

Drive Chain

Refer to *Important Safety Precautions* on page 33.

An endless (riveted master link) chain connects the countershaft and rear wheel sprockets. The O-ring chain uses rubber rings between the side plates of the pin and roller links to seal in the manufacturer-installed lubricating grease and keep out moisture and dirt.

The service life of the chain depends on proper lubrication and adjustment. Poor maintenance can cause premature wear or damage to the drive chain or sprockets.

When the motorcycle is ridden on unusually dusty or muddy tracks, more frequent maintenance will be necessary.

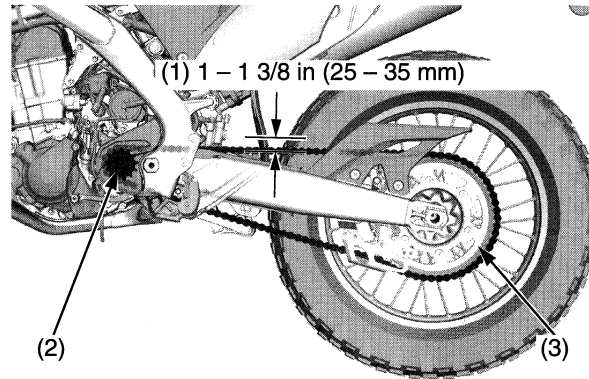
The drive chain should be checked, adjusted, and lubricated as part of the pre-ride inspection (page 19).

Under severe usage, or when the motorcycle is ridden in unusually dusty or muddy areas, more frequent maintenance will be necessary.

Before servicing your drive chain, turn the engine OFF, lower the side stand, and check that your transmission is in neutral.

Inspection

1. Turn the engine off, raise the rear wheel off the ground by placing an optional workstand or equivalent support under the engine and shift the transmission into neutral.
2. Check the drive chain slack (1) in the upper drive chain run midway between the drive sprocket (2) and driven sprocket (3). Drive chain slack should allow the following vertical movement by hand:
1 – 1 3/8 in (25 – 35 mm)



- (1) drive chain slack
(2) drive sprocket
(3) driven sprocket

3. Check drive chain slack at several points along the chain. The slack should remain constant. If it isn't, some links may be kinked and binding. Lubricating the chain will often eliminate binding and kinking.

NOTICE

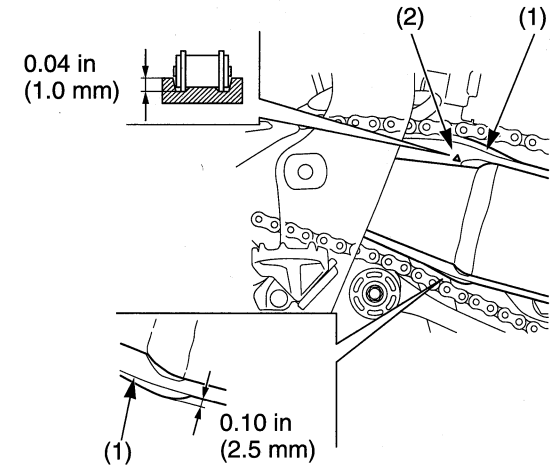
Excessive chain slack may allow the drive chain to damage the engine cases.

4. Inspect the drive chain for:
 - damaged rollers
 - loose pins
 - dry or rusted links
 - kinked or binding links
 - excessive wear
 - improper adjustment
 - damaged or missing O-rings

Replace the drive chain (page 132) if it has damaged rollers, loose pins, or kinks that cannot be free. Lubricate the drive chain (page 131) if it appears dry or shows signs of rust. Lubricate any kinked or binding links and work them free. Adjust chain slack if needed (page 131).

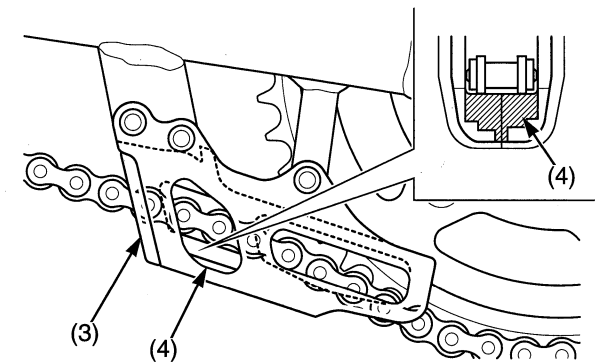
Drive Chain Sliders

1. Check the chain slider (1) for wear. Replace it if below the service limit.
SERVICE LIMIT:
upper side: 0.04 in (1.0 mm)
lower side: 0.10 in (2.5 mm)



- (1) chain slider
(2) wear indicator

2. Check the chain guide slider (3) for wear. Replace the guide slider if it is worn to the bottom of the wear limit (4).



- (3) chain guide slider
(4) wear limit

Drive Chain Rollers

Check the upper drive chain roller (1) and lower drive chain roller (2) for wear or damage. Measure the diameter of the drive chain rollers and replace them if below the service limit.

Service Limit:

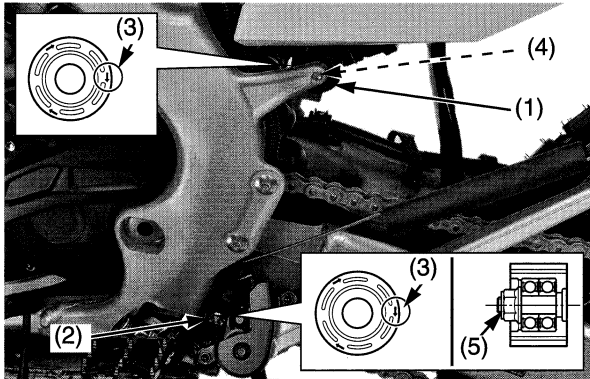
Upper roller: 1.2 in (31 mm)

Lower roller: 1.2 in (31 mm)

Replace the roller if necessary as follows.

Install the upper drive chain roller (Green) with the “→” mark (3) facing toward the bracket and lower drive chain roller (Black) with the “→” mark facing toward outside.

Install new a drive chain roller bolt (4) and nut (5).



- (1) upper drive chain roller (Green)
- (2) lower drive chain roller (Black)
- (3) “→” mark
- (4) drive chain roller bolt (new)
- (5) drive chain roller nut

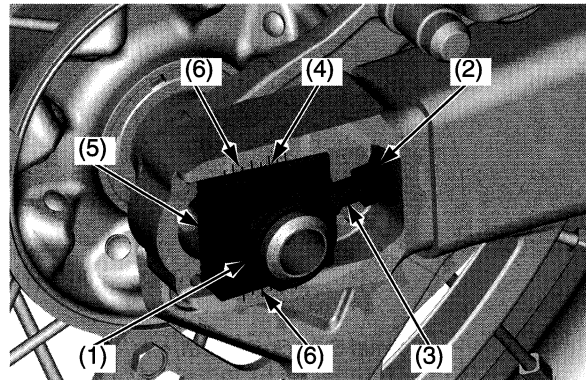
Clean the threads of the drive chain roller bolt and apply locking agent to the threads.

Tighten the drive chain roller bolt and nut to the specified torque:

9 lbf·ft (12 N·m, 1.2 kgf·m)

Adjustment

1. Loosen the rear axle nut (1).
2. Loosen the chain adjuster lock nuts (2) and turn the adjusting bolts (3) counterclockwise to decrease slack or clockwise to increase slack. Align the index marks (4) of the axle plates (5) with the same reference marks (6) on both sides of the swingarm.

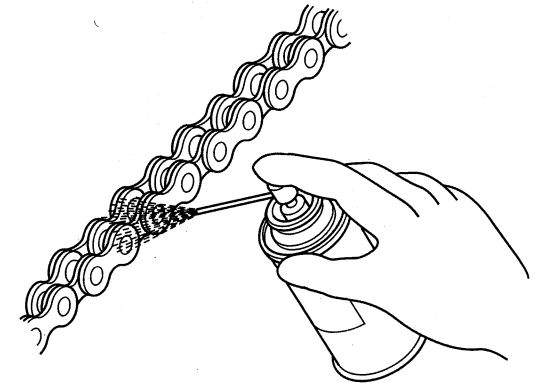


- (1) rear axle nut
 - (2) chain adjuster lock nuts
 - (3) adjusting bolts
 - (4) index marks
 - (5) axle plates
 - (6) reference marks
3. Tighten the rear axle nut to the specified torque:
94 lbf·ft (128 N·m, 13.1 kgf·m)
 4. Recheck chain slack and adjust as necessary.
 5. Turn the adjusting bolt counterclockwise until it touches the axle plates lightly. Then tighten the chain adjuster lock nuts to the specified torque while holding the adjusting bolts with a wrench:
20 lbf·ft (27 N·m, 2.8 kgf·m)

Lubrication

Lubricate the drive chain with Pro Honda HP Chain Lube or an equivalent chain lubricant or drive chain lubricant designed specifically for use with O-ring chains. Wipe off the excess chain lubricant.

Commercial chain lubricants not designed for motorcycle drive chains may contain solvents which could damage the O-rings.



Drive Chain

Removal, Cleaning & Replacement

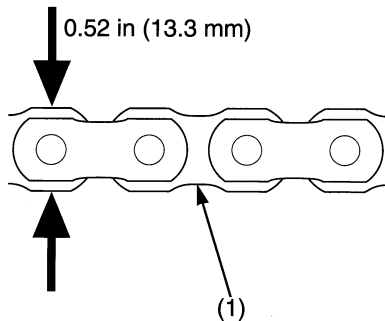
For maximum service life, the drive chain should be cleaned, lubricated, and adjusted before each outing. Your motorcycle has an endless (riveted master link) type chain. It should only be removed or replaced by your dealer.

The O-rings can be damaged by steam cleaning, high pressure washers, and certain solvents.

1. Clean the side surfaces of the chain with a dry cloth. Use a high flash point solvent such as kerosene or Pro Honda chain cleaner – not gasoline. Do not brush the rubber O-rings. Brushing will damage them. Use of a solvent may also damage the O-rings.
2. Replace the drive chain if it has damaged rollers, loose fitting links, damaged O-rings, or otherwise appears unserviceable.
3. Measure the drive chain plate (1). If the drive chain plate is worn anywhere to a thickness of 0.52 in (13.3 mm), the drive chain must be replaced.

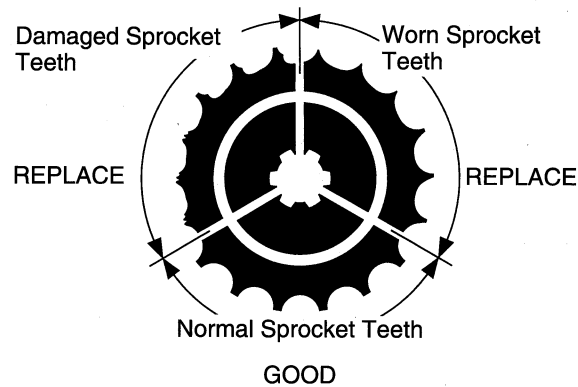
Chain:

Size/link: RK520EXU/116LE



(1) drive chain plate (inner)

4. Inspect the sprocket teeth for wear or damage. We recommend replacing the sprocket whenever a new chain is installed. Both chain and sprockets must be in good condition, or the new replacement chain or sprocket(s) will wear rapidly. Excessively worn sprocket teeth have a hooked, worn appearance. Replace any sprocket which is damaged or excessively worn.



NOTICE

Use of a new chain with worn sprockets will cause rapid chain wear.

5. Lubricate the drive chain (page 131).
6. Recheck chain slack and adjust if necessary.