

REMOVAL

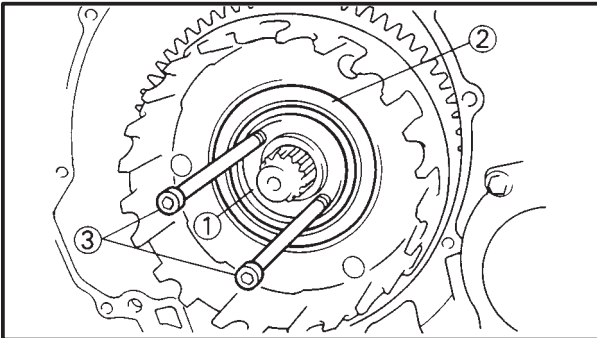
1. Straighten the lock washer tab.
2. Remove:
 - Clutch boss nut ①
 - Lock washer ②
 - Clutch boss ③

NOTE:

Loosen the clutch boss nut ① while holding the clutch boss ③ with the universal clutch holder.



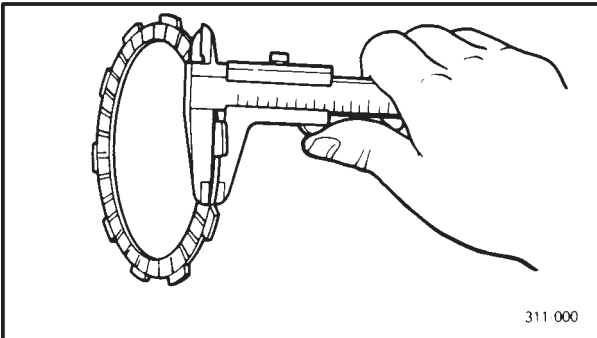
Universal clutch holder:
90890-04086



3. Remove:
 - Spacer ①
 - Bearing ②

NOTE:

Install 6 mm bolts ③ onto the spacer. Then remove the spacer by pulling.



311 000

INSPECTION

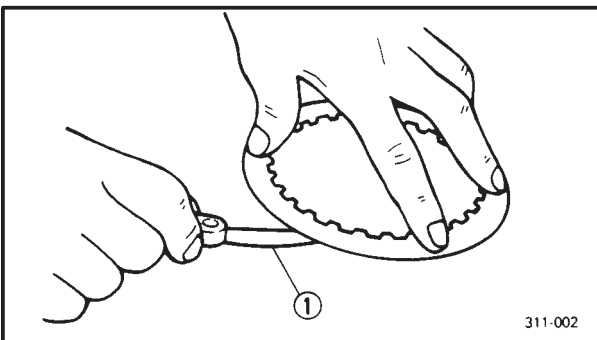
1. Measure:
 - Friction plate thickness

Out of specification → Replace friction plates as a set.

Measure at four points.



Thickness:
2.9 ~ 3.1 mm
<Limit>: 2.8 mm



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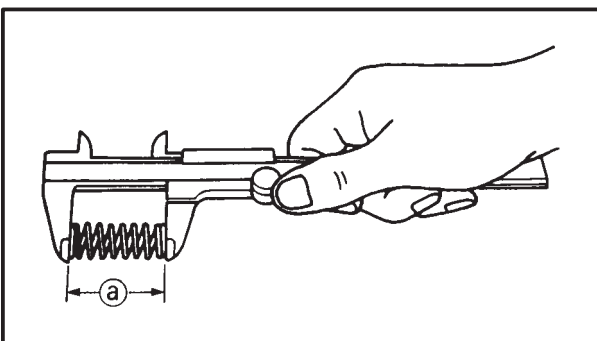
2. Measure:
 - Clutch plate warpage

Out of specification → Replace clutch plate as a set.

Use a surface plate and feeler gauge ①.



Warp limit:
Less than 0.1 mm

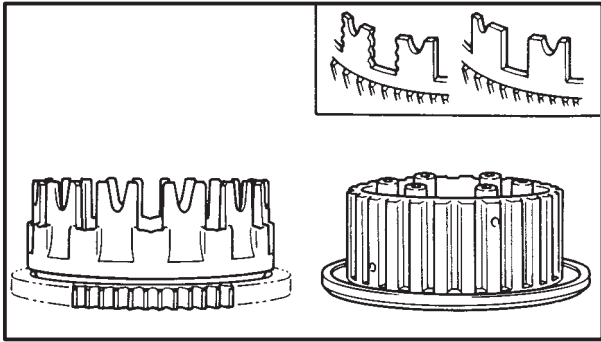


3. Measure:
 - Free length (clutch spring) ②

Out of specification → Replace springs as a set.



Free length (clutch spring):
55 mm
<Limit>: 53 mm



4. Inspect:

- Dogs
(on the clutch housing)
Pitting/Wear/Damage → Deburr or replace.
- Clutch housing bearing
Wear/Damage → Replace clutch housing.

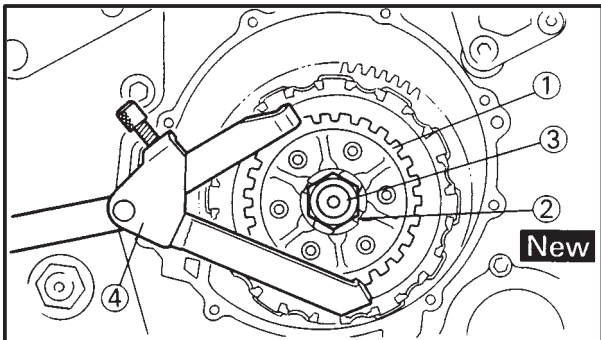
NOTE:

Pitting on the clutch housing dogs will cause erratic operation.

- Clutch boss splines
Pitting/Wear/Damage → Replace clutch boss.

NOTE:

Pitting on the clutch boss splines will cause erratic operation.



INSTALLATION

1. Install:

- Clutch boss ①
- Lock washer ② **New**
- Clutch boss nut ③

70 Nm (7.0 m•kg)

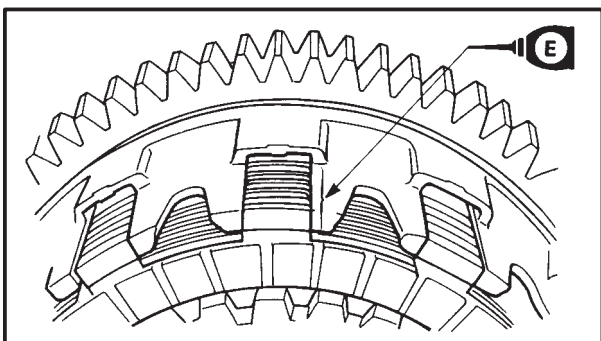
NOTE:

Tighten the clutch boss nut while holding the clutch boss with the universal clutch holder ④.



**Universal clutch holder:
90890-04086**

- #### 2. Bend the lock washer tab along a flat side of the nut.

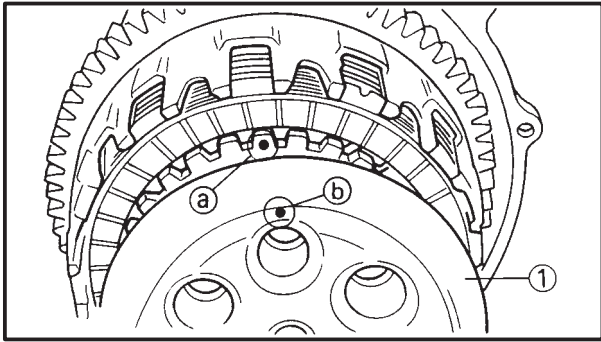


3. Install:

- Friction plates
- Clutch plates

NOTE:

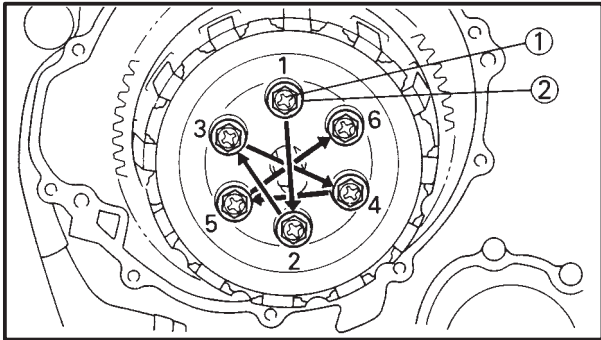
- Mount friction and clutch plate alternately.
- Lubricate the friction plates with engine oil.



4. Install:
- Pressure plate

NOTE:

Align the punched mark (a) on the clutch boss with the punched mark (b) on the pressure plate.

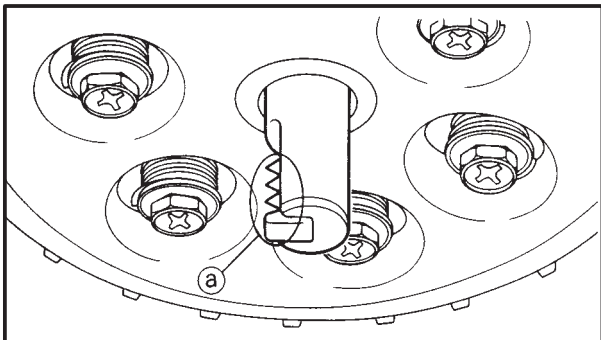


5. Install:
- Clutch springs (1)
 - Clutch spring bolts (2)

8 Nm (0.8 m•kg)

NOTE:

Tighten the clutch spring bolts in stage, using a crisscross pattern.

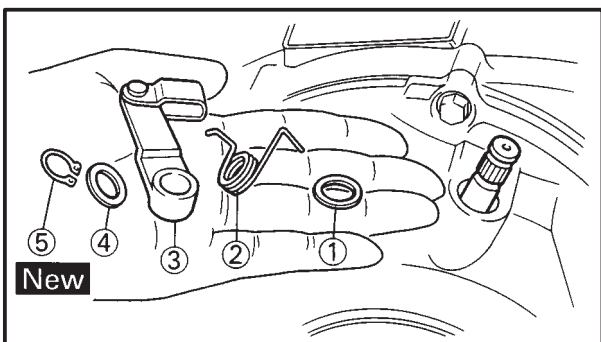


6. Install:
- Dowel pins
 - Gasket **New**
 - Crankcase cover (right)

10 Nm (1.0 m•kg)

NOTE:

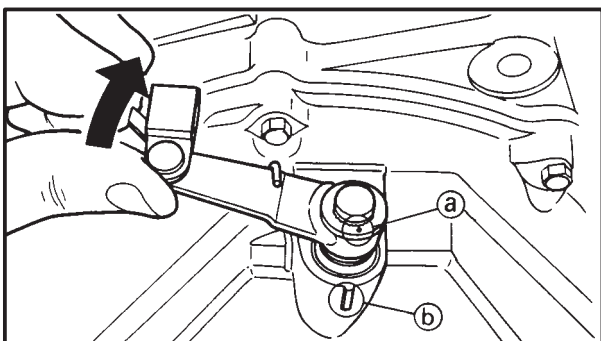
Install the pull rod so that the splines (a) are toward the back, then install the crankcase cover (right).



7. Install:
- Plain washer (1)
 - Torsion spring (2)
 - Pull lever (3)
 - Plain washer (4)
 - Circlip (5) **New**

NOTE:

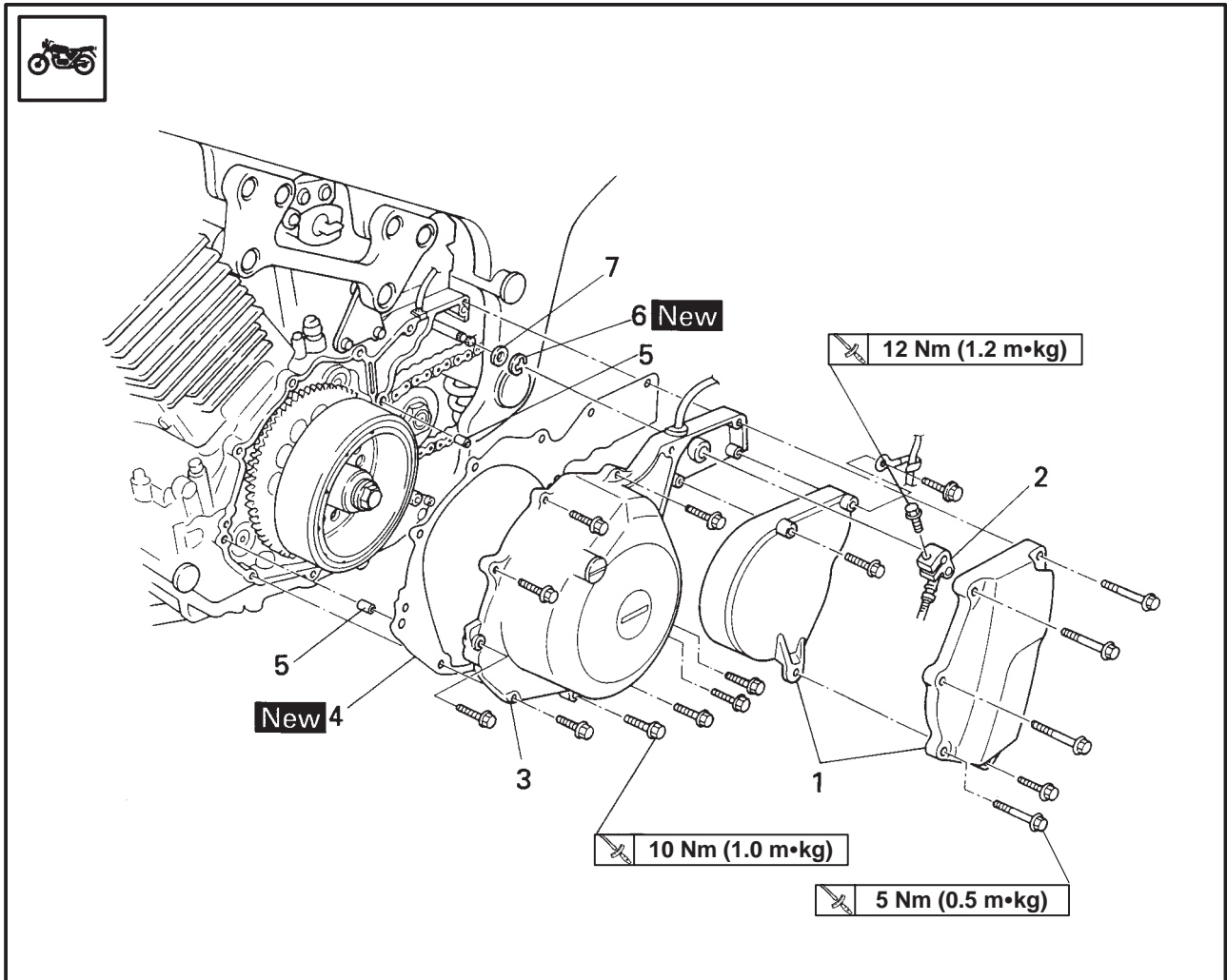
Align the punched mark (a) on the clutch pull lever shaft with the mark (b) on the crankcase cover.



CRANKCASE COVER (LEFT)

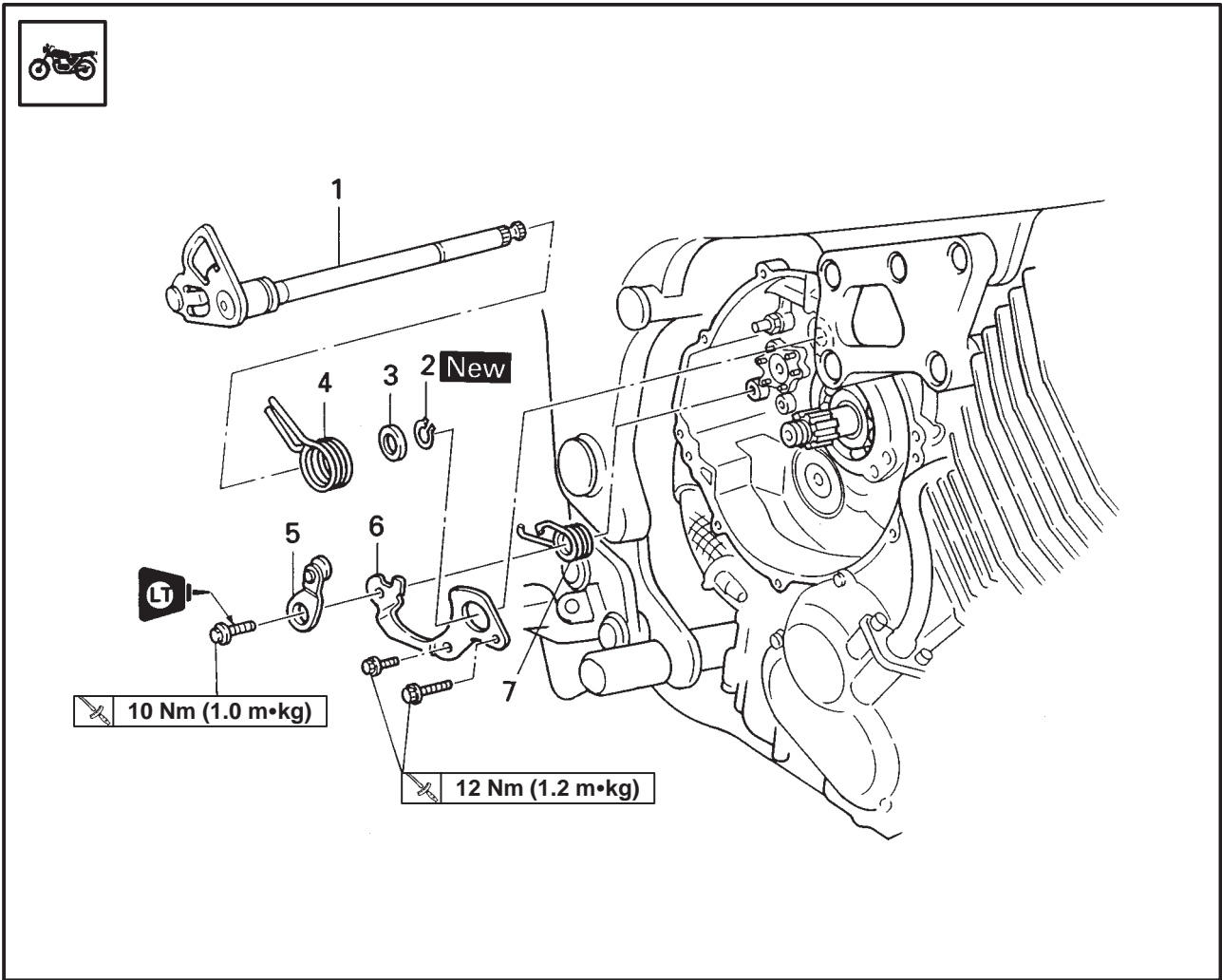


CRANKCASE COVER (LEFT)

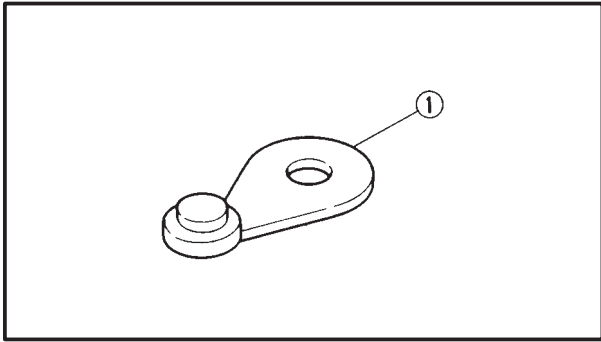


Order	Job name/Part name	Q'ty	Remarks
	Crankcase cover (left) removal		
	Engine oil		Remove the parts in the order below. Refer to "ENGINE OIL REPLACEMENT" in CHAPTER 3.
1	Drive sprocket cover 1/2	1/1	NOTE: _____ Loosen the bolts in a crisscross pattern. _____ For installation, reverse the removal procedure.
2	Shift arm	1	
3	Crankcase cover (left)	1	
4	Gasket	1	
5	Dowel pin	2	
6	Circlip	1	
7	Plain washer	1	

SHIFT SHAFT



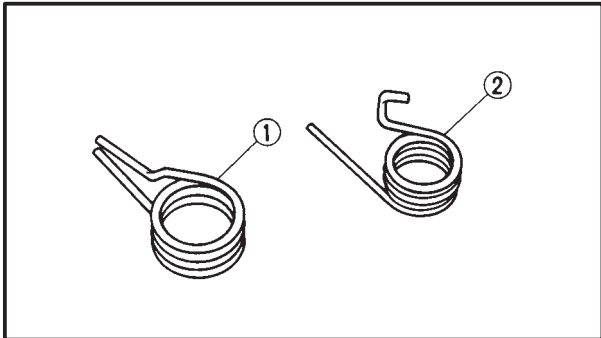
Order	Job name/Part name	Q'ty	Remarks
	Shift shaft removal		Remove the parts in the order below. Refer to "CLUTCH". Refer to "CRANKCASE COVER (LEFT)".
1	Shift shaft	1	Refer to "INSTALLATION".
2	Circlip	1	
3	Plain washer	1	
4	Torsion spring	1	
5	Stopper level	1	
6	Bearing retainer	1	
7	Torsion spring	1	
			For installation, reverse the removal procedure.



INSPECTION

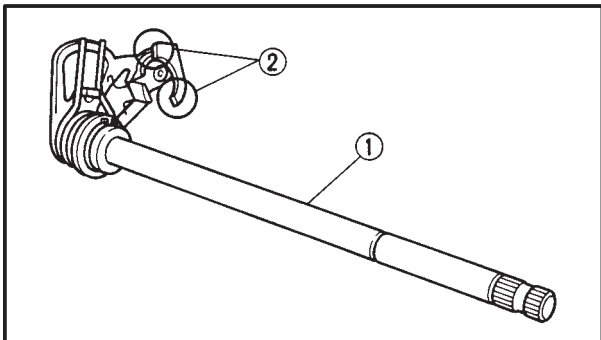
1. Inspect:

- Stopper lever ①
Roller turns roughly → Replace.
Bends/Damage → Replace.



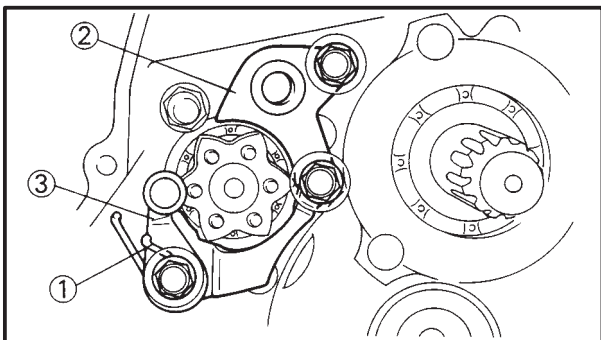
2. Inspect:

- Torsion spring (shift shaft) ①
- Torsion spring (stopper lever) ②
Wear/Damage → Replace.



3. Inspect:

- Shift shaft ①
- Shift pawls ②
Bends/Wear/Damage → Replace.



INSTALLATION

1. Install:

- Return spring ①
- Bearing retainer ②
- Stopper lever ③

	12 Nm (1.2 m•kg)
	10 Nm (1.0 m•kg)

NOTE:

Be sure the stopper lever roller fits into the shift cam segment.