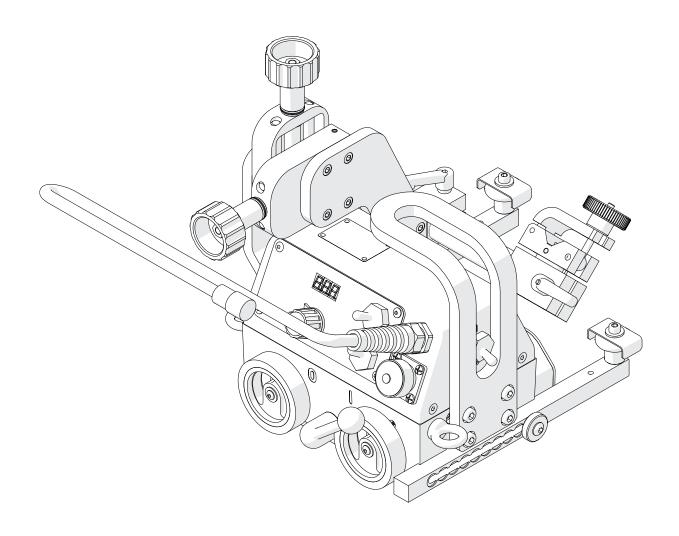


GECKOWELDING CARRIAGE

OPERATOR'S MANUAL



BEFORE USE, ENSURE EVERYONE USING THIS MACHINE READS AND UNDERSTANDS ALL SAFETY AND OPERATING INSTRUCTIONS IN THIS MANUAL.

Serial #	Date of Purchase

Ver: 2.03 25/08/23



LIMITED WARRANTY

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1. GENERAL INFORMATION

1.1. Application

The GECKO (HS) is a welding carriage designed to make continuous butt and fillet welds. The carriage allows MIG/MAG torches and is clamped with permanent magnets.

Accessories allow using torches of 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.

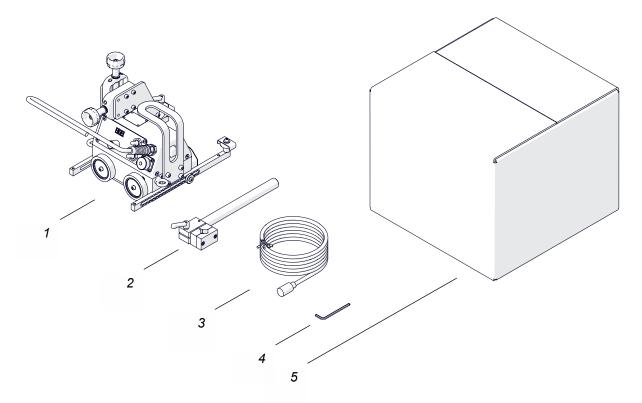
The machine is designed for use by a professional operator only.

1.2. Technical data

		GECKO	GECKO HS
Voltage		1~ 115–230 V, 50–60 Hz	1~ 115–230 V, 50–60 Hz
Voltage		1~ 42 V, 50–60 Hz	1~ 42 V, 50–60 Hz
Power		20 W	20 W
		PA/1F/1G	PA/1F/1G
Welding position		PB/2F	PB/2F
(according to EN	Horizontal	PC/2G	PC/2G
ISO 6947 and		PD/4F	PD/4F
AWS/ASME)		PE/4G	PE/4G
	Vertical	PF/3G	_
Minimum path curve	Outer	600 mm (23.6")	600 mm (23.6")
radius	Inner	800 mm (31.5")	800 mm (31.5")
Torch type		MIG/MAG	MIG/MAG
Torch diameter		16–22 mm (0.63–0.87")	16–22 mm (0.63–0.87")
Maximum torch reach	1	70 mm (2.8")	70 mm (2.8")
Maximum allowed	Horizontal work	8 kg (18 lbs)	8 kg (18 lbs)
cable weight	Vertical work	6 kg (13 lbs)	
Minimum workpiece t	hickness	4 mm (0.16")	4 mm (0.16")
Ground clearance		4 mm (0.16")	4 mm (0.16")
Horizontal pulling force	e	150 N	150 N
Vertical pulling force		100 N	1
C		0–35 mm (0–1.38")	0–35 mm (0–1.38")
Cross slide adjustment range		(up-down, left-right)	(up-down, left-right)
Guide arm adjustment range		0–170 mm (0–6.7")	0–170 mm (0–6.7")
Horizontal speed		0-110 cm/min (0-43.3 in/min)	5-220 cm/min (2-86.6 in/min)
Vertical speed		0-100 cm/min (0-39.4 in/min)	



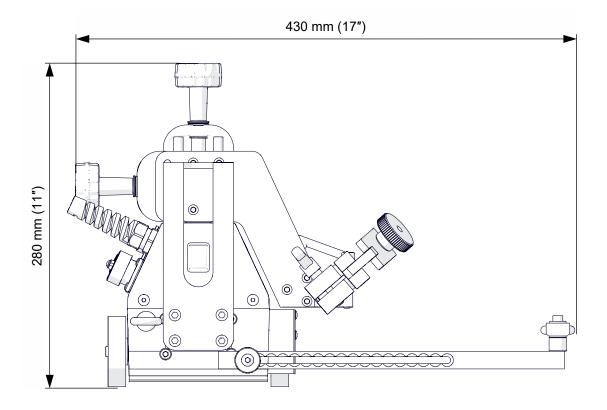
1.3. Equipment included

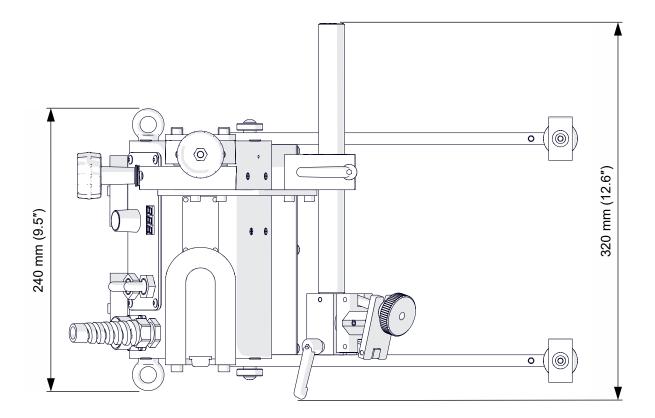


1	Welding carriage	1 unit
2	Torch holder	1 unit
3	Arc ignition cable	1 unit
4	4 mm hex wrench	1 unit
5	Box	1 unit
_	Operator's manual	1 unit



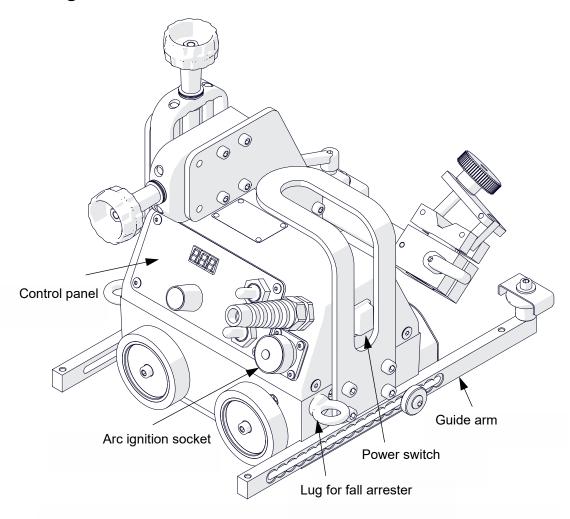
1.4. Dimensions

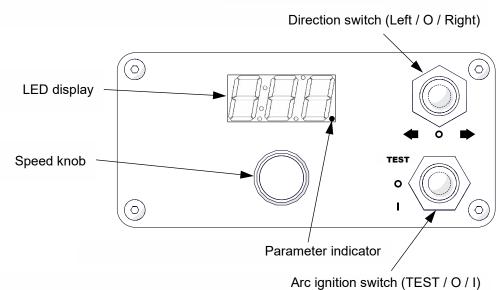






1.5. Design







2. SAFETY PRECAUTIONS

- 1. Before use, read this operator's manual and complete a training in occupational safety and health.
- 2. Use only in applications specified in this operator's manual.
- 3. Make sure that the carriage has all parts and they are genuine and not damaged.
- 4. Make sure that the specifications of the power source are the same as those specified on the rating plate.
- 5. Connect the carriage to a correctly grounded power source.
- 6. Do not carry the carriage by the cables, and do not pull them. This can cause damage and electric shock.
- 7. Keep untrained bystanders away from the carriage.
- 8. Before each use, ensure the correct condition of the carriage, power source, cables, plugs, sockets, control panel, and wheels.
- 9. 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 carriage.
- 10. Keep the carriage dry. Do not expose the carriage to rain, snow, or frost.
- 11. Keep the work area well lit, clean, and free of obstacles.
- 12. Do not use near flammable materials or in explosive environments.
- 13. Make sure that the rubber of the wheels is clean and not damaged.
- 14. Do not remove the cover of the wheels.
- 15. Remove objects attracted to the chassis by the magnet.
- 16. Transport and position the carriage by using the carrying handle.
- 17. Put the carriage so that four wheels are on the surface. Make sure that no contact is between the surface and chassis.
- 18. Do not stay below the carriage that is put at heights.
- 19. Connect the cables only after you set the power switch to 'O'.
- 20. Keep the sockets clean. Do not use high pressure during cleaning.
- 21. Install only MIG/MAG torches which diameter is the same as the diameter of the torch holder.
- 22. Do not put the torch more than 70 mm (2.76") outward from the left or right side of the carriage.



- 23. Keep the torch cables away from the surface. Hang them to decrease the load applied on the carriage. Use only cables whose weight is not more than 8 kg (18 lbs) for horizontal work and 6 kg (13 lbs) for vertical work.
- 24. Do not work on curves with convex or concave radius less than specified in technical data.
- 25. Use the HS version of the carriage in horizontal positions only.
- 26. At heights, use a fall arrester not to let the carriage fall.
- 27. Use eye protection (helmet, shield, and screen), ear protection, gloves, and protective clothing. The clothing must not be loose.
- 28. Do not stop the carriage by hand. To stop, set the direction switch to 'O'.
- 29. Do the maintenance only after you unplug the carriage from the power source.
- 30. Repair only in a service center appointed by the seller.
- 31. If the carriage falls, is wet, or has any damage, stop the work and immediately send the carriage to the service center for check and repair.
- 32. Do not leave the carriage unattended during work.
- 33. If you are not going to use the carriage, remove it from the work area and keep in a safe and dry place.



3. STARTUP AND OPERATION

3.1. Preparing

Transport the carriage to the work area by the carrying handle. Set to 'O' all switches (power, direction, and arc ignition switch).

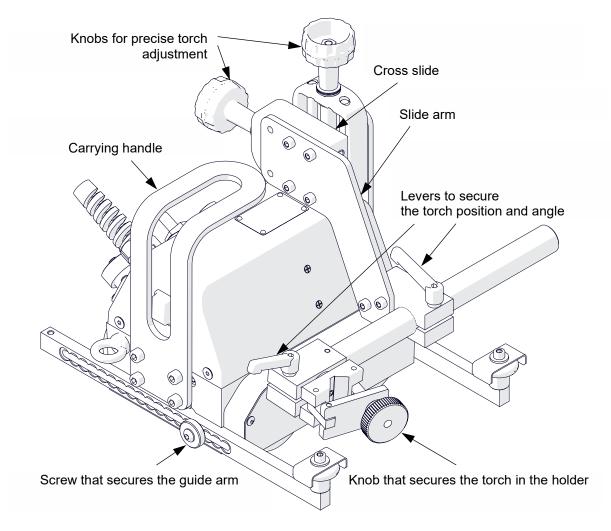


Fig. 1. View from the back



You can change the torch adjustment range to the right by 22 mm (0.87"). Use 4 mm hex wrench to detach the slide arm. Then, install it with four screws as shown in fig. 2.

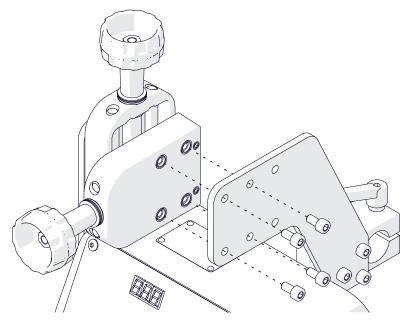


Fig. 2. Changing the adjustment range to the right

You can change the torch adjustment range upward by 22 mm (0.87"). Use 4 mm hex wrench to detach the cross slide. Then, install it with four screws as shown in fig. 3.

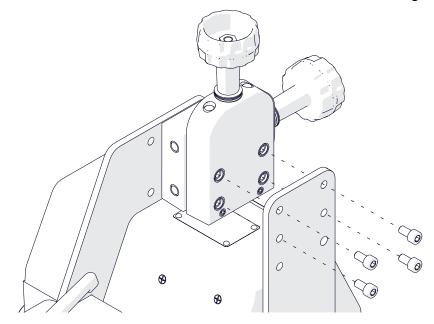


Fig. 3. Changing the adjustment range upward

Connect the carriage to the power source. Then, put the torch into the torch holder and tighten with the knob.



3.2. Connecting to the welding circuits

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 from fig. 4 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.

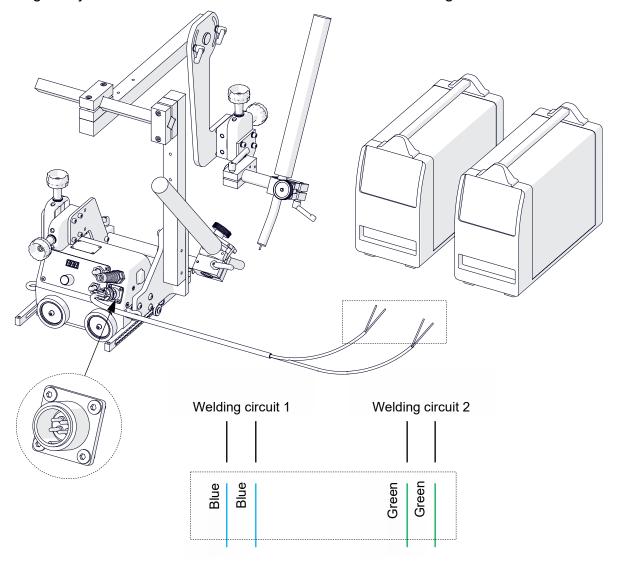


Fig. 4. Connecting the arc ignition cable to welding circuits

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



3.3. 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 (0.4") or one groove more than the left arm (fig. 5), and then tighten the screw again.

When the carriage moves to the right, move out the left arm.

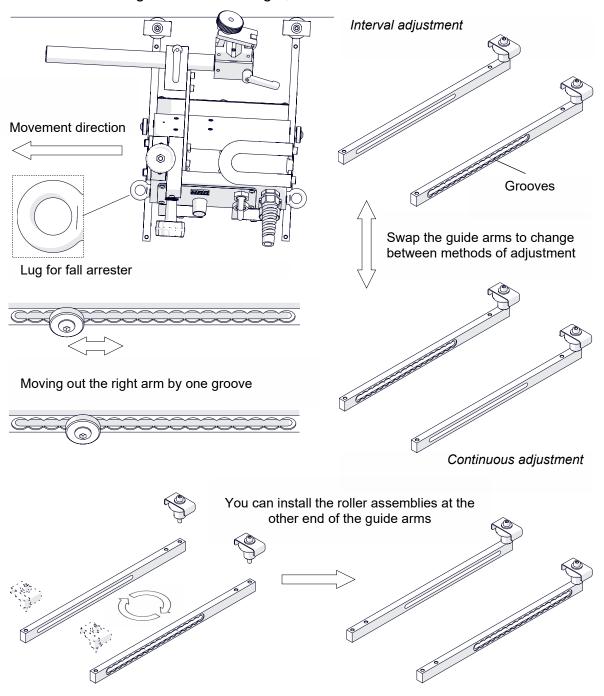


Fig. 5. Correct positioning of the guide arms



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 (fig. 5).

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

At heights, attach a fall arrester (not included) to a lug (fig. 5) 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.

3.4. Operating

To turn the carriage on, set the power switch to 'I'. All display segments come on (BBB). Next, the software version shows (SFE). If the speed unit is set to centimeters per minute, EUr shows. If the unit is set to inches per minute, USB shows. Next, the carriage speed shows. Set the required value using the speed knob.

To control the torch through the carriage, set the arc ignition switch to 'l'. Then the welding arc ignites **immediately** after selecting the movement direction with the direction switch.

To go into the settings, press and hold the speed knob for 3 seconds. Select the parameter you want to set by turning the knob (tab. 1).

Parame- ter		Value	Description
а	1	0–5 s [step: 0.5 s]	Carriage movement delay time. When the direction switch is set to ◀ or ►: □ □ □ I = 0 s - the arc ignites and the carriage starts immediately, □ □ □ I > 0 s - the arc ignites and the carriage starts after the set time (fig. 6).
dē	ו	0–5 s [step: 0.5 s]	Arc out delay time. When the direction switch is set to O : □ □ □ □ □ s – the carriage stops and the arc goes out immediately, □ □ □ □ s – the carriage stops and the arc ignites for the set time (fig. 6).

Tab. 1. Parameters

To select the parameter, press the speed knob. Set the value by turning the knob. To set, press the knob. To exit the settings, turn the knob until End displays, then press and hold the knob for 3 seconds. The settings are saved and used also at the next startup of the carriage.



If the set carriage movement delay time $(d \ | \)$ or arc out delay time $(d \ | \)$ is more than 0 s, a parameter indicator '•' shows next to the displayed carriage speed.

Use the direction switch to select the movement direction. The carriage starts working with the set parameters (fig. 6) and speed. You can adjust the speed at any time.

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

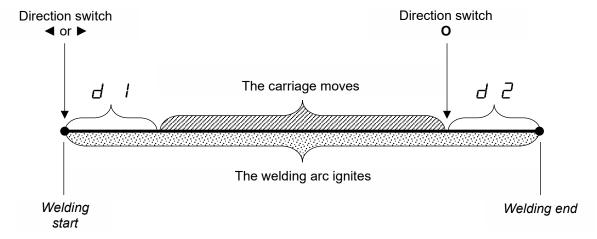


Fig. 6. Behavior of the carriage that controls the torch with the $d \mid l$ and $d \mid l$ parameters set After the work is finished, use the power switch to turn off the carriage. Then, unplug the carriage from the power source.

3.5. Changing the unit of speed

Before changing the unit of speed, set the power switch to 'O' to turn off the carriage.

To change the speed unit, press and hold the speed knob and set the power switch to 'I' at the same time. The display shows the currently used unit. By turning the knob, go to:

- \Box EUr to set the speed unit to centimeters per minute,
- \Box USA to set the speed unit to inches per minute.

To select, press the speed knob. Then the carriage turns on and displays the set speed unit.



3.6. Troubleshooting

Message	Problem	Solution
9.55.	Display not fully on after powering. Contact service center for cand 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."
powering.		Set the direction switch to 'O'. If the message still shows, contact service center for check and repair.
	Shown during travel indicates a mal- function.	Contact service center for check and repair.
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.
σC	Motor overload. The carriage stops.	Remove other objects that block the carriage or its wheels.
		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 this message still shows, contact service center for check and repair.



4. 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.

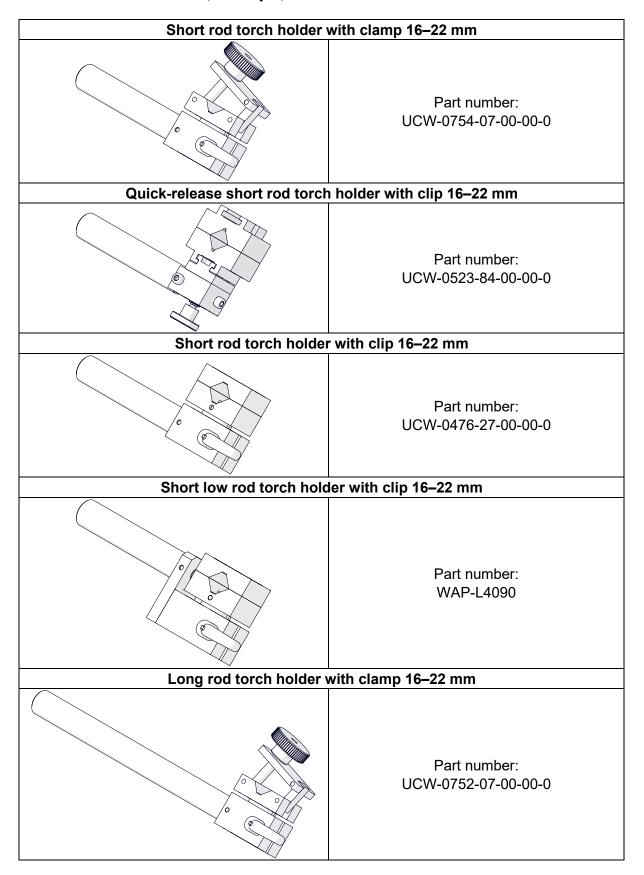
Every month:

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



5. ACCESSORIES

5.1. Torch holders, clamps, and rods



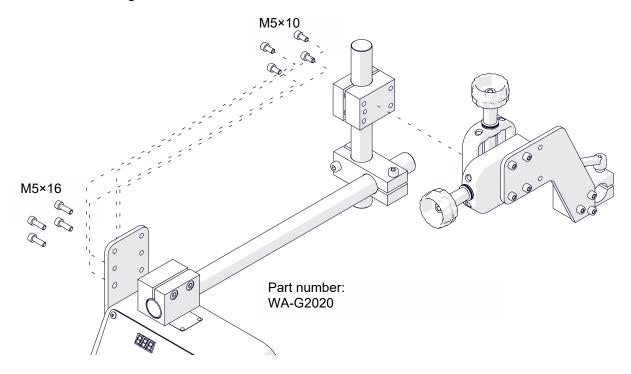


Long rod torch holder with clip 16–22 mm				
	Part number: UCW-0466-22-00-00-0			
Torch clamp	16–22 mm			
	Part number: WAP-G2090			
Torch clip 1	6–22 mm			
	Part number: WAP-G2160			
Torch clamp	22–35 mm			
	Part number: WAP-L4040			
Short	rod			
	Part number: WAP-G2050			
Long rod				
	Part number: WAP-L4030			



5.2. 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.



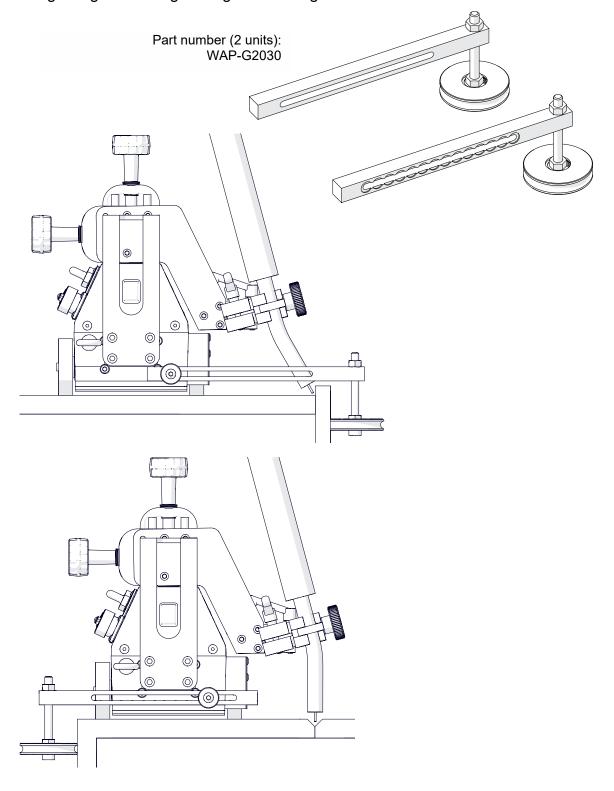


5.3. Guide arms

The adjustment range of accessory guide arms is 0–100 mm (0–3.94"). Before installing, remove the standard guide arms with a 4 mm hex wrench.

5.3.1. Edge following guide arms

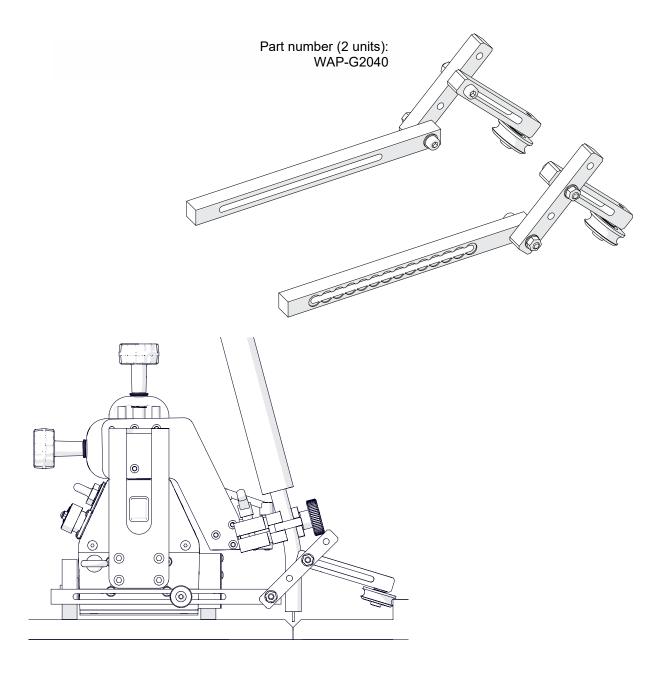
Allow guiding the carriage along outside edges.





5.3.2. Adjustable guide arms

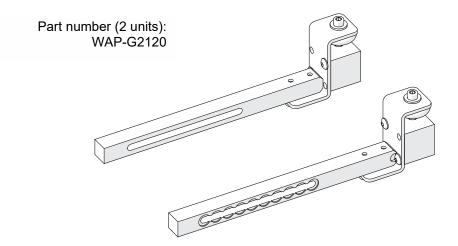
Allow guiding the carriage along lap joints and templates.

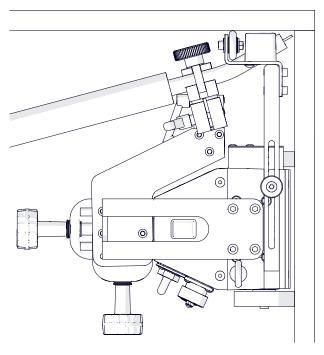




5.3.3. Magnet guide arms

Allow guiding the carriage on ceilings.

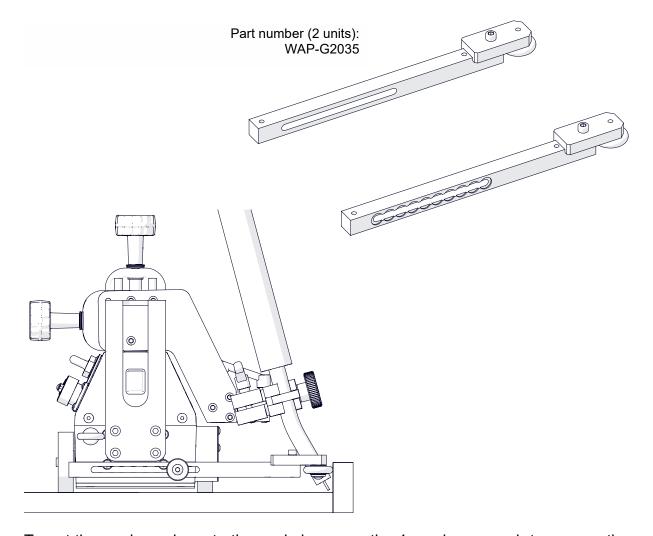




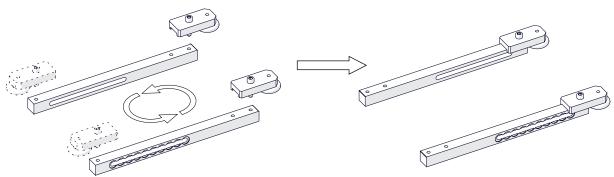


5.3.4. Low guide arms

Allow guiding the carriage along low walls.



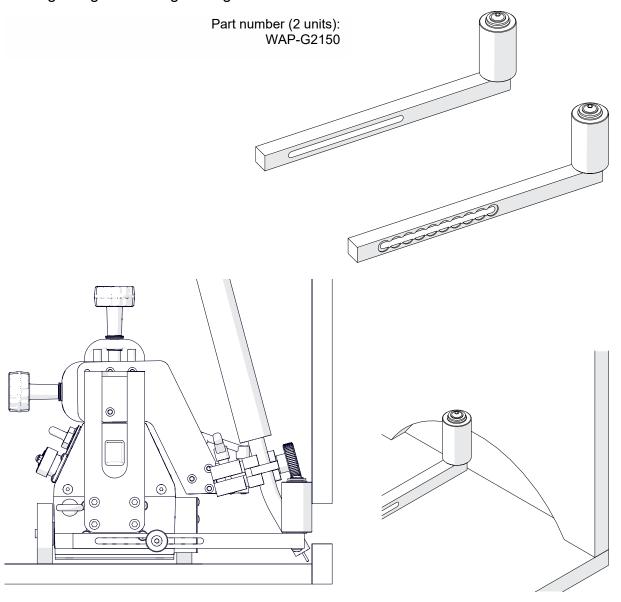
To put the carriage closer to the workpiece, use the 4 mm hex wrench to remove the roller assemblies. Next, install them at the other end of the guide arms, and then swap the guide arms.





5.3.5. High guide arms

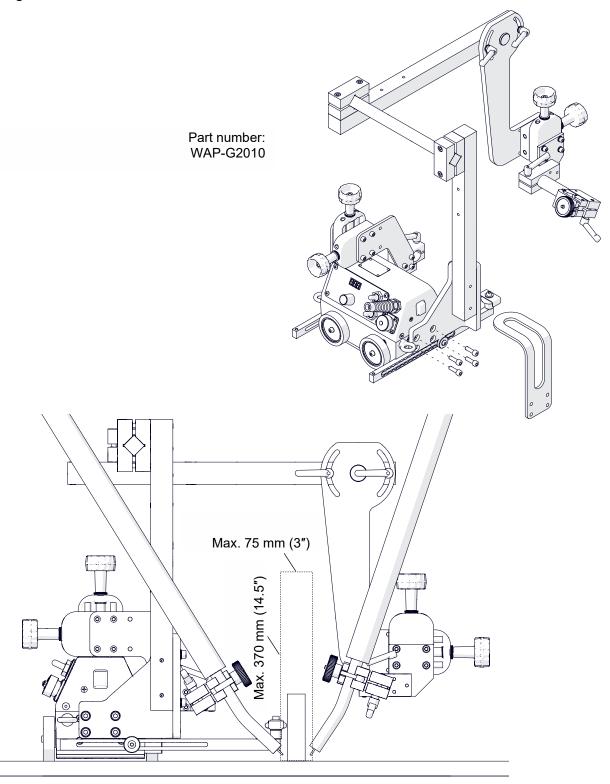
Allow guiding the carriage along walls that have holes.





5.4. Dual torch mount

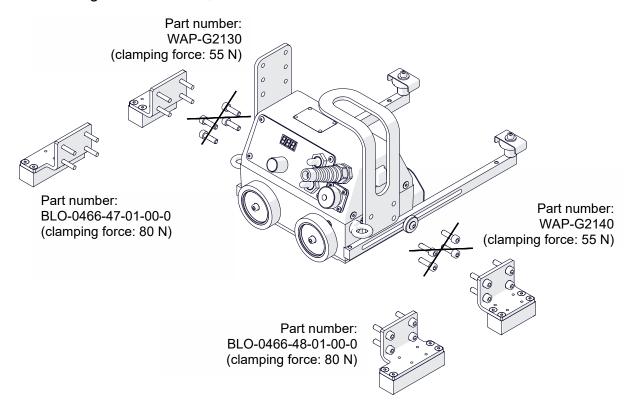
Allows using a second torch. Use the 5 mm hex wrench to remove the screws that attach the carrying handle. Next, use the same screws to attach the mount to the carriage.





5.5. Auxiliary magnet blocks

The blocks increase the clamping force of the carriage. Use the 5 mm hex wrench to remove eight screws. Next, install the blocks.



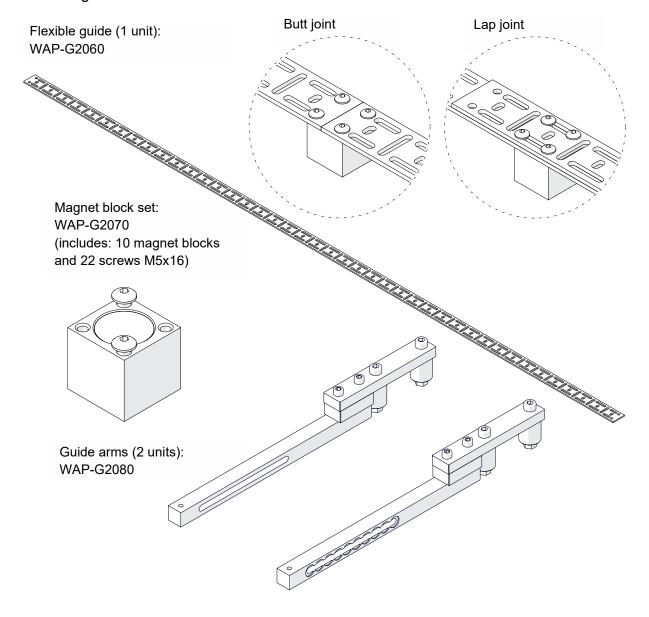


5.6. Flexible guide set

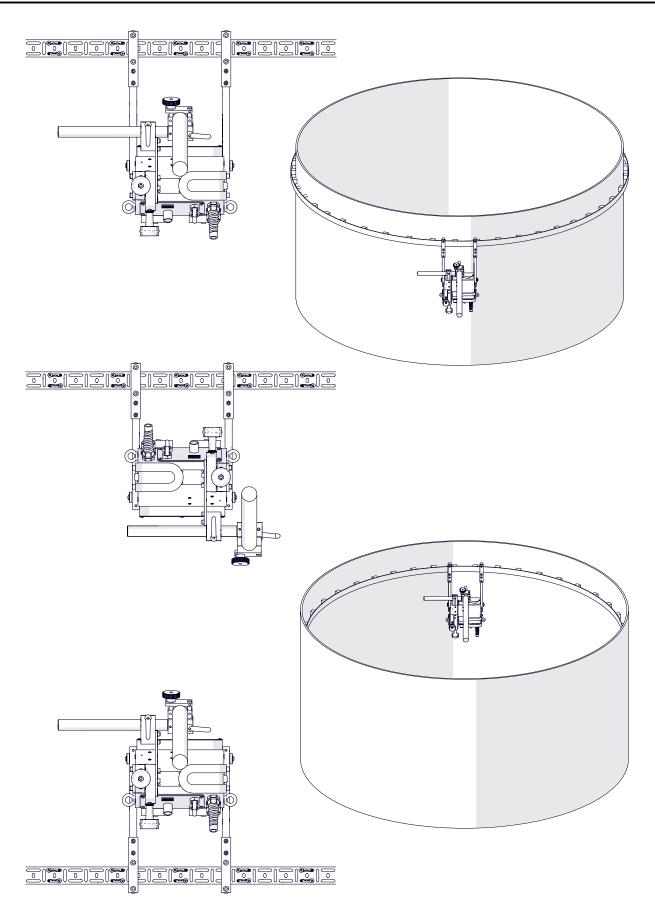
Allows guiding the carriage on planes along a straight line, and on pipes and tanks. A single flexible guide is 1.85 m (6 ft) long. Its minimum curve radius is 1 m (3.3 ft).

Holding force on a 5 mm (0.2") 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 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.



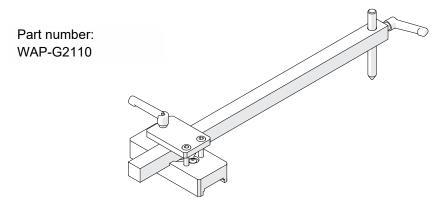




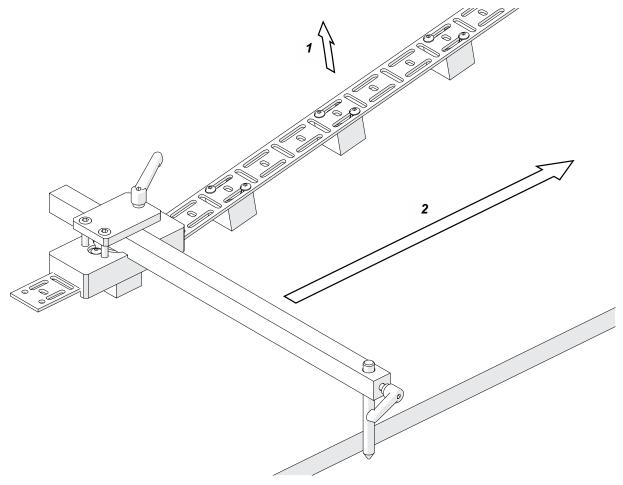


5.7. Guide adjustment tool

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



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.

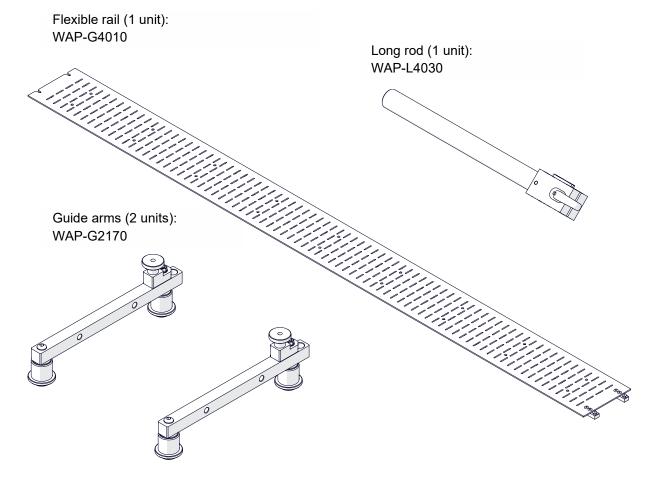




5.8. Flexible trackway set

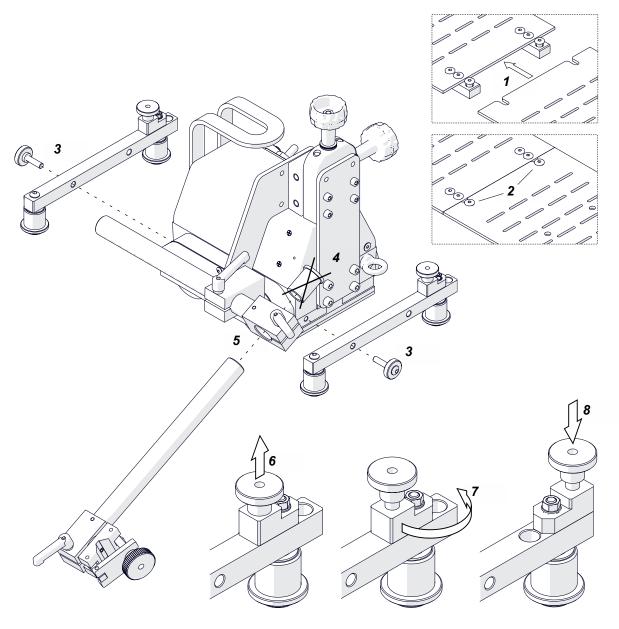
Allows the carriage to move on flexible rails that are clamped to planes, pipes, or tanks. A single flexible rail is 1.88 m (6.1 ft) long, and its minimum curve radius is 1.25 m (4.1 ft). Clamp each rail to the surface by using nine narrow magnetic units or at least five magnetic/vacuum units.

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

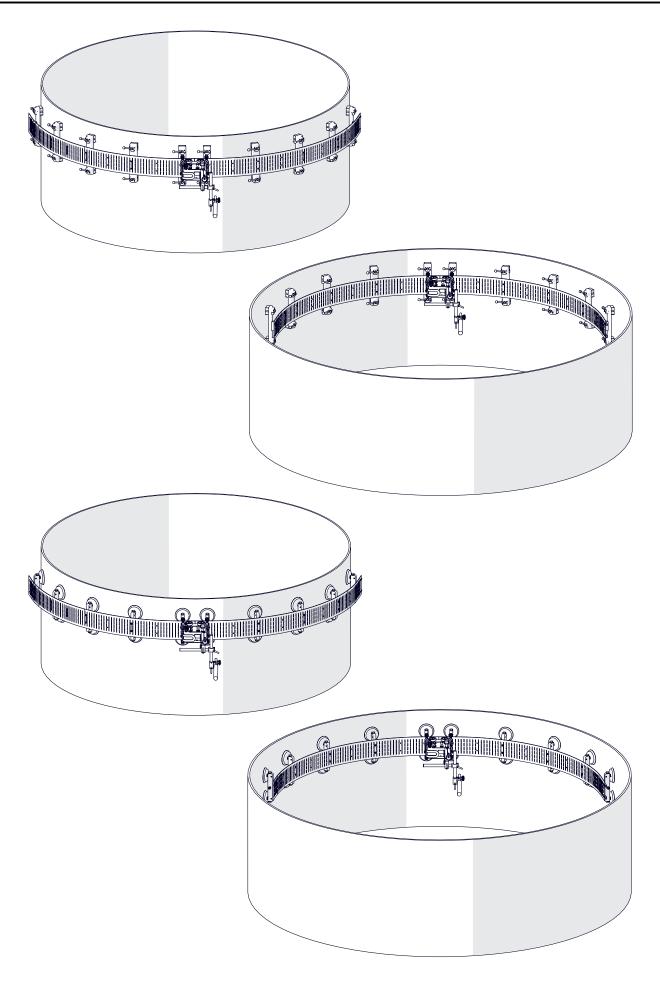




Connect two rails with the 3 mm hex wrench (1, 2). Use the 4 mm hex wrench to remove the standard guide arms and install the guide arms of the set (3). Remove the sleeve from the long rod (4) and install the rod into the carriage. Next, install the torch holder into the rod (5) and move the rollers outward (6, 7, 8). Then, put the carriage onto the rail and set the rollers as before.





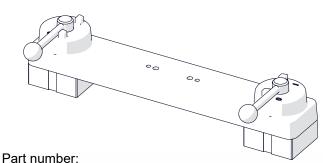




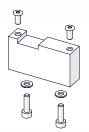
5.9. Magnetic units for flexible trackway

5.9.1. Magnetic unit

Allows clamping a flexible trackway to ferromagnetic surfaces.



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

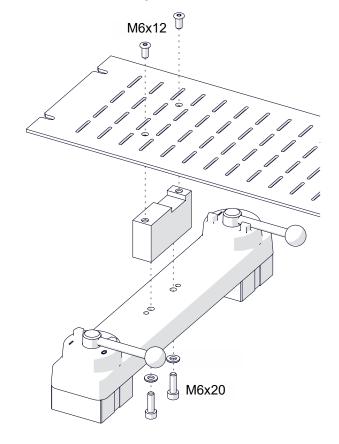


WAP-RB2010 (magnetic unit)

ZSP-0475-93-00-00-0 (heat-resistant magnetic unit)

Holding force on a	Tempo	Temperature			
5 mm (0.2") thick surfac	e 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)			

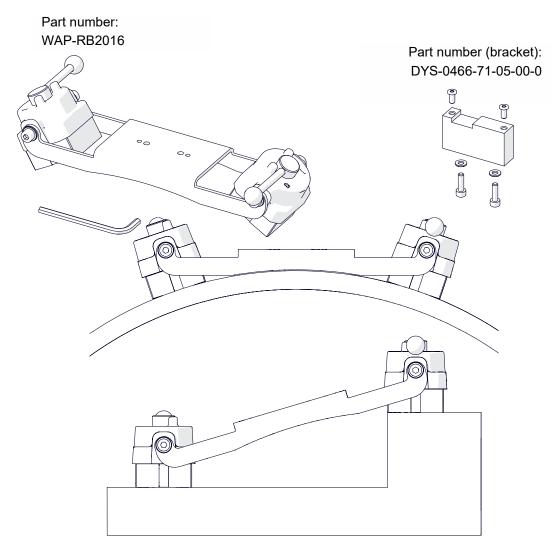
Attach with a torx screwdriver and the 5 mm hex wrench.





5.9.2. Pivoting magnetic unit

Allows clamping a flexible trackway to ferromagnetic surfaces that are concave or convex, to pipes of outer diameters of at least 800 mm (31.5"), and to surfaces that differ in height up to 80 mm (3.1").



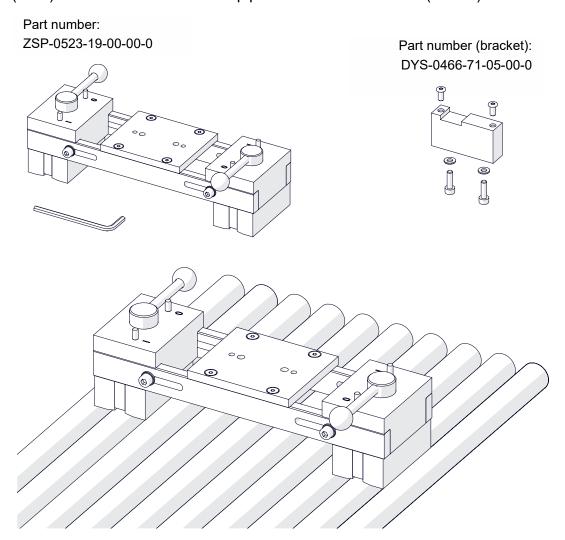
Holding force on a 5 mm (0.2") thick surface	Temperature	
100% (1200 N)	20°C (68°F)	
75% (900 N)	80°C (176°F)	
50% (600 N)	120°C (248°F)	

Install the unit in the same way as the magnetic unit is installed. To adjust the angle, use the 6 mm hex wrench and loosen four side screws.



5.9.3. Spacing-adjustable magnetic unit

Allows clamping a flexible trackway to two ferromagnetic pipes of diameters of 25–230 mm (1–9") and of distance between pipe axes of 170–230 mm (6.7–9").



Holding force on a 5 mm (0.2") thick surface	Temperature	
100% (1200 N)	20°C	(68°F)
75% (900 N)	80°C	(176°F)
50% (600 N)	120°C	(248°F)

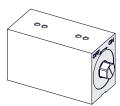
Install the unit in the same way as the magnetic unit is installed. To adjust the space, use the 5 mm hex wrench and loosen four side screws.



5.9.4. Narrow magnetic unit

Allows clamping a flexible trackway to ferromagnetic surfaces.



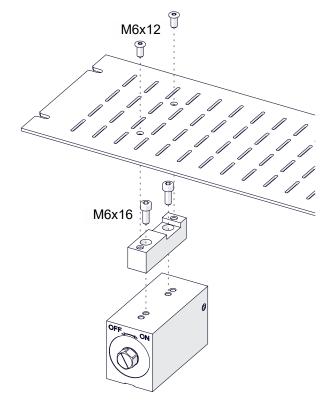


Part number (bracket): DYS-0466-71-07-00-0



Holding force on a 5 mm (0.2") 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 and the 5 mm hex wrench.

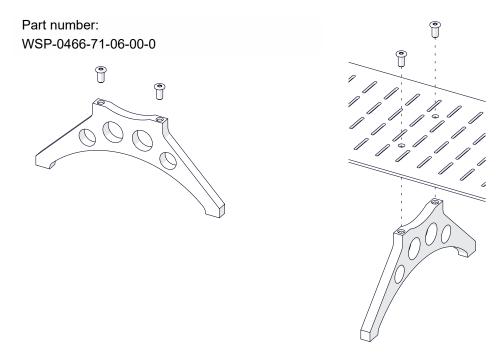


To clamp the unit to the surface, use the 17 mm flat wrench and set the side screw to ON.



5.10. Support for flexible trackway with magnetic units

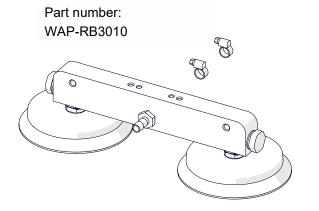
Allows supporting a flexible trackway used with at least five magnetic units, by filling the gaps between the units. To attach the support, use a torx screwdriver and M6x12 screws.



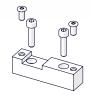
5.11. Vacuum unit

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°C (-4°F) and 200°C (392°F). Keep the flame at least 100 mm (4") away from the vacuum pads.

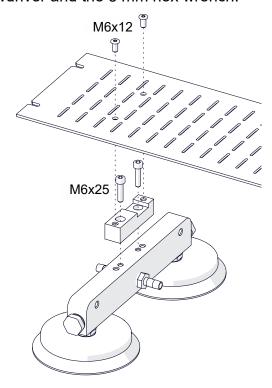


Part number (bracket): DYS-0466-71-04-00-0



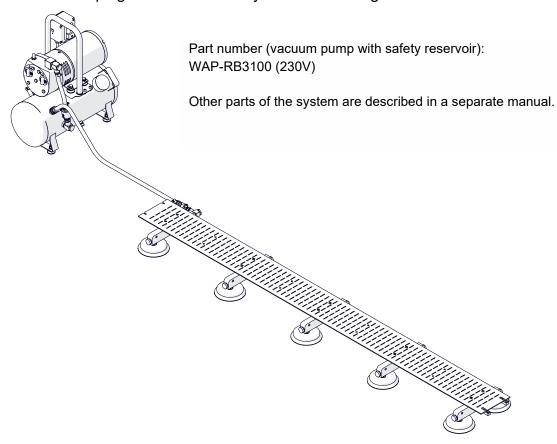


Attach with a torx screwdriver and the 5 mm hex wrench.



5.12. Vacuum track system

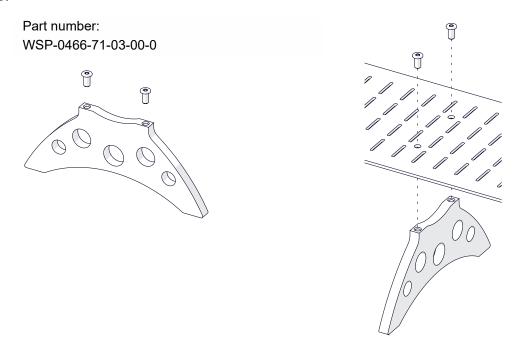
Allows clamping a flexible trackway to non-ferromagnetic surfaces.





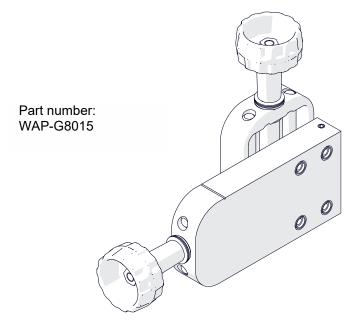
5.13. Support for flexible trackway with vacuum units

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 and M6x12 screws.



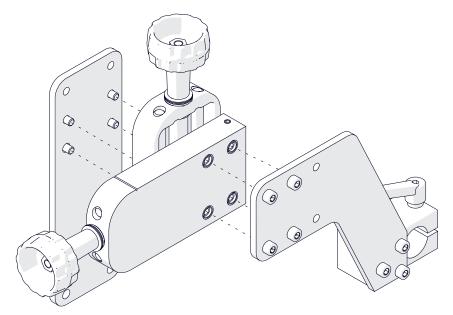
5.14. 76 mm cross slide

Increases the up-down or left-right adjustment range from 0-35 mm (0-1.38") to 0-76 mm (0-3").



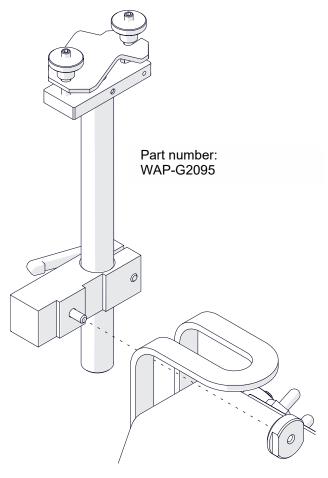


Use the 4 mm hex wrench to remove the standard cross slide and install the new cross slide.



5.15. Cable anchor

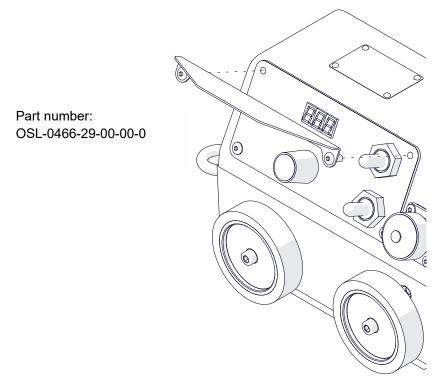
Attaches the gas cables and the power cord to decrease the load applied on the torch holder. Use the 5 mm hex wrench to install the anchor on the carrying handle.





5.16. Display protection shield

Protects the display from dirt. Use the 2.5 mm hex wrench to remove the top screws of the panel and use them to attach the shield.



5.17. Fall arrester

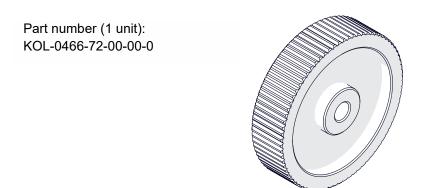
Protects the carriage from falling. The length of the line is 10 m (33 ft).



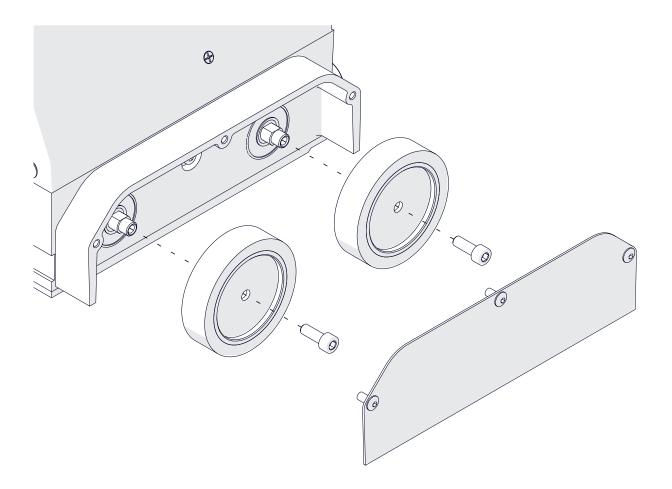


5.18. Stainless steel wheels

Allow working in horizontal position on a preheated plate.

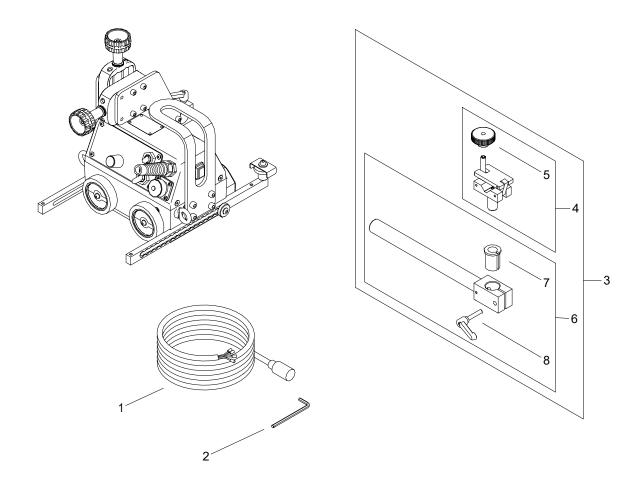


Use the 2.5 mm hex wrench to remove the cover. Then, use 4 mm hex wrench to remove four wheels. Install in reverse sequence.



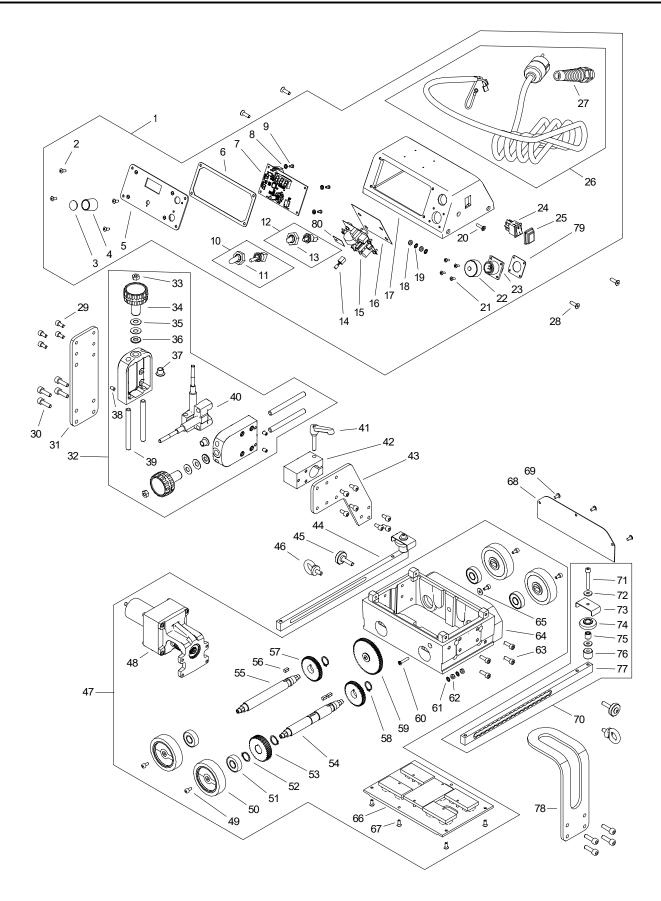


6. PARTS LIST



ITEM	PART NUMBER	DESCRIPTION	Q-TY
1	KBL-0466-17-00-00-0	START-STOP ARC IGNITION CABLE 6.5 M (20 FT)	1
2	KLC-000007	HEX WRENCH 4 MM	1
3	UCW-0752-07-00-00-0	TORCH HOLDER	1
4	ZRZ-0752-07-01-00-0	TORCH CLAMP	1
5	PKT-0752-07-01-03-0	CLAMP KNOB	1
6	WLK-0466-04-10-00-0	LONG ROD ASSY	1
7	TLJ-0419-04-02-03-0	INSULATION TUBE	1
8	RKJ-000036	HANDLEVER GN 300-45-M6-32-SW	1





ITEM	PART NUMBER	DESCRIPTION	Q-TY
1	OBD-0752-02-00-00-0	CONTROLLER HOUSING	1
2	WKR-000092	HEX SOCKET BUTTON HEAD SCREW M4x10	4
3	ZLP-000007	KNOB PLUG K11- RED	1



ITEM	PART NUMBER	DESCRIPTION	Q-TY
4	PKT-000016	POTENTIOMETER KNOB	1
5	MSK-0466-02-02-10-1	COVER PLATE ASSY	1
6	USZ-0466-02-02-03-0	COVER PLATE SEAL	1
7	MDL-0752-80-01-00-0	CONTROLLER MODULE	1
8	PDK-000158	EXTERNAL TOOTH LOCK WASHER 3.2	4
9	WKR-000428	CROSS RECESSED PAN HEAD SCREW M3x6	4
10	WZK-0752-02-08-01-0	ARC IGNITION HARNESS	1
11	OSL-000036	LEVER SWITCH COVER	1
12	WZK-0752-02-08-02-0	TRAVEL DIRECTION SWITCH HARNESS	1
13	OSL-000036	LEVER SWITCH COVER	1
14	WZK-0466-02-06-00-0	SUPPLY HARNESS	1
15	MDL-0466-02-03-00-1	PSU MODULE	1
16	PLY-0466-02-08-00-0	INSULATING PLATE	1
17	PKR-0752-02-01-00-0	CONTROLLER COVER ASSY	1
18	NKR-000013	HEX NUT M4	2
19	PDK-000060	EXTERNAL TOOTH LOCK WASHER 4.3	2
20	WKR-000152	CROSS RECESSED COUNTERSUNK HEAD SCREW M4x16	1
21	WKR-000313	HEX SOCKET BUTTON HEAD SCREW M3x8	4
22	NKR-000120	SAFETY NUT	1
23	WZK-0466-02-05-00-0	IGNITION SOCKET WIRE SET	1
24	PNK-000059	POWER SWITCH	1
25	OSL-000219	SWITCH COVER	1
26	PWD-0752-02-05-00-0		1
27	DLW-000007	CABLE GLAND WITH STRAIN RELIEF PG11	1
28	WKR-000136	HEX SOCKET COUNTERSUNK HEAD SCREW M5x16	4
29	SRB-000075	HEX SOCKET HEAD CAP SCREW M5x10	11
30	SRB-000114	HEX SOCKET HEAD CAP SCREW M6x20	8
31	WSP-0752-04-00-00-0		1
32	ZSP-0466-14-00-00-0	CROSS SLIDE ASSY	1
33	NKR-000017	HEX NUT M6	2
34	PKT-0466-14-02-00-0	KNOB	2
35	SPR-000013	DISC SPRING 8,2x18x0,7	4
36	PDK-000022	ROUND WASHER 8.4	2
37	TLJ-000089	SLIDE BUSHING 8x10x1x9,5	2
38	WKR-000026	HEX SOCKET SET SCREW WITH FLAT POINT M5x8	4
39	KLK-000118	DOWEL PIN 8m6x80	4
40	ZSP-0466-99-00-00-1	BOLT SET ASSY	1
41	RKJ-000036	HANDLEVER GN 300-45-M6-32-SW	1
42	KST-0752-06-00-00-0	PLATE BLOCK	1
43	WSP-0752-05-00-00-0		1
44	PRW-0752-09-00-00-0		1
45	SRB-0466-10-00-00-0	GUIDE ARM SCREW	2
46	SRB-000278	EYE BOLT M6	2
47	PDW-0752-01-00-00-0	CHASSIS	1
48	MTR-0466-01-06-00-0	MOTOREDUCER ASSY	1
49	SRB-000074	HEX SOCKET HEAD CAP SCREW M4x8	5
50	KOL-0752-01-04-00-0	DRIVE WHEEL ASSY	4
51	LOZ-000038	BALL BEARING 12x28x8	4
52	PRS-000005	EXTERNAL RETAINING RING 15z	2
53	KOL-0752-01-06-00-0	GEAR z30	1
54	WLK-0752-01-02-00-0	FRONT SHAFT	1
55	WLK-0752-01-03-00-0	REAR SHAFT	1
			1



ITEM	PART NUMBER	DESCRIPTION	Q-TY
56	WPS-000082	PARALLEL KEY 4x4x8	3
57	KOL-0752-01-05-00-0	GEAR z41	2
58	PRS-000004	EXTERNAL RETAINING RING 14z	2
59	KOL-0752-01-07-00-0	GEAR z=61 ASSY	1
60	WKR-000434	CROSS RECESSED COUNTERSUNK HEAD SCREW M4x20	1
61	PDK-000060	EXTERNAL TOOTH LOCK WASHER 4.3	2
62	NKR-000013	HEX NUT M4	2
63	SRB-000082	HEX SOCKET HEAD CAP SCREW M5x14	4
64	KRP-0752-01-01-00-0	CARRIAGE BODY	1
65	PDK-000108	ROUND WASHER 4.3	1
66	BLO-0752-01-08-00-0	MAGNET BLOCK	1
67	WKR-000130	HEX SOCKET COUNTERSUNK HEAD SCREW M4x10	6
68	OSL-0466-09-00-00-0	WHEEL COVER	1
69	WKR-000091	HEX SOCKET BUTTON HEAD SCREW M4x8	3
70	PRW-0752-08-00-00-0	RIGHT GUIDE ASSY	1
71	SRB-000091	HEX SOCKET HEAD CAP SCREW M5x35	1
72	PDK-000036	ROUND WASHER 5.5	2
73	OSL-0466-06-02-00-0	ROLLER COVER	1
74	RLK-0221-01-19-00-0	ROLLER	1
75	TLJ-0419-06-03-00-0	ROLLER SLEEVE	1
76	TLJ-0456-05-02-00-0	GUIDE ARM SLEEVE	1
77	PRW-0752-08-01-00-0	GUIDE ASSY	1
78	UCW-0752-03-00-00-0	HOLDER	1
79	KLR-000005	SEALING FLANGE 14	1
80	PDK-000098	SILICONE WASHER 20x15	1
81*	WZK-0752-02-02-00-0	POWER SUPPLY WIRE SET	1
82*	PWD-0476-10-00-00-0	GROUNDING WIRE	1

^{*}not shown in the drawing



7. WIRING DIAGRAM

