



INSTRUCTION GUIDE TRANSITION CARBON (ALL MODELS)




THIS INSTRUCTION GUIDE CONTAINS IMPORTANT INFORMATION. PLEASE READ CAREFULLY AND STORE IN A SAFE PLACE.

Congratulations! The Specialized bicycle you have chosen is among the finest advanced composite products available in cycling. Carbon fiber is a very special material that requires particular care during assembly, storage and riding. This installation guide contains instructions and warnings, plus torque specifications.


 Please read the following instructions. If you have any doubt regarding your mechanical ability and/or installation of this product, visit your local authorized dealer. Specialized recommends that the seatpost be installed using a torque wrench, by a qualified mechanic.

 Please read the following Warnings. Failure to follow any Warning may result in a catastrophic failure, resulting in serious personal injury or death. This phrase may not be repeated in connection with each Warning.

To ensure the best assembly possible and to prevent any damage to the components or frame, follow all torque specifications. Please refer to the specific owner's manual for the mating component's correct torque specifications. If the mating component's recommended torque exceeds the frame's recommended torque, use the lower torque spec. Due to torque considerations, not all components will be compatible.

 **WARNING!** Failure to follow the torque specifications in this installation guide will void the warranty, but most importantly may result in damage to the frame which may not be visible. If the frame is damaged, this can result in loss of structural integrity, which may result in serious personal injury or death.

Bicycle components such as a handlebar, handlebar stem, seatpost, saddle and brakes must all be compatible with each other, the frame and the intended use. Any doubt regarding compatibility should be discussed with an Authorized Specialized Dealer.

 **WARNING!** When placing the frame and/or bicycle in a repair stand, clamp the stand using a frame clamp specifically designed for thin-wall carbon tubes (for example, the Park Tools 100-X4 Extreme Range Clamp). Clamping the frame with a standard clamp can cause damage to the frame that may or may not be visible.

For the complete warranty provisions and any additional information, please visit www.specialized.com.

GENERAL WARNINGS

FORK: Do not remove the small bumpers on the side/back of the fork legs. These are to protect the frame from fork contact.

REAR WHEEL: Due to variables in tire manufacture, heat expansion, foreign debris, etc., Specialized recommends a minimum rear wheel-to-frame clearance of 2mm. The UCI requires sufficient clearance such that a credit card must fit between the rear tire and the back of the seat tube.


Thread the horizontal dropout screws in or out to fine-tune the alignment and fore-aft position of the wheel. To ensure that the rear wheel can't slip forward in the dropouts under torque, make sure that the rear axle butts up against the dropout screws before tightening the quick-release.

Contact between the frame and tire can cause wear and damage to the frame and tire, which can result in failure.


INSTALLING THE SEATPOST AND SADDLE

The Specialized Transition frames require a proprietary seatpost, available in 3 different setbacks (Page 3). The Transition seatpost system allows for an extremely wide seat tube angle range which is infinitely variable inside that range, and helps the rider achieve the optimal riding position.


To help the Transition frame achieve its aerodynamic benefits, the frame was designed with a limited vertical seatpost adjustment range. Proper installation of the Transition Seatpost requires the use of a dedicated Transition Fit Kit tool set.

 This setup (fitting and cutting) **MUST** be performed by an authorized Specialized dealer using the Transition Fit Kit tool set to ensure that the seatpost is cut to the optimal length to maximize the vertical adjustment range.

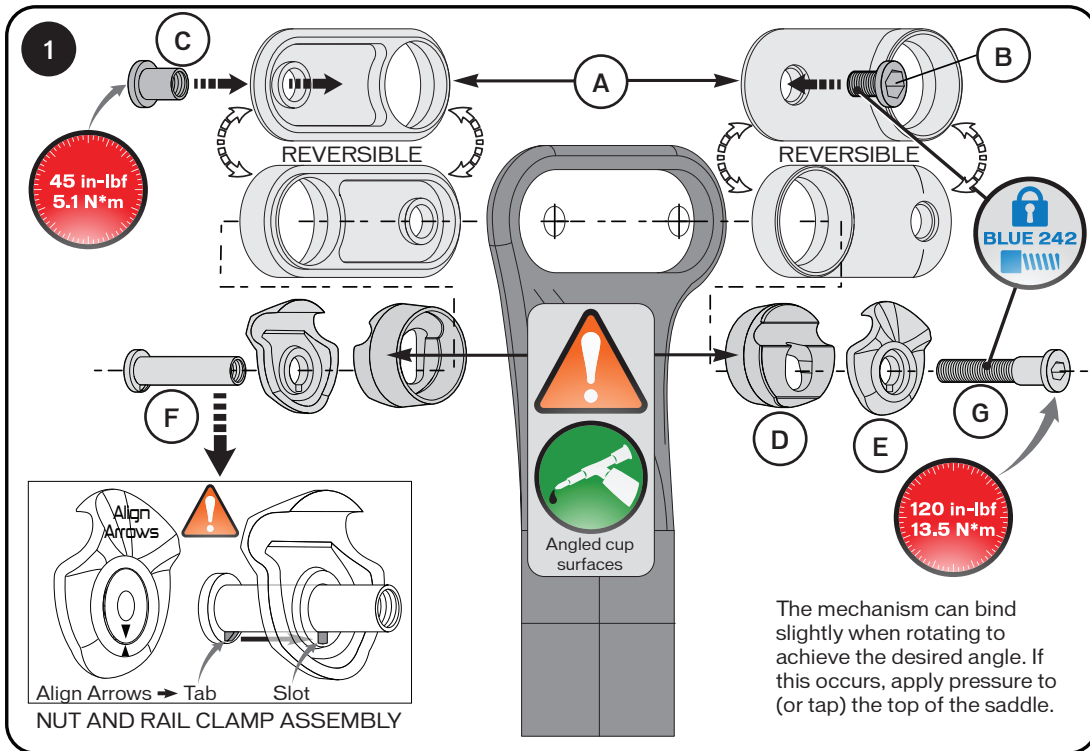
- The seatpost should not have any play inside the frame and should not lower into the frame without resistance.
- With proper preparation of the frame, clamp and seatpost, exceeding the recommended torque is not necessary.
- If the seatpost exhibits any fit and/or torque issues, it is recommended that the fit tolerance be verified by an authorized Specialized dealer.

 **WARNING!** Due to the nature of the seatpost having to be cut to a specific length, the seatpost is **NOT** marked with a minimum insertion line. For proper seatpost insertion, ensure that the seatpost extends below the minimum insertion hole located at the back of the seat tube area. Extension beyond the minimum insertion hole in the frame can result in failure.

 Do not grease the seatpost or seat tube contact surfaces. Grease reduces friction that is critical to proper seatpost grip. Remove any grease from the contact surfaces.

 **TECH TIP:** The application of carbon assembly paste can increase friction between carbon surfaces. Recommended compounds can be found at www.tacx.com. Please visit your Authorized Specialized Dealer for additional information.

1. Install the seatpost (cut to length using the Transition Fit Kit tool set) into the seat tube (Fig.2).
2. Install the reversible rail clamp carrier (Fig. 1, A) in the desired direction.
3. Apply blue threadlocker (Loctite 242) to the threads, then tighten the alloy rail carrier bolt (Fig.1, B) and nut (Fig.1, C) to 45 in-lbf (4.5 N*m).
4. Grease the conical surfaces of the wedges (Fig.1, D).
5. Install the conical portions of the clamp mechanism into the seatpost.
6. Engage the saddle rails into the slots in the sides of the wedges.
7. Place the outer rail clamps (Fig.1, E) over the saddle rails.
8. Install the rail clamp nut (Fig.1, F). To avoid damage to the clamp mechanism, the arrows must align to ensure the tab is placed in the groove of the rail clamp.
9. Install the rail clamp bolt (Fig.1, G). Apply blue threadlocker (Loctite 242) to the threads, place into the opposite side outer cap and thread into the nut. Tighten lightly.



10. Follow the seat collar assembly (Fig.2) for either the first generation collar (Fig.2, A) or the second generation collar (Fig.2, B). Option A, assemble the collar, wedges and bolt, place on the seatpost before installing in the frame. Option B, assemble the collar, then place the seatpost and collar in the frame.

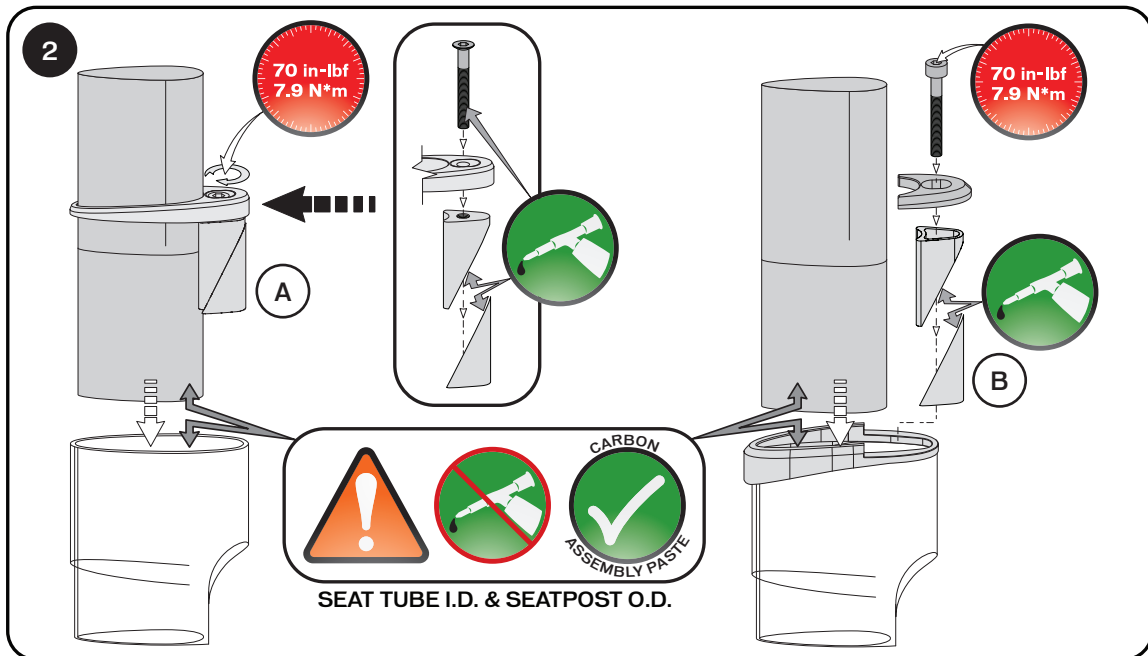
11. Adjust the saddle to the desired angle and fore-aft position.

TECH TIP: The clamp mechanism can bind slightly when rotating the saddle to adjust to the desired angle. If this occurs, lightly tap the top of the saddle.

12. Torque the seatpost bolt to 120 in-lbf (13.5 N*m).

13. Adjust the seatpost to the desired height for proper leg extension.

14. Torque the seat collar to 70 in-lbf (7.9 N*m).



WARNING! Any deep scratches or gouges in the seatpost can weaken the seatpost resulting in failure, causing serious personal injury or death.

WARNING! Damage to composite is difficult to visually identify. If the external composite surface is dented, frayed, gouged, deeply scratched, fractured, chipped or otherwise damaged, the component should be replaced. If a seatpost has suffered a crash or impact, even if no damage is visible, Specialized or an authorized Specialized dealer should inspect the product.

WARNING! For your safety, Specialized recommends this product be replaced after 3 years of use.

HEADSET

Your Specialized frame does not require any head tube pre-installation preparation. All surfaces are already prepared from the factory, with the exception of greasing the cups.

Use 36° x 45° x 38mm (1") cartridge bearings.

No tools are required for the installation or removal of the cartridge bearings.

BOTTOM BRACKET

Your Specialized frame does not require any bottom bracket pre-installation preparation. All surfaces are already prepared from the factory, with the exception of greasing the threads. It is acceptable to chase the threads if applicable and necessary. Do not face the bottom bracket shell surfaces.

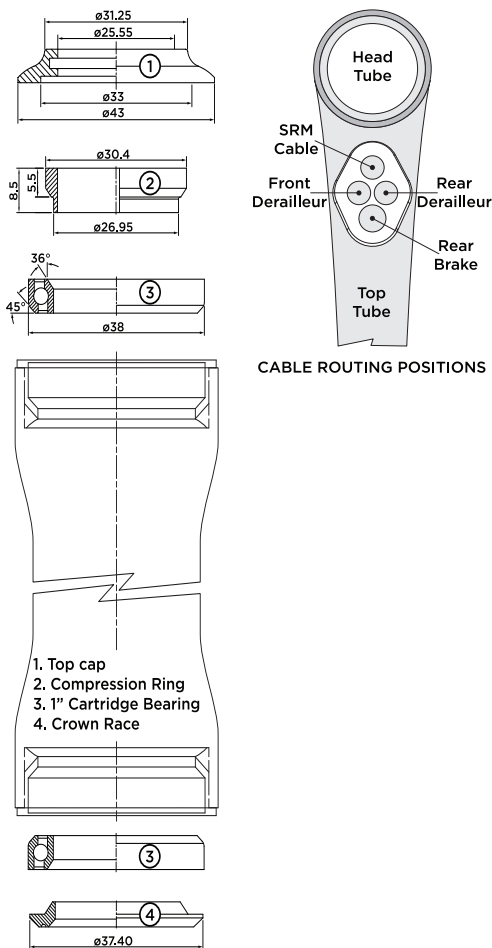
THREADED: Ensure that the bottom bracket shell threads are clean and greased prior to installation.

Recommended torque is 442 in-lbf (50 N*m).

OVERSIZED (OSBB): Please refer to the carbon crank installation guide for assembly instructions and compatible tools.

TORQUE SETTINGS

- **BRAZE-ON FRONT DERAILLEUR:** Recommended torque 44 in-lbf (5.0 N*m).
- **REAR DERAILLEUR:** Recommended torque 70 in-lbf (7.9 N*m). Ensure threads are clean prior to installation.
- **SEAT COLLAR:** Recommended torque 70 in-lbf (7.9 N*m).
- **DOWNTUBE (@ BB) BRAKE CABLE STOP:** Recommended torque 35 in-lbf (4.0 N*m).
- **WATER BOTTLE CAGE:** Recommended torque 35 in-lbf (4.0 N*m).

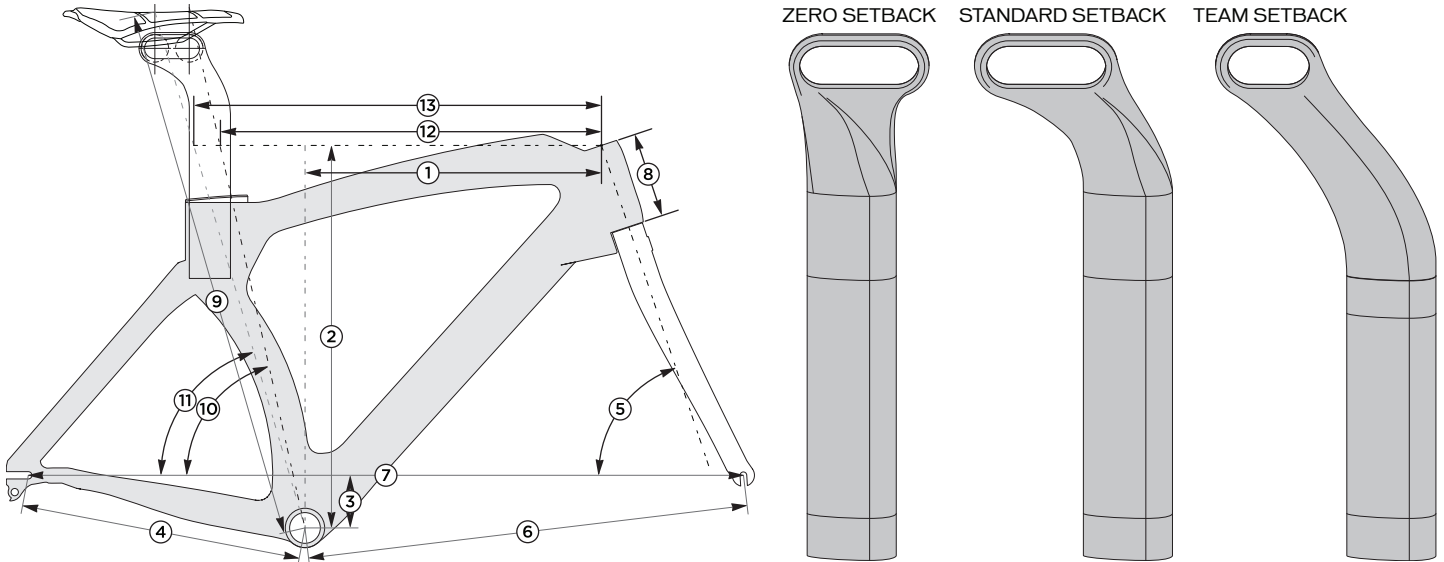


GEOMETRY

The following illustration and chart highlights all the Transition's relevant geometry measurements and angles, including "Reach" and "Stack" as well as the more traditional effective top tube length and seat tube angle.

Recommendations about Tri bike fit and how it differs from traditional road bike fit:

- The saddle is typically more forward.
- The saddle position is partly dependent on the amount of handlebar drop and vice versa.
- Position depends on the rider's goals, flexibility, event style and intended riding experience.
- To optimize the comfort, performance and control of the Transition bike, see a qualified Triathlon bike fitter.



	SIZE	XS (49)	SM (52)	MD (54)	LG (56)	XL (58)	XXL (61)
1	Reach (mm)	365	380	395	405	421	450
2	Stack (mm)	487	505	516	526	542	554
3	Bottom Bracket Drop (mm)	72	72	72	72	72	72
4	Chainstay Length (mm)	395	395	395	395	395	395
5	Head Tube Angle (°)	69.5	71.5	72	72	72.5	72.5
6	Front-Center (mm)	577	575	589	602	621	652
7	Wheelbase (mm)	961	961	975	988	1007	1036
8	Head Tube Length (mm)	90	100	110	120	135	150
9*	BB-to-Saddle Length (mm)	685	715	735	755	775	805
10	Effective Seat Tube Angle (°) Forward setting						
	Zero Setback Post	81.5°	82°	82°	82.5°	83°	83°
	Standard Setback Post	76.5°	77°	77.5°	78°	78.5°	79°
	Team Setback Post	73.5°	74°	74.5°	75°	75.5°	76°
11	Effective Seat Tube Angle (°) Rearward setting						
	Zero Setback Post	77.5°	78°	78°	78.5°	79°	79°
	Standard Setback Post	72.5°	73°	73.5°	74°	74.5°	75°
	Team Setback Post	71.5°	72°	72.5°	73°	73.5°	74°
12	Effective Top Tube Length (mm) Forward setting						
	Zero Setback Post	444	454	466	476	496	521
	Standard Setback Post	487	496	507	518	536	561
	Team Setback Post	517	526	536	546	564	589
13	Effective Top Tube Length (mm) Rearward setting						
	Zero Setback Post	479	489	500	511	530	554
	Standard Setback Post	524	533	544	553	571	596
	Team Setback Post	536	545	555	564	582	607

* The BB-to-Saddle Length for each frame size is an averaged approximation only, since saddle height varies for each rider. The effective Seat Tube Angles and Top Tube Lengths are derived from these BB-to-Saddle Lengths.

SPECIALIZED BICYCLE COMPONENTS

15130 Concord Circle, Morgan Hill, CA 95037 (408) 779-6229

Please note all instructions are subject to change for improvement without notice. Please visit www.specialized.com/tech for periodic tech updates. IG0271 Rev.B, March 2010

1

DRIVE SIDE NON-DRIVE SIDE

COMPLETE BRAKE ASSEMBLY
(Front view for front and rear brakes)

- Adjust the brake pad angle and height positions relative to the rim.

2

2.5mm 2.5mm
OR
8mm

2.5mm

8 in-lbf
0.9 N*m

1

2

3

3

5

5

1mm 4

- Attach the cable hanger hook on the drive size brake pin.
- Install the brake cable through the cable hanger.
- Thread the left and right cable screws inward equally until they barely touch the cable equally.
- Adjust the brake cable height so that the pads are the proper distance from the rim (1mm).
- Tighten the two cable bolts in small, equal increments until the recommended torque of 8in-lbf (0.9 N*m) is reached.
- Squeeze the brake levers to ensure that the cables are seated and the brakes work properly.

NOTE: To prevent damage to the cable hanger assembly, use one of two options (see illustration above):

- Use a 2.5mm Allen key on both sides simultaneously, or;
- Use a 2.5mm Allen key on one side and an open 8mm wrench on the hanger body.

Following either of these two options will stabilize the hanger and prevent damage to the hanger link arms from twisting when tightening the Allen bolts.

3

2mm

43 in-lbf
4.9 N*m

10mm

5mm

- Adjust the spring position screws to center the pads relative to the rim.
- REAR BRAKE:** Make sure the position screws are inset enough for the drive-side screw to clear the chainring.
- Rear drive-side brake pad bolt is hex style for easier access.

NOTE: Do not overtighten the position screws. Doing so will cause the spring plates to bind against the position screws.

NOTES:

- Inspect the clearance between the rear brake and the crank to make sure there's no contact when the crank is rotated.
- When the rear brake is disconnected, it will contact the crank. Do not rotate the crank with the brake disconnected.

Downtube @ bottom bracket cable stop:

- Tighten bolts to recommended torque 35 in-lbf (4.0 N*m).
- When packing the frame in a soft travel carry case, remove the brake cable stop to prevent damage to the stop.
- Fine tune the pad clearance by turning the adjuster barrel.