

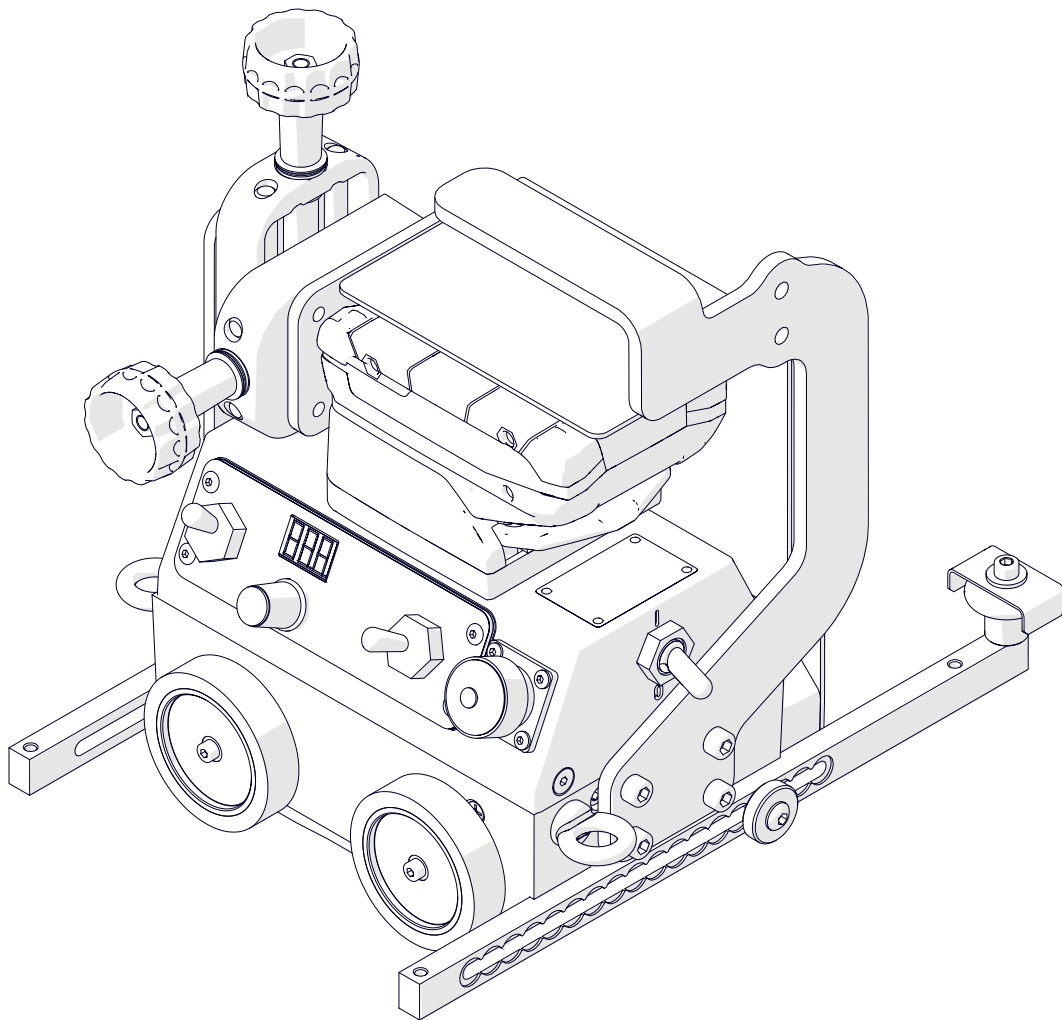


## **OPERATOR'S MANUAL**

# **GECKO BATTERY**

**WELDING CARRIAGE**

**PART #: WA-GECKO-18V**



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## **1. LIMITED WARRANTY**

Industrial Tool & Machinery Sales (hereinafter referred to as ITMS) will, within twelve (12) months from the original date of purchase, repair or replace any goods found to be defective in materials or workmanship.

This warranty is void if the item has been damaged by accident, neglect, improper service or other causes not arising out of defects in materials or workmanship. This warranty does not apply to machines and/or components which have been altered, changed, or modified in any way, or subjected to overloading or use beyond recommended capacities and specifications. Worn componentry due to normal wear and tear is not a warranty claim. Goods returned defective shall be returned prepaid freight to ITMS or agreed repair agent, which shall be the buyer's sole and exclusive remedy for defective goods. ITMS accepts no additional liability pursuant to this guarantee for the costs of travelling or transportation of the product or parts to and from ITMS or the service agent or dealer, such costs are not included in this warranty.

Our goods come with guarantees which cannot be excluded under the Australian Consumer Law. You are entitled to replacement or refund for a major failure and to compensation for other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

THE MANUFACTURER RESERVES THE RIGHT TO MAKE IMPROVEMENTS AND MODIFICATIONS TO DESIGN WITHOUT PRIOR NOTICE.

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## 2. BATTERY OPERATION

### 2.1. Safety precautions

- Before using the battery, read the entire operator's manual carefully and thoroughly. Keep safe all documents accompanying the battery.
- Protect the battery from water and moisture.
- Do not use faulty or deformed battery.
- Do not open the battery and do not short-circuit its contacts.
- Keep the battery out of the reach of children.
- Do not expose the battery to fire or high temperatures.
- Slightly acidic, flammable fluid may leak from a defective li-ion battery. In case it comes into contact with your skin, rinse immediately with plenty of water. In case it comes into contact with your eyes, wash them with clean water and seek medical attention immediately.
- Transporting li-ion battery packs:  
The shipping of li-ion battery packs is subject to laws relating to the carriage of hazardous goods (UN 3480 and UN 3481). Inform yourself of the currently valid specifications when shipping. If necessary, consult your freight forwarder. Certified packaging is available from ITM.
- Do not allow full discharge. Do not store discharged battery.



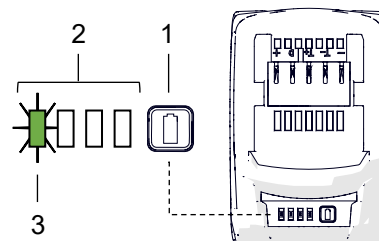
### 2.2. Specified Use

The battery is designed for use in corresponding CAS (Cordless Alliance System) battery-operated power tools and must only be charged using a CAS charger. To select the appropriate device, please contact your dealer. Read the relevant instructions for the devices used. For example, the charging process is explained in the charger manual. The user bears sole responsibility for any damage caused by improper use. Generally accepted accident prevention regulations and the safety information must be observed.

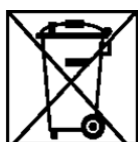
### 2.3. Operating

Charge the battery before the first use. Do not charge fully charged battery. If performance diminishes, recharge the battery. The ideal storage temperature is between 10°C and 30°C. The permissible charging temperature is between 0°C and 50°C.

The battery has a capacity and a signal indicator (depending on the model). Press the button (1) and the charge level is displayed by the LEDs (2). If one LED is flashes (3), the battery is almost flat and must be recharged.



### 2.4. Environmental protection



In accordance with the European Directive 2006/66/EC, the batteries are marked with the symbol of the crossed-out waste bin. Below this symbol there may be a chemical symbol of heavy metal present in the battery, if its percentage is above: 0.0005% for mercury (Hg), 0.002% for cadmium (Cd), 0.004% for lead (Pb). Batteries must not be disposed of with household waste and WEEE waste. The user must return the battery to a collection point for used batteries. Before returning the battery, discharge it\*, remove it from the device and protect the contacts with insulating tape.



Returning the battery to the collection point reduces the negative impact of its hazardous substances on human health and the environment, and enables the recovery of raw materials and plastics in the recycling process.



\* refers to undamaged batteries

### **3. GENERAL INFORMATION**

#### **3.1. Application**

The GECKO Battery is a carriage designed to weld continuous butt and fillet joints. The carriage is battery-powered. The carriage allows MIG/MAG torches and is clamped with permanent magnets.

Accessories allow using torches with a larger diameter and using two torches at the same time. They also allow the carriage to move along outside edges, lap joints and templates, walls that are low or have holes, and on ceilings, pipes, and tanks. Using an optional flexible trackway set allows the carriage to move on a flexible rail. You can clamp the rail to the surface by using magnetic units or by using vacuum units and a vacuum track system.

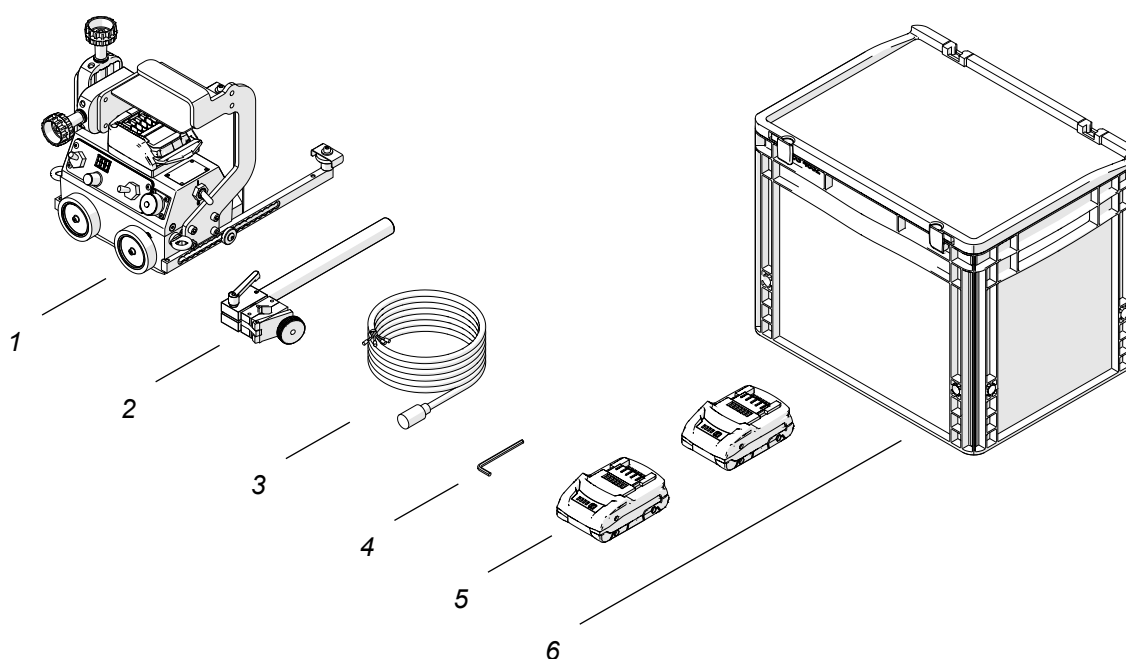
The machine is designed for use by a professional operator only.

### 3.2. Technical data

Voltage		18 V DC, 4 Ah
Power		20 W
Welding position (according to EN ISO 6947 and AWS/ASME)	Horizontal	PA/1F/1G PB/2F PC/2G PD/4F PE/4G
	Vertical	PF/3G
Minimum path curve radius	Outer	600 mm (23 5/8")
	Inner	800 mm (21 1/2")
Torch type		MIG/MAG
Torch diameter		16–22 mm (5/8–55/64")
Maximum torch reach		70 mm (2 3/4")
Maximum allowed cable weight	Horizontal work	8 kg (17.6 lbs)
	Vertical work	6 kg (13.2 lbs)
Minimum workpiece thickness		4 mm (5/32")
Ground clearance		4 mm (5/32")
Horizontal pulling force		150 N
Vertical pulling force		100 N
Cross slide adjustment range		0–35 mm (0–1 3/8"; up-down, left-right)
Guide arm adjustment range		0–170 mm (0–6 11/16")
Horizontal speed*		0–110 cm/min (0–43 5/16 in/min)
Vertical speed*		0–100 cm/min (0–39 3/8 in/min)
Weight		8 kg (17.6 lbs)
Protection class		I
Protection level		IP 20
Required ambient temperature during operation		0–50°C (32–122°F)
Required ambient temperature during storage		-10–60°C (14–140°F)
Maximum allowed ambient humidity non-condensing		80%

\* With a fully charged battery.

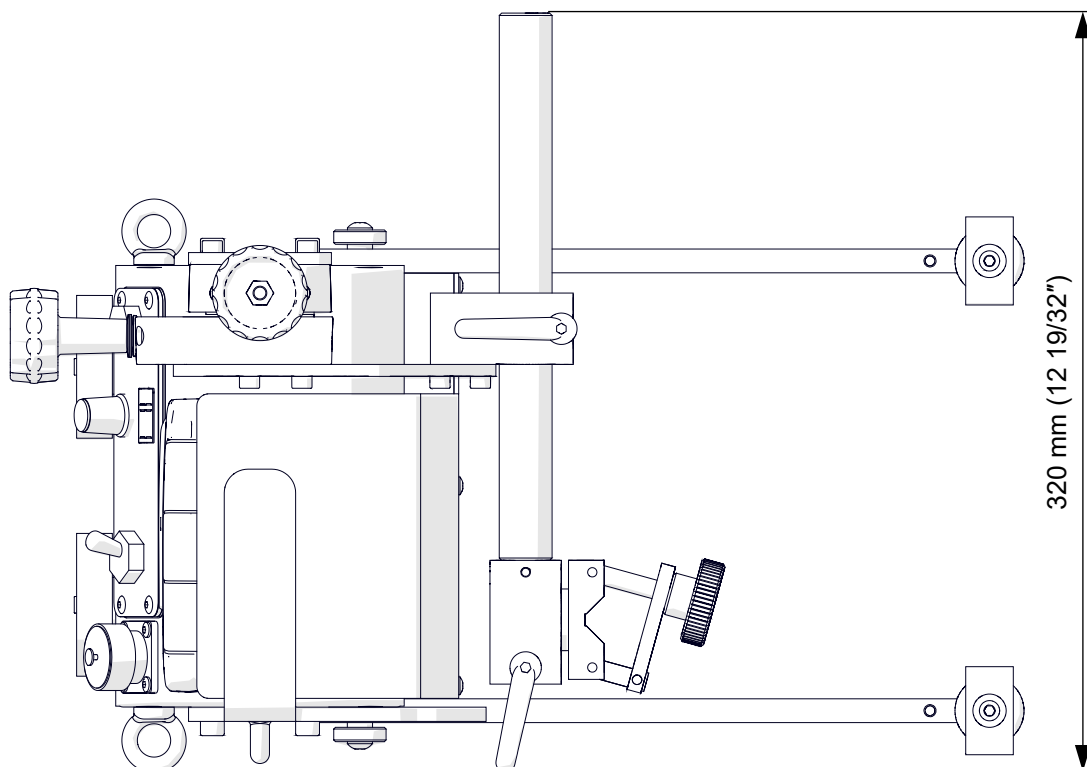
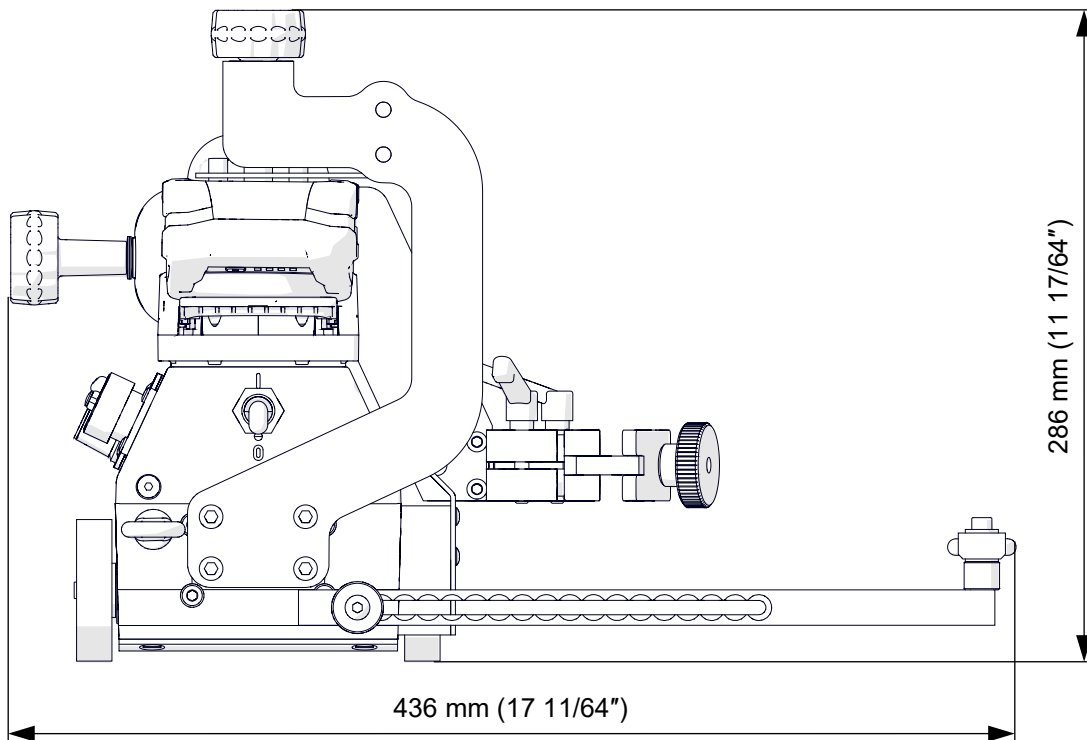
### 3.3. Equipment included



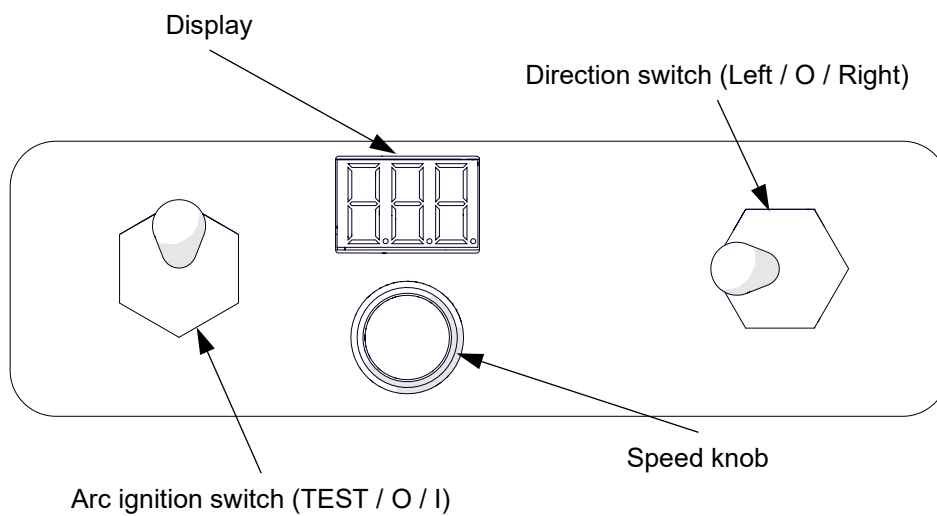
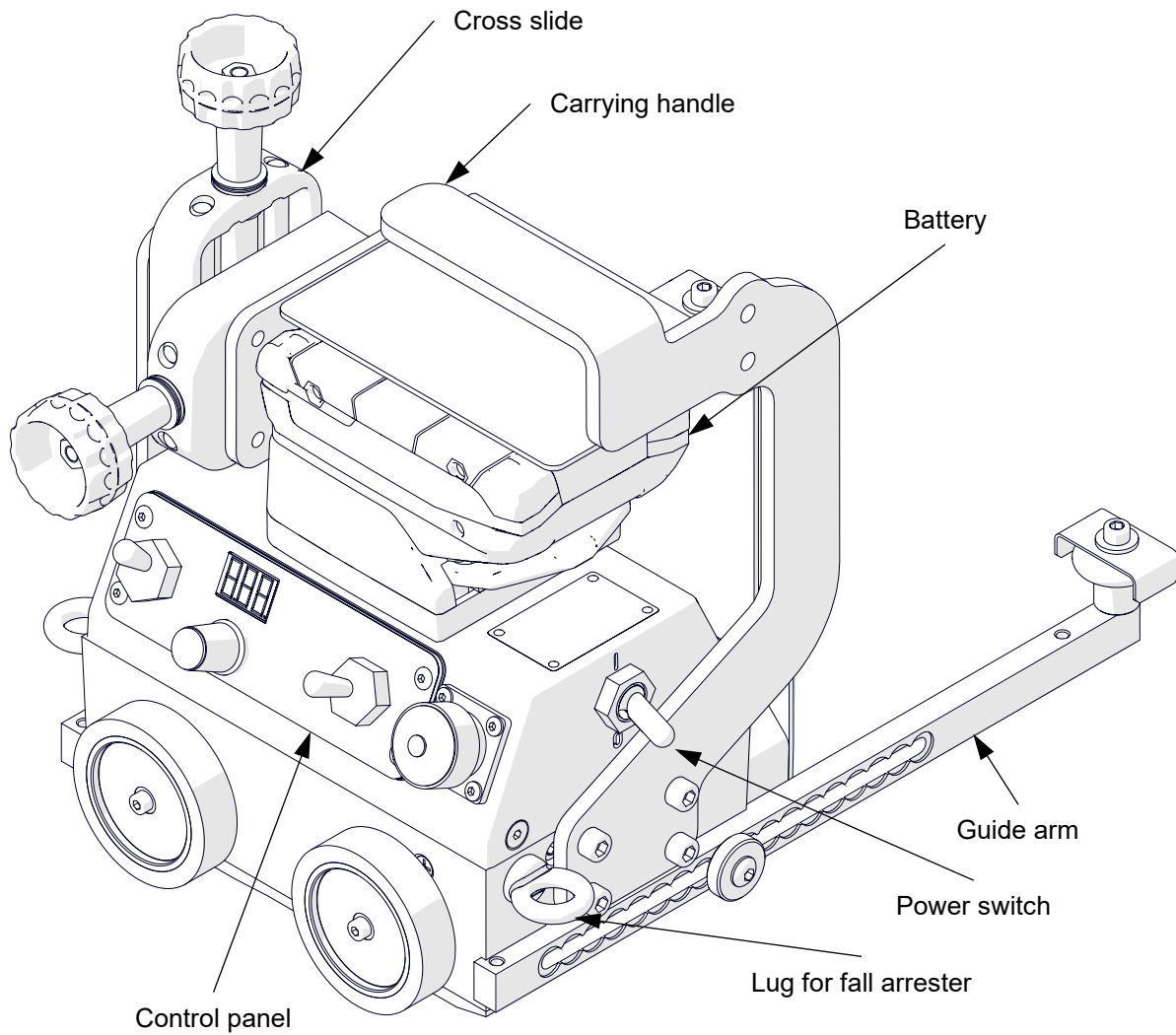
1	Carriage	1 unit
2	Torch holder	1 unit
3	Arc ignition cable	1 unit
4	4 mm hex wrench	1 unit
5	Battery 4 Ah	2 units
6	Plastic box	1 unit
–	Operator's manual	1 unit



### 3.4. Dimensions



### 3.5. Design



## **4. SAFETY PRECAUTIONS**

1. Before use, read this Operator's manual and complete a training in occupational health and safety.
2. Use only in applications specified in this Operator's manual.
3. Make sure that the machine has all parts and they are genuine and not damaged.
4. Keep untrained persons away from the machine.
5. Before each use, ensure the correct condition of the machine, cables, plugs, sockets, control panel, and wheels.
6. Before each use, make sure that no part is cracked or loose. Make sure to maintain correct conditions that can have an effect on the operation of the machine.
7. Keep the machine dry. Do not expose the machine to rain, snow, or frost.
8. Do not expose the machine to fire or excessive temperature.
9. Keep the work area well lit, clean, and free of obstacles.
10. Do not use in explosive environments or near flammable materials.
11. Make sure that the rubber of the wheels is clean and not damaged.
12. Do not remove the cover of the wheels.
13. Remove objects attracted to the chassis by the magnet.
14. Transport and position the carriage by using the carrying handle.
15. Put the carriage so that four wheels are on the surface. Make sure that no contact is between the surface and chassis.
16. Do not stay below the machine that is put at heights.
17. Keep the sockets clean. Do not use high pressure during cleaning.
18. Install only MIG/MAG torches whose diameter is the same as the diameter of the torch holder.
19. Do not put the torch more than 70 mm (2 3/4") outward from the left or right side of the carriage.
20. Keep the torch cables away from the surface. Hang them to decrease the load applied on the carriage. Use the welding cables whose weight is not more than specified in the technical data.
21. Do not work on curves with convex or concave radius less than specified in technical data.
22. At heights, protect the carriage from falling.

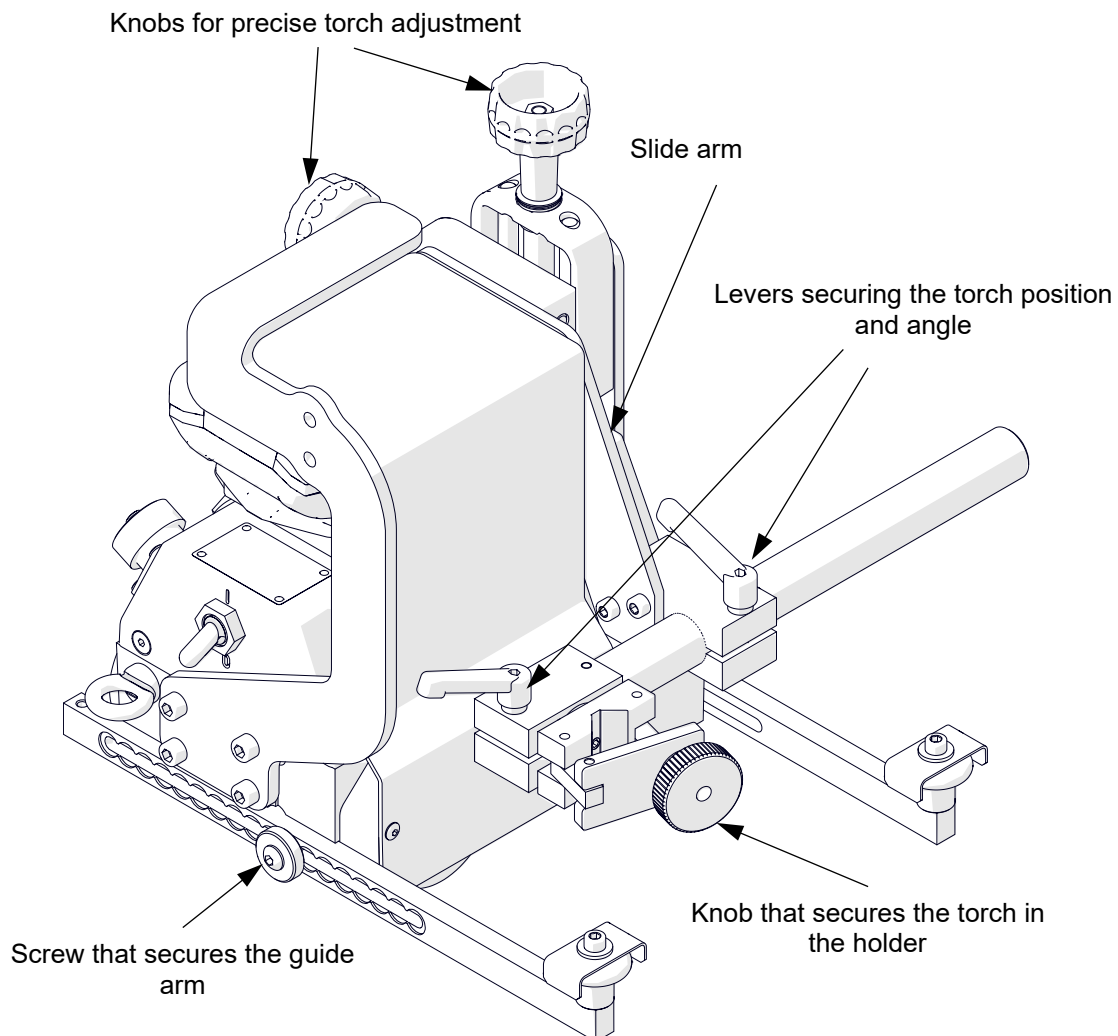


23. Use eye protection (helmet, shield, and screen), ear protection, gloves, and protective clothing. Do not use loose clothing.
24. Do not stop the machine by hand. To stop, set the travel direction switch to 'O'.
25. Repair only in a service center appointed by the seller.
26. If the machine falls, is wet, or has any damage, stop the work and immediately send the machine to the service center for check and repair.
27. Do not leave the machine unattended when it operates.
28. Store the machine in a safe and dry place.
29. Do not remove the battery during operation of the machine.
30. Do not leave the battery in the machine.
31. Remove the battery before you do maintenance or install/remove parts.
32. Use a battery and charger compatible with the machine, listed in the ACCESSORIES chapter.

## 5. STARTUP AND OPERATION

### 5.1. Preparing

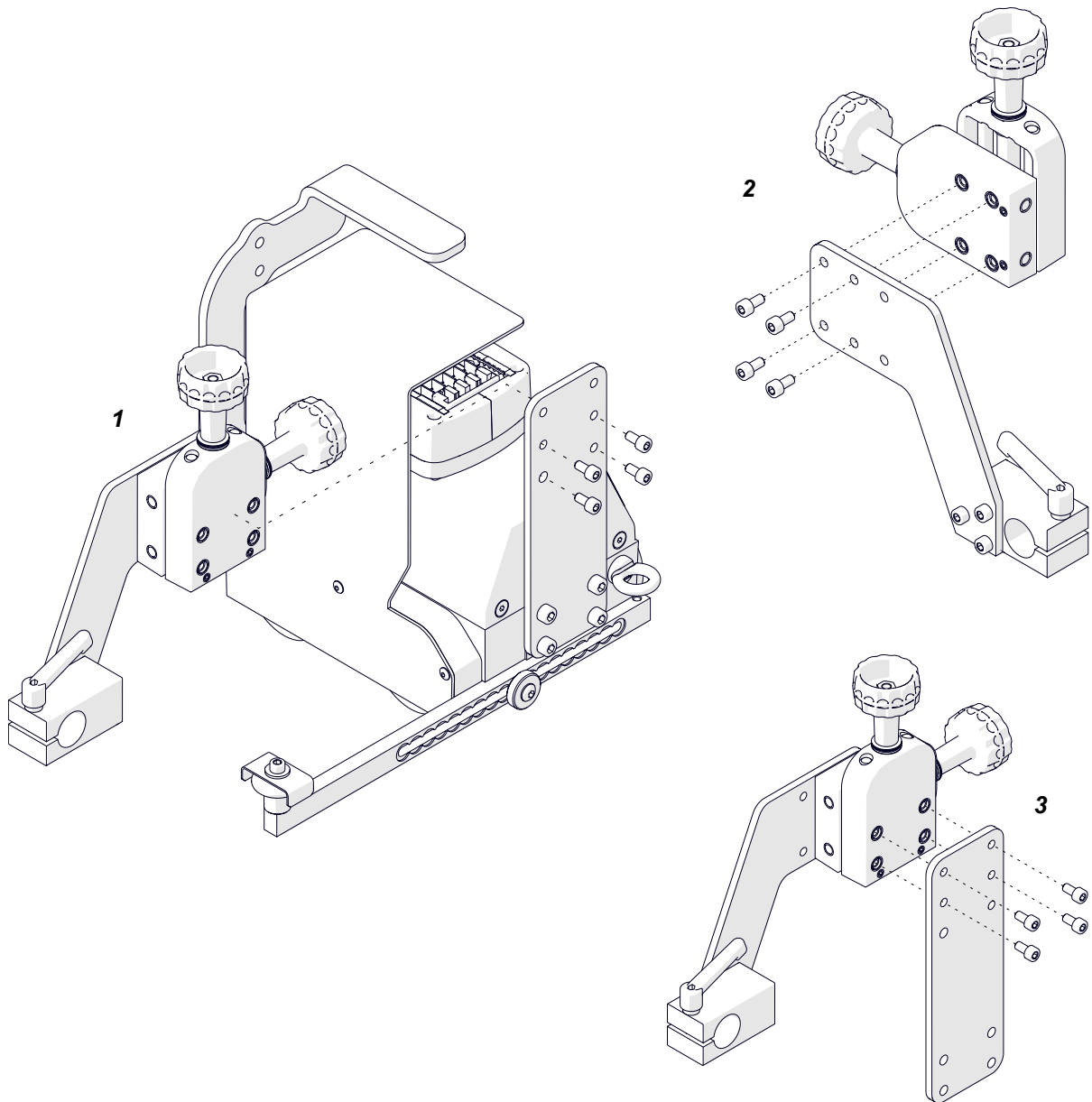
Use the carrying handle to transport the carriage to the work area. Set to 'O' all switches (power, direction, and arc ignition switch). Then, put the torch into the torch holder and tighten with the knob.



You can change the torch adjustment range upward and to the right by 22 mm (55/64"). To do this, use the 4 mm hex wrench to remove the cross slide (1).

To change the torch adjustment range to the right, detach the slide arm with the 4 mm hex wrench. Then, install it with four screws as shown in figure (2).

To change the torch adjustment range upward, use 4 mm hex wrench to install the cross slide with four screws as shown in figure (3).



## 5.2. Connecting to the welding circuits

Before connecting, read the operator's manual of the welding device and make sure that it provides such option. Connect the arc ignition cable only to the arc ignition control contacts in the welding device remote control socket. Make sure that the welding cycle control of the welding device is set to 2-stroke. If you set it to 4-stroke, arc ignition control will work incorrectly.



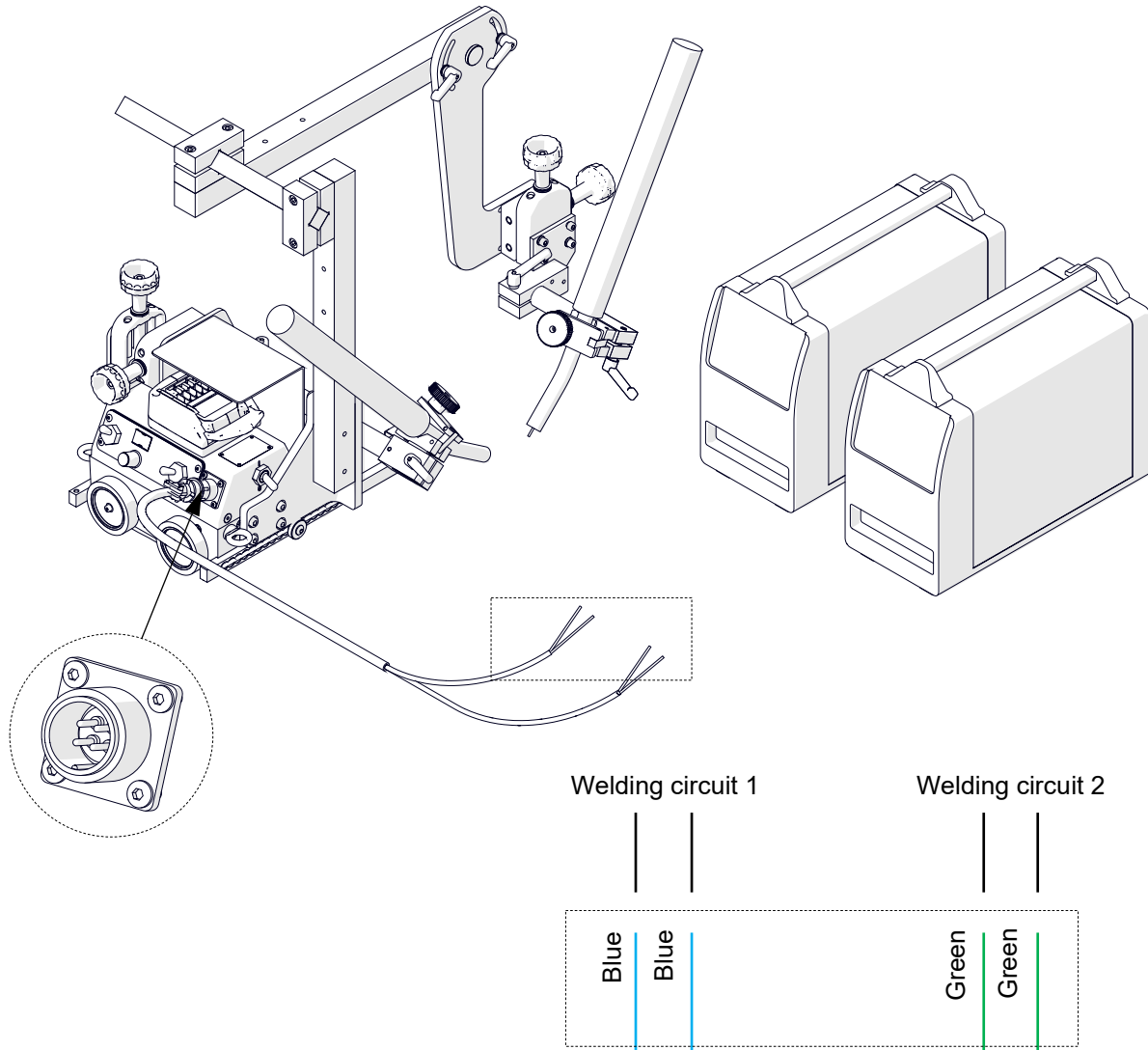
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**Do not connect to sockets other than the arc ignition remote control socket, specified by the manufacturer of the welding device. Incorrect connection of the arc ignition cable to the welding device may result in permanent damage to the carriage!**

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The carriage can be connected to a welding device (welding machine, wire feeder). Make sure that the device provides a start-stop signal (see the operator's manual provided by the manufacturer).

The carriage can control two torches by using the arc ignition cable plugged into the arc ignition socket. To do this, refer to the diagram below and connect one blue-jacketed wire to one terminal of the welding circuit. Then, connect the other blue-jacketed wire to the other terminal of the same circuit. To control the second torch, connect the green-jacketed wires to the terminals of the second welding circuit.

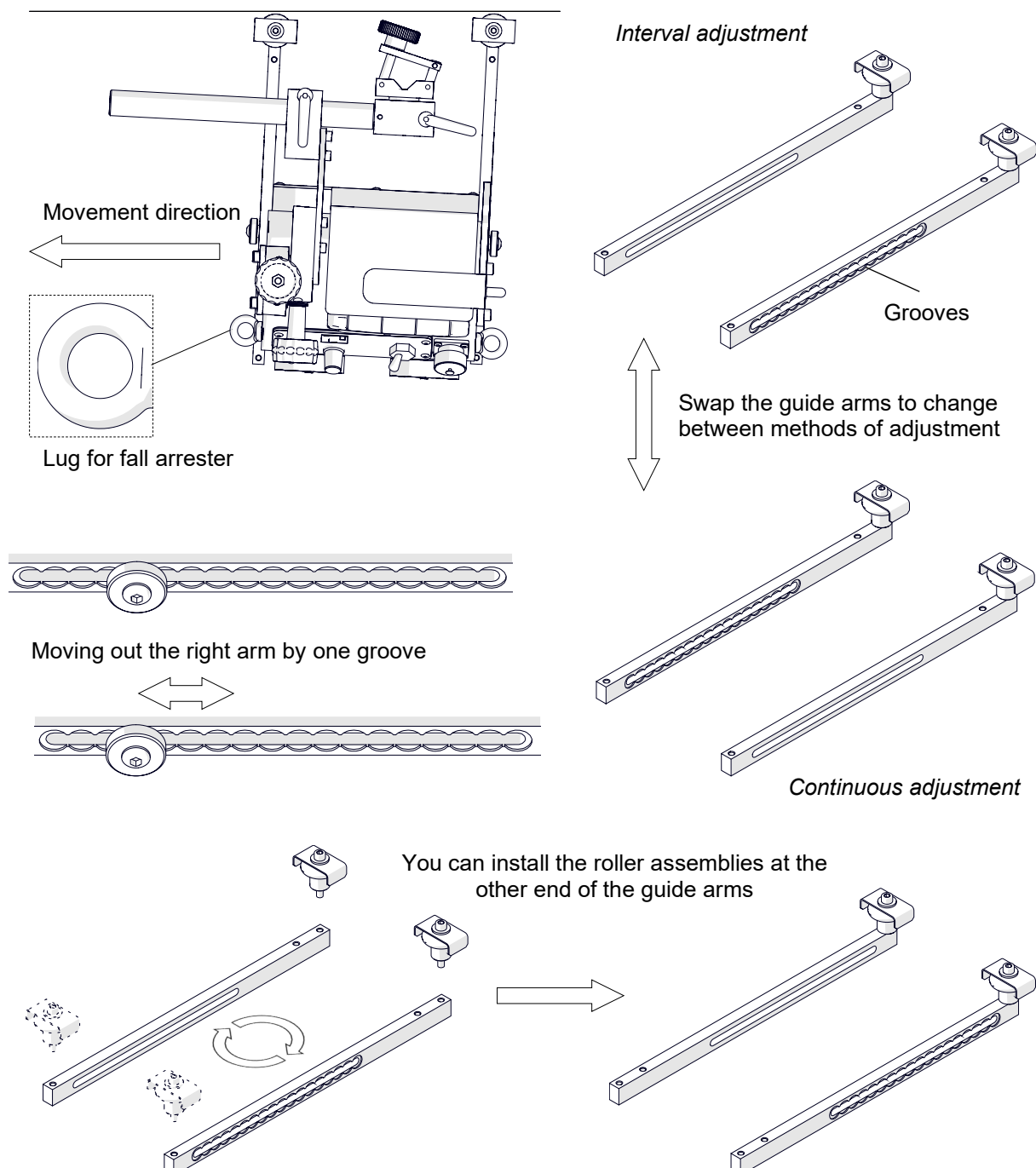


Make sure that the arc ignition cable is connected correctly. To do this, insert the battery, turn on the carriage and then set the arc ignition switch to TEST. This should enable the arc for a while.



### 5.3. Positioning at the work area

Put the guide arms so that the carriage is in constant contact with the workpiece. You can set them by a constant step (interval adjustment), or continuously after you swap them (continuous adjustment). To set them correctly when the carriage moves to the left, use the 4 mm hex wrench to loosen the screw that secures the right guide arm. Next, move out the right arm about 10 mm (25/64") or one groove more than the left arm, and then tighten the screw again.



To put the carriage closer to the workpiece, use the 4 mm hex wrench to remove the roller assemblies. Next, install them at the other end of the guide arms, and then swap the guide arms.

Loosen the levers to adjust the position and angle of the torch. Use two knobs at the cross slide to precisely set the torch position.

At heights, attach a fall arrester (not included) to a lug to prevent fall of the carriage. This will avoid possible injury to the operator in case the carriage loses the clamping. Do not stay below the carriage that is put at heights.

## **5.4. Operating**

Set the power switch to 'I' to turn on the carriage. Then, the display comes on (*888*). Next, if the unit of speed is set to centimeters per minute, *EUR* shows. If the unit is set to inches per minute, *USA* shows. Next, the carriage speed shows. Use the speed knob to set the required speed. To control the torch through the carriage, set the arc ignition switch to 'I'.



**If the arc ignition switch is set to 'I', the torch starts welding immediately after you select a travel direction.**

Use the direction switch to select a direction of travel. Then, the carriage travel starts with the speed shown. You can adjust the speed at any time.

To stop the movement, set the direction switch to 'O'.

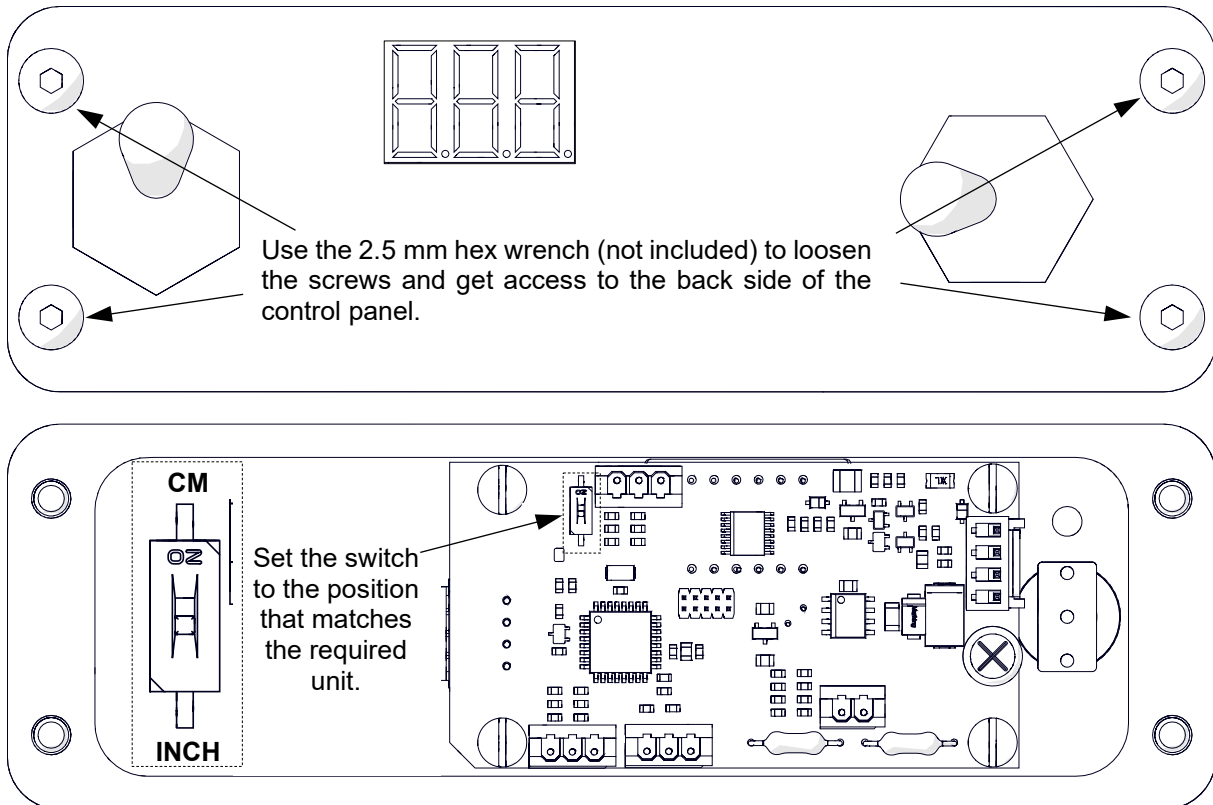
If you do not use the carriage for 5 minutes, it turns off. To turn the carriage back on, set the power switch to 'O' and then to 'I'.

When the battery is discharged, the carriage stops. Then, charge the battery.

After the work is finished, use the power switch to turn off the carriage. Then remove the battery.

## 5.5. Changing the unit of speed

To change the unit of speed between centimeters per minute and inches per minute, remove the battery and follow the steps shown in the figure below.



After you change the unit and supply the power to the carriage, the current unit of measure shows. When the switch is set to 'CM', the display shows *EUR* and the speed is shown in centimeters per minute. When the switch is set to 'INCH', the display shows *USA* and the speed is shown in inches per minute.

## 5.6. Troubleshooting

Message	Problem	Solution
-	Black display even though that the power switch is set to 'I'. The carriage was not used for 5 minutes and then it turned off.	Set the power switch to 'O' and then to 'I'.
7.55.	Display not fully on when powering.	Contact the service center for check and repair.
EUR	Speed shown in centimeters per minute instead of inches per minute.	Refer to the section "Changing the unit of speed".
USA	Speed shown in inches per minute instead of centimeters per minute.	Refer to the section "Changing the unit of speed".
Er.S	Direction switch not set to 'O' when powering.	Set the direction switch to 'O'.
Er.A	Arc ignition switch not set to 'O' when powering.	Set the arc ignition switch to 'O'. If the message still shows, contact service center for check and repair.
oC	Motor overload. The carriage stops.	Remove objects that block the carriage. Adjust the position of the cables so that they do not block the carriage. Use the welding cables whose weight is not more than the maximum weight specified in the technical data. If the message persists, contact service center for check and repair.
E.01	Battery voltage too low.	Charge the battery or replace to a fully charged.
E.02	Battery voltage too high.	Replace the battery.
E.10	Short circuit.	Clean the battery contacts. If the problem persists, replace the battery. If the error persists after replacement, contact the service center.
E.20	No electrical connection.	
E.30	Battery internal error.	Replace the battery.
E.40	Battery overheated.	Let the temperature of the battery decrease.
E.50	Battery temperature too low.	Move the battery to a warmer place and let the temperature of the battery increase.

If there are two errors, the messages can be combined into one, e.g. E.01 + E.50 = E.51.

## **5.7. Maintenance**

### **Every day:**

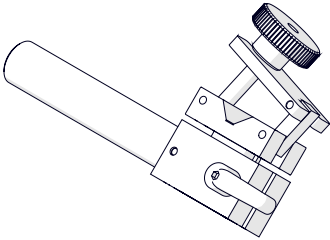
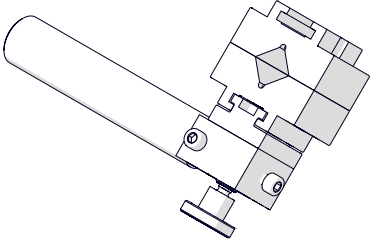
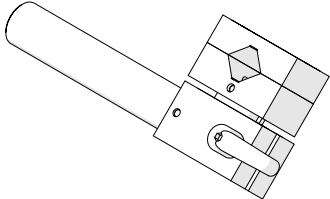
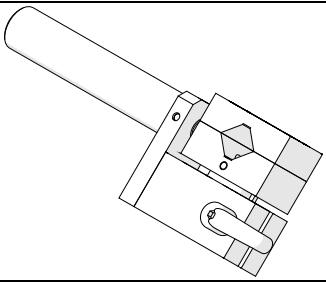
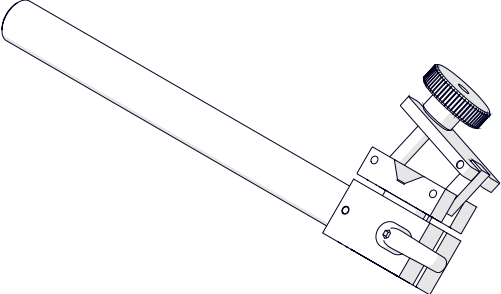
1. Clean the chassis and wheels.
2. Clean the rollers of the guide arms. Make sure that the rollers turn freely.
3. Clean the torch nozzle and replace if damaged.
4. Examine the battery and replace if damaged.

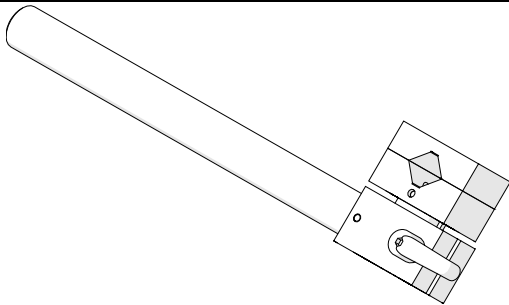
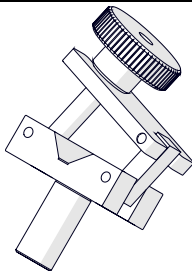
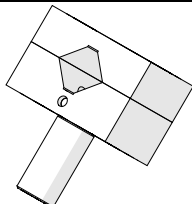
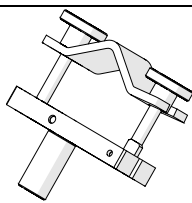
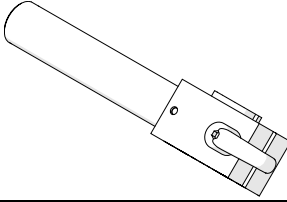
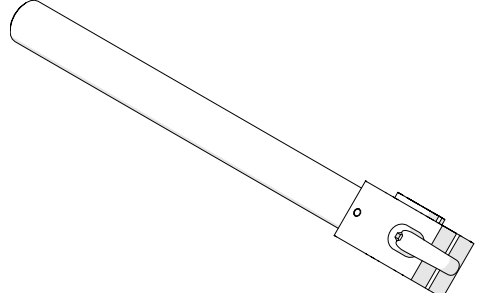
### **Every month:**

1. Make sure that the knob and the switches work as intended. Replace if they are loose or damaged.
2. Examine hoses and cables and replace if they are damaged.
3. Tighten screws if they are loose.

## 6. ACCESSORIES

### 6.1. Torch holders, clamps, and rods

Short rod torch holder with clamp 16–22 mm	
	Part number: UCW-0754-07-00-00-0
Quick-release short rod torch holder with clip 16–22 mm	
	Part number: UCW-0523-84-00-00-0
Short rod torch holder with clip 16–22 mm	
	Part number: UCW-0476-27-00-00-0
Short low rod torch holder with clip 16–22 mm	
	Part number: UCW-0476-06-00-00-0
Long rod torch holder with clamp 16–22 mm	
	Part number: UCW-0752-07-00-00-0

<b>Long rod torch holder with clip 16–22 mm</b>	
	Part number: UCW-0466-22-00-00-0
<b>Torch clamp 16–22 mm</b>	
	Part number: ZRZ-0752-07-01-00-0
<b>Torch clip 16–22 mm</b>	
	Part number: ZCS-0476-06-01-00-0
<b>Torch clamp 22–35 mm</b>	
	Part number: ZRZ-0466-19-00-00-0
<b>Short rod</b>	
	Part number: WLK-0476-20-01-00-0
<b>Long rod</b>	
	Part number: WLK-0466-04-10-00-0

## 6.2. Guide arms

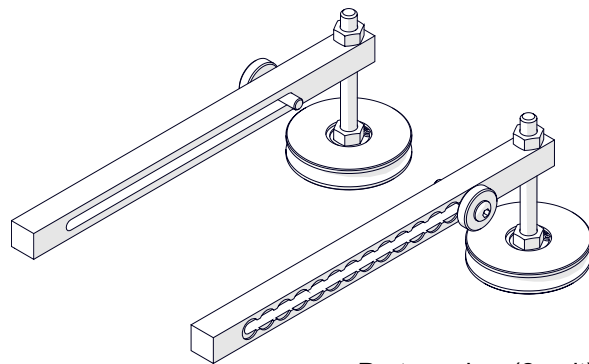
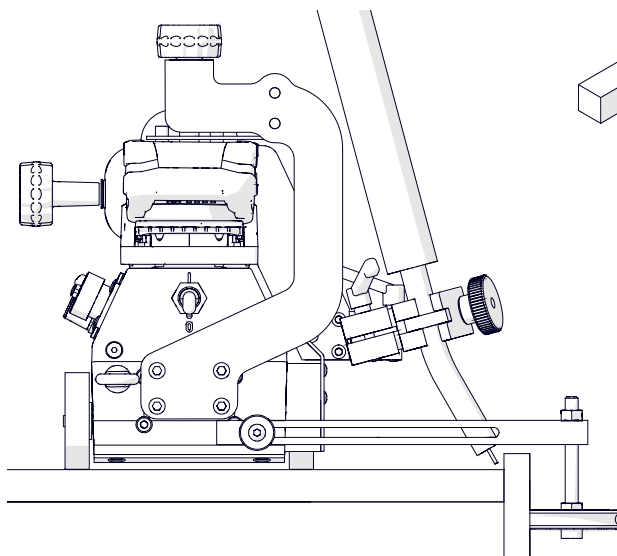
Before installing, remove the standard guide arms with a 4 mm hex wrench.

### 6.2.1. Edge following guide arms

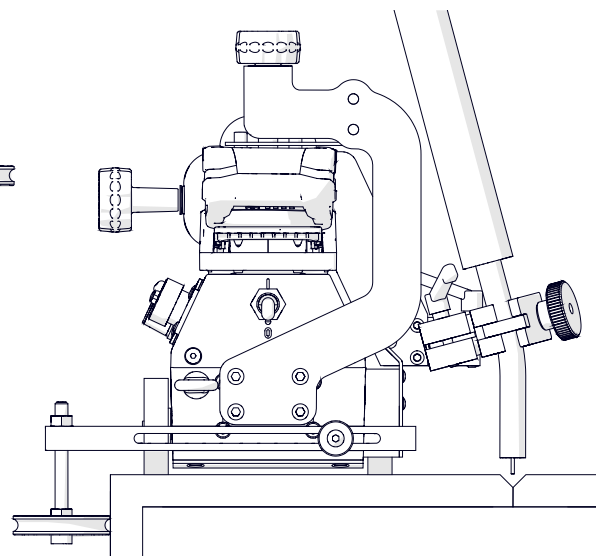
Allow guiding the carriage along outside edges.

Install with the included screws.

Adjustment range: 145 mm (5 45/64").



Part number (2 unit):  
PRW-0466-41-00-00-1

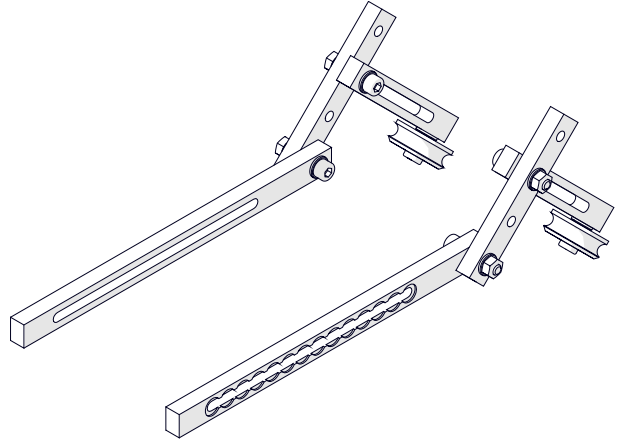
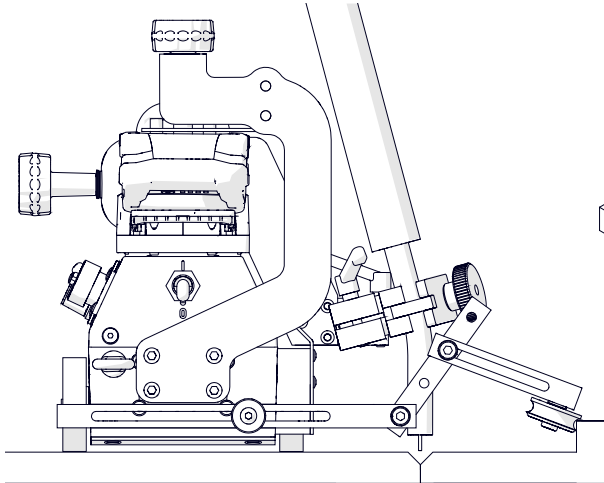




### 6.2.2. Adjustable guide arms

Allow guiding the carriage along lap joints and templates.

Adjustment range: 145 mm (5 45/64").

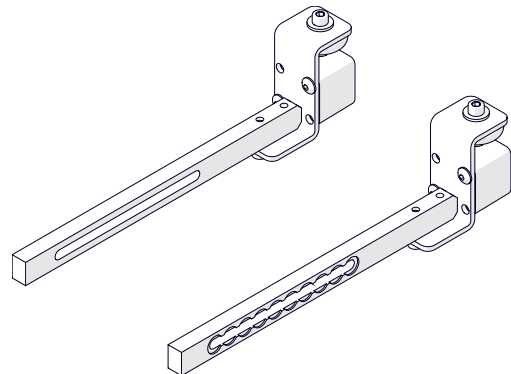
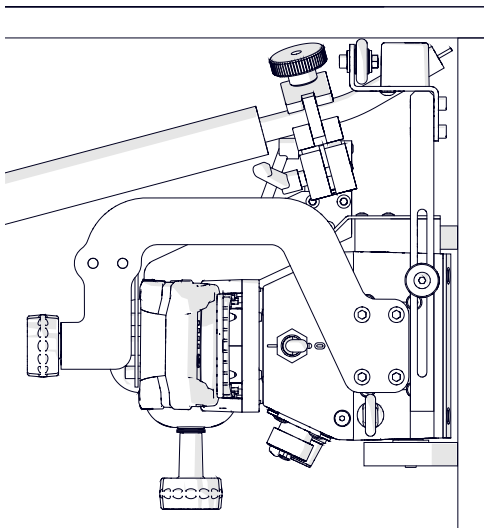


Part number (2 unit):  
PRW-0752-10-00-00-0

### 6.2.3. Magnet guide arms

Allow guiding the carriage on ceilings.

Adjustment range: 100 mm (3 15/16").

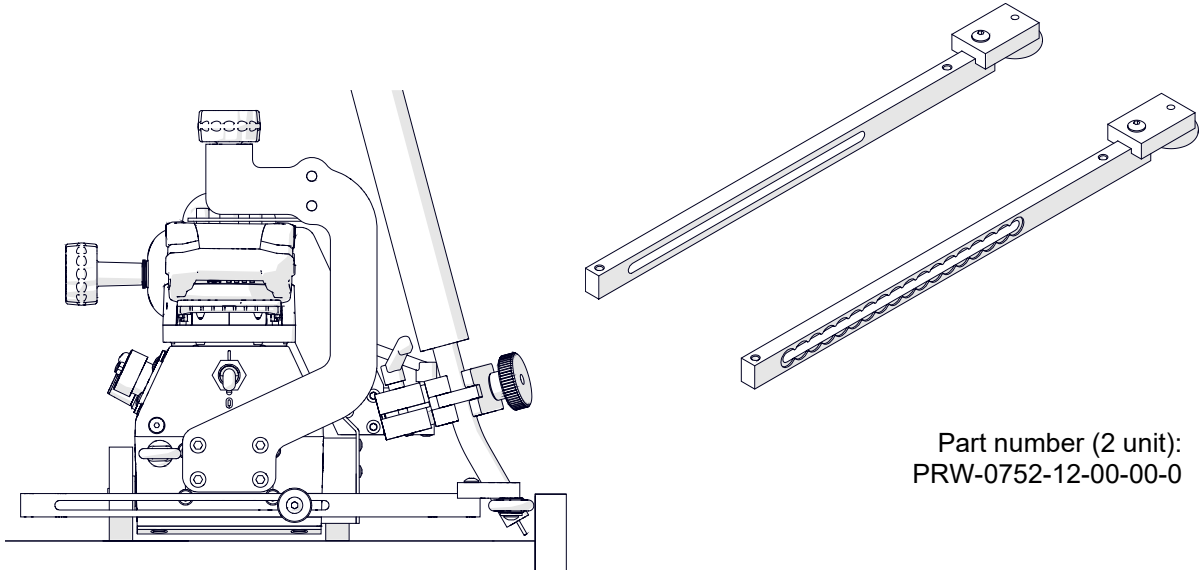


Part number (2 unit):  
PRW-0752-11-00-00-0

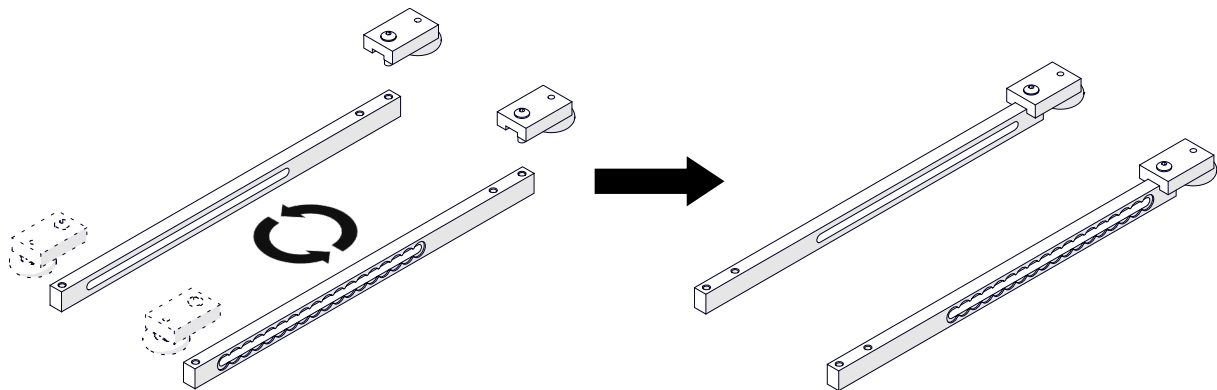
### 6.2.4. Low guide arms

Allow guiding the carriage along low walls.

Adjustment range: 170 mm (6 11/16").



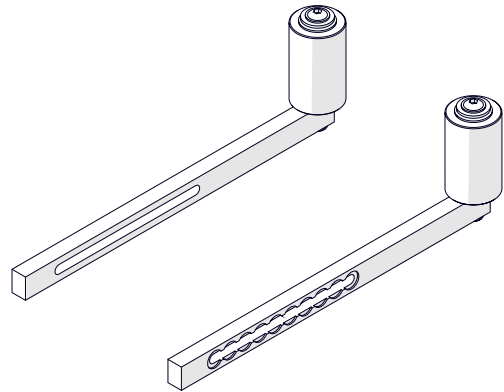
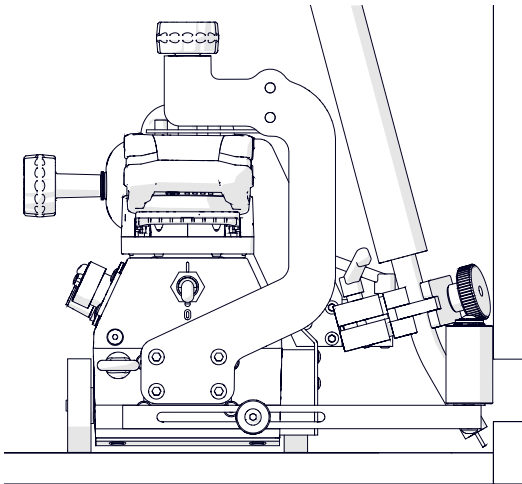
To put the carriage closer to the workpiece, use the 3 mm hex wrench to remove the roller assemblies. Next, install them at the other end of the guide arms, and then swap the guide arms.



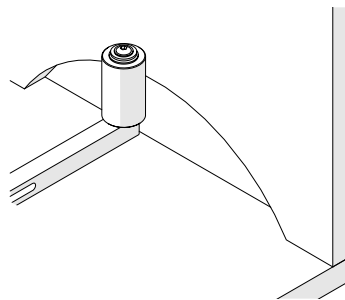
### 6.2.5. High guide arms

Allow guiding the carriage along walls that have holes.

Adjustment range: 100 mm (3 15/16").

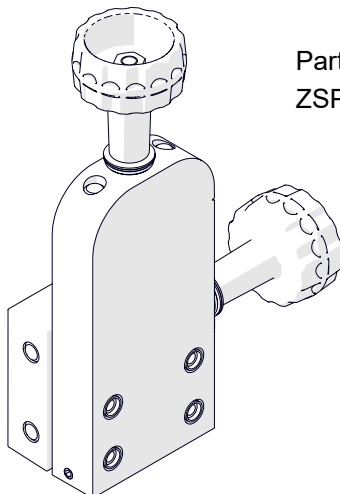


Part number (2 unit):  
PRW-0752-13-00-00-0

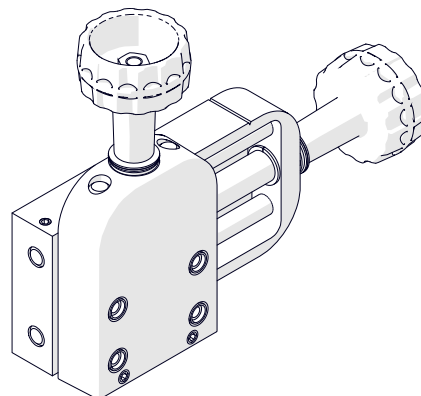


### 6.3. 76 mm cross slide

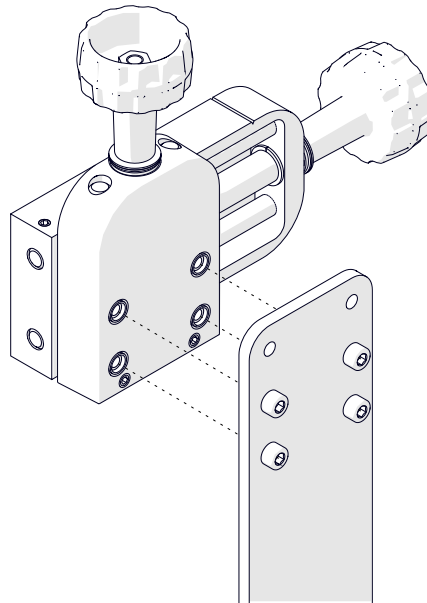
Increases the up-down or left-right adjustment range from 0–35 mm (0–1 3/8") to 0–76 mm (0–2 63/64").



Part number:  
ZSP-0466-46-00-00-1

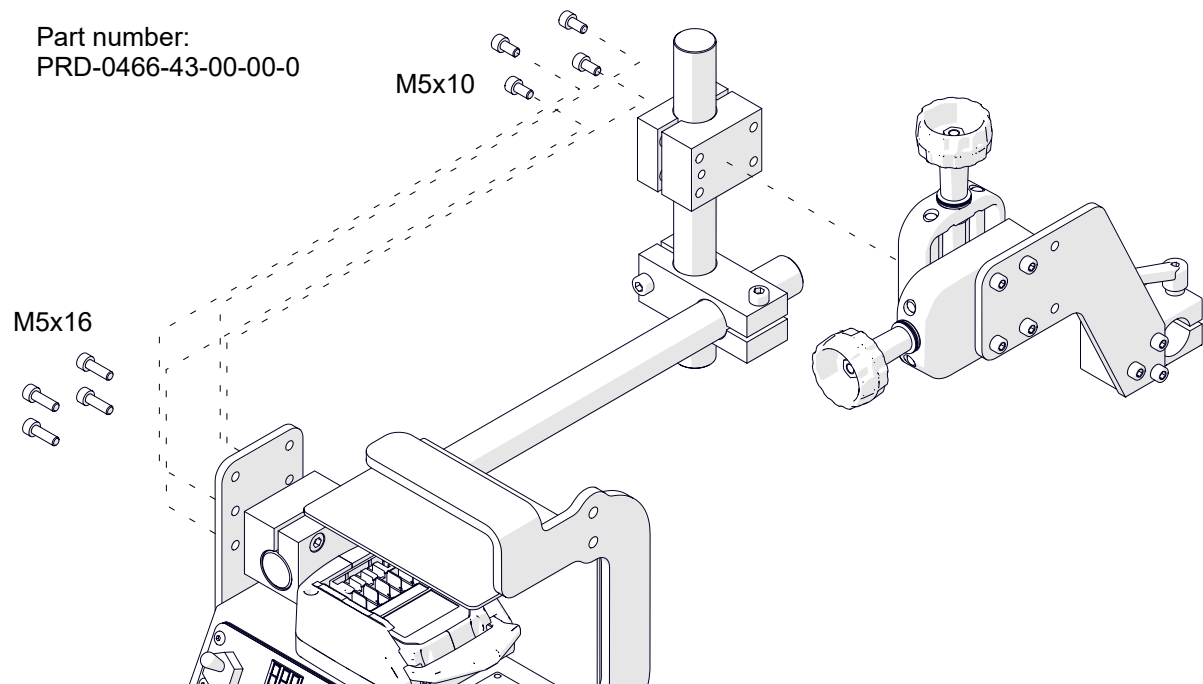


Install in place of the standard cross slide after removing four screws with a 4 mm hex wrench.



#### 6.4. Torch extension arm

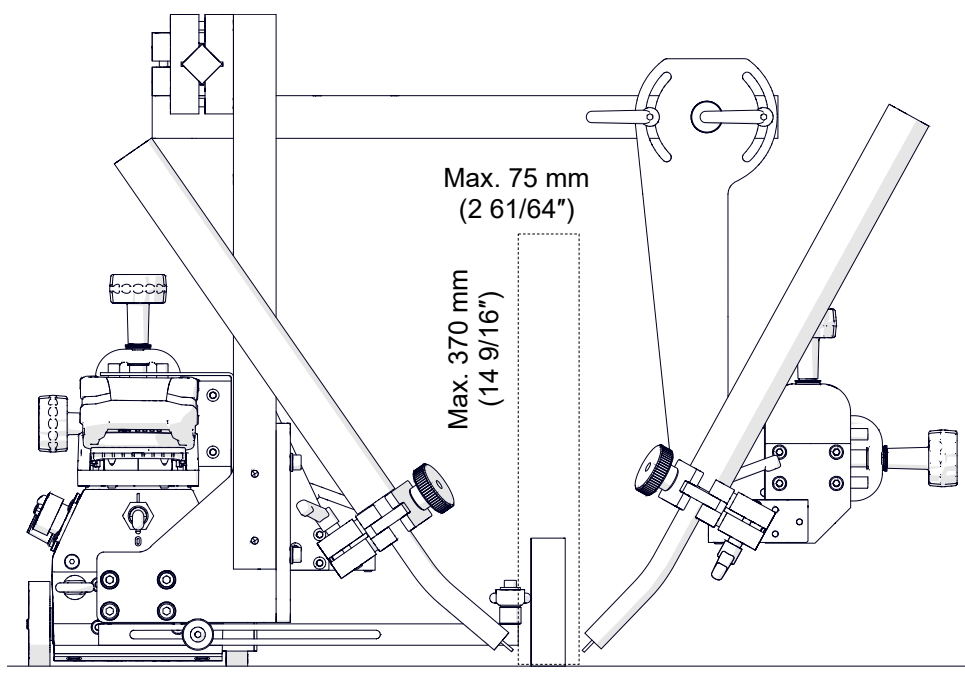
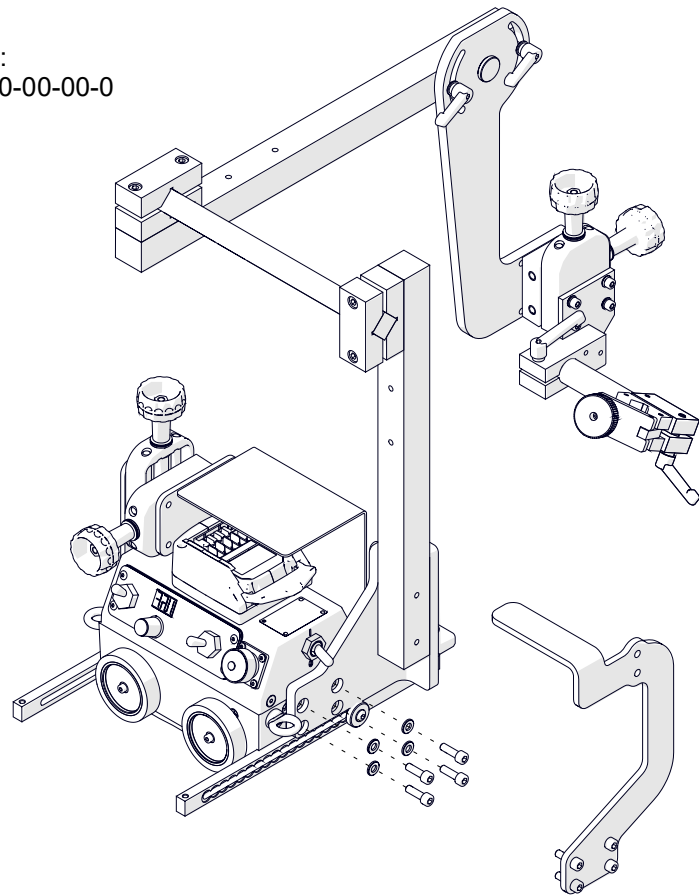
Increases the reach of the torch. Use the 4 mm hex wrench to remove the M5x10 screws that attach the cross slide. Next, use the same screws to attach the cross slide at the end of the arm as shown in the figure. Then, use M5x16 screws to attach the arm to the carriage.



## 6.5. Dual torch mount

Allows using a second torch. Use the 5 mm hex wrench (not included) to remove four side screws and then attach the mount to the carriage with four M6x20 screws and washers.

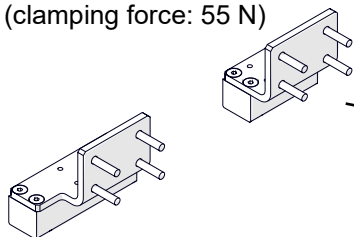
Part number:  
PDT-0466-40-00-00-0



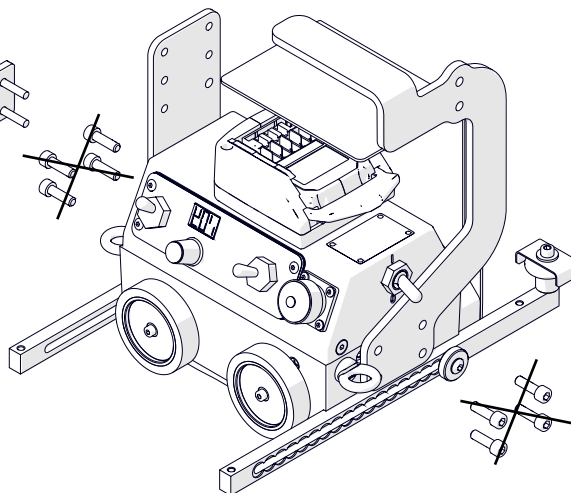
## 6.6. Auxiliary magnet blocks

The blocks increase the clamping force of the carriage to the surface. Use the 4 mm hex wrench and 5 mm hex wrench (not included) to remove eight side screws. Next, install the blocks.

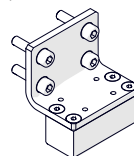
Part number:  
BLO-0466-44-01-00-0  
(clamping force: 55 N)



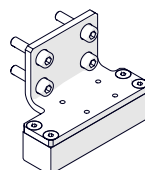
Part number:  
BLO-0466-47-01-00-0  
(clamping force: 80 N)



Part number:  
BLO-0466-45-01-00-0  
(clamping force: 55 N)



Part number:  
BLO-0466-48-01-00-0  
(clamping force: 80 N)



## 6.7. Flexible guide set

Allows guiding the carriage on planes along a straight line, and on pipes and tanks.

A single flexible guide is 1.85 m (6 ft) long. Its minimum curve radius is 1 m (3.3 ft).

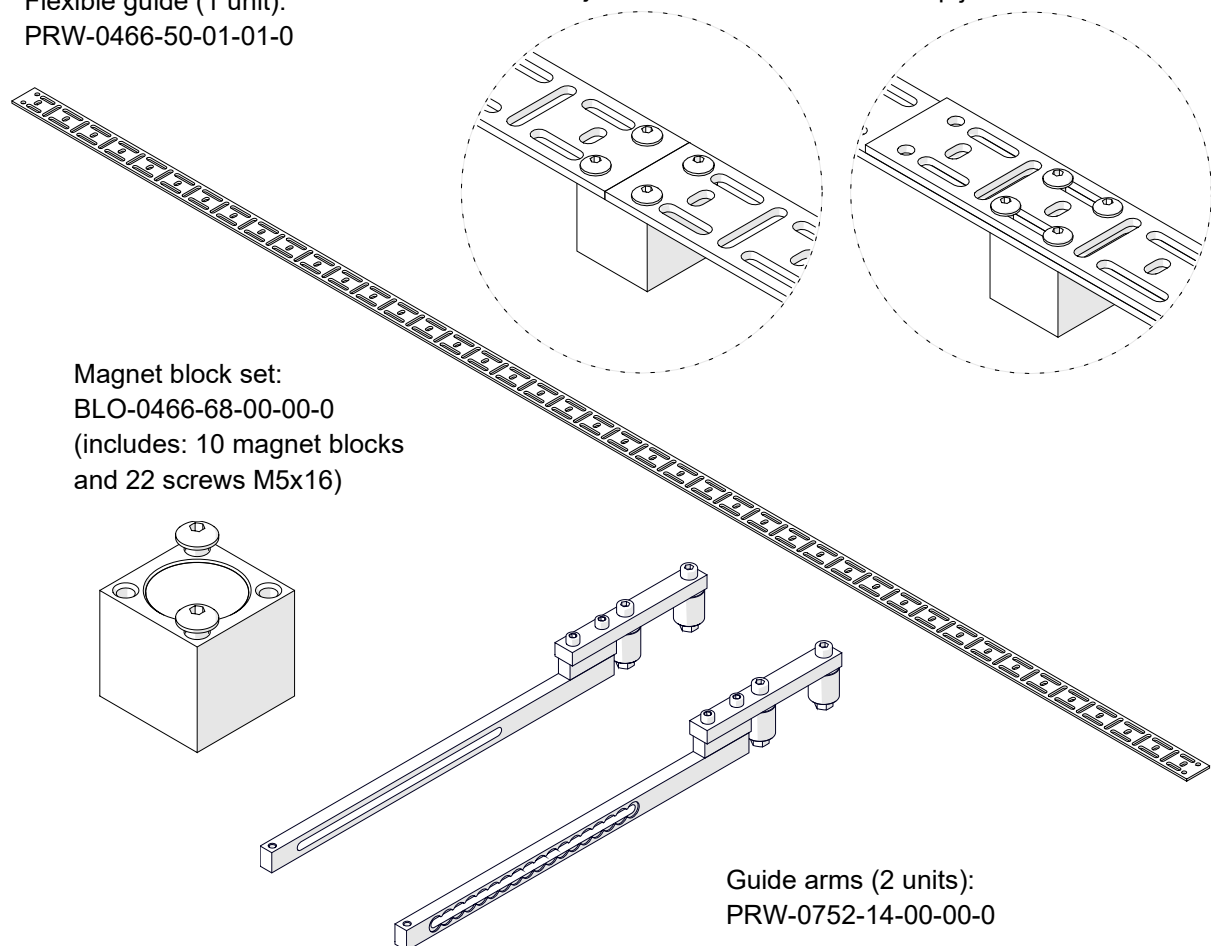
Holding force on a 5 mm (13/64") thick surface		Temperature
100%	(90 N)	20°C (68°F)
75%	(68 N)	80°C (176°F)
50%	(45 N)	120°C (248°F)

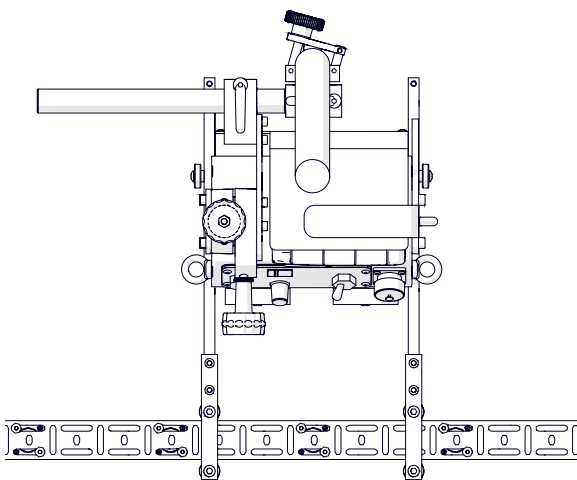
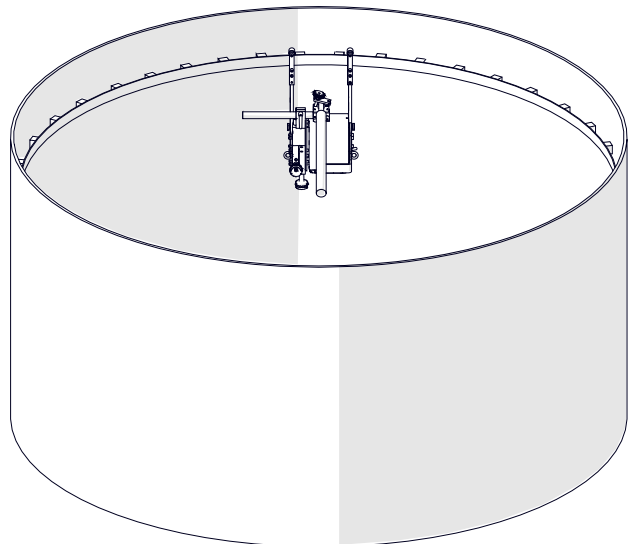
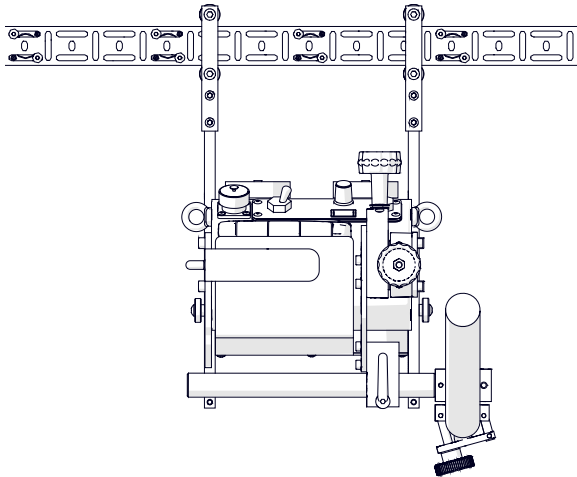
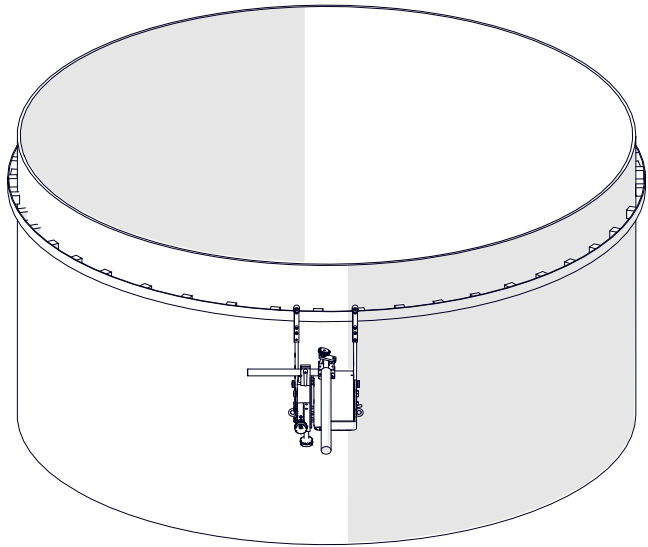
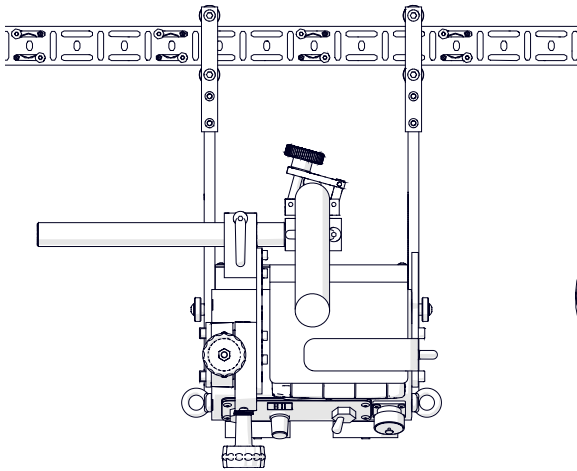
Connect two guides with the 3 mm hex wrench (not included) and M5x16 screws to form a butt or lap joint. Next, use the 4 mm hex wrench to remove the standard guide arms and install the new guide arms.

Flexible guide (1 unit):  
PRW-0466-50-01-01-0

Butt joint

Lap joint



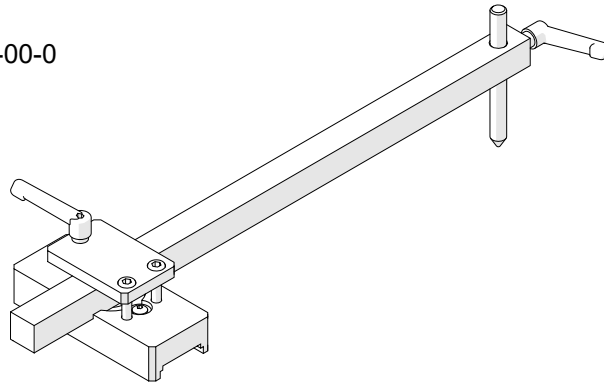




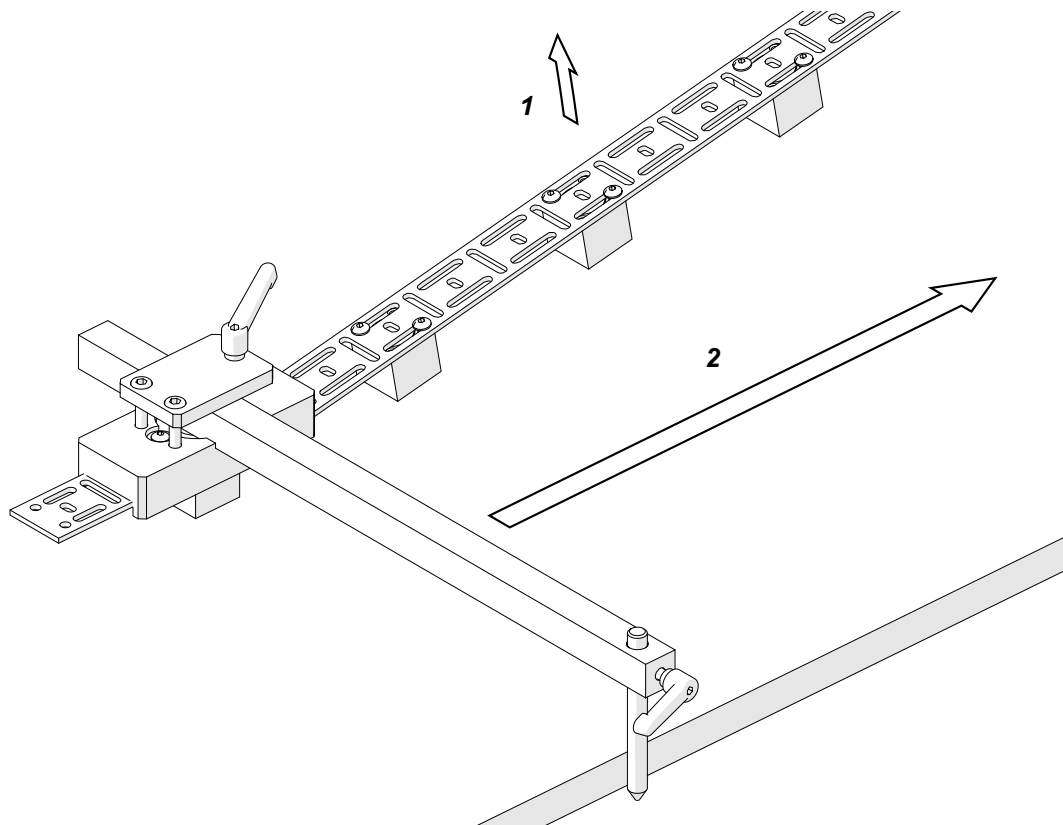
## 6.8. Guide adjustment tool

Allows the guide to be put parallel to an outside edge or a groove.

Part number:  
UST-0466-53-00-00-0



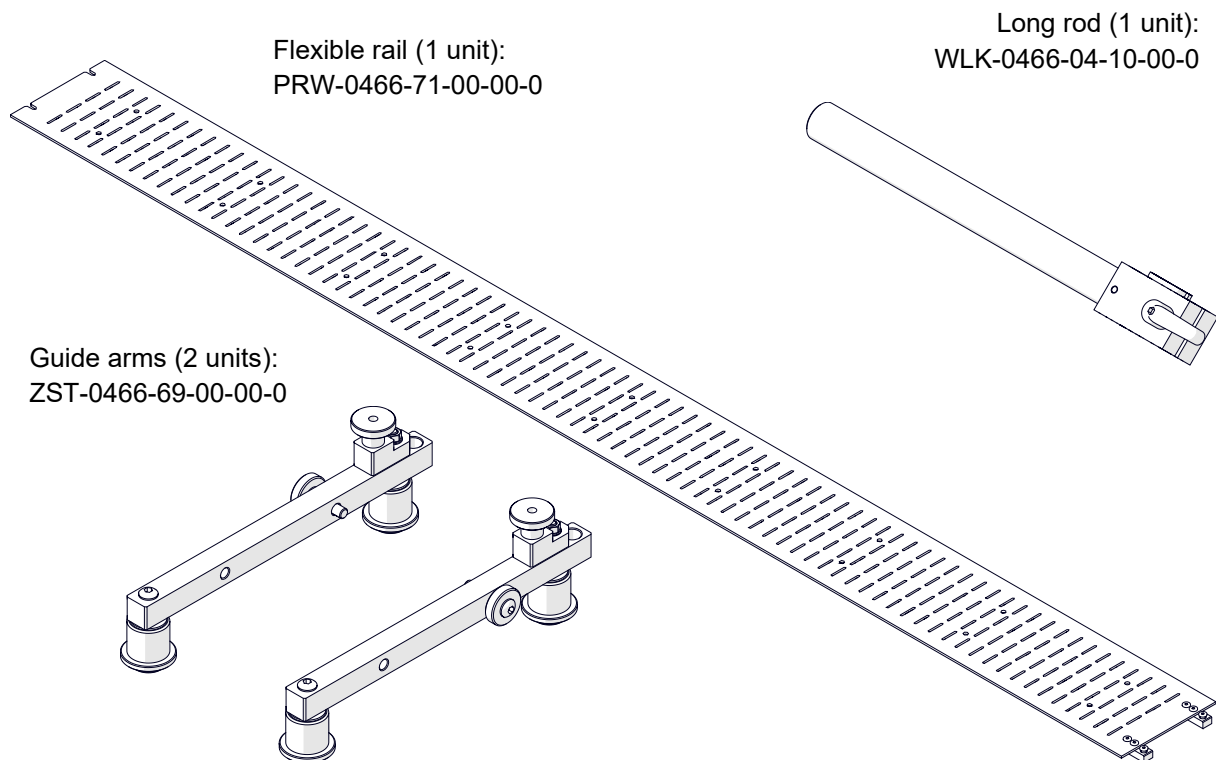
Attach the magnets to the guide and put the guide on the workpiece along the direction of welding. Loosen the levers and put the tool onto the first magnet, resting the side of the pilot pin on an outside edge or putting the tip of the pilot pin in a groove. Then, lock the levers in this position and pull the further part of the guide off the workpiece (1). Next, start moving the tool along the guide (2) to clamp the successive magnets to the workpiece.



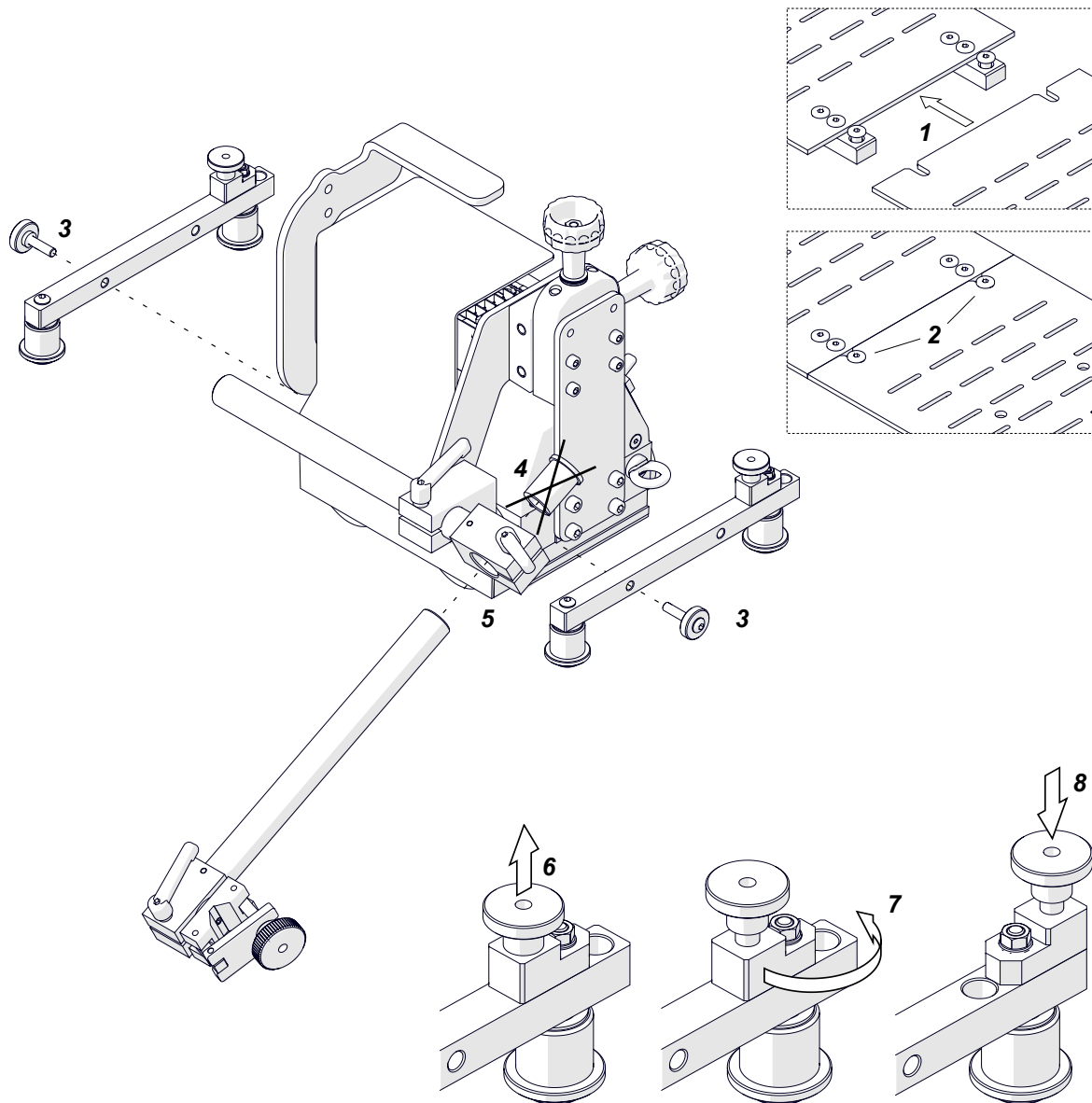
## 6.9. Flexible trackway set

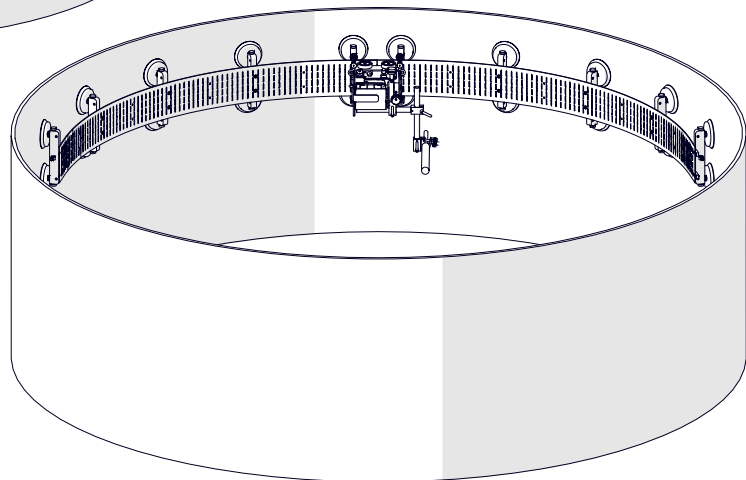
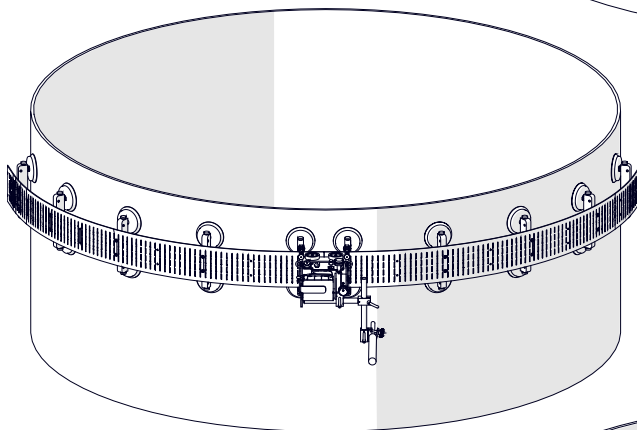
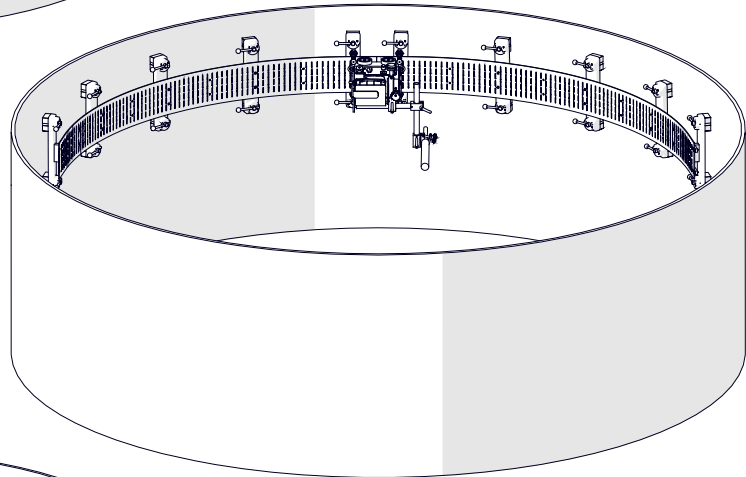
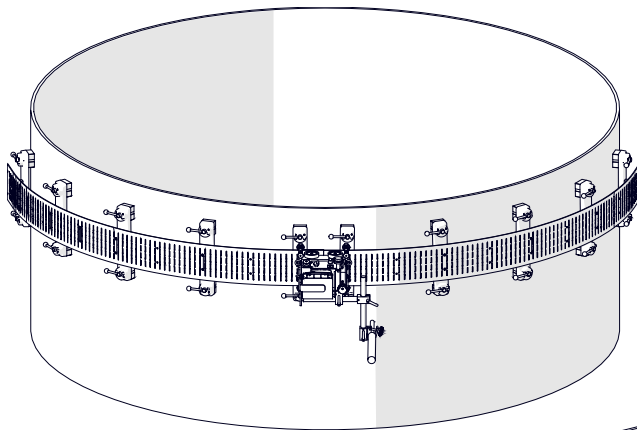
Allows the carriage to move on flexible rails that are clamped to planes, pipes, or tanks. A single flexible rail is 1.88 m (6.1 ft) long, and its minimum curve radius is 1.25 m (4.1 ft). Clamp each rail to the surface by using nine narrow magnetic units or at least five magnetic/vacuum units.

Before use, remove the anti-corrosion material from the rail.



Connect two rails with the 3 mm hex wrench (not included) (1, 2). Use the 4 mm hex wrench to remove the standard guide arms and install the guide arms of the set with the included screws (3). Remove the sleeve from the long rod (4) and install the rod into the carriage. Next, install the torch holder into the rod (5) and move the rollers outward (6, 7, 8). Then, put the carriage onto the rail and set the rollers as before.

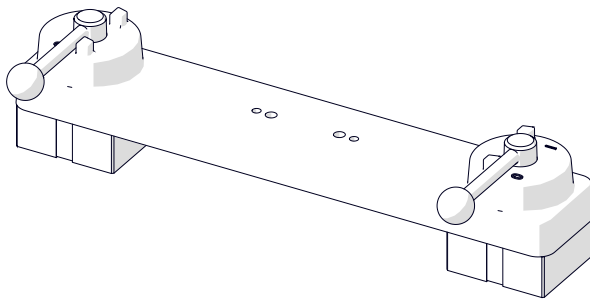




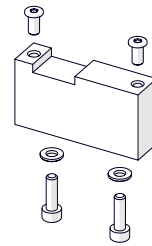
## 6.10. Magnetic units for flexible trackway

### 6.10.1. Magnetic unit

Allows clamping a flexible trackway to ferromagnetic surfaces.



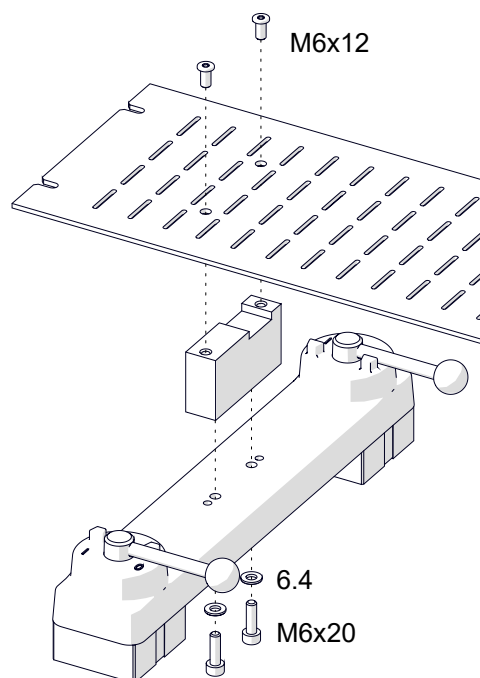
Part number (bracket):  
DYS-0466-71-05-00-0



Part number:  
ZSP-0475-92-00-00-0 (magnetic unit)  
ZSP-0475-93-00-00-0 (heat-resistant magnetic unit)

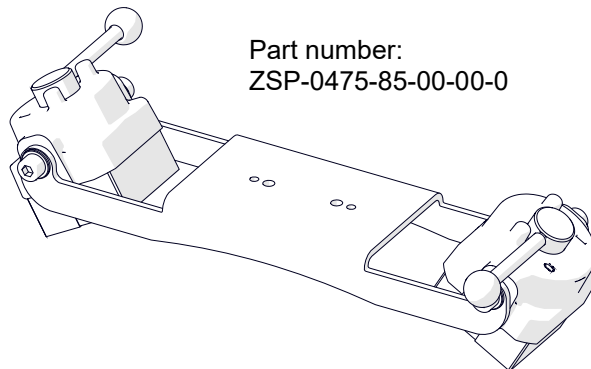
Holding force on a 5 mm (13/64") thick surface	Temperature	
	Magnetic unit	Heat-resistant magnetic unit
100% (1200 N)	20°C (68°F)	20°C (68°F)
75% (900 N)	80°C (176°F)	160°C (320°F)
50% (600 N)	120°C (248°F)	200°C (392°F)

Attach with a torx screwdriver (not included) and the 5 mm hex wrench (not included).



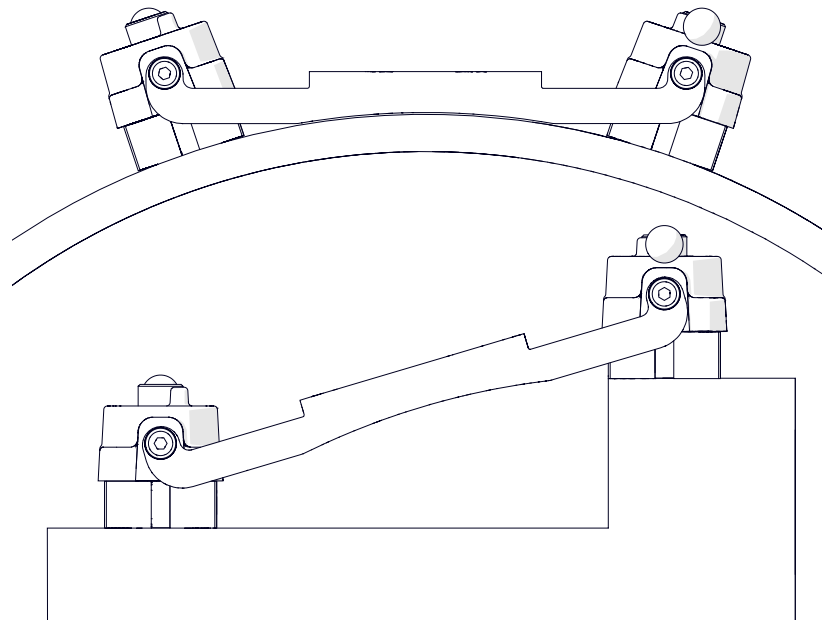
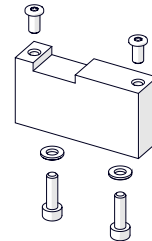
### 6.10.2. Pivoting magnetic unit

Allows clamping a flexible trackway to ferromagnetic surfaces that are concave or convex, to pipes with outer diameters of at least 800 mm (31 1/2"), and to surfaces that differ in height up to 80 mm (3 5/32").



Part number:  
ZSP-0475-85-00-00-0

Part number (bracket):  
DYS-0466-71-05-00-0



Holding force on a 5 mm (13/64") thick surface	Temperature
100% (1200 N)	20°C (68°F)
75% (900 N)	80°C (176°F)
50% (600 N)	120°C (248°F)

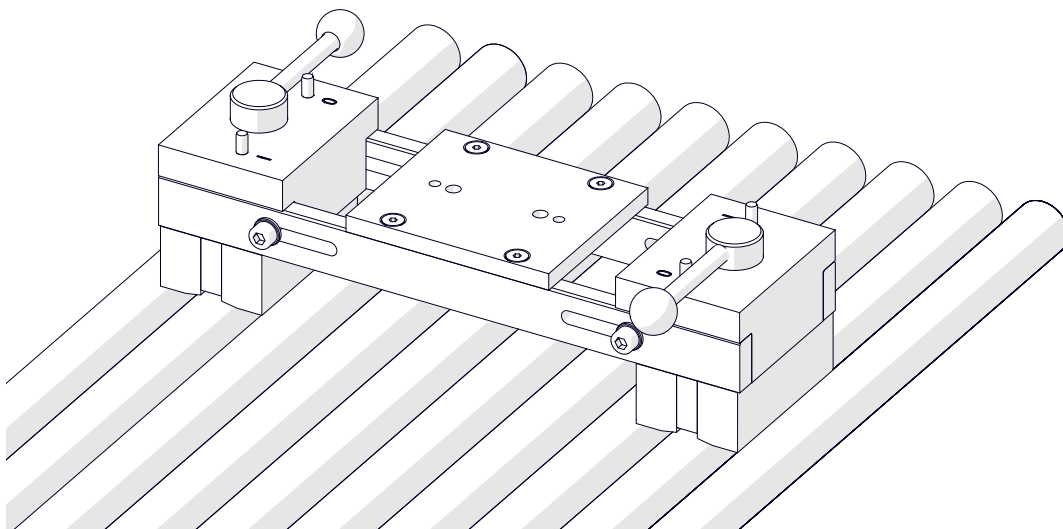
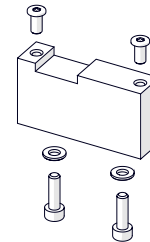
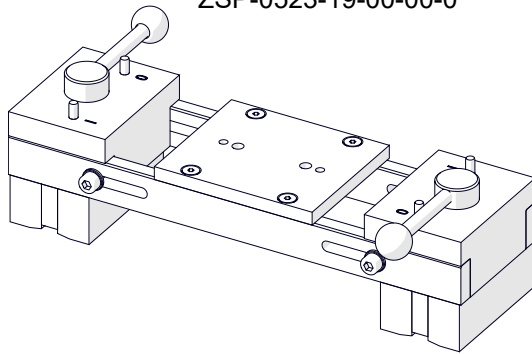
Install the unit in the same way as the magnetic unit is installed. To adjust the angle, use the 6 mm hex wrench (not included) and loosen four side screws.

### 6.10.3. Spacing-adjustable magnetic unit

Allows clamping a flexible trackway to two ferromagnetic pipes with diameters of 25–230 mm (63/64"–9 1/16") and with distance between pipe axes of 170–230 mm (6 11/16"–9 1/16").

Part number:  
ZSP-0523-19-00-00-0

Part number (bracket):  
DYS-0466-71-05-00-0



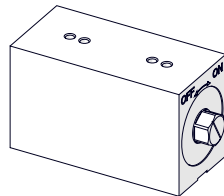
Holding force on a 5 mm (13/64") thick surface	Temperature
100% (1200 N)	20°C (68°F)
75% (900 N)	80°C (176°F)
50% (600 N)	120°C (248°F)

Install the unit in the same way as the magnetic unit is installed. To adjust the space, use the 5 mm hex wrench (not included) and loosen four side screws.

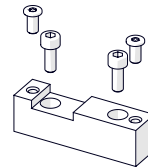
### 6.10.4. Narrow magnetic unit

Allows clamping a flexible trackway to ferromagnetic surfaces.

Part number:  
PDS-0582-10-00-02-0

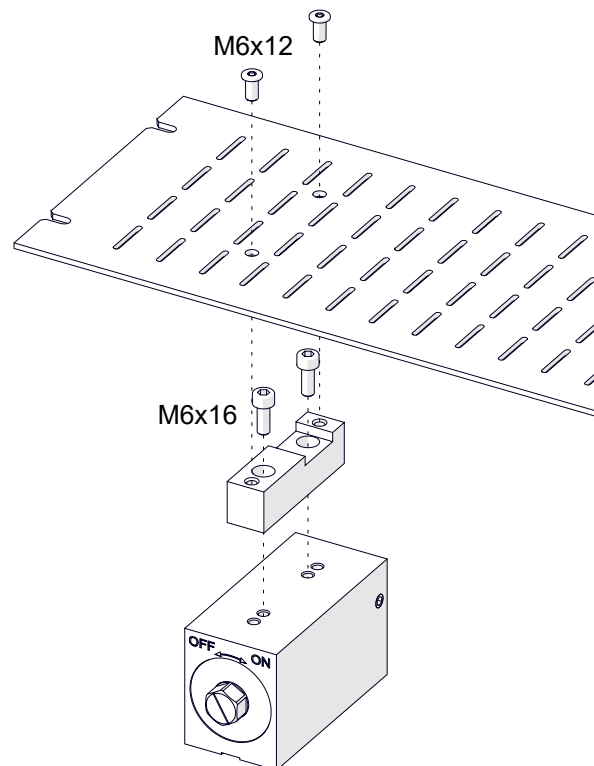


Part number (bracket):  
DYS-0466-71-07-00-0



Holding force on a 5 mm (13/64") thick surface	Temperature
100% (1000 N)	20°C (68°F)
75% (750 N)	80°C (176°F)
50% (500 N)	120°C (248°F)

Attach with a torx screwdriver (not included) and the 5 mm hex wrench (not included).

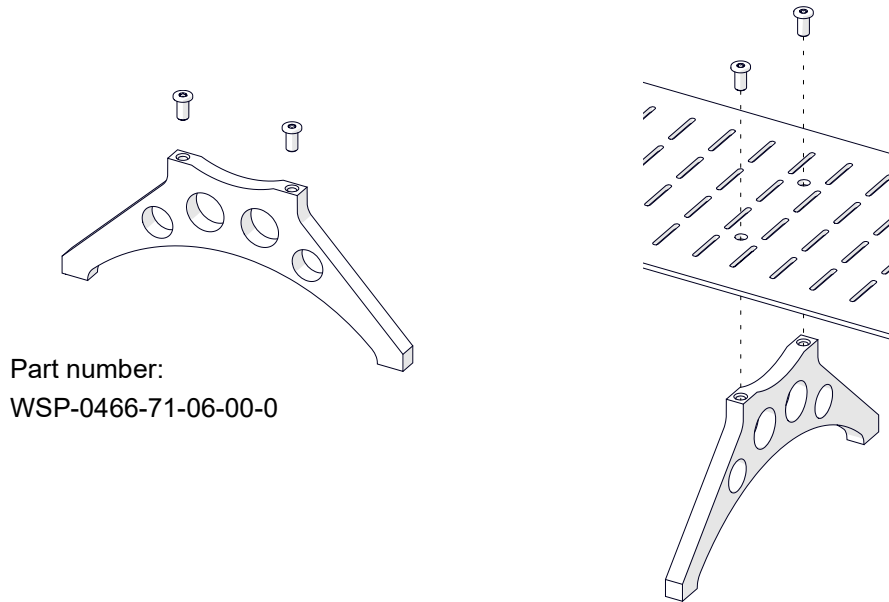


To clamp the unit to the surface, use the 17 mm flat wrench (not included) and set the side screw to ON.



## 6.11. Support for flexible trackway with magnetic units

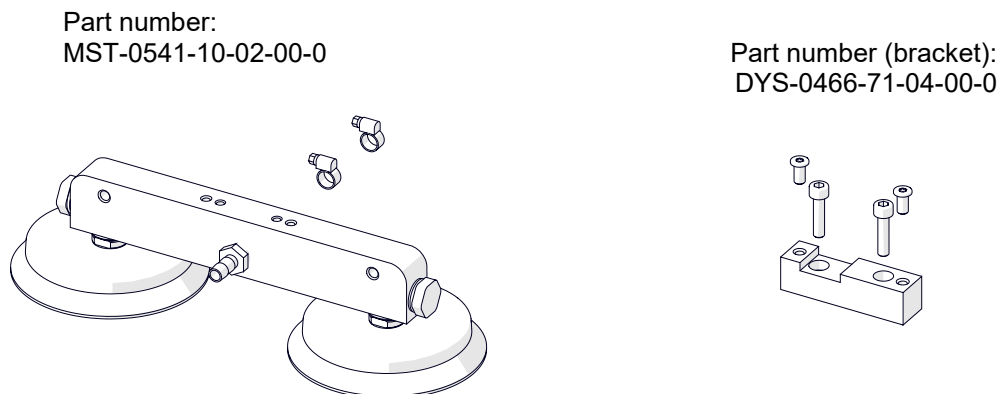
Allows supporting a flexible trackway used with at least five magnetic units, by filling the gaps between the units. To attach the support, use a torx screwdriver (not included) and M6x12 screws.



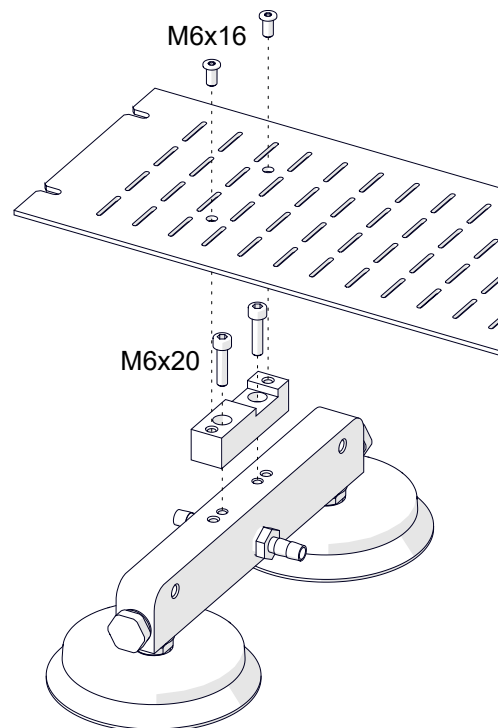
## 6.12. Vacuum unit

When used with a vacuum pump, the vacuum unit allows clamping a flexible trackway to non-ferromagnetic surfaces. The holding force of the vacuum unit is 1400 N at gauge pressure of  $-0.7$  bar ( $-10$  psig) and atmospheric pressure at sea level. The force decreases with increase in height above sea level. To increase the holding force of the trackway, use more vacuum units.

Make sure that the ambient temperature is between  $-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ ) and  $200^{\circ}\text{C}$  ( $392^{\circ}\text{F}$ ). Keep the flame at least 100 mm ( $3\frac{15}{16}$ ") away from the vacuum pads.



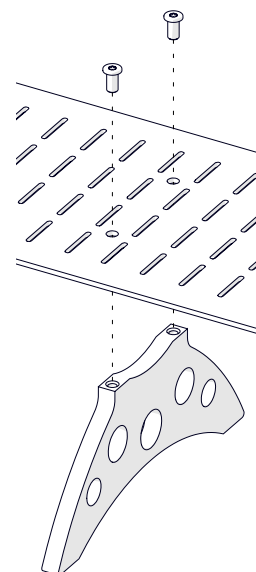
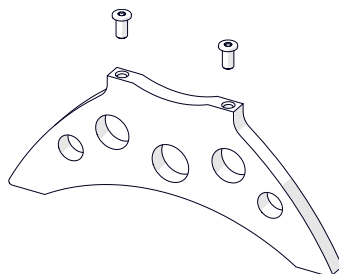
Install with a 4 mm hex wrench and 5 mm hex wrench (not included).



### 6.13. Support for flexible trackway with vacuum units

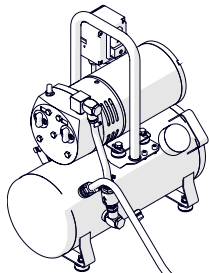
Allows supporting a flexible trackway used with at least five vacuum units, by filling the gaps between the units. To attach the support, use a torx screwdriver (not included) and M6x12 screws.

Part number:  
WSP-0466-71-03-00-0



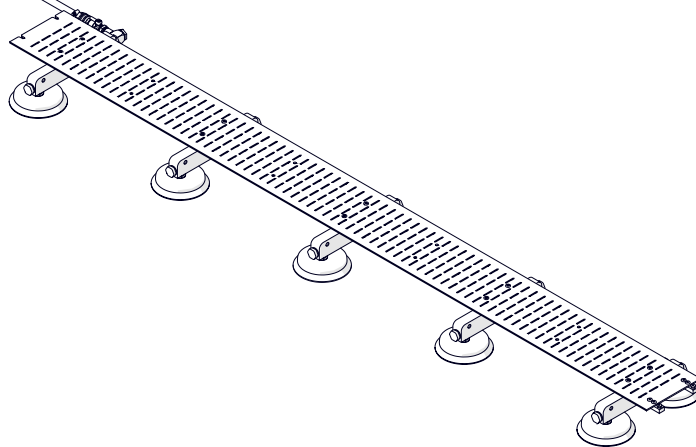
## 6.14. Vacuum Track System

Allows clamping a flexible trackway to non-ferromagnetic surfaces.



Part number (vacuum pump with safety reservoir):  
AGR-0541-10-10-00-0 (115 V UK)  
AGR-0541-10-20-00-0 (230 V CEE)

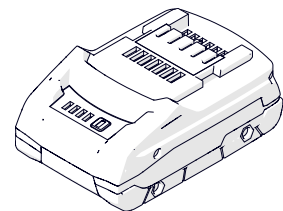
Other parts of the system are described in a separate manual.



## 6.15. Battery 4 Ah

Power source required for machine operation.

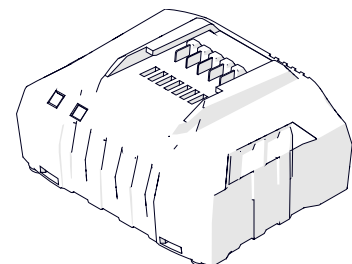
Part number:  
AKM-0738-10-00-01-0



## 6.16. Charger

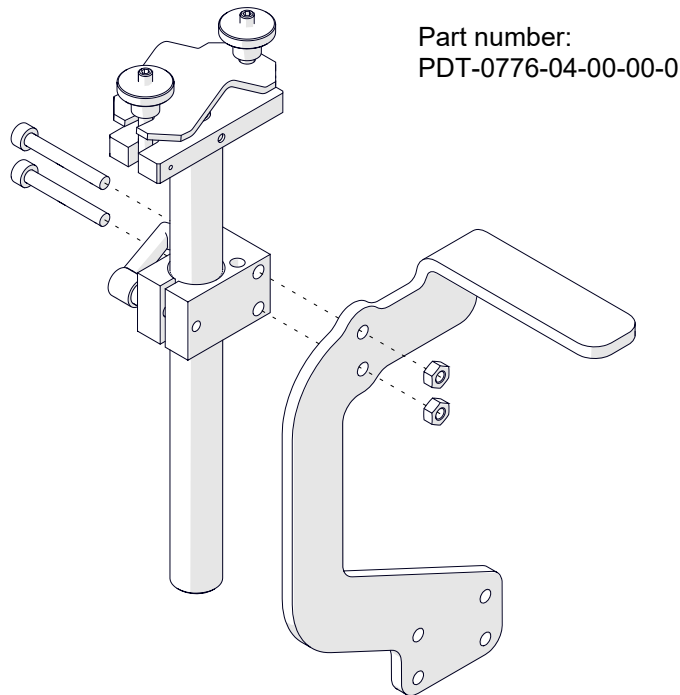
Charges the battery from the power source.

Part number:  
LDW-0738-04-00-30-0 (UK)  
LDW-0738-06-00-30-0 (AUS/NZ)  
LDW-0738-10-00-30-0 (EU)  
LDW-0738-24-00-30-0 (USA/CND)



### 6.17. Cable anchor

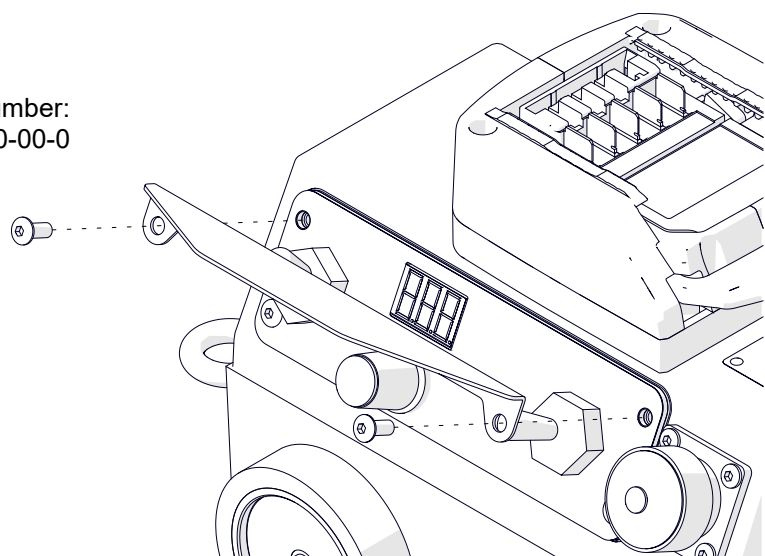
Attaches the gas hoses and the power cable to decrease the load applied on the torch holder. Using a 5 mm hex wrench (not included) and 10 mm flat wrench (not included) install the anchor on the carrying handle with two M6x45 screws and washers.



### 6.18. Display protection shield

Protects the display from dirt. Use the 2.5 mm hex wrench (not included) to remove the top screws of the panel and use them to attach the shield.

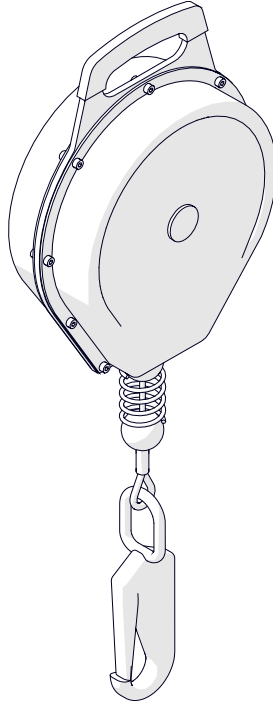
Part number:  
OSL-0526-22-00-00-0



### **6.19. Fall arrester**

Protects the carriage from falling. The length of the line is 10 m (33 ft).

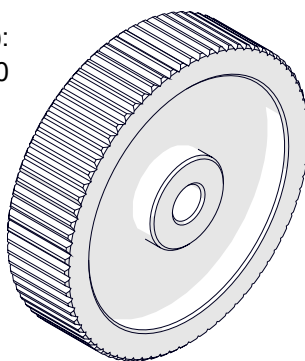
Part number:  
URZ-000001



### **6.20. Stainless steel wheels**

Allow working in horizontal position on a preheated plate.

Part number (1 unit):  
KOL-0466-72-00-00-0



Use the 2.5 mm hex wrench (not included) to remove the cover. Use the 3 mm hex wrench (not included) to remove four wheels. Install in reverse sequence.

