

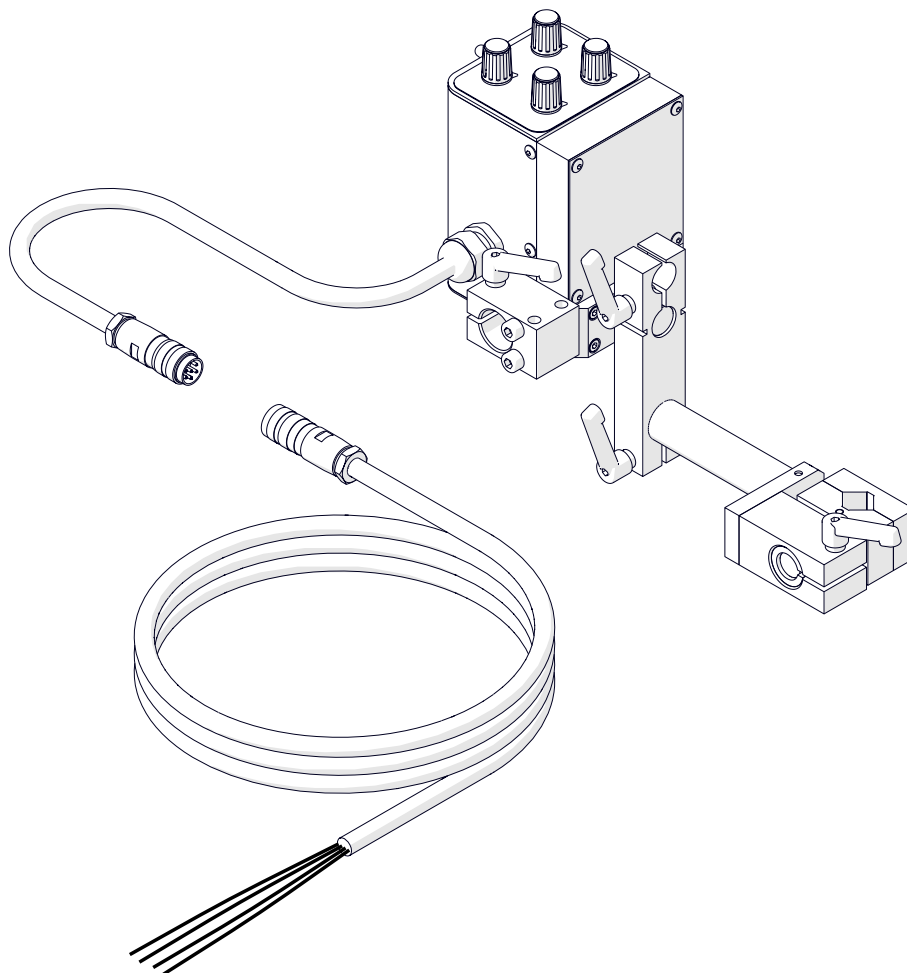


The tools of innovation.

OPERATOR'S MANUAL

OSC 8

ANGULAR OSCILLATOR



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1. GENERAL INFORMATION

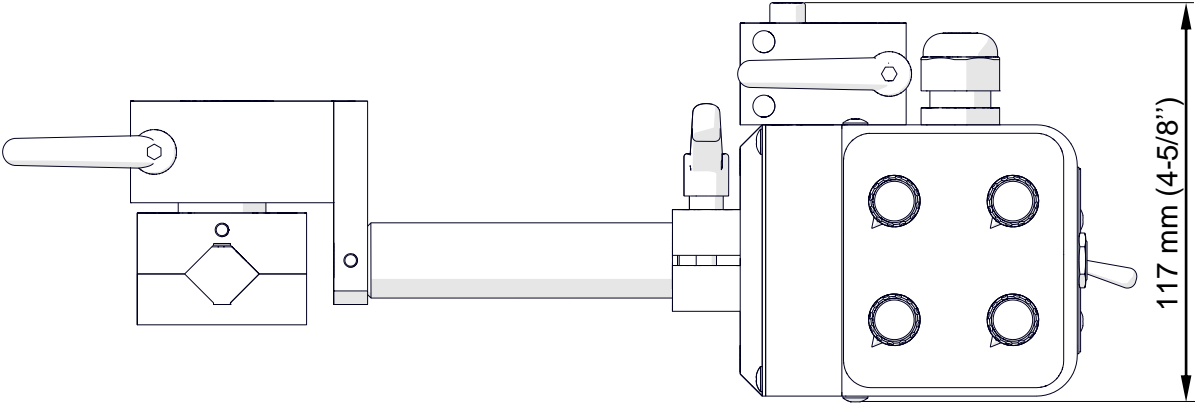
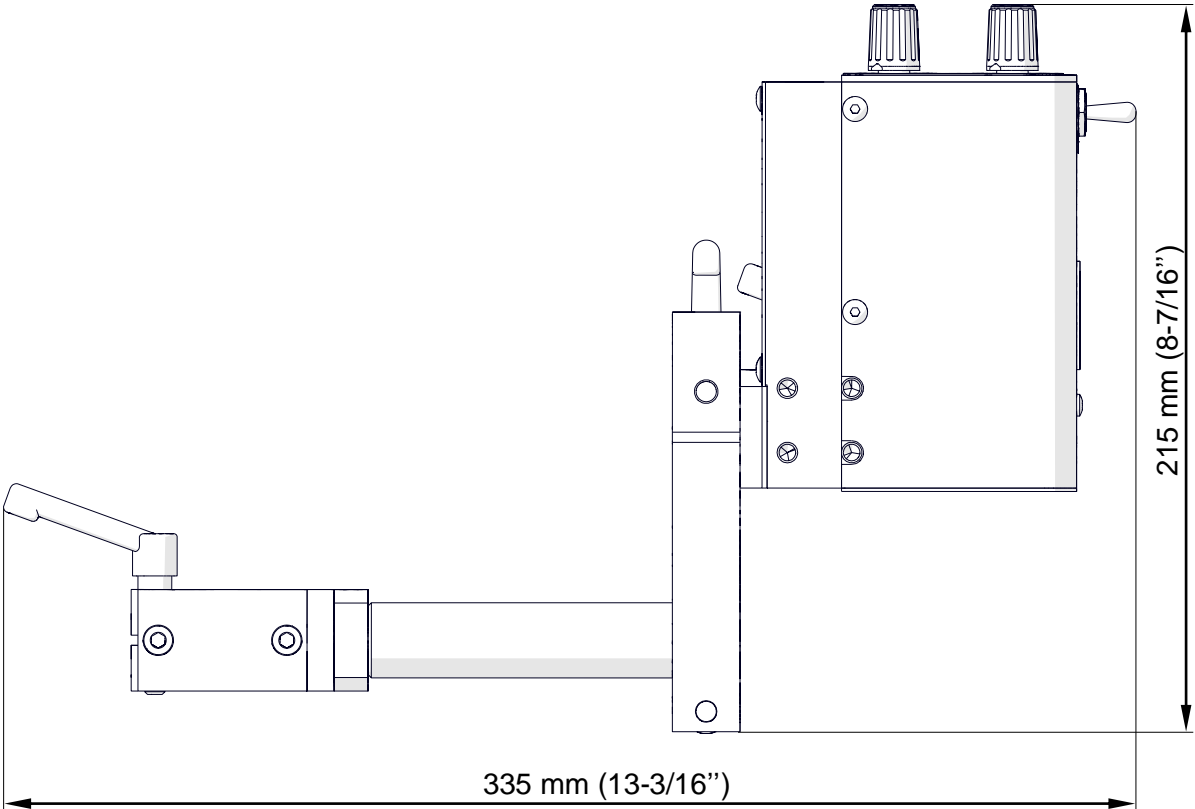
1.1. Application

The OSC 8 angular oscillator is designed to oscillate MIG/MAG torches with the handle diameter of 16–22 mm (5/8–7/8"). The oscillator must be placed onto a 22 mm (7/8") diameter rod and connected to a welding device.

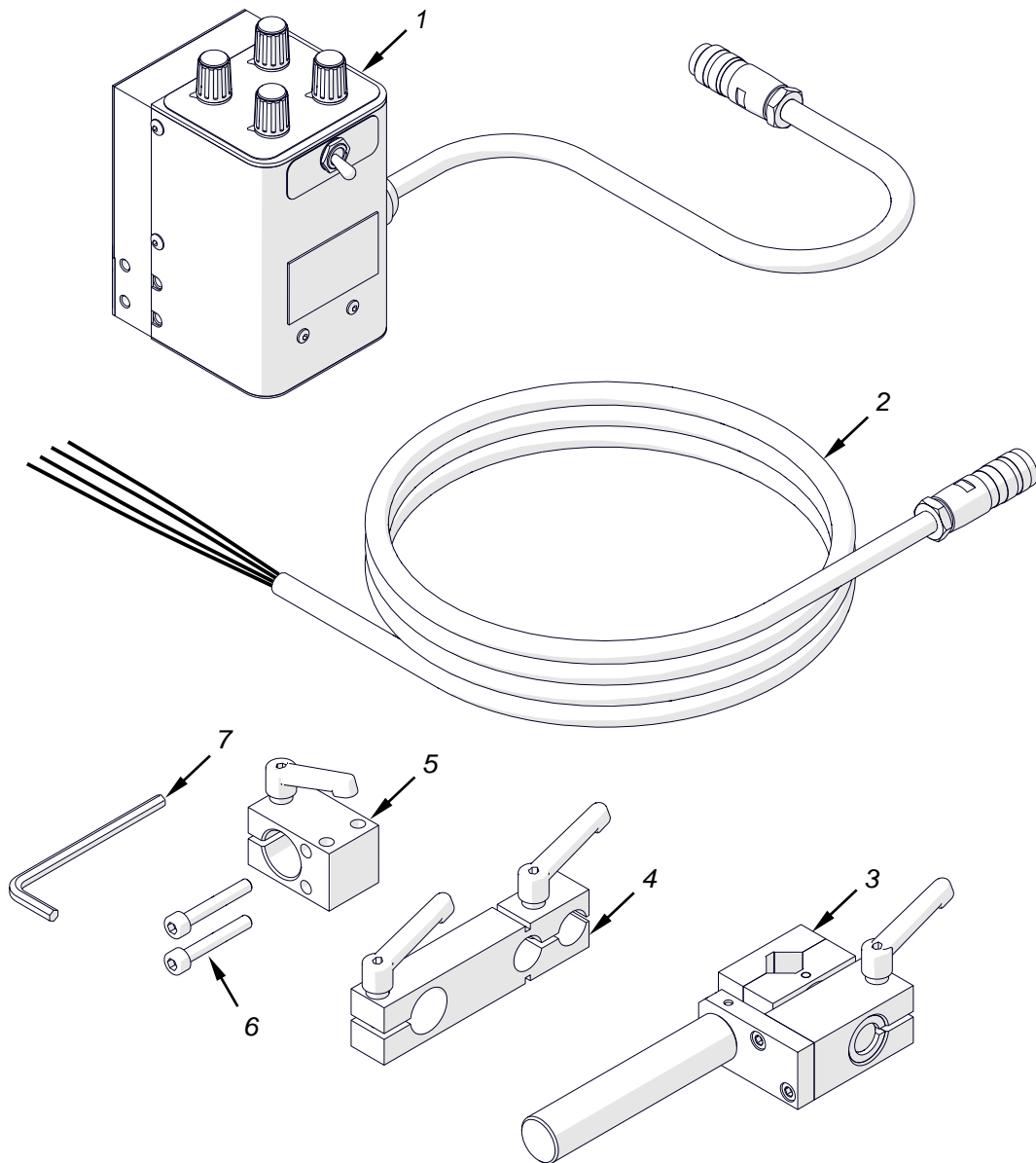
1.2. Technical data

Voltage	14–24 V DC
Power	50 W
Torch type	MIG/MAG
Torch diameter	16–22 mm (5/8–7/8")
Oscillation type	Pendulum
Oscillation width at r=150 mm (6")	1–30 mm (1–100%) 1/32–1-3/16"
Oscillation speed at oscillation width of 10 mm (3/8") and zero dwell time on ends	12–115 cycles/min (1–100%)
Oscillation dwell time on ends	0–3 s
Maximum torque	8 N·m (5.7 lb·ft)
Protection level	IP 21
Protection class	I
Required ambient temperature	0–50°C (32–122°F)
Weight	2 kg (4 lbs)

1.3. Dimensions



1.4. Equipment included



1	Oscillator	1 unit
2	2 m power cord	1 unit
3	Low rod torch holder with clip	1 unit
4	Oscillator arm	1 unit
5	Clamping block	1 unit
6	M6x40 screw	2 units
7	5 mm hex wrench	1 unit
-	Operator's Manual	1 unit

2. SAFETY PRECAUTIONS

1. Before beginning, read this Operator's Manual and complete proper occupational safety and health training.
2. Use the oscillator only in applications specified in this Operator's Manual.
3. The oscillator must be complete and all parts must be genuine and fully operational.
4. The specifications of the power source must conform to those specified on the rating plate.
5. Never carry the oscillator by the cord because this may damage the cord.
6. Keep the oscillator dry, and never expose it to rain, snow, or frost.
7. Never use near flammable liquids or gases, or in explosive environments.
8. Connect the oscillator with the power cable only when the switch is set to the center position.
9. Install only MIG/MAG torches with the handle diameter of 16–22 mm (5/8–7/8").
10. Never try to manually stop the motion of the oscillator. To stop oscillations, set the switch to the center position.
11. Repair only in a service center appointed by the seller.

3. STARTUP AND OPERATION

3.1. Assembling

Use the 5 mm hex wrench to fix the clamping block in the required position, and then install the oscillator arm and torch holder as shown in Fig. 1. The oscillator arm must be directed downward.

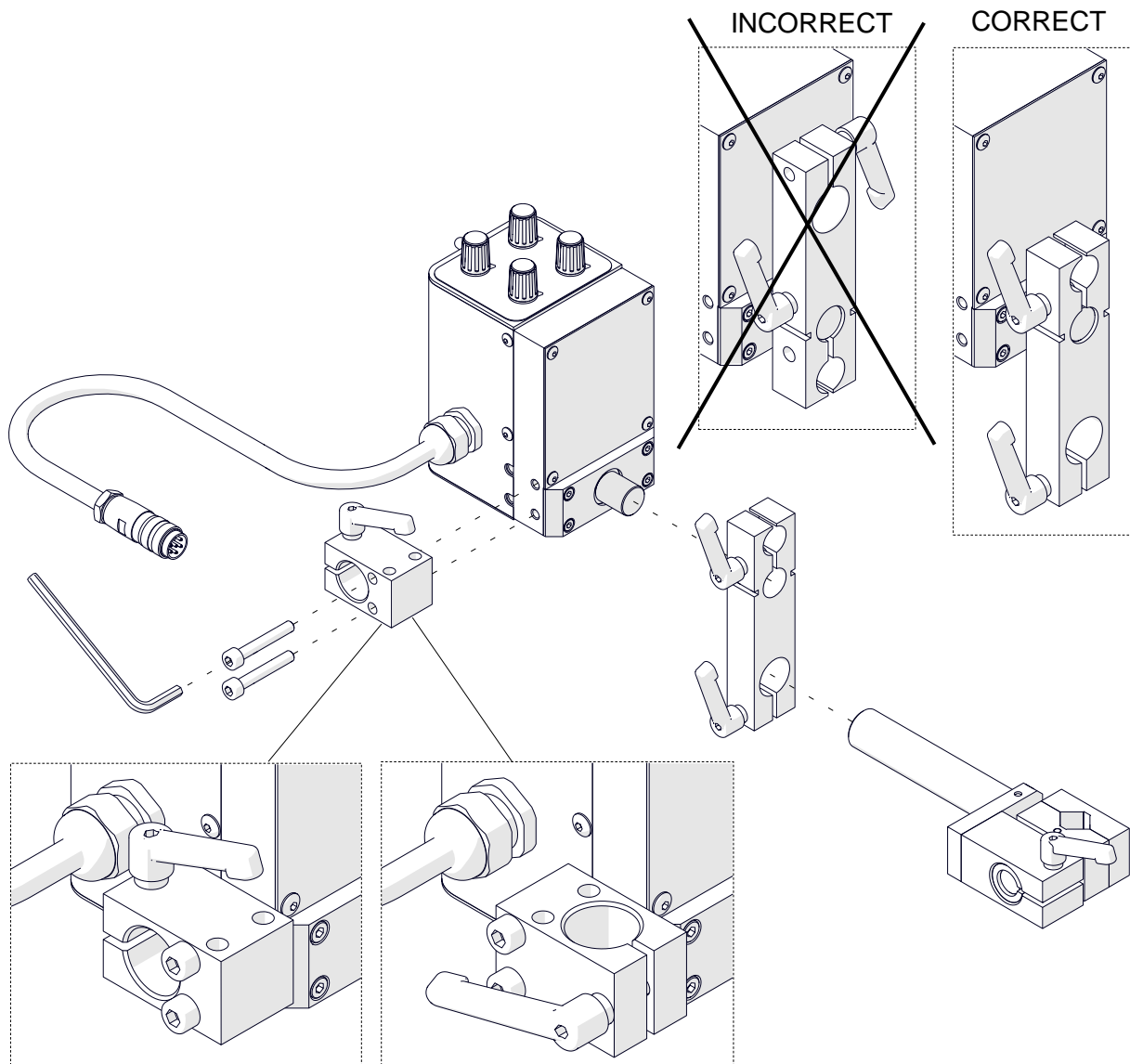


Fig. 1. Assembling the oscillator

3.2. Connecting

After the oscillator assembly is placed on a 22 mm (7/8") diameter rod, connect the power cable to the welding circuit according to the diagram from Fig. 2.

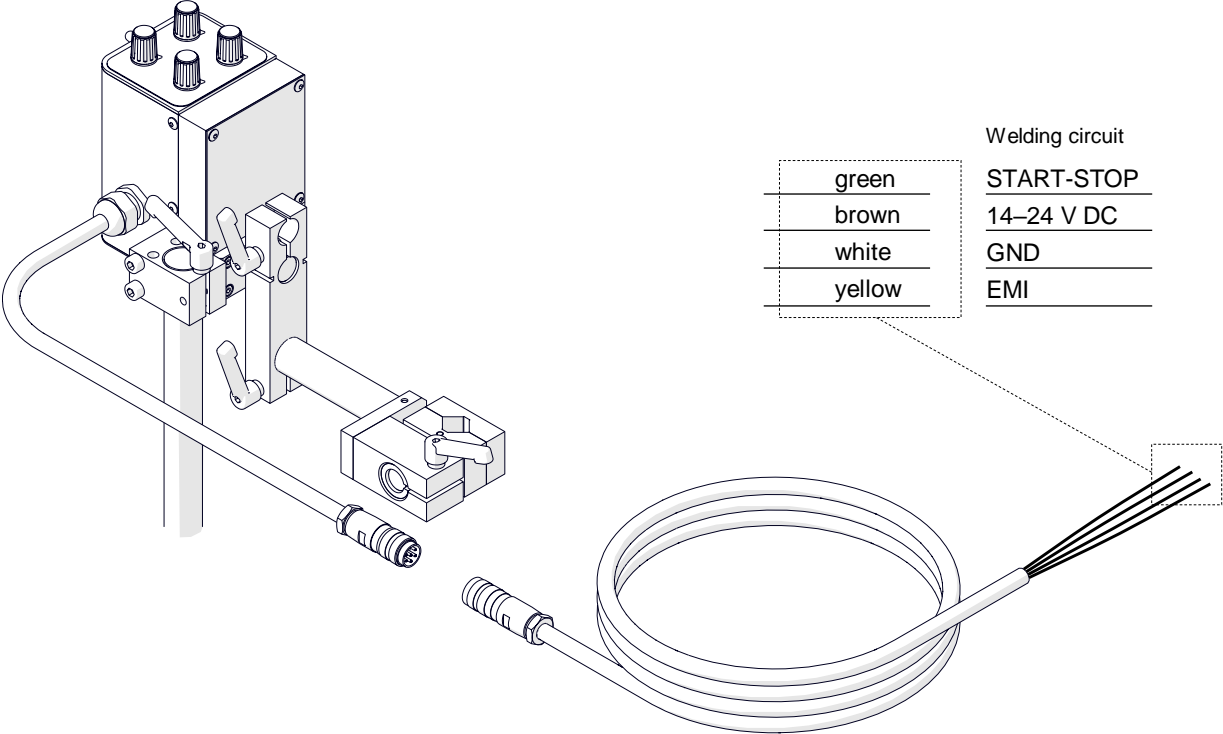
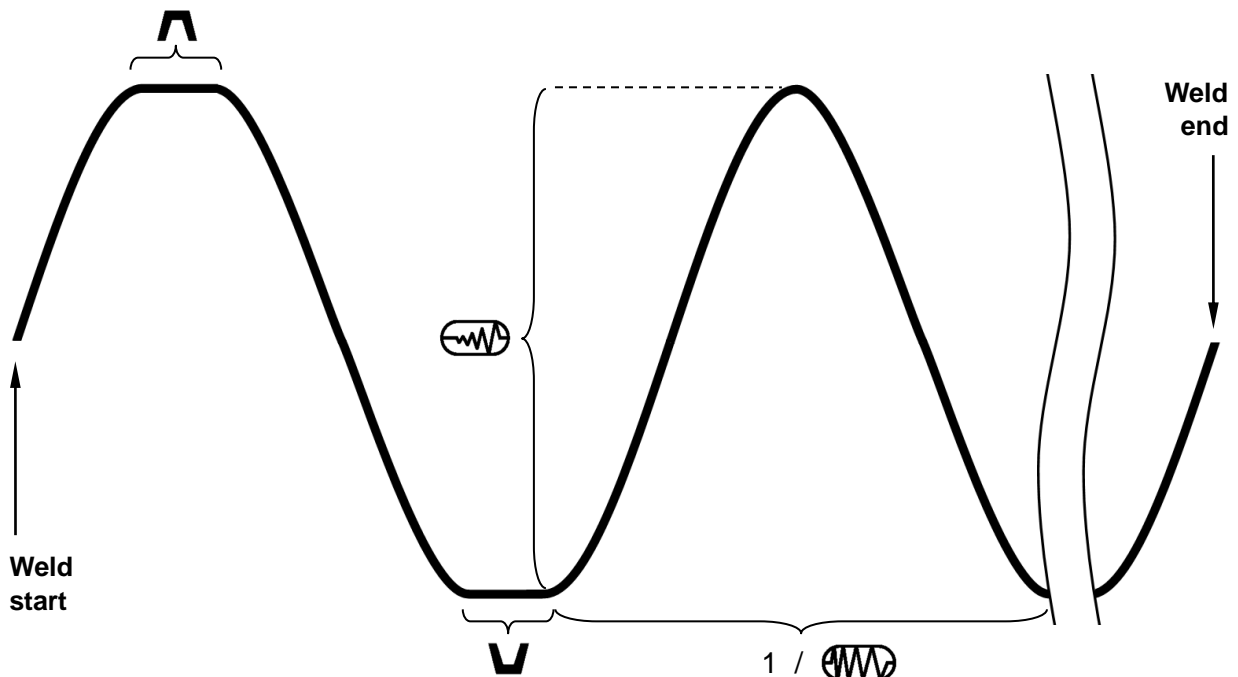


Fig. 2. Connecting the oscillator to the welding circuit

3.3. Operating

Use the knobs to set the required parameters from Fig. 3, and then use the switch to set the manual mode and start oscillations. To stop oscillations, set the switch to the center position.

If the automatic mode is set, oscillations start when the oscillator receives the control signal from the range of 14–24 V DC (on the START-STOP wire). To stop oscillations, provide the control signal of 0 V.



Parameter	Value	Description
	0–100%	Oscillation width.
	0–100%	Oscillation speed.
	0–3 s	Oscillation dwell time in the top position.
	0–3 s	Oscillation dwell time in the bottom position.

Fig. 3. Visual description of the oscillation parameters

To obtain the proper shape of oscillation, the axis of the oscillator's output shaft must cross with the axis of the torch (Fig. 4).

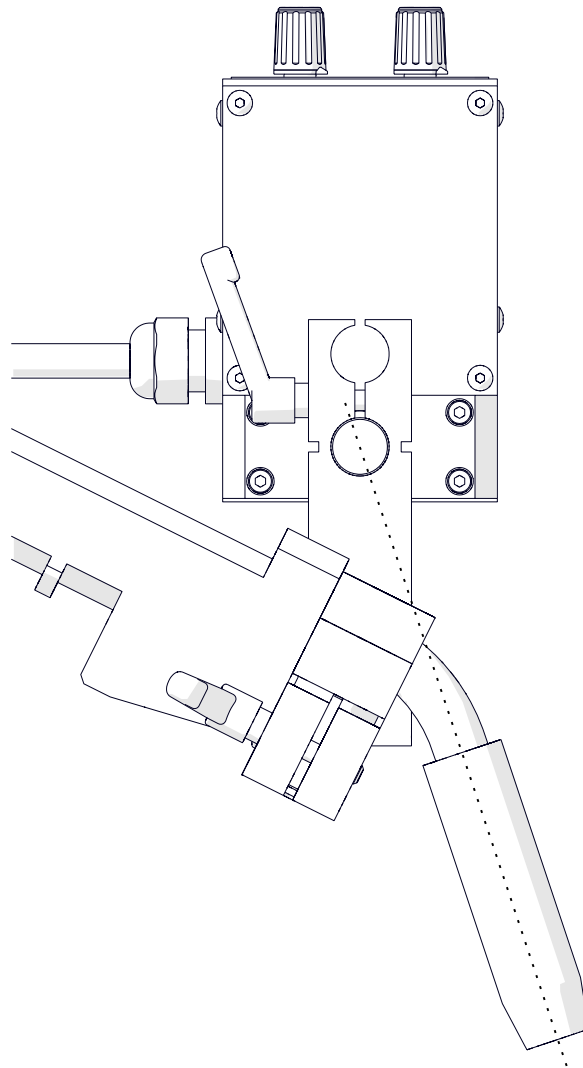
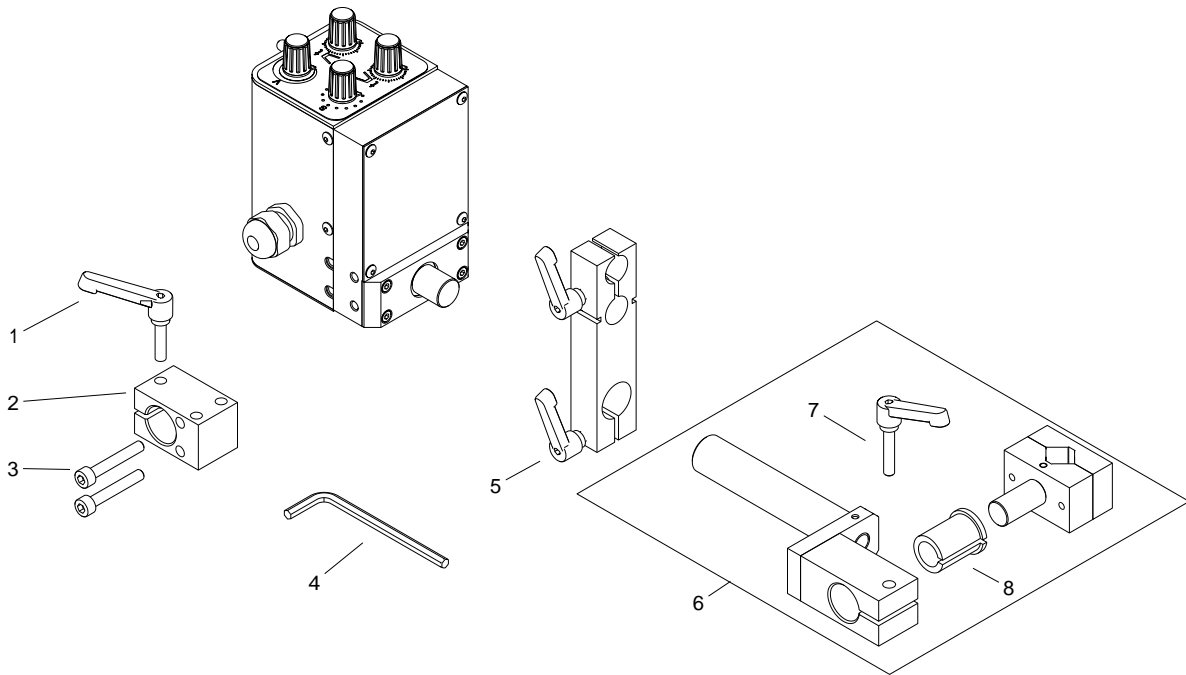
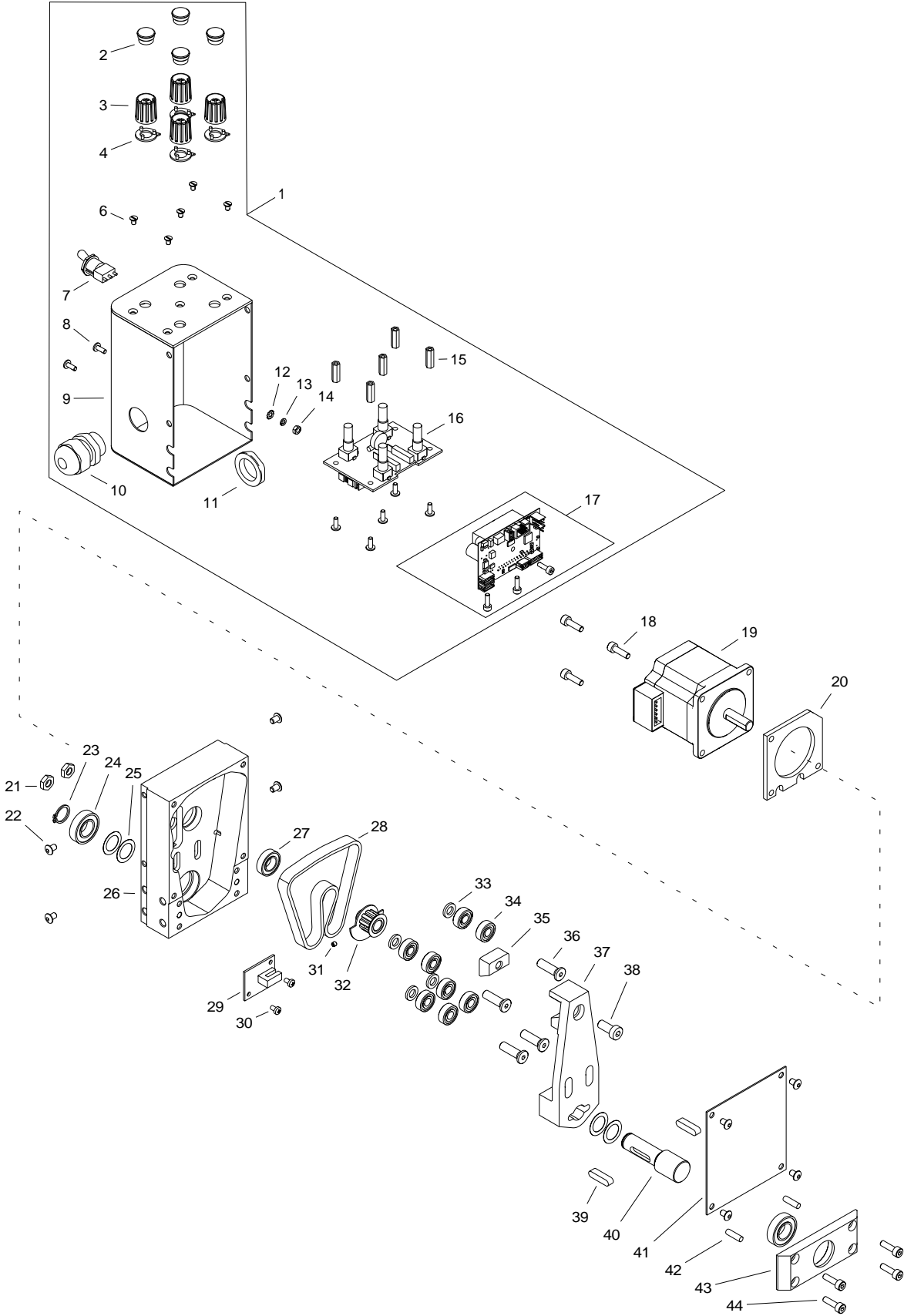


Fig. 4. Proper position of the torch

4. EXPLODED VIEWS AND PARTS LIST

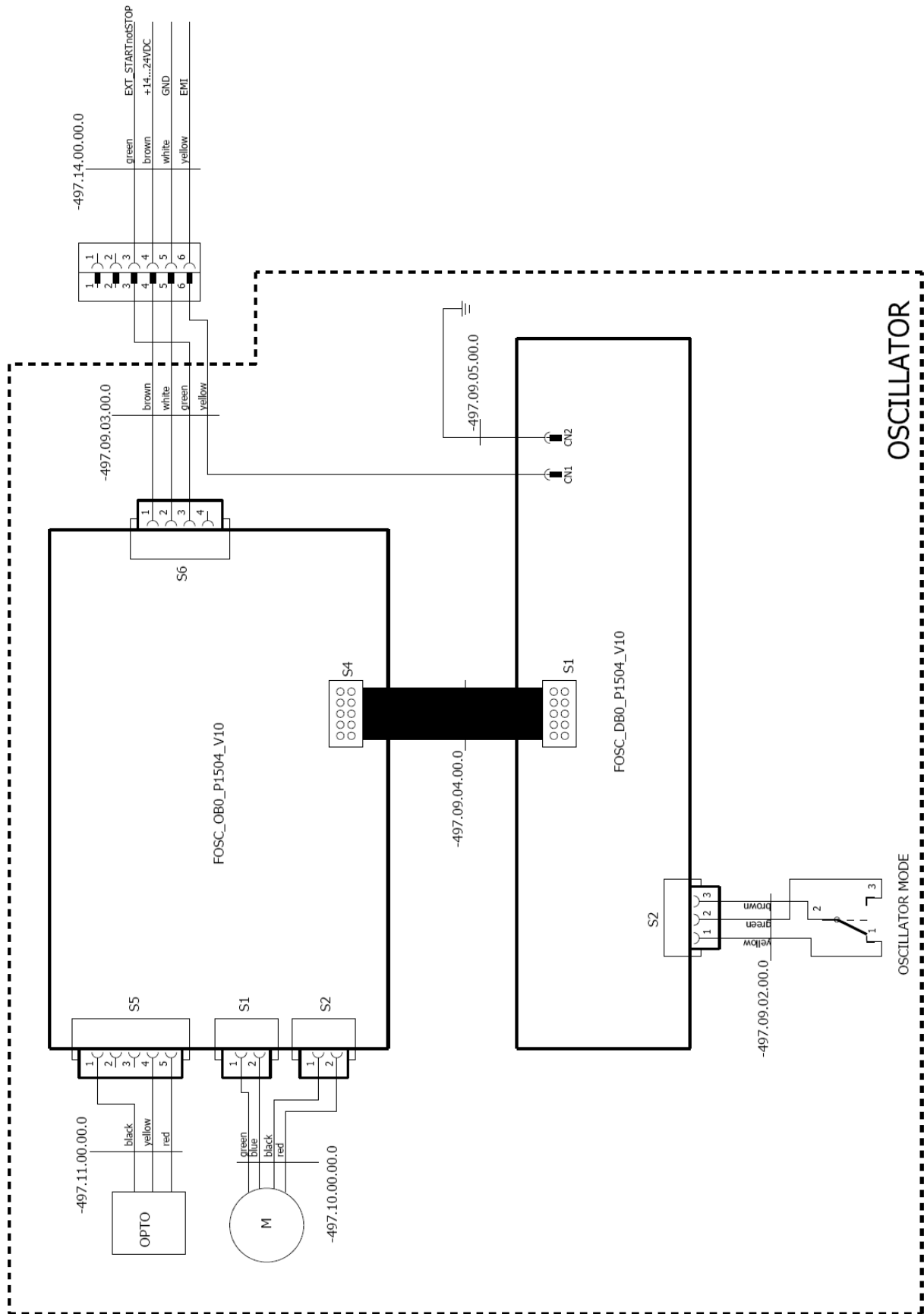


ITEM	PART NUMBER	DESCRIPTION	Q-TY
1	RKJ-000043	HANDLEVER M6-25	1
2	UCW-0497-13-00-00-0	CLAMP	1
3	SRB-000124	HEX SOCKET HEAD CAP SCREW M6x40	2
4	KLC-000008	5 MM HEX WRENCH	1
5	RAM-0477-01-10-00-0	OSCILLATOR ARM ASSY	1
6	UCW-0476-06-00-00-0	TORCH HOLDER LOWER ROD CLAMP ASSY	1
7	RKJ-000036	HANDLEVER M6-32	1
8	TLJ-0419-04-02-03-0	INSULATION TUBE	1



ITEM	PART NUMBER	DESCRIPTION	Q-TY
1	OBD-0497-09-00-00-0	HOUSING ASSY	1
2	ZLP-000020	CAP	4
3	PKT-000027	KNOB	4
4	WSK-000008	KNOB INDICATOR	4
6	WKR-000372	COUNTERSUNK HEAD SCREW M3x5	5
7	WZK-0497-09-02-00-0	TRAVEL DIRECTION SWITCH WIRE SET ASSY	1
8	WKR-000313	HEX SOCKET BUTTON HEAD SCREW M3x8	7
9	OBD-0497-09-01-00-0	HOUSING	1
10	WZK-0497-09-03-00-0	POWER CORD WIRE SET	1
11	NKR-000040	STRAIN RELIEF NUT	1
12	PDK-000058	EXTERNAL TOOTH LOCK WASHER 3.2	1
13	PDK-000041	SPRING WASHER 3.1	1
14	NKR-000009	HEX NUT M3	1
15	TLJ-000122	DISTANCE SLEEVE	5
16	MDL-0497-09-07-00-0	MODULE	1
17	MDL-0497-09-06-00-0	OSCILLATOR MODULE ASSY	1
18	SRB-000063	HEX SOCKET HEAD CAP SCREW M4x14	3
19	SLN-0497-10-00-00-0	MOTOR	1
20	DYS-0497-04-00-00-0	MOTOR PLATE	1
21	NKR-000139	LOW HEX NUT M6	2
22	WKR-000292	HEX SOCKET BUTTON HEAD SCREW M4x6	8
23	PRS-000003	EXTERNAL RETAINING RING 12z	1
24	LOZ-000085	BALL BEARING 12x24x6	2
25	PDK-000178	WASHER 12x18x0.2	4
26	KRP-0497-01-00-00-0	BODY	1
27	LOZ-000123	BALL BEARING 10x19x5	1
28	PAS-000013	TOOTHED BELT 130XL037	1
29	WZK-0497-11-00-00-0	TRANSOPTOR WIRE SET	1
30	WKR-000180	CROSS RECESSED PAN HEAD SCREW M3x5	2
31	WKR-000484	HEX SOCKET SET SCREW WITH FLAT POINT M3x3	1
32	KOL-0497-02-00-00-0	MOTOR GEAR ASSY	1
33	PDK-000155	SMALL ROUND WASHER 6.4	4
34	LOZ-000110	BALL BEARING 6x15x5	8
35	DCS-0497-07-00-00-0	BELT HOLDER	1
36	SRB-000386	HEX SOCKET ULTRA LOW HEAD CAP SCREW M6x20	4
37	WDZ-0497-03-00-00-0	CROSSHEAD	1
38	SRB-000301	LOW HEAD HEX SOCKET CAP SCREW M6x14	1
39	WPS-000033	PARALLEL KEY 5x5x20	2
40	WLK-0497-05-00-00-0	SHAFT	1
41	OSL-0497-08-00-00-0	FRONT COVER	1
42	KLK-000034	DOWEL PIN 4n6x14	2
43	OPR-0497-06-00-00-0	BEARING MOUNTING	1
44	SRB-000063	HEX SOCKET HEAD CAP SCREW M4x14	4

5. WIRING DIAGRAM



6. 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:

OSC 8 Angular Oscillator

is manufactured in accordance with the following standards:

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

and satisfies safety regulations of the guidelines: 2004/108/EC, 2006/95/EC, 2006/42/EC.

Person authorized to compile the technical file:

Marek Siergiej, ul. Elewatorska 23/1, 15-620 Białystok



Białystok, 5 September 2016

Marek Siergiej
CEO

7. QUALITY CERTIFICATE

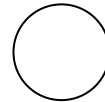
**Machine control card
OSC 8 Angular Oscillator**

Serial number

Electric test

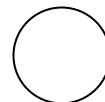
Type of test	Result	Name of tester
Insulation electrical strength test (1000 V, 50 Hz)	 Date
Continuity test of the protective earth system Ω Signature

Quality control



Adjustments, inspections

Quality control



8. WARRANTY CARD

WARRANTY CARD No.....

..... in the name of Manufacturer warrants the OSC 8 Angular Oscillator 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 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.....

1.01 / 19 October 2017

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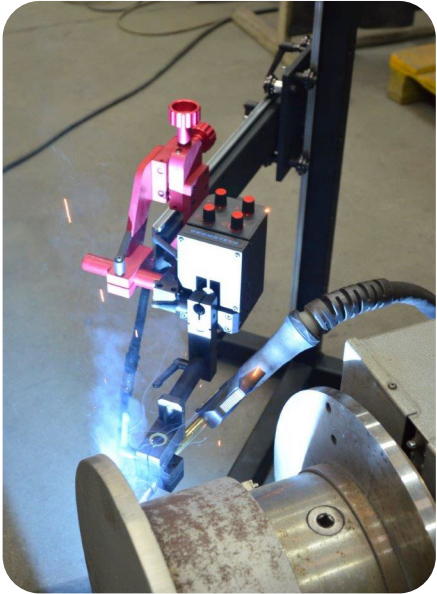
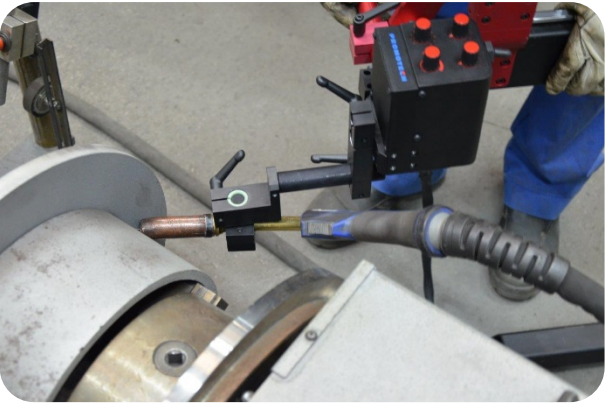
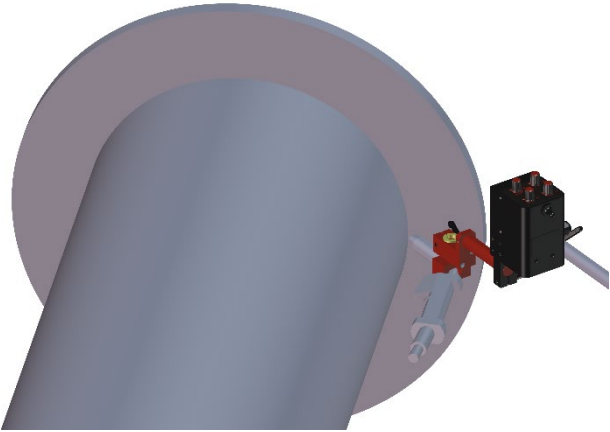
Free Standing Torch Support

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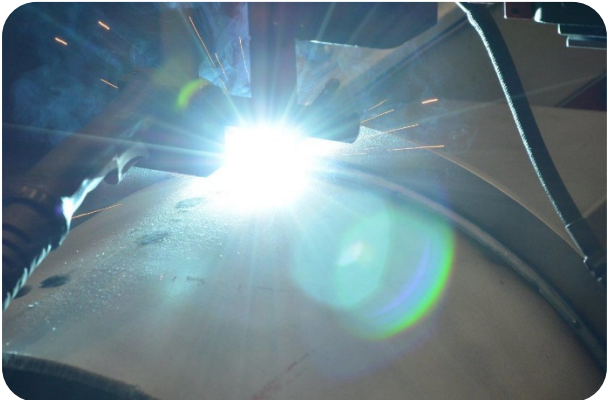
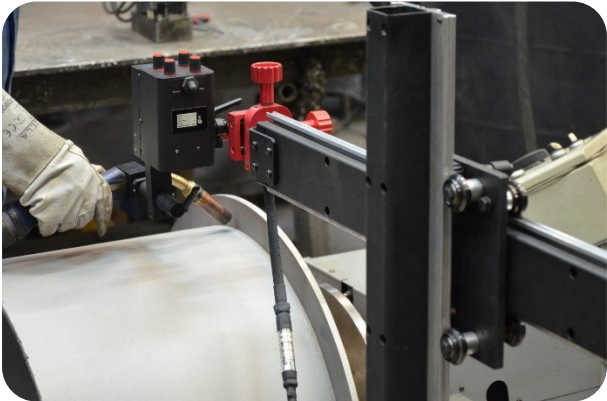
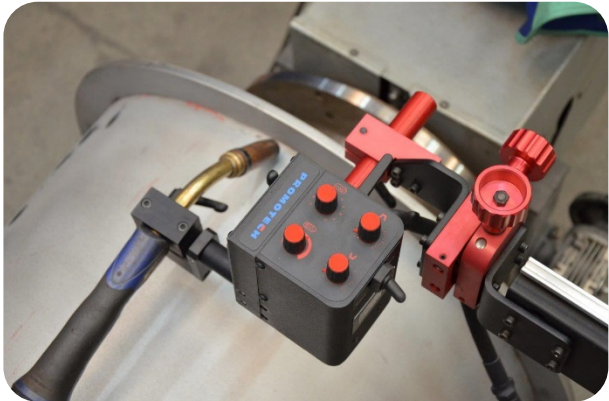
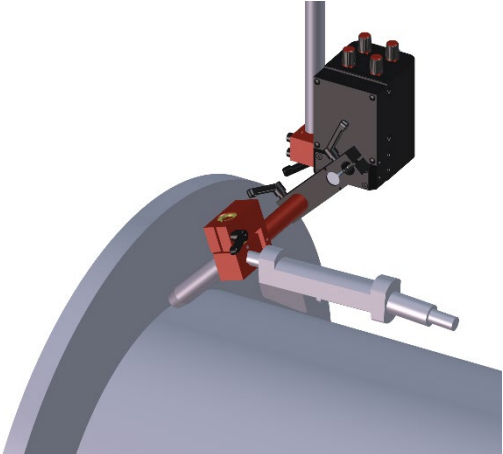
Pipe welding (side position)

- Pendulum Weave Welder OSC-8
- Freestanding Support



Pipe welding (upper position)

- Pendulum Weave Welder OSC-8
- Freestanding Support



Freestanding support

The support is designed to hold MIG/MAG torches with the handle diameter of 16–22 mm (5/8–7/8"). This allows welding of either rotating pipes or moving plates.

Configuration with pendulum weave welder OSC-8 allows welding with oscillation.

Product code: STJ-0629-10-00-00-0



Torch type	MIG/MAG
Torch handle diameter	16–22 mm (5/8–7/8")
Arm horizontal stroke	560 mm (22")
Arm vertical stroke	640 mm (25")
Weight	15.3 kg

