

AV-Mobile

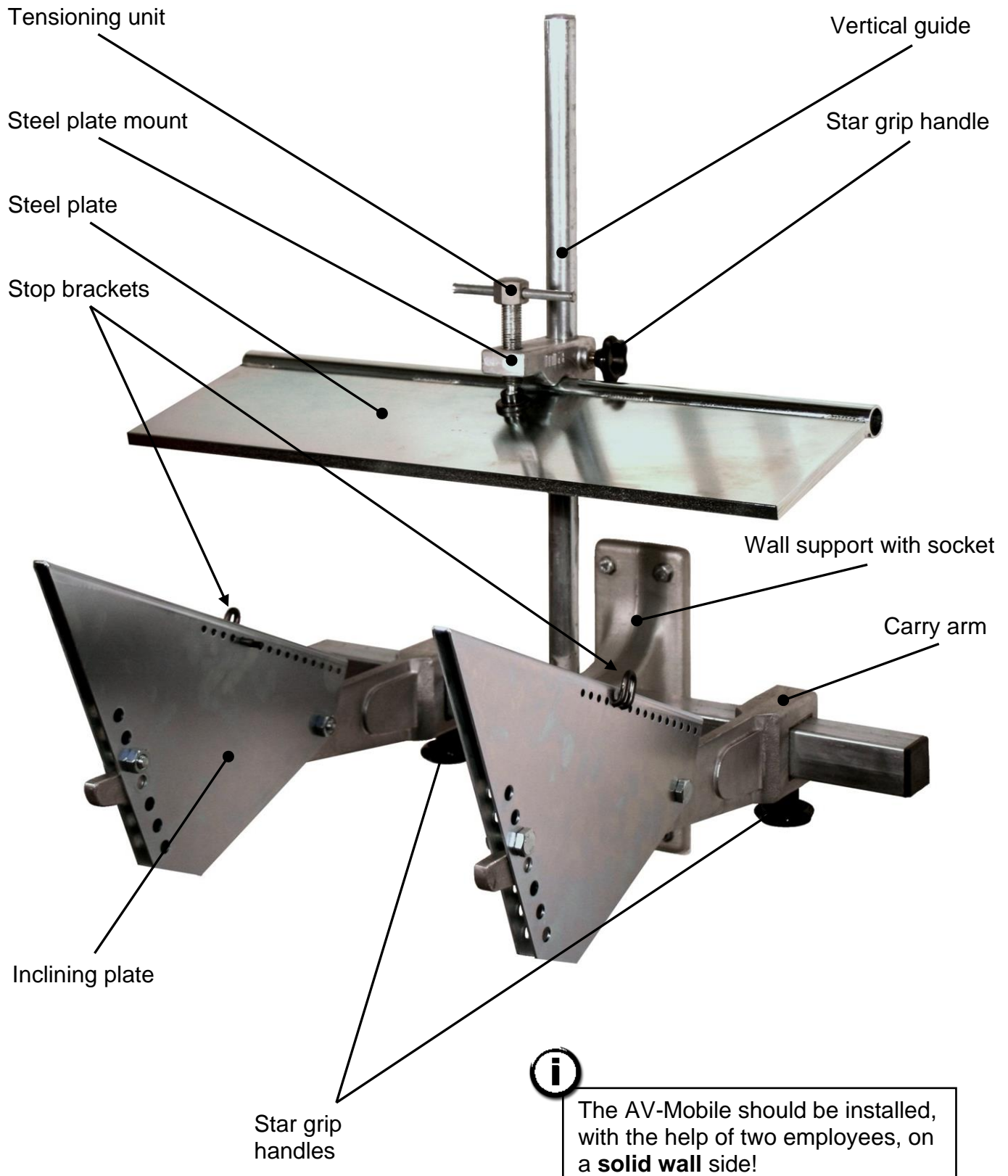
**Instruction manual
English (EN)**

**Cylinder Head
Clamping System**

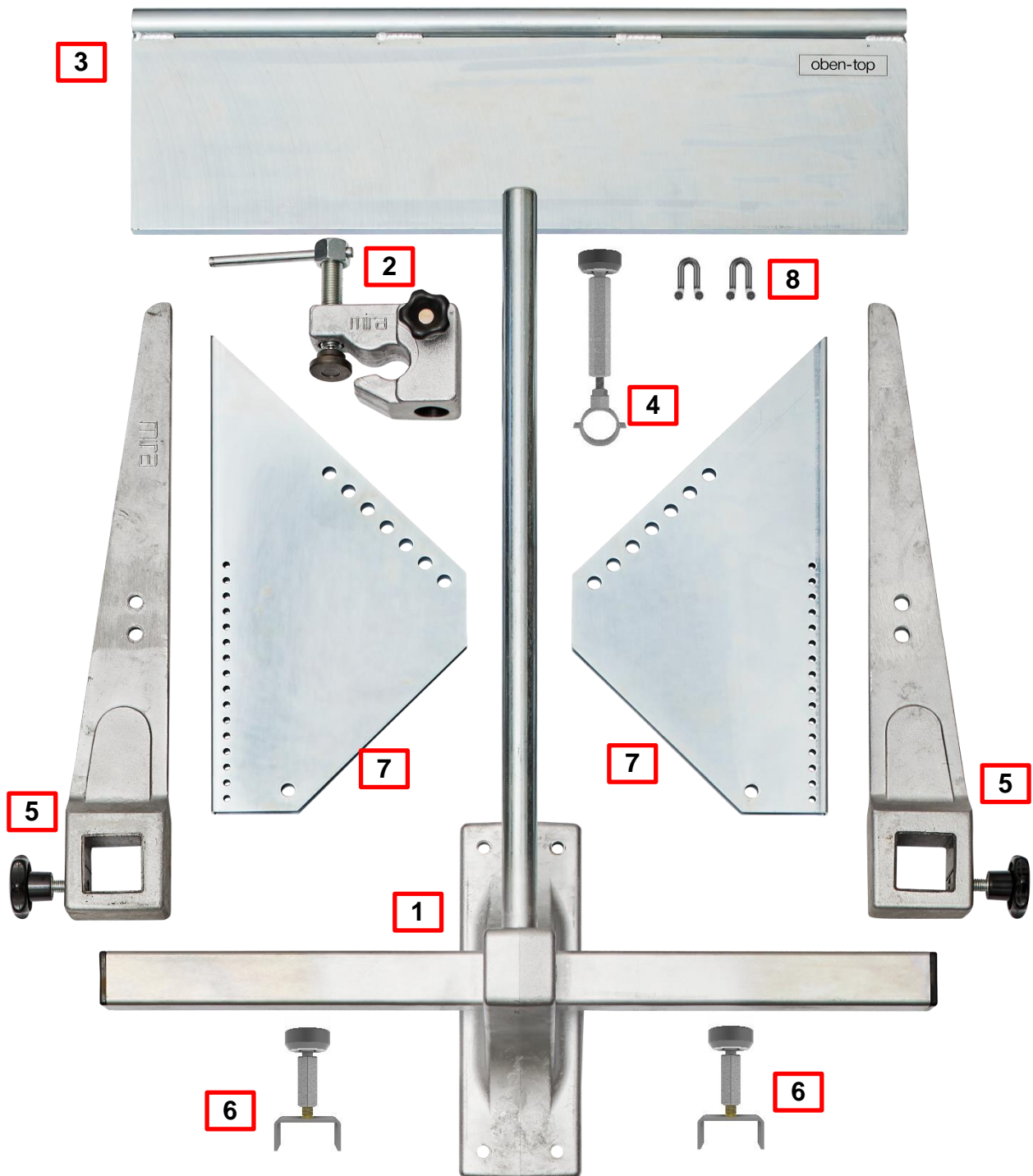


Table of contents

1. Overview	2
2. Package contents	3
3. Dimension and weight.....	4
4. Handling.....	5
5. Installation of the cylinderhead support AV-Mobile.....	6
6. Clamping of the cylinderheads.....	7
7. Mounting to wall (AV-Mobile).....	8
8. Maintenance and spare parts	9
8.1. Cleaning and care	9
8.2. Spare parts list	9
8.3. Spare parts drawing AV-Mobile.....	10
9. Special accessories	11
10. Notes	12

1. Overview

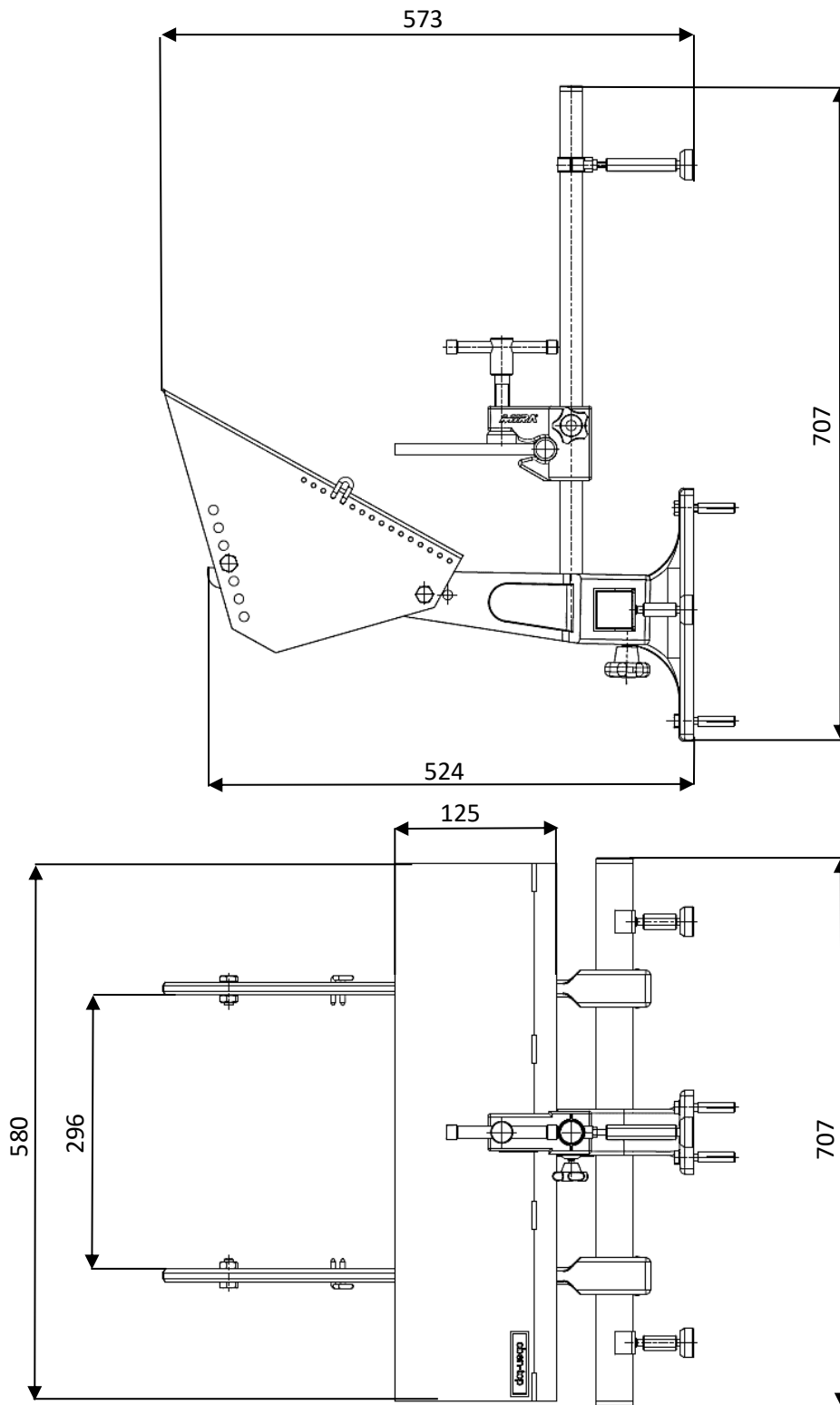
2. Package contents



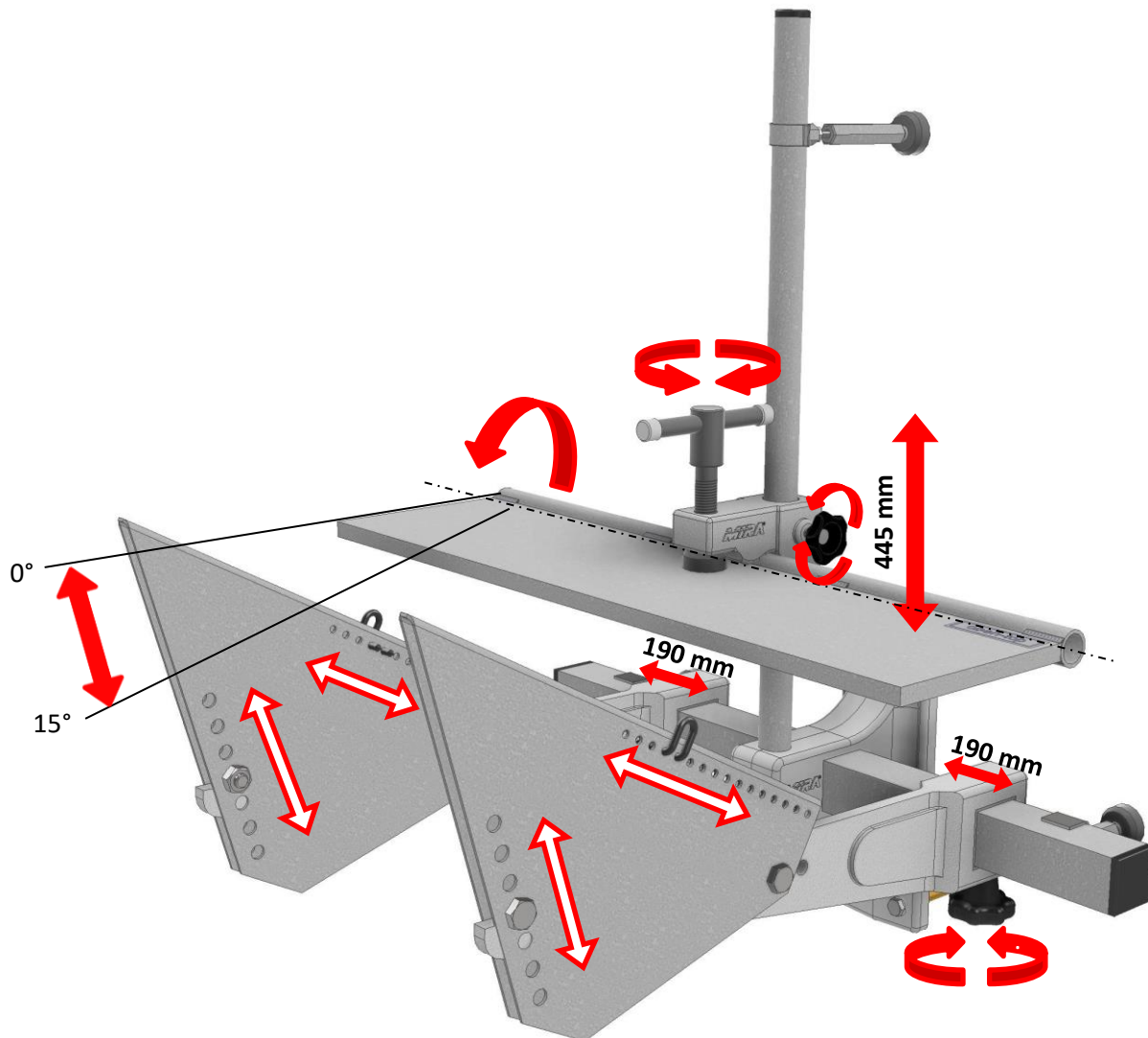
Position:	Quantity:	Descripton:
1	1x	Wall suport with socket
2	1x	Steel plate mount
3	1x	Steel plate
4	1x	Clamping piece long
5	2x	Carry arm
6	2x	Clamping piece short
7	2x	Inclining plate (Piece from Inclinig plate set)
8	2x	Stop brackets (Piece from Inclinig plate set)
	div.	Mounting material for wall mounting
	1x	Instruction manual in EN

3. Dimension and weight

Dimension in mm:



Weight: **20 kg**

4. Handling

= Continuously adjustable



= Adjustable via hole spacing

5. Installation of the cylinderhead support AV-Mobile

The universal cylinderhead support requires a clean, proper installation on a solid wall in order to ensure best results with the Mira VGX-21 Valve seat refacing device. The carry arms are installed, approximately 90cm, above the floor. Fig. 1

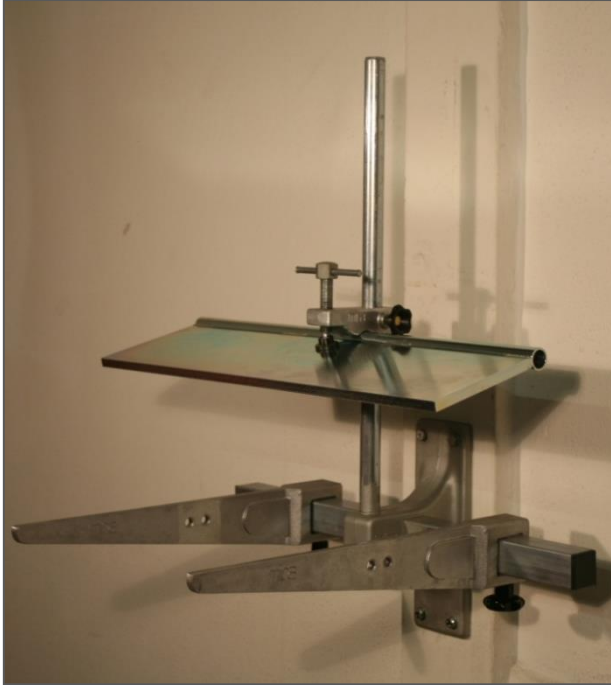


Fig. 1



To avoid damages and injuries, there are two employees required to mount the wall support!

When you place the steel plate, ensure that the milled side is on top, because of the slightly bended (convex) steel plate. The steel plate becomes straight when it is tightened.



(For more Information see instruction manual VGX-21 on page 15 in chapter «Processing of valve seats»)

Installation from Wallsupport:

- (1) To mount the support base, there must be drilled 4 bores in the footprint.
- (2) The included expansion bolts (1N0307M08) can be inserted into the bores and the wall support can be mounted on the footprint against a **solid wall**.
- (3) Use the included hexagonal screws (1N0056M08x030) to fastening the wall support. Tighten the screws firmly.



Fig. 2

The carrier arms, the steel plate and the steel plate mount, can now be fixed on the wall support.

The standard AV-Mobile cylinderhead-support includes inclining plates.

The inclining plates for cylinderheads with inclined valve seats, allows processing of the valve seats in an appropriate position (Fig. 3).



(For more Information see instruction manual VGX-21 on page 14 in chapter «Clamping of the cylinderheads» and in chapter «Special accessories» on page 33)



Fig. 3

6. Clamping of the cylinderheads

There are different possibilities for clamping cylinderheads. When fixing cylinderheads, attention must be paid that the magnet base and the clamping plate are in a clean condition and placed at level.

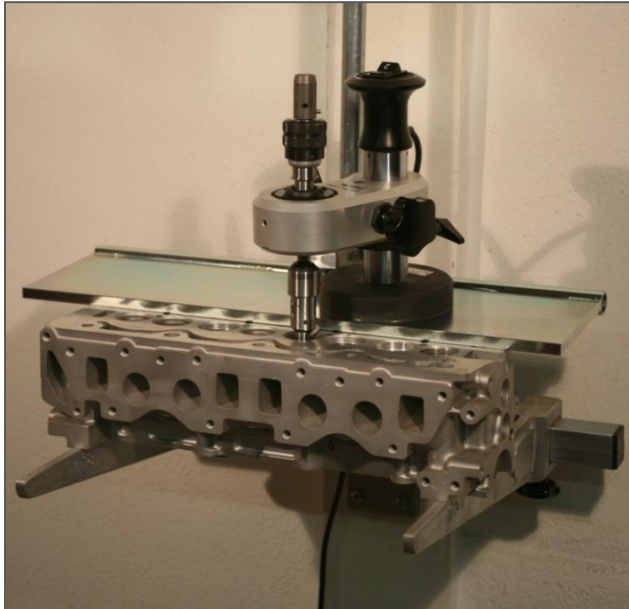


Fig. 4

At Fig. 4, the cylinderhead is fixed upright on to the MIRA cylinderhead support AV. This situation shows the standard position for straight valve seat processing.



PLEASE PAY ATTENTION!

The clamping of the cylinderheads and the processing of the valve seats must be done careful! To avoid injuries by squeezing or by cuts of sharp formtool edges, wear safety equipment (E.g.: Safety shoes, goggles etc.)!

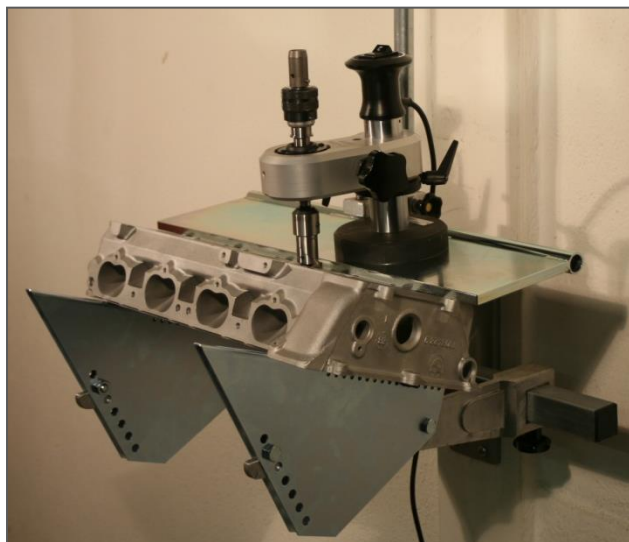


Fig. 5

If the cylinderhead includes inclined valve seats, like Fig. 5, the cylinderhead support must be equipped with the inclination plates (SH).

The inclination plates are delivered with 2 pairs of screws, nuts and a pair of stop brackets. For more Information see instruction manual VGX-21 chapter «Special accessories» on page 33.

The plates can be mounted easily and accommodate a safe and solid base for the valve seat refacing with the VGX-21. Fig. 5

For more Information see instruction manual VGX-21 in chapter «Processing of valve seats» on page 15 – 23

For machining the valve seat base bores, see in instruction manual VGX-21, in chapter 5 «Processing of insert counterbores (ring seats)» on page 24 - 25.

7. Mounting to wall (AV-Mobile)

It is recommended to wall-mount the Vario Drive system if combining it with an AV-Mobile workstation. To use the entire working area of the Vario Drive and reach the controls in a comfortable manner, make sure the assembly will be installed approximate to the AV-Mobile workstation.



For wall-mounting the Vario Drive, there has to be ensured that the mounting will suffice under the expected loads (weight of Vario Drive as well as operational stress).

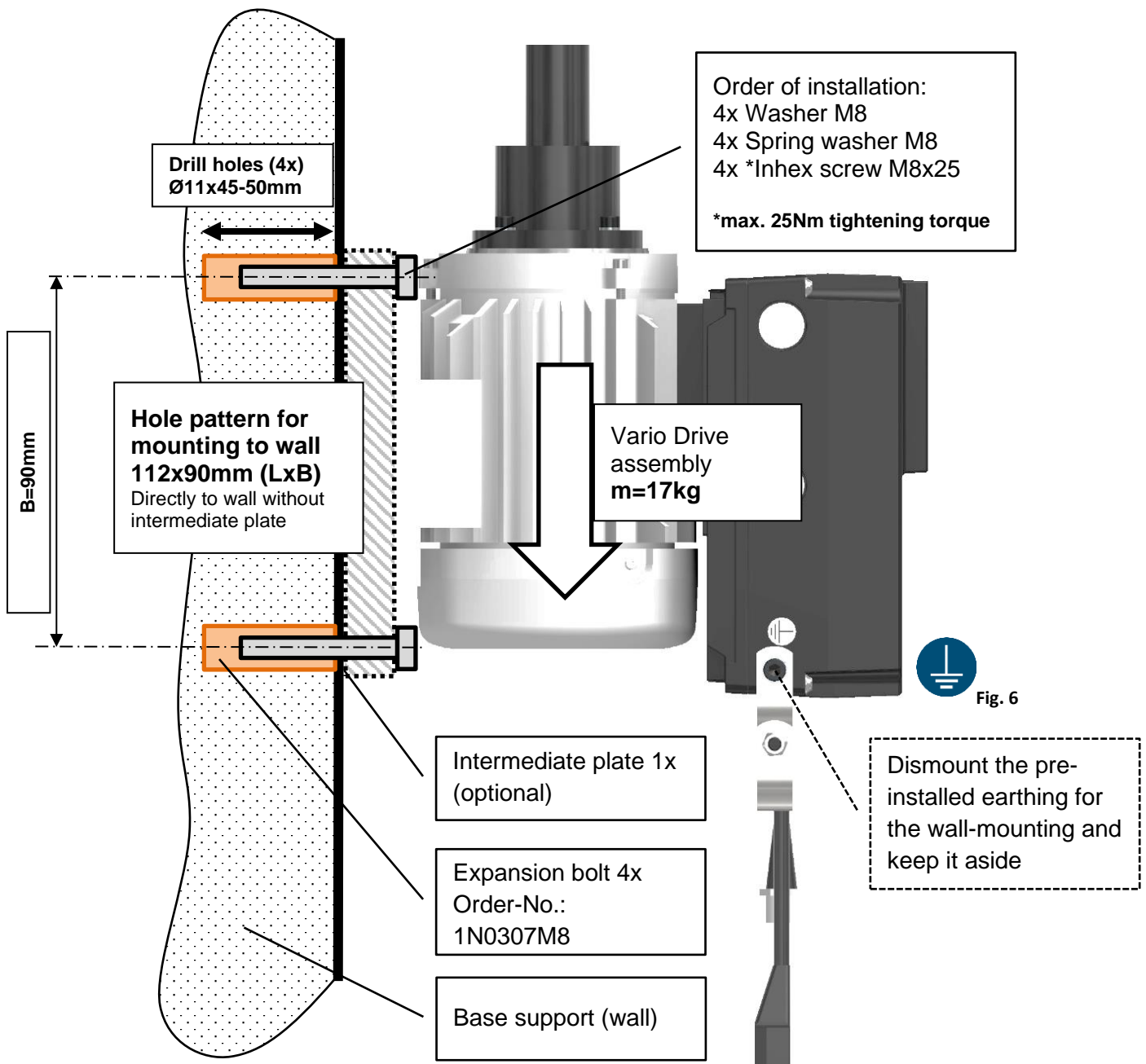
=> Weight of the Vario Drive system: 15kg

An even, smooth and flawless base support (wall) is required to ensure a firm, precise mounting for the system. Furthermore, only choose wall structures that are to be expected to last against the expected loads. Pure gypsum- and wooden boards are not suitable for load-bearing walls!



ATTENTION!

It is necessary to carry out this setup work with 2 persons. Risk of an accident and severe material damage by incorrect handling!



8. Maintenance and spare parts

8.1. Cleaning and care



Fig. 7

Before each use:

- The clamping device don't have to be dirty.
- Don't clean the clamping device with compressed air.
- Control fixation of screws an functionality of the elements. (Moveability)
- Ensure adjustability of the various elements.
- Steel base plate centered and aligned parallel to cylinder head.
- Clamping pieces short and long must lay completely on the wall.
- Ensure clampability of the steel base plate

After each use:

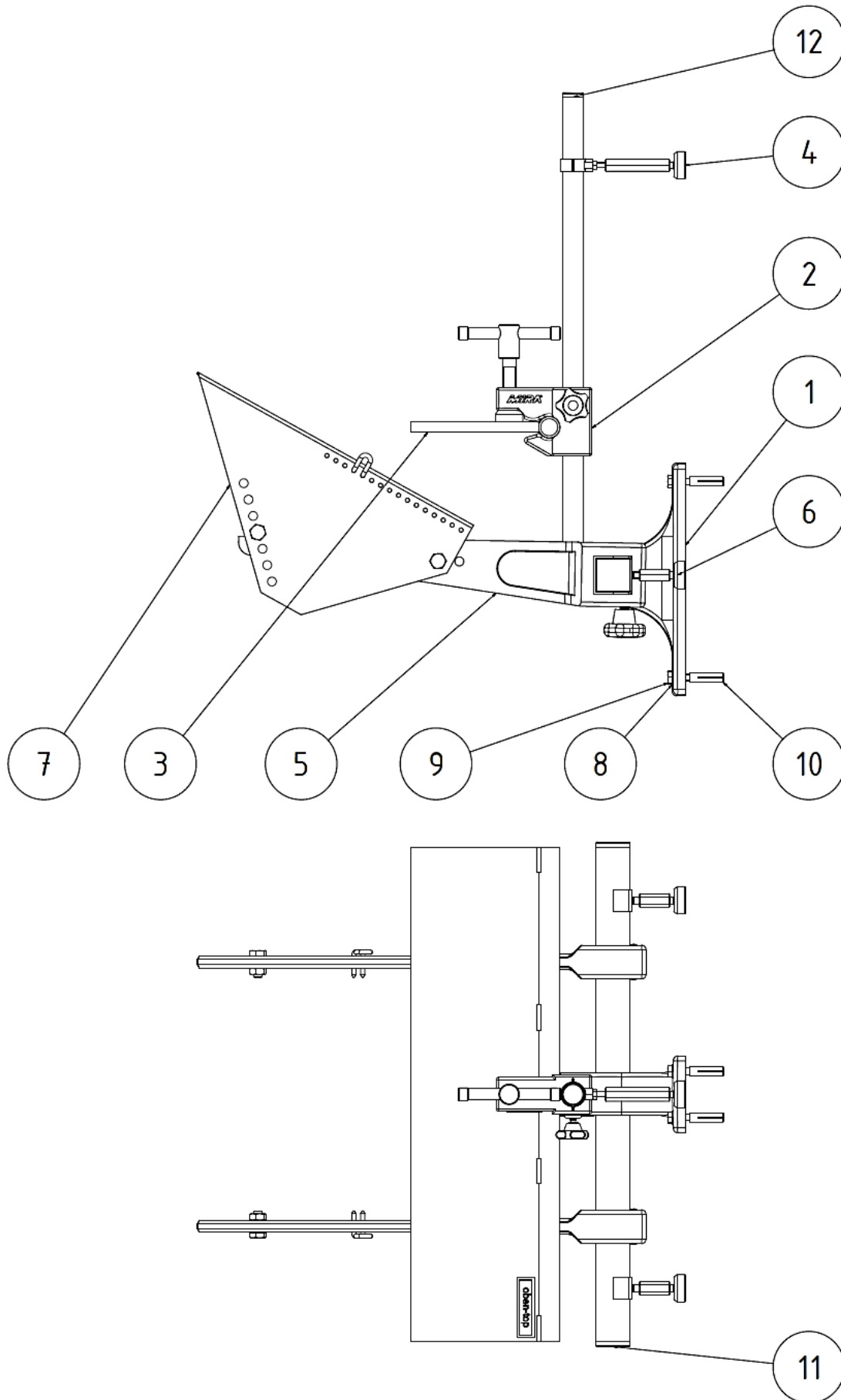
- Clean cooling lubricant from the clamping device
- Remove chips from the clamping device with a brush.
- Dry the clamping device with a soft, lint-free cloth.
- Protect steel base plate against rust as required.
- Ensure adjustability of the various elements.
- Prepare clamping device for the next use.
- Check the steel base plate for damage (deformation) and scratches.

8.2. Spare parts list

Descripton	Pos.	Quantity	Part-No.:
Wallsupports with socket	1	1	11252.1.1001
Steel plate mount	2	1	11242.3.2423
Steel plate	3	1	11242.3.1153
Clamping piece long	4	1	11242.4.2887
Carry arm	5	2	11242.2.1002
Clamping piece short	6	2	11242.4.2888
Inclining plate	7	1	11232.3.1731
Washer	8	4	1N0715M08
Hex screw	9	4	1N0715M08
Expansion anchor M8 WECO	10	4	1N0307M08
Locking pin	11	2	1KVS40V
Special pin	12	1	1KVS25
Label (oben-top)	13	1	1BAB03



Special accessories
See page 11

8.3. Spare parts drawing AV-Mobile

9. Special accessories

MIRA tooling and equipment are available on the [MIRA Webshop](#):



Storage table (AT)

To be fixed on the vertical guide post of the wall support AV. The MIRA units (VGX-21) can be placed on this storage table and gives an ideal platform for replacing tools and pilots:

Drawing number: 11232.2.1111

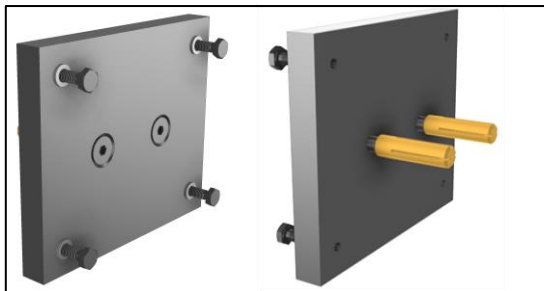
Fig. 8



Replacements parts:

Descripton:	Pos.:	Order Nr.:
Round plate	3	11251.4.1486
Counter sunk screw	4	1N0357M06x012
Triple star handling	5	1HSG08KA

Fig. 9



Mounting plate

The steel mounting plate is used for separate wall mounting of the VarioDrive. The mounting plate can be attached to the wall using 2x M10 screws and 2x expansion anchor. The VarioDrive can be fastened through the outer hole pattern (4x).

Drawing number: 10350.2.5256

Fig. 10

Replacement parts:

Descripton:	Pos.:	Order Nr.:
Mounting plate	1	10350.1.5256
Expansion anchor M8 WECO	2	1N0307M08
Nord-Lock M6x10.8	3	1N65212M6x10.8
Countersunk screw	4	1N0020M08x025
Hex screw	5	1N0715M08



Lined writing area consisting of 30 horizontal dotted lines.



Lined area for notes or text.



Manufacturer and worldwide distributor:

MINELLI CORPORATION
Mattenstrasse 3
8330 Pfäffikon ZH
Switzerland

www.miratool.ch

Your local distributor: