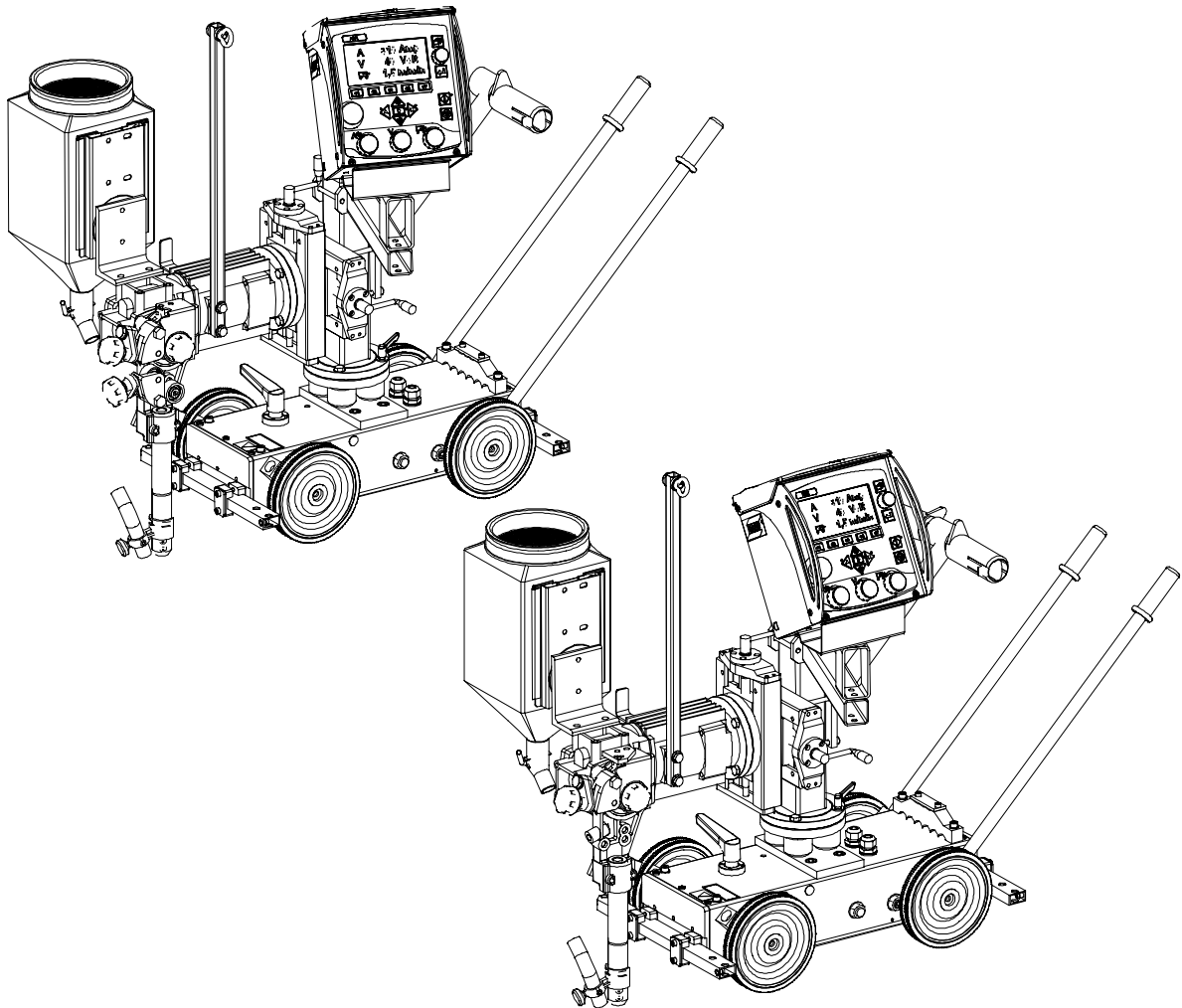


A6 Mastertrac

A6TF F1/ A6TF F1 Twin



Instruction manual

ENGLISH 4

Rights reserved to alter specifications without notice.



DECLARATION OF CONFORMITY

In accordance with
the LV-Directive 2006/95/EC, the Machinery Directive 2006/42/EC, the EMC Directive 2004/108/EC

Type of equipment

Feeder of welding wire in combination with movable Welding Automats and stationary Welding heads, used with control box PEK

Brand name or trade mark Fabrikatnamn eller varumärke

ESAB

Type designation etc.

A2 Multitrac, A2 Tripletrac, A2 S-series, A6 Mastertrac, A6 Mastertrac Tandem, A6 S- series

Manufacturer or his authorised representative established within the EEA

Name, address, telephone No, telefax No:

ESAB AB, Welding Equipment

Esabvägen, SE-695 81 LAXÅ, Sweden

Phone: +46 584 81 000, Fax: +46 584 411 924

The following harmonised standards in force within the EEA have been used in the design:

EN 60974-5, Arc welding equipment – Part 5: Wire feeders

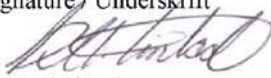
EN 12100-2, Safety of machinery – Part 2: Technical principles

EN 60974-10, Arc welding equipment – Part 10: Electromagnetic compatibility (EMC) requirements

Additional information: Restrictive use, Class A equipment, intended for use in locations other than residential

By signing this document, the undersigned declares as manufacturer, or the manufacturer's authorised representative established within the EEA, that the equipment in question complies with the safety requirements stated above.

Date / Datum
Laxå 2009-09-15

Signature / Underskrift

Kent Eimbrodt
Clarification

Position / Befattning
Global Director
Equipment and Automation

1 SAFETY	5
2 INTRODUCTION	8
2.1 General	8
2.2 Welding Method	8
2.3 Definitions	8
2.4 Horizontal Welding	8
2.5 Technical data	9
2.6 Main components A6TF F1 (SAW), A6TF F1 Twin (SAW)	10
2.7 Description of Main Components	11
3 INSTALLATION	12
3.1 General	12
3.2 Mounting	12
3.3 Adjusting the brake hub	12
3.4 Connections	13
4 OPERATION	14
4.1 General	14
4.2 Loading the welding wire (A6TF F1/ A6TF F1 Twin)	15
4.3 Changing the feed roller (A6TF F1/ A6TF F1 Twin)	16
4.4 Contact equipment for Submerged arc welding	17
4.5 Refilling with flux powder (Submerged arc welding)	18
4.6 Transportation of the Automatic Welding Machine	19
4.7 Conversion of A6TF F1/ A6TF F1 Twin (Submerged-arc) to MIG/MAG welding	19
4.8 Conversion of A6TF F1 (submerged-arc welding) to Twin-arc	19
5 MAINTENANCE	20
5.1 General	20
5.2 Daily	20
5.3 Periodic	20
6 TROUBLESHOOTING	21
6.1 General	21
6.2 POSSIBLE FAULTS	21
7 ORDERING OF SPARE PARTS	21
WEAR COMPONENTS	22
DIMENSION DRAWING	25
SPARE PARTS LIST	27

1 SAFETY

Users of ESAB welding equipment have the ultimate responsibility for ensuring that anyone who works on or near the equipment observes all the relevant safety precautions. Safety precautions must meet the requirements that apply to this type of welding equipment. The following recommendations should be observed in addition to the standard regulations that apply to the workplace.

All work must be carried out by trained personnel well-acquainted with the operation of the welding equipment. Incorrect operation of the equipment may lead to hazardous situations which can result in injury to the operator and damage to the equipment.

1. Anyone who uses the welding equipment must be familiar with:
 - its operation
 - location of emergency stops
 - its function
 - relevant safety precautions
 - welding
2. The operator must ensure that:
 - no unauthorised person is stationed within the working area of the equipment when it is started up.
 - no-one is unprotected when the arc is struck
 - the working area/working range is free from objects.
3. The workplace must:
 - be suitable for the purpose
 - be free from draughts
4. Personal safety equipment
 - Always wear recommended personal safety equipment, such as safety glasses, flame-proof clothing, safety gloves. **Note!** *Do not use safety gloves when replacing wire.*
 - Do not wear loose-fitting items, such as scarves, bracelets, rings, etc., which could become trapped or cause burns.
5. Protection against other risks
 - Dust particles of a certain size can be harmful to man. A ventilation system and extractor should therefore be provided to eliminate this risk.
 - When replacing the wire drum, exercise the greatest caution as the end of the wire could cause personal injury.

6. General precautions

- Make sure the return cable is connected securely.
- Work on high voltage equipment **may only be carried out by a qualified electrician.**
- Appropriate fire extinguishing equipment must be clearly marked and close at hand.
- Lubrication and maintenance must **not** be carried out on the equipment during operation.

Mind the following:

- That the freewheel clutch of the gear shall be in locked position.
- That, if the operator leaves the machine, it **shall** be parked with blocks in front of the wheels, in order to prevent the machine from moving unintentionally.
- Make sure that the automatic welding machine is not unstable before start.
- That the placement of the welding head and the wire reel influence the centre of gravity of the machine.
Too high a centre of gravity means an unstable welding machine.
- That the consumption of wire and flux results in displacement of the weight distribution during the welding.



WARNING, RISK OF CRUSHING!

Do not use safety gloves when replacing wire, feed rollers and wire bobbins.



WARNING



ARC WELDING AND CUTTING CAN BE INJURIOUS TO YOURSELF AND OTHERS. TAKE PRECAUTIONS WHEN WELDING. ASK FOR YOUR EMPLOYER'S SAFETY PRACTICES WHICH SHOULD BE BASED ON MANUFACTURER'S HAZARD DATA.

ELECTRIC SHOCK - Can kill

- Install and earth the welding unit in accordance with applicable standards.
- Do not touch live electrical parts or electrodes with bare skin, wet gloves or wet clothing.
- Insulate yourself from earth and the workpiece.
- Ensure your working stance is safe.

FUMES AND GASES - Can be dangerous to health

- Keep your head out of the fumes.
- Use ventilation, extraction at the arc, or both, to keep fumes and gases from your breathing zone and the general area.

ARC RAYS - Can injure eyes and burn skin

- Protect your eyes and body. Use the correct welding screen and filter lens and wear protective clothing.
- Protect bystanders with suitable screens or curtains.

FIRE HAZARD

- Sparks (spatter) can cause fire. Make sure therefore that there are no inflammable materials nearby.

NOISE - Excessive noise can damage hearing

- Protect your ears. Use ear defenders or other hearing protection.
- Warn bystanders of the risk.

MALFUNCTION

- Call for expert assistance in the event of malfunction.

READ AND UNDERSTAND THE INSTRUCTION MANUAL BEFORE INSTALLING OR OPERATING.

PROTECT YOURSELF AND OTHERS!

2 INTRODUCTION

2.1 General

The **A6TF F1/ A6TF F1 Twin** automatic welding machines are designed for Submerged-arc welding (SAW) of butt and fillet joints.

All other applications are prohibited.

They are intended for use in combination with the control box, **PEK** and ESAB's welding power sources **LAF** or **TAF**.

2.2 Welding Method

2.2.1 Submerged Arc Welding (SAW)

- Submerged arc Light Duty.
Submerged arc light duty with a Ø 20 mm connector permits a load up to 800 A (100%).
- **Submerged-arc Heavy duty**
Submerged-arc heavy duty, with a Ø 35 mm connector, which permits a load of up to 1500 A.

This version can be equipped with feed rollers for single or twin wire welding (twin-arc). A special knurled feed roller is available for flux-cored wire, which guarantees even wire feed without the risk of deformation due to high feed pressure.

2.3 Definitions

SAW welding	The weld bead is protected by a cover of flux during the welding.
SAW Light duty	This version permits a load up to 800 A (100%) and welding with a thin wire.
SAW Heavy duty	This version permits a load up to 1500 A (100%) and welding with a thick wire.
Twin-arc welding	Welding with two wires in one welding head.

2.4 Horizontal Welding

The automatic welding machines are designed for horizontal welding.

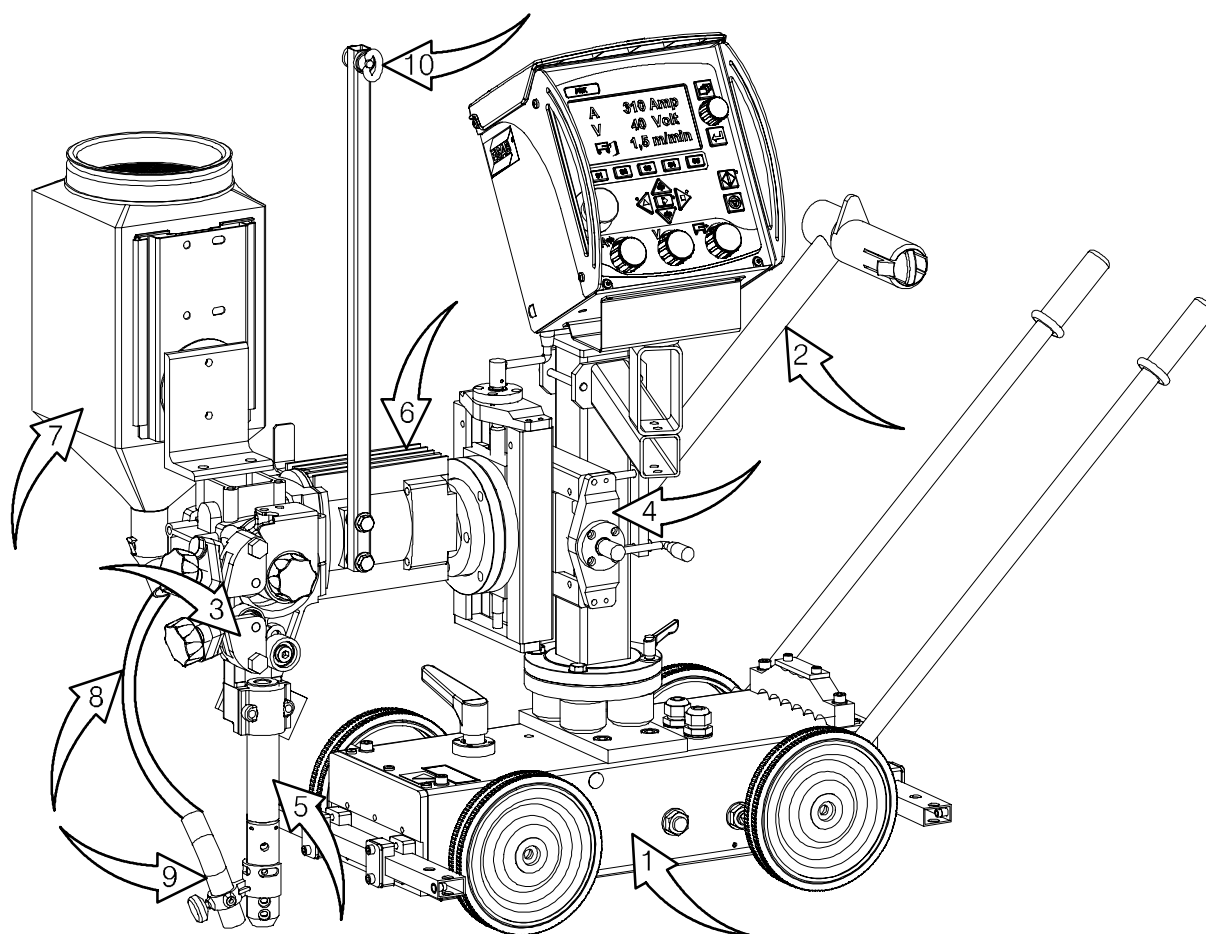
They are not to be used for welding on inclined planes.



2.5 Technical data

	A6TF F1	A6TF F1 Twin
Supply voltage	42 V AC	42 V AC
Permissible load at 100 %:	1500 A	1500 A
Wire dimensions:		
solid single wire	3.0-6.0 mm	3.0-6.0 mm
hollow wire	3.0-4.0 mm	3.0-4.0 mm
solid twin wire	2x2.0-3.0 mm	2x2.0-3.0 mm
Wire feed speed, max	4 m/min	4 m/min
Brake hub braking torque	1.5 Nm	1.5 Nm
Travel speed	0.1-2.0 m/min	0.1-2.0 m/min
Max. weight of wire	30 kg	30 kg
Flux container volume (Not to be filled with preheated flux)	10 l	10 l
Weight (excl. wire and flux)	110 kg	140 kg
Enclosure class	IP10	IP10
EMC classification	Class A	Class A

2.6 Main components A6TF F1 (SAW), A6TF F1 Twin (SAW)



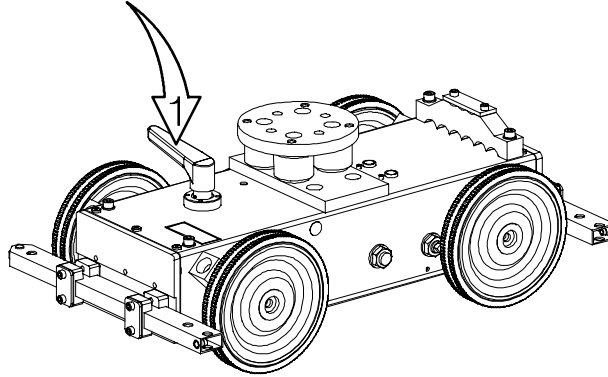
- | | | |
|----------------------|-----------------------------|----------------|
| 1. Carriage | 5. Connector | 8. Flux tube |
| 2. Carrier | 6. Motor with gear (A6 VEC) | 9. Flux nozzle |
| 3. Wire feed unit | 7. Flux hopper | 10. Wire guide |
| 4. Slide kit, manual | | |

See on page 11 for a description of the main components.

2.7 Description of Main Components

2.7.1 Carriage

The carriage is provided with 4-wheel drive. The carriage can be secured by way of the locking lever (1).



2.7.2 Carrier

The control box, wire feed unit and flux hopper, among other things, are to be fitted on the carrier.

2.7.3 Wire Feed Unit

The unit is used for guiding and feeding the welding wire down into the connector.

2.7.4 Manual Slides

The horizontal and vertical position of the welding head is adjusted by way of linear slides. The angular motion can be freely adjusted using the rotary slide.

2.7.5 Connector

Transfers welding current to the wire during welding.

2.7.6 Motor with gear (A6 VEC)

The motor is used for feeding the welding wire.

For more information regarding the **A6 VEC** see instruction manual 0443 393 xxx.

2.7.7 Flux Hopper / Flux Tube / Flux nozzle

The flux is filled into the flux hopper and is then transferred to the workpiece through the flux tube and the flux nozzle.


The amount of flux to be dropped down is controlled by way of the flux valve fitted to the flux hopper.

See “Refilling with flux on page 18.

3 INSTALLATION

3.1 General

The installation must be executed by a professional.



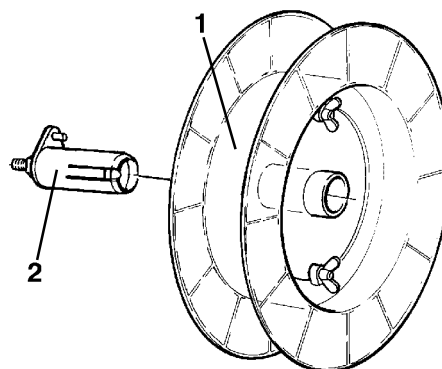
WARNING


Rotating parts can cause injury, take great care.

3.2 Mounting

3.2.1 Wire drum (Accessories)

Wire drum (1) is mounted on the brake hub (2).






WARNING

To prevent the reel sliding off the hub:

- Lock the reel in place by turning the red knob as shown on the warning label attached next to the hub.

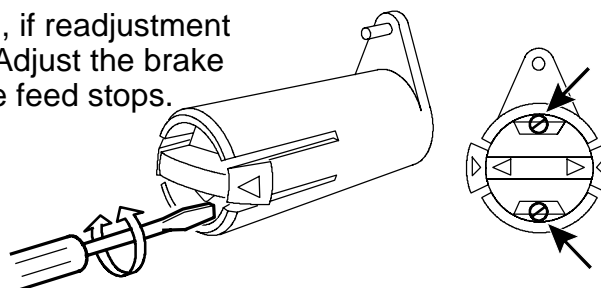


3.3 Adjusting the brake hub

The brake hub is adjusted when delivered, if readjustment is required, follow the instructions below. Adjust the brake hub so that wire is slightly slack when wire feed stops.

- **Adjusting the braking torque:**

- Turn the red handle to the locked position.
- Insert a screwdriver into the springs in the hub.



Turn the springs clockwise to reduce the braking torque

Turn the springs anticlockwise to increase the braking torque.

NB: Turn both springs through the same amount.

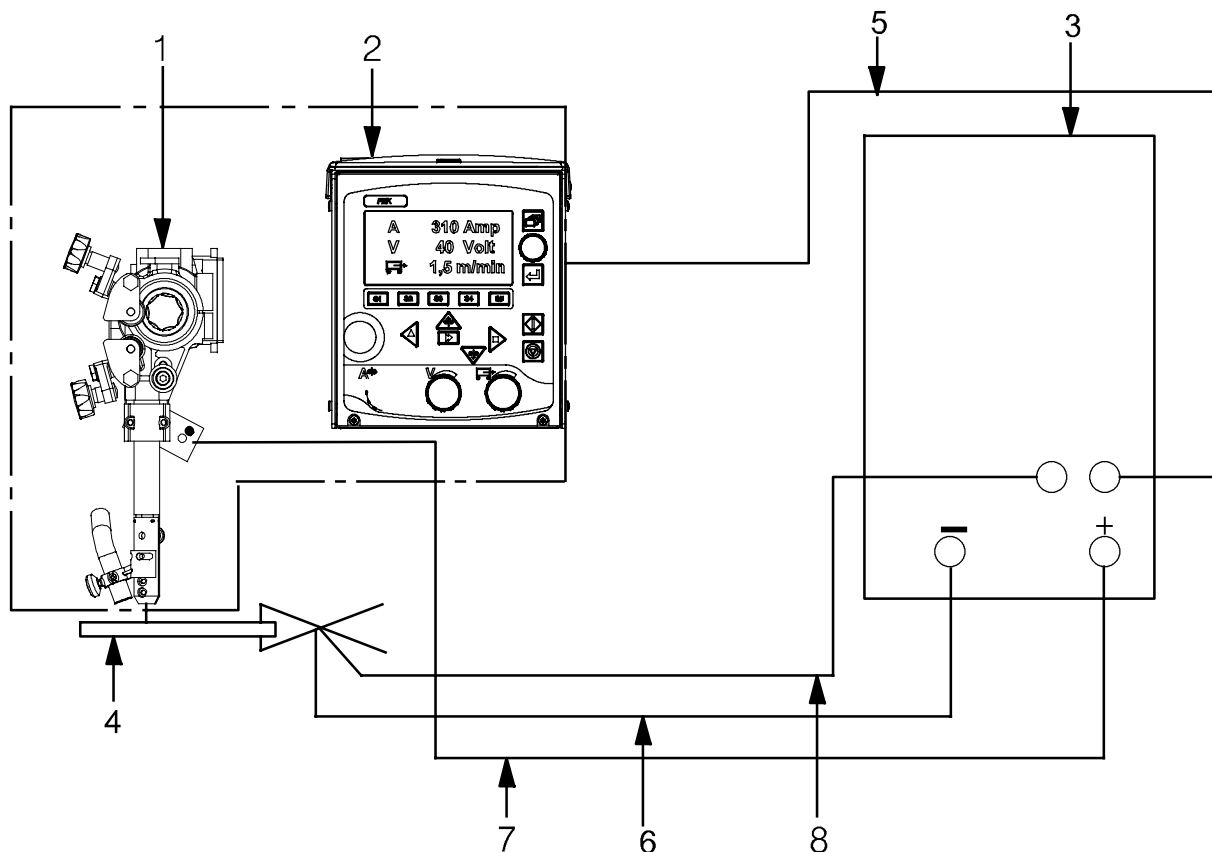
3.4 Connections

3.4.1 General

- The **PEK** is to be connected by a qualified person. See instruction manual 0460 948 xxx, 0460 949 xxx, 0459 839 036.
- For the connection of **A6 GMH**, see instruction manual 0460 671 xxx.
- For the connection of **A6 PAV**, see instruction manual 0460 670 xxx.

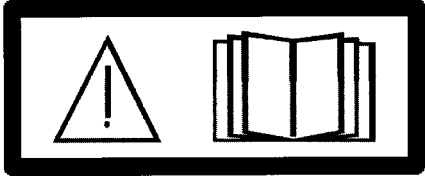
3.4.2 Automatic welding machine A6TF F1/ A6TF F1 Twin (Submerged arc welding, SAW)

1. Connect the control cable (5) between the power source (3) and the control box **PEK** (2).
2. Connect the return cable (6) between the power source (3) and work piece (4).
3. Connect the welding cable (7) between the power source (3) and the automatic welding machine (1).
4. Connect the measurement cable (8) between the power source (3) and workpiece (4).



4 OPERATION

4.1 General

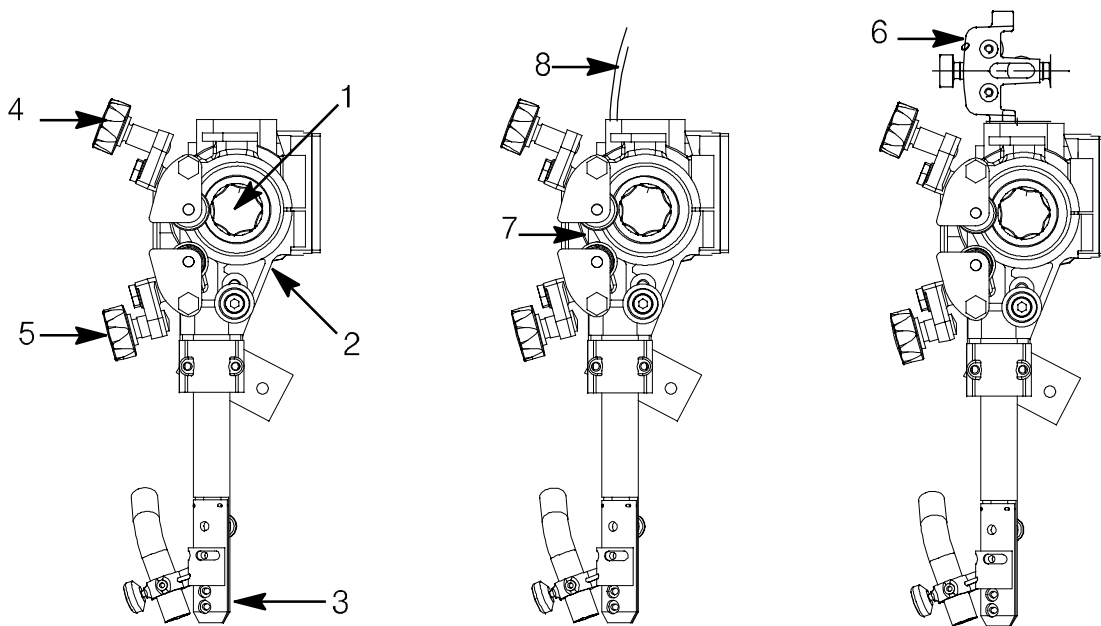
	<p>WARNING: <i>Have you read and understood the safety information ? You must not operate the machine before then !</i></p>
---	--


General safety regulations for the handling of the equipment can be found on page 5. Read through before you start using the equipment!

Return cable

Before welding start, check that the return cable is connected. See page 13.

4.2 Loading the welding wire (A6TF F1/ A6TF F1 Twin)

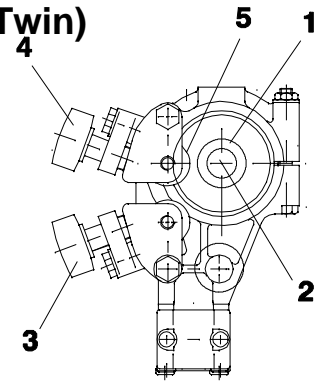


1. Mount the wire drum according to the instructions on page 12.
 2. Check that feed roller (1) and contact jaw or contact tip (3) are of the correct dimension for the selected wire size.
 3. For A6TF F1 Twin:
 - Feed the wire through the wire guide (8).
 4. When welding with fine wire:
 - Feed the wire through the fine Wire feed unit (6).
Ensure that the straightener is correctly adjusted so that the wire emerges straight out through the contact jaws or contact tip (3).
 5. Pull the end of the wire through the straightener (2).
 - For a wire diameter greater than 2 mm; straighten out 0.5 m of wire and feed it by hand down through the straightener.
 6. Locate the end of the wire in the feed roller (1) groove.
 7. Set the wire tension on the feed roller with the knob (4).
 - **Note!** Do not tension more than is required to achieve an even feed.
 8. Feed the wire forward 30 mm below the contact tip by pressing  on the control box **PEK**.
 9. Direct the wire by adjusting the knob (5).
- **Always** use a guide tube (7) to ensure even feed of fine wire (1.6 - 2.5 mm).

4.3 Changing the feed roller (A6TF F1/ A6TF F1 Twin)

Single wire

- Release the knobs (3) and (4).
- Release the hand wheel (2).
- Change the feed roller (1).
They are marked with their respective wire sizes.



Twin wire (Twin-arc)

- Change the feed roller (1) with twin grooves in the same way as for single wire.
- **NOTE!** The pressure roller (5) must also be changed. A special curved pressure roller for twin wire replaces the standard pressure roller for single wire.
- Assemble the pressure roller with special stub shaft (order no. 0146 253 001).

Flux-cored wire for knurled rollers (Accessories)

- Change the feed roller (1) and pressure roller (5) as a pair for the wire size to be used.
NOTE! A special stub shaft is required for the pressure roller (order no. 0212 901 101).
- Tighten the pressure screw (4) with moderate pressure to ensure that the flux-cored wire does not deform.

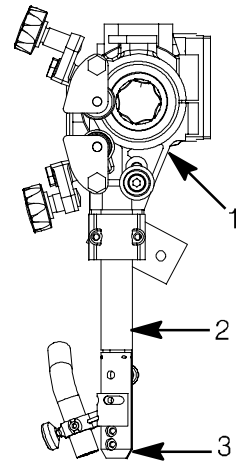
4.4 Contact equipment for Submerged arc welding

4.4.1 For single wire 3,0 - 6,0 mm

Use automatic welding machine A6TF F1 (SAW) where the following are included:

- Wire feed unit (1),
- Connector D35 (2)
- Contact jaw (3)

Ensure that good contact is achieved between the contact jaws and the wire.



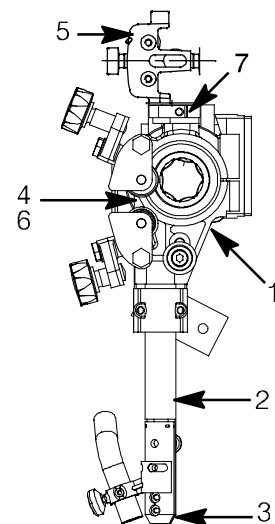
4.4.2 For twin wires 2 x 2,0 - 3,0 mm (D35)

Use automatic welding machine A6TF F1 Twin (SAW) where the following are included:

- Wire feed unit (1),
- Connector Twin D35 (2)
- Contact jaw (3)

Ensure that good contact is achieved between the contact jaws and the wire.

- Guide tubes (4, 6).

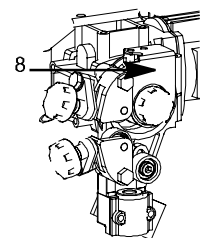


Accessories:

- Fine-wire straightener (5) to be fitted on top of the clamp of the wire feed unit (1).

N.B. When mounting the fine-wire straightener, remove the plate (7) if it's exists.

N.B. The protection plate (8) shall not be removed



Adjustment of the wires for Twin-arc welding:

- Position the wires in the joint so as to achieve optimal weld quality by rotating the connector. The two wires can be rotated so that they are positioned one after the other along the line of the joint, or in any position up to 90° across the joint, i.e. one wire on each side of the joint.

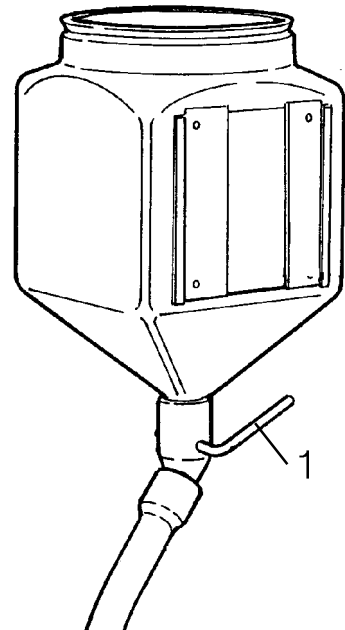
4.5 Refilling with flux powder (Submerged arc welding)

1. Close the flux valve (1) on the flux hopper.
2. Remove the cyclone on the flux recovery unit, if fitted.
3. Fill with flux powder.

NOTE! The flux powder must be dry.

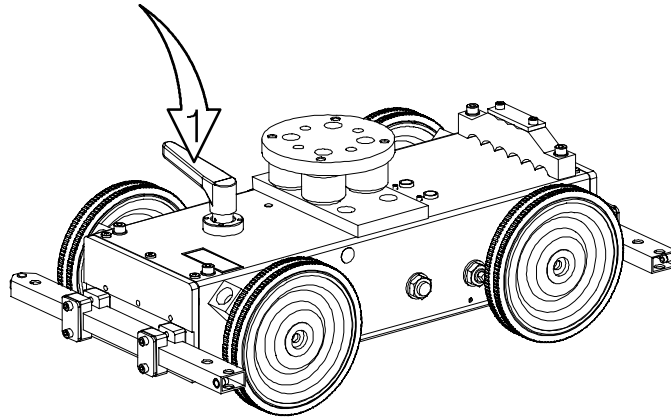
4. Position the flux tube so that it does not become kinked.
5. Adjust the height of the flux nozzle above the weld so that the correct amount of flux is delivered.

Flux coverage should be sufficient so that penetration of the arc does not occur.

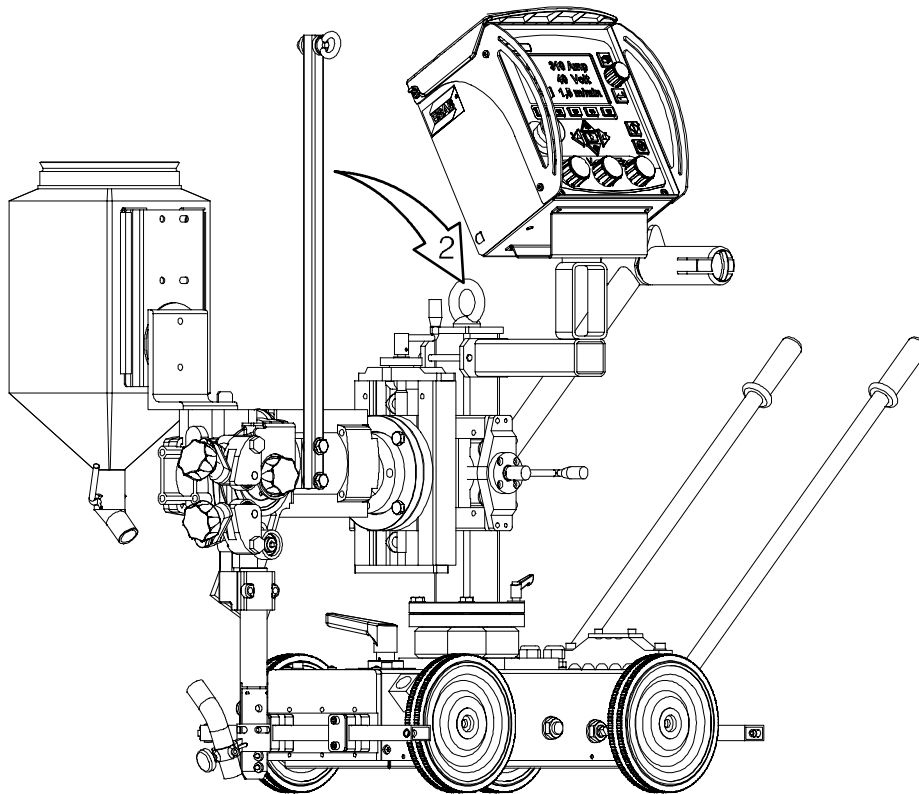


4.6 Transportation of the Automatic Welding Machine

- Disengage the wheels by turning the locking lever (1).



N.B. In case of lifting the automatic welding machine, the lifting eye (2) shall be used.



4.7 Conversion of A6TF F1/ A6TF F1 Twin (Submerged-arc) to MIG/MAG welding

Assemble in accordance with the instructions accompanying the conversion kit.

4.8 Conversion of A6TF F1 (submerged-arc welding) to Twin-arc

Assemble in accordance with the instructions accompanying the conversion kit.

5 MAINTENANCE

5.1 General

Note:

All warranty undertakings given by the supplier cease to apply if the customer attempts to rectify any faults on the machine during the warranty period.

NB! Before doing any kind of maintenance work, make sure the mains is disconnected.

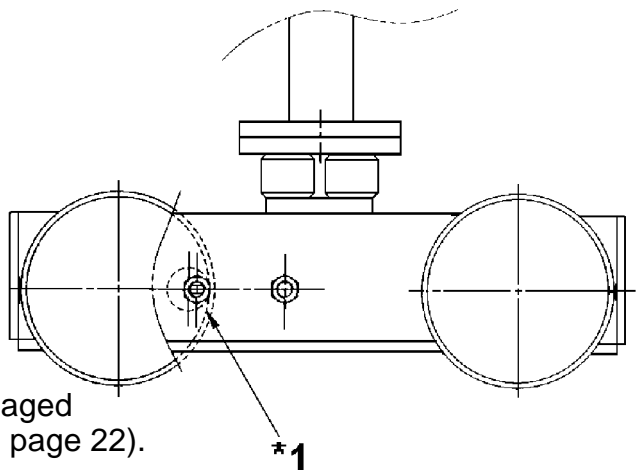
For the maintenance of the control box, **PEK**, see the instruction manual 0460 948 xxx, 0460 949 xxx, 0459 839 036.

5.2 Daily

- Clean flux and dirt off moving parts of the welding machine.
- Check that the contact tip and all electrical cables are connected.
- Check that all bolted joints are tight and that guides and drive rollers are not worn or damaged.
- Check the brake hub braking torque. It should not be so low, that the wire reel continues to rotate when wire feed is stopped and it should not be so great that the feed rollers slip. As a guide, the braking torque for a 30 kg wire reel should be 1,5 Nm.
To adjust the braking torque see on page 12.

5.3 Periodic

- Check the wire feed motor brushes once every three months. Replace when they are worn down to 6 mm.
- Examine the slides and lubricate if they bind.
- Inspect the wire guides, drive rollers and contact tip on the wire feed unit. Replace any worn or damaged components, (see wear parts list on page 22).
- If the carriage travel becomes jerky, check that the chain is correctly tensioned. Tension the chain if necessary.
- To tension the chain undo the nut (*1) and turn the cam, then tighten the nut.



6 TROUBLESHOOTING

6.1 General

Equipment

- Instruction manual for control box **PEK**, ordering number 0460 948 xxx, 0460 949 xxx, 0459 839 036.
- Instruction manual for motor with gear **A6 VEC**, ordering number 0443 393 xxx.

Check

- that the power supply is connected for the correct mains supply
- that all three phases are supplying the correct voltage (phase sequence is not important)
- that welding cables and connections are not damaged
- that the controls are correctly set
- that the mains supply is disconnected before starting repairs

6.2 POSSIBLE FAULTS

1. Symptom **Current and voltage readings show large fluctuations.**

Cause 1.1 Contact jaws or nozzle are worn or wrong size.

Action Replace contact jaws or nozzle.

Cause 1.2 Feed roller pressure is inadequate.

Action Increase pressure on feed rollers.

2. Symptom **Wire feed is irregular.**

Cause 2.1 Pressure on feed rollers incorrectly set.

Action Adjust pressure on feed rollers.

Cause 2.2 Feed rollers wrong size.

Action Replace feed rollers.

Cause 2.3 Grooves in feed rollers are worn.

Action Replace feed rollers.

3. Symptom **Welding cables overheating.**

Cause 3.1 Poor electrical connection.

Action Clean and tighten all electrical connections.

Cause 3.2 Cross-sectional area of welding cables too small.

Action Use cables with a larger cross-section or use parallel cables.

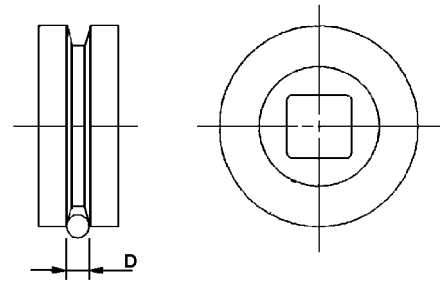
7 ORDERING OF SPARE PARTS

Spare parts are ordered through your nearest ESAB representative, see back cover. When ordering spare parts, please state machine type and number as well as designation and spare part number as shown in the spare parts list on page 27. This will simplify dispatch and ensure you get the right part.

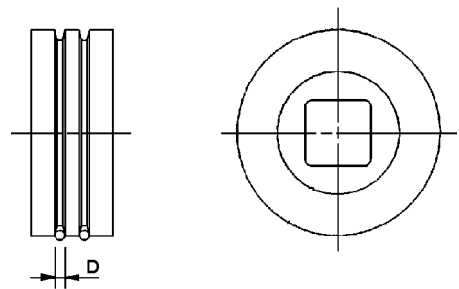
WEAR COMPONENTS

Feed rollers

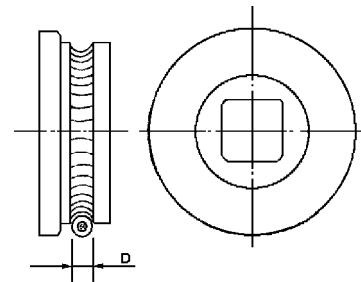
SAW and MIG/MAG	
Part no	D (mm)
0218 510 281	1,6
0218 510 282	2,0
0218 510 283	2,5
0218 510 286	4,0
0218 510 287	5,0
0218 510 288	6,0
0218 510 298	3,0-3,2



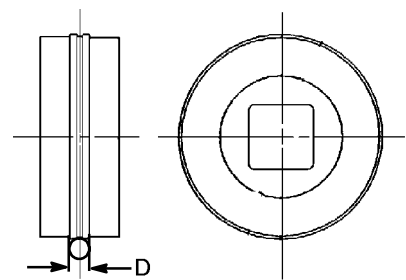
SAW Twin (D35)	
Part no	D (mm)
0218 522 480	2,5
0218 522 481	3-3,2
0218 522 484	2,0
0218 522 486	1,2
0218 522 487	1,0
0218 522 488	1,6



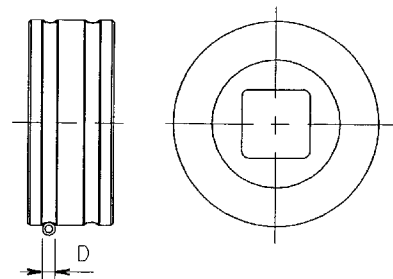
SAW and MIG/MAG tubular wire	
Part no	D (mm)
0146 024 880	0,8-1,6
0146 024 881	2,0-4,0



MIG/MAG	
Part no	D (mm)
0145 538 880	0,6
0145 538 881	0,8
0145 538 882	1,0
0145 538 883	1,2

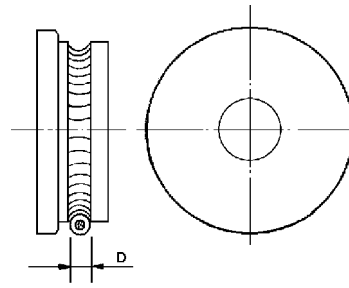


	D (mm)
148 772-880	2,0-3,0

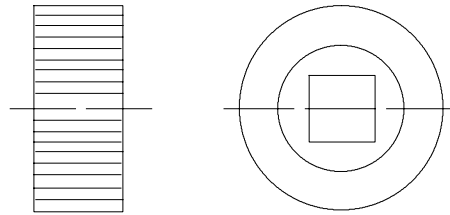


Pressure rollers

SAW and MIG/MAG tubular wire	
Part no	D (mm)
0146 025 880	0,8-1,6
0146 025 881	2,0-4,0
0146 025 882	5,0-7,0

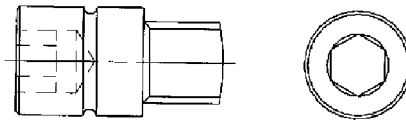


SAW Twin	
Part no	
0218 524 580	
0146 253 001	Stub shaft
0144 953 001	Spherical ball bearing
0190 452 178	Washer



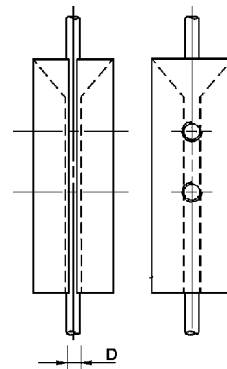
Stub shaft for pressure roller

SAW tubular wire
Part no
0212 901 101

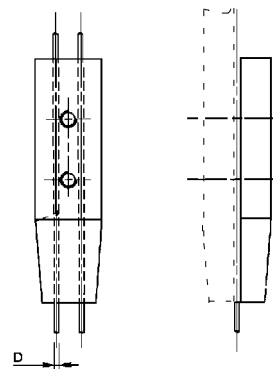


Contact jaws

SAW HD (D35)	
Part no	D (mm)
0265 900 880	3,0
0265 900 881	3,2
0265 900 882	4,0
0265 900 883	5,0
0265 900 884	6,0

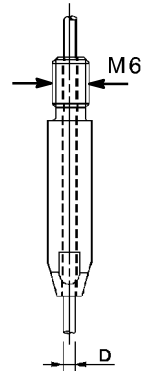


SAW Twin HD	
Part no	D (mm)
0265 902 880	2,5-3,0
0265 902 881	2,0
0265 902 882	1,6
0265 902 883	4,0

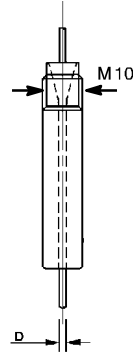


Contact tip

MIG/MAG and SAW Twin LD (D35)	
Part no	D (mm)
0153 501 002	0,8
0153 501 004	1,0
0153 501 005	1,2
0153 501 007	1,6
0153 501 009	2,0
0153 501 010	2,4-2,5

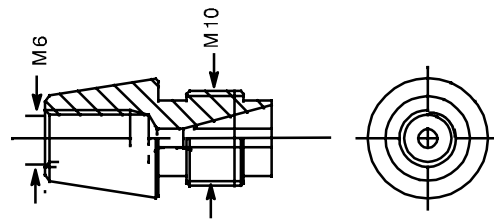


MIG/MAG (D35)	
Part no	D (mm)
0258 000 908	1,2
0258 000 909	1,6
0258 000 910	2,0
0258 000 911	2,4
0258 000 913	1,0
0258 000 914	0,8
0258 000 915	3,2

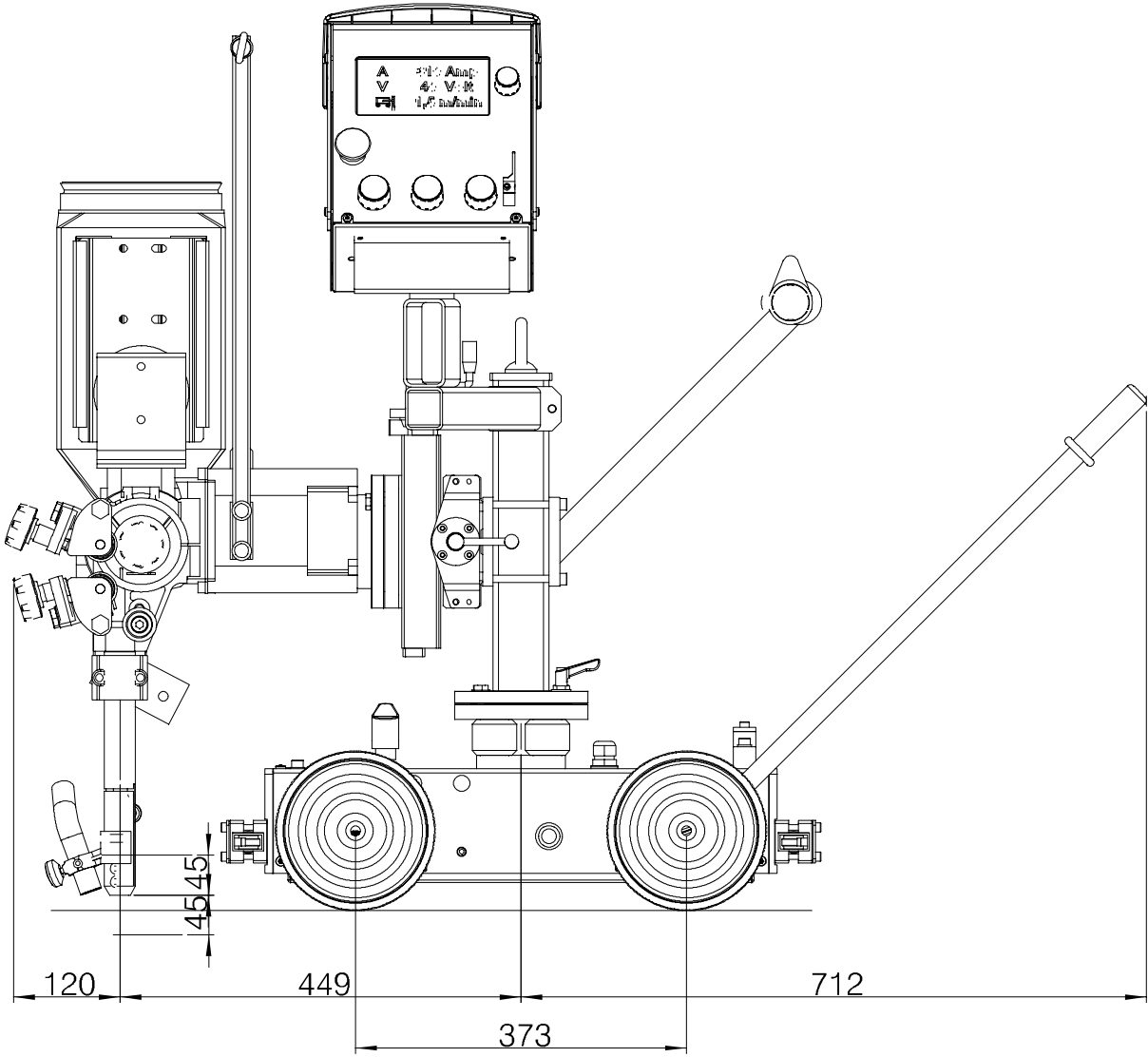


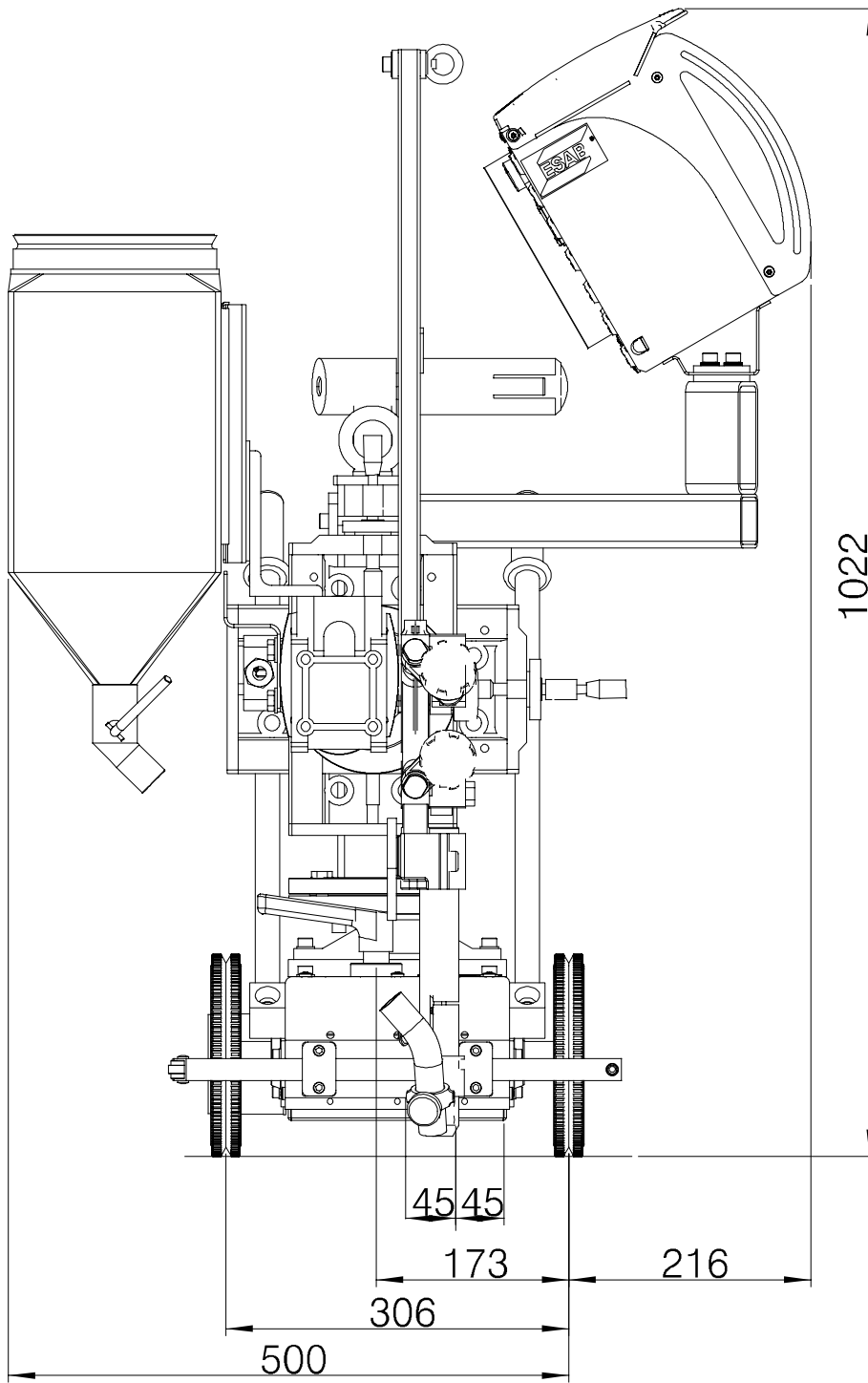
Adapter for contact tip

SAW and MIG/MAG (D35)	
Part no	D (mm)
0147 333 001	M6 / M 10



DIMENSION DRAWING

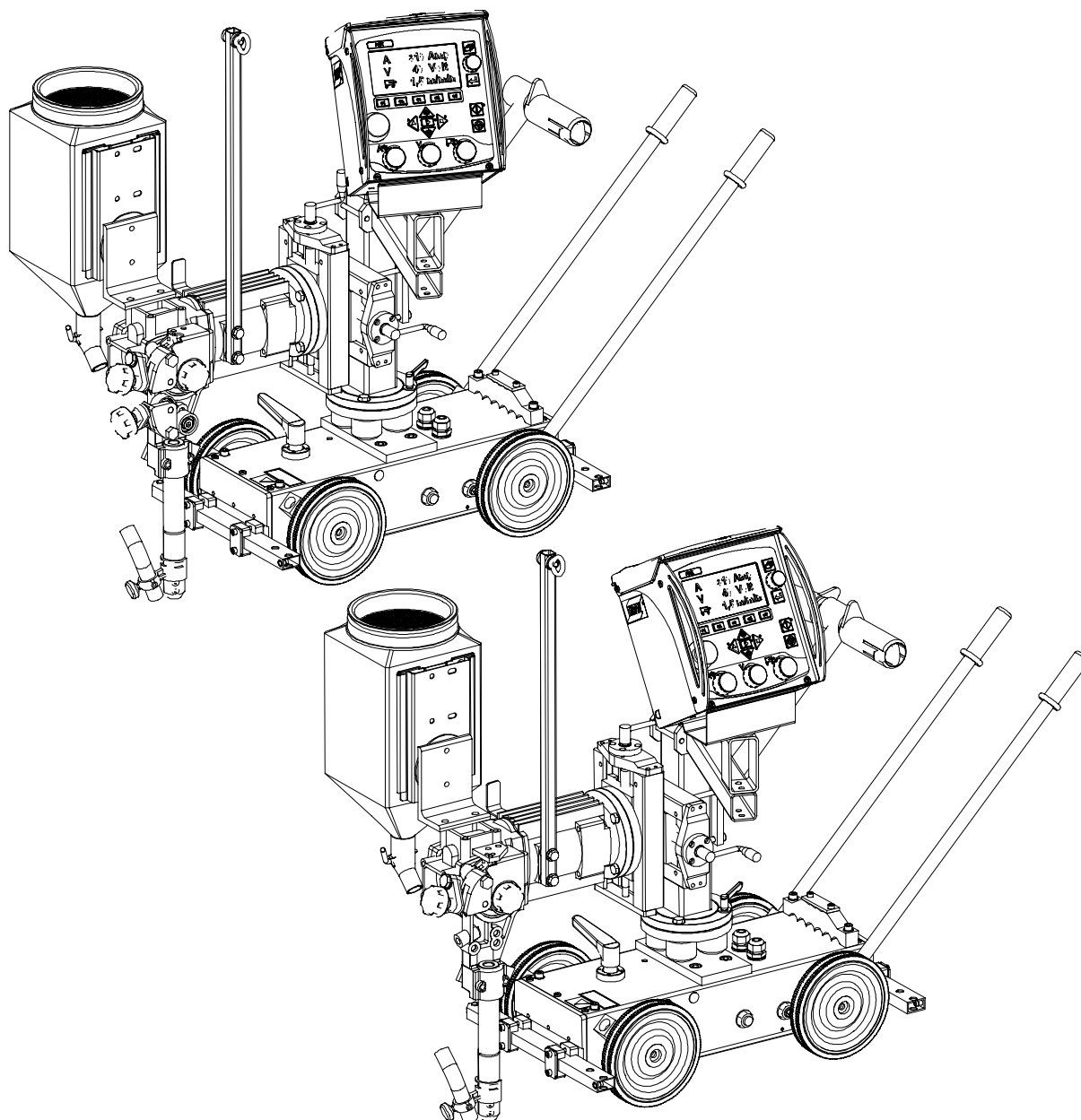




SPARE PARTS LIST

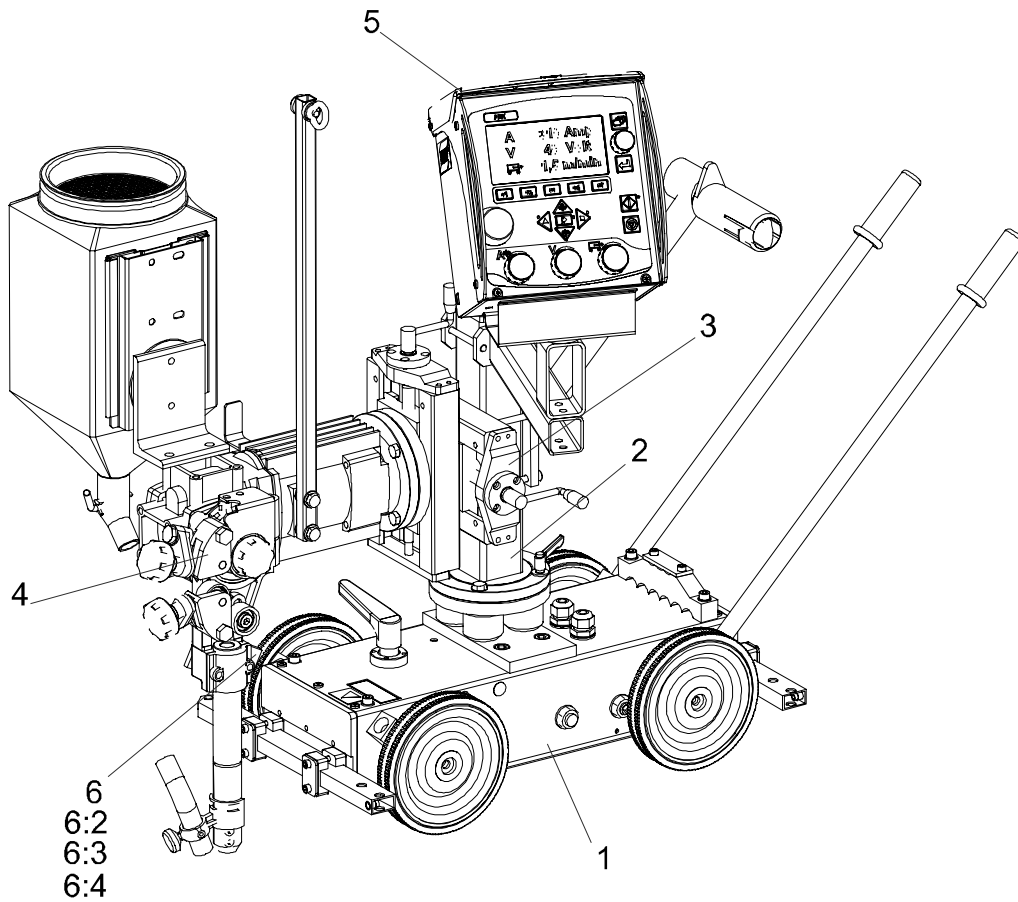
A6TF F1/ A6TF F1 Twin

Edition 2009-10-05

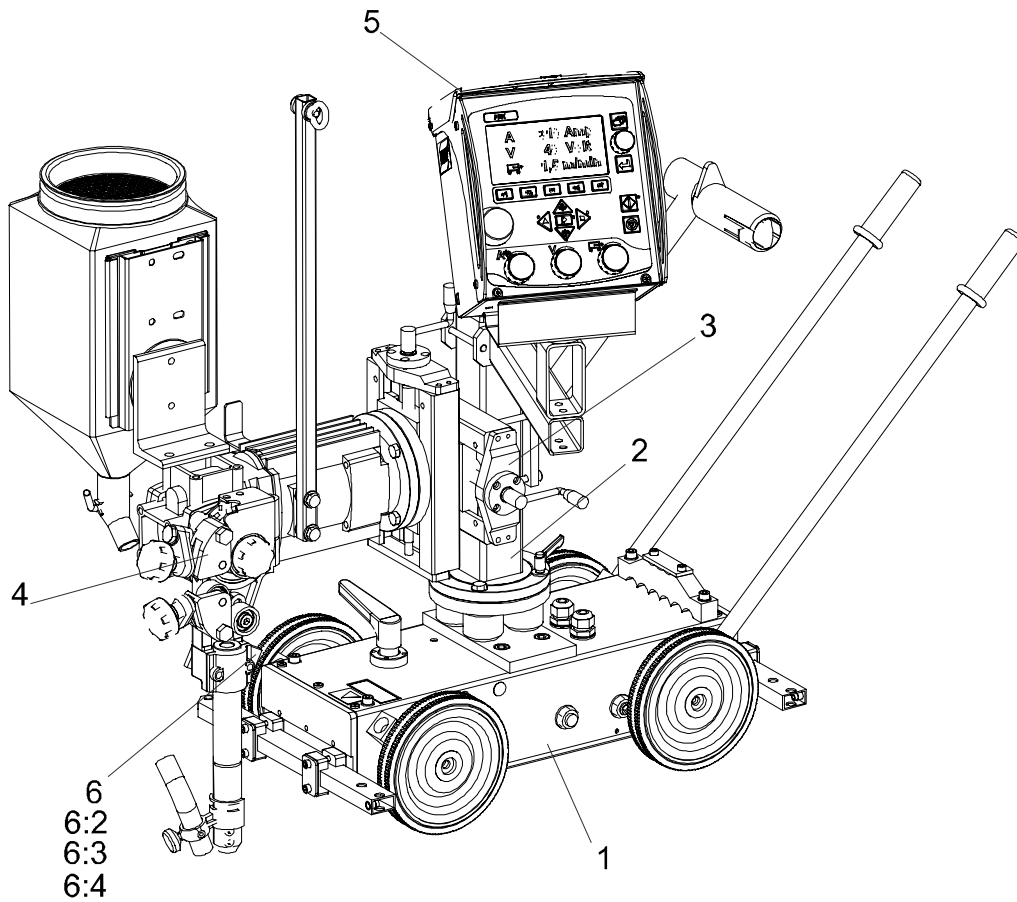


Ordering no.	Denomination	Notes
0461 235 880	A6 Mastertrac	A6TF F1 SAW
0461 235 881	A6 Mastertrac	A6TF F1 SAW, Twin
0461 235 890	A6 Mastertrac	A6TF F1 SAW
0461 235 891	A6 Mastertrac	A6TF F1 SAW, Twin

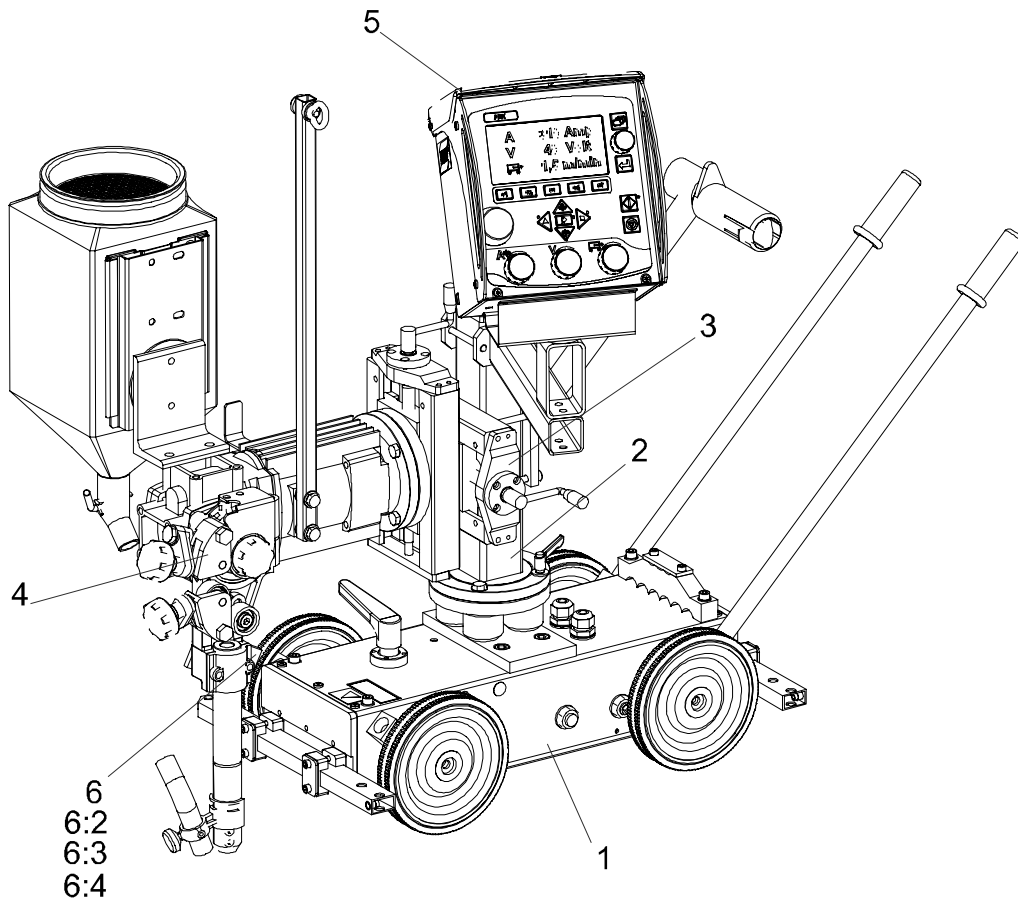
Item no.	Qty	Ordering no.	Denomination	Notes
		0461235880	Automatic welding machine	A6TF F1 (156:1), SAW
1	1	0449490881	Carriage	
2	1	0449254880	Carrier	
3	1	0449252880	Slide travel kit, manual	90 mm
4	1	0449250880	Wire feed unit, right	156:1
5	1	0460504880	Control box	PEK
6	1	0449253900	Cable set	L = 1,6 m
6:2	1	0460907891	Motor cable	1,5 m
6:3	1	0461239881	Arc welding cable	1,7 m
6:4	1	0460908880	Pulse transducer cable	2 m



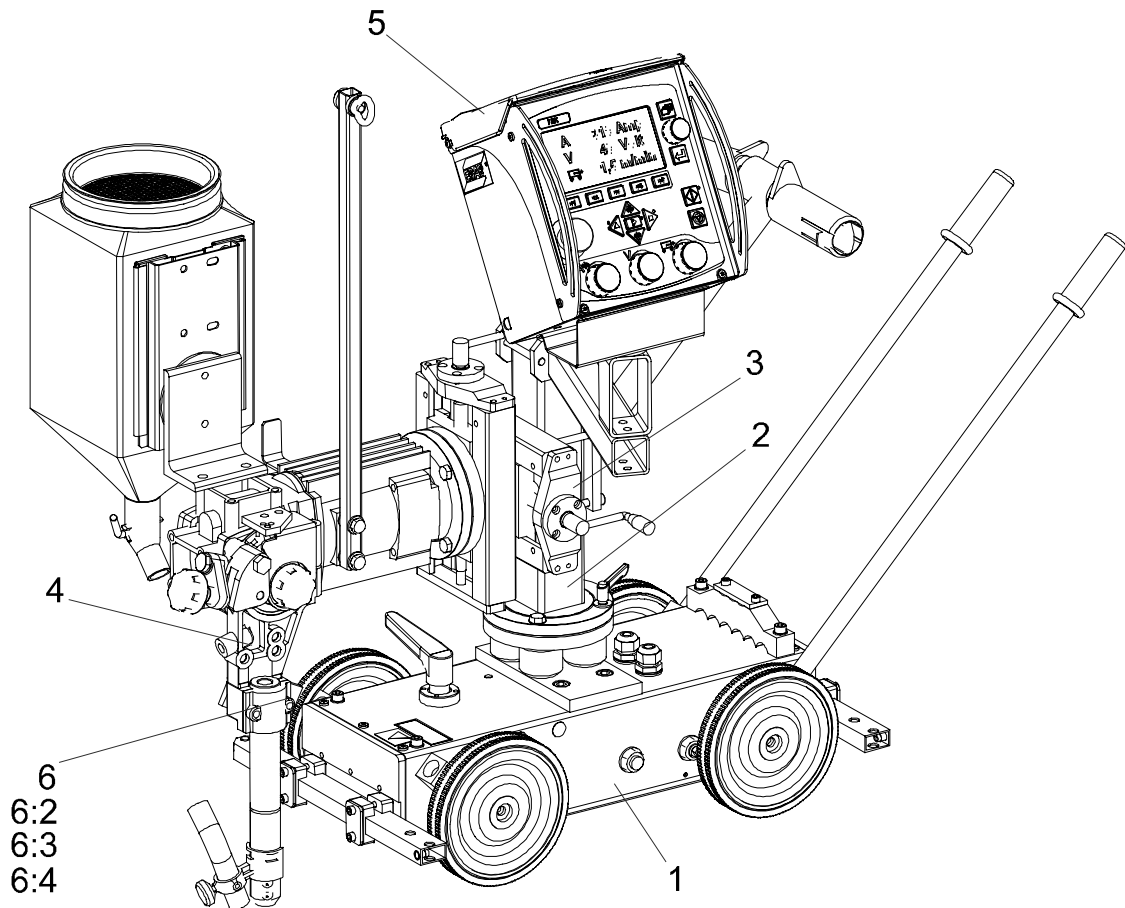
Item no.	Qty	Ordering no.	Denomination	Notes
		0461235890	Automatic welding machine	A6TF F1 (74:1), SAW
1	1	0449490881	Carriage	
2	1	0449254880	Carrier	
3	1	0449252880	Slide travel kit, manual	90 mm
4	1	0449250890	Wire feed unit, right	74:1
5	1	0460504880	Control box	PEK
6	1	0449253900	Cable set	L = 1,6 m
6:2	1	0460907891	Motor cable	1,6 m
6:3	1	0461239881	Arc welding cable	1,7 m
6:4	1	0460908880	Pulse transducer cable	2 m



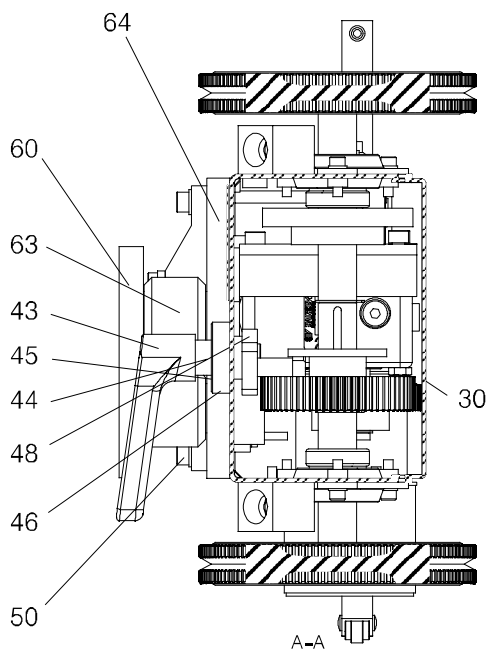
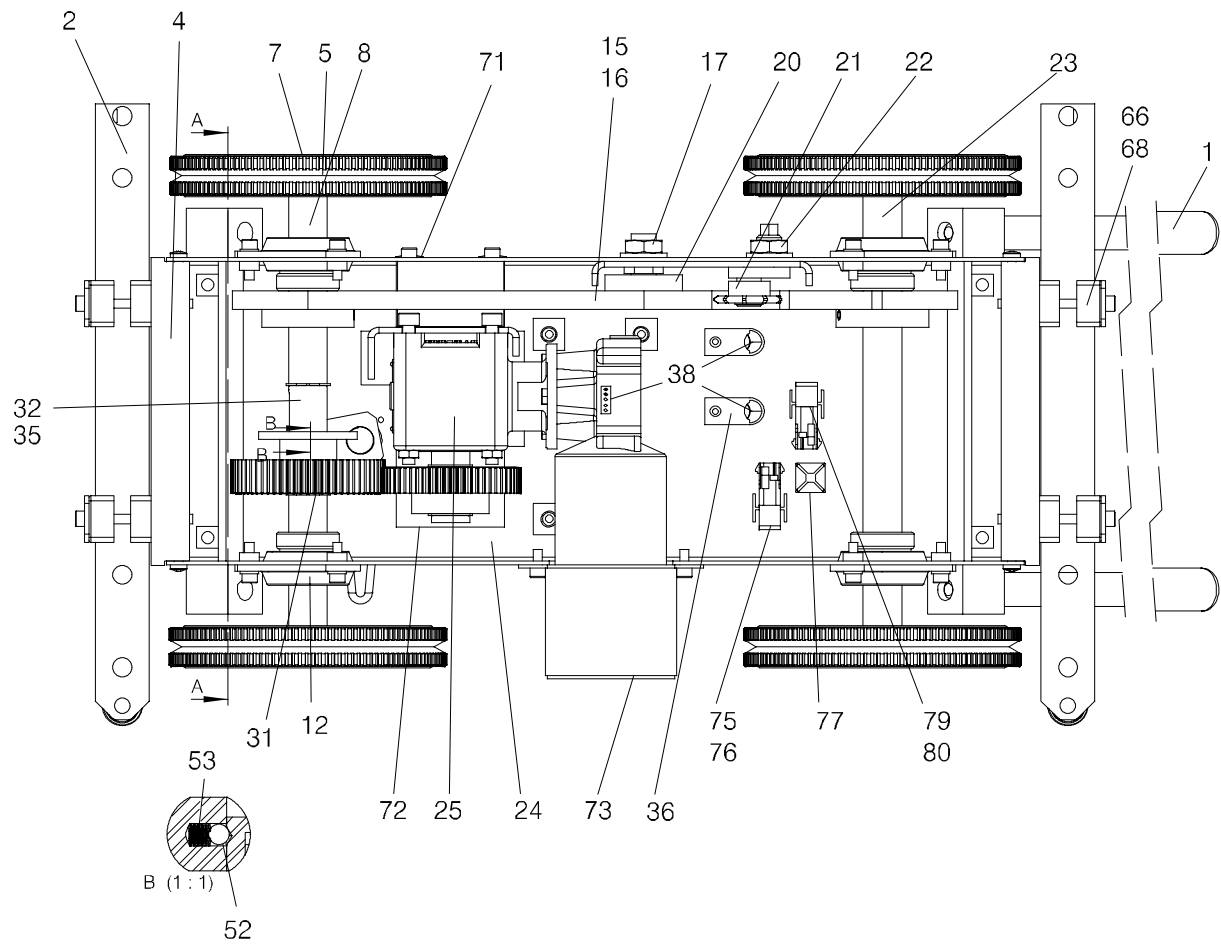
Item no.	Qty	Ordering no.	Denomination	Notes
		0460235881	Automatic welding machine	A6TF F1 (156:1), SAW Twin
1	1	0449490881	Carriage	
2	1	0449254880	Carrier	
3	1	0449252880	Slide travel kit, manual	90 mm
4	1	0449250881	Wire feed unit, Twin	156:1
5	1	0460504880	Control box	PEK
6	1	0449253900	Cable set	L=1,6m
6:2	1	0460907891	Motor cable	1,6 m
6:3	1	0461239881	Arc welding cable	1,7 m
6:4	1	0460908880	Pulse transducer cable	2 m



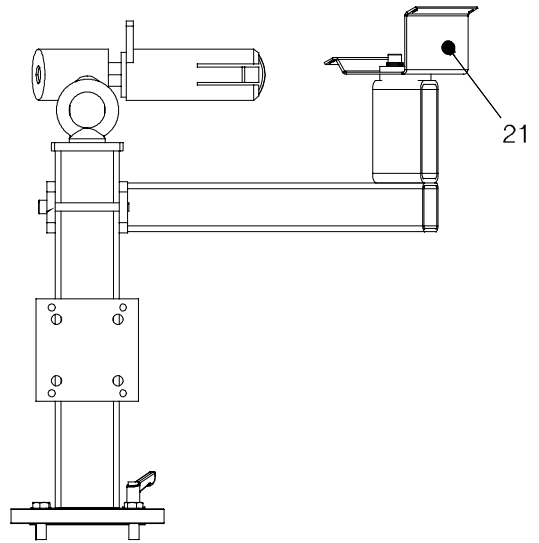
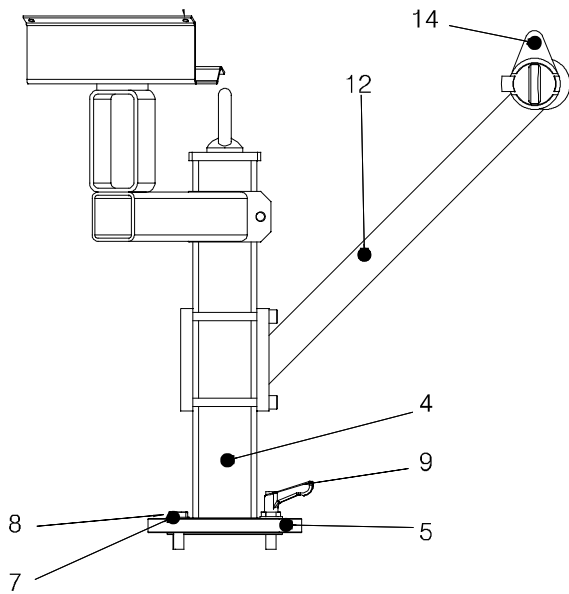
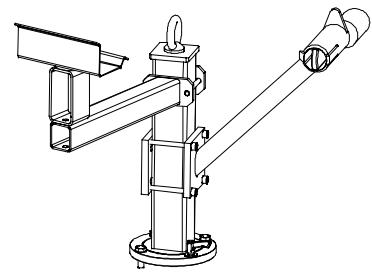
Item no.	Qty	Ordering no.	Denomination	Notes
		0461235891	Automatic welding machine	A6TF F1 (74:1), SAW Twin
1	1	0449490881	Carriage	
2	1	0449254880	Carrier	
3	1	0449252880	Slide travel kit, manual	90mm
4	1	0449250891	Wire feed unit, Twin	74:1
5	1	0460504880	Control box	PEK
6	1	0449253900	Cable set	L=1,6m
6:2	1	0460907891	Motor cable	1,6 m
6:3	1	0461239881	Arc welding cable	1,7 m
6:4	1	0460908880	Pulse transducer cable	2 m



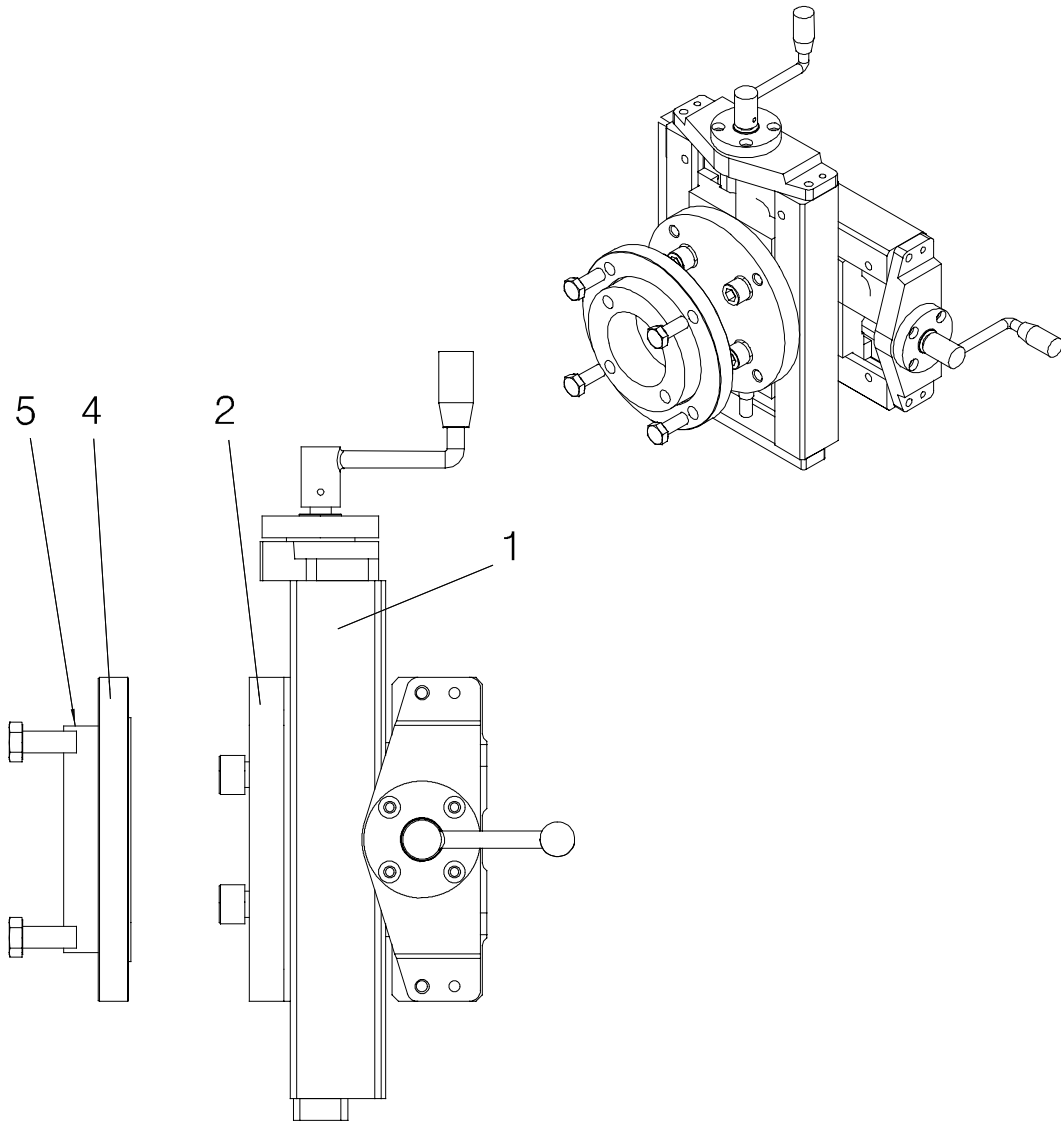
Item no.	Qty	Ordering no.	Denomination	Notes
		0449490881	Carriage	A6TFE/TGE
1	2	0334295880	Handle	
2	2	0449205880	Guide arm complete	
4	2	0334165880	Side plate	
5	4	0229202280	Wheel	
7	4	0219501013	Spring washer	D18,1/10,2
8	1	0334198880	Front shaft with sprocket	
9	1	0332947880	Bracket	
12	4	0334264001	Flange bearing unit	
15	1	0218201502	Chain	1/2"x4,88
16	1	0218201602	Chain lock simple	1/2"x4,88
17	1	0334160001	Stub shaft	
20	1	0334163880	Sprocket	
21	1	0334162880	Sprocket	
22	1	0334161001	Excenter	
23	1	0334197880	Rear shaft with chain wheel	
24	1	0449480880	Cover complete	
25	1	0449485881	Drive unit	
30	1	0334167001	Bottom plate	
31	2	0215701019	Circlip	D25x1,2
32	1	0334189001	Gear wheel	
35	1	0215701243	Wedge	5x5x65
36	1	0461242880	Pulse transducer cable	1,25m
38	1	0461241880	Motor cable	
43	1	0333630001	Locking arm adjustable	
44	1	0211102940	Roll pin	D 3x28
45	1	0215701016	Circlip	D20
46	1	0334196001	Bushing	
48	1	0334192880	Excenter	
52	1	0221307001	Steel ball	7,94 mm
53	14	0219501101	Spring plate	D8/3,2x0,3
60	1	0334171001	Plate	
63	4	0278300180	Insulator	
64	1	0334706001	Plate	
66	8	0449206001	Clamp	
68	4	0191498003	Cover plate	
71	2	0192230107	Dummy plug	D=16
72	1	0449487001	Attachment	
73	1	0461213880	Motor attachment	
75	1	0192784002	Sleeve plug	2-pol.
76	2	0192784102	Cap	
77	1	0191998103	Attachment	
79	1	0192784001	Pin plug	2-pol.
80	2	0192784101	Pin	



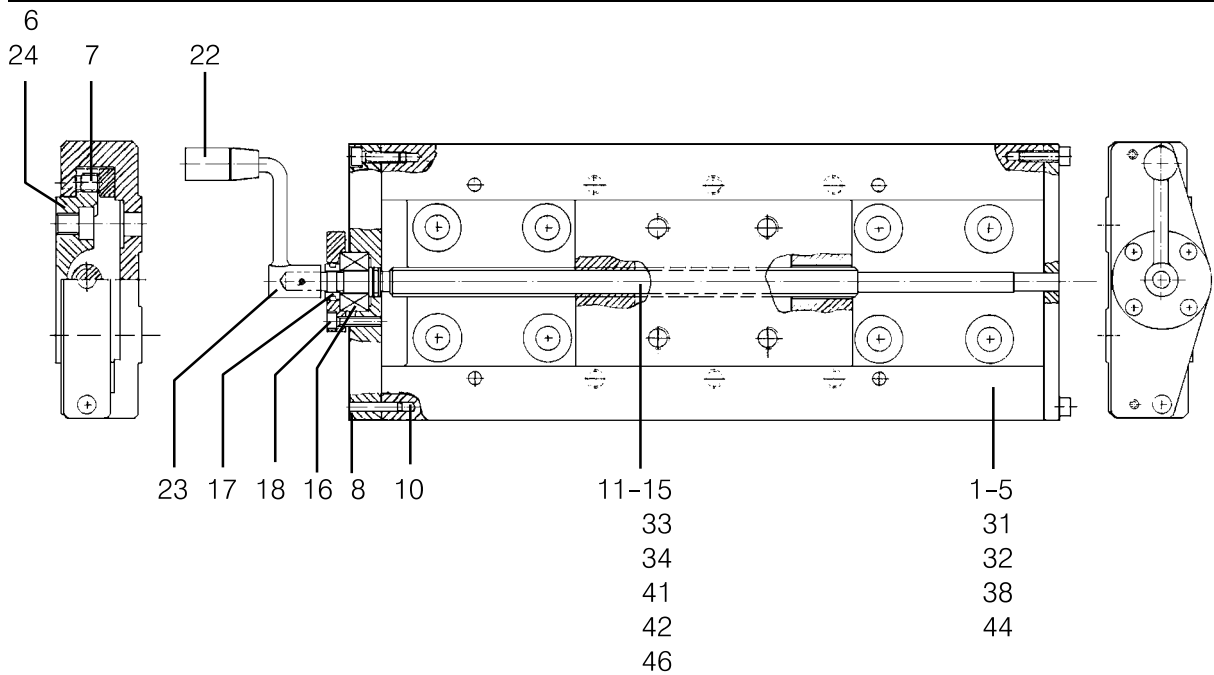
Item no.	Qty	Ordering no.	Denomination	Notes
		0449254880	Carrier	
4	1	0334168880	Column	
5	1	0334170001	Clamping ring	
7	6	0219504307	Cup spring	d20/10.2
8	3	0193571106	Locking plate steel	26/10,5x22
9	1	0193570129	Locking arm	m10x32
12	1	0334176880	Reel holder	
14	1	0146967880	Brake hub	
17	1	0334297880	Box holder	
21	1	0334185886	Box girder beam	
30	1	0334707883	Thread steerer	



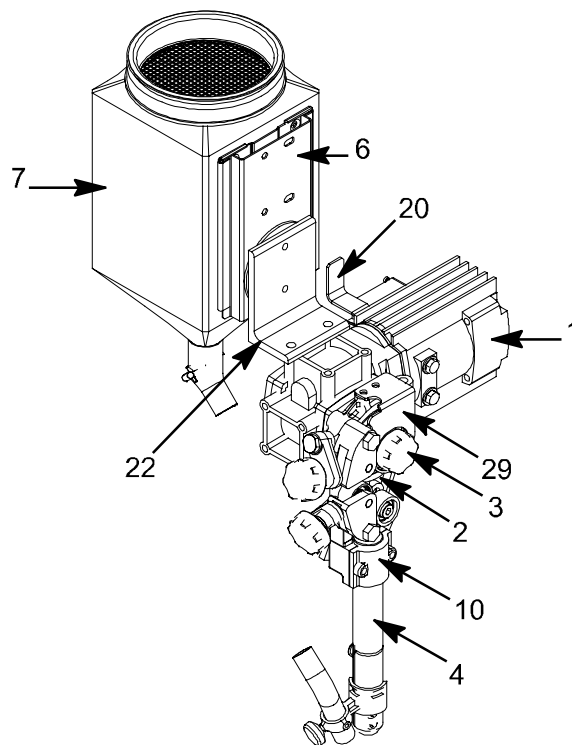
Item no.	Qty	Ordering no.	Denomination	Notes
		0449252880	Slide travel kit, manual	90mm
1	2	0154465880	Slide manual	L=90
2	1	0334171001	Plate	
4	1	0334170001	Clamping ring	
5	1	0334172001	Gear bracket	



Item	Qty	Orderingno.	Denomination	Remarks
		0154465880	Slide, manually operated	L=90
1	1	0154464001	Slide frame	
6	1	0154463880	Carriage with slide rails	
7	6	0190509485	Stop screw	M10x10
8	1	0154458001	End piece	
10	2	0211102957	Roll pin	D5x20
11	1	0154461001	Lead screw	
16	1	0190531201	Ball bearing	SKF 3201
17	1	0154456001	Lock nut	
18	1	0154457001	Ball bearing cap	
22	1	0334537001	Handle crank	
23	1	0211102938	Roll pin	D3x20

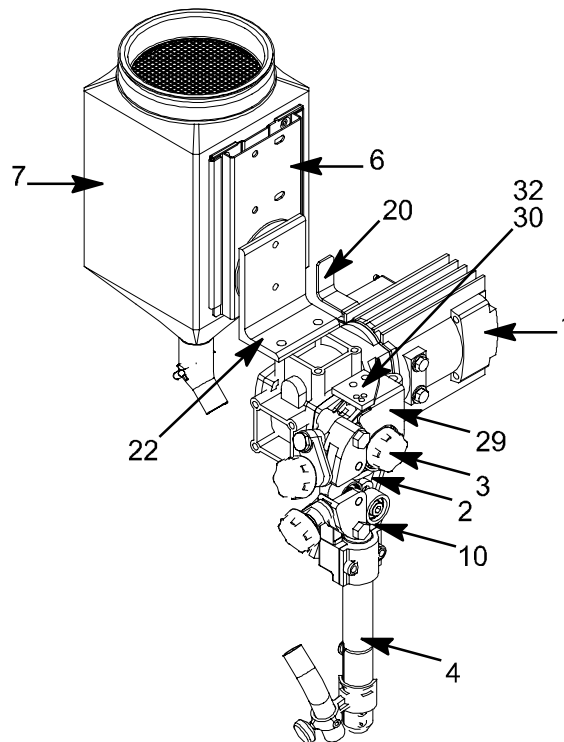


Item no.	Qty	Ordering no.	Denomination	Notes
		0449250880	Wire feed unit complete (Right mounted)	SAW (156:1), Single
1	1	0145063906	Motor with gear	A6 VEC (156:1), see separate manual
2	1	0147639880	Wire straightener, right mounted	D35
3	1	0218810183	Insulated hand wheel	
4	1	0334290882	Contact equipment	D35/ L275
6	1	0148487880	Bracket for flux hopper	
7	1	0147649881	Flux hopper	10 l
10	1	0457713001	Bar	
20	1	0148493001	Cable holder	
22	1	0334294001	Attachment	
29	1	0449528001	Protection plate	

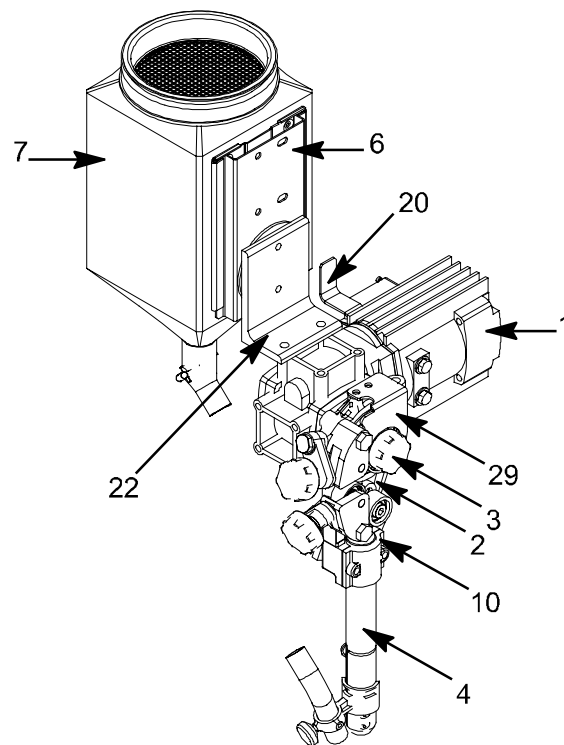


Item no.	Qty	Ordering no.	Denomination	Notes
		0449250881	Wire feed unit complete (Right mounted)	SAW (156:1), Twin
1	1	0145063906	Motor with gear	A6 VEC (156:1), see separate manual
2	1	0147639887	Wire straightener, right mounted	D35, Twin
3	1	0218810183	Insulated hand wheel	
4	1	0334290882	Contact equipment	D35/ L275
6	1	0148487880	Bracket for flux hopper	
7	1	0147649881	Flux hopper	10 l
10	1	0457713001	Bar	
20	1	0148493001	Cable holder	
22	1	0334294001	Attachment	
29	1	0449528001	Protection plate	
30	1	0155300001	Plate	
32	2	0156800002	Wire liner	D 8/4
35*	1	0146967880	Brake hub	
36*	2	0154734001	Brake hub clamp	

* Not shown in the picture

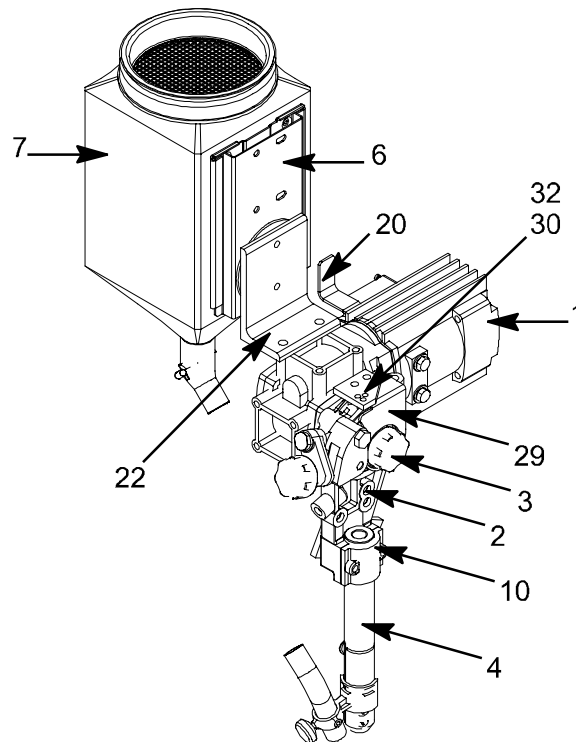


Item no.	Qty	Ordering no.	Denomination	Notes
		0449250890	Wire feed unit complete (Right mounted)	SAW (74:1), Singel
1	1	0145063907	Motor with gear	A6 VEC (74:1), see separate manual
2	1	0147639880	Wire straightener, right mounted	D35
3	1	0218810183	Insulated hand wheel	
4	1	0334290882	Contact equipment	D35/ L275
6	1	0148487880	Bracket for flux hopper	
7	1	0147649881	Flux hopper	10 l
10	1	0457713001	Bar	
20	1	0148493001	Cable holder	
22	1	0334294001	Attachment	
29	1	0449528001	Protection plate	

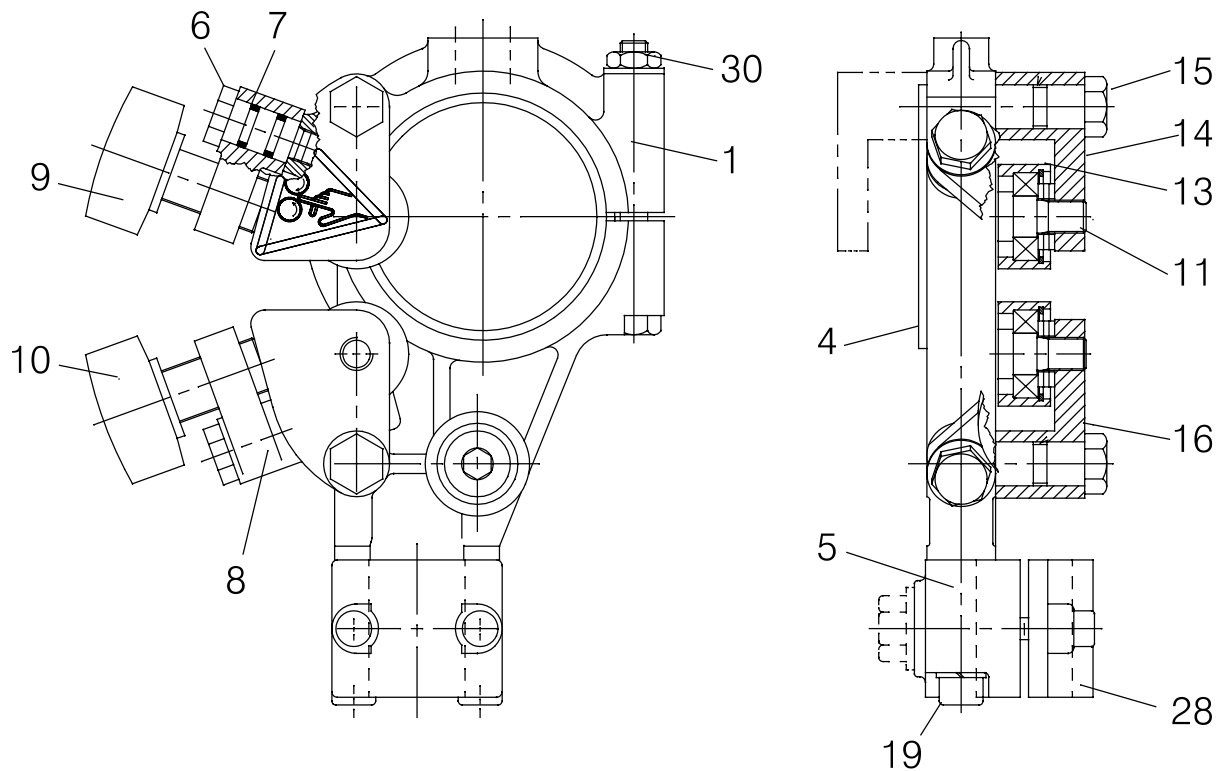


Item no.	Qty	Ordering no.	Denomination	Notes
		0449250891	Wire feed unit complete (Right mounted)	SAW (74:1), Twin
1	1	0145063907	Motor with gear	A6 VEC (74:1), see separate manual
2	1	0147639891	Wire straightener, right mounted	D35, Twin
3	1	0218810183	Insulated hand wheel	
4	1	0334290882	Contact equipment	D35/ L275
6	1	0148487880	Bracket for flux hopper	
7	1	0147649881	Flux hopper	10 l
10	1	0457713001	Bar	
20	1	0148493001	Cable holder	
22	1	0334294001	Attachment	
29	1	0449528001	Protection plate	
30	1	0155300001	Plate	
32	2	0156800002	Wire liner	D8/4
35*	1	0146967880	Brake hub	
36*	2	0154734001	Brake hub clamp	
40*	1	0145787880	Fine wire straightener	
42*	1	0334278881	Guide insert for fine wire	

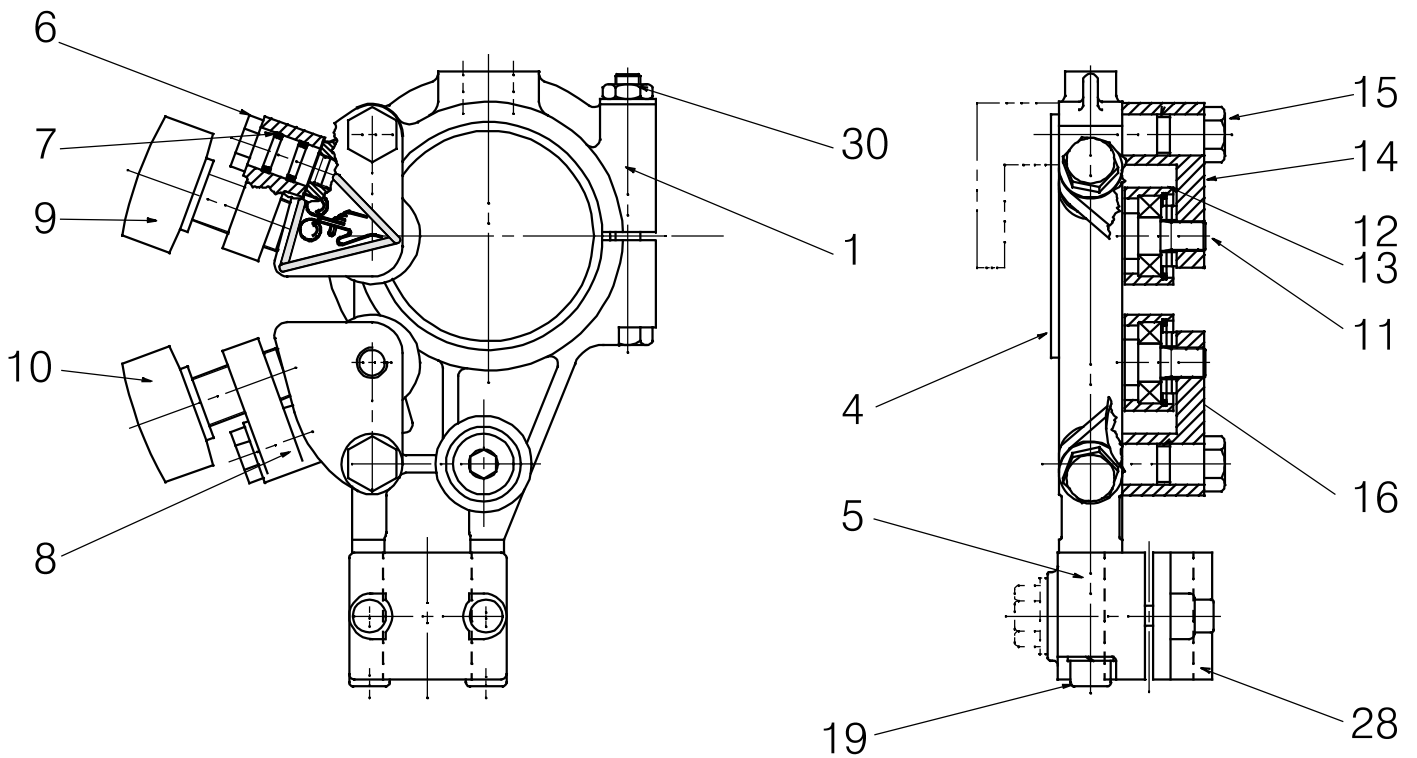
* Not shown in the picture



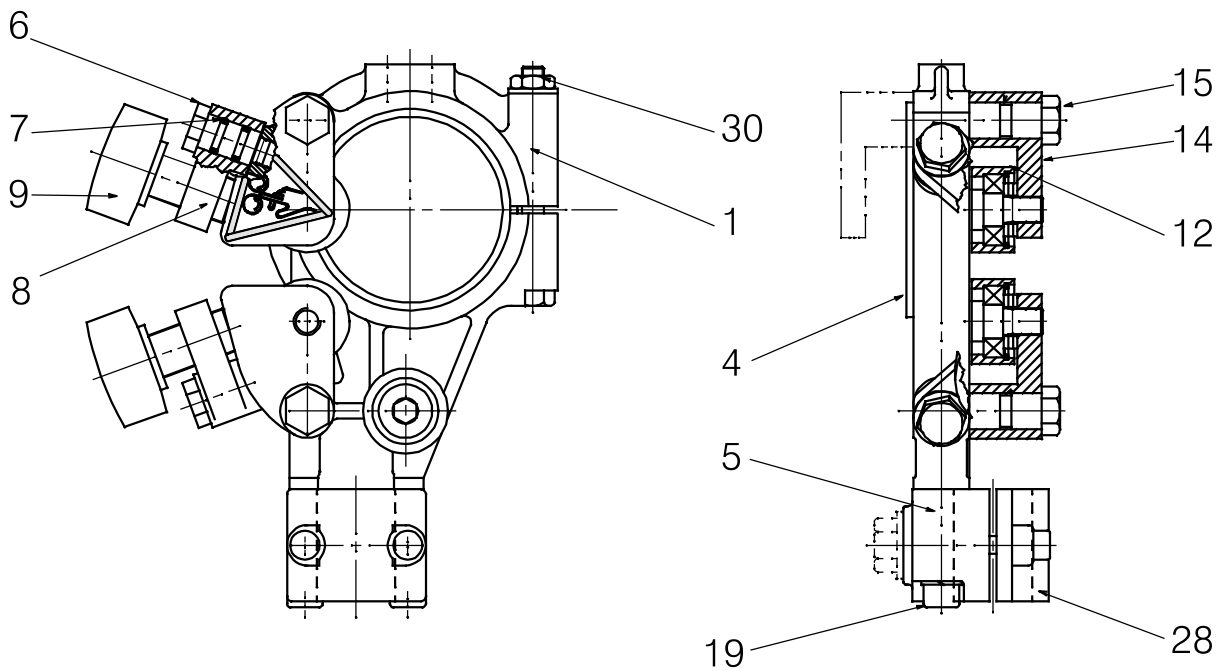
Item no.	Qty	Ordering no.	Denomination	Notes
		0147639880	Straightener (right mounted)	
1	1	0156449001	Clamp	
4	1	0215503601	Insulating sleeve	
5	1	0156530001	Clamp half	D35
6	2	0212900001	Spacer screw	
7	4	0215201209	Sealing, O-ring	D11.3x2.4
8	2	0218400801	Pressure roller arm	
9	1	0218810181	Handwheel, insulated	
10	1	0218810182	Handwheel, insulated	
11	3	0332408001	Stub shaft	
13	3	0153148880	Pressure roller	
14	1	0415498001	Pressure roller, upper	
15	2	0212902601	Spacer screw	
16	1	0415499001	Pressure roller, lower	
19	2	0219501013	Spring washer	D18.1/10.2
28	1	0156531001	Clamp half	D35
30	1	0212 601110	Nut	M10



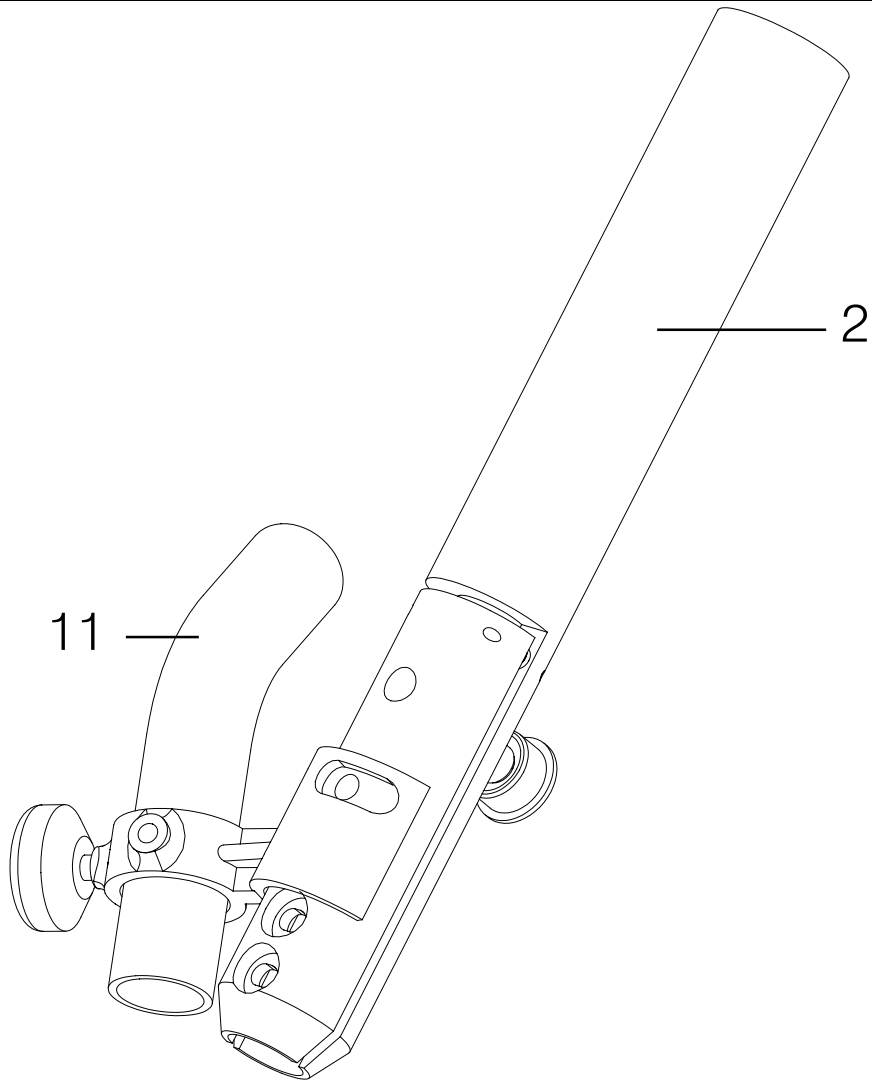
Item no.	Qty	Ordering no.	Denomination	Notes
		0147639887	Straightener (right mounted)	A6 D35 TWIN
1	1	0156449001	Clamp	
4	1	0215503601	Insulating sleeve	
5	1	0156530001	Clamp half	
6	2	0212900001	Spacer screw	
7	4	0215201209	Sealing, O-ring	11,3x2,4
8	2	0218400801	Pressure roller arm	
9	1	0218810181	Handwheel, insulated	
10	1	0218810182	Handwheel, insulated	
11	2	0332408001	Stub shaft	
12	1	0218524580	Pressure roller twin	
13	2	0153148880	Pressure roller	
14	1	0415498001	Pressure roller, upper	
15	2	0212902601	Spacer screw	
16	1	0415499001	Pressure roller, lower	
19	2	0219501013	Spring washer	d18,1/10,2
28	1	0156531001	Clamp half	
30	1	0212601110	Nut	M10



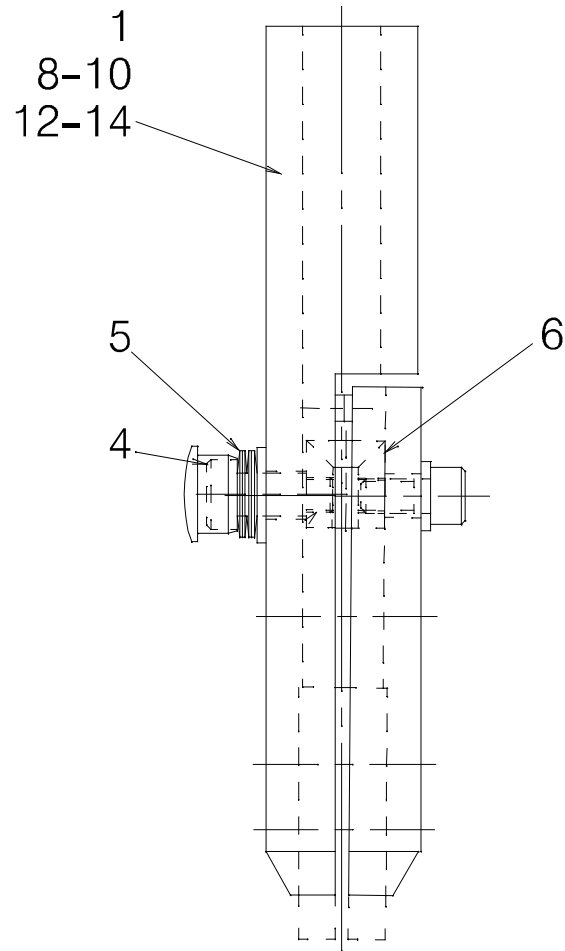
Item no.	Qty	Ordering no.	Denomination	Notes
		0147639891	Straightener (right mounted)	A6 D35 TWIN (74:1)
1	1	0156449001	Clamp	
4	1	0215503601	Insulating sleeve	
5	1	0156530001	Clamp half	D35
6	1	0212900001	Spacer screw	
7	2	0215201209	Sealing, O-ring	D11,3x2,4
8	1	0218400801	Pressure roller arm	
9	1	0218810181	Handwheel, insulated	
12	1	0218524580	Pressure roller twin	
14	1	0415498001	Pressure roller, upper	
15	1	0212902601	Spacer screw	
19	2	0219501013	Spring washer	D18,1/10,2
28	1	0156531001	Clamp half	
30	1	0212601110	Nut	M10



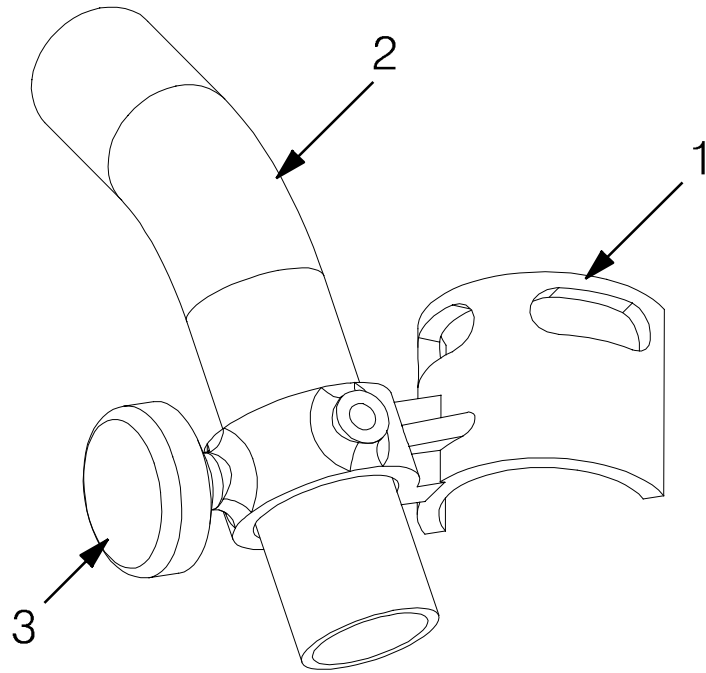
Item	Qty	Orderingno.	Denomination	Remarks
		0334290882	Contact equipment single wire	D35
2	1	0417959881	Contact jaw tube	L=275
11	1	0153299880	Flux nozzle complete	



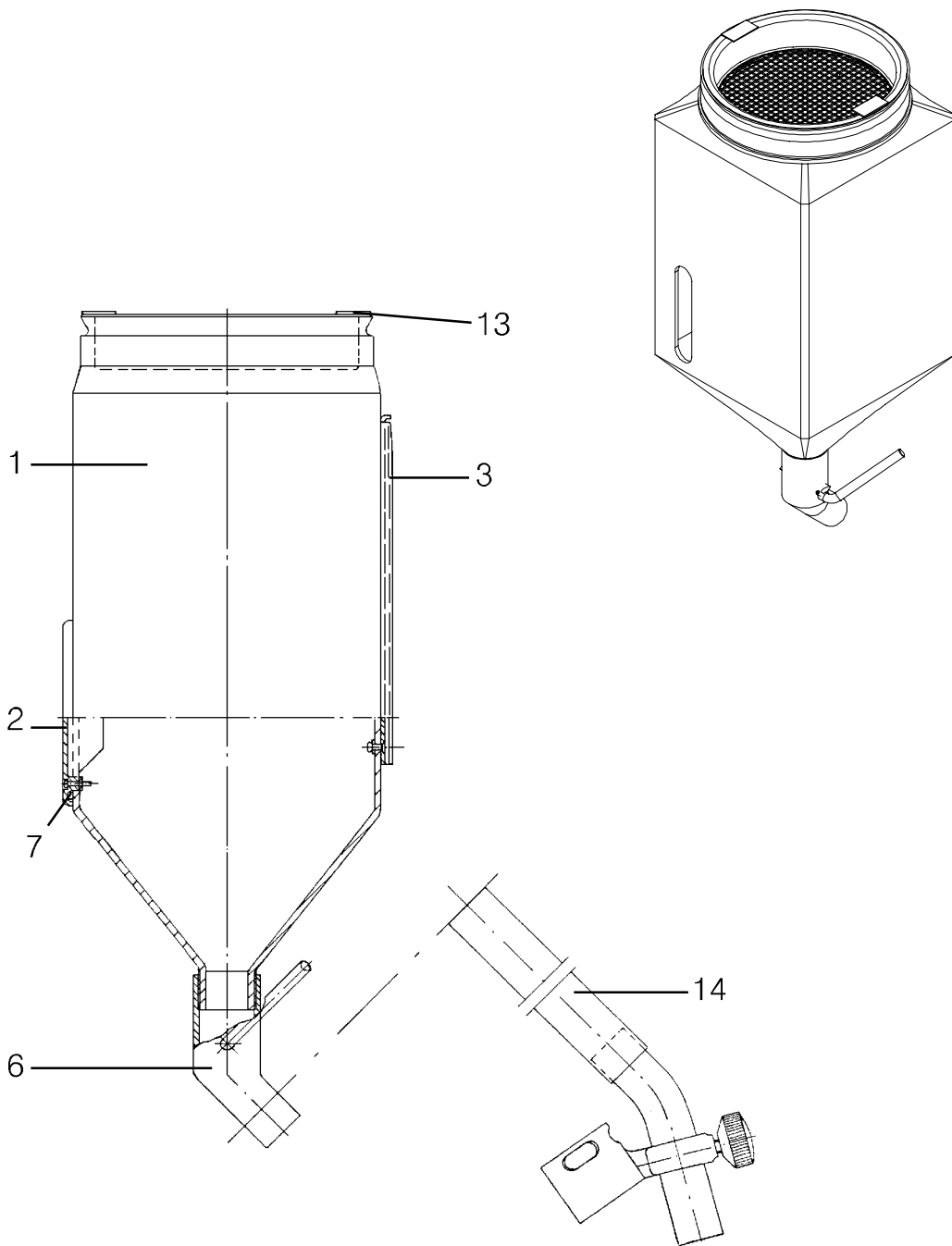
Item no.	Qty	Ordering no.	Denomination	Notes
		0417959881	Contact jaw tube	L = 275 mm
4	1	0443372001	Fitting bolt	
5	4	0219504307	Cup spring	d20/10.2, T=1.1
6	1	0417979001	Ring	
8	1	0443344881	Contact tube	L = 275 mm



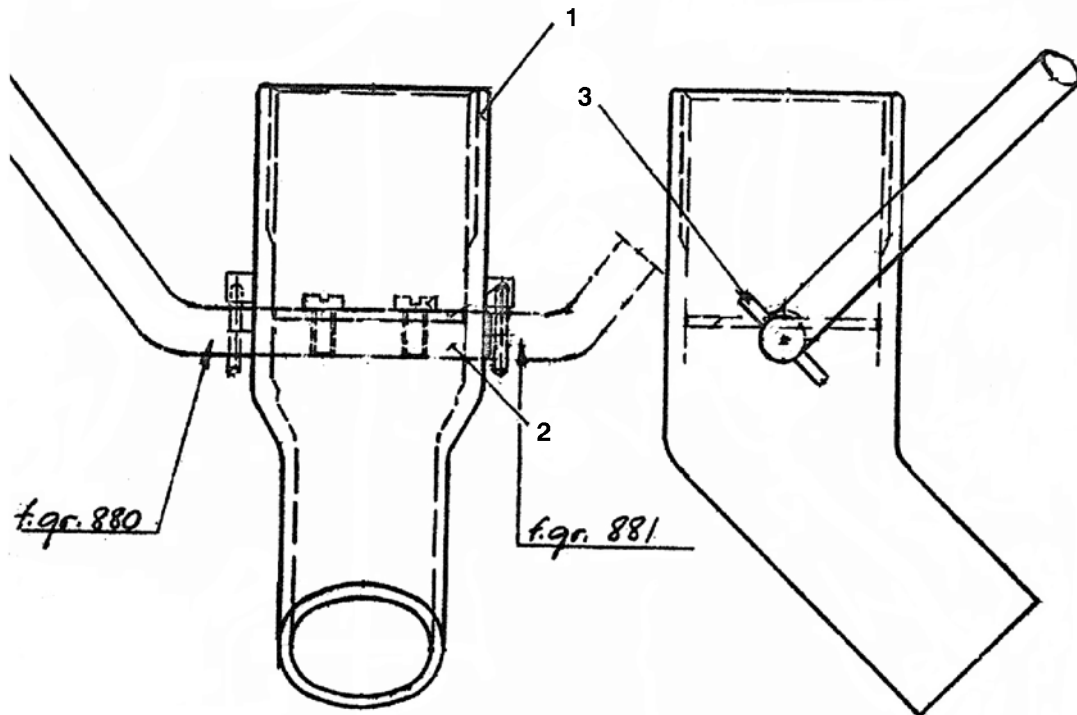
Item no.	Qty	Ordering no.	Denomination	Notes
		0153299880	Flux nozzle complete	
1	1	0153290002	Holder for flux pipe	
2	1	0153296001	Flux pipe, bent	
3	1	0153425001	Wheel	



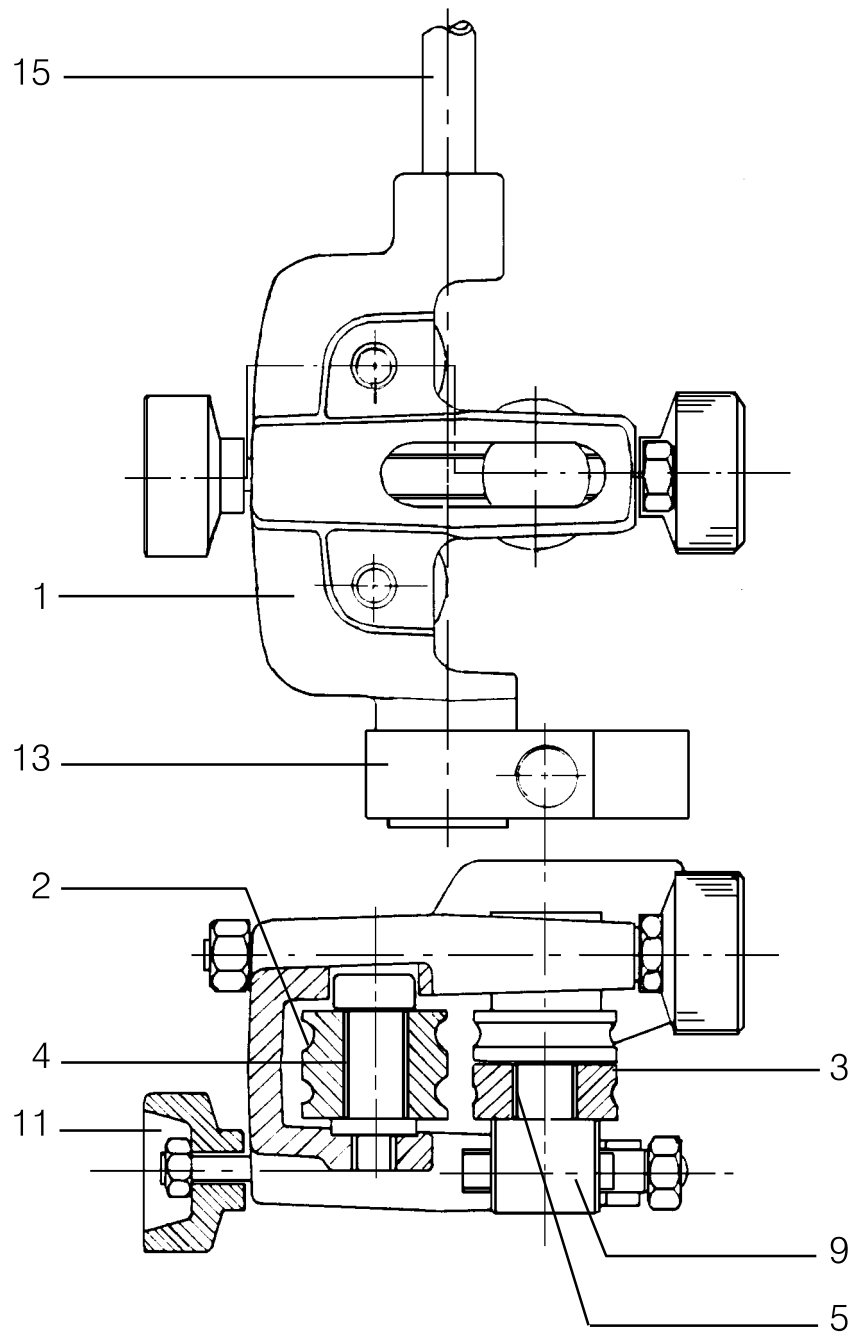
Item no.	Qty	Ordering no.	Denomination	Notes
		0147649881	Flux Hopper	10l
1	1	0154007001	Flux hopper	
2	1	0148837001	Window (a6 flux hopper)	
3	1	0147645001	Mounting	
6	1	0153347880	Flux valve	
7	1	0215201232	Sealing, O-ring	69,2x5,7
13	1	0020301780	Flux strainer	
14	1	0443383002	Flux hose	L=500



Item no.	Qty	Ordering no.	Denomination	Notes
		0153347880	Flux valve	
1	1	0153348001	Outlet	
2	1	0153349001	Shaft	
3	1	0211102938	Roll pin	d 3x20



Item no.	Qty	Ordering no.	Denomination	Notes
		0145787880	Fine wire straightener for twin wire	
1	1	0145788001	Case	D12/10
2	2	0145789001	Roller	
3	2	0145790001	Roller	
4	2	0145791001	Searing bushing	
5	2	0190240103	Bearing bushing	
9	2	0145793001	Runner	
11	2	0145794001	Knob	
13	1	0145795001	Link	
15		0151287001	Hose	



ESAB subsidiaries and representative offices

Europe

AUSTRIA

ESAB Ges.m.b.H
Vienna-Liesing
Tel: +43 1 888 25 11
Fax: +43 1 888 25 11 85

BELGIUM

S.A. ESAB N.V.
Brussels
Tel: +32 2 745 11 00
Fax: +32 2 745 11 28

THE CZECH REPUBLIC

ESAB VAMBERK s.r.o.
Vamberk
Tel: +420 2 819 40 885
Fax: +420 2 819 40 120

DENMARK

Aktieselskabet ESAB
Herlev
Tel: +45 36 30 01 11
Fax: +45 36 30 40 03

FINLAND

ESAB Oy
Helsinki
Tel: +358 9 547 761
Fax: +358 9 547 77 71

FRANCE

ESAB France S.A.
Cergy Pontoise
Tel: +33 1 30 75 55 00
Fax: +33 1 30 75 55 24

GERMANY

ESAB GmbH
Solingen
Tel: +49 212 298 0
Fax: +49 212 298 218

GREAT BRITAIN

ESAB Group (UK) Ltd
Waltham Cross
Tel: +44 1992 76 85 15
Fax: +44 1992 71 58 03

ESAB Automation Ltd
Andover
Tel: +44 1264 33 22 33
Fax: +44 1264 33 20 74

HUNGARY

ESAB Kft
Budapest
Tel: +36 1 20 44 182
Fax: +36 1 20 44 186

ITALY

ESAB Saldatura S.p.A.
Mesero (Mi)
Tel: +39 02 97 96 81
Fax: +39 02 97 28 91 81

THE NETHERLANDS

ESAB Nederland B.V.
Amersfoort
Tel: +31 33 422 35 55
Fax: +31 33 422 35 44

NORWAY

AS ESAB
Larvik
Tel: +47 33 12 10 00
Fax: +47 33 11 52 03

POLAND

ESAB Sp.zo.o.
Katowice
Tel: +48 32 351 11 00
Fax: +48 32 351 11 20

PORTUGAL

ESAB Lda
Lisbon
Tel: +351 8 310 960
Fax: +351 1 859 1277

SLOVAKIA

ESAB Slovakia s.r.o.
Bratislava
Tel: +421 7 44 88 24 26
Fax: +421 7 44 88 87 41

SPAIN

ESAB Ibérica S.A.
Alcalá de Henares (MADRID)
Tel: +34 91 878 3600
Fax: +34 91 802 3461

SWEDEN

ESAB Sverige AB
Gothenburg
Tel: +46 31 50 95 00
Fax: +46 31 50 92 22

ESAB international AB
Gothenburg
Tel: +46 31 50 90 00
Fax: +46 31 50 93 60

SWITZERLAND

ESAB AG
Dietikon
Tel: +41 1 741 25 25
Fax: +41 1 740 30 55

North and South America

ARGENTINA

CONARCO
Buenos Aires
Tel: +54 11 4 753 4039
Fax: +54 11 4 753 6313

BRAZIL

ESAB S.A.
Contagem-MG
Tel: +55 31 2191 4333
Fax: +55 31 2191 4440

CANADA

ESAB Group Canada Inc.
Mississauga, Ontario
Tel: +1 905 670 02 20
Fax: +1 905 670 48 79

MEXICO

ESAB Mexico S.A.
Monterrey
Tel: +52 8 350 5959
Fax: +52 8 350 7554

USA

ESAB Welding & Cutting Products
Florence, SC
Tel: +1 843 669 44 11
Fax: +1 843 664 57 48

Asia/Pacific

CHINA

Shanghai ESAB A/P
Shanghai
Tel: +86 21 2326 3000
Fax: +86 21 6566 6622

INDIA

ESAB India Ltd
Calcutta
Tel: +91 33 478 45 17
Fax: +91 33 468 18 80

INDONESIA

P.T. ESABindo Pratama
Jakarta
Tel: +62 21 460 0188
Fax: +62 21 461 2929

JAPAN

ESAB Japan
Tokyo
Tel: +81 45 670 7073
Fax: +81 45 670 7001

MALAYSIA

ESAB (Malaysia) Snd Bhd
USJ
Tel: +603 8023 7835
Fax: +603 8023 0225

SINGAPORE

ESAB Asia/Pacific Pte Ltd
Singapore
Tel: +65 6861 43 22
Fax: +65 6861 31 95

SOUTH KOREA

ESAB SeAH Corporation
Kyungnam
Tel: +82 55 269 8170
Fax: +82 55 289 8864

UNITED ARAB EMIRATES

ESAB Middle East FZE
Dubai
Tel: +971 4 887 21 11
Fax: +971 4 887 22 63

Representative offices

BULGARIA

ESAB Representative Office
Sofia
Tel/Fax: +359 2 974 42 88

EGYPT

ESAB Egypt
Dokki-Cairo
Tel: +20 2 390 96 69
Fax: +20 2 393 32 13

ROMANIA

ESAB Representative Office
Bucharest
Tel/Fax: +40 1 322 36 74

RUSSIA

LLC ESAB
Moscow
Tel: +7 095 543 9281
Fax: +7 095 543 9280

LLC ESAB

St Petersburg
Tel: +7 812 336 7080
Fax: +7 812 336 7060

Distributors

For addresses and phone numbers to our distributors in other countries, please visit our home page

www.esab.com



ESAB AB
SE-695 81 LAXÅ
SWEDEN
Phone +46 584 81 000

www.esab.com

