# Dry-Type Clutch Kit Instruction Manual (Cable-type)

Item No. : 0 2 - 0 2	0 1 4 6				
Applicable models and frame No.:					
Monkey · Gorilla (6V)	:Z50J-1300017 ~ 1805927				
Monkey (12V)	:Z50J-2000001 ~				
	: AB27-1000001 ~ 1899999				
Monkey (FI)	: AB27-1900001 ~				
Gorilla (12V)	:Z50J-2500001 ~				
	: AB27-1000001 ~ 1899999				
Monkey BAJA	:Z50J-1700001 ~				
Monkey RT	: AB22-1007601 ~				

• Thank you for purchasing one of our products. You are requested to follow the below-mentioned instructions in installing this Kit.

• Before installation, please check the contents of this Kit. Should you have any questions about the product, please kindly contact your local dealer.

Please note: Illustrations and photos may vary from actual hardware.

#### Please read the following before starting the installation.

We do not take any responsibility for any accident or damage whatsoever arising from the use of this product not in conformity with the instructions in this 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.

You are kindly requested not to contact us about the combination of our products with other manufacturers'.

This Kit is designed for exclusive use in the above-mentioned applicable models with specified frame numbers only. Note: this Kit cannot be mounted on any other types of motorcycles.

For the installation of this Kit, either our Dry-Type 5-Speed or 6-Speed Transmission Kit needs to be installed at the same time. Note that this Kit cannot be installed together with a genuine or our 4-speed transmission.

Be sure to do the disassembly work properly, referring to a HONDA's genuine service manual for the above-mentioned relative motorcycles.

Avoid running in the rain, or when driving your motorcycle is inevitable, try to cover as much as possible to prevent the friction discs from getting wet. (When running in the rain and friction disc get wet, clutch slippage may occur causing the clutch to be nonfunctional.)

Always wipe the water off the friction discs, a clutch plate and other parts and dry them sufficiently after riding in the rain or washing the motorcycle. In the humid or rainy seasons, store your vehicle with the clutch disengaged to prevent the friction discs, clutch plate or other parts from sticking to each other.

This instruction manual, as well as the service manual, is prepared for those who have acquired basic skill and knowledge. Therefore, technically inexperienced people or people without sufficient knowledge may not be able to fix these products correctly. Improper installation because of insufficient skill and knowledge could lead to parts breakage.

For installation of this Kit onto Monkey R, use an optional 730 mm clutch cable of 00-02-0132.

If this kit is installed onto the Monkey R or RT with a Honda's genuine optional protector installed, the release arm of this Kit will interfere with the protector. So, either remove the protector or cut off the interfering portions.

Installation of the Oil Cooler Kit requires an optional oil outlet of either 07-07-0020 or 07-07-0021. And a stock muffler or street-up muffler cannot be installed.

Please note that the descriptions in this manual like illustrations and photos may differ from the actual hardware.

Please avoid sudden clutch engagement as this will put too many strains on the clutch or transmission gear.

NOTE: On the Monkey, this product cannot be used together with a Z-style muffler of 04-02-2301 or 04-02-2306.

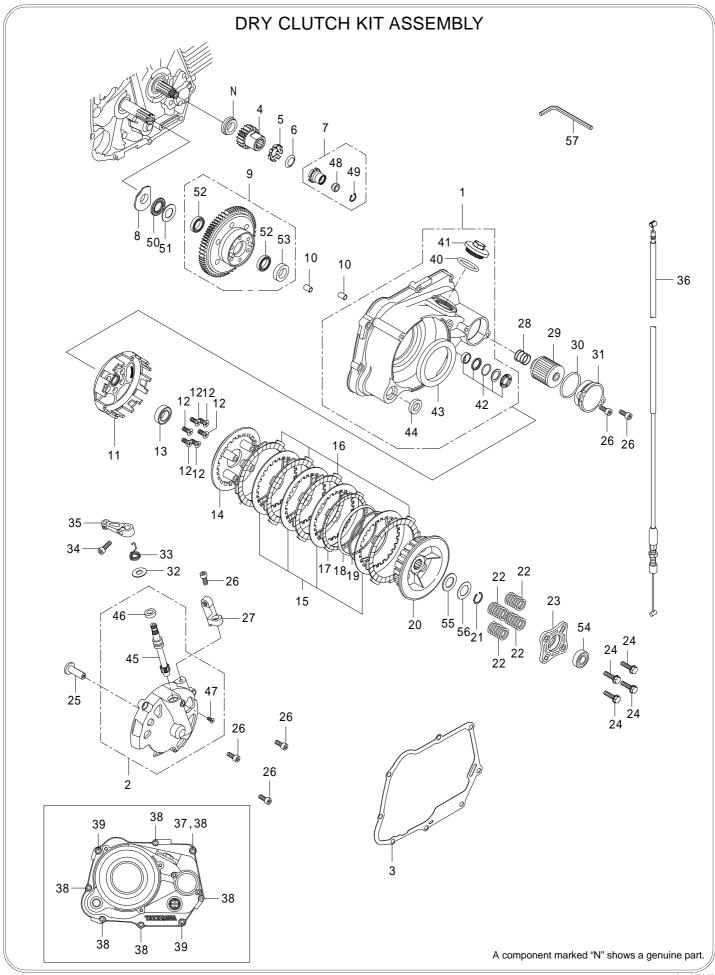
	The following show the envisioned possibility of injuries to human bodies or property damage as a result of disregarding the following cautions.
<ul> <li>Always try to driv</li> </ul>	ve your motorcycle at legal speeds on the public road, abiding by the laws.
(Riding a motorcy	cle at a speed exceeding the legal speed limit is subject to punishment for overspeeding in violation of the Law.)
Work only when	the engine and muffler are cool.
(Otherwise, you w	vill get burned.)
<ul> <li>Prepare right too</li> </ul>	Is for the work.
	stallation with improper tools could cause breakage of parts or injuries to you.)
•	and nuts securely to the specified torque with a torque wrench.
	parts may get damaged or come off.)
•	ts and frames have sharp edges or protruding portions, please work with your hands protected.
	vill suffer injuries.)
-	ways check every hardware for slack in parts like screws. If you find slack ones, screw them securely up to the specified torque.
(Or improper torqu	ue may cause parts to come off.)
	The following show the envisioned possibility of human death or serious injuries to human bodies as a result of disregarding the following cautions.
Those who lack t	technical skill or knowledge are required not to do the work.
(Improper installat	tion could lead to a motorcycle's overturning or accidents as a result of parts breakage.)
Rotating parts in	the dry-type clutch, such as a clutch outer, are touchable through an opening in a cover. Please never look into or touch them
when the engine is	s running. Moreover, be dressed to protect your legs when riding so you do not get your clothes caught in the rotating parts of the
clutch. (Otherwise	e, the motorcycle may overturn, and you will suffer injury or burn yourself.)
<ul> <li>Always drive the</li> </ul>	engine in a well-ventilated place, and do not start the engine in an airtight place.
(Otherwise, you w	vill suffer from carbon monoxide poisoning.)
<ul> <li>When you notice</li> </ul>	something unusual with your motorcycle while riding, immediately stop riding and park your motorcycle in a safe place.
	pnormality could lead to accidents.)
-	ne work, secure your motorcycle firmly on level ground for safety's sake.
	motorcycle could overturn and injure you while you are working.)
, ,	ion or maintenance of your motorcycle correctly according to the procedures in the instruction manual or service manual.
· · · ·	on or maintenance could lead to accidents.)
, ,	ed parts when checking or performing maintenance of your motorcycle, do not use these parts any longer, and replace them with new
•	ued use of these damaged parts as they are could lead to accidents.)
	hly 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.
Please be informe	ed that, mainly because of improvement in performance, design changes, and cost increase, the product specifications and prices are
	without prior notice.
	Id be retained for future reference, and keep it at hand so you can refer it any time.
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	~ Features ~

• As the clutch is installed on the transmission main shaft, the friction loss of the crankshaft can be reduced, and the crankshaft durability and throttle response can be improved.

•Being located outside, this clutch mechanism has an excellent cooling effect. Moreover, since the clutch mechanism does not encounter oil resistance, the clutch disengagement improves.

In addition, this dry-type clutch prevents oil from deteriorating caused by the wear of the clutch discs or the generated heat, and reduces adverse effect on the engine.

- $\boldsymbol{\cdot}$  The friction disks consist of five Kevlar blend disks so they may suit a high power engine.
- $\cdot$  We have incorporated a damper into the primary driven gear with an aim to reduce the shock felt at the time of clutch engagement.
- We have used a paper-type oil filter to improve the engine oil filterability. And we have created an oil sight window to check the amount of oil left.
- We have changed the clutch outer material from the conventional forged-aluminum to the die-cast aluminum, thus increasing its durability and strength.



No.	Part name	Qty	Repair part item No.	In packs
1	Right side crankcase cover COMP.	1	00-02-0068	1
2	Clutch cover COMP.	1	11650-181-T00	1
3	Right side crankcase cover gaskets	1	00-01-0095	1
4	Primary drive gear (18T)	1	23121-181-T01	1
5	Lock washer	1	00-01-0098	1
6	Conical spring washer	1	00-02-0036	1
7	Lock nut COMP.	1	90200-181-T00	1
8	Bearing seat	1	22301-181-T00	1
9	Primary driven gear COMP. (67T)	1	00-02-0071	1
10	Dowel pin, 8x12	2	00-00-0153	2
11	Clutch outer	1	23101-165-T10	1
12	Flat head screw, 6x15	6	00-00-0031	5
13	Seal bearing, 6903	1	00-00-0035	1
14	Clutch pressure plate	1	22350-181-T00	1
15	Clutch plate	4	00-02-0029	1
16	Clutch friction disk (Kevlar)	4	02-02-0003	5
17	Clutch friction disk B	1	00-02-0202	1
18	Judder spring	1	00-02-0203	1
19	Judder spring seat	1	22125-GEF-T10	1
20	Clutch center	1	22120-165-T00	1
21	External circlip, 17mm	1	00-02-0005	5
22	Clutch spring	4	22401-181-T00	1
23	Clutch lifter plate	1	22361-GEY-T10	1
24	Flange hex bolt, 6x22	4	00-02-0098	4
25	Clutch release rack	1	00-02-0039	1
26	Socket cap screw, 6x15	6	00-00-0042	10
27	Clutch cable receiver	1	22839-181-T00	1
28	Oil filter spring	1	15413-181-T00	1
29	Oil filter element	1	00-02-0027	1
30	O-ring, 40mm	1	00-02-0040	1
31	Oil filter cover	1	15411-181-T00	1
32	Plain washer, 10mm	1	00-00-0151	10
33	Clutch arm spring	1	00-02-0112	1
34	Socket cap screw, 6x20	1	00-00-0043	10
35	Clutch release arm	1	00-02-0106	1
36	Clutch cable COMP., 850mm	1	00-02-0133	1
37	Socket cap screw, 6x70 (12V motorcycle)	1	00-00-0081	2
38	Socket cap screw, 6x25	6	00-00-0089	10
39	Socket cap screw, 6x30	2	00-00-0090	5
40	O-ring, 30mm	1	00-01-0034	4
41	Hole cap	1	12361-GEF-T00	1
42	Oil pot window COMP.	1	00-02-0031	1
43	Oil seal, 60x80x8	1	00-02-0031	1
44	Oil seal, 13.8X24X5	1	00-02-0044	1
44	Clutch release pinion	1	00-02-0032	1
46	Oil seal, 10X17X5	1	00-02-0005	1
40	Flat head socket screw, 4X10 (SUS)	1	00-02-0008	6
47	Oil seal, 6X13X5	1	00-02-0037	1
40 49	C-ring, 13 mm	1	00-02-0037	5
	Thrust bearing	1	00-02-0099	5 1
50	, e	1		
51	Thrust washer		00-02-0060	1
52	Ball bearing, 6803	2	00-00-0024	1
53	Oil seal, 17X28X7	1	00-02-0020	1
54	Shield bearing, 6001	1	00-00-0026	1
55	Shim ring, 17X24X0.2	1	00-00-0368	1
56	Shim ring, 17X24X0.1	1	00-00-0369	1
57	Hex wrench, 5mm	1		

Please note that in ordering repair parts, be sure to quote the Repair Part Item No. Otherwise, we may not be able to accept your orders. There are some parts, however, for which we are not in a position to accept your order in just the quantity to be used. In this case, please take them in the quantity packed.

### ~ On installation ~

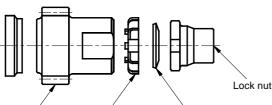
#### Check the contents of each kit

### (First, install the Close-Ratio Transmission Kit.)

- 1 .Make sure that your motorcycle is secure on a maintenance stand. And referring to the service manual, demount the engine.
- Place the removed engine on a working table so it stands stable.
   And referring to the service manual, split the crankcase and take out the transmission.
- 3 .Referring to the instruction manual for Close Ration Transmission Kit, install the transmission into the crankcases, replace the crankcase gaskets with new ones, and fit the crankcases together.
- 4 .Referring to the instructions in the HONDA's genuine service manual, reinstall the parts removed at the time of splitting the crankcase.At this point, however, keep the crankshaft and transmission mainshaft bare of hardware.

### (On installation of the primary gear)

1 Fit a stock collar into the crankshaft. Then fit a primary drive gear, lock washer and conical spring washer in this order, and loosely tighten them for now with a lock nut whose oil seal has been greased. Locate the lock washer and conical spring washer, being careful of their direction.



Lock washer

Drive gear

Conical spring washer (Be careful of its direction)



2 . Fit the clutch bearing seat into the transmission mainshaft.(Set the bearing seat so its folded portion fits well with the crankcase so as to prevent it from rotating.)

Then, fit the thrust bearing and thrust washer in this order into the mainshaft.



3 Apply engine oil to the ball bearing of the primary driven gear COMP. , and then the grease to the oil seal. And insert the primary driven gear COMP. into the mainshaft.

Take off the protective masking tape on the primary driven gear COMP., and wipe off the tape mark with thinner or the like.



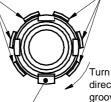
4 . Tighten the lock nut to the specified torque with the crankshaft being seated in detent.

#### ▲ Caution: Apply the specified torque. Torque: 39 N • m (4.0 kgf • m)

After tightening the lock nut to the specified torque, and if the hook on the lock washer does not fit in the lock nut grooves, turn the lock nut in the direction of tightening so the hook fits in the lock nut groove. Keep other hooks on the lock washer in close contact with the lock nuts.



Set the hooks to be in close contact with the lock nut.



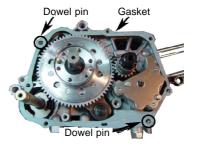
Turn the lock nut in the tightening direction so the hooks and grooves mesh together.

Fit the hooks into the lock nut grooves.

### (Installation of the right side crankcase cover)

. Degrease the mating surfaces of the crankcases, and attach the supplied two dowel pins and right side crankcase cover gaskets to the crankcase.

Apply grease to the lip of the oil seal in the right side crankcase cover.



- 2. Put in the case straight along the mainshaft so as not to damage the oil | 6. Attach the supplied external circlip to the grooves in the main shaft. seal of the right side crankcase cover COMP. and that of the lock nut. Then, temporarily fix the right side crankcase cover onto the crankcase by tightening cap screws from the center of the case to the outside diagonally to the specified torque.
- A Caution: Apply the specified torque. Torque: 10 N • m (1.0 kgf • m)



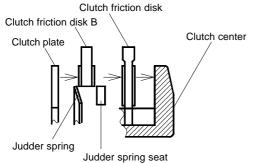
### (Installation of clutch)

1 Install and tighten the clutch outer on the mainshaft loosely with flat head screws, meshing it with the dowel pins. And then screw them up diagonally to the specified torque.

#### $\Delta$ Caution: Apply the specified torque. Torque: 10 N • m (1.0 kgf • m)

- 2 . Attach the seal bearing to the mainshaft.
- 3 . Into the clutch center, install the clutch disk, clutch friction disk B, Judder spring and Judder spring seat as shown in the figure below. And attach the clutch plate and clutch disk alternately. Be careful about the direction of the spring when installing it.

Be careful about the direction of the spring when installing it. (Install the spring in the direction so the tilted blade-like portion of the spring comes in touch with the Judder spring seat, as shown in the fig. below.)

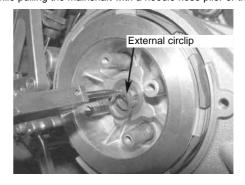


Since remaining oil on the clutch plates will cause slipping, degrease the oil finely

- Check that the clutch center and the clutch pressure plate fit in each other exactly.
- 4 . Holding the boss of the clutch pressure plate, align the protruding portion of the clutch friction disk with the clutch outer grooves. At the same time, align the clutch center with the mainshaft spline, and insert the mainshaft.
  - Install all clutch plate and all friction disc on the same grooves. (Do not install outside clutch plate on the different groove)
- 5 . Install shim ring 17x24x0.2 on to the clutch center. Please use shim ring 17x24x0.1 or 17x24x0.2 to hold clutch center maintain appropriately.



Make sure to place the circlip with the angular side facing out. Do not expand the external circlip more than necessary. If the external circlip does not easily fit into the main shaft grooves, fit it while pulling the mainshaft with a needle nose plier or the like.



7 . Fix the clutch spring to the boss of the clutch pressure plate.



8 . Fix the 6x22 hex flange bolt on the clutch pressure plate and tighten them with hands as hard as possible, with the bearing of the clutch lifter plate facing outside.

Pull the clutch lifter plate toward you and see if there is a clearance between the friction disks. If there is a clearance, this shows that the clutch center and the clutch pressure plate have got out of place with each other. Therefore, turn the clutch lifter plate to the right and left a little until they fit each other.

After making sure they fit closely, gradually tighten the 6x22 hex flange bolt diagonally, while pulling the clutch lifter plate toward you. Finally, tighten them to the specified torque.

 $\Delta$  Caution: Apply the specified torque. Torque: 10 N • m (1.0 kgf • m)

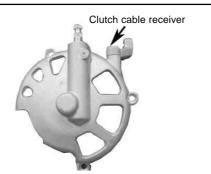
Do the work carefully so the clutch spring does not get out of place.



### (Installation of clutch cables)

- 1 .Referring to the instructions in the HONDA's genuine service manual, reinstall back the parts removed at the time of splitting the crankcase and mount the engine on the frame.
- 2 .Attach the clutch cable receiver to the clutch cover COMP. with a socket cap screw, and tighten the screw to the specified torque.

#### ▲ Caution: Apply the specified torque. Torque: 10 N • m (1.0 kgf • m)



3 . After making sure that a clutch release rack is present inside the clutch cover COMP., fit it securely into the right side crankcase cover and hold it loosely for now with a cap screw, and tighten the screw to the specified torque.

#### ▲ Caution: Apply the specified torque. Torque: 10 N • m (1.0 kgf • m)



- 4 . Attach the clutch cable end to the clutch lever.
- 5 . Route the clutch cable to the receiver, being careful not to stretch it too tight.
- 6 .Slightly apply grease to the clutch cable end, and fit the clutch cable into the clutch release arm.

Hang the left-side return spring on the clutch release arm so that the notch on the clutch release arm faces backward.

- 7 . Screw in the adjuster on the clutch cable to the cable receiver to the end.
- 8 .Fix into the release pinion the clutch arm spring and release arm with its inner cable of the clutch cable stretched. Tighten it with a cap screw to the specified torque.

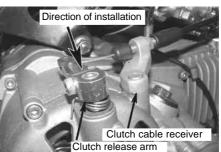
#### ▲ Caution: Apply the specified torque. Torque: 10 N • m (1.0 kgf • m)

Install the release arm by aligning the serrations with each other. If the release arm is pressed inside forcibly without aligning the serrations, then the release arm will break, getting unusable. 9 . Adjust the free play at the clutch with the adjuster on the clutch cable receiver, then tighten the locking nuts to the specified torque, and cover the clutch cable adjusters at both ends with rubber caps.

 $\Delta$  Caution: Apply the specified torque.

#### Torque: 10 N · m (1.0 kgf · m)

Adjust the free play at the clutch lever end to be 10 to 20 mm.



### (Installation of oil filter cover)

 Put the oil filter spring into the right side crankcase cover.
 Please see to it that it fits in the boss in the crankcase. Also attach the oil filter, and then fix the oil filter cover by tightening a cap screw to the specified torque.

▲ Caution: Apply the specified torque. Torque: 10 N • m (1.0 kgf • m)

Place the oil filter so that it sticks into the protrusion on the oil filter cover. Unless the oil filter spring is set correctly inside the protrusion on the oil filter, there will be a gap between the oil filter cover and the right side crankcase cover COMP.

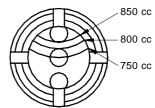
When replacing the oil filter, wipe off the oil on the mating surface of the O-ring and the oil filter cover, and then apply grease to the O-ring thinly.

- 2 . Referring to the HONDA's genuine service manual, reinstall back all the parts removed at the time of demounting the engine.
- 3 . Fasten drain plug and pour the engine oil to the crankcase (800cc).

#### ▲ Caution: Apply the specified torque. Drain bolt : 21.5 N • m (2.2 kgf • m) Hole cap : 12 N • m (1.2 kgf • m)

Apply engine oil slightly to an O-ring of the hole cap.

In case the crankcase is not to be split (at the time of oil change), add 750 cc of engine oil.



Use above figures just as a guideline on the oil level at the time of crankcase splitting.

### (Inspection after installation)

- With the engine turned off, shift the transmission to the first gear. Squeeze the clutch lever. Then, check that the rear wheel rotates when you move the machine, and that the rear wheel does not rotate when you have released the clutch lever.
- 2 . Shift the transmission into NEUTRAL, and start the engine. Then check each component for oil leak.

If nothing is wrong, do a test run at slow speed in a safe place to check how the clutch works.

#### SPECIAL PARTS TAKE Co., Ltd.

3-5-16 Nishikiorihigashi Tondabayashi Osaka Japan TEL: 81-721-25-1357 FAX: 81-721-24-5059 URL: http://www.takegawa.co.jp

## Notice on installing Special clutch or Dry Clutch

A collar attached to a crankshaft should be used an genuine one.

Please noted that never attach the collar included in Takegawa Heavy-Duty 3 disc clutch kit as it is different size. It will be a cause to damage if it installed. In the worst case it will cause to destroy the engine.

As the diagram below indicates, height and shape are different. Please confirm.

