

Super head bore stroke up (124 cc) kit description

Parts NO		Fitting	Frame NO
S-Racing Cam	S-Touring Cam	6V Monkey / Gorilla	:Z50J-1600008 ~
001-06-1112	001-06-2112	12V Monkey / Gorilla	:Z50J-2000001 ~ /AB27 1000001 ~
001-06-1122	001-06-2122		

Thank you for purchasing the product of Takegawa lately. Be sure to read this description before being used. Be sure to confirm the contents of a set before attachment. Please consult with the store which purchased, if there should be a point with mind.

Please be sure to read before use

- When the accident and damage occur by use which disregarded the directions currently written to the handling description, our company cannot take any responsibility for compensation.
 - The work of engine desorption, crank case division, etc. is needed for attachment of this kit. Please prepare the Honda genuine service manual only for each types of a car, and work carefully enough according to the attachment point. In addition, this handling description and the Honda pure service manual are aimed at the direction with fundamental skill and fundamental knowledge. I recommend you to carry out the request of the one where preparations of the inexperienced direction, a tool, etc., such as attachment, are more insufficient in a specialty store with technical trust.
 - In order to attach this kit, processing of a crank case is needed. (Please read well "drilling processing of a crank case" of an attached sheet.)
 - If drilling processing of a crank case is carried out, the durability of a crank case main part will fall. Thereby, a crank case may be damaged. Please understand the situation beforehand.
 - It is used attaching this product, and even if fault occurs on parts other than the products of our company, no guarantee of parts other than the products of our company can be undertaken by any matters.
 - When processing etc. is carried out in goods, it is not set as the object of a guarantee.
 - An inquiry of combination with the product of the other company should withhold.
 - An ignition system should observe strictly the matter written by the attached sheet "a use part list." Moreover, please do not use this kit by any means by point ignition.
 - Please do not use the ignition system of the product of the other company by any means.
 - Please determine a spark plug according to the glow condition of a plug on the basis of 6V vehicle (NGK) C8HSA/(DENSO) U24 FS-U and 12V vehicle (NGK) CR8HSA/(DENSO) U24 FS R-U.
 - A clutch should use a special clutch and a dry type clutch. With a stack clutch or a strengthening clutch, capacity runs short and a slide arises.
 - Please be sure to exchange an oil pump for a strengthened type thing.
 - Please equip with Oil cooler if needed.
 - Engine oil is more than the API SF class, and please use an about SAE 10W-40/15W-50 thing.
 - Fuel should surely use high-octane gasoline.
 - Use marginal number of rotations serves as 10500rpm. Please attach an engine rotation meter and be sure to use it below at marginal number of rotations.
 - Please change a sprocket into the thing according to the output.
 - This kit cannot be used independently. Please be sure to equip with the carburetor and muffler corresponding to engine. (Please refer to "a use part list" of an attached sheet.)
 - The titanium valve spring retainer is equipped normally with this super-head stage 2. The lightness of about 30% is achieved compared with the steel retainer. The S-PVD coating where HV2300 or more has the one surface hardness is adopted on the surface. An impact and abrasion resistance have been improved more than the Tin coating of the past. However, it is inferior of durability compared with made of steel and exchange it for the new article, please if a regular check is done without fail, and there are damage and consumption. Moreover, please exchange valuing durability for the valve made of steel spring retainer.
- 000-03-007: Valve spring retainer

Start and Acceleration

Sudden acceleration and rapid engine braking require high load for engine. When the worst, a crankshaft should be damaged, and keep in mind that there is a possibility of breaking engine.

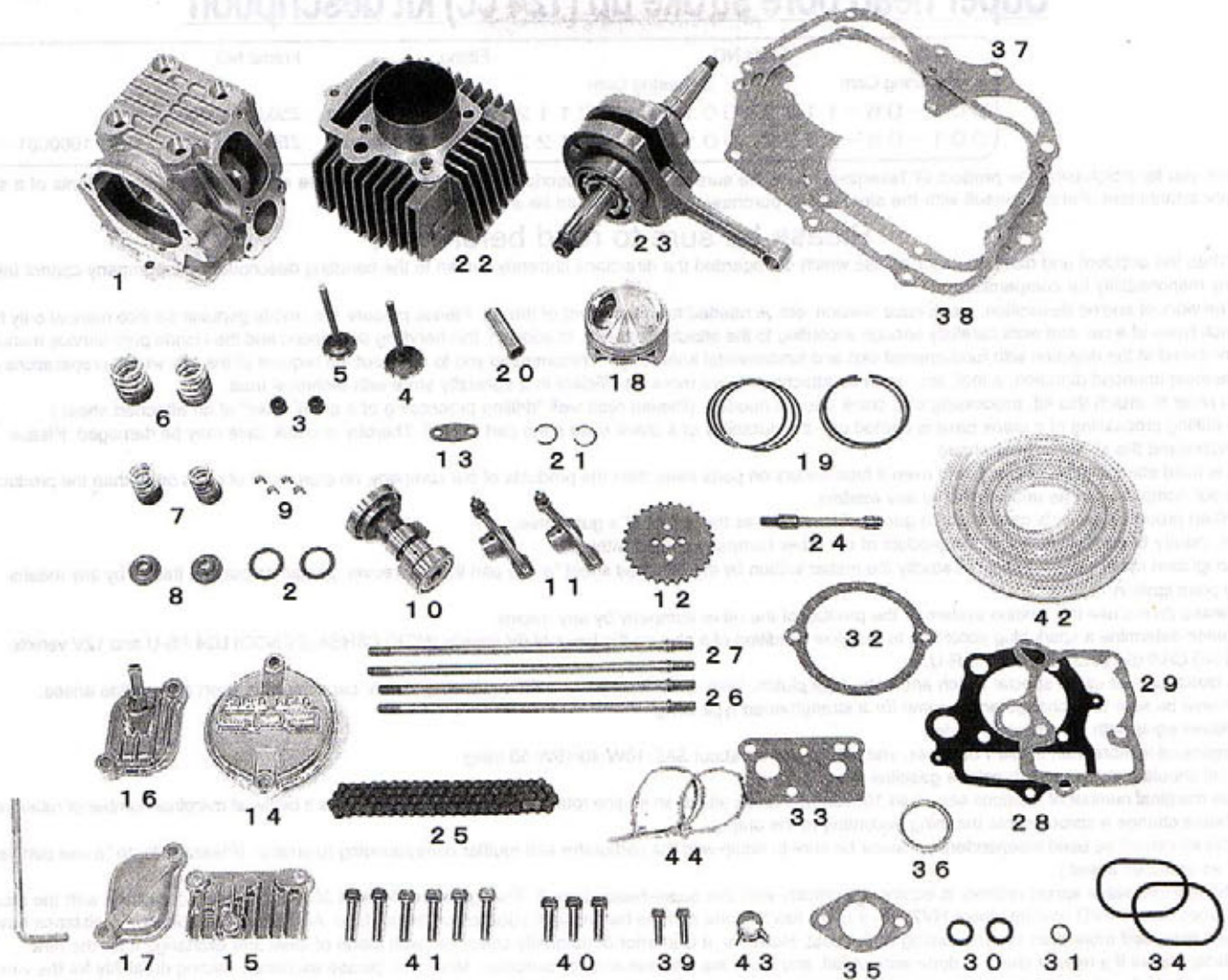
CAUTION Disregard of this display assumes injury and material injury for people.

- In case you work, please be sure to carry out at the time between the colds (when engine and the muffler have got cold).
(It becomes the cause of a burn.)
- In case you work, please prepare and perform the tool suitable for the work. (It becomes the cause of breakage of parts, and an injury.)
- Regulation torque should use a torque wrench and should be sure to do work certainly.
(It becomes the cause of breakage of a bolt and a nut, and omission.)
- A product and a frame may have edge and a projection. Please work by protecting a hand at the time of work. (It becomes the cause of an injury.)
- Surely, if each part is checked before a run, it checks whether there is any slack of a screw part etc. and has slack, please increase certainly with regulation torque and perform a bundle. (It becomes the cause of omission of parts.)
- A gasket and packings should surely use a new Shinabe article. Moreover, when you often check and there are wear and damage, please be sure to exchange for a new Shinabe article about the re-used parts.

WARNING If this display is disregarded, people may die, or it may get seriously injured.

- Please be sure to perform the check engine is put check make into operation in a well ventilated place. Please do not start engine in the sealed place.
(There is a possibility of becoming carbon monoxide poisoning.)
- During a run, when abnormalities occur, please let a safe place suspend vehicles immediately and stop a run.
(There is a possibility of leading to the accident.)
- In case you work, please stabilize vehicles certainly and work safely in a level place.
(There is a possibility that it may be injured by vehicles falling during work.)
- Check and maintenance should protect the check methods, such as a handling description or a service manual, and the point, and please perform them correctly. (Unsuitable check maintenance has a possibility of leading to the accident.)
- If damage parts are found when check, maintenance, etc. are performed, re-using the part should avoid and it should exchange damage parts.
(If it is used as it is, there is a possibility of causing an accident.)
- Since gasoline tends very to ignite, please check that there is nothing that avoids all fire and is easy to burn in the surroundings. Moreover, since stay of vaporized gasoline has danger, such as explosion, please work in a well ventilated place.

~ CONTENTS ~



NO	Parts Name	Qty	NO	Parts Name	Qty	NO	Parts Name	Qty
1	Cylinder head COMP.	1	16	Breather cap	1	31	Rubber gasket 7.5mm (Green)	1
2	Valve spring outer sheet	2	17	Inspection cap	1	32	L.Cylinder head side cover gasket	1
3	Valve stem seal	2	18	Piston	1	33	R.Cylinder head side cover gasket	1
4	Intake valve	1	19	Piston ring SET	1	34	Inspection cap O-ring	2
5	Exhaust valve	1	20	Piston pin	1	35	Inlet pipe gasket	1
6	Outer valve spring	2	21	Piston pin sir clip	2	36	Exhaust pipe gasket	1
7	Inner valve spring	2	22	Cylinder	1	37	Crank case gasket	1
8	Valve spring ritaner	2	23	Crank shaft COMP.	1	38	R.Crank case cover gasket	1
9	Valve cotter	4	24	Cam chain guide spindle	1	39	Socket cap screw 5X16	2
10	Cam shaft COMP.	1	25	Cam chain	1	40	Socket cap screw 6X20	3
11	Rocker arm ASSY.	2	26	Cylinder stud bolt 194.5mm	2	41	Socket cap screw 6X25	6
12	Cam sprocket 28T	1	27	Cylinder stud bolt 202mm	2	42	Breather pipe 950mm	1
13	Cam sprocket side plate	1	28	Cylinder head gasket	1	43	Hose clamp	1
14	L.Cylinder head side cover	1	29	Cylinder gasket	1	44	Inshulock tie	2
15	R.Cylinder head side cover	1	30	Rubber packing 16mm (Black)	2	Tool	Hex' wrench 5mm	1

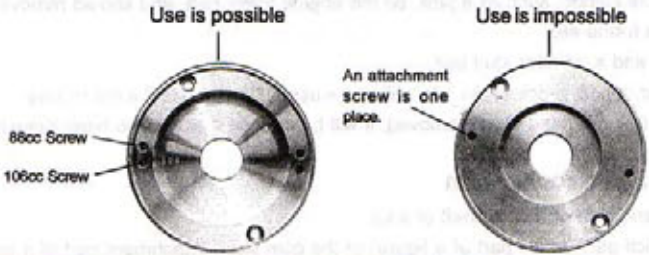
※24 is contained only in 001-06-2112 / 1112.

◎ Goods and a price are changed without a preliminary announcement at a performance Up, design change, Cost Up, etc. Please understand the situation beforehand.

◎ About a claim, it obtains to the goods accepted that the material of goods and processing have a defect by making it fix or exchange within the limit of less than one month after a goods purchase. However, not all the expense concerning repair or exchange is applicable. It is not this limitation, when right it attaches and the usage etc. is not kept.

◎ Please keep this handling description until these goods are canceled.

◆ Use part list

Oil pump	Super oil pump 6V:001-16-004 12V:001-16-005				
Clutch	Special clutch Dry type clutch				
Ignition system	6V	Outer rotor C.D.I:005-02-082 ※005-02-08/005-02-081 is improper. (Use is possible if a base plate is changed.) Inner rotor only for races C.D.I:005-02-03			
		12V	Stock generator/Stock C.D.I Stock generator/Hyper C.D.I Inner rotor only for races C.D.I:005-02-05		
	※About an inner rotor only for races C.D.I base plate				
					
Exhaust muffler	Street Basic (A Stock kick starter arm interferes. As for a back step, only 09-10-245 is good. Or there is a possibility that a brake rod may interfere.) BOMBER (There is a possibility that a Stock kick starter arm may interfere.) Hyper BOMBER Hyper Street Down				
Carburetor	MIKUNI VM26:003-05-044, 003-05-045 KEIHIN PE28:003-05-094				
Front fork and tire size		Stock fork	φ 27 Fork(TAKEGAWA)	φ 30 Fork(TAKEGAWA)	Up-side down front fork(TAKEGAWA)
	Tire size	8 inc 10 inc	x -	○ △※1	- ○※2
※1. NEW φ 27 Positive stand fork (Silver bottom case) for 10 inch tire wearing is possible for . OLD φ 27 Positive stand fork (Gold bottom case) for possible if it equips with a flat tire. ※2. Possible at the time of super head mount type oil cooler use, if it equips with a flat tire. ※3. Possible, if it equips with flat tire.					
In addition, notes	Frame mount type oil cooler cannot be used. If a Stock front fender is used, there is a possibility of interfering in a cylinder head. In this case, please process an interference About the time of 5speed transmission use, it is referring to the following.				

◆ At the time of 5speed transmission use

◇ When attaching the 5speed missions KIT and a kick starter spindle is A type, please be sure to exchange for B type. Since the load which whose transfer efficiency of torque improves at the time of a kick start, and is applied to a gear is mitigable, it leads also to gear breakage prevention.

◇ In B type kick starter spindle exchange, exchange is kick starter pinion simultaneously required. Please exchange for the thing of the number of teeth suitable for Missions KIT. Keep in mind that A type kick starter pinion cannot be used.



Parts Name	Parts NO
B type kick starter spindle KIT	002-04-001
B type kick starter pinion 23T	K-23B
B type kick starter pinion 25T	K-25B

- ③ Since the cylinder of this kit is a long type, an exhaust muffler, a carburetor, Oil cooler, etc. interfere in it, and it has some which cannot be attached. Moreover, a front tire may interfere in a cylinder head etc. Be careful.
- ③ What has ignition time earlier than a setup of our company is excepted from an object. Since the combination with the product of the other company causes a trouble, please do not perform it by any means.
- ③ Moreover, the instability of ignition time to point ignition is also excepted from an object. point ignition is used if it becomes, there is already no comb more absolutely than the ignition time (F mark 30degree) of stock please come out However, in any cases of any, a claim does not accept. Please understand the situation beforehand.
- ③ Use marginal number of rotations serves as 10500rpm. Please attach an engine rotation meter and be sure to use it below at marginal number of rotations.
- ③ Keep in mind that it is easy to go into use marginal number of rotations especially at the time of no-load and the time of sudden acceleration by 1st gear and 2nd gear. if use is carried out above use marginal number of rotations, there is a possibility of it not only having a bad influence on an engine life, but engine rotation smooth coming to be alike, and breaking engine when the worst.

~ Attachment point ~

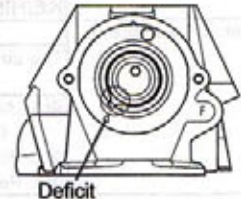
- ◇ Check the contents of a kit.

● The cautions at the time of removal

- ※ In case you do engine desorption work, stabilize the body certainly in a racing stand etc.
- ※ Be sure to do work at the time between the colds (when engine and the muffler have got cold).
- ◇ Extract engine oil and remove a muffler, a carburetor, a change pedal, L crank case cover, a drive sprocket, a kick arm, and a step bar.
- ◇ Remove the coupler of a breather tube, and a side stand switch and AC generator, and connection of a connector.
- ◇ Removal of engine should put suitable stands, such as a jack, on the engine lower part, and should remove engine from the body.
- ※ Be careful not to give a crack to a frame etc.
- ◇ Remove a cylinder head, a cylinder, and a cylinder stud bolt.
- ◇ A cylinder head bolting nut, a washer, a bolt, a dowel pin, etc. will be re-used if stock. Keep it not to lose.
- ◇ Remove a rocker arm shaft from the cylinder head which removed. It will be re-used if stock also here. Keep it not to lose.

● Attachment of a cam shaft and a rocker arm

- ◇ Apply engine oil to the bearing part and cam of a cam shaft of a kit.
- ◇ As you let Cam face pass in the deficit part (arrow part of a figure) of the cam shaft attachment part of a super head, put a cam shaft into it.
- ◇ As you put back bearing previously, make a cam shaft straight and push it in by hand.
- ※ Although there is also a hard thing, if it is made straight according to the individual difference of a head, it will enter by hand. Don't drive by any means with a hammer etc. It does not become a claim even if it strikes and breaks.
- ◇ Apply engine oil to the shaft hole and friction side of a rocker arm.
- ◇ Apply engine oil also to the re-used rocker arm shaft, insert in a cylinder head, let it pass on a rocker arm, and push in to the back.
- ◇ It is the socket cap screw 6x20 about R side cover gasket and R side cover to a super head. Attach by three.



● Crank Case Decomposition

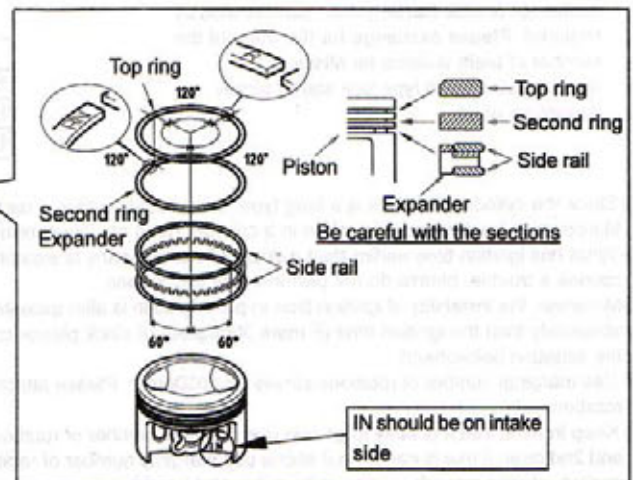
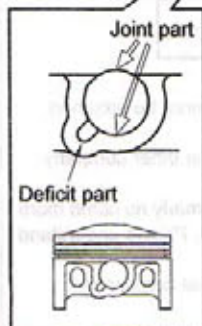
- ◇ Remove the parts of the circumference of a clutch, and the parts of the circumference of a flywheel.
- ◇ Remove a stata base and remove a cam chain.
- ◇ Remove a crank case bolt and divide a crank case.
- ◇ In the case of 6V, remove a cam chain guide spindle.
- ※ As for a crank case, processing is needed. Please read "drilling processing of a crank case" of an attached sheet for details.

● Attachment of a cylinder stud bolt, a cam chain guide spindle, a crankshaft, and a cam chain

- ◇ Attach the cylinder stud bolt of a kit. Attach a 194.5mm cylinder stud bolt in L crank case at 202mm and R crank case.
- ◇ In the case of 6V, attach the cam chain guide spindle of a kit.
- ◇ Incorporate the crankshaft of a kit.
- ◇ Unite the gasket of a kit with a crank case and bind a crank case bolt tight in several steps to a diagonal.
- ◇ Check that shafts, such as a crankshaft after bolting and transmission, turn smoothly.
- ◇ Attach the cam chain of a kit.
- ◇ Attach the parts of the circumference of a clutch, or a stata base and a flywheel.

● Attachment of a piston

- ◇ Stuff beautiful cloth into the cylinder hole and cam chain hole of a crank case.
- ◇ Attach a piston pin sir clip in one of the two of the pin hole of a piston.
- ※ The junction part of a piston pin sir clip should avoid the deficit part of a piston pin hole, and should unite it in the vertical direction to a piston.
- ◇ Apply engine oil to the ring slot on the piston, make a figure reference, attach a piston ring, and unite a junction part.
- ◇ Apply engine oil to a piston pin hole, the pin hole of con rod, and a piston pin, and attach a piston in con rod.
- ※ At this time, attach a piston so that the "IN" character of a piston turns to the Intake side.
- ◇ Also obtain the pin hole of a piston and attach a piston pin sir clip in one of the two
- ◇ Remove the cloth which was being packed.



● Attachment of a cylinder

- ◇ A cylinder should unite with a crank case and degrease a field by thinner etc.
- ◇ Attach one black of two pieces, a cylinder gasket, and rubber packing for a dowel pin B (a length of 12mm).
- ◇ Apply engine oil inside the cylinder of a kit, and insert in a cylinder so that the junction part of a piston ring does not shift.
- ◇ Insert a cylinder in a cylinder through a cam chain at a crank case.
- ◇ Temporary-stop a guide roller and a cylinder side bolt, and carry out them.

● Attachment of a super head

- ◇ A cylinder and a super head should unite and degrease a field by thinner etc.
- ◇ Attach two pieces, a head gasket, a rubber gasket (green), and rubber packing (black) in a cylinder for a dowel pin A (a length of 14mm).
- ◇ Attach a cam chain in a super head with through. A cam chain should not fall.
- ◇ Attach a head washer and a head nut in a position carefully, and bind tight with regulation torque.

Torque : 12N-m(1.2kgf-m)

- ◇ Carry out this bundle of the guide roller bolt and cylinder side bolt which temporary-stopped previously and were being carried out with regulation torque, and bind a cylinder head side bolt tight with regulation torque.

Torque : Both 10N-m(1.0kgf-m)

● Attachment of a cam sprocket

- ◇ Loosen the tension of cam chain tentionner.
- ◇ Unite the "T" mark of a flywheel with the deficit part of a crank case, and change a cam shaft into the state of Compression top point.
- ◇ Hang a cam chain on a cam sprocket and insert in a cam shaft so that the "O" mark of a cam sprocket suits the deficit part of a cylinder head.
(Please make reference an attached sheet "cautions at the time of cam sprocket attachment".)
- ◇ Attach a cam sprocket in a cam shaft with regulation torque by two socket cap screws 5x16 through a cam sprocket side plate.

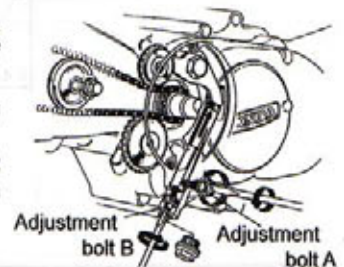
Torque : 9N-m(0.9kgf-m)

- ◇ Stretch cam chain tentionner.

● Adjustment of cam chain tentionner (6V)

- ◇ If the adjustment bolt A is loosened, although it will be automatically adjusted by the spring, when the tension of a cam chain is not enough, tighten the adjustment bolt B gradually, with the adjustment bolt A loosened, and even if you turn a flywheel, adjust to a grade without shakiness by the cam sprocket.

※ Since the tension of a cam chain is a manual formula, if 6V vehicles do not check periodically, gap will arise to cam chain and valve timing, and they will become an engine bad condition and the cause of failure. Moreover, after the cam chain has slackened, adjustment in which valve timing and the tappet crevice also became brave cannot be performed. Please be sure to perform adjustment of valve timing or tappet after check of the tension of a cam chain, and perform check periodically.



● Tappet adjustment

- ◇ Check that it is Compression tip point and IN and EX should unite a tappet crevice with 0.08mm (0.00315 in).
- ◇ A flywheel is turned counterclockwise, and it is again made Compression top point, and checks whether the tappet crevice is changing. If the tappet crevice is not changing Check having become tight and attach a breather cap, O ring and an inspection cap, and O ring with regulation torque by two socket cap screws 6x25.

Torque : 10N-m(1.0kgf-m)

- ◇ Attach L side cover gasket and L side cover with regulation torque by two socket cap screws 6x20.

Torque : 10N-m(1.0kgf-m)

● The cautions at the time of valve timing adjustment

- ◇ In the case of a racing cam shaft, please surely adjust by using all circle protractors and a dial gauge.

In OPEN Before top 25°

In CLOSE After botom 55°

EX OPEN Before botom 55°

EX CLOSE After top 25°

● Engine attachment

- ◇ Attachment of engine should put suitable stands, such as a jack, on the engine lower part, and should attach engine in the body.
- ◇ Attach the removed parts and connect wiring etc.

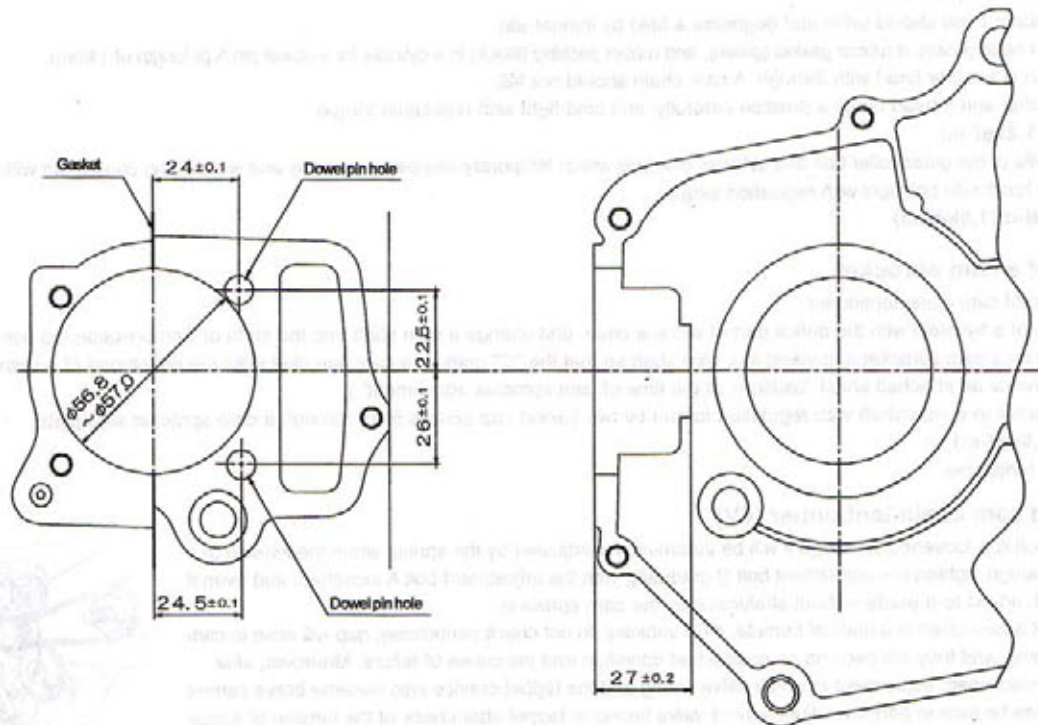
● The cautions after attachment

- ◇ Check each part and check whether there is any slack of a bolt, a nut, etc.
- ◇ Carry out the amount pouring of regulations of the engine oil.
- ◇ Remove a spark plug, kick for a while in the state of the main switch OFF and the fuel tap OFF, and inside engine, start after with sufficiently sufficient oil making it cross.
- ◇ It does not turn to high rotation suddenly after stating, but maintain low rotation.
- ☆ At the time of high temperature, if the bolt and nut which are bound tight with regulation torque also repeat the time between the colds, they may loosen little by little. Bolts and nuts should increase in number periodically and perform a bundle.

~ Crank case drilling processing ~

○ Please delete a processing size little by little, setting these goods so that it may become Dia56.8 to Dia57.0mm (2.236in to 2.244in) and a depth of 27mm (1.063in) by result of the state where the rank case gasket was inserted.

※ If it is processed, thickness with a dowel pin hole may become thin, durability may decrease, and a crank case may be damaged.



CAUTION

- Since the thickness of a case will become thin and intensity will fall if a crank case is processed, be careful of bolting of a Stud bolt enough.
 - Please understand that there is a case where it is damaged also during use.
- In any cases, our company takes no responsibility.

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