This brief user manual contains important information. Please read carefully and store in a safe place.

This user manual is specific to your Specialized Tarmac SL6. It contains important safety, performance and technical information, which you should read before your first ride and keep for reference. You should also read the entire Specialized Bicycle Owner’s Manual (“Owner’s Manual”), because it has additional important general information and instructions which you should follow. If you do not have a copy of the Owner’s Manual, you can download it at no cost at www.specialized.com, or obtain it from your nearest Authorized Specialized Retailer or Specialized Rider Care.

Additional safety, performance and service information for specific components such as seatpost or pedals on your bicycle, or for accessories such as helmets or lights, may also be available. Make sure that your Authorized Specialized Retailer has given you all the manufacturers’ literature that was included with your bicycle or accessories. If there is a difference between the instructions in this manual and the information provided by the component manufacturer, please refer to your Authorized Specialized Retailer.

When reading this user manual, you will note various important symbols and warnings, which are explained below:

**WARNING!** The combination of this symbol and word indicates a potentially hazardous situation which, if not avoided, could result in serious injury or death. Many of the Warnings say “you may lose control and fall.” Because any fall can result in serious injury or even death, we do not always repeat the warning of possible injury or death.

**CAUTION:** The combination of the safety alert symbol and the word CAUTION indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury, or is an alert against unsafe practices.

**INFO:** This symbol alerts the reader to information which is particularly important.

**GREASE:** This symbol means that high quality grease should be applied as illustrated.

**CARBON FRICTION PASTE:** This symbol means that carbon friction paste should be applied as illustrated to increase friction.

**TORQUE:** This symbol highlights the correct torque value for a specific bolt. In order to achieve the specified torque value, a quality torque wrench must be used.

**TECH TIP:** Tech Tips are useful tips and tricks regarding installation and use.

**INTENDED USE**
The Tarmac SL6 is intended and tested for Road Riding only (Condition 1). For more information on intended use and structural weight limits, please refer to the Owner’s Manual.

**GENERAL NOTES ABOUT ASSEMBLY**
This manual is not intended as a comprehensive assembly, use, service, repair or maintenance guide. Please see your Authorized Specialized Retailer for all service, repairs or maintenance. Your Authorized Specialized Retailer may also be able to refer you to classes, clinics or books on bicycle use, service, repair, and maintenance.

- Inspect the fork, stem, seatpost and seat tube, to ensure that there are no burrs or sharp edges. Remove any burrs or sharp edges using fine grit sandpaper.

- All edges of the stem in contact with the steerer tube should be rounded out to eliminate any stress points.

**WARNING!** Due to the high degree of complexity of the Tarmac SL6, proper assembly requires a high degree of mechanical expertise, skill, training and specialty tools. Therefore, it is essential that the assembly, maintenance and troubleshooting be performed by an Authorized Specialized Retailer.

**WARNING!** Many components on the Tarmac SL6, including, but not limited to, the seatpost and cable guides, are proprietary to the Tarmac SL6. Only use originally supplied components and hardware at all times. Use of other components or hardware will compromise the integrity and strength of the assembly. Tarmac SL6 specific components should only be used on the Tarmac SL6 and not on other bicycles, even if they fit. Failure to follow this warning could result in serious injury or death.

**WARNING!** Never modify your frame or components in any way. Do not sand, drill, file, or remove parts. Do not install incompatible forks or components. An improperly modified frame, fork, or component, can cause you to lose control and fall.

**CAUTION:** Do not face or ream the bottom bracket shell! This can prevent proper installation of the crank. Your Specialized frame does not require any bottom bracket shell pre-installation preparation, as all surfaces have been precisely machined to specific tolerances at the factory for proper interface with OSBB/BB30 compatible crankset.

**WARNING!** Burrs and sharp edges can damage the carbon and alloy surfaces of the components. Any deep scratches or gouges in the stem or fork can weaken the components.

- Use the Park IR-1 Internal Cable Routing Kit to simplify installation of shift wires or cable housings and brake housings.

**TOOLS / TORQUE SPECS**

**WARNING!** Correct tightening force on fasteners (nuts, bolts, screws) on your bicycle is important for your safety. If too little force is applied, the fastener may not hold securely. If too much force is applied, the fastener can strip threads, stretch, deform or break. Either way, incorrect tightening force can result in component failure, which can cause you to lose control and fall.

Where indicated, ensure that each bolt is torqued to specification. After your first ride, and consistently thereafter, recheck the tightness of each bolt to ensure secure attachment of the components. The following is a summary of torque specifications in this manual:

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>TORQUE (in-lbf)</th>
<th>TORQUE (Nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SADDLE RAIL CLAMP</td>
<td>120</td>
<td>13.5</td>
</tr>
<tr>
<td>SEAT COLLAR</td>
<td>55</td>
<td>6.2</td>
</tr>
<tr>
<td>DOWN TUBE PORT</td>
<td>25</td>
<td>2.8</td>
</tr>
<tr>
<td>DERAILEUR HANGER</td>
<td>40</td>
<td>4.5</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>TORQUE (in-lbf)</th>
<th>TORQUE (Nm)</th>
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</thead>
<tbody>
<tr>
<td>FRONT AXLE</td>
<td>133</td>
<td>15</td>
</tr>
<tr>
<td>REAR AXLE</td>
<td>133</td>
<td>15</td>
</tr>
</tbody>
</table>

**CAUTION:** Ensure that all contact surfaces are clean and bolt threads are greased or have a threadlocking compound (refer to the instructions for each bolt) prior to installation.
The following tools are required for installation of this product:

- 2, 3, 4, 5mm socket-style Allen keys
- High-quality grease
- Cable housing cutters
- Carbon assembly compound (carbon paste)
- Blue threadlocker

**GENERAL NOTES ABOUT MAINTENANCE**

The Tarmac SL6 is a high performance bicycle. All regular maintenance, troubleshooting, repair and parts replacement must be performed by an Authorized Specialized Retailer. For general information regarding maintenance of your bicycle, please refer to the Owner’s Manual. In addition, routinely perform a mechanical safety check before each ride, as described in the Owner’s Manual.

- Great care should be taken to not damage carbon fiber or composite material. Any damage may result in a loss of structural integrity, which may result in a catastrophic failure. This damage may or may not be visible in inspection. Before each ride, and after any crash, you should carefully inspect your bicycle for any fraying, gouging, scratches through the paint, chipping, bending, or any other signs of damage. Do not ride if your bicycle shows any of these signs. After any crash, and before you ride any further, take your bicycle to an Authorized Specialized Retailer for a complete inspection.

- While riding, listen for any creaks, as a creak can be a sign of a problem with one or more components. Periodically examine all surfaces in bright sunlight to check for any small hairline cracks or fatigue at stress points, such as welds, seams, holes, and points of contact with other parts. If you hear any creaks, see signs of excessive wear, discover any cracks, no matter how small, or any damage to the bicycle, immediately stop riding the bicycle and have it inspected by your Authorized Specialized Retailer.

- Lifespan and the type and frequency of maintenance depends on many factors, such as frequency and type of use, rider weight, riding conditions and/or impacts. Exposure to harsh elements, especially salty air (such as riding near the ocean or in the winter), can result in galvanic corrosion of components such as the crank spindle and bolts, which can accelerate wear and shorten the lifespan. Dirt can also accelerate wear of surfaces and bearings. The surfaces of the bicycle should be cleaned before each ride. The bicycle should also be maintained regularly by an Authorized Specialized Retailer, which means it should be cleaned, inspected for signs of corrosion and/or cracks and lubricated. If you notice any signs of corrosion or cracking on the frame or any component, the affected item must be replaced.

- Regularly clean and lubricate the drivetrain according to the drivetrain manufacturer’s instructions.

- Do not use a high pressure water spray directly on the bearings. Even water from a garden hose can penetrate bearing seals and crank interfaces, which can result in increased bearing and crank wear, which can affect the normal function of the bearings. Use a clean, damp cloth and bicycle cleaning agents for cleaning.

- Do not expose the bicycle to prolonged direct sunlight or excessive heat, such as inside a car parked in the sun or near a heat source such as a radiator.

- When placing the frame and/or bicycle in a repair stand, clamp the stand to the seatpost and not the frame. Clamping the frame can cause damage to the frame that may or may not be visible, which may impair the structural integrity of the frame.

**WARNING!** Failure to follow the instructions in this section may result in damage to the components on your bicycle and will void your warranty, but, most importantly, may result in serious personal injury or death. If your bicycle exhibits any signs of damage, do not use it and immediately bring it to your Authorized Specialized Retailer for inspection.

**WARRANTY**

Warranty information is available from your Authorized Specialized Retailer. It is also available for download at [www.specialized.com](http://www.specialized.com).

### SMALL PARTS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART #</th>
<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>DI2 SEATPOST BATTERY GROMMET</td>
<td>S186800006</td>
<td>ELE MY18 TARMAC DI2 BATTERY MOUNT FOR TARMAC SEATPOST</td>
</tr>
<tr>
<td>DOWN TUBE ICR GUIDE</td>
<td>S186500003</td>
<td>CDG MY18 TARMAC DOWNTUBE CABLE GUIDE - ELECTRONIC SHIFT</td>
</tr>
<tr>
<td>DOWN TUBE ICR GUIDE</td>
<td>S186500004</td>
<td>CDG MY18 TARMAC DOWNTUBE CABLE GUIDE - MECHANICAL SHIFT</td>
</tr>
<tr>
<td>DERRAILLEUR HANGER</td>
<td>S182600001</td>
<td>HHR MY18 ROAD DISC THRU AXLE DER HANGER</td>
</tr>
<tr>
<td>DERRAILLEUR HANGER</td>
<td>S182600003</td>
<td>HHR MY18 TARMAC DER HANGER DISC BRAKE (SHIMANO DIRECT MOUNT STANDARD)</td>
</tr>
<tr>
<td>BOTTOM BRACKET SLEEVE</td>
<td>S180400001</td>
<td>BBR MY18 TARMAC BOTTOM BRACKET CENTER SLEEVE</td>
</tr>
<tr>
<td>HEADSET CONE</td>
<td>S182500001</td>
<td>HDS MY18 TARMAC HEADSET CONE 10MM SATIN FINISH</td>
</tr>
<tr>
<td>HEADSET CONE</td>
<td>S182500002</td>
<td>HDS MY18 TARMAC HEADSET CONE 20MM SATIN FINISH</td>
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<tr>
<td>SEATPOST</td>
<td>S189400003</td>
<td>STP MY18 TARMAC S-WORKS CARBON SEATPOST 320 MM 0 DEG SETBACK</td>
</tr>
<tr>
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<td>S189400004</td>
<td>STP MY18 TARMAC S-WORKS CARBON SEATPOST 320 MM 20 DEG SETBACK</td>
</tr>
<tr>
<td>SEATPOST</td>
<td>S189400005</td>
<td>STP MY18 TARMAC S-WORKS CARBON SEATPOST 380 MM 0 DEG SETBACK</td>
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<tr>
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<td>STP MY18 TARMAC S-WORKS CARBON SEATPOST 380 MM 20 DEG SETBACK</td>
</tr>
<tr>
<td>SEATPOST COVER</td>
<td>S184900001</td>
<td>STP MY18 TARMAC SEATPOST CLAMP COVER</td>
</tr>
<tr>
<td>SEATPOST WEDGE</td>
<td>S184900002</td>
<td>STP MY18 TARMAC SEATPOST WEDGE</td>
</tr>
<tr>
<td>GROMMET</td>
<td>S122000007</td>
<td>CBS DI2 RUBBER PLUG STOPPER FOR CLOSING UNUSED WIRE HOLES</td>
</tr>
<tr>
<td>GROMMET</td>
<td>S159900006</td>
<td>MSC MY15 TARMAC MY16 VENGE DI2 DROPOUT EXIT FRAME PLUG FOR DI2 WIRE</td>
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<td>TOP HAT CABLE STOP</td>
<td>S142000001</td>
<td>CBS MY14 TOP HAT ICR CABLE STOP 7.75</td>
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<td>BOTTOM BRACKET GUIDE</td>
<td>S189900002</td>
<td>MSC MY18 TARMAC BOTTOM BRACKET GUIDE - MECHANICAL SHIFT</td>
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<tr>
<td>BOTTOM BRACKET COVER</td>
<td>S189900001</td>
<td>MSC MY18 TARMAC BOTTOM BRACKET COVER - ELECTRONIC SHIFT</td>
</tr>
</tbody>
</table>

### FRAME WIRING LENGTHS:

<table>
<thead>
<tr>
<th>LOCATION (from bottom bracket)</th>
<th>QTY</th>
<th>LENGTH (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOWN TUBE (FROM STEM)</td>
<td>1</td>
<td>1200</td>
</tr>
<tr>
<td>SEAT TUBE (FROM BATTERY)</td>
<td>1</td>
<td>1000</td>
</tr>
<tr>
<td>SEAT TUBE (FROM FRONT DERRAILLEUR)</td>
<td>1</td>
<td>500</td>
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<tr>
<td>CHAINSTAY (FROM REAR DERRAILLEUR)</td>
<td>1</td>
<td>750</td>
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</table>
In order to successfully build the Tarmac SL6 bicycle, it is very important to follow the order of operations as outlined in this manual. Modifying the order of assembly will result in a longer build process.

The Tarmac SL6 can have either electronic or mechanical shifting installed. The following instructions are for Shimano wiring.

### ELECTRONIC WIRED SHIFTING

1. Fig.1: Install the down tube ICR port cover (A), then torque the bolt (B) to 25 in-lbf (2.8 Nm).

2. Fig.2: Route the correct length wire (C) through the brake entry ICR port and down the down tube until it exits at the bottom bracket ICR port. Repeat for the seat tube battery and derailleur wires.

3. Fig.3: Plug the down tube wire into a SM-JC41 junction box (D), then plug the battery and derailleur wires into the remaining plugs in the junction box. Route all wires in front of and over the bottom bracket shell.

4. Fig.4: Once all the wires are connected, place the junction box into the bottom bracket ICR port, then install the cover (E). See the shift system manufacturer’s instructions for additional information.

### MECHANICAL SHIFTING

1. Fig.1: Install the down tube ICR port cover (A), then torque the bolt (B) to 25 in-lbf (2.8 Nm).

2. Fig.2: Install a flanged sheath (C) in each ICR port hole, then install the shift housings (D) with ferrules (E) into the ICR port holes. Make sure the housings are trimmed to the correct length so the handlebars can rotate fully in each direction without interference.
Fig. 3: Run the cables through the shifters, into the housings and into the down tube until they exit at the bottom bracket exit ICR port.

Fig. 3: Install cable sheaths (F) onto each cable.

Specialized recommends routing the cables to opposite sides of the down tube (California Cross), so the cables will cross themselves in the down tube.

Install a barrel adjuster at the preferred location along each cable housing, between the handlebar and the down tube.

Fig. 4: Run the cables through the bottom bracket cable guide (G), with the front derailleur cable on the non-drive side through the longer of the two cable paths.

Fig. 4: Continue running the cables back into the frame so the front derailleur cable exits the small ICR port behind the bottom bracket shell and the rear derailleur cable exits the dropout ICR port.

Once the cables exit the ICR ports, pull on the cables while inserting the bottom bracket cable guide. Be sure not to kink the cables.

Fig. 5: Run the front derailleur cable through the plastic cable guide (H), then insert the guide in the hole above and behind the bottom bracket shell. The sheath should protrude out the top of the guide. Once the guide is in place, install a rubber seal (I) over the cable and sheath, against the top of the guide.

Fig. 6: Insert a top hat (J - shifting top hat has a flat edge machined off the flange), a flanged sheath (K), a ferrule (L) and a section of shift housing (M, trimmed to length according to the derailleur manufacturer’s instructions) onto the cable exiting the dropout ICR port.

Finish the assembly of the front and rear derailleur systems according to the derailleur manufacturer’s instructions.

MECHANICAL BRAKING

Fig. 1: Install a rubber grommet (A) on the brake housing (B), then insert the brake housing into the chainstay housing port.

Fig. 2: Route the brake housing over the bottom bracket shell and up the down tube until it exits at the head tube.
Install a Churro (C, foam sleeve) on the housing, then run the sleeve down inside the down tube.

Run the housing back inside the down tube, then guide it out the down tube brake housing port.

Fig.3: Install a rubber grommet (A) on the brake housing (B), then run the housing up to the rear brake lever.

Install the housing and brakes according to the brake manufacturer’s instructions. Place the dogbone plate (fig.1) under the chainstay before running the bolts through the chainstay and into the rear brake.

Fig.4: Run the front brake housing (D) into the fork either from the top or the bottom, depending on the model of brake being installed. Install the fork and cartridge system according to the steps outlined on page 5, then install the brakes according to the brake manufacturer’s instructions. Once complete, install a rubber grommet (E) at the top and bottom exit ports.

### SEATPOST

Di2 BATTERY (fig.1):

A rubber seatpost sleeve is available to install a Shimano Di2 battery inside the seatpost. To assemble, place the rubber sleeve (A) around the battery (B), then insert the assembly into the seatpost.

### SEATPOST WEDGE CLAMP (fig.2):

- Follow the assembly steps below, then assemble the seatpost wedge.
  - Apply grease to the contact surfaces between the three wedge parts (C, D, E).
  - Titanium wedge clamp bolt: Apply anti-seize compound (e.g. Ti-Prep) to the bolt threads, head and washer (F).
  - Steel wedge clamp bolt: Apply grease to the bolt threads, head and washer (F).
- Place the rubber seal (G) onto the seatpost (H), then apply carbon assembly compound (carbon paste) to the seatpost and concave wedge surface.
- Insert the seatpost into the seat tube, then insert the seatpost wedge assembly in the frame.
- Once the saddle height is determined torque the seatpost wedge bolt to 55 in-lbf (6.2 Nm), then slide the rubber seal down so it interfaces with the top of the frame and the wedge bolt.
SEATPOST INSERTION (fig.3):

Both the frame and seatpost have minimum insertion requirements. In addition, the frame has a maximum insertion requirement to prevent damage to the tire cutout area.

- **MINIMUM INSERTION**: The seatpost must be inserted into the frame deep enough so the minimum insertion/maximum extension (min/max) mark on the seatpost is not visible. Both the frame and seatpost require a minimum of 75mm of insertion.

- **MAXIMUM INSERTION**: The SL6 frames have a tire cutout on the back of the seat tube. When inserting the seatpost, there should be sufficient space between the bottom end of the seatpost and the tire cutout so as to not cause any structural damage to the frame. The maximum insertion requirement varies by frame size. Please refer to Figure 3.

**CAUTION**: Failure to follow the seatpost and frame insertion requirements (fig.3) may result in damage to the frame and/or seatpost, which could cause you to lose control and fall.

The Tarmac SL6 seatpost is available in two lengths (320mm and 380mm). If the 380mm post is too long, we recommend using the 320mm seatpost.

**WARNING!** For general instructions regarding the installation of the seatpost, refer to the appropriate section in the Owner’s Manual. Riding with an improperly tightened seatpost can allow the saddle to turn or move and cause you to lose control and fall.

**WARNING!** Inspect the seatpost and seat tube to ensure that there are no burrs or sharp edges. Remove any burrs or sharp edges using fine grit sandpaper.

Do not apply grease to the contact surfaces between the seatpost and the seat tube. Grease reduces the friction, which is critical to proper seatpost grip. Specialized recommends the application of carbon assembly compound (fiber paste), which can increase friction between carbon surfaces. Please visit your Specialized Authorized Retailer for additional information.

HEADSET

The Tarmac SL6 frame uses a 1 1/8" (41.8mm x 8mm x 45°) Campagnolo Standard compatible top and 1 1/2” (52mm x 7mm x 45°) bottom bearing. Ensure that replacement bearings are compatible with the Specialized headset specification. No tools are needed for installation or removal of both bearings. Grease bearing surfaces before installation.

The Tarmac SL6 frame headset cone (short or tall) is sized specifically for the narrower diameter head tube of the Tarmac SL6 and is not interchangeable with other standard headset cones.

BOTTOM BRACKET

The Tarmac SL6 is equipped with a BB30/OSBB spec bottom bracket shell, with an alloy bearing interface and circlips. A number of BB30-compatible bottom bracket options are available to work with the Tarmac SL6 in order to use your preferred crankset.

**Direct mount 42 x 30 x 7mm BB30 bearings**: A sleeve must be installed between the two circlips to keep wires off the crank spindle.

**Fig.1**: When inserting the sleeve, one circlip must be installed first (A), then the sleeve (B) must be inserted with the directional arrow inserted first. Once the sleeve is inserted, install the 2nd circlip (C), followed by the direct mount BB30 bearings.

**Outboard bearing bottom bracket units**: Complete bottom bracket units that combine the left and right bearings/cups into a unified system do not use the circlips or sleeve.

Once the bottom bracket is assembled, install the cranks according to the manufacturer’s specifications.

To ensure optimal access, install any shift wires or cables before installing the bottom bracket sleeve, bottom bracket and crank assembly.