

Operation instructions • english
Gebrauchsanweisung • deutsch
Gebruiksaanwijzing • nederlands
Manuel d'utilisation • français

1922040E
0530

KEMPOWELD

WIRE 400

WIRE 550




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1. PREFACE

1.1. INTRODUCTION

Congratulations on having purchased this product. Properly installed Kemppi products should prove to be productive machines requiring maintenance at only regular intervals. This manual is arranged to give you a good understanding of the equipment and its safe operation. It also contains maintenance information and technical specifications. Read this manual from front to back before installing, operating or maintaining the equipment for the first time. For further information on Kemppi products please contact us or your nearest Kemppi distributor. The specifications and designs presented in this manual are subject to change without prior notice.

In this document, for danger to life or injury the following symbol is used:  Read the warning texts carefully and follow the instructions. Please also study the Operation safety instructions and respect them when installing, operating and servicing the machine.

1.2. PRODUCT INTRODUCTION

Kempoweld WIRE 400 and WIRE 550 wire feeders belong to the KEMPOWELD product range, designed for demanding professional use, both with water-cooled or air cooled MIG guns.

Synchronization unit KMW sync for push-pull guns can be easily mounted to the wire feeder unit. Units have 4-roll drive.

You can also equip the Kempoweld power source and the wire feeder unit with air- or water-cooled interconnection cable. You can hang the wire feeder unit onto boom with a specially-designed lift hook.

1.3. OPERATION SAFETY

Please study these Operation safety instructions and respect them when installing, operating and servicing the machine.

Welding arc and spatters

Welding arc hurts unprotected eyes. Be careful also with reflecting arc flash. Welding arc and spatter burn unprotected skin. Use safety gloves and protective clothing.

Danger for fire or explosion

Pay attention to fire safety regulations. Remove flammable or explosive materials from welding place. Always reserve sufficient fire-fighting equipment on welding place. Be prepared for hazards in special welding jobs, eg. for the danger of fire or explosion when welding container type work pieces. Note! Fire can break out from sparks even several hours after the welding work has been finished!

Mains voltage

Never take welding machine inside a work piece (eg. container or truck). Do not place welding machine on a wet surface. Always check cables before operating the machine. Change defect cables without delay. Defect cables may cause an injury or set out a fire. Connection cable must not be compressed, it must not touch sharp edges or hot work pieces.

Welding power circuit

Isolate yourself by using proper protective clothing, do not wear wet clothing. Never work on a wet surface or use defect cables. Do not put MIG-gun or welding cables on welding machine or on other electric equipment. Do not press MIG-gun switch, if the gun is not directed towards a work piece.

Welding fumes

Take care that there is sufficient ventilation during welding. Take special safety precautions when welding metals which contain lead, cadmium, zinc, mercury or beryllium.



This equipment's electromagnetic compatibility (EMC) is designed for use in an industrial environment. Class A equipment is not intended for use in residential location where the electrical power is provided by the public low-voltage supply system.

2. PARTS OF WIRE FEED MECHANISM WIRE

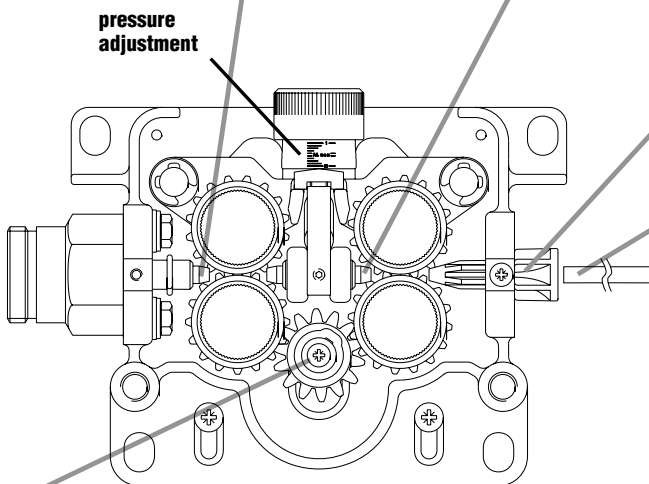
WIRE 400 ja WIRE 550

4 - roll wire feed mechanism



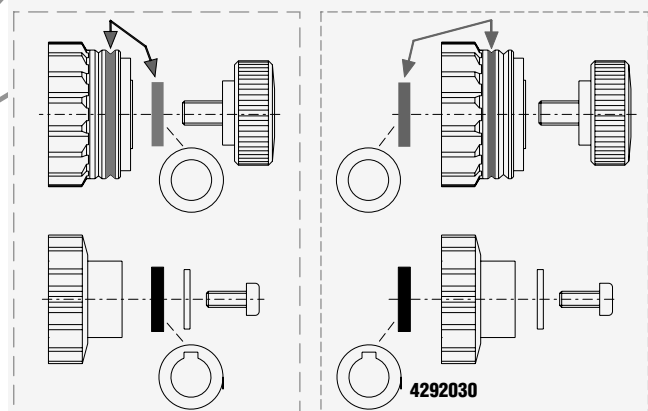
Wire guide tubes							
Fe	∅ 0,6...0,8 mm	∅ 1,0 mm white	3134140	∅ 2,0 mm orange	3134120	∅ 2,0 mm plastic	4267220
						∅ 2,0 mm plastic	4266970
Mc							
Fc	∅ 0,9...1,6 mm	∅ 2,0 mm orange	3133700			∅ 4,0 mm plastic	4270180
Ss	∅ 1,6...2,4 mm	∅ 4,0 mm blue	3134130	∅ 4,0 mm blue	3134110	∅ 4,0 mm brass	4267030
Al	∅ 0,8...1,6 mm	∅ 2,5 mm silver	3134290	∅ 2,5 mm silver	3134300	∅ 2,0 mm plastic	4267220
	∅ 1,6...2,4 mm	∅ 3,0 mm yellow	3134710	∅ 3,0 mm yellow	3134720	∅ 4,0 mm plastic	4270180

Promig 511



pressure adjustment

Syöttöpyörän uran valinta, val av matarhjulspår, valg av matehjul spor, valg af spor i tråd hjul, selection of feed wheel groove, Auswahl der Transportrollennut, selectie van de draaddiameter groef, sélection de la gorge du galet



Vetoratas, drivhjul, trekkstannhjul, drivhjul, gearwheel, Aufziehrad, aandrijfrol, galet d'entraînement

∅ 28 mm (0 - 18 m/min) 4265240, ∅ 40 mm (0 - 25 m/min) 4265250

Muovi, plast, plast, plastic, plastic, Kunststoff, plastic, plastique

∅ 28 mm (0 - 18 m/min) 4287860, ∅ 40 mm (0 - 25 m/min) 4297270

Teräs, stål, stål, steel, Stahl, staal, acier

Vetorattaan valintalevyn siirto, flytning av distansbricka, flytning av avstandsskive for matehjul, hvordan flytter man justerskiven, relocation of selection plate, Versetzen der Wahlschalterplatte, verplaatsing van selectie plaat, remise en place de la rondelle de sélection

Feed rolls



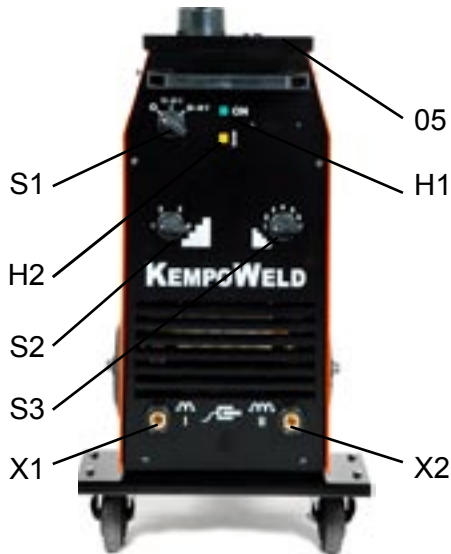
Fe Ss Al	Plain		∅ 0,6/0,8	3133810	∅ 1,0/1,2	3133210	∅ 1,4-1,6/2,0	3133820	∅ 2,4	3133880
			∅ 0,8/0,8 (L)	3143180	∅ 1,0/1,0 (L)	3138650	∅ 1,6/1,6 (L)	3141120	black	
			white		red		yellow		∅ 3,2	3133910
Fe Fc Mc	Knurled				∅ 1,2/1,2 (L)	3137390				
					∅ 1,0/1,2	3133940	∅ 1,4-1,6/2,0	3133990	∅ 2,4	3134030
					red		∅ 1,6/1,6 (L)	3141130	black	
Fe Fc Ss Al	Trapezoid				orange		yellow		∅ 3,2	3134060
					∅ 1,2/1,2 (L)	3142210	∅ 1,4/1,4 (L)	3142220	∅ 2,0/2,0 (L)	3142230
					orange		brown		grey	
						∅ 1,6/1,6 (L)	3142200	∅ 2,4 (L)	3142240	
						yellow		black		

(L) = Ball race

W000574

eng

3. KEMPOWELD PANELS



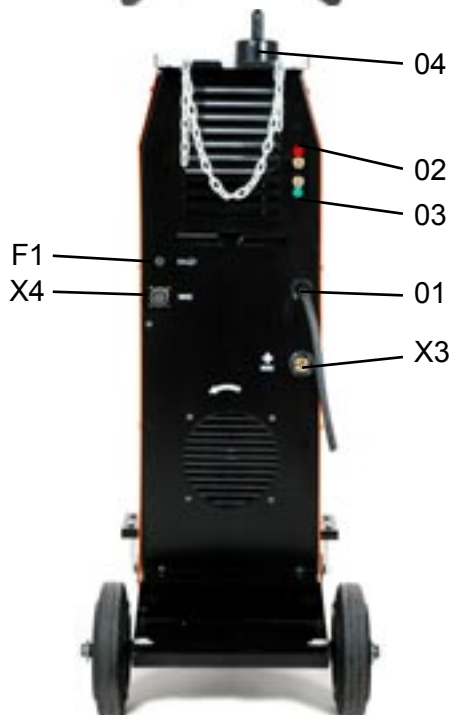
3.1. OPERATION CONTROL AND CONNECTORS

- S1 Main switch (voltage range)
- S2 Voltage selecting switch (coarse grading)
- S3 Voltage selecting switch (fine grading)
- H1 Pilot lamp for main switch
- H2 Pilot lamp for overheating (power source)
- X1 Return current connector (coarser arc)
- X2 Return current connector (softer arc)
- 05 Accessory drawer
- MSD-1 V/A metering unit (accessory for 4200 and 4200W)
- MSD-1 V/A metering unit (included in delivery of 5500W)



3.2. PARTS OF COOLING UNIT KEMPOWELD 4200W AND 5500W

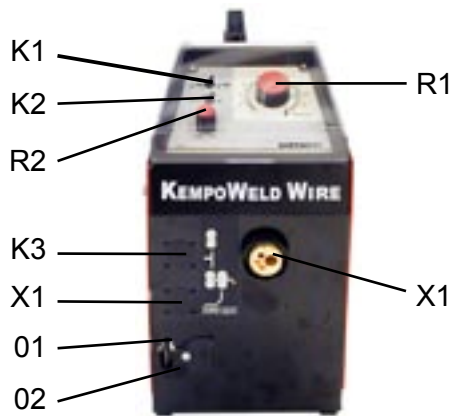
- S4 Main switch of cooling unit
- Sw1 Selecting switch for gun's cooling mode
- Sw2 Water cooling test switch
- Hw4 Pilot lamp for overheating
- Hw3 Pilot lamp for lacking water pressure
- F2 Fuse for cooling unit (2 A delayed / 4200W)
- F2 Fuse for cooling unit (4 A delayed / 5500W)
- 02 Water circulation return connector
- 03 Water circulation output connector
- 04 Filler hole for water tank



Rear plate of Kempoweld 4200, 4200W and 5500W

- 01 Inlet of mains cable
- F1 Fuse of auxiliary transformer (8 A delayed)
- X3 Welding current connector for wire feeder unit (+ pole)
- X4 Control connector for wire feeder unit

3.3 WIRE FEEDER PANELS



Front panel

- R1 Adjustment for wire feed
- X1 Welding gun connector (EURO)

Accessories

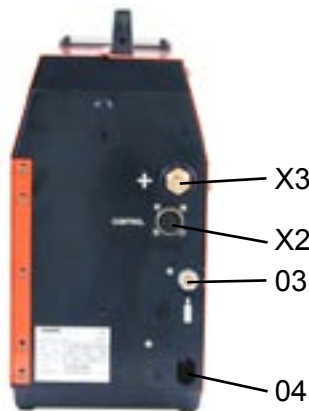
KMW timer

Accessory for Kempoweld WIRE 400
Included in delivery of Kempoweld WIRE 550

- K1 Trigger function mode (continuous/hold)
- K2 Welding mode selection (continuous/spot/cycle arc)
- R2 Adjustment for welding mode timing (spot or cycle time)

KMW sync (Accessory)

- K3 Wire feed adjustment selection (panel or push-pull gun)
- X1 Control connector for push-pull gun (Binzel / Hultegger)

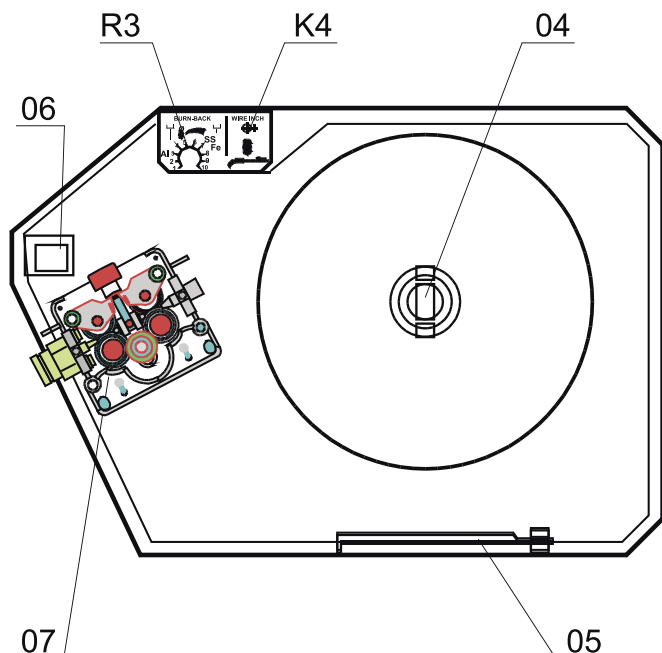


Cooling unit connections

- O1 Return water connector for gun
- O2 Feed water connector for gun
- O4 Inlet of water hoses

Rear panel

- O3 Shielding gas connector
- X2 Control cable connector (Kempoweld or interconnection cable)
- X3 Welding current connection (Kempoweld or interconnection cable)



3.4. INSIDE WIRE FEEDER UNIT

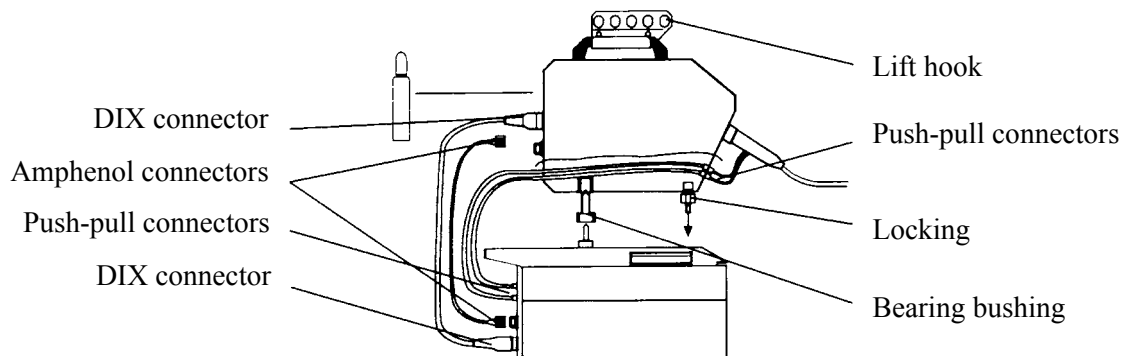
- K4 Wire inch switch (wire feed into gun)
- R3 Burn back time adjustment (according to filler material and wire feed)
- O4 Locking device for wire reel
- O5 Box door latch
- O6 Box door lock
- O7 Wire feed mechanism

4. ASSEMBLY OF KEMPOWELD EQUIPMENT

Kempoweld power source: Read the paragraph INSTALLATION in the operation instructions for the power source.

Wire feeder:

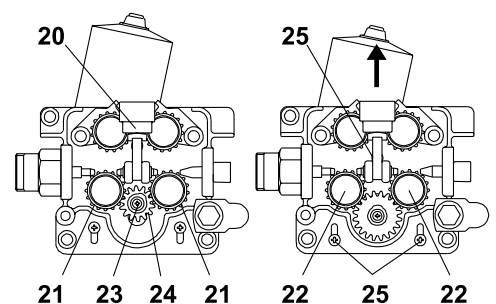
1. Mount the wire feeder unit into pin on the power source's cover. When necessary you can lock the wire feeder to the support piece on the power source's cover.
2. Mount the control cable and welding current cable to connectors on the rear walls and the return current cable to the connector on Kempoweld's front panel.
3. Welding current polarity: By the connection made according to markings, the gun has positive voltage. In order to change the polarity interchange the welding and return current cable ends connected to the power source with each other.
4. If the MIG gun is water-cooled, mount the water hoses to the wire feeder unit.
5. Mount the interconnection cable to the same connections.
NOTE! The hoses of the water-cooled interconnection cable go also through the wire feeder unit.
6. The wire feeder must be mounted to boom without galvanic contact to lift hook and boom. See the paragraph ACCESSORIES.
7. The MIG gun is mounted to the EURO connector. Use guide tubes and contact tips according to manufacturer's operation instructions. Accessories which are too narrow or otherwise unsuitable for the wire type used by you, will cause disturbances and excessive wear for accessories.



8. Max. wire feed speed
When the unit is delivered the max. wire feed speed is 18 m/min, which is enough for most welding jobs. If you need a higher speed, you can increase the max. wire feed speed to 25 m/min by replacing the gear wheel on motor shaft to a bigger one. The big gear wheel D40 is delivered in accessory drawer of the power source.

When necessary speed is changed according to following:

- Open tightening lever (20). Remove lower feed rolls (21). Release screw (23) and its washer. Remove gear wheel D28 (24) from motor shaft.
- Loosen screws (25) (3 pc) 1 twist. Mount the D40 gear wheel onto motor shaft. Screw the screw (23) with its washer back.
- Put feed rolls (21) back to their axles, however don't fasten yet fastening screws of feed rolls (22).
- Lift the motor so that the tooth gap between gear wheel and both lower feed rolls is approx. 0,2 mm.
- Tighten screws (25). Check gear teeth gaps, when necessary put the motor into a better position. Screw on the mounting screws of feed rolls (22)



Too small gap between gear wheel and feed rolls will overload motor. Too big gap for its part might cause too rapid wearing for teeth of feed rolls and gear wheel.

9. The shielding gas hose is mounted to the rear wall of the wire feeder. Mountings to the gas bottle and the shielding gas flow adjustment, see the paragraph Shielding gas.
KMW sync, see the paragraph ACCESSORIES.

5. INSTALLATION

5.1. ACCESSORIES CORRESPONDING TO WIRE DIAMETER

The wire feed rolls are available with plain groove, knurled groove and with trapezoidal groove for different purposes. All rolls and accessories in tables fits both WIRE 400 and WIRE 550 wire feeders.

Feed rolls with plain groove:

1. Universal feed roll for welding of all kinds of wires.
2. Special feed rolls for heavy duty use

Feed rolls with knurled groove:

Special feed roll for cored wires and steel wires.

Feed rolls with trapezoidal groove:

Special feed roll for aluminium wires.

The wire feed rolls have two grooves for different filler wire diameters. Correct wire groove is selected by moving selecting washer (28) from one side to another in feed roll.

Feed rolls and wire guide tubes of wire feeder unit have colour codes in order to make identification easier (see table on page 4).

In delivery the Kempoweld WIRE 400 is equipped with red feed rolls with plain groove and with orange wire guide tubes for welding filler wires of 0.9-1.2 mm (0.035", 0.045" and 0.052"). Kempoweld WIRE 550 is equipped with ball beared orange feed rolls with plain groove and with orange wire guide tubes for welding filler wire of 1.2 mm (0.052")

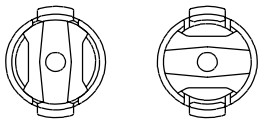
Feed rolls	
colour	filler wire \varnothing mm (inch)
white	0.6 and 0.8 (0.030)
red	0.9/1.0 and 1.2 (0.035, 0.045 and 0.052)
orange	1.2 (0.052)
brown	1.4
yellow	1.4, 1.6 and 2.0 (1/16 and 5/64)
grey	2.0 (5/64)
black	2.4 (3/32)
Guide tubes	
colour	filler wire \varnothing mm (inch)
orange	0.6-1.6 (0.024-1/16)
blue	yli 1.6 (yli 1/16)

5.2. MOUNTING OF MIG WELDING GUN

In order to ensure trouble-free welding check in operation instructions of gun used by you that wire guide tube and contact tip of gun are according to manufacturer's recommendation suitable to be used for wire feed diameter and type in question. Too tight a wire guide tube might cause for wire feeder unit a bigger stress than normally as well as disturbances in wire feed.

Screw snap connector of gun tight that there won't come any voltage losses on connecting surface. Loose connection will heat gun and wire feeder unit. When you are using liquid-cooled gun, mount water hoses according to ASSEMBLY OF KEMPOWELD EQUIPMENT.

5.3. MOUNTING AND LOCKING OF WIRE REEL



LOCKED

OPEN

- Release locking nails of wire reel hub by turning locking knob a quarter round.
- Mount the reel at its place. Note rotating direction of reel!
- Lock the reel with locking knob, locking nails of hub remain to outside position and will lock the reel.



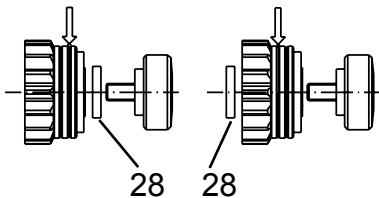
Check that in filler wire reel are no parts sticking out, which could e.g. chafe against chassis or door of wire feeder unit. Dragging parts might expose chassis of wire feeder unit under voltage.

5.4. ACCESSORY DRAWER

In the accessory drawer in the cover part of the power source there are in delivery Teflon guide tubes, needed for welding of aluminium and stainless wires. In the drawer are there also screw and insulation bushings designed for locking of rotation of the wire feeder unit, as well as big gear wheel D40.

5.5. AUTOMATIC WIRE FEED TO GUN

Automatic wire feed in wire feeder unit makes change of wire reel more rapid. In reel change the pressure of feed rolls need not released and filler wire goes automatically to correct wire line.



- Make sure that groove of feed roll match the diameter of welding wire used. Feed roll groove is selected by moving the groove selecting washer (28). Also the selector plate for changing the feed roll groove has to be moved similarly. (see table on page 4).
- Release the wire end from reel and cut off the bent length. Be careful that the wire does not spill from the reel to sides!
- Straighten about 20 cm of the wire and see that the end of it has no sharp edges (file off if necessary). A sharp edge may damage the wire guide tube and contact tip of the welding gun.
- Draw a bit of loose wire from wire reel. Feed wire through back liner to feed rolls. Don't release pressure of feed rolls!
- Press the gun switch and feed a bit wire until wire goes through feed rolls to gun. See that wire is in grooves of both feed roll pairs!
- Press still the gun switch until wire has come through contact tip.

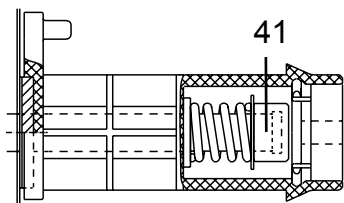
Automatic feed may sometimes fail with thin wires (Fe, Fc, Ss: 0,6...0,8 mm, Al: 0,8...1,0 mm). Then it might be possible that you must open feed rolls and feed wire manually through feed rolls.

5.6. ADJUSTMENT OF PRESSURE

Adjust the pressure of feed rolls with the control screw (20) so that the wire is fed into the wire guide tube evenly and allows a little braking when coming out from the contact tip without slipping at the feed rolls.

⚠ Excessive pressure causes flattening of the filler wire and damage to the coating. It also causes undue wear of the feed rolls as well as friction.

5.7. ADJUSTMENT OF TIGHTNESS OF REEL BRAKE



Brake force is adjusted through hole in locking device of reel hub by screwing the control screw (41) with screwdriver.

Adjust brake force as so big that the wire is not allowed to become too loose on the reel so that it would spill from the reel when the rotation of the reel stops. Need for brake force is increased with increase of wire feed speed. Since the brake loads for its part the motor, you shouldn't keep it unnecessarily tight.

5.8. RETURN CURRENT CABLE

Fasten earthing press of return current cable carefully, preferably direct to welding piece. Contact surface of press always should be as large as possible.

Clean the fastening surface from paint and rust!

Use in your Kempweld equipment copper cables. Too small cross-sectional area might cause overheating of connectors and insulations. Make sure that the welding gun in your use is designed for max. welding current needed by you! Never use a damaged welding gun!

5.9. COOLING UNIT

The cooling unit is built in the power source. All settings and operations needed for cooling are incorporated in the power source. Read in the operation instructions the paragraph COOLING UNIT.

5.10. SHIELD GAS

⚠ Handle gas bottle with care. There is a risk for injury if gas bottle or bottle valve is damaged!

For welding stainless steels, mixed gases are normally used. Check that the gas bottle valve is suitable for the gas. The flow rate is set according to the welding power used in the job. A suitable flow rate is normally 8 - 10 l/min. If the gas flow is not suitable, the welded joint will be sporous. Contact your local Kemppi-dealer for choosing gas and equipment.

5.10.1. Installing gas bottle

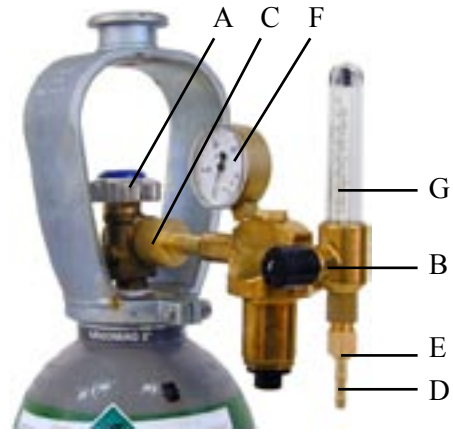
⚠ Always fasten gas bottle properly in vertical position in a special holder on the wall or on a carriage. Remember to close gas bottle valve after having finished welding.

Parts of gas flow regulator

- | | |
|--------------------------|-----------------------------|
| A Gas bottle valve | E Jacket nut |
| B Press regulation screw | F Gas bottle pressure meter |
| C Connecting nut | G Gas hose pressure meter |
| D Hose spindle | |

The following installing instructions are valid for most of the gas flow regulator types:

1. Step aside and open the bottle valve (A) for a while to blow out possible impurities from the bottle valve.
 2. Turn the press regulation screw (B) of the regulator until no spring pressure can be felt.
 3. Close needle valve, if there is one in the regulator.
 4. Install the regulator on bottle valve and tighten connecting nut (C) with a wrench.
 5. Install hose spindle (D) and jacket nut (E) into gas hose and tighten with hose clamp.
 6. Connect the hose with the regulator and the other end with the wire feed unit. Tighten the jacket nut.
 7. Open bottle valve slowly. Gas bottle pressure meter (F) shows the bottle pressure. Note! Do not use the whole contents of the bottle. The bottle should be filled when the bottle pressure is 2 bar.
 8. Open needle valve if there is one in the regulator.
 9. Turn regulation screw (B) until hose pressure meter (G) shows the required flow (or pressure). When regulating flow amount, the power source should be in switched on and the gun switch pressed simultaneously.
- Close bottle valve after having finished welding. If the machine will be out of use for a long time, unscrew the pressure regulation screw.



6. CONTROL PANELS AND ADJUSTMENTS

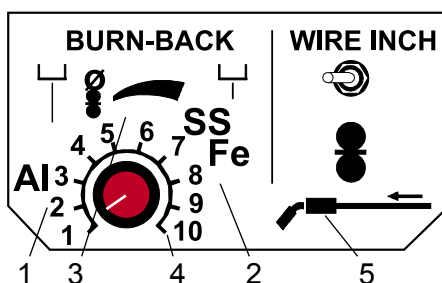
6.1. WIRE FEED SPEED POTENTIOMETER (R1)

The wire feed speed is adjusted steplessly with the potentiometer on the front panel, see the paragraph PANELS. The potentiometer has the memory scale for max. speeds of 18 m/min and 25 m/min.

6.2. BURN BACK TIME

Different filler materials and shielding gases behave in different ways in the welding end, so that you should switch off the welding current with a delay, which is suitable for wire feed stopping according to the welding case. If you try to end welding with an unsuitable burn back time, the wire will burn in the contact tip, there will be too big drop at the wire end, or the wire will stick at the ending point.

Factors influencing on the delay:



1. Melting of aluminium is much quicker than by the other material, so that the burn back time is clearly shorter.
2. Steel and especially filler wires require longer time than the stainless materials.
3. Thicker filler wires require longer time. Also by increase of wire feed speed the required time should be longer. In the instructions label are given points for starting with different materials. The fine-adjustment should be carried out according to each case in question.
4. Memory scale for potentiometer.

Wire inch

5. The wire inch starts the wire feed motor and mechanism, but not the power source. The filler wire can be driven to the feeder unit, gun and interconnection cable also with the welding gun's switch, but then also the power source will get started and the wire becomes live (gets voltage), and this can cause a danger situation by accidental contact to dangerous objects!

6.3. KMW TIMER FUNCTIONS

2 / 4-sequence procedure

The welding with the 2-sequence procedure.

1. Switch pressed: welding starts
2. Switch open: welding stops

The welding with the 4-sequence procedure.

1. Switch pressed: shielding gas is flowing
2. Switch open: welding starts
3. Switch pressed: welding stops
4. Switch open: gas flow stops after the burn back time

Spot, cycle arc and continuous welding (is operating only in the 2-sequence procedure position)

Spot welding ●

1. Set the spot time with the potentiometer R2.
2. The gun switch pressed: welding starts
3. Welding ends automatically after the set time

Cycle arc welding — — — —

1. Set the welding cycle time with the potentiometer R2. The pause time is adjusted automatically.
2. The gun switch: cycle welding is continued for so long as the switch is pressed.

6.4. KMW SYNC

The push-pull gun is most often used for feed of thin aluminium wires, when over 5 m reach is required. You can connect the gun equipped with the EURO adaptor to the KMW sync unit. The push-pull gun's potentiometer is connected to amphenol connector, mounted onto front wall of the wire feeder. You can connect to this connector also some other potentiometer, which has suitable values for it. With the unit's switch you can select the normal operation or the push-pull gun operation. For right connections in the gun, contact your KEMPPPI dealer.

Installation and mounting



In the KMW sync accessories are included the electronics card, switch, protective cap of switch, insulation bushings, fastening screws and cable set.

1. Remove the side plate.
2. Fasten the electronics card with screws and insulation bushings to fastening holes of the wire feeder unit's intermediate wall.
3. Remove protection knob from cover plate by side of gun adaptor on front wall of feeder and its underside cover plate totally.
4. Mount the amphenol connector to lower fastening place and the switch to hole, which has left on the upper cover plate.
5. Connect the connector for wiring from the card to the control card A001 to connector KMW sync, from which you have first removed the jumper piece.
6. Mount the push-pull gun to the feeder adaptor. In order to verify the operation, you can use even an ordinary welding gun.
7. Connect the push-pull gun's connector or a potentiometer, which has been connected on a corresponding way, to the amphenol mounted to the feeder.
8. Test with the switch that the enclosed control is changed according to the enclosed operation description.
9. Fasten the side plate back at its place.

Hanging onto the boom

The lift hook is fastened to the handle on the cover of the feeder. The wire feeder unit's position depends on the hole position.

7. OPERATION DISTURBANCES

The amount of use and the working environment should be taken into consideration when planning the frequency of maintenance of the wire feeder unit. Careful use and preventive maintenance will help to ensure trouble-free operation.

The following maintenance operations should be carried out at least every six months:

Check:

- The wear of the grooves of the feed rolls. Excessive wear of grooves causes problems in wire feed.
- The wear of the wire guide tubes of the wire feeder unit. Badly worn feed rolls and wire guide tubes should be discarded.
- The wire guide tube in the gun should be set as near the feed rolls as possible, but not touching them and the wire must follow a straight line from the end of the tube to the groove of the feed roll.
- Reel brake adjustment.
- Electric connections
 - * Oxidized couplings must be cleaned
 - * Loose couplings must be tightened

Clean dust and dirt from the equipment.

In case of problems contact your Kemppi dealer.

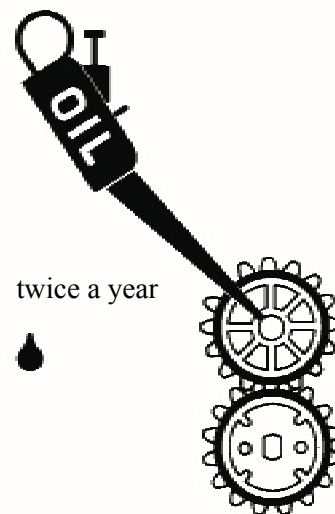
 **When using compressed air, always protect your eyes with proper eye protection.**

7.1. REGULAR MAINTENANCE OF EQUIPMENT

Kemppi service repair shops make regular maintenance according to agreement.

The major points in the maintenance procedure are listed as follows:

- Cleaning of the equipment
- Checking and maintenance of the welding tools
- Checking of connectors, switches and potentiometers
- Checking of electric connections
- Metering units checking
- Checking of mains cable and plug
- Damaged parts or parts in bad connection are replaced by new ones
- Maintenance testing. Operation and performance values of the equipment are checked, and adjusted when necessary by means of test equipment.



7.2. DISPOSAL OF THE MACHINE



Do not dispose of electrical equipment together with normal waste!

In observance of European Directive 2002/96/EC on Waste Electrical and Electronic Equipment and its implementation in accordance with national law, electrical equipment that has reached the end of its life must be collected separately and returned to an environmentally compatible recycling facility. As the owner of the equipment, you should get information on approved collection systems from our local representative.

By applying this European Directive you will improve the environment and human health!

8. TECHNICAL DATA

		WIRE 400	WIRE 550
Working voltage (safety voltage)		30 VAC	30 VAC
Connection power		150 VA	150 VA
Kuormitettavuus (nominal values)	40 % ED	400 A	- - -
	60 % ED	- - -	550 A
	100 % ED	260 A	430 A
Operation principle		4-roll drive	4-roll drive
Diameter of feed roll		32 mm	32 mm
Wire feed speed	I	0...18 m / min	0...18 m / min
	II	0...25 m / min	0...25 m / min
Filler wires	∅ Fe, Ss	0,6...1,2 mm	0,6...2,4 mm
	∅ Filler wire	0,8...1,6 mm	1,0...1,6 mm
	∅ Al	1,0...1,6 mm	1,0...1,6 mm
Wire reel	max. weight	20 kg	20 kg
	max. size	∅ 300 mm	∅ 300 mm
Gun connector		Euro	Euro
Operation temperature range		-20...+40°C	-20...+40°C
Storage temperature range		-40...+60°C	-40...+60°C
Degree of protection		IP 23C	IP 23C
Dimensions	length	570 mm	570 mm
	width	210 mm	210 mm
	height	440 mm	440 mm
Weight		12 kg	13 kg

The products meet conformity requirements for CE-marking.

9. ORDERING NUMBERS

Wire feeder units

Kempoweld WIRE 400.....	621740001
Kempoweld WIRE 550.....	621755001

Units

Kempoweld 3200.....	230/400 V	621532002
Kempoweld 3200W.....	230/400 V	621632002
Kempoweld 4200.....	230 V	6215422
Kempoweld 4200.....	400 V	6215424
Kempoweld 4200W.....	230 V	6216422
Kempoweld 4200W.....	400 V	6216424
Kempoweld 5500W.....	400 V	6216554

Accessories:

KMW timer.....	6219200
KMW sync 2.....	6219150
MSD-1.....	6185666
Hub for wheel reel.....	4289880
Branche cable KMP/Kempoweld.....	3151360

MIG guns

Air-cooled:

MMT 32.....	3 m.....	6253213MMT
MMT 32.....	4,5 m.....	6253214MMT
MMT 35.....	3 m.....	6253513MMT
MMT 35.....	4,5 m.....	6253514MMT
WS 35 (Al 1.2).....	6 m.....	6253516A12
WS 35 (SS 1.0).....	6 m.....	6253516S10
MMT 42.....	3 m.....	6254213MMT
MMT 42.....	4,5 m.....	6254214MMT
KMP 300.....	6 m.....	6257306
KMP 300.....	10 m.....	6257310

Liquid-cooled:

MMT 30W.....	3 m.....	6253043MMT
MMT 30W.....	4,5 m.....	6253044MMT
MMT 42W.....	3 m.....	6254203MMT
MMT 42W.....	4,5 m.....	6254204MMT
MMT 52W.....	3 m.....	6255203MMT
MMT 52W.....	4,5 m.....	6255204MMT
MT 51W.....	3 m.....	6255046
MT 51W.....	4,5 m.....	6255047
KMP 400W.....	6 m.....	6257406
KMP 400W.....	10 m.....	6257410
WS 30W (Al 1.2-1.6).....	6 m.....	6253046A12
WS 30W (SS 1.0).....	6 m.....	6253046S10
WS 30W (SS 1.2).....	6 m.....	6253046S12
WS 30W (Al 1.2-1.6).....	8 m.....	6253048A12
WS 30W (SS 1.0).....	8 m.....	6253048S10
WS 30W (SS 1.2).....	8 m.....	6253048S12
WS 42W (Al 1.2-1.6).....	6 m.....	6254206A12

WS 42W (SS 1.0).....	6 m.....	6254206S10
WS 42W (SS 1.2).....	6 m.....	6254206S12
WS 42W (Al 1.2-1.6).....	8 m.....	6254208A12
WS 42W (SS 1.0).....	8 m.....	6254208S10
WS 42W (SS 1.2).....	8 m.....	6254208S12

Air-cooled interconnection cables

Mounting cables for short distance:

KW 50-1.3-K.....	6260350
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Interconnection cables for long distance:

Multimig 50-5-K.....	6260104
Multimig 50-10-K.....	6260106
Multimig 50-5-KH.....	626010401
Multimig 50-10-KH.....	626010601

Liquid-cooled interconnection cables

Mounting cables for short distance:

KW 50-1.5-W.....	6260352
KW 95-1.5-W.....	6260391

Interconnection cables for long distance:

KW 50-5-W.....	6260354
KW 50-10-W.....	6260356
KW 50-5-WH.....	626035401
KW 50-10-WH.....	626035601
KW 95-5-WH.....	6260393
KW 95-10-WH.....	6260394

Return current cable

5 m - 50 mm ² (part 7).....	6184511
5 m - 95 mm ² (part 7).....	6184921

10. TERMS OF GUARANTEE

Kemppi Oy provides a guarantee for products manufactured and sold by them if defects in manufacture and materials occur. Guarantee repairs must be carried out only by an Authorised Kemppi Service Agent. Packing, freight and insurance costs to be paid by orderer. The guarantee is effected on the date of purchase. Verbal promises which do not comply with the terms of guarantee are not binding on guarantor.

Limitations on guarantee

The following conditions are not covered under the terms of guarantee: defects due to natural wear and tear, non-compliance with operating and maintenance instructions, connection to incorrect or faulty supply voltage (including voltage surges outside equipment spec.), incorrect gas pressure, overloading, transport or storage damage, fire or damage due to natural causes i.e. lightning or flooding.

This guarantee does not cover direct or indirect travelling costs, daily allowances or accommodation. Note: Under the terms of guarantee, welding torches and their consumables, feeder drive rolls and feeder guide tubes are not covered. Direct or indirect damage due to a defective product is not covered under the guarantee. The guarantee is void if changes are made to the product without approval of the manufacturer, or if repairs are carried out using non-approved spare parts.

The guarantee is also void if repairs are carried out by non-authorized agents.

Undertaking guarantee repairs

Guarantee defects must be informed to Kemppi or authorised Kemppi Service Agents within the guarantee period. Before any guarantee work is undertaken, the customer must provide proof of guarantee or proof of purchase, and serial number of the equipment in order to validate the guarantee. The parts replaced under the terms of guarantee remain the property of Kemppi.

Following the guarantee repair, the guarantee of the machine or equipment, repaired or replaced, will be continued to the end of the original guarantee period.

KEMPPi OY
PL 13
FIN – 15801 LAHTI
FINLAND
Tel (03) 899 11
Telefax (03) 899 428
www.kemppi.com

KEMPPiKONEET OY
PL 13
FIN – 15801 LAHTI
FINLAND
Tel (03) 899 11
Telefax (03) 7348 398
e-mail: myynti.fi@kemppi.com

KEMPPi SVERIGE AB
Box 717
S – 194 27 UPPLANDS VÄSBY
SVERIGE
Tel (08) 59 078 300
Telefax (08) 59 082 394
e-mail: sales.se@kemppi.com

KEMPPi NORGE A/S
Postboks 2151, Postterminalen
N – 3103 TØNSBERG
NORGE
Tel 33 34 60 00
Telefax 33 34 60 10
e-mail: sales.no@kemppi.com

KEMPPi DANMARK A/S
Literbuen 11
DK – 2740 SKOVLUNDE
DANMARK
Tel 44 941 677
Telefax 44 941 536
e-mail:sales.dk@kemppi.com

KEMPPi BENELUX B.V.
Postbus 5603
NL – 4801 EA BREDA
NEDERLAND
Tel (076) 5717 750
Telefax (076) 5716 345
e-mail: sales.nl@kemppi.com

KEMPPi (UK) Ltd
Martti Kemppi Building
Fraser Road
Priory Business Park
BEDFORD, MK443WH
ENGLAND
Tel 0845 6444201
Fax 0845 6444202
e-mail: sales.uk@kemppi.com

KEMPPi FRANCE S.A.
S.A. au capital de 5 000 000 F.
65 Avenue de la Couronne des Prés
78681 EPONE CEDEX
FRANCE
Tel (01) 30 90 04 40
Telefax (01) 30 90 04 45
e-mail: sales.fr@kemppi.com

KEMPPi GmbH
Otto – Hahn – Straße 14
D – 35510 BUTZBACH
DEUTSCHLAND
Tel (06033) 88 020
Telefax (06033) 72 528
e-mail:sales.de@kemppi.com

KEMPPi SP. z o.o.
Ul. Piłsudskiego 2
05-091 ZĄBKl
Poland
Tel +48 22 781 6162
Telefax +48 22 781 6505
e-mail: info.pl@kemppi.com

KEMPPi WELDING
MACHINES AUSTRALIA PTY LTD
P.O. Box 404 (2/58 Lancaster Street)
Ingleburn NSW 2565, Australia
Tel. +61-2-9605 9500
Telefax +61-2-9605 5999
e-mail: info@kemppi.com.au