

# 4th CLOSE GEAR SET NO 1/2

CODE : 305-1432200

COMPATIBILITY : GROM (JC61)

- Thank you for purchasing Kitaco product. Read and understand the instruction before installing.
- Exclusive tools are required for installation.
- Keep this instruction for later needs.
- ✕ This instruction is not included in replacement parts.

## ATTENTIONS (MUST READ)

• 4th CLOSE GEAR SET is SPEED TRANSMISSION is the products to make the each gear ratio closer for shifting connection improvement (performance improvement).  
Not for the parts just bolt-on and run. Other setting such as sprockets change according to engine performance is required.

- We are not responsible for damages and accidents caused by assembling mistake and improper setting.
- Do not modify the way which is not listed or it will cause damage and trouble.
- Please ask authorized mechanic for assembling and setting.
- Ask a specialist at specialty shop if you do not understand the role of the surrounding parts.
- Refer to the manufacturer HONDA service manual when installation.
- Bolts and nuts may get loosen by engine vibration.
- Please check and make sure each part of bolts and nuts are not loose before running.
- Apply to transmission oil or engine oil you are using for sure when installing each part.
- 4th CLOSE GEAR SET is designed and made exclusive for specific model, do not use on other models.
- Please contact a mechanic nearby immediately when you find something unusual.



### FLAMMABLES

Inflammable gasoline is used during operation. Using flammable things such as smoking is strictly prohibited.



As for cylinder, crankcase, exhaust pipe, etc., during engine operation and after operation are extremely hot. Do not touch carelessly.



This instruction is for person who has knowledge for motorcycle maintenance. If you do not, do not try to install, but ask for mechanic.



Do not touch spinning gears or other parts. Do not rotate tires while operation.

## PACKING LIST

NUMBER	NAME	CODE	QTY
A1	GEAR (M-4) 25T	305-1432204	1
A2	SIR CLIP 17mm	305-1010221	2
B1	GEAR (C-4) 25T	305-1432214	1
B2	SET RING 20mm	305-1123113	2
D1	R CRANKCASE GASKET	305-1432004	1
D2	L CRANKCASE GASKET	305-1432005	1

3-8-13 NAGATA  
HIGASHI-OSAKA,  
OSAKA, 577-0015,

## SPECIFICATION

REDUCTION RATIO	4th : STOCK 0.923 (24/26) → 1.000 (25/25)
REFERENCE	STOCK SPEED SENSOR USABLE

## OPTION PARTS (PURCHASE THE QUANTITY YOU REQUIRE)

### GENERAL TOOL & SPECIAL TOOL.

Refer to service manual for general tools.

	NAME	CODE	USE
SPECIAL TOOL	UNIVERSAL HOLDER	HONDA GENUINE : 07725-0030000	Holding cam sprocket
	LOCK NUT WRENCH 20 x 24mm	KITACO : 674-1013900	Installing / removing clutch
	LOCK NUT WRENCH 5.5 x 30mm	HONDA GENUINE : 07916-6390001	Installing / removing oil filter
	GEAR HOLDER	KITACO : 674-0510900	Installing / removing oil filter / clutch
	FLYWHEEL HOLDER	HONDA GENUINE : 07725-0040001	Installing / removing flywheel
	FLYWHEEL PULLER 30mm	KITACO : 674-0500130	
	UNIVERSAL BEARING PULLER	HONDA GENUINE : 07631-0010000	Installing / removing crankshaft R side bearing
	DRIVER	HONDA GENUINE : 07749-0010000	Installing bearing to R crankcase
	OUTER DRIVER 52 x 55mm	HONDA GENUINE : 07746-0010400	
	PILOT 22mm	HONDA GENUINE : 07746-0041000	
HYDRAULIC PRESS	-		
ASSEMBLY SET 14mm	HONDA GENUINE : 07JMF-KW70100	Installing crankshaft to R crankcase	
MOLYBDENUM DISULPHIDE GREASE	KITACO : 0900-969-00100		
GASKET	LIQUID GASKET KC-167	KITACO : 0900-969-00020	On crankcase contact
	THREE BOND 1215/1207B OR EQUIVALENT	HONDA RECOMMENDED GASKET	

## ATTENTION FOR INSTALLATION

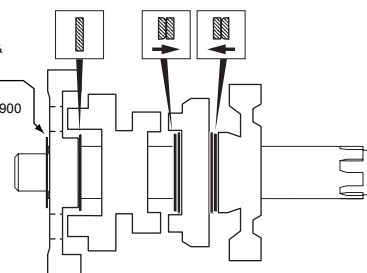
- Spline washer / sir clip installed on transmission has direction. There are round & flat surfaces. (These are assembled when shipped, but be careful when disassembled.)

✕ The arrows are the round surfaces.

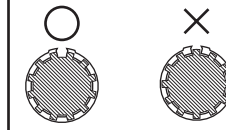
### COUNTER SHAFT

! Purchase new ones when scratches, bent & wear on it.

SPECIAL WASHER 12X23  
HONDA NUMBER : 90412-KPH-900



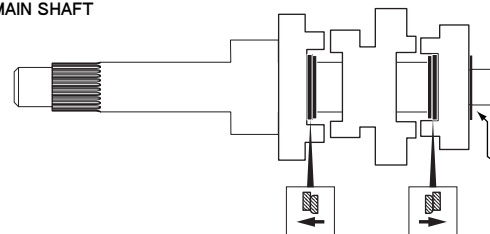
Make sure that snap ring is placed in the groove and end gap is aligned with spline groove.



### MAIN SHAFT

! Purchase new ones when scratches, bent & wear on it.

SPECIAL WASHER 12mm  
HONDA NUMBER : 90452-KGH-900



# 4th CLOSE GEAR SET NO 2 1/2

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NUMBER	NAME	REFERENCE	QTY	NUMBER	NAME	REFERENCE	QTY
Na1	MAINSHAFT (M-1) 14T		1	B2	SET RING 20mm	(SIR CLIP)	2
Na2	GEAR (M-2) 20T		1	Nb5	C-1 BUSH		1
Na3	GEAR (M-3) 20T		1	Nb6	C-2 GEAR COLLAR		1
A1	GEAR (M-4) 25T		1	Nb7	THRUST WASHER 15mm		1
A2	SIR CLIP 17mm		2	Nb8	SPLINE WASHER 20 x 1.2		2
Na4	SPLINE WASHER 17mm		2	Nb9	SPECIAL WASHER 12 x 23	HONDA GENUINE : 90412-KPH-900	1
Na5	SPECIAL WASHER 12mm	HONDA GENUINE : 90452-KGH-900	1	Nc1	SHIFT DRUM		1
Nb1	COUNTER SHAFT		1	Nc2	SHIFT FORK (L)	L STAMPED BEHIND	1
Nb2	GEAR (C-1) 35T		1	Nc3	SHIFT FORK (R)	R STAMPED BEHIND	1
Nb3	GEAR (C-2) 31T		1	Nc4	GEAR SHIFT FORK SHAFT	HONDA GENUINE : 24241-KPH-900	1
Nb4	GEAR (C-3) 23T		1	D1	R CRANKCASE GASKET		1
B1	GEAR (C-4) 25T		1	D2	L CRANKCASE GASKET		1

▲ N : HONDA STOCK PARTS

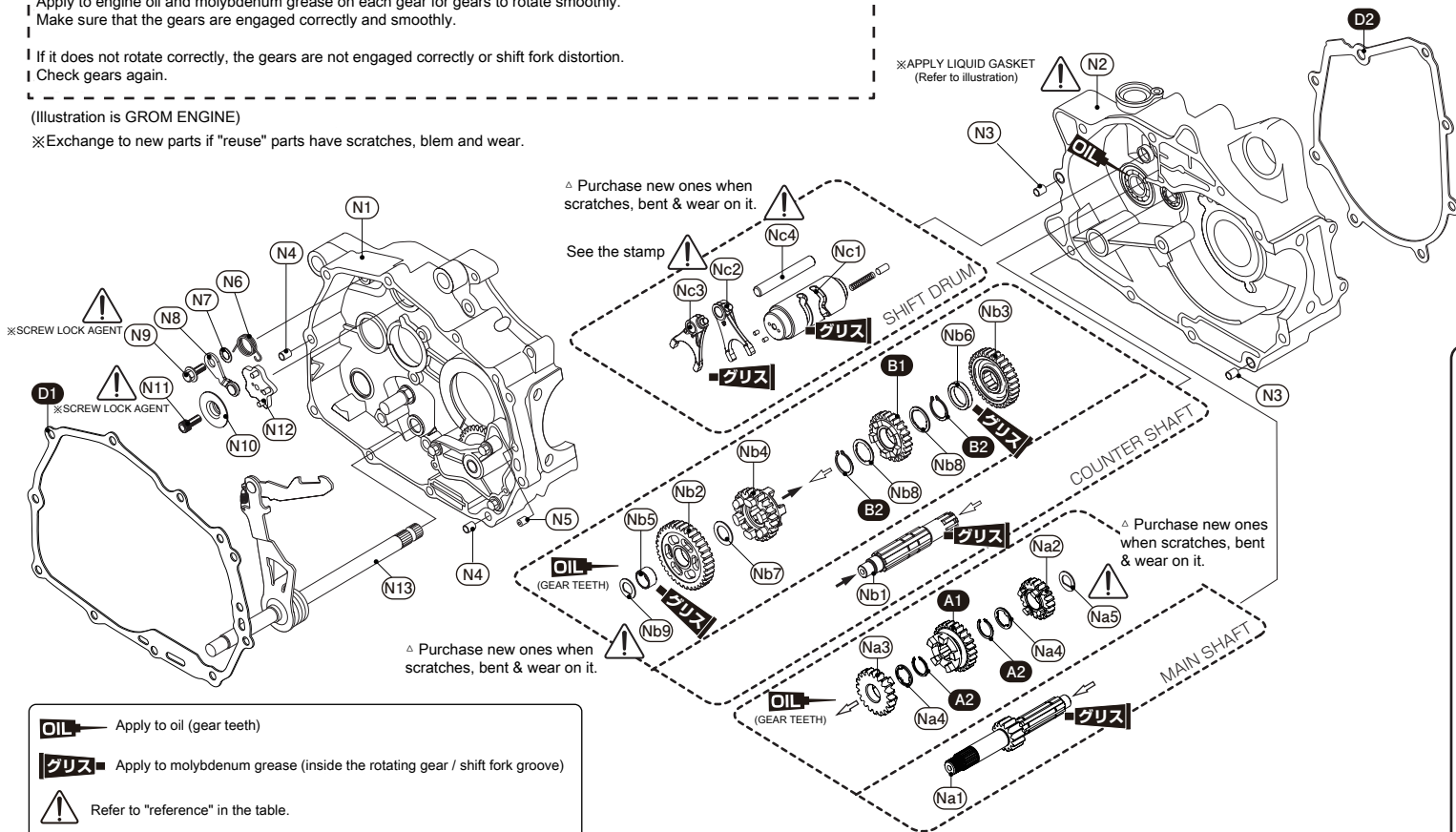
### ATTENTION FOR INSTALLATION

Apply to engine oil and molybdenum grease on each gear for gears to rotate smoothly.  
Make sure that the gears are engaged correctly and smoothly.

If it does not rotate correctly, the gears are not engaged correctly or shift fork distortion.  
Check gears again.

(Illustration is GROM ENGINE)

※Exchange to new parts if "reuse" parts have scratches, blem and wear.



**OIL** → Apply to oil (gear teeth)

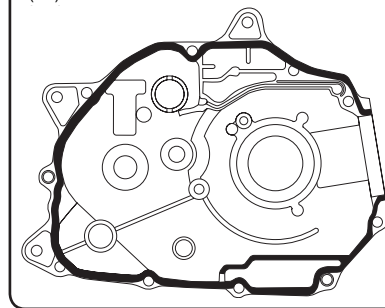
**グリス** → Apply to molybdenum grease (inside the rotating gear / shift fork groove)

**!** Refer to "reference" in the table.

### ▼ STOCK PARTS (REFERENCE / TIGHTENING TORQUE)

NUMBER	NAME	QTY	TORQUE	REFERENCE
N1	R CRANKCASE	1		
N2	L CRANKCASE	1		Refer to "Applying liquid gasket" illustration
N3	DOWEL PIN 10 x 12	2		
N4	DOWEL PIN 8 x 12	2		
N5	ORIFICE	1		
N6	SHIFT DRUM STOPPER SPRING	1		
N7	FLAT WASHER	1		
N8	SHIFT DRUM STOPPER ARM	1		
N9	SHIFT DRUM STOPPER ARM BOLT	1	12N · m	Apply to lock agent
N10	SHIFT DRUM STOPPER HOLDER	1		
N11	SHIFT DRUM INSTALLING BOLT	1	10N · m	Apply to lock agent
N12	STOPPER PLATE	1		
N13	GEAR SHIFT SPINDLE COMP.	1		

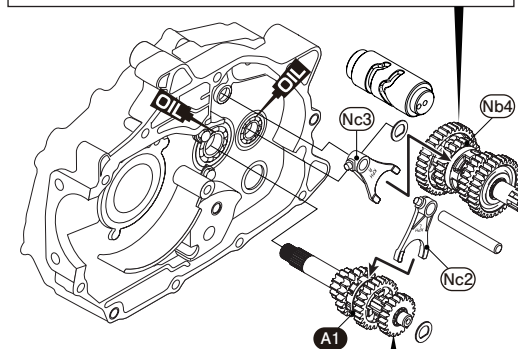
### APPLYING LIQUID GASKET (N2) L CRANKCASE ASSY



### HOW TO INSTALL TRANSMISSION

※Be careful of stamp on shift fork

Insert (Nc3) R shift fork in the groove of (Nb4) 3rd gear of counter shaft assy.



Insert (Nc2) L shift fork in the groove of (A1) 4th gear of mainshaft assy.