



Retrofit option

ON URUE AL 2R 10m miniDrive
ON URUE AL 2R 15m miniDrive

Conversion kit, 37 mm, 2-roll drive

General instructions

CAUTION



Read the operating instructions!

The operating instructions provide an introduction to the safe use of the products.

- Read the operating instructions for all system components!
- Observe accident prevention regulations!
- Observe all local regulations!
- Confirm with a signature where appropriate.



In the event of queries on installation, commissioning, operation or special conditions at the installation site, or on usage, please contact your sales partner or our customer service department on +49 2680 181-0.

A list of authorised sales partners can be found at www.ewm-group.com.

Liability relating to the operation of this equipment is restricted solely to the function of the equipment. No other form of liability, regardless of type, shall be accepted. This exclusion of liability shall be deemed accepted by the user on commissioning the equipment.

The manufacturer is unable to monitor whether or not these instructions or the conditions and methods are observed during installation, operation, usage and maintenance of the equipment. An incorrectly performed installation can result in material damage and injure persons as a result. For this reason, we do not accept any responsibility or liability for losses, damages or costs arising from incorrect installation, improper operation or incorrect usage and maintenance or any actions connected to this in any way.

© EWM AG · Dr. Günter-Henle-Str. 8 · D-56271 Mündersbach, Germany

The copyright to this document remains the property of the manufacturer.

Reprinting, including extracts, only permitted with written approval.

The content of this document has been prepared and reviewed with all reasonable care. The information provided is subject to change, errors excepted.

1 Contents

1	Contents	3
2	Safety instructions	4
3	Intended use	5
3.1	Short description of the working steps required	5
4	Conversion	6
4.1	Parts list	7
4.2	Replace wire feed rollers and supports	8
4.2.1	Removal	8
4.2.2	Assembly	9
4.3	Replace steel liner with teflon liner	10
4.4	Final inspection	13

2 Safety instructions

DANGER



Do not carry out any unauthorised repairs or modifications!

To avoid injury and equipment damage, the unit must only be repaired or modified by specialist, skilled persons!

The warranty becomes null and void in the event of unauthorised interference.

- Appoint only skilled persons for repair work (trained service personnel)!

WARNING



Validity of the document!

This document is valid only in combination with the operating instructions for the product being used!

- Read and observe the operating instructions for all system components, especially the safety instructions!



Risk of accidents due to non-compliance with the safety instructions!

Non-compliance with the safety instructions can be fatal!

- Carefully read the safety instructions in this manual!
- Observe the accident prevention regulations and any regional regulations!
- Inform persons in the working area that they must comply with the regulations!

CAUTION



Obligations of the operator!

The respective national directives and laws must be observed for operation of the machine!

- National implementation of the framework directive (89/391/EEG), as well as the associated individual directives.
- In particular, directive (89/655/EEG), on the minimum regulations for safety and health protection when staff members use equipment during work.
- The regulations regarding work safety and accident prevention for the respective country.
- Setting up and operating the machine according to IEC 60974-9.
- Check at regular intervals that users are working in a safety-conscious way.
- Regular checks of the machine according to IEC 60974-4.

3 Intended use

WARNING



Hazards due to improper usage!

Hazards may arise for persons, animals and material objects if the equipment is not used correctly. No liability is accepted for any damages arising from improper usage!

- The equipment must only be used in line with proper usage and by trained or expert staff!
- Do not modify or convert the equipment improperly!

These instructions apply to the conversion of the following wire feeders only:

- Steel, 2-roll drive (094-018628-00001) – miniDrive

3.1 Short description of the working steps required

- Replacing the steel liner with a liner in the intermediate hose package.
- Replacing the smooth wire feed roller supports with toothed wire feed roller supports to drive the pressure roller.
- Replacing the wire feed rollers with V-groove with wire feed rollers with U-groove (not supplied).

4 Conversion

CAUTION



Risk of crushing through rotating components and workpieces!

There is a risk of fingers being crushed between rolls, workpiece and frame or clothes being trapped.

- Before commissioning, ensure there are no persons inside the danger zone!
- Do not wear loose-fitting clothes when working with this machine!



Mechanical conversion!

Observe all safety precautions and accident prevention regulations when undertaking machine conversion work, in order to prevent injuries.

- Observe the safety precautions given in the standard operating instructions.
- Observe accident prevention regulations!

CAUTION



To perform the following steps, the protective flap of the wire feeder needs to be opened. Make sure to close the protective flap again before starting to work.

4.1 Parts list

Before conversion, check that the retrofit kit is complete (see parts list).

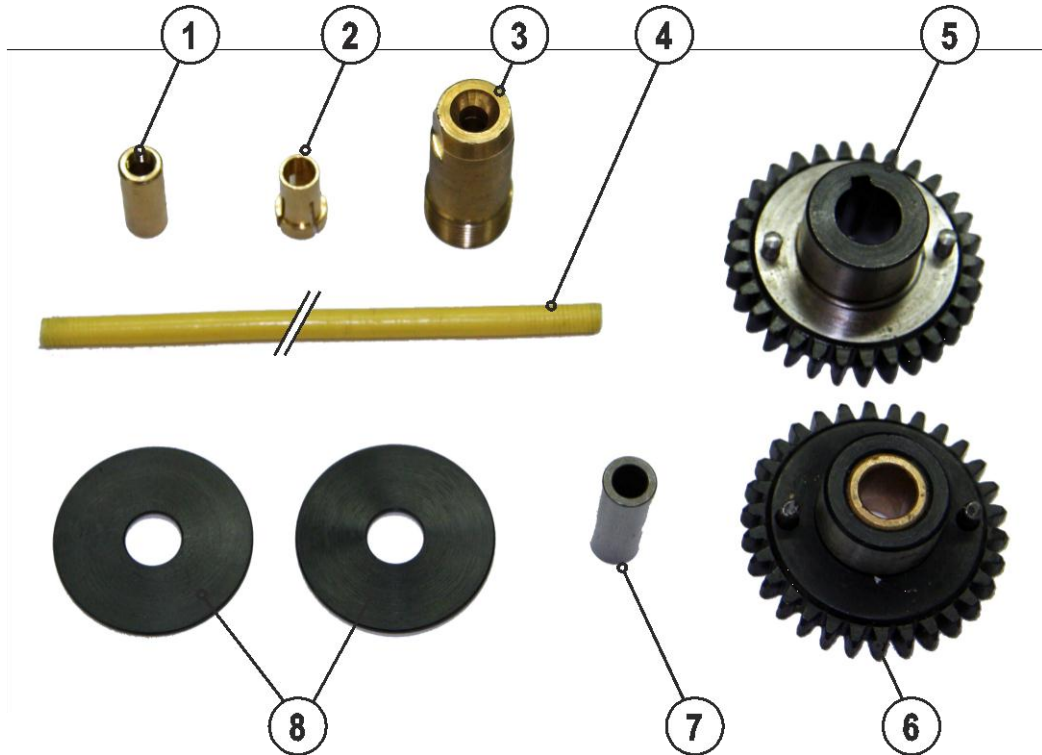


Figure 4-1

Item	Quantity	Description	Item number
1	1	Collet	094-019145-00000
2	1	Collet chuck	094-001291-00000
3	1	Clamping nipple	094-013360-00000
4	1	Liner, yellow	094-013523-00100
5	1	Main drive gear	094-019019-00000
6	1	Drive roll support	094-005232-00000
7	1	Spacer bolt	094-019018-00000
8	2	Spacer discs (plastic)	094-019017-00000

4.2 Replace wire feed rollers and supports

4.2.1 Removal

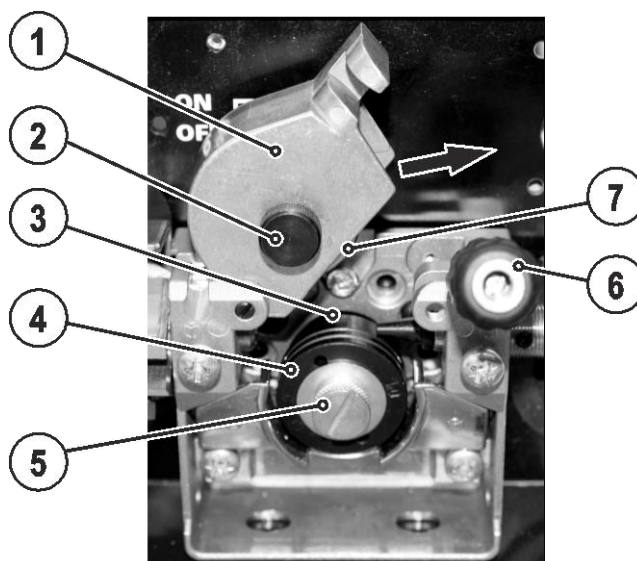


Figure 4-2

Item	Symbol	Description
1		Clamping unit
2		Axle
3		Wire feed roller support (smooth, bottom)
4		Drive roller
5		Knurled screw
6		Feed roll tensioner Fixing the clamping unit and setting the pressure.
7		Pressure roller

- Flip feed roll tensioner down towards user (clamping unit will be released)
- Unscrew the knurled screw and remove the drive roll and wire feed roller support (smooth, bottom).
- Unfasten the axle and remove the pressure roller in the direction of the arrow (see figure).

4.2.2 Assembly

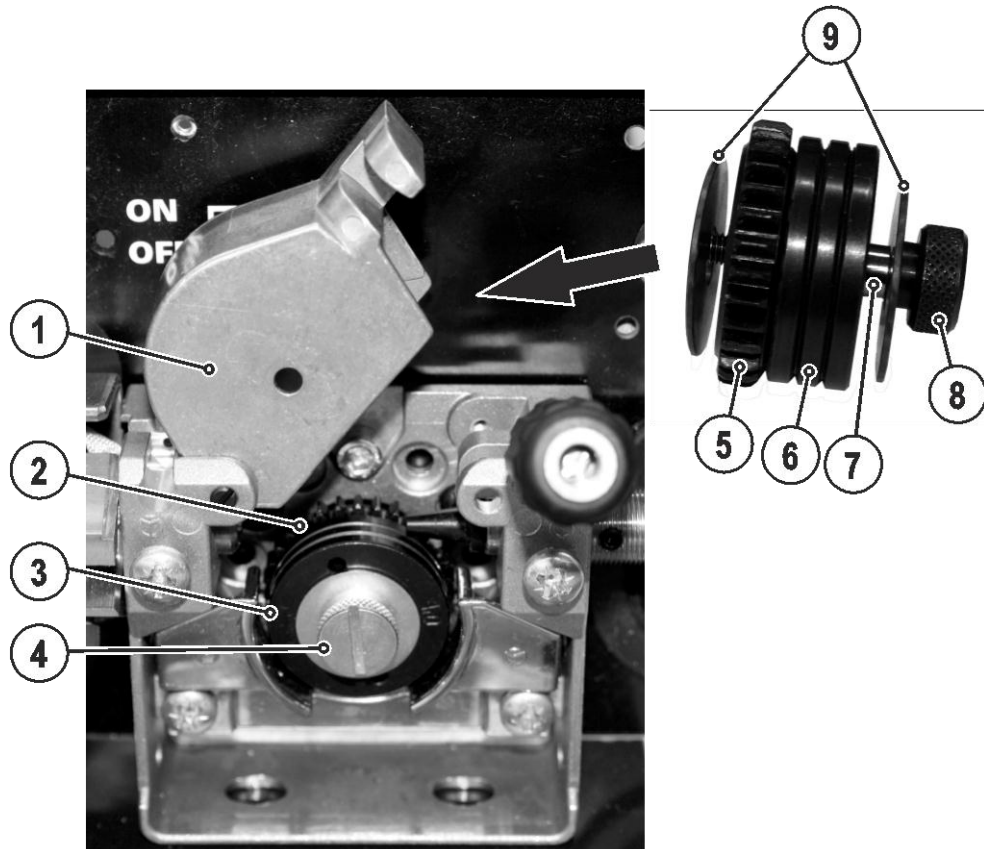


Figure 4-3

Item	Symbol	Description
1		Clamping unit
2		Wire feed roller support (toothed, bottom)
3		Wire feed roller
4		Knurled screw
5		Wire feed roller support (toothed, top)
6		Wire feed roller
7		Spacer bolt
8		Axle
9		Spacer discs (plastic)

- Assemble the spacer discs, spacer bolt, wire feed roller and wire feed roller support (toothed, top) as shown in the figure and insert into the clamping unit. Next, insert the axle and screw to the clamping unit.
- Mount the wire feed roller support (toothed, bottom) and wire feed roller onto the drive axle. Secure with the knurled screw.

4.3 Replace steel liner with teflon liner

Always make sure the the hose package is straight when replacing the wire guide.

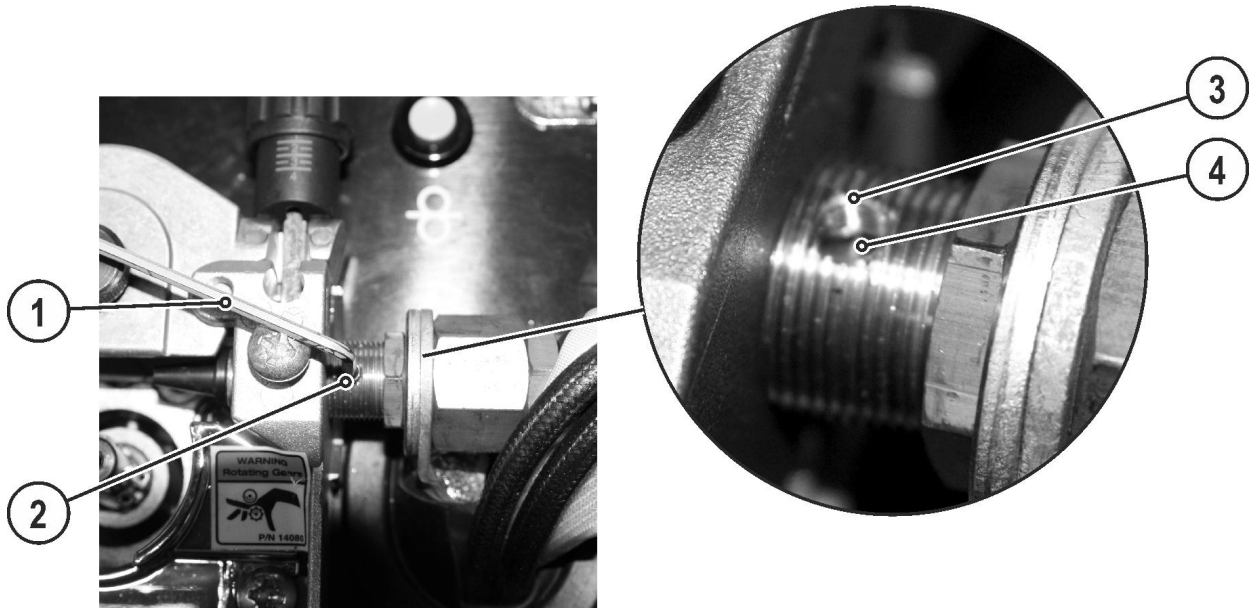


Figure 4-4

Item	Symbol	Description
1		Allen key (size 2.5)
2		Headless screw
3		Threaded hole
4		Steel liner

- Unscrew the headless screw using an Allen key (to release the steel liner from the wire feed mechanism)

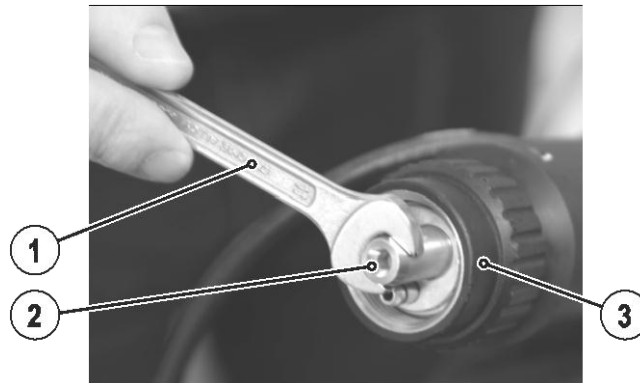


Figure 4-5

Item	Symbol	Description
1		Open-ended spanner, SW 11
2		Crown nut
3		Euro central connection Welding current, shielding gas and torch trigger included

- Loosen the crown nut of the liner fastening
- Pull out steel liner

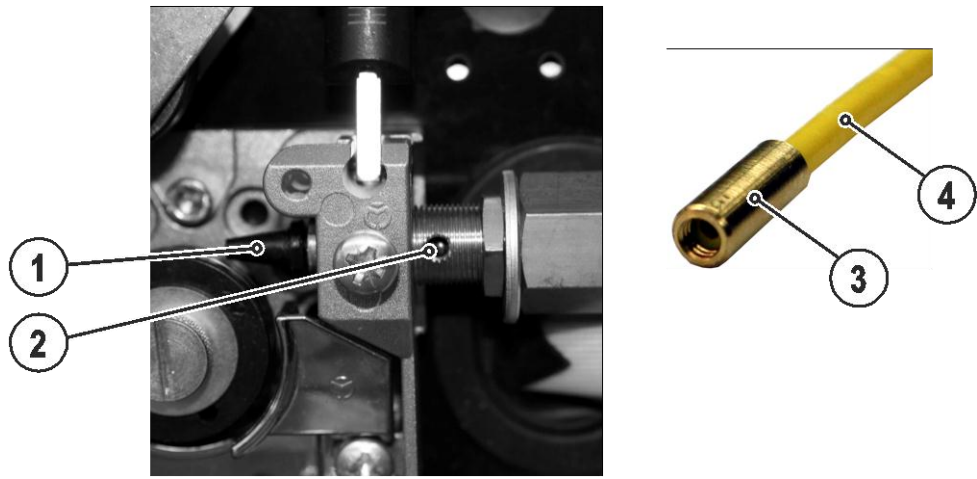


Figure 4-6

Item	Symbol	Description
1		Wire feed nipple
2		Threaded hole
3		Collet
4		Teflon liner

- Screw the collet onto the liner so it is flush.
- Insert the liner until it reaches the inlet guide of the wire feeder (visual control at the threaded hole).
- Screw the headless screw back in using an Allen key until there is a light resistance.

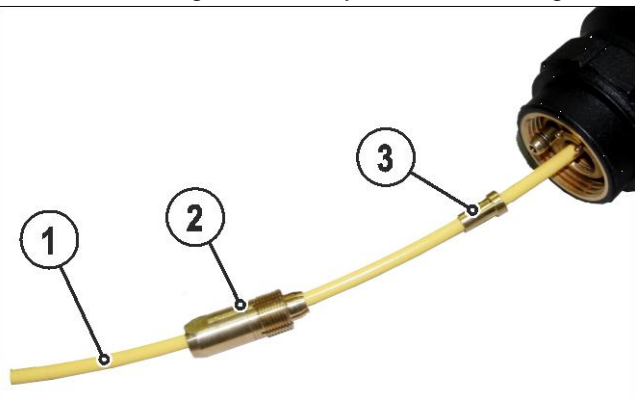


Figure 4-7

Item	Symbol	Description
1		Teflon liner
2		Clamping nipple
3		Collet chuck

- Push the collet chuck onto the liner and secure with the clamping nipple.

Conversion

Replace steel liner with teflon liner

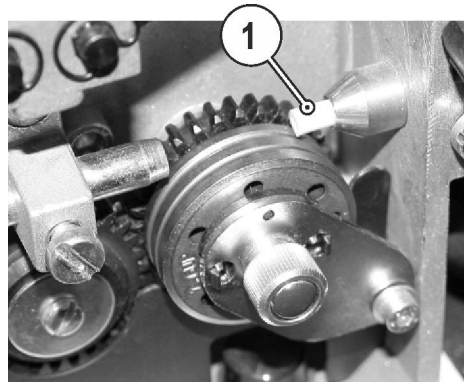


Figure 4-8

Item	Symbol	Description
1		Teflon liner

To allow for tolerances of the hose package length the liner has to be shortened to ensure optimum wire feeding. Make sure the liner does not touch the wire feed rollers, but is as close as possible to them (cf. figure).

- Remove capillary tubes (steel).
- Insert the Euro torch connector of the intermediate hose package into the Euro torch connector of the wire feeder of the complete system and lock.
- Mark the liner at the point where it is to be cut later on.
- Unfasten the Euro torch connector and extract.
- Cut the liner at the mark.
- Re-insert Euro torch connector and lock.

4.4 Final inspection

WARNING



Danger due to failure to carry out the final inspection!

After installation or conversion, all mechanical and electrical connections must be checked for correct installation to avoid any potential injuries.

- No leads or tubes should be squashed or laid on sharp edges.
- Check all mechanical connections to ensure that they are fitted correctly!
- Carry out the final inspection!
- Carry out the functional test!

CAUTION



Test!

Before re-commissioning, it is essential that an "inspection and test during operation" is carried out conforming to IEC / DIN EN 60974-4 "Arc welding devices - inspection and testing during operation"!

- For detailed instructions, please see the standard operating instructions for the welding machine.



Keep the conversion instructions with the machine documentation!

When ordering spare parts, ensure that the item number and serial number of the machine are quoted!