

# S2C Internal Gear Change Instructions

# Disassembly

- ❖ Remove dome nuts and lockwashers from both ends.



Dome Nut



Lockwasher

# Disassembly

- ❖ Remove brake arm screw and nut.



Brake Arm Clip

Brake Arm Screw  
and Nut

# Disassembly

- ❖ Take off the wheel
- ❖ Clamp the right hand end of axle



# Disassembly

- ❖ Unscrew the left hand cone locknut and brake adjuster nut.



Left hand cone locknut

Brake adjuster nut

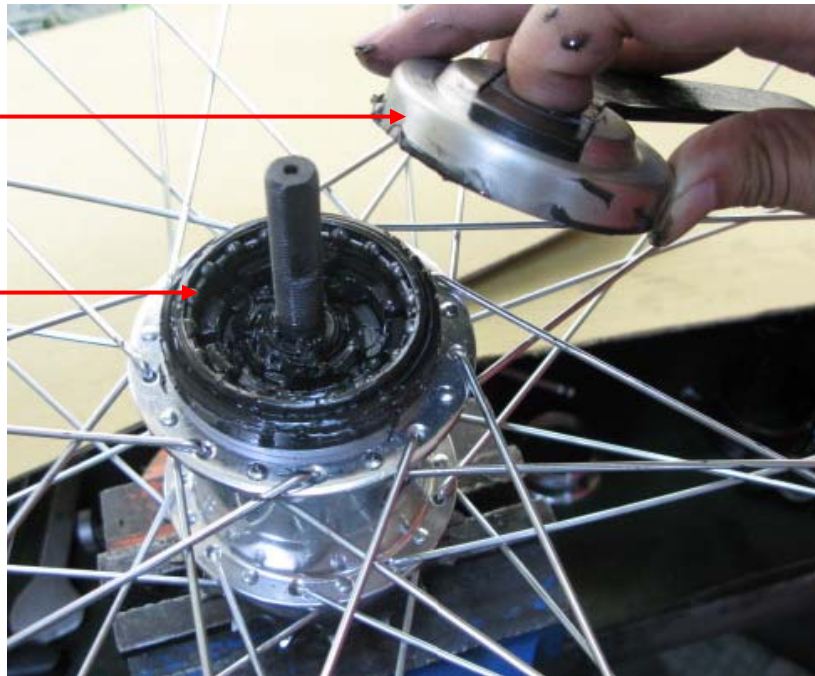


# Disassembly

- ❖ Remove the brake arm/cone assembly and ball cage assembly.

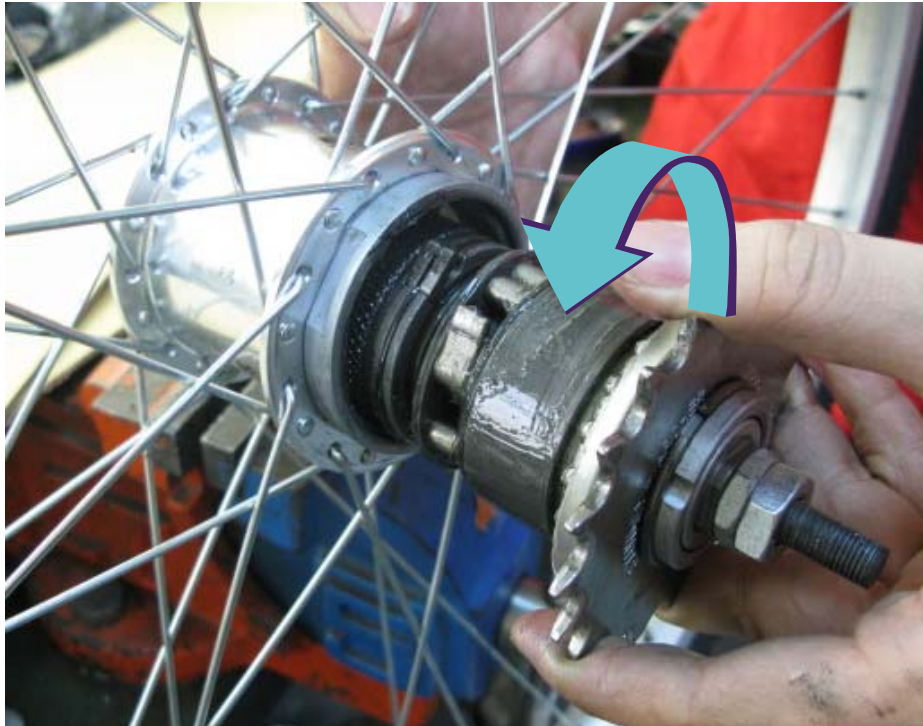
Brake arm/cone assembly

Ball cage assembly



# Disassembly

- ❖ Hold Sprocket.
- ❖ Rotate counterclockwise and pull out internal gear.



# Assembly

- ❖ Ensure that all brake parts are coated with grease.
- ❖ Insert new internal gear into hub shell by rotating driver counterclockwise for easy installing.





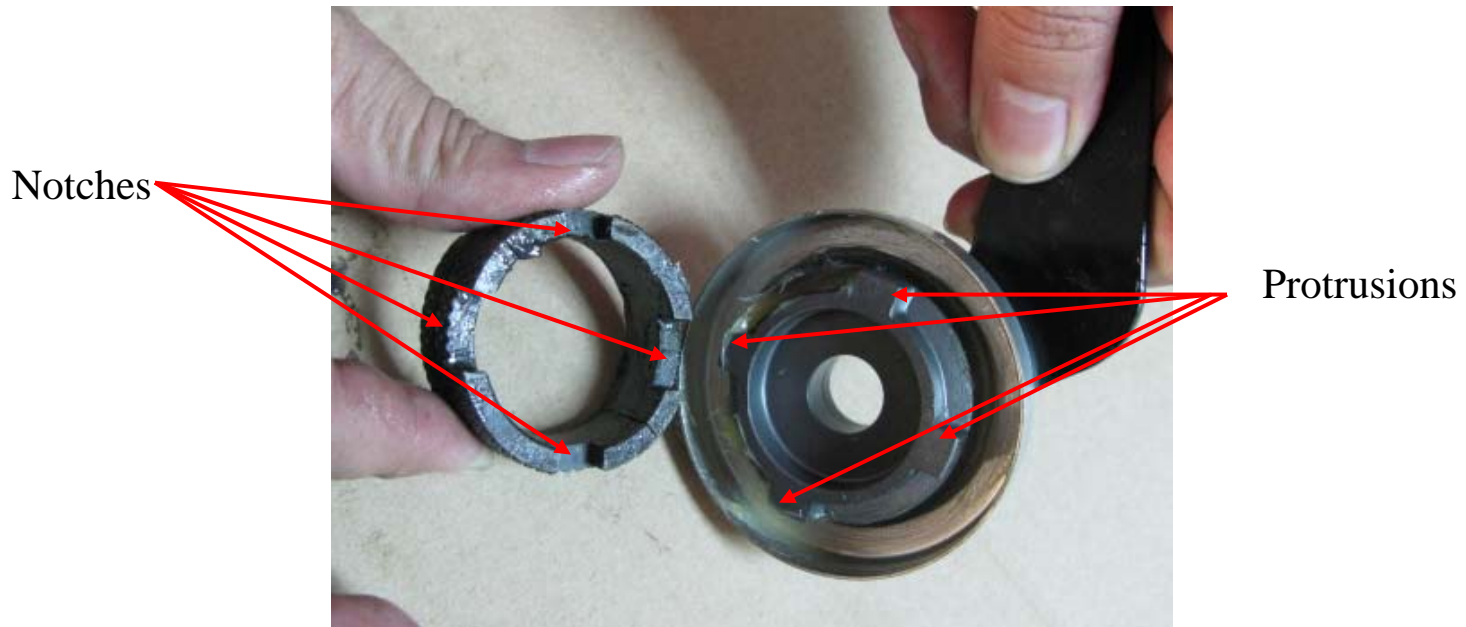
# Assembly

- ❖ Clamp the right hand end of axle.
- ❖ Place the ball cage assembly previously removed from the hub back into the new internal.



# Assembly

- ❖ Place brake arm/cone assembly onto hub, make sure the the protrusions on the underside of brake arm/cone assembly is lined up with the notches on the brake shoes. (no particular sequence)



# Assembly

- ❖ Slide over the axle to engage the Brake arm/cone assembly with brake shoes.
- ❖ Rotate brake arm/cone assembly softly to check if it engages with the brake shoes.



# Assembly

- ❖ Screw brake adjuster nut “finger tight.”
- ❖ Screw on cone locknut.
- ❖ Holding the brake adjuster nut stationary and tighten the cone locknut to torque 22 Nm.





# Assembly

- ❖ Remove circlip, sprocket, spacer and dust-cap from old internal.
- ❖ Fit dust-cap, spacer, sprocket and circlip onto the new internal.



# Assembly

- ❖ Put the hub axle into the rear fork and place the chain around the sprocket.
- ❖ Fit lockwashers and dome nuts and screw the nuts finger tight. Ensure that the serrations on the lockwashers face into the frame with the lugs located into the chainstay slots.



# Assembly

- ❖ Insert brake arm loosely into the clip and screw brake arm clip nut finger tight.
- ❖ With the wheel centralized, chain tensioned and aligned correctly, tighten the two dome nuts to a torque of 28Nm.





# Assembly

- ❖ Tighten the brake arm clip nut firmly to 7Nm max., ensuring brake arm remains in line with clip.

