JENA HYBRID

TECHNICAL INTRODUCTION

JENA HYBRID

Jena Hybrid has a carbon monocoque frame and fork. The frame's geometry is similar to the Jena, offering a performance endurance ride combined with a comfortable ride position for long hours spent in the saddle.

The **Jena Hybrid** features traditional components like hydraulic disc brakes, 11 speed transmission and carbon or aluminium rims. The only component added to the traditional configuration is the rear hub containing the 40 Nm Ebikemotion motor to assist pedalling.

The motor is powered by a 250 Wh battery perfectly integrated inside the frame's down tube. System control (on, off and monitoring) is controlled by the **iWoc button** installed on the handlebar, allowing the rider to choose Jena Hybrid's various assistance modes.

USABILITY

There are practically no limits on Jena Hybrid's usability and to the available configurations. The clearance between frame / fork and wheels allows you to install generously sized tires on 28" wheels or 650B MTB wheels. With 28" wheels you can install tires up to 44 mm wide, whereas with 650B MTB wheels, you can install 48 mm wide tires, equivalent to 1.95" (tested on Vittoria tires). There are numerous available supports that allow the installation of bottle holders, bags, carriers and mudguards. On the front fork, for example, you can install two bottle holders or one lowrider carrier for bags.

IMPROVED RIDING SAFETY

We improved riding safety by installing the iWoc button on the handlebar. The button is installed with a support on the handlebar, so riders can interact with the Ebikemotion system while keeping their hands firmly on the handlebar. On the Jena Hybrid, riders can select the assistance level and check the battery charge while keeping both hands on the top of the handlebar for safe off-road riding.

JENA HYBRID

COLOR	BLUE / ORANGE
FINISH	GLOSSY
COLOR CODE	Y8

JENA
HYBRID

SIZES AND GEOMETRIES

SIZE	C/C	L	H	A	H1	L1	A1	REACH	STACK	WHEELBASE
	[cm]	[cm]	[cm]	[°]	[cm]	[cm]	[°]	[mm]	[mm]	[mm]
S	41	52.9	47	72.8	12.5	42.3	70.5	373	556	1009
M	44	55.3	50	73.7	15	42.3	71	382	582	1023
L	47	57.6	53	73.1	17.5	42.3	71.5	392	608	1036
XL	51	60.0	57	72.8	20.0	42.3	72	401	633	1048

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SPARE PARTS LIST	
X35CHARG-EU	EBIKE X35 CHARGER WIRE FOR EUROPE
X35CHARG-US	EBIKE X35 CHARGER WIRE FOR US
X35CHARGER-C	EBIKE X35 CHARGER-C (WITHOUT WIRE)
X35CHGPNT-C	EBIKE X35 CHARGING POINT -C
X35EXBATSP1	X35 EXTERNAL BATTERY
X35LOCKNUT	EBIKE X35 MOTOR LOCK NUT
X35LOWA-KIT	EBIKE X35 MOTOR LOCK NUT + WASHERS
X35MAGNUT	EBIKE X35 MAGNET LOCK NUT
X35M1-SHIELD	EBIKE X35 SHIELD M1
X35ONE-C	EBIKE X35 ONE REMOTE -C BUTTON
X35PASSENSOR-B	EBIKE X35 PAS SENSOR B - SPEED SENSOR
MR137	HEADSET
WTP-BHIWOC	HOLDER FOR IWOC CLAMP TYPE
WTP-FHIWOC	HOLDER FOR IWOC BAND TYPE
WTP-RDHY-D2	REAR DROPOUT
WTP-HY-BBSHELL	BB CASE
WTP-ZSPACER5	HANDLEBAR'S SPACER H5 FOR J-BAR
WTP-ZSPACER10	HANDLEBAR'S SPACER H10 FOR J-BAR
W0TC	TOP COVER FOR J-BAR
W0TS	TOP SPACER FOR J-BAR
W0KITS	TOPCOVER+TOPSPACER+HANDLEBAR'SSPACERH5+ HANDLEBAR'S SPACER H10

JENA HYBRID

FRAME KEYPOINTS

SEATPOST DIAMETER 27.2 mm

CLEARANCE 700C x 42MM / 650B x 47MM

BRAZED ON FRONT DERAILLEUR

FLAT MOUNT DISC BRAKES

REAR STAYS O.L.D. 136MM

IWOC SUPPORT

RACK & MUDGUARD MOUNT

MAIN BATTERY INSIDE THE DOWNTUBE

FORK O.L.D. 100 MM

CHARGING POINT

PRESSFIT BBSHELL
86,5 MM WIDE X 41 MM DIAMETER

FRAME DETAILS	
HEADTUBE	1"1/4 upper — 1"1/4 lower
UPPER / LOWER BEARINGS	MR137
FRONT FORK O.L.D.	100 MM (QR type)
REAR STAYS O.L.D.	136 MM (thru axle type)
BB SHELL	SHIMANO PRESS FIT (86.5 WIDE X 41 DIAMETER)
SEAT POST	Ritchey comp
SEAT COLLAR DIAMETER	27.2 mm
FRONT DERAILLEUR TYPE	Brazed on

INDICATIVE TIGHTENING TORQUES

LIST	Nm	LIST	Nm
ALU/CARBON STEM ON GRAVEL	5	BOLTS FOR WATER BOTTLE CAGE	2.5
SHIMANO CRANKSET 386 (central bolt)	40	EXPANDER CAP	4
CRANKSET GEAR BOLTS LIGHT ALLOY	10	PEDALS	40
REAR DERAILLEUR BOLT	8	SEATPOST	4
FRONT DERAILLEUR BOLT GRAVEL (integrated)	7	THRUE AXLE HUBS	3/4
COLLAR COMMAND LEVERS ON CARBON GRAVEL HANDLEBAR	8	FORK EXPANDER	8
INTERCHANGEABLE FIXING SCREWS	3	BRAKES (caliper,disc)	5

JENA HYBRID

FAQ

What is the maximum speed attainable in assisted mode?

The maximum speed attainable with the motor engaged is 25 km/h.

How much does the entire pedal assist system weigh?

The pedal assist system weighs 3.7 kg with the battery and electric motor. It is the lightest system currently available on the market.

How many levels of assistance does the Jena Hybrid have?

There are three diferent assistance levels, which can be adjusted to your needs in the eBikemotion app (once the app has been paired to the bike, go to Settings > Motor Settings).

How much autonomy does the Jena Hybrid have?

Guaranteed autonomy varies depending upon a number of factors: driving style, assistance level, the user's weight, the slope of the route and pedalling ability. Testing shows the possibility of covering an uphill distance of between 1000 m and 2000 m depending on the difficulty of the route. With a full battery charge, you can ride uphill for more than an hour and a half.

Can the Jena Hybrid be used without the battery?

We do not recommend removing the battery. However, the Jena Hybrid can also be used in off mode.

Is it possible to increase the Jena Hybrid's autonomy?

Yes, by installing an optional second battery placed inside a "dummy bottle" on the seat tube of the Jena Hybrid. The total capacity is 460 W/h.

Do I have to wait until the battery is fully discharged before charging it?

No, Jena Hybrid's lithium battery can be charged at any time, because it does not have a memory effect.

How many times can I recharge the Jena Hybrid?

The guaranteed number of recharges to 100% capacity is 500 times, then recharge levels will decrease until the end of the cycle (equal to approximately 60%).

Can I check the battery charge level?

Yes, you can check the battery charge level via the iWoc indicator light on the top tube. The key to the light colour is provided in the Jena Hybrid leaflet. If you want to know the precise value of the battery charge, connect to the Ebikemotion app.

After how much time do I have to recharge the battery?

If the bike is not going to be used for a long period, we recommend you charge the battery at least up to 60% before leaving it unused. If after six months, the charge level is less than 20%, we recommend charging it again up to at least 60%.

FAQ

Can I use the Jena Hybrid in the rain?

Of course. The system is waterproof.

How can I wash the Jena Hybrid?

You clean Jena Hybrid like any other racing bike. The bicycle must not be washed with high pressure water, as water could get into the motor or communication port above the bottom bracket box. We recommend wiping it with a soft cloth and mild soap, then drying it completely before use.

Should the electrical assistance system be checked regularly?

The electrical system requires no special maintenance. To maintain maximum pedalling efficiency over time, Wilier Triestina strongly recommends regular maintenance and inspections every 12 months at an official Wilier Triestina dealer.

How are failures or faults indicated?

The backlit controller on the crossbar will flash pink. At the same time, the Ebikemotion app will display a red failure / fault warning triangle.

Is there a diagnostic tool?

Yes, the Ebikemotion app has a basic diagnostic function. Your authorised Wilier Triestina dealer has more advanced diagnostic tools.

What should I do in the event of a failure or fault?

If your bike should have a failure or fault, you can first consult the Ebikemotion app diagnostic/troubleshooting tool. If the problem persists, you will need to contact an official Wilier Triestina dealer to check the problem using advanced diagnostic tools. Any personal action different from those specified in the troubleshooting guide will void the product warranty.

Who do I contact for questions about the assisted pedalling system?

Contact the Wilier Triestina dealer where you purchased your bicycle or via the contact form at https://www.wilier.com/en/contacts

Where can I find the user manual?

A printed getting started guide is provided with the Jena Hybrid at the time of sale.

Can I replace the Jena Hybrid's cassette?

Yes, you can replace the cassette with one of the same size. Ensure you reinstall the original closure ring in the same position or the system will not function.