# **EARCHINE** SLR01

User Manual for Teammachine SLR 01, ICS Carbon Cockpit and ICS2 Stem

BMC

#### Assembly Instructions Teammachine SLR01

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## General Note

### The assembly instructions are intended to support dealers and/or customers during the build of Teammachine SLR01 framesets.

- The user must be familiar with the methods used to build a bicycle.
- The user is knowledgeable on how to assemble the latest parts and components.
- The user can handle the tools needed for the proper assembly.
- The user is aware that the frames and parts are sensitive products, and he treats them with care.

#### Symbols

These symbols are used in the assembly instructions and indicate the appropriate actions, described below.

#### Grease



**Torque Setting** 

**Thread locker** 



**Overview of Grease and Thread Locker** 



# Seatpost Clamp and Seatpost Installation

#### Seatpost Clamp Installation

- Apply grease on the contact surface between wedge and frame.
- Install the clamp wedge onto the frame.
- Do not apply grease between the seatpost clamp and the seatpost!



DO NOT APPLY GREASE BETWEEN THE SEATPOST CLAMP AND THE SEATPOST!



#### Seatpost Clamp Cover

There are two different covers for the seatpost clamp:

- Size 48 and 51
- Size 54 to 61

The indentation will help you making sure you are using the correct one.

The seatpost clamp cover can be inserted by pressing it into the clamp, no tools required.





#### **Seatpost Installation**

- Apply carbon friction paste onto the seatpost. Do not apply grease.
- Insert the seatpost into the frame.
- Tighten the seatpost clamp to a range from 5-7 Nm.

#### **Shimano Di2 Battery Installation**

- Install the Shimano Di2 battery into the seatpost using the adapter supplied.
- Insert the battery into the adapter.
- Thread the adapter into the seatpost, the foam will keep it securely in place.



## **Derailleur Hangers**

#### **Rear Derailleur Hangers**

Shimano and SRAM rear derailleur (RD) hangers are available for the Teammachine SLR01.

Apply grease to the RD hanger's contact surface, before the installation. Hand-tighten the bolt or tighten it to 2Nm, if using a torque wrench.





Shimano

### Stem Assembly Preparation

#### Fork, Headset and Stem Pre-tensioning

- Apply grease to the lower bearing seat on the frame and on the fork crown, then position the lower bearing on it.
- Apply grease on the upper bearing seat on the frame and then position the upper bearing on it.
- Install the fork into the headtube.
- Install the circlip onto the upper bearing.
- Install the fork onto the frame.





#### Topcone, Spacers and Stem/Cockpit configuration

Select the desired topcone/spacer configuration, choosing between:

- Low topcone or high topcone
- Spacers (10mm or 3mm)

- Assemble the components on the frame.
- Make sure the spacers are aligned with the topcone.
- The two halves of the spacers must be correctly aligned and engage with a click. See details below.





Ensure the concave face is facing up and the convex face is facing down.

Spacers are locked by applying pressure.

Spacers can be connected only when aligned correctly.



#### **Topcap Options**

- The open topcap can be used on ICS Carbon and ICS2 to add standard round spacers above the stem.
- This allows the finetuning of the riding position before cutting the steerer to its final length.
- Consult the next page to check the detailed assembly and ensure you are using the correct parts.
- All parts are included in the delivery of the complete bikes, modules and stems/cockpits parts.



### ICS Carbon



- 8. Shaped Top Cap for Round Spacers

#### **Closed Topcap**

- 1. Bolt
- 2. Flush Topcap
- 3. Steerer Wedge

### **ICS**2



#### **Closed Topcap**

- 1. Compression Bolt
- 2. Flush Topcap

- **Open Topcap**
- 3. Compression Bolt
- 4. Round Topcap
- 5. Standard Spacer
- 6. Lipped Steerer Wedge for Round Spacers

### Steerer Cutting Instructions

(ICS Carbon Cockpit and ICS2 Stem)

- Compress the assembled parts by hand and make sure that the topcone, spacers and stem are aligned properly.
- This procedure is identical for both ICS2 and ICS Carbon, the illustration below displays the procedure on the ICS Carbon cockpit.
- For the closed topcap configuration, mark the topcap contact surface level on the steerer.
- The example below demarcates the contact surface area for the closed topcap configuration on ICS carbon.



- For the open topcap configuration, mark the steerer at the contact level above the top round spacer
- The example below demarcates the contact surface area using a spacer on the stem.



#### Fork Steerer Cutting Mark

Once the height of the topcap contact point has been marked on the steerer (see previous instructions) you can proceed to mark the steerer a second time.

The second mark is used to cut the steerer.

Note that the cutting mark is **different** with ICS2 and ICS Carbon.

- **ICS Carbon:** the steerer is cut <u>4mm</u> below the topcap contact surface.
- **ICS2:** the steerer is cut <u>3mm</u> below the topcap contact surface.



- Proceed to cut the steerer. To ensure a precise cut, use a fork-cutting jig and a vice.
- Deburr the steerer with fine grain sandpaper.

- After the steerer has been cut, the self-cutting bolt can be installed until it is level with the surface.
- Grease the self-cutting bolt for easier installation.
- Remove any excess material from the bolt installation.





#### **Check Headset Operability**

- Install the fork, the headset, the stem and the topcap onto the frame to check the headset functionality:
- $\checkmark$  The headset must have no play
- $\checkmark$  The headset torque can be easily adjusted
- ✓ The stem does not compress the fork steerer when tightened
- If the steerer has not been cut correctly (i.e. it's too long for the chosen configuration), the topcap might be interfering with the steerer, not allowing the headset to be compressed.
- Shorten the steerer accordingly





Ensure a gap of 1mm between the steerer and the topcap after the topcap has been installed!

## **Brake Assembly**

#### **Rear Brake Assembly**

- Install the rear brake caliper onto the frame.
- The brake line enters the frame at the chainstay.

- Inside the frame, the brake line is threaded over the BB cartridge.
- The brake hose exits at the top of the headtube.
- A foam tube must be installed over the brake line in the downtube. Slide it over when the hose exits the headtube.





#### Front Brake Assembly

- Attach the front brake to the adapter.
- Tighten it according to manufacturer's instructions.

- Make sure the brake mount is in the correct position.
- The "UP" mark must face up and out, as shown in the illustration below.





• Guide the brake hose into the fork.

• Attach the front brake to the fork.





#### Standard Style Brake-Assembly for ICS2

The front brake hose runs along the left side of the steerer tube.

#### UK Style Brake-Assembly for ICS2 and Standard Brake-Assembly for ICS Carbon

For UK style brake-assembly and for ICS Carbon, the front brake hose runs along the right side of the steerer tube.

This is because the cables cross to the opposite side inside the ICS Carbon cockpit.



## Shimano Di2

Assembly Instructions

#### Shimano Di2 Groupset Assembly

- Prepare the DTi downtube cover and Shimano EW-RS910 (Shimano Di2 Junction Box) for installation on the down tube.
- These parts will only be assembled after the Di2 wires are routed through the frame.



#### Shimano Di2 Cable Routing:

- 1. 1x Shimano Di2 Battery (Shimano BT-DN110-A-1)
- 2. 1x Shimano Di2 Junction A (Shimano EW-RS910)
- 3. 2 x Shimano Di2 Junction B (Shimano SM-JC41)
- 1 X Shimano EW-SD50 Di2 cable, 700mm (from SM-JC41 to Rear Derailleur)
- 1 X Shimano EW-SD50 Di2 cable, 1000mm (from SM-JC41 to Battery)
- 1 X Shimano EW-SD50 Di2 cable, 350mm (from SM-JC41 to Front Derailleur)
- 1 X Shimano EW-SD50 Di2 cable, 700mm (from SM-JC41 to EW-RS910)
- 1 X Shimano EW-SD50 Di2 cable, 150mm (from EW-RS910 to SM-JC41)
- 2 X Shimano EW-SD50 Di2 cable, 1000mm (from Handlebar to SM-JC41)

TIP Use Shimano EW-SD50-I cable ties on every Di2 cable to improve the cable stability inside the frame







#### Shimano Di2 Battery Installation

Install the Shimano Di2 battery into the seatpost using the adapter supplied.

Insert the battery into the adapter.

Thread the adapter into the seatpost. The foam will keep it in place.



#### SRAM RED eTAP and eTAP AXS

For SRAM eTap and eTAP AXS, no electric wires need to be installed in the frame.

The assembly of the brake lines is similar to the assembly of the Shimano brakes.

Install the DT-Cover on the cable exit of the downtube.

Install SRAM AXS components according to SRAM instructions.



# Fork Installation and Cable Routing

ICS Carbon and ICS2

#### **Fork Installation**

- Install the lower headset bearing into the fork and slide it through the frame.
- Make sure the rear brake hose runs along the right side of the fork steerer according to standard ICS2 assembly.
- It is recommended to use electric tape to prevent the brake hose from moving inside the headtube.

- For countries with inverted brakes (e.g. UK) and for ICS Carbon, the rear brake hose runs along the left side of the steerer tube. Check the diagram on the next page for details.
- Install the upper headset bearing and the cone.
- The bearings need to be greased!





#### **ICS Carbon Cable Routing**



- 1. Front Brake Routing
- 2. Rear Brake Routing
- 3. Shimano Di2 Cables
**ICS2** cable routing



- 1. Front Brake Routing
- 2. Rear Brake Routing
- 3. Shimano Di2 Cables

- **ICS2 Standard Assembly**
- 1. Rear Brake Routing
- 2. Front Brake Routing
- 3. Shimano Di2 Cables

## **ICS Carbon**

Cockpit Installation



Prepare the topcap and spacer/topcone configuration based on where the steerer has been cut.

Install the topcap and

spacer/topcone configuration you have selected.

Install the open topcap to maintain a longer steerer tube and be able to still adjust the riding position if needed.

Install the closed topcap for the cleanest look if you know your stack height.

#### Important Note:

Make sure the correct steerer wedges are installed before installing the topcaps.





Slide the topcone over the fork steerer and hoses.

- Install the spacers.
- The two halves of the spacers must connect properly and engage with a click.



• The two halves of the spacers are not identical!

Ensure the concave face is facing up and the convex face is facing down.

• Spacers are locked by applying pressure.

Spacers can be connected only when oriented correctly.



Run the cables through the cockpit, using the cable liners supplied, or another tool for internal cable routing.

Please refer to the video manual for more specific instructions.

### Install the Steerer Wedges

- Make sure you are using the correct wedge, either for open or closed topcap configuration (see below).
- Make sure the wedges are aligned correctly (illustration on the right).



Closed Topcap

Open Topcap





## Install the Topcap for the Selected Configuration

Closed (flush)

• Open (with round spacers over the stem)

Closed Topcap

Open Topcap





• Alternate whilst tightening the retention bolts for even torque distribution.

Install the bolt cover

• Apply 3 Nm of torque





## ICS2

Stem Installation



Slide the topcone over the fork steerer and hoses.

- Install the spacers.
- The two halves of the spacers must connect properly and engage with a click.



• The two halves of the spacers are not identical!

Ensure the concave face is facing up and the convex one is facing down

Spacers are locked applying pressure

Spacers can be connected only when correctly oriented

Install the cable guide.

Make sure the brake lines do not get squeezed between the spacers, cable guide or stem. This could damage the brake lines.



Install the stem body

 Make sure only the upper stem bolt is installed onto the stem body at this point.





Install the topcap and spacer/topcone configuration you have selected.

Install the open topcap to maintain a longer steerer tube and be able to still adjust the riding position if needed.

Install the closed topcap for the cleanest look if you know your stack height.

**Important Note:** 

Make sure the correct steerer wedges are installed before installing the topcaps.

Install the topcap and adjust the headset play free.

Install the lower stem bolt and tighten both bolts to 5 Nm.





Attach the cable to the stem using the cable clip.

Tighten to 2Nm



Install the cover

Tighten to 2Nm







### Attention:

Make sure to keep an even alignment of the handlebar and stem with the fork.

**Never** rotate the handlebar and stem in relation to the fork!

This damages the internal brake hoses.



# **Computer Mounts**

### ICS2

- The alloy computer mount is compatible with ICS01 and ICS2 stems and features Garmin and Wahoo inserts.
- Single and double mounts are available, allowing the installation of additional devices that use the GoPro interface.
- The alloy brackets (Nr.1&2) are installed between the stem faceplate and the handlebar, as shown below.

## **ICS Carbon**

- The alloy computer mount features Garmin and Wahoo inserts, allowing the installation of additional devices that use the GoPro interface.
- The computer mount can be adjusted to adapt to different device sizes.
- Note: The washers must be positioned between the bolt and the computer mount.

**ICS** Carbon

• Tighten to 2.5 Nm.



Correct Installation of the Alloy Bracket

#### ICS2

## **Spare parts**

## TEAMMACHINE SLR 01



Pos. N°	Part N°	Part Name	Description
1	30000704	HS-B-13	Headset, w/o top cone $\rightarrow$ ICS2 stem
2	30000699	Axle Kit #7 Stealth	
3	30000714	BRK MOUNT ADP SLR01/SLR	for 160mm rotor
4	30000705	Cable Guide #26	
5	30000698	Aero Cage Set	
6	30000700	Dropout # 71	Standard (Shimano/Sram/Campa)
7	30000701	Dropout # 72	Direct mount (Shimano only)
8	30000702	SP CMP # 26	incl. Both cover for all frame sizes
9	212500	Internal battery adapter	
10	30000742	SP SLR01 SLR 15mm offset 400mm	standard part
11	30000741	SP SLR01 SLR 0mm offset 400mm	fitting part
12	30000743	SP SLR01 SLR 30mm offset 400mm	fitting part

## **TEAMMACHINE** SLR



400mm

400mm

400mm

SP SLR01/SLR, 0mm offset,

SP SLR01/SLR, 30mm offset,

stealth

Stealth

13

14

30000741

30000743

## ICS CARBON

Pos. N°	Part N°	Part Name	Description	Drop	Reach
2 to 10	30000709	CKP ICS Carbon Small part kit RED	including self cutting bolt		
15, 16	30000720	COM ICS CBN	for Garmin & Wahoo, incl GO PRO Mount		
11 (2x), 12 (3x), 13, 14	30000723	TC Set ICS2 ICS CBN RED	red top cones and spacers		
			Teu top cones and spacers	407	67
1 to 4, 7 to 10	30000726	CKP ICS Carbon 90 400 RED		127	67
1 to 4, 7 to 10	30000727	CKP ICS Carbon 100 420 RED		127	67
1 to 4, 7 to 10	30000728	CKP ICS Carbon 110 420 RED		127	67
1 to 4, 7 to 10	30000729	CKP ICS Carbon 120 420 RED		127	67
		CKP ICS Carbon 110 400 RED	w/o open top cap and wedge		
1 to 4, 7 to 10	30000730	TEAM	w/o spacers or top cones	127	77
		CKP ICS Carbon 120 400 RED	w/o computer mount		
1 to 4, 7 to 10	30000731	TEAM		127	77
		CKP ICS Carbon 130 400 RED			
1 to 4, 7 to 10	30000732	TEAM		127	77
		CKP ICS Carbon 140 400 RED			
1 to 4, 7 to 10	30000733	TEAM		127	77



**ICS**2

Pos. N°	Part N°	Part Name	Description	Angle	Drop	Reach
1 to 12, 13 (1x), 14 (3x)	30000734	ST ICS2 80mm	Top cone not included	-12.5°		
L to 12, 13 (1x), 14 (3x)	30000735	ST ICS2 90mm	Top cone not included	-12.5°		
L to 12, 13 (1x), 14 (3x)	30000736	ST ICS2 100mm	Top cone not included	-12.5°		
L to 12, 13 (1x), 14 (3x)	30000737	ST ICS2 110mm	Top cone not included	-12.5°		
L to 12, 13 (1x), 14 (3x)	30000738	ST ICS2 120mm	Top cone not included	-12.5°		
L to 12, 13 (1x), 14 (3x)	30000739	ST ICS2 130mm	Top cone not included	-12.5°		
L to 12, 13 (1x), 14 (3x)	30000740	ST ICS2 140mm	Top cone not included	-12.5°		
2 to 12	30000708	ICS 2 Small part kit	Cover for all stem length included			
13 (2x), 14 (3x), 15,16	30000724	TC Set ICS2 ICS CBN BLK	ICS2 stem $\rightarrow$ ICS2 frame*			
15,16	30000722	TC Retrofit Set ICS2 ICS CBN BLK	ICS2 stem $\rightarrow$ ICS1 frame**			
15,16	30000725	TC Retrofit Set ICS1 ICS AERO BLK	ICS1 stem $\rightarrow$ ICS2 frame			
17, 18, 19	30000718	ICS1/2 - computer mount	Aluminium			
19	302189	ICS01 Garmin Mount Long Alloy				
20	301707006919	Handlebar RCB01	400mm, stealth		117mm	77mm
20	301707006920	Handlebar RCB01	420mm, stealth, ca. 193g		117mm	77mm
20	301707006921	Handlebar RCB01	440mm, stealth		117mm	77mm
*ICS2 frames: Teamma	chine SLR01, SL	R, MY21				
*ICS1 frames: Teamma	chine SLR01/ SL	R02 MY18-20; Roadmachine >MY2	0; UnReStricted URS			
Roadmachine MY17-1	.9 and Timemac	hine Road are not compatible				



## **ICS Compatibility**

## **ICS COMPATIBILITY CHART**



## TOPCONE IDENTIFICATION

The topcones designed for MY21, Teammachine SLR01 frames, for the retrofitting of ICS Carbon cockpits and ICS2 stems, feature clear indentations for easy identification and compatibility check.



### Topcone ICS2, ICS Carbon – MY21 Teammachine SLR01



Topcones that feature #1 and #2 indentations (available in red or black) are designed to fit ICS2 stems and ICS Carbon cockpits on MY21 Teammachine SLR01 frames.

#### Topcone ICS2, ICS Carbon - Retrofit



Topcones that feature #3 and #4 indentations (only available in black) are designed to retrofit ICS2 stems and ICS Carbon cockpits on the following platforms:

- TEAMMACHINE SLR01: MY18 → MY20
- ROADMACHINE 01: MY20 →
- URS 01: MY20 →
- ALPENCHALLENGE AMP CARBON: MY19 →

## Topcone ICS01 / ICS Aero – MY21 Teammachine SLR01



#5 and #6 topcones (only available in black) can be used to fit ICS Aero, ICS01 and ICS01 0° stems and the MY21 TEAMMACHINE SLR01.

### Notes

- An additional topcone, marked as #7 allows the installation of round-steerer forks on MY21 Teammachine SLR frames.
- Timemachine 01 Road is currently not compatible with ICS2 and ICS Carbon.

## TOPCONE MARKING INDEX

Part Identification	Part Description	Compatibility
#1 ICS2-CARBON 5mm	Topcone ICS2, ICS Carbon, Low 5mm (MY21 SLR01)	<ul> <li>MY21 TEAMMACHINE SLR01 ONE</li> <li>MY21 TEAMMACHINE SLR01 TWO</li> <li>MY21 TEAMMACHINE SLR01 ICS CARBON MODULES</li> </ul>
#2 ICS2-CARBON 30mm	Topcone ICS2, ICS Carbon, High 30mm (MY21 SLR01)	<ul> <li>MY21 TEAMMACHINE SLR01 ONE</li> <li>MY21 TEAMMACHINE SLR01 TWO</li> <li>MY21 TEAMMACHINE SLR01 ICS CARBON MODULES</li> </ul>
#3 ICS2-CARBON 5mm	Topcone ICS2, ICS Carbon, Low 5mm (Retrofit)	<ul> <li>ROADMACHINE 01 MY20→</li> <li>URS 01 MY20→</li> <li>ALPENCHALLENGE AMP CARBON MY19→</li> <li>TEAMMACHINE SLR01 MY18→20</li> </ul>
#4 ICS2-CARBON 30mm	Topcone ICS2, ICS Carbon, High 30mm (Retrofit)	<ul> <li>ROADMACHINE 01 MY20→</li> <li>URS 01 MY20→</li> <li>ALPENCHALLENGE AMP CARBON MY19→</li> <li>TEAMMACHINE SLR01 MY18→20</li> </ul>
#5 ICS1-AERO 5mm	Topcone ICS01 / ICS Aero, Low 5mm (MY21 Teammachine SLR)	MY21 TEAMMACHINE SLR01
#6 ICS1-AERO 30mm	Topcone ICS01 / ICS Aero, High 30mm (MY21 Teammachine SLR)	MY21 TEAMMACHINE SLR01
#7 ROUND 8mm	Topcone Round Steerer, 8mm (MY21 Teammachine SLR)	MY21 TEAMMACHINE SLR

