





10 SPEED KIT

Professional Cycle Mechanic Installation Guide

WELCOME!

Please read this owner's handbook carefully before using your Super73 in order to become thoroughly familiar with the correct operation of your bike's controls, its features, capabilities, and limitations. This handbook includes safe riding tips, but does not contain any of the techniques and skills necessary to ride an electric bicycle safely.

Join the Supersquad community of riders wherever you are!

This is just the beginning of your adventure with us! We look forward to hearing about your experience and seeing you online on our social networks:

Youtube.com/c/super73

Facebook.com/groups/Super73owners/

Tag us! @super73 #Super73

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This handbook was drafted in the English language (Original instructions) and may have been translated into other languages as applicable (translation of Original instructions).

This handbook contains information on the Super73 electric bikes. Always store this Owner's Manual with the Super73 and refer to it for information whenever necessary. The information contained in this publication is based on the latest information available at the time of printing.

Please note all instructions and notices are subject to change and updates without notice. Please visit www.super73.com for periodic tech updates. Feedback: customercare@super73.com

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+ MISSION STATEMENT +

SUPER73 EXISTS TO CREATE ADVENTURE AND **COMMUNITY**.

WE STRIVE TO BOLSTER ADVENTUROUS EXPLORATION THROUGH

INNOVATION, CREATE POSITIVE AND FORWARD-THINKING

EXPERIENCES WITH INTEGRITY, AND CULTIVATE ENTHUSIASTIC

SUPPORT AND VISION FOR THE COMMUNITY.



GENERAL INFORMATION

Please note the following symbols:



WARNING!

Warnings, precautions, and potential risks associated with the use of your Super73.



×× Danger!

Possible dangers for your life and health if respective calls to action are ignored.



Recommendation! Meaningful additional information.

Please perform a safety check before each use, as described on in the "Safety Check" section on pg. 11 of this handbook.

\bigwedge The following instructions are meant only for \bigwedge a professional cycle mechanic.

Please do not attempt to install this 10 speed kit on your own to avoid risk of injury. Please do not attempt to install this 10 speed kit on your own to avoid damage to your vehicle. We recommend seeking local professional cycle mechanic assistance in order to safely install this 10 speed kit. Super73 is not responsible for any damage or injury from an improperly installed accessory.

INCLUDED IN THE PACKAGING

- 44T Chain Ring
- Custom Offset Chainring Carrier
- Left (Non-drive) / Right (drive side) Crank arms
- Deore Shifter
- Zee Short Cage Rear Derailleur
- 10 speed cassette, 11-36T gears
- Shifter cable housing, housing end caps and cable crimp cap
- BB Spacers
- Cassette Spacers
- Chain

TOOLS NEEDED

- Cassette tool (FR 5.2H)
- Crescent wrench or 26 mm Open end wrench
- Chain Whip
- Hex Wrench Set (2mm, 3mm, 4mm, 5mm, 6mm, 8mm)
- Crank Puller
- Wire Cutters
- Phillips Screwdriver
- Flathead Screwdriver
- Chain Breaker (CT-3.2 Park Tool)
- 15mm Open End Wrench
- 18mm Open End Wrench
- 2Imm Open End Wrench
- Bottom Bracket Removal Tool
- Scribe (UP-2 Park Tool)
- Small File
- Chain Link Pliers

PREPARATION FOR INSTALLATION

DANGER!

Do not ride with a bike that has not passed 100% safety verification.

Remove Chain Guard

A. Use a phillips screwdriver and 3 mm hex wrench to remove the two screws on the chain guard, one by the chainring and the other close to the rear wheel.

Remove drive side (right) pedal

- A. Use a 15 mm open wrench or 6 mm hex wrench to remove the drive side (right) pedal. Twist the wrench counter-clock wise to loosen and remove the pedal from the right crank.
- B. Use the same wrench to remove the non-drive (left) side pedal. Twist pedal clockwise as this is a reverse threaded part.

Remove chain

A. Use a standard set of chain link pliers to loosen the snap link in the bike's chain, allowing the chain to come off the bike entirely.

Remove both cranks and chainring

- A. Use an 8 mm hex wrench to remove the crank screw from each crank (counter clockwise)
- B. Once the crank screw is removed, use a crank puller to separate each crank from the bottom bracket.

Remove Bottom Bracket Assembly

- A. Use a flathead screwdiver to loosen and remove the pedal assist sensor located on the non-driveside of the bottom bracket.
- B. Use a bottom bracket removal tool to remove the non-driveside bottom bracket cup. Use the same tool to remove the driveside bottom bracket cup and pull the bottom bracket shaft away from the frame.
- C. If the bike had a chainguard installed, remove the chainguard mount from the bottom bracket shaft at this time.
- D. Take the larger black bottom bracket spacer from the IO speed kit and slide it across the bottom bracket shaft so it rests against the drive side bottom bracket cup. Tighten the bottom bracket shaft back onto the frame from the driveside.
- E. Take the smaller silver bottom bracket spacer and install inside of the nondriveside bottom bracket cup before reinstalling the cup on the bottom bracket shaft.
- F. Reinstall the pedal assist sensor on the non-driveside of the bottom bracket.

Remove Chain Tensioner

A. If the bike has a chain tensioner installed use a 5 mm hex wrench to remove the bike's chain tensioner by unscrewing it from the hanger.

Remove Rear Wheel

- A. Support the bike with a stand or lift and tuck the kickstand to allow more room for work in the wheel area.
- B. Use a zip tie cutter, remove the three zip ties that hold the motor cable to the frame, and disconnect the motor connection.
- C. Remove the rear brake caliper. Remove the caliper mounting bolts with a 5 mm hex wrench. Allow the caliper to rest against the frame and hand tighten the mounting bolts back into the mount for safekeeping.
- D. The I8 mm axle nut will need to be removed once the wheel is off the bike. To prepare for that, LOOSEN the I8 mm axle nut with an I8mm open end wrench. DO NOT fully remove the axle nut at this time, only loosen it.
- E. Use a 5 mm hex wrench to remove the two dropout bolts on each side of the wheel and set aside. Ensure the hex wrench is secure in the bolt before loosening/tightening to avoid any stripping to the bolt head. Uniformly loosen each screw.
- F. Remove the wheel from the frame. If you find that sliding the wheel out from the dropout channels is difficult, you may need to tap on the wheel as you guide it out to loosen the dropout plates from the channel. When you set the wheel down after removing it from the frame, make sure that the side with the brake rotor disc is facing upward. Once the wheel is removed from the frame, you can remove the I8 mm axle nut and the drive side dropout plate. Start by loosening the dropout clamp bolt with a 4 mm hex wrench, then remove the axle nut and washer. Once the nut and washer are removed, you will be able to remove the dropout plate by sliding it off of the axle.

Remove right grip, brake lever, and throttle from right handlebar.

- A. Use a 2.5 mm hex wrench, loosen and remove both screws on the handlebar. The grip will slide off the handlebar.
- B. Use a 4 mm hex wrench to loosen the brake lever clamp screws to remove the brake lever attachment from the handlebars.
- C. Use a 3 mm hex wrench to loosen the screw and slide the throttle off the handlebar. (do not remove the screw)

INSTALLATION

Install brake lever, shifter, throttle, and grip on handlebars in the following order

- A. Install the brake lever attachment on the handle bar closest to the inside. Leave loosely installed for final adjustments after everything is installed.
- B. Next, install the shifter with the low gear lever on top, and with the high gear lever on the bottom and ensure that the cable stays clean by coiling up the wire. Keep cable free of contaminants.
- C. Slide the throttle onto the handlebar followed by the grip and tighten the grip to establish position of remaining components.
- D. Position the shifter against the throttle and tighten making sure that the low gear shifter is at the highest gear, maximizing the length in the shifting cable. Click the smaller of the 2 paddles to release any remaining shifts.
- E. Now tighten the throttle and brake lever in place. Minor adjustments may be made after installation is complete. It may be that the throttle touches the shifting paddle when fully depressed.

Install 10 speed gears onto wheel

- A. Remove the original cog on the bike with a chain whip to hold the cog in place and a cassette removal tool to loosen the cassette lock ring.
- B. Once the cog is removed, position the 10-speed gears on the cassette spindle. On the spindle, there are grooves throughout, with one slightly wider than the rest. Locate the wide groove to line up with the 10 gear bundle for installing. When positioned correctly, the 10 gears will effortlessly slide onto the cassette spindle.
- C. After placing the gears on the axle, tighten the cassette lockring on top with a cassette tool. *While tightening, it is normal to hear a clicking sound.
- D. With the 10 speed gears installed add the round thick washer and the dropout plate making sure both dropout plates are properly aligned with the channel groove facing outward, followed by the thin washer and 18mm nut.

Install rear wheel back onto the frame

- A. To install the wheel onto the bike, align dropout channels with the frame and slide into place. Push wheel completely into the frame channels.
- B. Tighten the two dropout plate bolts on each side of the frame.
- C. Next, tighten the axle nuts with 18 and 21 mm wrenches.
- D. Install the brake caliper onto the mount and tighten the bolts using a 5 mm Hex Wrench. Ensure that the caliper is properly aligned with the rotor and make any adjustments if necessary.
- E. Reconnect the motor cable and secure it to the frame with zip ties. With zip tie cutters, cut the excess ends off each zip tie to avoid them getting caught in the wheel.

Install derailleur and shifter cable

- A. The new derailleur will fit and thread into the hanger at the same attachment point where the chain tensioner was located. Use a 5mm hex wrench to tighten into place. Make sure the pin on the derailleur is set into the groove on the back of the dropout plate.
- B. Run shifter cable through cable housing.
- C. Properly route shifter cable housing from the shifter through the left fork stanchion and the underside of the bike's frame, ending at the derailleur on the driveside. The cable and housing may need to be properly sized at this point.
- D. Pull the cable tight and attach to the derailleur. Tighten with 5mm hex wrench. To tighten the cable, shift the lever several times as if to change into a bigger sprocket or chainring. This will settle the cable into place and apply tension on it; the cable must be taut.

Install the crankset

- A. Make sure cranks are placed in opposition of each other and then tighten the crank screws into place.
- B. Install the pedals on each crank.

Cut new chain to size and install

- A. Run the chain around the chainring and over the largest cog in the 10-speed cassette, bypassing the derailleur.
- B. Line each end of the chain up to where an outer rivet meets an inner one. Once met, extend the chain an inch (about 2 rivets), to account for the derailleur.
- C. Mark that rivet an inch (about 2 rivets) down from the meeting point with a marker, that will be the chain cutting point. Ensure both rivets have an outer and inner piece.
- D. Use a chain breaker to break the chain at the marked link.
- E. Feed the chain through the derailleur, first, over the "under pulley" and then through and under the "upper pulley." Guide chain around chaining and connect the inner and outer rivet with a master link.
- F. Work the cranks and move the shifter ensuring the chain is grabbing each gear smoothly. Adjust tension as necessary.

Adjustments and Safety Check

- I. Check that the I8 mm and 2I mm axle nuts are fully tightened onto the rear wheel.
- 2. Shift through each gear and ensure the chain runs smoothly over the chainring, derailleur, and all gears.
- 3. Both cranks should be in opposition of each other and secure.
- 4. There should be no rattle in the bottom bracket, all pieces should fit snug.
- 5. The grip, brake lever, and new shifter paddles should feel comfortable before riding.
- 6. Check that the brake caliper is properly aligned and operating properly.
- 7. Lastly, check for any loose cables or connections and ensure that everything is securely fastened before riding.

$oldsymbol{\Lambda}$ GENERAL WARNINGS $oldsymbol{\Lambda}$

Like any sport, cycling involves risk of injury and it is the rider's responsibility to assume potential risks and injury involved when riding. By choosing to ride a bicycle, you assume the responsibility for that risk. You need to know and practice the rules and safety regulations of riding this bicycle. Proper use and maintenance of your bicycle reduces risk of injury. Check your local state or country regulations for electric bike laws. For example, check the minimum age for using an electric bike as this differs in various regions.

Riders must have the physical condition, reaction time, and mental capability to ride and manage traffic, road conditions, and sudden situations. Also, respect the laws governing E-bike use in accordance with each region. If you have an impairment or disability (i.e. visual impairment, hearing impairment, physical impairment, cognitive/language impairment, seizure disorder, etc.), consult your physician before riding any bicycle.

NOTICE: Only take on tasks for which you have the necessary knowledge and tools. It is recommended that users pay special attention to all of the general operating rules below before operating their Super73 bike.

- When riding, obey the same road laws as all other road vehicles, including giving right of way
 to pedestrians and stopping at red lights and stop signs.
- For additional information, contact the road traffic authority, police department or Department of Motor Vehicles in your state or country.
- Use correct hand signals to indicate turning or stopping.
- Concentrate on the path ahead. Avoid potholes, gravel, wet or oily roads, curbs, train
- tracks, speed bumps, and other obstacles.
- Walk your bike across all train tracks.
- Expect the unexpected, such as opening car doors or cars backing out of driveways
- Be aware at intersections and when preparing to pass other vehicles or other cyclists.
- Familiarize yourself with all the bike features. Practice using the brakes and throttle.
- If you are wearing loose pants, secure the bottom using leg clips or elastic bands to prevent them from being caught in the chain.
- Wear proper riding clothes and avoid wearing open-toe shoes.
- Don't carry passengers or cargo that will interfere with your ability to control the bicycle.
- Never ride and use the app simultaneously. Pull over and adjust any settings or set your destination in the navigation in a safe spot.
- Don't use music devices such as headphones while riding. This will restrict your hearing and impair your awareness of your surrounding environment.
- Maintain a comfortable stopping distance from all other objects, riders, and vehicles.
 Safe braking distances are based on forces, such as weather and lighting conditions among other variables.

WET WEATHER



It is recommended to not ride in wet weather. The Super73 is not meant for use in puddles, heavy rain, and streams. Never immerse this product in water as the electrical system may be damaged. Take extra care while riding in wet conditions. Feet or hands can slip in wet conditions and lead to serious injury from a fall. Brake earlier as it will take longer to slow than when operating in dry conditions. Decrease riding speed. Wear reflective clothing and use approved safety lights. Road hazards are more difficult to see when wet, proceed with caution.

RIDING AT NIGHT



Be safe! It is recommended to not ride at night. Ensure your Super73 is equipped with a full set of correctly positioned and clean reflectors. Use a properly functioning lighting set comprised of a white front light and red rear light. Wear reflective and light-colored clothing. Slow down and use familiar roads with street lighting, if possible.

FOR PARENTS AND GUARDIANS



As a parent or guardian, you are responsible for the activities and safety of your child. The Super73 is not designed for use by children under the age of 16. Obey local regulations and always wear a helmet.

SAFETY

The following safety notes provide additional information on the safe operation of your Super73 and should be closely reviewed. Failure to review these notes can lead to serious injury or death.

- All users must read and understand this manual before first use. Additional manuals for components used on your bicycle may also be provided and should be read before use in addition to this manual.
- Always wear an approved bicycle helmet whenever using this product and ensure that all
 helmet manufacturer instructions are used for fit and care of your helmet. Failure to wear a
 helmet when riding may result in serious injury or death in the event of an accident.
- Ensure correct tightening and setup is performed on your bicycle after assembly.
- It is your responsibility to familiarize yourself with the laws and requirements of operation of this product in the area(s) where you ride.
- Ensure handle bar grips are not damaged and properly installed. Loose or damaged grips can cause you to lose control and fall.
- Off-road riding requires close attention and specific skills and presents variable conditions and hazards which accompany the conditions. Wear appropriate safety gear and do not ride alone in remote areas.
- Bicycles and bicycle parts have strength and integrity limitations and extreme riding should not be performed or you risk damaging the components or becoming seriously injured.
- After any incident you must consider your bike unsafe to ride until an inspection is made according to provided safety check in the is handbook. Consult with a profesional cycle mechanic for a comprehensive inspection.
- Failure to properly charge, store, or use your battery will void the warranty and may cause a hazardous situation.
- Extreme care should be taken when using the pedal assist sensor and propulsion on this
 product. Ensure you understand and are prepared for the power assistance to engage as
 soon as pedaling is underway.
- You should check the operation of the brake inhibitor switches before each ride. The brake system is equipped with an inhibitor that shuts down the power to the electric motor whenever the brakes are engaged.
- User must understand the operation of the throttle and pedal-assist levels before using, and take ample care in their usage at speeds appropriate for each region and user experience level. Use the lowest assist level until you are comfortable with the bike and feel confident in controlling the power.
- Because e-bikes are heavier and faster than normal bicycles, they require extra caution and care while riding.
- Do not remove the front, rear or pedal reflectors.
- Be familiar with your local e-bike laws.
- Any after-market changes to your Super73 bike not expressly approved by Super73 may void the warranty and create an unsafe riding experience.