



**1998, 1999  
2000**

**9 speed  
Ergopower  
Overhaul Manual**

# 1998/99/2000 Ergopower Overhaul Manual

## Tools needed:

1. 3" piece of handlebar
2. Small hammer
3. Small flat blade screwdriver
4. Small blunt tip punch
5. Hook bend probing tool
6. Small needle nose pliers
7. 3mm & 5mm "T" handle and "L" handle Allen key

## **DISASSEMBLY PROCEDURES FOR RIGHT ERGOPOWER**

1. Remove Ergopower completely from handlebar on bike.
2. Remove brake blade (letter M on diagram) by tapping gently on brake blade pivot pin (letter L), with blunt tip punch and hammer.
3. Install Ergopower onto the 3" piece of handle bar so the clamp band is flush with the end of the handle bar. Remove the rear cap (letter A).
4. Clamp the piece of bar snugly in a vice so the front of the Ergopower is facing the floor and the internal mechanism is facing up.
5. Release the tension on the coil spring (letter D) by working the finger shift lever as you would during normal shifting. Shift until no more clicks are available. You will see the coil spring become exposed from underneath the retention washer (letter C) as you shift the finger shifter.
6. With the "L" bend 5mm Allen key, hold the central pivot shaft (letter O) by inserting the short end of the Allen key into the shaft. This keeps the central pivot shaft from turning while you loosen the fixing bolt (letter B).
7. With the 3mm "T" handle Allen key, loosen the fixing bolt and remove it entirely from the mechanism. **THIS BOLT IS NOT A REVERSE THREAD BOLT!**
8. Remove the retention washer (letter C), set aside.
9. Disengage the coil spring (letter D) with the small flat blade screwdriver by inserting the screwdriver under the spring and gently lifting up, set it aside.
10. Insert the 5mm "T" handle Allen key into the coil spring bushing (letter E) and apply enough pressure to keep the bushing in place.

11. Release the tension on the return spring (letter F) by working the thumb shifter until there are no more clicks. Be sure to maintain pressure on the coil spring bushing. The bushing will turn with every click, this is normal.
12. Keep the thumb (letter s) in place with your finger or thumb; remove the coil spring bushing (letter E) by pulling it free with the needle nose pliers. Any small washers on the bushing should be left in place.
13. Remove the thumb shifter (letter s) by pulling it out of the mechanism.
14. Remove the index ratchet (letter G) and return spring (letter F) by lifting them out with the needle nose pliers and set them aside.
15. Remove the large Teflon coated ratchet bushing (letter H) and set aside.
16. With the needle nose pliers, remove the spring carrier (letter I) and then remove the index springs (letter J) from the carrier itself. There will be a small Teflon coated washer left on the central pivot shaft, leave it in place.
17. Clean and inspect all parts for wear or damage at this time. Discard any worn or damaged parts and replace with new.

### **REASSEMBLY OF RIGHT HAND ERGOPOWER**

1. Install new index springs (letter J) into index spring carrier (letter I) as shown by dotted line in illustration. Apply grease where the springs insert into the spring carrier and where they will contact the ratchet ring (letter G).
2. Install index spring carrier (letter I) into Ergopower body. The post on the spring carrier should sit flush into a groove in the body of the Ergopower. There should be a small amount of play in the carrier as it sits in the body of the Ergopower.
3. Place the ratchet bushing (letter H) on top of the spring carrier. The notch in the bushing sits around the post on the spring carrier. Be sure you have the side with the small indent or “flap” down.
4. Place the indexed ratchet (letter G) on the central pivot (letter O). Keep the cable head holder on the same side where the post for the spring carrier is located

5. Insert the return spring into the ratchet ring. Be sure to guide the long tab through the indexed ratchet and into the small hole in the body of the Ergopower. The hole is located on the opposite side of the body in relation to the post on the index spring carrier. Apply a thin coat of grease around the return spring and on top of the index ratchet.
6. Place thumb shifter (letter S) directly on top of indexed ratchet. Insert the short exposed tip of the return spring (letter F) through the small hole in the thumb shifter (letter S). Applying downward pressure, slide the thumb shifter all the way into position directly on top of index ratchet (letter G). Maintain slight pressure on thumb shifter to keep it in place.
7. Insert coil spring bushing (letter E) into the center of the thumb shifter. Be sure to keep any washers on the bushing in place. Turn the bushing until you feel it connect or “grab” the flats on the index ratchet.
8. Keeping pressure on the coil spring bushing with your thumb or the “T” handle 5mm Allen key, work the finger shifter until there are no more clicks. By doing this, you are winding up the return spring (letter F). Keep pressure on the coil spring bushing to keep the mechanism in place.
9. Lay the coil spring (letter D) flat on the coil spring bushing (letter E), the hook in the center of the coil should lay flush in the lowest slot of the coil spring bushing.
10. Keep your thumb on the center of the coil spring (letter D) to hold it in place. Use the hook bend-probing tool to secure the outer most hook of the coil, to the post of the index spring carrier. Do this by winding the spring clockwise.
11. Place the retention washer (letter C) on top of the coil spring. Insert the fixing bolt (letter B) into the mechanism and screw the bolt until it is semi-tight.
12. Insert the 5mm “L” bend Allen key into the front of the Ergopower, and into the central pivot shaft (letter O). Hold the central pivot shaft secure while you finish tightening the fixing bolt (letter B) using the 3mm “T” handle Allen key. **DO NOT OVER TIGHTEN THIS BOLT!**
13. Replace the Ergopower rear cap assembly (letter A) by sliding it into the grooves in the body.
14. Check the action of the Ergopower by shifting through both directions with the thumb shifter and the finger shifter.
15. Replace brake blade into its position and gently tap the pivot pin (letter L) back into place. Check the action of the brake blade.

**This diagram has been altered for the purpose of assembly/disassembly instructions. It does not reflect the correct part numbers needed to order Campagnolo spare parts.**

