
K13



K13

TRAILER MOUNTED BOOM

Operator & Safety

Manual

DANGER

**BEFORE ENTERING PLATFORM,
CHECK ALL OUTRIGGERS**

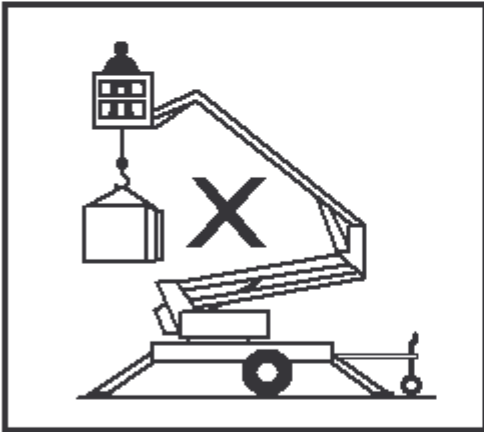


**DO NOT OPERATE
THE MACHINE UNTIL YOU
HAVE READ THE MANUAL**

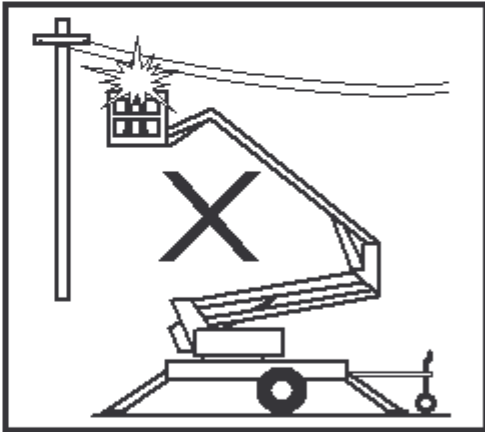


**FOR USE BY
AUTHORISED AND
TRAINED PERSONNEL ONLY**

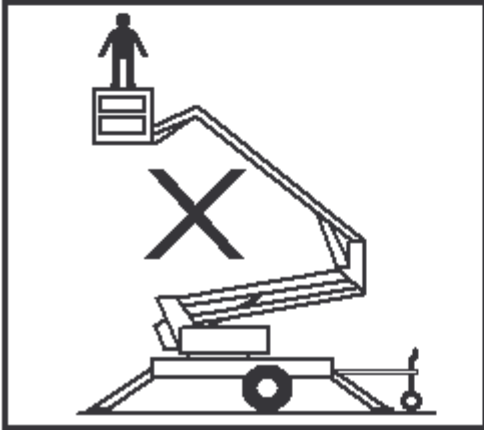
**IF YOU ARE IN ANY DOUBT,
CONSULT JLG OR THEIR DEALER.**



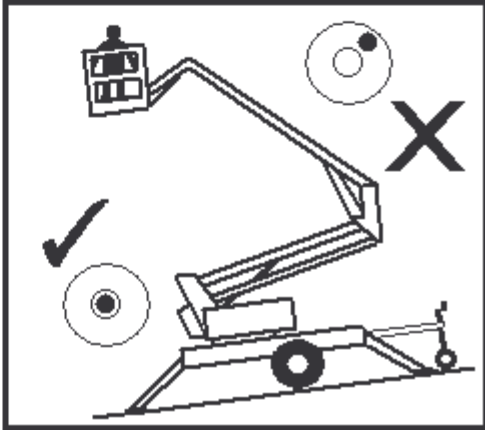
**NEVER USE BASKET
FOR LIFTING**



**DO NOT OPERATE CLOSE TO
OVERHEAD POWER CABLES**



**DO NOT SIT, CLIMB OR PLACE
LOADS ON GUARDRAILS**



**ALWAYS LEVEL MACHINE WITH
OUTRIGGERS BEFORE ELEVATING**

Contents	Section
Introduction	1
Description	2
Working Envelope	3
The Operator	4
Warning Notices	5
Pre-Start Checks	6
Road Towing Instructions	7
Power Supply	8
Setting Up	9
Operation	10
Safety Harness	11
Emergency Controls	12
Stowing	13

INTRODUCTION

The JLG K13 is a very versatile means of gaining access in difficult locations.

The machine is extremely safe in operation providing that basic rules are observed in setting up the machine.

Operators should have read and understood the contents of the manual, and received full training in the safe use of the machine before attempting to use it.

DESCRIPTION

The JLG K13 is of the parallel linkage vertical boom design, mounted on a road towable trailer. The unique yet very simple boom configuration gives the maximum safety and controllability combined with a robust construction to withstand a heavy working environment.

The K13 machine is designed for two-man capacity (200 kg S.W.L.)

The machine incorporates a bottom boom with tie rod, a short vertical boom and a top boom with tie rod. The K13 also has an independent hydraulically operated flick-out boom for extra manoeuvrability.

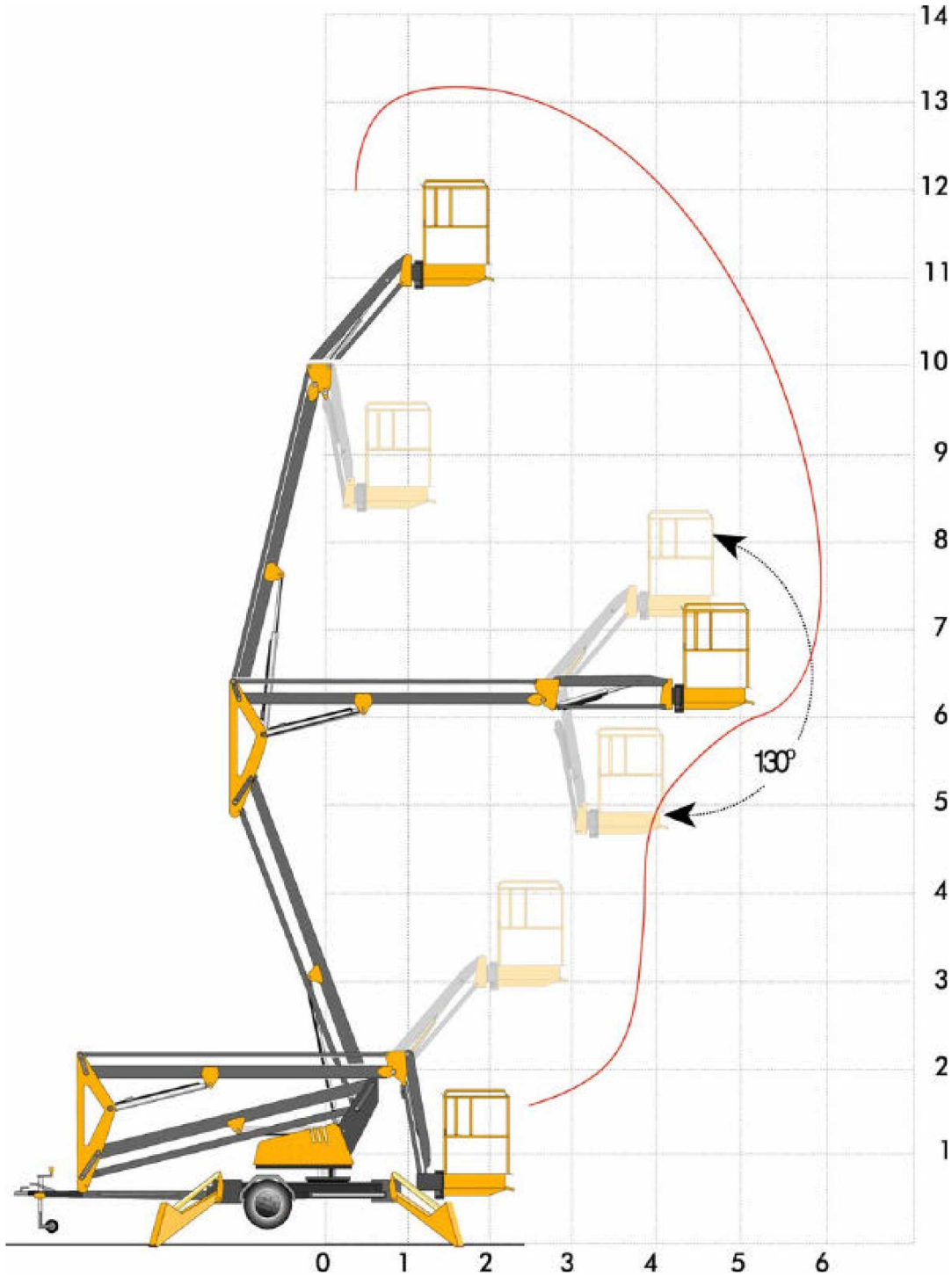
The hydraulic system is of a failsafe design throughout, with built in hydraulic lock valves on all the rams as a precaution against hose failure. The machine is controlled by means of proportional manual control valves of the direct hand lever operation type.

Emergency lower valves are fitted as standard to allow the machines to be lowered from either the platform or the base. There is also a base control valve fitted as standard, repeating all the functions of the basket control valve.

The outriggers are fitted with interlocks, to prevent the booms being raised without the outriggers being extended. A simple system of warning lights show the power is on and each of the outriggers is under load.

The K13 meets or exceeds the applicable requirements of AS1418.10 as originally manufactured for the intended applications and use.

WORKING ENVELOPE



WORKING ENVELOPE

THE OPERATOR

1. To operate the machine you must be medically fit and have no problems with your eyesight or hearing.
2. You must have a good head for heights.
3. Your first concern must be the SAFE OPERATION of the work platform, the safety of the people working with you and/or other persons in your working area.
4. You must be familiar with the operation instructions within this manual, and at no time attempt to operate the machine beyond the recommended limits.
5. The proper care of the work platform is a major factor in ensuring the safety of those who work with it. You must not misuse the machine or ignore or interfere with the devices and equipment which have been provided to maintain safety.
6. Operation of the machine should be restricted to personnel who have been authorised to operate the equipment and have received proper training.

WARNING NOTICES

- 1. DO NOT** operate the machine unless you have been fully trained in the safe use of the machine.
- 2. DO NOT** operate the machine on soft, slippery or sloping ground unless adequate precautions have been taken.

The stabilisers are designed to operate on *firm* and *level* ground with a *minimum bearing strength of 31 N/cm²*. The maximum load imposed by an outrigger is 10.3 kN.

Advice should be obtained from JLG as to the type of supports and precautions required before attempting to operate the machine outside these parameters.

- 3. DO NOT** operate the machine unless all four stabilisers are down in full contact with the ground, the machine is level and the wheels are lifted clear of the ground.
- 4. DO NOT** use any equipment in the basket to increase the reach or working height of the machine, e.g. ladders.
- 5. DO NOT** fit any additional equipment to the machine which would increase the wind loadings, e.g. notice boards.
- 6. DO NOT** use the machine for any application which may produce special loads or forces; JLG should be consulted for approval giving full details of the application prior to use.
- 7. DO NOT** use the machine close to live electrical conductors. This machine is not insulated and does not provide protection from contact or proximity to electrical current.

If you are working in an area with overhead power lines, contact your local authorities to find out the minimum safe approach distances applicable to your job site. A site-specific risk assessment must be carried out and risk control measures put in place before work commences. A dedicated observer may be required along with other risk control measures. Consult AS2550.1 and your local authorities for details.

- 8. DO NOT** tow the machine unless all booms and stabilisers are fully locked in position.

WARNING NOTICES

BEAUFORT WIND SPEED SCALE

The Beaufort Scale of wind force is accepted internationally and is used in communicating weather conditions. It consists of numbers 0 – 17, each representing a certain range of wind speeds at 10m (33ft.) above ground in the open.

DESCRIPTION OF WIND	SPECIFICATION FOR USE ON LAND	m/sec	
0	CALM	<i>Calm – smoke rises vertically.</i>	0-0.5
1	LIGHT AIR	<i>Direction of wind shown by smoke drift but not by wind vanes.</i>	0.6-1.5
2	LIGHT BREEZE	<i>Wind felt on face; leaves rustle; ordinary vanes moved by wind.</i>	1.6-3.0
3	GENTLE BREEZE	<i>Leaves and small twigs in constant motion; wind extends light flag.</i>	3.5-5
4	MODERATE BREEZE	<i>Raises dust and loose paper; small branches are moved.</i>	6-8
5	FRESH BREEZE	<i>Small trees in leaf begin to sway; crested wavelets form on inland waterways.</i>	9-10
6	STRONG BREEZE	<i>Large branches in motion, umbrellas used with difficulty.</i>	11-13
7	NEAR GALE	<i>When trees in motion; inconvenience felt when walking against wind.</i>	14-17
8	GALE	<i>Breaks twigs off trees; generally impedes progress.</i>	18-21
9	STRONG GALE	<i>Slight structural damage occurs (chimney pots and slates removed).</i>	22-24

Numbers 10-17 are not shown in this table.

Approximate corrections for wind speeds at other heights are:

2m subtract 30%; 3m subtract 20%; 6m subtract 10% 15m add 10%; 30m add 25%.

The maximum wind speed for safe operation of a K13 is 12.5m/sec.

PRE-START CHECKS

The following pre-start checks should be carried out before taking the machine to the place of work.

1. WHEELS

Check tyres for correct pressure for K13 = 45 p.s.i. (3.1 bar).

2. HYDRAULIC FLUID

The oil level in the tank must be full when booms are in the lowered position.
Use ULTRAMAX HVI 68 (ISO) Grade Oil.

3. CUT-OUT SWITCHES

All cut-out and safety switches must be working correctly.

4. EMERGENCY STOP

Check that the emergency stop switches are functioning correctly.

5. EMERGENCY LOWER

Check that the emergency lower valves are free to operate and are in the fully closed position.

6. DAMAGED/LOOSE FITTINGS

Inspect the machine to ensure there are no signs of damaged or loose hoses and fittings.

7. PETROL & ENGINE OIL

Check there is sufficient petrol and oil to enable the machine to work a full shift.

ROAD TOWING INSTRUCTIONS

Trailer mounted machines fitted with suspension units maybe safely towed behind a car or van at speeds of up to 80km/hr (50mph) where permitted.

1. Before towing, check the capacity of the vehicle being used. The machine weighs 1440 kg. (The weight of machines fitted with certain options may differ.)
2. Ensure that the booms are fully lowered and both the boom locking pins are fitted and holding the booms securely.
3. Ensure that the jockey wheel has been swung down into the vertical position.
4. Ensure that the outriggers are fully raised.
5. Use the jockey wheel to raise or lower the tow bar coupling, to position the machine above the 50mm ball hitch on the towing vehicle.
6. Apply the handbrake.
7. Lower the tow bar coupling down onto the ball hitch using the jockey wheel and secure the safety chain.
8. Fully raise the jockey wheel and lock in position.
9. Release the handbrake.
10. Plug in the trailer lights (7 pin plug) and check that both vehicle and trailer lights are working correctly.

POWER SUPPLY

The K13 is powered by a Robin petrol engine. Only use unleaded petrol as fuel. Before starting the engine, check the oil and petrol levels are correct.

To start the engine from the ground controls, turn the ignition key to the ON position, ensure the emergency stop button is pulled out, select ground controls, (if engine is cold hold down the choke button) then press the start button. The choke button, if used, is to be released as soon as the engine fires.

To start the engine from the platform, turn the ignition key at the ground controls to the ON position, ensure that emergency stop button at the ground controls is pulled out, then select platform controls on the controls selector switch. Climb into the basket. Ensure that the platform emergency stop button is pulled out, (hold down the choke button if the engine is cold) then press the start button. The choke button, if used, is to be released as soon as the engine fires.

The choke buttons provided at the controls are only to be used when starting a cold engine. Always allow the engine to reach its operating temperature before operating any of the hydraulic functions.

SETTING UP

Do not attempt to set up the machine on steep slopes, ramps or soft ground.

Note: The maximum load that can be exerted by the outrigger foot is 10.3 kN.

HYDRAULIC OUTRIGGERS

1. Start the engine from the ground controls as per the instructions on the previous page.
2. Keeping the black (outrigger enable) button depressed, use the outrigger control levers to lower each of the 4 outriggers to within 50-100 mm from the ground.
3. Still with the black button depressed, use levers 1 and 2 to lower the front outriggers until the jockey wheel is clear of the ground.
4. Now use levers 3 and 4 to lower the rear outriggers until the machine is level (see the “bubble” indicator on the chassis). Check to see that the machine tyres are off the ground. Make sure that all four of the green outrigger indicator lights on the control panel are lit up. The boom will not function until all four of these lights are on. Check that all outriggers are in firm contact with the ground.
5. Fold jockey wheel up into horizontal position.
6. Remove lower and upper boom transport pins and place in dedicated holding clips.
7. Before operating the machine, select the platform controls on the controls selector switch.

OPERATION

1. Set the machine up and lower the outriggers as per the instructions on page 9.1. Ensure that the boom transport pins have been removed.
2. At the ground controls, ensure the key is in the ON position, the emergency stop button is pulled out and the platform controls have been selected. Climb into the basket and ensure that the basket emergency stop button is pulled out. To start the engine, press the start button (holding down the choke button if the engine is cold). If used, release the choke button as soon as the engine fires.
3. The platform may now be raised, lowered or slewed in any direction by operating the control levers in the basket. The decal indicates which lever operates which function. *See Fig 8.*
4. A duplicate set of controls is mounted on the slew turret under the L.H. side cover which allows the platform to be operated from the ground. Again, the decal indicates which lever operates which function. *See Fig 9.*

WARNING

Before raising, ensure there are no overhead obstructions or power cables and the outriggers are properly extended and secured.



Figure 8: Basket Controls

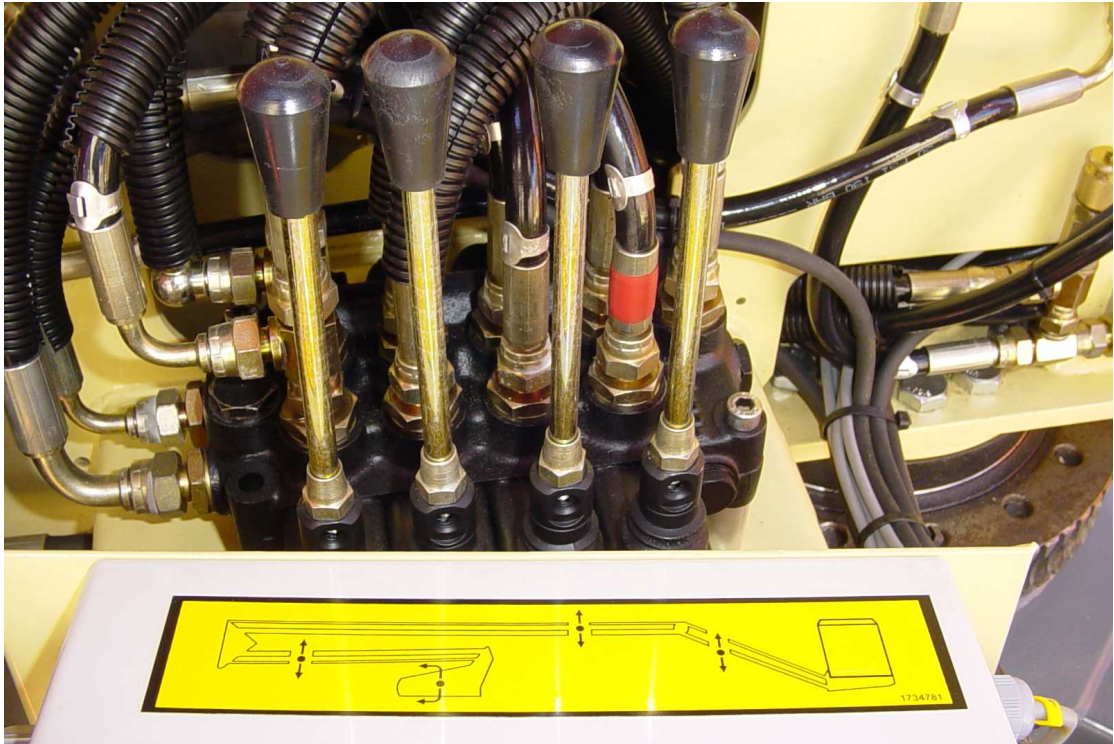
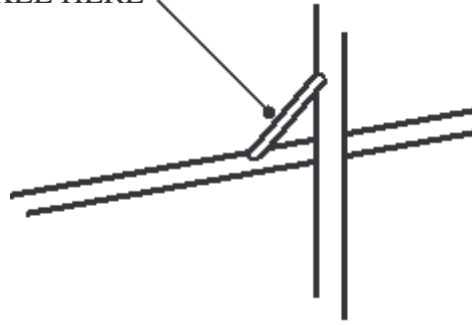


Figure 9: Ground Controls

SAFETY HARNESS

1. During operation, occupants of the platform must wear a full body safety harness with a lanyard attached to an authorised lanyard anchorage point. A permanent anchorage point is provided in the basket for fixing the harness.

ATTACH SHACKEL HERE



EMERGENCY CONTROLS

1. EMERGENCY STOP BUTTONS

Red emergency stop buttons are fitted on the machine to stop the motor in an emergency. These are fitted to both the upper and the lower control boxes. The emergency stops can be reset by pulling (prior S/No. K133976) or twisting (S/No. K133976 onwards).

2. BASKET & BASE EMERGENCY LOWER

In the event of an emergency, the bottom and the top booms may be lowered by means of emergency lower valves. There is one of these located on each boom cylinder. In the event of an emergency, an assistant may operate each of these valves simply by pushing the button on each valve until the corresponding boom is lowered.

Also, there is a manual pump located on the left-hand side of the platform control box. This may be used in the event of loss of power to the main pump or malfunction of the main pump. All basket functions may be operated as per usual (except the upper and lower booms may only be lowered) while pumping manually.

3. EMERGENCY SLEW - In the event of a power failure, the machine may be manually slewed by holding the slew control valve lever down at the base and manually indexing the slew platform by means of the 16mm ratchet on the shaft (red) of the slew gearbox.

NOTE – Before operation of the machine, it is important that both the operator and some other responsible person on site is aware of the position and function of the following: -

- a. Emergency Stop Buttons.
- b. Emergency Lowering Controls.
- c. Emergency Slew Drive Shaft.

STOWING

1. Fully lower all the booms and insert the pegs through the bottom of the vertical boom and the top boom. Ensure the arms of the pegs are secure in the retainer.
2. Lower the jockey wheel to the vertical position.
3. **HYDRAULIC OUTRIGGERS**
 - a. Press the black button on the lower control box.
 - b. Fully raise the outriggers.
4. The machine is now stowed for transportation. For road towing instructions refer to page 7.1.