

2.Periodic Maintenance

This chapter covers the periodic maintenance for the KYMCO Downtown 350i.

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WARNING:

- Before running the engine, make sure that the working area is well ventilated. Never run the engine in a closed area. The exhaust contains poisonous carbon monoxide gas, which may cause death to people.
- Gasoline is extremely flammable and is explosive under some conditions. The working area must be well ventilated and do not smoke or allow flames or sparks near the working area or fuel storage area.

Maintenance Schedule

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

Maintenance schedule legend

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

C: CLEAN

R: REPLACE

A: ADJUST

L: LUBRICATE

The maintenance schedule specifies the maintenance required to keep your DOWNTOWN 350i scooter in peak operating condition. Maintenance work should be performed in accordance with KYMCO standards and specifications by properly trained and equipped technicians. Your KYMCO dealer meets all of these requirements.

* Should be serviced by your KYMCO dealer, unless you have the proper tools, service data and are technically qualified.

** In the interest of safety, we recommend these items be serviced only by your KYMCO dealer. KYMCO recommends that your KYMCO dealer road test your scooter after each periodic maintenance service is completed.

FREQUENCY	WHICHEVER COMES FIRST	ODOMETER READING						
		X 1000 km	1	5	10	15	20	25
ITEM	X 1000 mi	0.6	3	6	9	12	15	18
	MONTH	1	6	12	18	24	30	36
* Air Filter Servicing			R	R	R	R	R	R
Spark Plug			I	R	I	R	I	R
* Throttle Free Play			I	I	I	I	I	I
* Valve Clearance			I	A	I	A	I	A
* Hose Inspection				I		I		I
Hose Inspection			C	C	C	C	C	C
* Engine Oil			R	R	R	R	R	R
* Engine Oil				C	R	C	R	C
* Engine Oil			R	R	R	R	R	R
* Fuel Injection Diagnostic Tool					I		I	
* Final Drive Oil			R	R	R	R	R	R
* CVT Removal				I	I	I	I	I
* CVT Removal					I		I	
* DRIVE BELT				I	I	I	R	I
Brake Fluid				I	R	I	R	I
Brake Pad Replacement				I	I	I	I	I
Brakes				I	I	I	I	I
* Switches				I	I	I	I	I
Steering				I	I	I	I	I
* Lights				I	I	I	I	I
* Torque Specifications				I	I	I	I	I
** Wheels/Tires				I	I	I	I	I
Coolant Level Check				I	R	I	R	I

Air Filter Servicing

SAFETY FIRST: Protective gloves and eyewear are recommended at this point.

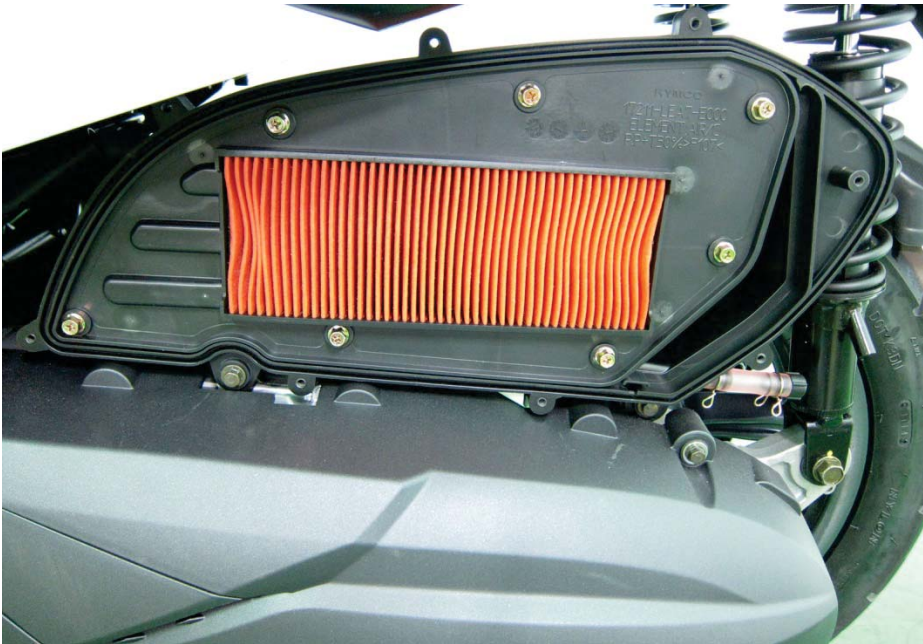
Replace the air filter according to the [Maintenance Schedule](#), and more often in exceptionally rainy or dusty areas.

Removal

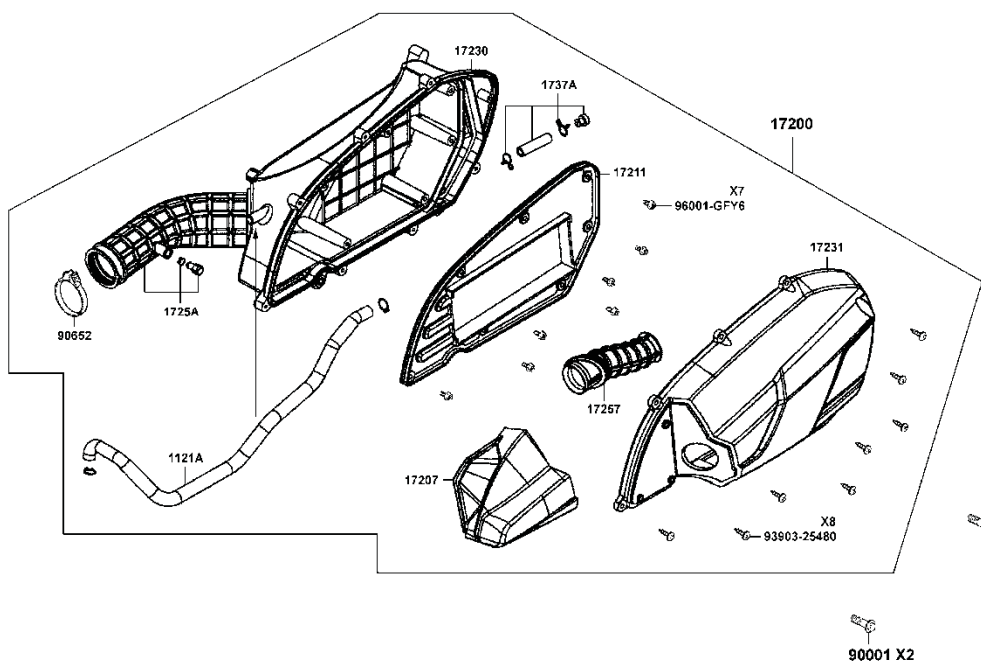


Remove the 8 air filter cover screws with a #2 Phillips screwdriver.

Remove the air filter cover.



Remove the 7 air filter bolts with an 8 mm socket or a #2 Phillips screwdriver.



Remove the air filter from the airbox. Discard the air filter in favor of a new item.

Caution:

- The air cleaner element has a viscous type paper element. Do not clean it with compressed air.
- Be sure to install the air cleaner element and cover securely.

Brake Fluid

The KYMCO Downtown 350i uses DOT 4 brake fluid that should be inspected after 3,000 mi (5,000 km) of use. It should be flushed and bled every 12 months, 6,000 mi (10,000 km), whenever the brakes feel spongy, or if the brake system has been taken apart and rebuilt. Always use fresh brake fluid from a tightly sealed container.

SAFETY FIRST: Protective gloves and eyewear are recommended at this point.

Warning: Brake fluid is very caustic and can damage paint, chrome and plastic. Wipe up any spills immediately.

Inspection



Turn the handlebars until the top of the master cylinder reservoir is level with the ground. Do this for both master cylinder reservoirs and check the level of brake fluid.

Draining

The brake bleeding process is the same for the front and rear brakes.



Remove the two master cylinder cover screws with a #2 Phillips head screwdriver.



Remove the cylinder cover.



Remove the master cylinder cover, plastic piece and rubber diaphragm. Clean and inspect the rubber diaphragm for tears or other damage. Replace as necessary.



Pull off the rubber cap over the bleeder valve and crack open the bleeder valve on the brake caliper using an 8 mm wrench. This valve is usually very tight so use a box end wrench or a 6 point socket and ratchet to prevent rounding off the head. Snug the bleeder valve back down.



Open the valve and remove the old brake fluid with a Mighty -Vac or a similar device.

Bleeding



Place a length of 6 mm inside diameter clear hose on the bleeder valve and place the other end in a suitable container. A spare battery vent hose works well for this job.



Fill the brake fluid with the proper type from a fresh, newly opened container.



Pump the brake lever several times and hold the lever in. While holding the lever in, crack open the bleeder valve. The front brake lever will travel all the way to the grip and brake fluid and/or air will come out of the bleeder valve into the 6 mm hose. Tighten the bleeder valve before releasing the front brake lever. Pump the lever several times again and repeat the process.

Be certain to check the master cylinder reservoir occasionally to make sure the reservoir doesn't run dry. Add more brake fluid as necessary. Continue this process until clean brake fluid comes out of the bleeder valve and there are no air bubbles. The brake lever should feel firm.

Tighten the bleeder valve to specification and push its rubber cover over the nipple.

(Air Bleeder Valve Torque: 7.5 N-m or 5.5 lb-ft)



Make sure the reservoir has the proper amount of fluid.



Place the rubber diaphragm, plastic piece and cover over the reservoir.



Thread in the reservoir cover screws and tighten them securely with a #2 Phillips screwdriver.

Check the function of the brakes before operating the machine.

Brake Inspection

SAFETY FIRST: Protective gloves and eyewear are recommended at this point.

Brake Lever Adjuster



There is adjuster on each brake lever. Each adjuster has four positions so that the released lever position can be adjusted to suit the rider's hands. To adjust the distance of the lever from the handlebar grip, push the lever forward and turn the adjuster knob to align the number with the arrow mark on the lever holder.

Brake lever adjusters

There is adjuster on each brake lever. Each adjuster has four positions so that the released lever position can be adjusted to suit the rider's hands.

To adjust the distance of the lever from the handlebar grip, push the lever ① forward and turn the adjuster knob ② to align the number with the arrow mark ③ on the lever holder.



■ **NOTE:** The distance from the grip to the released lever is at its closest at number 4 and the furthest away at number 1.



Brake Fluid

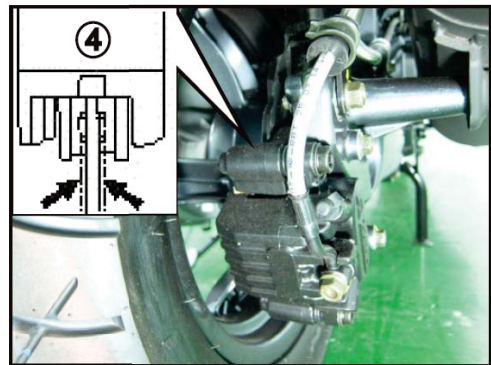
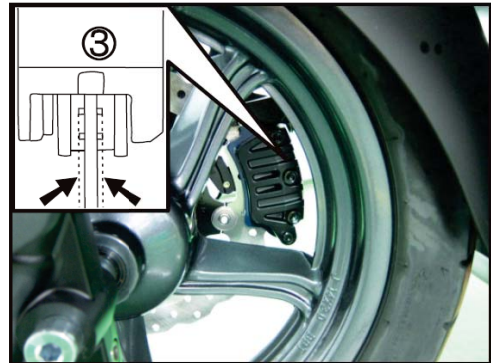
Brake Pad Wear

WARNING

For appropriate brake action, make sure the groove of the adjusting nut is aligned with the pin in the brake arm.

Inspect the brake pad and shoe thickness to verify there is enough material for the brakes to function properly.

1. If the wear indicator grooves in the front brake pads are no longer visible  , it is an indication that the brake pads are worn and require replacement.
2. If the wear indicator grooves in the rear brake pads are no longer visible  , it is an indication that the brake pads are worn and require replacement.



WARNING

The brakes will wear quickly if the lever is continually applied during riding (dragging the brake).
Consult your KYMCO dealer for braking system service.

Replace the pads if the brake wear exceeds the wear indicator lines or if the wear is uneven.

Note: Keep grease and oil off the brake discs to avoid brake failure.

Engine Compression Test

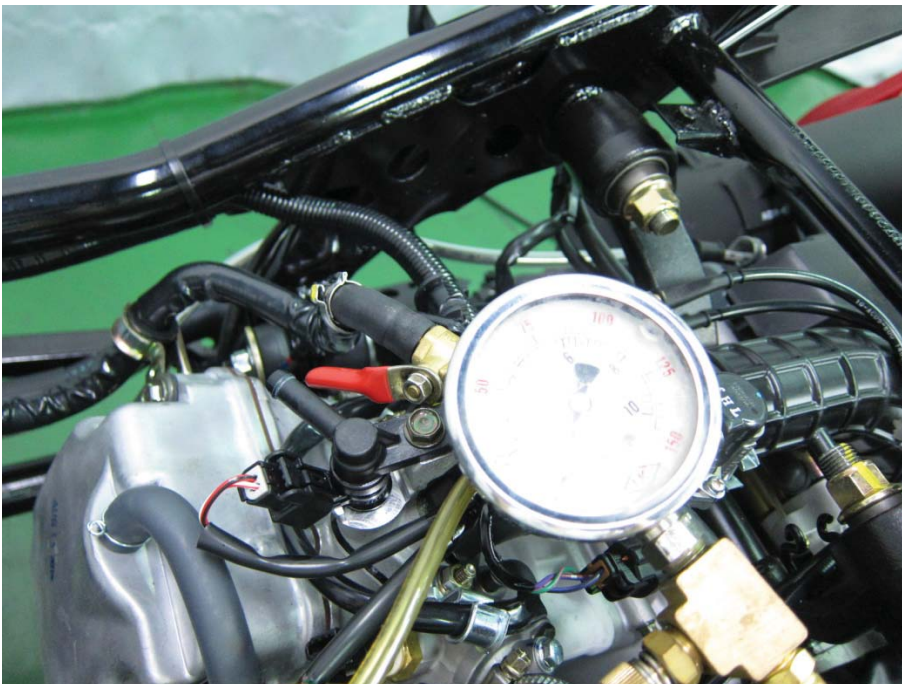
SAFETY FIRST: Protective gloves and eyewear are recommended at this point.

Remove the seat. See the [Seat](#) topic for more information.

Remove the luggage box. See the [Luggage Box](#) topic for more information.

Before testing the compression make sure the cylinder head bolts are tightened securely and the valve clearance is specification. See the [Cylinder Head](#) and [Valve Clearance](#) topics for more information.

Remove the spark plug. See the [Spark Plug](#) topic for more information.



Thread a compression tester into the spark plug hole hand tight. Hold the throttle all the way open. Crank the engine with the starter motor until the needle on the gauge stops rising. Do not crank the engine more than a few seconds.

Cylinder compression	$12 \pm 2 \text{ kg/cm}^2$
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Low compression is an indication of excessive engine wear, possibly worn rings or poorly sealing valves, or maybe a tight valve with not enough valve clearance. High compression is possibly an indication of excessive carbon buildup on the piston or performance modifications.

Install the spark plug. See the [Spark Plug](#) topic for more information.

Install the luggage box. See the [Luggage Box](#) topic for more information.

Install the seat. See the [Seat](#) topic for more information.

Coolant Level Check

SAFETY FIRST: Protective gloves and eyewear are recommended at this point.

SAFETY FIRST: Antifreeze is highly toxic and can kill pets and animals if drank. Do not leave coolant where animals (including children!) can get to it.

Inspection

Start the engine and bring it up to operating temperature.
Place the scooter on level ground and up on its center stand.

The coolant reserve tank is under the left floorboard.



Remove the left floorboard.



Remove the engine coolant lid screw with a #2 Phillips. And remove the engine coolant lid.

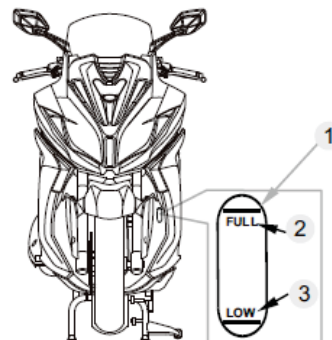
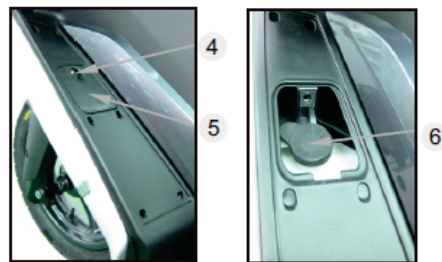


Open the coolant reserve tank lid. Siphon the coolant out of the reserve tank with an appropriate suction device. If a suction device is unavailable remove the reserve tank and pour it out. See the [Radiator](#) topic for more information.

Coolant level inspection

The reserve tank is under left floorboard .Check the coolant level through the inspection window ① at the left side skirt white the engine is at the normal operating temperature , with the scooter In an upright position.

If the coolant level is below the LOWER level mark ③ ,remove the left floor mat ,remove the lid screw ④ ,the reserve tank lid ⑤ ,and then the reserve tank cap ⑥ to add coolant mixture until it reaches the upper level mark ② .



⚠ WARNING

Add coolant to the reserve tank only. Do not attempt to add coolant by removing the radiator cap. Coolant in the radiator is under pressure and is very hot and can cause serious burns.



Remove the engine coolant reserve tank cover.



Open the coolant reserve tank lid.



Add coolant to the tank until it reaches the upper level mark.

Note: Do not add coolant through the radiator cap.

For more information on the engine coolant see the [Coolant](#) topic.

Engine Oil

SAFETY FIRST: Protective gloves and eyewear are recommended at this point.

Caution: Hot engine oil can burn. Avoid letting used motor oil contact exposed skin.

TROUBLESHOOTING

Oil level too low

1. Natural oil consumption
2. Oil leaks
3. Worn or poorly installed piston rings
4. Worn valve guide or seal

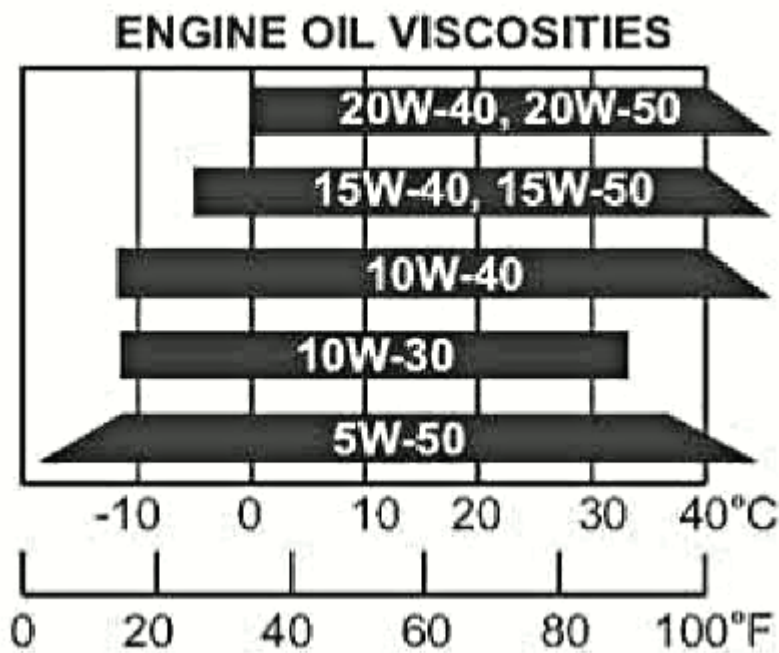
Poor lubrication pressure

1. Oil level too low
2. Clogged filter or oil passages
3. No use the specified oil

Oil Specifications

Use a fully synthetic quality 4-stroke engine oil to ensure longer service life of the scooter. Only use oils that have a SJ rating above per the API service classification.

Engine oil viscosity : SAE 5W-50



If these viscosities are not available, select an alternative engine oil according to the chart shown above.

Engine oil capacity	
At disassembly	1.5 Liter
At change	1.3 Liter

Inspection

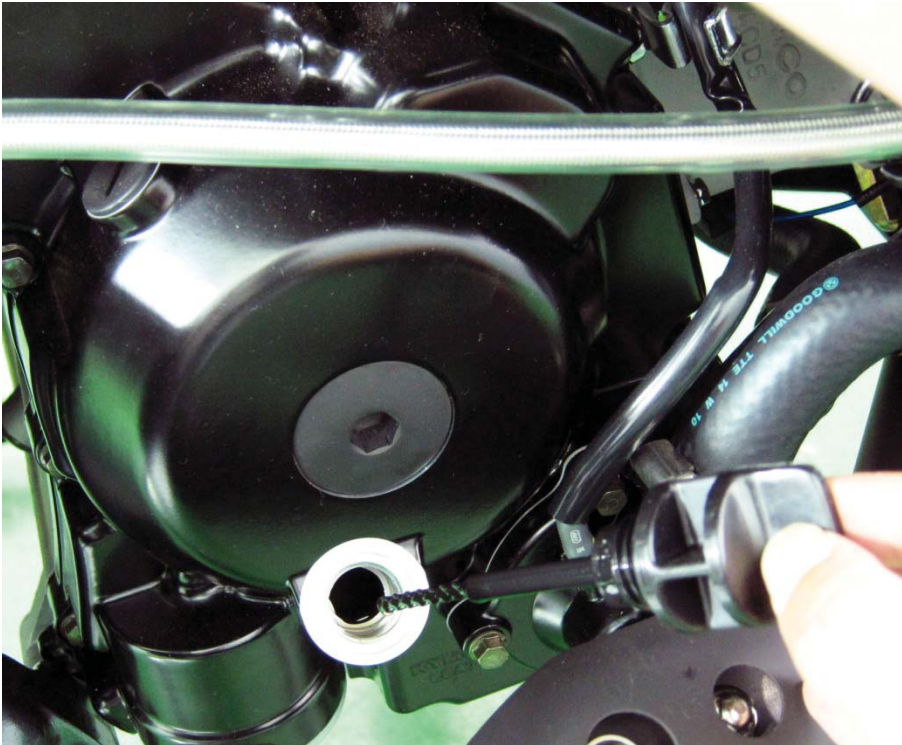
Oil Level

Check the engine oil level each day before operating the scooter.

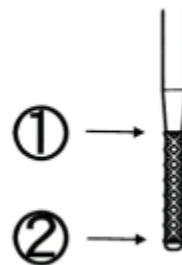
Place the motorcycle upright on level ground for engine oil level check. Run the engine for 2 ~ 3 minutes and check the oil level after the engine is stopped for 2 ~ 3 minutes.



The oil filler cap/dipstick is located on the right side of the engine.



Remove the oil filler cap/dipstick and wipe off the oil. Inspect the O-ring and replace it as needed. Insert the dipstick in without threading it in. Remove the dipstick and check the oil level.



The level must be maintained between the upper (1) and lower level (2) marks on the oil filler cap/dipstick.



If the oil level is at or below the lower mark add more of the same type and brand of oil to the engine through the oil filler hole. If the oil level is too high remove the drain plug and the excess oil.

Servicing

Draining

Warm the engine as with the inspection, this will heat the engine and allow the oil to drain out faster and more completely. The vehicle should be on level ground. Stop the engine.

Caution: Hot engine oil can burn. Avoid letting used motor oil contact exposed skin.



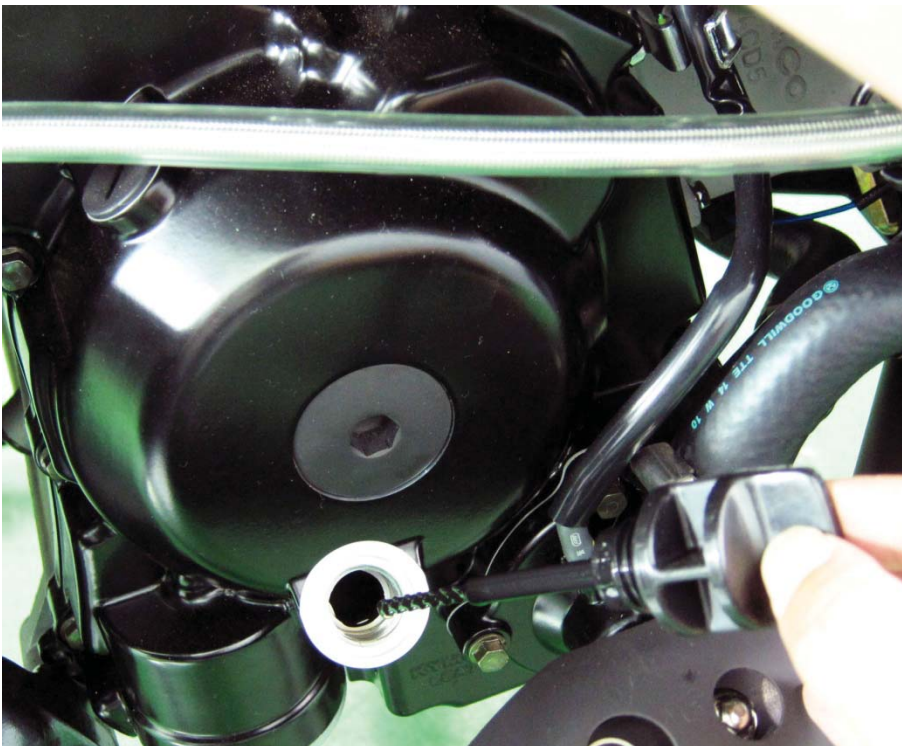
Place an oil pan under the engine. The oil drain bolt is located on the left side of the engine.



Loosen the engine oil drain bolt with a 17 mm socket. Remove the bolt and allow the oil to drain into the pan.



Discard the old sealing washer.



Remove the oil filler cap to allow for faster oil draining. Inspect the oil filler cap O-ring and replace it as needed.



When the oil has drained completely Install the drain bolt with a new sealing washer. Tighten the drain bolt to specification with a 17 mm socket.

Item	Qty	Torque		Remarks
		kgf-m	lb-ft	
Oil Drain bolt	1	2.5	18.08	New sealing washer

Strainer Screen



Remove the oil strainer screen bolt with a 17 mm socket. Inspect the strainer screen bolt O-ring and replace it as needed.



Remove the oil strainer screen.



Remove the O-rings from the oil strainer screen and inspect them. Replace the O-rings if they are in poor condition. Inspect the oil strainer screen for debris and damage. Clean it with a high flash point solvent and compressed air. Metal debris in the strainer screen can be an indicator of engine wear or damage.

NOTE: Always wear safety glasses when using compressed air and never point it directly at yourself or anyone else.



Return the O-rings to the oil strainer screen and install it into the left side of the engine. Tighten the oil strainer screen cap to specification with a 17 mm socket.

Item	Qty	Torque	
		kgf-m	lb-ft
Engine oil strainer cap	1	1.02	7.2

Filter Replacement



The oil filter compartment is located on the bottom of the engine below the oil filler cap/dipstick. Ready an oil drain pan to catch any remaining engine oil.



Loosen the oil filter cap with a 24 mm socket.



Remove the oil filter cap with spring and take out the used oil filter.



Inspect the oil filter cap O-ring and spring. Replace the items if they are in poor condition.



Install the spring to the oil filter cap. Apply a light coat of engine oil to the oil filter cap O-ring.



Pour a small amount of fresh engine oil into the oil filter. Insert the oil filter into place with the rubber seal side facing up.



Install the oil filter cap with spring. Makes sure the spring fits against the filter correctly. Tighten the oil filter cap securely with a 24 mm socket.

Item	Qty	Torque	
		kgf-m	lb-ft
Engine oil filter cap	1	1.0	7.2

Filling

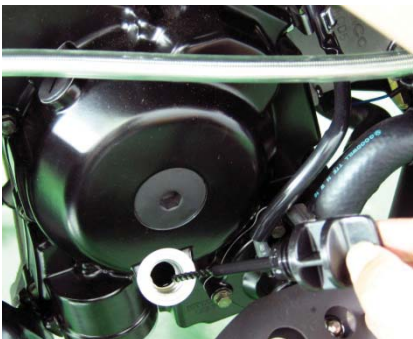
Add the oil to the engine through the oil filler/dipstick hole.



Use a fully synthetic quality 4-stroke engine oil to ensure longer service life of the scooter. Only use oils that have a SJ rating above per the API service classification.

Engine oil viscosity : SAE 5W-50

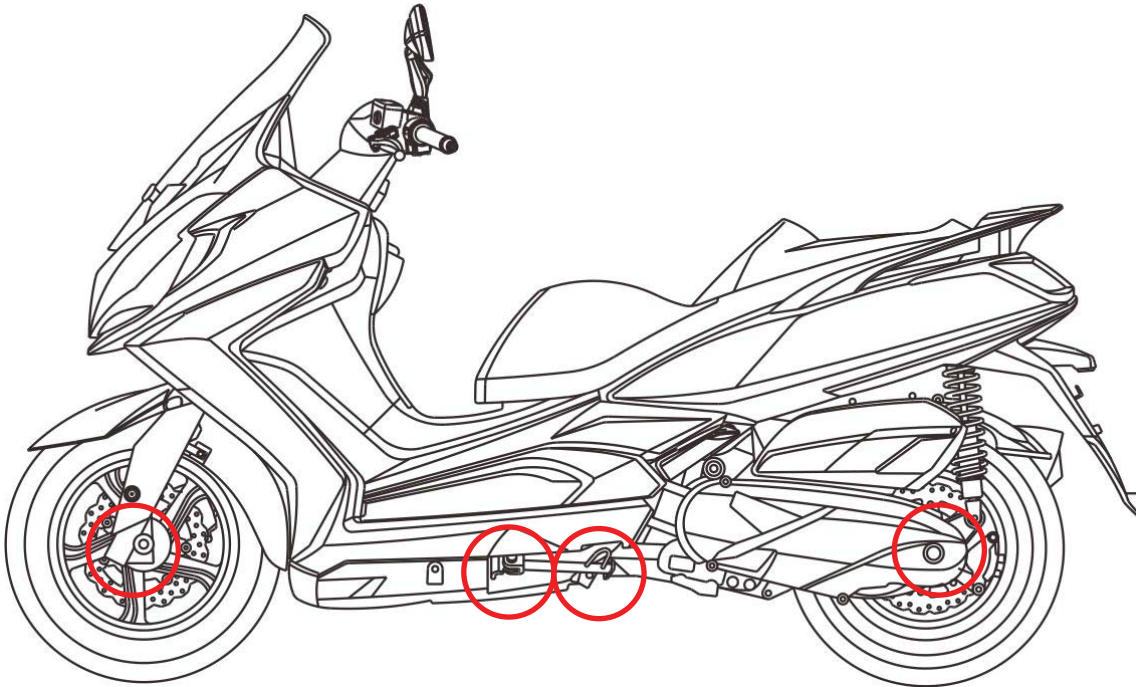
Engine oil capacity	
At disassembly	1.5 Liter
At change	1.3 Liter



Install the oil filler cap. Start the engine and let it run for several minutes. Check for any oil leaks. Stop the engine and check the [Engine Oil](#).

General Lubrication

SAFETY FIRST: Protective gloves and eyewear are recommended at this point.



The frame lubrication points are listed below. Use general purpose grease. Apply clean engine oil or grease to cables and movable parts not specified. This will avoid abnormal noise and increase the durability of the motorcycle.

- Front Wheel Axle
- Side Stand Pivot
- Center Stand Pivot
- Rear Wheel axle

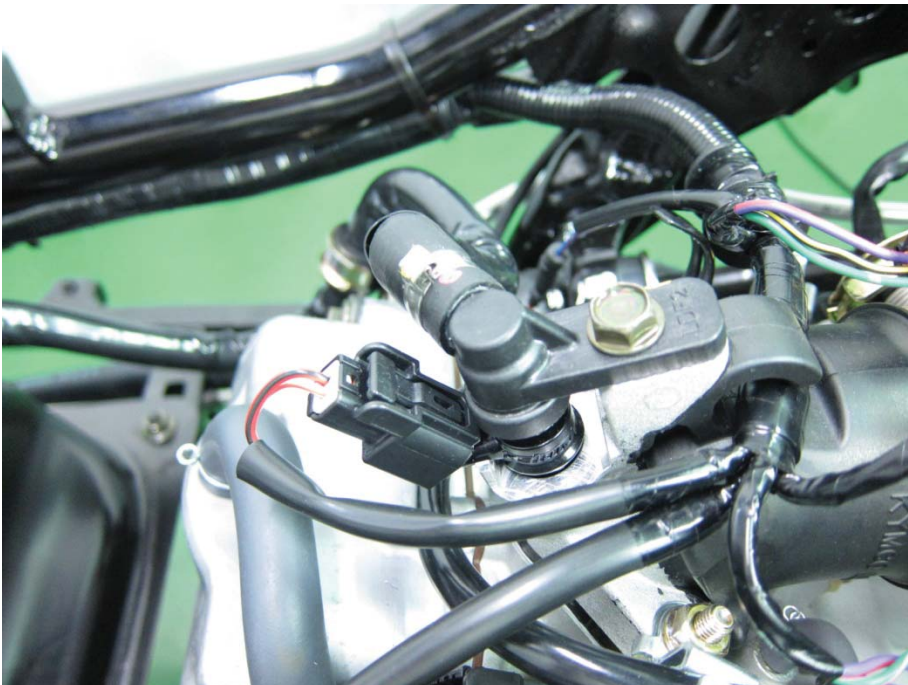
Hose Inspection

Remove the seat. See the [Seat](#) topic for more information.

Remove the luggage box. See the [Luggage Box](#) topic for more information.



Inspect the breather hose for damage and deterioration.



Inspect the fuel hose for damage and deterioration.

Side Stand

SAFETY FIRST: Protective gloves and eyewear are recommended at this point.

Interlock Function Check



Your scooter's side stand is not only necessary when you park, but it contains an important safety feature. This feature cuts-off the ignition if you try to ride the scooter when the side stand is down. Perform the following side stand inspection.



Check the side stand ignition cut-off system;

1. Place the scooter on its center stand.
2. Put the side stand up and start the engine.
3. Lower the side stand.
4. The engine should stop as you put the side stand down.

Note: If the side stand system does not operate as described, see your KYMCO dealer for service.

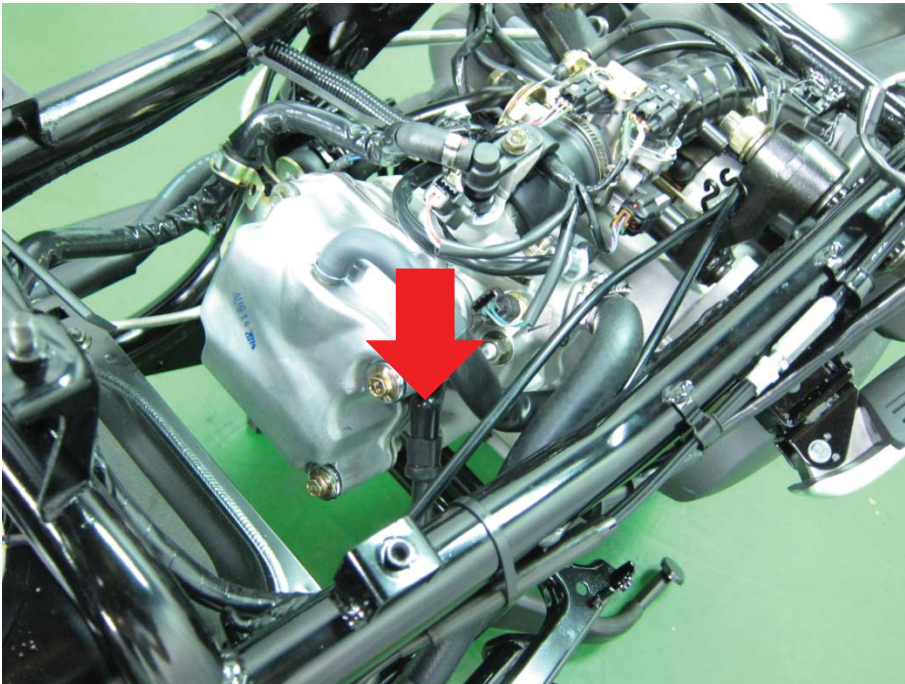
Spark Plug

SAFETY FIRST: Protective gloves and eyewear are recommended at this point.

Removal

Remove the seat. See the [Seat](#) topic for more information.

Remove the luggage box. See the [Luggage Box](#) topic for more information.



The spark plug is located on the left side of the cylinder.

remove the spark plug wire off of the spark plug.

Clean off the area surrounding the spark plug with compressed air or a shop towel to make sure debris doesn't get into the combustion chamber when the spark plug is removed.

NOTE: Always wear safety glasses when using compressed air and never point it directly at yourself or anyone else.



Remove the spark plug with a spark plug with a 5/8 in socket.

Spark plug	NGKCR7E
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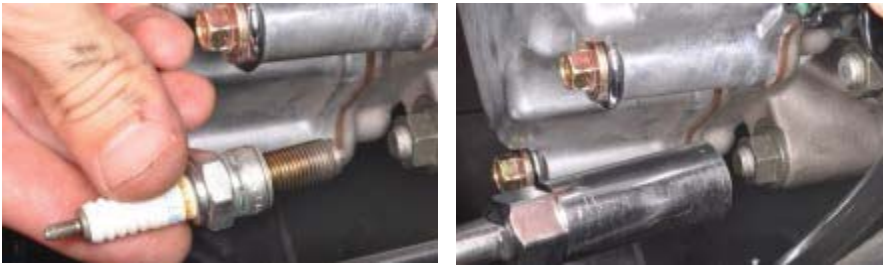
Inspection



Always check the gap of the spark plug before installation. If the gap needs to be adjusted bend the ground electrode carefully. Inspect the color of the porcelain nose of the spark plug. The color of the spark plug can indicate how the mixture is burning. A white colored plug shows a lean mixture, where a dark plug shows a rich mixture. Do not hesitate to replace a spark plug. Always replace a spark plug if any part of it is damaged.

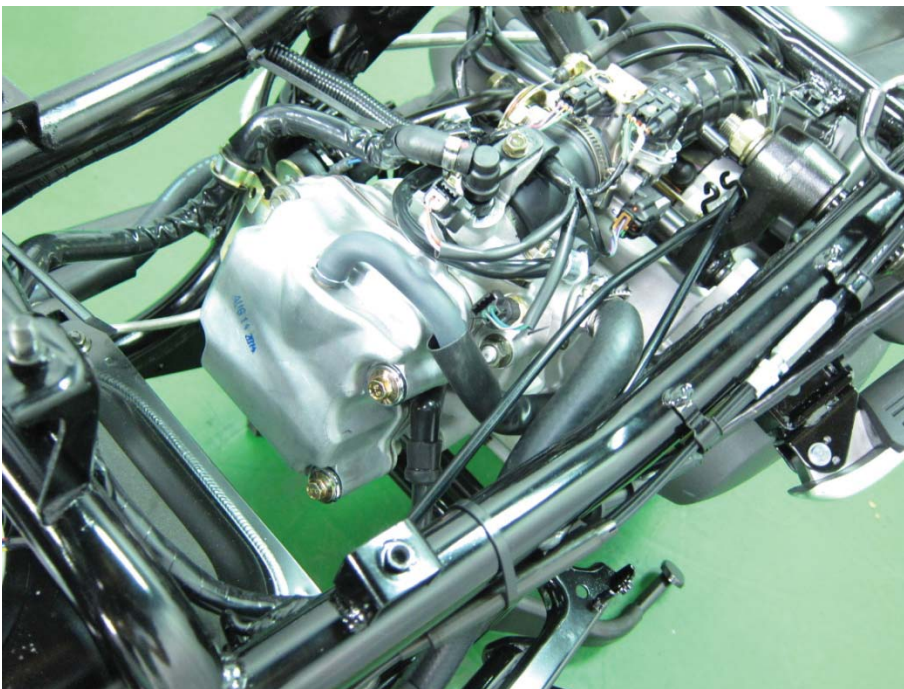
Spark plug gap	0.6 - 0.7 mm
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Installation



Thread the spark plug by hand before using a socket to tighten. Torque to specification with a 5/8" spark plug socket. Do not over tighten the spark plug. The cylinder head is made out of soft metal, and it can be easily damaged.

Item	Torque
Spark plug	17.2 N-m (1.5 - 2 ft-lb, 10.84 - 14.47 kgf-m)



Install the spark plug wire over the plug.

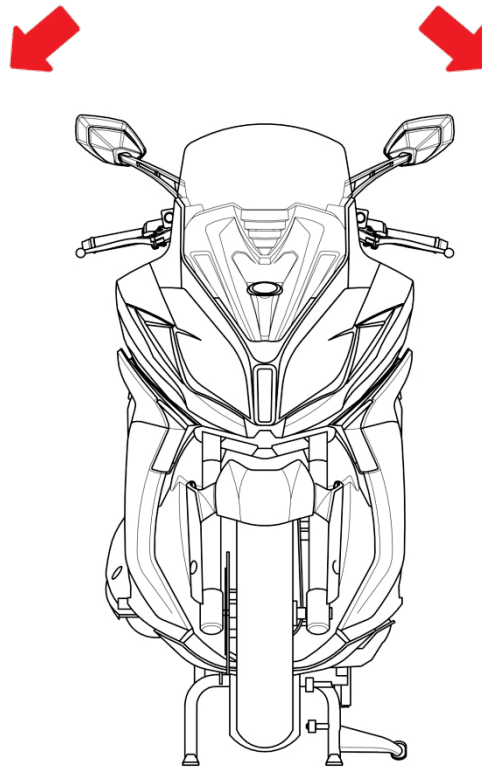
Install the luggage box. See the [Luggage Box](#) topic for more information.

Install the seat. See the [Seat](#) topic for more information.

Steering

SAFETY FIRST: Protective gloves and eyewear are recommended at this point.

Inspection

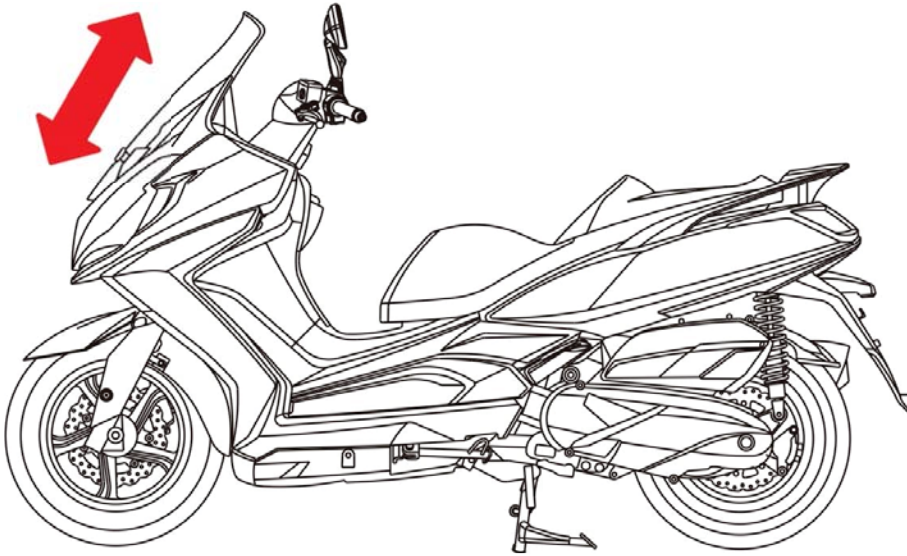


Raise the front wheel off the ground and check that the steering handlebar rotates freely. If the handlebar moves unevenly, binds, or has vertical movement, adjust the steering head bearing. See the [Steering Stem Removal](#) topic for more information.

Suspension

SAFETY FIRST: Protective gloves and eyewear are recommended at this point.

Front Suspension



Check the action of the front shock absorbers by compressing them several times. Check the entire shock absorber assembly for oil leaks, looseness or damage.

Pre-Load Setting

Suspension

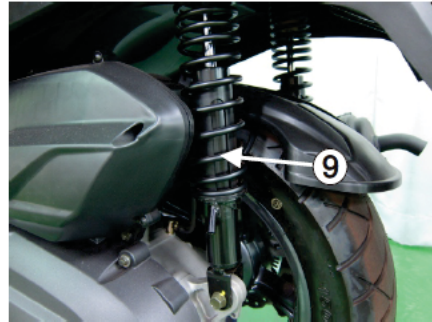
Each shock absorber ⑨ on your scooter has 5 spring preload adjustment positions for different load or riding conditions.

Use a pin spanner ⑩ to adjust the rear shock spring preload. Position 1 is for light loads and smooth road conditions. Position 3 to 5 increase spring preload for a stiffer rear suspension and can be used when the scooter is heavily loaded. Be certain to adjust both shock absorbers to the same spring preload positions.

Standard spring preload position: 3

CAUTION

Always adjust the shock absorber pre-load position in sequence (1-2-3-4-5 or 5-4-3-2-1). Attempting to adjust directly from 1 to 5 or 5 to 1 may damage the shock absorber.



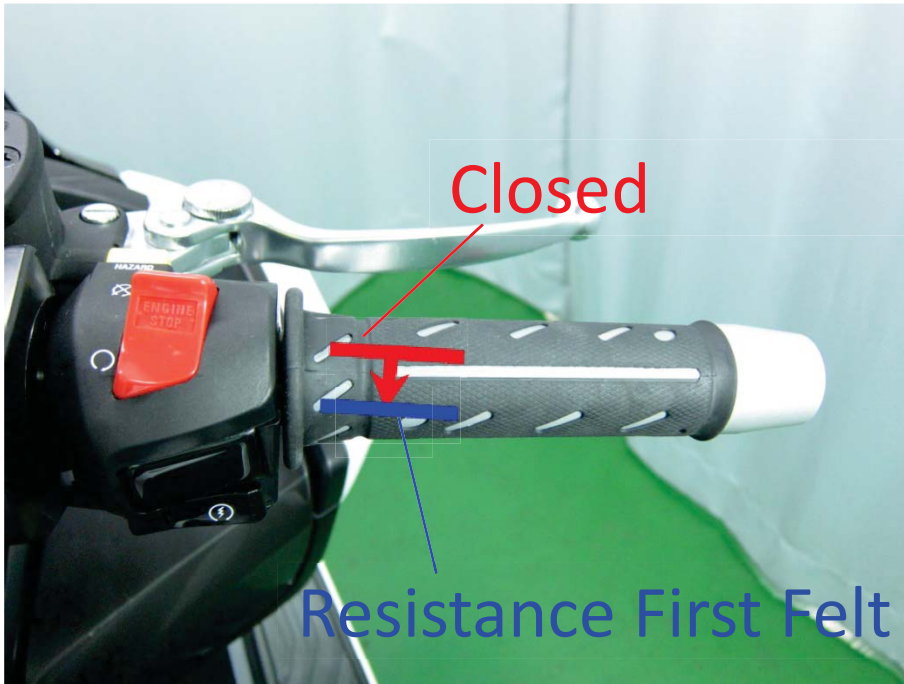
Each shock absorber on the scooter has 5 spring preload adjustment positions for different load or riding conditions.

Position 1 is for light loads and smooth road conditions. Position 3 to 5 increase spring preload for stiffer rear suspension and can be used when the scooters heavily loaded. Be certain to adjust both shock absorbers to the same spring preload positions.

Throttle Free Play

SAFETY FIRST: Protective gloves and eyewear are recommended at this point.

Inspection



Check the throttle cable free play by gently rotating the throttle grip back until resistance is felt.

Throttle grip free play	2 ~ 6 mm
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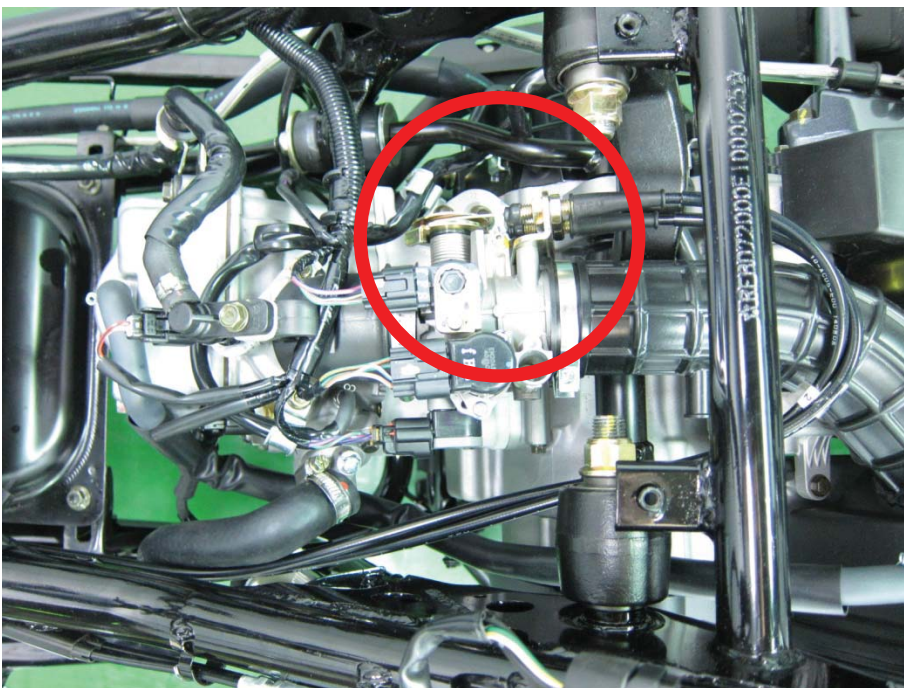
Make sure the throttle moves smoothly and returns on its own. Start the engine and let it warm up. Turn the handlebars from side to side, if the engine rpm changes either the free play is too small or the throttle cables are not routed properly. Check and correct the cause.

Major adjustment

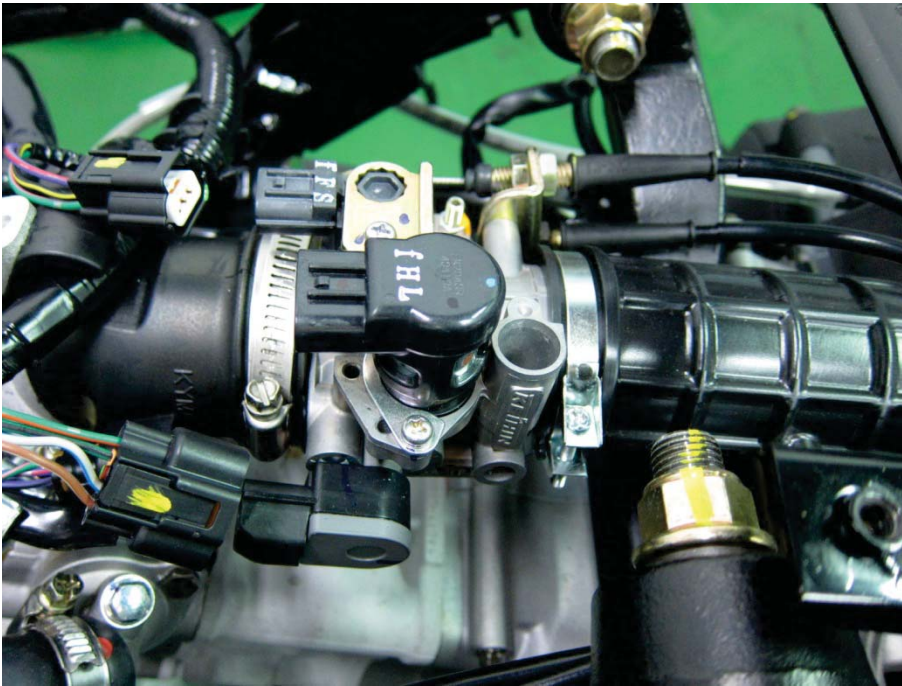
Major adjustment of the throttle grip free play is made with the adjusting nut at the throttle body side.

Remove the seat. See the [Seat](#) topic for more information.

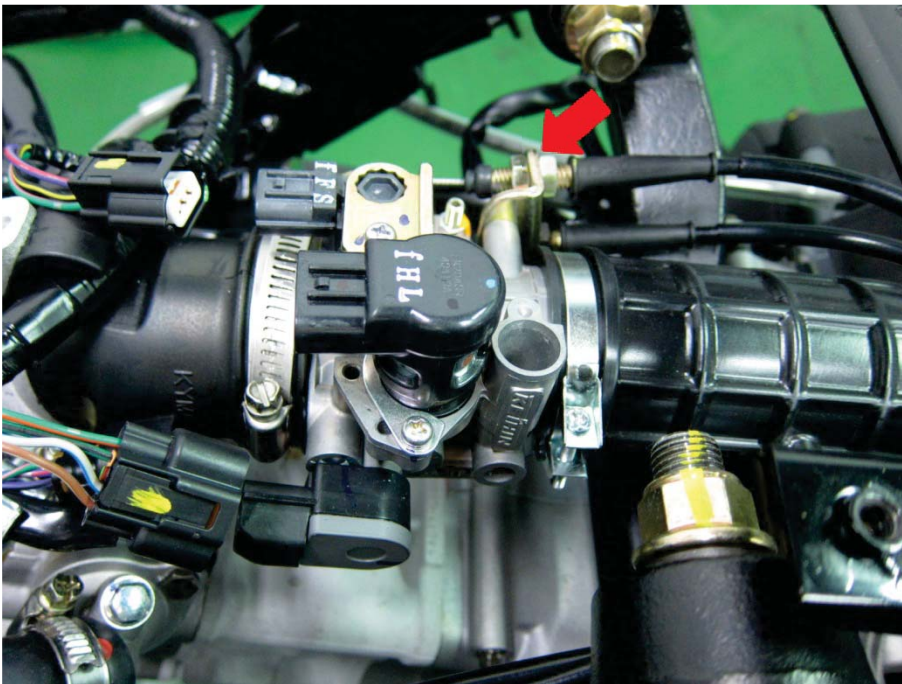
Remove the luggage box. See the [Luggage Box](#) topic for more information.



The throttle cables meet the throttle body on the right side.



The top throttle cable is the opening cable and the bottom is the closing cable.



Loosen the lock nut (forward) with a 12 mm wrench.



Turn the adjuster nut (rear) to adjust the throttle free play.

When the free play has been moved into specification hold the adjuster in place and tighten the locknut securely. Adjust the closing cable as needed for a proper throttle action.

Install the luggage box. See the [Luggage Box](#) topic for more information.

Install the seat. See the [Seat](#) topic for more information.

Minor Adjustment



Minor adjustments of the throttle free play can be made with the cable adjusters below the grip throttle.



Slide down the rubber cover.



Loosen the throttle cable adjuster lock nut with a 10 mm wrench.



Turn the adjuster with an 8 mm wrench to achieve the specified free play.

When the free play has been moved into specification hold the adjuster in place and tighten the locknut securely.



Slide the rubber cover over the adjuster and lock nut.
Inspect the throttle operation.

Tires

SAFETY FIRST: Protective gloves and eyewear are recommended at this point.

Check tires before each ride for wear and air pressure.



Check tire air pressure before riding when tires are cold.

Cold inflation tire pressure	Solo riding	Front	2.00 kg/cm ² (28.4 psi)
		Rear	2.25 kg/cm ² (32 psi)
	Dual riding	Front	2.00 kg/cm ² (28.4 psi)
		Rear	2.25 kg/cm ² (32 psi)



Replace tires if the tread depth reaches the wear mark or fails to meet the minimum tread depth.

Tires	Front wheel	120/80-14 58S
	Rear wheel	150/70-13 64S

Final Drive Oil

SAFETY FIRST: Protective gloves and eyewear are recommended at this point.

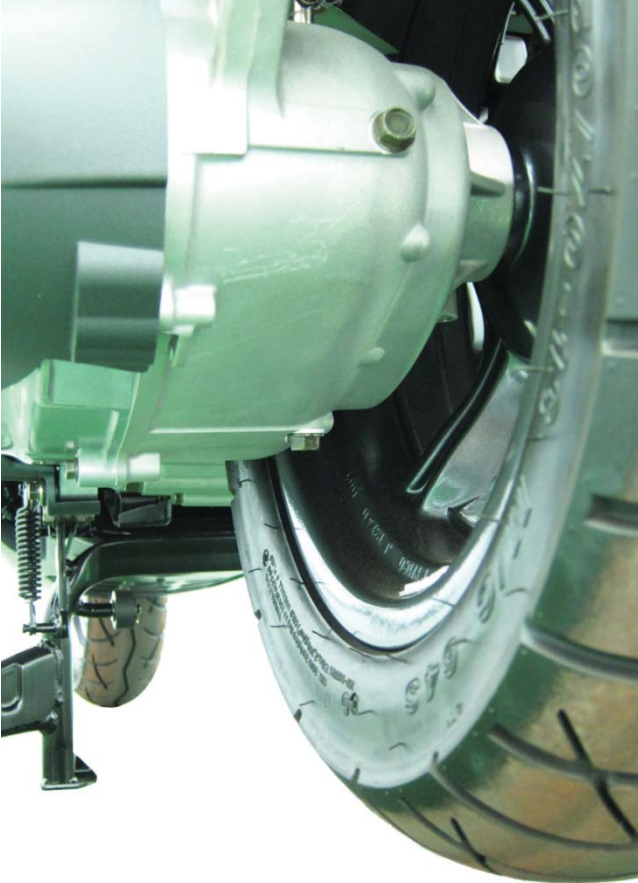
Place the scooter on level ground and up on its center stand.

The oil drain bolt and oil filler bolt are located on the transmission.

Gear oil type:	SAE 90
Gear oil capacity:	
At disassembly	0.23 Liter
At change	0.21 Liter

Draining

Place the vehicle on its center stand on level ground. Place a suitable oil drain pan under the transmission oil drain plug.



Remove the transmission oil level filler bolt with a 12 mm socket.



Place a suitable container under the drain plug to capture the final drive oil. Loosen the oil drain plug with a 12 mm socket. Remove the drain plug and slowly rotate the rear wheel to drain the transmission oil.



Inspect the drain plug and washer.



Install the oil drain plug and washer with a 12 mm socket. Tighten to specification.

Item	Qty	Thread size (mm)	Torque	
			kgf-m	lb-ft
Final drive oil drain bolt	1	8	0.8 - 1.2	5.79 - 8.68

Filling

Fill the final drive with the specified quantity of oil with a syringe.

Gear oil type:	SAE 90
Gear oil capacity:	
At disassembly	0.23 Liter
At change	0.21 Liter



Thread in the final drive oil level filler bolt.



Install the oil filler plug and torque it to specification with a 12 mm socket.

Item	Qty	Thread size (mm)	Torque	
			kgf-m	lb-ft
Final drive oil filler bolt	1	8	0.8 - 1.2	5.79 - 8.68

Valve Clearance

SAFETY FIRST: Protective gloves and eyewear are recommended at this point.

The valve clearance specification is only relevant if the engine is cold (below 35°C or 95°F).

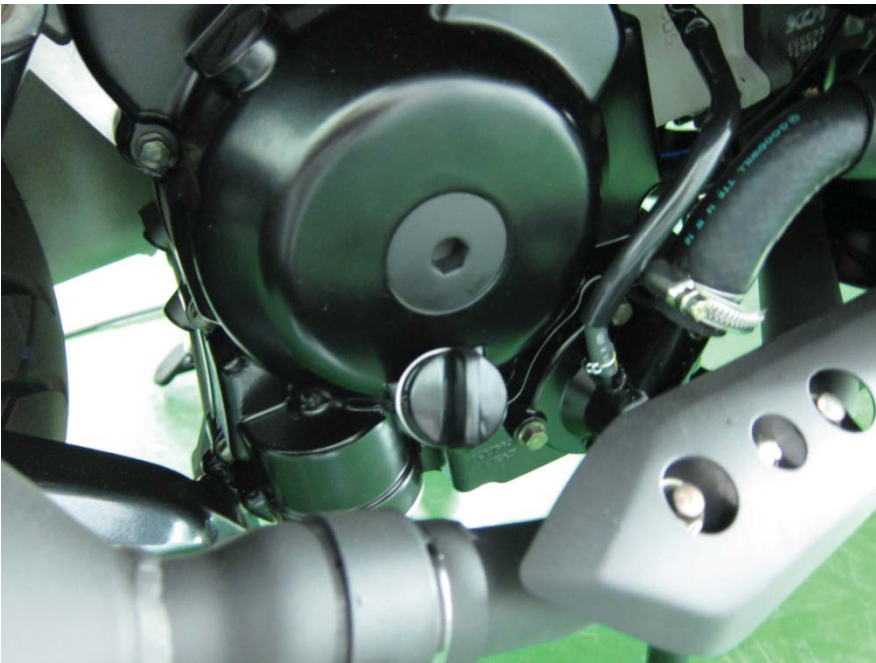
Inspection

Remove the seat. See the [Seat](#) topic for more information.

Remove the luggage box. See the [Luggage Box](#) topic for more information.

Remove the spark plug. See the [Spark Plug](#) topic for more information.

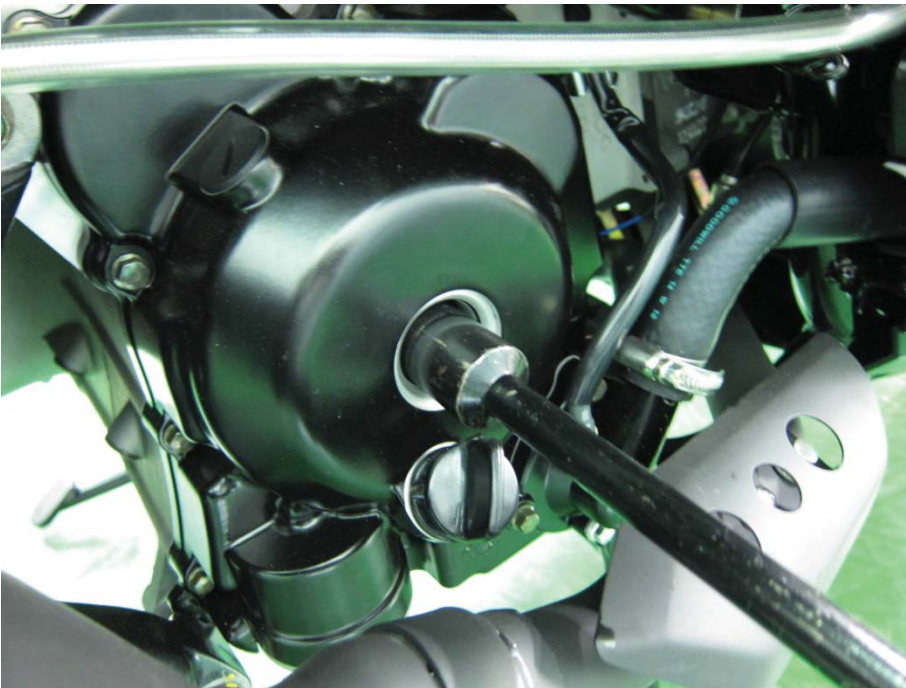
Remove the cylinder head cover. See the [Cylinder Head Cover](#) topic for more information.



Remove the crankshaft cap on the right side of the engine with a large flat blade screwdriver. Inspect the O-ring on the cap and replace it as needed.



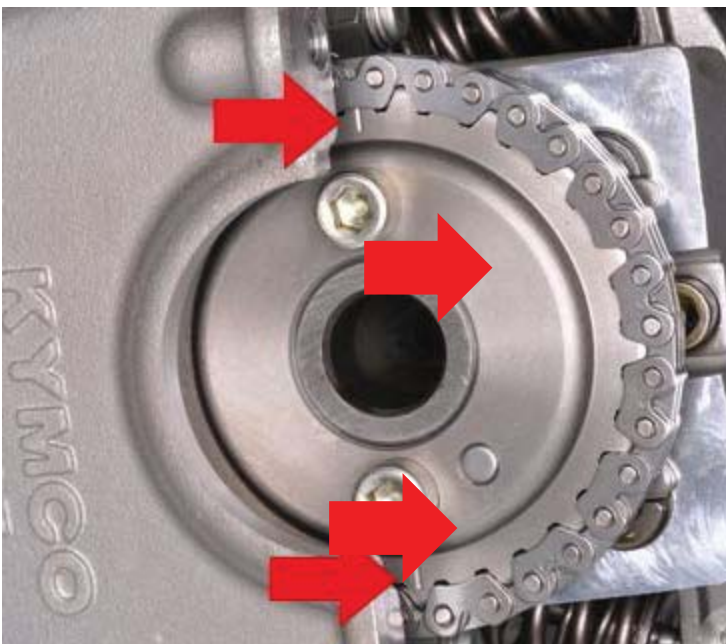
Remove the timing inspection cap from the right side of the engine with a large flat blade screwdriver. Inspect the O-ring on the cap and replace it as needed.



The crankshaft must be rotated (clockwise) until the piston is at top dead center (TDC) on the compression stroke.



Turn crankshaft clockwise until the "T" mark aligns with the index notch in the timing inspection hole.



For correct engine timing the marks on the camshaft sprocket must be even with the cylinder head mating surface at the same time the "T" mark is lined up with the with the index notch in the timing inspection hole. Also the camshaft sprocket mounting boss should be visible above the cylinder head surface.

If this is not the case, rotate the crankshaft 360° clockwise until the "T" mark is once again aligned with the notch on the case cover.



Measure the valve clearance with a thickness feeler gauge. Insert the feeler gauge between the tappet adjusting screw and the valve stem. The clearance is correct when there is a light drag on the feeler gauge. The clearance is the same for the exhaust and intake valves. If the clearance is out of spec move on to the adjustment section.

Valve clearance	IN: 0.10 mm	EX: 0.10 mm
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Adjustment



Use a tappet adjuster tool to adjust the valves.

SPECIAL TOOLS		
ITEM	TOOL NO.	DESCRIPTION
TAPPET ADJUSTER	E012	Tappet adjustment



Place a 9 mm box end wrench over the locknut, and loosen the locknut. If the valve clearance is tight back out the valve tappet adjusting screw with the tappet adjustment tool. If the clearance is too loose turn in the adjusting screw until there is a light drag on the feeler gauge. Hold the adjusting screw locknut in place with the wrench to make sure it doesn't interfere with the adjustment.

Lubricate the tappet adjusting screw threads with fresh engine oil. Hold the adjuster in place and tighten the locknut. Always recheck the clearance after tightening the locknut. Also, recheck after turning the engine over and back to TDC on the compression stroke.

Item	Qty	Thread size (mm)	Torque		Remarks
			kgf-m	lb-ft	
Valve adjusting lock nut	4	5	0.7-1.1	5.06-7.96	Apply oil to thread



Make sure the O-rings on the crankshaft and timing plugs are in good condition. Replace them as needed. Install the timing inspection and crankshaft caps to the right side of the engine. Tighten the caps securely but not overly with a large flat blade screwdriver.

Install the cylinder head cover. See the [Cylinder Head Cover](#) topic for more information.

Install the luggage box. See the [Luggage Box](#) topic for more information.

Install the seat. See the [Seat](#) topic for more information.