Guidelines & Tips

TURBO SL BIKES

RIDER CARE

GUIDELINES & TIPS - TURBO SL BIKES

Dear Turbo Rider,

We thank you for choosing a Specialized Turbo e-bike. This short guide provides essential information on setup, usage and maintenance of your Turbo bike.
It is not a substitute for the User Manual that comes with your bike or is available at www.specialized.com as latest digital version. If you need additional information or support, we recommend contacting your Specialized Turbo retailer.

Have a great ride! Specialized Rider Care

MANUALS

Please study all the supplied manuals carefully before your first ride. They contain important information on how to set up, use and maintain your Turbo e-bike.

SADDLE HEIGHT

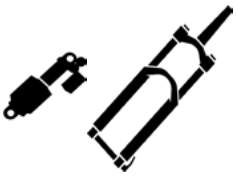
The correct saddle height is crucial for pedaling efficiency and comfort. The following method is a useful guideline: Move one crank downwards so that it is positioned as an extension of the seat tube (roughly the 5 o'clock position). Sit on the bike in riding position and place your heel on the lower pedal with the foot parallel to the ground. The correct saddle height should leave your knee only slightly bent in this position.

TIRE PRESSURE

Running the correct tire pressure on your bike is vital for a controlled and enjoyable ride. Please refer to the tire sidewall for the allowed pressure range and use our Support Center section on tires for specific recommendations: https://support.specialized.com/tires/en.

Your individual setting may vary according to rider weight and load, terrain and ride style. Front tires can be inflated with less pressure than rear tires. If your bike comes with tubeless ready tires (2BR), you may want to consider a tubeless setup for even better performance. Check the tire pressure before each ride.

SUSPENSION SETUP



A correct suspension setup is key for great riding performance, controlled handling and ultimate offroad fun. Please refer to the dedicated suspension chapter in your bike manual for getting the setup right. Your Specialized retailer will be happy to assist and can offer you a dedicated shock pump.

RECOMMENDED ACCESSORIES

Specialized App

With our free Specialized App you can further enhance your Turbo experience. It not only allows you to customize the motor characteristics by changing the default motor settings (e.g. customize for range vs. power), the app also enables you to control range, diagnose the system, record rides, sync them with Strava and much more.

Turbo Connect Display Wireless (TCD)

This wireless display connects via ANT+ and complements your bike display. This add-on is especially useful if your bike uses the first generation TCU with blue segments. The TCD shows all the regular data of a bicycle computer plus Turbo data like battery state of charge as % figure and bars, rider power, cadence and selected mode. It even allows connecting a heart rate strap to show live heart rate data.

Range Extender Battery (RE)

This external battery sits in a bottle cage on your Turbo SL e-bike and adds 160 Wh, or 50%, of range, which typically means an additional hour of ride time in flat/hilly terrain. For longer rides you can carry more than one additional RE. It is compact and only weighs 1 kg. Refer to the bike manual for bike-specific information about installation and handling.

RIDE TIPS

The following ride tips will help you optimize your Turbo rides.

Shifting

When shifting gears, reduce pedaling force. Try to avoid shifting under heavy loads, e.g. when accelerating or climbing. Only shift one gear at a time. This leads to smoother, quieter shifting and supports drivetrain longevity.

Mode Selection

When looking for increased range, primarily use the modes Eco and Sport/Trail. When you need maximum power or maximum range is not needed, Turbo mode is a great option.

Maintain a Smooth Cadence

The motor is designed to support you best at higher cadences (~75 crank rotations per minute and above). Pedaling with a smooth cadence is beneficial for optimal range and motor support. Tip: Use the bike display or TCD to monitor your cadence.

NORMAL SYSTEM BEHAVIOUR

Every e-bike system features "normal system behaviour", refering to behaviour intended per design to ensure correct performance and overall system stability. The following examples highlight a few common scenarios. Please contact your retailer if in doubt about a certain behaviour.

Parallel Discharging / Range Extender First

We recommend sticking to the default parallel discharge scenario when using a Range Extender battery. In parallel discharge mode, the technically needed reduction in motor assist at lower charge levels will be noticeable later and battery health will benefit long-term.

Discharging the RE first only makes sense if you want to remove it at some point to have a lighter bike or want to make room for a water bottle.

SL 1.2 motor only: when discharging the Range Extender first/only, you will get a 10% power reduction right from the beginning (RE charged to 100%) and about 30% less at 15% state of charge; this applies to normal battery and motor temperatures.

State of Charge and Power Output

Between 20% and 15% remaining battery state of charge, the system starts reducing motor support to ensure uninterrupted support at lower charge levels. Between 5% and 1% remaining soc, motor support shuts off, but the system stays on. This is not only beneficial for battery health and lifetime, but also ensures wired lights can be powered for about two more hours.

Display/App Shows Less State of Charge After 2+ Hours of Inactivity

When turning on the bike after more than two hours since last use, the remaining state of charge shown on the display or in the app can differ from the one displayed before powering the bike off. The difference can be up to 6%. This has to do with batteries recalibrating themselves in deep sleep mode.

MOTOR AND BATTERIES

Both the motor and battery are user-friendly components that do not require a lot of special attention. However, there are a few tips and notes you should consider.

Motor

- The motor unit is a fully closed, well-protected unit, but never pressure wash the bike/ bottom bracket area
- Any firmware manipulation, e.g. to derestrict the speed limit, is illegal and can void the warranty
- Be aware that the additional motor power results in greater wear of drivetrain parts, brake pads, tires, etc.
- Warranty terms: 2 years

Batteries

Your Specialized Turbo bike features the latest Lithium-Ion battery technology to provide maximum performance and safety.

- Familiarize yourself with the battery chapter in the manual and the symbols on the batteries themselves
- Be aware that batteries age over time and through usage (reduced range)
- Always power off the bike before connecting or disconnecting any battery or charging them
- Batteries have undercharge and overcharge protection, so that they can be charged/ discharged as needed
- Store your Turbo e-bike batteries, or the bike containing them, at room temperature before riding in extreme hot or cold conditions (especially when below 0° C / 32° F)
- When not using batteries for longer, say 2 weeks or more, leave them at a charge level of about 60%, store them/the bike in a dry, preferably cool place; recharge to 60% every three months
- When carrying your bike on a car bike rack, remove any removable batteries and make sure all covers, contacts and ports are closed and protected; transport batteries inside the car and secure them appropriately
- Warranty terms: 2 years or at least 75% capacity after 300 charge cycles.

Avoiding cable damage

DO NOT rotate the cranks backwards when:

1. The charge cable is connected
2. The RE cable is not connected to the frame port

This also means you should never push your Turbo SL backwards in the two above scenarios. The RE cable should either be connected at both ends or be completely removed from the bike. Disregarding this advice can result in damage to the charger connector, the RE cable or even the RE/charge port.

SERVICE AND MAINTENANCE

Hardware

Having your Turbo e-bike regularly inspected and serviced by an authorized Specialized retailer is imperative. Please refer to all manufacturer's maintenance documents and ask your local Specialized retailer for details.

Software

We continuously improve our software to offer you the best possible ride experience. Therefore, make sure your system runs with the latest software. Your local Specialized retailer will be happy to keep your system up-to-date.

Updating your bike display is usually possible using the over-the-air updating process within the Specialized app. Other components may require seeing your retailer to apply updates.

Cleaning your Turbo e-bike

By cleaning your bike regularly in an appropriate manner, you will achieve greater longevity, less wear and best performance. Here are some guiding principles:

- Never use a high-pressure washer (use a wet cloth or a low-pressure garden hose for removing dirt)
- Always turn off the bike before cleaning
- If applicable, remove any extender batteries and close all ports before cleaning (if needed, clean external batteries with a wet cloth; remove dirt from connectors with a soft brush or low-pressure air)
- Inspect charge/connector ports for dirt accumulation (to clean inside, use a soft brush or low-pressure air)
- Before connecting the charger or external battery, make sure all contacts and ports are dry and clean
- Regularly clean the speed sensor magnet at the rear brake rotor with a cloth (brake dust with metal parts can accumulate and cause issues)
- Keep your drivetrain maintained by regularly cleaning its components (chain/belt, chainring, cassette/cog, derailleur pulleys) and applying high quality chain oil. Belt drive systems must not be lubricated - please refer to the applicable manufacturer instructions, e.g. as provided by Gates Carbon Drive.