



# Benelli

TnT302S OWNER'S MANUAL


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## IMPORTANT REMINDER

Warning: This motorcycle must be equipped with a fuse of the same specification as stock to ensure safe operation. Use of fuses of the wrong specification is strictly prohibited. Use of incorrect fuses or non fuse objects could result in sparks, fire or even electrocution.

Location of the fuse: next to the battery.

A blown fuse is usually caused by an electrical system fault. Look over the vehicle any time a fuse has blown and needs to be replaced before installing it. If the fuse blows immediately when installed do not attempt to replace it again and do not replace the fuse with a non fuse object like wire. Take your vehicle to an authorized Benelli dealership for inspection and repair and only operate it once the situation is resolved.

Notes:

Before changing the fuse, switch the key to "  " in case of short circuit;

\* Make sure the contact point of the fuse is not broken while changing the fuse, which would result in bad contact, parts damage, and even fire.

Do not reconfigure the motorcycle or change the locations of the parts and accessories at will, this will cause a strong impact on the stability and safety of the motorcycle, and may cause operational faults. Modifications performed to the electrical system, emission control system, canister, or any other components are prohibited and will violate the riding safety and traffic administration regulations. Any and all problems arising from unauthorized modifications of this vehicle will become the responsibility of the user. The user shall obey all local regulations and traffic safety laws.



## PREFACE

### TIP:

#### Break-in of your Motorcycle

The first 1,000km (600 mi.) of operation are the most crucial miles of the engine service lifespan. If break-in is carried out normally, the longest service lifespan can be assured and the performance of the engine will be completely optimized.

## PREFACE

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 on how to operate, inspect and maintain your vehicle, but also 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 your dealer.


Our company continually seeks advancements 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 your dealer.

Please carefully read this manual to understand the key rules. The words "Warning", "Notice" and "Tip" are used here to indicate the importance degrees, please make sure that you fully understand the meanings as the following:



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## SAFETY NOTES

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

**Notice**----- Indicates special precautions that must be taken to avoid damage to the vehicle or other property.

**Tip**----- Provides key information to make procedures easier or clearer.

This owner's manual which describes the use and operation of the vehicle should be kept on the vehicle at all times for reference. If sold, this manual should accompany the vehicle.

## SAFETY NOTES

### Warning:

For the purposes of safety, the rider should carefully read this entire manual so that he/she is completely familiar with the vehicle before riding it.

1. Inspect your motorcycle completely before starting the engine so as to prevent possible accidents or damage.
2. Many accidents can be attributed to an inexperienced rider. Make sure that the rider is qualified before riding the motorcycle. Never allow someone without a drivers licence to ride the vehicle.
3. Most of the accidents between cars and motorcycles are caused by the cars "not seeing" the motorcycle rider. In order to avoid accidents, the rider shall make themselves visible by:
  - Wearing bright colored and reflective clothing;
  - Don't ride in the blind spot of the rear-view mirrors of the other vehicles on the road.



## SAFETY NOTES

4. The rider shall obey all of the national and local laws and regulations.
  - Speeding is one of the key reasons for accidents. So keep your speed within the limit stated.
  - Use your turn signals before turning and your brakes when braking to prevent accidents.
5. When riding, the driver should hold both handlebar grips and keep both feet on the footpegs and the passenger should grab somewhere on the vehicle or onto the driver with feet on the passenger footpegs.
6. Any reconfiguration or disassembly which would affect the riding safety or maintenance of your motorcycle is strictly prohibited.
7. Any aftermarket accessories installed shall not affect the riding safety or operational performance of the motorcycle. Overloading of the electrical system will result in danger and possibly fire.
8. Do not operate the engine within confined spaces as the exhaust gas would cause injury or death. Carbon Monoxide is a colorless, odorless, tasteless gas which may be present even if you do not see or smell any engine exhaust.


### PROTECTIVE CLOTHING

1. Most fatal accidents involving motorcycle riders are caused by head injuries. For the purposes of personal safety, the rider should wear an approved safety helmet, motorcycle boots, gloves and protection clothing. The passenger shall also wear this same gear.
2. The exhaust pipe and muffler will be very hot during and for some time after operation. Never touch the muffler or exhaust and wear riding gear that totally covers your legs.
3. Don't wear loose fitting clothing that may interfere with the control levers, pedals or wheels.



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## SERIAL NUMBER

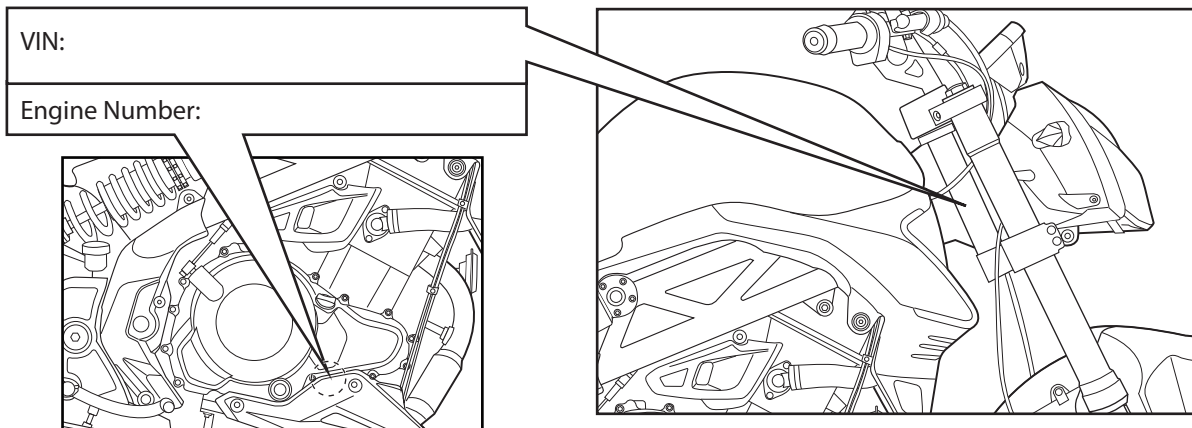
The vehicle identification number (VIN) and the engine serial number are used to register the vehicle, they are also used to assist your dealer in terms of ordering parts or referring to special service information.

Record the numbers for the possible use in the future.

Vehicle identification number (VIN) is printed on the right side of the steering head tube.

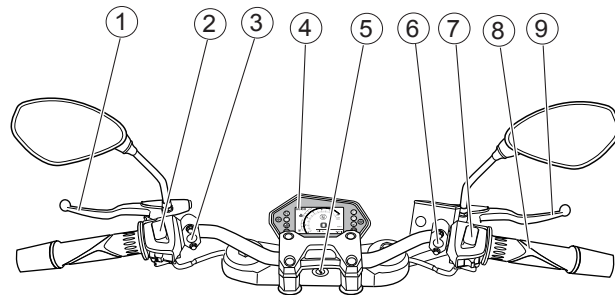
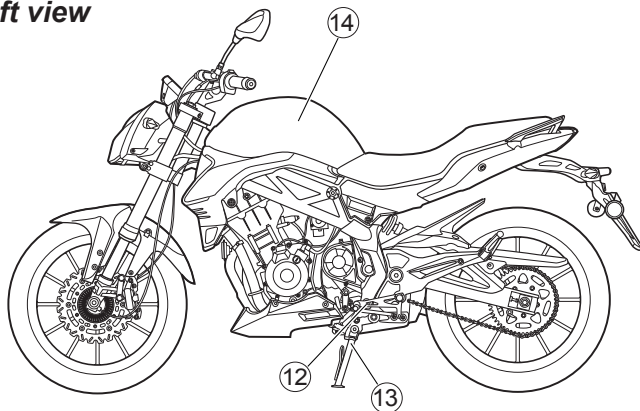
The engine serial number is printed on the lower part of the right engine crank case area.

Please write down these numbers here for your reference.

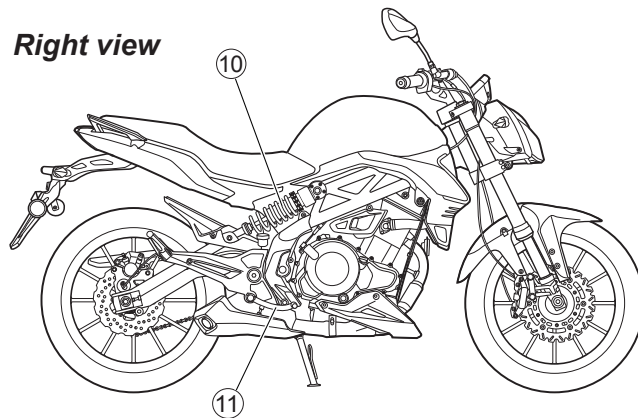


## LOCATION OF PARTS

**Left view**



**Right view**




- |                            |                       |
|----------------------------|-----------------------|
| ① Clutch lever             | ⑧ Throttle grip       |
| ② Left handlebar switch    | ⑨ Front brake lever   |
| ③ ABS switch (if equipped) | ⑩ Rear shock absorber |
| ④ Meter                    | ⑪ Rear brake pedal    |
| ⑤ Ignition switch          | ⑫ Shifter lever       |
| ⑥ Meter function button    | ⑬ Side stand          |
| ⑦ Right handlebar switch   | ⑭ Fuel tank           |



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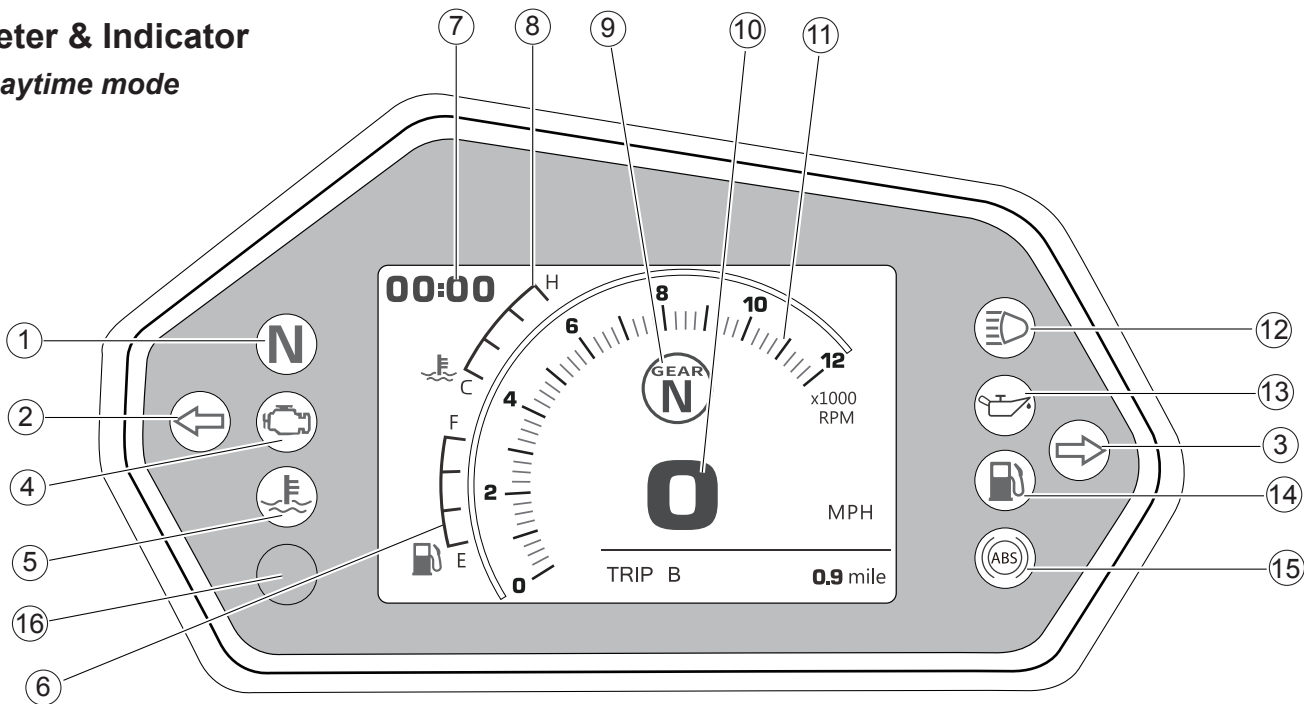
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## LOCATION OF PARTS

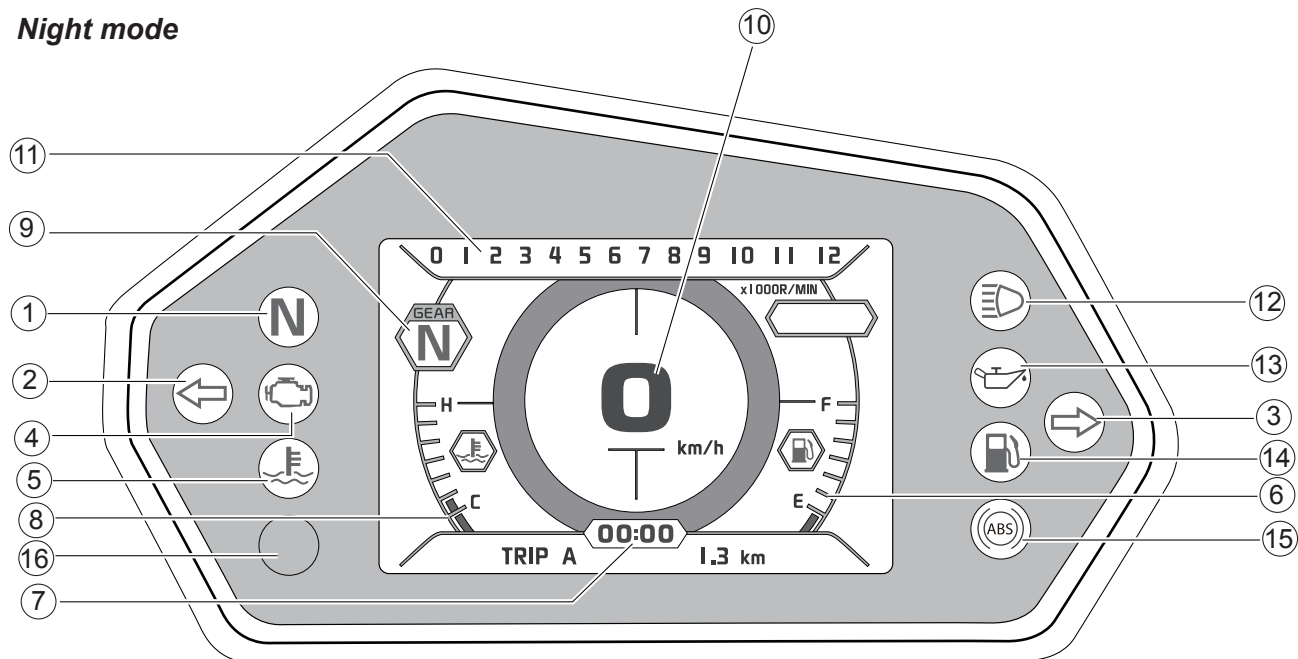
### Meter & Indicator

*Daytime mode*




## LOCATION OF PARTS

### Night mode



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## LOCATION OF PARTS

### 1. NEUTRAL INDICATOR LAMP

When the transmission is in the neutral position, the indicator lamp will be on.

### 2. TURNING INDICATOR

The indication lamps will flash with the turning signals.

### 3. TURNING INDICATOR

The indication lamps will flash with the turning signals.

### 4. ENGINE CONTROL SYSTEM TROUBLE INDICATOR

Return to an authorized dealer if this indicator is activated while riding.

### 5. WATER TEMPERATURE WARNING

Stop to check the water tank level if this indicator light is lit.

### 6. FUEL LEVEL INDICATOR

It indicates the fuel level in the fuel tank.

### 7. CLOCK

Indicates the time.

### 8. WATER TEMPERATURE GAUGE

This indicator indicates the temperature of the coolant. When the pointer is in between C and H, the temperature is normal. Stop to check the water tank level if the pointer is higher than the H level.

### 9. GEAR INDICATOR LAMP

Numbers on the meter indicate the gear positions of the vehicle including 1, 2, 3, 4, 5, and 6.

### 10. SPEEDOMETER

Speedometer shows the running speed, kilometers/hours.

### 11. TACHOMETER

Tachometer indicates the revolution per minute of the engine.

### 12. HIGH BEAM INDICATOR LAMP

When the high beam lamp of the headlight is on, the high beam indicator lamp will be on.

### 13. ENGINE OIL PRESSURE WARNING LAMP

When this indicator lights up, that means the bike has the risk of insufficient lubrication and should be checked/repaired immediately.

### 14. FUEL LEVEL WARNING LAMP

It indicates the fuel is less than 15% of total capacity in the fuel tank.



## LOCATION OF PARTS

### 15. ABS INDICATOR LIGHT (IF EQUIPPED)

1. ABS failure -- If any type of ABS failure is detected and stored, ABS indicator light is lit and stays on after repaired, then ABS indicator light will be unlit after the next Power switch ON/OFF and when vehicle speed exceeds 5km/h.
2. ABS is under OFF mode --ABS indicator light Blink 1 time/1.27s (Slow Blink)
3. When pressing the ABS switch within 3s ~30s --ABS indicator light Blink 1 time/0.32s (Quick Blink)
4. ABS is under ON mode -- When the ignition switch turned on, the ABS indicator lamp will light and stays activated, until the motorcycle is ridden away, once reaching about 3~5KM/H the ABS indicator lamp will be unlit.

Normally the ABS indicator light comes on when the ignition switch is turned on and goes off shortly after the vehicle starts moving. If the indicator light shows any of the following, a fault or faults may have occurred in the ABS. You should have the vehicle checked by an authorized Benelli dealer.


- a. The light does not come on when the ignition switch is turned on.
- b. The light remains lit after the vehicle is moving over 5km/h.

Remember that the ABS does not function when the indicator light is on, but if only the ABS system fails (without any other malfunctions in mechanical parts, for example, brake hoses, master cylinders, brake callipers), the conventional brake system should still work normally.



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### 16. PHOTSENSITIVE SWITCH

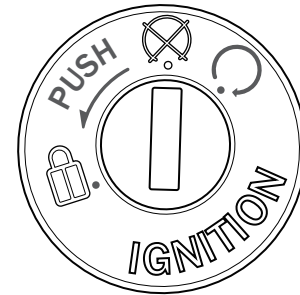
There are two modes in this meter. They switch automatically depending on the intensity of the light. Please follow the below steps to switch it manually. Cover the switch with your hand for 3-5 seconds to switch daytime mode to night mode. Use a flashlight to illuminate this switch for 3-5 seconds to change from night mode to daytime mode.

#### IGNITION SWITCH

“” (On) position: The circuits are on

“” Position: 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.

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



#### Notice :

Do not turn your key to lock the vehicle while driving which is not necessary and is also apt to cause accident.  
Press the key in with proper force.

## PRIMARY PARTS

### LEFT HANDLEBAR

#### 1. HORN BUTTON

Press down on the button to activate the horn.

#### 2. HIGH & LOW BEAM SWITCH

Turn the switch to the "≡▷" position, the high beam of the headlamp turns on and the indicator lamp on the meter will also turn on; turn the switch to the "≡▷" position, the low beam of the headlamp will turn on.

#### 3. DIRECTION INDICATOR LAMP SWITCH

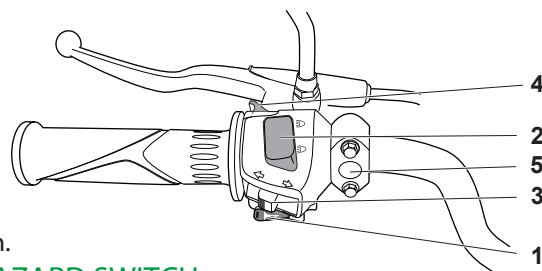
Turn the switch to "◀" position, the left direction signal lamp flashes; turn the switch to "▶" position, the right direction signal lamp flashes; and the indicator lamps will flash accordingly.

#### 4. PASSING SWITCH

When passing other vehicles, press this button so the high beam of the headlight will flash to alarm the vehicles in front of you.

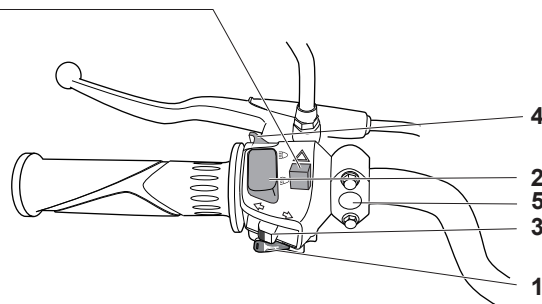
#### Warning :

Turn on the direction signal lamps in time when changing lanes or turning a direction, turn off the lamps when turning is complete.




#### HAZARD SWITCH

or



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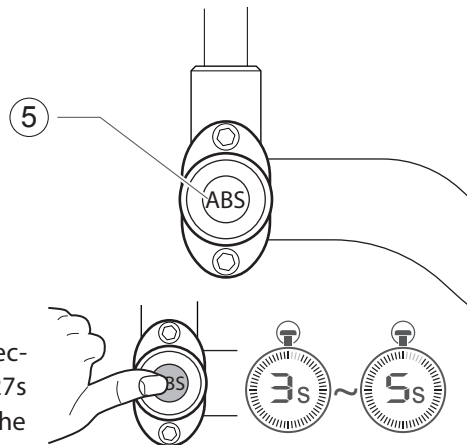
## PRIMARY PARTS

### 5. ABS SWITCH (IF EQUIPPED)

If you want to enable/disable the ABS, please keep your motorcycle under 5km/h or stop, because the ABS switch only works when the vehicle speed is lower than 5km/h.

From ABS ON mode → OFF mode

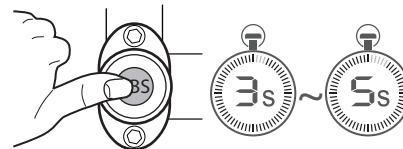
Please keep pressing the ABS switch precisely within the range of 3~5 seconds, the ABS indicator light should be changed from lit to blink as per 1.27s (Slow Blink) when you release the switch, now the ABS is turned OFF and the brake will work as a conventional system does.



From ABS OFF mode → ON mode

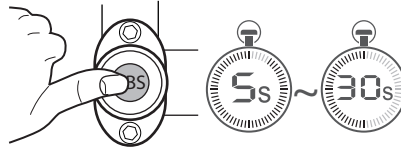
Please keep pressing the ABS switch precisely within the range of 3~5 seconds, the ABS indicator light should be changed from blink as per 1.27s (Slow Blink) to constantly lit when you release the switch.

Or you can turn the ignition switch off and on to reset the ABS system to ON mode

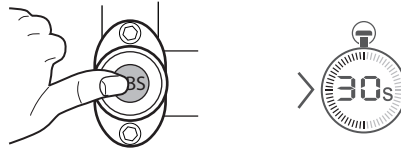


## PRIMARY PARTS

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 will be changed to ON mode from any other mode if the switch was stuck or pressed more than 30s.



### **NOTICE**

The ABS switch does not work if you press the ABS switch when either the front or rear wheel speed is over 5km/h.

### 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 riding 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:



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## PRIMARY PARTS

- To apply the brake effectively, use the front brake lever and rear brake pedal simultaneously in the same manner as a conventional vehicle brake system.
- ABS cannot compensate for adverse road conditions, misjudgement or improper application of the 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 a corner. Same as a conventional brake system, an excessive sudden stop may cause the wheel to 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 riders responsibility to ride at appropriate speeds and manner for weather, road surfaces and traffic conditions.



## PRIMARY PARTS

The computers integrated in the ABS compare vehicle speed with wheel speed. Since non-recommended tires can affect wheel speed, they may confuse the computers, which can extend braking distance.



### **WARNING**

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




### **NOTICE**

- The 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 rotational status. In this case, first turn the ignition key to “OFF” , and then back to “ON” . The ABS indicator light goes off by this operation, but if the ABS indicator light remains lit after the vehicle reaches a 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 at speeds of approximate 5 km/h or below.
- ABS does not function if the battery is discharged.



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## PRIMARY PARTS



### RIGHT HANDLEBAR

#### 1. ENGINE STOP SWITCH

When the switch is in "  " position and the power is on, the engine runs.  
When the switch is in "  " position and the power is off, the engine will not run.

**TIP:** Under normal conditions, this switch shall be on "Operate" (  ) position. Use this switch for emergency situations, for example accident or key switch problems.




#### 2. HAZARD SWITCH " "

Turn to "  " and the four direction signal lamps would flash to warn for emergency situation; turn to "  " for daytime riding.

#### 3. ELECTRIC STARTER BUTTON

Pull the clutch lever in or put the transmission in Neutral gear and press the button to run the electric starter and start the engine.

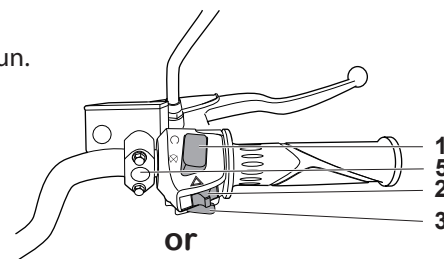
#### 4. LIGHT SWITCH (IF EQUIPPED)

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.

#### 5. METER FUNCTION BUTTON

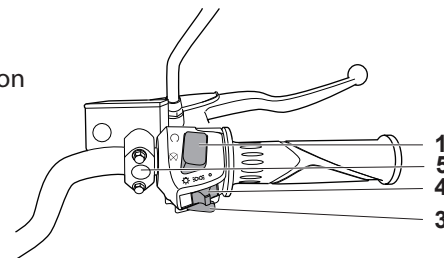
In ODO mode, turn off the key. To adjust the clock, turn on the ignition switch and immediately long press the set button, when released, the hour digit will start flashing on the meter.  
Short press the set button to change the number, or long-press to move the flashing digit

Without Headlight Switch



or

With Headlight Switch



## PRIMARY PARTS

to the next position to continue adjustment. To change the units between KM/H and MPH, turn on the ignition switch and wait for over 10 secs, then long-press the set button to switch between miles and kilometers. Under any modes ("ODO", "TRIP A" and "TRIP B"), short press the set button to switch between the three modes, while in TRIP A and TRIP B modes, long press the set button to reset the trip mileage.

### FUEL TANK

The capacity of the fuel tank (including reserve) is about 16L (4.22 gal.)

To open the fuel tank cap, insert the key and turn it clockwise and open the cover. To close the fuel tank, reinstall the cap and then press it down. Remove the key once it returns to the insert position.




Use fuel identified by either of the above symbols.

1. Gasoline containing up to 5% ethanol by volume.
2. Gasoline containing up to 10% ethanol by volume.

#### Warning :

Do not over fill the fuel tank. Do not splash fuel on the hot engine.

Please stop the engine and turn the ignition key to the "  " (Off) position when you need to refuel.

Do not forget to lock the fuel tank cap after adding fuel in case of evaporation to the air, which is a waste of energy and would pollute the environment. Don't use fire or smoke while refuelling.



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## PRIMARY PARTS

### REAR SHOCK ABSORBER

The motorcycle is equipped with one rear shock absorber on the right side of the motorcycle.

Spring pre-load adjustment.

The rear shock absorber is equipped with adjustment ring nuts for spring preload adjustment.

Adjust the spring preload as follows:

To increase the preload setting of the spring, turn the adjustment ring nut with a special wrench as in Illustration A, to make the suspension stiffer.

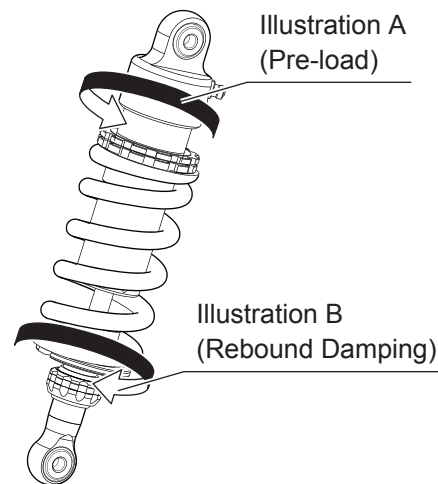
Rotate the opposite direction to achieve a softer setting. After adjustment, make sure the lock nut is tightened to ensure rider safety.

Rebound damping adjustment:

The rear suspension rebound damping can be adjusted by adjusting the knob on the lower portion of the rear shock. To adjust the rebound damping, follow the procedure below:

1. Turn the adjustment knob as in Illustration B until feeling tight and no click sound is heard, this is the zero point with maximum rebound damping effect. (rebound extremely slow)

2. Turn the adjustment knob in the opposite direction, and count the clicking sounds. The total adjustable range is 66 clicks from the zero point, during normal riding, the setting should be 5~10 clicks according to the road conditions and rider's preference.



## PRIMARY PARTS

Generally speaking, when the spring pre-load is increased, the rebound damping should also be increased accordingly. If you are not sure how to adjust the rear suspension correctly, please refer to your authorized dealer for technical advice.

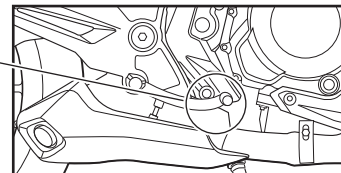
### Warning :

Rotate this adjusting knob by hand only, and never use too much force, or the rear suspension will be damaged. This will be deemed as abnormal usage, and will not be covered by warranty.

### REAR BRAKE PEDAL

Step on the rear brake pedal to slow down the motorcycle. The brake light will illuminate while in use.

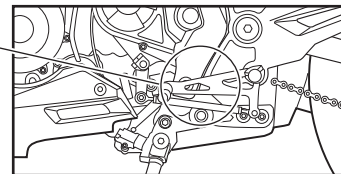
REAR BRAKE PEDAL



### SHIFTER LEVER

This motorcycle is equipped with a six-speed constant mesh gearbox.

SHIFTER LEVER




### Notice:

When the transmission is in the neutral position, the indicator lamp will turn on. Slowly release the clutch lever to make sure the transmission is in the neutral position.



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## FUEL AND ENGINE OIL RECOMMENDED

Release the throttle when down-shifting the transmission. Revving up the engine slightly when up-shifting will make shifting smoother and will avoid transmission damage.

### TOOL KIT

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

## FUEL AND ENGINE OIL RECOMMENDED

### Fuel:

It is a must to use lead free gasoline. Use a gasoline octane number of 91.

Notice: Use of lead free gasoline can extend the service life of the spark plugs.

### Engine Oil:

Please use a four-stroke motorcycle engine oil it should be equal to or higher than API SAE service grade SF. The specification is SJ10W/50.

Type Fully synthetic oil SJ10W-50 or SN 15W-50 Capacity 2.6L±0.1L
---



## ENGINE BREAK-IN

While riding your new motorcycle during the first 1,000km (600 mi.), the engine should not be over revved and all of the gears should not exceed 80% of the red zone of engine RPM; never fully open the throttle; and change gears in time to keep engine RPM in a reasonable range. It is strongly suggested to use the motorcycle very carefully during the break-in period.

Tip: During the first 300km (185 mi.) of break-in, you should examine the cleanliness of the engine oil frequently. Check the engine oil level before riding every time.

### PRE-RIDE INSPECTIONS

Checking the following items before riding is very important to your safety:

Check	Inspection
Handlebar	<ol style="list-style-type: none"><li>1) Stable</li><li>2) Turn smoothly</li><li>3) Not loose or bent</li></ol>
Braking	<ol style="list-style-type: none"><li>1) Correct brake lever and brake pedal free-play</li><li>2) Not spongy feeling</li></ol>



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## PRE-RIDE INSPECTIONS

Tires	<ol style="list-style-type: none"><li>1) Appropriate air pressure</li><li>2) Appropriate tire tread depth</li><li>3) No cracks or cuts</li></ol>
Fuel Level	Sufficient fuel for the km/mi. planned
Lights	Operate all the lamps – headlight, taillight, turn signals, instrument-panel light and city light.
Indicator Lamps	High beam indicator lamp, gear Indicator light, and turning indicators.
Horn & Brake Switch	Check that it sounds/lights up
Engine Oil	Correct oil level
Throttle	<ol style="list-style-type: none"><li>1) Appropriate free play at the throttle grip</li><li>2) Smooth operation</li></ol>
Clutch	<ol style="list-style-type: none"><li>1) Appropriate free play at the clutch lever</li><li>2) Smooth operation, not sticking when returning to fully closed position</li></ol>
Drive Chain	<ol style="list-style-type: none"><li>1) Appropriate adjustment</li><li>2) Appropriate lubrication</li></ol>



### RIDING TIPS

#### HOW TO START THE ENGINE

Insert the ignition key into the ignition lock and turn it to "ⓘ". Make sure the transmission is in neutral. The neutral indicator light lights up if the gear box is in the neutral position. Start the engine by pressing the start button.

**Notice:**

Do not rev the engine to high RPMs when you are not actually riding the motorcycle, it can cause overheating and damage internal engine parts.

**Warning:**

Do not start the engine while indoors or in an area of poor ventilation or without ventilation. Do not leave a running motorcycle unattended.



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### ACCELERATING & DECELERATING

Pull in the clutch lever, then press downward on the shifter lever to engage first gear. Twist the throttle grip toward yourself and release the clutch lever slowly and smoothly at the same time. The motorcycle will begin to move forward smoothly.

**Warning:**

Make sure the side stand is in the retracted position before riding.

**Gear box usage:**

The gear box will ensure smooth running of the engine within the normal engine RPM range, the rider should choose the gear according to the speed ridden. It is dangerous to ride with the clutch disengaged. Downshift the transmission when slowing down the motorcycle to ensure the engine is operating in the normal RPM range.

**Riding on an incline:**

When riding up a hill, the motorcycle will slow down and seem to lack power, when this happens downshift to a lower gear so that the engine can generate more power. Shift gears quickly to prevent your motorcycle from losing speed.

Downshift to lower gears when braking on a downhill slope to further slow the motorcycle down.

Don't over rev the engine.

Brake usage and stopping



Twist the throttle grip away from you to close the throttle. When braking use both the front and rear brakes evenly. Downshift the transmission when slowing down.

Before stopping the motorcycle, pull in the clutch lever and shift into neutral. Check that the neutral position indicator is lit to ensure it is in the neutral position.

### Notice:

Inexperienced riders usually only use the rear brake, which will accelerate the rear brake wear and result in longer stopping distances.

### Warning:

It is dangerous to only use either the front brake or the rear brake, this could result in a lack of control. Be careful and use caution when braking on a wet or curved road.

When parking the motorcycle choose a firm and flat surface. If you have to park the motorcycle on a slope with the side stand, shift the transmission into first gear to prevent slipping. Shift back in to neutral before starting the engine.

Turn the ignition switch to the "  " position to stop the engine.

Remove the ignition switch key when parking to keep your motorcycle safe.



### MAINTENANCE SCHEDULE

Listed on the following page is the scheduled maintenance table. Inspection, examination, lubrication, and specified maintenance should be addressed according the following chart. The inspection and maintenance of certain key components, are required to be done by professionals. We recommend you contact your local dealership to have any services performed marked by an: ✖.

### MAINTENANCE SCHEDULE KEY:

- I: Inspection, cleaning, adjustment, replacement
- C: Cleaning R: Replacement
- A: Adjustment
- L: Lubrication




## MAINTENANCE SCHEDULE

NO	ITEM	ODOMETER READING					
		1000km 600mi	4000km 2500mi	7000km 4500mi	10000km 6500mi	13000km 8500mi	16000km 10500mi
1	※ Fuel system		I		I		I
2	※ Throttle Operation		I	I	I	I	I
3	※ Air Filter	I	Per 6000km (3500mi): I or R				
4	※ Spark Plug	I		R		R	
5	※ Valve Clearance	Per 24000km (15000mi): I					
6	Engine Oil	I	Per 6000km (3500mi): R				
7	※ Oil Filter	I	Per 6000km (3500mi): R				
8	※ Fuel Injection	I		I		I	
9	Drive Chain	Per 1000km (600mi): I / L / A					
10	Battery			I		I	



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## MAINTENANCE SCHEDULE

NO	ITEM	ODOMETER READING					
		1000km 600mi	4000km 2500mi	7000km 4500mi	10000km 6500mi	13000km 8500mi	16000km 10500mi
11	Brake Pad Wear						
12	Brake System						
13	Braking Hydraulic Hoses						
14		Replace every two years					
15	Braking Hydraulic Fluid						
16		Replace every two years					
17	Clutch						
18	Hanger Bracket						
19	※ Nuts, Bolts, Fasteners						
20	※ Wheel/Rim						
21	※ Steering Bearings						
22	※ Cooling System						



## INSPECTION BEFORE DRIVING

※ suggested to be repaired by an authorized dealer: with special tools and inspection data provided by the manufacturer; by persons with a mechanical repair certification; and requires they follow the steps outlined in the maintenance schedule. Examination and repairs are suggested to be made only by authorized dealers for the sake of safety for these particular repairs.

### Notes:

1. Inspect more frequently when riding in dusty areas.
2. When the mileage exceeds the range given on the maintenance schedule start back at the beginning.
3. Take more maintenance to keep good performance for frequent driving in heavy conditions as rugged roads.

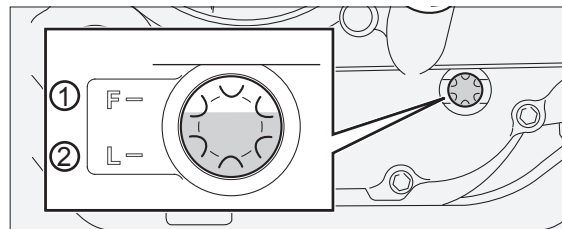
### OIL LEVEL & OIL CHANGE

Check the oil level before starting the engine.

Put the motorcycle on the side stand. Lift the handle bar and let the bike stand vertical to the flat ground. Check if the oil level is between the maximum and minimum level. If not, add the qualified engine oil to the proper level.

#### Oil Change & Oil Filter Replacement

1. Remove the oil filter with the special tool and oil drain bolt before oil draining.
2. Replace the oil filter with a new one if needed.



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3. Install the oil filter with the special tool and the oil drain bolt.
4. Fill the engine with qualified engine oil
5. Start the engine and allow to run at idle for several minutes then turn it off.
6. Make sure the oil reaches the upper limit mark without any oil leakage.



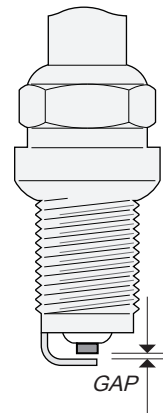
### SPARK PLUG

Remove any carbon deposits from the spark plug with a small wire brush or a spark plug cleaner during the inspection period noted in the maintenance schedule. Readjust the electrode gap of the spark plug with a feeler gauge to between 0.6~0.7mm.

Replace the spark plug every 6000km (3500mi).

Type of Spark Plug: NGK CR8E

When installing the spark plug, start threading it in by hand to avoid cross-threading it and damaging the threads of the cylinder head. Don't let foreign objects fall into the engine while the spark plug is removed.



### CATALYTIC CONVERTER

In order to meet the requirements of the environmental emissions standards, the muffler of the motorcycle is equipped with a catalytic converter.

## INSPECTION BEFORE DRIVING

The catalytic converter contains precious metals used as the catalyst, which will transform the hazardous substances in the exhaust gas, including carbon monoxide, hydrocarbon and nitrogen oxide into non-toxic carbon dioxide, water and nitrogen through a chemical reaction.

Since the catalytic converter is very important, a defective catalytic converter will pollute the air and decrease the performance of the engine, if replacement is needed, please use only genuine parts or entrust your dealership to replace it for you.

### Caution:

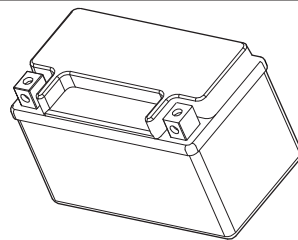
The catalytic converter will become very hot while the engine is running, please do not touch it.

## BATTERY

The battery is under the seat. The battery for your motorcycle is a maintenance free type. If a new battery is needed, please ask your dealer to fill the battery with electrolyte and charge the battery for you. Once filled and charged you no longer need to add electrolyte at any time during the battery's life.

If you have to remove the battery for inspection, please follow these steps :

- a. Turn off the ignition switch of the motorcycle;




**12V8Ah (YTX9-BS)  
MF (Maintenance Free) Battery**



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- b. Remove the seat cushion;
- c. Remove the mounting bolts and battery retainer bracket;
- d. Remove the negative terminal (−) first, and then the positive terminal (+);
- e. Remove the battery gently.

Install the battery in the reverse order of removal.

### Warning:

Correctly connect the battery wires when the battery is being re-installed. The red wire shall be connected to the positive terminal (+); and black wire shall be connected to the negative terminal (−). If the wires are incorrectly connected, it may damage the electrical system and the battery.

The ignition switch (key) shall be shut off while inspecting or replacing the battery.

Tighten the terminal bolts. Frequently clean the corrosive substances that form on the terminals with a wire brush while in use. Please operate according to the following requirements while filling electrolyte into the maintenance-free battery:

- a. Place the battery vertically on a horizontal surface and remove the sealing tape.
- b. Remove the electrolyte from the plastic bag. Remove its cover strip and set it aside to be used it as the filling plug for the battery.



**Attention:** Please do not tear or puncture the sealing tape on the filling port.  
The cover strip can be kept as filling plug for the battery.

c. Turn the electrolyte container upside down and align the six filling ports of the container with the six filling ports on the battery. Push downward with force on the container so as to puncture the sealing tape on the filling ports allowing the electrolyte to flow into the battery. Check for bubbles coming up from the battery to ensure electrolyte is flowing into the Battery. Attention: be sure not to tilt the container, or the filling process might be interrupted.

d. When you are sure that there are bubbles coming up from the battery at multiple ports leave the battery to fill for 30 minutes.

If there is a port with no bubbles flowing up from the battery lightly squeeze or tap the filling container until you can see bubbles rising from the battery at that port.

e. When the electrolyte container has emptied, tap it several times to ensure that all of the residual electrolyte has entered the battery; then slowly remove the electrolyte container from the top of the battery using caution to not spill any drops of electrolyte.



f. The six sealing plugs on the cover strip align respectively to the six filling ports on the battery. Make sure the ends of the six sealing plugs have been inserted into the filling ports on the battery; then press down firmly to fully seat the cover strip until it is flush with the top of the battery.

Once the battery is filled with electrolyte, DO NOT remove the cover strip to add water, electrolyte or any other liquid.

Pay attention to the following matters while replacing the battery:

Before replacing the battery, first determine the model of motorcycle and check if both batteries are of the same type. The battery used must be the same as the motorcycle was designed to use it. If a different type of battery is used, it may affect the performance and service life of the motorcycle, and possibly cause an electrical failure.

If the motorcycle will not be used for a long time, remove the battery and charge it once a month.

**Warning:** The battery will produce explosive gases when the chemical reaction occurs in it. Keep the battery away from fire, sparks, and high temperature places. The battery is filled with sulphuric acid (electrolyte). Electrolyte is a poisonous substance.

Please keep it out of the reach of children.

### THROTTLE CABLE ADJUSTMENT

1. Loosen the lock nut.
2. Turn the adjuster to bring the cable adjustment within 10~20mm.
3. Retighten the lock nut after adjustment of the cable clearance.

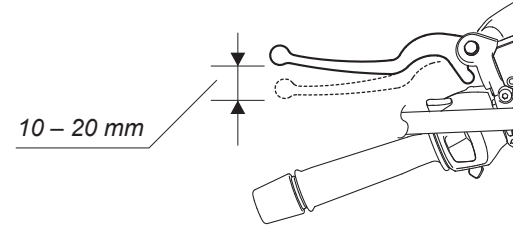


## INSPECTION BEFORE DRIVING

### CLUTCH ADJUSTMENT

The free play of clutch is measured from the free status of the lever, to the engagement point of the clutch, the standard should be 10~20mm. Adjust the clutch free-play as follows, if anything abnormal.

- (1) Loosen the locknut.
- (2) Screw in or out the adjusting bolt to set at the required free play.
- (3) Tighten the locknut.



### CHAIN ADJUSTMENT

Adjust the drive chain slack every 1000km's (600mi.) using the following method to reach a slack of 10~20mm. Regularly adjust your drive chain as needed according to your riding conditions and use.

**Warning:** The chain service suggestion here is for regular maintenance, it's recommended that the chain be checked before every ride. Damage to the engine, or your person can occur if excessive chain slack is ignored and the chain breaks.



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Adjust the chain as follows:

1. Support the motorcycle on the side stand.
2. Loosen the rear axle nut.
3. Loosen the adjuster locknuts.
4. Turn the adjusting bolts to adjust the chain slack. Reference marks are provided on both sides of the swingarm to help align the left and right adjustments. Tighten the axle nut, and adjuster lock nuts once the chain slack is set at 10~20mm and confirm it a second time.

### Notice:

When installing a new chain, check both the front and rear sprockets for wear, they should normally be replaced at the same time, as they wear each other out.

During regular maintenance, check the chain for the following conditions:

- |                         |                             |
|-------------------------|-----------------------------|
| (1) Loose pins          | (2) Damaged rollers         |
| (3) Rusty chain link    | (4) Twisted or snarled link |
| (5) Excessive free play | (6) Loose chain             |

The sprockets are probably damaged if any above-mentioned problems are found on the chain.

Inspect the sprockets as follows:



## INSPECTION BEFORE DRIVING

(1) Over worn sprocket teeth (2) Broken or damaged sprocket teeth (3) Loose sprocket fixing nuts

### BRAKE

The motorcycle uses a disc brake for both the front brake and the rear brake. Adjustment is finished before delivery. Contact your dealer if any problems arise.

#### Brake Fluid

The motorcycle uses DOT4 brake fluid. Please replace it every two years.

#### Warning :

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

Don't forget to check the brake fluid level in the front and rear brake fluid reservoirs. Add appropriate brake fluid if necessary.


#### Brake pads

Check the front and rear brake pads to ensure they have not been worn to the limit. Replace the pads if worn to the limit.



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### Warning :

Brake system maintenance should be performed by an authorized dealer which is equipped with the necessary tools and can assure the quality of service performed.

### Notice:

The hydraulic brake systems are under high pressure and require periodical maintenance per the manual.

Check the brake systems everyday as follows:

1. Check for leaks on the front and rear wheel brake systems;
2. Check for cracks in the brake fluid hoses;
3. Check the feedback feeling on the brake lever/pedal
4. Check the abrasion condition of the front and rear brake pads

### Rear Brake

To adjust the stroke of the rear brake pedal, loosen the locknut, then turn the rear brake adjusting bolt, the free play should be adjusted to 20~30mm.



### MAINTENANCE OF THE AIR FILTER

The air filter should be regularly maintained, especially when driving in areas full of dust and sand.

1. Remove the seat, fuel tank and the side cover.
2. Remove the screws from the air filter cover, remove the air filter cover and remove the filter element.
3. Clean the filter using a foam air filter cleaning spray and allow it to dry completely once clean.
4. Once dry, spray the filter with a foam air filter oil and wring out any excessive oil before reinstallation.
5. Reinstall the components back in reverse order of disassembly.

#### Notice :

DO NOT use flammable liquids like gasoline or organic solvents to clean the air filter element as they will cause the foam to deteriorate.

### BULB REPLACEMENT

Replacement of the Head Light Bulb

Remove the bulb cover, replace the old bulb with one of the same specification, and reinstall in reverse order of disassembly.



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## Notice:

The replacement bulb must be of the same specifications as the old one. High wattage bulbs will increase the circuit load which will cause faults like a battery power shortage.

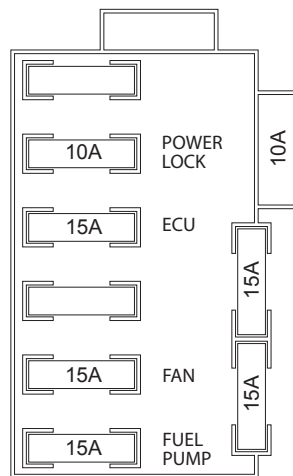
## FUSE REPLACEMENT

The fuses are located beside the battery. Frequent blowing of the fuses indicates a short circuit or over loading. Contact your authorized dealer for repair. Use fuses of the same specifications as indicated.

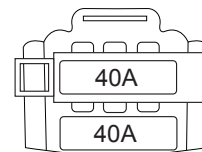
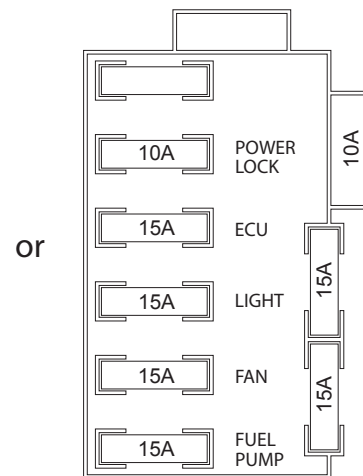
## Warning:

It's dangerous to use fuses of other specifications, it could result in severe failures like sparks or fire.

### With Headlight Switch



### Without Headlight Switch



ABS fuse

### LUBRICATION POINTS

Appropriate lubrication is important to keep every part of your motorcycle in normal working condition and lengthen its service life and to ensure safe operation. Lubricate your motorcycle after you have ridden it for many miles or the vehicle gets wet due to rain or cleaning. Detailed lubrication points are shown in the figure below:

Motorcycle lubricant

Lubricant type: Grease

1. Rear brake pedal shaft
2. Side stand and its spring
3. Throttle cable
4. Front brake lever pivot
5. Clutch lever pivot

### ADJUSTMENT OF VALVE CLEARANCE

Only check and adjust the valve clearance when the engine is cold.

The Standard Valve Clearance: Intake Valve: 0.20-0.25mm, Exhaust Valve: 0.25-0.30mm



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### Notice:

The adjustment of the valve clearance will have a direct influence on the performance of the engine, thus requiring strict accordance with the time interval required in the "Maintenance Schedule". Adjustment should be done by professional technicians with corresponding tools. In order to keep the valve clearance within range, we strongly recommend you leave it up to an authorized dealer to perform this maintenance.

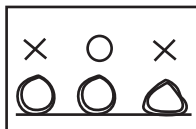
### TIRES

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

#### Tire Pressure

Insufficient tire pressure will not only accelerate wear, but it will also have an impact on riding stability such as making turning difficult. However, too high pressure will reduce the contact area between the tire and ground, causing slipping or loss of control. Tire pressures should be kept in the standard range. Adjust the tire pressures only when they are cold.

Front Wheel	190kpa 27.5psi
Rear Wheel	210kpa 30.5psi



## STORAGE GUIDELINES

### Tire Tread

Riding a motorcycle with tires that are excessively worn will reduce the riding stability or even cause a loss of control. When the tire tread of the front tire is less than 1.6mm, and the rear tire tread is less than 2mm or less, replacement is strongly recommended.

## STORAGE GUIDELINES

### Storage

If you need to store your motorcycle for a long time without use, it's suggested to follow these instructions:

1. Change the engine oil.
2. Lubricate the drive chain
3. Remove the spark plug and add one teaspoon of (15~20cm<sup>3</sup>) clean engine oil into cylinder. Press the start button several times to the distribute oil in the cylinder, then reinstall the spark plug.
4. Remove the battery. Keep the battery in a proper place which will avoid freezing and direct sunlight.
5. Clean and dry the motorcycle. Wax the surface of the paint.
6. Inflate the tires to the required pressure. Place the motorcycle on a stand to lift the tires off of the ground.
7. Cover the motorcycle (no plastic or cloth materials) and keep it in a place with consistent temperature and low humidity. Do not keep your motorcycle under direct sunlight.



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## STORAGE GUIDELINES

### Using the motorcycle after storage

1. Remove the cover and clean the motorcycle. Change the engine oil if you kept your motorcycle in storage for more than four months.
2. Install the battery after charging it as needed.
3. Wash away the anti-rust agent in fuel tank, and add fresh fuel into fuel tank. (if applied)



### EMISSION CONTROL SYSTEM

#### YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board, the U.S. Environmental Protection Agency, and SSR MOTORSPORTS. (hereinafter "SSR") are pleased to explain the Emission Related Components warranty on your 2019 Highway Motorcycle. New highway motor vehicles must be designed, built and equipped to meet U.S. EPA Federal and California anti-smog standards. SSR must warrant the Emission Related Components on your vehicle for 12,000mi or for 5 years, whichever comes first, provided that there has been no abuse, neglect or improper maintenance of your vehicle.

Your emission control system may include parts such as the carburetor or fuel injection system, the ignition system, catalytic converter and engine computer, if it is equipped. Also included may be hoses, belts, connectors and other emission-related assemblies.

Where a warrantable condition exists, SSR will repair your vehicle at no cost to you, for parts and labor.

If an emission-related part on your vehicle is defective, the part will be repaired or replaced by SSR. This is your emission control system DEFECTS WARRANTY.

#### OWNER'S WARRANTY RESPONSIBILITIES

As the vehicle owner, you are responsible for the performance of the required maintenance listed in your owner's manual. SSR recommends that you retain all receipts covering maintenance on your vehicle, but SSR cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

You are responsible for presenting your vehicle to the SSR' dealer as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

As the vehicle owner, you should be aware that SSR may deny your warranty coverage if your vehicle or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

If you use your vehicle in any type of competitive event, this warranty is immediately and completely void.



## EMISSIONS WARRANTY

If you have any questions regarding your warranty rights and responsibilities, you should contact SSR MOTORSPORTS, 12825 Alondra Blvd., Norwalk, CA 90650 TEL: 562-926-2888 or ( for California registered highway vehicles only) the California Air Resources Board at 9528 Telstar Avenue, El Monte, CA 91731-8001. SSR warrants that each new 2020 and later SSR highway motorcycle:

A: is designed, built and equipped so as to conform at the time of initial retail purchase with all applicable regulations of the United States Environmental Protection Agency, and the California Air Resources Board;

and

B: is free from defects in material and workmanship which cause such vehicle to fail to conform with applicable regulations of the United States Environmental Protection Agency or the California Air Resources Board for the periods specified above.

### I. COVERAGE

Warranty defects shall be remedied during customary business hours at any authorized SSR' dealer located within the United States of America in compliance with the Clean Air Act and applicable regulations of the United States Environmental Protection Agency and the California Air Resources Board. Any part or parts replaced under this warranty shall become the property of SSR.

### II. LIMITATIONS

This Emission Control System Warranty shall not cover any of the following:

A. Repair or replacement as a result of

- (1) accident,
- (2) misuse,
- (3) repairs improperly performed or replacements improperly installed,
- (4) use of replacement parts or accessories not conforming to SSR' specifications which adversely affect performance and/or
- (5) use in competitive racing or related events.



## EMISSIONS WARRANTY

- B. Inspections, replacement of parts and other services and adjustments required for required maintenance.
- C. Any vehicle equipped with an odometer or hour meter on which the odometer mileage or hour meter reading has been changed so that actual mileage cannot be readily determined.

### III. LIMITED LIABILITY

A. The liability of SSR under this emission control system warranty is limited solely to the remedying of defects in material or workmanship by an authorized SSR' dealer at its place of business during customary business hours. This warranty does not cover inconvenience or loss of use of the vehicle or transportation of the vehicle to or from the SSR' dealer. SSR shall not be liable for any other expenses, loss or damage, whether direct, incidental, consequential or exemplary arising in connection with the sale or use of or inability to use the vehicle for any purpose. Some states do not allow the exclusion or limitation of any incidental or consequential damages, so the above limitations may not apply to you.

B. No express emission control system warranty is given by us except as specifically set forth herein. Any emission control system warranty implied by law, including any warranty of merchantability or fitness for particular purpose, is limited to the express emission control system warranty terms stated in this warranty.

The foregoing statements of warranty are exclusive and in line of all other remedies. Some states do not allow limitations on how long an implied warranty lasts so the above limitations may not apply to you.

C. No dealer is authorized to modify this SSR Limited Emission Control System Warranty.

### IV. LEGAL RIGHTS

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



## EMISSIONS WARRANTY

V. THIS EMISSION CONTROL SYSTEM WARRANTY IS IN ADDITION TO THE STANDARD LIMITED WARRANTY FOR ALL VEHICLES.

### VI. ADDITIONAL INFORMATION

Any replacement part that is equivalent in performance and durability may be used in the performance of any maintenance or repairs. However, SSR is not liable for these parts. The owner is responsible for the performance of all required maintenance. Such maintenance may be performed at a service establishment or by an individual. The warranty period begins on the date the motorcycle is delivered to an ultimate purchaser.



## SPECIFICATIONS & TECHNICAL PARAMETERS

### SIZE AND WEIGHT

Length.....	2130mm
Width.....	800mm
Height.....	1120mm
Wheelbase.....	1410mm
Dry Weight.....	195kg

### ENGINE

Type.....	2-cylinder/4-stroke/8-valve, water-cooled
Model.....	265MN-A
Bore × Stroke.....	ø65x45.2mm
Displacement.....	300ml
Maximum Power.....	32.18hp/10500r/min
Maximum Torque.....	18.44ft-lbs/6500r/min
Ignition System Type.....	TLI
Compression Ratio.....	12:1
Start Type.....	Electric Starting
Transmission System.....	Chain
Clutch.....	Wet multi-plate

Front Brake Type .....	Dual discs
Rear Brake Type .....	Disc brake
Front Tire Specification.....	120/70ZR17
Rear Tire Specification.....	160/60ZR17

### ELECTRICAL SYSTEM

Battery.....	12V 8Ah(YTX9-BS)
Magneto.....	Fly-wheel Magneto
Headlamp.....	LED12V 13.5/7W
Tail/Brake Lamp.....	LED 12V1.4/0.8W
Front city Lamp.....	LED 12V 3.6W
Turn Signal Lamp.....	LED 12V 3.6W
Meter Lamp.....	12V 2W
High beam indicator lamp.....	12V 2W
Turning indicator .....	12V 3W
Horn Specification.....	12V 3A

### CAPACITY

Fuel Tank (include reserve tank).....	16±0.5L
Fuel Type.....	91



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Benelli Q.J. S.r.l.

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