

Superbike Kit



Installation manual and safety information for Suzuki Hayabusa GSX-R 1300 From model year 2021

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Caution



Important safety advice:

- Work undertaken on the steering and the brake system poses a safety risk. This work may only
 be carried out by appropriately qualified personnel. Faulty work can have serious consequences
 and may pose a threat to life and health. Only undertake this installation if you are sufficiently
 qualified and have an official workshop manual as well as all relevant service notifications
 available. Otherwise, we strongly recommend that the installation is carried out or at least
 checked in a specialist workshop.
- Brake fluid is toxic and may damage the surfaces of the fairing and other components. Use suitable means to protect all parts against damage. Please observe the safety information of the brake fluid manufacturer.
- Use only fresh brake fluid taken from a sealed container. Always use new sealing rings which comply with the specifications of the cable manufacturer. Never combine copper sealing rings with aluminium connections.
- ABS brake systems should be vented solely in a garage authorised by the vehicle manufacturer.
- Any work in relation to the installation, removal and tightening torque of original parts should always be carried out in compliance with the workshop manual.
- To ensure safe function, it is essential that all contact areas of clamp connections are clean, dry and damage free during installation. Important: Make sure that nothing gets onto these contact surfaces which decreases friction (e.g. oil, silicone, care products, etc.).
- It is essential that all clamp screws are tightened with torque. The torque specifications refer to dry screws and threads. The tight fit of all screw connections must also be checked at every inspection.
- It is your responsibility to check the product regularly and to determine if a service or replacement is required.
- Please remember that the top yoke is a safety-relevant part of your vehicle. Check the handlebar as well as the rise and top yoke after a fall or collision and replace them <u>completely</u> at the slightest indication of damage.
- Never tie the vehicle at the handlebar.
- The Superbike Kit requires registration.
- This product has been designed for a standard vehicle. ABM® Fahrzeugtechnik GmbH makes no warranty or guarantee of any kind for any damages whatsoever arising out of the combination with other component parts not tested by ABM, as a consequence of improper installation or inadequate maintenance.

1 Preparation

- Please read the entire safety information and installation manual carefully.
- A motorcycle not securely positioned can fall over during the following work. Therefore, make sure
 that the motorbike is positioned on solid, flat ground and is secured against falling over and rolling
 away.
- Keep children and pets away from the work area.
- Protect removed parts from damage.
- Never remove the upper top yoke without first removing load from the front wheel as this could damage the lower top yoke.
- When disassembling individual parts, please note which screws are used to fasten them. Keep these parts and screws and unless specified otherwise, reuse when assembling.

2 Content and recommended accessories:

Special tool required?	Torque wrench	Modification time:	approx. 4-5h
Accelerator cable/cables/lines:	original	Shorten fairing:	no
Clutch cable/line:	new	Shortening of windshield:	yes
Brake line:	new	Riser/handlebar	Adapter (transverse) with riser (25 mm) / 0429
Scope of delivery:	Top yoke clamps, clutch line, brake line, small parts.		

3 Installation



Safely position the vehicle.



Remove the upper side fairings.



Unplug the plugs for the handlebar switches and the ignition lock under the right cover.



Unclip the cable harnesses on the right side from the two brackets.



Remove the two brackets.



Remove the entire left side fairing according to manufacturer's specifications.



Cover all painted parts and the speedometer.

Remove both handlebar ends. Remove the left-hand rubber grip from the handlebar using compressed air.



Drain the clutch fluid according to the manufacturer's specifications.

Release the connection of the clutch line from the pump.

Completely remove the clutch and handlebar switch.



Tip:

Close the fittings of the brake and clutch line and their pumps with paper tissues.



Drain the brake fluid according to the manufacturer's specifications.

Release the connection of the brake line from the pump.

Completely remove the brake pump.



Remove the nut of the top yoke and loosen the clamp screws.



Lightly support the front wheel.



Pull the top yoke off the fork. Pull the accelerator grip off the clip on.



Loosen the screws of the ignition lock using a special tool or drill out.



Loosen the screws of the immobiliser and remove them from the top yoke.



Attach the immobiliser to the bracket using the screws and washers provided.

Tightening torque 3 Nm

Tip: Slightly adjust the bracket inwards using the cable tie.



Centrally align all parts.

Attach the ignition lock to the bracket using the spacer bushings, screws and washers provided.

Tightening torque 18 Nm

Drill out the screw heads (hexagon socket) for theft protection.



Place the spacer ring provided onto the head tube.



Screw the inclined clamps with the screws (M10), Schnorr safety washers and thread-locking fluid onto the top yoke.



Tightening torque 28 Nm



Remove the retaining plate for the accelerator cables.

Dismount the brake line and manifold. Cover the vehicle under the brake line with paper tissues.

Afterwards, reattach the original screw without the bracket.



Lay the accelerator cables over the steel line.



Unclip the two accelerator cables from the plastic brackets under the tank...



... and lay them under the tank (see image).



Attached the top yoke with the original nut and washer.

Tightening torque according to manufacturer's specifications

Attached the two clamp screws of the top voke.

Tightening torque 18Nm



Slide the accelerator grip onto the handlebar, adjust the handlebar (see image) and lightly fasten it with the clamps.

In doing so, the wide side of the clamps must be aligned forwards.



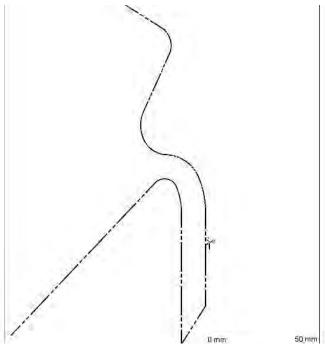
Stick on the left rubber grip flush to the handlebar.

Temporarily premount the clutch and handlebar switch.



Mount the handlebar end onto the accelerator grip side.

Temporarily premount the brake and handlebar switch.



Check the control scale (50 mm) of the cutting template and cut along the outer outline.



Place the template onto the fairing and draw on.



Shorten the fairing along the marking.



Round off the cutting edges with a file.

Tip:
Use a jigsaw and a rotation grinder.
Protect the fairing along the cutting edge with a tape.



Align the brake, clutch and handlebar switch and turn the handlebar left and right.



In doing so, the handlebar and the handlebar switches must not touch other components (e.g. fairing or tank), even with the handlebar turned fully.

If necessary, turn the handlebar a little more or trim the fairing.



The final assembly of the handlebar switches requires the drilling of holes for the centring pins.



To do this, align the operating elements and mark the positions for the centring pins (push onto the pins using grease).



Now, centre-punch the marked position and drill a hole (diameter and depth are based on the centring pin).

Set the backlash of the accelerator cable.



Insert the plugs of the brake and clutch switches.

Attach the cable harnesses of the two handlebar switches to the handlebar using cable ties.



The cable of the clutch handlebar switch is laid to the right under the top yoke but above the speedometer bracket.



Attach the cable of the ignition lock, immobiliser and clutch handlebar switch to the ignition lock with a cable tie.



Loosen the two cable harness brackets on the right under the fairing.

Reconnect all plugs (see image) and lay them in such a way that they will neither touch the steering damper nor get caught on it.



Carefully clamp the manifold into a vice.

Screw the brake line provided into the manifold, align as the original and tighten. Put some grease onto the sealing lens, insert it into the manifold (the straight surface towards the steel line) and connect it with the original steel cable.

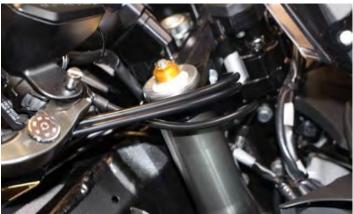
Reattach the manifold to the original bracket.



Attach the brake line with the new seals onto the hand pump.

Check with static brake that the brake lever can be pulled up to the handle and under no circumstances touches other parts.

After installing the brake line and the hand pump, the complete brake system must be drained according to the installation instructions of the manufacturer.



Caution:

The container must be dismantled again for complete filling.

To ensure a twist-free installation, the brake line connections can be aligned once.



Loosen the connection of the clutch line from the slave cylinder.



Completely remove the two original brackets and the clutch line.



Slide the rubber mounts onto the new clutch line and attach using the original brackets.



Attach the clutch line with new seals to the hand pump and cylinder.



After mounting the clutch line, the complete unit must be drainer according to manufacturer's specifications.

Caution:

The container must be dismantled again for complete filling.

To ensure a twist-free installation, the connections can be aligned once.



Attach the clamps.
Tightening torque 18Nm

Remount the side fairing and the upper covers.

Check the proper function of the complete electrical system.

- Pay attention to the freedom of movement of the handlebar, its mounted parts and adequate steering angle to each side. The handlebar must be able to be moved easily from steering angle to steering angle. Check the free play of the accelerator cables: In maximum steering angle to both sides and with the engine running, the motor speed must not change.
- After completing the work, check the firm fit, function and tightness of all components and screws. Make sure that there is sufficient brake fluid in the reservoir. Also check the front wheel's freewheel and the functionality of the brake system. Further, the function of the clutch, the throttle grip, the electric system and the anti-theft devices must be checked.
- Afterwards, a test drive must be carried out! After completion of the test drive, all screw connections must be re-checked for firm fit, tightness and all movable parts for adequate free travel. Re-test the front wheel's freewheel and check the brake system for overheating. Check the brake fluid level in the reservoir for significant changes.
- After ca. 100km, the firm fit of all screw connections of the handlebar must be re-checked against the specified tension values.