



52808437EN-USM1(D-03/2024)

160 ATJE S1

160 ATJE RC S1

180 ATJE S1

180 ATJE RC S1

160 ATJ+ E S1

160 ATJ+ E RC S1

200 ATJE 4RD S1

200 ATJE RC 4RD S1

OPERATION SAFETY SYSTEM (OSS)

LIGHTING PACK

SUPPLEMENTARY OPERATOR'S MANUAL

(ORIGINAL MANUAL)

INITIAL VERSION

D-03/2024

UPDATED

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1. SAFETY

1.1. FOREWORD

1.1.1. ABOUT THIS OPERATOR'S MANUAL

This additional operator's manual supplements the operator's manual supplied with this machine.

This operator's manual forms an integral part of this machine and must be kept in the platform's storage compartment at all times.

Carefully read and understand this supplementary instruction manual before using this machine.

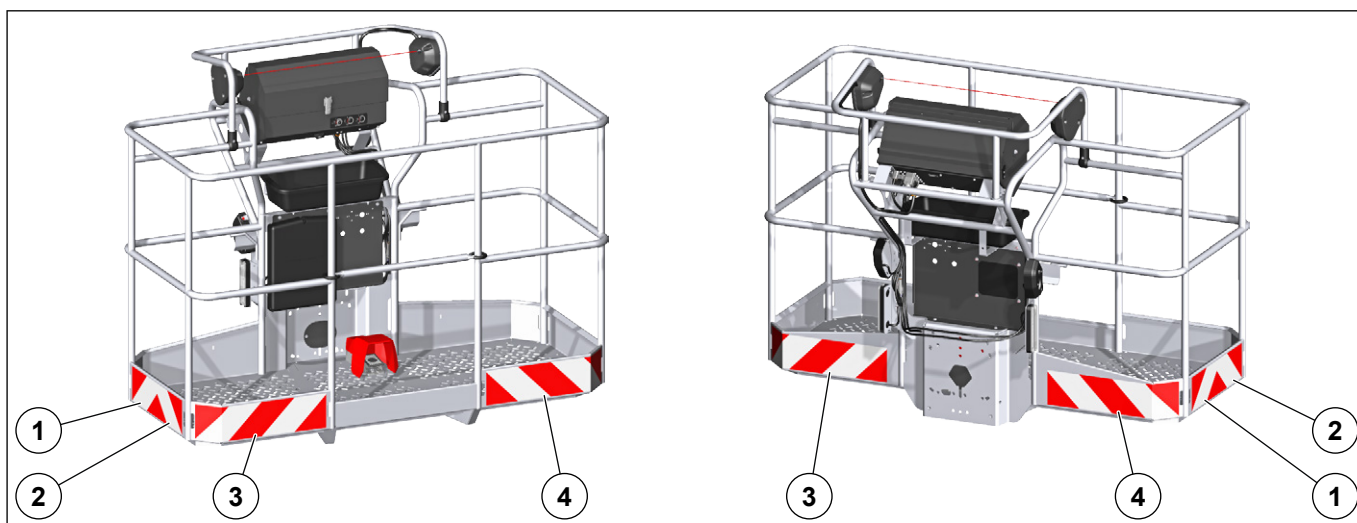
This manual has been produced based on the equipment list and technical specifications given at the time of its design.

Descriptions and illustrations are non binding.

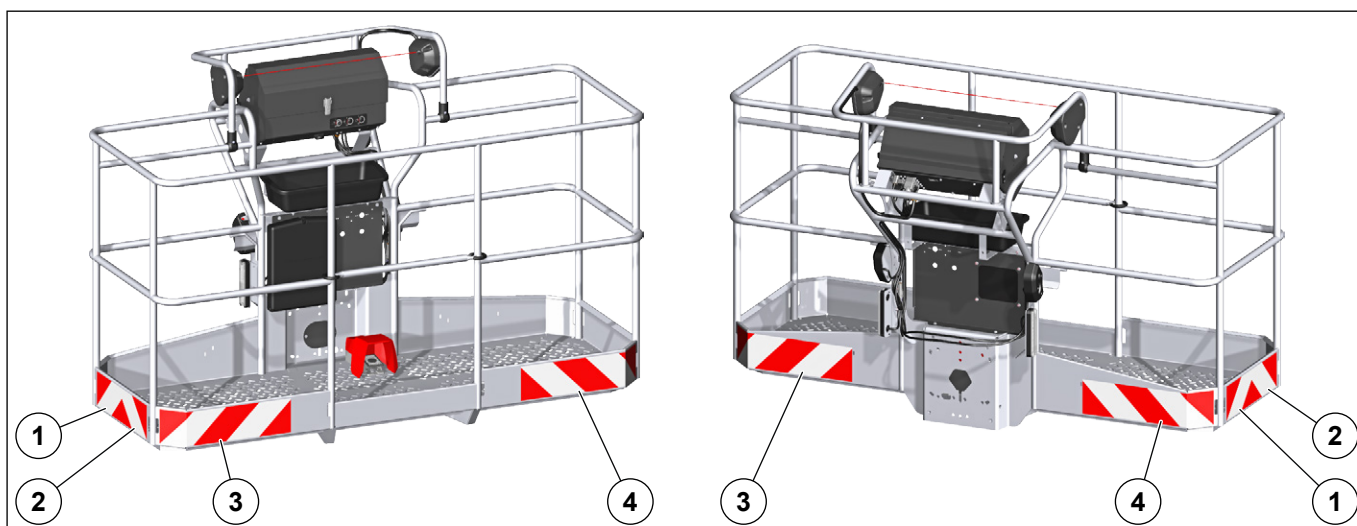
1.2. STICKERS - Option

1.2.1. LOCATION OF STICKERS

160 ATJE S1 / 160 ATJE RC S1 / 180 ATJE S1 / 180 ATJE RC S1



200 ATJE 4RD S1 / 200 ATJE RC 4RD S1

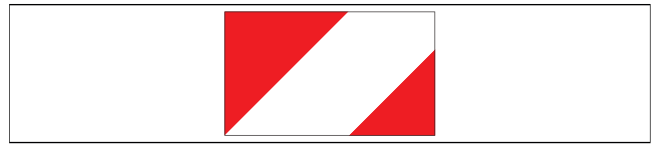


Item	Part No.	Designation
1	52813882	Sticker - Red and white reflective tape inclined to the right 1/2
2	52813883	Sticker - Red and white reflective tape inclined to the left 1/2
3	52813894	Sticker - Red and white reflective tape inclined to the right 2/2
4	52813895	Sticker - Red and white reflective tape inclined to the left 2/2

1.2.2. DESCRIPTION OF THE STICKERS

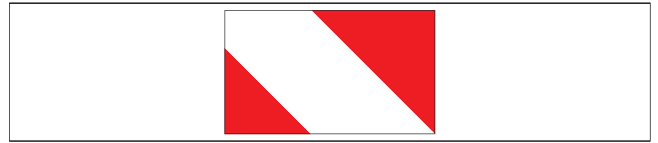
1.2.2.1. Sticker - Red and white reflective tape inclined to the right 1/2

Indicates that the machine component on which the sticker is affixed is mobile.



1.2.2.2. Sticker - Red and white reflective tape inclined to the left 1/2

Indicates that the machine component on which the sticker is affixed is mobile.



1.2.2.3. Sticker - Red and white reflective tape inclined to the right 2/2

Indicates that the machine component on which the sticker is affixed is mobile.



1.2.2.4. Sticker - Red and white reflective tape inclined to the left 2/2

Indicates that the machine component on which the sticker is affixed is mobile.

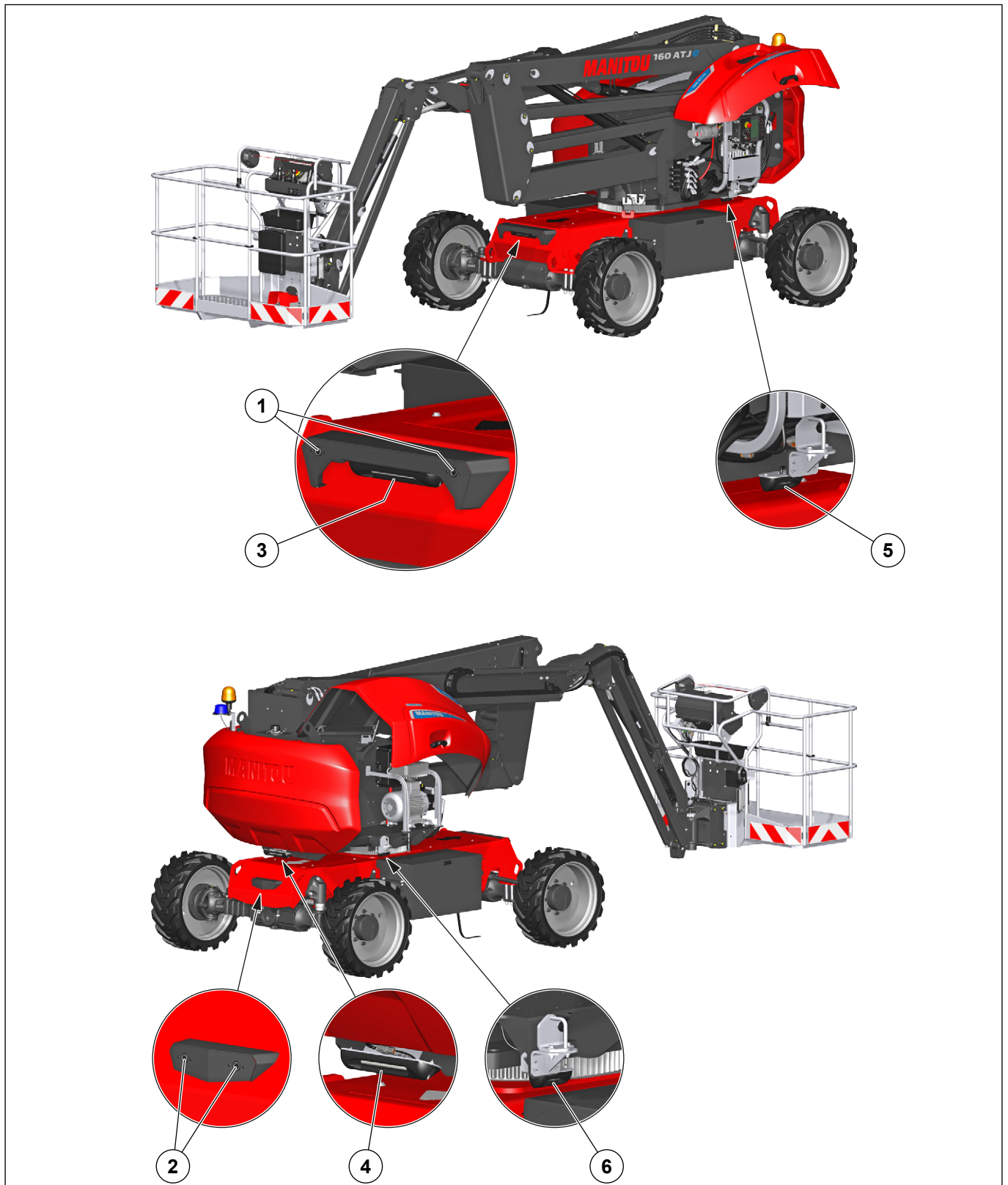


2. FAMILIARIZATION

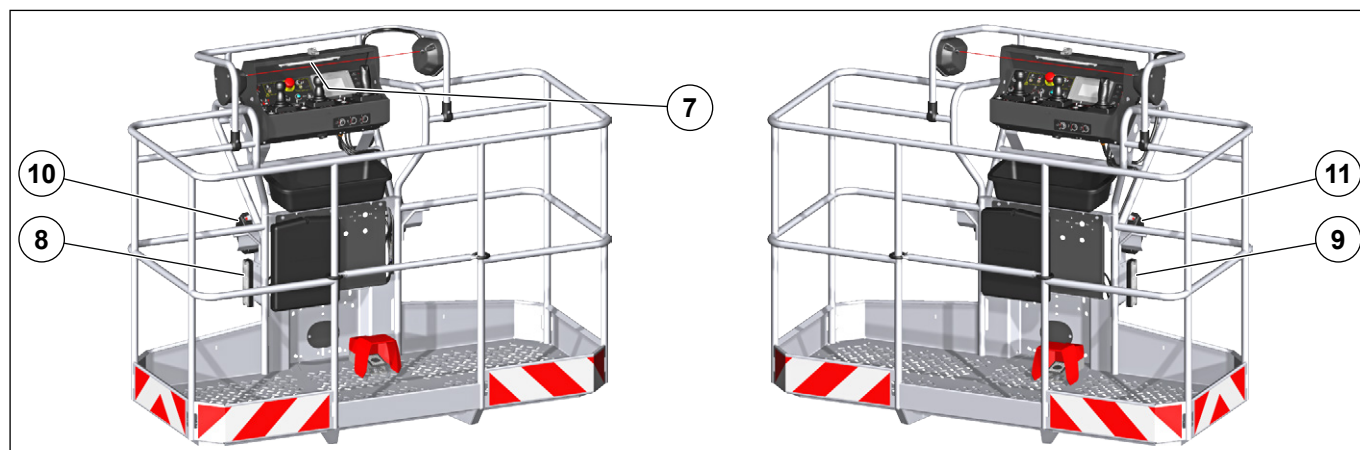
2.1. MACHINE COMPONENTS

2.1.1 LOCATION OF THE MACHINE COMPONENTS

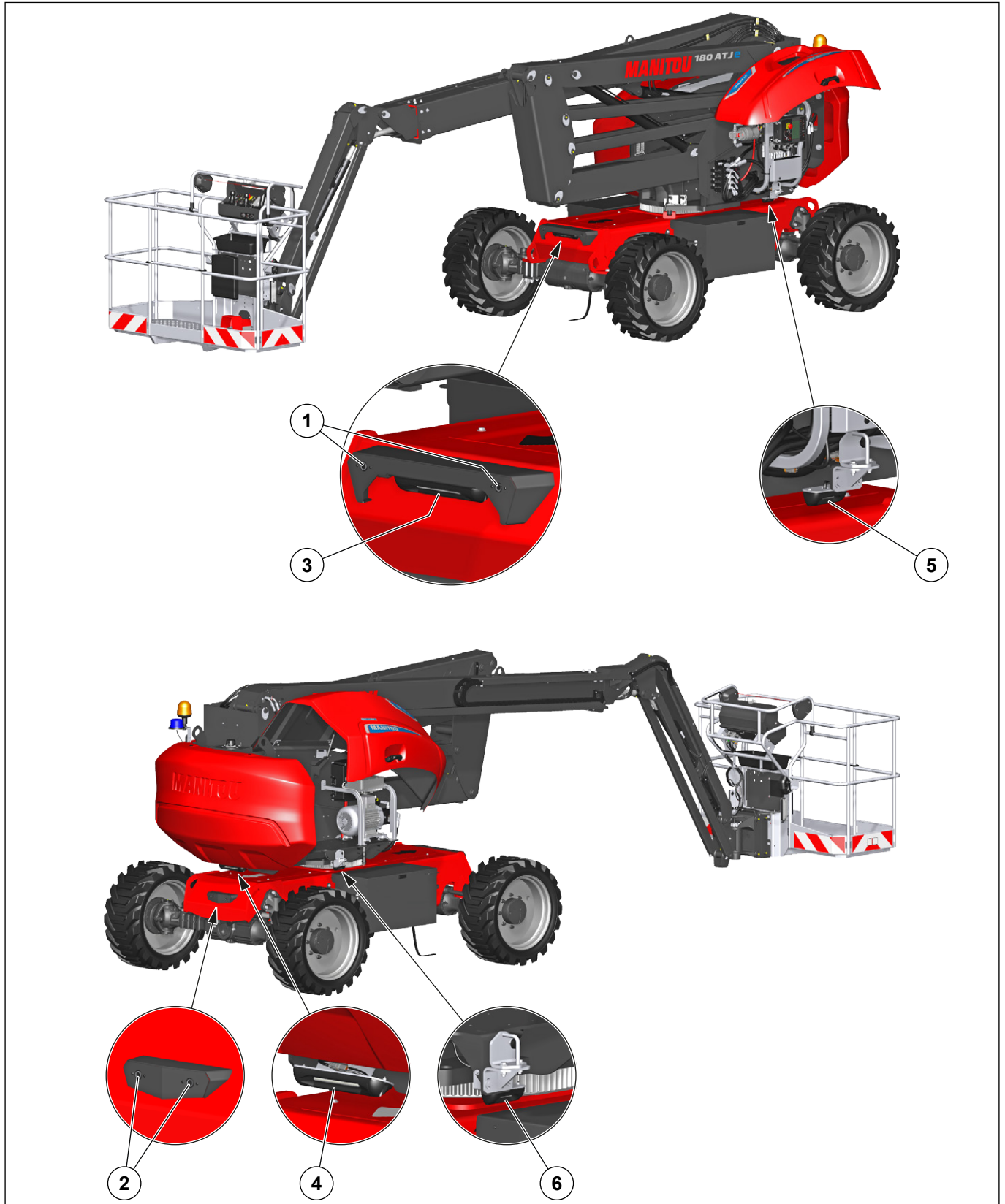
160 ATJE S1 / 160 ATJE RC S1



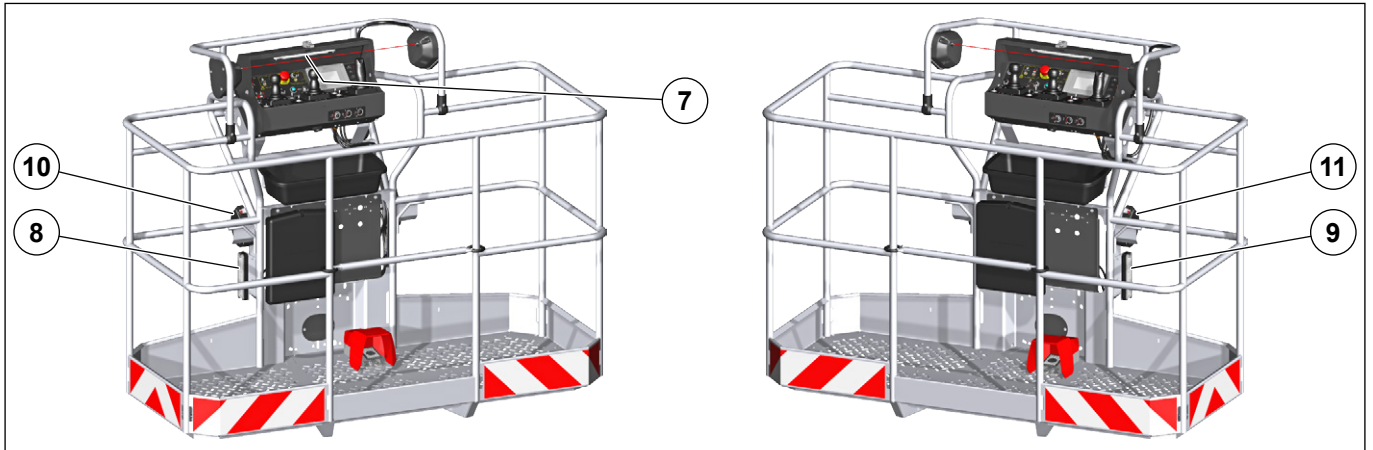
160 ATJE S1 / 160 ATJE RC S1



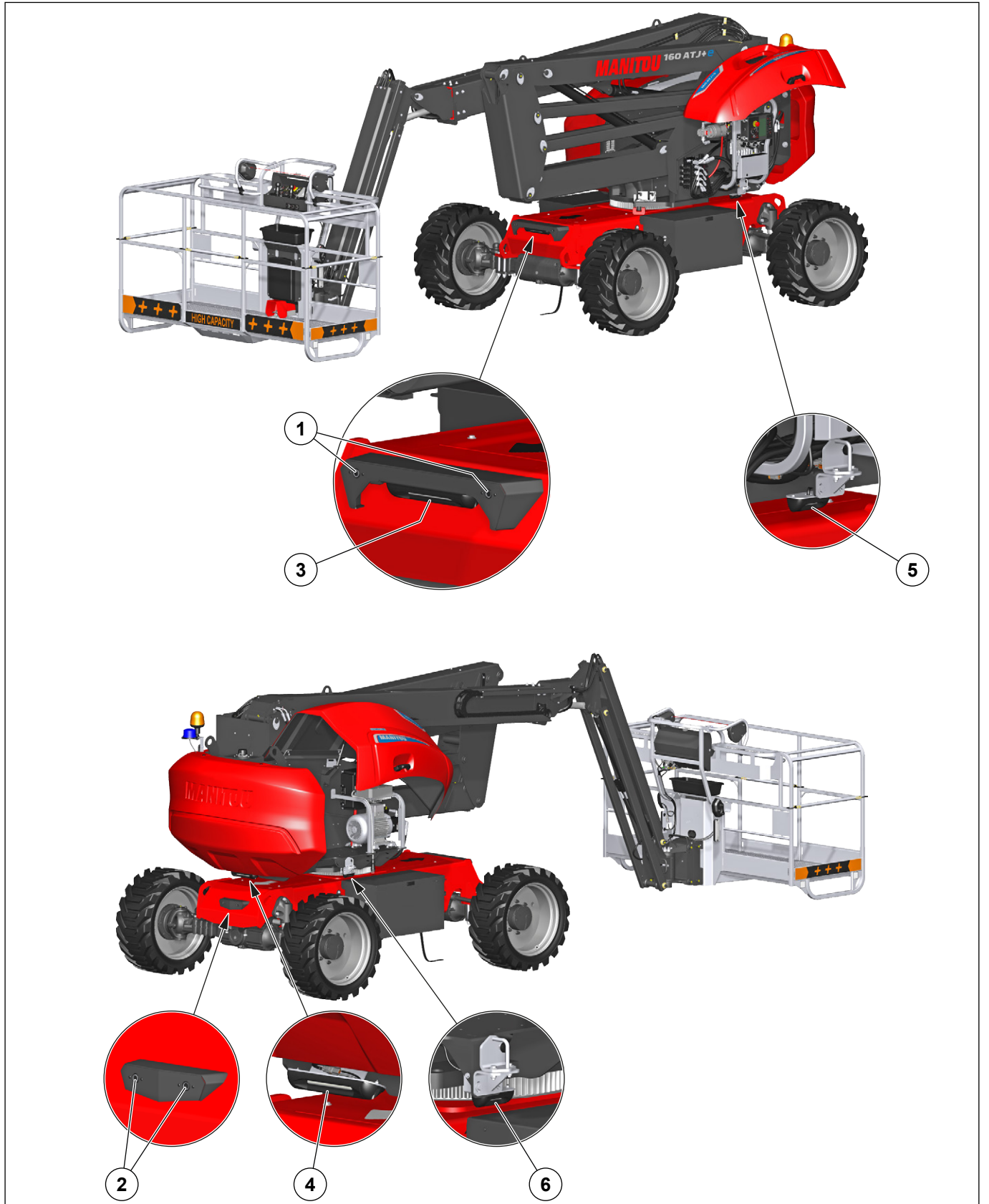
<i>Item</i>	<i>Designation</i>
1	Rear radars
2	Front radars
3	Rear light
4	Headlight
5	Right headlight
6	Left headlight
7	Control panel light bar
8	Left tricolor light
9	Right tricolor light
10	Left lanyard sensor
11	Right lanyard sensor



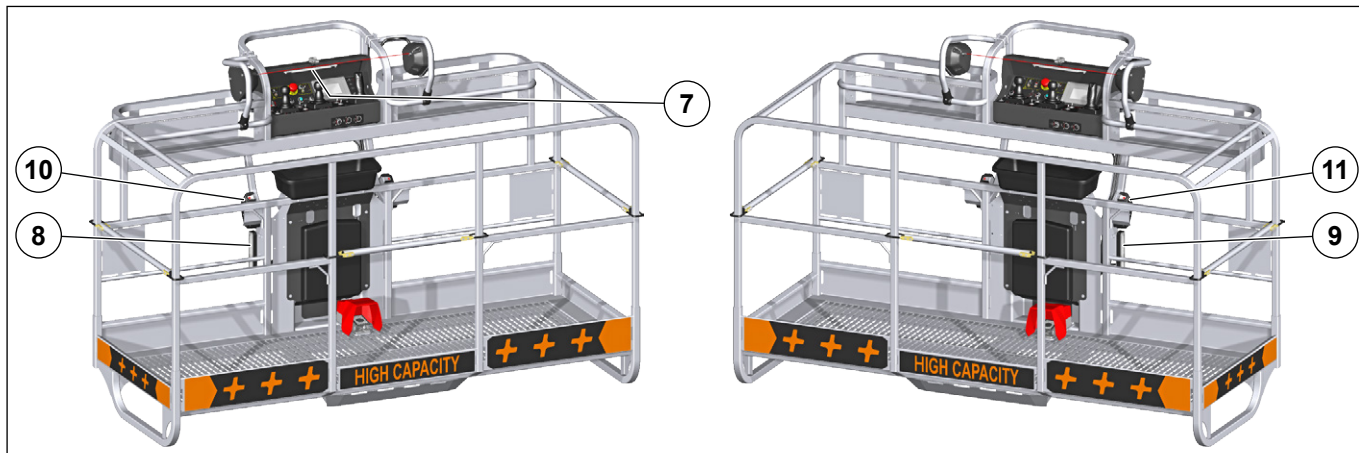
180 ATJE S1 / 180 ATJE RC S1



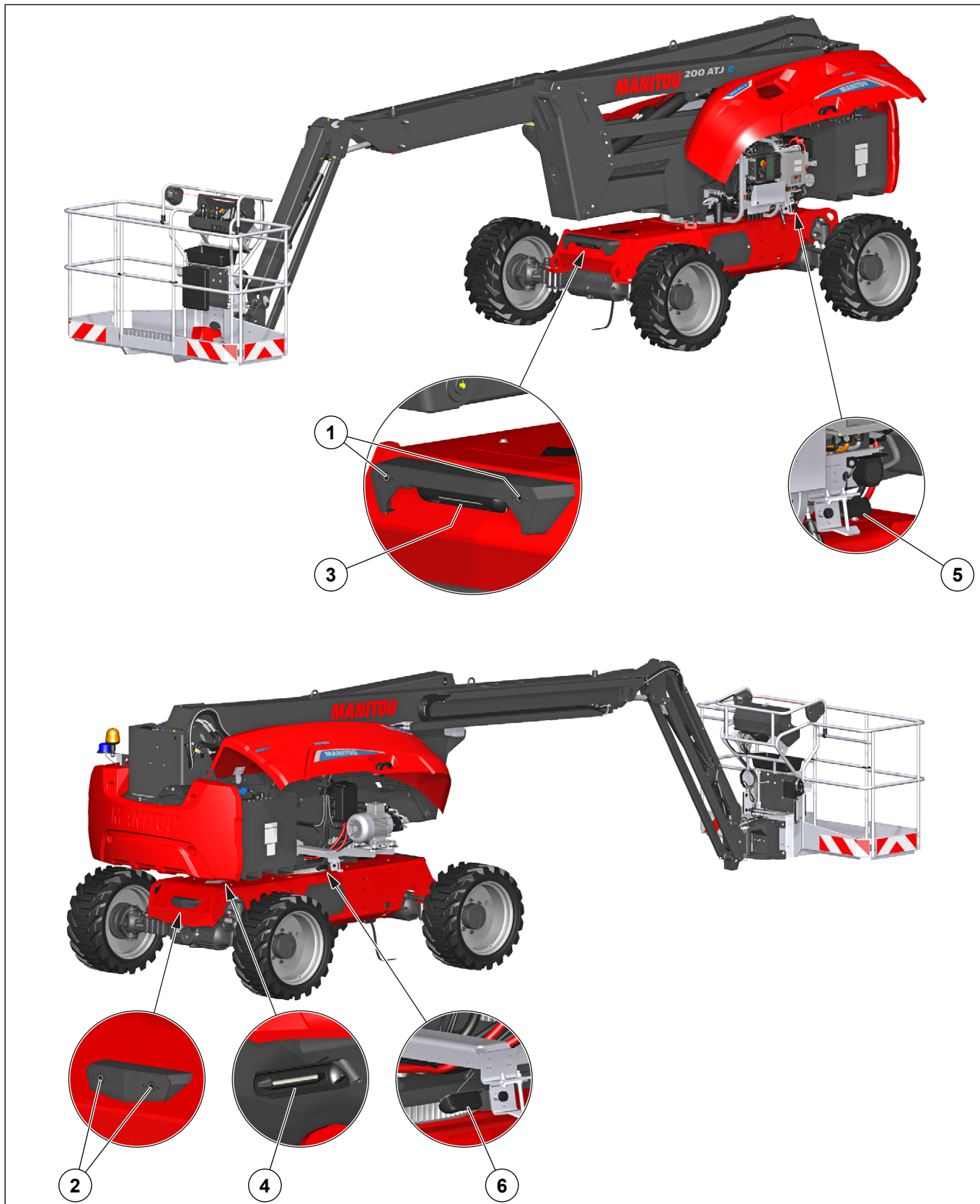
<i>Item</i>	<i>Designation</i>
1	Rear radars
2	Front radars
3	Rear light
4	Headlight
5	Right headlight
6	Left headlight
7	Control panel light bar
8	Left tricolor light
9	Right tricolor light
10	Left lanyard sensor
11	Right lanyard sensor



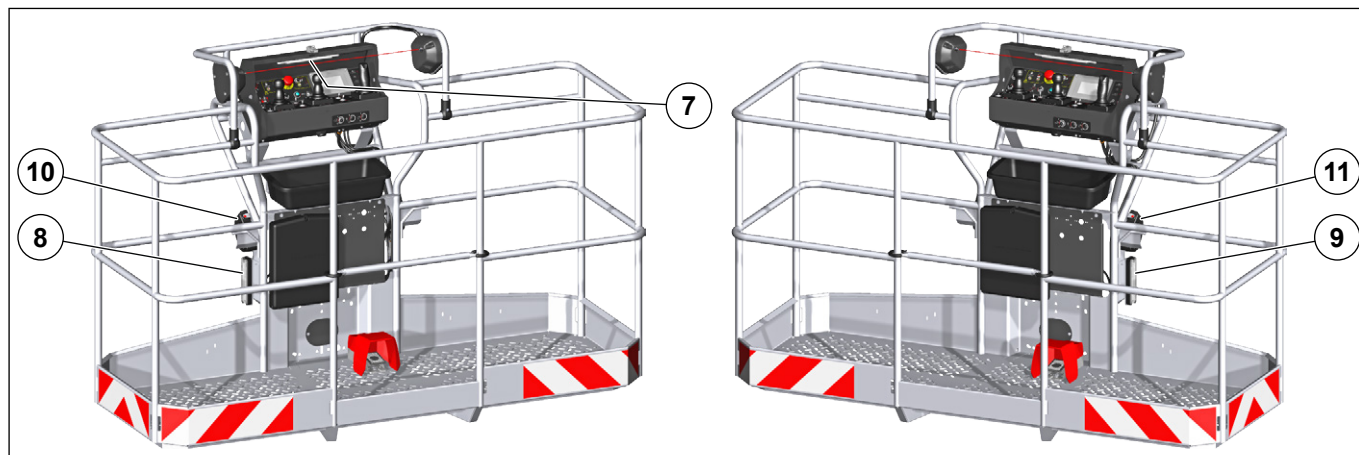
160 ATJ+ E S1 / 160 ATJ+ E RC S1



<i>Repère</i>	<i>Désignation</i>
1	Radars arrière
2	Radars avant
3	Feu arrière
4	Feu avant
5	Feu droit
6	Feu gauche
7	Barre d'éclairage du panneau de commande
8	Feu tricolore gauche
9	Feu tricolore droit
10	Détecteur de longe gauche
11	Détecteur de longe droit



200 ATJE 4RD S1 - 200 ATJE RC 4RD S1



<i>Repère</i>	<i>Désignation</i>
1	Radars arrière
2	Radars avant
3	Feu arrière
4	Feu avant
5	Feu droit
6	Feu gauche
7	Barre d'éclairage du panneau de commande
8	Feu tricolore gauche
9	Feu tricolore droit
10	Détecteur de longe gauche
11	Détecteur de longe droit

2.1.2. GROUND OBSTACLE DETECTION SYSTEM

The ground obstacle detection system comprises 2 front radars and 2 rear radars.

2.1.3. LIGHTING SYSTEM

The lighting system includes:

- Front, rear, left and right lights.
- The control panel light bar.
- Left and right tricolor lights with 3 independent lighting colors.

It has 3 functions:

- Danger: the left and right tricolor lights light up red when an alert occurs, see details in the corresponding chapter.
- All-movements alert: the left and right tricolor lights flash orange when one or more machine functions are activated.
- Machine lighting with 3 lighting modes:

AUTOMATIC MODE "AUTO"

<i>Ambient light levels</i>	<i>Driving the machine forward or backward</i>	<i>Front and rear lights</i>	<i>Left and right lights</i>	<i>Control panel light bar</i>	<i>Tricolor lights</i>
Low	no	Off	Illuminated	Illuminated	White light on
	Yes	Illuminated	Illuminated	Illuminated	White light on
High	no	Off	Off	Off	White light off
	Yes				

RUN MODE "ON"

<i>Control panel light bar</i>	<i>Front, rear, left and right lights</i>	<i>Tricolor lights</i>
Illuminated	Illuminated	White light on

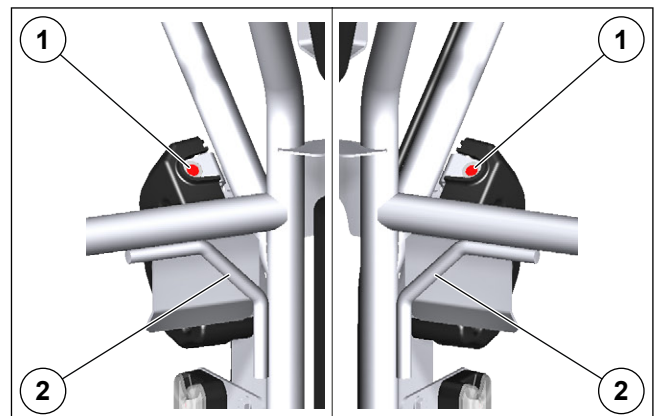
STOP MODE "OFF"

<i>Control panel light bar</i>	<i>Front, rear, left and right lights</i>	<i>Tricolor lights</i>
Off	Off	White light off

2.1.4. HARNESSLESS OPERATOR SYSTEM

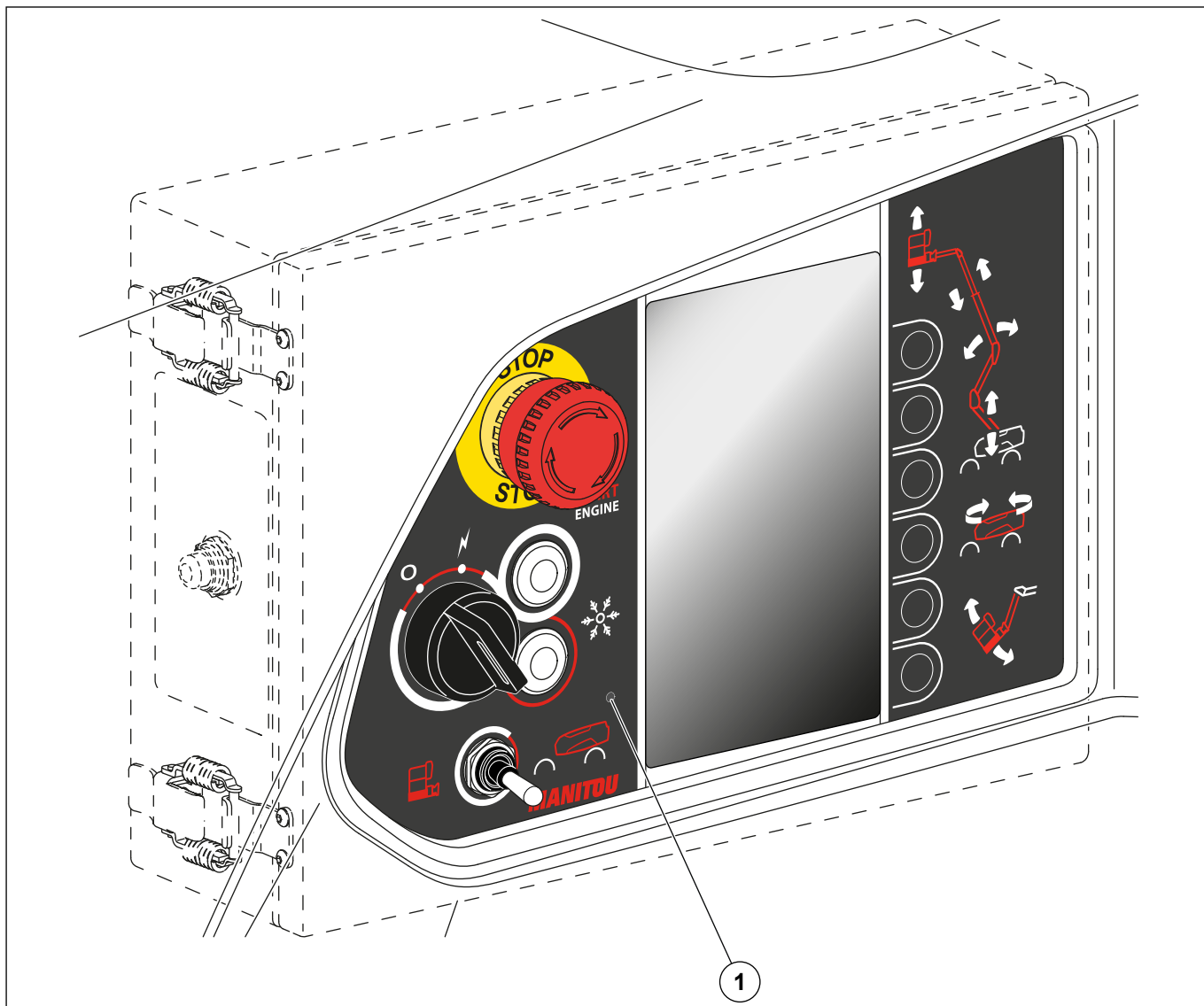
The harnessless operator system comprises 1 left and 1 right lanyard sensor, each equipped with an individually operated indicator lamp (1):

- It is lit when the safety harness lanyard is not attached to the corresponding lanyard anchorage point (2).
- It is off when the safety harness lanyard is attached to the corresponding lanyard anchorage point (2).



2.2. MACHINE CONTROLS


2.2.1. GROUND-LEVEL CONTROLS



Item	Designation	Description
1	Ambient light level sensor	It operates autonomously, switching the machine's lighting on and off in automatic mode "AUTO".

2.2.2. PLATFORM CONTROLS



Item	Designation	Description
1	Lighting button	 Press and release the button to change the machine's lighting mode.

2.3. ALERTS

2.3.1. DEFINITION OF ALERTS

Note: no machine functions are disabled in the case of the alerts listed below.

HARNESSLESS OPERATOR ALERT

It occurs when the safety harness lanyard is not attached to one of the lanyard anchorage points in the platform.

GROUND OBSTACLE DETECTION ALERT

It occurs when an obstacle is detected by one of the front or rear radars.

LATERAL TILTING ALERT

It occurs when the machine is driven on a sideways incline and the lateral tilt of the chassis exceeds the permitted value.

UNEVEN TERRAIN ALERT

It occurs when the machine is driven over uneven ground and the value of shocks felt in the platform exceeds the permitted value.

MACHINE LIGHTING ALERT

It occurs when the lighting mode is changed and informs you of the lighting mode activated.

2.3.2. SIGNALING OF ALERTS

HARNESSLESS OPERATOR ALERT

<i>Action on the machine</i>	<i>Ground-level and platform display screens</i>	<i>Tricolor lights</i>
The foot switch is pressed and held down	A CAUTION alert page is displayed for 3 seconds	Unlit
One or more machine functions (except steering functions) are activated	A DANGER alert page is displayed	Light up red

GROUND OBSTACLE DETECTION ALERT

Machine in the transport position:

<i>Distance from obstacle</i>	<i>Audible alarm</i>	<i>Ground-level and platform display screens</i>	<i>Tricolor lights</i>
160 ATJE S1 / 160 ATJE RC S1 / 160 ATJ+ E S1 / 160 ATJ+ E RC S1 : Less than or equal to 2.5 meters (8 feet 2 inches) and greater than 2 meters (6 feet 7 inches) 180 ATJE S1 / 180 ATJE RC S1 / 200 ATJE 4RD S1 / 200 ATJE RC 4RD S1 : Less than or equal to 3 meters (9 feet 10 inches) and greater than 2.25 meters (7 feet 4 inches)	Sounds intermittently and increasingly rapidly as the obstacle gets nearer	A CAUTION alert page is displayed for 3 seconds	Unlit
160 ATJE S1 / 160 ATJE RC S1 / 160 ATJ+ E S1 / 160 ATJ+ E RC S1 : Less than or equal to 2 meters (6 feet 7 inches) and greater than 1.5 meters (4 feet 11 inches) 180 ATJE S1 / 180 ATJE RC S1 / 200 ATJE 4RD S1 / 200 ATJE RC 4RD S1 : Less than or equal to 2.25 meters (7 feet 4 inches) and greater than 1.5 meters (4 feet 11 inches)	Sounds intermittently and increasingly rapidly as the obstacle gets nearer	A CAUTION alert page is displayed for 3 seconds	Unlit
Less than or equal to 1.5 meters (4 feet 11 inches)	Continuous	A DANGER alert page is displayed	Light up red

Machine in the working position:

<i>Distance from obstacle</i>	<i>Audible alarm</i>	<i>Ground-level and platform display screens</i>	<i>Tricolor lights</i>
Less than or equal to 1 meter (3 feet 3 inches) and greater than 0.75 meter (2 feet 5 inches)	Sounds intermittently and increasingly rapidly as the obstacle gets nearer	A CAUTION alert page is displayed for 3 seconds	Unlit
Less than or equal to 0.75 meters (2 feet 5 inches) and greater than 0.5 meters (1 foot 7 inches)	Sounds intermittently and increasingly rapidly as the obstacle gets nearer	A CAUTION alert page is displayed for 3 seconds	Unlit
Less than or equal to 0.5 meters (1 foot 7 inches)	Continuous	A DANGER alert page is displayed	Light up red

LATERAL TILTING ALERT

Machine in the transport position:

<i>Lateral chassis tilt</i>	<i>Audible alarm</i>	<i>Ground-level and platform display screens</i>	<i>Tricolor lights</i>
160 ATJE S1 / 160 ATJE RC S1 / 180 ATJE S1 / 180 ATJE RC S1 : Greater than or equal to 19° (34%) and less than 24° (45%) 160 ATJ+ E S1 / 160 ATJ+ E RC S1 : Greater than or equal to 14° (25%) and less than 19° (34%) 200 ATJE 4RD S1 / 200 ATJE RC 4RD S1 : Greater than or equal to 17° (30.6%) and less than 22° (40.4%)	Sounds intermittently	A CAUTION alert page is displayed for 3 seconds	Unlit
160 ATJE S1 / 160 ATJE RC S1 / 180 ATJE S1 / 180 ATJE RC S1 : Greater than or equal to 24° (45%) 160 ATJ+ E S1 / 160 ATJ+ E RC S1 : Greater than or equal to 19° (34%) 200 ATJE 4RD S1 / 200 ATJE RC 4RD S1 : Greater than or equal to 22° (40.4%)	Continuous	A DANGER alert page is displayed	Light up red

Machine in the working position:

<i>Lateral chassis tilt</i>	<i>Audible alarm</i>	<i>Ground-level and platform display screens</i>	<i>Tricolor lights</i>
160 ATJE S1 / 160 ATJE RC S1 / 180 ATJE S1 / 180 ATJE RC S1 / 160 ATJ+ E S1 / 160 ATJ+ E RC S1 : Greater than or equal to 4.5°. 200 ATJE 4RD S1 / 200 ATJE RC 4RD S1 : Greater than or equal to 3.5°.	Continuous	A DANGER alert page is displayed	Light up red

UNEVEN TERRAIN ALERT

Machine in the transport position:

<i>Shocks felt in the platform</i>	<i>Audible alarm</i>	<i>Ground-level and platform display screens</i>	<i>Tricolor lights</i>
Above 0.45 G and below 0.7 G	Sounds once	A CAUTION alert page is displayed for 3 seconds	Unlit
Greater than or equal to 0.7 G for at least 3 seconds	Sounds once	A DANGER alert page is displayed	Light up red

Machine in the working position:

<i>Shocks felt in the platform</i>	<i>Audible alarm</i>	<i>Ground-level and platform display screens</i>	<i>Tricolor lights</i>
Greater than or equal to 0.7 G for at least 3 seconds	Sounds once	A DANGER alert page is displayed	Light up red

MACHINE LIGHTING ALERT

<i>Machine lighting mode</i>	<i>Display screen in the platform</i>	
Automatic "AUTO"	An INFORMATION alert page is displayed for 3 seconds	A pictogram "AUTO" is displayed
On "ON"	An INFORMATION alert page is displayed for 3 seconds	A pictogram "ON" is displayed
On "OFF"	An INFORMATION alert page is displayed for 3 seconds	-

3. OPERATING THE MACHINE

3.1. BEFORE OPERATING THE MACHINE

3.1.1. ADDITIONAL EXTERNAL INSPECTION

The additional external inspection complements the external inspection described in the machine's operator's manual.

Safety precautions are identical to those described in the machine's operator's manual.

Perform a visual and physical inspection of the machine:

1. Check that the additional instruction manual is clean and complete.
2. Check the stickers and make sure they are all present, clean and legible.
3. Check for cracks in the welding.
4. Check the components for cracks and excessive corrosion.
5. Check that all components are in good condition and clean: radars, lights, control panel light bar, lanyard sensors and light level sensor.

3.1.2. ADDITIONAL FUNCTION TESTS

The additional function tests supplement the function tests described in the machine's operator's manual.

The additional function tests must be carried out after all the function tests described in the machine's operator's manual have been performed.

Safety precautions are identical to those described in the machine's operator's manual.

3.1.2.1. Testing the harnessless operator system

The machine is powered down.

The machine is in transport position.

The turntable and the platform are in neutral position.

The jib arm is completely lowered.

1. Switch on the machine.
2. Get into the platform.
Result:
 - The indicator lamps on the left and right lanyard sensors must be lit.
3. Attach your safety harness lanyard to the left lanyard anchorage point.
Result:
 - The left lanyard sensor indicator lamp should go out.
4. Detach the lanyard from the left anchorage point.
Result:
 - The left lanyard sensor indicator lamp should light up.
5. Attach your safety harness lanyard to the right lanyard anchorage point.
Result:
 - The right lanyard sensor indicator lamp should go out.
6. Detach the lanyard from the right anchorage point.
Result:
 - The right lanyard sensor indicator lamp should light up.
7. Press and hold down the foot switch.
Result:
 - A CAUTION alert page should be displayed for 3 seconds.

Continuation: see next page.

8. Raise the jib arm slightly.

Result:

- A DANGER alert page should be displayed.
- The tricolor lights should light up red.

9. Release the foot switch.

Result:

- The alert page should no longer be displayed.
- The tricolor lights must go out.

3.1.2.2. Testing the ground obstacle detection system

The machine is powered up.

The machine is in transport position.

The turntable and the platform are in neutral position.

The jib arm is slightly raised.

1. Fully lower the jib arm.

2. Get out of the platform.

3. Place an obstacle between 2 meters (6 feet 7 inches) and 2.5 meters (8 feet 2 inches) in front of the machine chassis.

4. Get into the platform.

5. Attach your safety harness lanyard to one of the lanyard anchorage points.

6. Press and hold down the foot switch.

Result:

- A CAUTION alert page should be displayed.
- The audible alarm should sound intermittently.

7. Release the foot switch.

8. Get out of the platform.

9. Remove the obstacle in front of the machine chassis and place it between 2 meters (6 feet 7 inches) and 2.5 meters (8 feet 2 inches) behind the machine chassis.

10. Get into the platform.

11. Attach your safety harness lanyard to one of the lanyard anchorage points.

12. Press and hold down the foot switch.

Result:

- A CAUTION alert page should be displayed.
- The audible alarm should sound intermittently.

13. Release the foot switch.

14. Get out of the platform.

15. Remove the obstacle behind the machine chassis.

16. Get into the platform.

17. Attach your safety harness lanyard to one of the lanyard anchorage points.

3.1.2.3. Testing the machine lighting

The machine is powered up.

The machine is in transport position.

The turntable and the platform are in neutral position.

The jib arm is completely lowered.

The "AUTO" pictogram must appear on the platform display screen.

1. Press and release the lighting button.

Result:

- An INFORMATION alert page should be displayed for 3 seconds.
- The "ON" pictogram should appear on the platform display screen.
- The control panel light bar should light up.
- The front, rear, left and right lights should come on.
- The tricolor lights should be white.

2. Turn the platform to the left or right.

Result:

- The control panel light bar should stay on.
- The front, rear, left and right lights should stay on.
- The tricolor lights should stay white.
- The tricolor lights should flash orange while the platform is rotating.

3. Press and release the lighting button.

Result:

- An INFORMATION alert page should be displayed for 3 seconds.
- The "ON" pictogram should no longer appear on the platform display screen.
- The control panel light bar and all lights should go out.

4. Turn the platform to the left or right.

Result:

- The tricolor lights should flash orange while the platform is rotating.

5. Release the foot switch.

6. Press and release the lighting button.

Result:

- An INFORMATION alert page should be displayed briefly.
- The "AUTO" pictogram should appear on the platform display screen.
- If light levels are low:
 - The control panel light bar should light up.
 - The front and rear lights should remain off.
 - The left and right lights should come on.
 - The tricolor lights should be white.
- If light levels are high:
 - The control panel light bar and all lights should remain off.

7. Drive the machine a short distance forward or backward.

Result:

- If light levels are low:
 - The control panel light bar should stay on.
 - The front and rear lights should come on.
 - The left and right lights should remain on.
 - The tricolor lights should stay white.
- If light levels are high:
 - The control panel light bar and all lights should remain off.

8. Brake the machine.

Continuation: see next page.

9. Turn the platform to the left or right.

Result:

- The tricolor lights should flash orange while the platform is rotating.

10. Put the platform in neutral position.

11. Get out of the platform.

12. Switch off the machine.

3.2. OPERATING THE MACHINE

3.2.1. OPERATION FROM THE PLATFORM

3.2.1.1. Using the machine's lighting

1. Switch on the machine.

Note: automatic mode "AUTO" is activated each time the machine is switched on.

2. Press and release the lighting button to successively activate the on "ON", off "OFF" and automatic "AUTO" modes.

3. Check the INFORMATION alert page displayed briefly on the display screen in the platform that corresponds to the activated mode: on "ON", off "OFF", or automatic "AUTO".

3.2.2. PROCEDURE IN THE EVENT OF AN ALERT

• Stop the harnessless operator alert:

1- Attach your safety harness lanyard to one of the lanyard anchorage points.

• Stop the ground obstacle detection alert:

1- Brake the machine.

2- Drive the machine forward or backward away from the obstacle.

• Stop the lateral tilting alert:

1- Drive the machine on a shallower sideways incline.

• Stop the uneven terrain alert:

1- Slow down your driving speed using the drive/steer control handle.

• Stop the machine's lighting alert:

1- This alert is simply information and no action is required.