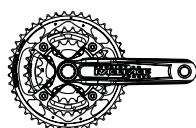
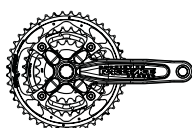


PRODIGY XC/DH CRANK

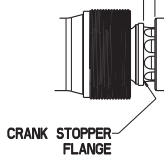


PRODIGY DH CRANKSET



PRODIGY XC CRANKSET

PRESS FIT MEASUREMENT



CRANK STOPPER FLANGE

CRANK BOLT WASHER
IMPORTANT:
WASHER MUST BE USED

CRANK BOLT
M15x10
(FITS 8mm ALLEN KEY)

CRANK ARM
SLIDE ON BY HAND UNTIL SPLINES
ON CRANK AND BB MATE

INNER CHAINING CHAINRING BOLT
M6x0.75x8.5mm

ISIS BOTTOM
BRACKET

OUTER CHAINING NUT
M8x0.75

CRANK ARM

STEEL PEDAL
WASHER

CAUTION:
ALWAYS USE WASHERS UNDER
THE HEAD OF CRANK BOLTS!
SOME CRANK BOLTS MAY
COME WITH "BUILT IN WASHERS"

CRANK BOLT
M15x10
(FITS 8mm HEX KEY)

OUTER CHAIN RING BOLT
M8x0.75x8.5mm

The ISIS DRIVE spline system is the new standard for strength, stiffness and performance for cranksets and bottom brackets. The ISIS DRIVE spindle end features 10-16mm long, tapering (1 deg) flutes (teeth) ending at a hard stop "flange". The ISIS DRIVE crank arm features a mating 10-flute socket with the same 1 degree taper. The mating tapers guarantee a tight, creak-free interference fit between the two parts. The hard stop or "Crank Stopper Flange" positions the crank consistently to achieve ideal front shifting performance. Finally, the Crank Stopper Flange in combination with the super stiff oversize crank bolts rigidly "sandwich" the crank arm in place, eliminating any movement that is typical of traditional square taper interface systems.

The Race Face Prodigy XC and DH ISIS Drive Cranksets have been designed and engineered to be simple, service free, install it and forget it systems. Please follow these simple installation instructions to ensure proper operation and long life of your new cranks.

CHAINLINE:

"Chainline" is a measurement from the centerline of your frame to the tip of the middle chainring on the crankset. This measurement is important because front shifting performance is directly connected to the chainline measurement on your bike.

All Race Face crank models (Prodigy XC, Prodigy DH, Turbine LP, Next LP, North Shore DH) are designed to achieve a chainline of 48.5-49.5mm when installed on a standard ISIS Drive 113mm (81mm ISIS designation) spindle such as the Race Face Prodigy or XS model.

TOOLS REQUIRED:

1. 8mm allen (hex) key (preferably with a long 6-8" handle)
2. Torque wrench with 8mm allen head socket (preferred)
3. 5mm allen (hex) key for chainring bolts
4. Waterproof grease

TORQUE SPECIFICATIONS:

Crank Bolts (initial installation - see note #2).....40 foot-pounds (54 Newton-Meters)
Crank Bolts (subsequent re-tightening).....35 foot-pounds (47 Newton-Meters)
Inner Chaining Bolts.....100 inch-pounds (11.3 Newton-Meters)

CRANK INSTALLATION:

- 1) Install outer and middle chainrings using standard chainring bolts and nuts. Tighten bolts alternately in a crossing pattern to eliminate un-even load on bolts. This is similar to fastening the lug nuts on your car wheels.
Note: To eliminate loosening, we recommend use of loctite small thread locker (purple) on outer chainring bolt threads if steel bolts are used. If aluminum hardware is used, grease the threads and check them regularly. If titanium hardware is used, apply "Finish Line Ti-Prep" anti seize compound to the threads and check them regularly.
- 2) Apply grease to the threads of the supplied 8.5mm inner chainring bolts (or anti-seize if you're using Ti hardware). This is absolutely necessary since you are threading these bolts directly into an aluminum spider on the crank.
- 3) Install inner chainring using pre-greased bolts. Torque to 100 inch/lbs. Use crossing pattern for tightening as per step #1. Use caution not to over-tighten these bolts and strip the aluminum threads in the spider.
Note: If you are using an aluminum inner chainring, be sure that it is the type with a recess for the chainring bolt head to fit into. Aluminum chainrings are relatively thick, and aluminum inner chainrings without this recess will decrease the amount of chainring bolt thread contact into the spider, increasing the chance of pulling the threads out or stripping them.
- 4) Inspect bottom bracket spindle. Make sure splines are in good shape, and free of burrs or sharp edges that may damage crank arm. Make sure the threads inside the spindle are in good shape.
- 5) Apply a generous amount of waterproof grease to all of the spline teeth on both ends of the spindle as well as to the threads on the inside of the spindle.

1) Slide the crank arm onto the spindle in a horizontally opposed relation. You will notice that the crank will not slide all the way onto the crank stopper at the end of the spline teeth on the spindle. This is okay and correct. There is a mating taper on the root of the spline flutes and on the mating splines in the crank arms. This taper creates an interference fit between the two parts, eliminating movement and creaks. The gap you notice after sliding the crankarm onto the spindle by hand is called the PRESS FIT MEASUREMENT.

Note: Crank bolts with washers are included with all Race Face ISIS Drive bottom brackets. ISIS Drive bottom brackets may be spec'd with either M12x1 or M15x1 bolt threads, depending on BB design and intended use. Both sizes are much stiffer and stronger than the conventional M8x1 bolts that are used with traditional square taper interfaces. Always use the crank bolts supplied with your bottom bracket. Do not substitute inferior crank bolts made of lower strength Titanium or Aluminum.

CAUTION: ALWAYS USE WASHERS UNDER THE HEAD OF THE CRANK BOLTS!! SOME CRANK BOLTS MAY COME WITH "BUILT IN" WASHERS AND SOME MAY COME SEPARATE. IF THE CRANK BOLTS ARE INSTALLED WITHOUT THE WASHERS, THE SOFTER ALUMINUM OF THE CRANK ARM'S SPLINE TEETH WILL BE PERMANENTLY DAMAGED, RENDERING THE CRANK ARM UN-USABLE. INSTALLATION OF CRANK ARMS WITHOUT WASHERS WILL VOID ALL WARRANTIES ON THE CRANK ARMS.

2) Using your 8mm allen key, install the crank bolts into the spindle threads and tighten until the back face of the crank arm bottoms out against the CRANK STOPPER FLANGE on the BB spindle. We recommend an initial installation torque of 40ft./lbs. (54 N.m), however, this requirement may vary depending on the crank arm design and material to a maximum of 60 ft.lbs (81 N.m). The most important thing is to make sure that the crank arm contacts the CRANK STOPPER FLANGE, not the torque required to achieve contact, however, exceeding 40ft/lbs, when the crank has already bottomed out against the CRANK STOPPER FLANGE may damage the mating face on the softer aluminum of the crank arm. The combination of the super stiff M12 or M15 bolt, along with the crank contacting the CRANK STOPPER FLANGE on the spindle creates a super rigid interface that does not allow the crank arm to move around the BB spindle, as is the case with traditional square taper interfaces. This, along with the extremely high torque load carrying capacity of the 10 flute splined interface eliminate all of the typical problems associated with the traditional square taper interfaces.

3) Make sure the steel pedal washers (included) are sitting in the recess cut around the pedal threads on the crank. Grease the threads on your pedals and install them. The pedals should be marked L (non-drive side) and R (driveside), with the L pedal having LH threads (tightens counter-clockwise). The pedals should tighten firmly against the pedal washer, but there is no need to exert excessive force or you risk stripping the threads.

warning: the steel pedal washers must be used. Failure to use the provided pedal washers will void all warranties on the crank. If the pedal washers are missing, or have been damaged, do not attempt to use different size of washer; contact your local race face dealer to secure a replacement.

4) Install your chain and adjust your front derailleur to manufacturer's specs. You're ready to ride

MAINTENANCE INSTRUCTIONS:

1. CHECK THE TIGHTNESS OF YOUR CRANK BOLTS AFTER YOUR FIRST RIDE, AND PERIODICALLY THEREAFTER. USE A TORQUE SPEC OF 35FT./LBS (47 N.m) FOR RE-TIGHTENING CHECKS.
2. Check and re-tighten if necessary, chainring bolts after your first ride and periodically thereafter. Pay special attention to the inner chainring bolts, as they are installed with lubricant. Riding with inner chainring bolts loose may damage or strip the threads in the aluminum spider. However, be careful not to over-tighten.
3. Check and re-tighten if necessary your pedals after your first ride and periodically thereafter. Riding with your pedals loose may damage or strip the threads. However, be careful not to over-tighten. Removal and cleaning cranks and chainrings with solvent is perfectly safe. Removal and re-greasing of hardware will be required.

IMPORTANT

The Prodigy XC is not intended for any use other than cross country. The Prodigy DH is intended for entry-level freeride / DH. These instructions are for both Prodigy XC and Prodigy DH cranksets. Although the method for installing both cranks is identical, they are not interchangeable! It is very important you read the warranty information at raceface.com or discuss your riding requirements with your race face dealer.



UNIT 100-100 BRAID STREET | NEW WESTMINSTER | BC | CANADA | V3L 3P4
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