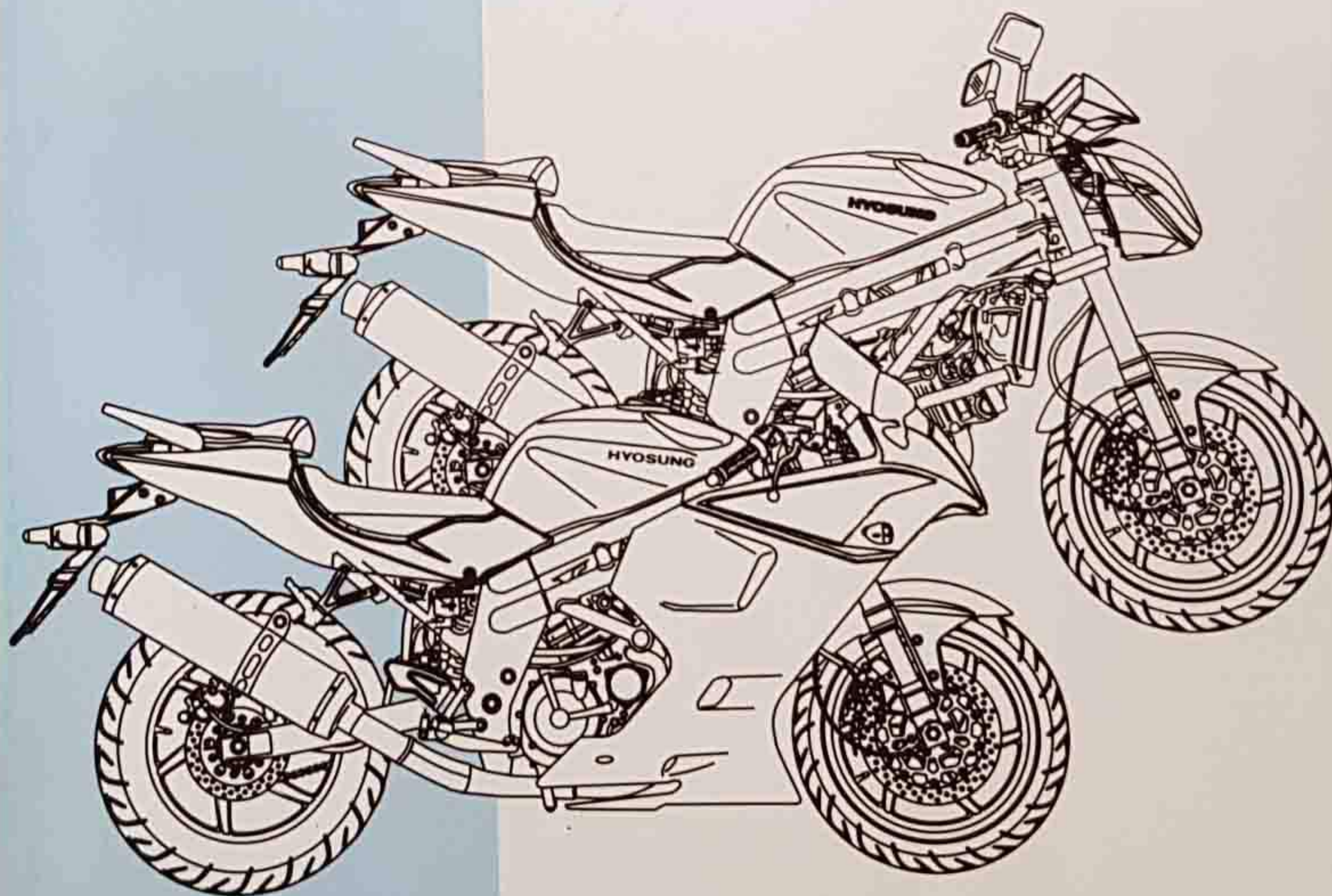




OWNER'S MANUAL

GT650/PISTON E

D spec



⚠ WARNING

This owner's manual contains important safety information.
Please read it carefully.

BATTERY INITIAL CHARGING

1. BATTERY INITIAL CHARGING

Initial charging of the battery is required after filling electrolyte to improve the battery durability.

2. BATTERY INSTALLATION

- ① Fill the electrolyte to the battery.
- ② Leave the battery for 30 minutes.
- ③ Charge the battery by standard charging. This is necessary for reliability of the battery.
- ④ Install the battery to the motorcycle.

※ **STANDARD CHARGING TIME** : 1.2 A for 10 hours



CAUTION

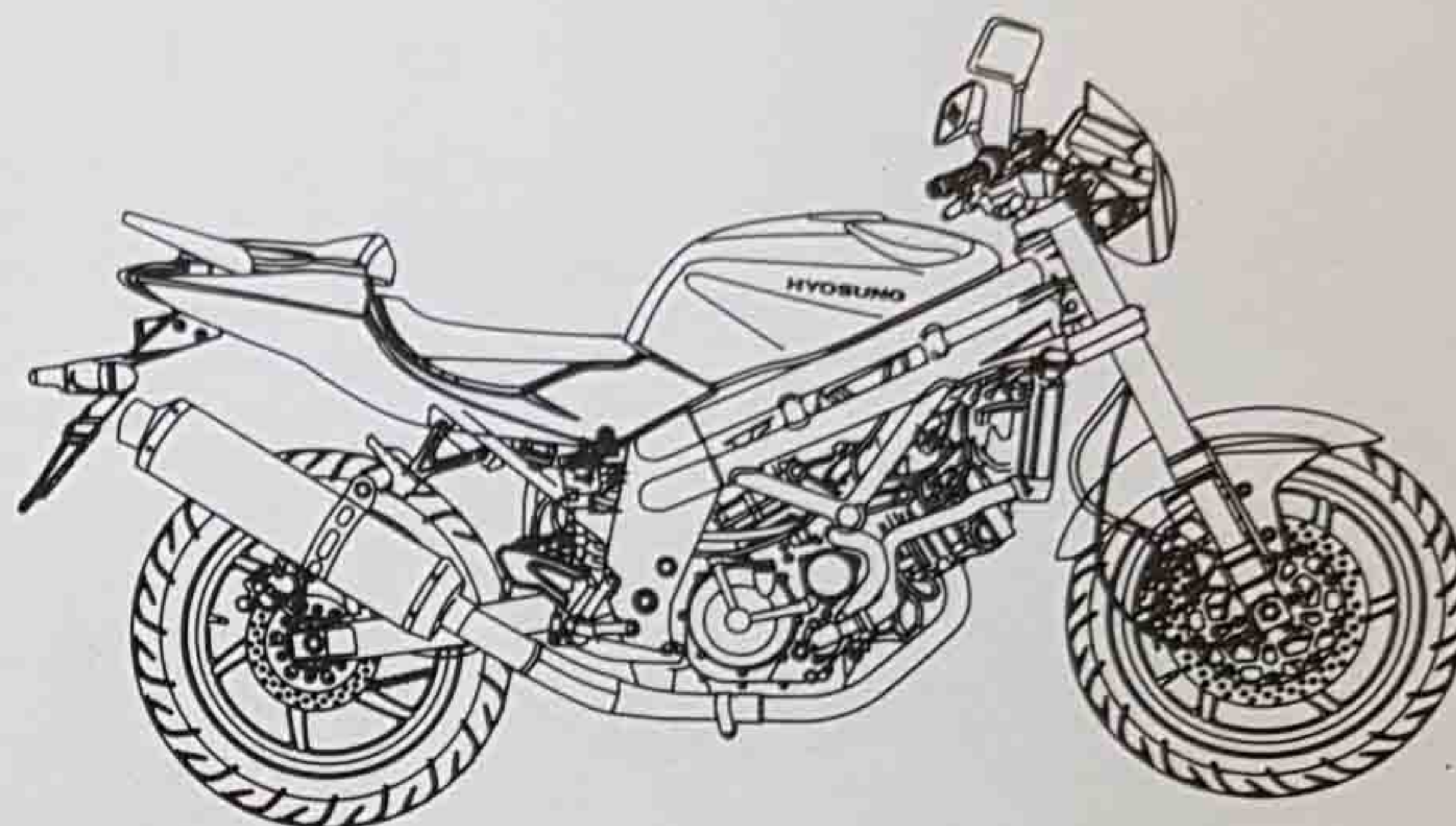
Do not use the battery without the battery initial charging.
Otherwise the battery service life may be shortened.

! WARNING

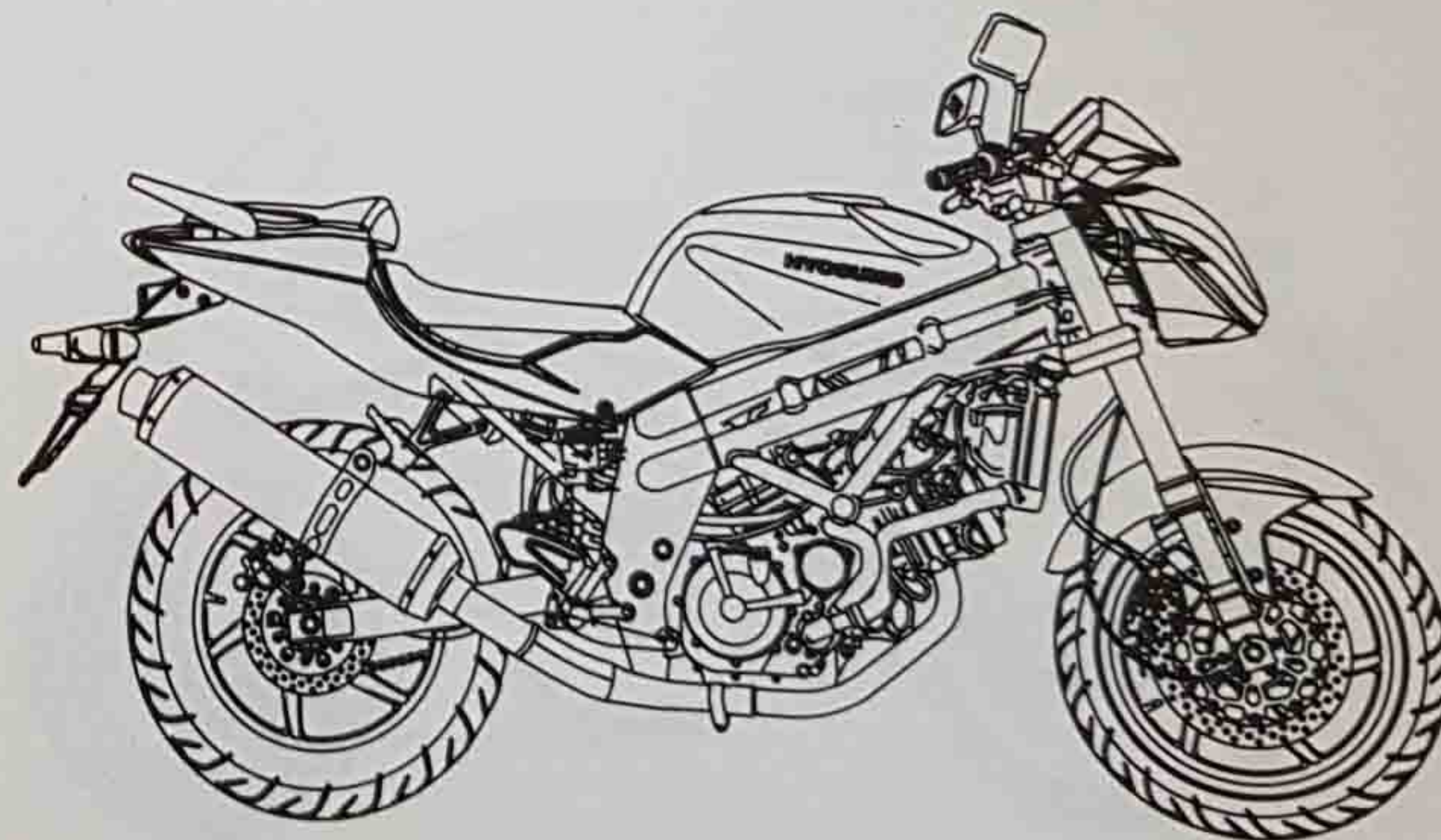
The 「GT650P/S/REI」 use a battery ignition system.

Do not permit to start or operate the motorcycle without the battery otherwise the electrical system will be damage.

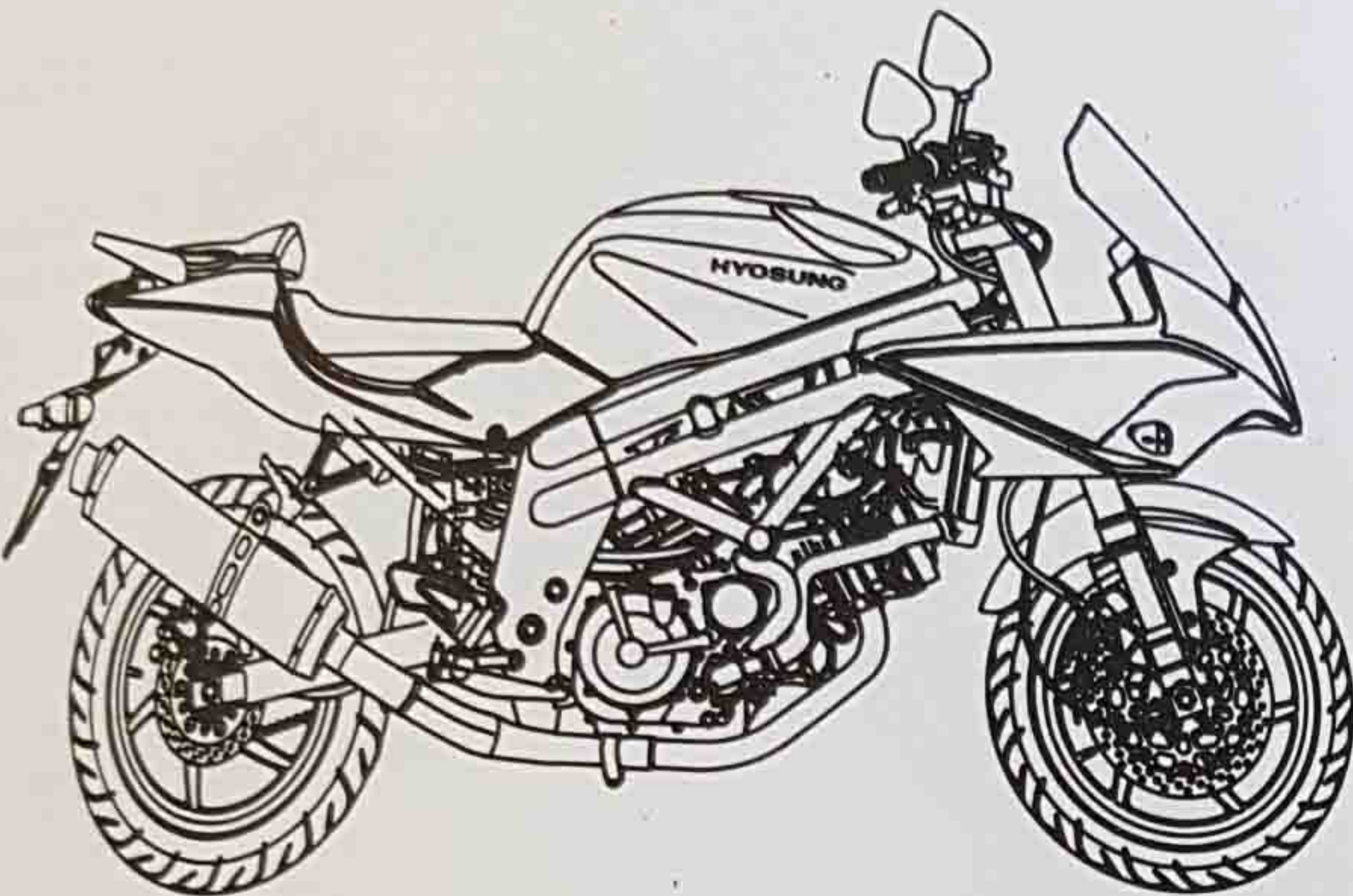
Always start or ride the motorcycle with the correct battery installed and connected.



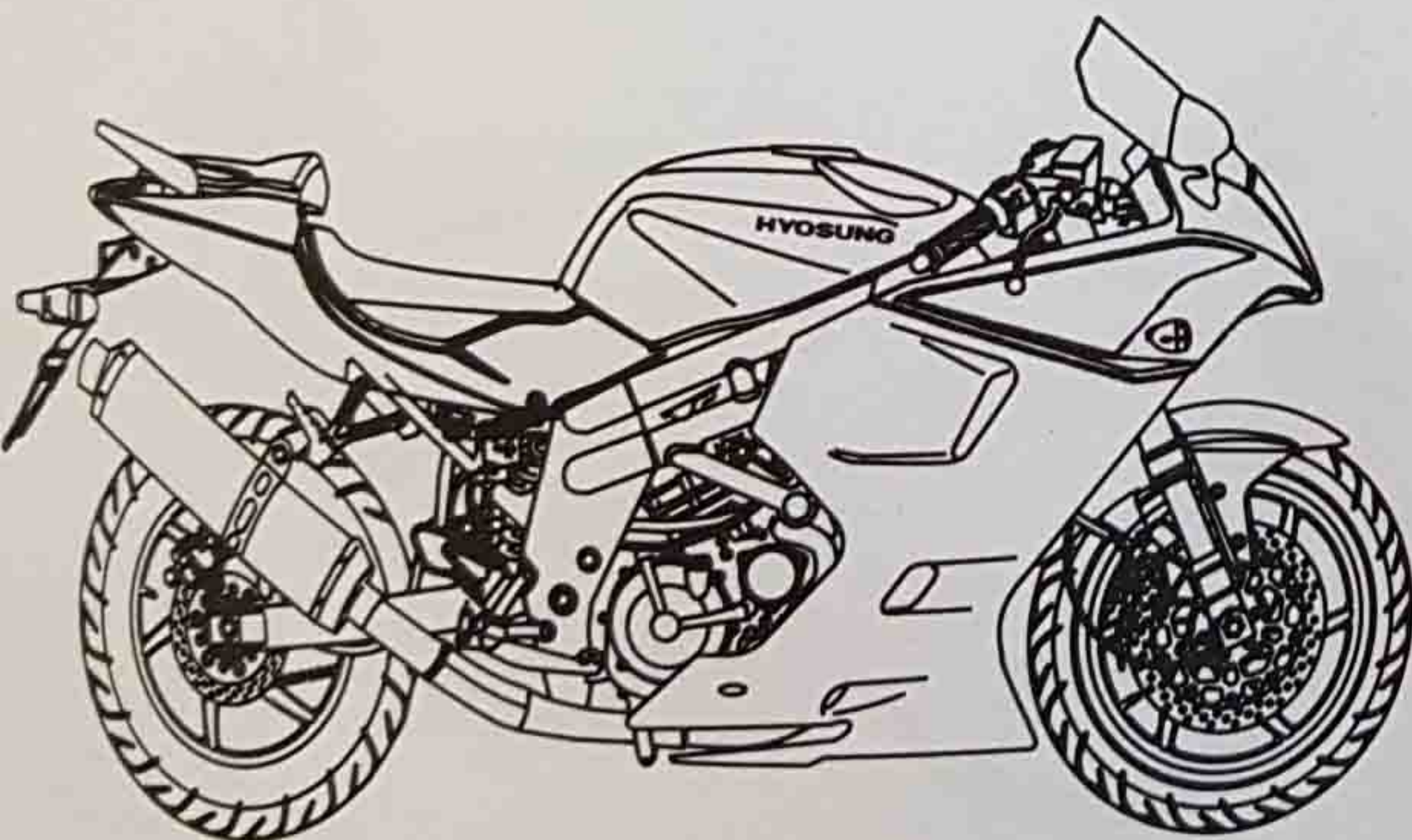
GT650EI



GT650PEI



GT650SEi



GT650REi

FOREWORD

THANK YOU for choosing a **Hyosung** motorcycle. We at **Hyosung** have designed, tested and produced this motorcycle using the most modern technology available to provide you with much happy, enjoyable, safe riding. Motorcycling is one of the most exhilarating sports and to ensure your riding enjoyment, you should become thoroughly familiar with the information presented in this Owner's Manual before riding the motorcycle.

The proper care and maintenance that your motorcycle requires is outlined in this manual.

By following these instructions explicitly you will ensure a long trouble-free operating life for your motorcycle. Your **Hyosung** dealer has experienced technicians that are trained to provide your machine with the best possible service with the right tools and equipment.

All information, illustrations photographs and specifications contained in this manual are based on the latest product information available at the time of publication. Due to improvements or other changes, there may be some discrepancies between information in this manual and your motorcycle. Hyosung reserves the right to make changes at any time, without notice and without incurring any obligation to make the same or similar changes to motorcycles previously built or sold.

Please note that this manual applies to all specifications for all respective destinations and explains all equipments. Therefore, your model may have different standard features than shown in this manual.

 **HYOSUNG**

© COPYRIGHT S&T Motors Co., Ltd.

IMPORTANT

BREAK-IN INFORMATION FOR YOUR MOTORCYCLE

The first 1,600 km (1,000 miles) are the most important in the life of your motorcycle.

Proper break-in operation during this time will help ensure maximum life and performance from your new motorcycle.

Hyosung parts are manufactured of high quality materials, and manufactured parts are finished to close tolerances. Proper break-in operation allows the machined surfaces to polish each other and mate smoothly.

Motorcycle reliability and performance depend on special care and restraint exercise during the break-in period. It is especially important that you avoid operating the engine in a manner which could expose the engine parts to excessive heat.

Please refer to the BREAK-IN section for specific break-in recommendations.

WARNING / CAUTION / NOTE

Please read this manual and follow its instructions carefully.

To emphasize special information the words 'WARNING', 'CAUTION', and 'NOTE' have special meanings.

Information following these signal words should be carefully reviewed.

! WARNING

The personal safety of the rider may be involved. Disregarding this information could result in injury to the rider.

! CAUTION

These instructions point out special service procedures or precautions that must be followed to avoid damaging the machine.

NOTE

This provides special information to make maintenance easier or important instructions clearer.

! WARNING

Noise Control System (muffler assembly)

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED

Owners are warned that the law may prohibit :

- (a) The removal or rendering inoperative by any person other than for the purpose of maintenance, repair or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its any sale or delivery to the ultimate purchaser or while it is in use ; and
- (b) The use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

MAINTENANCE :

The exhaust system of this motorcycle requires no periodic maintenance. The engine should be adjusted to the manufacture's specifications and the spark plug should be kept in good condition. Running the engine with incorrectly operating spark plug or misadjusted fuel injection system may cause permanent damage to the catalyst and to the noise control system.

CONSUMER INFORMATION

SAFE RIDING RECOMMENDATION FOR MOTORCYCLE RIDERS

Motorcycle riding is great fun and an exciting sport. Motorcycle riding also requires he/she to take some extra precautions to ensure the safety of the rider and passenger.

These precautions are :

! WARNING

- Before first use of the "GT650/PI/SIREI", read this owner's manual carefully to become familiar with the motorcycle features, and safety and maintenance requirements. Review all instructions, requirements and warnings. Keep the owner's manual in the owner's manual storage compartment located under the rear seat.
- Before the rider's first use of the "GT650/PI/SIREI", make sure that he/she is familiar with the location and operation of all controls, and has been instructed in the proper operation of the motorcycle.
- For first use of the "GT650/PI/SIREI", find a level, open area for the rider to use to become familiar with the operation of controls and the operating and handling characteristics of the motorcycle.

! WARNING

- Before each use, perform daily inspections with the rider. Specific items to check are listed in the INSPECTION BEFORE RIDING section on page 64 of this owner's manual.
- Make sure the rider wears a helmet, eye protection, and protective clothing (gloves, leather or heavy cloth pants, long sleeved shirt or jacket, boots).
- Permit use only by two persons. The motorcycle is designed for use only by one rider and one passenger.
- Do not permit anyone to operate the "GT650/PI/SIREI" under the influence of alcohol or other drugs. It may cause damage to the motorcycle and alter handling characteristics.
- Observe periodic maintenance requirements. Your authorized HYOSUNG dealer is trained and equipped to perform this service.
- Drain gasoline from the fuel tank prior to transporting the "GT650/PI/SIREI".
- Caution the rider and others near the "GT650/PI/SIREI" not to get close to or touch any moving parts or any heated areas such as the engine and exhaust system.
- Do not make any modifications to the "GT650/PI/SIREI". Modifications may make the motorcycle unsafe or illegal in your state.

! WARNING

The "GT650/PI/SIREI" are equipped with the side stand ignition interlock system. If the transmission is in neutral or the side stand up, you can only start the engine by squeezing the clutch lever. This side stand ignition interlock system prevents the motorcycle from being started with side stand down. Make sure that the side stand ignition interlock system is working properly before riding.

! CAUTION

The position lamp, meter lamp, tail lamp and license plate lamp on this motorcycle always comes on when the ignition switch is turned to the "ON" position. The head lamp is always lit when starting the engine.

! WARNING

- Do not run the engine indoors or where there is little or no ventilation. Exhaust gases contain carbon monoxide, a potentially lethal gas that is colorless and odorless.
- Never leave the motorcycle running while unattended, even for a short time.

! WARNING

Always open the throttle gradually to prevent front wheel lifting. Failure to observe this precaution may result in loss of control and an accident.

! WARNING

Keep both hands on the handgrips at all times when riding. Removing your hands from the handgrips reduces your ability to control the motorcycle and could result in an accident.

! WARNING

While operating the "GT650/PI/SIREI", the rider should keep both feet on the footrests at all times to avoid injuries resulting from accidents. Moving the rider's feet from the footrests reduces the rider's ability to control the motorcycle and could lead to an accident.

! CAUTION

WHEN STORING FOR LONG PERIOD :

1. Fully fill the fuel tank with fuel.
2. Remove the battery from the motorcycle.

! CAUTION

- The trunk could be heated. Don't keep anything that doesn't endure heat.
- Don't keep the fragile.
- Check if it is locked.
- The unlocking of rear seat could cause serious accident.
- Don't allow water to get inside the trunk or it could damage.
- Don't keep the valuables in the trunk when leaving unattended.
- Loading limit of trunk : 2 kg (4.41 lbs)

WARNING

Do not turn the ignition switch to its "OFF" or "LOCK" position or the engine stop switch to its "X" position while riding the motorcycle.

◎ RIDING APPAREL

WARNING

Loose clothing can be uncomfortable and unsafe when riding a motorcycle. Use good quality motorcycle riding apparel when riding your motorcycle.

◎ FAMILIARIZE YOURSELF WITH THE MOTORCYCLE

WARNING

Your riding skill and mechanical knowledge from the foundation for safe riding practices.

We suggest that you practice riding your motorcycle in a non-traffic situation until you are thoroughly familiar with your machine and its controls.

Remember practice makes perfect.

◎ BE EXTRA SAFETY CONSCIOUS ON BAD WEATHER DAYS

WARNING

Riding on bad weather days, especially wet ones, requires extra caution.

Braking distances double on a rainy day. Stay off of the painted surface marks, manhole covers and greasy appearing areas as they can be especially slippery.

Use extreme caution at railway crossings and on metal gratings and bridges. Whenever you have a doubt about road condition, slow down!

◎ WEAR A HELMET

WARNING

Motorcycle safety equipment starts with a quality safety helmet. One of the most serious injuries that can happen is a head injury. ALWAYS wear a properly approved helmet. You should also wear a suitable eye protection.

◎ INSPECTION BEFORE RIDING

WARNING

Review thoroughly the instructions in the "INSPECTION BEFORE RIDING" section of this manual. Do not forget to perform an entire safety inspection to ensure the safety of the rider and its passenger.

◎ KNOW YOUR LIMITS

WARNING

Ride within the boundaries of your own skill at all times. Knowing these limits and staying within them will help you to avoid accidents.

ACCESSORY INSTALLATION AND PRECAUTION SAFETY TIPS

There are a great variety of accessories available to **Hyosung** owners. **Hyosung** can not have direct control over the quality or suitability of accessories you may wish to purchase except genuine parts.

The addition of unsuitable accessories can lead to unsafe operating conditions. It is not possible for **Hyosung** to test each accessory on the market or combinations of all the available accessories, however, your dealer can assist you in selecting quality accessories and installing them correctly.

Use extreme caution when selecting and installing the accessories for your **Hyosung**. We have developed some general guidelines which will aid you when deciding whether, and how to equip your motorcycle.

WARNING

Improper accessories or modifications can make your motorcycle unsafe and can lead to an accident.

Never modify the motorcycle with improper or poorly installed accessories. Follow all instructions in this owner's manual regarding accessories and modifications. Use genuine **Hyosung** accessories or equivalent designed and tested for your motorcycle. Consult your **Hyosung** dealer if you have any questions.

1. In case that additional weight or aerodynamic affecting accessories are installed, they should be mounted as low as possible, as close to the motorcycle and as near the center of gravity as is feasible. The mounting brackets and other attachment hardware should be carefully checked to ensure that it provides for a rigid, nonmovable mount. Weak mounts can allow the shifting of the weight and create a dangerous, unstable condition.
2. Inspect for proper ground clearance and bank angle. An improperly mounted load could critically reduce these two safety factors. Also determine that the "load" does not interfere with the operation of the suspension, steering or other control operations.
3. Accessories fitted to the handlebars or the front fork area can create serious stability problems. This extra weight will cause the motorcycle to be less responsive to your steering control. The weight may also cause oscillations in the front end and lead to instability problems. Accessories added to the machine should be as light as possible and kept to a minimum.
4. The motorcycle may be affected by a lifting condition or by an instability in cross winds or when being passed or passing large vehicles. Improperly mounted or poorly designed accessories can result in an unsafe riding condition, therefore caution should be used when selecting and installing all accessories.

5. Certain accessories displace the rider from his or her normal riding position. This limits the freedom of movement of the rider and may limit his or her control ability.

6. Additional electrical accessories may damage the existing electrical system. Severe overloads may damage the wiring harness or create a dangerous situation due to the loss of electrical power during the operation of the motorcycle.

When carrying a load on the motorcycle, mount it as low as possible and as close as possible to the machine. An improperly mounted load can create a high center of gravity which is very dangerous and makes the motorcycle difficult to handle. The size of the "load" can also affect the aerodynamics and handling of the motorcycle.

Balance the load between the left and right side of the motorcycle and fasten it securely.

MODIFICATION

Modification of the motorcycle, or removal of original equipment may render the vehicle unsafe or illegal.

Obey all applicable equipment regulations in your area.

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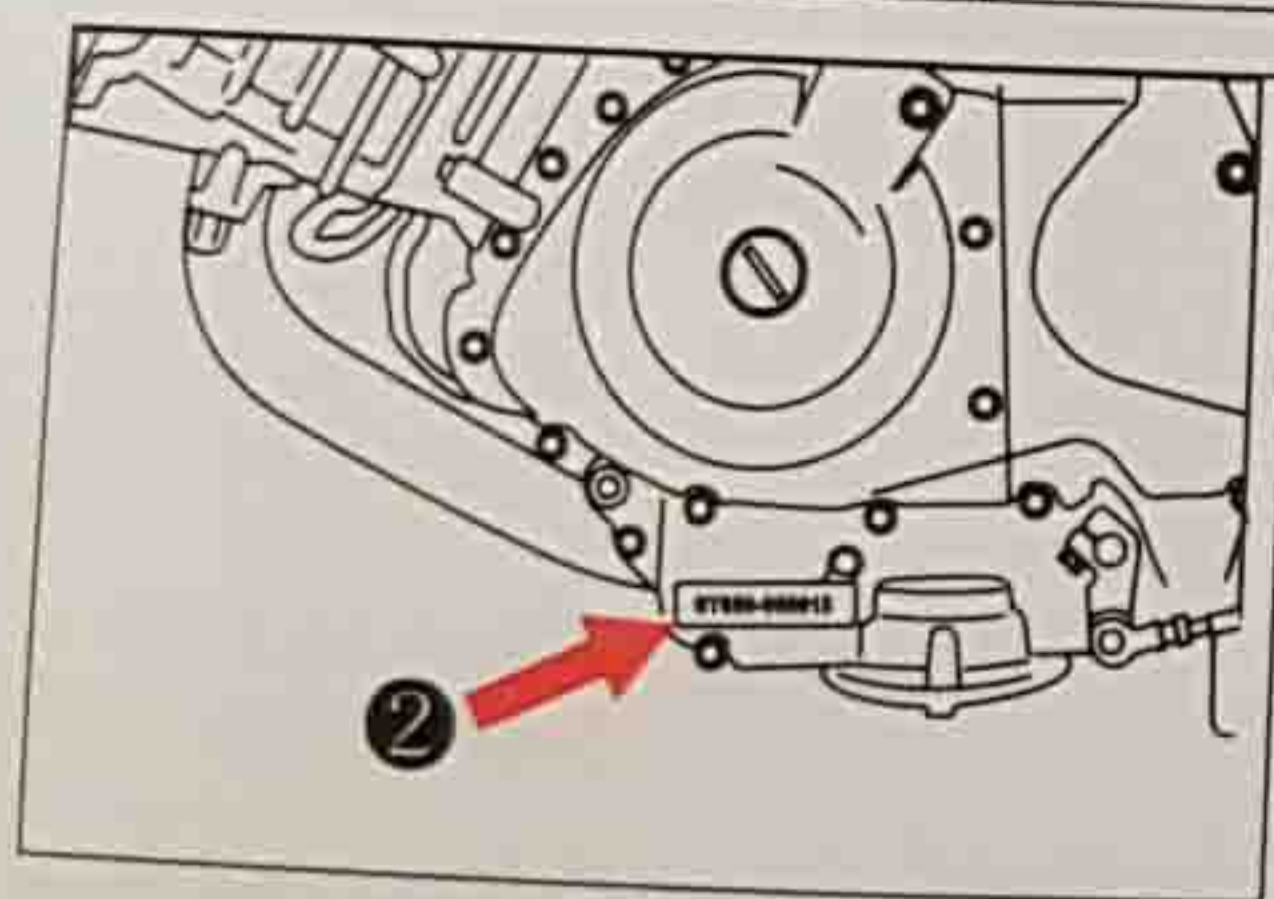
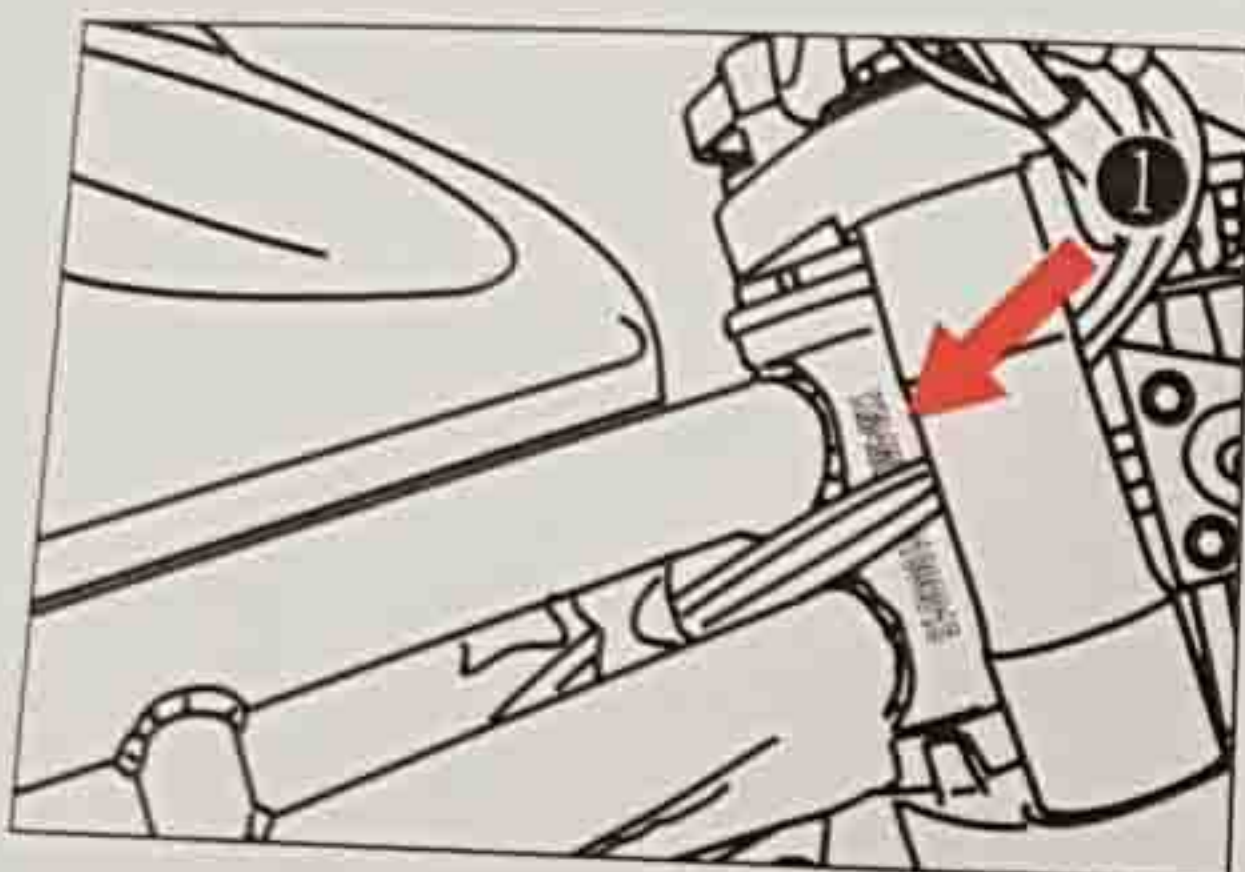
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SERIAL NUMBER LOCATION

The frame and/or engine serial numbers are used to register the motorcycle. They are also to assist your dealer in terms of ordering parts or referring to special service information.

The frame number is also known as the VIN or Vehicle Identification Number.



The frame number ① is stamped on the right side of the steering head tube.

The engine serial number ② is stamped on the left downside of the crankcase assembly.

Please write down the numbers in the box provided below for your future reference.

Frame number :

Engine number :

FUEL, ENGINE OIL AND ENGINE COOLANT RECOMMENDATION

FUEL

Use unleaded gasoline with an octane rating of 91 or higher.

Unleaded gasoline can extend spark plug life and exhaust components life.

CAUTION

Spilling gasoline can damage the painted surfaces.

Be careful not to spill any fuel when filling the fuel tank.

Wipe spilled gasoline up immediately.

WARNING

- When refueling, always shut the engine off and turn the ignition key to the "OFF" position. Never refuel near the flames, sparks and heat sources.
- Do not overfill the fuel tank. Do not fill gasoline above the fuel tank entrance lower end.

ENGINE OIL

Oil quality is a major contributor to your engine's performance and life. Always select good quality engine oil.

ENGINE OIL SPECIFICATION

Classification system	Grade	Remarks
API	Over SL	
SAE	10W/40	

※ If a SAE 10W/40 motor oil is not available, select alternative according to the following chart.

ENGINE OIL	Temperature										
	°C	-30	-20	-10	0	10	20	30	40		
	°F	-22	-4	14	32	50	68	86	104		
										20W50	
										15W40 15W50	
										10W40 10W50	
										10W30	
										5W30	

Use the chart to select a viscosity rating based on temperature range in your area.

NOTE

In very cold weather [below -15°C (5°F)], use SAE 5W/30 for good starting and smooth operation.

Using a premium quality four stroke motor oil will increase the service life of your motorcycle.

! WARNING

- Don't mix the unrecommended oil. It could damage the engine.
- When refilling the oil, don't allow the dust to get inside.
- Wipe the spilled oil up immediately.

ENGINE COOLANT SOLUTION

Use an engine coolant that is compatible with aluminum radiator, mixed with distilled water only at a 50 : 50 mixture ratio for engine coolant solution.

An engine coolant mixture other than 50 : 50 can affect cooling efficiency or rust inhibiting performance.

! WARNING

Engine coolant is harmful or fatal if swallowed or inhaled.

Do not drink anti-freeze or coolant solution. If swallowed, do induce vomiting. Immediately contact a poison control center or a physician. Avoid inhaling mist or hot vapors ; if inhaled, remove to fresh air. If coolant gets in eyes, flush eyes with water and seek medical attention. Wash thoroughly after handling. Solution can be poisonous to animals.

Keep out of the reach of children and animals.

! CAUTION

Spilled engine coolant can damage painted surfaces.

Do not spill any fluid when filling the radiator. Wipe spilled engine coolant up immediately.

⊙ WATER FOR MIXING

Use distilled water only.

Water other than distilled water can corrode and clog the aluminum radiator.

⊙ ENGINE COOLANT

The engine coolant performs as rust inhibitor and water pump lubricant as well as anti-freeze.

Therefore the engine coolant should be used at all times even though the atmospheric temperature in your area does not go down to freezing point.

Required amount of water / coolant

Solution capacity (total)	1.6 ℓ	
50%	Water	0.8 ℓ
	Engine coolant	0.8 ℓ

N O T E

This 50% mixture will protect the cooling system from freezing at temperatures above -31°C.

If the motorcycle is to be exposed to temperature below -31°C, this mixing ratio should be increased up to 55% (-40°C) or 60% (-55°C).

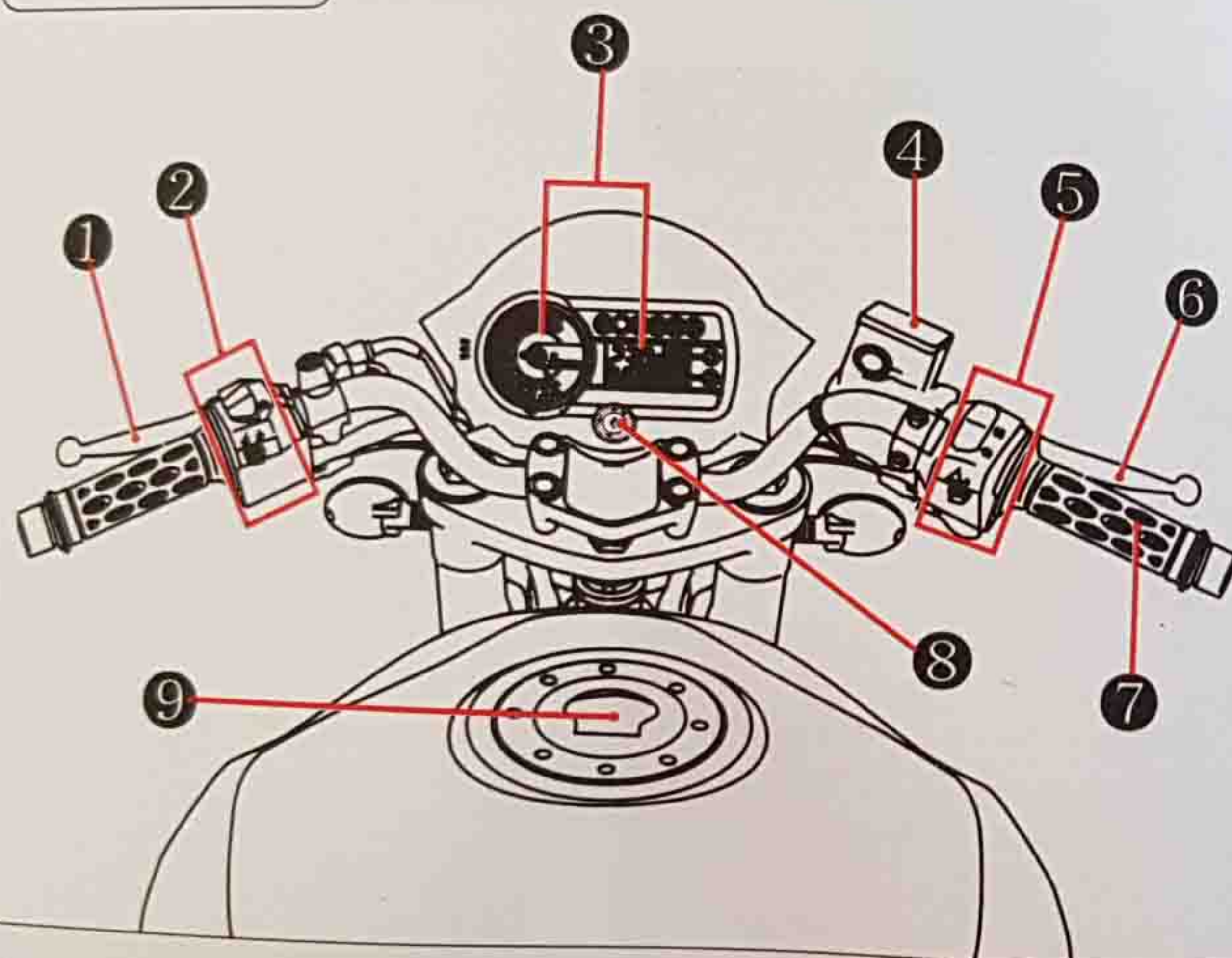
The mixing ratio should not exceed 60%.

⊙ COOLANT RESERVOIR TANK

Refer to 55 page.

NAMES OF EACH PARTS [*GT650 EJ*]

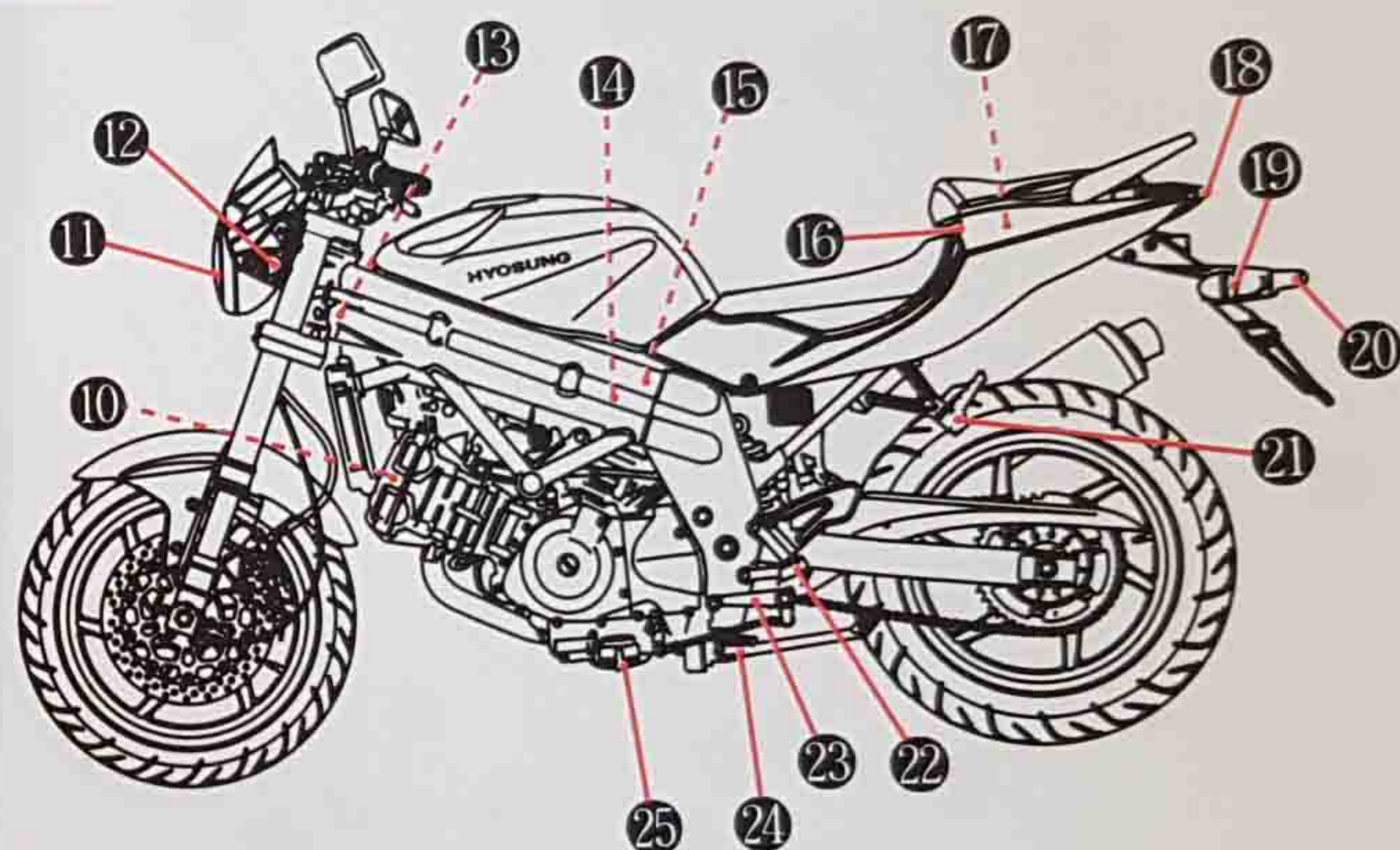
GT650 EJ



- ① Clutch lever
- ② Left handle switches
- ③ Instrument panel
- ④ Front brake fluid reservoir
- ⑤ Right handle switches

- ⑥ Front brake lever
- ⑦ Throttle grip
- ⑧ Ignition switch
- ⑨ Fuel tank cap

GT650 EJ



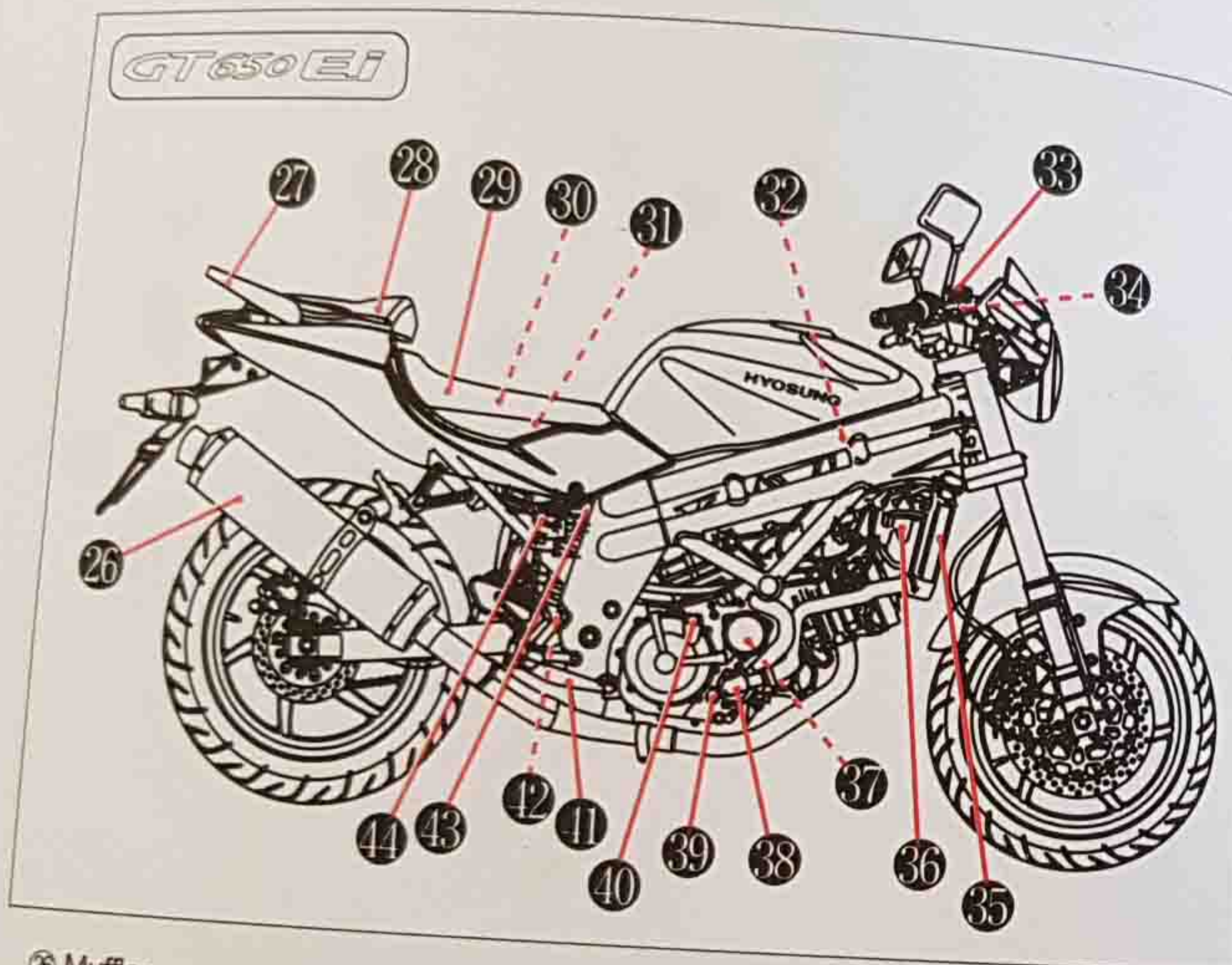
- ⑩ Spark plug (Front)
- ⑪ Head lamp & Position lamp
- ⑫ Front turn signal lamp
- ⑬ Ignition coil (Front)
- ⑭ Ignition coil (Rear)
- ⑮ Spark plug (Rear)
- ⑯ Rear seat lock
- ⑰ Fuses

- ⑱ Brake / Tail lamp
- ⑲ Rear turn signal lamp
- ⑳ License plate lamp
- ㉑ Passenger footrests
- ㉒ Footrests
- ㉓ Gearshift lever
- ㉔ Side stand
- ㉕ Engine oil drain plug

NOTE

"-----" : means the invisible parts.

NAMES OF EACH PARTS [GT650PEI]

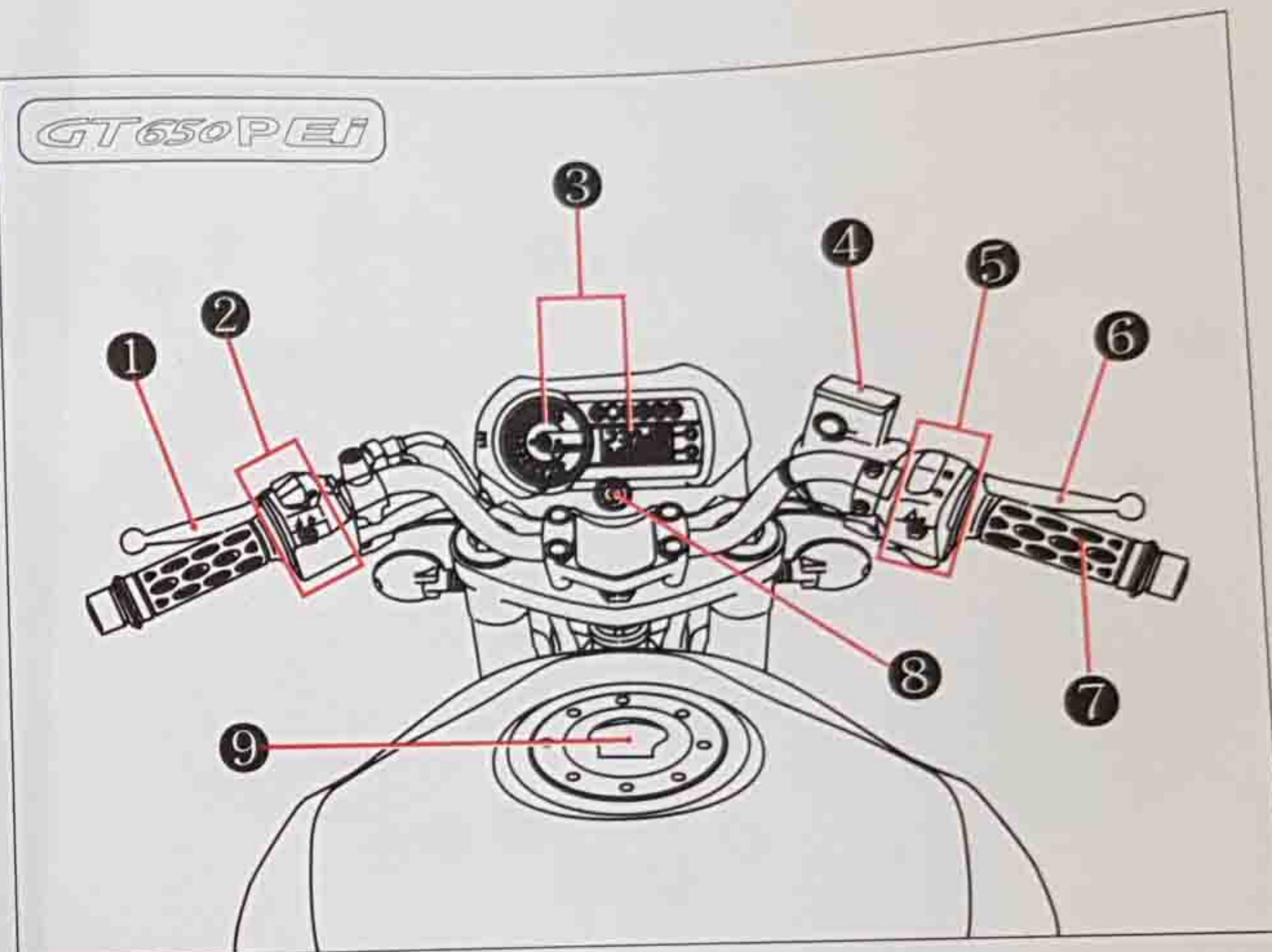


- ②⑥ Muffler
- ②⑦ Rear carrier
- ②⑧ Rear seat & Trunk & Tools
- ②⑨ Front seat
- ③⑩ ECU (Engine Control Unit)
- ③⑪ Battery
- ③⑫ Air cleaner
- ③⑬ Front brake fluid reservoir
- ③⑭ Front brake lamp switch
- ③⑮ Radiator

- ③⑯ Cooling fan and motor
- ③⑰ Engine oil filter
- ③⑱ Water pump
- ③⑲ Engine oil level lens
- ④① Engine oil filler plug
- ④② Rear brake pedal
- ④③ Rear brake lamp switch
- ④④ Coolant reserve tank
- ④⑤ Rear brake fluid reservoir

NOTE

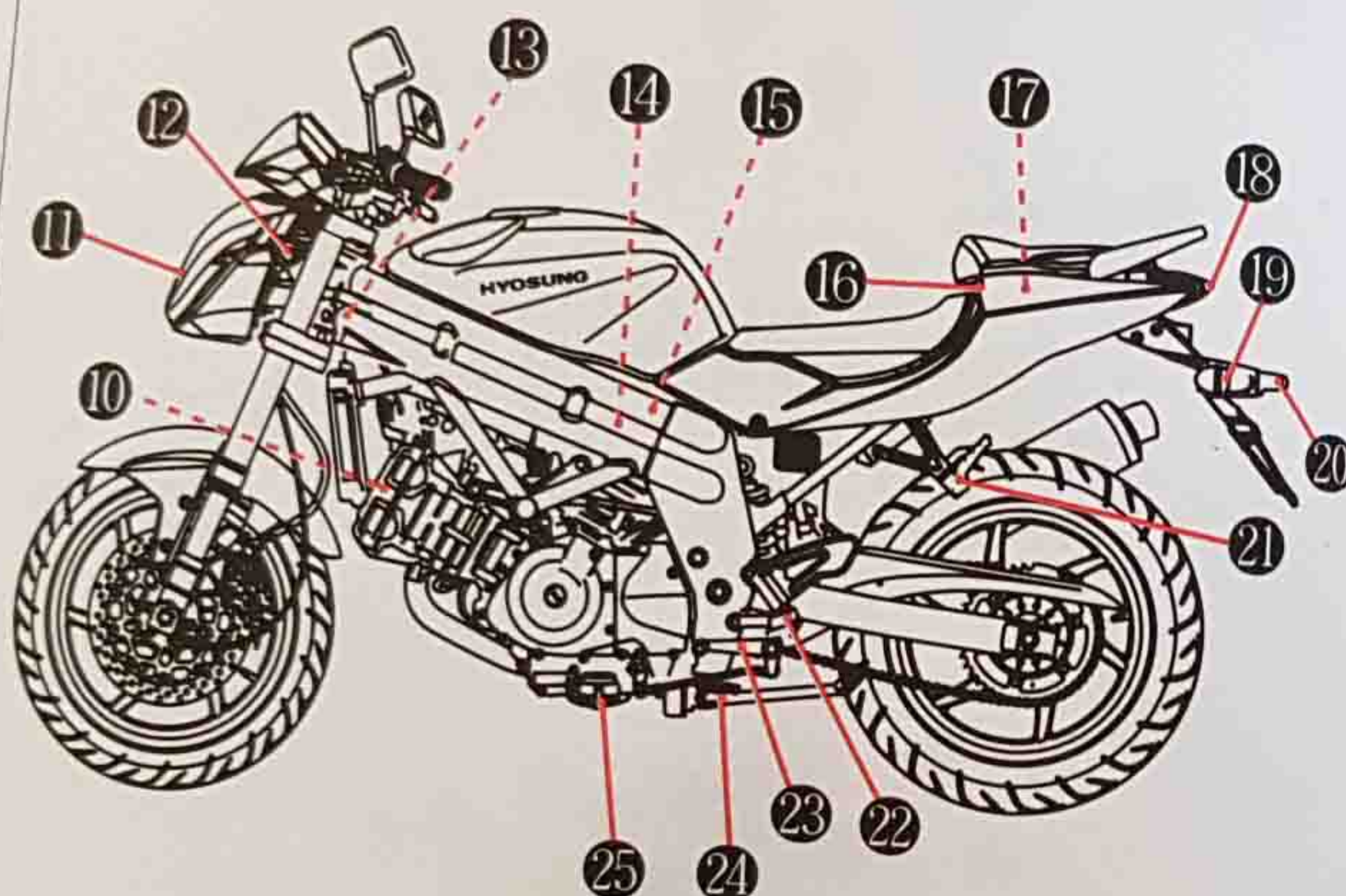
"-----" : means the invisible parts.



- ① Clutch lever
- ② Left handle switches
- ③ Instrument panel
- ④ Front brake fluid reservoir
- ⑤ Right handle switches

- ⑥ Front brake lever
- ⑦ Throttle grip
- ⑧ Ignition switch
- ⑨ Fuel tank cap

GT650PEI

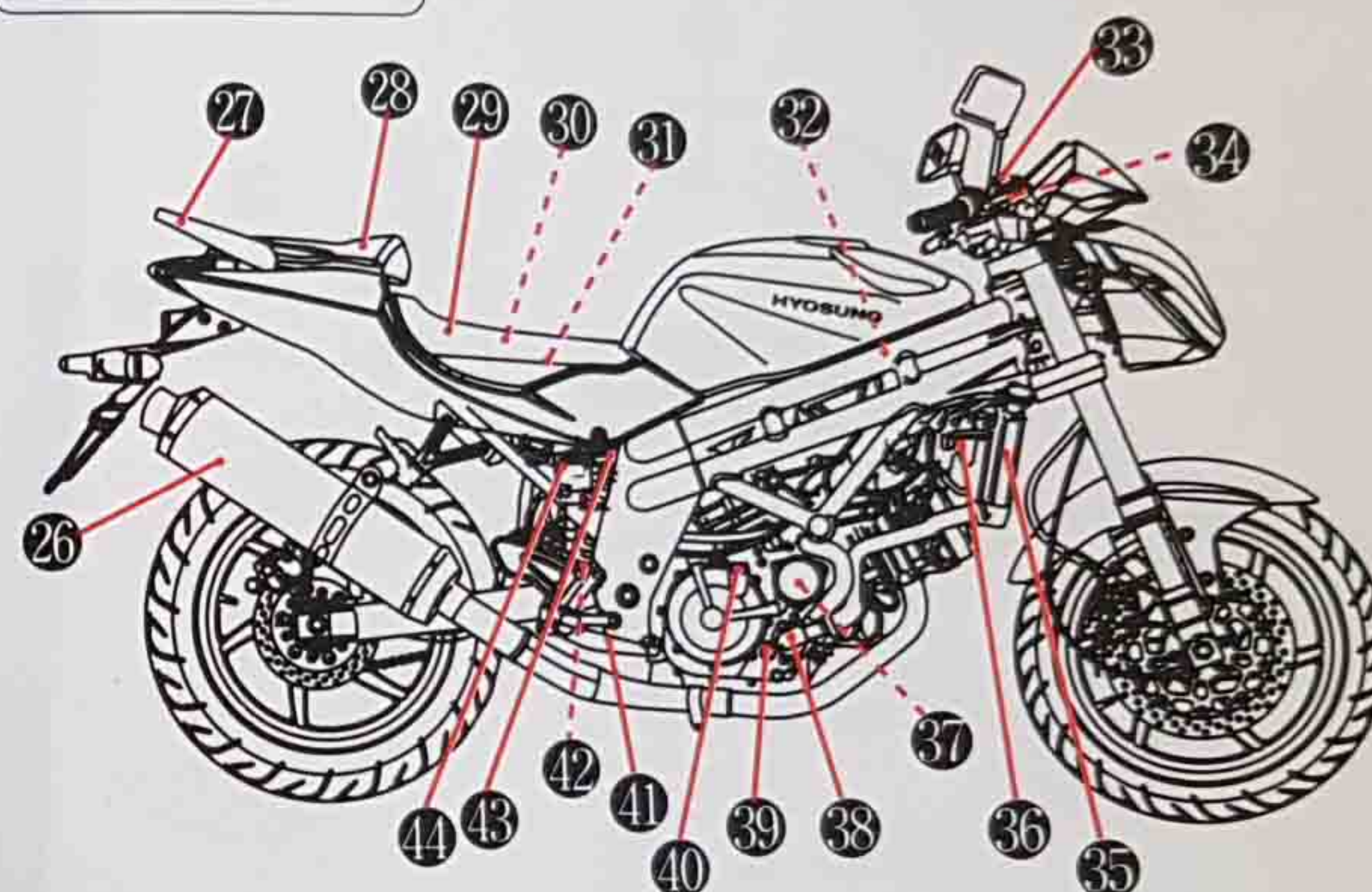


- ⑩ Spark plug (Front)
- ⑪ Head lamp & Position lamp
- ⑫ Front turn signal lamp
- ⑬ Ignition coil (Front)
- ⑭ Ignition coil (Rear)
- ⑮ Spark plug (Rear)
- ⑯ Rear seat lock
- ⑰ Fuses
- ⑱ Brake / Tail lamp
- ⑲ Rear turn signal lamp
- ⑳ License plate lamp
- ㉑ Passenger footrests
- ㉒ Footrests
- ㉓ Gearshift lever
- ㉔ Side stand
- ㉕ Engine oil drain plug

NOTE

"-----" : means the invisible parts.

GT650PEI

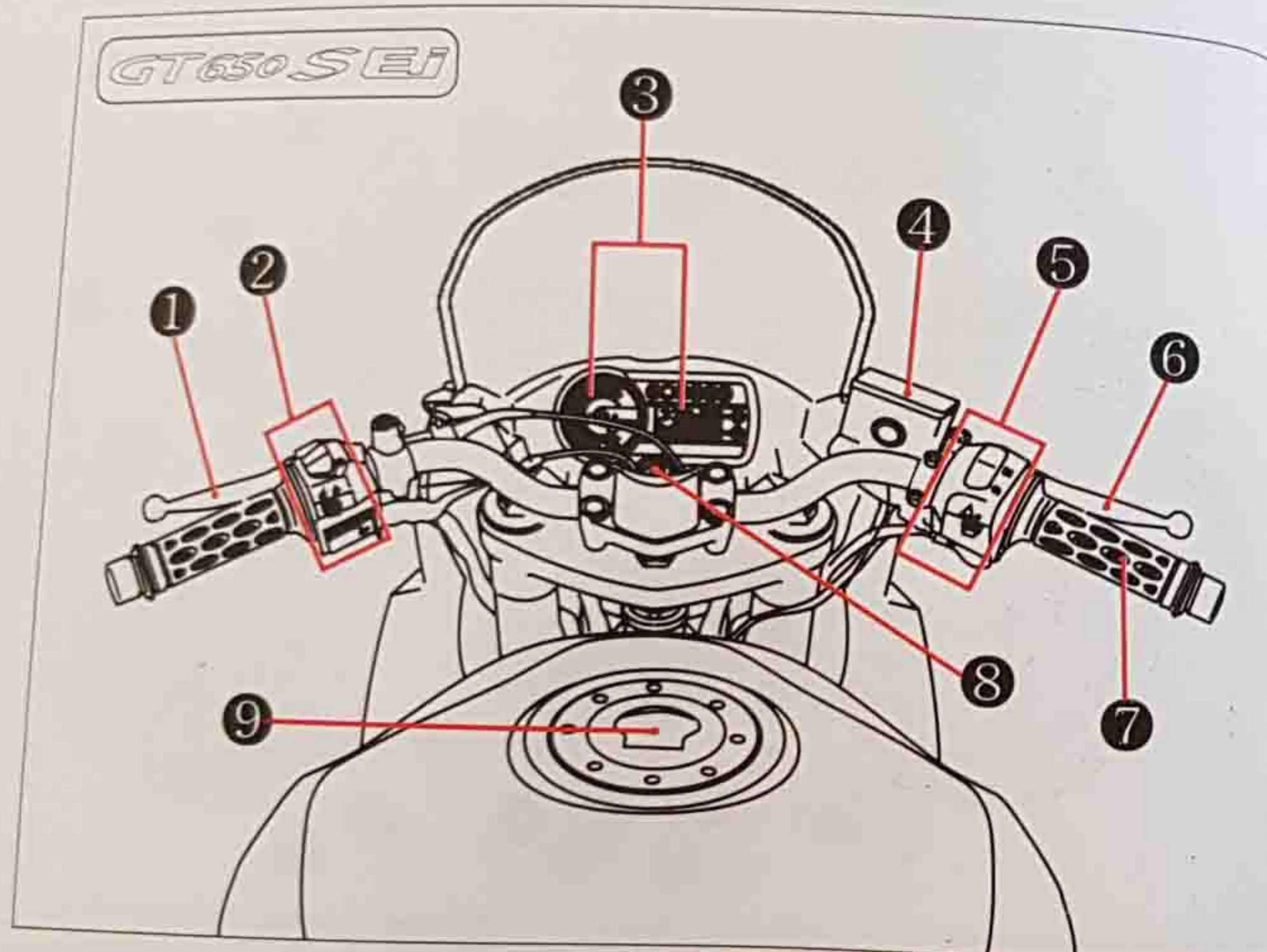


- ㉖ Muffler
- ㉗ Rear carrier
- ㉘ Rear seat & Trunk & Tools
- ㉙ Front seat
- ㉚ ECU (Engine Control Unit)
- ㉛ Battery
- ㉜ Air cleaner
- ㉝ Front brake fluid reservoir
- ㉞ Front brake lamp switch
- ㉟ Radiator
- ㊱ Cooling fan and motor
- ㊲ Engine oil filter
- ㊳ Water pump
- ㊴ Engine oil level lens
- ㊵ Engine oil filler plug
- ㊶ Rear brake pedal
- ㊷ Rear brake lamp switch
- ㊸ Coolant reserve tank
- ㊹ Rear brake fluid reservoir

NOTE

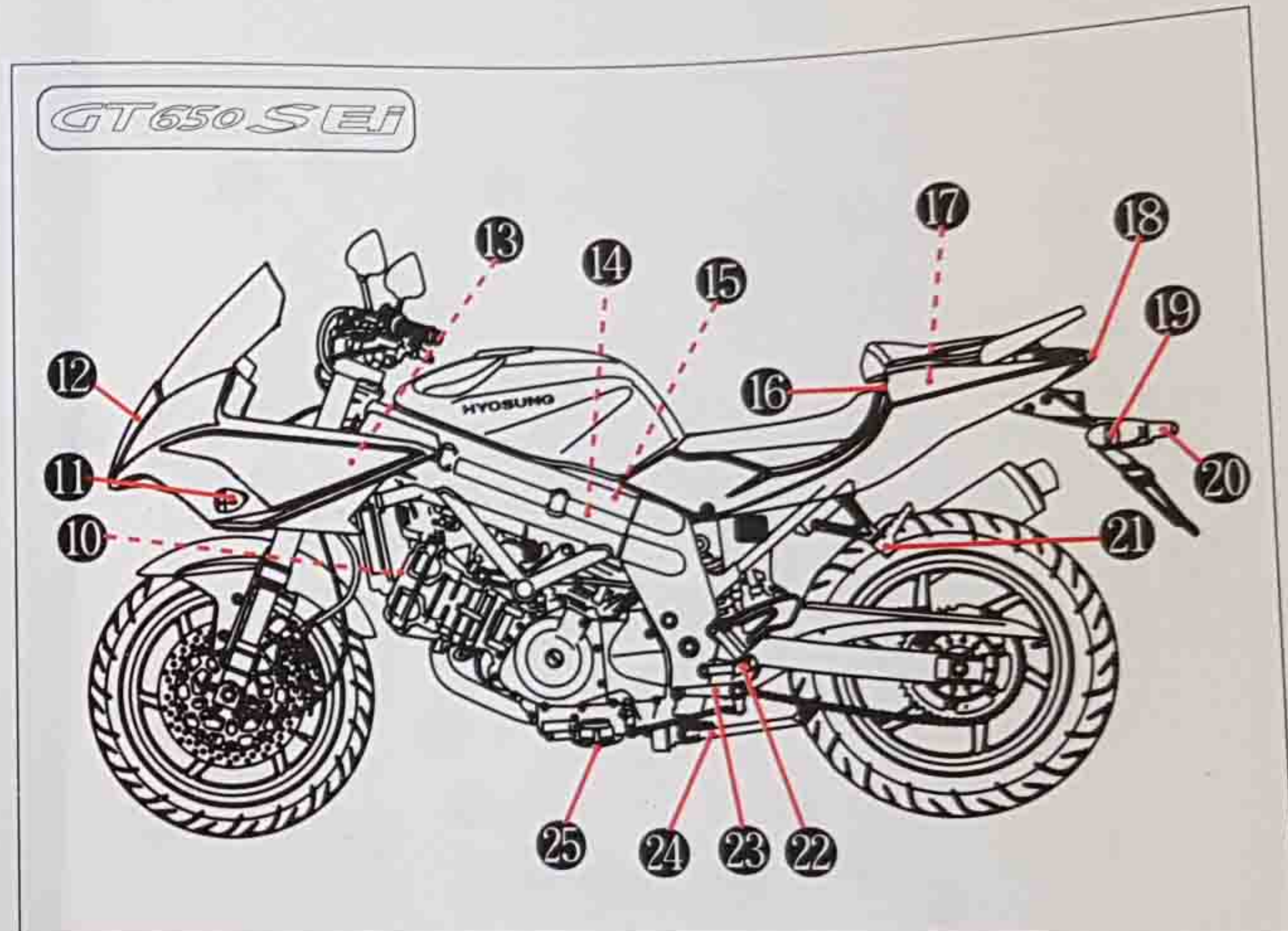
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NAMES OF EACH PARTS [GT650SEi]



- ① Clutch lever
- ② Left handle switches
- ③ Instrument panel
- ④ Front brake fluid reservoir
- ⑤ Right handle switches

- ⑥ Front brake lever
- ⑦ Throttle grip
- ⑧ Ignition switch
- ⑨ Fuel tank cap

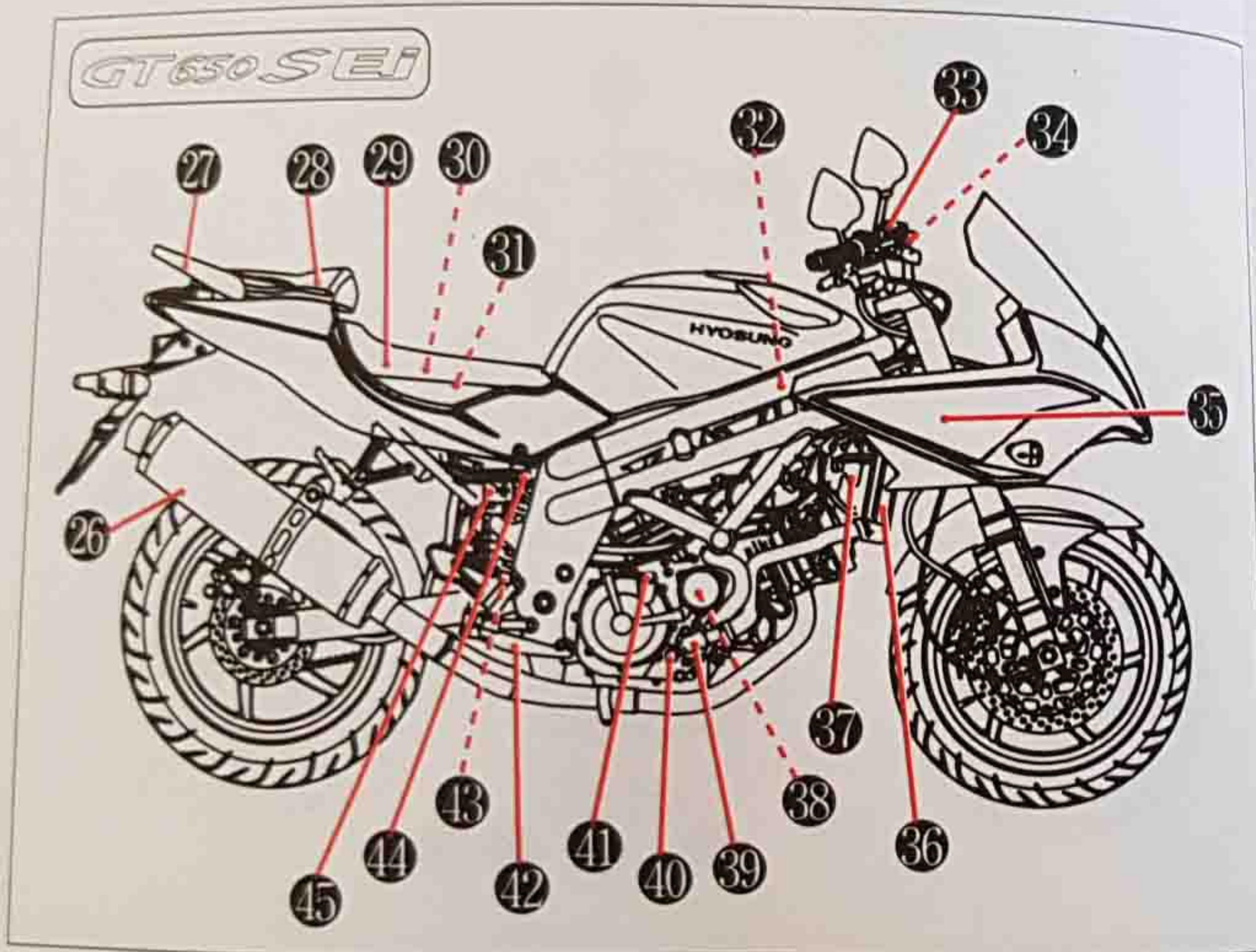


- ⑩ Spark plug (Front)
- ⑪ Front turn signal lamp
- ⑫ Head lamp & Position lamp
- ⑬ Ignition coil (Front)
- ⑭ Ignition coil (Rear)
- ⑮ Spark plug (Rear)
- ⑯ Rear seat lock
- ⑰ Fuses

- ⑱ Brake / Tail lamp
- ⑲ Rear turn signal lamp
- ⑳ License plate lamp
- ㉑ Passenger footrests
- ㉒ Footrests
- ㉓ Gearshift lever
- ㉔ Side stand
- ㉕ Engine oil drain plug

NOTE

"-----" : means the invisible parts.

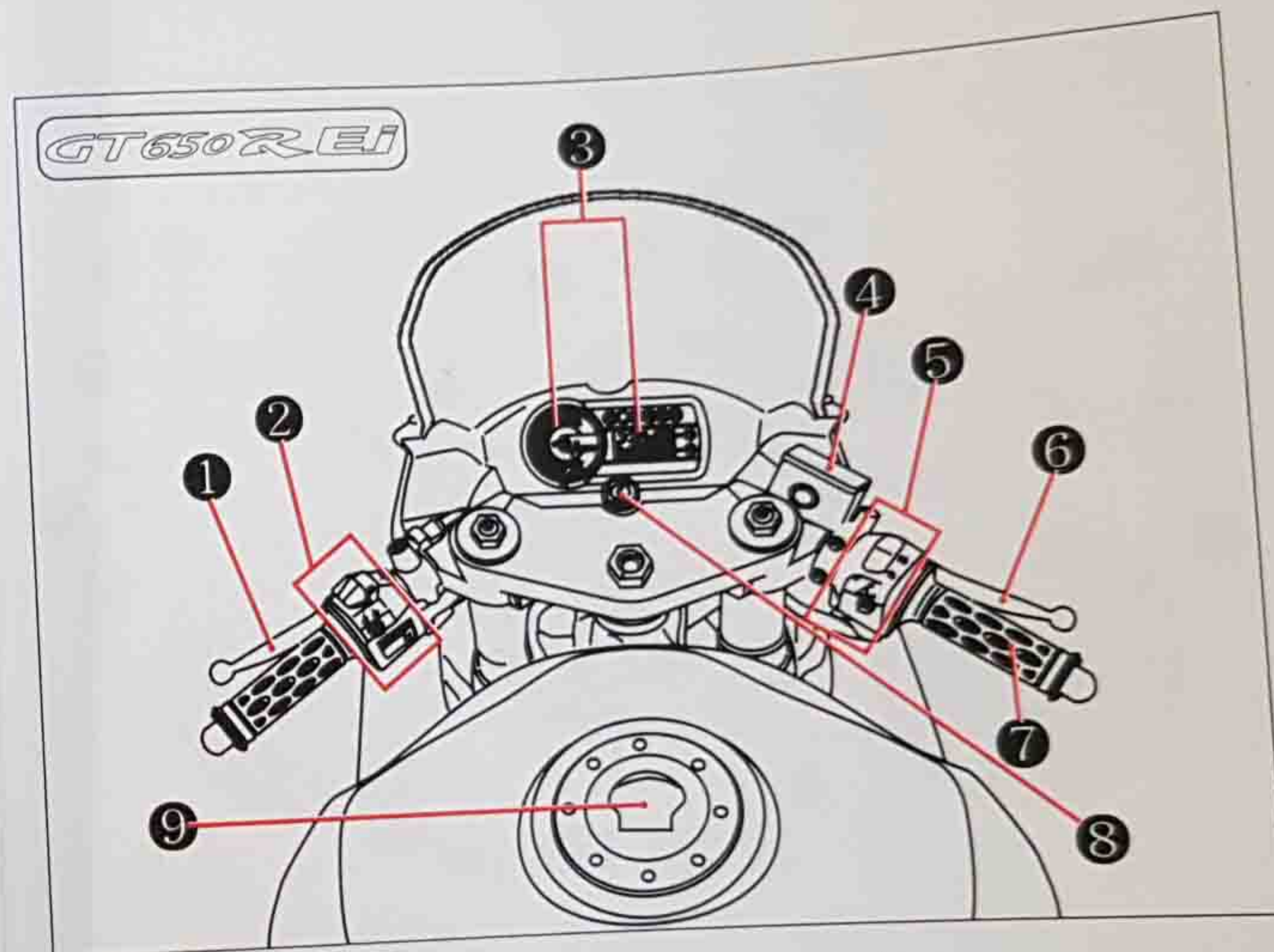


- | | |
|---------------------------------------|-------------------------------|
| ②⑥ Muffler | ③⑥ Radiator |
| ②⑦ Rear carrier | ③⑦ Cooling fan and motor |
| ②⑧ Rear seat & Trunk & Tools | ③⑧ Engine oil filter |
| ②⑨ Front seat | ③⑨ Water pump |
| ③⑩ ECU (Engine Control Unit) | ④⑩ Engine oil level lens |
| ③⑪ Battery | ④⑪ Engine oil filler plug |
| ③⑫ Air cleaner | ④⑫ Rear brake pedal |
| ③⑬ Front brake fluid reservoir | ④⑬ Rear brake lamp switch |
| ③⑭ Front brake lamp switch | ④⑭ Coolant reserve tank |
| ③⑮ Side cowling inner RH (Right Hand) | ④⑮ Rear brake fluid reservoir |

NOTE

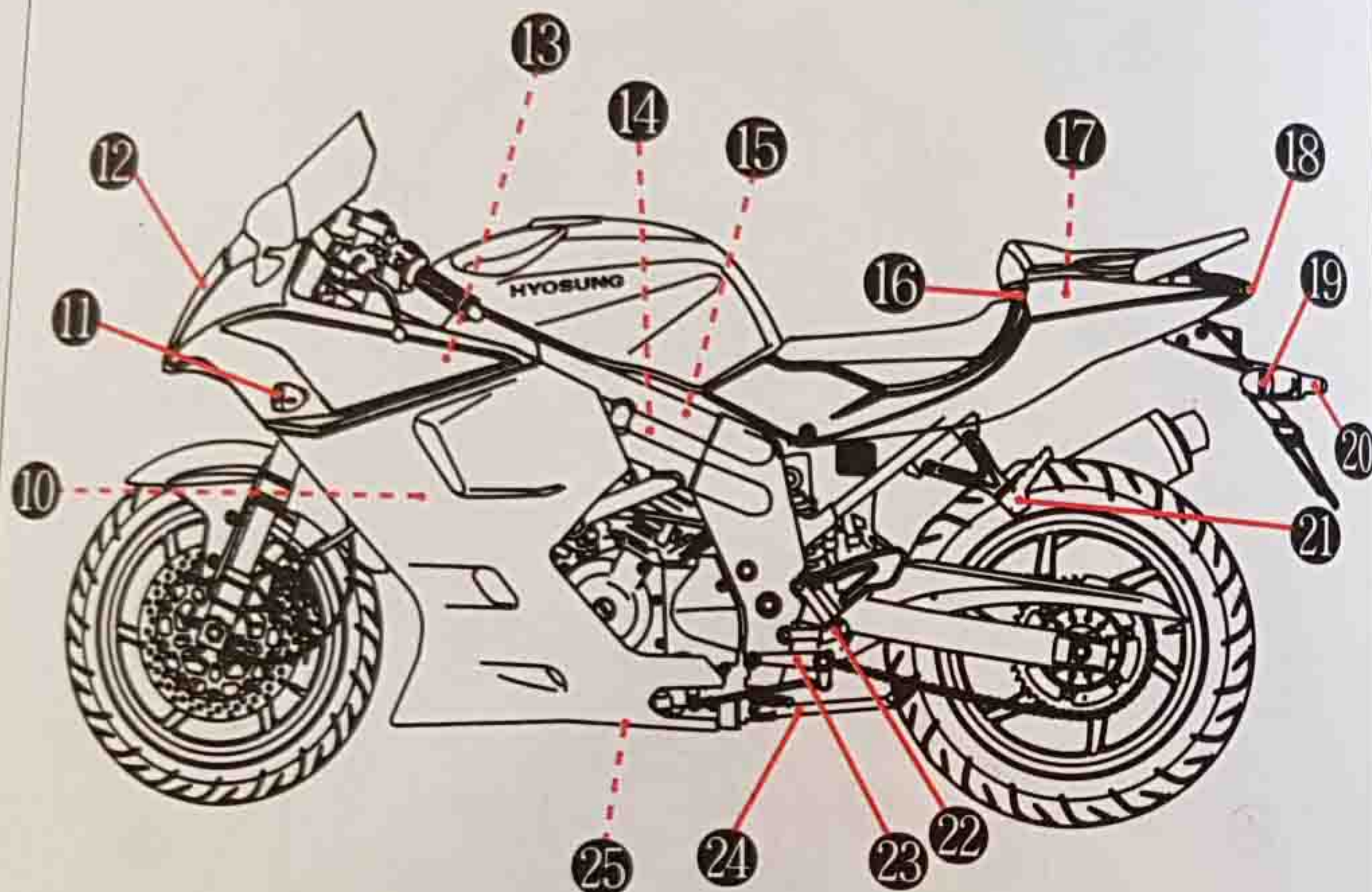
"-----" : means the invisible parts.

NAMES OF EACH PARTS [GT650REI]



- | | |
|-------------------------------|---------------------|
| ① Clutch lever | ⑥ Front brake lever |
| ② Left handle switches | ⑦ Throttle grip |
| ③ Instrument panel | ⑧ Ignition switch |
| ④ Front brake fluid reservoir | ⑨ Fuel tank cap |
| ⑤ Right handle switches | |

GT650REI



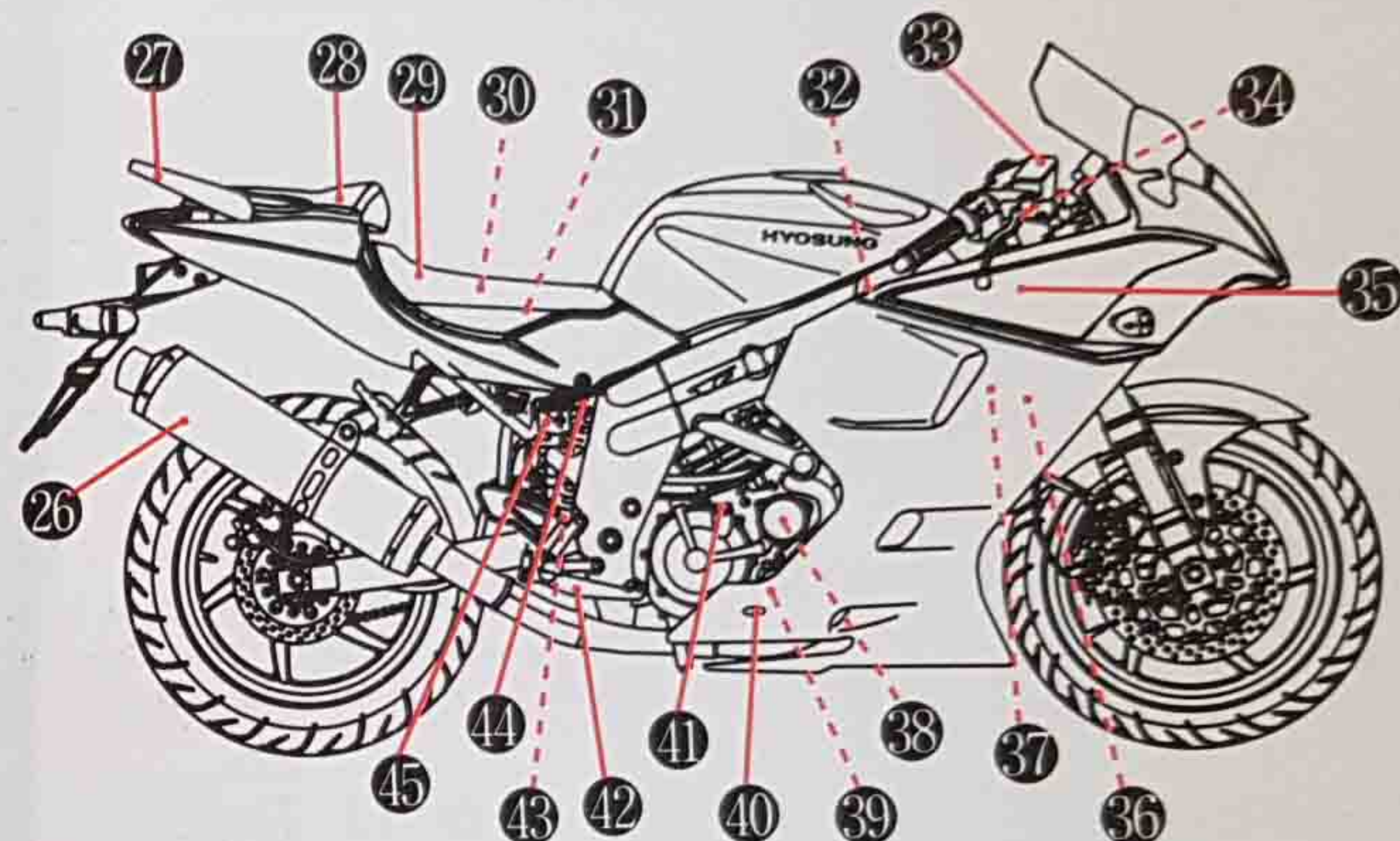
- ⑩ Spark plug (Front)
- ⑪ Front turn signal lamp
- ⑫ Head lamp & Position lamp
- ⑬ Ignition coil (Front)
- ⑭ Ignition coil (Rear)
- ⑮ Spark plug (Rear)
- ⑯ Rear seat lock
- ⑰ Fuses

- ⑱ Brake / Tail lamp
- ⑲ Rear turn signal lamp
- ⑳ License plate lamp
- ㉑ Passenger footrests
- ㉒ Footrests
- ㉓ Gearshift lever
- ㉔ Side stand
- ㉕ Engine oil drain plug

NOTE

"-----" : means the invisible parts.

GT650REI



- ㉖ Muffler
- ㉗ Rear carrier
- ㉘ Rear seat & Trunk & Tools
- ㉙ Front seat
- ㉚ ECU (Engine Control Unit)
- ㉛ Battery
- ㉜ Air cleaner
- ㉝ Front brake fluid reservoir
- ㉞ Front brake lamp switch
- ㉟ Side cowling inner RH (Right Hand)

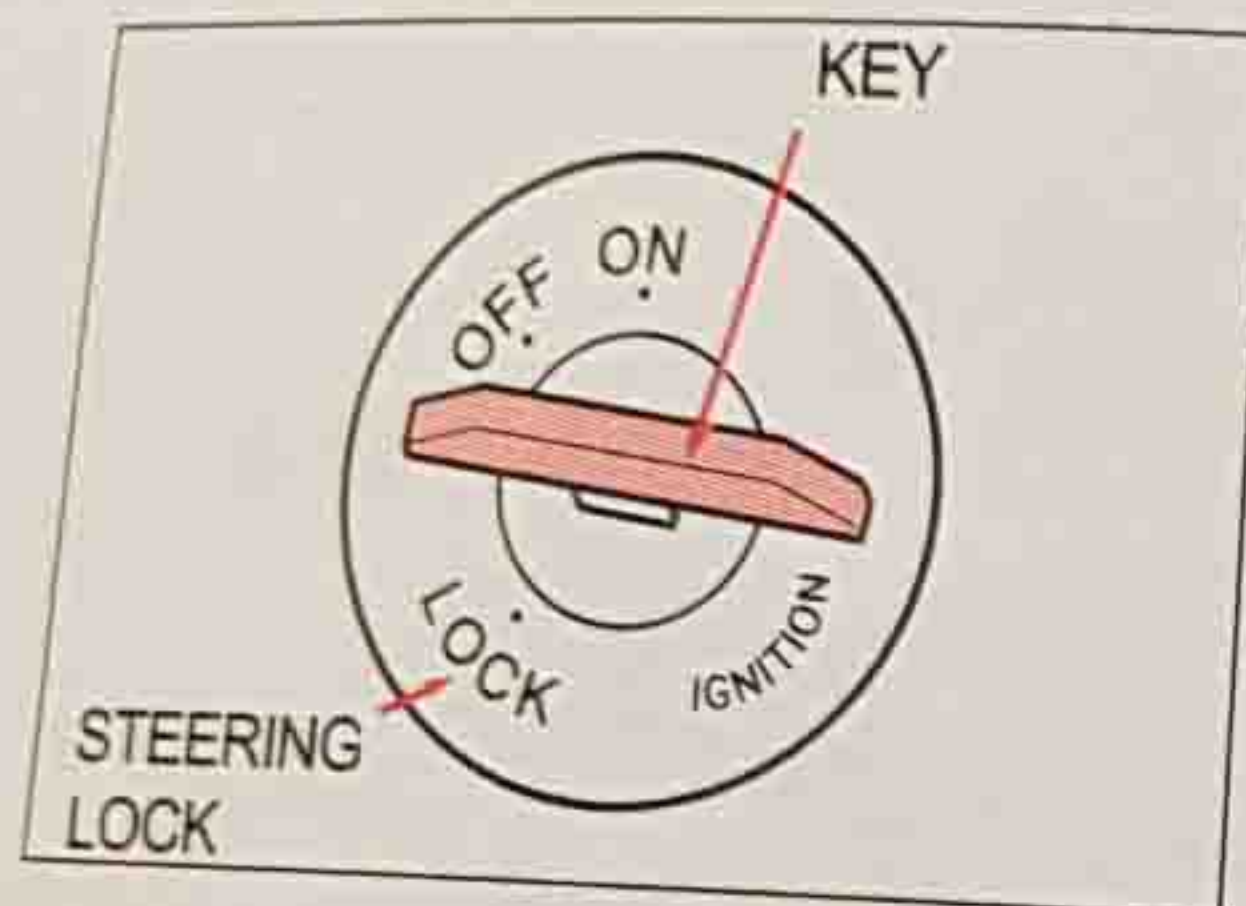
- ㊳ Radiator
- ㊴ Cooling fan and motor
- ㊵ Engine oil filter
- ㊶ Water pump
- ㊷ Engine oil level lens
- ㊸ Engine oil filler plug
- ㊹ Rear brake pedal
- ㊺ Rear brake lamp switch
- ㊻ Coolant reserve tank
- ㊼ Rear brake fluid reservoir

NOTE

"-----" : means the invisible parts.

CONTROLS

IGNITION SWITCH



The ignition switch has three positions :

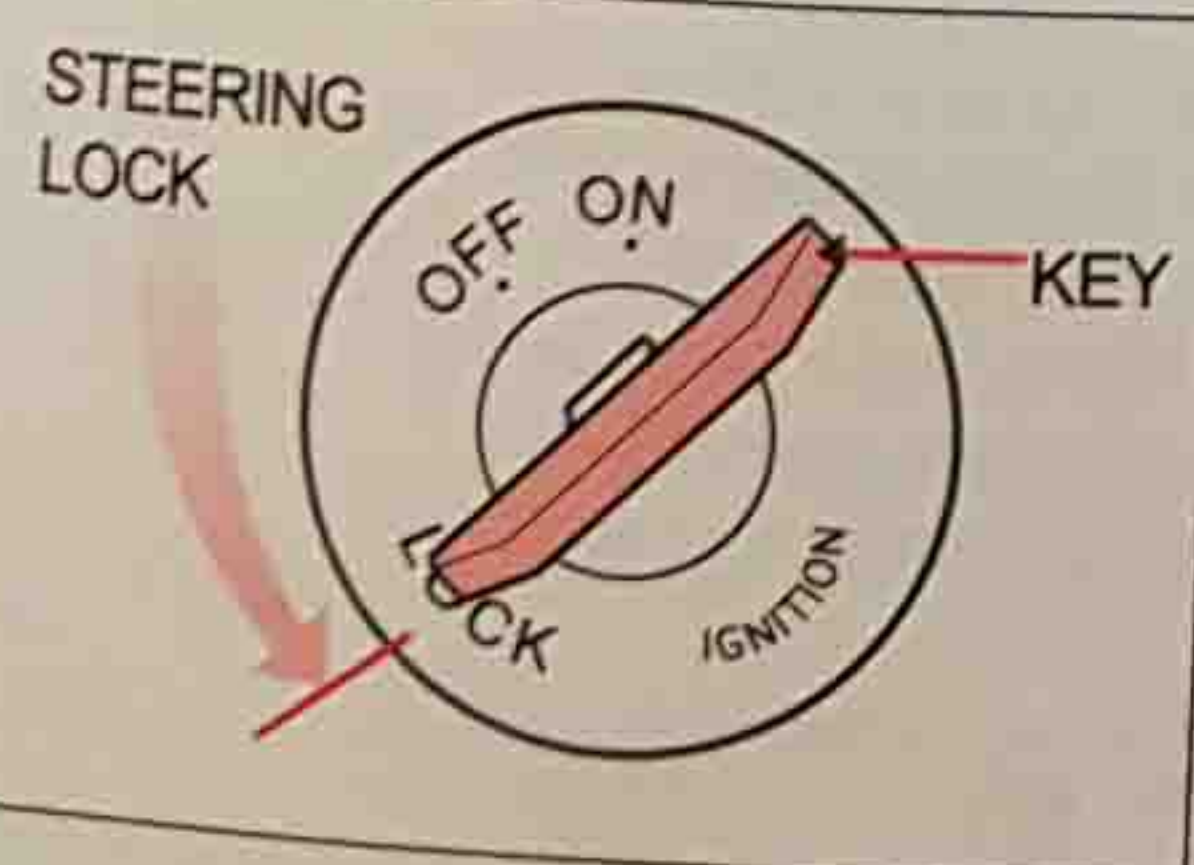
⊙ "ON" POSITION

The ignition circuit is completed and the engine can now be started.
The key cannot be removed from the ignition switch in this position.

⊙ "OFF" POSITION

All electrical circuits are cut off.
The engine will not start.
The key can be removed.

⊙ "LOCK" POSITION



- To lock the steering :
- Turn the handlebars all the way to the left.
 - Turn the ignition key to the "OFF" position.
 - Push down the ignition key from the "OFF" position, come up again and turn it to the "LOCK" position.
 - Remove the ignition key.

! WARNING

Turning the ignition switch to the "OFF" or "LOCK" position while the motorcycle is moving can be hazardous. Moving the motorcycle while the steering is locked can be hazardous. You could lose your balance and fall, or you could drop the motorcycle.

Stop the motorcycle and place it on the side stand if equipped before locking the steering. Never attempt to move the motorcycle when the steering is locked.

NOTE

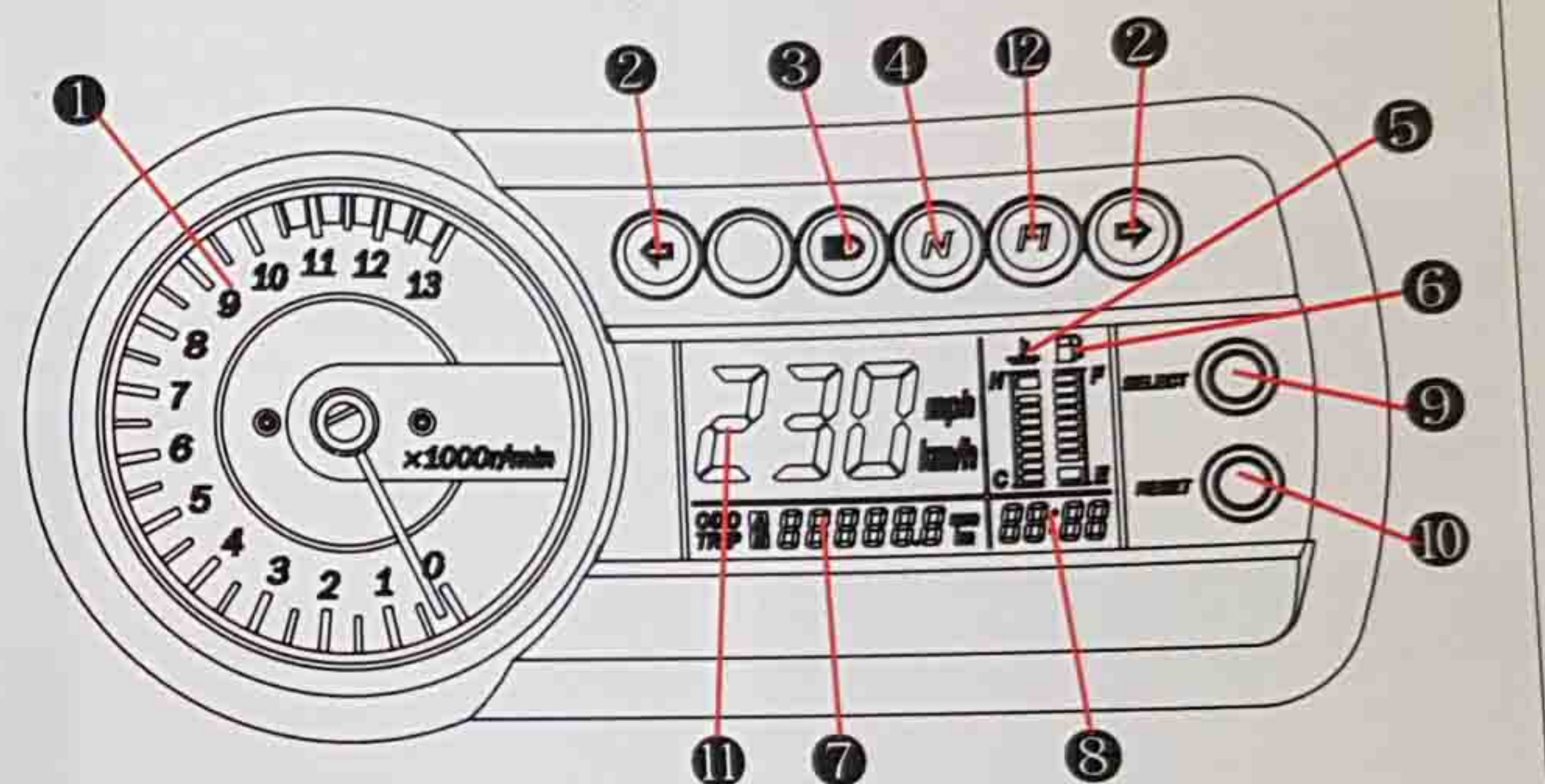
Start the engine after turning the key to the "ON" position, or the battery will lose power due to consumption by the lamp.

IGNITION KEY

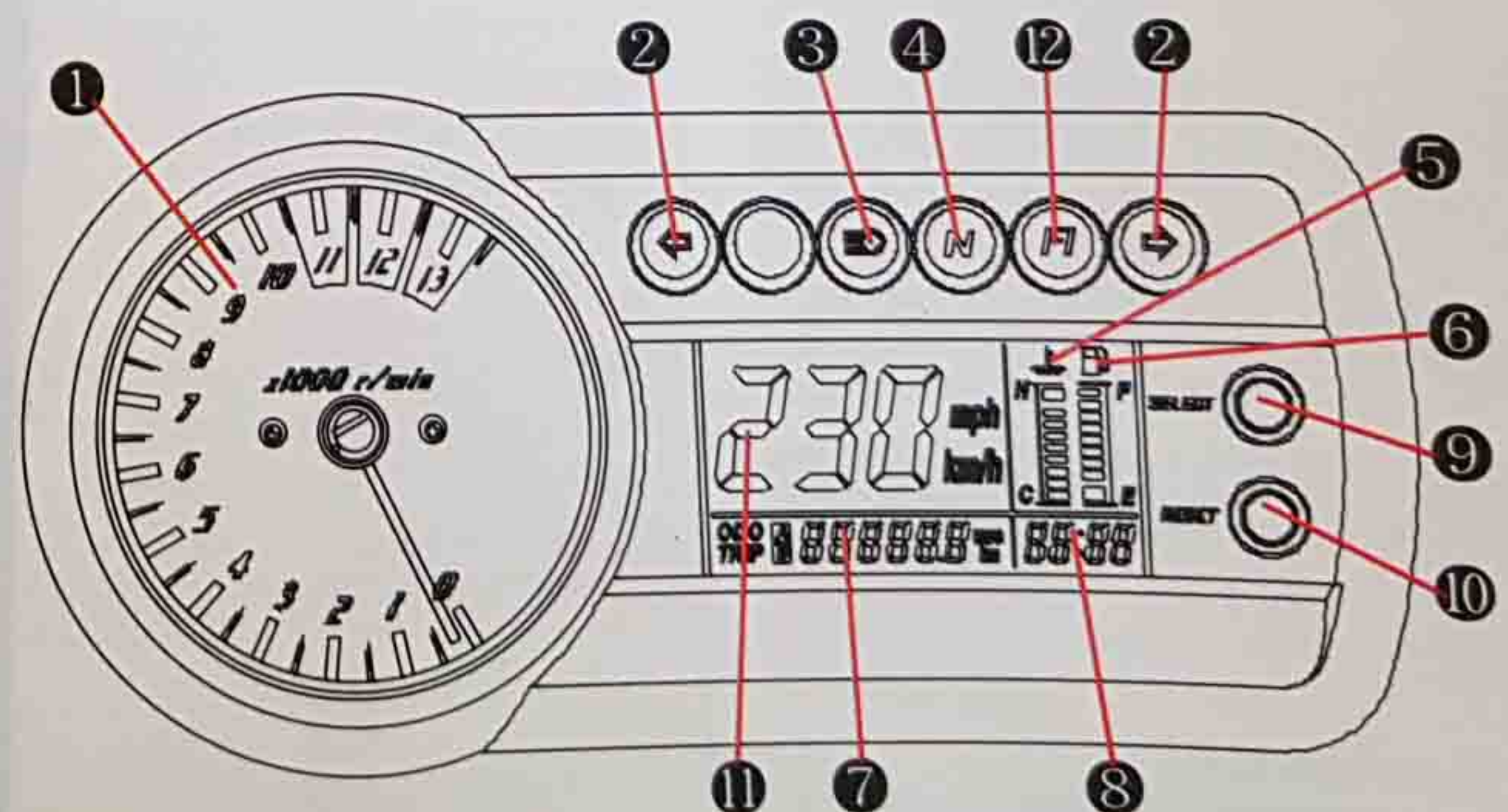
This motorcycle come equipped with two ignition keys.
Keep the spare key in a safe place.

INSTRUMENT PANEL

GT650PEI & GT650EI



GT650REI & GT650SEI



WARNING

Operating the display while riding can be hazardous. Removing a hand from the handlebars can reduce your ability to control the motorcycle.

Always keep both hands on the handlebars while riding.

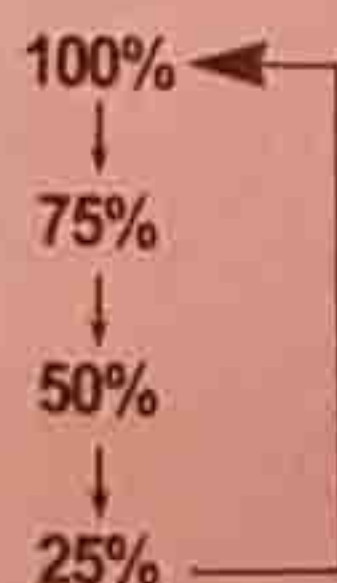
CAUTION

When the ignition switch is turned to the "ON" position, the meter lamp and display of speedometer will come on.

CAUTION

To adjust the brightness of speedometer display, push the switch ⑨ (in the normal mode) for 0.6 ~ 1 seconds while you want to change.

[Brightness of speedometer display]



① TACHOMETER

The tachometer indicates the engine speed in revolutions per minutes (rpm).

CAUTION

Revvng the engine into the red zone of the tachometer can cause severe engine damage. Never allow the engine to rev into the red zone of the tachometer in any gear.

② TURN SIGNAL INDICATOR LAMP

When the turn signals are being operated either to the right or to the left, the green indicator will flash at the same time.

③ HIGH BEAM INDICATOR LAMP

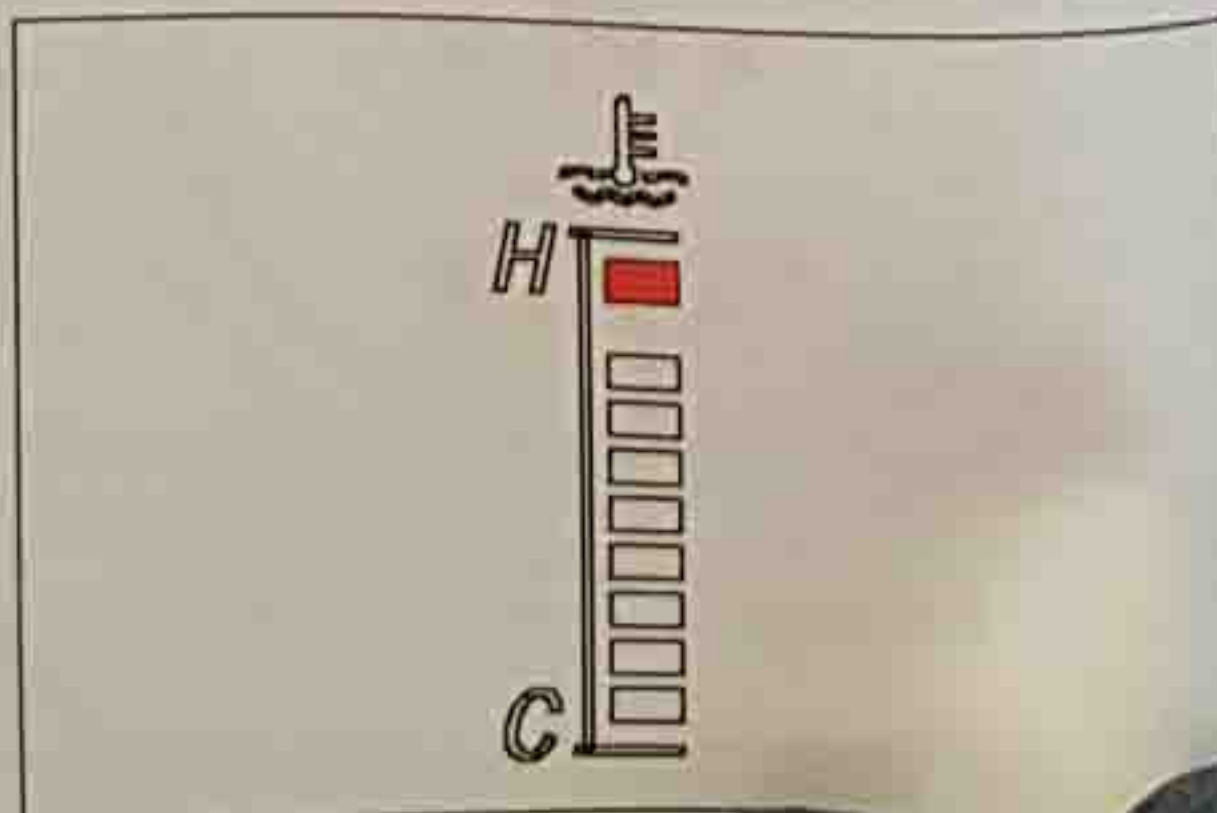
The blue high beam indicator lamp will come on when the head lamp high beam is turned on.

④ NEUTRAL INDICATOR LAMP

The green neutral indicator lamp will come on when the transmission is in neutral.

The lamp will go out when you shift into any gear other than neutral.

⑤ COOLANT TEMPERATURE METER



The *GT650PI/SIREI*'s speedometer is LCD (Liquid Crystal Display) type, it indicates the coolant temperature.

The coolant temperature meter displays all 9 segments when the coolant temperature is hot.

[The "H"(Hot) mark indicates the coolant temperature is hot.]

When the coolant temperature is higher than 125°C (257°F), the red lamp of "H"(Hot) mark comes on.

The "C"(Cool) mark indicates the coolant temperature is cool.

CAUTION

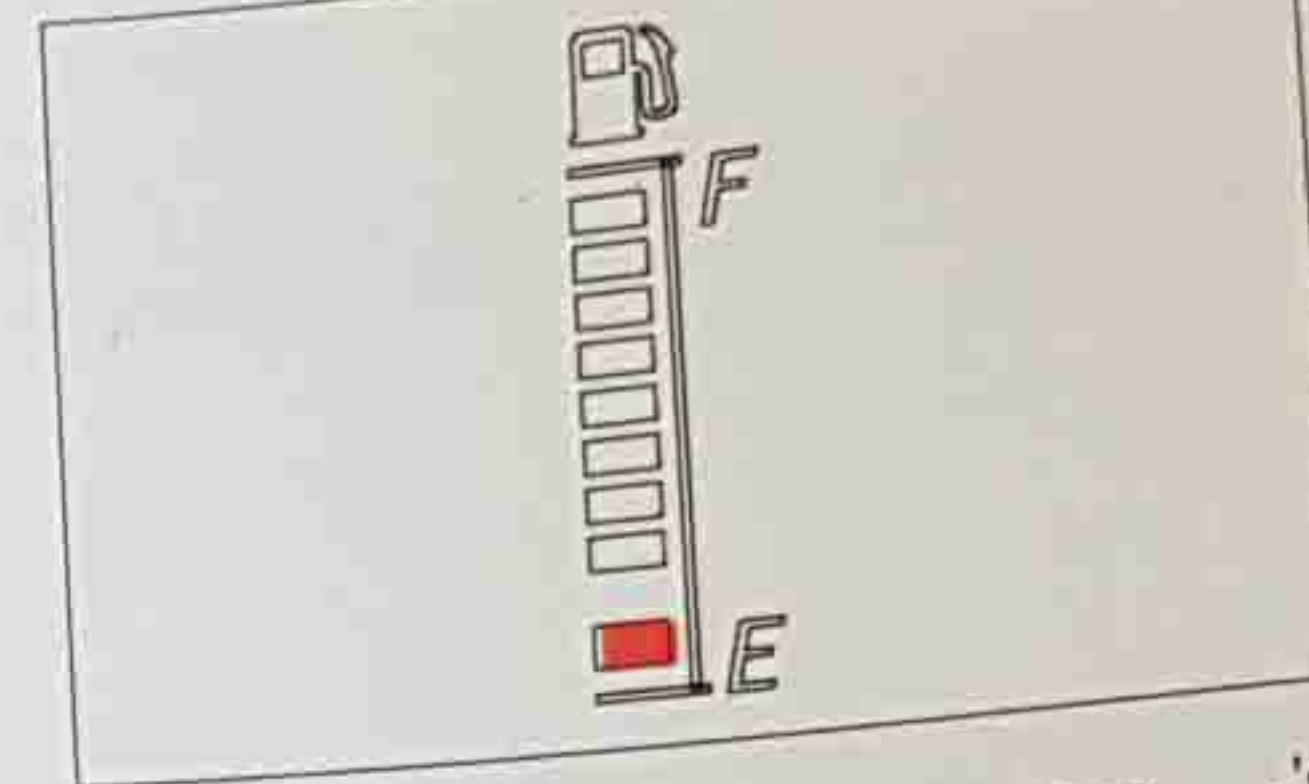
Running the engine with high engine coolant temperature can cause serious engine damage.

If the engine coolant temperature meter comes on the red lamp of "H" mark, stop the engine to let it cool.

NOTE

- *High engine speed, low vehicle speeds, or heavy load can increase engine coolant temperature. Decrease engine speed, reduce load and select an appropriate transmission gear to lower the temperature.*
- *Debris or mud in front of the engine or packed between the radiator fins can reduce cooling ability. Remove any debris or mud preventing air flow to the engine.*

⑥ FUEL METER



The *GT650PI/SIREI*'s speedometer is LCD (Liquid Crystal Display) type, it indicates the remaining fuel amount in the fuel tank.

The fuel meter displays all 9 segments when the fuel tank is full.

[The "F"(Full) mark indicates the fuel tank is full.]

The "E"(Empty) mark indicates the fuel tank is empty or nearly so.

When the remaining fuel is approximately 3.4 l, the red lamp of "E"(Empty) mark comes on only.

Fill the fuel tank before the red lamp of "E"(Empty) mark came on only.

The fuel tank capacity is 17.0 l.

CAUTION

When the red lamp of "E" mark comes on only, you should add fuel to the fuel tank at the first opportunity to avoid running out of fuel.

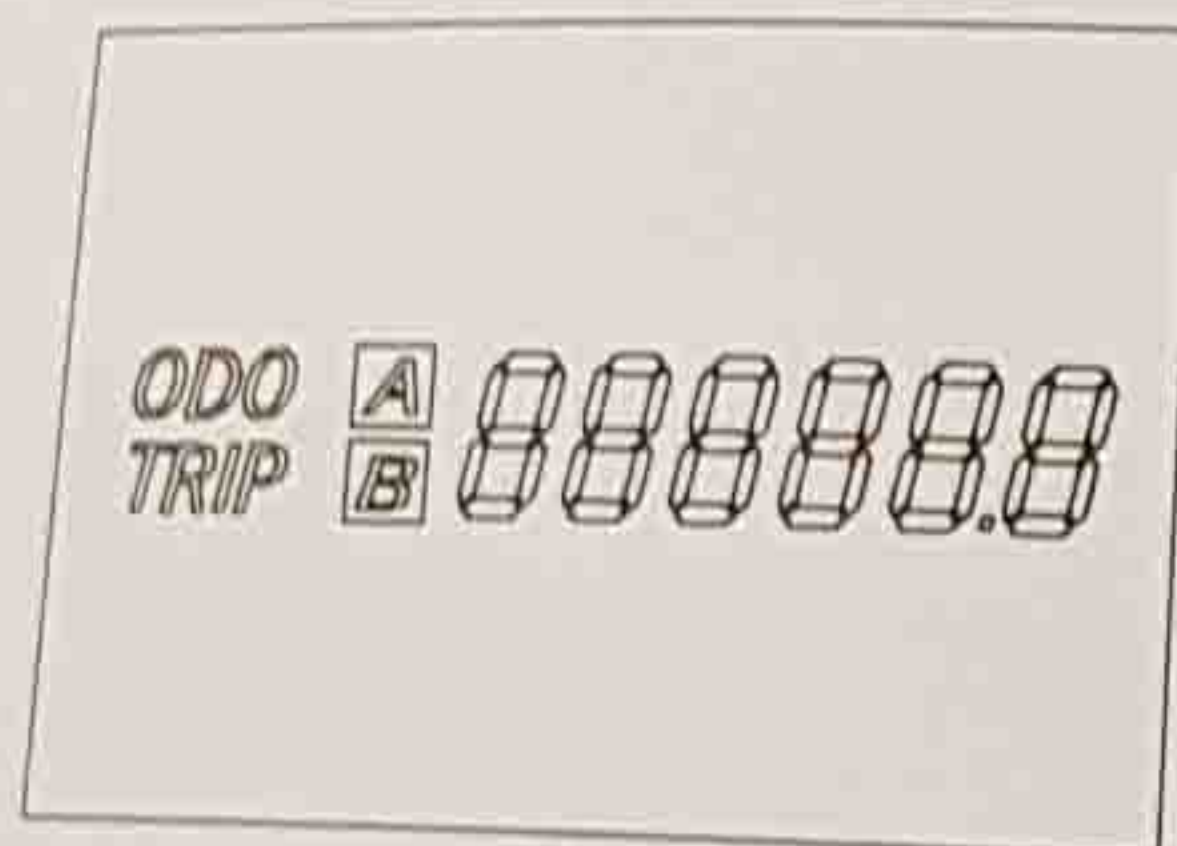
CAUTION

For checking the fuel meter, hold the motorcycle vertically and the ignition switch "ON".

⑦ ODOMETER / TRIP METER

The display in it has three functions, odometer and two trip meters.

The display changes odometer or trip meter, as indicated before turning the ignition switch off.

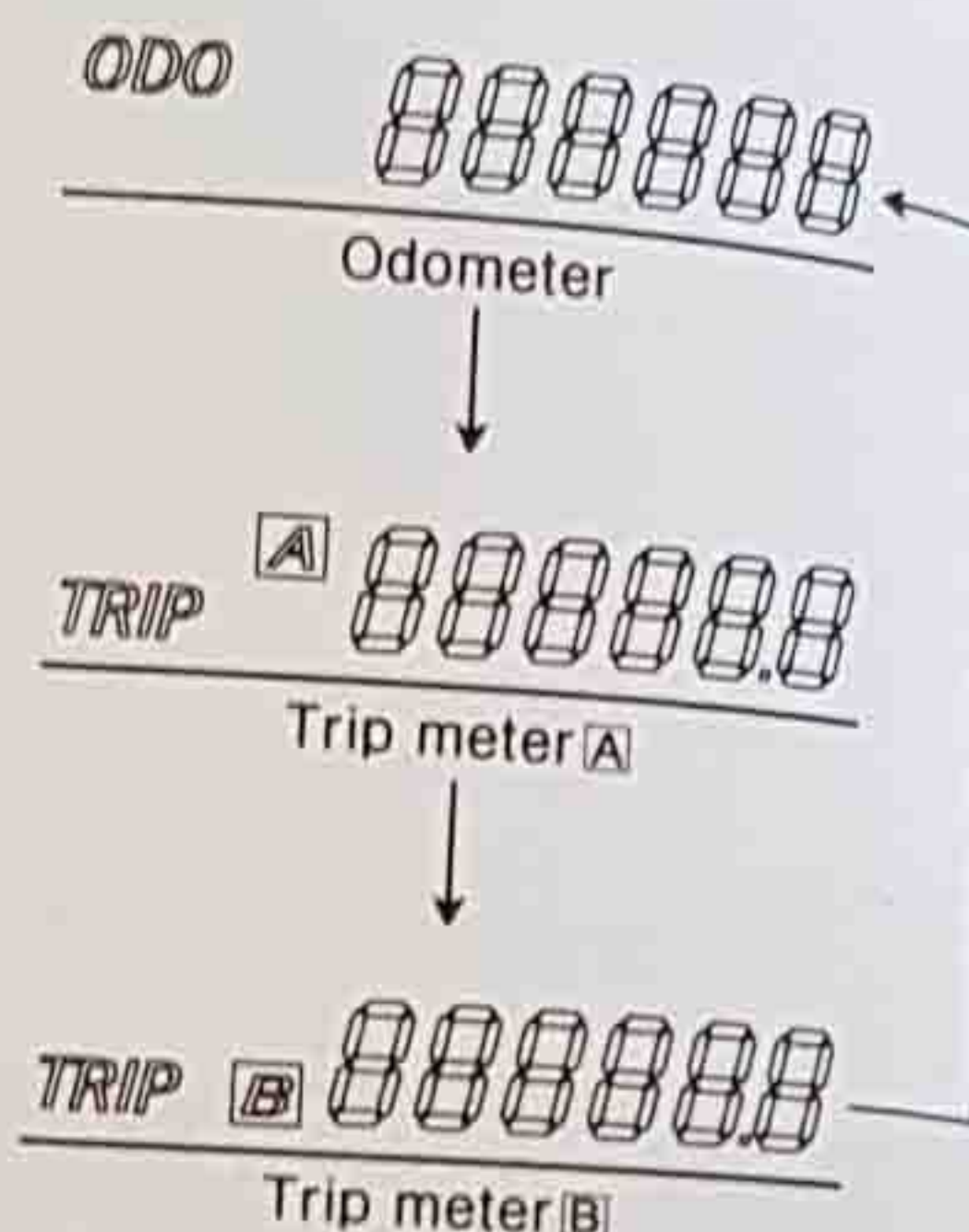


The odometer registers the total distance that the motorcycle has been ridden.

The two trip meters are resettable odometer.

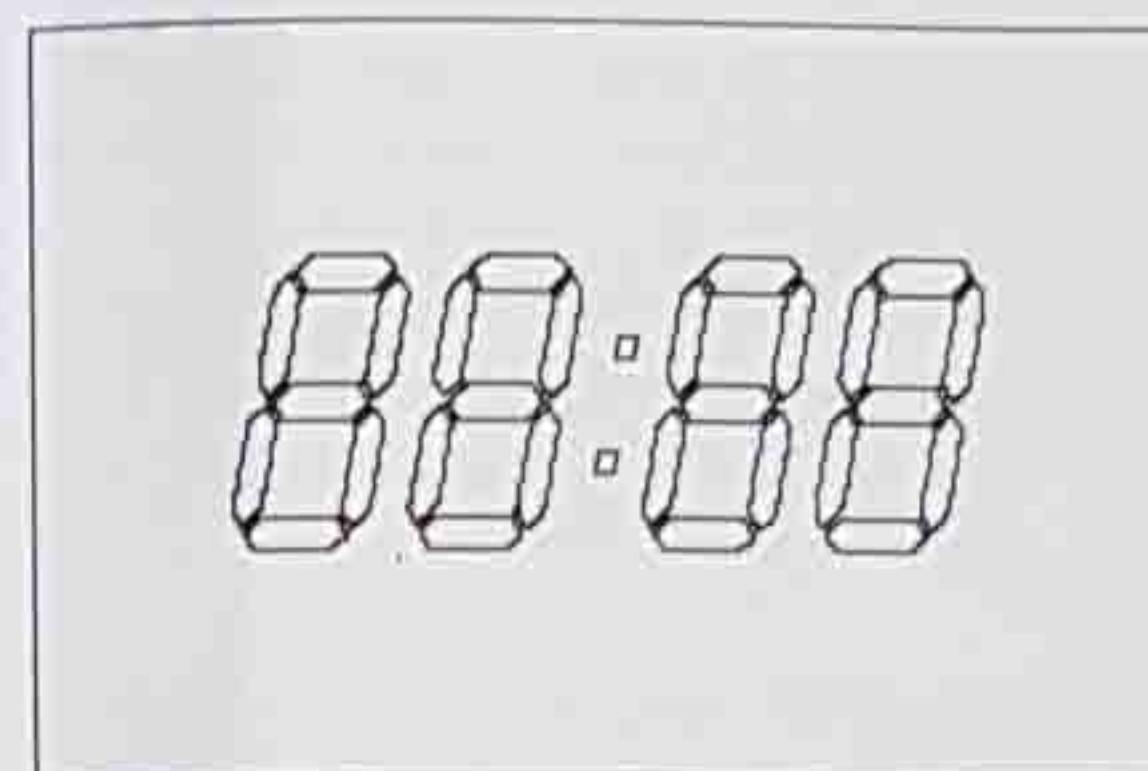
They can register two kinds of distance at the same time. For instance, trip meter **A** can register the trip distance and trip meter **B** can register the distance between fuel stops.

To change the display, push the switch ⑩ (in the normal mode) for 0.6 ~ 1 seconds while the display indicates the odometer, trip meter **A** or trip meter **B** you want to change.



To reset the trip meter to zero, push the switch ⑩ (in the normal mode) for 2 seconds while the display indicates trip meter **A** or **B** you want to reset.

⑧ CLOCK



The clock indicates 12-hour mode.

Follow the procedure below to adjust the clock.

1. Push the switch ⑨ (in the normal mode) for 2 seconds until the hour and minutes display blink. It is the clock reset mode.
2. Adjust the hour display by pushing the switch ⑩ (in the clock reset mode) for 0.6 ~ 1 seconds.
3. Adjust the minutes display by pushing the switch ⑨ (in the clock reset mode) for 0.6 ~ 1 seconds.
4. Push the switch ⑨ (in the clock reset mode) for 2 seconds to resume in the normal mode.

⑨ SELECT SWITCH

Use this switch to adjust the following :

• In the normal mode

Push it for	Adjustment
0.6 ~ 1 seconds	To adjust the brightness of speedometer display (100% → 75% → 50% → 25% → 100%)
2 seconds	Normal mode → Clock reset mode

• In the clock reset mode

Push it for	Adjustment
0.6 ~ 1 seconds	Increase the minutes of clock
2 seconds	Clock reset mode → Normal mode

CLOCK ADJUSTMENT

Mode	Switch	Push it for	Adjustment
Normal	Select(⑨)	2 seconds	Normal mode → Clock reset mode
Clock reset mode	Reset(⑩)	0.6 ~ 1 seconds	Increase the hour of clock
	Select(⑨)	0.6 ~ 1 seconds	Increase the minutes of clock
	Select(⑨)	2 seconds	Clock reset mode → Normal mode

⑩ RESET SWITCH

Use this switch to adjust the following :

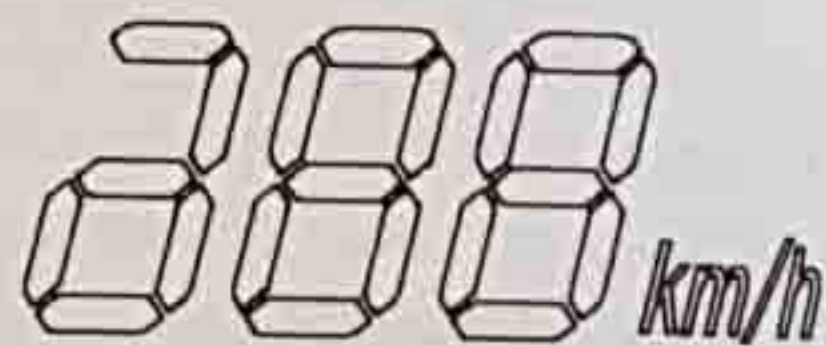
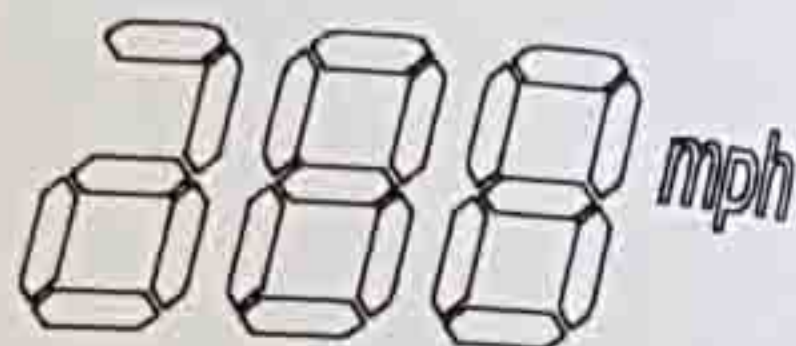
● In the normal mode

Push it for	Adjustment
0.6 ~ 1 seconds	Odometer → Trip meter A → Trip meter B → Odometer
2 seconds	Reset the trip meter to zero, while the display indicates trip meter A or B

● In the clock reset mode

Push it for	Adjustment
0.6 ~ 1 seconds	Increase the hour of clock

⑪ SPEEDOMETER



The speedometer indicates the road speed in kilometers or miles per hour.

To change the speedometer display :

1. Turn the ignition switch to the "ON" position.
2. Pushing the switch ⑨ (in the normal mode), turn the ignition switch to the "OFF" position and turn to the "ON" position again.
3. Push the switch ⑨ (in the normal mode) for 5 seconds continually until the speedometer display change.



WARNING

Obey the speed limit and traffic regulation at all times.

⑫ "FI" (Fuel Injection) CHECK LAMP

The LCD display panel ⑪ indicates "FI" letters and speedometer alternately, and the "FI" check lamp ⑫ comes on and remains lit when the ignition switch is set to "ON" position with the engine stopped as a test of injection system operation.

As soon as the engine starts, the LCD display panel ⑪ indicates speedometer continuously and the "FI" check lamp ⑫ should go out.

If the fuel injection system fails, the LCD display panel ⑪ indicates "FI" letters and speedometer alternately, and the "FI" check lamp ⑫ comes on and remains lit.



CAUTION

If the "FI" check lamp does not come on when the ignition switch is set to "ON" position with the engine stopped or fail to go out after the engine start, contact an authorized Hyosung dealer.

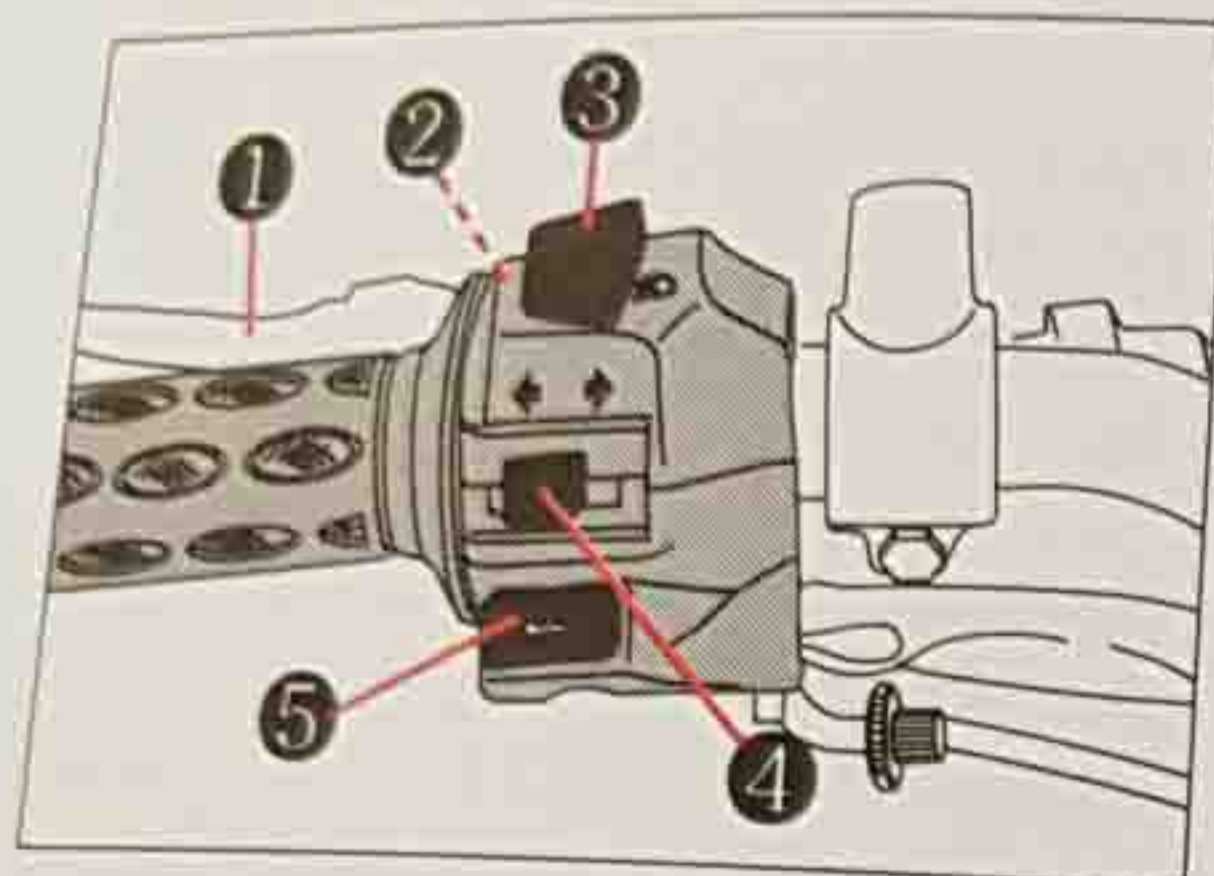


CAUTION

Riding the motorcycle with the LCD display panel indicating a problem with electric fuel injection system and with the "FI" check lamp lit after starting the engine can damage the engine and transmission.

Whenever the "FI" check lamp is lit and the LCD display panel indicates "FI" while riding, have your authorized Hyosung dealer or a qualified mechanic inspect the electric fuel injection system as soon as possible.

LEFT HANDLE SWITCHES



① CLUTCH LEVER

The clutch lever is used for disengaging the drive to the rear wheel when starting the engine or shifting the transmission gear. Squeezing the lever disengages the clutch.

CAUTION

Use the clutch correctly. Otherwise, the clutch may be worn quickly.

② "PASS" SWITCH

Press the "PASS" switch to operate the head lamp high beam for using when pass. With the ignition switch in the "ON" position, push the "PASS" switch to operate the head lamp high beam.

CAUTION

Do not operate when the dimmer switch "D" position.

③ DIMMER SWITCH

Change the direction of the head lamp light.

- "D" : The head lamp high beam comes on. The high beam indicator lamp also comes on.
- "D" : The head lamp low beam comes on.

WARNING

Set the dimmer switch "D" when other vehicle is running in front or against.

④ TURN SIGNAL SWITCH

Using when left, right turn or change direction.

- "L" Position : Flash the left turn signal lamp.
- "R" Position : Flash the right turn signal lamp.
- "Δ" (OFF) : Pushing the "Δ" position will stop the turn signal lamp to operate.

CAUTION

Always use the turn signals when you intend to change lanes or make a turn. Always be sure to turn the turn signal switch to the "OFF" position after completing the turn or lane change.

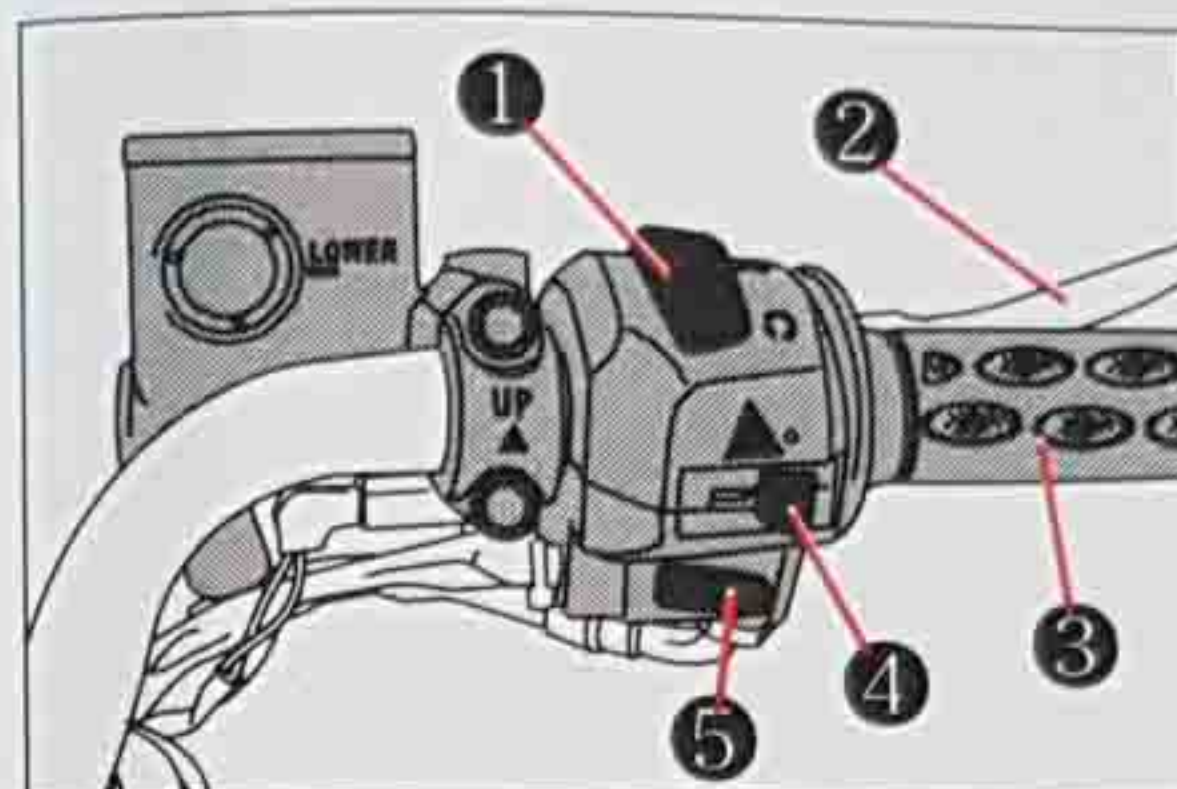
⑤ HORN SWITCH

Press the switch to operate the horn.

CAUTION

Use the horn switch only in case of needing.

RIGHT HANDLE SWITCHES



① ENGINE STOP SWITCH

- "X" Position : Use in emergency or when motorcycle has fallen over to stop engine quickly. The ignition circuit is off. The engine cannot start or run.
- "O" Position : The ignition circuit is on and the engine can start and run. Keep in this position for normal engine operation.

WARNING

Do not operate the engine stop switch into the "X" position while driving at one's pleasure.

② FRONT BRAKE LEVER

The front brake is applied by squeezing the brake lever gently toward the throttle grip.

The front brake is a powerful disk brake system. Do not brake excessively so as to cause the front wheel to lock up or skid. The brake lamp will come on when the lever is squeezed.

WARNING

Apply the brake lightly and with great care on slippery surfaces to avoid skidding.

③ THROTTLE GRIP

Engine speed is controlled by position of the throttle grip. Turn it toward you to increase engine speed. Turn it away from you to decrease the engine speed.

WARNING

Avoid turning the throttle grip during braking.

④ HAZARD WARNING SWITCH

- "Δ" : All four turn signal lamps and indicator lamp will flash simultaneously when the switch is turned on with the ignition switch in "ON" position.
- "•" : The turn signal lamps and indicator lamp go off.

Use the hazard warning switch to warn other traffic during emergency parking or when your vehicle could otherwise become a traffic hazard.

CAUTION

Turn off the hazard warning switch promptly after use.

If the motorcycle is ridden with the hazard warning switch turned on, it may confuse other drivers.

The battery will eventually become depleted if the hazards warning remains on for a period of time without the engine running.

⑤ ⚠ STARTER SWITCH

Use this switch to operate the starting motor.

With the ignition switch in the "ON" position, the engine stop switch in the "○" position, and the transmission is in neutral, squeeze the clutch lever and the side stand up and push the starter switch to start the engine.

When the ignition switch is set to "ON" position with the engine stopped, the meter lamp will come on and the needle of the tachometer will turn once to the end as a test of electric system operation.

Push the starter switch after the needle of the tachometer turn back.

⚠ CAUTION

Do not attempt the start the engine until the needle of the tachometer completes a full sweep and returns to the rest position otherwise the engine will start badly.

If the engine does not start or runs badly, turn the ignition switch to the "OFF" position. After 8 seconds, turn the ignition switch on, allow the tachometer needle to complete it's sweep and return to the rest position and then attempt to restart.

This allows the ISC (Idling Speed Control) solenoid to be initialized.

⚠ CAUTION

- Release the starter switch immediately after the motorcycle has started.
- Do not engage the starting motor for more than five seconds at a time as it may overheat the wiring harness and starting motor. If the engine does not start after several attempts, check the fuel supply and ignition system. (Refer to Page 94)

⚠ WARNING

The "GT650/P/S/REI" are equipped with the side stand ignition interlock system.

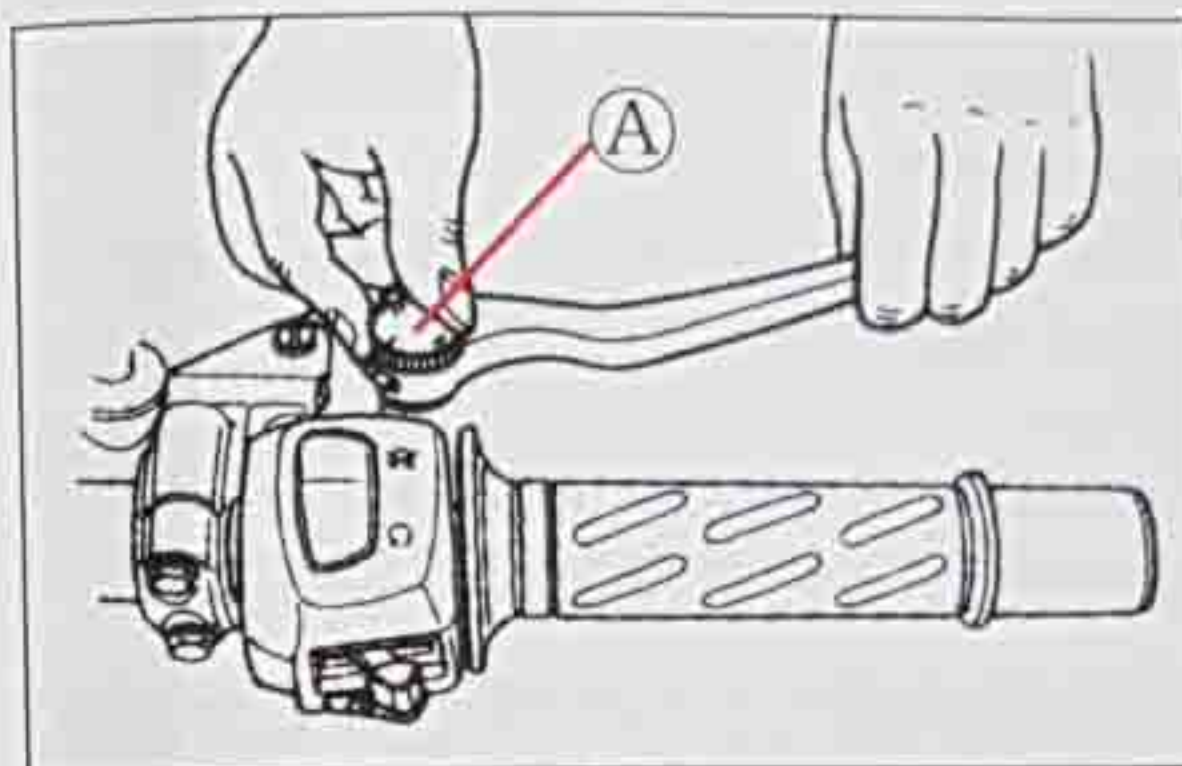
If the transmission is in neutral or the side stand up, you can only start the engine by squeezing in the clutch lever. This side stand ignition interlock system prevents the motorcycle from being started with side stand down.

Make sure that the side stand ignition interlock system is working properly before riding.

⚠ CAUTION

The position lamp, meter lamp, tail lamp and license plate lamp on this motorcycle always comes on when the ignition switch is turned to the "ON" position. The head lamp is always lit when starting the engine.

FRONT BRAKE LEVER ADJUSTMENT



The distance between the throttle grip and the front brake lever is adjustable among six positions.

To change the position, push the brake lever forward and turn the adjuster ① to the desired position ("□" mark of the front brake lever holder).

When changing the brake lever position, always be sure the adjuster stops in the proper position; a projection of the brake lever holder should fit into the depression of the adjuster ①.

These motorcycles are delivered from the factory with its adjuster set on position 6.

Position 1 provides the widest distance and position 6 provides narrowest distance.

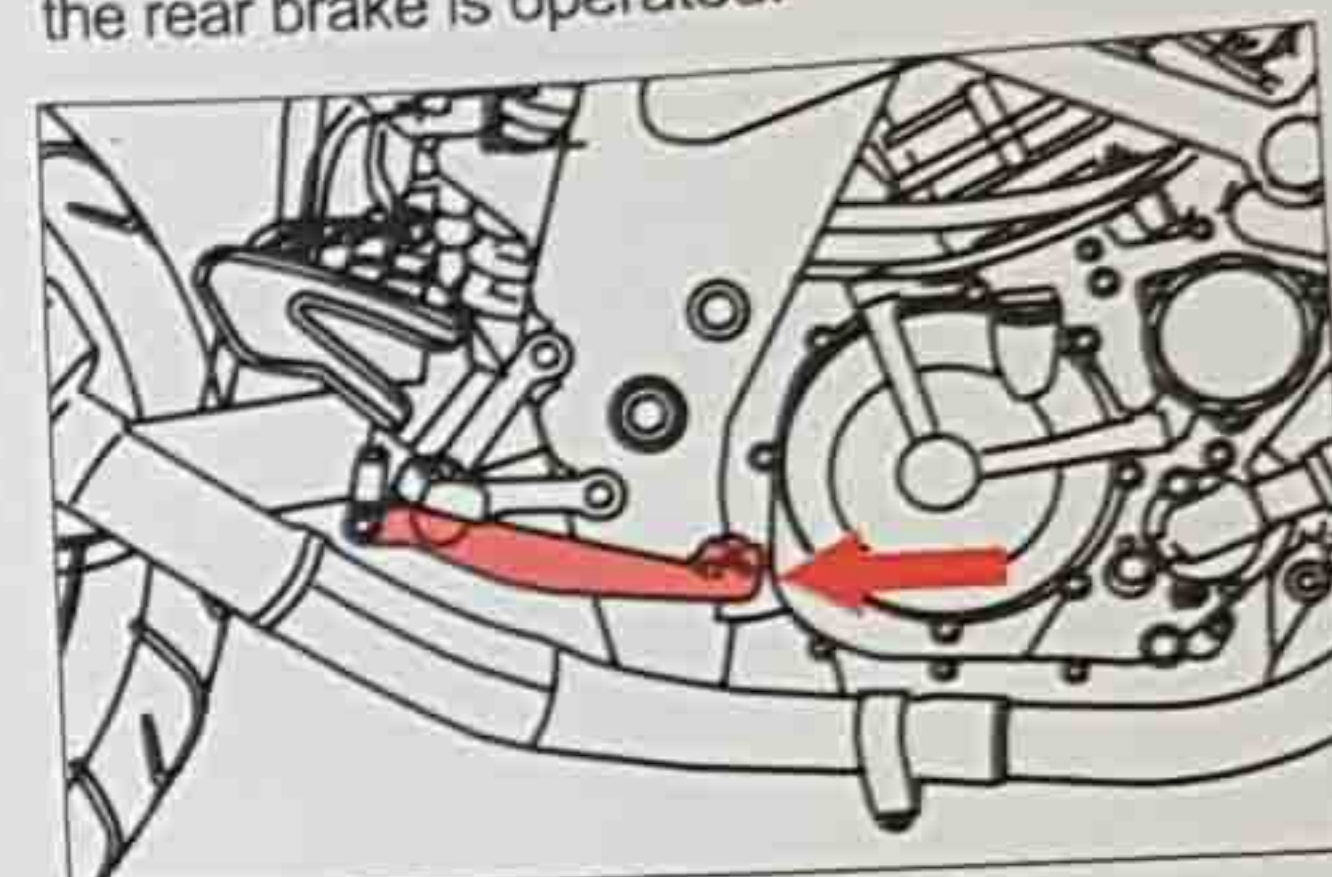
⚠ WARNING

Never attempt to change the front brake lever position while riding, or you may lose control.

REAR BRAKE PEDAL

Depressing the rear brake pedal will apply the rear brake.

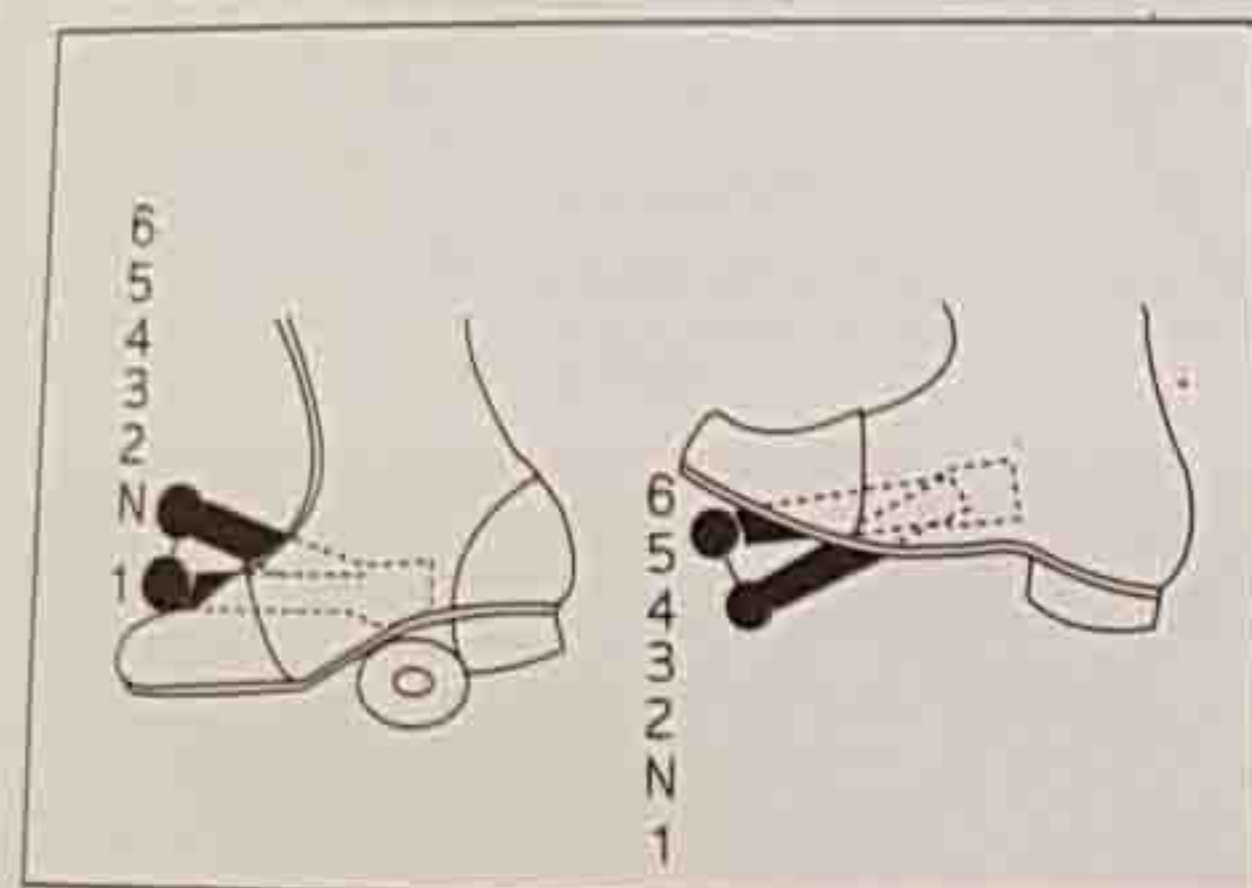
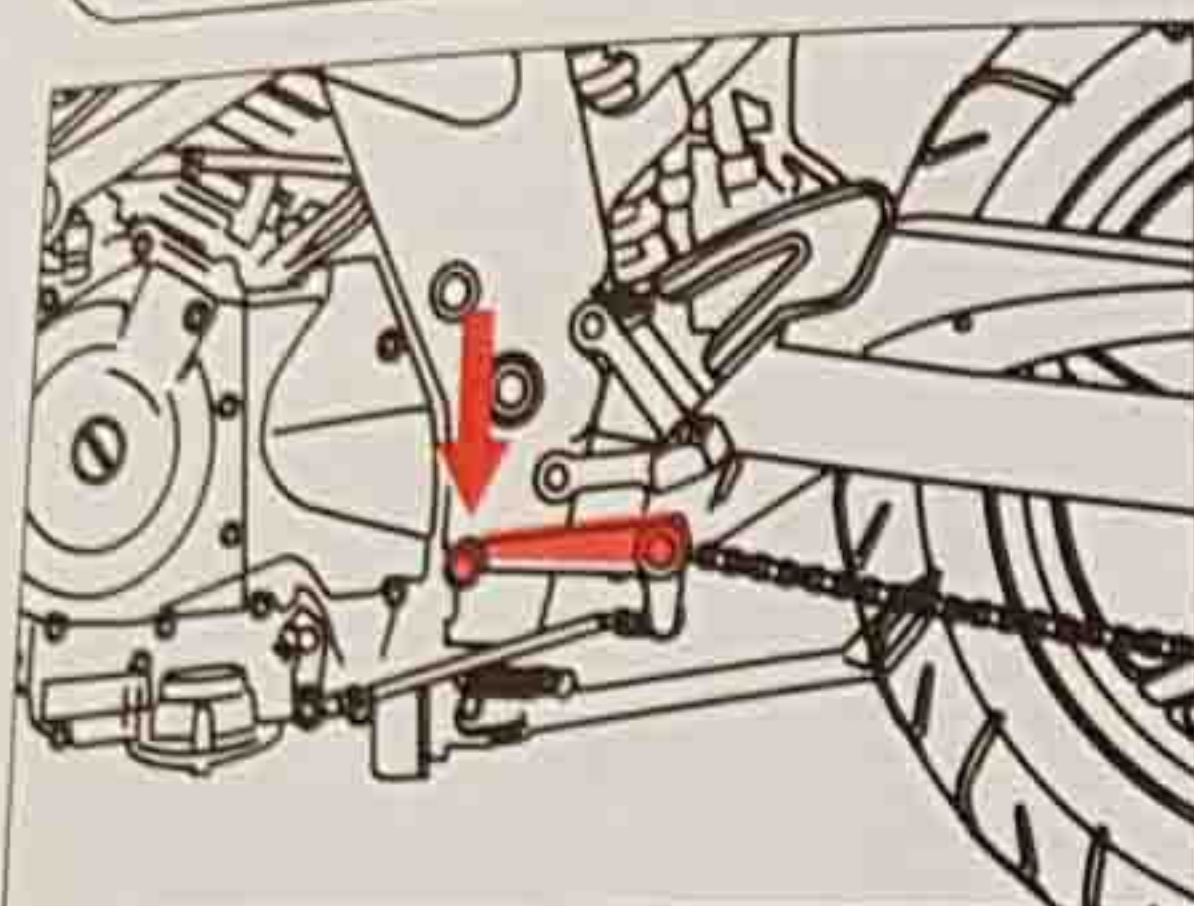
The brake lamp will be illuminated when the rear brake is operated.



⚠ WARNING

Apply the brake lightly and with great care on slippery surfaces to avoid skidding.

GEARSHIFT LEVER



The 'GT650/P/S/REI' have a 6-speed transmission which operates as shown.

To shift properly, squeeze the clutch lever and close the throttle at the same time you operate the gearshift lever.

Whenever a gear is selected, the gearshift lever will return to its normal position ready to select the next gear.

Lift the gearshift lever to upshift and depress the lever to downshift.

Neutral is located between first and 2nd gear.

When neutral is desired, depress or lift the lever halfway between first and 2nd gear.

It is not possible to upshift or downshift more than one gear at a time.

When shifting from first to 2nd gear or 2nd gear to low, neutral will be automatically skipped.

Reduce the motorcycle speed before down-shifting.

When down-shifting, the engine speed should be increased before the clutch is engaged.

This will prevent unnecessary wear on the drive train components and the rear tire.

CAUTION

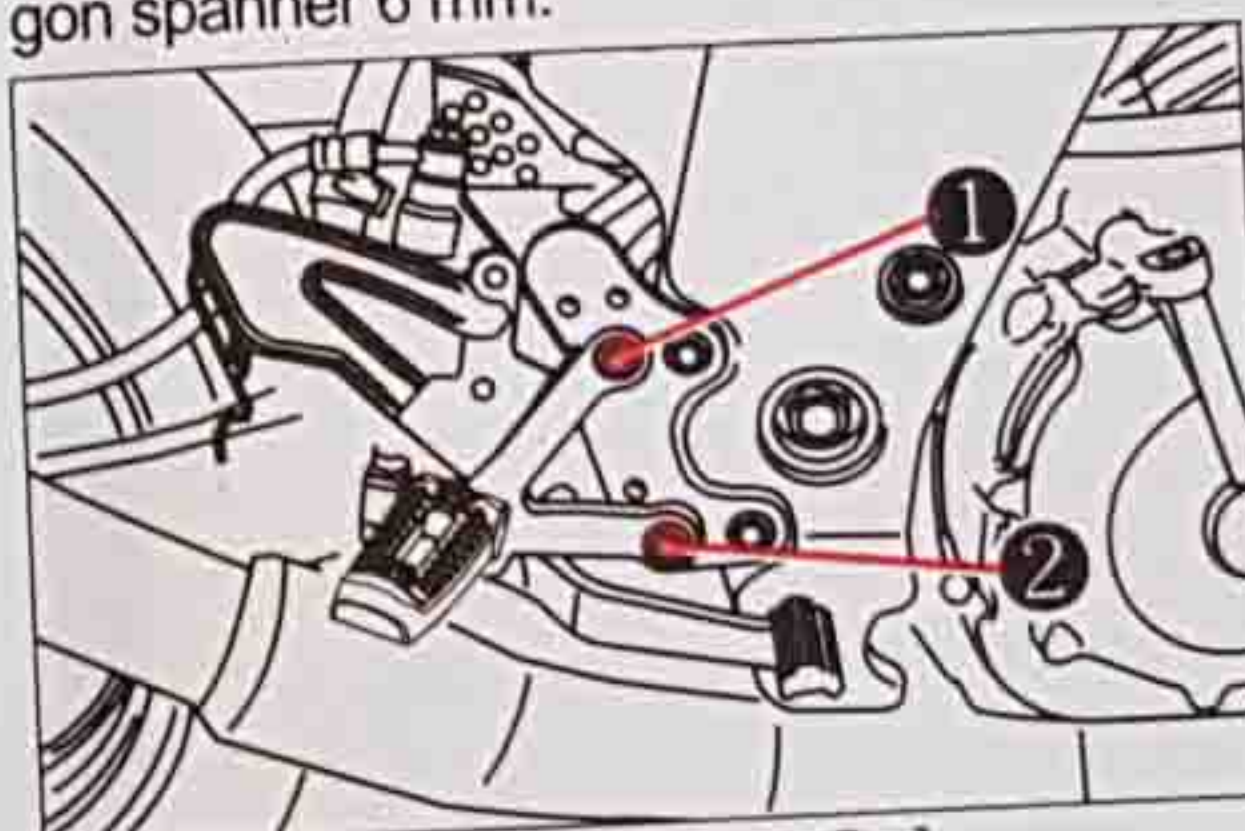
When the transmission is in neutral, the green indicator lamp on the instrument panel will be lit. However, even though the light is illuminated, cautiously release the clutch lever slowly to determine whether the transmission is positively in neutral.

FOOTRESTS

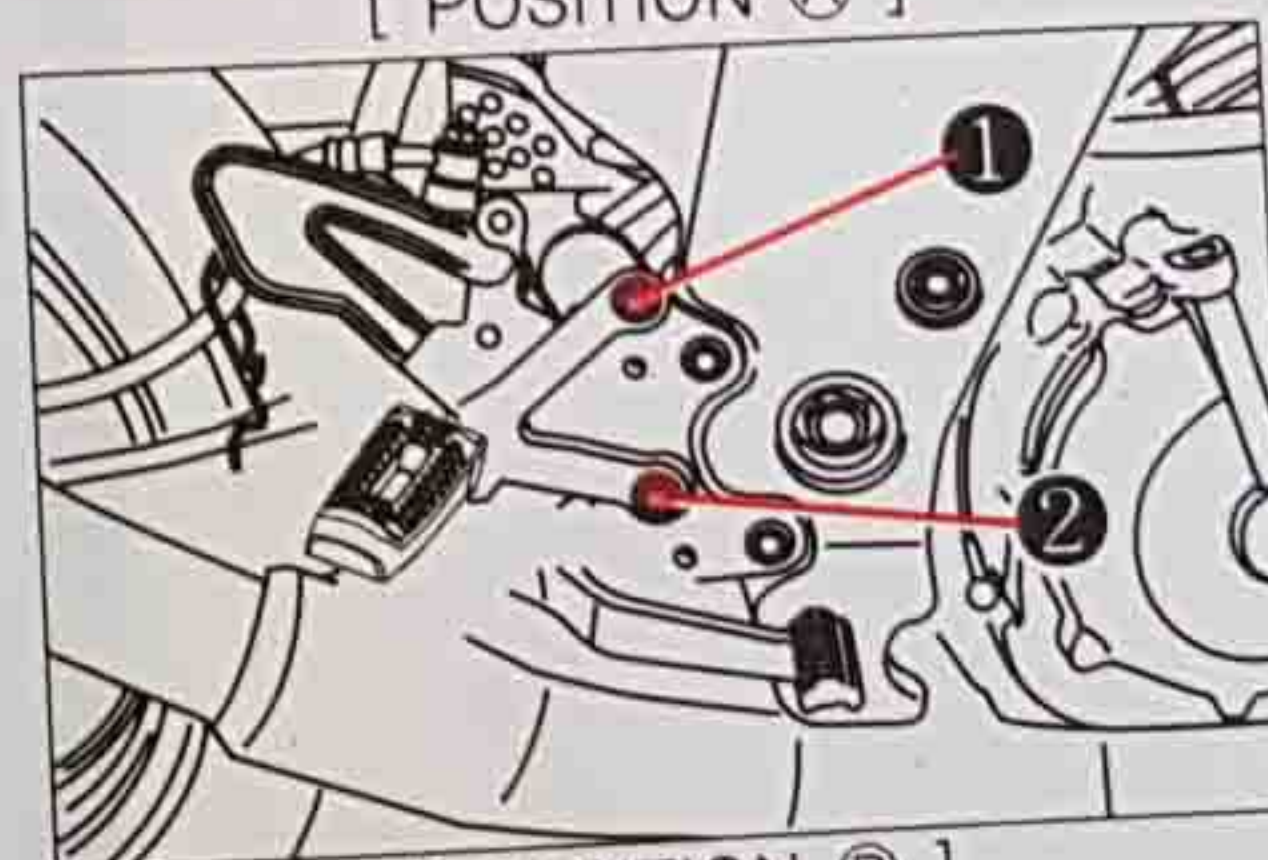
FOOTREST POSITION ADJUSTMENT [FOR 'GT650SEI' & 'GT650REI']

The 'GT650SEI' & 'GT650REI' have 3 type of the footrest position, right and left.

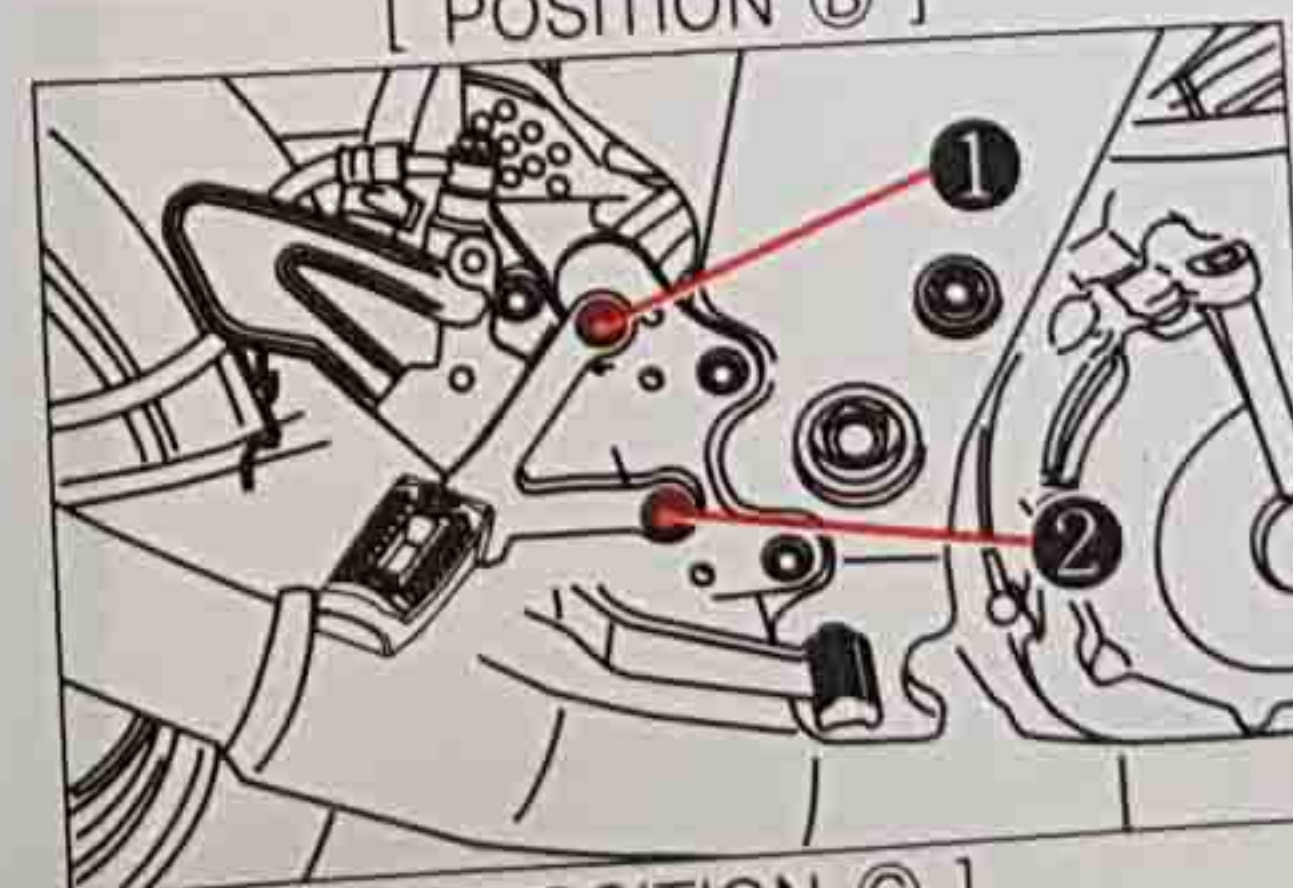
To change the position, remove the M8 mounting bolts ①, ② and install the bolts to the desired position by using the hexagon spanner 6 mm.



[POSITION A]



[POSITION B]



[POSITION C]

The 'GT650SEI' & 'GT650REI' are delivered from the factory on position A.

WARNING

When adjusting the footrest position, the M8 mounting bolts be torqued to the proper specification. If they are not, the footrest can come off unexpectedly.

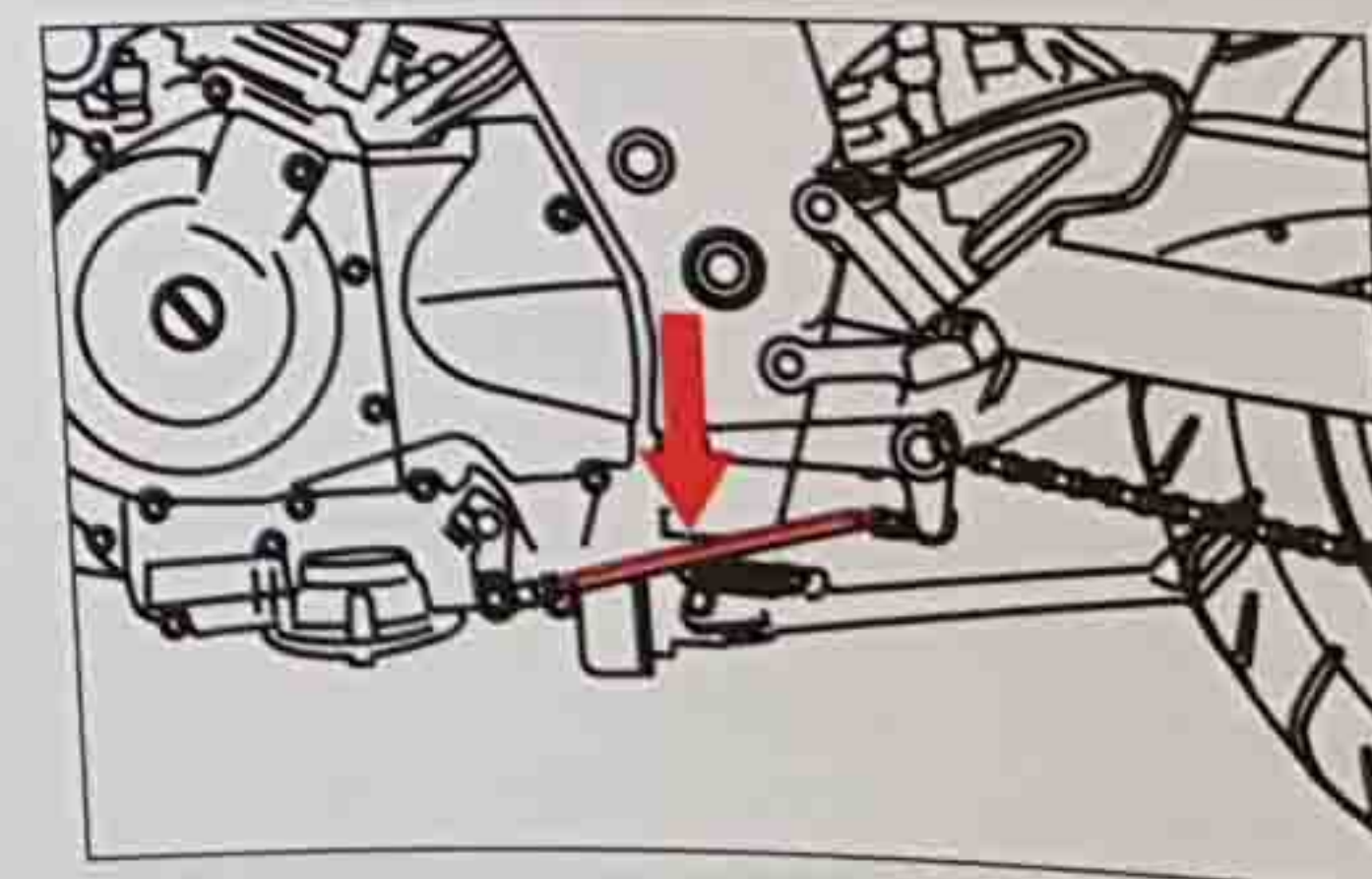
Tighten Torque

Footrest mounting bolt	2.2 ~ 3.5 kgf · m (22 ~ 35 N · m)
------------------------	--------------------------------------

GEARSHIFT LINK ROD [FOR 'GT650SEI' & 'GT650REI's OPTIONAL PARTS]

When the footrests in position C, exchange the gearshift link rod for appropriate riding position.

- Position A or B : Install the gearshift link rod ③
- Position C : Install the gearshift link rod ④





3

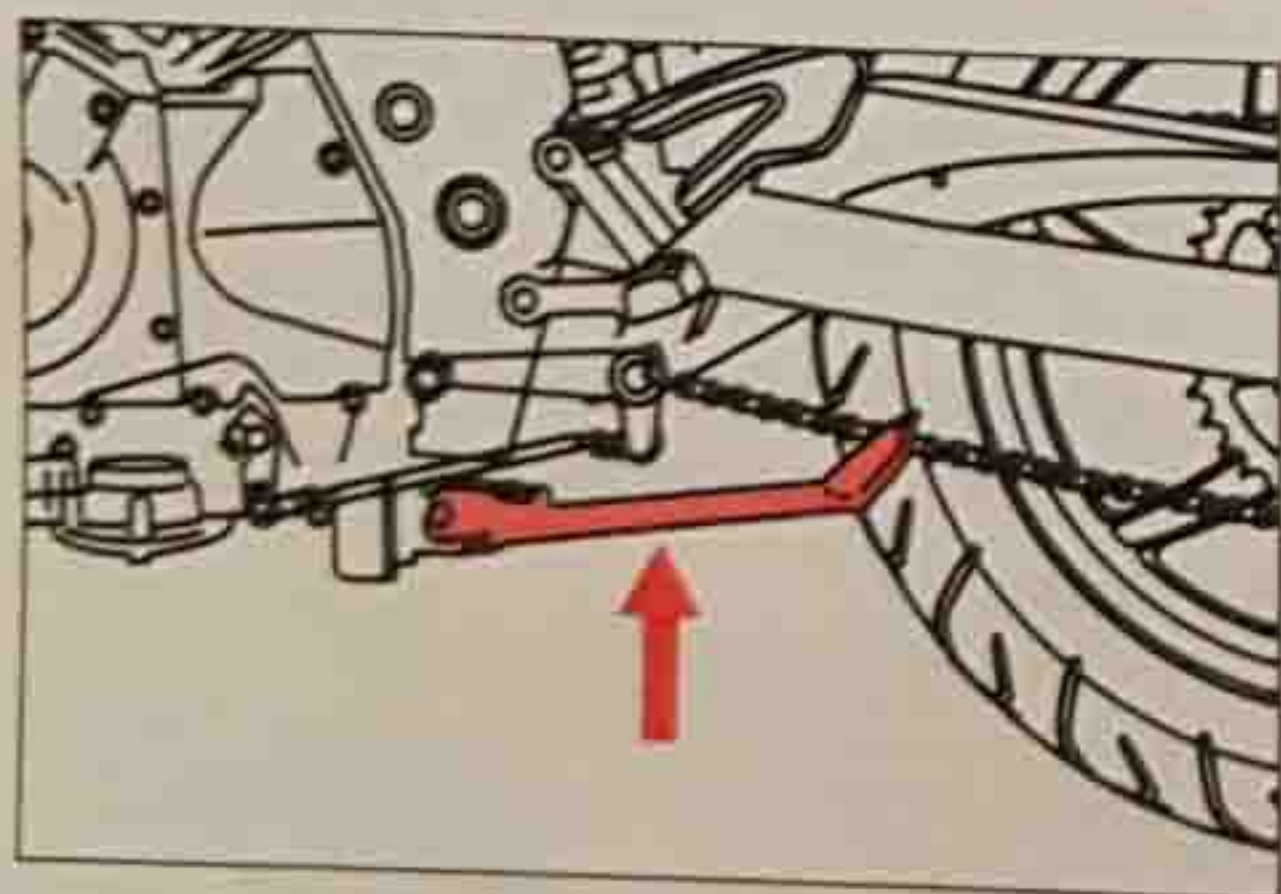


4 [Optional parts]

NOTE

The gearshift link rod ④ is optional parts.

SIDE STAND



The 「GT650/P/SIREI」 are equipped with the side stand ignition interlock system.

If the transmission is in neutral or the side stand up, you can only start the engine by squeezing the clutch lever.

This side stand ignition interlock system prevents the motorcycle from being started with the side stand down.

NO	Neutral switch	Clutch lever	Side stand	Engine start
1	●	●	△	Possible
2	△	●	●	Possible
3	●	△	△	Impossible
4	△	●	△	Impossible
5	△	△	●	Impossible

NOTE

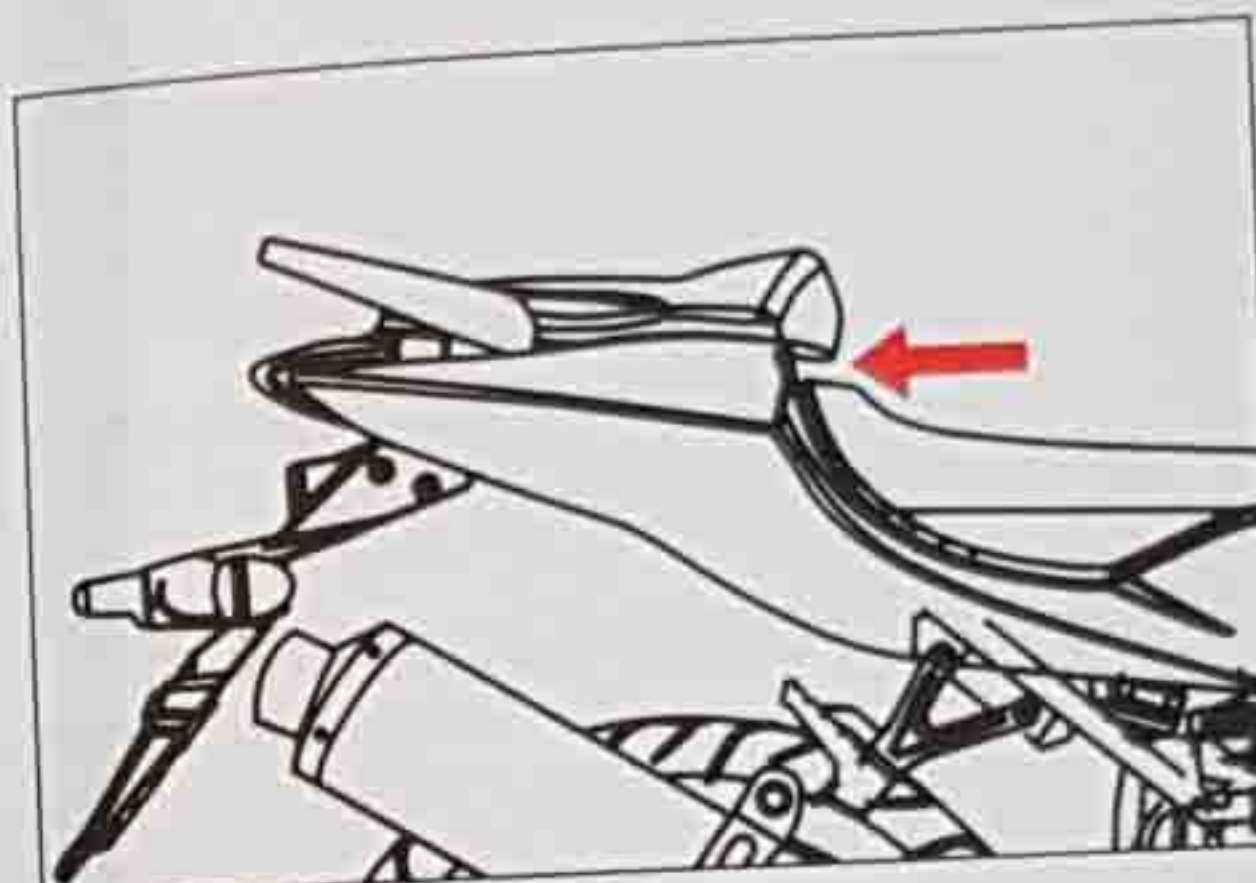
● On or Up

△ Off or Down

! WARNING

Make sure that the side stand ignition interlock system is working properly before riding.

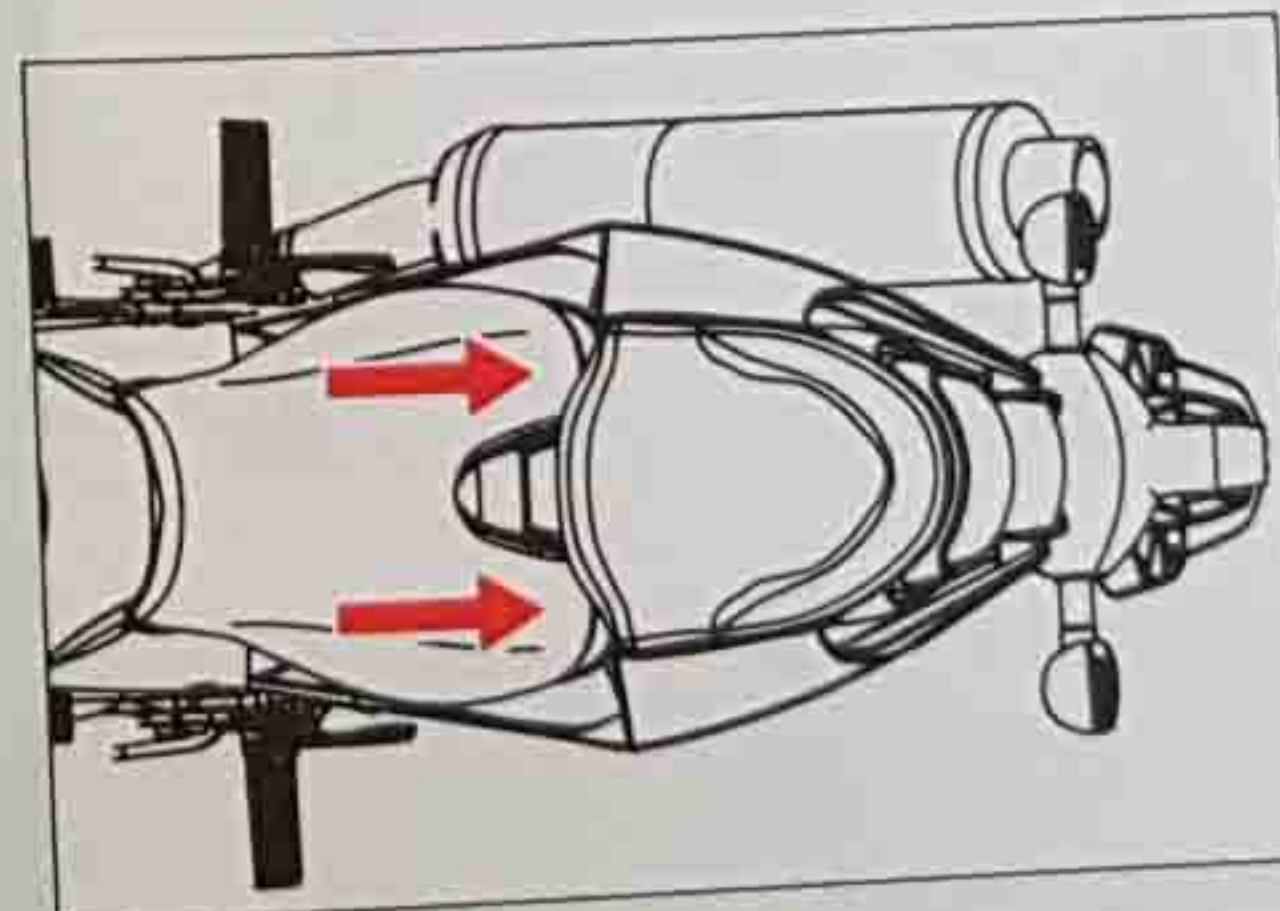
SEAT LOCK



The rear seat lock is located the frame cover under the front side of the rear seat.

To remove the rear seat, insert the ignition key into the rear seat lock and turn it clockwise.

To reinstall the rear seat, slide the seat hook into the seat hook retainer and push down firmly until the seat snaps into the locked position.



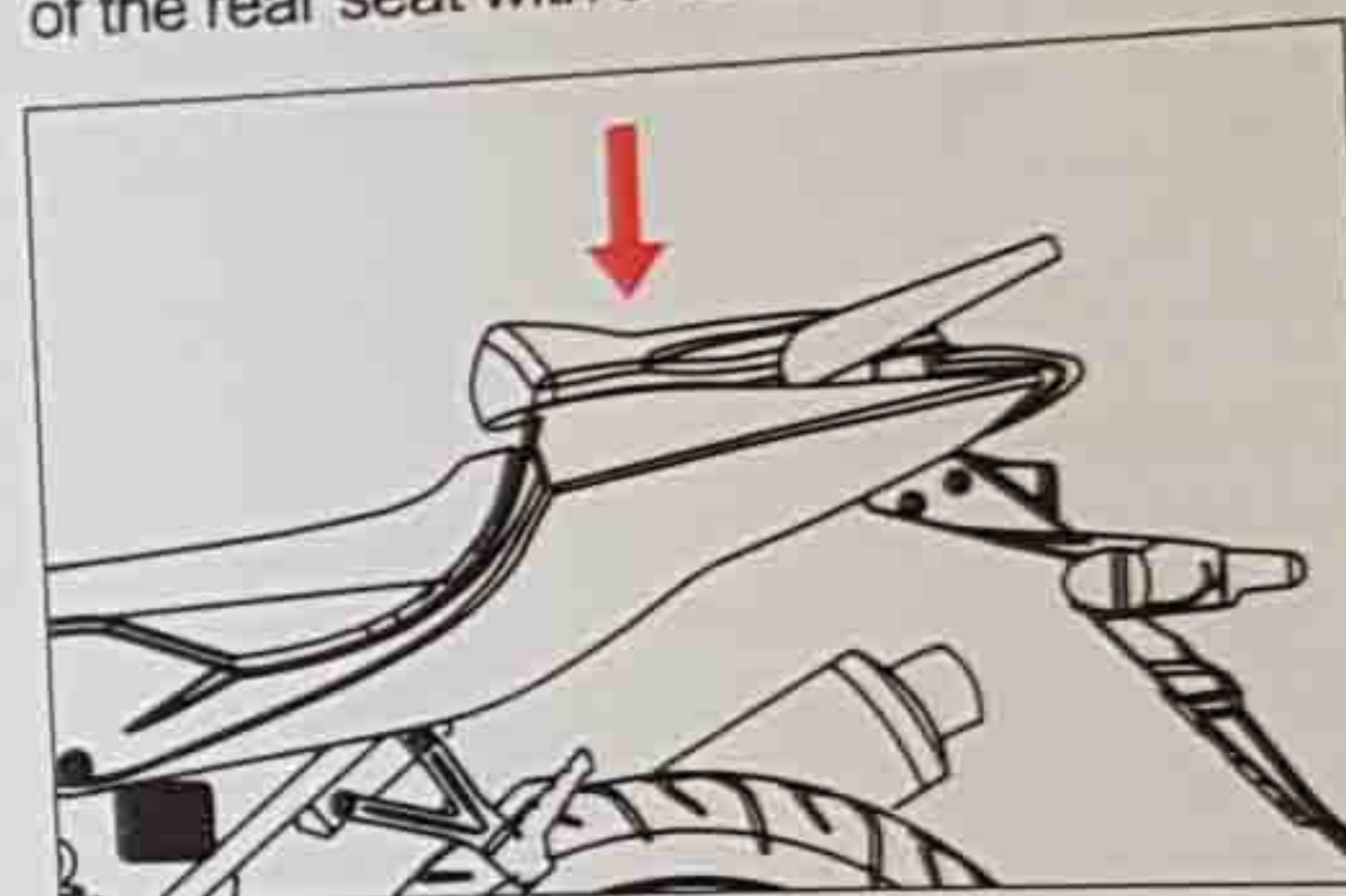
To remove the front seat, remove the two front seat mounting bolts located the rear side of the front seat.

To reinstall the front seat, slide the seat hook into the seat hook retainer and install the two front seat mounting bolts.

TRUNK

A small and light article such as maintenance manual or Owner's manual can be placed under the rear seat.

The tool kit is attached on the back side of the rear seat with a rubber band.



NOTE

Loading limit of trunk : 2 kg (4.41 lbs)

! CAUTION

- The trunk could be heated. Don't keep anything that doesn't endure heat.
- Don't keep the fragile.
- Check if it is locked.
- The unlocking of rear seat could cause serious accident.
- Don't allow water to get inside the trunk or it could damage.
- Don't keep the valuables in the trunk when leaving unattended.