Portable Mid-Rise Scissor Lift

Installation and Operation Manual


Models:

• MD-6XP

⚠️ DANGER

Read the entire contents of this manual before using this product. Failure to follow the instructions and safety precautions in this manual can result in serious injury or death. Make sure all other operators also read this manual. Keep the manual near the product for future reference. By proceeding with setup and operation, you agree that you fully understand the contents of this manual and assume full responsibility for product use.

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Limitations. Every effort has been made to ensure complete and accurate instructions are included in this manual. However, product updates, revisions, and/or changes may have occurred since this manual was published. BendPak reserves the right to change any information in this manual without incurring any obligation for equipment previously or subsequently sold. BendPak is not responsible for typographical errors in this manual. You can always find the latest version of the manual for your product on the BendPak website.

Warranty. The BendPak warranty is more than a commitment to you: it is also a commitment to the value of your new product. Contact your nearest BendPak dealer or visit www.bendpak.com/support/warranty for full warranty details. Go to bendpak.com/support/register-your-product/ and fill out the online form to register your product (be sure to click Submit).

Safety. Your product was designed and manufactured with safety in mind. However, your safety also depends on proper training and thoughtful operation. Do not install, operate, maintain, or repair the unit without reading and understanding this manual and the labels on the unit; do not use your Lift unless you can do so safely!

Owner Responsibility. In order to ensure operator safety and maintain your product properly, it is the responsibility of the product owner to read and follow these instructions:

• Follow all setup, operation, and maintenance instructions.
• Make sure product setup and use conforms to all applicable local, state, and federal codes, rules, and regulations, such as state and federal OSHA regulations and electrical codes.
• Read and follow all safety instructions. Keep them readily available for operators.
• Make sure all operators are properly trained, know how to safely operate the unit, and are properly supervised.
• Do not operate the product until you are certain all parts are in place and operating correctly.
• Carefully inspect the product on a regular basis and perform all maintenance as specified.
• Service and maintain the unit only with approved replacement parts.
• Keep all instructions permanently with the product and make sure all labels are clean and visible.
• Only use the Lift if it can be used safely!

Unit Information. Enter the Model Number, Serial Number, and the Date of Manufacture from the label on your unit. This information is required for part or warranty issues.

Model: ________________________________
Serial: ________________________________
Date of Manufacture: ______________________
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Introduction

This manual describes the MD-6XP, which is a mid-rise, frame-engaging, scissor Lift that is portable and comes with a small footprint designed for narrower bays and low-ceiling garages.

The MD-6XP can raise Vehicles up to 6,000 lbs (2,722 kg).

More information about the full line of BendPak products is available at bendpak.com.

This manual is mandatory reading for all MD-6XP users, including anyone who sets up, operates, maintains, or repairs them.

⚠️ DANGER  Be very careful when setting up, operating, maintaining, or repairing this equipment; failure to do so could result in property damage, product damage, injury, or (in very rare cases) death. Make sure only authorized personnel operate this equipment. All repairs must be performed by an authorized technician. Do not make modifications to the unit; this voids the warranty and increases the chances of injury or property damage. Make sure to read and follow the instructions on the labels on the unit.

Keep this manual on or near the device so that anyone who uses or services it can read it.

If you are having issues, refer to the Troubleshooting section of this manual for assistance.

Technical support and service is available from your dealer, on the Web at bendpak.com/support, by email at support@bendpak.com, or by phone at (800) 253-2363, extension 196.

You may also contact BendPak for parts replacement information (please have the model and serial number of your unit available) at (800) 253-2363, extension 191.
Shipping Information

Your equipment was carefully checked before shipping. Nevertheless, you should thoroughly inspect the shipment before you sign to acknowledge that you received it.

When you sign the bill of lading, it tells the carrier that the items on the invoice were received in good condition. Do not sign the bill of lading until after you have inspected the shipment. If any of the items listed on the bill of lading are missing or damaged, do not accept the shipment until the carrier makes a notation on the bill of lading that lists the missing and/or damaged goods.

If you discover missing or damaged goods after you receive the shipment and have signed the bill of lading, notify the carrier at once and request the carrier to make an inspection. If the carrier will not make an inspection, prepare a signed statement to the effect that you have notified the carrier (on a specific date) and that the carrier has failed to comply with your request.

It is difficult to collect for loss or damage after you have given the carrier a signed bill of lading. If this happens to you, file a claim with the carrier promptly. Support your claim with copies of the bill of lading, freight bill, invoice, and photographs. Our willingness to assist in helping you process your claim does not make us responsible for collection of claims or replacement of lost or damaged materials.

Safety Considerations

Read this manual carefully before using your new product. Do not set up or operate the product until you are familiar with all operating instructions and warnings. Do not allow anyone else to operate the product until they are also familiar with all operating instructions and warnings.

General Safety Information

- The product is a mid-rise scissor Lift. Use it only for its intended purpose. Do not make any modifications to the product.
- The product should only be operated by authorized personnel.
- You must wear OSHA-approved (publication 3151) personal protective equipment at all times when installing, using, maintaining, or repairing the Lift: leather gloves, steel-toed work boots, eye protection, back belts, and hearing protection are mandatory.
- Keep loads centered and balanced on the Lift.
- Never exceed the rated capacity of the Lift.
- When the product is in use, keep all body parts away from it.
- Make sure all operators read and understand the Installation and Operation Manual. Keep the manual near the device at all times.
- Make a visual inspection of the product before using it. Check for damage or missing parts. Do not use the product if you find any issues. Instead, take it out of service, then contact your dealer, email support@bendpak.com, visit bendpak.com/support, or call (800) 253-2363.
- Make a thorough inspection at least once a year. Replace any damaged or severely worn parts, decals, or warning labels.
Symbols
Following are the symbols used in this manual:

⚠ **DANGER**  Calls attention to an immediate hazard that **will** result in injury or death.

⚠ **WARNING**  Calls attention to a hazard or unsafe practice that **could** result in injury or death.

⚠ **CAUTION**  Calls attention to a hazard or unsafe practice that could result in minor personal injury, product, or property damage.

NOTICE  Calls attention to a situation that, if not avoided, could result in product or property damage.

💡 **Tip**  Calls attention to information that can help you use your product better.

Liability Information
BendPak Inc. assumes **no** liability for damages resulting from:

- Use of the product for purposes other than those described in this manual.
- Modifications to the equipment without prior, written permission from BendPak Inc.
- Injury or death caused by modifying, disabling, overriding, or removing safety features.
- Damage to the equipment from external influences.
- Incorrect operation of the equipment.
Frequently Asked Questions

**Question**: How much weight can the MD-6XP raise?

**Answer**: The MD-6XP can raise Vehicles up to 6,000 pounds (2,722 kg).

**Q**: The MD-6XP is called a “mid-rise” Lift, what does that mean?

**A**: It means that the MD-6XP can raise a Vehicle up to three and a half feet off the ground, which is higher than low-rise scissor lifts, but not as high as full-rise scissor lifts.

**Q**: Can the MD-6XP be installed outside?

**A**: BendPak does not recommend keeping it permanently outside. The MD-6XP has electrical components that must be protected from the environment, especially water. However, the MD-6XP is portable, so you can take it outside, use it, and then bring it back inside. If you do use the unit outside on a regular basis, BendPak recommends performing maintenance on it more frequently than specified in the Maintenance section (which is for units used inside only).

**Q**: Does it matter where I put the Stand/Power Unit?

**A**: Yes. The Long Hydraulic Hose needs to be able to reach the unit; additionally, the operator must have a clear, unobstructed view of the Lift at all times.

**Q**: What if I want to raise a Vehicle that is slightly over the weight capacity of the Lift?

**A**: This is not an intended use of the product. We strongly recommend against trying to raise a Vehicle that is heavier than the rated capacity of your Lift.

**Q**: How many Safety Lock positions does my Lift have?

**A**: Three. This gives you multiple heights to which you can raise the Lift, so it is easy to set it to the right height for what you are doing.

**Q**: What do the Safety Locks do?

**A**: Safety Locks use gravity and intelligent engineering to hold up the Platform, Arms, and the Vehicle on the Arms, once they are engaged. Even if the Lift loses power or the Hydraulic Hoses leak or are cut, the Vehicle will stay up if you left the Lift engaged on a Safety Lock. Only leave your Lift either fully lowered or engaged on a Safety Lock!

**Q**: Which end of the MD-6XP is the “front”?

**A**: There is no front or back. You can drive Vehicles onto and off of the Lift in either direction. The MD-6XP works great no matter which direction you drive the Vehicles on and off.

**Q**: The MD-6XP is described as “frame-engaging”, what does that mean?

**A**: It means the Pads on the ends of the Arms contact the underside of the Vehicle to raise it. To put it another way, the Vehicle is not raised by its wheels.
Components

MD-6XP components include:

- **Scissor Structure.** Holds the Lift together. Pivots in the middle. The two scissor pieces move together to raise the Lift, move apart to lower it.
- **Power Unit.** Provides Hydraulic Fluid to the Hydraulic Cylinders, which they use to raise the Scissor Structure. Connects to an external power source.
- **Platform.** Located on the top of the Scissor Structure. Holds the Arms and the Lift Pads.
- **Hydraulic Cylinders.** Move the Scissor Structure and Platform up to raise a Vehicle, move them down to lower a Vehicle.
- **Long Hydraulic Hose.** Connects to the Hydraulic Cylinder on the Lift closest to the Power Unit.
- **Short Hydraulic Hose.** Connects the two Hydraulic Cylinders on the Lift.
- **Safety Locks.** Hold the Platform in place, once they are engaged. The MD-6XP has three Safety Lock positions, which lets you select the right Vehicle height for your needs.
- **Latch.** Located at the Base of the Lift, used for moving the Lift around.
- **Lift Arm.** Attaches to the inside channels of the Platform, used for holding the Lift Pads.
- **Lift Pads.** Black, rubber Pads that make contact with the Lifting Points on the underside of the Vehicle being raised; do not raise a Vehicle on the Platform. The Lift comes with four Short Pads and four Tall Pads/Adapters/Bases. Using the Lift Pads is required.
- **Portable Stand.** Holds the Power Unit, has two mounting holes to attach the Power Unit.
- **Tow Cart.** Used for moving the Lift around your work space.
- **Tow Pin.** Attached to the Tow Cart, hooks to the Lift so you can move it.
Specifications

Top View

Side View
<table>
<thead>
<tr>
<th>Model</th>
<th>MD-6XP</th>
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<tbody>
<tr>
<td>Lifting capacity</td>
<td>6,000 lbs. / 2,722 kg</td>
</tr>
<tr>
<td>a Lifting Height (no Pads)*</td>
<td>47&quot; (3.9 feet) / 1,190 mm</td>
</tr>
<tr>
<td>b Overall Width</td>
<td>41.5&quot; (3.6 feet) / 1,054 mm</td>
</tr>
<tr>
<td>c Overall Length</td>
<td>76&quot; (6.4 feet) / 1,930 mm</td>
</tr>
<tr>
<td>d Frame Length</td>
<td>60&quot; (5 feet) / 1,524 mm</td>
</tr>
<tr>
<td>Lowered Height</td>
<td>4.75&quot; / 121 mm</td>
</tr>
<tr>
<td>Top Locking Position (no Pads)**</td>
<td>42&quot; (3.5 feet) / 1,067 mm</td>
</tr>
<tr>
<td>Middle Locking Position (no Pads)**</td>
<td>33.25&quot; (2.8 feet) / 844 mm</td>
</tr>
<tr>
<td>Bottom Locking Position (no Pads)**</td>
<td>22&quot; (1.8 feet) / 562 mm</td>
</tr>
<tr>
<td>Raising/Lowering Time***</td>
<td>45 seconds</td>
</tr>
<tr>
<td>Motor****</td>
<td>115/220 VAC, 50/60 Hz, 1 Ph</td>
</tr>
</tbody>
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* Distance is from ground to top of Platform; does not include height of Arms or Pads.

** For height comparison only; do not raise a Vehicle without Lift Pads.

*** Lowering is much slower with no Vehicle on the Lift.

**** Must specify at time of ordering.

Specifications subject to change without notice.
Installation Checklist

Following are the steps needed to install an MD-6XP Lift. Perform them in the order shown.

☐ 1. Review the installation Safety Rules.
☐ 2. Make sure you have the necessary Tools.
☐ 3. Select the Installation Site.
☐ 5. Check clearances.
☐ 6. Unloading and unpacking.
☐ 7. Set up the Tow Cart.
☐ 8. Attach the Power Unit to the Portable Stand.
☐ 10. About Thread Sealants.
☐ 12. Install the Lift Arms.
☐ 13. Fill the Hydraulic Fluid Reservoir.
☐ 14. Connect the Power Unit.
☐ 15. Install a Thermal Disconnect Switch (Electrician required).
☐ 16. Test the Lift.
☐ 17. Review the Final Checklist.
Installation

This section describes how to install an MD-6XP. Perform the steps in the order listed.

⚠️ **WARNING** *Use only the factory-supplied parts that came with your Lift.* If you use parts from a different source, you void your warranty and compromise the safety of everyone who installs or uses the Lift. If you are missing parts, visit bendpak.com/support or call (800) 253-2363, extension 191.

Safety Rules

When installing the Lift, your safety depends on proper training and thoughtful operation.

⚠️ **WARNING** Do not install this equipment unless you have automotive Lift installation training. Always use proper tools, such as a Forklift or Shop Crane, to move heavy components. Do not install this equipment without reading and understanding this manual and the safety labels on the unit.

BendPak recommends referring to the ANSI/ALI ALIS Standard (R2015) *Safety Requirements for Installation and Service* for more information about safely installing, using, and servicing your Lift.

Only fully trained personnel should be involved in installing this equipment. *Pay attention at all times.* Use appropriate tools and equipment. Stay clear of moving parts.

⚠️ **WARNING** You must wear OSHA-approved (publication 3151) personal protective equipment at all times when installing, using, maintaining, or repairing the Lift: leather gloves, steel-toed work boots, eye protection, back belts, and hearing protection are mandatory.

Tools

You may need some or all of the following tools:

- Hammer, mallet, crowbar, or pry bar
- Open-end wrench set
- Socket and ratchet set
- Medium crescent wrench
- Medium flat screwdriver
- Tape measure
- Fork Lift or Shop Crane
Select a Site

The MD-6XP is portable, so you may be moving it and using it at a variety of locations. Keep the following in mind when selecting a location for your Lift:

- **Clearance.** You must have adequate space on all sides, plus enough space above for the Vehicles you will be raising. See Clearance Around the Lift for more information.

- **Check for overhead obstructions.** Check for overhead obstructions such as building supports, heaters, electrical lines, low ceilings, hanging lights, and so on. You do not want the Vehicles on the Lift hitting obstructions.

- **Operator.** The operator must have a full, unobstructed view of the Lift.

- **Level Floor.** Only install the Lift on a dry, flat, and stable floor; do not install the Lift on dirt or an uneven surface.

- **Power.** You will need a 115 VAC or 220 VAC power source available near the Power Unit.

- **Operating temperature.** The Lift is designed to be used between temperatures of 41º to 104ºF (5º to 40ºC).

- **Outdoor use.** The Lift is best not left outside for long periods of time. If you want to use it outside, BendPak recommends moving it outside, using it, then moving it back inside.

⚠ **DANGER** Keep the Power Unit away from damp environments; the motor must not get wet.

- **Dress properly.** Always wear protective gear when installing the Lift. Leather gloves, steel-toed work boots, eye protection, back belts, and hearing protection are mandatory. Do not wear loose clothing or jewelry; contain long hair; keep hair, clothing, and gloves away from moving parts.

⚠ **WARNING** You must wear OSHA-approved (publication 3151) Personal Protective Equipment at all times when using the Lift.

Planning for Electrical Work (220 VAC only)

If you received a Power Unit configured for 220 VAC operation (must’ve been specified at the time of ordering), you will need to have a licensed, certified Electrician at some point in the installation.

⚠ **DANGER** All wiring must be performed by a licensed, certified Electrician.

A Power Unit configured for 220 VAC operation is shipped with a pigtail for wiring to the power source. Have your Electrician remove the pigtail and wire from inside the Electrical Box on the Power Unit to an appropriate Power Cord and Plug.

**Note:** The Power Cord and Plug are not supplied with the Lift.
Clearance Around the Lift

For safety purposes, a certain amount of clear space around the Lift is **required**.

You also need to make sure to leave enough space **above** the Vehicles you will be raising. Be sure to check for low-hanging obstructions such as hanging lights, beams, and so on. **Do not install the Lift under low-hanging obstructions.**

Extra distance is required on both ends so that you can drive Vehicles onto and off of the Lift in either direction; if your layout only allows Vehicles to be driven onto and off the Lift from one direction, then less space is required at the non-approach end.
**Unloading and Unpacking**

Try to have the components of the Lift unloaded near the installation location.

Once the components are unloaded, it is your responsibility to move them around. As the Lift includes a number of heavy pieces, the closer you unload it to the installation location, the better off you are.

⚠ **CAUTION** The Frame is heavy; if handled incorrectly, it can damage materials like tile, sandstone, and brick. Try to handle the Lift components twice: once when delivered and once when moved to the installation location. Use care when moving the Frame.

**Set up the Tow Cart**

The Tow Cart lets you move the Lift around your work space. The Tow Cart has two parts: the Handle and the Base; you need to attach the Handle to the Base.

The following drawing shows the Tow Cart.

![Tow Cart Diagram]

*Front View. Not all components are shown. Not drawn to scale.*

**To set up the Tow Cart:**

1. Find the Handle, Base, and the necessary hardware.
2. Attach the Handle to the Base using a Bolt, Washer, and Nut per hole.
   - Use M6 x 1.0 x 30 mm Bolts.
3. Keep the Tow Cart in an accessible area for future use.
Attach the Power Unit to the Portable Stand

The Power Unit attaches to a Portable Stand, so that you can move the Power Unit along with the Lift; the Power Unit can be placed up to 35 inches away from the Lift.

**Tip**  The Power Unit is heavy and awkward. We recommend having one person hold the Power Unit while a second person bolts it onto the Stand.

The following drawing shows the components of the Portable Stand.

*Side View. Not all components are shown. Not to scale.*

**To attach the Power Unit to the Portable Stand:**

1. Find the Power Unit, Portable Stand, and necessary hardware.
2. Remove the Power Unit from its packing material.
3. Align the Power Unit Mounting Plate with the Mounting Holes on the Stand, then secure it in place with the supplied Nuts and Bolts.
4. Use an appropriate tool to securely tighten the Nuts and Bolts.

**Important:** Do *not* make any connections to the Power Unit at this point.
Hydraulic Fluid Contamination

Hydraulic Fluid Contamination poses a **serious** issue for your Lift; contaminants such as water, dirt, or other debris can get into the Hydraulic Hoses and Fittings on the Lift, making your new Lift inoperable.

Your Lift is shipped with clean components; however, Bendpak strongly recommends that you take secondary precaution and clean all Hydraulic Hoses and Fittings prior to making connections. It is better and less costly to take these extra steps now so that you do not need to take your Lift out of service later to fix issues that could have been prevented at the time of installation.

There are several ways to clean Hydraulic Hoses and Fittings:

- **Compressed Air.** Use an air compressor to blow out contaminants from each Hydraulic Hose and Fitting prior to installation. Clean, dry air is preferred. Wear eye protection (safety glasses, goggled, or face shield) when using compressed air for cleaning. Never point an air hose nozzle at any part of your body or any other person.

- **Fluid Flushing.** As long as the Hydraulic Fluid is clean and compatible with the system fluid, you can flush the Hoses and Fittings to create turbulent flow and remove particulates. Always ensure that the fluid itself is contaminant-free.

Some additional steps that will keep the Hydraulic Fluid clean:

- **Remove old thread seal tape.** Some ports on the Hydraulic Cylinders are shipped with temporary plugs secured with thread seal tape, so make sure to thoroughly remove any leftover thread seal tape that may inadvertently enter the Hydraulic System.

- **Use a liquid thread sealant only.** Teflon paste-type thread sealant or Loctite™ 5452 thread sealant is recommended for all NPT Fittings. Do not over tighten NPT Fittings or they may crack. Never use thread seal tape on JIC Fittings or ORB O-Ring Fittings.

- **Always use clean equipment.** If you use a dirty bucket or funnel to transfer the Hydraulic Fluid into the Hydraulic Fluid Reservoir, the more likely it is that contaminants will be introduced to the Fluid. If you use cleaning rags, use a lint-free rag.

- **Proper storage.** Keep the Hydraulic Fluid sealed in its container until ready for use; store the fluid in a dry, clean, and cool area.

- **Cover the Fittings.** During installation or when performing maintenance on the Lift, do not leave the ends of the Fittings exposed; the same applies for the Hydraulic Hoses. As a general rule, keep the Hydraulic Hoses and Fittings capped and kept in a clean area until ready for use.

- **Filter the new Hydraulic Fluid.** Just because it is new does not necessarily mean it is clean. Use an offline filtration cart or kidney loop system to make sure the Hydraulic Fluid is clean before being transferred into the Hydraulic Fluid Reservoir (even using a heavy duty nylon mesh screen is better than trusting what is left at the bottom of the barrel).

- **Avoid mixing different types of Hydraulic Fluid.** If Hydraulic Fluid needs to be replaced, make sure to flush the Hydraulic System of the old Hydraulic Fluid before you add the replacement fluid; do not mix the two together.
About Thread Sealants

The efficiency of your Lift’s Hydraulic system relies on secure connections, which help prevent leaks and keep contaminants out. We recommend using a Liquid Thread Sealant (like Loctite™ 5452 or similar PTFE Thread Sealant) to seal the Hydraulic components on your Lift.

Thread Sealant lubricates and fills the gaps between the Fitting threads, and leaves no residue that could contaminate the Hydraulic Fluid. Other types of sealants can shred during installation or removal and eventually enter the Hydraulic System.

**Thread Sealant is not the same as Threadlocker**: Threadlocker holds assemblies tightly in place to prevent them from loosening over time, and is not easily removed.

Thread Sealant can be used with most Hydraulic Fittings, although you probably only need to use it with NPT connectors.

**To apply Thread Sealant:**

1. Make sure the Fittings and connectors you are going to use are clean and dry.
   - If you are adding Thread Sealant to a Fitting or connector that has already been used with a different sealant, use a wire brush to thoroughly remove the old sealant before adding more.

2. Apply a small amount of Thread Sealant to the first four threads of the Fitting.
   - **WARNING** Make sure to wear the proper protective equipment when handling Thread Sealant.
     - You only need a small amount because the sealant spreads to the other threads as it is tightened into place.
     - If you put too much, the excess liquid will be pushed out when the Fitting is tightened; use a rag to wipe the excess.

3. Tighten the Fitting into the connector; do **not** over tighten the Fitting.

4. Allow the manufacturer-recommended curing time before pressurizing the system.
Connect the Hydraulic Hoses

Hydraulic Hoses provide Hydraulic Fluid to the Hydraulic Cylinders, where it is used to raise the Platform.

The MD-6XP comes with two Hydraulic Hose lengths:

- **Short Hydraulic Hose.** Connects the two Hydraulic Cylinders on the Lift.
- **Long Hydraulic Hose.** Connects from the closest Hydraulic Cylinder to the Power Unit.

The Power Unit can be placed on either side of the Frame, as long as the operator has an unobstructed view of the Lift at all times.

The following drawing shows how to route the Hydraulic Hoses on the Lift.

![Hydraulic Hose Diagram](image)

*Drawing shows Power Unit on the left side of the Frame. Drawing not to scale. Some components not shown, other components exaggerated for clarity.*

**To connect the Hydraulic Hoses:**

1. Locate the Long Hydraulic Hose and a Hydraulic Straight Fitting.
2. Clean the Hydraulic components using the information in [Hydraulic Fluid Contamination](#).
3. The Short Hydraulic Hose is shipped from the factory already connected between the Hydraulic Cylinders.

   **If it is not**, remove the Shipping Plugs from the Hydraulic Hose Ports near the bottom of each Hydraulic Cylinder on the Lift, attach Hydraulic Elbow Fittings (04 JIC – 04 NPT) to the inside Hydraulic ports, and then connect the Short Hydraulic Hose to the Elbow Fittings you just attached, making sure to route the Hose through the Retaining Ring near the top of the Hydraulic Cylinders.

   Make sure to keep the Hydraulic Cylinder Ports and Fittings contaminant-free.
4. Attach a Hydraulic Straight Fitting (NPL 04 JIC – 04 NPT) to the outside Hydraulic Port of the Hydraulic Cylinder closest to where the Power Unit will be.

5. Route the Straight end of the Long Hydraulic Hose through the opening in the Frame, and then connect it to the Straight Fitting.

6. On the Power Unit, remove the Shipping Plug from the Hydraulic Out Port you want to use; it does not matter which one you use.

The following drawing shows the possible port configurations, depending on your Power Unit.

7. Attach a Hydraulic Elbow Fitting (04 JIC – 06 ORB) to the Hydraulic Out Port.

8. Connect the Curved end of the Long Hydraulic Hose to the Elbow Fitting on the Power Unit. Once all Hoses and Fittings have been attached, securely tighten all connections.

_Hydraulic Out Ports are usually labeled P on the Power Unit. Not all components of the Power Unit are shown. Not drawn to scale._
Install the Lift Arms

The Lift Arms are used with the Lift Pad accessories so that you can raise a Vehicle by the manufacturer’s recommended Lifting Points.

The Lift Arms attach inside the Channels, where they can move freely to accommodate various Lifting Points; one Lift Arm per each Channel.

The following drawing shows how to install the Lift Arms.

Only one Platform is shown. Some components not shown or exaggerated for clarity. Not drawn to scale.

To install the Lifting Arms:

1. Locate the four Lifting Arms.
2. Remove the Washer and Nut from the Lift Arm Pin.
3. Position the Lift Arm so that the Lift Arm Pin is above the Channel, then slide the Pin through the Channel.
4. Secure the Pin in place with the Washer and Nut you removed earlier.
   
   Do not over-tighten the Nut; keep it loose enough so that the Arm can move and pivot within the Channel.

5. Repeat Steps 2 through 4 for the remaining Lift Arms.
**Fill the Hydraulic Fluid Reservoir**

The Hydraulic Fluid Reservoir on the Power Unit must be filled with Hydraulic Fluid or automatic transmission fluid before you begin normal operation.

The Hydraulic Fluid Reservoir holds approximately **1.5 gallons / 5.5 liters**.

The Power Unit will **not** work correctly until the reservoir is filled with approved Hydraulic Fluid.

Approved Hydraulic Fluids are any general purpose ISO-32, ISO-46, or ISO-68 hydraulic oil or approved automatic transmission fluids such as Dexron III, Dexron VI, Mercon V, Mercon LV, Shell Tellus S4 / S3 / S2, or any synthetic multi-vehicle automatic transmission fluid.

⚠️ **WARNING**  Do not run the Power Unit without Hydraulic Fluid; you will damage it.

**To fill the Hydraulic Fluid Reservoir:**

1. Remove the Reservoir Cap from the top of the Hydraulic Fluid Reservoir.
   
   Take care to **keep contaminants out** of the Hydraulic Fluid Reservoir.

2. Add the required amount of Hydraulic Fluid to the Reservoir.

3. If the Reservoir is low, add approved fluid until the fluid level is at least at the minimum level; maximum level is best.
   
   If your Reservoir does not have the MAX/MIN markings, full is approximately .5 in / 12.5 mm under the Reservoir Cap.

4. When the Reservoir is filled, put the Reservoir Cap back on.
**Connect the Power Unit**

The standard Power Unit for your Lift comes fully assembled from the factory, configured for 115 VAC operation.

**Important electrical information:**

- Improper electrical installation can damage the Power Unit motor; this damage is not covered under warranty.
- Use a separate circuit breaker for each Power Unit.
- The circuit must be grounded and protected with a time-delay fuse or circuit breaker. For a 115 VAC, 1 phase circuit, use a 20 amp or greater fuse. For a 230 VAC, 1 phase circuit, use a 25 amp or greater breaker.

If you have a 220 VAC Power Unit, it will come with a pigtail for wiring to a power source. Have your Electrician remove the pigtail and wire from inside the Electrical Box on the Power Unit to an appropriate Power Cord and Plug.

⚠️ **DANGER** All wiring must be performed by a licensed, certified Electrician.

⚠️ **CAUTION** The Power Unit’s Motor is not thermally protected.

The following drawing shows the Power Unit for your Lift (220 VAC option only).

![Power Unit Diagram](image)

*Front View. Not all components are shown. Not drawn to scale.*

**To connect to a power source:**

1. Find the Power Cord on the Power Unit, and then make sure the Power Cord has an appropriate plug on the end.

**Important:** If you have a 220 VAC Power Unit, have your Electrician put a 220 VAC Plug appropriate for your location. *Remember, all wiring must performed by a licensed, certified Electrician for this process.*

2. Plug the Power Cord to an appropriate power outlet.

Install a Thermal Disconnect Switch

⚠ **WARNING** The motor on the Power Unit supplied with your Lift has no thermal overload protection.

Have the Electrician connect a motor Thermal Disconnect Switch or overload device that will make sure the equipment shuts down in the event of an overload or an overheated motor.

⚠ **DANGER** Installing a Thermal Disconnect Switch *must* be performed by a licensed, certified Electrician. Do not perform *any* maintenance or installation on the Lift without first making sure that main electrical power has been disconnected from the Lift and *cannot* be re-energized until all procedures are complete.

High running amps that exceed the motor’s full load amps (FLA) rating may result in permanent damage to the motor.

BendPak strongly recommends you *not* exceed the rated duty cycle of the motor.
Test the Lift

Before putting your Lift into normal operation, we recommend raising and lowering it a few times. This will help you get a feel for how to operate the controls and help get any residual air out of the Hydraulic System (sometimes called “bleeding” the system).

**Tip**

Residual air in the Hydraulic System can cause the Lift to shake, move erratically, or squeak; this is normal when you first start using the Lift. It will soon stop doing this, as the Hydraulic System is self-bleeding.

**To test your Lift:**

1. Check the area around and above the Lift for obstructions; move them away if you find any.
2. Make sure the Lift is fully lowered.
3. On the Power Unit, press and hold the **Up** button.
   - The Lift rises.
4. When the Lift moves past the first Safety Lock, release **Up**.
   - The Lift stops rising.
5. Press and hold the Lowering Handle.
   - The Lift starts lowering.
6. When the Lift gets to the ground, release the Lowering Handle.
   - Wait for one minute.
7. Repeat the process, this time raising the Lift to the top Safety Lock and then lowering it back down to the ground.
8. If the Lift is working without shaking, moving erratically, or squeaking, there is no need to repeat the procedure.
   - If the Lift is shaking, moving erratically, or squeaking, repeat the procedure one more time.
   - If you continue to have issues, refer to **Troubleshooting** for assistance.
Final Checklist Before Operation

Make sure these things have been done before using your Lift:

- Review the Installation Checklist to make sure all steps have been performed.
- Check the Hydraulic Fluid reservoir; it must be full of approved Hydraulic Fluid or automatic transmission fluid. You can harm the motor by running it without enough fluid.
- Check the Hydraulic System for leaks.
- Make sure that all Safety Locks are cleared and free.
- Leave the Manual with the Owner/Operator so that it is available for anyone who needs to read it.

Operation

This section describes how to operate your Automotive Lift.

⚠ DANGER When you even hear the words “Automotive Lift,” your brain should automatically remember that lifting a Vehicle is a serious endeavor with life-threatening risks. Focus on what you are doing. Automotive Lifts are dangerous tools when used by inexperienced or impaired operators. Do not assume you are going to be safe this time because nothing happened last time.

Safety Considerations

⚠ WARNING Your safety is dependent on reading, understanding, and implementing these Safety Rules. Do not skip over them—read them carefully and follow them; your life could literally depend on it!

Do the following before you raise a Vehicle on your Lift, do the following each time:

- **Check the Lift.** Walk all the way around the Lift, checking for any missing, heavily worn, or damaged parts. Do not operate the Lift if you find any issues; instead, take it out of service, then contact your dealer, email support@bendpak.com, or call (800) 253-2363.
- **Check the area.** Keep the area around and under the Lift clean and free of obstructions; anything that could cause a problem. Do not forget to check above the Lift. If you find an obstruction, move it out of the way.
- **Check the operators.** Make sure everyone who is going to operate the Lift has been trained in its use, has read the labels on the unit, and has read the manual. Only the operator at the Controls should be within 30 feet of the Lift while it is moving. Do not allow children to operate the Lift. Do not allow anyone under the influence of drugs, alcohol, or medication to operate the Lift. Do not allow any unauthorized personnel to operate the Lift.
- **Check for safety.** Make sure everyone who is going to be walking near the Lift is aware of its presence and takes appropriate safety measures. Only put Vehicles on the Platform. When raising a Vehicle, do not leave it until it is engaged on a Safety Lock. When lowering the Lift, do not leave it until it is on the ground.
- **Check the Vehicle.** Never exceed the Lift’s weight rating. Do not allow people inside a Vehicle you are going to raise. Make sure the Vehicle is not overbalanced on either end or either side.
About Safety Locks

Your Lift comes with three Safety Lock positions; they serve two important functions:

- **Safety.** Safety Locks hold the Platform in place. Once the Lift is engaged on the desired Safety Lock, the weight of the Vehicle holds the Platform in place. If the power goes out, the Safety Lock holds the Platform, and anything on it, in place.

⚠ **WARNING** Always leave your Lift engaged on a Safety Lock or fully lowered. Although rare, it is possible for Hydraulic Fluid in the Hydraulic Cylinders to leak, causing the Platform to slowly come down if it is not engaged on a Safety Lock. **Always leave the Lift either fully lowered or engaged on a Safety Lock.**

- **Adjustable height.** Having multiple Safety Locks means you can raise the Vehicle to just the right height for the work you are performing.

**To put your Lift on a Safety Lock:**

1. Press the **Up** button on the Power Unit to raise the Platform.
   
   The following drawing shows the Release Cam below the Lock Block.

   ![Release Cam Diagram]

   The Release Cam has not passed over the Lock Block; the Lift would **not** go on a Safety Lock at this point.

   When the Release Cam goes past a Lock Block, it makes an audible click when it hits the Base.

2. To use that Safety Lock, keep pressing **Up** for another half a second, then release **Up**.
3. Press and hold the Lowering Handle for a few seconds; the Release Cam moves into a locked position on the Lock Block it just passed.

4. If you miss the desired Safety Lock, there’s no problem; just try it again until you get it right.
About the Accessories

The MD-6XP comes with four Lift Arms.

To use the Lift Arms, you put on the desired Pads, drive the Vehicle over the Lift, then position the Pads under the manufacturer’s recommended Lifting Points for the Vehicle you are raising.

⚠️ WARNING When you raise a Vehicle with the MD-6XP, you are raising it using four Pads which grip the underside of the Vehicle at four points. You want to position your Pads under the manufacturer’s recommended Lifting Points because the manufacturer, by calling out those Lifting Points, is saying that if you raise the Vehicle at those points the Vehicle will be balanced. That balance is extremely important; it is what keeps the Vehicle from slipping off the Lift.

To find the manufacturer’s recommended Lifting Points for just about any Vehicle, consult Vehicle Lift Points for Frame-Engaging Lifts, available on the ALI website (www.autolift.org/ali-store).

You position the Pads by, in no particular order:

- sliding the Pads along the length of the Lift Arm
- sliding the Pin end of the Lift Arm in its Channel in the Platform
- moving the Pad end side to side (with the Pin end as the hinge point)

Each Lift Arm can be fitted with either a Short Pad or a Tall Pad/Adapter/Base combination, which come with the Lift.

Important: If you are going to be raising Vehicles with body-on-frame construction (compared to unibody construction), BendPak recommends purchasing 35 mm Frame Cradle Pads for safer lifting. These are available on the BendPak website in the Car Lift Accessories section. Make sure to order the 35 mm Pin Diameter option.

If you get 35 mm Pin Diameter Frame Cradle Pads, they replace the Tall Pad in the Tall Pad/Adapter/Base combination.

You can easily switch between the Short Pads and the Tall Pad/Adapter/Base combination based on the Vehicles you are raising.

To switch, remove the Lock Screw on the end of the Lift Arm, remove the current Pad, slide on the desired Pad, and then replace the Lock Screw.

If you are using the Tall Pad/Adapter/Base combination, you can use it with or with the Tall Pad Adapter, and the Tall Pad can be swapped out for a Frame Cradle Pad if you have purchased a set of them (Frame Cradle Pads are accessories, they do not come with the Lift).
**Power Unit Controls**

Use the controls on the front of the Power Unit to raise and lower the Lift.

The controls on the Power Unit are:

- **Up Button.** Press and hold to raise the Platform.
- **Lowering Handle.** Press and hold to lower the Platform.

**Raising a Vehicle**

This section describes how to raise a Vehicle on the Lift.

**To raise a Vehicle:**

1. Check the items listed in **Safety Considerations.**
   - If you find any issues, resolve them *before* raising the Vehicle; *only use the Lift if it can be used safely.*

2. Make sure the Lift is fully lowered and the Lift Arms are out of the way.

3. Drive the Vehicle over the Lift and then stop.

4. Put the Vehicle in park, put on the parking brake, and turn off the Vehicle.
   - If the Vehicle is a manual transmission, put it into first gear before turning it off; you do not want the Vehicle moving while it is raised.

5. Walk around the Vehicle and make sure there are no obstructions or any other issues that will interfere with the raising the Lift.

6. Position the Lifting Arms on the manufacturer’s recommended Lifting Points of the Vehicle you are raising.
   - If you are unsure where the Lifting Points are, consult Vehicle Lifting Points for Frame Engaging Lifts, which is available on the ALI website (www.autolift.org/ali-store), or provided by the manufacturer of the Vehicle.

7. Put the Lift Pads under the Vehicle so that they are **directly under** the Lifting Points for the Vehicle you are raising.
   - If necessary, use the included Lift Pad Extensions for extra height.
8. On the front of the Power Unit, press and hold the Up Button to raise the Lift until *just before* the Lifting Arms make contact with the Lifting Points.

9. Check to make sure the Lifting Arms will make solid contact with the Lifting Points when raised further.
   Adjust them if necessary.

10. Raise the Lift until the tires of the Vehicle are a few inches off the ground.
    
    If the Lift becomes unstable or the Vehicle starts moving, release the Up Button immediately.

11. Check to make sure the Lift Arms are making solid contact with the Lifting Points.
    If any of the Lift Pads are not making solid contact with the Lifting Points, lower the Lift and adjust the Lift Pads so that they make better contact.

12. Rock the Vehicle to make sure the Vehicle is stable and balanced.
    
    If the Vehicle is *not* stable and balanced, lower the Lift back to the ground and start over.
    If the Vehicle *is* stable and balanced, it is safe to raise further.

⚠ **DANGER**  Do *not* raise the Lift further until you are certain the Vehicle on the Lift is both stable and balanced. If the Vehicle is *not* stable and balanced, it could fall, which could damage the Vehicle, damage the Lift, or injure or kill anyone under the Vehicle.

13. On the Power Unit, press and hold the Up button.

14. When the Lift just passes the desired height, release the Up button.

15. Hold the Lowering Handle briefly to move the Lift back down, which engages it on the most recently passed Safety Lock.
    
    If you miss the desired Safety Lock, press and hold Up again and go for somewhat further past the desired Safety Lock. Release Up, then hold the Lowering Handle again to lower the Platform onto the desired Safety Lock.
Lowering a Vehicle

This section describes how to lower a Vehicle that is raised on the Lift.

To lower a Vehicle:

1. Check the items listed in Safety Considerations.
   If you find any issues, resolve them before starting to lower the Vehicle.

2. On the Power Unit, press and hold the Up Button for a few seconds.
   This moves the Lift off the Safety Lock on which it was engaged.
   The following drawing shows the Release Cam disengaged from the Lock Block.

3. Press and hold the Lowering Handle on the Power Unit.
4. When the Lift is fully lowered, release the Lowering Handle.

5. Push the Lift Arms in towards the Frame.
   This is so they are not in the way when the Vehicle is moved.

6. Carefully drive the Vehicle off the Lift.
Move the Lift

The MD-6XP is portable, which means you can move it around your work space. This can be done using the Tow Cart; the Tow Cart has a Tow Pin at the Base that hooks onto the Lift so you can move it around.

If you take the Lift outside, make sure to bring it back inside once you are done using it.

⚠️ DANGER Never expose the Power Unit motor to rain or other damp environments. Damage to the motor caused by water is not covered by the warranty.

To move the Lift:

1. Make sure the Lift is fully lowered.
2. Unplug the Power Cord and wrap the cord around the Power Unit Stand.
3. Place the Power Unit Stand carefully on the Lift to move the two together.

⚠️ CAUTION The Power Unit is heavy; use care when moving it.

4. Take the Tow Cart and hook the Tow Pin into the Latch on Lift Base near the bottom of the Hydraulic Cylinders.

The following drawing shows the components used to move the Lift.

5. Using a downward force, push the Tow Cart to raise the Lift onto its rear wheels, and then carefully move the Lift to the desired location.

Drawing combines a side view and top view of the Frame. Not drawn to scale. Not all components shown.
Lubricate the Lift

The following drawing shows the lubrication points on the Lift.

Maintenance

⚠ DANGER ⚠
Before performing maintenance on your Lift, make sure it is disconnected from power. The Lift uses electrical energy; if your organization has Lockout/Tagout policies, make sure to implement them before performing any maintenance. If you come into contact with high voltage/current, you could be injured or killed.

To maintain your Lift:

• **Daily**: Keep the Lift clean. Wipe up any oil spills, clean any dirt.
• **Daily**: Make a visual inspection of all moving parts and check for damage or excessive wear. If you find any damaged or worn parts, take the Lift out of service until they are replaced.
• **Daily**: Make sure the Safety Locks are in good operating condition. If you find that the Safety Locks are damaged or excessively worn, take the Lift out of service until they are replaced. **Do not use your Lift if the Safety Locks are damaged or excessively worn.**
• **Weekly**: Check all controls to make sure they are functioning normally.
• **Weekly**: Check all labels on the unit. Replace them if they are illegible or missing.
• **Monthly**: Lubricate the grease fittings. We recommend using white lithium grease or similar.
• **Monthly**: Check the Power Unit’s Hydraulic Fluid levels. Refill if low.

⚠ WARNING: ⚠
Do not operate your Lift if you find issues; instead, take it out of service, then contact your dealer, email support@bendpak.com, visit bendpak.com/support, or call (800) 253-2363, extension 196.
# Troubleshooting

This section describes how to troubleshoot your Lift.

**Note:** If your Lift is not functioning correctly, you must take it out of service until it is fixed.

**Important:** All repair work *must* be done by qualified personnel.

⚠ **WARNING**  The Lift uses electrical energy; if your organization has Lockout/Tagout policies, make sure to implement them before performing any Troubleshooting.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Action to Take</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform moves erratically or squeaks when in use.</td>
<td>Move the Platform up and down a few times, with a break between each; there could be residual air in the Hydraulic System.</td>
</tr>
<tr>
<td>Platform does not go up or down.</td>
<td>Make sure the Power Unit is connected to an appropriate power source.</td>
</tr>
<tr>
<td></td>
<td>Make sure none of the Hydraulic Hoses are pinched or leaking.</td>
</tr>
<tr>
<td></td>
<td>Make sure there is sufficient Hydraulic Fluid in the reservoir on the Power Unit.</td>
</tr>
<tr>
<td>Hydraulic Fluid is old or dirty.</td>
<td>Replace the dirty fluid with clean, approved Hydraulic Fluids, such as Dexron III, Dexron VI, Mercon V, Mercon LV, Shell Tellus S4 / S3 / S2, or comparable.</td>
</tr>
<tr>
<td>Lift make odd noises when in use.</td>
<td>Lubricate hinge points using white lithium grease.</td>
</tr>
<tr>
<td>Lift is slowly lowering on its own.</td>
<td>Make sure the Lift is engaged on a Safety Lock (if not, Hydraulic Fluid could be getting pushed back into the tank on the Power Unit, lowering the Lift). <em>Only leave the Lift either fully lowered or engaged on a Safety Lock.</em></td>
</tr>
</tbody>
</table>

If you continue to have problems with your Lift, contact your dealer, visit [bendpak.com/support](http://bendpak.com/support), email support@bendpak.com, or call (800) 253-2363, extension 196.
Wiring Diagrams

5585435

115 VAC

230 VAC
Automotive Lift Institute (ALI) Store

You probably checked the ALI's Directory of Certified Lifts (www.autolift.org/ali-directory-of-certified-lifts/) before making your most recent Lift purchase, but did you know the ALI Store (www.autolift.org/ali-store/) offers a wide variety of professional, easy-to-use, and reasonably priced training and safety materials that will make your garage a safer place to work?

The ALI Store is your trusted source for workplace safety!

Visit today and get the training and materials you need to work safely:
www.autolift.org/ali-store/.