

INTRODUCTION

**RIDING STYLES** 

PERFORMANCE

**PRODUCTS** 

**TOOLS** 







## **ADVANCING HOW THE WORLD MOVES**

1911 FOUNDED DENVER, CO





1942 **CO-DEVELOPED** SYNTHETIC RUBBER MASS PRODUCTION



1986 INTRODUCED REVOLUTIONARY POLY CHAIN SYNCHRONOUS BELT



1917 INVENTED V-BELTS

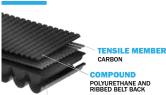


1980 ENGINEERED AND

DEVELOPED BELTS
TO REPLACE CHAINS
ON MOTORCYCLES



2006 POLY CHAIN GT CARBON



WEAR-RESISTANT NYLON FABRIC









2021 >> GATES MOTO X9 INTRODUCED MOTO X9

2007 GATES CARBON DRIVE LAUNCHES FIRST BICYCLE BELT DRIVE SYSTEM



In 2012 Frank Schneider conquers Alpe D'huez Megavalanche Cup



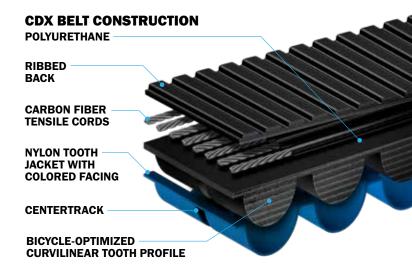






# THE STRENGTH OF CARBON

Gates Carbon Drive is named for the advanced carbon fiber tensile cords that give our belts their superior strength—surpassing the ISO standard for chains. Carbon fiber has an incredible strength-to-weight ratio that makes our belts as strong as steel but at a fraction of the weight. Unlike chains, our belts never stretch. Our carbon reinforced belts are paired with Gates patented CenterTrack™ sprockets, which provide industry-leading durability and performance.

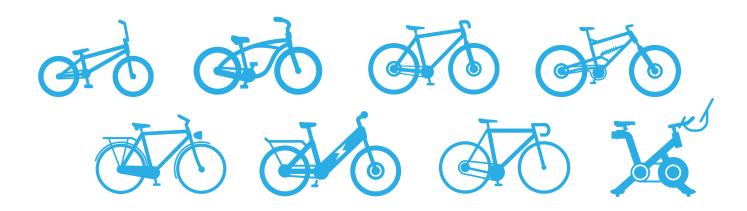


# THE BIKE INDUSTRY BELT DRIVE OF CHOICE

5 (4)+

More than 500 bike brands worldwide use Gates Carbon Drive because it is the industry standard for high quality, high performance, and top service. Bicycle brands consistently call Gates Carbon Drive one of the bicycle industry's top suppliers for quality and reliability—a reputation

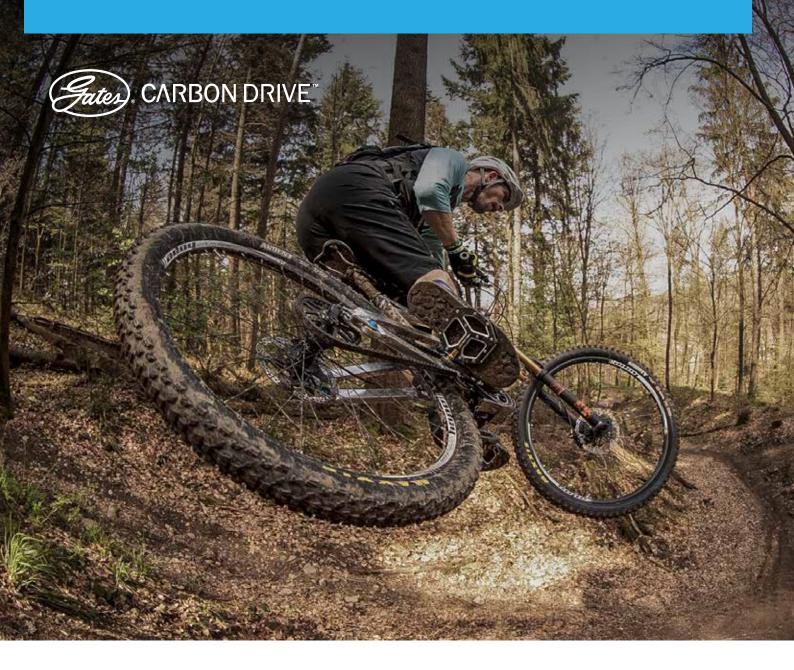
we work hard to keep. Gates Carbon Drive products can be found on thousands of bike models across all categories and styles, from electric bikes and city commuters to mountain bikes, cargo, BMX, global trekking, foldable, tandem, and even spin class stationary bikes.



# PARTNERING WITH THE BEST DRIVE TRAIN TECHNOLOGIES

Gates is helping to revolutionize bike design by leading a shift away from derailleurs and toward alternative gear shifting technologies. Derailleurs are fine for some uses, but like chains they can be high-maintenance. Gates is driving this shift to low-maintenance cycling by partnering with the best internal hub gear and gearbox brands—Shimano, Rohloff, enviolo, Pinion, Sturmey-Archer, and more. Gates engineers have also designed sprocket systems that integrate with all the leading eBike drives—Bosch, Shimano STEPS, Brose, Bafang, Panasonic, Yamaha, and more.





### RACE PROVEN. ADVENTURE TESTED.

Gates Carbon Drive™ is race proven on the World Cup Downhill circuit and is UCI approved for elite level BMX racing. It has powered mountain bikers, cyclocross, and BMX racers to podium finishes. Bike packers and adventure cyclists have relied on Gates Carbon Drive to set world records and conquer some of the planet's most extreme conditions, from the Sahara Desert to Arctic snowfields to the highest mountains.





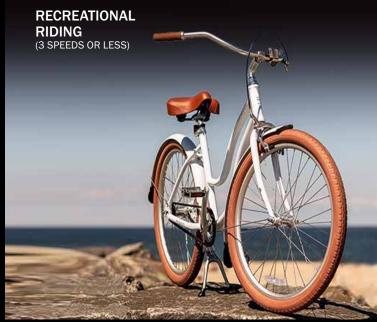


# CHOOSE YOUR RIDING STYLE

Gates Carbon Drive delivers a powerful and reliable ride over any terrain with a product line range that includes high-performance, urban, eBikes, leisure, and tandem bicycles.

CDN

NEW SIDETRACK



LOW MILEAGE COMMUTING





## CDC

CITY COMMUTING

MIDMOTOR EBIKES (50NM OR LESS)



## CDX

PREMIUM MIDMOTOR EBIKES
HIGH PERFORMANCE COMMUTING
MOUNTAIN BIKES

## **CDX:EXP**

**TREKKING** 

**EXTREME CONDITIONS** 







CARBON DRIVE PRODUCT LINE P	OSITIONING	
DESIGNED FOR	Seasonal, recreational cyclists looking for their first belt-driven bike	Seasonal, recreational cyclists who commute occasionally
PRODUCT DIFFERENTIATION	Entry-level performance and price vs. chain; few gears	Balance between performance and value for pedal bikes
BELT TRACKING	SideTrack™	CenterTrack™
LIFE/MILEAGE*	**	**
DEBRIS-SHEDDING RATING	2	3
E-BIKE MOTOR COMPATIBILITY		
GEAR COMPATIBILITY	Single-speed (SS), 3-Speed, 7-Speed Internal Gear Hub (IGH)	SS, 3-11 Speed IGH

SPROCKET TECHNICAL COMPARISON									
SPROCKET LOCATION	FRONT	REAR	FRONT						
MATERIAL	6061 T6 Aluminum	Hardened, Chromoly Steel	Glass-filled Nylon Composite						
COATING	Standard	Zinc							
CENTERTRACK			CenterTrack (FULL)						
DEBRIS PORTS	Und	ercut	Wide, Angled						
COLOR	Black/Silver	Silver	Black						
TOOTH RANGE	46, 50, 60	22	46, 50, 55						
WEIGHT (g)**	753***	142	48						
eBIKE SPIDER ASSEMBLIES	N	/A	N/A						

	,	,
BELT TECHNICAL COMPARISON		
COMPOUND	Engineered Polymer	Engineered Polymer
CENTERTRACK GROOVE	No	Yes
TENSILE CORD	Carbon	Carbon
PITCH	11mm	11mm
BELT LENGTHS (TOOTH COUNT)	111-122	111-132
BELT/JACKET COLOR	Black/Black	Black/Black

<sup>\*</sup> Mileage estimates application specific - data available on request.

<sup>\*\*\*</sup> SideTrack front weight includes crank, sprocket, guards, & guard hardware



Pavement



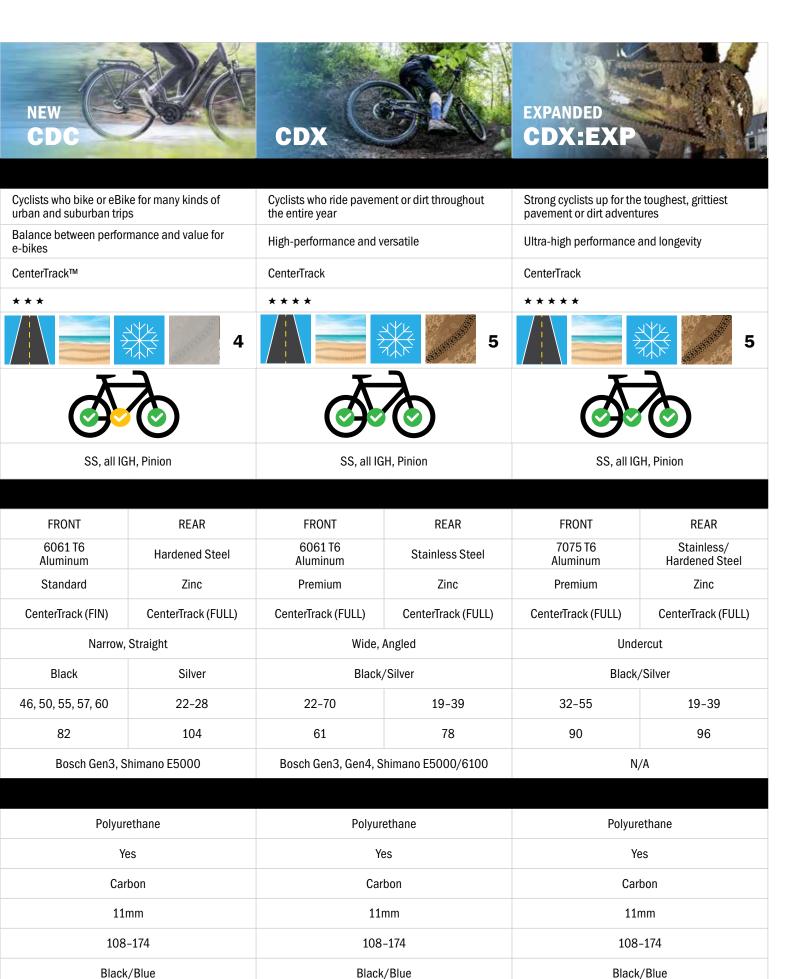


Snow



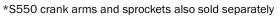
Mud

<sup>\*\*</sup> Sprocket weight assumes 46T Front, 22T Rear



# **CRANKSETS**

S550 CRANKSET*								
Sprocket Series	CDX:EXP							
Mounting Type	DIRECT MOUNT							
Crank Arm Length	170, 175							
Crank Finish/Color	MATTE BLACK							
Tooth Count	46, 50, 55							
ISO Compliant Guard	AVAILABLE**							
Bottom Bracket	EXTERNAL, INCLUDED***							



<sup>\*\*</sup>Available on complete cranksets only

<sup>\*\*\*</sup>Also available without BB; contact Gates Carbon Drive



S300 CRANKSE	T
Sprocket Series	CDX
Mounting Type	5-BOLT 130MM BCD
Crank Arm Length	170, 175
Crank Finish/Color	POLISHED BLACK OR MATTE SILVER
Tooth Count	46, 50*, 55*, 60*
ISO Compliant Guard	AVAILABLE IN 46T, 50T, 55T
Bottom Bracket	EXTERNAL, INCLUDED
*D:0 0	

<sup>\*</sup>Di2 Compatible available

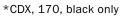


# **CRANKSETS**

S250 CRANKSET							
Sprocket Series	CDX OR CDN						
Mounting Type	5-BOLT 130MM BCD						
Crank Arm Length	170, 175						
Crank Finish/Color	BLACK OR SILVER; MATTE WITH POLISHED FACE						
Tooth Count	46, 50, 55						
ISO Compliant Guard	INCLUDED						
Bottom Bracket	JIS SQUARE TAPER, NOT INCLUDED						



S150 CRANKSET							
Sprocket Series	CDX OR CDN						
Mounting Type	5-BOLT 130MM BCD						
Crank Arm Length	170, 175						
Crank Finish/Color	MATTE BLACK OR MATTE SILVER						
Tooth Count	46, 50, 55, 60*, 70*						
ISO Compliant Guard	AVAILABLE						
Bottom Bracket	JIS SQUARE TAPER, NOT INCLUDED						







# **SPECIFIC ASSEMBLIES**



BOSCH MOTORS												
	GEN4	GEN3										
Item	SPIDER ASSEMBLY	SPIDER ASSEMBLY										
Mounting Type	4- AND 5-BOLT 130MM BCD	5-BOLT 130MM BCD										
Sprockets	CDX	CDX / CDC										
Color	BLAC	CK										
Tooth Count	39*, 42*, 46*, 48, 50, 55, 60, 63	46, 48**, 50, 55, 60, 63										
ISO Compliant Guard	AVAILABLE	AVAILABLE										

<sup>\*4-</sup>Bolt spiders. All other tooth counts are 5-Bolt spiders.



SHIMANO STEPS MOTORS									
	EP8/E6100/E5000								
Item	SPIDER ASSEMBLY								
Mounting Type	4-BOLT 104MM BCD								
Sprockets	CDX / CDC*								
Color	BLACK								
Tooth Count	39, 42, 46, 50, 55								
ISO Compliant Guard	AVAILABLE								

<sup>\*</sup>Only 46, 50, 55

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<sup>\*\*48</sup>T Assembly available only for use with Rohloff rear hubs.



## **SPECIFIC ASSEMBLIES**



FAZUA MOTOR A	FAZUA MOTOR ASSEMBLIES									
Item	SPIDER ASSEMBLY									
Mounting Type	5-BOLT 130MM BCD									
Sprockets	CDX CENTERTRACK									
Color	BLACK									
Tooth Count	50, 55, 60									
ISO Compliant Guard	AVAILABLE									

To achieve 51.7 beltline



For detailed information including eBike Assembly Part Numbers, reference Gates Carbon Drive eBike Integration Manual. GatesCarbonDrive.com/eBike

**NOTE:** Gates offers additional product solutions for the majority of motor manufacturers. For additional support, contact CarbonDrive@Gates.com.













# **FRONT SPROCKETS**

CDX F	CDX FRONT SPROCKETS																	
	Туре	Application	Material	Finish/ Color	Tooth Count													
CDX	4AA	4-BOLT, 104MM BCD	6061 ALUM	BLACK						39	42	46		50	55			
CDX:EXP	4BA	4-BOLT, 104MM BCD	7075 ALUM	BLACK						39		46		50	55			
CDX	5AA	5-BOLT, 130MM BCD	6061 ALUM	BLACK								46	48	50	55	6	) 6	3 70
CDX	5AA-D	5-BOLT, 130MM BCD, DISHED	6061 ALUM	BLACK								46	48	50	55	6	)	
CDX:EXP	MBA-15.0	GATES DIRECT MOUNT, URBAN*	7075 ALUM	BLACK								46		50	55			
CDX:EXP	MBA-5.8	GATES DIRECT MOUNT, ROHLOFF/MTB*	7075 ALUM	BLACK								46		50	55			
CDX	PMN	PINION	STAINLESS	SILVER					32									
CDX:EXP	PMN	PINION	STAINLESS	SILVER						39								
CDX:SL	PBA	PINION	7075 ALUM	BLACK					32	39								
CDX	BMN**	BOSCH GEN2/REVONTE	STAINLESS	SILVER	22	24	26	28										

<sup>\*</sup>Compatible only with Gates S550 Cranks

<sup>\*\*</sup>Rohloff offset only available in 22T

CDC F	RONT SP	ROCKETS												
CDC	PSE	PINION	STAINLESS	SILVER		32	39							
CDC	4AT	4-BOLT, 104MM BCD	6061 ALUM	BLACK				46		50	55			
CDC	5AT-D	5-BOLT, 130MM BCD	6061 ALUM	BLACK				46	48	50	55	57 6	О	

CDN F	RONT SP	ROCKETS						
CDN	5CN	5-BOLT, 130MM BCD**	COMPOSITE	BLACK		46	50 55	

 $<sup>\</sup>star\star\text{CDN}$  front sprockets are only available pre-assembled to S150 or S250 cranksets.

All Front Sprocket Part Numbers begin with CT11 followed by Tooth Count and Type (e.g. CT11504AA or CT1139PBA).



**NOTE:** For sprockets not listed, please contact technical support at CarbonDrive@Gates.com.

# **REAR SPROCKETS**

CDX R	EAR S	PROCKETS															
	Туре	Application	Material	Finish/Color					To	oot	h C	oun	t				
CDX	XMN	SHIMANO 3-LOBE	STAINLESS	SILVER				22		24	26						
CDX	XMN-U <sup>†</sup>	SHIMANO 3-LOBE, UNIFIED (45.5MM)	STAINLESS	SILVER				22		24	26	28					
CDX	XMN-D*	SHIMANO 3-LOBE, DI2 (41.7MM)	STAINLESS	SILVER								28					
CDX	YMN-U	SHIMANO INTER-5E 6-LOBE, UNIFIED (45.5MM)	STAINLESS	SILVER								28	30	32	34	36	
CDX	YMN-D*	SHIMANO INTER-5E 6-LOBE, DI2 (41.7MM)	STAINLESS	SILVER								28					
CDX	SMN	SHIMANO 9 -SPLINE	STAINLESS	SILVER	19	20	21	22	23	24	26	28	30	32	34		39
CDX:SL	SBA	SHIMANO 9-SPLINE	7075 ALUMINUM	BLACK						24	26	28	30	32	34		39
CDX	HMN	SHIMANO 9-SPLINE/ ISO 6 BOLT	STAINLESS	SILVER				22									
CDX	VMN	ENVIOLO	STAINLESS	SILVER				22		24	26	28					
CDX:EXP	RMN-E	ROHLOFF THREADED	STAINLESS	SILVER	19	20		22		24							
CDX:EXP	RSMN**	ROHLOFF SPLINE	STAINLESS	SILVER	19	20		22									
CDX:EXP	RSSB**	ROHLOFF SPLINE	COATED STEEL	BLACK	19	20		22									
CDX	NMN	STURMEY-ARCHER 3-LOBE	STAINLESS	SILVER				22		24							
CDX	AMN	STURMEY-ARCHER 3-LOBE	STAINLESS	SILVER							26						
CDX	AFMN	STURMEY-ARCHER RX-RF5 THREADED	STAINLESS	SILVER				22									
CDX	WMN	ISO THREADED, FREEWHEEL	STAINLESS	SILVER W/BLACK				22									
CDX	FMN	ISO THREADED	STAINLESS	SILVER	19	20	21	22									

<sup>\*</sup>Requires use of Shimano MU-UR500 Di2 system.

<sup>&</sup>lt;sup>†</sup> For 28T Di2 compatibility, contact Gates Carbon Drive.

CDC REAR SPROCKETS							
	Туре	Application	Material	Finish/Color	Tooth Count		
CDC	XSE	SHIMANO 3-LOBE	COATED STEEL	SILVER	22 24		
CDC	XSE-U	SHIMANO 3-LOBE, UNIFIED	COATED STEEL	SILVER	22 24 26		
CDC	VSE	ENVIOLO	COATED STEEL	SILVER	24 26 28		
CDC	SVN	SHIMANO 9-SPLINE	COATED STEEL	SILVER	22		
CDC	WSE	ISO THREADED, FREEWHEEL	COATED STEEL	SILVER	22		

All Rear Sprocket Part Numbers begin with CT11 followed by Tooth Count and Type (e.g. CT1126XMN-U or CT1120RSMN).



From the left: 9-spline SureFit™ 3-lobe Threaded

 $\textbf{NOTE:} \ \textbf{For sprockets not listed, please contact technical support at CarbonDrive@Gates.com.}$ 

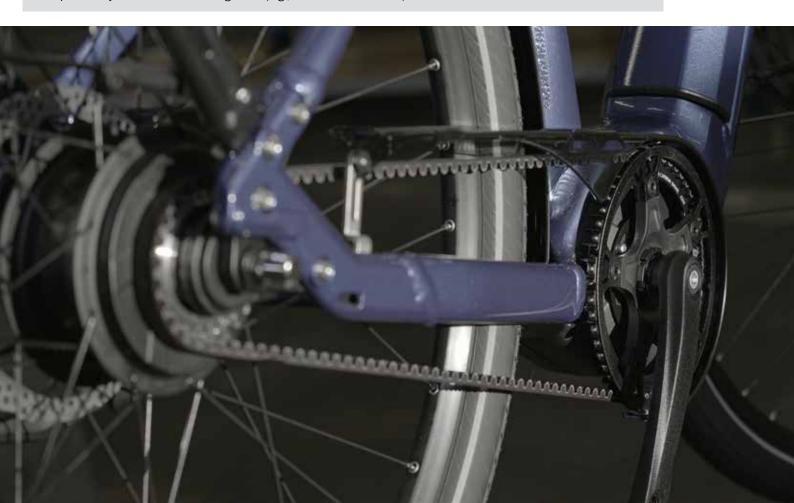
<sup>\*\*</sup> RSMN and RSSB sprockets require the Rohloff Splined Carrier 'L' (Art.#8540L), which secures the sprocket using a threaded lock-ring.

# **BELTS**



CENTERTRACK BELTS						
Tooth Count	Series					
108	CDX					
111	CDX, CDN					
113	CDX, CDN					
115	CDX, CDN					
118	CDX, CDN					
120	CDX, CDN					
122	CDX, CDN					
125	CDX, CDN					
128	CDX , CDN					
130	CDX, CDN					
132	CDX , CDN					
137	CDX					
143	CDX					
151	CDX					
158	CDX					
160	CDX					
166	CDX					
168	CDX					
174	CDX					
177	CDX					
178	CDX					
181	CDX					
183	CDX					

All belt part numbers follow the format pitch-tooth count-width-CT (e.g., 11M-122T-12CT). CDN part family ends with "CDN" designation (e.g., 11M-122T-12CT CDN).



# **SIDETRACK PRODUCTS**



SIDETRACK BELTS								
Tooth Count								
111	122							
113	125							
115	128							
118	130							
120	132							

Country of Origin: Scotland

S050 CRANKSET						
SIDETRACK						
SQUARE TAPER						
160, 170						
BLACK MATTE SILVER						
46, 50, 60						
INCLUDED						
JIS SQUARE TAPER, NOT INCLUDED						

Country of Origin: China

SII	DETR	ACK REAR SPRO	CKETS		
	Туре	Application	Material	Finish/Color	Tooth Count
ST	XSE	SHIMANO 3-LOBE	COATED STEEL	SILVER	22
ST	SSE	SHIMANO 9 -SPLINE	COATED STEEL	SILVER	22
ST	FSE	ISO THREADED, FIXED	COATED STEEL	SILVER	22

Country of Origin: China



# **TANDEM PRODUCTS**

CENTERTRACK TAN	DEM SPROCKETS
Mounting Type	5AA (5-BOLT 130MM BCD)
Series	CDX
Finish/Color	BLACK
Tooth Count	66, 69,74
Pitch	8MM
Material	6061 ALUM
Part Numbers	CT08665AA CT08695AA CT08745AA

CENTERTRACK TANDEM BELT						
Tooth Count	250					
Series	CDX					
Pitch	8MM					
Part Number	8M-250T-12CT					

**NOTE:** Longer length 11mm belt sizes now enable the use of standard CDX front sprockets for certain tandem timing applications. Contact CarbonDrive@Gates.com for more information.

## **BELTS FOR KIDS BIKES**



8MM PITCH BELT
Tooth Count
160
100
105
107
112
122
125
130
140
141
145

Additional sizes may be available; contact CarbonDrive@Gates.com.

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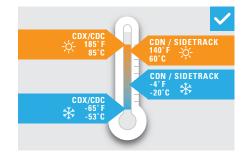
## **CARE FOR YOUR CARBON DRIVE**



Before using this product, please read the complete Owner's Manual.









DO NOT CRIMP









**DO NOT INVERT** 





**SPROCKET REMOVAL TOOL** 

**DO NOT ROLL ON** 

**DO NOT PRY ON** 

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# **DEALER & OEM RESOURCES**

#### **TOOLS FOR A SMOOTH RIDE**

Proper installation, alignment, and belt tension are important. Too little tension can lead to tooth jump or "skipping." Too much tension can cause wear and damage. Here are several tools to ensure the best tension and proper alignment for the smoothest ride.





#### **ECO TENSION TESTER**

Available in Europe, the Eco Tension Tester is a popular way to set belt tensions using gravity and a suspended weight.



#### **PROFESSIONAL BELT TENSION GAUGE**

Available in Europe, professional level tool for quickly determining the correct belt tension range.





#### **KRIKIT TENSION GAUGE**

Easy belt tension testing at home or in the field.



#### STRAP WRENCH

Essential tool for safe removal of rear sprockets from 9-spline and fixed gear hubs.



#### **UT LASER ALIGNMENT TOOL**

The UT Laser Belt Liner is a tool for a quick check of the alignment. Simply place the measuring unit on the belt or sprocket and alignment can be read within seconds. The fast and professional solution for every workshop.







#### SUREFIT™ INSTALLATION TOOLS

For factory and bike shop use - Gates SureFit Installation Tool offers easier installation of all SureFit sprockets.

## CARBON DRIVE BELT TENSIONING APP

Pluck the belt like a guitar string and the app will record a tension measurement using your phone's microphone. Available for Apple and Android based devices.



## INSTRUCTIONAL VIDEOS

Check tension, repair flats with internal hubs, and more – short videos for mechanics and riders.



#### **TECHNICAL MANUAL**

For bicycle manufacturers, contains engineering drawings frame requirements, geared hub integration, and more.



## EBIKE INTEGRATION MANUAL

ISO Requirements, frame stiffness requirements and crank/sprocket assembly tolerances, mid-drive and rear hub motor styles, internal gear hub beltline chart, and more.



#### **OWNER'S MANUAL**

Important handling information for engineers/mechanics to understand and for all of your new owners.





