

Trouble shooting

Trouble shooting

Problem	Cause	Solution
Motor does not turn on	<ul style="list-style-type: none"> ● Circuit breaking ● Battery leads connection loose ● Electric contactor fault ● Motor fault ● Circuit protector activated because of overheat. 	<ul style="list-style-type: none"> ● Press red switch on control box ● Screw the leads tight with battery terminal. ● Replace the control box part. ● Replace the motor ● Stop working 5 min for motor cooling down
Electric contactor fault Motor speed low	<ul style="list-style-type: none"> ● low voltage or too much weight on vehicle. 	<ul style="list-style-type: none"> ● Recharge the battery or check weight of vehicle.
Electric contactor fault Electric contactor fault Slippery on tire	<ul style="list-style-type: none"> ● Electric contactor fault ● Overload or moving on more than 7 degree incline 	<p>Electric contactor fault Give up moving</p>
Electric contactor fault noise	<ul style="list-style-type: none"> ● Electric contactor fault ● Overload or moving on more than 7 degree incline. 	<p>Decrease load weight</p>

Mini Mover/NVYC-500Q

Owner's Manual



Max vehicle load on level road: 2722KG(6000LBS)

DC 12V / 20Ah battery is recommended

Table of content

Introduction -----	2
This booklet -----	2
Manual conventions -----	3
Safety rules -----	5
Specification and features -----	6
Mounting -----	8
Explosive drawing -----	11
Maintenance -----	14
Trouble shooting -----	15

Maintenance

Maintenance

All moving parts within the Mini Mover have been Lubricated using high temperature lithium grease at the factory. No internal lubrication is required. If the Mini Mover being used in high moisture circumstance for long time and internal lubrication is necessary, please find a professional technician for maintenance.

Explosive drawing

Ref. NO	Description	Qty
1	Hexagon socket cap screw M6×14	8
2	Motor	1
3	Paper mat	1
4	Retaining ring for shaft ø20	2
5	Oil bearing	2
6	Separate sheath	2
7	Shaft	1
8	Wheel frame and control box ass.	1
9	Sun gear	1
10	O-ring ø100×1.9	1
11	Active gear	1
12	Gear ring	1
13	Rub-reduce washer	1
14	Planetary gear ass.	1
15	Above clutch axes washer	1
16	Clutch bushing	1
17	Cam clutch gear	1
18	Spring	1
19	Radial ball bearing 16002	1
20	Axis support bushing	1
21	O-ring ø16×2.1	1
22	Gear box frame	1
23	Radial ball bearing 61802	1
24	Retaining ring for shaft ø15	1
25	Clutch Cap	1
26	Washer ø6, Locking	1
27	Bolt M6 x 16	1
28	Turning level As	1
29	Support shaft	1
30	Support washer	1
31	Spring	1
32	Rubber tire	1
33	Jack ass.	1

Introduction

Introduction

Thank you for purchase of Mini Mover. The Mini Mover is designed and built by strict specifications. With proper use and maintenance, it will bring years of satisfying service.

This booklet

Every effort has been made to ensure the accuracy and completeness of the information in this manual. The right to change, alter and/or improve the product and this document is reserved at any time without prior notice.

Manual conventions

Manual conventions

This manual uses following symbols to help differentiate between different kinds of information. The safety symbol is used with a key word to alert you to potential hazards in operating and owning power tool.

Follow all safety messages to avoid or reduce the risk of serious injury and death.

DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, *will* result in death or serious injury.

WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, *could* result in death or serious injury.

CAUTION

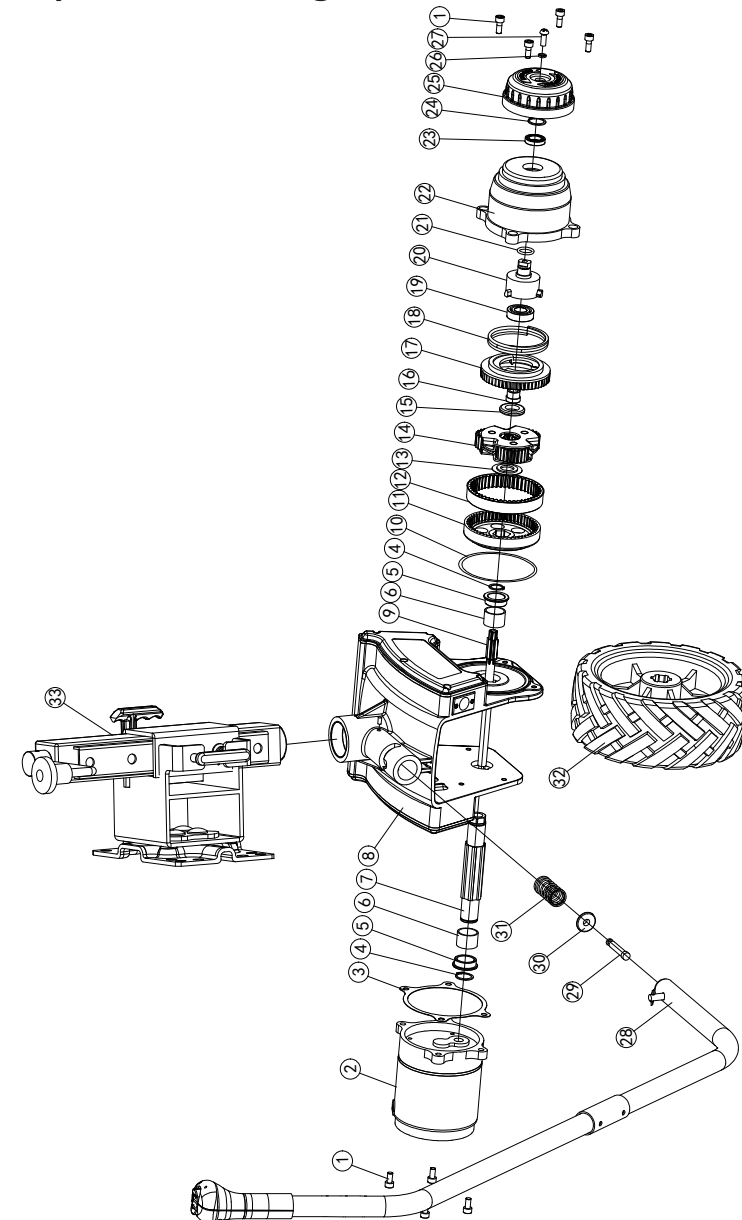
CAUTION indicates a potentially hazardous situation which, if not avoided, *may* result in minor or moderate injury.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, *may* result in property damage.

Explosive drawing

Explosive drawing





Operation

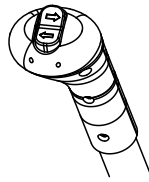
Operation

General tips for safe operation

1. Overloads might damage the Mini Mover, motor, tire etc.
2. Check if the handle positioning key totally screwed with Mini Mover before you start operation.
3. Check if battery leads correctly connect to battery terminals.
4. Don't use leads that being shatered, squashed or any damage.

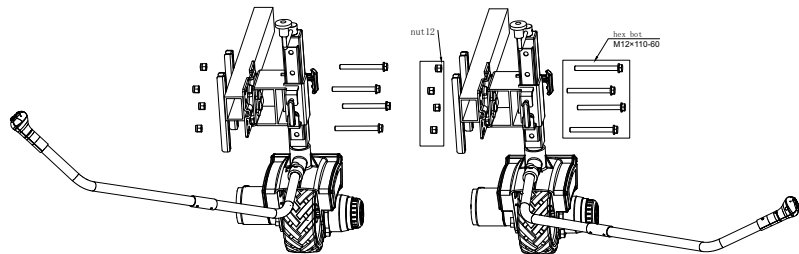
Operation guide

- Take time to access your situation and plan your movement.
- Clamp your Mini Mover with vehicle chassis. Locking pin and cover is recommended for every single time usage.
- Fix the handle and connect handle leads to control box, and connect battery leads to battery terminal.
- The press button  shall means forward,  shall means backward.



7


- Turn the Mini Mover tire to left or right while Mini Mover tire running.



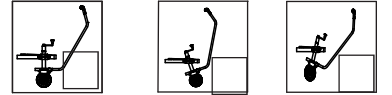
8


Safety Rules

Safety Rules

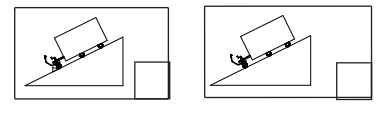
 **DANGER**


Always pay attention on Mini Mover mounting
If Mini Mover abnormally warps, stop work immediately.



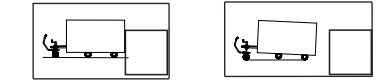
 **CAUTION**

Apply blocks to the wheels of the vehicle when on an incline.

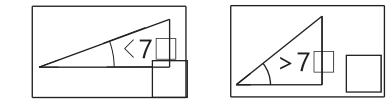



 **WARNING**

Mini Mover is able to adjust its height
For easy mounting, but DON'T lift up for moving.

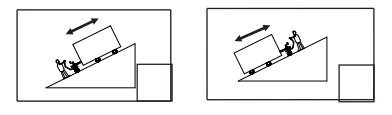


Do not push or pull vehicle on over 7 degree Gradient.



 **WARNING**

When you push or pull vehicle on gradient,
Make sure Mini Mover stand lower position.



Safety Rules

Safety Rules

 DANGER

Please observe surrounding when you working with your Mini Mover

 WARNING

Disassemble the Mini Mover and vehicle when not in use

 DANGER

Do not exceed rated capacity.

 CAUTION

Don't use Mini Mover for long distance movement.

 CAUTION

Please don't submerge Mini Mover and/or leave it on

 WARNING

Disconnect the Mini Mover leads and battery when not in use

 WARNING

Battery leads are replaceable but new leads have to be less than 3M in length and over 6mm² in section.

 WARNING

Stop working when Mini Mover tire won't bite on slippery surface.

Mounting

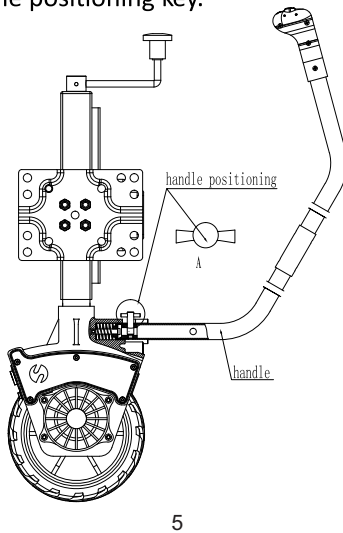
3. Connect the battery leads. For Mini Mover to function properly: connect red (positive) to positive (+) terminal of battery or jumpstart, connect black (negative) to negative (-) terminal of battery or jumpstart.

4. Connect the handle contactor to control box.

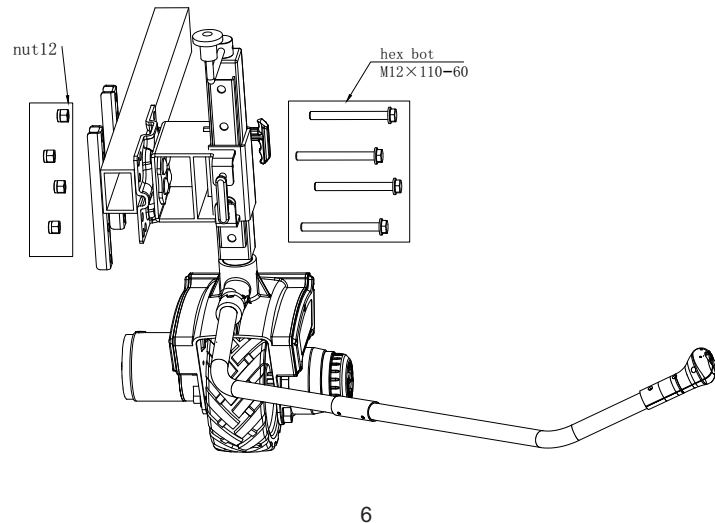
5. Press red button for processing circuit, and then check for proper tire rotation.

Mounting

1. Fasten handle positioning key.



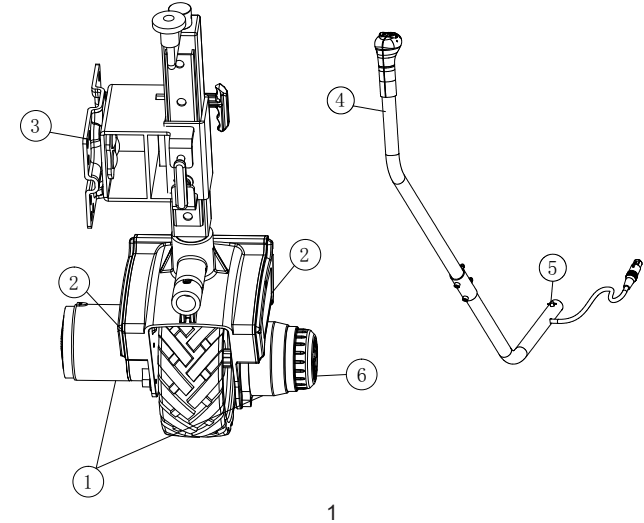
2. Attach the clamp to the frame by Hexagon head bolt M12 x110-60 (Length of thread is 60mm), flat washer $\phi 12$, and insert lock nut M12. The installation location is shown in the diagram



Specification & Features

Specification & Features

Read through this owners manual before operating your Mini Mover. Save this manual for future reference.



- ① Motor & Gear system: DC motor provides power to the gear mechanism, and reduction gears convert motor power into moving force.
- ② Control box: The electric components control forward or backward moving, and protect motor from over heat damage.
- ③ Jack assembly
- ④ Handle: Press button with arrow index to control moving direction.
- ⑤ Handle positioning key: It allows operator turning handle to right or left.
- ⑥ Clutch: When the clutch is "ENGAGED" status, mini mover can work driven by motor, when the clutch is "FREESPOOL" status, operator can move mini mover by manual.

Specification & Features

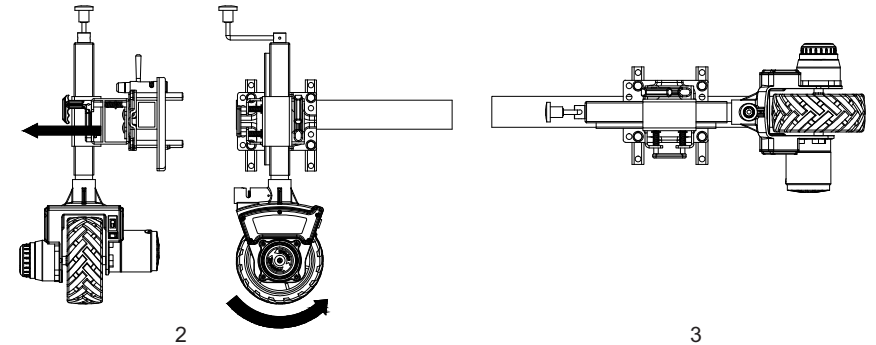
Specifications:

- Recommend power: DC 12V, 20Ah lead-acid battery or jumpstart
- Motor: 12V / 550W
- Speed: 6-7m/min
- Gear ratio: 494:1
- Brake: automatically brake
- Move on incline: less than 7 degree incline
- Max vehicle load on level road: 2722KG(6000LBS)

Mounting

1. See Diagram 2, 3 for turning over of mini mover

- ① Pull the handle in the direction of the arrow as shown in the diagram, so that the retaining pin shaft is detached from the mounting plate
- ② Rotate 90° counterclockwise in the direction of the arrow as shown in the diagram, turn over and transfer the rubber wheel to an appropriate position, Release the handle and reset the retaining pin. After rotation, mini mover horizontally with the frame.



2. The height of the jack is adjustable.

As shown in the picture: pull the U handle, the square jack can move up and down. Move to the appropriate position with the frame, loosen the U-handle, ensure that the head of the U-handle is completely inserted into the round hole of the square jack, and then power on to use.

