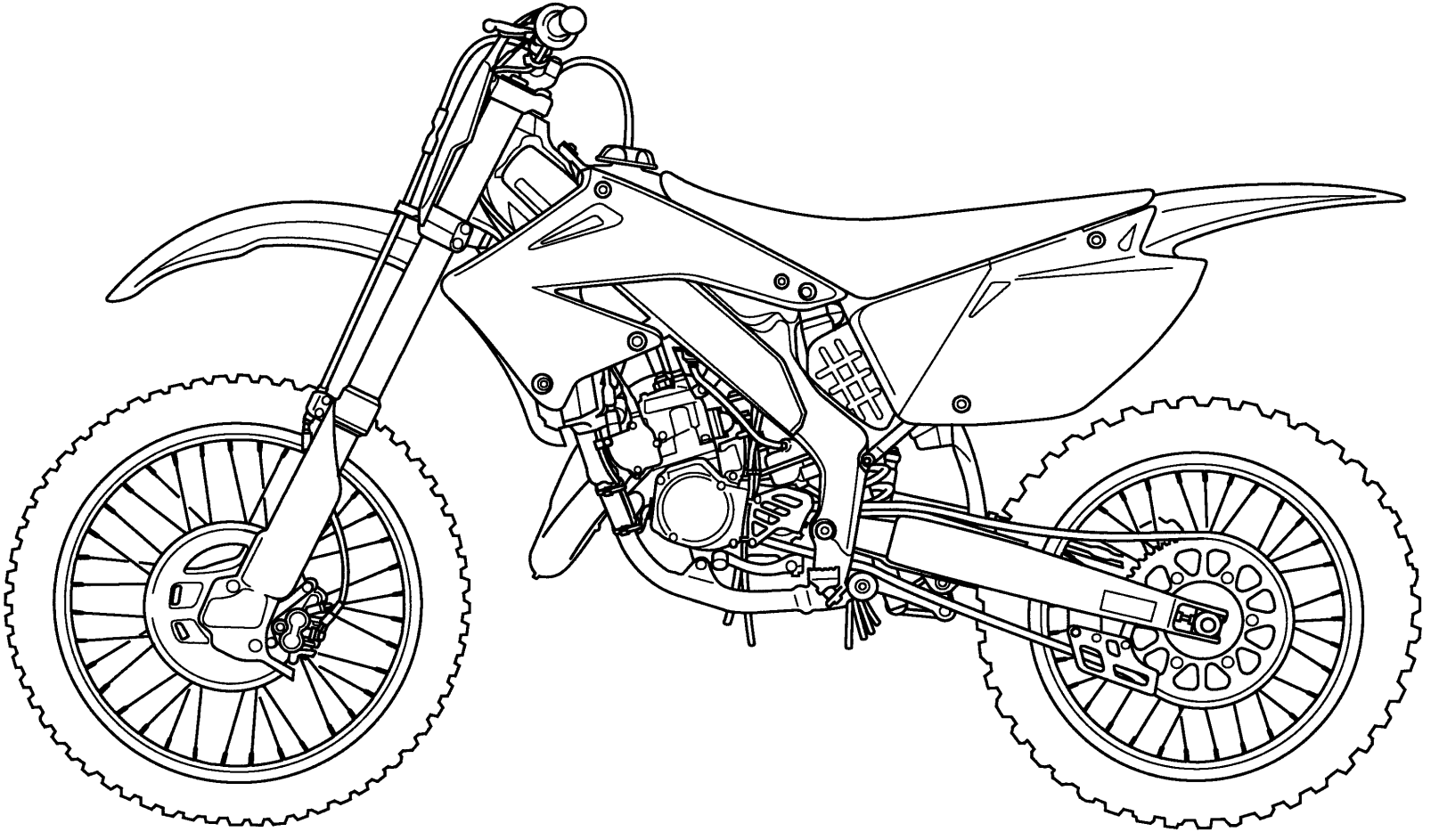
Honda CR125R **2004**
OWNER'S MANUAL



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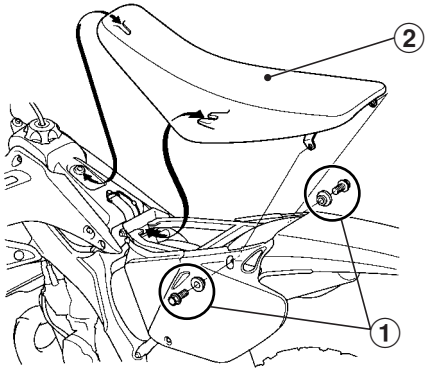
MAINTENANCE PREPARATIONS

SEAT

Seat Removal

1. Remove the seat bolts and collars.
2. Slide the seat back.

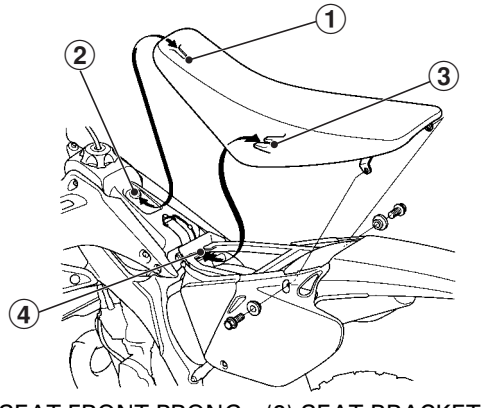


(1) SEAT BOLTS/COLLARS (2) SEAT

Seat Installation

1. Slide the seat front prong onto the seat bracket and the seat rear prong onto the tabs by pushing down and forward on the seat in each of these areas.
2. Install the collars and seat bolts.

TORQUE: 2.0 lbf·ft (26 N·m, 2.7 kgf·m)

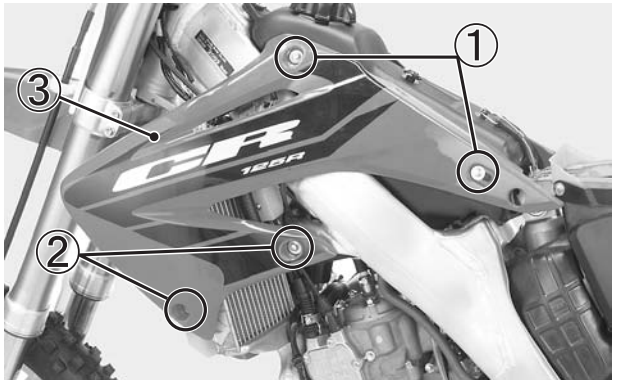


(1) SEAT FRONT PRONG (2) SEAT BRACKET
(3) SEAT REAR PRONG (4) TABS

FUEL TANK

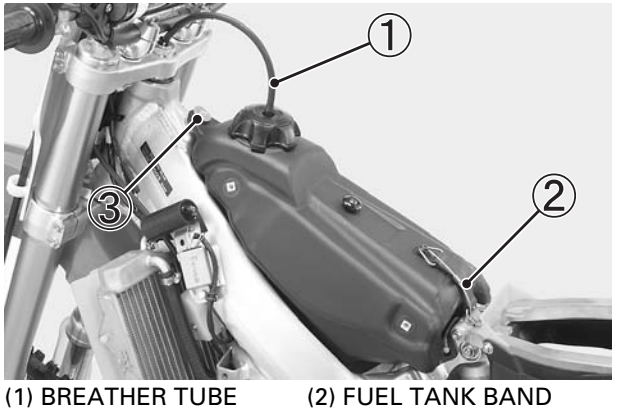
Fuel Tank Removal

1. Turn the fuel valve OFF.
2. Remove the seat (this page).
3. Remove the shroud A bolts/collars, B bolts/collars and shrouds.



(1) SHROUD A BOLTS/COLLARS
(2) SHROUD B BOLTS/COLLARS
(3) SHROUD

4. Pull the breather tube out of the steering stem nut.
5. Unhook and remove the fuel tank band.
6. Remove the fuel tank bolt.

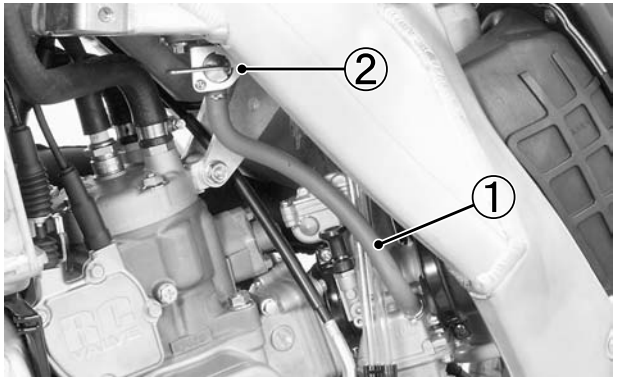


(1) BREATHER TUBE (2) FUEL TANK BAND
(3) FUEL TANK BOLT

7. Disconnect the fuel line from the fuel valve.
   The fuel line leading to the carburetor must be disconnected, not the fuel line leading to the fuel tank.
8. Remove the fuel tank.

⚠WARNING

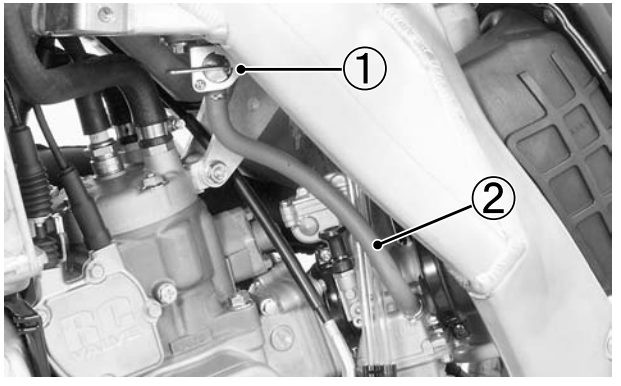
- ***Gasoline is extremely flammable and is explosive under certain conditions. Perform this operation in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where gasoline is drained or stored and where the fuel tank is refueled.***



(1) FUEL LINE (2) FUEL VALVE

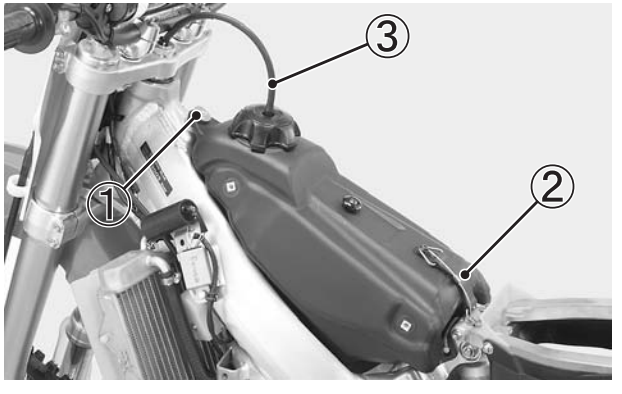
Fuel Tank Installation

1. Install the fuel tank on the frame.
2. Connect the fuel line.



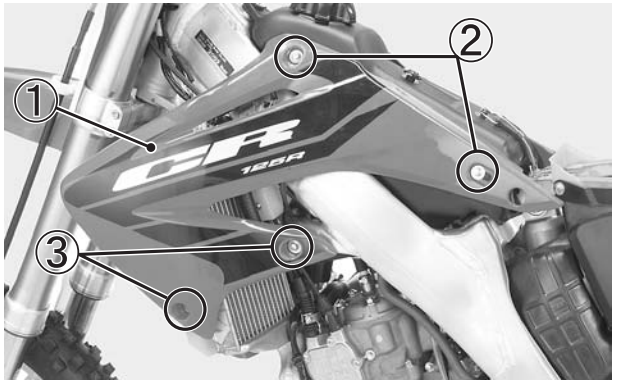
(1) FUEL VALVE (2) FUEL LINE

3. Install and tighten the fuel tank bolt.
4. Hook the fuel tank band.
5. Put the breather tube in the steering stem nut.



(1) FUEL TANK BOLT (2) FUEL TANK BAND
(3) BREATHER TUBE

6. Install the shrouds, collars and tighten the shroud A /B bolts.



(1) SHROUD
(2) SHROUD A BOLTS/COLLARS
(3) SHROUD B BOLTS/COLLARS

7. Install the seat (page 17).

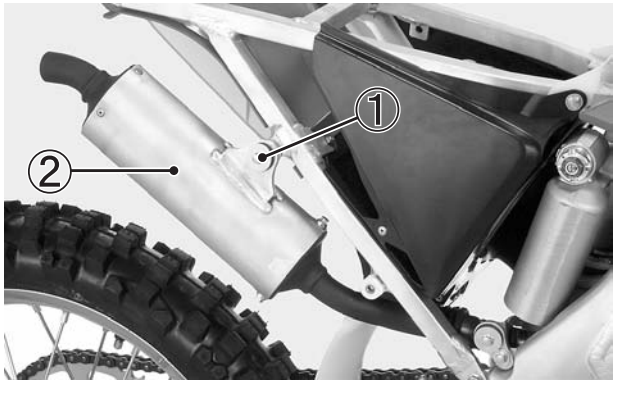
SUBFRAME

Subframe Removal

1. Remove the seat (page 17).
2. Remove the bolt, collar and right side cover.

(1) BOLT/COLLAR (2) SIDE COVER

3. Remove the bolt, washer and silencer.



(1) BOLT/WASHER (2) SILENCER

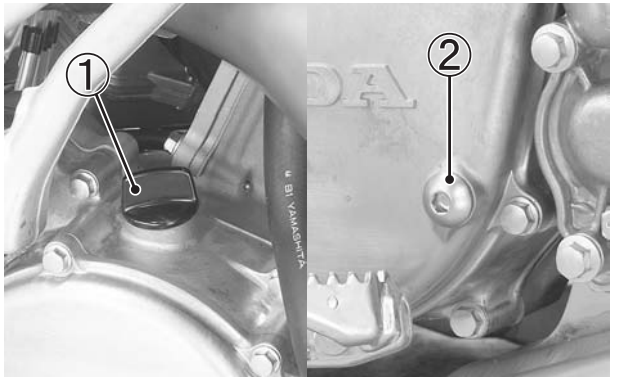
MAINTENANCE PROCEDURES

TRANSMISSION OIL

Inspecting and Adding Transmission Oil

1. Run the engine for three minutes, then shut it off.
2. Wait three minutes after shutting off the engine to allow the oil to properly distribute itself in the clutch and transmission.
3. Support the CR in an upright position on a level surface.
4. Remove the oil filler cap and oil check bolt from the right crankcase cover. A small amount of oil should flow out of the oil check bolt hole. Allow any excess oil to flow out of the oil check bolt hole.
5. If no oil flows out of the oil check bolt hole, add oil slowly through the oil filler hole until oil starts to flow out of the oil check bolt hole. Install the oil check bolt and oil filler cap.
6. Repeat steps 1-5.
7. After inspecting the oil level or adding oil, tighten the oil check bolt and oil filler cap securely.

   Oil Check Bolt Torque:
   7 lbf·ft (9.8 N·m, 1.0 kgf·m)

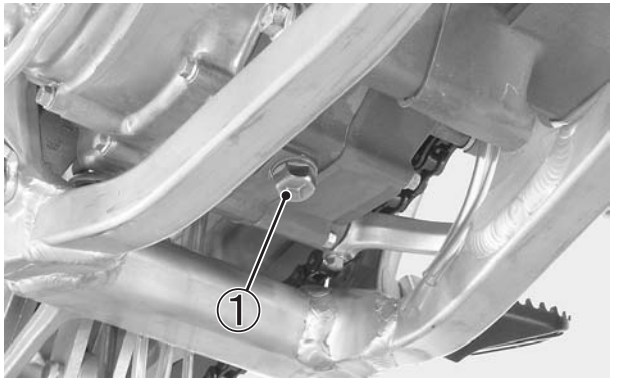


(1) OIL FILLER CAP (2) OIL CHECK BOLT

Replacing Transmission Oil

1. Run the engine for three minutes, then shut it off.
2. Support the CR in an upright position on a level surface.
3. Remove the oil filler cap from the right crankcase cover.
4. Place an oil drain pan under the engine to catch the oil. Then remove the oil drain bolt and sealing washer.
5. After the oil has drained completely, install the oil drain bolt with a new sealing washer.

   Drain Bolt Torque: 22 lbf·ft (29 N·m, 3.0 kgf·m)
6. Add the recommended oil.
   Capacity: 0.60 US qt (0.57 liter, 0.50 Imp qt) at oil change
7. Check the oil level by following the steps in Inspecting and Adding Transmission Oil.



(1) OIL DRAIN BOLT

Recommended Transmission Oil

Use Pro Honda HP Trans Oil, Pro Honda GN4 or HP4 (without molybdenum additives) 4–stroke oil, or an equivalent.*

4–stroke oil performance

API classification	SG or higher except oils labeled as energy conserving on the circular API service label
viscosity (weight)	SAE 10W–40
JASO T 903	MA
others	without friction modifiers as molybdenum additives

* Suggested oils are equal in performance to SJ oils that are not labeled as energy conserving on the circular API service label.

- Your CR does not need oil additives. Use recommended oil.
- Do not use oils with graphite or molybdenum additives. They may adversely affect clutch operation.
- Do not use API SH or higher oils displaying a circular API "energy conserving" label on the container. They may affect lubrication and clutch performance.

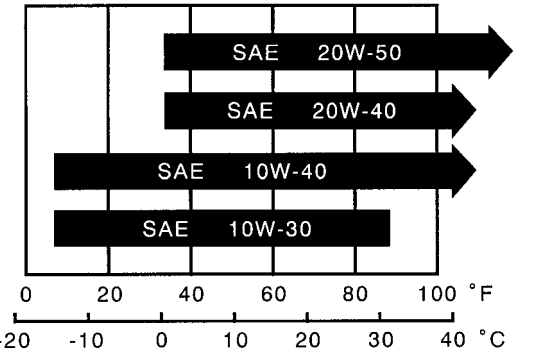
NOT RECOMMENDED

OK

CAUTION:

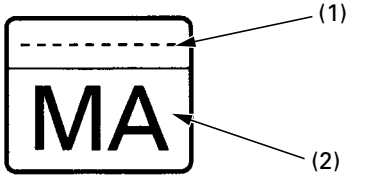
- ***Oil is a major factor affecting the performance and service life of the transmission and clutch. Non-detergent, vegetable, or castor based racing oils are not recommended.***

Other viscosities shown in the chart below may be used when the average temperature in your riding area is within the indicated range.



JASO T 903 standard

The JASO T 903 standard is an index to choose engine oils for 4-stroke motorcycle engines.
There are two classes: MA and MB.
Oil conforming to the standard has the following classification on the oil container.



PRODUCT MEETING JASO T 903
COMPANY GUARANTEEING THIS MA PERFORMANCE:

(1) code number of the sales company of the oil
(2) oil classification

COOLANT

Coolant Recommendation

Use Pro Honda HP coolant or an equivalent high quality ethylene glycol based anti-freeze containing corrosion protection inhibitors specifically recommended for use in aluminum engines (See anti-freeze container label).

CAUTION:

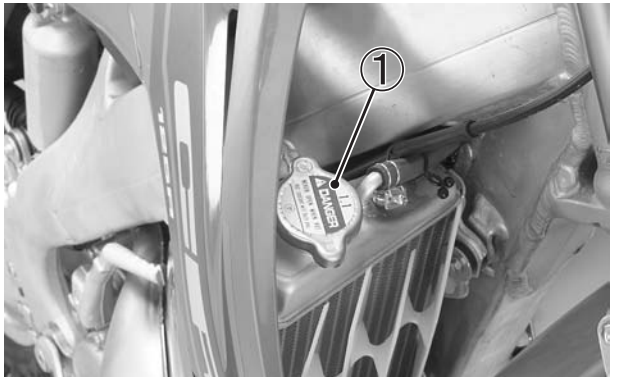
- ***Hard water or salt water is harmful to aluminum. The factory provides a 50/50 mix of anti-freeze and water in your CR. This mixture is recommended for most operating temperatures and provides good corrosion protection. A higher concentration of anti-freeze decreases the cooling system performance and is recommended only when additional protection against freezing is needed. Using less than 40% anti-freeze will not provide proper cooling or corrosion protection.***
- ***Using coolant with silicate inhibitors may cause premature wear of water pump seals or blockage of radiator passages. Using tap water may cause engine damage.***

Coolant Level

⚠WARNING

- ***Never remove the radiator cap when the engine is hot. The coolant is under pressure and severe scalding could result.***

1. With the engine cold, remove the radiator cap and check coolant level. The coolant level is correct when it is at the bottom of the radiator filler neck.



(1) RADIATOR CAP

2. Add coolant up to the filler neck if the level is low.

NOTE:

- Inspect the coolant level before each outing. A coolant loss of 0.7—2.0 US oz (20—60 cm³, 0.7—2.1 Imp, oz) through the over flow tube is normal. If coolant loss is more than this, inspect the cooling system.

Capacity: 1.03 US qt (0.97 liter, 0.85 Imp qt) at disassembly
0.93 US qt (0.88 liter, 0.77 Imp qt) at coolant change

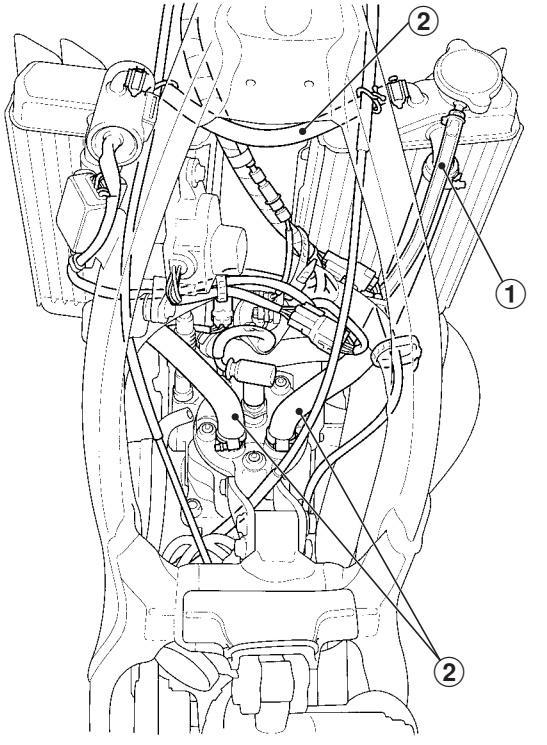
3. Install the radiator cap securely.

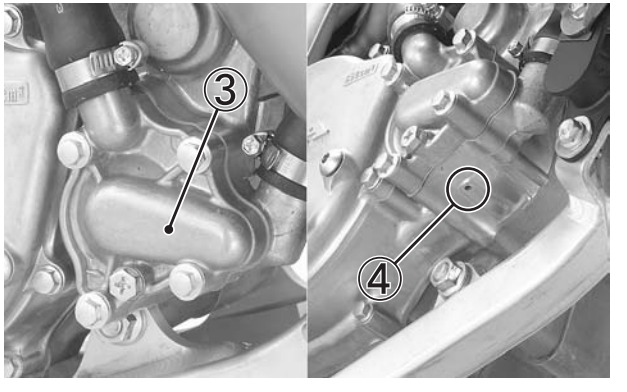
CAUTION:

- ***If the radiator cap is not installed properly, it will cause excessive coolant loss and may result in overheating and engine damage.***

Cooling System Inspection

1. Check the cooling system for leaks (see the Honda Service Manual for troubleshooting of leaks).
2. Check water hoses for cracks, deterioration, and clamp bands for looseness.
3. Check the radiator mount for looseness.
4. Make sure the overflow tube is connected and not clogged.
5. Check the radiator fins for clogging.
6. Check the water leakage check hole below the water pump for leakage. Make sure the hole remains open. If water leaks through the check hole, the water pump seal is damaged. If oil leaks through the check hole, the transmission oil seal is damaged. See the Honda Service Manual or consult your authorized Honda dealer for replacing the water pump seal or the transmission oil seal. Both seals should be replaced at the same time.





(1) OVERFLOW TUBE (2) WATER HOSE
(3) WATER PUMP COVER
(4) WATER LEAKAGE CHECK HOLE

SPARK PLUG

Standard:
(NGK) BR9EG,
(DENSO) W27ESR-V

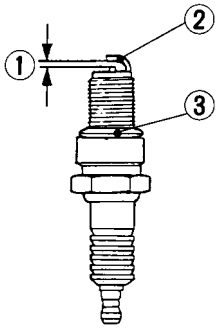
Optional:
(NGK) BR9EV,
(DENSO) W27ESR-G

If replacing with any other brand of spark plug, be certain to select the correct reach and heat range. Before removing the spark plug, clean the spark plug area thoroughly to prevent dirt from entering the cylinder.

CAUTION:

- ***The use of a spark plug of the incorrect reach or heat range can cause engine damage. The use of a non-resistor spark plug may cause ignition problems.***

1. Measure spark plug gap with a feeler gauge, and adjust by carefully bending the side electrode.
   The recommended spark plug gap is:
   0.020—0.024 in (0.5—0.6 mm).
2. Check the electrode for wear or deposits, the gasket for damage, and the insulator for cracks.



(1) PLUG GAP
(2) SIDE ELECTRODE
(3) SEALING GASKET

3. To obtain accurate spark plug readings, accelerate up to speed on a straightaway. Push the engine stop button and disengage the clutch by pulling the lever in.
   Coast to a stop, then remove and inspect the spark plug. The porcelain insulator around the center electrode should appear tan or medium gray.

NOTE:

- If you're using a new plug, ride for at least ten minutes before taking a plug reading; a brand-new plug will not color initially.

If the electrodes appear burnt, or the insulator is white or light gray (lean) or the electrodes and insulator are black or fouled (rich), there is a problem elsewhere (page 52).
Check the fuel/oil mixture, carburetor and fuel system, and ignition timing.

4. Install the spark plug by hand until finger tight, then tighten with a wrench until the sealing gasket is compressed (1/2 turn to compress a new spark plug gasket, 1/8—1/4 turn to compress a spark plug with a used gasket).

(1) SPARK PLUG

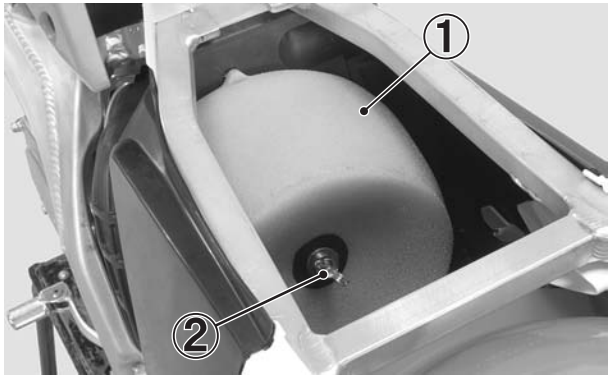
IGNITION

A CDI (Capacitive Discharge Ignition) system is used on your CR; consequently, routine ignition timing adjustment is unnecessary. If you want to check the ignition timing, refer to the Honda Service Manual.

AIR CLEANER
The air cleaner uses polyurethane inner and outer pieces which cannot be separated.
A dirty air cleaner will reduce engine power.

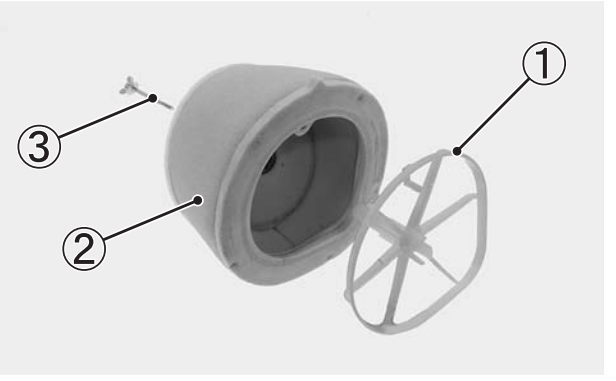
To clean the air cleaner:

1. Remove the seat (page17).
2. Loosen the air cleaner retaining bolt.
3. Remove the air cleaner assembly.



(1) AIR CLEANER
(2) AIR CLEANER RETAINING BOLT

4. Remove the air cleaner from the air cleaner holder.



(1) AIR CLEANER HOLDER (2) AIR CLEANER
(3) AIR CLEANER RETAINING BOLT

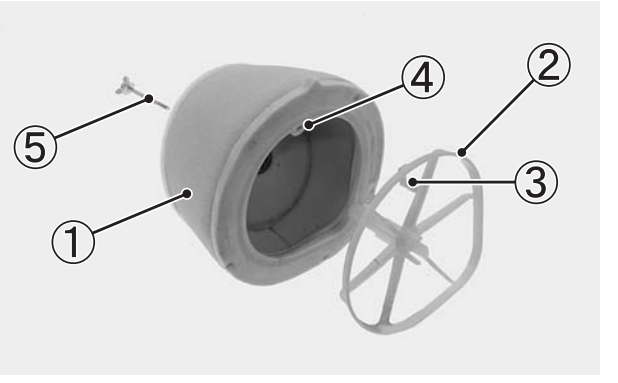
5. Wash the air cleaner in clean non-flammable cleaning solvent. Then wash in hot, soapy water, rinse well, and allow to dry thoroughly.
6. Clean the inside of the air cleaner housing.

⚠WARNING

- ***Never use gasoline or low flash point solvents for cleaning the air cleaner. A fire or explosion could result.***

NOTE:
- The air cleaner is made in two pieces: inner and outer, which cannot be separated.

7. Allow the air cleaner to dry thoroughly. After drying, soak the air cleaner in clean Pro Honda Foam Filter Oil or an equivalent air cleaner oil.
   Apply air cleaner oil to the entire surface, inner and outer, and rub it with both hands to saturate the air cleaner with oil. Squeeze out excess oil.
8. Apply a thin coat of white lithium grease to the sealing surface.
9. Assemble the air cleaner and holder.
   Insert the tab to the hole, and the air cleaner retaining bolt through the assembly.

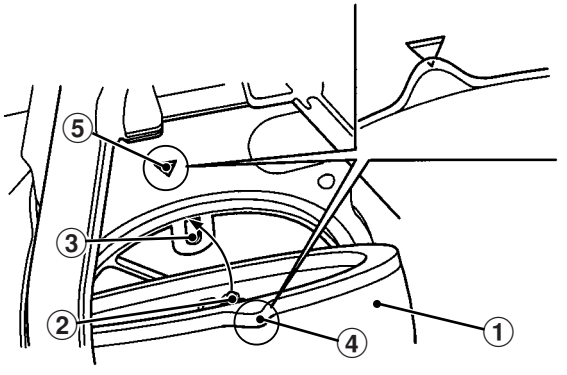


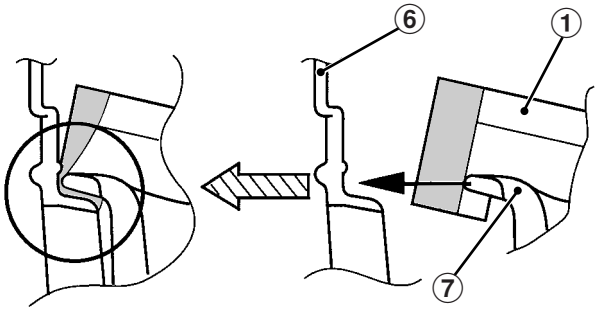
(1) AIR CLEANER (2) AIR CLEANER HOLDER
(3) TAB (4) HOLE
(5) AIR CLEANER RETAINING BOLT

10. Insert the pin in the air cleaner housing hole and install the assembly into the air cleaner housing while aligning the tab on the air cleaner and the reference mark on the air cleaner housing. Tighten the retaining bolt securely.
    Carefully position the sealing flange of the element to prevent dirt instruction.
11. Reinstall the seat, making sure it is securely attached.

CAUTION:

- ***If the air cleaner assembly is not installed correctly, dirt and dust may enter the engine resulting in rapid wear of the piston rings and cylinder.***





(1) AIR CLEANER (2) PIN
(3) AIR CLEANER HOUSING HOLE
(4) TAB (5) REFERENCE MARK
(6) AIR CLEANER HOUSING
(7) AIR CLEANER HOLDER

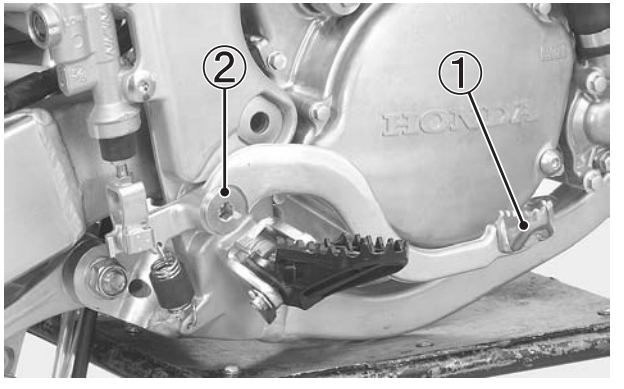
CLUTCH

Operation

1. Check for smooth clutch lever operation.
   Lubricate the clutch lever pivot or clutch cable if operation is not smooth.
2. Check the clutch cable for deterioration, kinks or damage.

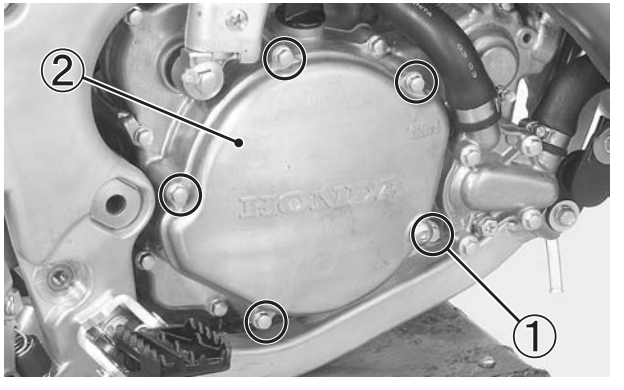
Clutch Disc/Plate Removal

Drain the transmission oil (page 20).
Remove the rear brake pedal by removing its pivot bolt.



(1) REAR BRAKE PEDAL (2) PIVOT BOLT

Remove the five clutch cover bolts and cover.



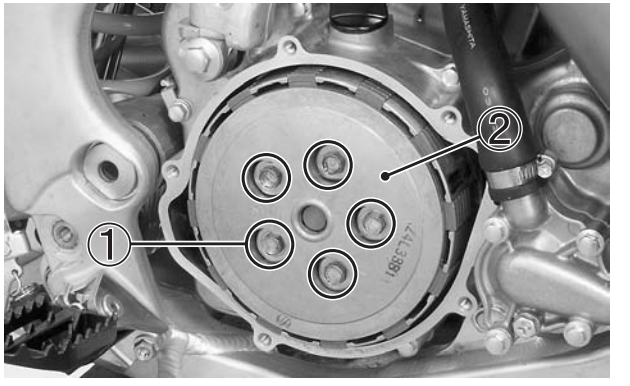
(1) CLUTCH COVER BOLTS
(2) CLUTCH COVER

Remove the five clutch spring bolts and clutch springs.

NOTE:

- Loosen the bolts in a crisscross pattern in 2 or 3 progressive steps.

Remove the clutch pressure plate.

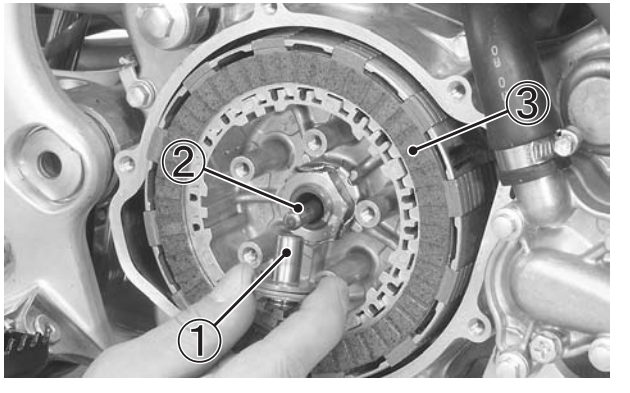


(1) CLUTCH SPRING BOLTS
(2) CLUTCH PRESSURE PLATE

Remove the clutch lifter and clutch lifter rod.
Remove the eight clutch discs and seven clutch plates.

NOTE:

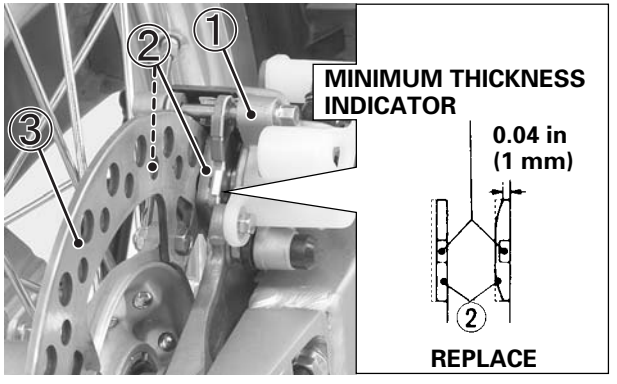
- Turn the lifter bearing plate of the clutch lifter bearing with your finger. The bearing plate should turn smoothly and quietly. Discard the clutch lifter if the bearing plate does not turn smoothly.



(1) CLUTCH LIFTER (3) CLUTCH PLATES AND
(2) CLUTCH LIFTER ROD DISCS

Rear Brake Pads

Inspect the pads visually from the rear side of the caliper to determine the pad wear. If either pad is worn anywhere to a thickness of 0.04 in (1 mm), both pads must be replaced.



(1) REAR BRAKE CALIPER (2) BRAKE PADS
(3) BRAKE DISC

Other Checks

Make sure there are no fluid leaks. Check for deterioration or cracks in the hoses and fittings.

DRIVE CHAIN

Regular cleaning, lubrication, and proper adjustment will help to extend the service life of the drive chain.

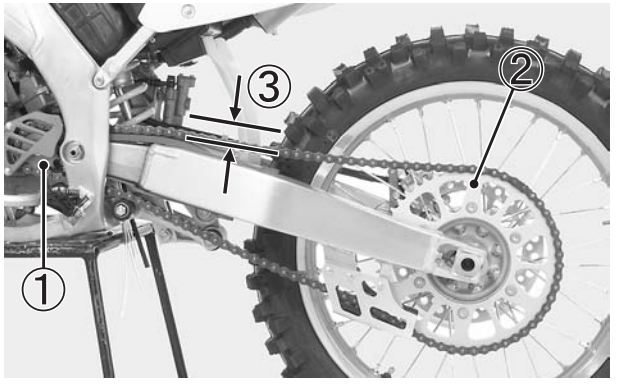
⚠WARNING

- ***Take care to prevent catching your fingers between the chain and sprocket.***

Inspection

1. Turn the engine off, raise the rear wheel off the ground by placing the optional workstand or equivalent support under the engine and shift the transmission into neutral.
2. Check slack in the drive chain midway between the sprockets, above the swingarm. Drive chain slack should allow 1—1-3/8 in (25—35 mm) of vertical movement.

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

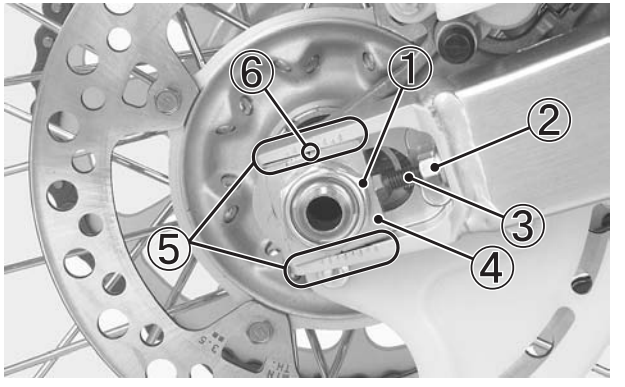


(1) DRIVE SPROCKET (2) DRIVEN SPROCKET
(3) DRIVE CHAIN SLACK

If the chain is found to be slack in one segment of its length and taut in another, this indicates that some of the links are either worn, kinked or binding. Kinking and binding can frequently be eliminated by thorough cleaning and lubrication. If the drive chain requires adjustment, the procedure is as follows:

Adjustment

1. Loosen the rear axle nut.
2. Loosen the lock nuts and turn the adjusting bolt counterclockwise to decrease slack or clockwise to increase slack.
   Align the index mark of the axle plates with the same reference marks on both sides of the swingarm.



(1) REAR AXLE NUT (2) LOCK NUT
(3) ADJUSTING BOLT (4) AXLE PLATE
(5) REFERENCE MARKS (6) INDEX MARK

3. Tighten and torque the rear axle nut.

   TORQUE: 94 lbf·ft (127 N·m, 13.0 kgf·m)

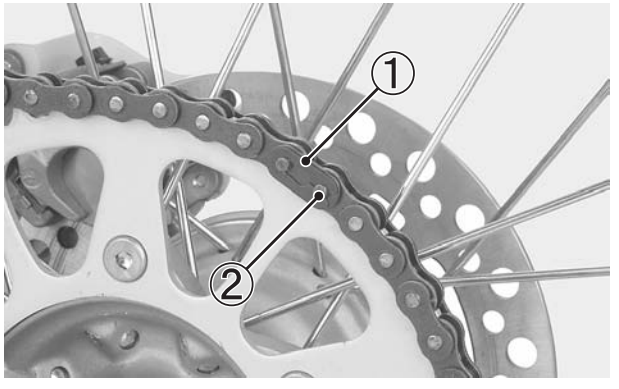
4. Recheck chain slack and adjust as necessary.
5. Loosen the adjusting bolt counterclockwise lightly until it touches the axle plate. Then, tighten and torque the lock nut by holding the adjusting bolt with a wrench.

   TORQUE: 20 lbf·ft (26 N·m, 2.7 kgf·m)

Removal, Cleaning and Inspection

For maximum service life, the drive chain should be cleaned, lubricated, and adjusted before each outing.

1. Carefully remove the master link retaining clip with pliers.
   Remove the master link and drive chain.
2. Clean the drive chain in high flash-point solvent and allow it to dry. Inspect the drive chain for possible wear or damage. Replace any chain that has damaged rollers, loose or tight fitting links, or otherwise appears unserviceable.

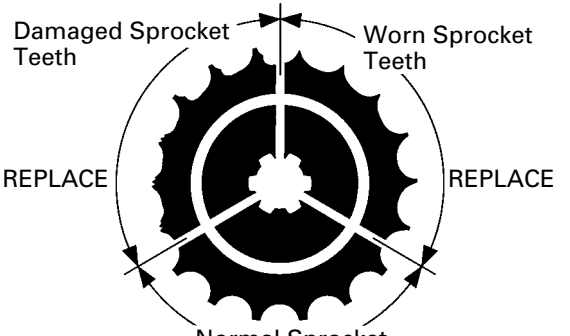


(1) RETAINING CLIP (2) MASTER LINK

3. Inspect the sprocket teeth for possible wear or damage.
   Replace if necessary.

NOTE:

- Never install a new drive chain on badly worn sprockets, or use new sprockets with a badly worn drive chain. 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.

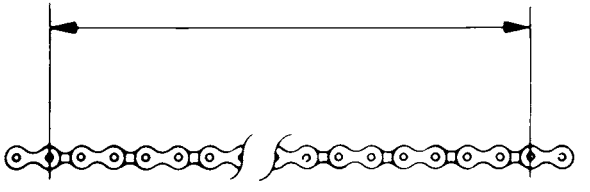


GOOD

4. Measure a section of the drive chain to determine whether the chain is worn beyond its service limit. Put the transmission in gear, and then turn the rear wheel forward until the lower section of the chain is pulled taut. With the chain held taut and any kinked joints straightened, measure the distance between a span of 17 pins, from pin center to pin center. If the measurement exceeds the service limit, replace the chain. After the chain is measured, shift the transmission into neutral again before proceeding with inspection and service.

Replacement chain:
D.I.D 520DMA2

SERVICE LIMIT: 10.20 in (259.0 mm)



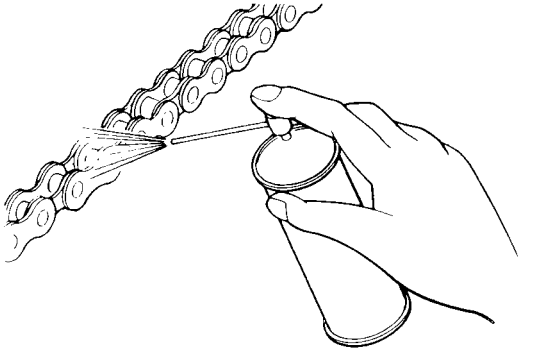
MEASURE A SPAN OF 17 PINS (16 PITCHES)

5. Lubricate the drive chain.
6. Pass the chain over the sprockets and join the ends of the chain with the master link. For ease of assembly, hold the chain ends against adjacent rear sprocket teeth while inserting the master link. Install the master link retaining clip so that the closed end of the clip will face the direction of forward wheel rotation. The master link is the most critical part affecting the security of the drive chain. Master links are reusable if they remain in excellent condition, but it is recommended that a new master link retaining clip be installed whenever the drive chain is reassembled.
7. Recheck chain slack and adjust as necessary.

Lubrication

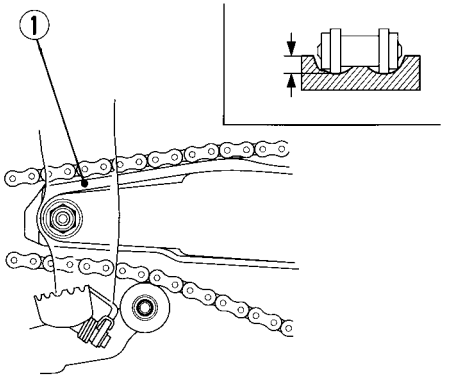
Commercially prepared drive chain lubricants may be purchased at most motorcycle shops and should be used in preference to motor oil. Pro Honda Chain Lube or an equivalent, or SAE 80 or 90 gear oil is recommended.

Saturate each chain joint so that the lubricant penetrates the space between adjacent surfaces of the link plates and rollers.



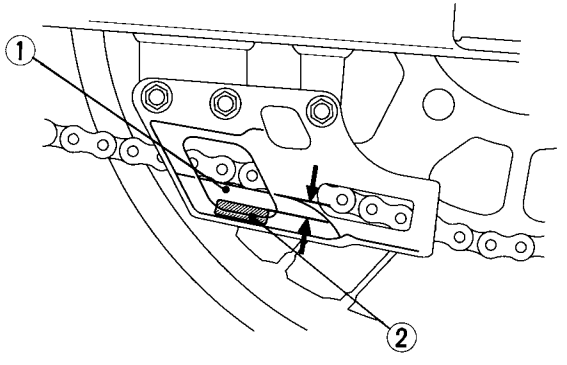
DRIVE CHAIN SLIDERS

1. Check the chain slider for wear.
   If the wear is 3/16 in (5 mm) or more, replace it.



(1) CHAIN SLIDER

2. Check the chain guide slider for wear.
   Replace the guide slider if the chain is visible through the wear inspection window.

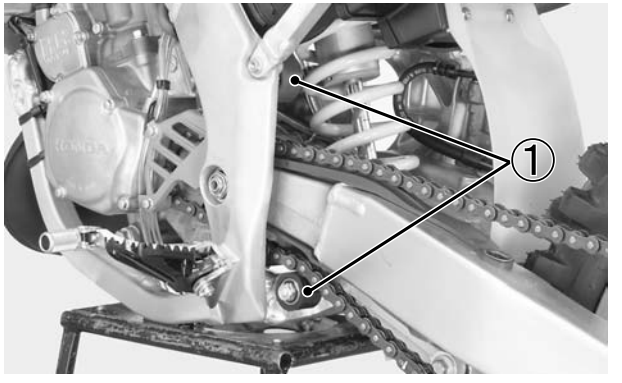


(1) CHAIN GUIDE SLIDER
(2) INSPECTION WINDOW

DRIVE CHAIN ROLLERS

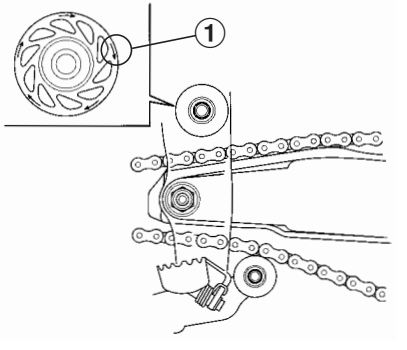
Check the drive chain rollers for wear. Replace if necessary.

SERVICE LIMIT:
UPPER ROLLER: 1.4 in (35 mm)
LOWER ROLLER: 1 in (25 mm)



(1) DRIVE CHAIN ROLLERS

NOTE:
- If the upper drive chain roller removal, install the drive chain roller with its "→" mark side facing out.



(1) "→" MARK

DRIVEN SPROCKET

Check the driven sprocket nut torque values after each race.

TORQUE: 24 lbf·ft (32 N·m, 3.3 kgf·m)