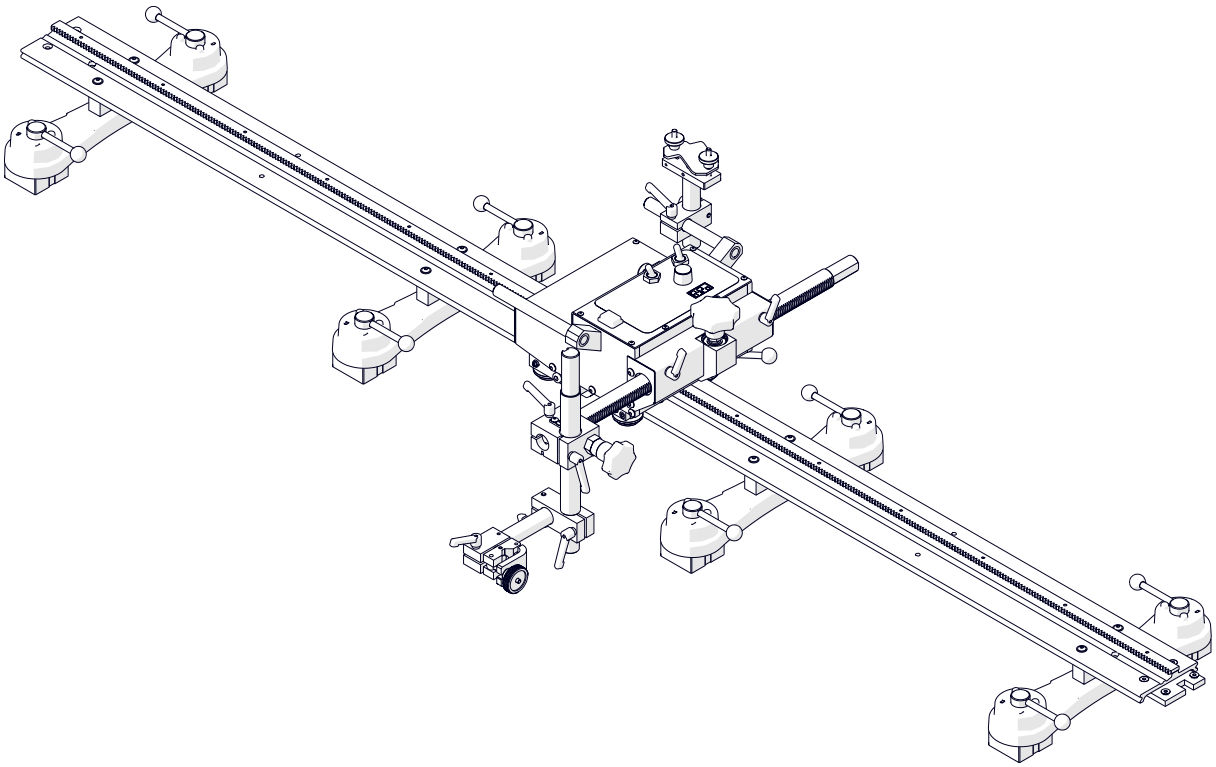
The tools of innovation.

OPERATOR'S MANUAL

Rail Runner LT

WELDING CARRIAGE



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Contents

1. GENERAL INFORMATION

1.1. Application

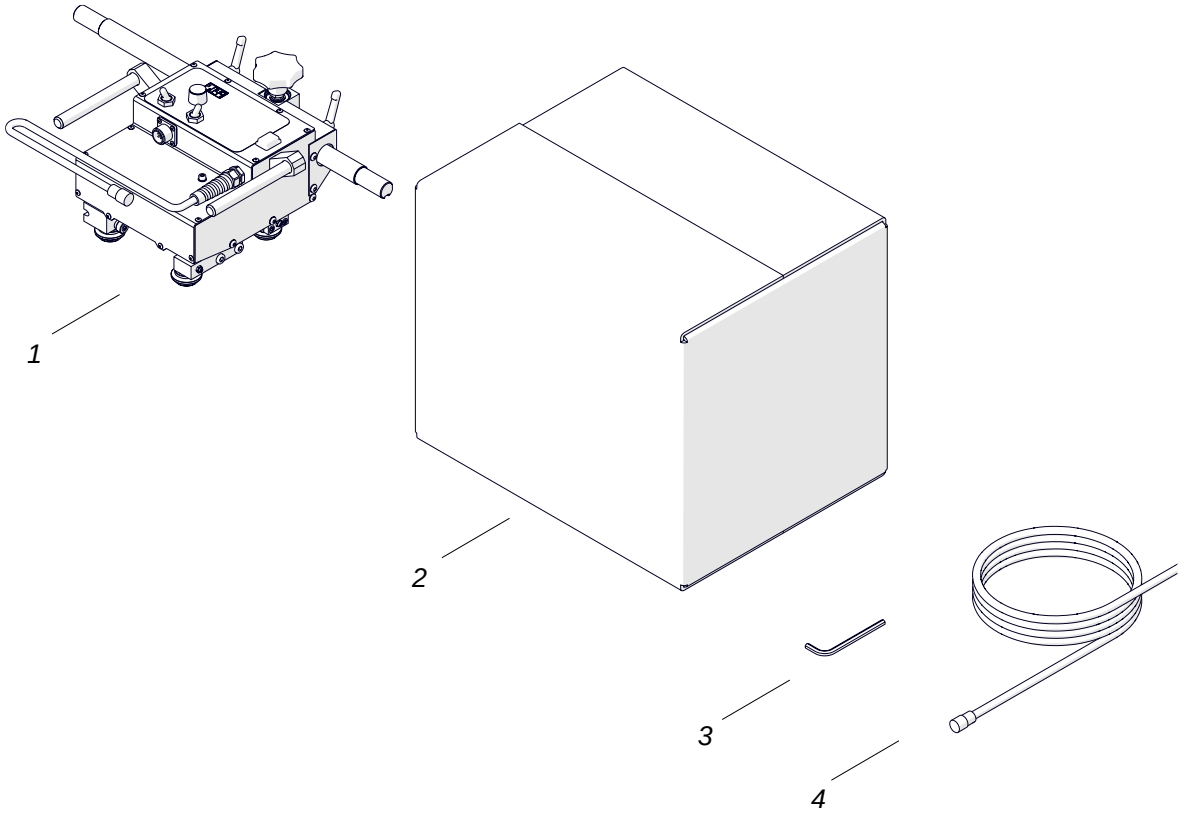
The Rail Runner LT is a track carriage designed to cut and to make butt and fillet welds. The carriage allows MIG/MAG, SAW, oxy-fuel, or plasma torches. The track is clamped with magnetic units to ferromagnetic surfaces that are flat or curved.

Accessories allow, for example, using torches with a larger diameter, and guiding the carriage on a semi-flexible, rigid, or ring track. Using a vacuum track system allows the track to be clamped to surfaces that are non-ferromagnetic.

1.2. Technical data

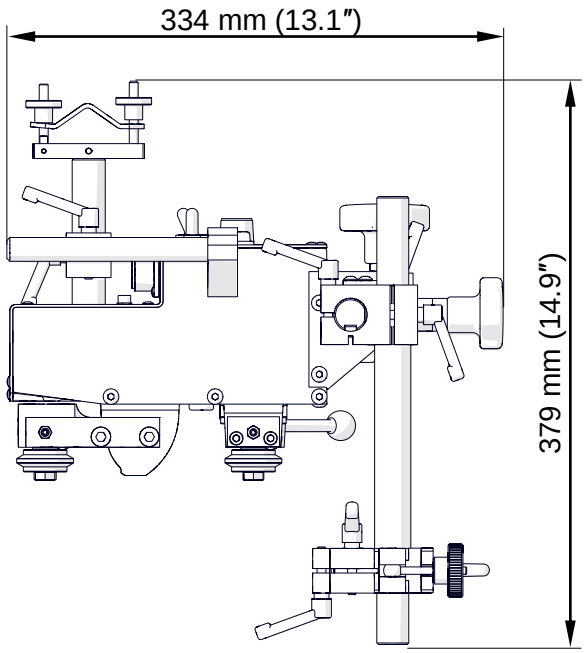
Voltage		1~ 115–230 V, 50–60 Hz
Power		66 W
Welding position (according to EN ISO 6947 and AWS/ASME)	Horizontal	PA / 1F / 1G PB / 2F PC / 2G PD / 4F PE / 4G
	Vertical	PG / 3G
Minimum curve radius of a semi-flexible track		5 m (16 ft)
Torch type		MIG/MAG, SAW, oxy-fuel, plasma
Torch diameter	MIG/MAG	16–22 mm (0.63–0.87″)
	SAW, plasma	28–35 mm (1.10–1.38″)
	Oxy-fuel	35 mm (1.38″)
Minimum workpiece thickness for magnetic clamping		5 mm (0.2″)
Horizontal pulling force		300 N
Vertical pulling force		200 N
Horizontal speed		10–200 cm/min (4–80 in/min)
Vertical speed		10–200 cm/min (4–80 in/min)
Allowed ambient temperature		0–50°C (32–122°F)
Maximum allowed ambient humidity without condensation		80%
Protection level		IP 23
Weight		10 kg (22 lbs)

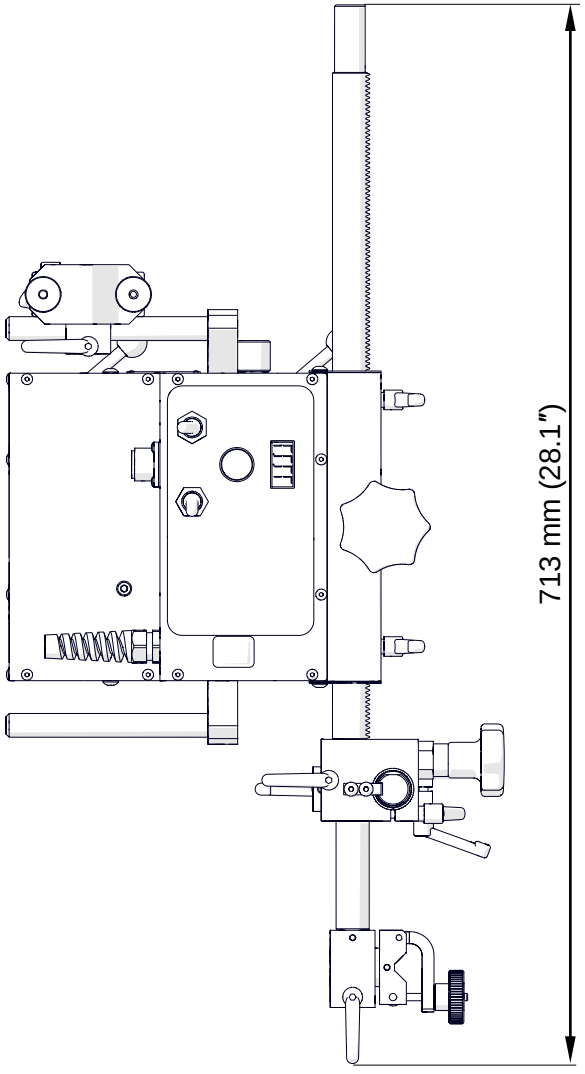
1.3. Equipment included



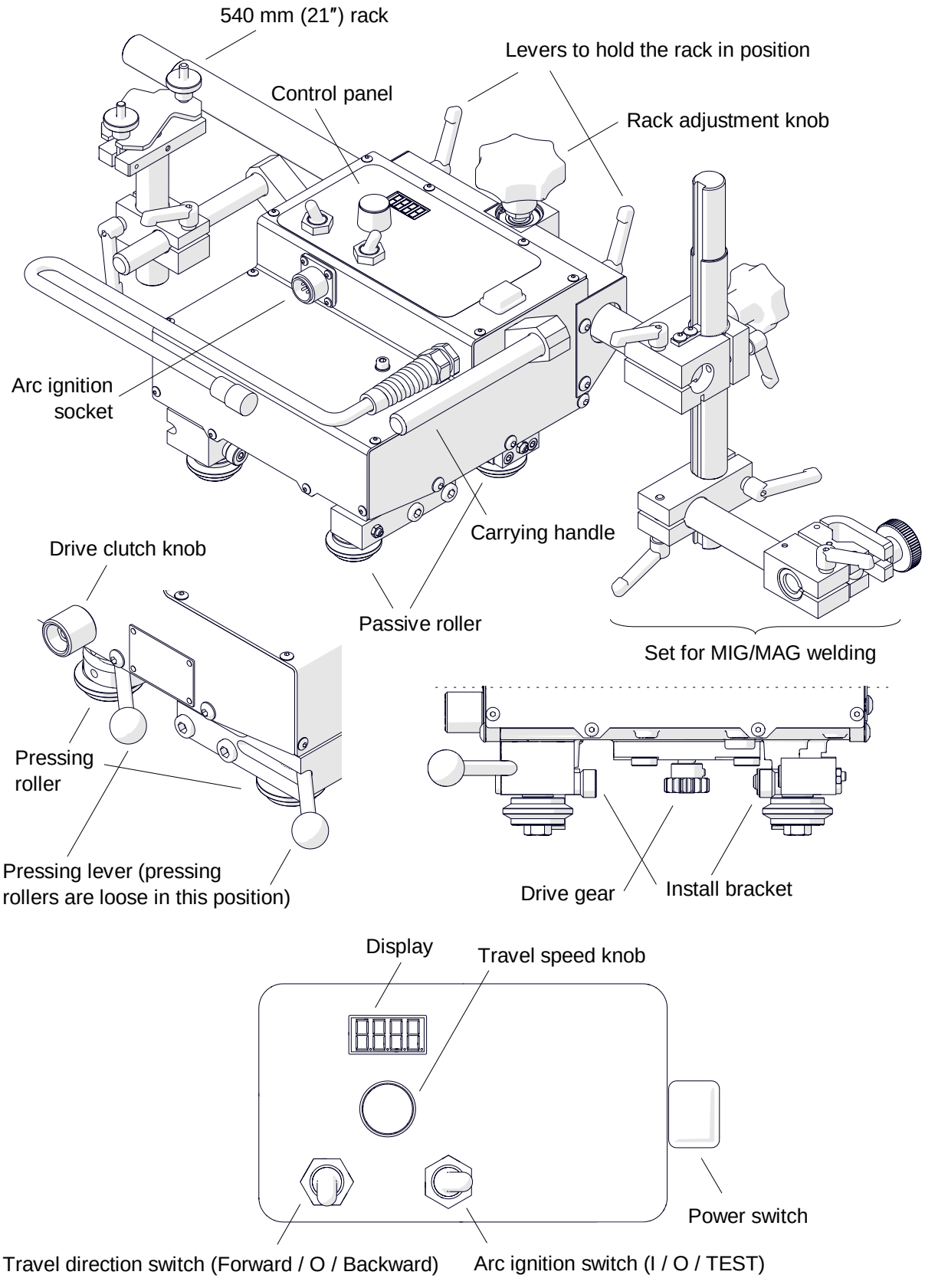
1	Carriage	1 unit
2	Cardboard box	1 unit
3	6 mm hex wrench	1 unit
4	3 m (10 ft) power cord	1 unit
–	Operator's Manual	1 unit

1.4. Dimensions





1.5. Design


540 mm (21″) rack
Levers to hold the rack in position
Control panel
Rack adjustment knob
Arc ignition socket
Carrying handle
Drive clutch knob
Passive roller
Set for MIG/MAG welding
Pressing roller
Pressing lever (pressing rollers are loose in this position)
Drive gear
Install bracket
Display
Travel speed knob
Power switch
Travel direction switch (Forward / O / Backward)
Arc ignition switch (I / O / TEST)

2. SAFETY PRECAUTIONS

1. Before starting, read this Operator's Manual and complete occupational safety and health training.
2. Use only in applications specified in this Operator's Manual.
3. Make sure that the carriage is complete and all parts 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 cords or cables, and do not pull them. This can cause damage and electric shock.
7. Keep untrained bystanders away from the carriage.
8. Before starting, ensure the correct condition of the carriage, power source, cords, arc ignition cable, connections, rollers, and gear.
9. Keep the carriage dry. Do not expose it to rain, snow, or frost.
10. Keep the work area well lit, clean, and free of obstacles.
11. Do not use near flammable materials, or in explosive environments.
12. Transport and position the carriage by using the carrying handles.
13. Install the carriage only on the supplied track.
14. Make sure that the gear and rollers are clean.
15. Plug the cords and arc ignition cable into sockets only when the power switch is set to 'O'.
16. Keep the sockets clean. Do not use high pressure during cleaning.
17. Install only torches whose diameter matches the diameter of the torch holder.
18. Suspend cables to reduce the load of the carriage.
19. Do not bend the semi-flexible track to a radius less than 5 m (16 ft).
20. Use the rigid track only on flat surfaces.
21. At heights, protect the carriage and the track from falling. To do this, use chains (not included) to attach the leftmost and rightmost magnetic units of the semi-flexible or rigid track to a stable structure. To protect the carriage, attach a chain to a carrying handle. The chains must not be loose.
22. Do not stay below the carriage or the track that is put at heights.
23. Use eye protection (helmet, shield, and screen), hearing protection, gloves, and protective clothing during work. Do not use loose clothing.

24. Before every use, make sure that the carriage is not damaged and no part is cracked or loose. Make sure to maintain correct conditions that can affect the operation of the carriage.
25. Do not try to stop the travel by hand. To stop, set the travel direction switch to ‘O’.
26. Maintain only after you unplug the carriage from the power source.
27. Repair only in a service center appointed by the seller.
28. If the carriage falls from any height, is wet, or has any damage, stop the work and promptly send the carriage to the service center for check and repair.
29. Do not leave the carriage unattended during work.
30. When the carriage is not in use, remove it from the worksite and keep in a safe and dry place.

3. STARTUP AND OPERATION

3.1. Assembling the semi-flexible or rigid track

Connect magnetic units to the rail, and put it on the workpiece. Use the 4 mm hex wrench to attach more rails (*1*, Fig. 1). Then, set the levers of the magnetic units to 'I' (*2*). This will clamp the track to the surface.

When working in PC/2G welding position, put the track so that the teeth of the racks point down.

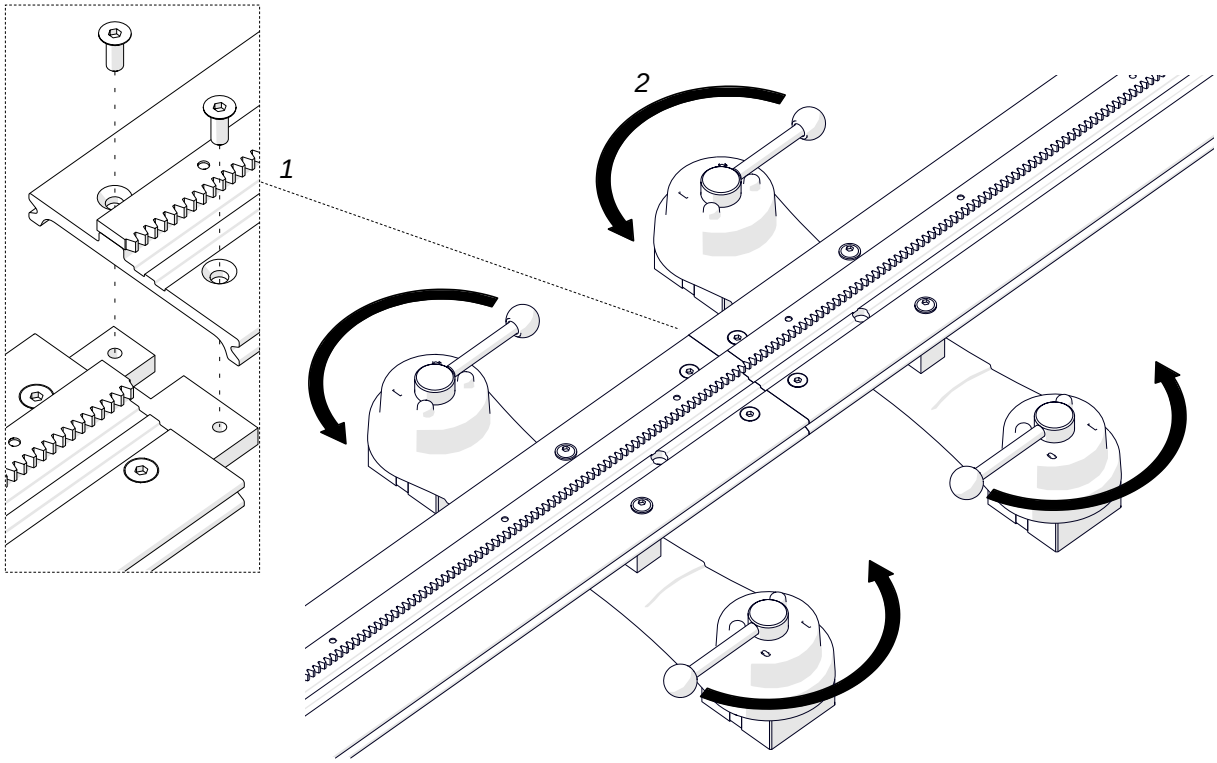


Fig. 1. Connecting the rails and clamping the magnetic units to the surface

If a semi-flexible rail is put on a curve, before you attach more rails use the 4 mm hex wrench to loosen the screws of the connecting plates (*1*, Fig. 2) and of the racks (*2*). Next, attach the rails, clamp them with levers, and then tighten the connecting plates. Put the rack adjustment tool (not included) into the hole (*3*), and rotate the tool to the left (*4*) to remove the gap (*5*) between the racks. Then, tighten the leftmost screw and the rightmost screw of each rack (*2*).

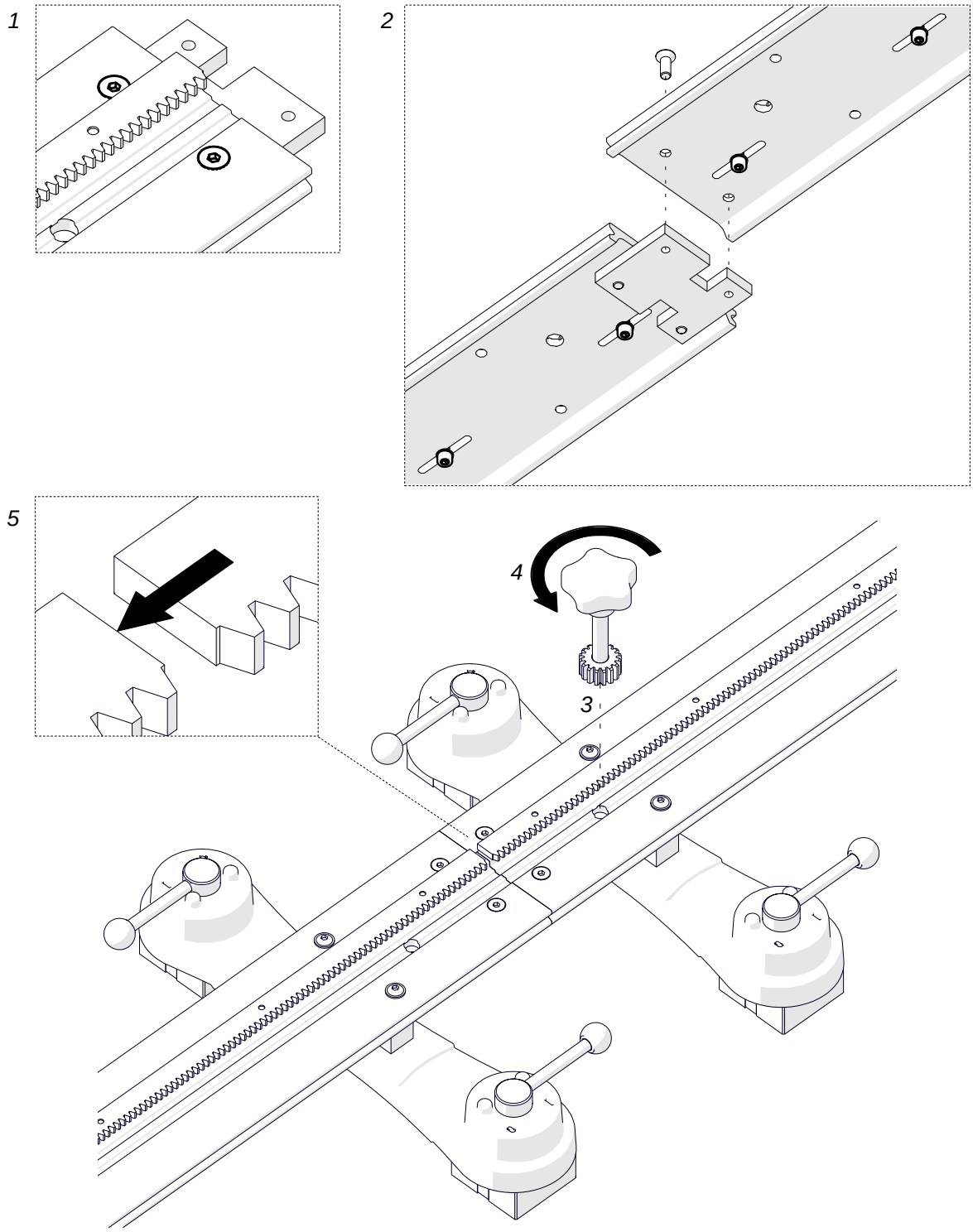


Fig. 2. Removing the gap between the racks of a semi-flexible track

3.2. Assembling the ring track

Select the track that matches the outer diameter of the round workpiece. Use the 4 mm hex wrench to attach the supports to the rails (*1*, Fig. 3). Next, on all supports, retract the bolts (*2*, or screws) as much as possible.

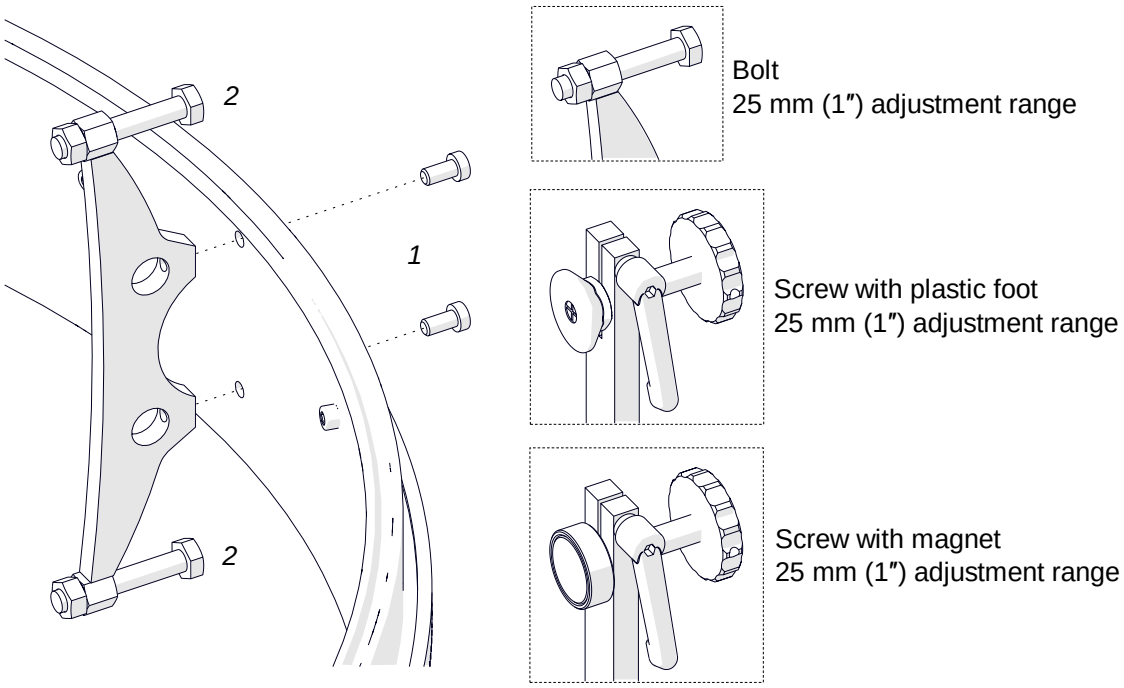


Fig. 3. Connecting the supports to the rails

Put the workpiece vertically, and then put the rails onto the workpiece so that the teeth of the racks point down. Next, for all rails, use the 12 mm hex wrench to set the hinge as shown in Fig. 4. Then, put the lock pin through the holes (*1*), and then rotate the wrench (*2*) to connect the rails.

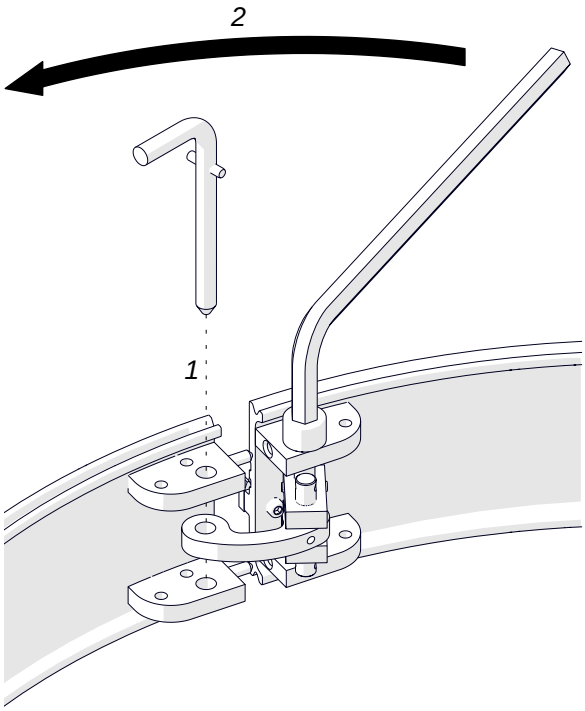


Fig. 4. Connecting the rails of the ring track

Use the 13 mm flat wrench to adjust the bolts (or the screws by hand) until they contact the workpiece (*1*, Fig. 5). Adjust each support equally to make the track concentric to the workpiece. Lock the supports with the nuts (*2*) or levers.

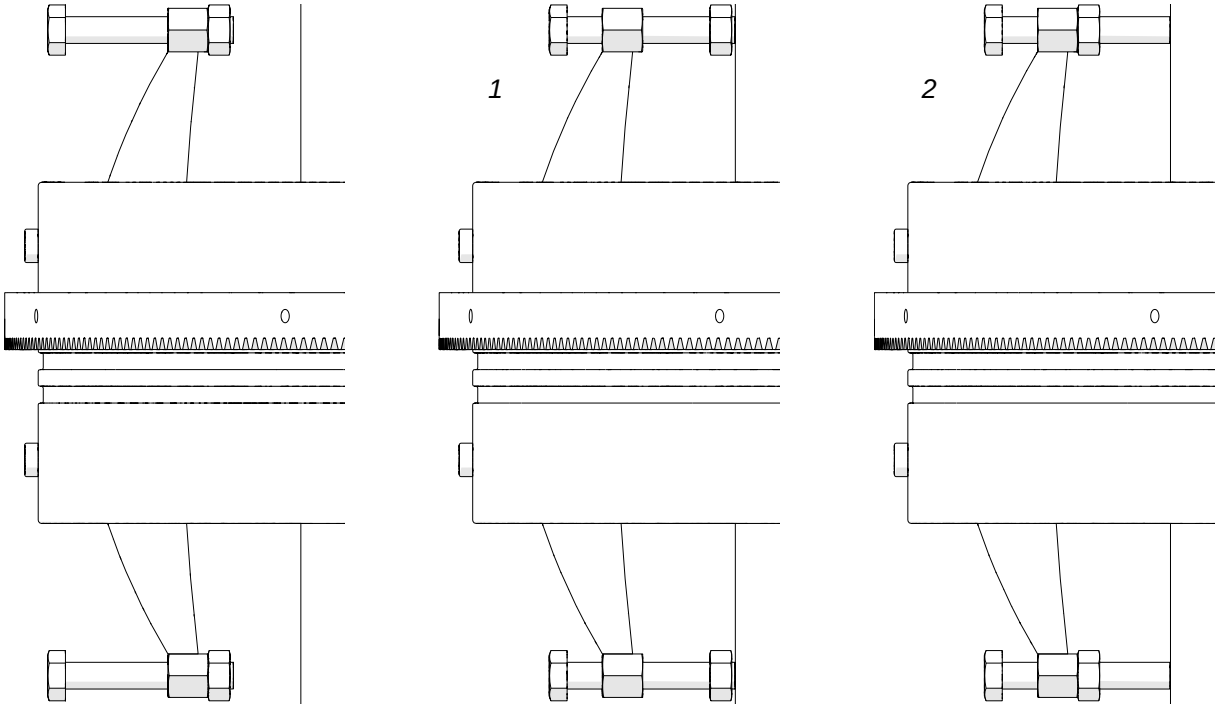


Fig. 5. Attaching the ring track to the workpiece

3.3. Positioning on a straight track

Set the power switch, arc ignition switch, and travel direction switch to ‘O’. Next, set the levers to OFF (*1*, Fig. 6), and then loosen the knob (*2*) fully to retract the gear (*3*). Then, put the carriage so that the install brackets are on the rail (*4*, *5*).

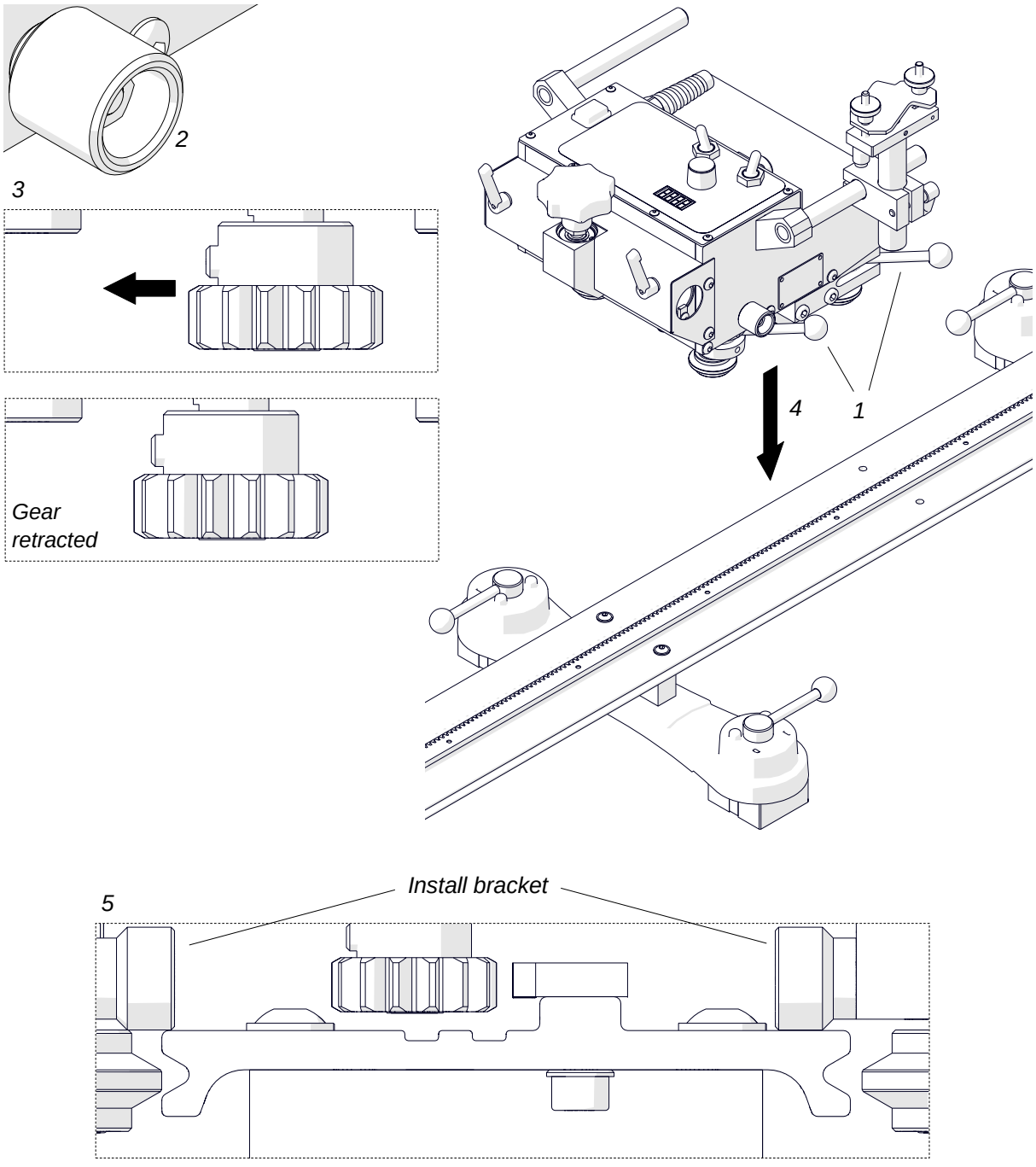


Fig. 6. Putting the carriage on a straight track

Set the levers to ON (*1*, Fig. 7) to put the rollers into the grooves (*2*). Then, while moving the carriage slightly left or right, tighten the knob (*3*) to engage the gear of the carriage with the rack of the rail (*4*). However, do not tighten the knob with too much force. Keep some backlash between the gear and rack.

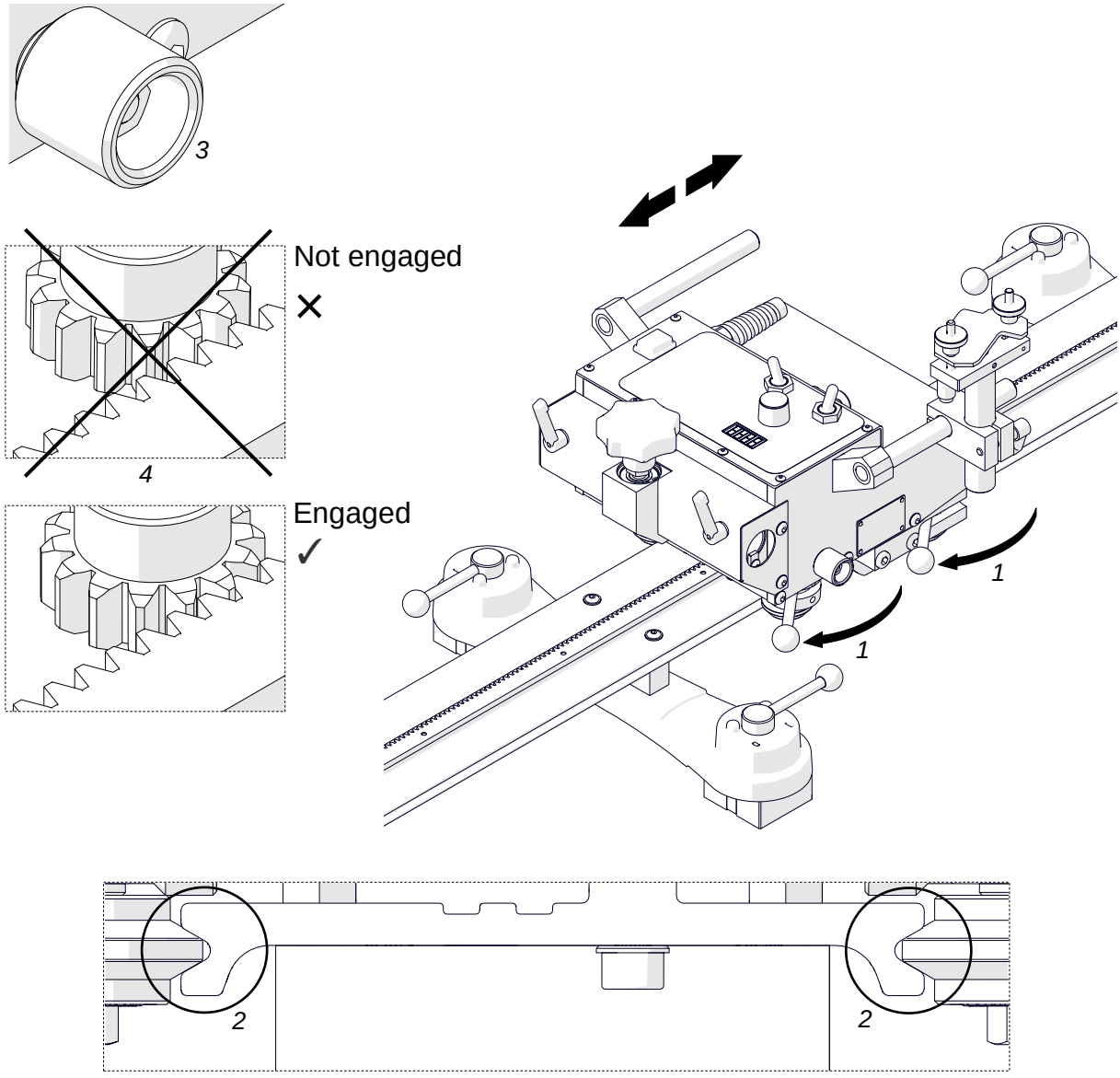


Fig. 7. Engaging the carriage with the track

3.4. Positioning on a curved track

Use the 6 mm hex wrench to loosen four screws (*1*, Fig. 8), and then put the carriage on the track. Rotate two roller brackets (*2*) to put the rollers into the grooves, and then set the levers to ON (*3*). Next, move the carriage left or right and make sure that it moves smoothly. Then, tighten the screws (*1*) and the knob (*4*).

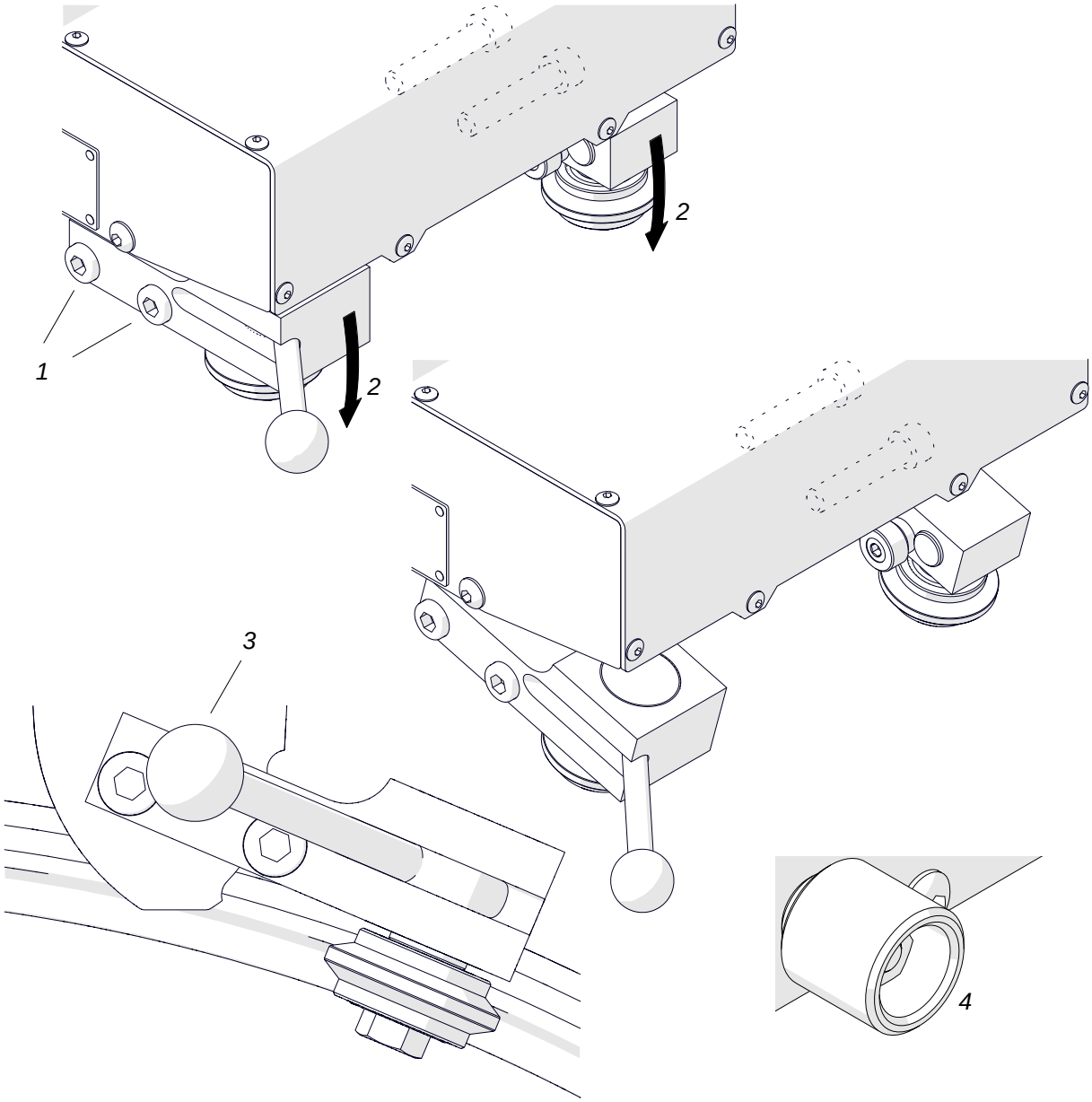
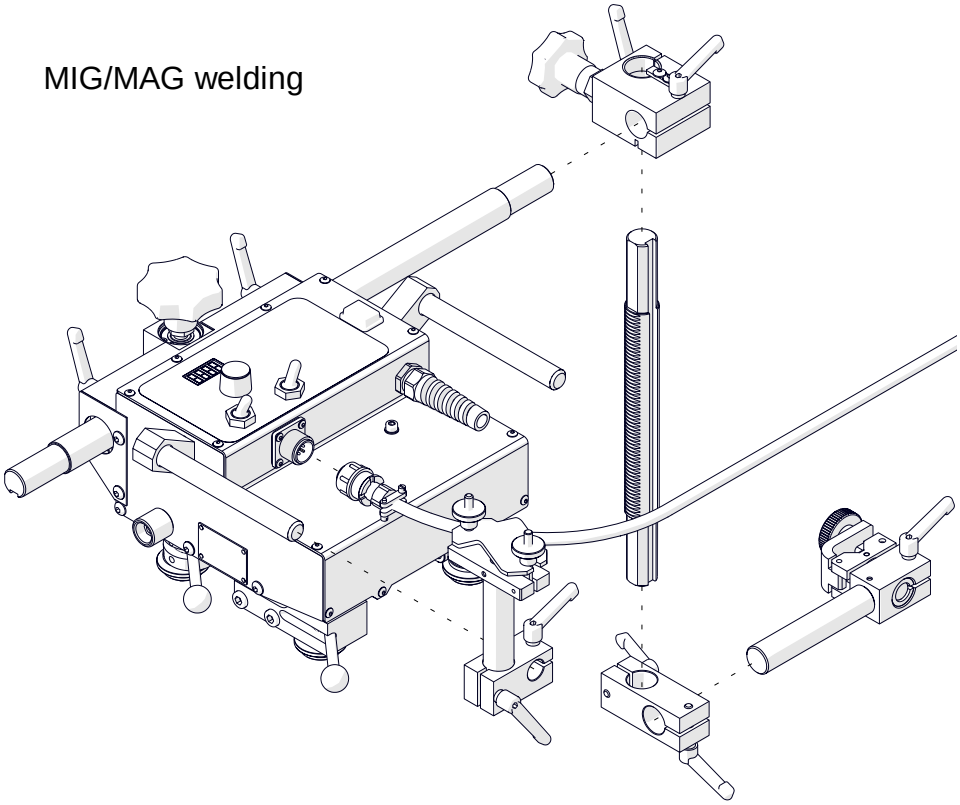


Fig. 8. Rotating the rollers for a curved track

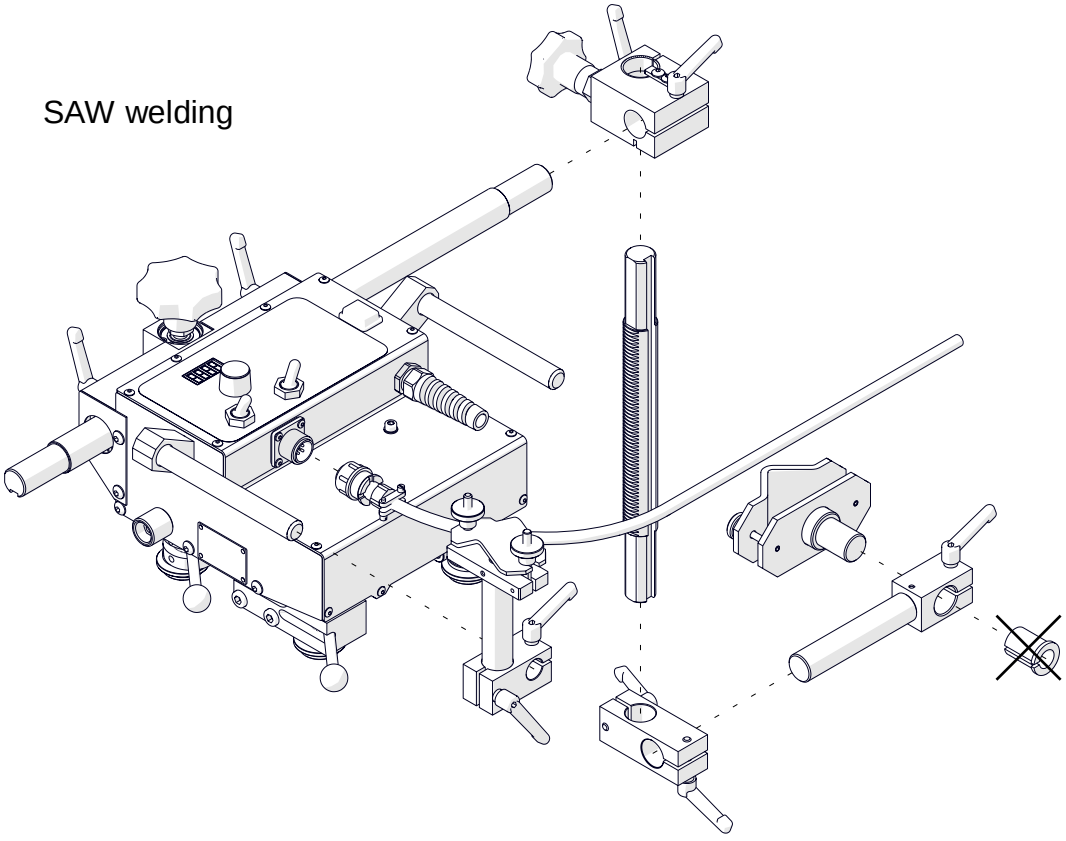
3.5. Preparing

Install an optional welding/cutting set as shown in Fig. 9.

MIG/MAG welding



SAW welding



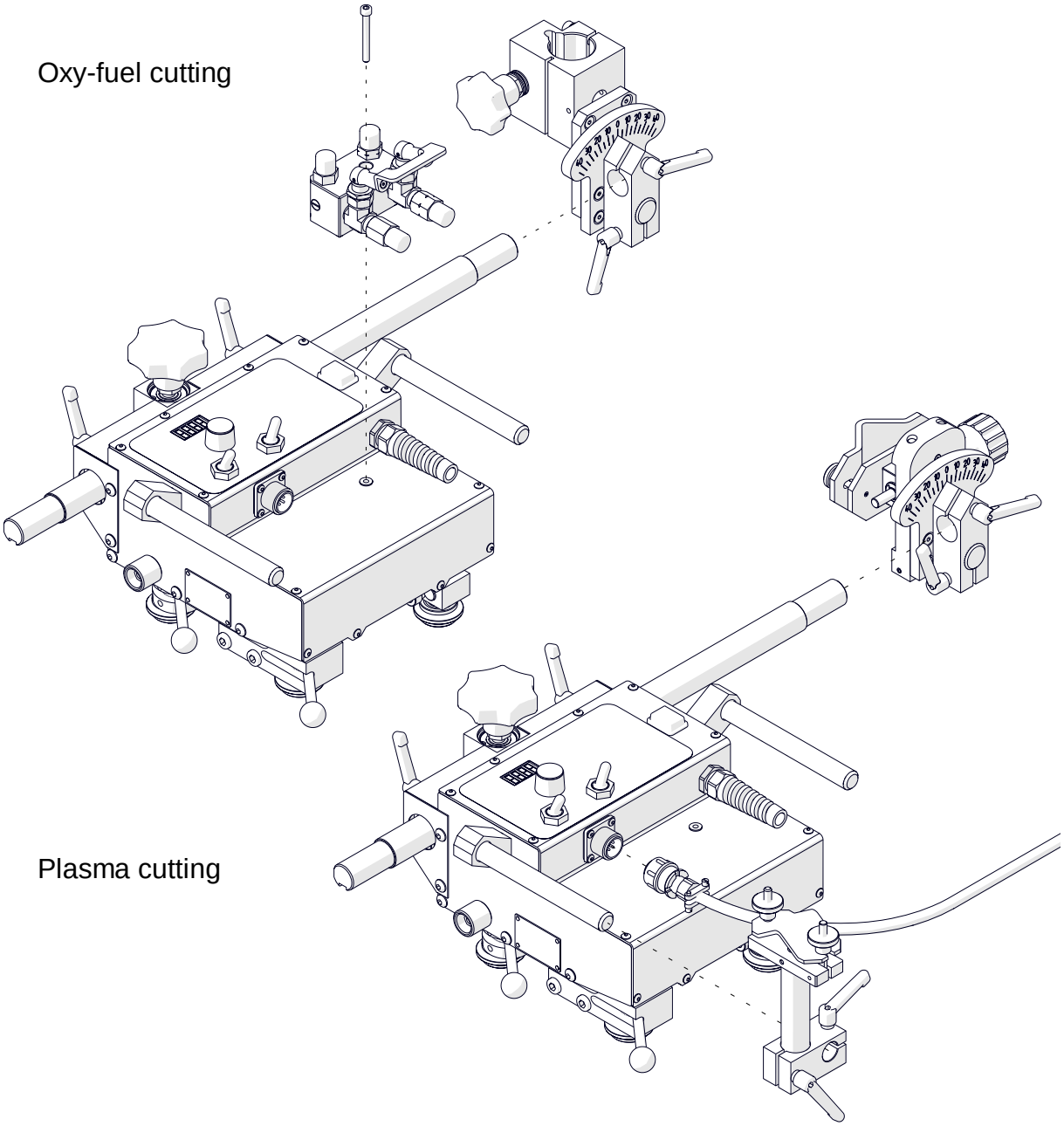


Fig. 9. Installing the welding/cutting set

At heights, protect the carriage and the track from falling. To do this, use chains (not included) to attach the leftmost and rightmost magnetic units of the semi-flexible or rigid track to a stable structure. To protect the carriage, attach a chain to a carrying handle. The chains must not be loose.

Connect the carriage to the power source. Then, put the torch and torch cables into the holders.

3.6. Connecting to the welding or plasma cutting circuits

The carriage can control two torches by using the arc ignition cable plugged into the arc ignition socket. To do this, according to the diagram shown in Fig. 10 connect one blue-jacketed wire to one terminal of the welding / plasma cutting 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.

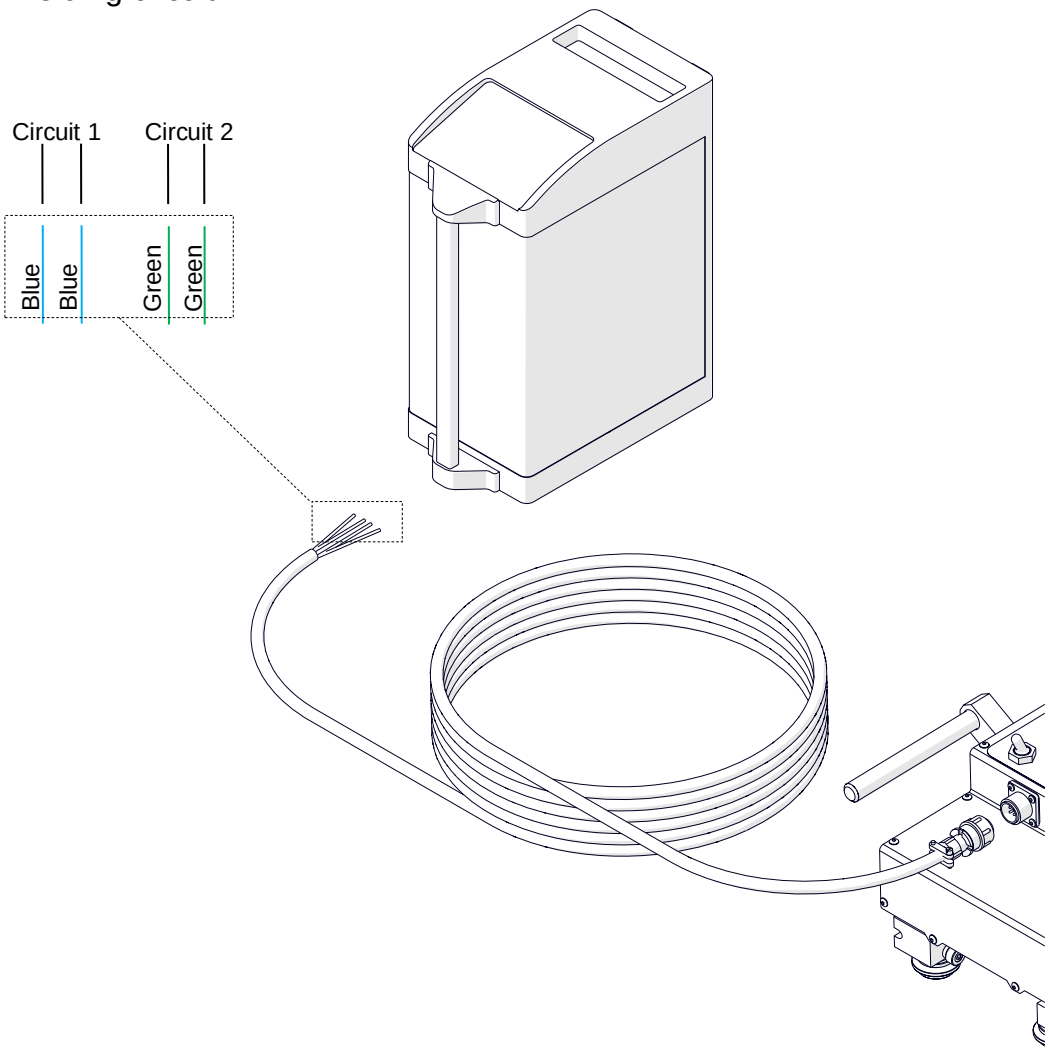


Fig. 10. Connecting the arc ignition cable to welding / plasma cutting circuits

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.

3.7. Operating

Set the travel direction switch and arc ignition switch to ‘O’. Next, set the power switch to ‘I’ to turn on the power. The whole display will then lit (8888). Then, EUr shows (for centimeters per minute) or USA (for inches per minute). Next, the carriage speed shows. Use the 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 / plasma cutting promptly after selecting a travel direction.

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

To stop the travel, set the travel direction switch to ‘O’.

After the work is finished, use the power switch to turn off the power. Then, unplug the carriage from the power source.

3.8. Adjusting the pressure of rollers

If the resistance during the travel is too little or too much, loosen the knob (*1*, Fig. 11). At the opposite side of the carriage, use the 13 mm and 8 mm flat wrenches to loosen the bolts (*2*) and nuts (*3*). Next, use the 2.5 mm hex wrench to adjust the screws (*4*), and then tighten the bolts (*2*).

Travel the carriage along the track. If the resistance is still incorrect, repeat the above steps.

If the carriage travels smoothly, use the 2.5 mm hex wrench to prevent rotation of each screw (*4*). Then, use the 8 mm flat wrench to tighten the nuts (*3*).

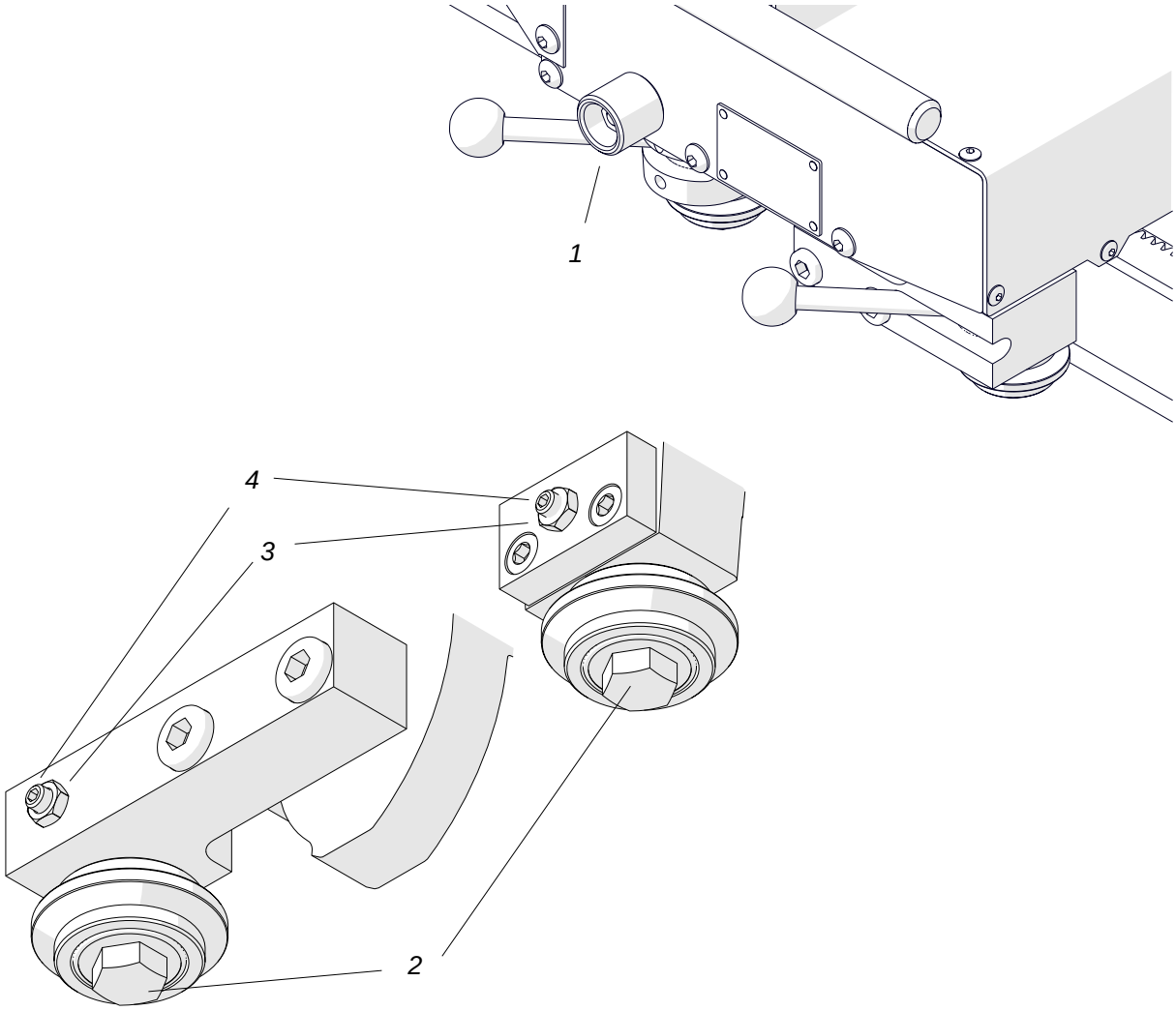
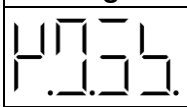
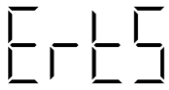


Fig. 11. Adjusting the pressure of rollers

3.9. Troubleshooting

Message	Cause	Solution
	Display not lit fully when powering.	Contact service center for check and repair.
	Speed shown in centimeters per minute instead of inches per minute.	Contact service center.
	Speed shown in inches per minute instead of centimeters per minute.	Contact service center.
	1. Travel direction switch not set to ‘O’ when powering. 2. Shown during travel indicates a malfunction of the switch or controller.	1. Set the travel direction switch to ‘O’. If the message still shows, contact service center for check and repair. 2. Contact service center for check and repair.
	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.
	Motor overload that promptly stops the carriage.	Adjust the position of the cables so that they do not block the travel. Remove other elements that block the carriage or the drive gear. If this message still shows, contact service center for check and repair.

4. MAINTENANCE

Daily:

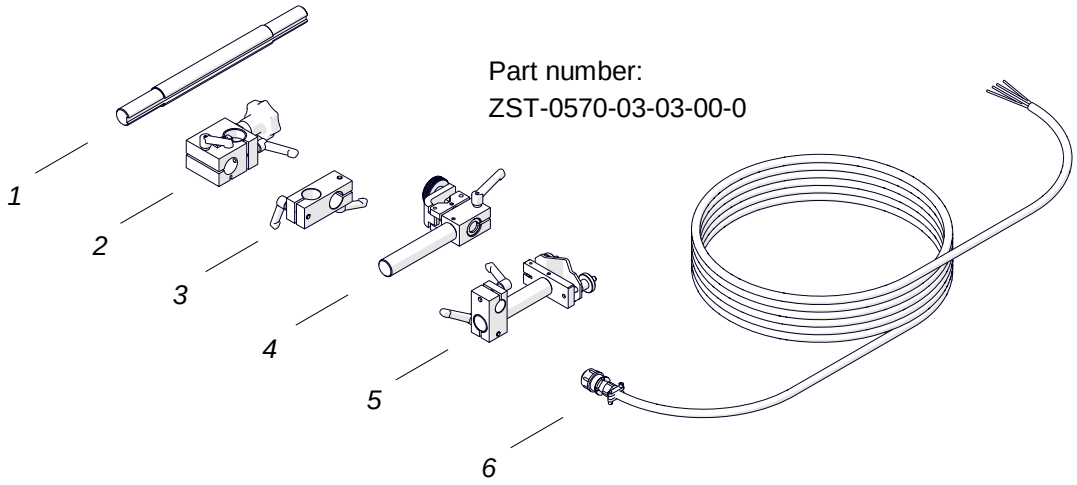
1. Clean the gear of the carriage and the rack of each rail.
2. Clean the rollers and make sure that they rotate freely.
3. Clean the torch nozzle. Replace if damaged.

Monthly:

1. Make sure that the knobs and the switches work as intended. Replace if loose or damaged.
2. Examine cables, cords, and hoses. Replace if damaged.
3. Tighten screws if loose.

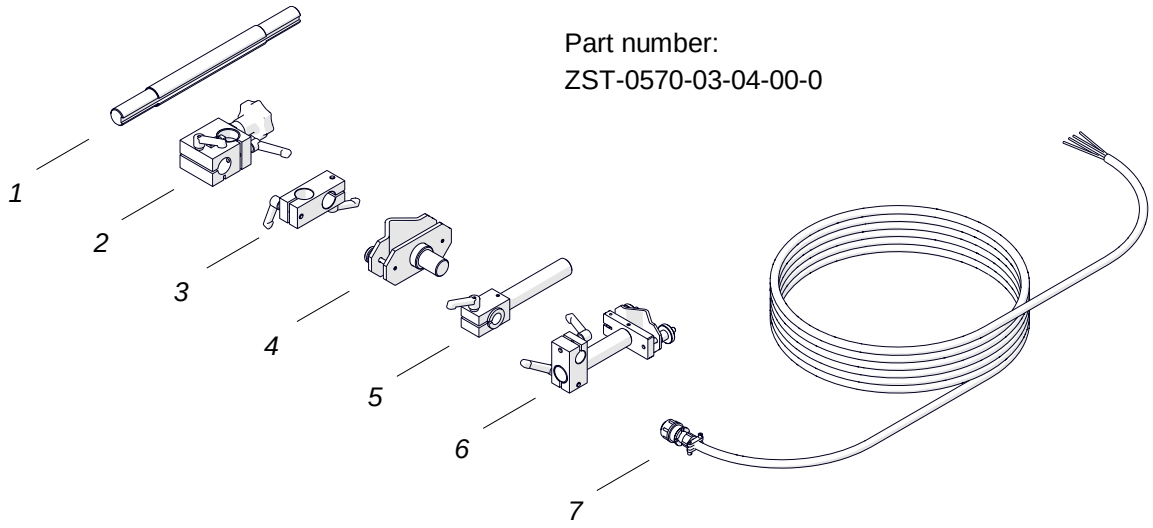
5. ACCESSORIES

5.1. MIG/MAG welding set



1	300 mm (12″) rack with 180 mm (7″) adjustment	1 unit
2	Rack holder	1 unit
3	Clamping block with levers	1 unit
4	Short rod torch holder with clamp 16–22 mm (0.63–0.87″)	1 unit
5	Cable anchor	1 unit
6	6.5 m (21 ft) arc ignition cable	1 unit

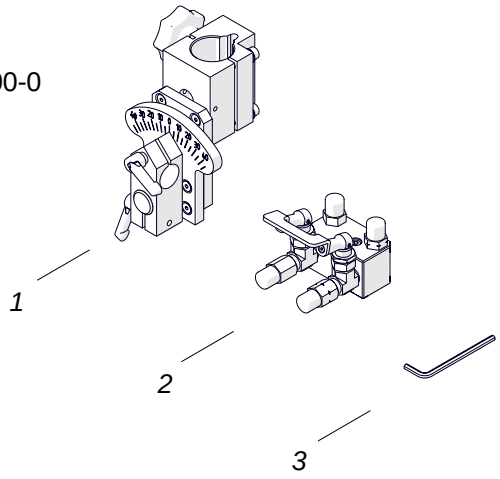
5.2. SAW welding set



1	300 mm (12″) rack with 180 mm (7″) adjustment	1 unit
2	Rack holder	1 unit
3	Clamping block with levers	1 unit
4	Cutting torch clamp 28–35 mm (1.10–1.38″)	1 unit
5	Short rod	1 unit
6	Cable anchor	1 unit
7	6.5 m (21 ft) arc ignition cable	1 unit

5.3. Oxy-fuel cutting set

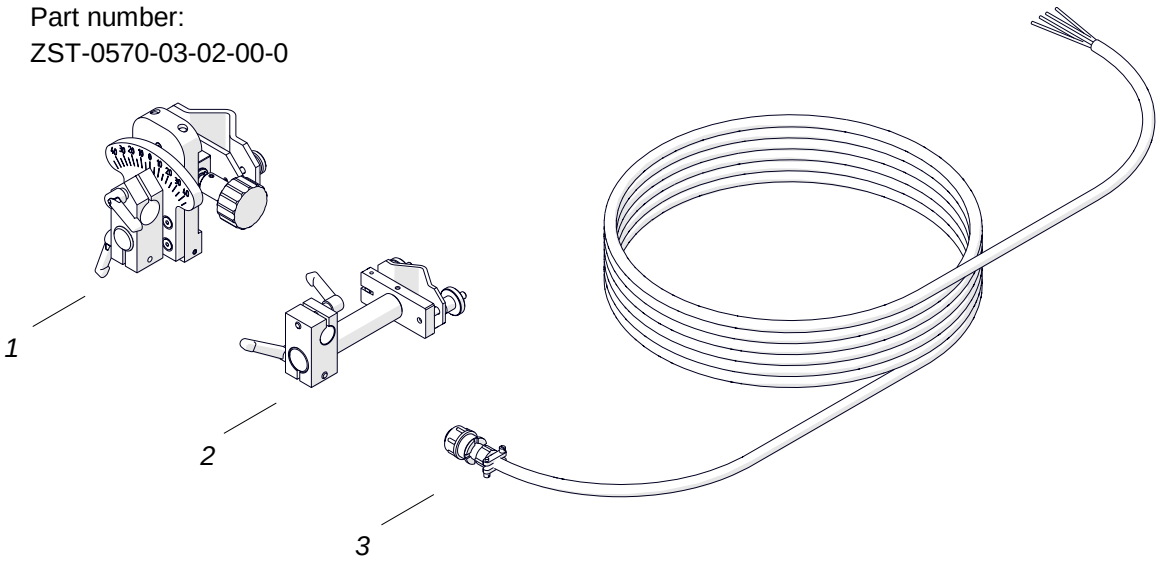
Part number:
ZST-0570-03-01-00-0



1	Precise machine torch holder 35 mm (1.38″)	1 unit
2	2/2 gas manifold with cut-off valve (imperial)	1 unit
3	4 mm hex wrench	1 unit

5.4. Plasma cutting set

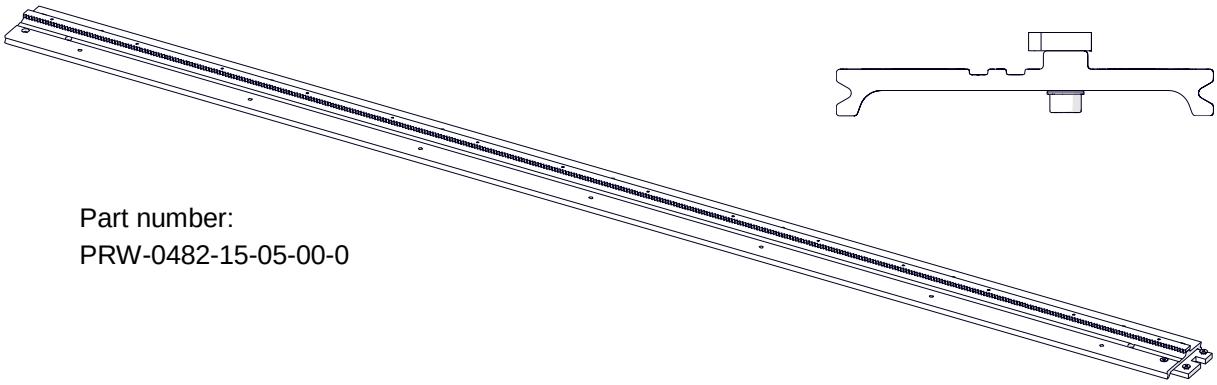
Part number:
ZST-0570-03-02-00-0



1	Precise torch holder 28–35 mm (1.10–1.38″)	1 unit
2	Cable anchor	1 unit
3	6.5 m (21 ft) arc ignition cable	1 unit

5.5. Semi-flexible track

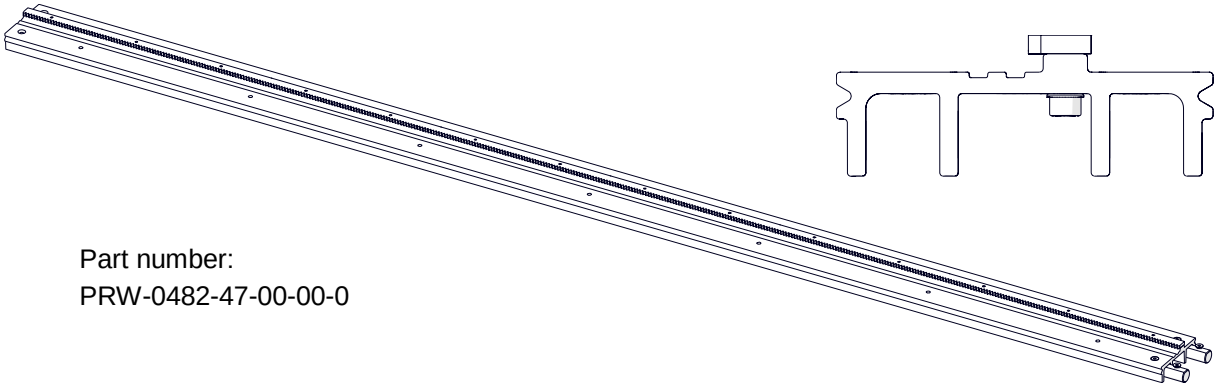
Allows guiding the carriage along a curve. The length of a single rail is 2 m (6.5 ft).



Part number:
PRW-0482-15-05-00-0

5.6. Rigid track

Allows guiding the carriage along a straight line. The length of a single rail is 2 m (6.5 ft).

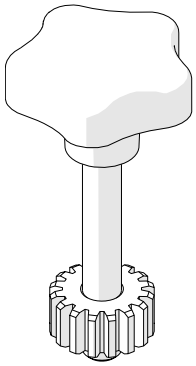


Part number:
PRW-0482-47-00-00-0

5.7. Rack adjustment tool

Removes the clearance between the racks of two semi-flexible rails that are put on a curve.

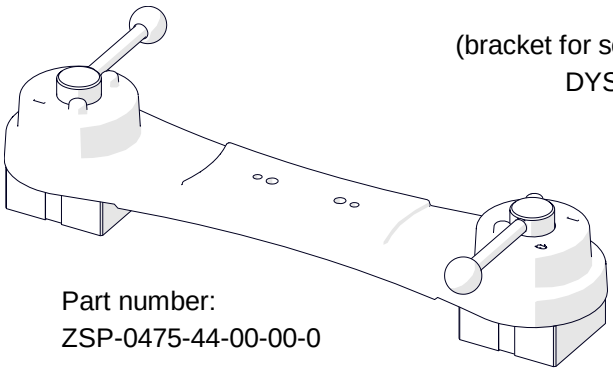
Part number:
PKT-0341-13-00-00-0



5.8. Magnetic units

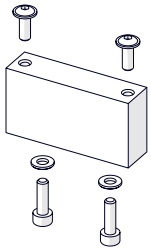
5.8.1. Magnetic unit

Allows clamping a semi-flexible or rigid track to ferromagnetic surfaces. The holding force on a 5 mm (0.2″) thick surface is 1200 N up to a temperature of 100°C (212°F). At 180°C (356°F) the force decreases to 720 N.

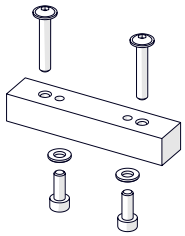


Part number:
ZSP-0475-44-00-00-0

Part number
(bracket for semi-flexible track):
DYS-0482-19-00-00-0

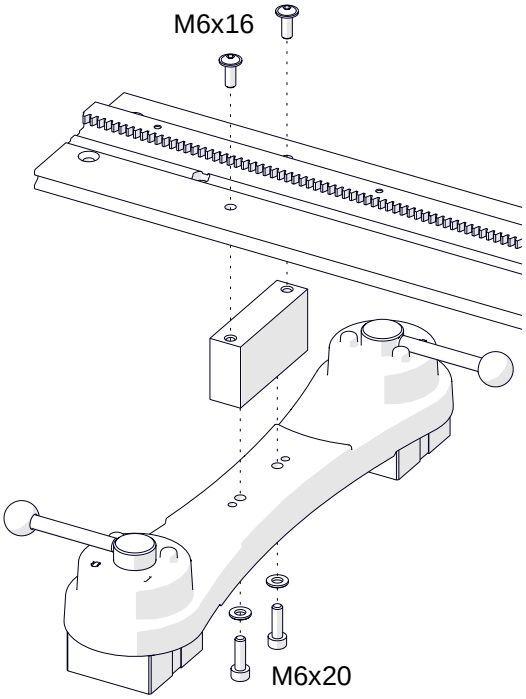


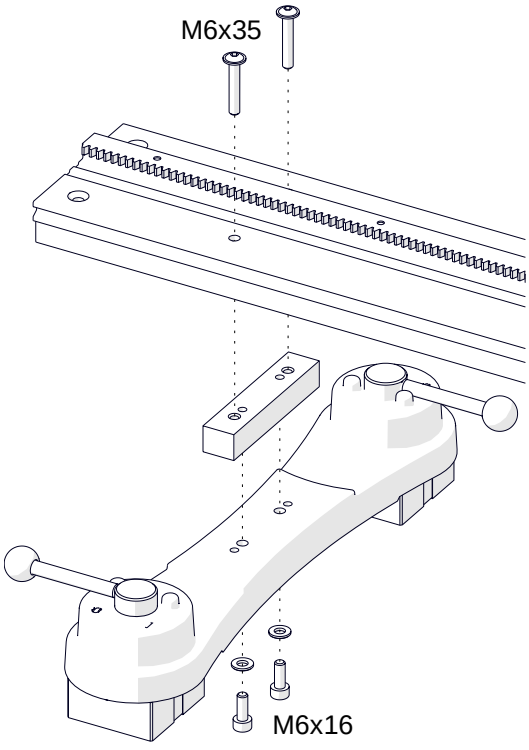
Part number
(bracket for rigid track):
DYS-0482-21-00-00-0



Attach the unit to a semi-flexible rail as shown in the left figure. Use the 4 mm hex wrench, M6x20 screws, and 6.4 mm washers to tighten the bracket to the unit. Then, use the 4 mm hex wrench and M6x16 screws to tighten the bracket to the rail.

Attach the unit to a rigid rail as shown in the right figure. Use the 4 mm hex wrench, M6x16 screws, and 6.4 mm washers to tighten the bracket to the unit. Then, use the 4 mm hex wrench and M6x35 screws to tighten the bracket to the rail.



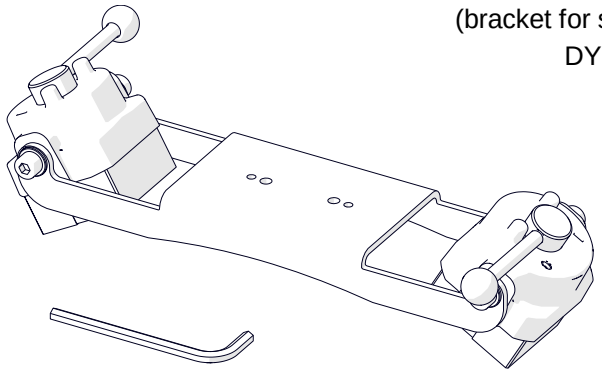


5.8.2. Pivoting magnetic unit

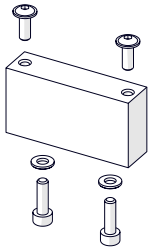
Allows clamping a semi-flexible or rigid track to ferromagnetic surfaces that are concave or convex, to pipes with outer diameters of at least 800 mm (31.5″), and to surfaces that differ in height up to 80 mm (3.1″). The holding force on a 5 mm (0.2″) thick surface is 1200 N up to a temperature of 100°C (212°F). At 180°C (356°F) the force decreases to 720 N.

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.

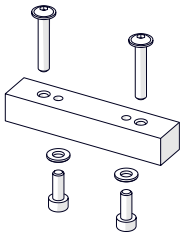
Part number:
ZSP-0475-85-00-00-0

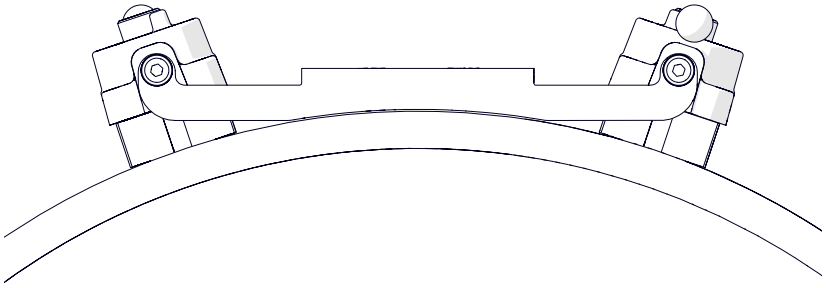


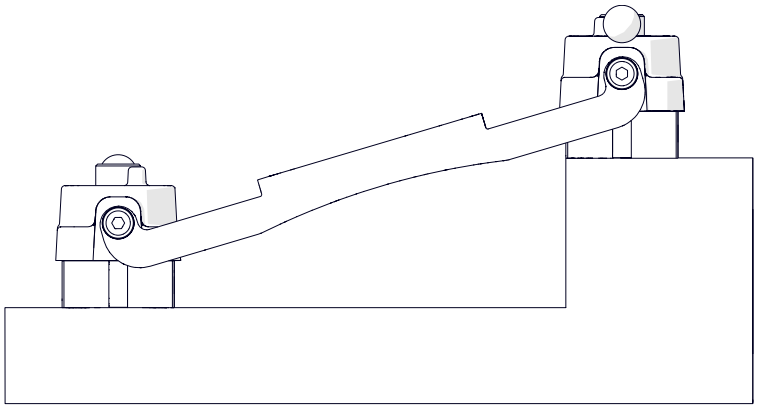
Part number
(bracket for semi-flexible track):
DYS-0482-19-00-00-0



Part number
(bracket for rigid track):
DYS-0482-21-00-00-0





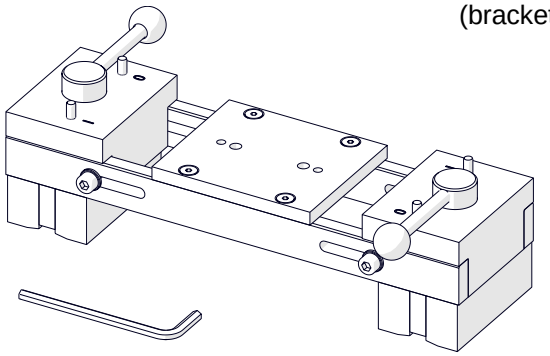


5.8.3. Spacing-adjustable magnetic unit

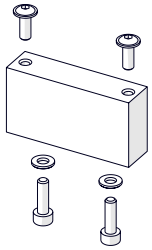
Allows clamping a semi-flexible track or rigid track to two ferromagnetic pipes with diameters of 25–230 mm (1–9″) and the distance between pipe axes of 170–230 mm (6.7–9.1″). The holding force on a 5 mm (0.2″) thick surface is 1200 N up to a temperature of 100°C (212°F). At 180°C (356°F) the force decreases to 720 N.

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

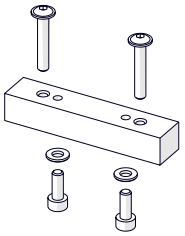
Part number:
ZSP-0523-19-00-00-0

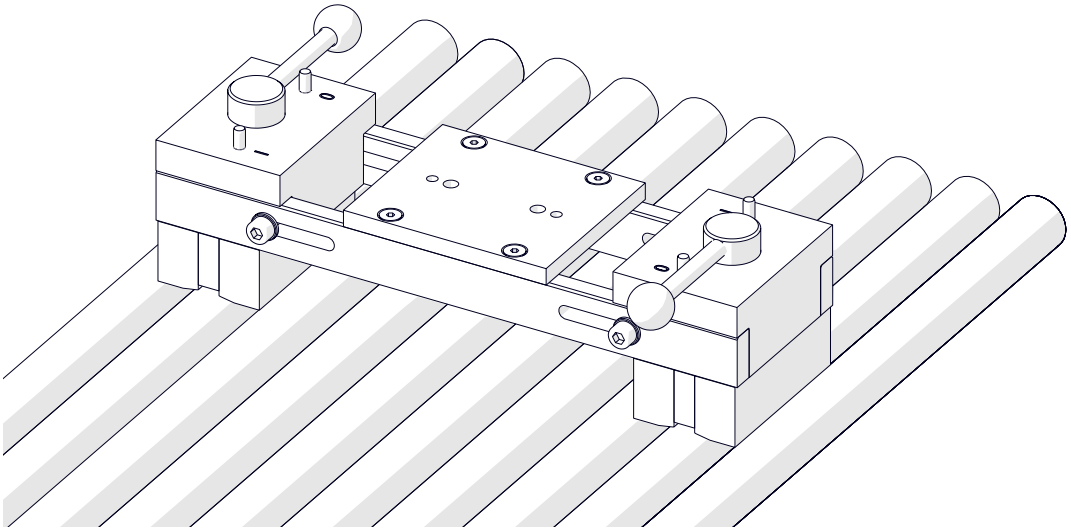


Part number
(bracket for semi-flexible track):
DYS-0482-19-00-00-0



Part number
(bracket for rigid track):
DYS-0482-21-00-00-0

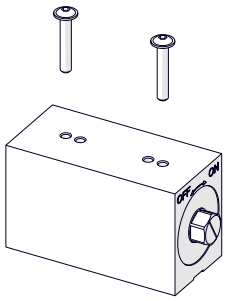




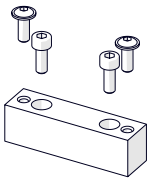
5.8.4. Narrow magnetic unit

Allows clamping a semi-flexible track or rigid track to ferromagnetic surfaces. The holding force on a 5 mm (0.2″) thick surface is 750 N up to a temperature of 100°C (212°F). At 180°C (356°F) the force decreases to 450 N.

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



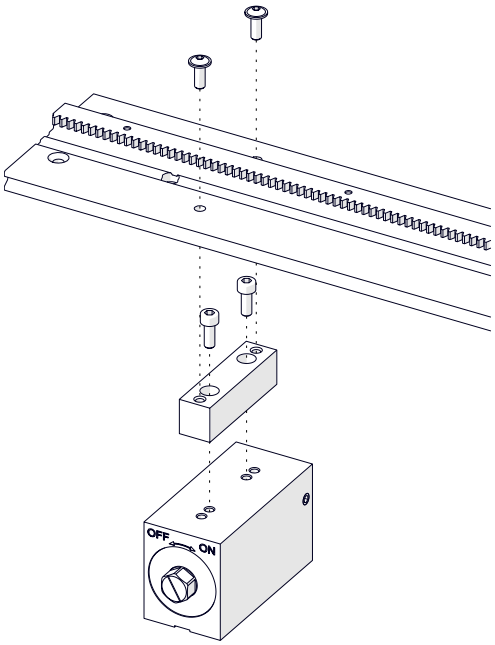
Part number
(bracket for semi-flexible track):
DYS-0582-10-00-00-0

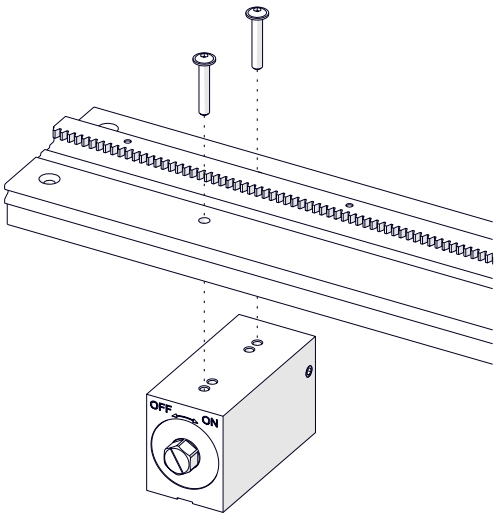


Attach the unit to a semi-flexible rail as shown in the left figure. Use the 4 mm hex wrench and M6x16 cylinder-head screws to tighten the bracket to the unit. Then, use the 4 mm hex wrench and M6x16 button-head screws to tighten the bracket to the rail.

Attach the unit to a rigid rail as shown in the right figure. Use the 4 mm hex wrench and M6x35 screws.

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

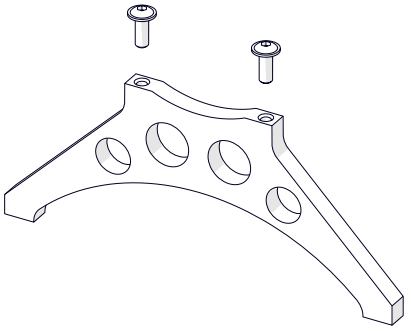


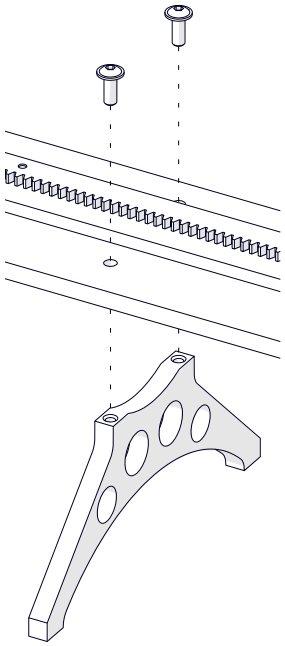


5.9. Semi-flexible track support

Allows supporting a semi-flexible track by using the support instead of a magnetic unit. To attach the support to a semi-flexible rail, use the 4 mm hex wrench and M6x16 screws.

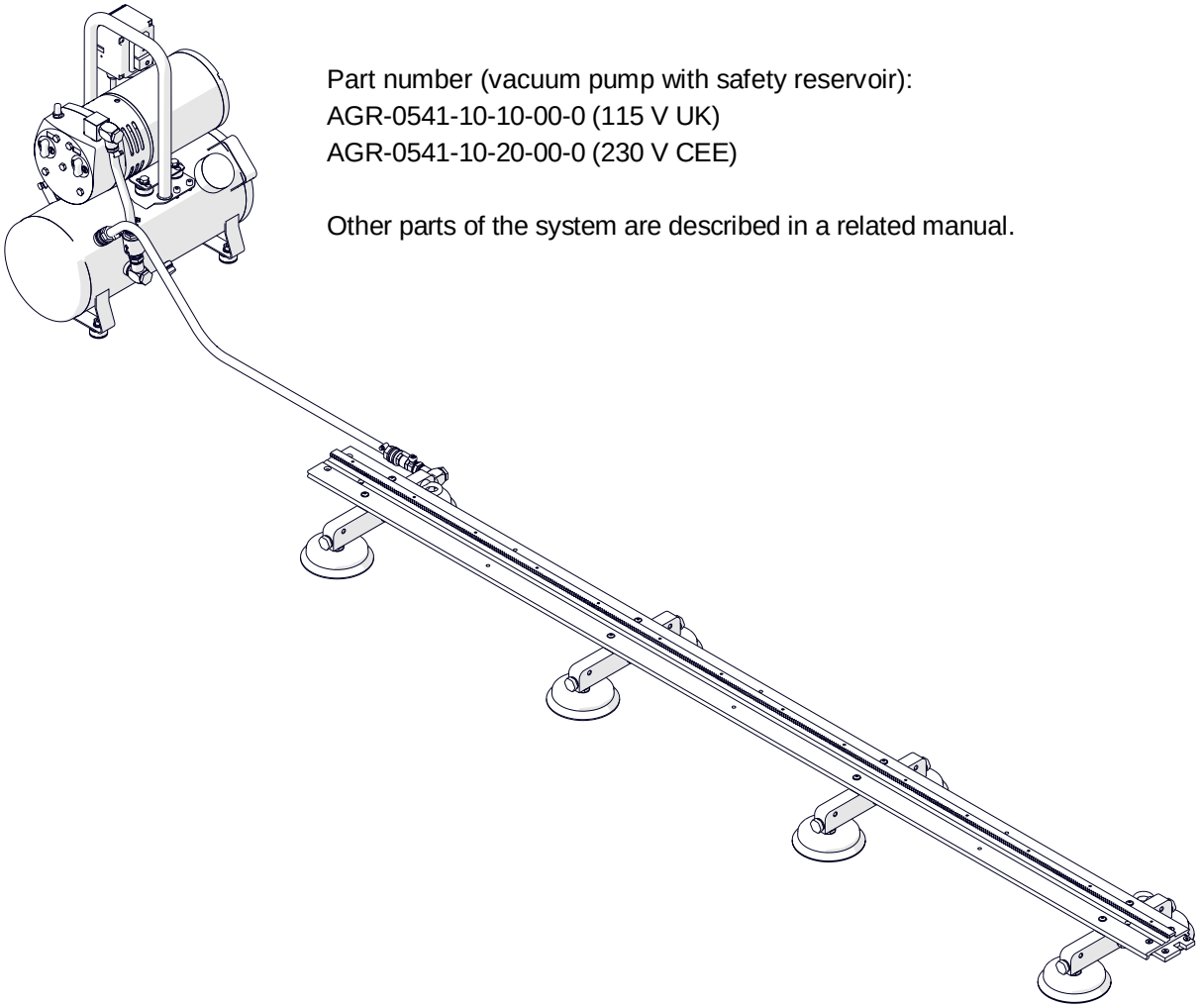
Part number:
WSP-0523-12-01-00-1





5.10. Vacuum track system

Dedicated to clamping the track to non-ferromagnetic surfaces.

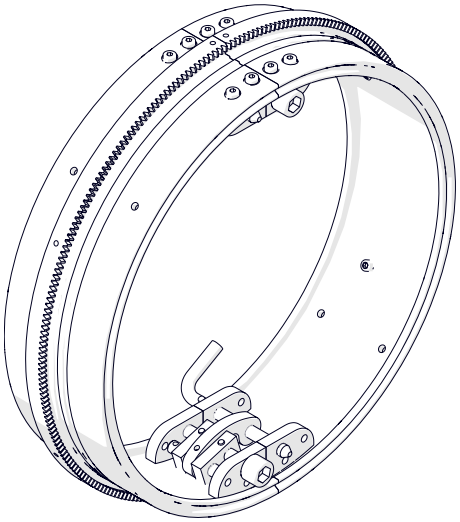


Part number (vacuum pump with safety reservoir):
AGR-0541-10-10-00-0 (115 V UK)
AGR-0541-10-20-00-0 (230 V CEE)

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

5.11. Ring tracks

Allow welding of round workpieces with the outer diameters from 200 mm (8″) to 3000 mm (120″). Depending on the diameter, the track consists of two, three, or four rails. Tracks not shown in the table are available on request.



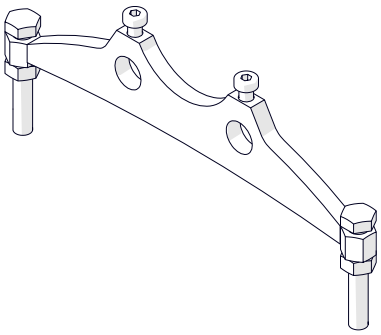
Pipe outer diameter		Part number
Min. [mm]	**Max.** [mm]	
200	250	TRO-0523-14-00-00-0
250	300	TRO-0523-78-00-00-0
300	350	TRO-0523-20-00-00-0
350	400	TRO-0523-21-00-00-0
400	450	TRO-0523-23-00-00-0
450	500	TRO-0523-24-00-00-0
500	550	TRO-0523-25-00-00-0
550	600	TRO-0523-26-00-00-0
600	650	TRO-0523-22-00-00-0
650	700	TRO-0523-28-00-00-0
700	750	TRO-0523-29-00-00-0
750	800	TRO-0523-30-00-00-0
800	850	TRO-0523-31-00-00-0
850	900	TRO-0523-32-00-00-0
900	950	TRO-0523-33-00-00-0
950	1000	TRO-0523-34-00-00-0
1000	1050	TRO-0523-35-00-00-0
1050	1100	TRO-0523-36-00-00-0
1100	1150	TRO-0523-37-00-00-0
1150	1200	TRO-0523-38-00-00-0
1200	1250	TRO-0523-39-00-00-0
1250	1300	TRO-0523-40-00-00-0
1300	1350	TRO-0523-41-00-00-0

Pipe outer diameter		Part number
Min. [mm]	**Max.** [mm]	
1350	1400	TRO-0523-42-00-00-0
1400	1450	TRO-0523-43-00-00-0
1450	1500	TRO-0523-44-00-00-0
1500	1550	TRO-0523-45-00-00-0
1550	1600	TRO-0523-46-00-00-0
1600	1650	TRO-0523-47-00-00-0
1650	1700	TRO-0523-48-00-00-0
1700	1750	TRO-0523-49-00-00-0
1750	1800	TRO-0523-50-00-00-0
1800	1850	TRO-0523-51-00-00-0
1850	1900	TRO-0523-52-00-00-0
1900	1950	TRO-0523-53-00-00-0
1950	2000	TRO-0523-54-00-00-0
2000	2050	TRO-0523-55-00-00-0
2050	2100	TRO-0523-56-00-00-0
2100	2150	TRO-0523-57-00-00-0
2150	2200	TRO-0523-58-00-00-0
2200	2250	TRO-0523-59-00-00-0
2250	2300	TRO-0523-60-00-00-0
2300	2350	TRO-0523-61-00-00-0
2350	2400	TRO-0523-62-00-00-0
2400	2450	TRO-0523-63-00-00-0
2450	2500	TRO-0523-64-00-00-0
2500	2550	TRO-0523-65-00-00-0
2550	2600	TRO-0523-66-00-00-0
2600	2650	TRO-0523-67-00-00-0
2650	2700	TRO-0523-68-00-00-0
2700	2750	TRO-0523-69-00-00-0
2750	2800	TRO-0523-70-00-00-0
2800	2850	TRO-0523-71-00-00-0
2850	2900	TRO-0523-72-00-00-0
2900	2950	TRO-0523-73-00-00-0
2950	3000	TRO-0523-74-00-00-0
3000	3050	TRO-0523-75-00-00-0

5.12. Ring track supports

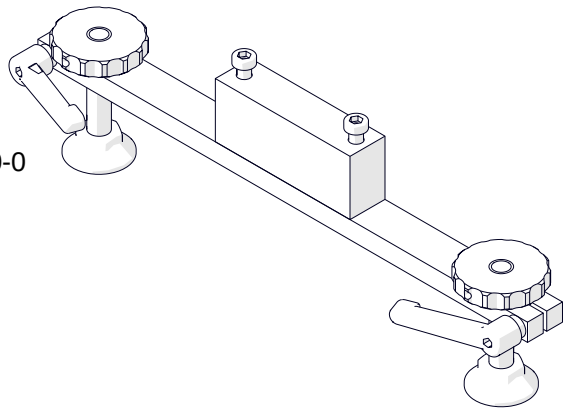
5.12.1. Ring track support with bolts

Part number:
WSP-0523-14-02-00-0



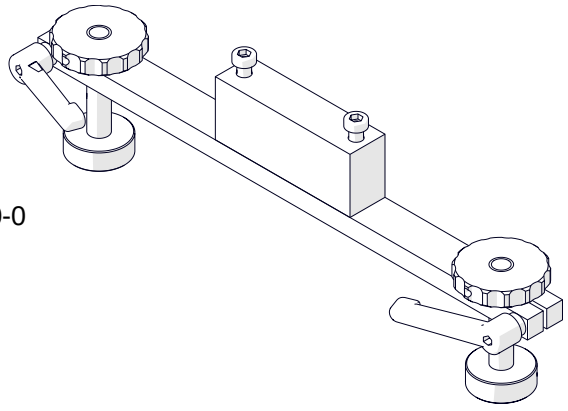
5.12.2. Ring track support with plastic feet

Part number:
WSP-0523-14-11-00-0



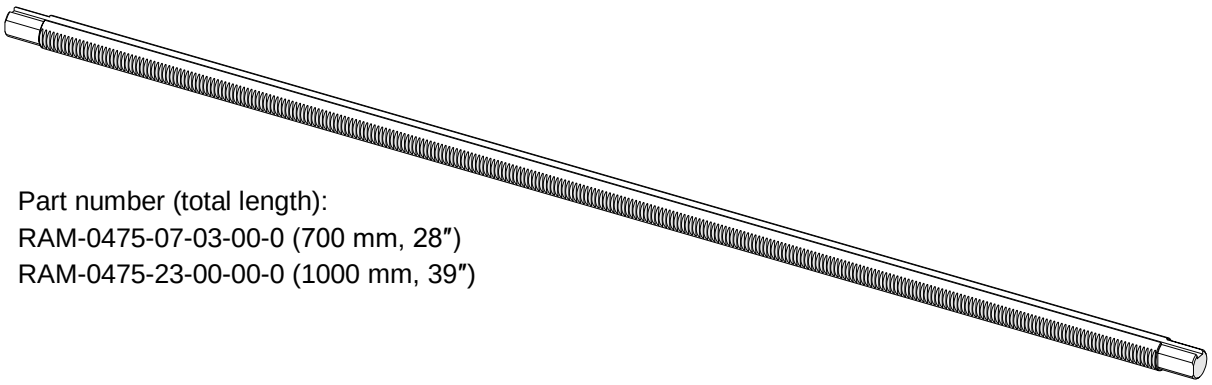
5.12.3. Ring track support with magnets

Part number:
WSP-0523-14-12-00-0



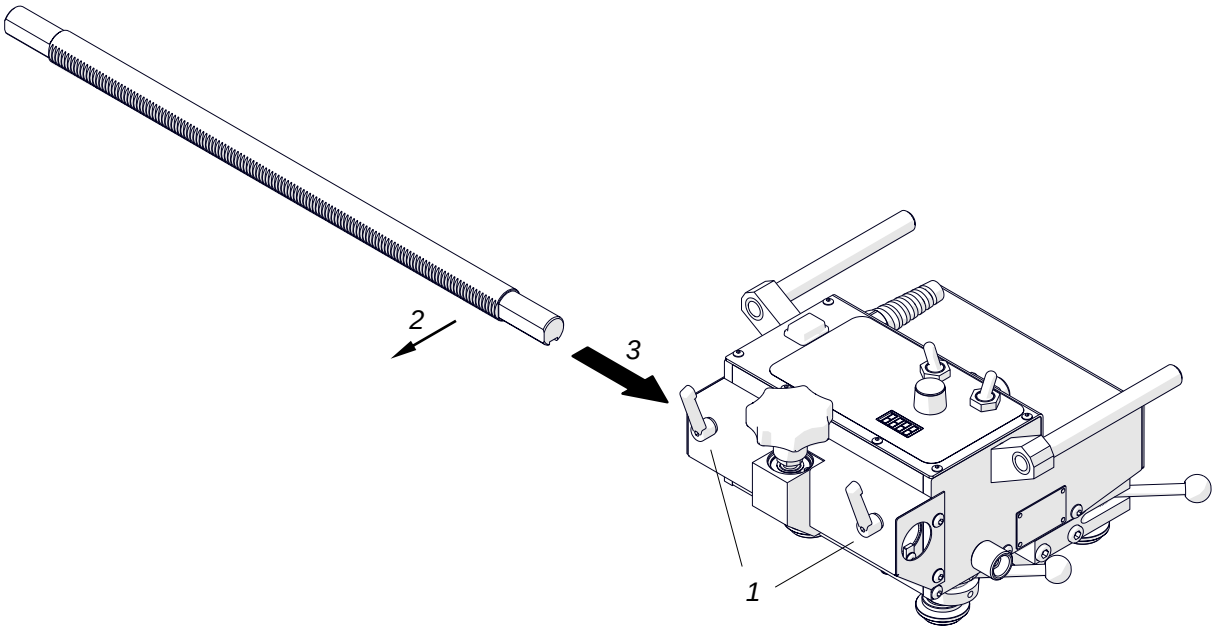
5.13. Rack

Changes the horizontal or vertical reach of the torch holder.



Part number (total length):
RAM-0475-07-03-00-0 (700 mm, 28″)
RAM-0475-23-00-00-0 (1000 mm, 39″)

Loosen the levers (*1*) and remove the installed rack. Point the teeth of the rack to the side (*2*) and move the rack into the carriage (*3*).

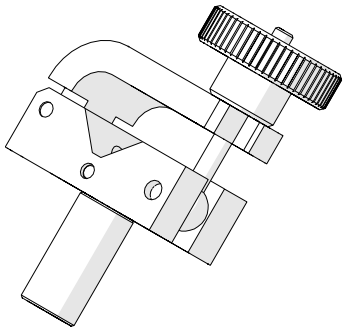


5.14. Torch clamps

5.14.1. 16–22 mm torch clamp

Allows using a torch with the diameter of 16–22 mm (0.63–0.87″).

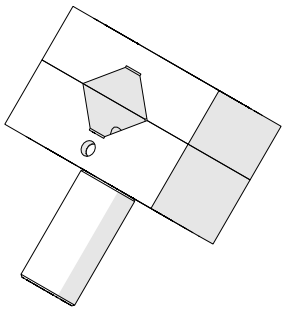
Part number:
ZRZ-0466-04-01-00-0



5.14.2. 16–22 mm torch clip

The clip allows using a torch with the diameter of 16–22 mm (0.63–0.87″). Use the 4 mm hex wrench to tighten the torch in the clip.

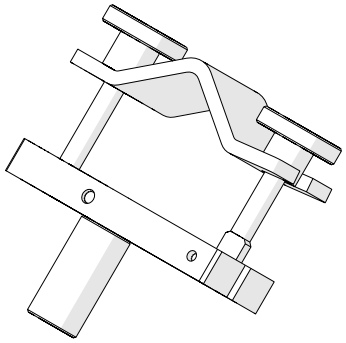
Part number:
ZCS-0476-06-01-00-0



5.14.3. 22–35 mm torch clamp

Allows using a torch with the diameter of 22–35 mm (0.87–1.38″).

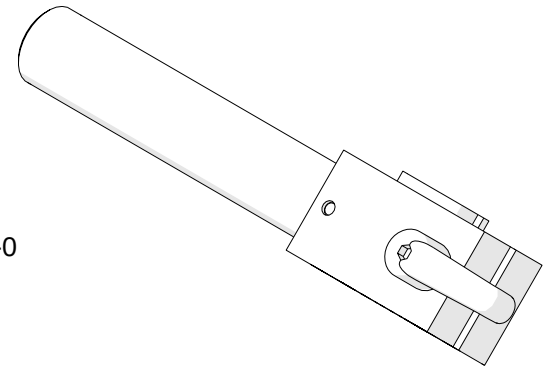
Part number:
ZRZ-0466-19-00-00-0



5.15. Rods

5.15.1. Short rod

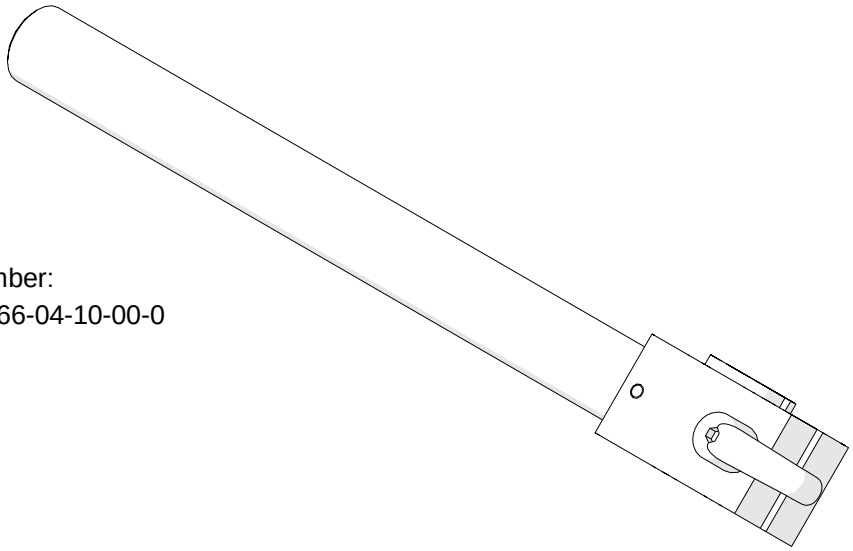
Provides a 120 mm (4.7″) reach.



Part number:
WLK-0476-20-01-00-0

5.15.2. Long rod

Provides a 240 mm (9.4″) reach.



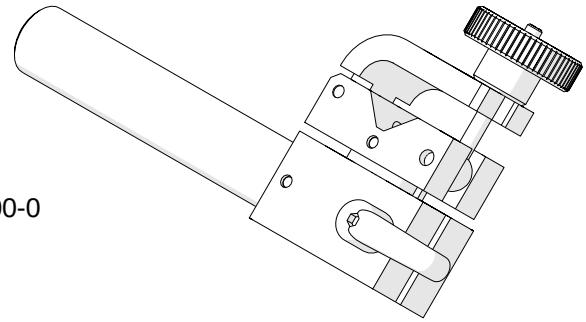
Part number:
WLK-0466-04-10-00-0

5.16. Torch holders

5.16.1. Short rod torch holder with clamp

Allows using a torch with the diameter of 16–22 mm (0.63–0.87″).

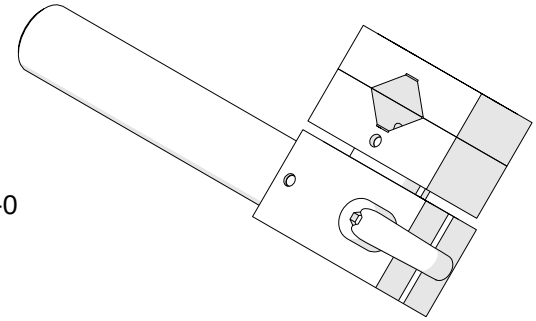
Part number:
UCW-0476-20-00-00-0



5.16.2. Short rod torch holder with clip

The holder allows using a torch with the diameter of 16–22 mm (0.63–0.87″). Use the 4 mm hex wrench to tighten the torch in the clip.

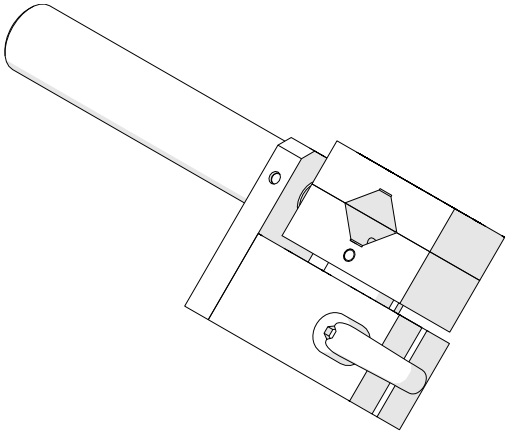
Part number:
UCW-0476-27-00-00-0



5.16.3. Short rod low torch holder with clip

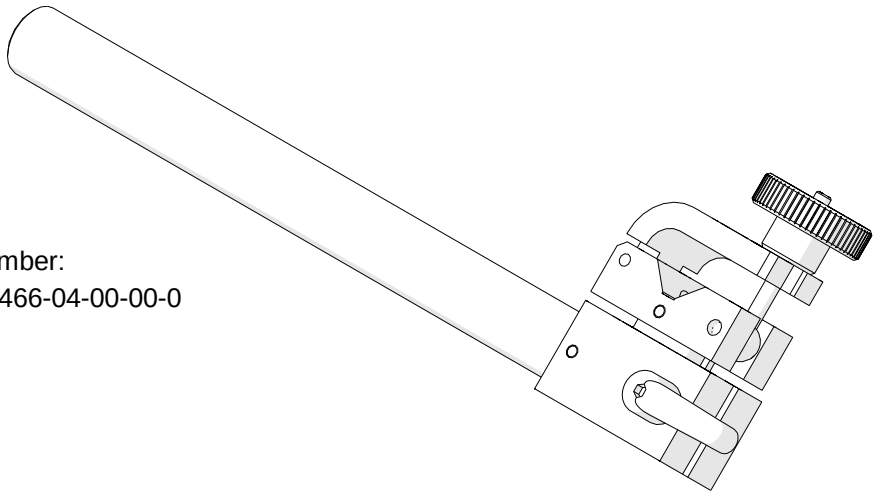
The holder allows using a torch with the diameter of 16–22 mm (0.63–0.87″). Use the 4 mm hex wrench to tighten the torch in the clip.

Part number:
UCW-0476-06-00-00-0



5.16.4. Long rod torch holder with clamp

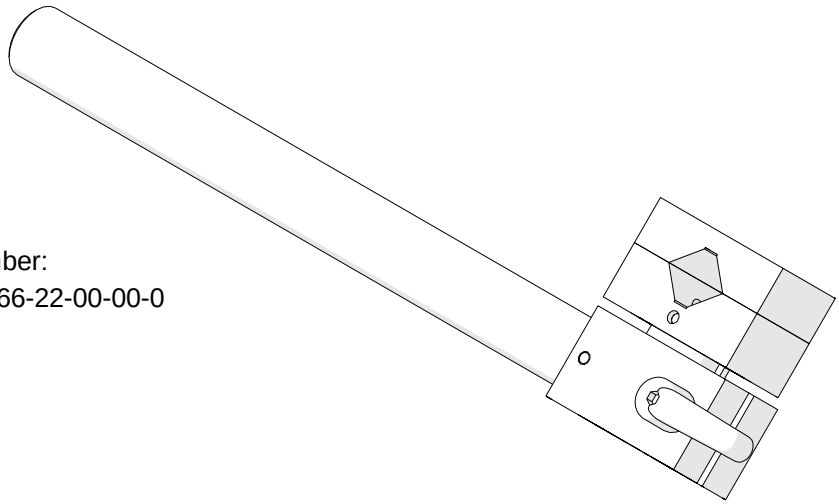
Allows using a torch with the diameter of 16–22 mm (0.63–0.87″).



Part number:
UCW-0466-04-00-00-0

5.16.5. Long rod torch holder with clip

The holder allows using a torch with the diameter of 16–22 mm (0.63–0.87″). Use the 4 mm hex wrench to tighten the torch in the clip.



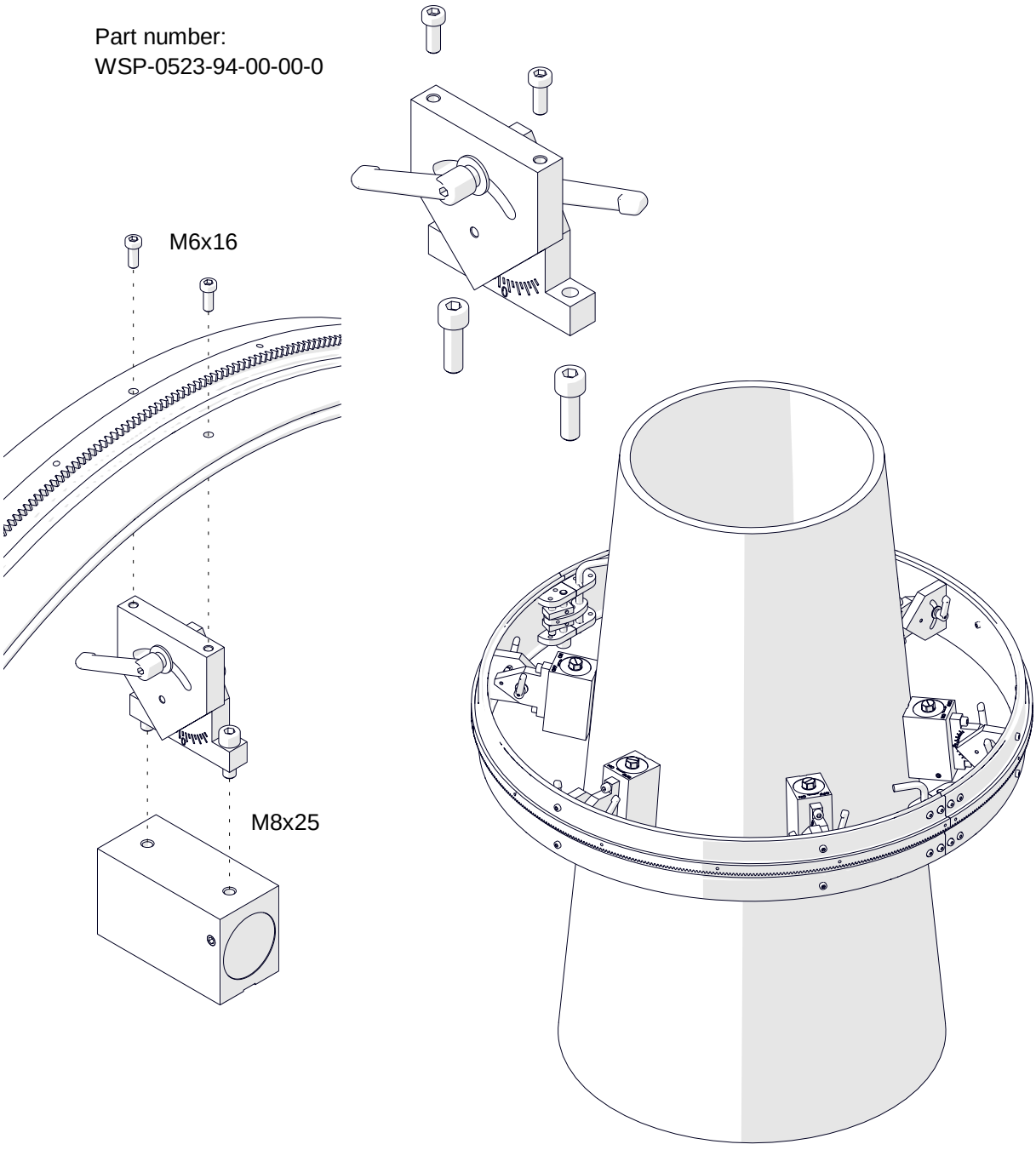
Part number:
UCW-0466-22-00-00-0

5.17. Pivoting support

Allows clamping a ring track onto conical workpieces by using narrow magnetic units.

Use the 5 mm hex wrench and two M6x16 screws to tighten supports to each slot of the ring track. Then, use the 6 mm hex wrench and two M8x25 screws to tighten the narrow magnetic units to the supports.

Loosen the two levers of each support and put the ring track onto the conical workpiece. Next, clamp the magnetic units to the workpiece and tighten the levers.

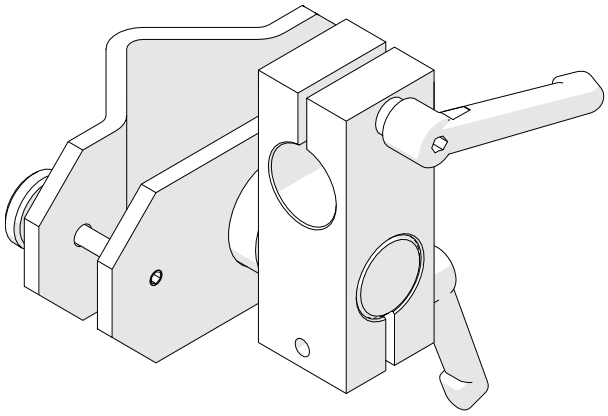


5.18. Cutting torch holders

5.18.1. Standard torch holder

Designed for torches with the diameter of 28–35 mm (1.10–1.38″). Allows rough adjustment of the torch angle.

Part number:
UCW-0475-28-00-00-0

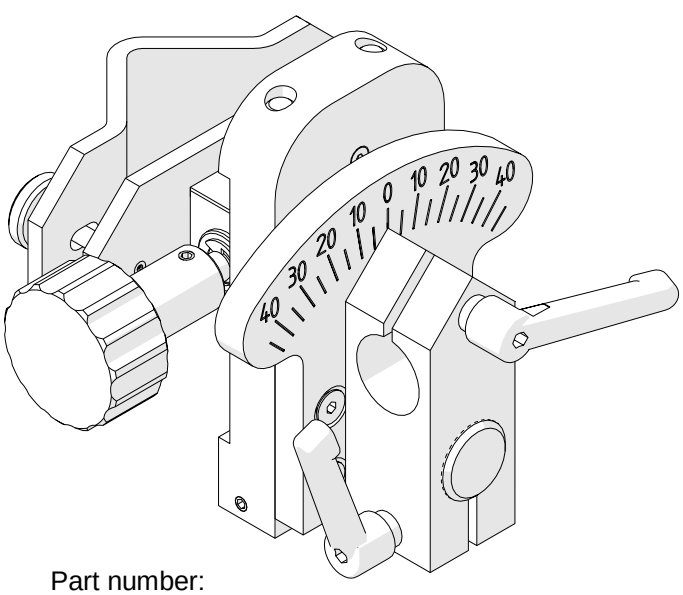


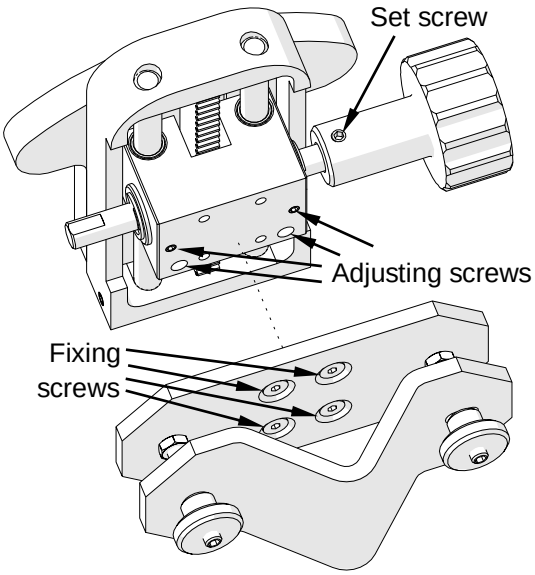
5.18.2. Precise torch holder

Designed for torches with the diameter of 28–35 mm (1.10–1.38″). Allows precise adjustment of the torch angle.

Use the knob to adjust the vertical position. Install the knob at any side by using the 2.5 mm hex wrench and the set screw.

To adjust the resistance of the vertical move, use the 2.5 mm hex wrench to unscrew the fixing screws. Then, use the 2 mm hex wrench to rotate the adjusting screws.



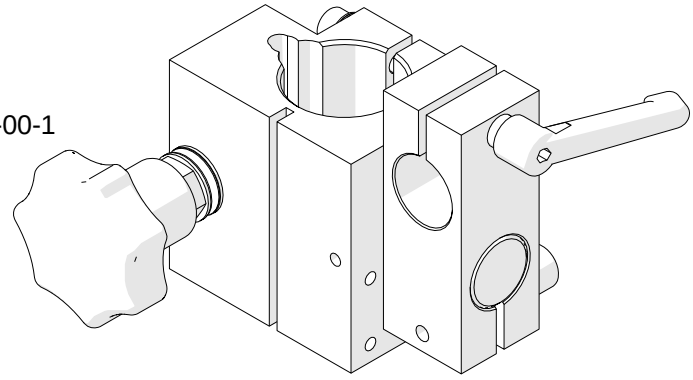


Part number:
UCW-0475-08-00-00-0

5.18.3. Machine torch holder (fox oxy-fuel cutting)

Designed for torches with the diameter of 35 mm (1.38″) equipped with a rack. The holder allows adjustment of the vertical position of the torch by using the knob and rough adjustment of the angle.

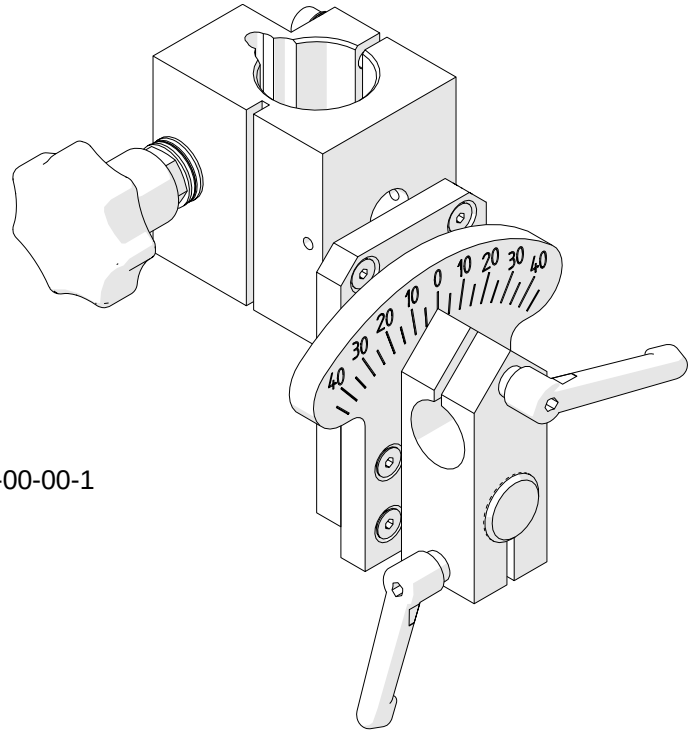
Part number:
UCW-0475-29-00-00-1



5.18.4. Precise machine torch holder (for oxy-fuel cutting)

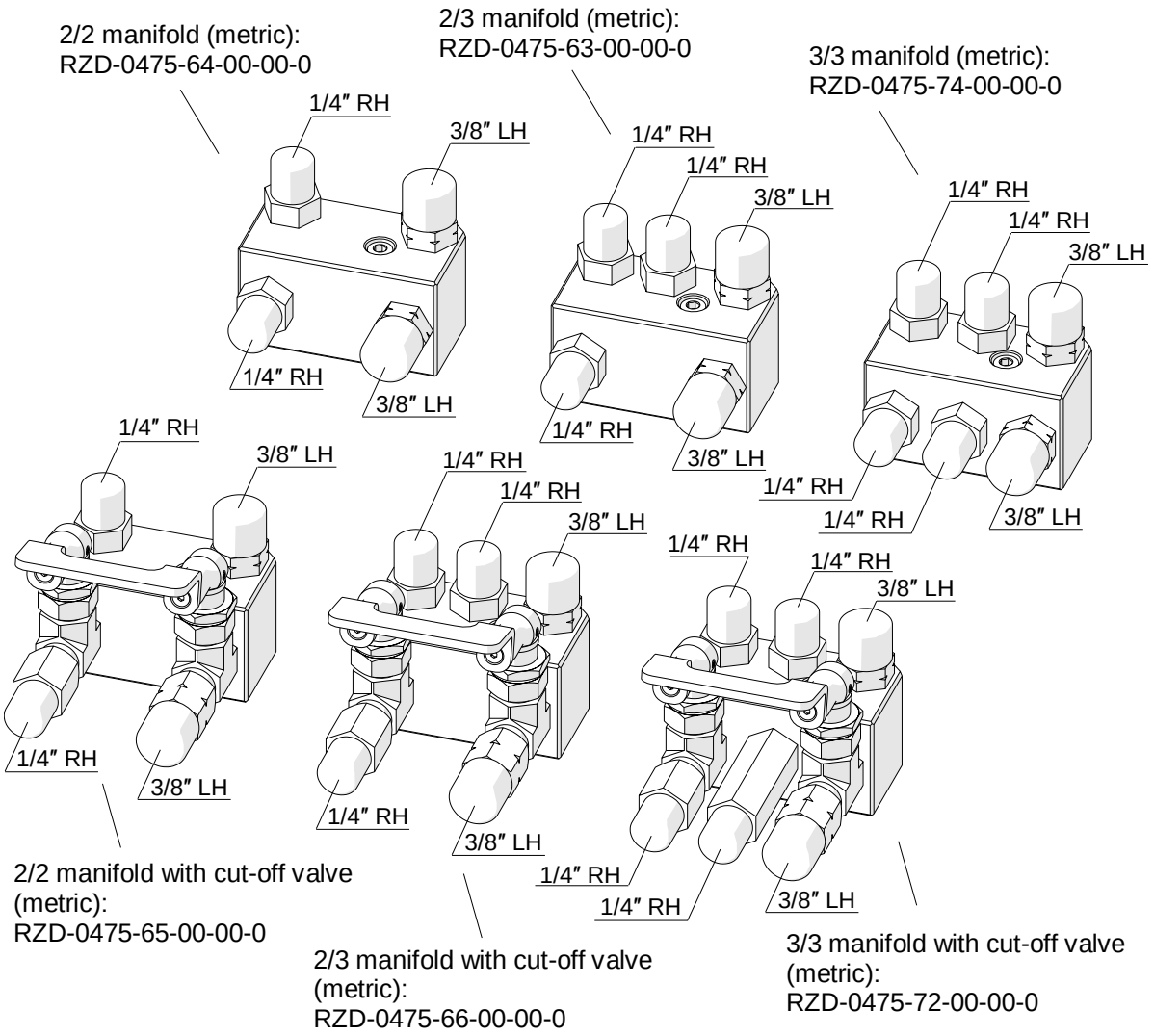
Designed for torches with the diameter of 35 mm (1.38″) equipped with a rack. The holder allows adjustment of the vertical position of the torch by using the knob and precise adjustment of the angle.

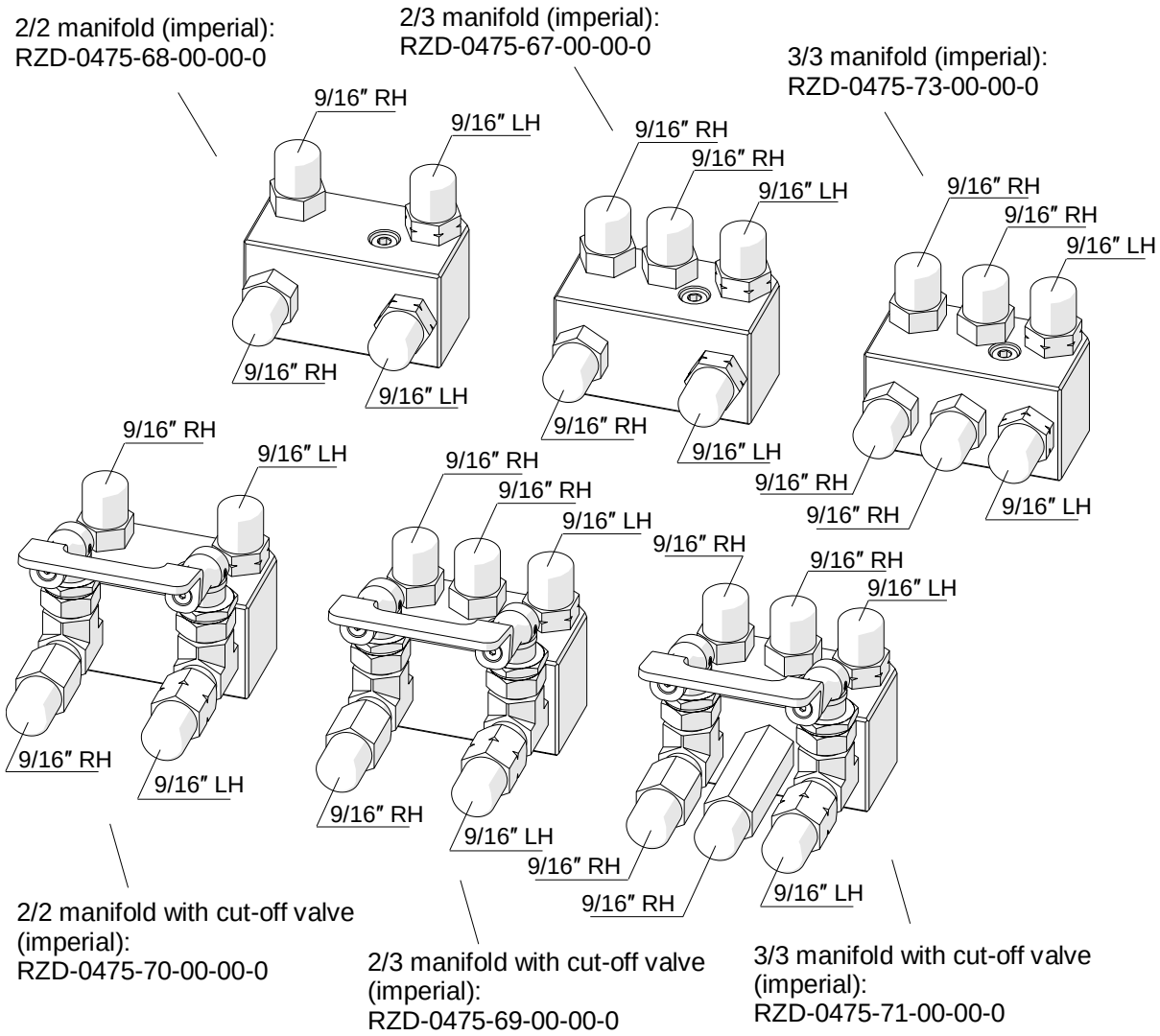
Part number:
UCW-0475-42-00-00-1



5.19. Gas manifold (for oxy-fuel cutting)

Provides safe gas delivery to 2- or 3-hose torches. Manifolds are available with or without gas cut-off valve in both metric and imperial versions.




2/2 manifold (imperial):
RZD-0475-68-00-00-0
9/16″ RH
9/16″ LH
9/16″ RH
9/16″ LH
2/3 manifold (imperial):
RZD-0475-67-00-00-0
9/16″ RH
9/16″ RH
9/16″ LH
9/16″ RH
9/16″ LH
3/3 manifold (imperial):
RZD-0475-73-00-00-0
9/16″ RH
9/16″ RH
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9/16″ RH
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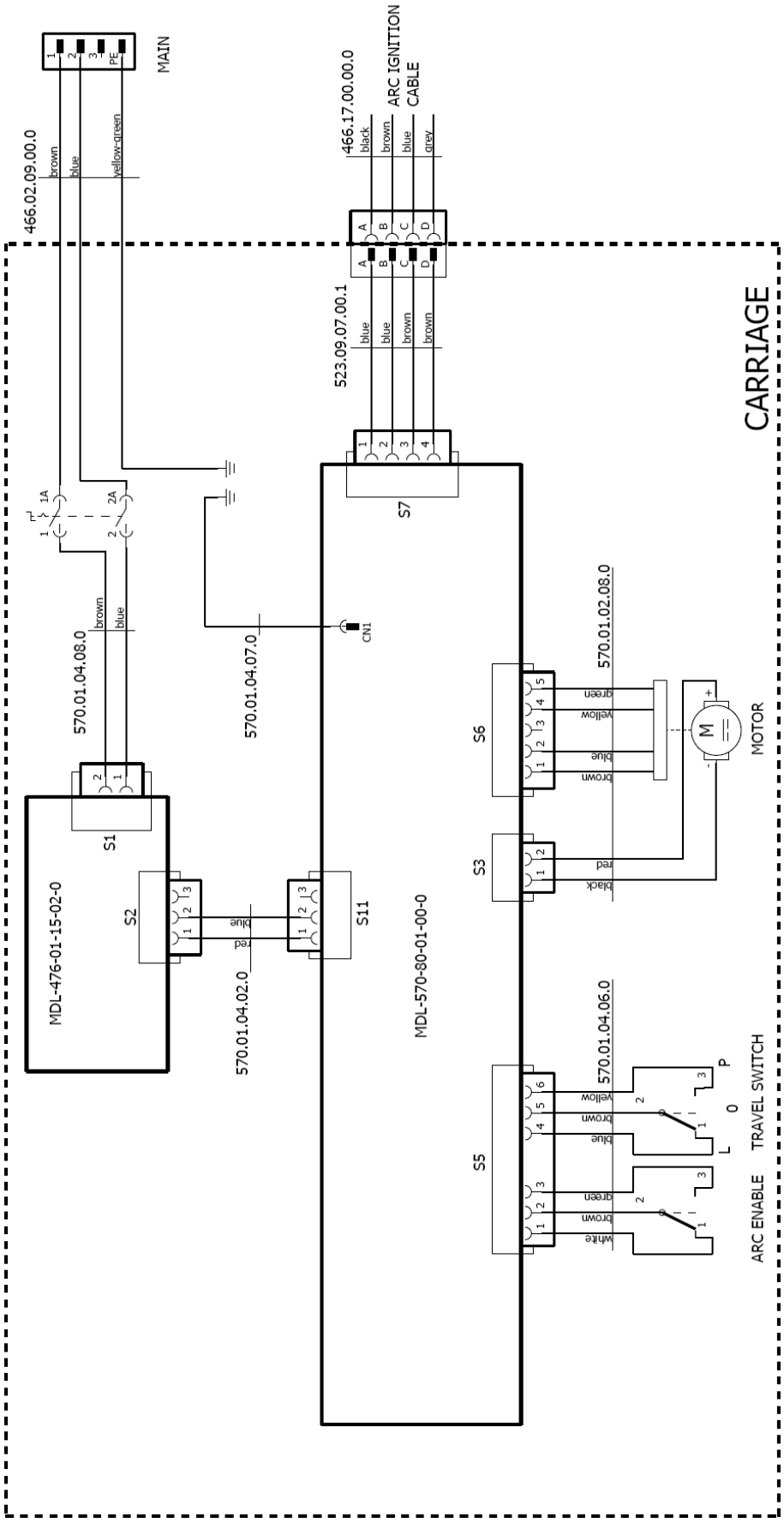
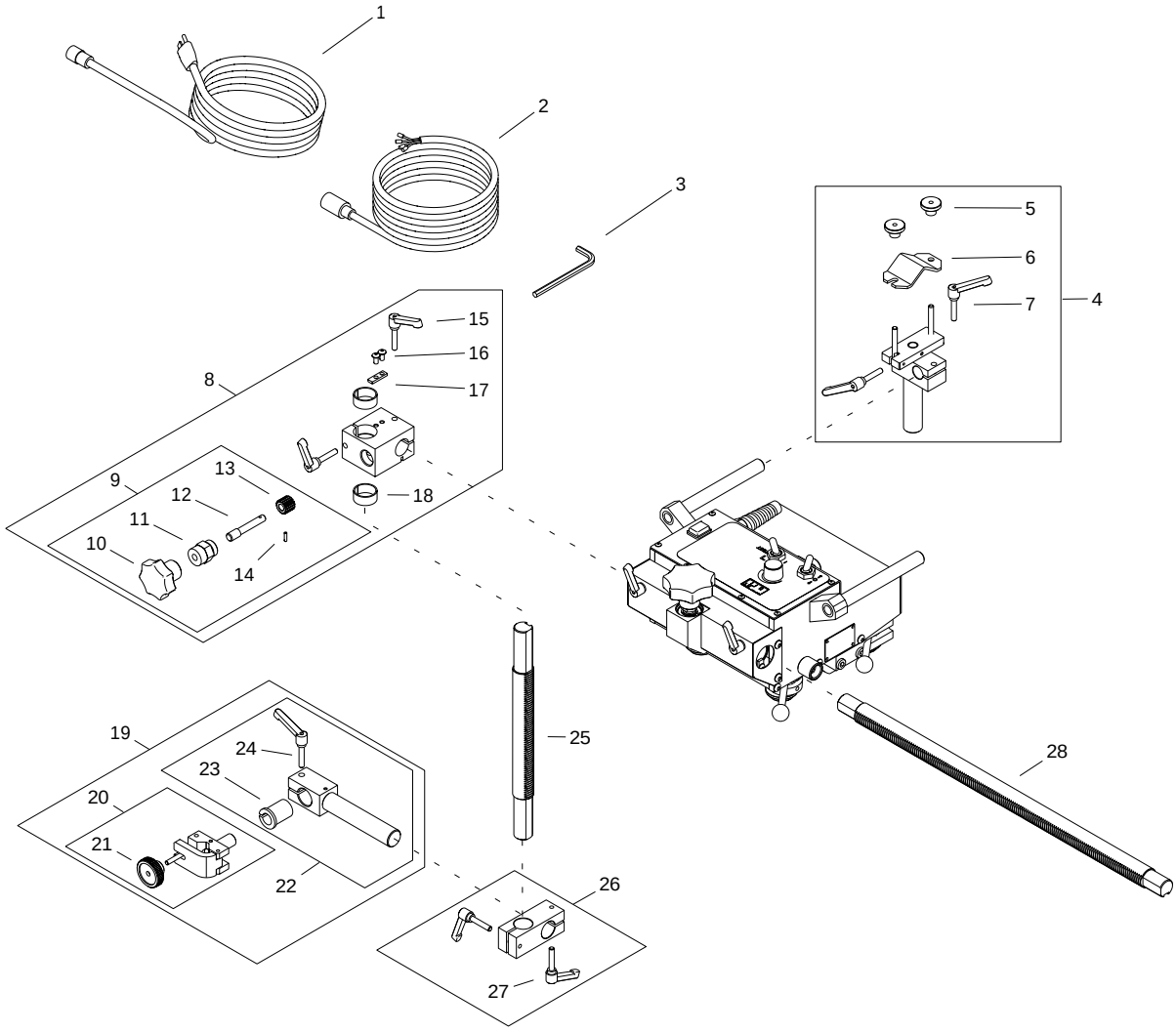
9/16″ LH
9/16″ RH
9/16″ LH
9/16″ RH
9/16″ LH
2/2 manifold with cut-off valve
(imperial):
RZD-0475-70-00-00-0
9/16″ RH
9/16″ RH
9/16″ LH
9/16″ RH
9/16″ LH
2/3 manifold with cut-off valve
(imperial):
RZD-0475-69-00-00-0
9/16″ RH
9/16″ RH
9/16″ LH
9/16″ RH
9/16″ RH
9/16″ LH
3/3 manifold with cut-off valve
(imperial):
RZD-0475-71-00-00-0

6. WIRING DIAGRAM

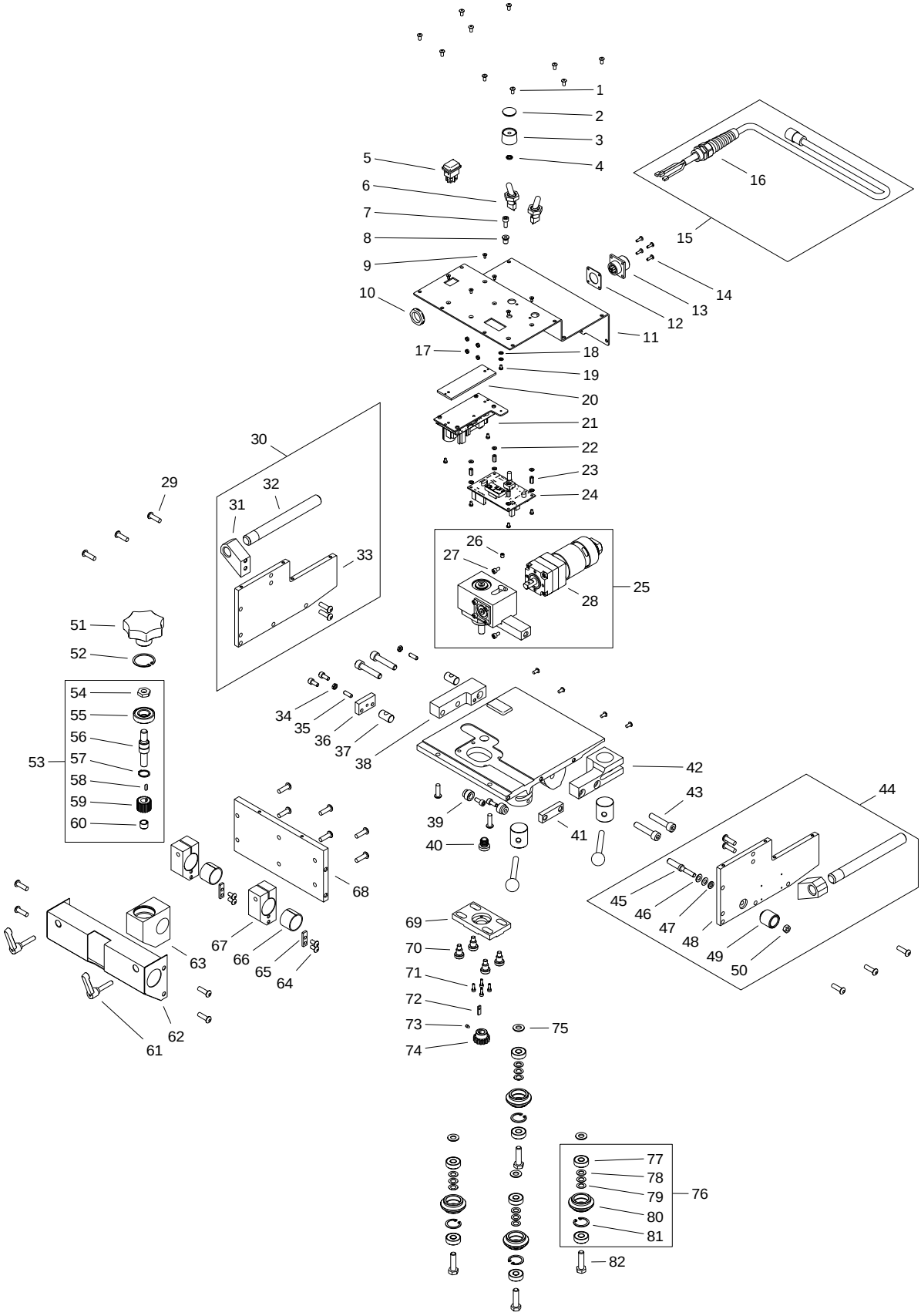


7. EXPLODED VIEWS AND PARTS LIST



ITEM	PART NUMBER	DESCRIPTION	Q-TY
1	PWD-0466-16-00-00-0	POWER CORD 115V (US)	1
1	PWD-0466-18-00-00-0	POWER CORD 230V (CEE)	1
1	PWD-0466-21-00-00-0	POWER CORD 230V (AU)	1
1	PWD-0466-28-00-00-0	POWER CORD 230V (UK)	1
1	PWD-0466-31-00-00-0	POWER CORD 230V (INDIA)	1
2	KBL-0466-17-00-00-0	START-STOP ARC IGNITION CABLE 6.5 M (20 FT)	1
3	KLC-000009	6 MM HEX WRENCH	1
4	UCW-0523-05-01-00-0	CABLE HOLDER	1
5	NKR-000121	KNURLED NUT M6	2
6	TRM-0219-06-16-00-0	CLAMP PLATE	1
7	RKJ-000036	HANDLEVER M6-32	2
8	ZSP-0475-62-00-00-0	SLIDE	1
9	PKT-0475-62-02-00-0	KNOB ASSY	1
10	PKT-000039	KNOB D50xM10	1
11	ZLC-0475-62-02-01-0	THREAD JOINT	1
12	OSK-0475-62-02-02-0	PIVOT PIN	1
13	KOL-0475-62-02-03-0	GEAR z16	1

ITEM	PART NUMBER	DESCRIPTION	Q-TY
14	KLK-000004	SPRING PIN 3x12	1
15	RKJ-000036	HANDLEVER M6-32	2
16	WKR-000096	HEX SOCKET BUTTON HEAD SCREW M5x10	2
17	WPS-0475-62-03-00-0	KEY	1
18	TLJ-0475-62-04-00-0	SELF-LUBRICATING SLEEVE 25x28x12	2
19	UCW-0476-20-00-00-0	SHORT ROD TORCH HOLDER ASSY	1
20	ZRZ-0466-04-01-00-0	TORCH CLAMP ASSY	1
21	PKT-0466-04-01-10-0	KNOB	1
22	WLK-0476-20-01-00-0	SHORT ROD ASSY	1
23	TLJ-0419-04-02-03-0	INSULATION TUBE	1
24	RKJ-000036	HANDLEVER M6-32	1
25	RAM-0523-17-00-00-0	GUIDE ARM	1
26	KST-0525-11-00-00-0	CLAMPING BLOCK	1
27	RKJ-000036	HANDLEVER M6-32	2
28	RAM-0525-07-00-00-0	GEARED RACK 540 MM (21″)	1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ITEM	PART NUMBER	DESCRIPTION	Q-TY
1	WKR-000091	HEX SOCKET BUTTON HEAD SCREW M4x8	14
2	PKR-000055	CAP	1
3	PKT-000041	KNOB fi23	1
4	PRS-000114	SEAL O-RING 6.3x1.8	1
5	WZK-0570-01-04-08-0	POWER SUPPLY WIRE SET	1
6	WZK-0570-01-04-06-0	SWITCH WIRE SET	1
7	SRB-000078	HEX SOCKET HEAD CAP SCREW M5x12	7
8	NTN-000004	BLIND RIVET NUT M5	1
9	WKR-000349	HEX SOCKET COUNTERSUNK HEAD SCREW M3x6	6
10	NKR-000040	STRAIN RELIEF NUT	1
11	OSL-0570-01-04-01-0	TOP COVER	1
12	KLR-000005	SEAL FLANGE 14	1
13	WZK-0523-09-07-00-1	ARC IGNITION WIRE SET	1
14	WKR-000287	HEX SOCKET BUTTON HEAD SCREW M3x10	4
15	WZK-0466-02-09-00-0	POWER WIRE SET	1
16	DLW-000007	CABLE GLAND WITH STRAIN RELIEF PG11	1
17	NKR-000010	HEX NUT M3	4
18	PDK-000058	EXTERNAL TOOTH LOCK WASHER 3.2	2
19	WKR-000180	CROSS RECESSED PAN HEAD SCREW M3x5	7
20	DYS-0570-01-04-05-0	POWER SUPPLY SPACER	1
21	MDL-0570-01-04-03-0	POWER SUPPLY MODULE ASSY	1
22	PDK-000014	ROUND WASHER 3.2	8
23	TLJ-000023	SLEEVE M3x10	4
24	MDL-0570-80-01-00-0	ELECTRONIC MODULE	1
25	MTR-0570-01-02-00-0	MOTOR SET ASSY	1
26	WKR-000048	HEX SOCKET SET SCREW WITH FLAT POINT M5x6	1
27	SRB-000074	HEX SOCKET HEAD CAP SCREW M4x8	2
28	MTR-0570-01-02-08-0	MOTOR	1
29	WKR-000499	HEX SOCKET BUTTON HEAD SCREW M6x20	22
30	BOK-0570-01-07-00-0	RIGHT COVER ASSY	1
31	WSP-0570-01-06-02-0	HANDLE SUPPORT	2
32	RKJ-0570-01-06-03-0	HANDLE	2
33	PLY-0570-01-07-01-0	RIGHT COVER PLATE	1
34	NKR-000034	LOW HEX NUT M5	2
35	WKR-000077	HEX SOCKET SET SCREW WITH FLAT POINT M5x16	2
36	PLY-0523-01-01-02-0	RESISTING PLATE	1
37	NKR-0523-01-01-09-0	NUT	2
38	WSP-0523-01-01-05-0	LEFT BRACKET	1
39	ZDR-0523-01-01-08-0	BUMPER	3
40	WKL-000013	INSERT FOR TUBES fi 16	1
41	NKR-0523-01-01-06-0	SPECIAL NUT	2
42	WSP-0523-01-01-04-0	RIGHT BRACKET	1
43	SRB-000158	HEX SOCKET HEAD CAP SCREW M8x40	4
44	BOK-0570-01-06-00-0	LEFT COVER ASSY	1
45	SRB-0523-01-03-03-0	FEED SCREW	1
46	SPR-000010	DISC SPRING 6.2x12.5x0.6	2
47	PDK-000136	SMALL ROUND WASHER 6.4	1
48	PLY-0570-01-06-01-0	LEFT COVER PLATE	1
49	PKT-0341-02-08-00-0	KNOB	1
50	NKR-000017	HEX NUT M6	1
51	PKT-000038	STAR KNOB D63	1

ITEM	PART NUMBER	DESCRIPTION	Q-TY
52	PRS-000022	INTERNAL RETAINING RING 32w	1
53	ZSP-0475-06-00-00-1	FEED ASSY	1
54	NKR-000087	LOW HEX NUT M10	1
55	LOZ-000101	BALL BEARING 15x32x8	1
56	WLK-0475-06-02-00-1	GEAR SHAFT	1
57	PRS-000005	EXTERNAL RETAINING RING 15z	1
58	WPS-000005	PARALLEL KEY 3x3x10	1
59	KOL-0475-06-03-00-0	GEAR z20	1
60	TLJ-000095	SELF LUBRICATING SLEEVE 10x12x08	1
61	RKJ-000036	HANDLEVER M6-32	2
62	OSL-0570-01-05-00-0	FRONT COVER	1
63	OPR-0570-01-03-03-0	HOUSING	1
64	WKR-000096	HEX SOCKET BUTTON HEAD SCREW M5x10	4
65	WPS-0475-62-03-00-0	KEY	2
66	TLJ-000069	SELF LUBRICATING SLEEVE 25x28x20	2
67	WSP-0570-01-03-02-0	ARM SUPPORT	2
68	PLY-0570-01-03-01-0	FRONT PLATE	1
69	PLY-0523-01-01-07-0	BOTTOM PLATE	1
70	SRB-0341-02-10-00-0	MOUNTING SCREW	4
71	SRB-000310	HEX SOCKET HEAD CAP SCREW M3x10	4
72	WPS-0341-02-01-10-0	KEY	1
73	WKR-000012	HEX SOCKET SET SCREW WITH DOG POINT M4x6	1
74	KOL-0341-02-01-09-0	GEAR z14	1
75	PDK-000022	ROUND WASHER 8.4	4
76	RLK-0341-01-02-00-0	PRESSURE ROLLER ASSY	4
77	LOZ-000053	BALL BEARING 8x22x7	8
78	PDK-000173	WASHER 8x14x0.1	4
79	PDK-000174	WASHER 8x14x0.1	8
80	RLK-0341-01-02-01-0	PRESSURE ROLLER	4
81	PRS-000014	INTERNAL RETAINING RING 22w	4
82	SRB-000030	FULL THREAD HEX HEAD SCREW M8x30	4

8. DECLARATION OF CONFORMITY

EC Declaration of Conformity

We

PROMOTECH sp. z o.o.
ul. Elewatorska 23/1
15-620 Białystok
Poland

declare with full responsibility that:

Rail Runner LT Welding Carriage

is manufactured in accordance with the following standards:

- EN 12100
- EN 60204-1
- EN 60974-10

and satisfies safety regulations of the guidelines: 2014/30/EC, 2014/35/EC, 2006/42/EC.

Person authorized to compile the technical file:
Marek Siergiej, ul. Elewatorska 23/1, 15-620 Białystok

Białystok, 15 February 2018

Marek Siergiej
CEO

9. QUALITY CERTIFICATE

Machine control card

Rail Runner LT Welding Carriage

Serial number.....

Electric test

Type of test	Result	Name of tester
Insulation electrical strength test (1000 V, 50 Hz)		..... Date
Continuity test of the protective earth system	..... Ω	..... Signature

Quality control .....

Adjustments, inspections

Quality control .....

10. WARRANTY CARD

WARRANTY CARD No.....

..... in the name of Manufacturer warrants the Rail Runner LT Welding Carriage to be free of defects in material and workmanship under normal use for a period of 12 months from the date of sale.

This warranty does not cover rollers as well as damage or wear that arise from misuse, accident, tempering, or any other causes not related to defects in workmanship or material.

Date of production .....

Serial number .....

Date of sale .....

Signature of seller.....

1.00 / 18 May 2018

WE RESERVE THE RIGHT TO MAKE CHANGES IN THIS MANUAL WITHOUT NOTICE