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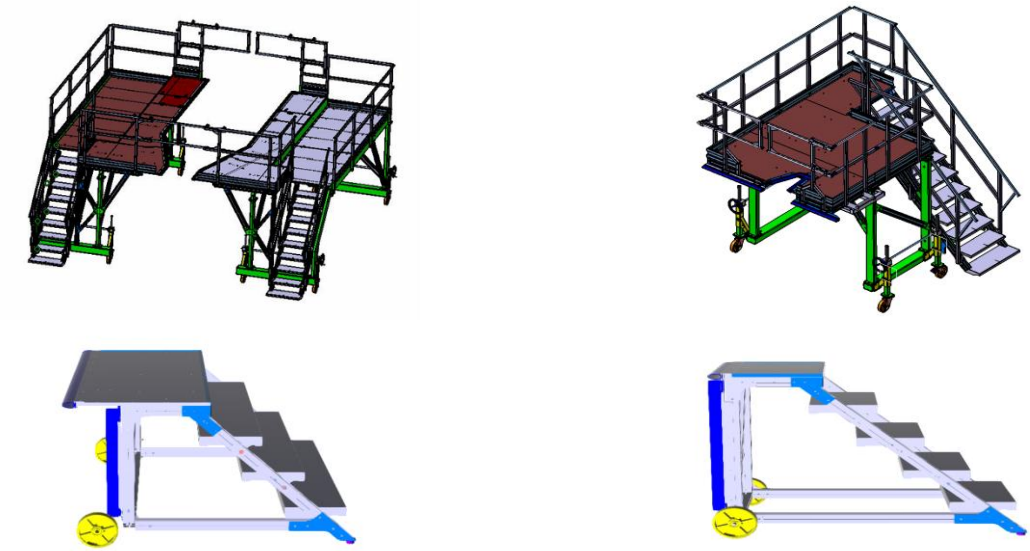
INSTRUCTION MANUAL FOR USE AND MAINTENANCE



Tool: KIT PLATFORM
Model: RMOSH3G-101B

TRANSLATION OF THE ORIGINAL INSTRUCTIONS

Instruction manual for use and maintenance of the 4 equipment that make up the RMOSH3G-101B PLATFORM KIT.

SECTION INDEX

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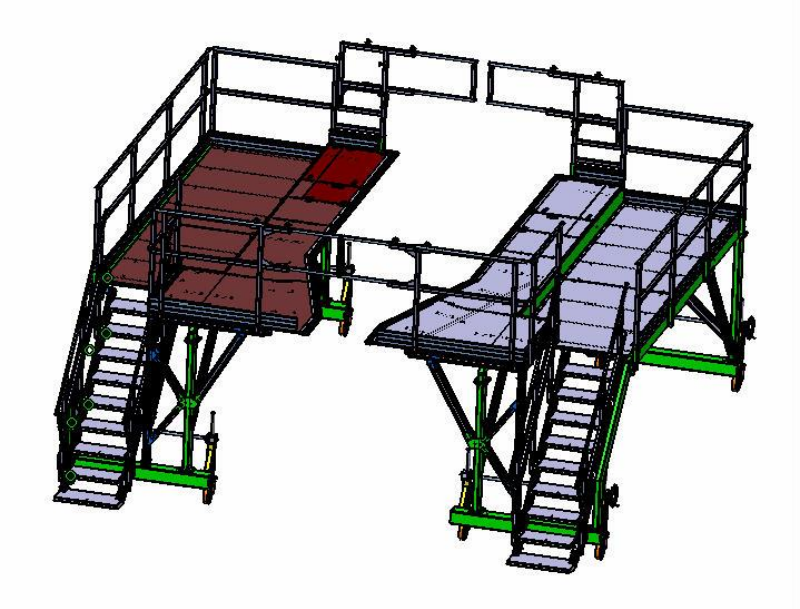


Tool: DECK SERVICING PLATFORM RH+LH
Model: RMOSH3G-102B/RMOSH3G-103B

TRANSLATION OF THE ORIGINAL INSTRUCTIONS

CE

INSTRUCTION MANUAL REVISION MATRIX

MANUAL PART	Revision	Date	Revision	Date	Revision	Date
Contents	0.0	30/09/2023				
Chapter 0	0.0	30/09/2023				
Chapter 1	0.0	30/09/2023				
Chapter 2	0.0	30/09/2023				
Chapter 3	0.0	30/09/2023				
Chapter 4	0.0	30/09/2023				
Chapter 5	0.0	30/09/2023				
Chapter 6	0.0	30/09/2023				
Chapter 7	0.0	30/09/2023				
Chapter 8	0.0	30/09/2023				
Chapter 9	0.0	30/09/2023				

Date	30/09/2023
Signature	

It is the responsibility of the customer to make sure that if the Manufacturer makes changes to this document, only the updated versions of the Manual will be present at the place of use.

THE OFFICIAL LANGUAGE CHOSEN BY THE MANUFACTURER IS ITALIAN
The Manufacturer assumes no liability for translations in other languages that do not conform to the original meaning.

CONTENTS

0 INTRODUCTION

1 PURPOSE OF THE INSTRUCTION MANUAL FOR USE AND MAINTENANCE

This manual was produced to provide the user with general knowledge of the tool and to allow it to be used in safe conditions.
This Instruction Manual is an integral part of the tool, and its purpose is to provide all the necessary information for:

- Handling the tool, packed and unpacked in safety conditions;
- The correct installation of the tool;
- Knowledge of the specific tool techniques;
- Thorough knowledge of its operation and its limits;
- Its correct use in safe conditions;
- Carrying out maintenance and repair operations in a safe and correct manner.

This document assumes that the regulations in force on health and safety at the workplace are complied with at the plants where the tool is to be used.

The person in charge is required, according to the laws in force, to read carefully the contents of this Instruction Manual and to have the operators and maintenance personnel read it, for the parts which concern them.

The instructions, documents and drawings contained in this manual are of a reserved technical nature and are strictly the property of the manufacturer; therefore, outside of the purposes for which it was produced, any reproduction, whether in whole or in part, of the contents and/or of the format, must be done with the prior consent of the Manufacturer.

2 INTENDED USERS

This Instruction Manual is intended for the installer, operator/user and personnel qualified for the use and maintenance of the tool.

EXPOSED PERSON

Any person wholly or partially in a danger zone.

OPERATOR

The person or persons assigned to install, operate, adjust, clean, repair and move a tool and to carry out maintenance operations on it.

QUALIFIED PERSONNEL or **QUALIFIED OPERATOR**

those people who have taken specialized courses, training, etc. and have experience regarding the installation, operation, maintenance, repair, and transporting of the tool.

Qualification of the intended users (see PAR. 0.6)

The tool is intended for industrial use, and thus professional and not general use, therefore it may only be used by qualified persons, and more specifically those who:

- Have reached the age of majority;
- Are physically and mentally fit to do work of particular technical difficulty;
- Have been properly instructed in the use and maintenance of the tool;
- Have been judged suitable by the employer to carry out the job assigned to them;
- Are able to understand and interpret the operator's manual and the safety requirements;
- Know the emergency procedures and how to carry them out;
- Have the ability to operate the specific type of equipment;
- Are familiar with the specific applicable rules;
- Have understood the operating procedures established by the Manufacturer of the tool.

The term QUALIFIED/SPECIALIZED PERSONNEL is understood as personnel who, following professional training and experience, have been expressly authorized to carry out the installation, use and maintenance of the tool.

3 STORAGE OF THE INSTRUCTION MANUAL

The Instruction Manual must be stored carefully and must accompany the tool at all stages of ownership that it may have in its life cycle.

The proper keeping of the manual includes handling it with care, with clean hands and by not setting it on dirty surfaces.

Parts of the manual must not be removed, torn or arbitrarily modified.

The Manual must be stored in an area protected against humidity and heat and in the immediate vicinity of the tool to which it refers.

4 UPDATING OF THE INSTRUCTION MANUAL

The Manufacturer is solely responsible for the instructions that it has drawn up and validated (Original Instructions); any translations MUST always be accompanied by the original instructions, in order to verify the correctness of the translation. In any case, the Manufacturer shall not be liable for translations not approved by the Manufacturer itself; therefore if any discrepancies are found, follow the instructions in the original language and, if necessary, contact the Manufacturer's sales office, which will make the necessary changes.

The Manufacturer reserves the right to make changes to the design, changes/improvements to the tool and updates of the Instruction Manual without prior notice to the Customers.
However, in the event of changes to the tool installed at the Customer's facilities, agreed upon with the Manufacturer and involving the updating of one or more chapters of the Instruction Manual, the Manufacturer shall send to the Customer the parts of the Instruction Manual affected by the changes, with the new overall revision of the Manual. It shall be the responsibility of the Customer, following the instructions that accompany the updated documents, to replace in all copies the Customer possesses the parts that are no longer valid with the new parts.

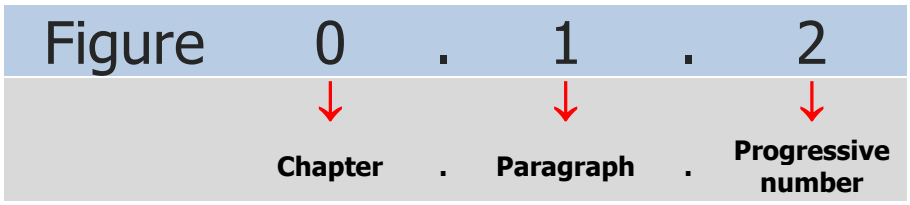
5 HOW TO READ THE INSTRUCTION MANUAL

The Manual is divided into chapters, each of which dedicated to a specific category of information, and thus addressed to the operator for whom the related tasks have been defined.
Terms, abbreviations and pictograms are used in order to make the text more quickly and readily understood; the meanings of these are given in Paragraph 7.

NUMBERING OF THE FIGURES

Each figure is numbered progressively.
The numbering is as follows:

Example: Figure 0.1.2



The progressive number starts again from 1 for each new paragraph.

NUMBERING OF THE TABLES

Each table is numbered progressively.

The numbering is as follows:

Example: Table 0-1.2

Table	0	-	1	.	2
	↓		↓		↓
	Chapter	**.**	**Paragraph**	**.**	**Progressive number**

The progressive number starts again from 1 for each new paragraph.

ABBREVIATIONS

Ch. = Chapter

Par. = Paragraph

Sect. = Section

Pg. = Page

Fig. = Figure

UNITS OF MEASUREMENT

The units of measurement used are those provided by the International System of Units (**SI**).

Quantities	Unit	Symbol
Time	second	s
Length	meter	m
Mass	kilogram	kg
Temperature	Celsius	°C
Amount of substance	mole	mol
Electric current	ampere	A
Luminous intensity	candela	cd

Mechanical quantities	Unit	Symbol	Conversion
Frequency	hertz	Hz	1 Hz = 1 s^{-1}
Force	newton	N	1 N = 1 kg m s^{-2}
Pressure	pascal	Pa	1 Pa = 1 N m^{-2}
Work, energy, amount of heat	joule	J	1 J = 1 N m
Power	watt	W	1 W = 1 J s^{-1}

6 DEFINITIONS

TOOLRY DIRECTIVE 2006/42/EC (Article 2 Definitions)

MANUFACTURER Any natural or legal person who designs and/or manufactures toolry or partly completed toolry covered by this Directive and is responsible for the conformity of the toolry or the partly completed toolry with this Directive with a view to its being placed on the market, under his own name or trademark or for his own use. In the absence of a manufacturer as defined above, any natural or legal person who places on the market or puts into service toolry or partly completed toolry covered by this Directive shall be considered a manufacturer.

PLACING ON THE MARKET Making available for the first time in the Community toolry or partly completed toolry with a view to distribution or use, whether for reward or free of charge.

PUTTING INTO SERVICE The first use, for its intended purpose, in the Community, of toolry covered by this Directive;

SAFETY COMPONENT

A component:

- which serves to fulfill a safety function,
- which is independently placed on the market,
- the failure and/or malfunction of which endangers the safety of persons, and
- which is not necessary in order for the toolry to function, or for which normal components may be substituted in order for the toolry to function.

ANNEX I TOOLRY DIRECTIVE 2006/42/EC (p. 1.1.1 Definitions)

HAZARD a potential source of injury or damage to health.

DANGER ZONE Any zone within and/or around toolry in which a person is subject to a risk to his health or safety.

EXPOSED PERSON Any person wholly or partially in a danger zone.

OPERATOR The person or persons installing, operating, adjusting, maintaining, cleaning, repairing or moving toolry.

RISK A combination of the probability and the degree of an injury or damage to health that can arise in a hazardous situation.

GUARD A part of the toolry used specifically to provide protection by means of a physical barrier.

PROTECTIVE DEVICE A device (other than a guard) which reduces the risk, either alone or in conjunction with a guard.

INTENDED USE The use of toolry in accordance with the information provided in the instructions for use.

REASONABLY FORESEEABLE MISUSE The use of toolry in a way not intended in the instructions for use, but which may result from readily predictable human behaviour.

RESIDUAL RISKS Risks that remain despite the inherent safe design measures, safeguarding and complementary protective measures adopted.

7 PICTOGRAMS

GENERAL INFORMATION

The pictograms must be applied in areas where they are easily visible and legible by anyone who approaches and in a place such that the person can react quickly to take the necessary action to avoid the danger.
When possible, they should be applied in areas protected from the risk of damage, abrasion, chemical attack, dust or anything else that would affect the visibility and reading of them. The usage temperature range goes from -5°C to +40°C, provided that there is not an uneven distribution of temperatures that adversely affect the thermal expansion of the material.
The surfaces on which the pictograms are applied must be clean, smooth and free of grease, oil or chemicals that reduce their adhesion.

According to regulations safety pictograms must be regularly checked and cleaned to ensure good readability at a safe distance. When the products are subjected to extreme environmental conditions or when the safety pictograms no longer fulfill the required visibility conditions, they need to be replaced.

OBLIGATION PICTOGRAMS

SYMBOL	DESCRIPTION
	Wear protective gloves
	Wear safety footwear
	Wear protective clothing
	Wear head protection
	Hold the handrail when going up and down of the stairs

1 GENERAL INFORMATION

1 MANUFACTURER'S IDENTIFICATION DATA

MANUFACTURER	RAMAL S.r.l
REGISTERED OFFICE	Via Calabria, 7 – 06019 Umbertide (PG)
TELEPHONE	+39 075 94 15 802
FAX	+39 075 94 12 222
E-MAIL	ramal@ramal.com
CALL CENTER	+39 075 94 15 802
CONTACTS	www.ramal.com

2 CE MARKING OF THE TOOL

Each tool is identified by a CE plate which gives in an indelible manner the reference data for the tool.

Always give this reference information in all communications with the manufacturer.

RAMAL CE **RAMAL S.r.l.** Via Calabria, 7 06019 Umbertide (PG)	MODEL	RMOSH3G-102B	 MAX 6
	SERIAL NUMBER	A00010	
	YEAR	2023	
	MAXIMUM LOAD	850 daN	

RAMAL CE **RAMAL S.r.l.** Via Calabria, 7 06019 Umbertide (PG)	MODEL	RMOSH3G-103B	 MAX 6
	SERIAL NUMBER	A00010	
	YEAR	2023	
	MAXIMUM LOAD	850 daN	

3 DECLARATIONS

EC DECLARATION OF CONFORMITY

THE MANUFACTURER

RAMAL S.R.L.		
Company		
Via Calabria, 7	06019	PG
Address	*Post Code*	*Province*
Umbertide		Italy
City		*Country*

DECLARES THAT THE TOOL

DECK SERVICING PLATFORM RH+LH	RMOSH3G-102B | RMOSH3G-103B
Tool	*Model*
A00010	2023
S/N	*Year of Manufacture*

DECK SERVICING PLATFORM RH+LH
Commercial name

PLATFORM FOR MAINTENANCE AND/OR PERIODIC INSPECTION AIRCRAFT MH139
Intended use

IS IN CONFORMITY WITH THE DIRECTIVES

Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on tool, and amending Directive 95/16/EC.

AND WITH THE TECHNICAL RULES

EN ISO 12100:2010

AND AUTHORIZES

Luca Malincarne		
First name and last name		
Via Calabria, 7	06019	PG
Address	*Post Code*	*Province*
Umbertide	Italy	
City	*Country*	

TO COMPILE THE TECHNICAL FILE ON ITS BEHALF

Place and date of the document
Umbertide, 30/09/2023

The Manufacturer

The tool is built in accordance with the relevant EC Directives applicable at the time of its placing on the market.

PROHIBITION ON PUTTING INTO SERVICE

The tool cannot be put into service after undergoing structural modifications or additions of other components not included as part of ordinary or extraordinary maintenance without it being declared again to comply with the requirements of Directive 2006/42/EC and of the applicable EC directives.

Place, date

Place, date

4 SAFETY REGULATIONS

The tool was built in compliance with the Technical Rules listed below.

STANDARD	Title
EN ISO 12100	Safety of tool - General principles for design – Risk assessment and risk reduction

5 INFORMATION ON TECHNICAL ASSISTANCE

The tools are covered by warranty, as provided in the general conditions of sale. If any malfunctioning or failure of parts of the tool occurs during the validity period which falls under the cases specified by the warranty, the Manufacturer, after the necessary checks on the tool, will repair or replace the defective parts.

It should be noted that modification made by the user without the express written authorization of the manufacturer will void the warranty and will release the manufacturer from any liability for damage caused by a defective product.

This applies especially when these modifications are done on safety devices, degrading their effectiveness. The same considerations apply when non-genuine replacement parts or parts other than those explicitly specified by the manufacturer as "safety devices" are used.

We therefore recommend that customers contact our Customer Service before making the aforementioned changes to the tool.

Any defects clearly and visibly present at the time of delivery of the product (cosmetic defects on the visible parts, cracks, dents, malfunctions, missing parts etc..) should be reported immediately to the company.

The Manufacturer shall not be liable for defects not reported by the customer at time of delivery.

6 PREPARATIONS TO BE DONE BY THE CUSTOMER

Unless otherwise agreed upon by contract, the Customer is normally responsible for:

- Area arrangement for equipment positioning based on the dimensions of the same.

2 SAFETY

1 GENERAL SAFETY WARNINGS

Before making the tool operational, carefully read and follow closely the instructions given in this manual.

The manufacturer has made the greatest effort in designing this tool to make it as SAFE as possible.
Bearing this in mind, the tool has been equipped with all the guards and safety devices considered necessary and provided with sufficient information for it to be used safely and correctly.
To this end, when necessary, for every man/tool interaction the following information has been given:

- Minimum operator qualifications required.
- Number of operators necessary.
- State of the tool.
- Residual risks.
- Personal protective equipment required or recommended.
- Prevention of human errors.
- Prohibitions/obligations regarding reasonably foreseeable misuse.

However, it is essential that the following instructions be strictly followed:

- Avoid wearing clothes with loops or similar that can get caught on parts the tool.
- Avoid wearing neckties or other loose pieces of clothing.
- Avoid wearing large rings or bracelets that can cause the hands to get caught on parts of the tool.
- The platform can be moved without the presence of operators on it.
- After handling, check that the weight of the entire platform rests on the wheels.
- During handling, pay attention to the presence of people or things, in particular pay attention in the vicinity of the aircraft.
- Make sure the wheels are braked before getting on the platform.
- Once on the platform, extend the sliding parapets.
- Where applicable, rubber corner guards are provided to protect operators using the platforms (as shown).

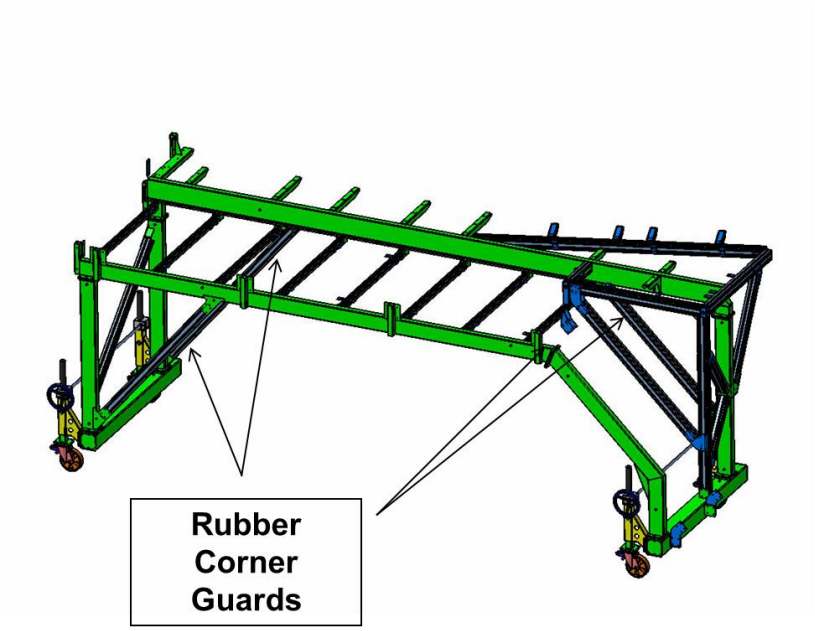


Fig. 2.1.1

In addition, when necessary the Manual will give further recommendations for the user regarding prevention measures, personal protective equipment, information to prevent human errors and prohibitions regarding misuse that is not allowed, but is reasonably foreseeable.

In any case, the user can usefully complement the information provided by the manufacturer with additional work instructions to contribute to the safe use of the tool, obviously not in contrast with that given in this Instruction Manual.

The manufacturer is released from any liability for damage to persons, animals or property caused by the tool in the case of:

- use of the tool by inadequately trained personnel;
- improper use of the tool;
- failure to carry out scheduled maintenance;
- unauthorized modifications or work done to the tool;
- use of non-genuine replacement parts or parts that are not specific for the model;
- complete or partial failure to follow the instructions;
- use contrary to specific national regulations;
- disasters or exceptional events.

General requirements

Mobile equipment must always be used according to the manufacturer's instructions, as given in this Manual, which must always be available to the operator at the workplace.

All safety devices installed on mobile equipment to avoid accidents and to ensure safety must not be modified nor removed, and they must be adequately protected.

The user must promptly inform the employer or their immediate supervisor about any defects or anomalies found in mobile equipment.

Checks and inspections

Inspections must be carried out by an expert; they must be visual and functional, with the purpose of guaranteeing the safeness of the tool.

They include:

- inspection of all load-carrying structures, which must not show any cracks, breakage, damage, deformation, corrosion, wear or alteration compared to the original specifications;
- checking all connections with pins, screws and bolts.

The results of this inspection must be reported on a specific form.

In the event that the technician assigned to do the inspection finds cracks or dangerous defects or anomalies, he/she must:

- Promptly notify the manufacturer of the tool.
- Put the tool out of service, providing for the necessary checks and/or repairs.
- Make sure that there are no objects between the parts of the tool.

If defects or anomalies are found, they must be eliminated before putting the tool into operation, and the expert who performs the inspection must note on a specific form that the repair has taken place, thus giving their approval for the use of the tool.

In the event that worn or defective parts are not promptly replaced, the manufacturer shall assume no responsibility for any damage from accidents that may result from this.

In order to ensure maximum tool safety it is PROHIBITED:

- to tamper with any part of the tool.

2 INTENDED USE

The equipment has been designed for the maintenance and / or periodic inspection of the MH139 aircraf.

The use of products/materials other than those specified by the Manufacturer, which can create damage and dangerous situations for the operator and/or persons close to the tool, is considered wrong and improper.

3 CONTRAINDICATIONS FOR USE

The tool must not be used:

- In an explosive or corrosive atmosphere or one with a high concentration of dust or oily substances suspended in the air.
- Exposed to the elements.

4 DANGER ZONES

The danger zones of the tool are:

- Near the equipment when moving the platform.
- On the equipment during operations to be carried out on the aircraft.

5 SIGNS

The following signs must be installed near the tool and in the tool work area:

OBLIGATION PICTOGRAMS

SYMBOL	DESCRIPTION
	Wear protective gloves
	Wear safety footwear

	Wear protective clothing
	Wear head protection
	Hold the handrail when going up and down of the stairs

6 RESIDUAL RISKS

It is necessary to be careful of the following residual risks that are present during use of the tool and that cannot be eliminated.

	WARNING - Fall from above

3 INSTALLATION

1 ASSEMBLY INSTRUCTION

The equipment must be assembled following the instructions in this chapter and using the supplied/indicated components.

Before starting the assembly, open the shipped box (as shown in figure 3.1.1) in order to take its contents.

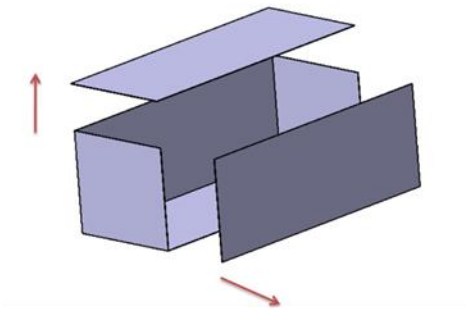


Fig. 3.1.1 - Box opening

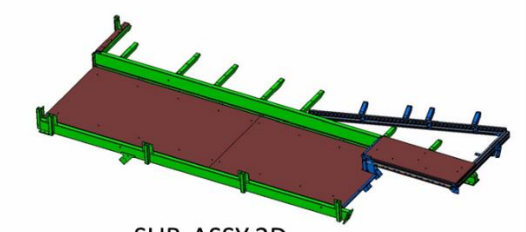
During this operation remove the fasteners that were used to lock the contents in the box.

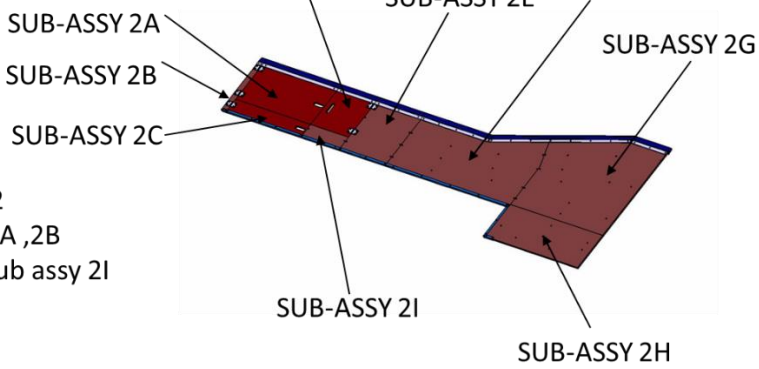
The instructions refer to the assembly of the RMOSH3G-102A platform, the RMOSH3G-103A platform is symmetrical.

List of fasteners to be used for mounting the platform		
Quantity	Name	Description
24	NA/101	BOLT 1-2 X 1 UNC STEEL HEXAGON HEAD
24	NA/102	BOLT 1-2 X 1.5 UNC STEEL HEXAGON HEAD
24	NA/103	FLANGE_NUT 1-2-13
16	NA/104	BOLT 3-8 X 1 NC STEEL HEXAGON HEAD
140	NA/105	BOLT 5-16 X 3.25 UNC STEEL HEXAGON HEAD
292	NA/106	FLANGE_NUT 5-16-13
9	NA/107	HELICOIL 1-2-13 INTERNAL
9	NA/108	BOLT 1-2 X 1 UNC STEEL HEXAGON HEAD
28	NA/109	BOLT 5-16 X 1 UNC STEEL HEXAGON HEAD
22	NA/110	BOLT 5-16 X 2.5 UNC STEEL HEXAGON HEAD
22	NA/111	BOLT 5-16 X 4.5 UNC STEEL HEXAGON HEAD
36	NA/112	BOLT 5-16 X 2.75 UNC STEEL HEXAGON HEAD
113	NA/115	FLANGE_NUT 1-4-13
28	NA/116	BOLT 1-4 X 2 UNC STEEL HEXAGON HEAD
6	NA/117	BOLT 1-4 X 0.5 UNC STEEL HEXAGON HEAD
51	NA/118	SCREW-A2-TSEI-1-4 X 0.75
65	NA/119	SCREW-A2-TSEI-1-4 X 1.5
64	NA/120	WASHERD8
2	NA/121	SCREW-A2-TSEI-1-4 X 1.5
2	NA/122	03194-3110060_NORELEM
4	NA/124	LOCKING_PIVOT_WHEEL_D200
4	NA/125	RMGE3G-102A_2206_SET_SCREW
4	NA/126	PLUG-D20X50
8	NA/127	STDUNI7435-20
4	NA/128	SUPPORT_LEG
2	NA/129	HANDWHEEL BAND MP03020300 D160 WITH FOLDING HANDLE
5	NA/130	HINGES CMM.60-120-SH-8(0)
2	NA/131	03196-24608030_(UNBETAETIGT_30)
4	NA/132	JACK CHS 2 TS 200 30 TS DE PR
2	NA/133	DOUBLE JOINT AZ2 20 HOLE D12 L1425
28	NA/134	HEXNUT 1-2-13
20	NA/135	SCREW-A2-TSEI-5-16 X 1.5
8	NA/136	HEXAGON_NUT 5-16-13
4	NA/137	WHEEL SUPPORT
36	NA/138	BOLT 5-16 X 3.25 2,9 UNC STEEL HEXAGON HEAD

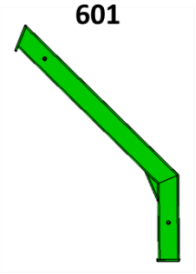
Platform components

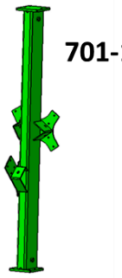
ASSY-1-102– WORK LEVEL

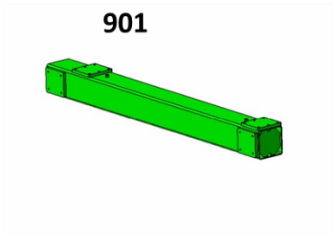


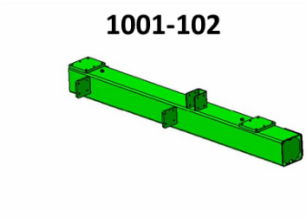


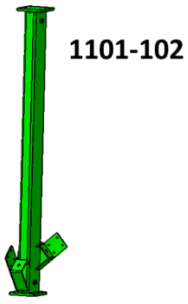
ASSY-2 – WORK LEVEL 2
composta da sub assy 2A ,2B ,2C,2D,2E,2F,2G,2H, e sub assy 2I

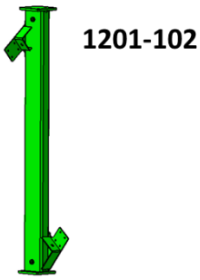




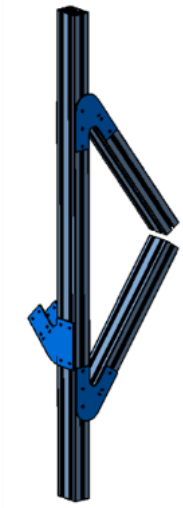




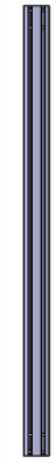




Sub-Assy «PROFILES 102»

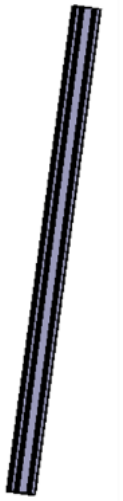


1405

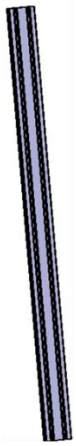


1501

1502



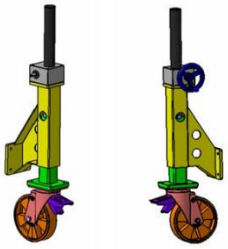
1403



1404

1503

1801 (Nr.2)
1802 (Nr.2)



NA/133 (Nr. 2)

1601 (Nr.2)

1603

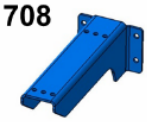
1606

1609

1610

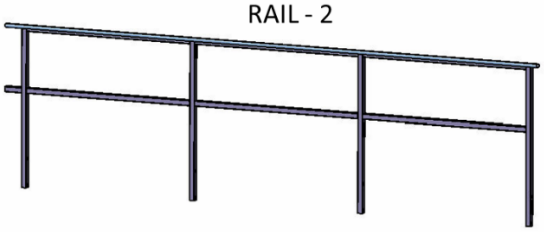
Nr. 4 Eye-bolt M16 da utilizzare durante la movimentazione. Puoi trovarli fissati sul gruppo 1 e avvitarli/rimuoverli dove serve.

1708

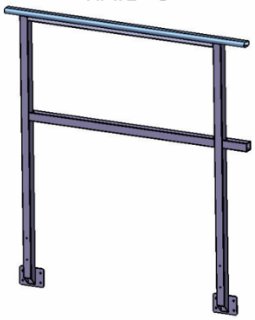


RAIL - 1

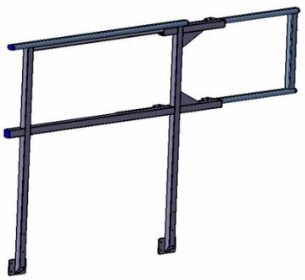
RAIL - 2



RAIL - 3



RAIL - 4



1. Take the Assy-1 using eyebolts.
2. Lift the Assy -1 from the front keeping it tilted (as shown) to allow the assembly of 1101LH and 1201LH.

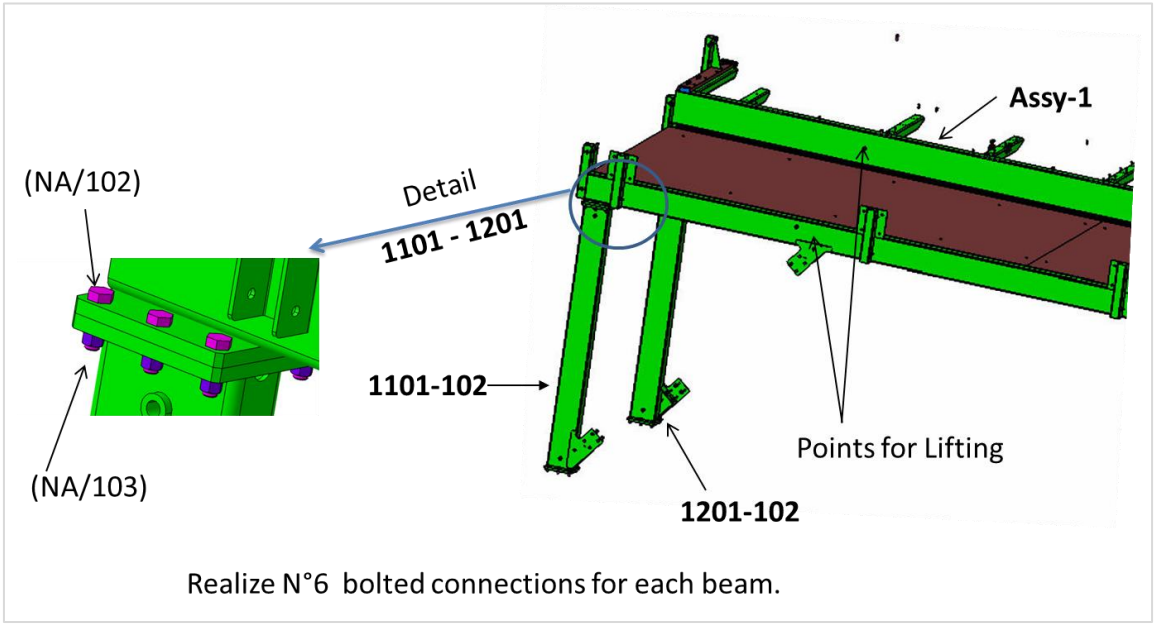
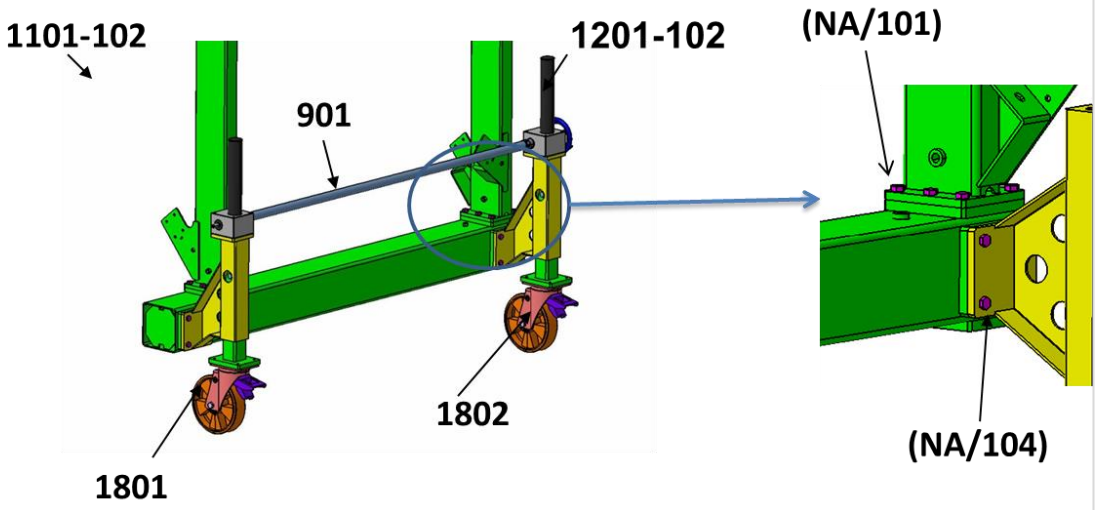


Fig. 3.1.2

3. Assemble Beam 901 and the Stabilizers 1801 and 1802.

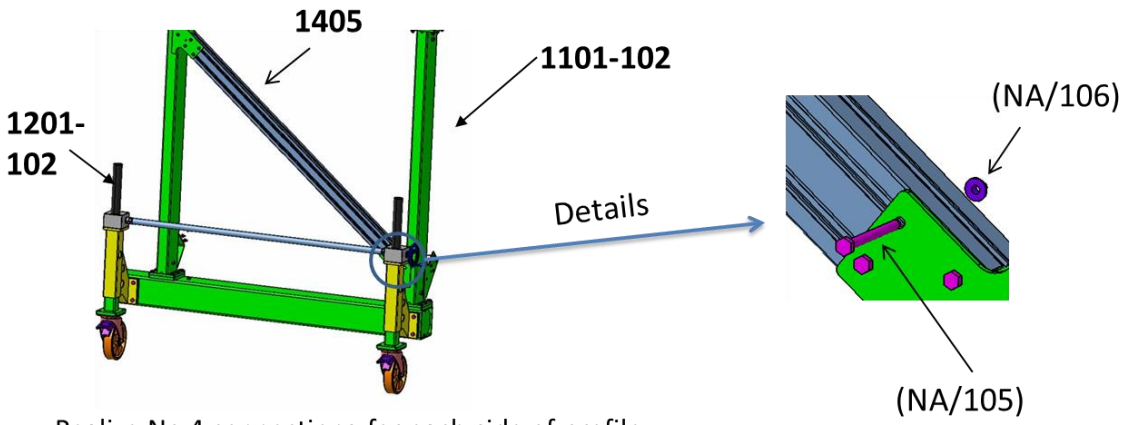


Use Nr. 6 screws for the assembly of each beam.

Use Nr. 4 screws for the assembly of each stabilizer.

Fig. 3.1.3

4. Realize a diagonal connection between 1201LH and 1101LH using 1405.



Realize Nr. 4 connections for each side of profile.

5. Disassemble the BRACKET **1** from the Sub-Assy ;

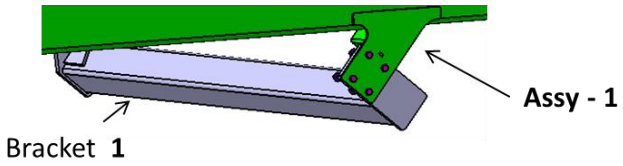


Fig. 3.1.4

5. Realize the connection with Profile 1501 e 1502.

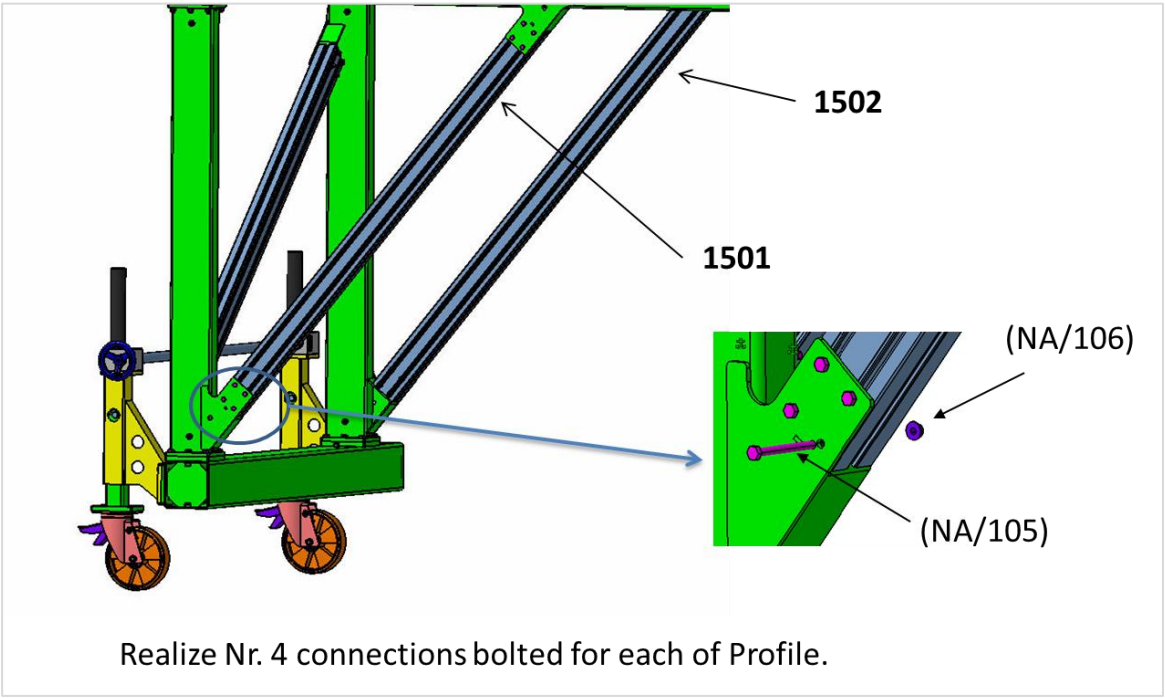


Fig. 3.1.5

6. Lift the Sub-Assy realized using the points for lifting (as shown).

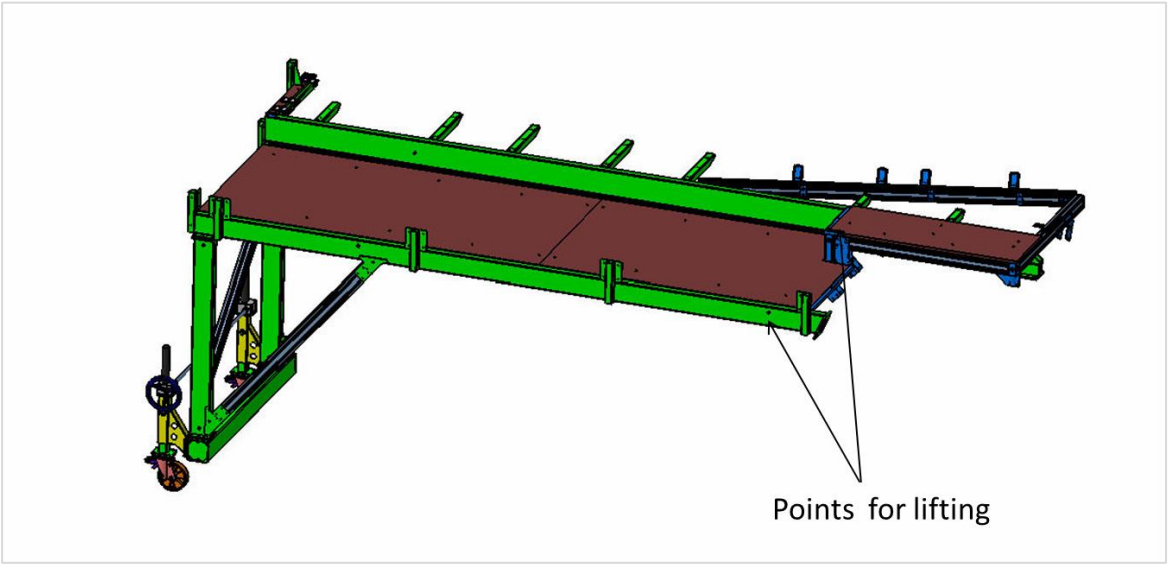


Fig. 3.1.6

7. Assemble Beam 601 and 701LH on the Sub-Assy.

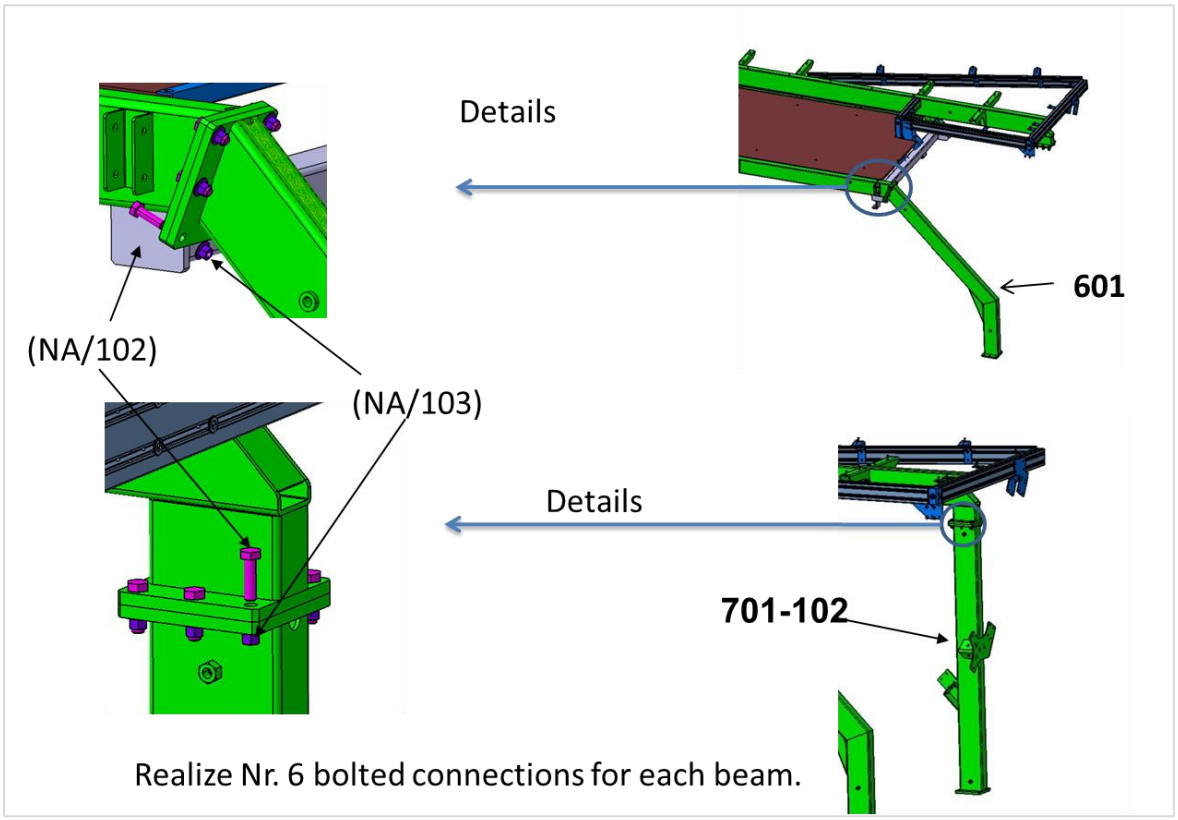


Fig. 3.1.7

8. Assemble the Beam 1001LH and Stabilizers 1801 and 1802.

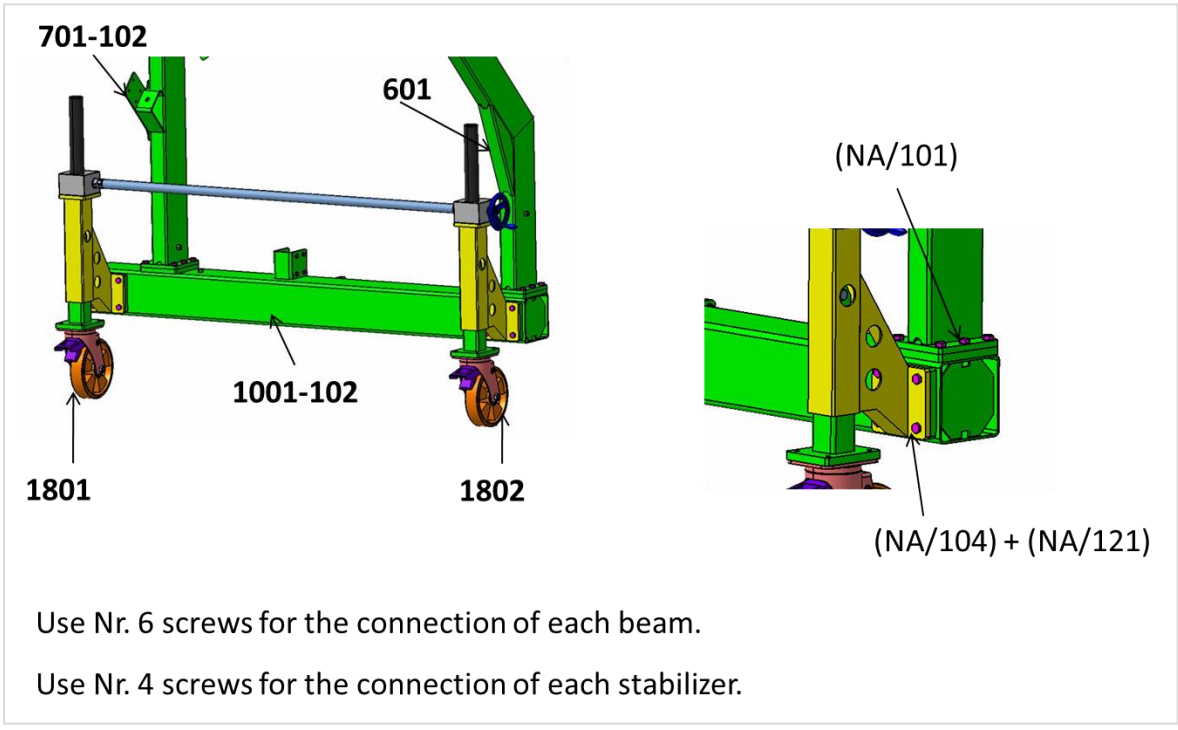


Fig. 3.1.8

9. Assemble the Sub-Assy «Profiles» as shown.

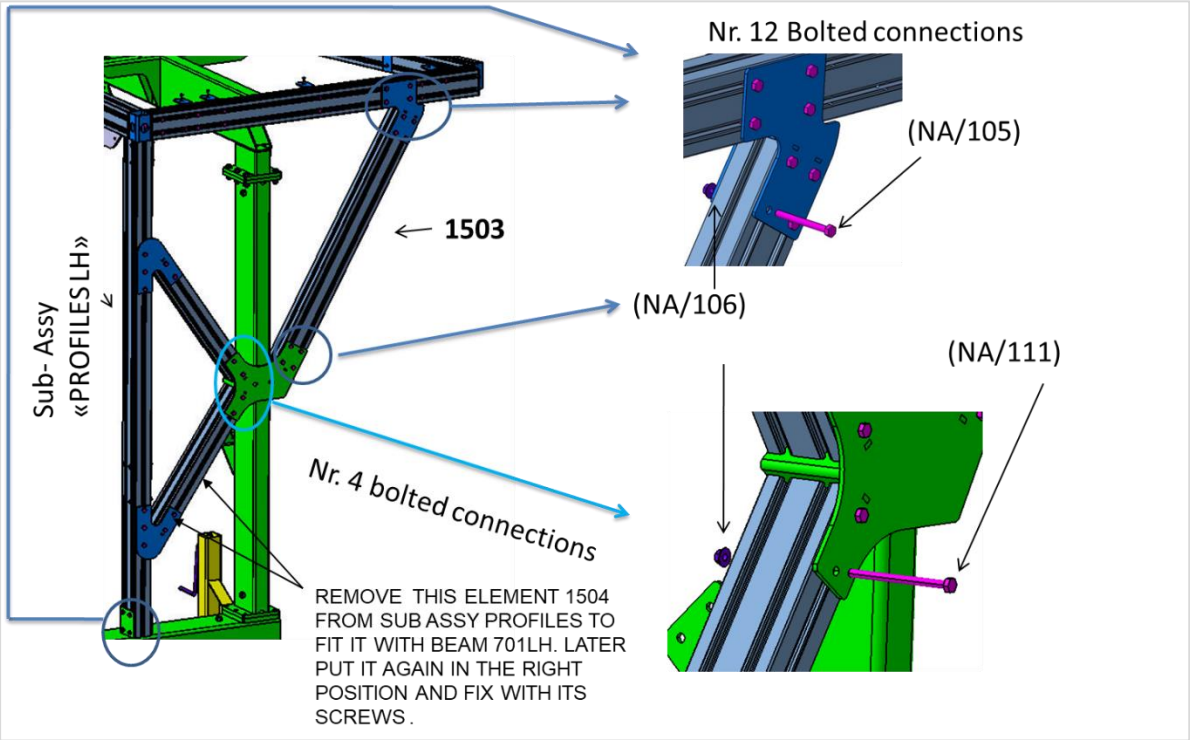


Fig. 3.1.9

10. Disassemble the Support 2 form the Assy-Platform.

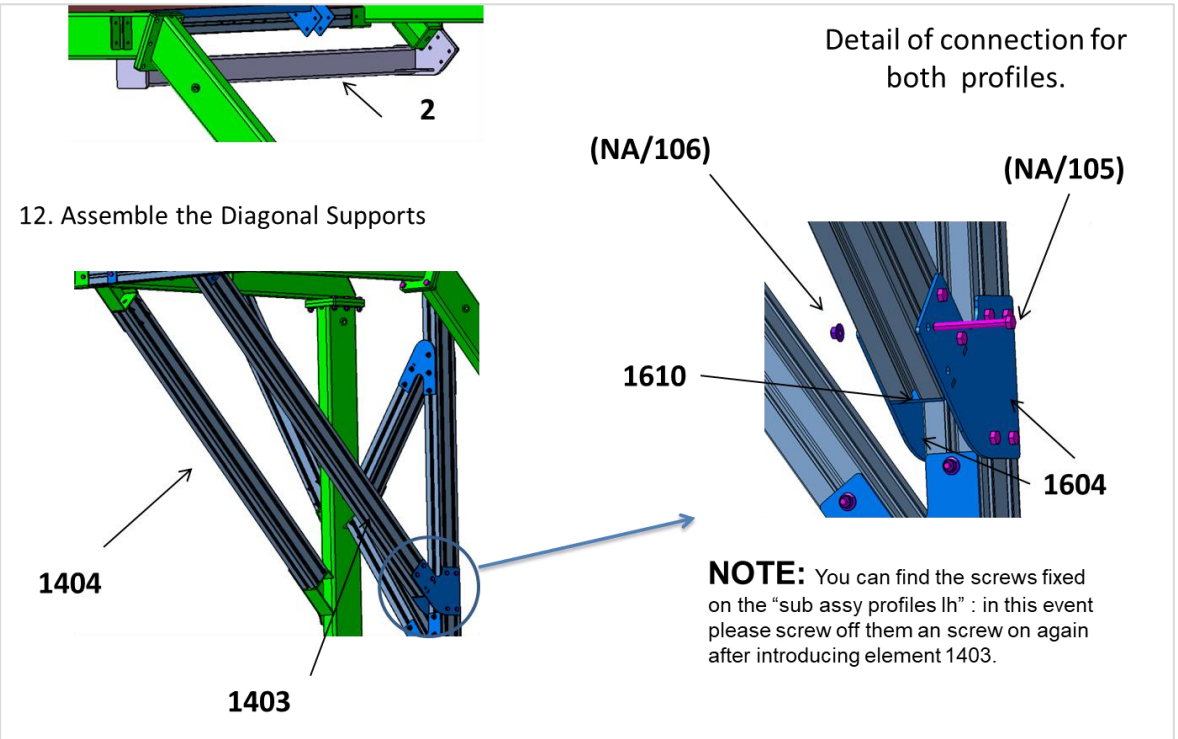


Fig. 3.1.10

11. Assemble the Assy – Stairs on the Platform.

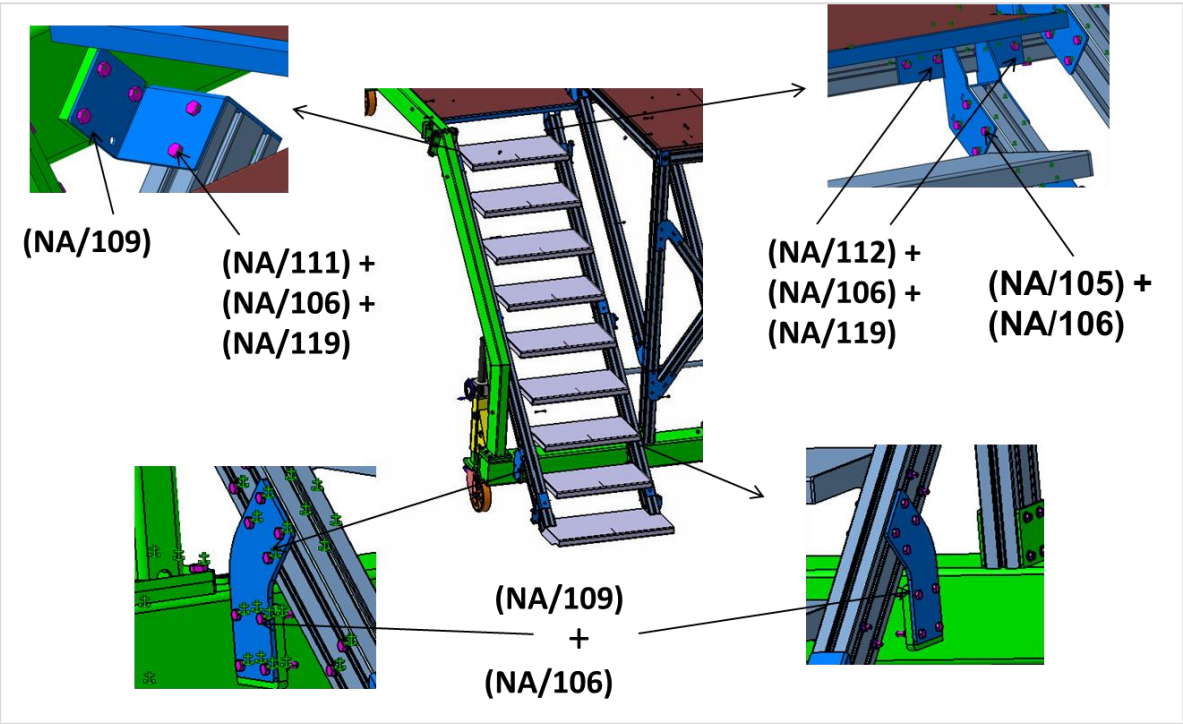


Fig. 3.1.11

12. Assemble the RAIL for STAIRS: as shown is valid for the RAIL left and right.

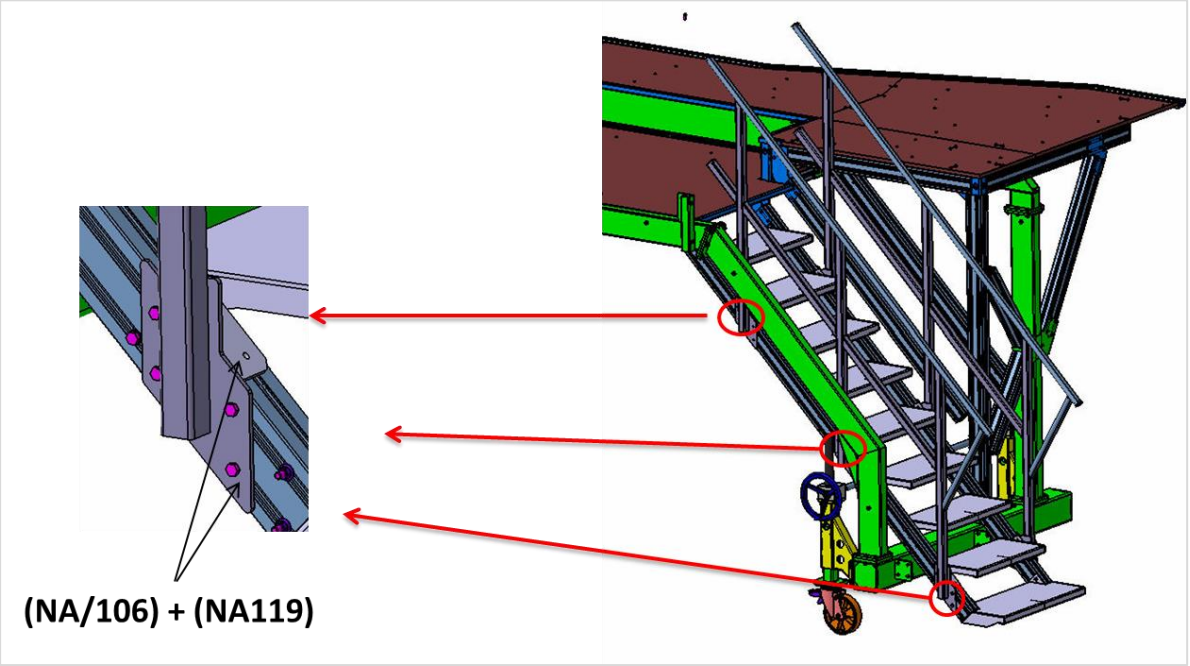


Fig. 3.1.12

13. Assemble the Assy – RAIL – 2.

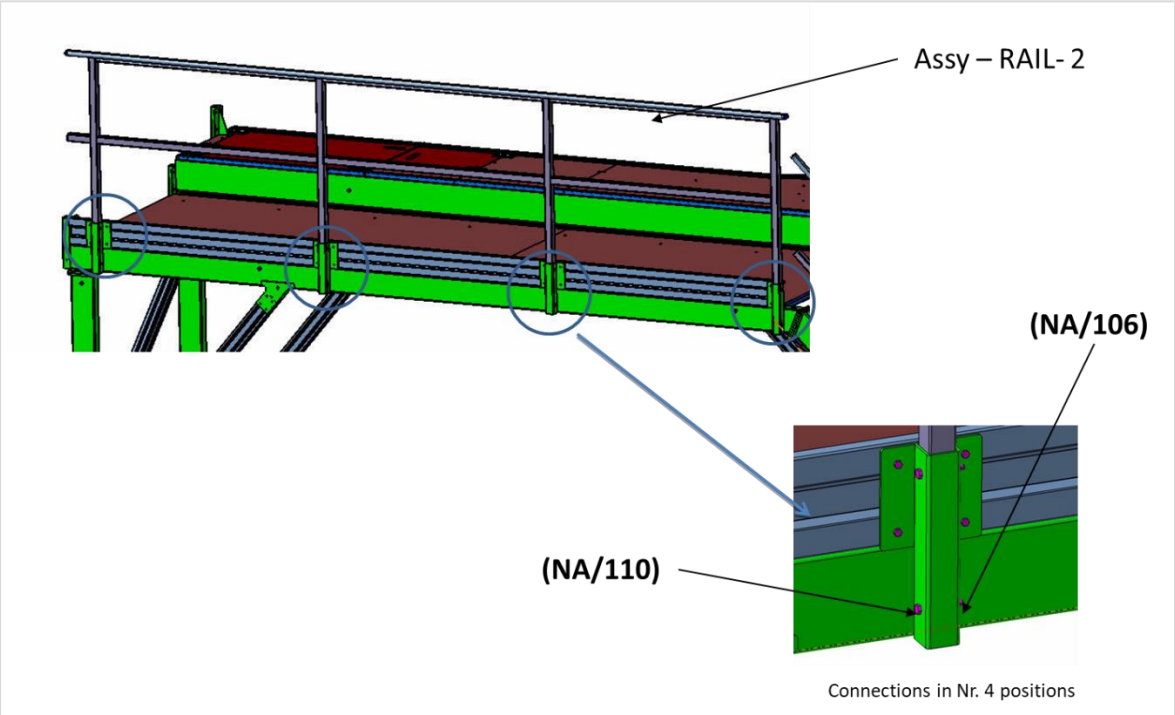


Fig. 3.1.13

14. Assemble the Assy – RAIL – 1.

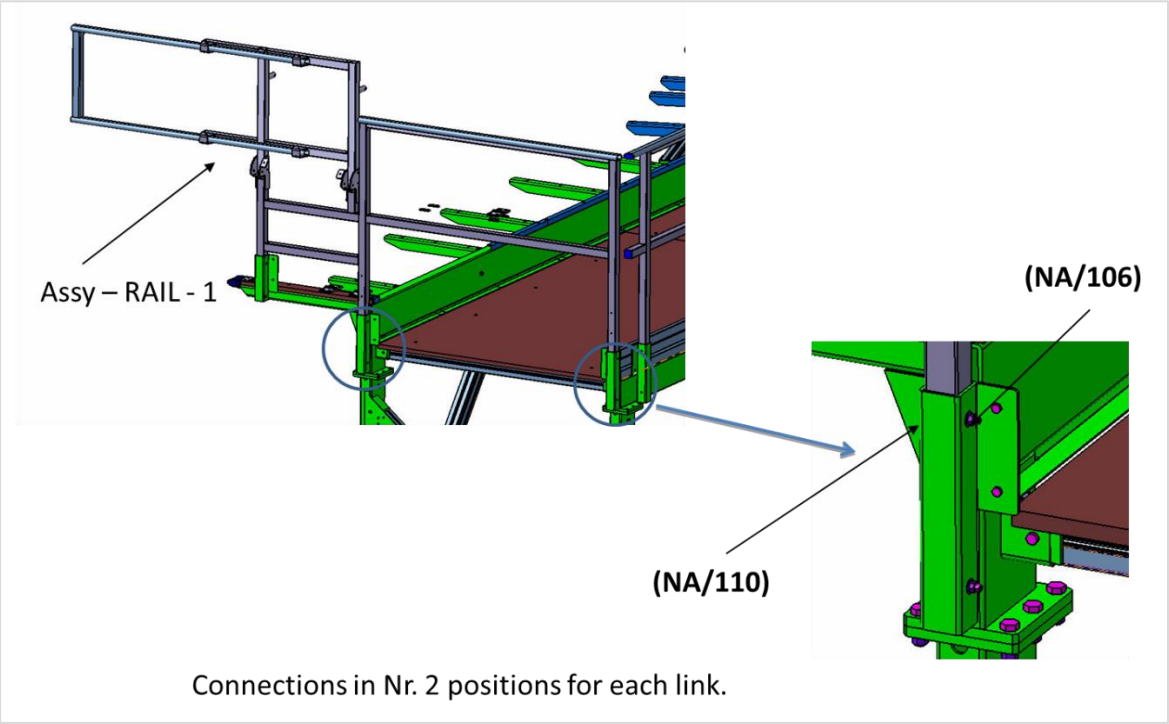


Fig. 3.1.14

15. Assembly the Assy -2 WORK LEVEL.

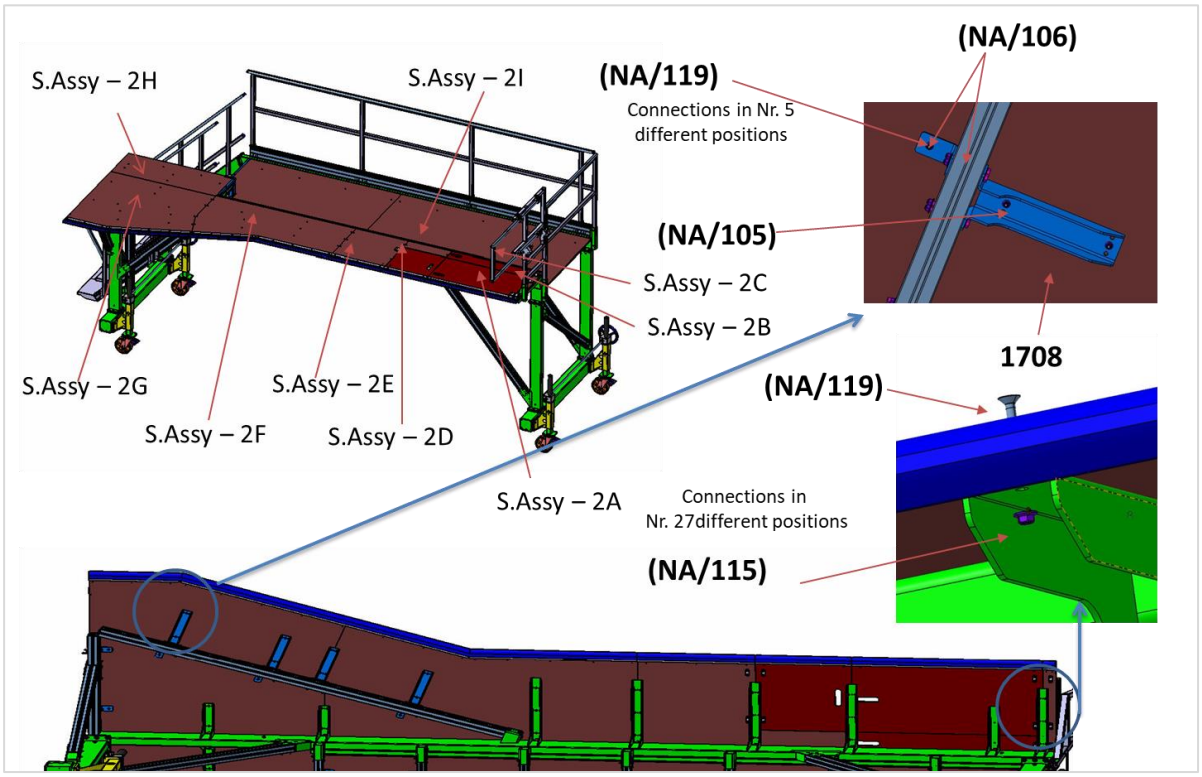


Fig. 3.1.15

16. Assembly the Sub Assy 2A,2C,2D WORK LEVEL

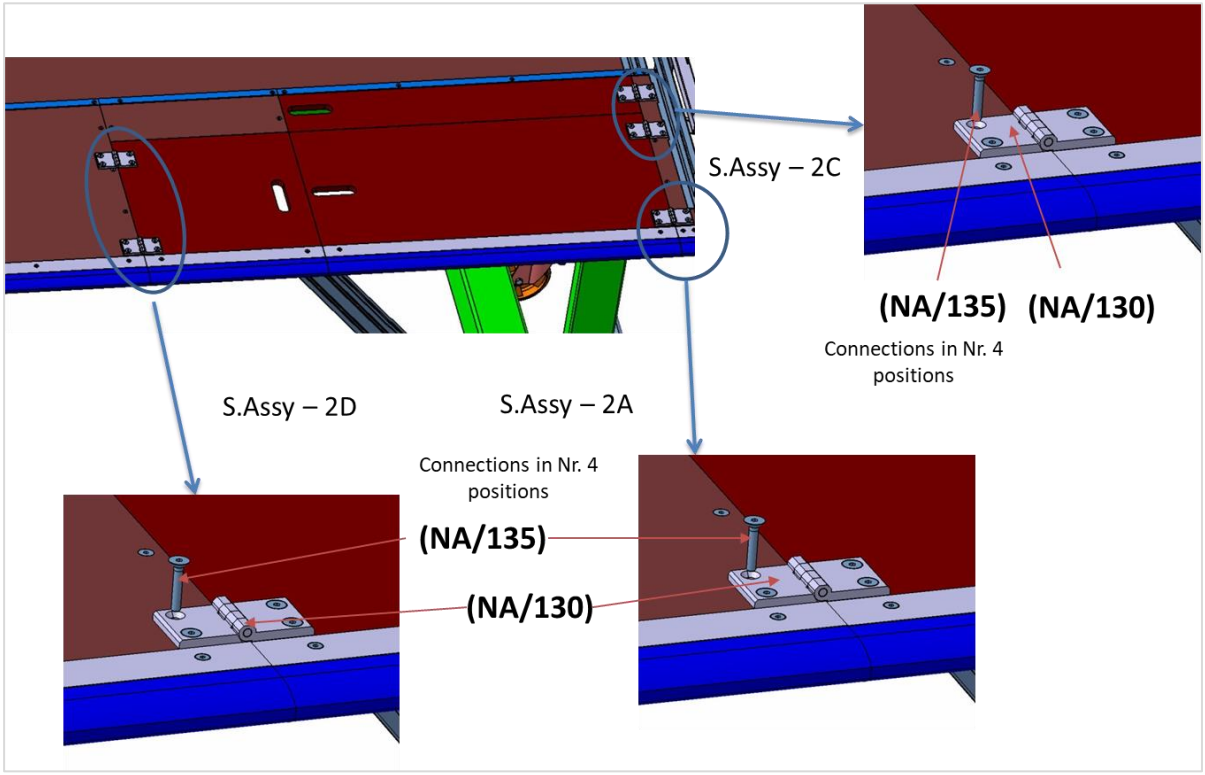


Fig. 3.1.16

17. Assemble the Assy – RAIL 3 and the Assy – RAIL 4.

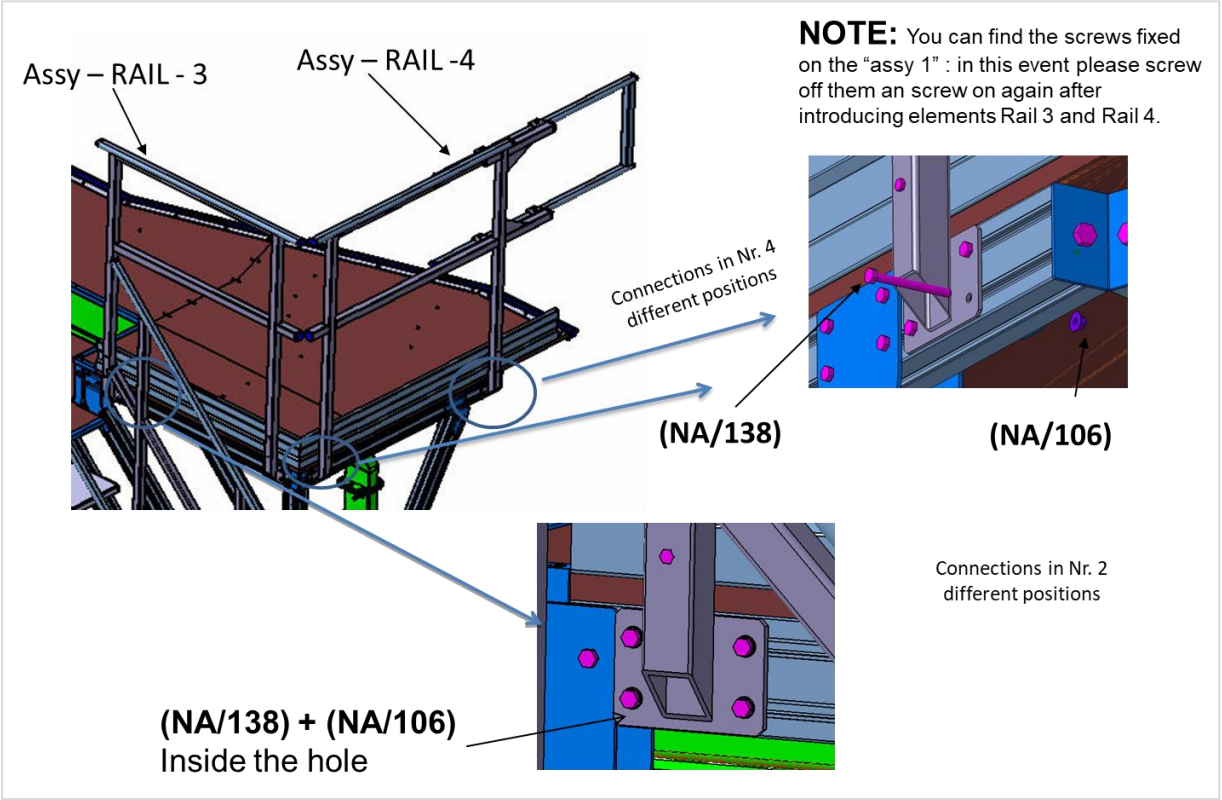

Assy – RAIL - 3
Assy – RAIL -4
NOTE: You can find the screws fixed on the "assy 1" : in this event please screw off them an screw on again after introducing elements Rail 3 and Rail 4.
Connections in Nr. 4 different positions
(NA/138)
(NA/106)
Connections in Nr. 2 different positions
(NA/138) + (NA/106)
Inside the hole

Fig. 3.1.17

2 TRANSPORTING AND MOVING

The tool can be transported with a normal vehicle capable of supporting weight and size of its components.

Always make sure that the weight of the component, that the user is handling, is correctly balanced when transporting it so as to prevent the component from shifting unexpectedly or the falling to the ground.

It is recommended that vehicles always be used that can support the weight and size of each component, so as to avoid damage to tool and to surrounding persons or objects.

The Manufacturer shall not be liable for damage caused to persons, animals or property resulting from the use of lifting procedure other than that mentioned.

3 STORAGE

When the tool is not being used, it must be stored taking the following precautions:

- store the tool or its components in a closed area;
- grease the non-painted parts;
- protect the tool or its components from bumps, blows and stresses;
- protect the tool or its components against moisture;
- avoid having the tool or its components be subjected to extreme temperatures and protect it against great changes of temperature;
- avoid having the tool or its components come into contact with corrosive substances.

4 DESCRIPTION OF THE TOOL

1 USE DESCRIPTION

The right and left components of the platform must be moved by using the wheels in order to bring them closer to the aircraft.

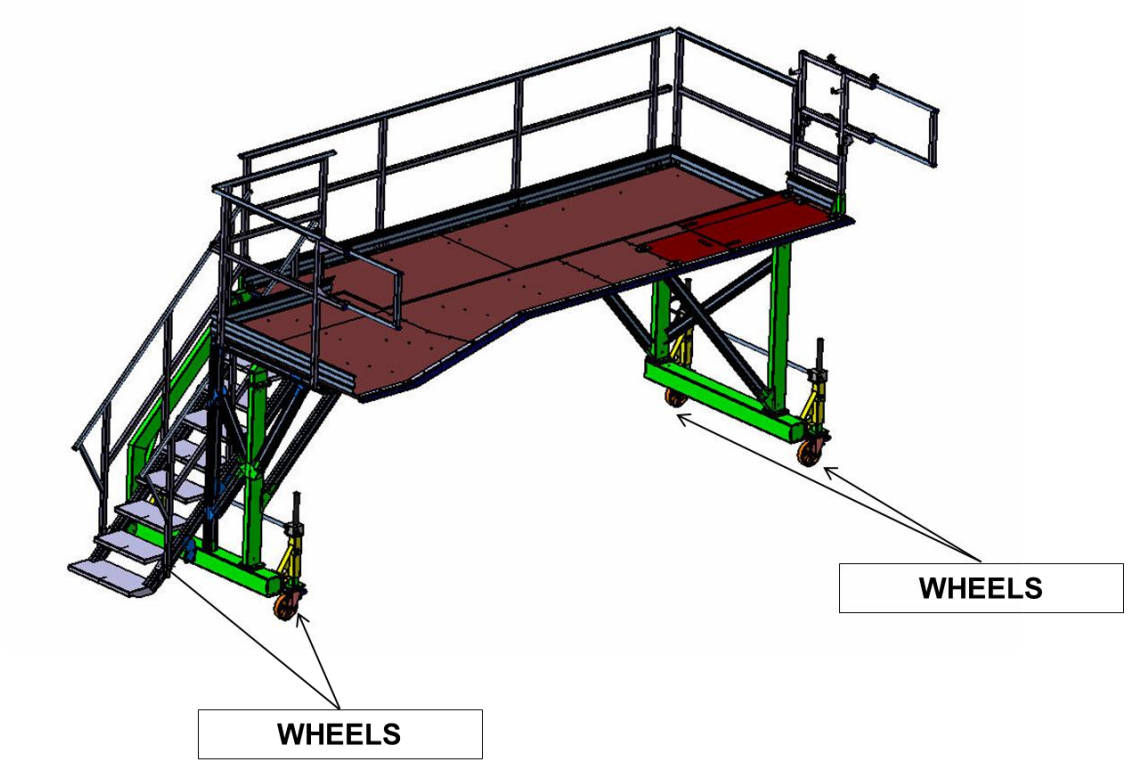


Fig. 4.1.1

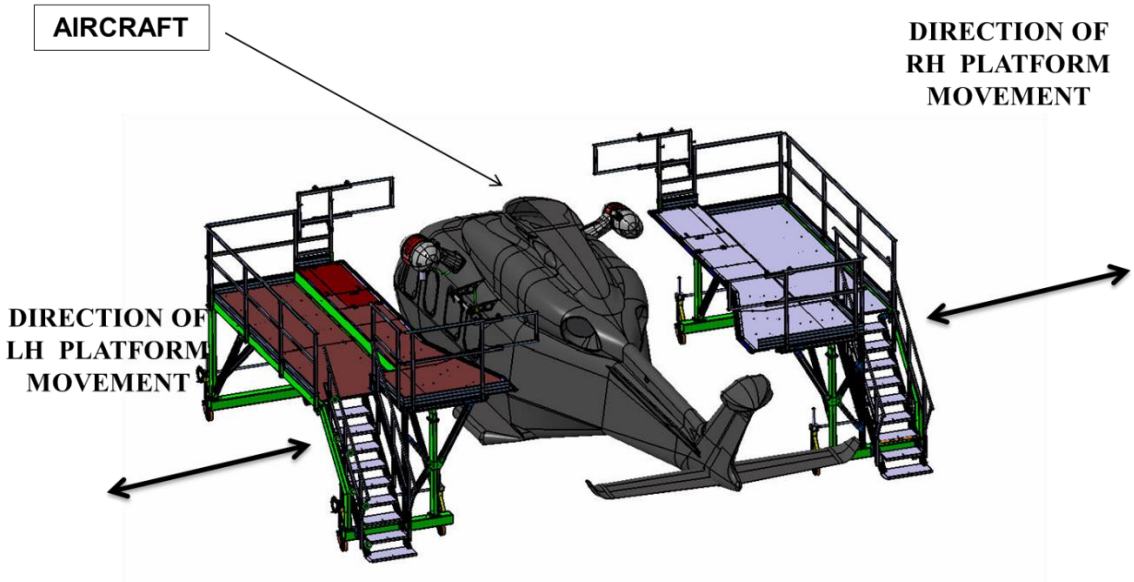


Fig. 4.1.2

Once approached to the aircraft, the use of the sliding handrail will reduce the risk of falling from above.

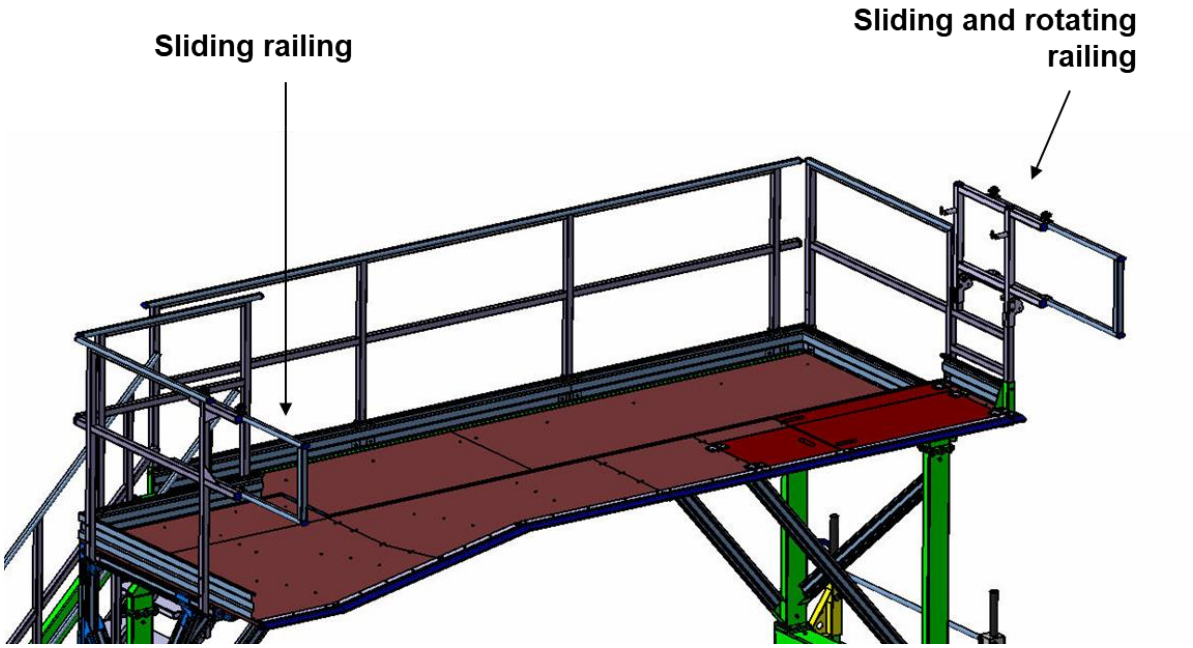


Fig. 4.1.3

Other moving parts will allow operators to perform maintenance / inspection of the aircraft.

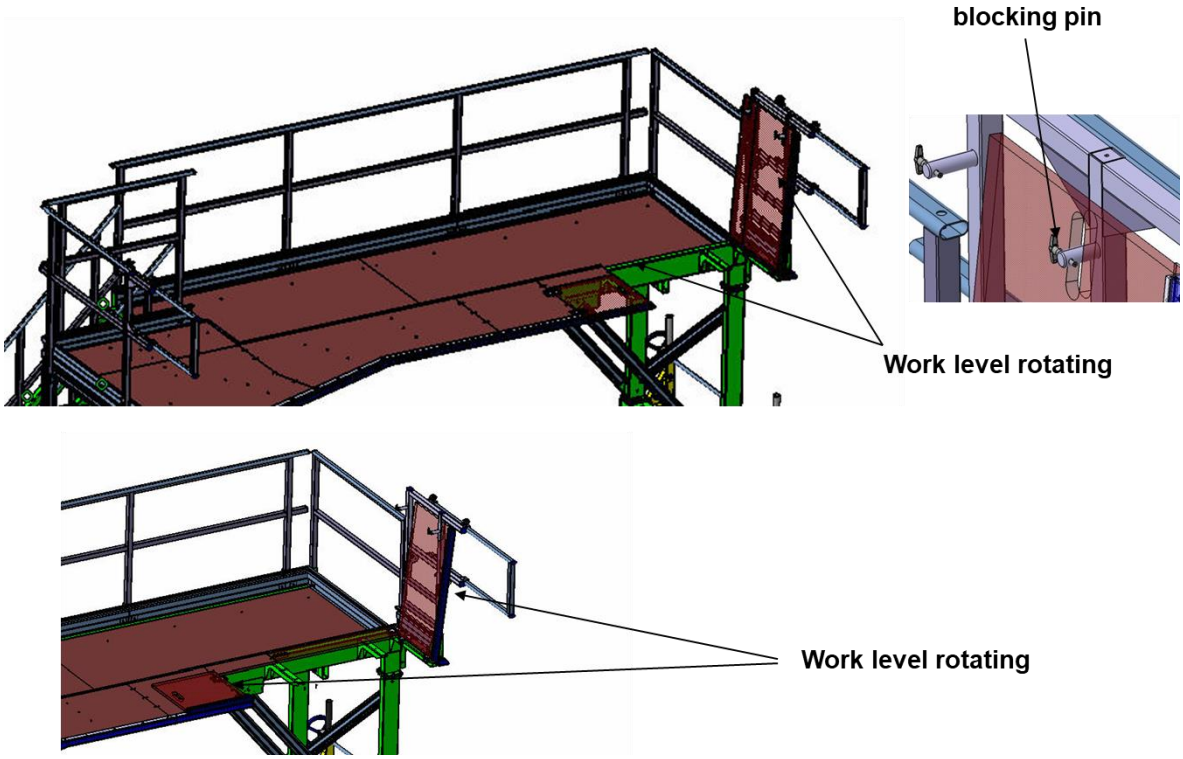


Fig. 4.1.4

The platform is equipped with rubber protection for approaching the aircraft.

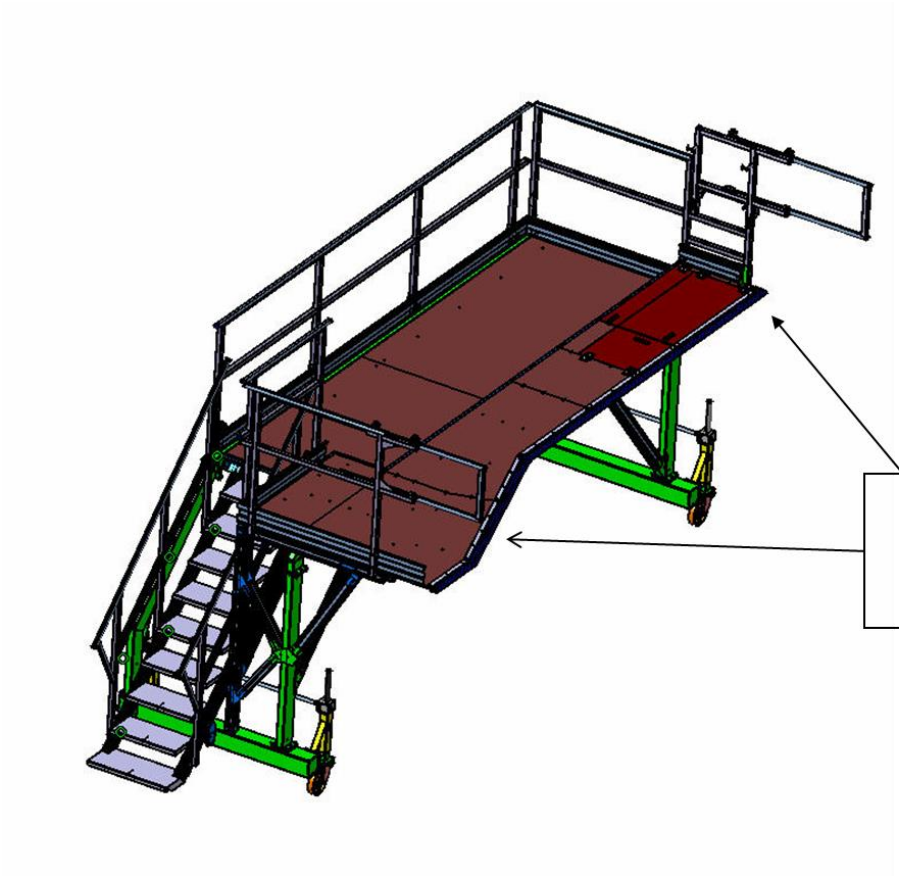


Fig. 4.1.5

2 DIMENSIONS

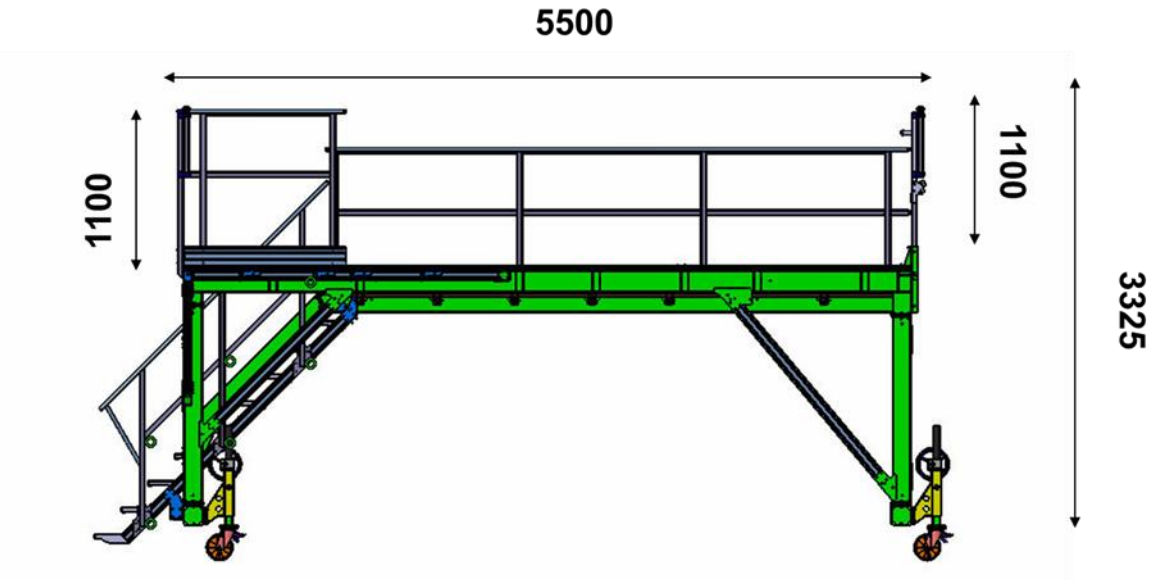


Fig. 4.2.1 – Dimension 1 (mm)

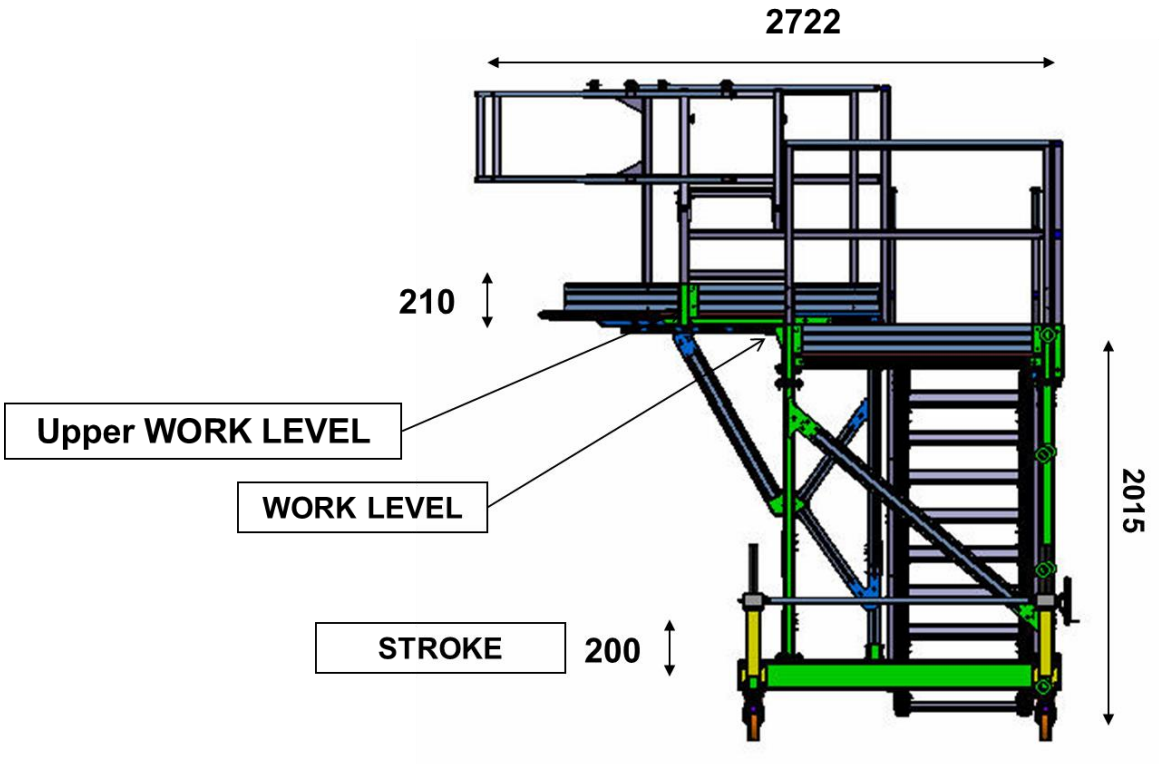


Fig. 4.2.1 – Dimension 2 (mm)

3 ENVIRONMENTAL CONDITIONS

The tool does not require special environmental conditions. It must be installed inside an industrial building that is well-lit, ventilated and equipped with a solid level floor.

The allowable temperature range is from 5°C to 40°C, with humidity not exceeding 50% at 40°C, or not exceeding 90% at 20°C.

Warning: the tool is not suitable for working in explosive or corrosive atmospheres or atmospheres with excessive dust.
Warning: the equipment is not adequate to work in the presence of wind.

The tool is suitable for working in environments that are at:

- elevation not over 1500 m a.s.l.;
- temperature between -20°C and + 40°C with average temperature around 35°C;
- relative humidity between 30 and 95%.

The tool is not suitable for working in explosive/corrosive atmospheres or atmospheres with excessive dust.

4 LIGHTING

The lighting of the installation environment must be in compliance with the laws in force in the country where the tool is installed and must provide good visibility in all areas and not create dangerous glare.

Since the tool does not have its own independent light sources, the work environment must be provided with general lighting such as to guarantee lighting values of 200 to 300 lux at every point of the tool.

5 STANDARD SUPPLY

The tool is supplied complete for putting into service.

It is supplied with:

- Instruction Manual for Use and Maintenance;
- Declaration of Conformity;
- CE Marking.

5 MAINTENANCE

1 STATE OF MAINTENANCE

To keep the equipment in a good state of preservation, it important that the tool be kept clean. Check that there are no damaged or worn parts; if there are, ask for replacement parts.

- Please check if the tool is completed in all its components before usage.
- After each usage, verify that tool isn't damaged.
- Check the condition of the structure before each use.
- Check the condition of the wooden walkway before each use.

Immediately replace the appliance (or individual parts) if there are damages, deformations or signs of wear.

2 SPECIAL PRECAUTIONS

When carrying out maintenance and/or repair work, carefully follow the instructions below:

- Before starting work, display a sign saying "TOOL BEING SERVICED" in a clearly visible position.
- To reach the highest parts of the tool, use equipment suitable for the operation to be performed.
- When work is completed, restore and correctly fasten in place all the guards and protective components removed.

The Manufacturer will not be responsible for non-compliance with the above recommendations and for any other use which does not comply with or is not mentioned in these instructions.

3 CLEANING

A mild detergent is sufficient for cleaning the tool.

6 ACCESSORIES AND REPLACEMENT PARTS

1 SERVICE

The Manufacturer is always willing to provide any type of information regarding the installation, use and maintenance of the tool.
The customer is kindly requested to state their questions clearly, with reference to this manual and to the instructions given.

2 REPLACEMENT PARTS

ALWAYS USE GENUINE PARTS.

The Manufacturer advises against the use of non-genuine parts: the use of non-genuine parts will void the warranty conditions (if they still exist) and will void the liability of the Manufacturer in the use of the tool and for any damage to people and/or property.

Spare parts list RMOSH3G-102A			
Identification number	Rev.	Description	quantity
ASSY-1-102-WORK LEVEL-1	0	WORK LEVEL-1	1
SUB-ASSY-2A-102	0	WORK LEVEL-2A	1
SUB-ASSY-2B-102	0	WORK LEVEL-2B	1
SUB-ASSY-2C-102	0	WORK LEVEL-2C	1
SUB-ASSY-2D-102	0	WORK LEVEL-2D	1
601	0	BEAM	1
701-102	0	BEAM	1
901	0	BEAM	1
1001-102	0	BEAM	1
1101-102	0	BEAM	1
1201-102	0	BEAM	1
SUB-ASSY PROFILES 102	0	SUB-ASSY PROFILES	1
1403	0	PROFILE	1
1404	0	PROFILE	1
1405	0	PROFILE	1
1501	0	PROFILE	1
1502	0	PROFILE	1
1503	0	PROFILE	1
1601	0	PLATE	2
1603-102	0	BENDED PLATE	1

1606-102	0	BENDED PLATE	1
1609-102	0	BENDED PLATE	1
1610	0	PLATE	1
NA/130	0	HINGE	5
1801	0	SUPPORT-LEG-LH	2
1802	0	SUPPORT-LEG-RH	2
RAIL-1	0	RAIL-1	1
RAIL-2	0	RAIL-2	1
RAIL-3	0	RAIL-3	1
RAIL-4	0	RAIL-4	1
ASSY - STAIRS	0	ASSY- STAIRS	1
ASSY – STAIRS-LH	0	ASSY – STAIRS-LH	1
ASSY – STAIRS-RH	0	ASSY – STAIRS-RH	1
SUB-ASSY-2E-102	0	WORK LEVEL-2E	1
SUB-ASSY-2F-102	0	WORK LEVEL-2F	1
SUB-ASSY-2G-102	0	WORK LEVEL-2G	1
SUB-ASSY-2H-102	0	WORK LEVEL-2H	1
SUB-ASSY-2I-102	0	WORK LEVEL-2I	1

Spare parts list RMOSH3G-103A			
Identification number	Rev.	Description	quantity
ASSY-1-102-WORK LEVEL-1	0	WORK LEVEL-1	1
SUB-ASSY-2A-102	0	WORK LEVEL-2A	1
SUB-ASSY-2B-102	0	WORK LEVEL-2B	1
SUB-ASSY-2C-102	0	WORK LEVEL-2C	1
SUB-ASSY-2D-102	0	WORK LEVEL-2D	1
601	0	BEAM	1
701-102	0	BEAM	1
901	0	BEAM	1
1001-102	0	BEAM	1
1101-102	0	BEAM	1
1201-102	0	BEAM	1
SUB-ASSY PROFILES 102	0	SUB-ASSY PROFILES	1
1403	0	PROFILE	1
1404	0	PROFILE	1
1405	0	PROFILE	1
1501	0	PROFILE	1
1502	0	PROFILE	1
1503	0	PROFILE	1
1601	0	PLATE	2
1603-102	0	BENDED PLATE	1
1606-102	0	BENDED PLATE	1
1609-102	0	BENDED PLATE	1
1610	0	PLATE	1
NA/130	0	HINGE	5
1801	0	SUPPORT-LEG-LH	2
1802	0	SUPPORT-LEG-RH	2
RAIL-1	0	RAIL-1	1
RAIL-2	0	RAIL-2	1
RAIL-3	0	RAIL-3	1
RAIL-4	0	RAIL-4	1
ASSY - STAIRS	0	ASSY- STAIRS	1
ASSY – STAIRS-LH	0	ASSY – STAIRS-LH	1
ASSY – STAIRS-RH	0	ASSY – STAIRS-RH	1
SUB-ASSY-2E-102	0	WORK LEVEL-2E	1
SUB-ASSY-2F-102	0	WORK LEVEL-2F	1

SUB-ASSY-2G-102	0	WORK LEVEL-2G	1
SUB-ASSY-2H-102	0	WORK LEVEL-2H	1
SUB-ASSY-2I-102	0	WORK LEVEL-2I	1

7 ADDITIONAL INSTRUCTIONS

1 WASTE DISPOSAL

When dismantling it is necessary to separate the plastic parts, metal parts and electrical components, which should be sent to separate waste collection in accordance with the laws in force.

As regards the metal part of the tool, it is sufficient to separate the ferrous parts from those of other metals or alloys, to be correctly sent for recycling by melting.

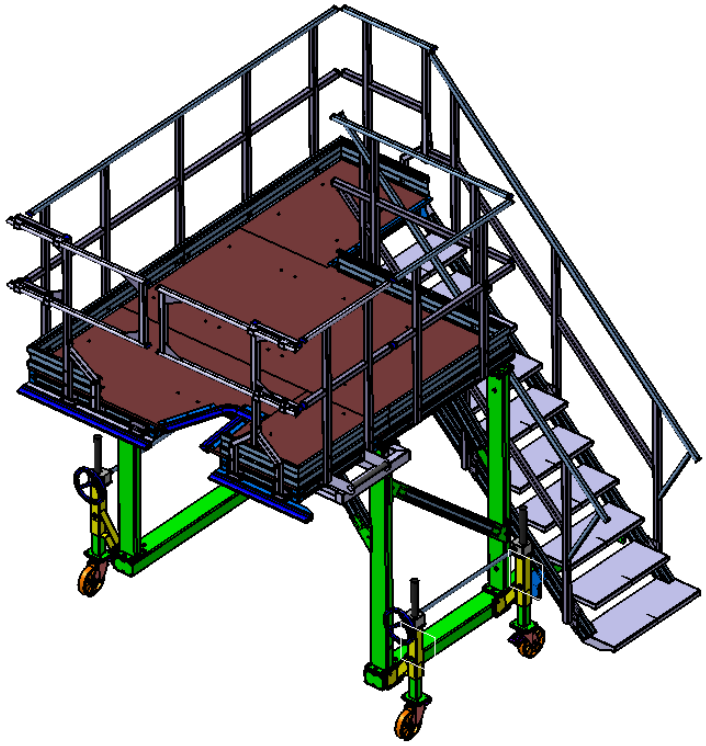
8 ENCLOSED DOCUMENTS

1 LIST ANNEXES

- Components purchased commercially
- Technical drawings

RAMAL S.R.L.
VIA CALABRIA, 7
06019 UMBERTIDE (PG)
PH.: +39 075 94 15 802
FAX: +39 075 94 12 222
E-MAIL: RAMAL@RAMAL.COM
WEB: WWW.RAMAL.COM

INSTRUCTION MANUAL FOR USE AND MAINTENANCE



Tool: TAIL SERVICING PLATFORM
Model: RMOSH3G-104B

TRANSLATION OF THE ORIGINAL INSTRUCTIONS

CE

INSTRUCTION MANUAL REVISION MATRIX

MANUAL PART	Revision	Date	Revision	Date	Revision	Date
Contents	0.0	30/09/2023				
Chapter 0	0.0	30/09/2023				
Chapter 1	0.0	30/09/2023				
Chapter 2	0.0	30/09/2023				
Chapter 3	0.0	30/09/2023				
Chapter 4	0.0	30/09/2023				
Chapter 5	0.0	30/09/2023				
Chapter 6	0.0	30/09/2023				
Chapter 7	0.0	30/09/2023				
Chapter 8	0.0	30/09/2023				
Chapter 9	0.0	30/09/2023				

Date	30/09/2023
Signature	

It is the responsibility of the customer to make sure that if the Manufacturer makes changes to this document, only the updated versions of the Manual will be present at the place of use.

THE OFFICIAL LANGUAGE CHOSEN BY THE MANUFACTURER IS ITALIAN
The Manufacturer assumes no liability for translations in other languages that do not conform to the original meaning.

CONTENTS

0 INTRODUCTION

1 PURPOSE OF THE INSTRUCTION MANUAL FOR USE AND MAINTENANCE

This manual was produced to provide the user with general knowledge of the tool and to allow it to be used in safe conditions.
This Instruction Manual is an integral part of the tool, and its purpose is to provide all the necessary information for:

- Handling the tool, packed and unpacked in safety conditions;
- The correct installation of the tool;
- Knowledge of the specific tool techniques;
- Thorough knowledge of its operation and its limits;
- Its correct use in safe conditions;
- Carrying out maintenance and repair operations in a safe and correct manner.

This document assumes that the regulations in force on health and safety at the workplace are complied with at the plants where the tool is to be used.

The person in charge is required, according to the laws in force, to read carefully the contents of this Instruction Manual and to have the operators and maintenance personnel read it, for the parts which concern them.

The instructions, documents and drawings contained in this manual are of a reserved technical nature and are strictly the property of the manufacturer; therefore, outside of the purposes for which it was produced, any reproduction, whether in whole or in part, of the contents and/or of the format, must be done with the prior consent of the Manufacturer.

2 INTENDED USERS

This Instruction Manual is intended for the installer, operator/user and personnel qualified for the use and maintenance of the tool.

EXPOSED PERSON

Any person wholly or partially in a danger zone.

OPERATOR

The person or persons assigned to install, operate, adjust, clean, repair and move a tool and to carry out maintenance operations on it.

QUALIFIED PERSONNEL or **QUALIFIED OPERATOR**

those people who have taken specialized courses, training, etc. and have experience regarding the installation, operation, maintenance, repair, and transporting of the tool.

Qualification of the intended users (see PAR. 0.6)

The tool is intended for industrial use, and thus professional and not general use, therefore it may only be used by qualified persons, and more specifically those who:

- Have reached the age of majority;
- Are physically and mentally fit to do work of particular technical difficulty;
- Have been properly instructed in the use and maintenance of the tool;
- Have been judged suitable by the employer to carry out the job assigned to them;
- Are able to understand and interpret the operator's manual and the safety requirements;
- Know the emergency procedures and how to carry them out;
- Have the ability to operate the specific type of equipment;
- Are familiar with the specific applicable rules;
- Have understood the operating procedures established by the Manufacturer of the tool.

The term QUALIFIED/SPECIALIZED PERSONNEL is understood as personnel who, following professional training and experience, have been expressly authorized to carry out the installation, use and maintenance of the tool.

3 STORAGE OF THE INSTRUCTION MANUAL

The Instruction Manual must be stored carefully and must accompany the tool at all stages of ownership that it may have in its life cycle.

The proper keeping of the manual includes handling it with care, with clean hands and by not setting it on dirty surfaces.

Parts of the manual must not be removed, torn or arbitrarily modified.

The Manual must be stored in an area protected against humidity and heat and in the immediate vicinity of the tool to which it refers.

4 UPDATING OF THE INSTRUCTION MANUAL

The Manufacturer is solely responsible for the instructions that it has drawn up and validated (Original Instructions); any translations MUST always be accompanied by the original instructions, in order to verify the correctness of the translation. In any case, the Manufacturer shall not be liable for translations not approved by the Manufacturer itself; therefore if any discrepancies are found, follow the instructions in the original language and, if necessary, contact the Manufacturer's sales office, which will make the necessary changes.

The Manufacturer reserves the right to make changes to the design, changes/improvements to the tool and updates of the Instruction Manual without prior notice to the Customers.
However, in the event of changes to the tool installed at the Customer's facilities, agreed upon with the Manufacturer and involving the updating of one or more chapters of the Instruction Manual, the Manufacturer shall send to the Customer the parts of the Instruction Manual affected by the changes, with the new overall revision of the Manual. It shall be the responsibility of the Customer, following the instructions that accompany the updated documents, to replace in all copies the Customer possesses the parts that are no longer valid with the new parts.

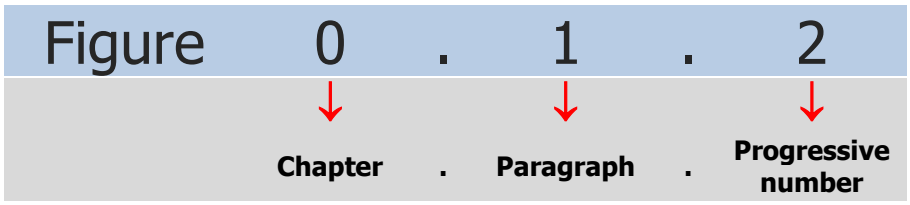
5 HOW TO READ THE INSTRUCTION MANUAL

The Manual is divided into chapters, each of which dedicated to a specific category of information, and thus addressed to the operator for whom the related tasks have been defined.
Terms, abbreviations and pictograms are used in order to make the text more quickly and readily understood; the meanings of these are given in Paragraph 7.

NUMBERING OF THE FIGURES

Each figure is numbered progressively.
The numbering is as follows:

Example: Figure 0.1.2



The progressive number starts again from 1 for each new paragraph.

NUMBERING OF THE TABLES

Each table is numbered progressively.

The numbering is as follows:

Example: Table 0-1.2

Table	0	-	1	.	2
	↓		↓		↓
	Chapter	**.**	**Paragraph**	**.**	**Progressive number**

The progressive number starts again from 1 for each new paragraph.

ABBREVIATIONS

Ch. = Chapter

Par. = Paragraph

Sect. = Section

Pg. = Page

Fig. = Figure

UNITS OF MEASUREMENT

The units of measurement used are the following:

Quantities	Unit	Symbol
Time	second	s
Length	meter	m
Mass	kilogram	kg
Temperature	Celsius	°C
Amount of substance	mole	mol
Electric current	ampere	A
Luminous intensity	candela	cd

Mechanical quantities	Unit	Symbol	Conversion
Frequency	hertz	Hz	1 Hz = 1 s^{-1}
Force	newton	N	1 N = 1 kg m s^{-2}
Pressure	pascal	Pa	1 Pa = 1 N m^{-2}
Work, energy, amount of heat	joule	J	1 J = 1 N m
Power	watt	W	1 W = 1 J s^{-1}

6 DEFINITIONS

TOOLRY DIRECTIVE 2006/42/EC (Article 2 Definitions)

MANUFACTURER Any natural or legal person who designs and/or manufactures toolry or partly completed toolry covered by this Directive and is responsible for the conformity of the toolry or the partly completed toolry with this Directive with a view to its being placed on the market, under his own name or trademark or for his own use. In the absence of a manufacturer as defined above, any natural or legal person who places on the market or puts into service toolry or partly completed toolry covered by this Directive shall be considered a manufacturer.

PLACING ON THE MARKET Making available for the first time in the Community toolry or partly completed toolry with a view to distribution or use, whether for reward or free of charge.

PUTTING INTO SERVICE The first use, for its intended purpose, in the Community, of toolry covered by this Directive;

SAFETY COMPONENT

A component:

- which serves to fulfill a safety function,
- which is independently placed on the market,
- the failure and/or malfunction of which endangers the safety of persons, and
- which is not necessary in order for the toolry to function, or for which normal components may be substituted in order for the toolry to function.

ANNEX I TOOLRY DIRECTIVE 2006/42/EC (p. 1.1.1 Definitions)

HAZARD a potential source of injury or damage to health.

DANGER ZONE Any zone within and/or around toolry in which a person is subject to a risk to his health or safety.

EXPOSED PERSON Any person wholly or partially in a danger zone.

OPERATOR The person or persons installing, operating, adjusting, maintaining, cleaning, repairing or moving toolry.

RISK A combination of the probability and the degree of an injury or damage to health that can arise in a hazardous situation.

GUARD A part of the toolry used specifically to provide protection by means of a physical barrier.

PROTECTIVE DEVICE A device (other than a guard) which reduces the risk, either alone or in conjunction with a guard.

INTENDED USE The use of toolry in accordance with the information provided in the instructions for use.

REASONABLY FORESEEABLE MISUSE The use of toolry in a way not intended in the instructions for use, but which may result from readily predictable human behaviour.

RESIDUAL RISKS Risks that remain despite the inherent safe design measures, safeguarding and complementary protective measures adopted.

7 PICTOGRAMS

GENERAL INFORMATION

The pictograms must be applied in areas where they are easily visible and legible by anyone who approaches and in a place such that the person can react quickly to take the necessary action to avoid the danger.

When possible, they should be applied in areas protected from the risk of damage, abrasion, chemical attack, dust or anything else that would affect the visibility and reading of them. The usage temperature range goes from 5°C to +40°C, provided that there is not an uneven distribution of temperatures that adversely affect the thermal expansion of the material.

The surfaces on which the pictograms are applied must be clean, smooth and free of grease, oil or chemicals that reduce their adhesion.

According to regulations safety pictograms must be regularly checked and cleaned to ensure good readability at a safe distance. When the products are subjected to extreme environmental conditions or when the safety pictograms no longer fulfill the required visibility conditions, they need to be replaced.

OBLIGATION PICTOGRAMS

SYMBOL	DESCRIPTION
	Wear protective gloves
	Wear safety footwear
	Wear protective clothing
	Wear head protection
	Hold the handrail when going up and down of the stairs

1 GENERAL INFORMATION

1 MANUFACTURER'S IDENTIFICATION DATA

MANUFACTURER	RAMAL S.r.l
REGISTERED OFFICE	Via Calabria, 7 – 06019 Umbertide (PG)
TELEPHONE	+39 075 94 15 802
FAX	+39 075 94 12 222
E-MAIL	ramal@ramal.com
CALL CENTER	+39 075 94 15 802
CONTACTS	www.ramal.com

2 CE MARKING OF THE TOOL

Each tool is identified by a CE plate which gives in an indelible manner the reference data for the tool.

Always give this reference information in all communications with the manufacturer.

<table>
<tr><td rowspan="4">RAMAL CE

RAMAL S.r.l.
Via Calabria, 7 06019 Umbertide
(PG)</td><td>MODEL</td><td>RMOSH3G-104B</td><td rowspan="4"> 
MAX 4</td></tr>
<tr><td>SERIAL NUMBER</td><td>B00010</td></tr>
<tr><td>YEAR</td><td>2023</td></tr>
<tr><td>MAXIMUM LOAD</td><td>600 daN</td></tr>
</table>

3 DECLARATIONS

EC DECLARATION OF CONFORMITY

THE MANUFACTURER

RAMAL S.R.L.		
Company		
Via Calabria, 7	06019	PG
Address	*Post Code*	*Province*
Umbertide		Italy
City		*Country*

DECLARES THAT THE TOOL

TAIL SERVICING PLATFORM	RMOSH3G-104B
Tool	*Model*
B00010	2023
S/N	*Year of Manufacture*

SERVICING PLATFORM
Commercial name

PLATFORM FOR MAINTENANCE AND/OR PERIODIC INSPECTION AIRCRAFT AW139
Intended use

IS IN CONFORMITY WITH THE DIRECTIVES

Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on tool, and amending Directive 95/16/EC.

AND WITH THE TECHNICAL RULES

EN ISO 12100:2010

AND AUTHORIZES

Luca Malincarne		
First name and last name		
Via Calabria, 7	06019	PG
Address	*Post Code*	*Province*
Umbertide	Italy	
City	*Country*	

TO COMPILE THE TECHNICAL FILE ON ITS BEHALF

Place and date of the document
Umbertide, 30/09/2023

The Manufacturer

The tool is built in accordance with the relevant EC Directives applicable at the time of its placing on the market.

PROHIBITION ON PUTTING INTO SERVICE

The tool cannot be put into service after undergoing structural modifications or additions of other components not included as part of ordinary or extraordinary maintenance without it being declared again to comply with the requirements of Directive 2006/42/EC and of the applicable EC directives.

Place, date Place, date

4 SAFETY REGULATIONS

The tool was built in compliance with the Technical Rules listed below.

STANDARD	Title
EN ISO 12100	Safety of tool - General principles for design – Risk assessment and risk reduction

5 INFORMATION ON TECHNICAL ASSISTANCE

The tools are covered by warranty, as provided in the general conditions of sale. If any malfunctioning or failure of parts of the tool occurs during the validity period which falls under the cases specified by the warranty, the Manufacturer, after the necessary checks on the tool, will repair or replace the defective parts.

It should be noted that modification made by the user without the express written authorization of the manufacturer will void the warranty and will release the manufacturer from any liability for damage caused by a defective product.

This applies especially when these modifications are done on safety devices, degrading their effectiveness. The same considerations apply when non-genuine replacement parts or parts other than those explicitly specified by the manufacturer as "safety devices" are used.

We therefore recommend that customers contact our Customer Service before making the aforementioned changes to the tool.

Any defects clearly and visibly present at the time of delivery of the product (cosmetic defects on the visible parts, cracks, dents, malfunctions, missing parts etc..) should be reported immediately to the company.

The Manufacturer shall not be liable for defects not reported by the customer at time of delivery.

6 PREPARATIONS TO BE DONE BY THE CUSTOMER

Unless otherwise agreed upon by contract, the Customer is normally responsible for:

- Area arrangement for equipment positioning based on the dimensions of the same.

2 SAFETY

1 GENERAL SAFETY WARNINGS

Before making the tool operational, carefully read and follow closely the instructions given in this manual.

The manufacturer has made the greatest effort in designing this tool to make it as SAFE as possible.
Bearing this in mind, the tool has been equipped with all the guards and safety devices considered necessary and provided with sufficient information for it to be used safely and correctly.
To this end, when necessary, for every man/tool interaction the following information has been given:

- Minimum operator qualifications required.
- Number of operators necessary.
- State of the tool.
- Residual risks.
- Personal protective equipment required or recommended.
- Prevention of human errors.
- Prohibitions/obligations regarding reasonably foreseeable misuse.

However, it is essential that the following instructions be strictly followed:

- Avoid wearing clothes with loops or similar that can get caught on parts the tool.
- Avoid wearing neckties or other loose pieces of clothing.
- Avoid wearing large rings or bracelets that can cause the hands to get caught on parts of the tool.
- The platform can be moved without the presence of operators on it.
- After handling, check that the weight of the entire platform rests on the wheels.
- During handling, pay attention to the presence of people or things, in particular pay attention in the vicinity of the aircraft.
- Make sure the wheels are braked before getting on the platform.
- Once on the platform, extend the sliding parapets.
- Where applicable, rubber corner guards are provided to protect operators using the platforms.

In addition, when necessary the Manual will give further recommendations for the user regarding prevention measures, personal protective equipment, information to prevent human errors and prohibitions regarding misuse that is not allowed, but is reasonably foreseeable.

In any case, the user can usefully complement the information provided by the manufacturer with additional work instructions to contribute to the safe use of the tool, obviously not in contrast with that given in this Instruction Manual.

The manufacturer is released from any liability for damage to persons, animals or property caused by the tool in the case of:

- use of the tool by inadequately trained personnel;
- improper use of the tool;
- failure to carry out scheduled maintenance;
- unauthorized modifications or work done to the tool;
- use of non-genuine replacement parts or parts that are not specific for the model;
- complete or partial failure to follow the instructions;
- use contrary to specific national regulations;
- disasters or exceptional events.

General requirements

Mobile equipment must always be used according to the manufacturer's instructions, as given in this Manual, which must always be available to the operator at the workplace.

All safety devices installed on mobile equipment to avoid accidents and to ensure safety must not be modified nor removed, and they must be adequately protected.

The user must promptly inform the employer or their immediate supervisor about any defects or anomalies found in mobile equipment.

Checks and inspections

Inspections must be carried out by an expert; they must be visual and functional, with the purpose of guaranteeing the safeness of the tool.

They include:

- inspection of all load-carrying structures, which must not show any cracks, breakage, damage, deformation, corrosion, wear or alteration compared to the original specifications;
- checking all connections with pins, screws and bolts.

The results of this inspection must be reported on a specific form.

In the event that the technician assigned to do the inspection finds cracks or dangerous defects or anomalies, he/she must:

- Promptly notify the manufacturer of the tool.
- Put the tool out of service, providing for the necessary checks and/or repairs.
- Make sure that there are no objects between the parts of the tool.

If defects or anomalies are found, they must be eliminated before putting the tool into operation, and the expert who performs the inspection must note on a specific form that the repair has taken place, thus giving their approval for the use of the tool.

In the event that worn or defective parts are not promptly replaced, the manufacturer shall assume no responsibility for any damage from accidents that may result from this.

In order to ensure maximum tool safety it is PROHIBITED:

- to tamper with any part of the tool.

2 INTENDED USE

The equipment has been designed for the maintenance and / or periodic inspection of the AW139. aircraf.

The use of products/materials other than those specified by the Manufacturer, which can create damage and dangerous situations for the operator and/or persons close to the tool, is considered wrong and improper.

3 CONTRAINDICATIONS FOR USE

The tool must not be used:

- In an explosive or corrosive atmosphere or one with a high concentration of dust or oily substances suspended in the air.

- Exposed to the elements.

4 DANGER ZONES

The danger zones of the tool are:

- Near the equipment when moving the platform.
- On the equipment during operations to be carried out on the aircraft.

5 SIGNS

The following signs must be installed near the tool and in the tool work area:

OBLIGATION PICTOGRAMS

SYMBOL	DESCRIPTION
	Wear protective gloves
	Wear safety footwear
	Wear protective clothing
	Wear head protection
	Hold the handrail when going up and down of the stairs

6 RESIDUAL RISKS

It is necessary to be careful of the following residual risks that are present during use of the tool and that cannot be eliminated.

WARNING - Fall from above

3 INSTALLATION

1 ASSEMBLY INSTRUCTION

The equipment must be assembled following the instructions in this chapter and using the supplied/indicated components.

Before starting the assembly, open the shipped box (as shown in figure 3.1.1) in order to take its contents.

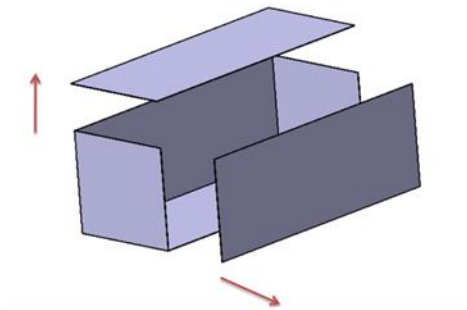
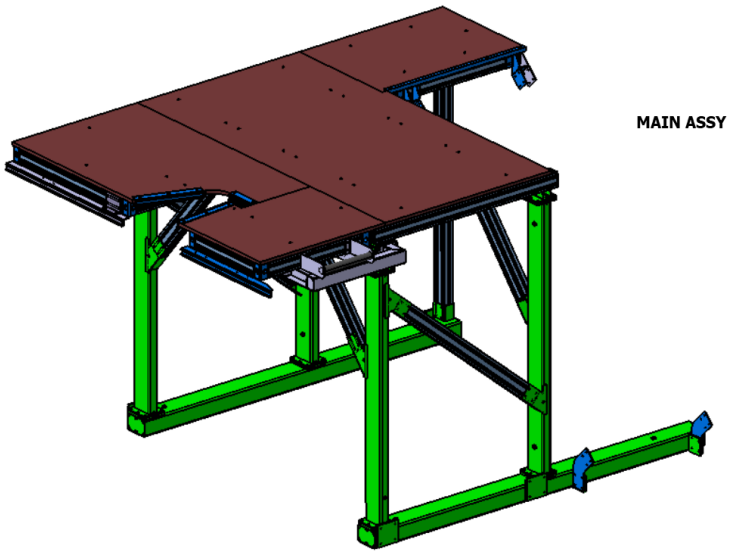


Fig. 3.1.1 - Box opening

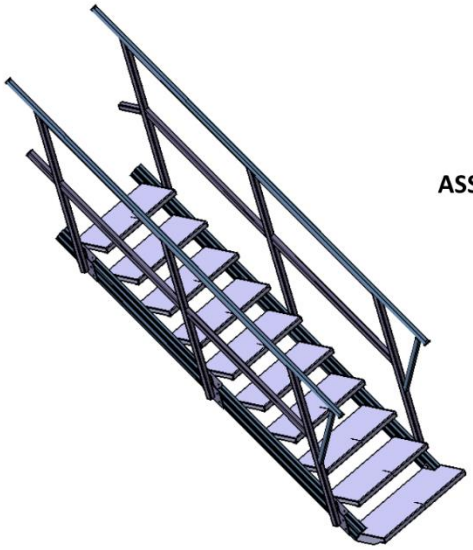
During this operation remove the fasteners that were used to lock the contents in the box.

List of fasteners to be used for mounting the platform		
Quantity	Name	Description
104	NA/101	NUT 5/16-18
80	NA/112	BOLT 5/16 x 3.25
98	NA/114	WASHER 5/16
16	NA/115	BOLT 5/16 x 2.5
2	NA/120	STABILIZER LH
2	NA/121	STABILIZER RH
1	NA/122	CONNECTION BEAM
1	NA/123	CONNECTION BEAM

Platform components



MAIN ASSY PLATFORM



ASSY STAIRS

RAIL-1

RAIL-2

RAIL-3

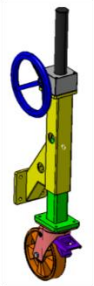
RAIL-5

RAIL-6

FOOTBOARD

To be arranged on main assy

SUPPORT LEG LH (Nr.2)

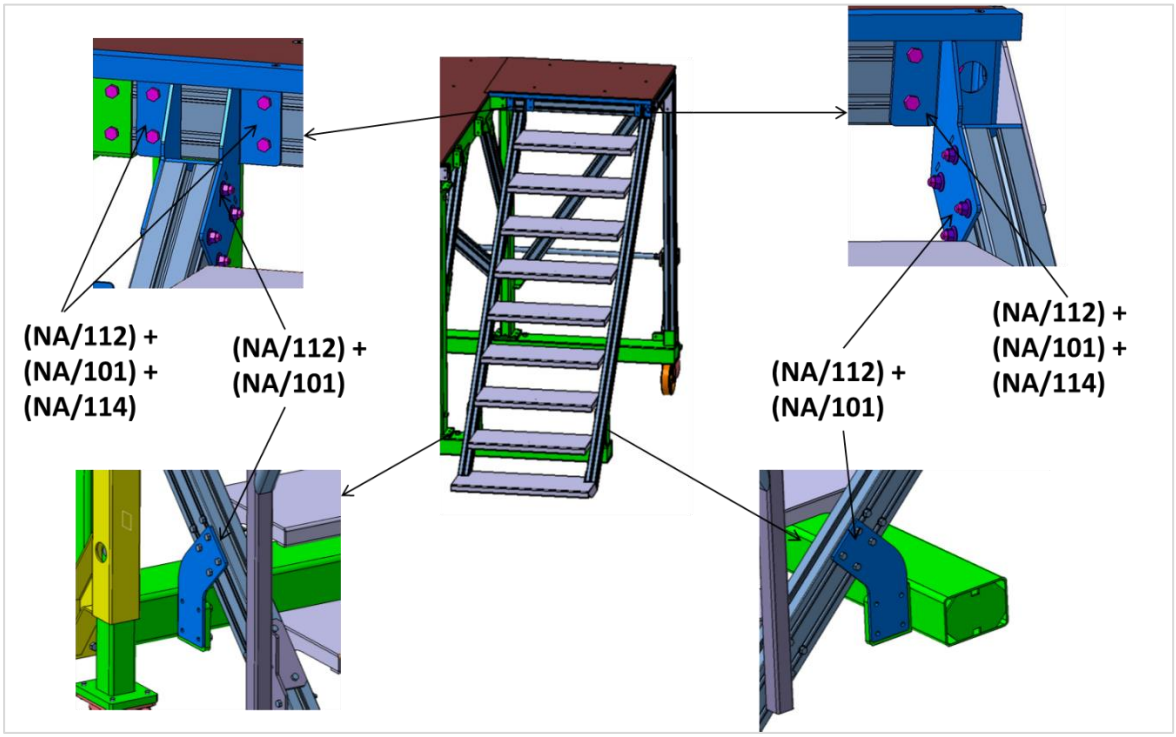


SUPPORT LEG RH (Nr.2)

NA/122

NA/123

1. Assemble the ASSY-STAIRS on the Platform



2. Assemble the RAIL for STAIRS: as shown is valid for the RAIL left and right

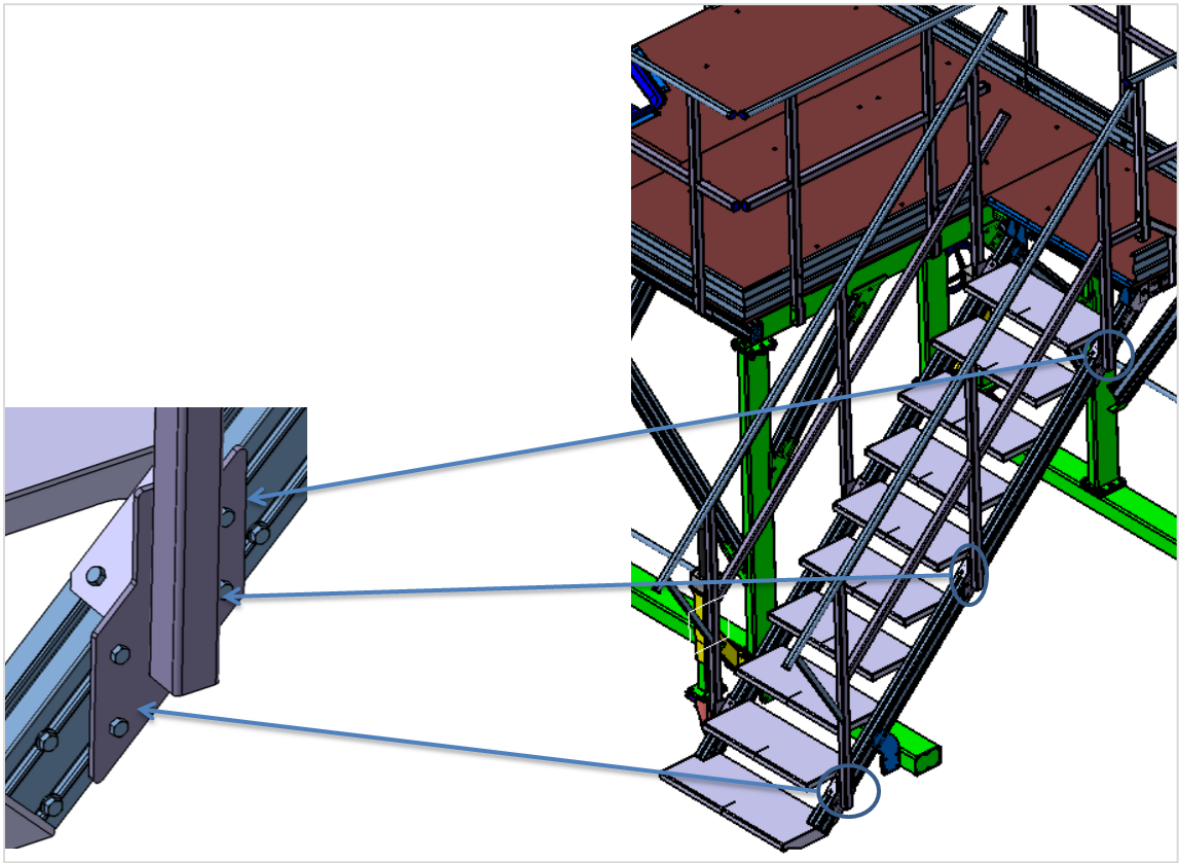


Fig. 3.1.2

3. Assemble the ASSY-RAIL 2 (Connections in Nr. 3 positions)

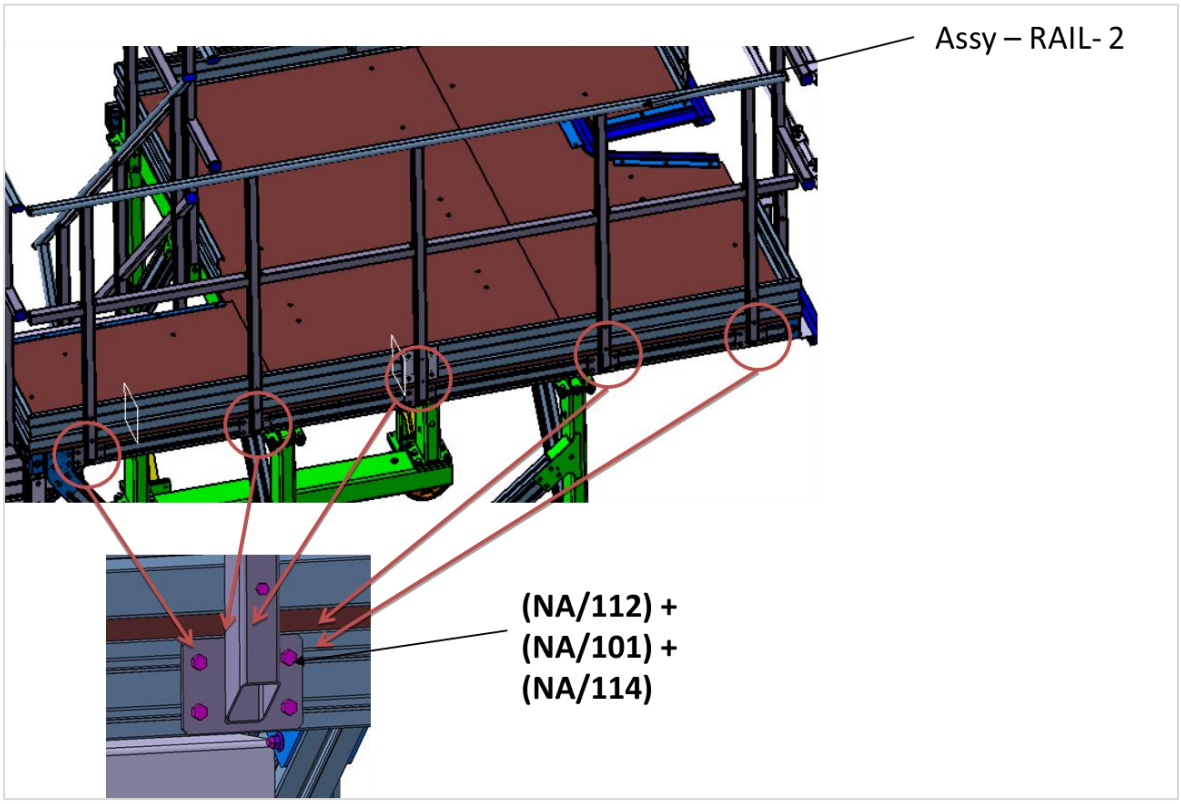


Fig. 3.1.3

4. Assemble the ASSY-RAIL 1 (Connections in Nr. 2 positions for each link)

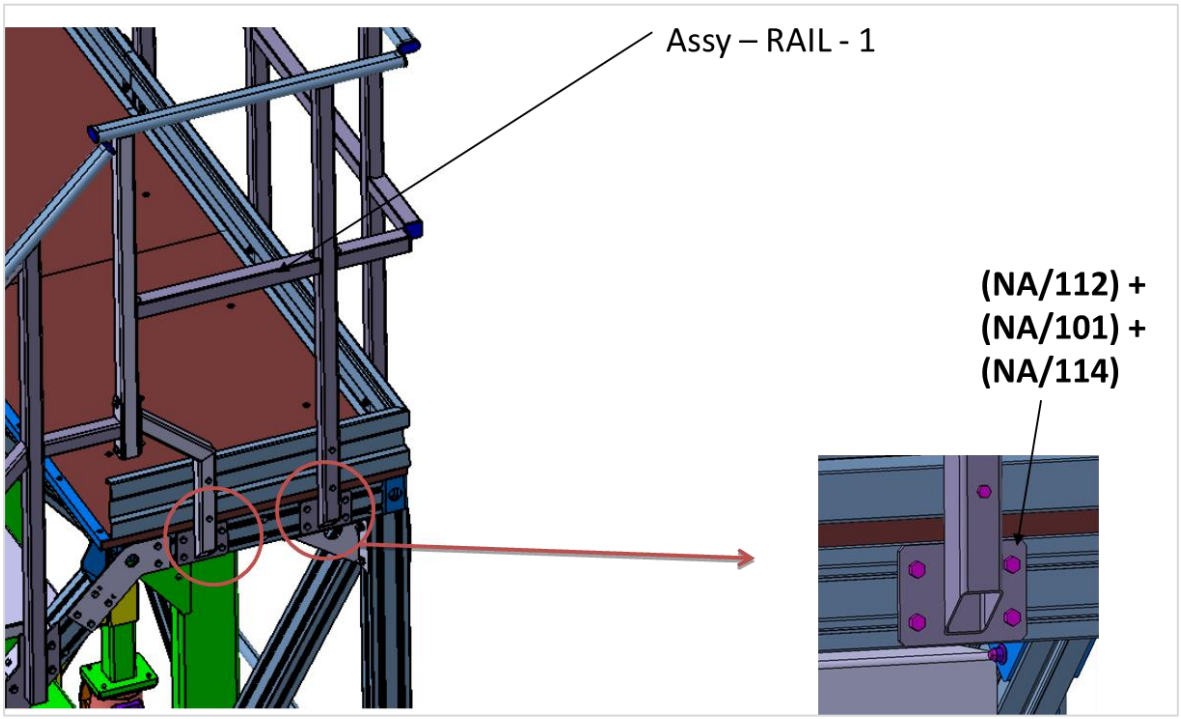


Fig. 3.1.4

5. Assemble the ASSY-RAIL 3-4

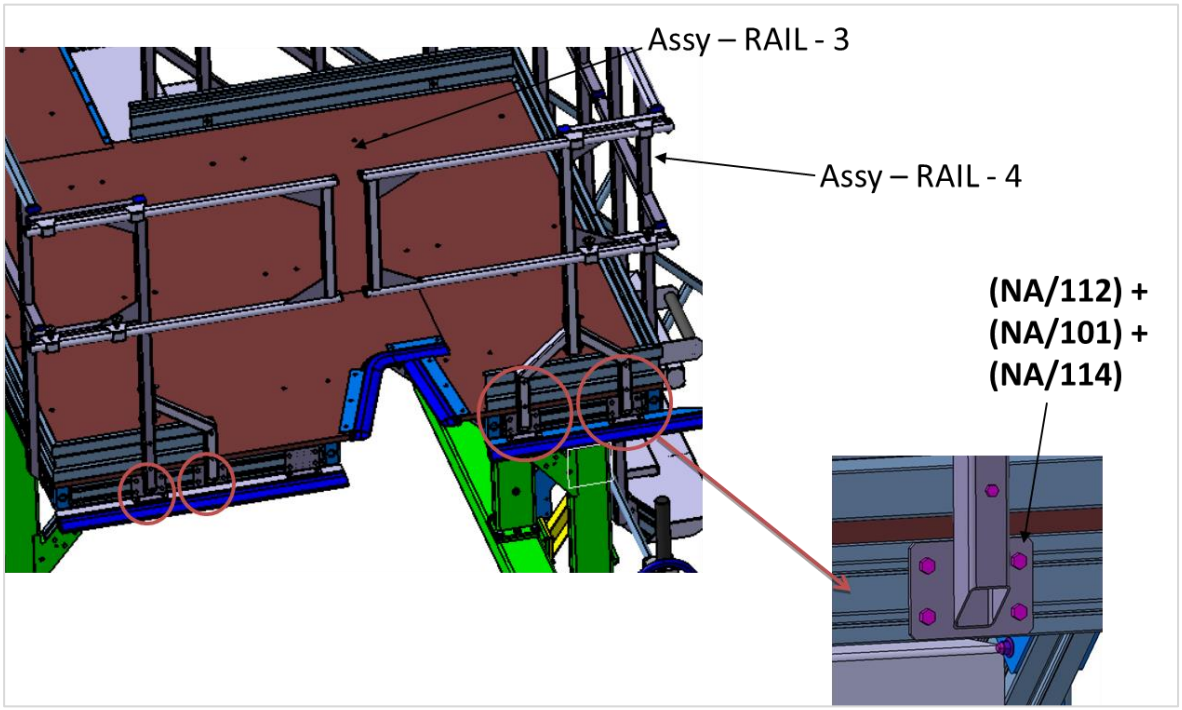


Fig. 3.1.5

6. Assemble the ASSY-RAIL 5 (Connections in Nr. 4 positions for each link)

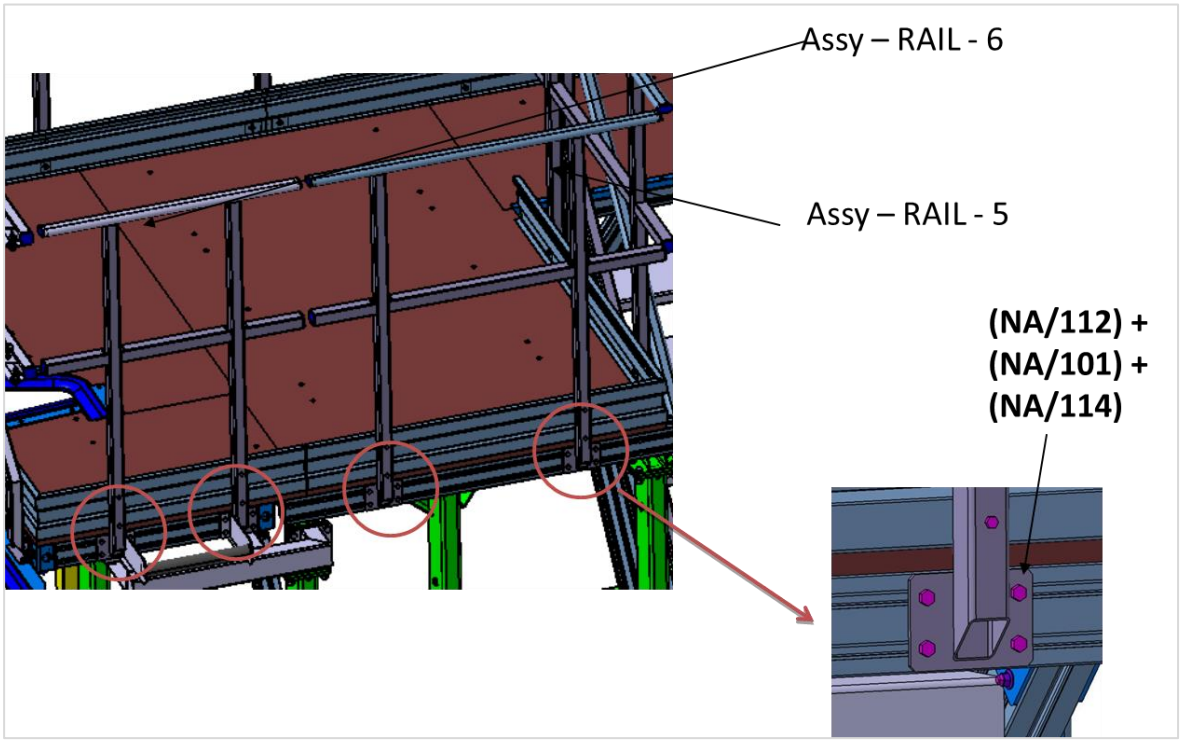


Fig. 3.1.6

7. Assemble the ASSY-RAIL 6 (Connections in Nr. 2 positions for each link)

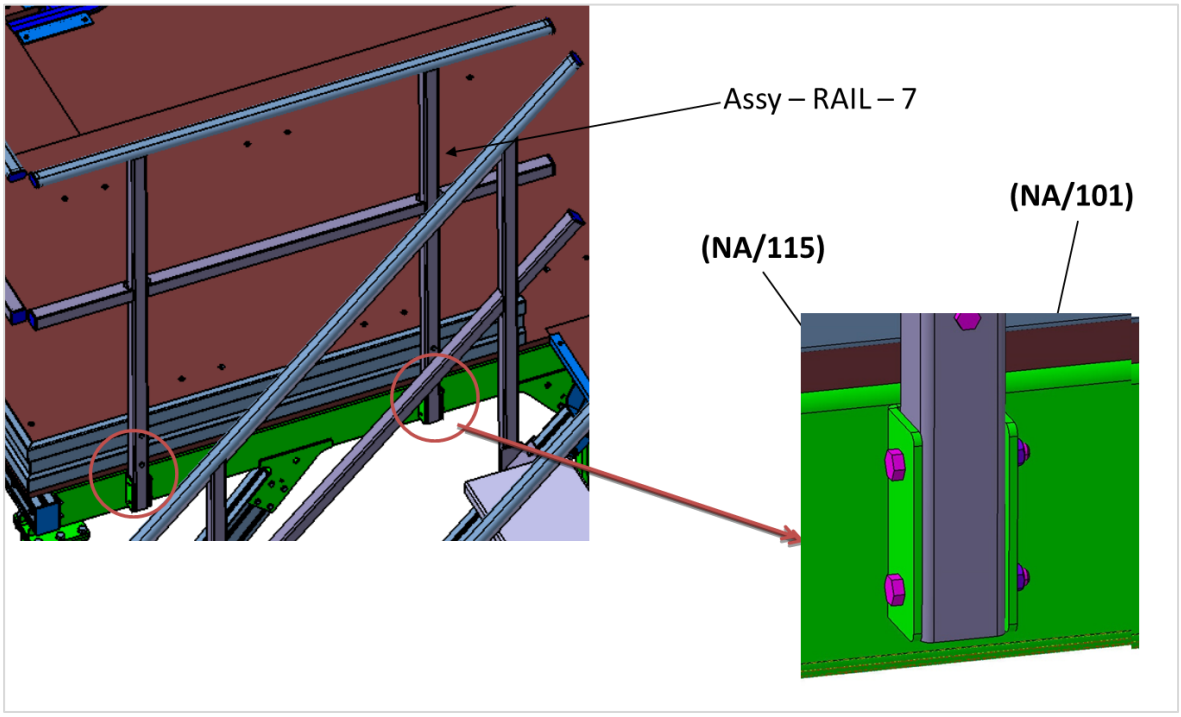


Fig. 3.1.7

8. Assemble Beam 5 and the Stabilizers

Use Nr. 6 screws for the assembly of each beam.

Use Nr. 4 screws for the assembly of each stabilizer.

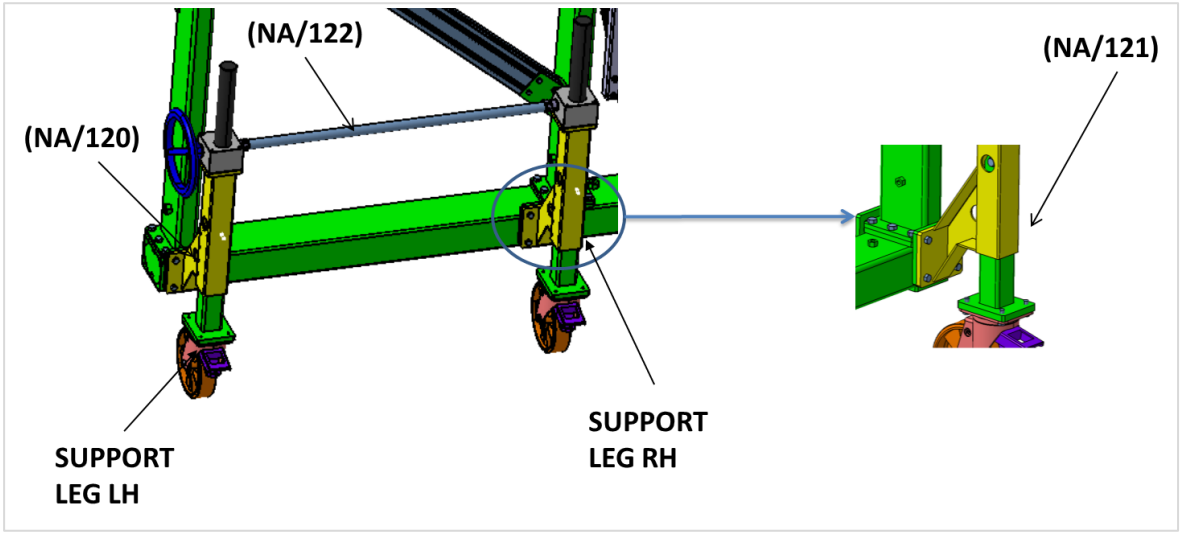


Fig. 3.1.8

9. Assemble Beam 6 and the Stabilizers

Use Nr. 6 screws for the assembly of each beam.

Use Nr. 4 screws for the assembly of each stabilizer.

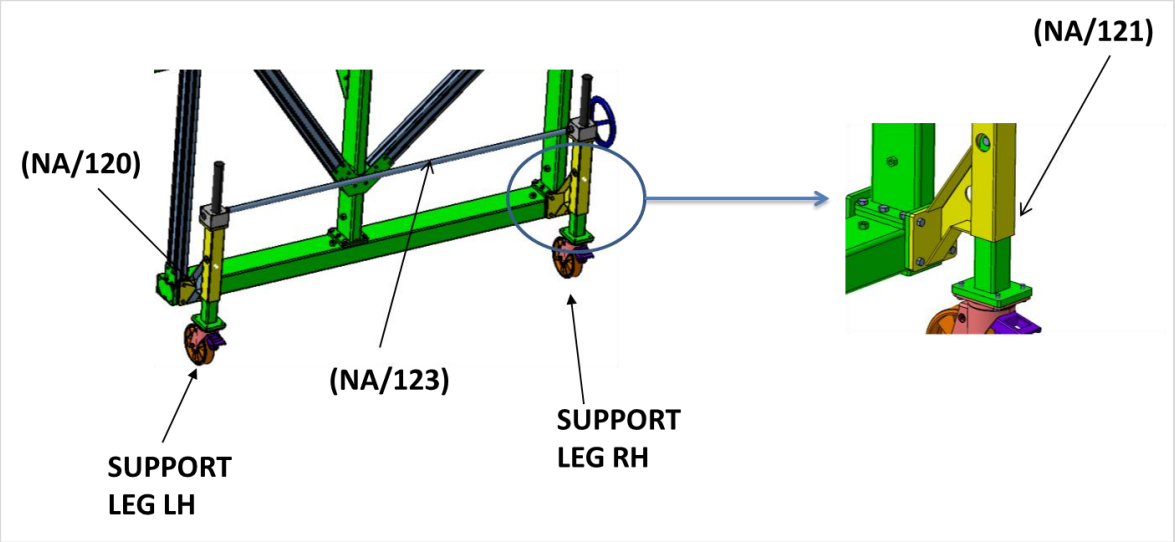


Fig. 3.1.9

2 TRANSPORTING AND MOVING

The tool can be transported with a normal vehicle capable of supporting weight and size of its components.

Always make sure that the weight of the component, that the user is handling, is correctly balanced when transporting it so as to prevent the component from shifting unexpectedly or the falling to the ground.

It is recommended that vehicles always be used that can support the weight and size of each component, so as to avoid damage to tool and to surrounding persons or objects.

The Manufacturer shall not be liable for damage caused to persons, animals or property resulting from the use of lifting procedure other than that mentioned.

3 STORAGE

When the tool is not being used, it must be stored taking the following precautions:

- store the tool or its components in a closed area;
- grease the non-painted parts;
- protect the tool or its components from bumps, blows and stresses;
- protect the tool or its components against moisture;
- avoid having the tool or its components be subjected to extreme temperatures and protect it against great changes of temperature;
- avoid having the tool or its components come into contact with corrosive substances.

4 DESCRIPTION OF THE TOOL

1 USE DESCRIPTION

The platform using the wheels can be brought closer to the tail of the aircraft.

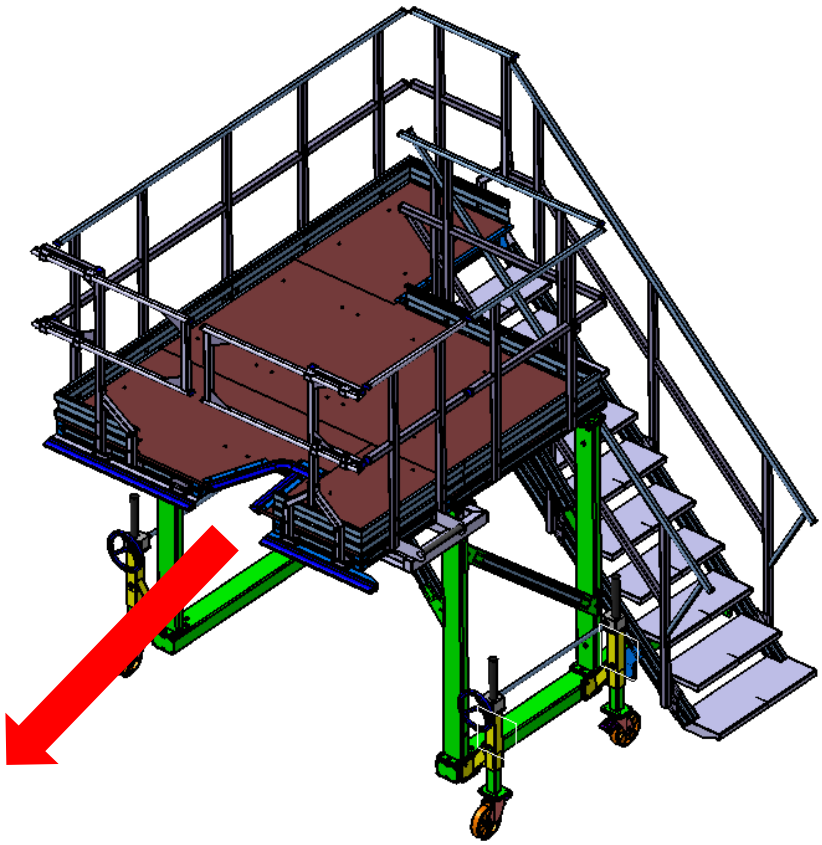


Fig. 4.1.1

Once close to the aircraft, the wheels must be locked before boarding. The sliding railings close the platform surface when it is not in the working position (close to the aircraft and prevent it from falling from above).

2 DIMENSIONS

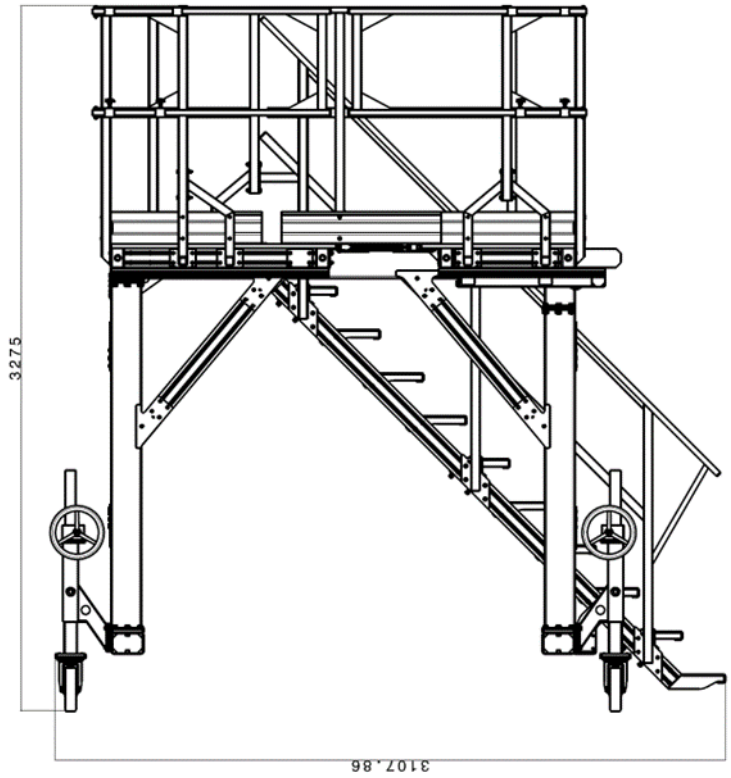


Fig. 4.2.1 – Dimension 1 (mm)

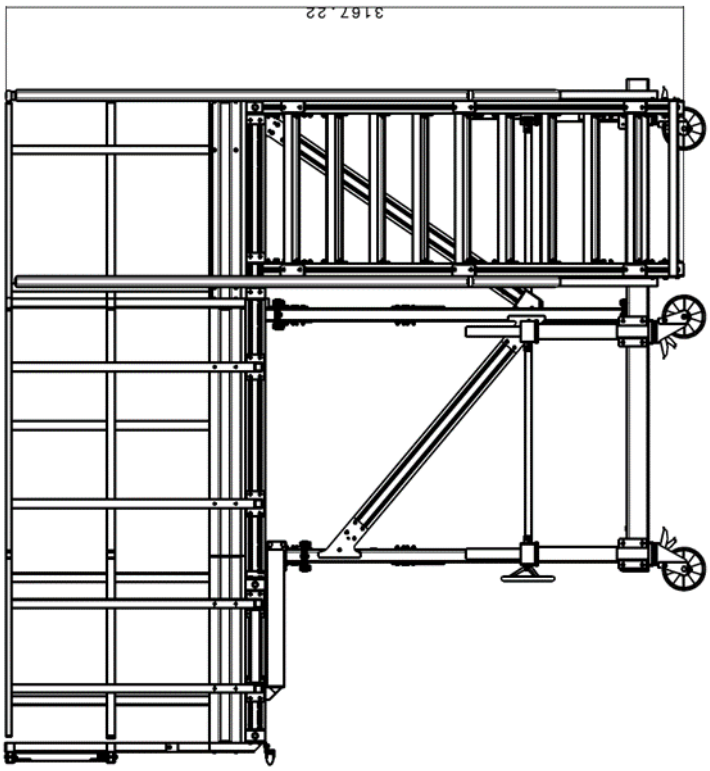


Fig. 4.2.2 – Dimension 2 (mm)

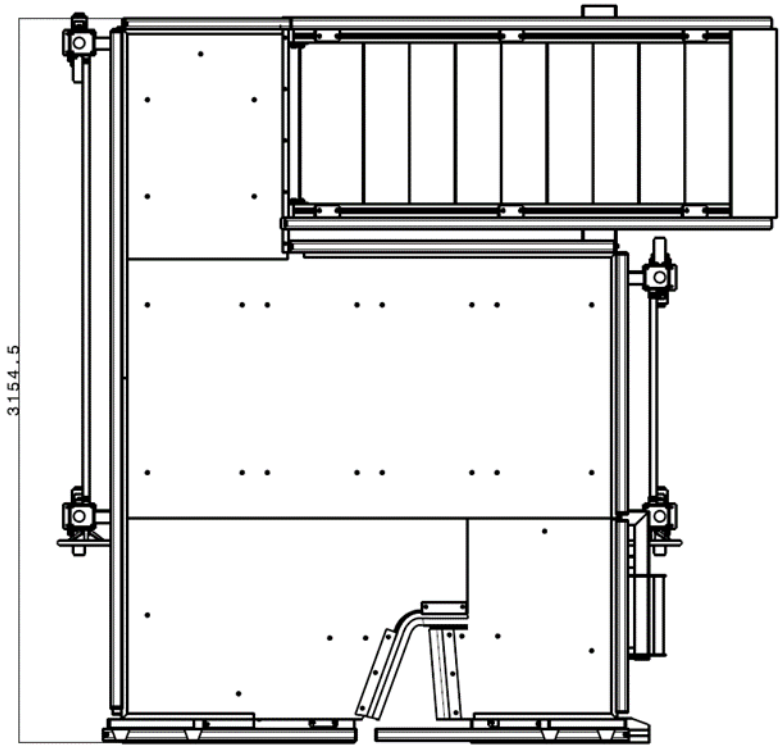


Fig. 4.2.3 – Dimension 3 (mm)

3 ENVIRONMENTAL CONDITIONS

The tool does not require special environmental conditions. It must be installed inside an industrial building that is well-lit, ventilated and equipped with a solid level floor.

The allowable temperature range is from 5°C to 40°C, with humidity not exceeding 50% at 40°C, or not exceeding 90% at 20°C.

Warning: the tool is not suitable for working in explosive or corrosive atmospheres or atmospheres with excessive dust.
Warning: the equipment is not adequate to work in the presence of wind.

The tool is suitable for working in environments that are at:

- elevation not over 1500 m a.s.l.;
- temperature between -20°C and + 40°C with average temperature around 35°C;
- relative humidity between 30 and 95%.

The tool is not suitable for working in explosive/corrosive atmospheres or atmospheres with excessive dust.

4 LIGHTING

The lighting of the installation environment must be in compliance with the laws in force in the country where the tool is installed and must provide good visibility in all areas and not create dangerous glare.

Since the tool does not have its own independent light sources, the work environment must be provided with general lighting such as to guarantee lighting values of 200 to 300 lux at every point of the tool.

5 STANDARD SUPPLY

The tool is supplied complete for putting into service.

It is supplied with:

- Instruction Manual for Use and Maintenance;
- Declaration of Conformity;
- CE Marking.

5 MAINTENANCE

1 STATE OF MAINTENANCE

To keep the equipment in a good state of preservation, it important that the tool be kept clean. Check that there are no damaged or worn parts; if there are, ask for replacement parts.

- Please check if the tool is completed in all its components before usage.
- After each usage, verify that tool isn't damaged.
- Check the condition of the structure before each use.
- Check the condition of the wooden walkway before each use.

Tightening torques	
Screws 3/8' 12.9	Ms= 35 N*m
Screws 5/16' 12.9	Ms= 18 N*m
Screws 1/2' 8.8	Ms= 60 N*m

Immediately replace the appliance (or individual parts) if there are damages, deformations or signs of wear.

2 SPECIAL PRECAUTIONS

When carrying out maintenance and/or repair work, carefully follow the instructions below:

- Before starting work, display a sign saying "TOOL BEING SERVICED" in a clearly visible position.
- To reach the highest parts of the tool, use equipment suitable for the operation to be performed.
- When work is completed, restore and correctly fasten in place all the guards and protective components removed.

The Manufacturer will not be responsible for non-compliance with the above recommendations and for any other use which does not comply with or is not mentioned in these instructions.

3 CLEANING

A mild detergent is sufficient for cleaning the tool.

6 ACCESSORIES AND REPLACEMENT PARTS

1 SERVICE

The Manufacturer is always willing to provide any type of information regarding the installation, use and maintenance of the tool.
The customer is kindly requested to state their questions clearly, with reference to this manual and to the instructions given.

2 REPLACEMENT PARTS

ALWAYS USE GENUINE PARTS.

The Manufacturer advises against the use of non-genuine parts: the use of non-genuine parts will void the warranty conditions (if they still exist) and will void the liability of the Manufacturer in the use of the tool and for any damage to people and/or property.

Spare parts list RMOSH3G-102A			
Identification number	Rev.	Description	quantity
1082	-	PROFILE	1
1084	-	PROFILE	1
1086	-	PROFILE	4
1087	-	PROFILE	1
1088	-	PROFILE	1
1089	-	PROFILE	1
1092	-	BENDED PLATE	1
1093	-	WELDED ASSY	1
1099	-	WELDED ASSY	1
1106	-	WELDED ASSY	1
1112	-	WELDED ASSY	1
4018	-	BENDED PLATE	1
4051 RAIL-1	-	HAND RAIL	1
4052 RAIL-2	-	HAND RAIL	1
4053 RAIL-3	-	HAND RAIL	1
4054 RAIL-4	-	HAND RAIL	1
4055 RAIL-5	-	HAND RAIL	1
4056 RAIL-6	-	HAND RAIL	1

4057 RAIL-7	-	HAND RAIL	1
STAIRS RAIL LH	-	STAIRS HAND RAIL	1
STAIRS RAIL RH	-	STAIRS HAND RAIL	1
SUPPORT LEG LH	-	STABILIZER	2
SUPPORT LEG RH	-	STABILIZER	2
WHEEL	-	WHEEL D200	4
2009	-	STEP2	8
2004	-	STEP1	1
ASSY HANDLE	-	ASSY HANDLE	1

7 ADDITIONAL INSTRUCTIONS

1 WASTE DISPOSAL

When dismantling it is necessary to separate the plastic parts, metal parts and electrical components, which should be sent to separate waste collection in accordance with the laws in force.

As regards the metal part of the tool, it is sufficient to separate the ferrous parts from those of other metals or alloys, to be correctly sent for recycling by melting.

8 ENCLOSED DOCUMENTS

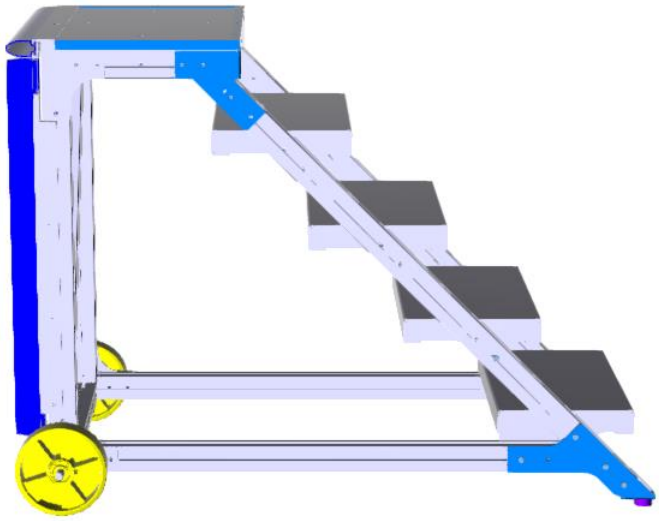
1 LIST ANNEXES

- Components purchased commercially
- Technical drawings

RAMAL S.R.L.
VIA CALABRIA, 7
06019 UMBERTIDE (PG)
TEL: +39 075 94 15 802
FAX: +39 075 94 12 222
E-MAIL: RAMAL@RAMAL.COM
WEB: WWW.RAMAL.COM

INSTRUCTION MANUAL FOR USE AND MAINTENANCE

Product: LADDER BAGGAGE COMPARTMENT
Model: RMOSH3G-105B
S/N: C00010



TRANSLATION FROM THE ORIGINAL INSTRUCTIONS

INSTRUCTION MANUAL REVISION MATRIX

MANUAL PART	Revision	Date	Revision	Date	Revision	Date
Contents	0.0	30/09/2023				
Chapter 0	0.0	30/09/2023				
Chapter 1	0.0	30/09/2023				
Chapter 2	0.0	30/09/2023				
Chapter 3	0.0	30/09/2023				
Chapter 4	0.0	30/09/2023				
Chapter 5	0.0	30/09/2023				
Chapter 6	0.0	30/09/2023				
Chapter 7	0.0	30/09/2023				
Chapter 8	0.0	30/09/2023				
Chapter 9	0.0	30/09/2023				

Date	30/09/2023
Signature	

CONTENTS

0 GENERAL INFORMATIONS

1 NOTE

- The ladder baggage compartment (model RMOSH3G-105B) is intended to be used in maintenance and repair operations for vehicle AW139.
- The ladder complies with the UNI EN 131 -1/2/7 and UNI EN 14122-2.
- The maximum weight is 200 kg (max. 1 people allowed on ladder).
- The structure weight is 70 kg.
- The ladder baggage compartment allows an easy transport and movement.
- The ladder baggage compartment is provided with an identification plate indicating the admittable weight and manufacturer identity.

1 SAFETY

1 GENERAL SAFETY WARNINGS

Protective Rubber is applyed on Aircraft side to prevent the Aircraft from possible damages.

Steps are built using anti slip aluminum material.

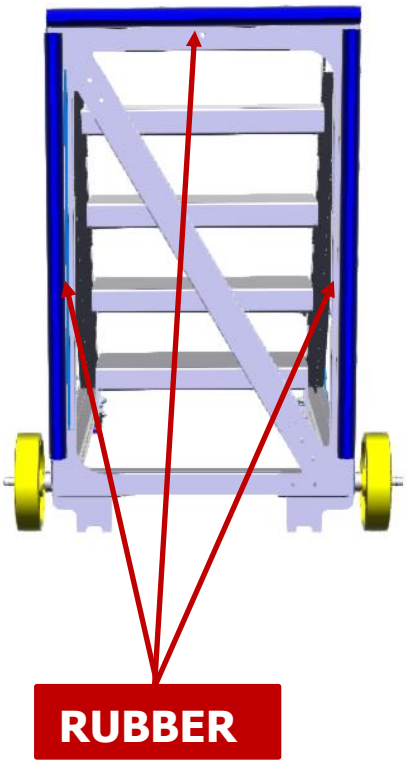


Fig. 1.1.1

2 INSTALLATION

1 INSTRUCTIONS FOR MOVEMENT

Move the ladder on the left or right side when necessary.

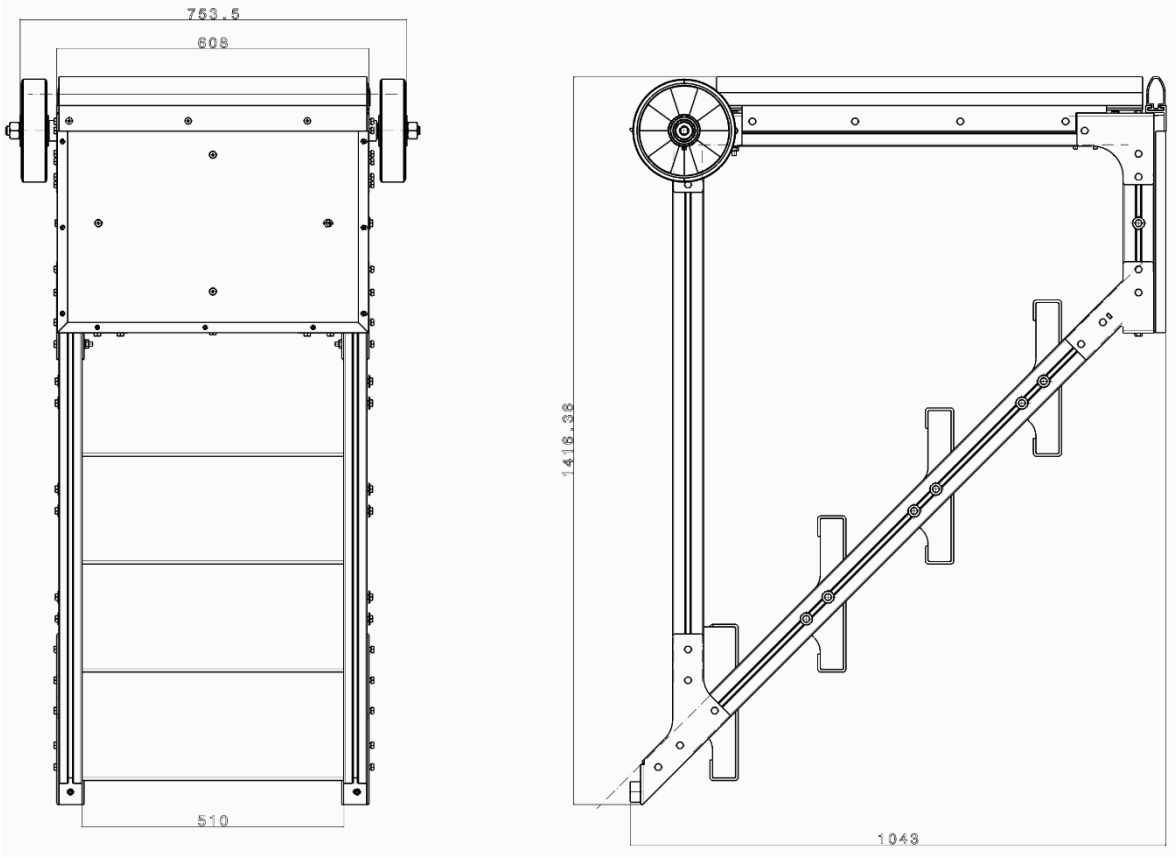
During ladders positioning in work location, take care to prevent accidental clashes with people or things. Prevent any possible clash when operating the ladder near the vehicle.

2 ASSEMBLY

Being ladders already assembled, assembly instructions are not necessary.

3 DESCRIPTION OF THE PLATFORM

3 DIMENSIONS



Dimensions in millimeters

Fig. 3.3.1

4 TECHNICAL CHARACTERISTICS AND MATERIALS USED

- The main structure is made of light alloy, composed of electro-welded sub-assys.
- All the light alloy components have been anodized.
- All the steel components have had a white zincking surface treatment.
- Nuts, bolts and fastening units are in stainless steel.
- All steps surfaces are covered with anti-slip material.
- The work floor is made of marine plywood.
- Wheels required for movement have a diameter of 200 mm.
- The ladder is equipped with a protective rubber of 50 mm on the vehicle side.

4 MAINTENANCE

1 CHECKS AND MAINTENANCE

- Please check if the ladder is completed in all its components before usage.
- After each usage, verify that ladder isn't damaged.
- Before using please verify that all protections are installed (see chapter 5 of this document).
- Verify all thread/bolt connections at least on every six months.
- Check the proper tightening of the screws / bolts every six months.
- For very good preservation, it is relevant to keep the ladders clean (it is enough to use a light detergent).

TORQUES	
Type of screw	**Ms**
5/16' 8.8	18 N*m

Tab. 4.1-1

5 ENCLOSED DOCUMENTS

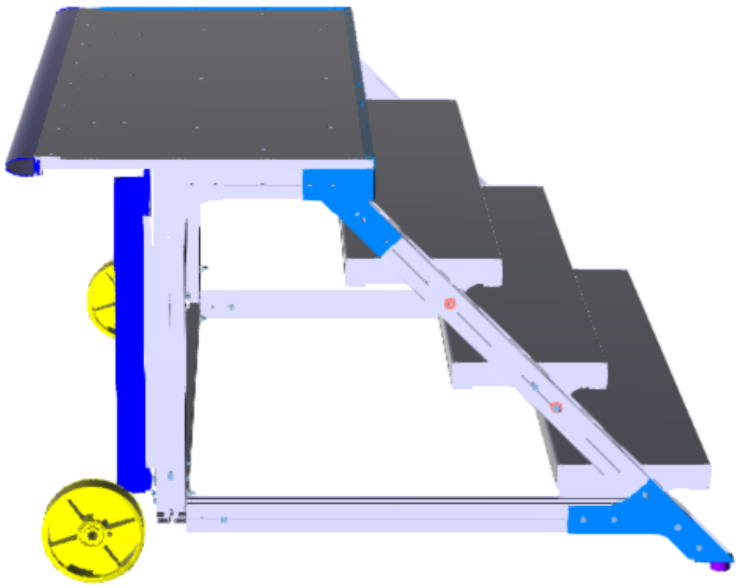
1 SPARE PART LIST

2 COMMERCIAL ELEMENTS

RAMAL S.R.L.
VIA CALABRIA, 7
06019 UMBERTIDE (PG)
TEL: +39 075 94 15 802
FAX: +39 075 94 12 222
E-MAIL: RAMAL@RAMAL.COM
WEB: WWW.RAMAL.COM

INSTRUCTION MANUAL FOR USE AND MAINTENANCE

Product: LADDER CABIN ACCESS
Model: RMOSH3G-106B
S/N: D00010



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Chapter 6	0.0	30/09/2023				
Chapter 7	0.0	30/09/2023				
Chapter 8	0.0	30/09/2023				
Chapter 9	0.0	30/09/2023				

Date	30/09/2023
Signature	

CONTENTS

0 GENERAL INFORMATIONS

1 NOTE

- The ladder cabin access (model RMOSH3G-106B) is intended to be used in maintenance and repair operations for vehicle AW139.
- The ladder complies with the UNI EN 131 -1/2/7 and UNI EN 14122-2.
- The maximum weight is 200 kg (max. 1 people allowed on ladder).
- The structure weight is 100 kg.
- The ladder cabin access allows an easy transport and movement.
- The ladder cabin access is provided with an identification plate indicating the admittable weight and manufacturer identity.

1 SAFETY

1 GENERAL SAFETY WARNINGS

Protective Rubber is applyed on Aircraft side to prevent the Aircraft from possible damages.

Steps are built using anti slip aluminum material.

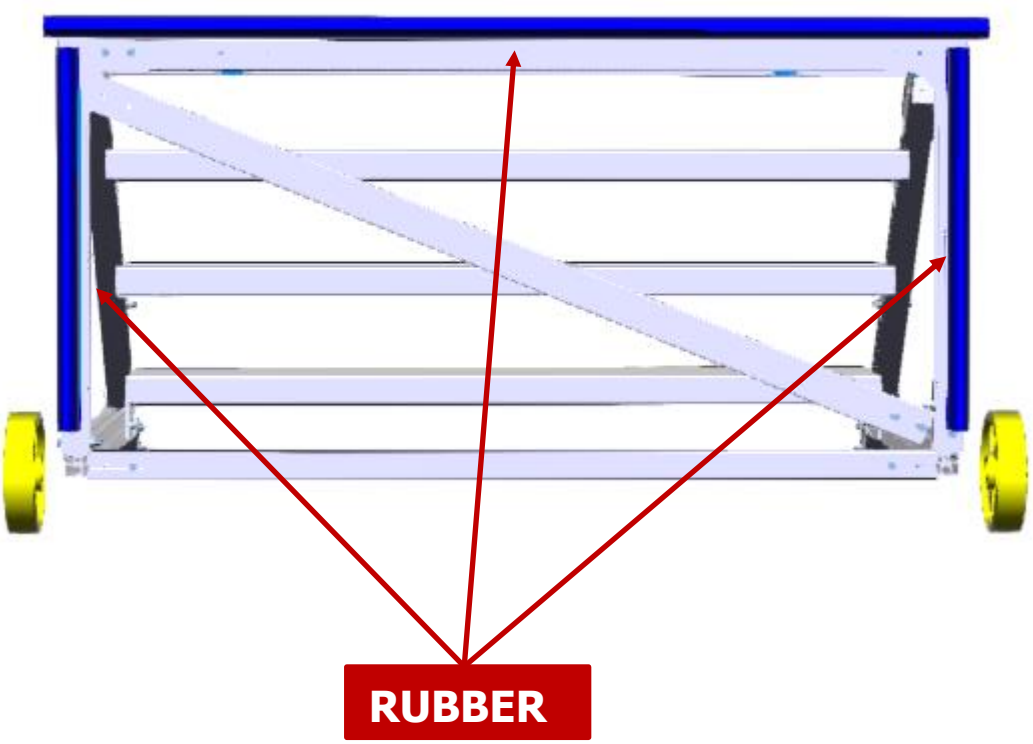


Fig. 1.1.1

2 INSTALLATION

1 INSTRUCTIONS FOR MOVEMENT

Move the ladder on the left or right side when necessary.

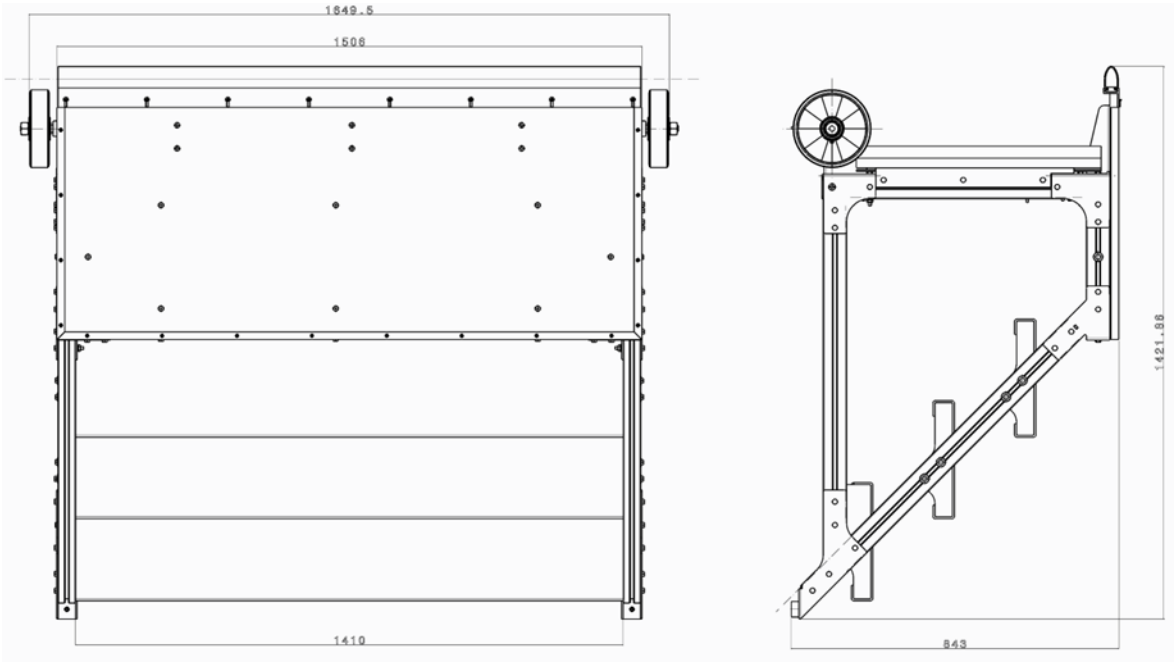
During ladders positioning in work location, take care to prevent accidental clashes with people or things. Prevent any possible clash when operating the ladder near the vehicle.

2 ASSEMBLY

Being ladders already assembled, assembly instructions are not necessary.

3 DESCRIPTION OF THE PLATFORM

3 DIMENSIONS



Dimensions in millimeters

Fig. 3.3.1

4 TECHNICAL CHARACTERISTICS AND MATERIALS USED

- The main structure is made of light alloy, composed of electro-welded sub-assys.
- All the light alloy components have been anodized.
- All the steel components have had a white zincking surface treatment.
- Nuts, bolts and fastening units are in stainless steel.
- All steps surfaces are covered with anti-slip material.
- The work floor is made of marine plywood.
- Wheels required for movement have a diameter of 200 mm.
- The ladder is equipped with a protective rubber of 50 mm on the vehicle side.

4 MAINTENANCE

1 CHECKS AND MAINTENANCE

- Please check if the ladder is completed in all its components before usage.
- After each usage, verify that ladder isn't damaged.
- Before using please verify that all protections are installed (see chapter 5 of this document).
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- Check the proper tightening of the screws / bolts every six months.
- For very good preservation, it is relevant to keep the ladders clean (it is enough to use a light detergent).

TORQUES	
Type of screw	**Ms**
5/16' 8.8	18 N*m

Tab. 4.1-1

5 ENCLOSED DOCUMENTS

1 SPARE PART LIST

2 COMMERCIAL ELEMENTS