

# TELESCOPIC MASTS

Operator manual

TELESCOPIC MASTS

**STAR 6 (STAR 13) - STAR 8NG  
(STAR 22J) - STAR 9 - STAR 10NG  
(STAR 26J) - STAR 11 - STAR 12**

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EN





# CONTENTS

- 1 - Operator manual . . . . . 7**
- 2 - After Sales Service . . . . . 7**
- 3 - Conformity . . . . . 8**

## A

### SAFETY PRECAUTIONS

- 1 - Recommendations . . . . . 9**
  - 1.1- Operator manual . . . . . 9
  - 1.2- Symbols used . . . . . 9
  - 1.3- Label colours . . . . . 10
- 2 - Pre-operation instructions . . . . . 11**
  - 2.1- General instructions . . . . . 11
  - 2.2- Specific instructions . . . . . 11
- 3 - Operation instructions . . . . . 12**
  - 3.1- Prohibitions . . . . . 12
  - 3.2- Potential risks . . . . . 13
    - 3.2.1 - Risk of command system disturbance . . . . . 13
    - 3.2.2 - Risk of falling . . . . . 13
    - 3.2.3 - Risk of electrocution . . . . . 14
    - 3.2.4 - Risk of jerks and overturning . . . . . 15
    - 3.2.5 - Risk of burns and explosion . . . . . 17
    - 3.2.6 - Risk of crushing and collision . . . . . 17

## B

### INTERVENOR'S RESPONSIBILITY

- 1 - Owner's (or hirer's) responsibility . . . . . 19**
- 2 - Employer's responsibility . . . . . 19**
- 3 - Trainer's responsibility . . . . . 19**
- 4 - Operator's responsibility . . . . . 20**
- 5 - Inspection and maintenance . . . . . 21**

## C

### MACHINE LAYOUT

- 1 - Identification . . . . . 23**
- 2 - Main components . . . . . 25**
  - 2.1- Electrical version . . . . . 25
- 3 - Safety devices . . . . . 30**
  - 3.1- Sliding mid-rail . . . . . 30
  - 3.2- Anchorage point . . . . . 30
- 4 - Labels . . . . . 31**
  - 4.1- Classification plan . . . . . 31
    - 4.1.1 - Red labels . . . . . 31
    - 4.1.2 - Orange labels . . . . . 33
    - 4.1.3 - Yellow labels . . . . . 34
    - 4.1.4 - Other labels . . . . . 36



4.1.5 -	Green labels .....	37
4.2 -	Identification .....	38
<b>5 -</b>	<b>Consoles .....</b>	<b>49</b>
5.1 -	Lower console .....	49
5.2 -	Upper console .....	53

## D

### OPERATING PRINCIPLE

<b>1 -</b>	<b>Description .....</b>	<b>57</b>
<b>2 -</b>	<b>Safety devices .....</b>	<b>57</b>
2.1 -	Activation of controls .....	57
2.2 -	Driving speed (minimum) .....	57
2.3 -	Electronic speed controller .....	58
2.4 -	Multi-function LED Battery charge status controller Engine hour meters .....	58
2.5 -	Automatic engine cut-out .....	58
2.6 -	Load in the platform .....	58
2.7 -	Machine tilt .....	59
2.8 -	Machine braking .....	60
2.9 -	Wheel motor brake release .....	60
2.10 -	Anti-pothole safety system .....	60
2.11 -	On-board charger .....	60

## E

### DRIVING

<b>1 -</b>	<b>Recommendations .....</b>	<b>61</b>
<b>2 -</b>	<b>Checks before use .....</b>	<b>61</b>
2.1 -	Visual inspections .....	61
2.1.1 -	General mechanical functions .....	61
2.1.2 -	Environment .....	62
2.2 -	Functional tests .....	62
2.2.1 -	Safety features .....	62
2.2.2 -	Lower console controls .....	63
2.2.3 -	Upper console controls .....	64
2.3 -	Regular checks .....	65
2.4 -	Repairs and adjustments .....	65
2.5 -	Checks when the machine is put back in service .....	65
<b>3 -</b>	<b>Usage .....</b>	<b>66</b>
3.1 -	Test procedure .....	66
3.1.1 -	Emergency stop push button function .....	66
3.1.2 -	Tilt control box function .....	67
3.1.3 -	Visual and audio alarms .....	67
3.1.4 -	Weighing system .....	68
3.2 -	Ground operations .....	68
3.2.1 -	Machine start-up .....	68
3.2.2 -	Machine shutdown .....	69
3.2.3 -	Movement control .....	69
3.2.4 -	Other controls .....	71
3.3 -	Operations from the platform .....	71
3.3.1 -	Machine start-up .....	71
3.3.2 -	Machine shutdown .....	71
3.3.3 -	Movement control .....	71
3.3.4 -	Other controls .....	74



# F

## SPECIAL PROCEDURE

- 1 - Emergency lowering . . . . . 75**
  - 1.1- Principle . . . . . 75
  - 1.2- Procedure . . . . . 75
- 2 - Lowering for repairs . . . . . 77**
  - 2.1- Principle . . . . . 77
  - 2.2- Procedure . . . . . 77
- 3 - Towing service . . . . . 79**
  - 3.1- Releasing of the brakes . . . . . 79
- 4 - Loading and unloading . . . . . 80**
  - 4.1- Principle . . . . . 80
    - 4.1.1- Loading by ramp . . . . . 80
    - 4.1.2- Loading by power lift truck . . . . . 81
    - 4.1.3- Unloading by power lift truck . . . . . 81
    - 4.1.4- Loading by lifting . . . . . 81
    - 4.1.5- Unloading by lifting . . . . . 81
  - 4.2- Putting in transport position . . . . . 82
  - 4.3- Unloading . . . . . 83
  - 4.4- Warning . . . . . 83
- 5 - Detection of internal fault . . . . . 84**
  - 5.1- Principle . . . . . 84
  - 5.2- Procedure . . . . . 84

# G

## TECHNICAL CHARACTERISTICS

- 1 - Main characteristics . . . . . 85**
- 2 - Overall dimensions . . . . . 89**
- 3 - Working area . . . . . 92**
  - 3.1- Machine STAR 6 (STAR 13) . . . . . 92
  - 3.2- Machine STAR 8 (STAR 22J) . . . . . 93
  - 3.3- Machine STAR 9 . . . . . 94
  - 3.4- Machine STAR 10 (STAR 26J) . . . . . 95
  - 3.5- Machine STAR 11 . . . . . 96
  - 3.6- Machine STAR 12 . . . . . 97
- 4 - ANSI standard specificities . . . . . 98**
  - 4.1- Overload test . . . . . 98
  - 4.2- Operational test . . . . . 99
  - 4.3- Stability test . . . . . 99

# H

## INTERVENTION LOG

- 1 - Intervention log . . . . . 103**

# CONTENTS





You have just bought a HAULOTTE® telescopic handler and we would like to thank you for your trust.

## 1 - Operator manual

As indicated on the delivery slip, this manual is one of the documents in the on-board case supplied upon delivery of your telescopic handler.

In order to guarantee you full satisfaction, you must scrupulously follow the operating instructions contained in this manual.

We would like to draw your attention in particular to 2 essential points :

- Compliance with the safety precautions (machine, operation, environment)
- Use within the equipment performance limits.

## 2 - After Sales Service

Our HAULOTTE Services® After Sales Service is completely at your disposal during and beyond the warranty period to provide the service you require.

- Contact our After Sales Service, specifying the exact machine type and its serial number.
- When ordering any consumables or spare parts, please use this manual and the Haulotte Essential catalogue to receive original spare parts, the only guarantee of interchangeability and perfect operation.
- In the event of malfunctions or incidents involving a HAULOTTE® machine, contact HAULOTTE Services® immediately even if no material or bodily damage is observed and we will intervene as soon as possible.

## 3 - Conformity

We remind you that HAULOTTE® machines comply with the provisions of the directives currently applicable to this type of machine.

Any modification without having obtained written authorization from HAULOTTE®, renders this conformity null..

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

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



# A - Safety precautions

A

B

C

D

E

F

G

H

I

## 1 - Recommendations

### 1.1 - OPERATOR MANUAL

The operator manual is intended for HAULOTTE® machine operators.



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

This manual contains the operator instructions provided by HAULOTTE® for using the machines efficiently and safely.



The operator manual must be kept in the cab in its storage case. This manual must be made available to each operator and kept in good condition.

Additional copies can be ordered from HAULOTTE Services®.

### 1.2 - SYMBOLS USED

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

#### S y m b o l m e a n i n g s

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 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

# A - Safety precautions

## 1.3 - LABEL COLOURS

The potential dangers and specific regulations are indicated on the machine 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 - CE - A S

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

Label color code - ANSI - C S A

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	CSA maintenance operation or information

# A - Safety precautions

A

## 2 - Pre-operation instructions

### 2.1 - GENERAL INSTRUCTIONS



**Never operate the machine in the following situations :**

- On a 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 3.2.3- Risk of jerks and overturning).
- Close to power lines. Respect the safety distance (👉 Section A 3.2.1- Risk of electrocution).
- At 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 explosive atmosphere.
- During storms (risk of lightning).
- In the presence of strong electromagnetic field (radar ...).

### 2.2 - SPECIFIC INSTRUCTIONS



**Never operate the machine 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 has more slope than the permissible limit.. Check the maximum value in the technical characteristics (👉 Section G 1- Main characteristics).
- At night if not equipped with the optional light.
- If the number of persons is more than the number permissible. Check the maximum value in the technical characteristics (👉 Section G 1- Main characteristics)
- If the side force in the platform is more than the permissible force. Check the maximum value in the technical characteristics (👉 Section G 1- Main characteristics)

B

C

D

E

F

G

H

I

# A - Safety precautions

## 3 - Operation instructions



The operation of the machine is recommended on flat, developed ground (tarmac, concrete, etc.).

### 3.1 - PROHIBITIONS



- Never use a defective machine (hydraulic leakage, worn out tyres, malfunction).
- Never operate the machine controls with sudden actions.
- Never place the machine against a structure to maintain this structure.
- Never use the machine to tow or drag.
- Never expose the batteries or electrical components to water (pressure cleaner, rain).
- Never neutralize the securities.
- Do not hit a fixed or mobile obstacle. The contact can cause premature deterioration of the structure and lead to the rupture of certain safety elements.
- Do not climb on the hoods.
- Never use the machine alone. It must be operated by pairs of operators.
- Never use the machine with a cluttered platform.
- Never increase the surface in the platform by using floor extensions or accessories not authorized by HAULOTTE®.
- Never leave the hydraulic cylinders entirely extended or retracted before switching the machine off, or during an extended stop period.



- Never use the machine with material or objects suspended on the guard-rail.
- Never use the machine with the elements that can increase the load of the wind (board).
- Never increase the height of work by using attachments (ladder).
- Never use the guardrail as the means of access to climb up or down the platform. Steps have been provided to this effect on the platform.
- Never climb on the guardrail.
- Never use the machine without installing the sliding midrail or without closing the safety gate.
- Never use the machine as crane, goods 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 badly cleared areas. Keep speed under control on bends.
- Never tow the machine (it must be transported on a trailer).

## A - Safety precautions

- The LPG bottle must be firmly attached in the correct position.
- Check the bottle and its connections regularly (every 250h) to detect any leaks. Never use matches. Always use a specially-designed leak detector product.
- The outside of the LPG bottle must always be kept free of rust by regularly applying specific paint protection.

### 3.2 - POTENTIAL RISKS

#### 3.2.1 - Risk of command system disturbance

Risk of disrupted movement close to high voltage lines or magnetic fields.

#### 3.2.2 - Risk of falling

On board the machine, respect the following instructions :

- Carry individual protection equipment adapted to the work conditions and local rules. Wearing of an approved helmet is strongly recommended.
- The occupants of the platform must wear a buckle or a safety harness ( 1 per person).
- Avoid hitting fixed or mobile obstacles (other machines).
- Ensure that the adjustable midrail is closed (low position and against the guardrails).
- During raising and driving, hold on tightly to the guardrails.
- Do not sit, stand, or climb on the guard rails of the platform.
- Constantly keep the feet firmly on the floor of the platform.
- Remove any trace of oil or grease on the steps, floor, handrail and the guardrails.
- Keep the floor of the platform free of debris.
- Do not leave the platform if the machine is not in stowed position.



To climb up or climb down from the platform : :

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



# A - Safety precautions

## 3.2.3 - Risk of electrocution



This machine is not isolated and does not offer any protection.

The risks of electrocution are high in the following situations :

- Close to live power lines, consider the movement of the machine and the swaying of the electric power lines.
- In case of hitting a high voltage line, wait for the power cut of the high voltage line before using the machine (clearance, distancing of the machine).
- During storms.

Never use the machine as a solder mass.

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

Respect the local rules and the minimum safety distance.

### Minimum safety distance

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

***N.B.:-:THIS TABLE IS APPLICABLE, EXCEPT WHEN THE LOCAL REGULATIONS ARE MORE STRICT.***

## A - Safety precautions

### 3.2.4 - Risk of jerks and overturning



On board the machine, respect the following instructions :

- Before engaging the machine on any internal or external surface (premises, bridge, truck, etc.), check that the ground is capable of supporting the load. Check the maximum value in the technical characteristics (👉 Section G 1- Main characteristics).
- During movement reversal from the upper or lower console, the joysticks or switches must be stopped in the neutral position.
- According to the overall dimensions, place the loads in the centre of the platform or distribute them in a uniform manner.
- On platforms, footpaths, etc. remain vigilant of the reversal of driving direction. Check the driving direction with the help of the red or green arrow on the chassis and on the upper console.
- Make sure that the chassis is never closer than 1 m (3 ft 3 in) m to holes, bumps, steep slopes, obstructions, debris and ground covering which may hide holes and other dangers.



- Do not drive the machine on slopes or tilts beyond limits. Check the maximum value in the technical characteristics(👉 Section G 1- Main characteristics).
- Do not descend slopes at high speed.
- Do not raise the platform or drive with the platform raised on slopes or when the machine is tilted.
- Do not drive in reverse (direction opposite to the field of vision).
- Never use the machine in winds exceeding the authorized limit.
- Do not increase the surface area exposed to the wind. The greater the surface area exposed, the more unstable the machine becomes.

***N.B.-:-THE BEAUFORT SCALE MEASURES THE WIND FORCE WITH A GRADUATION SYSTEM. A WIND SPEED RANGE AT 10 M (32 FT 9 IN) ABOVE FLAT, CLEAR LAND IS ASSOCIATED WITH EACH DEGREE.***

## A - Safety precautions

### 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. Weathervanes 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 - 14,4	75 - 88	46,60 - 54,68



# A - Safety precautions

A

B

C

D

E

F

G

H

I

## 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 inflammable ambience (spark, flame, etc.).
- Do not touch the hot parts of the motorization system (engine, filters, etc.).
- Do not use a tool to make contact between the battery terminals.
- Do not manipulate the battery close to a spark, flame, glowing tobacco (emission of gas).

## 3.2.6 - Risk of crushing and collision



On board the machine, respect the following instructions :

- During operation, keep all the parts of the body inside the platform.
- Adapt the movement speed according to the ground conditions (traffic, slope, etc.).
- Respect stopping distances :
  - 3 m (9 ft 10 in) at fast speed.
  - 1 m (3 ft 3 in) at slow speed.
- To position the machine close to obstacles, use the lifting controls (arm, boom, etc.) instead of the drive controls.
- Make sure there are no obstacles (structure) in the work area.
- When moving, position the platform so as to have the best possible visibility.
- Always have someone to guide manoeuvres in case of low visibility.
- All personnel on the machine or on the ground must wear a safety helmet.
- When raising or lowering the machine, and during drive, the operator must check that the area above, below and on each side of the machine, is clear.
- When moving the machine, ensure that there are no people or obstacles in the way..



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

**Take into account the distance, reduced visibility and dead angles during the driving and/or use of the machine.**

## A - Safety precautions

## B - Intervenor's responsibility

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

The owner (or hirer) has the obligation to inform operators of the operator manual instructions.

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.

### 2 - Employer's responsibility

The employer is obliged to issue a driving permit to the operator.

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



**Forbid machine operation to anyone :**

- Under the influence of drugs, alcohol, etc..
- subject to fits, loss of motricity, dizziness, etc..

### 3 - Trainer's responsibility

The trainer must be qualified to provide training to operators. The training must be given in an obstacle-free area until the trainee is able to drive and operate the machine safely.

## B - Intervenor's responsibility

### 4 - Operator's responsibility

The operator must read and understand 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 bad 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 be familiar with the emergency controls and how to operate the machine in an emergency.

The operator must stop using the machine in the event of malfunction or safety problems on the machine or in the work area.

## B - Intervenor's responsibility

### 5 - Inspection and maintenance

The inspection and maintenance table identifies the role and the responsibilities of each party in regular machine maintenance.



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

#### I n s p e c t i o n s   a n d   m a i n t e n a n c e

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 manual
Pre-operation inspection	Before operation or when the operator changes	Operator	Operator	Operator manual
Regular preventive maintenance	At the specified intervals (250h or 1 year)	Owner (or hirer)	On-site technician or qualified HAULOTTE Services® technician	Maintenance book
Regular visit	2 times a year or at the latest 6 months after the last regular 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

## **B** - Intervenor's responsibility

## C - Machine layout

### 1 - Identification

The identification plate fixed to the rear right side of the chassis bears all the indications allowing machine identification.

The constructor's plate at the rear of the mast bears all the indications allowing machine identification..



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

Identification plate - C E

A3

		PINGUELY HAULOTTE, La Péronnière, BP9 42152 L'Horme - France			
EQUIPMENT	<input type="text"/>				
TYPE	<input type="text"/>				
SERIAL N°	<input type="text"/>				
TOTAL WEIGHT	<input type="text"/>				kg
YEAR OF MANUFACTURE	<input type="text"/>				
NOMINAL POWER	<input type="text"/>				kW
GRADEABILITY	<input type="text"/>				%
	<i>INSIDE USE</i>		<i>OUTSIDE USE</i>		
MAXIMUM LOAD	<input type="text"/>	kg	<input type="text"/>	kg	
NUMBER OF PERSONS + LOAD	P +	kg	P +	kg	
LATERAL FORCE MAX.	<input type="text"/>	N	<input type="text"/>	N	
WINDSPEED MAX.	<input type="text"/>	m/s	<input type="text"/>	m/s	
SLOPE OPERATION MAX.	<input type="text"/>	degrees	<input type="text"/>	degrees	
307P219020 A					

## C - Machine layout

### Identification plate - A S

A3

		PINGUELY HAULOTTE, La Péronnière, BP9 42152 L'Horme - France			
EQUIPMENT					
TYPE					
SERIAL N°					
TOTAL WEIGHT					kg
YEAR OF MANUFACTURE					
NOMINAL POWER					kW
GRADEABILITY					%
MAXIMUM LOAD	<i>INSIDE USE</i>		<i>OUTSIDE USE</i>		
		kg		kg	
NUMBER OF PERSONS + LOAD	P +		P +		
		kg		kg	
LATERAL FORCE MAX.			N		
WINDSPEED MAX.			m/s		
SLOPE OPERATION MAX.			degrees		
307P219020 A					

### Identification plate - ANSI - CSA

A3

		PINGUELY HAULOTTE, La Péronnière, BP9 42152 L'Horme - France	
EQUIPMENT			
TYPE			
SERIAL N°			
TOTAL WEIGHT	lbs		
YEAR OF MANUFACTURE			
POWER SOURCE (fuel/gaz/LPG)	kW		
POWER SOURCE (electric)	V /	Ah	
MAXIMUM LOAD	lbs		
NUMBER OF PERSONS + LOAD	P + lbs		
MAXIMUM PLATFORM HEIGHT	ft		
MAXIMUM PLATFORM REACH	ft		
LATERAL FORCE MAX.	N		lbs
SLOPE OPERATION MAX.	0		degrees
MADE IN FRANCE			
THIS MACHINE HAS BEEN MANUFACTURED IN COMPLIANCE WITH ANSI			
307P218930 A			

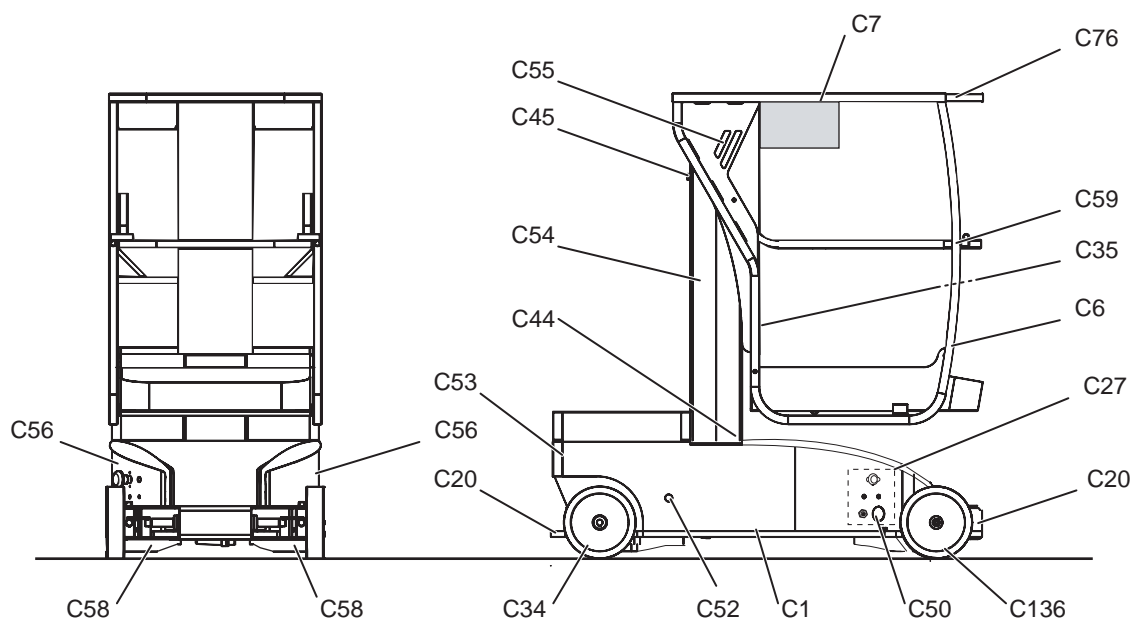


## C - Machine layout

### 2 - Main components

#### 2.1 - ELECTRICAL VERSION

View of the components STAR 6 (STAR 13)

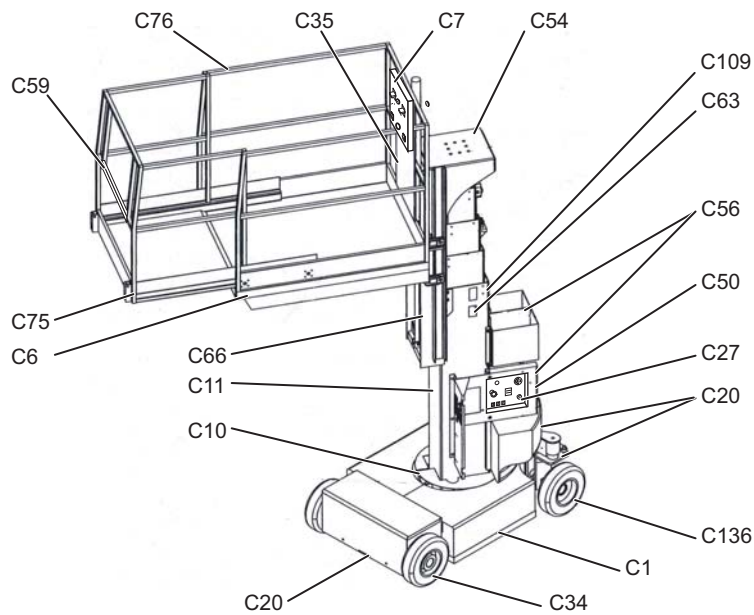


Description of the components

Marking	Description
C1	Dolly
C6	Platform
C7	Upper console
C20	Tie-down and lift lug
C27	Lower console
C34	Drive wheel
C35	Document carrier
C34	Drive wheel
C44	Slack chain contactor
C45	Mast raised/mast lowered contactor
C50	Battery charger socket
C52	Emergency lowering
C53	Connection console/chassis
C54	Telescopic mast
C55	Platform console connection
C56	Battery bay
C58	Anti-tipping over device
C59	Hinged midrail
C76	Guardrail
C136	Steering wheels

## C - Machine layout

### View of the components STAR 9

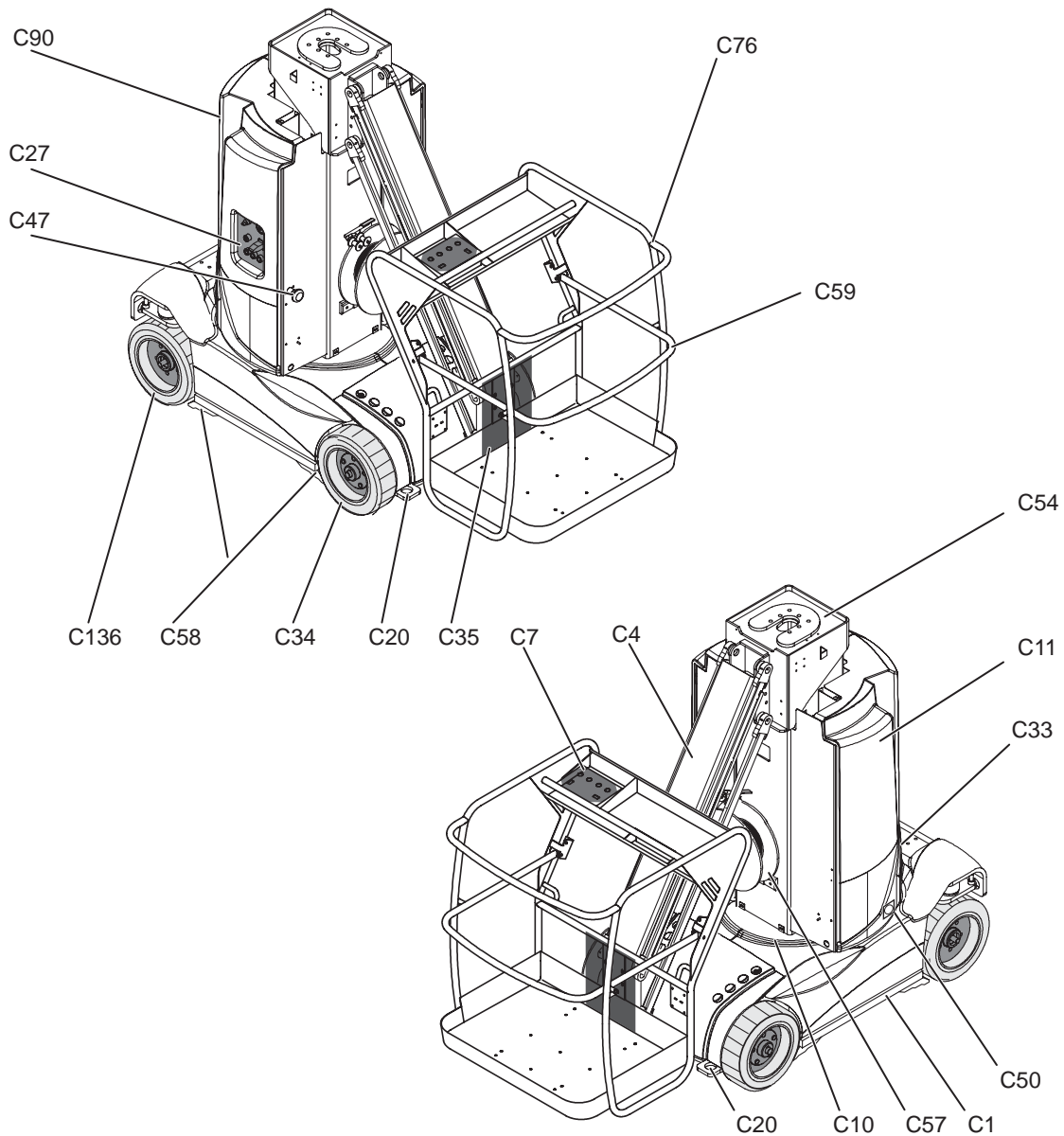


### Description of the components

Marking	Description
C1	Dolly
C6	Platform
C7	Upper console
C10	Rotation crown gear
C11	Turntable
C20	Tie-down and lift lug
C27	Lower console
C34	Drive wheel
C35	Document carrier
C50	Battery charger socket
C54	Telescopic mast
C56	Battery bay
C59	Hinged midrail
C63	Mast stop
C66	Hydraulic ladder
C75	Extension
C76	Guardrail
C109	Hydraulic unit
C136	Steering wheels

## C - Machine layout

View of the components STAR 8 (STAR 22J) - STAR 10 (STAR 26J)



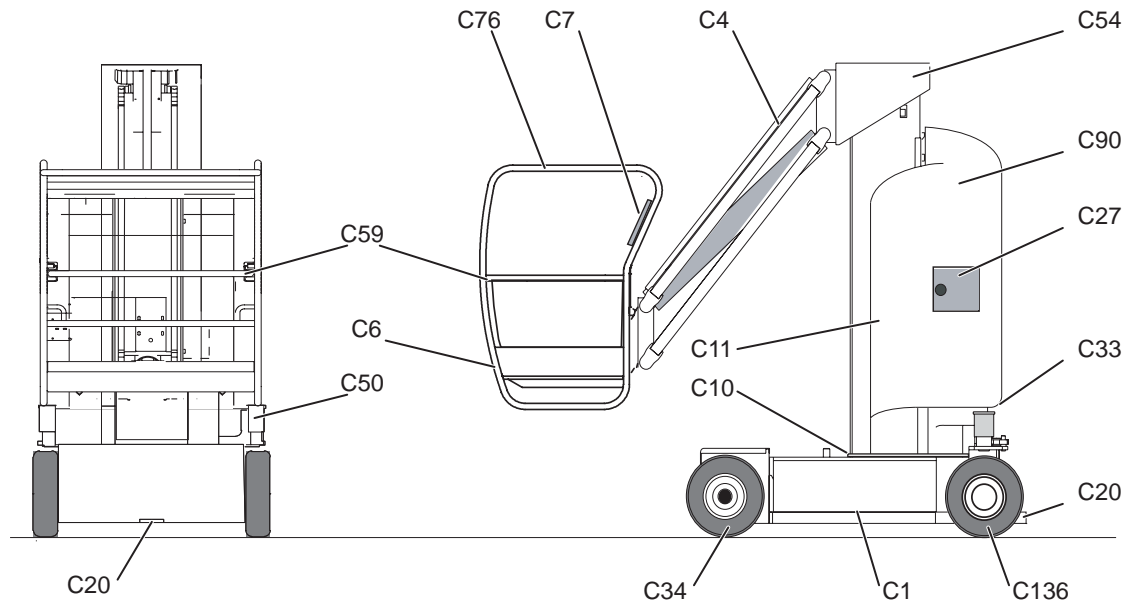
## C - Machine layout

### Description of the components

Marking	Description
C1	Dolly
C4	Jib
C6	Platform
C7	Upper console
C10	Rotation crown gear
C11	Turntable
C20	Tie-down and lift lug
C27	Lower console
C33	Counterweight
C34	Drive wheel
C35	Document carrier
C47	Battery cut-off
C50	Battery charger socket
C54	Telescopic mast
C57	Winder
C58	Anti-tipping over device
C59	Hinged midrail
C76	Guardrail
C90	Battery bay (hydraulic block and filter)
C136	Steering wheels

## C - Machine layout

View of the components STAR 11 - STAR 12



Description of the components

Marking	Description
C1	Dolly
C4	Jib
C6	Platform
C7	Upper console
C10	Rotation crown gear
C11	Turntable
C20	Tie-down and lift lug
C27	Lower console
C33	Counterweight
C34	Drive wheel
C35	Document carrier
C50	Battery charger socket
C54	Telescopic mast
C59	Hinged midrail
C76	Guardrail
C90	Battery bay (hydraulic block and filter)
C136	Steering wheels

## C - Machine layout

### 3 - Safety devices

#### 3.1 - SLIDING MID-RAIL

The platform is composed of guardrails and a sliding midrail facilitating access to the platform.



**Do not attach the sliding midrail to the guard rail.**



#### 3.2 - ANCHORAGE POINT

The machine is equipped with approved anchorage points accepting 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.**



## C - Machine layout

### 4 - Labels

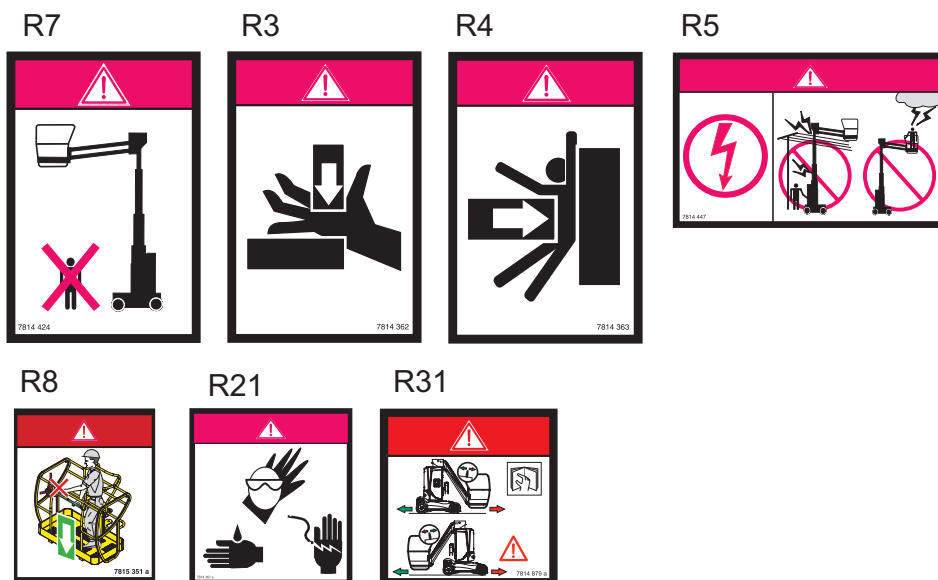
#### 4.1 - CLASSIFICATION PLAN

##### 4.1.1 - Red labels

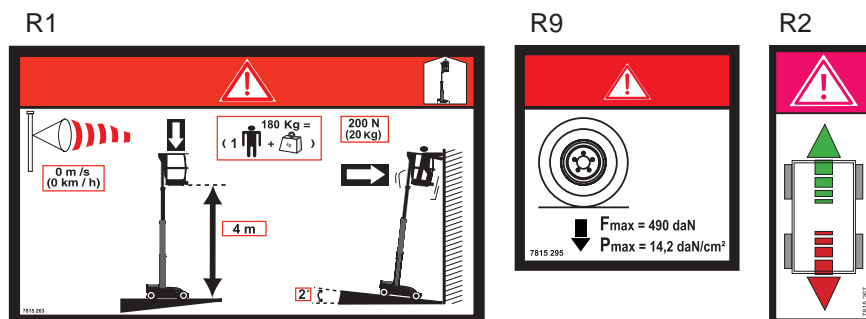


The red labels indicate a potentially fatal danger.

#### Common labels

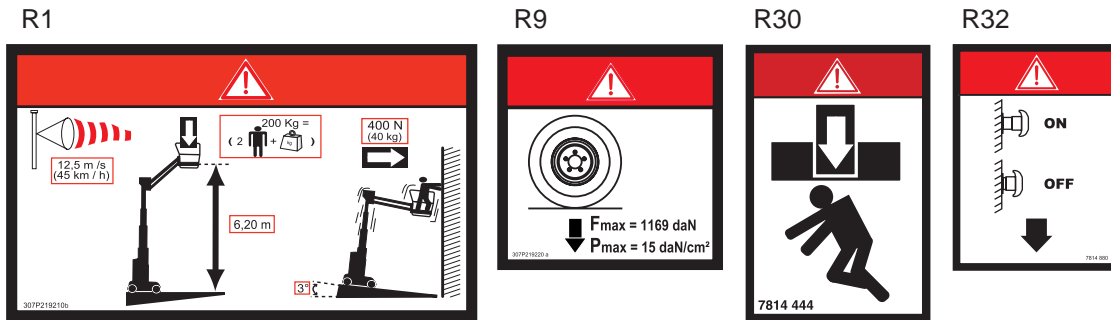


#### Specific labels STAR 6 (STAR 13)

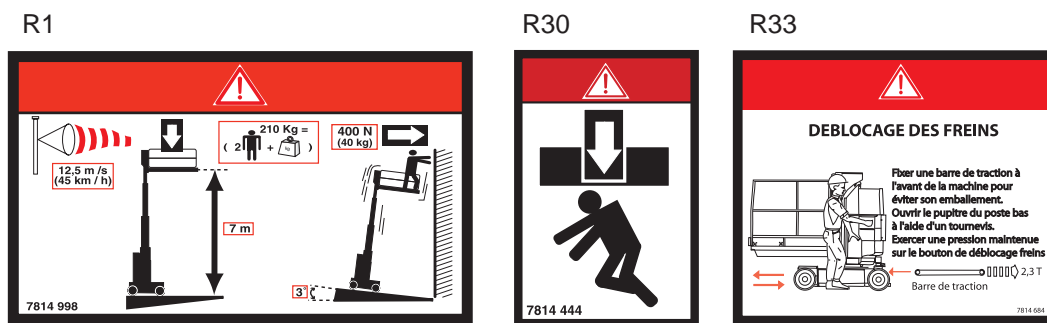


# C - Machine layout

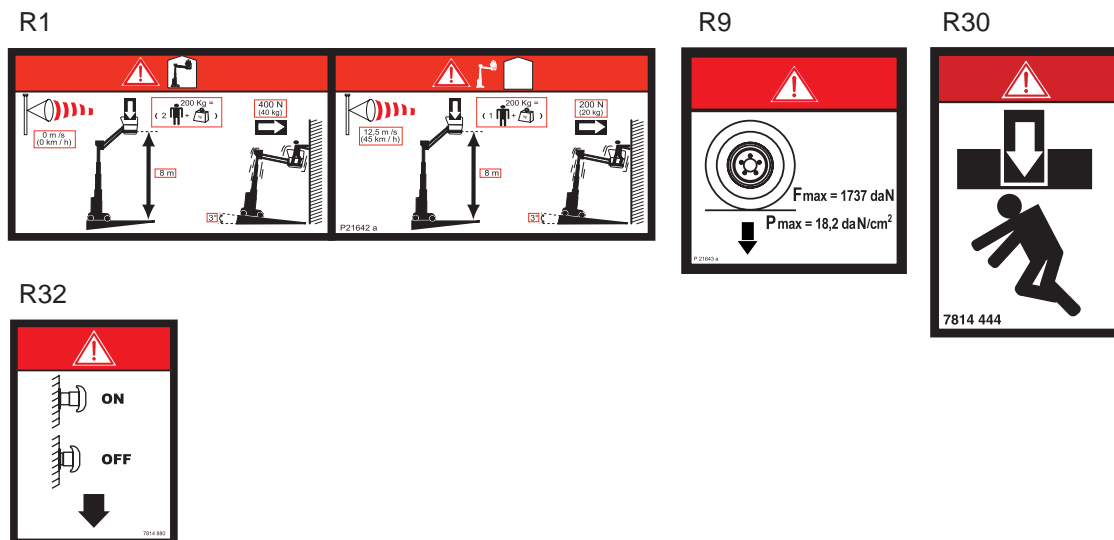
## Specific labels STAR 8 (STAR 22J)



## Specific labels STAR 9



## Specific labels STAR 10 (STAR 26J)

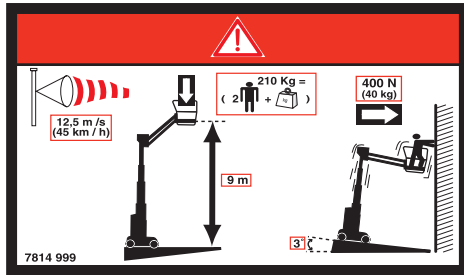




## C - Machine layout

### Specific labels STAR 11

R1



R30

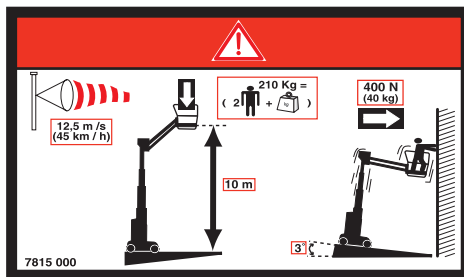


R33



### Specific labels STAR 12

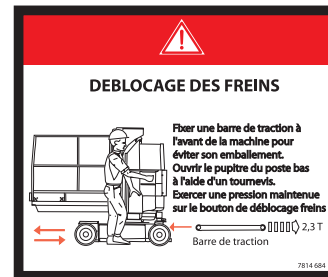
R1



R30



R33



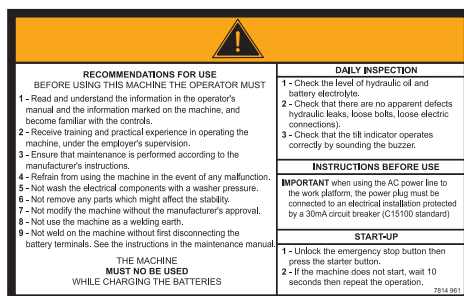
### 4.1.2 - Orange labels



The orange labels indicate a risk of serious injury.

### Common labels

O1



O4



O5



# C - Machine layout

## Common labels

<p><b>O1</b></p>	<p><b>O4</b></p> <p>7814 511</p>	<p><b>O5</b></p> <p>7814 383 b</p>
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## Common labels

<p><b>O1</b></p>	<p><b>O4</b></p> <p>7814 511</p>	<p><b>O5</b></p> <p>7814 383 b</p>
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### 4.1.3 - Yellow labels



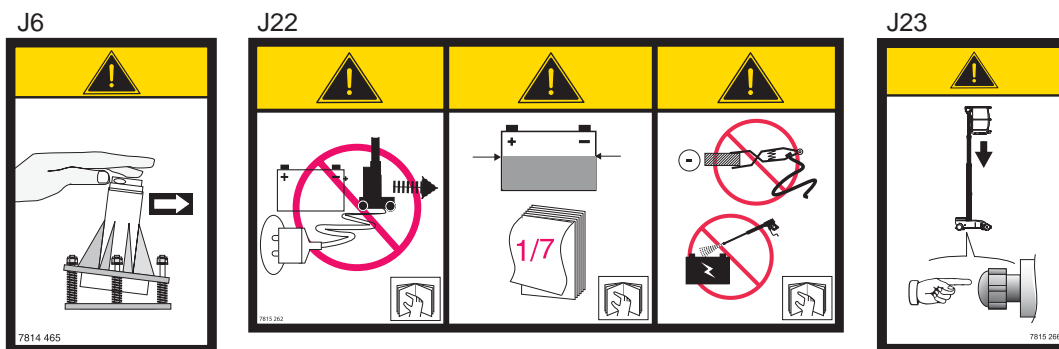
The yellow labels indicate a risk of material damage and/or minor injury.

## Common labels

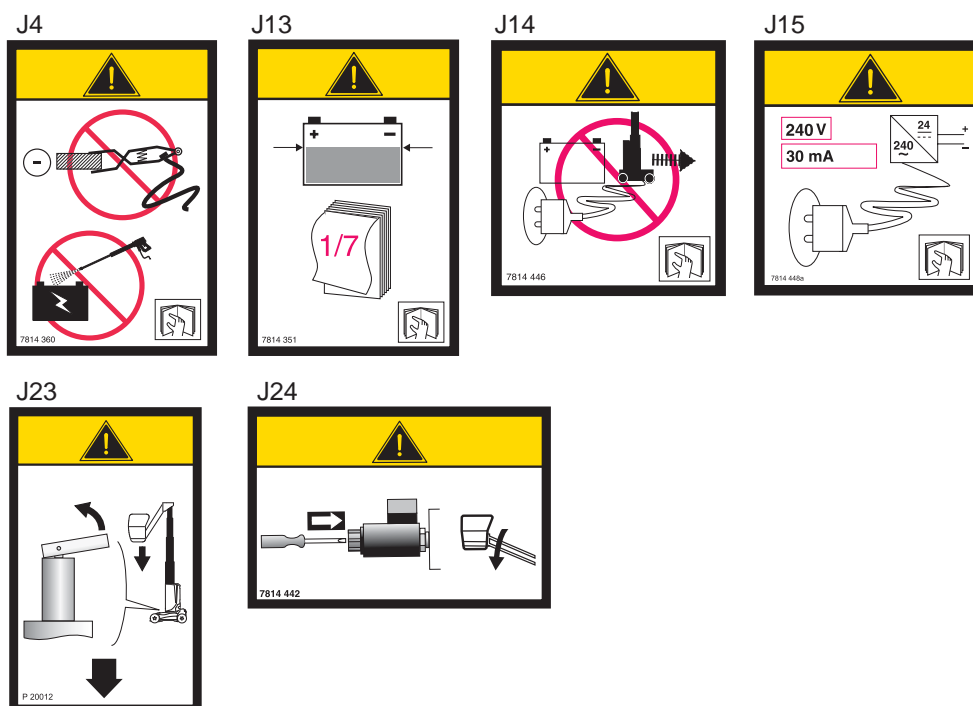
<p><b>J3</b></p> <p>7814 364</p>	<p><b>J10</b></p> <p>7814 354 a</p>
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## C - Machine layout

### Specific labels STAR 6 (STAR 13)



### Specific labels STAR 8 (STAR 22J) - STAR 9 - STAR 10 (STAR 26J) - STAR 11 - STAR 12



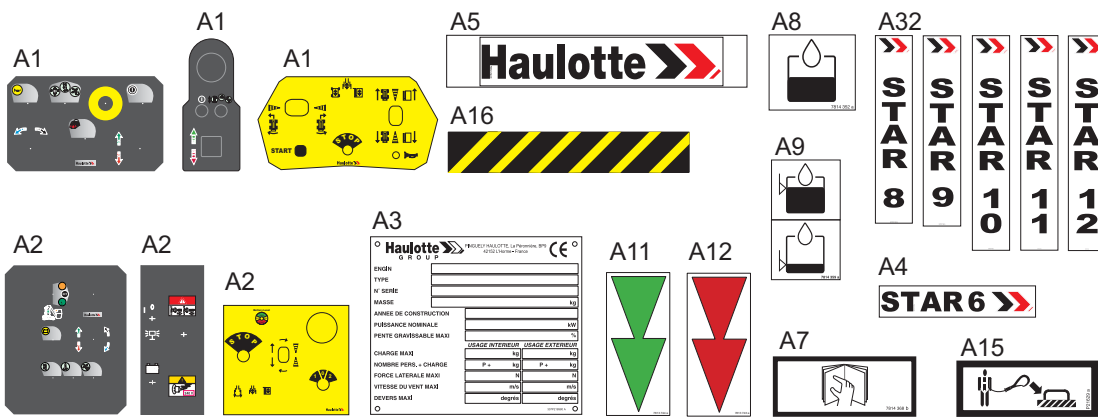
# C - Machine layout

## 4.1.4 - Other labels

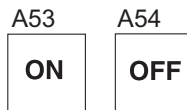


The other labels provide additional technical information.

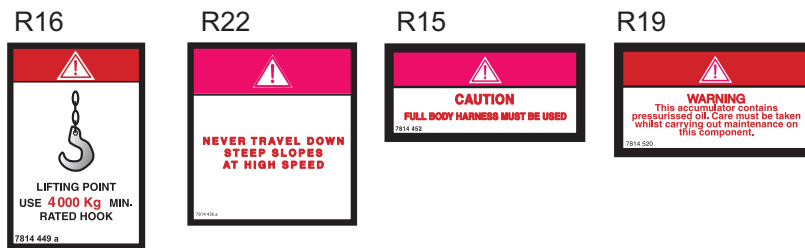
### Common labels



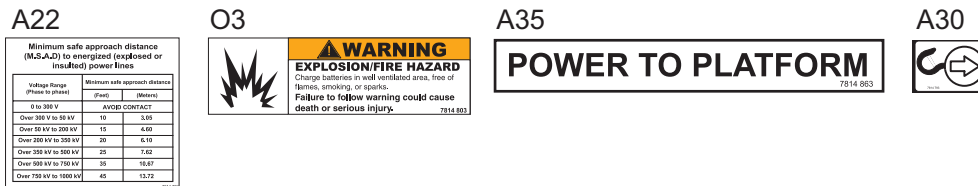
### Specific labels STAR 9 - STAR 11 - STAR 12



### Specific labels AS



### Specific labels ANSI

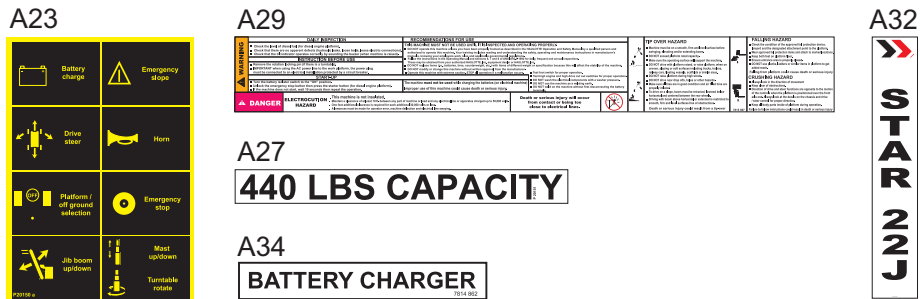


## C - Machine layout

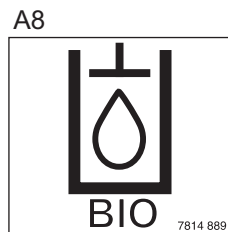
Specific labels ANSI : STAR 6 (STAR 13)



Specific labels ANSI : STAR 8 (STAR 22J)



Specific labels option



### 4.1.5 - Green labels



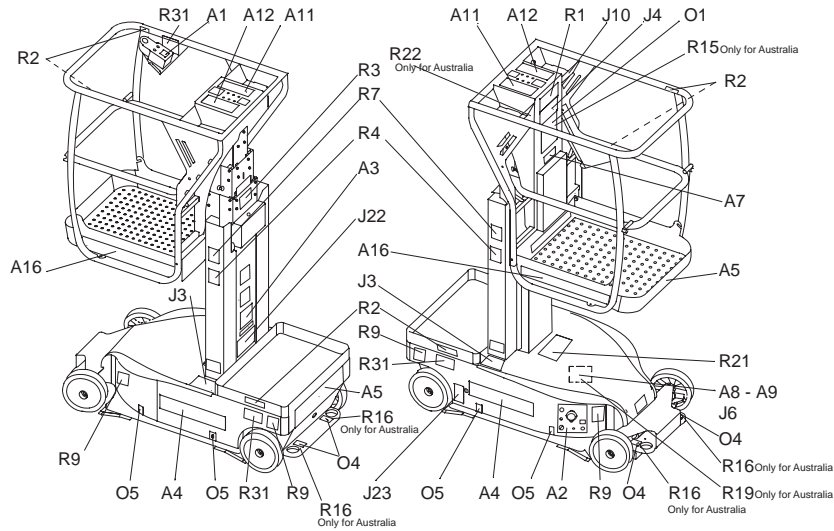
Green labels provide maintenance operation or information( CSA standard).



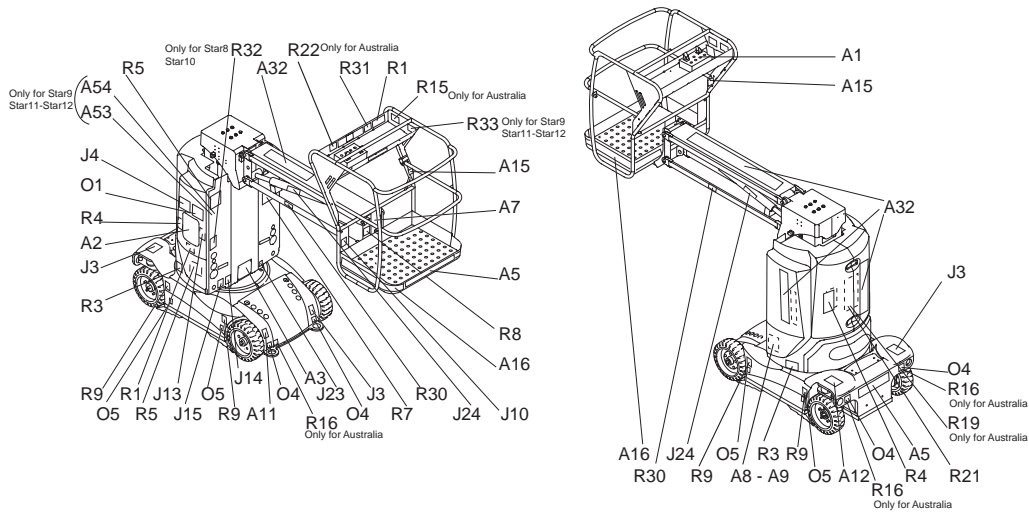
# C - Machine layout

## 4.2 - IDENTIFICATION

Localization : STAR 6 (STAR 13) - CE



Localization : STAR 8 (STAR 22J) - STAR 9 - STAR 10 (STAR 26J) - STAR 11 - STAR 12 - CE



## C - Machine layout

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### Label descriptions - C E

Color	Marking	Description	Quantity	STAR 6 (STAR 13)	STAR 9
Red	R1	Height of the floor and load	1	3078152630	3078149980
Red	R2	Driving direction	4	3078152670	
Red	R3	Risk of crushed hands	1	3078149010	3078149010
Red	R4	Risk of body crushing	1	3078143630	3078143630
Red	R5	Danger of electrocution	1	3078144470	3078144470
Red	R7	Do not park in the work area	2	3078144240	3078144240
Red	R8	Close the removable midrail	1	3078153510	3078153510
Red	R9	Wheel load	4	3078152950	
Red	R21	Protective clothing required	1	3078143610	3078143610
Red	R30	Vertical crushing of the body	1		3078144440
Red	R31	Driving direction	3	3078152650	3078148790
Red	R33	Brake release	1		3078146840
Orange	O1	Operation instructions	1	3078149610	3078149610
Orange	O4	Machine anchorage points	4	3078145110	3078145110
Orange	O5	Position of the lift truck forks	4	3078143830	3078143830
Yellow	J3	Do not place your foot on the hood	2	3078143640	3078143640
Yellow	J4	Do not use the machine as a solder mass	1		3078143600
Yellow	J6	Tilt verification	1	3078144650	
Yellow	J10	Socket	1	3078143540	3078143540
Yellow	J13	Battery verification	1		3078143510
Yellow	J14	Using the machine during battery charging is forbidden	1		3078144460
Yellow	J15	Battery charger socket	1		3078144480
Yellow	J22	Battery use	1	3078152620	
Yellow	J23	Emergency mast lowering	1	3078152660	307P200120
Yellow	J24	Emergency jib lowering	1		3078144420
Other	A1	Upper console	1	3078152460	
Other	A2	Lower console	1	3078152680	
Other	A3	Identification plate	1	307P219020	307P219020
Other	A4	Machine name logo	2	3078152090	
Other	A5	Small format HAULOTTE® logo	2	307P217410	307P217410
Other	A7	Read the operation manual	1	3078143680	3078143680
Other	A8	Hydraulic oil	1	3078143520	3078143520
Other	A8	Biodegradable oil	1	3078148890	3078148890
Other	A9	Upper and lower oil level	1	3078143590	3078143590
Other	A11	Front green boom	1	3078148820	3078148820
Other	A12	Rear red boom	1	3078148830	3078148830
Other	A15	Harness location	2	307P216290	307P216290
Other	A16	Yellow and black adhesive tape	2	2421808660	2421808660
Other	A32	Vertical machine name logo	1		307P217390
Other	A53	ON	1		3078142000
Other	A54	OFF	1		3078142010

## C - Machine layout

### Label descriptions - C E

Color	Marking	Description	Quantity	STAR 8 (STAR 22J)	STAR 10 (STAR 26J)
Red	R1	Height of the floor and load	2	307P219210	307P216420
Red	R3	Risk of crushed hands	2	3078149010	3078149010
Red	R4	Risk of body crushing	2	3078143630	3078143630
Red	R5	Danger of electrocution	1	3078144470	3078144470
Red	R7	Do not park in the work area	1	3078144240	3078144240
Red	R8	Close the removable midrail	1	3078153510	3078153510
Red	R9	Wheel load	4	307P219220	307P216430
Red	R21	Protective clothing required	1	3078143610	3078143610
Red	R30	Vertical crushing of the body	2	3078144440	3078144440
Red	R31	Driving direction	1	3078148790	3078148790
Red	R32	Emergency stop push button	1	3078148800	3078148800
Orange	O1	Operation instructions	1	3078149610	3078149610
Orange	O4	Machine anchorage points	4	3078145110	3078145110
Orange	O5	Position of the lift truck forks	4	3078143830	3078143830
Yellow	J3	Do not place your foot on the hood	2	3078143640	3078143640
Yellow	J4	Do not use the machine as a solder mass	2	3078143600	3078143600
Yellow	J10	Socket	1	3078143540	3078143540
Yellow	J13	Battery verification	1	3078143510	3078143510
Yellow	J14	Using the machine during battery charging is forbidden	1	3078144460	3078144460
Yellow	J15	Battery charger socket	1	3078144480	3078144480
Yellow	J23	Emergency mast lowering	1	307P218900	307P218900
Yellow	J24	Emergency jib lowering	1	3078144420	3078144420
Other	A1	Upper console	1	3078148280	3078148280
Other	A2	Lower console	1	3078148300	3078148300
Other	A3	Identification plate	1	307P219020	307P219020
Other	A5	Small format HAULOTTE® logo	2	307P217410	307P217410
Other	A7	Read the operation manual	1	3078143680	3078143680
Other	A8	Hydraulic oil	1	3078143520	3078143520
Other	A8	Biodegradable oil	1	3078148890	3078148890
Other	A9	Upper and lower oil level	1	3078143590	3078143590
Other	A11	Front green boom	1	3078148820	3078148820
Other	A12	Rear red boom	1	3078148830	3078148830
Other	A15	Harness location	2	307P216290	307P216290
Other	A16	Yellow and black adhesive tape	1	2421808660	2421808660
Other	A32	Vertical machine name logo	1	307P217430	307P217400



## C - Machine layout

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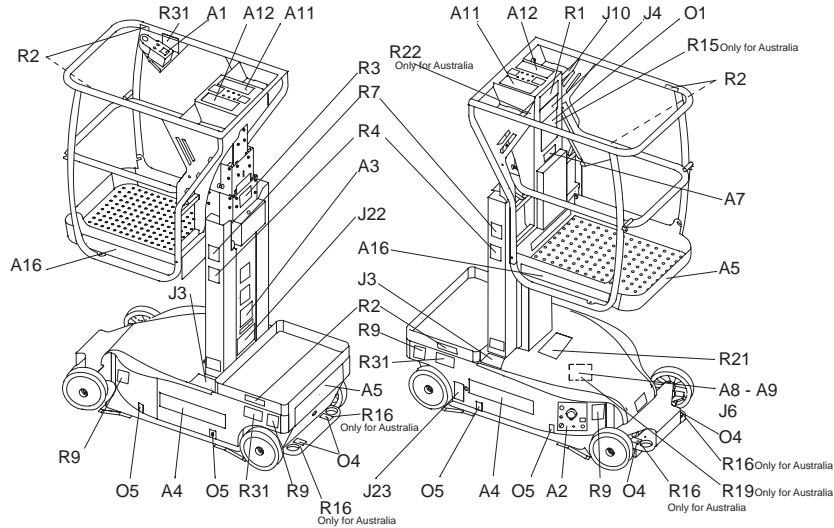
I

### Label descriptions - C E

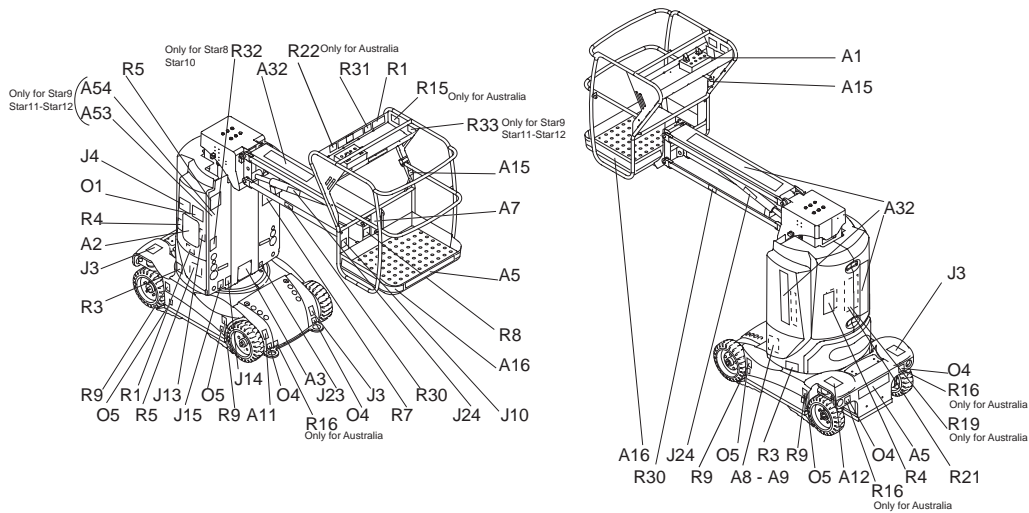
Color	Marking	Description	Quantity	STAR 11	STAR 12
Red	R1	Height of the floor and load	2	3078149990	3078150000
Red	R3	Risk of crushed hands	1	307814910	307814910
Red	R4	Risk of body crushing	1	3078143630	3078143630
Red	R5	Danger of electrocution	1	3078144470	3078144470
Red	R7	Do not park in the work area	1	3078144240	3078144240
Red	R8	Close the removable midrail	1	3078153510	3078153510
Red	R21	Protective clothing required	1	3078143610	3078143610
Red	R30	Vertical crushing of the body	2	3078144440	3078144440
Red	R31	Driving direction	1	3078148790	3078148790
Red	R33	Brake release	1	3078146840	3078146840
Orange	O1	Operation instructions	1	3078149610	3078149610
Orange	O4	Machine anchorage points	2	3078145110	3078145110
Orange	O5	Position of the lift truck forks	4	3078143830	3078143830
Yellow	J3	Do not place your foot on the hood	2	3078143640	3078143640
Yellow	J4	Do not use the machine as a solder mass	2	3078143600	3078143600
Yellow	J10	Socket	1	3078143540	3078143540
Yellow	J13	Battery verification	1	3078143510	3078143510
Yellow	J14	Using the machine during battery charging is forbidden	1	3078144460	3078144460
Yellow	J15	Battery charger socket	1	3078144480	3078144480
Yellow	J23	Emergency mast lowering	1	307P200120	307P200120
Yellow	J24	Emergency jib lowering	1	3078144420	3078144420
Other	A1	Upper console	1	3078148280	3078148280
Other	A2	Lower console	1		
Other	A3	Identification plate	1	307P219020	307P219020
Other	A5	Small format HAULOTTE® logo	1	307P217410	307P217410
Other	A7	Read the operation manual	1	3078143680	3078143680
Other	A8	Hydraulic oil	1	3078143520	3078143520
Other	A8	Biodegradable oil	1	3078148890	3078148890
Other	A9	Upper and lower oil level	1	3078143590	3078143590
Other	A11	Front green boom	1	3078148820	3078148820
Other	A12	Rear red boom	1	3078148830	3078148830
Other	A15	Harness location	2	307P216290	307P216290
Other	A16	Yellow and black adhesive tape	1	2421808660	2421808660
Other	A32	Vertical machine name logo	1	307P217450	307P217460
Other	A53	ON	1	3078142000	3078142000
Other	A54	OFF	1	3078142010	3078142010

# C - Machine layout

Localization : STAR 6 (STAR 13) - AS



Localization : STAR 8 (STAR 22J) - STAR 9 - STAR 10 (STAR 26J) - STAR 11 - STAR 12 - AS



## C - Machine layout

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### Label descriptions - A S

Color	Marking	Description	Quantity	STAR 6 (STAR 13)	STAR 9
Red	R1	Height of the floor and load	1	3078152630	3078149980
Red	R2	Driving direction	4	3078152670	
Red	R3	Risk of crushed hands	1	3078149010	3078143620
Red	R4	Risk of body crushing	1	3078143630	3078143630
Red	R5	Danger of electrocution	1	3078144470	3078144470
Red	R7	Do not park in the work area	2	3078144240	3078144240
Red	R8	Close the removable midrail	1	3078153510	3078153510
Red	R9	Wheel load	4	3078152950	
Red	R15	Harness use	1	3078144520	3078144520
Red	R16	Load strength on each slings	1	3078144490	3078144490
Red	R19	Fluid under pressure	1	3078145200	3078145200
Red	R21	Protective clothing required	1	3078143610	3078143610
Red	R22	Do not descend slopes at high speed	1	3078144360	3078144360
Red	R30	Vertical crushing of the body	1		3078144440
Red	R31	Driving direction	3	3078152650	3078148790
Red	R33	Brake release	1		3078146840
Orange	O1	Operation instructions	1	3078149610	3078149610
Orange	O4	Machine anchorage points	4	3078145110	3078145110
Orange	O5	Position of the lift truck forks	4	3078143830	3078143830
Yellow	J3	Do not place your foot on the hood	2	3078143640	3078143640
Yellow	J4	Do not use the machine as a solder mass	1		3078143600
Yellow	J6	Tilt verification	1	3078144650	
Yellow	J10	Socket	1	3078143540	3078143540
Yellow	J13	Battery verification	1		3078143510
Yellow	J14	Using the machine during battery charging is forbidden	1		3078144460
Yellow	J15	Battery charger socket	1		3078144480
Yellow	J22	Battery use	1	3078152620	
Yellow	J23	Emergency mast lowering	1	3078152660	307P200120
Yellow	J24	Emergency jib lowering	1		3078144420
Other	A1	Upper console	1	3078152460	
Other	A2	Lower console	1	3078152680	
Other	A3	Identification plate	1	307P219020	307P219020
Other	A4	Machine name logo	2	3078152090	
Other	A5	Small format HAULOTTE® logo	2	307P217410	307P217410
Other	A7	Read the operation manual	1	3078143680	3078143680
Other	A8	Hydraulic oil	1	3078143520	3078143520
Other	A8	Biodegradable oil	1	3078148890	3078148890
Other	A9	Upper and lower oil level	1	3078143590	3078143590
Other	A11	Front green boom	1	3078148820	3078148820
Other	A12	Rear red boom	1	3078148830	3078148830
Other	A15	Harness location	2	307P216290	307P216290
Other	A16	Yellow and black adhesive tape	2	2421808660	2421808660

## C - Machine layout

Color	Marking	Description	Quantity	STAR 6 (STAR 13)	STAR 9
Other	A32	Vertical machine name logo	1		307P217390
Other	A53	ON	1		3078142000
Other	A54	OFF	1		3078142010

### Label descriptions - A S

Color	Marking	Description	Quantity	STAR 8 (STAR 22J)	STAR 10 (STAR 26J)
Red	R1	Height of the floor and load	2	307P219210	307P216420
Red	R3	Risk of crushed hands	2	3078149010	3078149010
Red	R4	Risk of body crushing	2	3078143630	3078143630
Red	R5	Danger of electrocution	1	3078144470	3078144470
Red	R7	Do not park in the work area	1	3078144240	3078144240
Red	R8	Close the removable midrail	1	3078153510	3078153510
Red	R9	Wheel load	4	307P219220	307P216430
Red	R15	Harness use	1	3078144520	3078144520
Red	R16	Load strength on each slings	1	3078144490	3078144490
Red	R19	Fluid under pressure	1	3078145200	3078145200
Red	R21	Protective clothing required	1	3078143610	3078143610
Red	R22	Do not descend slopes at high speed	1	3078144360	3078144360
Red	R30	Vertical crushing of the body	1	3078144440	3078144440
Red	R31	Driving direction	1	3078148790	3078148790
Red	R32	Emergency stop push button	1	3078148800	3078148800
Orange	O1	Operation instructions	1	3078149610	3078149610
Orange	O4	Machine anchorage points	4	3078145110	3078145110
Orange	O5	Position of the lift truck forks	4	3078143830	3078143830
Yellow	J3	Do not place your foot on the hood	2	3078143640	3078143640
Yellow	J4	Do not use the machine as a solder mass	2	3078143600	3078143600
Yellow	J10	Socket	1	3078143540	3078143540
Yellow	J13	Battery verification	1	3078143510	3078143510
Yellow	J14	Using the machine during battery charging is forbidden	1	3078144460	3078144460
Yellow	J15	Battery charger socket	1	3078144480	3078144480
Yellow	J23	Emergency mast lowering	1	307P218900	307P218900
Yellow	J24	Emergency jib lowering	1	3078144420	3078144420
Other	A1	Upper console	1	3078148280	3078148280
Other	A2	Lower console	1	3078148300	3078148300
Other	A3	Identification plate	1	307P219020	307P219020
Other	A5	Small format HAULOTTE® logo	2	307P217410	307P217410
Other	A7	Read the operation manual	1	3078143680	3078143680
Other	A8	Hydraulic oil	1	3078143520	3078143520
Other	A8	Biodegradable oil	1	3078148890	3078148890
Other	A9	Upper and lower oil level	1	3078143590	3078143590
Other	A11	Front green boom	1	3078148820	3078148820
Other	A12	Rear red boom	1	3078148830	3078148830

## C - Machine layout

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Color	Marking	Description	Quantity	STAR 8 (STAR 22J)	STAR 10 (STAR 26J)
Other	A15	Harness location	2	307P216290	307P216290
Other	A16	Yellow and black adhesive tape	1	2421808660	2421808660
Other	A32	Vertical machine name logo	1	307P217430	307P217400

### Label descriptions - A S

Color	Marking	Description	Quantity	STAR 11	STAR 12
Red	R1	Height of the floor and load	2	3078149990	3078150000
Red	R3	Risk of crushed hands	1	3078143620	3078143620
Red	R4	Risk of body crushing	1	3078143630	3078143630
Red	R5	Danger of electrocution	1	3078144470	3078144470
Red	R7	Do not park in the work area	1	3078144240	3078144240
Red	R8	Close the removable midrail	1	3078153510	3078153510
Red	R15	Harness use	1	3078144520	3078144520
Red	R16	Load strength on each slings	1	3078144490	3078144490
Red	R19	Fluid under pressure	1	3078145200	3078145200
Red	R21	Protective clothing required	1	3078143610	3078143610
Red	R22	Do not descend slopes at high speed	1	3078144360	3078144360
Red	R30	Vertical crushing of the body	1	3078144440	3078144440
Red	R31	Driving direction	1	3078148790	3078148790
Red	R33	Brake release	1	3078146840	3078146840
Orange	O1	Operation instructions	1	3078149610	3078149610
Orange	O4	Machine anchorage points	2	3078145110	3078145110
Orange	O5	Position of the lift truck forks	4	3078143830	3078143830
Yellow	J3	Do not place your foot on the hood	2	3078143640	3078143640
Yellow	J4	Do not use the machine as a solder mass	2	3078143600	3078143600
Yellow	J10	Socket	1	3078143540	3078143540
Yellow	J13	Battery verification	1	3078143510	3078143510
Yellow	J14	Using the machine during battery charging is forbidden	1	3078144460	3078144460
Yellow	J15	Battery charger socket	1	3078144480	3078144480
Yellow	J23	Emergency mast lowering	1	307P200120	307P200120
Yellow	J24	Emergency jib lowering	1	3078144420	3078144420
Other	A1	Upper console	1	3078148280	3078148280
Other	A2	Lower console	1		
Other	A3	Identification plate	1	307P219020	307P219020
Other	A5	Small format HAULOTTE® logo	2	307P217410	307P217410
Other	A7	Read the operation manual	1	3078143680	3078143680
Other	A8	Hydraulic oil	1	3078143520	3078143520
Other	A8	Biodegradable oil	1	3078148890	3078148890
Other	A9	Upper and lower oil level	1	3078143590	3078143590
Other	A11	Front green boom	1	3078148820	3078148820
Other	A12	Rear red boom	1	3078148830	3078148830
Other	A15	Harness location	2	307P216290	307P216290

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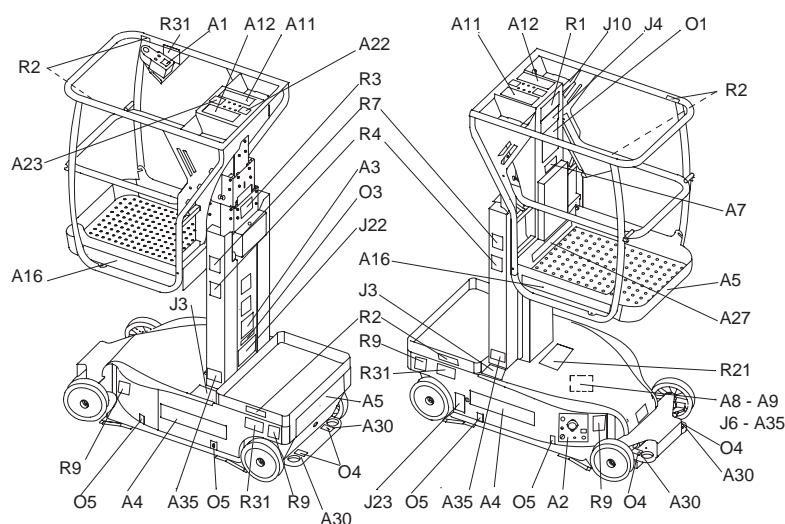
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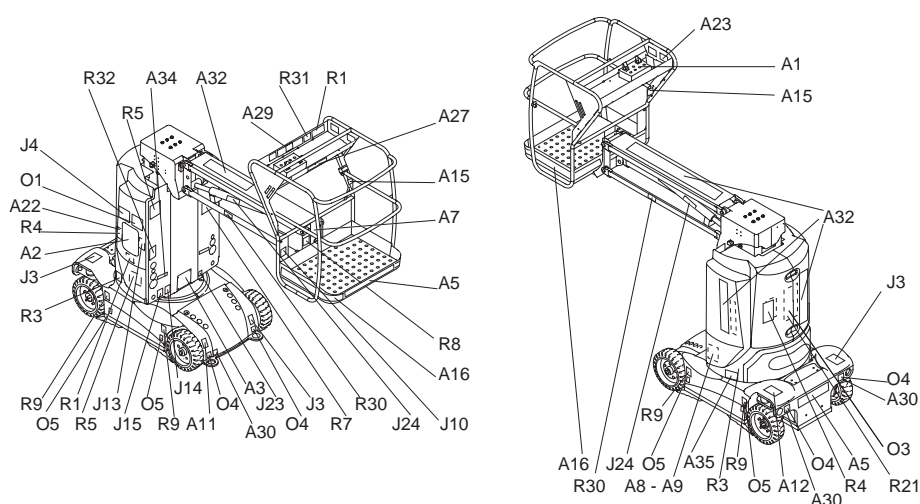
## C - Machine layout

Color	Marking	Description	Quantity	STAR 11	STAR 12
Other	A16	Yellow and black adhesive tape	2	2421808660	2421808660
Other	A32	Vertical machine name logo	1	307P217450	307P217460
Other	A53	ON	1	3078142000	3078142000
Other	A54	OFF	1	3078142010	3078142010

Localization : STAR 6 (STAR 13) - ANSI - CSA



Localization : STAR 8 (STAR 22J) - ANSI - CSA



## C - Machine layout

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### Label descriptions - ANSI - CSA

Color	Marking	Description	Quantity	STAR 6 (STAR 13)
Red	R1	Height of the floor and load	1	3078152970
Red	R2	Driving direction	4	3078152980
Red	R3	Risk of crushed hands	1	3078147240
Red	R4	Risk of body crushing	1	3078147260
Red	R5	Danger of electrocution	1	3078149300
Red	R7	Do not park in the work area	2	3078147170
Red	R8	Close the removable midrail	1	3078153630
Red	R9	Wheel load	1	3078153040
Red	R21	Protective clothing required	1	3078147350
Red	R31	Driving direction	3	3078152990
Orange	O1	Operation instructions	1	3078149050
Orange	O3	Risks of explosion	1	3078148030
Orange	O4	Machine anchorage points	4	3078147310
Orange	O5	Position of the lift truck forks	4	3078146950
Yellow	J3	Do not place your foot on the hood	2	3078147270
Yellow	J6	Tilt verification	1	3078147090
Yellow	J10	Socket	1	3078148900
Yellow	J22	Battery use	1	3078153000
Yellow	J23	Emergency mast lowering	1	3078153010
Other	A1	Upper console	1	3078152460
Other	A2	Lower console	1	3078152880
Other	A3	Identification plate	1	307P218930
Other	A4	Machine name logo	2	307P217380
Other	A5	Small format HAULOTTE® logo	2	307P217410
Other	A7	Read the operation manual	1	3078147290
Other	A8	Hydraulic oil	1	3078147140
Other	A8	Biodegradable oil	1	3078148920
Other	A9	Upper and lower oil level	1	3078147210
Other	A11	Front green boom	1	3078148820
Other	A12	Rear red boom	1	3078148830
Other	A15	Harness location	2	3078147950
Other	A16	Yellow and black adhesive tape	2	2421808660
Other	A22	Voltage table	1	3078147890
Other	A23	Symbols summary	1	3078153030
Other	A27	Permissible load	1	3078153050
Other	A30	Machine anchorage points	1	3078147930
Other	A35	Socket connection	1	3078148630

## C - Machine layout

### Label descriptions - ANSI - CSA

Color	Marking	Description	Quantity	STAR 8 (STAR 22J)
Red	R1	Height of the floor and load	2	307P219230
Red	R3	Risk of crushed hands	1	3078147240
Red	R4	Risk of body crushing	1	3078147260
Red	R5	Danger of electrocution	1	3078149300
Red	R7	Do not park in the work area	1	3078149310
Red	R8	Close the removable midrail	1	3078153630
Red	R9	Wheel load	1	307P219240
Red	R21	Protective clothing required	1	3078147350
Red	R30	Vertical crushing of the body	2	3078149390
Red	R31	Driving direction	1	3078149350
Orange	O1	Operation instructions	1	3078149050
Orange	O3	Risks of explosion	1	3078148030
Orange	O4	Machine anchorage points	1	3078147310
Orange	O5	Position of the lift truck forks	4	3078146950
Yellow	J3	Do not place your foot on the hood	2	3078147270
Yellow	J4	Do not use the machine as a solder mass	2	3078147220
Yellow	J10	Socket	1	3078148900
Yellow	J13	Battery verification	1	3078147330
Yellow	J14	Using the machine during battery charging is forbidden	1	3078149280
Yellow	J15	Battery charger socket	1	3078147580
Yellow	J23	Emergency mast lowering	1	307P218920
Yellow	J24	Emergency jib lowering	1	3078149380
Other	A1	Upper console	1	307P203690
Other	A2	Lower console	1	3078148300
Other	A3	Identification plate	1	307P218930
Other	A5	Small format HAULOTTE® logo	2	307P217410
Other	A7	Read the operation manual	1	3078147290
Other	A8	Hydraulic oil	1	3078147140
Other	A8	Biodegradable oil	1	3078148920
Other	A9	Upper and lower oil level	1	3078147210
Other	A11	Front green boom	1	3078148820
Other	A12	Rear red boom	1	3078148830
Other	A15	Harness location	1	3078147950
Other	A16	Yellow and black adhesive tape	2	2421808660
Other	A22	Voltage table	1	3078147890
Other	A23	Symbols summary	1	307P201500
Other	A27	Permissible load	2	307P211510
Other	A29	Summary safety instructions	1	3078150870
Other	A30	Machine anchorage points	2	3078147930
Other	A32	Vertical machine name logo	1	307P217440
Other	A34	Battery charger	1	3078148620
Other	A35	Socket connection	1	3078148630



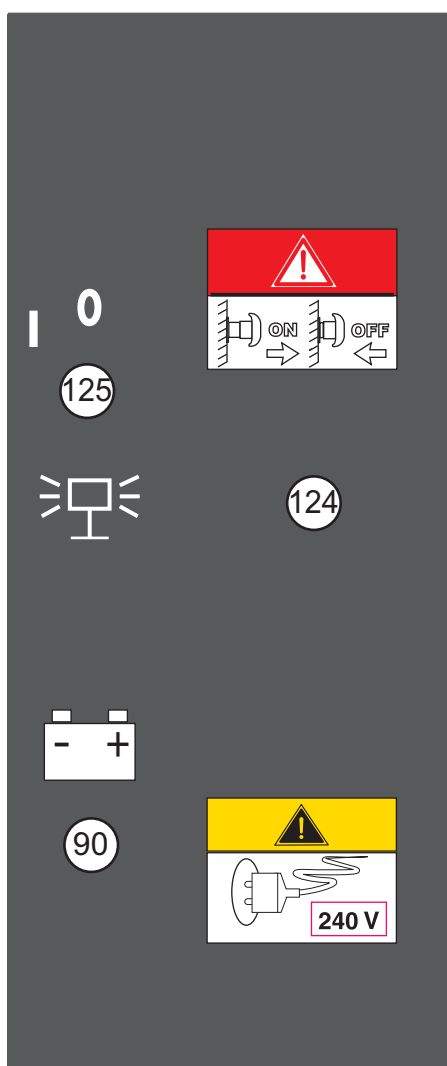
## C - Machine layout

### 5 - Consoles

**N.B.:-THE FUNCTIONS ARE DESCRIBED FOR THE ENTIRE RANGE. REFER TO THE MACHINE CONFIGURATION TO IDENTIFY THE FUNCTIONAL CONTROLS AND INDICATORS.**

#### 5.1 - LOWER CONSOLE

General view STAR 6 (STAR 13)

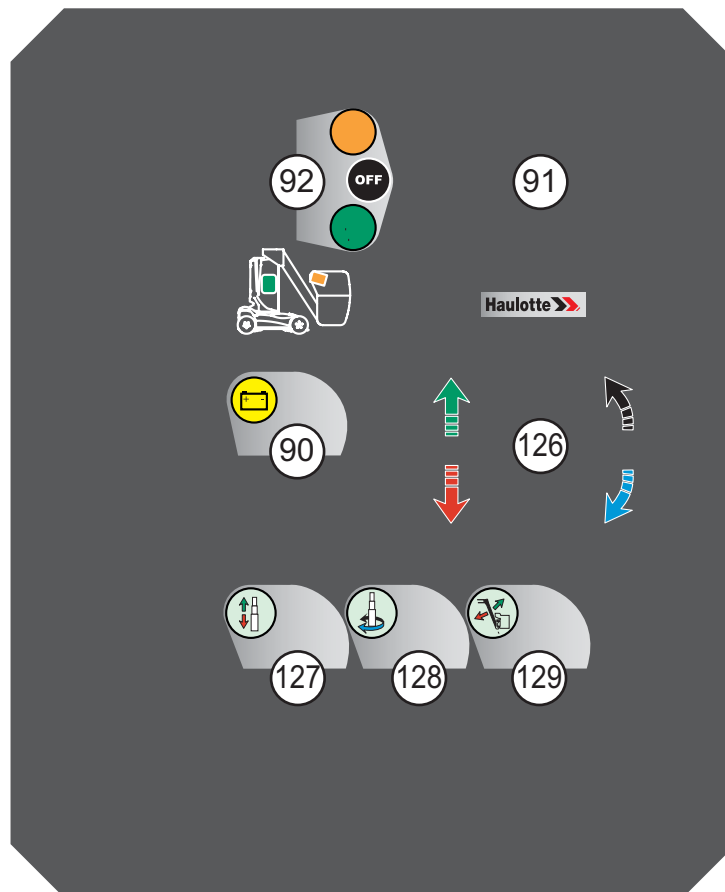


## C - Machine layout

### Controls and indicators STAR 6 (STAR 13)

Marking	Description	Function
P90	Battery charge level LED	Battery charge status
P124	Battery cut-off push button	Pulled (activated) : Battery cut-off activated Pushed in (deactivated) : Battery cut-off deactivated
P125	Key selector	Left : Switching on Center : Switching off

### General view STAR 8 (STAR 22J) - STAR 10 (STAR 26J)



## C - Machine layout

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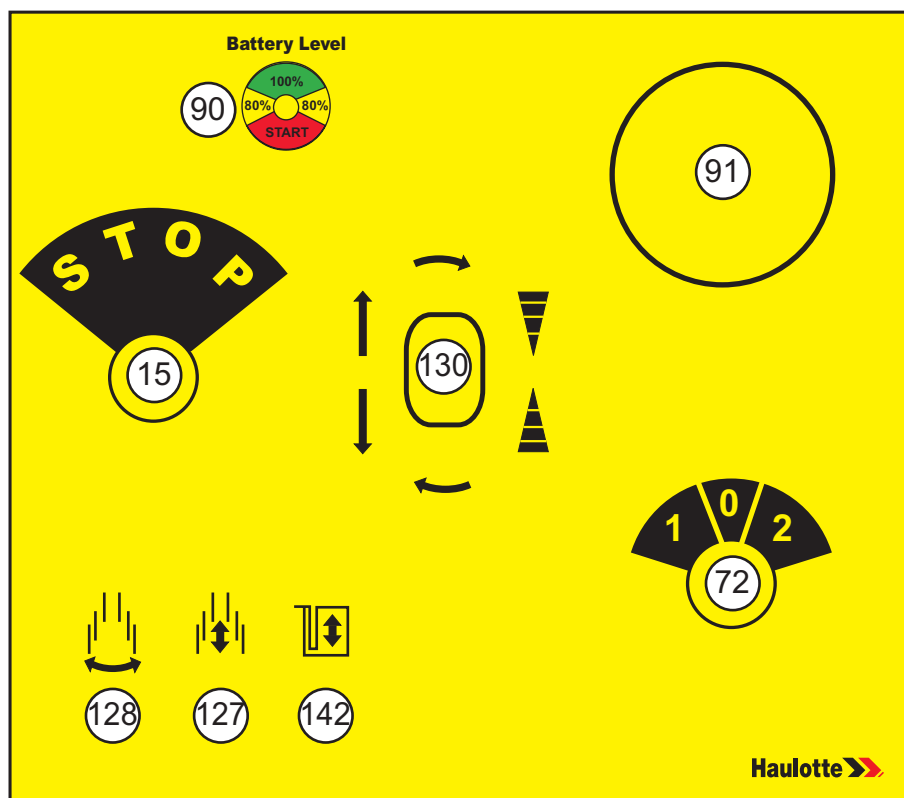
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### Controls and indicators STAR 8 (STAR 22J) - STAR 10 (STAR 26J)

Marking	Description	Function
P90	Battery charge level LED	Battery charge status
P91	Engine hour meter-Battery charge level LED	Number of hours of usage of the machine-Battery charge status
P92	Console activation key selector	Upwards : Upper console activation Center : Switching off Downwards : Lower console activation
P126	Movement selector	Upwards (proportional) : Mast elevation or clockwise rotation or jib elevation Downwards (proportional) : Mast lowering or anti-clockwise turntable rotation or jib lowering
P127	Mast telescoping selection	Maintained (activated) : Mast elevation/lowering Released (deactivated) : Movement halted
P128	Mast rotation selector	Maintained (activated) : Mast rotation Released (deactivated) : Movement halted
P129	Jib selector	Maintained (activated) : Lifting / lowering of jib Released (deactivated) : Movement halted

### General view STAR 9 - STAR 11 - STAR 12



## C - Machine layout

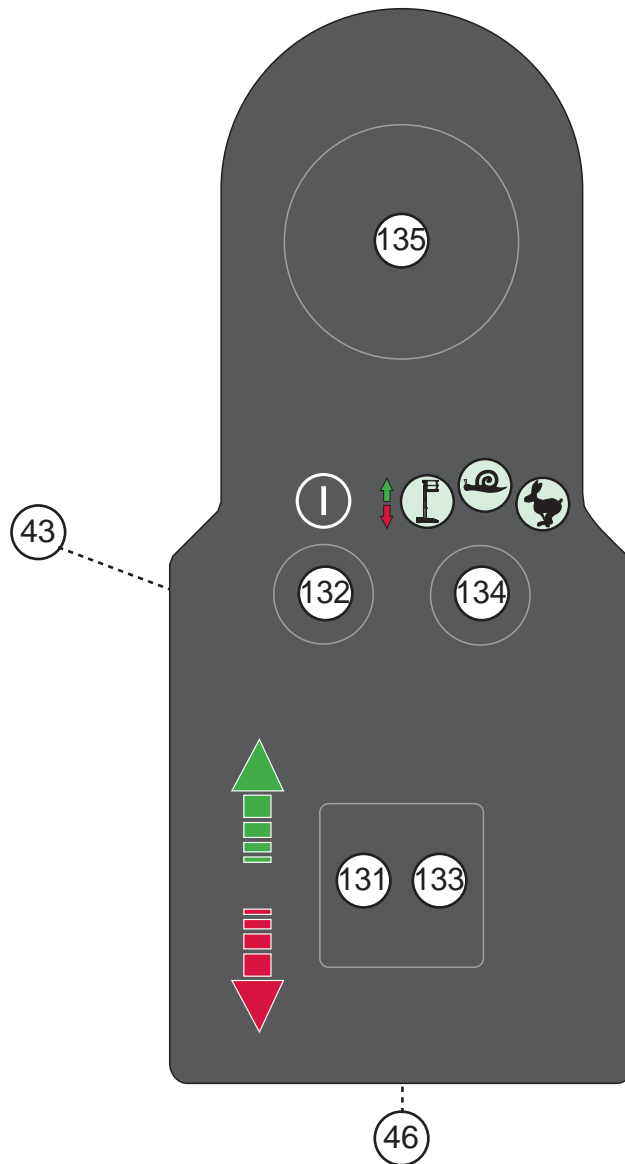
### Controls and indicators STAR 9 - STAR 11 - STAR 12

Marking	Description	Function
P15	Emergency stop push button	Pulled (activated) : Lower console power supply Pushed in (deactivated) : Power supply cut off to upper and lower consoles
P72	Console activation key selector	Left : Upper console activation Center : Switching off Right : Lower console activation
P90	Battery charge level LED	Battery charge status
P91	Engine hour meter-Battery charge level LED	Number of hours of usage of the machine-Battery charge status
P127	Mast telescoping selection	Maintained (activated) : Mast elevation/lowering Released (deactivated) : Movement halted
P128	Mast rotation selector	Maintained (activated) : Mast rotation Released (deactivated) : Movement halted
P130	Movement selector	Upwards (proportional) : Mast elevation or clockwise rotation or platform elevation Downwards (proportional) : Mast lowering or anti-clockwise rotation or platform lowering
P142	Platform selector	Maintained (activated) : Platform elevation/lowering Released (deactivated) : Movement halted

## C - Machine layout




### 5.2 - UPPER CONSOLE

General view STAR 6 (STAR 13)



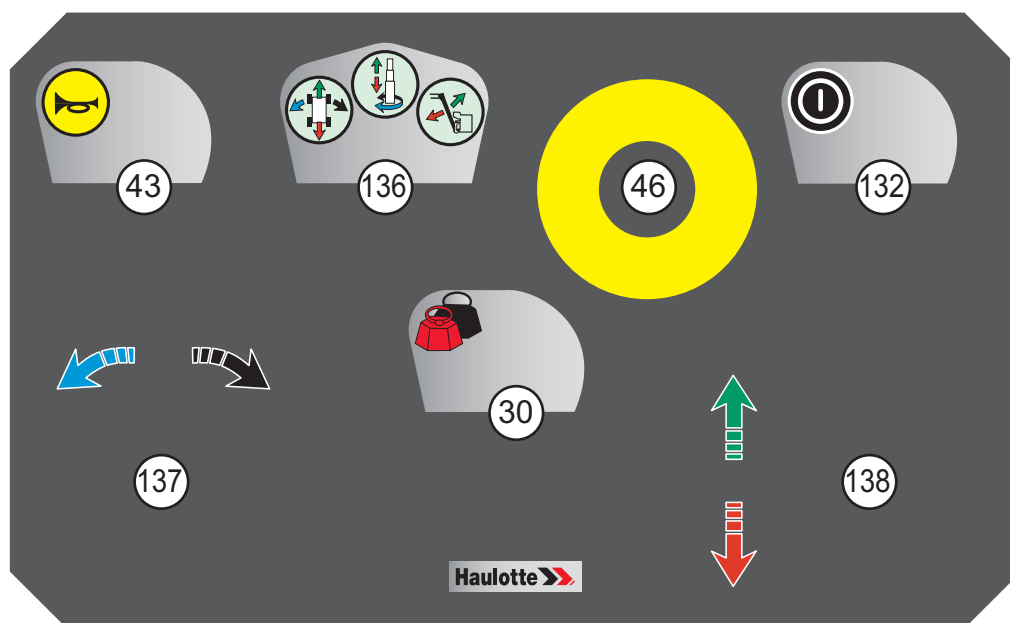
## C - Machine layout

### Controls and indicators STAR 6 (STAR 13)

Marking	Description	Function
P43	Horn selector	Horn
P46	Emergency stop push button	Pulled (activated) : Lower console power supply Pushed in (deactivated) : Power supply cut off to upper and lower consoles
P131	'Dead man' selector	Hold downwards : Associated command is validated
P132	Movement validation selector	Pressed : Movement selection Released : Movement activation (delay)
P133	Drive joystick	To the front : Driving forwards To the rear : Driving backwards To the left : Left turn To the right : Right turn
	Mast movement joystick	To the front : Mast elevation To the rear : Mast lowering
P134	Movement selector	 Fast driving (long distance)
		 Slow driving(short distance, final approach)
		 Mast telescoping
P135	Engine hour meter-Battery charge level LED	Number of hours of usage of the machine-Battery charge status-Alarms LED

## C - Machine layout

General view STAR 8 (STAR 22J) - STAR 10 (STAR 26J) - STAR 11 - STAR 12

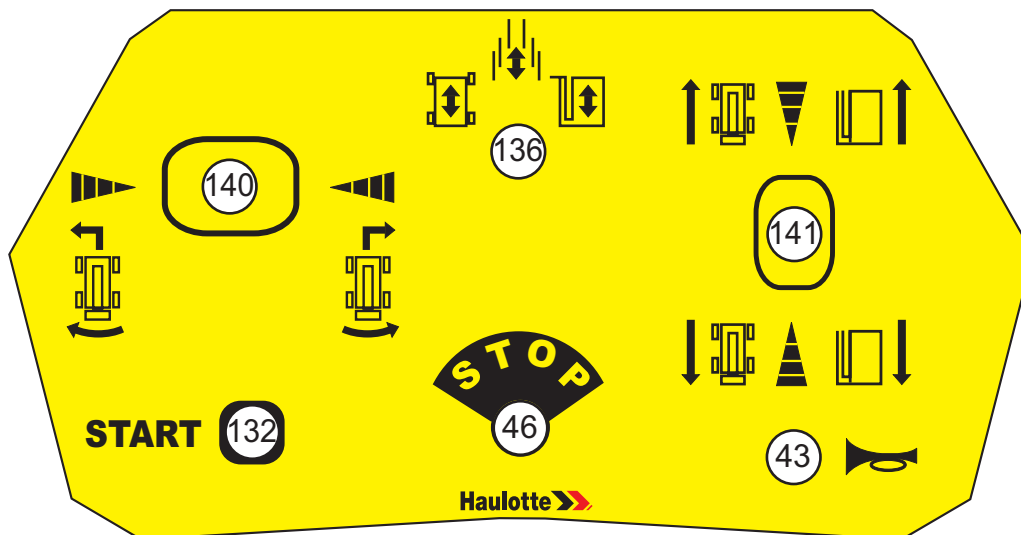


Controls and indicators STAR 8 (STAR 22J) - STAR 10 (STAR 26J) - STAR 11 - STAR 12

Marking	Description	Function
P30	Platform overload LED	Platform overload
P43	Horn selector	Horn
P46	Emergency stop push button	Pulled (activated) : Lower console power supply Pushed in (deactivated) : Power supply cut off to upper and lower consoles
P132	Movement validation selector	Pressed : Validation selection Released : Movement activation (delay)
P136	Movement selector	Driving and steering Mast telescoping and rotation Jib elevation/lowering
P137	Movement selector	To the right (proportional) : Steering to the right or anti-clockwise mast rotation To the left (proportional) : Steering to the left or clockwise mast rotation
P138	Movement selector	Upwards (proportional) : Mast elevation or driving forwards or jib elevation Downwards (proportional) : Mast lowering or reversing or jib lowering

## C - Machine layout

### General view STAR 9



### Controls and indicators STAR 9

Marking	Description	Function
P43	Horn selector	Horn
P46	Emergency stop push button	Pulled (activated) : Lower console power supply Pushed in (deactivated) : Power supply cut off to upper and lower consoles
P132	Movement validation selector	Pressed : Validation selection Released : Movement activation (delay)
P136	Movement selector	Driving
		Mast telescoping
		Platform elevation/lowering
P140	Movement selector	To the right (proportional) : Steering to the right or anti-clockwise mast rotation
		To the left (proportional) : Steering to the left or clockwise mast rotation
P141	Movement selector	Upwards (proportional) : Forward driving or mast elevation or platform elevation
		Downwards (proportional) : Reversing or mast lowering or platform lowering



## D - Operating principle

### 1 - Description

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

The controls and start-up of the electric motor are powered by battery.

To protect the staff and the machine, safety systems forbid the use of the machine beyond its capacities.

These security systems 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 'Dead man' system to activate the different movements.

The 'Dead man' system depends on the machine configuration :

- Joystick handle.
- Pedal.
- Validation button.

#### 2.2 - DRIVING SPEED (MINIMUM)

All driving speeds are authorized when the machine is stowed ( machine in lowered position).

The only speed allowed when not in stowed position is microspeed.



## D - Operating principle

### 2.3 - ELECTRONIC SPEED CONTROLLER

The machines are equipped with an electronic speed regulator configured for machine functionalities.



Do not interchange the variable transmissions between machines.

### 2.4 - MULTI-FUNCTION LED : BATTERY CHARGE STATUS CONTROLLER-ENGINE HOUR METER

This device has the following functions :

- The origin and type of defect can be located by regulator alarm code display (see maintenance book).
- A time meter indicates the number of machine in-service hours.
- A battery charge level indicator display with luminous segments.

***N.B.-:-IF BATTERIES ARE 80% DISCHARGED, IT IS IMPOSSIBLE TO RAISE THE PLATFORM AND DRIVING IS REDUCED BY HALF (SEE MACHINE MAINTENANCE BOOK).***

### 2.5 - AUTOMATIC ENGINE CUT-OUT

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.

### 2.6 - LOAD IN THE PLATFORM

If the load in the platform exceeds the maximum authorised load, no movement can be activated from the control consoles.



The platform overload LED and the buzzer warn the operator.

2 possibilities to restore normal configuration :

- Remove some weight from the platform to return to an acceptable load.
- Use the lower console to lower the platform.

***N.B.-:-ALL THE MOVEMENTS ARE SLOWED DOWN.***

## D - Operating principle

### 2.7 - MACHINE TILT

For STAR 6 (STAR 13)

If the machine is positioned on a slope exceeding authorized tilt with the mast extended, the tilt control unit alerts the operator.

Driving and elevation controls are cut if this situation lasts longer than 1 or 2 s.

To restore the driving function, only movements allowing the machine to be folded are permitted :

- Mast lowering.

If the machine descends a slope greater than 10% (around 5°) with the mast stowed, the machine automatically moves to slow.

For STAR 9

If the machine is positioned on a slope exceeding authorized tilt with the mast extended, the tilt control unit alerts the operator.

Driving and elevation controls are cut if this situation lasts longer than 1 or 2 s.

To restore the driving function, only movements allowing the machine to be folded are permitted :

- Mast lowering.
- Lowering the hydraulic ladder.

If the machine descends a slope greater than 10% (around 5°) with the mast stowed, the machine automatically moves to slow.

For STAR 8 (STAR 22J)-STAR 10 (STAR 26J)-STAR 11-STAR 12

If the machine is positioned on a slope exceeding authorized tilt, the tilt control unit alerts the operator.

Driving and elevation controls are cut if this situation lasts longer than 1 or 2 s.

To restore the driving function, only movements allowing the machine to be folded are permitted :

- Mast lowering.
- Jib lowering.

## D - Operating principle

### 2.8 - MACHINE BRAKING

If electric power is cut off, the machine is automatically braked..

Performance levels can be reduced in case of :

- Descending a bumpy ramp.
- Worn tyres.
- Damp or muddy ground.

### 2.9 - WHEEL MOTOR BRAKE RELEASE

Each time a translation command is made, electric power frees the brakes.

### 2.10 - ANTI-POTHOLE SAFETY SYSTEM

To avoid the risk of tipping over, the machine is equipped with anti-tipping devices located under the chassis.

### 2.11 - ON-BOARD CHARGER

This device charges the machine's batteries.

Battery charging starts as soon as the mains supply is connected.



The machine's electric system is automatically deactivated during charging.

# E - Driving

## 1 - Recommendations

The manager of the company where the machine is commissioned must ensure that the machine is fit for function. i.e. that the machine is suitable to carry out the work in complete safety in compliance with the user manual. All operator managers 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. 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

Every 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 functional test.

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

### 2.1 - VISUAL INSPECTIONS

#### 2.1.1 - General mechanical functions

Check the following points :

- The presence of the identification plate, labels and operator manual.
- Visual state of the machine :
  - Absence of cracks, broken solders, chipped paint.
  - No missing or loose parts (bolts, nuts, connectors, cables, etc.).
  - Absence of leakage (battery acid, oil, etc.).
- The state of the cylinders (leakage, rust, traces of wear and tear, impact, scratch, foreign body, etc.).
- Condition of the wheels (loose or missing nut, etc.).
- Condition of the tyres (cut, wear, etc.).
- State of the limit sensors (foreign body, etc.).
- Gear attachments.
- The state and connection of the electric wires and cables.





## E - Driving

- Hydraulic oil level.
- State of the hydraulic unit and pump (leakage, loose component, etc.).
- State of the consoles.
- State of the guard rail and the sliding midrail.
- Excessive mechanical clearance.
- The state of the mast, jib and platform (no visible damage, wear or distortion).

### 2.1.2 - Environment

#### Section A Safety precautions

Check the following points :

- Wind speed ( Section G 1- Main characteristics).
- The pressure and the load permissible by the ground surface ( Section G 1- Main characteristics).
- Maximum permissible load ( Section G 1- Main characteristics).
- Manual lateral effort ( Section G 1- Main characteristics).

## 2.2 - FUNCTIONAL TESTS

### 2.2.1 - Safety features

Elements to be tested :

- Operation of the upper and lower emergency stop push buttons.
- Operation of the tilt control box.
- Visual and audio alarms.
- Weighing system.

Refer to the functional test procedures ( Section E 3.1- Test procedure).

## E - Driving

### 2.2.2 - Lower console controls

Refer to the corresponding operations to test the controls in the order mentioned (🖱️ Section E 3.2- Ground operations).

Tests from the lower console STAR 6 (STAR 13)

Step	Control
1	Switching on( P125 )

Tests from the lower console STAR 8 (STAR 22J) - STAR 10 (STAR 26J)

Step	Control
1	Switching on( P92 )
2	Movements : <ul style="list-style-type: none"> <li>• Mast elevation/lowering ( P126 ) and mast telescoping selector ( P127 )</li> <li>• Mast rotation ( P126 ) and mast rotation selector ( P128 )</li> <li>• Jib elevation/lowering ( P126 ) and jib selector ( P129 )</li> </ul>
3	Console activation key selector( P92 )

Tests from the lower console STAR 9 - STAR 11 - STAR 12

Step	Control
1	Switching on( P72 )
2	Movements : <ul style="list-style-type: none"> <li>• Mast elevation/lowering ( P130 ) and mast telescoping selector ( P127 )</li> <li>• Mast rotation ( P130 ) and mast rotation selector ( P128 )</li> <li>• Platform elevation/lowering ( P130 ) and platform elevation/lowering selector ( P142 )</li> </ul>
3	Console activation key selector( P72 )

## E - Driving

### 2.2.3 - Upper console controls

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

Tests from the upper console STAR 6 ( STAR 13 )

Step	Control
1	Driving and steering P133
2	Movements : • Mast movement joystick ( P133 ) and mast telescoping movement selector( P134 )
3	Driving speed selector : • Fast movement selector ( P134 ) and joystick ( P133 ) • Slow movement selector ( P134 ) and joystick ( P133 )
4	Horn selector P43

Tests from the upper console STAR 8 ( STAR 22 J ) - STAR 10 ( STAR 26 J ) - STAR 11 - STAR 12

Step	Control
1	Driving ( P136 ) and movement selector ( P138 )
2	Steering ( P136 ) and movement selector ( P138 )
3	Movements : • Mast rotation ( P136 ) and movement selector ( P137 ) • Mast elevation/lowering ( P136 ) and movement selector ( P138 ) • Jib elevation/lowering ( P136 ) and movement selector ( P138 )
4	Horn selector P43

Tests from the upper console STAR 9

Step	Control
1	Driving ( P136 ) and movement selector ( P141 )
2	Steering ( P136 ) and movement selector ( P140 )
3	Movements : • Mast rotation ( P136 ) and movement selector ( P140 ). • Mast elevation/lowering ( P136 ) and movement selector ( P141 ) • Platform elevation/lowering ( P136 ) and movement selector ( P141 )
4	Horn selector P43



## E - Driving

### 2.3 - REGULAR CHECKS

The machine must be inspected regularly (intervals according to the country of use) and at least once a year, in order to detect any defect which may lead to an accident.

The inspection is carried out by a company or person chosen by the manager and is under his responsibility (Company employee or other).

The result of inspections must be recorded in the safety register opened by the manager. This register and the list of designated persons must be available to the Work Inspector and company safety committee at all times.

**N.B.:**  *SECTION H INTERVENTION LOG*

### 2.4 - REPAIRS AND ADJUSTMENTS

Extensive repairs, interventions or adjustments on the safety systems or elements.

HAULOTTE Services® technicians are specially trained to the requirements of our machines and have genuine spare parts, all the necessary documentation and tools required.

If one of these safety instructions is not complied with, HAULOTTE Services® can in no way be held responsible for the consequences.

Any modification without having obtained written authorization from HAULOTTE®, renders this conformity null..

### 2.5 - CHECKS WHEN THE MACHINE IS PUT BACK IN SERVICE

Intervention to be made after :

- Extensive dismantling and remounting.
- Repairs involving essential elements of the machine.
- Any accident causing stress.

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

## E - Driving

### 3 - Usage

**N.B.:-THE FUNCTIONS ARE DESCRIBED FOR THE ENTIRE RANGE. REFER TO THE MACHINE CONFIGURATION TO IDENTIFY THE FUNCTIONAL CONTROLS AND INDICATORS.**

#### 3.1 - TEST PROCEDURE

##### 3.1.1 - Emergency stop push button function

Lower console emergency stop push button STAR 6 (STAR 13)

Step	Action
1	Pull the battery cut-off push button ( P124 ).
2	Turn the key selector ( P125 ) to the left to power up.
3	Push the battery cut-off push button ( P124 ).

Upper console emergency stop push button STAR 6 (STAR 13)

Step	Action
1	Pull the emergency stop push button ( P46 ).
2	Turn the key selector ( P125 ) to the left to power up.
3	Push the emergency stop push button ( P46 ).

Lower console emergency stop push button STAR 8 (STAR 22J) - STAR 10 (STAR 26J)

Step	Action
1	Pull the emergency stop push button ( P46 ).
2	Turn the console activation selector key ( P92 ) downwards to activate the lower console.
3	Push the emergency stop push button ( P46 ).

Upper console emergency stop push button STAR 8 (STAR 22J) - STAR 10 (STAR 26J)

Step	Action
1	Pull the emergency stop push button ( P46 ).
2	Turn the console activation selector key ( P92 ) upwards to activate the upper console.
3	Push the emergency stop push button ( P46 ).

## E - Driving

A

B

C

D

E

F

G

H

I

### Lower console emergency stop push button STAR 9 - STAR 11 - STAR 12

Step	Action
1	Pull the emergency stop push buttons( P15, P46 ).
2	Turn the key of the console activation selector ( P72 ) to the right to activate the lower console.
3	Push the emergency stop push button ( P15 ).


### Upper console emergency stop push button STAR 9 - STAR 11 - STAR 12

Step	Action
1	Pull the emergency stop push buttons( P15, P46 ).
2	Turn the console activation selector ( P72 ) to the left to activate the upper console.
3	Push the emergency stop push button ( P46 ).


### 3.1.2 - Tilt control box function

This test must be performed on the machine with the mast fully extended.


For STAR 6 (STAR 13)

1. Pull the battery cut-off push button ( P124 ).
2. Switch the machine on P125.
3. Manually tilt and maintain the tilt towards the front for a few seconds (  Section C 2- Main components). The buzzer sounds.

For STAR 8 (STAR 22J)-STAR 10 (STAR 26J)

1. Pull the emergency stop push buttons ( P46 ) and on the chassis (button position ON).
2. Turn the console activation selector key ( P92 ) downwards or upwards to activate a console.
3. Manually tilt and maintain the tilt towards the front for a few seconds (  Section C 2- Main components). The buzzer sounds.

For STAR 9-STAR 11-STAR 12

1. Pull the emergency stop push buttons P15, P46.
2. Turn the console activation selector key ( P72 ) to the left or right to activate a console.
3. Manually tilt and maintain the tilt towards the front for a few seconds (  Section C 2- Main components). The buzzer sounds.

### 3.1.3 - Visual and audio alarms

For : STAR 6 (STAR 13)

1. Pull the battery cut-off push button ( P124 ).
2. Switch the machine on P125. A sound signal (beep) sounds.

## E - Driving

For : STAR 8 (STAR 22J)-STAR 10 (STAR 26J)

1. Pull the emergency stop push buttons ( P46 ) and on the chassis (button position ON).
2. Turn the console activation selector key ( P92 ) downwards or upwards to activate a console. A sound signal (beep) sounds.

For : STAR 9-STAR 11-STAR 12

1. Pull the emergency stop push buttons P15, P46.
2. Turn the console activation selector key ( P72 ) to the left or right to activate a console. A sound signal (beep) sounds.

### 3.1.4 - Weighing system

For STAR 8 (STAR 22J)-STAR 10 (STAR 26J)-STAR 11-STAR 12

1. Pull the emergency stop push buttons ( P15, P46 ) and on the chassis (button position ON).
2. Turn the console activation selector key ( P72 ) or ( P92 ) to activate a console(Depending on the machine). Upper console platform overload LED ( P30 ) flashes.

## 3.2 - GROUND OPERATIONS

### 3.2.1 - Machine start-up

For : STAR 6 (STAR 13)

1. Pull the battery cut-off push button ( P124 ).
2. Turn the key selector ( P125 ) to the left to power up.

For : STAR 8 (STAR 22J)-STAR 10 (STAR 26J)

1. Pull the emergency stop push button on the chassis (button position \*1).
2. Turn the console activation selector key ( P92 ) downwards to activate the lower console.

For : STAR 9-STAR 11-STAR 12

1. Pull the emergency stop push button ( P15 ).
2. Turn the key of the console activation selector ( P72 ) to the right to activate the lower console.

***N.B.-:-IF THE ENGINE DOES NOT START, CUT THE CONTACT (EMERGENCY STOP PUSH BUTTON PRESSED). RESTART THE START-UP PROCEDURE. OTHER POSSIBILITY, USE THE KEY STARTER OF THE VEHICLE. THE BUTTON DOES NOT NEED TO BE KEPT PRESSED, AN IMPULSE IS ENOUGH TO START OR STOP THE ENGINE. A SLIGHT SHIFT ON STARTING CORRESPONDS TO THE PRE-HEATING OF THE ENGINE***

## E - Driving

### 3.2.2 - Machine shutdown

For : STAR 6 (STAR 13)

Push in the battery cut-off push button ( P124 ).

For : STAR 8 (STAR 22J)-STAR 10 (STAR 26J)

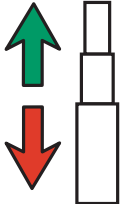

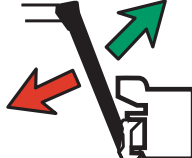
Push in the emergency stop push button on the chassis (button position OFF).

For : STAR 9-STAR 11-STAR 12

Press the emergency stop push button ( P15 ).



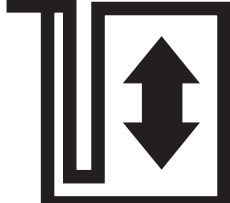
### 3.2.3 - Movement control

Lower console controls STAR 8 ( STAR 22 J ) - STAR 10 ( STAR 26 J )

Control	Action
Mast telescoping 	Press and hold the mast telescoping selector ( P127 ). Push the movement selector ( P126 ) upwards to raise the mast. <hr/> Press and hold the mast telescoping selector ( P127 ). Push the movement selector ( P126 ) downwards to lower the mast.
Mast rotation 	Press and hold the mast rotation selector ( P128 ). Push the movement selector ( P126 ) upwards for clockwise mast rotation. <hr/> Press and hold the mast rotation selector ( P128 ). Push the movement selector ( P126 ) downwards for anti-clockwise mast rotation.
Lifting / lowering of jib 	Press and hold the jib selector ( P129 ). Push the movement selector ( P126 ) upwards to raise the jib. <hr/> Press and hold the jib selector ( P129 ). Push the movement selector ( P126 ) downwards to lower the jib.

## E - Driving

Lower console controls STAR 9 - STAR 11 - STAR 12

Control	Action
<p>Mast telescoping</p> 	<p>Press and hold the mast telescoping selector ( P127 ). Push the movement selector ( P126 ) upwards to raise the mast.</p> <hr/> <p>Press and hold the mast telescoping selector ( P127 ). Push the movement selector ( P126 ) downwards to lower the mast.</p>
<p>Mast rotation</p> 	<p>Press and hold the mast rotation selector ( P128 ). Push the movement selector ( P130 ) upwards for clockwise mast rotation.</p> <hr/> <p>Press and hold the mast rotation selector ( P128 ). Push the movement selector ( P130 ) downwards for anti-clockwise mast rotation.</p>
<p>Platform elevation/lowering</p> 	<p>Press and hold the platform elevation/lowering selector ( P142 ). Push the movement selector ( P130 ) upwards to raise the platform.</p> <hr/> <p>Press and hold the platform elevation/lowering selector ( P142 ). Push the movement selector ( P130 ) downwards to lower the platform.</p>

***N.B.-:-IF THE SELECTOR OR SELECTORS ARE RELEASED, MOVEMENT STOPS.***

## E - Driving

### 3.2.4 - Other controls

For : STAR 8 (STAR 22J)-STAR 10 (STAR 26J)

- Switching from the lower console to the upper console :



The emergency push button on the chassis must be in position ON.

- Turn the console activation selector key ( P92 ) upwards to activate the upper console. The controls of the lower console are de-activated.

- Switching from the upper console to the lower console :



The emergency push button on the chassis must be in position ON.

- Turn the console activation selector key ( P92 ) downwards to activate the lower console. The controls of the upper console are de-activated.

For : STAR 9-STAR 11-STAR 12

- Switching from the lower console to the upper console :



The emergency stop push button ( P15 ) must be pulled.

- Turn the console activation selector ( P72 ) to the left to activate the upper console. The controls of the lower console are de-activated.

- Switching from the upper console to the lower console :



The emergency stop push button ( P15 ) must be pulled.

- Turn the key of the console activation selector ( P72 ) to the right to activate the lower console. The controls of the upper console are de-activated.

### 3.3 - OPERATIONS FROM THE PLATFORM

#### 3.3.1 - Machine start-up

Pull the emergency stop push button P46.

#### 3.3.2 - Machine shutdown

Press the emergency stop push button ( P46 ).







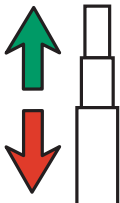
#### 3.3.3 - Movement control



Activate the controls and the "Dead man" system simultaneously to execute the different movements.

## E - Driving

### Upper console controls STAR 6 ( STAR 13 )

Control	Action
<p>Driving</p> 	<p>Set the movement selector ( P134 ) to :</p> <ul style="list-style-type: none"> <li>• Fast  for fast driving.</li> <li>• Slow  for slow driving.</li> </ul> <p>Push the drive joystick ( P133 ) forwards to move machine forwards.</p> <hr/> <p>Set the movement selector ( P134 ) to :</p> <ul style="list-style-type: none"> <li>• Fast  for fast driving.</li> <li>• Slow  for slow driving.</li> </ul> <p>Push the drive joystick ( P133 ) backwards to reverse the machine.</p> <hr/> <p>Push the steering joystick ( P133 ) to the left to steer left.</p>
<p>Steering</p> 	<p>Push the steering joystick ( P133 ) to the right to steer right.</p>
<p>Mast telescoping</p> 	<p>Set the movement selector ( P134 ) to mast telescoping. Push the mast movement joystick ( P133 ) forwards to raise the mast.</p> <hr/> <p>Set the movement selector ( P134 ) to mast telescoping. Push the mast movement joystick ( P133 ) backwards to lower the mast.</p>



## E - Driving

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C

D

E

F

G

H

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Upper console controls STAR 8 (STAR 13) - STAR 10 (STAR 26J) - STAR 11 - STAR 12

Control		Action
Driving		Set the movement selector ( P136 ) to driving and steering. Push the movement selector ( P138 ) upwards to move the machine forwards.
		Set the movement selector ( P136 ) to driving and steering. Push the movement selector ( P138 ) downwards to reverse the machine.
Steering		Set the movement selector ( P136 ) to driving and steering. Push the movement selector ( P137 ) to the right to steer right.
		Set the movement selector ( P136 ) to driving and steering. Push the movement selector ( P137 ) to the left to steer left.
Mast telescoping		Set the movement selector ( P136 ) to mast telescoping. Push the movement selector ( P138 ) upwards to raise the mast.
		Set the movement selector ( P136 ) to mast telescoping. Push the movement selector ( P138 ) downwards to lower the mast.
Mast rotation		Set the movement selector ( P136 ) to mast rotation. Push the movement selector ( P137 ) to the right for anti-clockwise mast rotation.
		Set the movement selector ( P136 ) to mast rotation. Push the movement selector ( P137 ) to the left for clockwise mast rotation.
Lifting / lowering of jib		Set the movement selector ( P136 ) to jib elevation/lowering. Push the movement selector ( P138 ) upwards to raise the jib.
		Set the movement selector ( P136 ) to jib elevation/lowering. Push the movement selector ( P138 ) downwards to lower the jib.

## E - Driving

### Upper console controls STAR 9

Control	Action
Driving	<p>Set the movement selector ( P136 ) to driving and steering. Push the movement selector ( P141 ) upwards to move the machine forwards.</p> <p>Set the movement selector ( P136 ) to driving and steering. Push the movement selector ( P141 ) downwards to reverse the machine.</p>
Steering	<p>Set the movement selector ( P136 ) to driving and steering. Push the movement selector ( P140 ) to the right to steer right.</p> <p>Set the movement selector ( P136 ) to driving and steering. Push the movement selector ( P141 ) to the left to steer left.</p>
Mast telescoping	<p>Set the movement selector ( P136 ) to mast telescoping. Push the movement selector ( P141 ) upwards to raise the mast.</p> <p>Set the movement selector ( P136 ) to mast telescoping. Push the movement selector ( P141 ) downwards to lower the mast.</p>
Platform elevation/lowering	<p>Set the movement selector ( P136 ) to platform elevation/lowering. Push the movement selector ( P141 ) upwards to raise the platform.</p> <p>Set the movement selector ( P136 ) to platform elevation/lowering. Push the movement selector ( P141 ) downwards to lower the platform.</p>
Mast rotation	<p>Set the movement selector ( P136 ) to mast rotation. Push the movement selector ( P140 ) to the right for anti-clockwise mast rotation.</p> <p>Set the movement selector ( P136 ) to mast rotation. Push the movement selector ( P140 ) to the left for clockwise mast rotation.</p>

***N.B.-:-THE RELEASE OF THE SELECTORS AND (OR) JOYSTICKS CAUSES ALL MOVEMENT TO STOP.***

### 3.3.4 - Other controls

- Horn : Push the horn push button ( P43 ) to sound the horn.

***N.B.-:-RELEASING THE PUSH BUTTON STOPS THE HORN.***

## F - Special procedure


### 1 - Emergency lowering

#### 1.1 - PRINCIPLE

Emergency lowering is required if the operator in the platform is no longer capable of controlling the movements even though the machine operates normally.

An operator on the ground, trained in using the emergency controls and in possession of the starter key, can use the lower console with the main power source to lower the operator in the platform.

#### 1.2 - PROCEDURE

 Section A 2- Pre-operation instructions

For : STAR 6 (STAR 13)

Push the emergency valve located under the chassis.



For : STAR 9

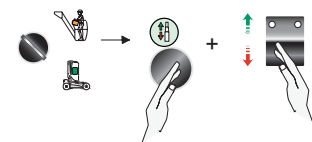
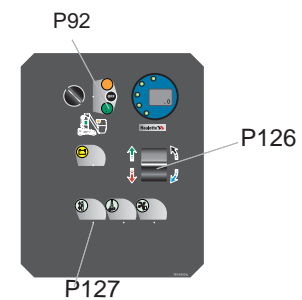
Push the electro-distributor and the emergency valve to lower the mast or hydraulic ladder.



## F - Special procedure

For : STAR 8 (STAR 22J)-STAR 10 (STAR 26J)

1. Turn the console activation selector key ( P92 ) downwards to activate the lower console. The controls of the upper console are de-activated.
2. Press the mast telescoping selector ( P127 ) and movement selector ( P126 ) simultaneously downwards.



For : STAR 11-STAR 12

Push the electro-distributor and the emergency valve to lower the mast or hydraulic ladder.



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

## F - Special procedure

### 2 - Lowering for repairs

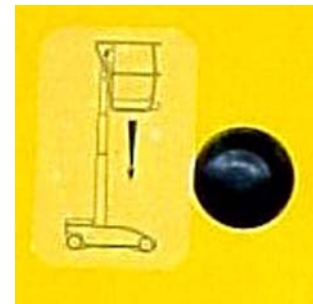
#### 2.1 - PRINCIPLE

The lowering for repairs function allows the operator in the platform to descend again in case of failure of the main power source.

#### 2.2 - PROCEDURE

For : STAR 6 (STAR 13)

Push the emergency valve located under the chassis.



For : STAR 8 (STAR 22J)-STAR 10 (STAR 26J)

Lowering the mast manually

- Pull the mast lowering solenoid valve control to lower the mast.
- Release it to halt lowering



For : STAR 8 (STAR 22J)-STAR 10 (STAR 26J)

Lowering the jib manually

- Press the centre of the solenoid valve to lower the jib.
- Release it to halt lowering.



## F - Special procedure

For : STAR 9

Push the electro-distributor and the emergency valve to lower the mast or hydraulic ladder.



For : STAR 11-STAR 12

Push the electro-distributor and the emergency valve to lower the mast or hydraulic ladder.



**If the operator in the platform must exit the platform to go on a sturdy, safe structure, the transfer must respect the following recommendations :**

- The operator must fasten himself by using 2 straps. One strap is attached to the platform, the other to the structure.
- The operator must exit the platform via the access hatch.
- The operator must not detach the strap connected to the platform until transfer is over or while it is still dangerous..



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

## F - Special procedure

### 3 - Towing service

In case of a failure of the machine, it is possible to tow it..

#### 3.1 - RELEASING OF THE BRAKES

To tow a broken-down machine, perform manual brake release.



**Execute these operations on flat, horizontal ground. Failing that, block the wheels to immobilize the machine.**

1. Open the rear hood.
2. Maintain the pull rod in brake release position during towing or moving the machine.



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## F - Special procedure

### 4 - Loading and unloading

**N.B.-:-WHILE CROSSING THE RAMPS, DURING LOADING OR UNLOADING HAULOTTE® RECOMMENDS POSITIONING THE COUNTERWEIGHT AT THE REAR.**

#### 4.1 - PRINCIPLE

##### 4.1.1 - Loading by ramp

**N.B.-:-THE SLOPE OF THE RAMP IS ALWAYS GREATER THAN THE MAXIMUM AUTHORIZED SLOPE. TO AUTHORISE DRIVING :**

- Lower the mast and jib.



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

- The loading ramps can bear the load.
- The loading ramps are correctly fixed.
- The adhesion is sufficient.
- The machine is completely stowed.

If 2 ramps are used, ensure that the distance between them does not exceed 0,35 m (1 ft 1 in) .

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



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

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

For : STAR 6 (STAR 13)

**N.B.-:-IN ORDER TO PERFORM LOADING AND UNLOADING OPERATIONS, THE OPERATOR CAN :**

- Disconnect the upper control unit.
- Connect the upper control unit to the chassis.





## F - Special procedure

### 4.1.2 - Loading by power lift truck

- Ensure that the machine controls are in the OFF position.
- Use a sufficiently powerful lift truck.
- Move the forks apart.
- Place the forks in the positions indicated on the chassis.
- Place the forks well under the machine to ensure optimum stability.



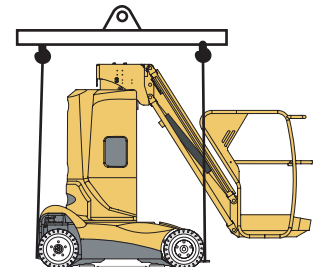
### 4.1.3 - Unloading by power lift truck

- While lifting, make sure that the load is evenly spread.
- Put down the machine.

### 4.1.4 - Loading by lifting

For : STAR 8 (STAR 22J) - STAR 10 (STAR 26J)

Use a lifting beam with 4 slings of sufficient strength.



### 4.1.5 - Unloading by lifting

For : STAR 8 (STAR 22J)-STAR 10 (STAR 26J)

Hook the 4 slings on the 4 sling hooks.

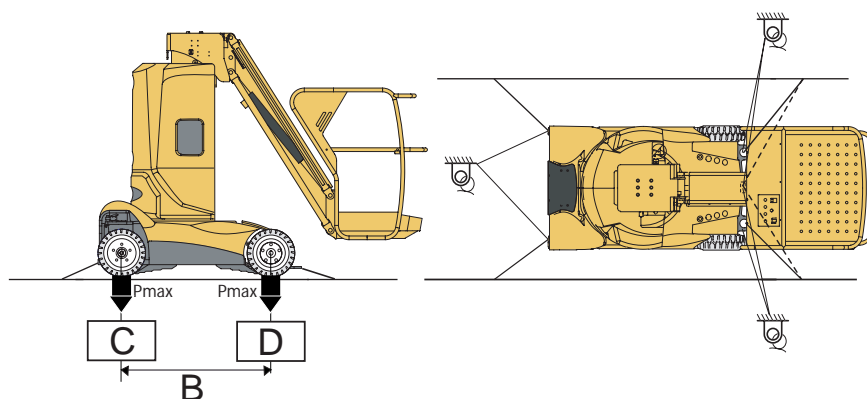
# F - Special procedure

## 4.2 - PUTTING IN TRANSPORT POSITION

The machine must be completely stowed.

1. Check the absence of load in the platform.
2. Secure the machine to the anchorage points given to this effect.
3. The guardrails must be locked and/or folded back.
4. Extensions must be locked and maintained with straps.

For : STAR 6 (STAR 13) - STAR 8 (STAR 22J) - STAR 9 - STAR 10 (STAR 26J) - STAR 11 - STAR 12



### Loading characteristics

Markin g	Description	STAR 6 (STAR 13)	STAR 8 (STAR 22J)
B	Lateral distance between the wheels	1,17 m (3 ft 10 in)	1,20 m (3 ft 11 in)
C	Front wheel pressure	14.2 daN/cm <sup>2</sup>	15 daN/cm <sup>2</sup>
D	Rear wheel pressure	14.2 daN/cm <sup>2</sup>	15 daN/cm <sup>2</sup>



Anchorage point

### Loading characteristics

Markin g	Description	STAR 9	STAR 10 (STAR 26J)
B	Lateral distance between the wheels	1,20 m (3 ft 11 in)	1,20 m (3 ft 11 in)
C	Front wheel pressure		18.2 daN/cm <sup>2</sup>
D	Rear wheel pressure		18.2 daN/cm <sup>2</sup>



Anchorage point

# F - Special procedure

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B

C

D

E


F

G

H

I

## Loading characteristics

Marking	Description	STAR 11	STAR 12
B	Lateral distance between the wheels	1,20 m (3 ft 11 in)	1,20 m (3 ft 11 in)
	Anchorage point		

### 4.3 - UNLOADING



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

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

1. The machine is completely stowed.
2. Remove the straps.
3. Start the machine.

### 4.4 - WARNING


For : STAR 8 (STAR 22J)-STAR 10 (STAR 26J)



On starting a machine that has been secured then transported, the safety system can detect a false overload forbidding all movement from the upper console.

To reinitialize the system, lift the jib by a few centimetres from the lower console.

If overload occurs, the lower console controls are deactivated.

To unload the machine, select the slow driving speed .



Do not go down the ramp at a fast speed.

## F - Special procedure

### 5 - Detection of internal fault

#### 5.1 - PRINCIPLE

For : STAR 8 (STAR 22J)-STAR 9-STAR 10 (STAR 26J)-STAR 11-STAR 12

The machine is equipped with an internal defect detection system.

The code displayed on the hour recorder ( P91 ) shows the user what kind of defect has occurred.

According to the type of fault, the machine switches in DOWNGRADED MODE; certain movements can be limited or forbidden by the system to maintain the operator's safety.

#### 5.2 - PROCEDURE

1. Stow the machine.
2. Switch the machine off.



**Do not allow the machine to be used until the fault has been repaired.**

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

# G - Technical characteristics

## 1 - Main characteristics

Technical characteristics - For STAR 6 (STAR 13) - STAR 8 (STAR 22J)

Machine Characteristics	STAR 6 (STAR 13)		STAR 8 (STAR 22J)	
	International system	Imperial system	International system	Imperial system
Length of machine in stowed position	1,5 m	(4 ft 11 in)	2,65 m	(8 ft 8 in)
Width of the machine in stowed position	0,76 m	(2 ft 5 in)	1,00 m	(3 ft 3 in)
Machine height	1,65 m	(5 ft 5 in)	1,99 m	(6 ft 6 in)
Maximum ground clearance	0,70 m	(2 ft 3 in)	0,10 m	(0 ft 3 in)
Maximum work height	6,00 m	(19 ft 8 in)	8,20 m	(26 ft 10 in)
Maximum platform height	4,00 m	(13 ft 1 in)	6,20 m	(20 ft 4 in)
Maximum radius			3,10 m	(10 ft 2 in)
Turntable rotation				345°
Vertical jib rotation				130°
Platform length	0,80 m	(2 ft 7 in)	0,98 m	(2 ft 7 in)
Platform width	0,68 m	(2 ft 2 in)	0,93 m	(3 ft 1 in)
Outside turning radius (without axle chocking retracted)	1,00 m	(3 ft 3 in)	1,87 m	(6 ft 1 in)
Inner turning radius (retracted axles)	0,31 m	(1 ft 0 in)	0,44 m	(1 ft 5 in)
Lateral distance between the wheels	1,17 m	(3 ft 10 in)	1,20 m	(3 ft 11 in)
Tilt/Width of the machine, with extended axles		2°		3°
Maximum authorized wind speed	0 km/h -Indoor use only	(0 mph)	0 km/h -Indoor use-45 km/h - Outdoor use	(0 mph) - Indoor use- (28 mph) -Outdoor use
Total weight	800 kg	(1764 lb)	2700 kg	(5954 lb)
Maximum platform load	180 kg	(397 lb)	200 kg	(441 lb)
Engine type			Electric	
Engine power		0,9 kW		1,2 kW
Sound level at 10 m (32 ft 9 in)		<73 dB (A)		<75 dB (A)
Vibration in the hands	>2,5 m/s <sup>2</sup>	(. in/s <sup>2</sup> )	>0,5 m/s <sup>2</sup>	(. in/s <sup>2</sup> )
Vibration in the feet	<2,5 m/s <sup>2</sup>	(. in/s <sup>2</sup> )	<0,5 m/s <sup>2</sup>	(. in/s <sup>2</sup> )
Capacity of the hydraulic tank	7 l	(2 gal US)	7 l	(2 gal US)
Starter battery		24 V-180 Ah		24 V-63 Ah
Maximum slope which can be climbed		22%		23%
Type of tyres			Solid tyres	
Wheel nut torque		127 daN.m	210 daN.m -Steering wheels80 daN.m -Central bolt for the driving gears	

## G - Technical characteristics

Machine Characteristics	STAR 6 (STAR 13)		STAR 8 (STAR 22J)	
	International system	Imperial system	International system	Imperial system
Slew ring torque			13,5 daN.m	
Maximum pressure on hard ground	14,2 bar		15 bar	
Micro-speed drive	0,5 km/h	(0,1 mph)	0,7 km/h	(0,2 mph)
Low-speed driving	1,5 km/h	(. mph)		
Fast driving	5 km/h	(. mph)	4,5 km/h	(. mph)

## G - Technical characteristics

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E

F

G

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Technical characteristics - For STAR 9 - STAR 10  
(STAR 26J)

Machine Characteristics	STAR 9		STAR 10 (STAR 26J)	
	International system	Imperial system	International system	Imperial system
Length of machine in stowed position	2,42 m	(7 ft 11 in)	2,65 m	(8 ft 8 in)
Width of the machine in stowed position	1,02 m	(3 ft 4 in)	1,00 m	(3 ft 3 in)
Machine height	1,98 m	(6 ft 6 in)	1,99 m	(6 ft 6 in)
Maximum ground clearance	0,10 m	(0 ft 3 in)	0,095 m	(0 ft 4 in)
Maximum work height	9,00 m	(29 ft 6 in)	10,00 m	(32 ft 9 in)
Maximum platform height	7,00 m	(22 ft 11 in)	8,00 m	(26 ft 3 in)
Maximum radius	2,50 m	(8 ft 2 in)	3,10 m	(10 ft 2 in)
Turntable rotation	360°		345°	
Vertical jib rotation			130°	
Platform length	0,98 m	(2 ft 7 in)	0,98 m	(2 ft 7 in)
Platform width	1,2 m -2,00 m With extension	(3 ft 11 in)	0,68 m	(2 ft 2 in)
Outside turning radius (without axle chocking retracted)	2,03 m	(6 ft 7 in)	1,87 m	(6 ft 1 in)
Inner turning radius (retracted axles)	0,63 m	(2 ft 0 in)	0,44 m	(1 ft 5 in)
Lateral distance between the wheels	1,20 m	(3 ft 11 in)	1,20 m	(3 ft 11 in)
Tilt	3°			
Maximum authorized wind speed	45 km/h	(28 mph)	0 km/h -Indoor use-45 km/h - Outdoor use	(0 mph) - Indoor use- (28 mph) -Outdoor use
Total weight	2350 kg	(5182 lb)	3100 kg	(6836 lb)
Maximum platform load	210 kg	(463 lb)	227 kg	(501 lb)
Engine type	Electric			
Engine power	1,2 kW		1,2 kW	
Sound level at 10 m (32 ft 9 in)	<73 dB (A)		<75 dB (A)	
Vibration in the hands	>2,5 m/s <sup>2</sup>	(. in/s <sup>2</sup> )	>0,5 m/s <sup>2</sup>	(. in/s <sup>2</sup> )
Vibration in the feet	<2,5 m/s <sup>2</sup>	(. in/s <sup>2</sup> )	<0,5 m/s <sup>2</sup>	(. in/s <sup>2</sup> )
Capacity of the hydraulic tank	10 l	(3 gal US)	7 l	(2 gal US)
Starter battery	24 V-300 Ah		24 V-63 Ah	
Maximum slope which can be climbed	20%		23%	
Type of tyres	Solid tyres			
Wheel nut torque	140 daN.m		210 daN.m -Steering wheels-80 daN.m -Central bolt for the driving gears	
Slew ring torque	13,5 daN.m			
Torque on ring mounted mast	19,5 daN.m			
Maximum pressure on hard ground	14,5 bar		18,2 bar	
Micro-speed drive	1 km/h	(0,28 mph)	0,7 km/h	(0,19 mph)
Fast driving	5 km/h	(1,39 mph)	4,5 km/h	(1,25 mph)

# G - Technical characteristics

## Technical characteristics - For STAR 11 - STAR 12

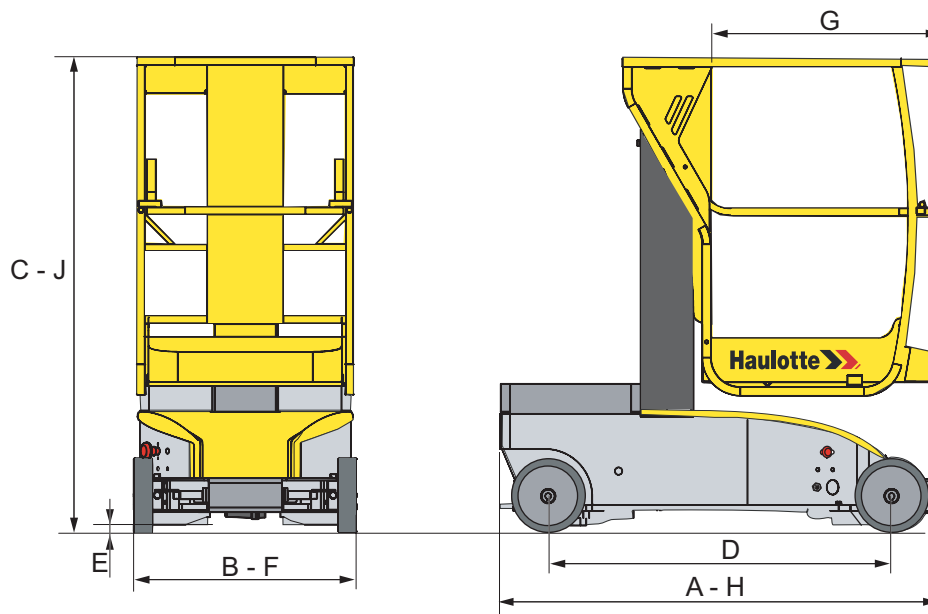
Machine Characteristics	STAR 11		STAR 12	
	International system	Imperial system	International system	Imperial system
Length of machine in stowed position	2,35 m	(7 ft 8 in)	2,40 m	(7 ft 10 in)
Width of the machine in stowed position	1,02 m	(3 ft 4 in)	1,29 m	(4 ft 2 in)
Machine height	2,20 m	(7 ft 2 in)	2,40 m	(7 ft 10 in)
Maximum ground clearance	0,80 m	(2 ft 7 in)	0,80 m	(2 ft 7 in)
Maximum work height	11,00 m	(36 ft 1 in)	12,00 m	(39 ft 4 in)
Maximum platform height	9,00 m	(29 ft 6 in)	10,00 m	(32 ft 9 in)
Turntable rotation	360°			
Vertical jib rotation	130°			
Platform length	0,96 m	(3 ft 1 in)	0,96 m	(3 ft 1 in)
Platform width	0,66 m	(2 ft 2 in)	0,66 m	(2 ft 2 in)
Outside turning radius (without axle chocking retracted)	2,03 m	(6 ft 7 in)	2,03 m	(6 ft 7 in)
Inner turning radius (retracted axles)	0,63 m	(2 ft 0 in)	0,63 m	(2 ft 0 in)
Lateral distance between the wheels	1,20 m	(3 ft 11 in)	1,20 m	(3 ft 11 in)
Tilt	3,5°		3°	
Maximum authorized wind speed	45 km/h	(28 mph)	45 km/h	(28 mph)
Total weight	2580 kg	(5689 lb)	2450 kg	(5402 lb)
Maximum platform load	210 kg	(463 lb)	210 kg	(463 lb)
Engine type	Electric			
Engine power	1,2 kW			
Sound level at 10 m (32 ft 9 in)	<73 dB (A)			
Vibration in the hands	>2,5 m/s <sup>2</sup>			
Vibration in the feet	<1,5 m/s <sup>2</sup>			
Capacity of the hydraulic tank	7 l	(2 gal US)	7 l	(2 gal US)
Starter battery	24 V-275 Ah			
Maximum slope which can be climbed	20%			
Type of tyres	Solid tyres		Solid tyres	
Wheel nut torque				
Slew ring torque	Mast 19,8 daN.m -Chassis 7,9 daN.m			
Torque on the chassis-mounted ring	13,5 daN.m		13,5 daN.m	
Torque on mast support	19,5 daN.m		19,5 daN.m	
Maximum pressure on hard ground	14,5 bar		14,5 bar	
Micro-speed drive	1,1 km/h	(0,3 mph)	1,1 km/h	(0,3 mph)
Fast driving	5 km/h	(1 mph)	5 km/h	(1 mph)



# G - Technical characteristics

## 2 - Overall dimensions

General diagram STAR 6 (STAR 13)

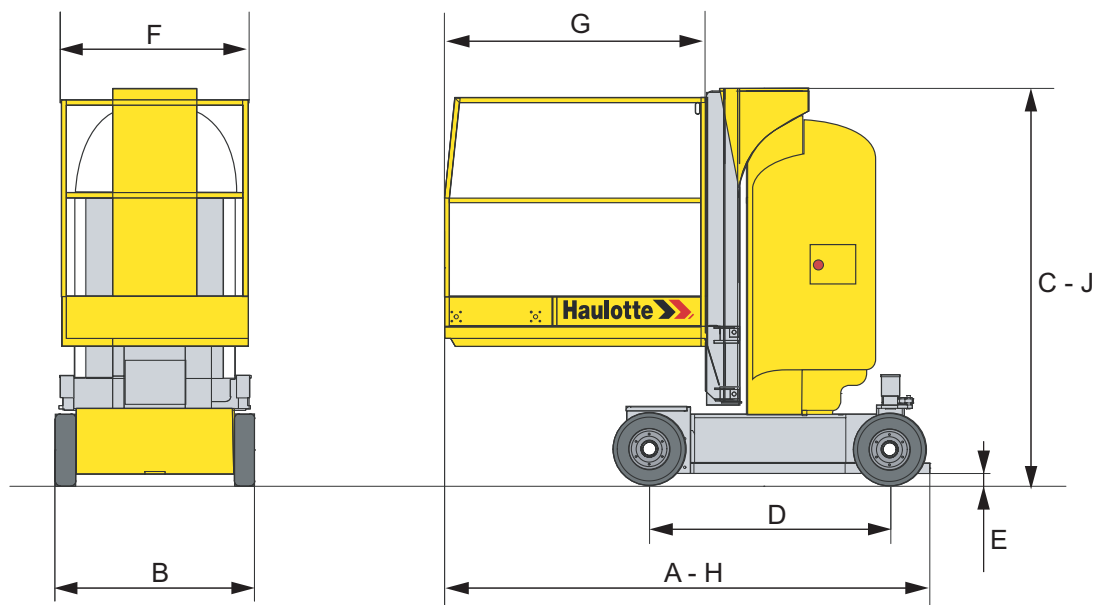


Overall dimension specifications

Marking	STAR 6 (STAR 13)	
	Mètre	Feet inch
A	1,50	4-11
B	0,76	2-5
C	1,65	5-5
D	1,17	3-10
E	0,07	0-2
F x G	0,76 x 0,80	2-5 x 2-7
H	1,50	4-11
J	1,65	5-5

# G - Technical characteristics

General diagram STAR 9

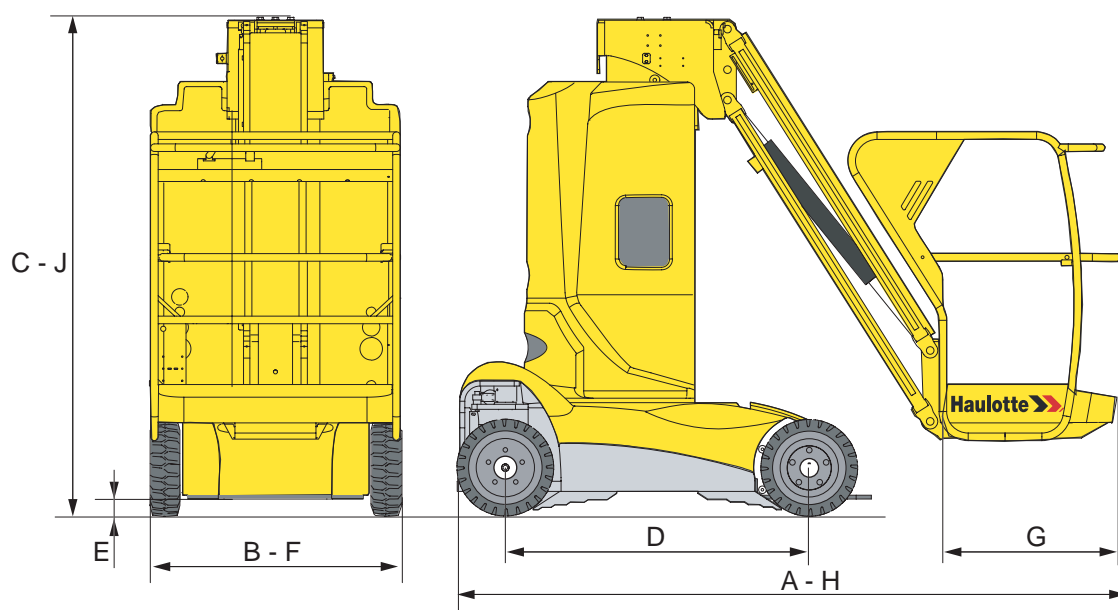


Overall dimension specifications

Marking	STAR 9	
	Mètre	Feet inch
A	2,42	7-11
B	1,02	3-4
C	1,98	6-6
D	1,20	3-11
E	0,10	0-3
F x G	1,20 x 0,98	3-11 x 3-2
H	2,42	7-11
J	1,98	6-6

# G - Technical characteristics

General diagram STAR 8 (STAR 22J) - STAR 10 (STAR 26J) - STAR 11 - STAR 12



Overall dimension specifications

Marking	STAR 8 (STAR 22J)		STAR 10 (STAR 26J)	
	Mètre	Feet inch	Mètre	Feet inch
A	2,65	8-8	2,65	8-8
B	1,00	3-3	1,00	3-3
C	1,99	6-6	1,99	6-6
D	1,20	3-11	1,20	3-11
E	0,10	0-3	0,10	0-3
F x G	1,00 x 0,68	3-3 x 2-2	1,00 x 0,68	3-3 x 2-2
H	2,65	8-8	2,65	8-8
J	1,99	6-6	1,99	6-6

Overall dimension specifications

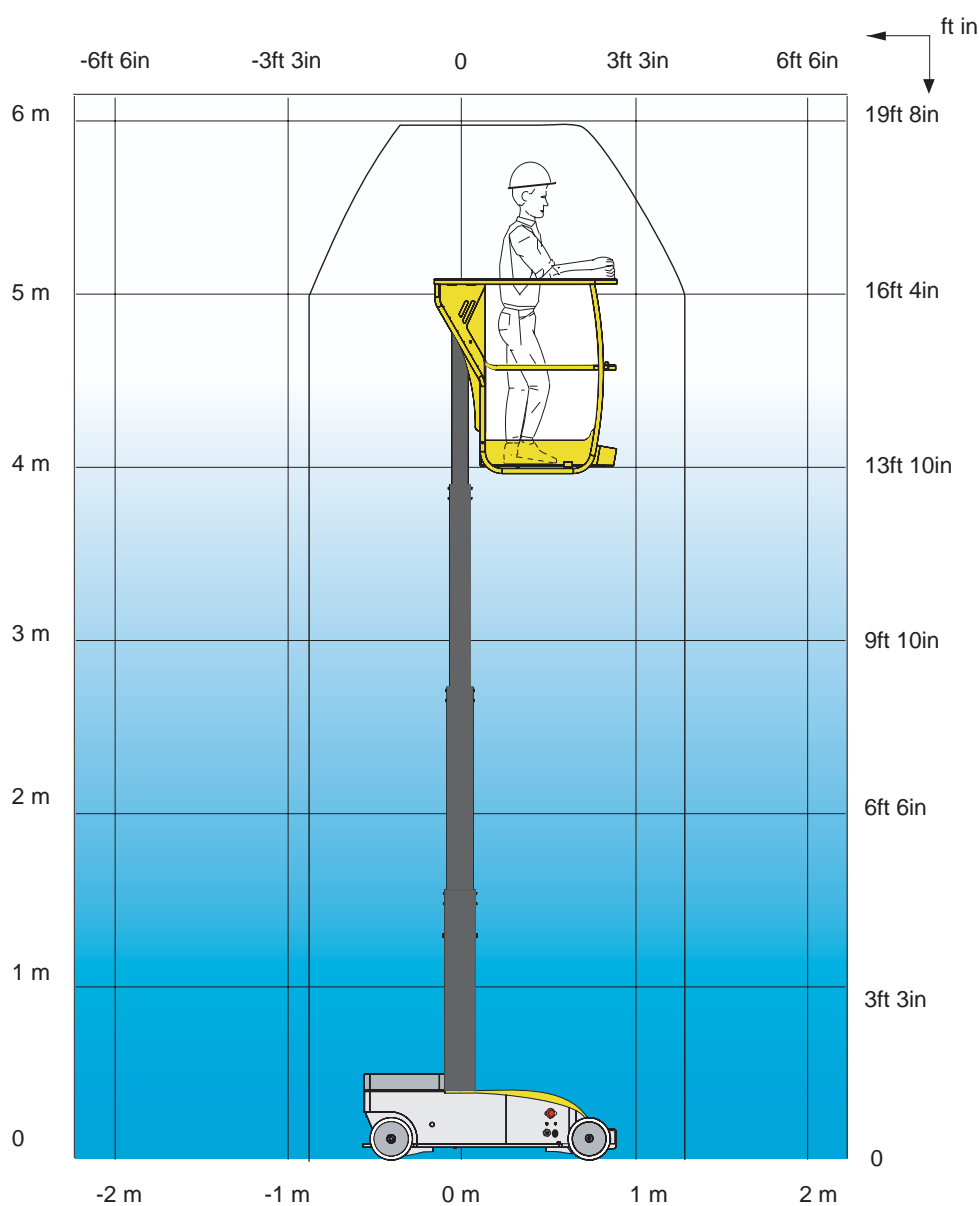
Marking	STAR 11		STAR 12	
	Mètre	Feet inch	Mètre	Feet inch
A	2,35	7-8	2,40	7-10
B	1,02	3-4	1,29	4-2
C	2,20	7-2	2,40	7-10
D	1,20	3-9	1,20	3-9
E	0,80	2-7	0,80	2-7
F x G	1,02 x 0,66	3-4 x 2-2	1,29 x 0,66	4-2 x 2-2
H	2,35	7-8	2,40	7-10
J	2,20	7-2	2,40	7-10

# G - Technical characteristics

## 3 - Working area

### 3.1 - MACHINE STAR 6 (STAR 13)

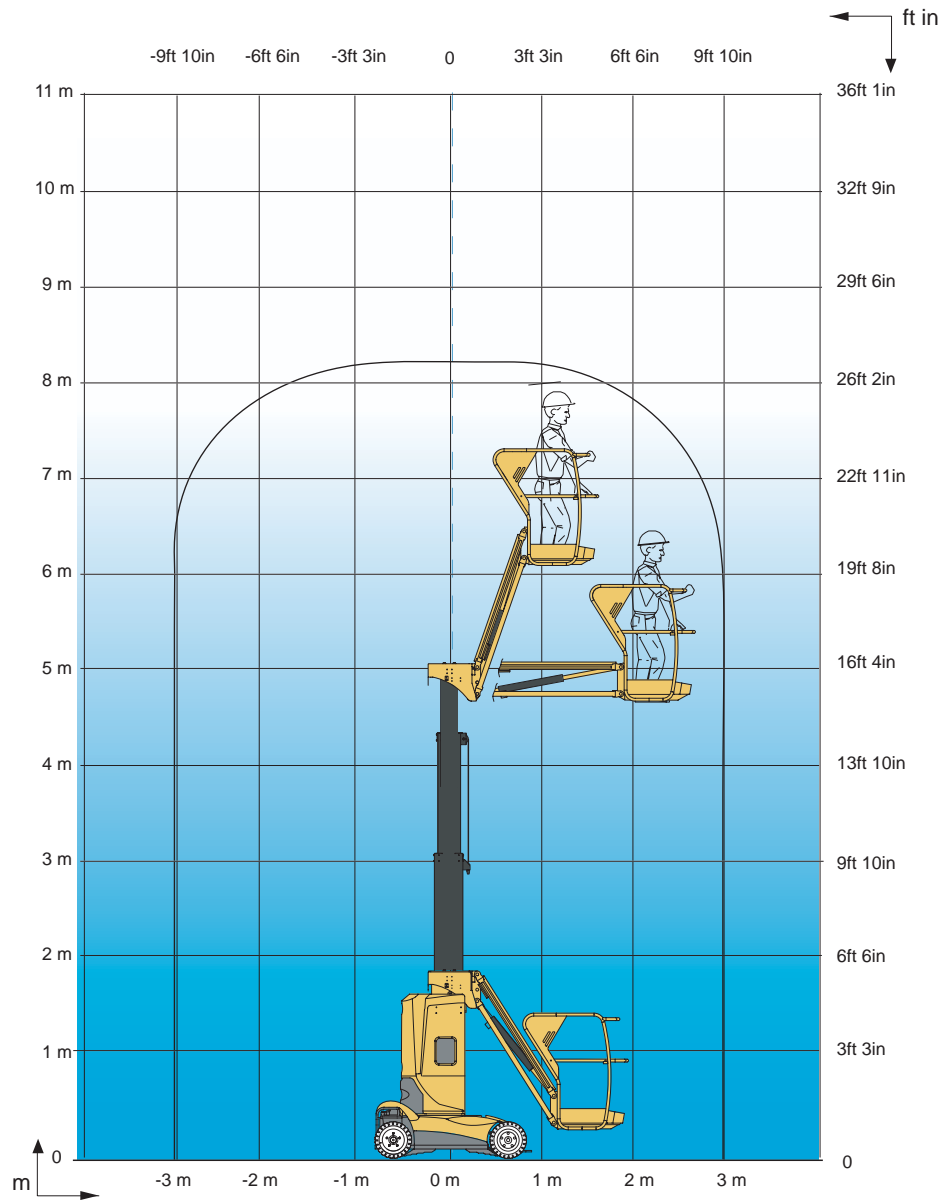
Working area



# G - Technical characteristics

## 3.2 - MACHINE STAR 8 (STAR 22J)

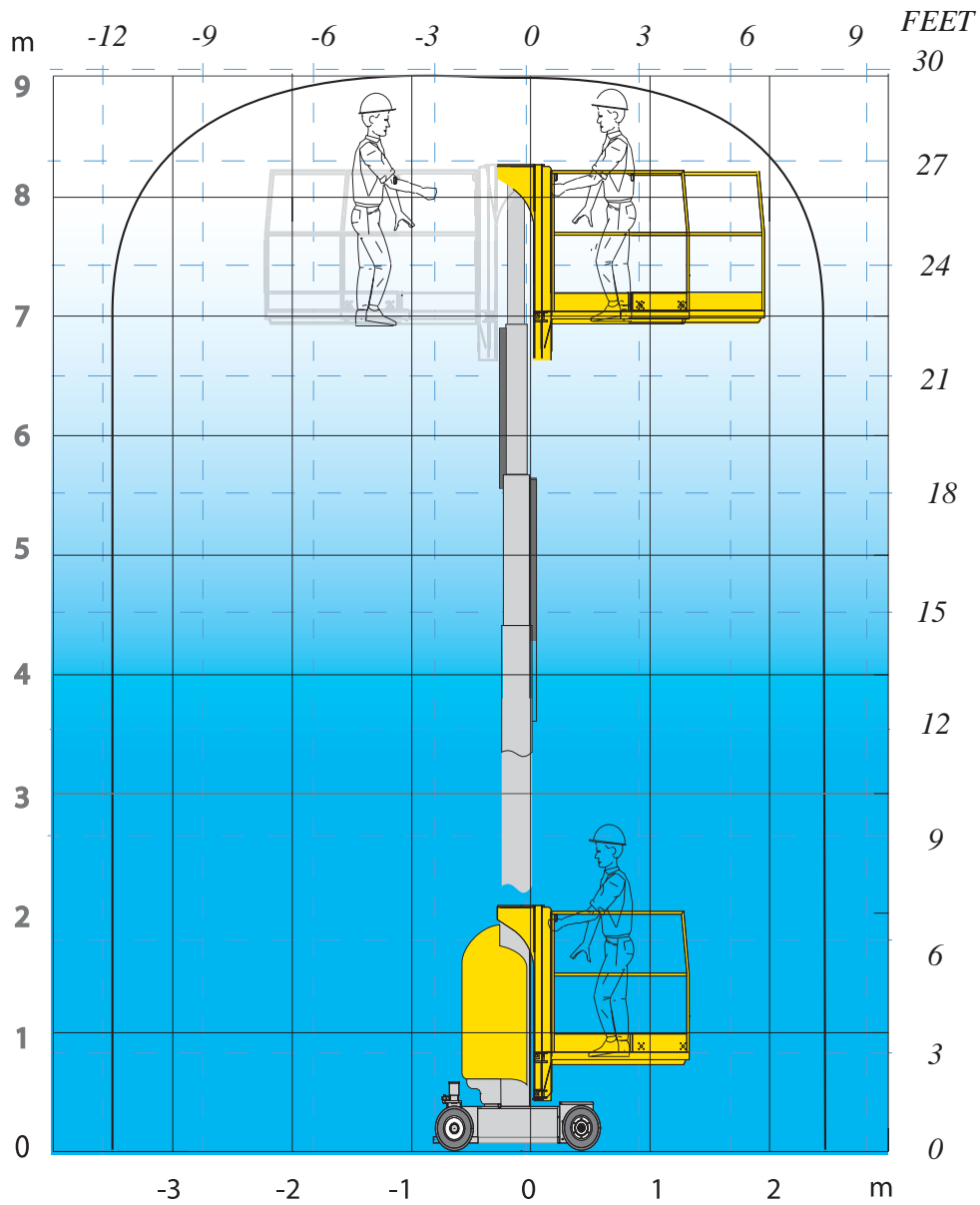
### Working area



# G - Technical characteristics

## 3.3 - MACHINE STAR 9

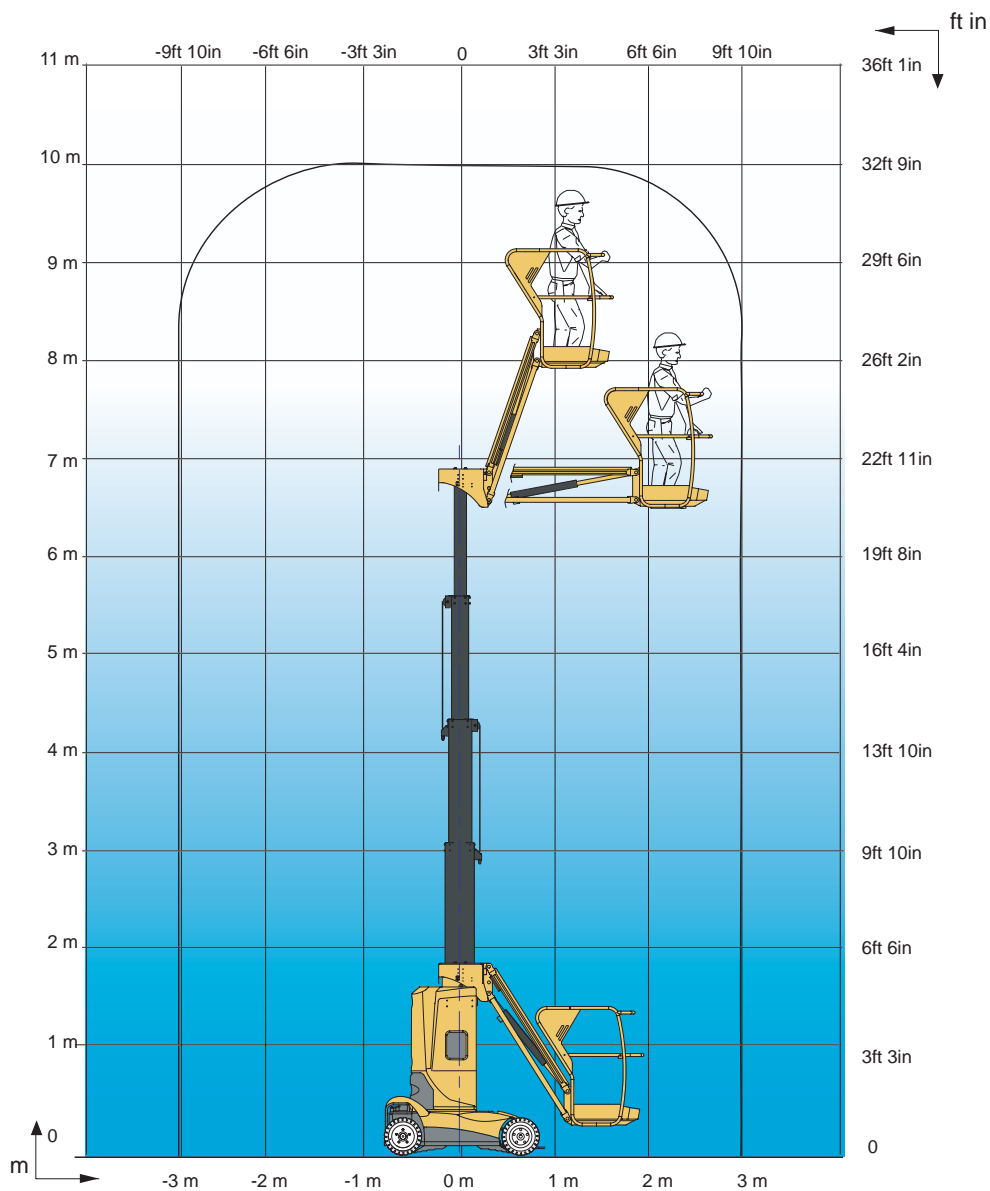
Working area



# G - Technical characteristics

## 3.4 - MACHINE STAR 10 (STAR 26J)

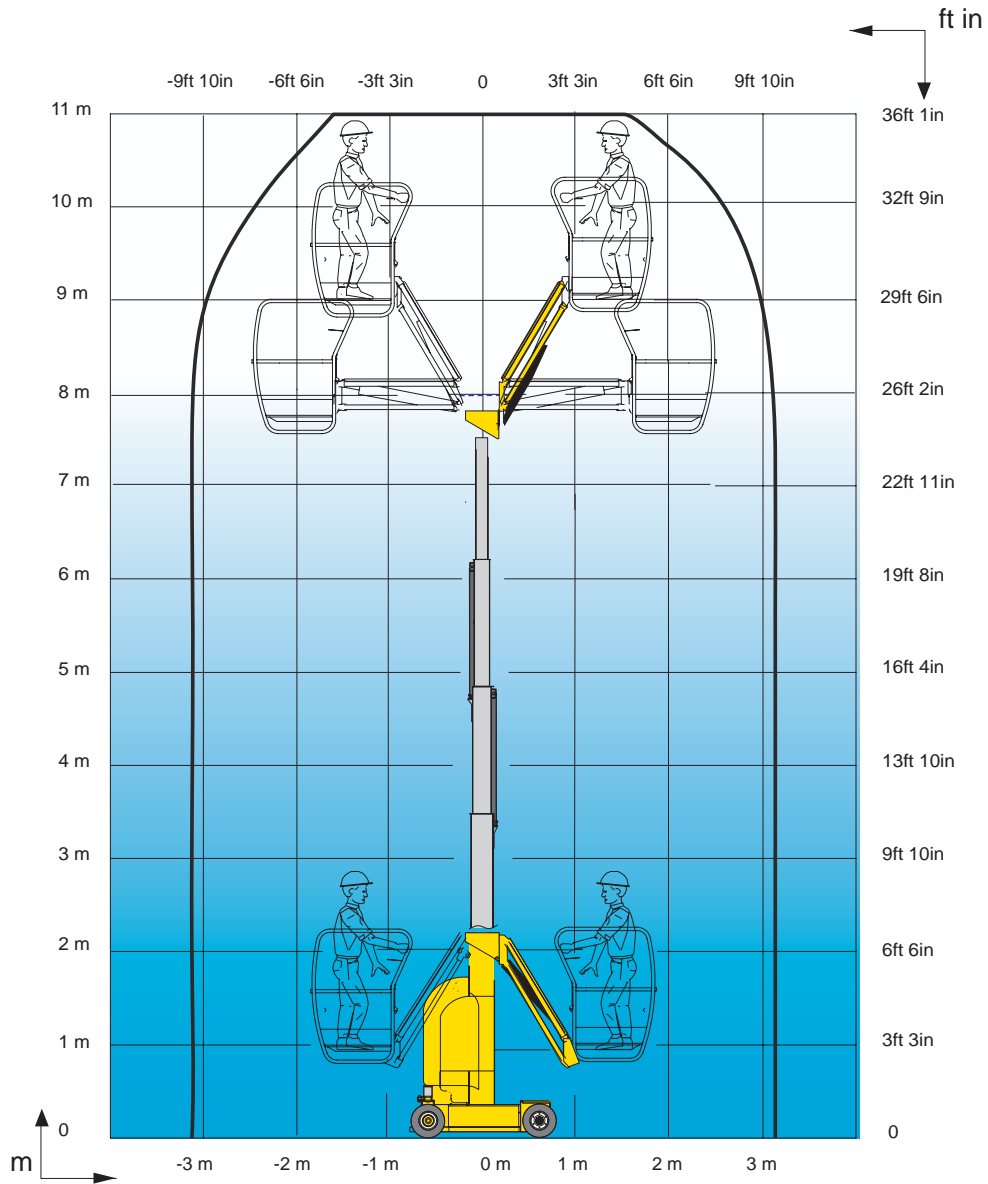
### Working area



# G - Technical characteristics

## 3.5 - MACHINE STAR 11

### Working area

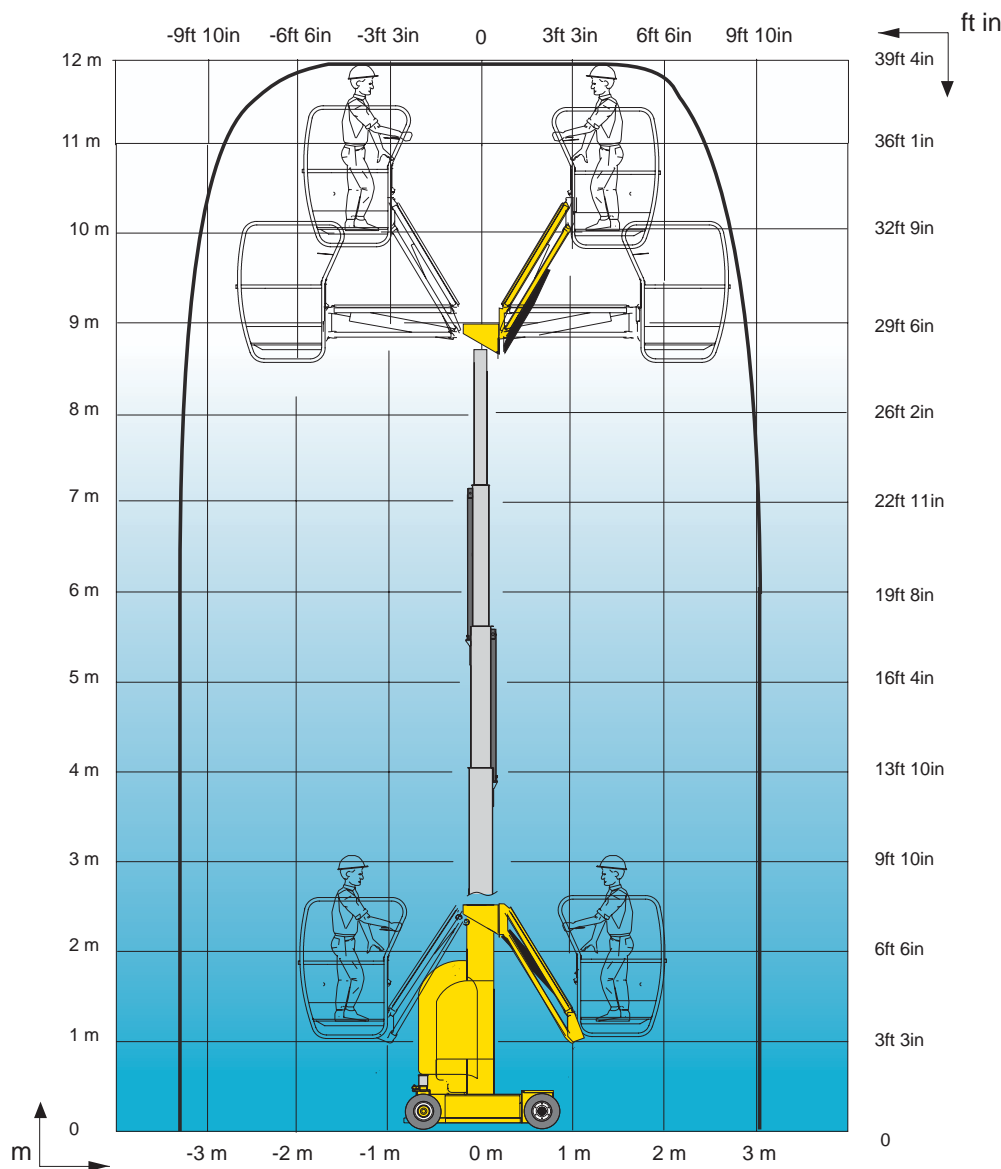




# G - Technical characteristics

## 3.6 - MACHINE STAR 12

### Working area



# G - Technical characteristics

## 4 - ANSI 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 under safe conditions.
- The results must be fully recorded.



To avoid the machine tipping over, it must be attached during the test (chains, anchor point).

### 4.1 - OVERLOAD TEST

The overload test is at 125% of the nominal load. See paragraph 1.12.3 of standard AS1418.10-1996 for test details.

Load table

Machine	Test load	
	Pound (lb)	Kilogramme (kg)
STAR 6 (STAR 13)	496	225
STAR 8 (STAR 22J)	551,5	250
STAR 9	*	*
STAR 10 (STAR 26J)	633,8	287,5
STAR 11	*	*
STAR 12	*	*



- 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.

## G - Technical characteristics

### 4.2 - OPERATIONAL TEST

Operational tests have proved the following facts :

- The machine has performed all movements without jerking, while carrying the nominal load.
- All safety systems are operating correctly.
- Maximum authorised 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 most unfavorable position for the machine (load  $W$  applied over distance  $L$ ).

A

B

C

D

E

F

G

H

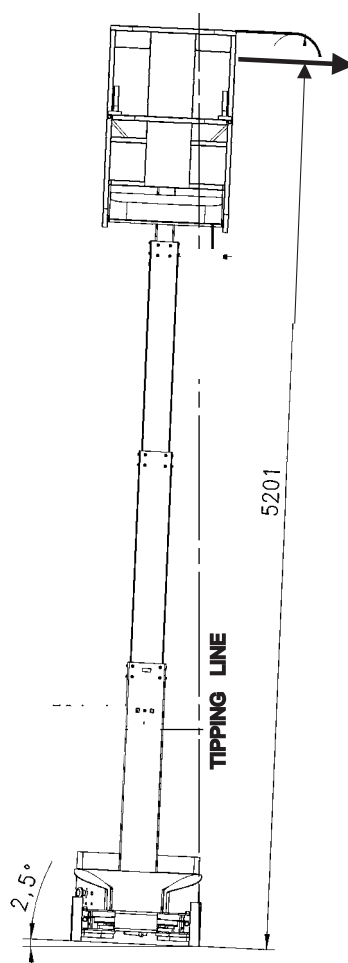
I

## G - Technical characteristics

Stability table for STAR 6 (STAR 13)

	T (°)	W		L		Moment of tipping over	
		Pound (lb)	Kilogramme (kg)	Feet inch (ft in)	Mètre (m)	Feet Pound (ft.lb)	Mètre Newton (mN)
Horizontal (1)	2,5	51,8	23,5	17-0	5,201	88,4	119,9

Stability for STAR 6 (STAR 13)



# G - Technical characteristics

A

B

C

D

E

F

**G**

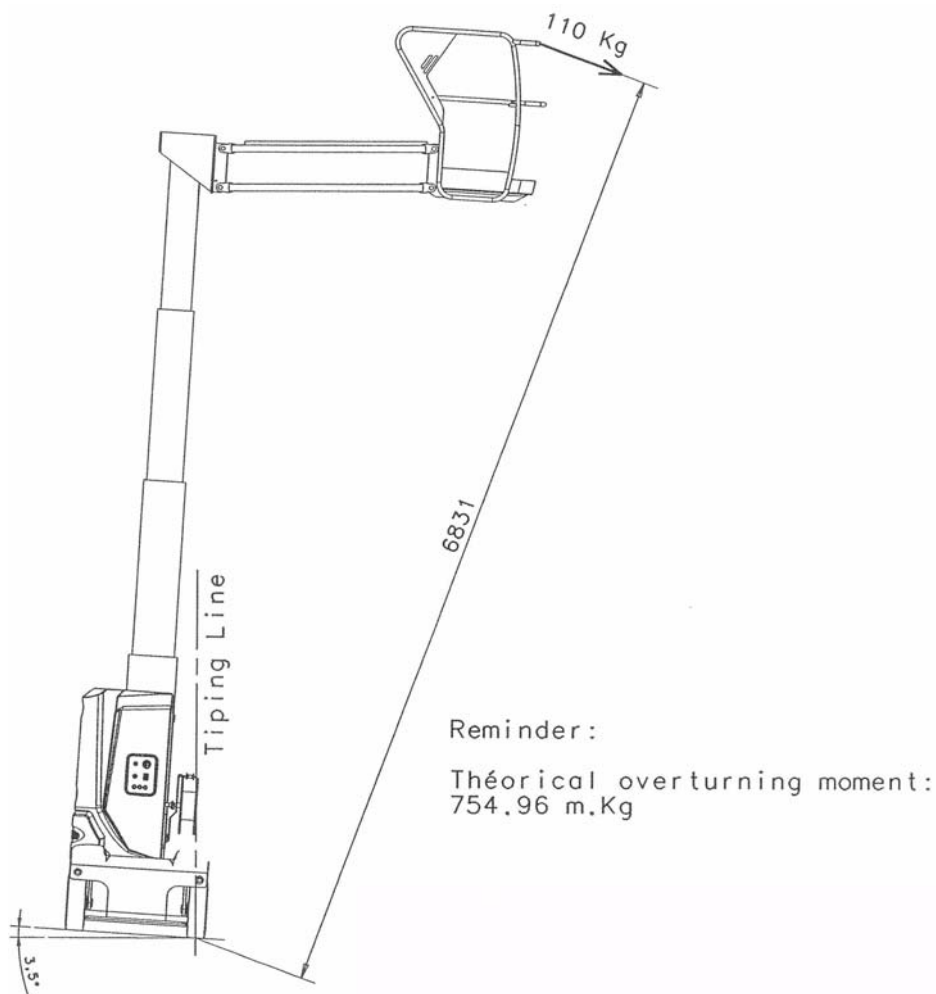
H

I

Stability table for STAR 8 (STAR 22J)

	T (°)	W		L		Moment of tipping over	
		Pound (lb)	Kilogramme (kg)	Feet inch (ft in)	Mètre (m)	Feet Pound (ft.lb)	Mètre Newton (mN)
Horizontal (1)	3,5	242,5	110	22-4	6,831	55682,9	754,96

Stability for STAR 8 (STAR 22J)

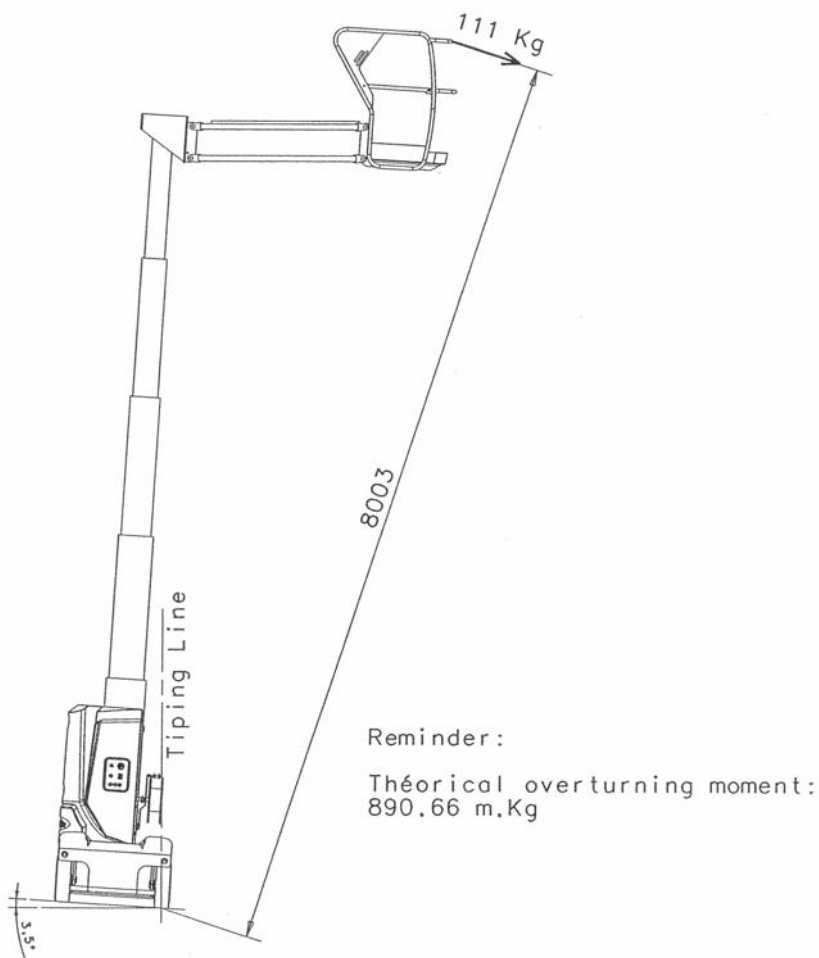


# G - Technical characteristics

Stability table for STAR 10 (STAR 26J)

	T (°)	W		L		Moment of tipping over	
		Pound (lb)	Kilogramme (kg)	Feet inch (ft in)	Mètre (m)	Feet Pound (ft.lb)	Mètre Newton (mN)
Horizontal (1)	3,5	244,7	111	26-3	8,003	656,9	890,66

Stability for STAR 10 (STAR 26J)



See paragraph 1.12.2 of standard AS1418.10-1996 for test details.

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

# H - Intervention log

## 1 - Intervention log

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

I n t e r v e n t i o n   l o g

H - REGISTRE D'INTERVENTION

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

MODELE

# H - Intervention log