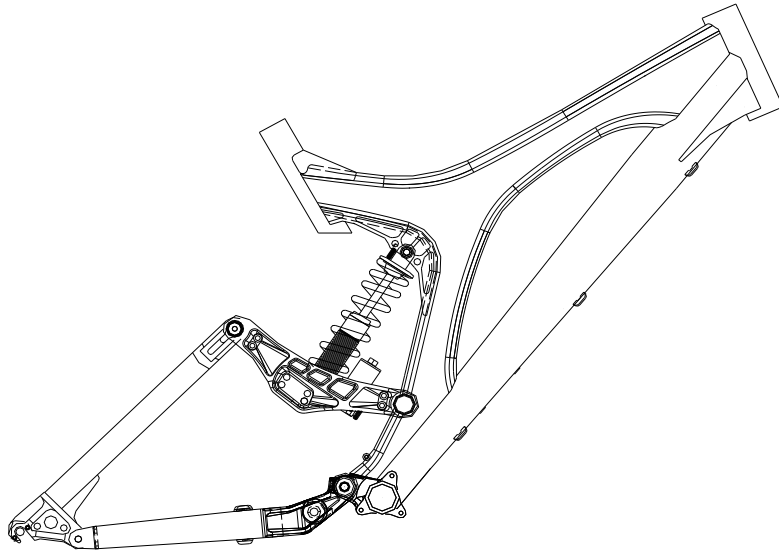


big hit

OWNER'S MANUAL



SPECIALIZED®

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INTRODUCTION

Congratulations on your purchase and welcome to the finest line of suspension bikes available!

About this Manual

This manual is designed to be used in conjunction with the Bicycle Owner's Manual and owner's manuals supplied by the manufacturer of the front and rear suspension components. If you did not receive any of these manuals, download them from the Internet, contact your dealer, or contact us by telephone. There may be more current manuals and technical information available. For the most current information, regularly check the Specialized web site or consult your Specialized dealer. These manuals were written for an important reason: your safety while riding.

This manual contains many "Warnings" and "Cautions" concerning the consequences of failure to maintain or inspect your bicycle or of failure to follow safe cycling practices. The combination of the safety alert symbol and the word Warning indicates a potentially hazardous situation which, if not avoided, could result in serious injury or death. 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 damage to your bicycle or a component. Because the consequences of not following a Warning usually include "you may lose control and fall," which could result in serious personal injury or death, we may not repeat this in conjunction with each Warning. Because it is impossible to anticipate every situation or condition which may occur, a practice or situation may be unsafe but not anticipated by this manual. So, don't forget to use your common sense.



Warning: Make sure you have, review, and understand the warnings, instructions, and content of the manuals for your bicycle.

About Off Road, Stunt, Downhill and Freeriding

Downhill racing, severe off road riding, jumping, and stunt riding is extremely dangerous. Some downhill racers and freeriders reach speeds similar to motorcycles, thus face similar risks and hazards. When engaging in these activities, you, your bicycle and safety equipment must be in perfect condition. We recommend that at all times you wear appropriate safety gear, such as an approved full face helmet, full finger gloves, and body armor.

Not every bicycle is built for every activity. Check with your Specialized dealer to make sure you have the right equipment.

No bicycle is indestructible. Downhill racing, severe off road riding, jumping, and stunt riding increases the stress on every part of your bicycle. Frames or parts under high stress may fail, causing you to lose control or fall. Because of the risk involved, Specialized recommends that you conduct a thorough inspection before each ride. If you miss a jump, ditch your bike in mid crash, dump or launch your bike without you on it, inspect yourself for injury, then carefully inspect your bicycle for damage.

Here is what you should look for when you inspect your bicycle for this type of riding: bent or broken components, such as the handlebar, handlebar stem, seatpost, pedals; dents, cracks, scratches, deformation, or discoloration. Because damage may be internal and hidden, if any of these signs are present, stop riding until your bicycle has been thoroughly inspected by your Specialized dealer.



Warning: Although many catalogs, advertisements and articles about bicycling depict riders racing, jumping, riding hard off road, and/or stunt riding, this activity is extremely dangerous, increases the rider's risk of injury or death, and potentially increases the severity of any injury. The action depicted is being performed by experts with many years of training and experience. Even with that training and experience, cyclists who engage in such activity often get seriously injured. It is also foreseeable that some jumps or stunts, and even during some races, that the rider will exceed the design capacity of the frame or components, which may result in something on the bicycle bending or breaking. If a frame or component bends or breaks, such may lead to loss of control, serious personal injury or death.

INTRODUCTION

As activities such as racing, jumping, severe off road riding, and stunt riding are extremely dangerous, SAFETY should always be the first consideration. Don't ride in the race, ride hard off road, try the jump, or do the stunt, UNLESS YOU CAN DO SO SAFELY. Here are some additional recommendations:

- Take lessons from a competent instructor first.
- Do jumps or stunts only in areas designated for this type of riding.
- Start with easy jumps and easy stunts first, and slowly develop skills before trying more dangerous jumps or stunts.
- Wear appropriate safety gear, such as a full face helmet, body armor, full finger gloves.
- Make sure by checking with your dealer that your bike is suitable for the kind of activity you intend to engage in.
- Constantly inspect your bicycle for signs of stress: cracks in the paint; dents; crushing or bending of the frame; bent components. Do not ride your bicycle if it shows such signs of stress.
- Do not seek to bend or break the frame or components. Remember, SAFETY FIRST!!!
- Understand and recognize that the stresses imposed on your bike by riding at speed, jumping or stunt riding may break or damage parts of the bicycle, which may result in loss of control, serious injury or death.

Specialized does not warrant the bicycle frame or components for such activities, and expressly disclaims all warranties, including the warranty of fitness for particular purpose and merchantability.

Stunt riding, severe off road riding, jumping, or riding downhill at speed is extremely dangerous, and the rider voluntarily assumes the risk that the bicycle frame and/or its components will bend or break, and voluntarily assumes the risk of injury or death.

Service and Modifications

Technological advances have made bicycles and bicycle components more complex, and the pace of innovation is increasing. It is impossible for this manual or the accompanying manuals to provide all the information required to properly repair and/or maintain your bicycle. In order to help minimize the chances of an injury, it is critical for you to have work performed by an authorized Specialized retailer.



Warning: Service on Specialized bicycles requires special knowledge and tools. Specialized recommends that all service and repairs be performed by an authorized Specialized retailer.

Your bicycle has been engineered and tested with specific components and parts. Because of the great variety in these items, it is impossible for Specialized to test and approve of all possible combinations. Modifying the frame, fork, or any of the components may make your bike unsafe. For example, changing the front suspension on your bicycle may alter the steering characteristics and/or add stresses to the frame which have not been tested for. If you must replace any component, have this done by your authorized Specialized retailer.



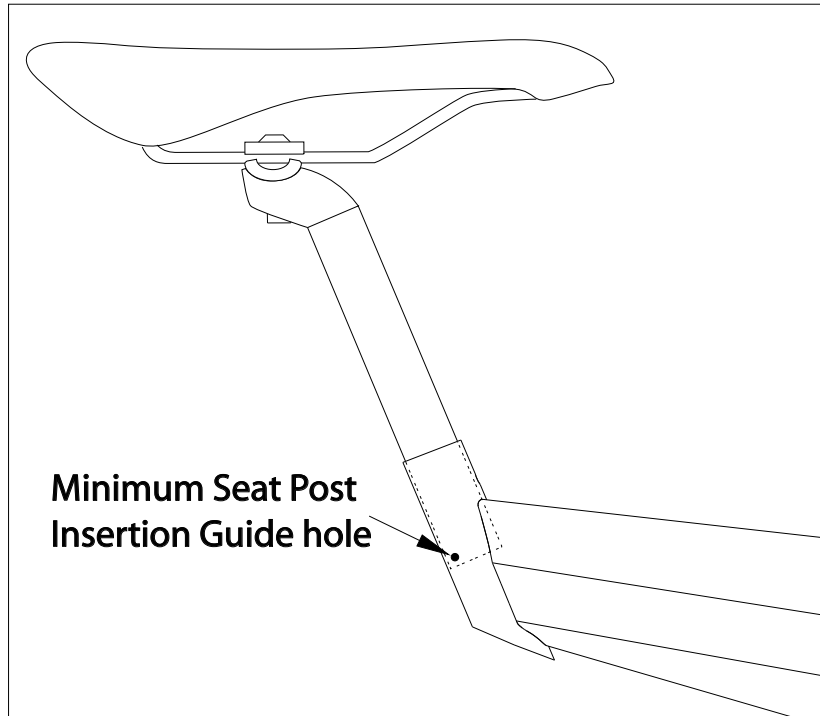
Warning: Never modify your frame or bicycle in any way. Do not sand, drill, fill, or remove parts. Do not install incompatible forks or suspension parts. An improperly modified frame, fork, or component, can cause you to lose control and fall.



Caution: Any modification of your frame, fork, or components means that your bike no longer meets our specifications and therefore voids your warranty.

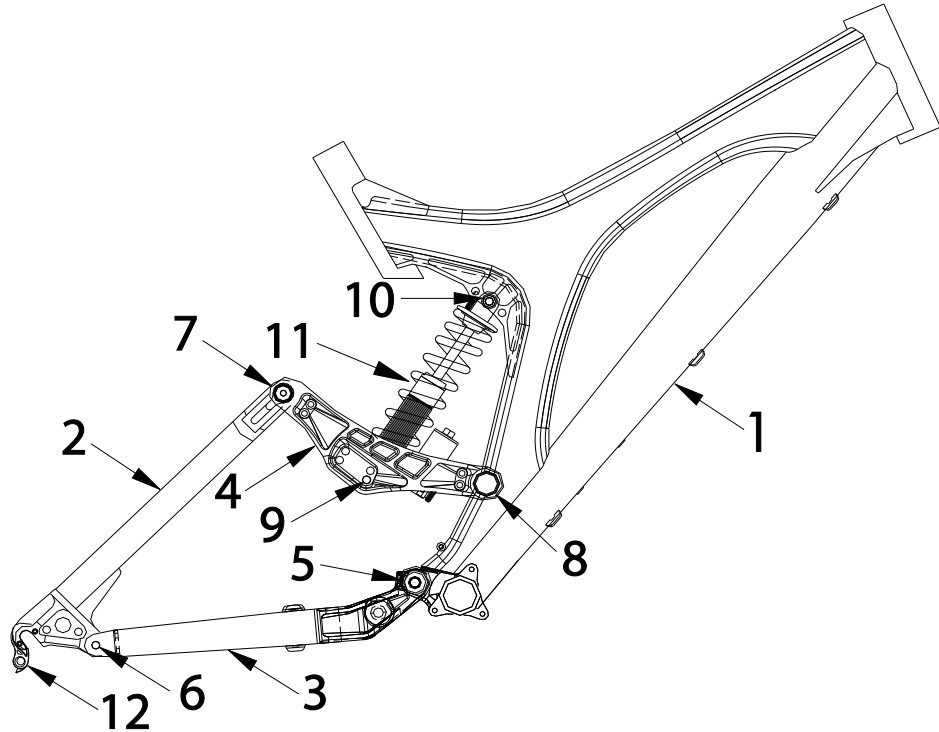
SEAT POST SETUP

SEATPOST MINIMUM EXTENSION: All Specialized full suspension models with interrupted seat tubes have a small hole to identify the minimum extension allowed for your seatpost. If you cannot see the seatpost tube through this hole, your seatpost is too far extended. If a greater saddle height is required, replace the seatpost with a longer one.



BIG HIT FSR FRAME FEATURES

1. Main Frame
2. Seatstay
3. Chainstay
4. Shock Link
5. Main Pivot
6. Dropout (Horst) Pivot
7. Shock Link at Seatstay Pivot
8. Shock Link at Frame Pivot
9. Lower Shock Eyelet
10. Upper Shock Eyelet
11. Shock
12. Replaceable Derailleur Hanger



BIG HIT FSR FRAME GEOMETRY

		Small (mm)	Small (in)	Medium (mm)	Medium (in)	Large (mm)	Large (in)
1	*Top Tube Length	578	22.76"	597	23.50"	613	24.13"
2	**Standover Height	776	30.55"	777	30.59"	779	30.67"
3	Head Tube Length	128	5.04"	137	5.39"	140	5.51"
4	Head Tube Angle (26" Steep)	68.2°	68.2°	68.2°	68.2°	68.2°	68.2°
4	Head Tube Angle (26" Slack)	66.3°	66.3°	66.3°	66.3°	66.3°	66.3°
5	Seat Tube Angle (26" Steep)	63.1°	63.1°	63.1°	63.1°	63.1°	63.1°
5	Seat Tube Angle (26" Slack)	61°	61°	61°	61°	61°	61°
6	BB Height (26" High)	387	15.24"	387	15.24"	387	15.24"
6	BB Height (26" Low)	362	14.25"	362	14.25"	362	14.25"
7	Wheelbase	1130	44.49"	1148	45.2"	1164	45.83"
8	Chainstay Length	432	17.0"	432	17.0"	432	17.0"

* TT length is the Horizontal Measurement from the center-line of the HT at the top of the HT to the center-line of the projected seat tube.

** Stand Over height is measured vertically at the centerpoint of the TT measurement.

FRAME SPECIFICATIONS

Headset: 1 1/8"

Seatpost diameter: 30.9mm

Front derailleur clamp: E-Type

Rear hub spacing: 135mm (6mm offset)

BB shell: 73mm

Seat Collar: 34.9mm

Stroke (Big Hit Expert): 69.85mm (2.75")

Stroke (Big Hit Comp): 63.5mm (2.5")

Eye-To-Eye: 222.25mm (8.75")

RIDER WEIGHT

SPRING RATE

<150lb

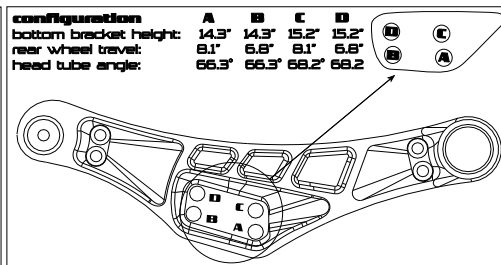
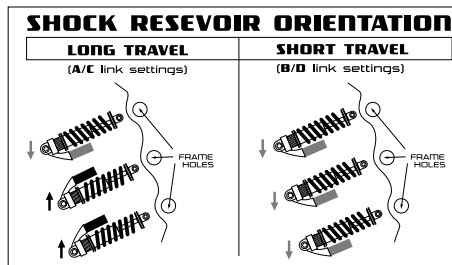
350lb

150-185lb

400lb

185-220lb

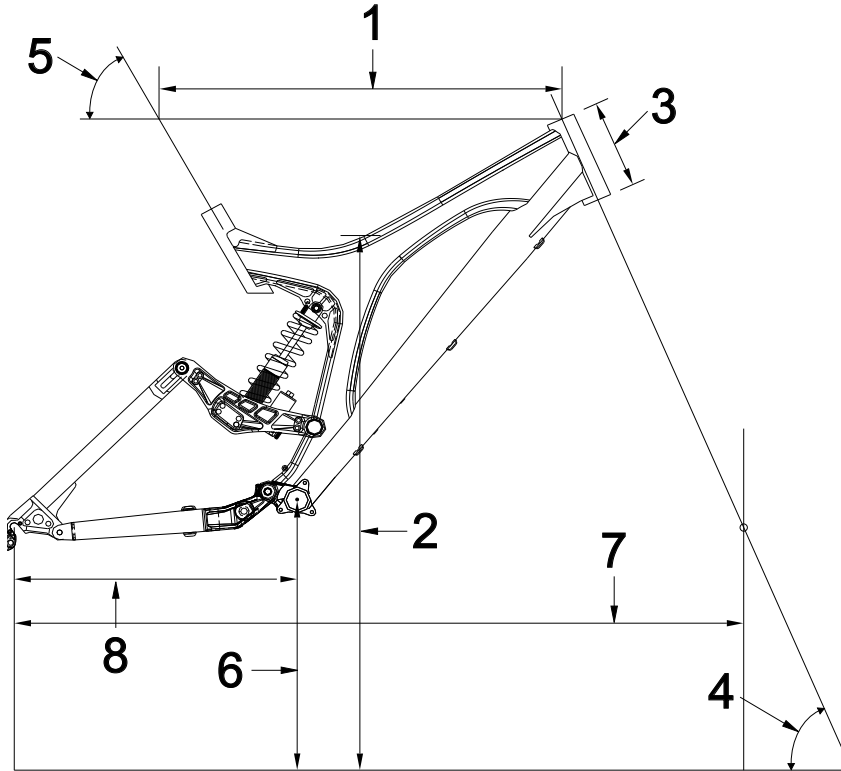
450lb



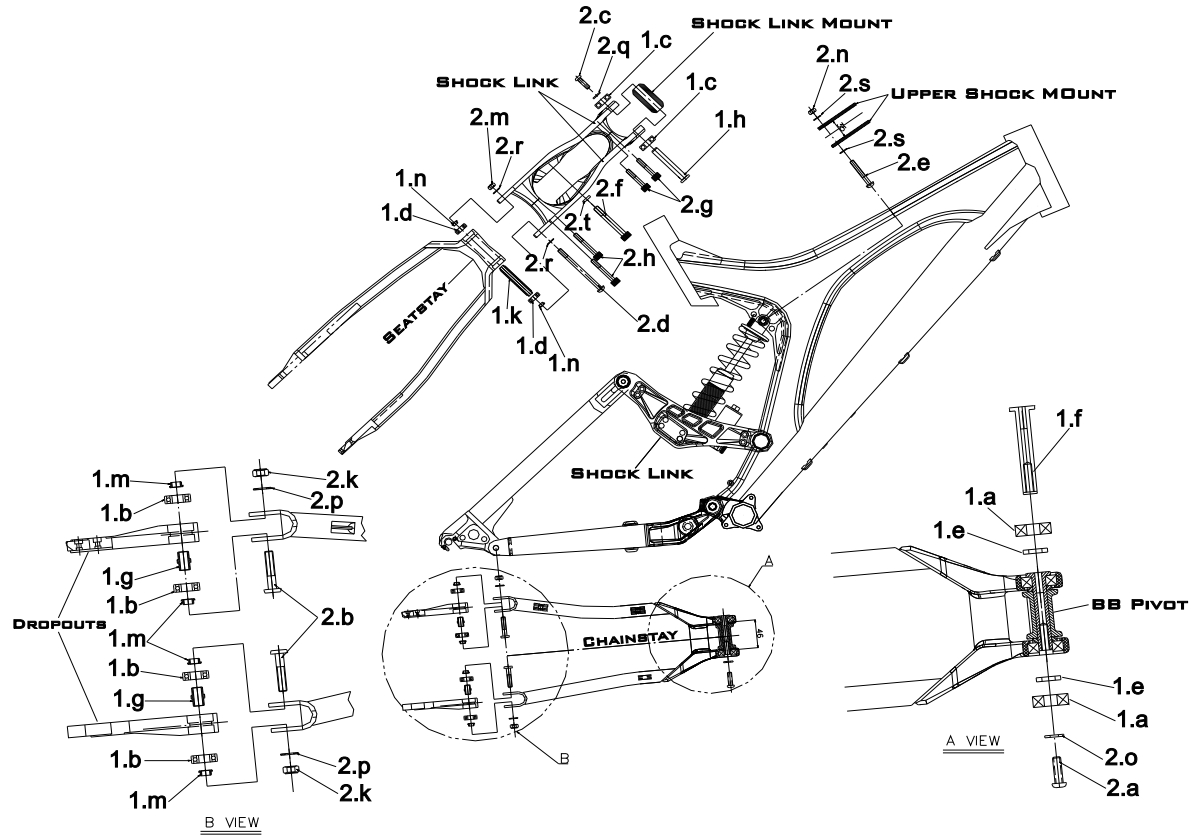
CAUTION! Do not use the link position A in conjunction with the middle frame hole when using a Manitou SPV shock with piggyback reservoir. This may result in shock damage.

NOTE: The spring weights listed above are to be used as an adjustment starting point only. Stock springs are set for the long travel setting (lower shock eye bolt) and the middle progression setting (upper shock eye bolt). Positioning the shock in the shorter travel setting and/or the higher/lower progression settings may require that the spring be changed accordingly. Refer to your shock manufacturer's manual for additional shock setup information. Larger impacts require a higher spring weight and a lower sag setting to prevent bottoming out. Be sure to adjust or replace the spring accordingly.

BIG HIT FSR FRAME GEOMETRY



SCHEMATIC #4



NOTE: Bearing and Bolt Kits are available only through your local Specialized dealer. To retain your warranty and for your safety, all maintenance should be performed by your local Specialized dealer.

Bearing Kit Parts

Part #	Qty.	Part Description	Part Specification
1.a	2	BB Pivot Bearing	6000 series bearing - 26mm O.D. x 10mm I.D. x 8mm Width
1.b	4	Dropout Pivot Bearing	698 (689) Series Bearing - 19mm O.D. x 8 Mm I.D. x 6mm Width
1.c	2	Shock Link @ Frame Pivot Bearing	6000 series bearing - 26mm O.D. x 10mm I.D. x 8mm Width
1.d	2	Shock Link @ Seatstay Pivot Bearing	698 (689) Series Bearing - 19mm O.D. x 8 Mm I.D. x 6mm Width
1.e	2	BB Pivot Spacer	Hard Anodized Alloy spacer 18mm O.D. x 10mm I.D. x 2.5mm Width
1.f	1	BB Pivot Axle	Steel thru-shaft 10mm O.D. x 63.5mm Length. M6 Allen key x M6 thread
1.g	2	Dropout Pivot Bearing Inner Axle	Steel Inner Bearing Axle - 8mm O.D. x 6mm I.D. x 15mm Width. (Center Flange - 10mm O.D. x 3mm Width)
1.h	1	Shock Link @ Frame Pivot Bearing Inner Thru-Axle	Steel thru-shaft 10mm O.D. x 63.5mm Length. M6 Allen key x M6 thread
1.k	1	Shock Link @ Seatstay Pivot Bearing Inner Axle	Steel Inner Bearing Axle - 8mm O.D. x 6mm I.D. x 62mm Width (Center Flange - 10mm O.D. x 56mm Width)
1.m	4	Dropout Pivot Flanged Bearing Washer	Steel Flanged Washer 8mm O.D. x 6mm I.D. x 4mm Width. (Flange - 10mm O.D. x 1mm Width)
1.n	2	Shock Link @ Seatstay Pivot Flanged Bearing Washer	Steel Flanged Washer 8mm O.D. x 6mm I.D. x 4mm Width. (Flange - 10mm O.D. x 1mm Width)

Bolt Kit Parts

B = Blue Loctite required

Part #	Qty.	Part Description	Part Specification	Torque in*lb
2.a	1	BB Pivot Bolt	Steel Bolt M6 x 23mm, 5mm Allen Hex head	90-110 B
2.b	2	Dropout Pivot Bolt	Steel Bolt M6 x 30mm, Flat 4mm Allen hex head	90-110
2.c	1	Shock Link @ Frame Pivot Bolt	Steel Bolt M6 x 23mm, 5mm Allen Hex head	90-110 B
2.d	1	Shock Link @ Seatstay Pivot Bolt	Steel Bolt M6 x 86mm, 5mm Allen Hex head	90-110
2.e	1	Upper Shock Eye Bolt	Steel Bolt M8 x 55mm, 6mm Allen Hex head	180-200
2.f	1	Lower Shock Eye Bolt	Steel Bolt M8 x 65mm, 6mm Allen Hex head	180-200 B
2.g	2	Shock Link @ Frame Connector Bolts	Steel Bolt M6 x 35mm, 5mm Allen Hex Head	90-110 B
2.h	2	Shock Link @ Seatstay Connector Bolts	Steel Bolt M6 x 45mm, 5mm Allen Hex Head	90-110 B
2.k	2	Dropout Pivot Nut	M6 Nut, Threadlock	
2.m	1	Shock Link @ Seatstay Pivot Nut	M6 Nut, Threadlock	
2.n	1	Upper Shock Eye Nut	M8 Nut, Threadlock	
2.o	1	BB Pivot Washer	M6 Washer	
2.p	2	Dropout Pivot Washer	M6 Washer	
2.q	1	Shock Link @ Frame Pivot Washer	M6 Washer	
2.r	2	Shock Link @ Seatstay Pivot Washer	M6 Washer	
2.s	2	Upper Shock Eye Washer	M8 Washer	
2.t	1	Lower Shock Eye Spacer	M8 Washer	



SBC LIMITED WARRANTY

Specialized Bicycle Components, Inc. (“Specialized”), a California corporation located at 15130 Concord Circle, Morgan Hill, California 95037, makes the following Limited Warranty concerning Specialized bicycles and framesets:

LIMITED LIFETIME WARRANTY ON BICYCLE FRAMES AND FRAMESETS

Subject to the following limitations, terms and conditions, Specialized warrants to the original owner for the lifetime of the original owner of each new Specialized bicycle or frameset that the bicycle frame or frameset when new is free of defective materials and workmanship. The lifetime limited warranty is conditioned upon the bicycle being operated under normal conditions and use, and properly maintained. This limited warranty does not apply to paint/finish or components attached to the bicycle/frameset such as front forks, wheels, drive train, brakes, seatpost, handlebar and stem or any suspension related parts or components. Paint/finish, components attached to the bicycle/ frameset such as front forks, wheels, drive train, brakes, seatpost, handlebar and stem or any suspension related parts or components are covered under the limited one (1) year warranty. This warranty is void if the bicycle or frameset was not purchased new from or not properly assembled by an authorized Specialized dealer.

LIMITED ONE (1) YEAR WARRANTY ON COMPLETE BICYCLE

Subject to the following limitations, terms and conditions, Specialized warrants to the original owner of each new Specialized bicycle that this bicycle when new is free of defective materials and workmanship. This warranty shall expire one (1) year from the date of the original purchase from an authorized Specialized dealer and is conditioned upon the bicycle being operated under normal conditions and use, and properly maintained. This warranty is void if the bicycle was not purchased new from or not properly assembled by an authorized Specialized dealer.

LIMITED ONE (1) YEAR WARRANTY ON SUSPENSION ATTACHMENTS & SUSPENSION RELATED EQUIPMENT

Also subject to the following limitations, terms and conditions, Specialized warrants to the original owner of each new Specialized bicycle or frameset that the suspension attachment points, and suspension related equipment (including pivot points, bushings, shock units, front suspension forks, stays, plates, fasteners) when new are free of defective materials or workmanship. This warranty shall expire one (1) year from the date of the original purchase from an authorized Specialized dealer and is conditioned upon the bicycle being operated under normal conditions and use, and properly maintained. This warranty is void if the bicycle was not purchased new from or not properly assembled by an authorized Specialized dealer. Some branded suspension equipment may have additional warranty coverage offered by the specific manufacturer. Please check in your owner’s manual pack for information regarding these warranties or check with your authorized Specialized dealer for details.

ADDITIONAL CONDITIONS

This Limited Warranty is made only to the original owner of this new Specialized bicycle or frameset purchased from an authorized Specialized dealer, and it shall remain in force only as long as the original owner retains ownership of the Specialized bicycle. This Limited Warranty is not transferable. In order to exercise your rights under this limited warranty, the bicycle or frameset must be presented to an authorized Specialized dealer, together with a receipt, bill of sale or other appropriate written proof of purchase which identifies the bicycle or frameset by serial number. Should this bicycle, frameset or any part be determined by Specialized to be covered by this warranty, it will be repaired or replaced, at Specialized’s sole option, which will be conclusive and binding. The original owner shall pay all labor charges connected with the repair or replacement of all parts. Under no circumstances does this limited warranty include the cost of travel or shipment to and from an authorized Specialized dealer. Such costs, if any, shall be borne by the original owner. This limited warranty does not apply to normal wear and tear, nor to claimed defects, malfunctions or failures that result from abuse, neglect, improper assembly, improper maintenance, alteration, collision, crash or misuse. This warranty is null and void if the bicycle is used for racing, trick riding, ramp riding, jumping, riding hard off road, aggressive riding, riding on severe terrain, riding in severe climates, riding with heavy loads, commercial activities or similar activities. Such use may damage the bicycle, can cause serious personal injury or death, and in all cases void this warranty.



USEFUL PRODUCT LIFE CYCLE

Every Specialized bicycle and frameset has a useful product life cycle. The length of that useful product life cycle will vary with the construction and materials of the bicycle or frameset, the maintenance and care the bicycle or frameset receives over its useful product life cycle, and the type and amount of use the bicycle or frameset is subject to. Uses in competitive events, trick riding, ramp riding, jumping, aggressive riding, riding on severe terrain, riding in severe climates, riding with heavy loads, commercial activities and other types of non-standard use can dramatically shorten the useful product life cycle of a Specialized bicycle or frameset. Any one or a combination of these conditions may result in an unpredictable failure of a Specialized bicycle or frameset that would not be covered by this warranty. ALL SPECIALIZED BICYCLES AND FRAMESETS SHOULD BE PERIODICALLY CHECKED BY AN AUTHORIZED SPECIALIZED DEALER for indicators of stress and/or potential failure, including cracks, deformation, corrosion, paint peeling, dents, and any other indicators of potential problems, inappropriate use, or abuse. These are important safety checks and very important to help prevent accidents, bodily injury to the rider and shortened useful product life cycle of a Specialized bicycle or frameset.

Special Note regarding Composite Frames and Components: Composite materials develop their strength and maintain strength only if the integrity of the part is fully maintained. Pay special attention to, and periodically and carefully inspect composite frames and components for signs of dents, fraying, gouging, scratches, fracture lines, chipping. In the event of a crash or serious impact, or if any of the foregoing signs are observed, the component and frame should not be ridden until inspected by an Authorized Specialized Dealer. For your safety, Specialized recommends replacing composite handlebars after three years of use.

THIS IS AN INTEGRATED AND FINAL STATEMENT OF SPECIALIZED'S LIMITED WARRANTY. SPECIALIZED DOES NOT AUTHORIZE OR ALLOW ANYONE, INCLUDING ITS AUTHORIZED DEALERS, TO EXTEND ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, FOR SPECIALIZED. NO OTHER REPRESENTATION, AND NO STATEMENT OF ANYONE BUT SPECIALIZED, INCLUDING A DEMONSTRATION OF ANY KIND BY ANYONE SHALL CREATE ANY WARRANTY REGARDING THIS BICYCLE OR FRAMESET. ALL OF THE REMEDIES AVAILABLE TO THE ORIGINAL OWNER ARE STATED HEREIN. IT IS AGREED THAT SPECIALIZED'S LIABILITY UNDER THIS LIMITED WARRANTY SHALL BE NO GREATER THAN THE AMOUNT OF THE ORIGINAL PURCHASE PRICE AND IN NO EVENT SHALL SPECIALIZED BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

DISCLAIMER

All other remedies, obligations, liabilities, rights, warranties, express or implied, arising from law or otherwise, including but not limited to, any claimed implied warranty of merchantability, any claimed implied warranty arising from course of performance, course of dealing or usage of trade, and any claimed implied warranty of fitness, are disclaimed by Specialized and waived by the original owner. Some states, jurisdictions, countries, provinces, do not allow some or all of the limitations set forth herein, or the exclusion or limitation of incidental or consequential damages. If any provision is found unenforceable, only that provision shall be stricken and all others shall apply. This limited warranty does provide the original owner with certain legal rights and recourse and the original owner may possess other rights or recourse, depending on the state, jurisdiction, country or province.

2Bless; 415; A1; AA Main; Aerotec; Air Force; Airliner; Air Lock; Air Tool; Air Wave; Air Wave Mega; Allez; Armadillo; Assfault; Beadlock; BigHit; BigHit Grom; Body Geometry; BrainTrust; Big Mouth; Cap Ply; Chamonix; Comfort Plush; Crossroads; Demo 9; Deuce; Dirt Bag; Dirtboy; Dirt Control; Dirt Master; Dirt Rodz; Dolce; E5; E Cage; Epic; Evil Twin; Expedition; Extreme Control; Extreme Master; F.A.C.T.; Fatboy; FlakJacket; Flexflo; ForeArm; FSR; FSRxc; FS-Xpert; Fuse; Globe; Ground Control; Ground Force; Hardlock; Hardlock Rapper; Hardrock; Hardrock'r; Hemi; Hotrock; Hucker; In Vent; ITeh Switch; KidTrust; Kid Cobra; King Cobra; Langster; Little Big Mouth; LSD; M1; M2; M4; M5; Mini-Wedgie; Mt. Baldy; Mondo; Mountain Cage; Mouthport; Nimbus; P.1; P.2; P.3; P.Brain; P. Street; Pave; Prybaby; Rib Cage; Rockhopper; Roll Model; Roll X; Roubaix, the Stylized "S" logo; S-Works; S1; Sawpit; Sequoia; Shocksox; Sirrus; Spanky; Speed Zone; Streetboy; Strongarm; Stumpjumper; SubZero; Survival Kit; Tarmac; Team Control; Team Master; Team Turbo; TrailTraction; Transform; Tri-Sport; TRX; TR-Xpert; Turbo Pro; Twistlock; Vegas; Web; Wedgie; Wedlock; X-Brace; X-Wire; and Zertz are trademarks of Specialized Bicycle Components, Inc. which may be registered in some jurisdictions. All other marks are the property of their respective owners.



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