TAKEGAWA

# Instruction Manual Super Cool Kit for KLX110

 Item No.
 : 0 9 - 0 7 - 2 1 3 4

 Applicable to
 :2002 KAWASAKI KLX110 models onwards

 Frame Nos.
 :LX110A-000001 ~

Installation of TAKEGAWA's VM26 big bore carburetor kit (03-05-3291)

is a prerequisite for installation of the products.

Thank you for purchasing one of our TAKEGAWA's products. Please strictly follow the following instructions in installing and using the products. Before fitting the products, please be sure to check the contents of the kit. Should you have any questions about the products, please kindly contact your dealer.

## ~ Features ~

This kit of 3-fin type SUPER COOL can be installed to KLX110.

The oil line exhaust slot is designed to best fit the KLX, so that the under guards can be used without change.

Detach a genuine air cleaner box, which is just working as a left shroud stay after the installation of the TAKEGAWA's VM26 carburetor kit, and fix an oil cooler in the place of the air cleaner box.

Besides, this kit includes a stay via which to fix the left shroud to the oil cooler stay. So you will be free from the worry that the shroud would be unstable without the genuine air cleaner box.

# Please read the following instructions before installation.

We do not take any responsibility for any accident or damage whatsoever arising from the use of the products not in conformity with the instructions in the manual.

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

If you make alterations to the product outside our factry, we shall be held free from any guarantee of the product.

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

This product is designed for exclusive use in the above-mentioned types of motorcycles and frame numbers only. Please take note that this kit cannot be mounted on other types of motorcycles.

#### About Optional Parts

Though TAKEGAWA's oil cooler plate (09-07-025 / 026) and oil cooler guard (09-07-006) are installable, the left side shroud and the screws to mount the oil cooler plate may interfere with each other. In such a case, cut off the interferring part on the left-side shroud before installation.

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

· Work only when the engine and the muffler are cool. (Otherwise, you will burn yourself.)

• Prepare right tools for the work, and do the work in the proper and right way.(Otherwise, improper work could cause breakage of parts or injuries to yourself.)

- Always use a torque wrench to screw bolts and nuts tight and securely to the specified torque. (Improper torque could cause these parts to get damaged or fall off.)
- As some products and frames have sharp-pointed or protruding portions, please work with your hands protected. (Otherwise, you will suffer injuries.)

• Before riding, always check every section for slack in parts like screws. If you find slack ones, screw them securely up to the specified torque. (Or improper torque 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 could lead to a motorcycle's overturning or accidents as a result of parts breakage.)

• Always drive the engine in a well-ventilated place, and do not switch the engine on in an airtight place. (Otherwise, you will suffer from carbon monoxide poisoning.)

• When you notice something abnormal with your motorcycle while riding down a road, stop riding immediately and park your motorcyle in a safe place. (Otherwise, the abnormality could lead to an accident.)

• Before doing work, place the motorcycle on level ground to stablize the position of your motorcycle for safety's sake. (Otherwise, your motorcycle could fall down and injure you while you are working.)

• Check or perform maintenance of parts correctly according to the procedures in the instruction manual or a service manual. (Improper checking or maintence could lead to an accident.)

If you find damaged parts when checking and performing maintenance, 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 an accident.)

• Keep plastic bags for packing products out of infants' reach, or discard them. (Otherwise, there is a danger of infants suffocating if they wear the bag.)

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.

A defective product which we acknowledge is caused by product materials or defect in manufacturing will be repaired or replaced with a new one by us at our expense, if and when a claim is filed with us within one (1) month of your purchase. However, replacing of parts shall be made at users' expenses. And we shall be held free from responsibility for any defect caused by improper installation or use. Please be informed that we shall be held harmless against any claim against us whatsoever arising out of use of the products in racing and the like.

This manual should be retained for future reference.

	~ Kit Contents ~
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No.	Parts Name	Qty	No.	Parts Name	Qty
1	Oil cooler stay 1	1	10	Oil hose 320mm	1
2	Oil cooler stay 2	1	11	Oil hose 505mm	1
3	Oil cooler (3-fin, silver)	1	12	Cushion rubbers	2
4	Banjo bolts M8	2	13	Cushion collars	2
5	Banjos (straight)	2	14	Socket cap screws 6X20	2
6	Sealing washers 10mm	4	15	Socket cap screw 6X12	1
7	Banjo bolts M12	2	16	M6 washer	1
8	Oil cooler banjos	2	17	M6 flange nut	2
9	Sealing washers 14mm	4	18	Insulation locks 150mm	2

## ~ Installation Procedures ~

- Before Installation
- 1. Check the contents of the kit.
- 2. Stabilize the vehicle horizontally and securely on level ground with a maintenance stand or the like.

## Oil Cooler Assembly

- 1. Fix cushion rubbers (No.12) on the oil cooler stay 1 (No.1).
  - Fit the rubber into the upper left hole as indicated by the arrow in the picture below.



2. Insert cushion collars (No.13) from the back of the oil cooler stay.



3. Passing a banjo bolt (No.7), a 14mm sealing washer (No.9), a banjo (No.8) and a 14mm sealing washer (No.9), in this order, through an oil cooler (No.3), tighten them loosely.

▲ CAUTION: Fastening the union bolt with the sealing washer out of the concave in the oil cooler header (hex-shaped portion) causes oil

leakage.



5. Fix the oil hose 505mm (No.11) to the upper side of the oil cooler and the oil hose 320mm (No.10) to the lower side of the oil cooler, and then tighten them to the specified torque. Torque: 6 N • m (0.6 kgf • m)

### **Oil Cooler Installation**

1. Prepare a tray for oil, and remove an oil pipe connecting the cylinder head and the crankcase.

If needed, remove an under guard before doing this work.

- 2. Put a sealing washer 10mm (No. 6), a banjo (No. 5), and a sealing washer 10mm (No. 6) in this order into a banjo bolt M8 (No. 4), and temporarily fix them to the crankcase and the cylinder head.
- ▲ CAUTION: At this point, be sure to check that the sealing washers on both the crankcase and the cylinder head are at the center of the banjos. Tighteneing those washers, being out of alignment, will cause an oil leakage.

∠ Banjo bolt - Sealing washer - Banjo - Sealing washer

#### To the engine

- Detach the left-side shroud on the body, and then the genuine air cleaner box.
   The flange screws, fixing the genuine air cleaner box to the body, will be re-used.
- 4. Install the oil cooler stay, attached with the oil cooler, onto the vehicle with the screws used to fix the genuine air cleaner.
  Torque: 9 N m (0.9 kgf m)



5. Arrange the angle of the oil cooler union and banjoes so that the oil hose will not interfere with the cylinder and the frame, and connect the oil hose to the banjos on the crankcase and the cylinder head.



6. Tighten the oil cooler banjo and the banjo bolts to the specified torque.
Banjo bolt M12 (Oil cooler side)

22.5 N ⋅ m (2.3 kgf ⋅ m)
Banjo bolt M8 (Engine side)
12 N ⋅ m (1.2 kgf ⋅ m)

 <sup>(1)</sup> CAUTION:Tighten the banjo bolt on the side of the oil cooler, holding the banjo

cooler header (the hex portion). 7. Bind the hoses together with an insulation lock

securely with a spanner on the oil

### Left-Side Shroud Installation

(No. 23) to prevent them from getting loose.

1. Attach an M6 washer (No.16) into the 6x12 socket cap screw (No.15), and then pass them through the hole on the oil cooler stay 2. And temporarily install them to the oil cooler stay 1, and loosely tighten them with an M6 flange nut (No.17).



 After tightening loosely the screw of the left-side shroud on the fuel tank side, adjust the position of the shroud bracket which has just been fixed loosely. Then, pass the genuine screw through the left-side shroud, and fix an M6 flange nut (No.17) from the back of the oil cooler stay 2.
 Fully tighten the loosely-screwed socket cap screws 6x12 to the specified torque.
 Torque: 9 N • m (0.9 kgf • m) Final Checking

- 1. Turning a steering wheel all the way to the right and left, check that the oil cooler does not interfere with the front fork, other parts and the frame.
- Remove the spark plug, press down on the kick starter several times to circulate the engine oil around the engine, and reinstall the spark plug.
- 3. Add about 80 cc of engine oil (oil cooler's capacity), start the engine, and check each section for oil leakage.

Stop the engine, and, in about a minute, stand the motorcyle vertically, and check the oil level gauge to see that the oil remains in specified amounts. If it is below the specified level, add the engine oil.

▲ CAUTION: Take note that, after engine starting, parts such as the oil cooler and the cylinder get hot.

SPECIAL PARTS TAXECAWA

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