

Operating instructions manhole lifter FE 1067

1. Intended use

The manhole lifter may only be used to shift upright concrete pipes, manhole rings and cones according to DIN 4034 Part 1 without coating up to 2,5 to net weight.

2. Delivery

The manhole lifter is delivered ready for use.

3. Safety instructions

- Operating the manhole lifter on tower cranes, truck cranes, diggers, lifting equipment etc. of which the manhole lifter can not be observed during the operation is strictly prohibited
- No fitful actions under load
- Slow and dynamic hoisting and lowering
- Danger of breakage of defective parts when lifting
- During the operation the stay of people in the danger zone is strictly prohibited
- The lifting eye has to be attached on the lifting device properly
- The manhole lifter may only be operated on an adequately resilient chain
- Do not hold the manhole lifter neither on the movable parts nor the circulation pipes – **risk of injuries !**



- Before and after lifting the shaft parts all circulation pipes, side panels respectively need to rest on the upper edge of the shaft parts or show the same distance. If this is not the case, the shaft part may not be lifted as otherwise it may release from the manhole lifter.
- Before operating please check whether the manhole lifter is free of grossly soiling and all movable parts are smooth-running
- The tothing of the brackets needs to be free of soiling. Brackets with broken or used sprockets or used or damaged counter balances need to be replaced

4. Operation

4.1 Lifting the manhole ring



Lower the manhole lifter in loosened position in the manhole ring to be lifted

Picture A

Picture A

Hanger in position „loosen“

All circulation pipes need to rest on the upper edge of the manhole ring
Put the hanger in the circuit board in position „hoist load“. Then hoist slowly and evenly.



Picture B

Hanger in position „hoist load“

Please note:

If one of the circulation pipes does not rest properly on the upper edge of the shaft part, do not lift! Lower once again and put the manhole lifter in the right position. Then relift slowly and evenly

After the manhole ring has been settled, release the sling chain until the hanger slides downwards. The hanger can be put in position „loosen“ by pulling it slightly diagonal.

The manhole lifter now can be lifted out of the shaft part.

4.2 Lifting a cone horizontal

Lower the manhole lifter in loosened position in the manhole ring to be lifted. Please note: Loose the locking pin from the cone valve, strike the cone valve down and lock it with the locking pin.

Picture C



All circulation pipes need to rest on the upper edge of the manhole ring
Put the hanger in the circuit board in position „hoist cone“. Then hoist slowly and evenly

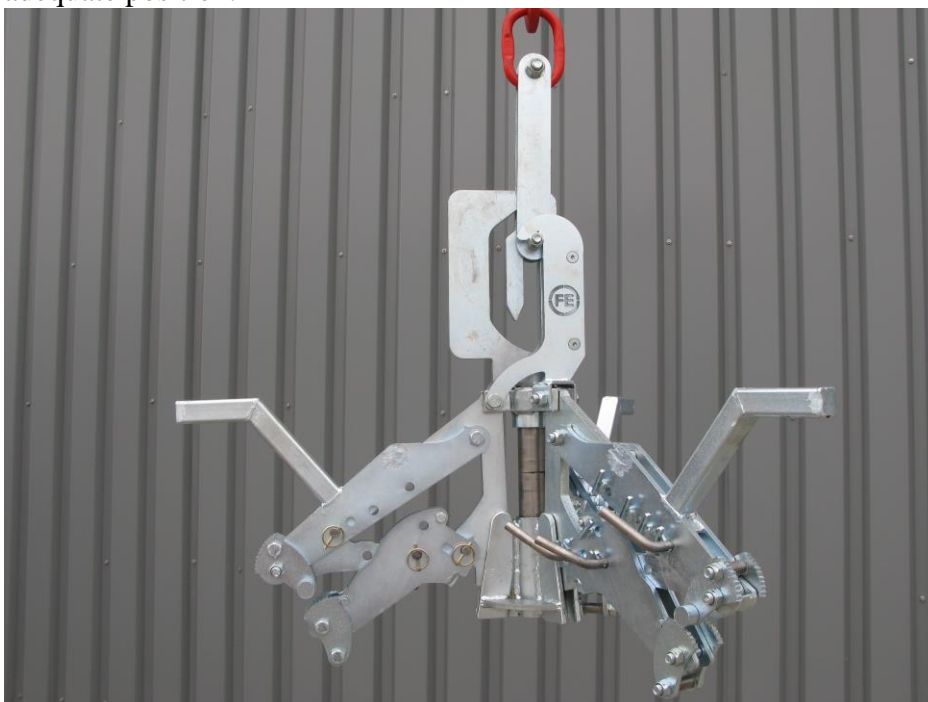
If one of the side panels does not rest properly on the upper edge of the cone, put the manhole lifter in the right position. If one of the side panels lifts off when hoisting, do not continue hoisting! Lower once again, then relift slowly and evenly.

After the cone has been settled, release the sling chain until the hanger slides downwards. The hanger can be put in position „loosen“ by pulling it slightly diagonal

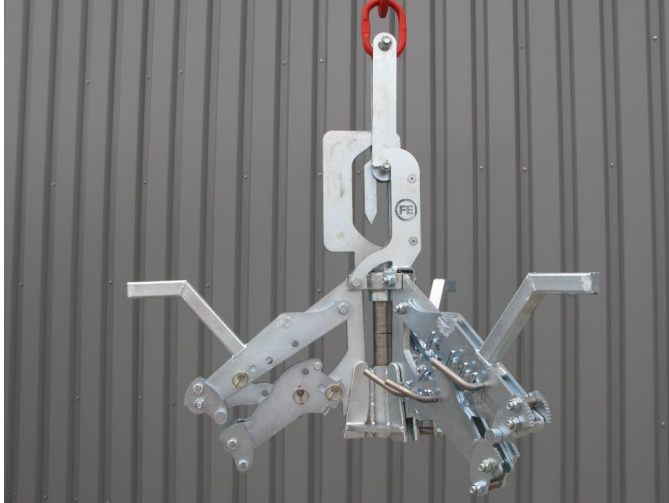
The manhole lifter now can be lifted out of the shaft part.

4.3 Lifting manhole bases and DIN 800 mm shaft parts

For lifting the manhole bases and DIN 800 shaft parts, the cone valve needs to be put in the adequate position.



Lifting manhole bases. Loose the locking pin and strike the cone valve upwards. Lock the cone valve in the drilling by using the locking pin.



Lifting DIN 800 mm shaft parts. Loose both locking pins and shift the conce valve forwards. Lock the cone valve by using the locking pins.



4.6 Retrofitting for DIN 1200 mm shaft parts

For lifting 1200 mm shaft parts. Shift all brackets outwards by unlocking the locking pin, adjust them on the adequate pipe diameter and relock the pin.



Please note: the brackets need to be movable!

5. Maintenance and fostering

- Clean the manhole lifter regularly with a high-pressure cleaner and warm water
- If necessary, grease and oil all movable parts
- Check the straight seat of screws and nuts
- Check the movability, abrasion and soiling of the brackets
- **Damages on the manhole lifter may only be fixed by the manufacturer or a technical expert !**



5.1 Brackets

- Check the movability of the brackets and the counter weights for forming
- Clean the tothing and check it for abrasion
- Replace worn and crooked brackets

5.2 Cone valve

- Check the cone valve and locking pins for damages and forming
- Check the split pin
- Grease the locking pins
- Replace damaged or crooked cone valves and locking pins
- Replace broken split pins



5.3 Side panels

- Check the side panels for damages and forming
- Slacken tightened screws. Remove crooked side panels and adjust them with a hydraulic press.
- Replace damaged side panels

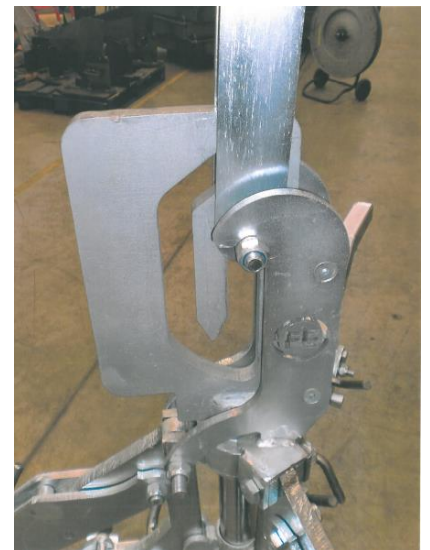


5.4 Circulation pipes

- Check the circulation pipes for damages
- Replace damaged or crooked circulation pipes

5.5 Circuit board and hanger

- Check the circuit board and hanger for damages and forming
- Clean the circuit board and grease it with high performance grease
- Replace damaged or crooked circuit boards and hangers



5.6 Channels

- Check the channels for damages and forming
- Check the channels for soiling (clean soiled channels)
- Oil channels

6. After sales service

For questions concerning the operating mode, disorders respectively please contact your specialist dealer primarily

7. Liability

The manufacturer will not take any liability for inappropriate use, manipulations as well as disorders which result from not effected yearly review, grossly soiling and lacking maintenance.

8. Examination

The manhole lifter has to be examined **by a technical expert** on its reliable condition **at least once a year**.