# SPECIALIZED USER MANUAL DIVERGE



# THIS BRIEF USER MANUAL CONTAINS IMPORTANT INFORMATION. PLEASE READ CAREFULLY AND STORE IN A SAFE PLACE.

This user manual is specific to your Specialized Diverge bicycle. 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.

The word CAUTION used without the safety alert symbol indicates a situation which, if not avoided, could result in serious damage to the bicycle or the voiding of your warranty.



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 Specialized Diverge bicycles are intended and tested for General Purpose Riding use only (condition 2). For more information on intended use and structural weight limits for the frame and components, 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.

- The Diverge models are equipped with standard eyelets for fenders, rear racks and front pannier racks. The eyelets on the fork legs can also be used for additional water bottle cages.
- Diverge forks are not compatible with crown-mounted cargo racks, such as the Specialized Pizza Rack.
- Any unused fender/rack eyelet holes can be plugged up using the supplied plastic finishing plugs.
- CARBON MODELS: A seat collar that is compatible with the installation of a rear rack is available separately (S204700001).
- MODELS WITH SWAT DOWN TUBE STORAGE: All models come equipped with a small storage bag. Certain models have an additional large bag included as well. All storage bags are available after-market.
- The front derailleur hanger is bolted on, and can be removed if it is not being used.
- Tire sizes vary significantly from brand to brand. CEN standards require a minimum of 6mm of clearance between the frame/fork and the tires. When choosing a wheel and tire combo, factor in enough clearance for the conditions, setup and wheel flex.
- Certain Diverge models are equipped with a Future Shock front damper. Please refer to the Future Shock User Manual for additional information.



WARNING! Due to the high degree of complexity of the Diverge, 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 Diverge, including, but not limited to, the handlebars and the stem, are proprietary to the Diverge. 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. Diverge specific components should only be used on the Diverge and not on other bicycles, even if they fit. Failure to follow this warning could result in serious injury or death.

WARNING! The rivet in the fork crown is specifically intended for use with fenders only and is not intended or tested for weight bearing use. Installation of a crown-mounted cargo rack, such as the Specialized Pizza Rack, can result in failure, which can result in serious injury or death.

CAUTION: Top tube accessory bags that strap around the steerer tube are not compatible with Diverge models equipped with a Future Shock damper below the stem. Use of a strap around the boot of the Future Shock damper may damage the boot, which will impair the waterproofness of the Future Shock.



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.



In order to successfully build the Diverge 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.

#### 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:



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, 2.5, 3, 4, 5mm socket-style Allen key bits
- Torx T10 socket-style bit
- Long 4mm Allen key bit for Roubaix/Ruby (S175300015)
- Torque wrench
- High-quality grease
- Cable housing cutters
- Carbon assembly compound (fiber paste)
- Blue threadlocker

#### **GENERAL NOTES ABOUT MAINTENANCE**

The Diverge 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 <u>not</u> 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 <u>not</u> 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.



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 <a href="https://www.specialized.com">www.specialized.com</a>.

#### FRAME WIRING LENGTHS

LOCATION	QTY	LENGTH (mm)	
JCT B BOX TO COCKPIT (SHIFTER)*	1	1400	
JCT B BOX TO REAR DERAILLEUR	1	700	
JCT B BOX TO FRONT DERAILLEUR	1	500 1000	
JCT B BOX TO BATTERY (@ SEATPOST)	1		
JCT B BOX TO BATTERY (@ BULKHEAD)	1	300	
JCT A BOX TO RIGHT SHIFTER	1	300	
JCT A BOX TO LEFT SHIFTER	1	1200	



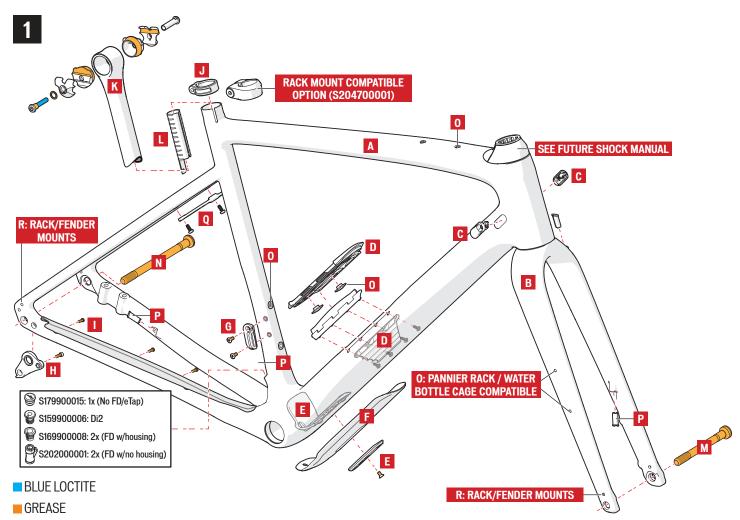
\* If running a JC200 junction box in front of stem, then the wire from the JCT B box to the stem is 1200mm.

#### SPECIALIZED BICYCLE COMPONENTS

15130 Concord Circle, Morgan Hill, CA 95037 (408) 779-6229 0000142133\_UM\_R2, 10/19

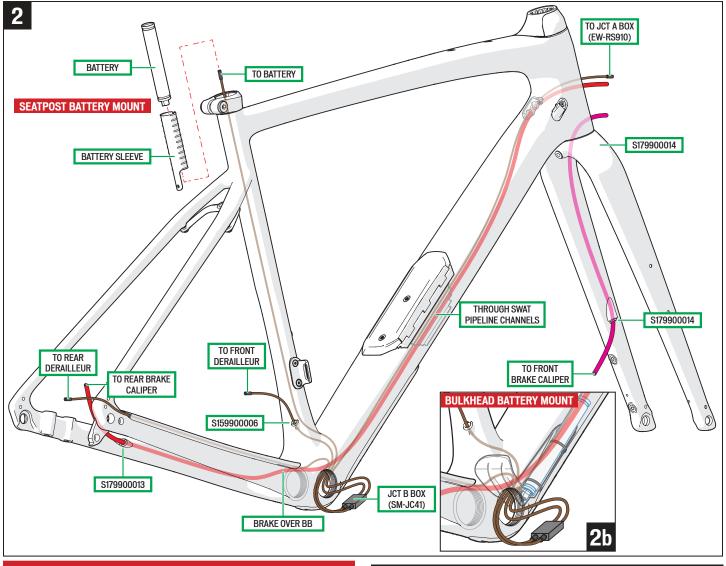
We may occasionally issue updates and addendums to this document. Please periodically check www.specialized.com or contact Rider Care to make sure you have the latest information.

Info: ridercare@specialized.com / 877-808-8154



	DESCRIPTION	TOOL SIZE	in-lbf	Nm
Α	FRAME			
В	FORK			
С	INTERNAL CABLE ROUTING (ICR) GUIDES	2mm	7	0.8
D	SWAT BEZEL/PIPELINE	Torx T10	0.5	0.06
Е	BULKHEAD/BRACKET	2.5mm	7	0.8
F	DOWN TUBE PROTECTOR			
G	FRONT DERAILLEUR HANGER	2.5mm	18	2.0
Н	REAR DERAILLEUR HANGER	4mm	40	4.5
1	CHAINSTAY PROTECTOR	2mm	7	0.8

	DESCRIPTION	TOOL SIZE	in-lbf	Nm
J	SEAT COLLAR	4mm	55	6.2
K	SEATPOST (SADDLE CLAMP)	5mm	120	13.5
L	Di2 BATTERY SLEEVE			
M	FRONT AXLE			
N	REAR AXLE			
0	WATER BOTTLE/ACCESSORY BAG	3mm	25	2.8
Р	CABLE HOUSING FERRULE			
Q	FENDER BRIDGE	3mm	27	3.0
R	FENDER MOUNTS		25	2.8



#### **ASSEMBLY**



The following instructions are specific to models with SWAT down tube storage. For models without SWAT storage, there's no Pipeline or Bulkhead. Use foam housing sleeves on housings instead of rattle prevention sleeves.

# **BOTTOM BRACKET**

The Diverge frames use a 68mm standard BSA threaded design. Grease the threads. Install and torque according to the bottom bracket manufacturer's instructions.

Before installing the bottom bracket and crank, make sure all housings and wires are routed through the frame.



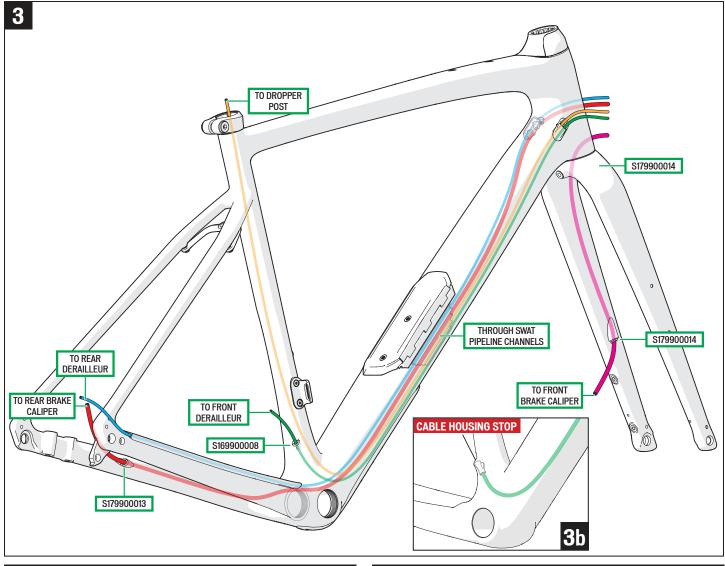
CAUTION: Do not face the bottom bracket shell! This can prevent proper installation of the crank. Your Specialized frame does not require any bottom bracket shell pre-installation preparation, as all surfaces have been precisely machined to specific tolerances at the factory for proper interface with a compatible crankset. Please refer to the manufacturer instructions for crank and bottom bracket installation.



CAUTION: Always use a bottom bracket equipped with a sleeve between the two cups. Running a bottom bracket without the sleeve can result in housings and/or wires contacting the bottom bracket spindle, which can result in wear.

#### SHIFTING - ELECTRONIC WIRED SYSTEM

- FIG.2 (Shimano Di2): Route the wires through the frame.
  - Route a 1400mm wire from the cockpit area, through the down tube ICR port hole into the down tube. Route the wire through the SWAT Pipeline channel and out the bottom bracket hole.
  - Route a 700mm wire starting from the chainstay port and out the bottom bracket hole.
  - Route a 500mm wire starting from the seat tube front derailleur port and out the bottom bracket hole.
  - **BIKES WITHOUT A DROPPER POST**: Route a 1000mm wire down from the top of the seat tube and out the bottom bracket hole.
  - Install the battery and sleeve in the seatpost (fig.2).
  - Plug the four wires into a Junction B box, then install the Junction B box and the wires above the bottom bracket shell.
  - BIKES WITH A DROPPER POST (Fig.2b): With the bulkhead removed from the frame, slide the battery plug through the bulkhead hole, then zip-tie the battery to the bulkhead. Plug a 300mm wire into the battery, then install the bulkhead in the down tube, with the wire coming out the bottom bracket hole.



#### SHIFTING - MECHANICAL SYSTEM

## FIG.3: Route the rear derailleur housing.

 Install a section shift housing starting at the chainstay port. Once in the down tube, the housing goes through a channel in the Pipeline guide, up the down tube and out the non-drive side ICR port.

#### FIG.4: Route the front derailleur housing.

 Install a section shift housing starting at the down tube ICR port.
Once in the down tube, the housing goes through a channel in the Pipeline guide and down to the bottom bracket, then up into the front derailleur exit port.



When running a 2x chainring setup, we recommend using a front derailleur that requires full length housing all the way to the derailleur cable pinch bolt.

- DERAILLEURS WITH SOLID HOUSING UP TO THE CABLE PINCH BOLT: Place a grommet (S169900008) over the shift housing and into the frame's ICR port.
- DERAILLEURS WITH EXPOSED CABLE FROM THE FRAME TO THE CABLE PINCH BOLT (Fig.3b): Place a cable housing grommet inside the frame and into the front derailleur ICR port. Rotate the grommet to ensure it's fully seated as deep as possible into the frame.

#### DISC BRAKES

#### FIG.2/3: Route the rear brake housing.

- Run the rear brake housing in through the chainstay ICR port and over the bottom bracket shell. Once in the down tube, the housing goes through a channel in the Pipeline guide, up the down tube and out the non-drive side ICR port.
- Install a grommet on over the brake housing and into the chainstay's ICR port.
- Install the caliper on the chainstay. Torque the caliper bolts according to the brake manufacturer's instructions.

#### FIG.2/3: Route the front brake housing.

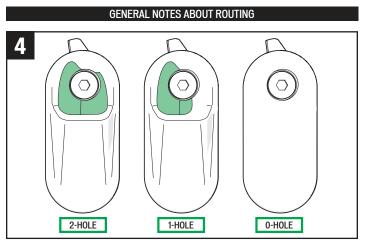
- Run the front brake housing in through the lower ICR port in the fork and guide it up in the fork leg until it exits at the upper ICR port.
- Install the caliper on the fork leg. Torque the caliper bolts according to the brake manufacturer's instructions.
- Install the housing grommets into the fork ICR ports.

#### DROPPER POST

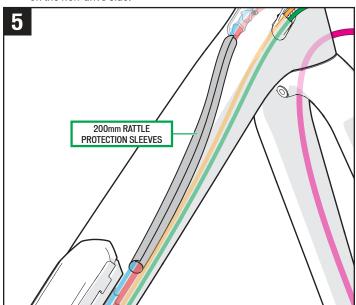
- **FIG.3**: Route the dropper post housing.
  - Run a section of shift housing through the drive side ICR port behind the head tube. Once in the down tube, the housing goes through a channel in the Pipeline guide and down to the bottom bracket shell, then goes up the seat tube.
  - When running a dropper post and Shimano Di2, the battery must be zip-tied to the bulkhead (fig.2b).

#### STANDARD SEATPOST

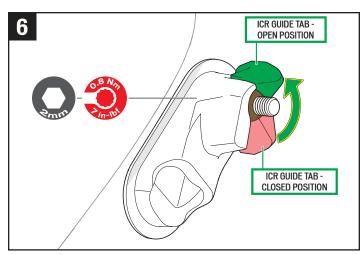
■ When running a standard seatpost on a bike equipped with Shimano Di2, the battery can be installed inside the seatpost, using a Di2 battery sleeve (\$209900014, fig.2), or attached to the Bulkhead (fig.3).



- FIG.4: There are three types of ICR port guides (zero, one or two holes). Determine if you have two, one or no housings coming out of the left or right ICR port holes and use the corresponding guides.
  - For example, if you're running a rear brake and Di2 with a dropper post, you'd use a 2-hole on the non-drive side and a 1-hole on the drive side. But if you're running eTap shifting, then you'd run a 1-hole on the non-drive side.



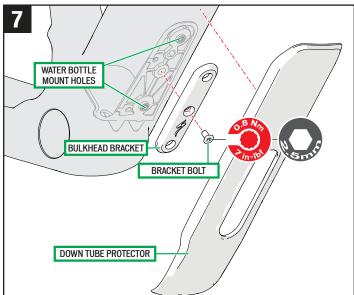
- FIG.5: Wrap the housings with rattle prevention sleeves (200mm length) and slide the sleeves over the housings and into the down tube.
- Slide the ICR guides over the housing(s) on the drive and non-drive side, then insert the guides into the holes in the sides of the down tube.



- FIG.6: Once the ICR guides are in position, torque the bolts to 7 in-lbf / 0.8 Nm. When tightening each bolt, make sure the internal tab is rotating with the bolt into the open position to pinch the ICR guide against the frame.
- Make sure the brake levers are properly positioned on the handlebar, then connect the brake housings to the brake levers according to the brake manufacturer's instructions.
- Install the derailleurs and shifter cables according to the shift system manufacturer's instructions.
- Install the chainstay protector and three housing clips, then torque the bolts to 7 in-lbf / 0.8 Nm.
- If a dropper post is being installed, complete the installation according to the dropper post manufacturer's instructions.

#### **BULKHEAD AND DOWN TUBE PROTECTOR**

- FIG. 7: Install the Bulkhead and down tube protector.
  - Use a 6mm L-shaped Allen (Hex) wrench to guide the bulkhead into the down tube. All housings/wires should be on the drive side of the Bulkhead.



- Align the bulkhead holes with the down tube holes, then install the bracket and center bolt.
- The bracket has two additional holes that can be used to mount a water bottle cage.
- Once the bracket is in place, the down tube protector can be installed around it, using the bracket as a guide.

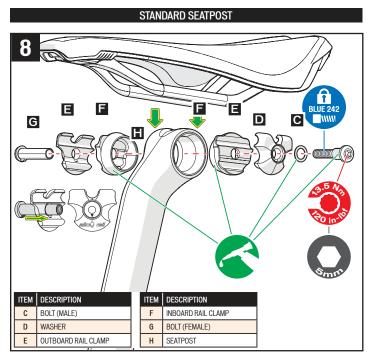


FIG.8: Install the saddle.

- Grease the inboard rail clamp contact surfaces (F), then install them in the seatpost head assembly (H).
- Position the saddle rails on the inboard rail clamps.
- Position the outboard rail clamps (E) over the saddle rails. Use 7x7mm clamps for alloy rails or 7x9mm clamps for carbon rails.
- Insert the female bolt (G) through one of the outboard rail clamps and key the bolt tab in the outboard rail clamp groove.
- Apply loctite to the bolt threads (C) and grease to the bolt head and washer (D), then place the washer on the male bolt.
- Install the bolt in the opposing outboard rail clamp, then thread it into the female bolt.

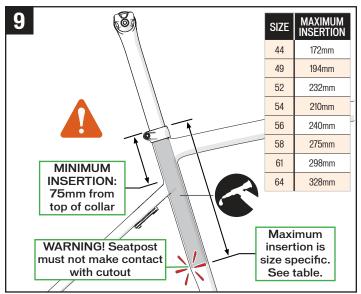


FIG.9: Determine saddle height.

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 frame has a 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 cutout so as to not cause any structural damage to the frame. The maximum insertion requirement is size specific. Please refer to the table in fig.8.
- If the post is at the minimum or maximum insertion and the saddle is not at the desired position, the seatpost must be replaced with a longer or shorter post.
- Once the saddle height is determined, torque the seat collar bolt to 55 in-lbf / 6.2 Nm.



CAUTION: Failure to follow the seatpost and frame insertion requirements (fig.9) may result in damage to the frame and/or seatpost, which could cause you to lose control and fall.



The Diverge seatpost is available in two lengths (330mm and 380mm) and two setbacks (0 and 20mm). If the 380mm post is too long, we recommend using the 330mm 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.