



#### Maintenance book

TELESCOPIC MASTS

STAR 6 (STAR 13) - STAR 6P - STAR 8 (STAR 22J) - STAR 10 (STAR 26J)

2420343800

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#### **Maintenance book**



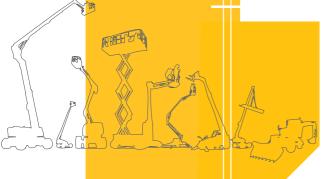
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#### Maintenance book

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# You have just purchased a HAULOTTE® product and we would like to thank you for your business.

#### 1 - Maintenance book

As indicated on the delivery slip, this maintenance book is one of the documents in our on-board case supplied on delivery of your machine.

Person using this product must do so in accordance with the instruction provided in this manual.

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

- Compliance with safety instruction (machine, use, environment).
- Use of the equipment within the performance limits set down in this manual.

#### 2 - After Sales Service

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

- When contacting our After Sales Service, ensure that you provide the machine model and serial number.
- When ordering any consumables or spare parts, please use this manual and the Haulotte Essential catalogue to receive your genuine HAULOTTE spare parts, your only guarantee of parts interchangeability and correct machine operation.
- If there is an equipment malfunction involving a HAULOTTE® product, then contact HAULOTTE Services® immediately even if the malfunction does not involve material and/or bodily damage..
- 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 (See: HAULOTTE Services® contact details)



#### 3 - Compliance

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

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

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

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



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

If you intend to add options to your product after original delivery, it is essential to follow the manufacturer's recommendations below:

- Installation by authorised HAULOTTE® personnel only.
- Update the manufacturer's identification plate.
- Have stability tests carried out by a certified agency/competent person.
- Ensure that any additional labels that relate to the option installed, are affixed to the machine in the appropriate location/s.

#### 1 - Recommendations

#### 1.1 - MAINTENANCE BOOK

The maintenance book is intended for the on-site maintenance technician.

It is the on-site maintenance technician's duty to carry out the regular maintenance work recommended by HAULOTTE Services®.

This maintenance work is essential for correct machine operation.

If regular maintenance is not carried out, this may:

- Void the warranty.
- · Cause machine malfunction.
- Reduce machine reliability and shorten its service life.
- · Cause operator safety problems.

To ensure that the regular maintenance requirements are fully satisfied, contact HAULOTTE Services®.

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



#### 1.2 - SYMBOLS USED

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

#### Symbol meanings

Symbol	Meaning
<u> </u>	Danger : Risk of injury or death (work safety)
	Caution : Risk of material damage (work quality)
$\Diamond$	Prohibition relating to work safety and quality
	Reminder: No identified risk, but a reminder of the need for common sense, good practice or pre-action prerequisites
	Cross-reference to another part of the manual (see section or sheet)
	Cross-reference to another manual (see manual)
<b>532</b>	Cross-reference to repairs (contact HAULOTTE Services®)
	Maintenance sheet
	Time required for intervention
	Recommended tools
<b>/</b>	Recommended part
	Safety
N.B. :	Additional technical information



#### 1.3 - LABEL COLORS

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



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

Familiarize yourself with the labels and their respective color codes.

#### Label color code

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

#### Label color code-For Russia and the Ukraine only

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

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#### 2 - Manufacturer's warranty

#### 2.1 - WARRANTY ACCEPTANCE

On reception of his machine, the owner or rental company must check the machine's condition and fill out the machine reception slip provided.

#### 2.2 - WARRANTY PERIOD

The present warranty is granted for a period of 12 months or a limit of 1000 operating hours for lifting and handling equipment and 2000 operating hours for public works machinery, to run from delivery and terminating with the first period to be reached.

Spare parts are covered by a 6 month warranty.

#### 2.3 - CONDITIONS OF WARRANTY

HAULOTTE® guarantees its products against defects, faults or manufacturing defects when the owner or rental company has informed HAULOTTE® of the defect.

The warranty does not cover the consequences of normal wear, nor any defects, failure or damage resulting from poor maintenance or abnormal usage, in particular overloading, impact by an external source, faulty installation or any modification made to products marketed by HAULOTTE® and performed by the owner or rental company.

In case of operation or use which does not comply with the instructions or recommendations in this maintenance book, claims will not be accepted.

The machine utilisation period must be recorded by reading the engine hour meter whenever an intervention is made. The engine hour meter must be maintained in good working order to guarantee maximum working life and to justify maintenance at the recommended time.

Warranty obligations for the time period stated above will cease immediately in situations where the defect is due to the following reasons :

- Use of spare parts that are not HAULOTTE® originals.
- If elements or products other than those recommended by the manufacturer are used.
- If the HAULOTTE® name, serial numbers or identification marks are removed or altered.
- After an unreasonably long delay before reporting a manufacturing problem.
- If the owner or rental company continues to use the machine despite problems.
- If damage is caused by modifications that do not comply with HAULOTTE® specifications.
- If lubricants, hydraulic oils or fuels that do not comply with HAULOTTE® recommendations are used.
- If the machine is incorrectly repaired or used by the customer or in case of an accident caused by a third party.

If no particular agreement has been made, any claims made after the previously established warranty period has expired will be refused..

The present warranty does not cover damage that may result directly or indirectly from any flaws or defects covered by the latter :

- Consumables : No claims will be accepted for objects or parts replaced in the context of normal machine usage.
- Settings: Adjustments of all sorts may become necessary at any time. Therefore adjustments are considered a part of normal machine usage conditions and are not covered by the warranty.



# - Safety precautions

- Hydraulic and fuel circuit contamination: Every possible precaution is taken to ensure that fuel and hydraulic liquid delivered is clean. On the other hand, in certain cases it is possible to contaminate fuel and hydraulic circuits, especially when fuel and lubricants are stored on the work site. Moreover, irregular or poor cleaning of the decanting device may also cause fuel/hydraulic circuit contamination and therefore damage the parts in direct contact with these liquids. HAULOTTE® will not accept any claims concerning cleaning of the fuel circuit, filter, injection pump or any other equipment in direct contact with fuel or lubricants.
- Wearing parts (pads, bearings, tyres, connections, etc.): These parts are, by definition, subject to deterioration during the period of operation. Wearing parts will therefore not be covered by the warranty agreement.

#### 2.4 - WARRANTY CONDITIONS

To benefit from the present warranty, the owner or rental company must inform the nearest HAULOTTE® branch or the branch that delivered the machine (the only dealer authorised to carry out an intervention under the manufacturer's warranty agreement) of the defect in writing as quickly as possible.

The branch will decide whether to repair or replace the part that proves to be faulty.

The owner or rental company must present the duly completed maintenance book supplied with the machine as proof that the maintenance operations recommended by the manufacturer have been carried out.

The owner or rental company must ensure that the defect covered by the HAULOTTE® warranty is reported to and acknowledged by the HAULOTTE® branch (the only dealer authorised to carry out work covered by the warranty) as rapidly as possible or must report the defect in writing.

Work carried out under the HAULOTTE® warranty will be performed by the branch which participated in delivery of the machine, wherever possible.



#### 3 - Scope of intervention

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



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

Inspections and maintenance

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



#### 4 - Instructions for intervention



Do not use the machine during while maintenance work is being completed on it.



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 operate the product in the following situations:

- Do not work in an explosive or flammable atmosphere (spark, flame, etc.).
- Do not touch the hot parts of the hydraulic power source (engine, filters, etc.).
- Do not bridge the battery terminals with metallic objects.
- Do not service the battery close to a spark, naked flame, glowing tobacco (emissions of gas).
- Never expose the batteries or electrical components to water (pressure cleaner, rain).
- Never disable the safety devices.
- Do not climb onto the covers.
  - Do not fill up the fuel tank, when the engine is running and/or close to a naked (open) flame.



Use an oil collection pan to avoid polluting the environment.



#### 1 - Lubrication diagram

Diagram STAR 6 (STAR 13) - STAR 6P (NA)

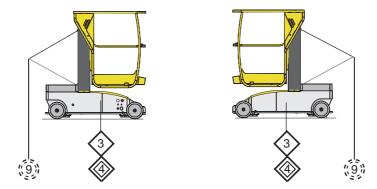
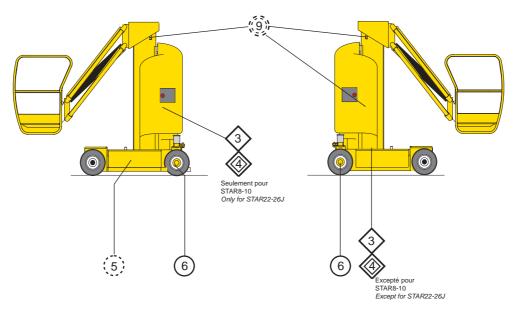


Diagram STAR 8 (STAR22J) - STAR 10 (STAR 26J)



#### List of ingredients

Marking	Ingredient	Symbol	HAULOTTE® code
	Engine oil - Can 20 I(5,3 gal US)		2420801360
1	Engine oil - Barrel 209 I(55,2 gal US)		2420801350
•	Engine oil (+30° / - 20° )		2820305670
	Engine oil (Winter option)		4000010660
	Box oil - Can 20 I(5,3 gal US)		2420801370
2	Box oil - Barrel 209 I(55,2 gal US)		2420801380
	Hydraulic oil (Standard) - Barrel 209 I(55,2 gal US)	•	2420801310
3	Hydraulic oil (Winter option)	$\Diamond$	2505002640
4	Biological hydraulic oil - Barrel 209 I(55,2 gal US)		2820304310
5	Extreme-pressure lithium grease		2820304320



Marking	Ingredient	Symbol	HAULOTTE® code
_	Lead-free grease - Aerosol 0,4 I(0.1 gal US)		2820304330
6	Lead-free grease - Can 5 I(1,32 gal US)	$\bigcirc$	2820304340
7	Molybdenum grease		
8	Oil		
9	High-pressure lubricant	(1 )) (1 ))	

#### 2 - Consumables

List of consumables

	Consumable	HAULOTTE® code	Applicability
Hydraulic filter cartridge		2505000970	• STAR 8 (STAR 22J) • STAR 10 (STAR 26J)

#### 2.1 - HYDRAULIC OILS

Hydraulic oils must comply with the following requirements:

- Oil filterability must be compatible with absolute filters .
- Have properties such as :
- · Antifoam and deaeration.
- Anti-wear, anti-shear and antioxydant.
- Rust and corrosion inhibitors (copper).

The recommended viscosity grades depending on the environmental conditions are as follows:

Environmental conditions	ISO Viscosity grade
Ambient temperature between - 15 °C(- 9 °F) and + 40 °C(+ 104 °F)	HV 46
Ambient temperature between - 35 °C(- 31 °F) and + 35 °C(+ 95 °F)	HV 32
Ambient temperature between 0 °C(32 °F) and + 45 °C(+ 113 °F)	HV 68

Biodegradable oils may be used if they comply with the following requirements:

- Ambient operating temperature between -15 °C(-9 °F) and + 40 °C(+ 104 °F) .
- HEES type biodegradable oil only according to standards ISO 15380 and VDMA 24568.
- Necessary characteristics

Viscosity grade	ISO Viscosity grade
Viscosity at + 40 °C(+ 104 °F)	46 +/- 3 mm² / s
Viscosity at + 100 °C(+ 260 °F)	> 8 mm² / s
Viscosity index	> 160
Flashpoint	> 220° C (> 572° F)
Pour point	< - 40° C (> - 104° F)



#### 3 - Labels

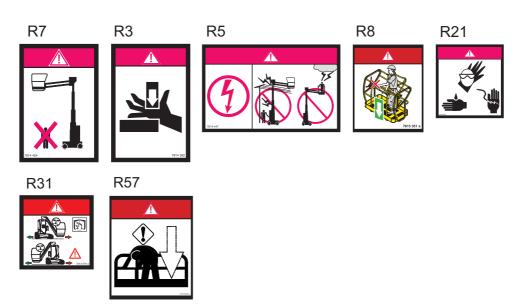
#### 3.1 - CLASSIFICATION PLAN

#### 3.1.1 - Red labels

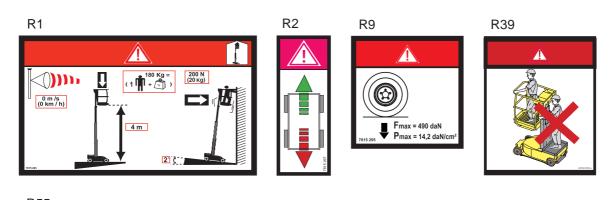


The red labels indicate a potentially fatal danger.

#### Common labels



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

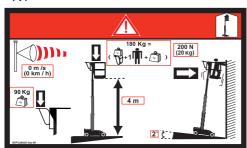






#### Specific labels STAR 6 P

R1



R2





R55

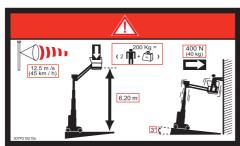


R56



Specific labels STAR 8 (STAR 22J)

R1



R9



R4



R30



R32

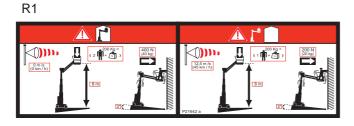


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#### Specific labels STAR 10 (STAR 26J)







R32

ON
OFF

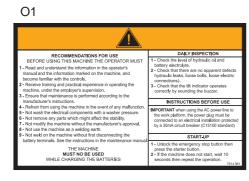


3.1.2 - Orange labels



The orange labels indicate a risk of serious injury.

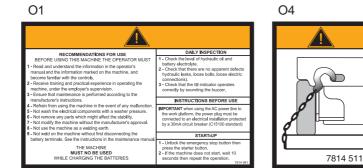
#### Common labels - CE







#### Common labels - AS





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#### Common labels - ANSI - CSA

RECOMMENDATIONS FOR USE

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

• OWN OPERATING PROPERLY.

• OPER





#### 3.1.3 - Yellow labels



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

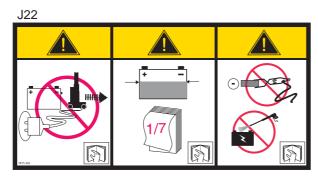
#### Common labels







Specific labels STAR 6 (STAR 13) - STAR 6 P





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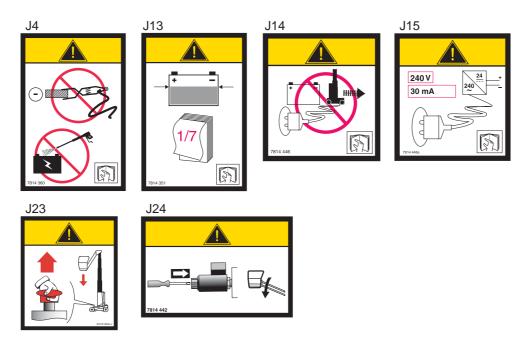
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Specific labels STAR 8 (STAR 22J) - STAR 10 (STAR 26J)

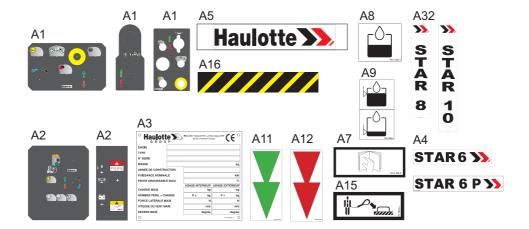


3.1.4 - Other labels



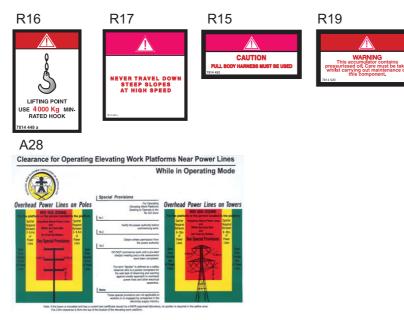
The other labels provide additional technical information.

#### Common labels





#### Specific labels AS



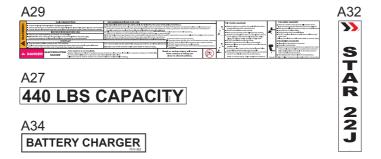
#### Specific labels ANSI



Specific labels ANSI: STAR 6 (STAR 13)



Specific labels ANSI: STAR 8 (STAR 22J)



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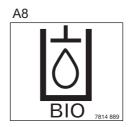
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Specific labels, optional



#### 3.1.5 - Green labels



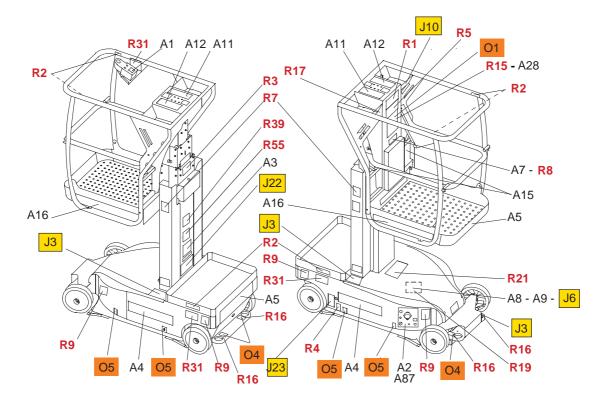
Green labels indicate maintenance, operations or information ( CSA standard).

#### 3.1.6 - Blue labels

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

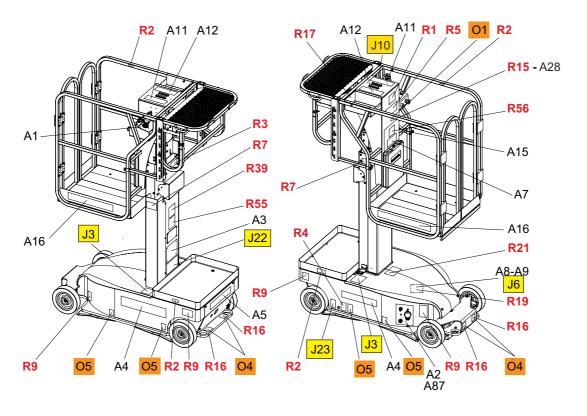
#### 3.2 - IDENTIFICATION

Location of the STAR 6 (STAR 13) labels - Standards CE and AS





#### Location of the STAR 6 P labels - Standards CE and AS



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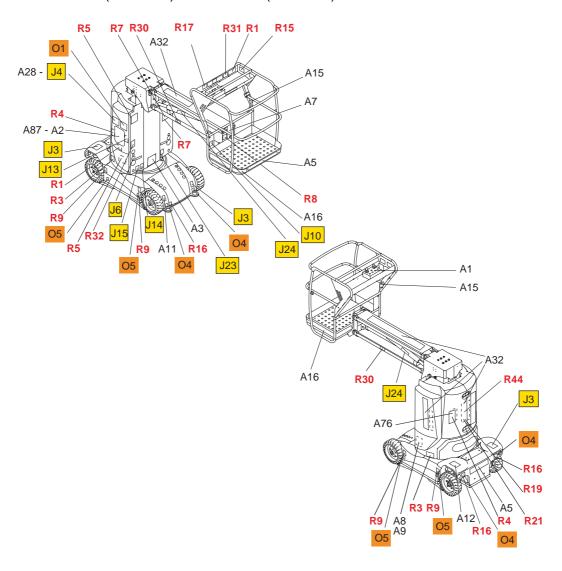
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Location of STAR 8 (STAR 22J) and STAR 10 (STAR 26J) labels - Standards CE and AS



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Label descriptions STAR 6 (STAR 13) - STAR 6P - STAR 8 (STAR 22J) - STAR 10 (STAR 26J) - Standards CE and AS

Label	descriptions S	TAR 6 (STA	.R 13) - STAR 6P - STAR 8 (STAR 22J) - S	TAR 10 (STAR 26J) - S	tandards CE and AS
C	olor N	Marking	Description	Quantity	
F	Red	R1	Height of the floor and load	1	For STAR 6 (STAR 13): 3078152630 For STAR 6 P: 307P228050 For STAR 8 (STAR 22J): 307P219210 For STAR 10 (STAR 26J): 307P216420
F	Red	R2	Travel direction	4	For STAR 6 (STAR 13) and STAR 6 P : 3078152670
F	Red	R3	Risk of crushed hands	1	3078149010
	Red	R4	Risk of body crushing	1	307P228390
F	Red	R5	Danger of electrocution	1	3078144470
	Red	R7	Do not park in the work area	2	3078144240
	Red	R8	Close the sliding mid-rail	1	3078153510 Except
F	Red	R9	Wheel load	4	STAR 6 P For STAR 6 (STAR 13): 3078152950 For STAR 6 P: 307P229050 For STAR 8 (STAR 22J): 307P219220 For STAR 10 (STAR 26J): 307P216430
F	Red	R15	Wearing of a safety harness is essential	1	For AS standard only: 3078144520
F	Red	R16	Load strength on each slings	4	For AS standard only : 3078144490
F	Red	R17	Do not travel down slopes at high speed	1	For AS standard only: 3078144360
F	Red	R19	Fluid under pressure	1	For AS standard only: 3078145200
F	Red	R21	Protective clothing required	2	3078143610
F	Red	R30	Vertical crushing of the body	2	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 3078144440
F	Red	R31	Travel direction	For STAR 6 (STAR 13):3 For STAR 8 (STAR 22J) and STAR 10 (STAR 26J):1	For STAR 6 (STAR 13): 3078152650 For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 3078148790
F	Red	R32	Emergency stop button	1	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J) : 3078148800
F	Red	R39	Do not climb onto the tool box	1	For STAR 6 (STAR 13) and STAR 6 P : 307P218750
F	Red	R44	Vertical crushing of the body	2	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J) : 3078143630



Color	Marking	Description	Quantity	
Red	R55	Maximum load in the toolbox	1	For STAR 6 (STAR 13) and STAR 6 P : 307P215830
Red	R56	Do not lower while operating	1	For STAR 6 P only : 307P228060
Orange	O1	Operation instructions	1	In french ( CE standard): 3078149030 In english ( CE standard): 3078149610 In english ( AS standard): 3078149660 In german ( CE standard): 3078149620 In spanish ( CE standard): 3078149630 In italian ( CE standard): 3078149640 In dutch ( CE standard): 3078149650 In danish ( CE standard): 3078149670 In finish ( CE standard): 3078149670 In finish ( CE standard): 3078149680 In portuguese ( CE standard): 3078149690 In swidish ( CE standard): 3078149690 In swidish ( CE standard): 3078149700
Orange	O4	Machine tie down points	4	3078145110
Orange	O5	Position of the lift truck forks	4	3078143830
Yellow	J3	Do not place your foot on the cover	2	3078143640
Yellow	J4	Do not use the machine as a welding earth	2	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J) : 3078143600
Yellow	J6	Verification of tilt operation	1	3078144650
Yellow	J10	Socket	1	CE standard : 3078143540 AS standard : 3078144570
Yellow	J10	Socket (Option 110V)	1	For STAR 6 (STAR 13) only: 307P222230
Yellow	J10	Socket (Option 115V)	1	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 3078151380



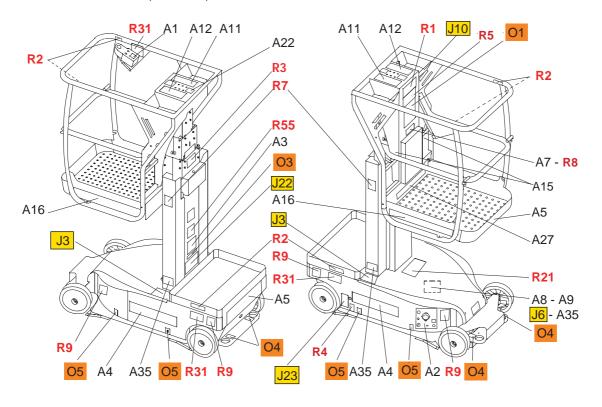
Color	Marking	Description	Quantity	
Yellow	J10	Socket - Cable reel	1	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 240V: 3078145730 110V: 3078147580 AS standard: 3078144390
Yellow	J13	Battery verification	1	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 3078143510
Yellow	J14	Using the machine during battery charging is forbidden	1	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 3078144460
Yellow	J15	Battery charger socket	1	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): CE standard: 3078144480 AS standard: 3078144390
Yellow	J22	Battery use	1	For STAR 6 (STAR 13) and STAR 6 P : 3078152620
Yellow	J23	Emergency mast lowering	1	For STAR 6 (STAR 13) and STAR 6 P: 3078152660 For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 307P218900
Yellow	J24	Emergency jib lowering	1	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J) : 3078144420
Other	A1	Platform control box	1	For STAR 6 (STAR 13): 3078152460 For STAR 6 P: 307P227960 For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 3078148280
Other	A2	Ground control box	1	For STAR 6 (STAR 13) and STAR 6 P: 3078152680 For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 3078148300
Other	A3	Identification plate	1	3078146180
Other	A4	Machine name logo	2	For STAR 6 (STAR 13): 307P217370 For STAR 6 P: 307P227980



Color	Marking	Description	Quantity	
Other	<b>A</b> 5	Small format HAULOTTE® logo	For STAR 6 P: 1 For STAR 6 (STAR 13), STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 2	307P217410
Other	A7	Read the operation manual	1	3078143680
Other	A8	Hydraulic oil	1	3078143520
Other	A8	Biodegradable oil	1	3078148890
Other	A8	Winter grade hydraulic oil	1	307P223700
Other	A9	Upper and lower oil level	1	3078143590
Other	A11	Front green drive direction arrow	1	3078148820
Other	A12	Rear red drive direction arrow	1	3078148830
Other	A15	Harness anchor point location	For STAR 6 P: 1 For STAR 6 (STAR 13), STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 2	307P216290
Other	A16	Yellow and black adhesive tape	2	2421808660
Other	A28	Risks of electrocution	1	For AS standard only : 307P226440
Other	A32	Vertical machine name logo	3	For STAR 8 (STAR 22J) : 307P217430 For STAR 10 (STAR 26J) : 307P217400
Other	A76	Hand pomp	1	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J) : 307P227170
Other	A87	Emergency control panel	1	For Italy only : 307P232500



Location of the STAR 6 (STAR 13) labels - ANSI standard - CSA standard



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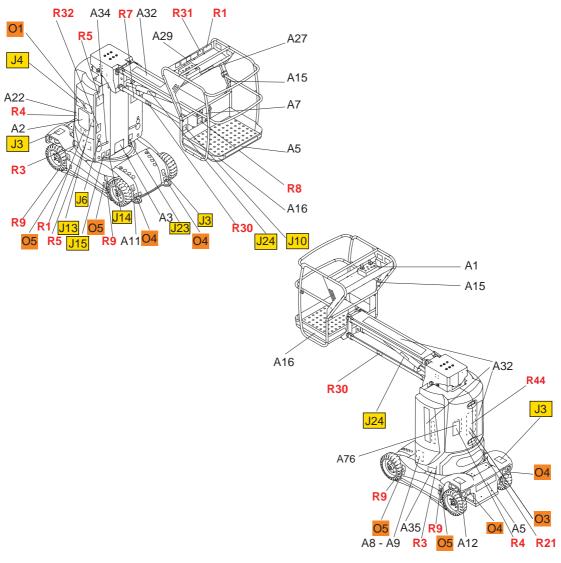
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Location of STAR 8 (STAR 22J) and STAR 10 (STAR 26J) labels - ANSI standard - CSA standard



Label descriptions STAR 6 (STAR 13) - STAR 8 (STAR 22J) - STAR 10 (STAR 26J) - ANSI standard - CSA standard

Color	Marking	Description	Quantity	
Red	R1	Height of the floor and load	1	For STAR 6 (STAR 13) : 3078152970 For STAR 8 (STAR 22J): 3078149340 For STAR 10 (STAR 26J): 307P222560
Red	R2	Travel direction	4	For STAR 6 (STAR 13) only: 3078152980
Red	R3	Risk of crushed hands	1	3078147240
Red	R4	Risk of body crushing	1	For STAR 6 (STAR 13) : 3078147260 For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 307P229490
Red	R5	Danger of electrocution	1	3078149300
Red	R7	Do not park in the work area	2	3078149310



Color	Marking	Description	Quantity	
Red	R8	Close the sliding mid-rail	1	3078153630 For STAR 6 (STAR 13) : 3078153040
Red	R9	Wheel load	1	For STAR 8 (STAR 22J): 307P219240 For STAR 10 (STAR 26J): 307P222570
Red	R21	Protective clothing required	1	3078147350
Red	R30	Vertical crushing of the body	2	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J) : 3078149390
Red	R31	Travel direction	For STAR 6 (STAR 13) : 3 For STAR 8 (STAR 22J) and STAR 10 (STAR 26J) : 1	For STAR 6 (STAR 13) : 3078152990 For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 3078149350
Red	R32	Emergency stop button	1	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 3078149370
Red	R44	Horizontal crushing of the body	2	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 3078147260
Red	R55	Maximum load in the toolbox	1	For STAR 6 (STAR 13) only: 307P215850
Orange	O1	Operation instructions	1	For STAR 6 (STAR 13) : 3078149050 For STAR 8 (STAR 22J) and STAR 10 (STAR 26J) : 3078147050
Orange	О3	Risks of explosion	1	3078148030
Orange	04	Machine tie down points	4	3078147310
Orange	O5	Position of the lift truck forks	4	For STAR 6 (STAR 13) : 3078149290 For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 3078146950
Yellow	J3	Do not place your foot on the cover	2	3078147270
Yellow	J4	Do not use the machine as a welding earth	2	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 3078147220
Yellow	J6	Verification of tilt operation	1	3078147090
Yellow	J10	Socket	1	3078148900
Yellow	J13	Battery verification	1	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J) : 3078147330
Yellow	J14	Using the machine during battery charging is forbidden	1	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 3078149280



Color	Marking	Description	Quantity	
				For STAR 8 (STAR
Yellow	J15	Battery charger socket	1	22J) and STAR 10
Tellow	010	Dattery Charger Socker	1	(STAR 26J) :
				3078147580
Yellow	J22	Battery use	1	For STAR 6 (STAR 13)
				only: 3078153000
				For STAR 6 (STAR 13) : 3078153010
				For STAR 8 (STAR
Yellow	J23	Emergency mast lowering	1	22J) and STAR 10
				(STAR 26J) :
				307P218920
				For STAR 8 (STAR
Yellow	J24	Emergency jib lowering	1	22J) and STAR 10
	-	3 3 3, 1, 1 3		(STAR 26J) :
				3078149380 For STAR 6 (STAR 13)
				: 3078152460
011		Di i		For STAR 8 (STAR
Other	A1	Platform control box	1	22J) and STAR 10
				(STAR 26J) :
				307P203690
				For STAR 6 (STAR 13)
				: 3078152880 For STAR 8 (STAR
Other	A2	Ground control box	1	22J) and STAR 10
				(STAR 26J) :
				3078148300
Other	A3	Identification plate	1	307P218930
Other	A4	Machine name logo	2	For STAR 6 (STAR 13)
				only: 307P217380
Other	A5	Small format HAULOTTE® logo	2	307P217410
Other Other	A7 A8	Read the operation manual  Hydraulic oil	1 1	3078147290 3078147140
Other	A6 A8	Biodegradable oil	1	3078148920
Other	A9	Upper and lower oil level	1	3078147210
Other	A11	Front green drive direction arrow	1	3078148820
Other	A12	Rear red drive direction arrow	1	3078148830
Other	A15	Harness anchor point location	2	3078147950
Other	A16	Yellow and black adhesive tape	2	2421808660
Other	A22	Voltage table	1	3078147890
		-		For STAR 6 (STAR 13)
				: 3078153050
Other	A27	Permissible load	1	For STAR 8 (STAR
				22J) : 307P201510
				For STAR 10 (STAR 26J) : 307P222690
				For STAR 8 (STAR
0	4.00	0	i.	22J) and STAR 10
Other	A29	Summary safety instructions	1	(STAR 26J) :
				3078150870
				For STAR 8 (STAR
Other	A32	Vertical machine name logo	3	22J) : 307P217440
			•	For STAR 10 (STAR
				26J): 307P222710



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Color	Marking	Description	Quantity		
Other	A34	Battery charger	1	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J): 3078148620	
Other	A35	Socket connection	1	For STAR 6 (STAR 13) : 3078153360 For STAR 8 (STAR 22J) and STAR 10 (STAR 26J) : 3078148630	3
Other	A76	Hand pomp	1	For STAR 8 (STAR 22J) and STAR 10 (STAR 26J) : 307P226850	

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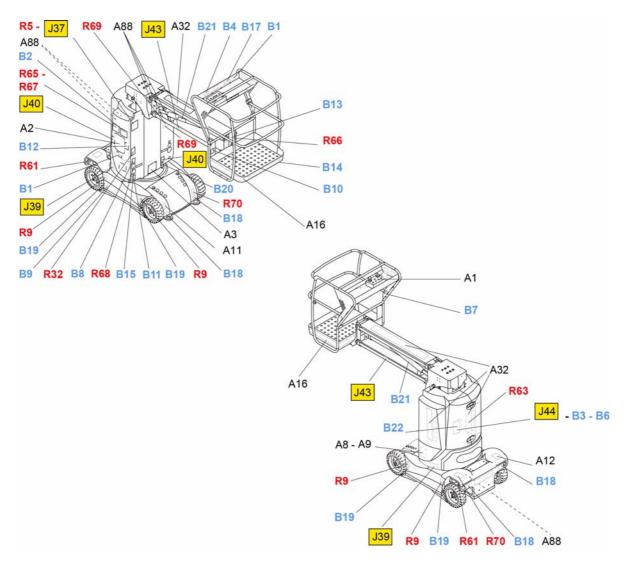
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Location of STAR 8 (STAR 22J) and STAR 10 (STAR 26J) labels - Russia and the Ukraine version



Label descriptions STAR 8 (STAR 22J) - STAR 10 (STAR 26J) - Russia version

Color	Marking	Description	Quantity	
Blue	B1	Height of the floor and load	2	For STAR 8 (STAR 22J) : 4000014410 For STAR 10 (STAR 26J) : 4000014030
Blue	B2	Operation instructions White background	1	In Russian : 4000014360
Blue	B3	Goggles compulsory	2	307P226670
Blue	B4	Helmet compulsory	2	307P226680
Blue	B6	Hand protection compulsory	2	307P226700
Blue	B7	Harness anchor point location	2	307P226710
Blue	B8	Plug : 24 V	1	307P226740
Blue	B9	Greasing the turntable rotation gear	1	307P227020
Blue	B10	Plug : 240 V - 30 mA	1	307P227050
Blue	B11	Verification of tilt operation	1	For Russia : 307P227060
Blue	B12	Battery verification	2	For Russia : 307P227180



#### - Recommendations

Color	Marking	Description	Quantity	
Blue	B13	Read the operation manual	1	For Russia :
	_	·		307P227190
Blue	B14	Obligatory routing	2	307P227510
Blue	B15	Plug : 220 V	1	307P227520
Blue	B17	Travel direction	1	307P227040
Blue	B18	Anchorage point	4	4000013970
Blue	B19	Position of the lift truck forks	4	4000013830
Blue	B20	Emergency mast lowering	1	4000013840
Blue	B21	Emergency jib lowering	1	4000013910
Blue	B22	Rescue manoeuvre	1	4000013930
Red	R5	Danger of electrocution	1	307P226960
Red	R9	Wheel load	4	For STAR 8 (STAR 22) : 307P219220 For STAR 10 (STAR 26J) : 307P216430
Red	R61	Lubrication point	2	307P219370
Red	R63	Smoking forbidden	2	307P226760
Red	R65	Pressurised spraying forbidden	2	307P226780
Red	R66	Blocking of the sliding bar is forbidden  Do not use the machine as a welding	1	307P226950
Red	R67	earth	2	307P226970
Red	R68	Using the machine during battery charging is forbidden	1	307P226980
Red	R69	Do not park in the work area	1	307P227000
Red	R70	Do not place your foot on the cover	2	307P227010
Yellow	J37	Electrical danger	1	307P227620
Yellow	J39	Risk of crushed hands	2	4000014340
Yellow	J40	Risk of body crushing	2	4000014290
Yellow	J43	Vertical crushing of the body	2	4000014270
Yellow	J44	Horizontal crushing of the body	2	4000014250
Other	A1	Platform control box	1	3078148280
Other	A2	Ground control box	1	3078148300
Other	А3	Identification plate	1	In Russian : 4000016130
Other	A8	Hydraulic oil	1	3078143520
Other	A8	Winter grade hydraulic oil	1	307P223700
Other	A9	Upper and lower oil level	1	3078143590
Other	A11	Front green drive direction arrow	1	3078148820
Other	A12	Rear red drive direction arrow	1	3078148830
Other	A16	Yellow and black adhesive tape	1	2421808660
Other	A32	Vertical machine name logo	1	For STAR 8 (STAR 22) : 307P217430 For STAR 10 (STAR
Othor	A 0.0	Tompor proof lobal	6	26J) : 307P217400
Other	A88	Tamper-proof label	6	307P227450



#### B - Recommendations

#### 1 - General program / Recommendations

The design service life of the products covered by this manual is for a period of 10 years. This service life is based on the machine being maintained within the maintenance regime set down in the Maintenance Manual supplied with the product.

It must be noted that should the product be subject to ongoing use in harsh environments, then the effective service life will be reduced. Contact Haulotte Services for further advice.

The time periods below are recommended for fuel-powered machines in normal use.

Symbol	Meaning	Symbol	Meaning
	Visual inspections	<b>EX.</b>	Systematic replacement Operation requiring HAULOTTE Services® authorisation
	Check-Test See user manual or machine maintenance book	(1)	Visual inspection with dismantling and exchange or replacement if necessary Operation requiring HAULOTTE Services® authorisation Increase in periodical inspections
<i>&gt;</i>	Check level		Tightening (bolt, etc.)
<b>/</b>	Lubrication-Lubrication		Tolerance (clearance lubrication)
	Oil change	(2)	Static and dynamic tests For countries where machines are not subject to controlled periodic maintenance

- 1 Increase in periodical inspections
- 2 For countries where machines are not subject to controlled periodic maintenance





Increase in periodical inspections: Depending on the condition of certain critical components after 1000 hours, the maintenance staff may have to reduce the interval between periodical inspections and maintenance. If the decision is made not to replace a part, the part concerned must be recorded in the inspection schedule.

Each day and before the beginning of a new work period and on each change of operator, the machine must be subjected to a visual inspection and a complete functional test. Any repairs required must be performed before the machine is used, its correct operation depends on it. Inspect the following items:

- State of the structure's parts: Wheel axles, Chassis, Turntable, Boom, jib, platform.
  - Absence of cracks, broken parts, damaged paint.
  - No distortion in metal components or visible damage.
  - Absence of foreign objects at the ends of boom/attachments.
  - Presence and check the original position of the platform control box sliding bar.
- Cylinders :
  - No leaks: Refer to the Maintenance book.
  - No rust and abrasions on the cylinder rod.
  - · Absence of foreign objects on all surfaces.
- Steering system : Wheels, Driving reducer, Brake and Tyres :
  - No cracks, distortions, damaged paint or other faults.
  - No missing or loose bolts.
  - Condition of the tyres (cuts, excessive wear, etc.)
- State of the rotation systems: Turntable rotation, Turntable rotation selector in platform, pulley:
  - No excessive clearance : Refer to the Maintenance book.
  - No missing or loose bolts.
  - Absence of foreign objects on all surfaces.
  - Greasing the turntable rotation gear Turntable and Platform.
  - Grease the extension system if necessary



Area	Daily	After 125 h (hours) or 1 year(s)	Intervals After 250 h (hours) or 1 year(s)	After 1500 h (hours) or 3 years	After 5000 h (hours) or 10 years
Platform assembly					
Structure parts	man				
Platform					<b>Y</b> _
Guardrail	in the second				
Sliding (or swinging) intermediate guardrail	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Swing doors					
Floor					
Harness anchorage point	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Mast assembly					
Structure parts	)minix				
Chains		<u>~</u>		(1)	<b>522</b>
Cables and tank bands				<b>D</b>	
Turntable assembly		·	·		
Structure parts					
Slew ring (3)	www.	<b>-</b>			
Turntable rotation gearbox	mm.				
Chassis assembly		<u> </u>	1		
Structure parts	mmv.				
Anchorage point					
Tyres and rims	)///IIII				
Wheel nuts and bolts	www.				
Wheel reducer	)JJIIIII				
Wheel axles		<b>/</b>			
Functions and controls					
Platform control box (indicators, etc.)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<b>W</b> _			
Ground control box (indicators, etc.)		<b>U</b> _			
'Enable Switch' pedal		<b>U</b> _			
Emergency stop buttons (on all control boxes)		<b>U</b> _			

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			Intervals		
Area	Daily	After 125 h (hours) or 1 year(s)	After 250 h (hours) or 1 year(s)	After 1500 h (hours) or 3 years	After 5000 h (hours) or 10 years
Circuit breaker and contactors		<b>W</b> _			
Overload		<b>W</b> _			
Horn		<b>W</b> _			
Brakes		<b>W</b> _			
Emergency lowering	,,,,,,,,,	<b>W</b> _			
Indicators, switches, joysticks and selectors		<b>W</b> _			
Dumping		<b>W</b> _			
Limit switch ( PV, radius limit, weighing)		<b>W</b> _			
Back to neutral for all joysticks, selectors, etc.					
Power system	,				
Engine	See manufacturer's	guide		I	I
Batteries (terminals, cleanliness, attachment)			<b>W</b>		
Hydraulic and electric assemblies		I	I	I	I
Hydraulic pump	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Hydraulic tank, cap and breather					
Hydraulic filter	<b>MILLION</b>	572			
Hydraulic oil		.*			
Electrical connections					
Hydraulic unit motor commutator			(1)		
Driving motor commutator			(1)		
Variable speed calculator			(1)		
Common areas					
Structure parts	)mux				

			Intervals		
Area	Daily	After 125 h (hours) or 1 year(s)	After 250 h (hours) or 1 year(s)	After 1500 h (hours) or 3 years	After 5000 h (hours) or 10 years
Welds					(1)
Hoses and couplings	<i>////</i>				(1)
Pins, rings and pin stop	<i>/////////////////////////////////////</i>			(1)	E22*
Pulleys and wear pads				(1)	522
Bearings					527
Cylinders (welds, leakproofness, external leak, excessive distortion)	in the second se	<b>U</b> _	(2)		
Caps and covers					
General points					
User manual and intervention register					
Safety stickers and manufacturer's plate					
Mandatory inspection	According to curren	t legislation in the co	untry of use and at lea	ast once a year	
Performance check for all functions and safety devices					
Greasing and lubrication according to the maintenance plan		<b>/</b>	<b>/</b> _	<b>/</b>	
General condition of the machine, paint, no leaks, cracks or excessive distortion, etc.					
Machine integrity, no modifications without HAULOTTE Services® authorisation			7771111		

- 1 Increase in periodical inspections
- 2 For countries where machines are not subject to controlled periodic maintenance
- 3 Particular attention to be paid when checking the crown gear



Particular attention to be paid when checking the crown gear :

- Visual appearence of the interior and exterior (floating or broken bolts, etc.).
- Check bolt tightness by testing a sample, making sure that the bolts are slightly loosened before retightening with a torque wrench. Section C E005Maintenance sheet
- Check the crown gear's functional clearance (every 1500 h). Consult the After-Sales Service



#### 2 - Detailed program

The time periods below are recommended for fuel-powered machines in normal use.

Symbol	Meaning	Symbol	Meaning
must.	Visual inspections	EX.	Systematic replacement Operation requiring HAULOTTE Services® authorisation
	Check-Test See user manual or machine maintenance book	(1)	Visual inspection with dismantling and exchange or replacement if necessary Operation requiring HAULOTTE Services® authorisation Increase in periodical inspections
<b>%</b>	Check level		Tightening (bolt, etc.)
<b>/</b>	Lubrication-Lubrication		Tolerance (clearance lubrication)
	Oil change	(2)	Static and dynamic tests For countries where machines are not subject to controlled periodic maintenance

- 1 Increase in periodical inspections
- 2 For countries where machines are not subject to controlled periodic maintenance



During the periodic inspection of the 5000 h (visual inspection with dismantling and exchange or replacement if necessary), a record must be made of all parts that have been dismantled but not replaced



		or 1-year service	1
Area	Type of intervention	Area Functions and controls	Type of intervention
Mast assembly		Functions and controls	
Chains	0	Platform control box (indicators, etc.)	
Turntable assembly		Ground control box (indicators, etc.)	<b>U</b> _
Slew ring	<b>~</b>	'Enable Switch' pedal	<b>W</b> _
Turntable rotation gearbox		Emergency stop buttons (on all control boxes)	
Chassis assembly		Circuit breaker and contactors	
Wheel nuts and bolts		Overload	
Wheel axles	<b>/</b>	Horn	4
Hydraulic and electric assem	blies	Brakes	4
Hydraulic filter	527	Emergency lowering	4
Hydraulic oil	1	Indicators, switches, joysticks and selectors	<b>U</b> _
Common areas		Dumping	
Pulleys and wear pads		Limit switch ( PV, radius limit, weighing)	
Bearings		Power system	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>U</b> _	Engine	See manufacturer's guide
·		General points	
		Mandatory inspection	According to current legislation in the country of use and at least once a year
		Greasing and lubrication according to the maintenance plan	
Date : Number of hours : Intervenor : HAULOTTE Services® contra Intervention sheet number : Signature :	ct number :	Comments	



250 h (hours) or 1-year service					
Area	Type of intervention	Area	Type of intervention		
Mast assembly		Functions and controls			
Chains	<b>-</b>	Platform control box (indicators, etc.)	4		
Turntable assembly		Ground control box (indicators, etc.)	<b>4</b> _		
Slew ring		'Enable Switch' pedal	<b>Y</b> _		
Turntable rotation gearbox		Emergency stop buttons (on all control boxes)			
Chassis assembly		Circuit breaker and contactors	<b>U</b> _		
Wheel nuts and bolts		Overload	<b>4</b>		
Wheel axles	<b>~</b>	Horn	<b>W</b>		
Hydraulic and electric assemb	lies	Brakes	<b>Y</b> _		
Hydraulic filter	572	Emergency lowering	<b>W</b> _		
Hydraulic oil	1	Indicators, switches, joysticks and selectors	<b>W</b> _		
Hydraulic unit motor commutator	T.	Dumping	<b>W</b> _		
Driving motor commutator	T.	Limit switch ( PV, radius limit, weighing)	<b>Y</b> _		
Variable speed calculator		Power system			
Common areas		Engine	See manufacturer's guide		
Pulleys and wear pads		Batteries (terminals, cleanliness, attachment)	<b>U</b>		
Bearings		General points			
Cylinders (welds, leakproofness, external leak, excessive distortion)		Mandatory inspection	According to current legislation in the country of use and at least once a year		
		Greasing and lubrication according to the maintenance plan	<b>/</b> =		
		Machine integrity, no modifications without HAULOTTE Services® authorisation			
Date : Number of hours : Intervenor : HAULOTTE Services® contrac Intervention sheet number : Signature :	t number :	Comments			



	375 h (ho <u>urs)</u>	or 1-year service	
Area	Type of intervention	Area	Type of intervention
ast assembly		Functions and controls	
Chains	<b>-</b>	Platform control box (indicators, etc.)	<b>U</b> _
urntable assembly		Ground control box (indicators, etc.)	<b>W_</b>
Slew ring	<b>-</b>	'Enable Switch' pedal	<b>U</b> _
Turntable rotation gearbox		Emergency stop buttons (on all control boxes)	
hassis assembly		Circuit breaker and contactors	<b>W_</b>
Wheel nuts and bolts		Overload	<b>U</b> _
Wheel axles	<u>/</u>	Horn	<b>U</b> _
ydraulic and electric assem	blies	Brakes	<b>U</b> _
Hydraulic filter	<b>137</b>	Emergency lowering	<b>U</b> _
Hydraulic oil	**	Indicators, switches, joysticks and selectors	<b>U</b> _
ommon areas		Dumping	
Pulleys and wear pads		Limit switch ( PV, radius limit, weighing)	<b>W</b> _
Bearings		Power system	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _	Engine	See manufacturer's guide
		General points	1
		Mandatory inspection	According to current legislation in the country of use and at least once a year
		Greasing and lubrication according to the maintenance plan	
ate : umber of hours : Itervenor : AULOTTE Services® contra Itervention sheet number : ignature :	oct number :	Comments	



	500 h (hours) d	r 1-year service
Area	Type of intervention	Area Type of interventio
Mast assembly		Functions and controls
Chains	<b>/</b>	Platform control box (indicators, etc.)
Turntable assembly		Ground control box (indicators, etc.)
Slew ring		'Enable Switch' pedal
Turntable rotation gearbox		Emergency stop buttons (on all control boxes)
Chassis assembly		Circuit breaker and contactors
Wheel nuts and bolts		Overload
Wheel axles	<b>/</b>	Horn
Hydraulic and electric assemb	lies	Brakes
Hydraulic filter	<b>133</b>	Emergency lowering
Hydraulic oil	./	Indicators, switches, joysticks and selectors
Hydraulic unit motor commutator	T.	Dumping
Driving motor commutator	T.	Limit switch ( PV, radius limit, weighing)
Variable speed calculator		Power system
Common areas		Engine See manufacturer's guide
Pulleys and wear pads		Batteries (terminals, cleanliness, attachment)
Bearings		General points
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>5</b>	According to current legislat  Mandatory inspection the country of use and at lea once a year
		Greasing and lubrication according to the maintenance plan
		Machine integrity, no modifications without HAULOTTE Services® authorisation
Date : Number of hours : Intervenor : HAULOTTE Services® contrac	t number :	Comments
Intervention sheet number : Signature :		



	625 h (hours)	or 1-year service	
Area	Type of intervention	Area	Type of intervention
Mast assembly		Functions and controls	
Chains	<b>/</b>	Platform control box (indicators, etc.)	
Turntable assembly		Ground control box (indicators, etc.)	<b>W</b> _
Slew ring	<u>/</u>	'Enable Switch' pedal	<u>"</u>
Turntable rotation gearbox		Emergency stop buttons (on all control boxes)	
Chassis assembly		Circuit breaker and contactors	
Wheel nuts and bolts		Overload	
Wheel axles	<u>/</u>	Horn	
lydraulic and electric assem	blies	Brakes	
Hydraulic filter	₽X <b>-</b>	Emergency lowering	<b>U</b> _
Hydraulic oil	.*	Indicators, switches, joysticks and selectors	<b>U</b> _
Common areas		Dumping	<b>U</b> _
Pulleys and wear pads		Limit switch ( PV, radius limit, weighing)	
Bearings		General points	
Cylinders (welds, leakproofness, external leak, excessive distortion)	4	Mandatory inspection	According to current legislation i the country of use and at least once a year
Power system		Greasing and lubrication according to the maintenance plan	<b>/</b>
Engine	See manufacturer's guide		
Date : Number of hours : ntervenor : HAULOTTE Services® contra ntervention sheet number :	ct number :	Comments	
Signature :			



Area	750 h (hours) Type of intervention	or 1-yea	ar service Area	Type of intervention
Mast assembly	71	Funct	tions and controls	71
Chains	<b>~</b>		Platform control box (indicators, etc.)	<b>W</b> _
Turntable assembly			Ground control box (indicators, etc.)	<b>W</b> _
Slew ring			'Enable Switch' pedal	<b>W</b> _
Turntable rotation gearbox	<b>"</b>		Emergency stop buttons (on all control boxes)	<b>U</b> _
Chassis assembly			Circuit breaker and contactors	<b>W</b>
Wheel nuts and bolts			Overload	<b>U</b> _
Wheel axles	<u>~</u>		Horn	<b>W</b> _
Hydraulic and electric assem	blies		Brakes	<b>W</b> _
Hydraulic filter	527-		Emergency lowering	<b>W</b> _
Hydraulic oil	*		Indicators, switches, joysticks and selectors	<b>W</b>
Hydraulic unit motor commutator	Sar.		Dumping	<b>W</b> _
Driving motor commutator			Limit switch ( PV, radius limit, weighing)	<b>W</b> _
Variable speed calculator	St.	Gene	ral points	
Common areas			Mandatory inspection	According to current legislation in the country of use and at least once a year
Pulleys and wear pads			Greasing and lubrication according to the maintenance plan	<u>~</u>
Bearings			Machine integrity, no modifications without HAULOTTE Services® authorisation	
Cylinders (welds, leakproofness, external leak, excessive distortion)				
Power system				
Engine	See manufacturer's guide			
Batteries (terminals, cleanliness, attachment)	<b>U</b> _			
Date:				
Number of hours :				
Intervenor : HAULOTTE Services® contra	ct number :	Comr	nents	
Intervention sheet number :	or namber.			
Signature :				
9				



	975 h (hours) (	or 1-year service	
Area	Type of intervention	Area	Type of intervention
Mast assembly		Functions and controls	, ,
Chains	<b>/</b>	Platform control box (indicetc.)	cators,
Furntable assembly		Ground control box (indica	ators,
Slew ring	<u>~</u>	'Enable Switch' pedal	<b>4</b> _
Turntable rotation gearbox		Emergency stop buttons (control boxes)	on all
Chassis assembly		Circuit breaker and contac	etors
Wheel nuts and bolts		Overload	<b>4</b> _
Wheel axles	~	Horn	<b>Y</b> _
Hydraulic and electric assem	blies	Brakes	<b>Y</b> _
Hydraulic filter	525	Emergency lowering	<b>U</b> _
Hydraulic oil	./	Indicators, switches, joyst and selectors	icks
Common areas		Dumping	<b>U</b> _
Pulleys and wear pads		Limit switch ( PV, radius li weighing)	mit,
Bearings		General points	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _	Mandatory inspection	According to current legislation i the country of use and at least once a year
Power system		Greasing and lubrication according to the maintena plan	
Engine	See manufacturer's guide		
Date:			
Number of hours : ntervenor :			
		Comments	
HAULOTTE Services® contra	ct number :		
ntervention sheet number :			
Signature :			



	1000 h (hours	s) or 1-year	r service	
Area	Type of intervention	Area Type of interventi		
Mast assembly		Functio	ons and controls	
Chains	<u>~</u>		latform control box (indicators, tc.)	<b>U</b> _
Turntable assembly			round control box (indicators, tc.)	<b>W</b> _
Slew ring		'E	Enable Switch' pedal	<b>U</b> _
Turntable rotation gearbox			mergency stop buttons (on all ontrol boxes)	<b>W</b> _
Chassis assembly		c	ircuit breaker and contactors	<b>U</b> _
Wheel nuts and bolts		o	verload	<b>U</b> _
Wheel axles	<b>~</b>	Н	orn	<b>W</b> _
Hydraulic and electric assem	blies	В	rakes	<b>W</b> _
Hydraulic filter	E2.	E	mergency lowering	<b>W</b> _
Hydraulic oil	./°		ndicators, switches, joysticks nd selectors	<b>W</b>
Hydraulic unit motor commutator		D	umping	<b>U</b> _
Driving motor commutator			imit switch ( PV, radius limit, eighing)	<b>U</b> _
Variable speed calculator	- T-	Genera	Il points	
Common areas		М	landatory inspection	According to current legislation in the country of use and at least once a year
Pulleys and wear pads		ac	reasing and lubrication ccording to the maintenance lan	<u>~</u>
Bearings		m	lachine integrity, no nodifications without HAULOTTE ervices® authorisation	
Cylinders (welds, leakproofness, external leak, excessive distortion)				
Power system				
Engine	See manufacturer's guide			
Batteries (terminals, cleanliness, attachment)	<b>W</b> _			
Date :				
Number of hours :				
Intervenor :		Comme	ante	
HAULOTTE Services® contra	ct number :	Committee	ziilə	
Intervention sheet number :				
Signature :				



1125 h (hours) or 1-year service			
Area	Type of intervention	Area	Type of intervention
Mast assembly		Functions and controls	
Chains	r <u>a</u>	Platform control box (indica etc.)	ators,
Turntable assembly		Ground control box (indicat etc.)	tors,
Slew ring	<b>/</b>	'Enable Switch' pedal	<b>U</b> _
Turntable rotation gearbox	<b>W</b>	Emergency stop buttons (or control boxes)	n all
Chassis assembly		Circuit breaker and contact	ors
Wheel nuts and bolts		Overload	<b>U</b> _
Wheel axles	<b>~</b>	Horn	<b>W</b> _
Hydraulic and electric assemblies		Brakes	<b>U</b> _
Hydraulic filter	<b>577</b>	Emergency lowering	<b>Y</b> _
Hydraulic oil	.*	Indicators, switches, joystic and selectors	cks
Common areas		Dumping	<b>U</b> _
Pulleys and wear pads		Limit switch ( PV, radius lim weighing)	nit,
Bearings		General points	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _	Mandatory inspection	According to current legislation in the country of use and at least once a year
Power system		Greasing and lubrication according to the maintenan plan	
Engine Doto	See manufacturer's guide	<del>                                     </del>	
Date : Number of hours : Intervenor : HAULOTTE Services® contract number :		Comments	
Intervention sheet number : Signature :			



Area	1250 h (hours Type of intervention	s) or 1-yea	ar service Area	Type of intervention
Mast assembly	Type of intervention	Eunct	ions and controls	Type of intervention
wast assembly			I	
Chains	<b>-</b>		Platform control box (indicators, etc.)	<b>U</b> _
Turntable assembly			Ground control box (indicators, etc.)	<b>W_</b>
Slew ring			'Enable Switch' pedal	4
Turntable rotation gearbox			Emergency stop buttons (on all control boxes)	4
Chassis assembly			Circuit breaker and contactors	<b>U</b> _
Wheel nuts and bolts			Overload	<b>U</b> _
Wheel axles	<u>~</u>		Horn	<b>W</b> _
Hydraulic and electric assem	blies		Brakes	<b>Y</b> _
Hydraulic filter	E2.		Emergency lowering	<b>Y</b> _
Hydraulic oil	./		Indicators, switches, joysticks and selectors	<b>W</b> _
Hydraulic unit motor commutator			Dumping	<b>Y</b> _
Driving motor commutator			Limit switch ( PV, radius limit, weighing)	<b>W</b> _
Variable speed calculator		Gener	al points	
Common areas	_		Mandatory inspection	According to current legislation in the country of use and at least once a year
Pulleys and wear pads			Greasing and lubrication according to the maintenance plan	<u>~</u>
Bearings			Machine integrity, no modifications without HAULOTTE Services® authorisation	
Cylinders (welds, leakproofness, external leak, excessive distortion)				
Power system				
Engine	See manufacturer's guide			
Batteries (terminals, cleanliness, attachment)	<b>Y</b> _			
Date :				
Number of hours :				
Intervenor :		Comm	nente	
HAULOTTE Services® contra	ct number :	Comm	101119	
Intervention sheet number :				
Signature :				



1375 h (hours) or 1-year service				
Area	Type of intervention	 	Area	Type of intervention
Mast assembly	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Functi	ions and controls	, , , , , , , , , , , , , , , , , , ,
Chains	<b>7</b>		Platform control box (indicators, etc.)	<b>W</b> _
Turntable assembly			Ground control box (indicators, etc.)	<b>W</b> _
Slew ring	<b>~</b>		'Enable Switch' pedal	<b>W</b> _
Turntable rotation gearbox	<b>y</b>		Emergency stop buttons (on all control boxes)	<b>U</b> _
Chassis assembly			Circuit breaker and contactors	<b>U</b> _
Wheel nuts and bolts			Overload	<b>4</b>
Wheel axles	<b>~</b>		Horn	4
Hydraulic and electric assemb	olies		Brakes	4
Hydraulic filter	527		Emergency lowering	4
Hydraulic oil	.5		Indicators, switches, joysticks and selectors	<b>U</b> _
Common areas			Dumping	<b>W_</b>
Pulleys and wear pads			Limit switch ( PV, radius limit, weighing)	<b>W</b> _
Bearings		Gener	al points	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _		Mandatory inspection	According to current legislation in the country of use and at least once a year
Power system			Greasing and lubrication according to the maintenance plan	<b>7</b>
	See manufacturer's guide			
Date:				
Number of hours :				
ntervenor:		Comm	nents	
HAULOTTE Services® contrac	et number :			
Intervention sheet number :				
Signature :				



	1500 h (hours)	or 1-yea	r service	
Area	Type of intervention	Eunoti	Area ons and controls	Type of intervention
Mast assembly		runcu	ons and controls	I
Chains	<u></u>		Platform control box (indicators, etc.)	<b>U</b>
Cables and tank bands	E22.		Ground control box (indicators, etc.)	<b>W</b>
Turntable assembly		'1	Enable Switch' pedal	<b>W</b>
Slew ring			Emergency stop buttons (on all control boxes)	<b>Y</b> _
Turntable rotation gearbox		C	Circuit breaker and contactors	<b>U</b>
Chassis assembly			Overload	<b>W</b>
Wheel nuts and bolts		ŀ	Horn	<b>4</b> /-
Wheel axles	<b>/</b> =	E	Brakes	<b>Y</b> _
Hydraulic and electric assemb	lies	E	Emergency lowering	<b>4</b> /
Hydraulic tank, cap and breather			ndicators, switches, joysticks and selectors	<b>W</b> _
Hydraulic filter	E27.		Dumping	<b>W</b> _
Hydraulic oil	· <b>/</b>		Limit switch ( PV, radius limit, weighing)	<b>W</b> _
Hydraulic unit motor commutator	JAT.	Power	system	
Driving motor commutator	JAT.	E	Engine	See manufacturer's guide
Variable speed calculator	JAT.	a	Batteries (terminals, cleanliness, attachment)	<b>W</b> _
Common areas		Genera	al points	
Pins, rings and pin stop	ST.		Mandatory inspection	According to current legislation in the country of use and at least once a year
Pulleys and wear pads		a	Greasing and lubrication according to the maintenance plan	<u>~</u>
Bearings		r	Machine integrity, no nodifications without HAULOTTE Services® authorisation	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>S</b>			
Date:				1
Number of hours :				
Intervenor : HAULOTTE Services® contract	t number :	Comm	ents	
Intervention sheet number :	t nulliper .			
Signature :				
		-		



	1625 h (hours)	or 1-voor sorvi	20	
Area	Type of intervention		Area	Type of intervention
Mast assembly		Functions an	d controls	
Chains	<b>~</b>	Platform o	ontrol box (indicators,	<b>U</b> _
Turntable assembly		Ground co etc.)	ontrol box (indicators,	
Slew ring	<u>~</u>	'Enable Sv	witch' pedal	<b>U</b> _
Turntable rotation gearbox		Emergenc control bo	y stop buttons (on all exes)	
Chassis assembly		Circuit bre	eaker and contactors	
Wheel nuts and bolts		Overload		<b>U</b> _
Wheel axles	<u>~</u>	Horn		
lydraulic and electric assem	blies	Brakes		
Hydraulic filter	527*	Emergeno	y lowering	<b>U</b> _
Hydraulic oil	1	Indicators and select	, switches, joysticks tors	
Common areas		Dumping		
Pulleys and wear pads		Limit swite weighing)	ch ( PV, radius limit,	
Bearings		General poin	ts	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _	Mandatory	y inspection	According to current legislation i the country of use and at least once a year
Power system			and lubrication to the maintenance	<b>/</b>
Engine	See manufacturer's guide			
Date:				
Number of hours : Intervenor :				
		Comments		
HAULOTTE Services® contra	ct number :			
ntervention sheet number :				
Signature :				



	1750 h (hours)	or 1-year service	
Area	Type of intervention	Area	Type of intervention
Mast assembly		Functions and controls	
Chains	<b>4</b>	Platform control box (indicators, etc.)	<b>W</b> _
Turntable assembly		Ground control box (indicators, etc.)	<b>W</b> _
Slew ring		'Enable Switch' pedal	<b>W</b> _
Turntable rotation gearbox		Emergency stop buttons (on all control boxes)	<b>W</b> _
Chassis assembly		Circuit breaker and contactors	
Wheel nuts and bolts		Overload	<b>W</b> _
Wheel axles	<b>4</b>	Horn	<b>W</b> _
Hydraulic and electric assemb	lies	Brakes	<b>W</b> _
Hydraulic filter	52	Emergency lowering	
Hydraulic oil	1	Indicators, switches, joysticks and selectors	
Hydraulic unit motor commutator		Dumping	
Driving motor commutator		Limit switch ( PV, radius limit, weighing)	<b>W</b> _
Variable speed calculator		Power system	
Common areas		Engine	See manufacturer's guide
Pulleys and wear pads		Batteries (terminals, cleanliness, attachment)	<b>W</b> _
Bearings		General points	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>S</b>	Mandatory inspection	According to current legislation in the country of use and at least once a year
		Greasing and lubrication according to the maintenance plan	<b>/</b>
		Machine integrity, no modifications without HAULOTTI Services® authorisation	
Date : Number of hours : Intervenor : HAULOTTE Services® contrac Intervention sheet number : Signature :	t number :	Comments	



	1875 h (hours)	or 1-vear s	ervice	
Area	Type of intervention		Area	Type of intervention
Mast assembly		Function	s and controls	
Chains	<b>~</b>	Plati etc.)	form control box (indicators,	<b>Y</b> _
Turntable assembly		Grou etc.)	und control box (indicators,	<b>U</b> _
Slew ring	<b>~</b>	'Ena	ble Switch' pedal	<b>U</b> _
Turntable rotation gearbox			rgency stop buttons (on all rol boxes)	<b>Y</b> _
Chassis assembly		Circ	uit breaker and contactors	<b>W</b> _
Wheel nuts and bolts		Ove	rload	<b>W</b> _
Wheel axles	<u>~</u>	Horr	1	<b>Y</b> _
Hydraulic and electric assemb	olies	Brak	ces	<b>W</b> _
Hydraulic filter	527	Eme	rgency lowering	<b>W</b> _
Hydraulic oil	·/°		cators, switches, joysticks selectors	<b>U</b> _
Common areas		Dum	ping	<b>W</b> _
Pulleys and wear pads			t switch ( PV, radius limit, hing)	<b>U</b> _
Bearings		General p	points	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _	Man	datory inspection	According to current legislation in the country of use and at least once a year
Power system			ising and lubrication ording to the maintenance	<b>7</b>
	See manufacturer's guide			
Date : Number of hours : Intervenor : HAULOTTE Services® contract	ct number :	Commen	ts	
Intervention sheet number : Signature :				



		2000 h (hours)	or 2-ye	ear service	
Į.	Area	Type of intervention		Area	Type of intervention
Mast assemb	ly		Funct	tions and controls	
Chains		<b>/</b>		Platform control box (indicators, etc.)	<b>"</b>
Turntable ass	embly			Ground control box (indicators, etc.)	<b>4</b>
Slew ring				'Enable Switch' pedal	<b>U</b> _
Turntable r	otation gearbox	<b>Y</b>		Emergency stop buttons (on all control boxes)	<b>U</b> _
Chassis asse	mbly			Circuit breaker and contactors	<b>Y</b> _
Wheel nuts	s and bolts			Overload	<b>Y</b> _
Wheel axle	es	<b>~</b>		Horn	<b>W</b>
Hydraulic and	l electric asseml	olies		Brakes	<b>W</b> _
Hydraulic f	iilter	527		Emergency lowering	<b>W</b> _
Hydraulic o	oil			Indicators, switches, joysticks and selectors	<b>Y</b> _
Hydraulic u	unit motor commutator	T		Dumping	<b>Y</b> _
Driving mo	tor commutator	T		Limit switch ( PV, radius limit, weighing)	<b>Y</b> _
Variable sp	eed calculator		Gene	ral points	
Common area	as			Mandatory inspection	According to current legislation in the country of use and at least once a year
Pulleys and	d wear pads			Greasing and lubrication according to the maintenance plan	<b>/</b>
Bearings				Machine integrity, no modifications without HAULOTTE Services® authorisation	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	welds, leakproofness, ak, excessive				
Power system		1			
Engine		See manufacturer's guide			
attachmen	terminals, cleanliness, t)				
Date :					
Number of ho	ours:				
Intervenor:			Comr	ments	
	ervices® contra	ct number :			
	sheet number :				
Signature :					



	2125 b (bours)	or 2-year service	
Area	Type of intervention	Area	Type of intervention
Mast assembly		Functions and contro	
Chains	<b>~</b>	Platform control box (etc.)	indicators,
Furntable assembly		Ground control box (i	ndicators,
Slew ring		'Enable Switch' pedal	<b>U</b> _
Turntable rotation gearbox		Emergency stop butto control boxes)	ons (on all
Chassis assembly		Circuit breaker and co	ontactors
Wheel nuts and bolts		Overload	
Wheel axles		Horn	
lydraulic and electric assem	blies	Brakes	<b>U</b> _
Hydraulic filter	527	Emergency lowering	
Hydraulic oil	1	Indicators, switches, j and selectors	oysticks
Common areas		Dumping	
Pulleys and wear pads		Limit switch ( PV, radi weighing)	ius limit,
Bearings		General points	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _	Mandatory inspection	According to current legislation i the country of use and at least once a year
Power system		Greasing and lubricat according to the main plan	
Engine	See manufacturer's guide		
Date:			
Number of hours : Intervenor :			
		Comments	
HAULOTTE Services® contra	ct number :		
ntervention sheet number :			
Signature :			



	2250 h (hours)	or 2-year service
Area	Type of intervention	Area Type of intervention
Mast assembly		Functions and controls
Chains	<b>~</b>	Platform control box (indicators, etc.)
Turntable assembly		Ground control box (indicators, etc.)
Slew ring		'Enable Switch' pedal
Turntable rotation gearbox		Emergency stop buttons (on all control boxes)
Chassis assembly		Circuit breaker and contactors
Wheel nuts and bolts		Overload
Wheel axles	<b>~</b>	Horn
Hydraulic and electric assemb	olies	Brakes
Hydraulic filter	15.Z*	Emergency lowering
Hydraulic oil	<i>:</i> /°	Indicators, switches, joysticks and selectors
Hydraulic unit motor commutator		Dumping
Driving motor commutator		Limit switch ( PV, radius limit, weighing)
Variable speed calculator		Power system
Common areas		Engine See manufacturer's guide
Pulleys and wear pads		Batteries (terminals, cleanliness, attachment)
Bearings	/ <u>~</u>	General points
Cylinders (welds, leakproofness, external leak, excessive distortion)		According to current legislation the country of use and at least once a year
		Greasing and lubrication according to the maintenance plan
		Machine integrity, no modifications without HAULOTTE Services® authorisation
Date: Number of hours: Intervenor: HAULOTTE Services® contrace Intervention sheet number: Signature:	et number :	Comments



	2375 h (hours)	or 2-vo	ar carvian	
Area	Type of intervention	 	Area	Type of intervention
Mast assembly		Funct	ions and controls	
Chains	<b>~</b>		Platform control box (indicators, etc.)	<b>U</b> _
Turntable assembly			Ground control box (indicators, etc.)	
Slew ring			'Enable Switch' pedal	<b>U</b> _
Turntable rotation gearbox			Emergency stop buttons (on all control boxes)	
Chassis assembly			Circuit breaker and contactors	<b>U</b> _
Wheel nuts and bolts			Overload	<b>U</b> _
Wheel axles			Horn	<b>U</b> _
Hydraulic and electric assemblies			Brakes	
Hydraulic filter	527		Emergency lowering	
Hydraulic oil	1		Indicators, switches, joysticks and selectors	
Common areas			Dumping	
Pulleys and wear pads			Limit switch ( PV, radius limit, weighing)	
Bearings		Gener	ral points	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _		Mandatory inspection	According to current legislation i the country of use and at least once a year
Power system			Greasing and lubrication according to the maintenance plan	<u>/</u>
Engine	See manufacturer's guide			
Date:				
Number of hours : Intervenor :		Comments		
Intervention sheet number :				
Signature :				



		or 2-year service	,	
Area	Type of intervention	Area Functions and controls	Type of intervention	
Mast assembly				
Chains	<b>-</b>	Platform control box (indicators, etc.)	<b>Y</b> _	
Turntable assembly		Ground control box (indicators, etc.)	<b>W</b> _	
Slew ring		'Enable Switch' pedal	<b>W</b>	
Turntable rotation gearbox		Emergency stop buttons (on all control boxes)	4	
Chassis assembly		Circuit breaker and contactors	<b>U</b> _	
Wheel nuts and bolts		Overload	<b>U</b> _	
Wheel axles	<u>~</u>	Horn	4	
Hydraulic and electric assemb	lies	Brakes	<b>W</b>	
Hydraulic filter	522	Emergency lowering	<b>U</b> _	
Hydraulic oil	.:/	Indicators, switches, joysticks and selectors		
Hydraulic unit motor commutator		Dumping		
Driving motor commutator		Limit switch ( PV, radius limit, weighing)	<b>W</b> _	
Variable speed calculator		Power system		
Common areas		Engine	See manufacturer's guide	
Pulleys and wear pads		Batteries (terminals, cleanliness, attachment)	<b>U</b> _	
Bearings		General points		
Cylinders (welds, leakproofness, external leak, excessive distortion)	(A)	Mandatory inspection	According to current legislation in the country of use and at least once a year	
		Greasing and lubrication according to the maintenance plan	<b>7</b>	
		Machine integrity, no modifications without HAULOTTE Services® authorisation	· muni	
Date:				
Number of hours :				
Intervenor : HAULOTTE Services® contrac	t number :	Comments		
Intervention sheet number :	t number :			
Signature :				
oignature.				



	2625 h (houro)	or 2-year service	
Area	Type of intervention	Area	Type of intervention
last assembly		Functions and controls	
Chains	7	Platform control box (indicators, etc.)	<b>W</b> _
urntable assembly		Ground control box (indicators, etc.)	<b>W</b>
Slew ring	<b>/</b>	'Enable Switch' pedal	<b>U</b> _
Turntable rotation gearbox	<b>W</b>	Emergency stop buttons (on all control boxes)	<b>Y</b> _
hassis assembly		Circuit breaker and contactors	<b>Y</b> _
Wheel nuts and bolts		Overload	4
Wheel axles	<b>~</b>	Horn	<b>Y</b> _
ydraulic and electric assem	blies	Brakes	<b>Y</b> _
Hydraulic filter	522	Emergency lowering	<b>Y</b> _
Hydraulic oil	.*	Indicators, switches, joysticks and selectors	<b>Y</b> _
ommon areas		Dumping	<b>Y</b> _
Pulleys and wear pads		Limit switch ( PV, radius limit, weighing)	4
Bearings		General points	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _	Mandatory inspection	According to current legislation i the country of use and at least once a year
ower system		Greasing and lubrication according to the maintenance plan	
Engine	See manufacturer's guide		
Date: lumber of hours: ntervenor: IAULOTTE Services® contra ntervention sheet number: Signature:	ct number :	Comments	



	2750 h (hours)	or 2-year service
Area	Type of intervention	Area Type of intervention
Mast assembly		Functions and controls
Chains	<b>~</b>	Platform control box (indicators, etc.)
Turntable assembly		Ground control box (indicators, etc.)
Slew ring		'Enable Switch' pedal
Turntable rotation gearbox		Emergency stop buttons (on all control boxes)
Chassis assembly		Circuit breaker and contactors
Wheel nuts and bolts		Overload
Wheel axles	<b>~</b>	Horn
Hydraulic and electric assemb	olies	Brakes
Hydraulic filter	152E	Emergency lowering
Hydraulic oil	*	Indicators, switches, joysticks and selectors
Hydraulic unit motor commutator		Dumping
Driving motor commutator		Limit switch ( PV, radius limit, weighing)
Variable speed calculator		Power system
Common areas		Engine See manufacturer's guide
Pulleys and wear pads		Batteries (terminals, cleanliness, attachment)
Bearings		General points
Cylinders (welds, leakproofness, external leak, excessive distortion)		According to current legislation the country of use and at least once a year
		Greasing and lubrication according to the maintenance plan
		Machine integrity, no modifications without HAULOTTE Services® authorisation
Date: Number of hours: Intervenor: HAULOTTE Services® contract Intervention sheet number: Signature:	ct number :	Comments



	2875 h (hours)	or 2-voor	corvice	
Area	Type of intervention	Z-year	Area	Type of intervention
Mast assembly		Function	ns and controls	
Chains	<b>/</b>	Platetc.	tform control box (indicators, .)	<b>U</b> _
Turntable assembly		Gro etc.	ound control box (indicators, .)	4
Slew ring		'En	able Switch' pedal	<b>Y</b> _
Turntable rotation gearbox			ergency stop buttons (on all ntrol boxes)	<b>U</b> _
Chassis assembly		Circ	cuit breaker and contactors	<b>U</b> _
Wheel nuts and bolts		Ove	erload	<b>U</b> _
Wheel axles		Hor	rn	<b>Y</b> _
Hydraulic and electric assemblies		Bra	ikes	<b>Y</b> _
Hydraulic filter	233	Em	ergency lowering	<b>U</b> _
Hydraulic oil	./		icators, switches, joysticks d selectors	<b>U</b> _
Common areas		Dur	mping	<b>U</b> _
Pulleys and wear pads			nit switch ( PV, radius limit, ighing)	<b>U</b> _
Bearings		General	points	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _	Mai	ndatory inspection	According to current legislation in the country of use and at least once a year
Power system			easing and lubrication cording to the maintenance n	<u>~</u>
Engine	See manufacturer's guide			
Date:				
Number of hours :				
Intervenor:		Comments		
HAULOTTE Services® contra	ct number :	Comments		
Intervention sheet number :				
Signature :				



Mast as	Area ssembly	Type of intervention	Funct	Area	Type of intervention
				ions and controls	
Ch	nains		-		
				Platform control box (indicators, etc.)	<b>Y</b> _
Ca	ables and tank bands	57.		Ground control box (indicators, etc.)	<b>W</b> _
Turntab	le assembly			'Enable Switch' pedal	<b>W</b> _
Sie	ew ring			Emergency stop buttons (on all control boxes)	<b>Y</b> _
Tu	rntable rotation gearbox			Circuit breaker and contactors	<b>W</b> _
Chassis	s assembly			Overload	<b>Y</b> _
Wi	heel nuts and bolts			Horn	<b>Y</b> _
Wi	heel axles	<b>/</b>		Brakes	<b>Y</b> _
Hydraul	lic and electric assemb	lies		Emergency lowering	<b>Y</b> _
Ну	/draulic tank, cap and breather			Indicators, switches, joysticks and selectors	<b>Y</b> _
Ну	/draulic filter	<b>535</b>		Dumping	<b>Y</b> _
Ну	/draulic oil	19		Limit switch ( PV, radius limit, weighing)	<b>Y</b> _
Ну	/draulic unit motor commutator	T.	Powe	r system	
Dr	iving motor commutator	T.		Engine	See manufacturer's guide
Va	riable speed calculator	T.		Batteries (terminals, cleanliness, attachment)	<b>U</b> _
Commo	n areas		Gene	ral points	
Pir	ns, rings and pin stop	T.		Mandatory inspection	According to current legislation in the country of use and at least once a year
Pu	illeys and wear pads			Greasing and lubrication according to the maintenance plan	<u>~</u>
Ве	earings			Machine integrity, no modifications without HAULOTTE Services® authorisation	, mux
ext	vlinders (welds, leakproofness, ternal leak, excessive stortion)				
Date :				I	I
1	r of hours :				
Interver			Comments		
1	TTE Services® contrac	t number :			
	ntion sheet number :				
Signatu	ire:				



		) or 3-year service	
Area	Type of intervention	Area	Type of intervention
Mast assembly		Functions and controls	
Chains	<b>-</b>	Platform control box (indicators etc.)	s, <b>"</b>
Turntable assembly		Ground control box (indicators, etc.)	<b>U</b> _
Slew ring		'Enable Switch' pedal	<b>"</b> _
Turntable rotation gearbox		Emergency stop buttons (on all control boxes)	<b>"</b>
Chassis assembly		Circuit breaker and contactors	<b>"</b>
Wheel nuts and bolts		Overload	4
Wheel axles	<b>~</b>	Horn	<b>W</b>
Hydraulic and electric assemi	olies	Brakes	<b>W</b>
Hydraulic filter	E27.	Emergency lowering	<b>4</b> /-
Hydraulic oil	.*	Indicators, switches, joysticks and selectors	<b>W</b>
Common areas		Dumping	<b>4</b> /-
Pulleys and wear pads	<b>1</b>	Limit switch ( PV, radius limit, weighing)	<b>W</b> _
Bearings		General points	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _	Mandatory inspection	According to current legislation in the country of use and at least once a year
Power system		Greasing and lubrication according to the maintenance plan	<b>-</b>
Engine Doto	See manufacturer's guide		
Date : Number of hours : Intervenor : HAULOTTE Services® contraction Intervention sheet number :	ct number :	Comments	
Intervention sheet number : Signature :			



	3250 h (ho <u>urs)</u>	or 3-year service	
Area	Type of intervention	Area	Type of intervention
Mast assembly		Functions and controls	
Chains	<b>~</b>	Platform control box (indicators, etc.)	<b>U</b> _
Turntable assembly		Ground control box (indicators, etc.)	4
Slew ring		'Enable Switch' pedal	<b>U</b> _
Turntable rotation gearbox		Emergency stop buttons (on all control boxes)	<b>W</b> _
Chassis assembly		Circuit breaker and contactors	
Wheel nuts and bolts		Overload	<b>W</b>
Wheel axles	<b>4</b>	Horn	<b>W</b> _
Hydraulic and electric assemb	lies	Brakes	<b>W</b> _
Hydraulic filter	527	Emergency lowering	<b>W</b> _
Hydraulic oil	<i>:</i> / <sup>6</sup>	Indicators, switches, joysticks and selectors	
Hydraulic unit motor commutator		Dumping	<b>W</b> _
Driving motor commutator		Limit switch ( PV, radius limit, weighing)	<b>W</b> _
Variable speed calculator		Power system	
Common areas		Engine	See manufacturer's guide
Pulleys and wear pads		Batteries (terminals, cleanliness, attachment)	<b>W</b> _
Bearings		General points	
Cylinders (welds, leakproofness, external leak, excessive distortion)		Mandatory inspection	According to current legislation in the country of use and at least once a year
		Greasing and lubrication according to the maintenance plan	<b>~</b>
		Machine integrity, no modifications without HAULOTTI Services® authorisation	
Date : Number of hours : Intervenor : HAULOTTE Services® contrac Intervention sheet number : Signature :	t number :	Comments	



	3375 h (hours)	or 2 voor oo	arvioo.	
Area	Type of intervention	or 3-year se	Area	Type of intervention
Mast assembly		Functions	and controls	, ,,
Chains	<b>1</b>	Platfo etc.)	rm control box (indicators,	<b>U</b> _
Furntable assembly		Groun etc.)	nd control box (indicators,	<b>U</b> _
Slew ring		'Enab	le Switch' pedal	<b>U</b> _
Turntable rotation gearbox			gency stop buttons (on all bl boxes)	<b>W</b> _
Chassis assembly		Circui	t breaker and contactors	<b>U</b> _
Wheel nuts and bolts		Overlo	pad	
Wheel axles		Horn		
Hydraulic and electric assemblies		Brake	s	<b>U</b> _
Hydraulic filter	527	Emerç	gency lowering	<b>W</b> _
Hydraulic oil	1		itors, switches, joysticks electors	
Common areas		Dump	ing	<b>U</b> _
Pulleys and wear pads		Limit : weigh	switch ( PV, radius limit, ing)	<b>W</b> _
Bearings		General po	oints	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _	Manda	atory inspection	According to current legislation in the country of use and at least once a year
Power system		I I	ing and lubrication ding to the maintenance	<u>/</u>
Engine	See manufacturer's guide			
Date:				
Number of hours : Intervenor :		Comments		
Intervention sheet number :				
Signature :				



	3500 h (hours)	or 3-year service
Area	Type of intervention	Area Type of intervention
Mast assembly		Functions and controls
Chains	<b>/</b>	Platform control box (indicators, etc.)
Turntable assembly		Ground control box (indicators, etc.)
Slew ring		'Enable Switch' pedal
Turntable rotation gearbox		Emergency stop buttons (on all control boxes)
Chassis assembly		Circuit breaker and contactors
Wheel nuts and bolts		Overload
Wheel axles	<b>~</b>	Horn
Hydraulic and electric assemb	olies	Brakes
Hydraulic filter	152Z*	Emergency lowering
Hydraulic oil	.**	Indicators, switches, joysticks and selectors
Hydraulic unit motor commutator		Dumping
Driving motor commutator		Limit switch ( PV, radius limit, weighing)
Variable speed calculator		Power system
Common areas		Engine See manufacturer's guide
Pulleys and wear pads		Batteries (terminals, cleanliness, attachment)
Bearings		General points
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>S</b>	According to current legislation the country of use and at least once a year
		Greasing and lubrication according to the maintenance plan
		Machine integrity, no modifications without HAULOTTE Services® authorisation
Date: Number of hours: Intervenor: HAULOTTE Services® contract Intervention sheet number: Signature:	et number :	Comments



	2625 b (bours)	or 3-year service		
Area	Type of intervention	or 3-year service	ea	Type of intervention
Mast assembly		Functions and	controls	, ,,
Chains	<b>~</b>	Platform contetc.)	trol box (indicators,	<b>W_</b>
Furntable assembly		Ground contretc.)	rol box (indicators,	<b>U</b> _
Slew ring	<u>~</u>	'Enable Switc	h' pedal	<b>U</b> _
Turntable rotation gearbox		Emergency s control boxes	top buttons (on all s)	<b>U</b> _
Chassis assembly		Circuit break	er and contactors	<b>U</b> _
Wheel nuts and bolts		Overload		<b>U</b> _
Wheel axles	<u>~</u>	Horn		<b>U</b> _
Hydraulic and electric assem	blies	Brakes		
Hydraulic filter	527	Emergency lo	owering	<b>U</b> _
Hydraulic oil	1	Indicators, sv and selectors	vitches, joysticks s	<b>U</b> _
Common areas		Dumping		<b>Y</b> _
Pulleys and wear pads		Limit switch ( weighing)	PV, radius limit,	
Bearings		General points		
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _	Mandatory in	spection	According to current legislation in the country of use and at least once a year
Power system		Greasing and according to plan	l lubrication the maintenance	<u>,                                    </u>
Engine	See manufacturer's guide			
Date:				
Number of hours :				
ntervenor:		Comments		
HAULOTTE Services® contra	ct number :			
ntervention sheet number :				
Signature :				



Area	3750 h (hours) o	r 3-year s	ervice Area	Type of intervention
Mast assembly	Type of intervention	Functions	s and controls	Type or intervention
Chains	7	Platfo etc.)	orm control box (indicators,	<b>W</b>
Turntable assembly		Grou etc.)	nd control box (indicators,	<b>W</b> _
Slew ring		'Enat	ble Switch' pedal	<b>u</b> _
Turntable rotation gearbox	<b>U</b>		rgency stop buttons (on all rol boxes)	<b>u</b> _
Chassis assembly		Circu	uit breaker and contactors	<b>W</b> _
Wheel nuts and bolts		Over	load	<b>W</b> _
Wheel axles	<u>~</u>	Horn	ı	<b>Y</b> _
Hydraulic and electric assemb	olies	Brak	es	<b>U</b> _
Hydraulic filter	527	Emer	rgency lowering	<b>4</b> _
Hydraulic oil	**		ators, switches, joysticks selectors	<b>4</b> _
Hydraulic unit motor commutator		Dum	ping	<b>W</b>
Driving motor commutator			switch ( PV, radius limit, hing)	<b>W</b>
Variable speed calculator		Power sys	stem	
Common areas		Engi	ne	See manufacturer's guide
Pulleys and wear pads			eries (terminals, cleanliness, hment)	<b>U</b> _
Bearings	imma /imma	General p	ooints	
Cylinders (welds, leakproofness, external leak, excessive distortion)		Mano	datory inspection	According to current legislation in the country of use and at least once a year
			sing and lubrication rding to the maintenance	<b>-</b>
		modi	nine integrity, no ifications without HAULOTTE ices® authorisation	
Date: Number of hours: Intervenor: HAULOTTE Services® contract Intervention sheet number: Signature:	ct number :	Comment	ts	



	3875 h (hours)	or 2 vo	or corvice	
Area	Type of intervention	 	Area	Type of intervention
Mast assembly	, ,,	Funct	ions and controls	, ,,
Chains	<b>/</b>		Platform control box (indicators, etc.)	<b>U</b> _
Turntable assembly			Ground control box (indicators, etc.)	<b>U</b> _
Slew ring			'Enable Switch' pedal	<b>W</b> _
Turntable rotation gearbox			Emergency stop buttons (on all control boxes)	<b>Y</b> _
Chassis assembly			Circuit breaker and contactors	<b>U</b> _
Wheel nuts and bolts			Overload	<b>U</b> _
Wheel axles			Horn	<b>U</b> _
Hydraulic and electric assem	blies		Brakes	<b>U</b> _
Hydraulic filter	525		Emergency lowering	<b>U</b> _
Hydraulic oil	./		Indicators, switches, joysticks and selectors	<b>U</b> _
Common areas			Dumping	<b>U</b> _
Pulleys and wear pads			Limit switch ( PV, radius limit, weighing)	<b>U</b> _
Bearings		Gener	ral points	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _		Mandatory inspection	According to current legislation in the country of use and at least once a year
Power system			Greasing and lubrication according to the maintenance plan	<b>7</b>
Engine	See manufacturer's guide			
Date:				
Number of hours :				
ntervenor:		Comments		
HAULOTTE Services® contra	ct number :		<del>-</del>	
Intervention sheet number :				
Signature :				



	4000_h (hours)	or 4-year service	
Area	Type of intervention	Area	Type of intervention
Mast assembly	71	Functions and controls	71
Chains		Platform control box (indicators, etc.)	<b>W</b> _
Turntable assembly		Ground control box (indicators, etc.)	<b>U</b> _
Slew ring		'Enable Switch' pedal	
Turntable rotation gearbox		Emergency stop buttons (on all control boxes)	
Chassis assembly		Circuit breaker and contactors	
Wheel nuts and bolts		Overload	
Wheel axles	<b>~</b>	Horn	<b>U</b> _
Hydraulic and electric assem	blies	Brakes	<b>U</b> _
Hydraulic filter	<b>57</b>	Emergency lowering	<b>U</b> _
Hydraulic oil		Indicators, switches, joysticks and selectors	4
Hydraulic unit motor commutator	-AT-	Dumping	4
Driving motor commutator	T.	Limit switch ( PV, radius limit, weighing)	4
Variable speed calculator		Power system	
Common areas		Engine	See manufacturer's guide
Pulleys and wear pads		Batteries (terminals, cleanliness attachment)	
Bearings		General points	
Cylinders (welds, leakproofness, external leak, excessive distortion)		Mandatory inspection	According to current legislation in the country of use and at least once a year
		Greasing and lubrication according to the maintenance plan	
		Machine integrity, no modifications without HAULOTT Services® authorisation	E
Date: Number of hours: Intervenor: HAULOTTE Services® contra Intervention sheet number: Signature:	ct number :	Comments	



	/125 b (bours)	or 4-year service		
Area	Type of intervention	Area	Type of intervention	
Mast assembly		Functions and controls		
Chains	<b>/</b>	Platform control box (indicat etc.)	ors,	
Furntable assembly		Ground control box (indicate etc.)	ors,	
Slew ring		'Enable Switch' pedal	4	
Turntable rotation gearbox		Emergency stop buttons (on control boxes)	all	
Chassis assembly		Circuit breaker and contacto	rs	
Wheel nuts and bolts		Overload	<b>U</b> _	
Wheel axles		Horn	<b>U</b> _	
Hydraulic and electric assem	blies	Brakes	<b>U</b> _	
Hydraulic filter	527	Emergency lowering	<b>W</b> _	
Hydraulic oil	1	Indicators, switches, joystick and selectors	rs U	
Common areas		Dumping	<b>W</b> _	
Pulleys and wear pads		Limit switch ( PV, radius limi weighing)	t,	
Bearings		General points		
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _	Mandatory inspection	According to current legislation in the country of use and at least once a year	
Power system		Greasing and lubrication according to the maintenanc plan	e ~	
Engine	See manufacturer's guide			
Date:				
Number of hours :				
ntervenor:		Comments		
HAULOTTE Services® contra	ct number :			
ntervention sheet number :				
Signature :				



	4250 h (hours)	or 4-year service	
Area	Type of intervention	Area	Type of intervention
Mast assembly		Functions and controls	
Chains	<b>/</b>	Platform control box (indicators, etc.)	<b>Y</b> _
Turntable assembly		Ground control box (indicators, etc.)	<b>U</b> _
Slew ring		'Enable Switch' pedal	<b>Y</b> _
Turntable rotation gearbox		Emergency stop buttons (on all control boxes)	<b>U</b> _
Chassis assembly		Circuit breaker and contactors	<b>U</b> _
Wheel nuts and bolts		Overload	4
Wheel axles	<b>~</b>	Horn	<b>Y</b> _
		Brakes	<b>Y</b> _
Hydraulic and electric assemb	lies	Emergency lowering	<b>W</b> _
Hydraulic filter	522*	Indicators, switches, joysticks and selectors	<b>W</b> _
Hydraulic oil	1	Dumping	<b>W</b> _
Hydraulic unit motor commutator		Limit switch ( PV, radius limit, weighing)	<b>W</b> _
Driving motor commutator		Power system	
Variable speed calculator		Engine	See manufacturer's guide
Common areas		Batteries (terminals, cleanliness, attachment)	<b>W</b> _
Pulleys and wear pads		General points	
Bearings		Mandatory inspection	According to current legislation in the country of use and at least once a year
Cylinders (welds, leakproofness, external leak, excessive distortion)		Greasing and lubrication according to the maintenance plan	<b>~</b>
		Machine integrity, no modifications without HAULOTTE Services® authorisation	
Date : Number of hours : Intervenor : HAULOTTE Services® contrac Intervention sheet number : Signature :	et number :	Comments	



	4375 h (hours)	or Awaar sa	rvico	
Area	Type of intervention	4-year se	Area	Type of intervention
Mast assembly		Functions	and controls	
Chains	<b>/</b>	Platfo etc.)	rm control box (indicators,	<b>W_</b>
Furntable assembly		Groun etc.)	d control box (indicators,	<b>U</b> _
Slew ring	<b>/</b>	'Enabl	le Switch' pedal	<b>U</b> _
Turntable rotation gearbox			gency stop buttons (on all ol boxes)	
Chassis assembly		Circui	t breaker and contactors	
Wheel nuts and bolts		Overlo	oad	4
Wheel axles	<b>/</b>	Horn		
Hydraulic and electric assem	blies	Brake	s	
Hydraulic filter	527	Emerç	gency lowering	
Hydraulic oil	.*		tors, switches, joysticks electors	
Common areas		Dump	ing	
Pulleys and wear pads		Limit s weigh	switch ( PV, radius limit, ing)	
Bearings		General po	oints	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _	Manda	atory inspection	According to current legislation i the country of use and at least once a year
Power system			ing and lubrication ding to the maintenance	<b>/</b>
Engine	See manufacturer's guide			
Date:				
Number of hours :				
ntervenor:		Comments	8	
HAULOTTE Services® contra	ct number :		•	
ntervention sheet number :				
Signature :				



		r 4-year service	
Area Mast assembly	Type of intervention	Area Functions and controls	Type of intervention
Wast assembly		runctions and controls	I
Chains		Platform control box (indicate etc.)	ors,
Cables and tank bands	100 A	Ground control box (indicato etc.)	rs,
Turntable assembly		'Enable Switch' pedal	<b>Y</b> _
Slew ring		Emergency stop buttons (on control boxes)	all
Turntable rotation gearbox	<b>"</b>	Circuit breaker and contactor	rs
Chassis assembly		Overload	4
Wheel nuts and bolts		Horn	4
Wheel axles	<b>/</b>	Brakes	4
Hydraulic and electric assemb	olies	Emergency lowering	<b>Y</b> _
Hydraulic tank, cap and breather		Indicators, switches, joystick and selectors	s 🖳
Hydraulic filter	<b>57</b>	Dumping	4
Hydraulic oil	.*	Limit switch ( PV, radius limit weighing)	t,
Hydraulic unit motor commutator		Power system	
Driving motor commutator		Engine	See manufacturer's guide
Variable speed calculator		Batteries (terminals, cleanling attachment)	ess,
Common areas		General points	
Pins, rings and pin stop	S.C.	Mandatory inspection	According to current legislation in the country of use and at least once a year
Pulleys and wear pads		Greasing and lubrication according to the maintenance plan	e
Bearings		Machine integrity, no modifications without HAULO Services® authorisation	DTTE
Cylinders (welds, leakproofness, external leak, excessive distortion)	<u> </u>		
Date : Number of hours : Intervenor : HAULOTTE Services® contract Intervention sheet number : Signature :	t number :	Comments	



	4625 b (bours)	or 4-year service		
Area	Type of intervention	Area	Type of intervention	
Mast assembly		Functions and controls		
Chains	<b>/</b>	Platform control box (indicator etc.)	rs,	
Furntable assembly		Ground control box (indicators etc.)	s, <b>"</b>	
Slew ring	<u>~</u>	'Enable Switch' pedal	<b>Y</b> _	
Turntable rotation gearbox		Emergency stop buttons (on a control boxes)		
Chassis assembly		Circuit breaker and contactors		
Wheel nuts and bolts		Overload	<b>U</b> _	
Wheel axles	<u>~</u>	Horn		
Hydraulic and electric assem	blies	Brakes		
Hydraulic filter	527	Emergency lowering		
Hydraulic oil	1	Indicators, switches, joysticks and selectors	<b>Y</b> _	
Common areas		Dumping	<b>Y</b> _	
Pulleys and wear pads		Limit switch ( PV, radius limit, weighing)		
Bearings		General points	·	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _	Mandatory inspection	According to current legislation i the country of use and at least once a year	
Power system		Greasing and lubrication according to the maintenance plan	· ·	
Engine	See manufacturer's guide			
Date:				
Number of hours :				
ntervenor:		Comments		
HAULOTTE Services® contra	ct number :			
ntervention sheet number :				
Signature :				



	4750 h (hours)	or 4-ye	ar service	
Area	Type of intervention		Area	Type of intervention
Mast assembly		Funct	ions and controls	
Chains	<b>~</b>		Platform control box (indicators, etc.)	<b>U</b> _
Turntable assembly	· ·		Ground control box (indicators, etc.)	<b>U</b> _
Slew ring			'Enable Switch' pedal	<b>4</b> /-
Turntable rotation gearbox			Emergency stop buttons (on all control boxes)	<b>Y</b> _
Chassis assembly			Circuit breaker and contactors	<b>Y</b> _
Wheel nuts and bolts			Overload	<b>W</b> _
Wheel axles	<b>4</b>		Horn	<b>U</b> _
Hydraulic and electric assemb	lies		Brakes	<b>W</b> _
Hydraulic filter	522*		Emergency lowering	<b>W</b> _
Hydraulic oil	*		Indicators, switches, joysticks and selectors	<b>W</b> _
Hydraulic unit motor commutator			Dumping	
Driving motor commutator			Limit switch ( PV, radius limit, weighing)	
Variable speed calculator	T.	Gene	ral points	
Common areas			Mandatory inspection	According to current legislation in the country of use and at least once a year
Pulleys and wear pads			Greasing and lubrication according to the maintenance plan	<b>/</b>
Bearings			Machine integrity, no modifications without HAULOTTE Services® authorisation	
Cylinders (welds, leakproofness, external leak, excessive distortion)				
Power system				
	See manufacturer's guide			
Batteries (terminals, cleanliness, attachment)	<b>W</b> _			
Date :				
Number of hours :				
Intervenor:		Comn	nents	
HAULOTTE Services® contrac	t number :	3		
Intervention sheet number :				
Signature :				



	4875 h (hours)	or 4-year service	
Area	Type of intervention	Area	Type of intervention
Mast assembly		Functions and controls	
Chains	<b>1</b>	Platform control box (indicators, etc.)	
Turntable assembly		Ground control box (indicators, etc.)	<b>U</b> _
Slew ring		'Enable Switch' pedal	<b>U</b> _
Turntable rotation gearbox		Emergency stop buttons (on all control boxes)	<b>U</b> _
Chassis assembly		Circuit breaker and contactors	<b>U</b> _
Wheel nuts and bolts		Overload	<b>U</b> _
Wheel axles	<u>~</u>	Horn	<b>U</b> _
Hydraulic and electric assem	blies	Brakes	
Hydraulic filter	522	Emergency lowering	<b>U</b> _
Hydraulic oil	1	Indicators, switches, joysticks and selectors	
Common areas		Dumping	<b>U</b> _
Pulleys and wear pads		Limit switch ( PV, radius limit, weighing)	
Bearings		General points	
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>W</b> _	Mandatory inspection	According to current legislation in the country of use and at least once a year
Power system		Greasing and lubrication according to the maintenance plan	<b>/</b>
Engine	See manufacturer's guide		
Date : Number of hours : Intervenor : HAULOTTE Services® contra	ct number :	Comments	
Intervention sheet number : Signature :			



5000 h (hours) or 5-year service					
Area	Type of intervention	Area	Type of intervention		
Platform assembly		Functions and controls			
Platform	<b>W</b>	Platform control box (indicators,	etc.)		
Mast assembly		Ground control box (indicators, e	tc.)		
Chains		'Enable Switch' pedal			
Turntable assembly		Emergency stop buttons (on all coboxes)	ontrol		
Slew ring		Circuit breaker and contactors	<b>U</b>		
Turntable rotation gearbox		Overload	<b>U</b> _		
Chassis assembly		Horn	<b>W</b> _		
Wheel nuts and bolts		Brakes	<b>W_</b>		
Wheel axles	<b>/</b>	Emergency lowering	4		
Hydraulic and electric assemb	olies	Indicators, switches, joysticks an selectors	d		
Hydraulic filter	E27.	Dumping	4		
Hydraulic oil	.*/	Limit switch ( PV, radius limit, weighing)	4		
Hydraulic unit motor commutator	JA.	Power system			
Driving motor commutator		Engine	See manufacturer's guide		
Variable speed calculator	JAT.	Batteries (terminals, cleanliness, attachment)	4		
Common areas		General points			
Welds		Mandatory inspection	According to current legislation in the country of use and at least once a year		
Hoses and couplings		Greasing and lubrication according the maintenance plan	<b>~</b>		
Pins, rings and pin stop		Machine integrity, no modification without HAULOTTE Services® authorisation	ns .		
Pulleys and wear pads					
Bearings					
Cylinders (welds, leakproofness, external leak, excessive distortion)	<b>E</b>				
Date :					
Number of hours :					
Intervenor:	at number -	Comments			
HAULOTTE Services® contract Intervention sheet number:	a number :				
Signature :					
-3					

### 3 - Maintenance sheets

Each specific procedure is described in the following maintenance instructions.

Before performing any maintenance interventions, place the machine in maintenance configuration.

Report that the machine is under maintenance by tagging the platform and ground control boxes.

Using the machine during maintenance is strictly forbidden.

Return the machine to operating configuration after maintenance has been completed.

**N.B.**-:-For Russia and the Ukraine only: All the fillings, drain and lubrication points (tanks caps, engines) drain plugs, ...) are red.

#### 3.1 - PLACING THE MACHINE IN MAINTENANCE CONFIGURATION

- 1. Place the machine on firm, level ground.
- 2. Stow the machine completely.
- 3. Press in the emergency switch- push buttons to cut off the electricity supply.

#### 3.2 - PLACING IN OPERATING CONFIGURATION

Pull the emergency stop buttons.

#### 3.3 - GENERAL POINTS

#### 3.3.1 - Recommendations on the conditions of maintenance

- Your safety and the safety of the people around are essential. The handling of parts must be carried out using appropriate equipment (Chains, Lifting slings, Lifting anchors, ...).
- Keep the elements of the machine in configuration of maintenance thanks to mechanics devices (Supports, ...).
- Make sure the work area is clean in order to not to pollute the system of the machine.
- Plug the end of any hoses removed, and cap any open ports to prevent contamination during maintenance.

#### 3.3.2 - Mechanical

#### 3.3.2.1 - Bolts and Tightening torques

- Bolts that become damaged and need to be replaced, must be replaced with bolts of identical specification: Type, Length, Diameter, Class.
- Tighten to the torque indicated when reassembling.
- If there are no specific requirements, apply the normalized tightening torques( Section C 3 Maintenance sheets E007).



#### 3.3.2.2 - Pins and bearings

Over and above the normal maintenance schedule, check pins and bearings in the following cases :

- Abnormal noise during the movements of the structure.
- Observance of excessive amounts of foreign material around the bearing extremities during the daily visual inspections.
- · Poor or no maintenance.

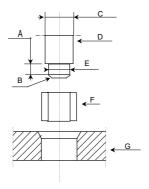
Replace slew ring in the following cases:

- Deformations, fatigue failure of the bearings and/or the pins.
- Presence of excessive clearance between the pin and housing(> at 0,5 mm).
- Presence of deformations, cracks or breakage of the bearings and/or the pins.
- Presence of scoring on the surface of the bearing.
- · If there is excessive friction.

When reassembling bearings and pins ensure that:

- Lightly lubricate the housing into which the bearing is to be installed.
- Insert the bearing using a bearing drift, preferably made out of mild steel.
- The bearing, the bearing drift and the bearing housing must be correctly aligned during the assembly process.
- The recommended values for the bearing drift are given on the diagram below:

#### Recommended Values



Marking	Description
Α	At least 0,5 times the nominal diameter
В	Make a chamfer
С	Nominal diameter of the bearing - 0,2 / - 0,3 mm
D	Bearing drift
E	Diameter of the bearing guide - 0,20 / - 0,25 mm
F	Bearing
G	Housing

After inserting the bearing, lubricate and fit the pin.



#### 3.3.2.3 - Bearings

Action on bearings needs to be taken outside the normal maintenance schedule if the following occurs :

- Abnormal noise during the movements of the structure.
- Machine not use for a period of 6 months or more.
- Environment of storage and specific uses(Strong moisture and salinity in the air).

#### Checking procedure:

- After disassembling the affected pivot, protect the bearing from external pollutants and potential damage.
- Clean the bearing with a suitable solvent.
- Replace the bearing in the following cases :
- Presence of abrasions in the bearing housing and/or inside the bearing itself.
- Presence of abrasion, wear, oxidation, deformations of the balls (or rollers) and the ring rollers.
- Reassembly of the bearing/pivot :
- Clean the bearing housing or pin in order to remove all the foreign objects/abrasions.
- Lightly lubricate the bearing housing and/or pin.
- · Lightly lubricate the outer ring of the bearing.
- When fitting a bearing in a housing ensure that the outer bearing ring is properly supported during installation.
- When fitting a bearing onto a shaft ensure that the inner bearing ring is properly supported during installation.

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#### 3.3.2.4 - Brakes

The brake system is an important component of the safety of the machine. It is essential to carry out functional tests periodically (every 6 month).



For safety reasons, rensure that the following precautions are taken prior to testing commencing:

- Set up barriers to define the test area.
- Place the machine in transport position(Jib in horizontal position accepted)
- Wearing of a safety harness is essential.

#### First test : High speed :

- This test must be completed on flat ground or on ground that has a incline (less than that for which the
  machine is rated. Refer to the manufacturers ID plate on the machine to determine the maximum
  incline).
- Draw a line on the ground to create a stopping reference.
- Drive forward until the maximum speed is reached (Between 3 km/h (1,9 mph) or 6 km/h (3,7 mph) depending on the machine being tested(Check the specification in the Operation Manual)).
- Release the joystick when the front wheels make contact with the stopping line previously drawn.
- When the machine comes to a stop, measure the distance between the middle of the front wheels and the reference mark on the ground :
- If the distance is between 0,2 m(0 ft8 in) and 1,5 m(4 ft11 in), the test validates correct operation.
- Otherwise, contact HAULOTTE Services® to repair the system.

#### Second test : On ramp :

- On non slipping loading ramp (maximum slope 20 %).
- Draw a line on the slope to create a stopping reference.
- · Climb on the ramp at microspeed.
- Release the joystick when the front wheels make contact with the stopping line previously drawn.
- When the machine comes to a stop, measure the distance between the middle of the front wheels and the reference mark on the ground :
- If the distance is lower than 0,5 m(1 ft8 in): the test validates correct operation.
- If the machine goes down again (skids, slips) of a distance higher than 0,5 m(1 ft8 in) : Contact HAULOTTE Services® to repair the system.

# C- Maintenance

#### 3.3.3 - Hydraulics

#### 3.3.3.1 - Oil replacement

Replace oil after each major intervention, and each time an anomaly has been detected.

Take an oil sample each year, check the viscosity, ensure there are no foreign bodies and change if necessary. Systematically change the oil in the hydraulic circuit every 2 years.

- Only use oils that that possess the technical characteristics that correspond to HAULOTTE® recommendations ( Section B 1 Lubrication diagram List of ingredients) or contact HAULOTTE Services®.
- Do not mix two oils with different characteristics : If necessary, drain and clean the whole system.
- Check the cleanliness of the oil filter cartridge (no metal shavings, rubber, plastic, ...): If necessary, drain and clean the whole system.
- Respect the following step during filling :
  - The machine must be completely stowed (For machines fitted with : Stabilisers raised).
  - Fill the tank.
  - 1 : Perform a complete cycle (fully extend and retract) of each cylinder.
  - 2 : Fill the tank if necessary(Never above of the maximum level).
  - Repeat the step (1) and (2) for each cylinder on the machine.

#### 3.3.3.2 - Replacing damaged of hoses

Replace hoses in the following circumstances:

- · Tears in the outer casing.
- Cracks in the outer casing.
- Damage to wire shielding.
- Visible leak in the hose.
- Damage to the outer casing caused by chemical reaction from a foreign source.



- To protect personal safety, observe the following conditions when disassembling or reassembling components:
- Stow and park the machine on level cleared ground(The machine should not be tilted. The boom at horizontal position).
- Stow the machine completely.
- Place barriers around the perimeter of the work area (risk area = maximum height of the machine).
- Locate the faulty hose/s and their end connection points, to ensure proper machine operation after intervention.
- Identify and memorise the hose path of the hose to be replaced.



Use an oil collection pan to avoid polluting the environment.

N.B.-:-Slowly undo the hose end fitting to allow the residual hydraulic pressure to dissipate.





- After hose removal, plug the the hose ends and the ports from which the hose was removed, to avoid polluting the hydraulic system.
- Check the cleanliness of the hoses and hydraulic components (no metal shavings, rubber, plastic, ...).
- If necessary, drain and clean the whole system (tank included).
- Tighten to the torque indicated when reassembling.

#### Tightening torque table

Description	Torque (JIC)	Torque (ORFS)
Hose 1/4" (diameter 6mm)	1,5 daN.m(11,08 lbf.ft)	2,6 daN.m(19,22 lbf.ft)
Hose 3/8" (diameter 10mm)	3,5 daN.m(25,86 lbf.ft)	4,2 daN.m(31,04 lbf.ft)
Hose 1/2" (diameter 12mm)	5 daN.m(36,95 lbf.ft)	5,7 daN.m(42,12 lbf.ft)
Hose 5/8" (diameter 16mm)	8 daN.m(59,12 lbf.ft)	8,5 daN.m(62,82 lbf.ft)
Hose 3/4" (diameter 19)	10 daN.m(73,91 lbf.ft)	12,2 daN.m(90,17 lbf.ft)



- Place the machine in its operating configuration.
- To purge the hydraulic system, operate the function/s on the machine that correspond to the hose/s that has/have been replaced, a few times.
- Check the oil level in the hydraulic oil tank.
- Check the pressure.

#### 3.3.3.3 - Evaluation of leaks on hydraulic cylinders

These measures must be taken each time an anomaly has been detected in the hydraulic cylinder during daily inspection and periodic maintenance checks.

#### **Generic Control:**

- Position a load equal to the rated capacity on the cage (or platform).
- Raise the cage (or the platform) using the ground control box. To activate the cylinder to be tested, proceed as follows:
- Raise Arm hydraulic cylinder: Raise the arm to approximately half full height. The telescopic boom should be fully extended and in the horizontal position. (For machines fitted with).
- Boom lifting cylinder or Jib cylinder: Lift the concerned equipment (boom or jib) of approximately half way. Extend the telescope to its maximum.
- Telescopic cylinder: Raise the boom to its maximum angle and telescope approximately 50 cm.
- · Measure the distance between the floor of the cage (or of the platform) and the ground.
- Leave the machine in this condition for 15 mn (minutes).
- Measure the distance between the floor of the cage (or of the platform) and the ground.
- If the difference between two measurements does not exceed 4 cm : the test validates correct operation.
- If the difference between two measurements exceeds 4 cm, contact HAULOTTE Services® or carry out the additional tests described below.



#### Control cylinder by cylinder:

- Position a load equal to the rated capacity on the cage (or platform).
- Perform the movement of the concern cylinder to half of its stroke.
- Attach a comparator to the cylinder concerned :
- Attach the body of the comparator to the cylinder rod.
- The needle of the comparator must be in contact with the end of the casing of the cylinder.
- The target is to measure the creep of the cylinder rod.
- If the creep of the cylinder rod is higher than the values indicated in the table below, replace the cylinder.

Type of cylinders	Maximum drift authorised due	to an internal leak of the cylinder
Lift cylinder arm or boom (Machine with working heights > 26 m(85 ft4 in))	After 10 mn, creep < 0,2 mm	After 60 mn, creep < 1 mm
Outriggers cylinder, Oscillating axle locking, Lift cylinder arm or boom (Machine with range-limiting system)	After 10 mn, creep < 0,5 mm	After 60 mn, creep < 2,5 mm
Lift cylinder arm or boom, Telescoping, Compensation,	After 10 mn, creep < 1 mm	After 60 mn, creep < 6 mm
Steering cylinder	After 10 mn, creep < 1,5 mm	After 60 mn, creep < 9 mm

#### 3.3.4 - Electric

#### 3.3.4.1 - Replacing damaged cables

- Locate the faulty wire/s and its/their points of connection to ensure continuity of machine operation after the wire is replaced.
- Note the wire path to facilitate reassembly.
- Respect the order (configuration) of origin during the reassembly.





Oil tank





### 1 - You will need



- · Standard tool kit
- Protective goggles
- Gloves



 Place barriers around the perimeter of the work area

## 2 - Preliminary procedure

1. Place the machine in maintenance configuration. 3.3.1-Placing the machine in maintenance configuration

### 3 - Control



Check the oil level when cold (before beginning a new period of work).

The oil level (1) must be between the upper and lower markers.

### 4 - Filling-up

Top up the oil level, if necessary:

- 1. Loosen and remove the tank cap.
- 2. Top up the oil level.
- 3. Refit and tighten the tank cap.



### 5 - Additional operation

1. Place the machine in its operating configuration. 3.3.2-Placing in operating configuration



Oil tank

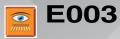






### Hydraulic filter cartridge





### 1 - You will need



- · Standard tool kit
- Protective goggles
- Gloves



Place barriers around the perimeter of the work area

## 2 - Preliminary procedure

1. Place the machine in maintenance configuration. 3.3.1-Placing the machine in maintenance configuration

### 3 - Replacement

• on STAR 8 (STAR 22J) and STAR 10 (STAR 26J) only:



Before dismantling, ensure that the oil circuit is no longer under pressure and that the oil temperature is not too high.

- 1. Loosen and remove plug (1).
- 2. Remove the cartridge.
- 3. Install a new cartridge.
- 4. Refit and tighten plug.



### 4 - Additional operation

1. Place the machine in its operating configuration. 33.3.2-Placing in operating configuration



Hydraulic filter cartridge











### 1 - You will need

- Standard tool kit
- Steel shims
- Protective goggles
- Gloves



Place barriers around the perimeter of the work area

## 2 - Preliminary procedure

1. Place the machine in maintenance configuration. 3.3.1-Placing the machine in maintenance configuration

### 3 - Lubrication



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

The maintenance of the slew ring is essential for the safety of the machine and to guarantee its service life. Whatever the type of system installed on the machine, interior or external teeth, follow the recommendations of greasing as indicated in the program.

- 1. Check for the presence of all the locating bolts.
- Check that the accessible screws are not loosened. If necessary, tighten the screws(Refer to the "tightening torque" table).
- Visually check the presence of the teeth and gear (if possible).
- 4. Check the appearance of the teeth.
- 5. Oil the (internal and external) crown gear teeth.
- 6. Oil the raceways (access to greasers via the holes situated on the turntable, until the oil escapes from the crown lip seal).











## 4 - Tightening

Machine type	Metric	Imperial
HA16PE	21,5 daN.m	(158 lbf.ft)
HA12IP (HA33JE)	9 daN.m	(66 lbf.ft)
HA15IP (HA43JE)	9 daN.m	(66 lbf.ft)
HA12CJ (HA33CJ)	9 daN.m	(66 lbf.ft)
HA12CJ+ (HA33CJ+)	9 daN.m	(66 lbf.ft)
HA120PX (N/A)	9 daN.m	(66 lbf.ft)
HA16X (N/A)	21,5 daN.m	(158 lbf.ft)
HA16SPX (HA46SJRT)	21,5 daN.m	(158 lbf.ft)
HA16PX (HA46JRT)	21,5 daN.m	(158 lbf.ft)
HA18SPX (HA51SJRT)	21,5 daN.m	(158 lbf.ft)
HA18PX (HA51JRT)	21,5 daN.m	(158 lbf.ft)
HA20PX (HA61JRT)	21,5 daN.m	(158 lbf.ft)
HA260PX (HA80JRT)	21,5 daN.m	(158 lbf.ft)
HA32PX (HA100JRT)	21,5 daN.m	(158 lbf.ft)
HA41PX-NT (HA130JRT-NT)	21,5 daN.m	(158 lbf.ft)
H14TX (HB40)	8,7 daN.m	(64 lbf.ft)
H16TPX (HB44J)	8,7 daN.m	(64 lbf.ft)
H21TX (HB62)	21,5 daN.m	(158 lbf.ft)
H23TPX (HB68J)	32 daN.m	(236 lbf.ft)
H25TPX (HB76J)	21,5 daN.m	(158 lbf.ft)
H28TJ+ (HB86TJ+)	21,5 daN.m	(158 lbf.ft)
H43TPX (HB135JRT)	21,5 daN.m	(158 lbf.ft)
STAR 8 (STAR 22J) - Ring on plate	13.5 daN.m	(100 lbf.ft)
STAR 8 (STAR 22J) - Plate on mast foot	19.5 daN.m	(144 lbf.ft)
STAR 8 (STAR 22J) - Ring on chassis	13.5 daN.m	(100 lbf.ft)
STAR 10 (STAR 26J) - Ring on plate	13.5 daN.m	(100 lbf.ft)
STAR 10 (STAR 26J) - Plate on mast foot	19.5 daN.m	(144 lbf.ft)
STAR 10 (STAR 26J) - Ring on chassis	13.5 daN.m	(100 lbf.ft)







### 5 - Criteria of replacement

Check the slewing system every 500 h or each major intervention done on the machine.

#### Step 1: Visual and sound check:

Replace slew ring in the following cases:

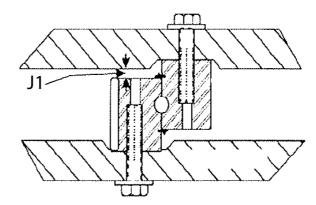
- Abnormal noise during the turntable rotation.
- Movement jolts during the rotation of the turret.
- · Gear teeth missing or damaged.
- Presence of metal particles in the grease.
- · Wear on gear teeth.

#### Step 2: Measurement of the clearance:

Place the machine in the following conditions:

- On flat ground, Set up barriers to define the test area.
- No load in the platform.
- From the ground control box, align the turret at 90 ° to the chassis.
- Lift the boom approximatively 30 ° from the ground.
- · Completely retract the telescope.
- Jib in horizontal position(if fitted).

From the magnetic comparator, note the clearance ( J1) between chassis (or turret) and the slew ring. Clearance between chassis (or turret) and slew ring



After having carried out the measurement:

- Lower the boom at horizontal position.
- Lift the arm (if exists) as its maximum position. Don't extend the telescopic boom.
- The telescopic boom should be fully extended and in the horizontal position..
- Jib in horizontal position(if fitted).

In its new configuration, note the clearance ( J1) between chassis (or turret) and the slew ring as previously.

- If the difference between two measurements does not exceed 2 mm: the test validates correct operation.
- Otherwise, contact HAULOTTE Services® to repair the system.







### 6 - Clearance check



Consult the After-Sales Service HAULOTTE Services®.

## 7 - Additional operation

- 1. Place the machine in its operating configuration. 3.3.2-Placing in operating configuration
- 2. Rotate the slew ring by one complete turn.



A tight spot or grinding sound during rotation or the presence of metal particles escaping from the lip seal are signs of abnormal wear in the raceway (Contact HAULOTTE Services $^{\circ}$ ).







### 1 - You will need

- · Standard tool kit
- Protective goggles
- Gloves
- JackHoist
- Torque spanner



Place barriers around the perimeter of the work area

## 2 - Preliminary procedure

1. Place the machine in maintenance configuration. 3.3.1-Placing the machine in maintenance configuration

### 3 - Criteria of replacement

Replace the hub and the tyres if any of the following conditions exist:

- Presence of cracks, damage, deformations or other faults on the hub
- Damage on the tyre :

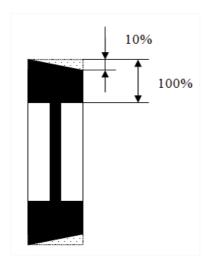
A or hole > 3 cm (2 in) in the rubber side wall on the whole tyre thickness.

Blister or pronounce lump on the external and lateral membrane.

Damaged wheel stud.

Damage or wear on the side wall to the extent that the reinforcing wire become visible.

Nonlinear wear of the ground contact surface greater than 10 %.

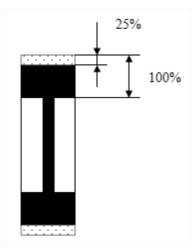




## 🚺 15 min



Consistent wear of the ground contact surface greater than 25 %.





For safety reasons, always use original HAULOTTE® spare parts that are specific to this machine. Refer to the spare parts catalogue.

### 4 - Replacement

- 1. Loosen the wheel nuts on the the wheel to be removed.
- 2. Raise the machine using a jack or a hoist.
- 3. Remove the wheel nuts.
- 4. Remove the wheel.
- 5. Fitt the new wheel.
- 6. Lower the machine to the ground.
- 7. Tighten the wheel nuts to the recommended torque









## 5 - Torque

Machine type	Wheel type	Torque in N.m - lbf.ft
114400 L (114000 l)	Drive wheel	210-155
HA12CJ (HA33CJ)	Steer wheel	210-155
HA12C1: (HA22C1:)	Drive wheel	210-155
HA12CJ+ (HA33CJ+)	Steer wheel	210-155
HA120PX (N/A)	Drive wheel	320-236
11A1201 X (N/A)	Steer wheel	320-236
HA16X	Drive wheel	320-236
11/(10/(	Steer wheel	320-236
HA16SPX (HA46SJRT)	Drive wheel	320-236
11/1001 X (11/1000111)	Steer wheel	320-236
HA16PX (HA46JRT)	Drive wheel	320-236
	Steer wheel	320-236
HA18SPX (HA51SJRT)	Drive wheel	320-236
	Steer wheel	320-236
HA18PX (HA51JRT)	Drive wheel	320-236
(	Steer wheel	320-236
HA20PX (HA61JRT)	Drive wheel	320-236
,	Steer wheel	320-236
HA260PX (HA80JRT)	Drive wheel	320-236
	Steer wheel	320-236
HA32PX (HA100JRT)	Drive wheel	650-479
	Steer wheel	650-479
HA41PX-NT (HA130JRT-NT)	Drive wheel	570-420
( ( ( )	Steer wheel	570-420
H14TX (HB40)	Drive wheel	320-236
- /	Steer wheel	320-236
H16TPX (HB44J)	Drive wheel	320-236
, ,	Steer wheel	320-236
H21TX (HB62)	Drive wheel	320-236
,	Steer wheel	320-236
H23TPX (HB68J)	Drive wheel	320-236
, , ,	Steer wheel	320-236
H25TPX (HB76J)	Drive wheel	320-236
	Steer wheel	320-236
H28TJ+ (HB86TJ+)	Drive wheel	650-479
	Steer wheel	650-479
H43TPX (HB135JRT)	Drive wheel	570-420
	Steer wheel	570-420
STAR 6 (STAR 13) - STAR 6 P	Drive wheel	127-94
	Steer wheel	127-94
STAR 8 (STAR 22J)	Drive wheel	80-59
	Steer wheel	115-85
STAR 10 (STAR 26J)	Drive wheel Steer wheel	80-59 115-85
Compact 10/10DV (Compact 0000)		115-85
Compact 10/12DX (Compact 2668/ 3368RT)	Drive wheel	190-140
330001)	Steer wheel	190-140

## 6 - Additional operation

1. Place the machine in its operating configuration. 3.3.2-Placing in operating configuration









Screws, bolts and nuts





## 1 - Torque (coarse thread)

Nominal diameter	Torque in N.m - Ibf.ft		
	Class 8.8	Class 10.9	Class 12.9
M6x1	9 - 11-6,64 - 8,11	13 - 14-9,59 - 10,33	15 - 17-11,06 - 12,54
M7x1	15 - 19-11,06 - 14,01	21 - 24-15,49 - 17,7	26 - 28-19,18 - 20,65
M8x1.25	22 - 27-16,23 - 19,91	31 - 34-22,86 - 25,08	37 - 41-27,29 - 30,24
M10x1.5	43 - 45-31,72 - 33,19	61 - 67-44,99 - 49,42	73 - 81-53,84 - 59,74
M12x1.75	75 - 94-55,32 - 69,33	110 - 120-81,13 - 88,51	130 - 140-95,88 - 103,26
M14x2	120 - 150-88,51 - 110,63	170 - 190-125,39 - 140,14	200 - 220-147,51 - 162,26
M16x2	190 - 230-140,14 - 169,64	260 - 290-191,77 - 213,89	320 - 350-236,02 - 258,15
M18x2.5	260 - 320-191,77 - 236,02	360 - 400-265,52 - 295,02	440 - 480-324,53 - 354,03
M20x2.5	370 - 450-272,9 - 331,9	520 - 570-383,53 - 420,41	620 - 680-457,29 - 501,54
M22x2.5	500 - 620-368,78 - 457,29	700 - 770-516,29 - 567,92	840 - 930-619,55 - 685,93
M24.3x3	630 - 790-464,66 - 582,67	890 - 990-656,43 - 730,19	1070 - 1180-789,19 - 870,32
M27x3	930 - 1150-685,93 - 848,2	1300 - 1400-958,83 - 1032,59	1560 - 1730-1150,6 - 1275,98
M30x3.5	1260 - 1570-929,33 - 1157,97	1770 - 1960-1305,49 - 1445,62	2200 - 2350-1622,64 - 1733,27

## 2 - Torque (fine thread)

Nominal diameter		Torque in N.m - lbf.ft	
	Class 8.8	Class 10.9	Class 12.9
M8x1	24 - 29-17,7 - 21,39	33 - 37-24,34 - 27,29	40 - 44-29,5 - 32,45
M10x1.25	46 - 57-33,93 - 42,04	64 - 71-47,2 - 52,37	77 - 85-56,79 - 62,69
M12x1.25	83 - 100-61,22 - 73,76	120 - 130-88,51 - 95,88	140 - 150-103,26 - 110,63
M14x1.5	130 - 160-95,88 - 118,01	180 - 200-132,76 - 147,51	220 - 240-162,26 - 177,01
M16x1.5	200 - 250-147,51 - 184,39	280 - 310-206,52 - 228,64	340 - 370-250,77 - 272,9
M18x1.5	290 - 360-213,89 - 265,52	410 - 450-302,4 - 331,9	490 - 540-361,41 - 398,28
M20x1.5	410 - 510-302,4 - 376,16	570 - 630-420,41 - 464,66	690 - 760-508,92 - 560,55
M22x1.5	550 - 680-405,66 - 501,54	780 - 870-575,3 - 641,68	920 - 1000-678,56 - 737,56
M24x1.5	690 - 860-508,92 - 634,3	970 - 1070-715,44 - 789,19	1160 - 1290-855,57 - 951,46
M27x2	1000 - 1300-737,56 - 958,83	1400 - 1560-1032,59 - 1150,6	1690 - 1880-1246,48 - 1386,62
M30x2	1400 - 1700-737,56 - 958,83	1960 - 2180-1032,59 - 1150,6	2350 - 2610-1246,48 - 1386,62



Screws, bolts and nuts







### Steering wheel pivots





### 1 - You will need



- · Standard tool kit
- Protective goggles
- Gloves



Place barriers around the perimeter of the work area

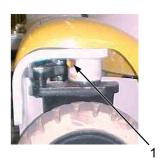
### 2 - Preliminary procedure

1. Place the machine in maintenance configuration. 3.3.1-Placing the machine in maintenance configuration

### 3 - Lubrication

on STAR 8 (STAR 22J) and STAR 10 (STAR 26J) only:

Lubricate the pivots (1) with lead-free grease



## 4 - Additional operation

1. Place the machine in its operating configuration. 3.3.2-Placing in operating configuration



**Steering wheel pivots** 







**Chains** 





### 1 - You will need



- Standard tool kit
- Protective goggles
- Gloves



Place barriers around the perimeter of the work area

Use only adapted tools and auxiliary resources.

Always wear the required protective clothing.



This procedure must be performed after the first 50 hours and then every 250 hours or every 6 months.

## 2 - Preliminary procedure

All disassembly operations, if possible, must only be performed on equipment that has been completely deactivated and only by personnel with the necessary technical knowledge.

In addition to the safety precautions indicated in these instructions, follow all regulations concerning safety and accident prevention that are generally applicable.

Every precaution must be taken before working on or near the machine.

After work has been completed, all casings and safety devices must be restored completely and operational.

## 3 - Lubrication

Lubricant must be applied with a brush to the external chains at least every 250 hours or every 6 months. The frequency of application depends on surrounding conditions and conditions of use. The frequency of application must ensure that a sufficient quantity of fluid oil is present in the chain links.

If the chain has been exposed to corrosive fluids, clean the chain immediately and apply lubricant.

**N.B.**-:-Telescoping operations may be necessary to access elements.

Before applying new lubricant, remove any foreign particles from the chain. Use recommended lubricants Section B 1Recommendations-Lubrication diagram.

When cleaning chains, follow regulations concerning the environment.



#### **Chains**





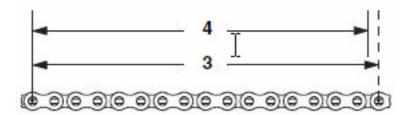
## 4 - Check the condition of the chains

To carry out the following operations, perform a complete telescoping.

- Check that the lifting chains and safety chains are clean.
- Check that there are no foreign particles on the chains and guide.
- Check that there are no signs of corrosion on chain elements.

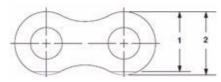
Chains with any of the defects described below must be replaced.

- Check for elongation wear :
  - Elongation of up to 2 %, over 12 segments, of the original chain length is permitted.
  - Measure the value of (3) using an appropriate method. Compare with the value of (4) indicated in the table below.



Machine	Link width (2)	Length of 12 links (4)
Star 6 - 8 - 10 HA32/41PX-NT H28TJ+/H43TPX	11.5 mm	152.40 mm
Star 8 - 10	14.50 mm	190.50 mm
HTL 4014/17 - HTL 3614/17	24 mm	304.80 mm

- Check for external wear on rollers and links :
  - External wear must not measure more than 2 % from the section of the original link (2), see table above.
  - Measure the value of (1) using an appropriate method.



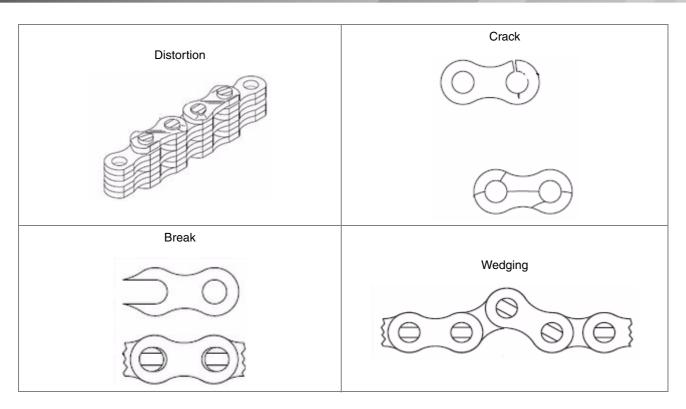
- Check that no line or element is damaged or missing.
- Check that links are not distorted, deformed or broken.



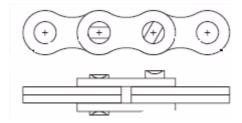
**Chains** 







• Check the connection points of links (the lines must be parallel).



## 5 - Check the tension of the chains

Refer to the technical data sheet for your product following this sheet. To make any other adjustments not detailed in this maintenance logbook : Contact Haulotte Services for further advice.

## 6 - Replacing the chains

The chains must imperatively be changed every 10 years.

Contact Haulotte Services for further advice.

Les chains and chain elements are made from case hardened steel in a high-quality process. Deliver any scrap chains or chain elements to a dealer specialised in metal recycling in compliance with regulations.

## **Control-Lubrication**



**Chains** 







**Cables** 





### 1 - You will need



- Standard tool kit
- Protective goggles
- Gloves



Place barriers around the perimeter of the work area

Use only adapted tools and auxiliary resources.

Always wear the required protective clothing.

## 2 - Preliminary procedure

All disassembly operations, if possible, must only be performed on equipment that has been completely deactivated and only by personnel with the necessary technical knowledge.

In addition to the safety precautions indicated in these instructions, follow all regulations concerning safety and accident prevention that are generally applicable.

Every precaution must be taken before working on or near the machine.

After work has been completed, all casings and safety devices must be restored completely and operational.

## 3 - Checking the cable transmission system

In order to ensure safe use of machinery, Haulotte Group recommends that you perform the following inspections :

#### **Daily inspection**

- Position the machine on a flat and firm surface.
- Power up the machine and select the console located on the turntable.
- Raise the boom to horizontal (For machines fitted with).
- Execute a complete extension/retraction cycle of the telescope assembly over approximately 2 m(6 ft7 in) or a complete lifting/lowering cycle for mast-type machines.
- Check that the movement is synchronized and symmetrical, and that there are no abnormal sounds. If you
  encounter a problem or suspect there may be a problem, carry out a more detailed inspection as described
  below.

#### **Regular inspection**

This operation must be performed after the first 50 hours, then:

- STAR: Every 250 hours or 3 months.
- other machines: Every 250 hours or 6 months.

#### To access parts:

- Position the machine on a flat and firm surface.
- Remove the protection covers and/or inspection flaps.
- Power up the machine and select the console located on the turntable.
- · Raise the boom to horizontal (For machines fitted with)
- Check that the attachment device for the cables is in place and tight at all visible attachment points.
- Extend the structure to gain access to the cables :



#### **Cables**

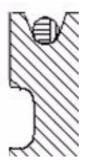




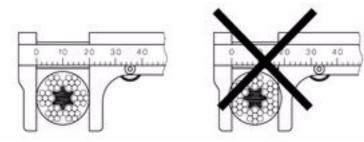
- Extend the boom at least 3 m(9 ft10 in) for telescopic machines.
- Raise the mast assembly up to the inspection flaps.

Using a flash light, perform a visual inspection of the following items :

- Check that cables are properly aligned with one another.
- Check that the cables under are equal tensio.
- Check that the pulleys are properly aligned with the cables.
- Check that the cable is properly seated in the pulley.



- Check that nothing blocks the chain guides.
- Check the condition of the cables. If any of the following defects are observed, replace the pair of cables.
  - The maximum reduction in diameter from the original diameter must not exceed 1 mm.

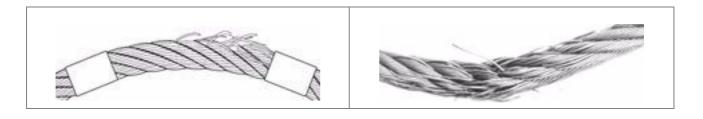


Machine	Original diameter
STAR 6 - 8 - 10	3 mm
H21TX - H23TPX - H25TPX	9 mm
H43TPX	19 mm

No broken strands must be observed, in particular at the ends.

Replacement is compulsory when 3 strands or more are broken along the length of the cable.

Replacement is compulsory when 1 strand is broken near the ends.



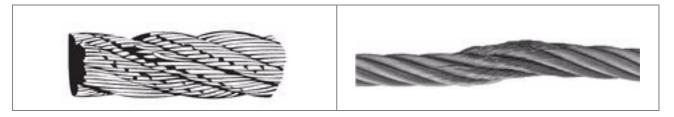


**Cables** 





No deformed folds or frayed strands must be observed.



No signs of corrosion must be observed.



## 4 - Check the tension of the cables

Refer to the technical data sheet for your product following this sheet. To make any other adjustments not detailed in this maintenance logbook: Contact Haulotte Services for further advice.

## 5 - Replacing the cables

Cables with a diameter measuring less than 6 mm (STAR) must be replaced every 5 years.

All other cables must imperatively be replaced every 7 years.

Replacement may be required more frequently for the following reasons:

- Machine operates in a particularly hostile environment.
- Abnormal noises are produced during movement of structure.
- Machine has been in storage for more than 6 months.
- Machine has been submitted to an abusive load or serious collision.
- Machine has been exposed to an electrical arc.

Contact Haulotte Services for further advice.

Cables and cable elements are made from case hardened steel in a high-quality process. Deliver any scrap cables or cable elements to a dealer specialised in metal recycling in compliance with regulations.

## **Control-Lubrication**



**Cables** 







#### Return cables





## 1 - You will need



- · Standard tool kit
- Protective goggles
- Gloves



 Place barriers around the perimeter of the work area

## 2 - Preliminary procedure

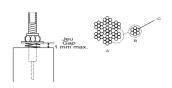
1. Place the machine in maintenance configuration. 3.3.1-Placing the machine in maintenance configuration

## 3 - Control

on STAR 8 (STAR 22J) and STAR 10 (STAR 26J) only:

Replace in case of:

- Broken wire (C)
- Broken strand (B)
- · Kinked cable
- · Wear on lugs
- Abnormal stretching of the cabel making it impossible to adjust play at the threaded end



## 4 - Additional operation

1. Place the machine in its operating configuration. 3.3.2-Placing in operating configuration



#### Return cables







Mast





## 1 - You will need



- · Standard tool kit
- Protective goggles
- Gloves



• Place barriers around the perimeter of the work area

## 2 - Preliminary procedure

1. Place the machine in maintenance configuration. 3.3.1-Placing the machine in maintenance configuration

## 3 - Lubrication

Lubricate the slides where the pads are (spatula).

Lubricate the pads at the rear of the machine.





## 4 - Additional operation

1. Place the machine in its operating configuration. 3.3.2-Placing in operating configuration



Mast











E029

## 1 - You will need



- · Standard tool kit
- Protective goggles
- Gloves



Place barriers around the perimeter of the work area

## 2 - Preliminary procedure



The battery manufacturer's safety instructions must be followed.

1. Place the machine in maintenance configuration. 3.3.1-Placing the machine in maintenance configuration

## 3 - Control

Loosen the caps located on the top of the battery.

The level of electrolyte in the battery must be approx. 0,01 m(0 ft39 in) above the plates.

## 4 - Filling-up

Loosen the caps located on the top of the battery.

If the level of electrolyte is below the level of the plates:.

- 1. Top up with distilled water.
- 2. Refit and tighten the battery caps.









## 5 - Battery charge

#### Battery charger status:

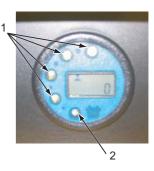
#### For STAR 6 (STAR 13) - STAR 6 P

- This is shown on a graph.
- Each of the 10 % segments represents \*2 of the charge.
- Batteries are charging : All segements are highlighted.
- Batteries more than 70 % empty: Flashing. Batteries should be recharged.
- Batteries more than 80 % empty: Only 2 segments are flashing.
   The batteries must be recharged.



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

- Batteries are charging: The green diodes are on(1).
- Batteries being discharged: The diodes go out one after the other (1).
- Batteries discharged: The red diode is on, elevation is disabled but driving and rotation are still possible(2).



#### When should the batteries be charged?:

- Never discharge the batteries to more than than 80 % of their capacity in 5 h (hours).
- When the batteries are discharged to between 35 % and 80 % of their nominal capacity.
- If installing new batteries, recharge them after 3 or 4 hours of use 3 to 5 times
- · After a long period of non-use.
- Never leave the batteries discharged.
- Do not put off recharging the batteries in cold weather as the electrolyte may freeze.



- Do not recharge the batteries if the temperature of the electrolyte exceeds 40 °C(104 °F). Allow to cool
  down.
- Keep the top of the batteries clean and dry. Incorrect connection or corrosion may cause a high loss of power
- The charger settings are adjusted in the factory using its own cable. If the cable needs changing, the HAULOTTE® factory must be contacted to obtain authorisation.

#### How to charge the batteries?:

- Use the machine's on-board charger. The charger has a charge rate compatible to the battery capacity.
- Ensure that the mains supply is compatible to the charger's consumption.
- Top up the batteries with distilled water to the minimum electrolyte level if any of the elements are below this
  minimum level.
- Work in a clean and well-ventilated area away from naked flames.







#### For STAR 6 (STAR 13) - STAR 6 P

Charger type	24 V - 30 A
Electric power supply	220 V single phase 50 Hz
Delivered voltage	24 V
Charging time	Approximately 15 h for batteries discharged to 80 %
Mains connection	Standard plug

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

Charger type	24 V - 30 A
Electric power supply	220 V single phase 50 Hz
Delivered voltage	24 V
Charging time	Approximately 8 h for batteries discharged to 80 %
Mains connection	Standard plug

Start-up is automatic as soon as the mains connection is established. The charger is fitted with a LED indicator placed near the special holding frame :

Green indicator: Battery 100 % charged

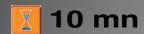
Yellow LED: Battery 80 % charged

Red LED: Charger in the intitial charge phase

When there is a fault, the LED indicator flashes in various colours depending on the type of alarm :

State of flashing indicator	Type of alarm	Description (Action)
Red	Battery presence	Battery not connected or not compliant : Check connection or rated voltage.
Yellow	Temperature probe	Temperature probe disconnected while charging or outside the functional failure: Check connection and measure battery temperature.
Green	Specified time	Phase 1 or 2 is longer than the maximum allowed time: Check battery capacity
Red-Yellow	Battery current	Loss of output current control : Faulty control logic.
Red-Green	Battery voltage	Loss of output voltage control: Battery disconnected or faulty control logic.
Red-Yellow-Green	Temperature	Overheating of semiconductors : Check fan operation.







In case of an alarm, the charger stops supplying power

#### **During charging:**

- The machine's electric system is automatically deactivated while the external power supply is connected to the machine
- Ensure that the battery are at a temperature not exceeding 45 °C(113 °F) (be careful in summer or in places with a high ambient temperature)
- Do not remove or open the caps on the elements.

#### Charge interruption:

- To turn off the charger, disconnect it from the mains.
- Should the machine need to be operated during a charging cycle, first diconnect the charger. This may reduce the life span of the batteries. Re-connect the charger once the operation is over.

#### After charging:

- Top up the electrolyte level, if necessary.
- · Avoid overflowing.
- Wash the top of the batteries without removing the caps.
- Dry with compressed air or clean cloths.
- · Oil the terminals.



When the charger is connected to the mains for more than 48 h (hours), a new charging cycle starts up at the end of the previous charging cycle in order to offset self-discharge.

## 6 - Additional operation

Place the machine in its operating configuration. 3.3.2-Placing in operating configuration

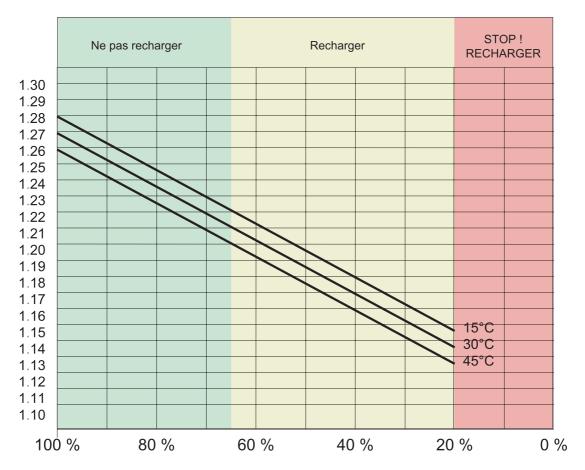
To keep your batteries in good condition, test the density of each element once a month using a battery hydrometer, according to the temperature indicated in the curves below:

Battery charge status according to density and temperature











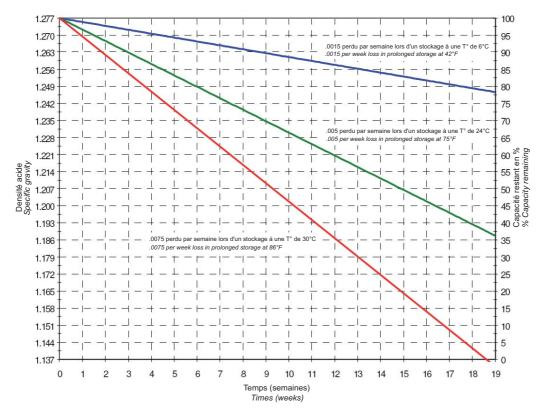
Do not store machines, outside and in cold weather conditions, when batteries are discharged : Risk of damaging batteries.







Loss of capacity during prolonged storage



Electrolyte freezing point according to the density of the acid and state of charge

Specific gravity	Battery charger status	Freezing point
1.280	100 %	-69 °C(-92 °F)
1.265	92 %	-57 °C(-71,3 °F)
1.250	85 %	-52 °C(-62 °F)
1.200	62 %	-27 °C(-16 °F)
1.150	40 %	-15 °C(5 °F)
1.100	20 %	-7 °C(19 °F)







**E049** 

## 1 - You will need

- · Standard tool kit
- Brush



- Multipurpose grease (of mineral type)
- Protective goggles
- Gloves



Place barriers around the perimeter of the work area

# 2 - Preliminary procedure

1. Place barriers around the perimeter of the work area.

### 3 - Lubrication

#### Jib cylinder

In order to maintain the lifting cylinder in good condition and avoid any internal or external corrosion during prolonged storage (inside or outside), proceed as follows:

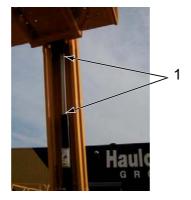
#### · Machine stowed

Carry out the movements to lift and descend of jib or platforme every 2 or 3 days to lubricate cylinder tube.



#### • Machine unfolded

Using a brush, apply multipurpose grease (of mineral type) to all the chrome and unpainted parts of the cylinder 1.





Lubricate the cylinder rod 1 once a month.





## 15 min







Do not use synthetic grease. Synthetic grease can damage the seals of cylinder.



Before operating the machine, remove the grease from the cylinder rod.



Do not high pressure wash the cylinder as this could cause damage to the cylinder rod, as well as penetration of water into the guide seal (corrosion, contamination, seizing).

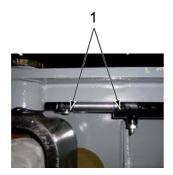


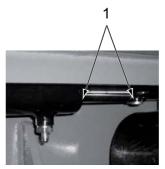
Lubricate the rod after each movement of the cylinder.

#### Steering cylinder

In order to maintain the lifting cylinder in good condition and avoid any internal or external corrosion during prolonged storage (inside or outside), proceed as follows:

· Wheels aligned







Lubricate the cylinder rod 1 once a month 1.



Do not use synthetic grease. Synthetic grease can damage the seals of cylinder.



Before operating the machine, remove the grease from the cylinder rod.



Do not high pressure wash the cylinder as this could cause damage to the cylinder rod, as well as penetration of water into the guide seal (corrosion, contamination, seizing).



Lubricate the rod after each movement of the cylinder.





## 15 min



E049

### Lift cylinder

In order to maintain the lifting cylinder in good condition and avoid any internal or external corrosion during prolonged storage (inside or outside), proceed as follows:

• Store the machine with retracted mast.













# 1 - Recommendations

If a malfunction occurs, check the following points:

- There is sufficient fuel.
- Sufficient engine oil.
- Sufficient hydraulic oil in the tank.
- Batteries are charging.
- Control box emergency stop push-buttons are pulled out.
- The control box selector key is set to platform or ground control box.
- Control box relays are engaged.
- Fuse status.
- Ground control box solenoid valve status.

If the malfunction persists, consult the troubleshooting table to identify the problem.

IF you cannot identify the problem, contact HAULOTTE Services®.

## 2 - Troubleshooting

Diagnosis STAR 6 (STAR 13) - STAR 6 P

Incident	Display			Probable cause	Solution
	Calibrat or		LED on variable speed calculat or		
OK	No	No	ON	Operational traction	No action is requested
TESTING	RUNS TESTS	No	ON	Brief display on start up	No action is requested
PLEASE WAIT	No	No	ON	Calibrator protocol wrongly positioned	Set the calibrator protocol to AUTO
BDI CUTOUT	BDI CUT	F01004	7 flash(es)	Cut-off is triggered by the BDI according to the programmed battery level	Recharge the battery or batteries
THERMAL CUTBACK	OVER TEMP.	No	8 flash(es)	Variable speed drive temperature exceeds 75 °C(167 °F)	Check:  • Variable speed drive mounting  • Surface cleanliness Allow the variable speed drive to cool down
ACCEL. FAULT	ACCEL. FAULT	F02001	6 flash(es)	Accelerator pushed down before key-locking	Check accelerator wiring Adjust the accelerator Recycle the 'Enable Switch' selector



SEQUENCE FAULT	SEQ. FAULT	F04005	2 flash(es)	'Enable Switch' contact is closed and the joystick activated on start up	Release the 'Enable Switch' selector and the joystick Check the 'Enable Switch' signal and the joystick instructions
2 DIR. FAULT	2 DIR. FAULT	No	2 flash(es)	2 directions selected at the same time Recycle the directions and 'Enable Switch' selector	Check the wiring to the direction switches
BATTERY LOW	BAT. LOW	No	7 flash(es)	Battery level below the 'low battery' setting Recycle the inverter or the 'Enable Switch' selector	Check battery voltage Recharge the battery or batteries
BATTERY HIGH	BAT. HIGH	No	7 flash(es)	Battery level is above the 'high battery' setting Recycle the inverter or the 'Enable Switch' selector	Check battery voltageB+ Not present on the variable speed drive
PERS. ERROR	PERS. ERROR	No	1 flash(es)	Adjusting a parameter outside the range (on key-locking)	Check settings
CRC ERROR	CRC ERROR	No	1 flash(es)	One or more corrupted settings	Check settings Recycle the key
COIL S/C	COIL S/C	F05020	9 flash(es)	Short-circuited or badly connected contactor coil Recycle the key	Check:  • The coil is short-circuited  • The control is directly connected to B+ve  • The wiring
MOFSET S/C	FET S/C	No	3 flash(es)	MOFSET is short circuited Recycle FS1 or the inverter	
SYSTEM FAULT	CAN FAULT	F05005	12 flash(es)	Faulty CAN bus Communication fault between nodes Recycle the main switch	Check cables, connections and modules
P. UP. TRAC. WELD	P. UP. WELD	No	OFF	Contacts soldered onto line contactor	Check the line contactor Check the control and power cable looms
VARIOUS INTERNAL CONTROLLER POWER UP MESSAGES (HIGHEST PRIORITY)	FAIL	No	OFF	Faulty variable speed drive power internal self-tests	Contact HAULOTTE Services®
	No	No	OFF	Slack chain	Check chain tension
ALARME BUZZER	No	No	OFF	Permissable tilt exceeded	Lower the platform Perform a drive movement to bring the machine back within the authorised threshold
	No	F02002	ON	Adjustable tray overloaded	Remove some weight from platform under 90 kg(198 lb)



	No	F04003	OFF	Validation off for over 5 s 'Enable Switch' selector and validation are off for over 5 s	Begin the validation operation again (action on the joystick)
AUCUN	No	F0001	OFF	Validation activated	No action is requested
	No	F04005	OFF	Joystick and 'Enable Switch' selector are not validated for over 5 s	Release the joystick

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

Code	Incident	Probable cause	Solution
		Incorrectly set battery adjustment.	Adjust the battery voltage setting.
1	BATTERY LOW	Incorrect adjustment of the variable speed drive parameters.	Check the variable speed drive settings.
		Battery voltage below 19 V.	Recharge the battery or batteries.
2	CAPACITOR CHARGE	<ul> <li>Power cable cut-off</li> <li>Cut-off or short circuit in the engine</li> <li>Broken variable speed drive.</li> </ul>	Check the drive and pump motors     Check the internal resistance of the variable speed drive between B- and T1/T2 and P: If it is below 65000 O, replace the variable speed drive     Check the cable carrier chain.
3	WEIGHING CARD KO	Short circuit on the weighing inputs.	Probable fault on the weighing card :  • Check variable speed drive inputs 26 and 38.
4	PRESSURE NOT OK	Pressure sensor alarm.	Overload on the weighing card(Wire 28 to 0 V)    Change the weighing card.
		Steering potentiometer power supply cut off.	Check the steering potentiometer connections.
5	5 STEER SENSOR KO	Broken potentiometer.	Check the steering potentiometer and change it if necessary.
		Incorrect Steer mini or Steer maxi or Steer 0 settings adjustment.	Check the variable speed drive settings(Adjust if necessary).
6	NO COMMUNICATION	Problem on the MDI and/or on the link between the MDI and the variable speed drive.	Check the MDI and the connection wire between the MDI and the variable speed drive.
7	CONTACTOR DRIVER	The general contactor driver does not close.	Short-circuited or badly connected contactor coil     Faulty speed variator
8	CONTACTOR CLOSED	Contacts jammed on the general contactor.	Change the general contactor(SB1).
		Short-circuited general contactor driver.	Check the coil's main relay.
9	DRIVER SHORTED	Wire 19 on terminal 9 is disconnected and forward engaged on hydraulic unit(Variable speed drive out of order if the relay is immediately powered).	Check the YV2 and the 19 wire.
10	SERIAL ERROR #1	Problem on the serial card.	Check the serial card.
		Check the cables in the cable carrying chain.	Replace the cables in the cable carrying chain.
11	EB DRIVER KO	Check the electromagnetic brakes.	Replace the electro-magnetic brakes     Replace the brakes.
		Check the SW1 output on the main card.	Replace the main card.
		Check the variable speed drive.	Replace the variable speed drive.



12	MICRO CONTROL KO	Variable speed drive out of order.	Replace the variable speed drive.
13	FORW + BACK	Forward and reverse drive joystick contacts receive current simultaneously.	Check the joystick Check the serial card Check the variable speed drive.
14	INCORRECT START	Erroneous start-up sequence.	Check the validation switches     Check the joystick contacts     Check and try out the 'Clear Eprom'-Replace the variable speed drive.
		Short circuit on the solenoid valves.	Check the solenoid valve cables and coils.
15	POWER FAILURE #1	Short circuit on the general contactor.	Check the coil's main relay.
		Short circuit on the buzzer.	Check the buzzer.
16	RIGHT I=0 EVER	Current is always zero in the right-hand motor.	Replace the variable speed drive     Check the motor pump and wiring.
17	LEFT I=0 EVER	Current is always zero in the left-hand motor.	Replace the variable speed drive     Check the motor pump and wiring.
18	RIGHT VMN NOT OK	VMN low in idle mode or incoherent with the PWM applied(Variable speed drive out of order).	Replace the variable speed drive.
19	LEFT VMN NOT OK	VMN low in idle mode or incoherent with the PWM applied(Variable speed drive out of order).	Replace the variable speed drive.
20	LEFT STBY I HIGH	Current high in idle mode in the drive motor Left(Variable speed drive out of order).	Replace the variable speed drive     Check the motor pump and wiring.
21	RIGHT STBY I HIGH	Current high in idle mode in the drive motor Right(Variable speed drive out of order).	Replace the variable speed drive     Check the motor pump and wiring.
22	HIGH FIELD CUR.	Current high in idle mode in the drive motor field(Variable speed drive out of order).	Change the calculator     Check the motor pump and wiring.
23	VFIELD NOT OK	Voltage low in the drive motor field.	<ul> <li>Check the drive motor field</li> <li>Check the cable between the motor and the variable speed drive</li> <li>Check the variable speed drive's internal resistance between F1 and F2-F1 and BF2 and BF1 and B+-F2 and B+-</li> </ul>
24	NO FIELD CURRENT		
25	EEPROM KO	Eprom out of order.	Replace the variable speed drive.
26	CHOPPER NOT CONFIG		
27	TH. PROTECTION	Variable speed drive temperature exceeds 75 °C(167 °F) .	Replace the variable speed drive.
28	EVP NOT OK	The variable speed drive is looking for a proportional valve.	Incorrect adjustment of the variable speed drive parameters.

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29	CHECK UP NEEDED	Incorrect adjustment of the variable speed drive parameters.	Contact HAULOTTE Services®
30	CONTACTOR OPEN	General contactor opened by the control PC.	Replace the variable speed drive.
31	CONTACTOR OPEN	Voltage is too high on the neutral position of the joystick.	Check the potentiometer powered in 51 and 52(Output in 39) Check the serial card or joystick.
39		Difference of at least 10 h between the time clocks of the variable speed drive and the MDI.	Check the MDI     Replace the variable speed drive.



# 1 - Wiring diagram-Main components

**N.B.**-:- See end of manual.

#### Nomenclature

Nomenclature	
Marking	Description
A1	Angle sensor
ED/EG	Right- and left-hand drive motor field systems
EFD / EFG	Right- and left-hand electromagnetic brakes
	1 A
FU1	Overload protection fuse
FUO	10 A
FU2	Brake release protection fuse
FU3	10 A
F03	Solenoid valve protection fuse
FU4	250 A
	Power protection fuse
FU5	U5 weighing card and U4 5A serial card fuse (Option)
GB1	Battery group 1
GB2	Battery group 2
HA	Tilt indicator
HA1	Tilt warning
KM1	Variable speed drive insulation control
KM2 / KA2	Brake release
KM3	Main contactor/battery isolation switch
KM4	Solenoid valve power supply circuit
M1	Motor pump unit 24V 3000W
MD / MG	Right- and left-hand drive motor
PV	Indicator hour-Battery indicator (MDI)
RCH	Battery charger relay
RL1	Power relay
RL2 SA1	Insulation relay (inactive)
SA1 SA2	Control box selection key selector (Ground control box)  Movement selector (Platform control box)
SB1	Ground control box emergency stop button-Line circuit-breaker
SB3	Platform control box emergency stop button
SB5	Jib control validation (Ground control box)
SB6	Mast control validation (Ground control box)
SB7	Turntable rotation validation (Ground control box)
SB8	Movement validation selector (Platform control box)
SB9	Horn switch
SM1	Turntable rotation joystick-Mast elevation/lowering
SM2	Platform joystick-Turntable rotation /Steering
SM3	Platform joystick-Driving
SQ1	tilt sensor
SQ4	Lower end of drive sensor (Mast)-Tilt reset contactor
SQ9	Weighing platform Picking sensor (For STAR 6 P only)
SQ10	Upper end of drive sensor (Mast)
SQ12	Jib end of drive-Tilt reset contactor
U1	Battery charger socket
U2	Variable speed drive socket
U3	Turntable SERIEL card



Marking	Description
U4	Platform SERIEL card
U5	Weighing card
YV1A	Right steering control solenoid valve
YV1B	Left steering control solenoid valve
YV2A	Turntable rotation left solenoid valve
YV2B	Turntable rotation right solenoid valve
YV3A	Jib lifting or mast lowering control solenoid valve
YV3B	Mast lifting control solenoid valve
YV4	Mast lifting control solenoid valve <sup>(1)</sup>
YV5	Jib lowering control solenoid valve <sup>(2)</sup>
YV6	Mast lowering control solenoid valve <sup>(3)</sup>

<sup>(1.)</sup> on Star 8NG (Star 22J) and Star 10NG (Star 26J) only (2.) on Star 8NG (Star 22J) and Star 10NG (Star 26J) only (3.) on Star 8NG (Star 22J) and Star 10NG (Star 26J) only

## 2 - Fuses

Description of the components STAR 6 (STAR 13) - STAR 6 P

Marking	Description
FU1	1 A Overload protection fuse
FU2	10 A Brake release protection fuse
FU3	10 A Option

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

Marking	Description
FU1	1 A Overload protection fuse
FU2	10 A Brake release protection fuse
FU3	10 A Solenoid valve protection fuse
FU4	250 A Power protection fuse
FU5	U5 weighing card and U4 5A serial card fuse (Option)

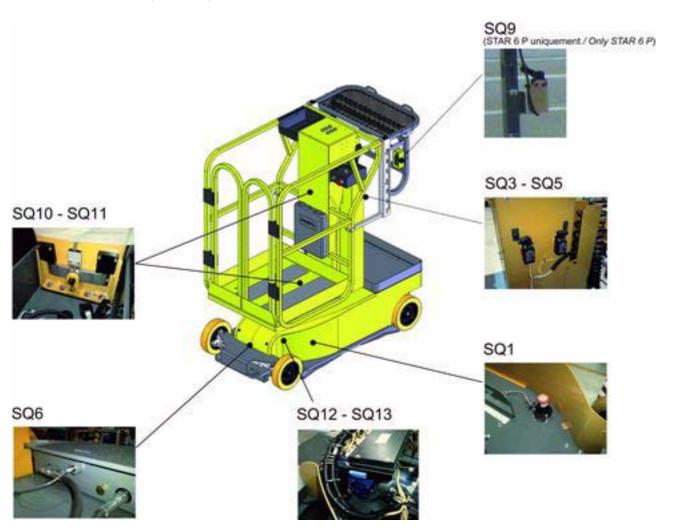
# 3 - Relays and terminals

Description of the components STAR 6 (STAR 13) - STAR 6 P - STAR 8 (STAR 22J)

Marking		Description	
KM1	Line circuit-breaker		
KM2 / KA2	Pump contactor		
RCH	Battery charger relay		
RL1	Overload relay		
RL2	Insulation relay		

# 4 - Locations and functions of the main safety features

Locations STAR 6 (STAR 13) - STAR 6 P



Description of the components

Marking	Description
SQ1	tilt sensor
SQ3	Lower end of drive sensor (Mast)
SQ5	Upper end of drive sensor (Mast)
SQ6	Steering sensor
SQ6	Weighing platform Picking sensor (For STAR 6 P only)
SQ10	Slack chain down sensor
SQ11	Slack chain up sensor
SQ12	Angle limitation sensor
SQ13	Angle limitation sensor

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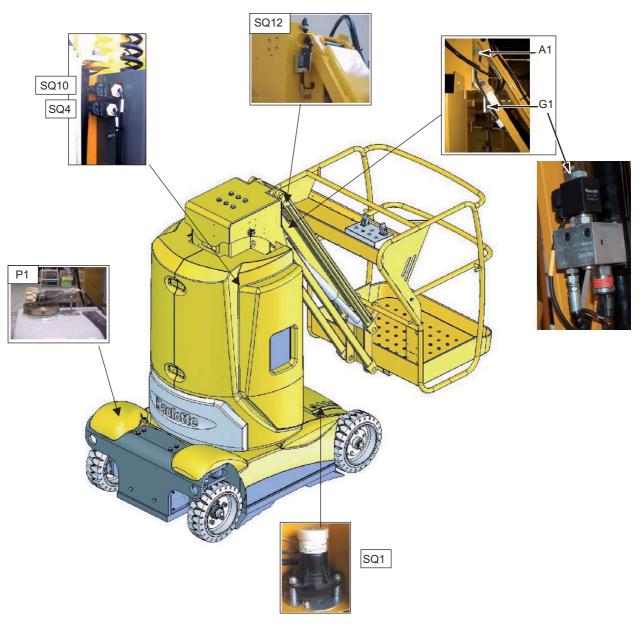
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### Locations STAR 8 (STAR 22J) - STAR10 (STAR 26J)



#### Description of the components

Marking	Description
A1	Jib angle sensor
G1	Angle sensor (weighing)
P1	Steering potentiometer
SQ1	tilt sensor
SQ4	Lower end of drive sensor (Mast)-Tilt reset contactor
SQ10	Upper end of drive sensor (Mast)
SQ12	Jib end of drive-Tilt reset contactor



## 5 - Buzzers

Description of the components STAR 6 (STAR 13) - STAR 6 P - STAR 8 (STAR 22J) - STAR 10 (STAR 26J)

Marking		Description
HA1	Buzzer	

## 6 - Indicators

Description of the components STAR 6 (STAR 13) - STAR 6 P

Marking	Description	
BDI	Indicator hour- Battery indicator	
HL3	Flashing light option	
HL4	Work light option	

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

Marking	Description
HA	Overload indicator- Tilt indicator
HPh	Work light option
MDI	Indicator hour- Battery indicator

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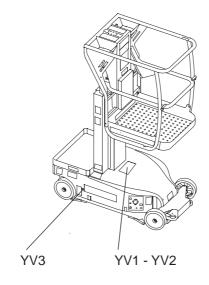
# - Hydraulic circuit

# 1 - Hydraulic diagram-Main components

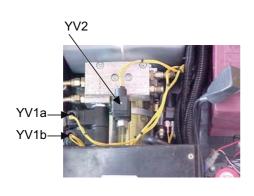
N.B.-:- See end of manual.

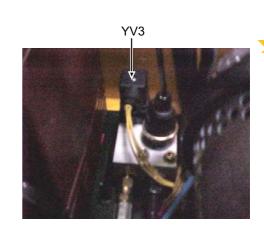
## 2 - Solenoid valves

Locations STAR 6 (STAR 13) - STAR 6 P



#### Photos of the components





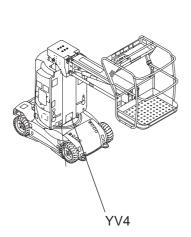
#### Description of the components STAR 6 (STAR 13) - STAR 6 P

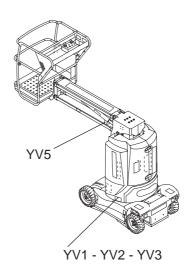
Marking	Description
YV1A	Left steering control solenoid valve
YV1B	Right steering control solenoid valve
YV2	Mast lifting control solenoid valve
YV3	Mast lowering control solenoid valve-Safety valve



# - Hydraulic circuit

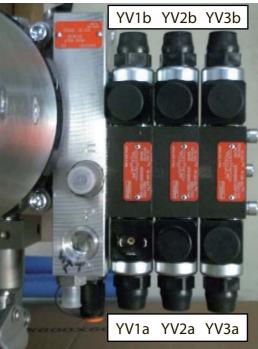
#### Locations STAR 8 (STAR 22J) - STAR 10 (STAR 26J)





Photos of the components





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

Marking	Description	
YV1A	Right steering control solenoid valve	
YV1B	Left steering control solenoid valve	
YV2A	Turntable rotation left solenoid valve	
YV2B	Turntable rotation right solenoid valve	
YV3A	Mast lifting control solenoid valve	
YV3B	Jib elevation control solenoid valve	
YV4	Mast lowering control solenoid valve	
YV5	Jib lowering control solenoid valve	



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# G-Intervention register

## 1 - Intervention register

The intervention register keeps a record of maintenance and repair work carried out inside or outside the maintenance programme.

**N.B.**-:-In the case of a HAULOTTE Services® intervention, the qualified technician must indicate the HAULOTTE Services® intervention number.

Date	Type of intervention	Number of hours	Intervenor	HAULOTTE Services® intervention number
				•

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# G - Intervention register

Date	Type of intervention	Number of hours	Intervenor	HAULOTTE Services® intervention number



# G - Intervention register

Date	Type of intervention	Number of hours	Intervenor	HAULOTTE Services® intervention number

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# C - Intervention register

Date	Type of intervention	Number of hours	Intervenor	HAULOTTE Services® intervention number



# G - Intervention register

Date	Type of intervention	Number of hours	Intervenor	HAULOTTE Services® intervention number

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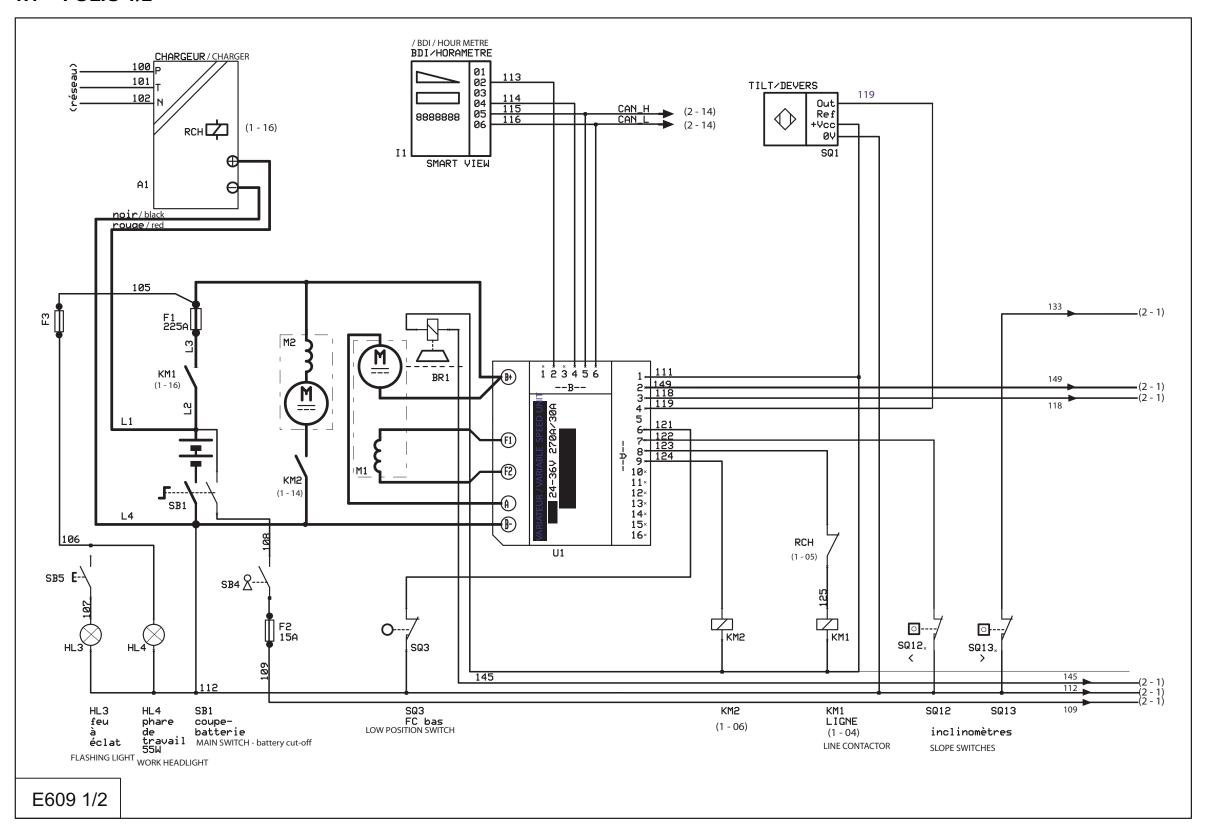
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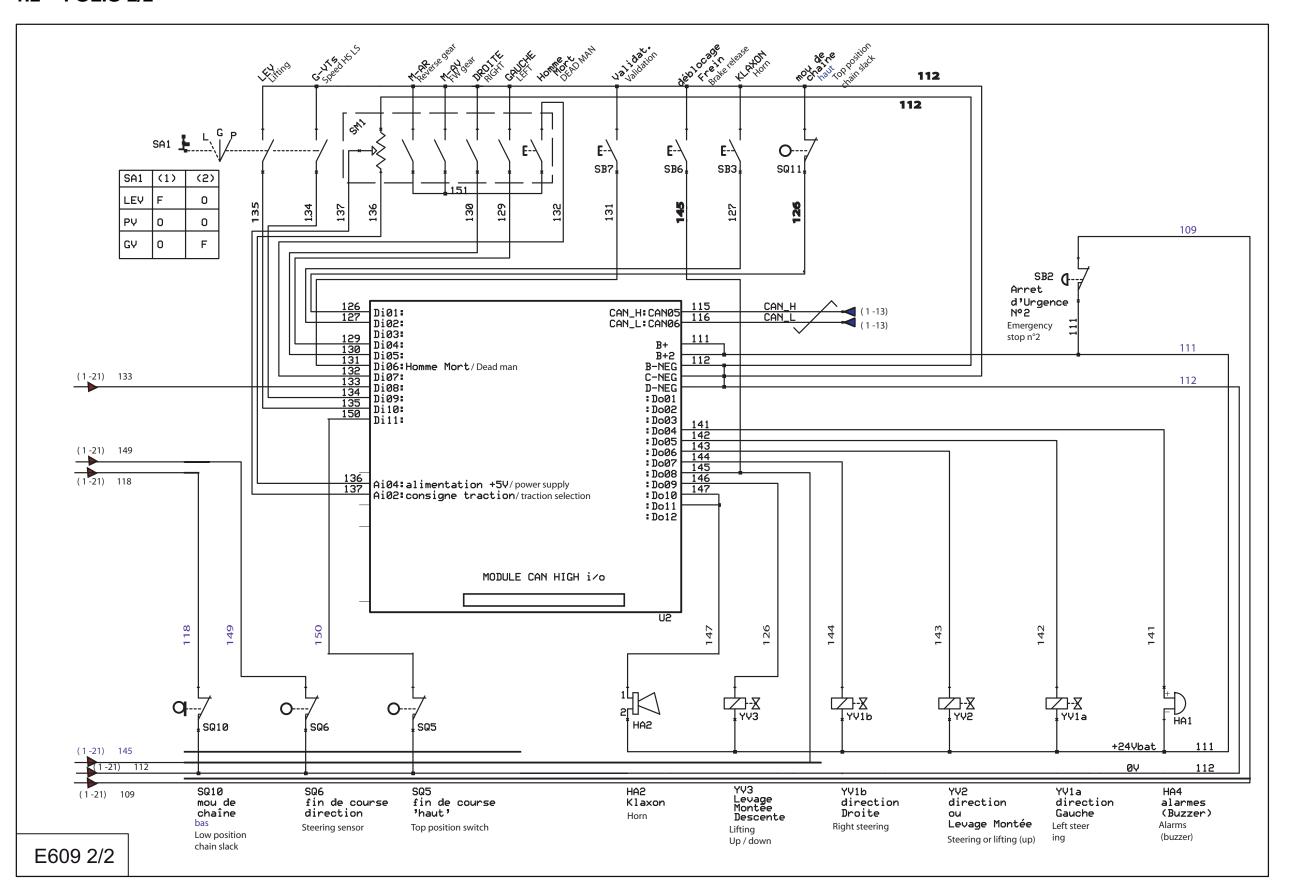
# C - Intervention register

Date	Type of intervention	Number of hours	Intervenor	HAULOTTE Services® intervention number

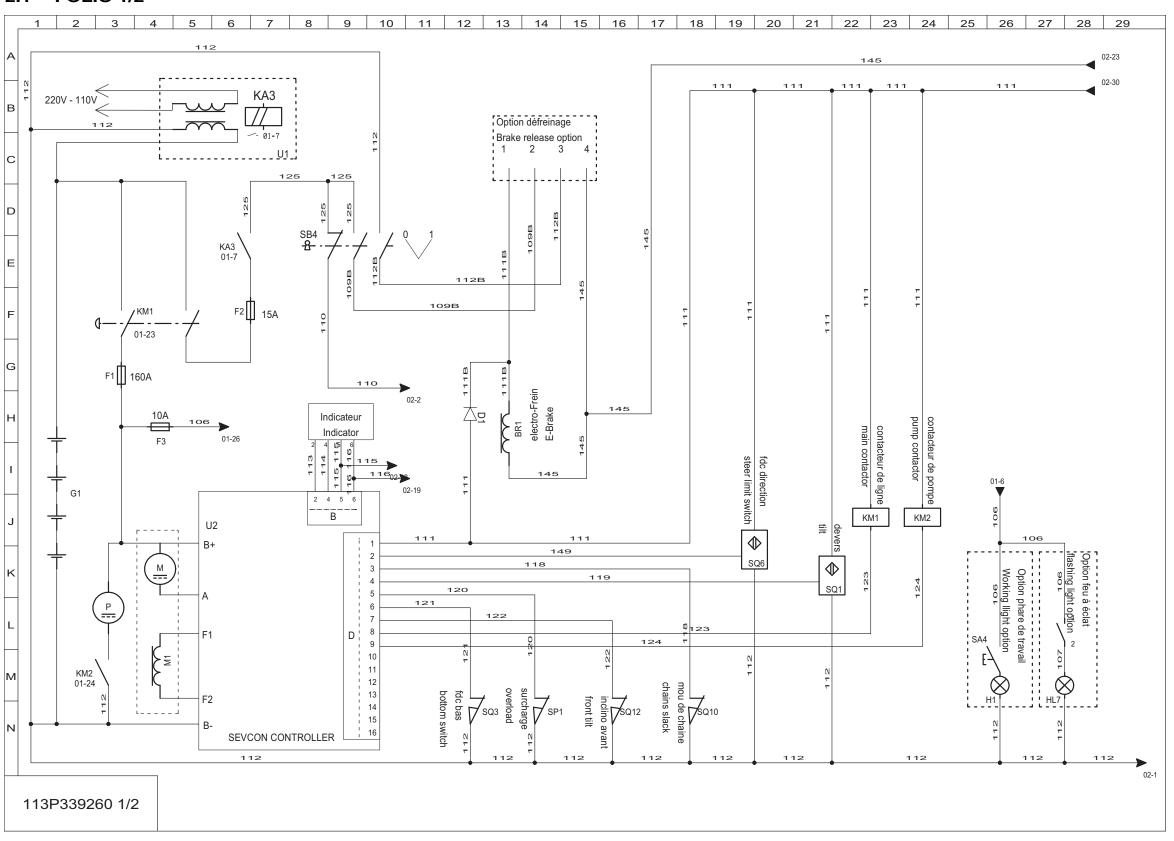
# 1 - STAR 6 (STAR 13)



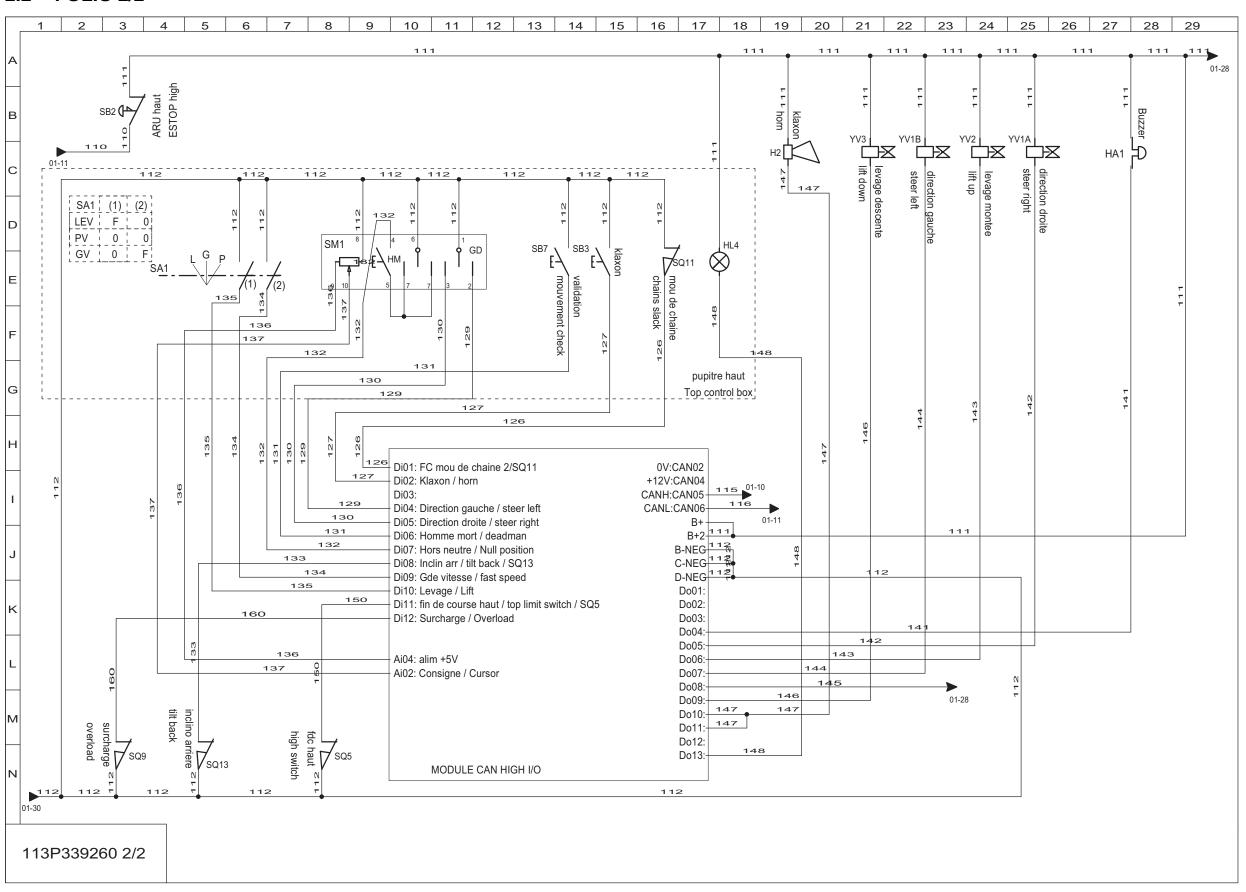
#### 1.2 - FOLIO 2/2



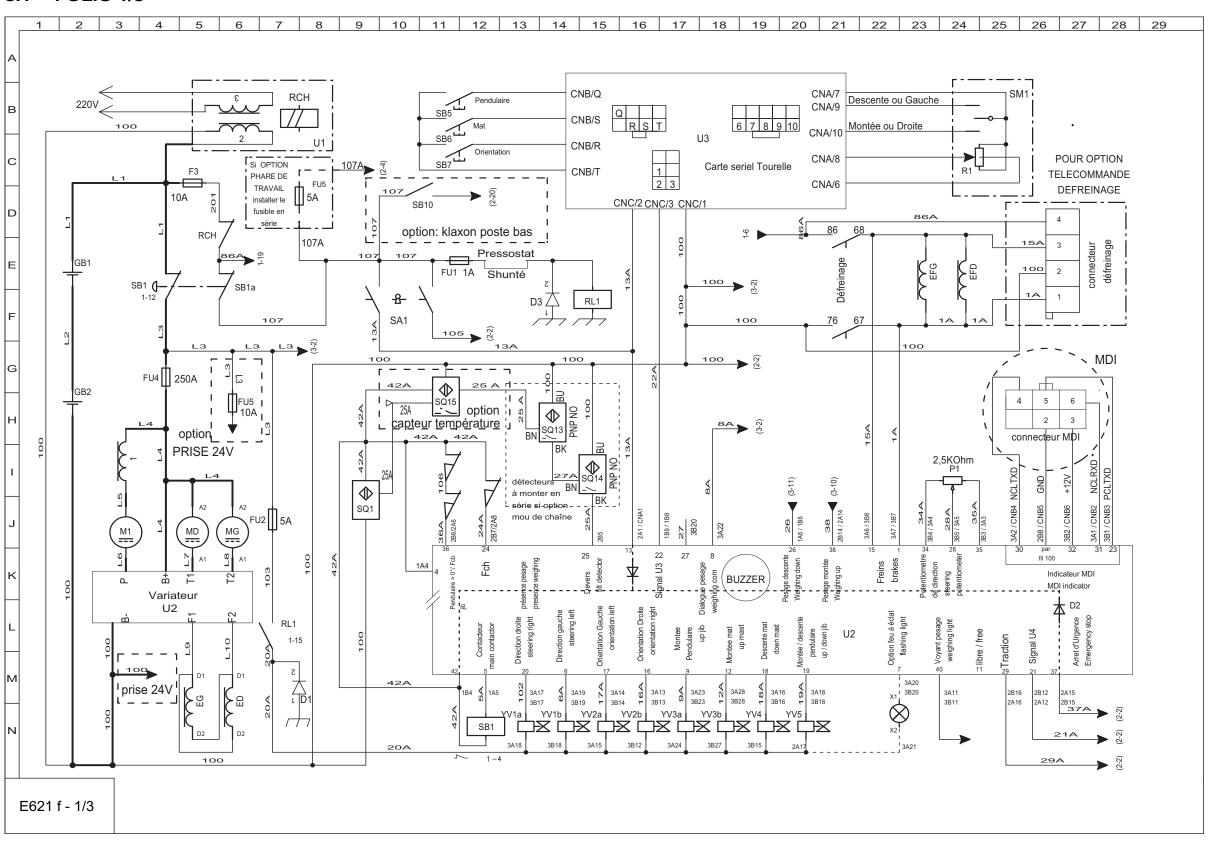
## 2 - STAR 6P



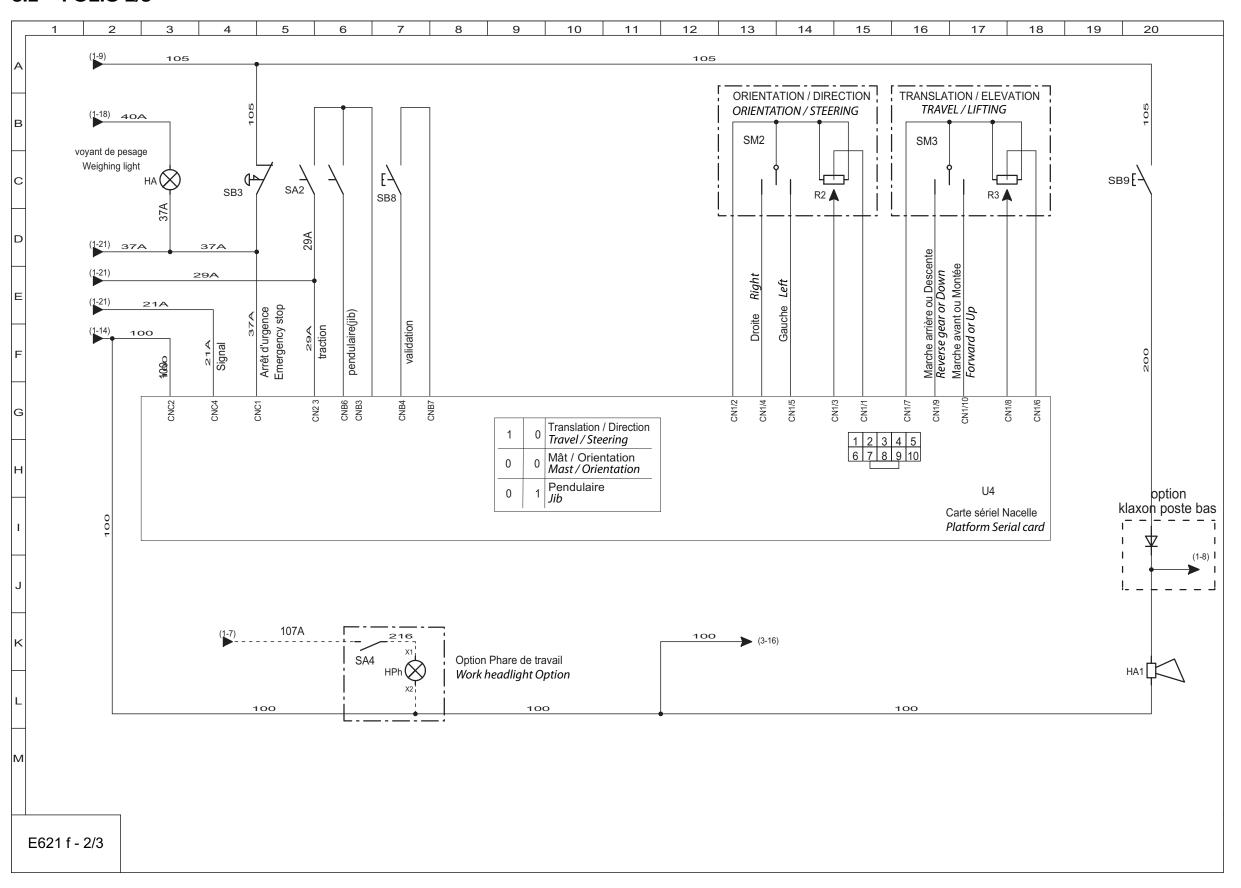
#### 2.2 - FOLIO 2/2



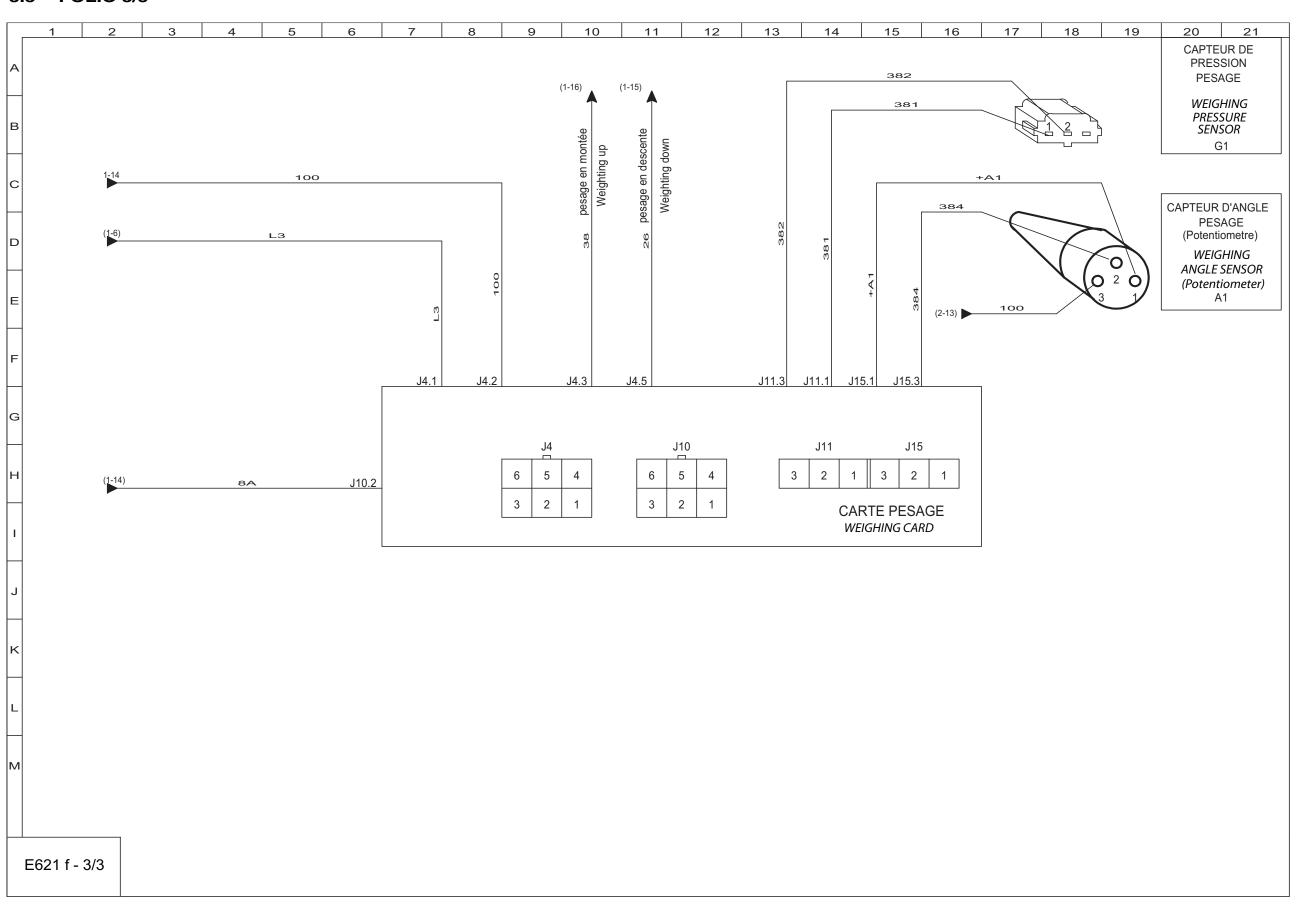
# 3 - STAR 8/10NG (STAR 22/26J)



#### 3.2 - FOLIO 2/3

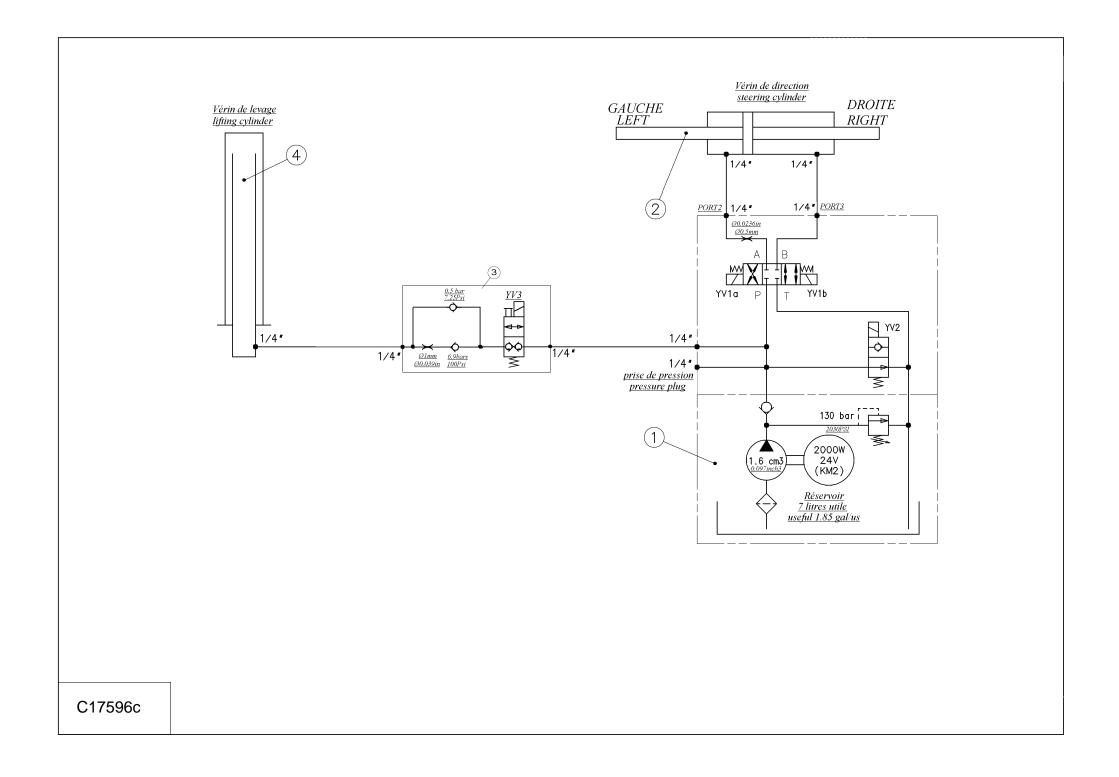


### 3.3 - FOLIO 3/3



# 1 - STAR 6 (STAR 13) - STAR 6 P

### 1.1 - FOLIO 1/1



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## 2 - STAR 8/10NG (STAR 22/26J)

