



Service Instruction for Disperators Glass Crusher

500 EXCELLENT Series

Model GKF550

Disperator AB

Mälurvägen 9

SE-141 71 Segeltorp

SWEDEN

Tel : +46 8 724 01 60

Fax: +46 8 724 60 70

E-mail: info@disperator.se

Web page: www.disperator.se



AUTHORITY

Dismantling and connection of the disperator glass crusher to electrical services must be done by **authorised persons and in accordance to valid local regulations.**

DISMANTLING OF GLASS CRUSHER

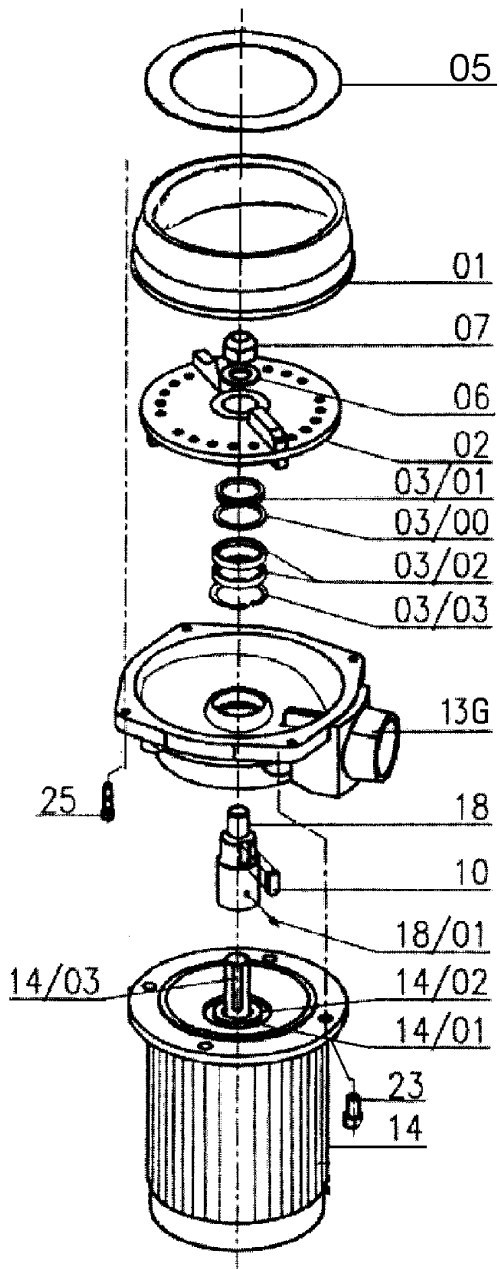
1. Switch the current off and remove all the main fuses from the three phases.
2. Disconnect the glass crusher cable from the mains supply.
3. Remove the feeding tube. -240/03. Loosen but do not remove the four screws on the right and left side of the housing, which holds the front cover, 240/01.
4. Hold the front cover, -240/01, and remove the right and left top screws. Use the bottom screws as a hinge and lower the front cover with the crusher to the floor. Note the weight of the unit is 60kg.
5. Disconnect the electrical cable from the motor, -14. Remove the front cover from the housing by removing the right and left screws at the bottom.
6. Place the crushing unit upright on the motor fan cover and remove the front cover, (4 screws and nuts, -25).
7. Remove the stationary shredder, -01, by levering against the large tooth with a crowbar supported against the rotary shredder, -02, near to one of the two shredder blades.
8. Hold fast the rotary shredder with, for example, a pipe wrench and loosen the axle nut, -07.
9. Remove the rotary shredder, -02. Use two crowbars opposite one another under the outer edge supported against the edge of the end shield, -13G.
10. Remove the V-ring seal, -03/01. Loosen the four fixing screws, -23, in the end shield, -13G and lift off. **Inspect washer, -03/00, for possible wear caused by V-ring seal and replace washer if necessary.**
11. Turn the end shield up side down and dismantle the locking ring, -03/03, by using pointed pliers. Press out the two axle seals, -03/02.
Inspect the contact surface of the carrier, -18, for wear caused by the axle seals. Replace the carrier if necessary.
12. Terminate dismantling here when only replacing the stationary and rotary shredders.
The V-ring seal, -03/01, and the two axle seals, -03/02, with special grease, -04, together with stationary seals, -05 must be replaced with every maintenance.
13. Loosen fixing screw, -18/01. Remove carrier, -18, carefully in order not to damage the motor bearings. If necessary, replace damaged bearings, -14/02, together with the motor axle seal, -14/01.
14. When replacing motor ensures that new motor, -14 has the same classification and quality as the original motor (compare rating plates). Drill two holes in the upper motor flange to allow for drainage of possible water condensation (see existing motor).

The life time of the grinding unit is dependent upon type of glass, the size and the number of bottles ground. It is estimated that the rotary shredder has to be replaced after 35.000 – 40.000 bottles ground.

Replacement motors with drainage holes are available for immediate delivery from DISPERATOR AB.



When ordering spare parts always state the model of the disperator and the item number of the article required, e. g. GKF550-01 for stationary shredder.



- 01 Stationary shredder
- 02 Rotary shredder
- 03/00 Washer for V-ring seal
- 03/01 V-ring seal
- 03/02 Axel seal, 2 pcs, with stainless spring
- 03/03 Locking ring, SgH
- 05 Seal for stationary shredder
- 06 Washer
- 07 Axel nut
- 10 Key for carrier
- 13G End shield
- 14 Motor with drained upper flange *)
- 14/01 Axel seal, motor drive side **)
- 14/02 Bearing, 1 pc. motor drive side, 1 pc. motor fan side **)
- 14/03 Key for motor shaft **)
- 18 Carrier
- 18/01 Fixing screw for carrier, SK6SS M6x6
- 23 Screw, 4 pcs. MC6S M12 fzb **)
- 25 Screw, 4 pcs. M8 fzb
Locking nuts, 4 pcs., LM6M M8 fzb

Spare parts not shown in drawing

- 04 Special grease for seals and carrier
- 09 Rubber sealing compound
- 31 Jam release wrench for rotary shredder, -02

*) Voltage and manufacture required when ordering

***) Motor manufacture required when ordering

SERVICE PACKAGE 1

Items to be replaced when carrying out preventive maintenance.

Article number: -03/01, -03/02, -04, -05, -06, -07, -10, and -42.

SERVICE PACKAGE 2

Items required when replacing parts subject to wear are items included in Service Package 1 plus the following.

Article number: -01, -02, -13G, -23, -25, and if required -03/00, and -18.



ASSEMBLY OF GLASS CRUSHER

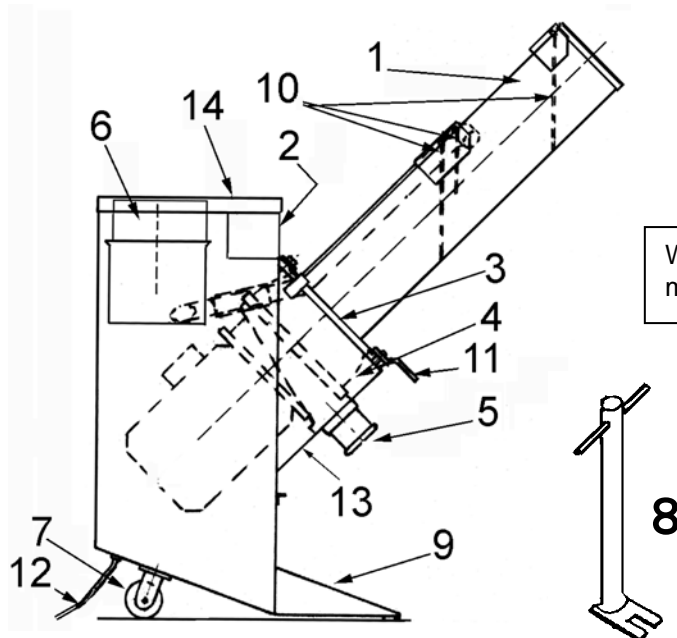
15. **Clean all components carefully.** Assemble in reverse order. Note especially the following.
 16. Before pressing the carrier, -18, onto the motor axle, remove the motor fan hood and support the axle at fan end in order to prevent damage to the motor bearings. Mark the depth of hole in the carrier onto the motor axle. Coat the motor axle and the carrier hole with protective grease or sliding lacquer to prevent rusting or jamming. Press the carrier **down to the mark** on the motor axle. Tighten the fixing screw, -18/01, through the M6-hole in the carrier.
 17. Place washer,-03/00, in the end shield, -13G. The edge on the outer diameter of the washer shall be nearest to the two axle seals, -03/02.

Apply a coat oil on the outer diameter of the two axle seals,-03/02, to ease pressing into the end shield. Press the axle seals into position using a tool having the **same outer diameter** in order that they shall not be damaged. These seals shall be placed with the groove and stainless spring **upwards towards the grinding unit**. The seals are fixed by fitting the locking ring, -03/03, into the groove in the end shield.

Grease the axle seals and pack the space between the two seals with **the special grease, -04, supplied by DISPERATOR**. Grease the sealing face of the carrier, -18, using the same grease before fitting the end shield, -13G, with axle seals over the carrier. **Care should be taken not to damage the lips of the axle seals.**
 18. Grease the V-ring seal, -03/01, and washer, -03/00, **using grease, -04, from DISPERATOR**. Fit the V-ring seal over the carrier, -18. Place the flat surface, showing type specification of the V-ring seal, upwards towards the grinding unit.
 19. Coat carrier axle, -18, and hole of the rotary shredder, -02, with protective grease or sliding lacquer. Check that the carrier key, -10, is positioned correctly and fit the rotary shredder on the carrier axle. Apply a layer of rubber sealing compound, -09, over joint between shredder and carrier axle. Fit the washer, -06, and tighten up axle nut, -07.
 20. Apply a thin layer of rubber sealing compound, -09, in the seat of the end shield, -13G. Position the stationary shredder, -01, with the large tooth at the outlet of the end shield, and press down tightly. Secure the stationary shredder to the end shield by hammering a number of punch marks around the joint between the stationary shredder and the end shield. Seal the outer top of the joint between the shredder and the end shield with rubber sealing compound.
 21. Tighten alternately the four screws and nuts, -25, with an even and moderate pressure to compress the rubber seal, -05. Check with a feeler gauge that the seal is tightened between the front cover, -240/01, and the stationary shredder.
- ## SUCTION EQUIPMENT WITH FILTER
22. Loosen the clamping ring holding the filter unit. Turn the filter unit in order to loosen the suction pipe. Lift the suction equipment out of the housing.
 23. Empty and clean the container holding the filter unit.
 24. Shake the filter clean or change if necessary, -240/19.
 25. Assemble in reverse order.



Disperator glass crusher - Model GKF550



When ordering spare parts, always give the model and the article number, e.g. GKF550-38

GKF 550

Glass crusher mounted in stainless steel cabinet, BS304S16

- 1 a Feeding tube with attachment for suction equipment, No. -240/03
- 1 b Seal for base plate of feeding tube, No. -240/11
- 2 a Motor contactor with over-load protector and coil, No. -38, see *) on page 3
- 2b Contactor coil, No. 42, see*) on page 3
- 3 Grinding chamber access prevention limit switch, No. -39, see *) on page 3
- 4 Glass crusher, see page 3 for parts included
- 5 Outlet flange for ground glass, No. 240/27
- 6a Suction equipment, No. -240/148, see*) on page 3
- 6b Filter for suction equipment, No. -240/19
- 6c Hose for suction equipment, No. -240/20
- 7 Wheels, 2 pcs., No. -240/12. Feet fixtures, 2 pcs optional
- 8 Jam release wrench for grinding unit, No. -31
- 9 Shelf for plastic bag or container to be attached to ground glass outlet (pos. 5)
- 10 Protective rubber curtains, 3 pcs., No. -240/28, 29, 30
- 11 Locking device for feeding tube, No. -240/10
- 12 Electrical supply cable, No. -180/01, 2m
- 13 Front cover, No.-240/01
- 14 Top cover, No. -240/09, removable

Should further information be required about the installation and maintenance of Disperator products, please contact us at the address given at the bottom of this page.

Disperator AB - Mälarvägen 9, SE-14171 Segetorp - Sweden

Tel: +46 - 8 724 01 60 Fax: +46 - 8 724 60 70

E-mail: info@disperator.se