



EN

Retrofit option

ON CS T.0005/TG.0003/D.0002

Crane suspension

099-002549-EW501

Observe additional system documents!

25.02.2019

**Register now
and benefit!
Jetzt Registrieren
und Profitieren!**

www.ewm-group.com



General instructions

WARNING



Read the operating instructions!

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

- Read and observe the operating instructions for all system components, especially the safety instructions and warning notices!
- Observe the accident prevention regulations and any regional regulations!
- The operating instructions must be kept at the location where the machine is operated.
- Safety and warning labels on the machine indicate any possible risks. Keep these labels clean and legible at all times.
- The machine has been constructed to state-of-the-art standards in line with any applicable regulations and industrial standards. Only trained personnel may operate, service and repair the machine.
- Technical changes due to further development in machine technology may lead to a differing welding behaviour.

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/en/specialist-dealers.

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-Strasse 8
56271 Mündersbach Germany
Tel.: +49 2680 181-0, Fax: -244
Email: info@ewm-group.com

www.ewm-group.com

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

Copying, 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 For your safety**1.1 Safety instructions****⚠ WARNING**

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)!



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!

These supplementary sheets must be used in conjunction with the appropriate standard operating instructions for the described product! These supplementary sheets expand or replace one or more chapters of the same name(s) in the standard description.

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

2 Intended use

2.1 General

WARNING



Hazards due to improper usage!

The machine has been constructed to the state of the art and any regulations and standards applicable for use in industry and trade. It may only be used for the welding procedures indicated at the rating plate. 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 its designated purpose and by trained or expert personnel!
- Do not improperly modify or convert the equipment!

These instructions apply only for the conversion of the following machines:

- Picomig 180
- Picomig 185
- Picomig 355
- Taurus 355 TKM
- Phoenix 355 TKM
- drive 4 IC
- Pico drive 200C
- Saturn drive 41
- Wega drive 41

Simultaneous use with the listed options is not intended and is therefore not permissible!

- **ON WAKD 4 / 41**
- **ON WAK 200C / 300C**

For compact power sources such as Picomig 355 TKG and Phoenix 355 puls MM TKM, the ON FIX CS K option is also need for fixation.

It describes how to convert the machine in order to use it on a suitable crane suspension.

2.2 Short description of the working steps required

drive 4 / 41

- Attach the plastic insulation.
- Place the wire feeder onto the machine carrier plate.
- Mount the lifting eye bracket.
- Secure the wire feeder with the hold-down device.

drive 200C / Picomig 180 puls

- Remove machine feet.
- Place the wire feeder onto the machine carrier plate.
- Install machine feet.
- Mount the lifting eye bracket.

drive 300C

- Remove machine feet.
- Place the wire feeder onto the machine carrier plate.
- Install machine feet.
- Mount the lifting eye bracket.
- Secure the wire feeder with the hold-down device.

Taurus / Phoenix 305, 335

Picomig 305 D3

- Place the welding machine onto the machine carrier plate.
- Mount the lifting eye bracket.
- Secure the welding machine with the hold-down device.

2.3 Diagram of the assembled option

2.3.1 drive 200C / Picomig 180 puls

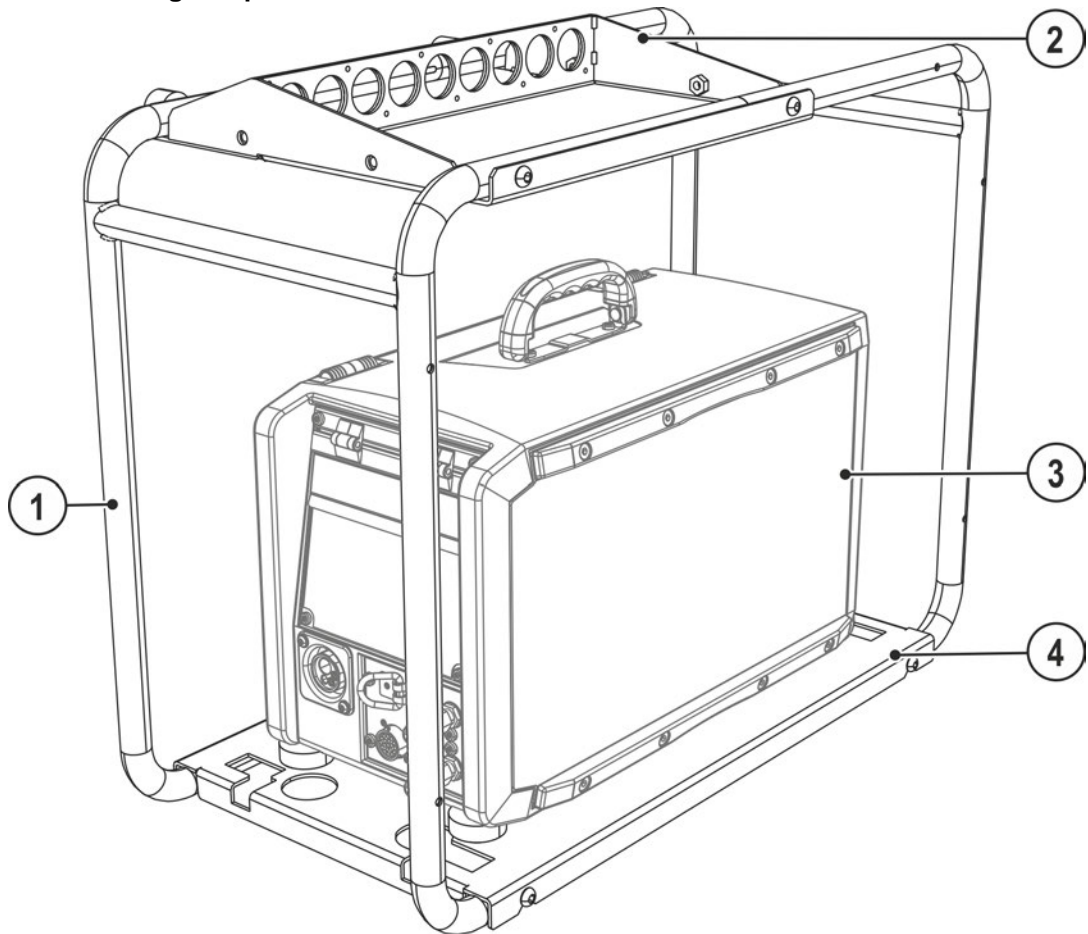


Figure 2-1

Item	Symbol	Description
1		Pipe, frame
2		Lifting eyes
3		drive 200C / Picomig 180 puls
4		Machine carrier plate To support the welding machine.

2.3.2 drive 300C

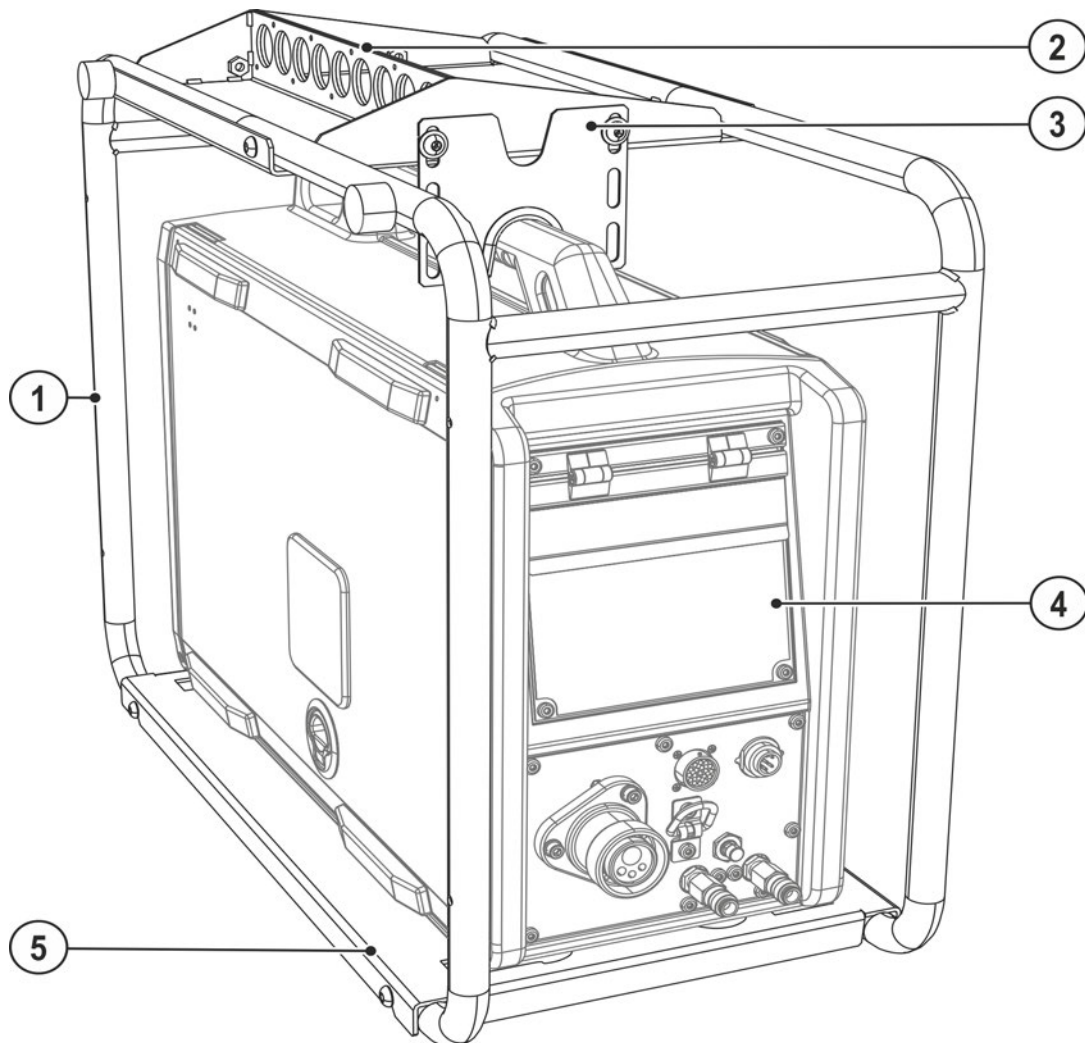


Figure 2-2

Item	Symbol	Description
1		Pipe, frame
2		Lifting eyes
3		Machine hold-down device
4		drive 300C
5		Machine carrier plate To support the welding machine.

2.3.3 drive 4 / 41

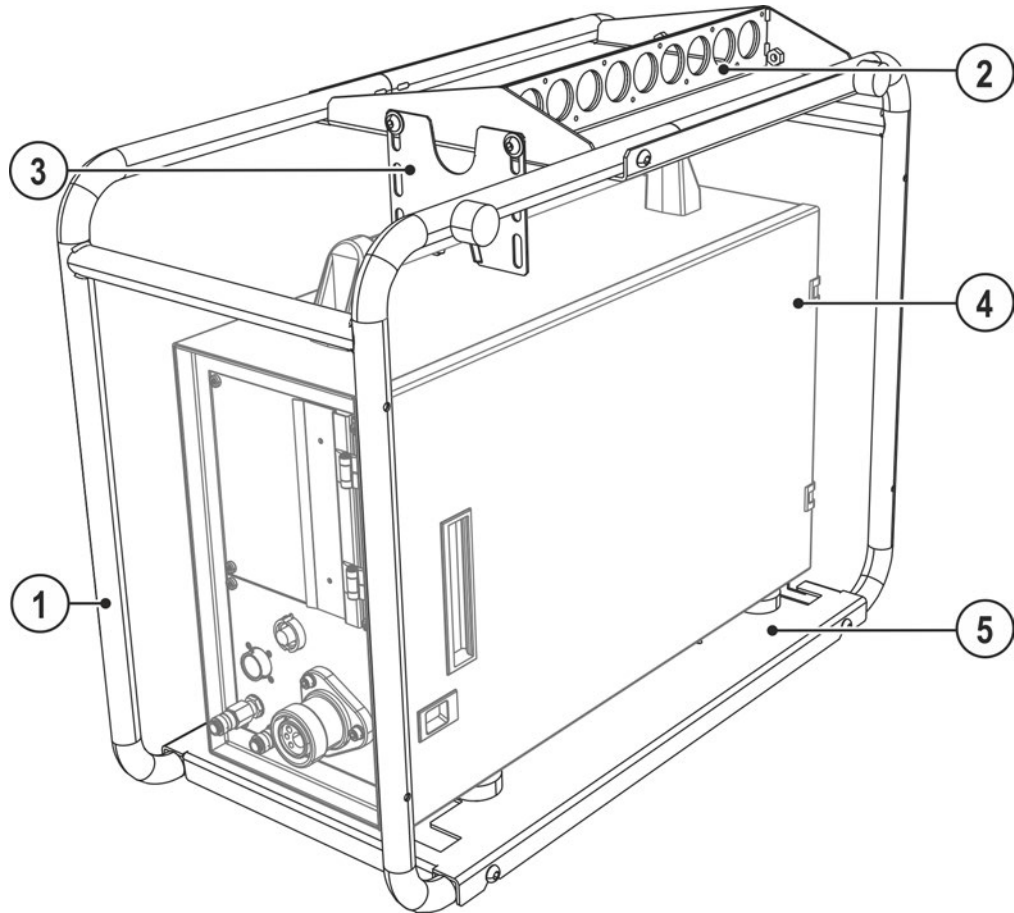


Figure 2-3

Item	Symbol	Description
1		Pipe, frame
2		Lifting eyes
3		Machine hold-down device
4		drive 4 / 41
5		Machine carrier plate To support the welding machine.

2.3.4 Taurus / Phoenix 335

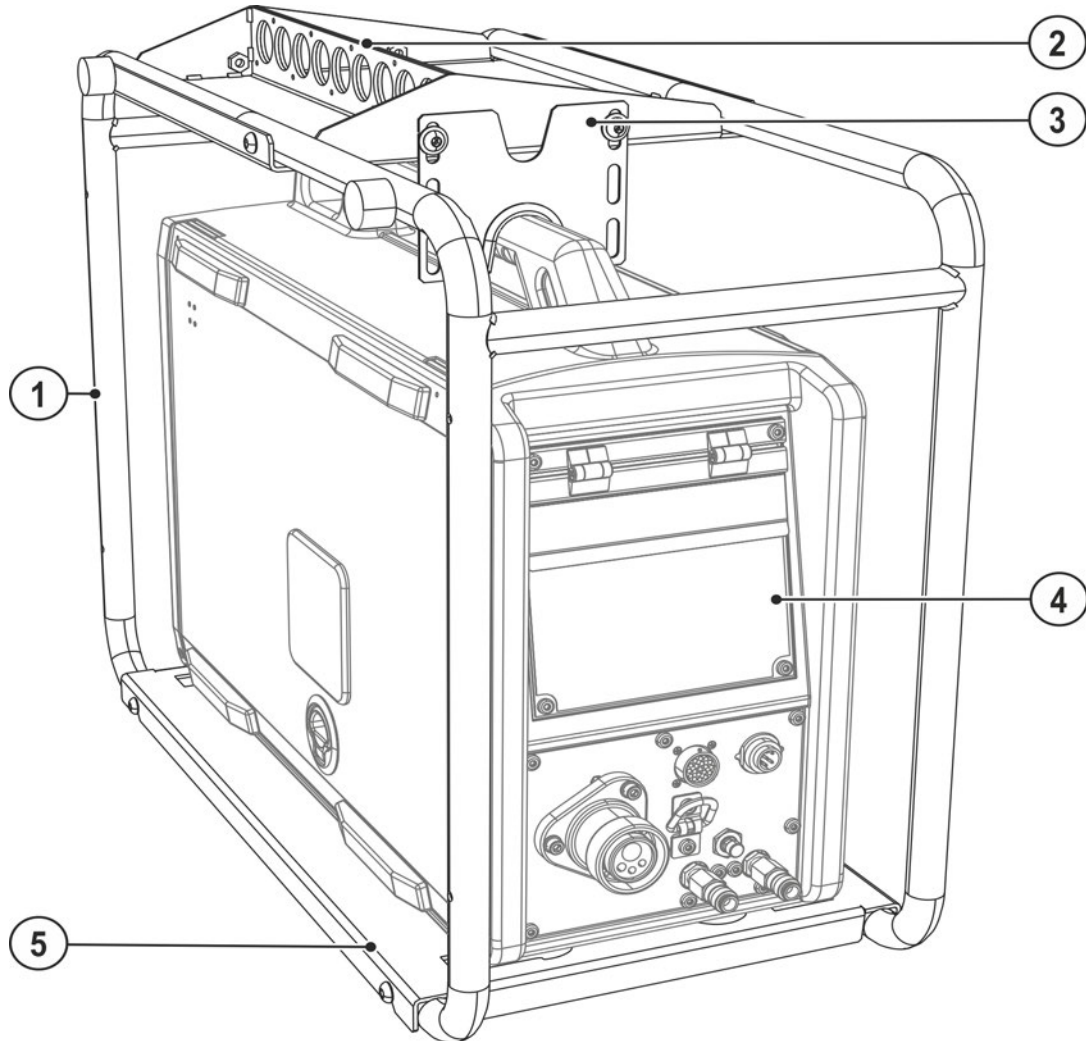


Figure 2-4

Item	Symbol	Description
1		Pipe, frame
2		Lifting eyes
3		Machine hold-down device
4		Taurus / Phoenix 335
5		Machine carrier plate To support the welding machine.

3 Design and function

3.1 Re-equipment set

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

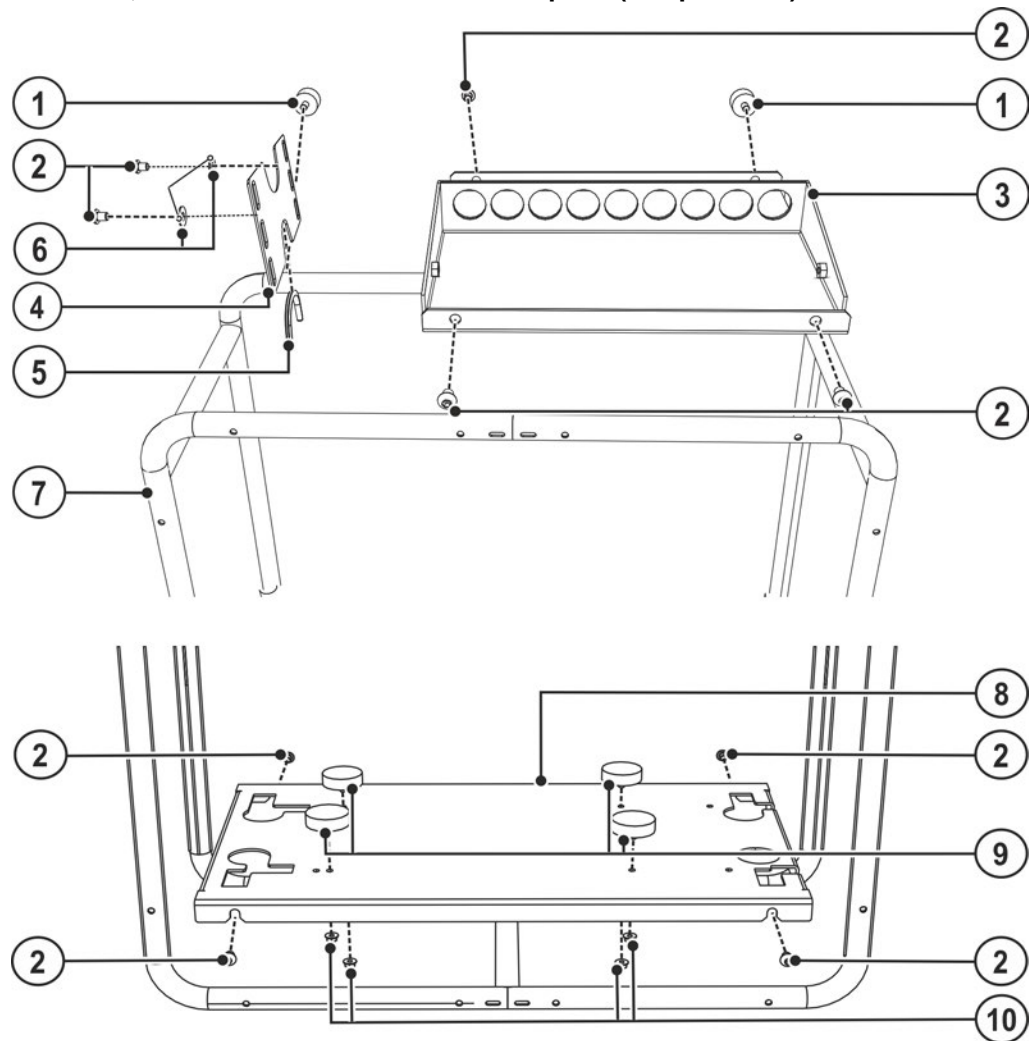


Figure 3-1

Item	Quantity	Description	Item number
1	2	Buffer	094-002876-00001
2	9	M8 x 16, Oval head screw, hexagon socket	094-007803-00000
3	1	Lifting lug bracket	094-015768-00001
4	1	Machine hold-down device	094-015811-00001
5	1	Edge protection	094-007643-00000
6	2	Fender washer	064-000793-00000
7	1	Pipe, frame	094-015767-00003
8	1	Unit carrier plate	094-015769-00002
9	4	Plastic insulation	094-015954-00000
10	4	Self-locking hexagon nut	064-000581-00000
	2	Cylinder head screw, M5 x 16 mm (not shown, > see 3.2.2 chapter)	094-007724-00000
	2	Cylinder head screw, M5 x 20 mm (not shown, > see 3.2.2 chapter)	064-000600-00000

Item	Quantity	Description	Item number
	2	Disk spring, M5 (not shown, > see 3.2.2 chapter)	064-000751-00000

3.2 Mounting of machine support

⚠ CAUTION



Risk of injury from overload of external protective earth!
 The crane frame must not have an electrically conductive connection to the protective earth of the transport means or fastening elements in order to avoid overload of the protective earth!

- Only use electrically isolated crane frame!
- Electrical grounding via the crane or other suspensions must be excluded!

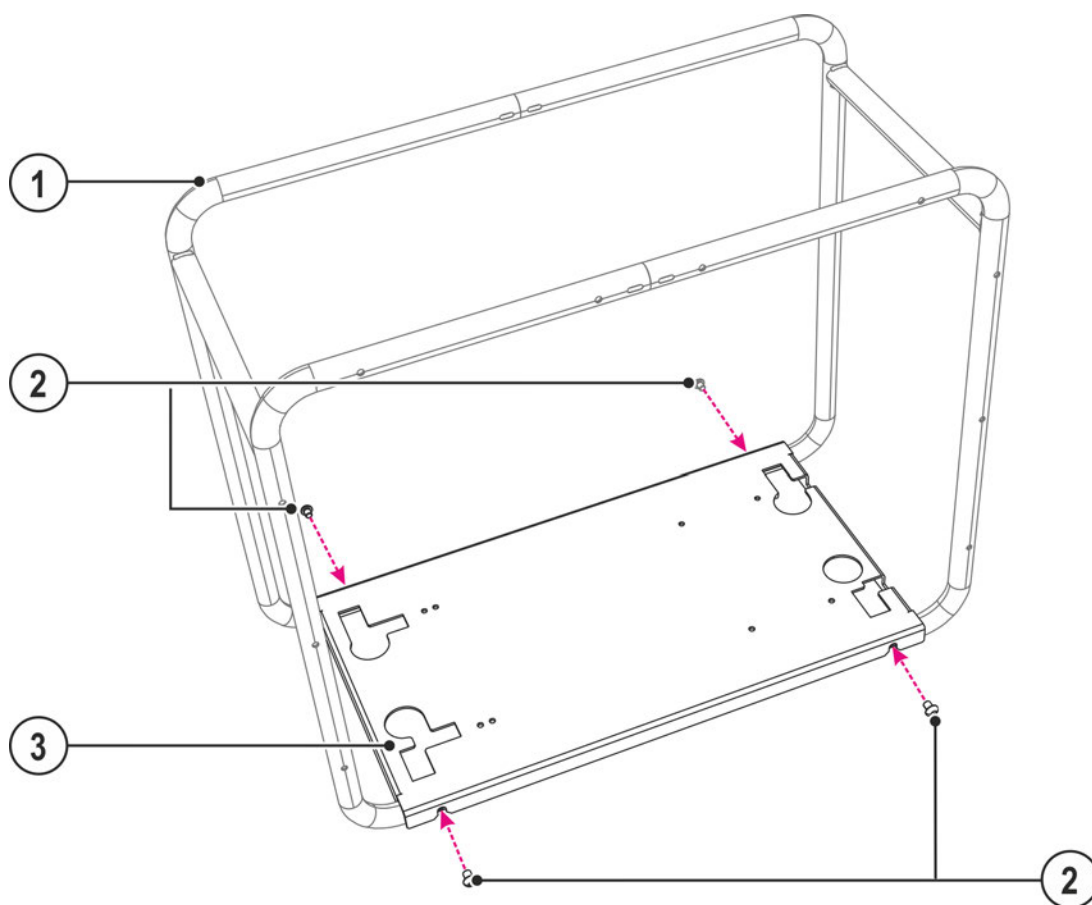


Figure 3-2

Item	Quantity	Description	Item number
1	1	Pipe, frame	094-015767-00003
2	4	M8 x 16, hexagonal pan screw	094-007803-00000
3	1	Unit carrier plate	094-015769-00002

- Attach the machine carrier plate to the carrier frame using 4 M8 x 16 hexagonal pan screw.

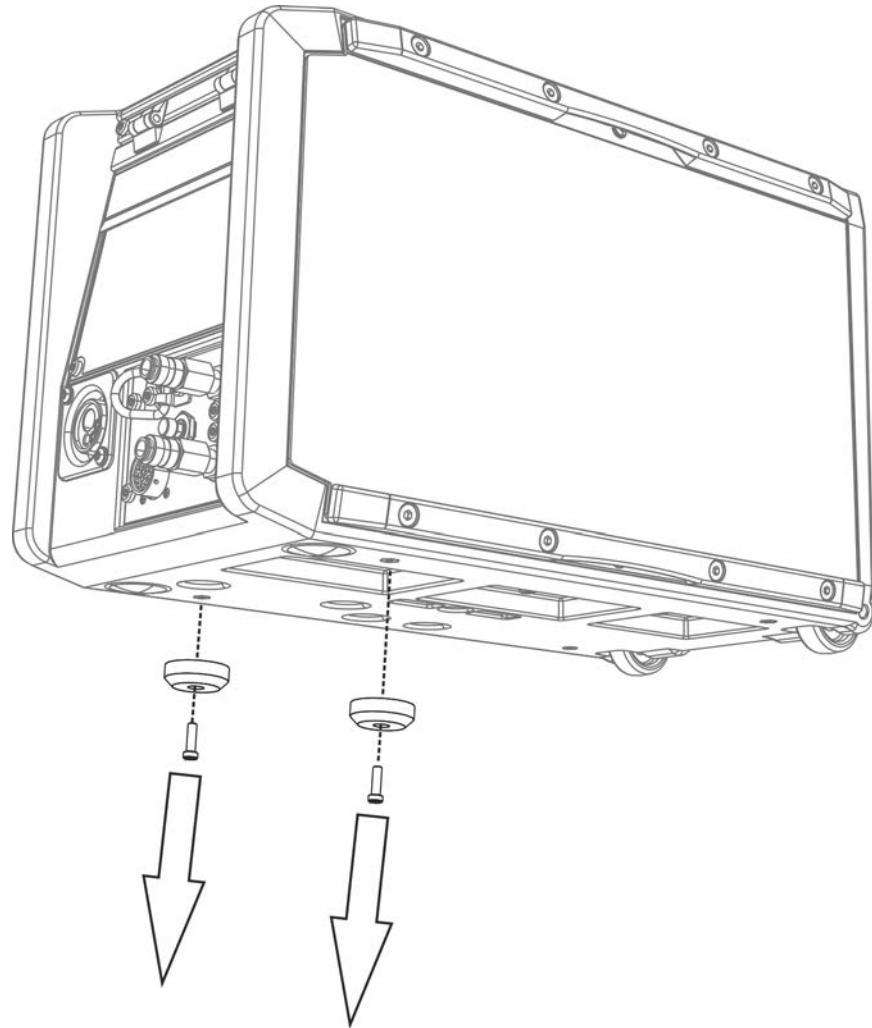
3.2.1 drive 200C / Picomig 180 puls

Figure 3-3

- Remove unit feet.

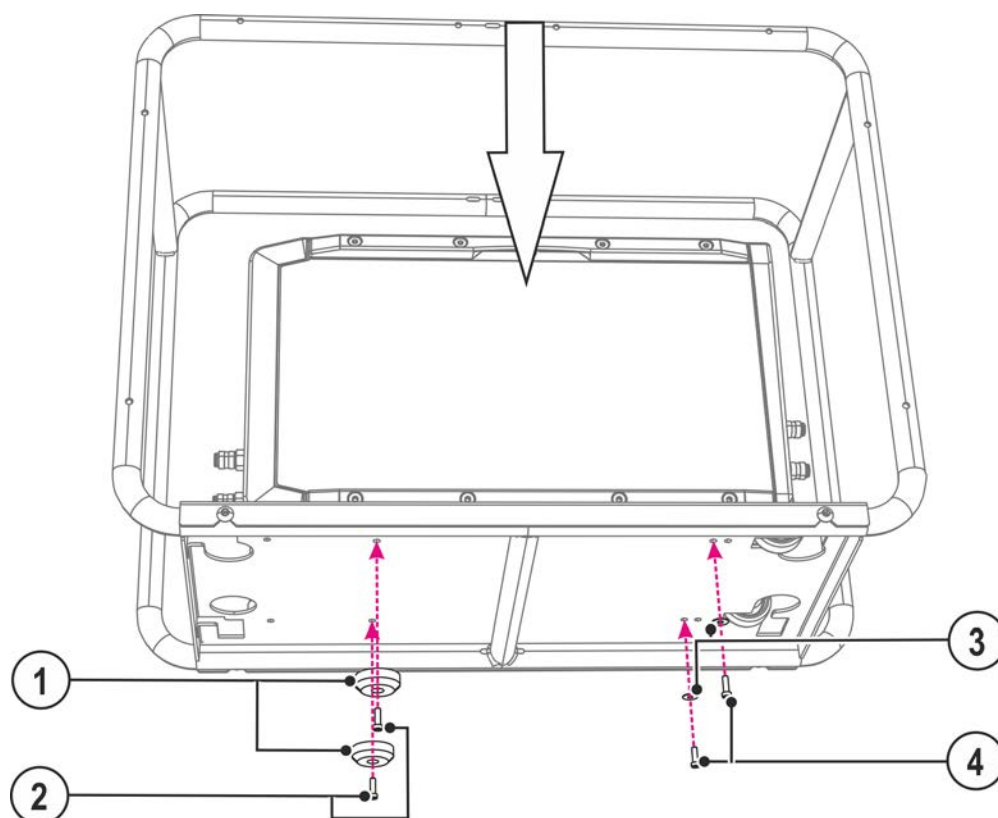


Figure 3-4

Item	Quantity	Description	Item number
1	2	Machine feet	
2	2	M5 x 20 mm, Cylinder head screw	064-000600-00000
3	2	M5, Disk spring	064-000751-00000
4	2	M5 x 16 mm, Cylinder head screw	094-007724-00000

- Place the wire feeder/welding machine onto the machine carrier plate.
- Install unit feet.
- Additionally secure machine with two screws.

⚠ WARNING



Risk of injury due to incorrect installation!

To compensate for the weight of the wire roll, the crane eye holder and machine alignment must be observed.

- Mount the short leg of the crane eyelet holder on the left.
- The wire roll of the machine should be aligned on the left side.

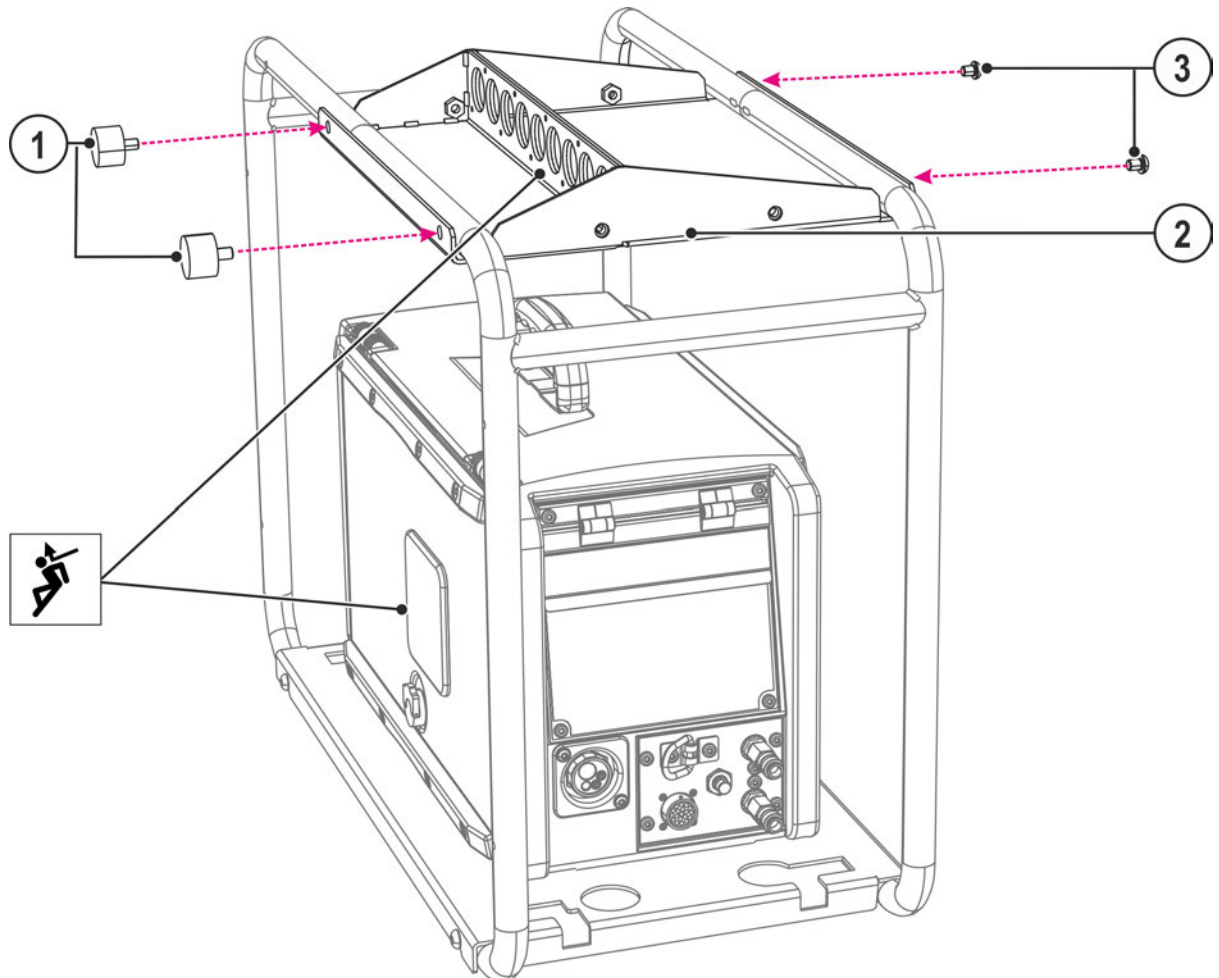


Figure 3-5

Item	Quantity	Description	Item number
1	2	Buffer	094-002876-00001
2	1	Lifting lug bracket	094-015768-00001
3	2	M8 x 16, Oval head screw, hexagon socket	094-007803-00000

- Attach the lifting eye bracket to the carrier frame using 2 buffers and 2 M8 x 16 oval head screw.

3.2.2 Installing the drive 300C

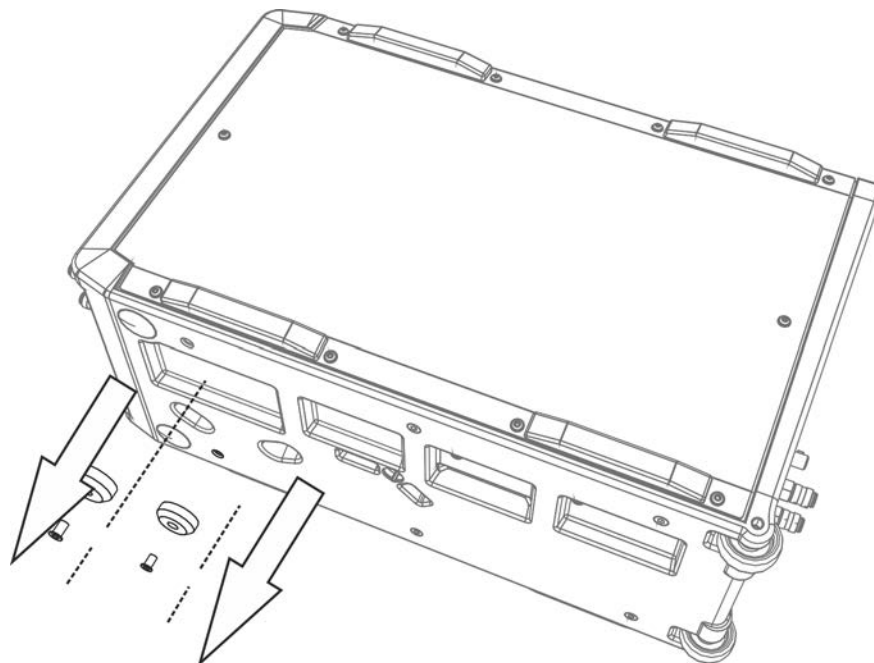


Figure 3-6

- Remove unit feet.

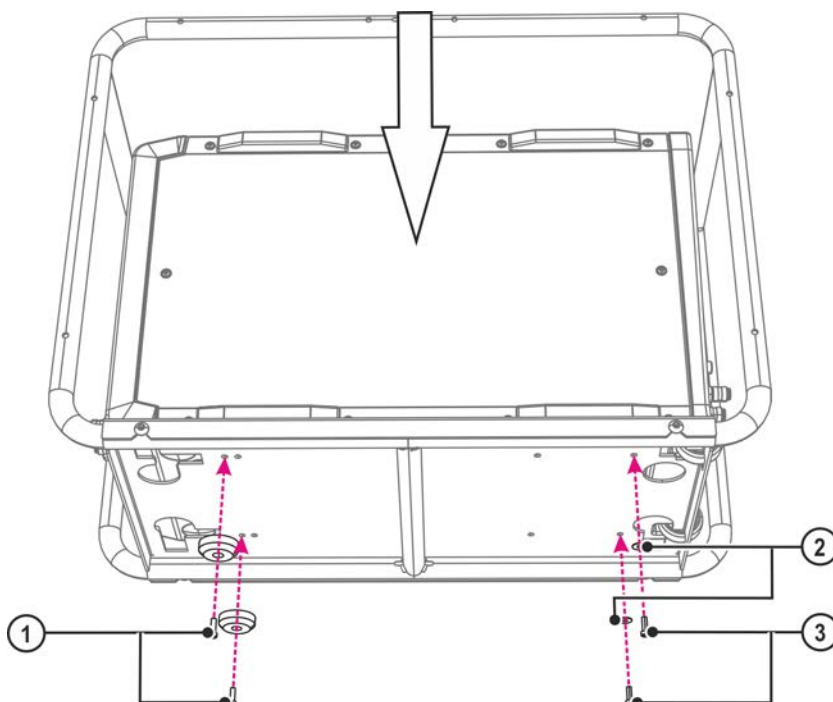


Figure 3-7

Item	Quantity	Description	Item number
1	2	M5 x 20 mm, Cylinder head screw	064-000600-00000
2	2	M5, Disk spring	064-000751-00000
3	2	M5 x 16 mm, Cylinder head screw	094-007724-00000

- Place the wire feeder onto the machine carrier plate.
- Install unit feet.
- Additionally secure machine with two screws.

⚠ WARNING



Risk of injury due to incorrect installation!

To compensate for the weight of the wire roll, the crane eye holder and machine alignment must be observed.

- Mount the short leg of the crane eyelet holder on the left.
- The wire roll of the machine should be aligned on the left side.

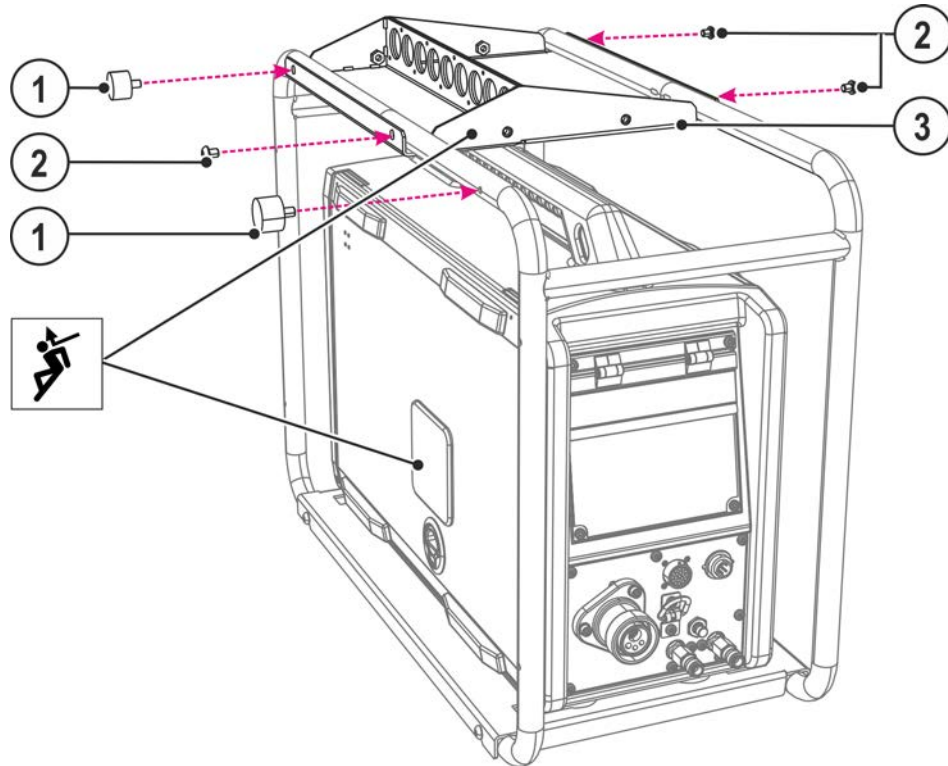


Figure 3-8

Item	Quantity	Description	Item number
1	2	Buffer	094-002876-00001
2	3	M8 x 16, Oval head screw, hexagon socket	094-007803-00000
3	1	Lifting lug bracket	094-015768-00001

- Attach the lifting eye bracket to the carrier frame using 2 buffers and 3 M8 x 16 oval head screw.
- Mount the buffers to the carrier frame

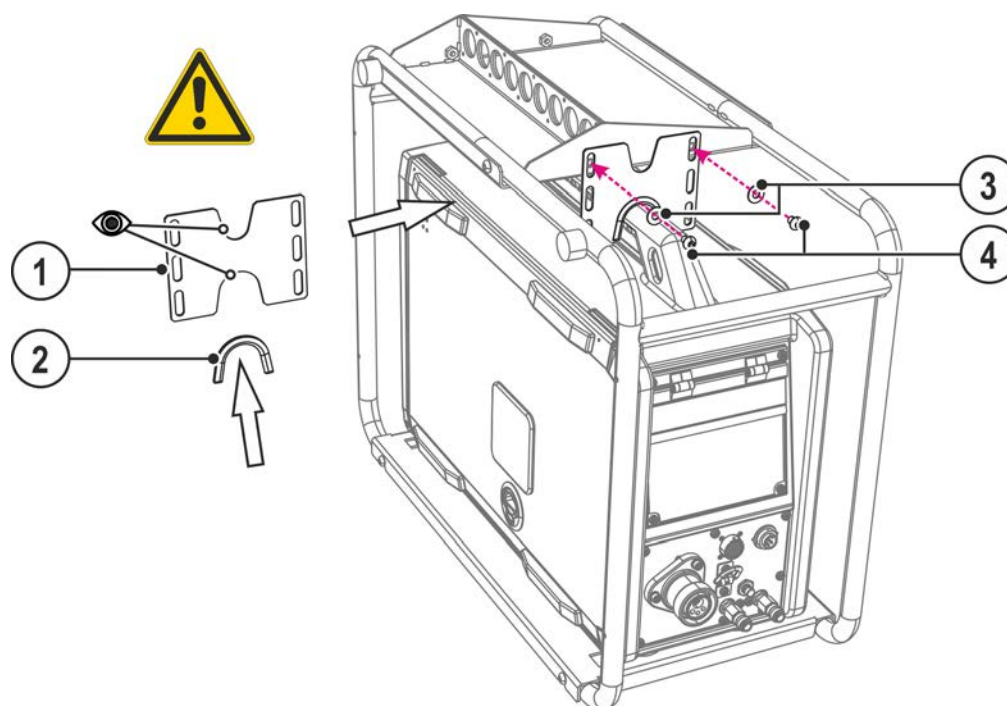


Figure 3-9

Item	Quantity	Description	Item number
1	1	Machine hold-down device	094-015811-00001
2	1	Edge protection	094-007643-00000
3	2	Fender washer	064-000793-00000
4	2	M8 x 16, Oval head screw, hexagon socket	094-007803-00000

- Attach the edge protection.
- Place the hold-down device on the carrying handle of the wire feeder and secure using two oval head screw and two fender washers.

3.2.3 Installing the drive 4 / 41

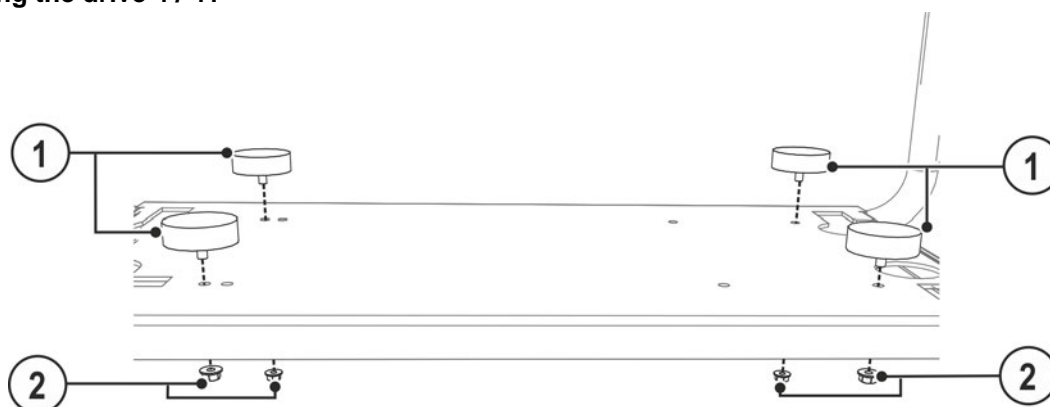


Figure 3-10

Item	Quantity	Description	Item number
1	4	Plastic insulation	094-015954-00000
2	4	Self-locking hexagon nut	064-000581-00000

- Before you install the machine, attach the plastic insulation to the machine carrier plate by inserting the hexagonal nuts into the bores.

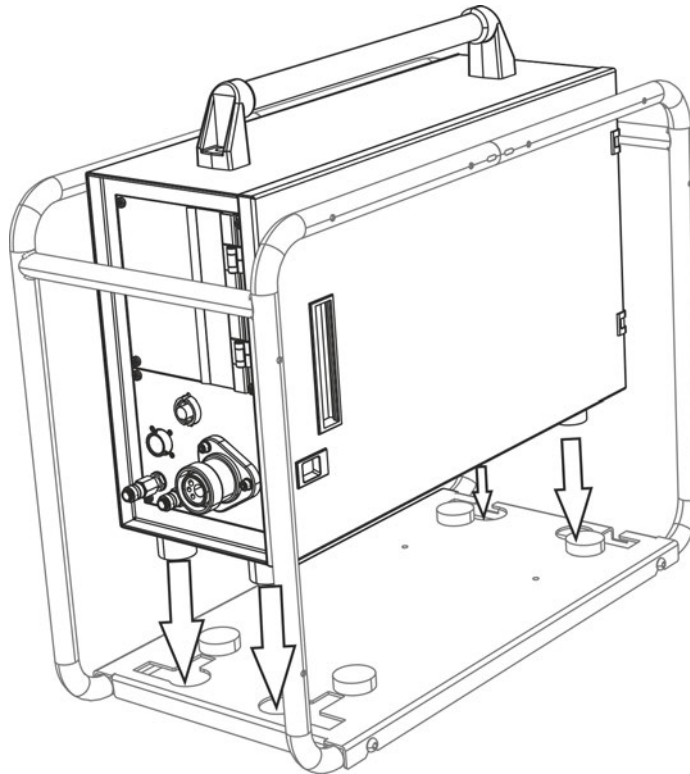


Figure 3-11

- Place the feet inside the predrilled bores.

⚠ WARNING



Risk of injury due to incorrect installation!

To compensate for the weight of the wire roll, the crane eye holder and machine alignment must be observed.

- Mount the short leg of the crane eyelet holder on the right.
- The wire roll of the machine should be aligned on the right side.

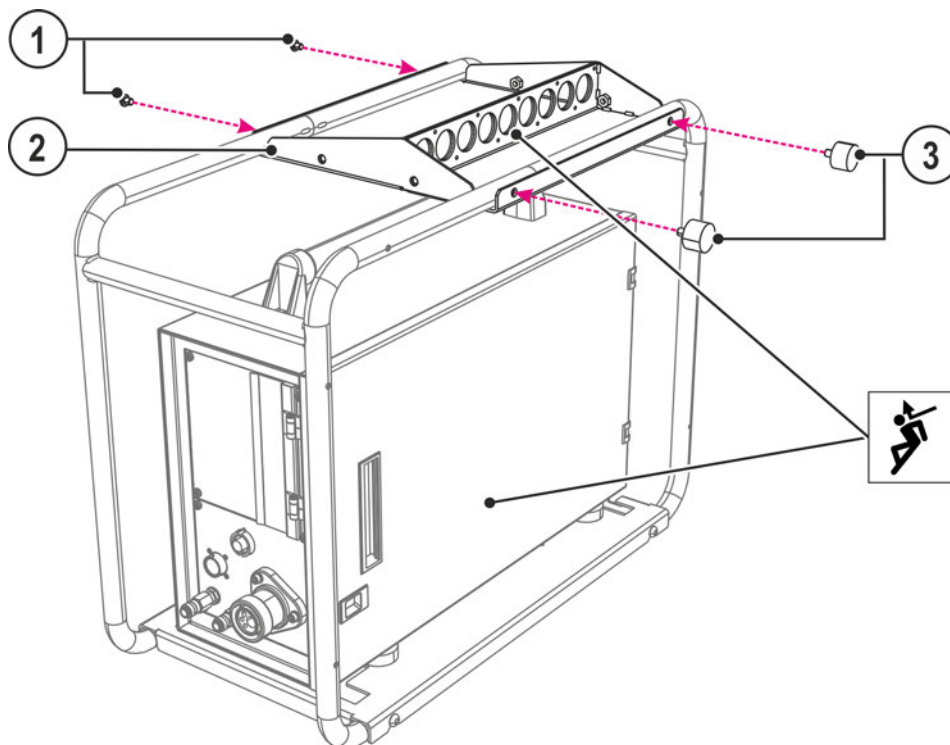


Figure 3-12

Item	Quantity	Description	Item number
1	2	M8 x 16, Oval head screw, hexagon socket	094-007803-00000
2	1	Lifting lug bracket	094-015768-00001
3	2	Buffer	094-002876-00001

- Attach the lifting eye bracket to the carrier frame using 2 buffers and 2 M8 x 16 oval head screw.

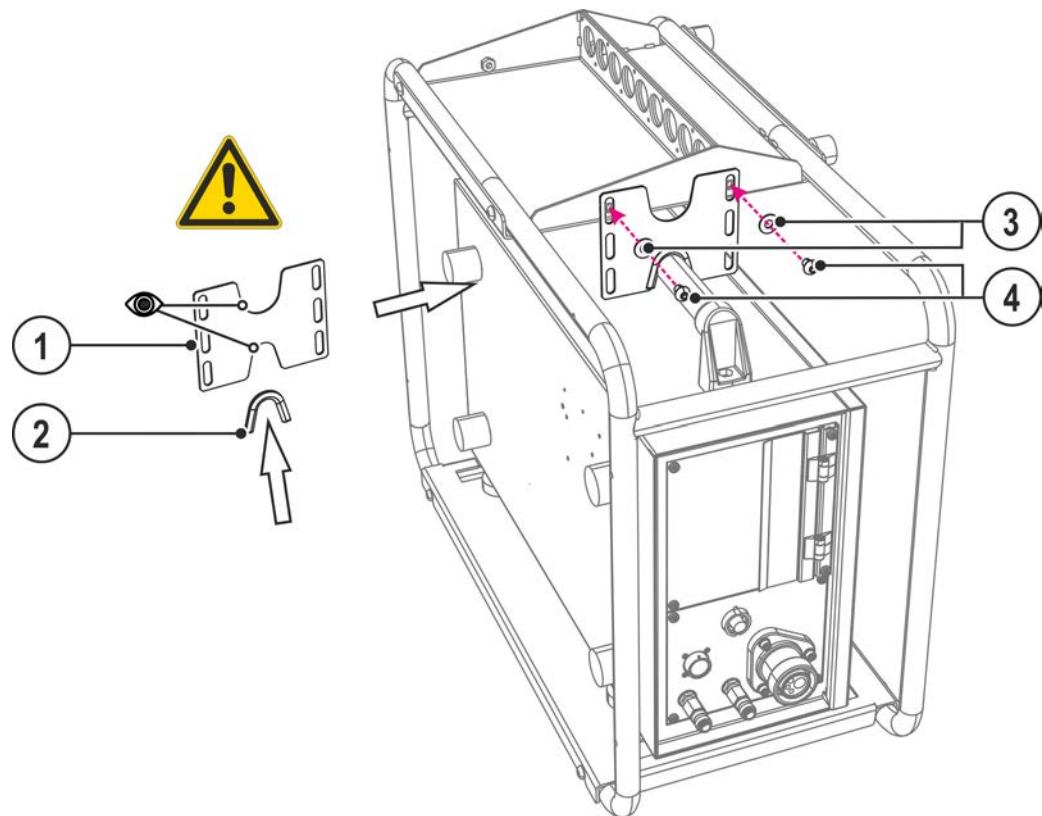


Figure 3-13

Item	Quantity	Description	Item number
1	1	Machine hold-down device	094-015811-00001
2	1	Edge protection	094-007643-00000
3	2	M8 x 16, Oval head screw, hexagon socket	094-007803-00000
4	2	Fender washer	064-000793-00000

- Attach the edge protection.
- Place the hold-down device on the carrying handle of the wire feeder and secure using two oval head screw and two fender washers.

3.2.4 Installing Taurus / Phoenix 305, 335, Picomig 305 D

WARNING



Risk of injury due to incorrect installation!

To compensate for the weight of the wire roll, the crane eye holder and machine alignment must be observed.

- Mount the short leg of the crane eyelet holder on the left.
- The wire roll of the machine should be aligned on the left side.

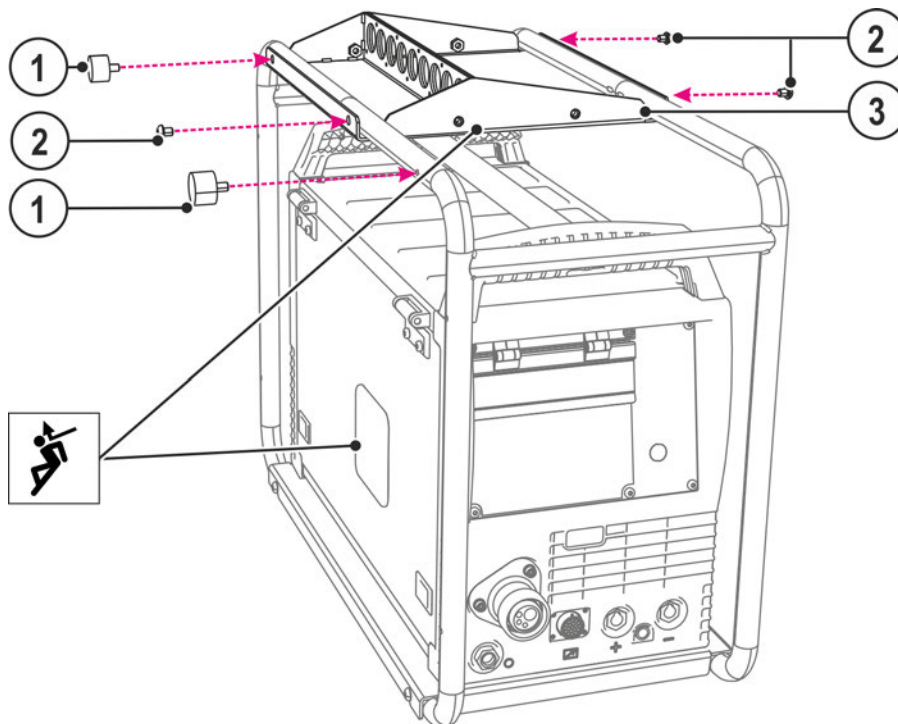


Figure 3-14

Item	Quantity	Description	Item number
1	2	Buffer	094-002876-00001
2	3	M8 x 16, Oval head screw, hexagon socket	094-007803-00000
3	1	Lifting lug bracket	094-015768-00001

- Place the feet inside the predrilled bores.
- Attach the lifting eye bracket to the carrier frame using 2 buffers and 3 M8 x 16 oval head screw.
- Mount the buffers to the carrier frame

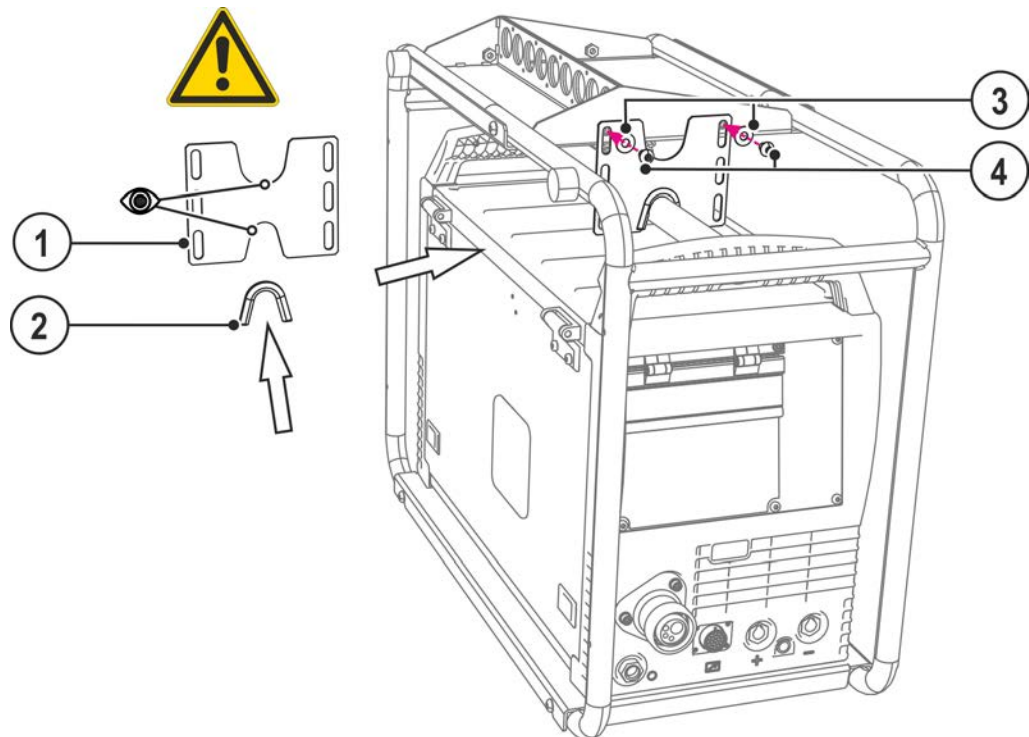


Figure 3-15

Item	Quantity	Description	Item number
1	1	Machine hold-down device	094-015811-00001
2	1	Edge protection	094-007643-00000
3	2	Fender washer	064-000793-00000
4	2	M8 x 16, Oval head screw, hexagon socket	094-007803-00000

- Attach the edge protection.
- Place the hold-down device on the carrying handle of the wire feeder and secure using two oval head screw and two fender washers.

3.3 Protection for wire feed roll cover

These accessory components can be retrofitted as an option > see 6 chapter.

3.3.1 ON FIX CS 55

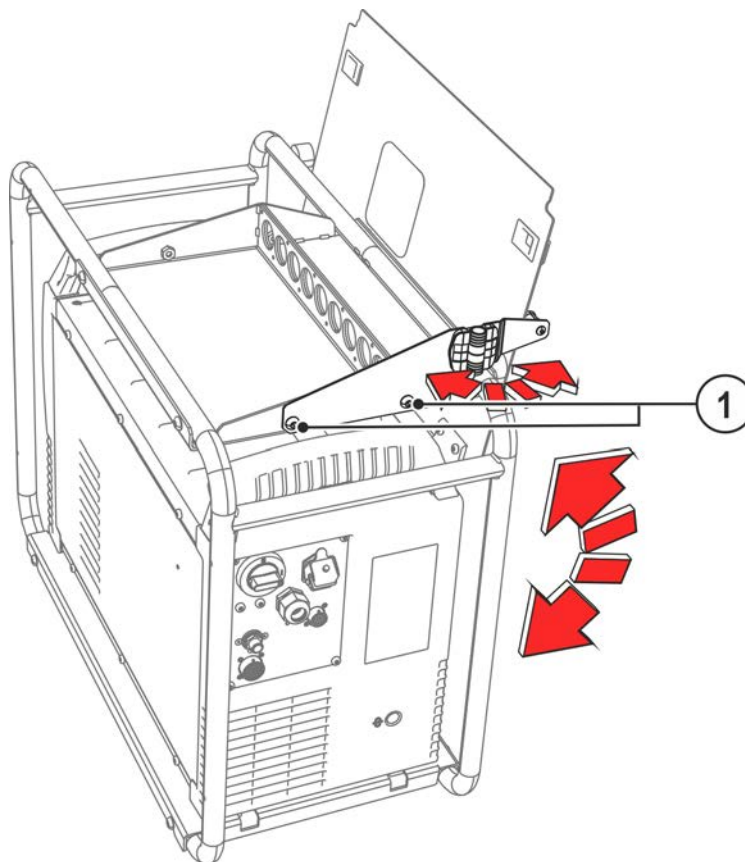


Figure 3-16

Item	Quantity	Description	Item number
1	2	M8 x 16, Oval head screw, hexagon socket	094-007803-00000

- Attach the locking plate to the carrier frame using 2 M8 x 16 oval head screw.

3.4 Final assembly

WARNING



Danger due to failure to carry out the final inspection!

Parts that are incorrectly fitted or that become loose are a source of danger.

- Check all mechanical connections to ensure that they are fitted correctly!
- Carry out the final inspection!
- Carry out the functional test!

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!

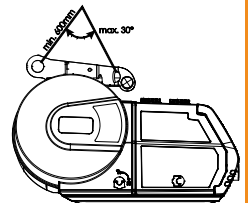
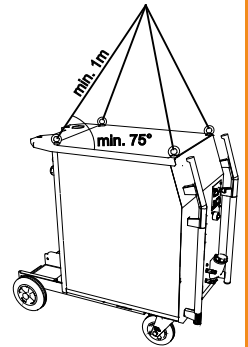
4 Functional characteristics

4.1 Safety rules while lifting

⚠ WARNING**Risk of injury during lifting by crane!**

When lifting the machine by crane, persons may be severely injured by falling machines or mount-on components.

- Simultaneous lifting of system components such as power source, wire feeder or cooling unit without suitable crane components is not allowed. Each system component has to be lifted separately!
- Remove any supply leads and accessories before lifting by crane (e.g. hose package, wire spool, shielding gas cylinder, toolbox, wire feeder, remote control, etc.!)!
- Properly close and lock all casing covers and protective caps before lifting by crane!
- Use the correct number of hoisting equipment of the right size in the correct position! Observe craning principle (see figure)!
- For machines with lifting eyes: always lift all lifting eyes simultaneously!
- When using retrofitted craning frames etc.: always use at least two lifting points positioned as far apart as possible – observe option description.
- Avoid any jerky movements!
- Ensure that the load is distributed evenly! • Use chain hoists and chain slings of the same length only!
- Stay outside the danger zone underneath the machine!
- Observe the regulations regarding occupational safety and accident prevention for the respective country.

**Craning principle**

4.2 Safety rules for operating the machine while it is suspended

⚠ WARNING**Risk of injury when operating in suspended state!**

When operating in suspended state, persons may be severely injured by falling machines or mount-on components.

- Keep casing covers and protective caps closed during operation!
- Use the supplied installation and mounting material only!
- Use the correct number of hoisting equipment of the right size in the correct position!
- Ensure that the load is distributed evenly!
- Use chain hoists and chain slings of the same length only!
- Avoid any jerky movements!
- Do not pull the torch hose package!
- Use strain reliefs of the right capacity!
- Stay outside the danger zone underneath the machine!

Daily maintenance!

- Always check the correct state of the hoisting assembly before operation!
- Check correct mounting of the wire spool support and wire spool (see standard operating instructions for the machine)!

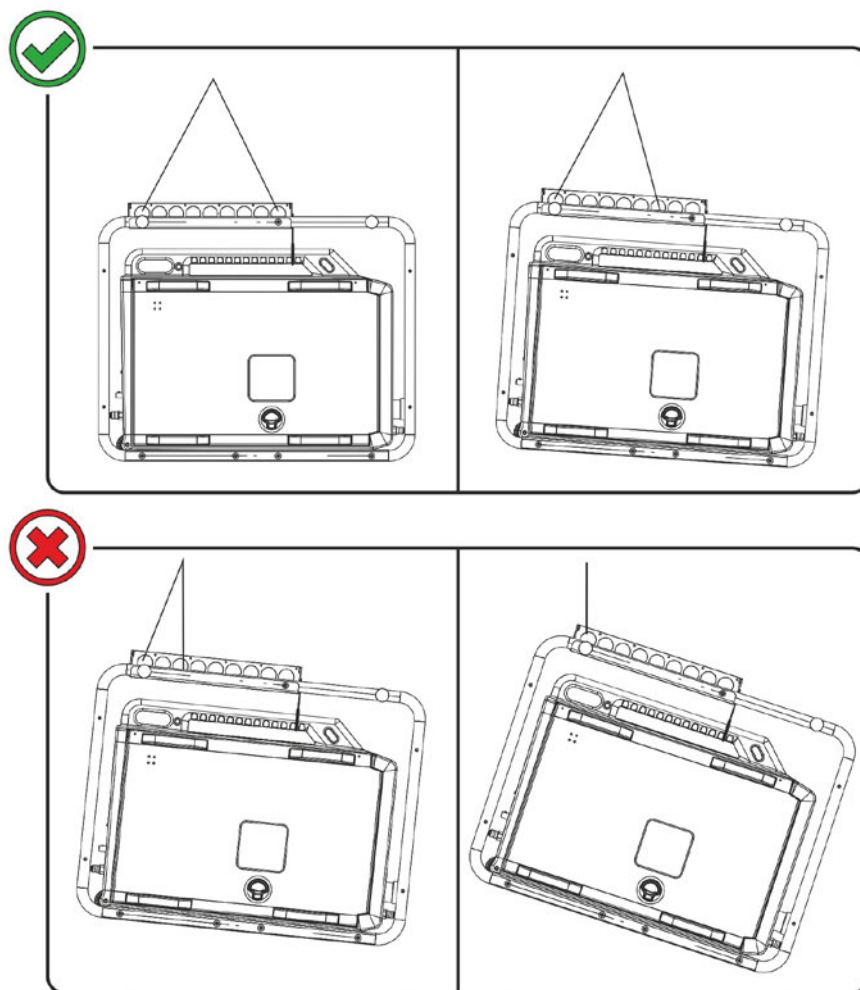


Figure 4-1

5 Technical data

5.1 ON CS T.0005/TG.0003/D.0002

The technical data given here completes or replaces the respective values in the standard operating instructions.

Dimensions L x W x H	745 mm x 351 mm x 605 mm 29.33 x 13.82 x 23.82 inch
----------------------	--

Weight	+19,6 kg + 43,21 lb
--------	------------------------

6 Accessories

6.1 ON CS T.0005/TG.0003/D.0002

Performance-dependent accessories like torches, workpiece leads, electrode holders or intermediate hose packages are available from your authorised dealer.

Type	Designation	Item no.
ON FIX CS	Wire spool cover bracket, to mount to lifting frame CS 55.	092-002741-00000