

# YOUNGMAN

INNOVATIVE WORK AT HEIGHT SOLUTIONS



## BOSS X-Series

The ultimate range of push around micro powered access platforms

**INSTRUCTIONS  
FOR USE**

Edition September 2011



EN 280

IP24

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## 1.1 INTRODUCTION

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These Instructions for Use provide information on the safe operation of the BoSS X-Series single person micro powered access platforms namely the BoSS X2, X3 and X3X. These Instructions do not apply to BoSS X3 machines with serial numbers between YMG 11001 to 11300. Operators should read and understand all the information contained within this manual before operating a BoSS X-Series machine.

Additional copies of these instructions may also be obtained from Youngman Group Ltd., please see contact details on the back cover. The instructions are also available to download from our website at [youngmangroup.com](http://youngmangroup.com).

The information contained in these instructions is based on the latest product information at the time of publication. As Youngman Group Ltd. operate a policy of continuous product improvement we reserve the right to make product changes at any time without obligation.

## 1.2 CHARACTERISTICS AND DESCRIPTION

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The BoSS X-Series is a range of manually propelled, micro powered access platforms. *Each machine includes the following features as standard:*

- Auto braking on fixed castors
- Foot operated click on brakes on swivel castors
- Tilt sensor – no stabilisers required
- Platform overload sensor and handset LED indicator
- Pressure loss valve
- Safety cut out on descent (pre programmed 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 control with emergency stop
- Secondary emergency stop button mounted on base
- Battery charger and charge level indicators
- Emergency platform lowering mechanism (no power required)
- Fail-safe props for deployment during maintenance
- Anti static strip
- Rigid and robust box section scissors
- Fits through standard doorways and into passenger lifts
- Winching eye
- Heavy duty power pack, battery charger and battery
- Serviceable components in slide out compartment
- Pull out storage drawer for charging cables and guardrail tools
- Wide forklift entry, hoisting and transit strap points
- Smooth roll castors with non marking tyres
- Maintenance Manual
- EC Declaration of Conformity
- 6 months LOLER certification (UK only)
- 12 months parts warranty

The following optional equipment is also available:

- Heavy duty all weather protective cover
- Confined space guardrail
- Bumpers

## 1.3 INTENDED USE

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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 maintenance, cleaning, painting, fit out work etc. at varying heights above ground level.

### **WARNING**

The user must obtain the guidance and written approval of Youngman Group Ltd 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 (Youngman offer a Work at Height Regulations training course called the Knowledge. For more information please call +44 (0) 1621 745900)
- i. be able to demonstrate understanding of the need for and 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 and recognise unsafe practices/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 being offered by IPAF-approved training centres in the UK from January 2010.

## 1.4 SELECTION AND MINIMUM ATTRIBUTES OF OPERATORS

---

In addition to the Operator of the BoSS X-Series machine the Site Surveyor and Planner and 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

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No modifications shall be made to any BoSS X-Series machine unless Youngman Group Ltd. has given full written approval. If in doubt please contact us for advice:

Youngman Group Ltd.  
The Causeway  
Maldon  
Essex  
CM9 4LJ  
United Kingdom

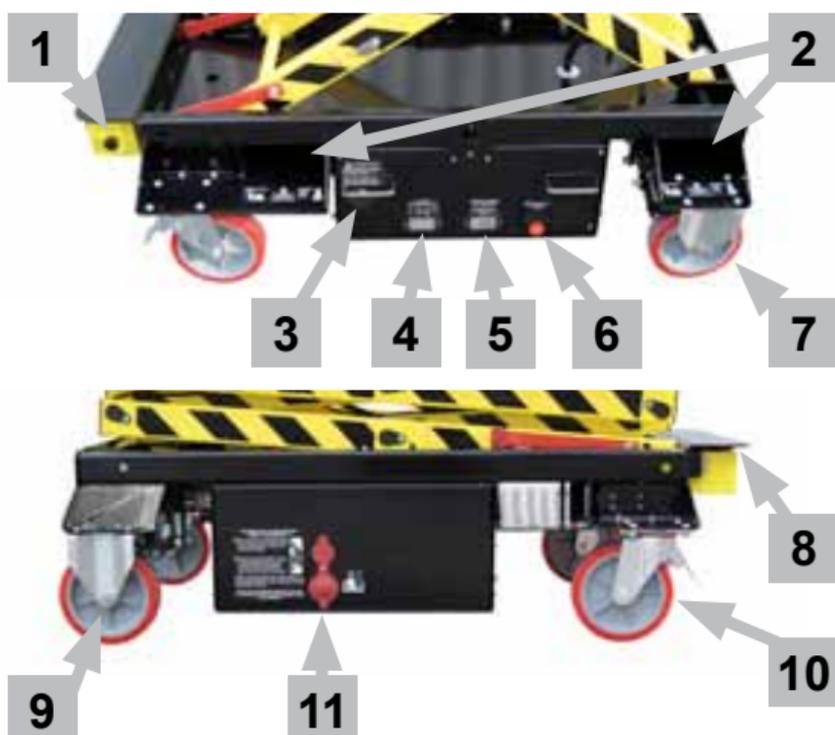
**t** +44 (0) 1621 745900

**f** +44 (0) 1621 859845

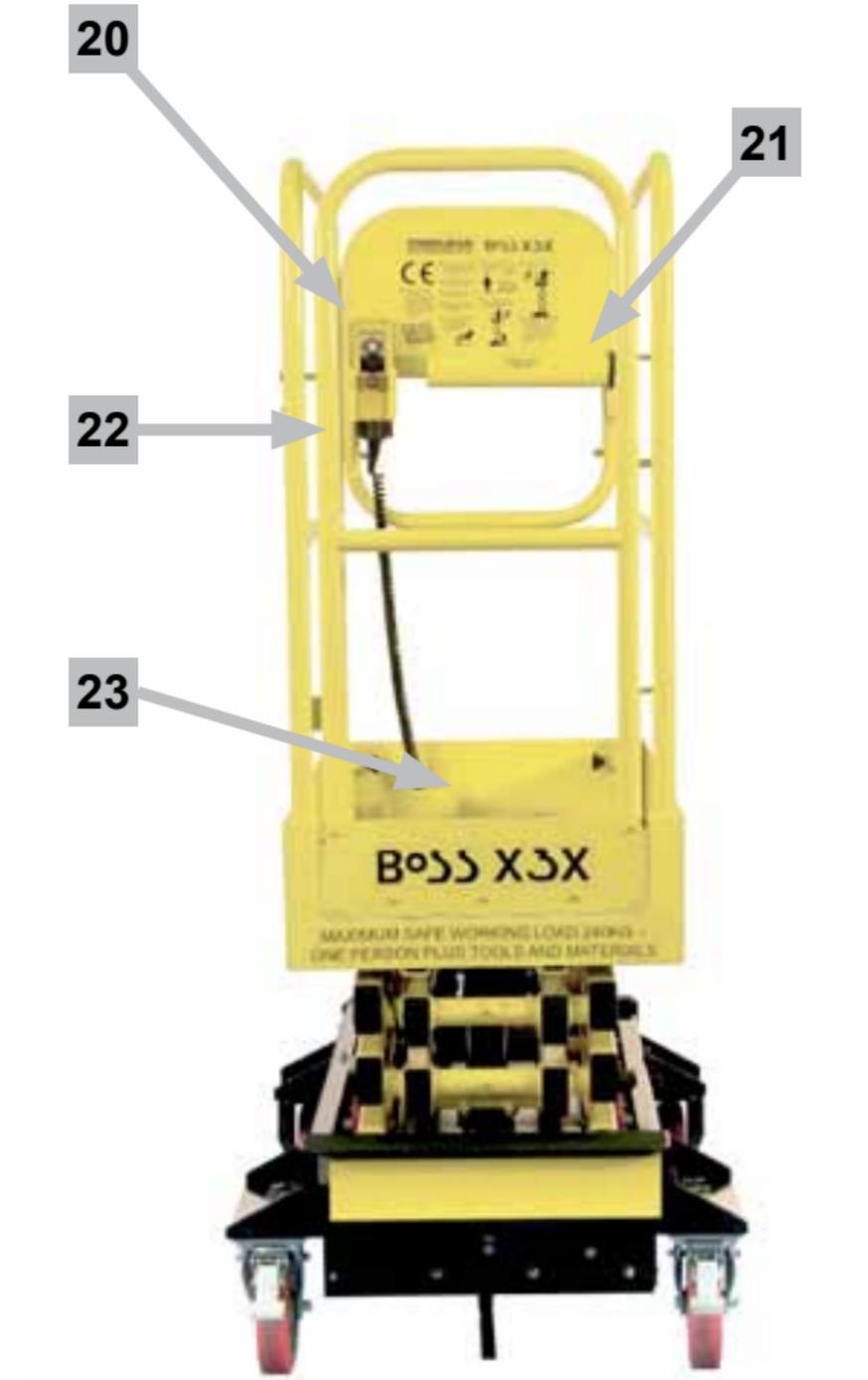
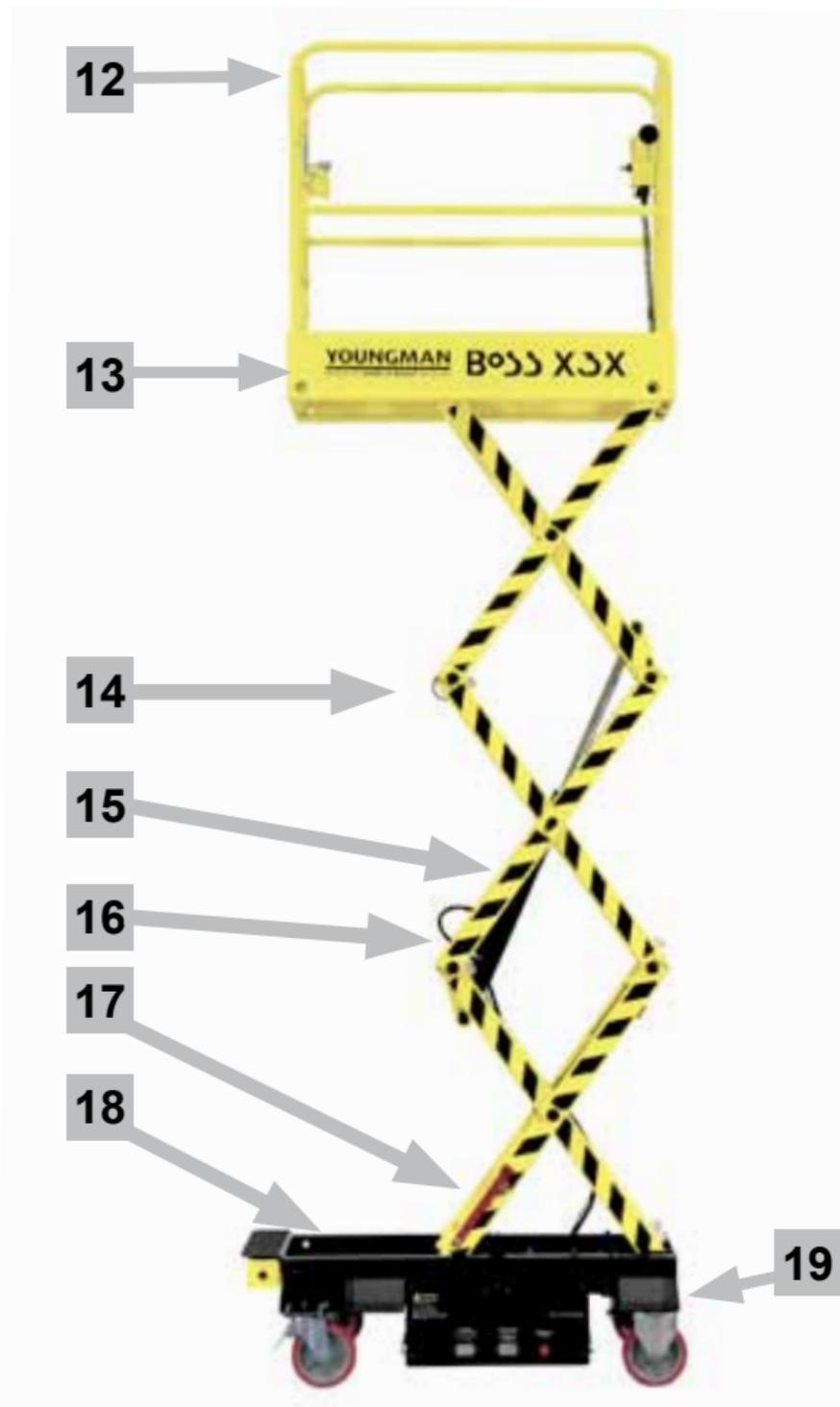
**e** sales@youngmangroup.com

## 1.6 TERMINOLOGY

- 1 Charging cables and guardrail tools tray
- 2 Forklift access, hoisting and transit strap points
- 3 Battery charging connection point
- 4 Battery charging indicator
- 5 Battery charge level indicator
- 6 Base unit emergency stop
- 7 Smooth roll castors with non marking tyres
- 8 Step up to platform
- 9 Fixed castors with auto braking applied as the platform is raised
- 10 Swivel castors with click on brakes
- 11 Emergency lowering release valve
- 12 Guardrails
- 13 Work Platform
- 14 Scissor assembly
- 15 Hydraulic ram
- 16 Pressure loss valve
- 17 Fail-safe props
- 18 Chassis
- 19 Winching eye
- 20 Handset control unit
- 21 Instructions for Use storage tube
- 22 Access gate
- 23 Slip resistant deck incorporating lanyard point



# 1.6 TERMINOLOGY



## 2.1 TECHNICAL DATA

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### **Rated load, manual forces and weight:**

Safe working load

*equivalent to*

Maximum allowable manual force

Maximum allowable chassis inclination

Maximum allowable wind speed

Maximum load per wheel

Machine weight

Maximum point loading

### **Dimensions:**

Maximum platform height

Minimum platform height

Maximum safe working height

Platform delay on descent height

Platform width

Platform length

Platform guardrail height

Toeboard height

Overall width

Stowed height

Stowed length

Ground clearance

### **Electrical:**

Voltage

Motor

Battery (deep cycle/sealed gel)

Battery charger

### **Hydraulics:**

Maximum hydraulic pressure

Working pressure

Hydraulic fluid reservoir

### **Performance:**

Maximum number of lifts and descents on one charge:

with 80kg platform load

with 240kg platform load

Ascent times:

with 80kg platform load

with 240kg platform load

Descent times\*:

with 80kg platform load

with 240kg platform load

\* Including 3 seconds for intermediate stop on descent

BoSS X3X	BoSS X3	BoSS X2
240kg		
1 person (80kg) plus 160kg tools & materials		
200N (interior use only)		
1.25°	1.5°	1.5°
0m/s		
450kg		
370kg	349kg	313kg
17.43kg/cm <sup>2</sup>	16.83kg/cm <sup>2</sup>	15.8kg/cm <sup>2</sup>
3.2m		
0.695m	0.695m	0.6m
5.2m	4.55m	4.01m
1.87m	1.85m	1.4m
0.57m		
1.25m	1.05m	1.05m
1.1m		
0.15m		
0.76m	0.7m	0.7m
1.8m	1.8m	1.7m
1.41m	1.21m	1.21m
0.05m		
12V DC		
1.2kW	1.2kW	0.8kW
12V/100Ah	12V/100Ah	12V/80Ah
Automatic multi voltage 110 and 240v		
250 bar		
150 bar		
2 litres		
>325	>430	>565
>215	>225	>250
15 seconds	12 seconds	10 seconds
18 seconds	15 seconds	12 seconds
21 seconds	17 seconds	15 seconds
21 seconds	18 seconds	15 seconds

## 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 transported across unstable or uneven ground as this could cause significant damage to the machines. It is good practice to walk the route from the machines 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/cm<sup>2</sup>
- BoSS X3 – 16.83kg/cm<sup>2</sup>
- BoSS X2 – 15.8kg/cm<sup>2</sup>

### 2.2.2 GROUND FLATNESS

---

Ideally the BoSS X-Series machine should be operated on flat surfaces 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 all round the platform before deployment and elevation and 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 re-routing measures.

## 2.3 NOISE AND VIBRATION

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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/s<sup>2</sup>

## 2.4 LIMITATIONS

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The BoSS X-Series machine is limited to indoor operation and must not be used outdoors. Please consult us direct 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 (eg 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 INDG 73 [20].

## 3 - Safety rules

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These safety rules should be adhered to in every way.

- NEVER** exceed the 240kg rated capacity (Safe Working Load or SWL) 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 50°C or below -20°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** remove the platform guardrails when the machine is in use
- 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

## 3 - Safety rules

---

- ALWAYS** check that there are no obstructions or persons that may be struck by the platform before and during the 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 handbook 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 (buildings etc) or moving objects (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
- 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 (eg cordon off areas to prevent persons and other vehicles entering the danger area)
- ALWAYS** lock the swivel castors when 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 the battery is charged before use
- ALWAYS** read and understand these Instructions for Use before using the machine
- ALWAYS** use 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)

## 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 base unit and by feeling underneath the base unit tray
- Loose electrical fittings and sensors by visual inspection
- Chafed hydraulic hose or electrical cables by visual inspection
- Condition of castors, tyres and brakes by visual inspection
- Structure – guardrails, platform, scissors and chassis (eg damage, cracks, corrosion, abrasions, welds, connections)
- Visual inspection of the castellated scissor nuts and the split pin retainers
- Obscured, dirty or damaged instruction labelling and plates
- Emergency stop function activated on the handset
- Emergency stop function activated on the base unit
- Emergency lowering of platform (see page 19)
- Raise and lower functions including descent delay (the raise and lower functions can be tested by removing the handset controller from its holder 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. Try to push the machine from the left and right hand side of the gate end of the machine to ensure the brakes are functioning.
- Switch on power and:
  - Ensure that the tilt sensor alarm sounds to confirm operation
  - Check that the battery is fully charged

If the above pre-use checks reveal malfunctions or damage on the machine, then it must not be used until the problem is rectified. If in doubt seek further assistance by contacting Youngman.

If instruction labels or plates are no longer legible or missing contact Youngman for replacements.

The Daily Checks page in Section 6.5 of these Instructions for Use may be photocopied or are available to download from our website at [youngmangroup.com](http://youngmangroup.com) to provide an aide memoir for operators when undertaking these important 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 these Instructions for Use, 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.

Never attempt to move the platform on a gradient without assistance. Always carry out a risk assessment.

### 4.3 ENGAGING THE BRAKES

---

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

- Fixed castors – these brakes are applied automatically as the platform rises
- 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 provided with a key operated switch which 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 below making sure 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 3 points of contact when entering and exiting the platform (eg the use of 2 hands and one foot as shown in the pictures below). Always use the step up to the platform on the base of the machine.



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



## 4.6 HANDSET CONTROL UNIT

---

The handset control unit houses the platform raise and lower controls.

Pressing the 'UP' button raises the platform.  
Pressing the 'DOWN' button lowers the platform

To avoid crushing or shearing hazards, an intermediate stop feature on lowering is fitted to activate when the platform reaches a base of work platform height from ground level of:

- BoSS X3X – 1.87m
- BoSS X3 – 1.85m
- BoSS X2 – 1.4m

This is a safety mechanism that reminds the operator to look around the machine to determine whether any persons

are adjacent to the machine. After a time delay and when the operator is sure it is safe to do so, the 'DOWN' button can be depressed a second time to continue the descent.



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

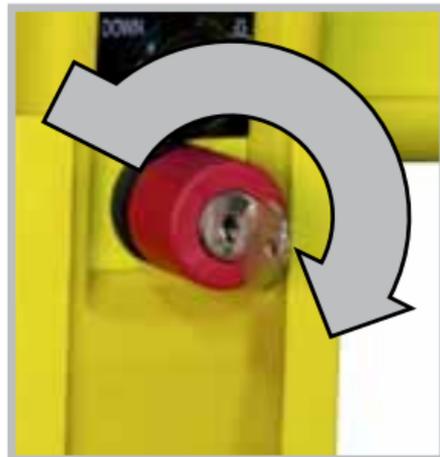


## 4.7 EMERGENCY STOP

---

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

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



There is also an emergency stop button on the base unit. 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.

1. Turn the finger screw on the pressure loss valve anticlockwise until it will not turn any further as shown in figure 1.
2. Then, turn the emergency valve on the base unit anticlockwise until the platform begins to descend, as shown in figure 2. If you need to stop the descent simply turn this valve clockwise again.



Figure 1



Figure 2

### **WARNING**

Always ensure someone other than the operator is trained to perform this rescue.

## 4.9 BATTERY CHARGING

---

A battery charge level indicator is fitted to the BoSS X-Series machine as shown in the photographs below. When the battery is fully charged the segment at the far right hand side of the display will be illuminated red, as shown in figure 1 below. When the second segment from the left is illuminated, as shown in figure 2 below, it is time to put the BoSS X-Series machine on charge



Figure 1



Figure 2

BoSS X-Series machines are fitted with low battery protection. If the battery level falls below 20% then the platform will not raise but can still descend.

The BoSS X-Series machine is fitted with an integral battery charger.

## 4.9 BATTERY CHARGING - CONTINUED

To charge the battery, follow the steps below:

- a. Depress the emergency stop button on the handset control unit and remove the key.
- b. Remove the cover from the charging connection point, as shown in figure 1 below.



Figure 1



Figure 2

- c. Connect either the mains or 110V transformer charging cable to the BoSS X-Series machine charging connection point, as shown in figure 2 above. These cables are to be found in the charging cable and guardrail tools tray under the step up to the platform.
- d. Connect the charging cable to a suitable power supply (110V transformer or mains)
- e. Whilst the battery is charging to 80% of capacity the second light will be flashing as shown in figure 1 below and when the charging of the remaining 20% is underway the third light will begin flashing as indicated in figure 2 below.



Figure 1



Figure 2

- f. When the battery is fully charged all four lights will illuminate after approximately 10 hours.

### WARNING

BoSS X-Series machines must be charged where the ambient temperature is between 0 and 50°C.

## 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 50°C or falls below -20°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 points provided on the machine (see pictures 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 forks are sufficiently inserted into the forklift entry points.

Once located in the correct position on the vehicle the BoSS X-Series machine should be anchored by means of fully tightened straps passed through the forklift access points.

## 5.2 LOADING AND UNLOADING

The BoSS X-Series machine may also be wheeled onto an adequately rated tail lift with the platform in the fully lowered position. 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 to the vehicle by means of straps passed through the forklift access points.



### **WARNING**

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

## 5.3 LIFTING

---

The BoSS X-Series machine may be lifted by a crane or Hiab by threading adequately rated lifting straps through the forklift access points.

### **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 control unit 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 entry points as shown below



## 6 MODIFICATIONS TO LATER BOSS X-SERIES MACHINES (REFER TO SERIAL NUMBERS AT THE START OF THIS SECTION)

In accordance with the Youngman Group policy of continuous product development we have introduced the following four changes to machines.

These changes are effective on machines with the following or later serial numbers:

- BoSS X3X – YMG 32001
- BoSS X3 – YMG 12001
- BoSS X2 – YMG 22001

The following three changes apply to all three machines:

- Tool box moved from under the step up to the platform and fitted to the guardrail as shown below.



- Width of gate reduced to prevent trapping of fingers as shown below.



- Pressure loss release moved from the ram to under the step up to the platform as shown below.



## 6 MODIFICATIONS TO LATER BOSS X-SERIES MACHINES (REFER TO SERIAL NUMBERS AT THE START OF THIS SECTION)

This changes the **EMERGENCY LOWERING** procedure for machines fitted with this new mechanism:

1. Turn the emergency valve on the base unit anticlockwise until it will not turn any further as shown in figure 1.

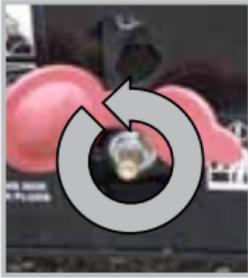


Figure 1

2. Pull the pressure loss valve release handle, shown in figure 2 below, which is mounted under the step up to the platform, until the platform lowers. It at any time you need to stop the descent simply release the handle.



Figure 2

### **WARNING**

**Always ensure someone other than the operator is trained to perform this rescue.**

In addition, in order to shorten the length of the BoSS X3X for transport, the step has been redesigned to be detachable as shown below.



The stowed length of the BoSS X3X is reduced from 1.41 to 1.3 metres when step is removed.

As a result of these machine changes four new labels have been added to the machines – see positioning in pictures below.



Tool box



Emergency descent procedure



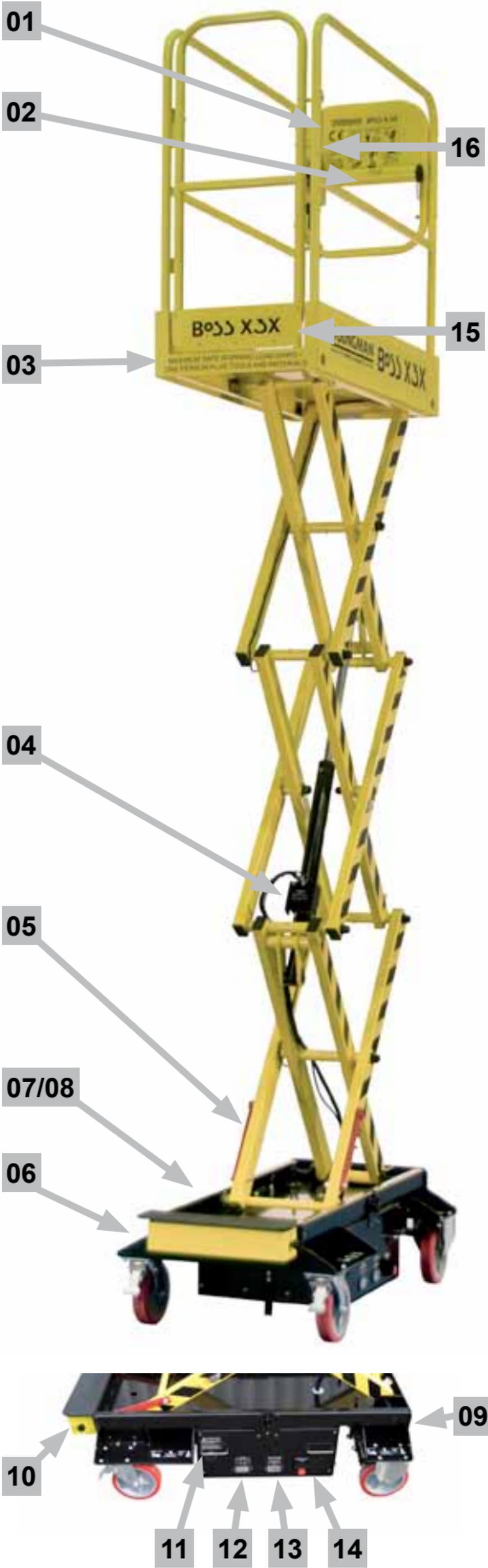
Charging point



Emergency pressure loss valve release handle

# 7.1 MACHINE LABELLING

See below for the correct location of the BoSS X-Series machine labels and machine plate









## 7.5 DAILY CHECKS - OPERATOR CHECKLIST

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The following checklist has been provided to enable daily pre-operation checks to be undertaken prior to use of this BoSS X-Series machine. These checks should be carried out each working day or 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.

## 7.5 DAILY CHECKS - OPERATOR CHECKLIST

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

### Machine Number

Check	OK?
● Hydraulic oil leaks by visual inspection of the floor around the base unit and by feeling underneath the base unit tray	
● Loose electrical fittings and sensors by visual inspection	
● Chafed hydraulic hose or electrical cables by visual inspection	
● Condition of castors, tyres and brakes by visual inspection	
● Structure – guardrails, platform, scissors and chassis (eg damage, cracks, corrosion, abrasions, welds, connections)	
● Visual inspection of the castellated scissor nuts and the split pin retainers	
● Obscured, dirty or damaged instruction labelling and plates	
● Emergency stop function activated on the handset	
● Emergency stop function activated on the base unit.	
● Emergency lowering of platform (see page 19)	
● Raise and lower functions including descent delay (the raise and lower functions can be tested by removing the handset controller from its holder 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. Try to push the machine from the left and right hand side of the gate end of the machine to ensure the brakes are functioning.	
● Switch on 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 reported to your employer. It may be necessary to seek further assistance from the supplier of the machine, this may be the hire company or the manufacturer. You should only rectify any defects if you are authorised and competent to do so.

Do not use this machine unless each of the items above is checked and stated as OK

## SECTION 8 BOSS X-SERIES ACCESSORIES

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### 8.1 CONFINED SPACE GUARDRAIL

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The BoSS X-Series Confined Space Guardrail has been developed to easily fit to the existing platform guardrail retainer points to allow access to restricted spaces such as the void above suspended ceilings.



## SECTION 8 BOSS X-SERIES ACCESSORIES

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### 8.2 BUMPERS

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The BoSS X Series Bumpers have been specially designed to fit easily into the machines fork lifting points and to reduce impact and scuffing damage to finished surfaces. They have the added advantage that they can be removed from the forklift points and clipped onto the guardrails for storage.



### 8.3 HEAVY DUTY ALL WEATHER COVER

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Ideal for protecting the machine when transporting or in storage.











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