

Sports Camshaft Instruction manual

Product number	01-08-0190 (N-10)
	01-08-0191 (N-20)

Adaptation model	GROM	(JC92-1000001 ~ 1099999)
	Monkey125	(JB03-1000001 ~) (JB05-1000001 ~)
	CT125	(JA65-1000001 ~ 1099999)
	Dax125	(JB04-1000001 ~)
	Super Cub 110	(JA59-1000001 ~)
	Cross Cub 110	(JA60-1000001 ~)

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.

Caution about fuel to use

DO NOT use for GROM (JC92-1000001 to 1099999), without FI con with our exhaust system only at the same time (due to air-fuel ratio will not be at the appropriate value and possibility of engine damage.) MUST USE specified FI controller TYPE-e at the same time. For MONKEY125, CT125, Dax125, Super Cub 110 and Cross Cub 110, please use specified FI CON TYPE-X at the same time with this product.

About de-comp

When installing a de-comp mechanism, you will need to disassemble the stock camshaft and use special tools (puller and press). (Not for Super Cub110 and Cross Cub110)
If NOT install the de-compression parts, it may be difficult to start the engine (depending on the condition of the battery.)
We offer the de-comp mechanism assembly service (fee apply). (12-07-0004)

☆ 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.
 - ◎ Installation of product, go to ensure reference to a genuine service manual to adaptive models always.
The instructions in this manual mainly describe the installation work of this product and omit other parts of the work.
Please refer to the genuine service manual when performing work on the omitted parts.
 - ◎ When installing, please prepare the tools and work carefully according to the installation instructions and genuine service manual.
 - ◎ This manual and genuine service manual are intended for those who have a basic skills and knowledge.
If no experience of mounting, etc., who preparation of such a tool is insufficient, we recommend that it is your request to the shop with a technical credit.
 - ◎ 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.)
 - ◎ Please perform the break-in.
 - ◎ When this product and FI controller are installed, the higher limit of engine rpm will increase as well as the output power will increase.
For long and high-load riding, we recommend installing our super oil pump kit (with relief valve mechanism) and oil cooler kit.
 - ◎ Some of bolts, nuts, dowel pins, and packings will be reused. However, be sure to replace worn-down or severely-damaged ones with new ones.
 - ◎ This product contains only the camshaft. The L.crankcase cover gasket (P/N:00-02-0498) required for installation (not included in this kit)
- ~ feature ~
- Changes the output characteristics of a stock engine (same displacement) to enable higher power. More power can be increased by combining with our exhaust system and FI controller.
 - N-10 sports camshaft mainly increases output in the low to medium rpm range. It contributes to improved handling and ease of riding.
 - N-20 sports camshaft mainly increases output in the high rpm range. It is an optional camshaft for the S-Stage bore up kit.
 - It possible to become auto de-compression specification, by using (transfer) the stock camshaft' s auto de-comp mechanism.
(Not for Super Cub110 and Cross Cub110)

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

- 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.)

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

- 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.)
- Plastic bags of product packaging, you can either be stored in a place that is out of reach of children, it should be discarded.
(When the children or wearing, there is a risk of suffocation.)

SPECIAL PARTS
TAKEGAWA

CONTACT Address : 3-5-16 Nishikiorihigashi Tondabayashi Osaka JAPAN
TEL: +81-721-25-1357 FAX: +81-721-24-5059 e-mail: english@takegawa.co.jp URL: http://www.takegawa.co.jp
Please contact with your name and country name provided. (Only English please)

- ◎ 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.

Product content



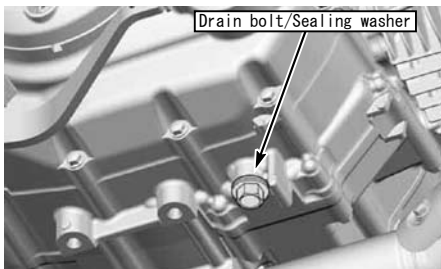
Product content	Quantity
Cam shaft COMP.	1

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

- Park the motorcycle in a horizontal place with a maintenance stand, etc
- When installing the FI controller, carefully read the installation manual.

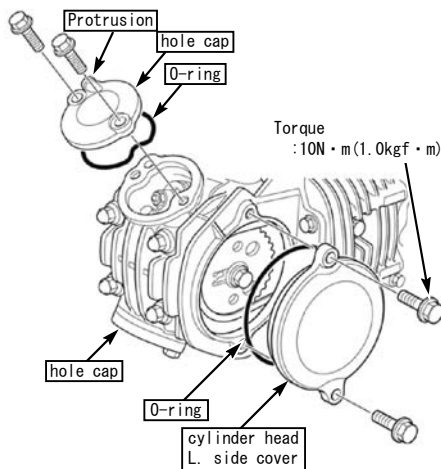
● Removal of Cam shaft

- If necessary, remove the exterior parts, air cleaner case and drive sprocket cover referring to the service manual.
- L. Disconnect the harness from the crankcase cover
- Prepare the pan, remove the drain bolt/sealing washer, filler cap, and drain the engine oil.

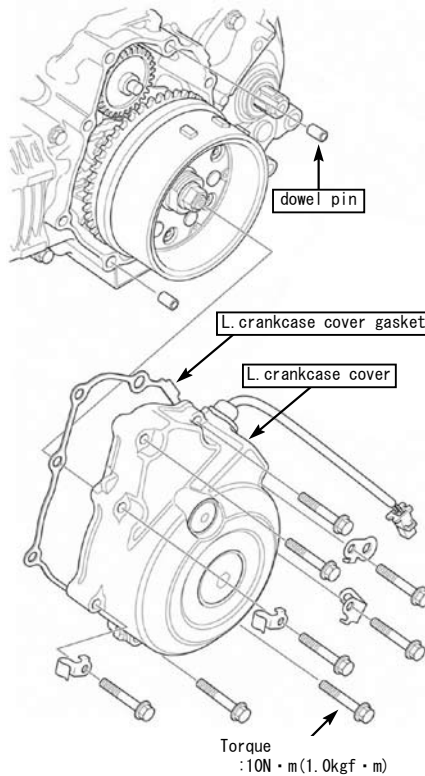


- Remove the two bolts and remove the cylinder head L. side cover/O-ring, intake side, and exhaust side hole cap/O-ring.

※ Prepare the pan for oil to drip.



- Loosen and remove the bolts diagonally in several steps. Remove the crankcase cover.
- ※ The L. crankcase cover is pulled in by magnetic force, so be careful not to get your fingers pinched.
- Remove the two dowel pins and clean off the gasket remaining on the crankcase and L. crankcase cover mounting surface.



- Turn the crankshaft counterclockwise and align the "O" mark on the cam sprocket with the protrusion on the cylinder head.



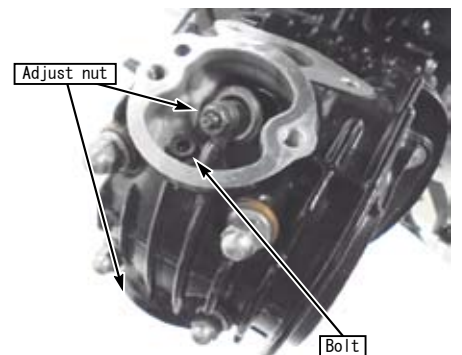
- Hold the cam sprocket with a universal holder, remove the cam sprocket bolt/washer, and remove the cam sprocket.



- Remove the tensioner rod oil filler bolt.



- Loosen the adjustment nuts on the rocker arms of both the intake and exhaust and loosen the adjustment screws. Remove the rocker arm shaft bolts for intake.



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

- Attach some M6 bolt to the intake side rocker arm shaft, pull it out from the cylinder head, remove the rocker arm.
- ※ CAUTION: falling off bearings.



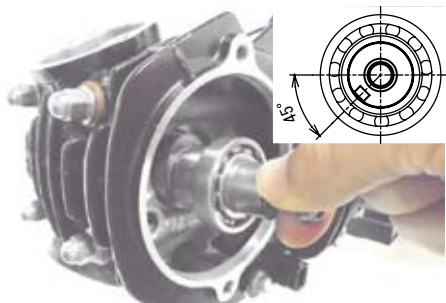
- Remove the bolt/washer that holds the camshaft in place.



- Remove the camshaft using with an appropriate bolts attached, matching it to the shape of the cylinder head.
- First, align the groove with the intake side at about 45 degrees and pull partially out.
- ※ If the camshaft is difficult to remove, use a sliding hammer or remove the cylinder head and remove it. Follow the service manual when removing the cylinder head.



- Next, rotate groove to the exhaust side at about 45 degrees and remove the cam crest and de-comp mechanism with the shape of the head.

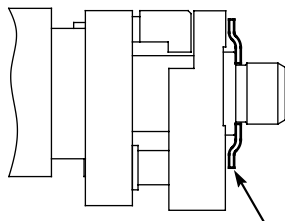


● Installation of de-comp parts

- ※ If you not install the de-comp mechanism, follow the steps from "Installing the camshaft"
- ※ Special tools (bearing pullers/presses) must be used for removal and installation.
- Remove the bearing on both, (stock and kit) of the de-compression side.



- Remove the de-compression mechanism parts from the stock camshaft and transfer it to the kit camshaft.
- ※ Caution: direction of the washer.



Caution: direction of the washer.

- Press in the bearing.

● Installation of Cam shaft

- Apply engine oil to each part of the camshaft.



- Install the camshaft by reverse order the removal procedure, aligning it with the shape of the cylinder head.
- Install bolts/washers to the cylinder head and install the camshaft.

▲ Note: Be sure that you protect specified torque.

Bolt/washer
Torque : 10N · m (1.0kgf · m)



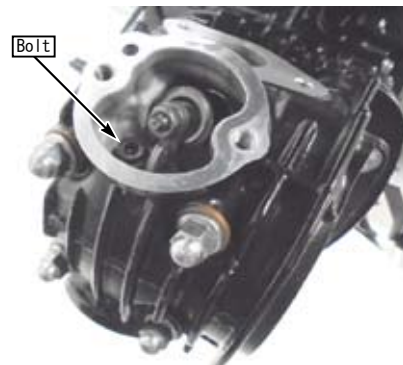
- Attach the intake side rocker arm to the cylinder head using the rocker arm shaft.



- Align the screw hole of the rocker arm shaft with the hole of the cylinder head and install the rocker arm shaft fixing bolt.

▲ Note: Be sure that you protect specified torque.

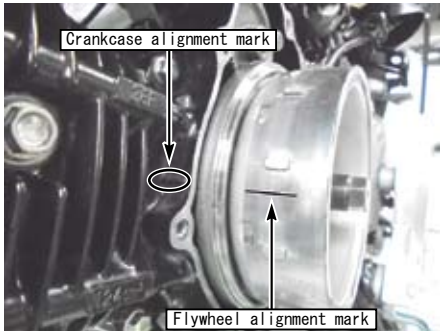
Bolt
Torque : 5N · m (0.5kgf · m)



■ 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 alignment mark on the flywheel matches the alignment mark on the crankcase, and align the cam sprocket so that the “○” mark on the cam sprocket aligns with the protrusion on the cylinder head.

Attach the cam chain and align the protrusion of the cam sprocket with the groove of the camshaft.



○ Hold the cam sprocket (with a universal holder) and tighten the cam sprocket bolt/washer to the specified torque.

⚠ Note: Be sure that you protect specified torque.

Bolt/washer
Torque : 27N · m (2.8kgf · m)

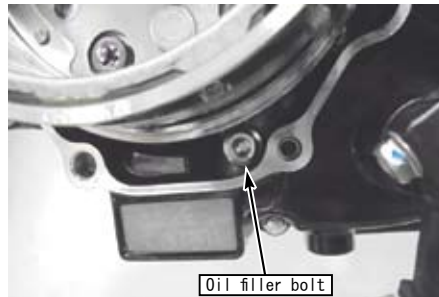


○ Turn the crankshaft two revolutions counterclockwise until the alignment mark on the flywheel aligns with the alignment mark on the crankcase, and the “○” mark on the cam sprocket aligns with the protrusion on the cylinder head.

○ Inject a small amount of engine oil into the tensioner rod bolt hole and install the oil filler bolt.

⚠ Note: Be sure that you protect specified torque.

Oil filler bolt
Torque : 10N · m (1.0kgf · m)



Oil filler bolt

● Adjustment of valve clearance

○ Check that the alignment mark on the flywheel aligns with the crankcase mark, and that the “○” mark on the cam sprocket aligns with the protrusion on the cylinder head.

○ Insert the thickness gauge between the rocker arm adjustment screw and the valve stem end, and tighten the adjustment screw until the thickness gauge shows some resistance.

Tighten the adjustment nut until it can be pulled out.

Valve clearance
0.08 ± 0.02mm for both intake and exhaust.

⚠ Note: Be sure that you protect specified torque.

Adjustment
Torque : 9N · m (0.9kgf · m)



○ Refer to the genuine service manual and install the removed parts and connect the wiring.

○ When installing the FI controller, carefully read the installation manual.
○ Attach the drain bolt with a new sealing washer to the crankcase and pour the specified amount of engine oil.

※ If the drain bolt has been changed, follow the instruction manual for that drain bolt.

Install the filler cap.

Engine oil amount

	Monkey125 GROM	CT125 DAX125 Super Cub 110 Cross Cub 110
At draining	0.9 ℓ	0.8 ℓ
At replacing the oil filter	0.9 ℓ	0.85 ℓ
At disassembly	1.05 ℓ	1.0 ℓ

⚠ Note: Be sure that you protect specified torque.

Drain bolt
Torque : 24N · m (2.4kgf · m)

○ Inspect each part to make sure there are no loose screws or nuts.

○ Start the engine carefully and check that there are no oil leaks or abnormal noises from the engine. (do this in well-ventilated and safe place)

Refer to the genuine service manual and check if the oil level is within the standard range.

Once again check for loose screws, nuts, etc.

⚠ Warning : Start the engine and perform inspections in a well-ventilated area.
Do not start the engine in a closed place.
(There is a risk of carbon monoxide poisoning.)

● About increasing the amount of engine oil (Stock oil pump)

○ By installing this product and FI controller, the upper limit of engine rpm will be higher than stock.

In running speed is 9500 rpm or higher, we recommend increasing the oil amount about 100 cc.

★ We recommend to use our super oil pump kit (with relief valve mechanism)

※ When using a super oil pump, please follow the instruction 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.

