

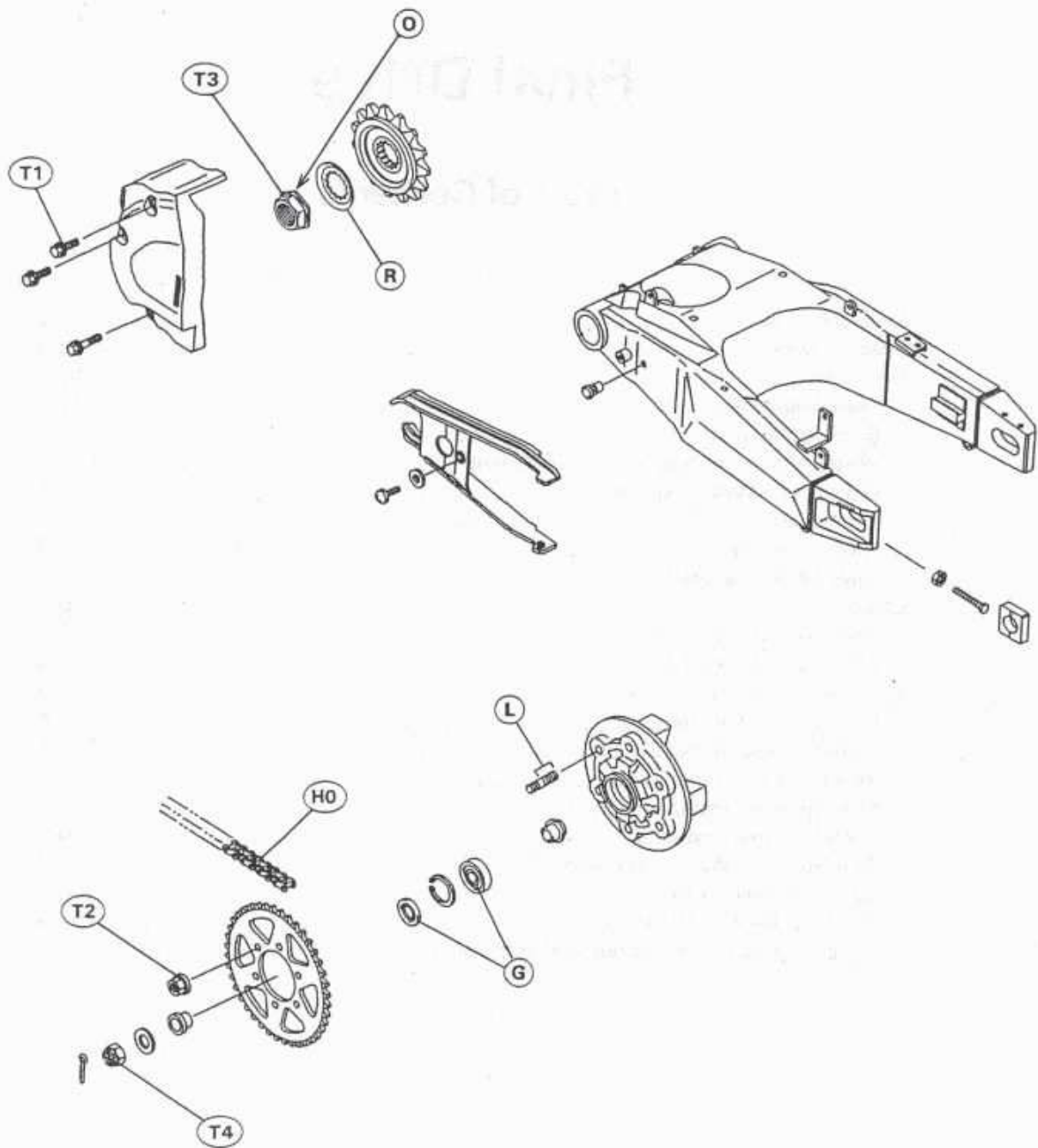
Final Drive

Table of Contents

Exploded View	10-2
Specifications	10-3
Drive Chain.....	10-4
Slack Inspection.....	10-4
Slack Adjustment.....	10-4
Wheel Alignment Inspection Adjustment	10-4
Drive Chain Wear Inspection.....	10-5
Lubrication	10-5
Drive Chain Removal.....	10-6
Drive Chain Installation	10-6
Chain Guard	10-7
Chain Guard Removal	10-7
Chain Guard Installation.....	10-7
Sprocket, Coupling	10-8
Engine Sprocket Removal	10-8
Engine Sprocket Installation.....	10-8
Rear Sprocket Removal	10-9
Rear Sprocket Installation.....	10-9
Sprocket Wear Inspection	10-9
Rear Sprocket Warp Inspection.....	10-9
Coupling Bearing Removal	10-10
Coupling Bearing Installation.....	10-10
Coupling Bearing Inspection and Lubrication.....	10-10

10-2 FINAL DRIVE

Exploded View



G : Apply grease.
HO: Apply heavy oil.
L : Apply a non-permanent locking agent.
O : Apply oil.
R : Replacement Parts

T1 : 9.8 N-m (1.0 kg-m, 87 in-lb)
T2 : 74 N-m (7.5 kg-m, 54 ft-lb)
T3 : 125 N-m (13.0 kg-m, 94 ft-lb)
T4 : 145 N-m (15.0 kg-m, 110 ft-lb)

Specifications

Item	Standard	Service Limit
Drive Chain:		
Standard chain		
Make	RK	---
Type	RK525ROZ2, Endless	---
Link	108 links	---
ZX750N	110 links	---
ZX750P		
Chain slack	30 ~ 35 mm	Too tight: less than 30 mm Too loose: more than 40 mm
20-link length	317.5 ~ 318.2 mm	323 mm
Sprockets:		
Rear sprocket warp	TIR 0.4 mm or less	TIR 0.5 mm

Special Tool – Inside Circlip Pliers: 57001-143
 Bearing Driver Set: 57001-1129
 Jack: 57001-1238

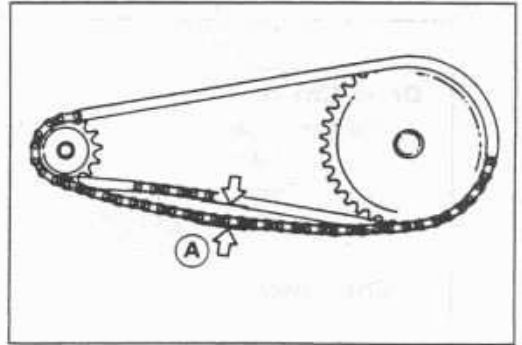
10-4 FINAL DRIVE

Drive Chain

Slack Inspection

NOTE

- Check the slack with the motorcycle setting on its side stand.
- Clean the chain if it is dirty, and lubricate it if it appears dry.
- Check the wheel alignment (see Wheel Alignment Inspection).
- Rotate the rear wheel to find the position where the chain is tightest.
- Measure the vertical movement (chain slack [A]) midway between the sprockets.
- ★ If the chain slack exceeds the standard, adjust it.

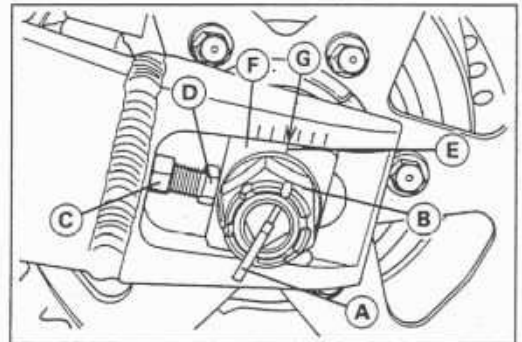


Chain Slack

Standard:	30 ~ 35 mm
Too Tight:	less than 30 mm
Too Loose:	more than 40 mm

Slack Adjustment

- Remove the cotter pin [A], and loosen the axle nut [B].
- Loosen the both chain adjuster locknuts [C].
- ★ If the chain is too loose, turn out the left and right chain adjuster [D] evenly.
- ★ If the chain is too tight, turn in the left and right chain adjusters evenly, and kick the wheel forward.
- Turn both chain adjusters evenly until the drive chain has the correct amount of slack. To keep the chain and wheel properly aligned, the notch [E] on the left wheel alignment indicator [F] should align with the same swingarm mark or position [G] that the right indicator notch aligns with.



⚠WARNING

Misalignment of the wheel will result in abnormal wear and may result in an unsafe riding condition.

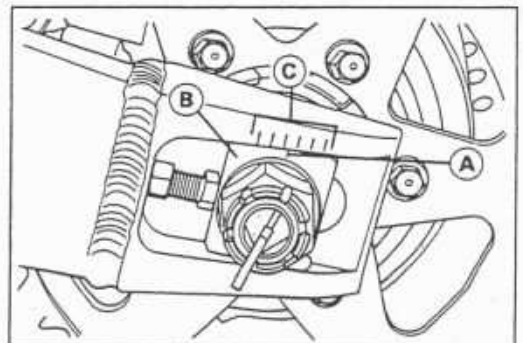
- Tighten both chain adjuster locknuts securely.
- Tighten the axle nut.
Torque – Rear Axle Nut: 145 N-m (15.0 kg-m, 110 ft-lb)
- Turn the wheel, measure the chain slack again at the tightest position, and readjust if necessary.
- Insert a new cotter pin and spread its ends.

Wheel Alignment Inspection Adjustment

- Check that the notch [A] on the left alignment indicator [B] aligns with the same swingarm mark or position [C] that the right alignment indicator notch aligns with.
- ★ If they are not, adjust the chain slack and align the wheel alignment (see Slack Adjustment).

NOTE

- Wheel alignment can be also be checked using the straightedge or string method.



⚠WARNING

Misalignment of the wheel will result in abnormal wear, and may result in an unsafe riding condition.

Drive Chain Wear Inspection

- Remove:
 - Chain Cover
- Rotate the rear wheel to inspect the drive chain for damaged rollers, and loose pins and links.
- ★ If there is any irregularity, replace the drive chain.
- ★ Lubricate the drive chain if it appears dry.
- Stretch the chain taut by hanging a 98 N (10 kg, 20 lb) weight [A] on the chain.
- Measure the length of 20 links [B] on the straight part [C] of the chain from the pin center of the 1st pin to the pin center of the 21st pin. Since the chain may wear unevenly, take measurements at several places.
- ★ If any measurements exceed the service limit, replace the chain. Also, replace the front and rear sprockets when the drive chain is replaced.

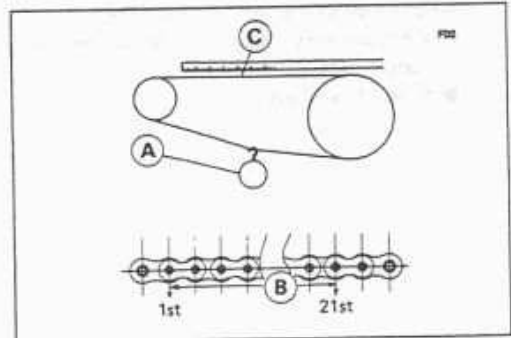
Drive Chain 20-link Length

Standard:	317.5 ~ 318.2 mm
Service Limit:	323 mm

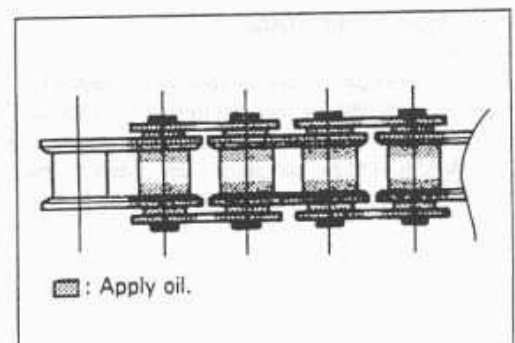
⚠WARNING

If the drive chain wear exceeds the service limit, replace the chain or an unsafe riding condition may result. A chain that breaks or jumps off the sprockets could snag on the engine sprocket or lock the rear wheel, severely damaging the motorcycle and causing it to go out of control.

For safety, use only the standard chain. It is an endless type and should not be cut for installation.

**Lubrication**

- ★ If a special lubricant is not available, a heavy oil such as SAE 90 is preferred to a lighter oil because it will stay on the chain longer and provide better lubrication.
- ★ If the chain appears especially dirty, clean it before lubrication.



CAUTION

The O-rings between the side plates seal in the lubricant between the pin and the bushing. To avoid damaging the O-rings and resultant loss of lubricant, observe the following rules.

Use only kerosene or diesel oil for cleaning an O-ring drive chain.

Any other cleaning solution such as gasoline or trichloroethylene will cause deterioration and swelling of the O-ring.

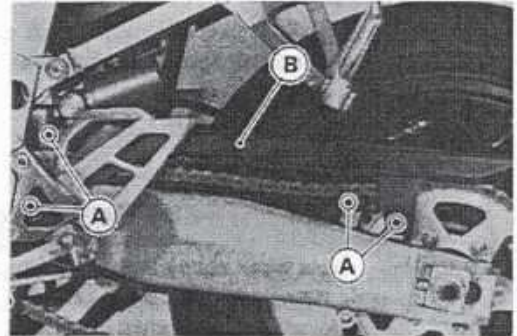
Immediately blow the chain dry with compressed air after cleaning.

Complete cleaning and drying the chain within 10 minutes.

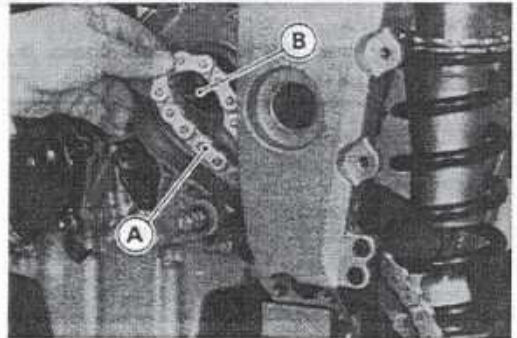
- Apply oil to the sides of the rollers so that oil will penetrate to the rollers and bushings. Apply the oil to the O-rings so that the O-rings will be coated with oil.
- Wipe off any excess oil.

Drive Chain Removal

- Remove:
 - Engine Sprocket (see Engine Sprocket Removal)
 - Rear Wheel (see Wheels/Tires chapter)
 - Chain Cover Screws [A]
 - Chain Cover [B]
 - Swingarm (see Suspension chapter)



- Remove the drive chain [A] from the engine output shaft [B].



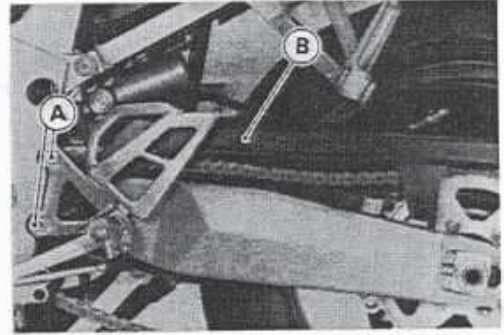
Drive Chain Installation

- Install:
 - Swingarm (see Suspension chapter)
 - Rear Wheel (see Wheels/Tires chapter)
 - Engine Sprocket (see Engine Sprocket Removal)
- Adjust the chain slack after installing the chain (see Slack Adjustment).

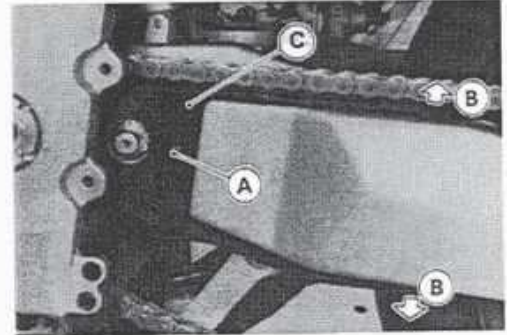
Chain Guard

Chain Guard Removal

- Remove:
 - Footpeg Bracket Bolts [A]
 - Chain Cover [B]

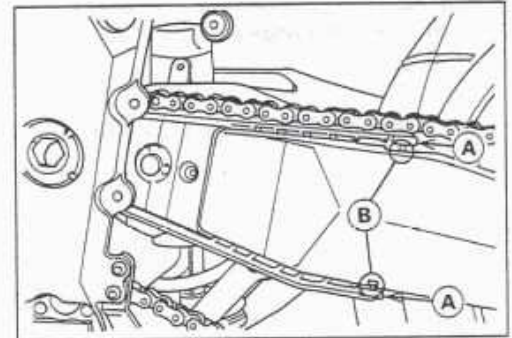


- Remove the screw [A], and pull [B] the rear parts of the chain guard [C] to clear the stoppers.
- Pull out the chain guard to the rear.



Chain Guard Installation

- Tap lightly the rear parts [A] of the chain guard with a plastic mallet and install it.
- Fit the projections [B] on the chain guard into the holes in the swingarm.
- Check the drive chain slack after installation (see Slack Inspection).



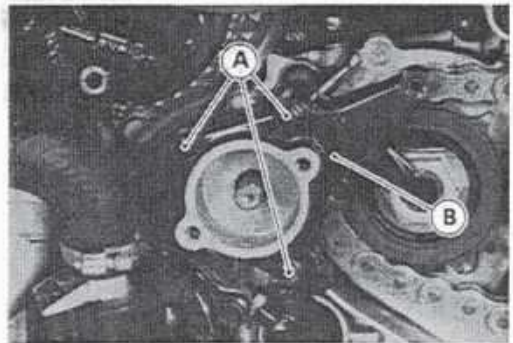
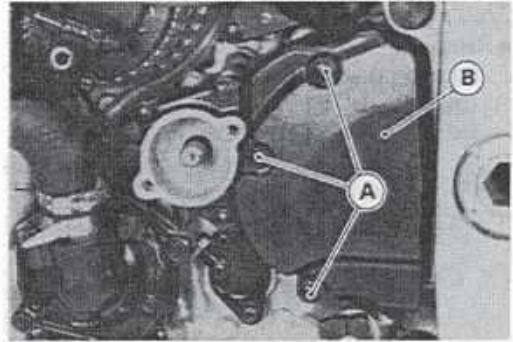
10-8 FINAL DRIVE

Sprocket, Coupling

Engine Sprocket Removal

- Remove:
 - Lower Fairings (see Frame Chapter)
 - Clutch Slave Cylinder (see Clutch chapter)
 - Engine Sprocket Cover Bolts [A]
 - Engine Sprocket Cover [B]
 - Chain Cover

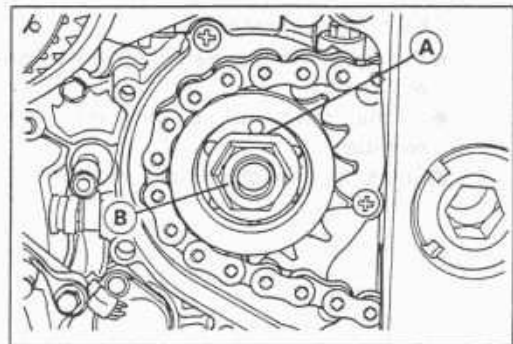
Slave Cylinder Cover Bolts [A]
Slave Cylinder Cover [B]



- Flatten out the bended washer [A].
- Remove the engine sprocket nut [B] and washer.

NOTE

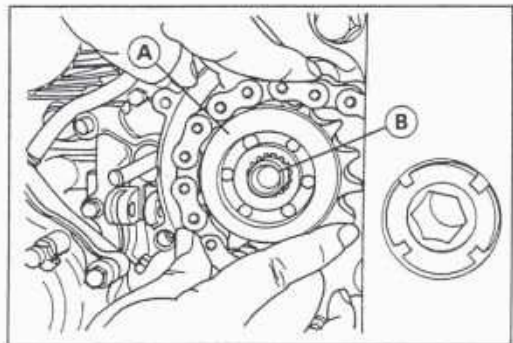
○ When loosening the engine sprocket nut, hold the rear brake on.



- Using the jack, raise the rear wheel off the ground.

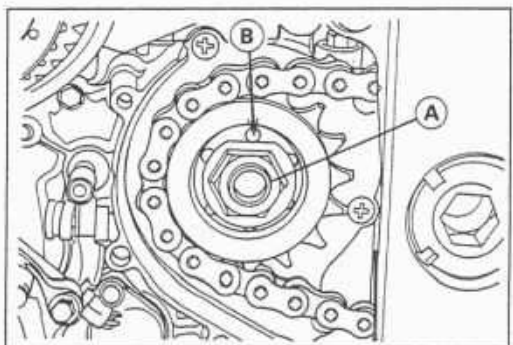
Special Tool – Jack: 57001-1238

- Loosen the drive chain (see Slack Adjustment).
- Pull the engine sprocket [A] off the output shaft [B] along with the chain.
- Remove the engine sprocket.



Engine Sprocket Installation

- Replace the sprocket washer and axle cotter pin.
- Install the engine sprocket onto the output shaft with the drive chain engaged.
- Either side of the sprocket may be faced out.
- Apply oil to the threads of the output shaft and the seating surface of the engine sprocket nut.
- After torquing the engine sprocket nut [A], bend the one side [B] of the washer over the nut.



NOTE

○ Tighten the nut while applying the rear brake.

Torque – Engine Sprocket Nut : 125 N-m (13.0 kg-m, 94 ft-lb)

- Adjust the drive chain slack after installing the sprocket (see Slack Adjustment).

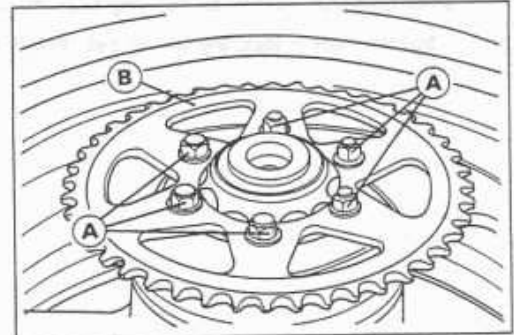
Rear Sprocket Removal

- Remove the rear wheel (see Wheel/Tires chapter).

CAUTION

Do not lay the wheel on the ground with the disc facing down. This can damage or warp the disc. Place blocks under the wheel so that the disc does not touch the ground.

- Remove the rear sprocket nuts [A].
- Remove the rear sprocket [B].

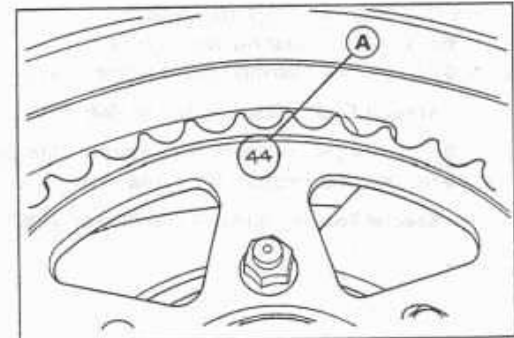


Rear Sprocket Installation

- Install the sprocket facing the tooth number marking [A] outward.
- Tighten the rear sprocket nuts.

Torque – Rear Sprocket Nut : 74 N-m (7.5 kg-m, 54 ft-lb)

- Install the rear wheel (see Wheels/ Tires chapter).

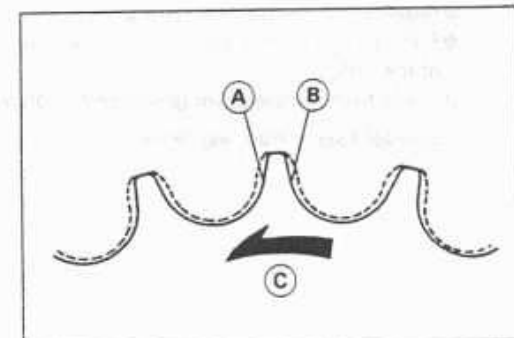


Sprocket Wear Inspection

- Visually inspect the engine and rear sprocket teeth for wear and damage.

★ If the teeth are worn as illustrated, replace the sprocket, and inspect the drive chain wear (see Drive Chain Wear Inspection).

- [A] Worn Tooth (Engine Sprocket)
- [B] Worn Tooth (Rear Sprocket)
- [C] Direction of Rotation



NOTE

○ If a sprocket requires replacement, the chain is probably worn also. When replacing a sprocket, inspect the chain.

Rear Sprocket Warp Inspection

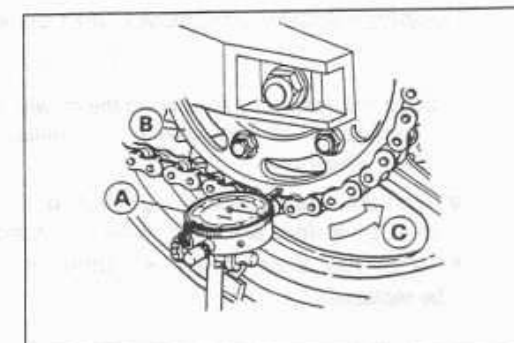
- Raise the rear wheel off the ground (see Wheels/Tires chapter) so that it will turn freely.

- Set a dial gauge [A] against the rear sprocket [B] near the teeth as shown, and rotate [C] the rear wheel to measure the sprocket runout (warp). The difference between the highest and lowest dial gauge readings is the amount of runout (warp).

★ If the runout exceeds the service limit, replace the rear sprocket.

Rear Sprocket Warp

- Standard: TIR 0.4 mm or less
- Service Limit: TIR 0.5 mm



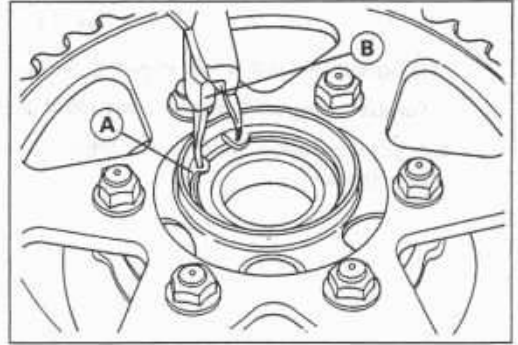
10-10 FINAL DRIVE

Coupling Bearing Removal

● Remove:

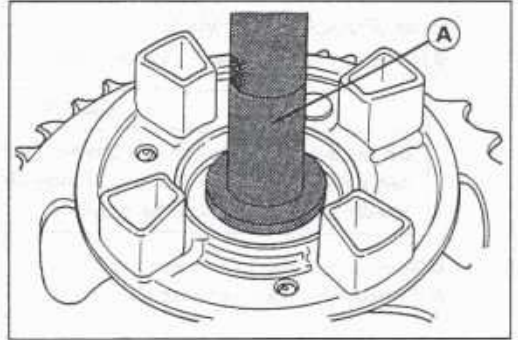
- Coupling
- Grease Seal
- Circlip [A]

Special Tool – Inside Circlip Pliers: 57001-143 [B]



● Remove the bearing by tapping from the wheel side.

Special Tool – Bearing Driver Set: 57001-1129 [A]



Coupling Bearing Installation

● Replace the bearing with a new one.

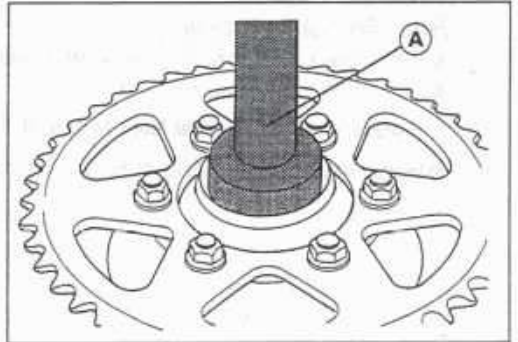
● Press in the bearing until it is bottomed.

Special Tool – Bearing Driver Set: 57001-1129 [A]

● Pack the bearing with high temperature grease.

● Replace the circlip with a new one.

Special Tool – Inside Circlip Pliers: 57001-143

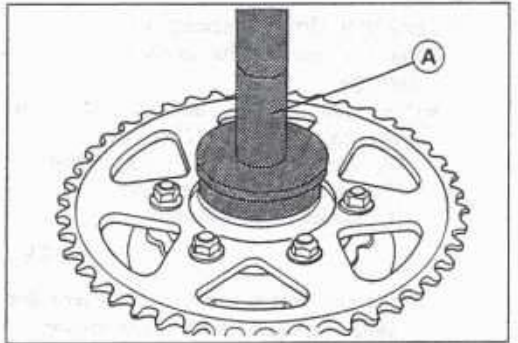


● Replace the grease seal with a new one.

● Press in the grease seal so that the seal surface is flush with the end of the hole.

○ Apply high temperature grease to the grease seal lips.

Special Tool – Bearing Driver Set: 57001-1129 [A]



Coupling Bearing Inspection and Lubrication

NOTE

○ It is not necessary to remove the coupling bearing for inspection and lubrication. If the bearing is removed, it will need to be replaced with a new one.

● Wash the bearing with a high flash-point solvent, dry it (do not spin it while it is dry), and oil it. Spin it by hand to check its condition.

★ If it is noisy, does not spin smoothly, or has any rough spots, it must be replaced.

- Pack the bearing with good quality bearing grease. Turn the bearing around by hand a few times to make sure the grease is distributed uniformly inside the bearing.