### Safety

**WARNING**

**Properly tighten hardware**
Always tighten hardware to the specified torque. Over-tightening hardware could deform or break the hardware or components. Under-tightening hardware could cause hardware or components to become loose. Either situation could damage the bicycle and result in injury to the rider.

**WARNING**

**Reapply threadlocker**
All reused-fasteners with pre-applied threadlocker must be cleaned with isopropyl alcohol and have new threadlocker applied before re-assembly. If threadlocker is not applied, the fasteners may loosen which could damage the bicycle and result in injury to the rider.

### Legend

- **Grease**
- **Do not apply grease**
- **Threadlocker**
- **Nm** Torque
- **Zip tie**
Brake/shift routing — mechanical

1. Rear derailleur hanger — W524188
2. Rear derailleur hanger bolts — W524884
3. Housing grommets — W330578
4. Front derailleur clamp — W5256886
5. Zip tie guide — W513997
6. Front derailleur cable
7. Rear derailleur cable
8. Front brake hose
9. Rear brake hose

Route the brake hoses
1. Connect the calipers to the brake hoses.
2. Route the rear brake hose through the grommet (3). Route both hoses as shown.
3. Attach the calipers to the chainstay and fork. Do not fully torque the mounting bolts until the calipers are aligned correctly.
Brake/shift routing — mechanical (continued)

Route the shift cables

1. Mark the rear shift cable with a marker. You will need to tell the cables apart when you assemble the headset.
2. Route the front derailleur shift cable through the grommet (3). Route both shift cables through the frame as shown.
3. Attach the derailleurs to the bicycle.
4. Connect the shift cables to the derailleurs.

Zip tie the shift cables and rear brake hose

1. Bend the zip tie in half to create a crease. This will make it easier to wrap the zip tie around the cables and out through the hole.
2. Use a hook and a pick tool to hold the cables and guide the zip tie around them.
3. Route the zip tie through the zip tie guide (5) as shown below.
4. Insert the zip tie guide into the down tube and tighten the zip tie.
**Brake routing — eTap**

1. Rear derailleur hanger — W524188
2. Rear derailleur hanger bolts — W524884
3. eTap grommet plug — 600209
4. Housing grommet — W330578
5. Zip tie guide — W513997
6. Front brake hose
7. Rear brake hose

### Route the brake hoses

1. Connect the calipers to the brake hoses.
2. Route the rear brake hose through the grommet (3). Route both hoses as shown.
3. Attach the calipers to the chainstay and fork. Do not fully torque the mounting bolts until the calipers are aligned correctly.
Brake routing — eTap (continued)

Zip tie the rear brake hose

1. Bend the zip tie in half to create a crease. This will make it easier to wrap the zip tie around the cables and out through the hole.
2. Use a hook and a pick tool to hold the cables and guide the zip tie around them.
3. Route the zip tie through the zip tie guide (5) as shown.

4. Insert the zip tie guide into the down tube and tighten the zip tie.
T47 bottom bracket

**Install the bottom bracket**

1. Apply grease to the threads on both sides of the frame.

2. Using your hands, thread the bottom bracket onto the frame.

   **NOTICE:** Do not start tightening the bottom bracket with a tool. Dirt and other contaminants can damage the threading.

3. Use the proper tool to torque both sides to specification (see the Tool and spline compatibility table below).

4. If necessary, add spacers before installing the cranks (see the Spacers required table at the top right).

**Spacers required**

The table below contains bottom bracket/crank combinations that require spacers. Your bicycle may have other combinations that do not require spacers.

<table>
<thead>
<tr>
<th>Crank</th>
<th>Bottom bracket</th>
<th>Spacers required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Drive side</td>
</tr>
<tr>
<td>Shimano</td>
<td>CeramicSpeed</td>
<td>0.5mm</td>
</tr>
<tr>
<td>SRAM DUB</td>
<td>SRAM DUB</td>
<td>2-3mm</td>
</tr>
<tr>
<td>SRAM GXP</td>
<td>Wheels MFG</td>
<td>1.0mm</td>
</tr>
</tbody>
</table>

**Tool and spline compatibility**

<table>
<thead>
<tr>
<th>Tool manufacturer</th>
<th>Tool model</th>
<th>Part number</th>
<th>Praxis</th>
<th>Unior</th>
<th>Park Tool</th>
<th>Wheels Mfg</th>
<th>CeramicSpeed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Praxis</td>
<td>TP-2400</td>
<td>594148</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TP-3028</td>
<td>594147</td>
<td></td>
<td></td>
<td>1671T47</td>
<td>1043614</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BBT-47</td>
<td>568922</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>BBTOOL-48-44</td>
<td>589307</td>
<td>—</td>
</tr>
<tr>
<td>Wheels MFG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SRAM DUB</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Chris King</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Ceramic-Speed</td>
<td>24mm</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>GXP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Fork and headset

1. Clean the steerer tube using isopropyl alcohol.
2. Grease both bearings (5), the fork crown race, and the inside of the head tube as shown to the left.
3. Insert the fork into the head tube.
   **TIP:** Support the fork with a table during the assembly.
4. Route the shift cables and brake hoses through the split ring (4) as shown below (see pages 2-5 for different routing examples).

5. Complete the headset assembly as shown to the left.

**NOTE:** If cutting the steerer tube, cut 2mm above the stem. Make sure the stem is in its final position with the required spacers underneath.
Install the IsoSpeed

1. Carefully remove the IsoSpeed covers (7, 8) with a paint-safe plastic pry bar.
2. Disassemble the bolt (1) and nut (6).
3. Use a 50/50 isopropyl alcohol/water mix to clean the nut threads (6), bolt threads (1), and the inside of the bushings (4, 5).
4. Apply grease to the bolt (1) and nut (6) as shown below.

**NOTICE:** Do not apply grease to the threads.

---

1. Bolt
2. Wave washer
3. Washer
4. Flanged bushing
5. Cylindrical bushing
6. Nut
7. Cap, non-driveside (as shown) — 5253577
8. Cap, driveside (as shown) — 5253576
9. Grommet — W5253578
5. Apply threadlocker to the nut threads (6).

6. Place the washers on the bolt. Tighten the nut to 10Nm while securing the bolt with a wrench as shown below.

7. Re-install the IsoSpeed covers.

8. Allow the assembly to cure for 24 hours at room temperature (72°F/22°C).
Chainkeeper

Adjust the chainkeeper — 1x chainring
1. Shift to the lowest gear (largest rear cassette cog).
2. Loosen the screw on the back of the chainkeeper.
3. Move the loose piece up or down so there is 1mm of vertical clearance to the chain.
4. Tighten the screw on the back of the chainkeeper.

Adjust the chainkeeper — 2x chainrings
1. Shift to the lowest gear (largest rear cassette cog) and inner chainring.
2. Loosen the screw holding the chainkeeper in place.
3. Rotate the chainkeeper so there is 1mm of horizontal clearance to the chain.
4. Tighten the screw to 3Nm.
# Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>All models</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rear hub OLD</td>
<td>142mm</td>
</tr>
<tr>
<td>Seat post OD</td>
<td>30mm</td>
</tr>
<tr>
<td>Seat post clamp ID</td>
<td>30.15mm</td>
</tr>
<tr>
<td>Upper fork steerer tube OD</td>
<td>28.6mm</td>
</tr>
<tr>
<td>Lower fork steerer tube OD</td>
<td>38.1mm</td>
</tr>
<tr>
<td>Bottom bracket type/width</td>
<td>T47/85.5mm</td>
</tr>
<tr>
<td>Brake rotor diameter</td>
<td>140/160mm</td>
</tr>
<tr>
<td>Chainline (1x)</td>
<td>49.7mm</td>
</tr>
<tr>
<td>Chainline (2x)</td>
<td>43.5mm</td>
</tr>
<tr>
<td>Chainring max (1x)</td>
<td>42t</td>
</tr>
<tr>
<td>Chainring max (2x)</td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>34t</td>
</tr>
<tr>
<td>Large</td>
<td>50t</td>
</tr>
<tr>
<td>Tire width max 700c</td>
<td>38mm (1.5&quot;)</td>
</tr>
<tr>
<td>Fender mount — rear</td>
<td>No</td>
</tr>
<tr>
<td>Fender mount — front</td>
<td>No</td>
</tr>
<tr>
<td>Rack mount</td>
<td>No</td>
</tr>
<tr>
<td>Dropper post compatibility</td>
<td>No</td>
</tr>
</tbody>
</table>