

VBT Leader – Basic Bike Mechanical Skills

1. All **VBT Tour Leader Applicants** must be able to do the following list:
 - Remove both wheels, change flat tires & reinstall wheels on all styles and show proper tire inflation. Quick release and axle through system.
 - Remove and install both pedals. Tighten to proper torque.
 - Adjust saddle fore and aft positions, saddle tilt and saddle height (identify max height). Proper torque on seat post quick release.
 - Basic understanding of how to adjust (fine tune) a rear derailleur on all styles.
 - Demonstrate making a handlebar rotating adjustment from the stem face plate and tighten properly.
 - V brakes, Disc brakes – Identify wear/damage
 - Understand difference in adjusting mechanical and hydraulic system.
 - Demonstrate brake lever adjustments. Adjust the reach.
 - Basic knowledge of bicycle anatomy (in English).

Below questions should be answered by Leader Applicants using as much detail as needed:

- In what position should the rear derailleur be before removing or installing the rear wheel and why?
 - When replacing a flat tire tube what should you do to ensure the replacement tube will not again puncture?
 - Explain why the chain needs to be changed or modified.
2. All **VBT Tour Leaders** must be able to perform these skills before going on tour. These skills will be trained in Technical Orientations by VBT staff:
 - Remove and install chain using power link (using proper tools).
 - Identify a loose or tight headset. And tight properly if needed.
 - Familiar with Bosch error code list.
 - V brakes/Disc brakes – replace and adjust properly on all styles.
 - Demonstrate proper bike lubricating technique.
 - Demonstrate proper bike cleaning technique.
 - Return bike to “Comfort Zone”.
 - Demonstrate bike safety check.
 - Remove and install mirror on all styles.
 - Demonstrate the proper fitting of helmet and guest on bike.
 - Demonstrate the proper van and trailer loading technique.
 - Demonstrate process for attaching trailer to the van (connect electric, attached safety cable, do a safety check if hitch to assure that hitch is engaged)
 - Demonstrate the proper van and trailer driving technique.

Troubleshooting E-Bike:

- change from miles to km
- turn on the lights
- computer does not work
- computer works but not showing any speed
- motor does not engage

Trouble shooting Road bike:

- diagnosing and correcting soft lever feel

Troubleshoot All styles:

- Skipping chain, which steps to take? Identify der. hanger status, cable tension and properly adjust front and rear derailleur on all styles. Do not affect the limit screws.
- How to decrease noise when braking (V brake and disc brake)