

⚠ Details described or illustrated in this booklet may differ from the vehicle's actual specification as purchased, the accessories fitted or the national-market specification. No claims will be asserted as a result of such discrepancies.  
Dimensions, weights, fuel consumption and performance data are quoted to the customary tolerances.  
The right to modify designs, equipment and accessories is reserved. Errors and omissions excepted.



# Benelli

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**250T-8**

Jun 28th 2018

## INTRODUCTION

Welcome to the world of motorcycling!

As the owner, you are benefiting from the vast experience and newest technology regarding the design and manufacture of high-quality products, which have earned us a reputation for dependability.

Please take the time to read this manual thoroughly, so as to enjoy all advantages of your vehicle. The Owner's Manual does not only instruct you in how to operate, inspect and maintain your vehicle, but also in how to safeguard yourself and others from trouble and injury.

In addition, the many tips given in this manual will help keep your vehicle in the best possible condition. If you have any further questions, do not hesitate to contact our dealer.

Our team wishes you many safe and pleasant rides. So, remember to put safety first!

Our company continually seeks advance in product design and quality. Therefore, while this manual contains the most current product information available at the time of printing, there may be minor discrepancies between your vehicle and this manual. If there is any question concerning this manual, please consult our dealer.



**Please read this manual carefully and completely before operating this vehicle.**

## IMPORTANT MANUAL INFORMATION

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



indicates a hazardous situation which, if not avoided, could result in death or serious injury.



indicates special precautions that must be taken to avoid damage to the vehicle or other property.



provides key information to make procedures easier or clearer.

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## SAFETY INFORMATION

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### SAFETY INFORMATION

#### Be a Responsible Owner

As the vehicle's owner, you are responsible for the safe and proper operation of your vehicle.

The safe use and operation are dependent upon the use of proper riding techniques as well as the expertise of the operator. Every operator should know the following requirements before riding this vehicle.

He or she should:

- Obtain thorough instructions from a competent source on all aspects of vehicle operation.
- Observe the warnings and maintenance requirements in this Owner's Manual.
- Obtain qualified training in safe and proper riding techniques.
- Obtain professional technical service as indicated in this Owner's Manual and/or when made necessary by mechanical conditions.

#### Safe Riding

Perform the pre-operation checks each time you use the vehicle to make sure it is in safe operating condition. Failure to inspect or maintain the vehicle properly increases the possibility of an accident or equipment damage. See the page for a list of pre-operation checks.

- This vehicle is designed to carry the operator and a passenger.
- The failure of motorists to detect and recognize vehicles in traffic is the predominating cause of automobile/vehicle accidents. Many accidents have been caused by an automobile driver who did not see the vehicle. Making yourself prominent appears to be very effective in reducing the chance of this type of accident. Therefore:
  - Wear a brightly colored jacket.
  - Use extra caution when you are approaching and passing through intersections, since intersections are the most likely places for vehicle accidents to occur.
  - Ride where other motorists can see you. Avoid riding in another motorist's blind spot
- Many accidents involve inexperienced operators. In fact, many operators who have been involved in accidents do not even have a current driver's license.
- Make sure that you are qualified and that you only lend your vehicle to other qualified operators.
- Know your skills and limits. Staying within your limits may help you to avoid an accident.
- We recommend that you practice riding your vehicle where there is no traffic until you have

become thoroughly familiar with the vehicle and all of its controls.

- Many accidents have been caused by error of the vehicle operator. A typical error made by the operator is veering wide on a turn due to excessive speed or under- cornering (insufficient lean angle for the speed).
- Always obey the speed limit and never travel faster than legal speed limit.
- Always signal before turning or changing lanes. Make sure that other motorists can see you.
- The posture of the operator and passenger is important for proper control.
- The operator should keep both hands on the handlebar and both feet on the operator footrests during operation to maintain control of the vehicle.
- The passenger should always hold onto the operator, the seat strap or grab bar, if equipped, with both hands and keep both feet on the passenger footrests. Never carry a passenger unless he or she can firmly place both feet on the passenger footrests.
- Never ride under the influence of alcohol or other drugs.
- This vehicle is designed for on-road use only. It is not suitable for off-road use.

#### Protective apparel

The majority of fatalities from vehicle accidents are

## SAFETY INFORMATION

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the result of head injuries. The use of a safety helmet is the most critical factor in the prevention or reduction of head injuries.

- Always wear an approved helmet.
- Wear a face shield or goggles.

Wind in your unprotected eyes could contribute to an impairment of vision that could delay seeing a hazard.

- The use of a jacket, substantial shoes, trousers, gloves, etc., is effective in preventing or reducing abrasions or lacerations.
- Never wear loose-fitting clothes, otherwise they could catch on the control levers or wheels and cause injury or an accident.
- Always wear protective clothing that covers your legs, ankles, and feet. The engine or exhaust system become very hot during or after operation and can cause burns.

- A passenger should also observe the above precautions.

#### Avoid Carbon Monoxide Poisoning.

All engine exhaust contains carbonmonoxide, a deadly gas. Breathing carbon monoxide can cause headaches, dizziness, drowsiness, nausea confusion, and eventually death.

Carbon Monoxide is a colorless, odorless, tasteless gas which may be present even if you do not see

or smell any engine exhaust. Deadly levels of carbon monoxide can collect rapidly and you can quickly be overcome and unable to save yourself. Also, deadly levels of carbon monoxide can linger for hours or days in enclosed or poorly ventilated areas. If you experience any symptoms of carbon monoxide poisoning, leave the area immediately, get fresh air, and SEEK MEDICAL TREATMENT.

- Do not run engine indoors. Even if you try to ventilate engine exhaust with fans or open windows and doors, carbon monoxide can rapidly reach dangerous levels.
- Do not run engine in poorly ventilated or partially enclosed areas such as barns, garages.
- Do not run engine outdoors where engine exhaust can be drawn into a building through openings such as windows and doors.

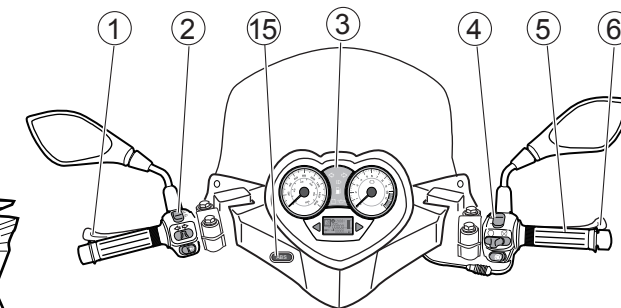
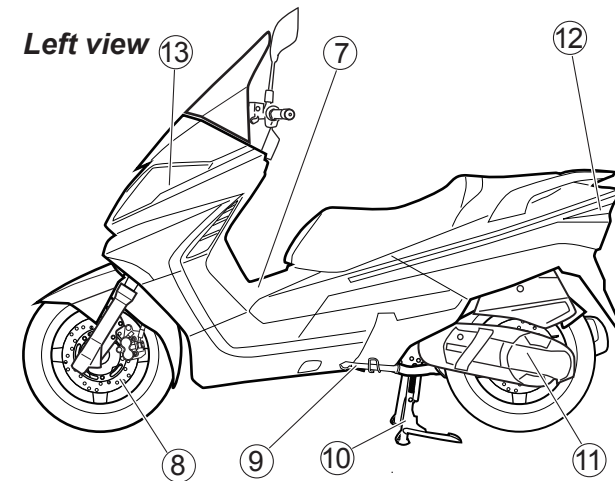
#### **Further safe-riding points**

- Be sure to signal clearly when making turns.
- Braking can be extremely difficult on a wet road. Avoid hard braking, because the vehicle could slide. Apply the brakes slowly when stopping on a wet surface.
- Slow down as you approach a corner or turn. Once you have completed a turn, accelerate slowly.
- Be careful when passing parked cars. A driver might not see you and open a door in your path.

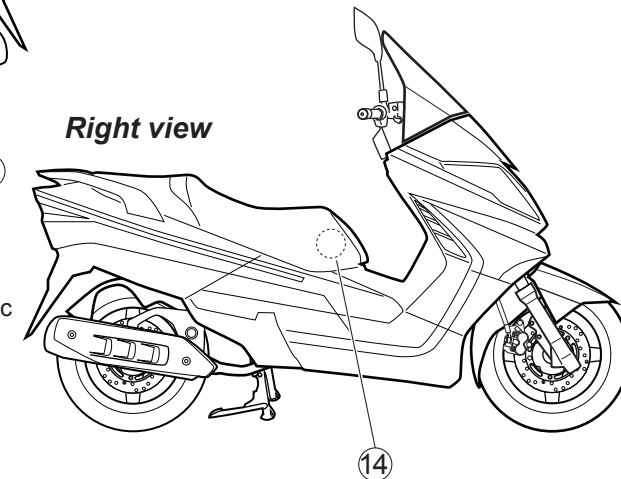
- Railroad crossings, streetcar rails, iron plates on road construction sites, and manhole covers become extremely slippery when wet. Slow down and cross them with caution. Keep the vehicle upright, otherwise it could slide out.
- The brake pads could get wet when you wash the vehicle. After washing the vehicle, check the brakes before riding.
- Always wear a helmet, gloves, trousers (tapered around the cuff and ankle so they do not flap), and a bright colored jacket.
- Do not carry too much luggage on the vehicle. An overloaded vehicle is unstable. Use a strong cord to secure any luggage to the carrier (if equipped). A loose load will affect the stability of the vehicle and could divert your attention from the road.

## **DESCRIPTION**

### **Left view**

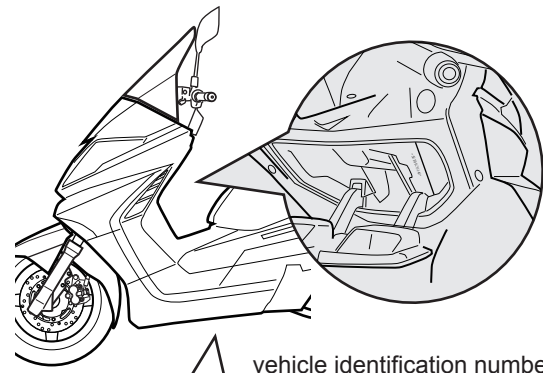


### **Right view**



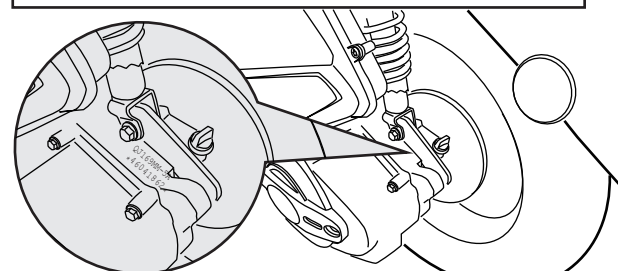
- ① Rear brake lever   ② Left handle switch   ③ Meter
- ④ Right handle switch   ⑤ Throttle grip
- ⑥ Front brake lever   ⑦ Fuel tank   ⑧ Front brake disc
- ⑨ Side stand   ⑩ Main stand
- ⑪ Transmission cover   ⑫ Tail light   ⑬ Headlight
- ⑭ Battery   ⑮ ABS Switch

## CONSUMER INFORMATION



vehicle identification number

**VIN:**



**Engine Number:**

### TIP

The vehicle identification number is used to identify your vehicle and may be used to register it with the licensing authority in your area.

### TIP

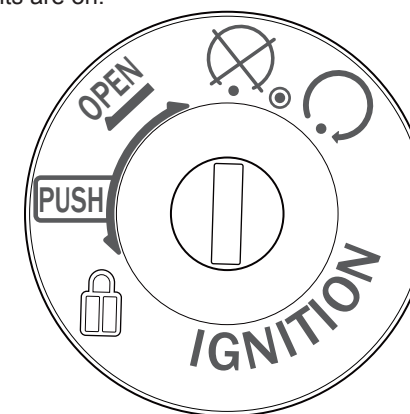
All picture information in manual is only for reference, and it may have different accessory for different market.

## INSTRUMENT AND CONTROL FUNCTIONS

### MAIN SWITCH/ STEERING LOCK

“⊗” (Off) position:  
All the circuits are off.

“○” (On) position:  
The circuits are on.



“P” (Parking): (IF EQUIPPED)

The taillight, license plate light and auxiliary lights are on. The hazard lights and turn signal lights can be turned on, but all other electrical systems are off. The key can be removed.

Seat open position: (IF EQUIPPED)

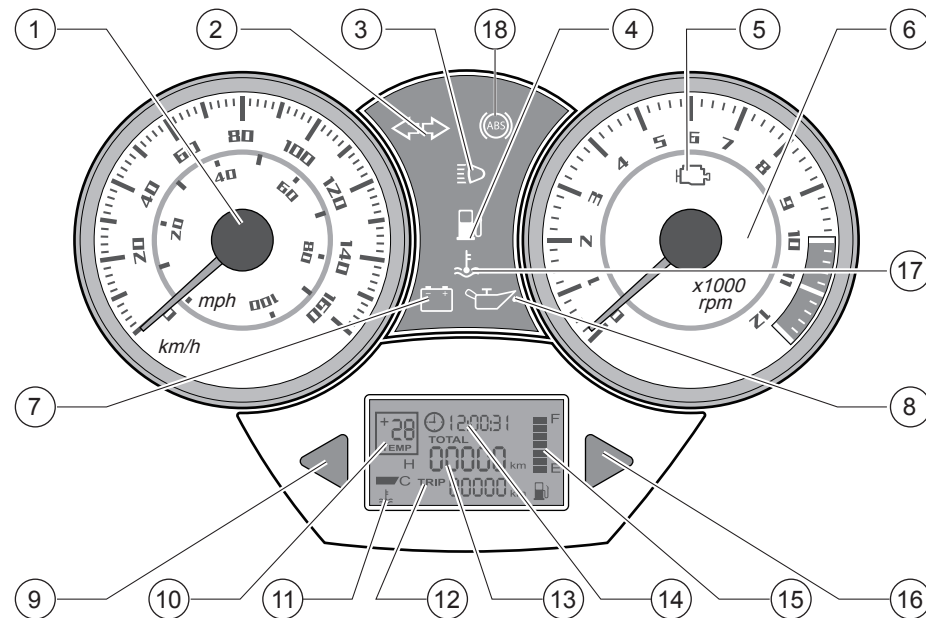
Insert the key to key switch and then turn it counter-clockwise to “SEAT OPEN”, and fold the seat up.

Anti-theft position: (IF EQUIPPED)

match the magnetic anti-theft shutter with the tail of the vehicle key, and turn it to “SHUT” or “OPEN” to shut or to open the key hole.

“⊗” Position: (IF EQUIPPED)

turn left to the maximum, press the key to the position of “⊗”. Take out the key. In this condition, the vehicle has been locked. If you want to unlock the vehicle, insert the key and turn clockwise.



### 18. ABS INDICATOR LIGHT

1. ABS failure -- After ignition, ABS warning lamp is lit up, and then goes out after a short period of time. If the ABS lamp is always on after the ignition, or suddenly light up in the process of driving, these mean that there are faults in the ABS. The braking system itself is still working in this condition, only the ABS control system is failed.
2. ABS is under OFF mode -- ABS indicator light Blink 1 time/1.2s(Slow Blink)
3. When press the the ABS switch within 3s ~30s --ABS indicator light Blink 1 time/0.4s(Quick Blink)
4. ABS is under ON mode -- When keyswitch turned on, the ABS indicator lamp lit and stays activated, until the motorcycle drive off,

### 1. Speedometer

Speedometer shows the running speed, kilometers/hours.vehicle, insert the key and turn clockwise.

### 2. Turning Indicator

The indication lamps would flash with the turning signals.

### 3. High Beam Indicator Lamp

When the high beam lamp of the headlamp turns on, the high beam indicator lamp would be on.

### 4. Fuel Warning Indicator

This light switches on when the fuel level is low.

### 5. Engine Control System Trouble Indicator

Return to authorized dealer if this indicator is activated during riding.

### 6. Tachometer

Tachometer indicates the revolution per minute of engine.

### 7. Battery Power Indicator Lamp

When the battery power is lower than 10.5V, the red indicator lamp will light up.

### 8. Engine Oil Indicator Lamp

When the initial mileage reaches 1,000km, the red alarm for oil will light up to remind you of replacing the oil. Afterwards, the red alarm will light up when the mileage reaches each increment of 3,000km. Press the **Select button** for a long time after oil replacement, and the indicator will be off.

### 9. Adjust Button

### 10. Thermometer

The thermometer indicates the ambient temperature.

### 11. Water Temperature Indicator

This indicator indicates the temperature of cooling liquid. When the pointer is in between C and H, the temperature is normal. It should stop to check the water tank if the pointer is higher than H level.

### 12. Trip Meter

Trip meter can be reset, which records the mileages driven in a specific period.Press the **Adjust Button** for a short time by three times, the mileage will be cleared.

### 13. Odometer

Odometer records the total mileage driven.and the kilometer system and mile system could be switched freely by pressing the **Adjust Button** for a short time.

### 14. Clock

It displays the time. To set the time, press the **Adjust Button** for a long time. Adjust the digit position by pressing the left key and adjust the value by pressing the **Select button**.

### 15. Fuel Quantity Indicator

Fuel quantity indicator records the quantity of fuel, the more squares on, the more fuel quantity left. Please refuel according to your schedule.

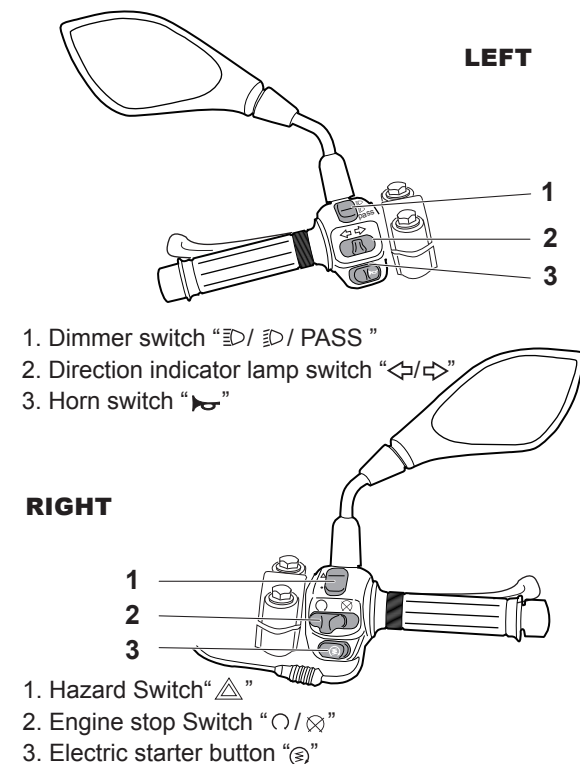
### 16. Select Button

### 17. Water Temperature Warning Indicator

This light switches on when the Water Temperature is higher.



## HANDLEBAR



### Dimmer Switch

Turn the switch to "☷" position, the high beam of headlamp turn on and the indicator lamp on the meter would also turn on; turn the switch to "☶" position, the low beam of headlamp turn on.

### Direction Indicator Lamp Switch

Turn the switch to "↵" position, the left direction signal lamp flashes; turn the switch to "↶" position, the right direction signal lamp flashes. And the indicator lamps would turn on accordingly.

### ⚠ WARNING

Turn on the direction signal lamps in time when changing the driveway or turning a direction and turn off the lamps.

### Passing Switch (IF EQUIPPED)

When passing other vehicles, press this button so the high beams of the headlamp would flash to alarm the vehicles in front of you.

### Horn Button 📢

Press down on the button, to activate the horn.

### Engine stop Switch

When the switch is on "○" position and the power is on, the engine runs.

When the switch is on "⊗" position and the power is off.

### 💡 NOTICE

**Under normal conditions, this switch shall be on Operate "○" position. Use this switch under emergency situation, for example accident or key switch problems.**

### Light Switch (IF EQUIPPED)

Turn switch to position of "☀" to light up the front lamp; Turn to "☷☶" to light up meter lamp, city light and tail lamp; turn to "●" for daytime driving.

### Electric Starter Button 🔌

Press the button to run the electric motor and start the engine.

### Front Brake lever

Pull the brake lever properly to use the front brake.

### Throttle grip

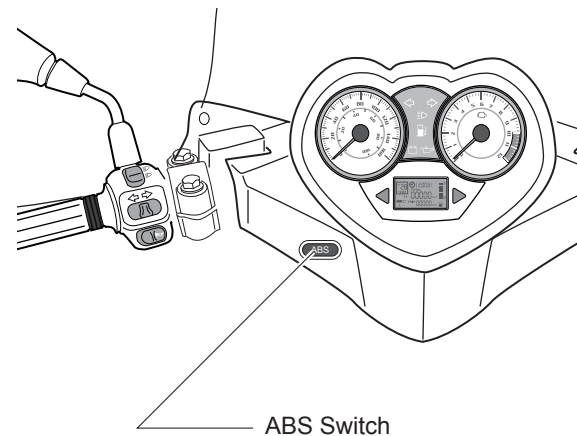
Throttle grip is to control the speed of engine. Twist the grip towards yourself when revving up or turn it in opposite way to slow down.

### Hazard Switch

Push the switch to "⚠" position the four direction signal lamps would flash to warn for emergency situation

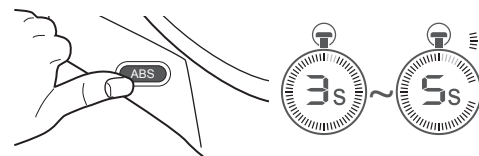
## ABS(Anti-Lock Braking System)

In order to change the status of ABS, please ensure that the motorcycle has been switch on and the speed is lower than a certain value. It is suggested to change the status when the motorcycle stops.the ABS is turned off and the brake will work as conventional system . When the ABS is off, ABS warning lamp blinks 1 time per 1200 ms (Slow blink).



### *From ABS ON mode → OFF mode*

Keep pressing the ABS button on the vehicle, the ABS lamp start to blink 1 time per 400ms after 3 seconds (Quick blink). Timing from the lights quick blinking, loosen the button within 2 seconds, then the ABS is turned off and the brake will work as conventional system . When the ABS is off, ABS warning lamp blinks 1 time per 1200 ms (Slow blink).

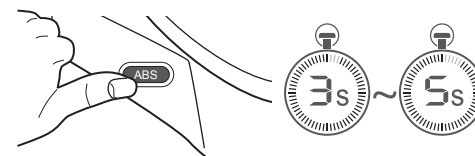


#### **NOTICE**

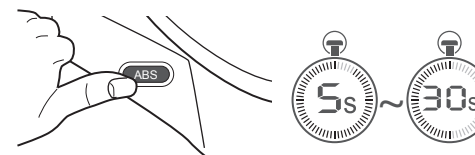
Change the ABS status when the vehicle stops and the ignition switch on

### *From ABS OFF mode → ON mode*

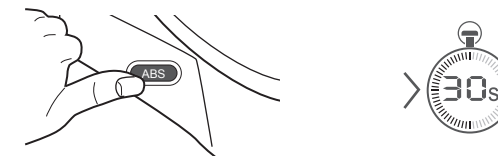
Please keep pressing the ABS button, the ABS lamp start to blink 1 time per 400ms after 3 seconds . Timing from the lights quick blinking, loosen the button within 2 seconds, then the ABS is turned on. The warning lamp changes from blinking to out.



The operation will be ignored by the system If you keep pressing the ABS switch within 5s~30s. ABS will keep the current mode.



The ABS indicator light will be turned on and ABS will be changed to ON mode from any other mode if the switch was stuck or pressed more than 30s.



### **Anti-lock Brake System (ABS) for models equipped with ABS**

ABS is designed to help prevent the wheels from locking up when the brakes are applied hard while running straight. The ABS automatically regulates brake force Intermittently, gaining gripping force and braking force helps prevent wheel lock-up and allows stable steering control while stopping. Brake control function is identical to that of a conventional vehicle. The brake lever is used for the front brake and the brake pedal for the rear brake.



Although the ABS provides stability while stopping by preventing wheel lock-up, remember the following characteristics:

- To apply the brake effectively, use the front brake lever and rear brake pedal simultaneously in the same manner as conventional vehicle brake system.
- ABS cannot compensate for adverse road conditions, misjudgment or improper application of brakes. You must take the same care as with vehicles not equipped with ABS.
- ABS is not designed to shorten the braking distance. On unpaved, uneven, or downhill surfaces, the stopping distance of a vehicle with ABS may be longer than that of an equivalent vehicle without ABS. Use special caution in such areas.
- ABS will help prevent wheel lock-up when braking in a straight line, but it cannot control wheel slip which may be caused by braking during cornering. When leaning in corners, it is better to limit braking to gentle application of both brakes or not to brake at all. Reduce your speed before you enter the corner. Same as conventional brake system, an excessive sudden braking may cause wheel lock up and lose control.

- During braking, ABS will not prevent the rear wheel from lifting.

#### **WARNING**

ABS cannot protect the rider from all possible hazards and is not a substitute for safe riding practices. Be aware of how the ABS operates and its limitations. It is the rider's responsibility to ride at appropriate speeds and manner for weather, road surface and traffic conditions.

#### **WARNING**

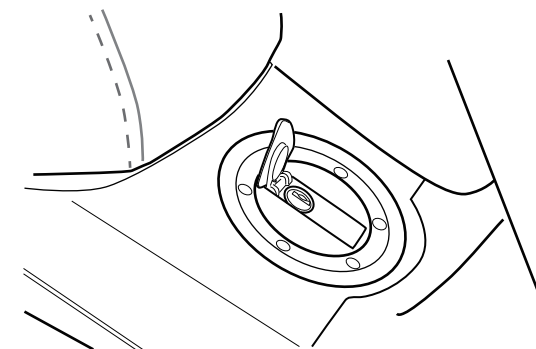
Use of non-recommended tires may cause malfunctioning of ABS and can lead to extended braking distance. The rider could have an accident as a result. Always use recommended standard tires for this vehicle.

#### **WARNING**

- ABS indicator light may come on under certain extreme riding condition. For example, wheelie, stoppie, or burn-out, rear-wheel drifting, or any maneuvers may cause the front and rear wheel to have different rotation status. In this case, first turn the ignition key to "OFF", and then back to "ON". ABS indicator light goes off by this operation, but if ABS indicator light remains lit after the vehicle runs at the speed of approximately 5 km/h or above, you should have the bike checked by an authorized Benelli dealer.
- When the ABS is functioning, you may feel a pulsing in the brake lever or pedal. This is normal. You don't need and should not stop applying brakes when this specific pulsing feeling appears.
- ABS does not function if the battery is discharged.

## FUEL TANK

To open fuel tank cap, turn it anticlockwise and open the cover. To close the fuel tank, please recap it.



### ⚠ **WARNING**

**Do not over fill the fuel tank. Do not make fuel splashes on hot engine.**  
**Please stop the engine and turn the ignition key to " ⓧ " (Off) position when you need to refuel.**  
**Do not forget to lock the fuel tank cover after adding the fuel in case of evaporation to the air, which is a waste of energy and would pollute the environment.**

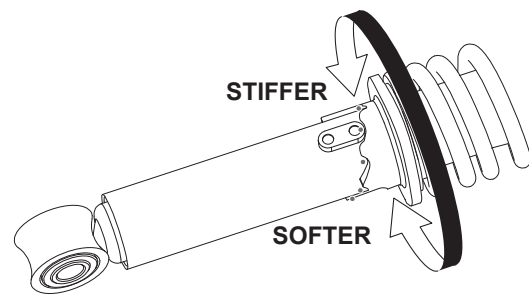
**Recommended fuel:**  
**REGULAR UNLEADED**  
**GASOLINE ONLY**  
**Fuel tank capacity:**  
**10.7L**

## REAR SHOCK ABSORBER

Each shock absorber assembly is equipped with a spring preload adjusting ring the spring of the rear wheel can be adjusted in compliance with the driver's weight and loading condition, driving method and road conditions. Adjust when vehicle it is stable on the main stand or side stand, turn the preload ring to the place required.

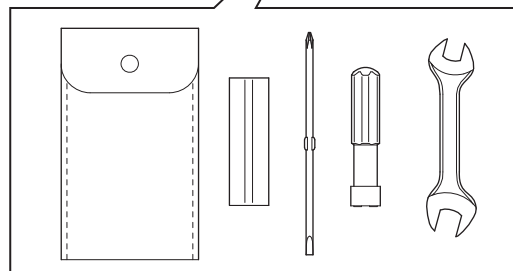
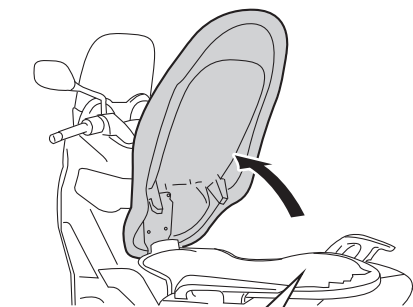
### TORQUE VALUE

Upper fixing bolt: 37-44N.m
Lower fixing bolt: 22-29N.m
5 stages, adjustable

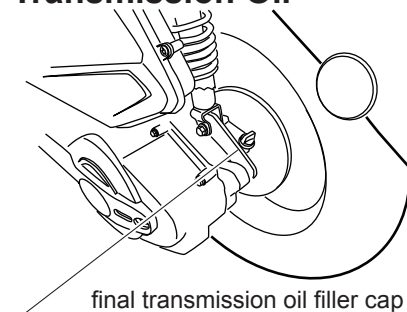


## Tool Bag (IF EQUIPPED)

The tool bag is under the seat. By using tools in the bag, you can do basic repair and adjustment and change some parts when needed.



## Final Transmission Oil



GEAR OIL	API GL-4 SAE85W/90
OIL QUANTITY	0.27 ±0.01L

## Running In

For driving a new vehicle in its first 1,000km way, the engine should not be over revved. Don't operate the throttle under a fully open position; It is strongly suggested to use the vehicle very carefully during its running in period; also the rider has to be familiar to the performance.

### 💡 **NOTICE**

**In the first 300km of break in, you should examine the cleanliness of the engine oil frequently. Check the oil level of engine oil before driving.**

## PRE-OPERATION CHECKS

Inspect your vehicle each time you use it to make sure the vehicle is in safe operating condition. Always follow the inspection and maintenance procedures and schedules described in the Owner's Manual.

### **WARNING**

**Failure to inspect or maintain the vehicle properly increases the possibility of an accident or equipment damage. Do not operate the vehicle if you find any problem. If a problem cannot be corrected by the procedures provided in this manual, have the vehicle inspected by a dealer.**

Before using this vehicle, check the following points:

ITEM	CHECKS
Fuel	<ul style="list-style-type: none"> <li>• Check fuel level in fuel tank.</li> <li>• Refuel if necessary.</li> <li>• Check fuel line for leakage</li> </ul>
Drum brake (IF EQUIPPED)	<ul style="list-style-type: none"> <li>• Check operation.</li> <li>• Check brake shoes for wear. Replace if necessary.</li> </ul>

ITEM	CHECKS
Disc brake (IF EQUIPPED)	<ul style="list-style-type: none"> <li>• Check operation.</li> <li>• If soft or spongy, have dealer bleed hydraulic system.</li> <li>• Check brake pads for wear. Replace if necessary.</li> <li>• Check fluid level in reservoir. If necessary, add recommended brake fluid to specified level.</li> <li>• Check hydraulic system for leakage.</li> </ul>
Throttle grip	<ul style="list-style-type: none"> <li>• Make sure that operation is smooth.</li> <li>• Check cable free play.</li> <li>• If necessary, have a dealer adjust cable free play and lubricate cable and grip housing.</li> </ul>
Engine oil	<ul style="list-style-type: none"> <li>• Check oil level in engine.</li> <li>• If necessary, add recommended oil to specified level.</li> <li>• Check vehicle for oil leakage.</li> </ul>
Wheels and tires	<ul style="list-style-type: none"> <li>• Check for damage.</li> <li>• Check tire condition and tread depth.</li> <li>• Check air pressure.</li> </ul>
Brake levers	<ul style="list-style-type: none"> <li>• Make sure that operation is smooth.</li> </ul>

ITEM	CHECKS
Sidestand, Mainstand ( IF EQUIPPED )	<ul style="list-style-type: none"> <li>• Lubricate pivots if necessary.</li> </ul>
Instruments, lights, signals and switches	<ul style="list-style-type: none"> <li>• Check operation.</li> </ul>

Read the Owner' s Manual carefully to become familiar with all controls. If there is a control or function you do not understand, ask your dealer.

### **WARNING**

**Failure to familiarize yourself with the controls can lead to loss of control, which could cause an accident or injury.**

## OPERATION AND IMPORTANT RIDING POINTS

### Starting the engine

- ① Turn the key to "ON".
- ② Close the throttle completely.
- ③ Start the engine by pushing the start switch while applying the front or rear brake.

### Starting off

- ① While pulling the rear brake lever with your left hand and holding the grab bar with your right hand, push the vehicle off the mainstand.
- ② Sit astride the seat, and then adjust the rear view mirrors.
- ③ Switch the turn signals on.
- ④ Check for oncoming traffic, and then slowly turn the throttle grip (on the right) in order to take off.
- ⑤ Switch the turn signals off.

### **WARNING**

**Do not start the engine indoor with bad ventilation or without ventilation. Do not leave a starting vehicle when no one else is around.**

### **NOTICE**

**Do not run the engine in high speed when you do not drive the vehicle(If equipped), or it will become overheating and damage its inner parts.**

### Acceleration and deceleration



The speed can be adjusted by opening and closing the throttle. To increase the speed, turn the throttle grip in direction (a). To reduce the speed, turn the throttle grip in direction (b).


### Braking

1. Close the throttle completely.
2. Apply both front and rear brakes simultaneously for safety concern.

### **WARNING**

**It is dangerous only to use either the front brake or rear brake which may cause skid or lose control. Be careful and use brakes properly when you drive on wet road or curved road.**

### Parking

1. The vehicle should be parked on firm and flat road.
2. Turn the power key to the position "  " to stop the engine.
3. Remove ignition key from the switch after locking for security reason.

## PERIODIC MAINTENANCE AND ADJUSTMENT

Periodic inspection, adjustment, and lubrication will keep your vehicle in the safest and most efficient

condition possible. Safety is an obligation of the vehicle owner/operator. The most important points of vehicle inspection, adjustment, and lubrication are explained on the following pages. The intervals given in the periodic maintenance and lubrication chart should be simply considered as a general guide under normal riding conditions. However, depending on the weather, terrain, geographical location, and individual use, the maintenance intervals may need to be shortened.

### **WARNING**

**Failure to properly maintain the vehicle or performing maintenance activities incorrectly may increase your risk of injury or death during service or while using the vehicle. If you are not familiar with vehicle service, have a dealer perform service.**

### **NOTICE**

- The annual checks must be performed every year, except if a kilometer-based maintenance, is performed instead.
- The vehicle may have different accessory for different market and some parts may not exist for common chart.

## PERIODIC MAINTENANCE CHART

ITEM	CHECKS	ODOMETER READING					
		1000Km New	4000Km 3 months	7000Km 6 months	10000Km 9 months	13000Km 1 year	16000Km 15months
Fuel line	• Check fuel hoses for cracks or crack		●		●		
Spark plug	• Check condition. Clean and regap.		●		●		
	• Replace			●		●	
Valves(If equipped)	• Check/adjust valve clearance.	●		●		●	
Air filter element	• Inspect/cleaning/replace	●	●	●	●	●	●
Disc brake (If equipped)	• Check operation, fluid level and vehicle for fluid leakage.	●		●		●	
	• Inspect/replace brake pads.			●		●	
Drum brake (If equipped)	• Inspect/replace brake shoes.			●		●	
Wheels	• Check runout and damage.	●	●	●	●	●	●
Tires	• Check tread depth and damage.	●	●	●	●	●	●
	• Replace if necessary.	●	●	●	●	●	●
	• Check air pressure.	●	●	●	●	●	●
Chassis fasteners	• Make sure that all nuts, bolts and screws are properly tightened	●		●		●	
Front brake lever pivot shaft	• Lubricate with silicone grease.	●	●	●	●	●	●

ITEM	CHECKS	ODOMETER READING					
		1000Km New	4000Km 3 months	7000Km 6 months	10000Km 9 months	13000Km 1 year	16000Km 15months
Rear brake lever pivot shaft	• Lubricate with silicone grease.	●	●	●	●	●	●
Side stand Main stand	• Check operation.	●	●	●	●	●	●
	• Lubricate.	●	●	●	●	●	●
Front fork	• Check operation and oil leakage.	●	●	●	●	●	●
Shock absorber	• Check operation and shock absorbers for oil leakage.	●	●	●	●	●	●
Engine oil	• Change.	●		●		●	
	• Check oil level and vehicle for oil leakage.	●		●		●	
Engine oil strainer	• Clean.	●			●		
Front and rear brake switches	• Check operation.	●	●	●	●	●	●
Moving parts and cables	• Lubricate.	●	●	●	●	●	●
Throttle grip Housing and cable	• Check operation and free play.	●	●	●	●	●	●
	• Adjust the throttle cable free play if necessary.	●	●	●	●	●	●
Lights, signals and switches	• Check operation.	●	●	●	●	●	●
	• Adjust headlight beam.	●			●		
NOTICE	More frequent inspection and maintenance are necessary in dusty area. Especially for air filter, it's suggested to do first maintenance in 500KM and clean air filter every 1000KM.						

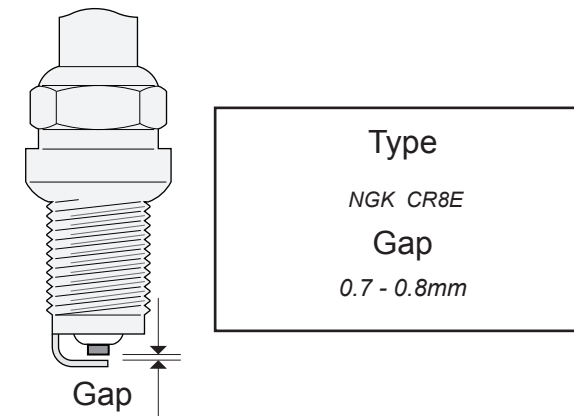
## CHECKING THE SPARK PLUG

The spark plug is an important engine component, which should be checked periodically, preferably by a dealer. Since heat and deposits will cause any spark plug to slowly erode, it should be removed and checked in accordance with the periodic maintenance. In addition, the condition of the spark plug can reveal the condition of the engine.

The porcelain insulator around the center electrode of the spark plug should be a medium-to-light tan (the ideal color when the vehicle is ridden normally). If the spark plug shows a distinctly different color, the engine could be operating improperly. Do not attempt to diagnose such problems yourself. Instead, have a dealer check the vehicle.

If the spark plug shows signs of electrode erosion and excessive carbon or other deposits, it should be replaced.

Before installing a spark plug, the spark plug gap should be measured with thickness gauge and, if necessary, adjusted to specification.



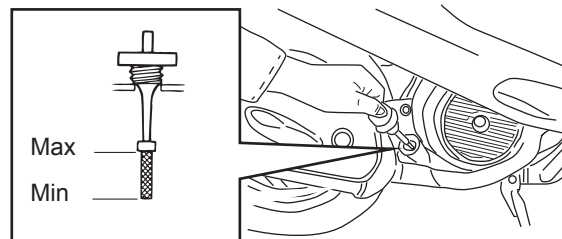
Clean the surface of the spark plug gasket and its mating surface, and then wipe off any grime from the spark plug threads.

## ENGINE OIL

The engine oil level should be checked before each ride. In addition, the oil must be changed at the intervals specified in the periodic maintenance and lubrication chart.

## TO CHECK THE ENGINE OIL LEVEL

1. Place the vehicle on the main stand. A slight tilt to the side can result in a false reading.
2. Start the engine, warm it up for several minutes, and then turn it off.
3. Wait a few minutes until the oil settles, remove the oil filler cap, wipe the dipstick clean, insert it back into the oil filler hole (without screwing it in), and then remove it again to check the oil level.
4. Insert the dipstick into the oil filler hole, and then tighten the oil filler cap.



## NOTICE

**The engine oil should be between the minimum and maximum level marks.**

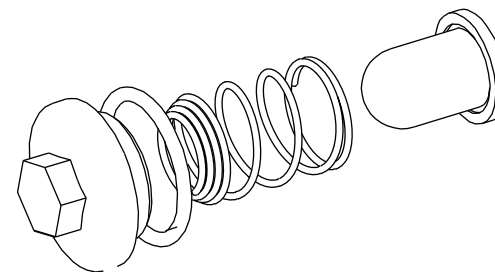
## TO CHANGE THE ENGINE OIL

1. Start the engine, warm it up for several minutes, and then turn it off.
2. Place an oil pan under the engine to collect the used oil.
3. Remove the engine oil filler cap and the engine oil drain bolt to drain the oil from the crankcase.
4. Install the washer and the engine oil drain bolt, and then tighten the drain bolt to the specified torque.
5. Refill with the specified amount of the recommended engine oil, and then install and tighten the oil filler cap.

**Type**  
API SH or Above, SAE 10W40  
**Capacity**  
1.4±0.05L

## OIL FILTER CLEANING (IF EQUIPPED)

Open the filter nut assembly of the element, and remove the element. Remove the foreign materials from the element by using a gasoline or air spraying gun.



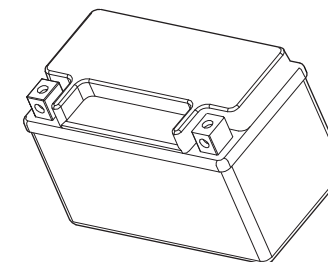
## ⚠ WARNING

- Oil level will not be correct when checking the oil level with the vehicle parked on an unlevelled ground or immediately after the engine stopped.
- Engine and exhaust pipe are hot right after engine stopped. Pay special attention not to get burned when checking or replacing engine oil.

## CHECKING THE BATTERY

This model is equipped with a maintenance free type battery or a normal battery. There is no need to check the electrolyte for maintenance free battery or to add distilled water.

Ask the dealer to add electrolyte for normal battery. Have a dealer charge the battery as soon as possible if it seems to have discharged. Keep in mind that the battery tends to discharge more quickly if the vehicle is equipped with optional electrical accessories.



**12V 8Ah(YTX9-BS)  
MAINTENANCE-FREE**



## VALVE CLEARANCE

The valve clearance changes with use, resulting in improper air-fuel mixture and/or engine noise. To prevent this from occurring, the valve clearance must be adjusted by a dealer at the intervals specified in the periodic maintenance and lubrication chart.

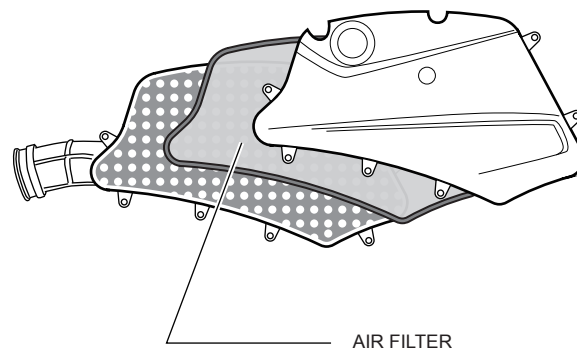
Valve clearance( Cold engine )	
IN: 0.10 ~ 0.13mm	EX: 0.10 ~ 0.15mm

## AIR FILTER

The air filter element should be replaced and should be cleaned at the intervals specified in the periodic maintenance and lubrication chart.

## REPLACING THE AIR FILTER ELEMENT

1. Place the vehicle on the main stand.
2. Remove the air filter case cover by removing the screws.
3. Pull the air filter element out.
4. Insert a new air filter element into the air filter case.
5. Install the air filter case cover by installing the screws.



## BRAKE FLUID (IF EQUIPPED)

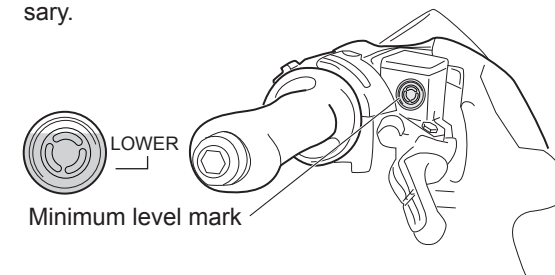
The vehicle uses the disc brake. Adjustment is finished before delivery. Contact dealer if any problem.

Recommended brake fluid  
DOT 4



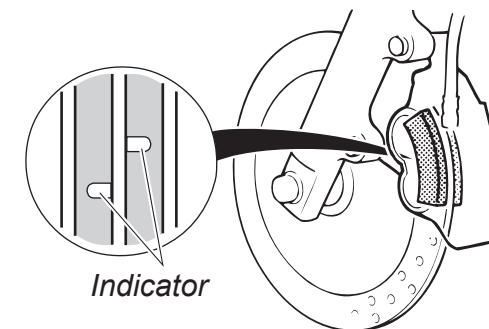
In case of drinking the brake fluid by mistake or contacting with eye or skin, wash with a large amount of water, and seek medical advice immediately if in a serious condition.

Don't forget to check the amount level in the brake fluid reservoir. Add appropriate brake fluid if necessary.



## BRAKE PADS (IF EQUIPPED)

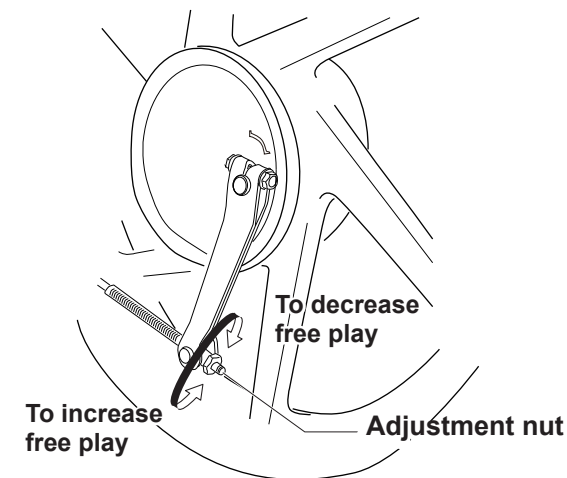
Check the brake pads whether have been worn to limits. Change the pads if over the limit



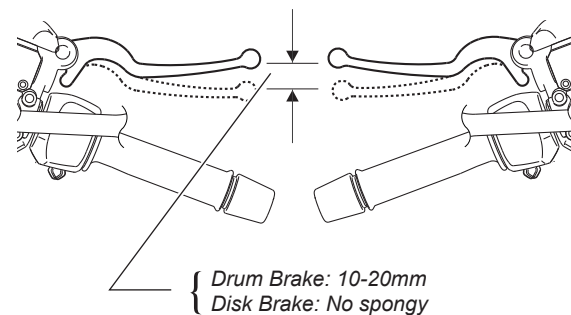
## CHECK THE DRUM LIMIT (IF EQUIPPED)

### Adjustment Nut

- Turn the adjustment nut on brake arm of rear wheels to adjust the free play of rear brake.
- Set down the rear brake lever after adjusting until there is effective brake feeling.

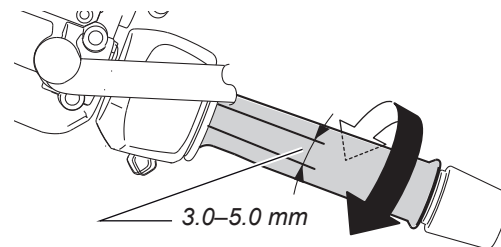


## CHECKING THE FRONT AND REAR BRAKE LEVER FREE PLAY



## CHECKING THE THROTTLE CABLE FREE PLAY

The throttle cable free play should measure 3.0–5.0 mm at the throttle grip. Periodically check the throttle cable free play and, if necessary, have a dealer adjust it.



## REPLACING THE FUSES AND BULBS

If a fuse or bulb for the individual circuits is blown, replace it as follows.

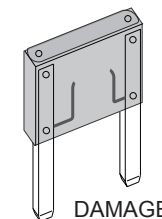
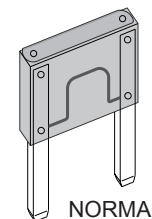
1. Turn the key to "OFF" and turn off the electrical circuit in question.
2. Remove the blown fuse or bulb, and then install a new fuse of the specified specification.

Headlight bulb	12V 35/35W
Turn light	LED
License plate light	12V 5W
Front city light	12V /5W
Rear city light	LED
Taillight bulb	LED

### **WARNING**

**Do not use a fuse or bulb of a higher amperage rating than recommended to avoid causing extensive damage to the electrical system and possibly a fire or problems.**

If the fuse or bulbs immediately blows again, have a dealer check the electrical system.



MAIN FUSE	30A	ABS 1	15A
EFI SYSTEM FUSE	15A	ABS 2	10A

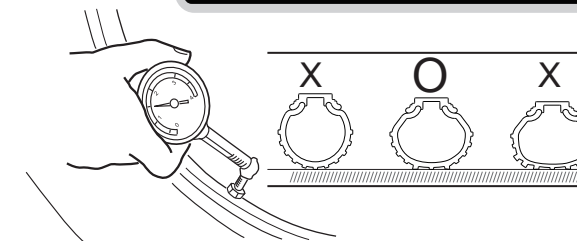
## TIRE

Inflation pressure and tire tread should be regularly checked. In order to ensure maximum safety and longer service life, inflation pressure requires more frequent routine check.

### Tire Pressure

Insufficient tire pressure will not only accelerate wearing, but also have bad impact on driving stability such as making turning difficult. However, too high pressure will reduce the contact area between tire and ground, thus causing slipping or even getting out of control. Tire pressure should be kept in the standard range. Adjust the tire pressure under a "cold" condition.

TIRE INFORMATION	
COLD TIRE PRESSURE	
[FRONT] 220±10 kpa	[REAR] 250±10 kpa



## LUBRICATION POINTS

Appropriate lubrication is important to keep every part of your vehicle in normal running and lengthen its working life and to ensure safe driving. Lubricate your vehicle after you have driven it for a long mileage or the vehicle is wet due to raining or washing. Detail lubrication points are shown:

### Lubricant grease

1. Speedometer spindle wire★
2. Speedometer gear and sensor gear ★
3. Side stand and its spring
4. Main stand and its spring
5. Throttle cable
6. Pivot of front brake lever
7. Pivot of rear brake lever

## STORAGE

### Short-term

Always store your vehicle in a cool, dry place and, if necessary, protect it against dust with a porous cover.

### Long-term

Before storing your vehicle for several months:

1. Change engine oil.

2. Drain fuel in fuel tank out.  
Install the fuel tank cover again.
3. Detach the spark plug and add one teaspoon of (15~20cm<sup>3</sup>) clean engine oil to cylinder. Kick the starting lever for several times to distribute oil in the cylinder, and install the spark plug again.
4. Remove the battery. Keep the battery in proper place which can avoid freezing and the direct sunlight. Charge the battery or examine the electrolyte level(if equipped with lead-acid battery).
5. Clean and dry the vehicle. Wax the surface of the paint.
6. Inflate tire to the required pressure. Put the vehicle on a block to make two tires off the ground.
7. Cover the vehicle (no plastic or coating material) and keep it in the place consistent temperature and low humidity. Do not keep your vehicle under direct sunlight.

Use the vehicle after storage

1. Take off the cover and clean the vehicle. Change engine oil if you keep your vehicle for more than four months.
2. Examine the electrolyte level and charging as needed. Install the battery.
3. Wash away the anti-rust agent in fuel tank, and add new petrol into fuel tank.

## SPECIFICATION

### Size and Weight

Length .....	2165mm
Width .....	800mm
Height .....	1390mm
Wheelbase .....	1500mm
Dry Weight .....	186kg

### Engine

Type .....	Single-cylinder, Four-stroke,water cooling
Model .....	169MM-5A
Bore × Stroke .....	Ø69×66.8mm
Displacement .....	250ml
Maximum Power .....	15.5kW/7000 r/min
Maximum Torque .....	23.4 N.m /6000r/min
Ignition System Type .....	TLI
Compression Ratio .....	10.7:1

### Brake

Front Brake .....	Dual discs
Rear Brake .....	Disc

### Tire

Front Tire .....	120/70-14
Rear Tire .....	140/60-14

### Fuel

Fuel Tank (include reserve tank) .....	10.7L
Fuel Type .....	Regular unleaded gasoline only