Carburetor Kit PE28 Instruction Manual

(For exclusive use in the Super Head 4VALVE+R-equipped motorcycle)

Product number	03-05-3292 (Carburetor kit) 03-02-056 (Manifold kit)

Adaptation model	KLX110 (LX110A-000001～)

Thank you very much for purchasing our products.
Thank you so you will comply with the following matters at the time of use.Before installation, please check your always kit contents.
If there is a point of notice event, Please contact us the dealer of purchase.

◎ If the description, such as photos or Illustration different with this part.

☆ Please read carefully before use ☆

◎ The use ignoring the instructions that are written in the manual, if the accident or damage has occurred, we can not assume any responsibility for compensation.
◎ This product installation and use, when a problem occurs to after market goods, guarantee other than this product, also can not assume any in any such matters.
◎ If it was the case or mounting that has been processed like a product, it will not be covered under warranty.
◎ It is not possible to inquire of the combination of other manufacturers.
◎ This product is the above-mentioned vehicle exclusive goods.Is not possible attached to the other vehicle. Please note.
◎ Product may have edges or protrusions. Be sure to wear working gloves.
(Please wear work gloves when working, even if a photo in this article show without work gloves.)
◎ Installation of product, go to ensure reference to a genuine service manual to adaptive models always.
◎ Do not drive a motorcycle under rainy weather because the machine is likely to easily absorb moisture after the installation of this kit. Moisture will get into the engine, leading to the troubles with the engine. And cover your machine with a vinyl sheet when washing it not to get the carburetor wet with water.
◎ Setting of a carburetor must be adjusted depending on the natural phenomena like the weather, temperatures and barometic pressure, and machine and carburetor themselves. Arrange the setting to match the engine and other conditions. For your information, the carburetor is shipped out in a state described on page 2.

⚠ Caution When the handling of ignoring this display, property damage and human shows the assumption of what injury.

■ When performing the work, etc., be sure during the cold (when the engine and the muffler is cold). (It may cause burns.)
■ When performing the work, it should be made to prepare the tools for the job. (Breakage of parts, it may cause injury.)
■ Do the work must always specified torque using a torque wrench. (Damage of bolts and nuts, and cause of dropout.)
■ The product and the frame, might have edges or protrusions. When working, please wear work gloves to protect your hands. (It may cause injury.)
■ Be sure to each part inspection before operation, check the loosening of the threaded portion, be sure to securely tighten the specified torque if there is loose. (It may cause detachment of the parts.)
■ Always use new gaskets, and seals. And check those parts to be reused for wear and damage. If you find worn or damaged parts, replace them with new ones.

⚠ Warning When the handling of ignoring this display people died, shows the contents of the serious injury possibility is assumed.

■ If you start the engine, be sure in a well-ventilated place. In the sealed such place, please do not start the engine. (There is a risk of carbon monoxide poisoning.)
■ During operation, when an abnormality occurs, immediately stop the vehicle in a safe place, please stop running. (It may lead to an accident.)
■ When performing the work, do the work safely stabilize the vehicle in a horizontal location. (There is a risk of injury vehicle collapsed while working.)
■ Inspection, maintenance, the instruction manual or, inspection methods such as service manuals, to protect the way, should be done correctly.(unsuitable inspection and maintenance, there is a risk that result to an accident.)
■ When carrying out the inspection and maintenance, etc., if found damaged parts, replace the damaged parts to avoid possible to reuse the parts. (There is a risk that lead to accidents Continued use.)
■ As gasoline is highly flammable, never place it close to fire. Make sure that nothing flammable is near the gasoline. Since vaporized accumulation of gasoline is at high risk of explosion, work in a well-ventilated place. (Otherwise, it may cause a fire.)

◎ Please note. Performance up, the design change, the product and the price in the cost up, etc. are subject to change without notice.
◎ 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.
◎ Keep this manual stored until this product is discarded.

SPECIAL PARTS TAKEGAWA
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Please contact with your name and country name provided. (Only English please)

Product content

Number	Product content	Quantity	Item Number
1	Carburetor assembly	1	03-03-027
※ 2	Inlet pipe	1	00-00-1497
※ 3	Insulator	1	00-03-0210
4	Air filter	1	03-01-1094
※ 5	Inlet pipe gasket	1	00-03-0007 (2 pcs)
※ 6	Band	1	00-00-0050
7	Throttle cable COMP.	1	00-00-1524
8	Main jet #110	1	00-03-0094
9	Slow jet #35 #35	1	00-03-0137
※10	Socket cap screw, 6x15	2	00-00-0718 (5 pcs)
※11	Socket cap screw, 6x20	2	00-00-0721 (5 pcs)
※12	Hex wrench, 5mm	1	————

※Items marked with an asterisk show a part included in the manifold kit.
∴Please order in the repair parts are always repair part number.
If it is not the part number order, you may not be able to order.
Please be forewarned.
It should be noted,In the case of parts that can not be separately shipment,
please order a set part number.
∴Repair parts may differ slightly from the kit contents in terms of shape, etc.
There is no problem to use it. Please be forewarned.

Factory preset mode of the carburetor

Main jet	#128
Slow jet	#52
Jet needle	F1343H24NAAC
Clip position	2nd groove from top
Throttle valve cut-away	#6.0
Air screw opening	1 ± 1/4 turns

[Setting parts]

◎Main jet
#82、#85、#88、#90、#92、#95、#98、
#100、#102、#105、#108、#110、#112、#115、#118、#120、#122、#125、#128、#130、#132、#135、#138、#140、#142、#145、#148、#150、#152、
#155、#158、#160、#162、#165、#168、#170、#172、#175、#178、#180、#182、#185、#188、#192、#195、#198、#200
◎Slow jet
#35、#38、#40、#42、#45、#50、#52、#55、#60、#62、#65、#68、#70

■ Mounting procedure ※Please refer to the Genuine Service Manual for detailed mounting methods and specified torques that are not specifically described.

○ Make sure that the motorcycle is secure on level ground.
○ Close a fuel cock, and open a drain cock on the carburetor to drain gasoline from the float chamber.

◎ Removal of Shroud

○ Referring to the service manual, remove a right and left shrouds.

◎ Carburetor Removal

○ Detach a top cap from a stock carburetor. Disconnect choke cables and a fuel hose, and ease a clamp screw on the air cleaner duct. Loosen two bolts in order to detach a manifold and carburetor.
○ Remove a choke lever bracket from the frame.
○ Remove an air cleaner duct from the air cleaner box.

◎ Remove a stock throttle cable.

○ Unfasten two screws to remove the cover of a throttle housing.
○ Disconnect an inner cable, and remove it from the throttle housing by rotating an adjuster on the throttle cable.

◎ Attachment of Throttle Cable

○ Rotate the adjuster and attach throttle cables of the kit to the throttle housing, and connect the inner cables to a throttle reel.
◇ Fix the cover of the throttle housing with two screws.

◎ Installation of Carburetor

○ Remove an ignition coil, and reinstall it in a position for installing the choke lever bracket.

⚠ Note: Be sure that you protect specified torque.
Torque : 4.9N・m (0.5kgf・m)

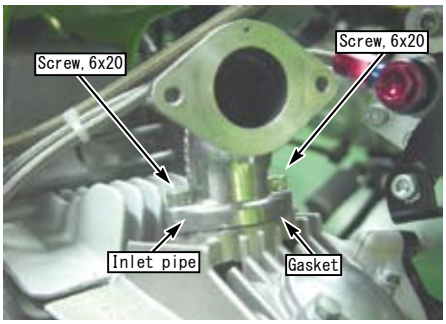
○ Fit an inlet pipe into the circled bolt holes on the cylinder head.

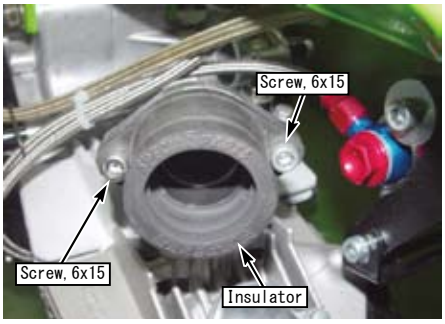
○ Put a gasket between the cylinder head and an inlet pipe, and fix it with 6x20 socket cap screws.

⚠ Note: Be sure that you protect specified torque.
Socket cap screw
Torque : 10N・m (1.0kgf・m)

○ And fix the insulator to the inlet pipe with 6x15 socket cap screws.

⚠ Note: Be sure that you protect specified torque.
Socket cap screw
Torque : 10N・m (1.0kgf・m)





○ First, detach the carburetor float chamber, and then a main jet and slow jet. Attach the #110 main jet and #35 slow jet of the kit, and then attach the float chamber.
○ Insert the carburetor into the insulator, and fix them by tightening a band.
○ Detach a carburetor's top cap, and remove a spring, a needle clip retainer, and a throttle valve.
○ Install the top cap, spring, and throttle valve to the throttle cable, and fix the needle clip retainer.
○ Aligning a notch on the throttle valve with a throttle stop screw, install it to the carburetor.
○ Adjust the adjuster of a throttle cable so there is approx. 5 mm of free play at the throttle grip. Snap the throttle a few times to check how the throttle valve opens or closes.
○ Dispose of the blow-by gas from the crankcase by yourself.
○ Replace the removed shrouds back in the original place, according to the service manual.

◎ You can see this instruction manual on our website as PDF data .
If this document hard to read, please download it from our website.

How to Set the Carburetor

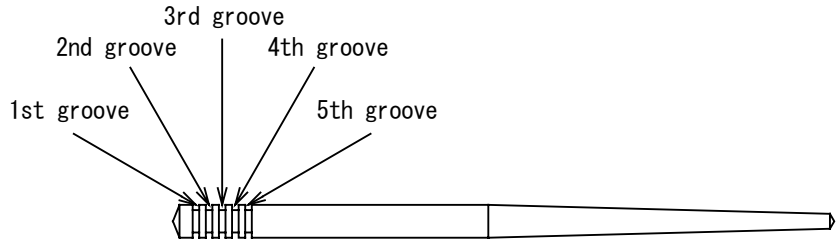
・When the carburetor does not match the engine and the engine fails, the engine failures are caused by either too dense or too lean air-fuel mixture.
・The engine failure symptoms for the engine are as follows:

When the air-fuel mixture is too dense:	When the air-fuel mixture is too lean:
・The explosion sound with a dull thud continues intermittently. ・The engine malfunctions further if you use the choke. ・The engine malfunctions when you warm it up. ・The engine works well if the cleaner is detached. ・The motorcycle belches dense (or, black) exhaust gas. ・The plug smolders, getting blackened.	・The engine overheats somewhat. ・The engine starts working well If you use the choke,. ・The engine does not accelerate well. (No smooth acceleration) ・Revolutions change, generating weak power. ・The plug burns white.

※ Set the carburetor only after warming up the engine, and then test-drive. And use a plug with the right heat value.
※ Do the setting in the following manner, studying at what throttle opening position the engine starts failing.

○ Jet needle (Throttle position at 1/4 - 3/4)

Whether or not the engine revolution is in proportion to the throttle operation
・When the acceleration is not smooth or even, make the air-fuel mixture dense.
・Make the air-fuel mixture lean when the engine revolution goes up heavily and belches black gas.
The mixture ratio at this throttle position can be adjusted by the location of E-ring in the grooves. The air-fuel mixture becomes dense as the location of the E-ring moves down from the 1st to the 5th groove.



○ Main jet (The throttle position at 3/4 - 4/4)

・The air-fuel mixture ratio at this throttle position can be adjusted by changing the number of the main jet. The larger the main jet numbers, the denser the mixture ratio becomes.
・In view of the engine and muffler specifications, select the most appropriate main jet to get the highest revolutions.

○ Slow jet / Pilot jet (First of all, please adjust the air screw.)

・In case you have given more than three turns to the air screw to tighten it, use a slow jet / pilot jet with a small number.
・If you have tighten the air screw (clockwise) to the full, use a slow jet / pilot jet with a larger number.
Check whether you have made a right choice of the pilot jet by seeing if the engine starts up revolving smoothly from the idling to running at slow speed.
・When the engine revolves up unevenly, the slow jet / pilot jet number is too small. (At idle)
・When the motorcycle belches black exhaust gas and produces heavy exhaust sound, the slow jet / pilot jet number is too big. (At idle)
・After replacing the slow jet / pilot jet, you need to readjust the airscrew.

○ Air screw

The air screw adjusts the air mass flow at the time of engine's revolving at slow speed. (At idling)
・Give the air screw a right turn → The air-fuel mixture gets dense.
・Give the air screw a left turn → The air-fuel mixture gets lean.
Loosen the tightened air screw back to the 1.5-turn position. And then from this position, give to the airscrew a right or left turn of 1/4 to 1/2 till the engine revolves at the highest speed.
Loosen the idle stop screw till you get the steady idling revolutions. And once again adjust the position of the airscrew to get the highest revolutions.

● On how the barometric pressure, temperatures and humidity affect the setting:

・At highlands or at high altitudes, the barometric pressure and air density go down and the air gets into the carburetor in less amounts.
This makes the air-fuel mixture dense which was adjusted at low altitudes.
・Under the weather conditions with very low temperatures, the air density increases, which makes the air-fuel mixture lean.
・Under the rainy and humid weather conditions, the air density decreases, which makes the air-fuel mixture dense.

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