MACE
INDUSTRIES LIMITED

Operators manual

UL-500
Inc. swan neck

MANUFACTURERS ORIGINAL INSTRUCTIONS

MCE-UL500-21-A1.2

CONTENTS

Table of Contents

IMPORTANT

Important

Read, understand and obey these safety rules and operating instructions before operating this machine.

Only trained and authorized personnel shall be permitted to operate this machine. This manual should be considered a permanent part of your machine and should remain with the machine at all times. If you have any questions, please call Mace Industries.

Contact us

Mace Industries Limited
Units 1-3 Macadam Road
Earlstrees Industrial Estate
Corby
NN17 4JN

Web: www.maceindustries.co.uk
Tel: 01536 206 600
Fax: 01536 206173

SAFETY RULES

Danger

Failure to obey the instructions and safety rules in this manual will result in death or serious injury.

Do Not Operate Unless:
You learn and practice the principles of safe machine operation contained in this operator's manual.

1 Avoid hazardous situations.

Know and understand the safety rules before going on to the next section.

2 Always perform a pre-operation inspection.

3 Always perform function tests prior to use.

4 Inspect the workplace.

5 Only use the machine as it was intended.

You read, understand and obey:

Manufacturer's instructions and safety rules—safety and operator's manuals and machine decals employer's safety rules and worksite regulations applicable to governmental regulations.

ELECTROCUTION HAZARD

Electrocution Hazards

Do not use the machine as a ground for welding.

Ensure safe routing of power cable to minimise risk of electrocution.

Explosion and Fire Hazards

Do not operate the machine in hazardous locations or locations where potentially flammable or explosive gases or particles may be present.

SETUP HAZARD

Setup Hazards

Check work area for overhead obstructions or other possible hazards.

Do not use the machine whilst under the influence of alcohol or drugs.

Ensure machine is securely fastened at the top and base before use.

Do not alter or disable machine components that in any way affect safety and stability.

Do not replace items critical to machine stability with items of different weight or specification.

Do not place ladders or scaffolding against any part of this machine.

Do not use the machine on a moving or mobile surface or vehicle.

Do not ride on machine.

Do not alter or disable limit switches or remote handset.

FALL HAZARD

Fall Hazards

Always erect a safety barrier to prevent access through underside of machine. Failure to do so could result in serious injury.

Do not lean over machine while belt is moving.

Do not lean over the belt whilst loading / unloading.

When loading the conveyor ensure transported material is central to the belt and machine frame.

Do not ride on machine.

Keep the loading/ unloading areas free from debris and clutter.

Bodily Injury Hazard

Use common sense and planning when installing and operating the machine.

Keep hands and limbs away from moving belt.

Always wear correct PPE.

COMPONENT DAMAGE HAZARD

Component Damage Hazards

Do not over load the machine 100**kg MAX** belt load.

Do not over load individual carriers **20kg MAX** per belt cleat.

Do not use machine as a ground for welding.

Damaged Machine Hazard

Do not use a damaged or malfunctioning machine.

Conduct a thorough pre-operation inspection of the machine and test all functions before each work shift. Immediately tag and remove from service a damaged or malfunctioning machine.

Be sure all maintenance has been performed as specified in this manual and the appropriate Mace Industries service manual.

Be sure all decals are in place and legible

CONTROLS

FWD	Forward
STOP	Stop
REV	Reverse
E-STOP	Emergency Stop

PRE-OPERATION INSPECTION

Do not operate unless:

You are trained, authorised and have learnt and practiced the principles of safe machine operation contained in this operator's manual.

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

Know and understand the pre-operation inspection before going on to the next section.

3 Always perform function tests prior to use.

4 Inspect the workplace.

5 Only use the machine as it was intended.

Fundamentals

It is the responsibility of the operator to perform a pre-operation inspection and routine maintenance.

The pre-operation inspection is a visual inspection performed by the operator prior to each work shift.

The inspection is designed to discover if anything is apparently wrong with a machine before the operator performs the function tests.

The pre-operation inspection also serves to determine if routine maintenance procedures are required. Only routine maintenance items specified in this manual may be performed by the operator.

Refer to the list on the next page and check each of the items and locations for modifications, damage or loose or missing parts.

A damaged or modified machine must never be used. If damage or any variation from factory delivered condition is discovered, the machine must be tagged and removed from service.

Repairs to the machine may only be made by a qualified service technician, according to the manufacturer's specifications. After repairs are completed, the operator must perform a pre-operation inspection again before going on to the function tests.

Scheduled maintenance inspections shall be performed by qualified service technicians, according to the manufacturer's specifications.

Pre Operation Inspection Tasks:

Be sure that all decals are legible and in place.

Be sure the main belt is properly tensioned and in good condition.

Be sure the belt cleats are secure and in good condition.

Check the following components or areas for damage, modifications and improperly installed or missing parts:

- Electrical components
- Limit switch (if ffitted)
- Handsets
- Wiring
- Drive motor
- Power on lights
- Nuts, bolts and other fasteners

Check entire machine for:

- Cracks in welds or structural components
- Dents or damage to the machine
- Be sure that all structural and other critical components are present and all associated fasteners and pins are in place and properly tightened.

MAINTENANCE

Observe and Obey

Only routine maintenance items specified in this manual shall be performed by the operator.

Scheduled maintenance inspections shall be completed by qualified service technicians, according to the manufacturer's specifications and the requirements specified in the responsibility's manual.

Maintenance symbols legend

NOTICE

The following symbols have been used in this manual to help communicate the intent of the instructions. When one or more of the symbols appear at the beginning of a maintenance procedure, it conveys the meaning below.

Indicates tools will be needed to carry out this operation.

Check main belt tension and tracking:

Maintaining the proper belt tension is essential to good machine performance and service life. Operating the machine with an improper belt tension can damage machine components.

Check belt tension whilst power is off.

1. The main belt will only need to be tensioned if it is slipping under load.
2. The belt tensioner unit is at the base of the conveyor beneath an orange guard.
3. To tension belt loosen the two clamp nuts, and turn the long tensioner bolt five full turns.
4. Repeat this step for the left and right hand tensioners.
5. Tighten the clamp nuts and test the belt slippage under load.

Scheduled Maintenance

Maintenance performed quarterly and annually must be completed by a person trained and qualified to perform maintenance on this machine according to the procedures found in the service manual for this machine.

Machines that have been out of service for more than three months must receive the quarterly inspection before they are put back into service.

FUNCTION TESTS

Do not operate unless:

You learn and practice the principles of safe machine operation contained in this operator's manual.

1 Avoid hazardous situations.

2 Always perform function tests prior to operation.

Know and understand the function tests before going on to the next section.

3 Always perform function tests prior to use.

4 Inspect the workplace.

5 Only use the machine as it was intended.

Fundamentals

The function tests are designed to discover any malfunctions before the machine is put into service.

The operator must follow the step-by-step instructions to test all machine functions.

A malfunctioning machine must never be used. If malfunctions are discovered, the machine must be tagged and removed from service.

Repairs to the machine may only be made by a qualified service technician, according to the manufacturer's specifications.

After repairs are completed, the operator must perform a pre-operation inspection and function tests again before putting the machine into service.

Function tests:

1. Ensure the conveyor is turned on at power source.

2. Ensure all Emergency stops are out. (Press reset on control panel if needed)

3. At ground controls; press FWD (3) – Belt will move forward.

4. Press STOP (2) – Belt will stop.

5. Press REV (1) – Belt will move in reverse.

6. Press STOP (2) – Belt will stop.

7. Press FWD (3) – Belt will move forward.

8. Press EMERGENCY STOP (4) – Belt will stop.
Note: Once Emergency stop is pressed, the reset button will need to be pushed to restart normal function.

7. Repeat above for controls at discharge control station.

If the machine fails any of these function tests, it should be removed from service and repaired.

WORKPLACE INSPECTION

Do not operate unless:

You learn and practice the principles of safe machine operation contained in this operator's manual.

1 Avoid hazardous situations.

2 Always perform function tests prior to operation.

3 Always perform function tests prior to use.

4 Inspect the workplace.

Know and understand the function tests before going on to the next section.

5 Only use the machine as it was intended.

Fundamentals

The workplace inspection helps the operator determine if the workplace is suitable for safe machine operation. It should be performed by the operator prior to operatitng the machine in the workplace.

It is the operator's responsibility to read and remember the workplace hazards, then watch for and avoid them while moving, setting up and operating the machine.

Workplace Inspection

Be aware of and avoid the following hazardous situations:

- Bumps, floor obstructions or debris
- Slopes
- Unstable or slippery surfaces
- Inadequate surface support to withstand all load forces imposed by the machine
- The presence of unauthorized personnel
- Other possible unsafe conditions

OPERATING INSTRUCTIONS

Do not operate unless:

You learn and practice the principles of safe machine operation contained in this operator's manual.

1 Avoid hazardous situations.

2 Always perform function tests prior to operation.

3 Always perform function tests prior to use.

4 Inspect the workplace.

5 Only use the machine as it was intended.

Fundamentals

The Operating Instructions section provides instructions for each aspect of machine operation. It is the operator's responsibility to follow all the safety rules and instructions in the operator's, safety and responsibilities manuals.

This conveyor was designed to transport solid (non-liquid/ non-dangerous) material such as boxes, totes, parts and tyres. The material must be loaded responsibly and with skill by the operator as to not cause damage by overloading the conveyor.

Only trained and authorized personnel should be permitted to operate a machine. If more than one operator is expected to use a machine at different times in the same work shift, they must all be qualified operators and are all expected to follow all safety rules and instructions in the operator's safety and responsibilities manuals. That means every new operator should perform a pre-operation inspection, function tests, and a workplace inspection before using the machine.

Operating instructions:

1. Press desired direction of belt. FWD/ REV.

2. Plan the movement you will make to place item onto conveyor belt. Remember to place the item in the centre of belt to minimise the risk of falling.

3. Place item onto conveyor belt. Ensure correct manual handling technique is followed. (If you think the item was misplaced stop conveyor and adjust item)

4. To remove an item at the end of the conveyor. Plan how you will remove the item safely. Ensure correct manual handling technique is followed. Always be aware of correct loading. Do not load belt with top heavy objects.

5. When the conveyor is not in use, stop conveyor belt. Ensure that no boxes or material is left on the belt.

SPECIFICATIONS

Model	UL-500
Machine weight	Minimum 65kg
Maximum payload overall	100kg
Maximum single point payload	50kg
Belt speed	Adjustable
Maximum angle	50°
Electric motor	0.75kw
Noise emissions (A weighted)	<75dB