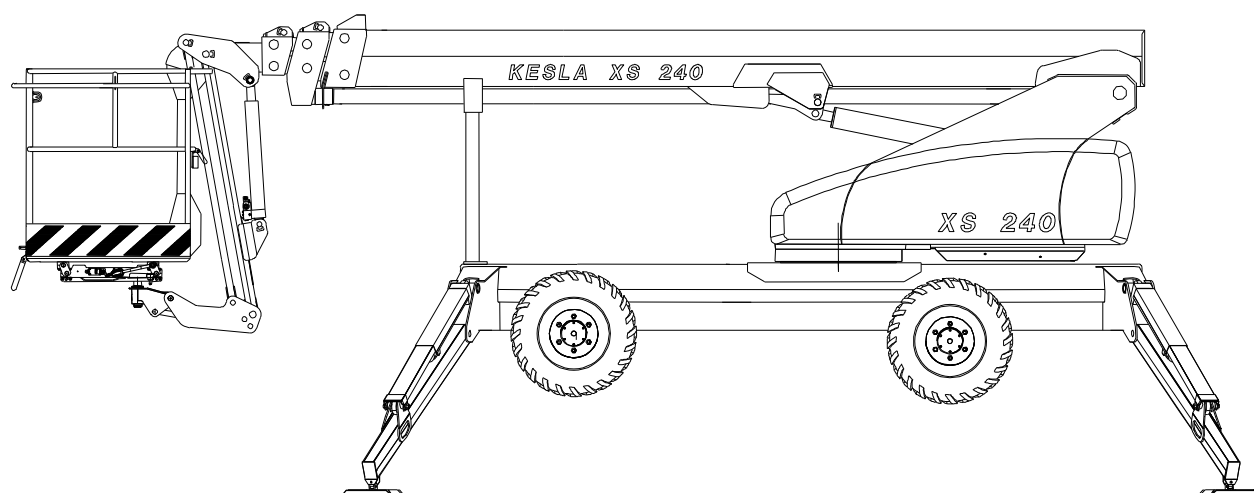


# ***Nostolift***

## ***XS240***

### ***SELF-PROPELLED***

### ***TELESCOPIC PLATFORM***



## ***OPERATION***

## ***MAINTENANCE***

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## 1 INTRODUCTION



*Nostolift XS 240 is a Self-Propelled Telescopic Access Platform provided with its own diesel engine. Due to its four-wheel drive and four-wheel steering, Nostolift XS 240 is very agile and can easily travel in difficult terrain when driven from the platform. Because all essential controls are centralized to the platform, the Nostolift XS 240 Access Platform is controllable from the platform in any normal operating situation. Correspondingly, the electrical box and the controls for ground operation are located on the turntable.*

*The brakes of the Access Platform*

*get automatically locked when the pressure of the drive motors decreases.*

*The electrical emergency lowering system can be controlled from the platform and from the turntable.*

*Due to its telescopic boom, Nostolift XS 240 has a wide side reach, and the work is also facilitated as the slewing mechanism rotates without limitation. The jib boom as standard equipment ensures agile movements.*

*Nostolift XS 240 Access Platform is provided with many safety-improving functions. To achieve good, effective and safe working results, their instructions must be read through carefully. The operation of the Access Platform is made easier by the electric joystick control of the boom.*

*The condition of the Access Platform must be inspected daily on the basis of this manual before starting the work. Do not use the Access Platform if it is not in order or if it has not been maintained or inspected.*

*The manufacturer reserves the right to change the construction, equipment as well as the maintenance instructions of the machine without advance notification.*

*With wishes of elevating success*

**NOSTOLIFT OY**

## 2 TRANSPORT DIMENSIONS

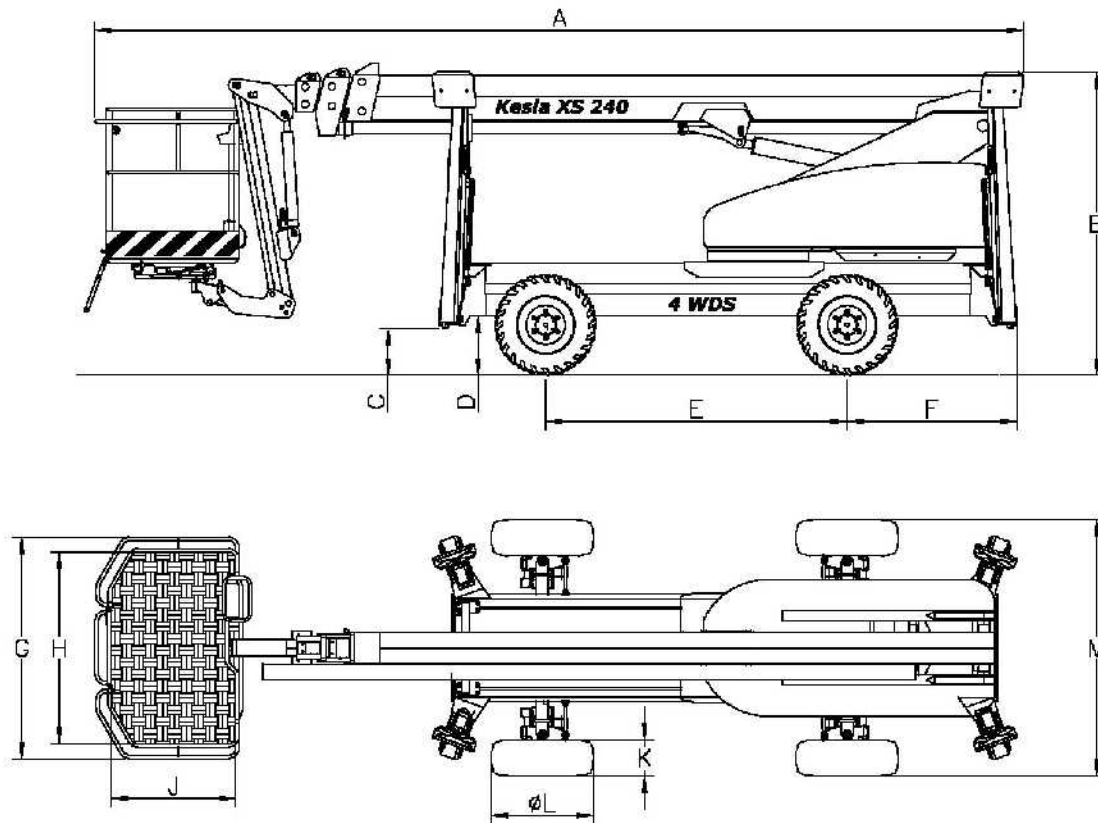


Figure 1. Transport dimensions

Dimension	mm	in.
A	7150	281.5
B (depending on tyres)	2335	91.9
C	355	14.0
D	430	16.9
E	2290	90.7
F	1275	50.2
G	1670	65.7
H	1500	59.1
J	1000	39.4

Dimension	mm	in.
K, wide tyre	340	13.4
K, all-terrain tyre	270	10.6
ØL, wide tyre	750	29.5
ØL, all-terrain tyre	760	29.9
M, wide tyre	2070	81.5
M, all-terrain tyre	1915	75.4

### 3 LIFTING THE ACCESS PLATFORM WITH LIFTING HOOK

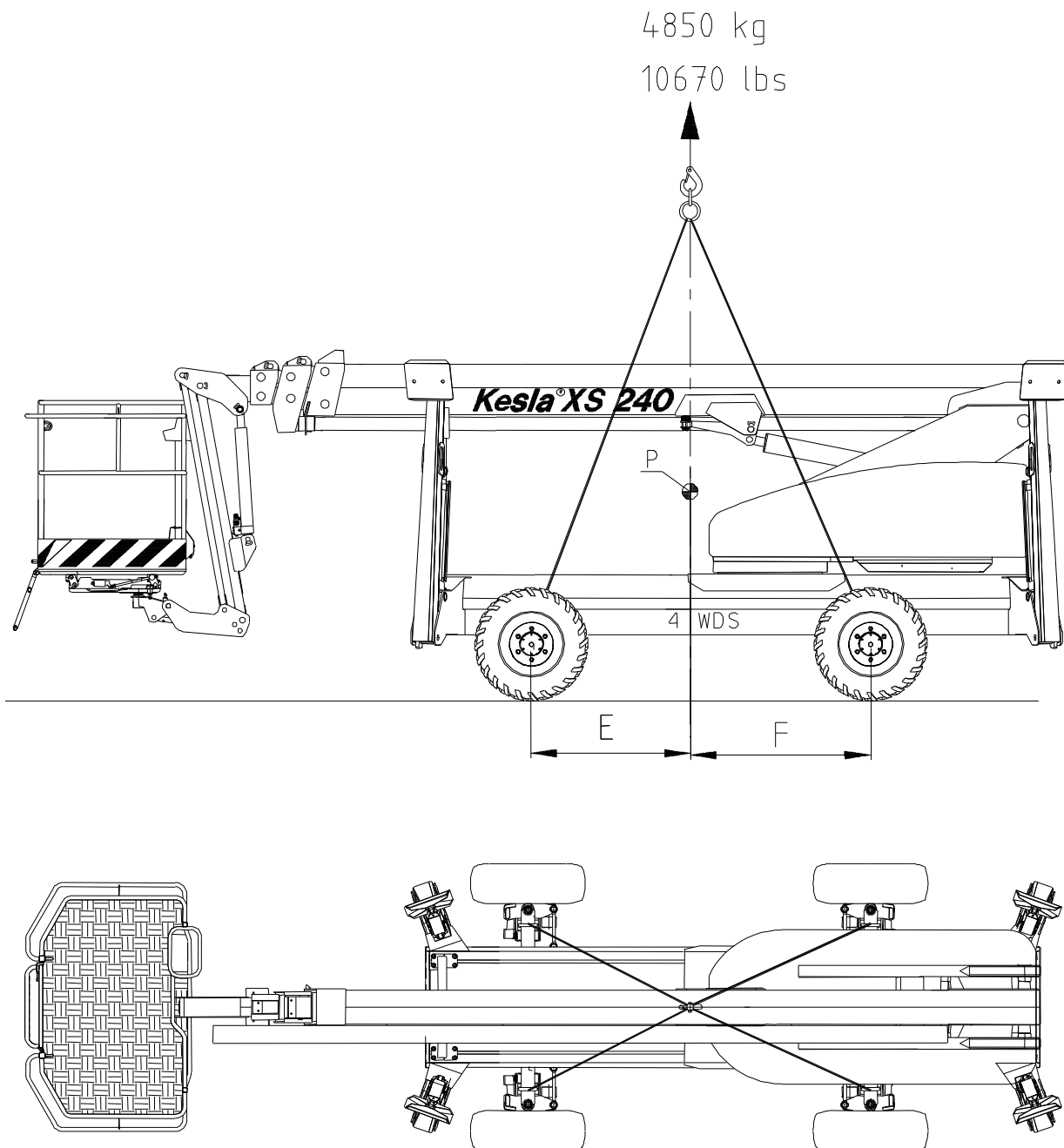


Figure 2. Lifting the Access Platform with lifting hook

		m	ft.
E	Distance of centre of gravity	1,25	
F	Distance of centre of gravity	1,04	
P	Centre of gravity		

## 4 SPECIFICATION

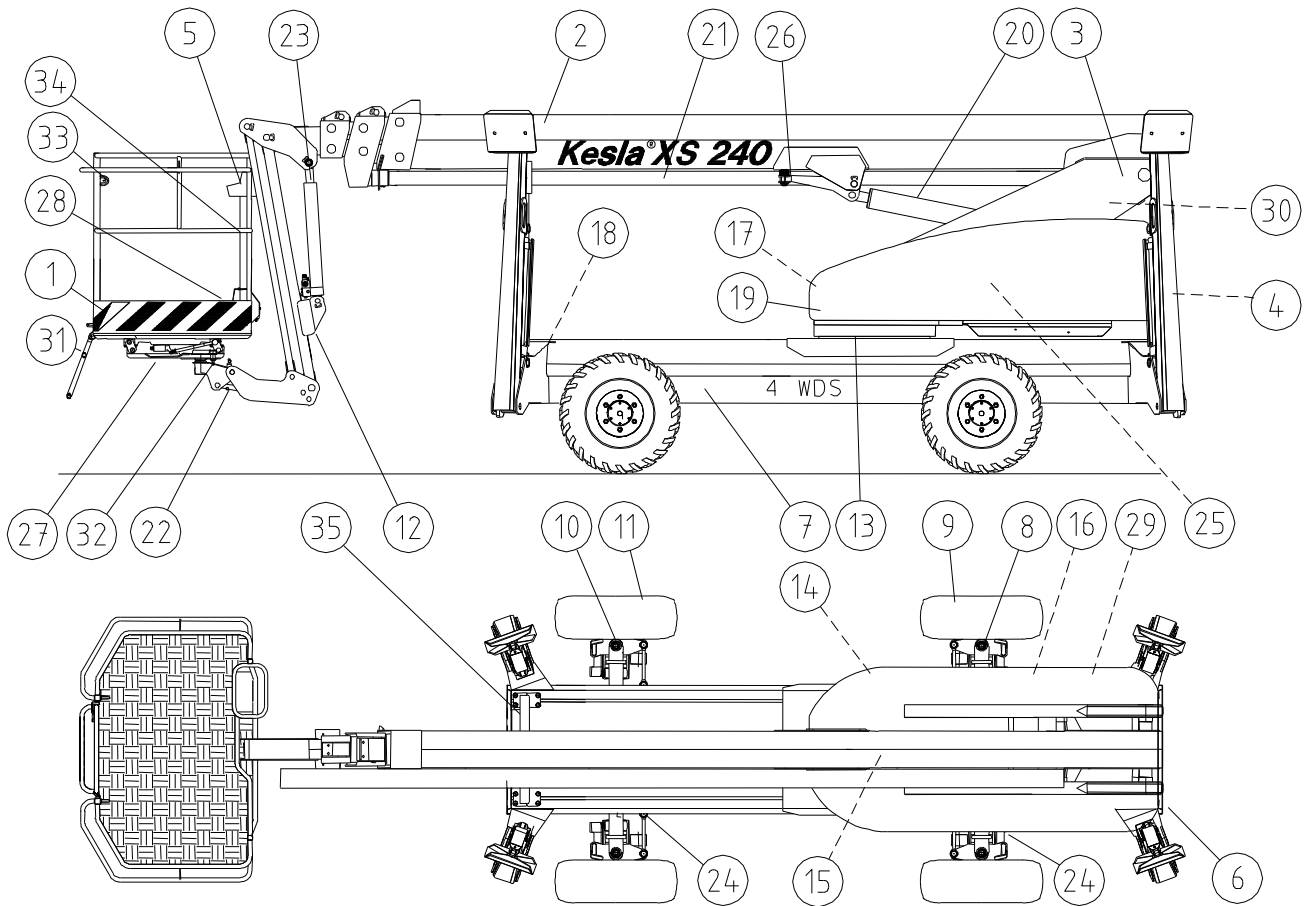


Figure 3. Specification

1. Platform
2. Boom
3. Turntable
4. Combustion engine
5. Controls on the platform: boom/platform, outriggers, and driving
6. Controls for ground operation of boom
7. Chassis
8. Front axle, rocker axle
9. Front wheel and brakes
10. Rear axle, dead
11. Rear wheel and brakes
12. Jib
13. Pivot bearing
14. Slewing motor, gear and brake
15. Fuel tank, filling on the left side of the Access Platform
16. Hydraulic oil tank, on the left side of the Access Platform
17. Battery, at the rear edge of the turntable under a cover
18. Equipment case, place for manual, ground fault circuit interrupter 220 V 50 Hz
19. Main power switch, at the rear edge of the turntable
20. Lifting cylinder
21. Telescope cylinder
22. Stabilizer cylinder for platform
23. Jib cylinder
24. Steering cylinders
25. Hydraulic pump
26. Limiter device for lifting radius
27. Platform load control device
28. Foot pedal (when pressed down: operating the boom)
29. Electric pump for the emergency lowering system
30. Control cylinder for stabilizer cylinder
31. Platform step
32. Cylinder for rotating the platform
33. Fastening hooks for safety harness
34. Electric outlets for power tools (220 V 50 Hz)
35. Transport support

## 5 TECHNICAL DATA

Max. height of platform bottom from ground.....	22.00 m (72' 2")
Max. working height.....	24.00 m (78' 9")
Min. lifting radius measured from the outer edge of platform with max. working height.....	1.4 m (4' 7")
Max. permitted platform load.....	230.0 kg (507 lbs)
Max. lifting radius with 230.0 kg platform load (to the edge of platform).....	9.4 m (30' 10")
Max. lifting radius with 120.0 kg platform load (to the edge of platform).....	10.7 m (35' 1")
Max. lifting radius with 80.0 kg platform load (to the edge of platform) .....	11.3 m (37')
Dimensions of platform bottom.....	1.0 x 1.5 m (3' 3" x 4' 11")
Hydraulic rotating of platform.....	90°
Slewing angle of jib boom.....	120°
Support distance of outriggers (lengthwise).....	5200 mm (17' 1")
Support distance of outriggers (width wise).....	4500 mm (14' 9")
Max. supporting force on the sole of outrigger.....	37000 N (8320 lbs)
Max. allowed slope of the ground.....	±7°
Max. allowed inclination of the chassis.....	±1°
Transport length.....	7.15 m (23' 5")
Transport width.....	2.07 m (6' 9")
Transport height (depending on the tyres).....	2.335 m (7')
Ground clearance under bottom.....	0.43 m (1' 5")
Wheelbase.....	2.29 m (7' 6")
Turning radius:	
4-wheel steering, outermost side of tyre.....	3.0 m (9' 10")
4-wheel steering, outermost part of platform.....	5.0 m (16' 5")
2-wheel steering, outermost side of tyre.....	4.4 m (14' 5")
2-wheel steering, outermost part of platform.....	6.4 m (21')
Rocking angle of front axle.....	±10°
Total weight with filled tanks.....	4850 kg (10700 lbs)
Rear axle load with 80 kg platform load.....	2430 kg (5360 lbs)
Front axle load with 80 kg platform load.....	2500 kg (5510 lbs)
Driving speed:	
slow.....	0 - 3 km/h (0 - 1,9 mph)
fast.....	0 - 5 km/h (0 - 3,1 mph)
Traction force:	
slow, oil temperature +20°C.....	15400 N, 1740 kg (3830lbs)
fast, oil temperature +20°C.....	7700 N, 870 kg (1915lbs)
Hill climbing capacity (theoretical): slow speed range.....	19° (35%)
All-terrain tyres, traction pattern.....	10.0/75-15.3/8pr
Wide tyres.....	350/50 - 16/12 pr
Max. noise level (2500 rpm) at ground operating point.....	91 dbA



SELF-PROPELLED TELESCOPIC PLATFORM

when operated from the platform.....77 dbA

Output of hydraulic pump at 2400 rpm.....max. 43 l/min (11,4 gpm)

Hydraulic pressure: boom.....230 bar

- drive motors and outriggers.....250 bar

Hydraulic pump: axial variable displacement piston pump

Volume of hydraulic oil tank.....60 l (15,8 gal)

Volume of fuel tank.....60 l (15,8 gal)

Combustion engine.....Kubota V1505-BB-EC-1

Kubota V1505-BB-EC-1:

Output at rotation speed 2400 rpm.....30 hp/22 kW

Max. torque at 2400 rpm (ISO 3046).....90 Nm

Fuel: light fuel oil, diesel oil ASTM D 975-1D/2D

Fuel consumption at rotation speed 2600 rpm.....4,7 l/h

Batteries.....two batteries: 12 V 55 Ah

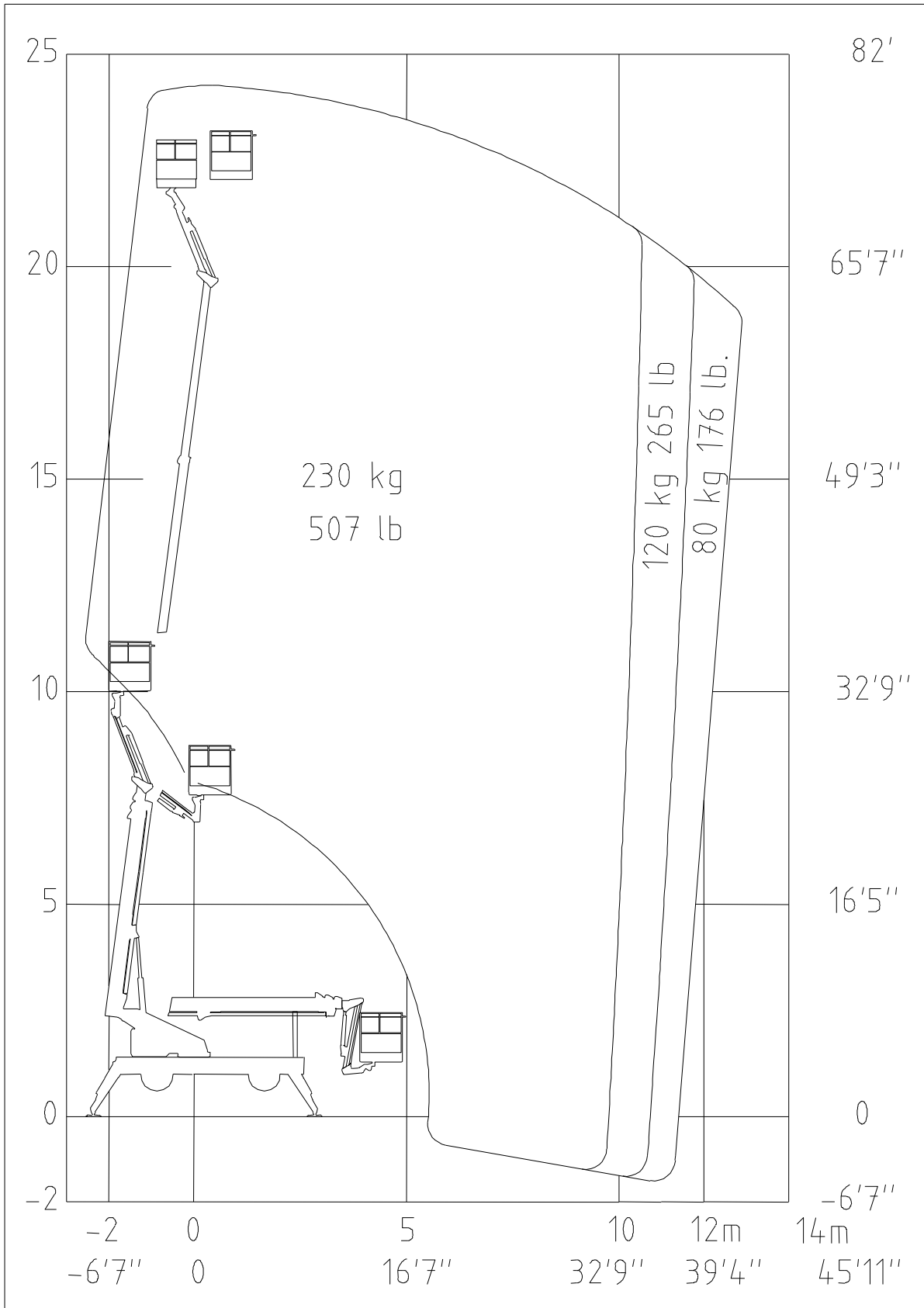
Warning and indicator lights:

- Oil pressure indicator light
- Charge indicator light
- Indicator light for the overheating of coolant
- Indicator light for malfunction in the control system

Warning texts in Iqan display:

- Fuel volume
- Hydraulic oil volume

## **5.1 NOSTOLIFT XS 240 BOOM GEOMETRY**



## 6 GENERAL SAFETY INSTRUCTIONS

1. Read through this owner's manual carefully before commissioning the Access Platform. The Access Platform shall never be operated by an operator who is not familiar with the operating and safety instructions. Store the owner's manual in the equipment case. ALWAYS keep the manual with the Access Platform.
2. The operator must be at least 18 years of age and have reasonable operating experience of Access Platforms. In practice, the owner/holder of the Access Platform must make sure that each operator is trained.
3. Nostolift XS 240 is fitted with the following fail-safe safety limit switches:
  - support position of outriggers
  - ground contact of outriggers
  - electric safety limit of maximum permitted lifting radius for raising function, telescope, jib, and electric backup limit switch for lifting radius
  - electric safety limit for excess platform load
  - safety limit for the transport position
4. The emergency lowering system consists of an electric pump located in front of the hydraulic oil tank and of the controls for the boom on the turntable and on the platform. For detailed instructions, refer to chapter "Use of emergency lowering system" in this manual.
5. Avoid rising near live electrical conductors. The minimum safe distance to cables with different voltage is shown on a sticker on the platform.
6. Always use a yellow flashing warning light when working on streets with busy traffic. The working zone shall be fenced to avoid risks. Also observe the relevant traffic regulations concerning the working site.
7. When driving the Access Platform, the boom shall always be supported in the transport position.
8. A maximum of two (2) persons with tools and supplies are allowed on the platform at the same time, however, so that the total load does not exceed 230 kg.
9. Only use the Access Platform with the outriggers well supported. Use extra plates under the outriggers, if needed. Make sure that an outrigger does not slip on the surface of the extra plate and that the extra plate withstands the weight of the outrigger. On icy surface, attach calks or bolts to the outrigger plates. The sole plates have been provided with holes for calks. For the tightness of different soil types, refer to the Soil tightness table under chapter 15. Remember that even asphalt may yield!
10. When operating the Access Platform, observe the adverse impact of wind, rain, temperature, thunder, bad visibility and accumulated snow and ice.
11. Do not take extra load while lifting. RISK OF TIPPING OVER!

12. *Be aware of the health risk in hot or chilly working environment.*
13. *Do not increase the wind load of the Access Platform with extra cover boards or load which enlarge the wind surface.*
14. *Do not increase the reach or working height of the platform by using planks, ladders or any other device. Do not swing or jump in the platform.*
15. *Do not throw down objects from the platform. Make sure that nothing can fall down.*
16. *Use ear protection when operating the Access Platform from the ground operating point, because the sound intensity exceeds 84 db (A). When operating the Access Platform from the platform, the sound intensity is less than 84 db (A), and the use of ear protection is not obligatory.*
17. *Always when you operate the Access Platform indoors or in a place with poor ventilation, the engine shall only be used for moving the Access Platform. Try to intensify the ventilation. Risk of intoxication! As an accessory, the Access Platform can be equipped with a mains current pump unit for operation indoors.*
18. *Do not use the Access Platform as a crane for transporting goods or persons between different levels or floors.*
19. *Do not deactivate a safety device, but repair it or have it repaired by a competent maintenance shop before re-use.*
20. *Ensure that the area below the platform is clear of all personnel and obstructions before lowering the platform.*
21. *To ensure safe and trouble-free functioning of the Access Platform, keep it free from snow, ice and other impurities.*
22. *Be very careful when handling fuels, lubricating and hydraulic oils as well as lubricating greases of the Access Platform. Avoid skin contact with these. Risk of exposure!*
23. *Always turn off the engine of the Access Platform when filling the fuel tank. Beware of splashes. Risk of fire!*
24. *Check and maintain the Access Platform regularly or let a maintenance shop familiar with Access Platforms carry out the service and repair work.*
25. *Do not make or cause to make any structural alterations to the Access Platform without the permission and instructions of the manufacturer.*
26. *Do not open the filling opening of the cooling system if the engine is warm. Risk of accident!*

27. Check the following issues daily before starting the work:

27.1 Checking the outriggers:

- Refer to the instructions in chapter "Checking the safety limits of outriggers".

27.2 Checking the telescope:

- Refer to the instructions in chapter "Checking the reach of telescope".

27.3 Checking the lifting function:

- Refer to the instructions in chapter "Checking the lifting radius".

28. Check the functioning of the backup safety limit for load control once a month. (Refer to checking instructions in chapter "Checking the backup safety limit for load control".)

29. Carry out or cause to carry out a thorough inspection of the Access Platform once in every twelve (12) months. Carry out a new inspection within a shorter period of time if the Access Platform is used in demanding conditions, if the load-bearing structures have been welded or if there is some other special reason for a new inspection. The annual inspection shall be performed by a person with a valid qualification certificate granted by an inspection organisation concerning the inspection of Access Platforms.

A dated record of this inspection shall be drawn up, and the record must be kept with the Access Platform at all times, stored e.g. in the equipment case, and the owner must keep a second copy. A model of an official record form is enclosed to this manual.

Alterations and repairs, their location on the Access Platform, date, and identity of the person(s) carrying out repairs and alterations shall be marked in the inspection record. Keep yourself up to date about developments in the field, check any retroactive amendment of laws and decrees since the last inspection, and take potential amendments into consideration when re-inspecting. Prior to repairs or alterations of load-bearing constructions, the manufacturer or his authorized representative shall always be contacted.

Test loading of the Access Platform with overload must be performed after any repairs or replacement of parts on the platform, jib, boom, turntable, chassis, outriggers or cylinders.

30. When leaving the Access Platform, always drive it out of way. Put the boom and outriggers in the transport position. As protection against unauthorized use, switch off the engine, remove the ignition keys from both the platform and the control panel of ground operating point, and switch off the main current. Remove all keys and keep them always together in one key ring, also during use.

31. Never operate or drive the Access Platform under the influence of alcohol or narcotics.



32. Always turn the ignition keys to position 0 when using electric welding equipment on the platform or close to the Access Platform. Do not use the chassis of the Access Platform or the steel constructions in the platform as an earth lead. Prevent welding current from contacting the Access Platform.

## 7 MAXIMUM SLOPE

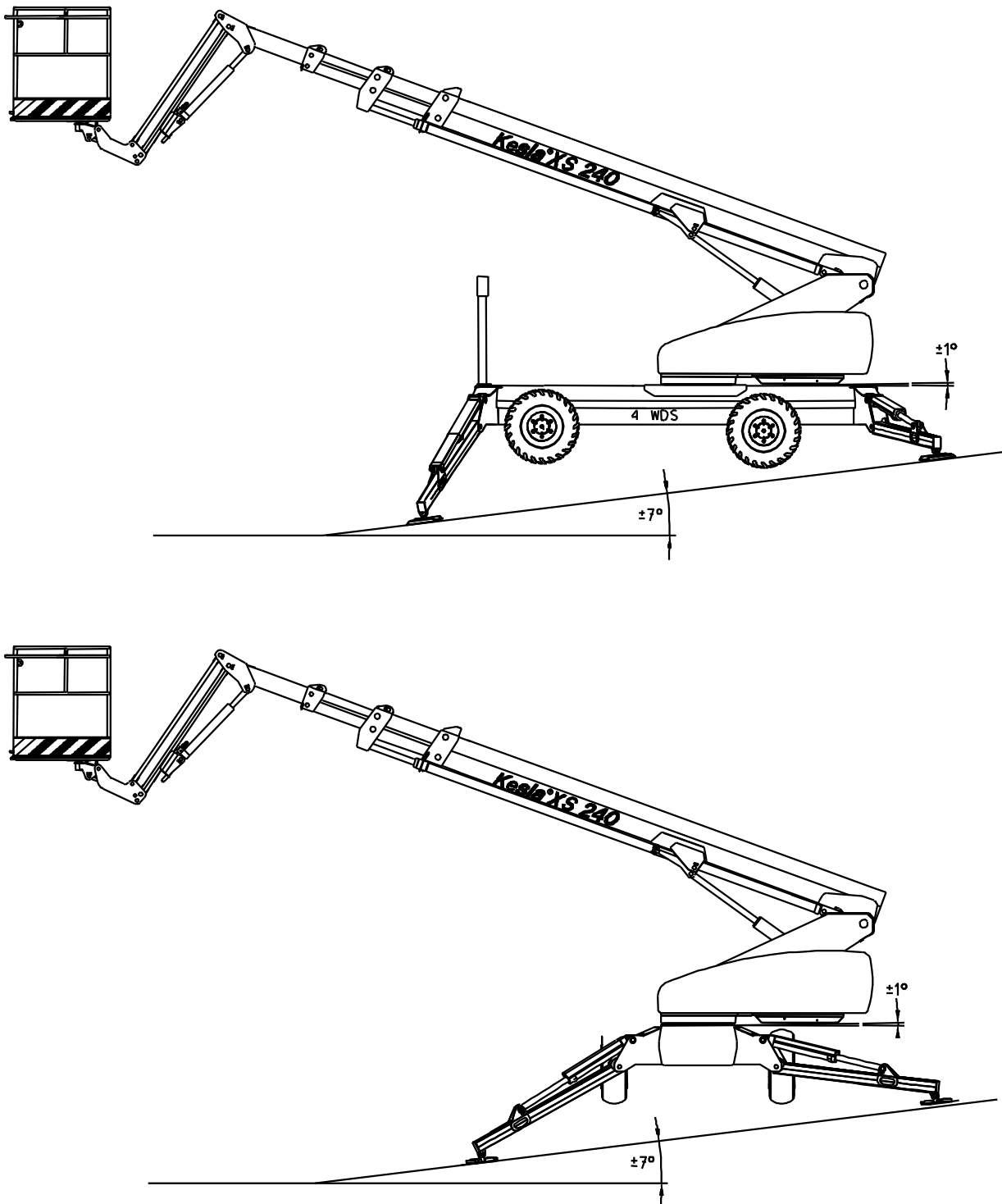


Figure 4. Maximum slope

**WARNING! MAKE SURE THAT THE ACCESS PLATFORM DOES NOT SLIDE ON SLOPING GROUND. IF NEEDED, ATTACH ADDITIONAL CALKS ON THE SOLE PLATES.**

## 8 COMBUSTION ENGINE

*The combustion engine of Nostolift XS 240 is a diesel engine, type Kubota V1505-BB-EC-1.*

*The speed of revolution of the engine has been adjusted to 2400 rpm at the factory. The maximum speed of revolution is 3000 rpm, which must not be exceeded. The engine will not start before the necessary glow time has elapsed.*

## 9 CONTROLS AND FUNCTIONS

*Starting:*

*Switch on the power from the main switch 1 (figure 5). The main ignition key can be removed also when power is switched on.*



Figure 5. Main power switch

### 9.1 CONTROLS FOR GROUND OPERATION

*The controls for ground operation are located on the turntable, on the front part of the engine guard. When the outriggers are in the support position and the engine has been started from the ground, it is possible to slew, raise and telescope the boom and to raise and lower the jib boom from the ground operating point. The speed of the movements can be adjusted steplessly by the speed control potentiometer. The speeds have been restricted to a safe range. If you wish to use a faster speed, first choose the movement and then adjust the speed to the desired level.*

*The emergency lowering system operates by using these controls at the ground operating point.*

*When the boom is operated from the ground, the current must be switched on from the ground. When operated from the platform, the ignition key must be removed from the ground operating point and placed in the ignition lock on the platform.*



### 9.1.1 Controls

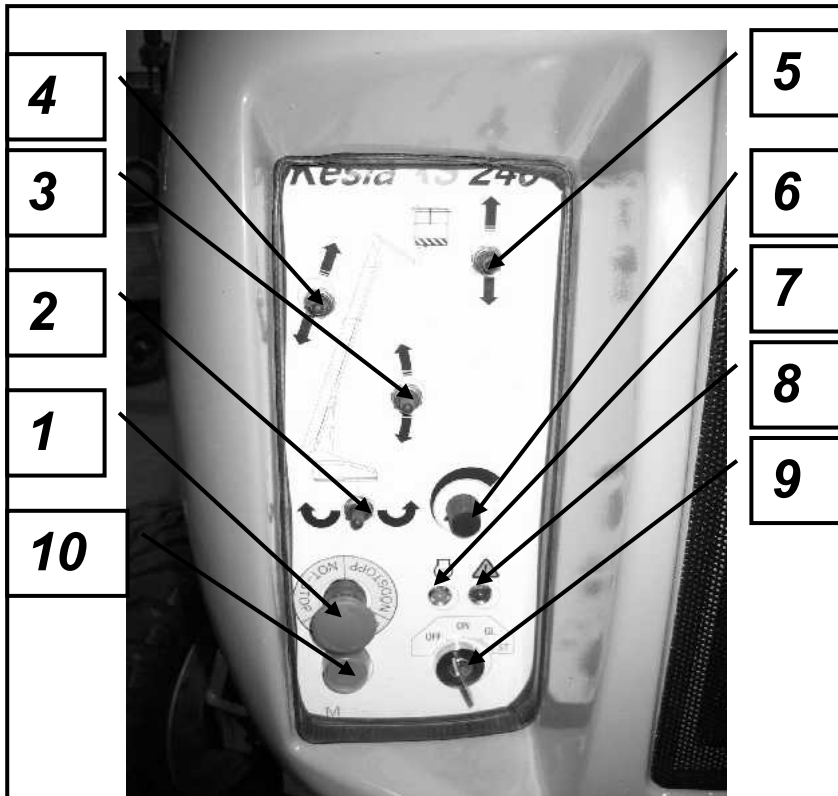


Figure 6

#### **Push-button No. 1:**

- **EMERGENCY STOP.**
- Pressing the **EMERGENCY STOP** push-button switches off the combustion engine and stops all movements of the Access Platform.
- The button gets locked in the lower position and the combustion engine cannot be re-started until the button is released back to the upper position. This is done by turning the button slightly clockwise, whereby it will pop up.
- If the emergency stop push-button on the platform or on the ground operating point is pressed down, the display shows text "Emergency stop activated".

#### **Switch No. 2:**

- Slew of boom.
- The turntable and boom turn to the direction of the switch movement.
- When this switch is used, the outriggers must be in the support position.

#### **Switch No. 3:**

- Raising/lowering of boom.
- The boom rises/descends in the direction of the switch movement.

- When this switch is used, the outriggers must be in the support position.

**Switch No. 4:**

- Boom extension.
- The boom extension moves out/in in the direction of the switch movement.
- When this switch is used, the outriggers must be in the support position.

**Switch No. 5:**

- Jib down/up
- The jib boom rises/descends in the direction of the switch movement.
- When this switch is used, the outriggers must be in the support position.

**Switch No. 6**

- Adjusting the speed of boom movement.
  - When turning the switch clockwise, the speed of boom movement increases. When increasing speed, first choose the movement and then adjust its speed. If the speed has been adjusted too high when starting the movement, the control system will limit the speed to a safe range.
- This control has an impact on the movement speeds only when using ground operation.

**Glow indicator light No. 7:**

- When starting the engine, indicates the glow time before starting.

**Error indicator light No. 8:**

- Indicates:  
when flashes: charging error, overheating or oil pressure disturbance.  
when lit up continuously: reach limit.

**Ignition lock No. 9:**

- Diesel glow, starting and stopping.

**Push-button No. 10**

- Emergency lowering (use of emergency lowering pump).
- By pressing this button, the platform can be lowered even if the combustion engine is turned off.

## **9.2 USE OF EMERGENCY LOWERING SYSTEM FROM THE GROUND**

- When using the emergency lowering system, the emergency stop push-buttons must not be pressed down.
- By pressing the emergency lowering push-button (10), the electric emergency lowering pump will start.

- Run in the boom extension and then lower the platform to the ground using the boom switches.

### 9.3 CONTROLS ON THE PLATFORM

Nostolift XS 240 can be driven and operated completely from the platform.

#### 9.3.1 Controls

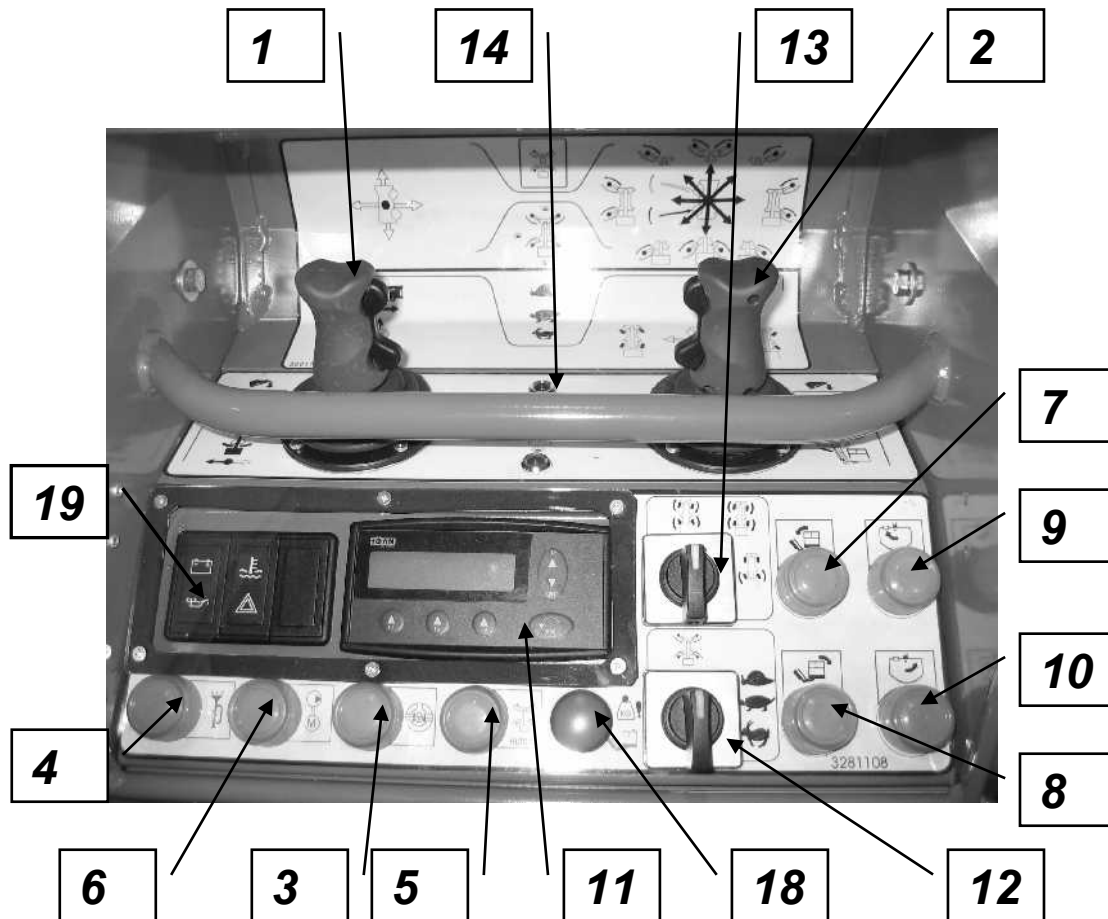


Figure 7

- |   |   |
|---|---|
| 1. Left joystick                            | 11. Control system display  |
| 2. Right joystick                           | 12. Outrigger/crawling/slow drive/fast drive switch, 1-2-3-4                                    |
| 3. Hydraulic differential gear              | 13. Steering mode selector: rear wheels / wheels in different directions / crab steering, 0-1-2 |
| 4. Sound signal                             | 14. Horizontal position lights (4)  |
| 5. Automatic setting of horizontal position | 15. Ignition lock   |
| 6. Emergency lowering of platform           | 16. Emergency stop push-button  |
| 7. Platform inclination forward             | 17. Pedal   |
| 8. Platform inclination backward            | 18. Indicator light for reach limit   |
| 9. Slewing of platform clockwise            | 19. Indicator light panel   |
| 10. Slewing of platform counterclockwise    |   |

Pedal

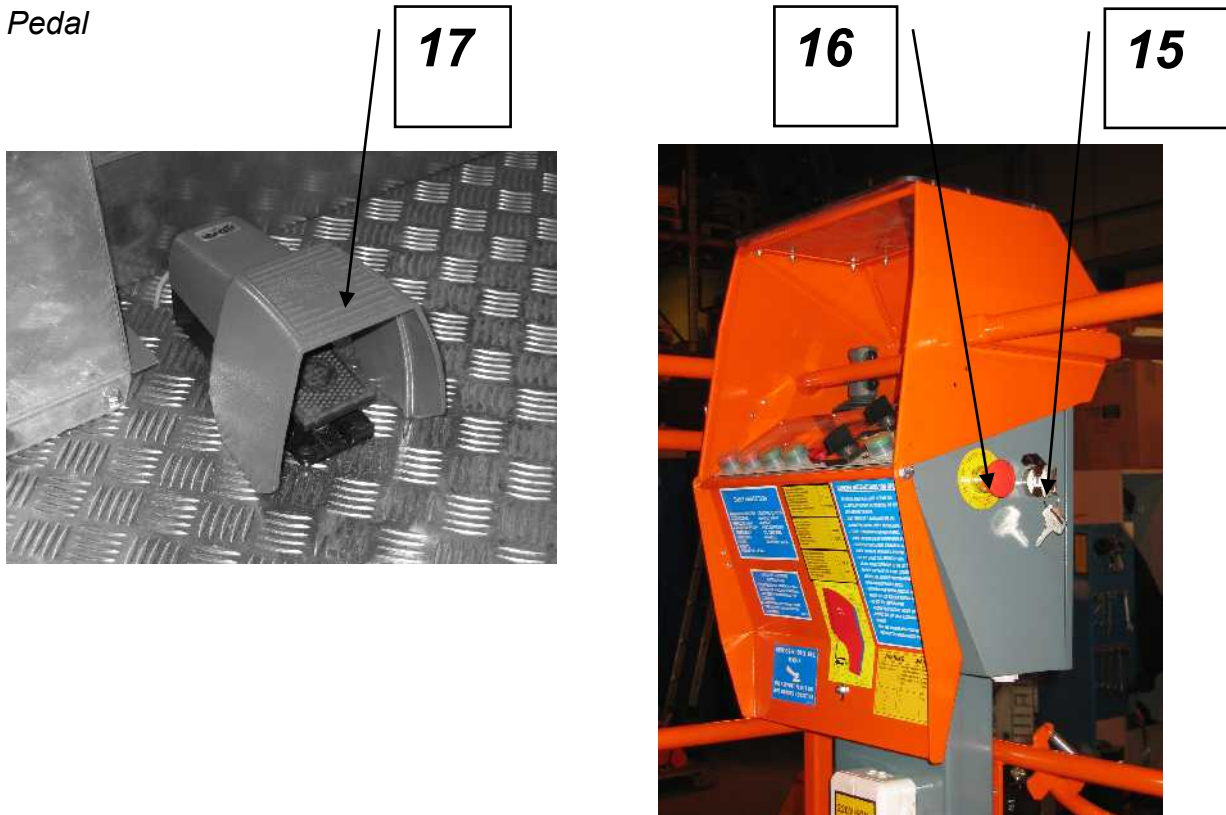


Figure 8

## 10 DRIVING THE ACCESS PLATFORM

- Make sure that nothing obstructs the transfer of the Access Platform and that there are no persons near the Access Platform who might get in danger when the Access Platform is transferred.
- Start the engine.
- Make sure that the boom is on the transport support and that all outriggers are in the upper position.
- Turn the outrigger/crawling/slow drive/fast drive switch (12) to position slow drive "3".
- If you wish to use a higher driving speed, choose fast drive, position "4".
- In driving situations requiring great precision, choose crawling, position "2".
- Use the left-hand side joystick (1) to choose the driving direction and speed. By pushing the joystick forward, the Access Platform will move forward, and by pulling the joystick backwards, the Access Platform will reverse. The speed changes steplessly on the basis of how much the joystick is moved.
- The Access Platform is steered by using the right-hand side joystick (2). By turning the joystick to the right/left, the Access Platform will turn to the same direction irrespective of

*the steering mode chosen. Steering speed changes on the basis of how much the joystick is moved.*

- The steering mode is chosen by using the using selector switch (13). In rear wheel steering "3", only the wheels on the platform-side axle steer. In position "2", the wheels on the front and rear axles turn in different directions. This steering mode gives the smallest turning radius. In position "1", crab steering, the wheels on both axles turn in the same direction.*
- The brakes open automatically when the pressure of drive motors exceeds 30 bar. The brakes close when the driving direction joystick (1) is in the middle position.*
- In slippery conditions, engage the hydraulic differential gear from switch (3). The differential gear is automatically disengaged within 1 minutes or by pressing the button again. The status of the differential gear is indicated on the display (11) as a text. The differential gear works in the same manner as a differential lock, preventing the loss of traction power through the wheel with the poorest traction.*
- If necessary, increase ground clearance between the bottom of the platform and ground by running the jib boom outwards. Stop the Access Platform, press the pedal (17) and run the jib boom out by turning the right-hand side joystick to the right. Run the jib boom in by turning the right-hand side joystick to the left.*



**NOTE! WHEN DRIVING DOWN A STEEP DOWN-HILL (SLOPE MORE THAN 10°), ALWAYS USE THE SLOW DRIVING SPEED**



## 11 USE OF OUTRIGGERS

- Make sure that the base is sufficiently even and hard. If the base is soft, use sufficiently large plates under the sole of outriggers (see Soil tightness table).
- On icy or otherwise slippery base, use additional calks on the sole plates of outriggers, especially if the Access Platform is used on an inclining surface.
- Start the engine from the platform.
- Use outrigger/drive switch (12) to choose outrigger use "1".
- Lower the outriggers to the support position by using the right-hand side joystick.
- Choose the outrigger(s) to be operated by moving the joystick in accordance with the diagram below.
- The outrigger(s) can be raised by pressing the thumb switch (9) (see the diagram).
- The outrigger(s) can be lowered by pressing the thumb switch (10) (see the diagram).

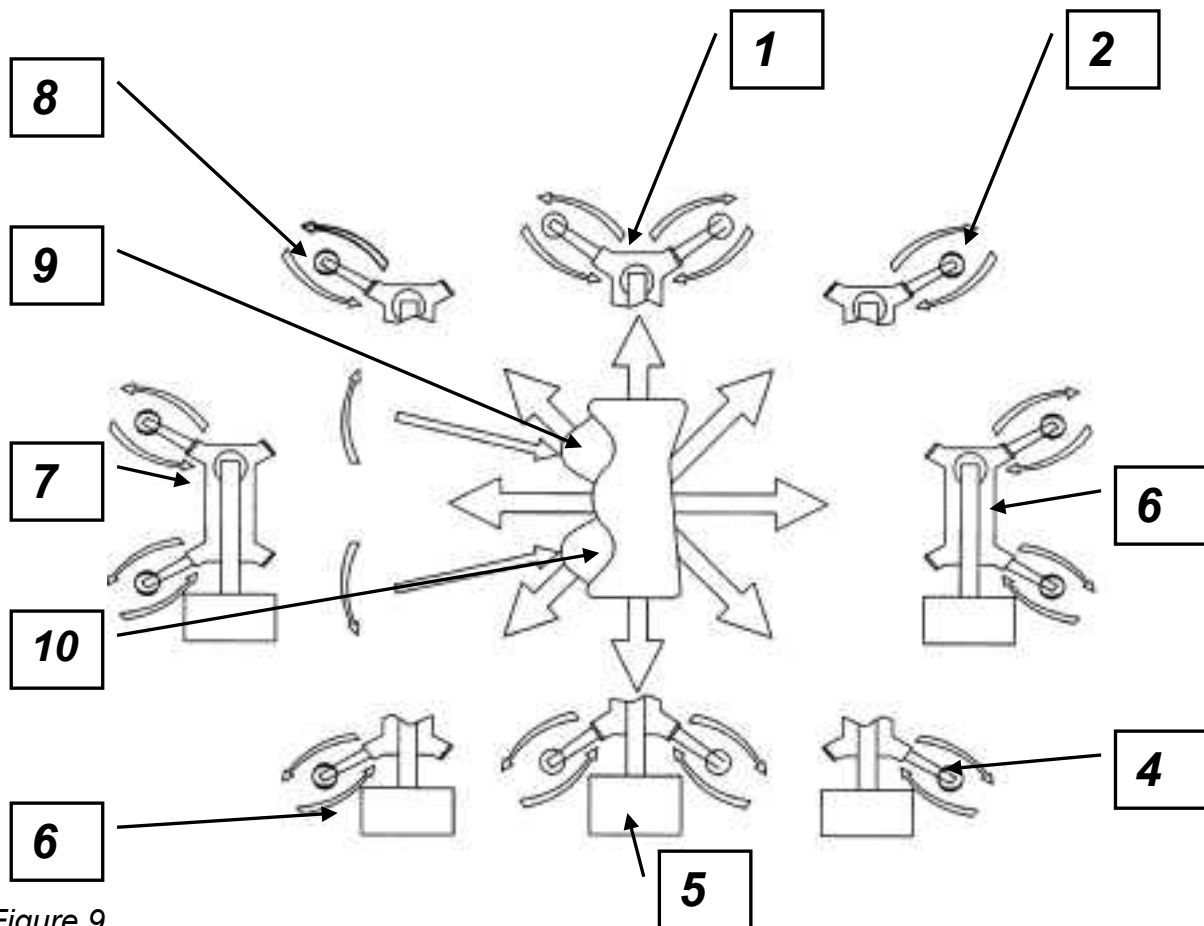


Figure 9

1. Joystick straight forward = both engine-side outriggers up/down
2. Joystick to the upper right corner = right-hand side front outrigger up/down
3. Joystick straight to the right = both right-hand side outriggers up/down
4. Joystick to the lower right corner = right-hand side rear outrigger up/down
5. Joystick straight back = both platform-side outriggers up/down
6. Joystick to the lower left corner = left-hand side rear outrigger up/down

7. Joystick straight to the left = both left-hand side outriggers up/down  
8. Joystick to the upper left corner = left-hand side front outrigger up/down

- Lower all outriggers and lift the Access Platform to be supported by the outriggers. Once all ground sensors have activated, the horizontal position lights (14) in the control panel switch on.
- Press the push-button (5) for automatic setting of horizontal position, whereby the horizontal position is set automatically. Once horizontal position has been reached, all horizontal position lights are lit and the display shows text "boom drive accepted". If the setting of horizontal position does not succeed, an error light (19) will be lit, and the display shows text "autoleveling failure! – use manual controls".
- Setting the horizontal position manually: If the automatic setting of horizontal position does not succeed or if you wish to use manual setting, carry out the setting of horizontal position on the basis of the horizontal position lights. The lights indicating the higher sides of the Access Platform will be lit. After this, raise that side of the Access Platform where the lights are not on. Once all lights are lit, the display shows text "boom drive accepted".
- Once the lifting boom is lifted off the transport support, the indicator lights go off.

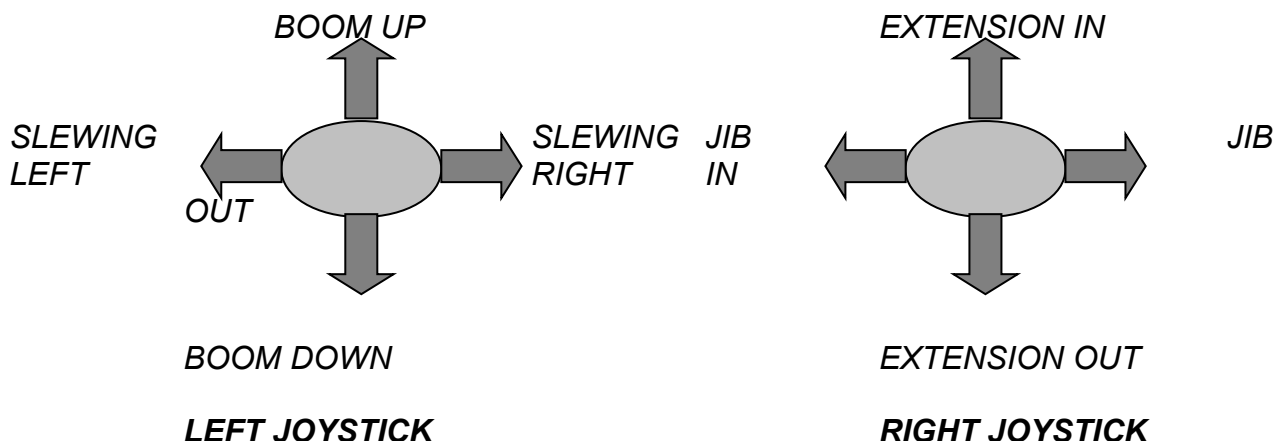
**Note!** The indicators for horizontal position **DO NOT PREVENT** the use of boom even if the Access Platform is not in horizontal position.

**THE OPERATOR IS ALWAYS RESPONSIBLE FOR PROPER OPERATION!**

## 11.1 USE OF BOOM

- Set the Access Platform to be supported by the outriggers in accordance with the instructions given under item Use of outriggers.
- Press the pedal (17) and lift the boom section off the transport support by using the left-hand side joystick (1).

### FUNCTIONS:



Guide the boom to the desired working area by using both joysticks. If necessary, you can use four simultaneous movements.

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*The Access Platform is provided with torque control which interrupts the distancing movements of the boom when the maximum permitted torque (=side reach) has been*

*achieved. In this case, it is only possible to lift the boom, run the extension in and the jib down. When torque control is activated, the indicator light (18) for reach limit on the control panel is lit and the display shows text "max outreach, only outreach shortening movements accepted".*

*Platform load control prevents all boom movements until the platform load has been reduced to a safe level. Just before platform load control is activated, the device gives an alarm sound, and the display shows text "max platform load". In this case, the use of the Access Platform must be stopped and the platform load must be reduced. If, however, the platform load is increased, platform load control interrupts all movements. In this case, the display shows text "overload". Note that when operating close to the maximum platform load, a sudden stopping of the lowering movement of the boom may result in excess platform load as mass inertia increases the forces influencing platform load control.*

## **11.2 USE OF EMERGENCY LOWERING SYSTEM FROM THE PLATFORM**

- When using the emergency lowering system, the emergency stop push-buttons must not be pressed down.
- Press the emergency lowering button (6), which starts the electric emergency lowering pump.
- Run in the boom extension, and then lower the platform on the ground using normal controls. The pedal must be kept pressed down while moving the boom.
- The emergency lowering pump is only intended for emergencies, and it does not withstand long-term or continuous use.

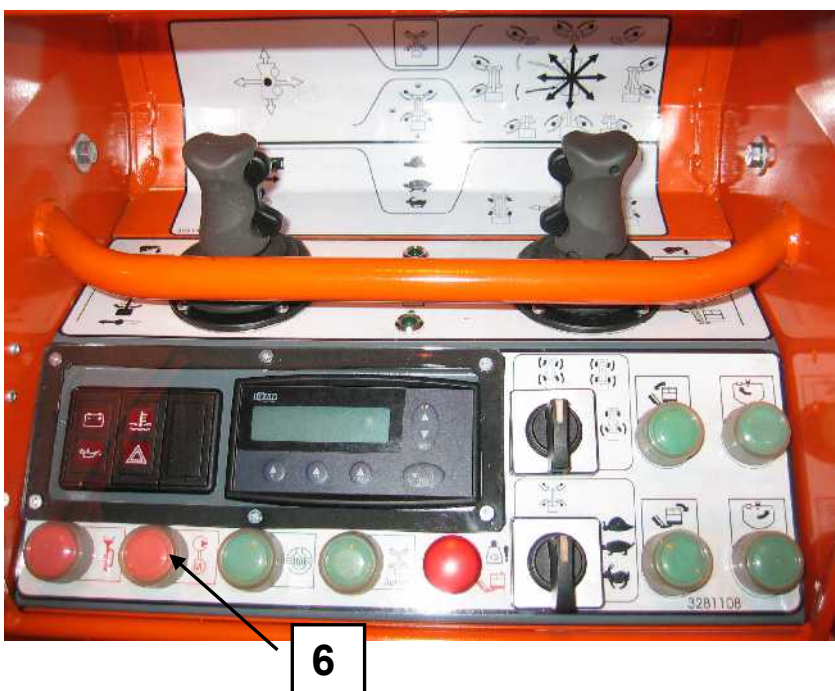




Figure 10

## 12 PRIMARY CONTROLS OF KUBOTA V1505

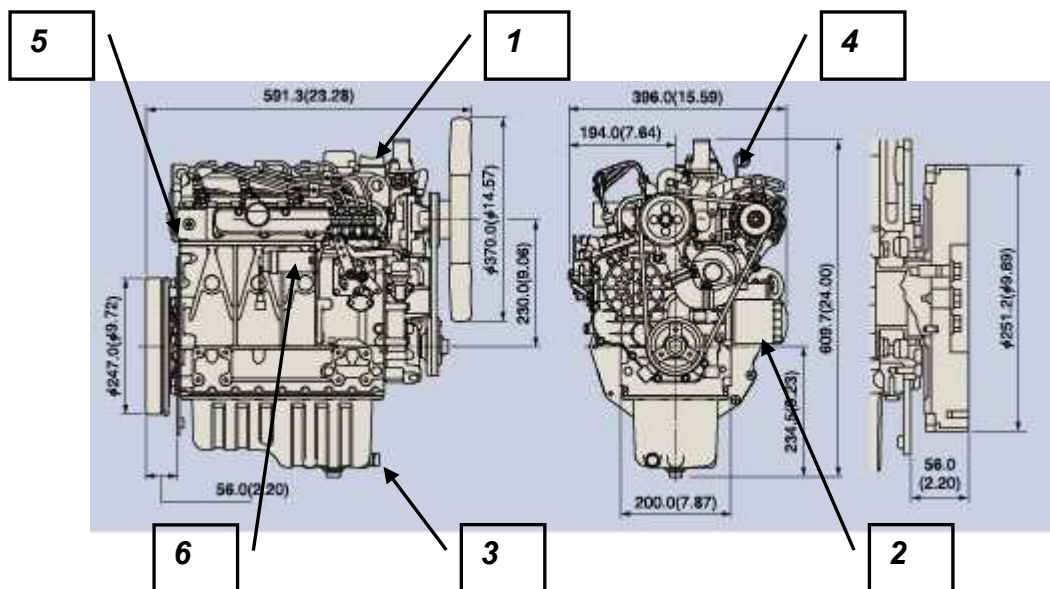


Figure 11. Kubota V1505

1.	Filling of engine oil	4	Oil volume dipstick
2.	Oil filter	5	Revolution speed control
3.	Oil drainage opening	6	Stopping solenoid

- The combustion engine of the Access Platform is provided with an automatic control for raising/reducing the revolution speed of the engine.
- When a joystick is used on the platform or when a control switch is used on the ground, the revolution speed of the engine rises to the maximum revolution speed adjusted.
- When the joysticks or control switches are released, the revolution speed of the engine decreases automatically to the minimum revolution speed adjusted within the set period of time from when the joystick or push-button was released.

### 12.1 USE OF BOOM IN COLD CONDITIONS

- Do not turn off the combustion engine when working in freezing conditions (-5°C or colder) even if you work at the same place for a longer period of time. The hydraulics and the combustion engine will cool unnecessarily.
- Make sure that the safety switches are clear of snow, ice and dirt.
- Check that the controls function and are clear of snow and ice.

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- In extremely cold weather, let the combustion engine run for a few minutes and then warm up the hydraulics by performing some movements with the booms at slow speed.
- Protect the platform and controls from snow and ice when not working with the Access Platform.

## **12.2 THINGS TO REMEMBER WHEN WORKING ON THE PLATFORM OR WHEN MOVING FROM SITE TO SITE**

- Observe the minimum safe distances to live electrical conductors.
- Do not damage the work platform or the controls.
- Do not throw down objects from the platform and make sure that nothing can fall down.
- Do not reach out of the platform.
- Do not use ladders or any other reaching devices in the platform.
- Do not swing or jump in the platform.
- Make sure that the platform is always in horizontal position.

**WARNING! IF THE OUTREACH EXCEEDS THE VALUES GIVEN IN BOOM GEOMETRY, REPAIR THE ACCESS PLATFORM OR HAVE IT REPAIRED BEFORE NEXT USE. DO NOT USE A FAULTY ACCESS PLATFORM. THE MAXIMUM ALLOWED PLATFORM LOAD IS 230 KG.**

## **12.3 USE OF SUPPLY CURRENT ON THE PLATFORM**

Connect the supply current 220V/50Hz 16A to the outlet beside the equipment case on the chassis. The platform has two earthed outlets for hand tools. The electric line is fitted with a ground fault circuit interrupter and a slip-ring package inside the pivot bearing. The ground fault circuit interrupter is in the equipment case, and it has a test button for checking the line before use. The ground fault circuit interrupter is also fitted with a supply voltage breaker.

## **12.4 TESTING THE GROUND FAULT CIRCUIT INTERRUPTER**

- Plug in a device, for instance a drilling machine, in the outlet on the platform. Engage supply current to the Access Platform (220 - 240V/50Hz) with an earthed cable. Press the test button of the ground fault circuit interrupter thus releasing the main power switch, which serves as an automatic fuse. Should the main power switch not be released and if the device has not functioned on the platform before this, you have to check that the main power switch is in its power supplying position.
- Should the switch be released in normal use, either the electric line or the tool is faulty. Stop the use of the tool immediately and have the equipment repaired.

## 13 PROCEDURES BEFORE TAKING THE ACCESS PLATFORM INTO USE

### 13.1 INSPECTED ITEMS AND INTERVALS

Check the following always before using the Access Platform at the intervals stated in the table. DO NOT USE A FAULTY ACCESS PLATFORM!

	<b>Daily</b>	<b>Weekly</b>	<b>Monthly</b>	<b>Note</b>
<i>General issues to be inspected</i>				
- engine oil volume	<b>X</b>			
- hydraulic oil volume	<b>X</b>			<i>electronic control</i>
- fuel volume	<b>X</b>			
- hydraulic oil leaks	<b>X</b>			
- condition of hydraulic hoses	<b>X</b>			
- tyre pressures		<b>X</b>		
- visual inspection of bolt connections and load-bearing structures	<b>X</b>			
<i>Operation of safety limits</i>				
- checking of telescope reach	<b>X</b>			<i>page 28</i>
- checking of lifting radius	<b>X</b>			<i>page 29</i>
- checking of backup safety limit of load control			<b>X</b>	<i>page 30</i>
- checking of safety limits of outriggers	<b>X</b>			<i>page 33</i>
- checking of ground sensor limits of outriggers		<b>X</b>		<i>page 33</i>
- checking of platform load control		<b>X</b>		

## 13.2 CHECKING THE PERMITTED LIFTING RADIUS

The functioning of the limiter of lifting radius depends on the platform load and lifting radius. The limiter is activated if the platform load is too heavy to start with, if the telescope or the jib are too far extended, or if the raising movement has gone to the limit. See Boom geometry.

## 13.3 CHECKING THE REACH OF TELESCOPE

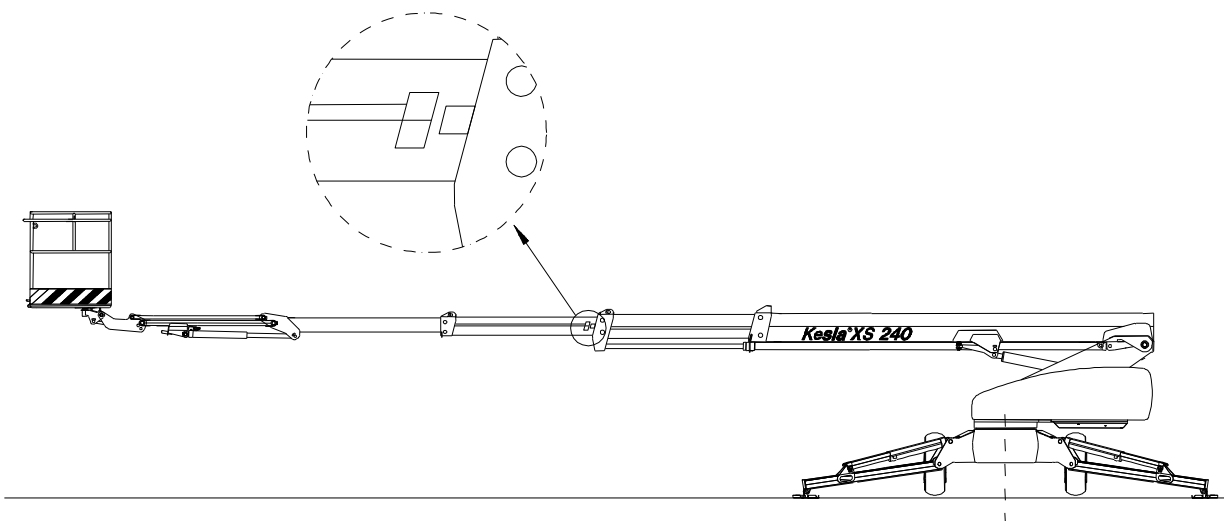


Figure 12. Checking the reach of telescope

Check the functioning of the safety limits of the lifting radius as follows: with an empty platform, run the telescope out with the jib extended straight until torque control cuts the movement. Make sure that the painted mark on the middle boom is visible (see figure 12). This is the way to verify the functioning of the safety limit of telescoping and at the same time the permitted lifting radius of the empty platform and extended jib. The maximum permitted lifting radius from the turning centre to the edge of the platform is 12.3 m.

Alongside the actual safety limit, on the right side of the telescopic cylinder when seen from the platform, there is also an electronic safety limit for the farther, i.e. higher lifting radius, which interrupts all movements. This safety limit is activated when the safety limits permitting a lifting radius in accordance with the Boom geometry diagram are out of the adjustments or faulty. In normal conditions, the electronic backup safety limit is not

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activated. Once this safety limit has activated, the booms must be brought to the normal operating range by starting the engine and running in the booms. There is no risk of tipping over even within the operating range of the backup safety limit.

## 13.4 CHECKING THE LIFTING RADIUS

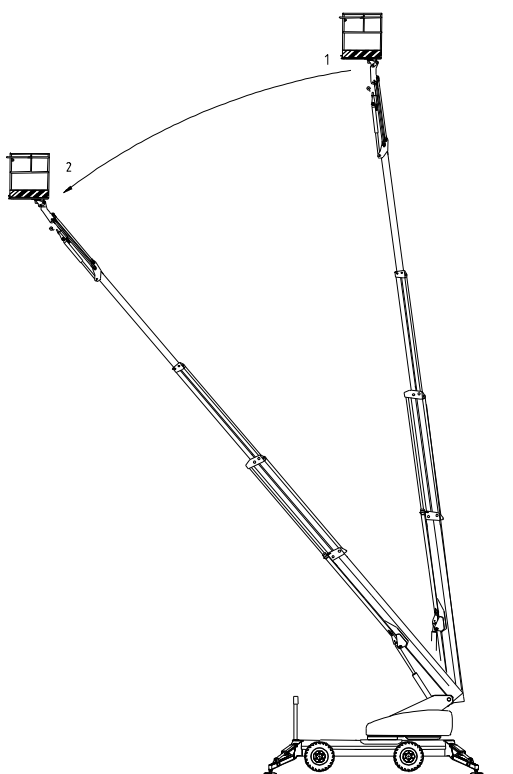


Figure 13 Checking the lifting radius

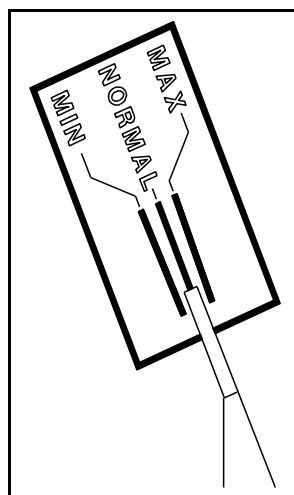


Figure 14. Point B, check mark

1. While operating the Access Platform from the ground operating point, raise the boom with an empty platform and jib extended all the way up.
2. With the boom raised all the way up, extend the boom extensions fully out with the telescope (figure 13, position 1).
3. Then lower the boom with the lowering push-button until the load control stops the movement (figure 13, position 2).
4. Check that the turntable indicator is between the min. and max. markings of the boom.

## 13.5 CHECKING THE BACKUP SAFETY LIMIT FOR LOAD CONTROL

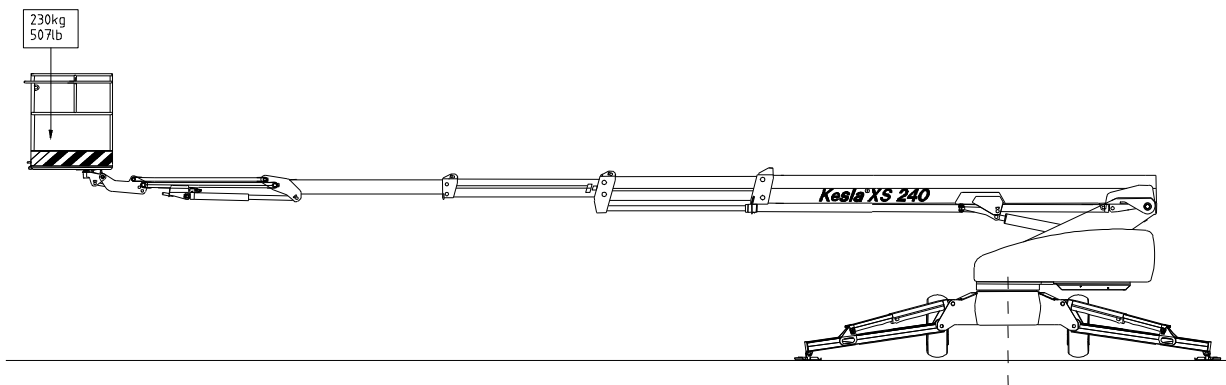


Figure 15. Checking the backup safety limit for load control

### 13.5.1 Operating principle of backup safety limit switch

If the actual safety limit switches are out of order or if the permitted loading of the boom, i.e. the permitted lifting radius, is exceeded because of a swing of the boom due to an external overload, the spindle of the backup safety limit switch will retract, turning off the combustion engine. This safety limit switch is located alongside the actual safety limit on the right side of the telescopic cylinder when seen from the platform. In normal conditions, the backup safety limit is not supposed to function.

WHEN THE BACKUP SAFETY LIMIT SWITCH IS ACTIVATED, THE BOOM MUST IMMEDIATELY BE RUN TO THE NORMAL OPERATING RANGE BY STARTING THE ENGINE AND BY RUNNING IN THE BOOMS. ALSO ASCERTAIN THE CAUSE OF THE FUNCTIONING OF THE BACKUP SAFETY LIMIT SWITCH.

### 13.5.2 Check the backup safety limit of platform load control as follows

1. Support the Access Platform on the outriggers (platform empty) with the boom in horizontal position.
2. Place a 230 kg load to the back edge of the platform.

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3. From the ground operating point, run the jib to a horizontal position and run the telescope farther until the actual load control cuts the movement.
4. Remove the 230 kg load and run the empty platform 500 mm more out from this position.
5. Place the 230 kg load back to the back edge of the platform, whereby the backup safety limit must turn off the engine. If you place the load to the front edge of the platform, the engine should not turn off but the actual load control must prevent any movements which increase the lifting radius.

## **13.6 CHECKING AND ADJUSTMENT OF PLATFORM LOAD CONTROL**

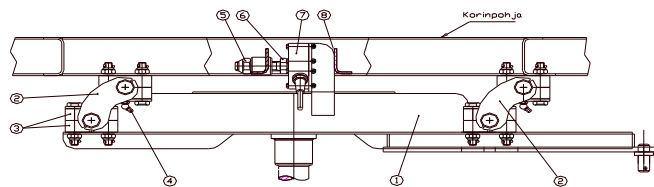


Figure 16

1. mounting
2. crank
3. bearing
4. grease nipples (8 pcs)
5. locking bolt
6. clearance adjusting screw
7. weigher sensor

### **13.6.1 Operating principle**

The purpose of platform load control is to prevent the platform from being loaded in excess of the maximum permitted load (230 kg). When the platform load exceeds 200 kg, the following text will flash on the display: **"PLATFORM LOAD >200kg"** (this text will appear when load is between 200 and 230 kg).



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When the maximum platform load (230 kg) is reached, the overload signal light will be lit, the text "**MAX. PLATFORM LOAD !!**" will be displayed and a discontinuous sound alarm will go on.

When the maximum permitted platform load is exceeded, the text "**PLATFORM OVERLOAD!! Reduce load. Movements prevented**" will be displayed and a continuous sound alarm will go on. All movements are prevented. Normal operation can be resumed once the platform load has been reduced.

When current is switched on, the control system will monitor sensor operation continuously. If the sensor values are not within the normal operating range, only downward movements are allowed. The text "**PLATFORM LOAD CONTROL MALFUNCTION !! DOWNWARD MOVEMENTS ALLOWED**" will be displayed. In case of a malfunction in platform load control, contact the manufacturer.

### Checking and adjustment

#### Checking and adjustment

Check platform load control as follows:

1. Set the Access Platform to be supported by the outriggers and lift the boom from the transport support. Switch off the engine.
2. Keep the current switched on.
3. Perform the check by using two persons whose weight is known, e.g. 90Kg+80kg = 170Kg
4. Place extra weights on the platform so that total load, including the persons, is 200 kg (- 0 kg +10kg ).
5. With the persons on the platform, a warning of exceeding the 200 kg platform load should be displayed.
6. Add extra weight on the platform until the maximum load of 230 kg is reached.
7. When the load is 230 kg, the overload signal light should go on and the text " MAX. PLATFORM LOAD !!" should be displayed. A continuous sound alarm should go on.  
**Note.** To ensure the best results, the persons on the platform should move around as if working. The accuracy of the platform load control is approx.  $\pm 10\text{kg}$ .
8. Add more weight on the platform. The alarms should go on before a platform load of 276 kg is reached.



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9. Remove some of the load from the platform. The overload alarm should go off and the 'Max. platform load' text should disappear. Note measuring accuracy.

10 If the platform load control does not operate properly, grease the bearings (3) of the cranks (2), 8 in all, and repeat the check. If needed, adjust according to the following instructions.

### Adjustment

1. Remove the display cover
2. Switch on the current with the platform ignition lock
3. Acknowledge the text on the display by pressing F1 OK



4. Press ESC to enter the menus
5. Move up/down the menus using the arrow keys
6. Look for the menu settings



7. Select **F3 OTHER**

## TOIMINTO



VALITSE

8. Press **F1 SELECT** in the **FUNCTIONS** menu

9. Select **FP-3: tare** using the arrow keys

VALITSE TOIMINTO  
FP-3:taara 50.0 Kg  
VALITSE



10. Press **F1 SELECT**

- 11.

SÄÄDÄ PARAMETRI  
FP-3:taara 12.0 Kg  
OK PERUUTA RESET



12. Adjust taring value using the arrow keys. If platform load control operates too soon, reduce the value. If platform load control operates too late, increase the value
13. Save the taring by pressing **F1 OK**  
You can cancel the change by pressing **F2 CANCEL**. **F3 RESET** restores the manufacturer's default setting (0.0 kg)
14. Return to the main display by pressing **ESC** twice
15. Switch off the current, then switch it back on
16. Check proper operation according to the instructions. Readjust, if needed.
17. Replace the display cover

The alarm limits have been set by the manufacturer and can not be adjusted separately. Adjustment affects all values in the same proportion by increasing or decreasing the weigher sensor reading.

### **13.7 CHECKING THE SAFETY LIMITS OF OUTRIGGERS**

- Check the functioning of the outrigger safety limits by trying to move the boom while the outriggers are up. If the boom moves, stop the movements and ascertain the fault.
- Place the outriggers in the support position (wheels are off the ground). In this position, the boom can be operated. The outriggers have ground and position sensors, which is why a force of at least 6 kg must be exerted on the outriggers. The outriggers must be turned from the transport position at least 75° towards the ground because of the functioning of the positions sensors.

The light indicator on the control panel of the platform indicates that the Access Platform is correctly supported ( $\pm 0.5 - 1^\circ$ ) when all four lights are lit.

### **13.8 CHECKING THE GROUND SENSOR ALARM**

When the boom is lifted off the transport support, the transport support limit switch overrides the points of the limits switches of ground sensors allowing the use of the boom even if the support of some outrigger is relieved. In this case, there should be a sound alarm on the platform.

Test the alarm as follows:

1. Set the Access Platform in the support position with the wheels approx. 100 mm off the ground.
2. Lift the boom approx. 100 mm from the transport support.
3. You can turn off the combustion engine. Leave the ignition key in the ON position (power on).
4. Place a jack or a hoist at each outrigger, see figure 17. Place for instance a board (A) between the jack and chassis. Pump the chassis up with the jack so much that the sole of the outrigger comes slightly off the ground, in which case the alarm sound should be heard. The alarm sound stops when the outrigger is lowered back on the ground.
5. Inspect all outriggers in the same manner.

If the alarm of some outrigger or all outriggers does not function, the Access Platform must not be used before repairing the fault.

If, when the sole of one outrigger or all outriggers is off the ground and power is switched on and the pedal is pressed, there is a sound alarm, it does not prevent the use of the Access Platform.

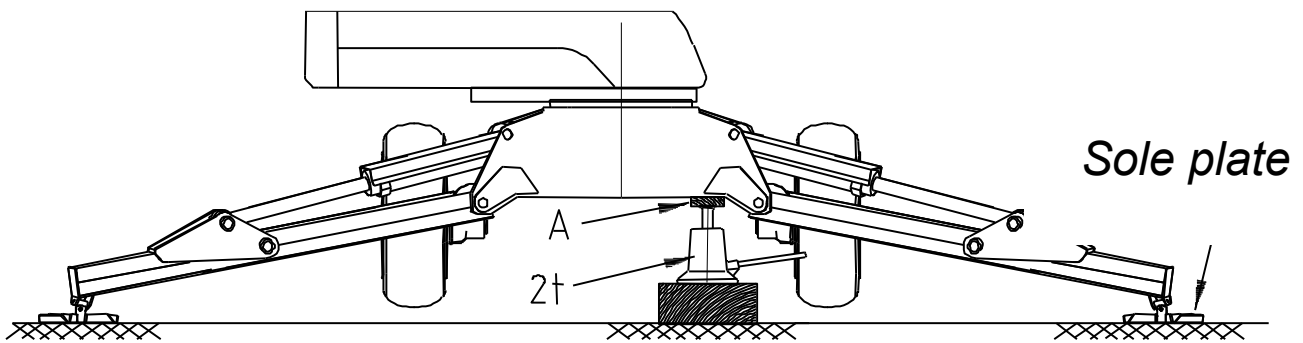


Figure 17

WHEN THE GROUND SENSOR ALARM IS ACTIVATED, LOWER THE BOOM IMMEDIATELY TO THE TRANSPORT POSITION. CHECK THE TIGHTNESS OF THE GROUND, REFER TO THE SOIL TIGHTNESS TABLE. CORRECT THE POSITION OF THE OUTRIGGERS SO THAT ALL FOUR OUTRIGGERS HAVE FIRM CONTACT WITH THE GROUND.

### 13.8.1 Safety instructions

- Do not add load to the platform when the movements of the boom have stopped after the limiter of the lifting radius has intercepted the movements of the boom. Extra load would cause a risk of tipping over, and a large extra load could cause overloading of the boom.
- Do not use the Access Platform if the safety limits or the limiters of the lifting radius are not working. If you are not sufficiently familiar with the maintenance of Access Platforms, contact an expert. It is absolutely prohibited to override any safety device, sound alarm or indicator light even for a minor job.
- Check, with the boom and jib slightly raised and the telescope slightly extended, that no movement is "creeping" and that the platform does not move downwards when the controls are in the middle position. Load the platform with a proper extra load during the test. The creeping must be repaired before starting to work.
- If needed, check the creeping of the outrigger cylinders in the position shown in figure 12 by slewing the boom above each outrigger and holding the boom there for about two minutes. If a cylinder retracts, have it repaired immediately.
- The platform load control does not remove the risk of tipping over caused by the addition of sudden load at the maximum lifting radius.
- The platform must not be used for lifting materials or supplies.
- An additional load of a maximum of 70 kg can be loaded into the platform.

## 14 CHECKING THE VOLUME OF AND ADDING HYDRAULIC OIL

The hydraulic oil tank of Nostolift XS 240 has a level switch which is connected to the control system of the Access Platform. The display on the platform indicates if the level of hydraulic oil is too low. The hydraulic oil tank must always be filled in accordance with this instruction.

- Remove the left side guard.

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- Before opening the filling cap, make sure that the environment of the cap is clean. Clean if necessary.
- When adding oil, the boom must be on the transport support and the outriggers in the upper position.
- Add oil using a pump provided with a separate filter. Do not add oil straight from an oil can.

## 15 SOIL TIGHTNESS TABLE

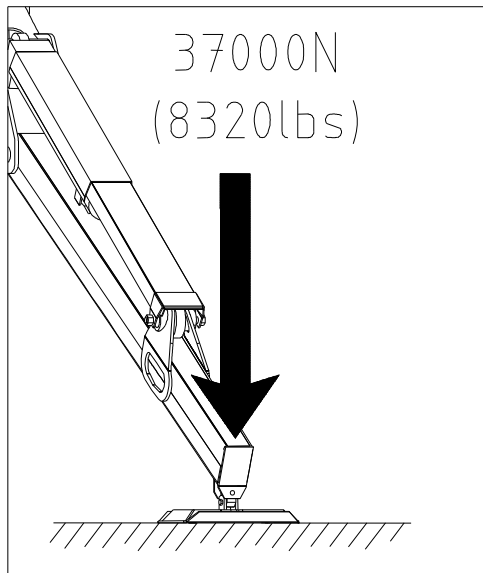


Figure 18  
Sole area A:

$$A = 0.38m \times 0.28m = 0.106 m^2$$

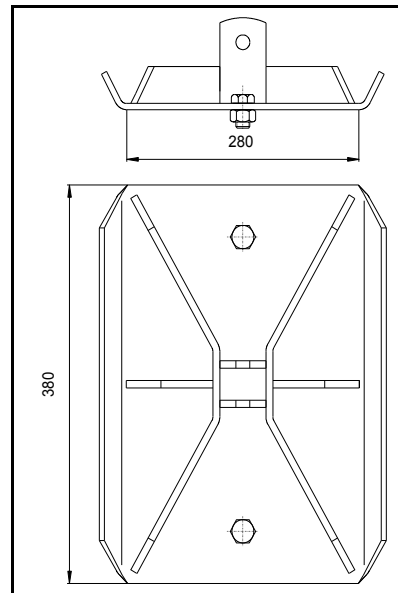


Figure 19. Sole of outrigger

$$\text{Pressure} \approx \frac{37000N}{0,106m^2} \approx 350kpa$$

ON ICY BASE, USE EXTRA CALKS ON THE SOLE PLATES AS SHOWN IN FIGURE 19. THE SOLES HAVE HOLES FOR THE CALKS.

Permissible loads on ground for certain soil types:

Soil type	Soil tightness	Permissible surface pressure Ps kPa		XS 240 pressure
Gravel	Very tight structure	600	>	350
	Medium tight structure	400	>	350
	Loose structure	200	<	350*

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Sand	Very tight structure	500	>	350
	Medium tight structure	300	<	350*
	Loose structure	150	<	350*
Fine sand	Very tight structure	400	>	350
	Medium tight structure	200	<	350*
	Loose structure	100	<	350*
Clay & fine silt	Loose (easy to work)	25	<	350*
	TOUGH (HARD TO WORK)	50	<	350*
	Firm (very hard to work)	100	<	350*

Note! items marked with asterisk (\*) must be provided with larger additional plates.

## 16 LOCATION OF SAFETY LIMITS AND ELECTRIC COMPONENTS

The figure below shows the location of safety limits and electric components

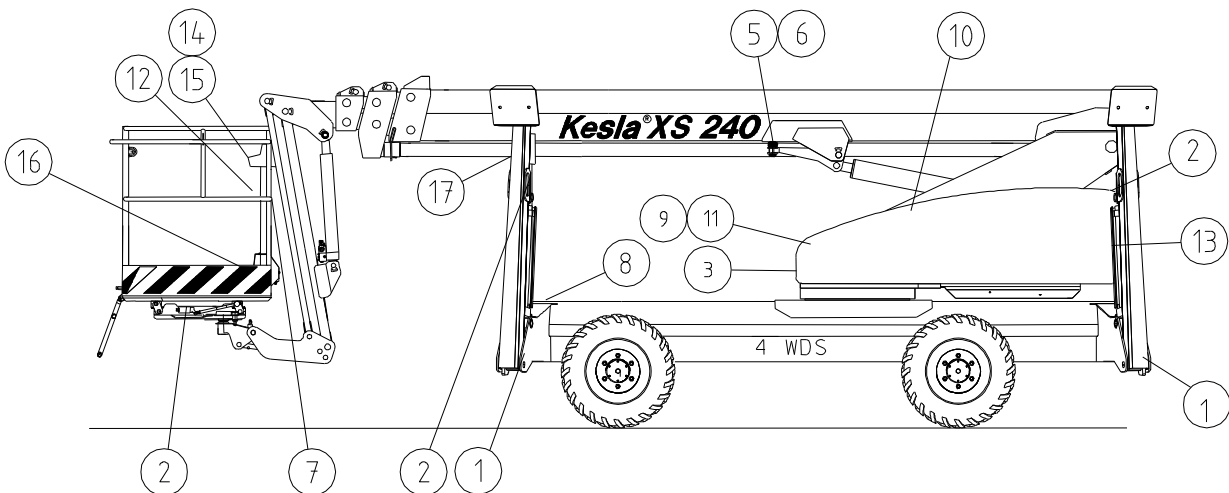


Figure 20 Location of safety limits and electric components.

1. Position limit switch
2. Ground sensor limit switch
3. Main power switch
5. Limit switches for load control
6. Backup limit switch for load control
7. Safety limit switch for stabilizer arm of jib
8. Ground fault circuit interrupter 220V 50Hz 16A
9. Horizontal level sensor
10. Electric inlet slip-ring switch (220V and 12V)
11. Battery
12. Outlets (2) 220V
13. Ground operating panel

- 14. Indicator of horizontal level
- 15. Control panel on platform
- 16. Foot pedal
- 17. Limit switch for transport support

## **17 TOWING THE ACCESS PLATFORM**

*The Access Platform must be towed if it gets stuck while being transferred.*

1. Tow the Access Platform by the towing eye located at the front or rear of the Access Platform.
2. Keep the combustion engine running and maintain traction to the wanted travelling direction to avoid locking of the brakes. Steer the Access Platform onto hard ground so that the pull rope can be released. When towing on hard ground, engage the fast drive speed range. Do not exceed a towing speed of 5 km/h.
3. If needed, the brakes can be released as follows: disconnect the hydraulic hoses of the brake cylinder. Then replace the nipple by screwing in an R 1/4"-75 full-threaded bolt in the hole of the hydraulic coupling. Squeeze loose the brake pads from the brake disc for instance for the time of towing. Refer to the drawing in chapter 19.9 Maintenance of driving brakes.
4. If the engine of the Access Platform is out of order or if the Access Platform has to be towed far, the hydraulic drive motors must be disconnected from the wheels by removing the covers of the wheel hubs. Removal of the covers (figure 21): Unscrew Allen screws 2 and pull out cover 1.

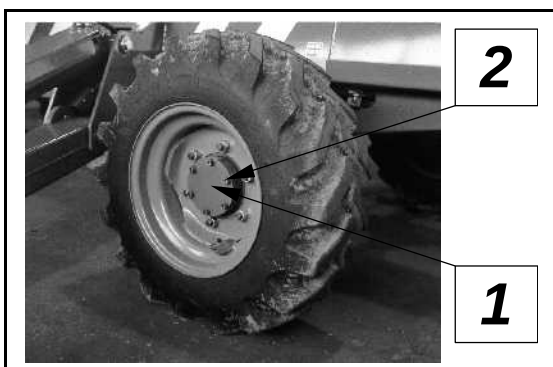


Figure 21. Removal of cover

## **18 PROCEDURES BEFORE TRANSPORTING THE ACCESS PLATFORM**



## **18.1 DO THE FOLLOWING BEFORE TRANSPORT**

1. Drive the boom to the transport position and raise the outriggers.
2. Strap the Access Platform carefully onto the transport base. Use the towing eyes on the chassis and the lifting points on the rear axle. If needed, place obstacles in front of and behind the wheels to prevent rolling.
3. Fasten the boom steadily onto the transport support or strap the platform carefully to the transport base to avoid straining of the boom during transport. Do not pull the ropes over the boom, but for example around the axles and the chassis.
4. Switch off current by the main power switch.
5. Check the total height before leaving.

## **19 MAINTENANCE**

The Access Platform must be maintained regularly in order to keep it safe and efficient. For descriptions of the necessary service procedures, refer to the maintenance scheme and annual inspection list. A manual for the diesel engine is delivered with the Access Platform, providing more detailed information on the operation and maintenance of the engine. Read through the manual carefully before using the Access Platform. If you feel uncertain about carrying out maintenance, do not hesitate to contact a service shop specialized in Access Platforms for the maintenance work and inspections needed.

### **19.1 MAINTENANCE OF SLEWING GEAR AND BRAKE**

Change the oil of the slewing gear for the first time after 100 operating hours. The next change is due after 1000 – 2000 hours or at least every 12 months. Add oil until the control/filling hole. Use oil of grade SAE 90 class ISO 3448 VG 150. Fill the brake space with ordinary 10W - 30 engine oil.

### **19.2 CHANGING THE HYDRAULIC OIL RETURN FILTER**

Change the filter after the first twenty (20) operating hours and after this every five hundred (500) operating hours.

Filter element: Finn-Filter FC1003.F010.BS, Nostolift Oy's spare part number 3090878.

Lubricate the filter element gasket with hydraulic oil before attachment.

Tighten the filter element to 25 Nm.

### **19.3 CHANGING THE HYDRAULIC OIL PRESSURE FILTER**

Change the filter element after the first twenty (20) hours of operation and after this every five hundred (500) operating hours.

Filter element: Finn-Filter FC5000.F010. gasket B, Nostolift Oy's spare part number 3090877.

Lubricate the filter element gasket with hydraulic oil before attachment.

Tighten the filter body to 70 – 90 Nm.



## 19.4 MAINTENANCE SCHEME (BASED ON OPERATING HOURS)

<i>Daily</i>	<i>Check hydraulic oil quantity</i>
	<i>Check fuel quantity</i>
	<i>Check load-bearing constructions</i>
	<i>Check hydraulic hoses and pipes and tightness of hydraulic couplings</i>
	<i>Check the functioning of emergency stop and safety devices</i>
	<i>Test all directions of functions</i>
<i>50h intervals</i>	<i>Lubricate all bearings and sliding surfaces</i>
	<i>Check the condition of telescope sliding pads and surfaces, lubricate and adjust if needed</i>
<i>500h intervals</i>	<i>Change hydraulic oil and filter</i>
	<i>Change slewing gear oil, first change after 100h</i>
	<i>Check the condition of brakes</i>
<i>1000h intervals or at least every 6 months</i>	<i>Check the condition of driving brakes, clean and lubricate</i>
<i>at intervals of 12 months</i>	<i>Annual inspection. Enclosed record to be filled in, signed and dated.</i>

## 19.5 SERVICE PROGRAMME FOR DIESEL ENGINE

Daily with the engine switched off	Check for oil and fuel leakages, repair leakages before use.
	Check engine oil level and cleanliness. Add oil, if needed.
	Check the amount of coolant. <u>NOTE! NEVER OPEN THE RADIATOR FILLING CAP OF A HOT ENGINE. LET THE ENGINE COOL AT LEAST 30 MINUTES AFTER USE BEFORE OPENING THE CAP.</u> Add coolant, if needed.
	Check for loose bolts and nuts and tighten if needed.
Daily with the engine switched on	Listen to the sound of the engine. Stop the engine if: - The rpm of the engine reduces or increases suddenly (the engine does not run smoothly). - There is unusual interference noise.
	Check the colour of exhaust gas. Stop the engine if the exhaust gas suddenly turns black.
	Stop the engine if the indicator light for oil pressure or overheating of coolant are lit while the engine is running.
After first 50h of operation	Change engine oil and oil filter.
Every 50h	Check fuel pipes and hoses, tightness of their connections and condition of hose clamps.
Every 100h	Clean the air filter element.
	Clean the fuel filter.
	Check the battery electrolyte level.
	Check the fan belt tightness and condition.
Every 200h	Change engine oil and oil filter.
	Check the condition of radiator hoses and hose clamps.
Every 400h	Replace the fuel filter element.
Every 500h	Clean the radiator system and radiator cell and check the condition of radiator.
	Remove potential accumulations from the fuel tank.
	Replace the fan belt.
Every 800h	Adjust valve clearances.

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Every 1500h	Check the condition of injector nozzles.
Every 3000h	Check the injection pump.
	Check the timing of injection.
Every 12 months	Replace the air filter element. *
	Check for damage in electrical conductors, and check the condition of connectors.
Every 24 months	Replace the fuel hoses and hose clamps.
	Replace the radiator hoses and hose clamps.
	Change the coolant.

\* Once a year or every six cleanings.

### 19.5.1 Changing the oil filter and oil of KUBOTA diesel engine

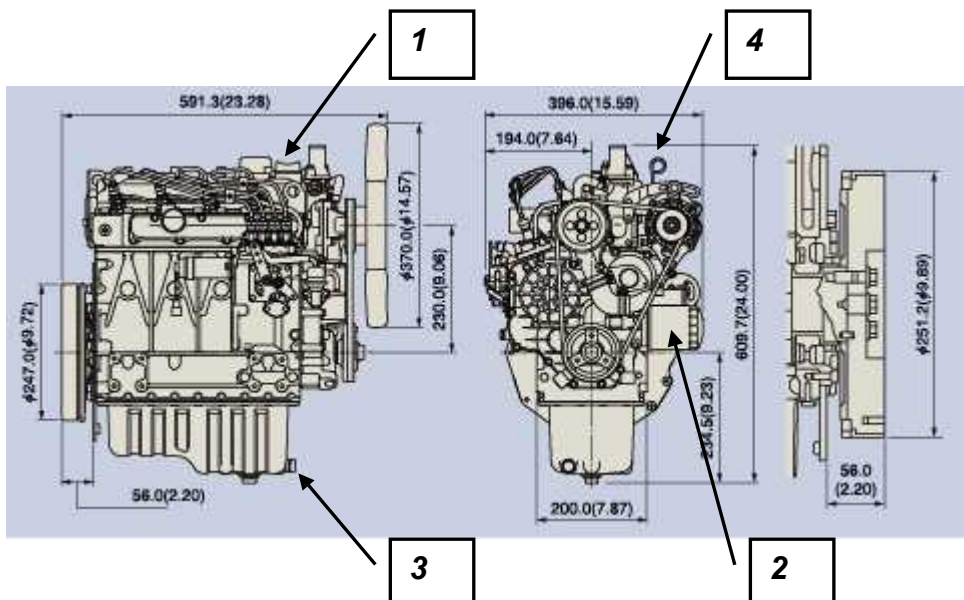


Figure 22. Changing oil and oil filter of Kubota D905-E motor

Being an often repeated operation the change of motor oil and the filter is handily done without lowering the motor by following these instructions.

1. Lower the outriggers and turn the MEWP so that the motor will go between wheel and chassis.
2. Open and remove the hood
3. Remove the oil drain plug (3) and drain the motor oil to a waste oil container.
4. Fasten the oil filter tool on the filter and turn counterclockwise to remove the old filter (2).
5. Apply a thin coating of new oil to the rubber gasket and turn until the rubber gasket contacts the adapter, then tighten an additional ½ turn.
6. Reinstall the drain plug and tighten.

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7. Open the oil cap (1) and fill the crankcase with new oil. Check that the oil level is up to the upper mark of the dipstick (4).
8. Close the oil cap and replace the dipstick. Let the motor run for a few minutes. Check for oil leaks and after oil pressure is stable check the oil level with the dipstick. Add more oil, if needed.
9. Reinstall the hood of the service opening.

## 19.6 LUBRICATION SCHEME

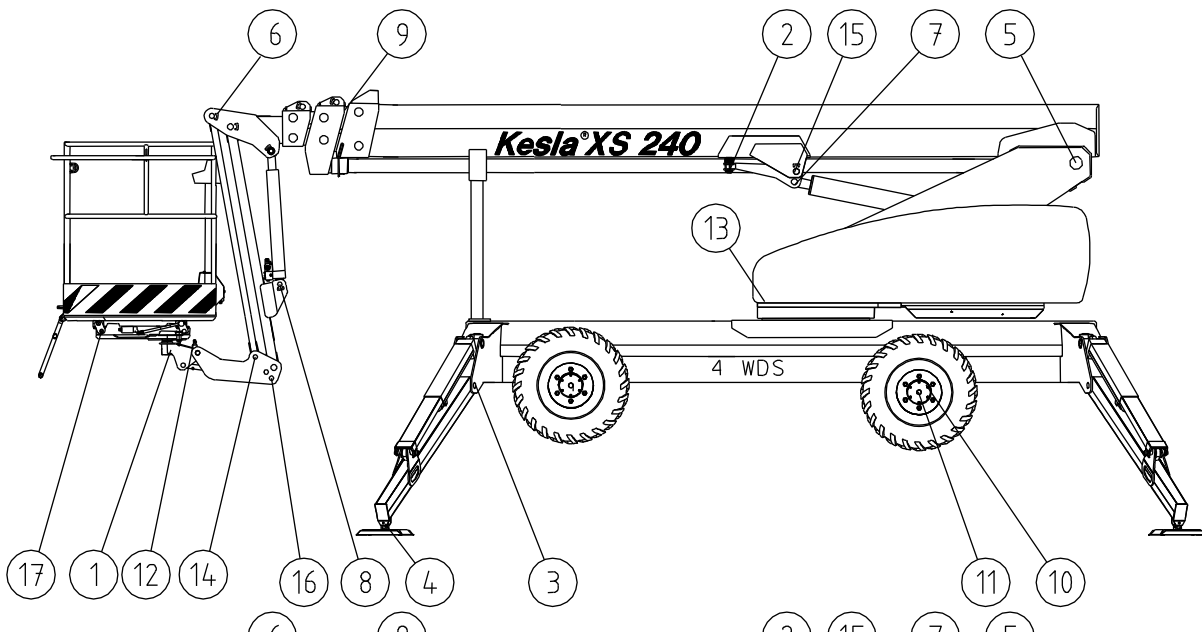


Figure 23. Lubrication scheme

Lubricate the following points every fifty (50) operating hours:

1. Articulation bearings for platform slewing
2. Bearing surfaces, joints and diaphragm springs of lifting radius guard and contact surfaces of adjustment pin
3. Outrigger joints and articulation bearings of cylinders
4. Joints of supporting plates
5. Articulation bearings of boom and turntable
6. Articulation bearings of platform stabilizer arms
7. Articulation bearings of lifting cylinder
8. Articulation bearings of jib cylinder
9. Sliding surfaces of boom and chain sprocket bearings

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10. *Pivoted axle bearings of wheels*
11. *Sliding surfaces of brake cylinders*
12. *Articulation bearings of platform slewing cylinder*
13. *Pivot bearing and tooth ring. Too much grease can break the gasket of pivot bearing. Lubricate every 950 hours or at least every 6 months. There are two lubrication points in the bearing. Turn the bearing while greasing. The cover of the lubrication opening of the pivot bearing and tooth ring is attached with 2 bolts.*
14. *Articulation bearings of stabilizer arm*
15. *Articulation bearings of load control linkage*
16. *Articulation bearings of platform inclining cylinder*
17. *Platform load control linkage*

## **19.7 SELECTION OF LUBRICANTS, OIL VOLUMES**

### **19.7.1 Kubota V1505**

Oil volume.....	6.0 l with filter
SAE 30 or SAE10W-30, SAE10W-40.....	over +25°C
SAE 20 or SAE10W-30, SAE10W-40.....	0°C ... +25°C
SAE 10W or SAE10W-30, SAE10W-40.....	below 0°C

## **19.8 HYDRAULICS**

Oil volume.....	60.0 l, filling volume
Oil grade.....	UNIVIS 32

### **19.8.1 Articulation bearings**

- *Lithium-based all-round grease e.g. Esso Beacon EP2*
- *Lubrication instruction: must ooze out a little during greasing*

### **19.8.2 Open cogging of pivot bearings**

- *Molybdenum-sulphide-based, e.g.*
- *Esso Surrent Fluid 30F*
- *Shell Cardium EP Fluid H*
- *Mobil Doria 30*
- *Lubrication instruction: apply*

### **19.8.3 Sliding surfaces of boom**

- *Lithium-based all-round grease e.g. Esso Beacon EP2*

### **19.8.4 Slide bearings**

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- Lithium-based all-round grease e.g. Esso Beacon EP2
- Lubrication instruction: must ooze out a little during greasing

### 19.8.5 Pivot bearing

- Lithium-based all-round grease e.g.
- Esso Beacon EP2
- Shell Alvania EP2
- Mobil Mobilux EP2

### 19.8.6 Slewing gear

- Oil volume 1.5 l
- ISO 3448 Vg 150
- SAE 90

## 19.9 MAINTENANCE OF DRIVING BRAKES

Verify the thickness of the friction surface on the brake pads. Clean, lubricate and check the functioning of the floating brake caliper mechanism every 6 months, and in difficult and dirty conditions even at shorter intervals. If the brake pad located on the spring side is clearly more worn, the mechanism must be cleaned and lubricated better.

For example when towing, the drive brake can be released by closing the control valves for the closing time of the brakes fully (figure 25). After this, choose fast drive, and run the Access Platform slightly forward or backward using the emergency lowering pump. This will pressurize the brakes and leave them open until the control valves are opened.

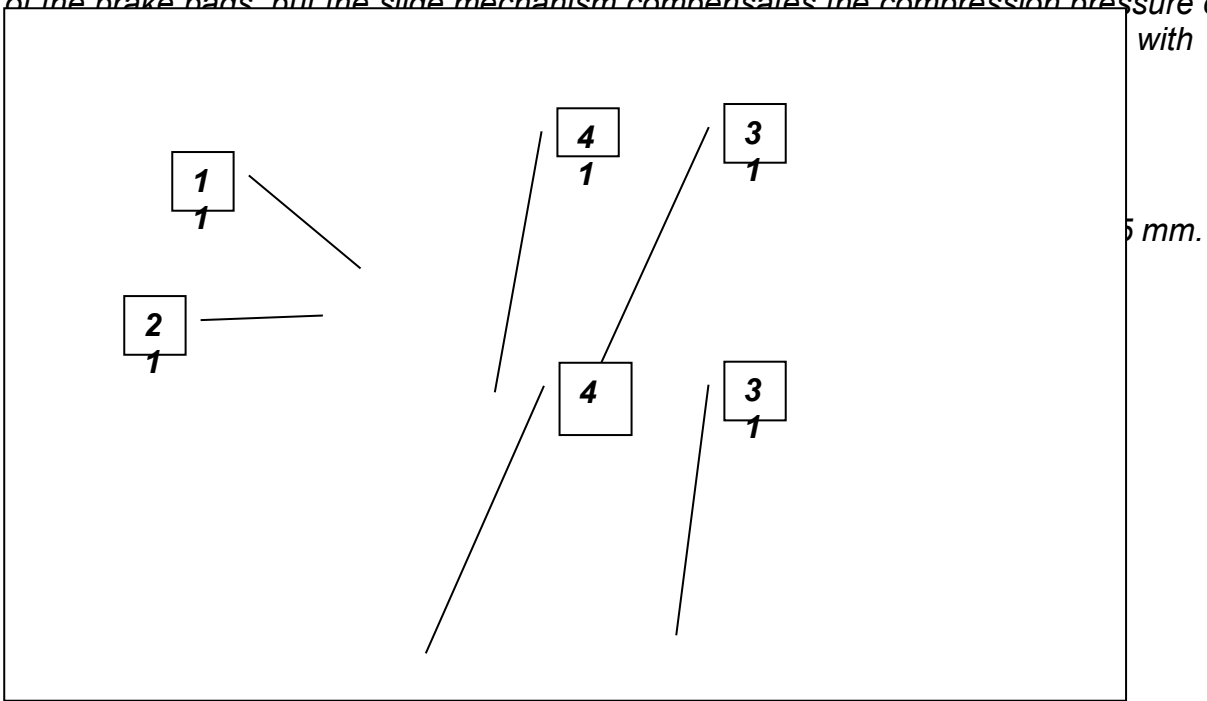
**NOTE!** Once the Access Platform has been transferred by towing, the control valves must be opened, whereby the brakes will close. **BEFORE USING THE ACCESS PLATFORM, THE CLOSING TIME OF THE BRAKES MUST BE RE-ADJUSTED!**

### 19.9.1 Construction of brakes

Disc brake which opens by hydraulic pressure.

When the pressure of the drive motor exceeds 30 bar, the disc brakes open, and the brakes close automatically pressed by a spring when the pressure drops below 30 bar.

The construction of the brake caliper is "floating" which means that a spring presses one of the brake pads, but the slide mechanism compensates the compression pressure of the with equal



*Figure 24 Changing the brake pads*

1. *Drive the Access Platform onto level and firm ground.*
2. *Use the outriggers to raise the wheels slightly off the ground and turn off the engine.*
3. *Remove the wheels.*
4. *Loosen the adjustment locking nut 1.*
5. *Turn adjustment screw 2 clockwise until the brake pads are released.*
6. *Remove the four screws 3 and move the brake cylinder aside.*
7. *Unscrew the four screws 4 and remove the old brake pads.*
8. *Install the brakes in reverse order.*
9. *Carry out basic adjustment of the brakes in accordance with the instruction below.*

#### **Basic adjustment of brakes**

1. *Set the Access Platform to be supported by the outriggers, with the wheels removed.*
2. *Start the engine and engage fast drive.*
3. *Lock the drive joystick to its extreme position or ask an assistant to keep the joystick in the extreme position so that the wheels rotate at an as high speed as possible.*
4. *Loosen locking nut 1.*
5. *Turn adjustment screw 2 counter-clockwise until the brake pads touch the brake disc slightly = clearance approx. 1 mm.*
6. *Lock the adjustment by tightening locking nut 1.*
7. *Carry out the same basic adjustment for all wheels.*
8. *Mount the wheels and test that the brakes hold.*
9. *If the brakes drag, loosen the adjustments. If the brakes do not hold or work slowly, tighten the adjustments and check the adjustment of closing time as instructed below.*

#### **19.9.3 Adjustment of closing time of brakes**



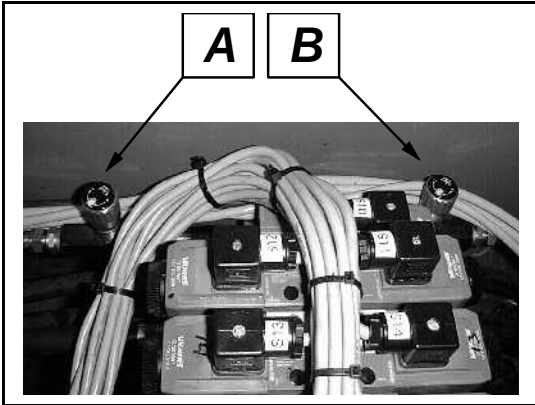


Figure 25. Adjustment of closing time of brakes

1. Set the Access Platform to transport position.
  2. Remove the cover of the valve group on the lower chassis (aluminium nodule plate cover closest to the turntable on the lower chassis).
  3. Run hydraulic oil to a temperature of +30°C.
  4. Check tyre pressure = 310 kPa.
  5. Select a hard, level surface on which to drive: concrete, tarmac, or the like.
  6. Drive the Access Platform at a fast speed.
  7. Release the drive joystick quickly to the middle position.
  8. Adjust the stopping distance of the Access Platform to approx. 1 m by valves A and B (figure 25). When adjusting, both valves must show the same value, see valve scales.
  9. When the valve is turned to the + direction, the stopping distance becomes shorter.
- NOTE! IF THE VALVE IS TURNED TO THE MINUS DIRECTION (COMPLETELY CLOSED), THE BRAKES DO NOT CLOSE.**

### 19.9.4 Boom chains - adjustment and maintenance

The two outermost boom extensions of Nostolift XS 240 (the extensions closest to the platform) are moved by chains.

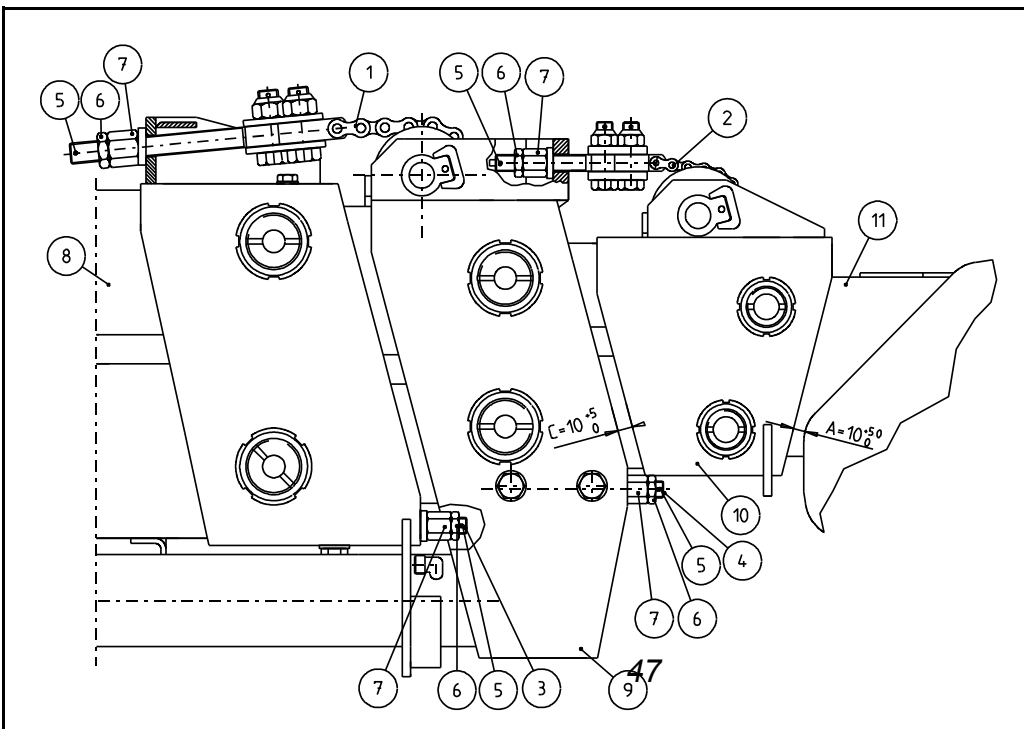


Figure 26. Adjustment of chains

1. Extension chains of the second outermost extension
2. Extension chains of the outermost extension
3. Retraction chain of the second outermost extension
4. Retraction chain of the outermost extension
5. Pin
6. Locking nut
7. Adjusting screw
8. Lifting boom
  
9. First extension
10. Second outermost extension
11. Outermost extension

#### **19.9.5 Adjusting the chains of the outermost extension (extension closest to the platform)**

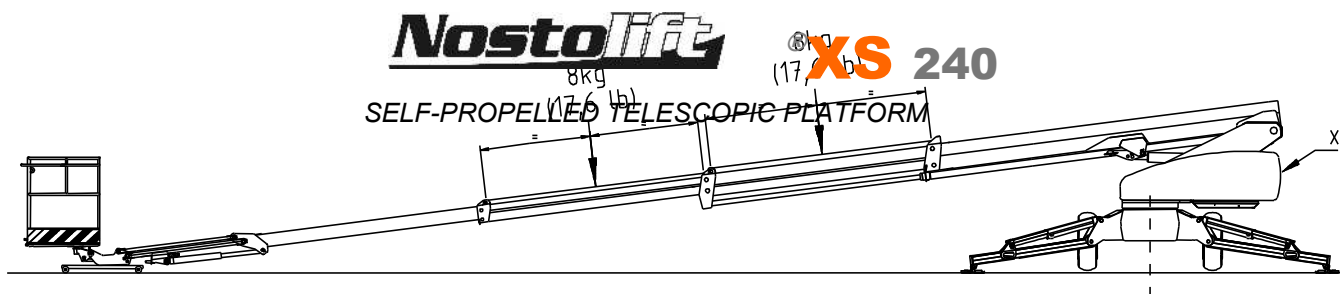
1. Retract the boom totally with the telescope cylinder.
2. Measure gap A. If the gap exceeds 10 mm by +5/–0 mm, loosen nuts 6 and 7 of the extension chain of the outermost extension and correspondingly tighten nuts 6 and 7 of the retraction chain of the outermost extension which makes the outermost extension move inwards. If the gap is smaller than 10 mm, loosen nuts 6 and 7 of the retraction chain and tighten nuts 6 and 7 of the extension chain.
3. After adjustment, tighten locking nuts 6.

#### **19.9.6 Adjusting the chains of the second outermost extension**

1. Retract the boom totally with the telescope cylinder.
2. Measure gap C. If the gap exceeds 10 mm by +5/–0 mm, loosen nuts 6 and 7 of the extension chain of the second outermost extension and correspondingly tighten nuts 6 and 7 of the retraction chain of the second outermost extension which makes the second outermost extension move inwards.
3. If the gap is smaller than 10 mm, loosen nuts 6 and 7 of the retraction chain and tighten nuts 6 and 7 of the extension chain.
4. After adjustment, tighten locking nuts 6.

#### **19.9.7 Adjustment of chain tension**

Figure 27. Adjustment of chain tension



1. Support the Access Platform on the outriggers with the wheels slightly off the ground. Raise the jib straight parallel with the boom. Lower the platform for instance on a pump lifter or other carriage equipped with wheels.
2. Drive out the booms totally, relieving with the lifting cylinder so that the carriage under the platform rolls easily. If the platform rises from the carriage during extending, the limiter of the lifting radius will cut both the lowering and extending movements of the booms. Therefore it is important to relieve the load of the booms during extending.

Retract the booms about 50 mm from maximum reach and leave the booms in this position. The situation is shown in drawing 27.

**NOTE!** During extending, no load is allowed on the platform, and extreme caution must be observed. It is most essential to relieve the booms with the lifting cylinder.



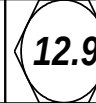
3. Adjust all four extension chains so that after a slight retraction, there will be 1 - 3 mm between the boom and the chain, measured at the middle of the free chain, when a point load of 8 kg presses the chain downwards, measured at the point of measuring.
4. If the booms do not settle within each other fully but the boom moved by the chain remains "out", fix the boom back in by loosening the extension chains and tightening the retraction chains. Adjust each extension at a time, testing every now and then.


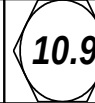

## 19.10 TORQUE SCHEME FOR BOLTS AND NUTS

Wheel nuts.....	250 Nm
Fastening bolts of slewing gear.....	22 - 26 Nm
Bolts of pivot bearing, inner circle.....	200 - 220 Nm
Bolts of pivot bearing, outer circle.....	200 - 220 Nm
Holding capacity of cable clamp in inlet of electr. outlets.....	5 kg when pulling from cable
Torque of locking nuts of outrigger axles	
(locking with toothed washer).....	50 - 70 Nm
Nuts of wheel hubs and pivot axles.....	50 - 70 Nm
Locking of axle nuts of cylinder pins (locking with toothed washer).....	50 - 70 Nm

### 19.10.1 Torques if not otherwise mentioned

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Preliminary torque for screws with metric ISO thread			
	Nm		
			
M4	2.8	4.0	4.9
M5	5.7	7.9	9.5
M6	9.7	13.7	16.2
M8	23.5	33.3	39.2
M10	47.1	65.7	79.4
M12	81.4	114.7	137
M14	130	181	216
M16	196	280	333
M18	270	382	461
M20	382	539	647
M22	519	730	873
M24	662	932	1118
M30	1324	1863	2236

Preliminary torque for screws with metric ISO fine thread			
	Nm		
			
M8 x 1	24.5	34.3	40.2
M10 x 1.25	49	68,6	80
M12 x 1.25	85.3	118	147
M12 x 1.5	80,4	118	138
M14 x 1.5	118	167	206
M16 x 1.5	196	285	343
M18 x 1.5	295	412	491
M20 x 1.5	402	569	687
M22 x 1.5	540	765	912

1 kpm = 9.80665 Nm

1 lbf.ft = 1.356 Nm

## 20 PROBLEMS IN OPERATING THE ACCESS PLATFORM

Situation	Solution
BOOM CANNOT BE OPERATED FROM THE PLATFORM	Check that the ignition keys are in the ignition lock of the platform (combustion engine has been started from the platform). Check that the outriggers are in the support position (lower position). Check that the foot pedal is pressed down.
BOOM CANNOT BE OPERATED FROM THE GROUND	Check that the ignition keys are in the ignition lock of the ground operating point (combustion engine has been started from the ground operating point). Check that the outriggers are in the support position (lower position).
Outriggers cannot be raised or lowered	Check that the selector switch for outriggers/driving and steering is in the position for outriggers. Check that the boom is on the transport support. Check that the foot pedal is not pressed down.
Access Platform cannot be driven/steered	Check that the selector switch for outriggers/driving and steering is in the position for driving and steering. Check that the boom is on the transport support.

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	<i>Check that the pedal is not pressed down.</i>
<i>Engine does not start from either of the operating points</i>	<i>Check that power has been turned on from the main switch. Check that the emergency stop push-button has not been pressed down at either of the operating points.</i>
<i>Engine starts, but does not run</i>	<i>Starting a "cold" diesel engine: Turn the ignition key in the glow position and keep it there until the glow indicator light goes out. Check from the display of the control system that there is enough fuel in the fuel tank.</i>

## **21 INSTRUCTIONS AND RECORDS FOR RE-INSPECTION**

### **21.1 INSPECTION OF THE ACCESS PLATFORM**

*Nostolift XS 240 must be inspected in accordance with these instructions at least once a year and, if needed, more frequently. The inspection interval must not exceed 12 months from the commissioning of the Access Platform. If uncertain, contact the manufacturer or importer.*

### **21.2 INTRODUCTION**

*These instructions provide minimum general instructions concerning the inspection procedure. The manual chapters concerning controls, checking of permitted lifting radius, construction and operation of emergency lowering system, and the location of safety limits will be of help when carrying out the inspection correctly. During the annual inspection, the inspection records of the Access Platform must be filled in. The inspecting person should have for instance the following stickers with him to replace eventually worn ones:*

- *General operating instructions for the operator*
- *Instructions for daily check*
- *Securing of stability*

- Operating point stickers

## **21.3 GENERAL REQUIREMENTS**

### **21.3.1 Manual**

*A manual must always be kept with the Access Platform.*

### **21.3.2 Locker for manual**

*The manual must always be kept in the equipment case.*

### **21.3.3 Manufacturer's plate**

*The manufacturer's plate of the Access Platform must be unbroken and clearly marked. The plate has been riveted onto the chassis next to the equipment case.*

### **21.3.4 Load plate**

- *SWL (=safe working load) given as the allowable number of persons and weight of additional load as well as the maximum permitted lateral load caused by the persons must be marked indelibly and clearly in a visible place on the platform.*
- *The load plate, located on the outer edge of the platform, must be replaced if it is not readable or if it is broken.*
- *A sticker or a paint mark will do, because the lost information can, if needed, be replaced with new one available on the manufacturer's plate.*
- *The calculated weight for the first person is 80 kg and for the next one 80 kg, leaving 70 kg for the weight of equipment.*
- *The weight of equipment of 70 kg and the maximum permitted lateral load of 400 N = 40 kg are shown on the load plate.*
- *The second load plate is located beside the valve for ground operating.*

### **21.3.5 Warning plate**

*The ground operating point and the platform of the Access Platform are fitted with the following warning plates. On the engine cover, there is also an instruction sticker for operating the emergency lowering system.*

- *Working near live electrical conductors*
- *Plate with instructions for operating the outriggers: SECURE STABILITY. EVEN ASPHALT CAN YIELD!*
- *Maximum working load*
- *Voltage sticker*
- *Warning of high sound intensity*
- *Inspecting the condition of Access Platform and trial operation before starting actual work (= daily check)*
- *Steps to be taken in case of malfunction during Access Platform operation*

- General instructions for the operators

### **21.3.6 Plate for outriggers**

The maximum supporting load and instructions regarding the use of extra plates must be indelibly and clearly marked at the place where the outriggers are used.

With the boom slewed above the outrigger in question at the maximum working load, the supporting load is 37000 N = 2550 kg.

The soil tightness table in the manual will help to define the need for extra plates.

- Potential building instructions or requirements regarding each separate site must be considered separately.
- Maximum supporting load = 37000 N, on soft ground extra plates must be used under the outriggers.

### **21.3.7 Hazard colours**

The Access Platform must be easily visible. All projecting parts must be clearly marked. Projecting parts are the extremities which reach outside the actual chassis, like outriggers and the platform. Being most easy to see, yellow/black diagonals are used for marking.

General about the markings:

- The stripes are marked on the Access Platform with yellow/black stickers
- There are stripes on the sides of outriggers and on the base strip of the platform

### **21.3.8 Operating zone scheme**

For the scheme of the operating zone, refer to chapter BOOM GEOMETRY, page 11.

### **21.3.9 Inspection plate**

The inspection plate, onto which the inspector stamps his initials and the date, is riveted on the equipment case.

## **21.4 SAFETY REQUIREMENTS**

### **21.4.1 Indicator of horizontal level**

The Access Platform is correctly supported when all four lights of the indicator, located on the control panel of the platform, are lit while the boom is on the transport support. The actual switch for horizontal level is situated on the turntable, accuracy  $+0.5^{\circ} - 1.0^{\circ}$ .

### **21.4.2 Prevention of raising the platform**



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*The Access Platform must be fitted with a device to prevent the use of the platform before the outriggers are in the support position, i.e. the outriggers must be in the fully extended position. The preventing device must active at the latest when the free distance between the horizontal level (= even ground) and the support plate exceeds 300 mm. The support position is activated when the outriggers have passed the horizontal level with about 4° towards the support position.*

*- The electric limit switches must be similar to the original ones and so connected that they become safely deactivated (of forced opening type).*

### **21.4.3 Prevention of undoing outrigger support**

*The Access Platform must be fitted with a device which prevents the moving of the outriggers when the boom is not in the transport position.*

*- The selector switch on the platform must be in position BOOM when the boom is operated. Thus the use of outriggers is prevented.*

*- Deliberate undoing or moving of outrigger support is prevented by means of a lock valve in the hydraulics (no hose is allowed between the cylinder and the lock valve).*

### **21.4.4 Position of platform**

*The platform must be safely attached to the Access Platform unit. Any unintentional swinging, inclining, slewing or moving of the platform has to be avoided. The screws, nuts, joint pins and fixing organs must be secured or locked reliably.*

*- Also use a cotter pin in double nut securing (fixing of chain end of boom).*

*- Avoid using self-locking nuts, and always replace one after opening it.*

*- In moving organs, mechanical lockings are to be used. This does not apply to the normal moving caused by the clearances of fixing organs or stabilizing and slewing equipment.*

*- The platform must remain sufficiently horizontal (recommendation not more than  $\pm 5^\circ$ ) regardless of the position of the Access Platform unit.*

*- In case of hose damage, the platform must be kept locked by the hydraulic stabilizing equipment.*

*- The hydraulic stabilizing equipment is fitted with a lock valve.*

*- The horizontal level of the platform can be corrected by using the control lever located in the control valves of the boom.*

*- The stabilizing equipment must function automatically in all situations.*

*- While raising the platform, it must always be horizontal.*

### **21.4.5 Emergency lowering system**

*Access Platforms fitted with a mechanical operating system must have an emergency lowering system with which the platform can be lowered. The controls of the emergency lowering system must be clearly indicated and their unintentional use must be prevented.*

*- The electric pump of the emergency lowering system is located in conjunction with the hydraulic oil tank.*

*- The operating buttons are located on the platform and turntable.*

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- The operating instruction sticker for the emergency lowering system is located on the engine guard.
- The pressure for the emergency lowering system is produced with the electric pump, and the system is controlled from the platform with control levers and by pressing continuously the push-button of the emergency lowering pump.
- Control from the ground takes place correspondingly, but by using the control push-buttons on the turntable and the control push-button of the pump.
- When the emergency lowering system is used, power must be switched on.

## **21.5 GENERAL CONDITION OF THE ACCESS PLATFORM**

*Visual inspection of condition*

### **21.5.1 Chassis**

- Corrosion damage
- Welds (there must be no visible breaks or cracks)
- Permanent deformations

### **21.5.2 Slewing ring**

- Tightness of ring screws and joint (see manufacturer's instructions)
- Slewing gear and holding of brake
- Condition and gap of tooth ring
- Bearing
- Welds

### **21.5.3 Booms**

- Welds
- Wear of joints
- Lockings of joints and cylinders
- Dents and tears
- Permanent deformations
- Bars and screws of stabilizing equipment
- Cylinders
- Slide pads and adjustments

### **21.5.4 Platform**

- Fixing organs
- Lockings of joints
- Tears and other damage
- Condition and self-closing of gate
- Access routes and railings

### **21.5.5 Outriggers**

- Wear
- Corrosion damage
- Welds

### **21.5.6 Transport position**

- Rack and pin for transport position of boom
- Position of outriggers and reliability of lock valves
- Condition of brakes

### **21.5.7 Hydraulic system**

- Leakages
- Condition of hoses (even a slightly damaged or leaking the hose must be replaced)

### **21.5.8 Electric system**

- Condition and fixing of cables
- Condition of connectors
- Functioning of limit switches

## **21.6 TEST OPERATION/TEST LOADING**

### **21.6.1 Operating movements**

- Primarily carry out the test operation or test loading (= overloading) in accordance with the manufacturer's instructions.
- If there are no instructions, we recommend carrying out the test operation by using the maximum permitted loads in extreme and most unfavourable positions. Mark the load used in the record.
- Test the functioning of all operating movements, do not use jerky movements.
- Observe the "creeping" of the outriggers, i.e. the reliability of the lock valves of the outrigger cylinders during loading (about 1 hour).
- After loading, check thoroughly for any tears or permanent deformations on the loaded parts.

### **21.6.2 Controls**

- Check the general condition of controls and their automatic returning to the 0 position.

- The controls on the platform must be protected against unintentional faulty operation.

### **21.6.3 Symbols**

- The movement directions and the analogies between the controls and the platform movements are shown by means of stickers. When unreadable or damaged, the stickers must be replaced.

### **21.6.4 Emergency stop**

- The emergency stop must have a red operating switch and a plate with the word "STOP" must be fixed next to it.
- It must be possible to use the emergency stop both from the platform and from the ground.
- The emergency stop function must stop all movements immediately after the button has been pushed down. Furthermore, the Access Platform must not restart immediately when releasing the push-button. The engine must not restart when releasing the emergency stop button.
- The emergency stop must be easily distinguishable from the other operating switches.
- Never use the emergency stop for stopping the Access Platform in normal conditions, the ignition lock is meant for that.
- It must not be possible to deactivate the emergency stop.

### **21.6.5 Safety limit switches**

- Check their functioning.
- Check the fastenings.

### **21.6.6 Sound signal**

- Check the functioning.
- There are push-buttons both on the platform and on the ground operating point.

## **21.7 REPAIRS**

### **21.7.1 Welding**

If you notice that the load-bearing structures of the Access Platform have been repaired by welding, enter a related remark in the inspection record under "Remarks", including the following information:

- Location of welding
- Date of repair welding
- Welder
- Find out if the manufacturer's instructions have been observed when welding.

### **21.7.2 Other repairs**

*Any other repairs of the load-bearing structures (e.g. cylinders) must also be entered in the inspection record under "Remarks", including the following information:*

- *Location of repair*
- *Date*
- *Repairer*
- *Make sure that the manufacturer's instructions have been observed.*

### **21.7.3 Test loading (= overloading)**

*After repairs of load-bearing structures or cylinders, the Access Platform must be tested while being loaded according to standard EN280. The test load used must be entered in the inspection record.*

*With machine-driven lifters, the test load must be 125% of the nominal load, i.e. 288 kg for Nostolift XS 240. The test is carried out by releasing the adjustment screws of load control completely for the duration of test loading. After test loading, load control must re-adjusted.*

*All movements with the test load must be carried out using acceleration and deceleration required by safe load management. When several different types of movements (such as lifting, lowering, slewing, transfer) must be carried out with the test load, they must be carried out once the swinging caused by the preceding movements has stopped, individually, and by paying attention to the most unfavourable positions.*

*If, because of the many different load and side reach combinations of the MEWP, test loads of varying weights are needed, all movements must be tested with all test loads unless the most unfavourable conditions can be simulated sufficiently well through a single performance test.*

*In the overload test, the MEWP must be located on an even base, and the lifting mechanism must be placed in each such position which causes the maximum strain on each load-bearing structure of the MEWP.*

*This test does not need to simulate the impact of the maximum permitted wind.*

*In the overload test, the brake systems need to be able to stop the test load(s) and keep them stopped. After removing the load(s), there must be no permanent deformations on the MEWP.*

## **22TERMS OF WARRANTY FOR NOSTOLIFT XS ACCESS PLATFORMS**

*Nostolift Oy warrants that the Access Platforms they sell are free from defects and provides the following warranty for any defects in materials and workmanship.*

- 1. The warranty is valid for a maximum of 12 months starting from the date of delivery of the Access Platform to the actual user or buyer, but not more than 18 months after delivery from the manufacturer. The warranty only applies to new Access Platforms while in the possession of the first buyer.*
- 2. During the duration of this warranty, Nostolift Oy is liable to repair, free of charge, defects in the Access Platform pursuant to these Terms of Warranty.*
- 3. A repair under warranty shall be carried out during normal working hours by a maintenance shop or distributor authorised by Nostolift Oy in the normal order of reception.*
- 4. For work completed under warranty the buyer and the authorised maintenance shop shall make a warranty claim and submit it to Nostolift Oy within 14 days.*
- 5. Nostolift Oy will decide whether the parts and work are covered by the warranty.*
- 6. Should the warranty claim concern a defective part, already removed from the Access Platform, that is to be replaced with a corresponding faultless part, the replacement shall take place free of charge at the spare part store of Nostolift Oy or an authorised maintenance shop.*
- 7. Any other expenses resulting from the fulfilment the warranty obligation, such as repair personnel's travel and accommodation expenses, transportation expenses of tools, overtime compensation and any comparable extra compensation shall be paid for by the buyer.*
- 8. The warranty does not apply to hydraulic hoses and seals. For components purchased by Nostolift Oy for the Access Platform, such as the pivot bearing, Nostolift Oy will pass on a warranty that is equal to the warranty given by the component's manufacturer/seller to Nostolift Oy.*
- 9. The warranty shall not apply to defects arising from failure to observe the operation and safety instructions, or the main cause of which is improper operation, installation or maintenance, or which are due to normal wear and tear or an accident.*
- 10. Nostolift Oy will not assume liability for any damage to property or persons resulting from a defective Access Platform, or loss of earnings, expenses of driving to the repair shop, or any similar claims.*

*11. The warranty shall be invalidated immediately and entirely if inaccurate repairs have been made to the Access Platform, foreign or inappropriate parts have been installed in the Access Platform, or permitted pressure settings of hydraulic equipment preset by Nostolift Oy have been changed without written permission of Nostolift Oy.*

*12. The warranty will apply provided that a completed installation inspection record, with an assurance by the buyer/user of having read and understood the manual, is returned to the manufacturer within 14 days of installation.*



## 23 WARRANTY COMPENSATION APPLICATION

NOSTOLIFT OY

Ratakaari 11

27500 KAUTTUA

FINLAND

Tel. + 358 (2) 8378 6300

Fax + 358 (02) 8378 6311

Owner or holder of Access Platform \_\_\_\_\_

Postal address \_\_\_\_\_ Tel. \_\_\_\_\_

Model and serial number of Access Platform \_\_\_\_\_

Access Platform delivered on (d/m/y) \_\_\_\_\_

Model and serial number of engine \_\_\_\_\_

SPECIFICATION ON DAMAGE AND ITS CAUSES \_\_\_\_\_

SPARE PART NUMBER AND DESCRIPTION OF PART WHICH CAUSED THE DAMAGE \_\_\_\_\_

MANNER OF USING THE ACCESS PLATFORM (e.g. renting) \_\_\_\_\_

WORKING HOURS OF ACCESS PLATFORM WHEN DAMAGED \_\_\_\_\_

Damage date (d/m/y) \_\_\_\_/\_\_\_\_/200\_\_ Repaired on (d/m/y) \_\_\_\_/\_\_\_\_/200\_\_

Repaired by \_\_\_\_\_ Job No. \_\_\_\_\_

The damaged parts were returned to Nostolift Oy. Shipment date (d/m/y) \_\_\_\_/\_\_\_\_/200\_\_

Method of delivery \_\_\_\_\_ Delivered from \_\_\_\_\_

Freight bill No. \_\_\_\_\_

The damaged parts are original parts ☐ Delivered as spare parts ☐

New parts have been delivered, consignment note no. \_\_\_\_\_

No. of invoice \_\_\_\_\_ Date (d/m/y) \_\_\_\_/\_\_\_\_/200\_\_

Signature \_\_\_\_\_

Name in block letters \_\_\_\_\_

Enclosures \_\_\_\_\_

To be filled in by Nostolift Oy:

Takuuhakemus saapunut: \_\_\_\_/\_\_\_\_/200\_\_

Osat saapuneet: \_\_\_\_/\_\_\_\_/200\_\_ Osien säilytyspaikka \_\_\_\_\_

PÄÄTÖS

Takuuanomus hylätty, laskutetaan kaikki

Hyväksytty työkust. ja varaosat \_\_\_\_\_

\_\_\_\_/\_\_\_\_/200\_\_ Tarkastanut \_\_\_\_\_

## 24BILL OF DELIVERY

NOSTOLIFT OY

Ratakaari 11

27500 KAUTTUA

FINLAND

Tel. + 358 (2) 8378 6300

Fax + 358 (2) 8378 6311

Commissioning date (d/m/y): \_\_\_\_/\_\_\_\_200\_\_\_\_

### Nostolift XS 240

Serial number \_\_\_\_\_ Owner \_\_\_\_\_

Accessories \_\_\_\_\_ Street address \_\_\_\_\_

\_\_\_\_\_  
Postal code and town \_\_\_\_\_

\_\_\_\_\_  
Telephone \_\_\_\_\_

\_\_\_\_\_  
Seller \_\_\_\_\_

✂

To be returned to:

NOSTOLIFT OY

Ratakaari 11

27500 KAUTTUA

FINLAND

Tel. + 358 (2) 8378 6300

Fax + 358 (2) 8378 6311

### BILL OF DELIVERY

Commissioning date (d/m/y): \_\_\_\_/\_\_\_\_200\_\_\_\_

### Nostolift XS 240

Serial number \_\_\_\_\_ Owner \_\_\_\_\_

Accessories \_\_\_\_\_ Street address \_\_\_\_\_

\_\_\_\_\_  
Postal code and town \_\_\_\_\_

\_\_\_\_\_  
Telephone \_\_\_\_\_



<sup>®</sup>**XS 240**

SELF-PROPELLED TELESCOPIC PLATFORM

Seller \_\_\_\_\_

## **25WARRANTY**

\_\_\_\_\_/\_\_\_\_\_<sub>200</sub>\_\_\_\_\_

SERIAL NUMBER \_\_\_\_\_

SELLER: \_\_\_\_\_

## **26 DIRECTIVES AND STANDARDS APPLIED**

*The following directives and standards have been applied to the design of the machine:*

- *EU declaration of conformity: directive 89/392/EEC as amended as well as the national Council of State Decision VNp 1314/94.*
- *CE marking: directive 93/68/EEC.*
- *Protection against electromagnetic interference: directive 89/336/EEC.*
- *Manual delivered with the machine: directive 89/392/EEC and 91/368/EEC and standards SFS-EN 292-2 and SFS-EN 414.*

## **27EU DECLARATION OF CONFORMITY FOR MACHINERY**

(directive 98/37/EEC)

NOSTOLIFT OY  
Ratakaari 11  
27500 KAUTTUA  
FINLAND

Tel. + 358 (2) 8378 6300

Fax + 358 (2) 8378 6311

*herewith declares that*

*Self-Propelled Telescopic Platform Nostolift XS 240*

*serial number 4024*

*is in conformity with the provisions of the Machine Directive 98/37/EEC, 89/336/EEC as amended and with national implementing legislation (Council of State Decision on machine safety Vnp 1314/94).*

*European standards EN 280, EN50081-1, EN50082-2, 200/14/EC, EN418, EN60204-1 has been applied to the design of the machine.*

*National standards and specifications applied to the design of the machine:*

*SFS 4020, SFS 4023, SFS 4025, SFS 4026, SFS 4300, SFS 4302, DIN 15018.*

*Notified body VTT, Technical Research Center of Finland has done the EC -type examination to this machine.*

*EC TYPE –EXAMINATION CERTIFICATE No TUO 115/524/04*

Kauttua, Finland  
place

25.04.2008  
date (d/m/y)



Signature

Jari Lilja

Product Development Manager

Name in block letters, position

## 27.1 REGISTRATION OF GUARANTEE OF KUBOTA ENGINE

To ensure that the warranty of the Kubota engine starts on the commissioning date of the machine, please complete the below form and forward it by e-mail, post or fax to the address given below.

Commissioning date (d/m/y): \_\_\_\_/\_\_\_\_/200\_\_\_\_

**Nostolift XS 240**

ENGINE TYPE: KUBOTA V1505

MANUFACTURING NUMBER: \_\_\_\_\_ SERIAL NUMBER: \_\_\_\_\_

SELLER: \_\_\_\_\_

CUSTOMER: \_\_\_\_\_

STREET  
ADDRESS: \_\_\_\_\_

—

POSTAL CODE AND  
TOWN: \_\_\_\_\_

E-MAIL  
ADDRESS: \_\_\_\_\_

—

To be returned to: KONEKESKO OY  
Moottori- ja vaihteistomyynti  
JUHA ANTTONEN  
PL 54  
FI-01301 VANTAA  
FINLAND

## 28 ACCESS PLATFORM INSPECTION RECORD

First inspection (commissioning inspection)  
INSPECTION LOCATION: NOSTOLIFT OY,  
KAUTTUA, FINLAND

Date (d/m/y) \_\_\_\_\_

Inspected by \_\_\_\_\_

Name in block letters \_\_\_\_\_

### BASIC INFORMATION ON ACCESS PLATFORM

Manufacturer: Nostolift Oy

Country of manufacture: Finland

Address: Ratakaari 11, 27500 KAUTTUA, FINLAND

Type of MEWP: BP Boom platform  
Chassis: MS MEWP (self-propelled)

Boom: TB Telescope boom  
Outriggers: HT Hydraulic turning

### TECHNICAL DATA

Model and type: Nostolift XS 240

Serial No./Manuf. year: \_\_\_\_\_

Max. load: 230 kg

Number of persons: 2

Extra load: \_\_\_\_\_

Combustion engine: petrol /LPG ☐ diesel ☐

Lowest operating temperature: -25°C

Weight: 4850 kg

Max. height of platform

HP= 22.0 m

Max. side outreach

SO= 11.0 m

Slewing of boom

SB= Limitless

Width of support

WS= 5.20x4.50 m

Transport width

TW= 2.07 m

Transport length

TL= 7.15 m

Transport height

TH= 2.335 m

Platform dimensions

PD= 1.0 mx1.5 m

### ITEMS TO BE INSPECTED;

OK = in order, NO = To be repaired

#### A. STRENGTH

OK NO

☐ ☐ Materials certificate

☐ ☐ Strength certificate

#### B. STABILITY

☐ ☐ Stability test certificate

☐ ☐ Operating zone scheme

#### C. GENERAL REQUIREMENTS

☐ ☐ Manual

☐ ☐ Locker for manual

☐ ☐ Product plate/inspection plate

☐ ☐ Load plate, plate for outriggers

☐ ☐ Warning plate

☐ ☐ Hazard colours

#### D. SAFETY DEVICES

☐ ☐ Safety limit switches

☐ ☐ Sound signal

#### E. LOADING

#### F. SAFETY REQUIREMENTS

OK NO

☐ ☐ Indicator of horizontal level

☐ ☐ Securings and lockings

☐ ☐ Device preventing raising

☐ ☐ Prevention of undoing outrigger support

☐ ☐ Safety distances

☐ ☐ Position of platform

☐ ☐ Construction of platform

☐ ☐ Emergency lowering system

☐ ☐ Limiter devices

#### G. ELECTRICAL EQUIPMENT

#### H. CONTROLS

☐ ☐ Symbols/directions of movement

☐ ☐ Locations

☐ ☐ Emergency stop

☐ ☐ Safety limits

#### DEFECTS AND REMARKS



# SELF-PROPELLED TELESCOPIC PLATFORM

☐ Load = \_\_\_\_\_ kg` \_\_\_\_\_  
☐ Operating movements \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Observed defects repaired on (d/m/y): \_\_\_\_/\_\_\_\_/20\_\_\_\_ \_\_\_\_\_

Signature \_\_\_\_\_

Name in block letters \_\_\_\_\_

## 28.1 ACCESS PLATFORM INSPECTION RECORD

(Fill in this record carefully and keep it with the Access Platform for at least two years.)

RE-INSPECTION (= maintenance check) Date (d/m/y) \_\_\_\_/\_\_\_\_/20\_\_\_\_

Place of inspection \_\_\_\_\_ Inspector \_\_\_\_\_

Address \_\_\_\_\_ Name in block letters \_\_\_\_\_

### BASIC INFORMATION ON ACCESS PLATFORM

Manufacturer \_\_\_\_\_ Model and type \_\_\_\_\_

Importer/distributor \_\_\_\_\_ Serial No./manufacturing year \_\_\_\_\_

Owner \_\_\_\_\_ Address \_\_\_\_\_

TYPE OF MEWP: BC ☐ Boom platform SC ☐ Scissor platform MP ☐ Mast platform  
 CHASSIS: T ☐ Truck MS ☐ MEWP (self-prop.) TT ☐ Trailer (towed) M ☐ Monkey  
 BOOM: A ☐ Articulated boom TB ☐ Telescope boom AT ☐ Articulated telescope boom  
 S ☐ Scissor FM ☐ Fixed mast TM ☐ Telescope mast  
 OUTRIGGERS: HT ☐ Hydr. turning HE ☐ Hydr. extending M ☐ Mechanical NO ☐ No outriggers

### ISSUES TO BE INSPECTED

OK = In order

NO = To be repaired

#### 1. GENERAL REQUIREMENTS

OK NO

- ☐ ☐ 1. Manual
- ☐ ☐ 2. Locker for manual
- ☐ ☐ 3. Manufacturer's plate
- ☐ ☐ 4. Load plate
- ☐ ☐ 5. Warning plate
- ☐ ☐ 6. Plate for outriggers
- ☐ ☐ 7. Hazard colours
- ☐ ☐ 8. Operating zone scheme
- ☐ ☐ 9. Inspection plate

#### 2. SAFETY REQUIREMENTS

- ☐ ☐ 1. Indicator of horizont. level
- ☐ ☐ 2. Device to prevent raising

OK NO

- ☐ ☐ 3. No undoing of outrigg. support
- ☐ ☐ 4. Position of platform
- ☐ ☐ 5. Emergency lowering system

#### 3. GENERAL CONDITION

- ☐ ☐ 1. Chassis
- ☐ ☐ 2. Slewing ring
- ☐ ☐ 3. Booms
- ☐ ☐ 4. Platform
- ☐ ☐ 5. Outriggers
- ☐ ☐ 6. Transport position
- ☐ ☐ 7. Hydraulic system
- ☐ ☐ 8. Electrical system

#### 4. TEST OPERATION/LOADING

OK NO

- Load \_\_\_\_\_ kg
- ☐ ☐ 1. Oper. movements
- ☐ ☐ 2. Controls
- ☐ ☐ 3. Symbols
- ☐ ☐ 4. Emergency stop
- ☐ ☐ 5. Safety limit switches
- ☐ ☐ 6. Sound signal

#### 5. REPAIRS

- ☐ ☐ 1. Welding
- ☐ ☐ 2. Other repairs
- ☐ ☐ 3. Test loading

### DEFECTS AND REMARKS:

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Observed defects repaired on (d/m/y): \_\_\_\_/\_\_\_\_/20\_\_\_\_

Signature \_\_\_\_\_

Name in block letters \_\_\_\_\_

ENCLOSURES: ☐ Remarks continue overleaf

Distribution: Owner of Access Platform

☐ Other document, qty: \_\_\_\_\_

Access Platform manual

Inspector

## 28.2 ACCESS PLATFORM INSPECTION RECORD

(Fill in this record carefully and keep it with the Access Platform for at least two years.)

RE-INSPECTION (= maintenance check)

Date (d/m/y) \_\_\_\_/\_\_\_\_/20\_\_\_\_

Place of inspection \_\_\_\_\_

Inspector \_\_\_\_\_

Address \_\_\_\_\_

Name in block letters \_\_\_\_\_

### BASIC INFORMATION ON ACCESS PLATFORM

Manufacturer \_\_\_\_\_

Model and type \_\_\_\_\_

Importer/distributor \_\_\_\_\_

Serial No./manufacturing year \_\_\_\_\_

Owner \_\_\_\_\_

Address \_\_\_\_\_

TYPE OF MEWP: BC ☐ Boom platform

SC ☐ Scissor platform

MP ☐ Mast platform

CHASSIS: T ☐ Truck

MS ☐ MEWP (self-prop.)

TT ☐ Trailer (towed)

M ☐ Monkey

BOOM: A ☐ Articulated boom

TB ☐ Telescope boom

AT ☐ Articulated telescope boom

S ☐ Scissor

FM ☐ Fixed mast

TM ☐ Telescope mast

OUTRIGGERS: HT ☐ Hydr. turning

HE ☐ Hydr. extending

M ☐ Mechanical

NO ☐ No outriggers

### ISSUES TO BE INSPECTED

OK = In order

NO = To be repaired

#### 1. GENERAL REQUIREMENTS

OK NO

- ☐ ☐ 1. Manual
- ☐ ☐ 2. Locker for manual
- ☐ ☐ 3. Manufacturer's plate
- ☐ ☐ 4. Load plate
- ☐ ☐ 5. Warning plate
- ☐ ☐ 6. Plate for outriggers
- ☐ ☐ 7. Hazard colours
- ☐ ☐ 8. Operating zone scheme
- ☐ ☐ 9. Inspection plate

#### 2. SAFETY REQUIREMENTS

- ☐ ☐ 1. Indicator of horizont. level
- ☐ ☐ 2. Device to prevent raising

OK NO

- ☐ ☐ 3. No undoing of outrigg. support
- ☐ ☐ 4. Position of platform
- ☐ ☐ 5. Emergency lowering system

#### 3. GENERAL CONDITION

- ☐ ☐ 1. Chassis
- ☐ ☐ 2. Slewing ring
- ☐ ☐ 3. Booms
- ☐ ☐ 4. Platform
- ☐ ☐ 5. Outriggers
- ☐ ☐ 6. Transport position
- ☐ ☐ 7. Hydraulic system
- ☐ ☐ 8. Electrical system

#### 4. TEST OPERATION/LOADING

OK NO

- Load \_\_\_\_\_ kg
- ☐ ☐ 1. Oper. movements
- ☐ ☐ 2. Controls
- ☐ ☐ 3. Symbols
- ☐ ☐ 4. Emergency stop
- ☐ ☐ 5. Safety limit switches
- ☐ ☐ 6. Sound signal

#### 5. REPAIRS

- ☐ ☐ 1. Welding
- ☐ ☐ 2. Other repairs
- ☐ ☐ 3. Test loading

### DEFECTS AND REMARKS:

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Observed defects repaired on (d/m/y): \_\_\_\_/\_\_\_\_/20\_\_\_\_

Signature \_\_\_\_\_

Name in block letters \_\_\_\_\_

ENCLOSURES: ☐ Remarks continue overleaf  
☐ Other document, qty: \_\_\_\_\_

Distribution: Owner of Access Platform  
Access Platform manual  
Inspector

## 28.3 ACCESS PLATFORM INSPECTION RECORD

(Fill in this record carefully and keep it with the Access Platform for at least two years.)

RE-INSPECTION (= maintenance check)

Date (d/m/y) \_\_\_\_/\_\_\_\_/20\_\_\_\_

Place of inspection \_\_\_\_\_

Inspector \_\_\_\_\_

Address \_\_\_\_\_

Name in block letters \_\_\_\_\_

### BASIC INFORMATION ON ACCESS PLATFORM

Manufacturer \_\_\_\_\_

Model and type \_\_\_\_\_

Importer/distributor \_\_\_\_\_

Serial No./manufacturing year \_\_\_\_\_

Owner \_\_\_\_\_

Address \_\_\_\_\_

TYPE OF MEWP: BC ☐ Boom platform

SC ☐ Scissor platform

MP ☐ Mast platform

CHASSIS: T ☐ Truck

MS ☐ MEWP (self-prop.)

TT ☐ Trailer (towed) M ☐ Monkey

BOOM: A ☐ Articulated boom

TB ☐ Telescope boom

AT ☐ Articulated telescope boom

S ☐ Scissor

FM ☐ Fixed mast

TM ☐ Telescope mast

OUTRIGGERS: HT ☐ Hydr. turning

HE ☐ Hydr. extending

M ☐ Mechanical NO ☐ No outriggers

### ISSUES TO BE INSPECTED

OK = In order

NO = To be repaired

#### 1. GENERAL REQUIREMENTS

OK NO

- ☐ ☐ 1. Manual
- ☐ ☐ 2. Locker for manual
- ☐ ☐ 3. Manufacturer's plate
- ☐ ☐ 4. Load plate
- ☐ ☐ 5. Warning plate
- ☐ ☐ 6. Plate for outriggers
- ☐ ☐ 7. Hazard colours
- ☐ ☐ 8. Operating zone scheme
- ☐ ☐ 9. Inspection plate

#### 2. SAFETY REQUIREMENTS

- ☐ ☐ 1. Indicator of horizont. level
- ☐ ☐ 2. Device to prevent raising

OK NO

- ☐ ☐ 3. No undoing of outrigg. support
- ☐ ☐ 4. Position of platform
- ☐ ☐ 5. Emergency lowering system

#### 3. GENERAL CONDITION

- ☐ ☐ 1. Chassis
- ☐ ☐ 2. Slewing ring
- ☐ ☐ 3. Booms
- ☐ ☐ 4. Platform
- ☐ ☐ 5. Outriggers
- ☐ ☐ 6. Transport position
- ☐ ☐ 7. Hydraulic system
- ☐ ☐ 8. Electrical system

#### 4. TEST OPERATION/LOADING

OK NO

Load \_\_\_\_\_ kg

- ☐ ☐ 1. Oper. movements
- ☐ ☐ 2. Controls
- ☐ ☐ 3. Symbols
- ☐ ☐ 4. Emergency stop
- ☐ ☐ 5. Safety limit switches
- ☐ ☐ 6. Sound signal

#### 5. REPAIRS

- ☐ ☐ 1. Welding
- ☐ ☐ 2. Other repairs
- ☐ ☐ 3. Test loading

### DEFECTS AND REMARKS:

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Observed defects repaired on (d/m/y): \_\_\_\_/\_\_\_\_/20\_\_\_\_

Signature \_\_\_\_\_

Name in block letters \_\_\_\_\_

ENCLOSURES: ☐ Remarks continue overleaf

Distribution: Owner of Access Platform

☐ Other document, qty: \_\_\_\_\_

Access Platform manual

Inspector

## 28.4 ACCESS PLATFORM INSPECTION RECORD

(Fill in this record carefully and keep it with the Access Platform for at least two years.)

RE-INSPECTION (= maintenance check)

Date (d/m/y) \_\_\_\_/\_\_\_\_/20\_\_\_\_

Place of inspection \_\_\_\_\_

Inspector \_\_\_\_\_

Address \_\_\_\_\_

Name in block letters \_\_\_\_\_

### BASIC INFORMATION ON ACCESS PLATFORM

Manufacturer \_\_\_\_\_

Model and type \_\_\_\_\_

Importer/distributor \_\_\_\_\_

Serial No./manufacturing year \_\_\_\_\_

Owner \_\_\_\_\_

Address \_\_\_\_\_

TYPE OF MEWP: BC ☐ Boom platform

SC ☐ Scissor platform

MP ☐ Mast platform

CHASSIS: T ☐ Truck

MS ☐ MEWP (self-prop.)

TT ☐ Trailer (towed) M ☐ Monkey

BOOM: A ☐ Articulated boom

TB ☐ Telescope boom

AT ☐ Articulated telescope boom

S ☐ Scissor

FM ☐ Fixed mast

TM ☐ Telescope mast

OUTRIGGERS: HT ☐ Hydr. turning

HE ☐ Hydr. extending

M ☐ Mechanical NO ☐ No outriggers

### ISSUES TO BE INSPECTED

OK = In order

NO = To be repaired

#### 1. GENERAL REQUIREMENTS

OK NO

☐ ☐ 1. Manual

☐ ☐ 2. Locker for manual

☐ ☐ 3. Manufacturer's plate

☐ ☐ 4. Load plate

☐ ☐ 5. Warning plate

☐ ☐ 6. Plate for outriggers

☐ ☐ 7. Hazard colours

☐ ☐ 8. Operating zone scheme

☐ ☐ 9. Inspection plate

#### 2. SAFETY REQUIREMENTS

☐ ☐ 1. Indicator of horizont. level

☐ ☐ 2. Device to prevent raising

OK NO

☐ ☐ 3. No undoing of outrigg. support

☐ ☐ 4. Position of platform

☐ ☐ 5. Emergency lowering system

#### 3. GENERAL CONDITION

☐ ☐ 1. Chassis

☐ ☐ 2. Slewing ring

☐ ☐ 3. Booms

☐ ☐ 4. Platform

☐ ☐ 5. Outriggers

☐ ☐ 6. Transport position

☐ ☐ 7. Hydraulic system

☐ ☐ 8. Electrical system

#### 4. TEST OPERATION/LOADING

OK NO

Load \_\_\_\_\_ kg

☐ ☐ 1. Oper. movements

☐ ☐ 2. Controls

☐ ☐ 3. Symbols

☐ ☐ 4. Emergency stop

☐ ☐ 5. Safety limit switches

☐ ☐ 6. Sound signal

#### 5. REPAIRS

☐ ☐ 1. Welding

☐ ☐ 2. Other repairs

☐ ☐ 3. Test loading

### DEFECTS AND REMARKS:

Observed defects repaired on (d/m/y): \_\_\_\_/\_\_\_\_/20\_\_\_\_

Signature \_\_\_\_\_

Name in block letters \_\_\_\_\_

ENCLOSURES: ☐ Remarks continue overleaf

Distribution: Owner of Access Platform

☐ Other document, qty: \_\_\_\_\_

Access Platform manual

Inspector

## 28.5 ACCESS PLATFORM INSPECTION RECORD

(Fill in this record carefully and keep it with the Access Platform for at least two years.)

RE-INSPECTION (= maintenance check)

Date (d/m/y) \_\_\_\_/\_\_\_\_/20\_\_\_\_

Place of inspection \_\_\_\_\_

Inspector \_\_\_\_\_

Address \_\_\_\_\_

Name in block letters \_\_\_\_\_

### BASIC INFORMATION ON ACCESS PLATFORM

Manufacturer \_\_\_\_\_

Model and type \_\_\_\_\_

Importer/distributor \_\_\_\_\_

Serial No./manufacturing year \_\_\_\_\_

Owner \_\_\_\_\_

Address \_\_\_\_\_

TYPE OF MEWP: BC ☐ Boom platform

SC ☐ Scissor platform

MP ☐ Mast platform

CHASSIS: T ☐ Truck

MS ☐ MEWP (self-prop.)

TT ☐ Trailer (towed)

M ☐ Monkey

BOOM: A ☐ Articulated boom

TB ☐ Telescope boom

AT ☐ Articulated telescope boom

S ☐ Scissor

FM ☐ Fixed mast

TM ☐ Telescope mast

OUTRIGGERS: HT ☐ Hydr. turning

HE ☐ Hydr. extending

M ☐ Mechanical

NO ☐ No outriggers

### ISSUES TO BE INSPECTED

OK = In order

NO = To be repaired

#### 1. GENERAL REQUIREMENTS

OK NO

☐ ☐ 1. Manual

☐ ☐ 2. Locker for manual

☐ ☐ 3. Manufacturer's plate

☐ ☐ 4. Load plate

☐ ☐ 5. Warning plate

☐ ☐ 6. Plate for outriggers

☐ ☐ 7. Hazard colours

☐ ☐ 8. Operating zone scheme

☐ ☐ 9. Inspection plate

#### 2. SAFETY REQUIREMENTS

☐ ☐ 1. Indicator of horizont. level

☐ ☐ 2. Device to prevent raising

OK NO

☐ ☐ 3. No undoing of outrigg. support

☐ ☐ 4. Position of platform

☐ ☐ 5. Emergency lowering system

#### 3. GENERAL CONDITION

☐ ☐ 1. Chassis

☐ ☐ 2. Slewing ring

☐ ☐ 3. Booms

☐ ☐ 4. Platform

☐ ☐ 5. Outriggers

☐ ☐ 6. Transport position

☐ ☐ 7. Hydraulic system

☐ ☐ 8. Electrical system

#### 4. TEST OPERATION/LOADING

OK NO

Load \_\_\_\_\_ kg

☐ ☐ 1. Oper. movements

☐ ☐ 2. Controls

☐ ☐ 3. Symbols

☐ ☐ 4. Emergency stop

☐ ☐ 5. Safety limit switches

☐ ☐ 6. Sound signal

#### 5. REPAIRS

☐ ☐ 1. Welding

☐ ☐ 2. Other repairs

☐ ☐ 3. Test loading

### DEFECTS AND REMARKS:



<sup>®</sup>**XS 240**

SELF-PROPELLED TELESCOPIC PLATFORM

Observed defects repaired on (d/m/y): \_\_\_\_/\_\_\_\_/20\_\_\_\_

Signature\_\_\_\_\_

Name in block letters\_\_\_\_\_

ENCLOSURES: ☐ Remarks continue overleaf  
☐ Other document, qty: \_\_\_\_\_

Distribution: Owner of Access Platform  
Access Platform manual  
Inspector



## Addendum 1 to EC TYPE-EXAMINATION CERTIFICATE No TUO 115/524/04

Machine	Mobile elevating work platform <b>NOSTOLIFT XS 240 D/B</b>
Manufacturer/ Customer	<b>Nostolift Oy</b>
Address	Ratakaari 11 FIN-27500 Kauttua FINLAND
Regulations	Machinery Directive 98/37/EC (VNp 1314/94)
Research report	TUO22-043651
Identification	Drawing: KESLA XS 240 D/B Technical data Outreach diagram: KESLA XS 240 D/B
Validity of certificate	From serial number XS2402003 Until 20.02.2009 Other conditions and limitations on the reverse side.

Tampere, November 22, 2006

VTT Technical Research Centre of Finland  
Notified body no 0537

  
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