

**Revision Index**

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## 1 Summary

### 1.1 Task

Define the assembly procedures to replace the OEM with a Suter one.

### 1.2 Target

Avoid mishandling of the Suter swingarm and potential safety issue for the customer due to errors generated during the assembly procedure.

### 1.3 Results

This document is intended to be a general guideline to install all the Suter swing arms.

It isn't specific related to a single motorcycle model, the instruction could be applied to any other Suter Swingarm.

In case of doubt, anyway, please contact Suter Industries.

The Suter Swing arm should be installed by professional, approved workshops, using correct tools and devices.

## 2 Disclaimer

The customer should be aware that the Suter Swing arm was developed for racing purposes only. If the customer uses this swing arm in any way he does it entirely at his own risk and Suter Industries AG (SI) shall have no liability to the customer whatsoever.

Please note that the operation, riding, testing and racing of motorcycles constitutes a highly dangerous undertaking in which the risk to life and limb are great. Such risks include, but are not limited to, serious injury, paralysis and loss of life.

The customer acknowledges that any such injury may prevent him from engaging in the same or similar activities in the future, which could result in a substantial reduction or elimination of his future earning capabilities. He hereby assumes such risk and waives for all time any claim which he may now have or hereafter may acquire against SI, by reason of any injury or damage or losses sustained by him, including his death, as a result of the operation, riding, testing or racing of motorcycles, or other motor vehicles, including, but not limited to, the use of the Suter Swing arms.

Further to the above mentioned regulations always our General Terms and Conditions apply.

Our Terms may be viewed on our website [www.suter-industries.ch](http://www.suter-industries.ch) anytime or may be requested in paper form from the headquarters of Suter Industries AG

### 3 Tightening torque.

### 4 Suter Industries Suggestions.

The Suter swingarm is made from high-grade aircraft quality aluminum. We highly recommend that after any crash the swingarm should be crack tested.

We provide a swingarm service where the bearings are removed and checked, replaced if necessary. Then the swingarm will be measured and straightened if necessary. Crack tested and thoroughly cleaned. This is highly recommended after any crash or every 2000 km.

Bolt / Screw / Nut	Thread	Torque [Nm]	Thread Locking
Swing arm Front Bolt	OEM	According to OEM specification	
Linkage Bolt	M10	25	Loctite 243
Rear Wheel Axle	M24x1.5	100	
Rear Wheel Axle	M25x2	120	
Rear Wheel Axle	ACME	130	
Rear Brake Caliper	M7	20	Loctite 243
Bolt flanged hexagon head	M10	30	
Bolt flanged hexagon head	M8	15	
Bolt flanged hexagon head	M6	8	
Bolt flanged hexagon head	M5	4	

## 5 Installation instruction

First remove the rear wheel.



Remove the link bolt from the shock absorber.



Remove the link bolt from the frame.



The shock absorber should now be completely separated from the swingarm.



Remove the speed sensor.  
Make sure that it won't get damaged when rebuilt.

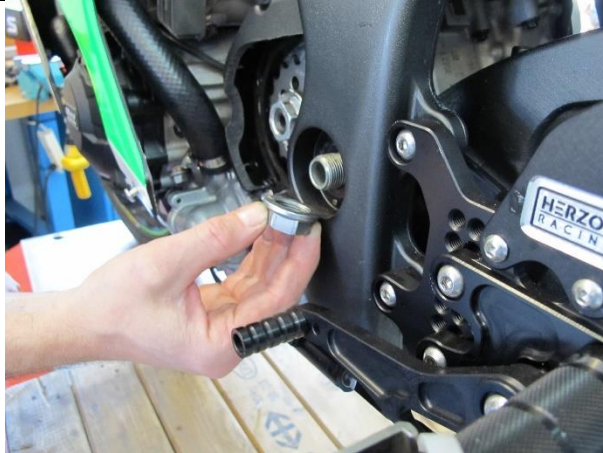


Loosen the swingarm main nut.

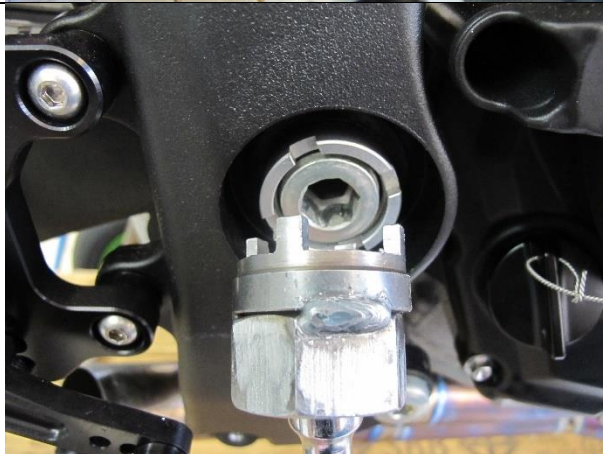




Remove the nut of the main bolt.



Loosen and remove the lock nut.



Loosen and then remove the swingarm bolt.

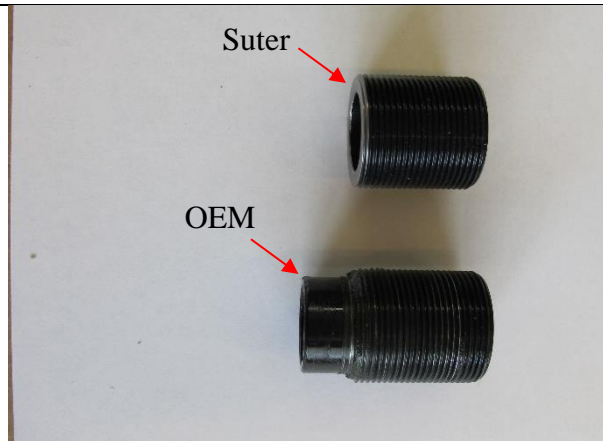


The swingarm should now be completely free, if there are no more restrictions. Remove the swingarm.



The OEM (standard) bush must be replaced with the Suter bush supplied.

**This bush is supplied by Suter Industries only if needed. If the bush is not included in the kit delivered by Suter Industries, please use the OEM one.**

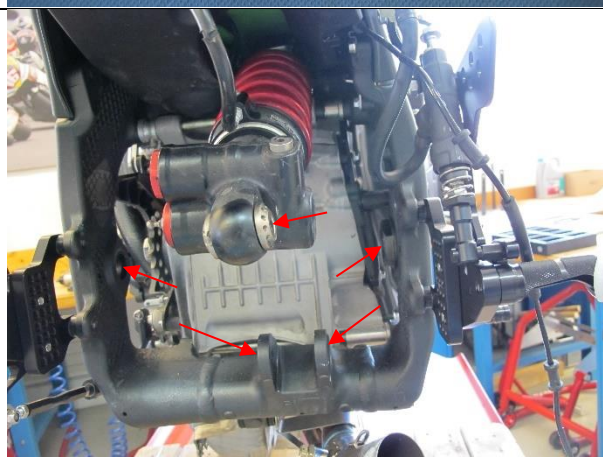


All parts that are needed to install the Suter swingarm.

**The pull-rod shown here is required only if not included in the kit supplied by Suter Industries.**



Ensure that all mounting-points are free.

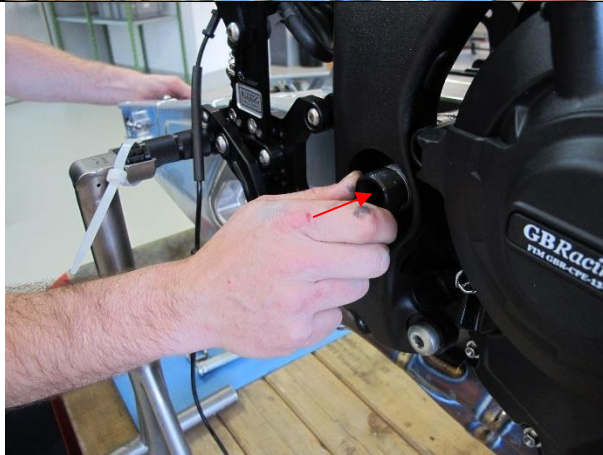




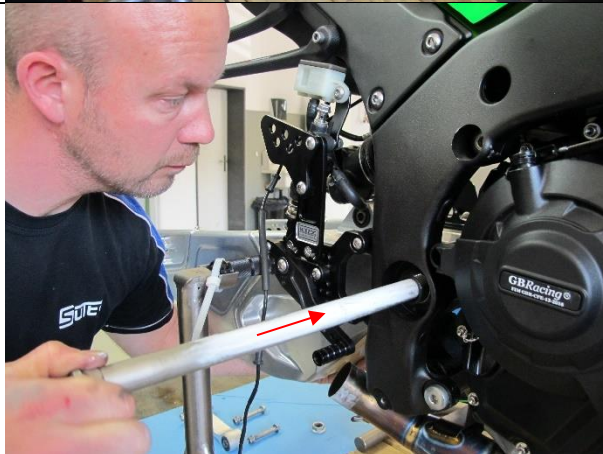
Slide the swingarm into the frame until the main axle holes line up.



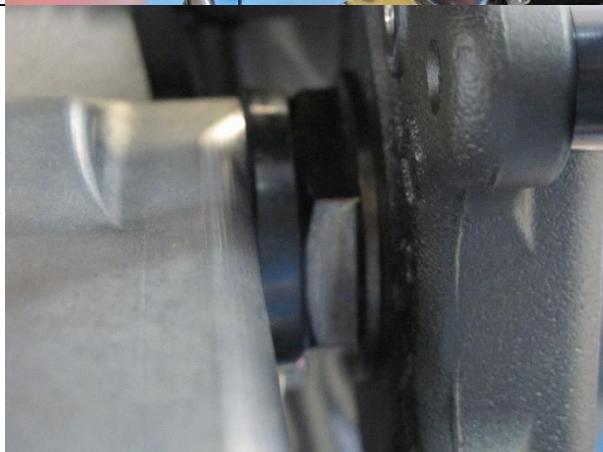
Screw in the bush provided.  
Important: Use the Suter-Bush (if included in the Suter Swing arm kit).



Slide in the swingarm bolt.



The swingarm should fit tightly between the frame and the bush provided.

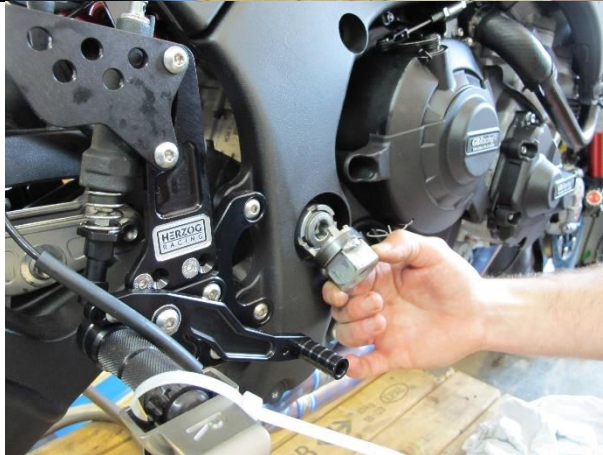




Screw the lock nut on.



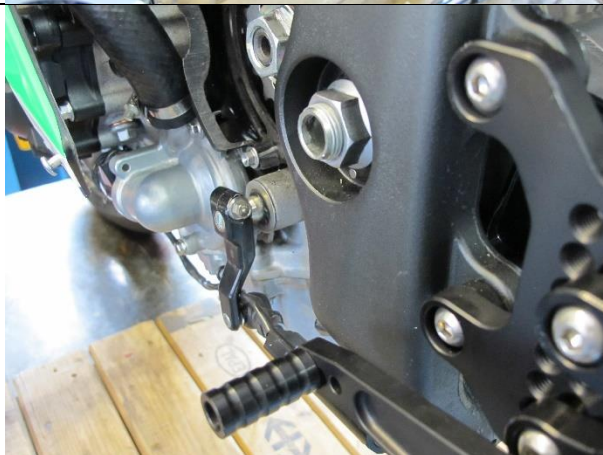
Tighten the lock nut with the correct tool.



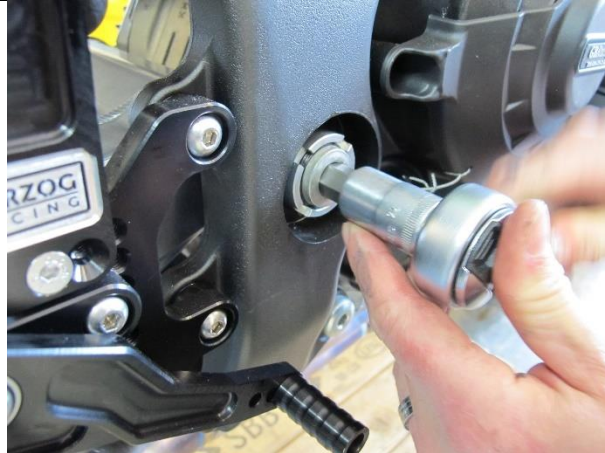
Tighten the locking nut with the correct torque as recommended by the manufacturer.



Tighten the main nut, using the correct torque as recommended by the manufacturer.



Whilst tightening the nut, the main bolt must be held.



Install the shock absorber, the pull rod and the link.



Therefore mount the pull rod to the frame with the correct nut and bolt, make sure you hold the nut whilst tightening. Use manufacturer recommended torque settings.



Next install the Suter linkage as in the photo.

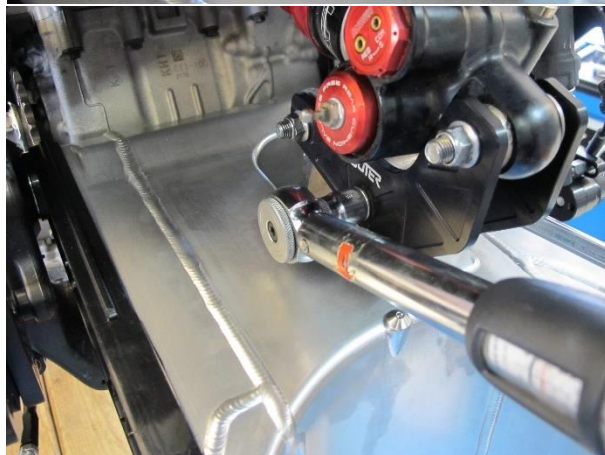




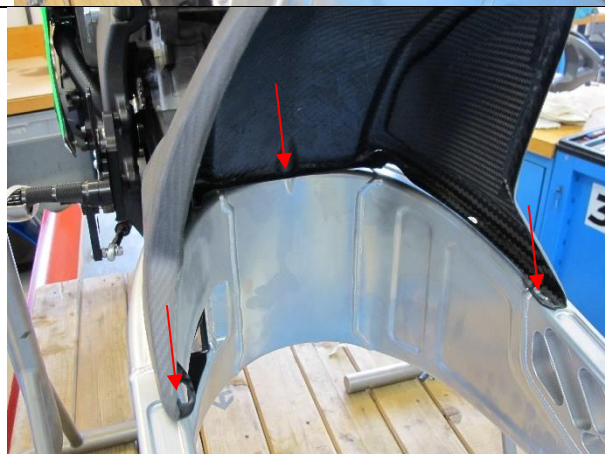
Tighten the shock absorber-bolt with the Manufacturer's recommended torque setting. Make sure you hold the nut whilst tightening.



Now tighten all bolts connecting the link and the swingarm to the manufacturer torque settings. Make sure you hold the nut whilst tightening.



Now fix on the mudguard using the three bolts provided. Tighten the Bolts according to the value in the Suter-Torque-Table.





Remove the brake disc from the wheel.



Place the distance ring on the brake disc pick up points.



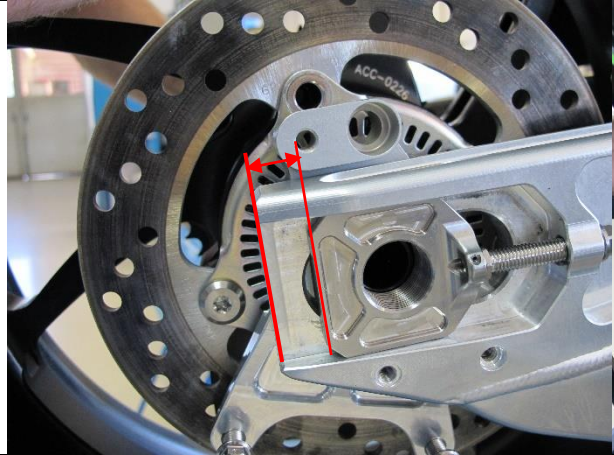
Tighten the provided bolts to the manufacturer torque settings.



Carefully put the wheel into the swingarm and slide in the axle bolt provided.



The wheel axle bolt should be easily screwed into the slider on the opposite side. Use the sliders for the desired length and measure from the flat surface at the end of the swingarm to check if they are parallel. Tighten the wheel axle bolt according to the value in the Suter-Torque-Table.



It is very important to check that there are no collisions. Especially between the swingarm and the exhaust should be enough clearance.

