

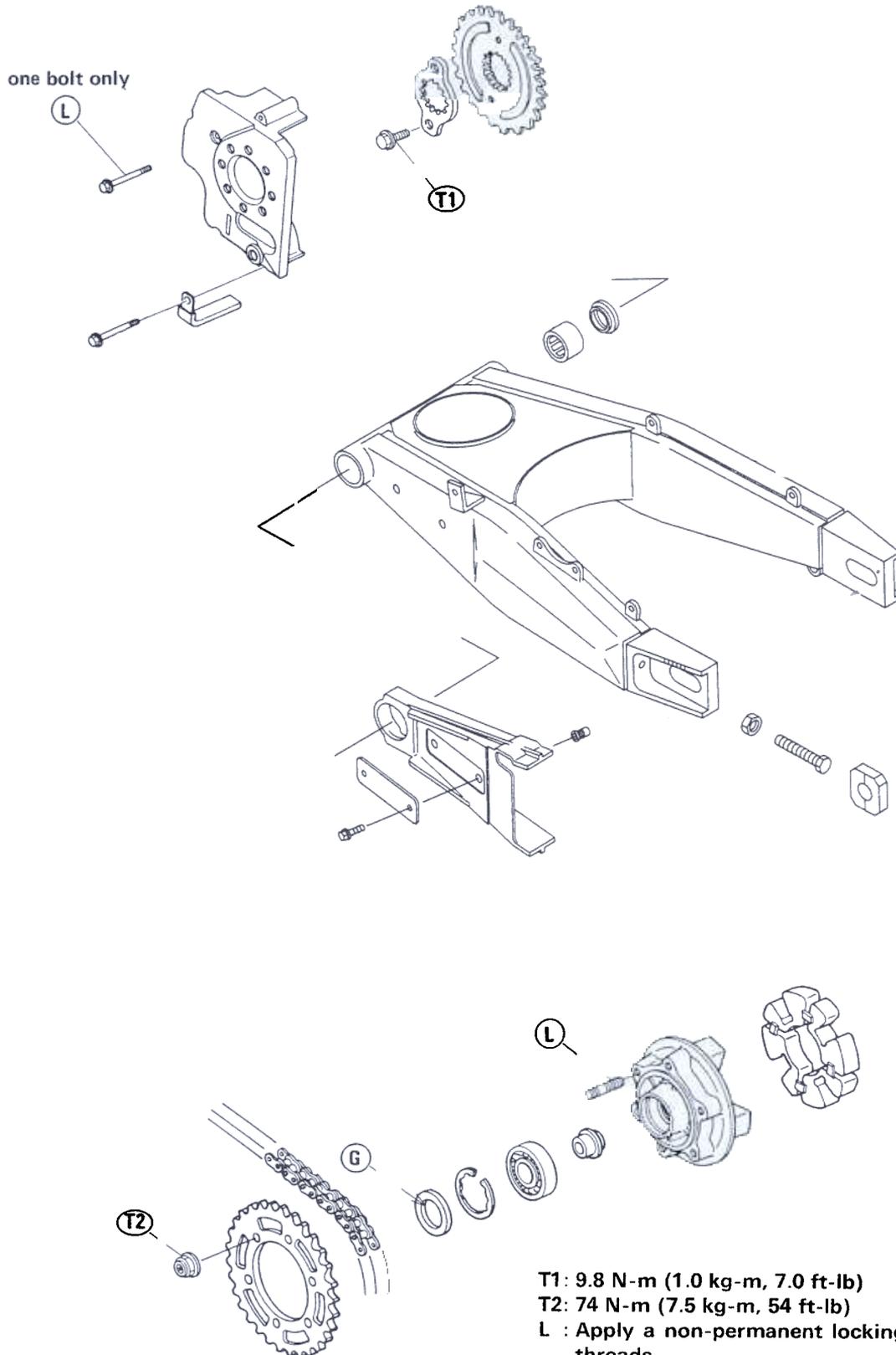
# Final Drive

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## 10-2 FINAL DRIVE

### Exploded View

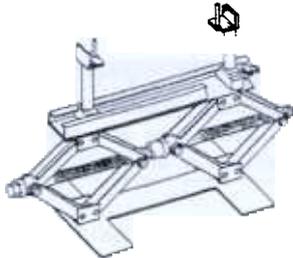


**Specifications**

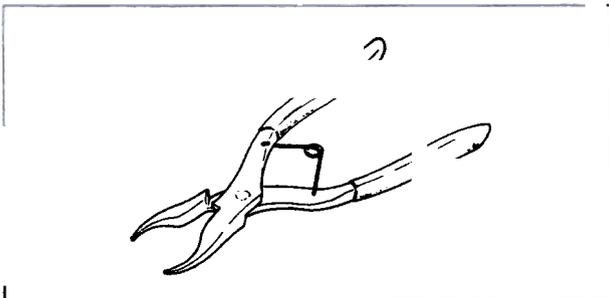
Item	Standard	Service Limit
<b>Drive Chain:</b> Make and type	ENUMA EK520-SX 0	---
Chain slack	Endless 108 links 20 ~ 35 mm (35mm is best)	Less than 20 mm, or more than 40 mm
20-link length	317.5 ~ 318.2 mm	323 mm

**Special Tools**

Jack: 57001-1238



Inside Circlip Pliers: 57001-143



Bearing Driver Set: 57001-1129



## 10-4 FINAL DRIVE

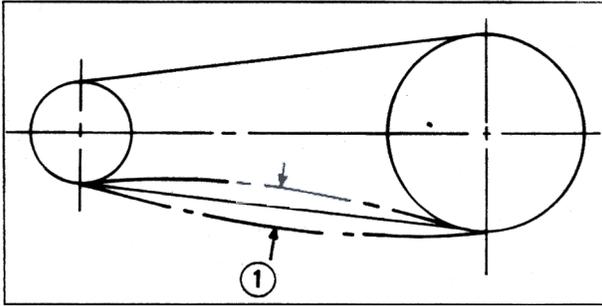
### Drive Chain

#### Drive Chain Slack Adjustment

- Set the motorcycle up on its side stand and check that the chain slack is within the standard value.

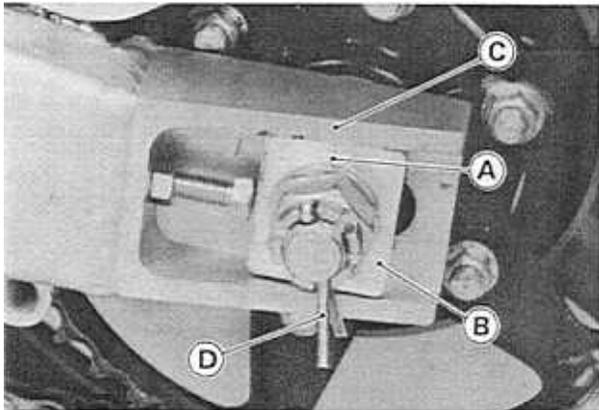
#### Drive Chain Slack

Standard: 20 ~ 35 mm (35mm is best)  
Service Limit: 20 ~ 40 mm



#### 1. Chain Slack

- Check to see that the notches on the alignment indicators on both sides are in the same position.

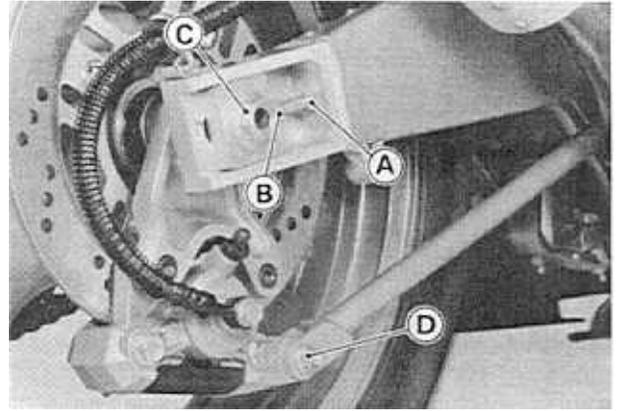


A. Notch  
B. Alignment Indicator  
C. Swing Arm Marks  
D. Cotter Pin

- Adjust the chain slack as follows.
- Loosen the following nuts.
  - Axle Nut
  - Both Chain Adjuster Locknuts

#### NOTE

- Do not loosen the torque link nut.



A. Locknut  
B. Adjuster  
C. Axle  
D. Torque Link Nut

- Turn the chain adjusters forward or rearward until the drive chain has the correct amount of chain slack.
- The right and left notches on the alignment indicators should point to the same marks or positions on the swing arm (see above).

#### ⚠ WARNING

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

- Tighten the adjuster locknuts securely.
- Tighten the axle nut to the specified torque (see Exploded View).
- Insert a new cotter pin through the axle and nut, and spread its ends.

#### Wheel Alignment Adjustment

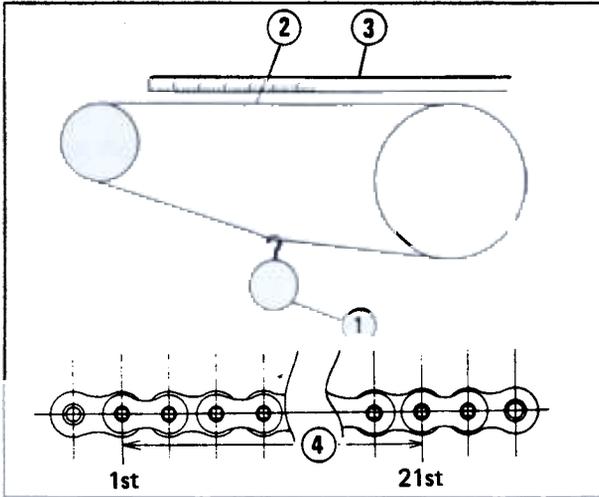
- Check to see if wheel alignment is properly adjusted. The right and left notches on the alignment indicators should point to the same marks or positions on the swing arm.
- ★ If they are not, adjust the chain slack and align the wheel alignment (see Drive Chain Slack Adjustment).

#### ⚠ WARNING

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

#### Drive Chain Wear Inspection

- Stretch the chain taut hanging a 98 N (10 kg, 20 lb) weight on the chain.
- Measure the length of 20 links on the straight part of the chain from pin center of the 1st pin to pin center of the 21st pin. Since the chain may wear unevenly, take measurement at several places.



- 1. Weight
- 2. Straight Part
- 3. Ruler
- 4. Measure this length.

**Drive Chain 20-Link Length**

Standard: 317.5 ~ 318.2 mm  
 Service Limit: 323 mm

★ If any measurement exceeds the service limit, replace the chain. Also, replace the engine and rear sprockets when the drive chain is replaced.

**⚠ WARNING**

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

**Lubrication**

**CAUTION**

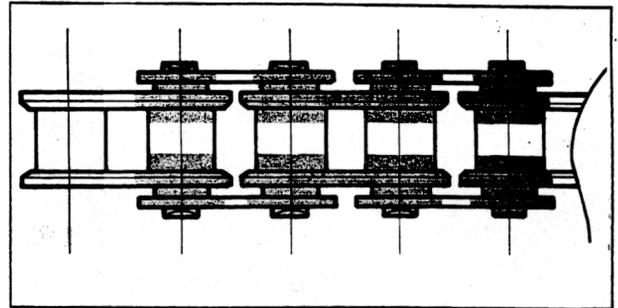
The O-rings between the side plates seal in the lubricant between the pin and the bushing. To avoid damaging the O-rings and resultant loss of lubricant, observe the following rules.

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-rings.

Immediately blow the chain dry with compressed air after cleaning.

Complete cleaning and drying the chain within 10 minutes.

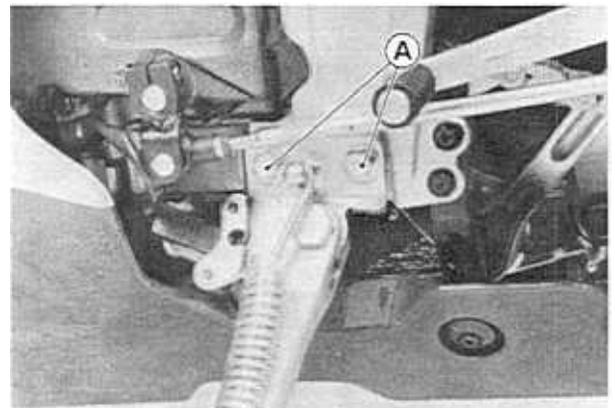
- If a special lubricant is not available, a heavy oil such as SEA 90 is preferred to a lighter oil because it will stay on the chain longer and provide better lubrication.



Oil Applied Areas

**Drive Chain Removal**

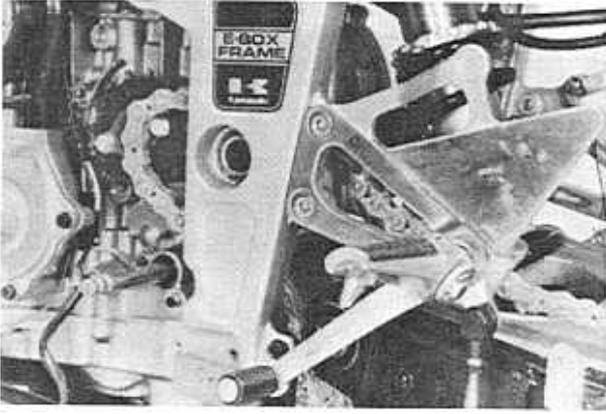
- Remove the following.
  - Lower Fairings (see Frame chapter)
  - Chain Cover
  - Engine Sprocket Cover (see this chapter)
  - Rear Shock Absorber Mounting Nut (lower)
  - Tie-Rod Nuts (upper)
  - Swing Arm Shaft Nut
  - Rear Caliper (see Brakes chapter)
- Loosen the drive chain.
- Remove the side stand.



A. Side Stand Bracket Bolts

- Place the jack under the frame to steady the motorcycle.
- Disengage the chain from the rear sprocket and the engine sprocket.
- Remove the swing arm shaft and pull it backward.
- Remove the chain.

## 10-6 FINAL DRIVE



### *Drive Chain Installation*

- Installation is the reverse of removal. Note the following.
- Tighten the following fasteners to the specified torque.
  - Rear Shock Absorber Mounting Nuts
  - Tie-Rod Nuts
  - Swing Arm Shaft Nut
  - Rear Wheel Axle Nut
- Apply a non-permanent locking agent to the side stand bracket bolts and tighten the specified torque (see Frame chapter).
- Adjust the drive chain (see this chapter).

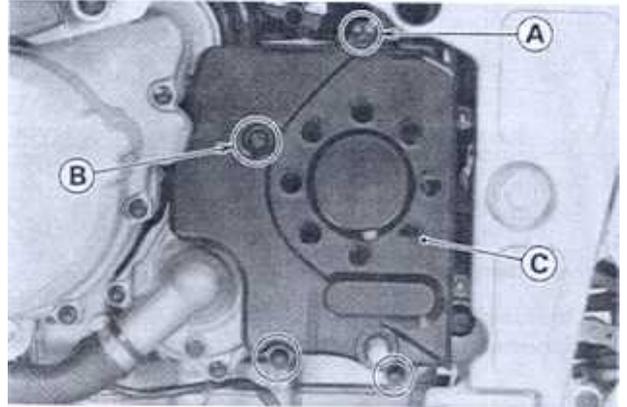
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## Sprocket, Coupling

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### *Engine Sprocket Removal*

- Loosen the drive chain (see Drive Chain Slack Adjustment).
- Remove the following.
  - Left Lower Fairing (see Frame chapter)
  - Shift Pedal
  - Engine Sprocket Cover

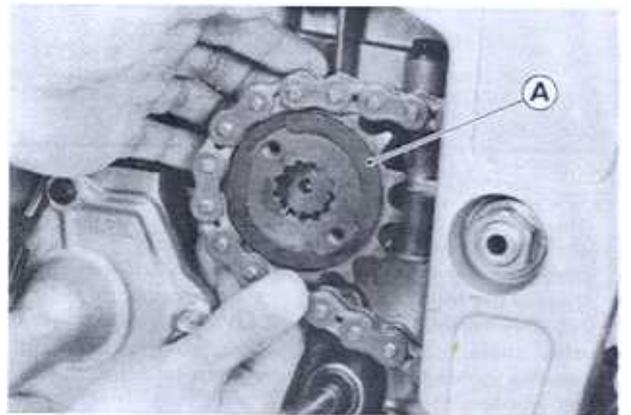


A. Bolts

B. Bolt (locking agent)

C. Engine Sprocket Cover

- Remove the engine sprocket plate.
- Pull the engine sprocket off the output shaft along with the chain.



A. Engine Sprocket

- Remove the engine sprocket.

### *Engine Sprocket Installation*

- Installation is the reverse of removal. Note the following.
- Engage the sprocket with the drive chain so that hollow side faces inward.
- Tighten the sprocket plate bolt to the specified torque (see Exploded View).
- Apply a non-permanent locking agent to the engine sprocket cover bolt (one bolt only, see Exploded View).

**Rear Sprocket Removal**

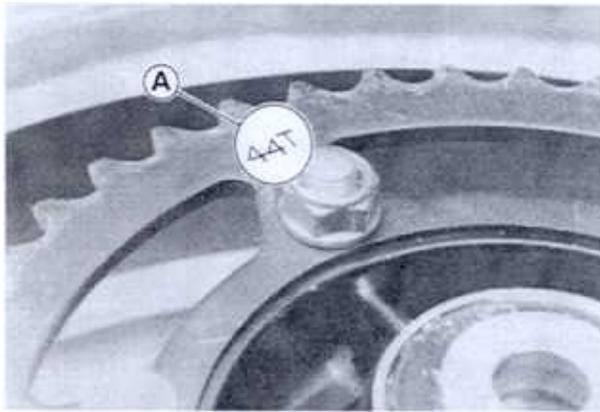
- Remove the rear wheel (see Wheels/Tires chapter)

<b>CAUTION</b>
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.

- Pull out the rear wheel coupling from the rear wheel.
- Remove the rear sprocket nuts.
- Remove the rear sprocket.

**Rear Sprocket Installation**

- Installation is the reverse of removal. Note the following.
- Install the sprocket facing the tooth number marking outward.



A. Tooth Number Marking

- Tighten the rear sprocket nuts to the specified torque (see Exploded View).
- If the stud bolt is to be replaced, apply a non-permanent locking agent to the lower half of the stud bolt.
- Install the rear wheel (see Wheels/Tires chapter).

**Rear Sprocket Wear**

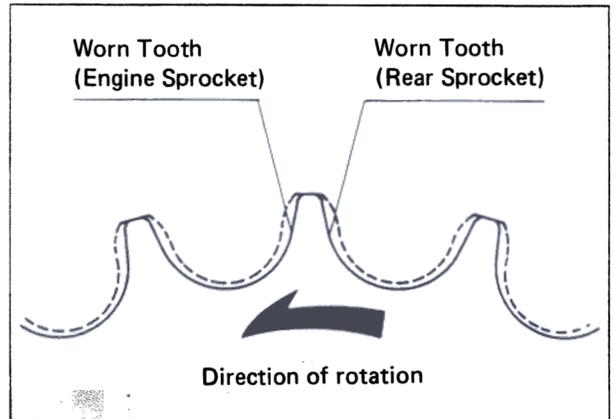
- Visually inspect the rear sprocket teeth.
- ★ If the teeth are worn as illustrated, replace the sprocket, and inspect the drive chain and engine sprocket (see Drive Chain Wear Inspection).

<b>CAUTION</b>
If a sprocket requires replacement, the drive chain is probably worn also. Upon replacing the rear sprocket, inspect the chain and engine sprocket.

**NOTE**

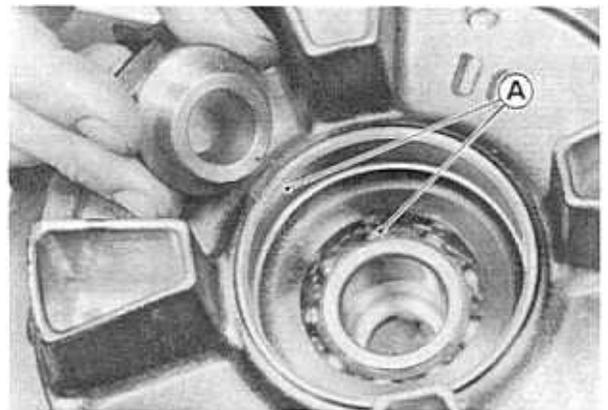
○ Sprocket wear is exaggerated for illustration.

**Sprocket Teeth**



**Coupling Installation**

- Grease the following.
  - Ball Bearing
  - Coupling Grease Seal
  - Coupling Internal Surface



A. Grease here.