

3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

3

INSPECTION/ADJUSTMENT

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3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

SERVICE INFORMATION

GENERAL

- Place the scooter on a level ground before starting any work.
- Gasoline is extremely flammable and is explosive under certain conditions.
- Work in a well ventilated area. Smoking or allowing flames or sparks in the work area or where the gasoline is stored can cause a fire or explosion.
- If the engine must be running to do some work, make sure the area is well ventilated. Never run the engine in an enclosed area.
- The exhaust contains poisonous carbon monoxide gas that may cause loss of consciousness and may lead to death. Run the engine in an open area or with an exhaust evacuation system in an enclosed area.

SPECIFICATIONS (XCITING 500/500 AFI)

ITEM		SPECIFICATIONS	
Throttle free play		2-6 mm (1/16 – 1/4 in)	
Spark plug	XCITING 500	NGK	CR8E
	XCITING 500 AFI	NGK	CR7E
Spark plug gap		0.6 – 0.7 mm (0.024 – 0.028 in)	
Valve clearance	IN	0.1 mm (0.004 in)	
	EX	0.1 mm (0.004 in)	
Engine oil capacity	At draining		2.0 liter (2.1 US pt, 1.8 Imp qt)
	At draining/oil filter change		2.1 liter (2.2 US pt, 1.9 Imp qt)
	Total amount		2.5 liter (2.6 US pt, 2.3 Imp qt)
Recommended engine oil		KYMCO 4-stroke oil or equivalent motor oil API service classification: SJ Viscosity: 5W50	
Engine idle speed		1400±100 rpm	
Final reduction oil capacity	At draining		0.45 liter (0.48 US pt, 0.4 Imp qt)
	Total amount		0.55 liter (0.57 US pt, 0.5 Imp qt)
Recommended final reduction oil		SAE 90	
Recommended brake fluid		DOT 4	
Parking brake lever stroke		3 – 6 notch	
Tire size	Front	120/70-15	
	Rear	150/70-14	
Tire air pressure	Solo riding	Front	200 kPa (2 kgf/cm ² , 29 psi)
		Rear	250 kPa (2.5 kgf/cm ² , 36 psi)
	Two up riding	Front	225 kPa (2.25 kgf/cm ² , 32 psi)
		Rear	250 kPa (2.5 kgf/cm ² , 36 psi)
Minimum tire tread depth	Front	1.6 mm (0.06 in)	
	Rear	2.0 mm (0.08 in)	

3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

SPECIFICATIONS (XCITING 250/300 AFI)

ITEM			SPECIFICATIONS
Throttle free play			2-6 mm (1/16 – 1/4 in)
Spark plug	XCITING 250	NGK	DPR7EA-9
	XCITING 300 AF	NG K	DPR6EA-9
Spark plug gap			0.6 – 0.7 mm (0.024 – 0.028 in)
Valve clearance	IN		0.1 mm (0.004 in)
	EX		0.1 mm (0.004 in)
Engine oil capacity	At draining		0.9 liter (0.95 US pt, 0.8 Imp qt)
	Total amount		1.1 liter (1.17 US pt, 0.97 Imp qt)
Recommended engine oil			KYMCO 4-stroke oil or equivalent motor oil API service classification: SJ Viscosity: 5W50
Engine idle speed			1600±100 rpm
Final reduction oil capacity	At draining		0.18 liter (0.19 US pt, 0.16 Imp qt)
	Total amount	XCITING 250	0.2 liter (0.21 US pt, 0.18 Imp qt)
		XCITING 300 AF	0.23 L (0.2 Imp qt, 0.24 Us qt)
Recommended final reduction oil			SAE 90
Recommended brake fluid			DOT 4
Tire size	Front		120/70-15
	Rear		150/70-14
Tire air pressure	Solo riding	Front	200 kPa (2 kgf/cm ² , 29 psi)
		Rear	250 kPa (2.5 kgf/cm ² , 36 psi)
	Two up riding	Front	225 kPa (2.25 kgf/cm ² , 32 psi)
		Rear	250 kPa (2.5 kgf/cm ² , 36 psi)
Minimum tire tread depth	Front		1.6 mm (0.06 in)
	Rear		2.0 mm (0.08 in)

TORQURE VALUES

Engine oil drain plug	25 N•m (2.5 kgf•m, 18 lbf•ft)
Oil strainer screen cap	15 N•m (1.5 kgf•m, 11 lbf•ft)
Oil filter cartridge (XCITING 500)	Apply oil to the threads and seating surface. 10 N•m (1 kgf•m, 7 lbf•ft) Apply oil to the threads and seating surface.
Transmission oil drain bolt	20 N•m (2 kgf•m, 15 lbf•ft)
Transmission oil filler bolt	20 N•m (2 kgf•m, 15 lbf•ft)
Spark plug	12 N•m (1.2 kgf•m, 9 lbf•ft)
Tappet adjust nut	9 N•m (0.9 kgf•m, 6 lbf•ft)

SPECIAL TOOLS

Tappet adjuster	A120E00036
Oil filter cartridge wrench	A120E00052 (XCITING 500/500 AFI)

3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

MAINTENANCE SCHEDULE (XCITING 500/500 AFI)

Perform the pre-ride inspection in the owner's manual at each scheduled maintenance period. This interval should be judged by odometer reading or months, whichever comes first.

I: INSPECT AND CLEAN, ADJUST, LUBRICATE OR REPLACE IF NECESSARY

C: CLEAN R: REPLACE A: ADJUST L: LUBRICATE

ITEM	FREQUENCY	WHICHEVER COMES FIRST ↓ →	ODOMETER READING [NOTE (1)]							
			X 1000 km	1	6	12	18	24	30	36
			X 1000 mi	0.6	4	8	12	16	20	24
	NOTE	MONTH		6	12	18	24	30	36	
AIR CLEANER	NOTE 2			R	R	R	R	R	R	
SPARK PLUGS					R		R		R	
THROTTLE OPERATION					I		I		I	
VALVE CLEARANCE							I			
FUEL LINE					I		I		I	
CRANKCASE BREATHER	NOTE 3			C	C	C	C	C	C	
ENGINE OIL			R	R	R	R	R	R	R	
ENGINE OIL FILTER			R	R	R	R	R	R	R	
ENGINE OIL STRAINER SCREEN			C	C	C	C	C	C	C	
ENGINE IDLE SPEED			I	I	I	I	I	I	I	
RADIATOR COOLANT	NOTE 6				I		I		R	
COOLING SYSTEM					I		I		I	
SECONDARY AIR SUPPLY SYSTEM					I		I		I	
TRANSMISSION OIL	NOTE 5		R							
DRIVE BELT	NOTE 4					I			I	
CLUTCH SHOE WEAR				I	I	I	I	I	I	
BRAKE FLUID	NOTE 7			I	I	I	R	I	I	
BRAKE PAD WEAR				I	I	I	I	I	I	
BRAKE SYSTEM			I		I		I		I	
BRAKE LIGHT SWITCH					I		I		I	
BRAKE LOCK OPERATION			I	I	I	I	I	I	I	
SIDE STAND					I		I		I	
SUSPENSION					I		I		I	
HEADLIGHT AIM					I		I		I	
NUTS, BOLTS, FASTENERS			I		I		I		I	
WHEELS/TIRES					I		I		I	
STEERING BEARINGS			I		I		I		I	

3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

NOTE:

- 1 At higher odometer readings, repeat at the frequency interval established here.
- 2 Service more frequently if the scooter is ridden in unusually wet or dusty areas.
- 3 Service more frequently when riding in rain or at full throttle.
- 4 Inspect every 18000 km (12000 mi) after replacement.
- 5 Replace every 1 year, or every 10000km (6000mi), whichever comes first.
- 6 Replace every 2 year, or at indicated odometer interval, whichever comes first.
- 7 Replace every 2 years. Replacement requires mechanical skill.

3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

MAINTENANCE SCHEDULE (XCITING 250/XCITING 300 AFI)

Perform the periodic maintenance at each scheduled maintenance period.

I: Inspect, and Clean, Adjust, Lubricate or Replace if necessary.

A: Adjust C: Clean R: Replace T: Tighten

Item	Frequency	Whichever comes first ⇔ ↓	Regular Service Mileage (km)					
			1000	2000	4000	6000	8000	10000
Engine oil			R New scooter 300km	R	R	R	R	R
Engine oil filter screen					C		C	
Fuel filter			Replace at every 6000km					
Gear oil	Note 3		R New scooter 300km		R			R
Valve clearance				A	A		A	
Carburetor					I		I	
Air Cleaner	Note 2,3		I		R			R
Spark plug			Clean at every 3000km and replace if necessary					
Brake system			I	I	I	I	I	I
Drive belt							I	
Suspension					I		I	
Nut, bolt, fastener							I	
Tire					I		I	
Steering head bearing			I			I	I	
Brake fluid			Perform pre-ride inspection daily					
Radiator coolant			Replace every year or at every 10000km (R)					
Radiator core						I		I
Radiator cap						I		I
Brake lever					I			I
Brake shoe wear					I			I
Shock absorber					I			I

- In the interest of safety, we recommend these items be serviced only by an authorized KYMCO motorcycle dealer.

Note: 1. For higher odometer readings, repeat at the frequency interval established here.

2. Service more frequently when riding in dusty or rainy areas.

3. Service more frequently when riding in rain or at full throttle.

3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

FUEL LINE

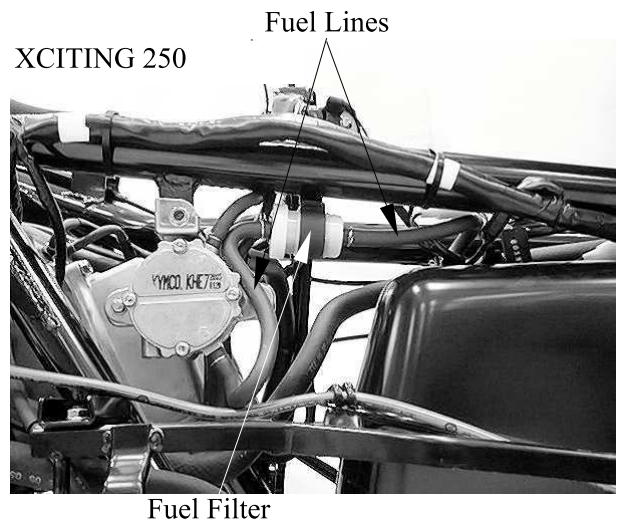
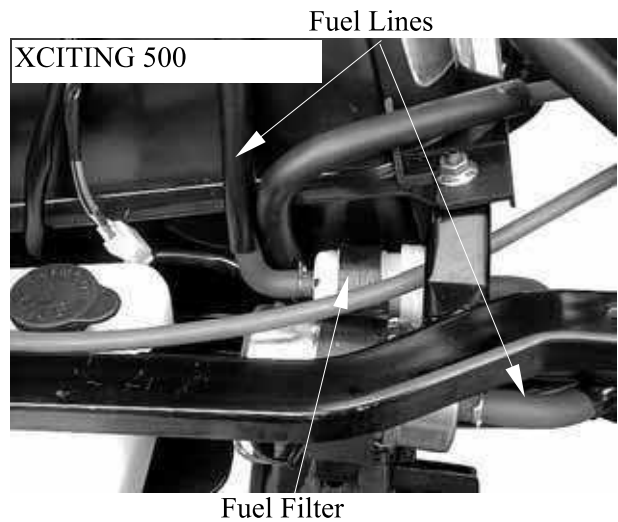
Remove the floorboard. (page 2-6).

Check the fuel lines for deterioration, damage or leakage. Replace the fuel line if necessary.

- * • Do not smoke or allow flames or sparks in your working area.

FUEL FILTER

Visually check the fuel filter. If accumulation of sediment or clogging is found, replace the fuel filter with a new one.



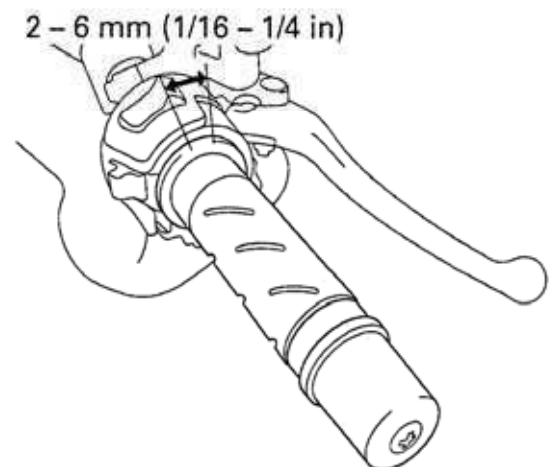
THROTTLE OPERATION

Check for smooth throttle grip full opening and automatic full closing in all steering positions.

Check the throttle cables and replace them if they are deteriorated, kinked or damaged. Lubricate the throttle cables, if throttle operation is not smooth.

Measure the throttle grip free play.

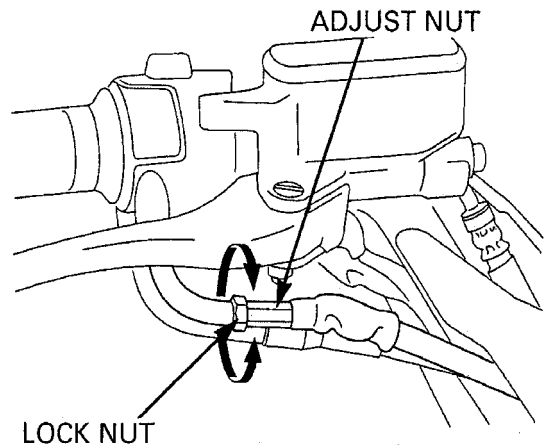
Free Play: 2~6 mm (1/16~1/4 in)



3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

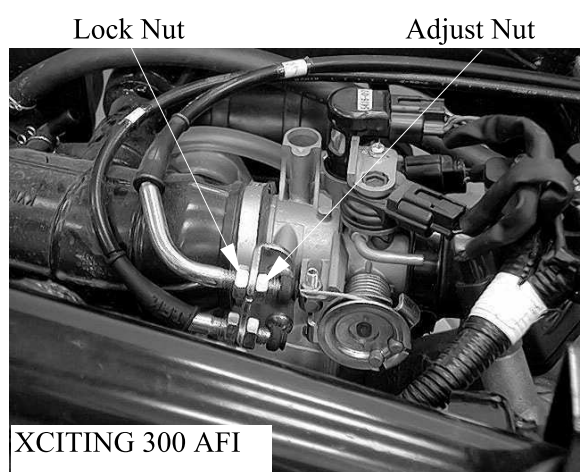
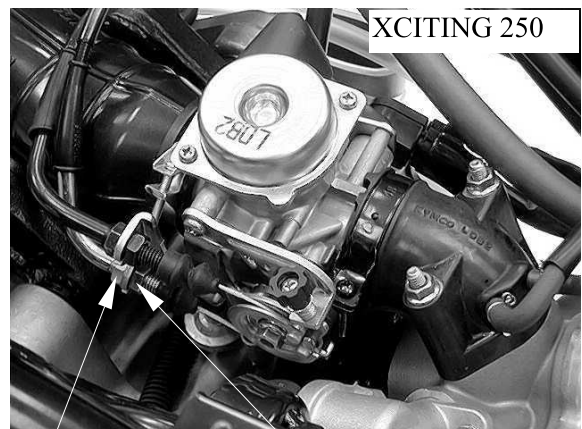
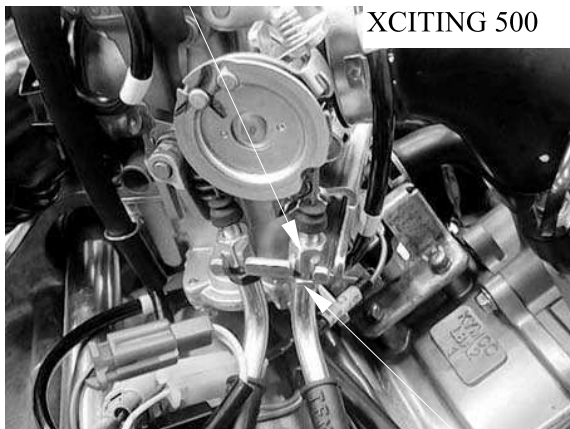
Throttle grip free play can be adjusted at either end of the throttle cable.

Minor adjustment is made with the upper adjuster.
 Slide the rubber sleeve back to expose the throttle cable adjuster.
 Adjust the free play by loosening the lock nut and turning the adjuster.



Major adjustments are made with the lower adjuster.

Remove the seat luggage box (page 2-3).
 Adjust the free play by loosening the lock nut and turning the adjuster.
 After adjustment, tighten the lock nut securely.
 Recheck the throttle operation.
 Replace any damaged parts, if necessary.



3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

AIR CLEANER

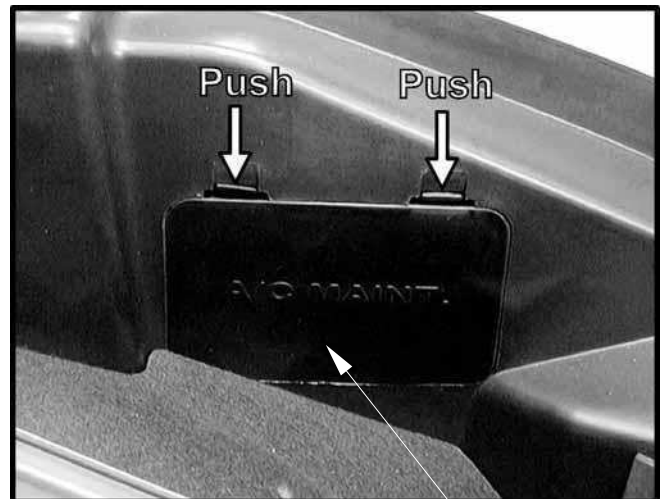
The air cleaner should be serviced at regular intervals. Service more frequently when riding in unusually wet or dusty areas.

Install a new air cleaner element. Use the KYMCO genuine air cleaner element or an equivalent air cleaner element specified for your model. Using the wrong, KYMCO air cleaner element or a non-KYMCO air cleaner which is not of equivalent quality may cause premature engine wear or performance problems.

Air cleaner element removal/installation (XCITING 500/500 AFI):

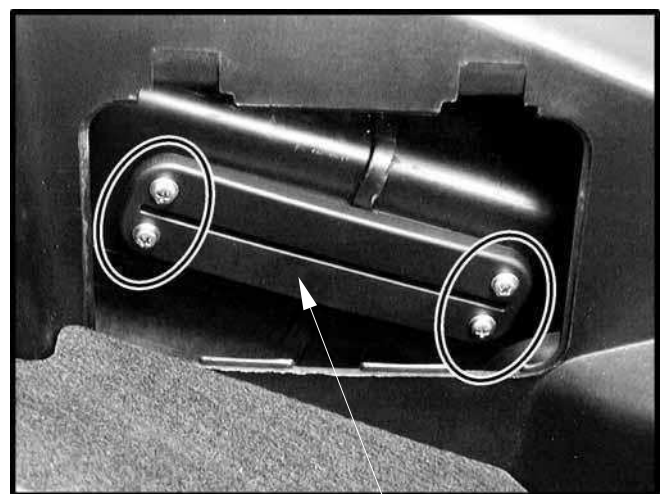
Unlock the seat with the ignition key.
Open the seat.

Remove the air cleaner cover.



Air Cleaner Cover

Remove the screws and air cleaner housing cover

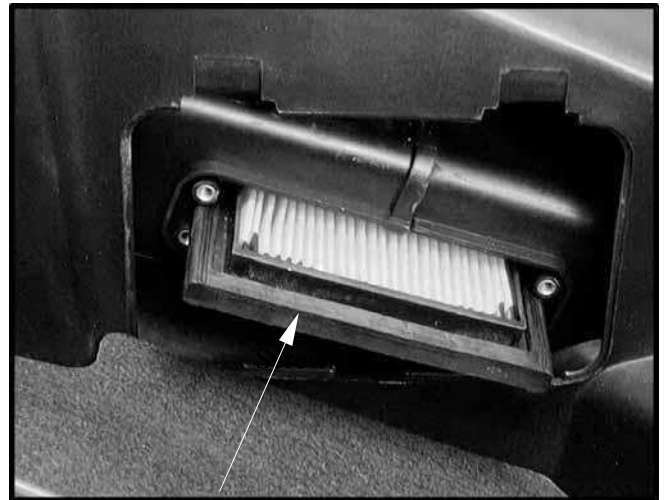


Air Cleaner Housing Cover

3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

Remove the air cleaner element by pull it out.
Discard the air cleaner element.

Install the removed parts in the reverse order of removal.



Air Cleaner Element

Air cleaner element removal/installation (XCITING 250/250 AFI):

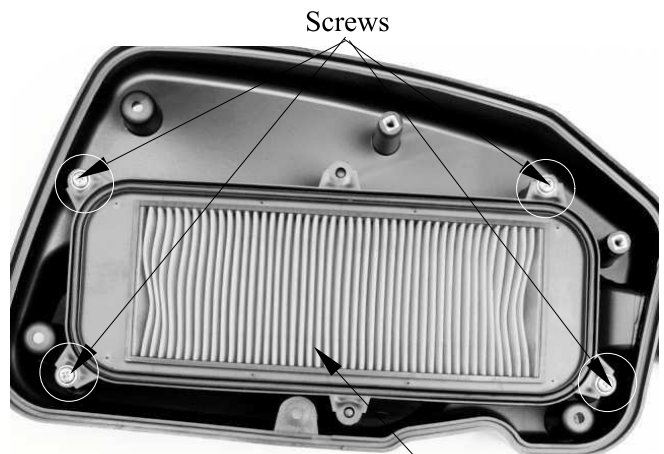
Remove the luggage box (page 2-3).

Remove the six screws and air cleaner cover.



Air Cleaner Cover

Remove the four screws and air cleaner element from air cleaner cover.
Discard the air cleaner element.

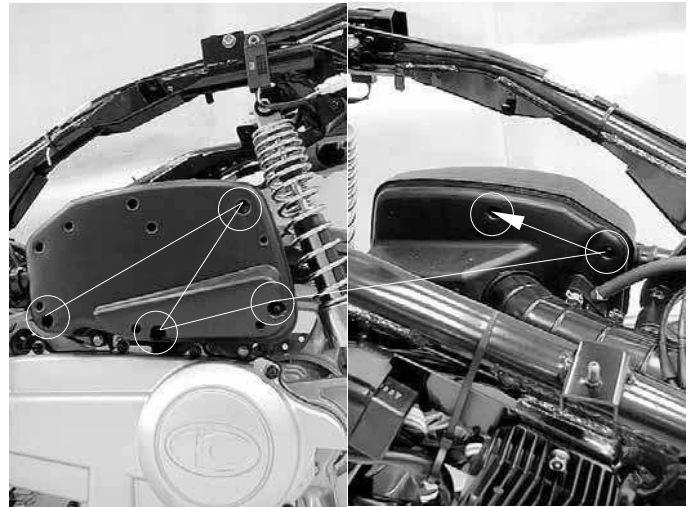


Air Cleaner Element

3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

Install the removed parts in the reverse order of removal

Tighten the screws using a diagonal pattern.

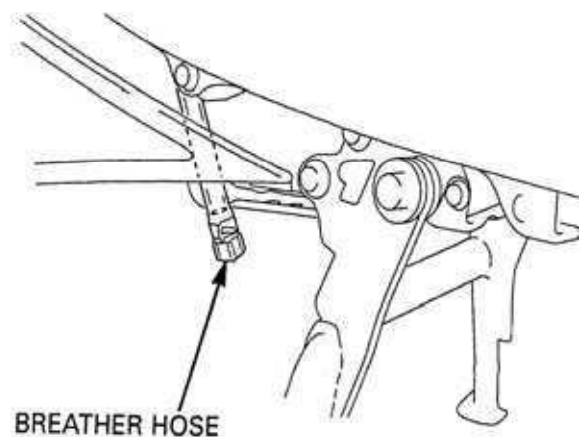


CRANKCASE BREATHER

Remove the crankcase breather tube plug from the tube and drain deposits into a suitable container.

Reinstall the crankcase breather tube plug.

Service more frequently when riding in rain, at full throttle, or after the scooter is washed or overturned. Service if the deposit level can be seen in the transparent section of the drain tube.



SPARK PLUG

REMOVAL

Remove the spark plug maintenance lid (XCITING 500/500 AFI) (page 2-4).
Remove the luggage box (XCITING 250 /250 AFI) (page 2-3)

Disconnect the spark plug cap and clean around the spark plug

* Clean around the spark plug base with compressed air before removing, and be sure that no debris is allowed to enter the combustion chamber.



Spark Plug Cap

3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

Remove the spark plug using a equipped spark plug wrench or an equivalent tool.

Inspect or replace as described in the maintenance schedule.

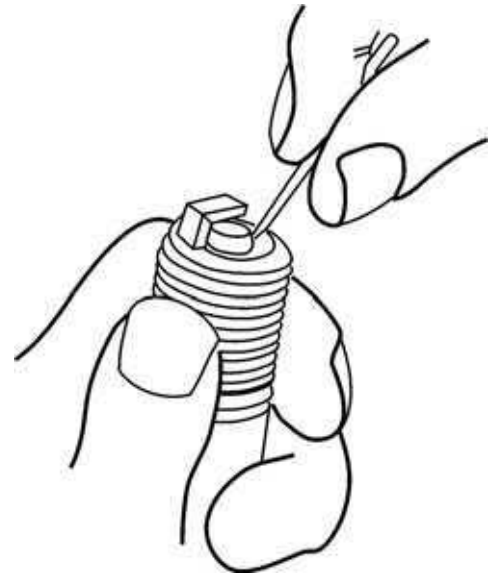


Spark Plug

INSPECTION

Remove the carbon deposits from the spark plug with a small wire brush or a spark plug cleaning machine.

The spark plug should be replaced periodically. Whenever removing the carbon deposits, be sure to observe the operational color of the spark plug's porcelain tip. This color tells you whether or not the standard spark plug is suitable for your type of usage. A normal operating spark plug should be light brown or tan color. If the spark plug is very white or glazed appearing, then it has been operating much too hot. This spark plug should be replaced with the colder plug.

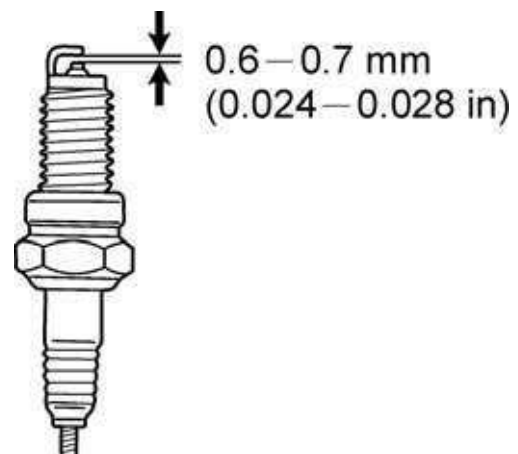


Recommended spark plug:
XCITING 500: NGK: CR8E
XCITING 500 AFI: NGK: CR7E
XCITING 250 : NGK: DPR7EA-9
XCITING 300 AFI: NGK: DPR6EA-9

Measure the spark plug gap between the center and side electrodes with the feeler gauge.

If necessary, adjust the gap by bending the side electrode carefully.

Spark plug gap:
0.6–0.7 mm (0.024–0.028 in)



Install the spark plug in the cylinder head and hand tighten, then torque to the specification.

Torque: 12 N•m (1.2kgf•m, 9 lbf•ft)

Install the spark plug cap.

Install the removed parts in the reverse order of removal.

3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

VALVE CLEARANCE

* Inspect and adjust the valve clearance while the engine is cold (Below 35°C/95°F).

To adjust (XCITING 500/500 AFI):

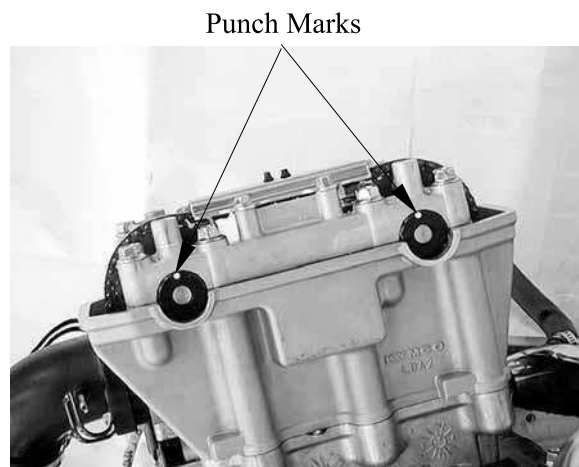
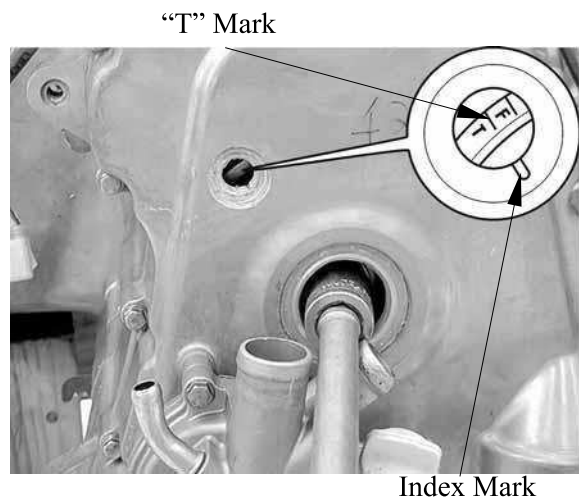
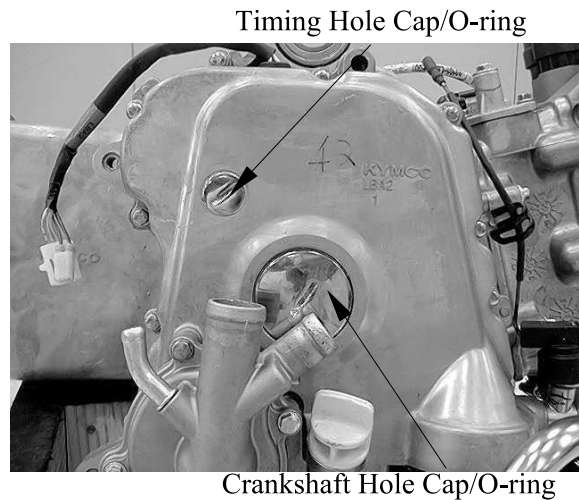
Remove the floorboard (page 2-6).
Remove the cylinder head cover (page 9-7).

Remove the timing hole cap and O-ring.
Remove the crankshaft hole cap and O-ring.

Turn the crankshaft clockwise and align the "T" mark on the flywheel with the index mark on the right crankcase cover.

The punch marks on the camshaft should face upward as shown.

If the punch marks on the camshaft are facing downward, turn the crankshaft clockwise one full turn (360°) and the punch marks are facing upward.



3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

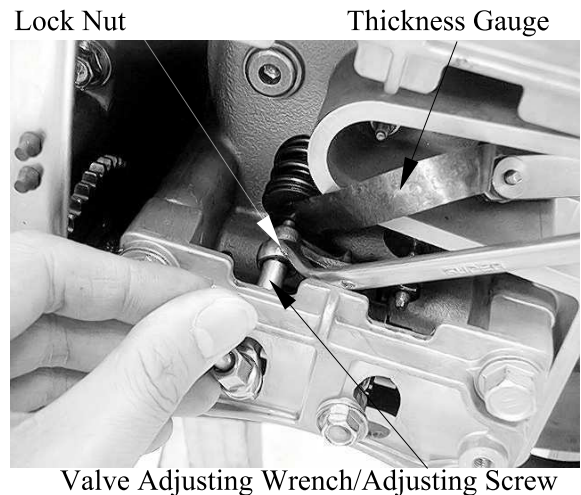
Adjust by loosening the valve adjusting screw lock-nut and turning the adjusting screw until there is a slight drag on the thickness gauge.

Valve clearance (when cold):

IN.: 0.1 mm (0.004 in)

EX.: 0.1 mm (0.004 in)

Apply oil to the valve adjusting screw lock-nut threads and seating surface.
Hold the adjusting screw and tighten the lock nut.



Special tool:

Valve adjusting wrench A120E00036

Torque: 9N•m (0.9 kgf•m, 6 lbf•ft)

After tightening the lock nut, recheck the valve clearance.

Install the removed parts in the reverse order of removal.

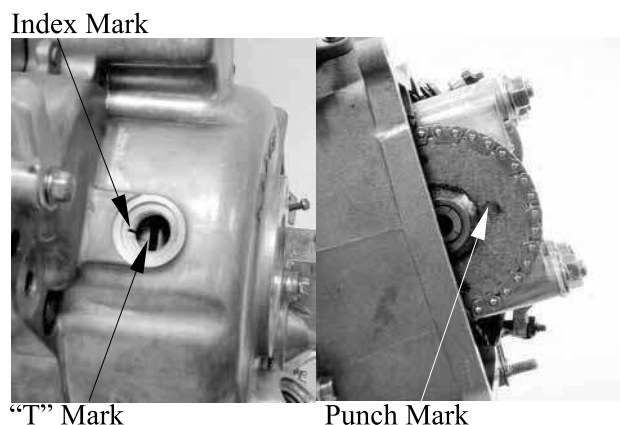
To adjust (XCITING 250/250 AFI):

Remove the floorboard (page 2-6).
Remove the cylinder head cover (page 9-8).

Remove the timing hole cap and O-ring.
Remove the crankshaft hole cap and O-ring.

Turn the crankshaft clockwise and align the "T" mark on the flywheel with the index mark on the right crankcase cover.

If the punch marks on the camshaft are facing downward, turn the crankshaft clockwise one full turn (360°) and the punch marks are facing upward.



3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

Adjust by loosening the valve adjusting screw lock-nut and turning the adjusting screw until there is a slight drag on the thickness gauge.

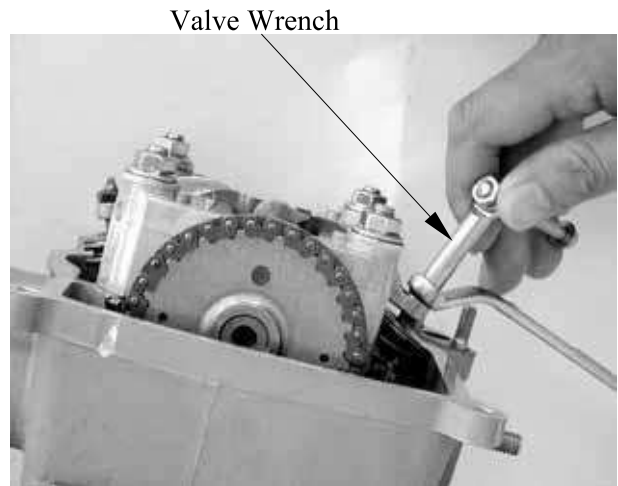
Valve clearance (when cold):

IN.: 0.1 mm (0.004 in)

EX.: 0.1 mm (0.004 in)

Apply oil to the valve adjusting screw lock-nut threads and seating surface.

Hold the adjusting screw and tighten the lock nut.



Special tool:

Valve adjusting wrench E012

Torque: 9 N•m (0.9 kgf•m, 6 lbf•ft)

After tightening the lock nut, recheck the valve clearance.

Install the removed parts in the reverse order of removal.

ENGINE OIL

OIL LEVEL INSPECTION

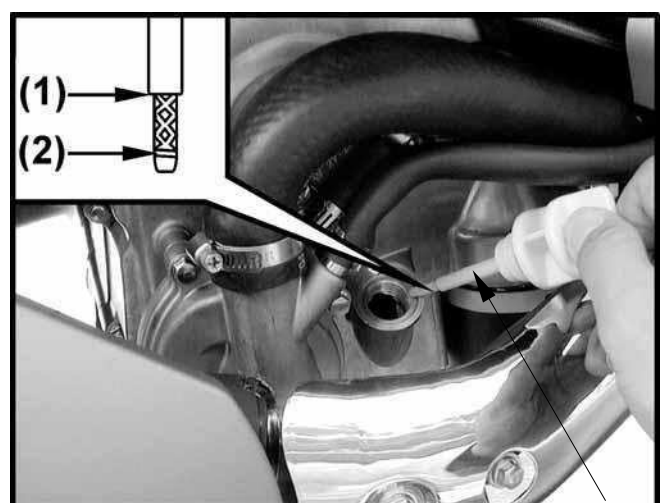
Start the engine and let it idle for 2–3 minutes.

Turn off the engine and support the scooter level surface.

Remove the oil filler cap/dipstick and wipe the oil from the dipstick with a clean cloth.

Insert the dipstick into the oil filler hole without screwing it in.

If the oil level is below or near the lower level line (1) on the dipstick, add the recommended engine oil until the oil level is to the upper level line (2)



Oil Filler Cap/Dipstick

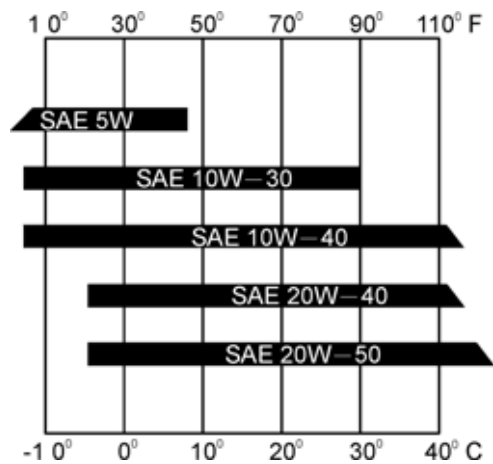
3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

Recommended engine oil:

KYMCO 4-stroke oil or equivalent motor oil API service classification: SJ

Viscosity: SAE 5W50

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



Reinstall the filler cap/dipstick.

ENGINE OIL & STARINER SCREEN

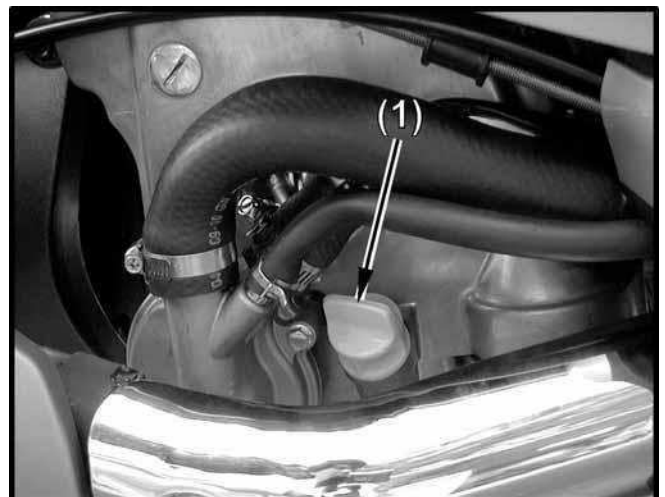
When running in very dusty conditions, oil changes should be performed more frequently than specified in the maintenance schedule.

Please dispose of used engine oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local recycling center or service station for reclamation. Do not throw it in the trash or pour it on the ground or down a drain.

Used engine oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely unless you handle used oil on a daily basis, it is still advisable to thoroughly wash your hands with soap and water as soon as possible after handling used oil.

Change the engine oil with the engine at normal operating temperature and the scooter on its center stand to assure complete and rapid draining.

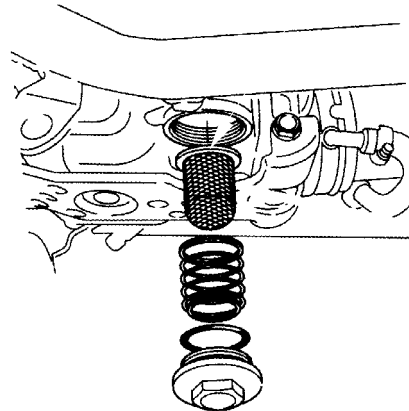
Remove the oil filler cap/dipstick (1) from the right crankcase cover.



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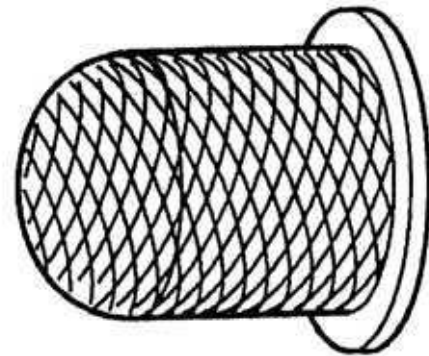
Place a drain pan under the crankcase and remove the oil strainer cap.

The setting spring and oil strainer screen will come out when the oil strainer cap is removed.



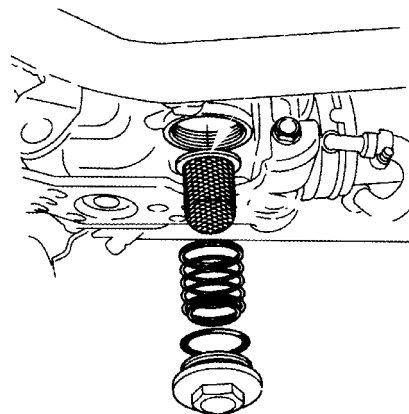
Clean the oil strainer screen.

After draining the oil completely, install the strainer screen and setting spring into the engine.



Apply clean engine oil to the strainer cap threads, flange surface and a new O-ring. Install and tighten the strainer cap with a new O-ring.

Torque: 15N•m (1.5 kgf•m, 11 lbf•ft)



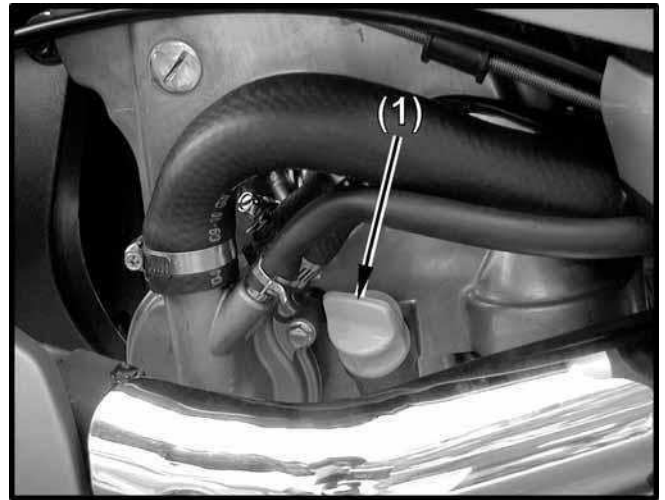
3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

Fill the crankcase with the recommended engine oil.

Oil capacity (XCITING 500/500 AFI):
2.0 liter (2.1 US qt, 1.8 Imp qt) at draining
2.1 liter (2.2 US qt, 1.9 Imp qt)
at oil filter cartridge change

Oil capacity (XCITING 250/300 AFI):
0.9 liter (0.95 US qt, 0.8 Imp qt)
at draining

Install the oil filler cap/dipstick (1).
 Check the engine oil level (page 3-14).
 Make sure there are no oil leaks

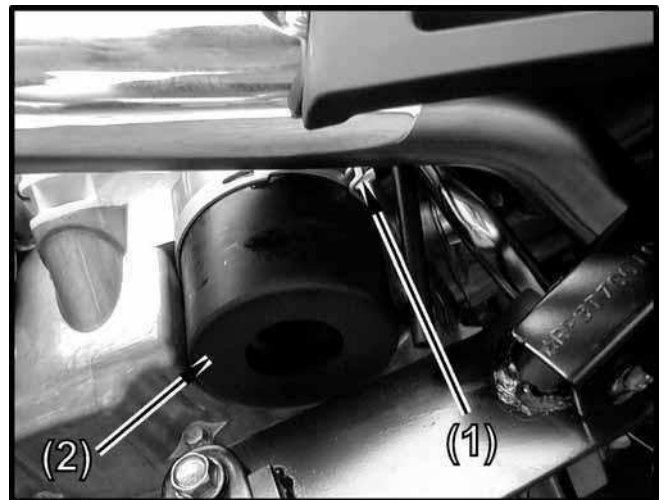


ENGINE OIL FILTER CARTRIDGE (XCITING 500/500 AFI)

REPLACEMENT

Drain the engine oil (page 3-15).

Remove the rubber sleeve (2) by removing the clip (1).



Remove and discard the oil filter cartridge (3) using the special tool.

Tool:
Oil filter wrench: A120E00052



3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

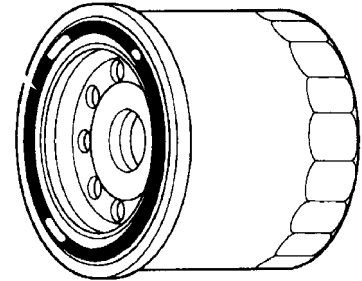
Apply clean engine oil to the new oil filter cartridge threads, flange surface and a new O-ring.

Install the new oil filter cartridge and tighten it to the specified torque.

Tool:

Oil filter cartridge wrench E052

Torque: 10N•m (1 kgf•m, 7 lbf•ft)



Refill the engine oil (page 3-15)

ENGINE IDLE SPEED

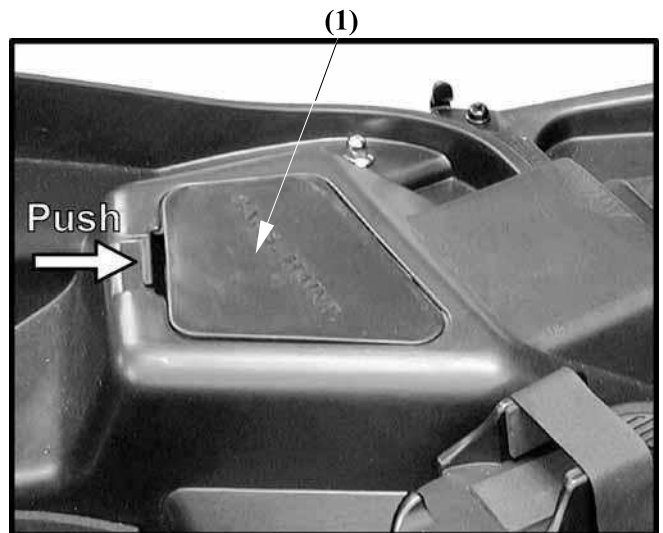
- ◆ Inspect and adjust the idle speed after all other engine maintenance items have been performed and are within specification.
- ◆ The engine must be warm for accurate idle speed inspection and adjustment.

Warm up the engine.

Place the scooter on its center stand.

Unlock the seat with the ignition key.

Open the seat and remove carburetor cover (1).



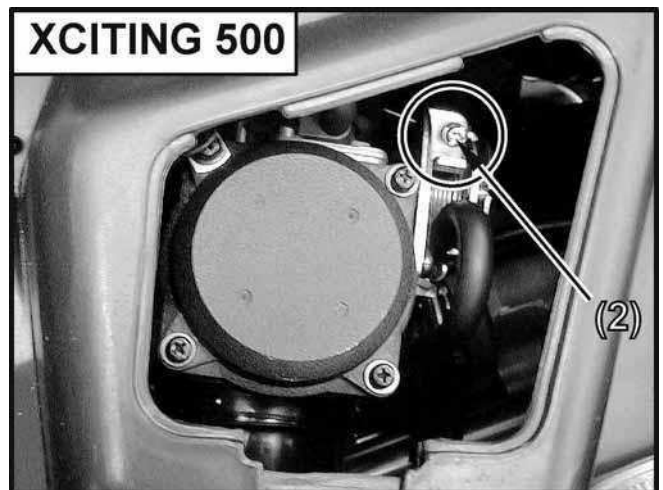
Turn the throttle stop screw (2) as required to obtain the specified idle speed.

Idle speed (XCITING 500/500 AFI):

1400±100 rpm

*** XCITING 500 AFI**

- The idle speed is not necessary to adjust.
- Do not loosen or tighten the painted bolts and screws of the throttle body. Loosening or tightening them can cause throttle and idle valve synchronization failure.

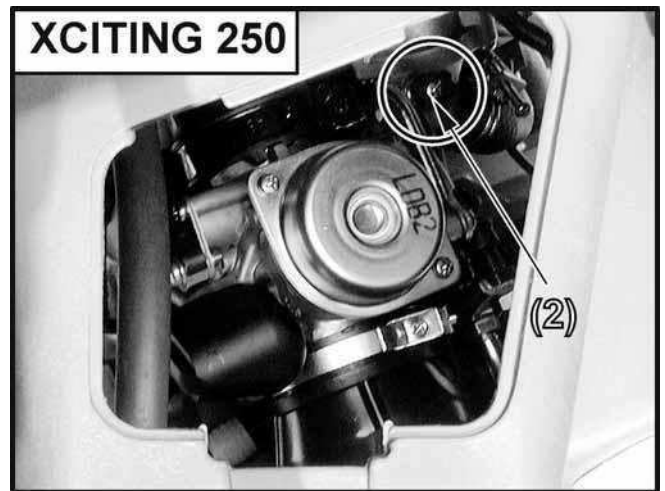


3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

Idle speed (XCITING 250/300 AFI):
1600±100 rpm

* **XCITING 300 AFI**

- The idle speed is not necessary to adjust.
- Do not loosen or tighten the painted bolts and screws of the throttle body. Loosening or tightening them can cause throttle and idle valve synchronization failure.



RADIATOR COOLANT

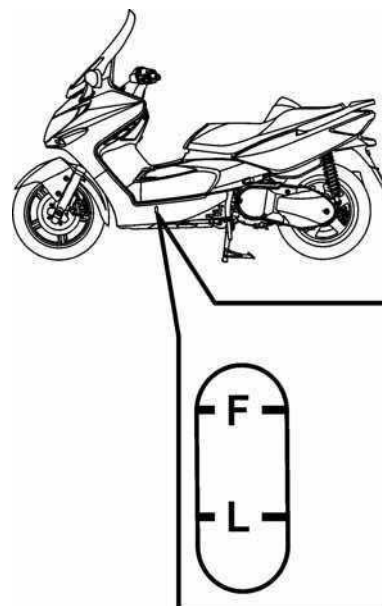
Place the scooter on its center stand.

Check the coolant level through the inspection window at the left floor skirt while the engine is at the normal operating temperature.

The level should be between the “F” and “L” level surface.

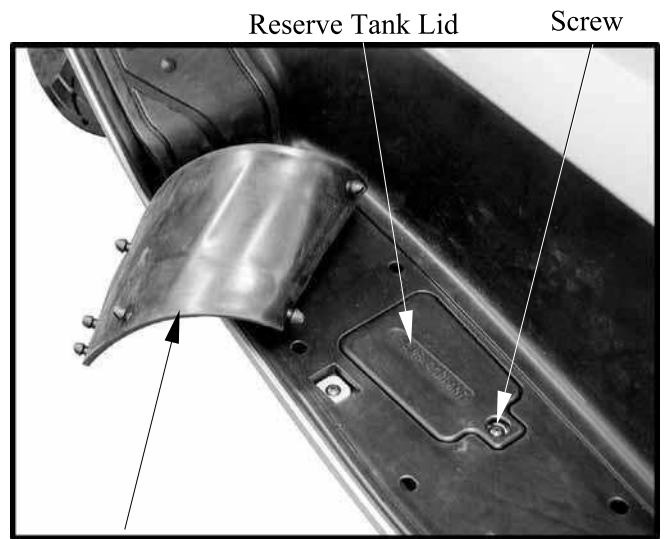
If the level is low, remove the reserve tank cap and fill the tank to the “F” level line with 1:1 mixture of distilled water and antifreeze (coolant mixture preparation: page 7-7)

- * 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.



3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

Remove the left floor mat and remove screw and reserve tank lid.



Left Floor Mat

Remove reserve tank cap.

Check to see if there are any coolant leaks when the coolant level decrease very rapidly. If reserve tank becomes completely empty, there is a possibility of air getting into the cooling system.

Be sure to remove all air from the cooling system (page 7-8).

Reinstall the filler cap.



Reserve Tank Cap

COOLING SYSTEM

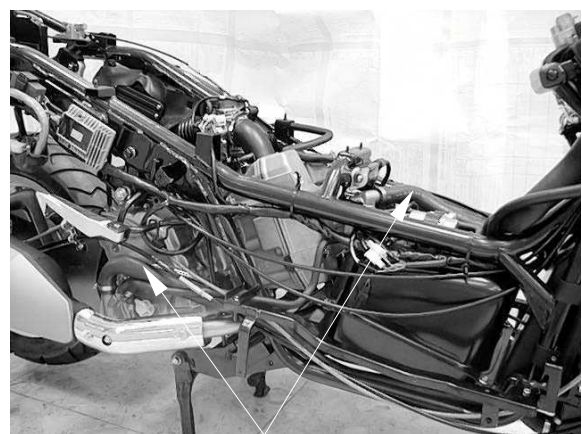
Remove the floorboard (page 2-6).

Check for any coolant leakage from the water pump, radiator hoses and hose joints.

Check the radiator hoses for cracks or deterioration and replace if necessary.

Check that all hose clamps are tight.

Remove the front lower cover (page 2-15).



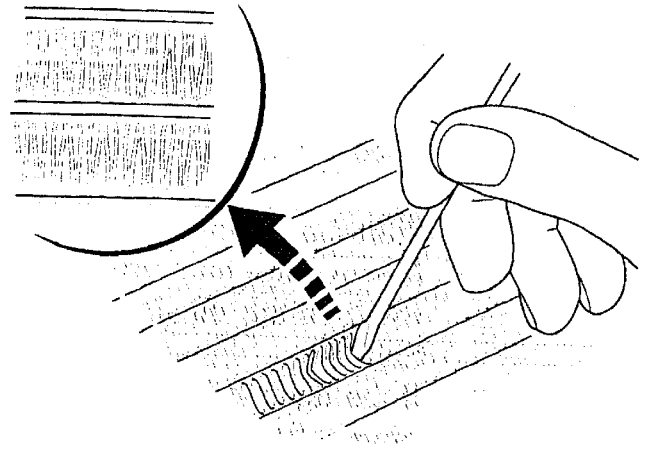
Radiator Hose

3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

Check the radiator air passages for clogs or damage.

Straighten any bent fins, and remove insects, mud or other obstructions with compressed air or low water pressure.

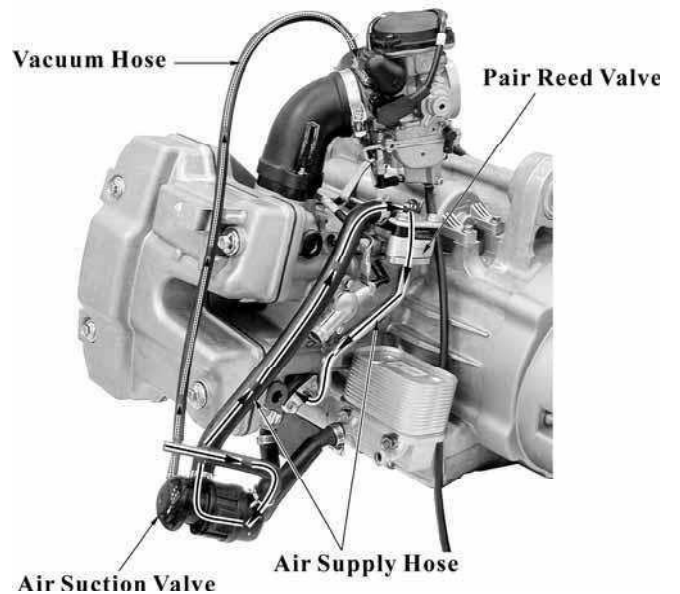
Replace the radiator if the air flow is restricted over more than 20% of the radiating surface.



SECONDARY AIR SUPPLY SYSTEM

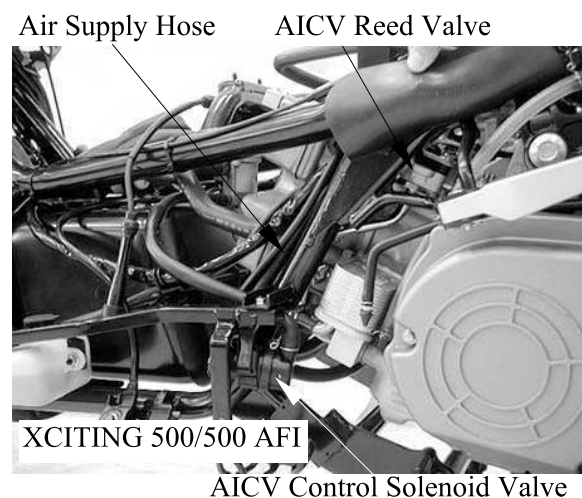
This model is equipped with a built-in secondary air supply system.

The secondary air supply system introduces filtered air into exhaust gases in the exhaust port. The secondary air is drawn into the exhaust port whenever there is negative pressure pulse in the exhaust system. This charged secondary air promotes burning of the unburned exhaust gases and changes a considerable amount of hydrocarbons and carbon monoxide into relatively harmless carbon dioxide and water.



Check the AICV (air injection control valve) hoses between the AICV control solenoid valve and cylinder head cover for deterioration, damage or loose connections. Make sure the hoses are not cracked.

If the hoses show any signs of heat damage, inspect the AICV check valve in the AICV reed valve cover damage.



3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

Air Supply Hose

AICV Reed Valve

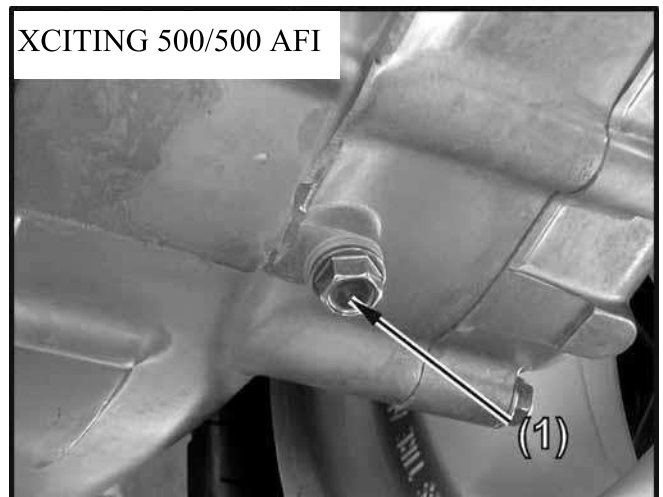


AICV Control Solenoid Valve

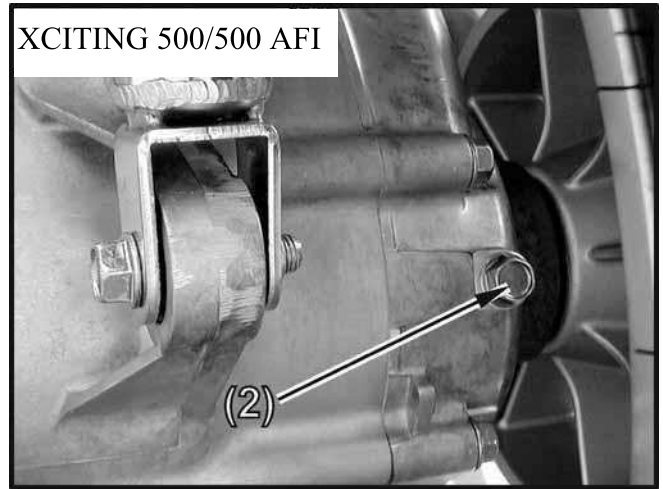
TRANSMISSION OIL OIL CHANGE

Place the scooter in its center stand.
 Remove the transmission oil drain bolt (1) and the transmission oil filler bolt (2), slowly turn the rear wheel and drain the oil.
 After draining the oil completely, install the oil drain bolt with a new sealing washer and tighten it.

Torque: 20 N•m (2 kgf•m, 15 lbf•ft)



3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI



Fill the transmission case with recommended oil.

Recommended transmission oil: SAE 90

Oil capacity (at draining):

XCITING 500/500 AFI:

0.45 liter (0.48 US qt, 0.4 Imp qt)

XCITING 250/300 AFI:

0.18 liter (0.19 US qt, 0.16 Imp qt)

Install the transmission oil filler bolt with a new sealing washer and tighten it.

Torque: 20 N•m (2 kgf•m, 15 lbf•ft)

3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

BRAKE FLUID

- * **Do not mix different type of fluid, as they are not compatible with each other.**
- ♦ Do not allow foreign material to enter the system when filling the reservoir.
 - ♦ Avoid spilling fluid on painted, plastic or rubber parts. Place a rag over these parts whenever the system is serviced.

When the fluid level is low, check the brake pads for wear. A low fluid level may be due to wear of the brake pads. If the brake pads are worn, the caliper piston is pushed out, and this accounts for a low reservoir level. If the brake pads are not worn and the fluid level is low, check the entire system for leaks.

FRONT BRAKE

Turn the handlebar so the reservoir is level and check the front brake fluid reservoir level.

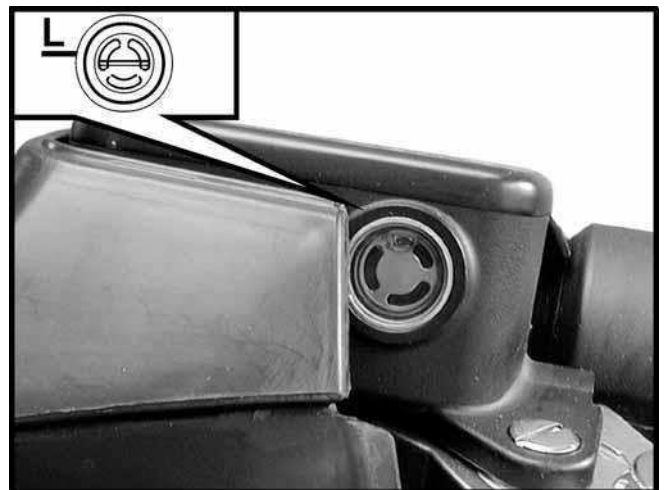
If the level is near the lower level line “L”, check brake pad wear.

REAR BRAKE

Place the scooter on a level surface and support it in an upright position.

Check the rear brake fluid reservoir level.

If the level is near the lower level line “L”, check brake pad wear.



3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

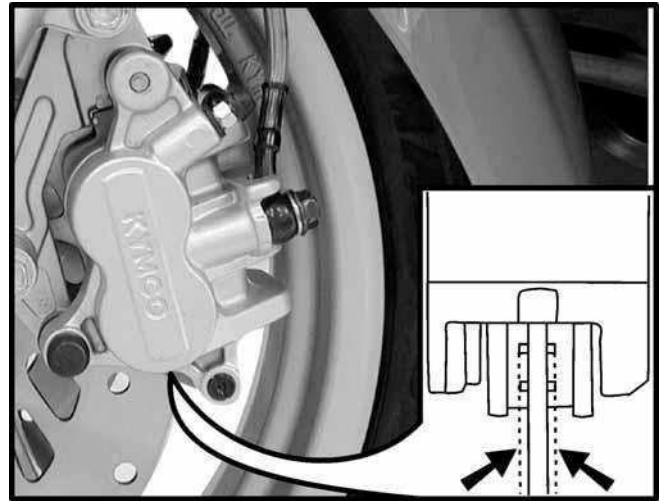
BRAKE PAD WEAR

Brake pad wear depends upon the severity of usage, the type of riding, and road conditions. (Generally, the pads will wear faster on wet and dirty roads.) Inspect the pads at each regular maintenance interval.

FRONT RIGHT/LEFT BRAKE

Check the cutout in each pad.

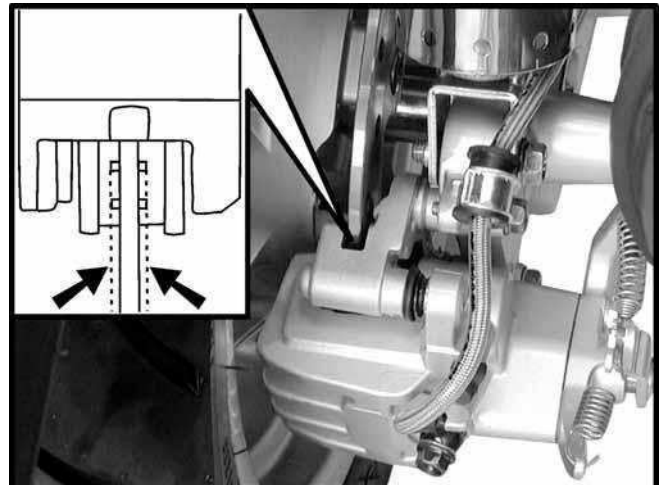
If either pad is worn to the cutout, replace both pads as a set.



REAR BRAKE

Check the cutout in each pad.

If either pad is worn to the cutout, replace both pads as a set.



BRAKE SYSTEM

INSPECTION

This model equipped with a linked brake system.

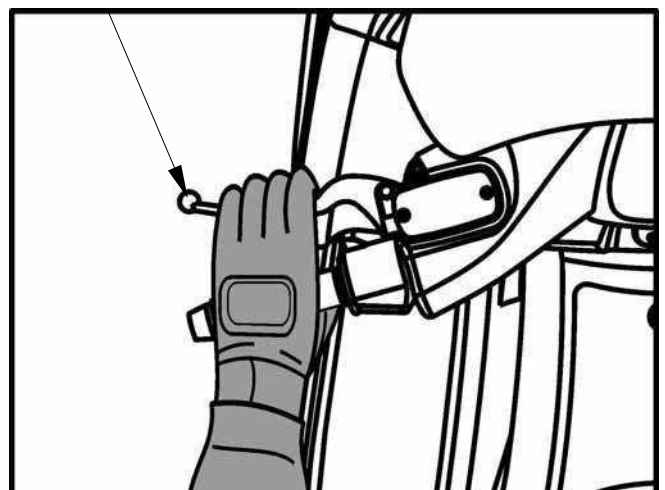
Check the rear brake operation as follows:

Place the scooter on its center stand.

Jack-up the scooter to raise the front wheel off the ground.

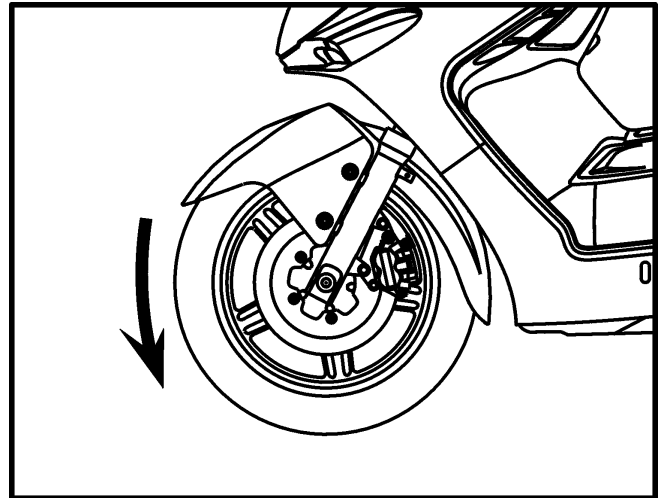
* Do not use the oil filter as a jack point.

Rear Brake Lever

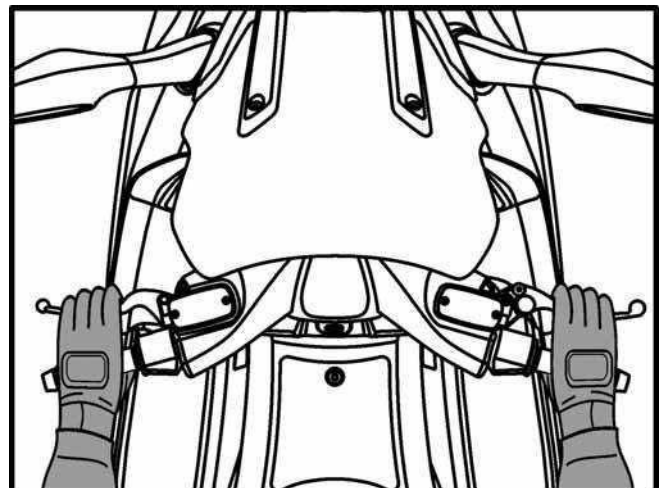


3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

Operate the rear brake lever.
 Make sure the front wheel does not turn while the rear brake lever is operated.



Firmly apply the brake lever and check that no air has entered the system.
 If the lever feels soft or spongy when operated, bleed the air from the system.



Inspect the brake hose and fittings for deterioration, cracks and signs of leakage.
 Tighten any loose fittings.
 Replace hoses and fittings as required.

BRAKE LOCK OPERATION (XCITING 500/500 AFI)

INSPECTION

Stop the engine and put the scooter on its center stand on level ground.

Pull up the parking brake lever slowly and check the parking brake lever stroke.

Parking brake lever stroke: 3 — 6 notches

If out of specification, adjust the parking brake lever.



3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

ADJUSTMENT

Place the scooter on its center stand.
Release the parking brake lever lock.
Pull up the parking brake lever until 1 notch.

Loosen the lock nut.
Turn the adjust bolt until you feel resistance when turn the rear wheel by your hand.
Hold the adjust bolt and tighten the lock nut securely.



Lock Nut

Adjust Bolt

Release the parking brake lever.
Make sure the rear wheel turns smoothly.

Pull the parking brake lever slowly and check the lever stroke.

Standard: 3 – 6 notches

All stroke: 9 notches

If there is out of specification, adjust again.

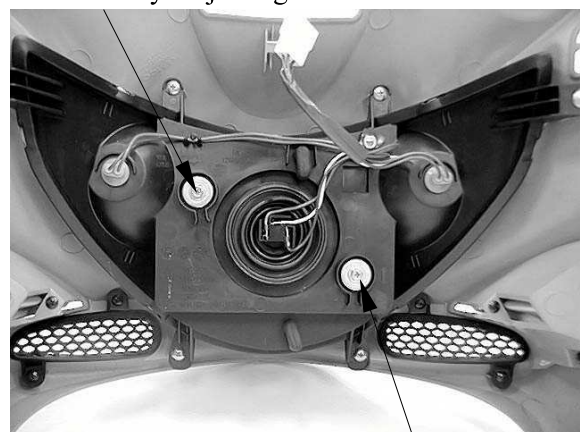
HEADLIGHT AIM

Place the scooter on a level surface.

Adjust the headlight beam vertically by turning the vertical beam adjuster.
A clockwise rotation moves the beam up and counterclockwise rotation moves the beam down.

Adjust the headlight beam horizontally by turning the horizontal beam adjuster.
A clockwise rotation moves the beam toward the right side of the rider.

Horizontally Adjusting Screw



Vertically Adjusting Screw

* Adjust the headlight beam as specified by local laws and regulations.

3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

SIDE STAND

Support the scooter on a level surface.

Check the side stand spring for fatigue or damage.

Check the side stand assembly for smooth movement and lubricate the side stand pivot if necessary.

Check the side stand ignition cut-off system:

- ✓ Start the engine.
- ✓ Fully lower the side stand while running the engine.
- ✓ The engine should stop as the side stand is lowered.

If there is a problem with the system, check the side stand switch (page 21-15).



SUSPENSION

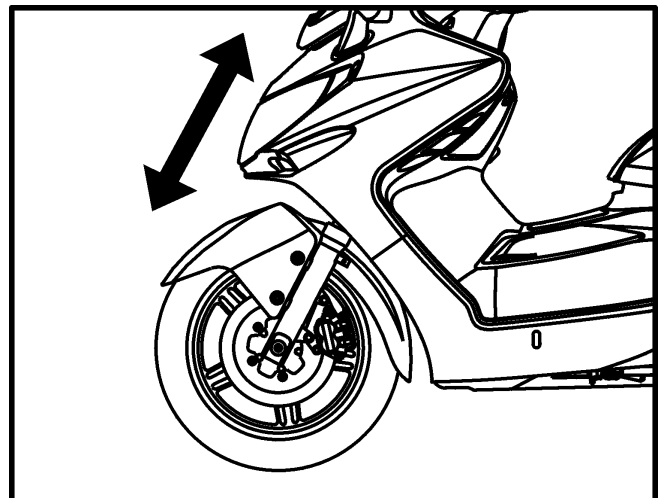
FRONT SUSPENSION INSPECTION

Check the action of the forks by operating the front brakes and compressing the front suspension several times.

Check the entire assembly for signs of leaks, damage or loose fasteners.

Replace damaged components which cannot be repaired.

Tighten all nuts and bolts.



3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

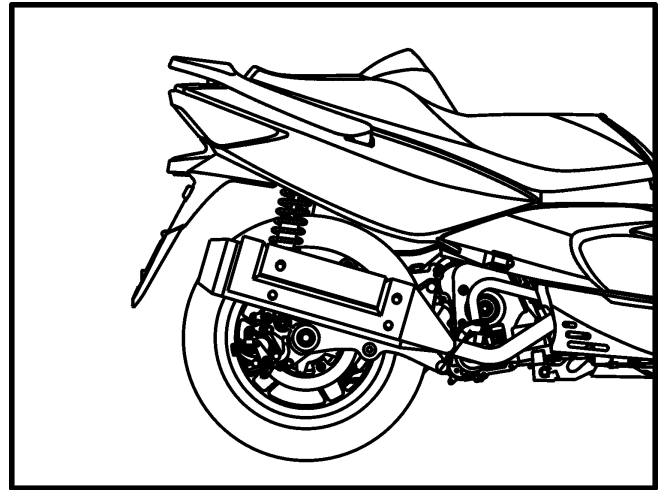
REAR SUSPENSION INSPECTION

Check the action of the shock absorber by compressing it several times.

Check the entire shock absorber assembly for signs of leaks, damage or loose fasteners.

Replace damaged components which cannot be repaired.

Tighten all nuts and bolts.



NUTS, BOLTS, FASTENERS

Check that all chassis nuts and bolts are tightened to their correct torque values (page 1-9).

Check that all safety clips, hose clamps and cable stays are in place and properly secured.

WHEELS/TIRES

Tire pressure should be checked when the tires are cold.

Recommended tire pressure:

	Solo riding	Two-up riding
Front	200 kpa (2 kgf/cm ² , 29 psi)	225 kpa (2.25 kgf/cm ² , 32 psi)
Rear	250 kpa (2.5 kgf/cm ² , 36 psi)	250 kpa (2.5 kgf/cm ² , 36 psi)

3. INSPECTION/ADJUSTMENT XCITING 500/500 AFI/250/300 AFI

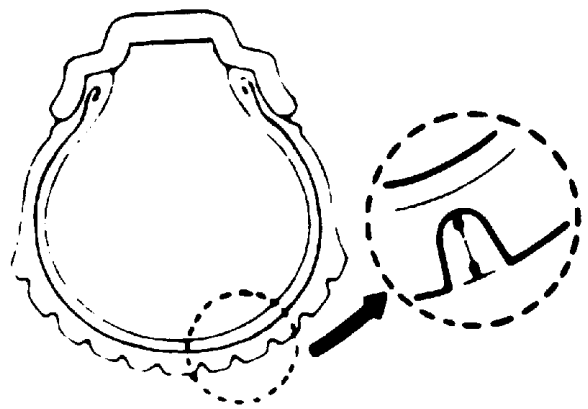
Recommended tire size:

	Front	Rear
Size	120/70-15	150/70-14
Type	TUBELESS	TUBELESS

Check the tires for cuts, embedded nails, or other damage.
 Check the front and rear wheels for trueness.

Measure the tread depth at the center of the tires.
 Replace the tires when the tread depth reaches the following limits.

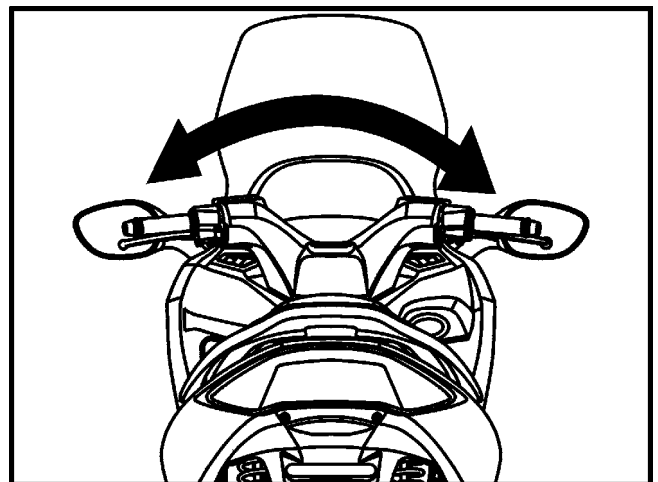
Minimum tread depth:
Front: 1.6 mm (0.06 in)
Rear: 2.0 mm (0.08 in)



STEERING HEAD BEARINGS

Check that the control cables do not interfere with handlebar rotation.

Support the scooter securely and raise the front wheel off the ground.
 Check that the handlebar moves freely from side to side.
 If the handlebar moves unevenly, binds, or has vertical movement, inspect the steering head bearings.



LUBRICATION SYSTEM

LUBRICATION SYSTEM DIAGRAM -----	4- 1
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OIL PRESSURE RELIEF VALVE (XCITING 500/500 AFI) -----	4- 6
OIL PUMP-----	4- 7
OIL COOLER (XCITING 500/500 AFI)-----	4-12