



Kick start

Tech

Crank stop: Breakage may result if your kickstart stop has been chrome or cad plated. Ensure your plater has baked it after plating otherwise breakage will result since this is a heat treated item.

20B398 Lock washer: Make sure this lock washer is used otherwise the nut WILL come loose and you will lose your kick start assembly as well as most likely damage your chain guard. If you choose not to use a lockwasher, Loctite is a modern day substitute.

Exhaust system clearance: After fitting the exhaust system to the m/c, slowly lower the kick start arm ensuring that there is adequate clearance. Also check clearance between kickstart crank teeth and back side of chain guard. If clearance needs to be increased between the crank arm and exhaust system an option is to bend the kick start arm by heating the arm to a cherry red color. Allow to cool very slowly. Do not cool with water as it will cause the crank to become brittle and break during use.

Kick start ratcheting: Ratcheting is when the engine starts up and the kick start crank arm remains down and engaged and creates a loud clunking (ratcheting) noise. Ratcheting could be due to several reasons. 1/ Dry kick start gear on main shaft causing it to bind up. Apply oil to the kick start gear and main shaft through the hole in the chain guard. If this does not solve the problem then it most likely becomes more involved.

2/ The main shaft has not been set up correctly within the transmission at time of assembly (or a mismanufactured mainshaft has been fitted) which will now require the complete disassembly of the transmission in order to do the job properly. This is an extremely time consuming job however we have come up with an alternative easy external fix that takes care of the problem by simply fitting our KI-10151 anti ratcheting spacer. Remove the kick start gear assembly and check to see if there is a space between the cupped washer and transmission output gear (or nut) by pushing the main shaft inwards. If there is no space and the cupped washer is riding directly on the sprocket driver gear (or nut) then fit the KI-10151 anti ratcheting spacer. In some rear instances it may be necessary to fit 2 anti ratcheting spacers.

Crank arm tooth profile: If the crank sometimes gets hung up on the mating gear either when kicking it over or if the crank doesn't return easily, it will be necessary to reprofile the 1st and last tooth on the crank arm. These 2 teeth start out as ½ teeth as their purpose is to just time the crank arm to mesh the gear teeth. If need be, grind these 2 teeth to a point so as they easily engage into the mating gear.

28 & 32 Gear Tooth Profile: Some replacement gears on the market have incorrectly made gear teeth profiles. Correctly made gear teeth should come to a sharp point at their tips where as these replacement gears have a large flat area at the tops of their teeth. Flat areas will not allow the crank to "time" properly and will cause the crank to jam or lock up. This jamming under kicking pressure will cause undue stress on the crank pivot stud and the supporting frame casting that will lead to frame breakage.

Kick Starting: Gently depress kick start crank until it meshes with the gear. Depress further until you feel the engine come up onto compression. Let crank return all the way up and once again gently depress crank until gears engage, hold it in this position momentarily and now take a big swing in the crank with all of your body weight keeping your leg straight. At this point some people unintentionally allow the crank to return upwards (not engaged) a few inches and then jump on it. This sudden engagement severely stresses the crank pivot stud and the supporting frame casting area that will lead to frame breakage.

. When crank gets to the bottom of its stroke, gently let the crank return by leaving your foot on the crank. Do not let the crank slam back otherwise it can break the kick start stop over a period of time.

Electric Starter

76234E Electric starter conversion kit, 12v

Note: 76234E electric starter is sold as a kit ready to install to your motorcycle. The kick start crank stud must be removed from the frame along with the kick start gear and ratchet assembly. This unit is easy to install and does not require any frame or permanent modifications as this assembly tucks nicely in behind the chain guard. Kickstart can be fitted for visual appearance only. The electrical system has to be upgraded to 12v and the 12v battery is relocated to the side of the motorcycle just out board of its original location. Kit includes starter conversion kit, electric starter, battery cradle assembly and starter switch. 12v battery is extra, see battery section.

This is a nicely designed electric start assembly well suited as a direct replacement to the stock kick start assembly.

Note: Always start your motorcycle with the spark fully retarded

Please visit our website www.kiwiindian.com for the latest information, tech and installation guide.