# ZINGER SINGLESPEED CONVERSION KIT INSTRUCTIONS

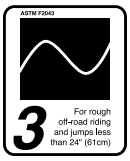
**Thanks for buying a Problem Solvers ZINGER SINGLESPEED CONVERSION KIT!** We're always looking to provide the products that allow you to configure your bike any way you want. So if you want to convert your XD™ driver-equipped rear wheel into a one gear wonder, you've chosen the right product (XD is a trademark of SRAM Corporation.)

⚠ **WARNING:** CYCLING CAN BE DANGEROUS. BICYCLE PRODUCTS SHOULD BE INSTALLED AND SERVICED BY A PROFESSIONAL MECHANIC. NEVER MODIFY YOUR BICYCLE OR ACCESSORIES. READ AND FOLLOW ALL PRODUCT INSTRUCTIONS AND WARNINGS INCLUDING INFORMATION ON THE MANUFACTURER'S WEBSITE. INSPECT YOUR BICYCLE BEFORE EVERY RIDE. ALWAYS WEAR A HELMET.

For complete ASTM guidelines, and additional product safety information, please visit problemsolversbike.com/safety

## COMPATIBILITY & INTENDED USE

- Problem Solvers Zinger Singlespeed Conversion Kit is designed to be used with XD driver hubs only
- Only use Problem Solvers 3/32" 6-bolt singlespeed cogs
- Only use chainrings without shift ramps and pins for singlespeed or dinglespeed applications. Chainrings with shift ramps and pins could cause chain loss
- Chainrings and chains must be compatible with 3/32" cogs

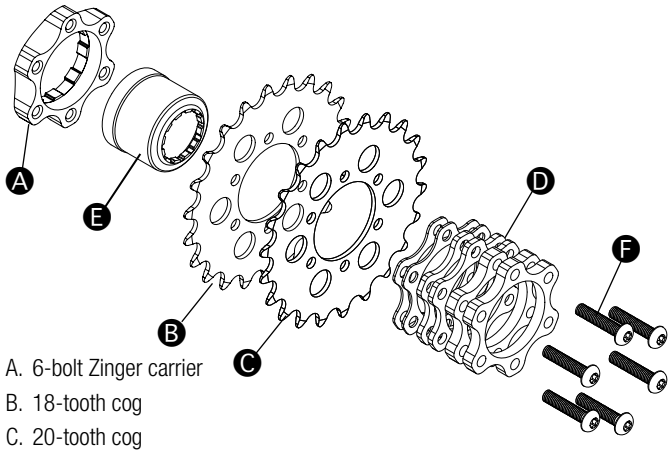



Intended for ASTM 3 conditions. This is a set of conditions for the operation of a bicycle on a regular paved surface, unpaved and gravel roads and trails with moderate grades with irregular terrain where loss of tire contact with the ground may occur. As well as rough trails and unimproved trails that require technical skills. Jumps and drops are intended to be less than 61cm (24").

The bicycle frame must be capable of being used as a singlespeed, whether through horizontal dropouts, adjustable swinging dropouts, eccentric bottom bracket, or otherwise.

⚠ **WARNING:** A chain guard should be used with all non-derailleur drivetrains to avoid risk of entrapment of fingers or clothing between a chainwheel and the chain.

## INCLUDED PARTS




A. 6-bolt Zinger carrier
B. 18-tooth cog
C. 20-tooth cog
D. 6-bolt Zinger spacers: 1mm (2), 2.5mm (2), 5mm (2)
E. Zinger driver nut
F. T25 M5 bolts (6)

## TOOLS

Chain whip
Cassette removal tool for SRAM XD driver
Adjustable wrench
T25 Torx wrench
Torque wrench that measures in Newton meters

## INSTALLATION

1. Remove cassette from the rear wheel.
2. Install the Zinger 6-bolt carrier onto the XD driver freehub spline (figure 1).

Figure 1

3. Place the Zinger driver nut onto the 6-bolt carrier and thread the nut onto the freehub driver threads. Torque Zinger driver nut to 30Nm (figure 2).

⚠ **CAUTION:** Be sure you have full engagement of cassette tool with the Zinger driver nut spline and initially hand-tighten the Zinger driver nut onto the free hub body to prevent cross threading.

Figure 2

4. Determine the spacer configuration you will need according to the desired chainline and place spacers onto the Zinger driver nut (figure 3).

Figure 3

### MEASURING CHAINLINE

Chainline is measured from the centerline of the frame to the center of the chain. Measure chainline with a ruler. Hold the ruler against the seat tube or downtube and measure the distance from the middle of the seat tube to the middle of the chainring. Take the front chainline measurement and, measuring from the rear cog, your chainline should roughly line up with the center of your hub shell. Before tightening the entire assembly, test fit all of your parts to make sure your chainline is straight. Visually inspecting your chainline should be sufficient.

5. Place desired Problem Solvers cog onto spacer stack.
6. Place the remaining spacers on the Zinger driver nut on the other side of the cog and secure the spacer stack and cog to the Zinger carrier using the T25 M5 bolts. Torque the M5 bolts to 7Nm (figure 4).

Figure 4

## INSTALLATION USING TWO COGS (DINGLESPEED)

**NOTE:** It is possible to set up your Zinger Kit as a 'dinglespeed,' using two front chainrings and two rear cogs with equal differences in tooth count (i.e. 20/18t cogs with 36/38t chainrings). If you intend to run this configuration, follow these steps to ensure proper installation.

⚠ **WARNING:** To accommodate the addition of a second Problem Solvers cog you must remove one 1mm spacer. This 1mm spacer will be leftover at the end of installation.

1. Remove cassette from the rear wheel.
2. Install the Zinger 6-bolt carrier onto the XD driver freehub splines (figure 5).

Figure 5

3. Place the Zinger driver nut onto the 6-bolt carrier and thread the nut onto the freehub driver threads. Torque Zinger driver nut to 30Nm (figure 6).

⚠ **CAUTION:** Be sure you have full engagement of cassette tool with Zinger driver nut spline and initially hand-tighten the Zinger driver nut onto the free hub body to prevent cross threading.

Figure 6

4. For dinglespeed applications, the two front chainrings should be in-line with the two rear cogs. Determine the spacer configuration you will need for the first cog according to the desired chainline (to determine chainline see above) (figure 7).

Figure 7

5. Place the first desired Problem Solvers cog for your dinglespeed onto the spacer stack.
6. Between your first and second cogs install 6–7.5mm of spacers depending on available spacers and optimal chainline (figure 8).

Figure 8

7. Place the remaining spacers (minus the 1mm spacer set aside earlier) on the Zinger driver nut on the other side of the second cog and secure the spacer stack and cogs to the Zinger carrier using the T25 M5 bolts. Torque the M5 bolts to 7Nm (figure 9).

Figure 9

⚠ **WARNING:** A wheel attachment device that is not properly secured can allow the wheel to loosen or come off, suddenly stop the wheel, decrease your control, and cause you to fall.

## ONGOING MAINTANENCE

Inspect your Zinger Kit for signs of excessive wear, cracks, or other fatigue before every ride. If you suspect your Zinger Kit has been damaged, return it to the shop where it was purchased to be inspected by a professional bicycle mechanic.

Periodically check the bolts and driver nut for tightness. Check chain tension before every ride. Improper chain line or insufficient chain tension may allow the chain to fall off causing a crash and serious injury.

## WARRANTY PROCESS

If you and your shop think your Problem Solvers product is worthy of a warranty inspection, please return the product to the original place of purchase, accompanied by a sales receipt.

For complete warranty information, visit problemsolversbike.com/safety