SGRACE-RSV4-B

by IRC COMPONENTS

The SGRACE is our latest high performance design. We have put an enormous amount of energy in the form of time, technology and knowledge to create a reliable and innovative product. It is a "Strain Gauge" sensor style that ensures long lasting performance. To bring this product into reality we have used all the manufacturing tricks, electronic formulae and rendered a keen eye on software support to make this happen. This product is encouraged to use in a on a closed circuit only. It is not homologated for road use. The manufacturer of this product is not liable for any injury or damage to the operator, vehicle, or third parties from the use of this product. **MADE IN ITALY**



DISCLAIMERS



- System setup must always be done when bike is at complete halt and is parked on stands.
- A wrong setting could affect, partially or fully, the system's effectiveness, ultimately damaging the gearbox.
- System setting is the responsibility of the user and not of the manufacturer. While fixing sensors, take extra caution to not damage while screwing and unscrewing the bike. It is a delicate product.
- The use of this product is at the total discretion of the private parties.
- Each system modification, both of hardware and software, as well as harness or single components, could affect the system functionality. It can do potential damage or cause injury to the user, vehicle, or to third parts and this will negate the product warranty.
- Installation must be done carefully It is mandatory that you follow instructions provided in the manual book. After installation it is highly recommended that you do proper test of the product before riding on.
- Installation is an extremely crucial setup for system efficiency. Be sure it is done by competent and specialized mechanic.

This manual is issued on Feb 28th 2017 in Rev. 4. It is the end user's responsibility to periodically visit the website www.irccomponents.it in order to check for revised and updated manual guides.

1. CONNECTIONS

Sensor has "magic threads" i.e. both right and left. Connect the sensor to the shiftrod. Once you have connected it, measure the shift-rod and cut it to customize it. After connecting, tighten the nuts and ensure the grub screws to avoid disconnections due to vibrations.

However, Install sensors and rod with uniball links on both the ends. Most bikes have stock uniballs. Check that the shiftrod does not rub or touch anything, as this could impair sensing. Try to fix sensors that does not get in connection with heated parts while riding. Make sure wire has a slight bend/loop so that it does not tighten up and pull the sensors up or down while shifting. **Warranty does not cover ripped out wires.**



WARNING: To adjust sensor positioning, act on the proper planes on it. Sensor failure could occur if acting on the cover.

2. DISPLAY

After switching on the system, the ECU makes a general check and, if passed, the display will show the firmware version.



WARNING: Do not start any process, setting or action on sensor until the above routine is completed.

When the pre load threshold has passed (par. 3.3), the display will show "**--**" .
In case of failure, the display will show an "**E**" followed by a number. Give this code to the assistant.

3. INITIAL SET UP

To set up initial program press both the buttons to enter into the system.
Push lower button to **scroll the menus forward**.
Push the upper one to **scroll the menus backwards**.
Press and maintain the lower button to enter into the various menus. However, to exit from the menu and undermenues press upper or both buttons. System will go out of programming session if no button is pushed except the "r" menu. Also during programming, the quickshifter is disabled.



WARNING: Act only on the following setup options.

3.1 Upshift Signal time programming "t"

Signal time programming for upshift.

3.4 Upshift Pre Load adjustment "L"

If upshift cut happens too early or too late, consequently change the preload set.

3.5 Actual Load displaying "S"

To read the value of actual applied load select this menu. This feature is also useful for preload adjustments and to check gearbox wear and is convenient to maintain the system.

3.5.1 Max Load displaying "--"

At this point, pressing and holding the lower button, the display will show blinking "--" for about 10s. Afterwards it will show the max load value registered in this period. This feature is useful for preload adjustment and for gearbox reliability and maintenance.

3.7 Downshift Pre Load adjustment "LS"

If downshift happens too early or too late, then consequently change the preload set.

3.9 analogic signal threshold "dL"

Always 2.5v at rest.

Possible threshold setting:

“05” 1.4÷3.6V (STANDARD)

“10” 0.5÷4.3V.

3.11 Pushing/Pulling"CE"

"C" Pushing, "E" Pulling. Referred to downshifting.

Ig into the menu you will find other parameters, DON’T CHANGE THESE.

4. CONNECTIONS

Put the 3 way plug into the OEM blip connector;

Connect **Red** wire to an ignition switch controlled +12v source and **Black** to ground.

5. WORKING CONDITIONS

5V; -20°C÷+95°C.

We value your business with us.

For any questions or troubleshooting queries, please contact us at:

tech-support@irccomponents.com Ph. (+39)0108938654.

Enjoy your choice.