

Big throttle body KIT (φ 34) Instruction manual

Product number 03-05-0143

Adaptation model and chassis numbers	GROM : JC61-1000001 ~ 1299999
	: JC61-1300001 ~
	: JC75-1000001 ~
Object cylinder head	MSX125
	MSX125SF
	Stock cylinder head

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.

◎ During installation, it prepares the tool or the like, do the work with care in accordance with the mounting procedure.

In addition, this manual and Honda 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.

◎ Bolt, nut it is to re-use, wear, what damage is severe it without re-use, please be sure to use the new ones.

◎ This part is a product that was developed for the closed competition, please do not use public roads.

◎ Need to use with FI CON 2 or FI CON TYPE-e · TYPE-X for Big throttle body, Sports cam · S-Stage · e-Stage, on stock engine bore and cylinder.

~ feature ~

○ Corresponds to stock cylinder + sports cam · S-Stage · e-Stage. Higher output is achieved on wide powerband compared with stock throttle body.

○ Included larger diameter connecting tube which can be connected to normal air cleaner box.

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. Please go to protect your hands when you work. (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.)
- Gasket always use new parts. Also, parts can be re-used may be checked, if wear or damage, it is always replaced with new parts.
- During rotation of engine, do not incorporated carelessly looking through throttle body intake pipe.
(There is that flame is injected, it is very dangerous.)

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.)
- 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.)

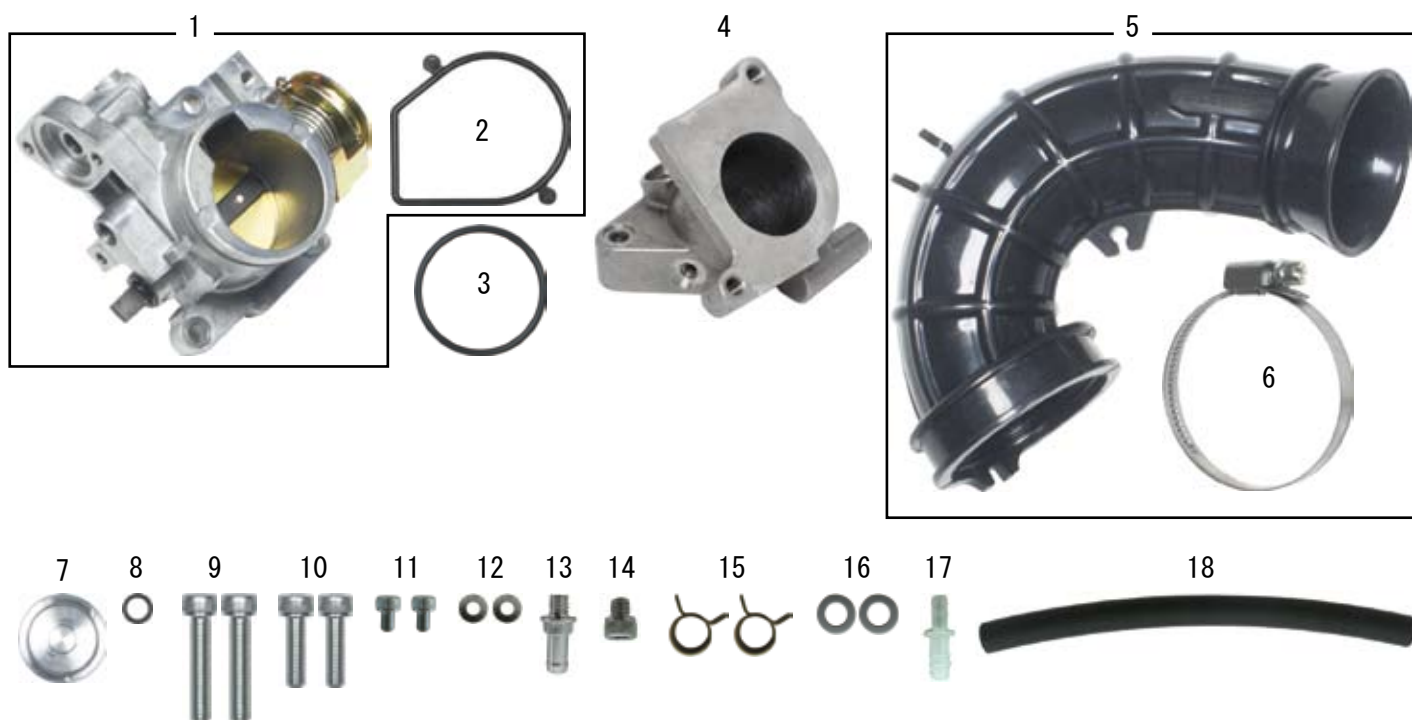
◎ Please note. Performance up, the design change, the product and the price in the cost up, etc. are subject to change without notice.

◎ 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

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)



Number	Product content	Quantity	Item Number
1	Big throttle body (φ 34)	1	03-05-0002
2	Rubber packing	1	00-03-0048
3	O-ring, 33mm	1	00-03-0206
4	Inlet pipe	1	00-00-1474
5	Connecting tube	1	03-01-0003
6	Hose band	1	00-03-0049
7	Blind plug (for MSX125)	1	91205-K26-T00
8	O-ring, 6mm	1	00-00-0615 (5 pcs)
9	Socket cap screw, 6x30	2	00-00-0090 (5 pcs)
10	Socket cap screw, 6x20	2	00-00-0721 (5 pcs)
11	Socket cap screw, 5x8	2	00-00-0321 (5 pcs)
12	Plain washer, 5mm	2	00-00-0118 (10 pcs)
13	Union M6	1	17112-BR1-T00
14	Socket cap screw, 6x6	1	00-00-0707 (5 pcs)
15	Hose clamp (9.5)	2	00-00-0216 (4 pcs)
16	Aluminum washer, 6.5x11x1	2	00-02-0095 (20 pcs)
17	Hose connector	1	00-00-0220
18	Tube, 5x125	1	00-07-0073 (500mm)

※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.

■ Mounting procedure ※Please refer to the genuine service manual if the detail is not mentioned method and the specified torque.

■ First

Work in the horizontal and safe location, such as using the maintenance stand, start from to stabilize the vehicle.

▲ Note

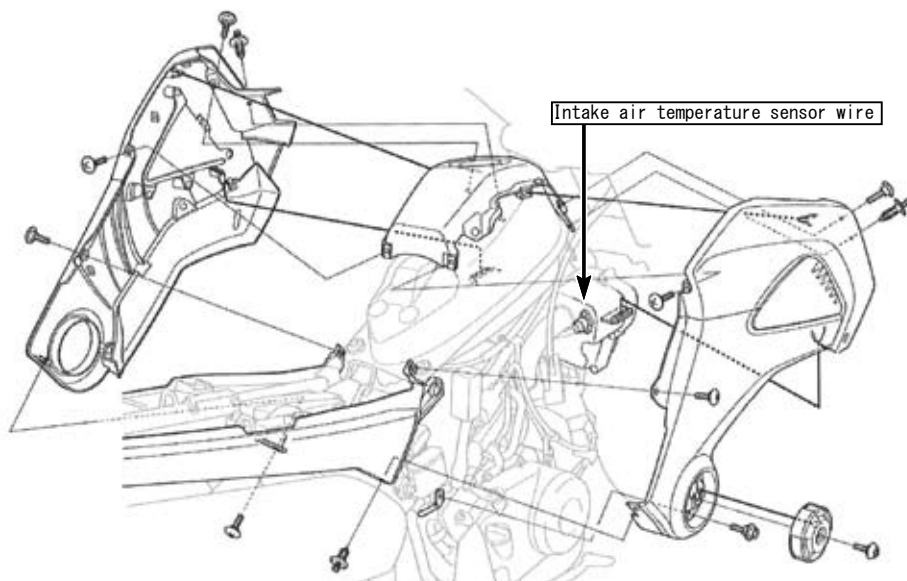
This manual are described only the outline for removal of exterior parts.

If you are unfamiliar with the exterior removal work, ask the dealer and be sure to follow the work procedure and tightening torque of the manufacturer's genuine service manual. Also, please carefully, not to damage the clip and the groove when remove exterior parts.

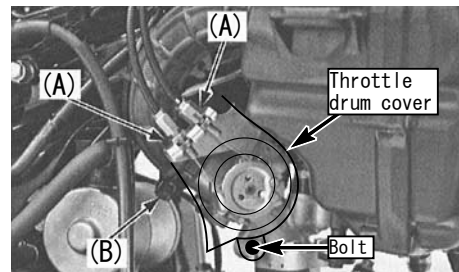
Removal of the genuine parts.

Refer to service manual and remove shroud, air cleaner box, throttle body. (GROM, disconnect the intake temperature sensor).

● The figure below for GROM (JC61-1000001 ~ 12999999) and MSX125.

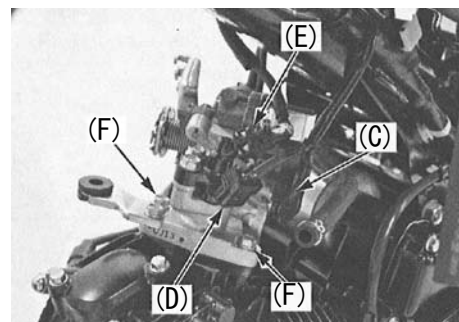


Remove the bolt and remove the throttle drum cover. Loosen the throttle cable lock nut (A). Remove the throttle cable from the cable bracket and throttle drum. Loosen connect hose band screw (B), and remove connection of the air cleaner connect hose.



Throttle position sensor coupler (C), fuel injector coupler (D), it will disconnect quick connector (E).

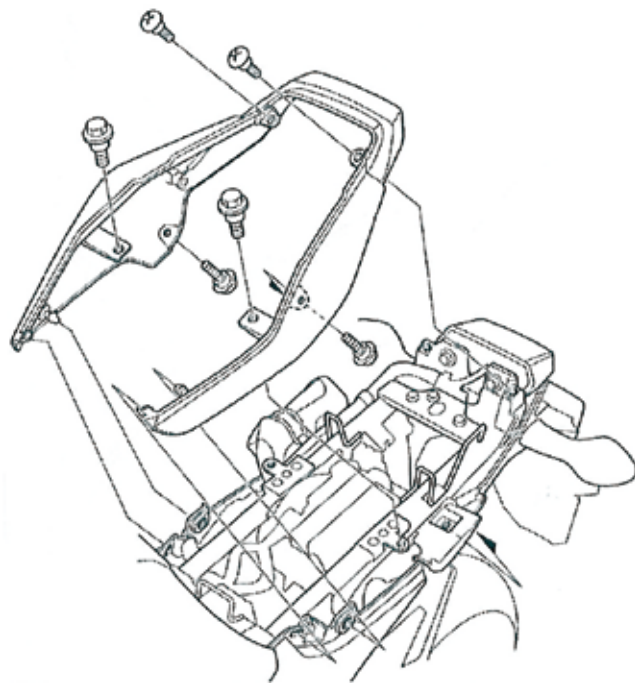
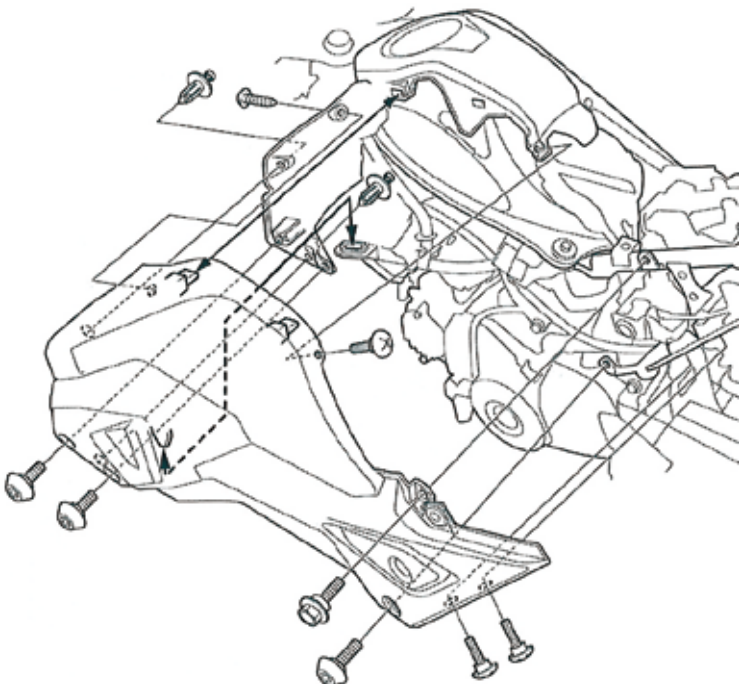
Bolt (F), remove the throttle body.



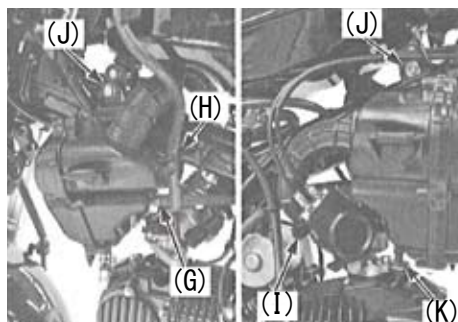
● The figure below for GROM (JC61-1300001 ~ · JC75-1000001 ~) and MSX125SF.

The same procedure for both left and right side.

For the intake air temperature sensor wire, please refer to the above figure.



Crank breather hose (G), disconnect the fuel breather hose (H).
Loosen the connect hose band screw (I), remove the connection from the throttle body of the connect hose.
Bolt Remove (J), remove from the air cleaner case stay tab (K).

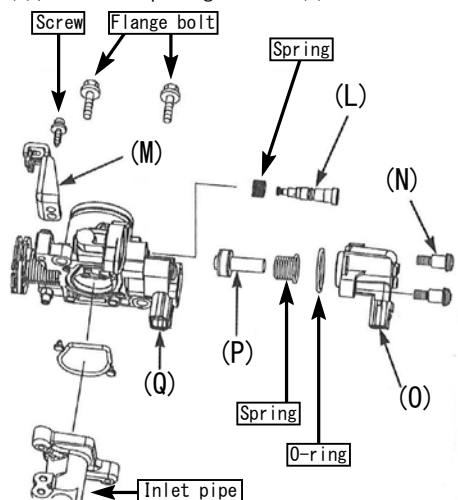


For GROM (JC75)

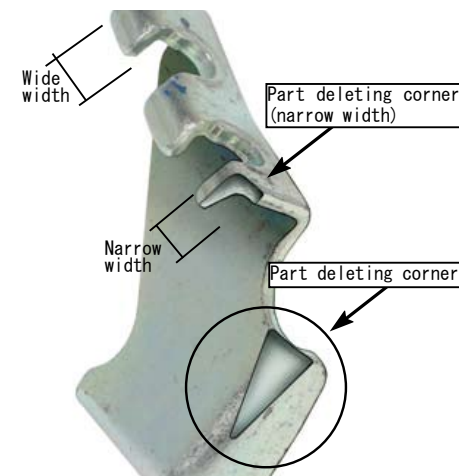
Please remove the connection of charcoal canister (2 part).



Remove the flange bolts, and remove the genuine throttle body.
Remove these parts from throttle body: idle air screw (L), spring, throttle cable bracket (M), Torx screw (N), fast idle solenoid valve (O) *(not included in MSX 125), Spring, valve seat (P), O ring (P), throttle opening sensor (Q).



The throttle cable bracket cut the corner about 1mm to 2mm as shown in the bottom photo, to avoids interference with the air cleaner box.
※ Do not cut too much.



Attach the idle air screw and spring removed from the stock throttle body and turn out 2 turns from the fully closed position.



Attach the rubber seal and the removed parts to the big throttle body and tighten with specified torque.



⚠ Note: Be sure that you protect specified torque

Torx screw (N)

Torque : 3.4N · m (0.3kgf · m)

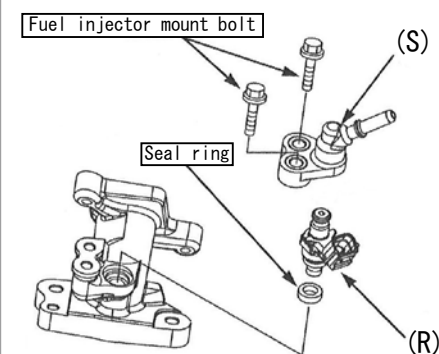
Throttle opening sensor torx screw

Torque : 3.4N · m (0.3kgf · m)

Throttle cable bracket screw

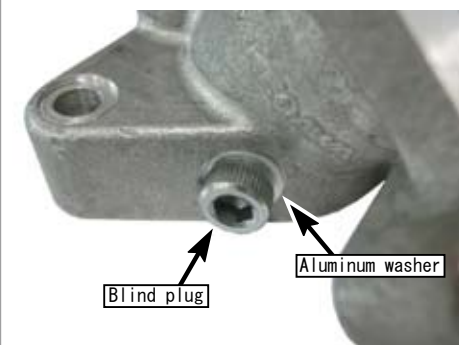
Torque : 3.4N · m (0.3kgf · m)

Remove the fuel injector joint mount bolt, fuel injector (R), seal ring and fuel injector joint (S) from the stock intake pipe.



For GROM (JC61): inlet pipe in the kit, apply an aluminium washer, blind plug.

For GROM (JC75): aluminium washer, apply medium strength screw lock agent in the thread part of the union and tighten with specified torque.



⚠ Note: Be sure that you protect specified torque

Union

Torque : 6N · m (0.6kgf · m)

To the inlet pipe in the kit Install the O-ring.



■ Mounting procedure ※Please refer to the genuine service manual if the detail is not mentioned method and the specified torque.

Using the socket cap screw 6x30, stock flange bolt, attach the inlet pipe and the air cleaner bracket to the cylinder head and tighten with specified torque.



⚠ Note: Be sure that you protect specified torque

Socket cap screw · Flange bolt
Torque : 12N · m (1.2kgf · m)

Apply a little of oil to the O ring and the seal ring on the top of the injector.

Use the stock injector joint mount bolt, attach the injector and fuel injector joint to the inlet pipe, and tighten with specified torque.

■ Warning

Must use the stock injector joint mount bolt.

Use of bolts other than stock bolt may cause dropping of the injector joint and may cause serious accidents.

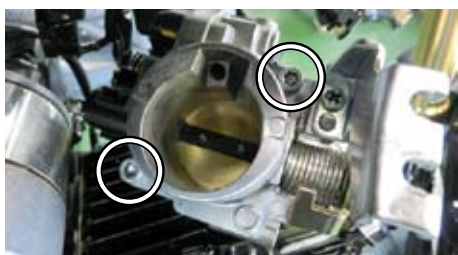


The injector used depends on the engine specifications. For details, please check the MAP selection table for each engine FI Con 2, FI Con TYPE-e, X instruction manual.

⚠ Note: Be sure that you protect specified torque

Fuel injector joint mount bolt
Torque : 12N · m (1.2kgf · m)

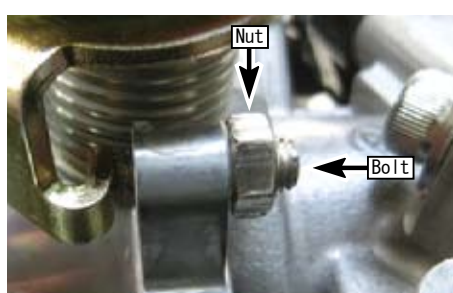
Using the socket cap screw 6x20, attach the big throttle body to the inlet pipe and tighten with the specified torque.



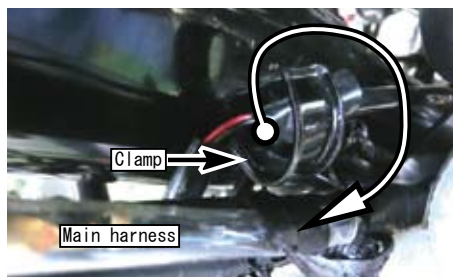
⚠ Note: Be sure that you protect specified torque

Socket cap screw
Torque : 12N · m (1.2kgf · m)

Turn the bolt in the lower part of the throttle pulley and turn it further 1/4 turn from the point where it interferes with the throttle pulley and tighten the nut.



Remove the main harness from the clamp of the frame.



Connect throttle opening sensor connector, fuel injector connector, quick connector.



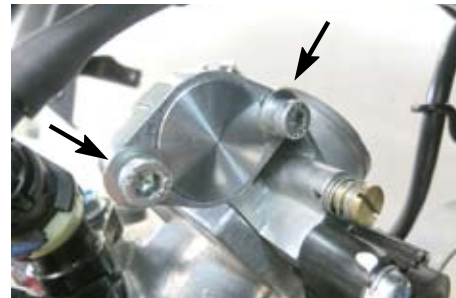
For MSX125, it is necessary to install a blind plug instead of the fast idle solenoid valve. Attach the O ring (6mm) to the blind plug (included in the kit).



Attach blind plug.



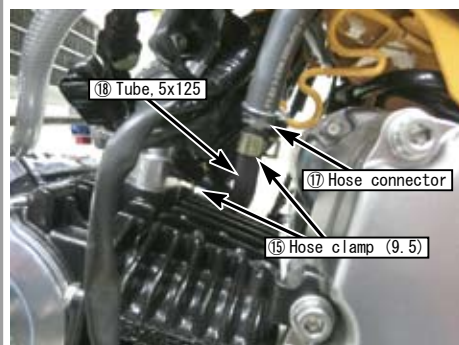
Attach socket cap screw (5x8) and plain washer (5mm) and tighten with specified torque.



⚠ Note: Be sure that you protect specified torque

Socket cap screw · Plain washer
Torque : 3.4N · m (0.3kgf · m)

GROM (JC75) uses charcoal canister. Please use the tube 5x125 as you need.



Remove the 8 screws and remove the air cleaner case cover.



Screw, remove the genuine element.



■ Mounting procedure ※Please refer to the genuine service manual if the detail is not mentioned method and the specified torque.

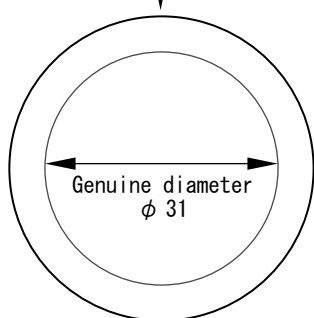
Cut the part shown in the bottom photo inside the air cleaner box and remove each tube.



Use the attached pattern paper in the connecting tube mounting hole and enlarge it.
Cut the positioning pin and remove burrs cleanly.

Pattern

Cut line $\phi 40.5$



Please install the connecting tube in the kit.

※ It is recommended to use with our power filter : (03-01-0001) and large diameter air duct. : (03-01-0002).

Assemble the air cleaner case in reverse order.

While attaching the connecting tube to the throttle body and attach the air cleaner box.

Align the groove of the connecting tube with the boss of the throttle body and tighten the hose band with specified torque.



⚠ Note: Be sure that you protect specified torque

Hose band
Torque : $3\text{N} \cdot \text{m}$ ($0.3\text{kgf} \cdot \text{m}$)

Using the stock flange bolt, tighten the air cleaner case with specified torque.

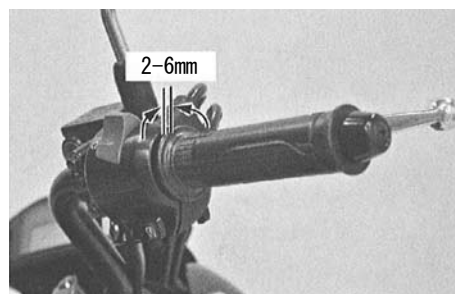


⚠ Note: Be sure that you protect specified torque

Bolt
Torque : $10\text{N} \cdot \text{m}$ ($1.0\text{kgf} \cdot \text{m}$)

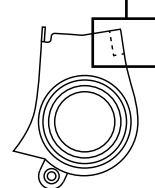
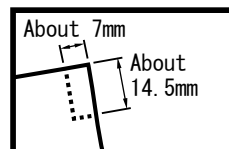
Attach throttle cable and adjust the throttle free play.

Free Play: 2-6mm



※ If you turn the steering wheel all the way to the left and right, when the engine speed goes up, check the throttle cable routing and readjust it.

Cut the throttle drum cover as shown in the picture, and avoid interference with the air cleaner case.



Install the modified throttle drum cover and tighten with specified torque.

⚠ Note: Be sure that you protect specified torque

Bolt
Torque : $5.2\text{N} \cdot \text{m}$ ($0.5\text{kgf} \cdot \text{m}$)

Install the injection controller follow with the instruction manual.

Initialization of the engine control unit is required, initialize with the following procedure.

Delete the DTC, in case of DTC is saved in the engine control unit, the throttle opening sensor can not be reset and the engine control unit can not be initialized.

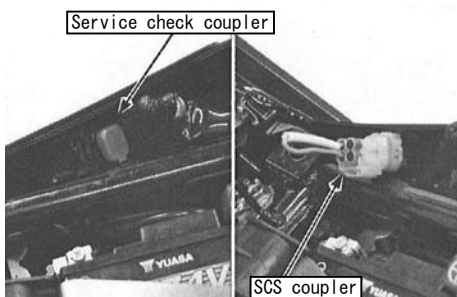
If the DTC is not saved, please start from "Resetting the throttle opening sensor".
※ DTC = Diagnostic trouble code.

■ Delete the saved DTC.

① Turn the main switch to OFF and remove the seat.

② Remove the service check connector and cover then short circuit the terminal of the service check connector with a special tool.
If there is no special tool, short circuit the blue code of the red connector and the green / black code with the lead wire.

SCS Coupler: Honda genuine prts number
070PZ-ZY30100



③ Turn on the key.

※ If the PGM-FI warning light remains on, the DTC is not saved, so please start from the "reset throttle opening sensor" term.
When the PGM-FI warning light starts flashing after lit 0.3 seconds, the DTC is saved, please do the following work.

④ Disconnect the SCS connector or lead from the service check connector.

⑤ Reconnect the service check short connector or lead wire to the service check connector within about 5 seconds after the PGM - FI warning light is lit (reset receiving blinking pattern).

⑥ When the PGM-FI warning light goes out and starts flashing (completion pattern), the saved DTC is erased.

※ Be sure to short circuit the service check connector or lead wire while the PGM-FI warning light is on.
If the procedure is incorrect, the PGM-FI warning light once turns off then turned on (revocation pattern). In this case, turn off the main switch and process it again.

Caution: self-diagnostic memory will not be erased if the main switch is set to OFF before the PGM-FI warning light begins to flash.

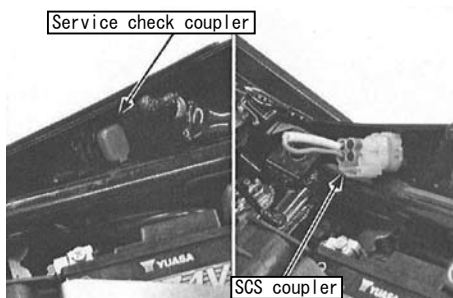
■ Resetting throttle opening sensor.

① Set the main switch to OFF and remove the seat.

② Remove the cover of service check connector and use a special tool to short circuit the terminal of the service check connector.

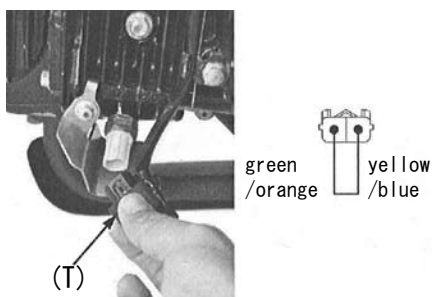
If there is no special tool, short circuit the blue code of the connector and the green / black code with the hand lead wire.

SCS Coupler: Honda genuine prts number
070PZ-ZY30100



③ Disconnect the oil temperature sensor 2 P (black) connector (T) and short circuit the wire side connector terminal with the lead wire.

Connection: yellow/blue - green/orange



④ Disconnect the oil temperature sensor 2 P (black) connector (T) and short the wire side connector terminal with the lead wire. (Reset reception blink.)

⑤ Once the lead wires are removed, the PGM-FI warning light starts flashing when completed (Reset completed.)
If the lead wire is connected even after 10 seconds have elapsed, the PGM-FI warning light will remain lit. (Reset failure pattern.) Please do the work again.

⑥ Turn off the main switch, connect the oil temperature sensor 2 P (black) connector, disconnect the special tool from the service check connector and attach the dummy connector to the service check connector.

⑦ Please do installation in reverse order of removal.

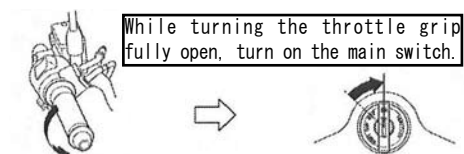
■ Engine control unit initialization.

① Set the main switch to OFF and remove the seat.

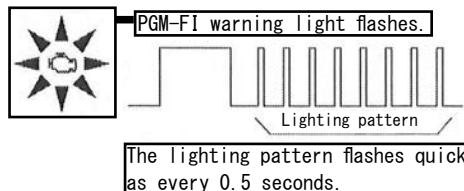
② Remove the cover from the service check connector and use a special tool to short circuit the terminal of the service check connector. If there is no special tool, short circuit the connector using the lead wire.

SCS Coupler: Honda genuine prts number
070PZ-ZY30100

③ While turning the throttle grip fully open, turn on the main switch.



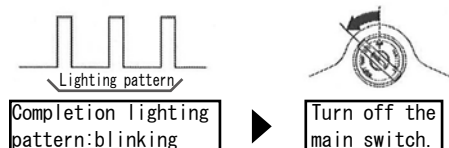
④ The PGM-FI warning light will come on and it will start flashing quickly. Close the throttle grip within 5 seconds after the start of flashing and keep that state for more than 3 seconds.



Within 5 seconds after the start of flashing, off the throttle and keep for more than 3 seconds.



⑤ When initialization of the engine control unit is completed, the PGM - FI warning light repeats blinking every 3 seconds. When the completion pattern is confirmed, turn off the main switch.



※ If the PGM-FI warning light does not begin flashing quickly, set the main switch to OFF and repeat the above procedure
※ If you can not redo the procedure, check the DTC is saved in the engine control unit.

※ If you can not redo the procedure and DTC is not saved, the engine control unit may be damaged or failed. Please check the unit itself.

⑥ Disconnect the special tool or lead wire from the service check connector and attach the dummy connector to the service check connector

⑦ Refer to the Takegawa Injection Controller instruction manual and check the engine speed.

⑧ Adjust the idle air screw to the specified engine idling speed.