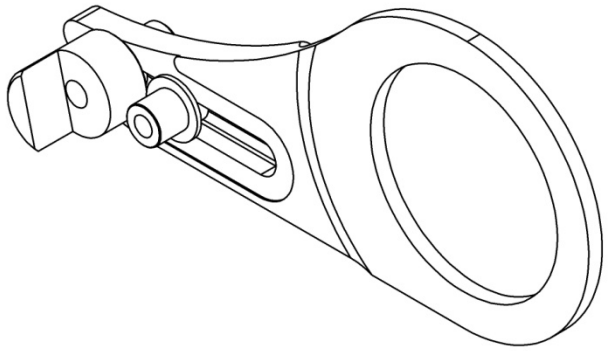
ACS (Anti-Chain Suck) Installation Instructions (K13-240)



K13-240
ACS

Description:

The three most common types of chain suck for a mountain bike are (assuming no damage to the drivetrain):

1) Excessive chain 'slap' - When a chain has too much 'slack' underneath the chainstay of the frame and is ridden over rough terrain, large amounts of movement of the chain will occur, this referred to as chain slap. During moments of pedaling this chain slap can allow the chain to be caught between the frame's chainstay and the chainrings of the crankset resulting in the chain being 'sucked' up.

2) Shift Ramp Snags - When a shift is initiated by the front derailleur and the chain is in transition from a small ring to a larger ring, the shift ramps that are designed into certain chainrings, can catch the chain when being returned to the rear derailleur. During moments of pedaling this chain slap can allow the chain to be caught between the frame's chainstay and the chainrings of the crankset resulting in the chain being 'sucked' up.

3) Excessive Mud Build-up - In some circumstances riding conditions can be considered severe such as mud. During muddy conditions a build up mud and debris between individual chainrings and chainrings and a frame's chainstay can cause a chain to be 'sucked' up.

The K-Edge ACS series is designed to prevent only two of the three most common types of chain suck - chain slap and snags. The ACS is not designed to stop a chain but rather deflect and prevent a chain from being caught in a situation that would cause an inevitable chain suck.

Note:

Please be aware of the capabilities of our ACS device and that it is not a chain guide but rather a deflector preventing the chain from entering a situation of a chain suck.

This device is not designed to come into direct-constant contact with the chain during normal riding conditions, doing so will damage the ACS.

Compatibility:

The K-Edge ACS will not work with bike frames that utilize a 'DW' link or dropped chainstay. Check the design of your frame prior to installation of this product to confirm proper fitment.

The K-Edge ACS series can be used with triple MTB cranksets, double specific cranksets and triple cranksets with a double chainring setup. Also, compatible with an 'E-Type' or 'Bottom Bracket Mount' front derailleur utilizing external bottom bracket cups or NON-GXP bottom brackets with 68mm and 73mm BB shells.

Warnings:

All K-Edge products are to be installed by a professional bike mechanic.

These instructions are generalized to accommodate a wide ranges of setups for a bike. If your setup does not match what is being described, take extra care in the process of your setup and contact K-Edge Support if you have any questions.

Improper installation of any K-Edge product or use outside of its design intentions could lead not only to damaging the bike but could also cause personal injury to the rider.

Parts Included:

- K13-240:
  - ✓ 1x Dirt ACS
  - ✓ 1x 22-24T Puck
  - ✓ 1x 32-34T Puck
  - ✓ 1x 28-32T Double Specific Puck

Tools/Items Required:

- ✓ Manufacturer's Instructions with torque specs for Crankset and Bottom Bracket
- ✓ Bottom Bracket Tool
- ✓ Torque Wrench
- ✓ Metric Allen set (3mm for pucks)

Installation Steps:

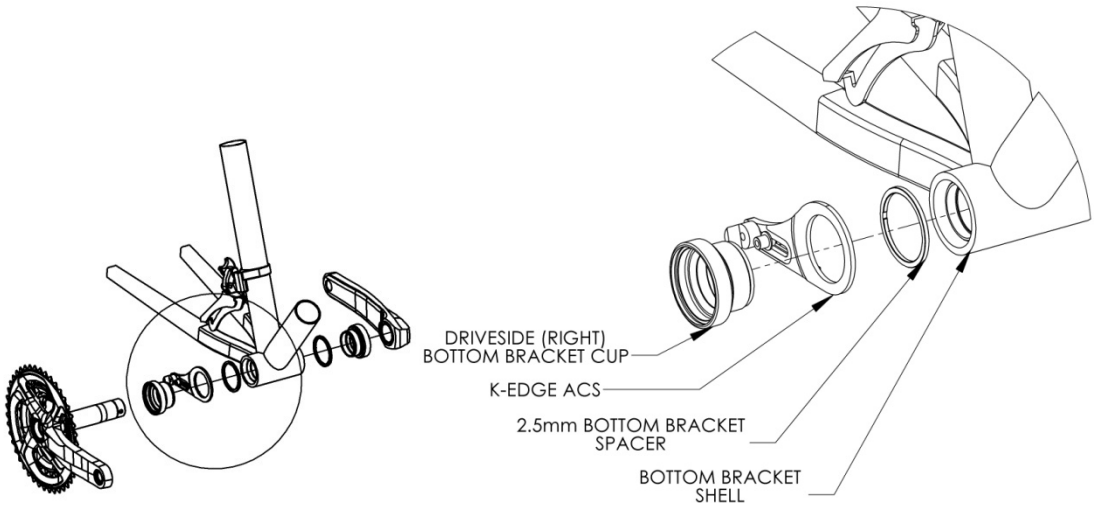
1. Determine which pucks are need for your set up:
    a. Standard Triple Cranksets : 22-24T Puck and 28-32T Puck
    b. Triple Crankset with only two Chainrings: 32-34T Puck only
    c. Double Specific Cranksets: 28-32T Puck only

2. Install the appropriate pucks onto the ACS base and position them as far away from the BB mount as possible and lightly tighten bolts.

3. Remove crankset per manufacturer's recommendations.

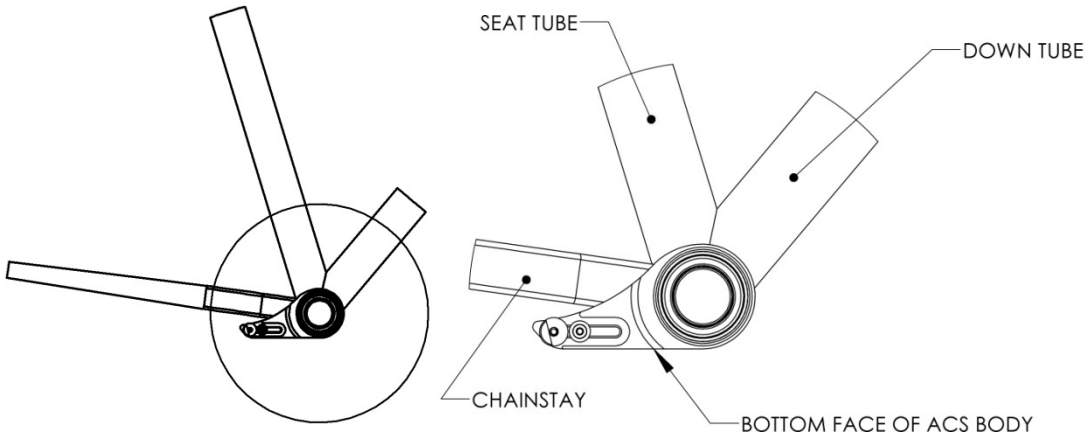
4. Remove driveside (right side) bottom bracket cup.

5. Replace 2.5mm spacer (normally reserved for an 'E-Type' front derailleur) with the ACS if working with a 73mm BB shell. If working with a 68mm BB shell, place the 2.5mm spacer in between the ACS and the BB shell and install components in accordance to the image below:



6. Reinstall driveside (right side) bottom bracket cup and hand-tighten only.

7. Position the ACS parallel to the ground when the bike is on its wheels an allowance of 10° or less from horizontal is acceptable. See image below:

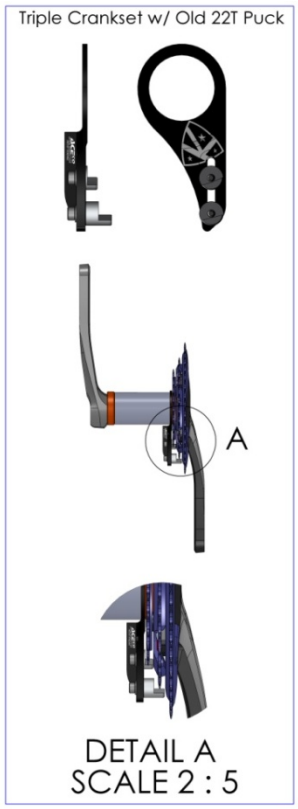


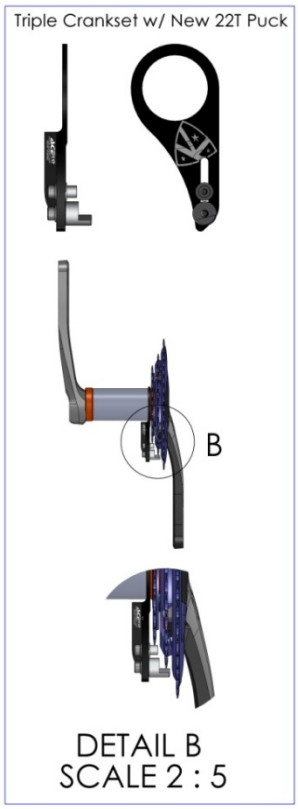
8. Torque the driveside (right side) bottom bracket cup per manufacturer's recommendations while maintaining ACS parallel to the ground.

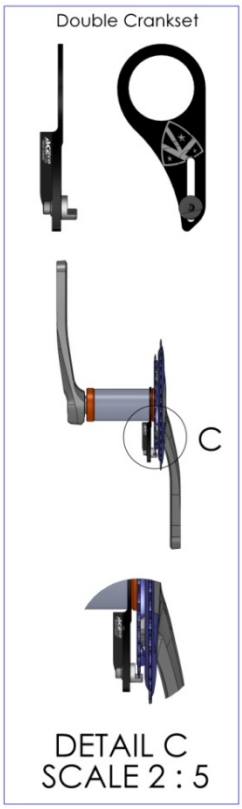
9. Install the crankset according to manufacturer's instructions.

10. Adjust pucks .5mm-1mm above the tallest tooth of the chainring by sliding the pucks along the slot of the ACS and rotate crank arms to check for clearance.

11. Check that all components are secure and ride.







Troubleshooting:

- Pad does not get close enough to chain.
    - Check that the secondary 2.5mm spacers (for 68mm BB Shells only) is placed between the ACS and BB shell.
    - Check to ensure that the 2.5mm spacer (normally reserved for an 'E-Type' front derailleur) is not installed with the ACS.
- Pad rubs excessively with chain and there are no spacers installed.
    - Check to see if your crankset is compatible with the ACS.
    - Check the alignment of the ACS and ensure it is not bent outward towards the chainrings.
- There is a clicking noise and/or my front shifting is not operating normally.
    - Check for clearance between the ACS and the front derailleur cage and adjust accordingly.
    - Check to ensure that the 2.5mm spacer (normally reserved for an 'E-Type' front derailleur) is not installed with the ACS.
    - Check that the installation of the crankset is in accordance to the manufacturer's recommendations.
- Chain still falls off to the inside while I ride.
    - Check that the pad is positioned as close as possible (without touching/rubbing) to the chain and adjust accordingly.
    - Check the alignment of the ACS and ensure it is not bent inward towards the frame.
    - Check position of the ACS, the angle can be either halfway between down-tube and seat-tube of frame OR to where the top plane of the pad is parallel to the ground when the bike is on its wheels.
- The ACS moved/rotated when it was guiding the chain onto the small chainring.
    - Check that the driveside (right side) cup was installed properly to the manufacturer's recommendations - tighten to the upper end of the torque specification range.
    - Check that all components are properly installed and accounted for - a missing/inappropriate spacer can cause a lack of friction within the ACS and the frame.
    - Check that there is no grease between the ACS and the BB Cup and the BB shell/2.5mm spacer.

Support/Contact:

If problem(s) still persist after troubleshooting, please contact K-Edge Support for further assistance at info@K-Edge.com immediately. Please be sure to include your full name, phone number, K-Edge product purchased, brand and model of bike, crankset with ring sizes, front derailleur, cassette size (if applicable), rear derailleur (if applicable) and a brief description of your problem.