

# Boundary Cranks Installation

Available Lengths: 110/127 mm, 110/137 mm, 127/150 mm

## Introduction

Constructed from tough, stiff 7050 alloy, Boundary Cranks use the Q-Axle micro-spline standard for maximum strength and stiffness. The Q-axle micro spine is parallel (not tapered) and secures with pinch-bolts on the crank. This makes it easy to install and remove.

## What's Required

### All unicycles:

- ✓ Boundary cranks and compatible hub (Q-Axle standard)

### For unicycles with disc brakes (sold separately):

- ✓ Compatible frame with International Standard (IS) adaptor on left side of frame (see *Compatibility Requirements*)
- ✓ Compatible disc brake hub (Q-Axle standard) and disc brake rotor
- ✓ Brake lever mount on saddle or Kris Holm T-bar handle
- ✓ Star Fighter Brake Lever Extension (*recommended*)



Boundary Cranks (with disc brake)



Boundary Cranks (without disc brake)



## Crank Installation

See photos above for assembly and position of required components. Also see manufacturer instructions supplied with the disk brake and brake rotor.

1. Lightly grease the hub spindle.
2. Push the spacer washers onto the hub spindle. These sit between the bearing and the cranks.
3. Generously loosen bolts on crank using a 5 mm hex key.
4. Line up the crank on the hub spindle. There is one wider slot on the spindle. Match this with the cranks.
5. Push the cranks onto the hub, if hard, use a soft rubber hammer or put some wood in between and gently hammer it on the axle.
6. Tighten Q-Axle bolts (8mm hex) into the holes on the end of the hub spindles to firm hand pressure, these help to keep the cranks in place and need to be installed!
7. Tighten crank bolts to firm hand pressure (10 – 14 Nm). Alternate tightening between the bolts to make sure that the cranks are properly seated in the splines.
8. Repeat with the other crank.

## Compatibility Requirements

### Brakes

- ✓ Disk brake with International Standard (IS) mount or IS adaptor.

### Disk Rotors

- ✓ 180 mm or 203 mm (smaller size recommended for 24" wheel size)

### Compatible disc brake frames

- ✓ Requires IS brake mount on left fork blade. Fits most disc-brake compatible frames.
- ✓ Fits KH frames produced after April 2023, which have the disc brake mount on the left side or both sides of the frame. Not compatible with older KH frames with the disc brake rotor on the right side of the frame.

### Compatible hubs

- ✓ Q-Axle micro spline hub compatible. Not compatible with ISIS hubs.



#### Warranty

Kris Holm Unicycles products are warranted to the original owner against manufacturing defects for one (1) year following the original purchase date. For more details visit <http://www.krisholm.com/khu/warranty>



**Unicycling can be hazardous and can result in injuries.** Use common sense, ride within your abilities, and wear safety gear. Disk brake rotors become very hot with use – avoid contact! Tuck in laces and avoid wearing loose clothing that could catch in brakes, pedals or other parts of the unicycle. Kris Holm Unicycles cannot accept responsibility for any personal injury that you might sustain or that you might cause to another person as a result of the use, breakage or improper assembly of Kris Holm Unicycles equipment.