ELECTRIC ARTICULATING BOOM LIFTS

Operator's manual

ELECTRIC ARTICULATING BOOM LIFTS

HA12IP (HA33JE) - HA15IP (HA43JE) - HA16PE - HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+)

2420332470 e01.12 EN

CONTENTS

D

OPERATING PRINCIPLE

E

DRIVING

CONTENTS

F

SPECIAL PROCEDURE

G

TECHNICAL CHARACTERISTICS

H

INTERVENTION REGISTER

You have just purchased a HAULOTTE® product

and we would like to thank you for your business.

1 - Operator's manual

As stated on the delivery slip, this manual is one of the documents in the on-board document holder provided upon delivery of your HAULOTTE® machine.

The operator manual is a translation of the original instructions.

Safe operation of this product can only be assured if you follow the operating instructions contained in this manual.

We would particularly like to draw your attention to 2 essential points :

- Compliance with safety instruction (machine, use, environment)
- Use of the equipment within the performance limits.

With regard to the designation of our equipment, we stress that this is purely for commercial purposes and not to be confused with the technical characteristics. Only the tables of technical characteristics should be used to study the suitability of the equipment for the intended use.

2 - After Sales Service

Our HAULOTTE Services® After Sales Service is at your disposal throughout your machine's service life to ensure optimal use of your HAULOTTE product..

- When contacting our After Sales Service, ensure that you provide the machine model and serial number.
- When ordering any consumables or spare parts, please use this manual and the Haulotte Essential catalogue to receive your genuine HAULOTTE spare parts, your only guarantee of parts interchangeability and correct machine operation..
- If there is an equipment malfunction involving a HAULOTTE® product, then contact HAULOTTE Services® immediately even if the malfunction does not involve material and/or bodily damage..
- HAULOTTE® must be informed in the event of an incident that either involves one of these products or has caused bodily injury or significant deterioration of property (personal property or the product); contact HAULOTTE Services® immediately (See : HAULOTTE Services® contact details)

3 - Compliance

We would like to remind you that HAULOTTE® complies with the provisions of any applicable directives applicable to this type of machine.

HAULOTTE advises you that NO modifications carried out without the written permission of HAULOTTE® will void the HAULOTTE warranty..

HAULOTTE® cannot be held liable for any changes to the technical specifications contained in this manual.

HAULOTTE® reserves the right to alter technical specifications and to make improvements or modifications to the machine without modifying this manual.

Certain options can modify the machine's operating characteristics and its associated safety. If your machine was originally delivered with options fitted, replacing a safety component associated with a particular options not require any particular precautions other than those associated with the installation itself (static test).

Otherwise, it is essential to follow the manufacturer's recommendations below :

- **Installation by authorised HAULOTTE® personnel only.**
- **Update the manufacturer's identification plate.**
- **Have stability tests carried out by a certified agency/competent person.**
- **Ensure label compliance.**

4 - HAULOTTE Services® contact details

HAULOTTE Services® contact details

	HAULOTTE FRANCE PARC DES LUMIERES 601 RUE NICEPHORE NIEPCE 69800 SAINT-PRIEST **TECHNICAL Department:** **+33 (0)820 200 089** **SPARE PARTS : +33 (0)820 205 344** FAX : +33 (0)4 72 88 01 43 E-mail : haulottefrance@haulotte.com www.haulotte.fr		HAULOTTE ITALIA VIA LOMBARDIA 15 20098 SAN GIULIANO MILANESE (MI) **TEL: +39 02 98 97 01** FAX: +39 02 9897 01 25 E-mail : haulotteitalia@haulotte.com www.haulotte.it		
	HAULOTTE HUBARBEITSBÜHNEN GmbH AN DER MÖHLINHALLE 1 D-79189 BAD KROZINGEN-HAUSEN **TEL : +49 (0) 7633 806 92-0** FAX : +49 (0) 7633 806 92-18 E.mail : haulotte@de.haulotte.com www.haulotte.de		HAULOTTE VOSTOK, OOO 3, ZHUKOVSKOGO STREET DOLGOPRUDNY 141700 MOSCOW REGION RUSSIAN FEDERATION **TEL/FAX : +7 495 579 57 17** E.mail : nkoval@haulottevostok.ru www.haulotte-international.com		HAULOTTE DO BRASIL AV. CECI, 608 – B 13 CEP: 06460-120 – TAMBORE BARUERI – SAO PAULO – BRASIL **TEL : +55 11 4208 4206** FAX : +55 11 4191 4677 E.mail : haulotte@haulotte.com.br www.haulotte.com.br
	HAULOTTE IBERICA C/ARGENTINA N° 13 - P.I. LA GARENA 28806 ALCALA DE HENARES MADRID **TEL : +34 902 886 455** TEL SAT : +34 902 886 444 FAX : +34 91 656 97 81 E.mail : iberica@haulotte.com www.haulotte.es		HAULOTTE POLSKA Sp. Z.o.o. UL. GRANICZNA 22 05-090 RASZYN - JANKI **TEL : +48 22 720 08 80** FAX : +48 22 720 35 06 E-mail : haulottepolska@haulotte.com www.haulotte.pl		HAULOTTE MÉXICO, Sa de Cv Calle 9 Este, Lote 18, Civac, Jiutepec, Morelos CP 62500 Cuernavaca México **TEL : +52 77 7321 7923** FAX : +52 77 7516 8234 E-mail : haulotte.mexico@haulotte.com www.haulotte-international.com
	HAULOTTE PORTUGAL ESTRADA NACIONAL NUM. 10 KM. 140 - LETRA K 2695 - 066 BOBADELA LRS **TEL : + 351 21 995 98 10** FAX : + 351 21 995 98 19 E.mail : haulotteportugal@haulotte.com www.haulotte.es		HAULOTTE SINGAPORE Pte Ltd. No.26 CHANGI NORTH WAY, SINGAPORE 498812 **Parts and service Hotline: +65 6546 6179** FAX : +65 6536 3969 E-mail: haulotteasia@haulotte.com www.haulotte.sg		HAULOTTE MIDDLE EAST FZE PO BOX 293881 Dubaï Airport Free Zone DUBAÏ United Arab Emirates **TEL : +971 (0)4 299 77 35** FAX : +971 (0) 4 299 60 28 E-mail : haulottemiddle-east@haulotte.com www.haulotte-international.com
	HAULOTTE SCANDINAVIA AB Taljegårdsgatan 12 431 53 Mölndal SWEDEN **TEL : +46 31 744 32 90** **FAX : +46 31 744 32 99** E-mail : info@se.haulotte.com spares@se.haulotte.com www.haulotte.se		HAULOTTE TRADING (SHANGHAI) Co. Ltd. #7 WORKSHOP No 191 HUA JIN ROAD MIN HANG DISTRICT SHANGHAI CHINA 201108 **TEL : +86 21 6442 6610** FAX : +86 21 6442 6619 E-mail : haulotteshanghai@haulotte.com www.haulotte.cn		HAULOTTE ARGENTINA Ruta Panamericana Km. 34,300 (Ramal A Escobar) 1615 Gran Bourg (Provincia de Buenos Aires) Argentina **TEL.: +54 033 27 45 21 91** FAX. +54 033 27 45 72 19 E-mail : haulotteargentina@haulotte.com www.haulotte-international.com
	HAULOTTE UK Ltd STAFFORD PARK 6 TELFORD - SHROPSHIRE TF3 3AT **TEL : +44 (0)1952 292753** FAX : + 44 (0)1952 292758 E.mail : salesuk@haulotte.com www.haulotte.co.uk		HAULOTTE GROUP / BILJAX 125 TAYLOR PARKWAY ARCHBOLD, OH 43502 – USA **TEL : +1 419 445 8915** FAX :+1 419 445 0367 Toll free : +1 800 537 0540 E.mail : sales@us.haulotte.com www.haulotte-usa.com		HAULOTTE DO BRASIL AV. CECI, 608 – B 13 CEP: 06460-120 – TAMBORE BARUERI – SAO PAULO – BRASIL **TEL : +55 11 4688 1295 / +55 11 4208 4206** FAX : +55 11 4191 4677 E.mail : americalatina@haulotte.com www.haulotte-international.com
	HAULOTTE NETHERLANDS BV Koopvaardijweg 26 4906 CV OOSTERHOUT - Nederland **TEL : +31 (0) 162 670 707** FAX : +31 (0) 162 670 710 E.mail info@haulotte.nl		HAULOTTE AUSTRALIA PTY Ltd 46 GREENS ROAD DANDENONG – VIC – 3175 **TEL : +61 (0)3 9792 1000** FAX : +61 (0)3 9792 1011 E.mail : sales@haulotte.com.au		

1 - Recommendations

1.1 - OPERATOR'S MANUAL

This operators manual is specific to the HAULOTTE® products listed on the cover page of this manual..

The operator manual does not replace the basic training required for all worksite equipment operators.

HAULOTTE® has compiled this manual to assist in safe and efficient operation of the products covered by the manual.

This manual must be kept on the machine (or in the cab in its storage case. The manual must be available to all operators and must be kept in good condition. Additional copies can be ordered from HAULOTTE Services®.

1.2 - SYMBOLS USED

Symbols are used to alert the operator to safety precautions or to highlight practical information.

Legend

Symbol	Meaning
	Danger : Risk of injury or death (work safety)
	Caution : Risk of material damage (work quality)
	Prohibition relating to work safety and quality
	Reminder : No identified risk, but a reminder of the need for common sense, good practice or pre-action prerequisites
	Cross-reference to another part of the manual (see section or sheet)
	Cross-reference to another manual (see manual)
	Cross-reference to repairs (contact HAULOTTE Services®)
N.B. :	Additional technical information

1.3 - LABEL COLORS

The potential dangers and any specific regulations are indicated around the product by labels and identification plates.

The labels must be kept in good condition. Additional labels can be obtained from HAULOTTE Services®.

Familiarize yourself with the labels and their respective color codes.

Label color code

Labels	Color	Meaning
	Red	Potentially fatal danger
	Orange	Risk of serious injury
	Yellow	Risk of material damage and/or minor injury
	Other	Additional technical information
	Green	Maintenance operation or information

Label color code-For Russia and the Ukraine only

Labels	Color	Meaning
	Red	Prohibitions - Danger
	Yellow	Warning : Risk of material damage and/or minor injury
	Blue	Precaution
	Blue	Information
	Other	Additional technical information

2 - Pre-operation instructions

2.1 - GENERAL INSTRUCTIONS

• The employer has the obligation to issue a driving permit to the operator.

• The employer is obliged to inform the operator of the local regulations.

Do not operate the product in the following situations :

- On soft, unstable or cluttered ground.
- With wind blowing faster than the permissible limit. Check the maximum value in the technical characteristics (Section G 1-Main characteristics). Consult the Beaufort scale (Section A 3.2.4-Risk of uncontrolled movement and overturning).
- Close to power lines. Respect the safety distance (Section A 3.2.3-Risk of electrocution).
- At ambient temperatures higher than 45 °C(113 °F) and lower than -15 °C(5 °F) . Consult HAULOTTE® if it is necessary to work outside this range.
- In an explosive atmosphere.
- During storms (risk of lightning).
- In the presence of strong electromagnetic fields (radar, etc ...).

***N.B.**-:-You are advised to use the machine under "NORMAL" climatic conditions.. If you need to use the machine in climatic conditions likely to cause deterioration (humidity, temperatures outside the recommended ranges, salinity, corrosiveness, atmospheric pressure), contact HAULOTTE Services®. Reduce intervals between servicing.*

***N.B.**-:-Whilst the machine is not in use, care must be taken to ensure that if the machine is not locked in a secure location, that the unit key switch is removed to prevent unauthorised use of the machine.*

2.2 - SPECIFIC INSTRUCTIONS

Do not operate the product in the following situations :

- If the load in the platform exceeds the maximum load authorized. Check the maximum value in the technical characteristics (Section G 1-Main characteristics).
- If the ground slope is greater than the permissible limit. Check the maximum value in the technical characteristics (Section G 1-Main characteristics).
- For HA16PE only : In a non-ventilated area as the exhaust gases are toxic.
- At night unless the machine is equipped with the optional light.
- If the number of persons exceeds the permissible limit. Check the maximum value in the technical characteristics (Section G 1-Main characteristics)
- If the side force is greater than the permissible force. Check the maximum value in the technical characteristics (Section G 1-Main characteristics)

3 - Operation instructions

It is preferable to operate the machine on flat, consolidated ground (tarmac, concrete, etc.).

3.1 - PROHIBITIONS

- Never use a faulty machine (hydraulic leaks, worn tires, malfunction).
- Never operate the machine controls suddenly.
- Never place the machine against a structure to hold that structure in place.
- Never use the machine to tow other machines or to drag materials.
- Never expose the batteries or electrical components to water (pressure cleaner, rain).
- Never disable the safety devices.
- Do not make contact with a fixed or mobile obstacle. The contact can cause premature deterioration of the structure and lead to the corruption of certain safety elements.
- Do not climb onto the covers.
- Never use the machine with only an operator in the platform. It must be used by 2 operators.
- Never use the machine when the platform is cluttered.
- Never increase the surface area of the platform by using floor extensions or accessories not authorized by HAULOTTE®.
- Never leave the hydraulic cylinders fully extended or retracted before switching off the machine, or during an extended stop period.

- Never use the machine with material or objects hanging from the guardrail or the boom.
- Never use the machine with elements that can increase the wind force (panels).
- Never increase the working height by using attachments (ladder).
- Never use the guardrail as a means of access for climbing in or out of the platform. The basket can be easily accessed in its low position. For machines fitted with : Steps have been provided for this purpose where required.
- Never climb on the guardrail.
- Never use the machine without fully lowering the sliding midrail or without closing the platform entry gate.
- Never use the machine as a crane, material lift or elevator.
- Never use the machine for any other purpose than to transport people, their tools and material to the desired place.
- Never drive fast in narrow or cluttered areas. Keep speed under control in bends.
- Never tow the machine over extended distances (it must be transported on a trailer). In case of a machine failure, it is possible to tow it to load it onto a trailer (Section F 3Towing).

3.2 - POTENTIAL RISKS

3.2.1 - Risk of command system disturbance

Risk of disrupted movement. Maintain clearance from high voltage lines or magnetic fields.

3.2.2 - Risk of falling

When in the platform, respect the following instructions :

- Carry individual protection equipment adapted to the work conditions and local rules.
- Avoid contact with fixed or mobile obstacles (other machines).
- Ensure that the adjustable midrail is closed (low position and against the guardrails).
- Ensure that the gate is closed and locked (For machines fitted with).
- Hold on securely to the guardrails during elevation and driving.
- Do not sit, stand, or climb on the platform guard rails.
- Ensure that guard rails are correctly installed and locked.
- Always keep your feet firmly on the floor of the platform.
- Remove any trace of oil or grease from the steps, floor, handrail and the guardrails.
- Keep the floor of the platform free of debris.
- Do not leave the platform until it is fully in its stowed position.
- Do not climb on to the platform if the machine is not in the stowed position.

To climb up or climb down from the platform :

- The machine must be completely stowed.
- Face the machine to access the entry opening to the platform
- Keep 3 support points between the steps and the guardrail

3.2.3 - Risk of electrocution

The machine is not electrically insulated and does not offer any insulation protection.

The risks of electrocution are high in the following situations :

- Close to live power lines, consider the movement of the machine and the sway of the electric power lines particularly in windy conditions.
- In the event that you were to make accidental contact with a high voltage line, wait for the power to the line to be switched off before operating the machine.
- During storms.

Never use the machine as a welding earth.

Maintain a minimum safe distance with regard to power lines and electrical devices.

Respect the local rules and the minimum safety distance from power lines..

Minimum safety distance

Electric voltage	Minimum safety distance	
	Mètre	Feet
0 - 300 V	Avoid contact	
300 V - 50 kV	3	10
50 - 200 kV	5	15
200 - 350 kV	6	20
350 - 500 kV	8	25
500 - 750 kV	11	35
750 - 1000 kV	14	45

***N.B.**-:-This table is applicable, except when the local regulations are more strict.*

3.2.4 - Risk of uncontrolled movement and overturning

When in the platform, respect the following instructions :

- Before operating the machine on any indoor or outdoor surface (premises, bridge, truck, etc.), check that the surface is capable of supporting the combined machine weight and platform capacity. Check the maximum value in the technical characteristics (Section G 1-Main characteristics).
- Remain vigilant of driving direction reversal at the platform. Check the driving direction with the help of the red or green arrow on the chassis relative to the red and green arrows on the platform control box.
- Always ensure that the chassis is never driven any closer than 1 m(3 ft3 in) m to holes, bumps, tilts, obstructions, debris and ground coverings that may hide holes and other dangers.
- During motion direction reversal from the platform or ground control box, the joysticks or switches must be stopped in neutral position before reversing the direction of motion.
- Taking note of the overall load dimensions and weight, place the loads in the centre of the platform or distribute them it a uniform manner.
- If the tilt alarm sounds when the platform is raised, lower platform completely, then reposition machine onto level ground before raising platform.

A- Safety precautions

- **Do not drive the machine on slopes or tilts beyond the design limits. Check the maximum value in the technical characteristics(Section G 1-Main characteristics).**
- **Do not travel down slopes at high speed.**
- **Do not use the machine (elevation and travel) on an incline greater than that permitted by the slope sensor.**
- **Do not drive in reverse (direction opposite the field of vision).**
- **Never use the machine in winds exceeding the permissible limit.**
- **Do not increase the surface area exposed to wind. The greater the surface area exposed, the more unstable the machine becomes.**

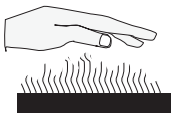
- **While driving, always place the arrow above the rear axle, in the direction of movement.**
- **While driving on a slope, always orient the machine in the direction of the slope.**
- **Do not pull or push objects with the boom.**

***N.B.**-:-The Beaufort scale measures the wind force with a graduation system. A wind speed range at 10 m(32 ft9 in) above flat, clear land is associated with each degree.*

Beaufort scale

Force	Meteorological description	Observed effects	m/s	km/h	mph
0	Calm	Smoke rises vertically.	0 - 0,2	0 - 1	0 - 0,62
1	Very light breeze	Smoke indicates the wind direction.	0,3 - 1,5	1 - 5	0,62 - 3,11
2	Light breeze	Wind felt on the face. Leaves rustle. Weather vanes turn.	1,6 - 3,3	6 - 11	3,72 - 6,84
3	Slight breeze	Leaves and small branches in constant movement. Flags move slightly.	3,4 - 5,4	12 - 19	7,46 - 11,8
4	Nice breeze	Dust and loose papers fly. Small branches bend.	5,5 - 7,9	20 - 28	12,43 - 17,4
5	Nice breeze	Small trees sway. Crested wavelets form on inland waters.	8,0 - 10,7	29 - 38	18,02 - 23,6
6	Cool wind	Large branches shake. Power lines and chimneys 'sing'. It is difficult to use an umbrella.	10,8 - 13,8	39 - 49	24,23 - 30,45
7	Strong cool wind	All trees shake. Walking against the wind becomes difficult.	13,9 - 17,1	50 - 61	31 - 37,9
8	Squall	Some branches break. Generally we cannot walk against the wind.	17,2 - 20,7	62 - 74	38,53 - 45,98
9	Strong squall	The wind causes slight damage to buildings. Tiles and chimney stacks are blown off.	20,8 - 24,4	75 - 88	46,60 - 54,68

3.2.5 - Risk of burns and explosion



For any intervention on the power sources, wear glasses and protective clothes (acid spray).

N.B.-:-*Acid is neutralised with sodium bicarbonate and water.*

- **Do not work in an explosive or flammable atmosphere (spark, flame, etc.).**
- **Do not touch the hot parts of the hydraulic power source (engine, filters, etc.).**
- **Do not bridge the battery terminals with metallic objects.**
- **Do not service the battery close to a spark, naked flame, glowing tobacco (emissions of gas).**

- For HA16PE only : Do not fill up the fuel tank, when the engine is running and/or close to a naked (open) flame.

3.2.6 - Risk of crushing and collision

When in the platform, respect the following instructions :

- During operation, keep all the parts of the body inside the platform.
- To position the machine close to obstacles, use the raise controls (arm, boom, etc.) instead of the drive controls.
- Ensure there are no obstacles (structure) in the work area.
- When driving, position the platform so as to provide the best visibility possible.
- Always obtain assistance from a guide on the ground when manoeuvring.
- All the personnel in the platform or on the within the vicinity of the machine must wear Personal Protection Equipment (safety helmet, etc.).
- When lifting or lowering the basket and during driving, the operator must check that the area above, below and to each side of the machine are clear.
- When moving the machine, ensure that the machine operating areas is free of persons and obstacles.

Do not operate other machines (crane, platform, etc.) in the work area.

Take account of the distance, reduced visibility and blind spots during use of the machine.

B - Intervenor's responsibility

1 - Owner's (or hirer's) responsibility

The owner (or hirer) has the obligation to inform operators of the instructions contained in the Operator Manual.

The owner (or hirer) has the obligation to renew all manuals or labels that are either missing or in bad condition. Additional copies can be ordered from HAULOTTE Services®.

The owner (or hirer) is responsible for applying the local regulations regarding operation of the machine.

2 - Employer's responsibility

The employer has the obligation to issue a driving permit to the operator.

***N.B.**-:-In accordance with the regulation in the country where the machine is operating, the user must be authorized to drive by the doctor of Labour Ministry.*

Forbid anyone from operating the machine who is :
- **Under the influence of drugs, alcohol, etc..**
- **subject to fits, loss of motor skills, dizziness, etc..**

3 - Trainer's responsibility

The trainer must be qualified to provide training to operators in accordance with applicable local regulations. The training must be given in an obstacle-free area until the trainee is considered competent as defined by the training program undertaken.

4 - Operator's responsibility

The operator must read and understand the contents of this manual and the labels affixed on the machine.

The operator must inform the owner (or hirer) if the manual or any labels are missing or in poor condition, and of any malfunction of the machine.

The operator may only operate the machine for the purpose intended by the manufacturer.

Only authorized and qualified operators may operate HAULOTTE® machines.

All operators must become familiar with and fully understand the emergency controls and how to operate the machine in an emergency as a component of their formal operator training.

The operator has the obligation stop using the machine in the event of malfunction or safety problems on the machine or in the work area and report the problem to his/her supervisor.

5 - Inspection and maintenance

The inspection and maintenance table below, identifies the role and the responsibilities of each party in periodical machine maintenance..

If the machine is operated in a hostile environment or intensively, increase the frequency of maintenance.

Inspections and maintenance

Type of intervention	Frequency	Person-in-charge	Intervenor	Reference document
Pre-delivery inspection	Before each delivery of sold, hired or resold equipment	Owner (or hirer)	Qualified HAULOTTE Services® technician	Operator's manual
Pre-operation inspection	Before operation or when the operator changes	Operator	Operator	Operator's manual
Periodical preventive maintenance	At the specified intervals (250 hours or 1 year)	Owner (or hirer)	On-site technician or qualified HAULOTTE Services® technician	Maintenance book
Periodical visit	2 times a year or at the latest 6 months after the last periodic visit, and according to the local regulations	Owner (or hirer)	Organization or technician approved by the employer or by the intermediary of HAULOTTE Services® in accordance with the HAULOTTE Services® contract	Maintenance book

1 - Identification

The manufacturers identification plate fixed on the chassis bears all pertinent information to identify the machine (Please see machine configuration).

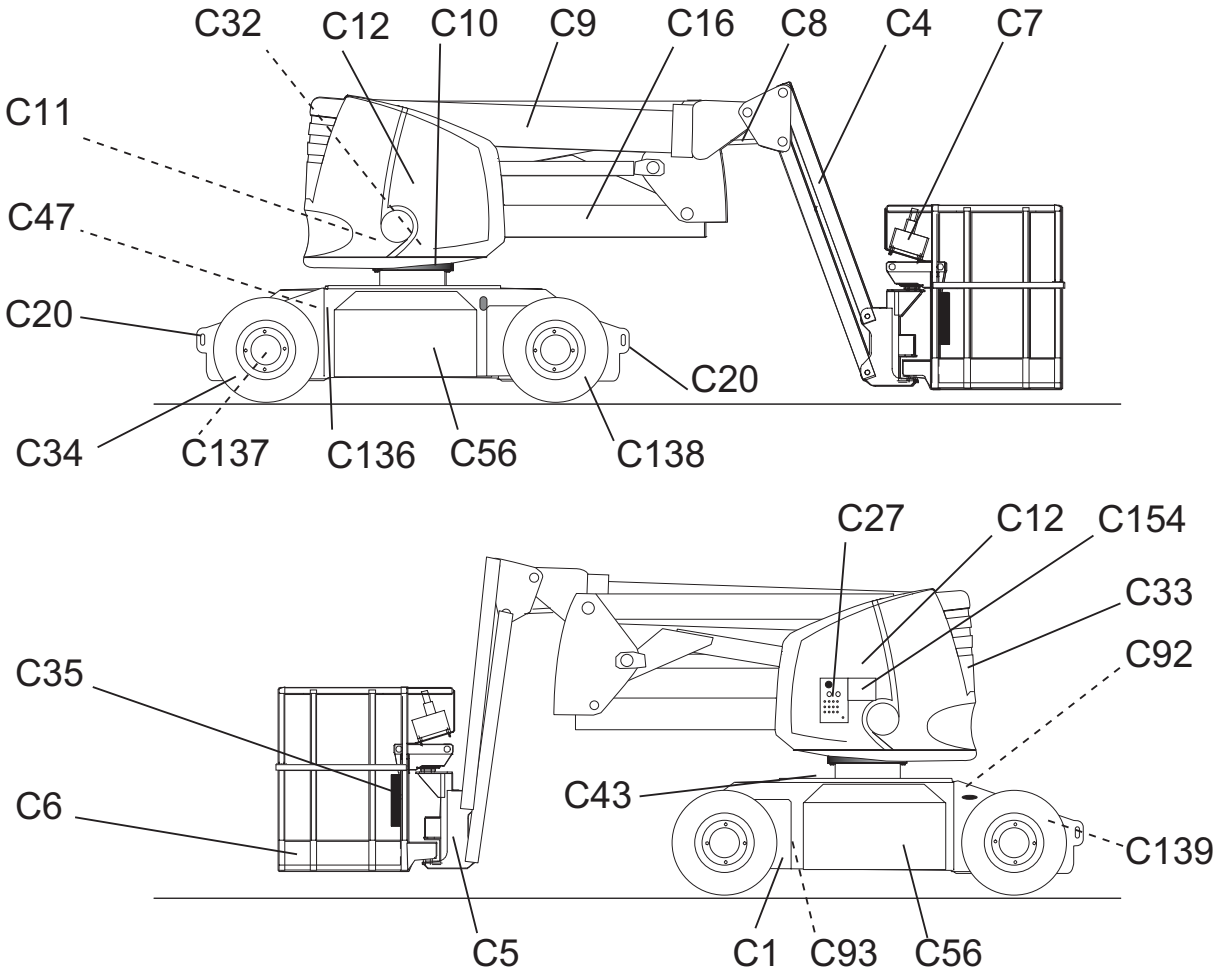
on HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) only :

The manufacturer's identification plate fixed on the side of the riser arm features all the necessary information to identify the machine.

For any request for information, intervention or spare parts, specify the type and serial number of the machine.

2 - Main components

HA12IP (HA33JE) - Major Component Location Diagram



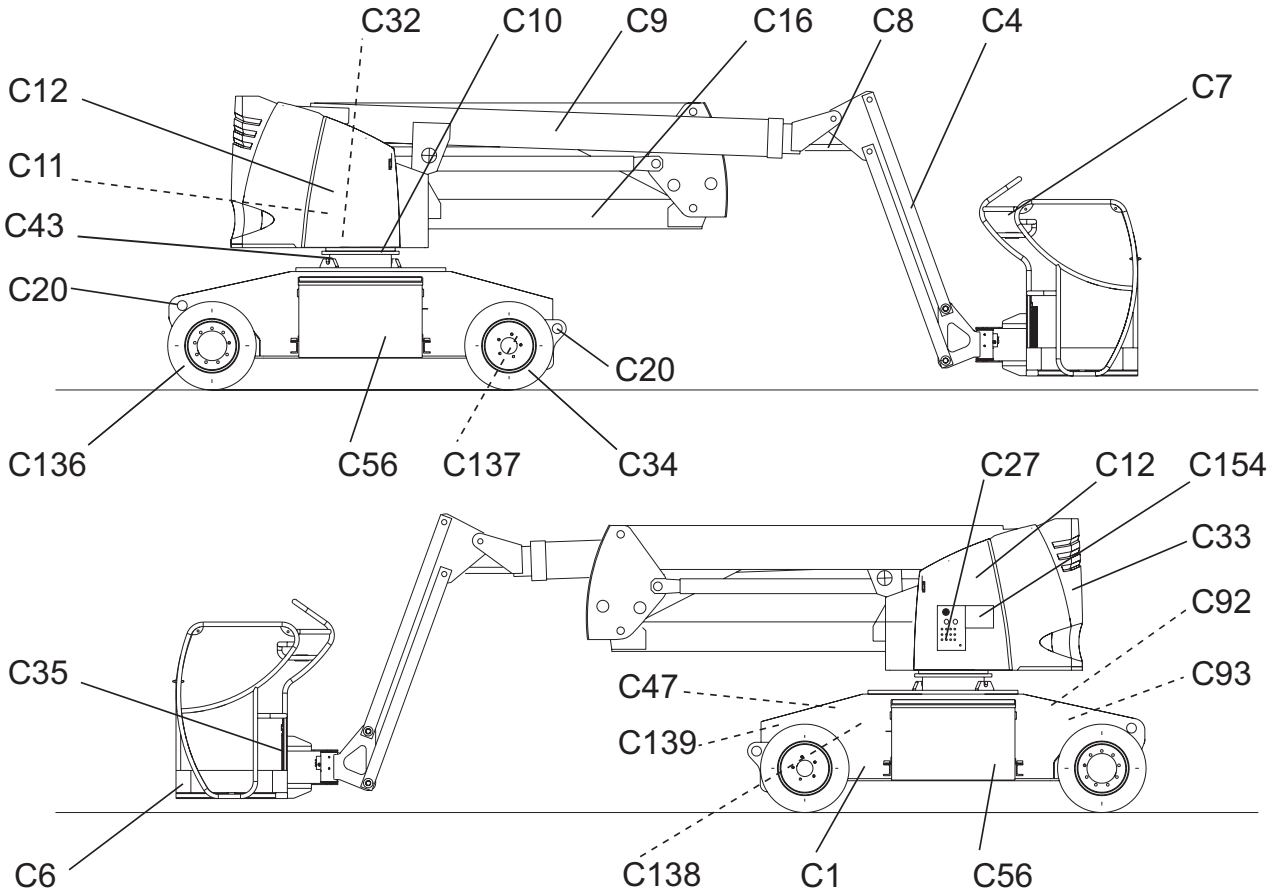
C - Machine layout

HA12IP (HA33JE) - Description of the components

Marking	Description
C1	Chassis
C4	Jib
C5	Platform support incorporating load limiter
C6	Platform
C7	Platform control box
C8	Level compensation cylinder
C9	Upper boom
C10	Slew ring
C11	Turntable assembly
C12	Side cover
C16	Lower arm
C20	Tie-down (and/or lifting) points
C27	Ground control box
C28	Slope sensor switch
C32	Turntable rotation gearbox
C33	Counterweight
C34	Drive wheels
C35	Document holder
C43	Turntable rotation lock pin
C47	Battery isolation switch
C56	Battery box
C92	Hydraulic filter
C93	Electric pump unit
C136	Steer wheels
C137	Electric drive motor
C138	Battery charger
C139	Electronic variable speed drive
C153	Hydraulic oil tank
C154	For Russia and the Ukraine only : Temperature probe relays

C - Machine layout

HA15IP (HA43JE) - Major Component Location Diagram



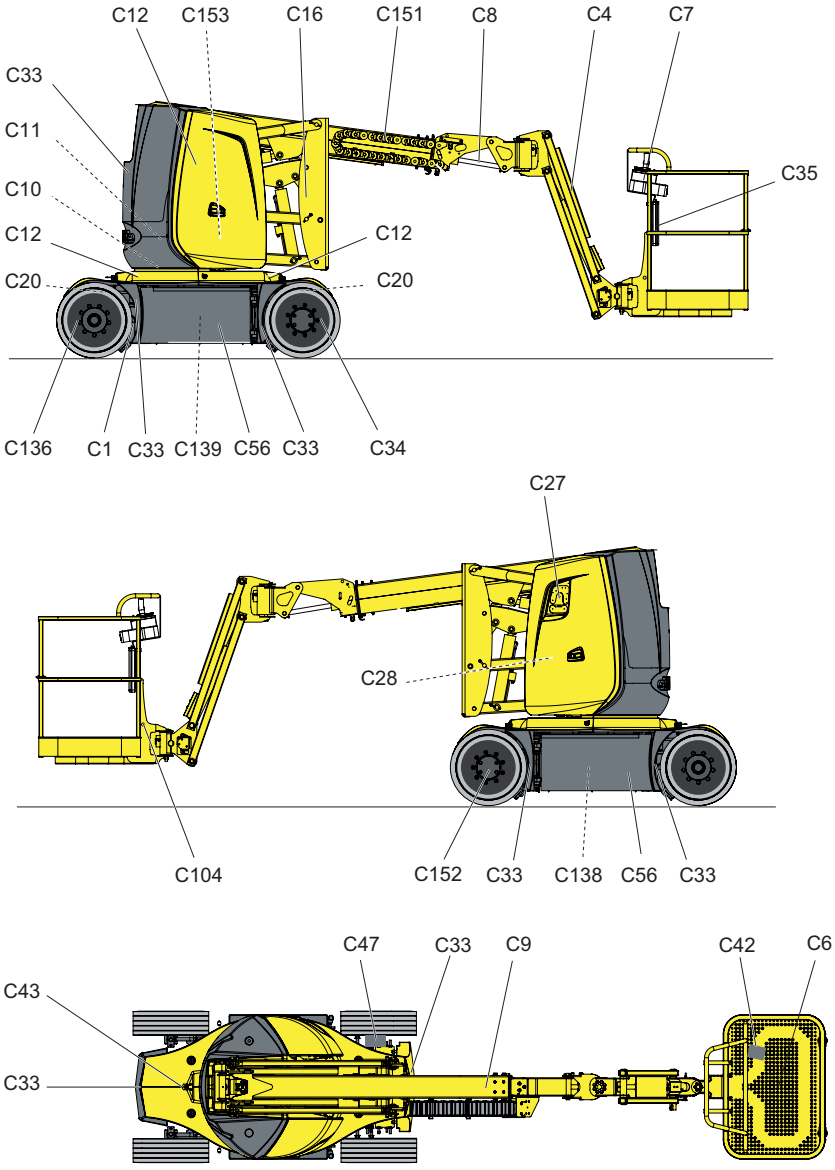
C - Machine layout

HA15IP (HA43JE) - Description of the components

Marking	Description
C1	Chassis
C4	Jib
C6	Platform
C7	Platform control box
C8	Level compensation cylinder
C9	Upper boom
C10	Slew ring
C11	Turntable assembly
C12	Side cover
C16	Lower arm
C20	Tie-down (and/or lifting) points
C27	Ground control box
C28	Slope sensor switch
C32	Turntable rotation gearbox
C33	Counterweight
C34	Drive wheels
C35	Document holder
C43	Turntable rotation lock pin
C47	Battery isolation switch
C56	Battery box
C92	Hydraulic filter
C93	Electric pump unit
C136	Steer wheels
C137	Electric drive motor
C138	Battery charger
C139	Electronic variable speed drive
C153	Hydraulic oil tank
C154	For Russia and the Ukraine only : Temperature probe relays

C - Machine layout

HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+) - Major Component Location Diagram



Extérieur / *Outside*

Intérieur / *Inside*

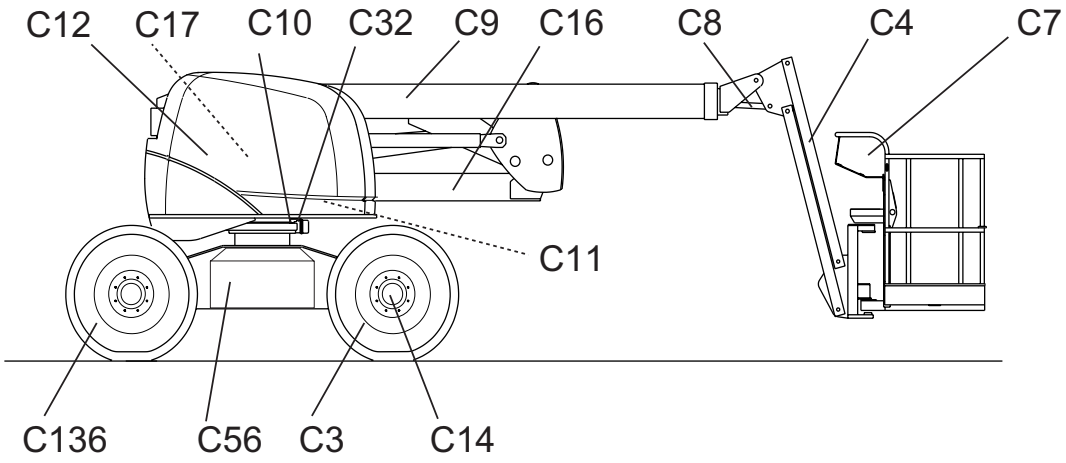
C - Machine layout

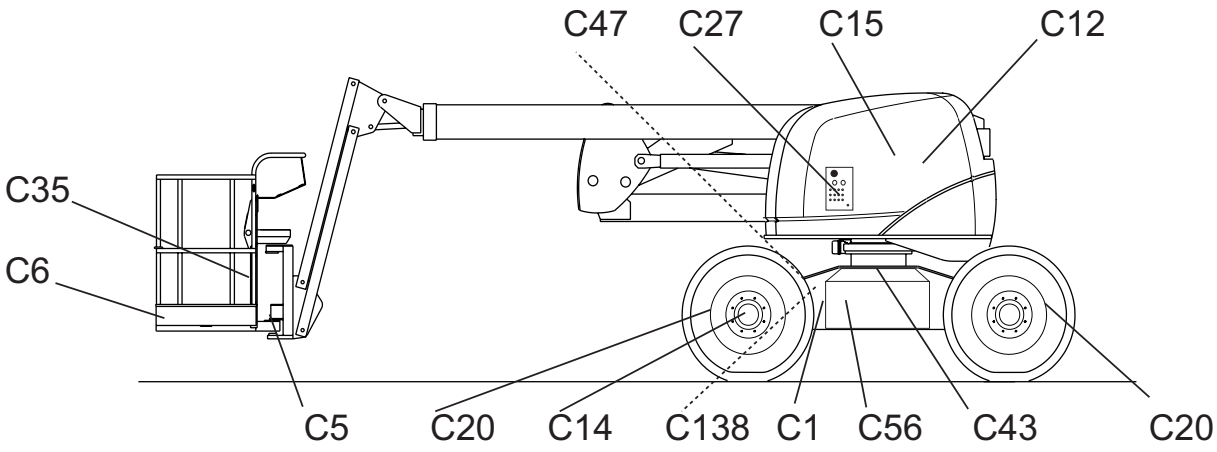
HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+) - Description of the components

Marking	Description
C1	Chassis
C4	Jib
C6	Platform
C7	Platform control box
C8	Level compensation cylinder
C9	Upper boom
C10	Slew ring
C11	Turntable assembly
C12	Side cover
C16	Lower arm
C20	Tie-down (and/or lifting) points
C27	Ground control box
C28	Slope sensor switch
C33	Counterweight
C34	Drive wheels
C35	Document holder
C42	'Enable Switch' pedal
C43	Turntable rotation lock pin
C47	Battery isolation switch
C56	Battery box
C104	Harness anchorage point
C136	Steer wheels
C138	Battery charger
C139	Electronic variable speed drive
C151	Cable carrier cat track
C152	Electric drive motor - Brake - Wheel reducer
C153	Hydraulic oil tank

C - Machine layout

HA16PE - Major Component Location Diagram





C - Machine layout

HA16PE - Description of the components

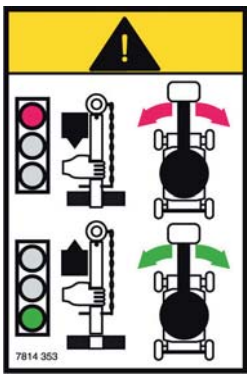
Marking	Description
C1	Chassis
C3	Rear drive and/or steer wheel
C4	Jib
C5	Platform support incorporating load limiter
C6	Platform
C7	Platform control box
C8	Level compensation cylinder
C9	Upper boom
C10	Slew ring
C11	Turntable assembly
C12	Side cover
C14	Hydraulic drive motor and reducer
C15	Right side cover (hydraulic oil tank and fuel tank)
C16	Lower arm
C17	Left side cover (engine, pump and starter battery)
C20	Tie-down (and/or lifting) points
C27	Ground control box
C28	Slope sensor switch
C32	Turntable rotation gearbox
C33	Counterweight
C35	Document holder
C43	Turntable rotation lock pin
C47	Battery isolation switch
C56	Battery box
C136	Steer wheels
C138	Battery charger
C153	Hydraulic oil tank

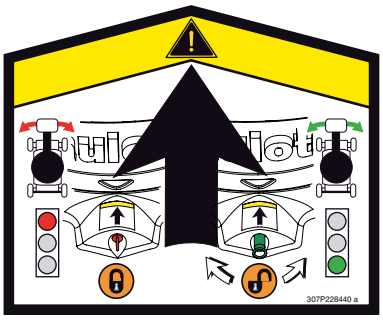
3 - Safety devices

3.1 - TURNTABLE ROTATION PIN

The turntable rotation pin allows turntable locking during machine transportation

After each transportation, remove the turntable rotation locking pin.





Turntable rotation locking pin (Please see machine configuration)

Turntable rotation locking pin (Please see machine configuration)

C - Machine layout

Turntable rotation locking pin (Please see machine configuration)

Turntable rotation locking pin (Please see machine configuration)

Turntable rotation locking pin (Please see machine configuration)

3.2 - SLIDING (OR SWINGING) INTERMEDIATE GUARDRAIL

The illustrations in this paragraph do not necessarily correspond to the range of products designated in the manual.

The platform is comprised of guardrails and a sliding mid-rail facilitating platform access.

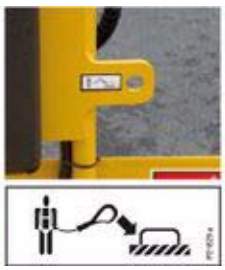
Do not restrain the sliding midrail to the guard rail.

3.3 - ANCHORAGE POINT (PLEASE SEE MACHINE CONFIGURATION)

The illustrations in this paragraph do not necessarily correspond to the range of products designated in the manual.

The machine is equipped with harness anchorage points points which accept a single harness per anchorage point. The anchorage points are identified by the presence of the Anchorage point label.

If the local regulation imposes the wearing of a harness, use the approved anchorage points.



4 - Labels

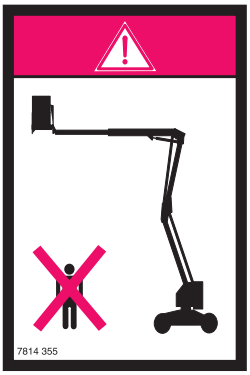
4.1 - CLASSIFICATION PLAN

4.1.1 - Red labels

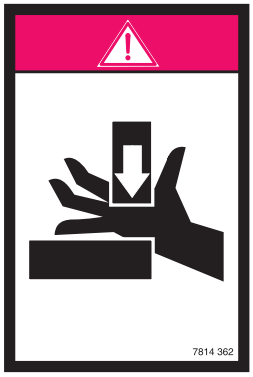
The red labels indicate a potentially fatal danger.

Common labels

R7

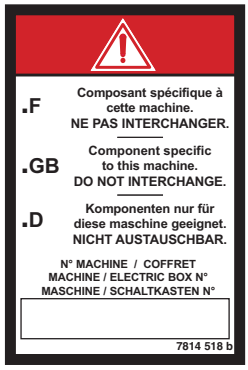


R3

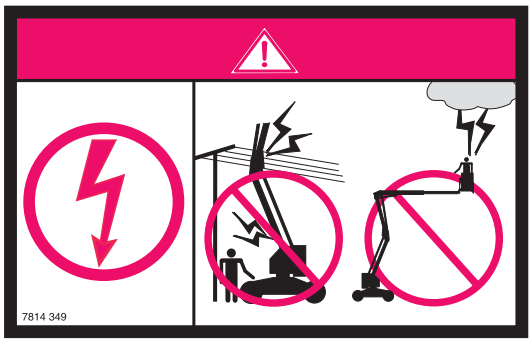


R4

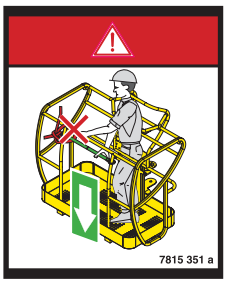
R6



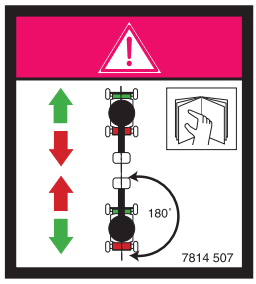
R5



R8



R2



R17

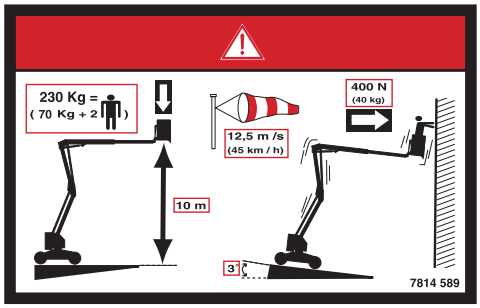
R21

R52

C - Machine layout

Specific labels HA12IP (HA33JE)

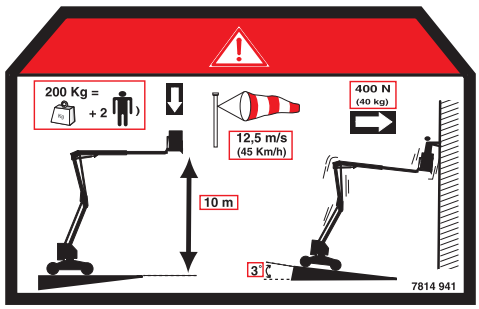
R1



R9

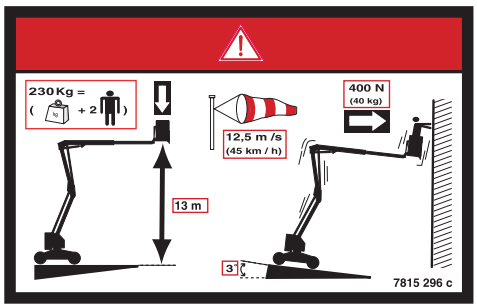
Specific labels HA12IP (HA33JE) Option Wide platform

R1



Specific labels HA15IP (HA43JE)

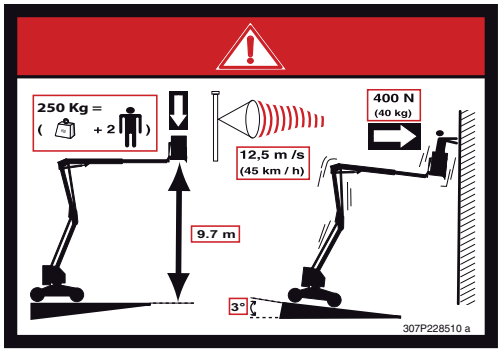
R1



R9

Specific labels HA12CJ (HA32CJ)

R1



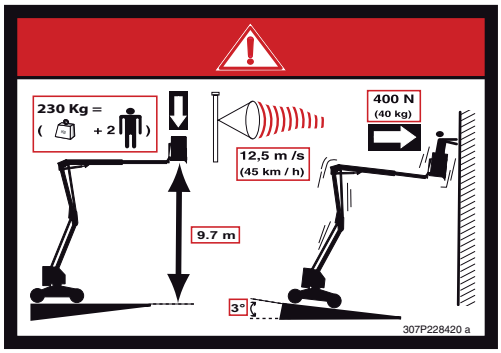
R9

R16

C - Machine layout

Specific labels HA12CJ+ (HA32CJ+)

R1

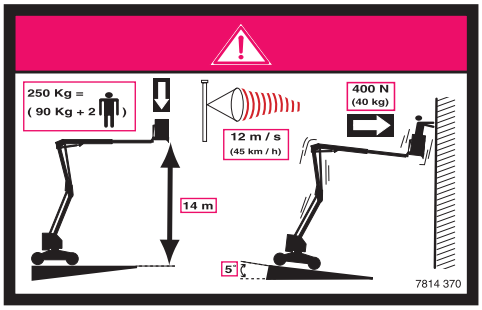


R9

R16

Specific labels HA16PE

R1



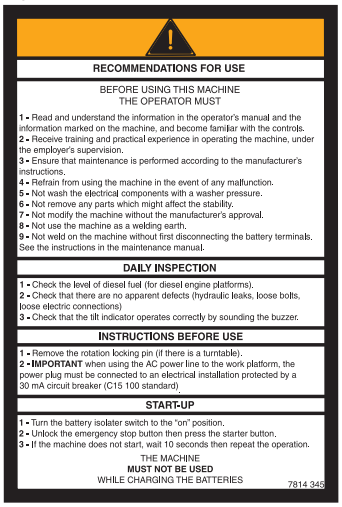
R9

4.1.2 - Orange labels

The orange labels indicate a risk of serious injury.

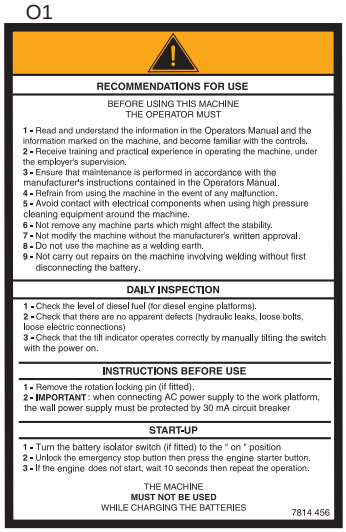
Common labels - CE

O1



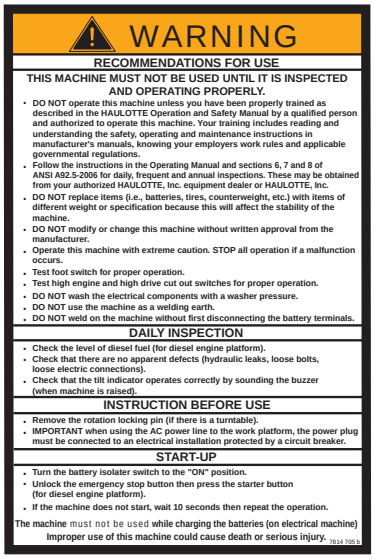
Common labels - AS

O1



Common labels - ANSI - CSA

O1



WARNING

RECOMMENDATIONS FOR USE

THIS MACHINE MUST NOT BE USED UNTIL IT IS INSPECTED AND OPERATING PROPERLY.

- DO NOT operate this machine unless you have been properly trained as described in the HAULOTTE Operation and Safety Manual by a qualified person and authorized to operate this machine. Your training includes reading and understanding the safety, operating and maintenance instructions in manufacturer's manuals, knowing your employers work rules and applicable governmental regulations.
- Follow the instructions in the Operating Manual and sections 6, 7 and 8 of ANSI A92.5-2006 for daily, frequent and annual inspections. These may be obtained from your authorized HAULOTTE, Inc. equipment dealer or HAULOTTE, Inc.
- DO NOT replace items (i.e., batteries, tires, counterweight, etc.) with items of different weight or specification because this will affect the stability of the machine.
- DO NOT modify or change this machine without written approval from the manufacturer.
- Operate this machine with extreme caution. STOP all operation if a malfunction occurs.
- Test foot switch for proper operation.
- Test high engine and high drive cut out switches for proper operation.
- DO NOT wash the electrical components with a washer pressure.
- DO NOT use the machine as a welding earth.
- DO NOT weld on the machine without first disconnecting the battery terminals.

DAILY INSPECTION

- Check the level of diesel fuel (for diesel engine platform).
- Check that there are no apparent defects (hydraulic leaks, loose bolts, loose electric connections).
- Check that the tilt indicator operates correctly by sounding the buzzer (when machine is raised).

INSTRUCTION BEFORE USE

- Remove the rotation locking pin (if there is a turntable).
- IMPORTANT when using the AC power line to the work platform, the power plug must be connected to an electrical installation protected by a circuit breaker.

START-UP

- Turn the battery isolater switch to the "ON" position.
- Unlock the emergency stop button then press the starter button (for diesel engine platform).
- If the machine does not start, wait 10 seconds then repeat the operation.

The machine must not be used while charging the batteries (on electrical machine)

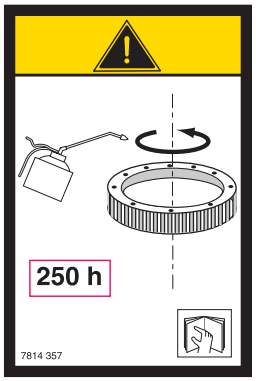
Improper use of this machine could cause death or serious injury. 7814 705 0

4.1.3 - Yellow labels

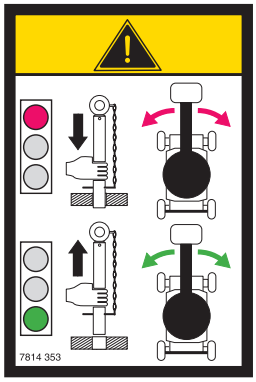
The yellow labels indicate a risk of material damage and/or minor injury.

Common labels

J1

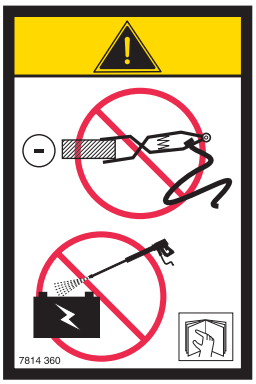


J2

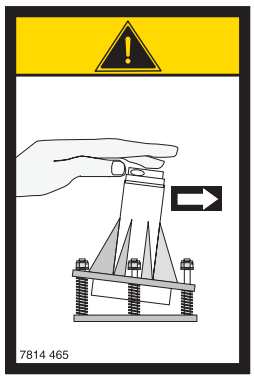


J3

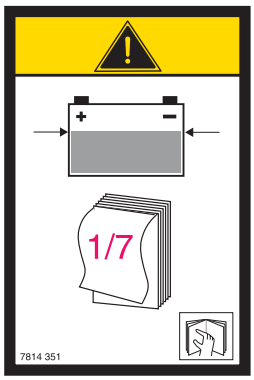
J4



J6

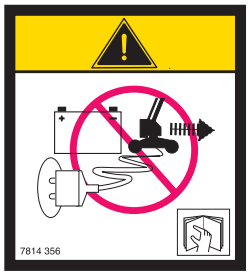


J13



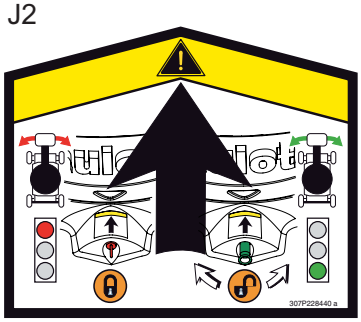
J10

J14

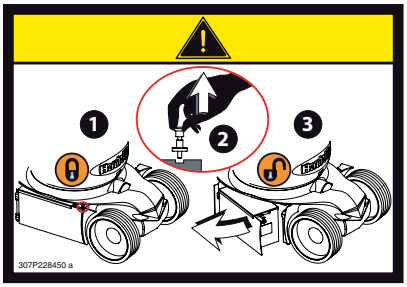


Specific HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) labels

J2



J33

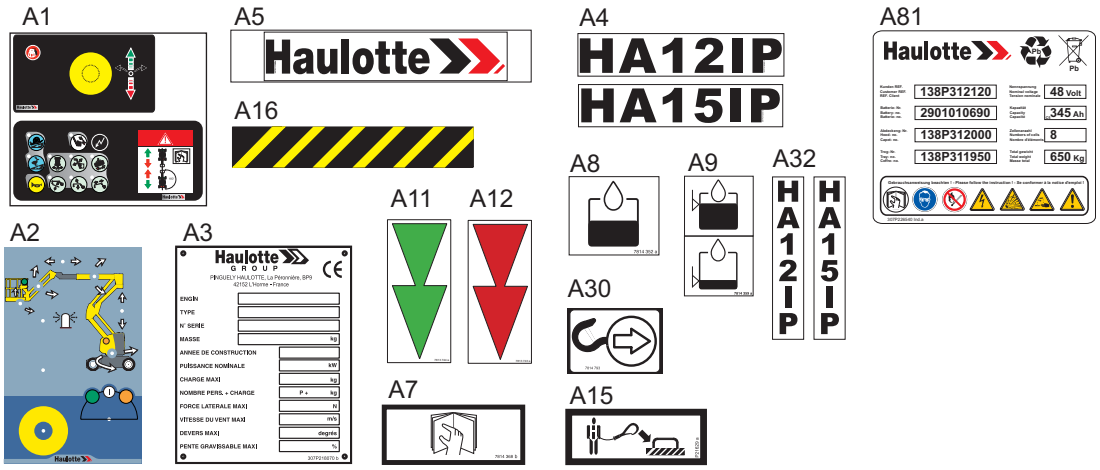


J34

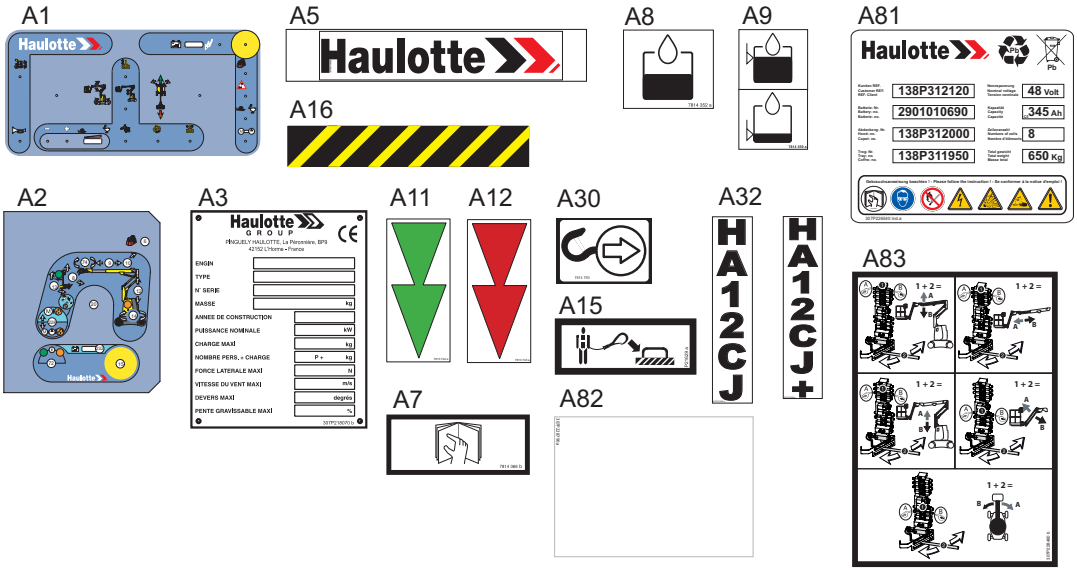
4.1.4 - Other labels

The other labels provide additional technical information.

Specific labels HA12IP (HA33JE) - HA15IP (HA43JE)



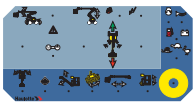
Specific labels HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+)



C - Machine layout

Specific labels HA16PE

A1

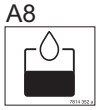


A5

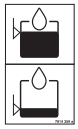
A4

A16

A8

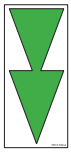


A9



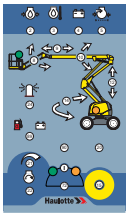
A32

A11

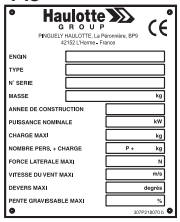


A12

A2



A3

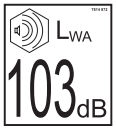


A30

A7

A15

A10



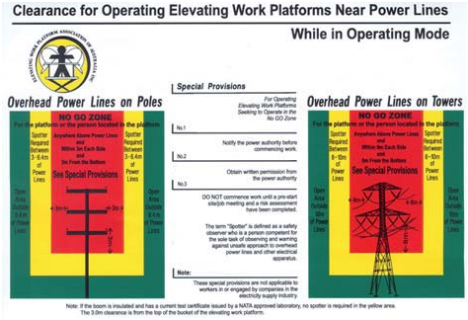
Specific labels AS

R16

R17

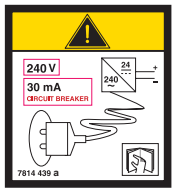
R15

A28



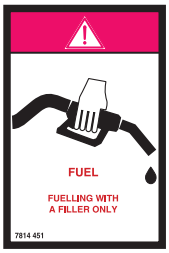
J10

J15



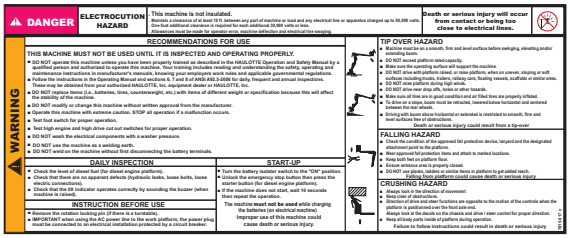
Specific labels AS : HA16PE

R14



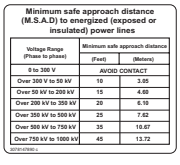
Specific labels ANSI

A29



O3

A22



Specific labels, optional

A8

4.1.5 - Green labels

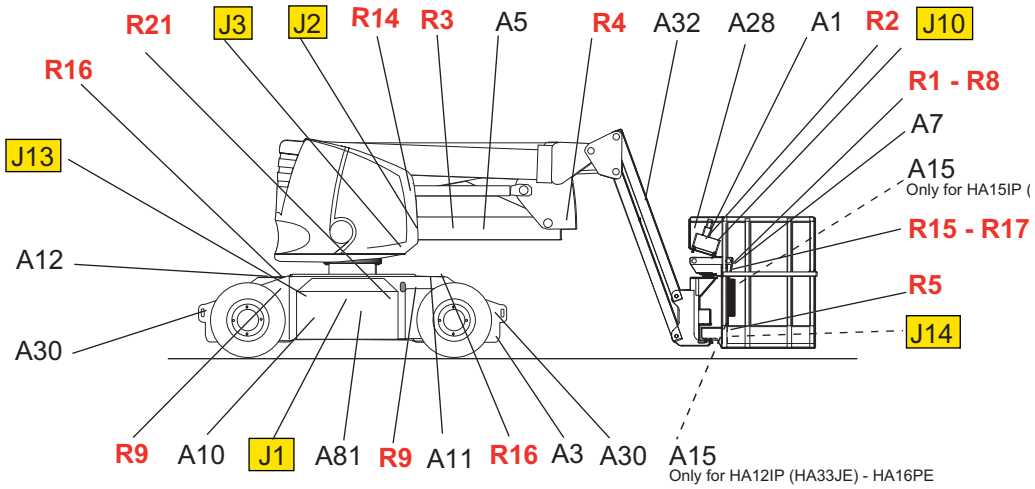
Green labels indicate maintenance, operations or information (CSA standard).

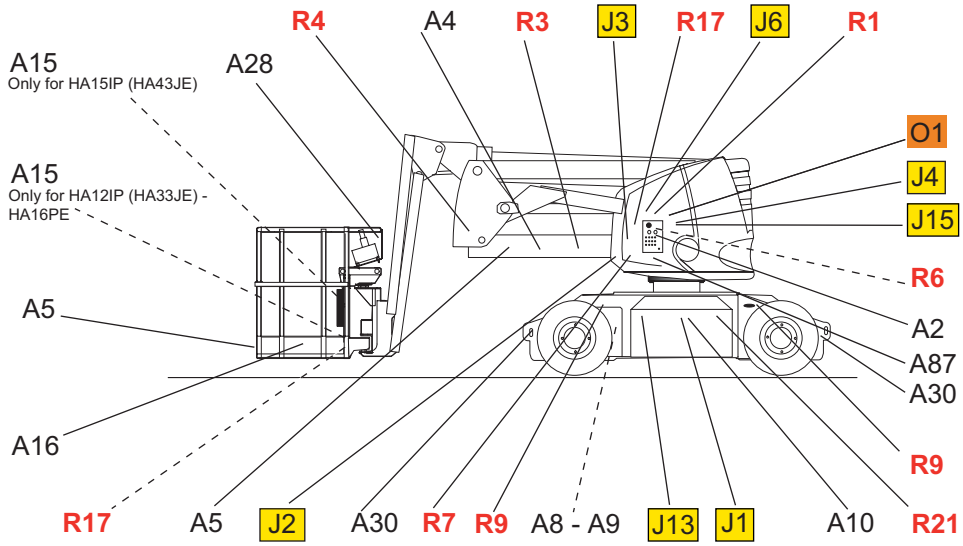
4.1.6 - Blue labels

N.B.-:-*The blue labels indicate information or a precaution to be taken in case of danger.*

4.2 - IDENTIFICATION

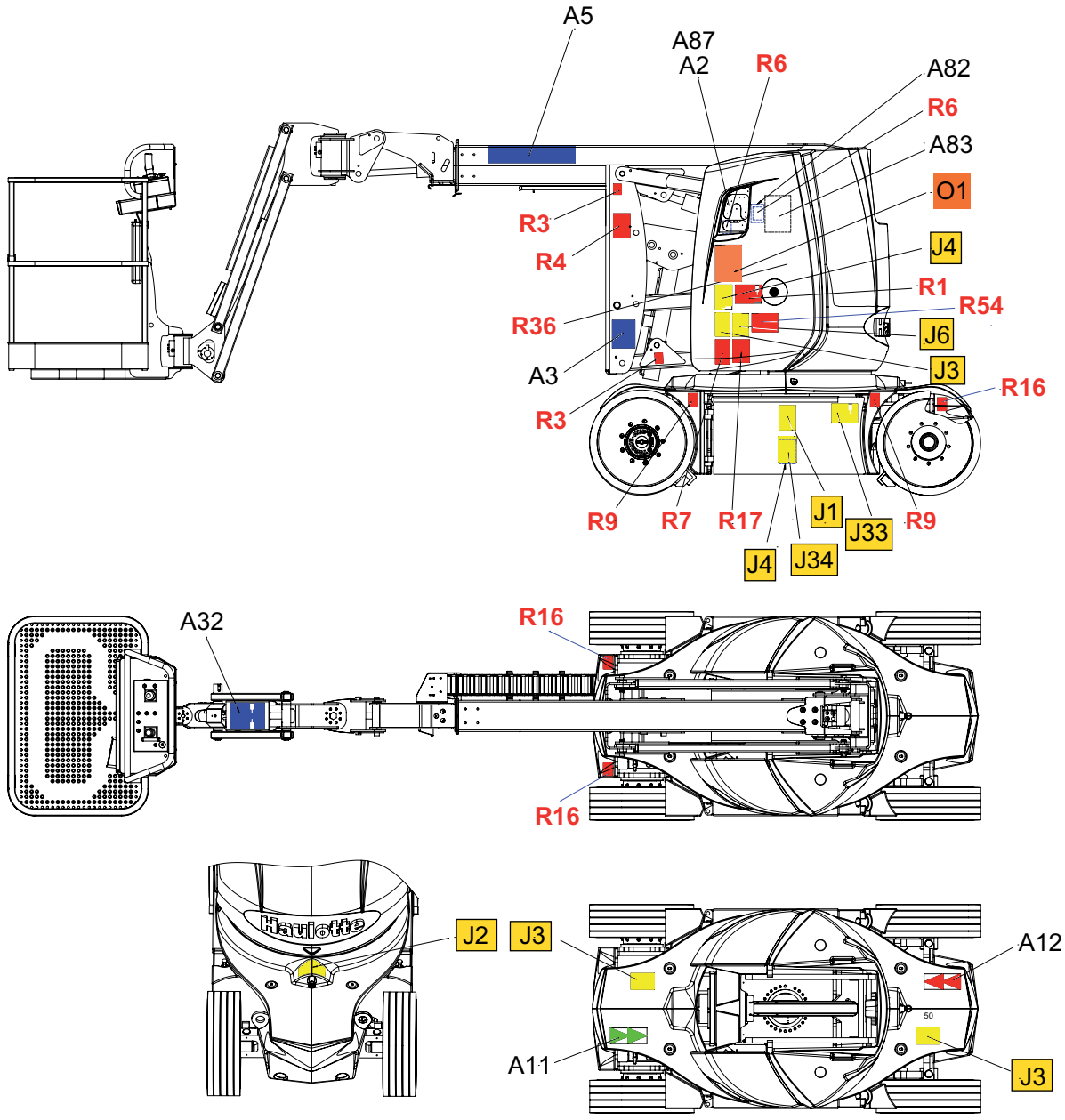
Location of the HA12IP (HA33JE) - HA15IP (HA43JE) - HA16PE labels - Standards CE and AS



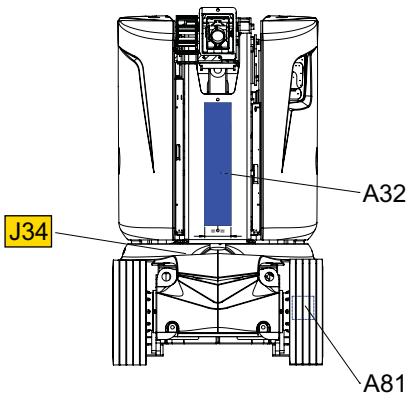


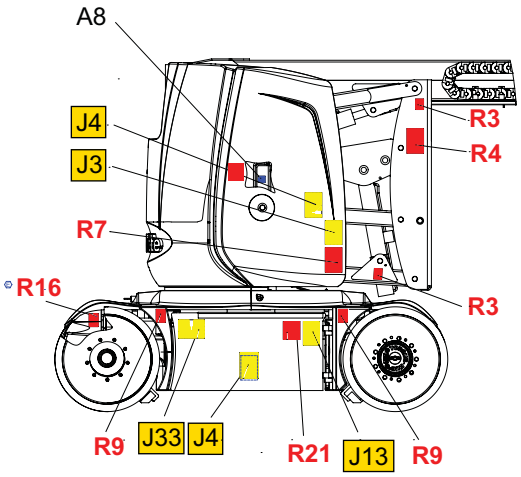
C - Machine layout

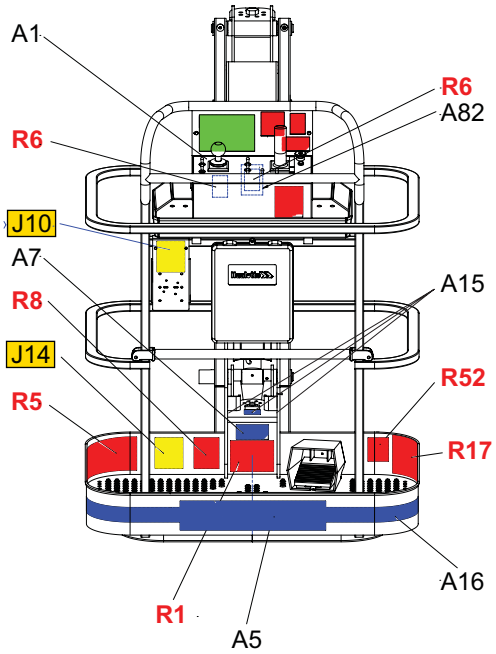
Location of the HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+) labels - Standards CE and AS

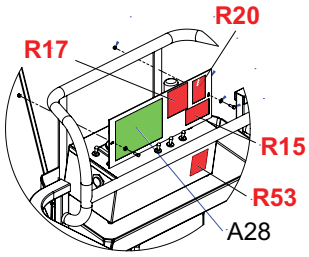


C - Machine layout









C - Machine layout

Label descriptions HA12IP (HA33JE) - HA15IP (HA43JE) - HA16PE - HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+) - Standards CE and AS

Color	Marking	Description	Quantity	
Red	R1	Height of the floor and load	2	For HA12IP (HA33JE) : 3078145890 For HA15IP (HA43JE) : 3078152960 For HA16PE : 3078143700 For HA12CJ (HA32CJ) : 307P228420 For HA12CJ+ (HA32CJ+) : 307P228510
Red	R1	Height of the floor and load(Option)	2	For HA12IP (HA33JE) only : 3078149410
Red	R2	Travel direction	1	For HA12IP (HA33JE) , HA15IP (HA43JE) and HA16PE : 3078145070
Red	R3	Risk of crushed hands	2	For HA12IP (HA33JE) , HA15IP (HA43JE) and HA16PE : 3078143620 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P219350
Red	R4	Risk of body crushing	2	307P228390
Red	R5	Danger of electrocution	1	3078143490
Red	R6	Do not interchange	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : AS standard only : 3078145180 For HA16PE, HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 3078145180
Red	R7	Do not park in the work area	For HA12IP (HA33JE) , HA15IP (HA43JE) and HA16PE : 1 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 2	3078143550
Red	R8	Close the sliding mid-rail	1	3078153510
Red	R9	Wheel load	4	For HA12IP (HA33JE) : 3078151550 For HA15IP (HA43JE) : 3078152060 For HA16PE : 3078151600 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P228410
Red	R14	Fuel filling-up	1	For HA16PE only : For AS standard only : 3078144510

C - Machine layout

Color	Marking	Description	Quantity	
Red	R15	Wearing of a safety harness is essential	1	For AS standard only : 3078144520
Red	R16	Load strength on each slings	4	For AS standard only : For HA12IP (HA33JE) , HA15IP (HA43JE) and HA16PE : 3078144490 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P229500
Red	R17	Do not travel down slopes at high speed	1	For CE standard only : For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078144490 For HA16PE, HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 3078143970 For AS standard only : 3078144360
Red	R20	Travel direction	1	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 3078145230
Red	R21	Protective clothing required	1	3078143610
Red	R36	Manual emergency maintenance procedure	1	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P228460
Red	R52	Driving with the battery compartment open is strictly forbidden	1	For AS standard only : 3078148240
Red	R53	Basket in compliance with EN 280 standard	1	For AS standard only : 3078144540
Red	R54	Emergency operation(s)	1	For AS standard only : 307P229510

C - Machine layout

Color	Marking	Description	Quantity	
Orange	O1	Operation instructions	1	In french (CE standard) : 3078143420 In english (Standards CE and AS) : 3078144560 In german (CE standard) : 3078143440 In spanish (CE standard) : 3078143430 In italian (CE standard) : 3078143460 In dutch (CE standard) : 3078143470 In danish (CE standard) : 3078144940 In finish (CE standard) : 3078145540 In portuguese (CE standard) : 3078145830 In swidish (CE standard) : 3078145940
Orange	O1	Operation instructions White background	1	In english (Standards CE and AS) : 307P227220
Yellow	J1	Greasing the turntable rotation gear	1	3078143570
Yellow	J2	Remove the blocking pin before rotating	For HA12IP (HA33JE) and HA15IP (HA43JE) : 1 For HA16PE : 2 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 1	For HA12IP (HA33JE) , HA15IP (HA43JE) and HA16PE : 3078143530 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P228440
Yellow	J3	Do not place your foot on the cover	For HA12IP (HA33JE) , HA15IP (HA43JE) and HA16PE : 2 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 4	3078143640
Yellow	J4	Do not use the machine as a welding earth	For HA12IP (HA33JE) , HA15IP (HA43JE) and HA16PE : 1 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 4	3078143600
Yellow	J6	Verification of tilt operation	1	3078144650

C - Machine layout

Color	Marking	Description	Quantity	
Yellow	J10	Socket	1	For HA12IP (HA33JE) , HA15IP (HA43JE) and HA16PE : CE standard : 3078143540 AS standard : 3078144570
Yellow	J10	Socket 110 V	1	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : For AS standard only : 3078147580
Yellow	J10	Socket 220 V	1	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 3078143540
Yellow	J10	Socket 240 V	1	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : For AS standard only : 3078144570
Yellow	J13	Battery verification	1	3078143510
Yellow	J14	Using the machine during battery charging is forbidden	1	3078143560
Yellow	J15	Battery charger socket	1	For HA12IP (HA33JE) , HA15IP (HA43JE) and HA16PE : AS standard : 3078144390
Yellow	J33	Battery compartment locking	2	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P228450
Yellow	J34	Lifting forbidden	2	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P228780
Other	A1	Platform control box	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P218040 For HA16PE : 307P217990 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P227720
Other	A2	Ground control box	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P218030 For HA16PE : 3078143040 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P227740
Other	A3	Identification plate	1	307P218070

C - Machine layout

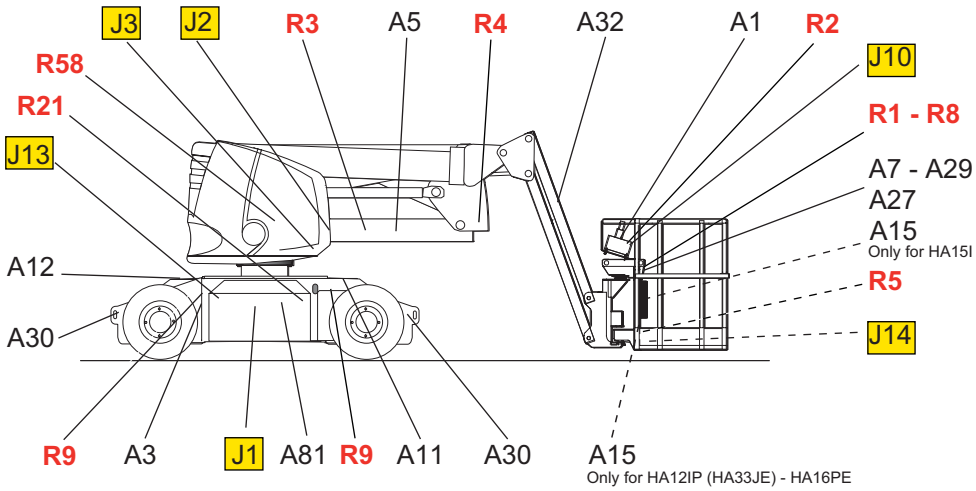
Color	Marking	Description	Quantity	
Other	A4	Machine name logo	1	For HA12IP (HA33JE) : 307P218260 For HA15IP (HA43JE) : 307P218250 For HA16PE : 307P218270
Other	A5	Small format HAULOTTE® logo	For HA16PE : 3 For HA12IP (HA33JE) and HA15IP (HA43JE) : 1 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 2	For HA16PE : 307P217770 For HA12IP (HA33JE) , HA15IP (HA43JE), HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) only : 307P217080
Other	A7	Read the operation manual	1	3078143680
Other	A8	Hydraulic oil	1	For HA12IP (HA33JE) , HA15IP (HA43JE) and HA16PE : 3078143520
Other	A8	Winter grade hydraulic oil	1	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P223700
Other	A8	Hydraulic oil for hot countries	1	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P223730
Other	A8	Biodegradable oil	1	3078148890
Other	A9	Upper and lower oil level	1	For HA12IP (HA33JE) , HA15IP (HA43JE) and HA16PE : 3078143590
Other	A10	Noise emission level	1	For HA16PE : For CE standard only : 3078148700
Other	A11	Front green drive direction arrow	1	3078137440
Other	A12	Rear red drive direction arrow	1	3078137430
Other	A15	Harness anchor point location	For HA12IP (HA33JE) , HA15IP (HA43JE) and HA16PE : 2 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 3	307P216290
Other	A16	Yellow and black adhesive tape	For HA12IP (HA33JE) , HA15IP (HA43JE) and HA16PE : 1 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 2	2421808660
Other	A28	Risks of electrocution	1	For AS standard only : 307P226440

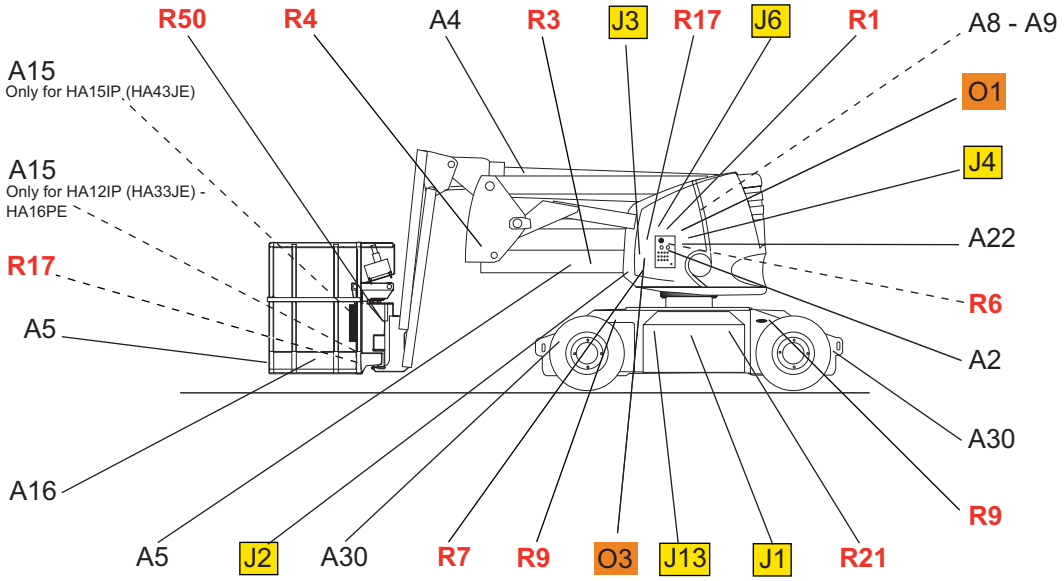
C - Machine layout

Color	Marking	Description	Quantity	
Other	A30	Machine tie down points	2	For HA12IP (HA33JE) , HA15IP (HA43JE) and HA16PE : 3078147930
Other	A32	Vertical machine name logo	1	For HA12IP (HA33JE) : 3078148310 For HA15IP (HA43JE) : 3078152050 For HA16PE : 3078148580
Other	A32	Machine name logo	2	For HA12CJ (HA32CJ) : 307P227900 For HA12CJ+ (HA32CJ+) : 307P227880
Other	A81	Battery	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226540
Other	A81	Battery unit	1	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : For CE standard only : 307P228000 For AS standard only : 307P229480
Other	A82	Plastic protection	2	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P228790
Other	A83	Manual emergency maintenance procedure	1	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P228460
Other	A87	Emergency control panel	1	For Italy only : 307P232500

C - Machine layout

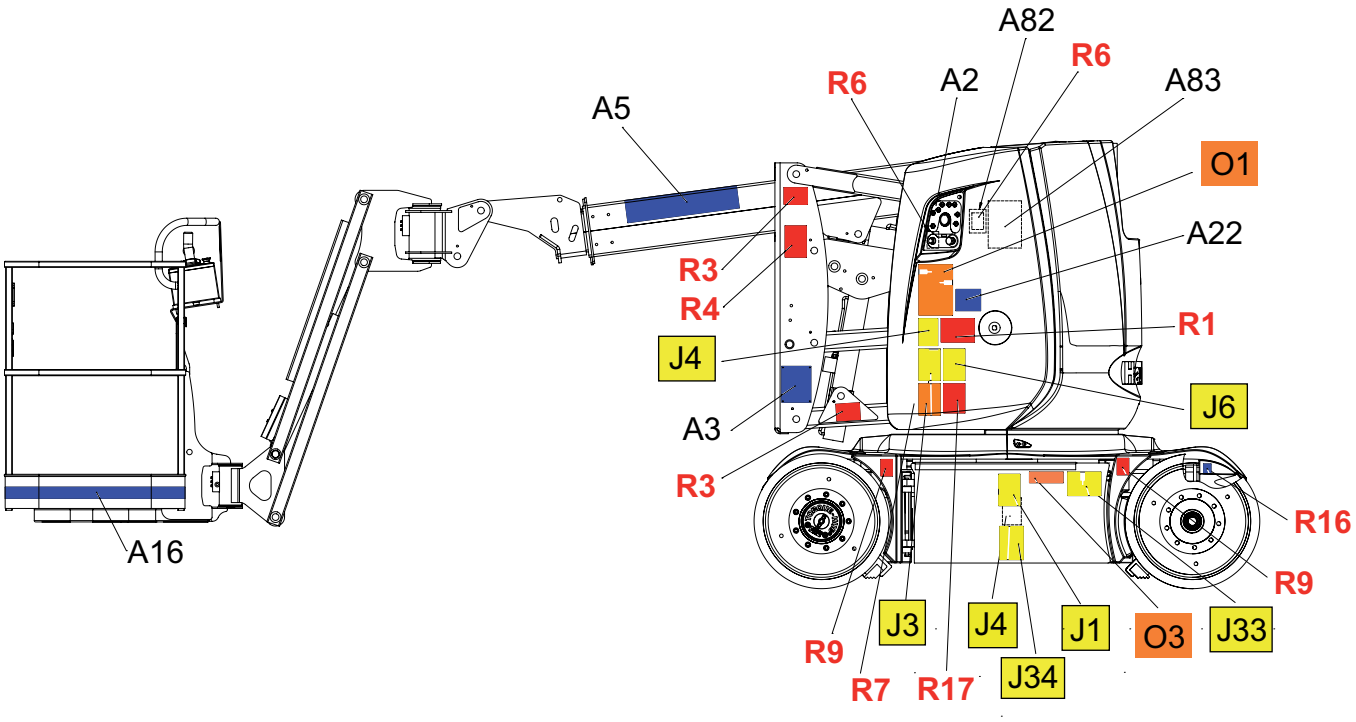
Location of the HA12IP (HA33JE) - HA15IP (HA43JE) - HA16PE labels - ANSI standard - CSA standard

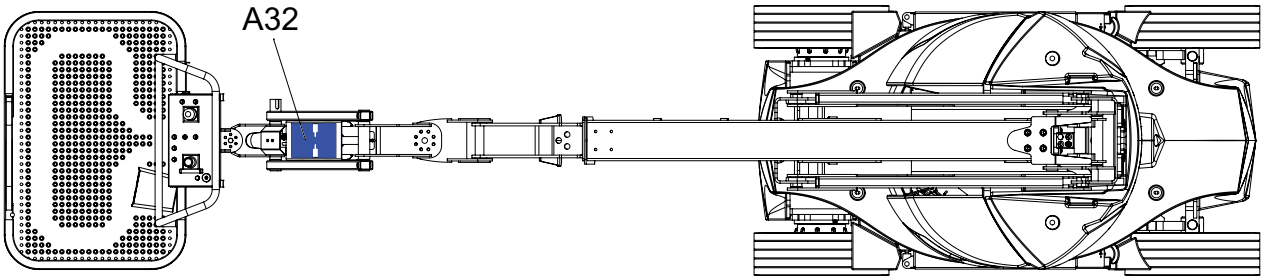


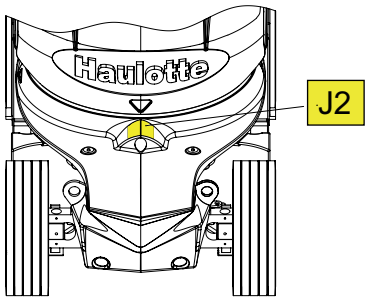


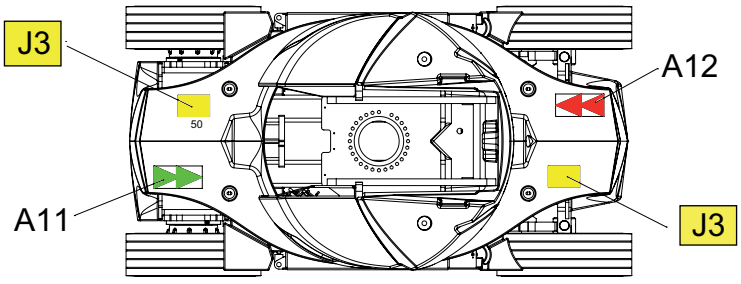
C - Machine layout

Location of HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) labels - ANSI standard - CSA standard

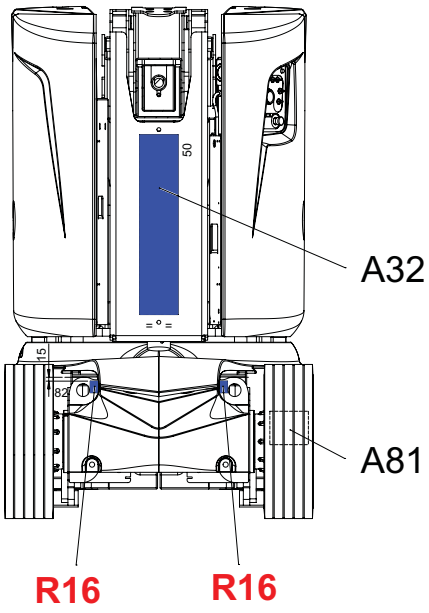


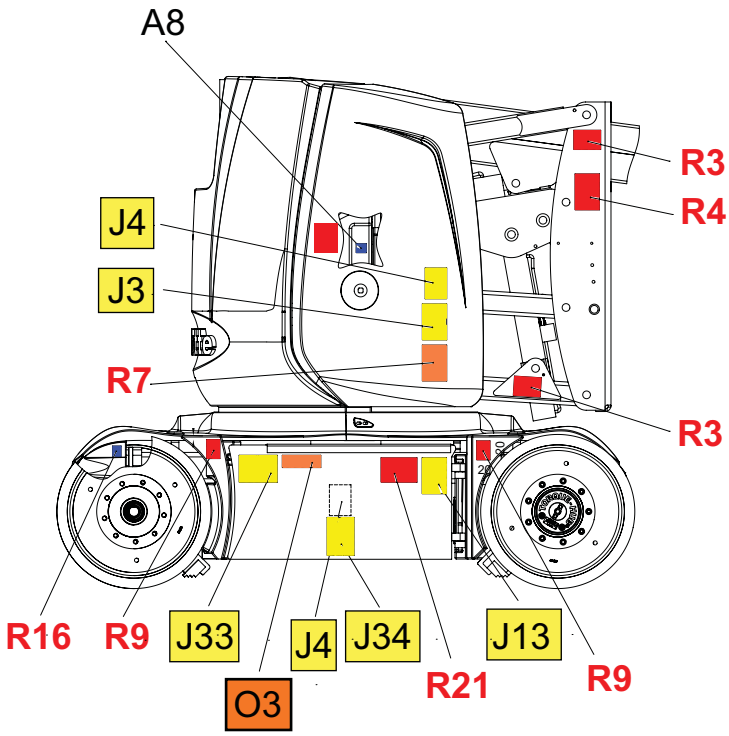


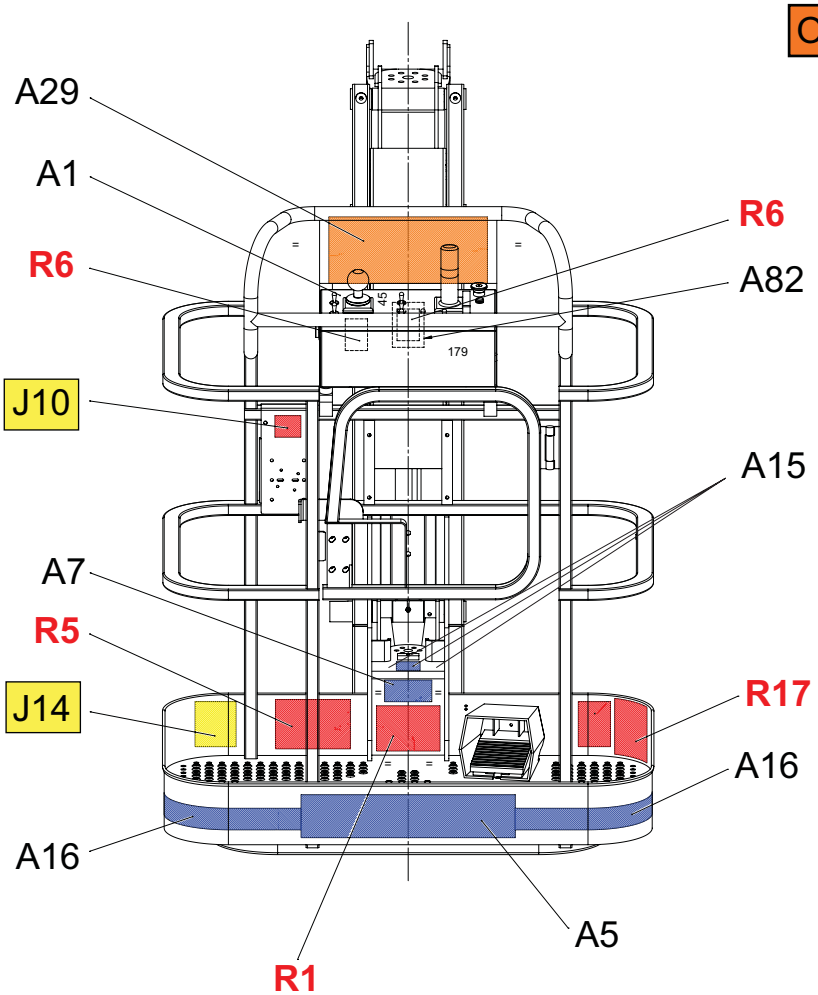




C - Machine layout







C - Machine layout

Label descriptions HA12IP (HA33JE) - HA15IP (HA43JE) - HA16PE - HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+) - Standards ANSI and CSA

Color	Marking	Description	Quantity	
Red	R1	Height of the floor and load	2	For HA12IP (HA33JE) : 3078148120 For HA15IP (HA43JE) : 3078148120 For HA12CJ (HA32CJ) : 307P228670 For HA12CJ+ (HA32CJ+) : 307P228680
Red	R2	Travel direction	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078147300
Red	R3	Risk of crushed hands	For HA12IP (HA33JE) and HA15IP (HA43JE) : 2 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 4	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078147240 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P228830
Red	R4	Risk of body crushing	2	3078147260
Red	R5	Danger of electrocution	1	3078147100
Red	R6	Do not interchange	For HA12IP (HA33JE) and HA15IP (HA43JE) : 1 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 4	3078147320
Red	R7	Do not park in the work area	For HA12IP (HA33JE) and HA15IP (HA43JE) : 1 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 2	3078147170
Red	R8	Close the sliding mid-rail	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078153630
Red	R9	Wheel load	4	For HA12IP (HA33JE) : 307P216650 For HA15IP (HA43JE) : 307P215110 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P228640
Red	R16	Load strength on each slings	4	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P229500

C - Machine layout

Color	Marking	Description	Quantity	
Red	R17	Do not travel down slopes at high speed	For HA12IP (HA33JE) and HA15IP (HA43JE) : 1 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 2	3078148140
Red	R20	Travel direction	1	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 3078145230
Red	R21	Protective clothing required	1	3078147350
Red	R50	Socket 110 V	1	3078147580
Red	R58	Oil viscosity	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P229300
Orange	O1	Operation instructions	1	3078147050
Orange	O3	Risks of explosion	For HA12IP (HA33JE) and HA15IP (HA43JE) : 1 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 2	3078148030
Yellow	J1	Greasing the turntable rotation gear	1	3078147190
Yellow	J2	Remove the blocking pin before rotating	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078147700 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P228650
Yellow	J3	Do not place your foot on the cover	For HA12IP (HA33JE) and HA15IP (HA43JE) : 2 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 4	3078147270
Yellow	J4	Do not use the machine as a welding earth	For HA12IP (HA33JE) and HA15IP (HA43JE) : 1 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 4	3078147220
Yellow	J6	Verification of tilt operation	1	3078147090
Yellow	J10	Socket	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078147580

C - Machine layout

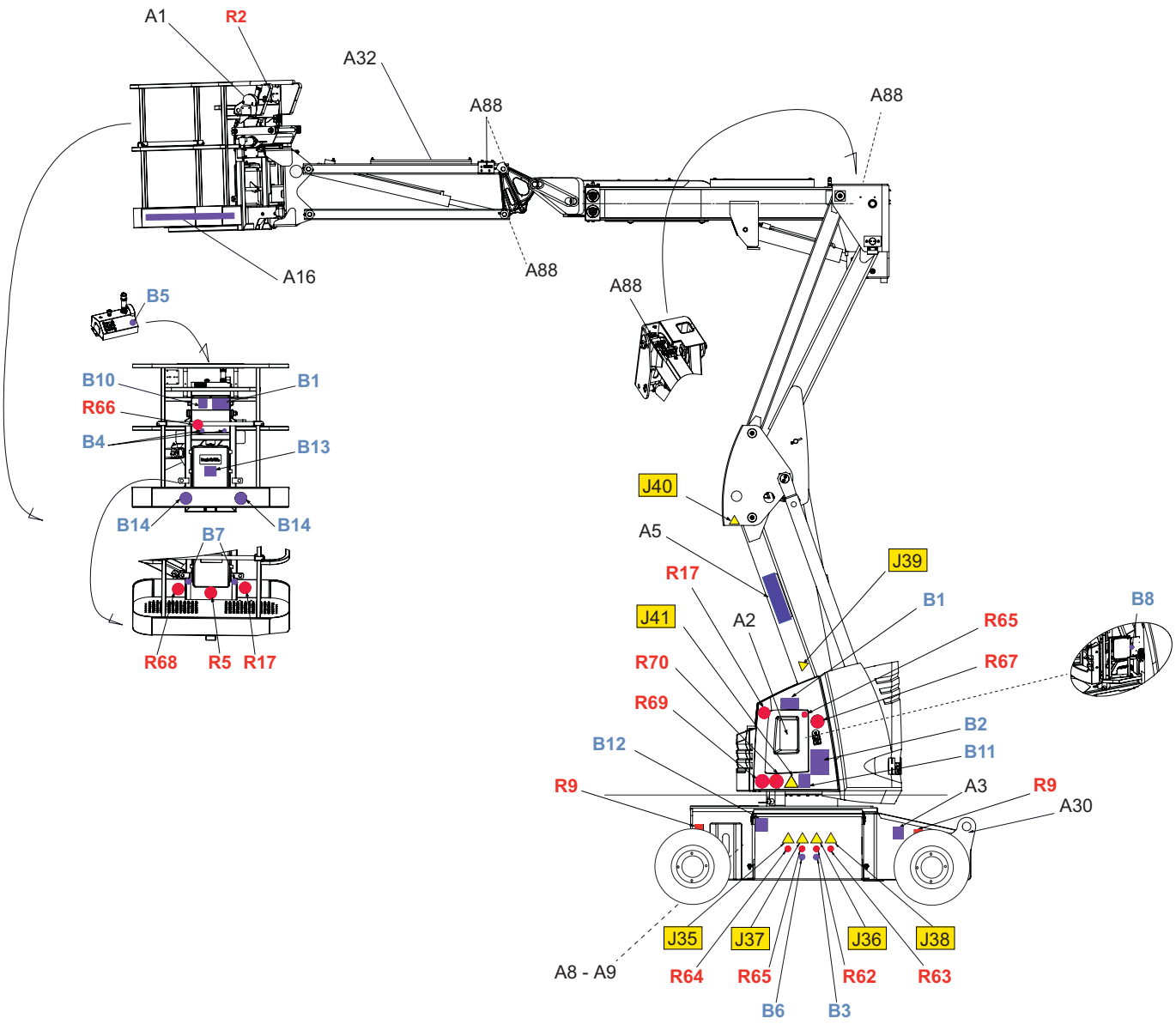
Color	Marking	Description	Quantity	
Yellow	J10	Socket 110 V	1	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 3078147580
Yellow	J13	Battery verification	1	3078147330
Yellow	J14	Using the machine during battery charging is forbidden	1	3078147370
Yellow	J33	Battery compartment locking	2	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P228660
Yellow	J34	Lifting forbidden	2	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P228810
Other	A1	Platform control box	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P218040 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P227720
Other	A2	Ground control box	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P218030 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P227740
Other	A3	Identification plate	1	307P217080
Other	A4	Machine name logo	1	For HA12IP (HA33JE) : 3078148150 For HA15IP (HA43JE) : 3078153610
Other	A5	Small format HAULOTTE® logo	For HA12IP (HA33JE) and HA15IP (HA43JE) : 1 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 2	307P217080
Other	A7	Read the operation manual	1	3078147290
Other	A8	Hydraulic oil	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078147140
Other	A8	Winter grade hydraulic oil	1	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P222400
Other	A8	Hydraulic oil for hot countries	1	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P225760
Other	A8	Biodegradable oil	1	3078148920
Other	A9	Upper and lower oil level	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078147210

C - Machine layout

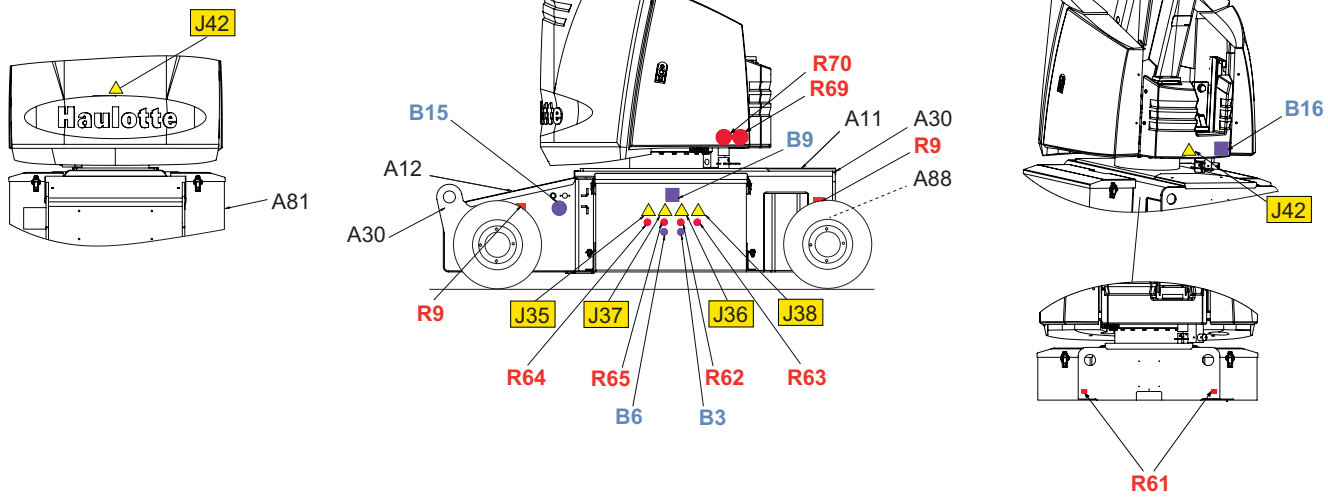
Color	Marking	Description	Quantity	
Other	A11	Front green drive direction arrow	1	3078147980
Other	A12	Rear red drive direction arrow	1	3078147970
Other	A15	Harness anchor point location	For HA12IP (HA33JE) and HA15IP (HA43JE) : 2 For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 3	3078147950
Other	A16	Yellow and black adhesive tape	1	2421808660
Other	A22	Voltage table	1	3078147890
Other	A27	Permissible load	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P200080
Other	A29	Summary safety instructions	1	3078150170
Other	A30	Machine tie down points	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078147930
Other	A32	Vertical machine name logo	1	For HA12IP (HA33JE) : 3078148320 For HA15IP (HA43JE) : 3078153620
Other	A32	Machine name logo	2	For HA12CJ (HA32CJ) : 4000016170 For HA12CJ+(HA32CJ+) : 4000016030
Other	A81	Battery	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226540
Other	A81	Battery unit	1	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P228000
Other	A82	Plastic protection	2	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P228790
Other	A83	Manual emergency maintenance procedure	1	For HA12CJ (HA32CJ) and HA12CJ+ (HA32CJ+) : 307P228460

C - Machine layout

Location of the HA12IP (HA33JE) labels - Russia version

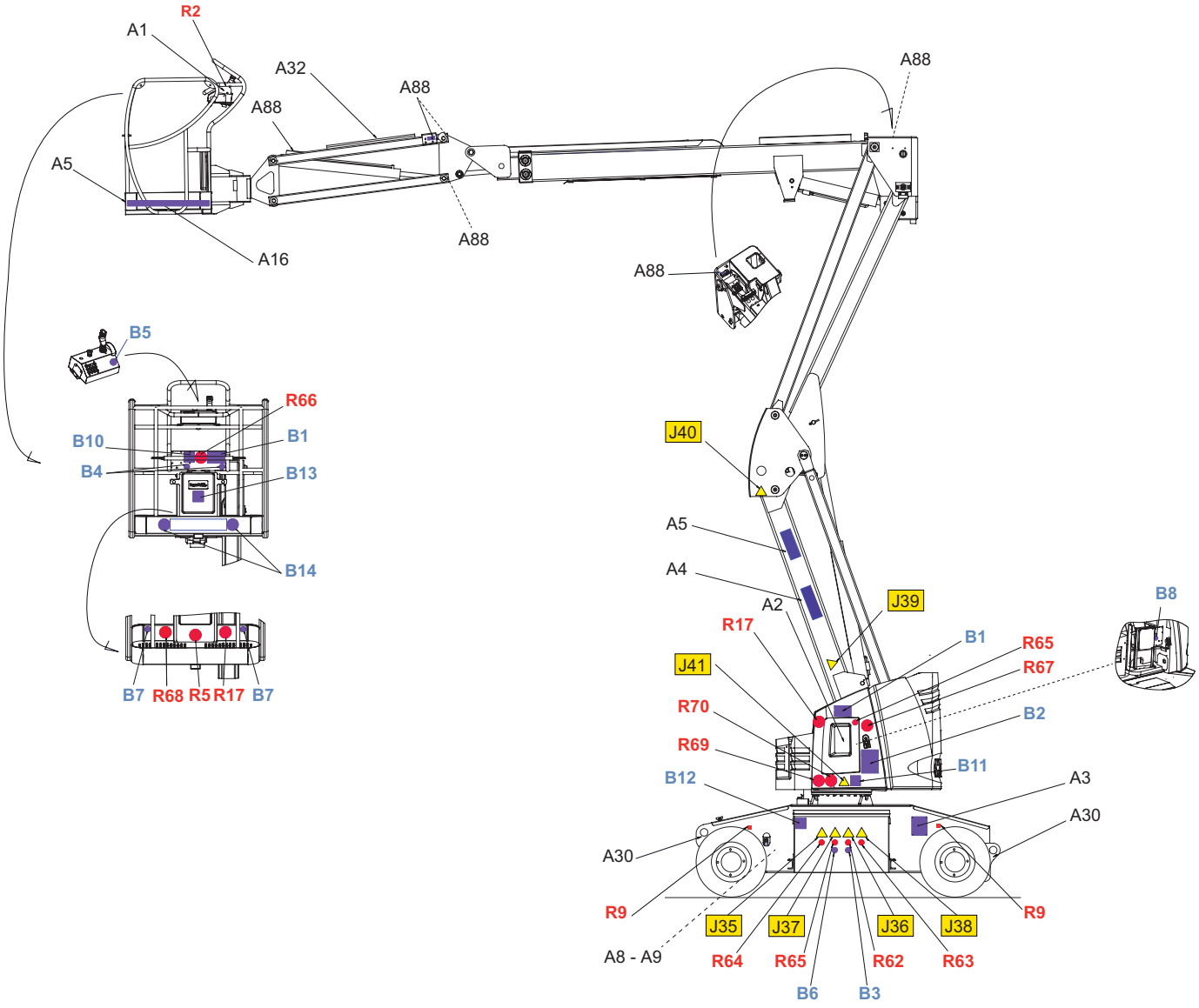


C - Machine layout

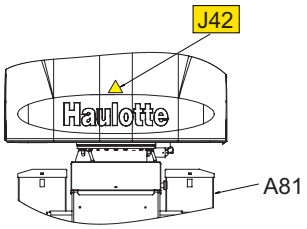


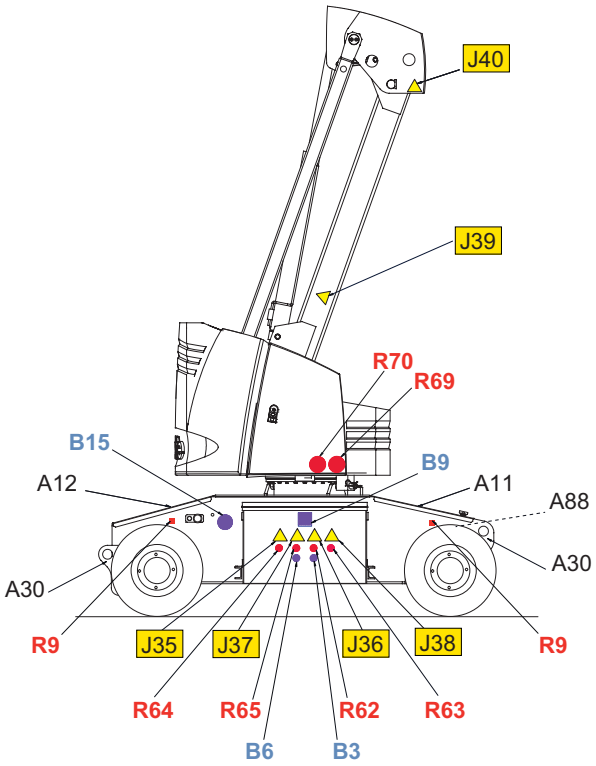
C - Machine layout

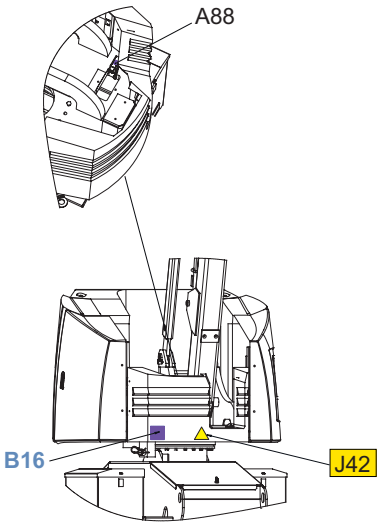
Location of the HA15IP (HA43JE) labels - Russia version



C - Machine layout







C - Machine layout

Label descriptions HA12IP (HA33JE) - HA15IP (HA43JE) - Russia version

Color	Marking	Description	Quantity	
Blue	B1	Height of the floor and load	2	For HA12IP (HA33JE) : 307P227120 (Standard platform) For HA12IP (HA33JE) : 307P227130 (Wide platform) For HA15IP (HA43JE) : 307P227110
Blue	B2	Operation instructions White background	1	In Russian : 307P225160
Blue	B3	Goggles compulsory	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226670
Blue	B4	Helmet compulsory	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226680
Blue	B5	Caution disconnect	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226690
Blue	B6	Hand protection compulsory	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226700
Blue	B7	Harness anchor point location	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226710
Blue	B8	Plug : 24 V	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226740
Blue	B9	Greasing the turntable rotation gear	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227020
Blue	B10	Plug : 240 V - 30 mA	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227050
Blue	B11	Verification of tilt operation	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227060
Blue	B12	Battery verification	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227180
Blue	B13	Read the operation manual	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227190
Blue	B14	Obligatory routing	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227510
Blue	B15	Plug : 220 V	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227520
Blue	B16	Remove the blocking pin before rotating	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227810
Red	R2	Travel direction	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078145070

C - Machine layout

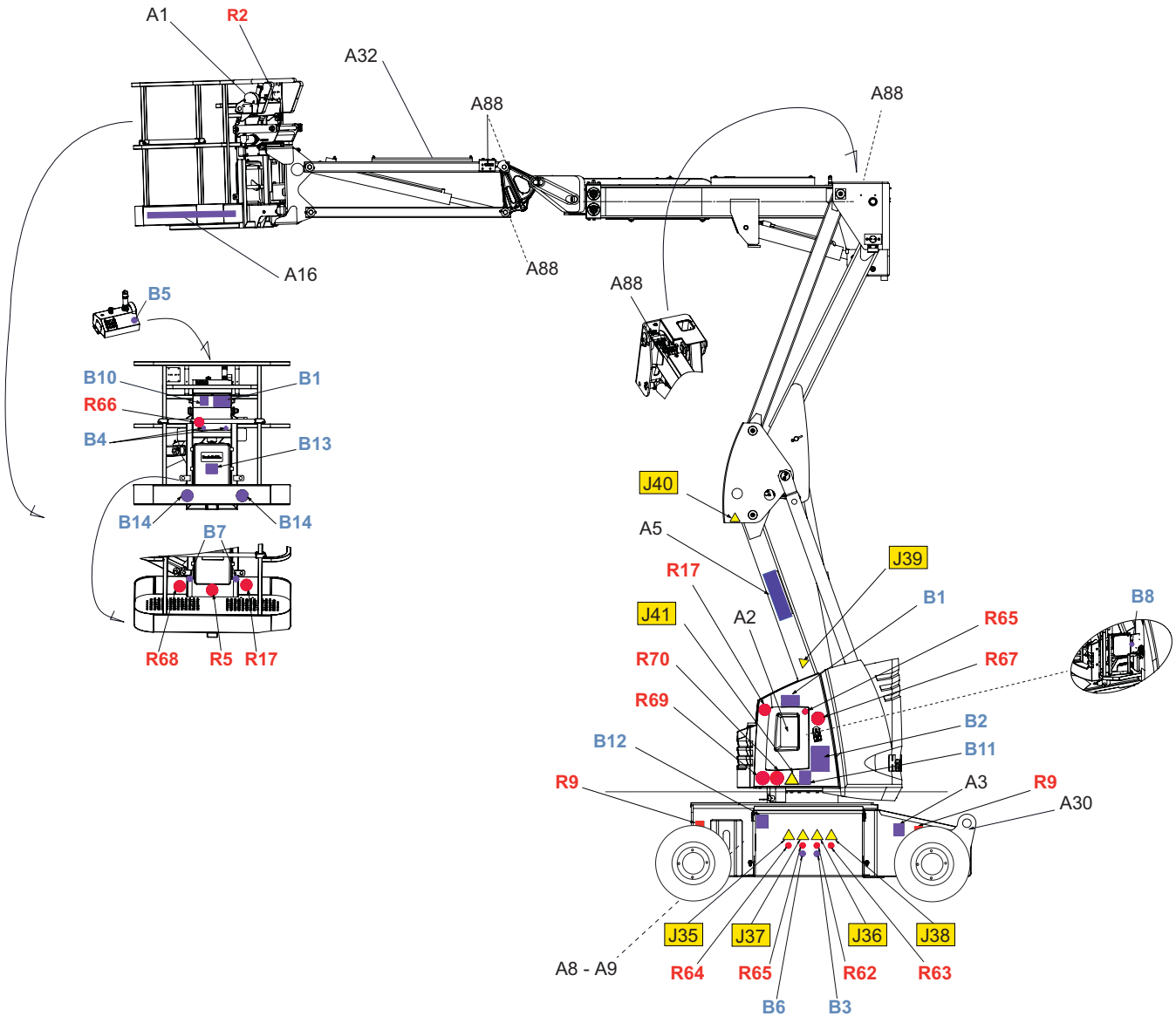
Color	Marking	Description	Quantity	
Red	R5	Danger of electrocution	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226960
Red	R9	Wheel load	4	For HA12IP (HA33JE) : 3078151550 For HA15IP (HA43JE) : 3078152060
Red	R17	Do not travel down slopes at high speed	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226990
Red	R61	Lubrication point	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P219370
Red	R62	Flames prohibited	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226750
Red	R63	Smoking forbidden	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226760
Red	R64	No admittance to unauthorized persons	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226770
Red	R65	Pressurised spraying forbidden	3	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226780
Red	R66	Blocking of the sliding bar is forbidden	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226950
Red	R67	Do not use the machine as a welding earth	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226970
Red	R68	Using the machine during battery charging is forbidden	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226980
Red	R69	Do not park in the work area	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227000
Red	R70	Do not place your foot on the cover	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227010
Yellow	J35	Battery danger	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227580
Yellow	J36	Fire Hazard	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227610
Yellow	J37	Electrical danger	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227620
Yellow	J38	Corrosion hazard	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227640
Yellow	J39	Risk of crushed hands	2	For HA12IP (HA33JE) : 307P227660
Yellow	J40	Risk of body crushing	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227670

C - Machine layout

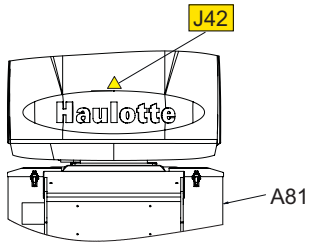
Color	Marking	Description	Quantity	
Yellow	J41	Side unstable hazard	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227680
Yellow	J42	Gear hazard	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227690
Other	A1	Platform control box	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P218040
Other	A2	Ground control box	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P218030
Other	A3	Identification plate	1	In Russian : For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227820
Other	A4	Machine name logo	1	For HA12IP (HA33JE) : 307P218260 For HA15IP (HA43JE) : 307P218250
Other	A8	Hydraulic oil	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078143520
Other	A8	Winter grade hydraulic oil	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P223700
Other	A8	Biodegradable oil	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078148890
Other	A9	Upper and lower oil level	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078143590
Other	A11	Front green drive direction arrow	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078137440
Other	A12	Rear red drive direction arrow	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078137430
Other	A16	Yellow and black adhesive tape	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 2421808660
Other	A30	Machine tie down points	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078147930
Other	A32	Vertical machine name logo	1	For HA12IP (HA33JE) : 3078148310 For HA15IP (HA43JE) : 3078152050
Other	A81	Battery	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226540
Other	A88	Tamper-proof labe	7	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227450

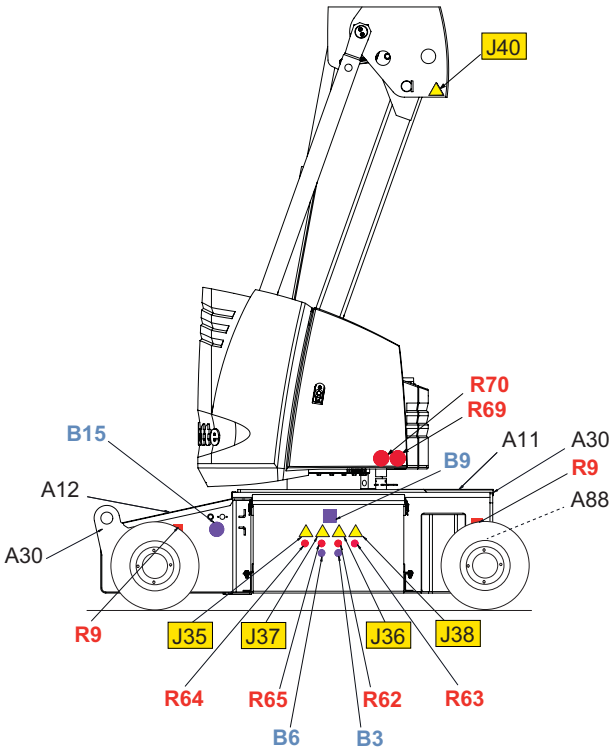
C - Machine layout

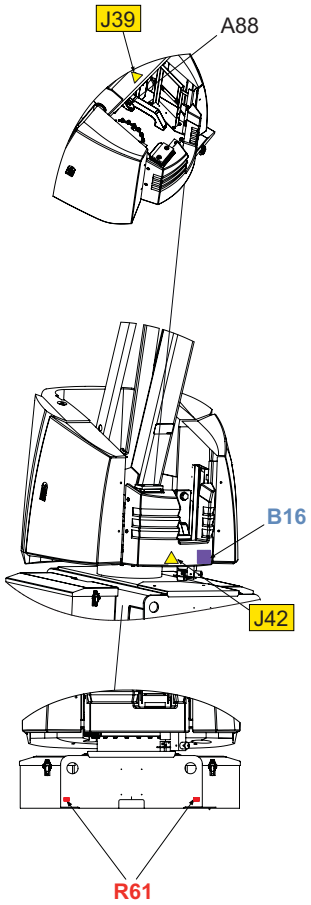
Location of the HA12IP (HA33JE) labels - Ukraine version



C - Machine layout

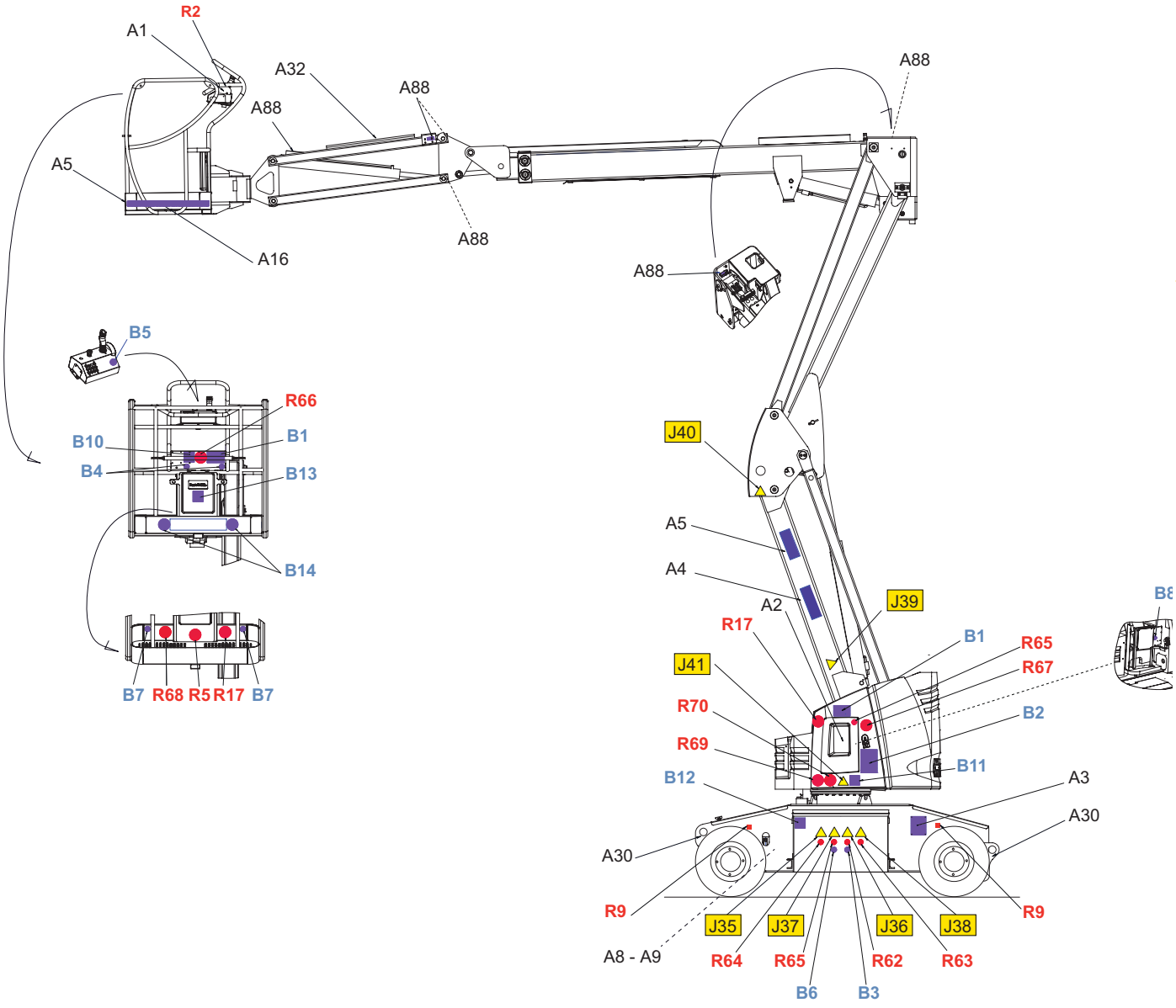




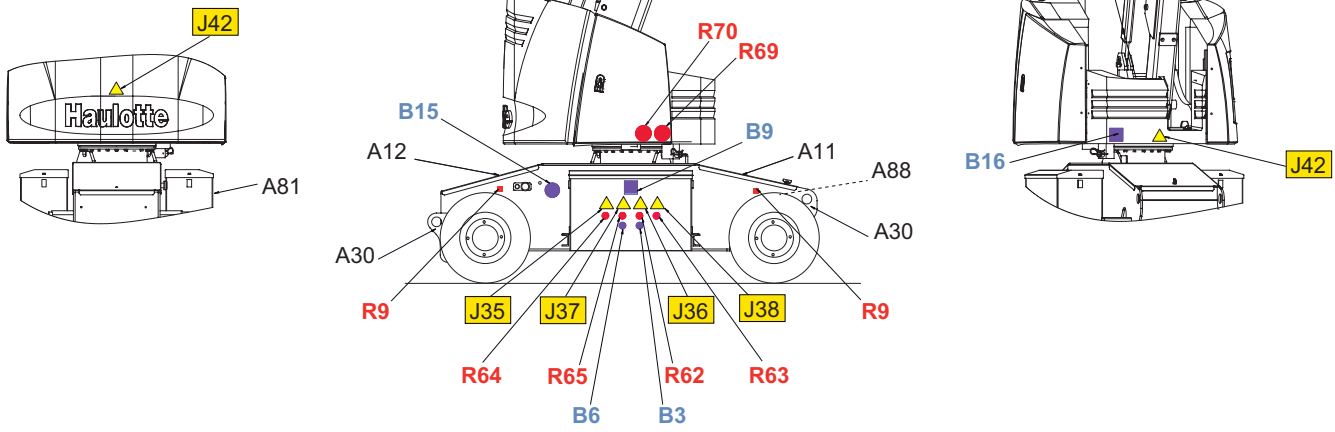


C - Machine layout

Location of the HA15IP (HA43JE) labels - Ukraine version



C - Machine layout



C - Machine layout

Label descriptions HA12IP (HA33JE) - HA15IP (HA43JE) - Ukraine version

Color	Marking	Description	Quantity	
Blue	B1	Height of the floor and load	2	For HA12IP (HA33JE) : 307P227120 (Standard platform) For HA12IP (HA33JE) : 307P227130 (Wide platform) For HA15IP (HA43JE) : 307P227110
Blue	B2	Operation instructions White background	1	Ukrainian : 307P227850
Blue	B3	Goggles compulsory	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226670
Blue	B4	Helmet compulsory	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226680
Blue	B5	Caution disconnect	1	For HA12IP (HA33JE) : 307P226690
Blue	B6	Hand protection compulsory	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226700
Blue	B7	Harness anchor point location	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226710
Blue	B8	Plug : 24 V	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226740
Blue	B9	Greasing the turntable rotation gear	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227020
Blue	B10	Plug : 240 V - 30 mA	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227050
Blue	B11	Verification of tilt operation	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227870
Blue	B12	Battery verification	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227860
Blue	B13	Read the operation manual	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227840
Blue	B14	Obligatory routing	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227510
Blue	B15	Plug : 220 V	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227520
Blue	B16	Remove the blocking pin before rotating	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227810
Red	R2	Travel direction	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078145070
Red	R5	Danger of electrocution	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226960

C - Machine layout

Color	Marking	Description	Quantity	
Red	R9	Wheel load	4	For HA12IP (HA33JE) : 3078151550 For HA15IP (HA43JE) : 3078152060
Red	R17	Do not travel down slopes at high speed	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226990
Red	R61	Lubrication point	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P219370
Red	R62	Flames prohibited	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226750
Red	R63	Smoking forbidden	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226760
Red	R64	No admittance to unauthorized persons	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226770
Red	R65	Pressurised spraying forbidden	3	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226780
Red	R66	Blocking of the sliding bar is forbidden	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226950
Red	R67	Do not use the machine as a welding earth	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226970
Red	R68	Using the machine during battery charging is forbidden	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226980
Red	R69	Do not park in the work area	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227000
Red	R70	Do not place your foot on the cover	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227010
Yellow	J35	Battery danger	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227580
Yellow	J36	Fire Hazard	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227610
Yellow	J37	Electrical danger	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227620
Yellow	J38	Corrosion hazard	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227640
Yellow	J39	Risk of crushed hands	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227660
Yellow	J40	Risk of body crushing	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227670
Yellow	J41	Side unstable hazard	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227680

C - Machine layout

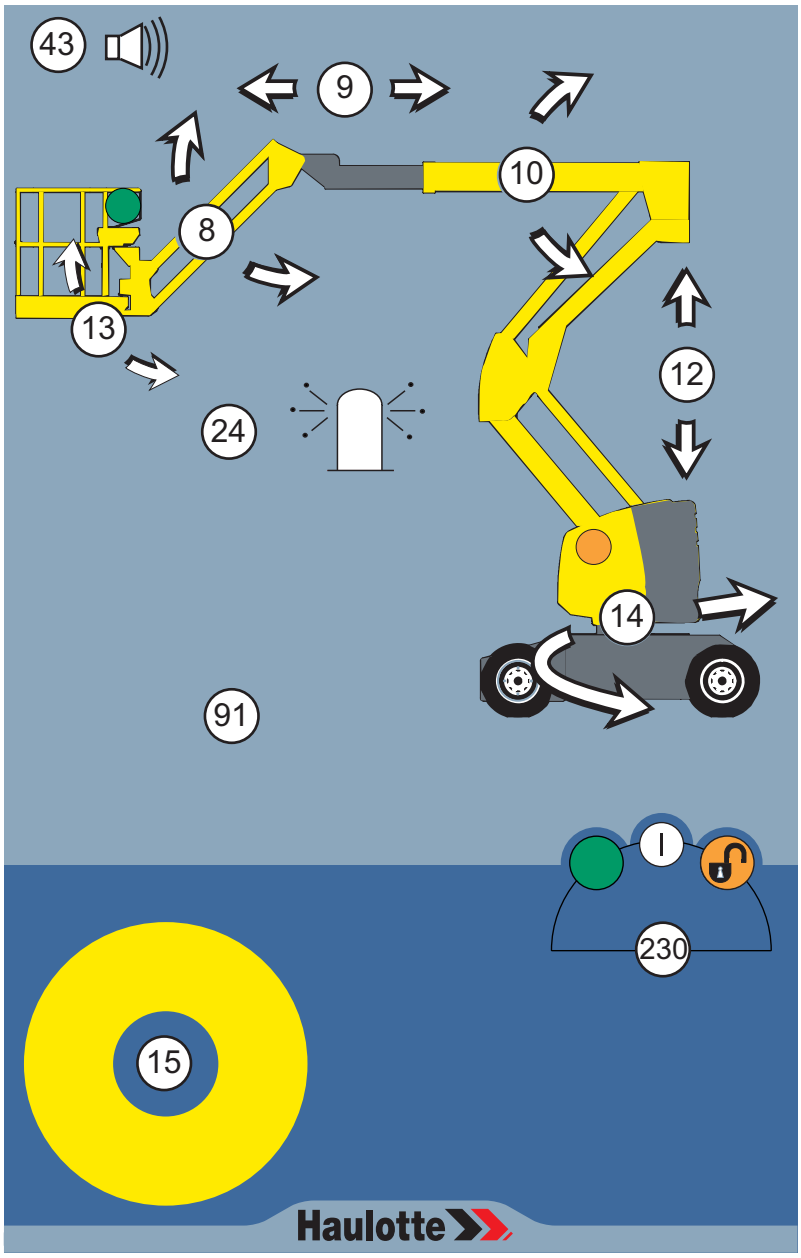
Color	Marking	Description	Quantity	
Yellow	J42	Gear hazard	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227690
Other	A1	Platform control box	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P218040
Other	A2	Ground control box	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P218030
Other	A3	Identification plate	1	Ukrainian : For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227830
Other	A4	Machine name logo	1	For HA12IP (HA33JE) : 307P218260 For HA15IP (HA43JE) : 307P218250
Other	A8	Hydraulic oil	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078143520
Other	A8	Winter grade hydraulic oil	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P223700
Other	A8	Biodegradable oil	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078148890
Other	A9	Upper and lower oil level	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078143590
Other	A11	Front green drive direction arrow	1	3078137440
Other	A12	Rear red drive direction arrow	1	3078137430
Other	A16	Yellow and black adhesive tape	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 2421808660
Other	A30	Machine tie down points	2	For HA12IP (HA33JE) and HA15IP (HA43JE) : 3078147930
Other	A32	Vertical machine name logo	1	For HA12IP (HA33JE) : 307P218310 For HA15IP (HA43JE) : 3078152050
Other	A81	Battery	1	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P226540
Other	A88	Tamper-proof labe	7	For HA12IP (HA33JE) and HA15IP (HA43JE) : 307P227450

5 - Control boxes

N.B.-:-*The functions are described for the entire range. Refer to the machine model to identify the controls and functions indicators.*

5.1 - GROUND CONTROL BOX - EMERGENCY CONTROL PANEL

HA12IP (HA33JE) - HA15IP (HA43JE) - General view



C - Machine layout

HA12IP (HA33JE) - HA15IP (HA43JE) - Controls and indicators

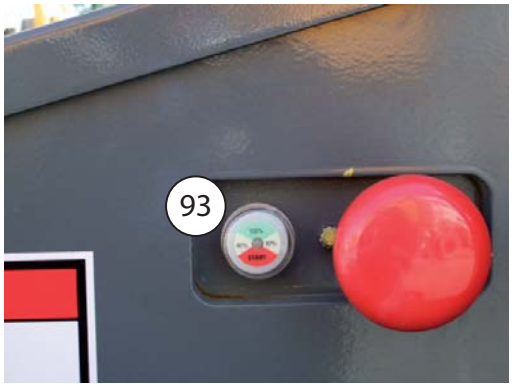
Marking	Description	Function
8	Jib lifting / lowering selector	Move upwards : Jib lifting
		Move downwards : Jib lowering
9	Boom telescoping selector	Move to the left : To telescope out
		Move to the right : To telescope in
10	Boom raising selector	Move upwards : Boom raising
		Move downwards : Boom descent
12	Arm lifting selector	Move upwards : Arm lifting
		Move downwards : Boom lowering
13	Platform levelling or transport position selector	Move to the right : Platform leveling lowered or placed in transport position
		Move to the left : Platform compensation lifted or placed in operating position
14	Turntable rotation selector	Move to the left : Counter clockwise (CCW) rotation
		Move to the right : Clockwise rotation
15	Emergency stop button	Pulled out (activated) : Ground control box energized
		Pushed down (deactivated) : De-energizes control system
24	Beacon light on/off (Option)	Move to the right : Beacon light on
		Move to the left : Beacon light off
43	Horn selector(1)	Horn
72	Control box energizing key selector	Left : Platform control box energized
		Center : De-energizes control system
		Rotate to right and hold : Ground control box energized
91	Hour meter-Battery charge indicator	Total machine running hours - Battery charger status
93	Battery charging indicator	Battery charge level status during battery charging
230	Control box energizing key selector / 'Enable Switch' selector(2)	Left : Platform control box energized
		Center : De-energizes control system
		Rotate to right and hold : Ground control box energized movement validation Release : Movement stopped

(1.) For machines fitted with
(2.) For machines fitted with

C - Machine layout

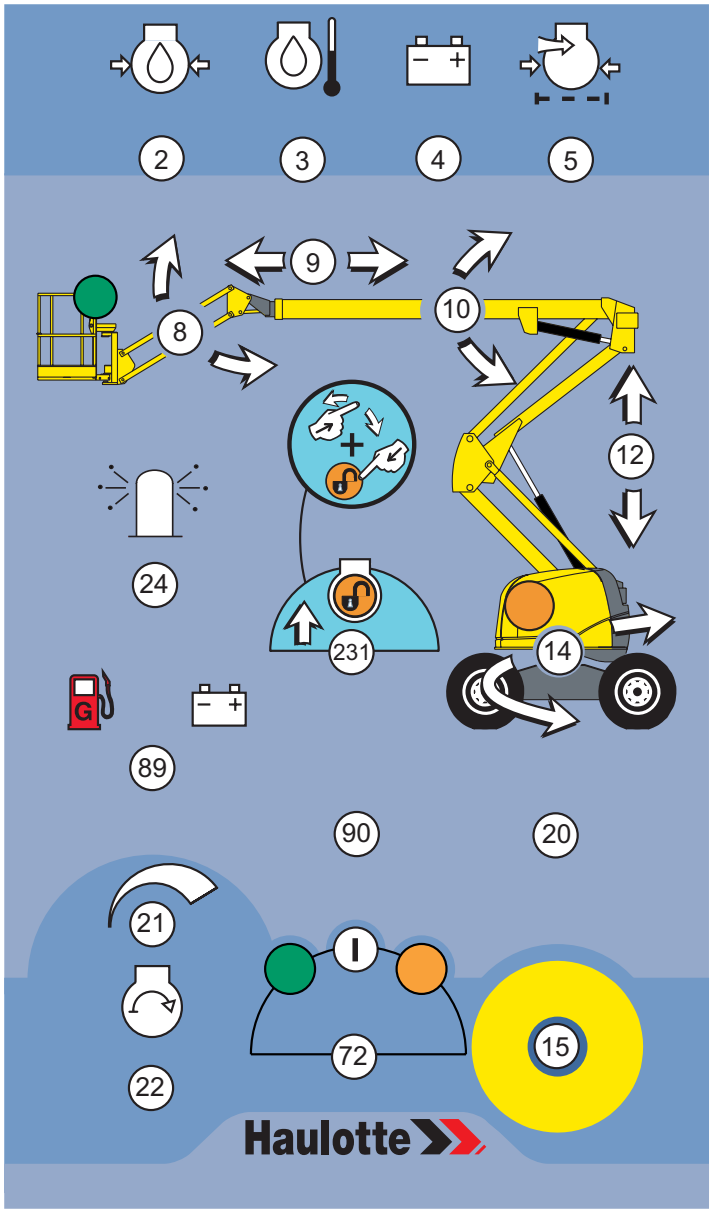
Photo HA12IP (HA33JE) - HA15IP (HA43JE)

Battery charging indicator



C - Machine layout

HA16PE - General view



HA16PE - Controls and indicators

Marking	Description	Function
2	Engine oil pressure light	Low engine oil pressure(1)
3	Engine temperature indicator	High engine oil temperature((1.))
4	Battery charge indicator	Low battery charge((1.))
5	Air filter clogging indicator	Clogged air filter((1.))
8	Jib lifting / lowering selector	Move upwards : Jib lifting
		Move downwards : Jib lowering
9	Boom telescoping selector	Move to the left : To telescope out
		Move to the right : To telescope in
10	Boom raising selector	Move upwards : Boom raising
		Move downwards : Boom descent
12	Arm lifting selector	Move upwards : Arm lifting
		Move downwards : Boom lowering

C - Machine layout

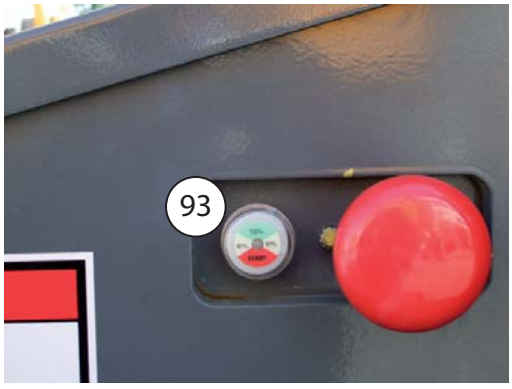
Marking	Description	Function
14	Turntable rotation selector	Move to the left : Counter clockwise (CCW) rotation
		Move to the right : Clockwise rotation
15	Emergency stop button	Pulled out (activated) : Ground control box energized
		Pushed down (deactivated) : De-energizes control system
20	Hour meter	Total machine running hours
21	Engine acceleration selector	Move to the right : Engine speed increases
		Move to the left : Engine idle speed
22	Engine start-up selector	Starting the engine
24	Beacon light on/off	Move to the right : Beacon light on
		Move to the left : Beacon light off
72	Control box energizing key selector	Left : Platform control box energized
		Center : De-energizes control system
		Right : Ground control box energized
89	Bi-energy selector	Move to the right : Electric power supply
		Move to the left : Petrol or Optional diesel power supply
90	Battery charge indicator	Battery charger status
93	Battery charging indicator	Battery charge level status during battery charging

(1.) Perform the required maintenance (see the machine maintenance book)

C - Machine layout

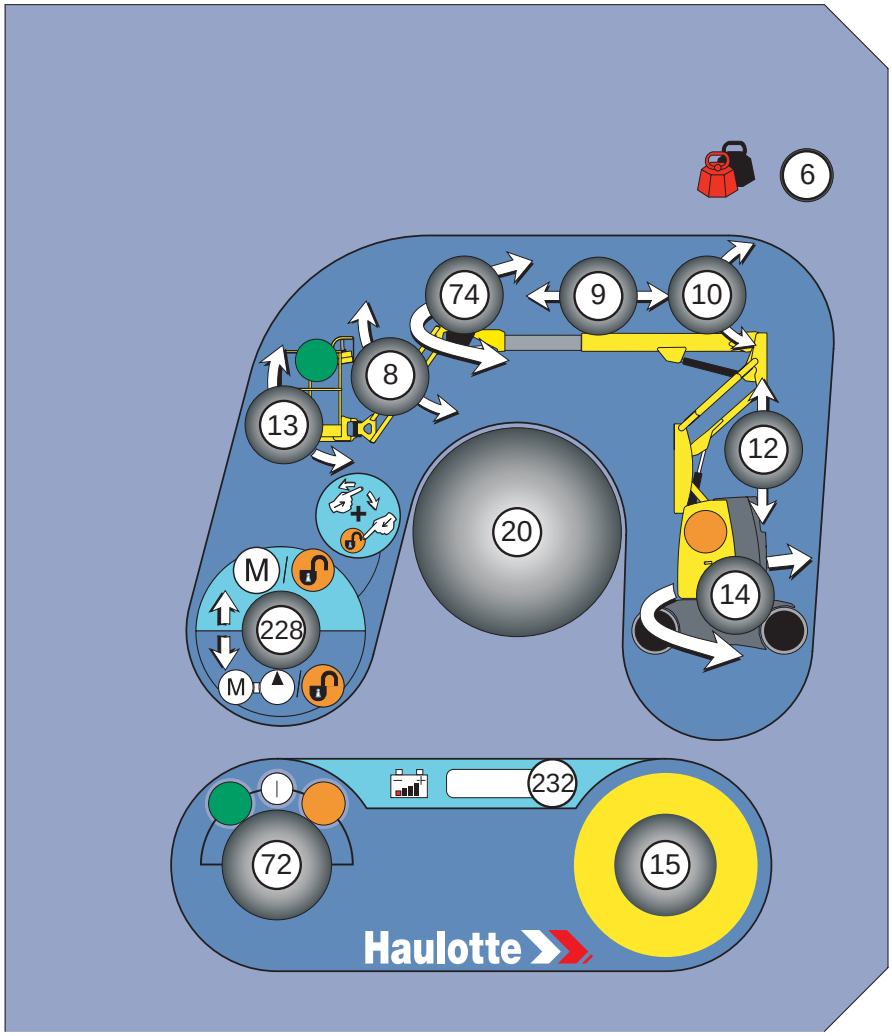
Photo HA16PE

Battery charging indicator



C - Machine layout

HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+) - General view



HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+) - Controls and indicators

Marking	Description	Function
6	Platform overload indicator	Platform overload
8	Jib lifting / lowering selector	Move upwards : Jib lifting
		Move downwards : Jib lowering
9	Boom telescoping selector	Move to the left : To telescope out
		Move to the right : To telescope in
10	Boom raising selector	Move upwards : Boom raising
		Move downwards : Boom descent
12	Arm lifting selector	Move upwards : Arm lifting
		Move downwards : Boom lowering
13	Platform levelling or transport position selector	Move to the left : Platform compensation lifted or placed in operating position
		Move to the right : Platform leveling lowered or placed in transport position
14	Turntable rotation selector	Move to the left : Counter clockwise (CCW) rotation
		Move to the right : Clockwise rotation
15	Emergency stop button	Pulled out (activated) : Ground control box energized
		Pushed down (deactivated) : De-energizes control system
20	Hour meter	Total machine running hours

C - Machine layout

Marking	Description	Function
72	Control box energizing key selector	Left : Platform control box energized
		Center : De-energizes control system
		Right : Ground control box energized
74	Jib rotation selector(1)	Move to the left : Counter clockwise (CCW) rotation
		Move to the right : Clockwise rotation
228	'Enable Switch' selector / Back-up unit selector(2)	Move upwards : Movement validation
		Move downwards : Back-up unit activated Movement validation
232	Battery discharge indicator	

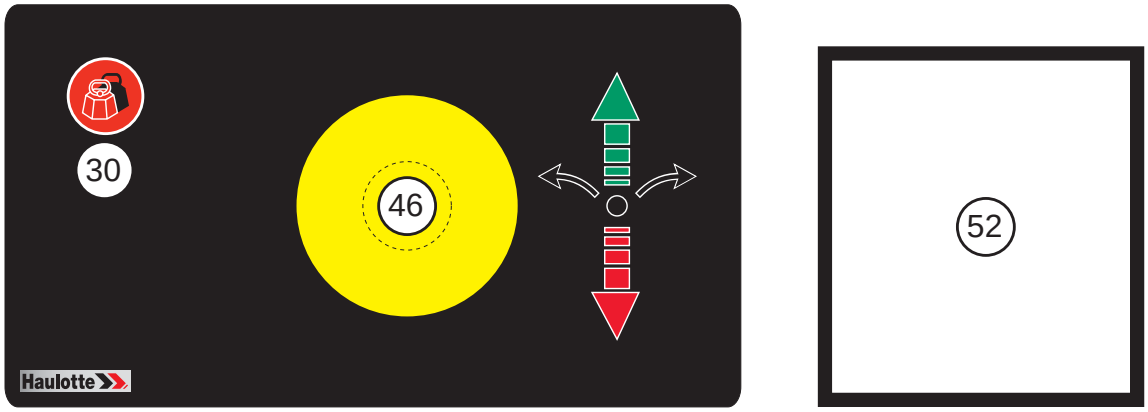
(1.) For HA12CJ+ (HA32CJ+) only
(2.) For machines fitted with

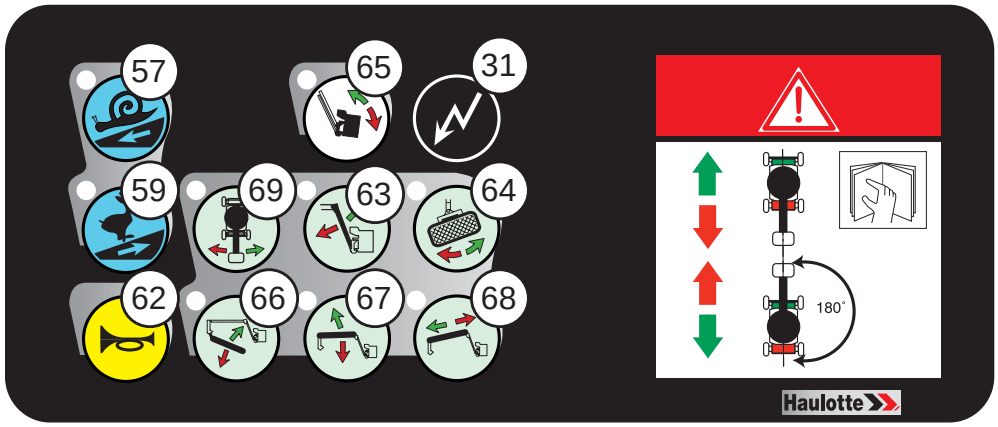
Photo HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+)

Battery charging indicator

5.2 - PLATFORM CONTROL BOX

HA15IP (HA43JE) - HA12IP (HA33JE) - General view





HA12IP (HA33JE) -HA15IP (HA43JE) - Controls and indicators

Marking	Description	Function
30	Platform overload indicator	Platform overload
31	Power ON indicator	On : Machine switched on
		Off : Machine switched off
46	Emergency stop button	Pulled out (activated) : Platform control box power supply energized
		Pushed down (deactivated) : De-energizes control system

C - Machine layout

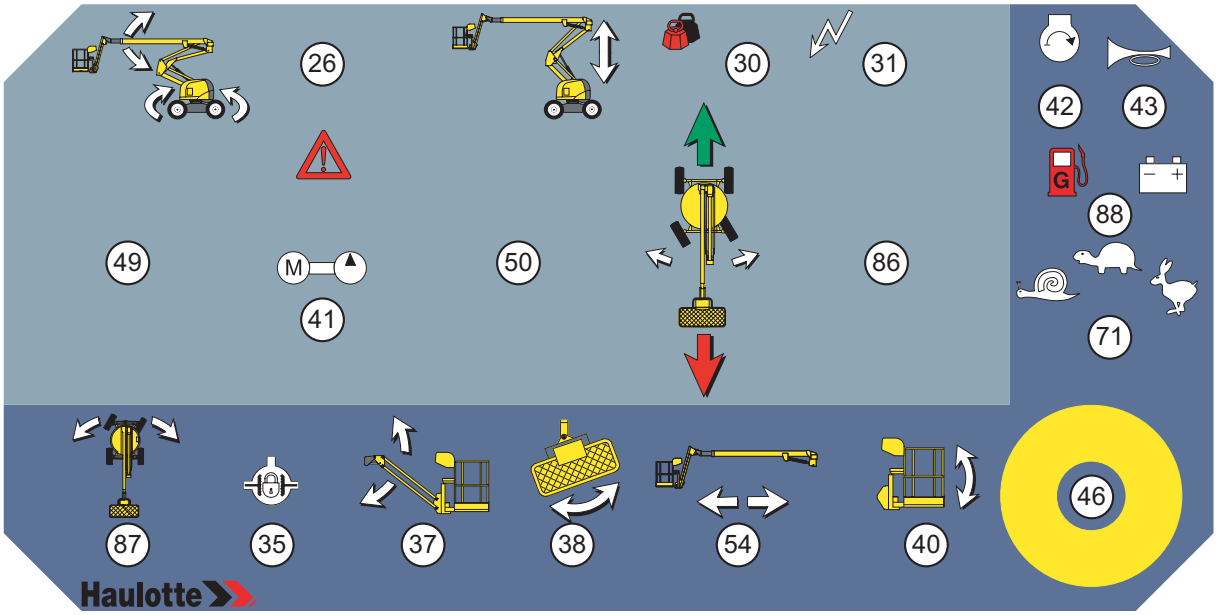
Marking	Description	Function
52	Movement joystick	Move forward : • Forward drive • Jib lifting • Counter clockwise (CCW) platform rotation • Platform levelling raising • Arm lifting • Boom raising • Boom telescope in • Counter clockwise (CCW) turntable rotation
		Move backward : • Reverse drive • Jib lowering • Clockwise platform rotation • Platform levelling lowering • Boom lowering • Boom descent • Boom telescope out • Clockwise turntable rotation
	Front axle steering selector	Press right side of button : Right-hand steering
		Press left side of button : Left-hand steering
57	Low-speed drive selector switch with indicator light	Pressed down (activated and LED on) : Low-speed drive selection (for short distance and final approach)
59	High-speed drive selector switch with indicator light	Pressed down (activated and LED on) : High-speed drive selection (for long distance)
62	Horn selector switch	Pressed down (activated) : Horn
63	Jib selector switch with indicator light	Pressed down (activated and LED on) : Jib selection
64	Platform rotation selector switch with indicator light	Pressed down (activated and LED on) : Platform rotation selection
65	Platform levelling selector switch with indicator light	Pressed down (activated and LED on) : Platform compensation selection
66	Arm elevation selector switch with indicator light	Pressed down (activated and LED on) : Arm lifting selection
67	Boom lifting selector switch with indicator light	Pressed down (activated and LED on) : Boom lifting selection
68	Boom telescope selector switch with indicator light	Pressed down (activated and LED on) : Boom telescope selection
69	Turntable rotation selector switch with indicator light	Pressed down (activated and LED on) : Turntable rotation selection

C - Machine layout

Photo HA12IP (HA33JE) - HA15IP (HA43JE)

C - Machine layout

HA16PE - General view



HA16PE - Controls and indicators

Marking	Description	Function
26	Fault indicator	Operation malfunction(1)
		Machine on excessive slope
30	Platform overload indicator	Platform overload
31	Power ON indicator	On : Machine switched on
		Off : Machine switched off
35	Differential lock selector	Press in and hold (activated) : Maximum drive torque (on difficult or sloping ground)
		Release (deactivated) : Standard torque
37	Jib lifting / lowering selector	Move upwards : Jib lifting
		Move downwards : Jib lowering
38	Platform rotation selector	Move to the right : Counter clockwise (CCW) rotation
		Move to the left : Clockwise rotation
40	Platform leveling selector	Move upwards : Platform elevation
		Move downwards : Platform lowers
41	Not used	
42	Engine start-up selector	Starting the engine
43	Horn selector	Horn
46	Emergency stop button	Pulled out (activated) : Ground control box energized
		Pushed down (deactivated) : De-energizes control system
49	Turntable rotation joystick	Move to the right : Counter clockwise (CCW) rotation
		Move to the left : Clockwise rotation
	Boom lift joystick	Move upwards : Boom raising
		Move downwards : Boom descent
50	Arm lifting/lowering joystick	Move forward : Arm lifting
		Move backward : Boom lowering
54	Boom telescoping selector	Move to the right : To telescope in
		Move to the left : To telescope out

C - Machine layout

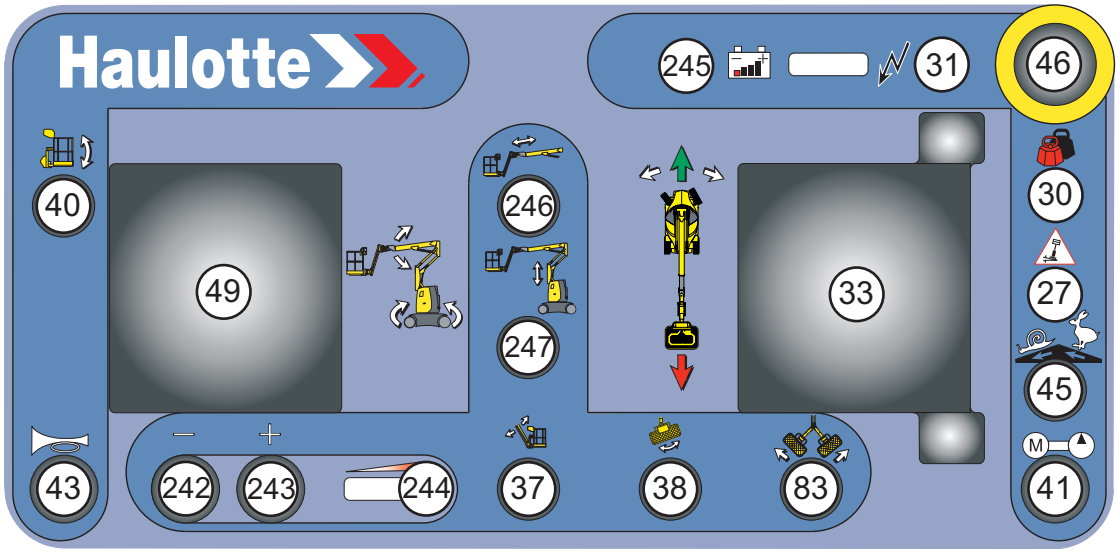
Marking	Description	Function
71	Drive speed selector	High-speed driving
		Medium-speed drive (difficult ground, slope)
		Low-speed driving
86	Drive joystick	Move forward : Forward drive
		Move backward : Reverse drive
	Rear axle steering selector	Press right side of button : Right-hand steering
		Press left side of button : Left-hand steering
87	Front axle steering selector	Move to the right : Right-hand steering
		Move to the left : Left-hand steering
88	Bi-energy selector	Move to the right : Electric power supply
		Move to the left : Petrol or Optional diesel power supply

(1.) Perform the required maintenance (see the machine maintenance book)

Photo HA16PE

C - Machine layout

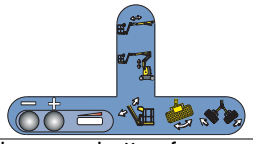
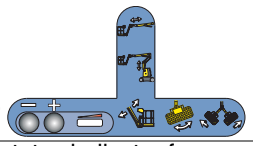
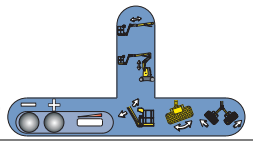
General view HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+)



Controls and indicators HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+)

Marking	Description	Function
27	Tilt indicator	Machine on excessive slope
30	Platform overload indicator	Platform overload
31	Power ON indicator / Fault	On : Machine switched on
		Flashing : Machine operating fault
		Off : Machine switched off
33	Drive joystick	Move forward : Forward drive
		Move backward : Reverse drive
	Front axle steering selector	Press right side of button : Right-hand steering
		Press left side of button : Left-hand steering
37	Jib lifting / lowering selector	Move upwards : Jib lifting
		Move downwards : Jib lowering
38	Platform rotation selector	Move to the right : Counter clockwise (CCW) rotation
		Move to the left : Clockwise rotation
40	Platform leveling selector	Move upwards : Platform elevation
		Move downwards : Platform lowers
41	Back-up unit selector(1)	Press in and hold : Back-up unit activated
		Release : Back-up unit deactivated
43	Horn selector	Horn
45	Drive speed selector	High-speed driving
		Low-speed driving
46	Emergency stop button	Pulled out (activated) : Ground control box energized
		Pushed down (deactivated) : De-energizes control system
49	Turntable rotation joystick	Move to the right : Counter clockwise (CCW) rotation
		Move to the left : Clockwise rotation
	Boom lift joystick	Move upwards : Boom raising
		Move downwards : Boom descent
83	Jib rotation selector(2)	Move to the left : Clockwise rotation
		Move to the right : Counter clockwise (CCW) rotation

C - Machine layout

Marking	Description	Function
242	Speed reduction button for movements in zone 	Press the + button down : Increases the operating speed of functions controlled by the toggle switches.
243	Speed increase button for movements in zone 	Press the - button down : Deceases the operating speed of functions controlled by the toggle switches.
244	Speed status indicator for movements in zone 	The light bar position on the scale signifies where the speed selector is position within the maximum and minimum scale.
245	Battery discharge indicator	The position of the light bar indicates the proportion of charge left in the batteries with the RH end of the scale being maximum charge and the LH end being low charge.
246	Boom telescoping selector	Move to the left : To telescope out Move to the right : To telescope in
247	Arm lifting selector	Move upwards : Arm lifting Move downwards : Boom lowering

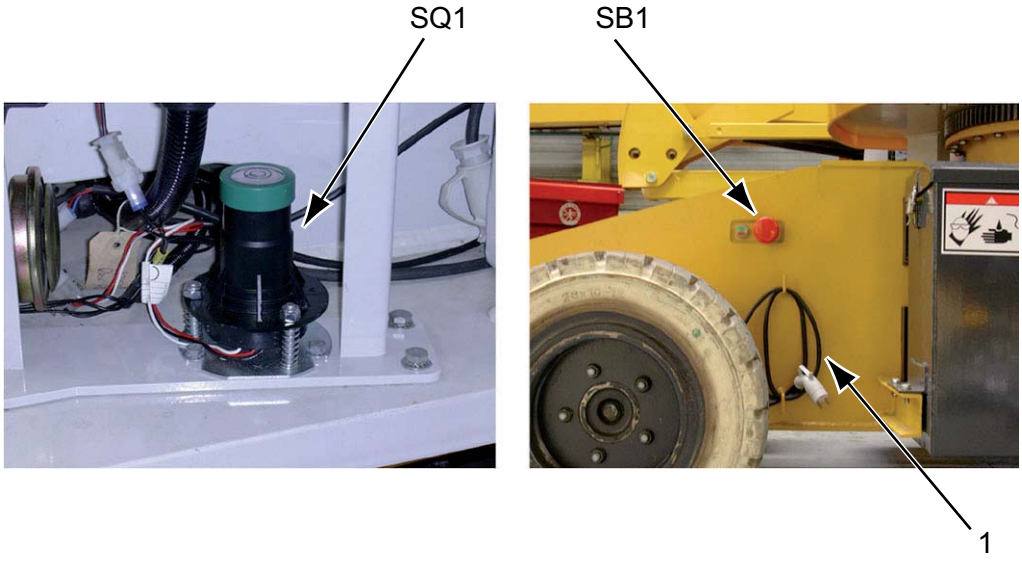
(1.) For machines fitted with
(2.) For HA12CJ+ (HA32CJ+) only

C - Machine layout

Photo HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+)

5.3 - VARIOUS COMPONENTS

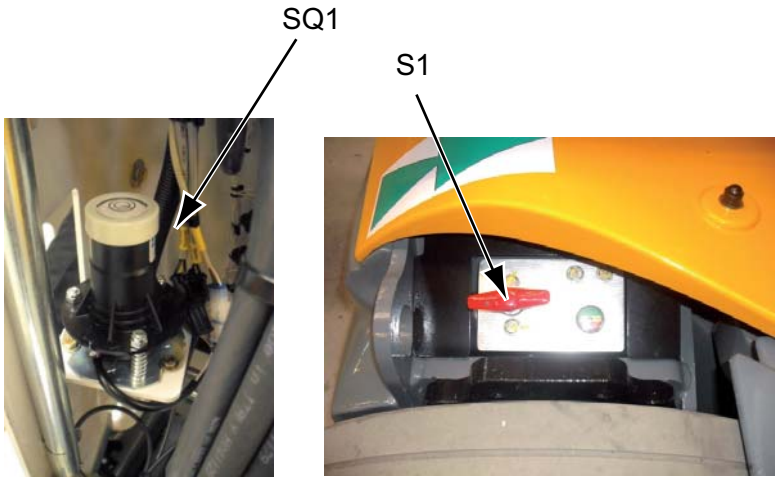
HA12IP (HA33JE) -HA15IP (HA43JE)



HA12IP (HA33JE) -HA15IP (HA43JE)

Marking	Description	Function
1	Battery charger socket	Connection point for onboard battery charger
SQ1	Tilt sensor switch	Senses ground slope on which machine is operating
SB1	Battery isolation switch	Machine shutdown

HA12CJ (HA32CJ) -HA12CJ+ (HA32CJ+)



HA12CJ (HA32CJ) -HA12CJ+ (HA32CJ+)

Marking	Description	Function
SQ1	Tilt sensor switch	Senses ground slope on which machine is operating
S1	Battery isolation switch	Machine shutdown

D - Operating principle

1 - Description

For : HA12IP (HA33JE) - HA15IP (HA43JE) - HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+)

Hydraulic energy to perform machine movements is provided by an electric motor driven hydraulic pump.The operating speed of the pump is governed by a speed regulator.

For : HA16PE

Hydraulic energy for machine movement is provided by a pump unit.

The power supplied to the electric motor(s) is generated by batteries.

To protect the user and the machine, safety systems prevent the operation of the machine beyond its capacities. Section G Technical characteristics

These security systems if activated, immobilize the machine and neutralize the movements.

Poor knowledge of the characteristics and operation of the machine can lead the operator to think that a normal safety operation is a malfunction.

2 - Safety devices

2.1 - ACTIVATION OF CONTROLS

The controls must be validated by a 'Enable Switch' system to activate the different movements.

The 'Enable Switch' system depends on the machine configuration and will consist of one of the following :

- Joystick handle.
- Pedal.
- Validation button.

2.2 - DRIVE SPEED

All driving speeds are authorised when the machine is stowed.

For : HA12IP (HA33JE) - HA15IP (HA43JE)

The electronic variable speed unit controls movement and driving speed.

It receives information from the control joystick concerning the movements to be performed. It also manages the safety systems status.

For : HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+)

The electronic variable speed unit controls movement and driving speed.

It receives data from the joystick and buttons via the machine calculator. It also manages the operation and state of the machine safety systems.

The variable speed unit regulates the speed.

This device has the following functions :

- Prevention of engine racing.
- Triggering of reverse braking if necessary.

2.3 - ELECTRONIC VARIABLE SPEED DRIVE

For HA12IP (HA33JE) - HA15IP (HA43JE) - HA16PE :

The machines are equipped with an electronic speed regulator configured for each function.

For HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+) :

The machines are fitted with an electronic variable speed drive which manages the power supplied to the drive motors and hydraulic pump motor. Power to the motors is controlled by the machine calculator.

The speed regulators are configured for each individual machine. Do not interchange the speed controllers/regulators between machines even if they are the same model..

2.4 - ON-BOARD ELECTRONICS

For HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+) - HA16PE

The machines are equipped with one/several specific calculator(s)configured for the machine's functionalities.

Do not interchange the calculator between machines.

2.5 - SPACE FOR OPERATING TEMPERATURE THERMOSTAT

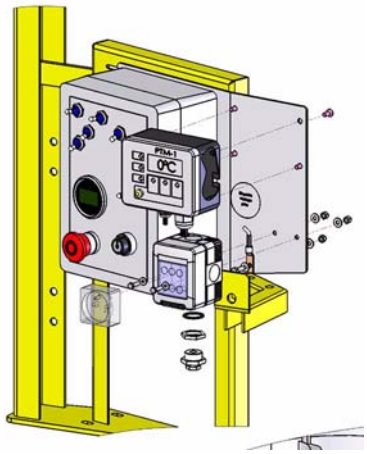
For Russia and the Ukraine only :

Hydraulic energy to perform machine movements is provided by an electric motor driven hydraulic pump.The operating speed of the pump is governed by a speed regulator. If the temperature llimits are reached, an audible alarm alerts the operator. All movements are cut off apart from travel to transport position.

Temperature limits :

- Electric machines : from 0° to + 40°
- Fuel-powered machines : from - 20° to + 40°

Location of operating temperature thermostat



2.6 - DETECTION OF INTERNAL FAULT

For HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+) - HA16PE :

***N.B.**-:-The presence of this device depends on the machine configuration.*

The fault or power indicator flashes to show an internal malfunction.

The machine switches to downgraded mode.

Certain movements can be limited or forbidden to preserve the operator's safety.

2.7 - AUTOMATIC ENGINE CUT-OUT

For HA16PE only

The engine automatically cuts out in the following conditions (Please see machine configuration) :

- The alternator is not functioning.
- Engine temperature is too high.
- Oil pressure is too low.
- A machine malfunction is detected.

2.8 - LOAD LIMITING IN THE PLATFORM (IF FITTED)

If the platform load exceeds the maximum authorized load, no movement is possible from the platform control box.

The platform overload indicator and the buzzer warn the operator that the overload condition exists.

To return the machine to normal operation remove some weight from the platform.

2.9 - CHASSIS TILT

If the machine is standing on a slope exceeding the authorized slope and if the machine is not in the transport position, the fault indicator and buzzer warn the operator.

Driving and certain movements are cut off (If the machine is unfolded).

To restore the drive function, only movements allowing the machine to be stowed are permitted :

For HA12IP (HA33JE) - HA15IP (HA43JE) - HA16PE :

- Boom lowering to return to a horizontal position.
- Lowering the arm.
- Lowering the jib until it is below horizontal position (According to the machine configuration).

For HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+) :

- Boom lowering to return to a low position.
- Lowering the arm.
- Lowering the jib until it is below horizontal position (According to the machine configuration).

***N.B.**-:-Lowering is allowed if the telescope is fully retracted.*

2.10 - BATTERY DISCHARGE INDICATOR-HOUR METER

Display by % charge(The tenth lit bar graph segment corresponds to 100 %) :

- 100 % charge : Battery correctly charged.
- 20 % charge : The batteries must be recharged. The movement ascent is stopped.

2.10.1 - Hour meter

For : HA16PE :

It totals up :

- Machine operating hours (the egg timer flashes).
- Electropump operating time (bi-energy mode).

For : HA12IP (HA33JE) - HA15IP (HA43JE) :

It displays :

- P = Pump operating time.
- T = Operating time in drive.
- Length of time the machine is energized (even if not in use).

For : HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+) :

It totals up :

- The machine operating hours (Movements and travel).

2.10.2 - Automatic reset

The automatic restart is coming up at a certain voltage level.

The automatic restart doesn't mean that the battery is fully charged.

Only the indicator of the charger gives the real state of the batteries charge.

2.11 - ON-BOARD CHARGER

The on-board charger is used to charge the semi-traction or traction batteries.

the maximum amperage is 30 A for the 100 - 110 V networks and 16 A for the 220 - 240 V networks.

Battery charging starts as soon as external power supply is connected (No movement is allowed during the charging process.).

2.11.1 - Black charger - Network 110 V - USA

Black charger

The (93) indicator indicates charge status :

- Green LED : Battery 100 % charged.
- Yellow LED : Battery 80 % charged.
- Red LED : Battery in initial charging phase.

If a fault occurs, the indicator flashes in different colours, depending on the type of fault (See machine maintenance book). The audible beep sounds.

2.11.2 - Metal charger - Network 230 V

Metal charger

The (93) indicator indicates charge status :

- Green LED : Battery 100 % charged (Flashing LED in the equalization phase).
- Yellow LED : Battery 80 % charged.
- Red LED : Battery in initial charging phase.

In case of a fault, the indicator flashes red to indicate an excessive charging time, short-circuit battery components, errors in the temperature reading, or an excessive ambient temperature.

2.12 - DRIVE BUZZER

For Russia and the Ukraine only :

Each travel or lifting movement activates a buzzer (horn).

1 - Recommendations

The manager of the company responsible for the commissioning of the machine must ensure that the machine is fit for the work it is to perform. i.e. that the machine is suitable to carry out the work in complete safety in compliance with this Operator Manual. All managers who are responsible for persons operating the machine, must be familiar with the regulations currently applicable in the country of use and ensure that they are adhered to.

Before using the machine, read the previous chapters in this manual. Ensure that you have understood the following points :

- **Safety precautions.**
- **Operator's responsibilities.**
- **Presentation and the operating principle of the machine.**

2 - Checks before use

Each day and before the beginning of a new work period and on each change of operator, the machine must be subjected to a visual inspection and a complete functional test.

Any repairs required must be performed before the machine is used, its correct operation depends on it.

Find all the function indicators and controls in Section C 5 - Control boxes

2.1 - VISUAL INSPECTIONS

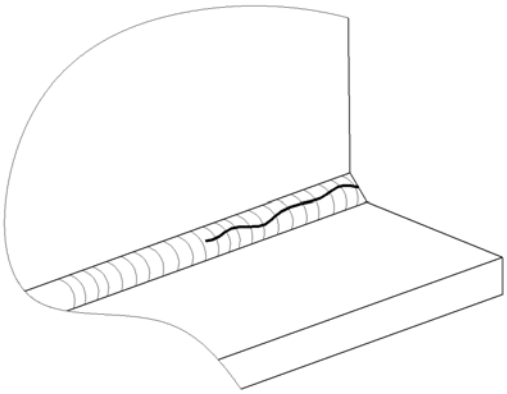
2.1.1 - General mechanical functions

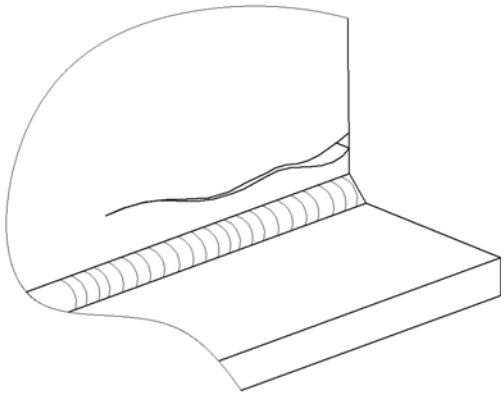
For all the following checks, ensure that the machine is switched off.

Check the following points :

- The presence of the identification plate, labels and operator manual :
  - Their state of cleanliness and visibility.
  - Clean or replace if necessary.
- Visual state of the machine :
  - Absence of leaks (battery acid, hydraulic oil, etc.). Absence of foreign objects on all surfaces. Call the staff in charge of the maintenance if necessary.
  - No missing or loose parts (bolts, nuts, connectors, cables, etc.). Refer to the "tightening torques" table quoted in the Maintenance Book.
  - Absence of cracks, broken parts, damaged paint. No deformations or other anomalies on the structure's parts.

Example





- Cylinders' state :
  - No leaks. Refer to the Maintenance book.
  - No rust and abrasions on the cylinder rod.
  - Absence of foreign objects on all surfaces.
- Steering system's state : wheels, reducers, brakes and tires :
  - No cracks, distortions, damaged paint or other faults
  - No missing or loose bolts. Refer to the "tightening torques" table quoted in the Maintenance Book.
  - Condition of the tyres (cuts, excessive wear, etc.).
- Status of the control boxes :
  - No damage.
  - Back to neutral for all joysticks, selectors, etc..
  - Presence and readablility of the control box labels.
- Movement, safety limit switches :
  - No damage.
  - No missing or loose bolts. Refer to the "tightening torques" table quoted in the Maintenance Book.
  - Absence of foreign objects on all surfaces.
- The state and connection of the electric wires and cables :
  - No damage, wear marks or other faults.
  - No contact between connectors.
- State of the hydraulic unit and pump :
  - No leaks.
  - No missing or loose parts (bolts, nuts, connectors, cables, etc.).
  - Hydraulic oil filter. Refer to the Maintenance book.

- State of the structure's parts : Arm, boom, jib, cage (or platform) :
  - No cracks, damaged paint.
  - No distortion in metal components or visible damage.
  - No foreign objects at the ends of the booms, between arms and link parts.
  - Presence and check the original position of the platform control box sliding bar.

- State of the rotation systems : Turntable rotation, Turntable rotation selector in platform, Jib orientation (For machines fitted with).
  - No excessive clearance : Refer to the Maintenance book.
  - No missing or loose bolts.
  - Absence of foreign objects on all surfaces.
  - Greasing the turntable rotation gear Turntable and Platform.
- State of the tanks :
  - No leaks.
  - No missing or loose parts (bolts, nuts, connectors, cables, etc.). Top up the oil level, if necessary (Machine in transport position).

2.1.2 - Environment

Section A -Safety precautions.

Check the following points :

- Wind speed (Section G 1-Main characteristics).
- The permissible ground pressure and loading on the machine supporting surface (Section G 1-Main characteristics).
- The maximum permissible load in the platform (Section G 1-Main characteristics).
- The maximum permissible lateral force allowed at the platform (Section G 1-Main characteristics).

2.2 - FUNCTIONAL TESTS

2.2.1 - Safety features

Features to be tested :

- Operation of the upper and lower emergency stop buttons.
- Operation of the tilt sensor.
- Visual and audible alarms.
- Platform load management system (Where fitted).
- Movement, safety limit switches.

For functional test procedures refer to (Section E 3.1-Test procedure).

2.2.2 - Ground control box controls (emergency station)

Refer to the corresponding operations to test the controls in the order mentioned (Section E 3.2-Operation from ground position).

on HA12IP (HA33JE) and HA15IP (HA43JE) only

Step	Control
1	Energizes control system 72, 230
2	Movements : • Jib lifting/lowering 8 • Boom telescope out/in 9 • Lifting / lowering of boom 10 • Lifting/lowering of arm 12 • Platform leveling 13 • Turntable rotation 14
3	Beacon light on/off 24
4	Control box energizing key selector 72, 230
5	Horn selector 43(1)

(1.) For machines fitted with

on HA12CJ (HA33CJ) and HA12CJ+ (HA33CJ+) only

Step	Control
1	Energizes control system 72
2	Movements : • Jib lifting/lowering 8 • Boom telescope out/in 9 • Lifting / lowering of boom 10 • Lifting/lowering of arm 12 • Platform leveling 13 • Turntable rotation 14 • Jib rotation 74
3	Control box energizing key selector 72

For HA16PE only

Step	Control
1	Engine start-up selector 22
2	Engine acceleration selector 21
3	Movements : • Jib lifting/lowering 8 • Boom telescope out/in 9 • Lifting / lowering of boom 10 • Lifting/lowering of arm 12 • Turntable rotation 14
4	Beacon light on/off 24
5	Control box energizing key selector 72

2.2.3 - Platform control box controls (driving station)

Refer to the corresponding operations to test the controls in the order mentioned (Section E 3.3-Operations from the platform).

For HA12IP (HA33JE) - HA15IP (HA43JE)

Step	Control
1	Energizes control system 72
2	Steering switch (52) and movement joystick (52)
3	Movements : • Jib elevation/lowering (63) and movement joystick 52 • Platform rotation (64) and movement joystick 52 • Platform compensation (65) and movement joystick 52 • arm lifting/lowering (66) and movement joystick 52 • Boom lifting/lowering (67) and movement joystick 52 • Boom telescope out/in (P68) and movement joystick 52 • Turntable rotation (69) and movement joystick 52
4	Drive speed selector : • Low speed selector (57) and movement joystick 52 • High speed selector (59) and movement joystick 52
5	Horn selector 62

For HA12CJ (HA33CJ) - HA12CJ+ (HA33CJ+)

Step	Control
1	Driving and steering 33
2	Movements : • Lifting / lowering of boom 49 • Lifting/lowering of arm 247 • Jib lifting/lowering 37 • Boom telescope out/in 246 • Jib rotation 83 (For HA12CJ+ (HA33CJ+)) • Platform rotation selector 38 • Turntable rotation 49 • Platform leveling 40
3	Drive speed selector 45
4	Horn selector 43

For HA16PE only

Step	Control
1	Engine start-up selector 42
2	Driving and rear axle direction 86
3	Front axle steering selector 87
4	Platform rotation selector 38
5	Movements : • Jib lifting/lowering 37 • Platform leveling 40 • Lifting / lowering of boom 49 • Turntable rotation 49 • Lifting/lowering of arm 50 • Boom telescope out/in 54
6	Drive speed selector 71
7	Differential lock selector 35
8	Horn selector 43

2.3 - PERIODICAL CHECKS

The machine must be inspected on a regular basis at intervals in accordance with the requirements set forth in the Country of use but no less than once per year. The purpose of the inspection is to detect any defect which could lead to an accident during routine use of the machine.

These inspections must be carried out by a competent company or person whose selection is under the responsibility of the manager (Company employee or other).

The inspection results must be recorded in the safety register or machine log book controlled and overseen by the company manager. This register or machine log book and the list of competent repair persons must be made available to the Government Work Inspector and company safety commitee at all times.

N.B.-:- *Section H Intervention register*

2.4 - REPAIRS AND ADJUSTMENTS

Extensive repairs, interventions or adjustments on the safety systems or elements must be performed by a HAULOTTE Services® employee or a HAULOTTE Services®-approved employee with HAULOTTE Services® training, using original spare parts only.

HAULOTTE Services® technicians are specially trained to carry out extensive repairs, interventions or adjustments on the safety systems or elements of HAULOTTE® machines, and carry genuine HAULOTTE spare parts and tools as required, and also provide fully documented reports on all work completed..

HAULOTTE Services® will not take responsibility for any consequential outcomes resulting from inferior services/repairs carried out by others.

HAULOTTE advises you that NO modifications carried out without the written permission of HAULOTTE® will void the HAULOTTE warranty..

2.5 - INSPECTION / TESTING REQUIREMENTS

Intervention to be made after :

- Extensive dismantling and reassembly.
- Repairs involving the machine's essential components.
- Any accident causing stress to the machine.

Perform a fitness for function inspection, a condition inspection and static and dynamic tests (Consult the After-Sales Service HAULOTTE Services®).

3 - Operation

***N.B.**-:-The functions are described for the entire range. Refer to the machine model to identify the controls and functions indicators.*

Find all the function indicators and controls in Section C 5 - Control boxes

3.1 - TEST PROCEDURE

3.1.1 - Emergency stop button operation

on HA12IP (HA33JE) and HA15IP (HA43JE) only :

***N.B.**-:-The battery main/isolation switch (SB1) must be pulled (Section C 5.3 - Control boxes).*

For HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+) - HA16PE only :

***N.B.**-:-The battery main/isolation switch must be turned.*

Ground control box emergency stop button

Step	Action
1	Pull the emergency stop button 15.
3	on HA12IP (HA33JE) and HA15IP (HA43JE) only : Turn and hold the key on the control box activation selector switch (72, 230) to the right to energize the ground control box. The indicators light up. For HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+) - HA16PE only : Turn the key on the control box activation selector switch (72) to the right to energize the ground control box. The indicators light up.
4	Push the emergency stop button (15). The indicators go out.

Platform control box emergency stop button

Step	Action
1	Pull the emergency stop buttons(15, 46).
2	Turn the key on the control box activation selector switch (72) to the left to energize the platform control box. The indicators light up.
3	Push the emergency stop button (46). The indicators go out.

3.1.2 - Tilt sensor switch operation

Machine unfolded, the slope sensor gives an audible signal telling the operator that the machine should not be deployed. In this case, fully lower the platform and reposition the machine on level ground before raising the platform again.

1. Pull the emergency stop push-buttons on the upper and lower control boxes (15, 46).
2. Switch on the machine from the lower control box (72, 230). All of the ground control box indicators light up and a sound signal (beep) is emitted.
3. Lift the boom, the arm or the jib above the horizontal axis (For HA12IP (HA33JE) - HA15IP (HA43JE) - HA16PE).
4. Locate the tilt sensor next to the ground control box.
5. Manually tilt and maintain the tilt sensor towards the front for a few seconds (Section C 2-Main components) :
6. The audible beep sounds.
7. For machines fitted with : The slope sensor prevents lifting and driving movements.

3.1.3 - Visual and sound alarms

1. Pull or turn the battery main/isolation switch (SB1) (Section C 5.3 - Control boxes).
2. Pull the emergency stop buttons (15, 46).
3. Select the turntable control box or the platform control box (72, 30,). The indicator (31) of the control box lights up, and there is audible signal (beep).

3.1.4 - Weighing system

1. Pull the emergency stop buttons (15, 46).
2. Switch the machine on (72, 230) :

- Move to the right : Ground control box
- Move to the left : Platform control box
- The platform overload indicators (6, 30) on the platform and ground control boxes and the buzzer warn the operator (If the authorized load on the platform is exceeded).

3.1.5 - Movement safety end of drive contactors

1. Raise the jib to horizontal position and activate high speed. The machine must be in micro-speed (Except HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+)).
2. Unfold the jib completely and activate high speed. The machine must be in micro-speed (Except HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+)).
3. Raise the boom slightly above the horizontal position and then activate high speed. The machine must be in micro-speed.
4. Unfold the boom completely and then activate high speed. The machine must be in micro-speed.
5. Raise the arm slightly and then activate high speed. The machine must be in micro-speed.
6. Unfold the arm completely. The machine must be in micro-speed.

3.2 - OPERATION FROM GROUND POSITION

Ground control box is an auxiliary to be used only in case of emergency.

3.2.1 - Machine start-up

on HA12IP (HA33JE) and HA15IP (HA43JE) only :

1. Pull the battery power (SB1).
2. Pull the emergency stop button 15 : This will de-activate the state of emergency stop button located in platform.
3. Turn and hold the key on the control box activation selector switch (72, 230) to the right to energize the ground control box.

on HA12CJ (HA33CJ) and HA12CJ+ (HA33CJ+) only :

1. Turn the battery main/isolation switch (SB1).
2. Pull the emergency stop button 15 : This will de-activate the state of emergency stop button located in platform.
3. Turn the key on the control box activation selector switch (72) to the right to energize the ground control box.

For HA16PE only :

1. Turn the battery main/isolation switch (SB1).
2. Pull the emergency stop button 15 : This will de-activate the state of emergency stop button located in platform.
3. Turn the key on the control box activation selector switch (72) to the right to energize the ground control box. The following indicators light up :
   - Low engine oil pressure 2.
   - Engine temperature 3.
   - Battery charge 4.
4. The clogged air filter indicator (5) is switched off.
5. Press on the starter selector 22. The engine starts. The indicators go out.
6. Let the engine heat up.

3.2.2 - Machine shutdown

- Turn the key of the control box activation selector (72) to the center.
- The machine is shut down. The power to the machine is switched off, all the indicators on the lower console are off.

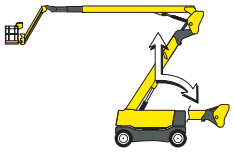
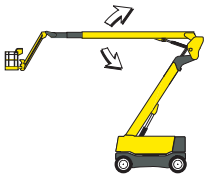
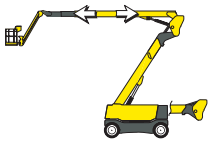
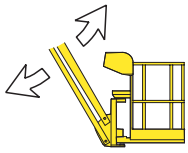
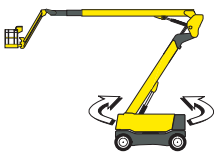
3.2.3 - Movement control

Bucket compensation is possible regardless of the work height. Even at low movement speeds, use the controls with caution.

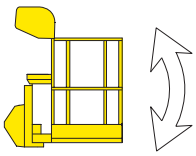
For HA12IP (HA33JE) - HA15IP (HA43JE) - Ground control box controls (emergency station)

***N.B.**-:-For machines fitted with : Hold the selector (230) to the right to validate movement. The release of the selector causes all movement to stop.*

For HA12IP (HA33JE) - HA15IP (HA43JE) - Ground control box controls (emergency station)

Control		Action
Lifting/lowering of arm		Push the arm lift/lower selector (12) upwards to raise the arm. Push the arm lift/lower selector (12) downwards to lower the arm.
Lifting / lowering of boom		Push the boom raising selector switch (10) upwards to lift the boom. Push the boom raising selector switch (10) downwards to lower the boom.
Boom telescope out/in		Push the boom telescoping selector switch (9) to the left to extend the telescope. Push the boom telescoping selector switch (9) to the right to retract the telescope.
Jib lifting/lowering		Push the jib selector switch (8) upwards to lift the jib. Push the jib selector switch (8) downwards to lower the jib.
Turntable rotation		Push the turntable rotation switch (14) to the right for an anticlockwise rotation. Push the turntable rotation selector switch (14) to the left for a clockwise rotation.

E - Driving

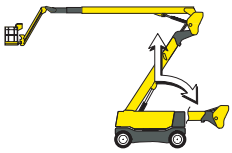
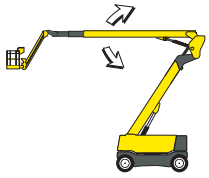
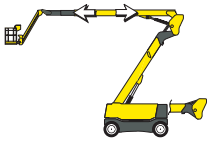
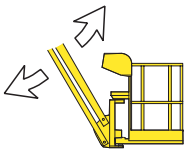
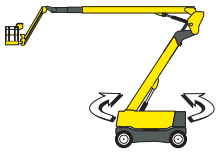
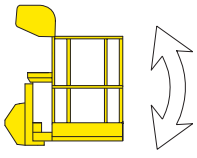
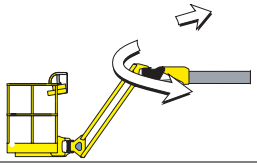
Control		Action
Platform leveling		Push the platform levelling selector switch (13) upwards to lift the platform.
		Push the platform levelling selector switch (13) downwards to lower the platform.

For HA12CJ (HA33CJ) - HA12CJ+ (HA33CJ+) - Ground control box controls (emergency station)

***N.B.**-:-Hold the selector (228) upwards to validate movement. The release of the selector causes all movement to stop.*

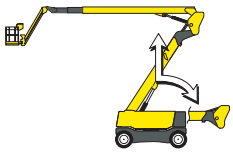
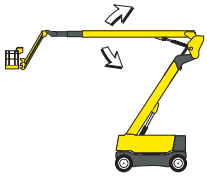
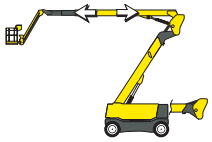
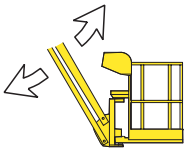
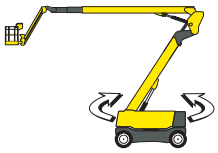
E - Driving

For HA12CJ (HA33CJ) - HA12CJ+ (HA33CJ+) - Ground control box controls (emergency station)

Control		Action
Lifting/lowering of arm		Push the arm lift/lower selector (12) upwards to raise the arm. Push the arm lift/lower selector (12) downwards to lower the arm.
Lifting / lowering of boom		Push the boom raising selector switch (10) upwards to lift the boom. Push the boom raising selector switch (10) downwards to lower the boom.
Boom telescope out/in		Push the boom telescoping selector switch (9) to the left to extend the telescope. Push the boom telescoping selector switch (9) to the right to retract the telescope.
Jib lifting/lowering		Push the jib selector switch (8) upwards to lift the jib. Push the jib selector switch (8) downwards to lower the jib.
Turntable rotation		Push the turntable rotation switch (14) to the right for an anticlockwise rotation. Push the turntable rotation selector switch (14) to the left for a clockwise rotation.
Platform leveling		Push the platform levelling selector switch (13) upwards to lift the platform. Push the platform levelling selector switch (13) downwards to lower the platform.
Jib rotation		Push the jib rotation selector switch (74) to the left for a clockwise rotation. Push the jib rotation selector switch (74) to the right for an anticlockwise rotation.

E - Driving

For HA16PE only - Ground control box controls (emergency station)

Control		Action
Lifting/lowering of arm		Push the arm lift/lower selector (12) upwards to raise the arm. Push the arm lift/lower selector (12) downwards to lower the arm.
Lifting / lowering of boom		Push the boom raising selector switch (10) upwards to lift the boom. Push the boom raising selector switch (10) downwards to lower the boom.
Boom telescope out/in		Push the boom telescoping selector switch (9) to the left to extend the telescope. Push the boom telescoping selector switch (9) to the right to retract the telescope.
Jib lifting/lowering		Push the jib selector switch (8) upwards to lift the jib. Push the jib selector switch (8) downwards to lower the jib.
Turntable rotation		Push the turntable rotation selector switch (14) to the left for a clockwise rotation. Push the turntable rotation switch (14) to the right for an anticlockwise rotation.

***N.B.**-:-The release of the selector causes all movement to stop.*

3.2.4 - Other controls

- Switching from the ground control box to the platform control box :

The battery main/isolation switch (SB1) and the emergency stop push-button (15) must be pulled or turned.

• Turn the key on the control box activation selector switch (72, 230) to the left to energize the platform control box. The ground control box controls are de-energized.

- Switching from the platform control box to the ground control box :

The emergency stop button (15) must be pulled out.

• on HA12IP (HA33JE) and HA15IP (HA43JE) only : Turn and hold the key on the control box activation selector switch (230) to the right to energize the ground control box. The platform control box controls are de-energized.

• For HA16PE - HA12CJ (HA33CJ) - HA12CJ+ (HA33CJ+) only : Turn the key on the control box activation selector switch (72) to the right to energize the ground control box. The platform control box controls are de-energized.

For HA16PE only

- Engine speed increases :
- Turn the engine speed selector switch (21) to the right to switch to increase speed.
- Turn the engine speed selector switch (21) to the left to switch to idling speed.
- For the machines equipped with beacon lights :
- Push the beacon light selector switch (24) to the right to switch on the beacon light.
- Push the beacon light selector switch (24) to the left to switch off the beacon light.

3.3 - OPERATIONS FROM THE PLATFORM

3.3.1 - Machine start-up

For HA16PE only

1. Pull the emergency stop button 46.
2. Press on the starter selector 42. The engine starts. The power-up indicator (31) lights up.
3. Let the engine heat up.

***N.B.**-:-If the engine does not start, switch off the ignition (emergency stop button pushed in). Repeat the start-up procedure.*

3.3.2 - Machine shutdown

For HA16PE only :

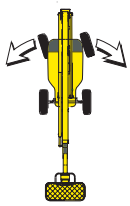
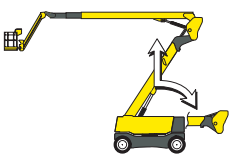
Press the emergency stop button (46).

3.3.3 - Movement control

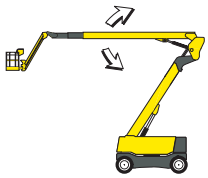
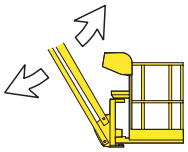
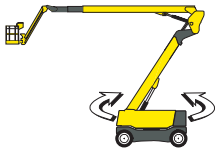
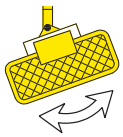
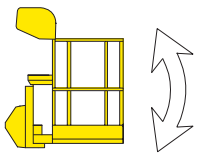
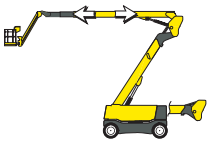
For HA12IP (HA33JE) - HA15IP (HA43JE) - Platform control box controls (driving station)

Activate the controls and the 'Enable Switch' system simultaneously to perform the various movements.

For HA12IP (HA33JE) - HA15IP (HA43JE) - Platform control box controls (driving station)

Control		Action
Driving		Push the low or high speed touch pads (59) or (57). Push the drive joystick (52) forwards to move the machine forwards.
		Push the low or high speed touch pads (59) or (57). Push the drive joystick (52) backwards to reverse the machine.
Steering		Push the low or high speed touch pads (59) or (57). Push the drive joystick (52) forwards to move the machine forwards. Push the front-axle steering selector switch (52) to the right to steer to the right.
		Push the low or high speed touch pads (59) or (57). Push the drive joystick (52) forwards to move the machine forwards. Push the front-axle steering selector switch (52) to the left to steer to the left.
Lifting/lowering of arm		Push the arm lift/lower touch pads (66). Push the arm lift/lower joystick (52) forwards to raise the arm.
		Push the arm lift/lower joystick (52) backwards to lower the arm.

E - Driving

Control		Action
Lifting / lowering of boom		Push the boom lifting touch pads (67). Push the boom raising joystick (52) forwards to lift the boom. Push the boom raising joystick (52) backwards to lower the boom.
Jib lifting/lowering		Push the jib elevation touch pads (63). Push the jib joystick (52) forwards to raise the jib. Push the jib joystick (52) backwards to lower the jib.
Turntable rotation		Push the turntable rotation touch pads (69). Push the turntable rotation joystick (52) backwards for counter clockwise (CCW) rotation. Push the turntable rotation joystick (52) forwards for clockwise rotation.
Platform rotation		Push the platform rotation touch pads (64). Push the turntable rotation joystick (52) backwards for counter clockwise (CCW) rotation. Push the platform rotation joystick (52) forwards for clockwise rotation.
Platform leveling		Push the platform compensation touch pads (65). Push the platform compensation joystick (52) forwards to raise the platform. Push the platform compensation joystick (52) backwards to lower the platform.
Drive speed (minimum)		Push the driving speed selector (59) to high speed (long distance driving, tarmac, concrete). Push the driving speed selector (57) to for driving in low speed (short distance, final approach, descending from the lorry).
Boom telescope out/in		Push the boom telescope touch pads (68). Push the boom telescoping joystick (52) forwards to retract the telescope. Push the boom telescoping joystick (52) backwards to extend the telescope.

N.B.-:-*The release of the selectors and (or) joysticks causes all movement to stop.*

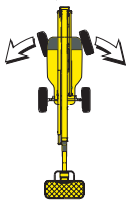
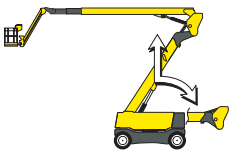
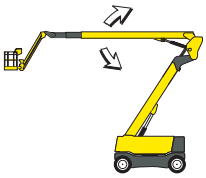
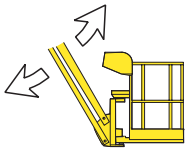
E - Driving

For HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+) - Platform control box controls (driving station)

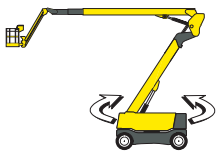
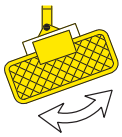
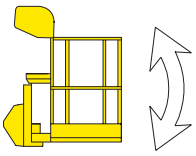
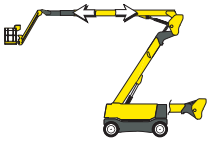
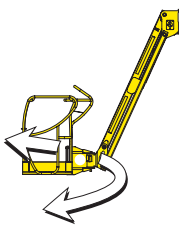
Activate the controls and the 'Enable Switch' system simultaneously to perform the various movements.

***N.B.**-:-Press and hold the 'Enable Switch' pedal down to confirm the movement. Movements are stopped and prohibited as a result of pressing the pedal without motion for more than 7 s or releasing the pedal.*

For HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+) - Platform control box controls (driving station)

Control		Action
Driving		Push the low or high speed selector 45. Push the drive joystick (33) forwards to move the machine forwards.
		Push the low or high speed selector 45. Push the drive joystick (33) backwards to reverse the machine.
Steering		Push the low or high speed selector 45. Push the drive joystick (33) forwards to move the machine forwards. Push the front-axle steering selector switch (33) to the right to steer to the right.
		Push the low or high speed selector 45. Push the drive joystick (33) forwards to move the machine forwards. Push the front-axle steering selector switch (33) to the left to steer to the left.
Lifting/lowering of arm		Push the arm lift/lower selector (247) upwards to raise the arm.
		Push the arm lift/lower selector (247) downwards to lower the arm.
Lifting / lowering of boom		Push the boom raising joystick (49) forwards to lift the boom.
		Push the boom raising joystick (49) backwards to lower the boom.
Jib lifting/lowering		Push the jib selector switch (37) forwards to lift the jib.
		Push the jib selector switch (37) back to lower the jib.

E - Driving

Control		Action
Turntable rotation		Push the turntable rotation joystick (49) to the left for a clockwise rotation.
		Push the turntable rotation joystick (49) to the right for an anticlockwise rotation.
Platform rotation		Push the platform rotation selector (38) to the left for a clockwise rotation.
		Push the platform rotation selector (38) to the right for an anticlockwise rotation.
Platform leveling		Push the platform levelling selector switch (40) forwards to lift the platform.
		Push the platform levelling selector switch (40) back to lower the platform.
Drive speed (minimum)	 	Push the driving speed selector (45) to  high speed (long distance driving, tarmac, concrete).
		Push the driving speed selector (45) to  for driving in low speed (short distance, final approach, descending from the lorry).
Boom telescope out/in		Push the boom telescoping selector switch (246) to the left to extend the telescope.
		Push the boom telescoping selector switch (246) to the right to retract the telescope.
Jib rotation (For HA12CJ+ (HA33CJ+) only)		Push the jib rotation selector switch (83) to the left for a clockwise rotation.
		Push the jib rotation selector switch (83) to the right for an anticlockwise rotation.

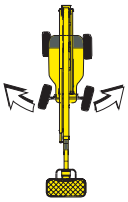
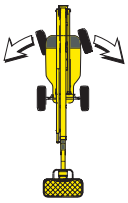
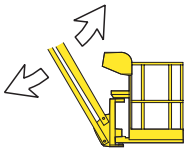
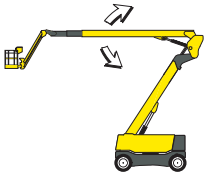
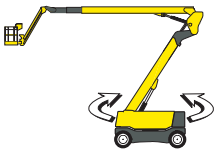
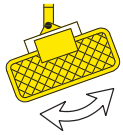
***N.B.**-:-The release of the selectors and (or) joysticks causes all movement to stop.*

For HA16PE - Platform control box controls (driving station)

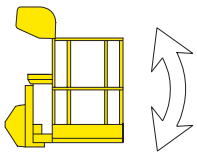
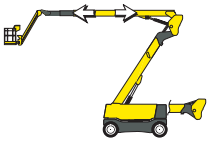
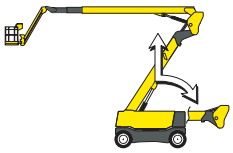
Activate the controls and the 'Enable Switch' system simultaneously to perform the various movements.

E - Driving

For HA16PE - Platform control box controls (driving station)

Control		Action
Driving		Push the drive joystick (86) forwards to move the machine forwards. Push the drive joystick (86) backwards to reverse the machine.
Rear-axle steering		Push the rear axle steering selector to the right (86) to steer to the right Press to the left of the rear axle steering selector (86) to steer to the left
Front-axle steering		Push the front-axle steering selector switch (87) to the right to steer to the right. Push the front-axle steering selector switch (87) to the left to steer to the left.
Jib lifting/lowering		Push the jib selector switch (37) upwards to lift the jib. Push the jib selector switch (37) downwards to lower the jib.
Lifting / lowering of boom		Push the boom raising joystick (49) upwards to lift the boom. Push the boom raising joystick (49) downwards to lower the boom.
Turntable rotation		Push the turntable rotation selector switch (49) to the left for a clockwise rotation. Push the turntable rotation switch (49) to the right for an anticlockwise rotation.
Platform rotation		Push the platform rotation selector (38) to the right for an anticlockwise rotation. Push the platform rotation selector (38) to the left for a clockwise rotation.

E - Driving

Control		Action
Platform leveling		Raise the safety cover. Push the platform levelling selector switch (40) upwards to lift the platform.
		Raise the safety cover. Push the platform levelling selector switch (40) downwards to lower the platform.
Drive speed (minimum)		Set the drive speed selector switch (71) to  for high-speed driving (long distance driving, tarmac, concrete).
		Position the driving speed selector (71) on  for medium speed driving (crossing uneven ground, slope).
		Set the driving speed selector (71) to  for low-speed driving (short distance, final approach, unloading from lorries).
Boom telescope out/in		Push the boom telescoping selector switch (54) to the left to extend the telescope.
		Push the boom telescoping selector switch (54) to the right to retract the telescope.
Lifting/lowering of arm		Push the arm lift/lower joystick (50) forwards to raise the arm.
		Push the arm lift/lower joystick (50) backwards to lower the arm.

N.B.-:-*The release of the selectors and (or) joysticks causes all movement to stop.*

3.3.4 - Other controls

For : HA16PE - HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+)

- Horn : Push the horn selector (43) to the right to sound the horn.

N.B.-:-*The horn stops when the selector switch is released.*

For : HA12IP (HA33JE) - HA15IP (HA43JE)

- Horn : Press the Horn switch (62) to sound the horn.

Find all the function indicators and controls in Section C 5 - Control boxes

1 - Emergency lowering

1.1 - PRINCIPLE

***N.B.**-:-During rescue and emergency maintenance manoeuvres from the ground, it is essential to ensure that there are no obstacles under the platform (wall, beam, electricity line, etc.).*

Emergency lowering is implemented if the operator using the console on the platform needs to be rescued and cannot operate the controls himself even if the machine is operating normally. This situation may arise if the operator is taken ill, is injured or if the control console is inaccessible.

A ground operator trained in using the emergency controls and in possession of the starter key can use the ground control box with the main power source to lower the platform operator.

If the machine is stuck or hooked in surrounding structures or equipment, it is essential to release the operators before intervening on the machine.

1.2 - PROCEDURE

Section A 2-Pre-operation instructions

1. Turn the key on the control box activation selector switch (72) to the right to energize the ground control box. The platform control box controls are de-energized.
2. Lower the platform from the ground control box.

***N.B.**-:-Activating the emergency controls listed above deactivates the controls of the console on the platform.*

1.3 - EXTRAORDINARY PROCEDURE

In the context of emergency lowering, it is possible that the emergency stop located on the platform is activated or that safety mechanisms such as the overload limitor are preventing the machine from operating normally.

During an exceptional procedure, for machines which are not fitted with the manual rescue control as described in the "emergency lowering" paragraph, activating the lower console deactivates the emergency pushbutton located on the platform.

***N.B.**-:-During these exceptional manoeuvres, movements are slowed down for safety reasons.*

2 - Lowering for repairs

2.1 - PRINCIPLE

The lowering for repairs function allows the operator to be lowered to the ground in case of failure of the main power source.

2.2 - PROCEDURE

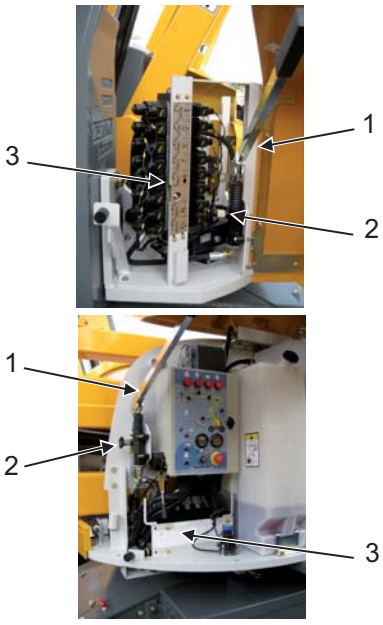
For HA12IP (HA33JE) - HA15IP (HA43JE) - HA16PE :

There is a way of performing movements from the ground, when the main energy source malfunctions. It is a hand pump located next to the hydraulic distributors on the turntable.

This pump can be used in combination with a manual override multi bank electro-hydraulic valve, to perform the movement required to lower the platform :

- Boom lowering.
- Boom descent.
- To telescope in
- Turntable rotation.
- Platform rotation.
- Jib lowering.

1. Insert the lever (1) in the socket of the pump.
2. Check that the pump depressurizing valve (2) is in closed position.
3. Push the lever from top to bottom several times whilst keeping the manual electro-distributor control for the requirement movement shown on the plate pressed in and held in 3



F - Special procedure

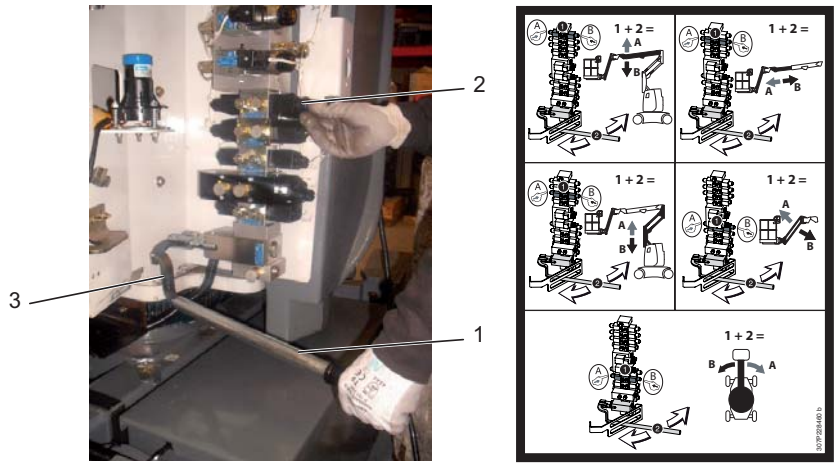
For HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+) :

There is a way of performing movements from the ground, when the main energy source malfunctions. This involves a hand pump located at the base of the hydraulic unit on the turntable.

This pump can be used in combination with a manual override multi bank electro-hydraulic valve, to perform the movement required to lower the platform :

- Boom lowering.
- Boom descent.
- To telescope in
- Turntable rotation.
- Jib lowering.

4. Insert the lever (1) in the return bend of the pump (3).
5. Push the lever from left to right several times whilst keeping down the manual electro-distributor control (2) for the required movement, as shown on the plate (A74).



***N.B.**-:-Some lifting movements may be performed in order to avoid particular obstacles.*

***N.B.**-:-An electric emergency pump is available as an option. It replaces the main pump in case of a malfunction. Depending on the control box used, push and hold the back-up hydraulic power system selector switch ((228) downwards or (41) upwards) and lower the platform.*

If the operator in the platform has to exit the platform when elevated, he must exit onto a sturdy, safe structure, the transfer must respect the following recommendations :

- The operator must secure himself by using 2 straps. One lanyard is attached to the platform, the other to the structure onto which he wishes to exit.
- The operator must exit the platform via the standard access point.
- The operator must not detach the strap connected to the platform until transfer is complete or while the transfer still presents a danger.

If the operator cannot be lowered by any of the above mentioned methods, contact HAULOTTE Services® immediately.

3 - Towing

In case of a machine failure, it is possible to tow it to load it onto a trailer.

3.1 - DISSENGAGING THE DRIVE HUBS

To tow a broken-down machine, disconnect the wheel drive hubs.

Perform these operations on flat, horizontal ground. Failing that, block the wheels to immobilize the machine. During an operation of disengaging the drive hubs, the machine is in free wheels, the brake system no longer functions.

For : HA16PE

Unscrew the central nut (1) until the nut is at the limit.

For : HA12IP (HA33JE) - HA15IP (HA43JE)

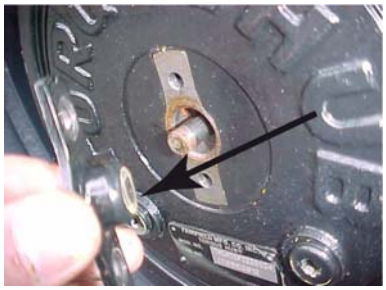
Unscrew the central nut until the nut is at the limit.

As soon as there is resistance, do not force further to avoid breaking the central nut in the reducer.

For : HA12CJ (HA33CJ) - HA12CJ+ (HA33CJ+)

Unscrew the 2 nuts with an 11 mm spanner.

Turn the part and screw it back on.



The gears are released.

3.2 - REENGAGING THE DRICE HUBS

After repairing the machine, reengage the wheel drive hubs.

For : HA12IP (HA33JE) - HA15IP (HA43JE)

Tighten the central reducer nut (1).

For : HA12CJ (HA33CJ) - HA12CJ+ (HA33CJ+)

Perform in reverse order to the drive hub disengaging procedure.

For : HA16PE

- Screw the central nut up again to engage the internal gear.
- Engage the driving gear slowly in case of resistance.
- Screw the central nut up completely when the once the drive gear has commenced to engage.

***N.B.**-:-In the event that resistance to gear engagement is felt, perform the machine drive function to slowly move the internal hub gear to a mesh position where both gears will engage ; then screw the central nut in fully.*

4 - Loading and unloading

***N.B.**-:-When driving up an incline or ramp, during loading or unloading HAULOTTE® recommends positioning the counterweight at the rear.*

on HA12CJ (HA33CJ) and HA12CJ+ (HA33CJ+) only :

***N.B.**-:-When driving up an incline or ramp, during loading or unloading HAULOTTE® recommends positioning the drive axle below the steered axle.*

Raise the platform sufficiently to avoid contact with the ground.

To avoid any risk of tipping over, the boom must be maintained in the longitudinal axis of the chassis.

Section F 4.2Putting in transport position.

4.1 - PRINCIPLE

To avoid any risk of sliding during loading, ensure that :

- **The loading ramps can bear the load.**
- **The loading ramps are correctly attached.**
- **The loading ramp has sufficient grip.**

Since the gradient of the slope usually exceeds the authorized limit for an unfolded machine in the normal operational mode, the arm and boom must be lowered and retracted to allow travel up the ramp.

In this case, the buzzer is not activated and driving is authorised.

For HA16PE :

To climb the slope, select low driving speed .

For HA12IP (HA33JE) , HA15IP (HA43JE) , HA12CJ (HA33CJ) and HA12CJ+ (HA33CJ+) only :

Select the high driving speed to climb the slope

If the slope is too steep, use a winch in addition to traction.

Never place yourself below or too close to the machines during loading.

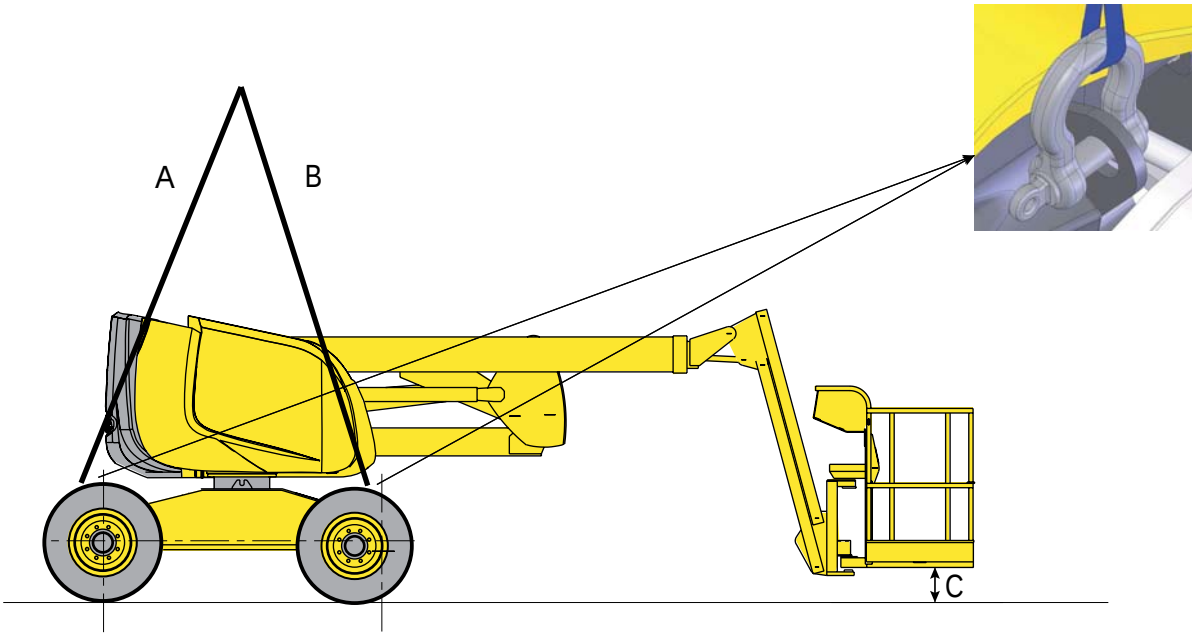
A wrong move can lead to the tipping over of the machine and cause serious bodily and material accidents.

4.1.1 - Loading by lifting

Ensure that :

- The machine is completely stowed.
- The platform must be empty.
- The lifting equipment ie. slings, shackles, hooks, lifting beam etc. are in good condition and of sufficient capacity.
- The personnel performing the lift is authorised to complete the lift.

Procedure for the use of slings-HA12CJ/CJ+ - HA16(S)PX - HA18(S)PX



Machine	Distance C	Number of slings	Length A	Length B	Maximum load per sling and shackle
HA12CJ/CJ+ HA16(S)PX HA18(S)PX	20 cm (8 in)	4	5 m (16 ft 5 in)	5 m (16 ft 5 in)	5000 DaN (11241 lbf)

Before using slings, lift the jib to obtain a minimum 20 cm (8in) clearance between the ground and cage.

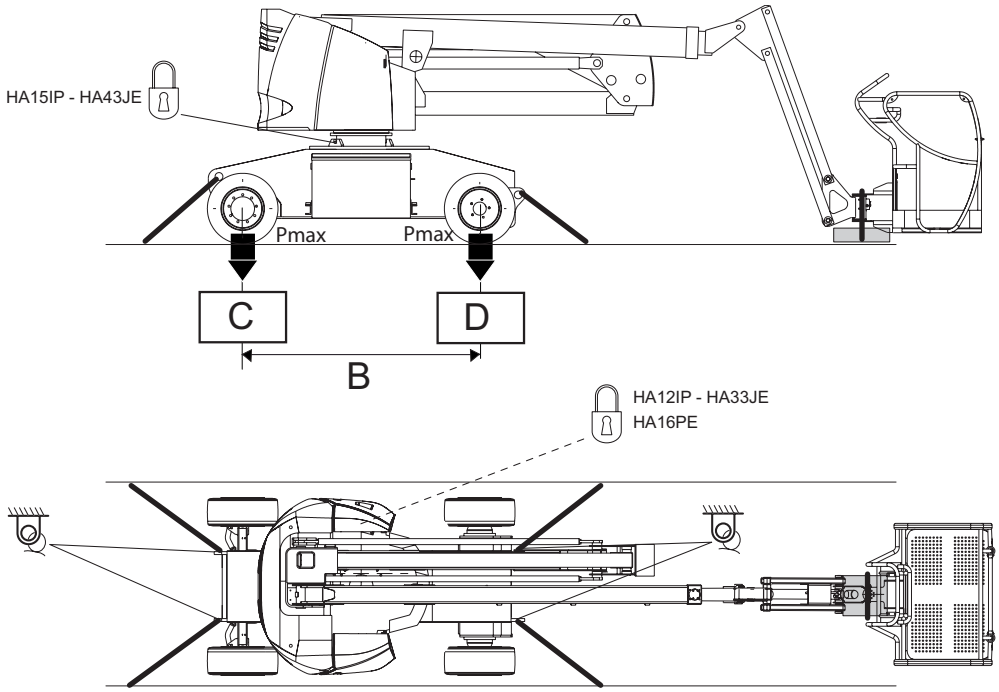
4.2 - PUTTING IN TRANSPORT POSITION

The machine must be completely stowed.

1. Check the platform is completely empty.
2. Raise the boom sufficiently.
3. Depending on the configuration of the machine, engage the transport position selector (13) to the right.
4. Lower the boom without forcing (for fear of damaging the platform).
5. Secure the machine to the anchorage points provided for this purpose (See Figure below).
6. Block the turntable with the rotation stop pin located under the turntable.

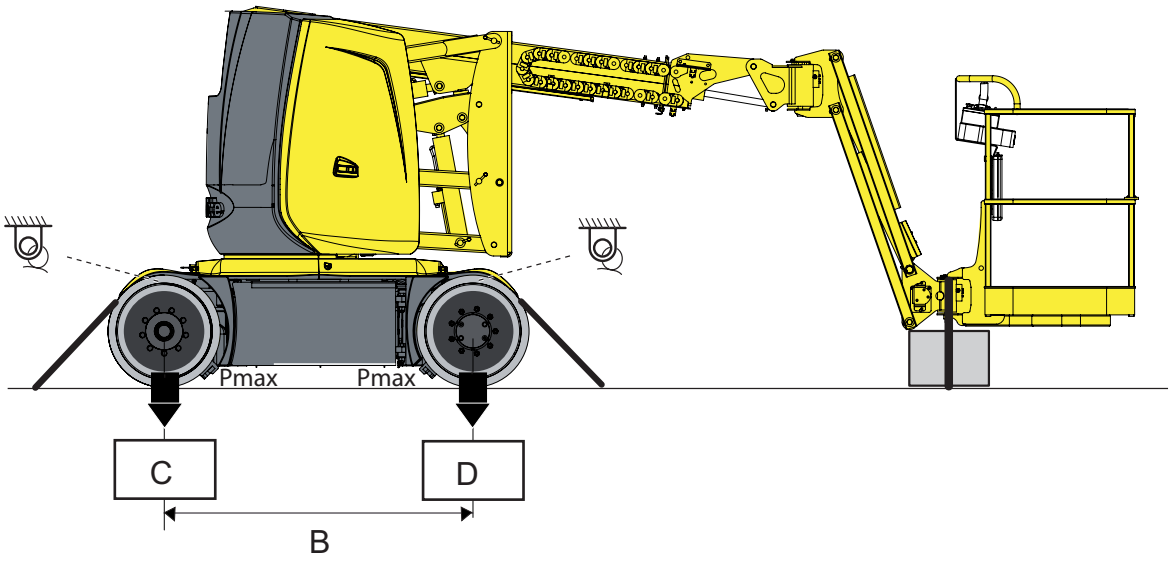
Do not transport the machine if the turntable is not locked.

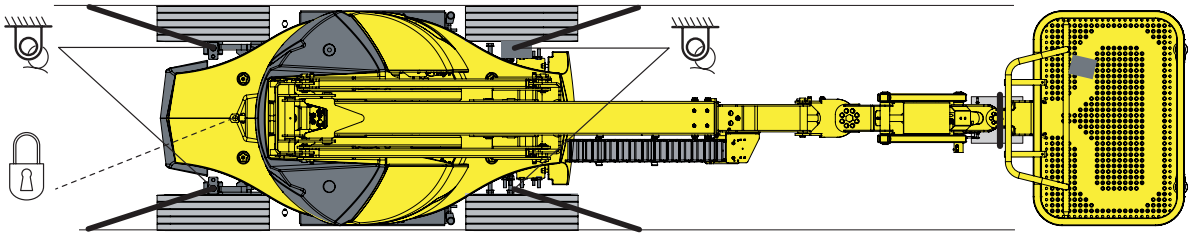
For : HA12IP (HA33JE) - HA15IP (HA43JE) - HA16PE



F - Special procedure

For : HA12CJ (HA33CJ) - HA12CJ+ (HA33CJ+)





Loading characteristics

Marking	Description	HA12IP (HA33JE)	HA15IP (HA43JE)
B	Lateral distance between the wheels[(1)].	1,80 m(5 ft10 in)	2,00 m(6 ft6 in)
C	Front wheel ground pressure[((1.))]	10,4 daN/cm² (2,13 lbf/sq.ft)	8,6 daN/cm² (1,76 lbf/sq.ft)
D	Rear wheel ground pressure[((1.))]	10,4 daN/cm² (2,13 lbf/sq.ft)	8,6 daN/cm² (1,76 lbf/sq.ft)
	Anchorage point		
	Turntable rotation locking		

(1.) Check the technical data in the technical characteristics

F - Special procedure

Loading characteristics

Marking	Description	HA16PE
B	Lateral distance between the wheels(1).	2,00 m(6 ft6 in)
C	Front wheel ground pressure((1.))	7,6 daN/cm² (1,56 lbf/sq.ft)
D	Rear wheel ground pressure((1.))	7,6 daN/cm² (1,56 lbf/sq.ft)
	Anchorage point	
	Turntable rotation locking	

(1.) Check the technical data in the technical characteristics

Loading characteristics

Marking	Description	HA12CJ (HA33CJ)	HA12CJ+ (HA33CJ+)
B	Lateral distance between the wheels(1).	1,65 m(5 ft5 in)	1,65 m(5 ft5 in)
C	Front wheel ground pressure((1.))	17,5 daN/cm² (3,58 lbf/sq.ft)	17,5 daN/cm² (3,58 lbf/sq.ft)
D	Rear wheel ground pressure((1.))	17,5 daN/cm² (3,58 lbf/sq.ft)	17,5 daN/cm² (3,58 lbf/sq.ft)
	Anchorage point		
	Turntable rotation locking		

(1.) Check the technical data in the technical characteristics

4.3 - UNLOADING

Before operating, check that the machine is in good condition.

If the machine has been damaged during transportation, contact the transporter in writing.

1. Unlock the turntable rotation locking pin.
2. Remove the tie downs.
3. Start the machine.

4.4 - WARNING

Upon starting a machine that has been secured then transported, the safety system may detect a false overload forbidding all movement from the platform control box.

To reinstate the system, lift the jib a few centimetres from the ground control box.

For : HA12IP (HA33JE) - HA15IP (HA43JE) - HA12CJ (HA33CJ) - HA12CJ+ (HA33CJ+)

If the machine was transported in the transport position :

Push the transport position selector (13) to the left to set the machine to operating position.

To unload the machine, select low driving speed  .

Do not travel down the ramp at a fast speed.

4.5 - STORAGE

The machine must always be powered up when it is unfolded so that the security systems are active.

This means that the machine must be parked in stowed position.

The boom may be raised but it cannot be telescoped.

We strongly advise you not to store or immobilize the machine unfolded to avoid jeopardising the safety of people and property.

F - Special procedure

1 - Main characteristics

Certain options can modify the machine's operating characteristics and its associated safety. If your machine was originally delivered with options fitted, replacing a safety component associated with a particular options not require any particular precautions other than those associated with the installation itself (static test).

Otherwise, it is essential to follow the manufacturer's recommendations below :

- **Installation by authorised HAULOTTE® personnel only.**
- **Update the manufacturer's identification plate.**
- **Have stability tests carried out by a certified agency/competent person.**
- **Ensure label compliance.**

HAULOTTE® has a continuous improvement policy in place for its product range ; Given this policy, The Company reserves the right to modify their product technical characteristics without notice.

The hand and feet vibration and noise level values indicated in the technical characteristics tables are obtained in the following conditions :

- **The maximum quadratic mean value weighted as an acceleration frequency and the total value of the vibrations to which the hand-arm system is exposed have been measured on the products by simulating a cycle representative of normal use. The values meet the requirements of the 2006/42/CE machine directive.**
- **For electric machines, the sound power level is measured at the drive station under the conditions described by the 2006/42/CE machine directive.**
- **For machines equipped with internal combustion engines, the noise level guarantees (LWA displayed on the product) and is measured in accordance with the method and the conditions described in Appendix III, Part B, Method 1 and 0 of the 2000/14/CE European directive.**

For HA12IP (HA33JE) - Technical characteristics

Machine	HA12IP		HA33JE	
Characteristics	Metric	Imperial	Metric	Imperial
Overall width of machine	1,35 m	(4 ft5 in)	1,35 m	(4 ft5 in)
Maximum ground clearance	0,15 m	(0 ft5 in)	0,15 m	(0 ft5 in)
Transport height	2,00 m	(6 ft6 in)	2,00 m	(6 ft6 in)
Transport length	5,45 m	(17 ft10 in)	5,45 m	(17 ft10 in)
Maximum work height	12,00 m	(39 ft4 in)	12,00 m	(39 ft4 in)
Maximum platform height	10,00 m	(32 ft9 in)	10,00 m	(32 ft9 in)
Maximum work radius	6,63 m	(21 ft9 in)	6,63 m	(21 ft9 in)
Turntable rotation	355 °			
Jib working range	+70° / - 70°			
Platform length	0,80 m	(2 ft7 in)	0,80 m	(2 ft7 in)
Platform width	1,20 m	(3 ft11 in)	1,20 m	(3 ft11 in)
Outer turning radius	2,85 m	(9 ft4 in)	2,85 m	(9 ft4 in)
Inner turning radius	2,50 m	(8 ft2 in)	2,50 m	(8 ft2 in)
Tilt CE-AS compliant machines	3 °			
Rated slope ANSI-CSA compliant machines			0 °	
Slope warning ANSI-CSA compliant machines			5 °	
Maximum wind speed allowed	45 km/h	(28 mph)	45 km/h	(28 mph)
Total weight	5900 kg	(13007 lb)	5900 kg	(13007 lb)
Maximum platform load	230 kg	(507 lb)	230 kg	(507 lb)

G - Technical characteristics

Machine	HA12IP		HA33JE	
Characteristics	**Metric**	**Imperial**	**Metric**	**Imperial**
Maximum number of people on the platform	2			
Engine type	Electric			
Hydraulic oil tank capacity	30 l	(7.9 gal US)	30 l	(7.9 gal US)
Battery types	Standard : Semi traction Option : Traction			
Battery voltage	48 V			
Battery capacity	Standard : 345 Ah Option : 360 Ah			
Maximum climbable slope	25 %			
Tyre type and/ or size	7.00" - 12"		7.00" - 12"	
Maximum ground pressure on hard ground	10,4 daN/cm²	2,13 lbf/sq.ft	10,4 daN/cm²	2,13 lbf/sq.ft
Maximum ground pressure on soft ground	7,2 daN/cm²	1,47 lbf/sq.ft	7,2 daN/cm²	1,47 lbf/sq.ft
Micro drive speed	0,9 km/h	(0,56 mph)	0,7 km/h	(0,4 mph)
Low drive speed	2,2 km/h	(1,37 mph)	2,3 km/h	(1,4 mph)
High drive speed	4,5 km/h	(2,8 mph)	5,0 km/h	(3,1 mph)
Hand vibration	<2,5 m/s²	(98 in/s²)	<2,5 m/s²	(98 in/s²)
Feet vibration	<0,5 m/s²	(19 in/s²)	<0,5 m/s²	(19 in/s²)
Noise emission level	< 70 dB (A)			
Manual lateral force at platform	CE-AS compliant machines : 400 N - 90 lbf		ANSI-CSA compliant machines : 666 N / 150 lbf	

G - Technical characteristics

For HA15IP (HA43JE) - Technical characteristics

Machine	HA15IP		HA43JE	
Characteristics	Metric	Imperial	Metric	Imperial
Overall width of machine	1,50 m	(4 ft11 in)	1,50 m	(4 ft11 in)
Maximum ground clearance	0,15 m	(0 ft5 in)	0,15 m	(0 ft5 in)
Transport height	2,10 m	(6 ft11 in)	2,00 m	(6 ft6 in)
Transport length	6,60 m	(21 ft7 in)	6,60 m	(21 ft7 in)
Maximum work height	15,00 m	(49 ft2 in)	15,00 m	(49 ft2 in)
Maximum platform height	13,00 m	(42 ft7 in)	13,00 m	(42 ft7 in)
Maximum work radius	8,45 m	(27 ft8 in)	8,45 m	(27 ft8 in)
Turntable rotation	350 °			
Jib working range	+70° / - 70°			
Platform length	0,80 m	(2 ft7 in)	0,80 m	(2 ft7 in)
Platform width	1,20 m-1,50 m	(3 ft11 in)-(4 ft11 in)	1,20 m-1,50 m	(3 ft11 in)-(4 ft11 in)
Outer turning radius (without retracted axle adjustment)	3,70 m	(12 ft1 in)	3,70 m	(12 ft1 in)
Inner turning radius (with axles retracted)	1,70 m	(5 ft6 in)	1,70 m	(5 ft6 in)
Tilt CE-AS compliant machines	3 °			
Rated slope ANSI-CSA compliant machines	0 °			
Slope warning ANSI-CSA compliant machines	5 °			
Maximum wind speed allowed	45 km/h	(28 mph)	45 km/h	(28 mph)
Total weight	7300 kg	(16094 lb)	7300 kg	(16094 lb)
Maximum platform load	230 kg	(507 lb)	230 kg	(507 lb)
Maximum number of people on the platform	2			
Engine type	Electric			
Hydraulic oil tank capacity	30 l	(7.9 gal US)	30 l	(7.9 gal US)
Battery types	Standard : Semi traction Option : Traction			
Battery voltage	48 V			
Battery capacity	Standard : 345 Ah Option : 360 Ah			
Maximum climbable slope	25 %			
Tyre type and/ or size	23.10" - 12"			
Maximum ground pressure on hard ground	8,6 daN/cm²	1,76 lbf/sq.ft	8,6 daN/cm²	1,76 lbf/sq.ft
Maximum ground pressure on soft ground	6,3 daN/cm²	1,29 lbf/sq.ft	6,3 daN/cm²	1,29 lbf/sq.ft
Low drive speed	2,3 km/h	(1,4 mph)	2,3 km/h	(1,4 mph)
High drive speed	5 km/h	(3,11 mph)	4,5 km/h	(2,8 mph)
Hand vibration	<2,5 m/s²	(98 in/s²)	<2,5 m/s²	(98 in/s²)
Feet vibration	<0,5 m/s²	(19 in/s²)	<0,5 m/s²	(19 in/s²)
Noise emission level	< 70 dB (A)			
Manual lateral force at platform	CE-AS compliant machines : 400 N - 90 lbf		ANSI-CSA compliant machines : 666 N / 150 lbf	

G - Technical characteristics

For HA12CJ (NA) - Technical characteristics

Machine	HA12CJ		HA32CJ	
Characteristics	Metric	Imperial	Metric	Imperial
Overall length of machine	5,36 m	(17 ft7 in)	5,36 m	(17 ft7 in)
Overall width of machine	1,20 m	(3 ft11 in)	1,20 m	(3 ft11 in)
Overall height of machine	1,99 m	(6 ft6 in)	1,99 m	(6 ft6 in)
Minimum ground clearance	0,04 m	(0 ft2 in)	0,04 m	(0 ft2 in)
Maximum ground clearance	0,11 m	(0 ft4 in)	0,11 m	(0 ft4 in)
Cage ground clearance in stowed position	0,35 m	(1 ft2 in)	0,35 m	(1 ft2 in)
Platform length in transport position	3,86 m	(12 ft8 in)	3,86 m	(12 ft8 in)
Platform height in transport position	2,22 m	(7 ft3 in)	2,22 m	(7 ft3 in)
Overall width at standard tyre level	1,20 m	(3 ft11 in)	1,20 m	(3 ft11 in)
Maximum work height	11,70 m	(38 ft5 in)	11,70 m	(38 ft5 in)
Maximum floor elevation height	9,70 m	(31 ft10 in)	9,70 m	(31 ft10 in)
Maximum working overhang above ground	6,94 m	(22 ft9 in)	6,94 m	(22 ft9 in)
Maximum height of pivot point	4,74 m	(15 ft7 in)	4,74 m	(15 ft7 in)
Maximum span of cage above ground	6,44 m	(21 ft2 in)	6,44 m	(21 ft2 in)
Turntable rotation	355 °			
Boom rotation angle	83 °			
Jib working range	+63.5° / - 68.7°			
Horizontal jib rotation	+90° / - 90°			
Length of jib movement with horizontal cage	2,45 m	(8 ft0 in)	2,45 m	(8 ft0 in)
Height of jib movement at cage end	2,31 m	(7 ft7 in)	2,31 m	(7 ft7 in)
Cage overall length	0,8 m	(2 ft7 in)	0,8 m	(2 ft7 in)
Cage overall width	1,14 m	(3 ft9 in)	1,14 m	(3 ft9 in)
Cage overall height	1,1 m	(3 ft7 in)	1,1 m	(3 ft7 in)
Cage rotation angle	+90° / - 90°			
Outer turning radius	Right : 3,60 m	Right : (11 ft10 in)	Right : 3,60 m	Right : (11 ft10 in)
	Left : 3,60 m	Left : (11 ft10 in)	Left : 3,60 m	Left : (11 ft10 in)
Inner turning radius	Right : 1,95 m	Right : (6 ft5 in)	Right : 1,95 m	Right : (6 ft5 in)
	Left : 1,95 m	Left : (6 ft5 in)	Left : 1,95 m	Left : (6 ft5 in)
Space requirement for turning radius	Right : 3,60 m	Right : (11 ft10 in)	Right : 3,60 m	Right : (11 ft10 in)
	Left : 3,60 m	Left : (11 ft10 in)	Left : 3,60 m	Left : (11 ft10 in)
Tyre width	0,19 m	(0 ft7 in)	0,19 m	(0 ft7 in)
Wheelbase	1,65 m	(5 ft5 in)	1,65 m	(5 ft5 in)
Tyre diameter	0,6 m	(2 ft0 in)	0,6 m	(2 ft0 in)
Tyre size	600 x 190			
Compliance with standards	CE		ANSI	
Tilt CE-AS compliant machines	3 °			
Rated slope ANSI-CSA compliant machines	0 °			
Slope warning ANSI-CSA compliant machines	5 °			
Load moment indicator	Fixed potholes			

G - Technical characteristics

Machine	HA12CJ		HA32CJ	
Characteristics	Metric	Imperial	Metric	Imperial
Maximum wind speed allowed	45 km/h	(54.7 mph)	45 km/h	(54.7 mph)
Total weight	6970 kg	(15.369 lb)	6970 kg	(15.369 lb)
Maximum load capacity	250 kg	(551 lb)	250 kg	(551 lb)
Battery types	Standard : Semi traction Option : Traction			
Battery voltage	48 V			
Battery capacity	320 Ah (C5)			
Maximum climbable slope	25 %			
Wheel nut torque	21 daN.m	(154 lbf.ft)	21 daN.m	(154 lbf.ft)
Slew ring torque	9 daN.m	(66 lbf.ft)	9 daN.m	(66 lbf.ft)
Maximum ground pressure on hard ground	17,5 daN/cm²	3.58 lb/ft²	17,5 daN/cm²	3.58 lb/ft²
Maximum ground pressure on soft ground	15 daN/cm²	3.073 lb/ft²	15 daN/cm²	3.073 lb/ft²
Micro drive speed	0,68 km/h	(0.42 mph)	0,68 km/h	(0.42 mph)
Low drive speed	3 km/h	(1.86 mph)	3 km/h	(1.86 mph)
High drive speed	6 km/h	(3.72 mph)	6 km/h	(3.72 mph)
Hydraulic oil tank capacity	13,5 l	(2.97 gal US)	13,5 l	(2.97 gal US)

G - Technical characteristics

For HA12CJ+ (HA33CJ+) - Technical characteristics

Machine	HA12CJ+		HA32CJ+	
Characteristics	Metric	Imperial	Metric	Imperial
Overall length of machine	5,64 m	(18 ft6 in)	5,64 m	(18 ft6 in)
Overall width of machine	1,20 m	(3 ft11 in)	1,20 m	(3 ft11 in)
Overall height of machine	1,99 m	(6 ft6 in)	1,99 m	(6 ft6 in)
Minimum ground clearance	0,04 m	(0 ft2 in)	0,04 m	(0 ft2 in)
Maximum ground clearance	0,11 m	(0 ft4 in)	0,11 m	(0 ft4 in)
Cage ground clearance in stowed position	0,35 m	(1 ft2 in)	0,35 m	(1 ft2 in)
Platform length in transport position	4,2 m	(13 ft9 in)	4,2 m	(13 ft9 in)
Platform height in transport position	2,6 m	(8 ft6 in)	2,6 m	(8 ft6 in)
Overall width at standard tyre level	1,20 m	(3 ft11 in)	1,20 m	(3 ft11 in)
Maximum work height	11,70 m	(38 ft5 in)	11,70 m	(38 ft5 in)
Maximum floor elevation height	9,70 m	(31 ft10 in)	9,70 m	(31 ft10 in)
Maximum working overhang above ground	7,22 m	(23 ft8 in)	7,22 m	(23 ft8 in)
Maximum height of pivot point	4,74 m	(15 ft7 in)	4,74 m	(15 ft7 in)
Maximum span of cage above ground	6,72 m	(22 ft1 in)	6,72 m	(22 ft1 in)
Turntable rotation	355 °			
Boom rotation angle	83 °			
Jib working range	+63.5° / - 68.7°			
Horizontal jib rotation	+90° / - 90°			
Length of jib movement with horizontal cage	2,45 m	(8 ft0 in)	2,45 m	(8 ft0 in)
Height of jib movement at cage end	2,31 m	(7 ft7 in)	2,31 m	(7 ft7 in)
Cage overall length	0,8 m	(2 ft7 in)	0,8 m	(2 ft7 in)
Cage overall width	1,14 m	(3 ft9 in)	1,14 m	(3 ft9 in)
Cage overall height	1,1 m	(3 ft7 in)	1,1 m	(3 ft7 in)
Cage rotation angle	+90° / - 90°			
Outer turning radius	Right : 3,60 m	Right : (11 ft10 in)	Right : 3,60 m	Right : (11 ft10 in)
	Left : 3,60 m	Left : (11 ft10 in)	Left : 3,60 m	Left : (11 ft10 in)
Inner turning radius	Right : 1,95 m	Right : (6 ft5 in)	Right : 1,95 m	Right : (6 ft5 in)
	Left : 1,95 m	Left : (6 ft5 in)	Left : 1,95 m	Left : (6 ft5 in)
Space requirement for turning radius	Right : 3,60 m	Right : (11 ft10 in)	Right : 3,60 m	Right : (11 ft10 in)
	Left : 3,60 m	Left : (11 ft10 in)	Left : 3,60 m	Left : (11 ft10 in)
Tyre width	0,19 m	(0 ft7 in)	0,19 m	(0 ft7 in)
Wheelbase	1,65 m	(5 ft5 in)	1,65 m	(5 ft5 in)
Tyre diameter	0,6 m	(2 ft0 in)	0,6 m	(2 ft0 in)
Tyre size	600 x 190			
Compliance with standards	CE		CSA ANSI	
Tilt CE-AS compliant machines	3 °			
Rated slope ANSI-CSA compliant machines	0 °			
Slope warning ANSI-CSA compliant machines	5 °			
Load moment indicator	Fixed potholes			

G - Technical characteristics

Machine	HA12CJ+		HA32CJ+	
Characteristics	Metric	Imperial	Metric	Imperial
Maximum wind speed allowed	45 km/h	(54.7 mph)	45 km/h	(54.7 mph)
Total weight	7040 kg	(15.523 lb)	7240 kg	(15.964 lb)
Maximum load capacity	230 kg	(507 lb)	230 kg	(507 lb)
Battery types	Standard : Semi traction Option : Traction			
Battery voltage	48 V			
Battery capacity	320 Ah (C5)			
Maximum climbable slope	25 %			
Wheel nut torque	21 daN.m	(154 lbf.ft)	21 daN.m	(154 lbf.ft)
Slew ring torque	9 daN.m	(66 lbf.ft)	9 daN.m	(66 lbf.ft)
Maximum ground pressure on hard ground	17,5 daN/cm²	3.58 lb/ft²	17,5 daN/cm²	3.58 lb/ft²
Maximum ground pressure on soft ground	15 daN/cm²	3.073 lb/ft²	15 daN/cm²	3.073 lb/ft²
Micro drive speed	0,68 km/h	(0.42 mph)	0,68 km/h	(0.42 mph)
Low drive speed	3 km/h	(1.86 mph)	3 km/h	(1.86 mph)
High drive speed	6 km/h	(3.72 mph)	6 km/h	(3.72 mph)
Hydraulic oil tank capacity	13,5 l	(2.97 gal US)	13,5 l	(2.97 gal US)

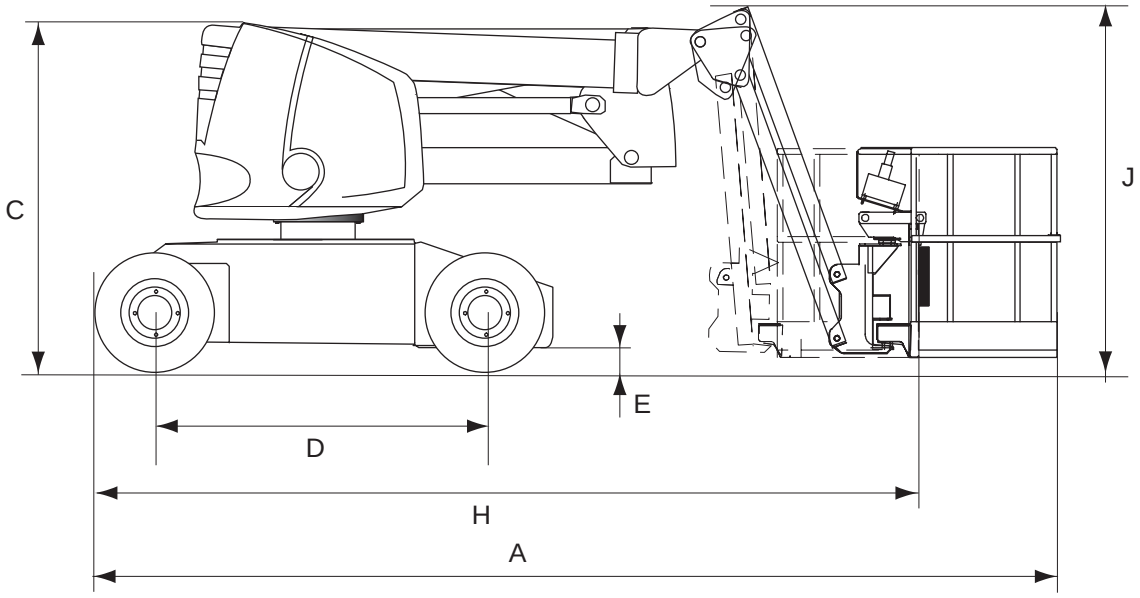
G - Technical characteristics

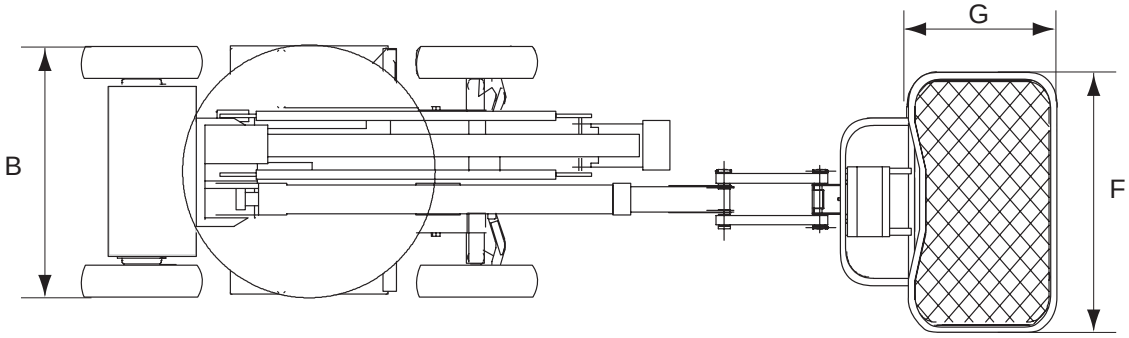
For HA16PE - Technical characteristics

Machine	HA16PE	
Characteristics	Metric	Imperial
Length of machine in stowed position	6,65 m	(21 ft9 in)
Overall width of machine	1,83 m	(6 ft0 in)
Machine height	2,20 m	(7 ft2 in)
Maximum ground clearance	0,265 m	(0 ft10 in)
Maximum work height	16,10 m	(52 ft9 in)
Maximum platform height	14,10 m	(46 ft3 in)
Maximum work radius	9,10 m	(29 ft10 in)
Turntable rotation	350 °	
Boom rotation angle	+75° / - 0°	
Outer turning radius (without retracted axle adjustment)	3,50 m	(11 ft5 in)
Distance between centres of the wheels	2,00 m	(6 ft6 in)
Dumping	5 °	
Maximum wind speed allowed	45 km/h	(28 mph)
Total weight	7885 kg	(17383 lb)
Maximum platform load	250 kg	(551 lb)
Maximum number of people on the platform	2	
Engine type	Diesel - Deutz F3L1011F	
Engine power	28 kW	(28 Hp)
Engine power when idle	15 kW	(12 Hp)
Fuel consumption when idle	230 g/kWh	
Hand vibration	<2,5 m/s²	(98 in/s²)
Feet vibration	<0,5 m/s²	(19 in/s²)
Fuel tank capacity	65 l	(17.17 gal US)
Hydraulic oil tank capacity	100 l	(22 gal US)
Operating batteries	12 V-95 Ah	
Differential lock	Yes	
Maximum climbable slope	25 %	
Tyre type and/ or size	8,25 - 15	
Wheel nut torque		(236 lbf.ft)
Slew ring torque	21,5 daN.m	(159 lbf.ft)
Maximum ground pressure on hard ground	7,6daN/cm²	1,56 lbf/sq.ft
Maximum ground pressure on soft ground	6,1daN/cm²	1,25 lbf/sq.ft
Low drive speed	1,5 km/h	(0.9 mph)
Medium-speed driving	3,0 km/h	(1.8 mph)
High drive speed	6,0 km/h	(3.6 mph)
Sound level at 10 m	< 74 dB (A)	
Noise emission level	107 dB (A)	
Manual lateral force at platform	CE-AS compliant machines : 400 N - 90 lbf	

2 - Overall dimensions

General diagram HA12IP (HA33JE)



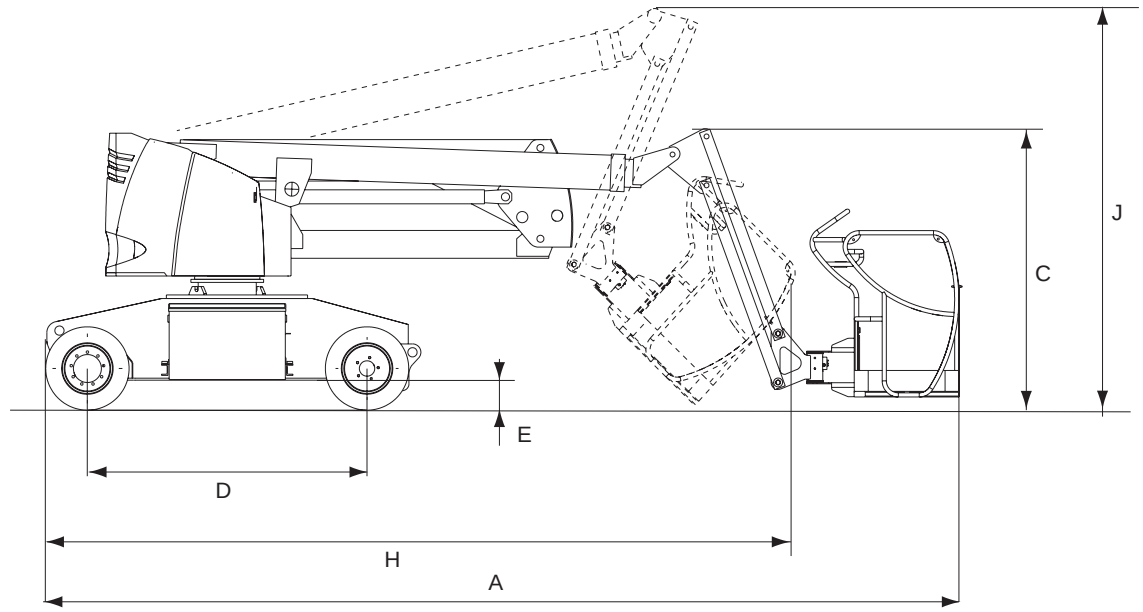


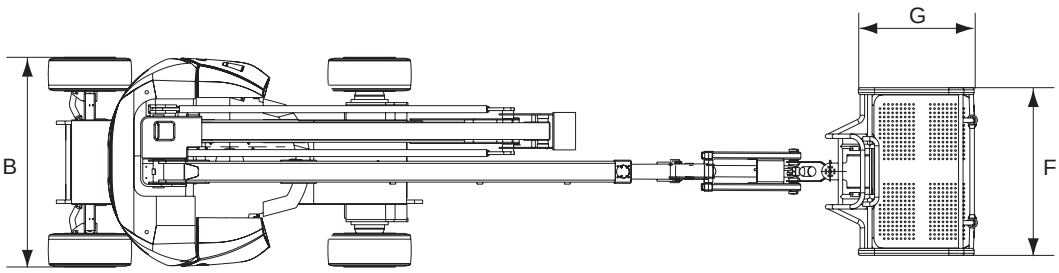
Overall dimension specifications

Marking	HA12IP (HA33JE)	
	Mètre	Feet inch
A	5,45	17 ft 10 in
B	1,35	4 ft 5 in
C	2	6 ft 7 in
D	1,80	5 ft 10 in
E	0,15	0 ft 5 in
F x G	1,20 x 0,80	3 ft 11 in x 2 ft 7 in
J	2,00	6 ft 7 in

G - Technical characteristics

General diagram HA15IP (HA43JE)



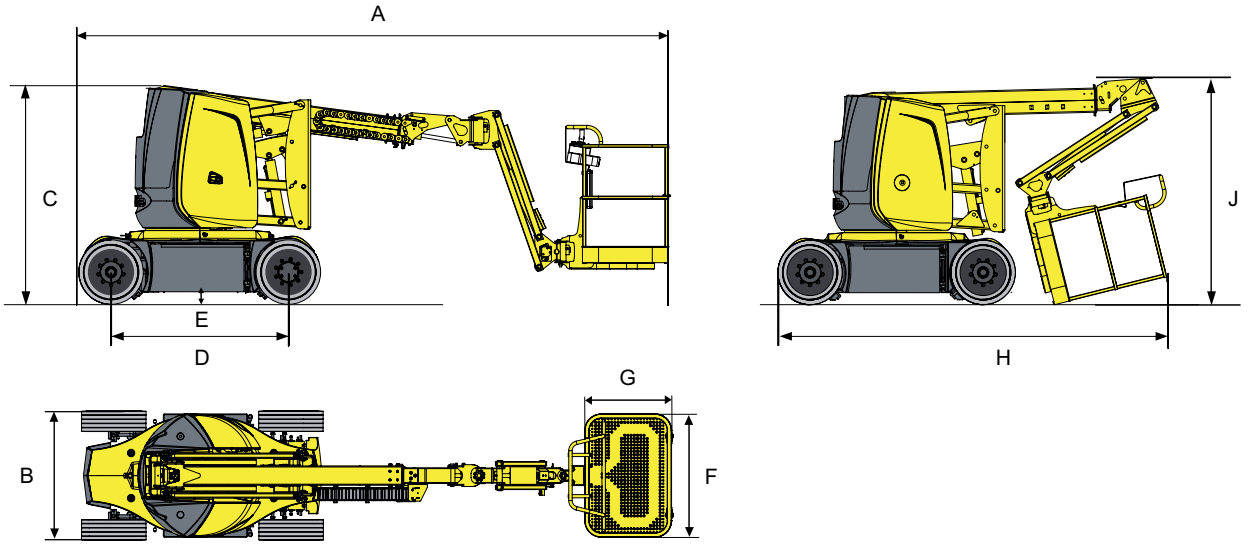


Overall dimension specifications

Marking	HA15IP (HA43JE)	
	Mètre	Feet inch
A	6,60	21 ft 7 in
B	1,50	4 ft 11 in
C	2,10	6 ft 11 in
E	0,15	0 ft 5 in
F x G	1,20/1,50 x 0,80	3 ft 11 in / 4 ft 11 in x 2 ft 7 in
J	2,10	6 ft 11 in

G - Technical characteristics

General diagram HA12CJ (HA32CJ) - HA12CJ+ (HA32CJ+)

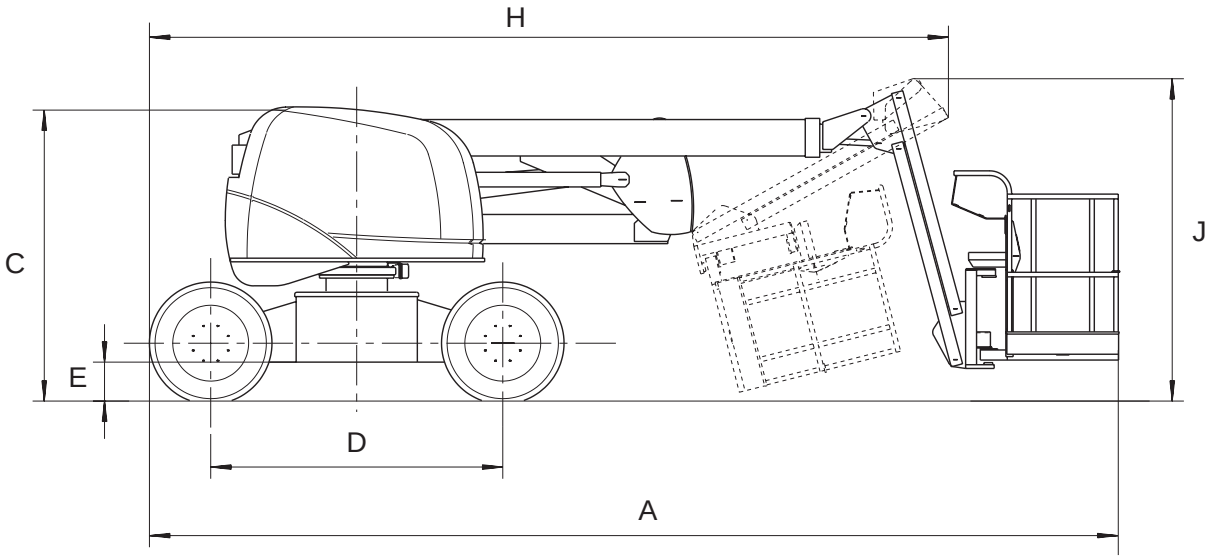


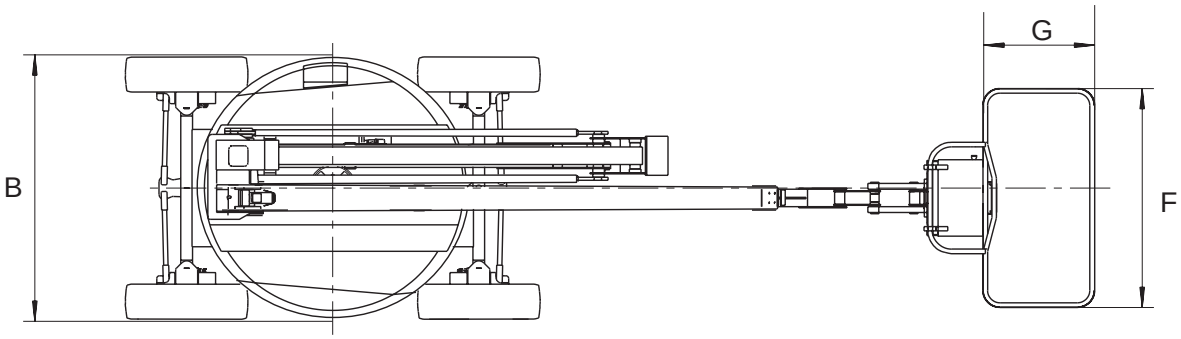
Overall dimension specifications

Marking	HA12CJ (HA32CJ)		HA12CJ+ (HA32CJ+)	
	Mètre	Feet inch	Mètre	Feet inch
A	5,36	17 ft 7 in	5,64	18 ft 6 in
B	1,20	3 ft 11 in	1,20	3 ft 11 in
C	1,99	6 ft 6 in	1,99	6 ft 6 in
D	1,65	5 ft 5 in	1,65	5 ft 5 in
E	0,11	0 ft 4 in	0,11	0 ft 4 in
F x G	1,14 x 0,80	3 ft 9 in x 2 ft 7 in	1,14 x 0,80	3 ft 9 in x 2 ft 7 in
H	3,86	12 ft 8 in	4,20	13 ft 9 in
J	2,22	7 ft 3 in	2,60	8 ft 6 in

G - Technical characteristics

General diagram HA16PE





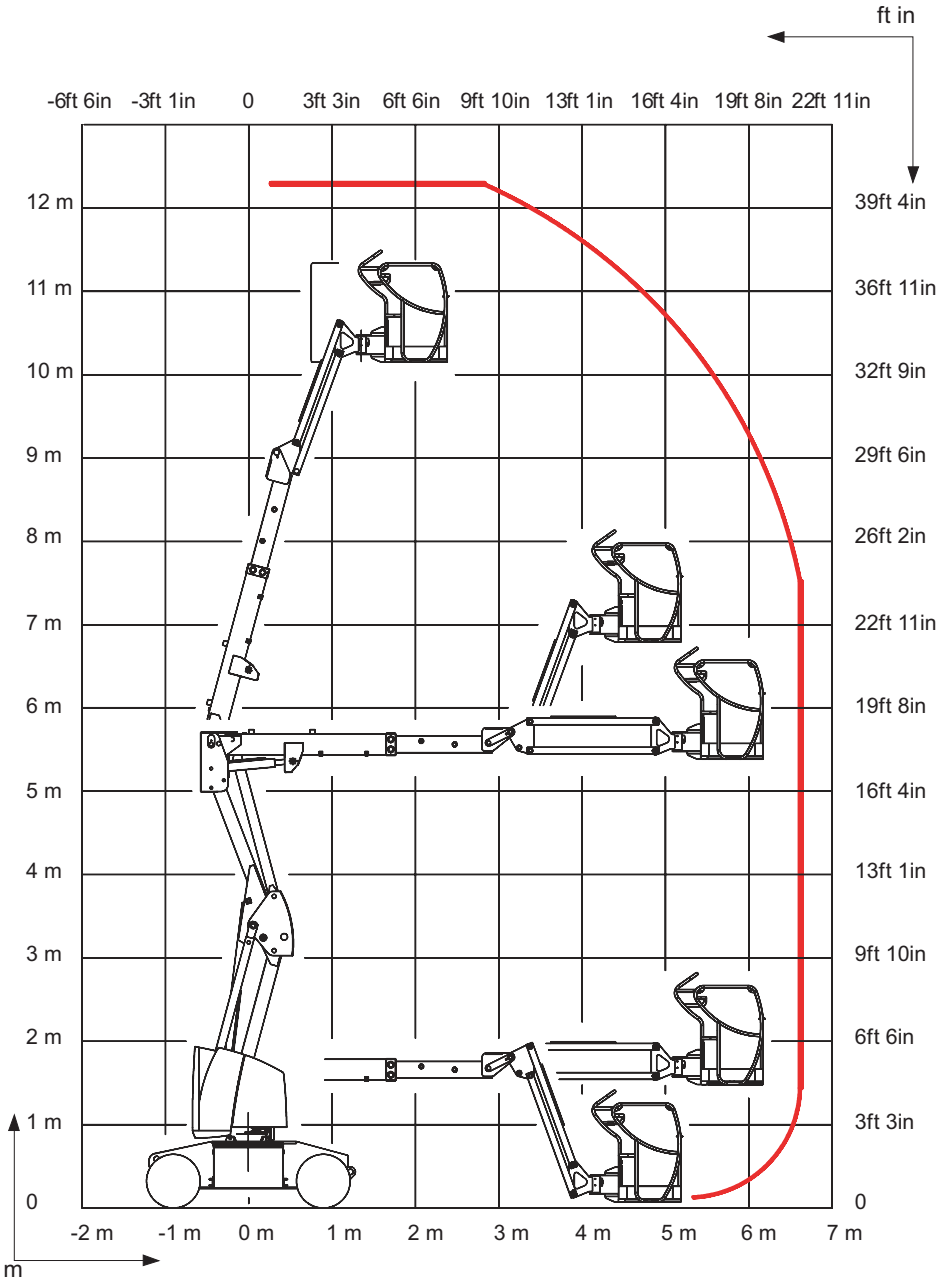
Overall dimension specifications

Marking	HA16PE	
	Mètre	Feet inch
A	6,65	21 ft 9 in
B	1,83	6 ft 0 in
D	2,00	6 ft 7 in
E	0,265	0 ft 10 in
F x G	1,50 x 0,80	4 ft 11 in x 2 ft 7 in

3 - Working area

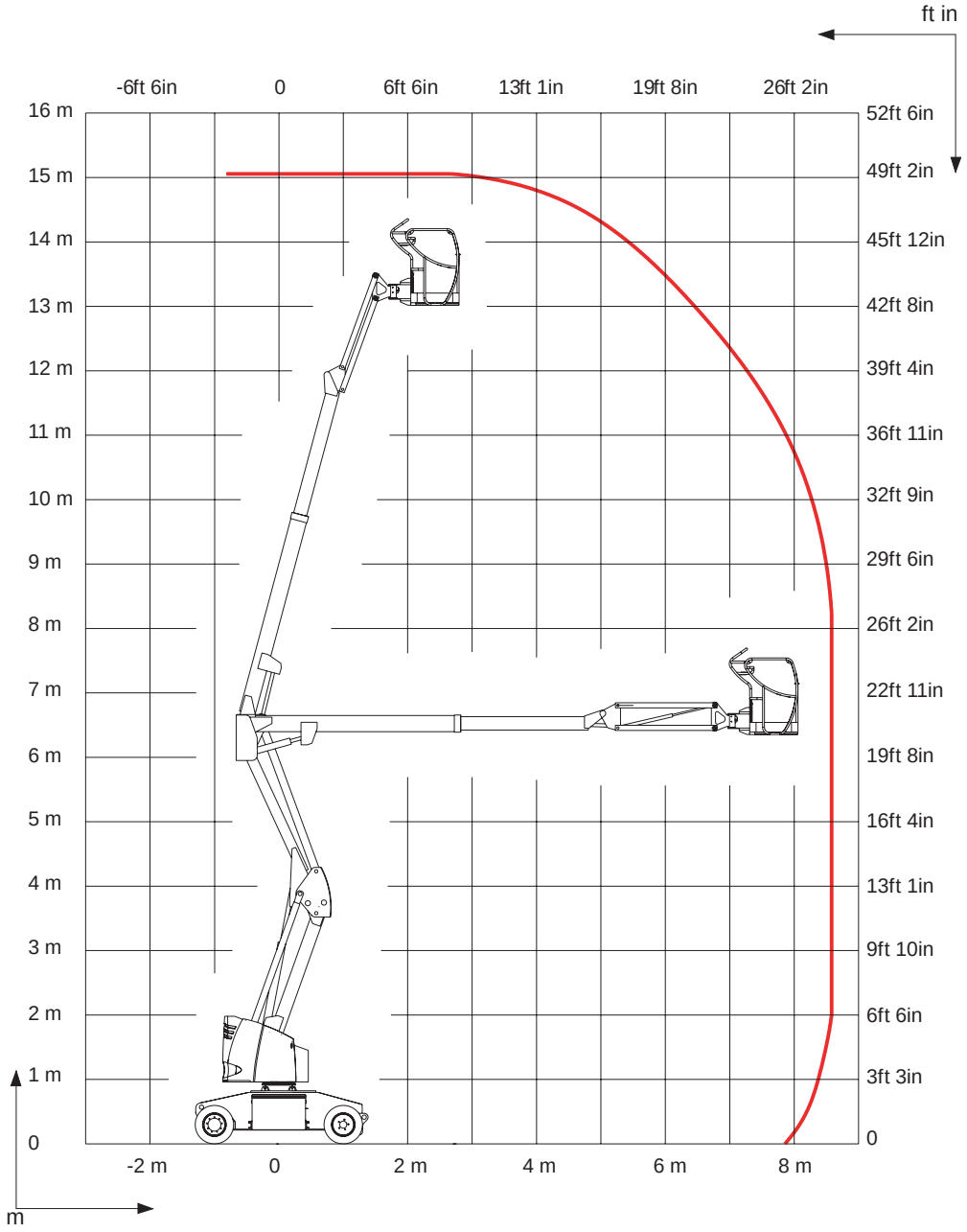
3.1 - MACHINE HA12IP (HA33JE)

Working area



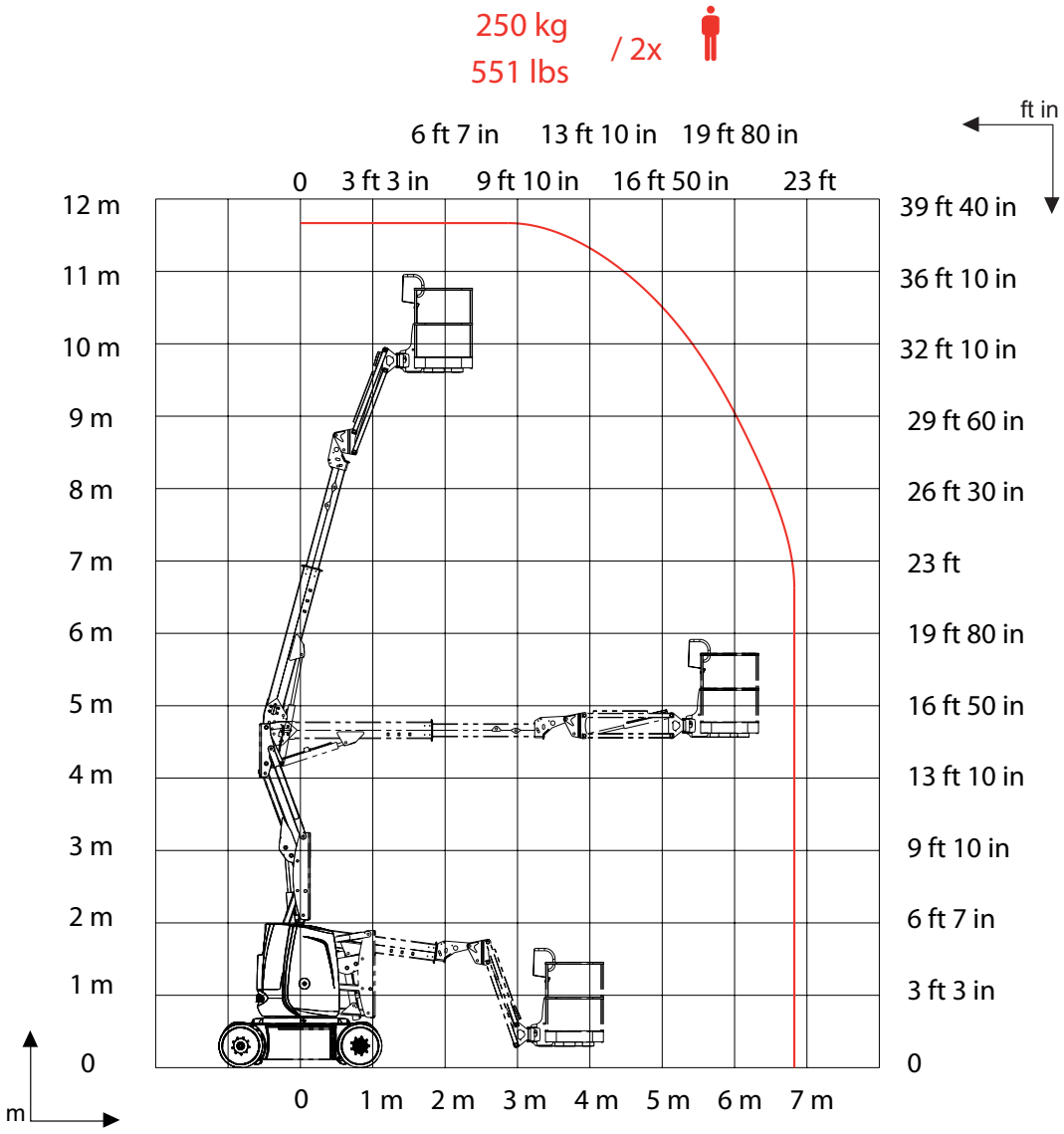
3.2 - MACHINE HA15IP (HA43JE)

Working area



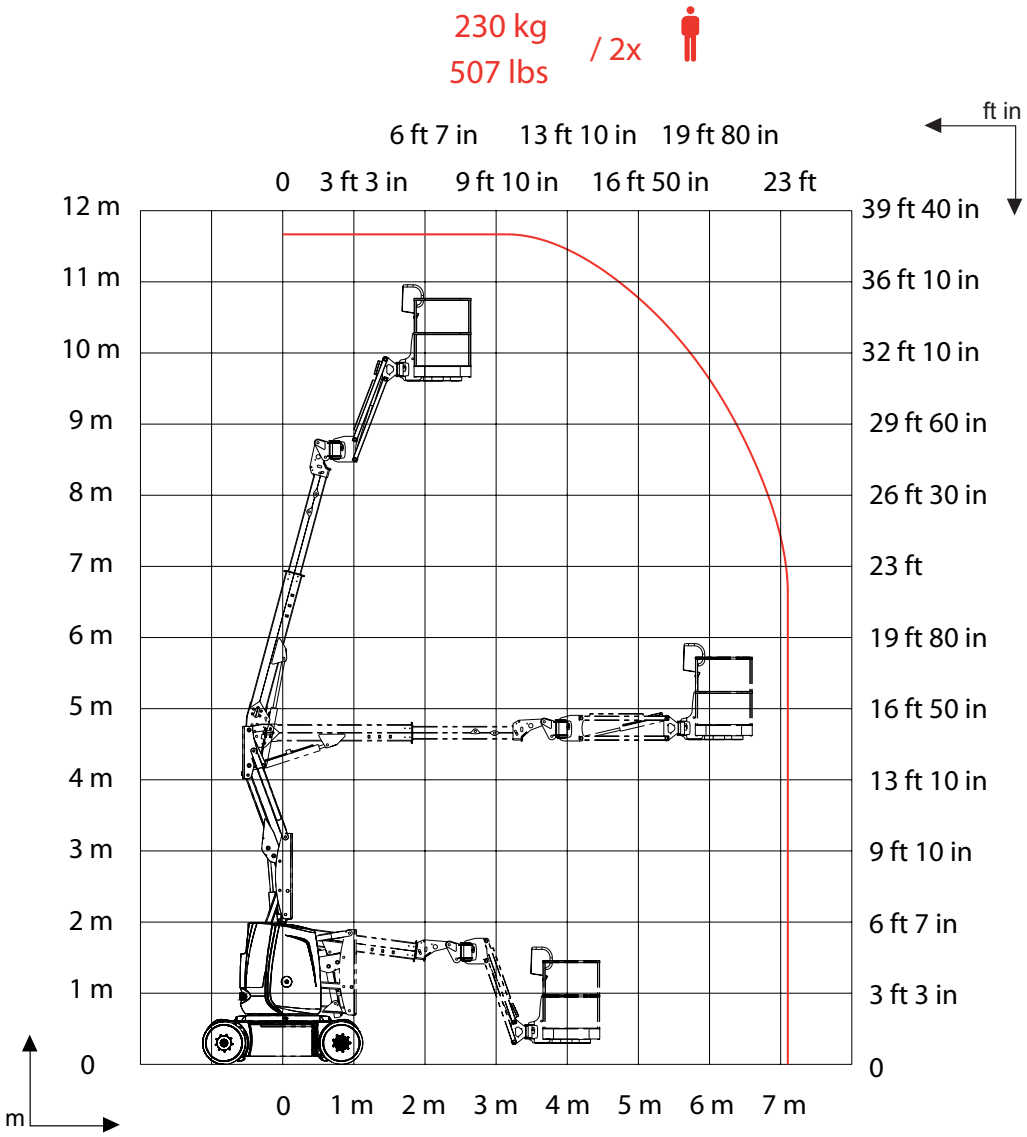
3.3 - MACHINE HA12CJ (HA32CJ)

Working area



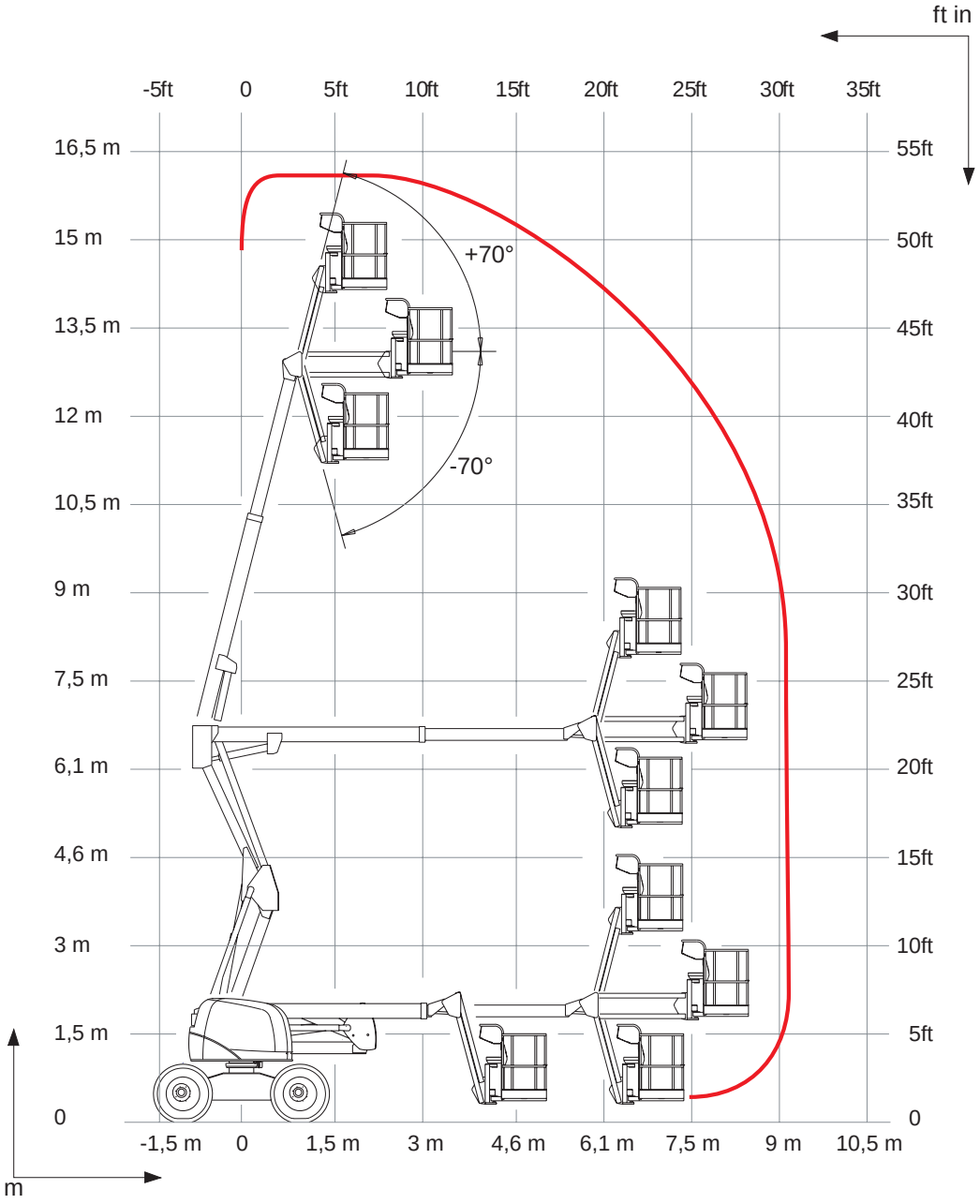
3.4 - MACHINE HA12CJ+ (HA32CJ+)

Working area



3.5 - MACHINE HA16PE

Working area



4 - AS - CE standard specificities

The following tests must be performed after :

- A major technical intervention.
- An accident due to major component failure on the machine.

• The following tests must be performed by a qualified person in secure conditions.

• The results must be fully recorded.

To avoid the machine tipping over, it must be secured during the test (by a chain or anchorage point).

4.1 - OVERLOAD TEST

The overload test is performed with 125 % of the nominal load. See paragraph 1.12.3 of the AS1418.10 standard for test details.

Load table

Machine	Test load	
	Pound (lb)	Kilogramme (kg)
HA12IP (HA33JE)	634	287,5
HA15IP (HA43JE)	634	287,5
HA16PE	688	312.5
HA12CJ	662	300
HA12CJ+	633	287

The machine must not show any signs of permanent distortion.

Tests are performed by a qualified person under optimal conditions and results must be fully recorded.

4.2 - FUNCTIONAL TEST

Functional tests have confirmed the following: :

- The machine has performed all movements without jerking, while carrying the nominal load.
- All security systems are operating correctly.
- Maximum authorized operating speeds are not exceeded.

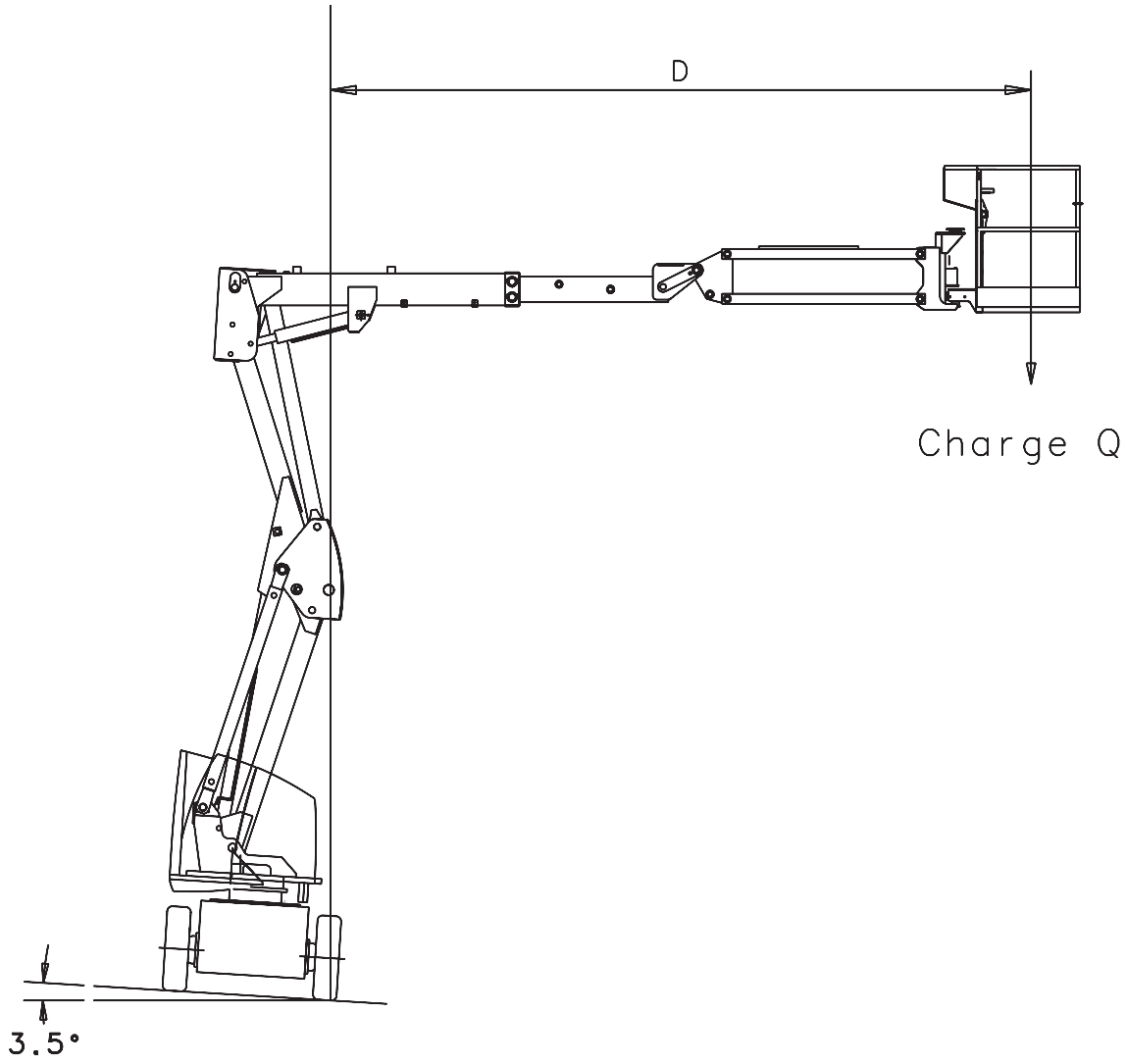
4.3 - STABILITY TEST

The stability test proves that the machine is stable in an unfavourable position. The moment when the machine tips is calculated by combining loads in the machine's most unfavourable position (load W applied over distance L).

Stability table for HA12IP

	T (°)	W		L		Moment of tipping over
		Pound (lb)	Kilogram me (kg)	Feet inch (ft in)	Mètre (m)	daNm
Horizontal (1)	3,5	761	345	18-11	5,76	1992

Stability for HA12IP

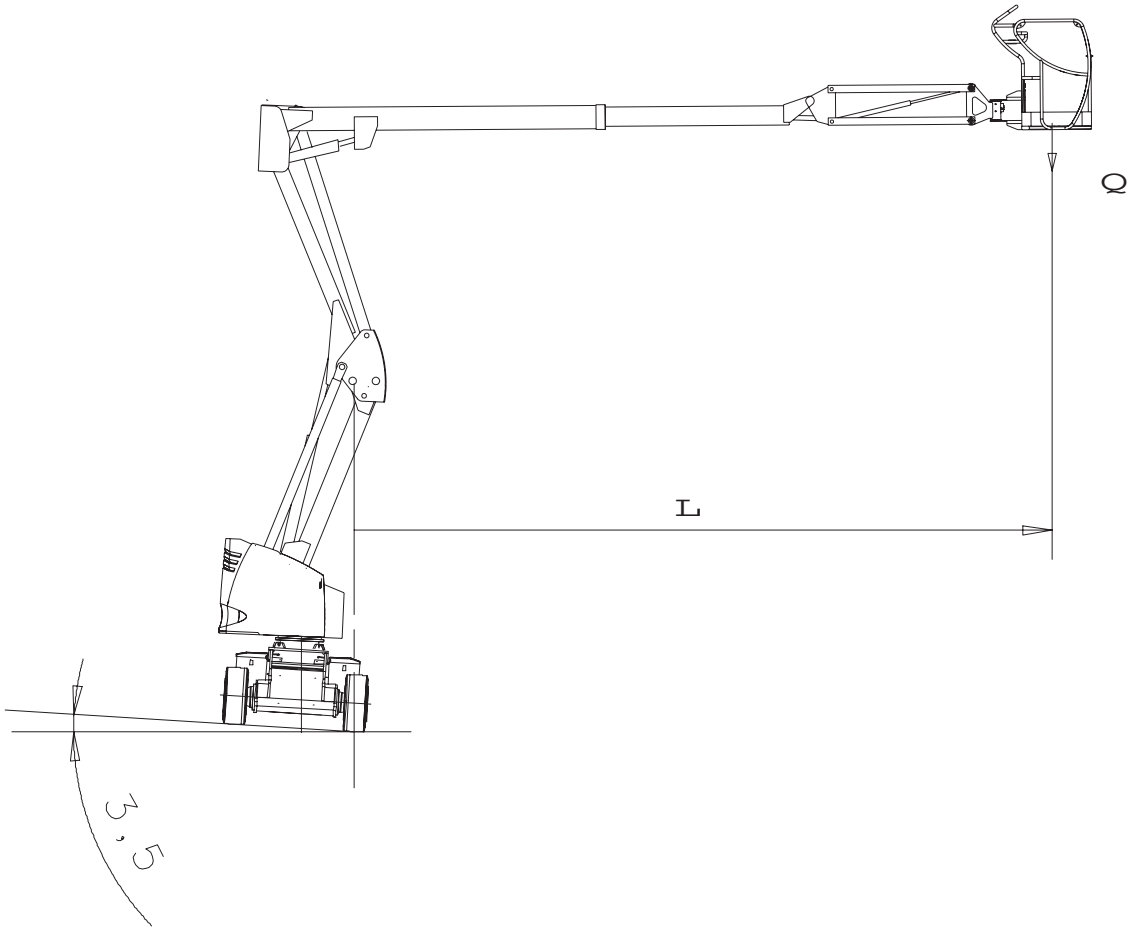


G - Technical characteristics

Stability table for HA15IP

	T (°)	W		L		Moment of tipping over
		Pound (lb)	Kilogramme (kg)	Feet inch (ft in)	Mètre (m)	daNm
Horizontal (1)	3,5	759	344	25-3	7.684	2646

Stability for HA15IP

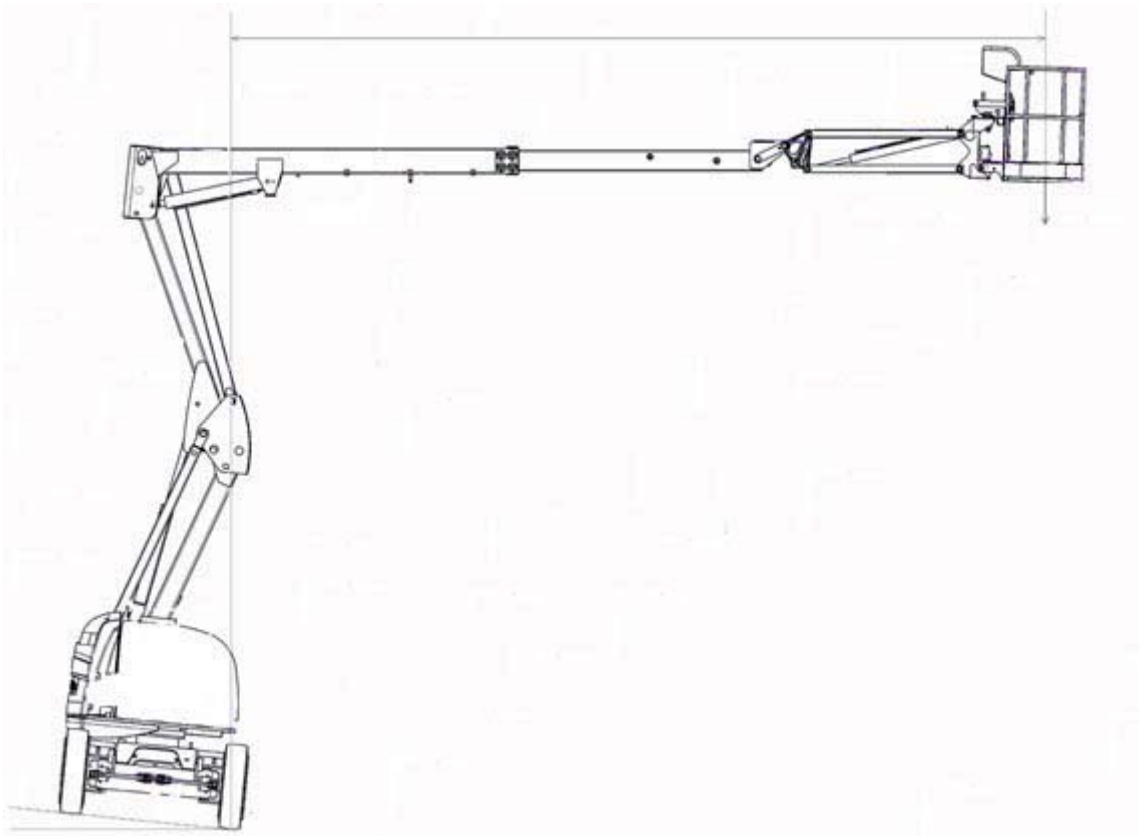


G - Technical characteristics

Stability table for HA16PE

	T (°)	W		L		Moment of tipping over
		Pound (lb)	Kilogramme (kg)	Feet inch (ft in)	Mètre (m)	daNm
Horizontal (1)	3,5	789	358	27-6	8.381	3003

Stability for HA16PE

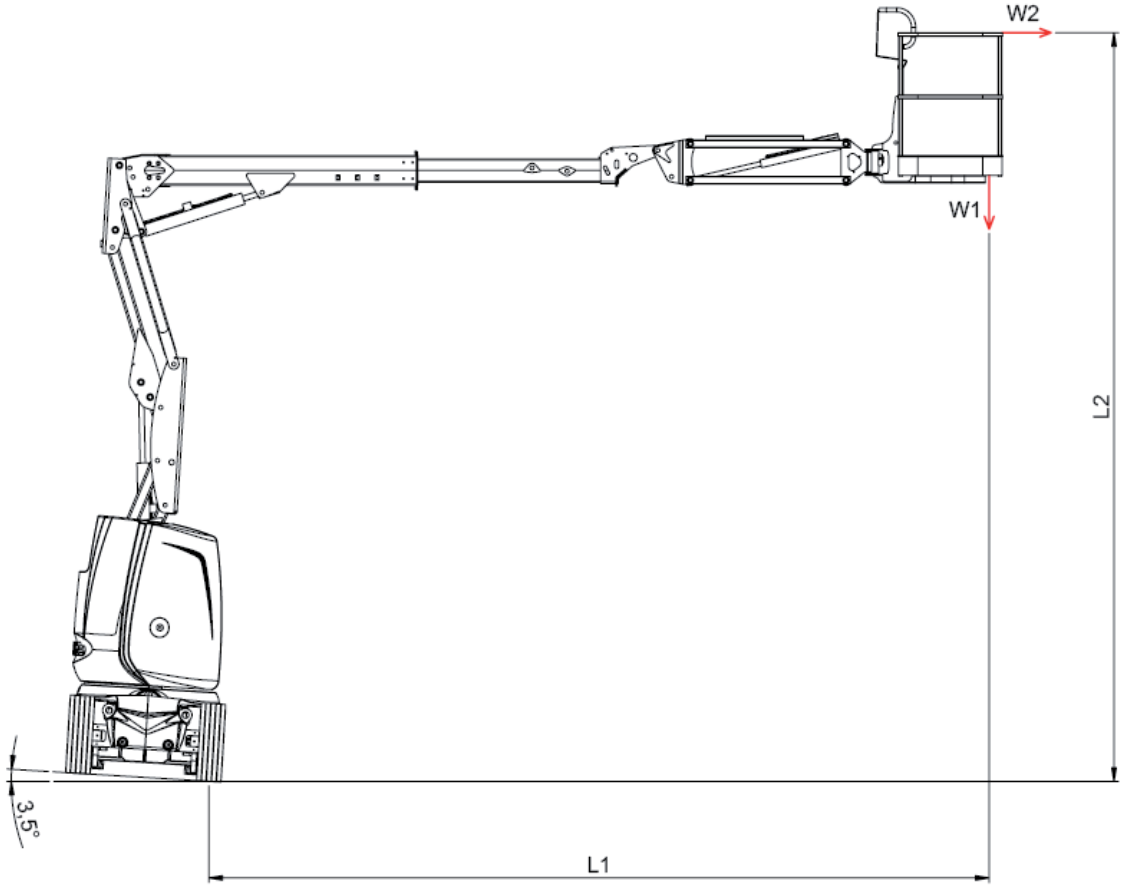


G - Technical characteristics

Stability table for HA12CJ (HA33CJ)

	T (°)	W		L		Moment of tipping over
		Pound (lb)	**Kilogramme (kg)**	**Feet inch (ft in)**	**Mètre (m)**	**daNm**
W1	3,5	662	300	19 ft 9 in	6,01	2112
W2	3,5	117	53	18 ft 11 in	5,76	2112

Stability for HA12CJ (HA32CJ)

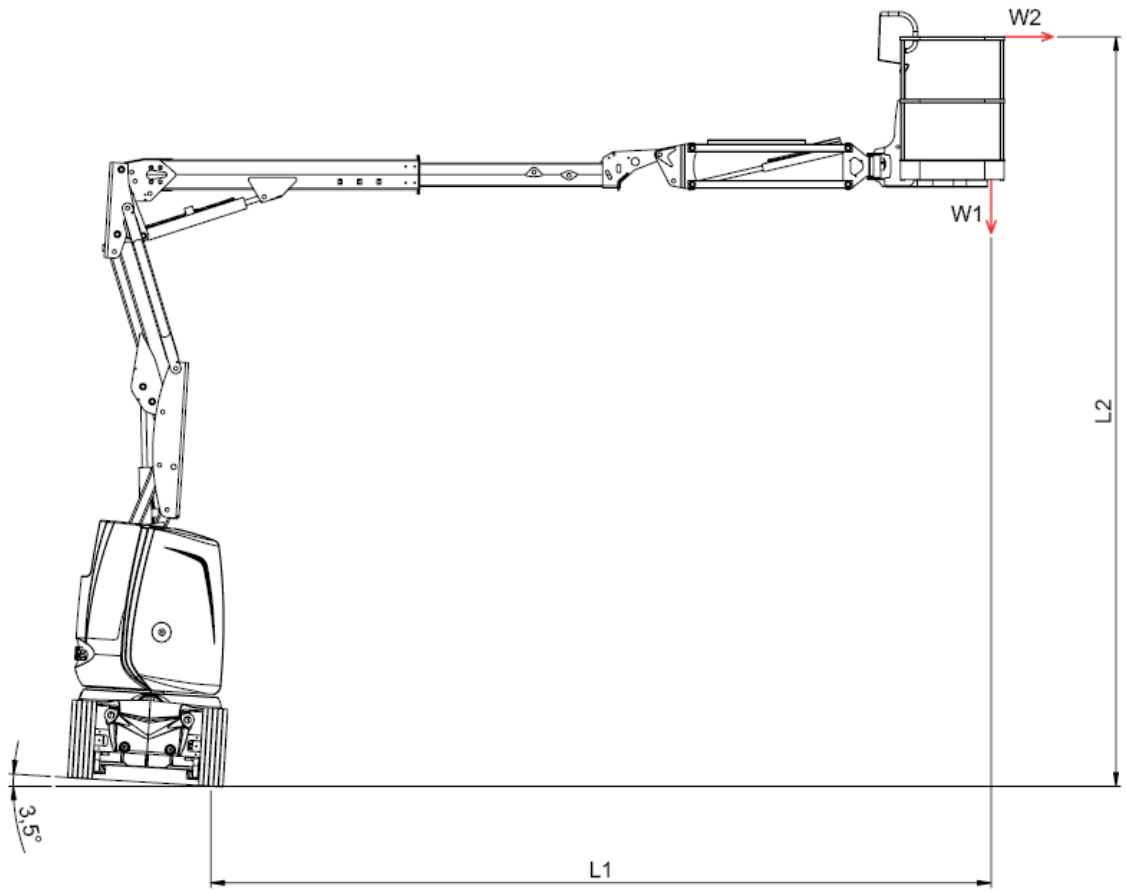


G - Technical characteristics

Stability table for HA12CJ+ (HA32CJ+)

	T (°)	W		L		Moment of tipping over
		Pound (lb)	Kilogramme (kg)	Feet inch (ft in)	Mètre (m)	daNm
W1	3,5	634	287,50	20 ft 7 in	6,28	2060
W2	3,5	97	44	18 ft 11 in	5,76	2060

Stability for HA12CJ+ (HA32CJ+)



See paragraph 1.12.2 of the AS1418.10 standard for test details.

The machine must return to a stable state without tipping over.

5 - Declaration of conformity

CE Declarations of Conformity only apply to machines that are certified for the European market.

Declaration of conformity - Electric platforms

DECLARATION DE CONFORMITE CE

(certificate of conformity with CE-directives)

Nom et adresse du constructeur ou son représentant autorisé dans la communauté :
Name and address of manufacturer or their authorised agents within the European Community

HAULOTTE Group Siège Social
La Péronnière
BP 09
42152 L'HORME Cedex
FRANCE

HAULOTTE GROUP
Usine de _____
_____
_____
_____

Déclare que la machine décrite ci-dessous :
(Declares that the technical installation described below)

Nacelle ou Plate-forme mobile élévatrice de personnes
(Elevating work Platform)

Machine au nom commercial *(Machine with the commercial name)* ____,
Conforme au type *(in compliance with the type)* ____
Numéro de série *(Serial number)*: ____

Se conforme aux dispositions de la directive machine 2006/42/CE.
(Conforms to the provisions set out in the EC Machinery Directive 2006/42/EC)

N° de certificat *(Certificate no)*: ____ ____ ___ __ __ ____

Cette machine est identique au modèle ayant fait l'objet d'un examen CE de type par l'organisme notifié :
(This machinery is identical to the model that was tested in an EC type-examination by the appointed body)

Organisme certifié (*Authorised certification body*) :

_____ **n°** ___
_____
_____

- Se conforme également aux dispositions de la directive 2004/108/CE concernant la compatibilité électromagnétique.
  (is in accordance with the provisions contained in EEC Directive no. 2004/108/CE on electromagnetic compatibility)
- Se conforme aux principales exigences des normes harmonisées suivantes : EN 280 et EN 954.
  (also fulfils the principal requirements of the following harmonised standards: EN 280 and EN 954)

Fait à L'Horme le : ……

_____
Directeur Division _____ */Managing Director,* _____ *Division*

Signature

Cette déclaration est conforme aux exigences de l'annexe II-a de la directive 2006/42/CE. Toute modification de la machine décrite ci-dessus rendrait cette déclaration caduque.
This declaration conforms with the requirements of annex II-A of the directive 2006/42/EEC.Any modification to the above described machine violates the validity of this declaration.

Declaration of conformity - Thermal platforms

DECLARATION DE CONFORMITE CE

(certificate of conformity with EC directives)

Nom et adresse du constructeur ou son représentant autorisé dans la communauté :
Name and address of manufacturer or their authorised agents within the European Community

HAULOTTE Group Siège Social
La Péronnière
BP 09
42152 L'HORME Cedex
FRANCE

HAULOTTE GROUP
Usine de _____
_____
_____
_____

Déclare que la machine décrite ci-dessous :
(Declares that the technical installation described below)

Nacelle ou Plate-forme mobile élévatrice de personnes
(Elevating work Platform)

Machine au nom commercial *(Machine with the commercial name)* ____,
Conforme au type *(in compliance with the type)* ____
Numéro de série *(Serial number)*: ____

Se conforme aux dispositions de la directive machine 2006/42/CE.
(Conforms to the provisions set out in the EC Machinery Directive 2006/42/EC)

N° de certificat *(Certificate no)*: ____ ____ ___ __ __ ____

Cette machine est identique au modèle ayant fait l'objet d'un examen CE de type par l'organisme notifié :
(This machinery is identical to the model that was tested in an EC type-examination by the appointed body)

Organisme certifié (*Authorised certification body*) :

_____ **n°** ___
_____
_____

- Se conforme également aux dispositions de la directive 2000/14/CE concernant l'émission de bruit par l'équipement dans l'environnement en utilisation extérieure
  (is also in accordance with the clauses contained in the EC Outdoor Noise Directive (2000/14/EC))
  - Méthode de mesure (*Measuring methods*) — Annexe III-B
  - LwA, Niveau de puissance acoustique garantie (*LWA, sound level guaranteed*) — ___ dB
  - LwA, Niveau de puissance acoustique minimum/maximum (*LWA, maxi sound level*) — ___/___ dB
- Se conforme également aux dispositions de la directive 2004/108/CE concernant la compatibilité électromagnétique.
  (is in accordance with the provisions contained in EEC Directive no. 2004/108/CE on electromagnetic compatibility)
- Se conforme aux principales exigences des normes harmonisées suivantes : EN 280 et EN 954.
  (also fulfils the principal requirements of the following harmonised standards: EN 280 and EN 954)

Fait à L'Horme le : ……

_____
Directeur Division _____ */Managing Director, _____ Division*

Signature

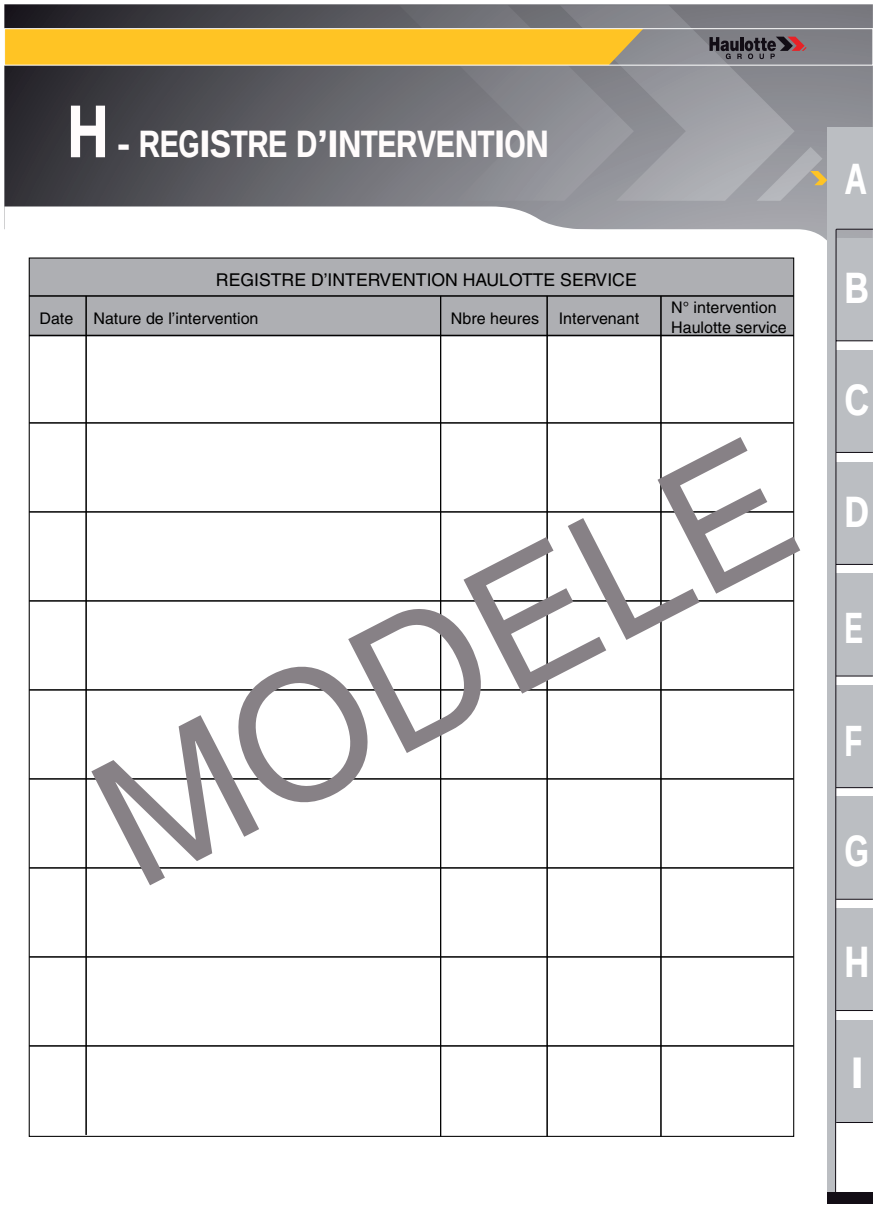
Cette déclaration est conforme aux exigences de l'annexe II-a de la directive 2006/42/CE. Toute modification de la machine décrite ci-dessus rendrait cette déclaration caduque.
This declaration conforms with the requirements of annex II-A of the directive 2006/42/EEC.Any modification to the above described machine violates the validity of this declaration.

G - Technical characteristics

1 - Intervention register

In order to benefit from the HAULOTTE® guarantee, each maintenance or repair operation must be entered in the INTERVENTION REGISTER, which can be found at the end of the maintenance book delivered with your machine.

Intervention register



Haulotte GROUP

H - REGISTRE D'INTERVENTION

REGISTRE D'INTERVENTION HAULOTTE SERVICE				
Date	Nature de l'intervention	Nbre heures	Intervenant	N° intervention Haulotte service

MODELE

H - Intervention register