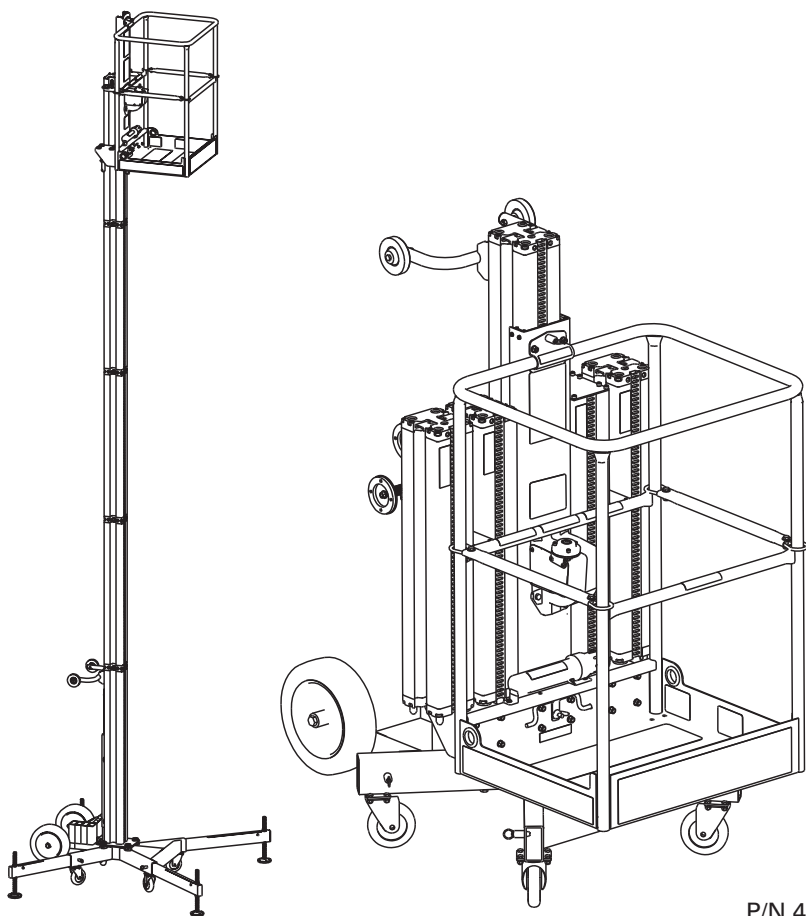


ReechCraft™ **PowerLiFT™**

www.reechcraft.com/powerlift

PL60 OPERATOR'S SAFETY MANUAL



P/N 4026199

SECTION 1

SAFETY PRECAUTIONS

1.1 General

This section is the starting point for establishing habitual precautions for safe operation of the machine. This manual is your guide in developing a daily routine that focuses on safety and proper maintenance of the machine prior to each use. A maintenance program must be established and conducted by a qualified person to ensure the machine is in safe working condition before it is operated.

Before operating the machine, the operator shall:

1. Read, understand and obey the operating instructions and safety rules in this manual.
2. Obey all labels, warnings and instructions located on the machine.
3. Be sure that all occupants of the machine wear appropriate personal protection equipment (PPE) for the conditions.

If there are any questions regarding safety, training, maintenance, inspection, application or operation of the machine, please contact ReechCraft.



FAILURE TO COMPLY WITH THE SAFETY PRECAUTIONS LISTED IN THIS MANUAL COULD RESULT IN MACHINE DAMAGE, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

1.2 Pre-Operation

Operator Preparedness



Figure 1-1 Read your manual

- Do not operate this machine until the operator has read and fully comprehends the Operator's Safety Manual of the machine.
- Only competent personnel may operate the machine.
- Read, fully comprehend and obey all DANGERS, WARNINGS, CAUTIONS and operating instructions on the machine and in this manual.
- Only use this machine in a manner which is within the scope of the intended application set by ReechCraft.

- All operating personnel must be familiar with the emergency procedures and controls specified in this manual
- All operating personnel must read, comprehend and obey all applicable employer, local and governmental regulations as they pertain to the safe operation of the machine.

Work Site Inspection

- The operator is to take measures to identify and avoid all hazards in the work area that will affect the safe operation of the machine.
- Do not elevate unless all tools, equipment and materials can be safely stowed within the platform.
- Machine can be operated in ambient air temperature of -20°F to 135°F (-29°C to 57°C). Consult ReechCraft for operation outside of this range. Machine performance may be affected in very hot or cold conditions.

Machine Inspection

- Before machine operation, perform walk around inspections and function checks. Refer to Section 2 of this manual for further instructions.
- No one shall operate the machine until it has been inspected, serviced and maintained according to the requirements in this manual.



MODIFICATION OR ALTERATION OF MACHINE SHALL BE MADE ONLY WITH PRIOR WRITTEN PERMISSION FROM THE MANUFACTURER

- Do not operate any machine on which the safety decals or instruction placards are missing or illegible.
- Avoid any build up of debris on platform floor. Keep mud, oil, grease and other slippery substances from footwear and the platform floor.

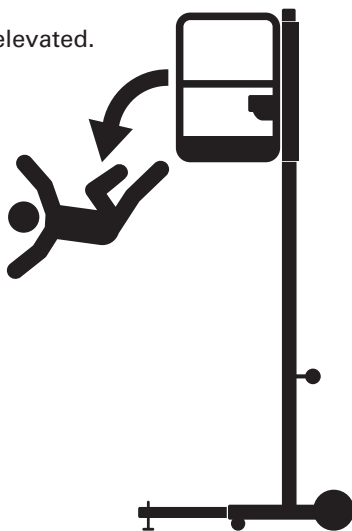
1.3 Operation

General

- Do not use the machine for any purpose other than positioning personnel, their tools, equipment and materials.
- Never operate a machine that is not working properly. If a malfunction occurs, shut down the machine and contact ReechCraft.
- Unless in an emergency, do not allow personnel to tamper with, or operate the machine from the ground with personnel on the platform.
- The operator will not elevate the platform unless the bearing surface is stationary and capable of supporting the intended load.
- Always ensure that power tools are properly stowed and never left suspended by their cord from the platform.
- Be sure to fully lower the platform completely and shut off all power before leaving the machine.
- No more than one person is allowed on the machine. Only the operator is permitted in the platform during operation.

Fall Hazards

- Do not enter or leave the platform while elevated.
- Before operating the machine, make sure all mast sections, outriggers, railings and gates are in their proper position. Be sure the platform is properly secured to the climbing unit before operating the machine.
- Keep both feet firmly positioned on the platform floor at all times. Never use ladders, boxes, steps, planks or any other item on the platform to provide additional height for greater reach.
- Never use the mast or railings to enter or leave the platform.



- Always use extreme caution when entering or exiting the platform. Be sure that the platform is fully lowered before exiting the platform.
- Always maintain three points of contact with the machine. “3 point contact” means using two hands and one foot or two feet and one hand at all times while entering or exiting the platform.

Electrocution Hazard

- This machine is not insulated and will not provide protection from contact or proximity to electrical current.
- Maintain distance from electrical lines, apparatus or any energized (exposed or insulated) parts according to the Minimum Approach Distance (MAD) as shown in Table 1-1.
- Allow clearance for machine movement and electrical line swaying.

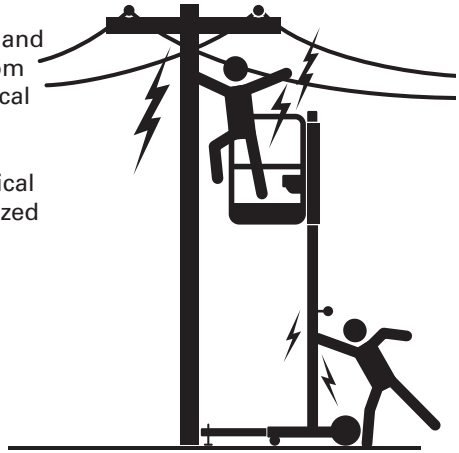


Table 1-1 Minimum Approach Distances (M.A.D.)

VOLTAGE RANGE (PHASE TO PHASE)	MINIMUM SAFE APPROACH DISTANCE - FEET (METERS)
0-50KV	10 (3)
Over 50KV to 200KV	15 (5)
Over 200KV to 350KV	20 (6)
Over 350KV to 500KV	25 (8)
Over 500KV to 750KV	35 (11)
Over 750KV to 1000KV	45 (14)

NOTE: This requirement shall apply except where employer, local or governmental regulations are more stringent.

SAFETY PRECAUTIONS

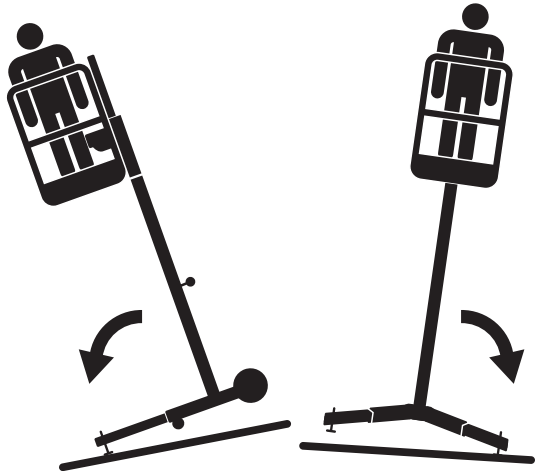
- Maintain a clearance of at least 10 ft (3 m) between any part of the machine and its occupants, their tools and their equipment from any electrical line or apparatus carrying up to 50,000 volts. 1 ft (.3 m) additional clearance is required for every additional 30,000 volts or less.
- The minimum safe approach distance may be reduced if insulating barriers are installed to prevent contact, and if the barriers are rated for the voltage of the line being guarded. These barriers shall not be part of (or attached to) the machine. The minimum safe approach distance shall be reduced to a distance within the designed working dimensions of the insulating barrier. This determination shall be made by a qualified person in accordance with employer, local or governmental requirements for work practices near energized equipment.



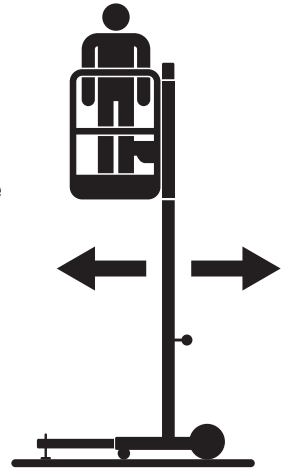
DO NOT MANEUVER MACHINE OR PERSONNEL INSIDE PROHIBITED ZONE (MAD). ASSUME ALL ELECTRICAL PARTS AND WIRING ARE ENERGIZED UNLESS KNOWN OTHERWISE.

Tipping Hazards

- Be sure the bearing surface is solid, stationary and capable of supporting the intended load.
- Before entering the platform, ensure that all outriggers have been properly installed and all leveling jacks are fully extended and bearing weight.
- Check to be sure the chassis is level according to the bubble level indicator on the chassis and all wheels are completely off the ground. Note: the platform will not release from its docked position unless each outrigger is in its proper position, fully extended and bearing weight.



- Do not perform work that will subject the machine to a horizontal force or create a swaying motion of the platform.
- The user should be familiar with the operating surface. If there is a question related to the stability of the ground condition, an appropriate sill should be used to safely spread the load of the machine and rated load capacity.
- Do not elevate the platform on a slope greater than what can be leveled and kept from sliding by the outrigger leveling jacks and an appropriate sill.
- Do not elevate if there is a safety concern related to the stability of the bearing surface.
- Before using the machine on floors, bridges, and other surfaces, check allowable capacity of the surfaces.
- Never exceed the maximum platform capacity. Distribute loads evenly on platform floor.
- Keep the bearing pads of the outriggers a safe distance from holes, bumps, drop-offs, obstructions, debris, concealed holes and other potential hazards at the ground level.
- Never attempt to use the machine as a crane. Do not tie off machine to any adjacent structure.
- Do not increase the platform size or height with unauthorized extensions, attachments or steps, as personnel movement or added height will decrease stability.
- If the mast or platform is caught so that one or more of the outrigger bearing pads are off the ground, the operator must be removed before attempting to free the machine.



Crushing and Collision Hazards

- Appropriate personal protection equipment must be worn by all operating and ground personnel.
- Check work area clearances above, on sides and below platform while moving, elevating or lowering platform.
- Be sure to keep all body parts inside the platform railing during operation.
- Exercise extreme caution at all times to prevent obstacles from striking or interfering with operating controls (drill) and persons in the platform.
- Ensure that operators of other overhead and floor level equipment or machines are aware of the machines presence. Disconnect power to overhead cranes.
- Warn personnel not to work, stand or walk under an elevated platform. Position barricades on the floor as necessary.



1.4 Maneuvering, Transporting & Lifting

General

- Never allow personnel in the platform while moving, lifting or repositioning the machine.
- This machine shall not be towed by a vehicle.
- Be sure the platform is fully lowered and outriggers and mast sections are properly stowed before tilting back for rough terrain transport.
- Remove drill, tools and equipment from platform when transporting in a vehicle.
- Refer to the Machine Operation section of this manual for lifting information.

Additional Safety Information

- Platform must be fully lowered before outriggers can be safely removed.
- Do not use machine as a ground for welding.
- Do not attempt to transport assembled machine by forklift.
- Be sure to lock two or more of the casters before leaving the machine unattended.
- Use extreme caution when transporting the machine on a slope in the upright position.

SECTION 2

PREPARATION & INSPECTION

2.1 Personnel Requirements

This Machine is intended to be used as a personnel handling device and must be operated and maintained by competent personnel only.

Anyone under the influence of drugs, alcohol or are subjected to bouts of dizziness, seizures or loss of physical control must not operate this machine.

Operator Requirements

Before operating this machine, the operator must read and comprehend this manual.

The operator must be familiar with:

1. Use and limitations of the components of the machine including the specification requirements of the drill motor.
2. Instruction placards and warning decals on the machine and in this manual.
3. Employer and government regulations.
4. Use of approved fall protection device (where applicable).
5. Sufficient mechanical aptitude and knowledge of the machine to recognize a component malfunction or a potential malfunction.
6. The safest means to operate the machine where overhead and ground hazards are present. These hazards include: overhead obstructions, additional moving equipment, obstacles, depressions, drop-offs, etc.
7. A means to avoid unprotected electrical conductors.
8. The specific job requirements.

Operator Responsibilities

The exercise of good judgment, safety control, and caution in evaluating each situation is the responsibility of the Operator. The Operator must shut down the machine in the event of a malfunction or other unsafe condition of the machine or job site.

SECTION 3

MACHINE OPERATION

3.1 General

NOTE: The manufacturer has no direct control over the machine application and operation. The operator is responsible for following sound safety practices.

3.2 Machine Description

The ReechCraft PowerLift is a drill powered aerial work platform (AWP). The removable platform is mounted to an elevating climbing unit that combines up to four (4) modular mast sections that are stacked and fixed to a base mast on a movable chassis. The machine is stabilized by way of outriggers and leveling jacks. The PowerLift's intended purpose is to provide personnel and their tools access to work areas above the ground.

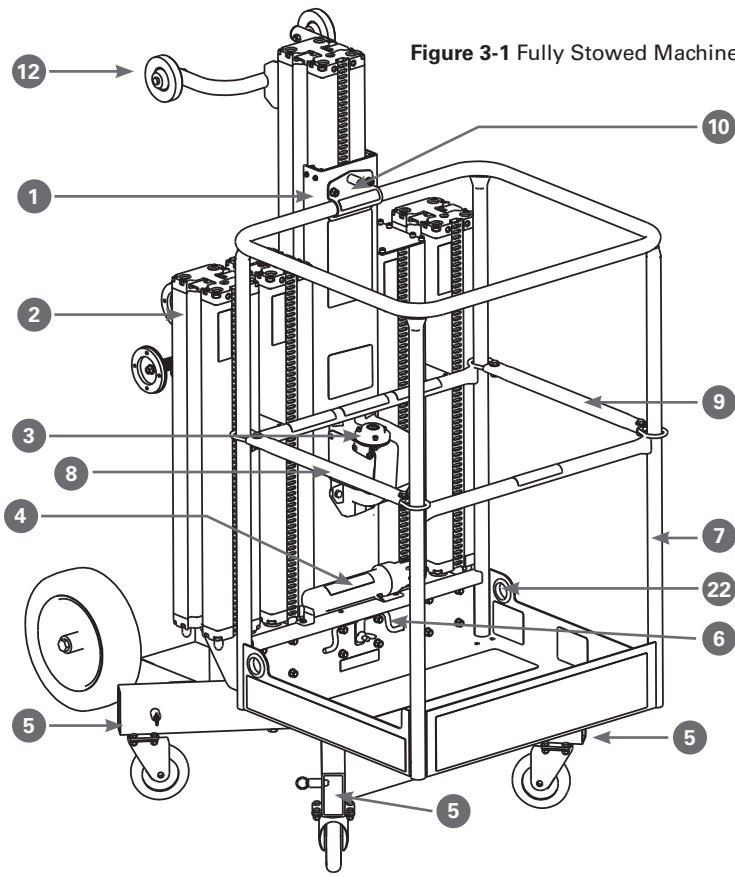


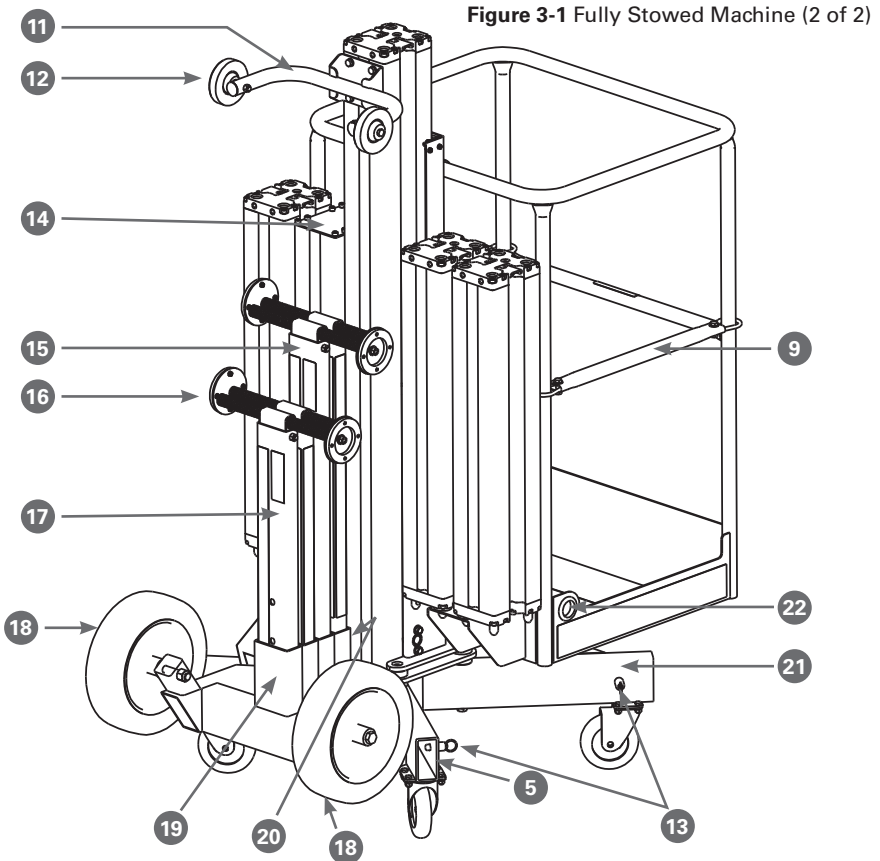
Figure 3-1 Fully Stowed Machine (1 of 2)

Legend

- | | |
|--------------------------------|---------------------------------------|
| 1. Climbing Unit | 13. Outrigger Retaining Pin |
| 2. Intermediate Mast | 14. Top Mast |
| 3. Drive Shaft Brake | 15. Front Outrigger |
| 4. Manual Container | 16. Leveling Jack |
| 5. Outrigger Socket | 17. Rear Outrigger |
| 6. Manual Descent Crank | 18. All Terrain Transport Tire |
| 7. Platform | 19. Outrigger Storage Socket |
| 8. Gearbox | 20. Bubble Level |
| 9. Platform Entry Gate | 21. Chassis |
| 10. Platform Retaining Pin | 22. Anchor Point/Ext. Cord Throughway |
| 11. Tilt-back handle | |
| 12. Horizontal Transport Wheel | |

The primary control of the machine is the drill motor.

NOTE: Be sure to follow the recommended drill motor specifications for safe operation and best machine performance.



Drill Motor

ReechCraft recommends a cordless drill of at least 18V capacity or a corded drill of at least 7 amps.

Ensure the drill motor's optional "Hammer" setting is disabled and the drill motor is in "Drill" mode.

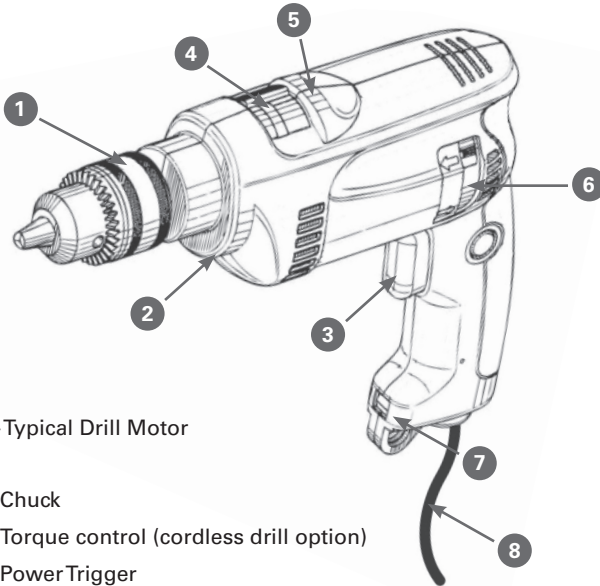


Figure 3-2 - Typical Drill Motor

1. Chuck
2. Torque control (cordless drill option)
3. Power Trigger
4. Speed Controller (optional)
5. Drill/Hammer Function Selector (optional)
6. Direction Selector
7. Battery Pack (cordless)
8. Power Cord

WARNING

USE ONLY CORDLESS OR DOUBLE INSULATED CORDED DRILL MOTORS. DISCONTINUE THE USE OF THE DRILL IF A FAULT IS DETECTED. ENSURE THE DRILL MOTOR IS IN "DRILL" MODE AND SET TO THE APPROPRIATE TORQUE SETTING.

3.3 Machine Operation

General

When the platform reaches the bottom of its travel, the overload clutch creates a ratcheting or buzzing noise, indicating that the machine has reached the fully lowered position.



BE SURE TO MAINTAIN A FIRM GRIP ON THE DRILL AT ALL TIMES DURING OPERATION.

The machine is fitted with a drive shaft brake to prevent motion of the platform not initiated by the operator.

Before operating the machine, be sure the platform is fully lowered and all four (4) outriggers are properly installed (See Figure 3-3). Be sure the machine is level and on a surface capable of supporting the intended load.



IN THE EVENT THAT THE CLIMBING UNIT FAILS TO ELEVATE AFTER THE OUTRIGGERS HAVE BEEN PROPERLY INSTALLED AND STABILIZED, THE MACHINE IS NOT WORKING PROPERLY AND MUST NOT BE USED UNTIL IT IS INSPECTED AND REPAIRED BY A QUALIFIED PERSON.

NOTE: *Do not attempt to enter or exit the platform unless it is fully lowered.*

3.4 Machine Setup

Because the ReechCraft PowerLift is a modular operator assembled machine, the platform, each outrigger and mast section can be removed to reduce weight as the situation requires.

NOTE: For the purposes of this section, it is assumed that the machine is in it's fully stowed configuration.

Getting Started

1. Place the machine on a firm, stationary surface capable of supporting the intended load directly under the desired work area.
2. Connect to an appropriate power source. AC: connect to a grounded 15A AC power supply. Be careful the extension cord remains slack at maximum height and does not become entangled in the machine which may lead to electrical shock or instability.
3. Install front and rear outriggers in their designated positions. Using the drill and hex driver, level the chassis by adjusting each of the leveling jacks, until the bubble level is centered. (See Figure 3-3)

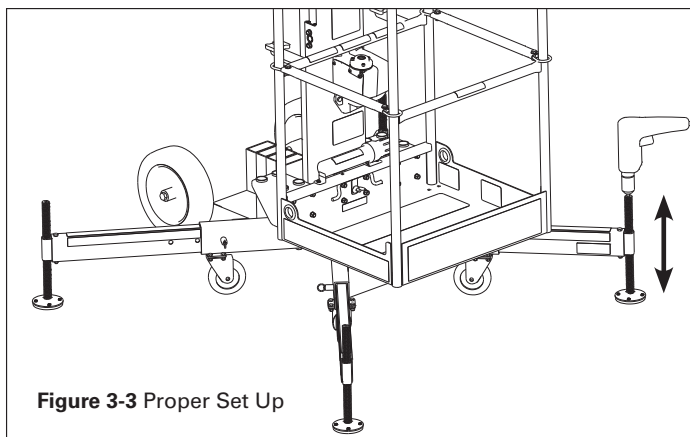


Figure 3-3 Proper Set Up

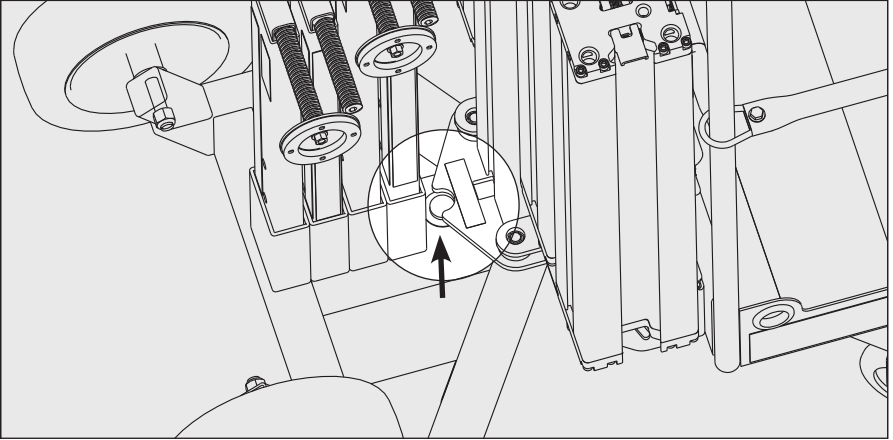


Figure 3-4 Bubble Level

! WARNING

DO NOT USE MACHINE IF CHASSIS CANNOT BE LEVELED

Elevating

Make sure the pre-start inspection has been completed and the machine is safe to use and the chassis is level and stable with all four outriggers bearing weight.

Move the direction selector so the drill motor is in the forward (clockwise) position.

Hold the drill motor handle firmly, push down lightly to automatically disengage the drive shaft brake and squeeze the trigger to elevate.

Stop using the drill motor if any part of it becomes excessively hot. Wait until the drill motor has cooled down before continuing operation.

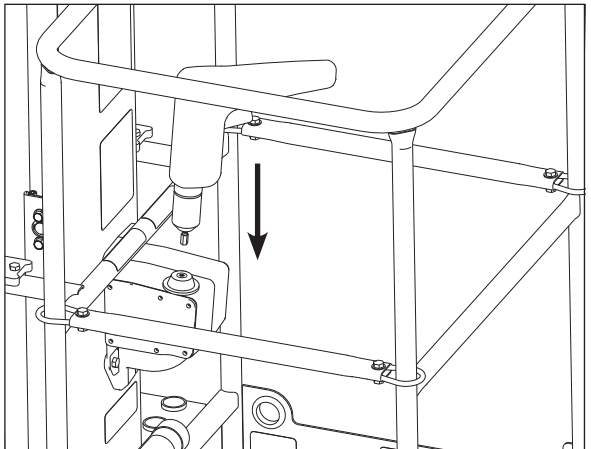


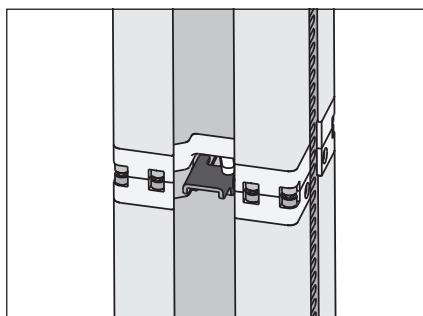
Figure 3-5 Drill Motor Operation / Elevating

Joining Mast Sections

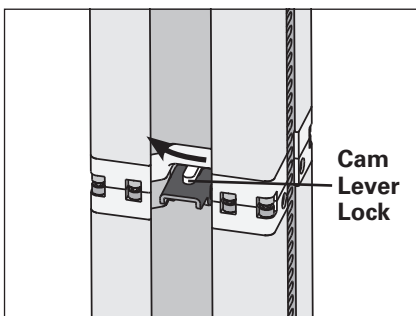
CAUTION

DO NOT DROP MAST SECTIONS. ALWAYS MAINTAIN A FIRM GRIP WHEN HANDLING

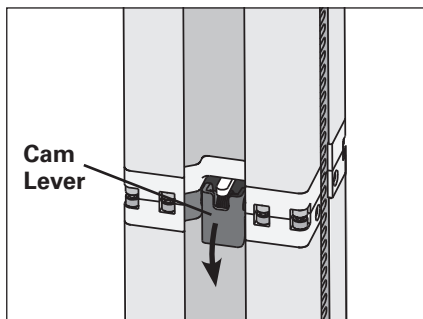
Figure 3-6 Joining Mast Sections



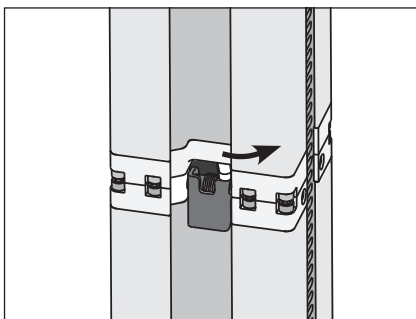
- 1.** Stack the mast ensuring that the track is facing toward the platform.



- 2.** Rotate the cam lever lock until it stops in the center position.



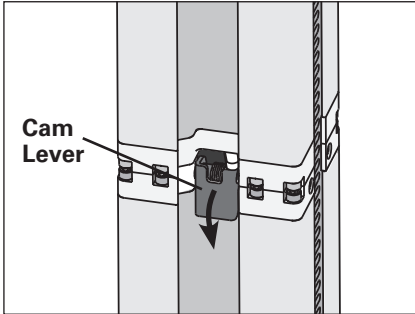
- 3.** Press both cam levers down and in at the same time.



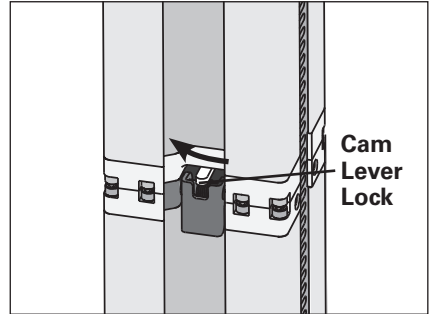
- 4.** With the cam lever in the down position, be sure the cam lever lock springs automatically into the locked position.

Separating Mast Sections

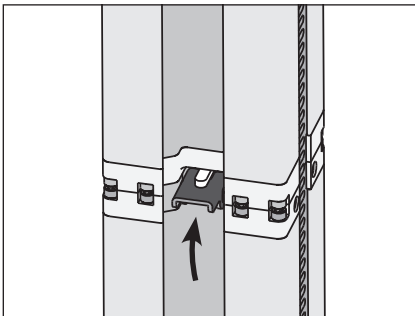
Figure 3-7 Separating Mast Sections



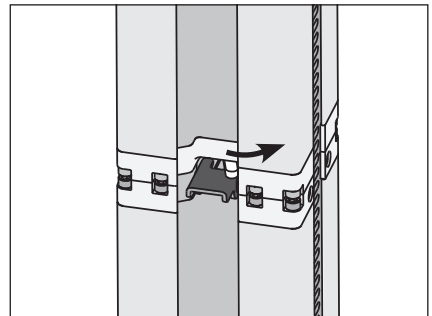
1. Press both cam levers inward to allow the cam lever lock to rotate freely.



2. Rotate the cam lever lock until it stops in the center position.



3. Release the cam levers to the open position.



4. Carefully return to the stowed position.

Elevate the climbing unit approximately 3 in. (80 mm) past the top of the mast and carefully remove the mast section from its stowed position.

Unpowered Decent

The platform Manual Decent Crank (See Figure 2-5) is provided to:

Allow the machine operator to lower the platform in the event that the drill motor loses power or contains insufficient power to lower the platform.

For emergency operation please see section 4 - Emergency Procedures.

3.5 Maneuvering & Transport

General

The machine may be manually maneuvered or transported in a vehicle disassembled or fully stowed.



DO NOT ATTEMPT TO TRANSPORT OR MOVE MACHINE UNLESS THE PLATFORM IS FULLY LOWERED. DO NOT MOVE THE MACHINE WITH PERSONNEL IN THE PLATFORM.

The machine may be moved around a worksite using the following methods:

- Fully assembled, pushed around the floor using the casters.
- Disassembled, with each major component carried separately.

There are two ways to move the assembled machine:

Upright Maneuvering

- The machine can be pushed or pulled around using the swivel casters.
- The floor is required to be smooth, level and dry.
- All outriggers must be installed corresponding to the number of masts, and elevated temporarily during maneuvering only. (See Figure 3-4)
- There can be no significant weight on the machine while it is being rolled around.
- Be sure there are no overhead or ground obstructions or hazards

NOTE: *Be sure the swivel casters are in their unlocked position and free of debris on the wheel or in the mechanism.*

Tilted Over Maneuvering

- For increased control, lock the rear casters before tilting back.
- Ensure that control of the machine will be maintained during tilt back and during transport.
- Be sure to maintain a firm grasp of the handle at all times during transport.
- Familiarize yourself with the terrain and identify and avoid any overhead or ground hazards before tilting back and transporting.

The machine can be tilted over and maneuvered as shown in Figure 3-8.

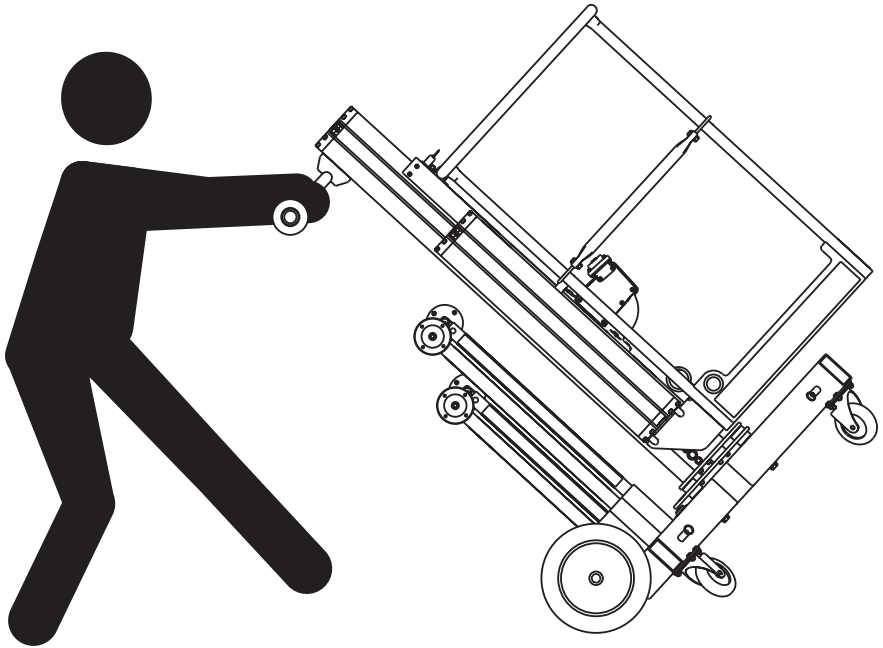


Figure 3-8 Maneuvering when tilted back

NOTE: *Ensure platform is empty before tilting back.*

⚠ CAUTION

ONLY ATTEMPT TO TILT THE UNIT BACK, OR RETURN TILTED UNIT TO THE UPRIGHT POSITION ON A FLAT AND LEVEL SURFACE, CLEAR OF ANY PERSONNEL. ENSURE A FIRM GRIP WITH TWO HANDS ON THE HANDLE AND ENSURE WEIGHT IS DISTRIBUTED TO AVOID THE USER OR THE MACHINE BEING THROWN BY THE MOVING WEIGHT OF THE MACHINE.

⚠ WARNING

TAKE PRECAUTIONS TO AVOID MANUAL HANDLING INJURIES. USE PROPER LIFTING TECHNIQUES: BEND AT THE KNEES ONLY, NEVER TWIST YOUR BACK WHEN HOLDING OR CARRYING A LOAD, AND/OR GET HELP. ONLY CARRY ONE COMPONENT AT A TIME.

Parking and Storage

- Move machine to a dry, well protected and well ventilated area out of direct sunlight.
- Ensure the platform is fully lowered.
- If necessary, remove the drill motor to prevent unauthorized use.
- Ensure at least two of the swivel casters are in the fully locked position.

NOTICE

DO NOT STORE IN LOCATIONS WHERE THE MACHINE MAY ACCUMULATE ICE, GREASE OR AIRBORNE DEBRIS.

Vehicle Transport

When transporting the machine by vehicle, it should be disassembled into its major components and each component secured separately. Restrain each component of the machine securely during transport.

When transported fully stowed, the machine should be completely and securely restrained to eliminate any shifting or excessive movement.

NOTICE

USE OF EXCESSIVE FORCE WHEN SECURING MACHINE CAN CAUSE DAMAGE TO THE MACHINE.

Secure the machine to the transport vehicle with adequately rated ropes or straps. Do not over stress such devices and place a buffer between the device and any part of the machine.