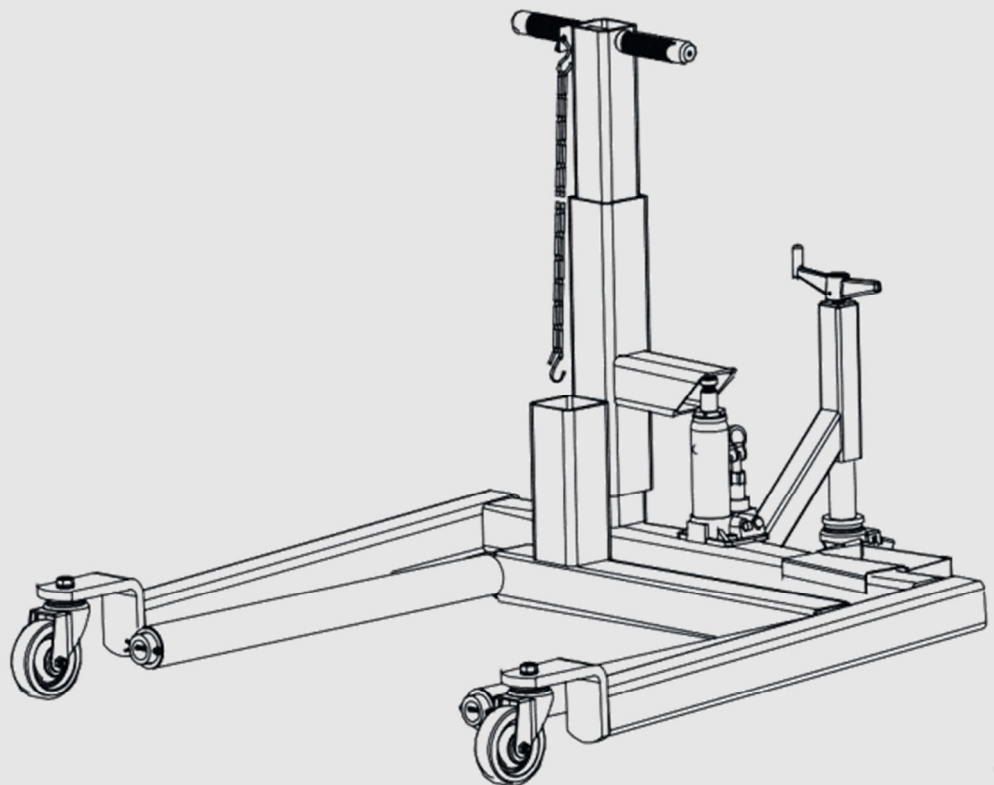


MAHLE CWD-1500

EN

Operation Manual
Truck Wheel Dolly





**EVERY PERSON WHO OPERATES THIS
EQUIPMENT NEEDS TO KNOW AND
UNDERSTAND ALL OF THE INFORMATION IN
THIS MANUAL – FAILURE TO DO SO COULD
RESULT IN SERIOUS INJURY OR DEATH.**

**READ THIS MANUAL
CAREFULLY AND
RETAIN FOR YOUR
RECORDS**

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1. Safety Regulations

1.1 Warnings

⚠ Failure to follow all of these safety instructions can lead to severe injury or death from a sudden loss of the load. Contact the manufacturer at the numbers or address printed on the back cover of this manual if you have any questions.

⚠ **Anyone who operates this equipment must read and understand all the instructions and warnings provided with this equipment before being allowed to use it.** All operators must be careful, competent, trained, and qualified in the safe operation of the equipment. The owner (or other responsible individual) must ensure that any operator observes the proper safety procedures for using this product at all times. If the operator does not read well or is not fluent in English, the owner / manager must read and review the instructions and warnings in the manual with the operator in the operator's native language to be sure that the operator will use the equipment properly.

⚠ **The owner / manager must keep this manual for future reference,** and make sure the warning labels on the equipment are legible and intact at all times. Replacement labels and manuals are available from the manufacturer. Call the manufacturer using the contact information on the back cover of this manual if you have any questions.

⚠ **If there is any evidence of hydraulic oil leaking from underneath this equipment,** the equipment must be removed from service and returned to the manufacturer for servicing. Contact the manufacturer as soon as possible. If this warning is not heeded, it may result in possible serious injury and/or property damage or death.

⚠ **NEVER overload this dolly.** The dolly's maximum capacity is 1500 lb / 680 kg. If the wheel dolly does not have enough capacity to raise the load, remove it and use a wheel dolly with adequate capacity. Failure to observe this instruction may lead to unstable or overload conditions that could cause failure of the wheel dolly.

⚠ **Use this wheel dolly only on hard level surfaces capable of sustaining the load.** Use on other than hard level surfaces can result in wheel dolly instability and possible loss of load.

⚠ **Use only as intended.** This wheel dolly is designed solely for the removal and installation of wheels from over-the-highway trucks, trailers, tractors, and buses.

⚠ **NEVER modify the product in any way.** Modifications may cause the dolly to perform improperly, resulting in injury or death.

⚠ **The wheel dolly carriage is the only approved lifting point.** Do not attempt to use any other part of the wheel dolly as a lifting point. Place wheel as close to back vertical lift member of wheel dolly as possible. Do not use any kind of cribbing or adapters with this wheel dolly. The wheel dolly must remain in direct contact with the floor and the lifting carriage must be in direct contact with the wheel to be lifted.

⚠ **After raising a vehicle, never allow any part of your body to pass under it** and never begin work on the vehicle until it is properly supported by adequate stands. Once the vehicle is properly supported and is stable, the wheel dolly can then be positioned to install or remove the wheel.

⚠ **Lower and secure load before moving wheel dolly to another area.**

⚠ **Never place hand or any other body part between lift carriage and wheel,** personal injury can occur.

⚠ **NEVER abuse or cause damage to the jack.** NEVER subject the jack to abnormal shocks or loads. Your safety and that of others depends on the proper operation of the jack.

2. Foreword

2.1 From the manufacturer

Thank you for your purchase. To complement the offering of A/C, fluid and nitrogen service equipment, MAHLE Service Solutions has partnered with Gray Manufacturing to provide the highest quality hydraulic and pneumatic equipment available for the professional service technician. This equipment adheres to high standards promised in the MAHLE guarantee including the assurance of innovation and reliability that comes with the Gray Manufacturing name. Please contact MAHLE Service Solutions' customer service at (800) 468-2321 or tech.mss@us.mahle.com with any comments or questions.

3. Symbols Use

3.1 Signal words

Signal words call attention to a safety message or messages, or a property damage message or messages, and designate a degree or level of hazard seriousness. Signal words used in this manual include:

Keyword	Probability of occurrence	Severity of danger if instructions not observed
DANGER	Immediate impending danger	Death or severe injury.
WARNING	Possible impending danger	Death or severe injury
CAUTION	Possible dangerous situation	Minor injury
NOTICE	Possible damage to property	Possible property damage

4. Responsibilities

4.1 Receiving inspection

Before attempting to operate this equipment, thoroughly read and understand this manual. Completely remove all tape and packaging. Inspect the equipment immediately upon delivery. If shipping damage is evident, inform the delivering carrier immediately and contact the manufacturer using the contact information on the back cover of this manual.

4.2 Owner and/or operator responsibilities

The owner of this equipment must read these instructions and maintain them for future reference and for instructing any other users of the equipment. The owner is responsible for keeping all warning labels and instruction manuals legible and intact. Replacement labels and literature are available from the manufacturer. The owner must never authorize or allow anyone to use this equipment until the operator has read and understood the information in this manual and on the accompanying labeling on the equipment itself.

If this equipment is being used in an occupational setting (or workplace), the employer should ensure that all personnel working with and around the equipment know of the risks associated with its use. Personnel involved in the use and operation of this equipment shall be careful, competent, trained, and qualified in the safe operation of the equipment and its proper use when servicing motor vehicles and their components. Safety information provided with this equipment should be emphasized by the employer and understood by each employee. The employer must make this manual available to all personnel using this equipment and all personnel must read and understand the contents of this manual. If the operator is not fluent in English, the manufacturer's instructions and warnings shall be read to and discussed with the operator in the operator's native language by the employer, making sure that the operator comprehends its contents and observes the proper procedures for use of this equipment.

5. Specifications

5.1 CWD-1500

Model CWD-1500	US units	Metric units
Maximum capacity	1500 lb	680 kg
Power	Hydraulic	Hydraulic
Caster diameter	4 in	10.2 cm
Lift arm length	24 in	61.0 cm
Lift arm width	24 in	61.0 cm
Shipping weight	120 lb	54.4 kg

5.2 Hydraulic jack

Model CWD-1500	US units	Metric units
Capacity	1500 lb	680 kg
Height – closed	1.25 in	3.2 cm
Extension screw	2.125 in	5.4 cm
Stroke	5.125 in	13.0 cm
Ram diameter	0.875 in	2.2 cm
Base size	3.75 x 3.75 in	9.5 x 9.5 cm
Handle length	8.5 in	21.6 cm
Shipping weight	7 lb	3.2 kg

6. Product Description

6.1 Component identification

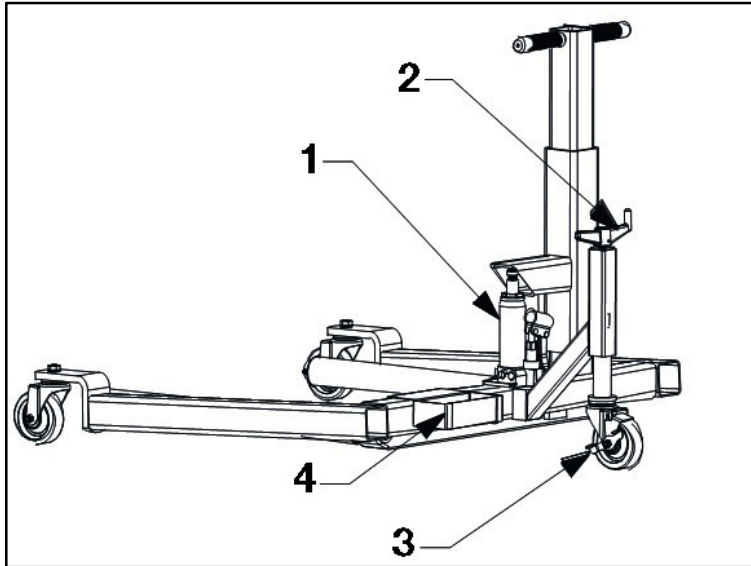


Fig. 1: CWD-1500

- 1 Hydraulic jack
- 2 Hand crank
- 3 Rear caster lock
- 4 Detachable parts tray

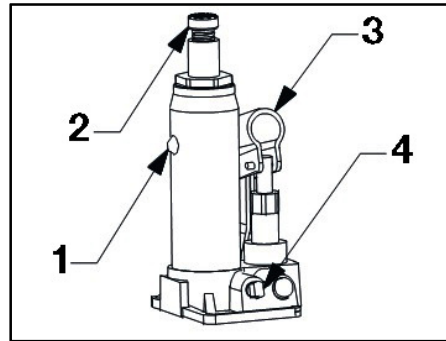


Fig. 2: Hydraulic jack

- 1 Oil fill plug
- 2 Saddle with extension screw
- 3 Pump handle socket
- 4 Pressure release

7. Operation

⚠ WARNING - This section discusses the appropriate and safe methods for using the jack to raise and lower a vehicle. Safe operation is not limited to simply raising and lowering a vehicle - it also includes adequate preparation before the vehicle is lifted. Failure to follow all of the steps outlined in this section could result in serious injury or death.

7.1 Priming the jack

- ⓘ** Before using the wheel dolly, it may be necessary to prime the hydraulic jack.
1. Using the jack handle, open the pressure release by rotating it counterclockwise on full turn.
 2. Place the handle in the handle socket and pump about 6 full strokes to purge air from the pump and valving.
 3. Close the release. Pump the jack until it has reached its full extension. Continue to pump several times to purge air from under the ram.
 4. Open the release and push the ram into its lowest position. Close the release.

7.2 CWD-1500 operation

1. Raise the wheel of the vehicle and support its weight properly with stands. Open the jack's release valve one full turn counterclockwise to be certain the ram is fully retracted. If necessary, use the jack extension screw to adjust the low position of the carriage.
 2. Move the wheel dolly into lifting position under the wheel and use the hand crank, if necessary, to align the wheel dolly with the vehicle's axle so that the carriage will evenly contact the tire.
 3. After positioning, close the jack release valve and pump the hydraulic jack to raise the lift carriage until it just contacts the tire.
- ⚠ CAUTION:** Once contact is made with the tire, do not raise the wheel dolly any farther. This will cause the wheel dolly to lift the weight of the vehicle which may result in damage to the wheel dolly by overloading it and could raise the vehicle off of the vehicle stand making the vehicle unstable.
4. Remove the wheel assembly. Note: The rear caster can be locked for stability while working.
 5. Lower the lift carriage as far as possible while maintaining adequate floor clearance before transporting wheel.
 6. Raise the lift carriage to replace the wheel assembly by pumping the hydraulic jack.
 7. Reconnect the wheel assembly and lower lift carriage by opening the jack's release valve.

8. Maintenance and Inspection

⚠ **WARNING** - The wheel dolly must be inspected according to the requirements of this section. Failure to properly inspect the jack could lead to severe injury or death. The wheel dolly must be removed from service and inspected immediately if it is subjected to an abnormal load or a shock load. If any irregularities or problems are detected during an inspection, the wheel dolly must be removed from service immediately and repaired. Contact the manufacturer using the contact information printed on the back cover of this manual. Remember, if you have *any* doubt about the safe condition of this jack, **DON'T USE IT!**

8.1 Inspection – before each use

The employer, owner, and/or manager are responsible for maintaining the equipment in good, serviceable condition. Employees must be trained on how to inspect the equipment. **Before each use** of this equipment, the operator must visually inspect it for any abnormal conditions. The employer, owner, and/or manager must inspect (or appoint a knowledgeable person to inspect) each unit regularly. **Regular inspections** should be made **weekly** (if the equipment is used daily) or **monthly** (if the lift unit is used only intermittently). Regular inspections should include the following:

- Inspect the entire wheel dolly for signs of corrosion, damage and/or excessive wear.
- Inspect welds for any cracks or chips.
- Verify that all warning and instructions decals are in place and legible before the lift is put back in service. If any decals are missing or illegible, contact the manufacturer for replacements.
- If there is any evidence of hydraulic oil leaking from underneath this lift, the lift must be removed for service and returned to the manufacturer for servicing. This unit is equipped with a non-serviceable vertical restraint and must be returned to the factory for repair. Contact the manufacturer as soon as possible.

⚠ If any irregularities or problems are detected during an inspection, the jack must be removed from service immediately and repaired. Contact the manufacturer using the contact information on the back cover of this manual.

8.2 Maintenance instructions

⚠ **WARNING** - All inspection and maintenance procedures must be performed after the equipment has been removed from service. Failure to do this may result in personal injury and/or property damage.

- All warning and capacity labels should be readable and complete. Wash external surfaces of jack, labels, and decals with a mild soap solution.
- Lubricate all rotating and sliding portions of the equipment monthly.
- Check oil level in the oil reservoir. Refer to the “ADDING HYDRAULIC FLUID” section.

8.3 Adding hydraulic fluid

1. Remove the wheel dolly from service.
 2. The lift carriage must be in the fully lowered position and the wheel dolly must be on a level surface.
 3. Clean around the oil fill plug before removing it to prevent contamination of the hydraulic oil and hydraulic system.
 4. Remove the fill plug. Visually check the hydraulic oil level. The oil should be visible and at the bottom of the fill hole. If the fluid level is low, add a premium hydraulic fluid until it is at the bottom of the fill hole.
- ⚠ Do not fill jack with brake or transmission fluid. Use of the wrong fluid can deteriorate the seals and corrosion problems will occur.
5. Re-install the fill plug. Clean up any spilled oil. Test the wheel dolly for normal operation.
- ❗ If the lift carriage still doesn't rise to proper height, repeat steps above. If this doesn't solve the problem, contact the manufacturer using the contact information on the back cover of this manual.

9. Troubleshooting

This section is a list of potential problems and solutions. If the solution listed fails to correct the problem, call the manufacturer at the numbers and address printed on the back cover of this manual. Please have the model number, and serial number of your jack available. The serial number is printed on a tag located on one of the front caster brackets.

Problem	Cause/Solution
Fails to lift load	<ul style="list-style-type: none">• Lift is overloaded. Rated capacity is for the jack is 2000 lb. / 908 kg. Use larger capacity wheel dolly.• Low oil level, see the “ADDING HYDRAULIC FLUID” section.
Fails to hold load	<ul style="list-style-type: none">• Pressure release open, turn release clockwise until tight
Oil leaks	<ul style="list-style-type: none">• Oil fill plug loose, tighten fill plug.

11. Notes

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