



Maintenance, Service and Repair of LaserDisc Super Duty Hubs

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1. Before you start

GENERAL WARNING:

All WTB products should be installed and serviced by a qualified bicycle mechanic using appropriate professional tools. *WTB assumes no liability for products which are improperly installed, removed, assembled, disassembled or configured. Improper installation, adjustment or service may result in damage to the component or component failure.*

Use only genuine WTB replacement parts.

After any installation, adjustment or repair, test your work by taking a test ride in a controlled environment, away from cars, other cyclists, obstacles or other hazards.

Failure to follow these instructions can result in component failure. Component failure can cause the rider to lose control of the bicycle and fall, leading to serious injury or death.

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(a) Identify your hub. The graphics on the hub shell should say LaserDisc Super Duty. *If they do not, find the Maintenance, Service and Repair instructions for your WTB hub model on this web site, at wtb.com/tech-users-manuals.*

(b) Make sure you have read the WTB Hub Instructions which are packed with the hubs and are also available on this web site at wtb.com/tech-users-manuals.

(c) Download, read and follow these Maintenance, Service and Repair instructions.

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2. Tools and Equipment

To disassemble and reassemble your hubs, you will need the following tools:

a drift punch long enough to tap out a bearing from the opposite side of the hub

a mallet to tap the drift punch

a small screw driver

a bearing press or soft-jawed vise to press in new bearings

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3. Serviceable Parts

#	Description	Qty	WTB part #
1	Hub shell	1	W135-0146
2	Front Axle (sleeve)	1	W135-0147
3	End Cap (w/ O-ring)	2	W135-0154
4	Bearing, 21.5x31x7mm	4	W135-0148
5	Locator Sleeve	2	W135-0149

WTB Hub Parts Kits	Qty	WTB part #
21.5x31x7 Bearings - 2 per bag	1	W035-0057

WTB "LaserDisc Super Duty" Front Hub - 110x20

#	Description	Qty	WTB part #
1	Hub shell	1	W135-0140
2	Freehub Body (assembly)	1	W135-0137
3	Rear Axle (w/ dsc side cap)	1	W135-0186
4	Bearing, 15x26x7mm	2	W135-0104
5	Dust Seal (bearing)	2	W135-0111
6	Washer, 15x17x.5mm	1	W135-0128
7	Pawls	6	W135-0115
8	Cam Plate	1	W135-0110
9	Dust Seal (freehub)	1	W135-0109
10	End Cap (drv side, slotted)	1	W135-0143
11	Bearing Sleeve	1	W135-0141
12	Spacer, 35x40x.5mm	1	W135-0157

WTB Hub Parts Kits	Qty	WTB part #
15x26x7 Bearings - 2 per bag	1	W035-0051
Freehub w/ bearings, spacer, loop spring, cam plate and seal	1	W035-0052

WTB "LaserDisc Super Duty" Rear Hub - 150x12

4. Adjusting the bearings

The LaserDisc Super Duty hubs do not need bearing adjustment. There is a small amount of play in the axle when the hub is not clamped in the fork, and this is normal. When the wheel is secured in the frame or fork, the axle system will compress slightly and eliminate the play.

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5. Disassembling the hubs

For the **front hub**, pull the End Caps (3) out of the hub. The “O” Ring (3) should stay on the end cap and pull off with it. The Locator Sleeve (5) May pull out with the End Cap; but if it does not, pull it out as well. This will expose the Cartridge Bearings (4). Floating between the bearings is a hollow tube, the Front Axle (sleeve) (2) that acts as the axle. Push the Front Axle to the side with a drift punch or a small screwdriver, so that the opposite inner bearing race is visible through the bearing. Carefully, using a small flat end drift punch, tap on the inner bearing race. This will drive out the bearing. You can then remove the opposite bearing in the same way.

For the **rear hub**, place the blade of your screwdriver in the slot of the Drive Side End Cap (10), twist the blade to slightly open up the slot, and remove the End Cap. Remove the rubber Dust Seal (5).

Now, the Freehub Body (2) can be removed from the Axle (3), and the axle can be pushed through the Hub Shell (1) and removed. The Hub Shell and Freehub Body are separate pieces, held together by the Axle, so you will be able to separate them. Pieces shouldn't go flying as they are separated, though be careful to not drop any of the Pawls (7) or the axle Washer (6), which may be loose. Now you will be able to access any of the internal parts of the hub.

When re-assembling the hub, put the large Dust Seal (9) on *last*.

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6. Replacing the front hub and rear hub bearings

On the **rear hubs**, the Bearings have a light press-fit. So, once the hubs are disassembled, the Bearings can be lightly tapped or pressed out. Follow the directions above for taking your hub apart, and from there you will be able to access the 2 Bearings in the Hub Shell and the 2 Bearings in the Freehub Body. Tap out the old Bearings as described in the **front hub** disassembly instructions above, then carefully tap or press the new Bearings back into place.

On the **front hubs**, slide an End Cap onto a Locator Sleeve, then into one Bearing, and position it in one end of the Hub Shell. Tap the Bearing into place in the Hub Shell so it is flush with the face of the Hub Shell; then place the Axle (sleeve) in the Hub Shell and on to the Locator Sleeve which is in the Bearing. Position the other Bearing and, with the second End Cap and Locator Sleeve in place, tap it into the Hub Shell, making sure that the Axle (sleeve) remains centered so that the Locator Sleeve can seat in the Axle (sleeve). Clamp the hub into the front fork and check for binding. You should now be done.

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7. Contact Information

If you have any questions or problems with any WTB product, please go to wtb.com for help.

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8. Disclaimer

The original English language version/meaning of these instructions supercedes all translations. WTB is not responsible for any errors in translation of these or any product instructions.

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