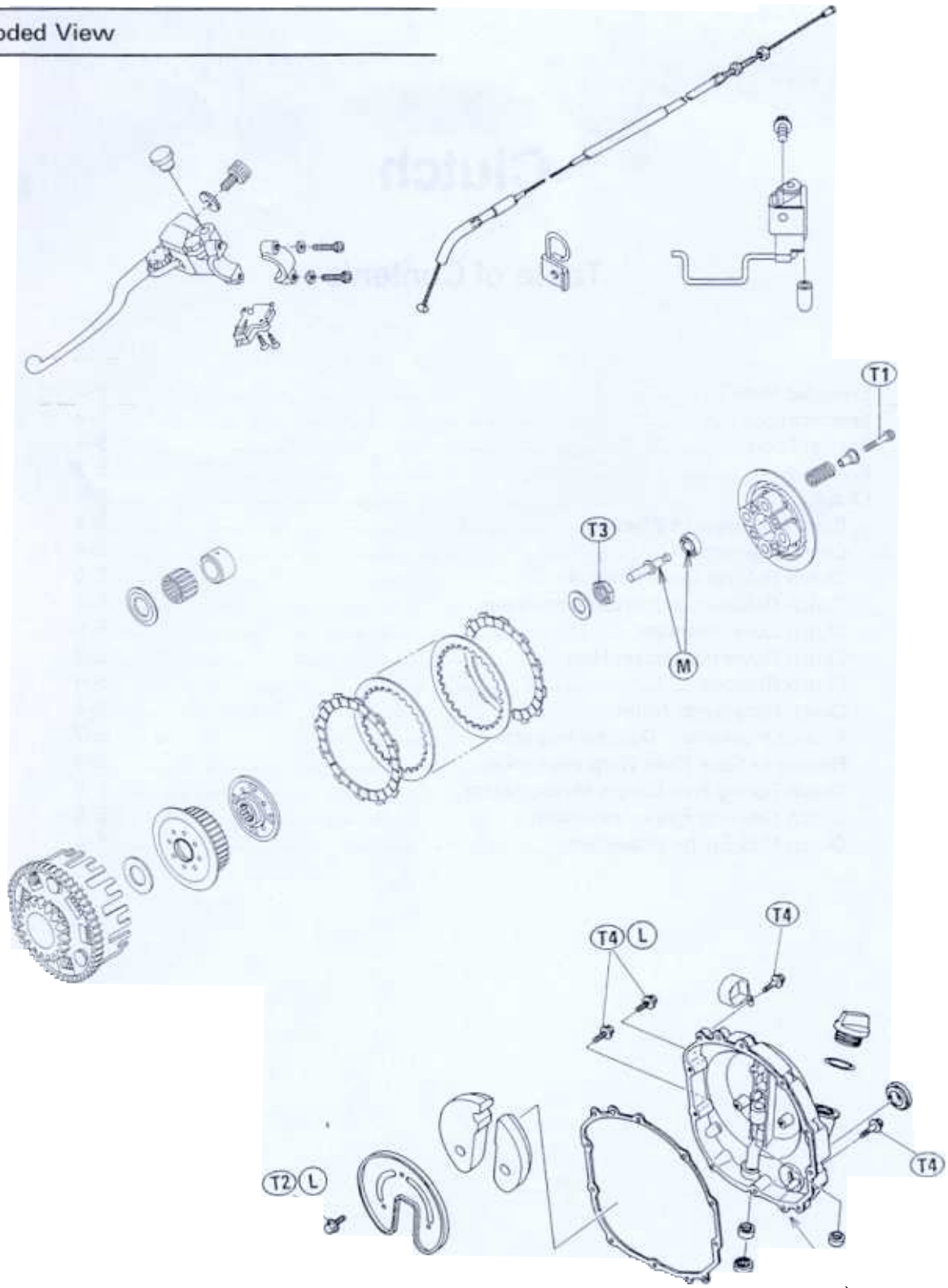
Clutch

Table of Contents

Exploded View 5-2
Specifications 5-3
Special Tools 5-3
Sealant 5-3
Clutch 5-4
- Clutch Adjustment Check 5-4
- Clutch Adjustment 5-4
- Clutch Release Lever Removal 5-5
- Clutch Release Lever Installation Notes 5-5
- Clutch Cover Removal 5-5
- Clutch Cover Installation Note 5-5
- Clutch Removal 5-6
- Clutch Installation Notes 5-6
- Friction Plate Wear, Damage Inspection 5-7
- Friction or Steel Plate Warp Inspection 5-8
- Clutch Spring Free Length Measurement 5-8
- Clutch Housing Finger Inspection 5-8
- Clutch Hub Spline Inspection 5-8

Exploded View



see 5-5

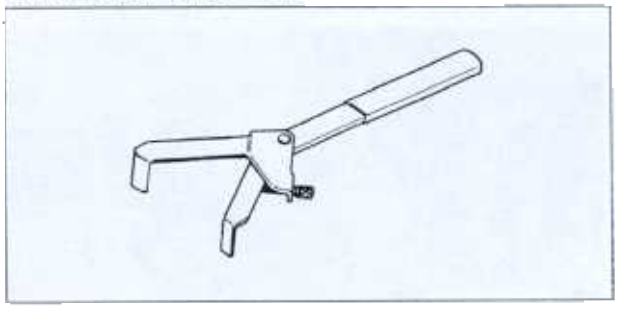
T1: 12 N-m (1.2 kg-m, 8.5 ft-lb)
T2: 9.8 N-m (1.0 kg-m, 7.0 ft-lb)
T3: 130 N-m (13.5 kg-m, 98 ft-lb)
L : Apply a non-permanent locking agent to the threads.
M : Apply a thin coat of a molybdenum disulfide grease.
SS: Apply silicone sealant to the threads.

Specifications

Item	Standard	Service Limit
Clutch:		
Clutch lever free play	2 ~ 3 mm	- - -
Friction plate thickness	2.7 ~ 2.9 mm	2.5 mm
Friction and steel plate warp	0.2 mm or under	0.3 mm
Clutch spring fee length	33.6 mm	32.6 mm

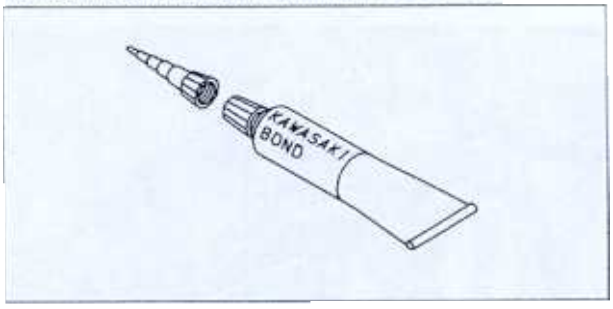
Special Tools

Clutch Holder: 57001-1243



Sealant

Kawasaki Bond (Silicone Sealant): 56019-120



Clutch

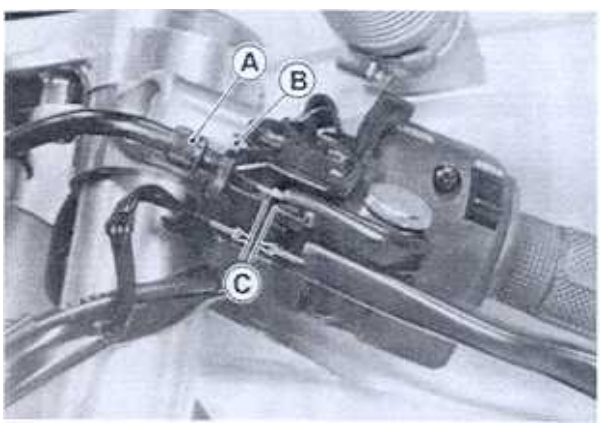
Due to the fiction plate wear and clutch cable stretch over a long period of use, the clutch must be adjusted in accordance with the Periodic Maintenance Chart.

⚠WARNING

To avoid a serious burn, never touch the engine or exhaust pipe during clutch adjustment.

Clutch Adjustment Check

- Pull the clutch lever just enough to take up the free play.
- Measure the gap between the lever and the lever bracket.



A. Adjuster
B. Locknut
C. Clutch Lever Free Play 2 ~ 3 mm

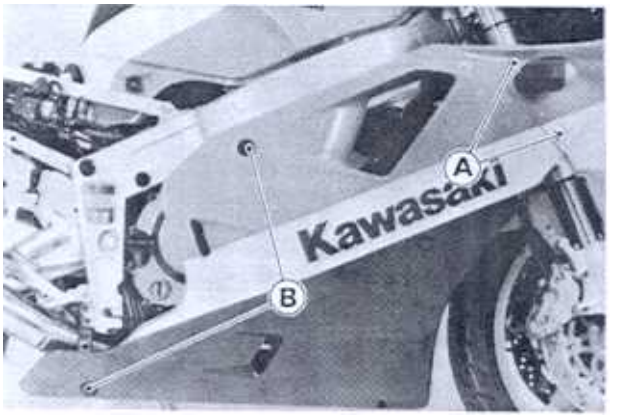
★If the gap is too wide, the clutch may not release fully. If the gap is too narrow, the clutch may not engage fully. In either case, adjust the clutch.

Clutch Adjustment

- Loosen the knurled locknut at the clutch lever.
- Turn the adjuster so that the clutch lever will have 2 ~ 3 mm of play.
- Tighten the locknut.

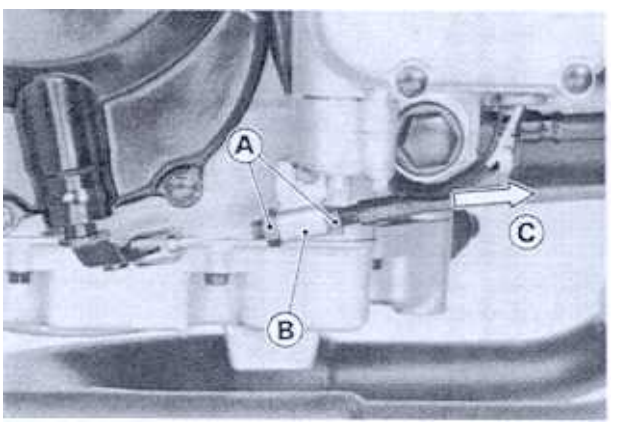
★If it cannot be done, use the adjusting nuts at the lower end of the cable.

- Remove the fairings.



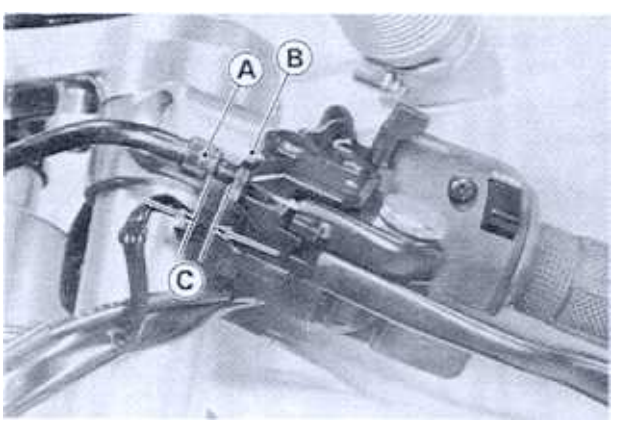
A. Fairing Mounting Screws
B. Fairing Mounting Bolts

- Loosen the lower cable adjusting nuts at the clutch cover as far as they will go.



A. Adjusting Nuts
B. Bracket
C. Pull Outer Cable.

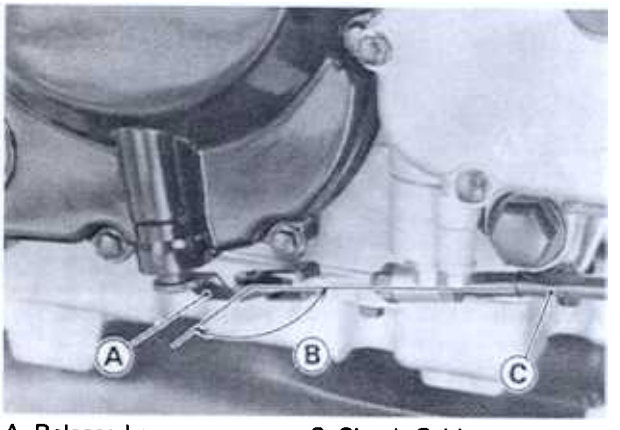
- Loosen the knurled locknut at the clutch lever.
- Turn the adjuster so that 5 ~ 6 mm of threads are visible.



A. Adjuster
B. Locknut
C. 5 ~ 6 mm

- Pull the clutch cable tight and tighten the lower cable adjusting nuts against the bracket.

●Turn the adjuster at the clutch lever until the free play is correct. At this time, check that the clutch release lever to clutch cable angle is 80 ~ 90°.



A. Release Lever C. Clutch Cable
B. 80 ~ 90°

★If the clutch cannot be adjusted by this method, inspect the clutch parts.
●Tighten the knurled locknut at the clutch lever.

NOTE

○*Be sure that the outer cable end at the clutch lever is fully seated in the adjuster at the clutch lever, or it could slip into place later, creating enough cable play to prevent clutch disengagement.*

●After the adjustment is made, start the engine and check that the clutch does not slip and that it releases properly.

Clutch Release Lever Removal

CAUTION

Do not remove the clutch release shaft unless it is absolutely necessary. If removed, you must replace the oil seal with a new one.

●Place a suitable container under the clutch cover.
●Remove the clutch cover (see this chapter).
●Turn the release lever counter clockwise, and then pull out the release lever with its shaft.

Clutch Release Lever Installation Notes

●Visually inspect the oil seal, and replace it if necessary.
●Install the release lever, and turn it clockwise until it stops.

Clutch Cover Removal

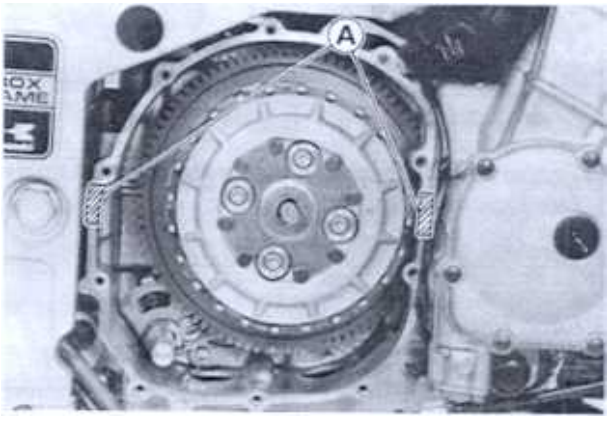
●Drain the engine oil (see Engine Oil Change in Engine Lubrication System chapter).
●Remove the lower fairing (see Lower Fairing Removal in Frame chapter).
●Remove the inner cover.
●Remove the clutch cable lower and from the clutch cover.
●Remove the clutch cover bolts and take off the cover.

CAUTION

Do not remove the clutch release shaft for clutch cover removal. Clutch release shaft removal damages the oil seal in the clutch cover necessitating the oil seal replacement.

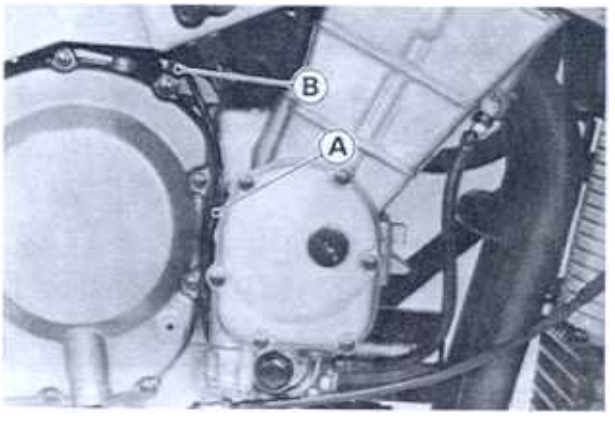
Clutch Cover Installation Note

●Replace the clutch cover gasket with a new one.
●Apply silicone sealant to the mating surface as shown.



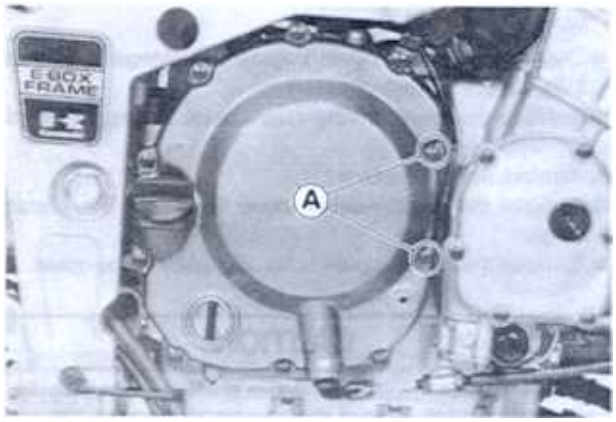
A. Silicone Sealant (Kawasaki Bond: 56019-120)

●Clamp the pick-up coil wire as shown.

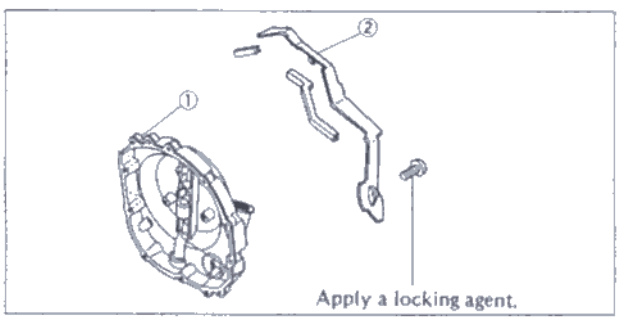


A. Pick-up Coil Lead B. Clamp

●Apply a non-permanent locking agent tot he following bolts and screw.



A. Cover Bolt

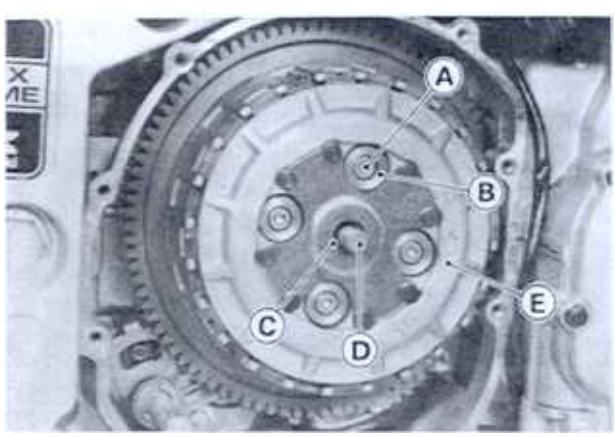


1. Clutch Cover 2. Right Inner Cover

● Tighten the clutch cover bolts to the specified torque (see Exploded View).

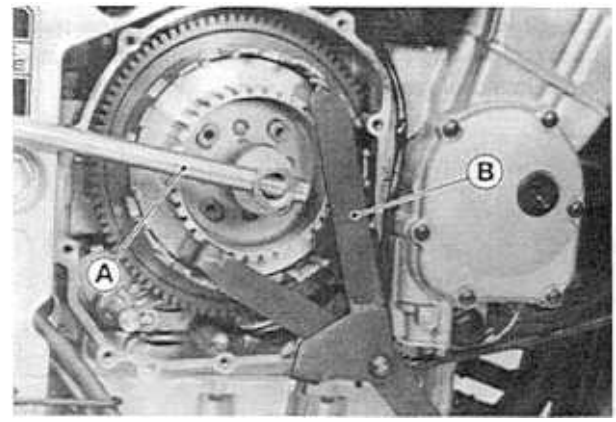
Clutch Removal

● Remove the clutch cover.
● Remove the clutch spring bolts, retainers, and springs; then take off then clutch spring plate with the bearing and pusher.



A. Clutch Spring Bolt
B. Retainer
C. Bearing
D. Pusher
E. Clutch Spring Plate

● Remove the friction plates and steel plates as a set.
● Remove the clutch hub nut. When loosening the hub nut, use the clutch holder (special tool) to keep the clutch hub from turning as shown.

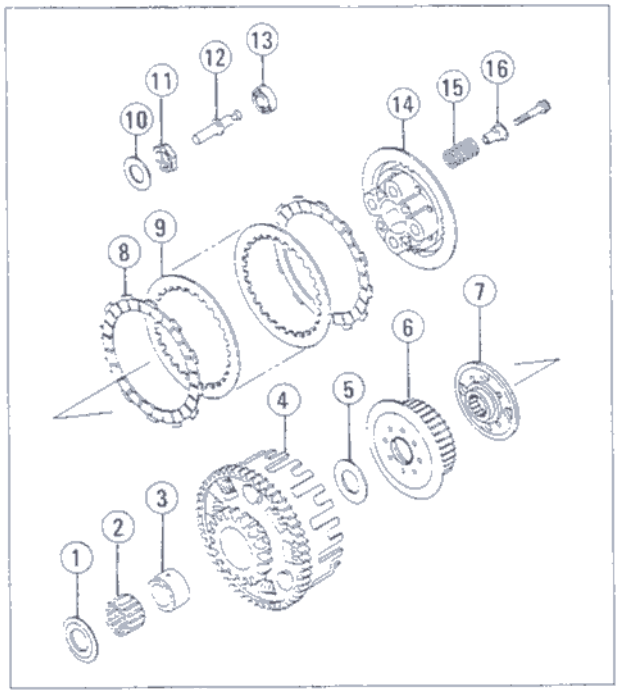


A. Wrench B. Holder: 57001-1243

● Remove the thrust washer, clutch hub, clutch cam, washer, clutch housing, needle bearing, collar, and spacer.

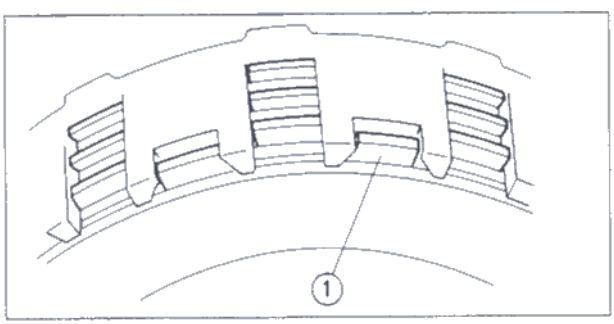
Clutch Installation Notes

● Clutch installation is the reverse of removal. Pay attention to the following items.



1. Spacer
2. Needle Bearing
3. Collar
4. Clutch Housing
5. Washer
6. Clutch Hub
7. Clutch Cam
8. Friction Plate
9. Steel Plate
10. Washer
11. Hub Nut
12. Pusher
13. Bearing
14. Spring Plate
15. Clutch Spring
16. Retainer

○Install the spacer with the chamfered side facing inwards.
○Install the clutch cam on the clutch hub.
○Discard the used hub nut, and install a new nut.
○Install the clutch holder (special tool: 57001-1243) to keep the clutch hub from turning and tighten the clutch hub nut to the specified torque (see Exploded View).
○Install the friction plates and steel plates, starting with a friction plate and alternating them.
○Install the last friction plate fitting the tangs in the groove on the housing as shown.



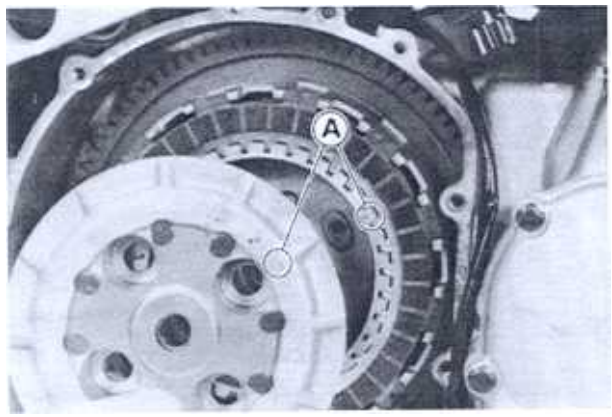
1. Last Friction Plate

○Apply molybdenum disulfide grease to the pusher end and ball bearing.

CAUTION

If new dry steel plates and friction plates are installed, apply engine oil to the surfaces of each plate to avoid clutch plate seizure.

○When install the spring plate, align the marks on the hub and the plate.

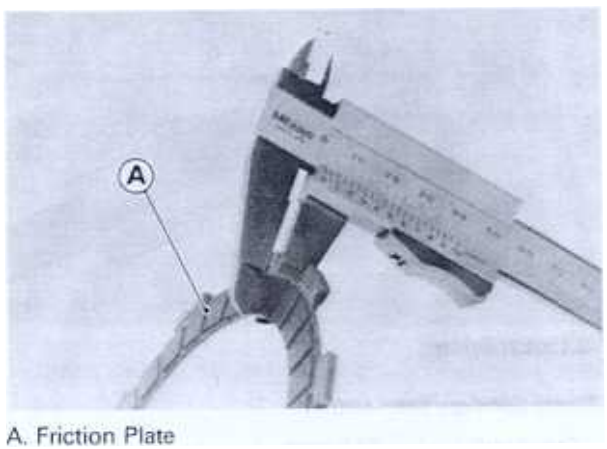


A. Marks

○Tighten the clutch spring bolts to the specified torque (see Exploded View).

Friction Plate Wear, Damage Inspection

●Visually inspect the friction plates to see if they show any signs of seizure, overheating, or uneven wear.
★If any plates show signs of damage, replace the friction plates and steel plates as a set.
●Measure the thickness of the friction plates at several points (see Specifications).
★If any of the measurements is less than the service limit, replace the friction plate.



A. Friction Plate

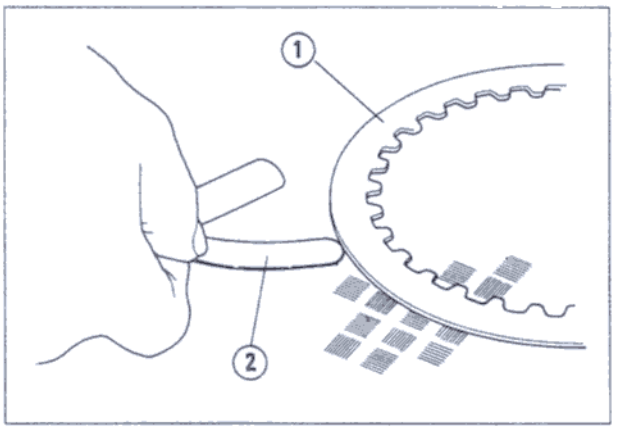
Friction Plate Thickness

Standard:	2.7 ~ 2.9 mm
Service Limit:	2.5 mm

Friction or Steel Plate Warp Inspection

●Place each friction plate or steel plate on a surface plate, and measure the gap between the surface plate and each friction plate or steel plate. The gap is the amount of friction or steel plate warp.

★If any plate is warped over the service limit, replace it with a new one.



1. Friction or Steel Plate 2. Thickness Gauge

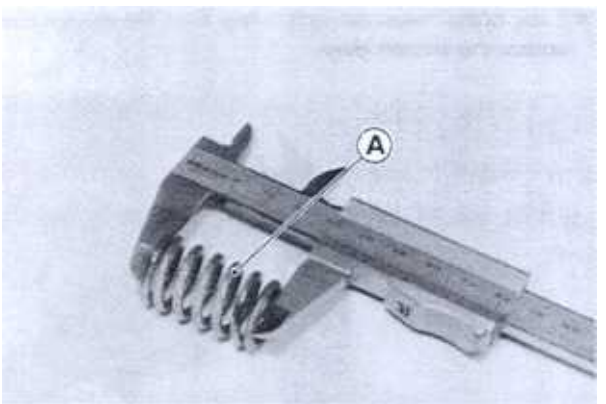
Friction and Steel Plate Warp

Standard:	**less than 0.2 mm**
Service Limit:	**0.3mm**

Clutch Spring Free Length Measurement

●Since the spring becomes shorter as it weakens, check its free length to determine its condition.

★If any of the springs is shorter than the service limit, it must be replaced.



A. Clutch Spring

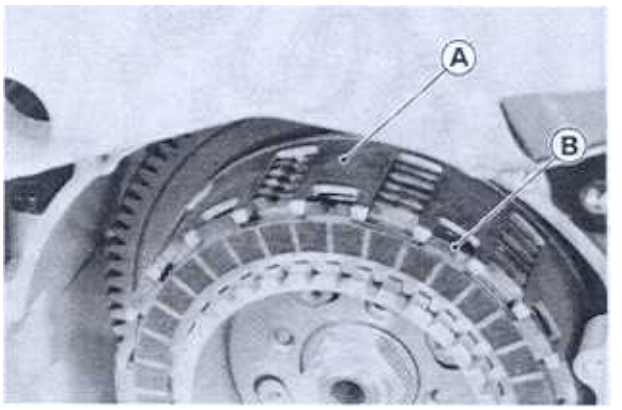
Clutch Spring Free Length

Standard:	**33.6 mm**
Service Limit:	**32.6 mm**

Clutch Housing Finger Inspection

●Visually inspect the fingers of the clutch housing where the tang of the friction plates hit them.

★If they are badly worn or if there are grooves cut where the tang hit, replace the housing. Also, replace the friction plates if their tangs are damaged.

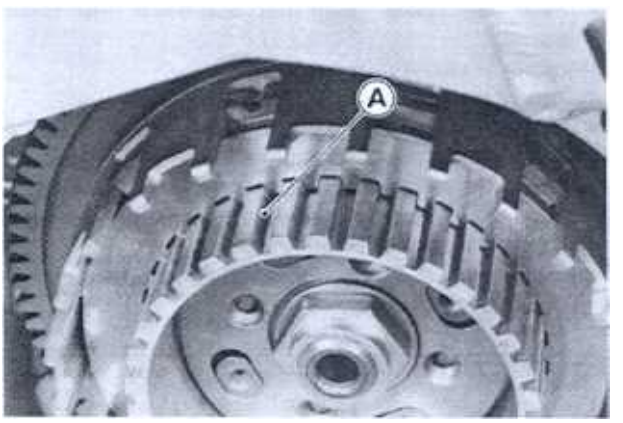


A. Clutch Housing Finger B. Friction Plate Tang

Clutch Hub Spline Inspection

●Visually inspect where the teeth on the steel plates wear against the splines of the clutch hub.

★If there are notches worn into the splines, replace the clutch hub. Also, replace the steel plates if their teeth are damage.



A. Clutch Hub Spline