



Operators manual

Screena



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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.

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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

This machine is not electrically insulated and will not provide protection from contact with or proximity to electrical current.

Do not operate the machine during lightning or storms.

Do not use the machine as a ground for welding.

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

Keep away from the machine if it contacts energized power lines. Personnel must not operate or move the machine until energized power lines are shut off.



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

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

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.

Be aware of ground surface prior to installation.

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.

Ensure all tyres are in good condition and cotter pins are properly installed.

Do not ride on machine.

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 Hazard

Do not use machine as a ground for welding.

Do not attempt to clear excavator bucket by hitting the Screena hopper.

If using a generator ensure it has a voltage regulator fitted.

Do not overload the machine - 250kg MAX load

Damaged Machine Hazard

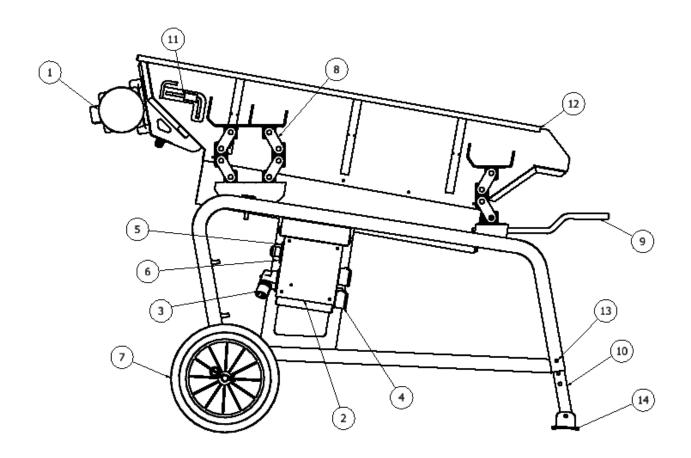
Do not use a damaged or malfunctioning machine.

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

LEGEND



- 1. Motor
- 2. Control Box
- 3. Power In Connector
- 4. Power Out Connectors
- 5. Start Button
- 6. Stop Button

- 7. Wheels
- 8. Vibratory (Oscillating) Mounts
- 9. Machine Handles
- 10. Adjustable Feet
- 11. Mesh Tensioner
- 12. Mesh Hook

- 13. Foot Pin
- 14. Pivoting Foot

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. See Decals section.

Be sure the mesh screen is properly tensioned and in good condition.

Be sure the vibratory/oscillating mounts are secure and in good condition.

Be sure the correct accessories are present. See parts list.

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

- Emergency stop button
- Control box
- Wiring
- Motor and cables
- Tyres and wheels
- 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.

Check entire machine for:

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



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



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 mesh tension:



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

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Check mesh tension whilst power is off.

- 1. When machine is turned off, ensure the mesh is fitted correctly.
- 2. Turn the Screena on. If the mesh rattles on the centre brace. Turn off and tighten tensioner bolts evenly both sides.
- 3. Repeat as necessary until rattle ceases.

Check all fasteners for tightness:



Maintaining the proper fastener tightness is essential to good machine performance and service life.



Check all fasteners whilst power is off.

- 1. Start from the motor towards the base of the Screena unit.
- 2. Check motor mounting bolts are tight and nylon lock nuts are functioning properly.
- 3. Complete this process throughout the machine.

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.

Tests:

Operational test:

- 1. Supply power to the Screena machine.
- Press Start button on control box
- 3. Screena should start vibrating
- 4. Press Stop button on control box
- 5. Screena should stop vibrating

Set-up / Mesh exchange:

- 1. Select an area that is firm, level and free of obstruction.
- 2. To attach screen mesh, loosen tensioner bolts at top of machine.
- 3. Lay new mesh onto tensioner bars
- 4. Tension until tight
- 5. Press Start button on control box
- 6. If mesh rattles: Stop Screena and re-tighten tensioner bolts evenly.
- 7. Repeat as necessary until rattle stops

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





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 moving the machine to 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
- Overhead obstructions
- Hazardous locations
- Inadequate surface support to withstand all load forces imposed by the machine
- Wind and weather conditions
- 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 machine was designed to screen raw materials down to varying grades such as stone, sand, rubble and soil. The material must be loaded responsibly and with skill by the operator as to not cause damage by overloading the unit.

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 preoperation inspection, function tests, and a workplace inspection before using the machine.

Instructions

Before starting a new task with the Screena, plan a safe route to manoeuvre the machine into position. This can be done by one person. However, if the terrain is bumpy and loose, use another person at the motor end of the Screena to help balance the weight.

Once the Screena is in position. Ensure that the surface is flat and stable enough to sustain the load of not only the Screena, but also that of the material being dumped onto it.

With the Screena in position. Plan the removal of materials from under the mesh. This can easily be done with a Shifta conveyor placed under the unit. If a conveyor is not available, a wheelbarrow will suffice.

After the Screena is set up and the removal of materials has been planned, route the power cables to the unit. These should be routed in such a way to avoid materials falling onto them and causing damage.

With the power supplied to the Screena, complete the functional tests within this manual. (Test on/ off functions).

The Screena is now set up.

Begin screening.

For fine tuning of screening characteristics see box to the left.

Once the task has been completed. Remove power to the Screena. Clean down the unit and inspect for any damage during the operating period.

Fine tuning

First, test the Screena with a test load of the required screening material.

If the material stays on the mesh too long – increase the angle of the screening by extending the legs at the rear of the unit.

This will increase the spill speed.

Not long enough – decrease the angle of the screening by lowering the legs at the rear of the unit.

This will reduce the spill speed and increase the chance of breaking up the material.

TRANSPORT INSTRUCTIONS



Observe and Obey:

Common sense and planning must be applied to control the movement of the machine when moving it with a forklift.

The transport vehicle must be parked on a level surface.

Use chocks on the wheels whilst being transported.



Securing to Truck or Trailer for Transit:

Always check the machine wheel brakes are on in preparation for transport.

Inspect the entire machine for loose or unsecured items.

DO NOT OVER TIGHTEN STRAPS.

Excessive tension of the straps will cause damage to the machine.

SPECIFICATIONS

Model
Maximum payload
Machine self-weight
Motor frequency
Electric motor power
Storage dimensions
Noise emissions (A weighted)
Supply Voltage

[SCREENA]
250kg
180kg
50hz
0.55kw
1.95m x 1.65m x 1.2m
<75dB

110v / 240v (see data plate on machine)

