

B - Familiarization

A

1 - General safety

1.1 - INTENDED USE

To ensure the safe use of an Aerial Work Platform, support personnel must always be available on the ground. If necessary, support personnel will be required to operate the emergency functions of the machine and in rescuing the operator.

Do not operate the product in the following situations :

- On soft, unstable or cluttered ground.
- With wind blowing faster than the permissible limit.
 - Check the allowable wind speed specified in the performance specifications tabulation.
 - Consult the Beaufort scale.
- Close to power lines. Keep a safe distance.
- Outside of the temperature range -20°C / $+50^{\circ}\text{C}$ (-4°F / $+122^{\circ}\text{F}$).
- In an explosive atmosphere / environment.
- During storms.
- In the presence of strong electromagnetic fields.

N.B.:-USE THE MACHINE UNDER "NORMAL" CLIMATIC CONDITIONS. IF YOU NEED TO USE THE MACHINE IN CLIMATIC CONDITIONS LIKELY TO CAUSE DETERIORATION (EXTREME : HUMIDITY, TEMPERATURES, SALINITY, CORROSIVENESS, ATMOSPHERIC PRESSURE), CONTACT HAULOTTE SERVICES®. REDUCE INTERVALS BETWEEN SERVICING.

N.B.:-WHILE THE MACHINE IS NOT IN USE, CARE MUST BE TAKEN TO BRING THE MACHINE TO THE FULLY STOWED POSITION. ENSURE THAT THE MACHINE IS LOCKED IN A SECURE LOCATION, AND THE CONTROL KEY IS REMOVED TO PREVENT UNAUTHORISED USE OF THE MACHINE.

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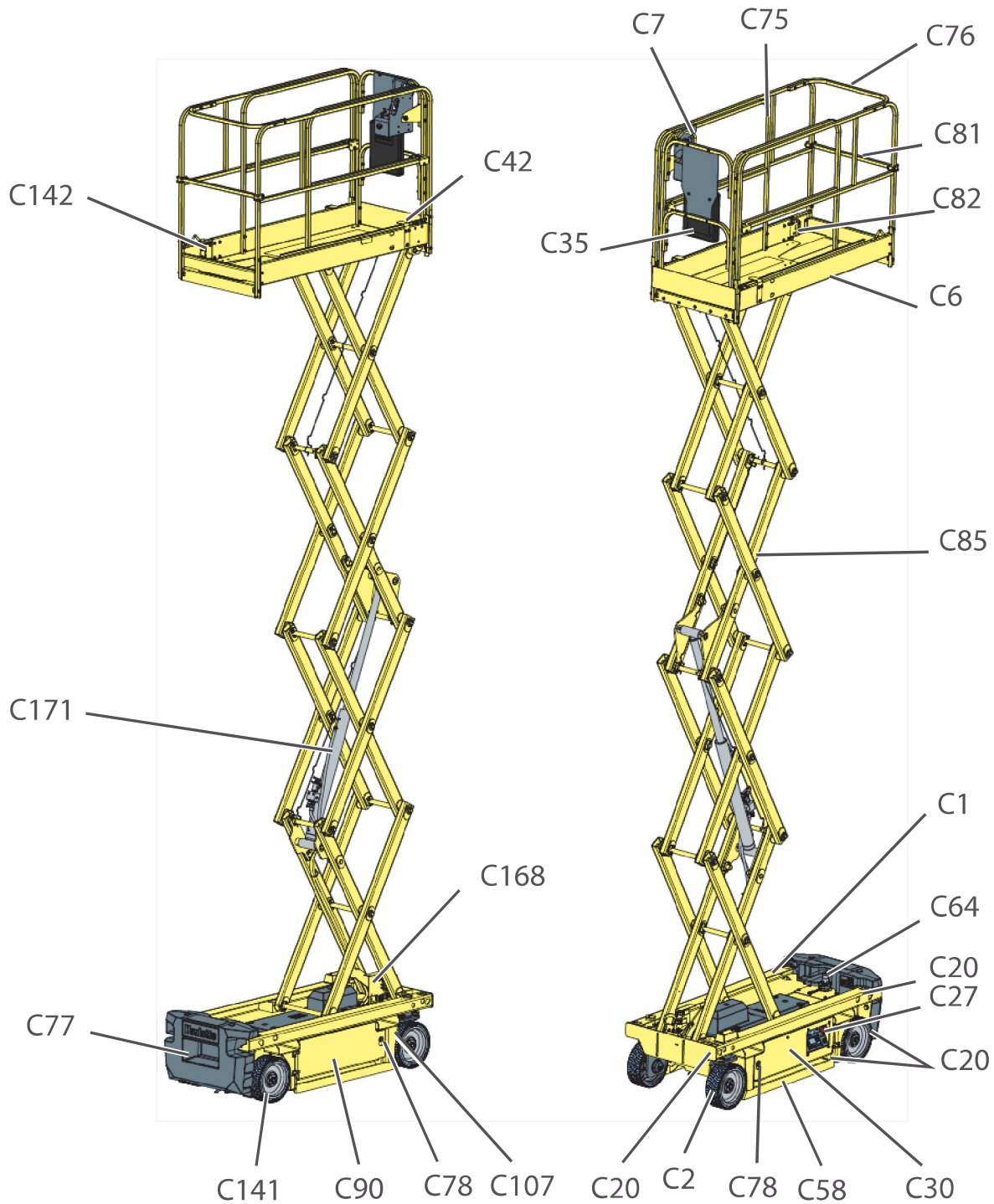
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B - Familiarization

3 - Primary machine components

3.1 - LAYOUT

OPTIMUM 8 - OPTIMUM 1931 E



B - Familiarization

Marking	Description	Marking	Description
C1	Chassis	C77	Platform access ladder
C2	Front drive wheels	C78	Compartment locking latch
C6	Platform	C81	Sliding guardrail
C7	Platform control box	C82	Deck extension handle
C20	Tie-down (and/or forklift loading)	C85	Scissors
C27	Ground control box	C90	Battery bay (block)
C30	Hydraulic oil tank	C107	Pull T-handle for emergency lowering
C35	Document holder	C141	Rear wheel
C42	'Enable Switch' pedal (Optional - Not shown)	C142	Lanyard attachment points
C58	Pothole protection	C168	Maintenance support
C64	Tilt sensor	C169	Folding guardrails (Optional - Not shown)
C75	Extension desk	C171	Scissors lifting cylinder
C76	Guardrail		

3.2 - MAINTENANCE SUPPORT

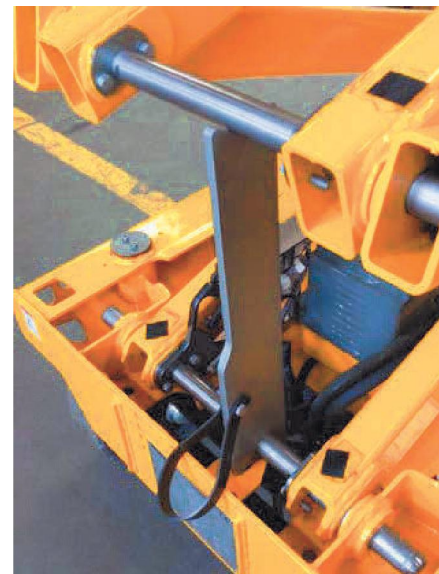
The maintenance stand must be in place before any maintenance operation is begun.

Placing the machine in maintenance configuration :

- Lift scissor arms to a sufficient height (floor of the platform at around 2,5 m / 8 ft 2 in from the ground).
- Pull the plastic handle and put the stand in the vertical position.
- Release the handle. The stand should remain in the vertical position.
- Lower the scissor arms.
- Scissor arm pivoting rod should rest on the V groove of the stand.

Putting in use position :

- To put back the machine into its normal operation, reverse the steps used above.

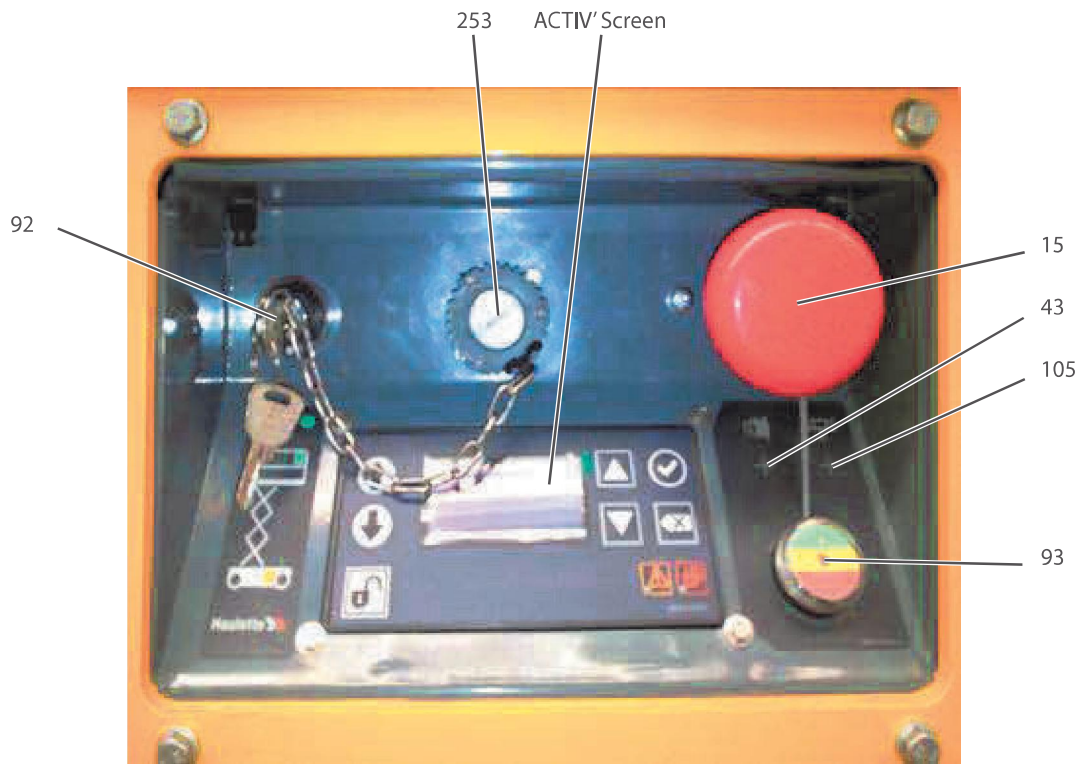


B - Familiarization

3.3 - GROUND CONTROL BOX

3.3.1 - Layout

General view



Controls and indicators

Marking	Description	Function
15	E-stop button	Pulled out : Ground control box energized Pushed in : De-energizes control system
43	Horn button	Not used
92	Control box activation key selector	Right : Ground control box energized Center : De-energizes control system Left : Platform control box energized
93	Battery charging indicator	Battery charger status
105	Beacon light (Optional)	Move upwards : Flashing light turn ON Move downwards : Flashing light turn OFF
253	Diagnostic tool socket	Connection to the diagnostic tool (HaulotteDiag)

B - Familiarization

Controls and indicators

Marking	Description	Function
27	Tilt indicator	Machine on excessive slope
30	Overload indicator	Platform overloaded
43	Horn button	Move upwards and hold to activate horn
46	E-stop button	Pulled out : Platform control box power supply energized Pushed in : De-energizes control system
85	Fault indicator	Fault indicator Faulty or tilting or overloaded machine
		<p>Battery charged</p>
91	Battery charging indicator	<p>Flashing : Batteries have 40 % charge left</p>
		<p>Constantly on : Batteries have only 20 % charge left</p>
108	Movement joystick	Move forward : Forward drive or platform raising Move backwards : Reverse drive or platform lowering
	Front axle steering selector	Press right side of button : Right-hand steering Press left side of button : Left-hand steering
110	Raising / lowering selector	On : Raising / Lowering selection activated Off : Raising / Lowering movement is not selected
111	Driving selection indicator	On : Driving function activated Off : Driving movement is not selected
112	2-position selector	Move to the left : Platform raising / lowering Move to the right : Drive movements
123	'Enable Switch' selector	Press in and hold : Associated command is validated Release : Associated command movement is halted

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B - Familiarization

4 - Performance Specifications

4.1 - TECHNICAL CHARACTERISTICS

Use the table to select the right Haulotte machine for the job.

CE and AS standards

Machine	OPTIMUM 8	
Characteristics - Dimensions	SI	Imp.
Maximum working height	7,77 m	25 ft 6 in
Maximum platform height	5,77 m	18 ft 11 in
Total weight	1520 kg	3,352 lbs
Maximum platform capacity	230 kg	500 lbs
Maximum number of occupants allowed	Indoor use : 2 Outdoor use : 1	
Maximum wind speed allowed	Indoor use : 0 km/h Outdoor use : 45 km/h	Indoor use : 0 mph Outdoor use : 28 mph
Manual force - CE - AS	Indoor use : 400 N (90 lbf) Outdoor use : 200 N (45 lbf)	
Gradeability	25 %	
Maximum side rated slope allowed - CE - AS	1,5°	
Maximum longitudinal rated slope allowed - CE - AS	3°	
Maximum load on wheel	963 kg	2,123 lbs
Maximum ground pressure of wheel on paved ground	13,84 daN/cm ²	209 lb/in ²
Drive speed :		
• Folded machine maximum speed	4,5 km/h	2.79 mph
• Unfolded machine maximum speed	0,5 km/h	0.3 mph
Maximum freewheel speed during towed operation	4,5 km/h	2.79 mph
Outside turning radius	1,5 m	4 ft 11 in
Inside turning radius	1 m	3 ft 3 in
Power source - Electric		
Battery	24 V - 105Ah (C5)	
Hydraulic tank capacity	6 l	1.6 gal US

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ANSI and CSA standards

Machine	OPTIMUM 1931 E	
Characteristics - Dimensions	SI	Imp.
Maximum working height	7,77 m	25 ft 6 in
Maximum platform height	5,77 m	18 ft 11 in
Total weight	1440 kg	3,175 lbs
Maximum platform capacity	230 kg	500 lbs
Maximum number of occupants allowed	Indoor use : 2 Outdoor use : 2	
Maximum wind speed allowed	Indoor use : 0 km/h Outdoor use : 45 km/h	Indoor use : 0 mph Outdoor use : 28 mph
Manual force - ANSI - CSA	445 N	100 lbf
Gradeability	25 %	
Rated slope - ANSI - CSA	0°	
Maximum load on wheel	963 kg	2,123 lbs
Maximum ground pressure of wheel on paved ground	14,31 daN/cm ²	207 lb/in ²
Drive speed :		
• Folded machine maximum speed	4,5 km/h	2.79 mph
• Unfolded machine maximum speed	0,5 km/h	0.3 mph
Maximum freewheel speed during towed operation	4,5 km/h	2.79 mph
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D - Operation instructions

2 - Ground control box

2.1 - TO START AND STOP THE MACHINE

- Ensure that the E-Stop buttons (15) and (46) at the ground and platform control boxes are pulled out.
- Turn the key of the control box activation selector (92) to the right to energize the ground control box.

To shut-down the machine from the ground control box :

- Turn the control box activation selector (92) key to the center.
- Push in the E-stop button (15).

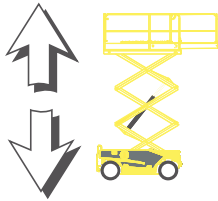

2.2 - MOVEMENT CONTROL



Even at low movement speeds, use the controls with caution.

N.B.:-RELEASING THE ENABLE SWITCH WILL STOP ALL MOVEMENTS.

Ground box controls (emergency station)

Control	Action
Platform raising / lowering 	Push the platform raising / lowering selector (106) upwards to raise the platform. <hr/> Press the platform raising / lowering selector (106) downwards to lower the platform.
Emergency lowering / Emergency platform lowering halted 	Pull the emergency handle (C107) to lower the platform. <hr/> Release the emergency handle (C107) to stop platform lowering.



Once rescue operations are complete, write an incident report.

D - Operation instructions

Pull T-handle for emergency lowering



N.B.:-PULLING ON TO THE PULL T HANDLE, IMMEDIATELY ACTIVATES THE EMERGENCY LOWERING OF THE PLATEFORM.



ALWAYS keep personnel and obstructions clear of the aerial work platform that might block the lowering.

2.3 - ADDITIONAL CONTROLS FROM THE GROUND CONTROL BOX

For the machines equipped with beacon light :

- Push the beacon light selector switch (105) upwards to turn ON the beacon light.
- Push the beacon light selector switch (105) downwards to turn OFF the beacon light.

D - Operation instructions

3 - Platform control box

3.1 - TO START AND STOP THE MACHINE

To start the machine :

At the ground control box :

- The E-stop button on the ground control box must be in ON position (pulled out / activated).
- Turn the key on the control box activation selector switch (92) to the left to energize the platform control box.

At the platform control box :

- Pull the E-stop button (46).

To stop the machine :

- Push in the E-stop button (46).





3.2 - DRIVE AND STEER CONTROL

To control the direction and drive :

- Move the 2-position selector (112) to the right.
- The drive indicator (111) lights up.
- Simultaneously operate drive joystick (108) with joystick trigger (Enable switch (123)) pressed in and maintained

N.B.-:THE ENABLE SWITCH (123) IS THE FOOT PEDAL FOR ANSI AND CSA STANDARDS ONLY.

N.B.-:THE DRIVE AND LIFT SPEEDS ARE PROPORTIONAL TO THE POSITION OF THE JOYSTICK. PUSHING THE JOYSTICK COMPLETELY FORWARD OR BACKWARD, WILL RESULT IN MAXIMUM SPEED.

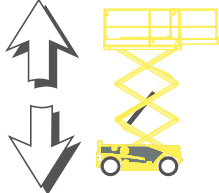
Control	Action
Driving	 Move the drive joystick (108) forwards to drive the machine forwards.
	 Move the drive joystick (108) backwards to drive in reverse.
Front-axle steering	 Push the front-axle steering selector thumb switch (108) to the right to steer to the right.
	 Push the front-axle steering selector thumb switch (108) to the left to steer to the left.

D - Operation instructions

3.3 - MOVEMENT CONTROL

To operate raising/lowering function, move 2 position selector switch (112) to the left. Activate raising/lowering selector (110). Simultaneously operate joystick (108) with joystick trigger (Enable switch (123)) pressed in and maintained.

N.B.:-THE ENABLE SWITCH (123) IS THE FOOT PEDAL FOR ANSI AND CSA STANDARDS ONLY.

Control	Action
Platform raising / lowering 	Push the movement joystick (108) forwards to raise the platform.
	Push the movement joystick (108) backwards to lower the platform. 1. 2. 3. .

1. When the platform is lowered to a height of 1,50 m(4 ft11 in) from the ground; a time delay is automatically activated for a few seconds, before any further lowering of the platform can commence
2. This is to avoid any risk of crushing
3. The alarm sounds

D - Operation instructions

4 - Emergency procedure

4.1 - IN CASE OF POWER LOSS

In case of loss of the main power source, the secondary (back-up) power unit, powered by the starting battery, allows movements to be controlled from both the ground and platform control boxes.

In an emergency, if the operator has to exit the platform while it is elevated, the transfer of the operator must respect the following recommendations. :

- Exit onto a sturdy and safe structure.
- The occupant(s) must ensure that 2 lanyards are used for security/safety. One must be attached to the designated anchorage point on platform the occupant(s) is in and the other attached to the structure intended to get on.
- Occupant(s) must exit the current platform through the normal access.

N.B.-:DO NOT DETACH THE LANYARD FROM THE CURRENT PLATFORM IF THE TRANSFER TO THE NEW STRUCTURE POSES ANY DANGER OR UNTIL THE TRANSFER IS SAFELY COMPLETED. DO NOT ATTEMPT TO CLIMB DOWN FROM THE PLATFORM. WAIT FOR ASSISTANCE TO LEAVE THE CRADLE SAFELY.

4.2 - TO RESCUE OPERATOR IN PLATFORM

In a situation where an operator located in the platform needs to be rescued (for example in case of illness, injury or trapped against a structure making the control box inaccessible), the rescue personnel at ground level needs to obtain rapid and direct access to operating functions.

HAULOTTE® provides a ground control emergency system that should be used to safely bring the operator into such a position that appropriate medical attention could be provided.

Lower the platform using the emergency pull T-handle on the chassis.



Once rescue operations are complete, write an incident report.

Or :

1. Turn the key of the control box activation selector (92) to the right to energize the ground control box. The platform box controls are de-energized.
2. Lower the platform from the ground control box.
3. Lower the platform using the platform raising/lowering selector (1) while simultaneously pressing and maintaining the "Enable switch" (9).
4. Release it to halt lowering.