# Specifications on my Challenge Fujin Recumbent Bicycle.

Frame:

Model: Short Frame Fujin. Wheelbase: 116.5 cm (45.9'') Seatheight: 39.5 cm (15.5'') Bottombracket height: 61.5 (24.2'')

Weight: Overall weight of my Fujin complete with Rear and Side

Racks : 21kg (46.3lbs)

Length: Overall greatest length: 188.5 cm (74.2'') = rear edge

rear tire to front edge chainring (with pedals in vertical

position)

- Frame and Rear stays: Aluminium 7005, Front fork aluminium alloy 1"

- Folding tiller stearing with Rudelli Headset

- Challenge system Steel Spring Suspension in Front fork, adjustable AO 30RC Aircylinder Rear fork suspension.

### Wheels:

Front wheel:

20 inch Jetset CH-E280, 32 spokes rim with a Son 16" to 20" 6V -3W K165 Hub Dynamo light system and fitted with Schwalbe Marathon Plus tire ( with Smart Guard) size 35-406 ( $20 \times 1.35$ ) HS348.

### Rear wheel:

26 inch Aeroheat AT Velocity 6106-T6 Heat Treated High Strenght Aloy rim, 32 spokes with Shimano Deore 525 Hub and fitted with Schwalbe Marathon Plus tire (with Smart Guard) size 35-559 ( $26 \times 1.35$ ) HS319

Brakes: Shimano Hydraulic Deore BR-M525 Diskbrakes both front and rear.

#### Gears:

Gear sytem 3x9 = 27speed with : Uniglide chain 9spd.

In front: Shimano Ultegra 165mm crankset, rings 30, 42, 52 teeth and Shimano Tiagra front derailleur.

In the rear: a Shimano LX Deore derailleur with 9 cog Shimano HG CS M580 freewheel 11T with 11-12-14-16-18-21-24-28-32 teeth.

Both controlled by Shimano Sram Attack gripshift.

## Other parts:

- Shimano pedals PD-M324 Combi SPD/platform
- Ventisit SeatMat.
- Challenge Headrest/support.
- Lightsystem: Busch&Müller Lumotec Oval Diwa Plus 17 lumen Frontlight and B&M DIWA (distance warning System) Rearlight. (this light also has a Brakelight function) powered by the Son Hub Dynamo.
- 2x Busch and Müller Cycle Star Handlebarend Rearview Mirrors wih longstem left and with shortstem on the right.
- Sigma BC1600 Odometer.

The Gear ratiotable for my chainring/freewheel combination. (shows the distance in meters per pedal revolution)

# Gear ratio Chart:

	Rear								
	11	12	14	16	18	21	24	28	32
Front									
30	5.45	5.00	4.28	3.75	3.33	2.86	2.50	2.14	1.87
42	7.64	7.00	6.00	5.25	4.67	4.00	3.50	3.00	2.62
52	9.45	8.67	7.43	6.50	5.78	4.95	4.33	3.71	3.25

Chainwheel teeth divided by freewheelteeth x wheelcircumfrence = 200 cm for my reartire size ( $35-559-26\times1.35$ )

Speed is pedalfrequenty/per minute x distance per revolution x 60 (minutes in the hour)

Example at 86 pedalstrokes/minute with gear 42front x 21rear =  $86 \times 4.00m = 344meters \times 60 = 20640 meters = 20.64 km/hour ( 12.82 miles an hour)$