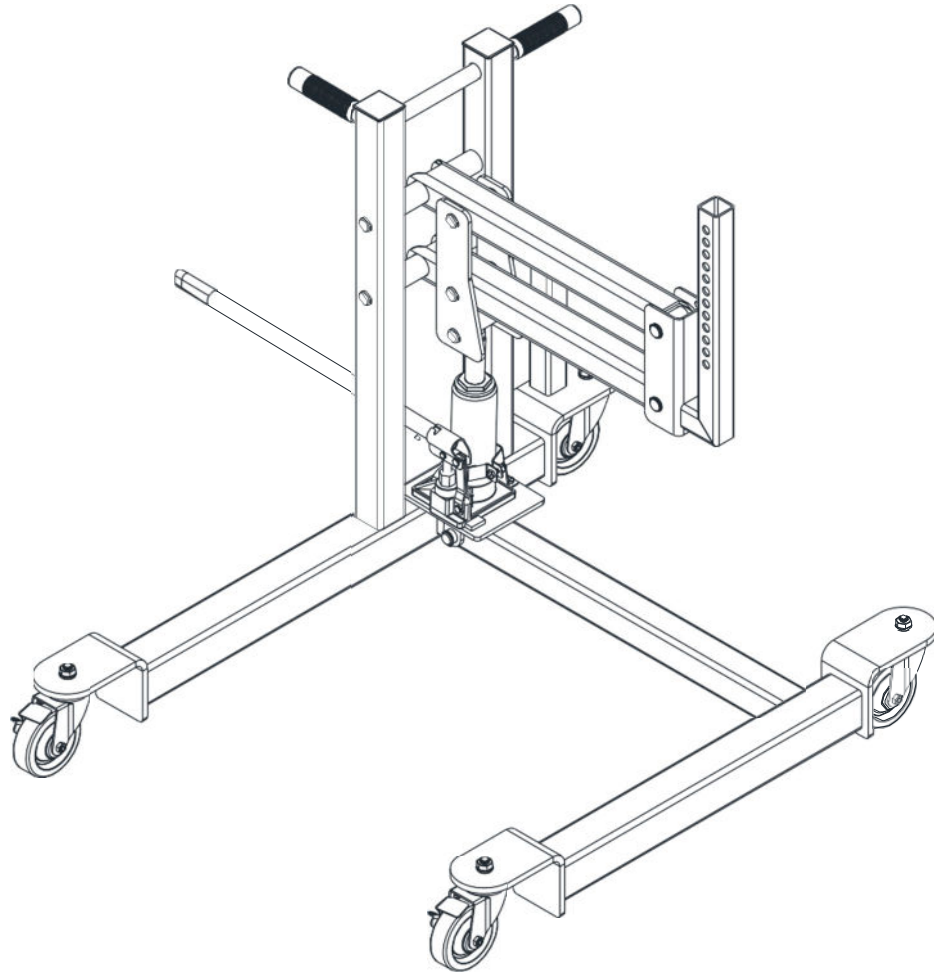


CL Challenger Lifts

Disk Brake Dolly (CLHM-200)



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Email: sales@challengerlifts.com Web site: www.challengerlifts.com

Office 800-648-5438 / 502-625-0700 Fax 502-587-1933

**IMPORTANT: READ THIS MANUAL COMPLETELY BEFORE
INSTALLING or OPERATING LIFT**

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Receiving Inspection

Before attempting to operate this Disc Brake Dolly, thoroughly read and understand this manual. Completely remove all tape and packaging. Inspect the Disc Brake Dolly immediately upon delivery. If shipping damage is evident, inform the delivering carrier immediately and contact customer service at the numbers and address printed on the back cover of this manual.

Introduction

Owner and / or Operator Responsibilities

The owner and / or user must understand the manufacturer's operating instructions and warnings before using this Disc Brake Dolly. The use of portable lifting devices is subject to certain hazards that cannot be avoided by mechanical means, but only by the exercise of intelligence, care, and common sense. Personnel involved in the use and operation of such equipment shall be careful, competent, trained, and qualified in the safe operation of the equipment and its proper and intended use when servicing motor vehicles and their components. Examples of hazards are dropping, tipping, or slipping of vehicles or their components caused primarily by improperly securing loads, overloading, off-centered loads, use on other than hard level surfaces, and using equipment for a purpose for which it was not designed.

The owner / manager must make this manual available to all personnel using this Disc Brake Dolly. They 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 purchaser / owner, making sure that the operator comprehends its contents and observes the proper procedures for use of this Disc Brake Dolly. Owner and / or user must study and maintain for future reference the manufacturer's instructions. Owner and / or user are responsible for keeping all warning labels and instruction manuals legible and intact. Replacement labels and literature are available from the manufacturer.

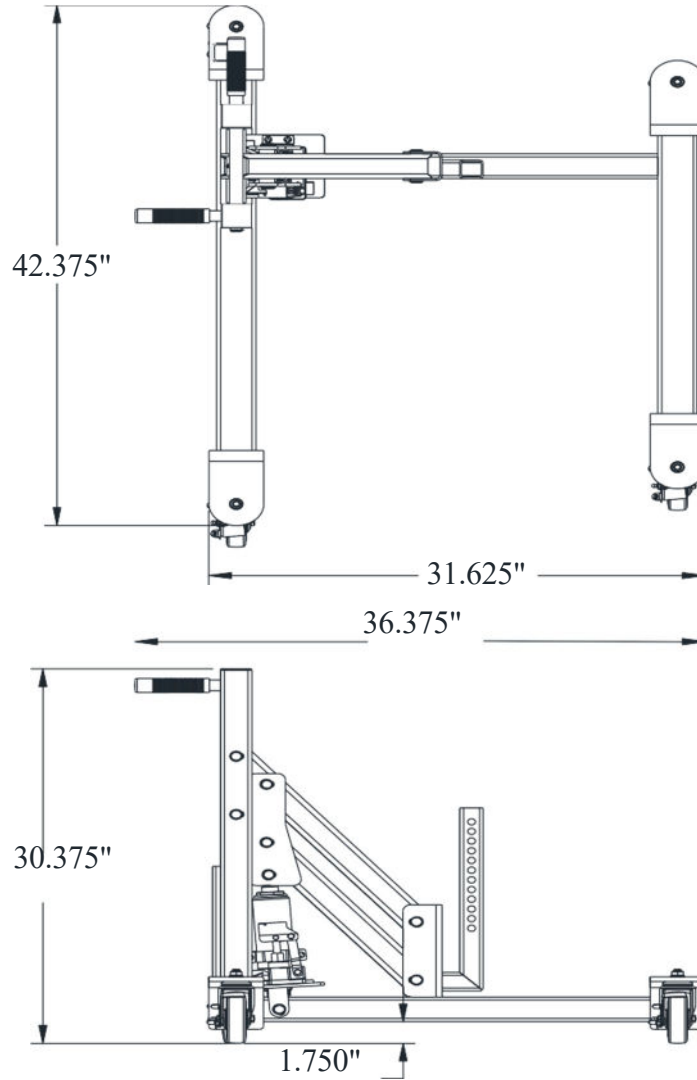
Signal Words

Signal words call attention to a safety message or messages, or a property damage message or messages, and designates a degree or level of hazard seriousness. The signal words are “**DANGER**,” “**WARNING**,” “**CAUTION**,” and “**NOTICE**.”

- **DANGER:** Indicates a hazardous situation, which, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations.
- **WARNING:** Indicates a hazardous situation, which, if not avoided, could result in death or serious injury.
- **CAUTION:** Indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury. It may be used to alert against unsafe practices.
- **NOTICE:** Indicates a property damage message.

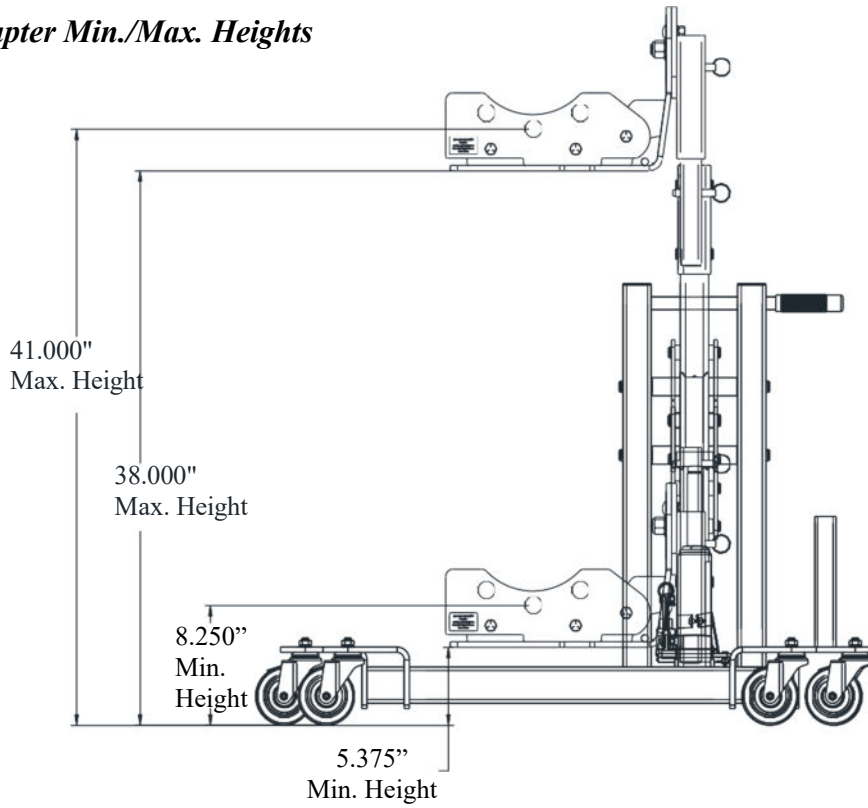
Specifications

Capacity	200 lbs. / 90 kg.
Weight	175 lbs. / 79 kg.

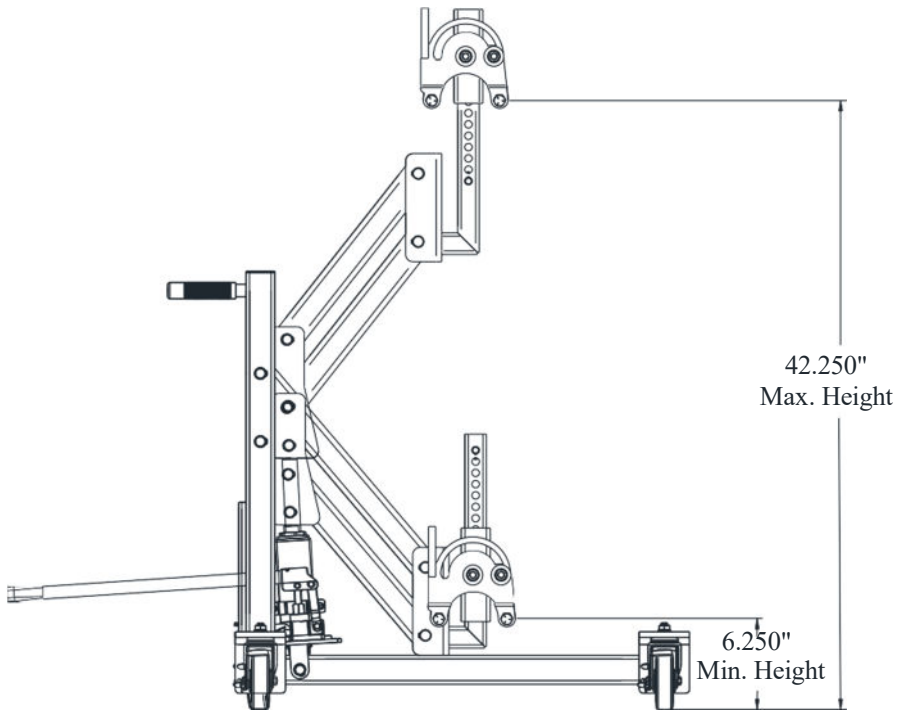


Model CLHM-200

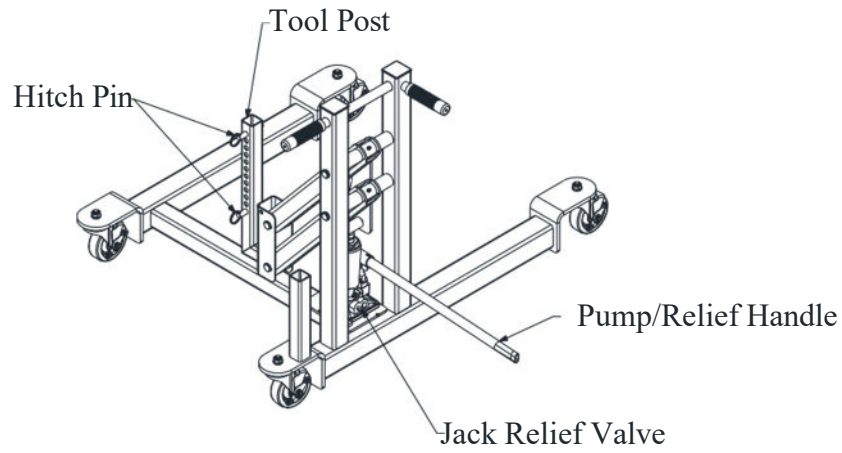
Wheel End Adapter Min./Max. Heights



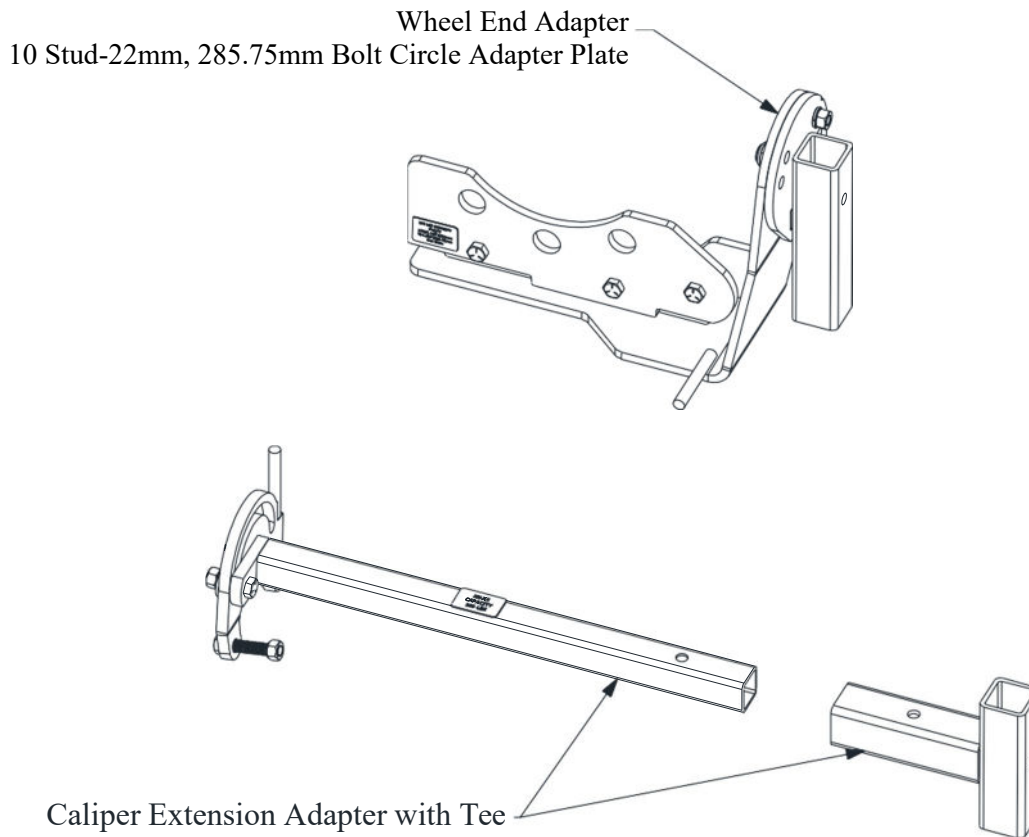
Caliper Extension Adapter Min./Max. Heights



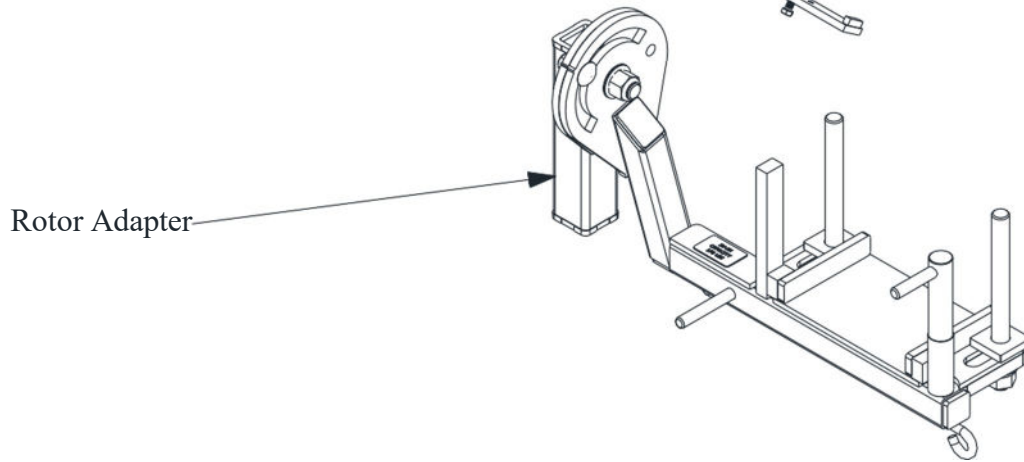
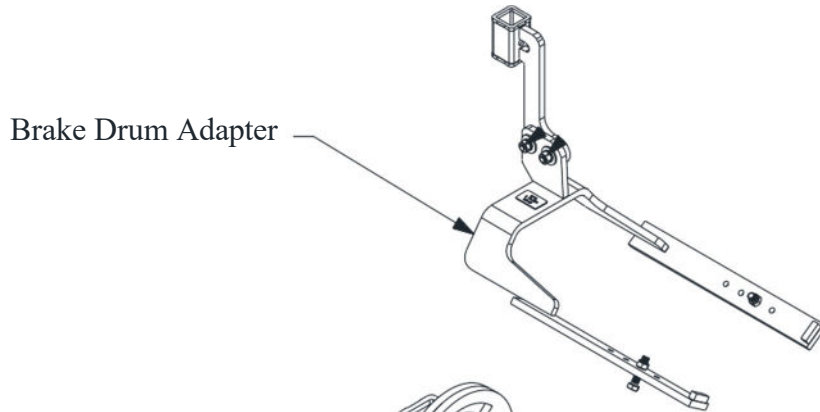
Component Identification



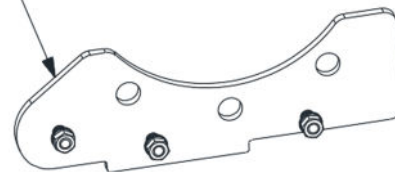
Included Adapters



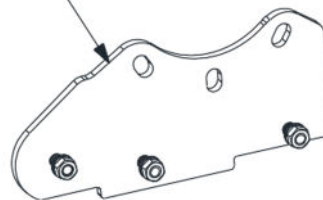
Optional Adapters



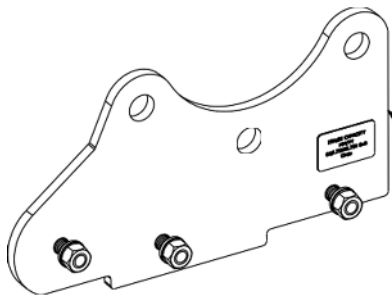
10 Stud-22mm, 335mm Bolt Circle
Wheel End Adapter Plate
(Wheel End Adapter)



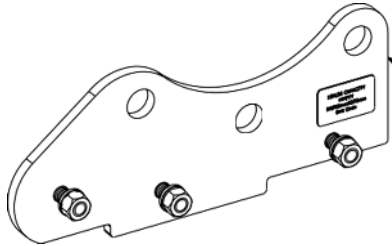
10 Stud-14mm, 8.337/8.858" Bolt Circle
Wheel End Adapter Plate
(Wheel End Adapter)



Model CLHM-200



6 Stud-.750", 8.750" Bolt Circle
Wheel End Adapter Plate
(Wheel End Adapter)



8 Stud-22mm, 275mm Bolt Circle
Wheel End Adapter Plate
(Wheel End Adapter)

Safety Instructions

WARNING

To avoid serious injury or death, read this manual carefully before operating this unit. Contact the manufacturer at the numbers or address printed on the back cover of this manual if you have any questions.

Failure to understand and obey safety instructions may result in unsafe or improper use of this product.

- Do not overload the maximum lifting capacity of the jack of 200 lbs. / 90 kg.
- No alterations shall be made to this product.
- Use this jack only on hard, level surfaces capable of sustaining the load.
- Be sure vehicle is appropriately supported before starting repairs.
- Do not allow any part of your body under the load while jack is supporting a load.
- Do not use blocks or cribbing devices with this jack.
- Use only the factory supplied adapters as a means of contacting the load.
- Never use any other part of the jack as a lifting surface.
- Keep component in the lowest position when rolling jack across floor.
- Never use any other means to pump this jack than the factory supplied pump handle.

Failure to understand and obey this warning may result in personal injury and / or property damage

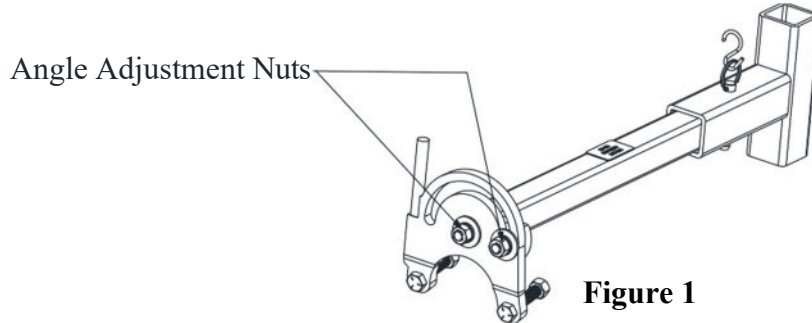
WARNING

The bottle jack on this jack has been modified to ensure a proper descent rate. Do not use any replacement other than from the manufacturer. Failure to heed this warning may result in personal injury and / or property damage.

Operating Instructions

Before using the DBD-200 operator needs to understand how the DBD-200 works. There is one lifting means available to the operator, which is the manual hydraulic power unit. The manual hydraulic power unit is to elevate and lower vertical positions. The relief valve should be closed while using the manual power unit to lift. If the carriage is elevated, it can be easily lowered using the relief valve. The Disc Brake Dolly swivel casters can be locked to prevent further rolling.

Removing a Caliper, Caliper Extension Adapter



1. Park vehicle on level surface to raise the vehicle. Raise the vehicle high enough to get the wheel off the ground. Support the vehicle with adequate vehicle support stands before removing any components or getting under the vehicle. Chock wheels to prevent the vehicle from moving.
2. Remove tire and wheel assembly to access wheel hub and caliper according to the manufacturer's instructions using a supporting device or wheel dolly.
3. Release air brakes and install the brake chamber release tool/cage bolt per manufacturer's instructions. Once caged, remove the mounting nuts or bolts, and detach the chamber from the caliper. Do Not Attempt to remove the brake chamber prior to caging, according to the manufacturer's instructions
4. Attach the Caliper Extension Adapter to the Disc Brake Dolly where the center of gravity of the caliper will be as close to the Tool Post as possible.
5. Using the manual power unit, raise the Disc Brake Dolly high enough so that the Caliper Extension Adapter can be positioned to where the studs on the Caliper Extension Adapter can be inserted into the brake chamber mounting holes on the caliper. Tighten angle adjustment nuts on the caliper adapter once the desired angle has been determined.
6. Insert the studs on the adapter into the brake chamber mounting holes. Install nuts (provided) onto the studs to secure the caliper to the Caliper Extension Adapter. Disconnect any sensors that may be connected to the caliper.
7. Remove the caliper mounting bolts from the brake spider. Once the caliper is free, raise or lower the caliper using the manual power unit on the Disc Brake Dolly. It may be necessary to use a dead blow hammer or a prying tool to free the brake caliper from the brake spider.
8. If replacing the caliper, remove the nuts on the caliper adapter and remove old caliper. Do not readjust the angle of the adapter. Place new caliper onto the Disc Brake Dolly.

Replacing a Caliper

1. Reinstall the caliper by following the removal instructions in the reverse order, and the manufacturer's installation instructions.
2. Torque all fasteners according to the manufacturer's instructions.
3. Adjust brakes per manufacturer's instructions once caliper and brake chamber are reassembled.
4. Raise vehicle, remove stands, lower vehicle, and remove wheel chocks.
5. Test brakes on vehicle and make sure all repairs have been completed according to the manufacturer's specifications.

Removing a Rotor/Wheel End Assembly, Wheel End Adapter Pivot Configurations

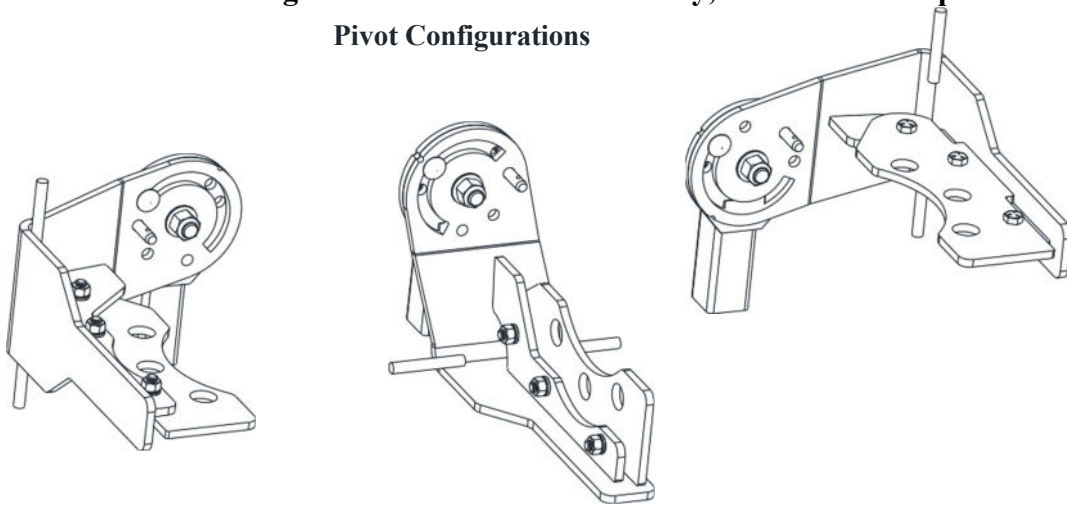


Figure 2

1. It will be necessary to remove the caliper so that the hub/rotor can be removed. Follow the instructions for removing the caliper. Remove caliper and Caliper Extension Adapter from the Disc Brake Dolly, install the Wheel End Adapter to the tool post, and fully insert the hitch pin to the tool post at the desired height. Using the second pin, pin the Wheel End Adapter to the in place, in the vertical direction. Select the appropriate Adapter Plate that matches the bolt pattern of the hub/rotor assembly being serviced. Attach the Adapter Plate to the Wheel End Adapter as shown in Figure 2. Secure with the nuts and washers provided and torque to 50 ft-lbs.
2. Once caliper and pads have been removed, take off the hub cap.
3. Remove wheel end nut retaining device.
4. Using a wheel nut socket and wrench, loosen spindle nut, but do not remove.
5. Position the Disc Brake Dolly with Wheel End Adapter in front of wheel end assembly. Rotate the wheel end to align the wheel studs to the mounting holes on the Wheel End Adapter. Install

and tighten three wheel nuts to attach the wheel end to the Wheel End Adapter, making sure the Wheel End Adapter and wheel end surfaces are flat against each other.

6. Using a wheel nut socket and wrench, remove the wheel end nut. Roll the Disc Brake Dolly away from the vehicle.
7. The Wheel End Adapter hitch pin may be removed so that the Wheel End Adapter can be rotated to service the wheel end assembly. The Wheel End Adapter has a feature that allows the adapter to be adjusted to where it can be rotated and by friction can stay in the position until moved by the operator. To adjust this feature, tighten or loosen the nut on the carriage bolt on the back of the Wheel End Adapter. Reinstall the hitch pin in the appropriate pinning hole on the Wheel End Adapter during service.

Removing a Rotor/Wheel End Assembly, Rotor Adapter

1. It will be necessary to remove the caliper so that the rotor can be removed. Follow the instructions for removing the caliper. Remove caliper and caliper adapter from the Disc Brake Dolly and install the rotor adapter to the tool post and fully insert the pin to the tool post at the desired height. Using the second pin, pin the rotor adapter to the horizontal position.
2. Once caliper and pads have been detached, remove the hub cap.
3. Remove keeper arm or spindle nut retaining device.
4. Using a wheel nut socket and wrench, loosen spindle nut, but do not remove.
5. Adjust the width of the rotor adapter adjustable retaining pins to accept the rotor into the adapter and tighten the nuts on the bottom of the rotor adapter once the correct width is determined, as shown in Figure 3.

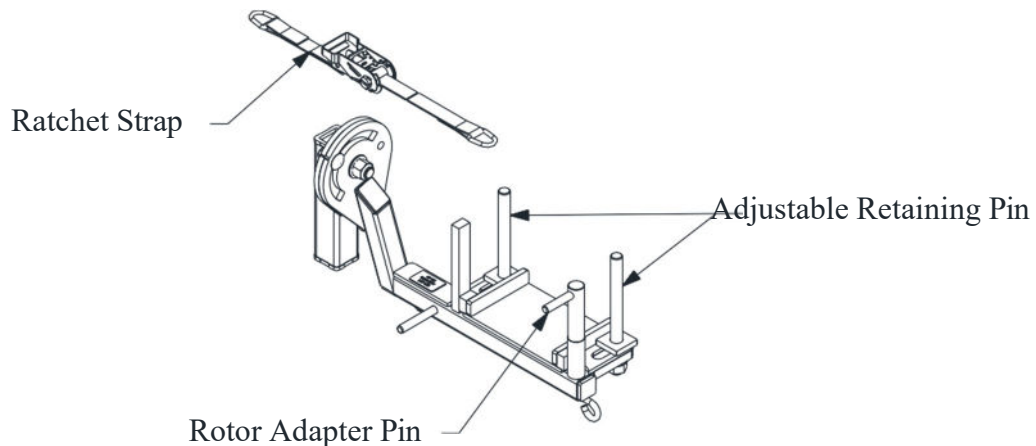


Figure 3

6. Position the Disc Brake Dolly with Rotor Adapter under rotor/wheel end assembly. It may be necessary to remove the rotor adapter pin (shown in Figure 3) on the adapter to position the Disc Brake Dolly under the rotor and hub assembly. Close release on the manual power unit. Once under the rotor, raise the Disc Brake Dolly with the manual power unit until it contacts the rotor and hub assembly. Replace the rotor retaining pin in the socket tube on the rotor adapter.
7. Attach both ends of the ratchet strap to the hooks on the rotor adapter. Operate the ratchet until the strap is tight enough to secure rotor/wheel end assembly to the rotor adapter.
8. Remove the spindle nut, washer, and outer spindle bearing. Move rotor/wheel end assembly side to side gently to free it from the spindle. As the rotor/wheel end assembly becomes free, roll the Disc Brake Dolly away from the vehicle.
9. The rotor adapter horizontal positioning pin may be removed so that the rotor adapter can be rotated to service the rotor/wheel end assembly. The rotor adapter has a feature that allows the adapter to be adjusted to where it can be rotated and by friction can stay in the position until moved by the operator. To adjust this feature, tighten or loosen the nut on the carriage bolt on the back of the rotor adapter.

Replacing a Wheel End Assembly:

1. After performing all required repairs and maintenance procedures according to the manufacturer's instructions, the wheel end assembly can be reinstalled.
2. Rotate the Wheel End Adapter Rotor Adapter to the vertical position and pin into place.
3. Move the Disc Brake Dolly close to the spindle and adjust the height of the wheel end assembly with the manual power unit, if necessary. Align and gently assemble wheel end assembly onto the spindle, taking care not to damage the wheel seal.
4. Install outer bearing into the bearing journal in the wheel end as instructed by the manufacturer's specifications.
5. Install the wheel end washer and nut, and hand tighten.
6. Remove the wheel nuts from the studs and move Disc Brake Dolly away from the work area.
7. Torque the wheel end nut according to the manufacturer's specifications and install the wheel nut retaining device.
8. Install the wheel end cap according to the manufacturer's specifications.
9. Install the wheel and tire assembly.

Removing a Brake Drum, Brake Drum Adapter

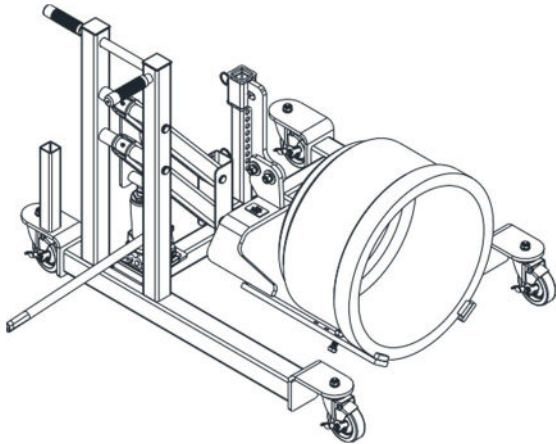


Figure 4

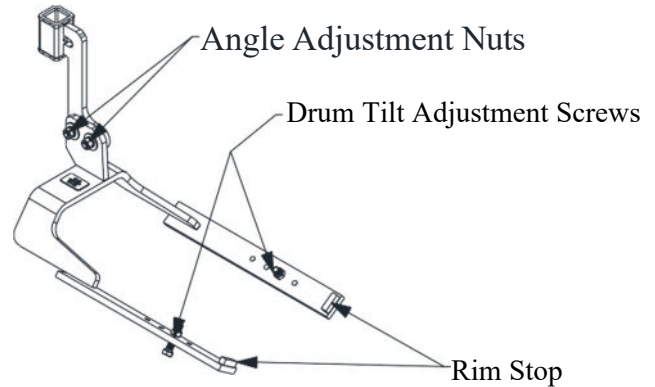


Figure 5

1. Park vehicle on level surface to raise the vehicle. Raise the vehicle high enough to get the wheel off the ground. Support the vehicle with adequate vehicle support stands before removing any components or before getting under the vehicle. Chock wheels to prevent the vehicle from moving.
2. Remove tire and wheel assembly to access brake drum according to the manufacturer's instructions using a supporting device or wheel dolly.
3. Release air brakes and install the brake chamber release tool/cage bolt per manufacturer's instructions. Do Not Attempt to remove the brake drum without caging the brakes according to the manufacturer's instructions.
4. Attach the Brake Drum Adapter to the tool post on the Disc Brake Dolly in the direction shown in Figure 4. The Brake Drum Adapter should only be attached in the direction shown. Insert the hitch pin in the top position of the tool post.
5. Using the manual power unit, raise the Disc Brake Dolly high enough so that the Brake Drum Adapter can be positioned under the brake drum. Tighten angle adjustment nuts on the Brake Drum Adapter once the desired angle has been determined. Adjust Drum Tilt Adjustment Screws to the desired position and height for the brake drum to sit horizontally on the Brake Drum Adapter and lock into place by tightening the nuts.
6. Roll the DBD-200 into position and raise the Brake Drum Adapter until it becomes in contact with the brake drum on the vehicle and lock the casters. The Brake Drum Adapter must be inserted far enough under the brake drum, such that the stops engage the lip of the brake drum as shown in Figure 5. The brake drum may need to be broken loose from the wheel end due to corrosion or oxidation. It may be necessary to use a dead blow hammer or a prying tool to free the brake drum from the wheel end.
7. Once the brake drum is free, unlock the casters and carefully move the DBD-200 away from the vehicle with the brake drum resting on the Brake Drum Adapter. The Drum can be lowered to the floor by using the relief valve on the manual power unit.

Replacing a Brake, Drum Brake Drum Adapter:

1. Reinstall the brake drum by following the removal instructions in the reverse order, and the manufacturer's installation instructions.
2. Torque all fasteners according to the manufacturer's instructions.
3. Uncage brake chamber and adjust brakes per manufacturer's instructions once brake drum installed.
4. Raise vehicle, remove stands, lower vehicle, and remove wheel chocks.
5. Test brakes on vehicle and make sure all repairs have been completed according to the manufacturer's specifications.

Maintenance Instructions

⚠WARNING

All inspection and maintenance procedures must be performed after the Disc Brake Dolly has been removed from service. Failure to heed this warning may result in personal and / or property damage.

NOTICE

The owner must inspect or appoint a knowledgeable person to inspect the Disc Brake Dolly. Visual inspection should be made before each use of Disc Brake Dolly, checking for abnormal conditions. Regular inspections should be made weekly for daily use and monthly for intermittent use. Each Disc Brake Dolly must be inspected immediately if subjected to an abnormal load or shock. Any Disc Brake Dolly which appears to be damaged, found to be badly worn, or operates abnormally shall be removed from service until necessary repairs are made.

1. Check oil level in the oil reservoir. Refer to the "Adding Hydraulic Fluid" section.
2. All warning and capacity labels should be readable and complete. Wash external surfaces of jack, labels, and decals with a mild soap solution.
3. Lubricate all rotating and sliding portions of the jack monthly.
4. Grease the jack once per month with good bearing grease. There are grease fittings located in the pivot tubes of the lift arm, and casters.

Structural Inspection

⚠WARNING

The Disc Brake Dolly must be removed from service and inspected for damage immediately if the Disc Brake Dolly is subjected to an abnormal shock or load. Failure to heed this warning may result in personal and / or property damage.

NOTICE

The owner must inspect or appoint a knowledgeable person to inspect the Disc Brake Dolly for signs of corrosion and / or excessive wear. Visual inspection should be made before each use of the Disc Brake Dolly, checking for abnormal conditions. Regular inspections should be made weekly for daily use and monthly for intermittent use. Each Disc Brake Dolly must be inspected immediately if subjected to an abnormal load or shock. Any Disc Brake Dolly which appears to be damaged in any way, is found to be badly worn, or operates abnormally shall be removed from service until necessary repairs are made.

1. Visually inspect each Disc Brake Dolly component, for signs of cracking, chipping, or excessive wear, including all welds.
2. Visually inspect the lift arms and tool post for any permanent deformation such as bending or twisting. The tool post should raise and lower smoothly. If the tool post is not able to be raised to full height or does not stay in fully raised position, refer to the Adding Hydraulic Fluid section of this manual.
3. Visually inspect the manual power unit for oil leaks. Refer to the Troubleshooting section if oil leaks are present.
4. Visually inspect all four wheels for cracking, chipping, or excessive wear. The wheels should rotate freely.
5. Visually inspect the Disc Brake Dolly and adapters for leaks, cracks, and loose or missing fasteners. All controls should operate freely.

If any irregularities or problems are detected during an inspection, the Disc Brake Dolly must be removed from service immediately and repaired. Contact the Manufacturer at the numbers and address printed on the back cover of this manual.

Adding Hydraulic Fluid

1. Remove the Disc Brake Dolly from service.
2. The lift arms must be in the fully lowered position and the Disc Brake Dolly must be on a level surface.
3. Clean the side of the reservoir before removing the plug to prevent contamination of the hydraulic oil and hydraulic system.
4. Remove the plug. Visually check the hydraulic oil level. The oil should be visible and within half inch of the fill hole. If the fluid level is low, add a high-grade hydraulic fluid equivalent to Tellus T22.

▲ CAUTION

Do not use brake or transmission fluid. Use of the wrong fluid can deteriorate the seals and corrosion problems will occur.

5. Re-install the plug. Clean up any spilled oil. Test the Disc Brake Dolly for normal operation.
If the lift carriage still does not rise to proper height, repeat steps above. If this does not solve the problem, contact customer service at the numbers and address printed on the back cover of this manual.

Troubleshooting

This is a list of problems and solutions. If the solution listed fails to correct the problem, contact customer service at the numbers and address printed on the back cover of this manual. Please have the model number, and serial number of your Disc Brake Dolly available. The serial number is located on one of the rear caster brackets.

PROBLEM

CAUSE / SOLUTION

- | | |
|--------------------------|--|
| Fails to lift load..... | Low oil level, see the “Adding Hydraulic Fluid” section.
Relief valve open, turn relief valve clockwise until tight.
Overloaded, use larger capacity Disc Brake Dolly. |
| Fails to hold load | Relief valve open, turn relief valve clockwise until tight. |
| Oil leaks..... | Reservoir plug loose, tighten plug.
Reservoir is overfilled. Oil will leak from the plug if the reservoir is overfilled. |

Notes

