board, yellow copper, chrome steel and PC board
4. Minimum ground clearance: 95MM

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5. Capacity: 100KG for scattered materials (such as sands and crushed stones) and the maximum capacity is 200KG.

6. Power voltage: 12V, XT90 connector. We commend an a lipo battery with over 25C 3S lipo whose size range is 240\*130\*45MM (length/width/height).

According to test results, a 22000MHA lipo battery can continually work for up to 65 minutes with full load and a 38A lead-acid battery can continually work for up to 35 minutes with full load.

There are three positions to place the battery. The best option for lipo battery is the left side of the cab, for the purpose of a more convenient charge. The second position is between the two chassis. Its space dimension is 175\*140\*160MM (length/width/height). For a lead-acid battery, it's best to choose one with a bigger capacity as long as the size is eligible. A 38A lead-acid battery was used to run test this truck. The last position is between the two front wheels. The space dimensions are 270\*140\*250MM (length/width/height).

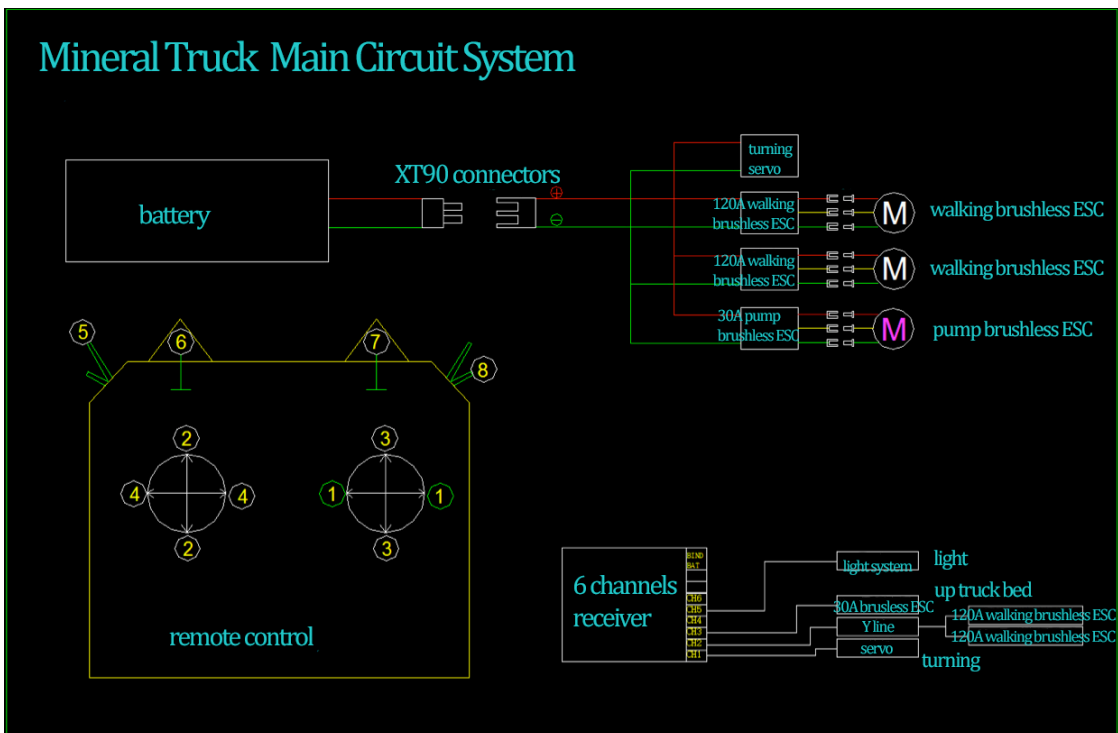
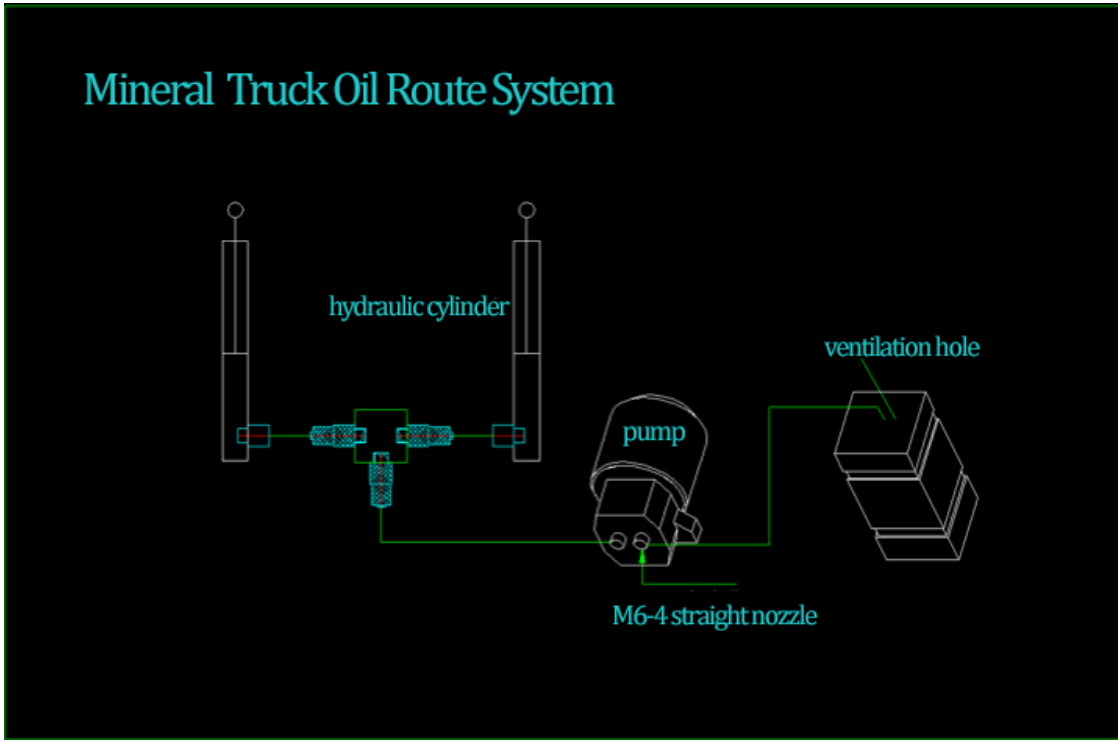
7. Maximum speed: 10KM/H

8. Remote control: FS-I6S

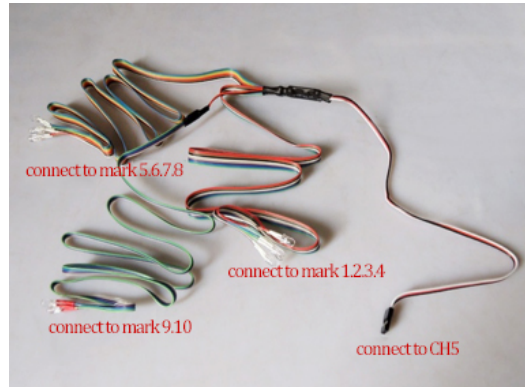
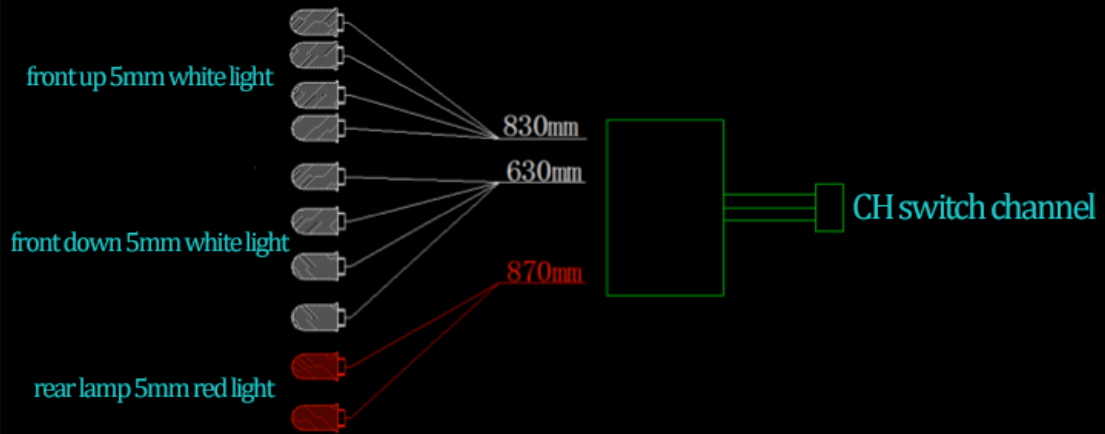


9. Hydraulic oil: #32 Hydraulic Oil, 280ML. Mobile 32 Hydraulic Oil 14oz (Z-X0042).

10. Light system: Needs to purchased separately. 1/14 Scale Earth Hauler 797F Hydraulic Mining Truck Light System (VVV-S0200).



# Mineral Truck Light System



**Form 1: Parameter List of QuicRun-WP16BL30**  
(Parameters in the form below indicate factory defaults)

Programmable Items	Option 1	Option 2	Option3	Option4	Option 5	Option 6	Option 7	Option8	Option9
1.Running Mode			Fwd/Rev						
2.Drag Brk Force								100%	
3.Low Voltage Cutoff				3.0V/Ce ll					
4.Start Mode (Punch)					Level5				
5.Max. Brk Force			75%						
6.Max. Rev Force				100%					
7.Initial Brk Force		0%							
8.Throttle Range		9%							
9.Timing				11.25de g					

Note 1: Fwd=Forward, Rev=Reverse, Brk=Brake

Note 2: When setting the "automatic identification" mode, the battery pack can only be recognized as 2S, 4S and 6S Lipo. Because each adipose cell's normal voltage is from 2.6V to 4.2V, it is not easy to have a correct calculation on the voltage of all adipose cells.

### Programmable Items List

Programmable Items	Programmable Value								
	Option 1	Option 2	Option3	Option4	Option 5	Option 6	Option 7	Option 8	Option9
1.Running Mode			Fwd & Rev						
2.Drag Brk Force								100%	
3.Low-Voltage Cutoff				3.0V/ce ll					
4.Start Mode (Punch)					Level5				
5 Max. Brk Force				100%					

### Mineral Truck Servo Specifications:

Working voltage: 12V~24V(DC) (Any voltage between this range is okay)

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No-load rotating current: <500mA

Maximum torque: 180kg.cm(24V) (experimental result, instead of theoretical value)  
1764N.cm(24V) (experimental result, instead of theoretical value)  
90kg.cm(12V) (experimental result, instead of theoretical value)  
882N.cm(12V) (experimental result, instead of theoretical value)

Angel speed: 0.5s/60°(it takes 0.5s to turn 60°), when using 24V.  
1.0s/60°(it takes 1.0s to turn 60°), when using 12V.

Rotating angel: The Maximum angel is 300° (any angle among this range can be set up).

Input mode: Pulse signal (remote controller, multi-channel controller, single chip computer)  
or analog voltage signal (potentiometer)

Range of pulse signal input: 0.5ms-2.5ms, can fit all multi-channel controllers, 1ms-2ms  
model aircraft remote controls, "single-chip programming" and "Arduino" and so on.

Range of voltage signal input: 0V~+5V

Accuracy: 0.32°

Weight: 530G

Gears' material: steel

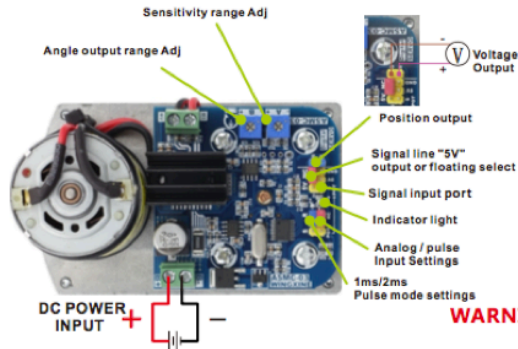
Total size: 95.5mm X 60.5mm X 102.6mm

**High torque servo series  
ASMC-03 series  
RC PULSE/Analog Voltage Control**

**WINGXINE**

ebay ID : wingxine

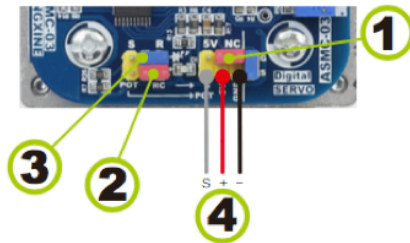
<http://www.aliexpress.com/store/325585>



1. Power steering line basis having indicated polarity wiring.
2. Potentiometer A: used to adjust the servo motion sensitivity.
3. Potentiometer B: used to adjust the rotation angle range of the steering gear shaft.  
Turn the steering angle and contraction ratio of the input signal. With mechanical steering midpoint symmetry contraction.
4. position output: for external devices coarse detection steering angle is actually running. Input voltage range of 0V ~ 5V. The effective operation of the correspondence between the angle and voltage is: 0° to 0.22V  
300° to 4.78V
5. Indicator light: LED is flashing, servos work properly.
6. Mode settings: See description below.

**WARNING: The power input reverse will burn servos directly, please check when wiring!**

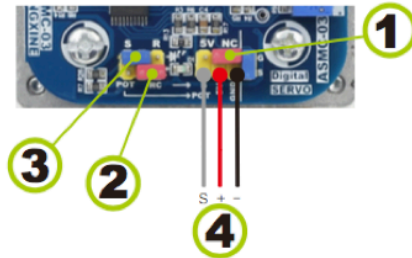
**RC MODE  
("1ms" Pulse Width Mode)**



- 1, the jumper settings "NC" position.
- 2, the jumper settings "RC" position.
- 3, the jumper is set in "R" position.
4. (1)"RC" pin is signal input.  
(Servo controller "S" pin or RC receiver "S" pin, generally are used on model aircraft "S" indicates)  
(2) "GND" pin connected to negative signal line.  
(Servo controller "-" foot or remote control receiver "-" feet, generally are used on model aircraft "-" indicates)

**WARNING: The servo an independent power supply, so "+" does not require wiring.**

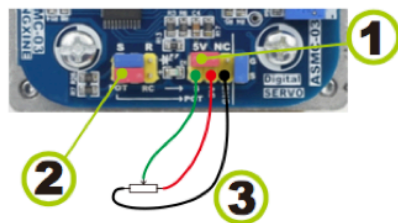
**RC MODE  
("2ms" Pulse Width Mode)**



- 1, the jumper settings "NC" position.
- 2, the jumper settings "RC" position.
- 3, the jumper is set in "S" position.
4. (1)"RC" pin is signal input.  
(Servo controller "S" pin or RC receiver "S" pin, generally are used on model aircraft "S" indicates)  
(2) "GND" pin connected to negative signal line.  
(Servo controller "-" foot or remote control receiver "-" feet, generally are used on model aircraft "-" indicates)

**WARNING: The servo an independent power supply, so "+" does not require wiring.**

**Voltage input or Potentiometer input MODE**



- 1, the jumper settings "5V" position.
- 2, the jumper settings "POT" position.
3. (1) signal input terminal labeled "POT" pin is connected to the potentiometer wiper.  
(2) labeled "5V" and "GND" pins are connected to the potentiometer two fixed ends.  
If the input voltage directly controls the time to pick "5V" pin "the 1st position" jumpers set in the "NC" position, just pick "POT" and "GND" pin. Input voltage range of 0V to +5 V (DC).

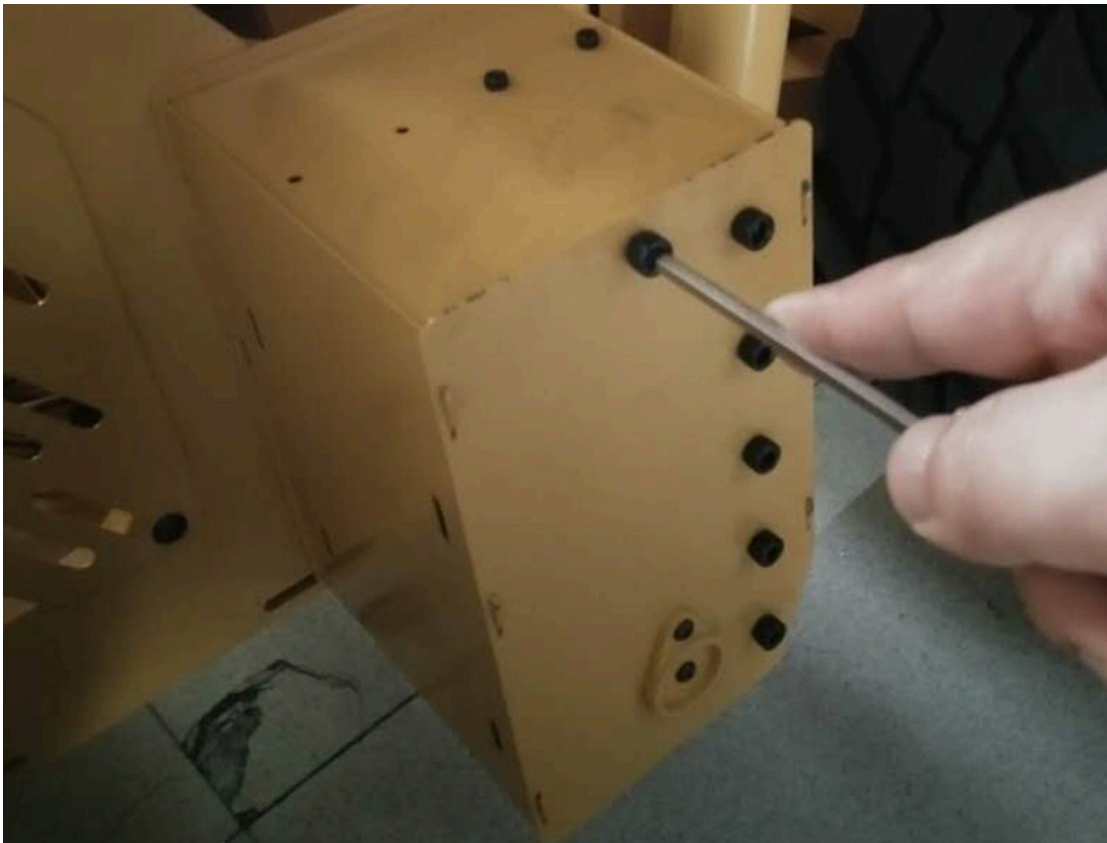
**WARNING:** 1, the steering gear output "+5 V" power supply can only meet the potentiometer, Do not use servos to supply power to other equipment.  
2, the potential selection: 10k, 50k, 100k, potentiometer with resistance greater than 10k.

**ALFS**

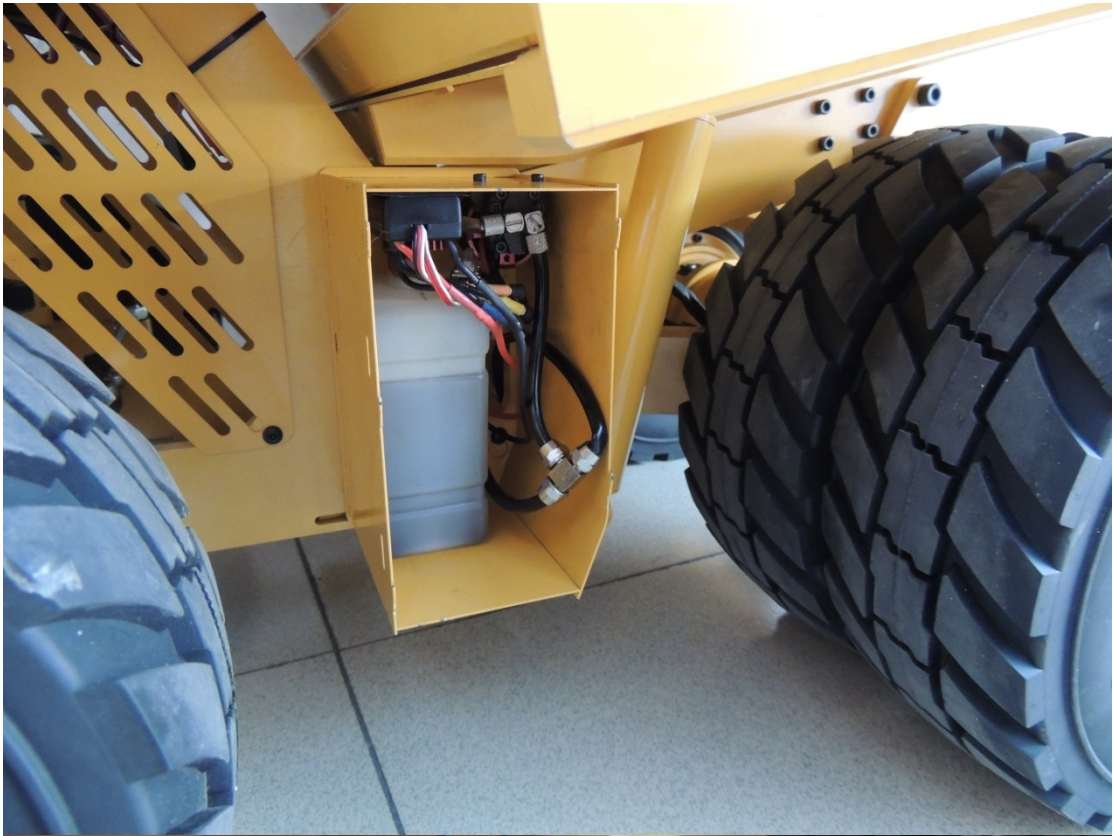
wingxine@hotmail.com

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How to pour out oil:







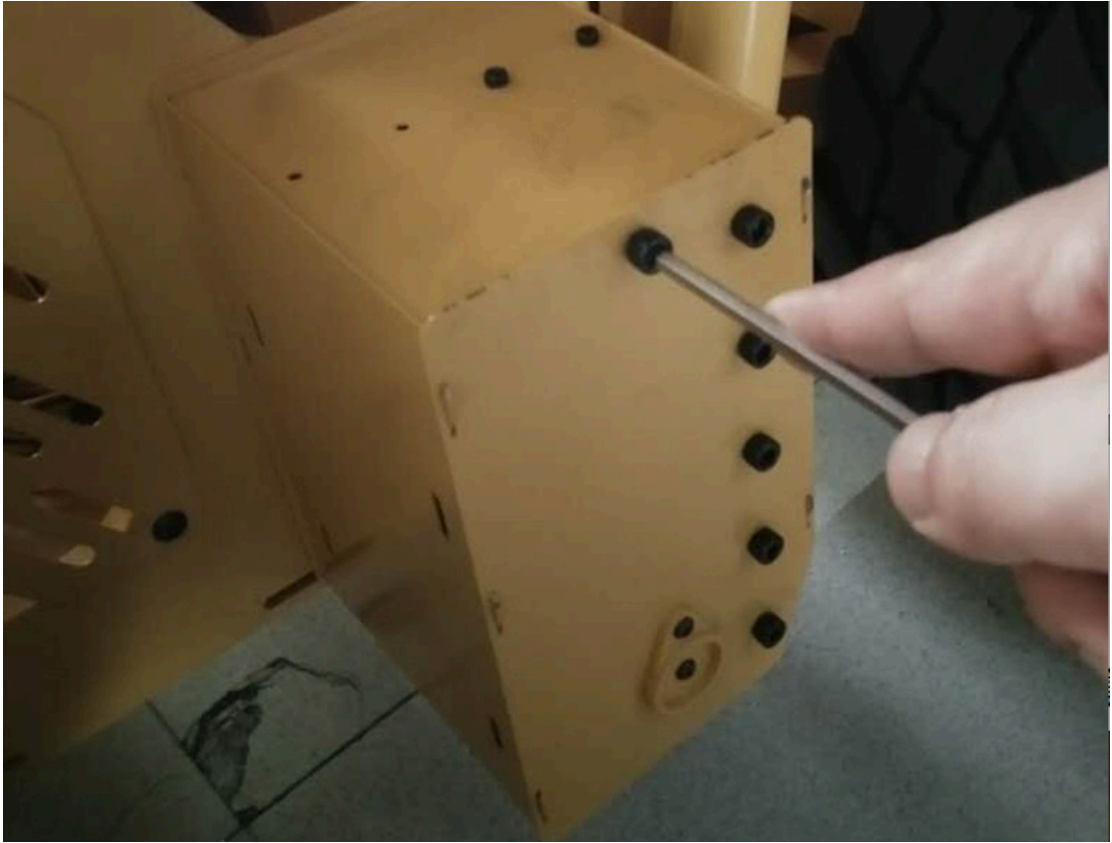




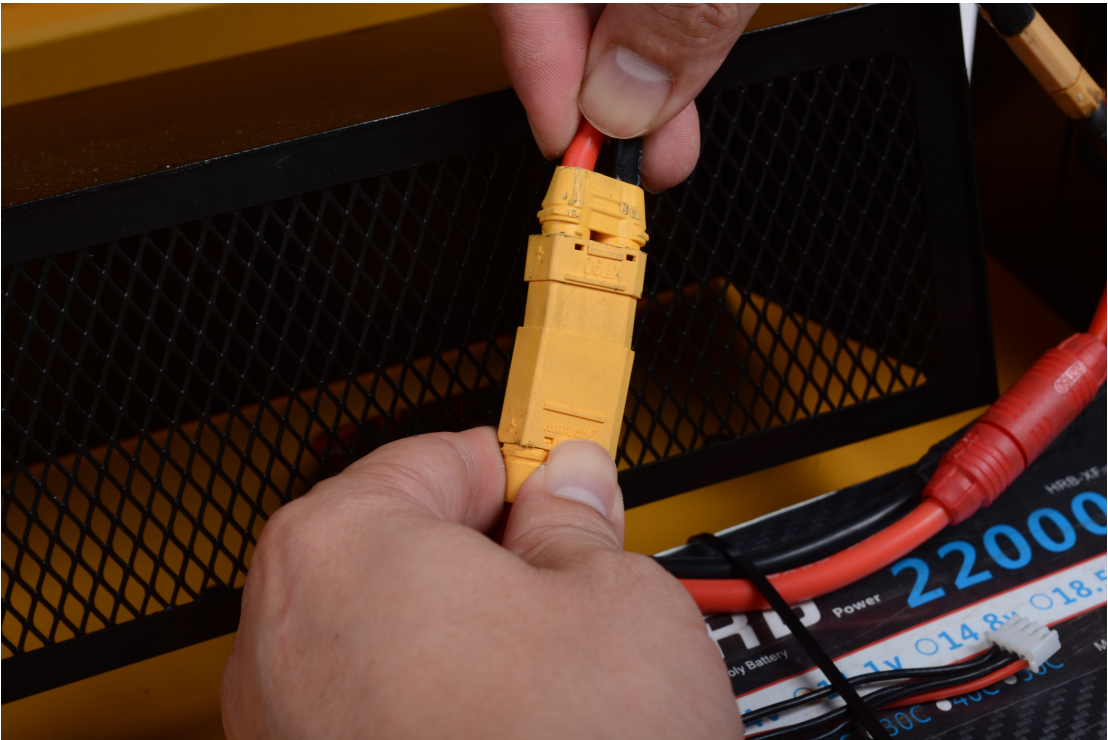
## How to fill oil

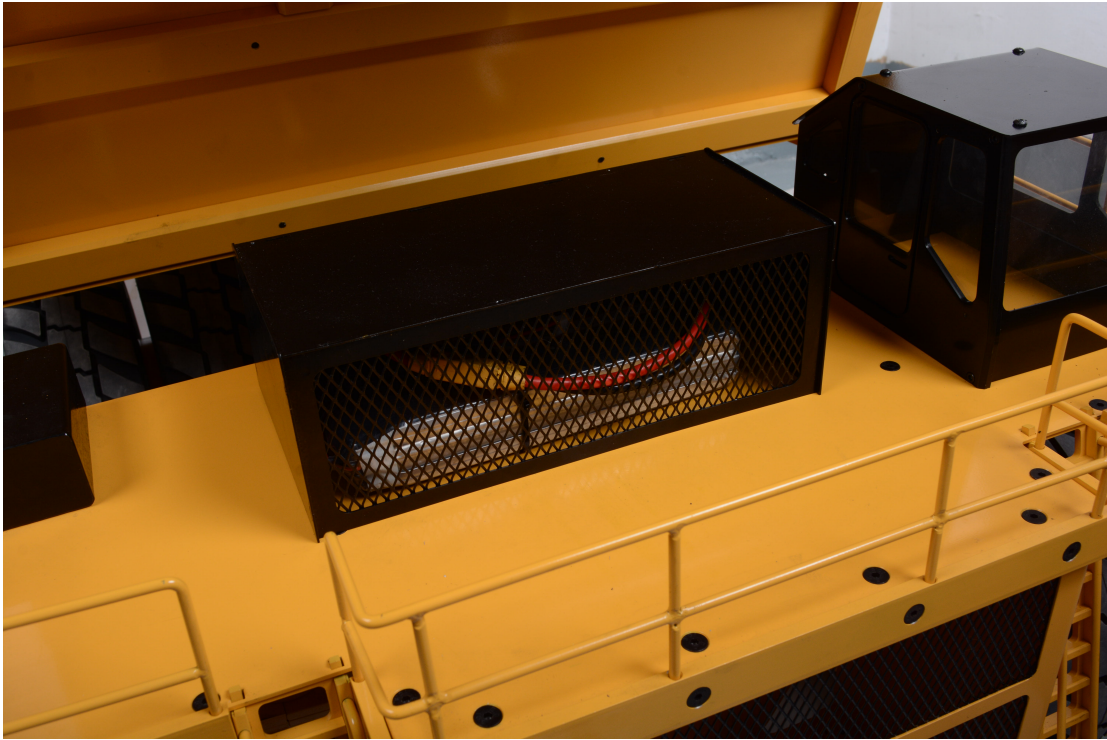






How to install battery





**Steps before operation:** Place 4 cells of AA battery into the remote control and then turn on the remote control itself. Finally, power the truck on.

**Steps after operation:** Power off the truck first. Then, turn off the remote control and remove 4 cells of AA batteries.

Note: You have to follow all these steps before operation; otherwise the truck itself may be inoperable.