

Big throttle body KIT Φ 28 Instruction manual

Product number 03-05-0169

Adaptation model	CRF110F (JE02-1000001 ~)
Requirement	Must equipped with Hyper ECU

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 of ignoring the instructions that are written in the instruction manual, if an 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 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.)

◎ Caution: Reused parts, do not reuse severely worn or damaged; replace to new.

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

◎ This product is not compatible with stock ECU. (must use Hyper ECU) Install "Hyper ECU" and apply based on preset MAP that matches the specifications.

~ feature ~

○ By replacing the stock throttle body Φ 19mm to the big Φ 28mm throttle body, it is possible to improve the output of stock engine or bore-up kits, and using a stock air cleaner box, it is also possible to run on unpaved off-road conditions.

⚠ 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.)

■ 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.

■ 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.)

■ 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.)

■ 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.

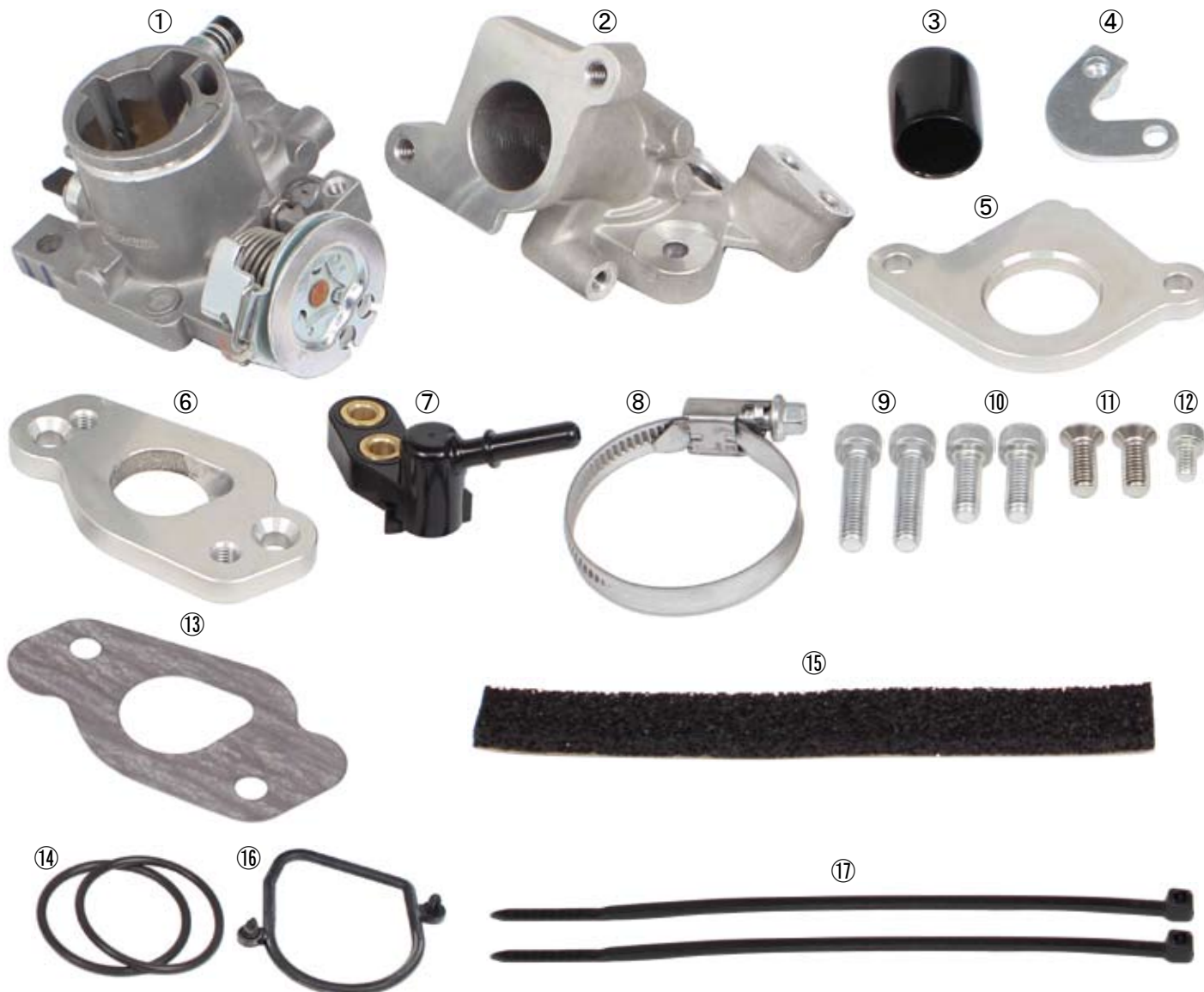
◎ Please be informed that we shall be held harmless against any claim against us whatsoever arising out of use of the products in racing and the like.

◎ Keep this manual stored until this product is discarded.

SPECIAL PARTS
TAKEGAWA

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)

Product content



Number	Product content	Quantity	Item Number
1	Big throttle body	1	
2	Intake manifold	1	
3	Cap, Φ 19	1	00-00-0286
4	Bracket	1	
5	Adapter	1	
6	Inlet adapter	1	
7	Injector joint	1	00-03-0017
8	Band, 32-50/9	1	00-00-0014
9	Socket cap screw, 6x25	2	00-00-0722 (5 pcs)
10	Socket cap screw, 6x16	2	00-00-0810 (5 pcs)
11	Small head flat head screw, 6x15	2	00-00-0410 (6 pcs)
12	Socket cap screw, 5x8	1	00-00-0321 (5 pcs)
13	Gasket	1	00-03-0018
14	O-ring, 29mm	2	00-02-0406
15	Cushion	1	00-00-0299
16	Gasket	1	00-03-0019
17	Cable tie, 150mm	2	00-00-0135 (10 pcs)

※ 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.

■ 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.

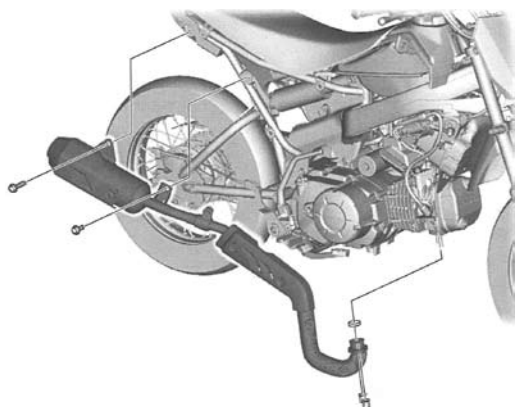
● Removal of exterior parts

◇ Refer to the genuine service manual and remove the exterior parts.

● Exhaust muffler (stock) removal

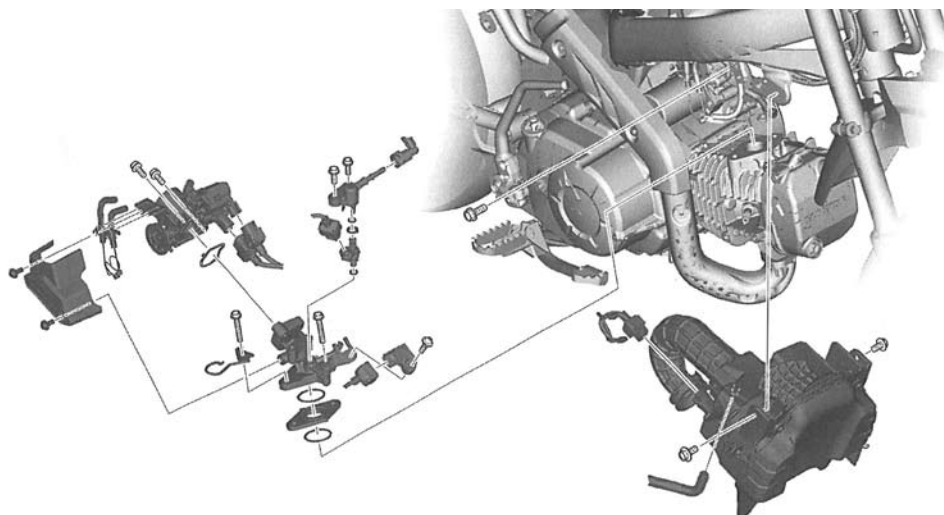
※ If the exhaust muffler already changed, remove it following to their instruction manual.

◇ Refer to the genuine service manual and remove the exhaust muffler.



● Removal of air cleaner case, inlet pipe / throttle body

◇ Refer to the genuine service manual and remove the air cleaner case, inlet pipe / throttle body.



○ When removing the stock manifold, protect it to prevent dust from getting into the engine port.

○ Refer to the photo and remove the throttle cable bracket, fast idle solenoid valve (O-ring, valve seat/spring), and throttle sensor (O-ring) from the stock throttle body. Attach them to the big throttle body ① with the specified torque.

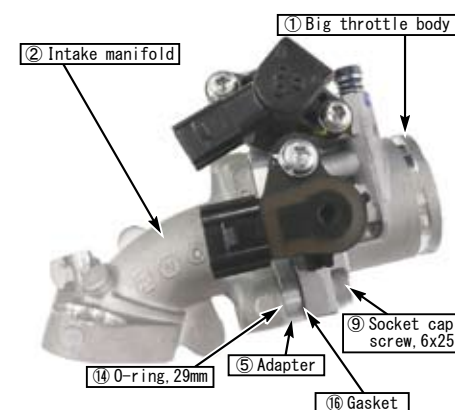
※ not use the "throttle cable bracket" of big throttle body ①.

⚠ Note: Be sure that you protect specified torque.
Torx screw / screw
Torque : 3.4N · m (0.35kgf · m)



○ Place the O-ring (29mm) ⑭ in the groove of the adapter ⑤. Check that the gasket ⑯ of the big throttle body ① is securely inserted into the groove. Then use the socket cap screw (6x25) ⑨ to temporarily secure the big throttle body ①, adapter ⑤, and intake manifold ② in that order.

※ At this time, little tighten the gasket ⑭ and ⑯ so that they stay on the groove.



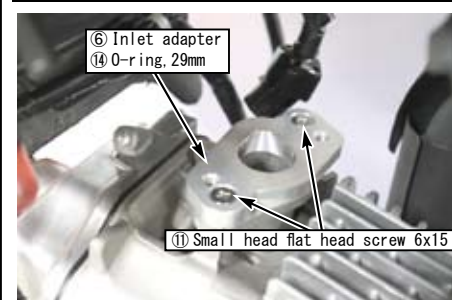
○ Attach the O-ring 29mm ⑭ to the inlet adapter ⑥, and place it on the cylinder head.

Keep O-ring stay on the groove.

Tighten the small head flat head screw ⑪ (6x15) to the specified torque.

⚠ Note: Be sure that you protect specified torque.

⑪ Small head flat head screw 6x15
Torque : 10N · m (1.0kgf · m)

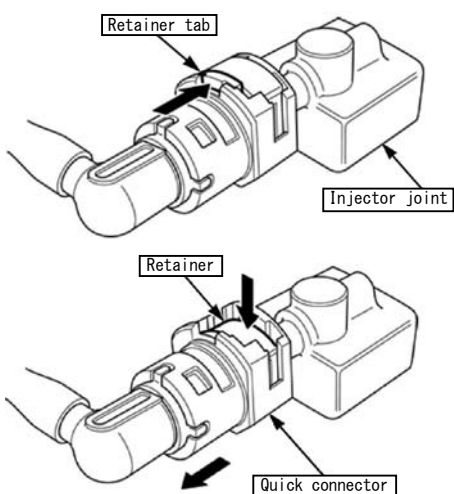


- Place the gasket ⑬ on top of the adapter ⑤, and secure the intake manifolds ① and ② (prepared earlier) with the socket cap screw ⑩ (6x16) at the specified torque.
Fix the socket cap screw ⑨ (6x25 temporarily fastened) with the specified torque.

⚠ Note: Be sure that you protect specified torque.
⑨、⑩ Socket cap screw
Torque : 10N · m (1.0kgf · m)



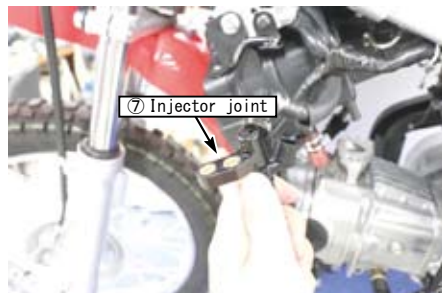
- Disconnect the quick connector from stock injector as follows.
- Cover the area around the quick connector with a rag or similar as gasoline will come out.
- Push down the retainer tab to remove the quick connector from the injector joint and replace it with the injector joint ⑦.



- Check condition of O-ring (6.3x2.2 reuse) from the stock injector and install it to the injector joint ⑦.

※ O-ring is deteriorated, replace it with a new one.

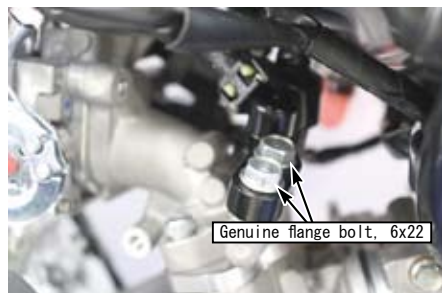
※ The original dust seal ring (brown) will not be reused.



- Make sure the stock injector has a seal ring, insert it into the intake manifold, and tighten it to the specified torque using the genuine flange bolts (6x22).

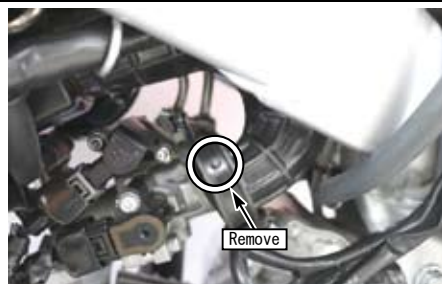
※ Route fuel line without clamp. Attach a cushion ⑮ to the fuel line if necessary.

⚠ Note: Be sure that you protect specified torque.
Genuine flange bolt 6x22
Torque : 12N · m (1.2kgf · m)



- Place the air cleaner box (in the reverse order). Tighten to the specified torque. Remove the stock tube band from the connecting tube. Note: The tube has a rib to prevent it from turning, remove it (with pliers) and replace it with band ⑧, connect it to big throttle body ①, and secure it.
- Connect the injector, fast idle solenoid, intake air temperature sensor, throttle sensor connector, and case breather.

⚠ Note: Be sure that you protect specified torque.
Air cleaner box fixing bolt
Torque : 10N · m (1.0kgf · m)



- Connect the two throttle inner cables to the throttle drum (specified position), and attach the throttle cable to the throttle cable bracket.

Turn the adjuster to adjust the throttle grip free play and tighten the lock nut.
Free play: 2mm to 6mm

(at the throttle grip flange)

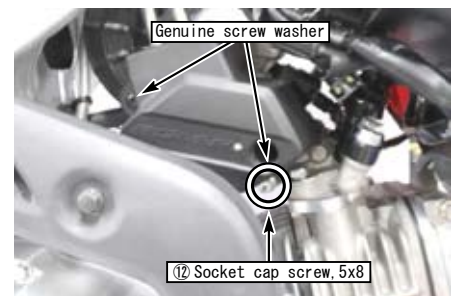


- Referring to the photo, pass the genuine screw washer 5x14 through the throttle body cover and temporarily secure the bracket ④.



- Secure the throttle body cover (prepared) to the throttle body cable bracket and intake manifold ② with the stock screw washer top (5x14) with the socket cap screw bottom ⑫ (5x8), and finally secure the bracket ④ with the specified torque.

⚠ Note: Be sure that you protect specified torque.
Socket cap screw
Torque : 5N · m (0.5kgf · m)



- Attach a Φ 19 cap ③ to the connector of the intake pressure sensor and bundle it with the main harness using a 150mm cable tie ⑩.

Also bundle the spark plug wire of the ignition coil so that it does not interfere.

- ※ The intake pressure sensor will not be reused.



● Check and adjusting idling speed

- The adjustment screw is adjusted at the time of shipment, but individual differences, the idling speed after warm-up may not stay within the standard value. It does not fall within the standard level, loosen the lock nut (at the bottom of the throttle pulley) and adjust the screw.

- At too low

⇒ Tighten the adjustment screw.

Tighten the lock nut after adjustment.

- At too high

⇒ Loosen the adjustment screw.

Tighten the lock nut after adjustment.

Standard idling speed: 1400rpm ± 100rpm

⚠ Note : When adjust the idle, must adjust the throttle position also on the Hyper ECU.

⚠ Warning : Be sure to start the engine in a safe, well-ventilated area with great care.

- Idle air screw standard opening

Return 3 turns from fully closed

- Refer to the service manual and reassemble the exterior parts and exhaust muffler in reverse order.

