

Cherry BX-2 Supplement # 3

Rims made of 2 pieces (Z 020 and D 015)

The rims produced according to the drawings Z 020 und D 015 are simple and affordable. Though, a disadvantage is that changing tires is more effort, since you need to disconnect the brake hose. I tried to develop a wheel consisting of two parts, locating the brake on the inner side of the wheel.

It is more advantageous to change the existing wheels and equip the brake hose with a quick disconnect.

Changing the existing tires is explained on the attached drawing dated Oct. 2004: The existing rim can be changed using an adaptor ring. The tube will be cut to 50 mm length and amended by a 25 mm adapter which contains hole for the valve. Both axle-parts will be attached to the bearing flanges using 3 flat-head-bolts each. The total length of the wheel needs to match the original one (play in the bearings!). Now the tread of the valve will be exposed far enough to check or adjust the tire pressure without a valve extension. To remove the tire it is recommended to remove the brake-disk to have a better access to the two M8 socket set screws. It is impossible if the socket set screws are in the way. Create two access holes as given in the drawing to allow access.

Experience shows that the inner diameters of the 4.00 inch tires are pretty different. Vredestein tires measure 4 inches = 102 mm, but TOST tires barely 100 mm. Therefore I recommend reducing the diameter of the tire bed between the seats of the tire flanges to 98 mm to ease mounting. To centre the tire (measuring 102 mm) on the tire bed (100 mm) you can use a glass-fiber bandage instead of a rubber band. To ease mounting the glass-fiber band can be machined to a cone. Using the quick disconnects from Legris, Biel/Switzerland (www.legris.com) disconnecting the brake-tubes is possible without the need bleed the brake. Type LF 3000 is available for tubes 4, 5 und 6 mm diameter. Legris AG, Renferstr. 9, 2504 Biel / Switzerland, phone. +41 32-3441080, Fax -3441070. Disconnecting the tube, the brake part is placed horizontally immediately closing the tube with a little pin (cone).

Leaving the brake outside is better for maintenance and costs.

The drawing also shows mounting the spring to prevent the brake pads chaffing on the disk all the time. The two setscrews M4 are to be adjusted as the pads are wearing off.

Cherry BX-2 Supplement # 3 (page 2)

Instruction to change the rims into the 2-piece series:

Source: drawing Z 020 and D 015

Additionally: Drawing A4 dated Oct. 2004

- 1. Reduce the length of D 015, pos 3 on the valve side**
- 2. Machine the ring out of an aluminum-tube 100/80 - 30 mm**
- 3. Attach to flange using flat head screws M3 x 10 (3x)**
- 4. When cutting the tread into the tube use some aluminum-strips (inside and outside) or use flat head sheet metal screws 2,9 x 10 (3x).**
- 5. Drill bolt-holes 5 mm.**
- 6. Insert the valve hole in the aluminum -ring.**
- 7. Break edges in the valve area.**
- 8. Clear material (two holes) to remove M8 socket set screws Z 020, pos 13.**
- 9. If necessary - adapt the tire-bed to the inner diameter of the tire.**

