

# Information on the assembly of the NICOLAI Saturn 16 MGU Frame Kit

**Technical data, Torques and interface dimensions**  
are found in the [Tech Sheet NICOLAI Saturn 16 MGU](#)  
(accessible via QR code on the right)



## **Frame release**

We have designed the frame of the Saturn 16 MGU for a system weight of up to 150 kg and use in condition 4 (Enduro).

## **Drive Train:**

The frame kit is designed for use with a Gates belt. Two combinations of sprockets are possible. We recommend variant 1 for MTB use.

Variant	Front sprocket	Rear sprocket	Tooth of belt	Speed at a cadence of 70 /min
1	39	34	125 T	Gear 1: approx. 6 km/h, gear 12: approx. 38 km/h
2	39	28	122 T	Gear 1: approx. 8 km/h, gear 12: approx. 46 km/h

## **Components**

When you assemble your bike, you are responsible for ensuring that the components can withstand your weight and riding style over the long term. Critical parts are handlebars, seat post and wheelset.

For riders weighing 85 kg or more, we recommend that you do without lightweight parts

If you weigh significantly more, use DH or freeride components of category 4 or 5.

### **! Remove the battery before assembly.**

This ensures that the Pinion MGU does not start up during assembly.

### **! When you have finished assembling the bike, check that all components are free to move.**

Turn the crank, front wheel and rear wheel: nothing should rub. Deflate the shock or take out the spring of the shock and fully compress the rear end: Rear tire and seat tube should not collide.

## **Front and rear light**

If you want to connect a light to the FIT/MGU-System, we recommend the brands Lupine or Supernova. In our experience, these lamps do not pose any problems in an EMC test (electromagnetic compatibility).

## **Formalities (only applicable in the EU)**

The Frame Kit and the complete EPAC are subject to regulation by the EU Machinery Directive (2006/42/EC). According to the Machinery Directive, the EPAC is a "machinery", the Frame kit is a "partly completed machinery".

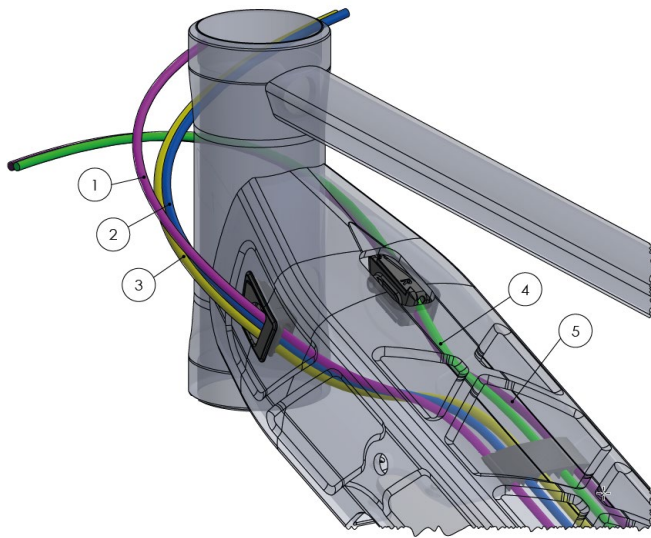
We are not the manufacturer of your complete bike (the "machinery") and therefore do not affix a type plate to the frame. For the delivered Frame Kit, the "partly completed machinery", we issue an extended declaration of incorporation.

The FIT/MGU system is programmed to support pedalling up to a maximum of 25 km/h (+ permitted tolerance) or if applicable 20 mph (+ permitted tolerance). It has a rated continuous output of 250 W.

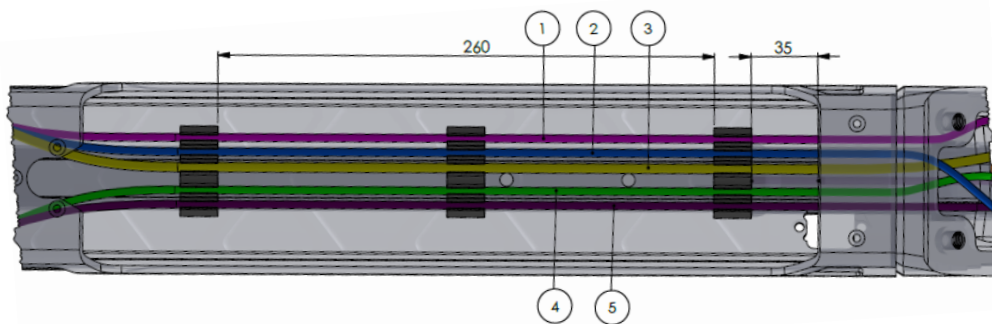
The fully assembled Saturn 16 MGU with 25 km/h is considered an EPAC within the EU and has equivalent status as a bicycle.

### Cable routing in the down tube

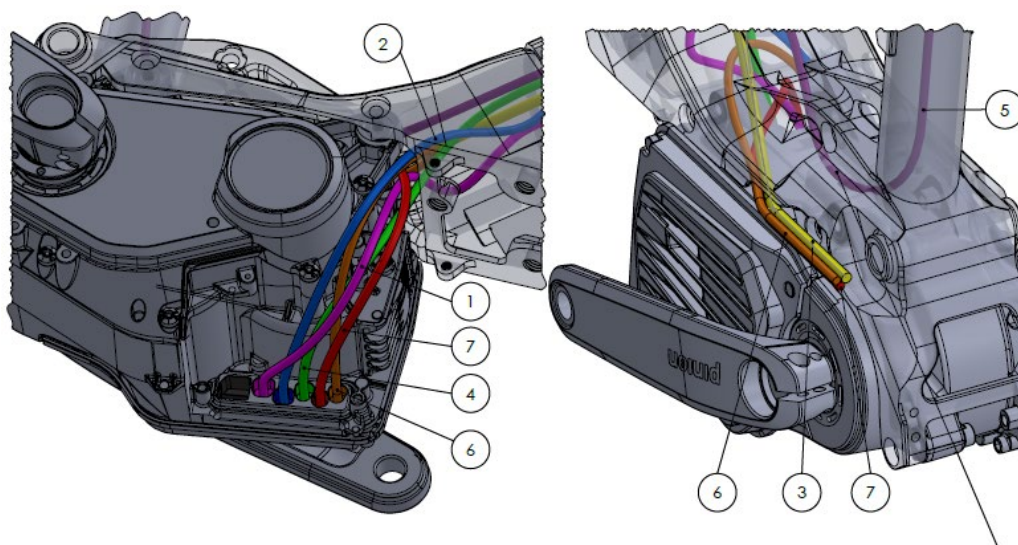
The cable outlets on both sides of the down tube (black in the picture below) can each accommodate 3 cables. The lowest opening is designed for a 5 mm cable (brake hose), the two upper ones for 4 mm cables.



Nr.	Typ	D / mm
1	Light cable	4
2	Pinion TE1 gear lever	4
3	Rear brake hose	4
4	Display	5
5	Dropper Post	4
6	Speedsensor	4
7	Rear light	4



### Cable routing in the bracket



Route the cable of the seat post between the screw connection points of the motor. Check for free movement after installation!

## Extended declaration of incorporation for partly completed machinery

Only valid in countries that follow the European Union legislation (CE)

**The manufacturer**

Nicolai GmbH  
Altenbekener Str. 2a  
31008 Elze  
Germany

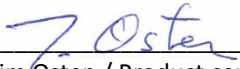
**of the partly completed machinery**

Nicolai Saturn 16 MGU Frame Kit

**hereby declares:**

- All relevant essential health and safety requirements of Directive 2006/42/EC have been applied and complied with up to the interfaces described in the document "Information on the assembly of the Nicolai Saturn 16 MGU Frame Kit".
  
- The partly completed machinery also complies with
  - Directive on radio equipment 2014/53/EU
  - Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment 2011/65/EU
  
- The following technical standards were applied:
  - EN 15194:2017 Cycles - Electric power assisted cycles – EPAC Bicycles
  - EN 17404, Cycles - Electric power assisted cycles - EPAC Mountain bikes
  
- The relevant technical documentation according to Annex VII B was compiled.  
We undertake to transmit relevant information of the partly completed machinery in response to a reasoned request by the appropriate national authorities.
  
- The machinery is incomplete and must not be put into service until the machinery into which it is to be incorporated has been declared in conformity with the provisions of the Machinery Directive (2006/42/EC).

Mehle, 22.07.2024

  
Joachim Osten / Product certification