

## Sachs POWER DISC

## Vollhydraulisches Scheibenbremssystem

## Fully hydraulic Disc Brake System

## Système de frein à disque entièrement hydraulique

Scheibenbremse mit hydraulischer Betätigung

Disc brake operated hydraulically

Frein à disque à commande hydraulique

Betriebsanleitung Nr. /  
Manual No. / Instructions de  
service n°  
1668.2 / 1 D-E-F

Bitte vor Inbetriebnahme des  
Fahrrades lesen.

Please read the following  
before using your bicycle for  
the first time

Veuillez lire la notice d'emploi  
avant de vous servir de la  
bicyclette.

1668 101 001



## Advantages

- Power transmission without friction losses between the hydraulic brake lever and the brake
- Even when wet, deceleration values are far above standard rim brakes.
- Precise brake control
- High braking effect is achieved through minimal hand force used at the brake lever.
- Easy to adjust and virtually maintenance-free.
- The hydraulic brake line may also be installed inside the frame.
- There is no need for standard maintenance.

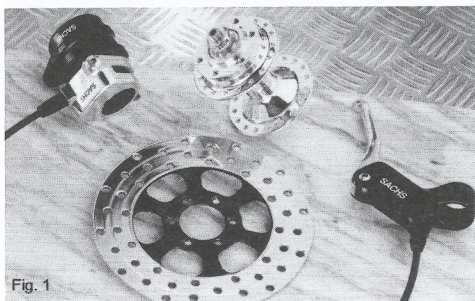


Fig. 1

## Operation

## Brakes:

- Mind the increased braking effect of disc brakes, as compared with other brake systems. Familiarize yourself with disc brakes by braking sensitively.

**Attention:** On long downhill rides with an intense use of the brakes, the brake discs may reach a high temperature. (Prevent risk of injury by avoiding contact with the disc after using brakes.)

## Advice:

On the nickel-plated brake disc the coating on the braking surface may partly get worn after a long period of usage. This does not have, however, any influence on the brake performance.

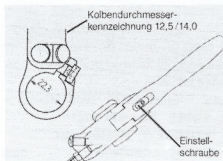


Fig. 2

- The brake is operated by means of a 2- or 4-finger brake lever. Brakes are activated with levers as follows:

right-hand = front brake  
left-hand = rear brake

**It is a must to see the bicycle manufacturer's instruction material regarding any differing installation!**

The brake levers have adjusting

screws and a marking with the piston diameter (Fig. 2).

## Attention:

For the SACHS disc brake use only original brake levers with the adjustment screw (1 Fig. 3). Any conversion or combination with the SACHS brake lever without adjustment screw (2 Fig. 3) or with third-party components may lead to function problems and must, therefore, not be made.

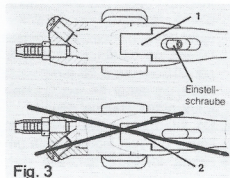


Fig. 3

## Adjustment / Maintenance

1. Readjustment of the brake is absolutely necessary if the brake lever can be pulled almost back to the handlebar grip.

## Adjustment procedure:

- Screw the lever adjustment screw (3 Fig. 4) clockwise with a 2 mm hexagon wrench, until the disc pads slightly graze as you rotate the wheel.

Adjust the screw (4 Fig. 5) in the center of the brake calliper carrier until the brake disc runs

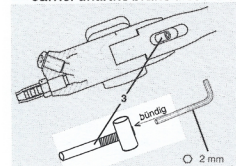


Fig. 4

free from any friction.

- Work the brake lever several times strongly, and repeat the adjustment procedure if needed. The action point must occur in the 1st third of the brake lever travel.

- Readjust the brake in due course according to wear.

## Attention:

The adjustment screw at the calliper carrier must only be used for

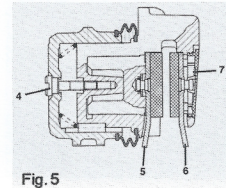


Fig. 5

the fine adjustment, it must not be unscrewed fully.

2. Replacement of the brake pads:

The wear limit is reached if the brake lever can be pulled almost back to the handlebar grip (shift with a sufficient deceleration) and the adjustment screw (3 Fig. 4) is screwed in so much that it is flush with the cylindrical nut.

**Attention:** Do not screw the adjustment screw in beyond this point. If further adjustment is needed, replace the brake pads.

## Adjustment / Maintenance

To replace the brake pads, remove wheel from the fork or the frame. Note: it is not necessary to remove the black cover. If desired, push on the cover inner surface to remove.

- Push pad tabs inwards to release pads from their seated position and slide down and out of calliper.
- Unscrew the adjustment screw at the brake lever counter clockwise until 7-8 mm of threads are exposed.
- Make sure to use the correct brake pads with the disc. Pay attention to the inscription „steel disc“ and „alloy disc“ on the brake pads and „ST“ and „AL“ on the disc.
- Fit the pad with the large tab and

thick facing (6 Fig. 5) on the calliper at the side of the piston and push it with a blunt object into its lock.

- Place the spoke side brake pad (narrow strap and thin facing) (6 Fig. 5) into calliper and hold in place.
- Put chip (coin) between the brake pads, pull the brake lever back while holding the black

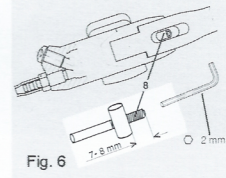


Fig. 6

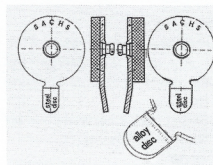


Fig. 7

- cover (7 Fig. 5) in place.
- Fit the wheel as usual, guiding the brake disc between the brake pads.

**Attention:** Brake pads and disc must be free from oil and grease. Damaged brake lines must be replaced by a professional.

- Make adjustments as described in task 1 and carry out functional testing.

## Maintenance / Safety

## Attention:

- When cleaning the bike, do not wash SACHS brake discs with greasy solutions, kerosene or the like.
- The brake disc must always be free from grease and oil.
- Replace the brake pads, if contaminated by grease or oil (safety reasons).
- Check that the brake lines do not chafe at the frame or fork, and that their bending radii are larger than 30 mm.
- Check function prior to every ride
- The switch attached to the brake caliper triggers the relay. The motor will be turned off and the brake light is activated. The

switch must be replaced by a specialist immediately if damage or leaking commences (this is only valid for special I bicycle EBC)

The system comes from the factory filled with the biodegradable hydraulic oil SHELL NATURELLE HFE-15. **Attention:** Do not replace with any brake fluid.

**How to check:** A slight pull on the brake lever should result in immediate brake pad movement, e of the piston (6 Fig. 5). If it fails to do so, air must be trapped in the system. In such a case the brake must be bleed.

## Attention!

- Brakes are safety components:
- Bleeding / Recharging
  - Replacing of damaged or

worn parts (incl. brake pads) are jobs to be done by a professional only.

Technical modifications to the brake system which are not released by SACHS void any warranty claims. SACHS undertakes no responsibility for any parts or accessory products that have not been released by SACHS.

**Prior to retrofitting the disc brake,** ask the bicycle manufacturer whether the fork and the rear frame meet the strength requirements for the SACHS Power Disc. Use only forks and the rear frames that have been released by the fork and frame manufacturer for Power Disc application.