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## **GB** Operating instructions

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### **TIG welding torch**

TIG 17 G

TIG 26 G

TIG 150 G

TIG 200 G



**N. B. These operating instructions must be read before commissioning.**  
**Failure to do so may be dangerous.**

**Machines may only be operated by personnel who are familiar with the appropriate safety regulations.**



**The machines bear the conformity mark and thus comply with the**

- EC Low Voltage Directive (2006/95/ EG)
- EC EMC Directive (2004/108/ EG)



**The content of the operating instructions does not constitute grounds for any claims on the part of the buyer.**

**The copyright to these operating instructions remains with the manufacturer.**

Reprinting, including extracts, only with written approval.

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## 2 Safety instructions

### 2.1 Notes on the use of these operating instructions

These operating instructions are arranged into chapters.

For ease of navigation, there are also occasional symbols for especially important text passages on the edge of the pages in addition to sub-headings.



#### Technical features which users must observe.

The **safety instructions** are categorised as follows according to importance:

#### CAUTION

**Working and operating procedures which must be followed precisely to avoid damaging or destroying the product.**

- The safety information includes the "CAUTION" keyword in its heading without a general warning symbol.
- The hazard is explained using a symbol at the edge of the page.



#### CAUTION

**Working or operating procedures which must be closely observed to prevent possible minor personal injury.**

- The safety information includes the "CAUTION" keyword in its heading with a general warning symbol.
- The risk is explained using a symbol on the edge of the page.



#### CAUTION

**Working or operating procedures which must be closely observed to prevent serious personal injury.**

- The safety information includes the "WARNING" keyword in its heading with a general warning symbol.
- The risk is also explained using a symbol on the edge of the page.



#### DANGER

**Working or operating procedures which must be closely observed to prevent serious personal injury.**

- The safety information includes the "DANGER" keyword in its heading with a general warning symbol.
- The risk is also explained using a symbol on the edge of the page.

Instructions and lists detailing step-by-step actions in given situations can be recognised by bullet points, e.g.:

- Insert the welding current lead socket into the relevant socket and lock.

Symbol	Description
	Press
	Do not press
	Turn
	Switch

## 2.2 General

### CAUTION



#### Obligations of the operator!

**In the European Economic Area (EEA), the relevant national version of the basic guidelines must be followed and observed!**

- National version of the basic guidelines (89/391/EEC) as well as the relevant individual guidelines.
- In particular the Directive (89/655/EEC) on the minimum regulations for safety and health protection when staff members are using equipment during work.
- The accident prevention regulations of the relevant country (e.g. in Germany, BGV D 1).
- Check at regular intervals that users are working in a safety-conscious way!



**We can only guarantee the perfect functioning of our products when used with system components and options from our own range of products!**



#### Trained personnel!

**Commissioning is reserved for persons who have the relevant expertise of working with arc welding machines.**



### CAUTION



#### Noise exposure!

**Noise exceeding 70 dBA can cause permanent hearing damage!**

- Wear suitable ear protection!
- Persons located within the working area must wear suitable ear protection!



### CAUTION



**Risk of accidents if these safety instructions are not observed!**

**Non-observance of these safety instructions is potentially fatal!**

- Carefully read the safety information in this manual!
- Observe the accident prevention regulations in your country.
- Inform persons in the working area that they must observe the regulations!



#### Fire hazard!

**Flames may arise as a result of the high temperatures, stray sparks, glowing-hot parts and hot slag produced during the welding process.**

**Stray welding currents can also result in flames forming!**

- Check for fire hazards in the working area!
- Do not carry any easily flammable objects such as matches or lighters.
- Keep appropriate fire extinguishing equipment to hand in the working area!
- Thoroughly remove any residue of flammable substances from the workpiece before starting welding.
- Only continue work on welded workpieces once they have cooled down.  
Do not allow to come into contact with flammable material!
- Connect welding leads correctly!



**Risk of injury due to radiation or heat!**

**Arc radiation results in injury to skin and eyes.**

**Contact with hot workpieces and sparks results in burns.**

- Wear dry protective clothing (e.g. welding shield, gloves, etc.) according to the relevant regulations in the country in question!
- Protect persons not involved in the work against arc beams and the risk of glare using safety curtains!

 **DANGER**



**Electric shock!**

**Welding machines use high voltages which can result in potentially fatal electric shocks and burns on contact. Even low voltages can cause you to get a shock and lead to accidents.**

- Do not touch any live parts in or on the machine!
- Connection cables and leads must be free of faults!
- Switching off alone is not sufficient! Wait for 2 minutes until the capacitors have discharged.
- Place welding torch and stick electrode holder on an insulated surface!
- The unit should only be opened by specialist staff after the mains plug has been unplugged!
- Only wear dry protective clothing!



**Electromagnetic fields!**

**The power source may cause electrical or electromagnetic fields to be produced which could affect the correct functioning of electronic equipment such as IT, CAD devices, telecommunication lines, power cables, signal lines and pacemakers.**

- Observe the maintenance instructions! (see Maintenance and Testing chapter)
- Unwind welding lines completely!
- Shield devices or equipment sensitive to radiation accordingly!
- The correct functioning of pacemakers may be affected (obtain advice from a health professional if necessary).



**Validity of this document!**

**This document describes an accessory and is only valid in combination with the operating instructions for the power source being used (welding machine)!**

- Read the operating instructions, in particular the safety instructions for the power source (welding machine)!



**Proper usage!**

**The machine has been manufactured according to the latest developments in technology and current regulations and standards. It is to be operated only for the use for which it was designed (see chapter Commissioning/Area of application). If the machine is not used properly, danger may be caused to persons, animals and material objects due to this machine.**

- The machine must only be used in line with proper usage and by trained or expert staff!
- No improper or conversion work is not permitted!

## 2.3 Transport and installation

 **CAUTION**



**Damage due to supply lines not being disconnected!**

**During transport, supply lines which have not been disconnected (mains supply leads, control leads, etc.) may cause hazards such as connected equipment tipping over and injuring persons!**

- Disconnect supply lines!

### 2.3.1 Scope of delivery

The delivery is checked and packaged carefully before dispatch, however it is not possible to exclude the possibility of damage during transit.

**Receiving inspection**

- Check that the delivery is complete using the delivery note!

**In the event of damage to the packaging**

- Check the delivery for damage (visual inspection)!

**In the event of complaints**

If the delivery has been damaged during transport:

- Please contact the last haulier immediately!
- Keep the packaging (for possible checking by the haulier or for the return shipment).

**Packaging for returns**

If possible, please use the original packaging and the original packaging material. If you have any queries on packaging and protection during transport, please contact your supplier.

## 2.4 Ambient conditions

### CAUTION



**Equipment damage due to dirt accumulation!**

**Unusually high quantities of dust, acid, corrosive gases or substances may damage the equipment.**

- Avoid high volumes of smoke, vapour, oil vapour and grinding dust!
- Avoid ambient air containing salt (sea air)!

### 2.4.1 In operation

**Temperature range of the ambient air:**

- -10 °C to +40 °C

**Relative air humidity:**

- Up to 50% at 40 °C
- Up to 90% at 20 °C

### 2.4.2 Transport and storage

**Storage in an enclosed space, temperature range of the ambient air:**

- -25 °C to +55 °C

**Relative air humidity**

- Up to 90% at 20 °C

## 2.5 Proper usage



**Proper usage!**

**The machine has been manufactured according to the latest developments in technology and current regulations and standards. It is to be operated only for the use for which it was designed (see chapter Commissioning/Area of application). If the machine is not used properly, danger may be caused to persons, animals and material objects due to this machine.**

- The machine must only be used in line with proper usage and by trained or expert staff!
- No improper or conversion work is not permitted!

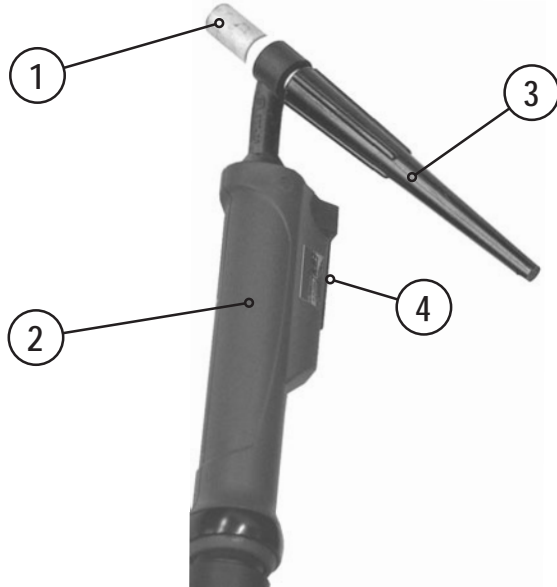
### 3 Technical data

Type	TIG 17	TIG 26	TIG 150	TIG 200
Poling of the electrode with DC	normally negative			
Operation type	hand-controlled			
Duty cycle	35 %			
Voltage measurement	113 V peak value			
Max. arc ignition and stabilisation voltage	12kV			
Switching voltage key button	0.02–42 V			
Switching current key button	0.01–100 mA			
Switching output key button	max. 1 W (ohmic load)			
Voltage type	DC direct voltage or AC alternating voltage			
Electrode types	standard Tungsten electrodes			
Ambient temperature	-10 °C to +40 °C			
Protection classification of the machine-side connections (EN 60529)	IP3X	IP2X	IP3X	IP3X
Shielding gas	Shielding gas DIN EN 439			
Gas flow	10 to 20 l/min			
Maximum welding current (DC/AC)	140 A/100 A	180 A/130 A	150 A/105 A with gas nozzle, long	200 A/140 A
Tube package	4, 8 or 12 m			
Tungsten electrodes	0.5–2.4 mm	0.5–4.0 mm	1.0–2.4 mm	1.6–3.2 mm
Connection	Welding torch central connection			
Constructed to standard	DIN EN 60974-7			

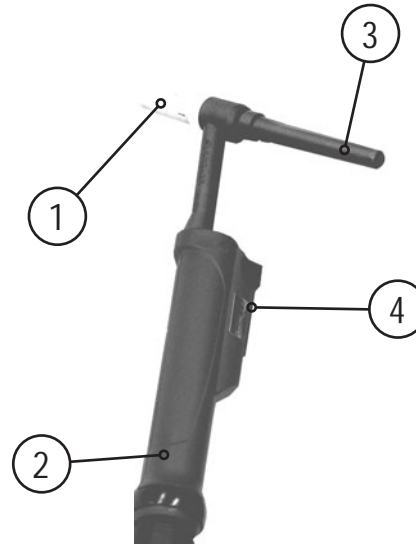
## 4 Machine description

The TIG torches are available in different model versions. The up/down and Retox versions add extra operating elements to the torches (see Function specification chapter).

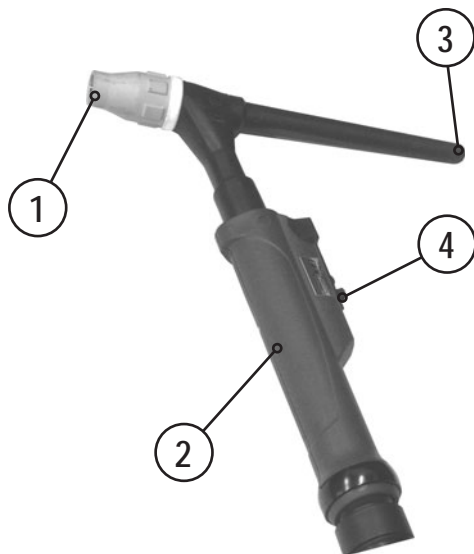
### 4.1 TIG 17, TIG 26, TIG 150, TIG 200



TIG 17, TIG 26, TIG 150, TIG 200



TIG 26 Up/Down, TIG 150 Up/Down, TIG 200 Up/Down



TIG 150 Retox, TIG 200 Retox

Figure 4-1

Item	Symbol	Description
1		Gas nozzle
2		Grip plate
3		Torch cap
4		Operating elements



## 4.2 Connection variants

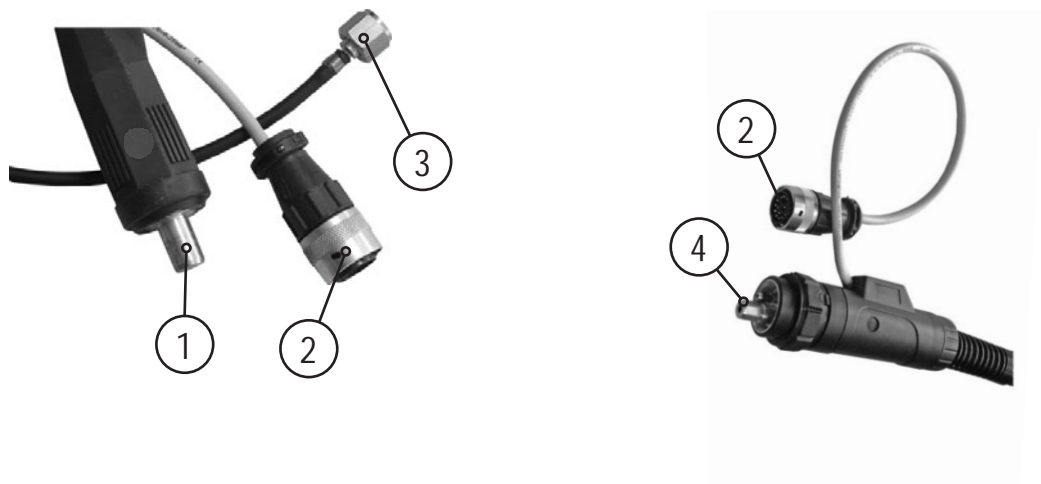


Figure 4-2

Item	Symbol	Description
1		Welding torch decentral connection
2		Control lead cable plug
3		Gas connection
4		Welding torch central connection

## 5 Commissioning

### 5.1 General

#### CAUTION



**Risk of burns on the welding current connection!**

**If the welding current connections are not locked, connections and leads heat up and can cause burns, if touched!**

- Check the welding current connections every day and lock by turning in clockwise direction, if necessary.

#### CAUTION



**Hazards due to electrical current!**

**This equipment works using high electrical currents!**

- Observe the safety instructions "For your safety" on the opening pages!
- Only connect connection or welding leads (e.g. electrode holders, welding torches, workpiece lead, interfaces) when the equipment is switched off.

### 5.2 Area of application – proper usage

The welding machines are only suitable for:

- TIG welding

## 5.3 Equipping the torch

### 5.3.1 TIG 17, 26

 Equipping the torch using the example of the TIG 17 torch. Procedure is similar for other models as appropriate.

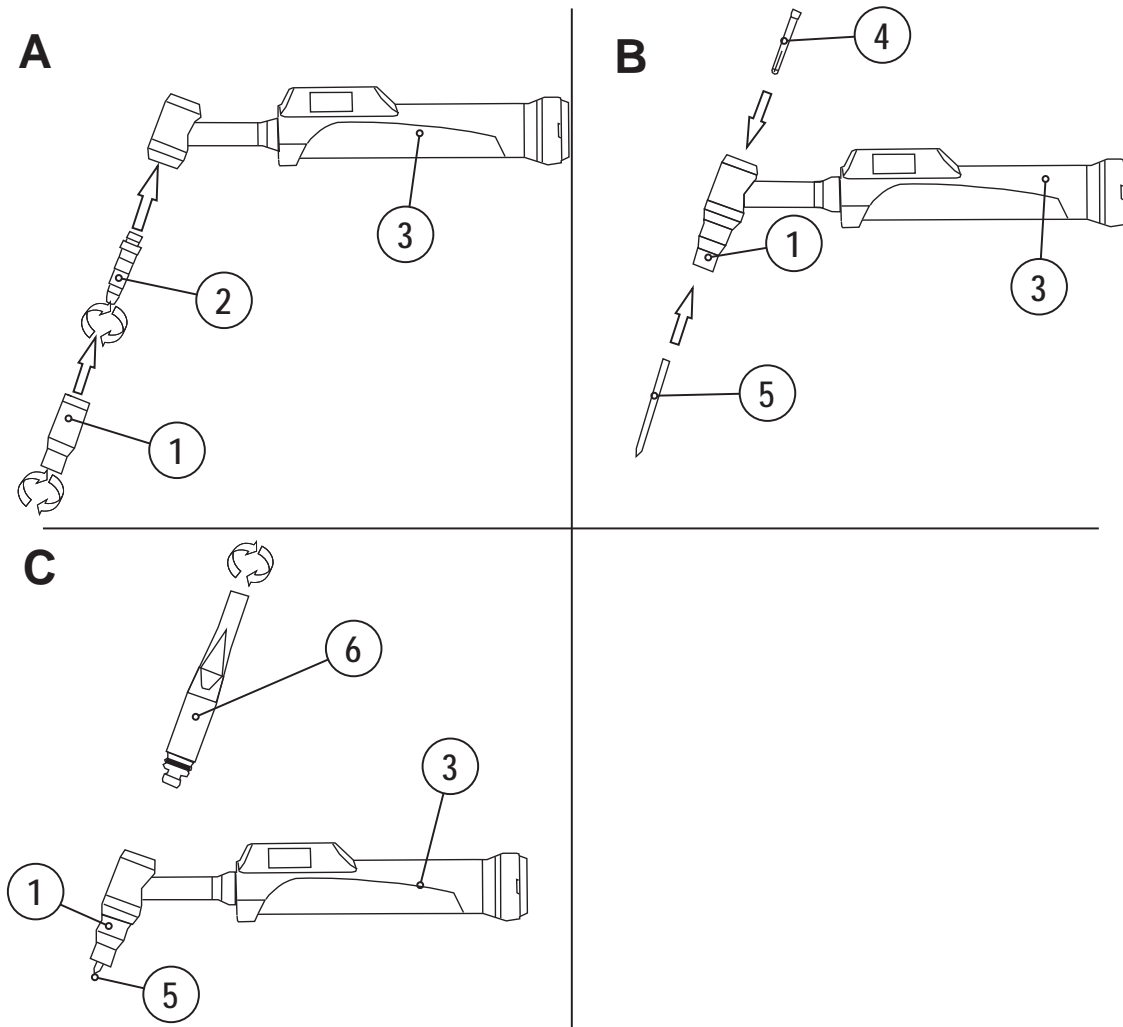


Figure 5-1

Item	Symbol	Description
1		Gas nozzle
2		Collet casing
3		Torch body
4		Collet
5		Electrode
6		Torch cap

**5.3.2 TIG 150, 200**



Torches TIG 150 and TIG 200 can be fitted either with an electrode holder or gas diffuser. The design of a gas diffuser means that it generates a laminar gas flow which is suitable for open air welding in particular.

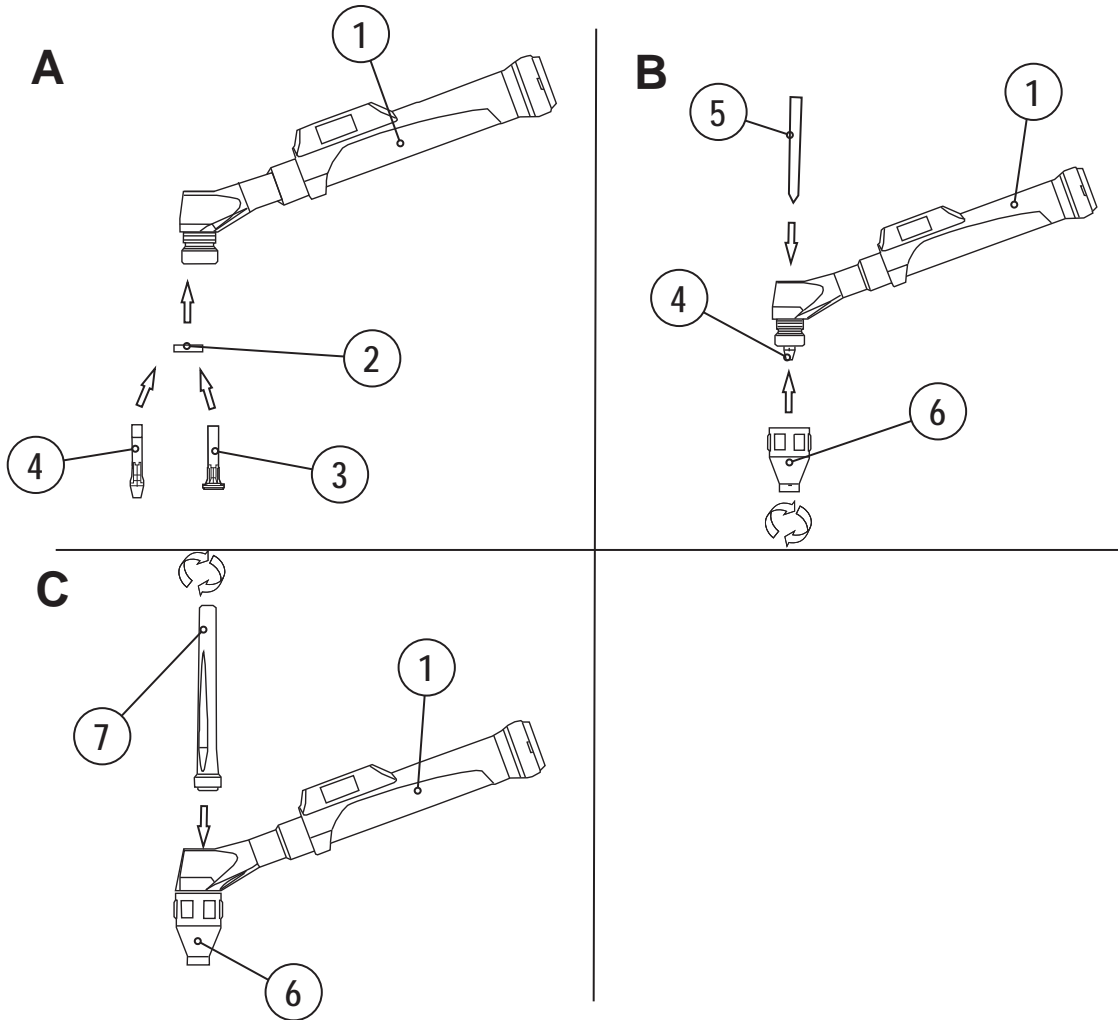


Figure 5-2

Item	Symbol	Description
1		Torch body
2		Insulation
3		Gas diffuser
4		Electrode holder
5		Electrode
6		Gas nozzle
7		Torch cap

## 6 Functional characteristics

### 6.1 General

TIG welding torches are connected to the power source via the tube package. The following run via the tube package:

- the welding current lead,
- the shielding gas supply and
- the control lead.

With liquid-cooled TIG welding torches, the lines for the

- coolant supply and
- coolant return

also run through the tube package.

The welding filler is generally added by hand in the form of rods during TIG welding. In fully automated machines, the welding filler is fed in as wire via a separate feed unit.

### 6.2 TIG torch

TIG torches are equipped with a rocker switch. The rocker switch can be used to

- switch the main current on and off, and
- reduce the current to a secondary current during welding.

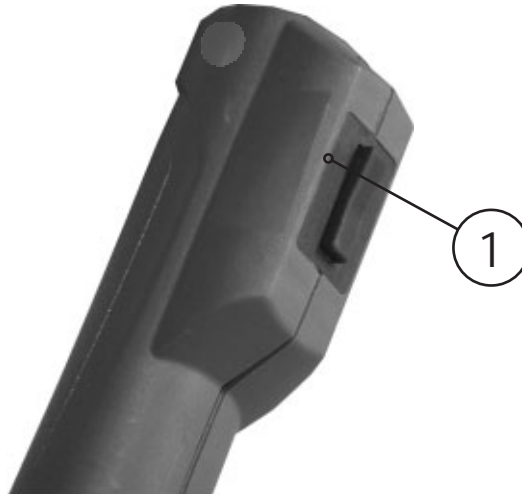


Figure 6-1

Item	Symbol	Description
1		Rocker

### 6.3 TIG Up/Down torch

TIG up/down torches are equipped with two rocker switches. The rocker switches can be used to

- switch the main current on and off,
- reduce to a secondary current by tapping,
- increase the welding current infinitely during the welding process (UP function) or
- infinitely reduce the current (DOWN function).

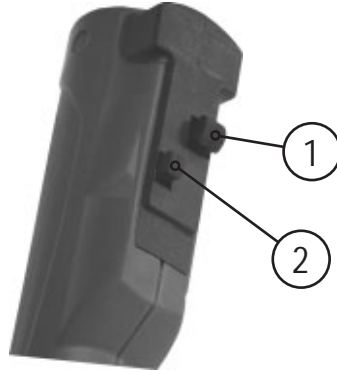
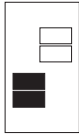
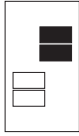


Figure 6-2

Item	Symbol	Description
1		Rocker switch
2		Rocker switch

## 6.4 TIG Retox torch

RETOX torches have two rocker switches in addition to a display. The assignment of the individual operating elements with functions may differ from the welding machine being used.

In most cases,

- the left rocker switch can be used to switch the welding current on and off,
- the right rocker switch can be used to reduce the welding current infinitely (DOWN function) or increase it (UP function).

In addition to these functions, RETOX torches can also be used to call up JOBs made available by the welding machine.

Depending on the function set on the welding machine, the display on a RETOX torch shows the

- welding current set or
- the JOB number selected.



Figure 6-3

Item	Symbol	Description
1		Rocker switch
2		Rocker switch
3		Display



More detailed information can be found in the relevant operating instructions for the power source.

## 7 Maintenance and testing

### CAUTION



The following work must always be carried out with the power source switched off.

### 7.1 Daily maintenance tasks

- Check torch, tube package and power connections for exterior damage and replace if available or have repaired by specialist staff!
- Check that all gas and water connections are securely sealed.
- Check that the cooling equipment on the torch, and where applicable the power source cooling, is functioning correctly.
- Check the coolant level. Top up deionised coolant if necessary.
- Check the replaceable parts in the torch, including the gas lens and gas nozzle seal.
- For torches with cold wire feed:  
Check the cold wire supply nozzle and adjusting nut on the cold wire supply tube.

### 7.2 Monthly maintenance tasks

- Check for filter impurities in the coolant system.  
If necessary, replace the filter insert; do not clean.
- Check the coolant container for sludge deposits and check the coolant for cloudiness.  
Clean the coolant container if contaminated, and replace the coolant!  
Observe the prescribed coolant quality on the cooling system!
- Check the electrical conductance of the coolant; replace the coolant if it is conductive.
- If the coolant is dirty, rinse through the torch alternately several times with fresh coolant using the coolant return and supply.
- Disassemble, check and clean the plasma welding torch and the electrode clamping module.  
Deposits in the torch can cause high frequency shocks and consequently cause damage to the torch.
- Check the O-rings in the clamping cap and in the collet casing, and in the gas and water nipples on the torch.  
Replace faulty O-rings. Grease new O-rings with silicone grease or Vaseline

### 7.3 Repair Work

#### CAUTION



**Repairs may only be carried out by authorised specialist staff!**

**Do not remove the torch from the tube package!**

**Never clamp the torch body in a vice or similar, as this can cause the torch to be irreparably destroyed!**

If damage occurs to the torch or to the tube package which cannot be corrected as part of the maintenance work, the entire torch must be returned to the manufacturer.

### 7.4 Disposing of equipment

This product has been manufactured from metallic materials and plastics. Almost all of the metal can be re-used by separating it from the plastics. The identification of the plastics means that they can be sorted and ultimately recycled.

The transport packaging has been reduced to the absolute essentials. The packaging materials have been selected for maximum recyclability.

## 8 Operating problems, causes and remedies

All products are subject to rigorous production checks and final checks. If, despite this, something fails to work at any time, please check the product using the following flowchart. If none of the fault rectification procedures described leads to the correct functioning of the product, please inform your authorised dealer.

### 8.1 Customer checklist

Error	Cause	Remedy
Torch gets too hot.	<ul style="list-style-type: none"> <li>• Collet/gas nozzle not secured correctly.</li> </ul>	<ul style="list-style-type: none"> <li>• Check and tighten!</li> </ul>
	<ul style="list-style-type: none"> <li>• Power connections on torch side and to workpiece are loose.</li> </ul>	
	<ul style="list-style-type: none"> <li>• Insufficient coolant flow.</li> </ul>	<ul style="list-style-type: none"> <li>• Check cooling system!</li> </ul>
No key function.	<ul style="list-style-type: none"> <li>• Control lead broken/faulty.</li> </ul>	<ul style="list-style-type: none"> <li>• Check/repair!</li> </ul>
	<ul style="list-style-type: none"> <li>• Flow monitor in circulation cooling unit has been triggered.</li> </ul>	<ul style="list-style-type: none"> <li>• Check coolant level and top up if necessary!</li> </ul>
Arc between gas nozzle and workpiece.	<ul style="list-style-type: none"> <li>• Spatter bridge between collet and gas nozzle.</li> </ul>	<ul style="list-style-type: none"> <li>• Clean inside of gas nozzle!</li> </ul>
Unstable arc.	<ul style="list-style-type: none"> <li>• Change the properties of the Tungsten electrode which may occur with alloy deposits due to contact with the workpiece material or the filler material.</li> </ul>	<ul style="list-style-type: none"> <li>• Re-grind or replace the Tungsten electrode.</li> </ul>
	<ul style="list-style-type: none"> <li>• Incorrect welding parameters set.</li> </ul>	<ul style="list-style-type: none"> <li>• Correct welding parameters!</li> </ul>
Pore formation.	<ul style="list-style-type: none"> <li>• Significant spatter formation in the gas nozzle.</li> </ul>	<ul style="list-style-type: none"> <li>• Clean gas nozzle!</li> </ul>
	<ul style="list-style-type: none"> <li>• Insufficient or missing gas cover.</li> </ul>	<ul style="list-style-type: none"> <li>• Check gas cylinder contents and pressure setting!</li> </ul>
	<ul style="list-style-type: none"> <li>• Draft is blowing away shielding gas.</li> </ul>	<ul style="list-style-type: none"> <li>• Shield place of welding work using safety walls!</li> </ul>



## 9 Warranty

### 1-year warranty

Regardless of statutory warranty rights and based on our General Terms and Conditions, EWM HIGHTEC WELDING GmbH provides a 1-year warranty for its product starting from the date of purchase. Different warranty periods apply to accessories and spare parts. Parts subject to wear are naturally exempt from the warranty.

EWM guarantees the error-free condition of the products in terms of materials and processing. If the product proves to be defective in terms of materials or processing within the warranty period, you have the right to free repair or to replacement by an appropriate product, at our discretion. On receipt by EWM the returned product becomes the property of EWM.

### Condition

The prerequisite for providing the full warranty is operating the products in accordance with the EWM operating instructions observing the relevant legal recommendations and guidelines. This is because only machines that are maintained regularly function correctly in the long term.

### Making a claim

When making a claim under the warranty, please contact only your authorised EWM sales partner.

### Exclusion of warranty

The warranty does not apply to products that are damaged due to accidents, misuse, improper operation, incorrect installation, use of force, disregard of the specifications and operating instructions, inadequate maintenance (see chapter "Maintenance and Care"), exterior influences, acts of God or personal misfortunes. Furthermore, it is not valid in the case of improper changes, repairs or modifications. In addition, a claim for warranty does not exist in the case of partially or completely dismantled products and interventions by persons who are not authorised by EWM, as well as in the case of normal wear.

### Limitation

All claims regarding fulfilment or non-fulfilment on the part of EWM from this declaration in connection with this product are limited as follows to the replacement of the actual damages. EWM's liability stemming from this declaration in connection with this product is fundamentally limited to the amount that the purchaser originally paid for the original purchase. This limitation does not apply to personal injuries or damage to property caused by negligent behaviour on the part of EWM. In no way will EWM be responsible for lost profits, indirect or subsequent damage. EWM is not liable for damages based on the claims of third parties.

### Place of jurisdiction

If the person making the claim is a business person, the sole place of jurisdiction for all disputes resulting directly or indirectly from the contractual relationship shall be the headquarters or the branch office of the supplier, at the discretion of the supplier. The purchaser gains ownership of the products supplied as replacements within the framework of the warranty adjustment at the time of the exchange.

## 10 Replaceable parts

### 10.1 TIG 17

Type	Designation	Item no.
TORCH CAP LONG	Torch cap	094-001114-00000
TORCH CAP SHORT	Torch cap	094-001120-00000
O-RING 9X1	O-ring	094-001313-00000
COLLET D0.5 L50.0	Collet	094-001308-00000
COLLET D1.0 L50.0	Collet	094-001309-00000
COLLET D1.2 L50.0	Collet	094-001310-00000
COLLET D1.6 L50.0	Collet	094-000931-00000
COLLET D2.0 L50.0	Collet	094-001311-00000
COLLET D2.4 L50.0	Collet	094-000932-00000
GASKET RING 17-18-26	Conical nipple	094-001306-00000
Insulation	Insulator ring	094-001307-00000
Insulation	Insulation, Teflon for large gas lens	094-001194-00000
COLLET BODY D0.5-1.2	Collet casing	094-001314-00000
COLLET BODY D1.6	Collet casing	094-000936-00000
COLLET BODY D2.0-2.4	Collet casing	094-000937-00000
COLLET BODY GASL D1.0	Collet casing	094-001324-00000
COLLET BODY GASL D1.6	Collet casing	094-001325-00000
COLLET BODY GASL D2.4	Collet casing	094-001192-00000
GASNOZZ4 D6.5 L47.0	Gas nozzle, ceramic	094-001316-00000
GASNOZZ5 D8.0 L47.0	Gas nozzle, ceramic	094-000926-00000
GASNOZZ6 D9.5 L47.0	Gas nozzle, ceramic	094-001317-00000
GASNOZZ7 D11.0 L47.0	Gas nozzle, ceramic	094-000927-00000
GASNOZZ8 D12.5 L47.0	Gas nozzle, ceramic	094-000929-00000
GASNOZZ10 D16.0 L47.0	Gas nozzle, ceramic	094-001318-00000
GASNOZZ12 D19.5 L47.0	Gas nozzle, ceramic	094-001319-00000
GASNOZZ4 GL D6.5 L42.0	Gas nozzle, ceramic	094-001320-00000
GASNOZZ5 GL D8.0 L42.0	Gas nozzle, ceramic	094-001321-00000
GASNOZZ6 GL D9.5 L42.0	Gas nozzle, ceramic	094-001322-00000
GASNOZZ7 GL D11.0 L42.0	Gas nozzle, ceramic	094-001195-00000
GASNOZZ8 GL D12.5 L42.0	Gas nozzle, ceramic	094-001196-00000

**10.2 TIG 26**

Type	Designation	Item no.
TORCH CAP LONG	Torch cap	094-001114-00000
TORCH CAP SHORT	Torch cap	094-001120-00000
O-RING 9X1	O-ring	094-001313-00000
GASKET RING 17-18-26	Conical nipple	094-001306-00000
COLLET D0.5 L50.0	Collet	094-001308-00000
COLLET D1.0 L50.0	Collet	094-001309-00000
COLLET D1.2 L50.0	Collet	094-001310-00000
COLLET D1.6 L50.0	Collet	094-000931-00000
COLLET D2.0 L50.0	Collet	094-001311-00000
COLLET D2.4 L50.0	Collet	094-000932-00000
COLLET D3.2 L50.0	Collet	094-000935-00000
COLLET D4.0 L50.0	Collet	094-001312-00000
Insulation	Insulator ring	094-001307-00000
Insulation	Insulation, Teflon for large gas lens	094-001194-00000
COLLET BODY D0.5-1.2	Collet casing	094-001314-00000
COLLET BODY D1.6	Collet casing	094-000936-00000
COLLET BODY D2.0-2.4	Collet casing	094-000937-00000
COLLET BODY D3.2	Collet casing	094-000940-00000
COLLET BODY D4.0	Collet casing	094-001315-00000
COLLET BODY GASL D1.0	Collet casing	094-001324-00000
COLLET BODY GASL D1.6	Collet casing	094-001325-00000
COLLET BODY GASL D2.4	Collet casing	094-001192-00000
COLLET BODY GASL D3.2	Collet casing	094-001193-00000
COLLET BODY GASL D4.0	Collet casing	094-001326-00000
GASNOZZ4 D6.5 L47.0	Gas nozzle, ceramic	094-001316-00000
GASNOZZ5 D8.0 L47.0	Gas nozzle, ceramic	094-000926-00000
GASNOZZ6 D9.5 L47.0	Gas nozzle, ceramic	094-001317-00000
GASNOZZ7 D11.0 L47.0	Gas nozzle, ceramic	094-000927-00000
GASNOZZ8 D12.5 L47.0	Gas nozzle, ceramic	094-000929-00000
GASNOZZ10 D16.0 L47.0	Gas nozzle, ceramic	094-001318-00000
GASNOZZ12 D19.5 L47.0	Gas nozzle, ceramic	094-001319-00000
GASNOZZ4 GL D6.5 L42.0	Gas nozzle, ceramic	094-001320-00000
GASNOZZ5 GL D8.0 L42.0	Gas nozzle, ceramic	094-001321-00000
GASNOZZ6 GL D9.5 L42.0	Gas nozzle, ceramic	094-001322-00000
GASNOZZ7 GL D11.0 L42.0	Gas nozzle, ceramic	094-001195-00000
GASNOZZ8 GL D12.5 L42.0	Gas nozzle, ceramic	094-001196-00000
GASNOZZ12 GASL D19.5 L42.0	Gas nozzle, ceramic	094-001323-00000

## 10.3 TIG 150

Type	Designation	Item no.
TIG 150/260W S	Torch cap	094-011752-00000
TIG 150/260W M	Torch cap	094-011753-00000
TIG 150/260W L	Torch cap	094-011754-00000
WE-D1.6MM	Gas lens	094-009658-00000
WE-D2.4MM	Gas lens	094-009659-00000
WE-D3.2MM	Gas lens	094-009660-00000
48MM NW12.5MM	Gas nozzle, ceramic	094-009663-00000
48MM NW16.0MM	Gas nozzle, ceramic	094-009664-00000
48MM NW19.5MM	Gas nozzle, ceramic	094-009665-00000
TIG 150/260W S	Torch cap	094-011752-00000
TIG 150/260W M	Torch cap	094-011753-00000
TIG 150/260W L	Torch cap	094-011754-00000
EH-D2.4MM TIG 150/260 W	Electrode holder	094-011755-00000
D10, L26 , CERAMIC	Gas nozzle, ceramic	094-011756-00000
36MM NW11.5MM TIG 150/260W	Gas nozzle, ceramic	094-011757-00000
ISOLATION TIG 150/260W	Adapter ring	094-011758-00000
TIG 150/260W	Insulation for gas lens	094-011760-00000
TIG 150/260W	Insulation	094-011979-00000
D11.5 L26	Ceramic gas nozzle	094-011980-00000
36MM NW10.0MM TIG 150/260W	Ceramic gas nozzle	094-011982-00000
DIFF-D2.4MM	Gas lens TIG 150/260W	094-011984-00000
EH-D1.6MM	Electrode holder TIG 150/260 W	094-012406-00000
EH-D1.0MM	Electrode holder, TIG, 150/260 W	094-012665-00000
EH-D2.0MM	Electrode holder, TIG, 150/260 W	094-012666-00000
EH-D3.2MM	Electrode holder, TIG, 150/260 W	094-012667-00000
DIFF-D1.0MM 150/260W	Gas lens, TIG	094-012668-00000
DIFF-D1.6MM 150/260W	Gas lens, TIG	094-012669-00000
DIFF-D2.0MM 150/260W	Gas lens, TIG	094-012670-00000
DIFF-D3.2MM 150/260W	Gas lens, TIG	094-012671-00000
36MM NW6.5MM 150/260W	Ceramic gas nozzle, TIG	094-012673-00000
36MM NW8.0MM 150/260W	Ceramic gas nozzle, TIG	094-012674-00000

## 10.4 TIG 200

Type	Designation	Item no.
TIG 150/260W S	Torch cap	094-011752-00000
TIG 150/260W M	Torch cap	094-011753-00000
TIG 150/260W L	Torch cap	094-011754-00000
WE-D1.6MM	Electrode holder	094-009634-00000
WE-D2.0MM	Electrode holder	094-009635-00000
WE-D2.4MM	Electrode holder	094-009636-00000
WE-D3.2MM	Electrode holder	094-009637-00000
WE-D4.0MM	Electrode holder	094-009638-00000
WE-D4.8MM	Electrode holder	094-009639-00000
WE-D1.6MM	Gas lens	094-009640-00000
WE-D2.0MM	Gas lens	094-009641-00000
WE-D2.4MM	Gas lens	094-009642-00000
WE-D3.2MM	Gas lens	094-009643-00000
WE-D4.0MM	Gas lens	094-009644-00000
WE-D4.8MM	Gas lens	094-009645-00000
37MM NW7.5MM	Gas nozzle, ceramic	094-009646-00000
37MM NW10.0MM	Gas nozzle, ceramic	094-009647-00000
37MM NW13.0MM	Gas nozzle, ceramic	094-009648-00000
37MM NW15.0MM	Gas nozzle, ceramic	094-009649-00000
52MM NW7.5MM	Gas nozzle, ceramic	094-009650-00000
52MM NW10.0MM	Gas nozzle, ceramic	094-009651-00000
52MM NW13.0MM	Gas nozzle, ceramic	094-009653-00000
52MM NW15.0MM	Gas nozzle, ceramic	094-009654-00000
26MM NW10.0MM	Gas nozzle, ceramic	094-009655-00000
	Insulator for gas lens	094-009657-00000
WE-D1.6MM	Gas lens	094-009658-00000
WE-D2.4MM	Gas lens	094-009659-00000
WE-D3.2MM	Gas lens	094-009660-00000
WE-D4.0MM	Gas lens	094-009661-00000
WE-D4.8MM	Gas lens	094-009662-00000
48MM NW12.5MM	Gas nozzle, ceramic	094-009663-00000
48MM NW16.0MM	Gas nozzle, ceramic	094-009664-00000
48MM NW19.5MM	Gas nozzle, ceramic	094-009665-00000
TORCH CAP LONG	Torch cap	094-010601-00000
TORCH CAP SHORT	Torch cap	094-010723-00000
STANDARD TIG 200/450W/450W SC	Insulation	094-011759-00000
37MM NW13.0MM REINFORCED TIG 200/450W/450W SC	Gas nozzle, ceramic	094-011997-00000
37MM NW15.0MM REINFORCED TIG 200/450W/450W SC	Gas nozzle, ceramic	094-011998-00000
34MM NW24.0MM TIG 200/450W/450W SC	Gas nozzle, ceramic	094-011999-00000

## 11 Appendix A

### 11.1 Declaration of Conformity

The designated machine conforms to EC Directives and standards in terms of its design and construction:

- EC Low Voltage Directive (2006/95/EC),
- EC EMC Directive (2004/108/EC),
- DIN EN 60974-7.

This declaration shall become null and void in the event of unauthorised modifications, improperly conducted repairs, non-observance of the deadlines for the repetition test and / or non-permitted conversion work not specifically authorised by the manufacturer.

The original copy of the declaration of conformity is enclosed with the unit.