

# TAF5-speed cross-transmission kit Instruction manual

Product number 02-04-0293

|   |                               |
|---|-------------------------------|
| Adaptation model<br>and chassis numbers | GROM : JC61-1000001 ~ 1299999 |
|   | : JC61-1300001 ~              |
|   | MSX125                        |
|   | MSX125SF                      |

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.

- While keeping the power band in engine speed is a 5-speed cross-transmission kit that can be accelerated smoothly.
- When our bore up kit is installed, you can use the full torque output performance intact.
- And securing the tooth width by which the short-stroke movement of gears, and improved durability.

Gear ratio

| Position                      | 1 st          | 2 nd          | 3 rd          | 4th           | 5th           |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|
| Genuine transmission          | 2.500 (14/35) | 1.550 (20/31) | 1.150 (20/23) | 0.923 (26/24) | —             |
| TAF5-speed cross-transmission | 2.333 (15/35) | 1.684 (19/32) | 1.272 (22/28) | 1.040 (25/26) | 0.923 (26/24) |

☆ 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.
- ◎ This product is the above-mentioned vehicle exclusive goods. Is not possible attached to the other vehicle. Please note.
- ◎ This product is required to work until the engine desorption and crankcase split, the work is also place to use a special tool. It will be necessary, so please prepare HONDA genuine service manual of your vehicle separately.
- ◎ The mounting refers to the genuine service manual that was in the above application models, but you need to do the work reliably, service manual if people without basic skills and knowledge were working, could not correct assembly because there is a possibility that in parts may be damaged without enough attention please. No attachment experience, if it is not ready for tools, it is recommended that you ask the high technical credit specialty stores.
- ◎ This product is a transmission kit. Only L/R Crankcase gaskets are supplied with this kit. It does not include necessary parts such as gaskets, packing, O-rings, etc., required for engine disassembly work. Please purchase separately depending on engine specifications.
- ◎ Intense wear and damage without re-use, please always use new ones.
- ◎ Other manufacturers (engine, clutch, etc.) a combination of should not relied at all. There is a possibility of damage to parts. Also, in combination with other manufacturers, if the part is damaged, we can not assume any responsibility.
- ◎ Please refrain from inquiries about the product and the combination of other companies.
- ◎ Such as descriptions and specifications are subject to change without prior notice for improvement of product. Please acknowledge beforehand.
- ◎ Keep this manual stored until this product is discarded.
- ◎ Shift change pattern after this kit built-in is the same as genuine. Shift change should be done to ensure in a state in which the clutch is cut completely. If you shift to disengage the clutch in unreasonable shift and manual clutch vehicles, gear and other parts will be damaged.
- ◎ will require additional installation of speed sensor kit (05-06-0017). (Because change is gear ratio, can not accurate speed display in genuine speed sensor.)

**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.)
- When using a knife or the like, to protect hand, and caution in handling, do the work. (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.)

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

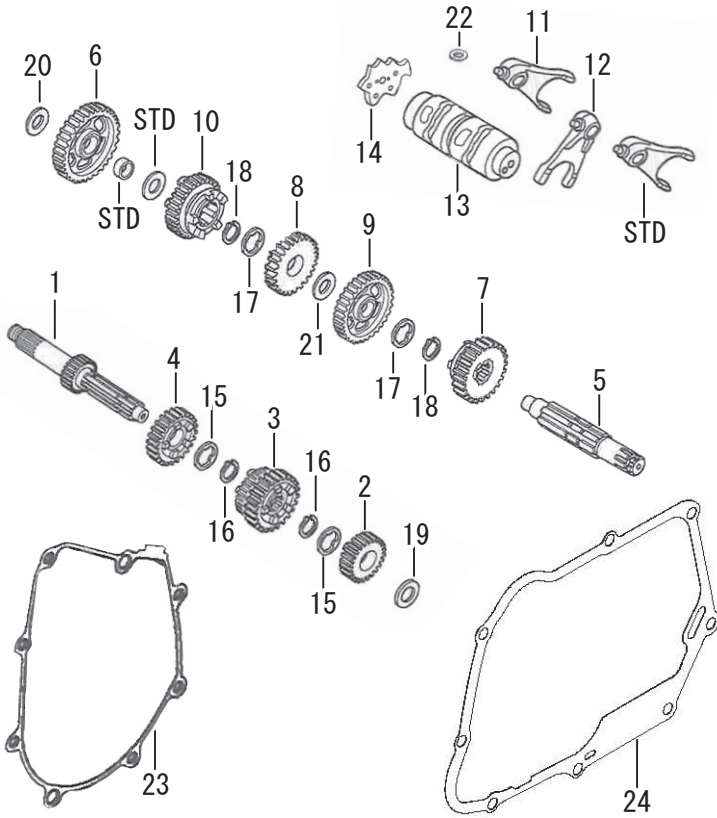
- During operation, when an abnormality occurs, immediately stop the vehicle in a safe place, please stop running. (It may lead to an accident.)
- When performing the work, do the work safely stabilize the vehicle in a horizontal location. (There is a risk of injury vehicle collapsed while working.)
- 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.)

- ◎ Please note. Performance up, the design change, the product and the price in the cost up, etc. are subject to change without notice.
- ◎ Keep this manual stored until this product is discarded.

**SPECIAL PARTS**  
**TAKEGAWA**

CONTACT Address : 3-5-16 Nishikirohigashi 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)

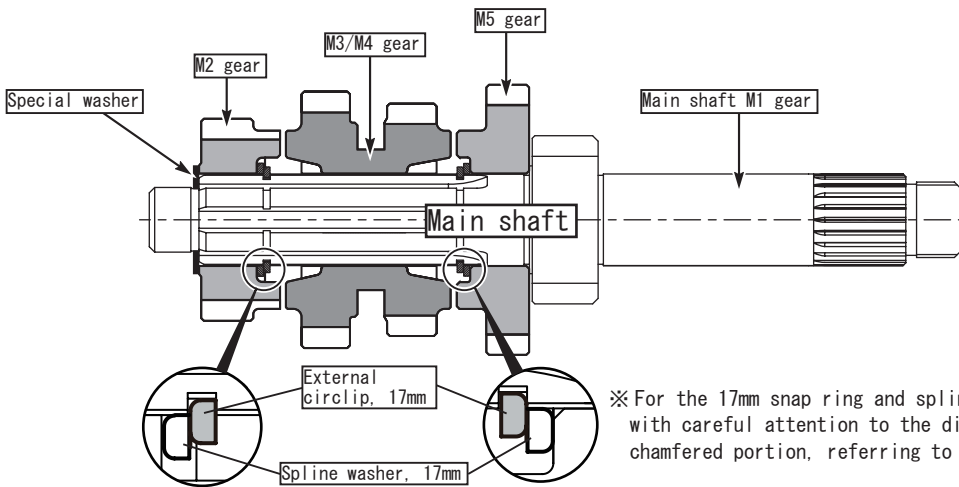
Product content



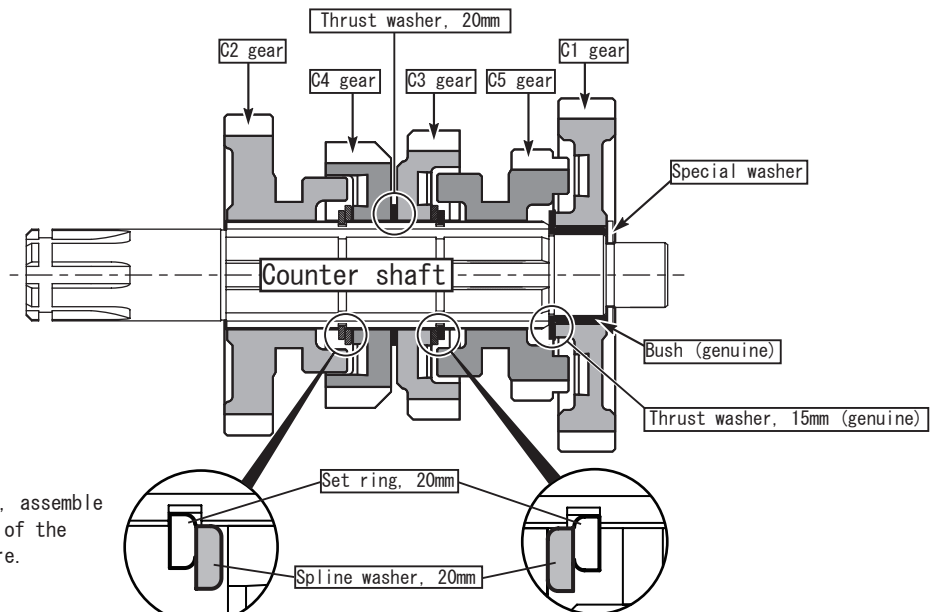
| No. | Product content                   | Qty | Item Number         |
|-----|-----------------------------------|-----|---------------------|
| 1   | Main shaft 15T                    | 1   | 23211-KYZ-T01       |
| 2   | Main shaft 2nd gear (19T)         | 1   | 23431-KYZ-T01       |
| 3   | Main shaft 3rd/4th gear (22T/25T) | 1   | 23451-KYZ-T00       |
| 4   | Main shaft 5th gear (26T)         | 1   | 23491-KYZ-T00       |
| 5   | Counter shaft                     | 1   | 23221-KYZ-T00       |
| 6   | Counter shaft 1st gear (35T)      | 1   | 23411-KYZ-T00       |
| 7   | Counter shaft 2nd gear (32T)      | 1   | 23421-KYZ-T01       |
| 8   | Counter shaft 3rd gear (28T)      | 1   | 23461-KYZ-T00       |
| 9   | Counter shaft 4th gear (26T)      | 1   | 23481-KYZ-T01       |
| 10  | Counter shaft 5th gear (24T)      | 1   | 23501-KYZ-T01       |
| 11  | Gear shift fork                   | 1   | 24210-KYZ-T10       |
| 12  | Center gear shift fork            | 1   | 24231-KYZ-T10       |
| 13  | Gear shift drum                   | 1   | 24301-KYZ-T10       |
| 14  | Shift drum stopper plate COMP.    | 1   | 24400-KYZ-T00       |
| 15  | Spline washer, 17mm               | 2   | 00-02-0023 (5 pcs)  |
| 16  | External circlip, 17mm            | 2   | 00-02-0005 (5 pcs)  |
| 17  | Spline washer, 20mm               | 2   | 00-02-0360 (2 pcs)  |
| 18  | Set ring, 20mm                    | 2   | 00-01-0030 (6 pcs)  |
| 19  | Special washer, 12X20             | 1   | 00-02-0358          |
| 20  | Special washer, 12X23             | 1   | 00-02-0361          |
| 21  | Thrust washer, 20mm               | 1   | 00-02-0359          |
| 22  | Plain washer, 6mm                 | 1   | 00-00-0086 (10 pcs) |
| 23  | Left crankcase cover gasket       | 1   | 00-02-0357          |
| 24  | Right crankcase cover gasket      | 1   | 00-02-0356          |

※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.

Transmission gear assembly drawing



※For the 17mm snap ring and spline washer, assemble with careful attention to the direction of the chamfered portion, referring to the figure.



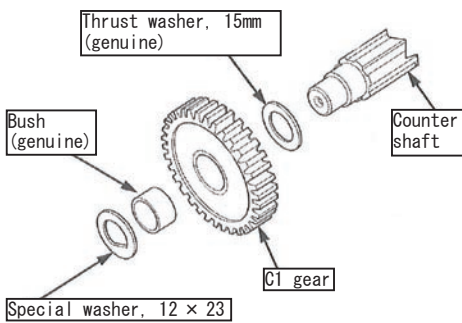
※For the 20mm set ring and spline washer, assemble with careful attention to the direction of the chamfered portion, referring to the figure.

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

○ Attach the included special washer 12x20 to main shaft.  
 ※ Please note that the special washer is little hard to install because the inner diameter hole is D shape.

○ Than gear has been removed from the vehicle, and assembling the bush 15mm and thrust washer 15mm in the counter shaft 1st gear in the kit came with counter shaft, and assemble the C1 gear built-in kit by kit of special washer 12 x23.

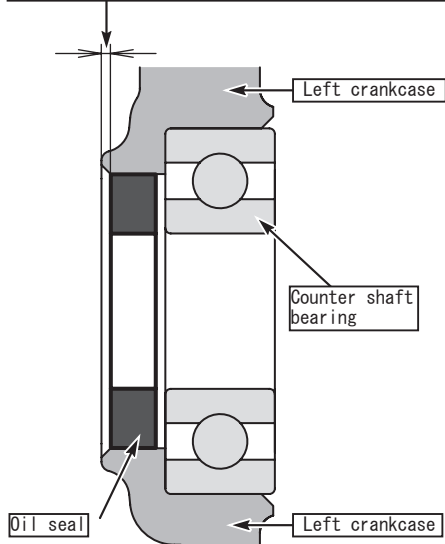
※ Please note that the special washer is little hard to install because the inner diameter hole is D shape.  
 ※ Bush 15mm and thrust washer 15mm re-use goods, be sure to inspect before assembly, please replaced with new parts if necessary.  
 ※ Engine oil is applied to each gear, please assembled.  
 ※ Apply the molybdenum solution to Bush.



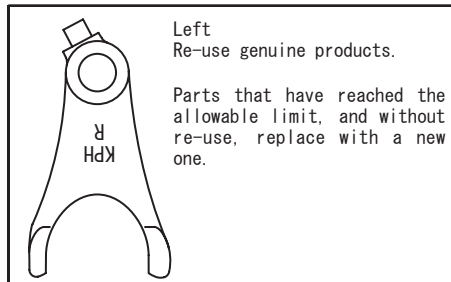
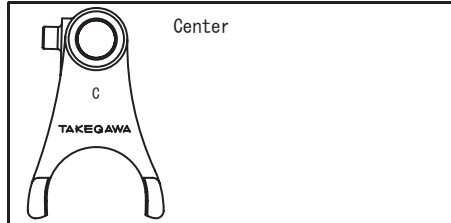
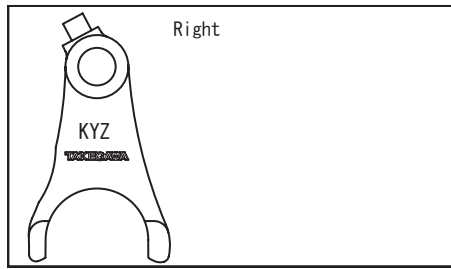
○ Before assembly the counter shaft, it requires confirmation work oil seals. Check part is position oil seals that is mounted in portion of counter shaft of the left crank case is inserted. (See below)

○ Please about 1mm as shown below (where the chamfer end).  
 ※ If there is no about 1mm, please push in the back.  
 ※ If it is too push in the back, that it may interfere in bearing.

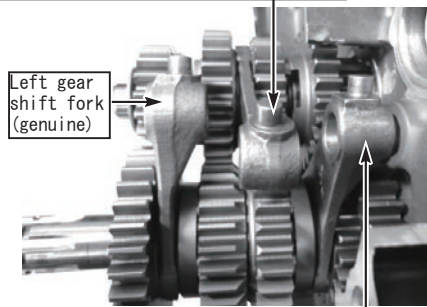
About 1mm  
 (plug to the point where chamfered ends)



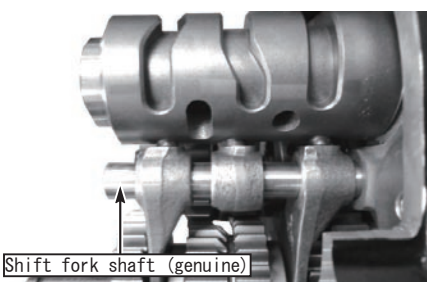
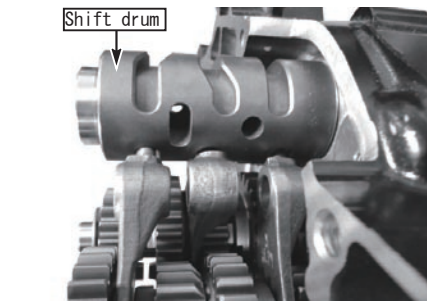
○ Assembled with each shift fork into gear (gear shift fork C5 gear, center gear shift fork M3 gear, M4 gear, left the gear shift fork (genuine re-used) C2 gear) incorporated into crankcase.



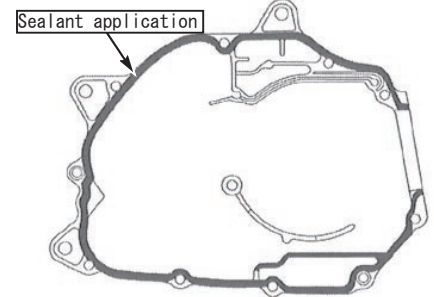
Center gear shift fork (kit accessory)



○ And assembling the shift drum combines the projection of each shift fork shift drum, to include the shift fork shaft.  
 ※ Please assembled by coating molybdenum solution to shift fork shaft.



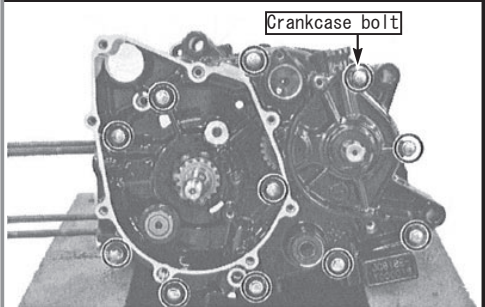
○ Place the dowel pin to right crank case, and a thin coat of sealant to the mating surfaces, combine the case.  
 ※ Three Bond 1215 / 1207B, or use equivalent.



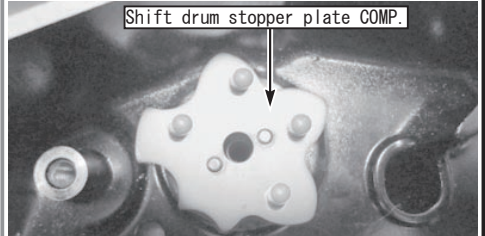
○ The combination of crankcase and assemble the crankcase bolts.  
 ※ Bolt tightening is mounting in several times a diagonal.

▲ Note: Be sure that you protect the specified torque.

Crankcase bolt  
 Torque : 10N · m (1.0kgf · m)



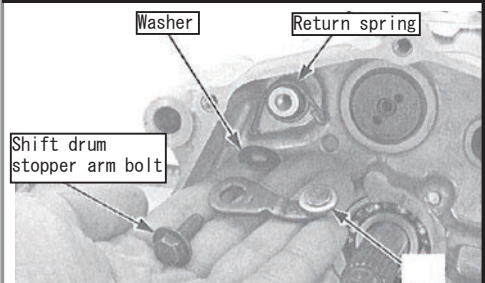
○ It will assemble the shift drum stopper plate COMP.  
 ※ Gear shift drum pin will reuse the removed parts.



○ It assembled a hole in shift stopper plate shift drum stopper arm.  
 ※ The shift drum stopper arm bolt, please coated with a thread locker.

▲ Note: Be sure that you protect the specified torque.

Shift drum stopper arm bolt  
 Torque : 12N · m (1.2kgf · m)

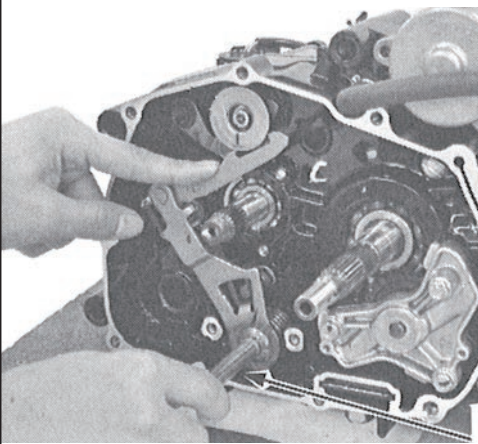


■ Mounting procedure ※ Please refer to the genuine service manual if the detail is not mentioned method and the specified torque.

○ It incorporates a gear shift spindle, and tighten assembled the drum stopper holder by socket bolt. After assembly, it will assemble the gear shift spindle.  
※ Apply the thread locker.

⚠ Note: Be sure that you protect the specified torque.

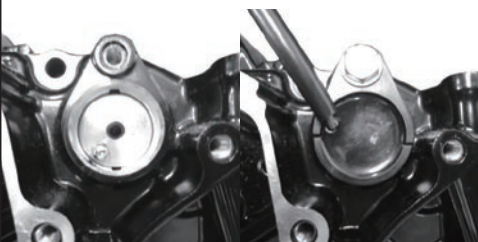
Socket bolt  
Torque : 10N · m (1.0kgf · m)



○ Each shaft is sure turn smoothly, make sure either shift to each position while rotating counter shaft.  
○ Change shift drum switch contact spring, and assembling the change switch contact cap and tighten flange bolts 6x14 assembled a neutral contact switch ASSY to the crankcase.

⚠ Note: Be sure that you protect the specified torque.

Shift drum stopper arm bolt  
Torque : 12N · m (1.2kgf · m)



○ Tighten flange bolts 6x18 sandwiched washer 6mm of kit (genuine parts) between the speed sensor ASSY and the crankcase.  
※ If you do not this work gear and speed sensor is in contact, it will be damaged.

⚠ Note: Be sure that you protect the specified torque.

Crankcase bolt  
Torque : 12N · m (1.2kgf · m)



○ The parts that were removed, and assembled In service manuals, etc. reference.  
○ Transmission is to start the engine in neutral state, it will check the oil leakage of each part. If no abnormality performs low-speed operation test in a safe place, check operation of transmission.