

EQUIPMENT MANUFACTURER:

AEROMOB HELICOPTER PARTS INDUSTRY

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ORIGINAL INSTRUCTIONS**EQUIPMENT NAME:**

HELIMOB 407

MODEL:

K02

MACHINERY DESIGNATION:

MECHANICAL GROUND HANDLING WHEELS SET

EQUIPMENT PART NUMBER:

AM-RDM-407-K02

LANGUAGE:

ENGLISH

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Written by Date: MATEUS FREITAS 08/MAY/2025	Approved by Date: PHIL XAVIER 08/MAY/2025
Updated by Date:	Approved by Date:

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 HELIMOB 407, the mechanical ground handling wheels set for the Bell 407 and BELL 206 Long Ranger helicopter models.

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), Illustrated Parts Catalog (IPC), and Assembly Manual (AMS). 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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2 GENERAL INFORMATION

The dimensions of the HELI MOB 407, PART NUMBER AM-RDM-407-K02, as well as the list of the accompanying documentation, are shown below. The weight of each wheel is 17,6 kg, the weight of the lever bar is 4,9 kg, for a total of 40,1 kg for the complete set.

PART NUMBER: AM-RDM-407-K02

ITEMS OF PART NUMBER: AM-RDM-407-K02

ITEM NUMBER	DESCRIPTION	PART NUMBER	QTY
1	RIGHT GROUND HANDLING WHEELS	AM-RDM-407-MT2	1
2	LEFT GROUND HANDLING WHEELS	AM-RDM-407-MT1	1
3	LOCK PIN	AM-RDM-407-016	2
4	FRONT PIN	AM-RDM-407-008	2
5	BI-PART LEVER BAR	AM-RDM-125-M06	1
6	USER MANUAL (PDF)	UM-AM-RDM-407-K02	1
7	ILLUSTRATED PARTS CATALOGUE - IPC	IPC-AM-RDM-407-K02	1
8	FLIGHT MANUAL SUPPLEMENT - FMS	FMS-AM-RDM-407-K02	1
9	USER VIDEO MANUAL (MP4)	UVM-AM-RDM-407-K02	1
10	MAINTENANCE MANUAL - MM	MM-AM-RDM-407-K02	1

The documentation accompanying the product can be accessed via the link www.aeromob-industry.com/support-am-rdm-407-k02 or by scanning the QR CODE available in this Manual.

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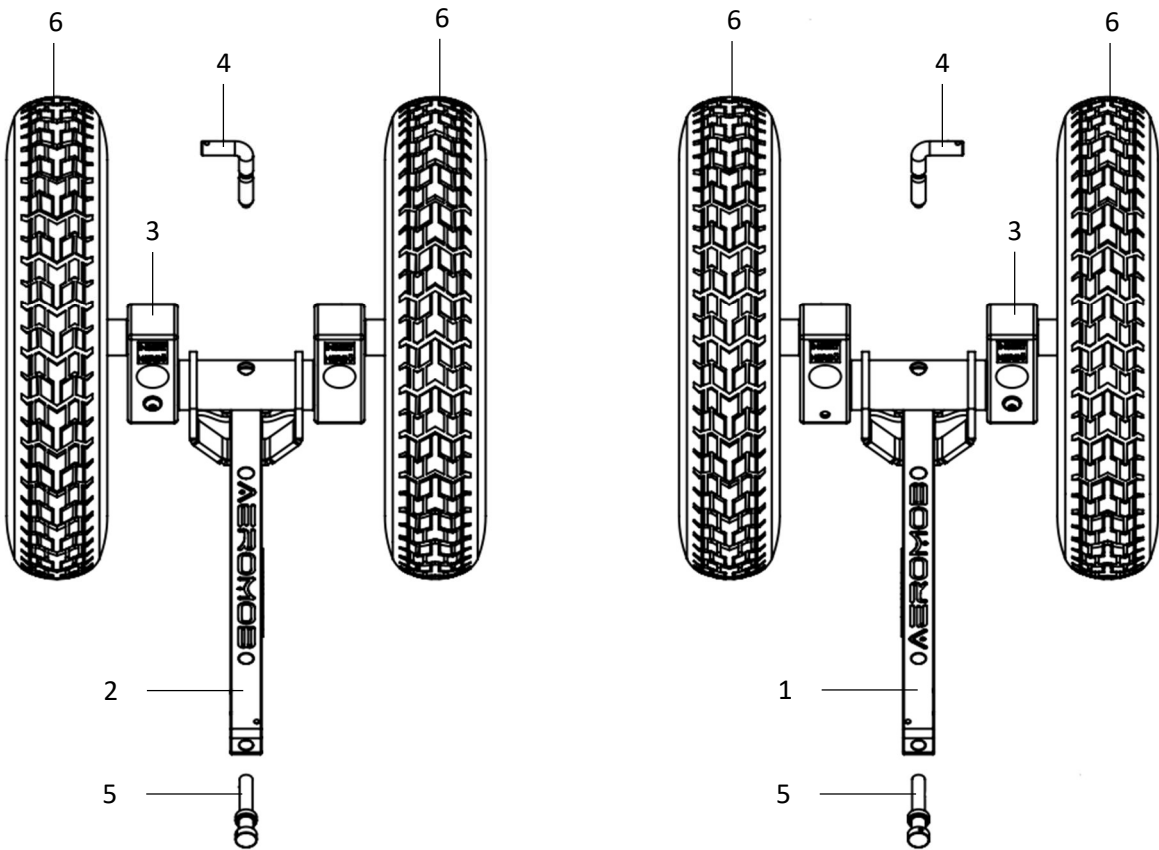
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Main structure: Chromium Molybdenum Alloy

Total equipment weight: 40,1 kg



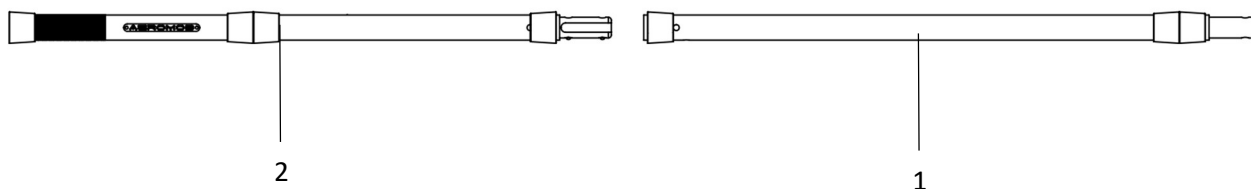
HELIMOB 407 GROUND HANDLING WHEELS

Figure 1

REF. (FIGURE 1)	DESIGNATION
1	Left body
2	Right body
3	Arm
4	Lock pin
5	Front pin
6	Wheel

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The dual lever-bar of the HELIMOB 407 K02 (PN AM-RDM-407-K02) has these components:



DUAL LEVER-BAR

Figure 2

REF. (FIGURE 2)	DESIGNATION
1	Lower lever-bar
2	Upper lever-bar

3 APPROVED USE

The wheel pair (PN AM-RDM-407-K02) is operationally approved for suspending and manoeuvring BELL 407 and BELL 206 Long Ranger helicopters, with a maximum weight of 1 200 kg/2 645 lbs. It is expressly forbidden to use this equipment on other helicopter models, above the approved weight and/or for non-approved functions.

WARNING: It is mandatory to have read this USER MANUAL completely before operating this equipment. If you have any questions, contact Aeromob technical support.

4 LIMITATIONS

The tires must be calibrated to 74 psi (5,1 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.

CAUTION:

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.

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 two people are needed, one person to hold the helicopter by the tail and another to push the aircraft.

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Operation of this equipment with people or luggage aboard the aircraft is prohibited. The set has a load capacity of 2,500kg/5,511lbs, distributed over the pair of wheels.

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.

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.

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5 OPERATION

NOTE:

Refer to chapter 9 of the aircraft maintenance manual.

WARNING:

REMOVE WHEELS BEFORE FLIGHT.

CAUTION:

DO NOT TOW THE HELICOPTER IF THE GROSS WEIGHT IS MORE THAN 2645 POUNDS (1200 KG).

CAUTION:

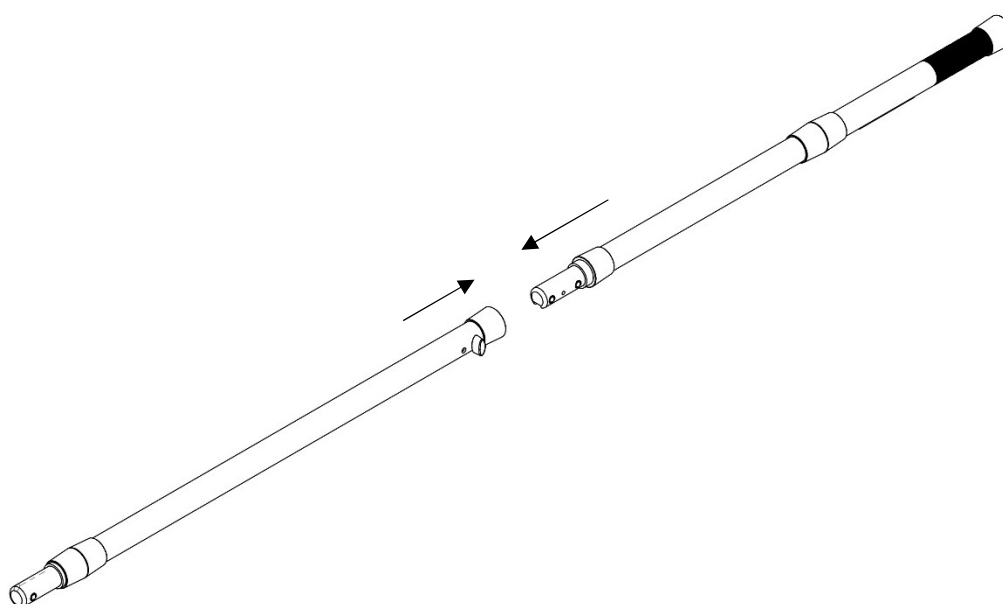
DO NOT TOW THE HELICOPTER ON AN UNEVEN SURFACE OR ACROSS THE HANGAR DOOR WITH TOO MUCH SPEED. THIS CAN CAUSE PERMANENT DAMAGE TO THE AFT CROSSTUBE.

NOTE:

The tires must be inflated to 74 psi (5.1 bar).

A. Dual lever-bar assembly

1. Connect the lower lever-bar to the upper lever-bar.



DUAL LEVER-BAR ASSEMBLY

Figure 3

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B. Installation

NOTE:

Only the procedure for the LH ground handling wheels is described. Do the same procedure for the RH ground handling wheels.

1. Make sure all helicopter doors are closed and locked.
2. Attach the fixed pin to the aft eyebolt (2).
3. Align the front pin hole (4) with the front eyebolt (3).
4. Remove the front pin (5) from the front pin bracket (9) and insert it on the front pin hole (4) to attach the HELIMOB 407 to the skid tube (1).
5. Make sure the lock pin (6) is stored in the pin bracket (7).
6. Attach the dual lever-bar on the outboard opening on the HELIMOB 407 arm until the lever-bar touches the stopper. To find the correct side to attach the dual lever-bar, obey the signs on the arm of the HELIMOB 407.

WARNING:

ATTACHMENT OF THE LEVER BAR ON THE WRONG SIDE OF THE ARM MAY CAUSE DETACHMENT OF THE EQUIPMENT DURING LEVERAGE OR HANDLING.

7. Put a person on the tail skid to keep the helicopter in a level position when you lift the helicopter.
8. Pull the dual lever-bar in a rearward-angle to lift aircraft until the lever bar is parallel to the skid tubes (1).

WARNING:

THE DUAL LEVER-BAR HAS A TENDENCY TO SNAP OVER WHEN RAISING AND LOWERING THE HELICOPTER. GRIP DUAL LEVER-BAR HANDLE TIGHTLY WITH BOTH HANDS DURING OPERATION.

9. Put lock pin (6) on the locking hole (8).

WARNING:

IF THE LOCK PIN IS NOT INSTALLED, THE EQUIPMENT WILL DESARM ON ITS OWN, POSING SERIOUS SAFETY RISK.

10. Make sure the HELIMOB 407 arm is locked.
11. Remove the dual lever-bar.

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WARNING:

NEVER LEAVE THE DUAL LEVER-BAR ATTACHED TO THE EQUIPMENT WHILE LEVERED. IF THE LOCK PIN IS ACCIDENTALLY REMOVED, THE EQUIPMENT WILL DISARM WITHOUT WARNING. THE DUAL LEVER-BAR WILL BE ROTATED IN HIGH SPEED, AND POSSIBLY BE THROWN OFF, POSING SERIOUS RISKS.

CAUTION:

REMAIN CLEAR OF SKID TUBES WHEN THE HELICOPTER IS RAISED.

C. Towing

CAUTION:

MAKE SURE A PERSON ALWAYS STAYS WITH THE HELICOPTER WHEN THE GROUND HANDLING WHEELS ARE IN THE EXTENDED POSITION. THIS CAN PREVENT UNWANTED HELICOPTER MOVEMENT AND DAMAGE TO THE HELICOPTER.

1. Make sure all helicopter doors are closed and locked.
2. Make sure the ground handling area is free of foreign object debris (FOD).
3. Slowly tow or push the helicopter to the specified area. Hold the aircraft only at approved points.

CAUTION:

IF YOU MOVE THE HELICOPTER BY HAND, DO NOT PUSH ON ANY PART OF THE AIRFRAME. THIS CAN CAUSE DAMAGE TO THE HELICOPTER.

NOTE:

To tow the helicopter, the manufacturer recommends the AEROMOB towing solutions, such as the CARTMOB (PN AM-CRT-K02) and AEROTANK M35 (PN AM-ATK-M35).

D. Removal

NOTE:

Only the procedure for the LH ground handling wheels is described. Do the same procedure for the RH ground handling wheels.

WARNING:

KEEP YOUR FEET CLEAR OF THE LANDING-GEAR SKID TUBES WHEN YOU LOWER THE HELICOPTER. FAILURE TO DO SO MAY RESULT IN INJURY TO PERSONNEL.

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1. Attach the dual lever-bar on the outboard opening on the HELIMOB 407 arm until the lever-bar touches the stoper. To find the correct side to attach the dual lever-bar, obey the signs on the arm of the HELIMOB 407.

WARNING:

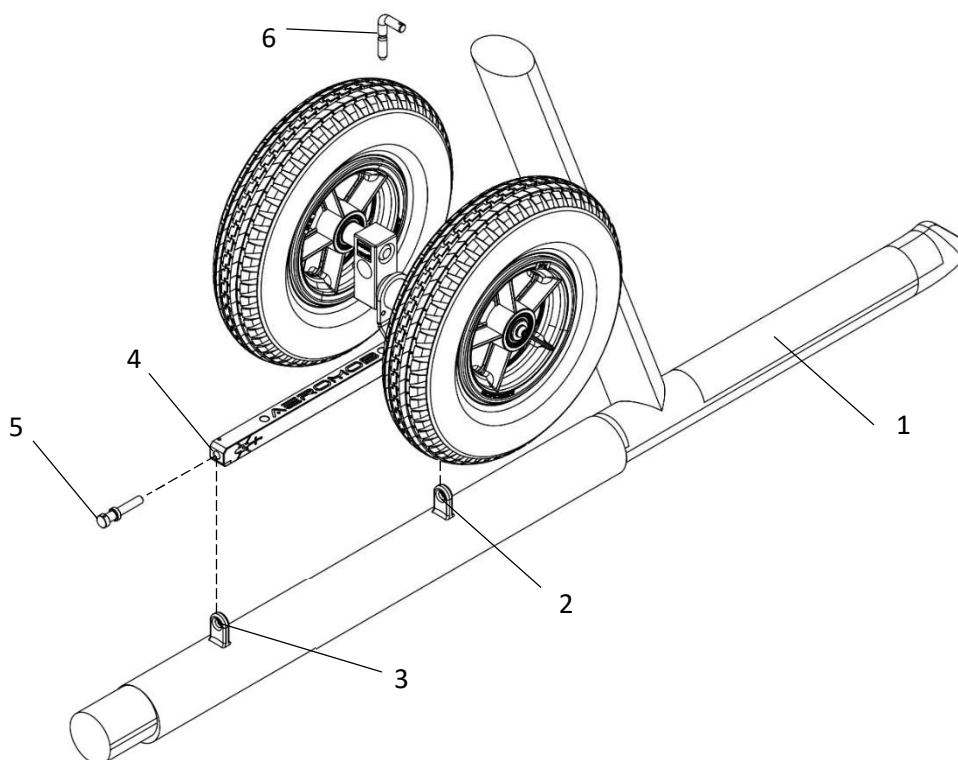
ATTACHMENT OF THE LEVER BAR ON THE WRONG SIDE OF THE ARM MAY CAUSE DETACHMENT OF THE EQUIPMENT DURING LEVERAGE OR HANDLING.

2. Grip the dual lever-bar tightly and remove the lock pin (6) from the lock hole (8). This releases the arm.
3. Pull dual lever-bar in a forward-arc to lower the aircraft until the lever bar is parallel to the skid tubes (1).

WARNING:

THE DUAL LEVER-BAR HAS A TENDENCY TO SNAP OVER WHEN RAISING AND LOWERING THE HELICOPTER. GRIP DUAL LEVER-BAR HANDLE TIGHTLY WITH BOTH HANDS DURING OPERATION.

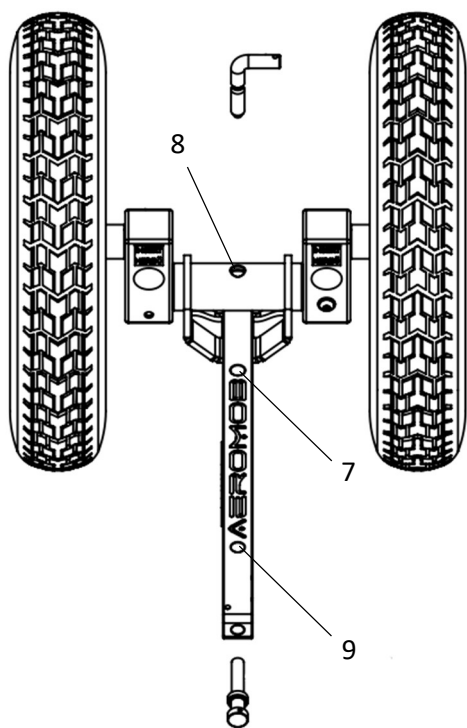
4. Put lock pin (6) on the pin bracket (7).
5. Remove the dual lever bar from the outboard opening on the arm.
6. Remove the front pin (5) from the front eyebolt (3) and store it in the front pin bracket (9).
7. Remove the locked pin from the aft eyebolt (2) to remove the HELIMOB 407 from the skid tube (1).



HELIMOB 407 INSTALLATION ON THE SKID TUBES

Figure 4

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HELIMOB 407 LOCK PINS
Figure 5

6 STORAGE

To store the HELIMOB 407, keep the dual 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. The K02 version of this equipment features a dual lever-bar, which reduces the size required to store the lever bar aboard the aircraft.

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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 causes continuous and deep cracks on the surface and other permanent damage on the tire.
- **DO NOT** allow any person to remain aligned with the movement of the lever bar during leverage or de-leverage; if the lever escapes and is thrown off, the force is extremely strong and dangerous. All area must be free of people, animals and objects.
- **NEVER** position yourself as if to push the lever bar; if the bar escapes, it can possibly hit you, posing serious risk of harm.
- **NEVER** handle the aircraft without the lock pin fully attached (until it hits the stopper) to the lock hole.
- **NEVER** leave the lever bar attached to the equipment while it is lifted. If the lock pin is accidentally removed, the equipment will disarm without warning. The bar will be rotated in high speed, and possibly be thrown off, posing serious risks.
- **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 HELIMOB 407 is attached.
- **NEVER** use this equipment if any part, protection, component or identification plate is missing or damaged.
- **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;

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- **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-rdm-407-k02 or just scan the QR CODE available in this Manual.

8.2 USER MANUAL

This document is the User Manual. It is mandatory reading before operating this equipment. To access the updated version of the User Manual, go to: www.aeromob-industry.com/support-am-rdm-407-k02 or just scan the QR CODE available in this Manual.

8.3 MAINTENANCE PROCEDURES

The overhaul plan and any necessary maintenance procedures must be carried out in accordance with the maintenance manual. To access the updated version of the Maintenance Manual, go to: www.aeromob-industry.com/support-am-rdm-407-k02 or just scan the QR CODE available in this Manual.

8.4 SPARE PARTS

The Illustrated Parts Catalog - IPC is the official reference document for ordering spare parts. To access the updated version of the Illustrated Parts Catalog, go to: www.aeromob-industry.com/support-am-rdm-407-k02 or just scan the QR CODE available in this Manual.

8.5 WARRANTY

Your equipment has a 5-year warranty and, if necessary, can be requested directly from AEROMOB via the link: www.aeromob-industry.com/support-am-rdm-407-k02 or by scanning the QR CODE available in this Manual.

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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-rdm-407-k02 or by scanning the QR CODE available in this Manual.

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-RDM-407-K02) FLIGHT MANUAL SUPPLEMENT

(PN UM-AM-RDM-407-K02) USER MANUAL

(PN MM-AM-RDM-407-K02) MAINTENANCE MANUAL

(PN IPC-AM-RDM-407-K02) ILLUSTRATED PARTS CATALOG



www.aeromob-industry.com/support-am-rdm-407-k02

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