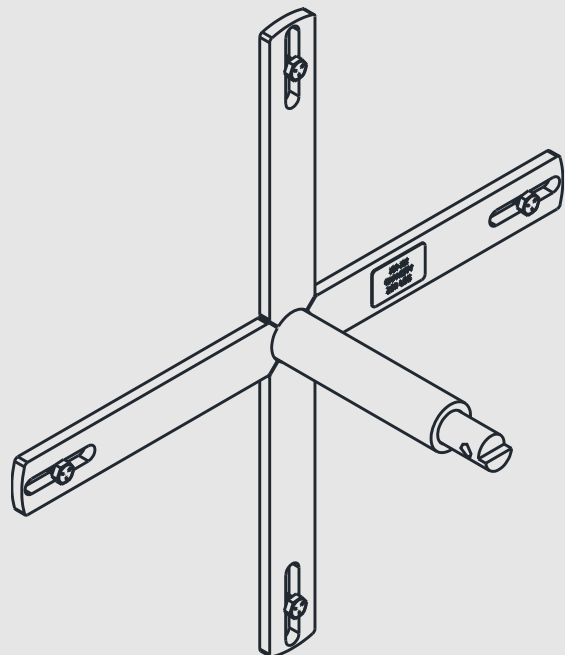
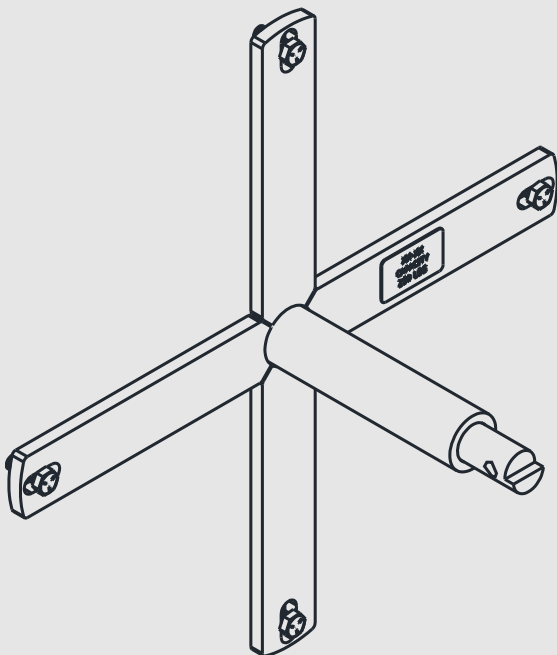


## MAHLE CAD-2000FW

EN

Operation Manual  
Flywheel Adapter





**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**

# Contents












---

1. Safety Regulations .....	4
1.1 Warnings.....	4
2. Foreword .....	5
2.1 From the manufacturer.....	5
3. Symbol Use .....	5
3.1 Signal words .....	5
4. Responsibilities .....	6
4.1 Receiving inspection .....	6
4.2 Owner and/or operator responsibilities .....	6
5. Specifications .....	6
5.1 CAD-2000FW Flywheel Adapter .....	6
6. Operation .....	7
6.1 Using the Flywheel Adapter .....	7
6.2 Using with CTJ-2200/A Transmission Jacks..	8
6.3 Using with CTJ-2700 Transmission Jack.....	9
6.4 Using with ATJ-1000H transmission Jack...	10
7. Notes.....	11

# 1. Safety Regulations

---

## 1.1 Warnings

-  To avoid serious injury or death, read this manual carefully before operating this unit. Contact the manufacturer at the number or address printed on the back cover of this manual if you have any questions.
-  The maximum capacity is 250 lbs. / 113 kg. Do not overload.
-  Ensure the load is secured to the adapter before moving it.
-  Read the Owner's Manual that came with the jack and follow all instructions and warnings.
-  No alterations shall be made to this product.
-  Use the jack only on hard, level surfaces capable of sustaining the load.
-  Be sure the vehicle is appropriately supported before starting repairs or getting under the vehicle.
-  Do not allow any part of your body to be under the load while supported solely by the jack.
-  Do not use blocks or cribbing devices with the jack or adapter. Do not attempt to extend the height or range of the jack or adapter beyond what they are designed for.
-  Never use any part of the jack as a lifting surface. Use only the adapter as a means of contacting the load.
-  Never transport a flywheel in the raised position or use the flywheel to push, pull, or transport the jack. Keep the flywheel in the lowest position when rolling the jack across floor. Do not move the jack any faster than 2 feet per second.

Failure to understand and obey these warnings may result in personal injury and / or property damage

## 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@mahle.com](mailto:tech.mss@mahle.com) with any comments or questions.

## 3. Symbol 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
<b>DANGER</b>	<b>Immediate</b> impending <b>danger</b>	<b>Death</b> or <b>severe</b> injury.
<b>WARNING</b>	<b>Possible</b> impending <b>danger</b>	<b>Death</b> or <b>severe</b> injury
<b>CAUTION</b>	Possible <b>dangerous situation</b>	<b>Minor</b> injury
<b>NOTICE</b>	Possible damage to property	<b>Possible property damage</b>

## 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

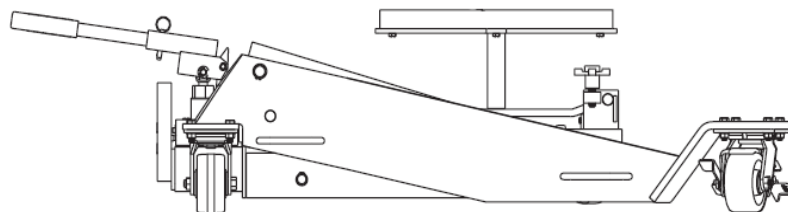
### 5.1 CAD-2000FW Flywheel Adapter

Model CAD-2000FW	US units	Metric units
Capacity	250 lb	113 kg

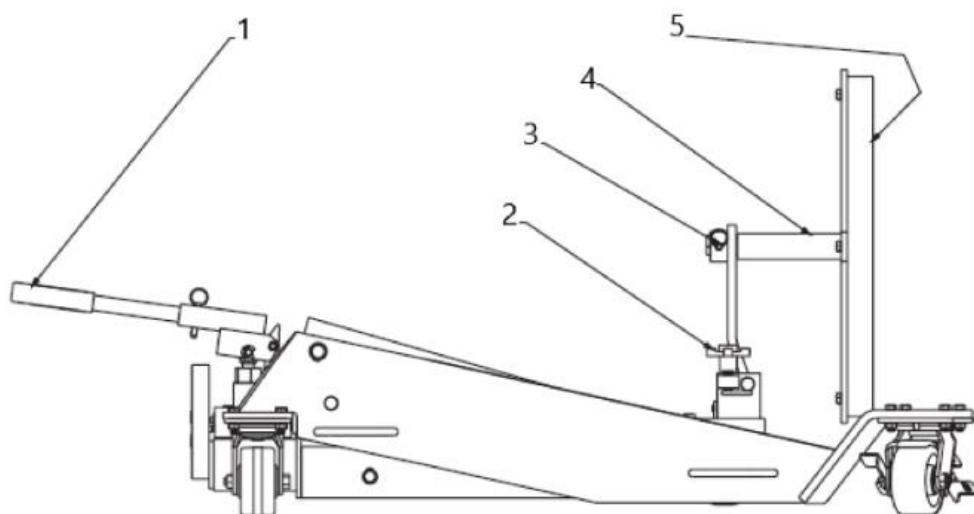
## 6. Operation

### 6.1 Using the Flywheel Adapter

1. Remove all retaining bolts connecting the flywheel to the crankshaft except for the top bolt and two at 90° to the top bolt.
2. Close the release knob and operate the pump handle to raise the lift arm and align the flywheel adapter to the flywheel using the tilt adjustment knob.
3. Position the flywheel adapter centrally on the flywheel and secure it with bolts. Ensure there is sufficient space to access the remaining three bolts that attach the flywheel to the crankshaft flange. Confirm that the release knob on the jack is closed, then proceed to remove the last three bolts connecting the flywheel to the crankshaft.
4. Back the jack and flywheel away from the engine and slowly lower the flywheel. Only roll the jack with it fully lowered and the adapter in the vertical position.
5. Adequately support the flywheel and remove it from the adapter.
6. Attach the new flywheel to the adapter and reverse the removal steps to install it.



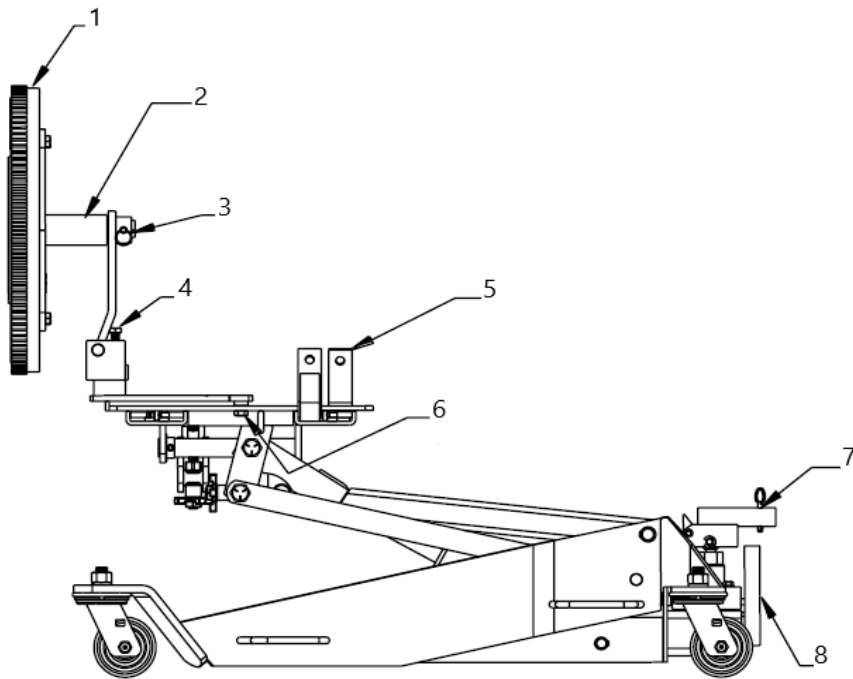
**Fig. 2: Flywheel in vertical position for transport on CCL Jack**



**Fig. 1: Flywheel adapter on CCL Clutch Jack**

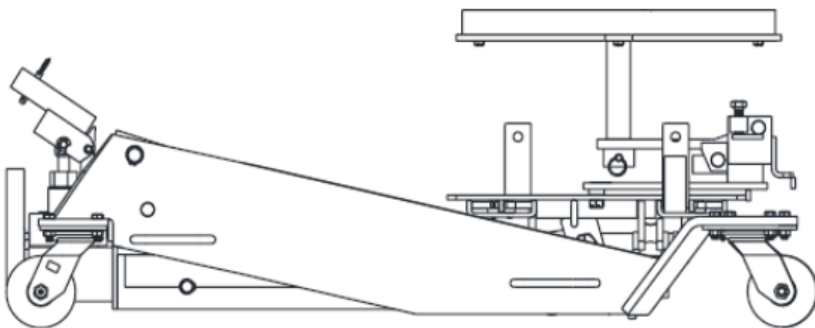
- |   |                      |
|---|----------------------|
| 1 | Pump Handle          |
| 2 | Tilt Adjustment Knob |
| 3 | Quick release pin    |
| 4 | Flywheel adapter     |
| 5 | Flywheel             |

## 6.2 Using with CTJ-2200 / CTJ-2200A Transmission Jacks



**Fig. 3: Flywheel adapter on CTJ-2200 /2200A Jacks**

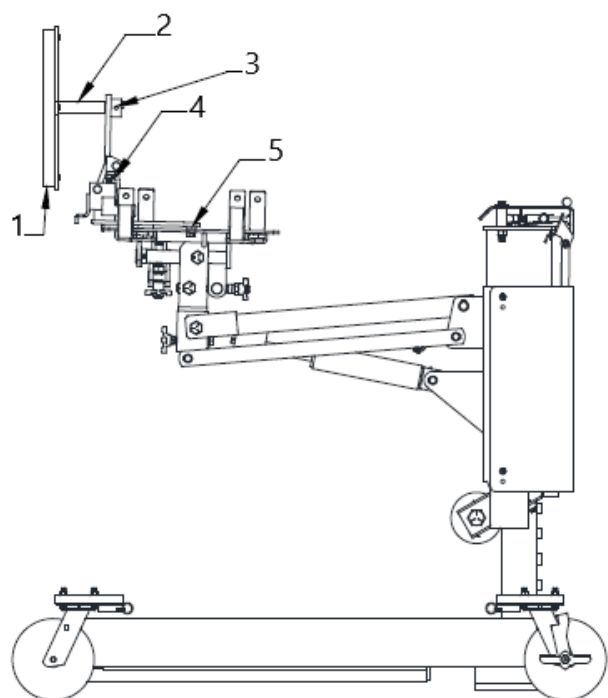
- 1 Flywheel
- 2 Flywheel Adapter
- 3 Quick release pin
- 4 Tilt Adjustment Knob
- 5 Front brackets have been removed in these pictures. Remove the back brackets if necessary.
- 6 Position the adapter plate as shown and install the  $\frac{1}{2}$  - 13UNC capscrews through the head plate into the adapter and tighten.
- 7 Pump Handle
- 8 Release Knob



**Fig. 4: Flywheel in vertical position for transport on CTJ-2200 /2200A Jack**

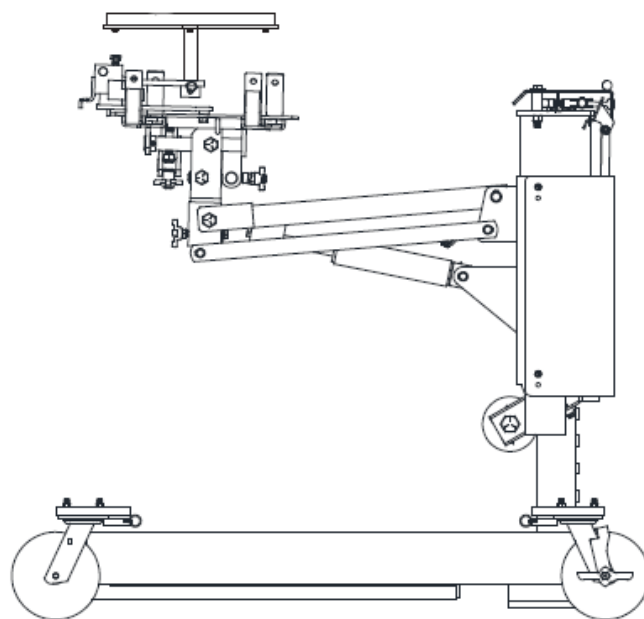


### 6.3 Using with CTJ-2700 Transmission Jack



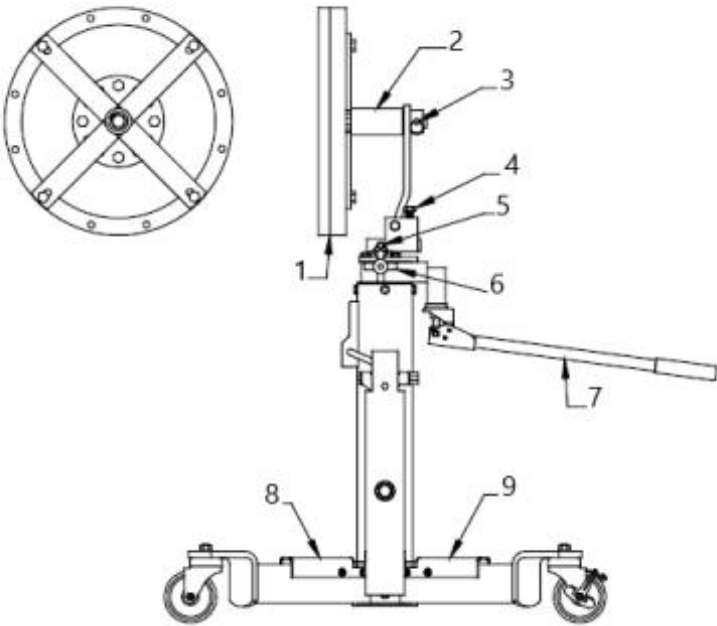
**Fig.7: Flywheel adapter on CTJ-2700**

- 1 Flywheel
- 2 Flywheel Adapter
- 3 Quick release pin
- 4 Tilt Adjustment Knob
- 5 Position the adapter plate as shown and install the ½-13UNC capscrews through the head plate into the adapter and tighten.



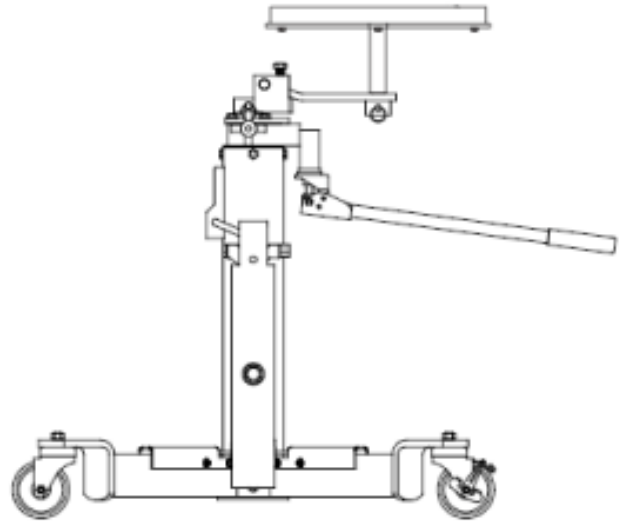
**Fig. 8: Flywheel in vertical position for transport on CTJ-2700**

## 6.4 Using with ATJ-1000H High Rise transmission Jack



**Fig. 9: Flywheel adapter on ATJ-1000H**

- 1 Flywheel
- 2 Flywheel Adapter
- 3 Quick release pin
- 4 Tilt Adjustment Knob
- 5 Quick Release Pin
- 6 Release Knob
- 7 Pump Handle
- 8 Down Pedal
- 9 Up Pedal



**Fig. 10: Flywheel in vertical position for transport on ATJ-1000H**

## 7. Notes



MAHLE Aftermarket Inc.  
23030 Mahle Dr  
Farmington Hills, MI 48335 U.S.A.

Phone: (800) 468-2321  
E-mail: [tech.mss@mahle.com](mailto:tech.mss@mahle.com)

[www.servicesolutions.mahle.com](http://www.servicesolutions.mahle.com)