

Clutch Cover Kit (Magnesium) Instruction manual

Product number 02-01-0072 (Painted brown)

Adaptation engine 1P60-5FMJ/1P60-FMJ engine only

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.)

◎ In the case of 1P60-5FMJ, the kick shaft diameter may vary from engine to engine.

~ feature ~

○ We have formed the clutch cover and oil filter by die-casting, and used lightweight magnesium alloy, with a specific gravity of 1.7, to make the clutch.

○ We have given the rust-proofing treatment and then put liquid painting onto the surface.

○ A thermostat with a spring, made of a shape-memory alloy, is available for use in this kit as an optional extra.

○ An oil tap for an oil cooler can be installed on the clutch cover itself. This kit enables the flow of oil from the clutch cover to oil cooler.

○ This kit comes with a glass-type oil pot window with a high level of durability.

○ Equipped with a large-size oil filler cap.

Precautions for use

- An oil cooler unit, which is installable to the oil filter cover, cannot be installed to this kit due to the size difference. Oil lines can be used only at the specified location.
- A conventional oil cooler hose cannot be used due to size differences. Please use the one for a die-cast cover.
- An oil filter cover and a clutch release rack are for exclusive use with a die-cast cover. They are not compatible with the conventional ones.
- In case you install an oil cooler without using a thermo unit, install an included oil hole plug.
NEVER install an oil hole plug when an oil cooler is not to be used. There is a possibility of the cover's breaking because the oil pressure path will be blocked.
- A blind plug for a kick starter spindle differs from the conventional one in size. Please use the blind plug for a die-cast cover.
- Please refer to a relative instruction manual for a thermo unit, an oil cooler, and so on.

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.)

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 the high risk of explosion, work in a well-ventilated place.

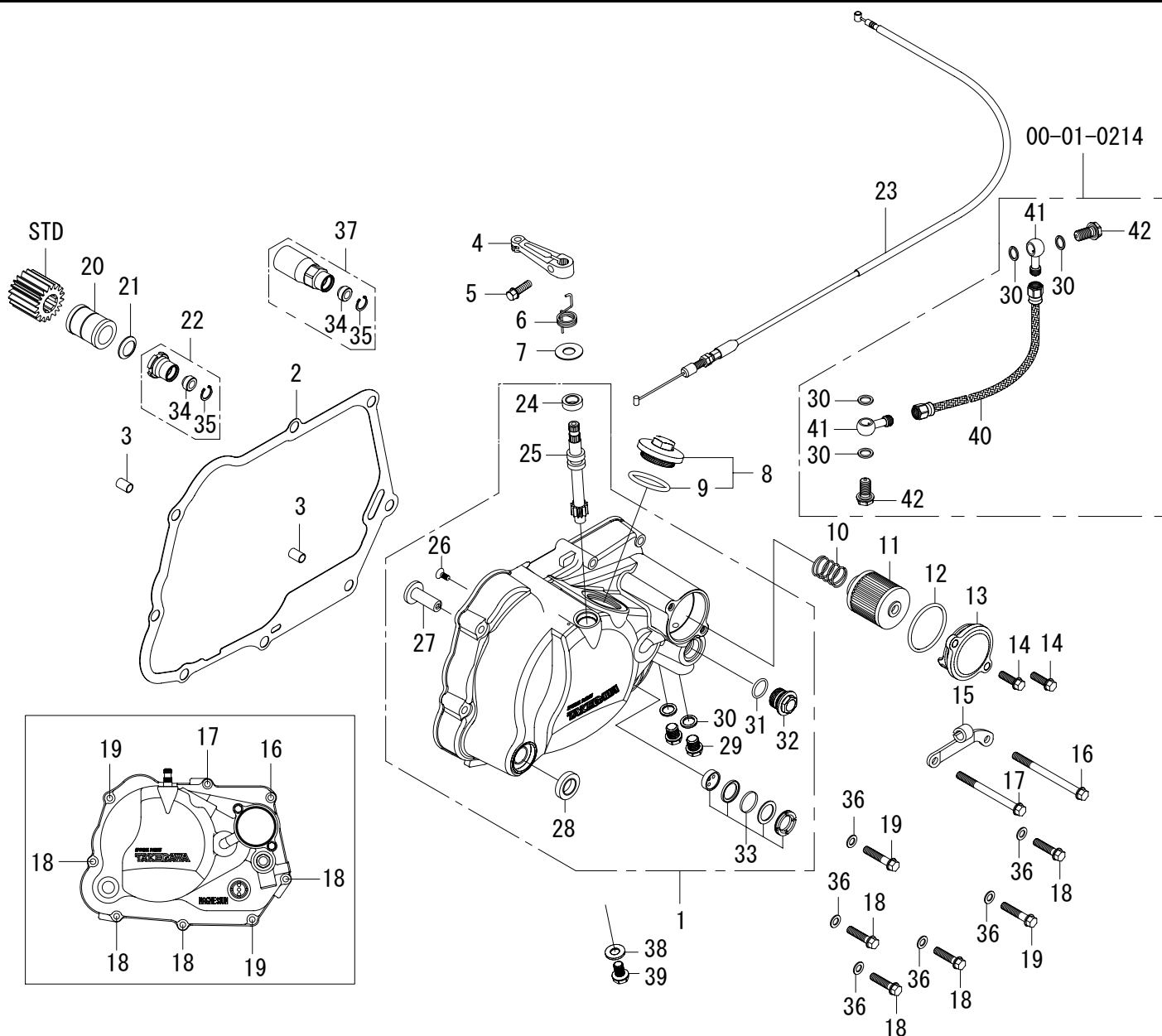
◎ Please note. Performance up, the design change, the product and the price in the cost up, etc. are subject to change without notice.

◎ 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)



Number	Product content	Quantity	Item Number	Number	Product content	Quantity	Item Number
1	Right-side crankcase cover SUB ASSY.	1	00-02-0432	23	Clutch cable COMP. (910mm)	1	00-02-0107
2	Right-side crankcase cover gasket	1	01-13-0208	24	Oil seal, 10x17x5	1	00-02-0006
3	Dowel pin, 8x12	2	00-00-0153 (2 pcs)	25	Clutch release pinion	1	00-02-0033
4	Clutch release arm	1	00-00-1668	26	Flat head screw, 4x10	1	00-00-0100 (10 pcs)
5	Flange bolt, 6x18	1	00-00-0880 (5 pcs)	27	Clutch release rack	1	00-02-0039
6	Clutch release arm spring	1	00-02-0112	28	Oil seal, 13.7x24x5	1	00-02-0032
7	Plain washer	1	00-00-0151 (10 pcs)	29	Oil plug bolt	2	00-07-0072 (with Sealing washer)
8	Hole cap	1	02-09-0001 (with O-ring)	30	Aluminum sealing washer	6	00-00-0789 (5 pcs)
9	O-ring	1	00-01-0034 (4 pcs)	31	O-ring, 15mm	1	00-00-0185 (5 pcs)
10	Oil filter spring	1	00-07-0065	32	Thermostat hole cap	1	00-07-0063 (with O-ring)
11	Oil filter element	1	00-02-0027	33	Oil pot window set	1SET	00-02-0031
12	O-ring, 40mm	1	00-02-0040	34	Oil seal, 6x13x5	2	00-02-0037
13	Oil filter cover	1	00-00-1411	35	C-ring, 13mm	2	00-02-0099 (5 pcs)
14	Flange bolt, 6x16	2	00-00-0879 (5 pcs)	36	Aluminum washer, 6mm	10	00-02-0530 (5 pcs)
15	Clutch cable receiver	1	00-00-2106	37	Spacer nut COMP.	1	00-00-2308
16	Flange bolt, 6x90	1	00-00-0894 (3 pcs)	38	Sealing washer (copper)	1	00-00-0283
17	Flange bolt, 6x55	1	00-00-0889 (3 pcs)	39	Flange bolt, 8x16	1	00-00-0039 (4 pcs)
18	Flange bolt, 6x35	4	00-00-0885 (3 pcs)	40	Oil hose, 190mm	1	00-01-0214
19	Flange bolt, 6x40	2	00-00-0886 (5 pcs)	41	Union (straight)	2	00-07-0283
20	Spacer	1	00-00-1412	42	Banjo bolt, M8x1.25	2	
21	Conical spring washer, 14mm	1	00-02-0036				
22	Lock nut COMP.	1	00-02-0396				

※ 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.

○ Check the contents of the kit.

Disassembly

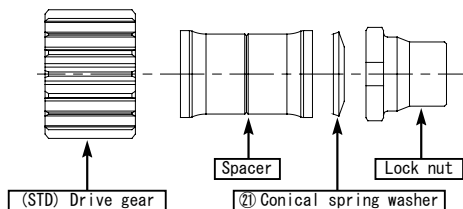
- Drain the engine oil.
- Detach an oil pipe connecting the cylinder head and clutch.
- Pull out a right crankcase-cover bolt to remove a right crankcase cover.
- Detach a case-cover gasket and two dowel pins.
- Unscrew four flat screws on the oil filter rotor cover, and remove the oil filter cover, gaskets, a lock nut, a lock washer B and an oil filter rotor.



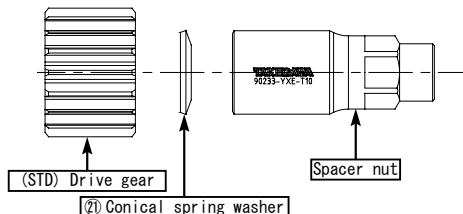
Installation

- The installation work varies depending on the engine No.
- Fit the included spacer into the crankshaft, and tighten the crankshaft with the conical spring washer and lock nut.
- ※ In fitting the conical spring washer, be careful about which side of it to face which direction.

In the case of 1P60-FMJ:



In the case of 1P60-5FMJ:



- Tighten the lock nut to the specified torque with the crankshaft being seated in detent.
- ※ First, finish this work, and then install the heavy-duty Clutch Kit of 02-01-0008 referring to its Instruction Manual.

⚠ Note: Be sure that you protect specified torque.
Lock nut
Torque : 39N · m (4.0kgf · m)

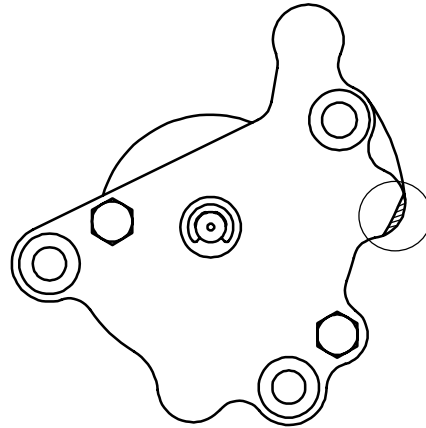
(Installation of Right Crankcase Cover)

- Degrease the mating surfaces of the crankcase, and to the crankcase, attach supplied two dowel pins and right crankcase cover gasket.

In case the oil pump interferes with the clutch cover:

Modify the shaded portion in the circle in the figure below so that there will be no more interference.

- ※ Remove the oil pump before modifying it. After modifying it, wash it so that the chips won't remain in it.



- First make sure that a clutch release rack is present inside the right-side crankcase cover COMP., and fit aluminum washers into six bolts excluding flange bolts to hold a clutch cable receiver. And fit them loosely for now into the crankcase, and tighten them to the specified torque.
- ※ Never fix the right crankcase cover obliquely with force. Otherwise, the oil seal on the lock nut will be damaged, causing the crank seizing.

⚠ Note: Be sure that you protect specified torque.
Bolt
Torque : 7N · m (0.7kgf · m)

- Put the oil filter spring inside the right crankcase cover. Please see to it that it fits in the boss. Also attach the oil filter, and then fix the oil filter cover by tightening a flange bolt to the specified torque.
- ※ Place the oil filter so it sticks in the protrusion on the oil filter cover.
- ※ When replacing the oil filter, wipe off the oil on the surface which comes in contact with the O-ring and the oil on the oil filter cover, and then apply grease to the O-ring thinly.
- ※ No aluminum washer is to be used.

⚠ Note: Be sure that you protect specified torque.
Flange bolt, 6x16
Torque : 9N · m (0.9kgf · m)

- Attach the clutch cable end to the clutch lever.
- Route the clutch cable to the receiver without pulling it fully stretched and forcibly.
- Slightly apply grease to the clutch cable end, and fit the clutch release arm into the clutch release pinion.
- ※ Fit the clutch release arm into the clutch release pinion so the notch on the clutch release arm faces backward.
- Screw in the adjuster of the clutch cable to the cable receiver to the end.
- Fix into the release pinion the clutch arm spring and release arm with its inner cable stretched. Tighten it with a flange bolt to the specified torque.

⚠ Note: Be sure that you protect specified torque.
Flange bolt
Torque : 8N · m (0.8kgf · m)

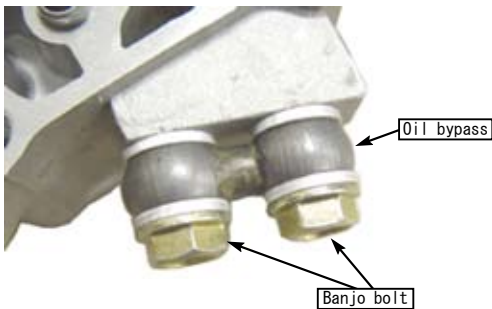
○ Adjust the free play at the clutch with the adjuster on the clutch cable receiver, then install and tighten the locking nuts to the specified torque.

And cover the clutch cable adjusters at both ends with rubber caps.

※ Adjust the free play at the clutch lever end to be 10 to 20 mm.

⚠ Note: Be sure that you protect specified torque.
Lock nut
Torque : 10N · m (1.0kgf · m)

○ Remove an oil bypass and banjo bolts as shown in the photo below.

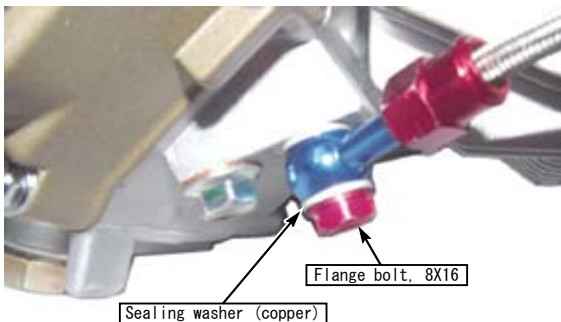
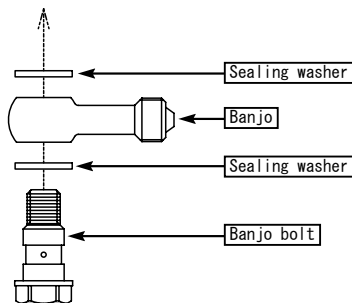


○ Loosely install for now a kit-included flange bolt (8x16) and sealing washer (copper) to the lower oil line, and a sealing washer, union and banjo bolt to the upper oil line, as shown in the figure and photo below.

In the same way, on the side of the cylinder head as well, loosely install for now a sealing washer, union and banjo bolt in this order.

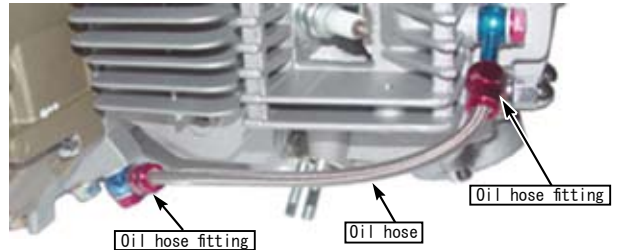
And referring to the photo, install an oil hose.

To the engine



○ When tightening the banjo bolt, adjust its angle so the oil hose does not interfere with cylinder or exhaust system. And attach the banjo bolt and oil hose fittings.

⚠ Note: Be sure that you protect specified torque.
Flange bolt, 8x16
Torque : 24N · m (2.4kgf · m)
Banjo bolt
Torque : 12N · m (1.2kgf · m)
Oil hose fitting
Torque : 6N · m (0.6kgf · m)

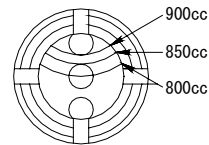


○ First, make sure that the drain bolt is tightened to the torque of 21.5N · m (2.2kgf · m), then add 800 cc of engine oil, attach the O-ring to the hole cap, and tighten hole cap to the specified torque.

※ Apply engine oil slightly to the O-ring of the hole cap.

※ Viscosities and amount of engine oil will have an effect on the clutch shifting. Take care not to use too viscous engine oil or inject too much of engine oil. Additionally, do not mix too much of chemical admixture like molybdenum which will cause clutch slippage.

⚠ Note: Be sure that you protect specified torque.
Hole cap
Torque : 12N · m (1.2kgf · m)



Use above figures just as a guideline on the oil level at the time of crankcase splitting

(Rechecking after Installation)

○ With the engine turned off, shift the transmission to first speed, and hold the clutch lever. Then, check that the rear wheel rotates when you move the machine, and that the rear wheel does not rotate when you have released the clutch lever.

○ Shift the transmission into NEUTRAL, and start the engine. Then check each section for oil leak. If nothing is wrong, do a test run at slow speed in a safe place to check the clutch operation.

(Installation of thermo unit)

○ After removing a thermostat hole cap, install the thermo unit.

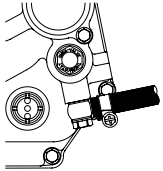
※ For details, see the Instruction Manual for the thermo unit.

※ The thermo unit alone does not function.

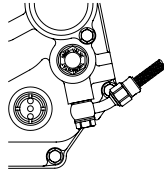
(Oil Cooler Installation)

● In case a thermo unit is to be installed:

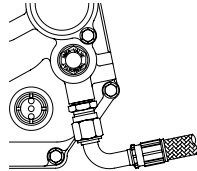
- Install a thermo unit.
- Unfasten two oil plug bolts, and install an adapter suitable for the kind of hose you will use. Then connect the hose.
- ※ Please see the instruction manual for the thermo unit.
- ※ Please see the instruction manuals for the oil cooler kit and the adapter.



Rubber hose



Slim-line hose



Allegri's hose

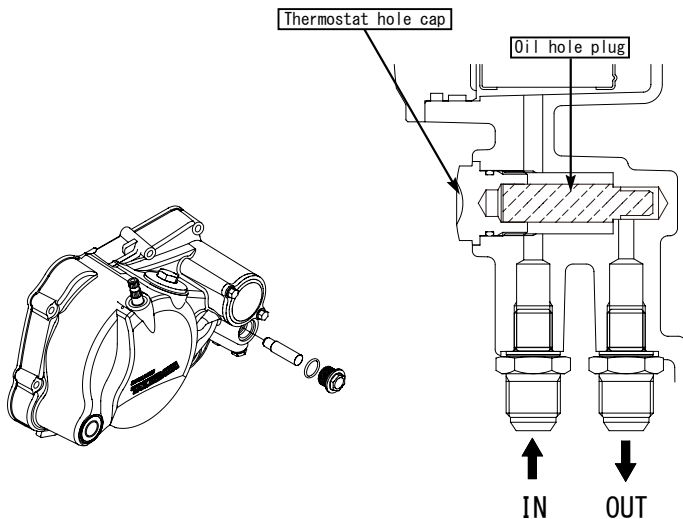
⚠ NOTE : NEVER install a thermo unit or an oil hole plug if you do not connect an oil hose to the clutch cover.
There is a possibility that the engine is damaged due to the oil passage blockage.

● In the case of not installing the thermo unit

- Detach the thermostat hole cap, and fit a supplied oil hole plug into the oil hole.
- Apply engine oil to the O-rings of the thermostat hole cap, and tighten the hole cap to the specified torque.

⚠ Note: Be sure that you protect specified torque.
Hole cap
Torque : 13N · m (1.3kgf · m)

- Unfasten two oil plug bolts, and fit an adaptor to match the hose to be used. And connect the hose.
- ※ For details, see the Instruction Manuals for an Oil Cooler Kit and an Adaptor.



In case an oil cooler is not installed:

- NEVER install a thermo unit or an oil hole plug. And in case the thermo unit and / or an oil hole plug is installed, DO be sure to remove it or them.

⚠ NOTE : There is a possibility that the engine is damaged because the oil passage will be blocked when the thermo unit or an oil hole plug is installed.

