



INSTRUCTIONS FOR CONVERTING REAR WHEEL FROM SHIMANO®-COMPATIBLE FREEHUB BODY TO CAMPAGNOLO®-COMPATIBLE FREEHUB BODY

Conversion kit contents:

- 1 Campagnolo® compatible cassette body
- 1 Axle spacing washer
- 1 Axle nut

i CAUTION !

The following hub conversion information is provided as a guide for the professional mechanic. These instructions are written with the assumption that the mechanic is familiar with bicycle repair principles and has suitable and appropriate tools.

1. Place the hub into an axle vise drive side down. DO NOT OVERTIGHTEN the vise. Axle damage could occur.
2. Loosen the axle lock nut and adjustable nut. Loosen the locknut until it contacts the axle end cap. Continue turning the locknut against the axle end cap, forcing it out of the axle end. Thread the locknut back onto the axle just until the locknut threads are fully engaged. Pry the axle end cap out of the axle using a screwdriver or other suitable prying tool. Remove the lock nut and adjustable nut.
3. Remove the entire hub with cassette body assembly from the hub axle. Observe the location of axle spacers and seals for proper reassembly. Leave the axle in the axle vise.
4. Remove the Shimano®-compatible cassette body by gently pulling it away from the hub shell while holding the hub shell with the cassette body facing up. Place the hub shell on a clean surface, with the cassette body end up. Note the location of the washer between the cassette body and hub bearing for proper reassembly.
5. Remove the rubber contact seal from the drive side of the axle. Note that this rubber contact seal is not used on a Campagnolo®-compatible hub. This seal is somewhat redundant, as the cartridge bearing is sealed.
6. Install the axle spacing washer on the axle. This washer sits between the shoulder on the axle and the cassette body outboard bearing.
7. Install the Campagnolo®-compatible cassette body on the hub shell. Be sure the thin thrust washer is in place between the cassette body and hub bearing. Turn the cassette body to engage the pawls and cassette body engagement teeth.
8. Ensure that the rubber seal is installed properly on the adjustable nut and thread the adjustable nut on the axle finger tight.
9. Replace the lock nut, also finger tight. Using the two 19mm wrenches as before, hold the lock nut while turning the adjustable nut tightly up against it.



INSTRUCTIONS FOR CONVERTING REAR WHEEL FROM SHIMANO®-COMPATIBLE FREEHUB BODY TO CAMPAGNOLO®-COMPATIBLE FREEHUB BODY [continued]

10. Carefully replace the axle end cap by tapping it back into place with a soft faced hammer.
11. Due to the small difference in axle spacing, the wheel will need to be re-dished. The total dish change needed is small – the rim will need to move toward the drive side less than two millimeters. **IMPORTANT:** lubricate every spoke nipple by placing one or two drops of penetrating oil on each spoke at the rim hole. Place the wheel in a wheel truing fixture and spin the wheel so as to force the oil into the spoke and nipple threads.
12. Remove the tire [and tube and rim tape for clincher wheels]. Use a wheel dishing gauge to determine the extent to which the rim will need to move to be properly centered. Move the rim by loosening each left side [non-drive] spoke nipple 1/8 turn. **IMPORTANT:** Each spoke must be held carefully to prevent wind-up while turning the spoke nipple. Hold the spoke with a Rolf Prima Spoke Vise [available March, 2003] or with a small adjustable wrench closed on the flat section of the spoke near the point where the spoke enters the rim. Check the dish with a wheel dishing gauge and make corrections if needed.
13. The conversion is complete. Reinstall the rim tape, tube and tire, and cassette. Install the wheel in the bicycle frame. Be sure to close the quick release mechanisms properly. Be sure also to check and adjust the rear derailleur travel.