MATLIFT
BY EWP SPARES

MATERIAL LIFT

OPERATOR'S MANUAL

MDL SERIES



COMPACT

MDL3.3 / MDL4.4 / MDL5.5



TALL

MDL3 / MDL4.5 / MDL6 / MDL7.5

Read this manual and the fitted labels before operating the lift.

Use the machine data plate to confirm its model and rated load.

BEFORE YOU START

Contents

For trained operators. Read the safety rules, inspect and test the lift, then check the work area before every use. **Compact:** MDL3.3, MDL4.4, MDL5.5. **Tall:** MDL3, MDL4.5, MDL6, MDL7.5. Confirm your exact model, controls and rated load on the machine.

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01 / SAFETY

Safety essentials

Serious injury or death can result from ignoring the instructions and warnings for this machine. Only trained, authorized operators may use it.

Five checks before lifting

1. **Recognize hazards**
   Read and understand the precautions in this guide and on the lift.
2. **Inspect the machine**
   Look for damage, missing parts or unauthorized changes before the shift.
3. **Test functions**
   Prove each installed control and attachment works correctly.
4. **Inspect the workplace**
   Check floor support, clearances, power lines and weather.
5. **Lift materials only**
   Use the lift solely for its intended material handling purpose.

Follow all applicable rules

Read the machine labels and other manufacturer information. Follow employer and site requirements, as well as applicable regulations. Operators must have suitable training.

01 / SAFETY

Stability and electrical hazards

Stable setup

Before raising a load, lower and lock the legs and any fitted stabilizers. All casters must touch firm, level ground. Insert leg retaining pins through both the leg and base. Never remove a pin while the lift is loaded or raised. Do not use blocks to level the lift.

Load and wind

Fit and secure the load attachment. Do not exceed the rating at the measured load center. Keep the load centered and secured. Avoid strong or gusty wind; a wide load catches more wind. If wind may occur while a load is raised, proper guying is required. Avoid side pull or lifting fixed or overhanging loads.

Never lift people, stand on forks or attachments, climb the mast, or use the machine as a step. Keep ladders and scaffolds clear of the lift.

Overhead electricity: set clearance for the site

This lift is not electrically insulated. Approach distances vary across Australian jurisdictions, voltages, asset types and work methods. The site supervisor must establish the applicable exclusion zone before the operator moves or extends the lift near overhead electrical assets.

Before work: Identify the asset and confirm the required clearance with the site duty holder and electrical asset owner as needed. Allow for the full height of the fitted compact or tall mast, the load and attachments, movement, and conductor sag or sway. Establish barriers and a safe work method where required.

Stop if clearance cannot be assured. Keep others clear after any contact until the electricity supply is confirmed isolated by the responsible authority.

01 / SAFETY

Crushing, collision and damage

Keep clear of the load

No one may stand beneath a raised load or the machine. Clear the area below before lowering. If fitted, the safety brake may let the load descend 1-3 ft (30-92 cm) before the mast locks. Keep fingers away from folding legs, stabilizer locks and other pinch points.

Control movement

Keep a firm hold on a leg when removing its pin and on a stabilizer when releasing its lock plate. Hold the winch handles until the brake engages; a held load must not turn them. Do not tilt unless the area is clear of people and obstructions. Check overhead clearance before raising.

Travel and loading

Move a raised load only for minor positioning. Avoid uneven surfaces, holes and debris, especially with folded legs. Do not use the lift on a vehicle or moving surface. Plan transport on inclines, and load only when both vehicle and lift stand on level ground.

Machine and attachment

Do not use a damaged or malfunctioning lift, a worn or kinked cable, or an unsecured attachment. Keep at least four cable wraps on the winch drum when the carriage is fully lowered. Lock the adjustable forks with snap pins and retain fork extensions with their pins.

Do not modify structural or stability-critical parts.

Replacement parts must match the original weight and specification. Never use the machine as a welding ground or grasp the cable. Use appropriate lifting methods when handling the machine or its attachments.

01 / SAFETY

Condition, labels and safe use

Stop, tag and remove from service

Any visible damage, malfunction, missing critical part, unauthorized change or damaged cable requires the lift to be removed from service. Only a qualified technician may repair it to the required specification. Inspect and test it again before use.

Read the fitted safety labels

Keep every fitted label clean, present and legible. These common signal colours explain the seriousness of a message; always follow the actual label on the lift.

RED	Immediate danger; failure to avoid it will cause death or serious injury.
ORANGE	Potential danger that could cause death or serious injury.
YELLOW + ALERT	Potential danger that may cause minor or moderate injury.
YELLOW	Potential danger that may damage property.
GREEN	Operating or maintenance information.

Never leave a load raised and unattended. An untrained person could operate the lift. Store the legible manual in its holder on the machine. Keep lubricant off winch braking surfaces and do not lubricate mast column surfaces.

02 / COMPONENTS

Identify your MDL version

These are the two supplied machine examples. They have different mast heights and may have different cable, winch, carriage and base parts. Check the model plate and fitted equipment before using a procedure.



COMPACT VERSION

MDL3.3 / MDL4.4 / MDL5.5
Shorter mast. The supplied photo shows the compact base; verify the fitted cable guard on the actual unit.



TALL VERSION

MDL3 / MDL4.5 / MDL6 / MDL7.5
Taller mast. The supplied photo shows a winch housing, braced base and forks.

Check these parts on the actual lift

Mast sections and carriage; winch, brake and cable guides; attachment and its retaining pins; legs, wheels and stabilizers; carriage hold-down for transport. Options vary by model and serial number. Do not assume that parts or attachments from one version fit the other.

03 / BEFORE EACH SHIFT

Pre-operation inspection

Inspect before each shift and before function tests. If an item is missing, damaged or altered without authorization, stop and tag the machine. A qualified technician must repair it; inspect again afterward.

Documents and labels

☐ Manual complete, legible and in the holder
☐ All safety labels present and readable

Base and structure

☐ Fitted compact or tall legs, base, stabilizers and latches
☐ Each mast stage, carriage, hold-down and safety brake (if fitted)
☐ Welds, fasteners, pins and structural members
☐ Wheels, casters, dents and corrosion

Lifting system

☐ Winch brake, drum and correctly fitted cable guard/housing
☐ Cable anchor, pulleys, guides and cable condition on this mast
☐ Minimum four wraps on drum at full lower
☐ Load attachment and its retaining devices

04 / FUNCTION TESTS

Set up and test the base

Choose firm, level ground with no obstruction. Carry out the following tests before use. If a function hesitates, binds, fails to lock or otherwise malfunctions, tag the lift and remove it from service.

Without stabilizers

1. Remove a leg retaining pin.
2. Lower that leg fully.
3. Reinsert the pin through the leg and base.
4. Repeat on the other leg.

With stabilizers

1. Release each lock plate and lower the stabilizer.
2. Confirm its caster touches the ground and the stabilizer locks down.
3. Lower and pin each leg through the leg and base.

Straddle base, where fitted

Place a 2 in (5.1 cm) block under one leg swivel caster. Release the opposite arm lock knob, adjust the arm width, then tighten the knob while supporting the leg assembly. Repeat on the other side. Do not fit a straddle base or flat forks to MDL4.4 or MDL5.5.

Acceptance: legs and stabilizers are fully lowered, each pin and lock is engaged, and the casters make full contact with a firm, level surface.

04 / FUNCTION TESTS

Test fitted attachments

Install only the attachment intended for the job. With the carriage lowered, confirm each mounting pin, snap pin and fastener seats correctly.

Standard forks	Insert forks into the carriage and fit the retaining pin.
Adjustable forks	Insert and retain the forks; set width and engage each snap pin.
Flat forks	Insert mounting bracket into carriage, retain it, then set fork width and snap pins. Not for MDL4.4 or MDL5.5.
Load platform	Position it on the standard forks, or set adjustable forks to 23 in (58.4 cm) before fitting.
Pipe cradle	Attach the cradles to the forks and tighten all fasteners.
Fork extensions	Slide the extension tubes onto the forks; set length and insert retaining pins.
Boom	Insert it into the carriage and retain it; attach the lifting shackle to the selected hole.

04 / FUNCTION TESTS

Test the winch and mast

One-speed winch

Install an attachment. Hold the handles firmly and rotate toward the mast to lift the carriage. Rotate away from the mast to lower. At the chosen height, turn toward the mast by 1/4 turn to set the brake. Movement must remain smooth without binding or hesitation.

Single-speed winch checks

Use the single-speed procedure at left. Check the carriage raises and lowers smoothly, without binding or hesitation. Confirm the winch brake holds the load. If a test fails, remove the lift from service and arrange a qualified repair.

Use the winch and mast controls fitted to your model.

Mast sequence

1. **Raise to full height**
   The carriage should reach the top of the front mast section before the next section rises; later sections follow in order.

2. **Fully lower**
   Check the sequence remains controlled. Turn the handles toward the mast by 1/4 turn to set the brake after lowering.

If any test fails, remove the machine from service. After a qualified repair, complete the pre-operation inspection and all function tests again.

05 / BEFORE MOVING TO THE TASK

Inspect the workplace

The operator checks the worksite before moving the lift into position and keeps watching for changing hazards during setup and operation.

Ground	Holes, drop-offs, debris, bumps, floor obstructions, slopes and slippery or unstable surfaces.
Support	Ground or floor unable to withstand forces from the lift and its load.
Above	Overhead structures, electrical conductors and inadequate clearance.
Environment	Wind, changing weather, hazardous locations and nearby moving traffic or equipment.
People	Bystanders and anyone who could enter the raised load or mast area.

Stop and reassess if site conditions change or a new hazard appears.

06 / MATERIAL HANDLING

Operate the lift

Every operator, including a new operator later in the same shift, must perform the pre-operation inspection, function tests and workplace inspection. Use the machine to lift materials only.

1. **Set up**
   Use firm, level ground. Lower and lock the legs and stabilizers as on page 9.

2. **Locate the load center**
   Find the load weight and its center of gravity. Check page 14 and the applicable capacity row before lifting.

3. **Secure and lift**
   Center the load on the attachment and restrain it. Hold the winch handles; rotate toward the mast. Do not let cable wind unevenly on the drum.

4. **Lower and hold**
   Keep the space below clear. Rotate the handles away from the mast. At the desired height, rotate toward the mast by 1/4 turn to set the brake.

5. **Move only if necessary**
   Prefer moving the lift unloaded. If minor repositioning with a raised load is unavoidable, use level, clear ground, a low load position, no sudden stops, and keep everyone clear.

Never exceed the rating for the measured load center. Keep the load centered, secured and as close to the carriage as possible.

07 / CAPACITY

Position the load

The load center is the balancing point (center of gravity) of the load. Measure its distance from the front of the carriage. As that distance increases, the permitted load may fall.

Forks and platform

- Find the load weight and load center before lifting.
- With the load placed close to the carriage, measure from its front to the center of gravity.
- Use the matching MDL row and load-center column on pages 15-16.
- Place the load close to the carriage, within the allowed load-center zone, and secure it.

Boom

Find the weight and center of gravity; check the chart for that distance. Secure the load to the lifting shackle on the boom.

Maximum centers by attachment

Attachment	Limit from carriage
Standard / adjustable forks; load platform	24 in / 61 cm
Flat forks	28 in / 71 cm
Pipe cradle	18 in / 46 cm
Boom; fork extensions	42 in / 107 cm

07 / CAPACITY

Capacity: 14-30 in

Use the model shown on the machine data plate. The first three rows are compact models; the last four are tall models. Select the load-center column at the measured distance and do not exceed its value. Each cell lists pounds above kilograms.

LOAD CENTER / INCHES AND CENTIMETRES

Model	14 in 36 cm	20 in 51 cm	22 in 56 cm	24 in 61 cm	26 in 66 cm	28 in 71 cm	30 in 76 cm
MDL3.3	**701 lb** 318 kg	**701 lb** 318 kg	**701 lb** 318 kg	**441 lb** 200 kg	**412 lb** 187 kg	**375 lb** 170 kg	**366 lb** 166 kg
MDL4.4	**650 lb** 295 kg	**584 lb** 265 kg	**518 lb** 235 kg	**430 lb** 195 kg	**390 lb** 177 kg	**353 lb** 160 kg	**317 lb** 144 kg
MDL5.5	**650 lb** 295 kg	**584 lb** 265 kg	**518 lb** 235 kg	**430 lb** 195 kg	**379 lb** 172 kg	**350 lb** 159 kg	**315 lb** 143 kg
MDL3	**1000 lb** 454 kg	**1000 lb** 454 kg	**1000 lb** 454 kg	**1000 lb** 454 kg	**913 lb** 414 kg	**825 lb** 374 kg	**738 lb** 335 kg
MDL4.5	**800 lb** 363 kg	**800 lb** 363 kg	**800 lb** 363 kg	**800 lb** 363 kg	**763 lb** 346 kg	**725 lb** 329 kg	**688 lb** 312 kg
MDL6	**800 lb** 363 kg	**733 lb** 332 kg	**667 lb** 303 kg	**600 lb** 272 kg	**563 lb** 255 kg	**525 lb** 238 kg	**488 lb** 221 kg
MDL7.5	**650 lb** 295 kg	**583 lb** 264 kg	**517 lb** 235 kg	**450 lb** 204 kg	**425 lb** 193 kg	**400 lb** 181 kg	**375 lb** 170 kg

Do not extrapolate beyond the listed 42 in (107 cm) load center. Confirm the fitted attachment limit on page 14 and the rating on the machine data plate.

07 / CAPACITY

Capacity: 32-42 in

Use the model shown on the machine data plate. The first three rows are compact models; the last four are tall models. Select the load-center column at the measured distance and do not exceed its value. Each cell lists pounds above kilograms.

LOAD CENTER / INCHES AND CENTIMETRES

Model	32 in 81 cm	34 in 86 cm	36 in 91 cm	38 in 97 cm	40 in 102 cm	42 in 107 cm
MDL3.3	**335 lb** 152 kg	**306 lb** 139 kg	**265 lb** 120 kg	**229 lb** 104 kg	**203 lb** 92 kg	**185 lb** 84 kg
MDL4.4	**293 lb** 133 kg	**258 lb** 117 kg	**HOLD** verify rating	**218 lb** 99 kg	**192 lb** 87 kg	**176 lb** 80 kg
MDL5.5	**279 lb** 127 kg	**258 lb** 117 kg	**240 lb** 109 kg	**214 lb** 97 kg	**196 lb** 89 kg	**176 lb** 80 kg
MDL3	**650 lb** 295 kg	**600 lb** 272 kg	**550 lb** 249 kg	**500 lb** 227 kg	**450 lb** 204 kg	**400 lb** 181 kg
MDL4.5	**650 lb** 295 kg	**620 lb** 281 kg	**590 lb** 268 kg	**560 lb** 254 kg	**530 lb** 240 kg	**500 lb** 227 kg
MDL6	**450 lb** 204 kg	**430 lb** 195 kg	**410 lb** 186 kg	**390 lb** 177 kg	**370 lb** 168 kg	**350 lb** 159 kg
MDL7.5	**350 lb** 159 kg	**330 lb** 150 kg	**310 lb** 141 kg	**290 lb** 132 kg	**270 lb** 122 kg	**250 lb** 113 kg

MDL4.4 at 91 cm: The source chart pairs 218 lb with 105 kg; these figures disagree. Do not use that chart point until its approved rating is confirmed. Do not extrapolate beyond 107 cm; also check the attachment and data plate.

08 / TRANSPORT

Transport on a vehicle

Park the transport vehicle on level ground and secure it against movement. Check vehicle capacity, the loading surface and tie-down ratings against the machine weight on its data plate.

1. **Prepare**
   Remove the load attachment; stow any stabilizers and check the fitted compact or tall locking hardware.

2. **Lock the carriage**
   Lower it fully. Swing the hold-down bar over the carriage, then raise the carriage until it bears against the bar.

3. **Set loading wheels**
   Where fitted, select their position and insert the retaining pin.

4. **Lock casters**
   Lock the rear base casters before placing the lift against the vehicle.

5. **Load**
   Use suitable handling technique and check the carriage remains locked down.

6. **Restrain**
   Use at least one properly rated chain or strap over the mast; a strap over the legs can damage them. Unload by reversing the loading procedure.

08 / TRANSPORT

Crane lift and storage

Crane lifting

Fold and stow the legs and any stabilizers. Remove or secure loose items. Use the lifting bracket at the top of the rear mast column. Position the lifting hook through the bracket so that its point faces away from the lift. Confirm the lifting equipment can support the machine weight.

After each use

Lower and secure the carriage. Reverse the setup sequence to prepare the machine for storage. Choose a firm, level location sheltered from weather, obstructions and traffic. Do not leave a raised load unattended.

Ready for next use?
The next operator starts again with the manual, machine and workplace checks. A machine showing damage or a fault stays tagged out until repaired and retested.

MATLIFT BY EWP SPARES

Keep this manual with the machine.