

CRATUS *AERO CRANK*

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The Relentless Pursuit of Speed

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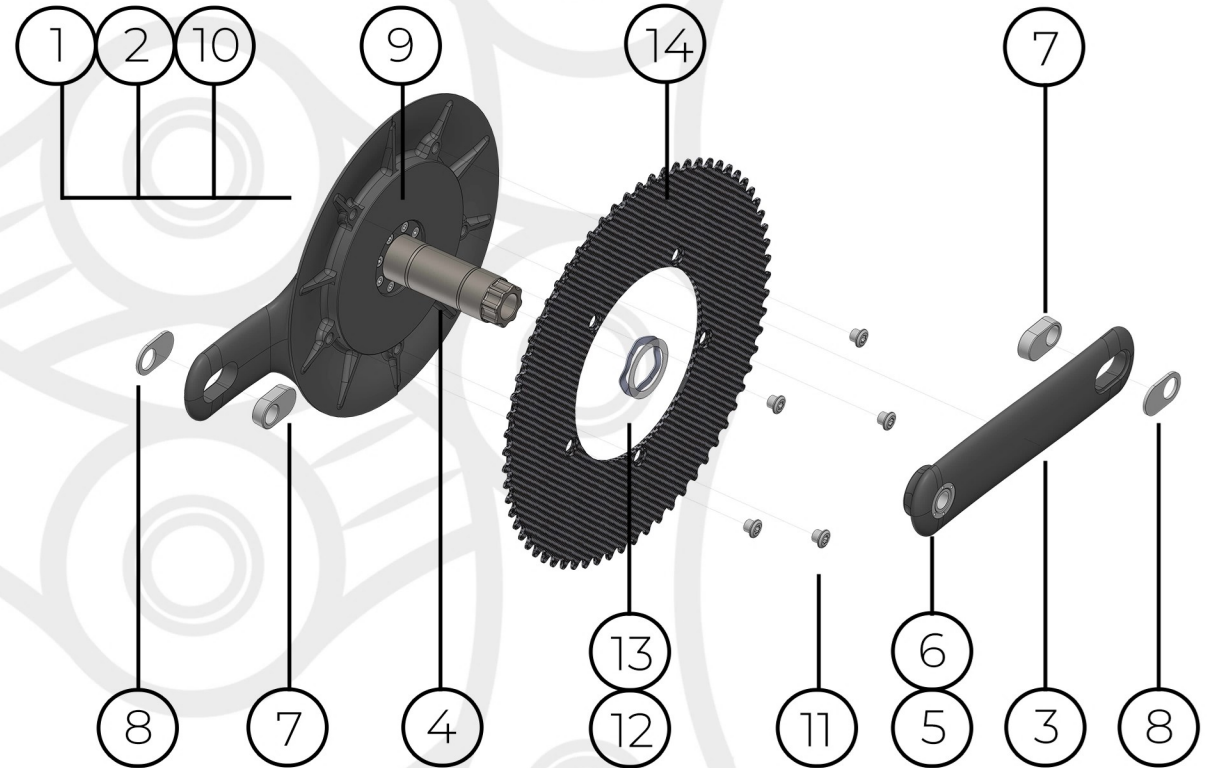
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Cratus Aero Crank

Thank you for purchasing a WattShop #Cratus crank. We hope it serves you well in achieving maximum performance in all of your races! Please share your pictures and results on Facebook, Twitter and Instagram using #WattShop.

WATTS IN THE BOX			
No	Part Description	Quantity	Torque
1	Drive side (DS) crank	1	-
2	Drive side (DS) dome	1	-
3	Non-drive side (NDS) crank arm	1	-
4	Spindle	1	-
5	NDS bolt + washer	1	35Nm
6	NDS lock ring + washer	1	-
7	Pedal inserts (LH and RH)	1 (pair)	-
8	Pedal insert plates	1 (pair)	-
9	M4x10mm countersunk head bolts	8	2Nm
10	M3x6mm countersunk head bolts	4	1Nm
11	Chainring bolts	5	5Nm
12	Wave washer	1	-
13	0.5mm spindle spacers	8	-
OPTIONAL			
14	Chainring	1	-
NOTES			
If you require a spindle less than 30mm in diameter you will also receive a spindle spacer			

TOOLS REQUIRED	
T10 Torx key	Chainring nut wrench
T20 Torx key	Torque wrench
T30 Torx key	Pin spanner
M10 Hex key	
NOTES	
T20 Torx key and the pin spanner will only be required if you disassemble that which has already been assembled.	



The WattShop Cratus crank was designed to provide you with the narrowest Q-factor possible alongside optimised aerodynamics and crank arm adjustability. The latter is an interchangeable component with adjustability in 2.5mm increments from 160mm through to 175mm or 145mm through to 160mm, depending on crank length chosen. Additional pedal inserts can be purchased separately via our website.

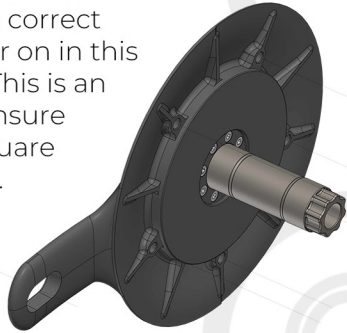
Please note if you have any custom aspects you may receive slightly different components to those listed above but this will be explained prior to shipping.

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INSTALLATION GUIDE

1. You will find that your crank comes supplied with the DS crank (part 1), DS dome (part 2) and spindle (part 4) already pre-mounted using the 8x M4x10mm countersunk head bolts (part 9) and 4x M3x6mm countersunk head bolts (part 10). If for any reason you disassemble these parts please follow the correct steps discussed further on in this guide to reassemble. This is an important aspect to ensure the chainring spins square to the bottom bracket.



2. The chainring (part 14) (crank specific or generic) can not be manoeuvred over the front face of the crankset therefore before installing the crank you will need to install the chainring. This is done from the reverse face. Using the 5x chainring bolts provided (part 11), installed and torque to 5Nm. Use T30 torx key and chainring nut wrench.



3. Without using the wave washer (part 12) or 0.5mm spacers (part 13), slide the crank through your bottom bracket. With a 30mm spindle the NDS crank arm will engage directly. With smaller diameter spindles you will need to use the provided spindle spacer. This takes out the spindle diameter to the correct size, matching the NDS arm.

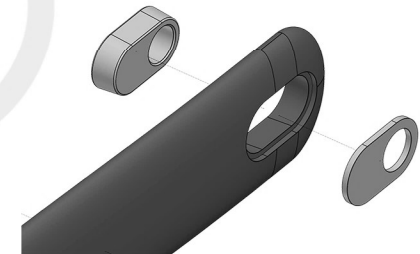
4. The NDS bolt + washer (part 5) and lockring + washer (part 6) will already be installed when you receive the crankset. Note the NDS bolt will move freely. Using the 10mm hex key and torque wrench install the NDS arm (part 3) and torque to 35Nm. Once torqued we can now check for lateral movement and rotational resistance. Firstly, does your crank move left to right, if it does you will need to remove the crank and install the wave washer and/or the 0.5mm spacers to take up the slack. Do not install too many spacers, the crank has been designed to run with no spacers or at most, one or two depending on the BB cup size and this will affect the rotational resistance.



5. Once you have found the sweetspot check the rotational resistance by spinning the crank. If the crank is restricted in its rotation you have installed too many spacers.

Some BB cups sit slightly proud of the bearings on the DS. This can affect the set up. Unfortunately all we can recommend in this instance is to replace the BB with another brand or have the cup ring machined down.

6. The pedal inserts (part 7) can now be installed. Ensuring the DS pedal is a standard thread and the NDS pedal is the LH thread, the insert is positioned from the reverse side of the arm. Ensure that you have applied grease to the pedal insert to make future removal easier. Check you have installed these the correct way to achieve your desired crank arm length. The pedal plate (part 8) is positioned from the outside face into the corresponding recess, ensure you align the hole in the correct position. Finally install your pedals.



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SPINDLE/CRANK INSTALLATION

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If you have disassembled your spindle from the DS crank it will need to be reassembled in the correct order.

Please see the adjacent image. Assuming each bolt is numbered 1-8, they need to be installed as follows; 1-4-7-2-5-8-3-6. The reason for this pattern is to ensure the crank is installed square.

Use the T20 torx key, loctite and torque to 2Nm.

