

SCOTT

BIKE

SCOTT SCALE
USER MANUAL

INNOVATION
TECHNOLOGY
DESIGN

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Distribution:
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v6.2/15122016



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The Scale bikes should be adjusted exactly to the current rider to maximize safety, comfort and fun while riding.

All adjustments should be done at your local SCOTT dealer or by following the instructions in this manual.

Please contact your authorized SCOTT dealer if you have any doubts or require further information in order to avoid technical problems or any harm.

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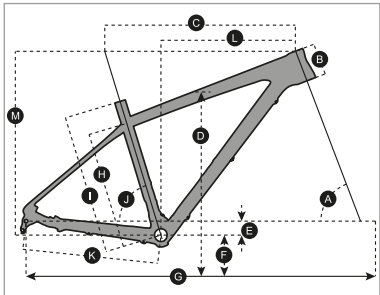
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SCALE CONCEPT

Scale is the result of research and development based on the feedback from the SCOTT-ODLO Racing Team searching for one of the lightest cross country racing frames in the market.

SCOTT’s focus was not only on creating a lightweight frame, but one that was also a stiff and easy to handle racing frame.

GEOMETRY/TECHNICAL DATA SCALE



Seatpost diameter	Scale 700 / Plus: 31.6mm (27.5”), Scale 900: 34.9mm (29”)
Seattube clamp	Scale 700 / Plus: 34.9mm (27.5”), Scale 900: 38.2mm (29”)
Headtube diameter	11/8” /1.5”, tapered, cups semi-integrated, 50-61mm cup OD
Fork travel	Scale 700 / 900: 100mm, Scale Plus: 120mm
Technical fork length	Scale 700: 487mm (27.5”), Scale 900: 506mm (29”), Scale Plus: 520mm
BB housing	PF BB 92
Rear Hub Width	Scale 700 / 900: IDS SL2 135-5/135-12/142-12mm, Scale Plus: Boost 148/12mm
Max tire width	Scale 700 / 900: 57.5mm/2.25”, Scale Plus: 74mm/2.9”
Chainring size	Scale 700 / 900: min. 22T, max. 44T, Scale Plus: Max 34T (single)

GEOMETRY/TECHNICAL DATA SCALE

SCALE 700

	S		M		L		XL	
A HEAD TUBE ANGLE	69.0 °		69.0 °		69.0 °		69.0 °	
B HEAD TUBE LENGTH	100.0 mm	3.9 in	100.0 mm	3.9 in	115.0 mm	4.5 in	125.0 mm	4.9 in
C TOP TUBE HORIZONTAL	575.0 mm	22.6 in	600.0 mm	23.6 in	625.0 mm	24.6 in	650.0 mm	25.6 in
D STANDOVER HEIGHT	728.9 mm	28.7 in	758.0 mm	29.8 in	786.8 mm	31.0 in	819.7 mm	32.3 in
E BB OFFSET	-44.0 mm	-1.7 in	-44.0 mm	-1.7 in	-44.0 mm	-1.7 in	-44.0 mm	-1.7 in
F BB HEIGHT	307.5 mm	12.1 in	307.5 mm	12.1 in	307.5 mm	12.1 in	307.5 mm	12.1 in
G WHEEL BASE	1’075.2 mm	42.3 in	1’100.2 mm	43.3 in	1’126.3 mm	44.3 in	1’152.0 mm	45.4 in
H BB CENTER TO TOPTUBE CENTER	315.8 mm	12.4 in	369.3 mm	14.5 in	409.3 mm	16.1 in	458.2 mm	18.0 in
I BB CENTER TO TOP OF SEATTUBE	390.0 mm	15.4 in	440.0 mm	17.3 in	480.0 mm	18.9 in	530.0 mm	20.9 in
J SEAT ANGLE	73.0 °		73.0 °		73.0 °		73.0 °	
K CHAINSTAY	427.0 mm	16.8 in	427.0 mm	16.8 in	427.0 mm	16.8 in	427.0 mm	16.8 in
L REACH	398.1 mm	15.7 in	423.1 mm	16.7 in	443.8 mm	17.5 in	466.0 mm	18.3 in
M STACK	578.6 mm	22.8 in	578.6 mm	22.8 in	592.6 mm	23.3 in	601.9 mm	23.7 in
N STEM LENGTH	70.0 mm	2.8 in	80.0 mm	3.1 in	90.0 mm	3.5 in	100.0 mm	3.9 in

SCALE 900

	S		M		L		XL	
A HEAD TUBE ANGLE	69.5 °		69.5 °		69.5 °		69.5 °	
B HEAD TUBE LENGTH	105.0 mm	4.1 in	105.0 mm	4.1 in	115.0 mm	4.5 in	125.0 mm	4.9 in
C TOP TUBE HORIZONTAL	580.0 mm	22.8 in	600.0 mm	23.6 in	620.0 mm	24.4 in	640.0 mm	25.2 in
D STANDOVER HEIGHT	756.0 mm	29.8 in	783.0 mm	30.8 in	810.0 mm	31.9 in	842.0 mm	33.1 in
E BB OFFSET	-60.0 mm	-2.4 in	-60.0 mm	-2.4 in	-60.0 mm	-2.4 in	-60.0 mm	-2.4 in
F BB HEIGHT	310.0 mm	12.2 in	310.0 mm	12.2 in	310.0 mm	12.2 in	310.0 mm	12.2 in
G WHEEL BASE	1’079.0 mm	42.5 in	1’096.8 mm	43.2 in	1’117.0 mm	44.0 in	1’137.9 mm	44.8 in
H BB CENTER TO TOPTUBE CENTER	329.0 mm	13.0 in	375.0 mm	14.8 in	415.0 mm	16.3 in	465.0 mm	18.3 in
I BB CENTER TO TOP OF SEATTUBE	390.0 mm	15.4 in	440.0 mm	17.3 in	480.0 mm	18.9 in	530.0 mm	20.9 in
J SEAT ANGLE	72.5 °		72.5 °		72.5 °		72.5 °	
K CHAINSTAY	438.0 mm	17.2 in	438.0 mm	17.2 in	438.0 mm	17.2 in	438.0 mm	17.2 in
L REACH	385.0 mm	15.2 in	405.0 mm	15.9 in	422.0 mm	16.6 in	439.0 mm	17.3 in
M STACK	618.0 mm	24.3 in	618.0 mm	24.3 in	628.0 mm	24.7 in	637.0 mm	25.1 in
N STEM LENGTH	70.0 mm	2.8 in	80.0 mm	3.1 in	90.0 mm	3.5 in	100.0 mm	3.9 in

SCALE PLUS

	S		M		L		XL	
A HEAD TUBE ANGLE	67.6 °		67.6 °		67.6 °		67.6 °	
B HEAD TUBE LENGTH	100.0 mm	3.9 in	105.0 mm	4.1 in	115.0 mm	4.5 in	125.0 mm	4.9 in
C TOP TUBE HORIZONTAL	577.0 mm	22.7 in	602.0 mm	23.7 in	627.0 mm	24.7 in	652.0 mm	25.7 in
D STANDOVER HEIGHT	780.0 mm	30.7 in	806.0 mm	31.7 in	829.0 mm	32.6 in	857.0 mm	33.7 in
E BB OFFSET	-50.0 mm	-2.0 in	-50.0 mm	-2.0 in	-50.0 mm	-2.0 in	-50.0 mm	-2.0 in
F BB HEIGHT	315.0 mm	12.4 in	315.0 mm	12.4 in	315.0 mm	12.4 in	315.0 mm	12.4 in
G WHEEL BASE	1’108.0 mm	43.6 in	1’133.4 mm	44.6 in	1’159.3 mm	45.6 in	1’185.2 mm	46.7 in
H BB CENTER TO TOPTUBE CENTER	328.0 mm	12.9 in	383.0 mm	15.1 in	425.0 mm	16.7 in	477.0 mm	18.8 in
I BB CENTER TO TOP OF SEATTUBE	390.0 mm	15.4 in	440.0 mm	17.3 in	480.0 mm	18.9 in	530.0 mm	20.9 in
J SEAT ANGLE	72.8 °		72.8 °		72.8 °		72.8 °	
K CHAINSTAY	439.0 mm	17.3 in	439.0 mm	17.3 in	439.0 mm	17.3 in	439.0 mm	17.3 in
L REACH	389.0 mm	15.3 in	412.0 mm	16.2 in	435.0 mm	17.1 in	457.0 mm	18.0 in
M STACK	607.0 mm	23.9 in	612.0 mm	24.1 in	621.0 mm	24.4 in	631.0 mm	24.8 in
N STEM LENGTH	50.0 mm	2.0 in	60.0 mm	2.4 in	70.0 mm	2.8 in	80.0 mm	3.1 in

BB STANDARDS/FD MOUNTING DETAILS

Scale is available for PressFit 92 Cartridges (PF92).
PF BB 92 has a housing width of 92mm (Scale 700) or 89.5mm plus a 2.5mm additional washer (Scale 900, Scale Plus) with an inner diameter for the cartridges of 41mm.



Scale 700 (27.05") FD
The front derailleur (FD) fixation for Scale 700 is a direct mount system.
It is made for Shimano E-Type derailleurs or SRAM S3 assembly.
For Scale Plus the FD fixation is E-Type with 3mm outboard to match with rear hub boost standard.
In addition it has an integrated chainguide assembled on this fixation plate.



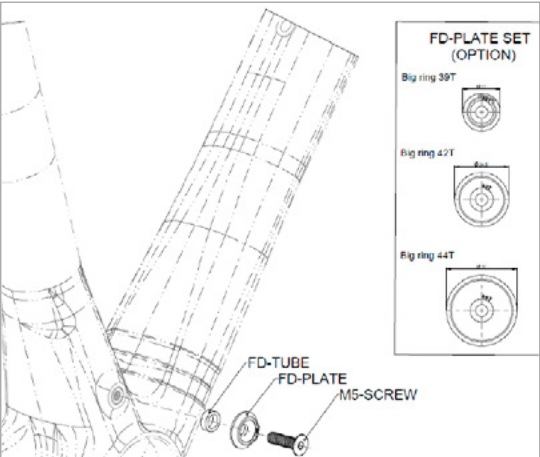
Scale 900 (29") FD
The Front Derailleur (FD) clamp is with an inner diameter of 34.9mm, the cable routing on the frame is for "down route/pull - down swing" models.

IMPORTANT!

Please note that the maximum tightening torque on the FD clamp is 5Nm/44in/lbs.
A higher tightening torque might cause damage to the FD camp and/or frame tube!
Please also refer to the related manuals of the manufacturer of the FD.

CHAINGUIDE

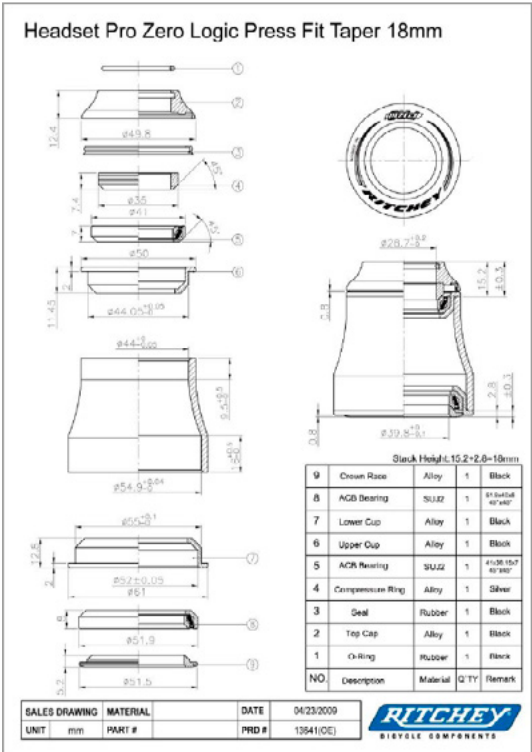
On some Scale 900 (29") Carbon models you will find a chainguide system to support the shifting performance when using 2 chainring cranksets.
3 different mounting plates are available to match the different sizes of the outer chainrings (39/42/44T).
Please note the max. tightening torque of 5Nm/44 in/lbs on the mounting screw of the plate.



HEADSET OPTIONS

Scale features a tapered headset and fork steerer system to match with semi-integrated headsets of the "50-61"mm range.

The steerers of those forks are tapered from 1.5" to 1 1/8".
This bigger diameter of the fork steerer as well as on the frame headtube helps to increase the stiffness and handling of the bike.



Ritchey WCS Carbon Zero Tapered	PF 50-61mm	18mm UD	PRD 13636
Ritchey PRO Tapered	PF 50-61mm	12.9mm	PRD 13640

It is also possible to use forks with a standard 1 1/8" steerer tube when using a reducer headset such as e.g.

Ritchey WCS Carbon Zero Tapered	PF 50-61mm	18mm UD for 1 1/8" fork	PRD 14860
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BB CABLE GUIDE/CABLE ROUTING

Scale features also an internal cable routing for front and rear derailleur.
 A special BB Cable Guide was developed for Scale which is available as a spare part at the SCOTT distribution with article number

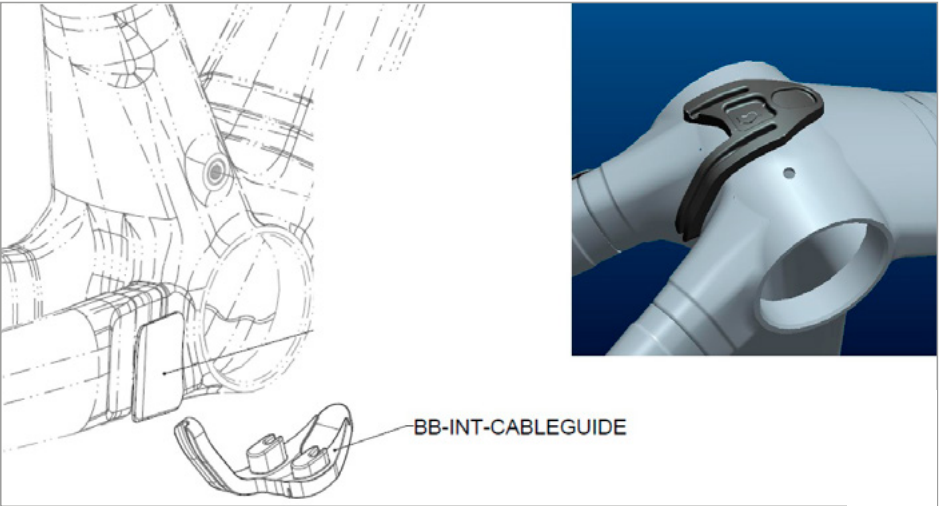
for Scale 700

235285	Cableguide BB Scale 700 2014
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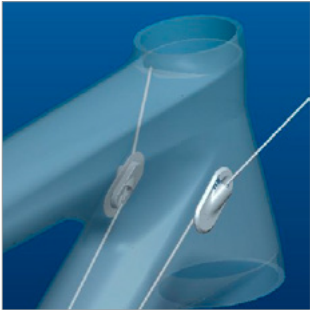
and for Scale 900

219579	Cableguide BB Scale
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Please note that those 2 cableguides are not interchangeable between the frame sizes.

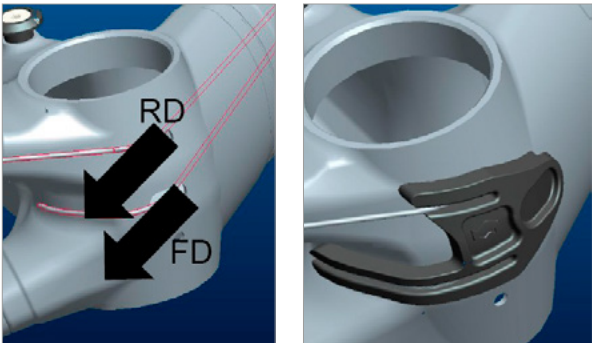


Please note that the outer housing of the FD and RD cables will stop at the cable stop/port on the front end of the down tube.



If you want to replace the cables, please follow these steps:

1. Remove the clip-in BB Guide in the BB housing
2. Push the inner cables from the front downward inside the downtube to the BB housing.
3. Pull them out of the related holes (RD on right side, FD on left side) on the BB housing.



4. Push them through the related holes on the BB Guide and clip the BB Guide into the BB housing
5. Follow the standard set up and assembly instructions of the shifting system manufacturer for final adjustment of the shifting system

SEATTUBE CLAMP

Please make sure to only use a seatclamp with an inner diameter of 34.9mm (Scale 700 / Plus) or 38.2mm (Scale 900) and please note the maximum tightening torque on the fixing bolt of 5Nm/44 in/lbs

REPLACEABLE REAR DERAILLEUR HANGER

Scale uses the same replaceable rear derailleur hanger system (called IDS SL2) as SCOTT Spark, Genius and Genius LT.

Depending on the different models you'll find following options:

1. 142mm axle with RWS 142/12

This is available via the SCOTT distribution with:

219574	complete set of RWS 142/12
219577	right side replaceable RD hanger

2. 135mm axle with RWS 135/5

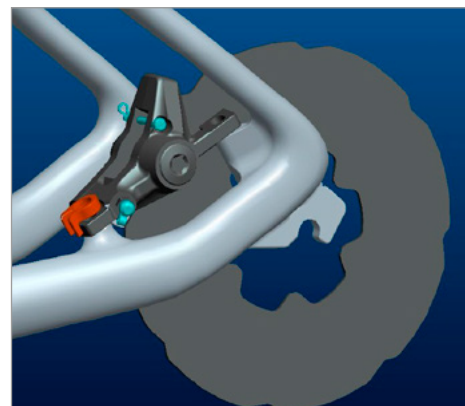
This is available via the SCOTT distribution with:

219572	complete set of RWS 135/5
219575	right side replaceable RD hanger

If you want to use another RWS standard SCOTT can also offer the following as after-market parts for specific wheelsets via the SCOTT distribution:

219574	RWS 135/12 parts set
219576	right side replaceable RD hanger

REAR DISC BRAKE MOUNT



The rear disc brake on Scale is Postmount (PM) Standard on the left chainstay and optimized for 160mm/6" rotors, so the calliper can be mounted directly without adapters on the Postmount fixation.

Please note Scale is designed for disc rotors between 160mm/6" and 185mm/7" (adapter needed from manufacturer of the brake) only.

FRONT FORK SET-UP/CHANGE OF FRONT FORK

For the set up of the front fork please use the fork specific manual attached to the bike.

We recommend using front forks with distance of

487mm/19.2" for Scale 700,

506mm/19.9" for Scale 900,

520mm/20.5" for Scale Plus

between mid of axle to top of crown, as this will not influence the geometry and alter handling of the bike.

