

1. GENERAL INFORMATION

1.1 Scope of this leaflet

Congratulations on your purchase of a Sturmey-Archer internal gear hub. For the best performance, please follow instructions in this leaflet. Please contact your dealer if any problems are experienced with these products.

⚠ **Riding the gear hub out of the adjustment may cause damage to the internal parts and possible malfunction!**

1.2 Lubrication

No routine lubrication is required. During a major service, the hub greases should be replenished or replaced especially for transmitted parts of internal hub. Please contact your Sturmey-Archer dealer who is equipped to carry this out.

⚠ **Under no circumstances should any lubricant be applied to the brake shoes, as this may prevent the brake from functioning!**

1.3 Gear Changing

Continue pedaling, but ease pressure on the pedals and select the gear required. If the bicycle is stationary simply select gear required. Do not shift while heavy load is applied.

⚠ **Shifting while heavy pedal load is applied may cause damage to the internal parts and possible malfunction.**

1.4 Gear Ratio

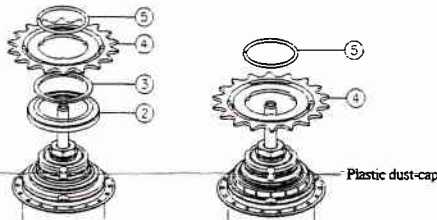
1st Gear 0.75 | 2nd Gear 1.0 | 3rd Gear 1.33

1.5 Brake Operation

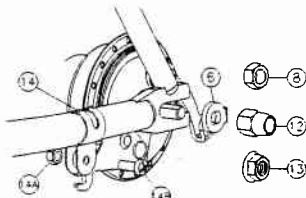
To activate the brake, pull the appropriate brake lever on the handlebar. If the wheel does not run free, or cannot be locked by a full application of the brake, then adjustment is necessary.

2. INSTALLATION

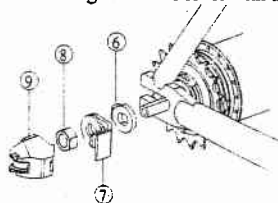
1. Set the wheel-set done.
2. Fit the Dust-Cup (2) · Spacer (3) · Sprocket (4) · Cir-clip (5) onto the Driver. If the hub is already installed with a plastic dust-cup with built-in spacer, just fit the sprocket (4) and cir-clip (5).



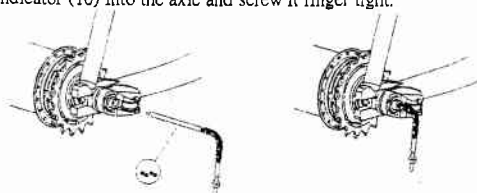
3. Put the hub axle into the fork end and place the chain around the Sprocket.
4. Fit the Lock-Washer(6) · Dome-Nut(12) on the right of the axle. **Screw the nut finger tight.**
5. Fit brake arm into Brake Clip (14) with nut and bolt. Do not tighten at this point.



6. Locate the Lock-Washer (6) · Locating Washer (7) · Axle Nut (8) and Guide Pulley Unit (9), **Do not tighten nuts at this point.** Align the wheel, tension the chain and ensure the Locking Washer is level with the chainstay.



7. Tighten the axle nut to **28Nm** and tighten the brake arm clip screw to **7Nm**.
8. Set the Indicator (10) into the axle and screw it finger tight.

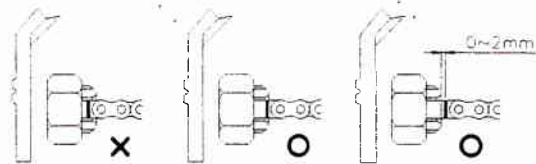


9. Ensure components are fitted to the right side of axle. Unscrew the indicator by up to half a turn if necessary to ensure easy fitment over the guide unit. Connect the indicator coupling (18) at the end of the indicator (10) to the cable connector (19).



3. GEAR ADJUSTMENT

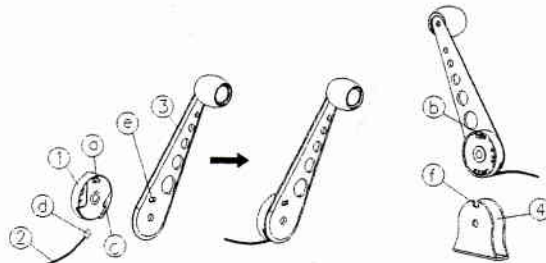
1. Ensure that no more **2.5mm** of axle protrudes from the axle nut.
2. Select 2nd gear and rotate the pedal crank to ensure the gear is engaged. Turn the Cable Adjuster (20) until the center of the end of the indicator rod is out from the end of the axle **0-2mm**, as show in diagram.



3. Tighten the cable-adjusting nut and indicator locknut to locate the gear changing system.
4. Select 3rd gear position, rotate the pedal crank, change back to 2nd gear and check adjustment. Retry the stages description above when the gear changing is not correct.
5. If there is an indicator cover, fit it firmly on the guide nut or the guide pulley unit.

4. INSTALLATION OF THE SHIFTER

1. Fit the cable nipple (d) into the recess (c) of the gear set (1). Mate the gear set (1) and the lever (3) by inserting the protrusion "a" of the gear set (1) into the cut "e" of the shifter lever (3).
2. Place the shifter assembly into shifter base (4). Ensure that the protrusion "b" of the gear set (1) engages with the recess "f" of the shifter base (4).



3. Place the washer (5) and screw the bolt (6).
4. Screw the nut (7) and **tighten it to torque 9Nm**. Shift the lever to make sure gear change is correct.

