

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 <p>Overload or moving on more than 7 degree incline</p>	<p>Electric contactor fault</p> <p>Give up moving</p>
Electric contactor fault noise	<ul style="list-style-type: none"> ● Electric contactor fault <p>Overload or moving on more than 7 degree incline.</p>	<p>Decrease load weight</p>

Mini Mover

Owners Manual and Operating Instruction



Max jockey wheel load: 498KG(1100LBS)
Max vehicle load on level road: 2722KG(6000LBS)
DC 12V / 20Ah battery is recommended

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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
34	Locker	1
35	Hexagon bolt M12×110-60	2
36	Hoop active board	1
37	Hoop fix board	1
38	Washer 12	4
39	Lock nut M12	2

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

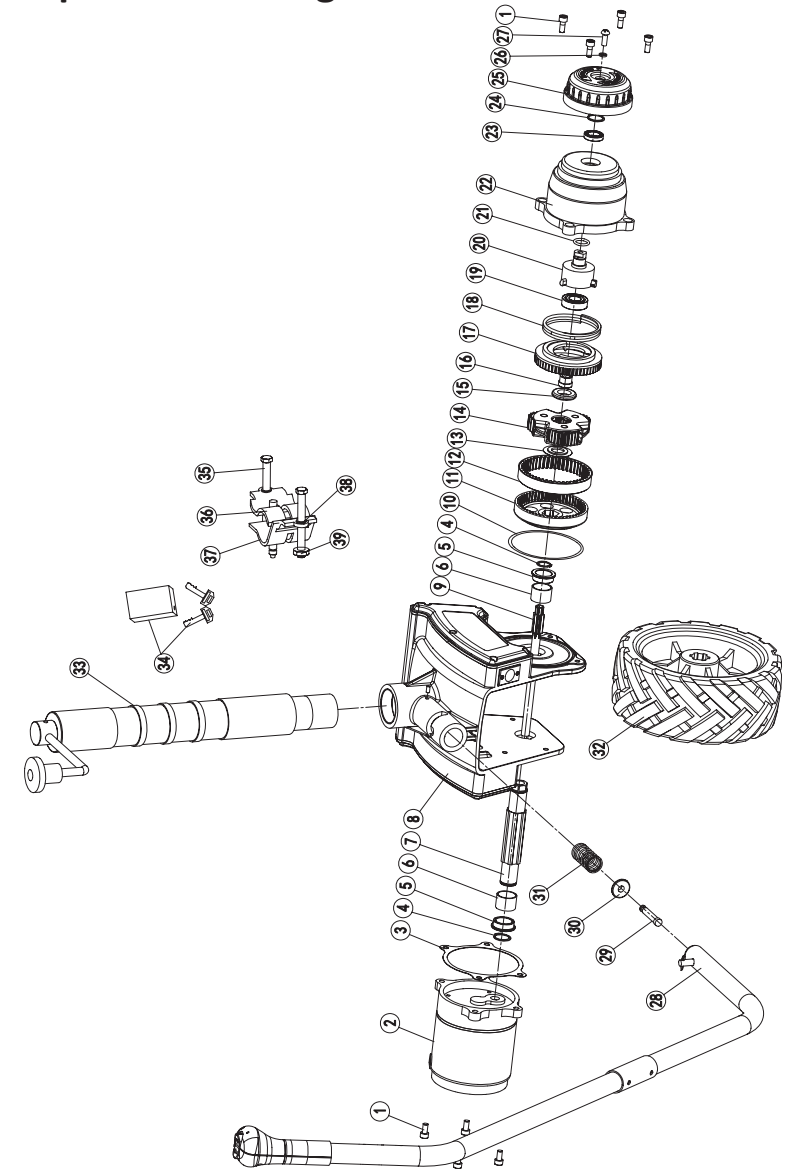
CAUTION indicates a potentially hazardous situation which, if not avoided, *may* result in minor or moderate injury.

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

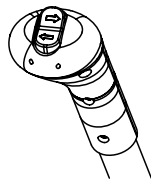
Operation

General tips for safe operation

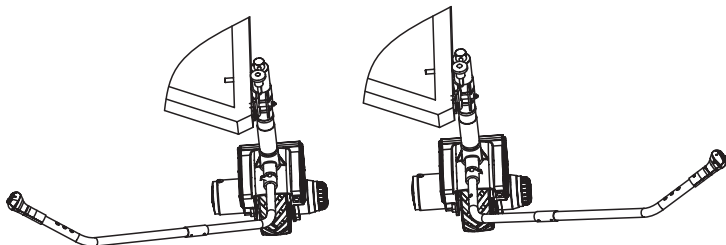
1. Overloads might damage the Mini Mover, motor, tire etc.
2. Check if the handle positioning key totally screwed with Mini Mover before you start operation.
3. Check if battery leads correctly connect to battery terminals.
4. Don't use leads that being shatered, squashed or any damage.

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.




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

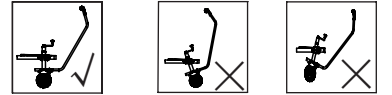



Safety Rules

Safety Rules

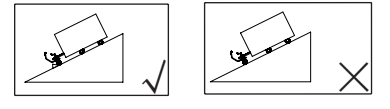
 **DANGER**


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

Three diagrams illustrating the correct and incorrect ways to mount the Mini Mover. The first diagram shows the Mini Mover mounted correctly on a vehicle chassis, with a checkmark. The second and third diagrams show the Mini Mover mounted incorrectly, with a cross.

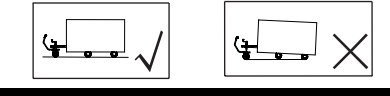
 **CAUTION**

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

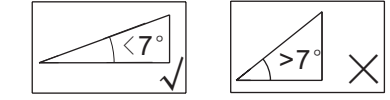
Two diagrams illustrating the correct and incorrect use of blocks on an incline. The first diagram shows a vehicle on an incline with blocks applied to the wheels, with a checkmark. The second diagram shows a vehicle on an incline without blocks, with a cross.


 **WARNING**

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

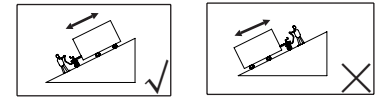
Two diagrams illustrating the correct and incorrect use of the Mini Mover's height adjustment. The first diagram shows the Mini Mover at a low height, with a checkmark. The second diagram shows the Mini Mover at a high height, with a cross.

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

Two diagrams illustrating the correct and incorrect use of the Mini Mover on a gradient. The first diagram shows a gradient of less than 7 degrees, with a checkmark. The second diagram shows a gradient of more than 7 degrees, with a cross.

 **WARNING**

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

Two diagrams illustrating the correct and incorrect use of the Mini Mover on a gradient. The first diagram shows the Mini Mover at a low position on a gradient, with a checkmark. The second diagram shows the Mini Mover at a high position on a gradient, with a cross.

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

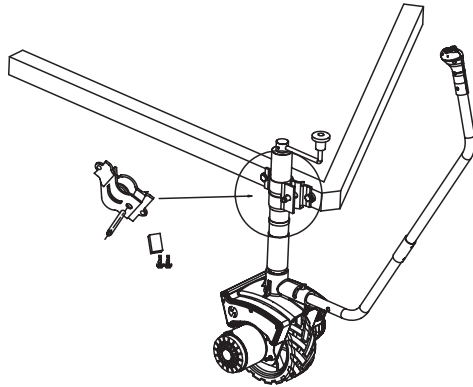
6. Connect the battery leads. For Mini Mover to function properly: connect red (positive) to positive (+) terminal of battery or jumpstart, connect black (negative) to negative (-) terminal of battery or jumpstart.

7. Connect the handle contactor to control box.

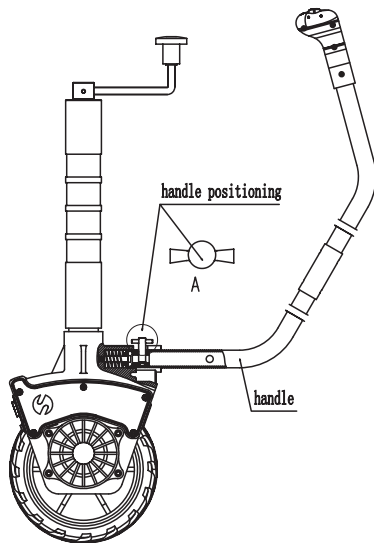
8. Press red button for processing circuit, and then check for proper tire rotation.

Mounting

3. Insert Mini Mover to clamp and screw on locking pin by wrench until Mini Mover being fixed tightly.



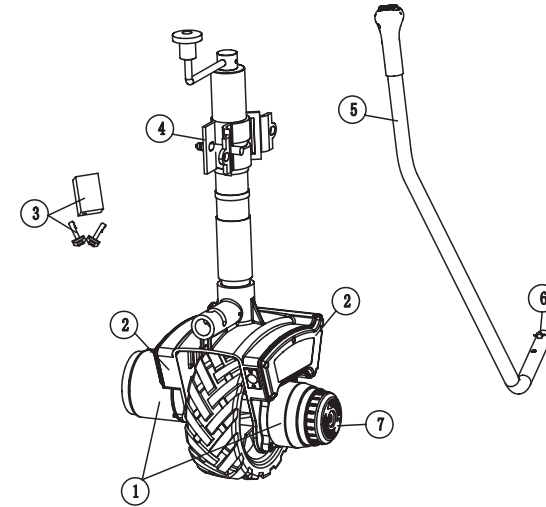
4. Put the lock on to protect your Mini Mover from stolen
5. Fasten handle positioning key.



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 converts motor power into moving force.
- ② Control box: The electric components control forward or backward moving, and protect motor from over heat damage.
- ③ Locking & Cover: The locking pin and cover prevent your Mini Mover from stolen.
- ④ Clamp: It is same as normal jockey wheel clamp for fix Mini Mover to vehicle chassis.
- ⑤ Handle: Press button with arrow index to control moving direction.
- ⑥ Handle positioning key: It allows operator turning handle to right or left.
- ⑦ 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.

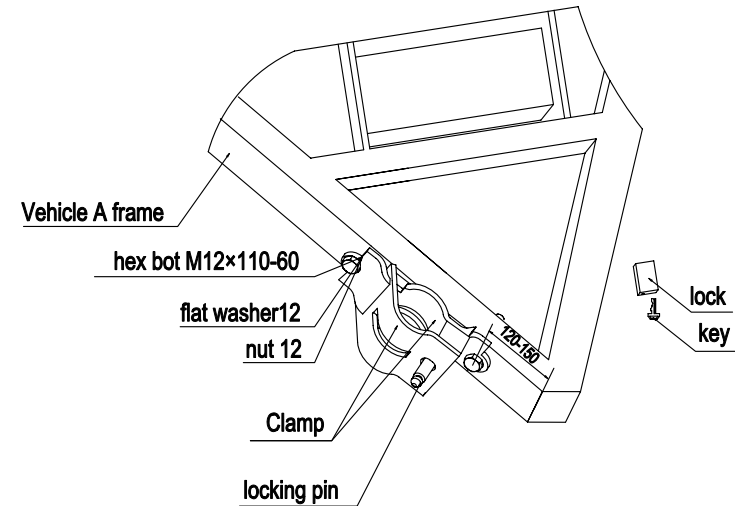
Specification & Features

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)
- Max jockey wheel load: 498KG(1100LBS)

Mounting

Mounting



This Mini Mover is designed with clamp fix that is same as normal jockey wheel mounting style. However, in consideration of anti-stolen, a locking pin is used instead of standard clamp pin. In that case, operator might need a wrench to screw on and off in mounting.

- 1.** Attach the clamp to chassis with 2 x M12 bolt and 2 x M12 nut. It would be better attach clamp to where is close enough to jumpstart or battery.
- 2.** The locking pin cover shall be put on position as below.

