

BOSS®



X-SERIES

The ultimate push around scissor lifts

USER GUIDE



EN 280

IP24

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Section 1 - Description

1.1 Introduction

This user guide provides information on the safe operation of the BoSS X-Series single person push around scissor lifts namely the BoSS X2 (now discontinued), BoSS X3 and BoSS X3X. This user guide does not apply to BoSS X3 machines with serial numbers between YMG11001 and 11300. Operators should read and understand all the information contained within this user guide before operating a BoSS X-Series machine.

Additional copies of this user guide may also be obtained from the manufacturer; please see the contact details on the back cover. The instructions are also available to download from the manufacturer's website at www.bosspoweredaccess.com.

The information contained in this user guide is based on the latest product information at the time of publication. The manufacturer operates a policy of continuous product improvement. We reserve the right to make product changes at any time without notice.

1.2 Characteristics and description

The BoSS X-Series is a range of manually propelled scissor lifts. Each machine includes the following features as standard:

- Automatic braking on fixed castors
- Foot operated click-on brakes on swivel castors
- Tilt sensor
- Platform overload sensor with LED indicator on handset controller
- Pressure loss valve
- Safety cut-out on descent (preprogrammed to 3 seconds)
- Audible alarm on descent
- Self-closing gate with locking latch and transit gate lock
- Gate incorporates end toeboard removing trip hazard
- Slip-resistant deck incorporating lanyard point
- Safety and usage instructions mounted on the guardrail
- Platform mounted handset controller with emergency stop
- Secondary emergency stop button mounted on the chassis
- Battery charge level indicator
- Battery charger with charging indicator
- Non-powered emergency platform lowering mechanism
- Fail-safe props for deployment during maintenance
- Anti-static strip
- Rigid, robust box section scissors
- Machines fit through standard doorways and into small passenger lifts
- Winching eye
- Heavy duty power pack, battery charger and battery
- Serviceable components in slide out drawer

-
- Guardrail mounted tool box (with tool tray) for storage of charging cables and guardrail tools
 - Wide forklift pockets for lifting, hoisting and strapping during transit
 - Heavy-duty castors with cast aluminium hubs and non-marking tyres
 - Maintenance Manual
 - EC Declaration of Conformity
 - 6 months LOLER certification (UK only)
 - 3-year parts warranty

The following BoSS X-Series machine accessories are also available:

- Confined Space Guardrail
- Bumpers - Front and side impact protection
- Heavy-Duty All-Weather Covers

1.3 Intended use

BoSS X-Series machines have been designed to comply with the safety requirements of the European Machinery, Low Voltage and Electromagnetic Compatibility Directives and in accordance with the European Standard EN 280 Mobile Elevating Work Platforms – Design calculations – Stability criteria – Construction – Safety – Examinations and tests.

BoSS X-Series machines are intended to lift one person (plus essential tools and materials) to enable work to be undertaken at height. BoSS X-Series machines are designed for indoor use only and must be used on level ground which is able to support the weight of the machine and its maximum safe working load. Typical applications include building and construction, particularly fit and strip out, shop fitting, painting and decorating, general maintenance and cleaning at varying heights above ground level.

WARNING

The user must obtain the guidance and written approval of the manufacturer in the event of any special working methods or conditions which are outside those specified in this section.

1.4 Selection and minimum attributes of operators

Personnel operating a BoSS X-Series machine should have either been selected, trained and authorised to do so, or be undergoing formal training under supervision. ISO 18878 gives details of the requirements for the training of MEWP operators. Records of training and experience of personnel should be consulted to assist in the selection of suitable personnel.

Personnel should be instructed not to work under the influence of alcohol, drugs or other impairment to efficiency. Personnel should also be assessed as to their physical ability to undertake the appointed tasks. The BoSS X-Series machine operator should:

- a. be physically fit.**
- b. appear to be comfortable working at height when taken up in the work platform of a MEWP.**
- c. have a responsible attitude.**
- d. demonstrate an ability to learn.**
- e. be able to communicate clearly with other personnel on site.**

-
- f. be able to demonstrate understanding of relevant health and safety regulations.**
 - g. be able to demonstrate understanding of accident prevention and control.**
 - h. be able to demonstrate that they can work safely at height.**
 - i. be able to demonstrate understanding of the need for plus correct use and maintenance of personal protective equipment.**
 - j. operate the BoSS X-Series machine safely and manoeuvre the machine as required, to correctly position and carry out the tasks in a correct and proper manner.**
 - k. be able to identify and avoid foreseeable hazards plus recognise unsafe practices and developing situations.**
 - l. carry out daily pre-use checks.**

WARNING

Operation of the BoSS X-Series machine by untrained or inadequately trained operators may result in serious injury or death.

A course for the category Push Around Vertical (PAV) is offered by IPAF-approved training centres in the UK.

1.4 Continued

In addition to the Operator of the BoSS X-Series machine the Site Surveyor and Planner plus the machine Demonstrator should be competent to fulfil these roles as specified in the Safe Use of MEWP's – Code of Practice sections 7.2.6 and 7.2.7 respectively.

When planning the job the Site Surveyor and Planner should work through the following stages

- a. Identify the task to be undertaken.**
- b. Select an appropriate MEWP.**
- c. Identify the hazards associated with the task.**
- d. Carry out a risk assessment.**
- e. Identify control measures.**
- f. Develop the method to be used.**
- g. Record the planning in a Method Statement (including any contingency activities for personnel rescue).**
- h. Communicate the plan to all persons involved.**
- i. Review the plan before the job starts and incorporate any changing circumstances.**

1.5 Modifications

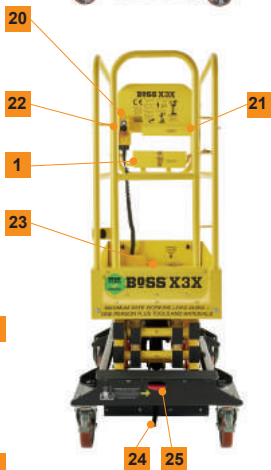
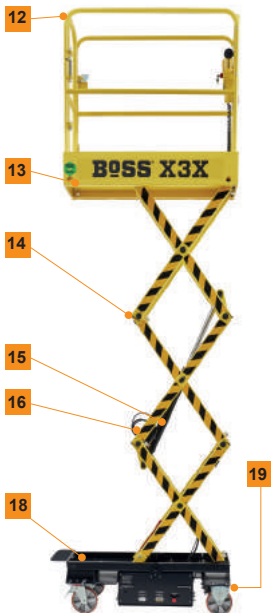
No modifications shall be made to any BoSS X-Series machine unless the manufacturer has given full written approval. If in doubt, please contact the manufacturer for advice:

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1.6 Terminology

- 1 Guardrail mounted tool box (with tool tray)
- 2 Forklift pockets for lifting, hoisting and strapping during transit
- 3 Battery charging cable connection point
- 4 Battery charging indicator
- 5 Battery charge level indicator
- 6 Chassis mounted emergency stop
- 7 Heavy-duty castors with cast aluminium hubs and non-marking tyres
- 8 Step up to platform
- 9 Fixed castors with automatic braking applied on platform ascent
- 10 Swivel castors with click on brakes
- 11 Emergency lowering release valve (stage 1 of 2 of emergency descent procedure)
- 12 Guardrails
- 13 Work platform
- 14 Scissor assembly
- 15 Hydraulic cylinder
- 16 Pressure loss valve
- 17 Fail-safe props
- 18 Chassis
- 19 Winching eye
- 20 Handset controller
- 21 User guide storage tube
- 22 Self-closing gate with locking latch and transit gate lock
- 23 Slip-resistant deck incorporating lanyard point
- 24 Anti-static strip
- 25 Emergency lowering pull handle (stage 2 of 2 of emergency descent procedure)



Section 2 - Specification

2.1 Technical data

| Rated load, manual forces and weight: | BoSS X3X | BoSS X3 | BoSS X2 (Discontinued) |
|---------------------------------------|--|-------------------------|---------------------------|
| Safe working load | 240kg | | |
| Equivalent to | 1 person (80kg) plus 160kg tools & materials | | |
| Maximum allowable manual force | 200N (interior use only) | | |
| Maximum allowable chassis inclination | 1.25° | 1.5° | 1.5° |
| Maximum allowable wind speed | 0m/s | | |
| Maximum load per wheel | 450kg | | |
| Machine weight | 370kg | 349kg | 313kg |
| Maximum point loading (fully loaded) | 17.43kg/cm ² | 16.83kg/cm ² | 15.8kg/cm ² |

| Dimensions: | | | |
|-----------------------------|--------|--------|-------|
| Maximum platform height | 3.2m | 2.55m | 2.01m |
| Minimum platform height | 0.695m | 0.695m | 0.6m |
| Maximum safe working height | 5.2m | 4.55m | 4.01m |
| Platform width | 0.57m | | |
| Platform length | 1.25m | 1.05m | 1.05m |
| Platform guardrail height | 1.1m | | |
| Toeboard height | 0.15m | | |
| Overall width | 0.76m | 0.7m | 0.7m |
| Stowed height | 1.8m | 1.8m | 1.7m |
| Stowed length | 1.41m | 1.21m | 1.21m |
| Ground clearance | 0.05m | | |

| Electrical: | | | |
|------------------|--------------------------------------|-----------|----------|
| Voltage | 12V DC | | |
| Power pack motor | 1.2kW DC | 1.2kW DC | 0.8kW DC |
| Battery | 12V/100Ah | 12V/100Ah | 12V/80Ah |
| Battery charger | Automatic multi voltage (110 & 240V) | | |

| Hydraulics: | | | |
|----------------------------|----------|--|--|
| Maximum hydraulic pressure | 225 bar | | |
| Working pressure | 150 bar | | |
| Hydraulic fluid reservoir | 2 litres | | |

| Performance: | | | |
|---|----------------------------|----------------------------|----------------------------|
| Maximum lifts/descents on one charge | >215 (240kg load) | >225 (240kg load) | >250 (240kg load) |
| Ascent time | 18 seconds (240kg load) | 15 seconds (240kg load) | 12 seconds (240kg load) |
| Descent time (including 3 second delay) | 21 seconds (240kg load) | 18 seconds (240kg load) | 15 seconds (240kg load) |

2.2 Operating site

When a BoSS X-Series machine is delivered to site ensure that the machine will be able to reach the work area; these are not rough terrain machines and should not be pushed across unstable or uneven ground as this could cause significant damage to the machines. It is good practice to walk the route from the machine parking place to the workplace.

A visual inspection of the operating area should be made before setting up the machine paying particular attention to the following issues:

2.2.1 Ground conditions

Ensure that the ground on which the BoSS X-Series machine is to operate is capable of supporting the weight of the machine (including the maximum rated load of 240kg). Be aware of specific floor areas such as manhole covers which may not be designed to withstand the following maximum point loading exerted by the castor wheels:

BoSS X3X – 17.43kg/cm²

BoSS X3 – 16.83kg/cm²

BoSS X2 – 15.8kg/cm²

2.2.2 Ground flatness

Ideally the BoSS X-Series machine should be operated on a flat surface resulting in a 0 degree chassis inclination. However, the BoSS X-Series machine can be safely operated where the ground is slightly uneven resulting in the following maximum lateral and longitudinal inclinations:

BoSS X3X – 1.25°

BoSS X3 – 1.5°

BoSS X2 – 1.5°

The BoSS X-Series machines are fitted with a tilt sensor and will not raise if this angle is exceeded. All four castor wheels must be in contact with the ground at all times.

2.2.3 Overhead obstructions

Ensure that adequate clearance is available above and around the platform before deployment and elevation. Pay particular attention to the presence of live electrical cables.

2.2.4 Segregation from other site vehicle movements

Every worksite should be subject to a risk assessment and where vehicle movements are likely to occur close to the BoSS X-Series machine, measures should be taken to segregate the machine from other vehicles. This might include the use of cones, barriers, signage and rerouting measures.

2.3 Noise and vibration

The maximum noise level emitted by a BoSS X-Series machine is 75.8dB(A). Hand and arm vibration experienced on a BoSS X-Series machine does not exceed 2.31m/s².

2.4 Limitations

The BoSS X-Series machine is limited to indoor operation and must not be used outdoors. Please consult the manufacturer if you are unsure about any application for which the machine is being considered.

The machine has been tested for Electromagnetic Compatibility (EMC). However, operation near to high powered radio transmission apparatus (e.g. radar, antennae) or within strong electrical and/or magnetic fields may affect some of the features of this machine.

WARNING

This machine has not been designed for operation in a hazardous environment where flammable or explosive gases or particulates are present. Advice should be sought from the person in charge of the site regarding the need to select MEWP's that are designed for use in the hazardous environment and the use of suitable personal protective equipment. Expert advice may need to be sought.

This machine is not electrically insulated and must never be used for live line working. Death or serious injury can result from contact with (or inadequate clearance from) electrical conductors.

The risk assessment carried out as part of the planning process when considering the use of a BoSS X-Series machine should take account of the particular hazards of lone working. Of particular concern is the rescue of the occupant from the platform in the case of machine malfunction, work platform entanglement or a medical emergency. Guidance on lone working is given in the HSE leaflet INDG73.

Section 3 - Safety rules

These safety rules should be adhered to in every way.

- NEVER** exceed the 240kg Safe Working Load of the platform.
- NEVER** use the BoSS X-Series machine as a crane.
- NEVER** attempt to increase the reach or working height of the BoSS X-Series machine by use of additional equipment eg. ladders.
- NEVER** use the BoSS X-Series machine in temperatures exceeding 45°C or below -15°C.
- NEVER** manoeuvre the BoSS X-Series machine on an inclined surface otherwise it may become uncontrollable.
- NEVER** release the brakes or manoeuvre the BoSS X-Series machine whilst in an elevated position, as this may cause instability.
- NEVER** manoeuvre the BoSS X-Series machine with a person or materials on the platform.
- NEVER** attempt to get on or off the work platform of the BoSS X-Series machine when elevated.
- NEVER** apply external side loads to the platform or scissor structure.
- NEVER** allow persons at ground level to operate the controls whilst the platform is occupied (unless in an emergency situation).
- NEVER** operate the BoSS X-Series machine outdoors.
- NEVER** use the BoSS X-Series machine as a jack, prop or tie to support other structures or machines etc.
- NEVER** interfere with, wedge or attempt to override hydraulic, electrical or mechanical safety devices.
- NEVER** open the drawer in the chassis. The drawer must only be opened by an authorised, trained and competent maintenance engineer.
- NEVER** allow works overhead of the BoSS X-Series machine to be carried out which are outside the control of the operator.
- NEVER** use the BoSS X-Series machine as an electrical earth when welding structures alongside it.
- NEVER** use the guardrails to carry materials.
- NEVER** attempt to overreach.
- NEVER** stand in front of, or behind the BoSS X-Series machine whilst it is being winched.

Section 3 - Safety rules

- ALWAYS** ensure that there are no obstructions/persons that may be struck by the platform before and during raising and lowering of the platform.
- ALWAYS** carry tools and materials within the confines of the guardrails of the work platform.
- ALWAYS** undertake the daily checks recommended in this user guide prior to the operation of the machine.
- ALWAYS** ensure that all instructions, warning and safe working load labelling and plates are clean and legible.
- ALWAYS** ensure the BoSS X-Series machine is positioned on adequate ground to support the weight of the machine and its rated load.
- ALWAYS** keep the BoSS X-Series machine clear of live electric conductors.
- ALWAYS** keep the BoSS X-Series machine away from contact with fixed objects (e.g. ceilings etc.) or moving objects (e.g. vehicles, cranes etc.)
- ALWAYS** ensure hands are within the confines of the guardrails when elevating the work platform.
- ALWAYS** ensure the access gate is closed and latched once the operator has entered the work platform.
- ALWAYS** ensure that another responsible person on site knows how to use the emergency controls (i.e. the chassis mounted emergency stop and the two stage emergency lowering procedure).
- ALWAYS** ensure the weight is evenly distributed within the platform.
- ALWAYS** ensure the safety of persons that may enter the area around the platform and keep other vehicles clear of the work area (cordon off to prevent persons and other vehicles entering the danger area).
- ALWAYS** lock the swivel castors when the machine is stationary whether or not it is in use.
- ALWAYS** ensure the tilt sensor alarm sounds when the power is switched on.
- ALWAYS** ensure that the battery is charged before use.
- ALWAYS** read and understand this user guide before using the machine.
- ALWAYS** deploy both fail-safe props if working under the work platform.
- ALWAYS** thread the hoisting straps inside the guardrails when hoisting the machine.
- ALWAYS** check that the LOLER certification of the machine is in date before use (UK ONLY).

Section 4 – Operating instructions

4.1 Daily checks

It is essential to carry out daily checks on the BoSS X-Series machine to ensure its safe condition of use including the following as a minimum:

- Hydraulic oil leaks by visual inspection of the floor around the chassis and by feeling underneath the chassis drawer outer casing.
- Visible loose electrical fittings and switches by visual inspection.
- Visible chafed hydraulic hose or electrical cables by visual inspection.
- Condition of castors, tyres and brakes by visual inspection.
- Structure – guardrails, platform, scissors and chassis (e.g. cracks, corrosion, abrasions, cracked welds, loose fixings, general damage etc).
- Visual inspection of castellated scissor nuts and locking pins.
- Obscured, dirty or damaged instruction labelling and plates.
- Emergency stop function activated on the handset.
- Emergency stop function activated on the chassis.
- Emergency lowering of the platform (see page 19).
- Raise and lower functions including the 3 second descent delay (the raise and lower functions can be tested by removing the handset controller from its mount on the work platform and using the controls whilst at ground level).
- Without the swivel castor brakes applied and on a level surface, raise the platform until the auto fixed castor brakes are engaged. Then push the machine from the left and right side of the gate end of the machine to ensure the brakes are functioning.
- Switch on the power and ensure that the tilt sensor alarm sounds to confirm operation. Also check that the battery is fully charged.

If the above daily pre-use checks reveal malfunctions or damage on the machine, then it must not be used until the problem is rectified by an accredited maintenance engineer. If in doubt, seek further assistance by contacting the manufacturer. If instruction labels or plates are no longer legible or missing, contact the manufacturer for replacements. The Daily Checks page in Section 6.5 of this user guide may be photocopied or are available to download from our website at bosspoweredaccess.com to provide an aide memoire for operators when undertaking these essential checks.

WARNING

Before operating the BoSS X-Series machine, you must ensure that you have been adequately trained in its use and have read and fully understood this user guide, paying particular attention to the Safety Rules in Section 3.

4.2 Manoeuvring the platform

Manoeuvre the platform into position using both hands on the platform guardrail uprights as shown below. Take care to avoid trapping hands or feet whilst manoeuvring the platform.



WARNING

Never manoeuvre the BoSS X-Series machine whilst it is elevated or with a person, tools or materials on the platform.

Moving the machine up or down a slight gradient:

- **ALWAYS** ensure that no person or obstacle is in front of the machine going down a slight gradient or behind the machine going up a slight gradient
- **DO NOT** attempt to move the machine up or down a steep gradient
- **ALWAYS** undertake a risk assessment

4.3 Engaging the brakes

The BoSS X-Series machine is fitted with two braking systems:

- On the two fixed castors – these brakes are applied automatically as the platform rises.
- On the two swivel castors – these brakes are engaged by the use of a foot pushing down on the lever as shown in the picture below. To release, push the foot under the lever and flick upwards. The swivel castors **MUST** be locked whenever the machine is stationary whether or not it is in use.



4.4 Battery isolation switch

The BoSS X-Series machine is fitted with a key operated switch on the handset controller. This switch is used to isolate the battery, and therefore the electrical system, preventing unauthorised use. To enable the electrical system, insert the key and turn clockwise, as shown in the image on the right, ensuring the red emergency stop button is fully released.

Ensure that when the machine is not in use, the emergency stop button is depressed and the key removed.



4.5 Entering and leaving the work platform

Always use three points of contact when entering and exiting the platform (e.g. the use of two hands and one foot as shown in the pictures below). Always use the step up to the platform on the chassis of the machine.



On entering the platform, ensure that the gate is closed behind you, as shown below.



4.6 Handset controller

The handset controller includes the platform raise and lower controls. Pressing the 'UP' button raises the platform. Pressing the 'DOWN' button lowers the platform.



Part way through the descent of the platform, a 3-second stop is triggered to alert the operator to look down and around all 4 sides of the platform to ensure that there are no people or obstacles preventing the continued descent of the platform, thus averting any risk of crushing or shearing.

Once the operator is sure that it is safe to continue the descent, the 'DOWN' button can be depressed a second time to continue the lowering of the platform.

BoSS X-Series machines are fitted with a platform overload sensor. If the platform load is exceeded the platform will not ascend and the red LED indicator on top of the handset will illuminate.



4.7 Emergency stop

An emergency stop button is provided on the handset controller. Once depressed this isolates the power to the raise and lower functions.

To restore the power, twist the emergency stop button key clockwise to release the button as shown below.



There is also an emergency stop button on the chassis. Push in to activate and twist clockwise to release.

4.8 Emergency lowering

In the unlikely event of a power failure of the BoSS X-Series machine the platform can be lowered manually by use of the following procedure:

STEP 1 Turn the finger screw on the emergency descent valve anticlockwise until it will not turn any further, as shown in Figure 1 below.

STEP 2 Pull the red handle under the step up to the platform towards you until the platform has fully lowered, as shown in Figure 2 below.

If for any reason, you need to stop the emergency descent at any time, release the handle and the platform will stop descending. To continue the descent pull the red handle again.



Figure 1

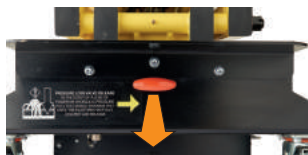


Figure 2

WARNING

Always ensure that someone at ground level i.e. other than the operator, is trained to perform this procedure.

In the unlikely event that the motor will not stop running, even after both emergency stop buttons have been depressed, open the drawer in the chassis and using the red strap remove the 100A fuse and close the drawer before undertaking the emergency lowering procedure above. DO NOT reuse the machine until it has been inspected, and if necessary repaired, by a competent engineer.

4.9 Battery charging

A battery charge level indicator is fitted to the BoSS X-Series machine. When the machine is fully charged all segments on the indicator will be illuminated red, as shown in Figure 1 below. When only the first segment, on the left of the indicator is illuminated red and flashing, as shown in Figure 2 below, it is time to put the machine on charge.

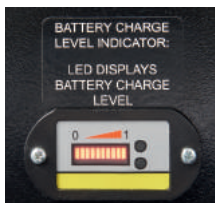


Figure 1

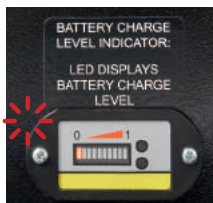


Figure 2

BoSS X-Series machines are fitted with a low battery protection system. If the battery level falls below 10%, then the platform will not raise but can still descend. The BoSS X-Series machine is fitted with an integral battery charger. To charge the battery, follow these steps:

STEP 1 Depress the emergency stop button on the handset controller and remove the key.

STEP 2 Turn the cover to expose the battery charging cable connection point, as shown in Figure 1 below.



Figure 1



Figure 2

STEP 3 Connect either the mains power or 110V transformer charging cable to the BoSS X-Series machine battery charging cable connection point, as shown in Figure 2 above. Both of these cables can be found in the tool box which is mounted on the platform guardrail.

STEP 4 Plug the other end of the charging cable into either a mains 240V or transformer 110V power supply.

STEP 5 While the battery is charging to 80% of its capacity the second LED from the left on the indicator will be flashing green as shown in Figure 1 below. When the charging of the final 20% is underway the third LED from the left will be flashing green as shown in Figure 2 below.



Figure 1



Figure 2

STEP 6 When the battery is fully charged, all four lights will illuminate, after approximately ten hours.

WARNING

BoSS X-Series machines must be charged where the ambient temperature is between 0 and 45°C.

Section 5 - Transport, handling and storage

5.1 Storage

The BoSS X-Series machine should be stored inside in a secure, clean and dry environment, the emergency stop on the handset depressed and the key removed. It should not be stored outside.

When the BoSS X-Series machine is parked the swivel castor brakes must be applied and if the machine has to be parked on a gradient the castors must be chocked. The BoSS X-Series machine must not be stored where the air temperature exceeds 45°C or falls below -15°C.

5.2 Loading and unloading

The BoSS X-Series machine, with swivel castor brakes applied, may be loaded onto a vehicle by means of an adequately rated forklift using the forklift pockets provided on the machine, as shown in the images below.



WARNING

The machine may be lifted from either side using these points only and it must not be lifted from either end. Ensure the tines of the forklift are inserted all the way through to the other side of the machine and ensure the tines are kept horizontal. Once located in the correct position on the vehicle the BoSS X-Series machine should be anchored by means of adequately rated and fully tightened straps through each of the forklift pockets on the machine.

The BoSS X-Series machine, with platform fully lowered, may also be wheeled onto an adequately rated tail lift. The swivel castor brakes should then be applied, the tail lift raised, the brakes released and the machine wheeled onto the flat base of the tail lift vehicle and the swivel castor brakes applied. The BoSS X-Series machine should be anchored by means of adequately rated and fully tightened straps through each of the forklift pockets on the machine.



WARNING

The forklift or tail lift used to lift the BoSS X-Series machine must be adequately rated.

BoSS X-Series machines are fitted with a winching eye to allow the machine to be winched onto an adequately rated trailer or low loader.



Once the machine has been positioned, the swivel castor brakes must be locked. The machine should be anchored to the trailer or low loader by means of adequately rated and fully tightened straps through each of the forklift pockets of the machine.

WARNING

Never stand in front of, or behind the BoSS X-Series machine while it is being winched.

5.3 Lifting

The BoSS X-Series machine may be lifted by a crane or Hiab by threading adequately rated lifting straps through each of the forklift pockets on the machine.

WARNING

A full risk assessment must be carried out.
The straps must be threaded inside the guardrails of the machine.

5.4 Preparation for transport

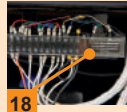
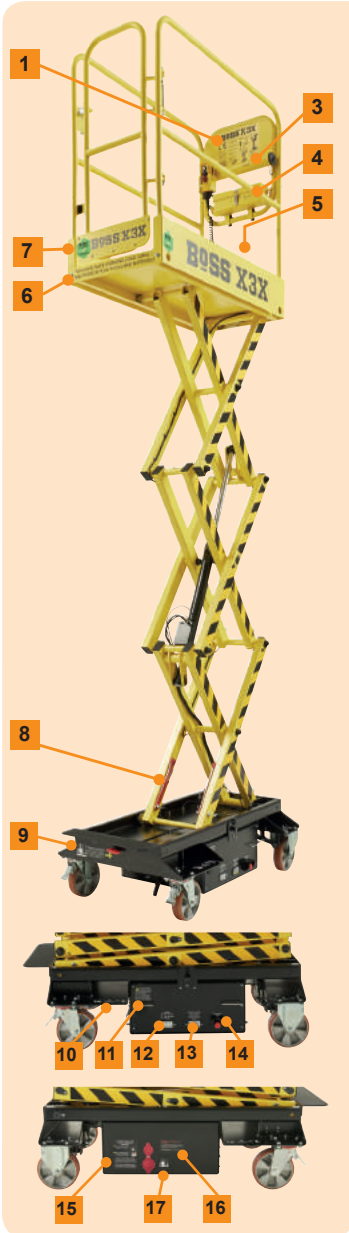
Prior to transporting the BoSS X-Series machine on a vehicle, ensure that the following precautions are taken:

- a. Ensure that the platform is fully lowered to its rest position.
- b. Ensure that the handset controller is secured to the platform and that the transit gate lock is engaged.
- c. Ensure that both swivel castor brakes are applied.
- d. Secure the BoSS X-Series machine to the transport vehicle using straps through each of the forklift pockets as shown below.



Section 6 – Maintenance and repair record

6.1 Machine labelling



- 2** OVERLOAD
- 3** INSTRUCTIONS FOR USE
- 4** CHARGING CABLES & GUARDRAIL TOOLS
- 5** HARNESS LANYARD POINT
↓

6 MAXIMUM SA
ONE PERSON



7 **WARNING**
If label number 7 (left) is not visible on the outer face of the toeboard of any of the 4 sides of the machine, DO NOT USE the machine and contact the manufacturer.



15 **TO LOWER THE PLATFORM WITHOUT POWER IN AN EMERGENCY**

- 1** TURN THE VALVE TO THE RIGHT OF THIS LABEL ANTICLOCKWISE UNTIL IT WILL NOT TURN ANY FURTHER
- 2** PULL THE PRESSURE LOSS RELEASE HANDLE TOWARDS YOU UNTIL THE PLATFORM HAS FULLY LOWERED AND THEN RELEASE

PRIOR TO THE RESTORATION OF POWER TURN THE VALVE TO THE RIGHT OF THIS LABEL CLOCKWISE UNTIL FULLY TIGHT AND THEN USE THE HANDSET CONTROLLER IN ACCORDANCE WITH THE INSTRUCTIONS FOR USE

DO NOT USE A PRESSURE WASHER ON THIS SIDE OF THE BASE UNIT UNLESS BOTH RUBBER PLUGS ARE IN POSITION.

1

BOSS® X3X CE

- PAYING PARTICULAR ATTENTION TO THE SAFETY RULES. READ AND UNDERSTAND THE INSTRUCTIONS FOR USE, LOCATED IN THE TUBE BELOW, BEFORE OPERATING THIS MACHINE.
- BOSS X3X IS DESIGNED FOR INDOOR USE ONLY. IT MUST NOT BE USED OUTDOORS.
- MAXIMUM WIND SPEED: 0 METRES/SECOND
- MAXIMUM MANUAL FORCE: 200 NEWTONS
- MAXIMUM ALLOWABLE CHASSIS INCLINATION: 1.25 DEGREES
- NEVER STAND IN FRONT OF THE MACHINE ON AN INCLINE. ALWAYS CARRY OUT A RISK ASSESSMENT WHEN MOVING THE MACHINE ON AN INCLINE.
- ENSURE BOTH SWIVEL CASTOR BRAKES ARE LOCKED BEFORE ELEVATING THE PLATFORM.
- SAFE WORKING LOAD: 240KG
1 PERSON (80KG) + TOOLS & MATERIALS (160KG)
- DO NOT ATTEMPT TO MOVE THE PLATFORM WHEN ELEVATED.
- DO NOT OVERREACH.
- DO NOT USE GUARDRAILS TO GAIN ADDITIONAL HEIGHT.
- ON DESCENT THERE IS AN AUTOMATED INTERMEDIATE STOP. CHECK AROUND THE PLATFORM AND, ONLY IF SAFE TO CONTINUE, PRESS THE 'DOWN' BUTTON.

BOSS® X3 CE

- PAYING PARTICULAR ATTENTION TO THE SAFETY RULES. READ AND UNDERSTAND THE INSTRUCTIONS FOR USE, LOCATED IN THE TUBE BELOW, BEFORE OPERATING THIS MACHINE.
- BOSS X3 IS DESIGNED FOR INDOOR USE ONLY. IT MUST NOT BE USED OUTDOORS.
- MAXIMUM WIND SPEED: 0 METRES/SECOND
- MAXIMUM MANUAL FORCE: 200 NEWTONS
- MAXIMUM ALLOWABLE CHASSIS INCLINATION: 1.5 DEGREES
- NEVER STAND IN FRONT OF THE MACHINE ON AN INCLINE. ALWAYS CARRY OUT A RISK ASSESSMENT WHEN MOVING THE MACHINE ON AN INCLINE.
- ENSURE BOTH SWIVEL CASTOR BRAKES ARE LOCKED BEFORE ELEVATING THE PLATFORM.
- SAFE WORKING LOAD: 240KG
1 PERSON (80KG) + TOOLS & MATERIALS (160KG)
- DO NOT ATTEMPT TO MOVE THE PLATFORM WHEN ELEVATED.
- DO NOT OVERREACH.
- DO NOT USE GUARDRAILS TO GAIN ADDITIONAL HEIGHT.
- ON DESCENT THERE IS AN AUTOMATED INTERMEDIATE STOP. CHECK AROUND THE PLATFORM AND, ONLY IF SAFE TO CONTINUE, PRESS THE 'DOWN' BUTTON.

SAFE WORKING LOAD 240KG – PLUS TOOLS AND MATERIALS

8

ENSURE BOTH MAINTENANCE PROPS ARE IN POSITION BEFORE UNDERTAKING MAINTENANCE UNDER THE RAISED PLATFORM.

9



PRESSURE LOSS VALVE RELEASE
IN THE EVENT OF A LOSS OF POWER OR HYDRAULIC PRESSURE PULL THE HANDLE TOWARDS YOU UNTIL THE PLATFORM HAS FULLY LOWERED AND RELEASE



11

ATTENTION
PRESS THE EMERGENCY STOP BUTTON ON THE HANDSET AND REMOVE THE KEY PRIOR TO CHARGING.
POWER SUPPLY: 110 OR 240 VOLTS.
SELECT THE APPROPRIATE CABLE FROM THE CHARGING CABLES AND GUARDRAIL TOOL BOX MOUNTED ON THE GUARDRAIL AND PLUG IN BELOW.

12

CHARGER INDICATOR LIGHTS

| | | | |
|-------------------|-------------------------------------|--|----------------------|
| ● AC POWER SUPPLY | ● CHARGE TO 80% OF BATTERY CAPACITY | ● CHARGE REMAINING 20% OF BATTERY CAPACITY | ● CHARGING INDICATOR |
|-------------------|-------------------------------------|--|----------------------|

13

BATTERY CHARGE LEVEL INDICATOR:
LED DISPLAYS BATTERY CHARGE LEVEL

14

EMERGENCY STOP

16

WARNING: IF LIFT MOTOR FAILS TO SHUTDOWN

OPEN THE DRAWER AT THE OPPOSITE SIDE OF THE CHASSIS AND REMOVE 100 AMP FUSE USING RED STRAP BEFORE UNDERTAKING TWO STAGE EMERGENCY DESCENT PROCEDURE.

THEN, ARRANGE FOR REPAIR OF MACHINE BY TRAINED ENGINEER.

17



18

TILT SENSOR ZERO CALIBRATION POINTS
Calibration **MUST** only be carried out by fully trained maintenance personnel.

19

| | |
|---|--|
| MANUFACTURER: Wiener UK Sales & Distribution Ltd. | COUNTRY OF MANUFACTURE: PRC |
| MODEL: BOSS X | SERIAL NUMBER: PP |
| YEAR OF MANUFACTURE: _____ | |
| MASS (UNLOADED): _____ KG | RATED LOAD: 240KG+1 PERSON+160KG TOOLS & MATERIALS |
| MAXIMUM MANUAL FORCE: 200N | MAXIMUM WIND SPEED: 0M/S |
| MAXIMUM CHASSIS INCLINATION: _____ | |
| BATTERY CHARGER: AUTOMATIC 110/240V | |

CE **BOSS**
Innovative. Training. Estates. The Commercial. Multi-Use. Close. Call. All.

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6.5 Daily checks - operator checklist

The following checklist has been provided to enable daily pre-operation checks to be undertaken prior to the use of this BoSS X-Series machine. These checks should be carried out **each** working day or, if operating multiple shifts per day, at the beginning of each shift. The purpose of the checks is to identify any wear and tear or malfunctions of the machine's components and systems.

WARNING

Failure to undertake these checks may result in defects on, or deterioration of, this BoSS X-Series machine going undetected and possibly resulting in an unsafe machine.

Note that Regulation 8 of the Lifting Equipment Regulations 1998 (LOLER) require that persons using lifting equipment have appropriate training and instruction to enable them to identify whether the lifting equipment is safe to use.

Prior to operating the machine, the following items must be checked:

| SERIAL NUMBER |
|---------------|
| |

| CHECK | OK? |
|---|---|
| Hydraulic oil leaks by visual inspection of the floor around the chassis and by feeling underneath the chassis drawer outer casing. | |
| Visible loose electrical fittings and switches by visual inspection. | |
| Visible chafed hydraulic hose or electrical cables by visual inspection. | |
| Condition of castors, tyres and brakes by visual inspection. | |
| Structure – guardrails, platform, scissors and chassis (e.g. cracks, corrosion, abrasions, cracked welds, loose fixings, general damage etc). | |
| Visual inspection of castellated scissor nuts and locking pins. | |
| Obscured, dirty or damaged instruction labelling and plates. | |
| Emergency stop function activated on the handset. | |
| Emergency stop function activated on the chassis. | |
| Emergency lowering of the platform (see page 19). | |
| Raise and lower functions including the 3 second descent delay (the raise and lower functions can be tested by removing the handset controller from its mount on the work platform and using the controls whilst at ground level). | |
| Without the swivel castor brakes applied and on a level surface, raise the platform until the auto fixed castor brakes are engaged. Then push the machine from the left and right side of the gate end of the machine to ensure the brakes are functioning. | |
| Switch on the power and: | ensure that the tilt sensor alarm sounds to confirm operation |
| | check that the battery is fully charged |

WARNING

Should any defects be identified in any of the above areas, these should be investigated immediately. It may be necessary to seek further assistance from the supplier of the machine, this may be the rental company or the manufacturer.

You should only rectify any defects, if you are a maintenance engineer and authorized, trained and competent to do so. Please refer to the BoSS X-Series Maintenance Manual.

DO NOT USE this machine unless each of the items above is checked and stated as OK.

Section 7 BoSS X-Series Accessories

7.1 Confined Space Guardrail

This interchangeable Confined Space Guardrail fits easily into the 4 guardrail retainers on the platform and allows safe access through the grid of a suspended ceiling or into other restricted spaces.

- Easy to fit
- Compatible with BoSS X3 and BoSS X3X machines
- Sliding intermediate guardrail gate
- Holster for handset controller
- Safety instructions on guardrail



7.2 Bumpers

The BoSS X-Series Bumpers have been specially designed to fit into the forklift pockets of BoSS X3 and BoSS X3X machines, and when not in use they clip neatly onto the guardrail.

Manufactured from closed cell EVA, the Bumpers reduce impact and scuffing damage to finished surfaces.

- 4-piece kit
- Easy to fit
- Clip to guardrail when not in use
- Reduce impact and scuffing damage to finished surfaces
- Compatible with BoSS X3 and BoSS X3X



7.3 Heavy-Duty All-Weather Covers

Covers to protect BoSS X3 and BoSS X3X machines during transport and in storage.



Section 8 - Variations on earlier BoSS X-Series machines

(Please refer to the machine serial numbers below)

We continually improve our machines based on customer feedback, regulatory requirements, changes in standards and technological innovation.

Machines with earlier serial numbers than those detailed here differ from the machines covered earlier in this user guide.

BoSS X3X – YMG 32001

BoSS X3 – YMG 12001

BoSS X2 – YMG 22001

These earlier machines differ as follows:

- Storage for the charging cables and guardrail tools is in the form of a small drawer under the step up to the platform.
- The main frame of the entry gate to the platform is wider. The width has been reduced on later models to avoid trapping of hands in the hinge of the gate as it closes.
- The Emergency Lowering procedure operated differently on earlier models as follows:

STEP 1 Turn the finger screw on the valve on the hydraulic cylinder anticlockwise until it will not turn any further as shown in Figure 1 to the right.



Figure 1

STEP 2 Turn the finger screw on the power pack emergency descent valve anticlockwise until it will not turn any further, as shown in Figure 2 to the right. The platform will now lower safely.

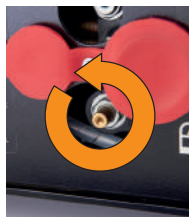


Figure 2

WARNINGS

ALWAYS ensure that someone at ground level i.e. other than the operator, is trained to perform this rescue.

NEVER undertake STEP 2 before STEP 1.

Label variations on earlier BoSS X-Series machines

These 4 label variations are as follows:

- The label in Figure 1 is adhered to the pressure loss valve cover on the hydraulic cylinder.
- The label in Figure 2 is adhered to the charging cable tray under the step up to the platform.
- The label in Figure 3 is adhered above the battery charging cable connection point.
- The label in Figure 4 is adhered to the chassis back plate to the left of the red emergency descent and check valve cover.

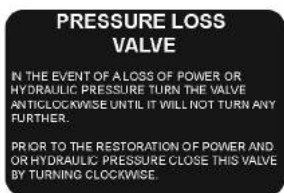


Figure 1



Figure 2

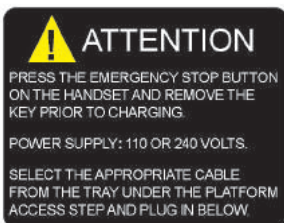


Figure 3

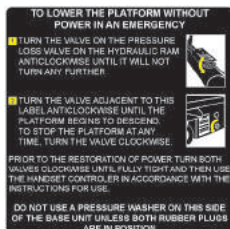


Figure 4

For further information and support for
BoSS X-Series machines or any other
products and services, please contact:

Werner UK Sales & Distribution Ltd.
Blackwater Trading Estate
The Causeway, Maldon,
Essex, CM9 4LJ
United Kingdom



uk.customercare@wernerco.com



bosspoweredaccess.com

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