



## Instruction Manual for Manual Clutch Cover Kit

Item No.	KSR110
	: 02-01-0350 (without drive gear)
	: 02-01-0352 (with drive gear)
	KLX110 (DR-Z110)
	: 02-01-0351 (without drive gear)
	: 02-01-0353 (with drive gear)
Fits	KSR110 / KLX110 (From '03 onwards)

- Thank you for purchasing one of our TAKEGAWA-made products. Please strictly follow the following instructions in installing and using the kit.
- Before installing the kit, please be sure to check the kit contents. Should you have any questions about the kit, please contact your local motorcycle dealer.

**Read all instructions first before starting the installation.**

**Please use a thermo unit of Item No. 02-01-5052 (coming with a gold cap) for use with this clutch cover.**

- Ⓢ We do not take any responsibility for any accident or damage whatsoever arising from the use of the kit not in conformity with the instructions in the manual.
- Ⓢ We shall be held free from any kind of warranty whatsoever of products other than this product if the glitch takes place on the other products than this one after the installation and use of this product.
- Ⓢ As brake arms and mufflers, made by other manufacturers, may interfere with the clutch cover or clutch cable. So please do not use these brake arms and mufflers.
- Ⓢ If you make modifications to any product of the kit, we shall be held free from any guarantee of the product.
- Ⓢ You are requested not to contact us about the combination of our products with other manufacturers'.
- Ⓢ Please note that this kit is designed for exclusive use in the above-mentioned fitting models and frame numbers only and that it cannot be mounted on any other models.
- Ⓢ Installation of this kit requires the disassembly and assembly of the clutch, and other work. Moreover, the use of Kawasaki's genuine special tools is specified in installing some parts. Do the installation work properly referring to a Kawasaki's instruction manual for the relevant motorcycle models.
- Ⓢ Please consult with your motor cycle dealer for KAWASAKI about their service manual or special tools.
- Ⓢ Please be informed that, mainly because of improvement in performance, design changes, and cost increase, the product specifications and prices are subject to change without prior notice.
- Ⓢ This manual should be retained for future reference.



### CAUTION

The following show the envisioned possibility of injuries to human bodies and property damage as a result of disregarding the following cautions.

- Work only when the engine and muffler are cool. (Otherwise, you will get burned.)
- Do the installation with right tools. (Otherwise, breakage of parts or injuries to you may take place.)
- Always use a torque wrench to screw bolts and nuts tight and securely to the specified torque. (Otherwise, these parts may get damaged or fall off, resulting in accidents.)
- As some products and frames have sharp edges or protruding portions, please work with your hands protected. (Otherwise, you will suffer injuries.)
- Before riding, always check every hardware for slack in parts like screws. If you find slack ones, screw them securely up to the specified torque. (Otherwise, improper tightening may cause parts to come off.)

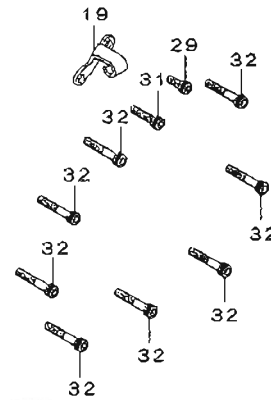
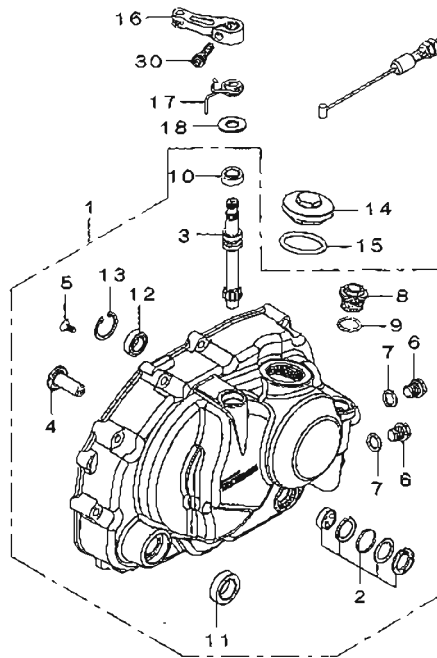
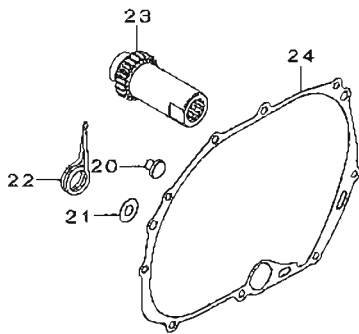
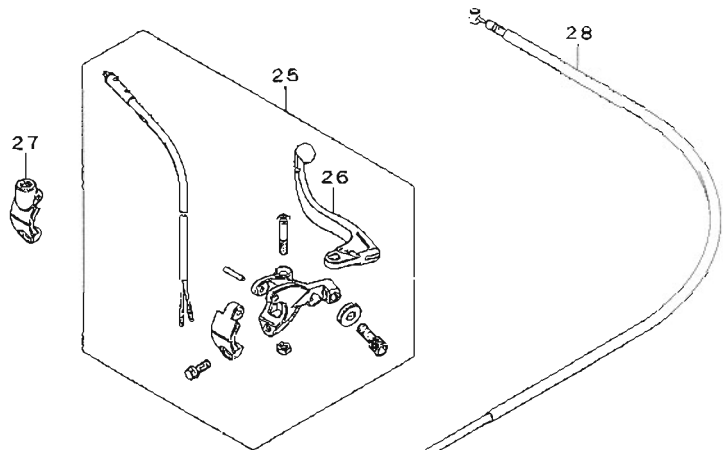
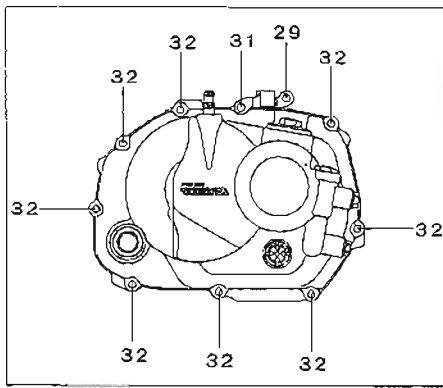


### WARNING

The following show the envisioned possibility of human death or serious injuries to human bodies as a result of disregarding the following warnings.

- Always start the engine in a well-ventilated place, and do not turn on the engine in an airtight place. (Otherwise, you will suffer from carbon monoxide poisoning.)
- When you notice something abnormal with your motorcycle while riding, immediately stop riding and park your motorcycle in a safe place to check what has gone wrong. (Otherwise, the abnormality could lead to accidents.)
- Before doing work, make sure your motorcycle is secure on level ground for safety's sake. (Otherwise, your motorcycle could overturn and injure you while you are working.)
- Check or carry out maintenance of your motorcycle correctly according to the procedures in the instruction manual or service manual. (Improper checking or maintenance could lead to accidents.)
- If you find damaged parts when checking and performing maintenance of your motorcycle, do not use these parts any longer, and replace them with new ones. (The continued use of these damaged parts as they are could lead to accidents.)
- 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.)

## Kit includes:



No.	Part Name	Qty	Repair Part Item No.	In packs of	No.	Part Name	Qty	Repair Part Item No.	In packs of
1	Right crankcase cover assembly	1	11330-KL1-T11/A	1	18	Plain washer, 10 mm	1	BW-01-0003	10
2	Oil pot window kit	1	21253-42	1	19	Clutch cable receiver	1	50130-KL1-T01	1
3	Clutch release pinion	1	21253-44	1	20	Clutch lift rod	1	22847-KL1-T00	1
4	Clutch release rack	1	21253-38	1	21	Shim ring, 9 x 20 x 0.5	1	BW-01-0028	1
5	Flat head screw, 4 x 10	1	BW-00-0006	10	22	Change-shaft return spring	1	24851-KL1-T00	1
6	Oil plug bolts, M10 x 1.25	2	000-13-020	1	23	Primary drive gear, 22T	1	02-01-0294	1
7	Sealing washers, 10 mm	2	09-071-015	10	24	Clutch cover gasket	1	11330-KL1-T00	1
8	Thermostat hole cap (silver)	1	15411-GEF-T00	1	25	Clutch lever assembly	1	53170-165-T00	1
9	O-ring, 16 mm	1	020-01-0012	2	26	Clutch lever	1	53178-165-T00	1
10	Oil seal, 10 x 17 x 5	1	21253-45	1	27	Mirror bracket, 8 mm	1	22889-125-T00	1
11	Oil seal, 16 x 26 x 7	1	000-13-069	1	28	Clutch cable COMP., 910 mm	1	21253-30B	1
12	Oil sea, 12 x 20 x 5	1	000-13-068	2	28	Clutch cable COMP., 860 mm	1	21253-30R	1
13	Internal circlip, 22 mm	1	BW-01-0029	3	29	Socket cap screw, 6 x 15	1	BW-00-0002	10
14	Hole cap	1	21253-40	1	30	Socket cap screw, 6 x 20	1	BW-00-0015	10
15	O-ring, 30 mm	1	000-13-052	4	31	Socket cap screw, 6 x 25	1	BW-00-0005	10
16	Clutch release arm	1	21253-36	1	32	Socket cap screws, 6 x 35	8	BW-00-0043	4
17	Clutch arm spring	1	22815-KL1-T00	1	33	Hex wrench, 5 mm	1		

※ Please order repair parts by indicating the Repair Part Item No. as listed above. As you see from the list, depending on the repair parts, in some cases we may not be in a position to accept your order for a single item in the quantity of one.

※ In Item Nos of 02-01-0351 and -0353 is not included No. 27 listed above. And the length of the part number 28 is 850 mm.

## Features

- This is a kit to convert a stock foot-operated automatic centrifugal clutch to a manual wire-type clutch.
- The clutch cover is made of barrel-polished die-cast aluminum.
- You can drain the oil into the oil cooler from the clutch cover, and the extra-cost option of thermostat can be installed. (The patent applied for.)
- To the oil hole, a stock filler cap or an extra-optional breather cap can be installed.
- We have employed rack-and-pinion systems in the clutch operating mechanism, leading to improved clutch operationality.
- This kit is installable on both stock clutch and optional heavy-duty 6-disk clutch kit.
- With the optional hydraulic cylinder kit, the clutch type can be converted from the wire-system to hydraulic system without the need to change clutch covers. (Patent applied for.)
- Removal of a stock primary clutch and use of a special drive gear will reduce the load on the crankshaft and improve the throttle response.
- This kit comes with a quick-release type clutch lever which can be installed or detached with a bolt only. Moreover, for installation on KSR110, an M8 mirror holder is additionally included in this kit.

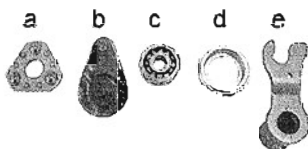
## Safety Precautions for Use

- This clutch cover alone does not operate. Be sure to use a special primary drive gear.
- The optional thermostat is usable only when an oil-cooler hose is connected to the crankcase cover. Never install the thermostat when an oil cooler is not installed, or when the oil-cooler hose is connected to any other hardware than the crankcase cover.
- When the oil-cooler hose is to be connected from the crankcase cover, be sure to either install the thermostat or when the thermostat is not to be installed, install a oil hole plug included in the Oil Cooler Kit. If the above hardware is not installed, the engine oil will not circulate around the oil cooler.
- NEVER install a thermostat or an oil plug bolt if you connect an oil cooler hose to either the oil filter or cylinder-head oil pipe. Otherwise, the engine oil will not be provided to the crankshaft, damaging the engine.
- If the oil-cooler hose is connected to the crankcase cover, only the engine oil, to be provided to the crankshaft, will circulate to the oil cooler, and engine oil, to be provided to cylinder head, will not circulate to the oil cooler. In order to send entire amount of engine oil to oil cooler, either connect the oil hose to the oil filter, or install oil cooler onto either crankcase or cylinder-head oil pipe.

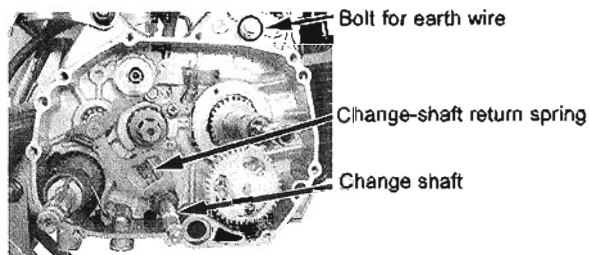
## Installation Instructions

### Disassembly

1. ● Make sure the bike is secure on a sidestand.
  - Prepare an oil container, and detach a drain plug to drain the engine oil.
2. ● Remove a kick pedal, right step-holder, and brake pedal.
  - Unfasten a screw on the clutch cover to remove the clutch cover, cover gasket and dowel pin.
3. ● Remove a release lever, release ball, release cam, ball bearing and bearing holder.
  - a. Release ball assembly
  - b. Release cam
  - c. Ball bearing
  - d. Ball bearing holder
  - e. Release lever
4. ● Remove a 14mm nut, holding a primary clutch with a special tool of primary clutch holder.
  - **KAWASAKI-made genuine special tool:**  
Primary clutch holder: 57001-1507



5. ● Remove a 14mm nut, holding a secondary clutch with a special tool of clutch holder.
  - ✳️ Install the special tool of clutch holder, meshing three convex portions on the clutch holder with a concave portion on the clutch hub.
  - **KAWASAKI-made genuine special tool:**  
Clutch holder: 57001-1508
6. ● Remove the primary and secondary clutches together.
7. ● Remove a change pedal to pull out a change-shaft lever.
  - Remove a change-shaft return spring from the change-shaft lever.



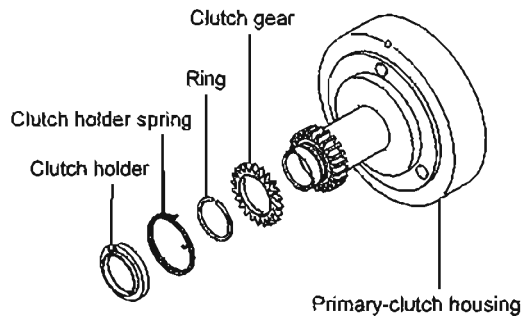
8. ● Remove a bolt for engine earth wire on the crankcase. (This is applicable only to KSR110)

## About primary clutch gear:

It does not matter whether or not you will install the clutch gear. If the clutch gear is installed, there will be no backlash, and the noise from the gear will be reduced. And no-installation of the clutch gear does not affect the clutch operation.

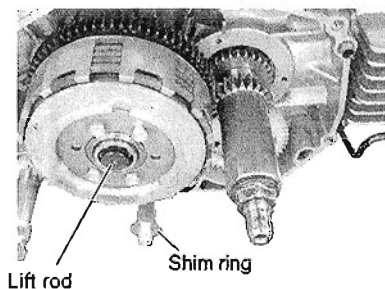
(Install the clutch gear only when the kit comes with a gear.)

- From the primary clutch housing, detach a clutch holder, clutch holder spring, ring and clutch gear.
- Attach a clutch gear and ring to a provided drive gear.
  - Attach a holder spring to the clutch holder.
  - Press the holder into the drive gear, meshing the cogs correctly.
  - Put marks on any random tips of cogs meshing together.

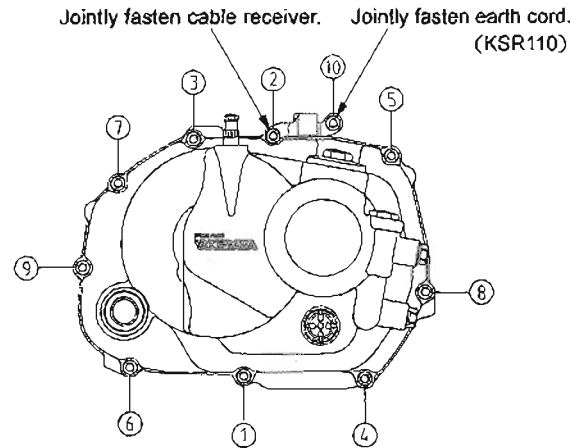


## Assembly and installation:

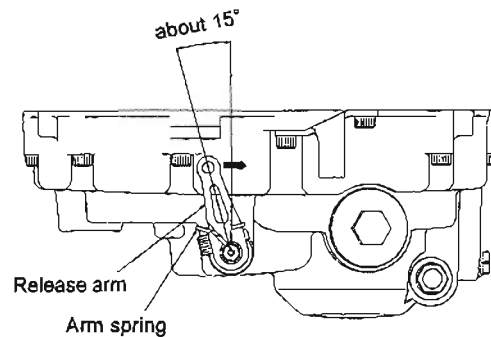
- Attach a provided change-shaft return spring to the change-shaft lever, which please install onto the crankcase.
  - ※ Be careful about the direction of the return spring.
  - Attach the change pedal, and tighten it with a bolt.
    - Torque: 11.8N · m (1.2 kgf · m)
- In case the clutch gear is installed to the drive gear, give the clutch gear a 2-tooth clockwise turn. And install the clutch gear together with the drive gear, meshing the clutch gear with the secondary clutch.
  - ※ At this point, check that the marks on the cog tips are not meshing with each other.
  - ※ In case the clutch gear is not to be installed, the work above is not needed.
  - Tighten a 14mm nut, holding a secondary clutch with a clutch holder.
    - Torque: 72 N · m (7.3 kgf · m)
  - Tighten a 14mm nut, holding the primary drive gear.
    - Torque: 72 N · m (7.3 kgf · m)
- Attach to spring plate the removed ball-bearing holder, and ball bearing, and attach a provided clutch lift rod to the ball bearing.
  - Attach a provided shim ring to the change-shaft lever.



- Degrease the clutch-cover mounting surface of the crankcase. Put in two dowel pins into the crankcase, and attach a new clutch cover gasket.
  - Attach a right crankcase cover, and fasten it with a provided socket cap screw in a few steps in the order as specified below.
    - Torque: 8.8 N · m (0.9 kgf · m)
    - ※ Check that a clutch release rack is attached inside the cover.
    - ※ Attach the right crankcase cover with care not to damage an O-ring of a kick shaft.
    - ※ And jointly fasten a clutch cable receiver and the O-ring in place.
    - ※ Jointly fasten an earth cord and the cable receiver.
      - (This applies only to KSR110.)



- Put a 10 mm washer into the release pinion with the washer's round edge facing downwards.
  - Hang one end of a clutch arm spring on the release arm, and the other end on the cover. And position the release arm in place as per the figure below.
    - ※ Turn the release pinion clockwise until it comes to a halt, and attach the release arm.



- Attach a socket cap screw to the release arm. And pressing down the release arm lightly, tighten the socket cap screw.
    - Torque: 8.8 N · m (0.9 kgf · m)
- Attach a bracket to the provided clutch lever, and hammer in the spring pin with a plastic hammer.
    - ※ Use a mirror bracket in fixing rearview mirrors to KSR110.
  - Attach a clutch lever to the steering handle, and tighten the bolt.
    - Torque: 8.8 N · m (0.9 kgf · m)

8. ● Attach a clutch cable adjuster to the release arm.
  - Detach a nut on the clutch cable adjuster completely from the screw, and pass a cable through the clutch cable receiver.
  - Reinstall the removed nut, and fasten the cable receiver in between nuts loosely for now.
  - Route the clutch cable to the clutch lever without stretching it by force, and attach the cable end to the lever
  - Adjust the free play at the clutch lever with an adjuster on the clutch cable, and fasten the nut.
 

Torque: 11.8 N · m (1.2 kgf · m)

 Free play at the lever tip: 10 ~ 20 mm
  - ※ Fine-tune the free play with the adjuster on the clutch lever

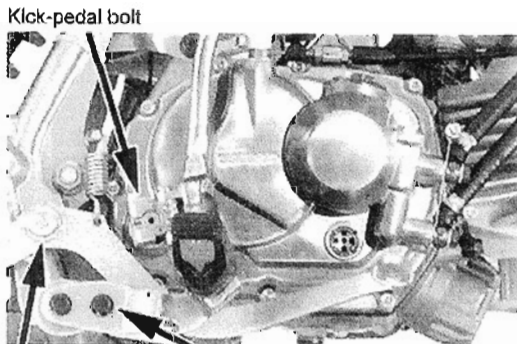
9. ● Install the removed right step holder, brake pedal and kick pedal.
 

**Specified torque for :**

Right step-holder bolt : 26 N · m (2.7 kgf · m)

Brake-pedal bolt : 8.8 N · m (0.9 kgf · m)

Kick-pedal bolt : 11.8 N · m (1.2 kgf · m)



Kick-pedal bolt  
Brake-pedal bolt      Step-holder bolt

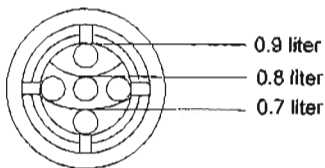
10. ● Fasten a drain plug, and add engine oil.
 

Torque: 29 N · m (3.0 kgf · m)

※ In case a gasket on the drain plug is damaged, replace it with a new one.

Engine oil level: 0.9 liter (at the time of oil change)

※ Use the following figure just as a guideline on how to read the oil level through oil pot window.



11. ● Start the engine in a safe place, and check that nothing is wrong with the clutch operation.

## Important Notice

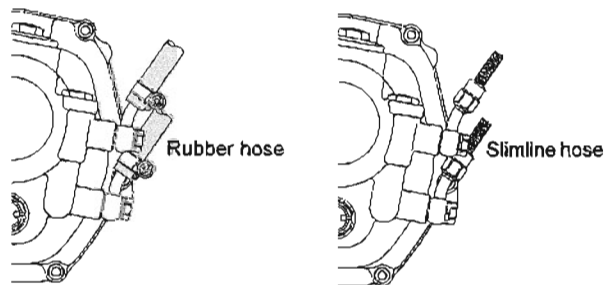
### Installation of oil cooler:

(In the case of installing the thermo unit)

Please be sure to use a thermo unit of Item No. 02-01-5052 coming with a gold cap.

Please note that a thermo unit of Item No. 02-01-5053 coming with a blue cap is not usable because of different screw diameter.

1. Install the thermo unit according to the Instruction Manual.
2. Detach two oil plug bolts, attach hardware like a banjo to match the kind of hose to be used, and connect the hose.
  - ※ Please see an Operation Manual for the thermo unit.
  - ※ Please see an Operation Manual for the oil cooler kit.



(In the case of connecting the oil hose to other hardware than the clutch cover)

NEVER install a thermostat or an oil hole plug if you connect an oil hose to the oil filter or cylinder-head oil pipe.

**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 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.

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