

# USER MANUAL

1st Edition. February, 2021

# RIDEA

- RIDEA ES CRANKSETS

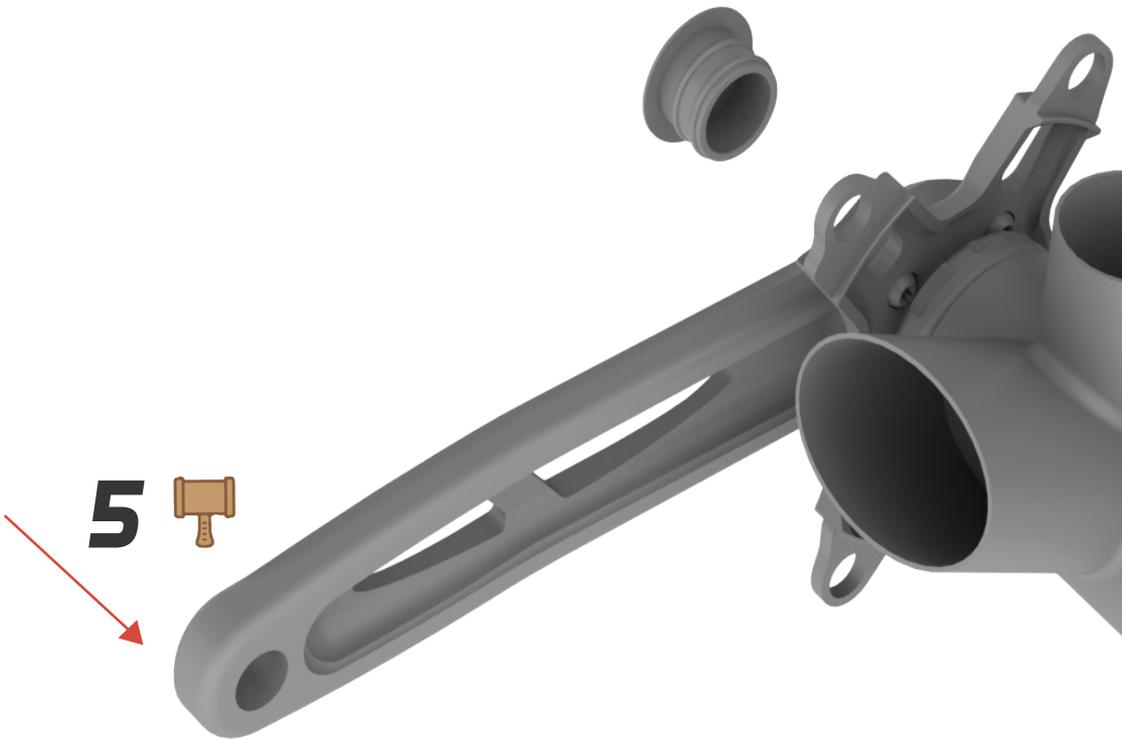


- RIDEA IT CRANKSETS



## INSTALLATION DIAGRAM

For detailed installation information, please read pages 5-6.

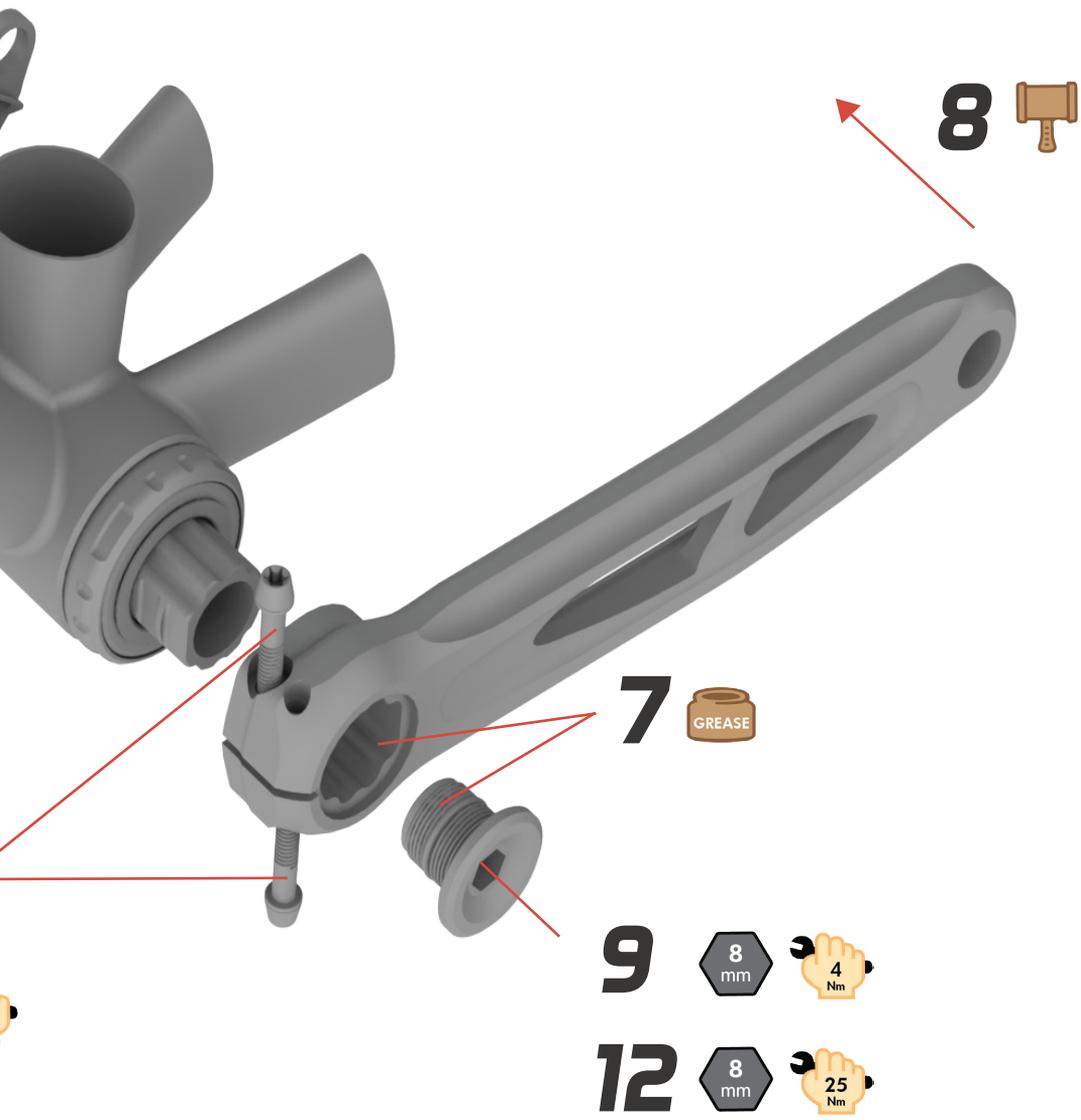


**5** 

**6** 

**10** 

**11**  

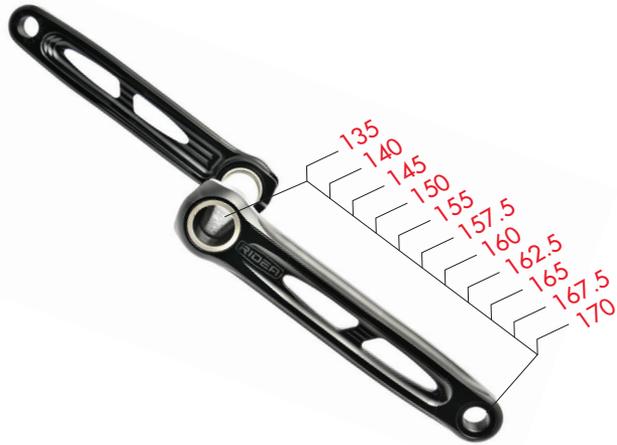


**8** 

**7**  GREASE

**9**   4 Nm

**12**   25 Nm



 **R491**

- Single/Double Ring



 **ITFT**

- Single Ring



 **R5MT**

- Double Ring



 **T5TT**

- Single Ring



 **ITST**

- Single/Double Ring



 **R491**

- Single/Double Ring



 **MSH1**

- Single Ring



 **R5MT**

- Double Ring



 **A5TT**

- Single Ring



 **R5ST**

- Single/Double Ring

# USER MANUAL

**Congratulations!** You have purchased a piece of engineering that we, at Ridea, have made with passion. Enjoy your rides with your Ridea component as much as we enjoyed making it.

## IMPORTANT NOTICE

Thank you for your purchase of a Ridea product. Please read thoroughly this user manual before proceeding with the installation of your new Ridea crankset. Although the installation process is easy to follow, we recommend taking your crankset to a professional bicycle mechanic with specialized tools to perform the installation.

## Rider weight limit

Both ES and IT cranks are recommended for riders up to 100 kg. For your own safety, please refrain from using ES or IT cranks if your body weight is higher than 100 kg.

## CONTENTS

- ES/IT right crank arm and spider
- ES/IT left crank arm
- Chainline adjuster 1 mm (1 piece)
- This user manual

## LIST OF TOOLS

- Torque wrench
- T25 torx wrench
- 4 mm hex wrench
- 8 mm hex wrench
- Rubber mallet
- Grease

## INSTALLATION

Both ES cranks and IT cranks follow the same installation procedure, detailed below.

**Important note:** Tightening to the recommended torque is important for your safety and for the performance and durability of your bicycle. Always use a torque wrench.

### Chainring installation (chainrings not included)

1. Use a 4 mm hex wrench to tighten the chainring screws to 10 N m. Do not tighten to the final torque one screw before tightening the others. Instead, alternatively tighten each screw, switching between them, until all of them reach the recommended torque.

### Crankset installation

2. Refer to bottom bracket manufacturer's user manual to perform its installation.
3. Insert the right crank arm unit into the BB shell and measure the chainline. If needed, adjust it with the appropriate chainline adjusters. These should be installed in the crankset spindle, between the bottom bracket and the crankset.
4. Remove the right crank arm unit from the BB shell to apply grease in the bearing contact areas of the spindle.
5. Insert the right crank arm unit into the BB shell. If required, use a rubber mallet to tap the crank to make sure that the spindle is fully inserted into the BB shell.
6. Remove both clamp bolts from left crank arm using a T25 torx wrench.
7. Grease the spindle contact area of the left crank arm, as well as the thread of the left crank arm fixing bolt.
8. Insert the left crank arm into the spindle.
9. Pre-tighten the left crank arm fixing bolt to 4 N m with an 8 mm hex wrench.
10. Grease the threads of both clamp bolts.
11. Tighten both clamp bolts to 9 N m. Tighten them bit a bit, alternating between bolts until their recommended torque.
12. Re-tighten the left crank arm fixing bolt to its final torque of 25 N m.

## ES/IT CRANKSET REMOVAL

1. Completely remove left crank arm fixing bolt.
2. Completely remove both clamp bolts and take out the left crank. If required, use a rubber mallet to tap the crank to help you remove it.
3. Slide the right crank arm and the spindle out of the BB shell. If required, use a rubber mallet to tap the spindle from the non-drive side to help you remove the crankset.

**Tip: To remove right crank axle cap, thread a M5 screw (like the screw used in most quick releases) through the center hole to help you remove the cap. To insert the cap, push it inside by hand and tap it gently with a rubber mallet if required.**

## MAINTENANCE AND CARE OF THE CRANKSET

### Clean your crankset with water and mild soap.

Check your Ridea product for wear, damage of any type and looseness before every ride and immediately after any crash or fall. **DO NOT** ride your bicycle if you find any damage on your Ridea product or in any other component of your bicycle.

Maintenance intervals greatly vary with riding conditions, distance ridden and intensity of your rides. In case of doubt about the status and condition of your crankset, please stop riding and check with a professional mechanic to perform a maintenance service.

It is important to periodically check the tightening torques of the bolts and to check if there is any play in the cranks (try to move the cranks laterally to feel if there is any play). If you feel any play or if the bolts are loose, tighten them to the correct torque again.

Less often, it is recommended to perform a full removal, cleaning, inspection, re-greasing and re-installing of your crankset and bottom bracket unit.

**CRANKS & LS- MSH1 CHAINRING**

Spider model	<b>ES MSH1</b>
BCD	96 mm
No. of arms	4
Compatible chainrings	Ridea Powering MSH1 W2T
Crank arm length	135; 150; 155; 160; 167.5; 170; 172.5; 175; 177.5 mm
Weight	542 g (steel) 499 g (titanium)
Spider diameter	24mm
chain line	Single: 51.5mm



**ES MSH1**

**CHAINRING**

**LS- MSH1**



**W0T**

32T | 52g  
34T | 61g  
36T | 59g

**W2T**

30T | 45g  
32T | 50g  
34T | 60g  
36T | 65g  
38T | 70g  
40T | 75g

## CRANKS &amp; LF- R491 CHAINRING

Spider model	ES R491	IT R491
BCD	110 mm	
No. of arms	4	
Compatible chainrings	Ridea Lami-Flow R4-91 series (single or double). Also compatible with any Shimano (R9100/8000/7000) compatible chainring.	
Crank arm length	155; 160; 165; 167.5; 170; 172.5; 175; 177.5; 180 mm	135; 140; 145; 150; 155; 157,5; 160; 162,5; 165; 167.5; 170 mm
Weight	548 g (steel) 498 g (titanium)	468 g (steel) 418 g (titanium)
Spider diameter	24mm	
Chain line	Single: 48mm Double: 44.5mm	



**ES R491**


**IT R491**

## CHAINRING

**LF- R491**

compatible with SHIMANO cranksets

/ Single Ring /



### W0T

38T		64g
40T		67g
42T		73g
44T		84g
46T		94g
48T		110g
50T		113g
52T		121g
54T		131g
56T		141g

### W2T

34T		46g
36T		59g
38T		65g
40T		73g
42T		81g
44T		95g

### W3T

INSET 3mm

46T		105g
48T		115g
50T		130g

### W3T

46T		94g
48T		100g
50T		116g
52T		123g
54T		131g
56T		140g

/ Double Ring /



### W0T

50T/34T		141g
52T/36T		156g
53T/39T		164g
56T/44T		197g

### W3T

50T/34T		152g
52T/36T		155g
53T/39T		172g

### W2T

48T/32T		145g
50T/34T		152g
52T/36T		170g
53T/39T		171g

# ROAD

## CRANKS & LF- R5MT CHAINRING

Spider model	ES R5MT	IT R5MT
BCD	130+74 mm	
No. of arms	5	
Compatible chainrings	Ridea Lami-Flow R5-MT series (46-30t)	
Crank arm length	155; 160; 165; 167.5; 170; 172.5; 175; 177.5; 180 mm	135; 140; 145; 150; 155; 157.5; 160; 162.5; 165; 167.5; 170 mm
Weight	567 g (steel) 517 g (titanium)	487 g (steel) 437 g (titanium)
Spider diameter	24mm	
Chain line	Double: 46mm	



 **ES R5MT**



 **IT R5MT**

## CHAINRING

### LF- R5MT



**W0T**  
46T/30T | 107g

### LS- R5MT



**W2T**  
46T/30T | 105g

## CRANKS &amp; LF- R5ST CHAINRING

Spider model	ES R5ST	IT ITST	IT ITFT
BCD	130 mm		
No. of arms	5		
Compatible chainrings	Ridea Lami-Flow R5-ST series (double or single)		Ridea Lami-Flow R5-ST series (single only)
Crank arm length	155; 160; 165; 167.5; 170; 172.5; 175; 177.5; 180 mm	135; 140; 145; 150; 155; 157.5; 160; 162.5; 165; 167.5; 170 mm	
Weight	562 g (steel) 512 g (titanium)	482 g (steel) 432 g (titanium)	
Spider diameter	24mm		
Chain line	Single: 48mm Double: 44.5mm		Single: 45mm



ES R5ST



IT ITFT



IT ITST

## CRANKS &amp; LF- R5ST SINGLE CHAINRING

Spider model	IT BCSA	ES BCSA
BCD	130 mm	
No. of arms	5	
Compatible chainrings	Ridea Lami-Flow R5-ST series (single only)	
Crank arm length	170 mm	
Weight	474 g (steel) 430 g (titanium)	555 g (steel) 510 g (titanium)
Spider diameter	24 mm	
Chain line	Single: 48mm	
Applicable	BROMPTON · MOULTON · DAHON · BIRDY	



**IT-BCSA**  
(IT-ITFT -E3)



**ES-BCSA**  
(ES-ITFT -E3)

## CRANKS &amp; LF- R5ST CHAINRING

Spider model	IT BCSB	ES BCSB
BCD	130 mm	
No. of arms	5	
Compatible chainrings	Ridea Lami-Flow R5-ST series (double or single)	
Crank arm length	170 mm	
Weight	491 g (steel) 446 g (titanium)	554 g (steel) 509 g (titanium)
Spider diameter	24mm	
Chain line	Single: 51mm Double: 48mm	
Applicable	BROMPTON、MOULTON、DAHON	



**IT-BCSB**  
(IT-ITST -E3)



**ES-BCSB**  
(ES-R5ST -E3)

## CRANKS &amp; LF- R5ST DOUBLE CHAINRING

Spider model	IT BCBD	ES BCBD
BCD	130 mm	
No. of arms	5	
Compatible chainrings	Ridea Lami-Flow R5-ST series (double only)	
Crank arm length	170 mm	
Weight	495 g (steel) 447 g (titanium)	558 g (steel) 510 g (titanium)
Spider diameter	24mm	
Chain line	Double: 51mm	
Applicable	BIRDY	



**IT-BCBD**  
(IT-ITST -E6)



**ES-BCBD**  
(ES-R5ST -E6)

## CHAINRING

### LF- R5ST

/ Single Ring /



#### W0T

46T | 88g  
48T | 101g  
50T | 111g  
52T | 113g  
54T | 119g  
56T | 126g  
58T | 133g

#### W3T

42T | 68g  
46T | 91g  
48T | 98g  
50T | 105g  
52T | 112g  
54T | 118g  
56T | 120g  
58T | 130g

/ Double Ring /



#### W0T

53T/39T | 142g  
56T/44T | 174g  
58T/46T | 192g

#### W3T

56T/44T | 176g

#### W2T

53T/40T | 155g

## TRACK

### CRANKS & FF, LF, TF CHAINRING

Spider model	ES A5TT	IT T5TT
BCD	144mm	
No. of arms	5	
Compatible chainrings	Ridea Turbulent-Flow, Lami-Flow, Full-Flow track series	
Crank arm length	155; 160; 165; 167.5; 170; 172.5; 175 mm	155; 160; 165; 170 mm
Weight	580 g (steel) 545 g (titanium)	510 g (steel) 475 g (titanium)
Spider diameter	24mm	
Chain line	Single: 44mm	



**ES A5TT**



**IT T5TT**

## CHAINRING

### FF



46T		110g
47T		120g
48T		130g
49T		140g
50T		150g
51T		160g
52T		170g

### LF

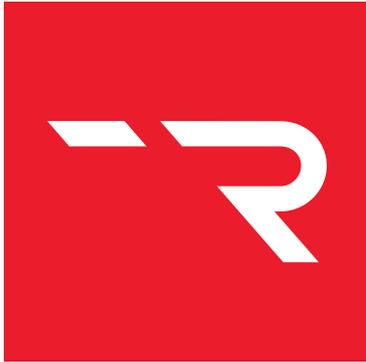


47T		80g
48T		85g
49T		90g
50T		95g
51T		100g
52T		105g

### TF



47T		110g	56T		210g	65T		329g
48T		120g	57T		228g	66T		341g
49T		130g	58T		243g	67T		355g
50T		140g	59T		254g			
51T		150g	60T		266g			
52T		160g	61T		276g			
53T		170g	62T		286g			
54T		180g	63T		303g			
55T		195g	64T		316g			



Ridea Group Ltd.

No.53-63 Gouqian Lane, Gouqian Village, Lukang Township, Changhua County, 50567, Taiwan  
+886 4 771 5639 · [service@rideabikes.com](mailto:service@rideabikes.com) · [www.rideabikes.com](http://www.rideabikes.com)

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