KÄRCHER

Service Manual
(draft)

CB 1/23 1.534-001
CB 1/25 1.534-002
CB 1/28 1.534-003

SQI-C / 24.11.2004

Contents:

Special tools:

Extractor 4.263-030 (for gears, shafts, flanges)

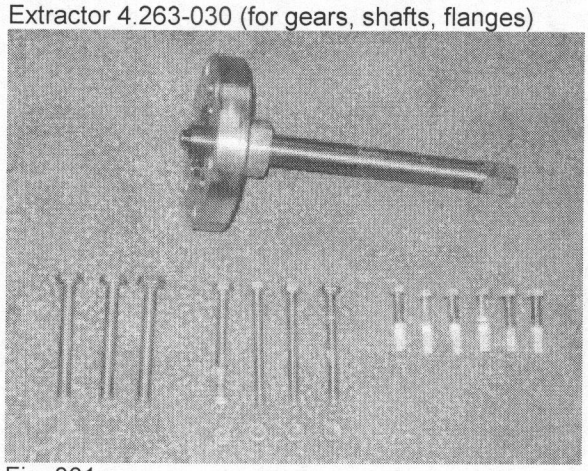

Fig. 001

Extractor 6815-010 (for impellers)

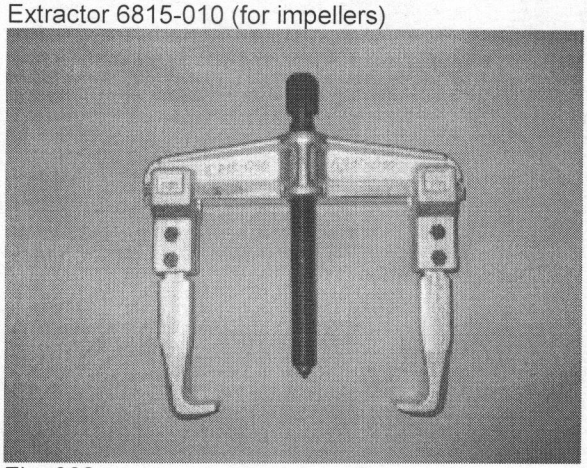

Fig. 002

Rolling up and lifting attachment 3.900-008 (for portal driving and raising)

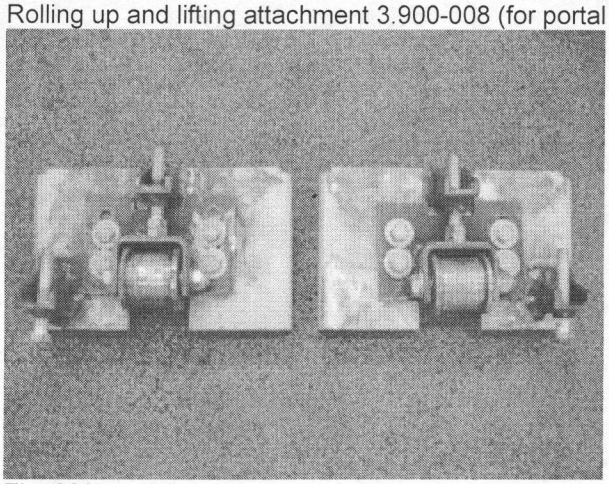

Fig. 003

Sickle spanner 7.815-008 (for roof brush ball bearing)

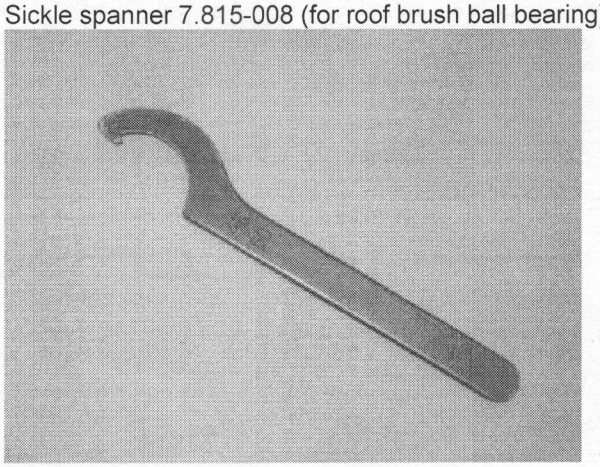

Fig. 004

Data transmission cable 6.643-836 (for software transmission)

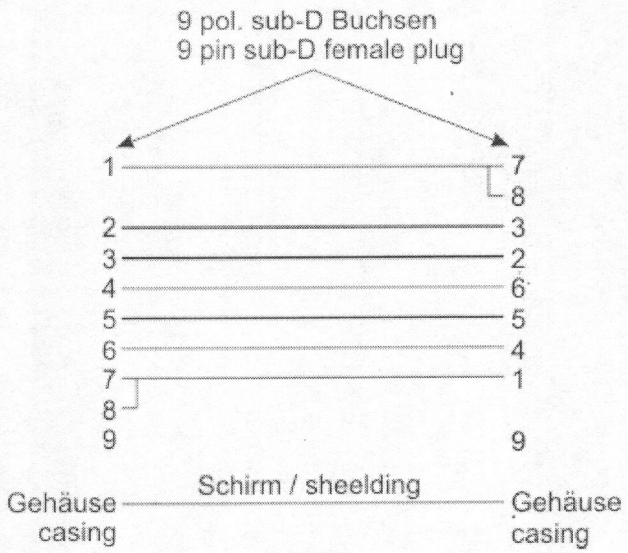

Fig. 005

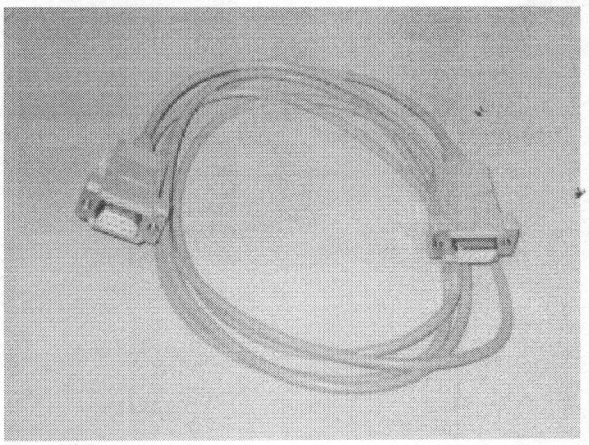

Fig. 006

Note:
Only the leads 2, 3, 5 and the screen are needed.

Portal driving:

Replacing geared motor, running roller on driven side

Required time for one side: approx. 90 minutes with one fitter

1. Turn off main switch plant and secure against restart (e.g. with a padlock).

2. Disconnect cable in the motor terminal box.

3. Unscrew front plate of the movable foot

4. Mount lifting attachment (A) on movable foot (Fig. 010).

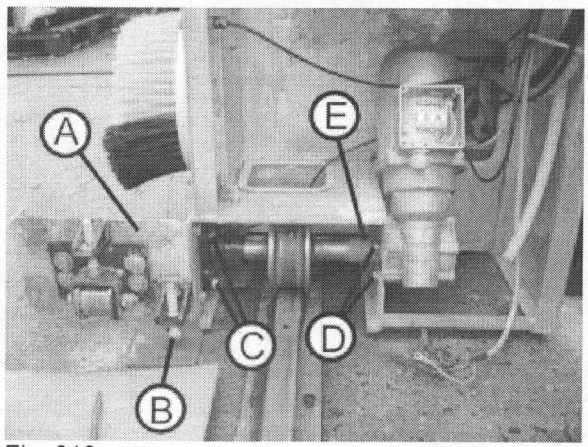

Fig. 010

5. Raise portal with screw (B), support movable foot and loosen screw (B) again

6. Loosen retaining screws from flange bearing (C) and from geared motor (D) (Fig. 010).

7. Remove complete drive unit with the help of service recess (E) from drive shaft (Fig. 010).

8. Push away cover (F) from flange bearing (I) (Fig. 011).

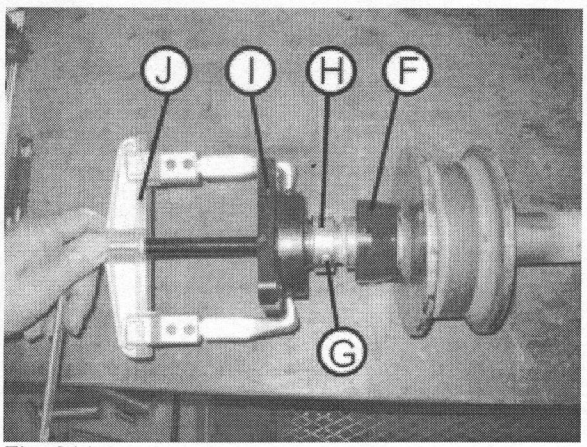

Fig. 011

9. Loosen safety screw (G) and open clamping ring (H) (Fig. 011)

10. Extract flange bearing (I) with extractor (J) (Fig. 011).

11. Loosen retaining screw from shaft and remount without washer. Then screw extractor (K) onto gear and eject the shaft of the running roller (L) (Fig. 012).

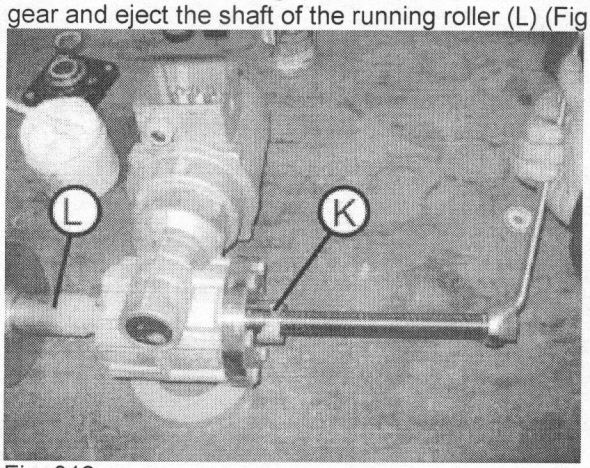

Fig. 012

12. When assembly the new components, ensure that the clamping ring of the flange bearing is tightened only when the drive unit is installed in the movable foot again. For that, when putting the drive unit into the movable foot, make sure that the safety screw of the clamping ring is visible from front to be able to tighten it later.

13. Place the 4 screws of the flange bearing, but do not tighten.

14. Tighten gear with the 6 screws (tightening torque 25 Nm). Ensure that the special locking washers are mounted again.

15. Tighten screws (C) of the flange bearing (Fig. 013).

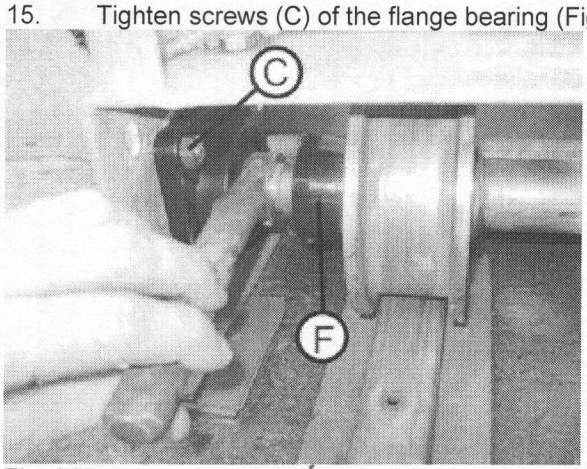

Fig. 013

16. Grip clamping ring and tighten safety screw (Fig. 013).

17. Grease rubber lip of cover (F). Then, slide the cover onto the flange bearing. If the cover is not greased, when driving the portal, you will hear squeaking noises.

18. Raise portal with screw (B), remove support material and lower portal again (Fig. 010).

19. Mount front plate and adjust height so that the safeguard does not jam.

20. Perform a test wash.

Portal driving

Replacing flange bearing, running roller, portal revolving side

Required time for one side: approx. 75 minutes with one fitter

1. Drive up portal somewhat with manual functions.
2. Turn off main switch plant and secure against restart (e.g. with a padlock).
3. Unscrew front plate of the movable foot
4. Mount lifting attachment (O) on movable foot (Fig. 010).

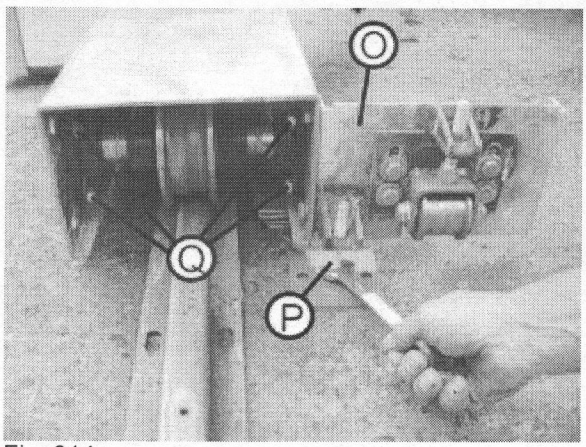

Fig. 014

5. Raise portal with screw (P), support movable foot, loosen screw (P) and remove lifting attachment again (Fig. 014).
6. Loosen retaining screws of both flange bearings (Q) (Fig. 014).
7. Remove complete unit (Fig. 014).
8. Push away covers (R) from flange bearings (S) (Fig. 011).

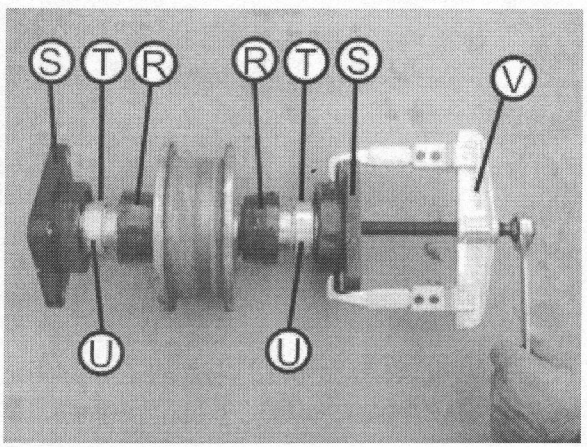

Fig. 015

9. Loosen safety screws (T) and open clamping rings (U) (Fig. 015)
10. Extract flange bearing (S) with extractor (V) (Fig. 015).

11. When assembly the new components, ensure that the clamping ring of the flange bearing is tightened only when the running roller is installed and connected in the movable foot again. For this, tighten the 8 screws (Q) of the flange bearing and then connect the running roller (W) in the movable foot (Fig. 016).

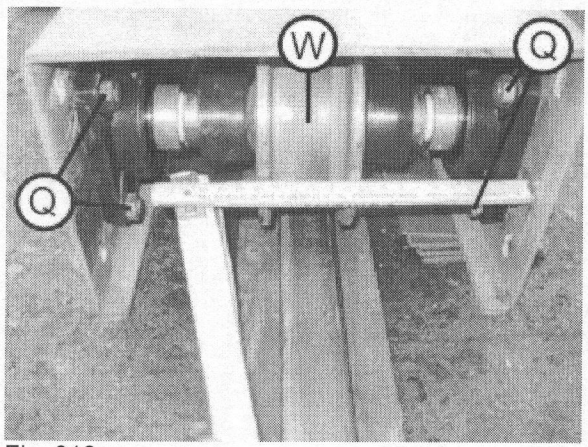

Fig. 016

12. Clamp clamping rings (R) and tighten safety screws (T) (Fig. 017)

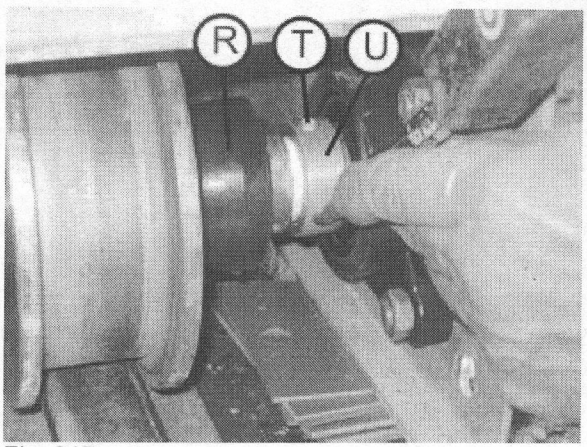

Fig. 017

13. Grease rubber lip of cover (R). Then, slide the cover onto the flange bearing. If the cover is not greased, when driving the portal, you will hear squeaking noises (Fig. 017).

14. Raise portal with screw (P), remove support material and lower portal again (Fig. 014).

15. Mount front plate and adjust height so that the safeguard does not jam.

16. Perform a test wash.

Side brushes:

Replacing rotation geared motor

Required time per side brush: approx. 90 minutes with 2 fitters

1. Move side brushes to the portal centre using manual functions.

2. Turn off main switch plant and secure against restart (e.g. with a padlock).

3. Disconnect motor cable at the motor terminal box.

4. Pull down brush shaft. For this, loosen the 6 connecting screws of brush shaft and drive flange.

5. Remove jointed cross shaft axle screw (A) and pull down geared motor fully with plate (Fig. 020).

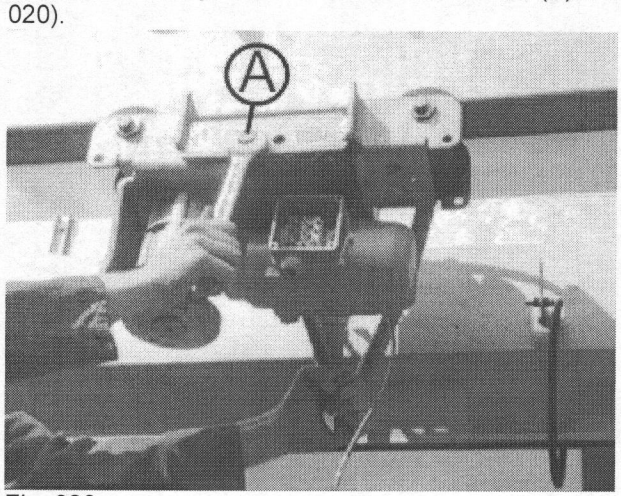

Fig. 020

6. Loosen the 6 retaining screws (B) from the gear (Fig. 021)

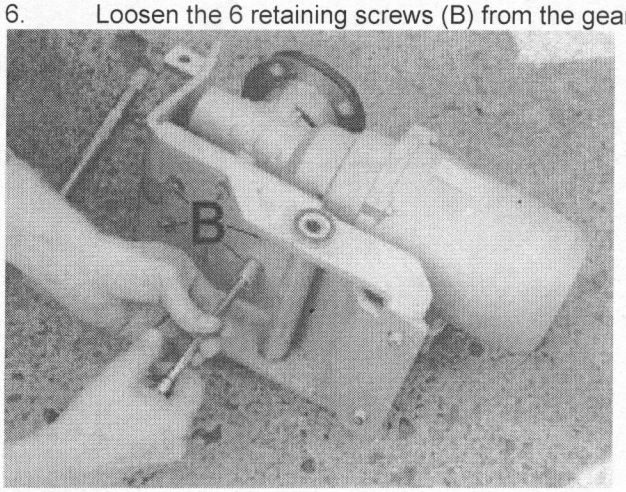

Fig. 021

7. Assembly of new gear in reverse sequence. Ensure that the special locking washers for the gear and brush shaft fastener are mounted again.

8. Check direction of brush rotation and carry out test wash.

Side brushes:

Replacing geared motor driving

Required time per side brush: approx. 90 minutes with one fitter

1. Move side brushes to the portal centre using manual functions.
2. Move dryer downward using manual functions.
3. Turn off main switch plant and secure against restart (e.g. with a padlock).
4. Disconnect all cables to the motor terminal box.
5. Loosen nuts of the 4 roller axles (A) slightly (Fig. 022)

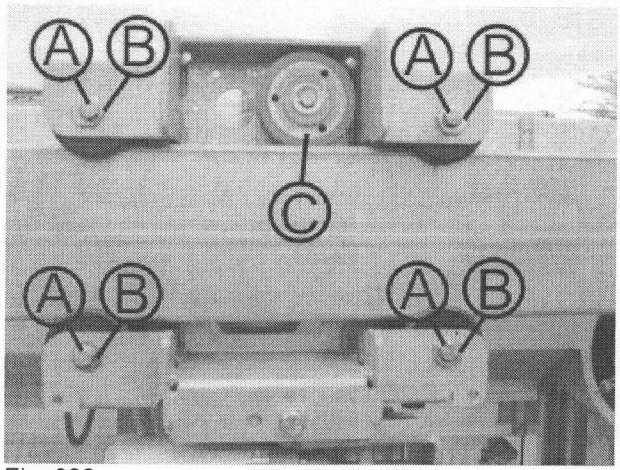

Fig. 022

6. Turn cam (B) of the 4 running rollers downward fully, so that the driving wheel is relieved (Fig. 022).

7. Unscrew retaining screw (D) of the driving axle and finally screws it back again without washer (Fig. 023)

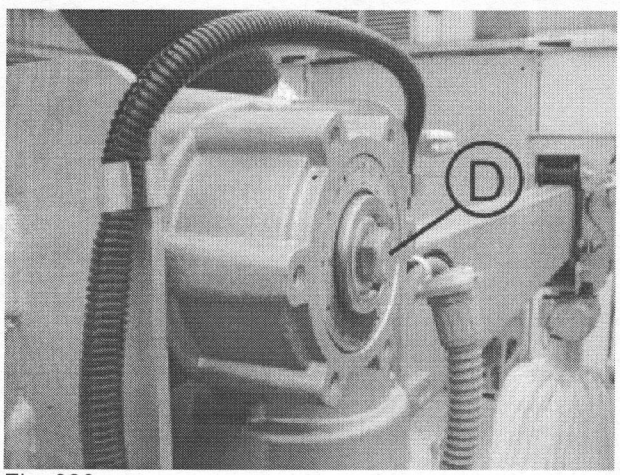

Fig. 023

8. Screw on extractor at the gear and eject driving shaft from the gear (Fig. 024)

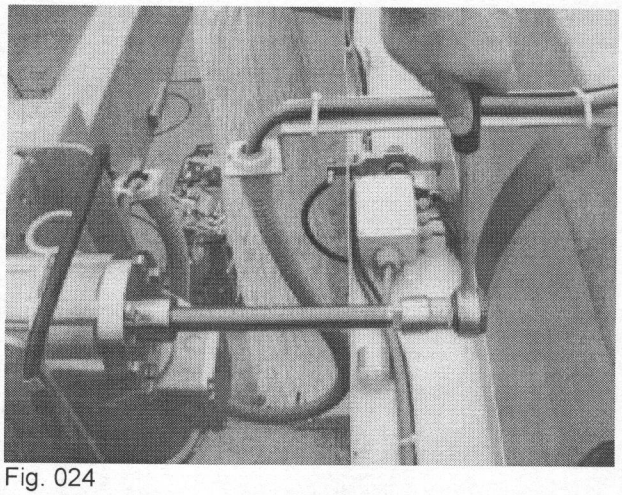

Fig. 024

9. Loosen the 6 retaining screws (E) from the gear and pull down the geared motor completely (Fig. 025).

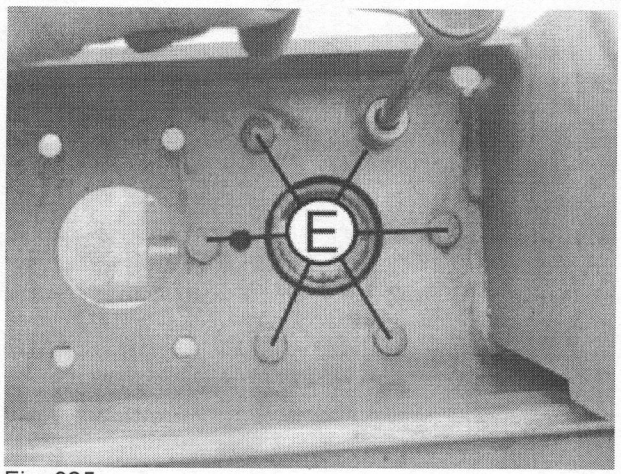

Fig. 025

10. Assembly of the geared motor in reverse order. Ensure that the special locking washers are installed again when fixing the gear. The tightening torque for the screws (E) is XX Nm (Fig. 025).

11. Adjust running rollers (see Replacing running rollers)

12. Perform a test wash.

Side brushes:

Replacing drive roller

Required time per side brush carriage: approx. 45 minutes with one fitter

1. Move side brushes to the portal centre using manual functions.

2. Turn off main switch plant and secure against restart (e.g. with a padlock).

3. Loosen the nuts of the 4 roller axle (A) a little and by turning the driving roller (O) disengage the cam (B) (Fig. 026).

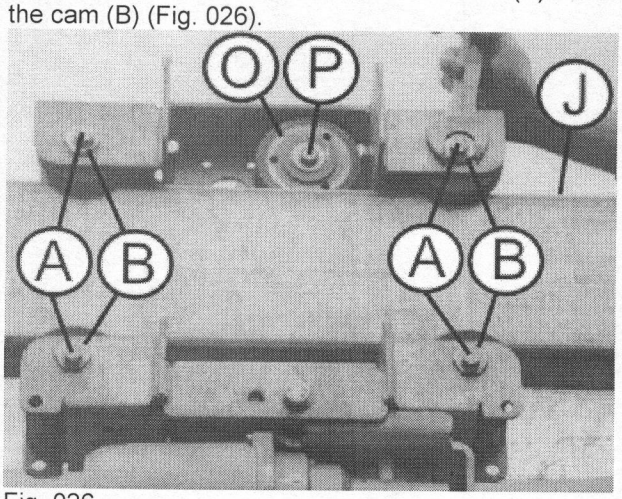

Fig. 026

4. Unscrew retaining screw (P) of the driving roller and finally screw it back again without washer (Fig. 026)

5. Mount extractor on running roller with 3 screws and extract driving wheel. If needed, the 3 threads must first be rethreaded (Fig. 027)

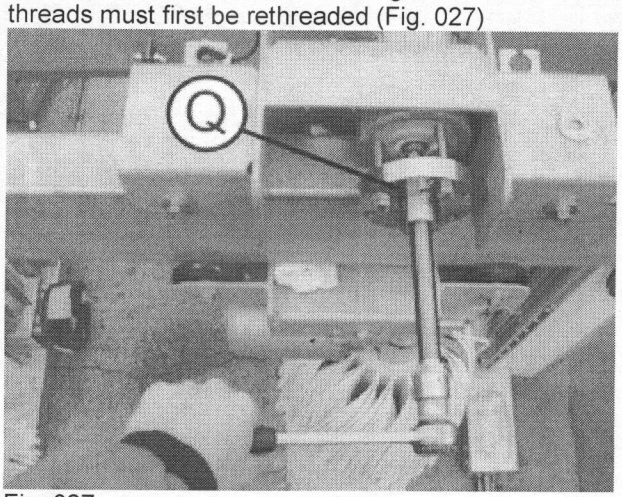

Fig. 027

6. Assembly of new driving roller in reverse sequence.

7. Adjust running rollers (see Replacing running rollers)

8. Perform a test wash.

Note: The upper running surface (J) of the crosshead must be free of grease (Fig. 026).

Side brushes:
Replacing running rollers

Required time per side brush carriage: approx. 45 minutes with one fitter

1. Move side brushes to the portal centre using manual functions.

2. Turn off main switch plant and secure against restart (e.g. with a padlock).

3. Change running rollers (F) one after the other. For this, loosen the nuts of the relevant roller axle (A) and by turning the cam (B) disengage the running roller.

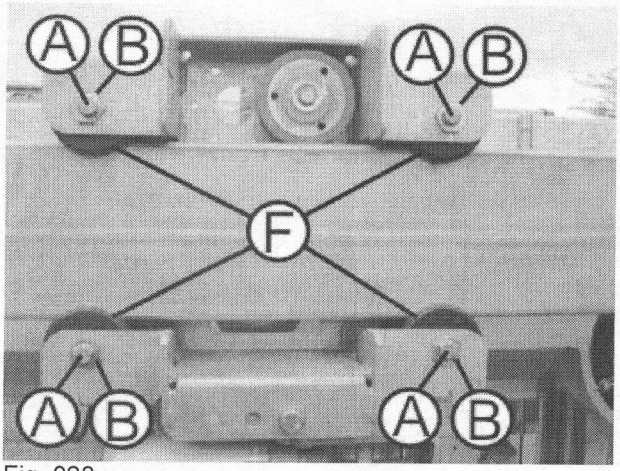

Fig. 028

4. Remove roller axle (A) of the relevant running roller (F) and mount the new running rollers (Fig. 029).

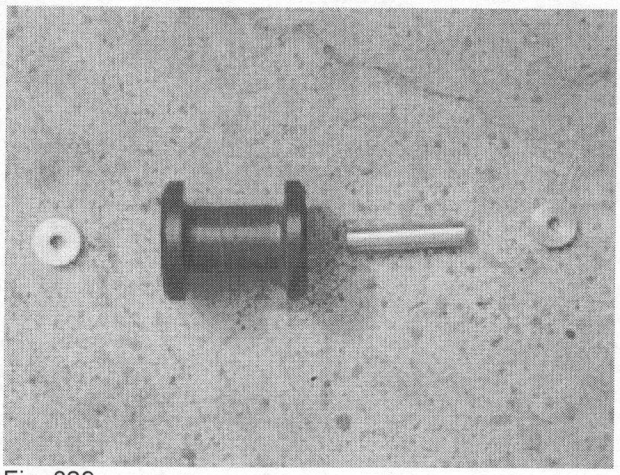
Fig. 029

5. Place the water weight on the truck and adjust it horizontal to the running roller (G) with the cams. Then tighten the roller axle (A) of the running roller (G) (Fig. 030 + 031).

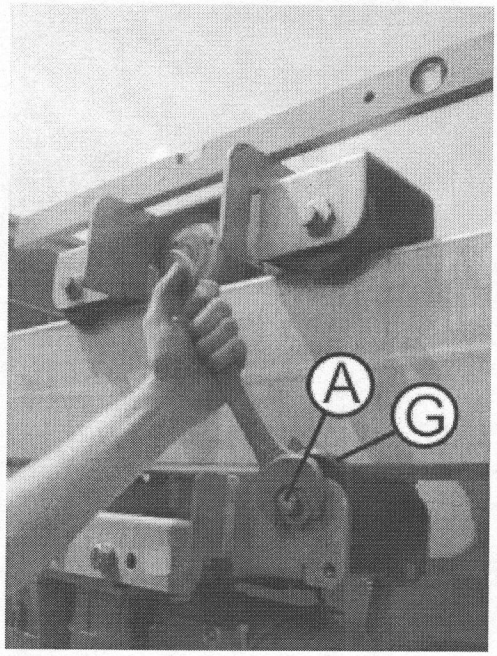

Fig. 030

6. Adjust the cams of the running rollers (H) so tight that the running rollers can be turned only by hand. Then tighten the roller axle screws of the running rollers (H) (Fig. 031).

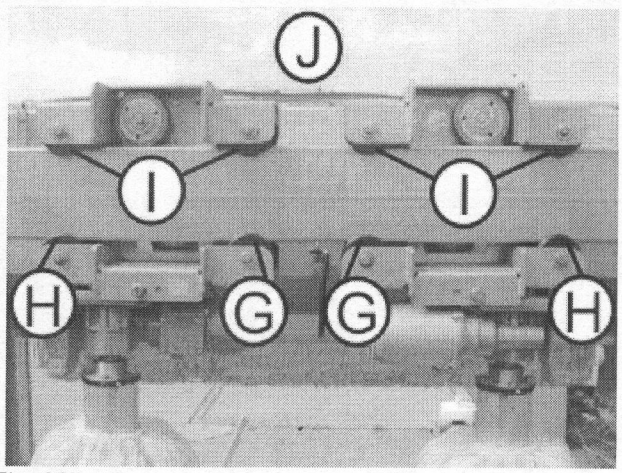

Fig. 031

7. Adjust the top running rollers (I) with the cams in such a way that there is a gap of approx. 2 mm between the side brush holder (J) and the running roller. Then tighten the roller axle screws of the running rollers (I) (Fig. 031).

Note: When adjusting the cams, ensure that both cams of a running roller are adjusted to the same position.

8. Perform a test wash.

Side brushes

Replacing rubber buffer crosshead

Required time for both sides: approx. 30 minutes with 2 fitters

1. Move side brushes to the portal centre using manual functions.
2. Turn off main switch plant and secure against restart (e.g. with a padlock).
3. Loosen screws (K) (Fig. 032).
4. Disengage and replace rubber buffers (L) by pressing both side brushes (Fig. 032 + 033).

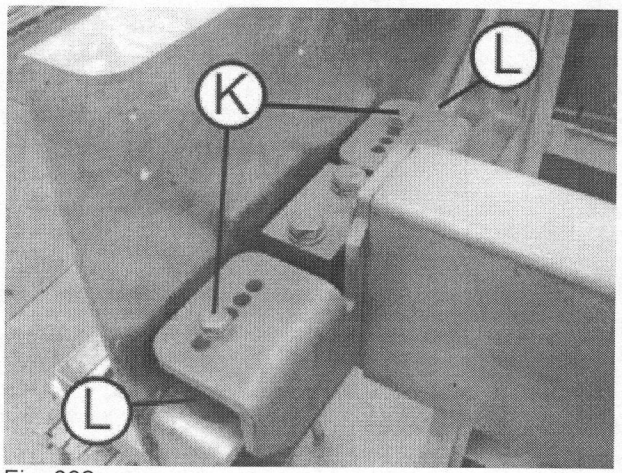

Fig. 032

Fig. 033

5. Tighten screws (K) (Fig. 032).
6. Perform a test wash.

Side brushes:
Inclination setting

Required time for both sides: approx. 15 minutes with one fitter

1. Move side brushes to the portal centre using manual functions.

2. Turn off main switch plant and secure against restart (e.g. with a padlock).

3. Loosen both counter nuts (L) and set the inclination of the relevant side brush with the screws (N) in such a way that the brush hangs downward straight (Fig. 034 + 035).

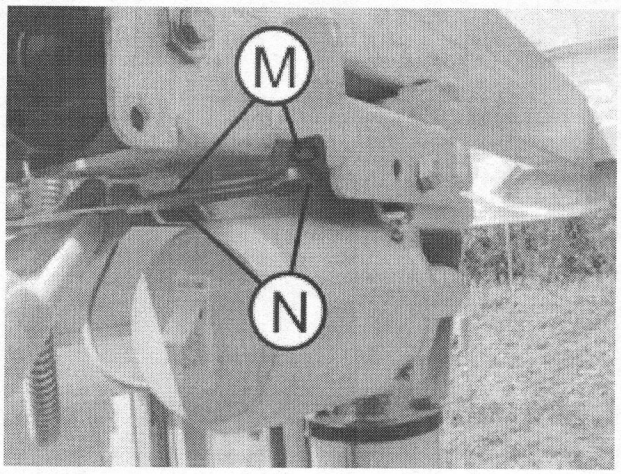

Fig. 034

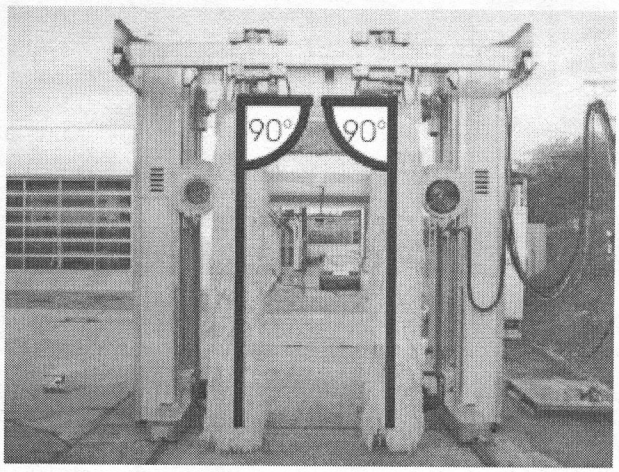

Fig. 035

4. Tighten counter nuts (M) (Fig. 034).

5. Perform a test wash.

Roof brush, replacing geared motor rotation

Required time for both sides: approx. 15 minutes with one fitter

1. Unscrew the lower guide rail (A) of the roof brush on side 1 (Fig. 040).

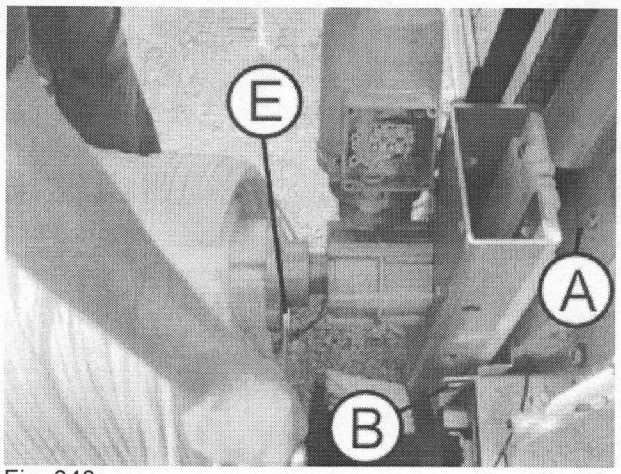

Fig. 040

2. Unscrew limit switch roof brush below (B) (Fig. 040)

3. Move roof brush downward fully using manual functions and support.
   Attention: As there is no limit switch, roof brush does not shut off independently!

4. Turn off main switch plant and secure against restart (e.g. with a padlock).

5. Disconnect cable on the motor terminal box.

6. Loosen energy chain (C) (Fig. 041).

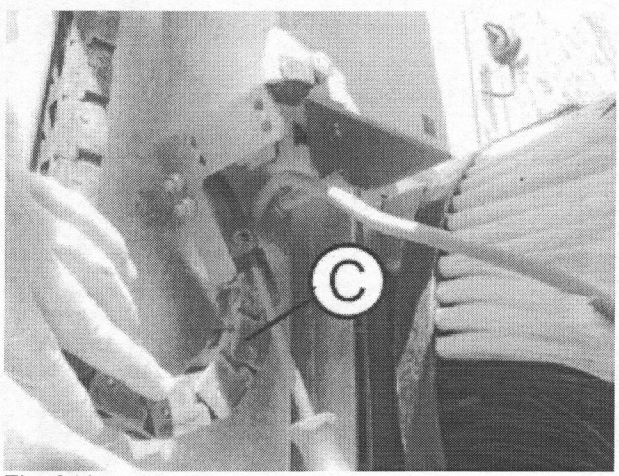

Fig. 041

7. Loosen lifting belt by removing the stud (D) (Fig. 042).

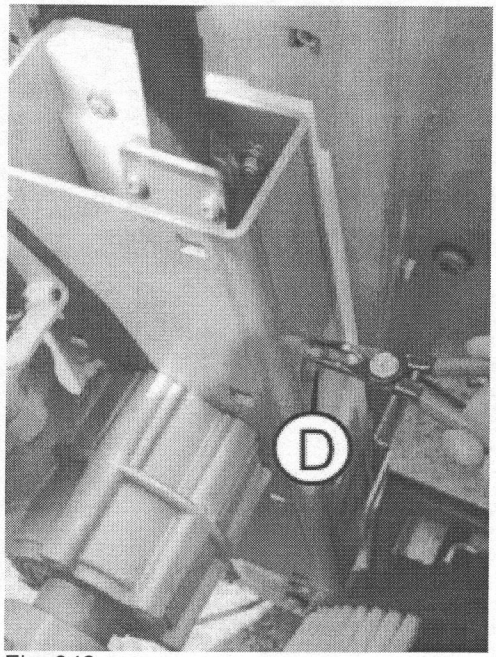

Fig. 042

8. Loosen connecting screws (E) of brush shaft and drive flange and remove complete unit (Fig. 040).

9. Dismantle sliding blocks (F) and (G) (Fig. 043).

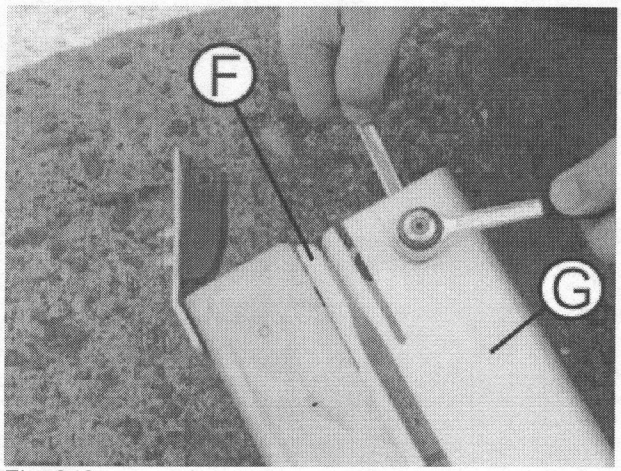

Fig. 043

10. Disconnect geared motor from running wagon by loosening the 6 screws (H) (Fig. 044).

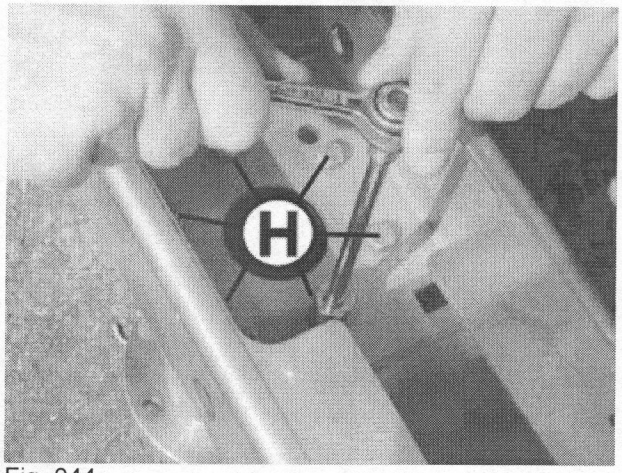

Fig. 044

11. Mount new geared motor on running wagon. Ensure that the special locking washers are mounted on the screws (H) again. The tightening torque is XX Nm (Fig. 044).

12. Mount sliding blocks on running wagon. Make sure that the screws of the sliding block (F) are secured with removable assembly adhesive (Fig. 043).

13. Mount running wagon on brush shaft. The tightening torque for the screws (E) is XX Nm (Fig. 040).

14. Mount lifting belt and energy chain. Connect motor cable.

15. Raise roof brush using manual functions and carefully introduce running wagon onto the running rail.

16. Adjust sliding block (G) and tighten, so that both sliding blocks are close to the running rail without any gap (Fig. 045).

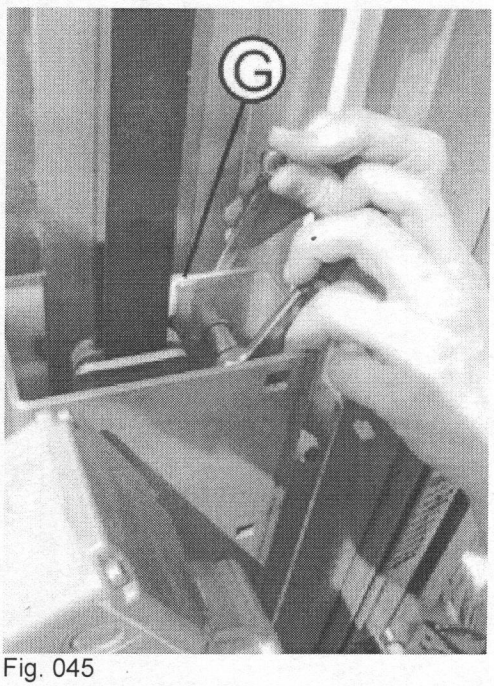

Fig. 045

17. Mount lower running rail (Tightening torque 25 Nm). Make sure that there is no misalignment when changing over from short to long running rail.

18. Push lifting belt on retaining stud of the running wagon in such a way that it runs parallel to the guide rail.

19. Mount limit switch roof brush below and set to 5 mm distance.

20. Carry out test wash and check direction of roof brush rotation.

Roof brush, replacing flange bearing

Required time: approx. 90 minutes with one fitter

1. Move roof brushes to medium height using manual functions.
2. Turn off main switch plant and secure against restart (e.g. with a padlock).
3. Loosen groove nut (A) with sickle spanner (B) a little (Fig. 046)

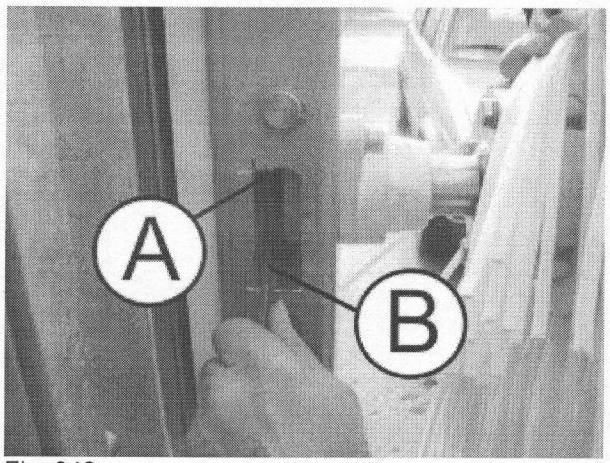

Fig. 046

4. Unscrew the lower guide rail (C) of the roof brush on side 2 (Fig. 047).

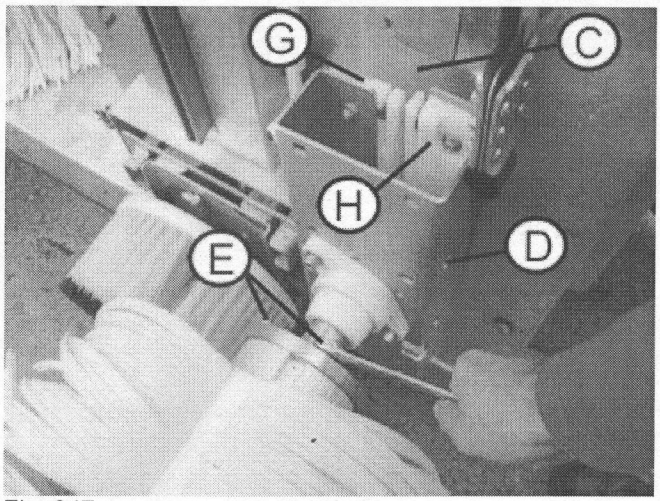

Fig. 047

5. Turn on the main switch. Move roof brush downward fully using manual functions and support.
6. Turn off main switch again and secure.
7. Loosen lifting belt by removing the stud (D) (Fig. 047).
8. Loosen connecting screws (E) of brush shaft and drive flange and remove complete unit (Fig. 047).

9. Dismantle sliding blocks (G) and (H) (Fig. 047).

10. Unscrew groove nut.

11. Screw on extractor (I) and press flange (J) from the flange bearings (Fig. 048).

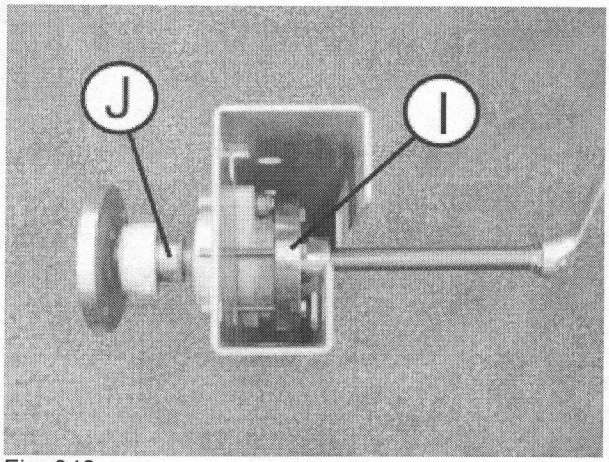

Fig. 048

12. Mount new flange bearing and flange, however, do not tighten the screws of the flange bearing and the groove nuts.

13. Mount sliding blocks on running wagon. Make sure that the screws of the sliding block (H) are secured with removable assembly adhesive (Fig. 047).

14. Mount running wagon on brush shaft. The tightening torque for the screws (E) is XX Nm (Fig. 040).

15. Mount lifting belt with studs (D) (Fig. 047).

15. Raise roof brush using manual functions and carefully introduce running wagon onto the running rail.

16. Adjust sliding block (G) and tighten, so that both sliding blocks are close to the running rail without any gap (Fig. 047).

17. Align running wagon parallel to the running rail. Finally, tighten the screws of the flange bearing.

18. Tighten groove nuts (A) (Fig. 046).

19. Mount lower running rail (Tightening torque 25 Nm). Make sure that there is no misalignment when changing over from short to long running rail.

20. Push lifting belt on retaining stud of the running wagon in such a way that it runs parallel to the guide rail.

21. Perform a test wash.

Roof brush, replacing sliding block

Required time: approx. 30 minutes per side with one fitter

1. Unscrew the lower guide rail (A) of the roof brush on the relevant side (Fig. 049).

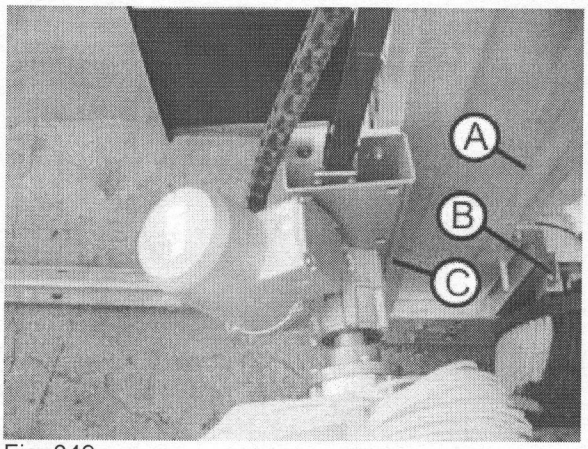

Fig. 049

2. When changing the sliding stones on the side of the rotation motor, unscrew the limit switch roof brush below (B) and light barrier (C) (Fig. 049)

3. Move roof brush downward using manual functions.
Attention: As there is no limit switch, roof brush does not shut off independently!

4. Turn off main switch plant and secure against restart (e.g. with a padlock).

5. Swivel roof brush aside on the relevant side and dismantle sliding blocks (D) and (E) (Fig. 050)

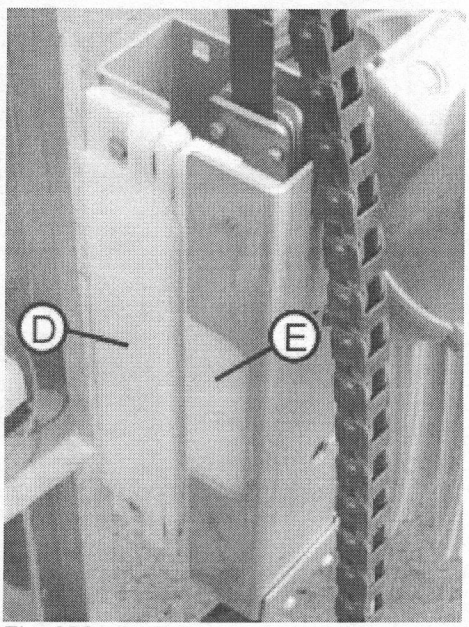

Fig. 050

6. Mount new sliding blocks on running wagon. Make sure that the screws of the sliding block (E) are secured with removable assembly adhesive (Fig. 050).

7. Raise roof brush using manual functions and carefully introduce the running wagon onto the running rail.

8. Adjust sliding block (D) and tighten, so that both sliding blocks are close to the running rail without any gap (Fig. 050.1).

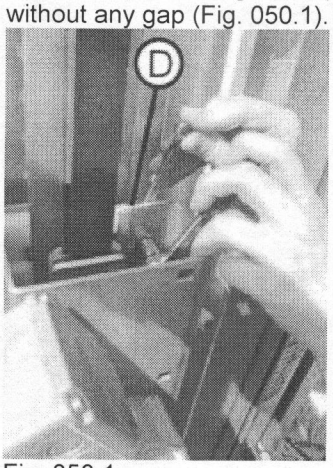

Fig. 050.1

9. Mount lower running rail (Tightening torque 25 Nm). Make sure that there is no misalignment when changing over from short to long running rail.

10. Mount limit switch roof brush below (B) and set to 5 mm distance (Fig. 049).

11. Install light barrier (C) (Fig. 049).

12. Push lifting belt on retaining stud of the running wagon in such a way that it runs parallel to the guide rail.

13. Perform a test wash.

Roof brush, replacing lifting belts

Required time: approx. 135 minutes with one fitter

1. Move roof brush downward fully using manual functions and support so that the lifting belts are disengaged.

2. Turn off main switch plant and secure against restart (e.g. with a padlock).

3. Loosen both lifting belts by removing the stud (A) (Fig. 051).

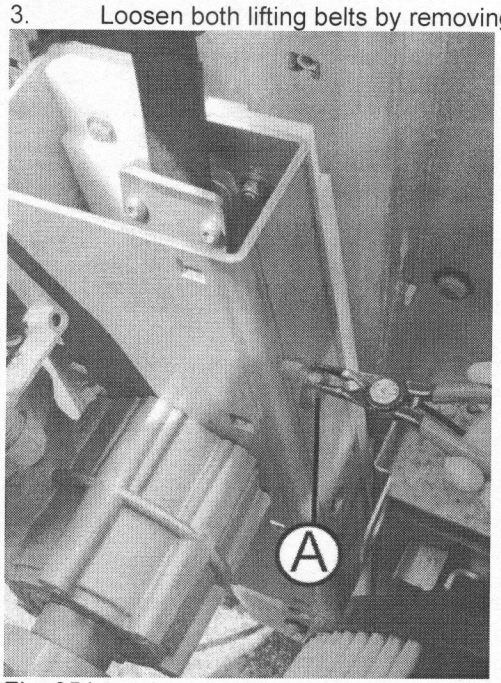

Fig. 051

4. Disconnect lifting motor cable on terminal box

5. Loosen both retaining screws (B) of the lifting motor, push complete unit to the left and remove downwards (Fig. 052).

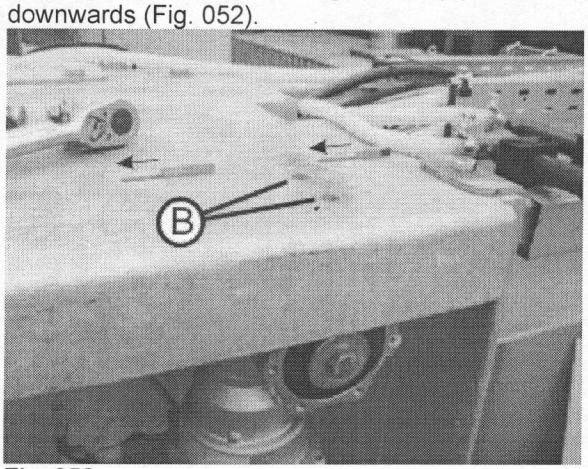

Fig. 052

6. Loosen the 4 clamping plates (C) with the screws (D) (Fig. 053).

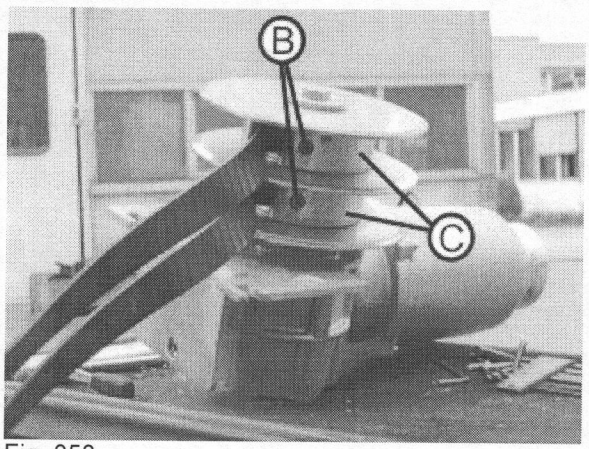

Fig. 053

7. Install the new lifting belt set (5.174-015).

Notes:

- Owing to the production tolerances of the belts, both belts must always be replaced simultaneously. Therefore, the lifting belt set includes both belts (5.174-015).
- There is only one lifting belt set. This is used for roof brushes and dryers at all 3 plant heights.
- During assembly, ensure the correct coiling direction (Fig. 053).
- Make sure that the grooves of the lifting belts are on the inner side (Fig. 053).
- Make sure that the clamping plates (C) are mounted with the rounded end at the belt outlet (Fig. 053/055).


Fig. 054

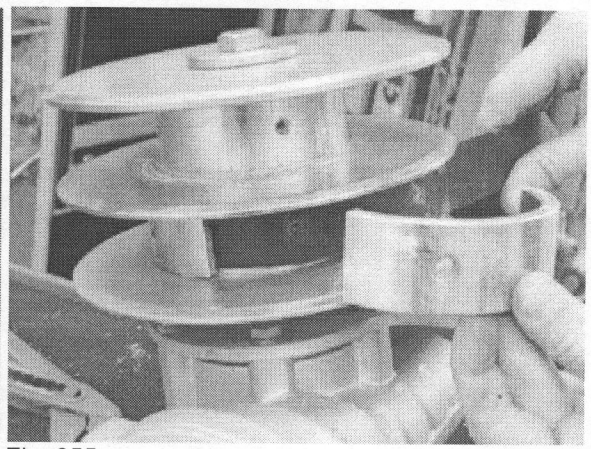
Fig. 055

8. Install complete lifting motor unit again in the portal. Thereby, ensure the alignment of the winding disks to the deflection pulleys.

9. Fasten loop clamps at the end of the lifting belt on side 2. The loop length must be approx. 40 mm (Fig. 056).

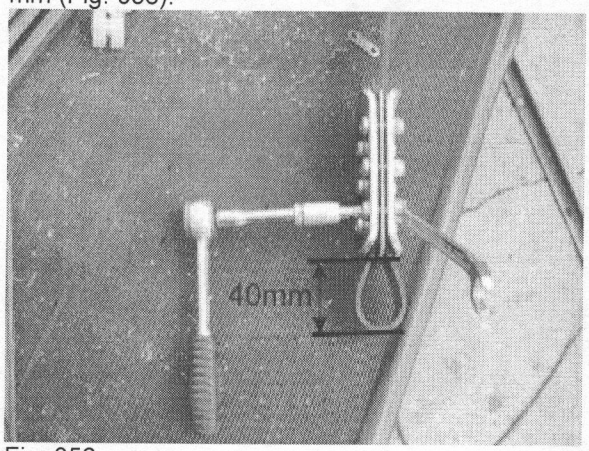

Fig. 056

10. Turn on plant and slowly raise the lifting belts by using the manual functions, until the end of the belt on side 2 is at the lower edge of the guide rails (Fig. 057).

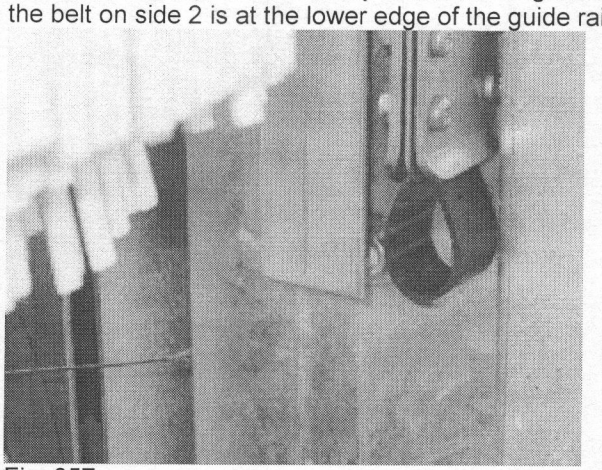

Fig. 057

11. Fasten loop clamps at the end of the lifting belt on side 1 so that the end of the belt is at the lower edge of the guide rail. The loop length must be approx. 40 mm.

12. Fasten the two lifting belts on the running wagon again with the retaining studs and raise the roof brushes with manual functions. Then, push the lifting belts on the retaining studs of the running wagon in such a way that they run parallel to the guide rails.

13. Check whether the roof brush is hanging horizontal. Finally, saw off the excess belt length on side 1 (Fig. 058).

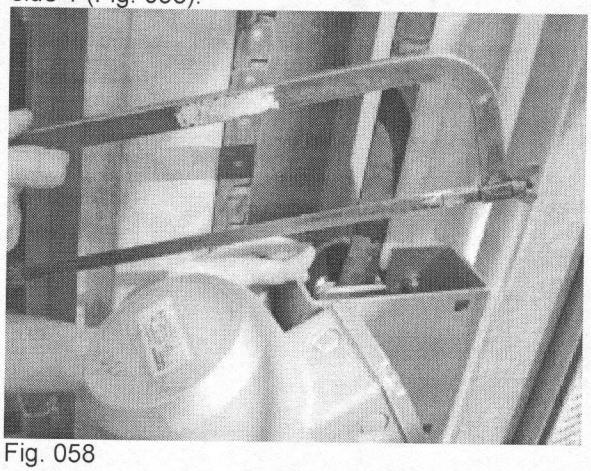

Fig. 058

14. Perform a test wash.

Roof brush, replacing lifting deflection pulleys

Required time: approx. 15 minutes per side with one fitter

1. Move roof brush downward fully using manual functions and support so that the lifting belts are disengaged.

2. Turn off main switch plant and secure against restart (e.g. with a padlock).

3. Loosen deflection pulley screw. Finally, replace roller (Fig. 058.1/058.2).

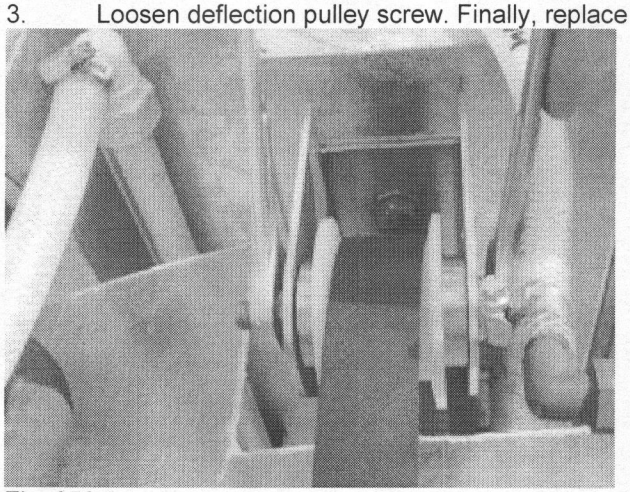

Fig. 058.1

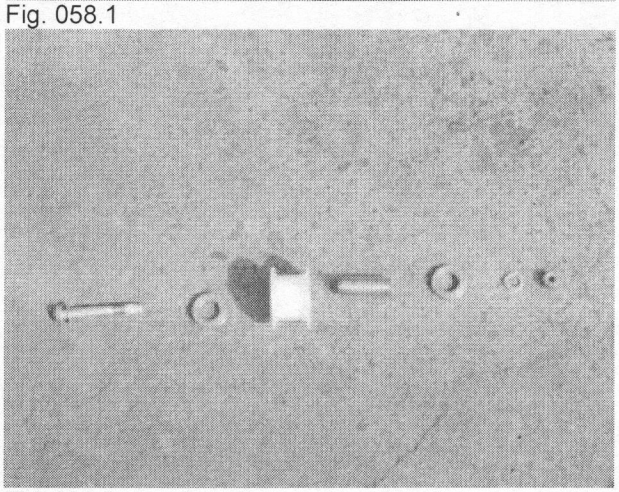

Fig. 058.2

4. After assembling the new running roller, check whether they run smoothly.

5. Perform a test wash.

Roof brush, replacing lifting motor

Required time: approx. 100 minutes with one fitter

1. Move roof brush downward fully using manual functions and support so that the lifting belts are disengaged.

2. Turn off main switch plant and secure against restart (e.g. with a padlock).

3. Loosen both lifting belts by removing the stud (A) (Fig. 059).

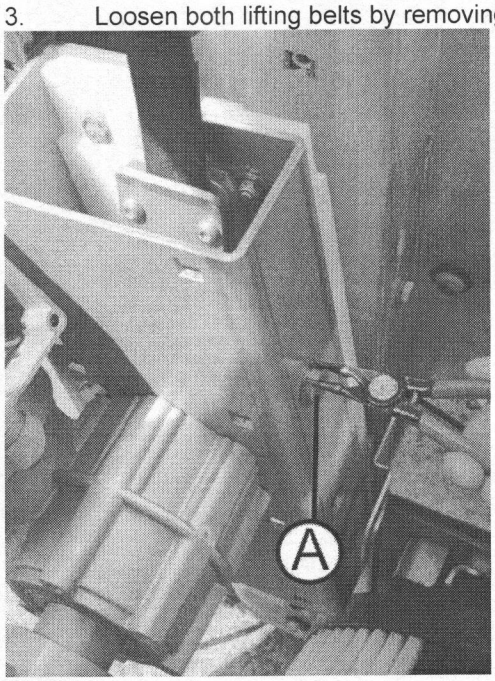

Fig. 059

4. Disconnect lifting motor cable on terminal box

5. Loosen both retaining screws (B) of the lifting motor, push complete unit to the left and remove downwards (Fig. 060).

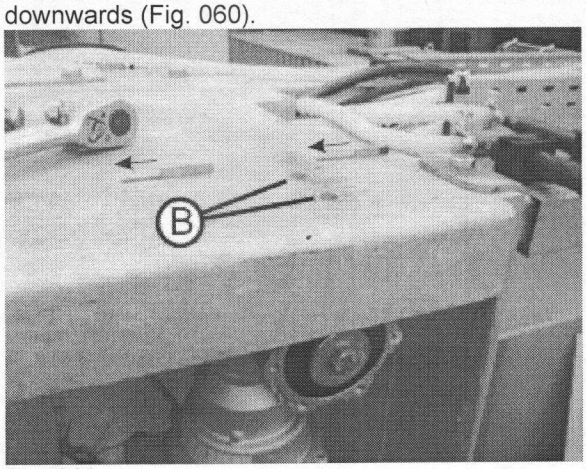

Fig. 060

6. Loosen retaining screw from shaft and remount without washer. Then screw on the extractor 4.263-030 at position (C) of the gear and eject the shaft (Fig. 061).

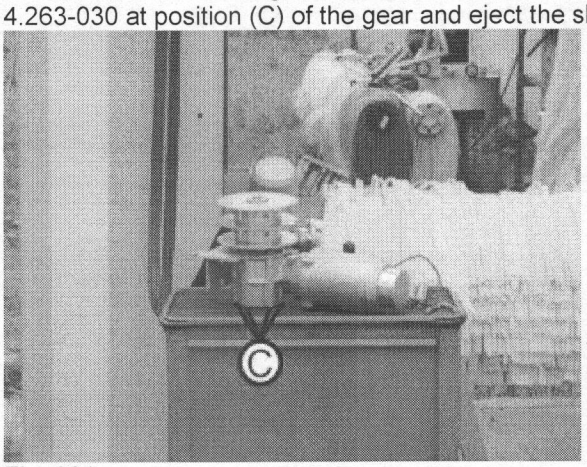

Fig. 061

8. Install shaft in new geared motor. Then, install the complete lifting motor unit again in the portal. Thereby, ensure the alignment of the winding disks to the deflection pulleys.

9. Fasten the two lifting belts on the running wagon again with the retaining studs and raise the roof brushes with manual functions. Then, push the lifting belts on the retaining studs of the running wagon in such a way that they run parallel to the guide rails.

10. Check whether the roof brush is hanging horizontal.

11. Perform a test wash.

Roof dryer, replacing blower motor

Required time for one motor: approx. 60 minutes with one fitter

1. Move dryer downward fully using manual functions and support so that the lifting belts are disengaged (Fig. 070).

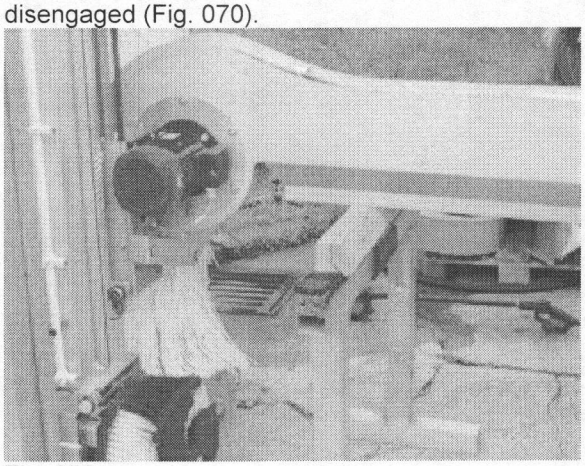

Fig. 070

2. Turn off main switch plant and secure against restart (e.g. with a padlock).

3. Disconnect cable at the motor terminal box.

4. Mount covering grid with the screws (A) (Fig. 071).

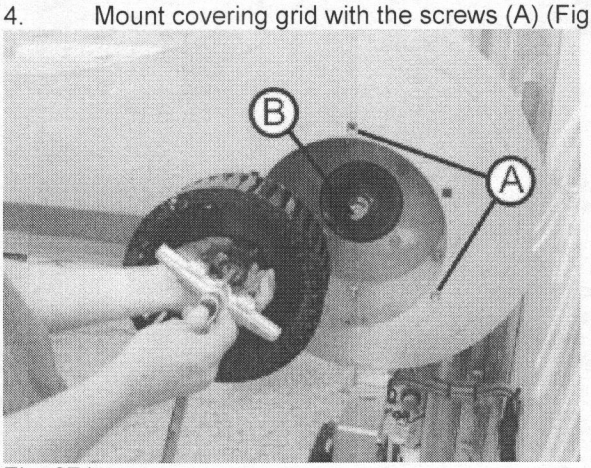

Fig. 071

4. Loosen retaining screw (B) from impeller and remount without washer. Then screw down extractor and extract the impeller (Fig. 071).

5. Loosen connecting screws (C) of motor and dryer (Fig. 072).

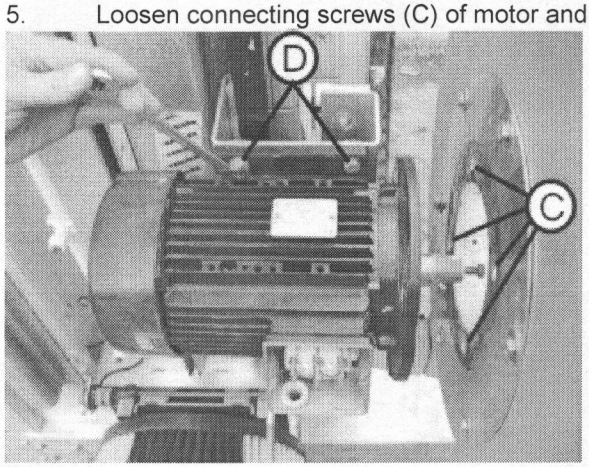

Fig. 072

6. Loosen retaining screws (D) of motor and remove motor downwards (Fig. 072).

7. Assembly in reverse order.

8. Check direction of rotation of impeller with manual functions.

9. Perform a test wash.

Roof dryer, replacing impeller

Required time for one impeller: approx. 30 minutes with one fitter

1. Move dryer downward using manual functions.

2. Turn off main switch plant and secure against restart (e.g. with a padlock).

3. Mount covering grid with the screws (A) (Fig. 073).

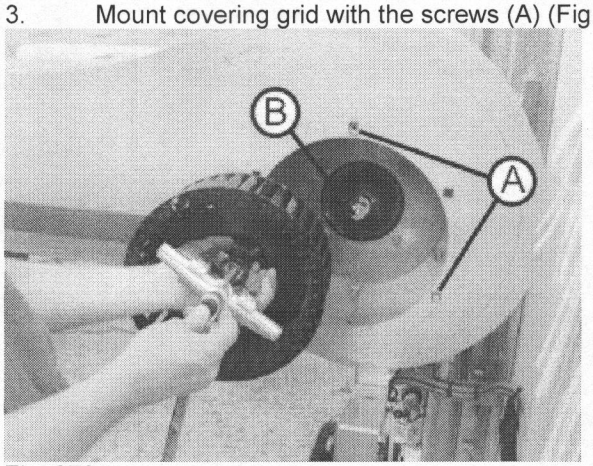

Fig. 073

4. Loosen retaining screw (B) from impeller and remount without washer. Then screw down extractor and extract the impeller (Fig. 073).

5. Assembly in reverse order.

6. Perform a test wash.

Roof dryer, replacing sliding blocks

Required time: approx. 30 minutes per side with one fitter

1. Unscrew the lower guide rails (A) of **one** side of the roof dryer. Never unscrew both rails simultaneously, as the roof driver might tip over. When changing the sliding stones on side 1, unscrew the dryer limit switch below (B) (Fig. 074)

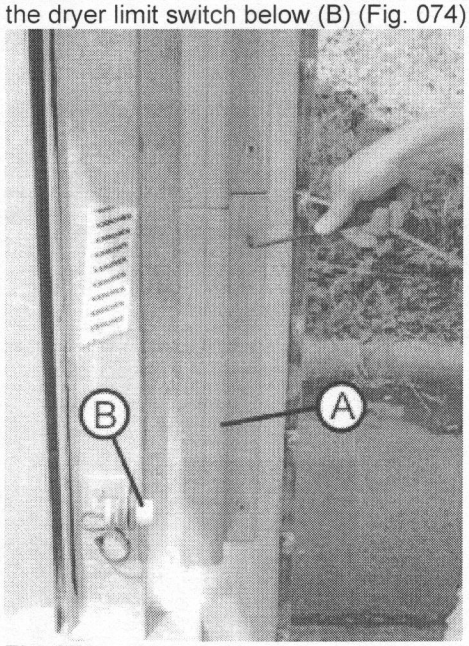

Fig. 074

2. Move roof dryer downward using manual functions.
Attention: As there is no limit switch, roof dryer does not shut off independently!

4. Turn off main switch plant and secure against restart (e.g. with a padlock).

5. Swivel roof brush aside on the relevant side and dismantle sliding blocks (C) and (D) (Fig. 075)

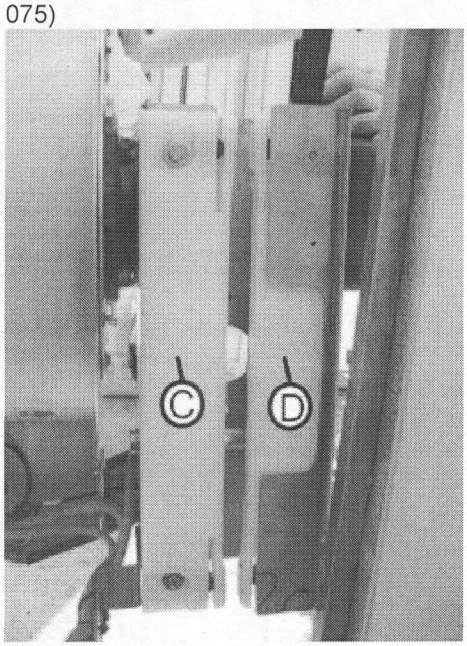

Fig. 075

6. Mount new sliding blocks on running wagon. Make sure that the screws of the sliding block (D) are secured with removable assembly adhesive (Fig. 075).

7. Raise roof dryer using manual functions and carefully introduce the running wagon onto the running rail.

8. Adjust sliding block (C) and tighten, so that both sliding blocks are close to the running rail without any gap (Fig. 076).

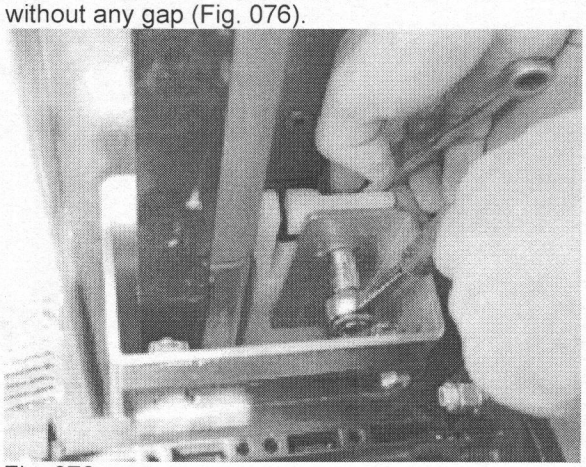

Fig. 076

9. Mount lower running rail (Tightening torque 25 Nm). Make sure that there is no misalignment when changing over from short to long running rail.

10. Mount limit switch roof dryer below (B) and set to 5 mm distance (Fig. 074).

11. Push lifting belt on retaining stud of the running wagon in such a way that it runs parallel to the guide rail.

12. Perform a test wash.

Roof dryer, replacing lifting belts

Required time: approx. 105 minutes with one fitter

1. Move side brush 1 inward using manual functions.

2. Move dryer downward and support so that the lifting belts are disengaged.

3. Turn off main switch plant and secure against restart (e.g. with a padlock).

4. Remove the retaining studs of the lifting belts on the running wagon (Fig. 077).

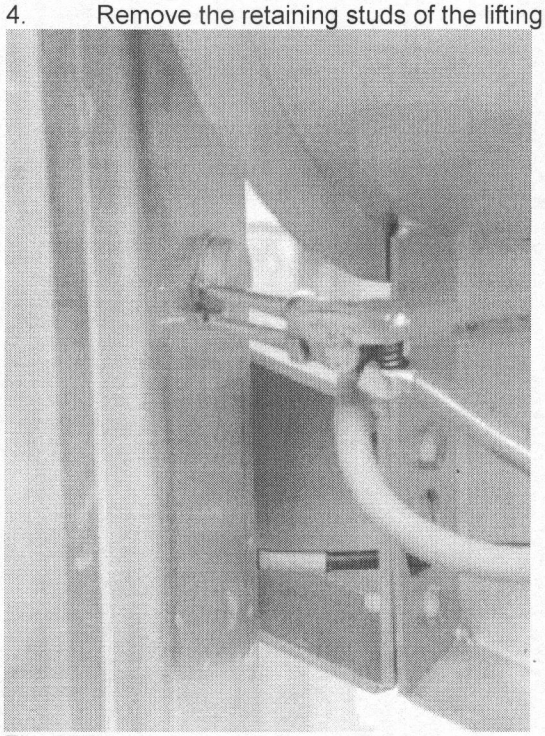

Fig. 077

5. Loosen safety screw (A) of the pulleys and remount without washer. Remove first separating wheel (B) (Fig. 078).

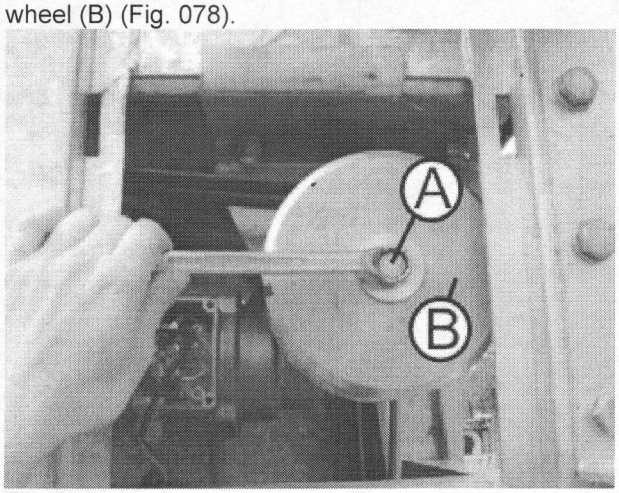

Fig. 078

6. Extract first pulley (C) using the extractor (4.263-030) from the shaft (Fig. 079).

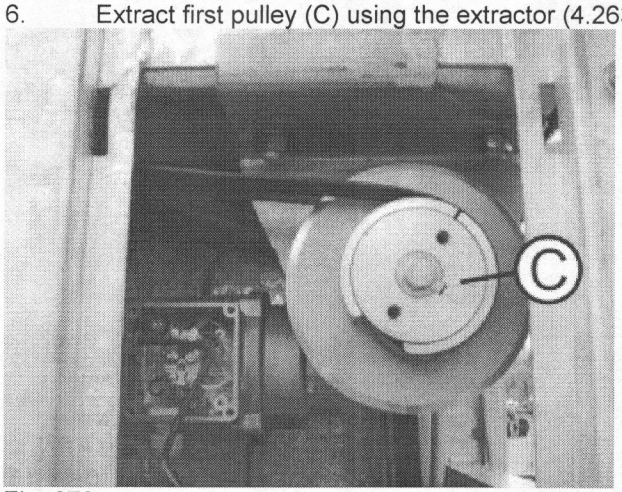

Fig. 079

7. Remove second separating wheel.

8. Extract second pulley.

9. Loosen the 4 clamping plates (E) with the screws (D) and install new lifting belt set (5.174-015) (Fig. 080).

Notes:

- Owing to the production tolerances of the belts, both belts must always be replaced simultaneously. Therefore, the lifting belt set includes both belts (5.174-015).
- There is only one lifting belt set. This is used for roof brushes and dryers at all 3 plant heights.
- During assembly, ensure the correct coiling direction (Fig. 080).
- Make sure that the grooves of the lifting belts are on the inner side (Fig. 080).
- Make sure that the clamping plates (D) are mounted with the rounded end at the belt outlet (Fig. 080).
- Ensure that the lifting belts are mounted in both pulleys at the same position.

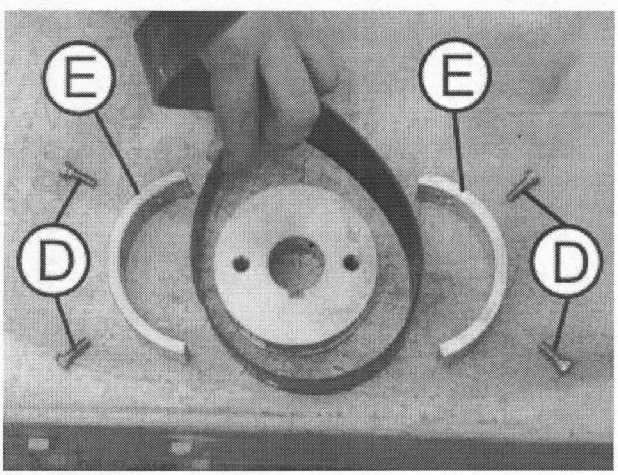

Fig. 080

10. Reinstall pulleys and separating wheels on lifting shaft.

11. Fasten loop clamps on the end of the lifting belt on side 2. The loop length must be approx. 40 mm (Fig. 081).

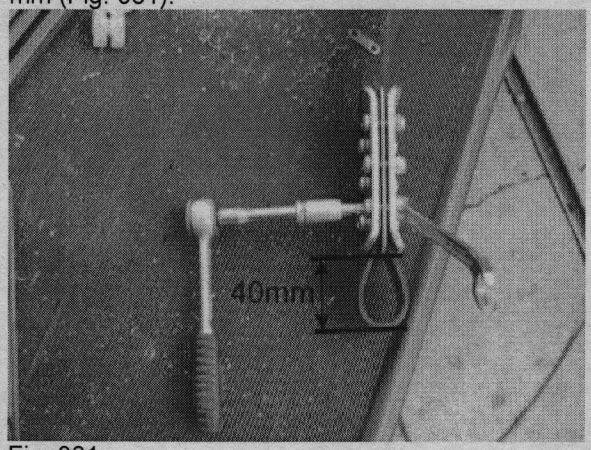

Fig. 081

12. Turn on plant and slowly raise the lifting belts by using the manual functions, until the end of the belt on side 2 is at the lower edge of the guide rails (Fig. 082).

Fig. 082

13. Fasten loop clamps at the end of the lifting belt on side 1 so that the end of the belt is at the lower edge of the guide rail. The loop length must be approx. 40 mm.

14. Fasten the two lifting belts on the running wagon again with the retaining studs and raise the roof dryer with manual functions. Then, push the lifting belts on the retaining studs of the running wagon in such a way that they run parallel to the guide rails.

15. Check whether the dryer is hanging horizontal. Finally, saw off the excess belt length on side 1.

16. Perform a test wash.

Roof dryer, replacing lifting deflection pulleys

Required time: approx. 15 minutes per side with one fitter

1. Move roof dryer downward using manual functions and support so that the lifting belts are disengaged.

2. Turn off main switch plant and secure against restart (e.g. with a padlock).

3. Loosen deflection pulley screw. Finally, replace roller (Fig. 083/084).

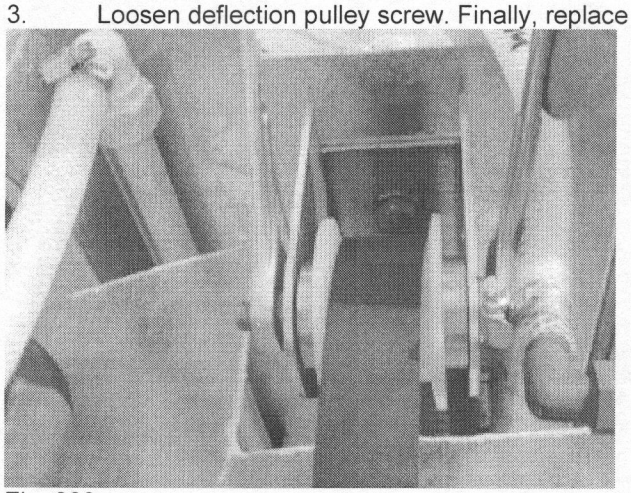

Fig. 083

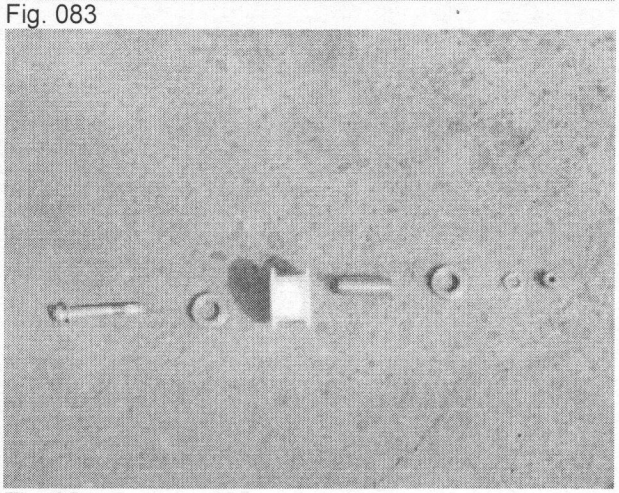

Fig. 084

4. After assembling the new running roller, check whether they run smoothly.

5. Perform a test wash.

Roof dryer, replacing lifting motor

Required time: approx. 105 minutes with one fitter

1. Move side brush 1 inward using manual functions.
2. Move dryer downward and support so that the lifting belts are disengaged.
3. Turn off main switch plant and secure against restart (e.g. with a padlock).
4. Disconnect cable on the motor terminal box.
5. Remove the retaining studs of the lifting belts on the running wagon (Fig. 085).

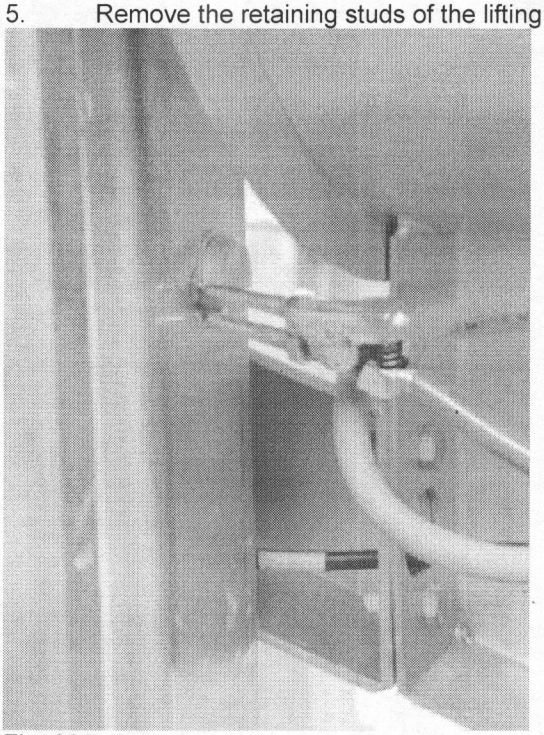

Fig. 085

6. Loosen safety screw (A) of the pulleys and remount without washer. Remove first separating wheel (B) (Fig. 086).

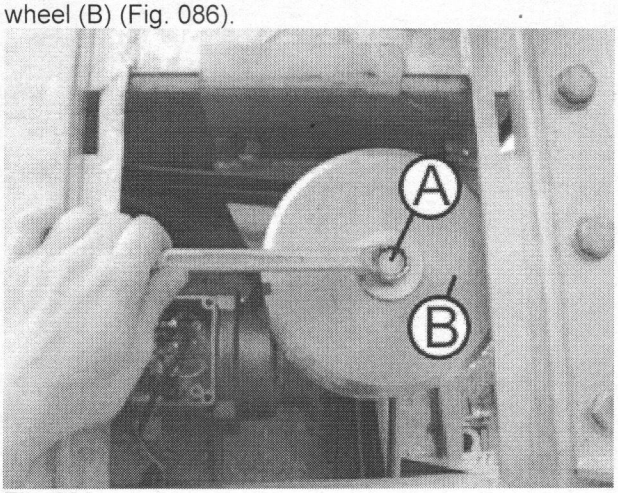

Fig. 086

7. Extract first pulley (C) using the extractor (4.263-030) from the shaft (Fig. 087).

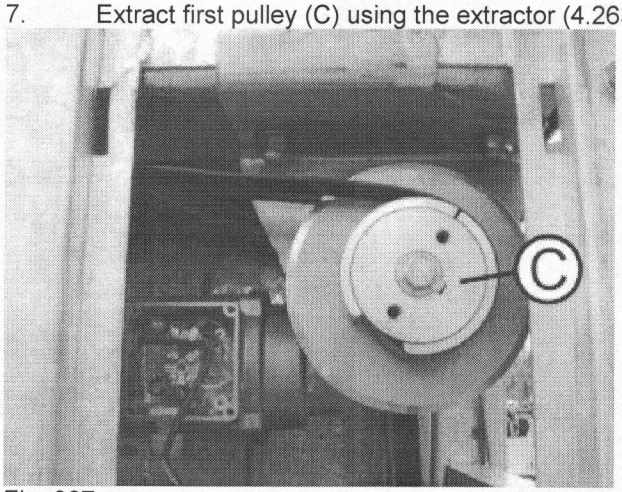

Fig. 087

8. Remove second separating wheel.

9. Extract second pulley.

10. Loosen retaining screws (D) of geared motor and remove motor downwards (Fig. 088).

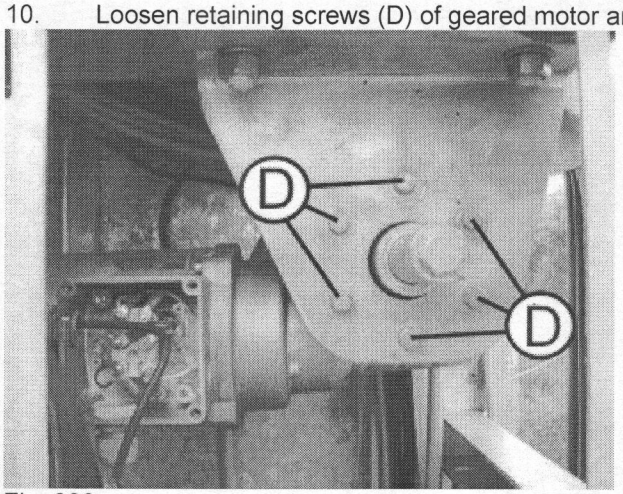

Fig. 088

11. With the extractor, press pulley shaft from the gear (Fig. 089).

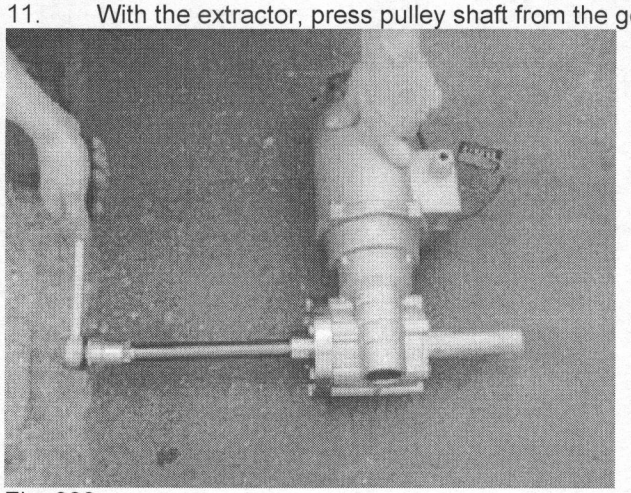

Fig. 089

12. Assembly in reverse order. Ensure that both pulleys are mounted in the same position on the shaft.

13. Fasten the two lifting belts on the running wagon again with the retaining studs and raise the roof dryer with manual functions. Then, push the lifting belts on the retaining studs of the running wagon in such a way that they run parallel to the guide rails.

14. Check whether the dryer is hanging horizontal.

15. Perform a test wash.

Roof dryer, safety switch setting

1. Move roof dryer downward using manual functions.

2. Turn off main switch plant and secure against restart (e.g. with a padlock).

3. Set distance (A) of proximity switch to the safety switch at 4 mm. Set lower edge of the proximity switch at same height (B) as switching flag (Fig. 090).

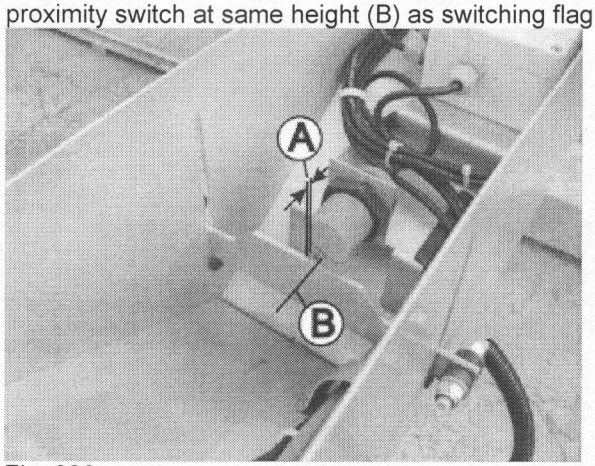

Fig. 090

4. Test whether safety switch is working with manual functions and during the wash. The dryer must raise on actuating the safety switch.