

**EQUIPMENT MANUFACTURER:**

AEROMOB HELICOPTER PARTS INDUSTRY

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Costa e Silva

Joinville/SC – Brazil

### ORIGINAL INSTRUCTIONS

**EQUIPMENT NAME:**

HARDMOB 145D

**MODELS:**

K01

**MACHINERY DESIGNATION:**

HELICOPTER WHEELS

**APPLICABLE TO EQUIPMENT PART NUMBERS:**

AM-HDM-145D-K01

AM-HDM-145DS-K01

**LANGUAGE:**

ENGLISH

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<b>Written by   Date:</b> EDNELSON SANTOS   30/APR/2024	<b>Approved by   Date:</b> PHIL XAVIER   30/APR/2024
<b>Updated by   Date:</b> MATEUS FREITAS   10/JUL/2025	<b>Approved by   Date:</b> PHIL XAVIER   10/JUL/2025

## 1 INTRODUCTION

The equipment you are receiving was developed under the most advanced engineering concept. Congratulations on your operational choice!

This manual contains instructions and approved operating procedures for using the HARDMOB 145D, the set of wheels for aircraft movement developed for the Airbus H145 D2 and D3, including the Mercedes versions which feature cross tube fairing. The model variation AM-HDM-145DS-K01 can be used for skids with floaters and wire fairings.

This User Manual is a mandatory read by anyone wishing to operate the equipment, assuring quality and safety in the operation.

In addition to this User Manual, your equipment is accompanied by the following documents: Flight Manual Supplement (FMS), Maintenance Manual (MM) and Illustrated Parts Catalog (IPC). For more information on these documents, as well as on Warranty and Support, see chapters 8 and 9 of this manual.

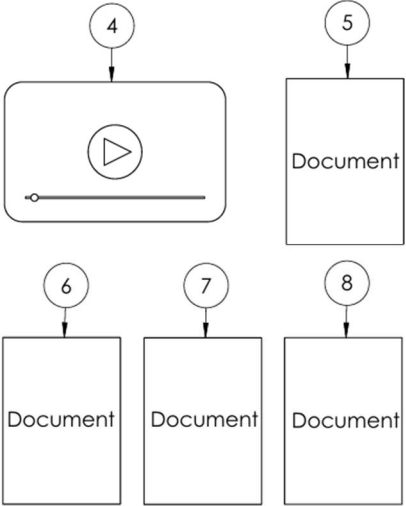
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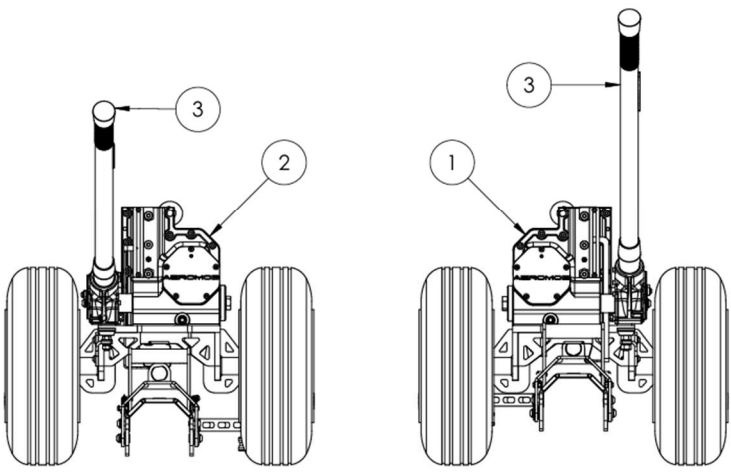
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### 2 GENERAL INFORMATION

The dimensions of the HARDMOB 145D, PART NUMBER AM-HDM-145D-K01, as well as the list of the accompanying documentation, are shown below. The weight of each wheel is 37,1 kg, the weight of each lever is 1,8 kg, for a total of 77,8 kg for the complete set

**PART NUMBER: AM-HDM-145D-K01**



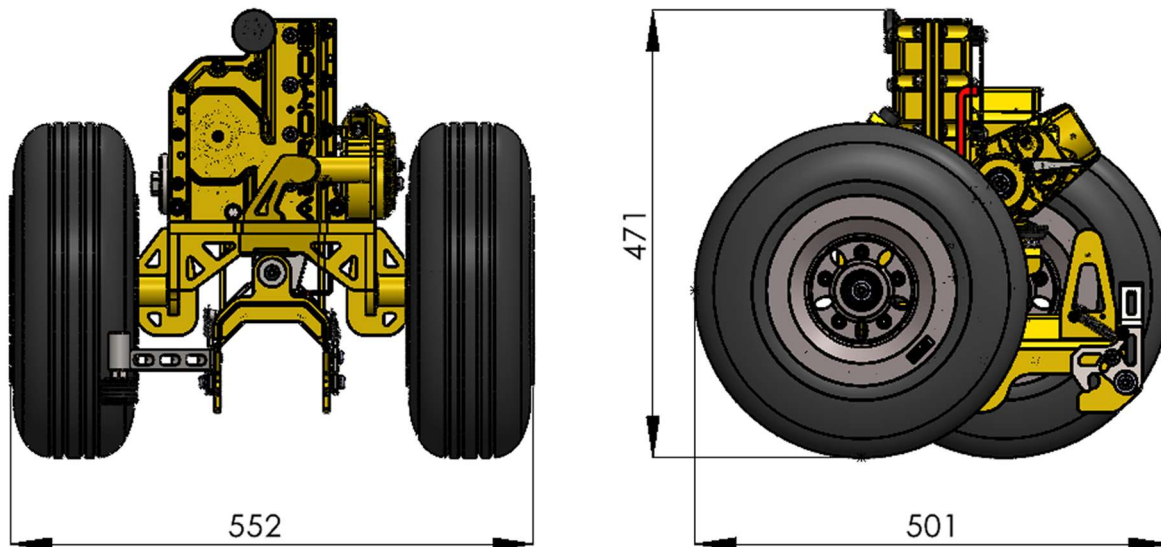
**ITEMS OF PART NUMBER: AM-HDM-145D-K01**

ITEM NUMBER	DESCRIPTION	PART NUMBER	QTY
1	LEFT GROUND HANDLING WHEELS	AM-HDM-145D-MT1	1
2	RIGHT GROUND HANDLING WHEELS	AM-HDM-145D-MT2	1
3	LEVER BAR	AM-HDM-145D-M04	2
4	USER VIDEO MANUAL (MP4)	UVM-AM-HDM-145D-K01	1
5	USER MANUAL (PDF)	UM-AM-HDM-145D-K01	1
6	ILLUSTRATED PARTS CATALOGUE - IPC	IPC-AM-HDM-145D-K01	1
7	FLIGHT MANUAL SUPPLEMENT	FMS-AM-HDM-145D-K01	1
8	MAINTENANCE MANUAL	MM-AM-HDM145D-K01	1

The documentation accompanying the product can be accessed via the link [www.aeromob-industry.com/support-am-hdm-145d-k01](http://www.aeromob-industry.com/support-am-hdm-145d-k01) or by scanning the QR CODE available in this Manual.

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**3 APPROVED USE**

The HARDMOB 145 wheel pair (PN AM-HDM-145D-K01 and PN AM-HDM-145DS-K01) is operationally approved for suspending and handling Airbus H145 D2 and D3, weighing up to 3.200 kg. It is expressly forbidden to use this equipment on other helicopter models, above the approved weight and/or for non-approved functions.

**4 LIMITATIONS**

The tires must be calibrated to 105 psi (7.2 bar). All 4 tires of the set must be calibrated before using the equipment. If there is a variation in ambient temperature larger than 10°C from the day of calibration to the time the equipment is used, the tires may lose their calibration and must therefore be recalibrated before use.

A minimum of two operators is required to lever and lift the aircraft, with one person responsible for levering and the other for safeguarding the helicopter's tail from the risk of tipback. The tendency for the tail to droop will depend on the level of the ground, as well as the position of the aircraft's Center of Gravity at the time, which will vary depending on the amount of equipment installed in the aircraft, fuel supplied and the basic empty CG of your helicopter. To move the aircraft with human power, at least three people are needed, one person to hold the helicopter by the tail and two others to push the aircraft. Operation of this equipment with people or luggage aboard the aircraft is prohibited. The set has a load capacity of 3,200 kg/7054 lbs, distributed over the pair of wheels.

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**WARNING**

**INCORRECT CALIBRATION OF THE TIRES MAY CAUSE THE RISK OF PERSONAL INJURY AND/OR DAMAGE TO EQUIPMENT! IN ADDITION, UNDER-CALIBRATION WILL MAKE THE HELICOPTER HEAVY TO MOVE AND REDUCE THE HELICOPTER'S GROUND CLEARANCE DURING THE MOVEMENT.**

Use of this equipment is approved for paved surfaces, firm grass or firm beaten ground, and installation of the equipment and movement of the aircraft on ground with a slope of up to 5% is permitted. Use on uneven terrain, which causes severe shaking or jolting, is not permitted, as it could pose a risk of damage to the aircraft and/or operators near the aircraft.

Handling is limited to walking speed when propelled by human power, and up to 6 km/h (3.7mph) when the aircraft is being towed by a motorized vehicle. For towing the suspended aircraft using a motorized vehicle, it is recommended to use the original CARTMOB tow bar (PN AM-CRT-K02) from AEROMOB, due to its height, which favors forward CG for the aircraft during towing.

The equipment may only be used complete and in perfect working order. It is strictly forbidden and dangerous to use the equipment if any part, information plate or component is missing. If any item or component needs to be replaced, contact the manufacturer.

It is strictly forbidden and dangerous to use the equipment with any part or component that is not part of this set and/or has not been supplied by the manufacturer.

**5 INSTRUCTION OF USE**

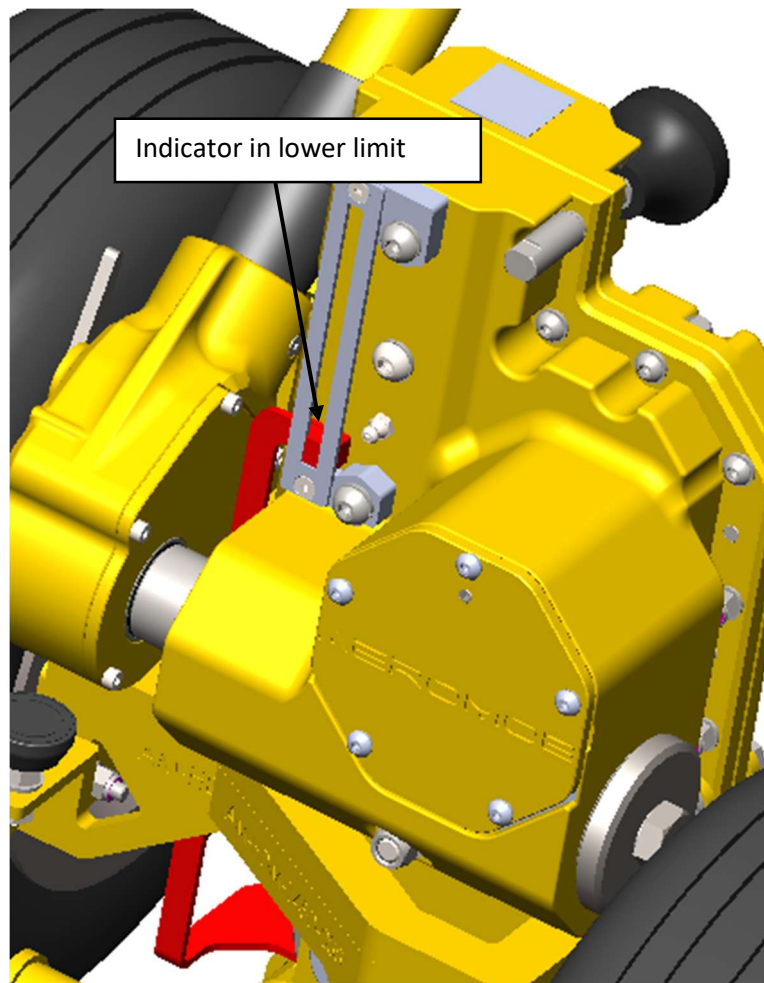
**5.1 EQUIPMENT ASSEMBLY**

To ensure the safe shipment of the HARDMOB 145D, the lever bars are shipped detached from the handle. To attach the lever to the handle, insert it in the place indicated on the handle. Once attached, there is no need to detach the lever, and it can remain attached to the equipment for all use, including during aircraft handling.

**5.2 LEVERAGE OPERATION**

Before starting the operation, make sure the tires are calibrated in accordance with the limitations section of this manual. Also, ensure that the equipment is completely unlevered, with the arm perpendicular to the ground. Make sure that all the aircraft doors are closed and locked.

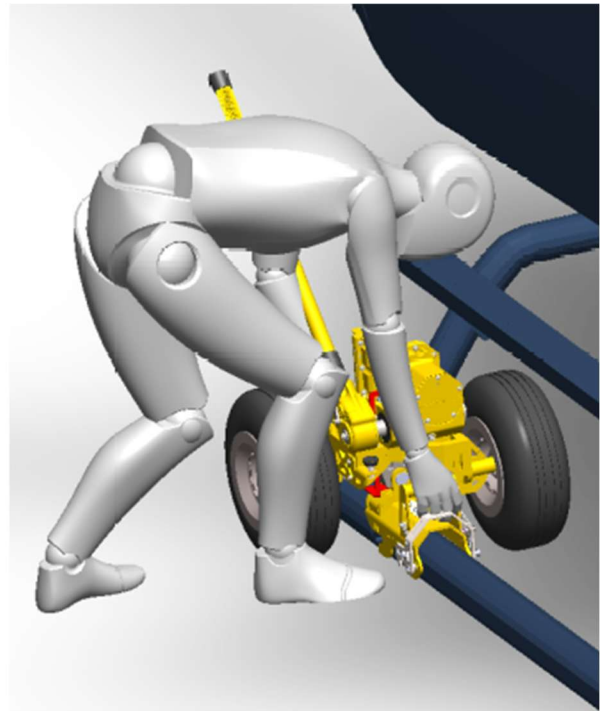
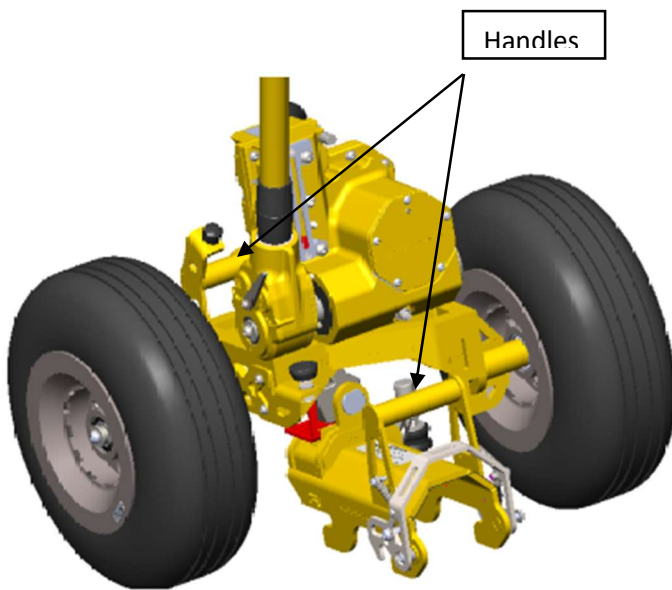
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For moving the HARDMOB 135 close to the aircraft, use the lever bars to push the equipment close to the coupling point on the helicopter skid. Check right and left equipment sides. When correctly positioned, the lever bar is positioned outwards in relation to the aircraft.

With the equipment close to the attachment point, and with the lever tilted backwards, hold the equipment using the handles, and attach the equipment on the ski as shown below.

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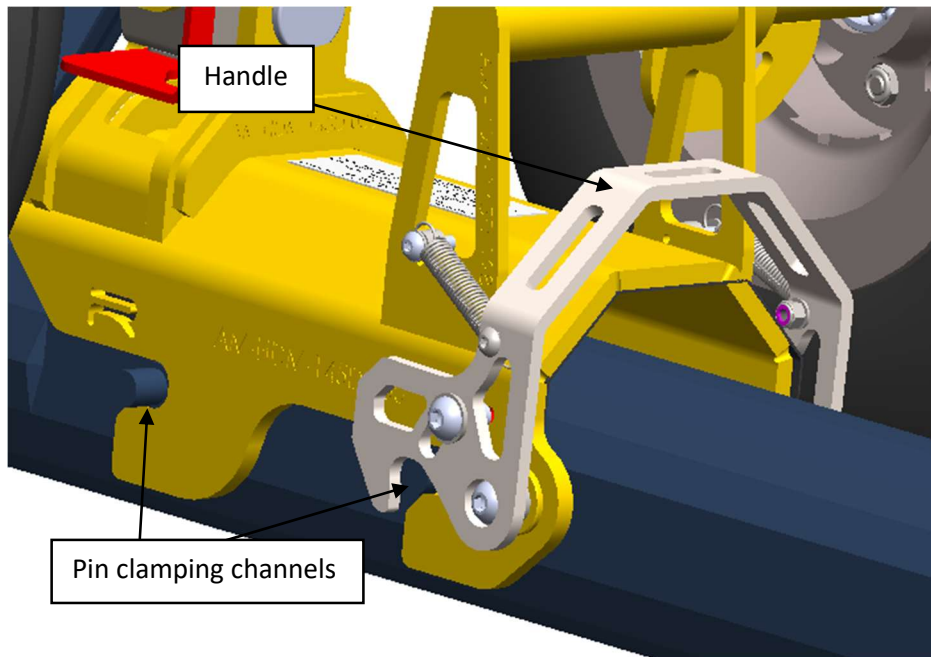
Make sure the equipment is perfectly attached to the 4 pins on the ski, and that the frontal handle is locked, bracing the frontal pin, as shown below.

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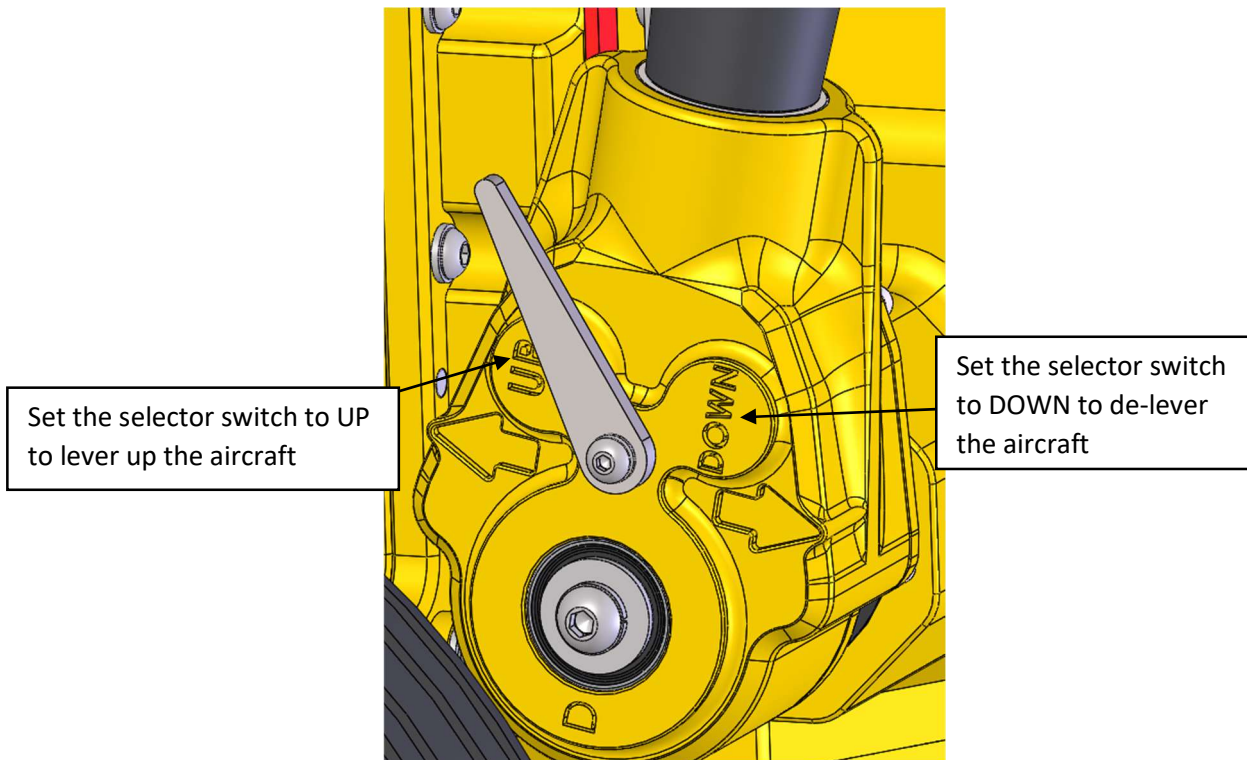
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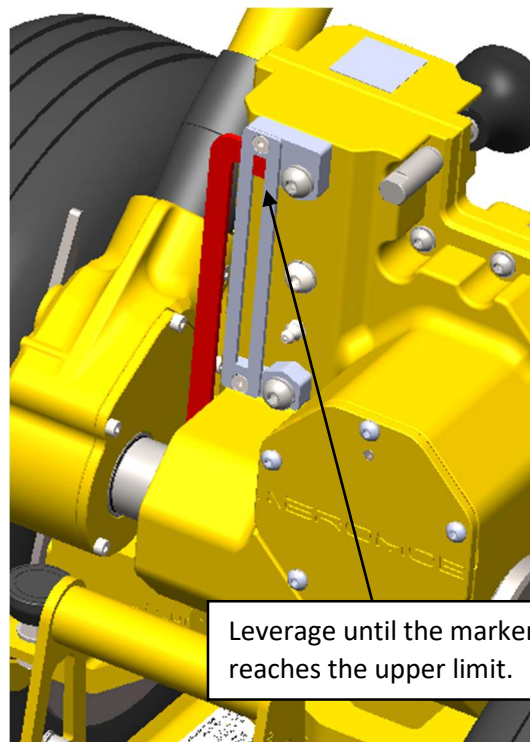
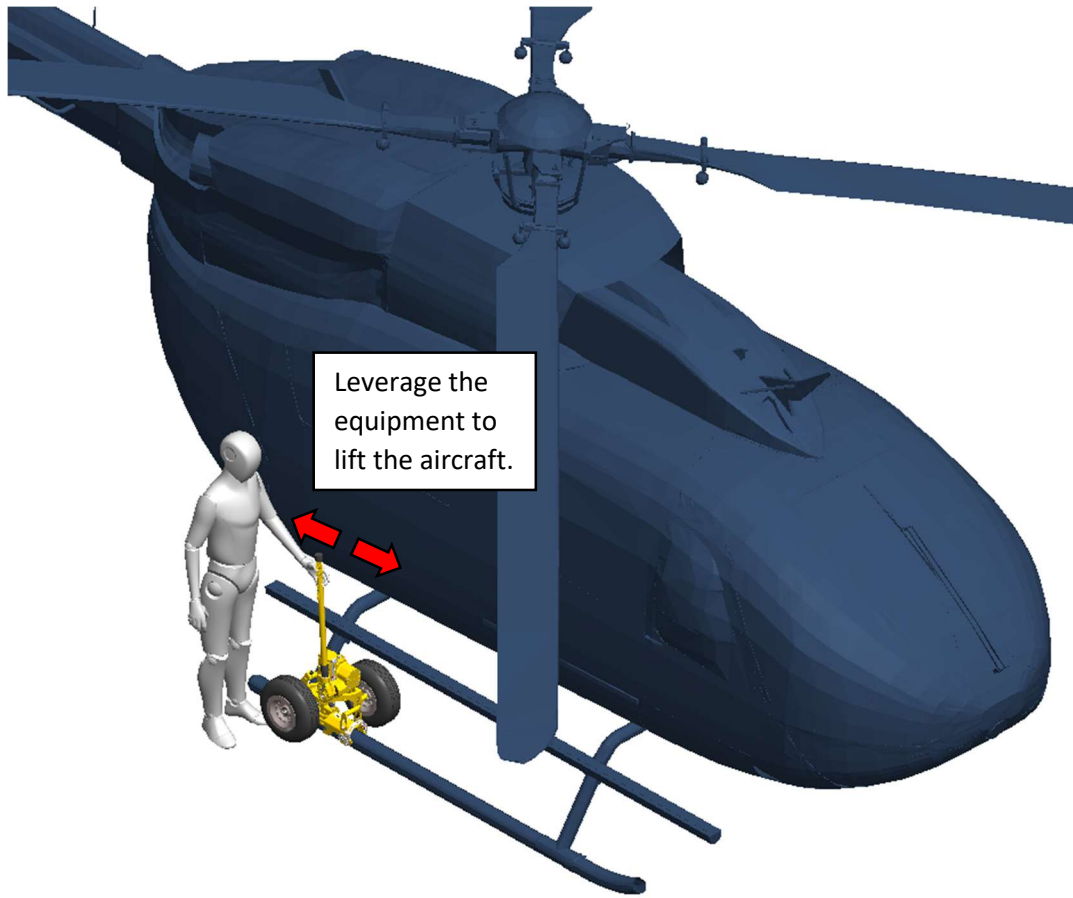


Then, switch the selector on the handle to “UP”, as shown below.



Operate the lever to lift the aircraft off the ground until the marker is at the upper limit.

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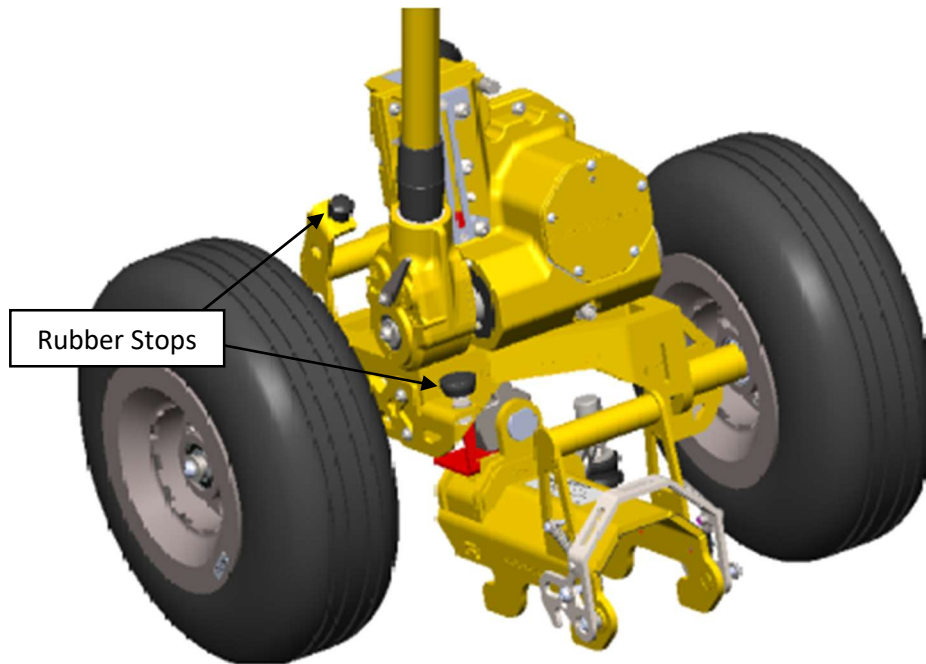
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**NEVER** lever the equipment beyond the stops, as this can force and damage the equipment.



After raising one side of the aircraft, a second operator should be positioned near the tail of the helicopter to prevent the helicopter from tipping-back. The operator positioned close to the tail must hold on only to points approved for this purpose by the aircraft manufacturer.



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Tilt the lever backwards and repeat the 5.2 procedure for the other side of the aircraft.

**WARNING**

**WHEN LEVERAGING AND DE-LEVERAGING, MAKE SURE THAT NO OBJECTS OR BODY PARTS IS UNDER THE SKID. DOUBLE ATTENTION IS DUE TO THE OPERATORS' FEET, TO MAKE SURE THEY ARE NEVER UNDER THE SKID.**

**5.3 HANDLING**

There are two options for moving the aircraft: manually pushing the suspended aircraft, or using a tow bar. Before initiating handling, double-check that all the aircraft doors are properly closed and locked.

For manual handling, it is necessary for one operator to hold the tail so that the aircraft is suspended, and two other operators to push the aircraft, as shown below. The operators pushing the aircraft must hold on only to the skid's cross-tube and footstep, and never apply pressure on the fuselage.

To tow the aircraft with a motorized vehicle, it is recommended to use AEROMOB's CARTMOB (PN AM-CRT-K02) tow bar or AEROTANK M35 (PN AM-ATK-M35). For more information, see the equipment's respective User Manual.

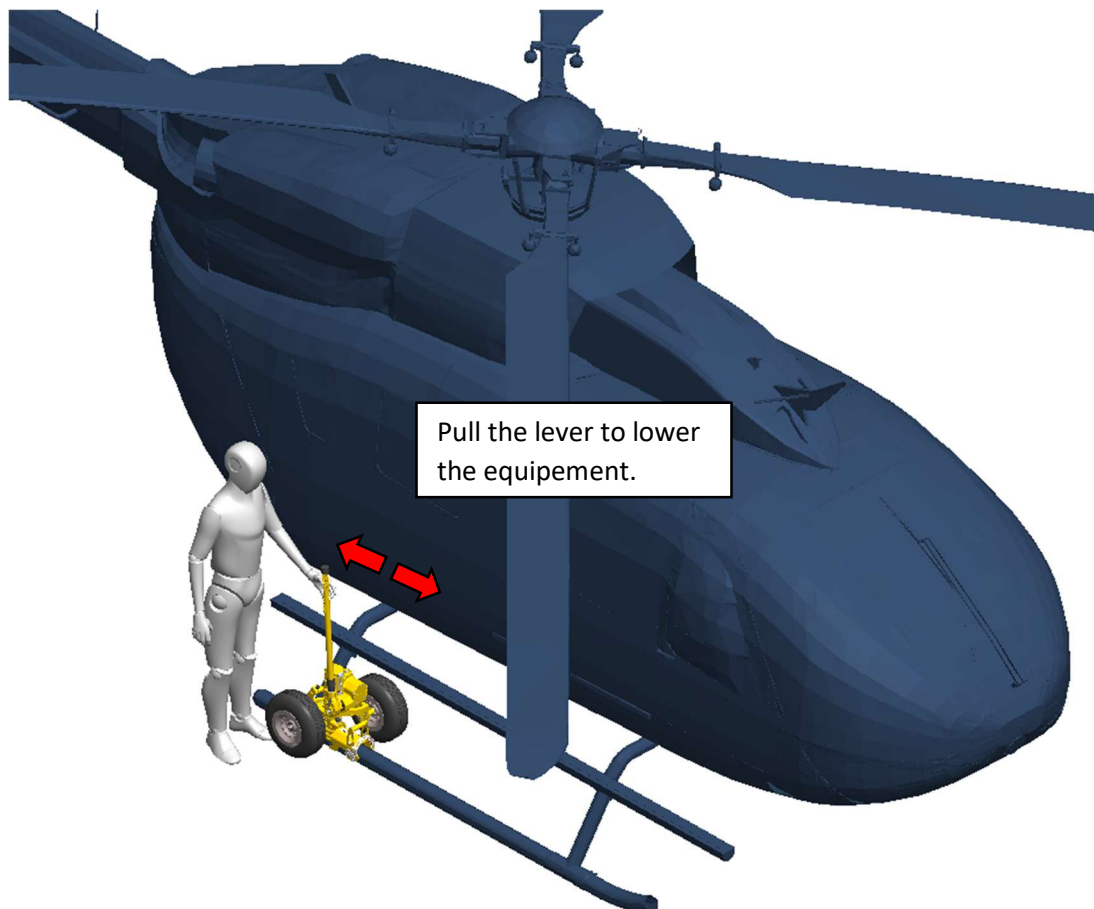
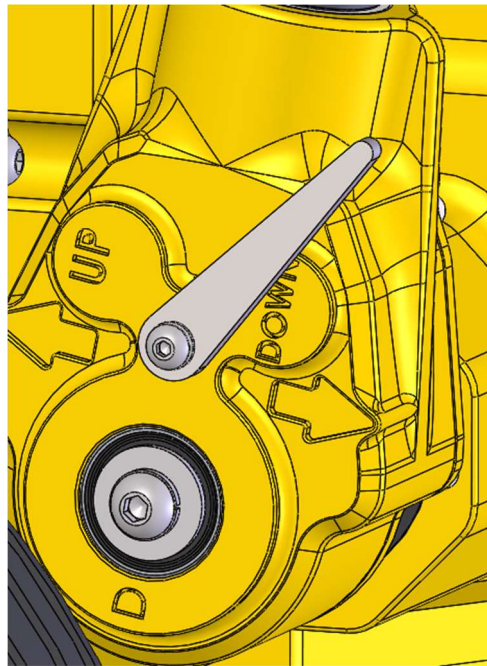
**5.4 DE-LEVERING**

After moving the aircraft manually or using a motorized vehicle attached to the CARTMOB or E-MOB 1.0, the front of the skid must be lowered until its front touches the ground gently.

Before deleveraging, make sure that there is an operator positioned near the tail of the aircraft, preventing it from tipping-back, until the first side of the skid has been fully disengaged.

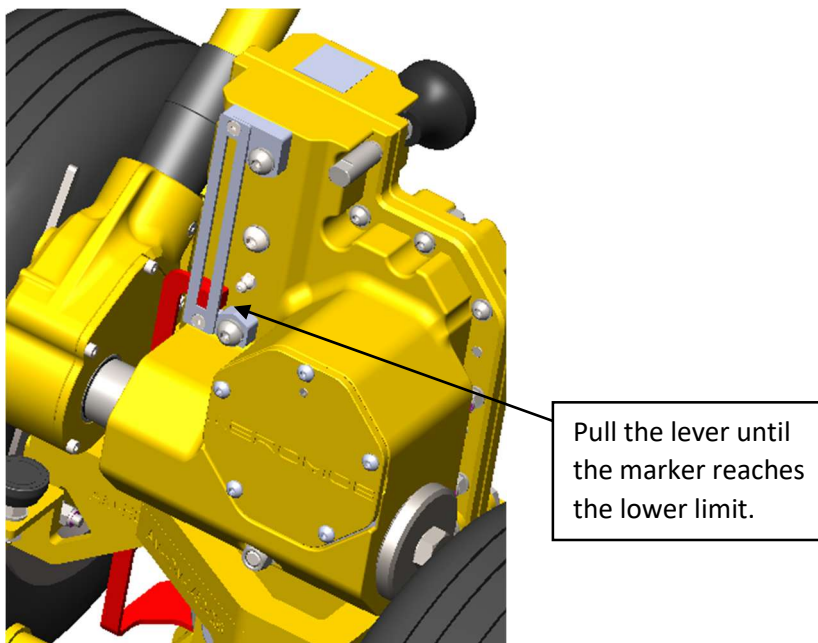
To de-lever the HARDMOB 145, switch the handle selector lever to the "DOWN" position, as indicated on the handle and shown below.

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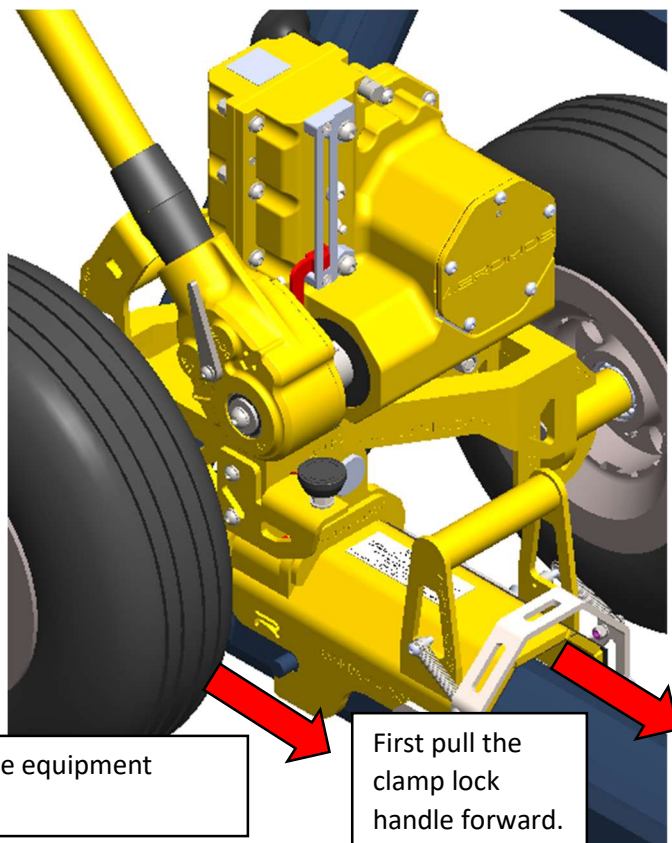
Pull the lever to lower the equipment.

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**5.5 DETACHING THE EQUIPMENT**

After de-levering, turn the handle selector to the “UP” position and place the lever against the rubber stop. Pull the clamp lock handle forward and then push the equipment forward, holding the handles, as shown below, thus detaching the equipment from the aircraft ski.



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Repeat steps 5.4 and 5.5 on the other side of the aircraft, to remove the HARDMOB 145D on the other side.

### 6 STORAGE

To store the HARDMOB 145, keep the lever bar attached to the equipment. The equipment may be kept coupled to the aircraft, as long as it is completely unlevered, for easy and efficient use; the equipment may also be stored inside the hangar. Make sure that its positioning does not create an obstacle to the movement of people or aircrafts. To ensure the preservation of equipment tires, keep the equipment sheltered from the weather, the sun and the environment. Otherwise, the tire will dry out and present small cracks scattered around, impairing the operation.

Keep the equipment out of the reach of children. To take the equipment on board, simply disconnect the lever bar and transport it normally.

### 7 PROHIBITIONS

- **NEVER** authorize anyone to use this equipment without first reading this instruction manual;
- **NEVER** operate the equipment with a non-calibrated tire. Operating with a flat tire generates continuous and deep cracks in its surface, permanently damaging the tire.
- **DO NOT** use this equipment with people or luggage aboard the aircraft;
- **DO NOT** use this equipment on uneven terrain that causes severe shaking or jolting, as this may pose a risk of damage to the aircraft and/or operators near the aircraft;
- **DO NOT** use the equipment on other helicopter models, above the approved weight, or for unapproved functions.
- **NEVER** open or unlock the doors of the aircraft while it is being leveraged, already suspended, moving or during de-leveraging;
- **NEVER** operate the aircraft while the HARDMOB 145 is attached;
- **NEVER** continue leveraging or de-leveraging the equipment if the cursor has already reached the limit of the stroke;
- **NEVER** use this equipment if any part, protection, component or identification plate is missing or damaged;

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- **NEVER** use the equipment with any part or component that is not part of this set and/or has not been supplied by the manufacturer;
- **DO NOT** allow this equipment to be operated or handled by children;
- **NEVER** lever or de-lever the lever bar forcing beyond the rubber stops;
- **DO NOT** leverage the equipment with the lever selector in the “DOWN” option;
- **DO NOT** de-lever the equipment with the lever selector in the “UP” option;
- **DO NOT** operate the equipment under any circumstances if any object, foot, hand or other body part is under the aircraft skid;
- **DO NOT** leave the equipment exposed to the weather, the sun or the environment for long periods of time to ensure the longevity of the tires;

## **8 PRODUCT DOCUMENTS**

### **8.1 FLIGHT MANUAL SUPPLEMENT (FMS)**

The Flight Manual Supplement (FMS), sent printed with the equipment and available for digital consultation, should be inserted into the flight manual (POH), in the SUPPLEMENTS section, for quick access of basic information relating to this equipment. To access the updated version of the Flight Manual Supplement (FMS), go to: [www.aeromob-industry.com/support-am-hdm-145d-k01](http://www.aeromob-industry.com/support-am-hdm-145d-k01) or just scan the QR CODE available in this Manual.

### **8.2 MAINTENANCE PROCEDURES**

The overhaul plan and any necessary maintenance procedures must be carried out in accordance with the maintenance manual, document part number MM-AM-HDM-145D-K01. To access the updated version of the Maintenance Manual, go to: [www.aeromob-industry.com/support-am-hdm-145d-k01](http://www.aeromob-industry.com/support-am-hdm-145d-k01) or just scan the QR CODE available in this Manual.

### **8.3 SPARE PARTS**

The Illustrated Parts Catalog - IPC is the official reference document for ordering spare parts (PN IPC-AM-HDM-145D-K01, PN IPC-AM-HDM-145DS-K01). To access the updated version of the Illustrated Parts Catalog, go to: [www.aeromob-industry.com/support-am-hdm-145d-k01](http://www.aeromob-industry.com/support-am-hdm-145d-k01) or just scan the QR CODE available in this Manual.

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**8.4 WARRANTY**

Your equipment has a 1-year warranty and, if necessary, can be requested directly from AEROMOB via the link: [www.aeromob-industry.com/support-am-hdm-145d-k01](http://www.aeromob-industry.com/support-am-hdm-145d-k01) or by scanning the QR CODE available in this Manual.

**8.6 SUPPORT**

If you have any questions about how to use the equipment, please contact our support team. Do not use the equipment if you have any doubts about its operation. If you notice any faults with the equipment, if components are missing, or in any other case where support is required, please contact us via the website, which can be accessed via the link: [www.aeromob-industry.com/support-am-hdm-145d-k01](http://www.aeromob-industry.com/support-am-hdm-145d-k01) or by scanning the QR CODE available in this Manual.

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**9 ACCESS TO ALL UPDATED DOCUMENTATION**

Below is a list of files and documents available to the customer of this equipment and the QR CODE for access to the always up-to-date version:

**(PN FMS-AM-HDM-145D-K01) FLIGHT MANUAL SUPPLEMENT**

**(PN UM-AM-HDM-145D-K01) USER MANUAL**

**(PN UVM-AM-HDM-145D-K01) USER VIDEO MANUAL**

**(PN MM-AM-HDM-145D-K01) MAINTENANCE MANUAL**

**(PN IPC-AM-HDM-145D-K01, IPC-AM-HDM-145DS-K01) ILLUSTRATED PARTS CATALOG**



[www.aeromob-industry.com/support-am-hdm-145d-k01](http://www.aeromob-industry.com/support-am-hdm-145d-k01)

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