



Basic instructions for fitting the Fitzy Indian starter system.

At some point post lockdown I'll be posting a YouTube video of the installation process.

Modifications the owner needs to make include:

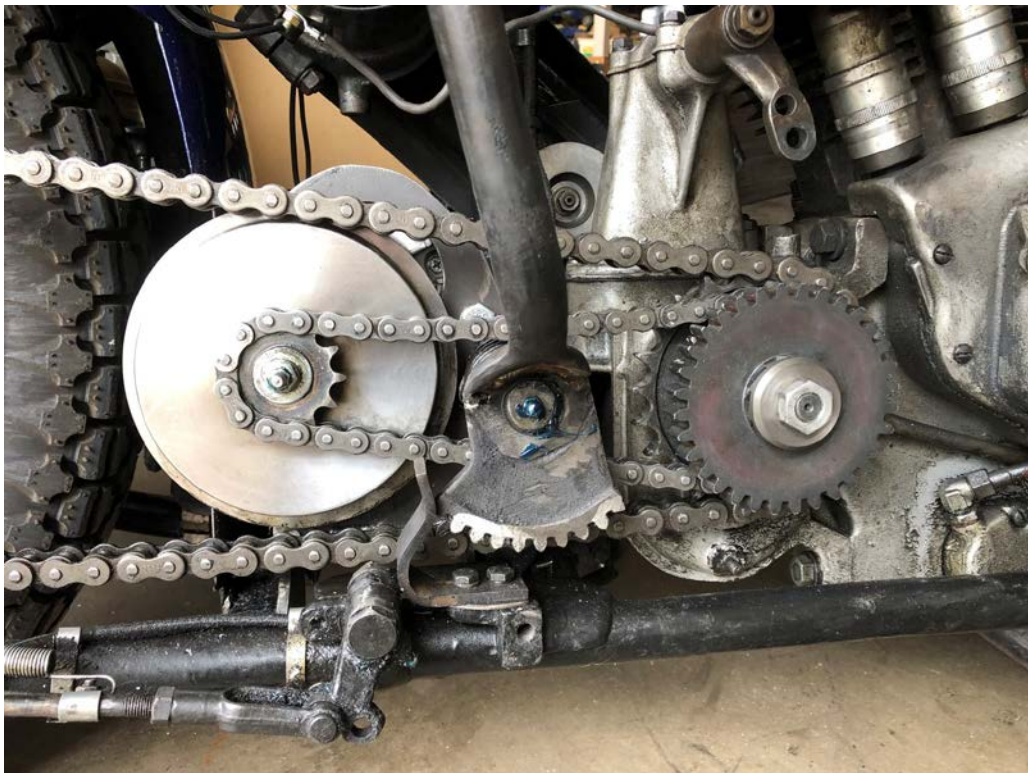
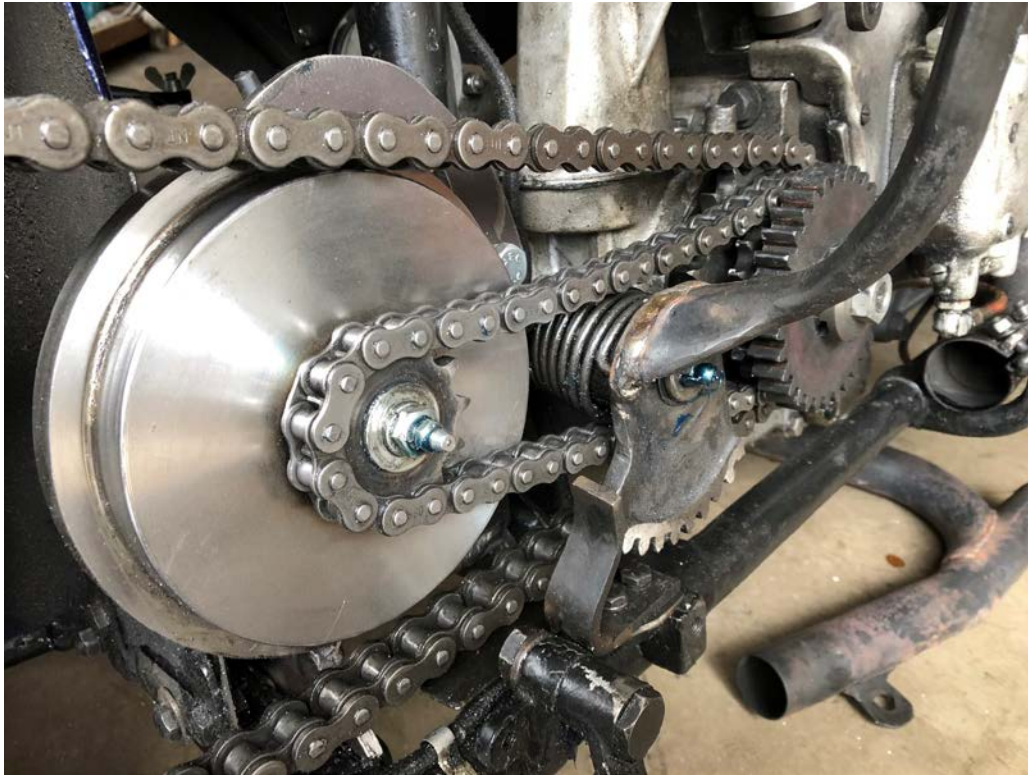
- Grinding flats on the main gearbox shaft to allow the sprag to slide all the way back to the drive sprocket
- Machining the kick starter gear to reduce the overall depth of the inner bore by 6mm
- Machining the inward spigot on the kick starter gear to accept the Thackery spring
- Machining the width of the kick starter gear teeth down 3 mm
- Machining the kick starter dog teeth height down by 1.5 mm
- Machining the main shaft dog gear to remove the tapered section so that it is 10 thou clear of the kick starter dog teeth when in the overrun position with the nut tight
- Drilling a hole in the chain cover for the flywheel grease nipple

The installation involves

- Removal of RHS foot rest

- Remove rear brake linkage
- Remove exhaust pipes
- Remove chain guard
- Remove kick starter arm
- Remove centre stand and spring
- Remove battery frog, bolt, battery and battery carrier frame
- Starter assembly drops into the space where battery was and bolts to the 4 frame holes that the battery case was bolted to
- Perform modification above
- Remove starter assembly flywheel (unscrew grease nipple and slides off)
- Install starter assembly loosely with 4 bolts supplied and slide on sprag and flywheel with chain on (note chain master link must face out). Sprag has boss on the inside and spins freely in clockwise direction. There should be clearance between the flywheel and the kick starter spring lug. Some bikes may need the lug ground down a couple of mm
- Slide on kick starter gear with Thackery spring towards the engine. Once in place the gear should be able to be pushed against the spring to go hard up against the sprag sprocket
- Fit the dog gear and nut and check kick starter gear can be spun to override dog teeth.
- With chain in place fit spacer washers as required maintaining alignment between the sprockets and bolt up to position assembly with chain tight (no slack)
- Refit grease nipple to flywheel
- Install new battery carrier, clamps to frame and uses 2 primary case bolts
- Install and connect battery, owner will need to source battery clamp (not included as battery size unknown. I used a generic clamp from Bursons, part No BHD18 and sells for \$8.95
- Install starter switch and connect one wire to the fused bike power and the other to the starter motor blade connector, I installed mine on the rear guard mounting bolt under the seat. For left hand throttle put on right hand side and vice versa.
- Test run the starter with ignition OFF (push the button) Chain should develop the necessary slack after the first couple of runs. If all running properly check and retighten mounting bolts
- Kick starter arm has to be repositioned around 2 mm further away from the engine so it clears the starter chain. This is done by grinding off the boss that sits against the circlip.
- Loose fit the chain guard and mark position of flywheel grease nipple, remove and drill 1/2 hole for nipple
- Refit modified kick starter arm
- Refit chain guard and check it is clear of the running gear. It may need packing out to achieve clearance, some do some don't.
- Refit centre stand, exhaust pipes, brake linkages and foot rest

Photos of the installed unit and link to video of a test run



Click here to see video <https://youtu.be/keDStijlxWA>