RH Electronics

Steuergeräte
KFZ-Elektronik
Diagnose
Automotiv
Entwicklung

INSTALLATION INSTRUCTIONS

FOR RH SECOND LIFE KIT

The kit can be used for the following vehicles:

CAN models (metal connector): R1200GS / R1200RT / R1200ST / K1200S / K1200R / K1200GT* (CAN)

Analog models (plastic connector): R1100S / R850R / R1150R / R850RT* / R1150RT* / R1150GS / R1150GS Adventure / R1150RS / R1200C / R1200CL / R1200C Montauk / R1200C Independent / K1200RS* / K1200GT* (Analog) K1200 LT*

* Vehicles were not delivered without ABS, a conversion is not possible.
However, the RH Second Life Kit can be used technically without restrictions.

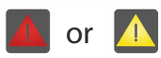
1. Make sure that the motorcycle is in fault-free condition and the battery is fully charged. First switch off the ignition.
2. To prevent the front brake reservoir from leaking, please fix the handbrake lever with a cable tie. Now remove your original BMW / FTE ABS unit from the vehicle.
3. Install the RH Second Life Kit into the vehicle using the original brackets.
4. Now connect the electronic connector plug. The two connectors for monitoring the brake fluid level are no longer needed. Please fasten them with cable ties in a suitable place.
5. Now connect the four brake lines to the four quick-release connectors in the correct order. For this purpose, please use the four new seals and clips supplied (already attached to the unit). Secure the clamps to the brake lines with the original protective caps.
6. Bleed the brake system according to the manufacturer's instructions without ABS. Use only DOT 4 brake fluid. We recommend conventional bleeding by pumping at the brake levers. Then perform a pressure test and check the entire system for leaks.
7. Before assembling the motorcycle, we recommend that you first check the operation of the brake and tail lights by turning on the ignition. Afterwards, carry out the programming of the warning people.

To be able to program the warning lights, you need an overview of the function displays and the selection of the mode you want.

Function displays

Each motorcycle has two warning lights in the instrument cluster, depending on the motorcycle type the display is slightly different (see original operating instructions).

Overview warning lights CAN models (metal connector):

Designation	Symbol in the combined instrument
Warning light general	 or
Warning light ABS	 (in some cases the exclamation mark is replaced by the text "ABS")

Overview warning lights analog models (plastic plug):

Designation	Symbol in the combined instrument
Warning light general	
Warning light ABS	

Programming mode for warning lights

The behavior of the warning lights can be configured by the customer.

The RH Second Life Kit is able to diagnose errors on the system. The display of these errors is shown via the General warning light. The following system-relevant components are monitored:
- Rear light/brake light
- Rear wheel sensor for speedometer and speed
- Brake light switch on the foot and hand controls

The following programming modes are available.

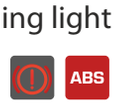
Mode	Warning light general 	Warning light ABS 	State of the "General warning light" during programming 
1	Brake system error display active	flashes slowly until approx. 5 km/h are exceeded, then OFF (approach test)	OFF
2	Brake system error display active	Permanent ON	BLINKS
3	Brake system error display active	Permanently OFF Vehicle signals "no ABS available	BLINKS QUICKLY
4* * Mode 4 only with Analogue models	Brake system error display inactive	Permanently OFF Vehicle signals "no ABS available	FLASHES SUPER FAST

Table mode overview

To configure the behavior of the warning lights, you must set the device to programming mode. To do this, proceed as follows:

1. First switch off the ignition.

2. Apply the front and rear brakes and then switch on the ignition. Continue to hold down both brakes.

3. Wait approx. 30 seconds until the "ABS warning light" lights up continuously and the "General warning light" is off. You are now in programming mode.

   On vehicles with an electronic speedometer, the speedometer needle now also strikes out at 20km/h. The display of a higher speed represents an error message. Any errors must be corrected beforehand.

Speedometer display in programming mode		**Error**
20 km/h	12 mph	No error in the system and programming mode active
40 km/h	25 mph	Coding vehicle faulty or unknown
60 km/h	37 mph	Error tail light or brake light
80 km/h	50 mph	Error rear wheel sensor
100 km/h	62 mph	Undervoltage error

Table speedometer display in programming mode, for models with electronic speedometer

4. You can now release the brakes. By actuating the front brake lever, you switch to the next mode. You can recognize the currently selected mode by the behavior of the General warning light. (See Mode overview table)

   If no input is made for 10 seconds, you automatically exit the programming mode. The last selected state is saved.

5. The completion of programming is indicated by both warning lights going out. In the case of an electronic speedometer, the speedometer also drops to 0 km/h.

6. Switch the ignition off and on again to check whether the mode has been saved. Please also check whether the warning lights behave according to the set programming mode.

7. If you want to make a change, simply repeat these steps.

You can now reassemble the motorcycle. Now carry out a final test with test drive. T**he brake function on the front wheel and rear wheel must be clearly demonstrated**.

Please note that the brake boost and **ABS function is no longer present**. The braking system is now less maintenance-intensive and susceptible and also better dosable. However, please note that both wheels will lock during emergency braking because you do not have the ABS function.

When reading out with a diagnostic tool, the ABS control unit is no longer found or can no longer be read out.

Technical data

Operating voltage:	11 - 14,5 Volt
Operating temperature	-20 °C bis +85 °C
Max. Load taillight (analog):	20 W (2 x 10 W) for CAN devices limited by ZFE
Max. Load Brake Light (Analog):	42 W (2 x 21 W) for CAN devices limited by ZFE
Max. pressure:	150 Bar
Burst pressure:	>1000 Bar
Medium:	DOT4

Maintenance

Please change the brake fluid DOT4 as prescribed by the manufacturer at least every 2 years.

Warranty / Guarantee

We grant a 24-month warranty on function from the date of invoice if the device is installed correctly. Excluded are damages due to water, corrosion, overvoltage and reverse polarity of the supply voltage as well as damages due to improper installation.

Parts list

4x clamps for quick lock (already installed on the device)

4x seal for quick lock (already installed in the device)

1x reusable packaging to return your old device for purchase to us.

1x instruction manual

1x warn sticker "no ABS

We expressly point out that with the installation of a Second Life Kit in a motorcycle, the road approval (General Operating Permit) in Germany expires. Please inquire about the current legal situation in your country.

The kit is therefore only suitable for racing purposes or for individual approvals with appropriate registration and TÜV acceptance. You are welcome to make an appointment here in our house for individual acceptance.

You can find videos on the following topics on our WEB page: www.rhelectronics.de:

- Problems Integral ABS of FTE
- The RH Second Life Kit
- Installation and configuration of the RH Second Life Kit
- Individual acceptance

RH Second Life Kit CAN

RH Second Life Kit analog

Quick release fastener with clamp

Quick release fastener with protective cap