

SERVICE BULLETIN – SB 77_99-100

SB 77_99-100

Replacement of Electromagnetic Brake

2018-11-27 Rev. C

1 Scope and Target Group

XC

AWARNING

- ✓ Always refer to the user manual for additional information and safety warnings.
- ✓ Only perform this task if you are qualified to carry out the steps described below.
- ✓ Always make sure that the tasks described in this bulletin are intended for the equipment you are working on.
- ✓ If you are unsure about the workflow, steps or qualification, contact your TTS aftersales service contact.

Your aftersales service contact:

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2 Replacement of Disc Brake 4BZFM 100/130H

Due to technical improvements, the disc brake 4BZFM 100/130H can be equipped with new parts resulting in higher friction forces and thus in better brake performance.

3 Preparation

For the replacement, you will need the following tools and parts:

- Replacement kit 500 45 27 (see fig.1) consisting of:
 - 1 armature disc
 - 1 brake disc
 - 1 friction disc
 - 27 compression springs
 - 2 nameplates with rivets
- Drill
- Hammer for the rivets
- Jaw or ring wrenches
- Torque wrench
- Allen keys

A CAUTION

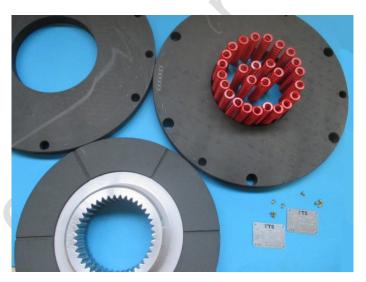


Fig. 1 - Replacement kit 500 45 27

Hazard of Electric Shock!

Switch off all power supply before you start working! Also make sure that the brake is torque-free on the output side!



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4 Solution

4.1 Step 1:

- Loosen the brake cap, remove it and carefully clean the inside of the cap.

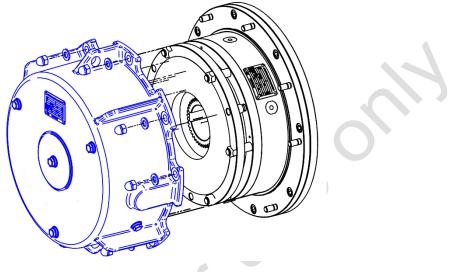


Fig. 2 - Remove the cap

4.2 Step 2:

- Screw in (fasten) the three (3) Allen socket screws for the emergency release clockwise as far as they will go.

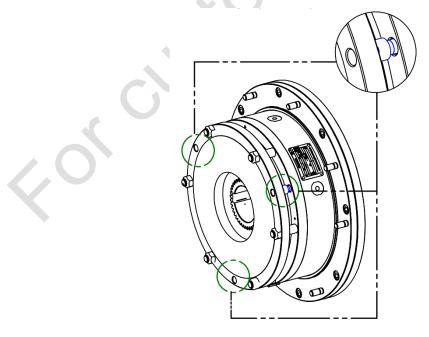


Fig. 3 – Screw in Allen socket screws



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4.3 Step 3:

- First, remove the hexagon screws uniformly.
- Then remove the brake disc from the stud bolts.
- Now take the friction disc from the pinion.

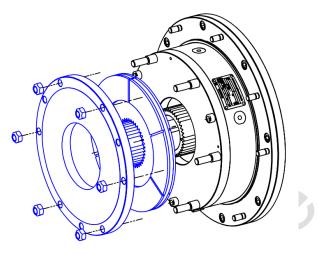


Fig. 4 - Remove brake disc and friction disc

4.4 Step 4

Danger from flying objects!

A CAUTION

Coil body and armature disc are under spring tension! An abrupt tension release of the compression springs may lead to injuries caused by uncontrollable flying objects! Be careful when removing the emergency release screws!

- Remove the emergency release screws by alternating and uniform counterclockwise turning.
- Carefully and slowly remove the armature disc.

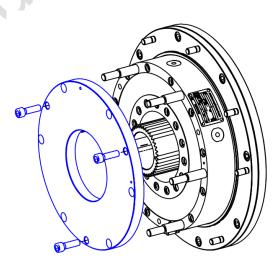


Fig. 5 - Remove armature disc



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4.5 Step 5:

- Remove the old compression springs (27 springs).

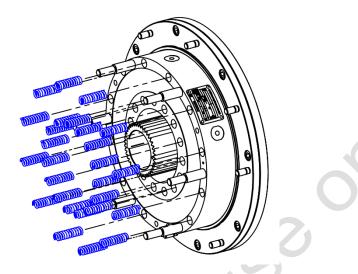


Fig. 6 - Remove old springs

4.6 Step 6:

- Insert the new compression springs (27 springs).

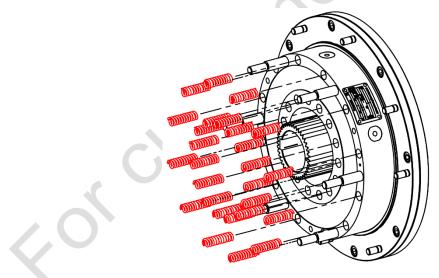


Fig. 7 - Insert new springs



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4.7 Step 7:

- Fit the new armature disk on the stud bolts such that the smooth face shows to the friction disc and the disc side with shoulder shows towards the coil body.
- Screw in (fasten) the three (3) Allen socket screws for the emergency release clockwise as far as they will go.

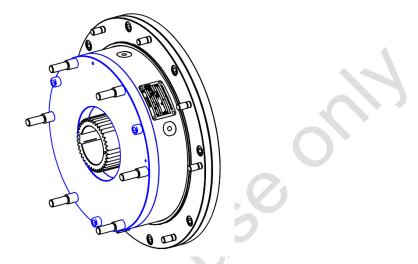


Fig. 8 - Fasten emergency release Allen socket screws

4.8 Step 8

- Put the friction disc on the pinion.



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4.9 Step 9:

- Place the brake disc on the stud bolts. Make sure that the disc is in line with the holes for the emergency release screws.
- Screw in the hexagon nuts on the stud bolts and turn them clockwise alternately and uniformly as far as they will go.
- Tighten the hexagon nuts to 80 Nm.

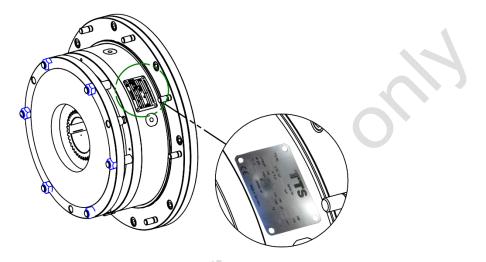


Fig. 9: Coil body nameplate

4.10 Step 10:

- Screw out (loosen) the three (3) Allen socket screws for the emergency release by counterclockwise alternating and uniform turning as far as they will go.

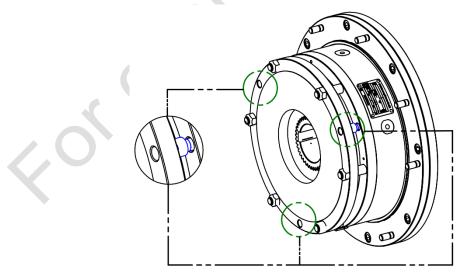


Fig. 10 - Loosen emergency release screws



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4.11 Step 11:

- Place the cover on the brake and fasten it with the cap nuts. Make sure that the cover is in line with the holes for the emergency release screws.

NOTICE

or

Change the nameplate on the cover!

This is necessary to identify the replaced brake when ordering for spare parts!

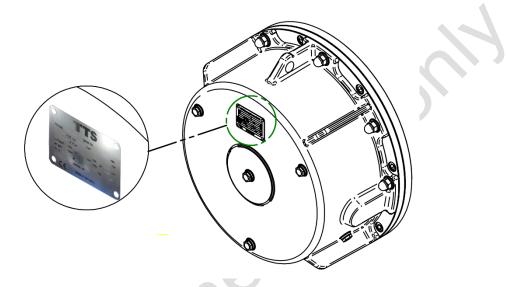


Fig. 11 - Nameplate on cover