

“CRACKING NOISES”

Pinion transmissions operate quietly, without distracting noises. If noises occur and the transmission shifts properly, the noises do not originate in the transmission and have a different cause. Use the following checklist, step-by-step, to identify the cause.

1

1. FRAME CONNECTION



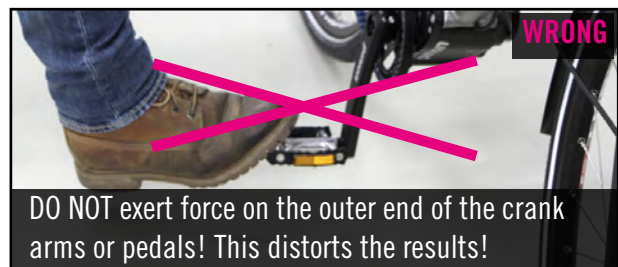
Securely hold the bicycle on the main frame. Use your foot to push against the input shaft.



Turn the bicycle and push against the input shaft from the other side.

NO, NO CRACKING NOISES → CONTINUE WITH CHECK 2
YES, IT MAKES CRACKING NOISES!

1. Remove transmission according to instructions.
2. Push out, clean and grease adapter sleeves.
3. Clean and check faces on the frame.
4. Check screw fittings of special components (e.g., Tout Terrain TBA system).
5. Apply carbon assembly paste.
6. Install transmission according to instructions.



DO NOT exert force on the outer end of the crank arms or pedals! This distorts the results!

PROBLEM NOT CORRECTED → CONTINUE WITH CHECK 2



2. CRANK CONNECTION



Apply load to crank arms in horizontal position. Rock from the knees – **WITHOUT** applying driving force!



Rotate crank arms 180°. Rock again – **WITHOUT** applying driving force!

NO, NO CRACKING NOISES → CONTINUE WITH CHECK 3
YES, IT MAKES CRACKING NOISES!

1. Remove crank arms according to instructions.
2. Clean crank tothing.
3. Check wear pattern of crank tothing.
4. If wear pattern is not OK: contact Pinion.
5. If wear pattern is OK: continue with step 6.
6. Mount crank arms according to instructions.

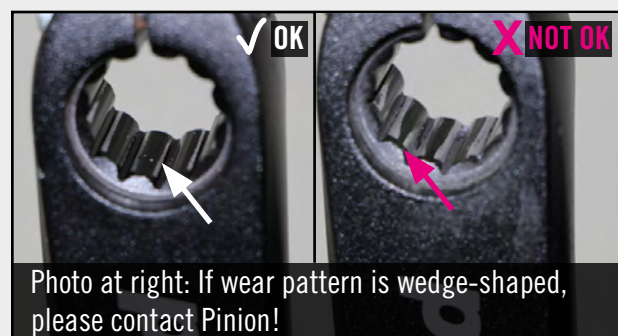
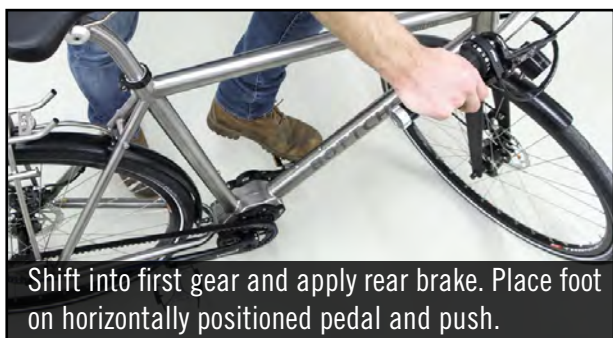


Photo at right: If wear pattern is wedge-shaped, please contact Pinion!

PROBLEM NOT CORRECTED → CONTINUE WITH CHECK 3



3. DRIVETRAIN



Shift into first gear and apply rear brake. Place foot on horizontally positioned pedal and push.



Rotate transmission (not the crank arms) by 90° and push again. Repeat procedure 4x.

**NO, NO CRACKING NOISES → CONTINUE WITH CHECK 4
YES, IT MAKES CRACKING NOISES!**

1. Remove chain sprocket or belt pulley. If using a spider, remove fittings from spider.
2. Clean and then grease all contact surfaces; mount fittings on spider with zero backlash.
3. Grease lock-ring screw fitting and tighten with 40 Nm instead of 30 Nm (left-handed thread!).
4. Remove the sprocket or belt pulley from the rear hub. Clean, grease and remount.
5. Check fastening of rear wheel and screw connections on dropouts.
6. Check toothing on freehub body and bearings of rear hub.
7. Check alignment of toothed belt according to manufacturer's specifications.
8. Check toothed belt or chain for wear.

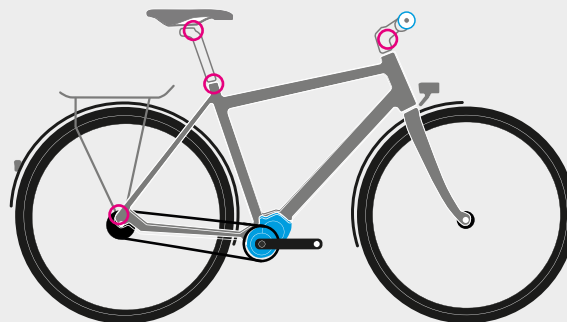
PROBLEM NOT CORRECTED → CONTINUE WITH CHECK 4

CHECKED

4. OTHER COMPONENTS

LIST OF POSSIBLE SOURCES OF CRACKING NOISES:

- Connection between saddle and seatpost
- Connection between seatpost and frame
- Defective rear hub
- Defective freehub
- Fastening of disc brake caliper
- Rear linkage on full-suspension bicycles
- ...



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TECHNICAL SUPPORT

FOR SERVICE REQUESTS, ALWAYS HAVE THE TRANSMISSION SERIAL NUMBER
 READY!SUPPORT@PINION.EU TEL.: +49 (0)711/217 491-590