

CRANK OPTIONS

FAIRDALE WEEKENDER ARCHER
9-SPEED / FRICTION DRIVETRAIN
BUILD SPECIFICATION · V.2

→ 1x / 2x / 3x

→ BUDGET TIERS

→ NEW & USED SOURCING

→ MARKETPLACE LINKS INCLUDED

01 FRONT END ARCHITECTURE

DECISION / FIRST PRINCIPLES

1x SINGLE

Simpler, trendy, fewer parts. Choose between wide range OR tight cog spacing — you can't have both with a 9-speed cassette. Friction works fine but loses the trim advantage.

ADEQUATE

2x DOUBLE

Best balance for drop-bar all-road. Wide range + tight spacing. Front shifts give big jumps, rear gives fine-tune. Friction trim is silent and infinite.

RECOMMENDED

3x TRIPLE

Most range, most flexibility. Looks "wrong" on a modern drop-bar bike which is precisely why xbiking loves it. Genuinely functional for loaded touring and steep terrain.

02 CRANK MATRIX

22 OPTIONS / ALL TIERS

1x		FREE + RING
CRANK	Rockhopper crank, remove big & granny	
RINGS	32T or 38T NW	
PRICE	\$15–25	
SOURCE	Have it	
FIND IT		

1x		BUDGET FUNCTIONAL
CRANK	Shimano Deore M4100 / M5100	
RINGS	30–34T	
PRICE	\$80–100	
SOURCE	New	
FIND IT		

1x		BUDGET SEXY
CRANK	Sugino XD600 or RD2	
RINGS	38–42T NW	
PRICE	\$80–120	
SOURCE	Used	
FIND IT		

1x		SEXY MODERN
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CRANK	White Industries M30 + ring
RINGS	38-42T NW
PRICE	\$400-450
SOURCE	New
FIND IT	

1x GOD TIER ★

CRANK	White Industries VBC, 1x setup
RINGS	Any ring
PRICE	\$500-600
SOURCE	New
FIND IT	

1x DEEP CUT

CRANK	Sugino Mighty Tour vintage + NW
RINGS	42-44T NW
PRICE	\$60-150
SOURCE	Used
FIND IT	

2x FREE

CRANK	Rockhopper crank, big ring removed
RINGS	32/22 or 42/32
PRICE	\$0
SOURCE	Have it
FIND IT	—

2x BUDGET FUNCTIONAL

CRANK	Shimano Sora R3000 / Tiagra 4700
RINGS	50/34 or 46/30
PRICE	\$60-100

SOURCE	Used
FIND IT	

2x		BUDGET SEXY
CRANK	Sugino Alpina 2	
RINGS	46/30 or 48/34	
PRICE	\$180–220	
SOURCE	New	
FIND IT		

2x		VINTAGE SEXY
CRANK	Shimano 600 / Ultegra 6400–6500 reringed	
RINGS	46/30 modified	
PRICE	\$50–90	
SOURCE	Used	
FIND IT		

2x		FUNCTIONAL NEW
CRANK	Shimano GRX RX600 / RX810	
RINGS	46/30	
PRICE	\$180–280	
SOURCE	New	
FIND IT		

2x		SEXY MODERN
CRANK	White Industries R30 or G30	
RINGS	46/30	
PRICE	\$450–500	
SOURCE	New	
FIND IT		

2x		GOD TIER MODERN ★
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CRANK	White Industries VBC
RINGS	46/30 or custom
PRICE	\$500–550
SOURCE	New
FIND IT	

2x	GOD TIER VINTAGE ★
CRANK	Rene Herse cranks
RINGS	Custom
PRICE	\$600–800
SOURCE	New
FIND IT	

2x	DEEP CUT
CRANK	Sugino XD2 / Mighty Tour vintage
RINGS	46/30 or 48/32
PRICE	\$80–180
SOURCE	Used
FIND IT	

3x	FREE
CRANK	Rockhopper crank as-is
RINGS	42/32/22 or 44/32/22
PRICE	\$0
SOURCE	Have it
FIND IT	—

3x	BUDGET FUNCTIONAL
CRANK	Shimano Deore M590 / LX M580
RINGS	44/32/22
PRICE	\$40–80

SOURCE	Used
FIND IT	

3x		BUDGET SEXY
CRANK	Shimano XT M770 / M780 3x	
RINGS	44/32/22	
PRICE	\$100–180	
SOURCE	Used	
FIND IT		

3x		VINTAGE GOD TIER ★
CRANK	Shimano XT M730 / M732 / M737	
RINGS	46/36/24	
PRICE	\$150–300	
SOURCE	Used	
FIND IT		

3x		VINTAGE GOD TIER ALT ★
CRANK	Suntour XC Pro / XC Comp	
RINGS	48/38/28	
PRICE	\$200–400	
SOURCE	Used	
FIND IT		

3x		SEXY MODERN
CRANK	Velo Orange Grand Cru	
RINGS	46/36/26	
PRICE	\$200–260	
SOURCE	New	
FIND IT		

3x		GOD TIER ULTIMATE ★
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CRANK	Rene Herse triple
RINGS	Half-step + granny custom
PRICE	\$700–900
SOURCE	New
FIND IT	

03 TIER SUMMARY

COST BANDS / BEST MOVES

<p>PURE FREE</p> <p>\$0</p> <p>Use Rockhopper crank, 2x or 3x</p>	<p>BUDGET FUNCTIONAL</p> <p>\$50–100</p> <p>Used Shimano Deore / LX or 105</p>
<p>BUDGET SEXY</p> <p>\$150–220</p> <p>Sugino Alpina 2 or vintage Ultegra</p>	<p>FUNCTIONAL NEW</p> <p>\$180–300</p> <p>Shimano GRX or modern Deore</p>
<p>SEXY MODERN</p> <p>\$400–500</p> <p>White Industries R30 / M30</p>	<p>GOD TIER MODERN</p> <p>\$500–700</p> <p>White Industries VBC</p>
<p>GOD TIER VINTAGE</p> <p>\$200–400</p>	<p>GOD TIER ULTIMATE</p> <p>\$700+</p>

04 HOW TO RIDE 3x

THE OPERATOR'S MANUAL

MENTAL MODEL

Front shifter is a **range selector**. Rear shifter is your **fine tune**. You're not constantly working both — you pick the front ring for the terrain, then use the rear for moment-to-moment cadence.

RING USAGE (44/32/22)

Big · 44T Flats, descents, tailwind, fast cruising Smallest 5–6 cogs

Middle · 32T Default. 70–80% of all riding. Any cog — flexible

Granny · 22T Steep climbs, loaded touring, gravel grinds Largest 4–5 cogs

SHIFTING FLOW

1. Start in **middle ring**. Use rear shifter for most adjustments.
2. Approaching a hill? Shift to **granny BEFORE** you slow down — anticipate.
3. Long flat or descent? Shift up to **big ring**.
4. Always shift front under **light pedal pressure**. Ease up briefly.

THE CROSS-CHAIN RULE

Imagine a line from front ring to rear cog. Keep it *roughly* straight.

- **Big × biggest cog** = sharp angle inward. Avoid.
- **Granny × smallest cog** = sharp angle outward. Avoid.
- **Big × small** and **granny × big** = your highest and lowest gears. Totally fine — these are the diagonal extremes the system is designed for.

FRICION SUPERPOWER: INFINITE TRIM

Indexed front shifters have 2–3 fixed trim positions per ring. Friction has none — push lever until ring shifts, then nudge back a hair to silence chain rub.

You can fine-tune the FD cage to *any* position. This is why friction-front-shifting people never hear chain rub: it can always be trimmed out perfectly.

HALF-STEP + GRANNY TRADITION

Old touring setup: big and middle rings only 4–6T apart (e.g. 46/42/24). Front shifts give *small* gear changes, rear gives *big* jumps. Lets you fine-tune cadence on the front, find ballpark on the rear. Mostly obsolete after brifters, but a beloved xbiking deep cut.

WHY 3× GOT ABANDONED

Marketing. 1× is easier to sell (one less shifter). Modern wide-range cassettes sort of replace the granny. But: 3× has tighter cog spacing *and* wider total range. A 44/32/22 × 11-32 has ~588% range — more than 1×12 with a 10-52 — and no huge cadence jumps. Hard to beat for touring.

05 GEAR INCH GRID

44/32/22 × 11–32 / 700C / 38MM TIRE

← SWIPE →

Big · 44T 106.0 89.7 77.7 68.6 61.4 55.6 48.6 41.7 36.4

Middle · 32T 77.1 65.2 56.5 49.9 44.6 40.4 35.3 30.3 26.5

Granny · 22T 53.0 44.8 38.8 34.3 30.7 27.8 24.3 20.8 18.2

High range (flats / descents) Mid range (default) Low range (climbs)

Cross-chain (avoid)



MARKETPLACES

- FB Marketplace · Bikes
- FB MP · Bike Parts
- eBay Components
- Chicago Craigslist · Bike Parts
- Pinkbike BuySell
- r/bicyclemarketplace
- r/xbiking

CHICAGO LOCAL

- Working Bikes Cooperative
- West Town Bikes
- The Bike Lane
- Boulevard Bikes (Logan Sq)
- Heritage Bicycles

NEW / FRICTION-FRIENDLY

- Velo Orange
- Rivendell Bicycle Works
- Rene Herse Cycles
- White Industries
- Universal Cycles
- Competitive Cyclist
- Paul Components

FAIRDALE ARCHER · BUILD SPEC V.2

9-SPEED FRICTION DRIVETRAIN · CRANK OPTIONS

HELVETICA NEUE · AFTER VIGNELLI

GENERATED FOR GAREN · 2026