PORTABLE WELDING CARRIAGE

WELDYCAR 2.0 PRO

SAFETY INSTRUCTIONS FOR OPERATING AND MAINTENANCE

No AS-PM-T0550200

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Instructions

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Original instructions

LINCOLN® ELECTRIC

Thank you very much for the trust you have shown by choosing this piece of equipment. It will give you trouble-free service if it is used and maintained as recommended.

Its design, component specifications and manufacturing are in accordance with applicable European directives.

Please refer to the CE declaration enclosed to identify the directives applicable to it.

The manufacturer shall not be liable for any combination of parts not recommended by it.

For your safety, please follow the non-limitative list of recommendations and obligations, a large part of which are included in the Labour Code.

Please inform your supplier if you find any error in this instruction manual.

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INFORMATION

This technical literature is intended for the following machines or products:

- **WELDYCAR 2.0 PRO**

This manual and the product with which it is associated refer to the applicable standards in force.

Please read this document carefully before you install, use or maintain the machine. Keep this document in a safe place for future reference. This document must follow the machine described if there is a change in ownership of the machine and accompany it up to demolition.

Display and pressure gauge:

Measurement instruments or displays of voltage, intensity, speed, accuracy etc. are to be considered as indicators, whether they are analogue or digital.

For operating instructions, adjustments, troubleshooting and spare parts, please refer to the special instructions for safe operating and maintenance.

The installation is an assembly of several products. Please read all the sections of the literature before starting to use the machine, as they contain information about residual risks and the ways to protect yourself from all its components.

In spite of all the measures applied, invisible residual risks may still remain.
Residual risks can be reduced if the safety instructions are observed, the machine is used as recommended and general service instructions are followed.

MEANING OF SYMBOLS

	Reading the manual/instructions is mandatory.		Indicates a hazard.
	Mandatory use of safety shoes.		Warning of an electricity risk or hazard.
	Mandatory use of hearing protection.		Warning of a risk or hazard due to an obstacle on the floor.
	Mandatory use of a safety helmet.		Warning of a risk or hazard of falling with a level change.
	Mandatory use of safety gloves.		Warning of a risk or hazard due to suspended loads.
	Mandatory use of safety glasses.		Warning of a risk or hazard due to a hot surface.
	Mandatory use of a safety visor.		Warning of a risk or hazard due to moving mechanical parts.
	Mandatory use of safety clothing.		Warning of a risk or hazard due to a closing movement of mechanical parts of a machine.
	Make sure you clean the working zone.		Warning of a risk or hazard due to laser radiation.
	Mandatory use of breathing protection.		Warning of a risk or hazard due to an obstacle at a height.
	Visual inspection required.		Warning of a risk or hazard due to the presence of a pointed part.
	Indicates a lubrication operation.		Wearers of pacemakers may not be admitted in the designated area.
	Requires maintenance action.		The equipment has a lithium ion battery that has special requirements in the areas of transport, storage and recycling (refer to battery literature)
	The equipment is not ATEX certified		

A - IDENTIFICATION

The information below should be provided in all correspondence.

B - SAFETY INSTRUCTIONS

1 - Conditions for use

Thank you for purchasing this LINCOLN ELECTRIC equipment, which will give you all satisfaction.

This equipment is designed for fastening a MIG/MAG welding torch and moving it on plates in manual, semi-automatic or automatic mode.

These instructions must be provided to each user. Before each operation, the user must become familiar with the equipment and make sure that they have read and understood the information contained in the instructions. The use of the equipment entails knowledge of and compliance with the usual warning and safety observations relating to the applied process.

Refer to the standards and good practices associated with the processes used.

LINCOLN ELECTRIC reserves the right to modify the characteristics of its products at any time to apply the latest technological developments. That means that the information in this document is liable to change without notice.

2 - Users

The equipment may only be put into service, used or put out of service by authorised personnel.

CAUTION!
All the service and maintenance personnel working with this equipment must have read and understood all the instructions in this manual.

The equipment has a control unit that is only to be used by a single operator at any given time. The manufacturer has not provided for the management of co-working with the equipment by several operators.

The technical data and drawings in this manual are provided for guidance and do not necessarily reflect the configuration currently delivered by our plant. If formally requested, complete up-to-date information may be supplied by the manufacturer.

3 - Safety

The risks relating to the equipment have been analysed in accordance with applicable standards.

This equipment is used with a welding installation, and in that case, is governed by the safety instructions described in the instructions of the installation for the process in question.

4 - Conformity

The serial number of the equipment is indicated on a CE identification plate located on the equipment. This equipment meets the relevant provisions of applicable directives:

- Machinery Directive 2006/42/EC
- EMC Directive 2014/30/EU
- RoHS Directive 2011/65/EU

Each product is delivered with its own declaration specific to its serial number.

5 - Environment

The usage temperature of the equipment must lie between -5°C (23°F) and 50°C (122°F), with air humidity below 90%.
The storage temperature of the equipment must lie between -10°C (14°F) and 70°C (158°F), with air humidity below 90%.

While disposing of the equipment and its tools and accessories, a number of precautions need to be taken, particularly in order to avoid risks during disassembly and transport, and also in relation to the environmental consequences in view of the products or components contained in it.

The equipment has one or more batteries that need to undergo a specific recycling process (refer to the indications of the supplier). The remainder of the equipment must follow the normal recycling process.

For those reasons, the company that uses and owns the equipment must take this aspect into consideration and pay for all its costs.

6 - Main recommendations

The carriage may not be used for moving or lifting loads for which is has not been designed by **LINCOLN ELECTRIC**

The tools and/or processes applied to the carriages must be approved by **LINCOLN ELECTRIC**.

Do not hold back, push or pull the carriage when it is operating.

The use of Personal Protective Equipment (PPE) and work clothing covering the body is mandatory in the work area. Do not wear a tie and keep your hair tied back securely.

The carriage has an IP43 protection rating; it is protected from water falling from an angle up to a 60°. Water or water vapour must not enter the inside of the carriage.

Any defective component of the carriage must be replaced or repaired by a specialist.

Regularly check the tightening of all the components of the carriage.

Do not disassemble the printed circuit boards during the guarantee period; otherwise, the guarantee will be immediately voided (unless agreed by the manufacturer).

Any modification of the equipment or addition of components that are not approved by the manufacturer can significantly modify the working of the equipment.

The carriage must be slung to prevent falls in the event of a loss of magnetic adherence. To that end, use a load balancer with a capacity adjustable from 10 to 14kg (cable length 2.5m). It should be placed at a minimum distance corresponding to a cable extension of 50 to 100cm.

LINCOLN ELECTRIC shall not be liable in any way if the rules above are not applied.

7 - Limits of use of the machine or the installation

The limits of use of the machine (or installation) are provided in the different documents; please review them carefully before starting to use the machine (or installation).

For safety reasons, and in the light of our current knowledge of customer processes, the working area may be occupied only by one individual.

The machine (or installation) may only be operated by a single person above the age of 18 and trained in operating and use-related risks.

The machine (or installation) may only be used for welding applications; any other use of the machine is forbidden.

The machine (or installation) is designed for indoor use.
It may not be used outdoors.

The workshop must be adequately lit and ventilated.

The dimensions and weights of the workpieces must be appropriate for the machine (or installation).

Loading and unloading may only be carried out outside the welding cycle.

The energy supply must imperatively comply with recommendations.
The customer must supply and install a device for isolating each source of energy (electricity, air, gas and water). The devices must be clearly identified. They must be of the locking type.

The machine (or installation) is designed for professional use.

Before use, the operator must make sure that there is no risk of collision with personnel.

Make sure that no part of the machine can come within less than 500 mm from an obstacle.
Important: the operator passage way must absolutely be clear over a minimum width of 800 mm.
The floor should be marked out.

While accessing the marked area, a worker could be hit by a part of the installation.

For any extended absence, the operator must shut off the supply of utilities (electricity and fluids).

Maintenance may only be carried out by experienced personnel who are trained in machine-related risks.

Access to the machine (or installation) must be left free for maintenance (e.g. no workpiece etc.).

The frequency of such maintenance is indicated for production in one work shift per day (i.e. 8 hours a day).

Consumables must be changed based on their wear and tear.

Visually inspect the overall condition of the installation and the working area twice a shift, or with every change of production.

The maintenance schedule must absolutely be followed.
We recommend putting in place a traced system for tracking all your maintenance operations.

All maintenance must be carried out by specialised personnel who have
read and understood these instructions.

Electricity technician
Qualified operator with the ability to work in normal conditions on electrical parts for regulation, maintenance and repair.

Mechanical technician
Specialised technician authorised to carry out complex and exceptional mechanical operations.

Based on the results of the risk assessment, a few elements have emerged where there was no “technical” solution for eliminating risk or making it negligible.

In spite of all the care that has gone into the designing of our machines (or installations), some risk areas remain. To control these risks, the customer must pay particular attention to them, ensure that the instructions are applied and define any additional measures that may be necessary in view of its own internal operating procedures.

Therefore, you will find below a guidance list of residual risks.

Training of operators in safety and in the use of the machine from their operating position will better address these residual risks.

We recommend putting place workstation instructions that remind users of the presence or otherwise of residual risks in the working area.

8.1 - Residual risks - General

☛ Environment risk - slipping and/or falling

The working and safety area must be clear of all obstacles.

The working area must be kept clean and cleaned regularly.

The machine must undergo periodic maintenance (see maintenance instructions of each piece of equipment).

Waste consumables must be cleaned.

The operator must pay special attention to cables and rolling tracks on the ground.

The operator must use the necessary personal protective equipment (helmet, gloves, safety shoes, mask and work clothing).

Falling from heights:

In order to be protected from falling from heights and for access to high parts, the operator must use access means that comply with applicable standards.

For all work at heights, the use of personal protective equipment (helmet, gloves, safety shoes, mask, ear muffs and harness) is indispensable.

For all work at heights, the operator must be trained in the use of means for accessing high locations.

☛ Mechanical risk - Impacts, shearing, crushing

The operator may not wear loose clothing or a tie, must have their hair tied back and use personal protective equipment (helmet, gloves, safety shoes, mask and work clothing).

The operator must make sure that nobody else is close to the machine before starting.

The operator’s working position is before the control console.

The machine safety areas must not be crossed.

The operator must be trained in the use of the machine, and all personnel must be aware of residual risks.

Catching between an obstacle and the machine - Access to a moving part.

The operator must use personal protective equipment, (helmet, gloves, safety shoes, mask and work clothing).

The operator’s working position is before the control console.

The operator must make sure nobody is present in the machine working area or safety area before using it.

The operator must make sure that all the machine guards are in place before using it.

The operator must be trained in the use of the machine, and all personnel must be aware of residual risks.

Anchoring failure of handling equipment

The machine may not be modified.

The machine is not designed for anchoring lifting equipment.

Presence of a person under the load

The operator must be trained and approved for the use of handling equipment.

The operator must be trained in the use of the machine, and all personnel must be aware of residual risks.

☛ **Mechanical risk - Puncturing or piercing**

The use of personal protective equipment (helmet, gloves, safety shoes, mask, ear muffs) is indispensable.

The operator must be trained in the use of the machine and all personnel must be aware of residual risks.

8.2 - Residual risks - Process

☛ **Electrical risk - Splattering of molten particles**

Splattering of molten material on flammable materials or personnel:

The working area must be kept clean and cleaned regularly.

Put guards in place around the torches depending on the working environment.

The use of personal protective equipment (helmet, gloves, safety shoes, mask, ear muffs, fire-resistant work clothing) is indispensable.

The operator must be trained in the use of the machine, and all personnel must be aware of residual risks.

☛ **Ergonomics risk - Fatigue**

Loading of heavy coils on coil carriers at a height:

The operator must use appropriate handling means.

The operator must be trained in the use of the machine, and all personnel must be aware of residual risks.

☛ **Material and product risks - Poisoning**

Fumes/gas discharged by the process:

Provide for the use of extraction equipment (to be supplied by the customer).

The use of personal protective equipment (helmet, gloves, safety shoes, mask, ear muffs) is indispensable.

The operator must be trained in the use of the machine, and all personnel must be aware of residual risks.

☛ **Mechanical risk - Puncturing or piercing**

Contact between the end of the filler wire and a part of the body

The use of personal protective equipment (helmet, gloves, safety shoes, mask, ear muffs) is indispensable.

The operator must be trained in the use of the machine and all personnel must be aware of residual risks.

☛ **Radiation risk - Eye and skin injuries**

Arc flash

Put guards in place around the torches depending on the working environment.

The use of personal protective equipment (helmet, gloves, safety shoes, mask, ear muffs) is indispensable.

The operator must be trained in the use of the machine and all personnel must be aware of residual risks.

☛ **Thermal risk - Burns**

Part of the body in contact with a hot part (torch/workpiece etc.)

The use of personal protective equipment (helmet, gloves, safety shoes, mask, ear muffs) is indispensable.

The operator must be trained in the use of the machine and all personnel must be aware of residual risks.

☛ **Noise risk - Fatigue**

Process noise

The use of personal protective equipment (helmet, gloves, safety shoes, mask, ear muffs) is indispensable.

The operator must be trained in the use of the machine and all personnel must be aware of residual risks.

☛ **Mechanical risk - Crushing**

Handling of gas cylinders and/or racks

Gas cylinders must be transported securely strapped to a truck.

Racks are to be transported with appropriate handling equipment (e.g. travelling crane, lift truck).

The operator must be trained and approved for the use of handling equipment.

The use of personal protective equipment (helmet, gloves, safety shoes, mask, ear muffs) is indispensable.

☛ **Material and product risk - Explosion**

Storage of gas cylinders and/or racks near the machine

The storage must be sufficiently distant from the welding area and other sources of heat, in a ventilated location.

Cylinders must be secured.

The operator must be trained and personnel must be aware of how gas is used.

9 - Guarantee limitation

No modification may be made to the equipment or tools during the guarantee period. Any modification that is made without prior written consent shall void the guarantee.

LINCOLN ELECTRIC shall guarantee the working of the equipment providing only the supplied and certified components are used. These original components are listed in the list of spare parts.

The equipment is guaranteed for 12 months from its date of delivery (except wearing parts).

The equipment is guaranteed, including parts and labour, except if:

- any equipment modifications have been made by a company other than **LINCOLN ELECTRIC** without its permission.
- failures are caused by use outside the stated usage temperature range.
- failures are caused by accidental impacts on the equipment.
- failures are caused by external connections that are not in accordance with recommendations.
- failures are caused by external reasons.
- any of the heat-sensitive labels on the rail showing that maximum permitted temperature is not exceeded are missing.

CAUTION!
Do not disassemble the printed circuit boards during the guarantee period; otherwise, the guarantee will be immediately voided (unless agreed by the manufacturer).

CAUTION!
Any modification of the equipment or addition of components that are not approved by the manufacturer can significantly modify the working of the equipment.

10 - Transport and handling

The loading and transport of the equipment from the premises of **LINCOLN ELECTRIC** to the customer's facility are defined in the conditions negotiated with the order.

The conditions for unloading and handling the equipment up to its place of use are defined in the conditions negotiated with the order.

By default, the equipment is delivered in a cardboard box.

The equipment has a lithium ion battery that has special requirements in the areas of transport, storage and recycling (refer to battery literature).

1 - Overview

This independent mobile carriage with 4 drive wheels can hold a MIG/MAG torch in order to make the welder's work easier. It is lightweight and rugged, and once equipped, it will provide the quality of automatic setting in motion, at the same time allowing simple use and rapid implementation.

The magnetic base of the carriage enables it to make uphill vertical welds without tooling; activation is merely by using a tilting lever (in that case, one of the rings on the side of the carriage must be connected to a cable to prevent the risk of falls).

A disengagement lever makes it possible to position the carriage.

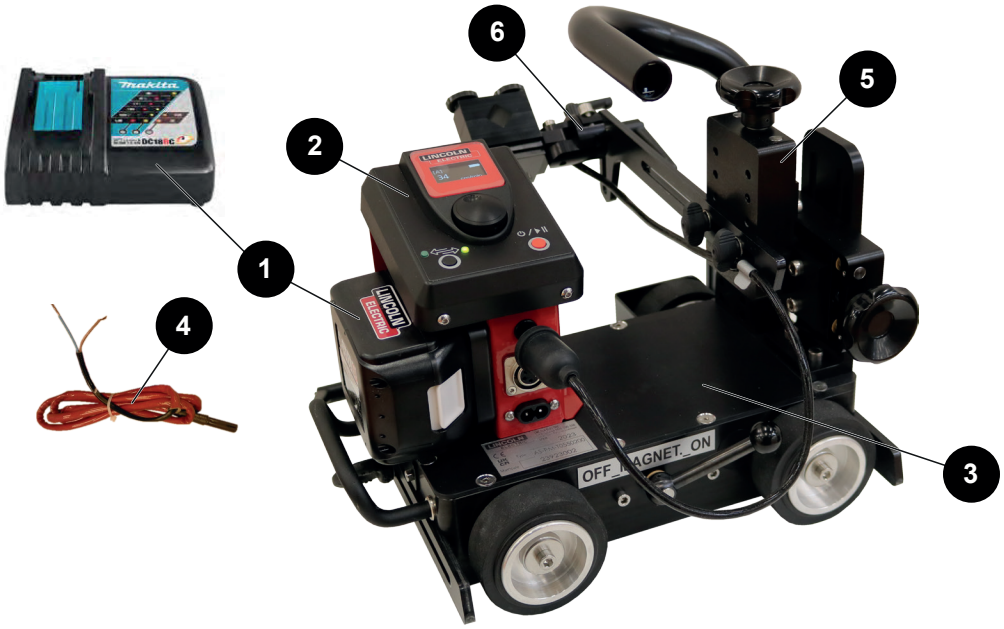
The carriage display indicates the actual speed of the carriage when it is in motion.

The torch holder has an arc sensor for starting the carriage automatically.

The PRO version also allows the control of the power source welding start (trigger). It allows the management of pre/post welding times, anti-cratering and intermittent welding.

The **WELDYCAR 2.0 PRO** pack is supplied with the following:

- carriage base
- control unit
- 40 mm crossed slides
- torch holder with arc sensing
- trigger start cable
- battery and charger.



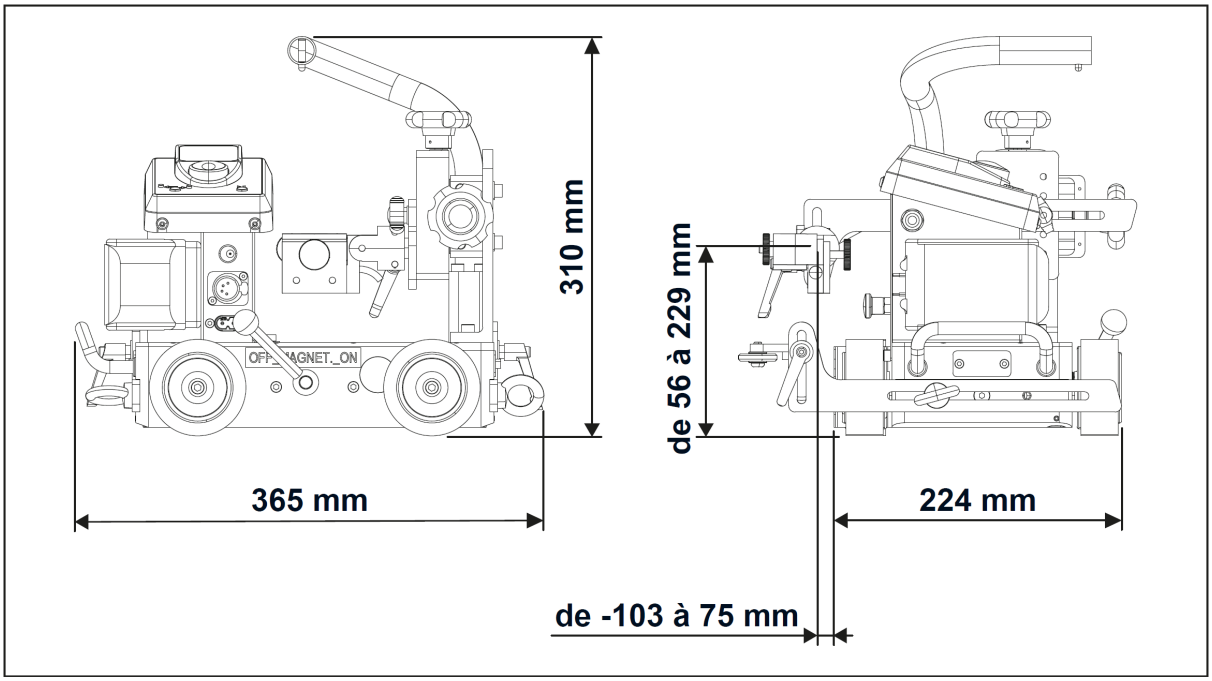
1	18V battery with 230V charger
2	Carriage control panel
3	Mobile base
4	Welding start cable (trigger)
5	40mm manual crossed slides
6	MIG torch holder with sensor

1.1 Specifications

Specification		
Programmable: · Power source control (trigger) · Intermittent welding		Yes
Carriage speed (with wheel Ø 75 mm)	cm/min	1 to 180*
manual X & Y slide travel	mm	40
Torch holder with arc sensing		Universal with quick attachment
Overall exterior dimensions	mm	Length: 365 Width: 260 Height: 310
Weight of carriage with battery and manual X and Z slides Weight of carriage with battery and Z slide and oscillation slide	Kg	9 12
Maximum equipment load	Kg	5
Protection rating		IP43
Electrical energy		
Electrical power voltage		18V Lithium ion battery 5Ah
Battery life	hours	20
Battery life with optional oscillator	hours	8
Charging time with 230V - 50-60 Hz charger	Min	45
Operating and storage		
Operating temperature (with air humidity below 90%)	-	-5°C to +50°C
Storage temperature (with air humidity below 90%)	-	-10°C to +70°C
Welding position		
Guiding		Crabbing
Magnet attraction force	kg	28
		

*** MIND the slipping of the wheels in the vertical position (downhill "PG" and uphill "PF") which leads to a speed difference relating to the carried weight (PG: up to +6.5% and PF: up to -4%)**

Dimensions of basic carriage:



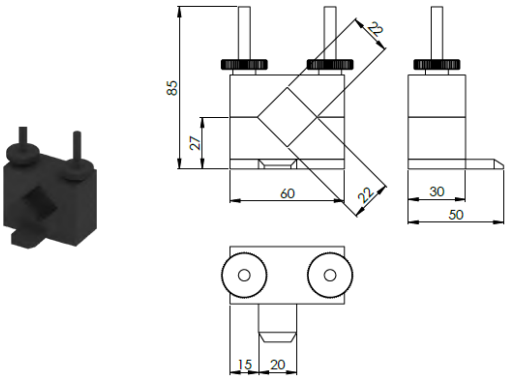
Optional oscillators		
Pendulum oscillator		
Oscillation travel (amplitude)	mm	0 to 40
Frequency	Strokes/ min	0 to 100
Osci-Weldy linear oscillator(2)		
Oscillation travel (amplitude)	mm	2 to 56
Offset (O)	mm	0 to 27 (dependent on amplitude)
Oscillation speed	cm/min	20 to 200
External timer (t1)	seconds	0 to 10
External timer (t2)	seconds	0 to 10

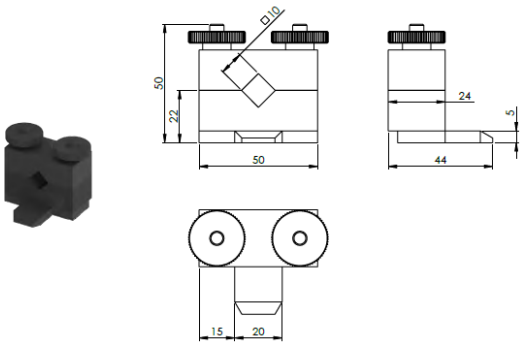
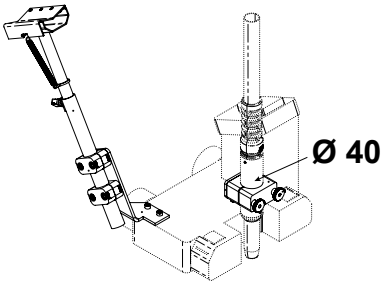
Please refer to the document:

- **86955877: OSCI-WELDY**

1.2 Part numbers

AS-PM-T0550200	**WELDYCAR 2.0 PRO**	
Power supply		
AS-PP-T0550100	Battery	
AS-PP-T0550101	Battery charger 18V POWER 110-230VAC	
AS-PP-T0550102	Direct mains power supply, 110V-230VAC	
Rails		
W000401721	4 aluminium wheels	
AS-PP-T0550207	2G rail, 1.5 metres (Temperature below 70°C)	
AS-PP-T0550208	2 2G arms	
AS-PP-T0550109	Rail end magnet	

AS-PP-T0550210	2G rail, HT 1.5 metres (Temperature below 18°C)	
AS-PP-T0550112	End of rail magnet, HT	
Safety		
AS-PP-T0550202	Limit switch kit (x2)	
AS-PP-TP0550116	10-14 kg load balancer Length 2.5 metres	
W000315476	250 kg fall arrest system Length 10 metres	
Holders		
AS-PP-T0550203	Bundle holder post	
AS-PP-T0550104	XLR lamp	
AS-PS-T0550004	Extraction torch holder	

AS-PS-T0550002	InnershieldK 115 K116 torch holder	
AS-PS-T0550006	Hyperfill torch holder kit	
AS-PP-T0550106	Manual slide, 100MM	
AS-PP-T0550201	Angular torch holder	
W000384545	Second torch holder	
Oscillation/slide		
W000315474	Pendulum oscillator	
W000276068	Linear oscillator	
AS-PP-T0550105	**Weldyrail** linear oscillator assembly kit	

2 - Mechanical description

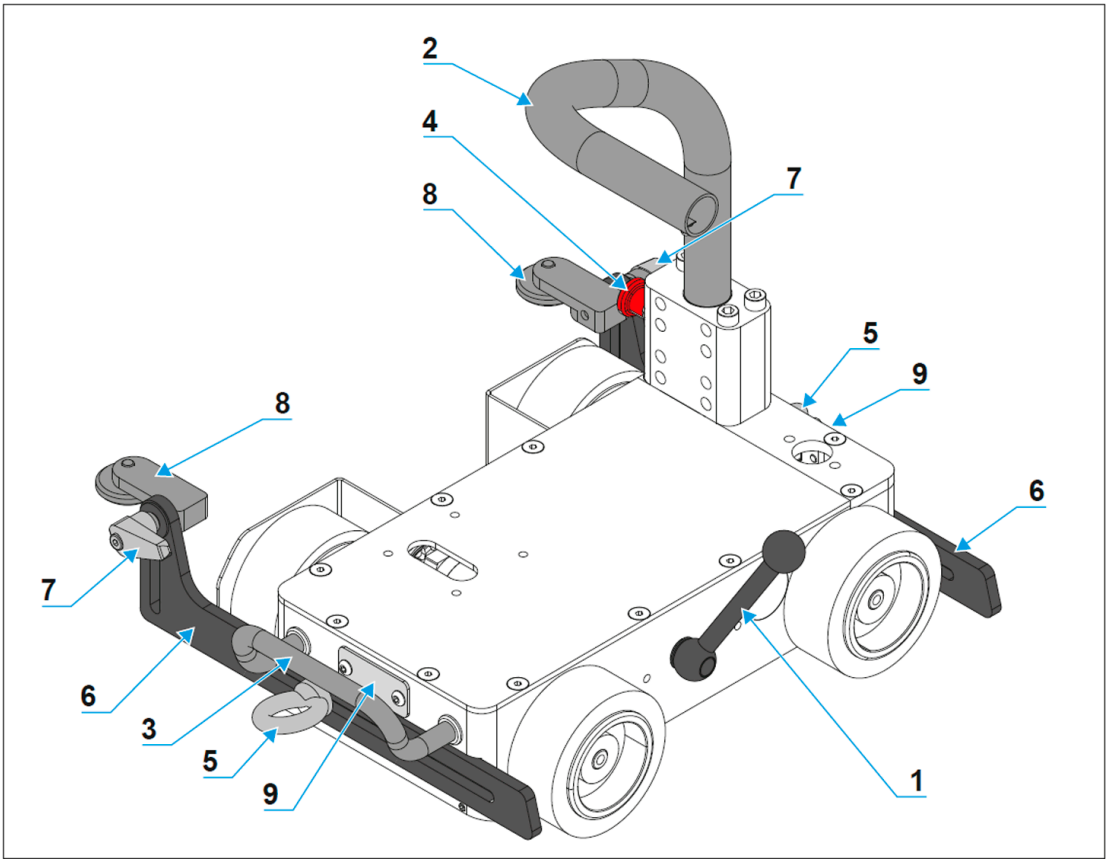
The equipment is an independent carriage with four drive wheels that is designed especially for mechanising semi-automatic welding in all positions.

This carriage is designed to operate with at least one control unit and an interface.

It is lightweight and rugged, and once equipped, it will provide the quality of automatic setting in motion, at the same time allowing simple use and rapid implementation. Its magnetic attraction force enables it to roll with no holding rail on carbon steel plates in the uphill vertical, overhead and horizontal vertical positions.

For use with warming up, we optionally offer equipment with aluminium wheels (without rubber). Also, mind you do not damage the magnetic property of the magnets that hold the carriage in place when it is in use.

2.1 Description of mobile base



1	**Magnetic handle:** => magnetises the chassis to allow it to operate in the uphill vertical, overhead and horizontal vertical positions.
2 and 3	**Carrying handles:** => for lifting the carriage ergonomically to move it.
4	**Locking pin:** => releases the carrying handle to allow it to rotate.
5	**Securing rings:** => secure the carriage when it is ready to operate in the uphill vertical, overhead and horizontal vertical positions. The securing rings also make it possible to lock and move the crabbing arms (Ref. 6).

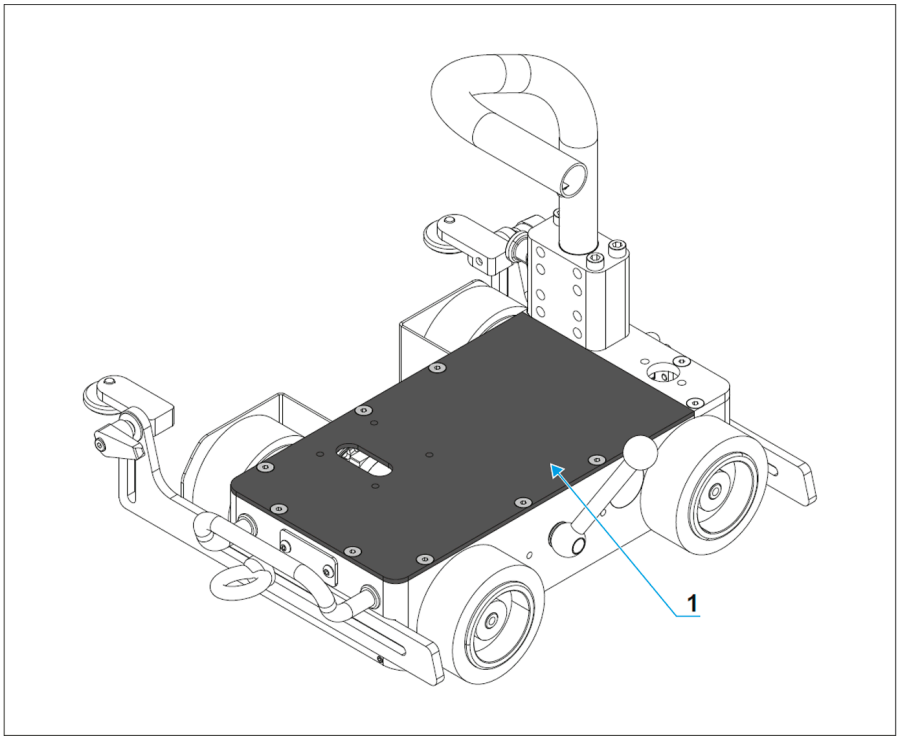
6	**Crabbing arms:** => position the support rollers (Ref. 8)
7	**Locking handles:** => position and lock the position of the support rollers.
8	**Support rollers:** => guide the carriage to follow a path defined by a surface
9	**Limit switch sensor (optional):** => stops the carriage when the stop hits an obstacle.

By default, the carriage offers magnetic adherence to metal plates, allowing it to be placed in all possible positions. It is absolutely necessary to move the magnetic handle (Ref. 1) before starting an operation.

The magnetic adherence depends to a large extent on the diameter of the wheels mounted on the carriage. With optional wheels (Ø100), the loss of magnetic adherence is total.

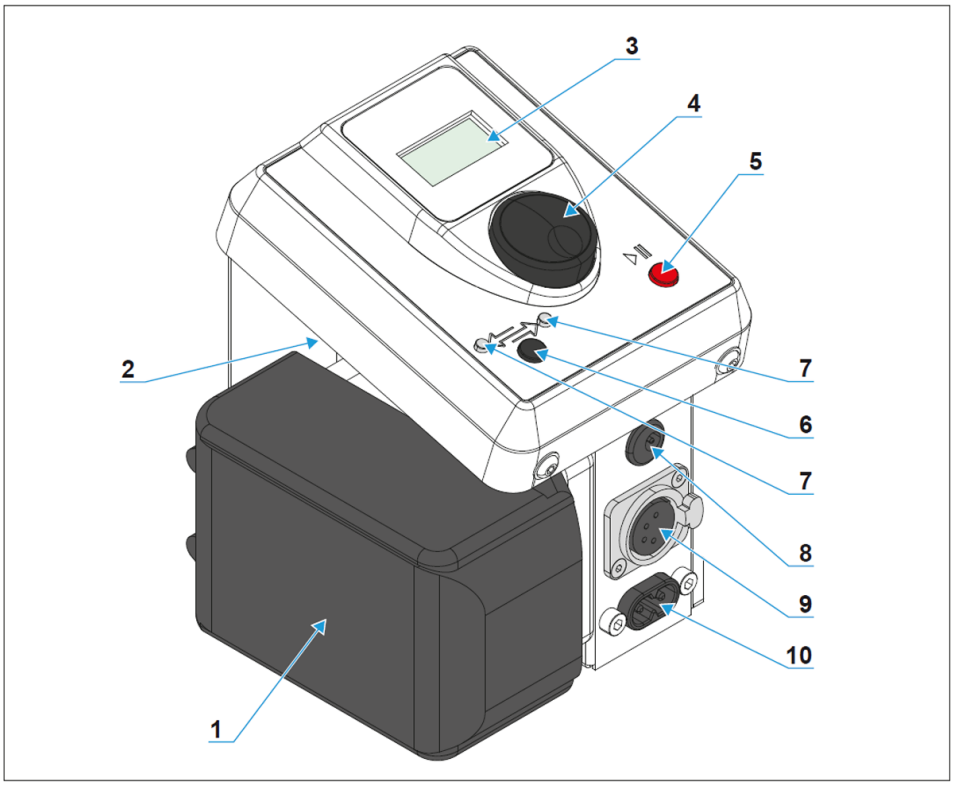
In the uphill vertical, overhead and horizontal vertical positions, it is absolutely necessary to secure the carriage with one of the two securing rings (Ref. 5) to prevent the machine from falling.

2.2 Access for servicing and maintenance



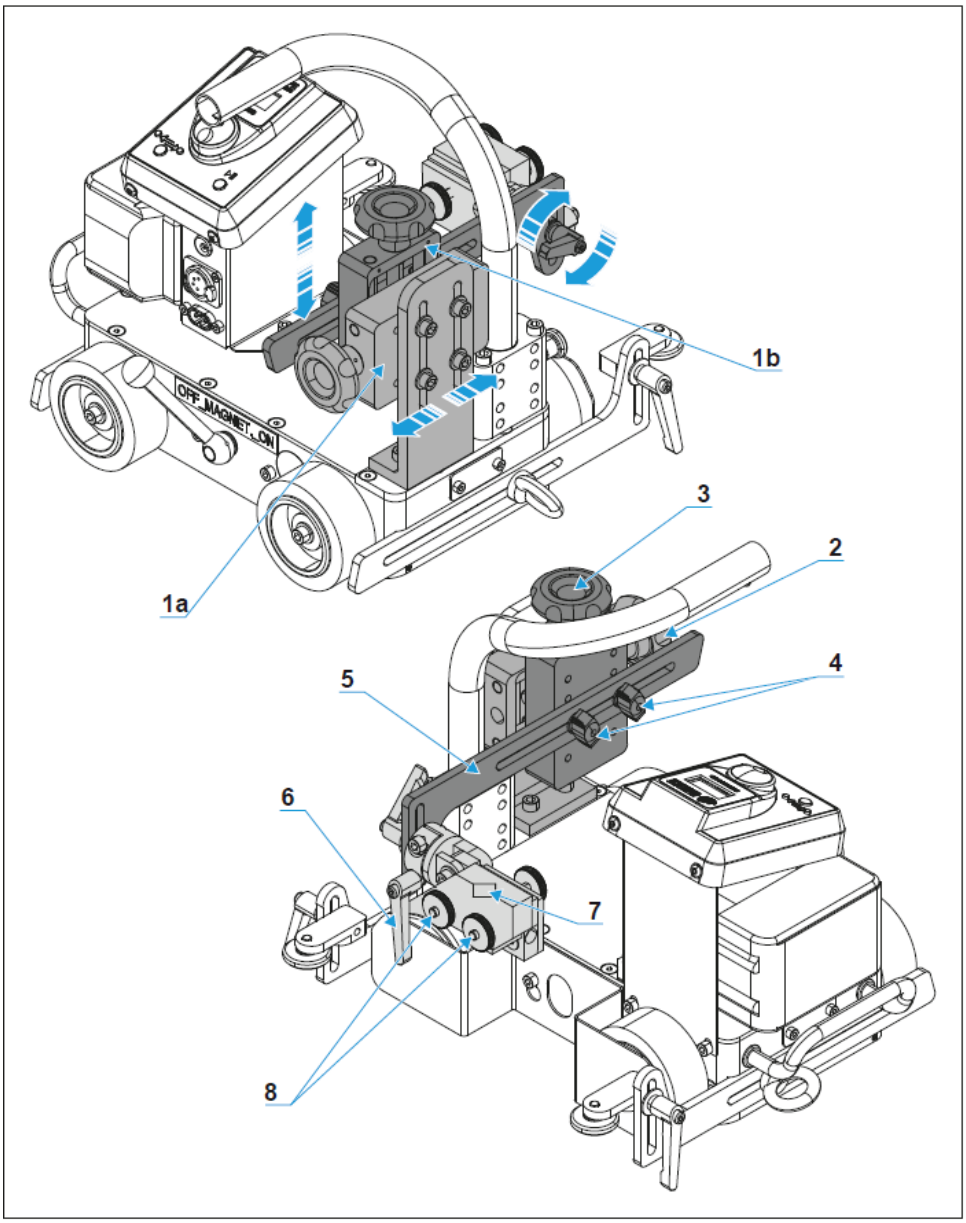
1	**Casing:** => inspecting, repairing and maintaining the components of the carriage.

2.3 Description of control unit



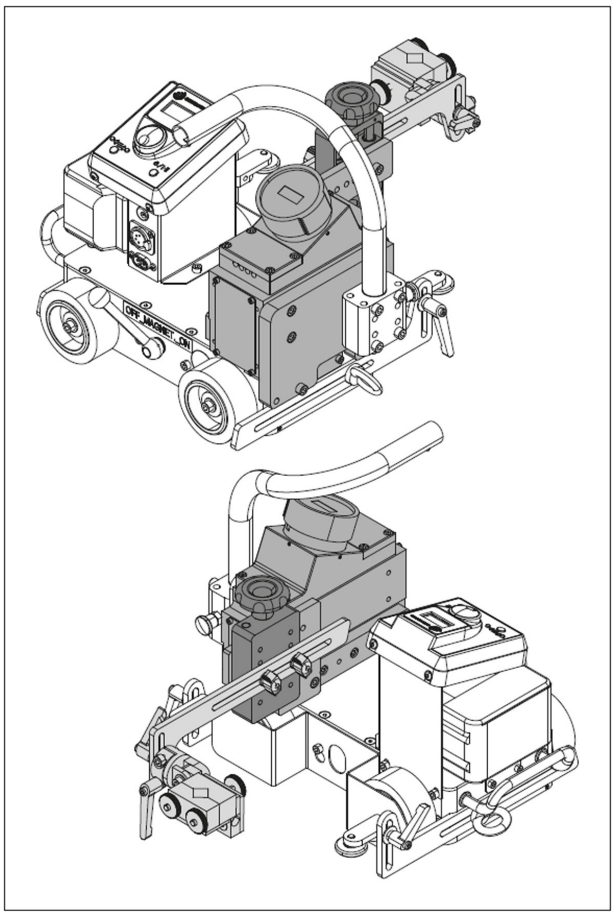
1	**Battery:** => supplying power to the equipment. The equipment is designed to operate with an 18V lithium ion battery.
2	**Accessory power connector:** => connecting an accessory (slide, oscillator etc.). The output voltage is equal to 14.4V DC (5A max)
3	**Screen:** => setting up and controlling the equipment.
4	**Selection wheel/click:** => navigating the menus and selecting the different operating parameters.
5	**On/off and cycle start/pause button:** => starting and shutting down the equipment, and starting a cycle or putting it on pause.
6	**Direction change button:** =>changing the carriage movement direction.
7	**Direction indicator lamps:** => showing the carriage movement direction. The LED flashes when the cycle is under way.
8	**Welding arc sensor connector:** => connecting a welding arc sensor located on the torch holder. In that case, carriage movement is synchronised with the arc, which is triggered by the torch trigger.
9	**Accessory port:** => connecting an accessory (e.g. sensor, lamp, etc.).
10	**Torch trigger control port:** => connecting a cable to control the trigger on the torch. In that case, the welding arc is synchronised with carriage movement, which is triggered by the Cycle start button on the console. Optional: by special request, two torches can be controlled simultaneously via a second trigger connector.

2.4 Description of the double YZ manual slide torch holder

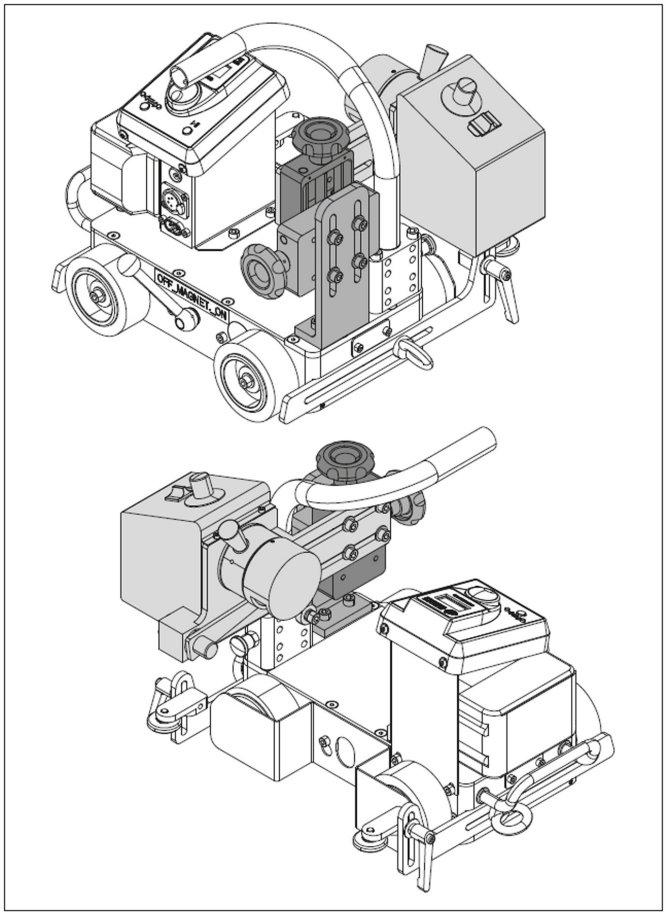


1a	**Manual Y slide:** => using the wheel (**Ref. 2**) to finely adjust the transverse position of the tool fitted on.
1b	**Manual Z slide (Ref. 1b):** => using the wheel (**Ref. 3**) to finely adjust the height of the tool fitted on.
4	**Wing screw:** => moving the holder (**Ref. 5**) laterally in relation to the carriage movement direction.
6	**Tightening handle:** => adjusting the angle of the welding torch holder (**Ref. 7**).
7	**Torch holder:** => fastening the welding torch to the carriage. This holder is made up of two jaws tightened by two knurled screws (**Ref. 8**) around the torch gooseneck.

2.5 View of assembly with optional **OSCI-WELDY** *Y oscillator + manual Z slide*



2.6 View of assembly with optional pendulum Y oscillator + manual double Y/Z slide



2.7 Magnetic rail

This rail guides the **Weldycar 2.0 Pro** carriage in the 2G horizontal vertical position on a magnetic plate (steel).
It has magnets to hold the rail to the part.

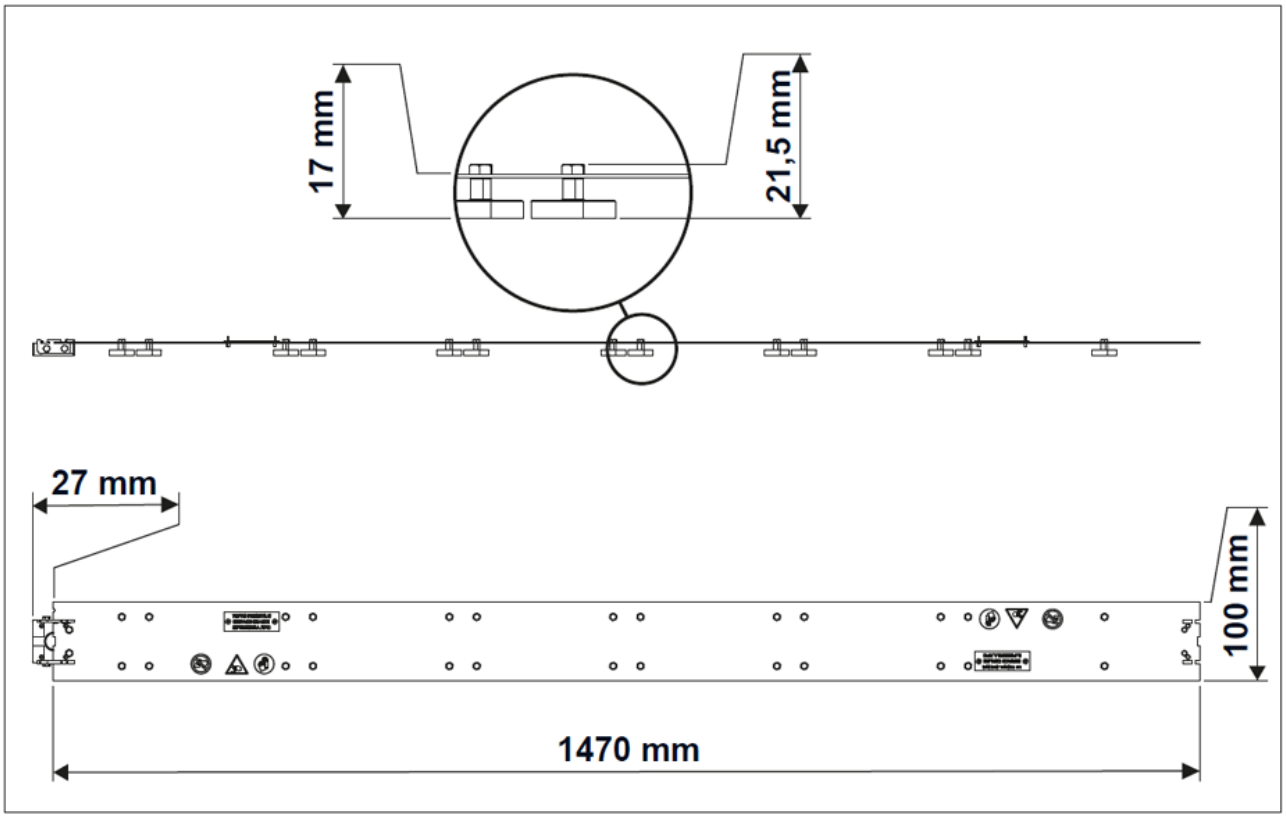
Dimensions & Weight		
Dimensions (Length x Width x Height): · For 1500 mm long rail	mm	1497x100x21
Weight (depending on number of magnets): · For 1500 mm long rail	Kg	3.5 to 4.2
Capacity limit in working position: For an equipped carriage (with option and one additional 2kg load)	Kg	16
Operating and storage		
With standard rails: · Temperature of the surface in contact with the rail · Storage temperature	°C	< 70 < 70
With HT high-temperature rails: · Temperature of the surface in contact with the rail · Storage temperature	°C	< 180 < 70

In order not to damage the magnetic property of the magnets that hold the rails in position, and also the carriage when it is in use, optional high-temperature magnets are available, which are suitable for use with pre-heating.

The magnets may interfere with the working of pacemakers and implantable defibrillators.
A pacemaker could switch to test mode and make the wearer unwell.
A defibrillator could possibly cease to operate.
If you wear such a device, keep a sufficient distance from the magnets.
Prevent wearers of such devices from approaching the magnets.

Do not use the rail to move or support equipment other than Weldycar carriages.
Do not push or pull the rail when a carriage is fastened on it.
Check the temperature of the metal surface on which the rail is placed before use.
Check the heat-sensitive label before use.
Handle the rail with suitable protective equipment (gloves, safety shoes, helmet, safety glasses etc.).
Make sure the whole rail (magnets, sides, rack) is clean before use.
Any modification or addition of components that are not approved by the manufacturer can significantly modify the working of the equipment.
Replace the magnets if they are broken
Keep the magnets safe from strong impacts when placing the rails. Mind the risk of pinching while placing the rails.

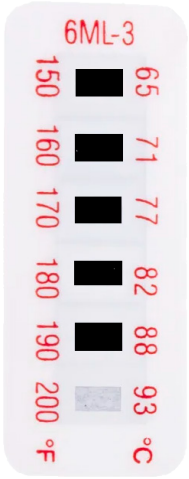
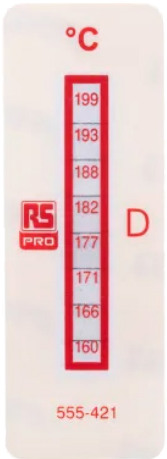
Dimensions of rail 1500:



2.8 Inspection of the heat-sensitive label

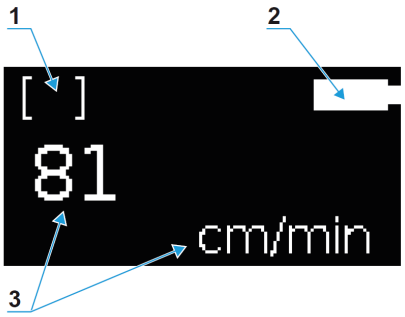
Every time the rails are used, checking the heat-sensitive labels placed under the rail is **ABSOLUTELY NECESSARY**. The label is used to take the temperature near the magnets and save it.

Caution! If the temperature exceeds the usage limit (depending on the characteristics of the rail used), the rail MAY NOT BE USED as it is. The magnets MUST BE CHANGED, and a new heat-sensitive label must be applied.

Heat-sensitive label 65°C to 93°C		Heat-sensitive label 160°C to 199°C	
			
✓	✗	✓	✗

3.1 Main view

Press the red button to switch on the carriage. The screen switches on.



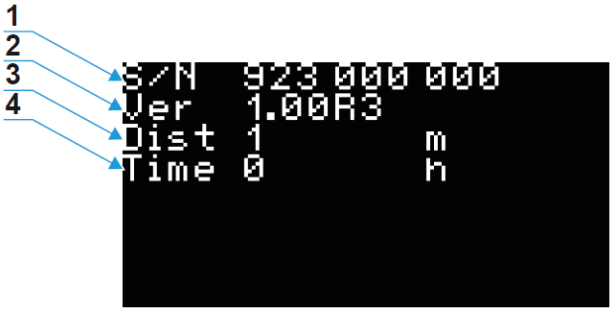
1	**Carriage status:** • [ ]: Programmable mode disabled/automatic start disabled • [A]: Automatic start enabled (via arc sensor) • [P]: Programmable mode enabled
2	**Battery level**
3	**Display of welding feed speed, modifiable during the cycle**: • The choice of the number of decimals after the point is adjustable • The choice of the unit is adjustable

Caution:
The Start button is used as follows:
- cycle start/stop button (short press)
- immediate stop/pause (short press)
- starting up and shutting down (long press)

NB: In vertical positions, with a certain carried mass, the distance covered may be different from the setpoint. For example, with PG (vertical downhill welding), there may be up to 5% more at a 50cm/min speed

3.2 Product information access

This page is accessible by clicking the wheel for 2 seconds when the **LINCOLN ELECTRIC** logo is displayed when the carriage is switched on.



1	**Serial number**
2	**Software version**
3	**Distance covered (in metres)**
4	**Power up counter (in hours), time increment when the equipment is switched on.**

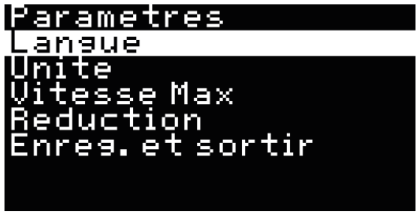
3.3 Access to advanced settings menu

This page is accessible when you keep the wheel clicked in till “Password” is displayed, and then release it.

Password entry (using the wheel): different user levels:

- Manufacturer (**LINCOLN ELECTRIC**)
- Customer: 73

Then click the wheel. That provides access to the advanced settings menu:



Menu in English (EN) or French (FR) depending on setting:

Select the required setting using the wheel, and then click to access the selection,
Select the value via the wheel and then click to confirm the selection by going back to the menu page,
Once completed, click on Save and exit to go back to the main view of the interface.

- **Language:**

Fr = 0 and En = 1

- **Unit:**

Unit: Cm = 0 and Inch = 1

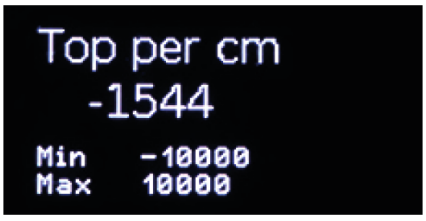
- **Max speed (cm/min):**

Max speed (in cm/min)(Speed corresponding to the not-welding speed):
Increment: 1 and Min: 1

Version	Maximum speed
WELDYCAR Ø 75 mm	Max: 200 (if CM/MIN)/80 (if INCH/MIN)
WELDYCAR Ø 100 mm	Max: 266 (if CM/MIN)/104 (if INCH/MIN)
WELDYRAIL 2.0	Max: 180 (if CM/MIN)/70 (if INCH/MIN)

- **Reduction:**

Increment: 1
Min: -10,000
Max: 10,000



Carriage reduction value correspondence table.

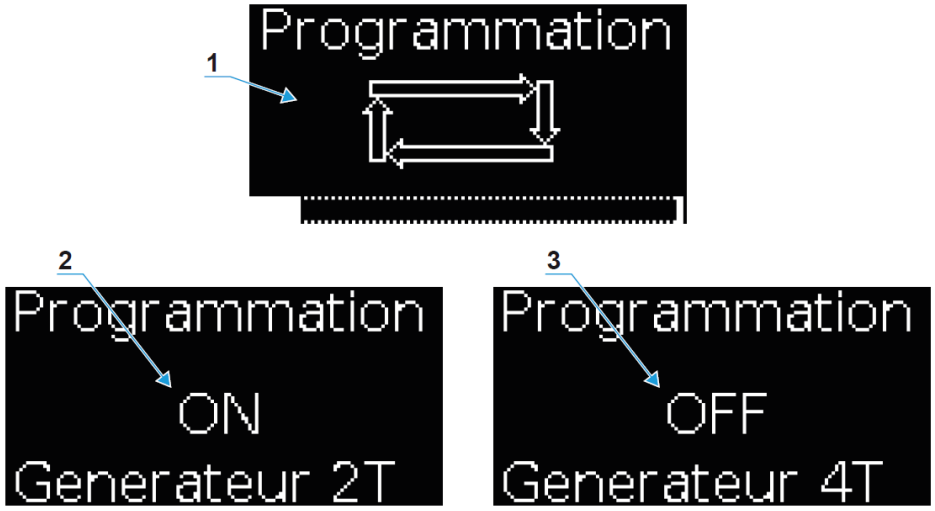
Version	“Point per cm”
WELDYCAR Ø 75 mm	1398
WELDYCAR Ø 100 mm	1048
WELDYRAIL 2.0	-1544

If this setting is changed, the permissible maximum speed must also be changed

- **Save and exit:**

3.4 Programming

3 seconds



When you press the wheel, you reach the Programming page (Ref. 1). Clicking the wheel enables you select the type of programming:

- Programming On (**Ref. 2**)
- Programming Off (**Ref. 3**)

To move from one to the other, just turn the wheel. The confirm by clicking on the wheel.

3.5 Programmable mode enabled, On [P]

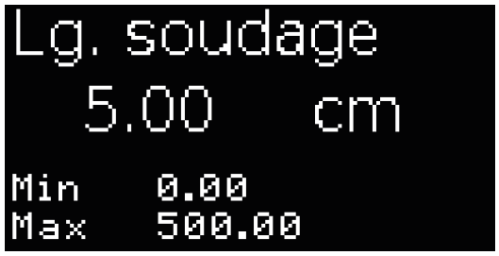
When the Programming On mode is selected, turning the wheel enables you to navigate through the different possibilities of settings:

- **Welding control delay before carriage movement during the defined period:**

Click on the icon to modify the following settings:

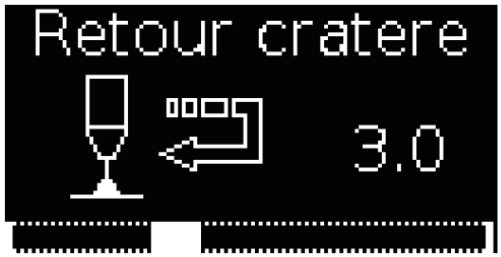
- Pre-welding delay (in seconds): 3.0
  Increment: 0.1
  Min.: 0.1
  Max.: 3.0

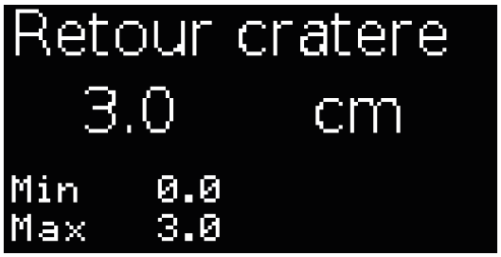
- **Weld length (weld length at a speed pre-set on the main screen):**



Click on the icon to modify the following settings:
- Weld length (in cm or inches depending on the setting): 5.00
  Increment: 0.01/0.1/1 (depending on pre-set parameter)
  Min.: 0.00
  Max.: 500.00

- **Crater return at the end of the weld length, the carriage goes back by the set value:**



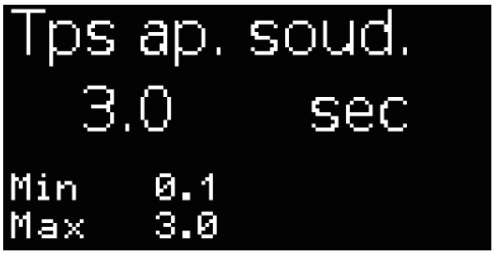


Click on the icon to modify the following settings:
- Crater return (in cm or inches depending on the setting): 3.0
  Increment: 0.1
  Min.: 0.0
  Max.: 3.0

- **Crater return arc (enabling welding control during a crater return):**

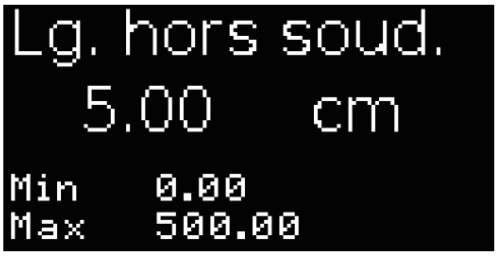
Click on the icon to modify the following settings:
  ON = 1: the trigger relay output is active during crater return.
  OFF = 0: the trigger relay output is inactive during crater return.

- **Welding control delay with continued carriage movement up to the end of the defined period:**



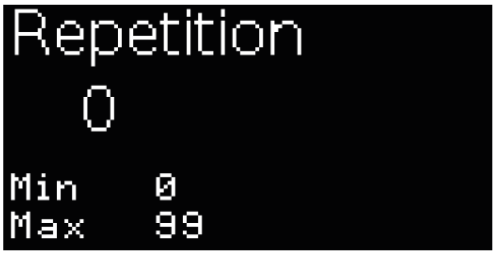
Click on the icon to modify the following settings:
- Post-welding delay (in seconds): 3.0
  Increment: 0.1
  Min.: 0.1
  Max.: 3.0

- **Non-welding length (movement without welding at max. speed):**



Click on the icon to modify the following settings:
- Non-welding length (in cm or inches depending on the setting): 5.00
  Increment: 0.01/0.1/1 (depending on pre-set parameter)
  Min.: 0.00
  Max.: 500.00

- **Repetition (Number of repetitions of programmed cycle (welding/non welding)):**



Click on the icon to modify the following settings:
- Repetition
  Increment: 1
  Min.: 0
  Max.: 99

- **Digit:**

Click on the icon to modify the following settings:
- Digit

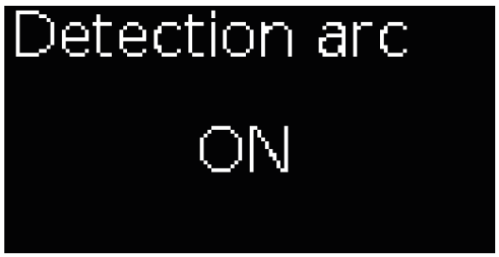
- **Exit:**

Clicking on this icon takes you back to the main view.

3.6 Programmable mode disabled, Off [ ] or [P]

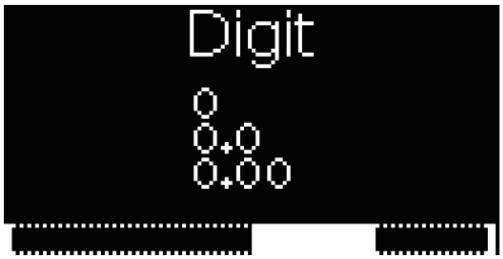
When the Programming Off mode is selected, turning the wheel enables you to navigate through the different possibilities of settings:

- **Arc sensing:**



Click on the icon to modify the following settings:
ON = [A]: Automatic start enabled (via arc sensor).
OFF = [ ]: Programmable mode disabled/automatic start disabled.

- **Digit:**



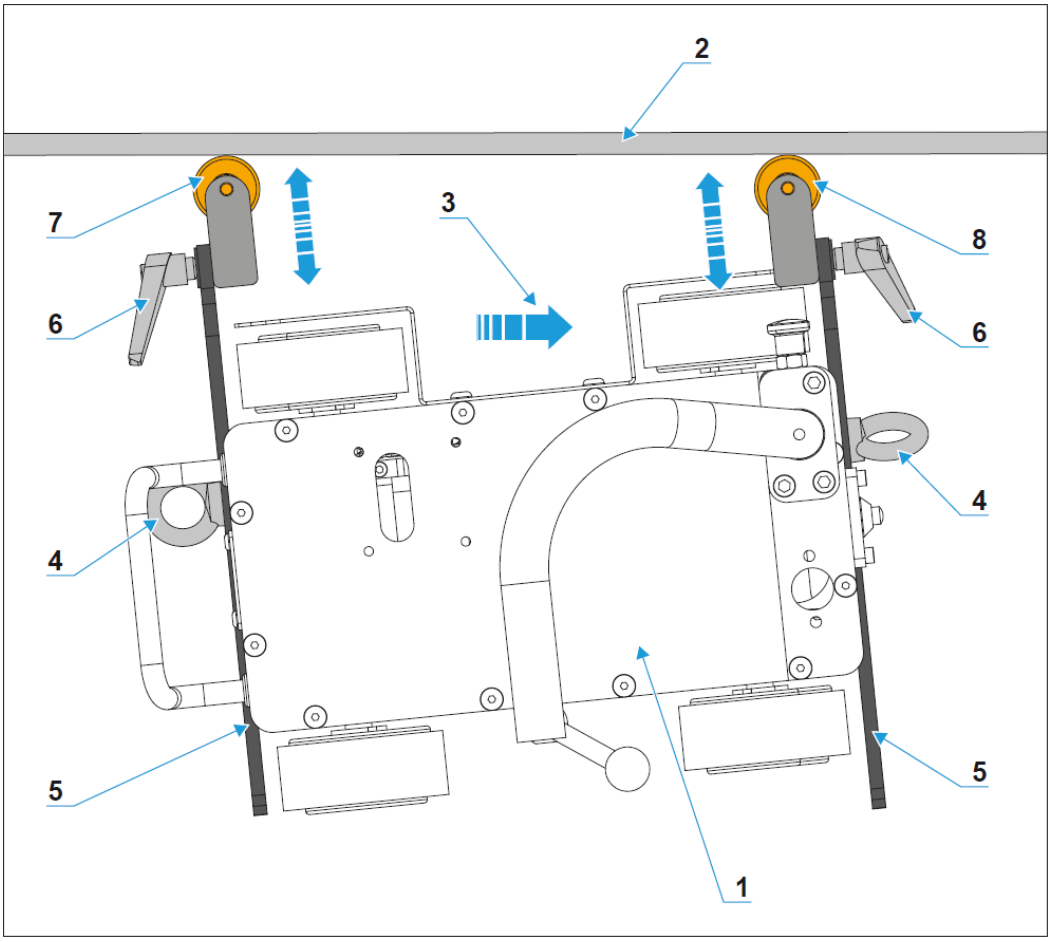
Click on the icon to modify the following settings:
- Digit

- **Exit:**

Clicking on this icon takes you back to the main view.

1 - Putting in place

1.1 Crabbing principle



IMPORTANT!
For vertical or horizontal vertical applications, the following safety systems must be added:
- A balancer fastened above the working area and joined to the carriage carrying handle

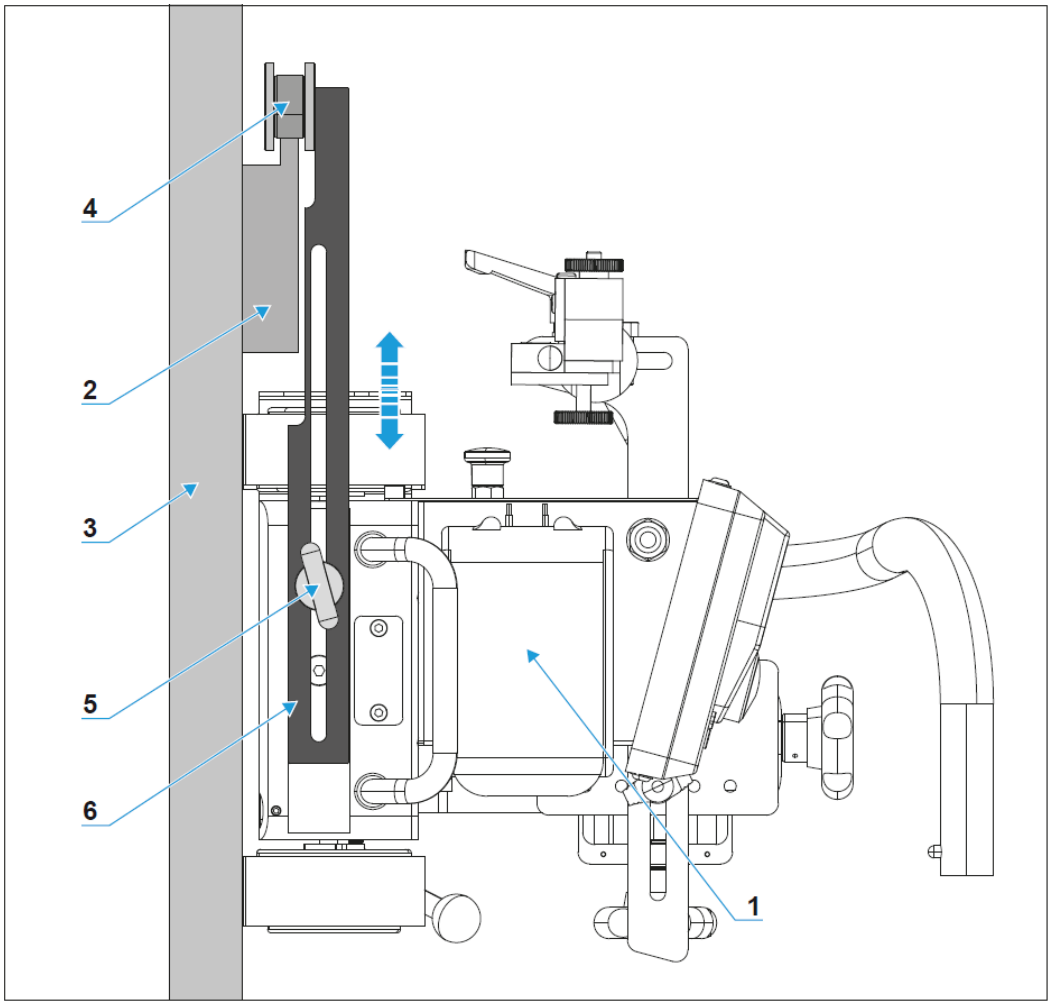
To access equipment at heights, the user must use accessing means in accordance with the regulations, such as a safe mobile gangway, an aerial lift etc.".

The machine (**Ref. 1**) rolls on a plate and moves along a direction (**Ref. 3**) by pressing its two copper rollers (**Ref. 7** and **8**):
- either directly on the stiffener to weld for angle welds.
- or along a profile fixed parallel to the joint to weld.

To adjust the position of the support rollers:
- unscrew the securing rings (**Ref. 4**) to release the guides (**Ref. 5**). Put the guides in position and lock them by screwing the securing rings (**Ref. 4**).
- unscrew the handles (**Ref. 6**) to turn the support rollers (**Ref. 7** and **8**) perpendicular to the support surface (**Ref. 2**). Lock them once in position by screwing the handles (**Ref. 6**).

The crabbing effect for guiding is obtained by adjusting the front support roller (**Ref. 8**) so that it is set back in relation to the rear roller (**Ref. 7**).

1.2 Rail guiding principle



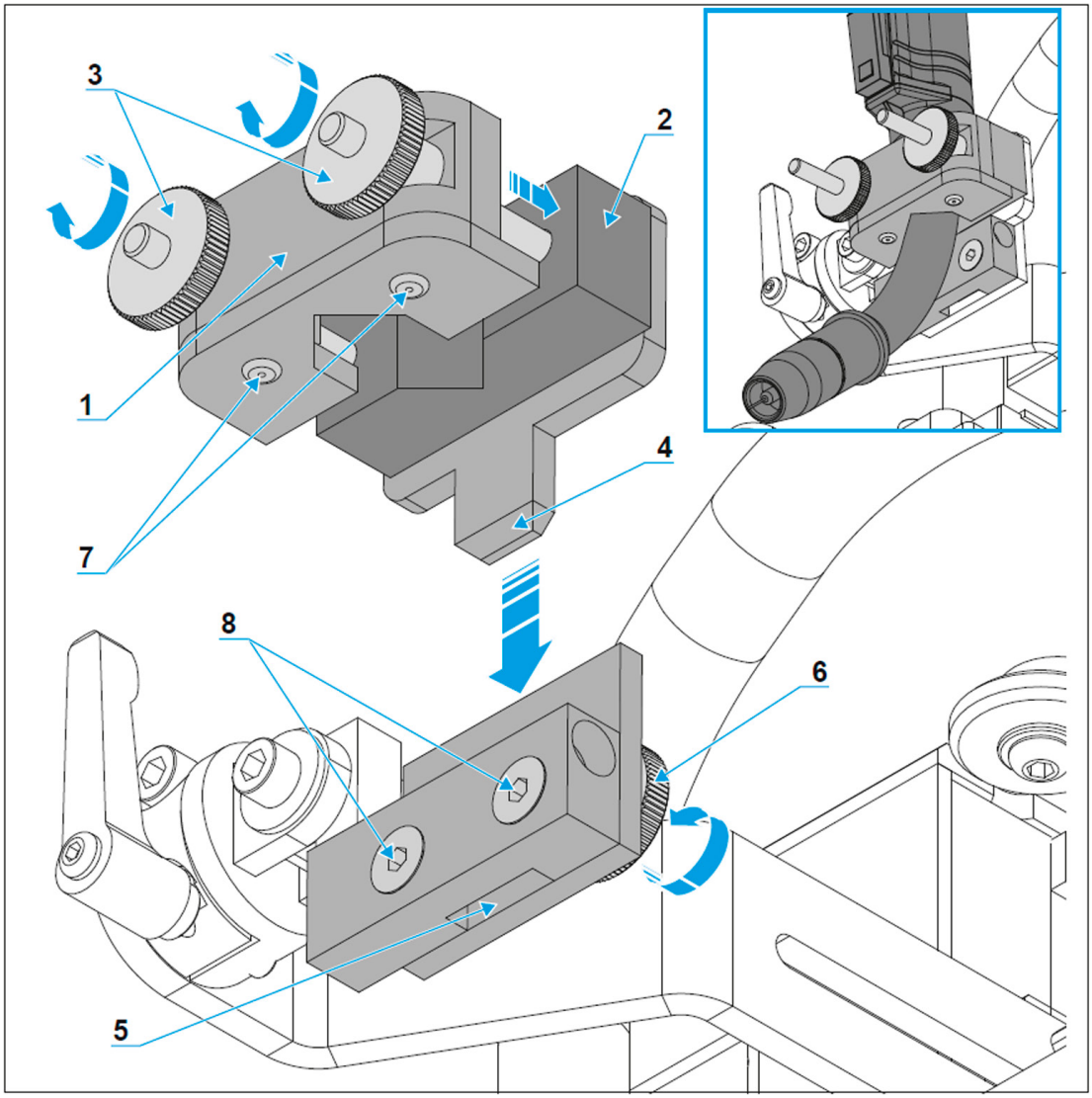
The carriage (**Ref. 1**) rolls suspended by the magnetic rail (**Ref. 2**) fixed to the vertical plate (**Ref. 3**).

In the uphill vertical, overhead and horizontal vertical positions, it is absolutely necessary to secure the carriage with one of the two securing rings (**Ref. 5**) to prevent the machine falling.

To adjust the position of the two special rollers (**Ref. 4**):

- Unscrew the securing rings (**Ref. 5**) to release the guides (**Ref. 6**).
- Put the guides in position and lock them by screwing the securing rings (**Ref. 5**).

NB: The magnetic rail (**Ref. 2**) and the special arms with rollers (**Ref. 4**) are available as an option.

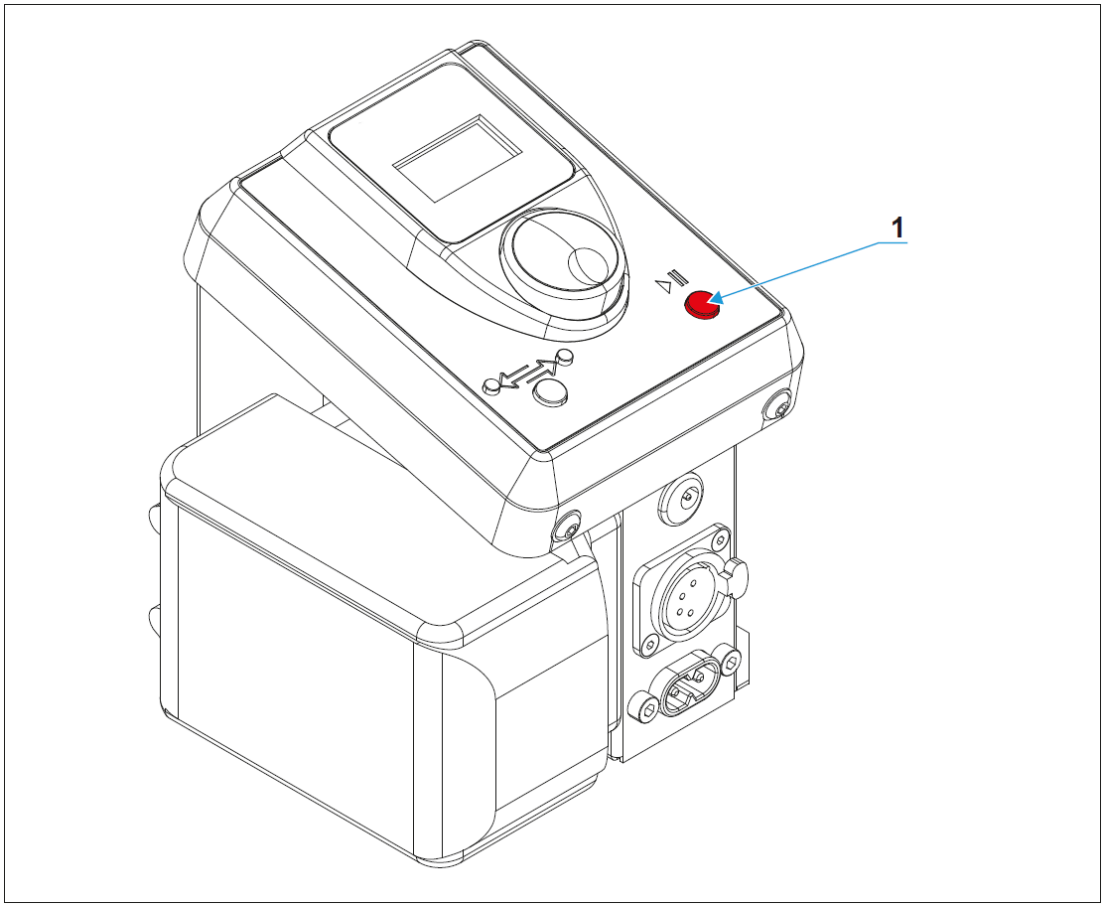


- Place the torch gooseneck between the two jaws (**Ref. 1**) and (**Ref. 2**).
- Screw the two knurled nuts (**Ref. 3**) to clamp the tool between the jaws.
- Insert the torch clamp (**Ref. 4**) in the holder (**Ref. 5**).
- A quick attachment system (**Ref. 6**) allows you to easily lock/detach the torch clamp (**Ref. 4**) to/from the holder (**Ref. 5**).

The jaw (**Ref. 1**) must be turned down in order to form a steel bridge that loops a magnetic field for detection with the arc sensor. To do so, the two stops (**Ref. 7**) of the jaw (**Ref. 1**) must be turned towards the two screws (**Ref. 8**) of the holder (**Ref. 5**).

There are different torch holder models: standard or for extraction, hyperfill or innershield torch.

IMPORTANT! While assembling the torch, make sure that the torch bundle does not interfere with the parts around the weld area.
As an option, we supply a bundle holder post fastened to the carriage.



3.1 Starting the carriage

- Installation of the battery or optional external power supply.
- Press (for 1 sec) the start button (**Ref. 1**) to start up the machine. The screen will go on.

3.2 Shutting down the carriage

- Press (for 3 sec) the start button (**Ref. 1**) to shut down the machine.
- The screen will go off.

1 - Putting the carriage into service

- Place the mechanical Y and Z slides at the middle of the travel range.

By default, the carriage offers magnetic adherence, allowing it to be placed in all possible positions. It is absolutely necessary to move the magnetic handle before starting an operation.

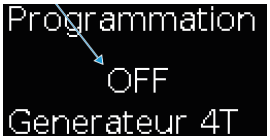
In the uphill vertical, overhead or horizontal vertical positions, it is absolutely necessary to secure the carriage with one of the two securing rings to prevent the risk of the machine falling.

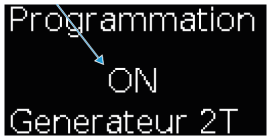
- Place the carriage at the start of the area to weld and adjust the crabbing arms for the movement direction.
- Magnetise the carriage
- Place the removable torch support on the gooseneck and then on the carriage and lock with the knurled screw

Install the battery or (optional) external power supply
Switch on the carriage by pressing the red button (long press).
The screen switches on

Adjust the welding speed.

After that there are two possibilities:





SET-UP	In this Programming Off mode, the following are required: - Welding power source in maintained mode - Connect the current sensor - Current clamp properly assembled	In this Programming On mode, the following are required: - Welding power source in momentary mode - Connect the trigger cable to the torch
PROG	No programming	You can programme: - A welding length - Intermittent welding - Pre and post welding time
ON	Press the welding torch trigger; the current sensor senses the strike and starts the carriage. The carriage moves as long as the arc is on.	Press Cycle start/stop; the carriage controls the torch and activates the arc in accordance with the set cycle programme.
	During the welding process, you can - Modify the position of the torch with the wheels of the mechanical slides. - Modify the welding speed	
OFF	Press the welding torch trigger once again; the current sensor no longer senses the arc and thus the carriage stops.	Press Cycle start/stop once again; the carriage controls the torch and stops welding in accordance with the set cycle programme.

1 - Care

Before working on the machine, it is ***MANDATORY*** to lock out all the supplies of utilities to the machine (electricity, air, gas etc.).
Locking an emergency stop button is not sufficient.

CAUTION: All work at heights (maintenance, troubleshooting etc.) must be carried out with appropriate personnel lifting equipment.

For operating instructions, adjustments, troubleshooting and spare parts, please refer to the special instructions for safe operating and maintenance.

The use of Personal Protective Equipment (PPE) is **mandatory**.

1.1 Routine maintenance

- Remove weld splatter.
- Regularly clean the outside of the carriage and adjustment parts
- Clean the holder every time the battery is inserted.

1.2 Periodic maintenance

The distance covered and the number of hours of use of the carriage can be seen from the Information page of the HMI.

After every 100 hours of use:

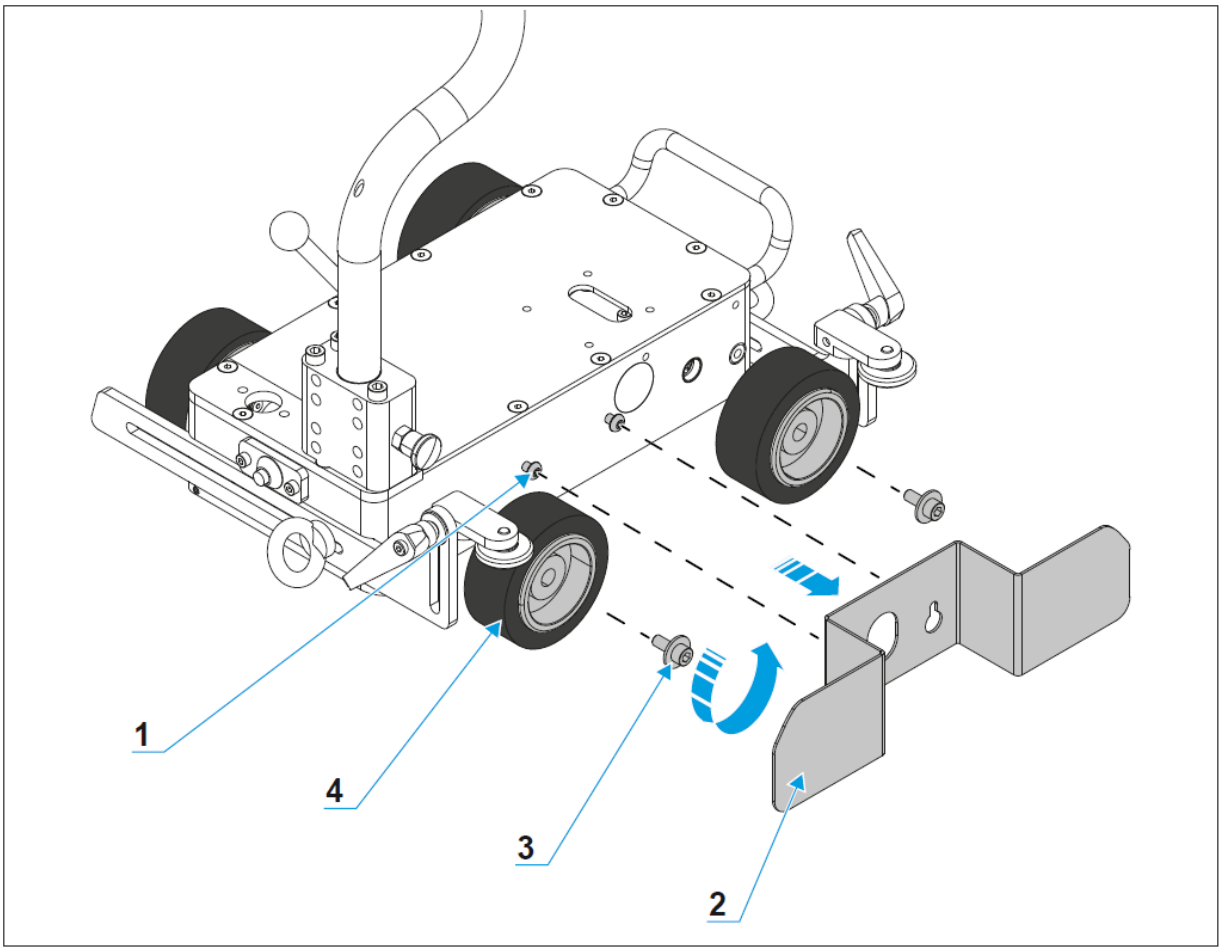
- Clean the carriage and adjustment parts:
  - clean the drive wheels.
  - clean the lower casing of the mobile base.
  - clean the support rollers.

After every 500 hours of use:

- clean and lubricate the wheel drive mechanism.
- adjust the drive chain tension.
- check the wear and tear of moving parts and replace any parts with excessive play.
- carefully blow on the printed circuit boards with dry air and check the connections.
- check the attraction force of the magnet.

The recommended lubricant is high-performance grease for moving metal/metal combinations, type Molykote Br2 Plus.

1.3 Replacing the wheels



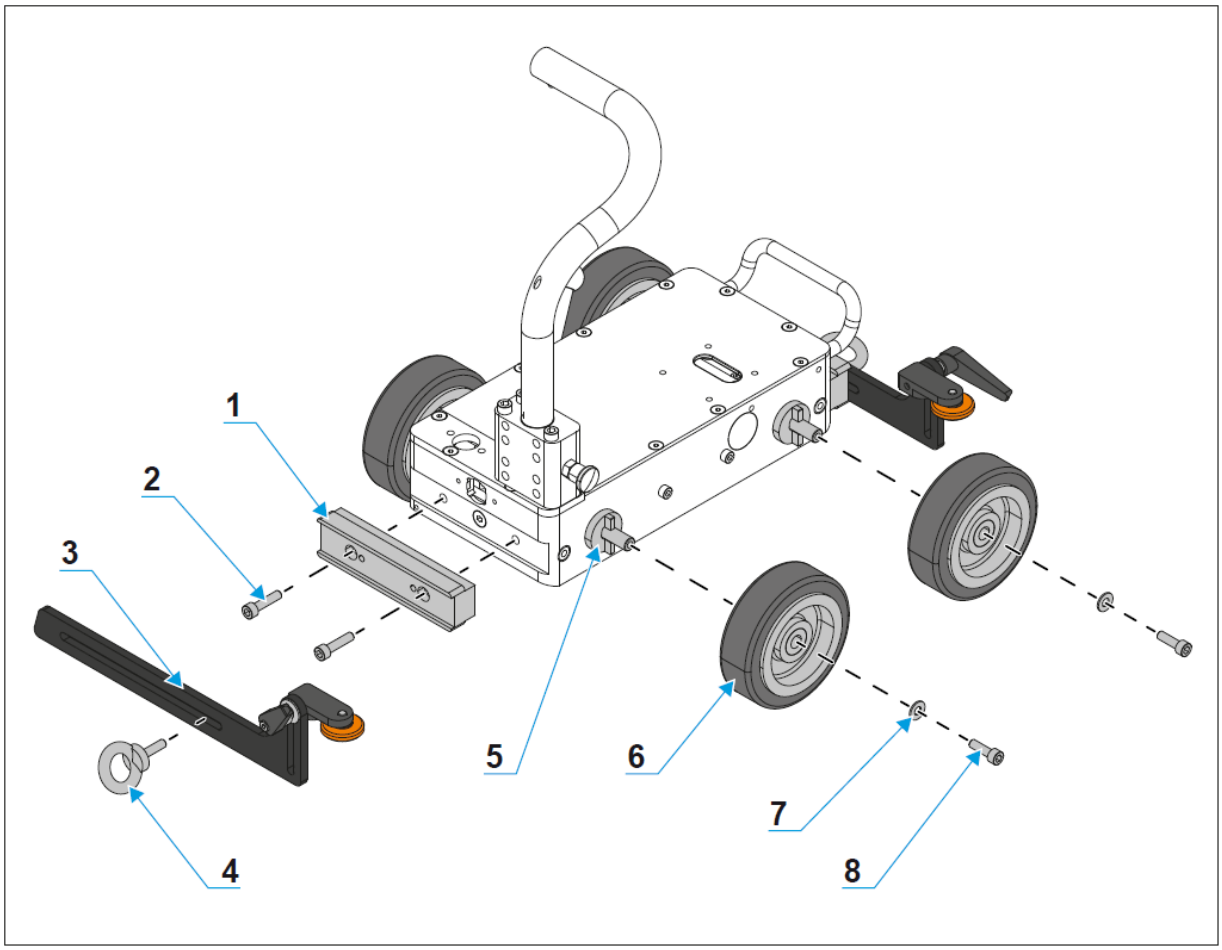
The carriage has a guard plate on the side near the torch to protect the wheels from weld splatter.

- Slightly unscrew the two screws (**Ref. 1**) and remove the guard plate (**Ref. 2**) to access the two wheels near the torch.
- Unscrew the screws holding the wheel (**Ref. 3**) and remove the wheel (**Ref. 4**).
- Repeat the operation to remove the four wheels of the carriage.
- Reverse the procedure for reassembly.

As standard, the carriage has Ø75mm wheels but is available optionally with Ø100mm wheels.

For Ø100mm wheels: the magnetic attraction is lost. Working in the overhead, horizontal vertical and vertical positions is not possible. This configuration makes it necessary to purchase a special crabbing arm.

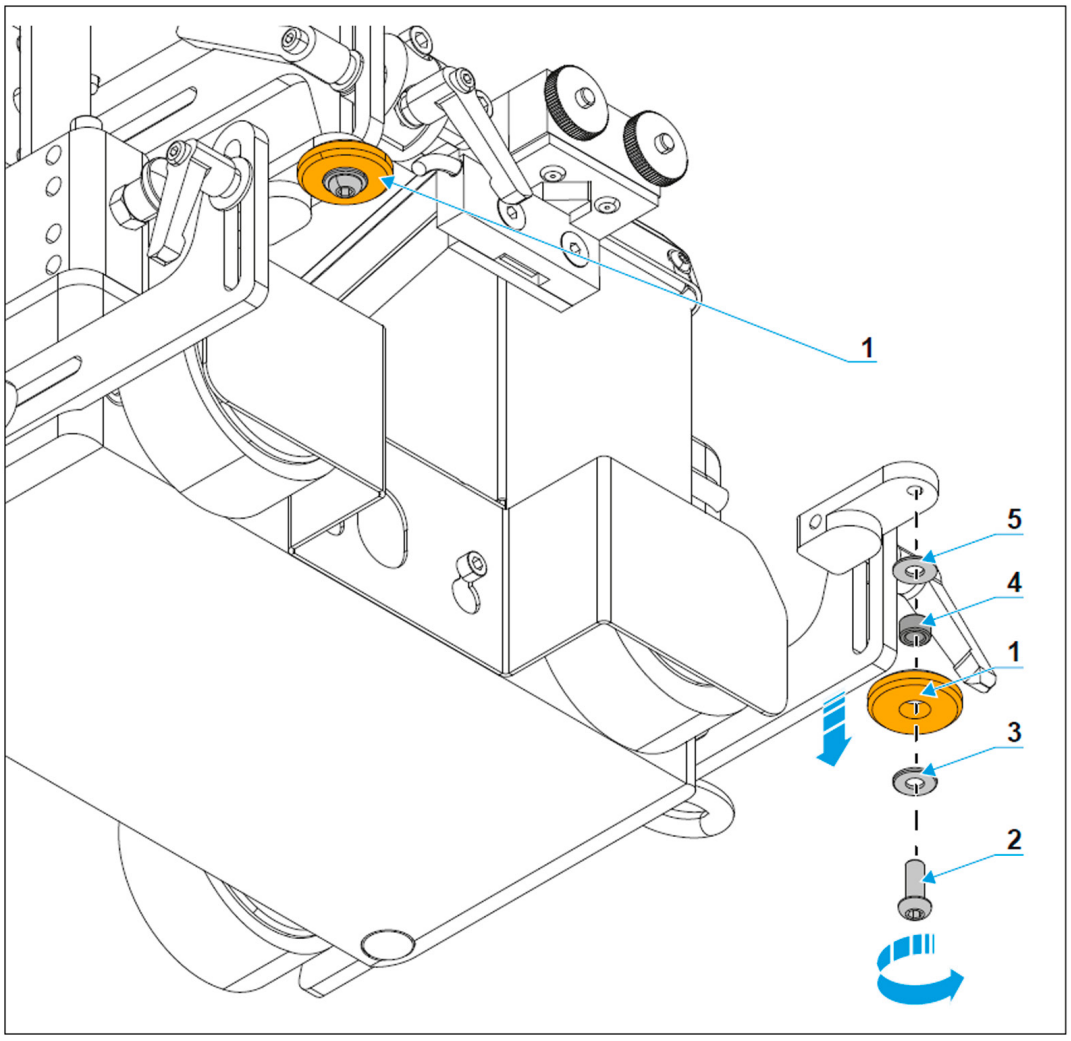
If the wheel diameter is changed, the reduction ratio must be changed, along with the maximum permissible speed.



Assembling 100mm diameter wheels requires a kit made up of 2 blocks (**Ref. 1**), 4 spacers (**Ref. 5**) and 4 100mm wheels (**Ref. 6**).

- Unscrew the two rings (**Ref. 4**) to remove the two arms (**Ref. 3**).
- Place the block (**Ref. 1**) and screw it to the carriage with the two screws (**Ref. 2**).
- Place the arm (**Ref. 3**) and fasten it with the ring (**Ref. 4**).
- Repeat these two operations on the other side.
- Place the spacer (**Ref. 5**) and lock it in place with the pin.
- Put in place the wheel (**Ref. 6**), and then the washer (**Ref. 7**) and screw (**Ref. 8**).
- Repeat the operation for the four wheels of the carriage.

1.4 Replacing the guide rollers



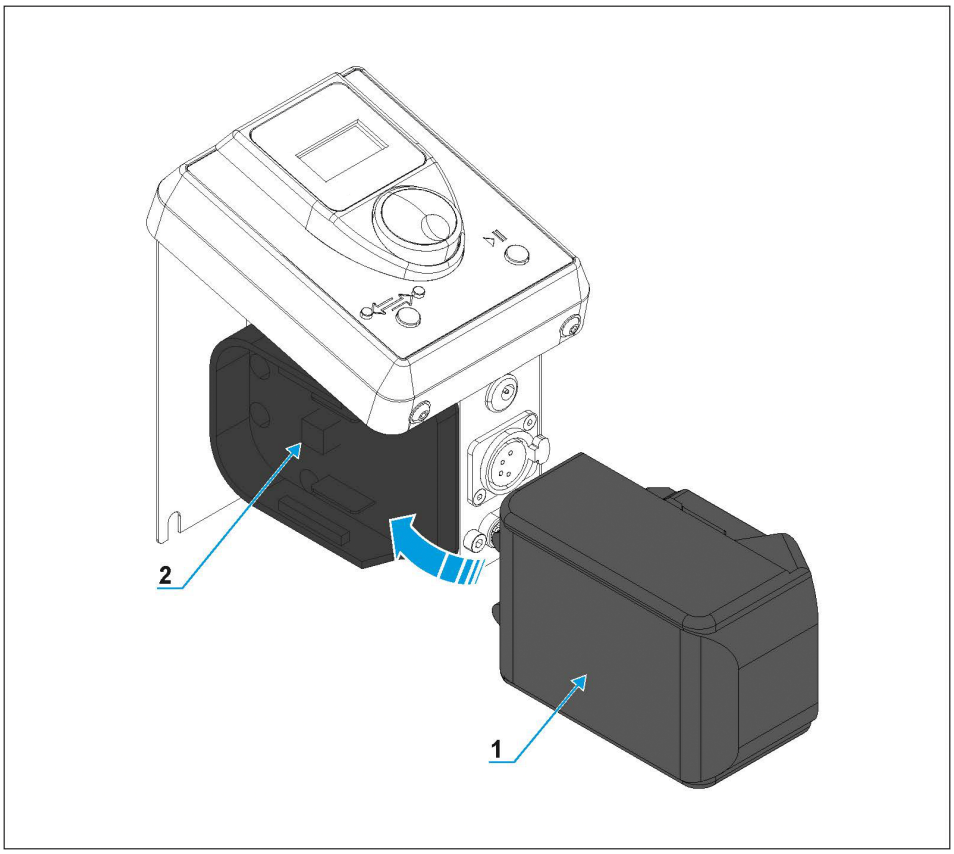
The carriage has two rollers (**Ref. 1**) which enable it to be supported by an object to follow a definite path.

For each roller (**Ref. 1**):

- Unscrew the screw (**Ref. 2**) and successively remove the following components:
  - » screw (**Ref. 2**),
  - » washer (**Ref. 3**),
  - » roller (**Ref. 1**),
  - » spacer (**Ref. 4**),
  - » washer (**Ref. 5**).

- Reverse the procedure for reassembly.

1.5 Replacing the battery



The carriage is designed to operate with an 18V lithium ion battery or an optional external power supply.

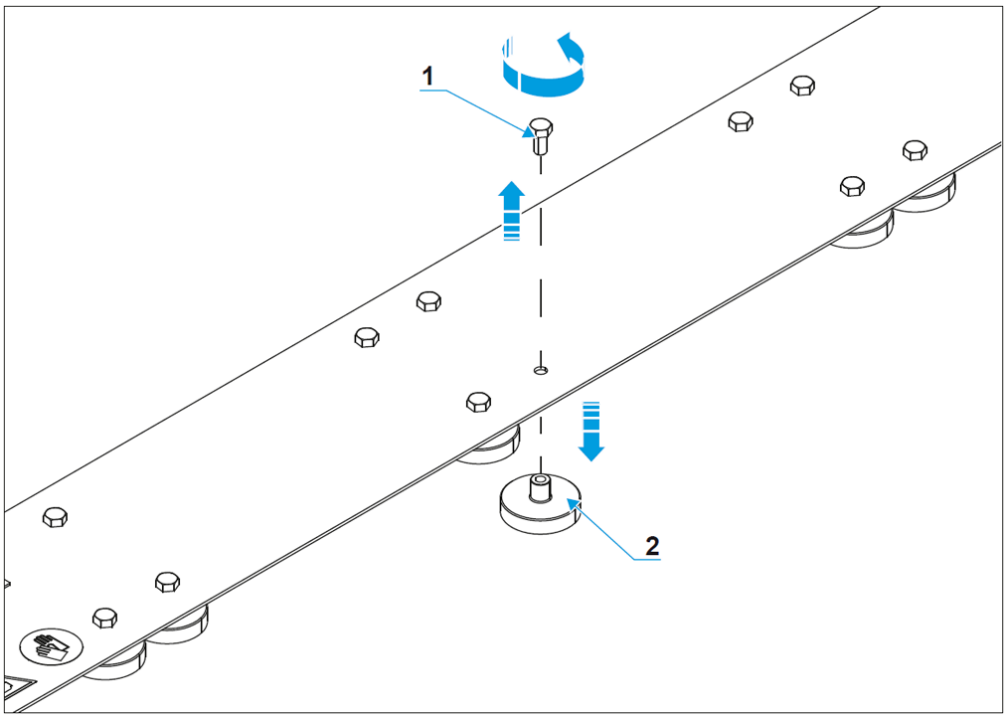
Battery replacement procedure:

- Release the battery (**Ref. 1**) by pressing the unlocking button before taking it off its holder (**Ref. 2**).

It is important to clean the holder thoroughly using a blower or a clean cloth before inserting a battery. Risk of malfunction.

- Insert the battery (**Ref. 1**) in its holder (**Ref 2**) up to the holding clips.

1.6 Replacing the magnets

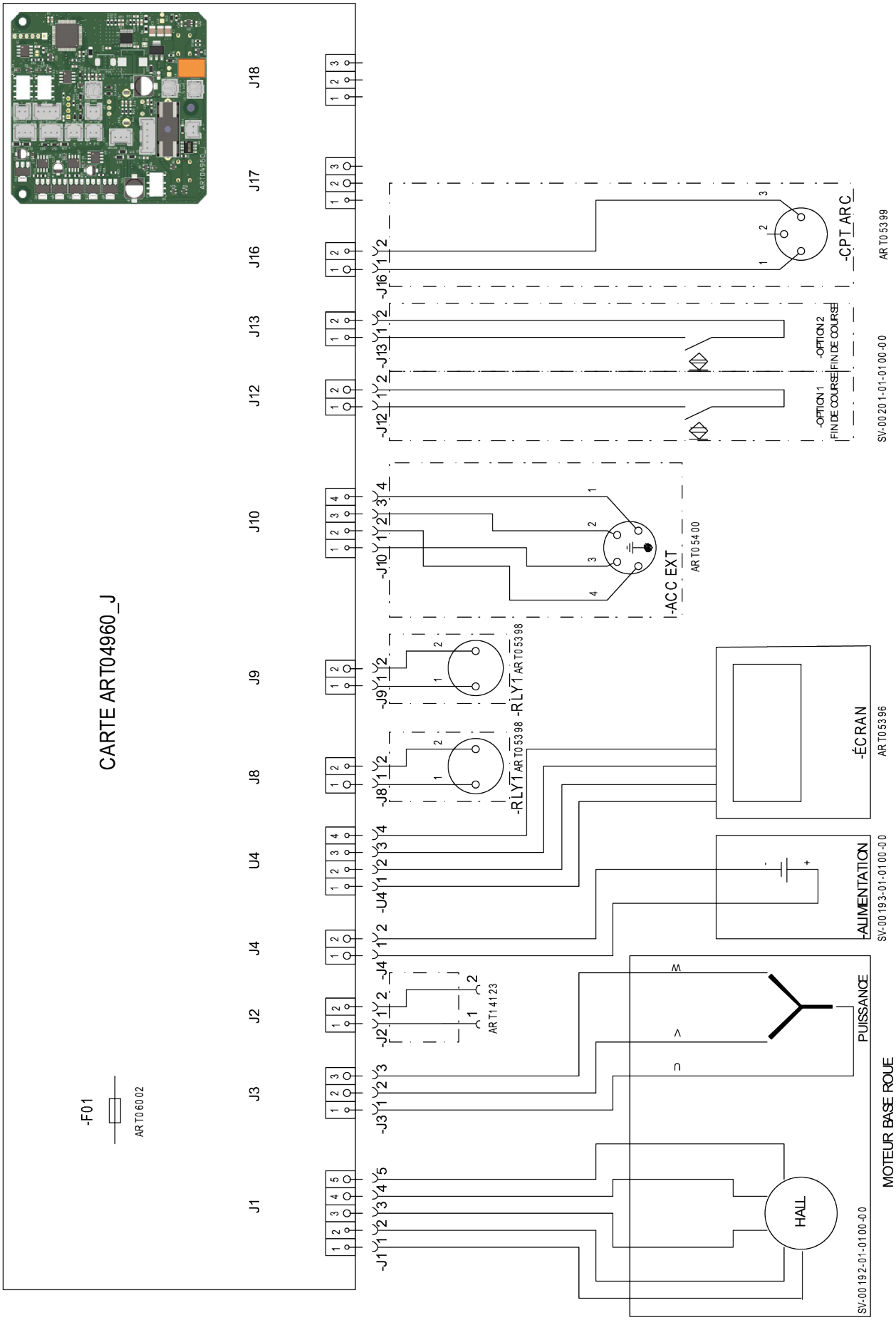


CAUTION!
Wait for the rail to cool down sufficiently before handling it (possible risk of burns).

Magnet replacement procedure:

- Demagnetise the rail of all parts and metal dust.
- Unscrew the screw (**Ref 1**) to remove the magnet (**Ref. 2**).
- Replace the magnet (**Ref. 2**) with a standard or HT magnet.
- Screw the screw (**Ref. 1**) to fasten the magnet (**Ref. 2**).
- Repeat the operation if several magnets need replacement.

Possible symptom	Probable causes	Possible remedies
Low battery	The battery is discharged.	Recharge or replace the **Weldy-Rail** battery.
The arc sensor no longer works.	The tool holder jaw is assembled in the wrong direction.	Check the assembly of the tool holder.


CARTE ART04960_J
-F01
ART06002
J1
J3
J2
J4
U4
J8
J9
J10
J12
J13
J16
J17
J18
-J1
-J3
-J2
-J4
-U4
-J8
-J9
-J10
-J12
-J13
-J16
-RLY1 ART05398
-RLY1 ART05398
-ACC EXT
ART05400
-OPTION 1
FIN DE COURSE
-OPTION 2
FIN DE COURSE
-CPT ARC
ART05399
SV-00201-01-0100-00
-ÉCRAN
ART05396
-ALIMENTATION
SV-00193-01-0100-00
PUISSANCE
HALL
MOTEUR BASE ROUE
SV-00192-01-0100-00

Ordering procedure:

Almost all the parts of a machine or installation are referenced in the photographs and sketches.

The descriptive tables contain three types of item:

- items normally held in stock: ✔
- items not held in stock: ✘
- articles upon request: no reference

(For such parts, please complete the list of parts page and send us a copy. In the Order column, state the number of parts required and indicate the type and number of your equipment.)

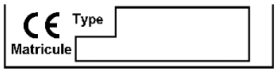
For items referenced in the photographs or sketches but not included in the tables, please send us a copy of the relevant page and highlight the relevant reference.

Example:

✔	normally held in stock.
✘	not in stock
	upon request.

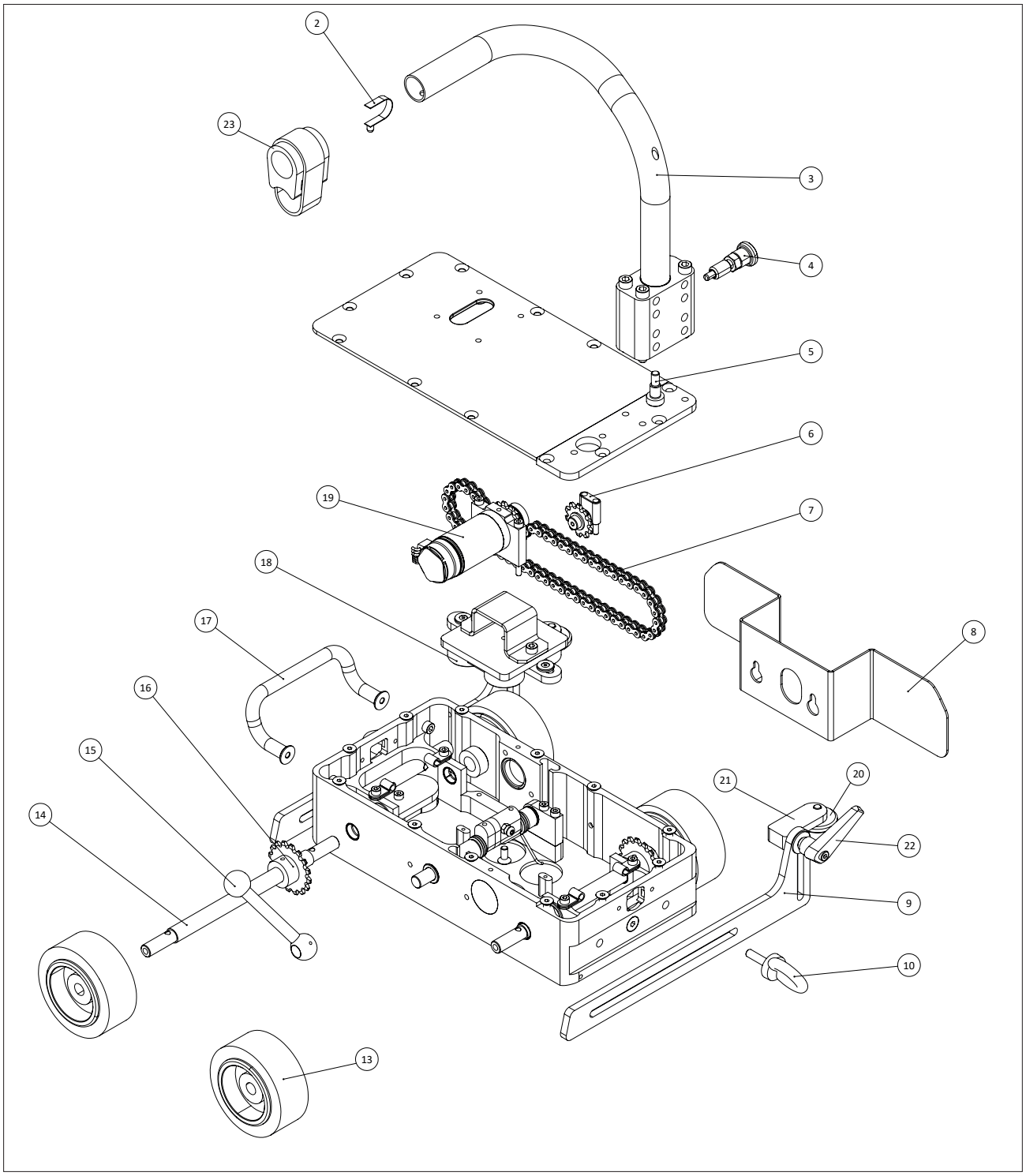
Ref.	Part no	Stock	Order	Description
E1	W000XXXXXX	✔		Machine interface board
G2	W000XXXXXX	✘		Flow meter
A3	P9357XXXX			Printed front plates

- While ordering parts, please indicate the quantity and note the number of your machine in the box above.



TYPE:
Number:

4.1 Carriage on rail



List of parts:

Ref.	Quantity	Description
2	1	Handle spring clip
3	1	Complete tubular handle
4	1	M10 indexing pin
5	1	Washer head screw, M6x10 N12 ISO7379
6	1	Tensioning pinion assembly
7	1	Chain, 05B1 31 links + AR

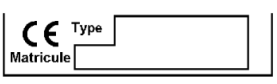
8	1	Wheel guard plate Ø75
9	2	Standard arm, 250 mm
10	2	Lifting eye, M6 long
13	4	Wheel, Ø75
14	2	Wheel shaft
15	1	Magnet deactivating handle
16	2	Machined pinion, Z16
17	1	Bent black clamp handle
18	4	Magnet, Ø31 Neodyme G45
19	1	Motor system assembly
20	2	Complete roller
21	2	Roller support
22	2	Indexable lever
23	1	Bundle support for handle with hook-and-loop tape, 20 mm

Order form:

✔	normally held in stock.
✘	not in stock
	upon request.

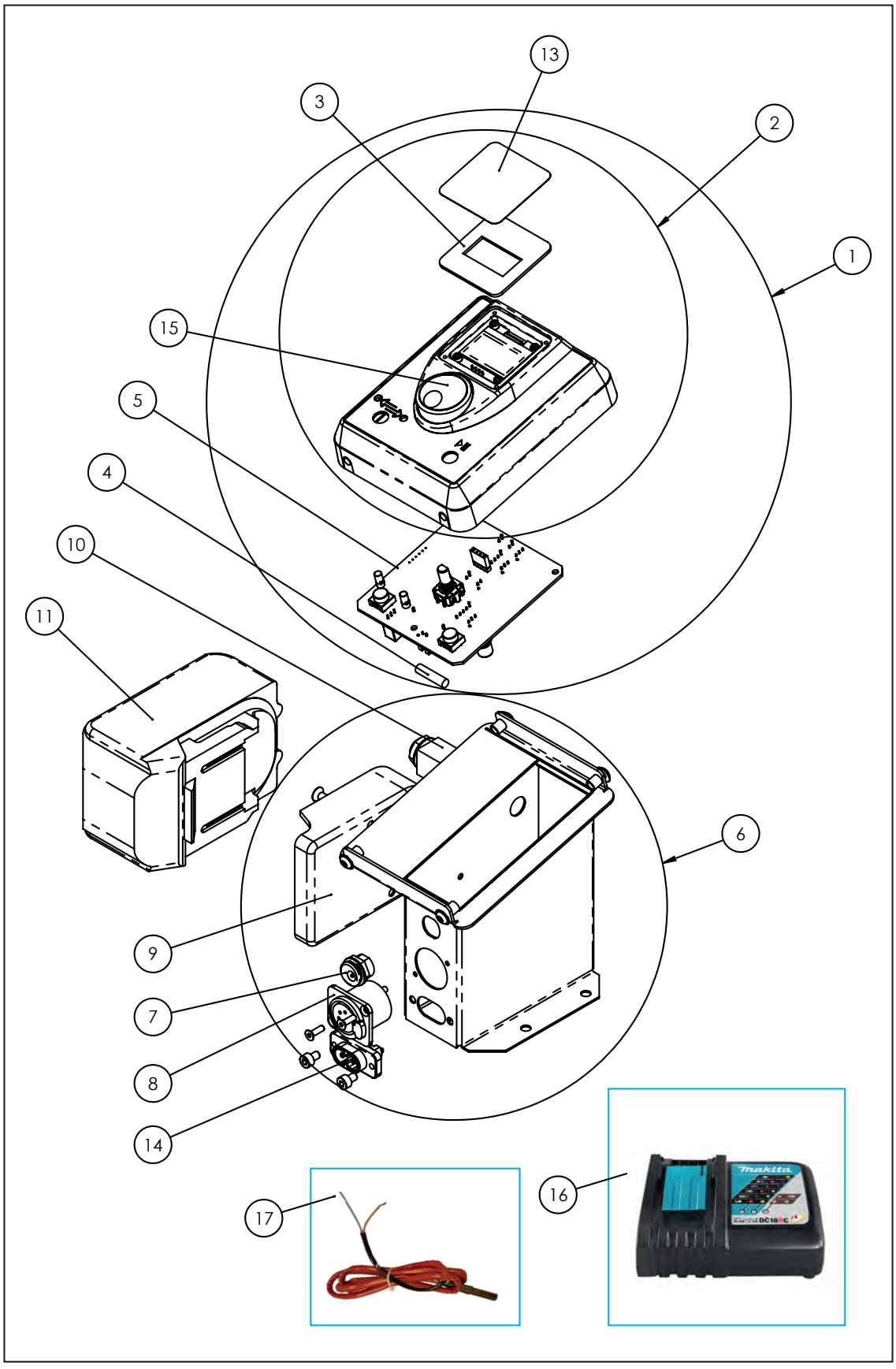
Ref.	Part no	Stock	Order	Description
2 (x5)	AS-PS-T0550203			Spring clip
2+3+4+5	AS-PS-T0550204			Complete handle
4	AS-PS-T0550205			Indexing pin
6	AS-PS-T0550206			Tensioning pinion
7	AS-PS-T0550207			Chain
8	AS-PS-T0550208			Wheel guard plate
9	Z91300122			Crabbing arm
10 (x2)	Z91300129			Lifting eyes
13	Z91300120			Wheel, Ø 75mm
14	AS-PS-T0550209			Wheel shaft
15	W000051009			Magnet activating handle
16	AS-PS-T0550210			Z16 driving pinion
17	W000051009			Handle
18	AS-PS-T0550212			Magnets, Ø31
19	AS-PS-T0550213			Motor system assembly
20	W000401738			Support roller
21 (x2)	AS-PS-T0550214			Roller support
22 (x2)	Z91300127			Indexable lever
23	AS-PS-T0550215			Bundle support for handle

- While ordering parts, please indicate the quantity and note the number of your machine in the box above.



TYPE:
Number:

4.2 Control unit



List of parts:

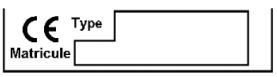
Ref.	Quantity	Description
1	1	Original interface
2	1	Original interface without board or panel potentiometer button
3	1	Screen protection window
4	1	Fuse cartridge, 5A 5x20
5	1	Original control board
6	1	Original control unit
7	1	Arc sensor connector
8	1	External accessory connector control unit bundle
9	1	Battery holder
10	1	Jack connector, 6.35mm
11	1	Battery, 18V 5.0 Ah
16	1	Battery charger
13	1	Window protection film
	1	Matte window protection film
14	1	Trigger connector bundle
15	1	Panel potentiometer button

Order form:

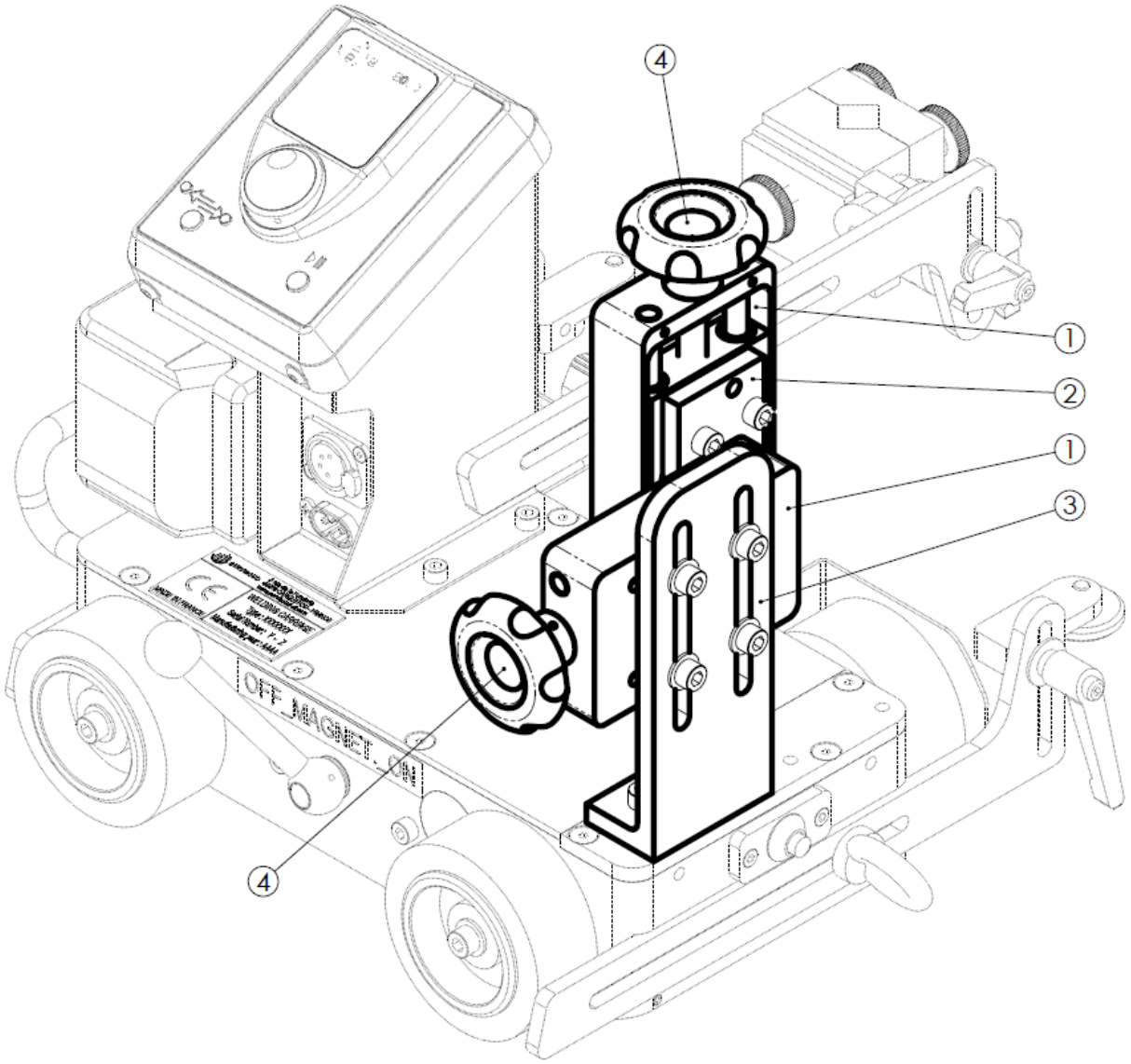
✔	normally held in stock.
✘	not in stock
	upon request.

Ref.	Part no	Stock	Order	Description
1	AS-PS-T0550110			Complete interface
2	AS-PS-T0550111			Panel
4 (x10)	AS-PS-T0550112			Fuse, 5x20 5A
5	AS-PS-T0550113			Control board
6	AS-PS-T0550114			Control unit with connectors
9	AS-PS-T0550115			Battery holder
11	AS-PS-T0550116			Lithium ion battery, 18V 5Ah
13 (x5)	AS-PS-T0550117			Protective film
15	AS-PS-T0550118			Potentiometer button
16	AS-PS-T0550119			Battery charger
17	W000401758			Trigger cable

- While ordering parts, please indicate the quantity and note the number of your machine in the box above.



TYPE:
Number:


4
1
2
1
3
4
OFF MAGNET

List of parts:

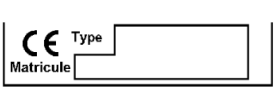
Ref.	Quantity	Description
1	2	Simple slide
2	2	Manual carriage connecting bracket
3	1	Torch holder bracket
4	2	Slide wheel, ø51

Order form:

✔	normally held in stock.
✘	not in stock
	upon request.

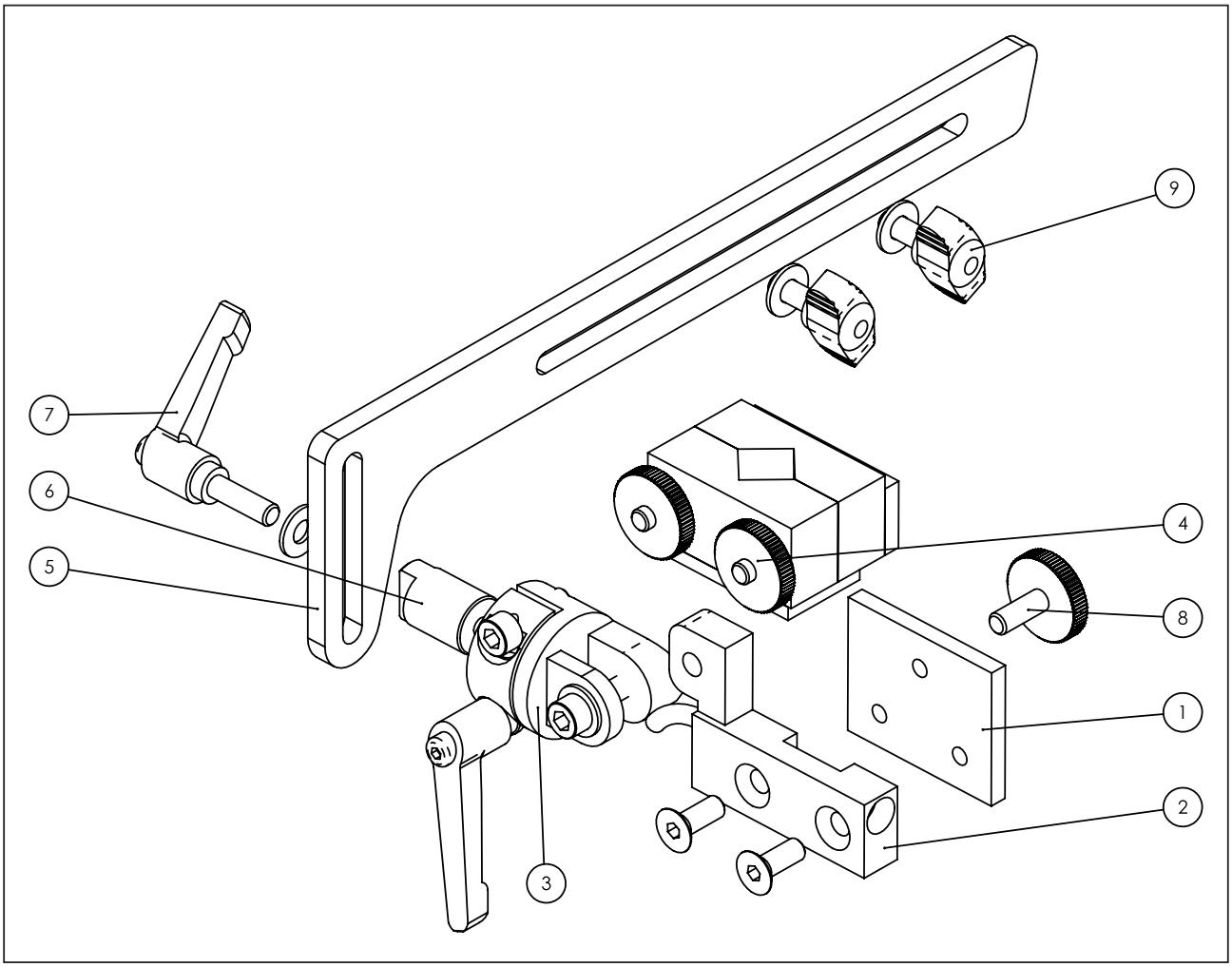
Ref.	Part no	Stock	Order	Description
1	W000401736			Complete assembled adjustment slide
4	W000401744			Slide wheel

- While ordering parts, please indicate the quantity and note the number of your machine in the box above.



TYPE:
Number:

4.4 Straight torch holder



List of parts:

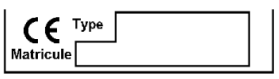
Ref.	Quantity	Description
1	1	Torch holder plate
2	1	Equipped arc sensor with long cable
3	1	Angular adjustment piece with lever
4	1	Torch holder mounted on Tee
5	1	H crabbing arm
6	1	Torch holder pin
7	1	Indexable lever, M6x20
8	2	Knurled screw, M6x16
9	2	Wing screw, M6x16
10	2	Countersunk screw, M6x16 A2 ISO 10642
11	3	Washer, ø6 A2 ISO 7093

Order form:

✔	normally held in stock.
✘	not in stock
	upon request.

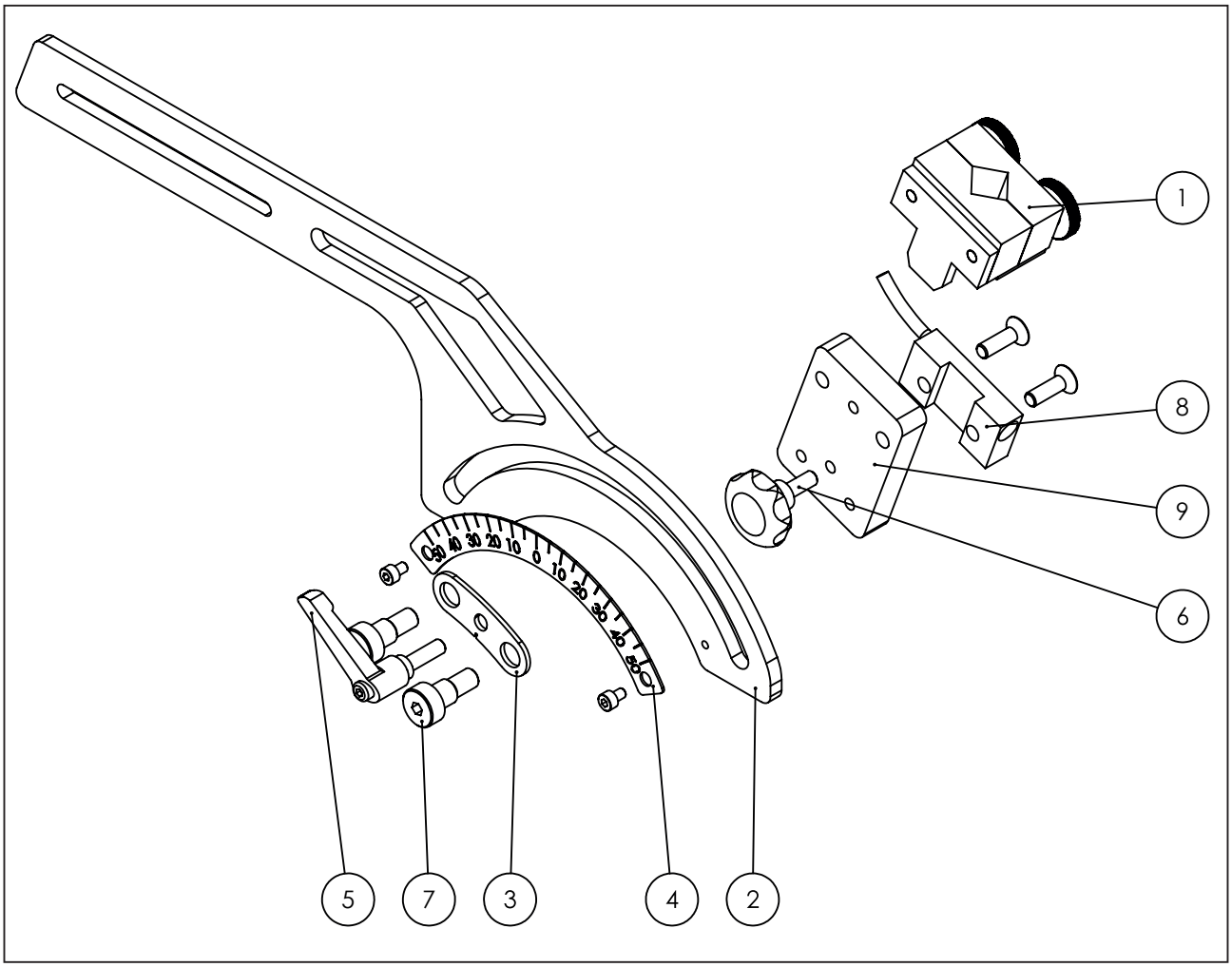
Ref.	Part no	Stock	Order	Description
2	AS-PS-T0550130			Arc sensor with long cable
3	AS-PS-T0550131			Angular adjustment piece
4	Z91300124			Complete Ertalon torch holder mounted on Tee
	AS-PS-T0550004			Extraction torch holder
	AS-PS-T0550002			Innershield torch holder
5	Z91300122			Adjustment rule
6	AS-PS-T0550132			Adjustment piece support pin
7 (x2)	Z91300127			Zamac indexable levers, 25 mm
8 (x2)	W000275073			Fastening screw for torch holder unit
9 (x2)	Z91300128			Wing screw
12	W000401740			Intermediate angular adjustment unit (without arc sensor)

- While ordering parts, please indicate the quantity and note the number of your machine in the box above.



TYPE:
Number:

4.5 Angular torch holder



List of parts:

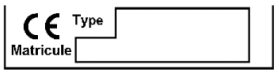
Ref.	Quantity	Description
1	1	Standard torch holder
2	1	Angular sector
3	1	Index
4	1	Angular graduation sector
5	1	Indexable lever, M6x20
6	1	Threaded rod button
7	1	Washer head screw Ø10 - length 10 - M8 st st
8	1	Equipped arc sensor
9	1	Torch/angular arm support plate

Order form:

✔	normally held in stock.
✘	not in stock
	upon request.

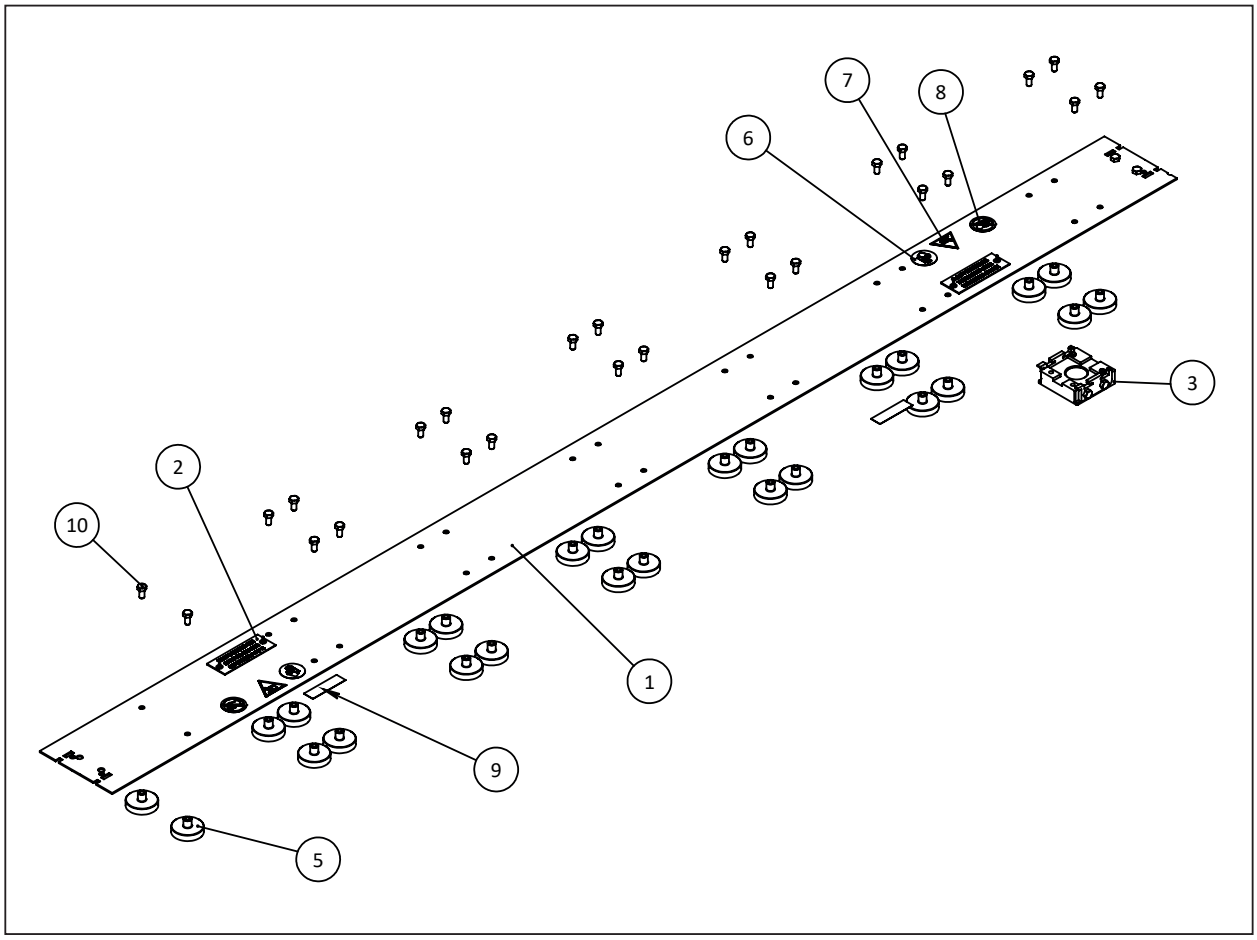
Ref.	Part no	Stock	Order	Description
	AS-PP-T0550201			Angular holder
1	Z91300124			Complete Ertalon torch holder mounted on Tee
5 (x2)	Z91300127			Indexable lever, M6x20
6 (x2)	AS-PS-T055201			Tightening screw
8	W000275067			Arc sensor

- While ordering parts, please indicate the quantity and note the number of your machine in the box above.



TYPE:
Number:

4.6 2G rail, 1500 mm



List of parts:

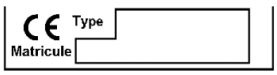
Ref.	Quantity	Description
	1	Horizontal vertical rail, 1500 mm
1	1	Rail
2	2	Information label
3	1	Fastening piece
5	26	Magnet pad
6	2	Protective gloves mandatory pictogram
7	2	Hand crushing hazard pictogram
8	2	No cardiac pacemaker pictogram
9	2	Heat-sensitive label, 60-90°C
10	28	Screw, M5x10 - Z8 - ISO4017

Order form:

✔	normally held in stock.
✘	not in stock
	upon request.

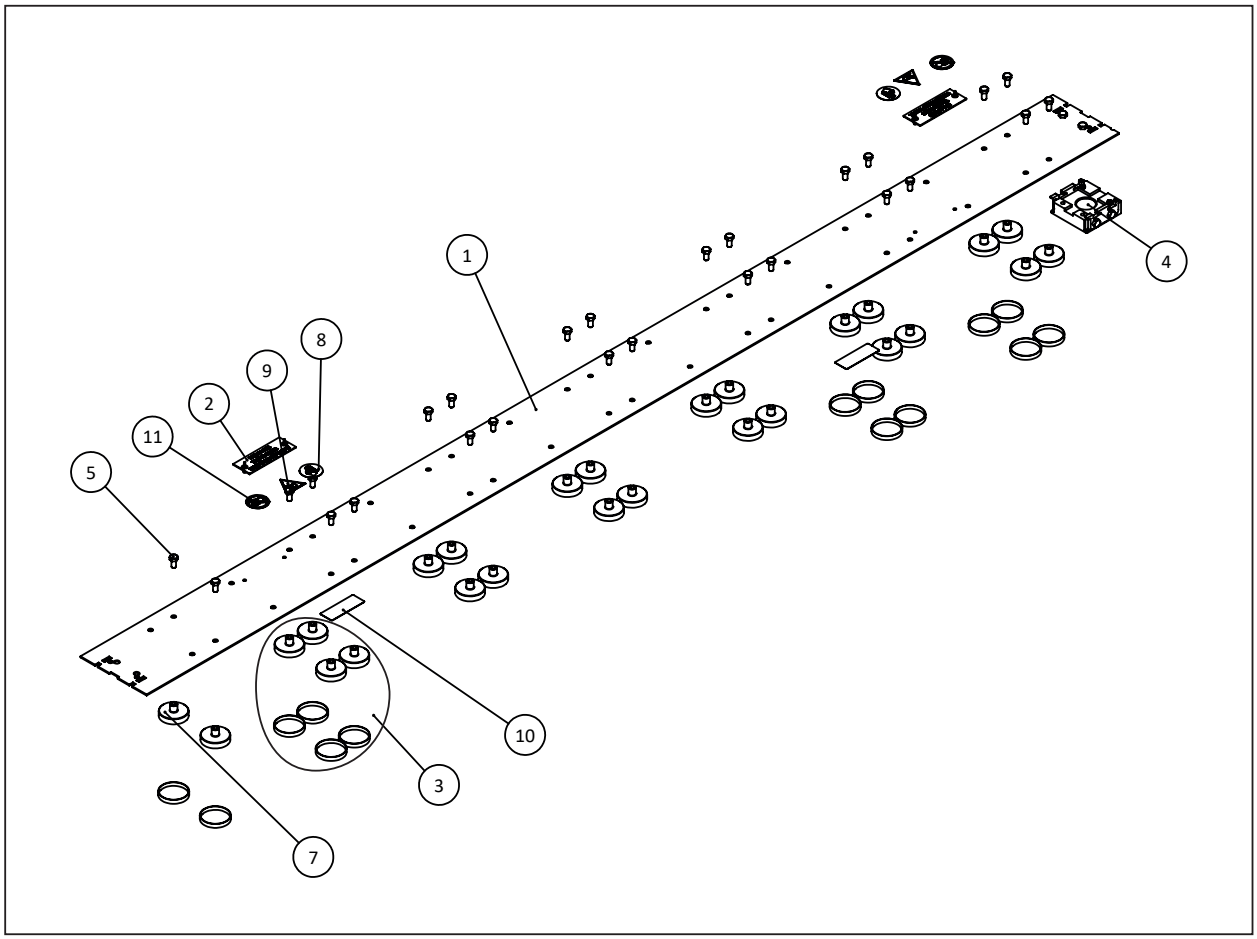
Ref.	Part no	Stock	Order	Description
	AS-PP-T0550207			2G rail, 1500 mm
3	AS-PS-T0550120			Fastening piece
5 (x4) + 10 (x4)	AS-PS-T0550121			Magnetic pads
9 (x2)	AS-PS-T0550122			Heat-sensitive labels, 60-90°C

- While ordering parts, please indicate the quantity and note the number of your machine in the box above.



TYPE:
Number:

4.7 2G HT rail, 1500 mm



List of parts:

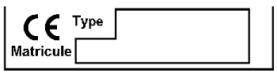
Ref.	Quantity	Description
	1	HT horizontal vertical rail, 1500 mm
1	1	Rail
2	2	Information label
3	14	Magnet cap
4	1	Fastening piece
5	28	Screw, M5x10 - Z8 - ISO4017
7	26	High temperature, ø32mm M5 tap
8	2	Protective gloves mandatory pictogram
9	2	Hand crushing hazard pictogram
10	2	Heat-sensitive label, 161-204°C
11	2	No cardiac pacemaker pictogram

Order form:

✔	normally held in stock.
✘	not in stock
	upon request.

Ref.	Part no	Stock	Order	Description
	AS-PP-T0550210			HT 2G rail, 1500 mm
4	AS-PS-T0550120			Fastening piece
7(x4) + 3(x4) + 5(x4)	AS-PS-T0550123			HT magnetic pads
10 (x2)	AS-PS-T0550124			Heat-sensitive labels, 161-204°C

- While ordering parts, please indicate the quantity and note the number of your machine in the box above.



TYPE:
Number:

PERSONAL NOTES

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