

# Instruction Manual for Thermo Unit

Item No. : 02 - 01 - 5053 : KSR110 and KLX110

For use with: 02-01-0339 / 0340 / 0342 / 0343 / 0341 / 0344 only

• Thank you for purchasing one of our TAKEGAWA-made products. Please strictly follow the following instructions in installing and using the products.

Before installing the products, please be sure to check the product contents. Should you have any questions about the products, please contact your local motorcycle dealer.

### Read all instructions first before starting the installation.

This product is for exclusive use with a clutch cover with a blue thermostat hole cap. Please be informed that this product is not suitable for use with a cover with a silver thermostat hole cap because the screw diameter is not the same.

We do not take any responsibility for any accident or damage whatsoever arising from the use of the kit not in conformity with the instructions in this Instruction Manual.

We shall be held free from any responsibility or compensation whatsoever for any glitch in the parts other than ours if the glitch takes place after the installation and use of the products.

If you make modifications to any of the provided products, we shall be held free from any guarantee of the product.

You are requested not to contact us about the combination of our products with other manufacturers'.

Please note that this kit is designed for exclusive use in the above-mentioned fitting models only and that it cannot be mounted on any other models.

Please be informed that, mainly because of improvement in performance, design changes, and cost increase, the product specifications and prices are subject to change without prior notice. This manual should be retained for future reference

CAUTION

The following show the envisioned possibility of injuries to human bodies and property damage as a result of disregarding the following cautions.

- · Work only when the engine and muffler are cool. (Otherwise, you will get burned.)
- Do the installation with right tools. (Otherwise, breakage of parts or injuries to you may take place.)
- Always use a torque wrench to screw bolts and nuts tight and securely to the specified torque. (Otherwise, these parts may get damaged or fall off, resulting in accidents.)
- · Before riding, always check every hardware like screws for slack. If you find slack ones, screw them securely up to the specified torque.

(Otherwise, improper tightening may cause parts to come off.)

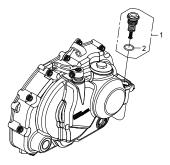
WARNING

The following show the envisioned possibility of human death or serious injuries to human bodies as a result of disregarding the following warnings.

- Those who are technically unskilled or inexperienced are required not to do the work.
- (Improper installation because of insufficient skill or knowledge could lead to parts breakage and subsequently to overturning and accidents.)
- Always start the engine in a well-ventilated place, and do not switch on the engine in an airtight place. (Otherwise, you will suffer from carbon monoxide poisoning.)
- When you notice something abnormal with your motorcycle while riding, immediately stop riding and park your motorcycle in a safe place to check what has gone wrong. (Otherwise, the malfunction could lead to accidents.)
- Before doing work, make sure your motorcycle is secure on level ground for safety's sake. (Otherwise, your motorcycle could overturn and injure you while you are working.)
- Check or carry out maintenance of your motorcycle correctly according to the procedures in the instruction manual or service manual.
- (Improper checking or maintenance could lead to accidents.)
- If you find damaged parts when checking and performing maintenance of your motorcycle, do not use these parts any longer, and replace them with new ones. (The continued use of these damaged parts as they are could lead to accidents.)

### Kit includes:

KAWASAKI-made KSR110. KLX110 SUZUKI-made DR-7110



No.	Part Name	Qty	Repair Part Item No.	in packs of
1	Thermo unit assembly	1		
2	O-ring, 16 mm	1	020-01-0012	2

#### Features

In the structure are used a spring of shape-memory alloy and a bidirectional bias-type spring. With the use of the shape-memory-alloy spring in this thermo unit, this unit can respond to temperature changes extremely quickly.

Even if the oil cooler gets clogged and consequently the oil pressure goes up, the said bias-type spring will secure the relief passage.

The valve of the thermo unit is open when the oil temperature is low. So the oil flows into the filter through the bypass passage, instead of flowing into the oil cooler.

When the oil temperature rises to 70 degrees Celsius or more, the valve shuts and the oil flows into the oil cooler. Thus, this thermo unit keeps the oil at a constant temperature, preventing overcooling.

Designed to be lightweight and compact

## Precautions for Use -

The thermo unit alone cannot function. Be sure to install an oil cooler. It is likely that the use of this thermo unit without the oil cooler will damage the thermo unit.

Never fail to connect the oil-cooler hose to the clutch cover. In case the oil hose is connected to the cylinder head, never operate the thermo unit.

Otherwise, it is likely that the thermo unit will be damaged.

Never disassemble, process or adjust the thermo unit. Otherwise, it will not operate

properly

### Installation Instructions

- 1 Remove a thermostat hole cap from the die-cast clutch cover.
- 2 Check the oil hole for dirt, dust and foreign body, which please remove, if any.
- 3 Install the thermo unit onto the die-cast clutch cover, being careful not to jam the O-ring. And tighten it to the specified torque

Torque: 15 N·m (1.5 kgf·m)

Apply a dab of engine oil to the O-ring.

4 Connect the oil-cooler hose to the die-cast clutch cover.

## SPECIAL PARTS TAXALEGAMA

3-5-16 Nishikiorihigashi Tondabayashi Osaka Japan TEL: 81-721-25-1357 FAX: 81-721-24-5059

URL: http://www.takegawa.co.jp