

## DEAR KOVE CUSTOMER

### KY800X OWNER'S MANUAL

First Version (Nov. 2023)

First of all, congratulations on purchasing the brand new KOVE motorcycle! By choosing KOVE product, you have become a member of the KOVE motorcycle family.

The Owner's Manual provides an introduction to the main specifications, basic structure, adjustment methods, and maintenance knowledge of the motorcycle. It will guide you to master the basic operations of the motorcycle, as well as troubleshooting or reducing common issues, ensuring driving safety, optimizing vehicle performance, and improve the service life of the motorcycle.

**This manual contains an introduction to the basic configuration of the motorcycle. The contents and images are for reference only. Please refer to the actual product for accuracy.**

**Actual vehicle may differ from the information provided in this manual due to factors such as manufacturing time, user requirements, and design improvements, etc., KOVE reserves the right to make changes without notice and without any obligation. We apologize for any inconvenience and appreciate your understanding.**

The Owner's Manual is an important component of the vehicle and must be handed over to the new owner if the vehicle is sold.

This manual is copyrighted by KOVE. Reproduction without written consent from KOVE is strictly prohibited and will be subject to legal action.

To ensure your safety and increase your riding pleasure :

- Please read the Owner's Manual carefully;
- Please follow all recommendations and procedures in the manual;
- Please pay more attention to the safety information and warning labels in the manual and the one posted on the motorcycle.

**IMPORTANT NOTES**

Your safety and the safety of others are of utmost importance. Safe riding of this motorcycle is a significant responsibility. To assist you in making informed decisions regarding safety, we have provided operating procedures and other information on the safety labels and in the Owner’s Manual. These serve as reminders of potential hazards that could cause harm to you or others.

Of course, it is impractical for us to list all the dangers associated with riding and maintaining a motorcycle. You must make the correct judgment personally.

Do not install additional electrical devices, as the vehicle’s lithium battery has limited capacity, and adding such devices may lead to battery depletion.

You will encounter various forms of important safety information, including:

- The safety labels on the motorcycle’s body;
- On the safety informations, you will find safety warning symbols  and one of the following three warnings: CAUTION, DANGER, WARNING.

The meanings of the three warning phrases are shown below:

 **CAUTION** -If you do not follow the instructions, you may be injured.

 **DANGER** -Failure to comply with the instructions will result in serious injury or death.

 **WARNING** -Failure to follow instructions will result in serious injury or death

Additional important information is listed below the following headings:

**Info** -Information to help you avoid damage to your motorcycle, other property, or the environment.

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## SAFETY ADVICE

This section contains important information about motorcycle safety riding. Please read the content carefully.

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## Safety guide

To enhance your riding safety, please follow the following guidelines:

- Perform all daily and routine checks specified in the Owner's Manual.
- Turn off the engine and keep away from sparks and open flames before refueling the fuel tank.
- Do not start the engine for an extended period of time in an enclosed or semi-enclosed space, as the exhaust contains carbon monoxide, a toxic gas that can be lethal.

### Always wear a helmet

Certified motorcycle helmets and protective clothing are essential for reducing the risk and severity of injuries to the head and other body parts while riding.

### Before riding

Ensure you are in good physical condition, fully attentive, and free from alcohol or drug consumption. Both you and your passenger should wear certified motorcycle helmets and protective gear. Instruct your passenger to firmly grip the handrails or hold onto your waist, keep their feet on the footrests, and lean their body with yours during turns, even when the motorcycle is stationary.

### Take the time to learn and practice

Even if you have experience riding other motorcycles, it is essential to practice riding the motorcycle in a safe area. This will help you become familiar with its operation, handling, and adapt to its size and weight.

### Be aware of protection when riding a bike

Always be mindful of the vehicles around you. Never assume that other drivers can see you. Be prepared for emergency braking or evasive maneuvers at any time.

## Make yourself easily seen

Especially at night, wear bright reflective clothing to make yourself more visible, stop where other drivers can see you, turn on your signal before turning or changing lanes, and honk your horn to alert pedestrians when necessary.

## Do not drink and ride

Alcohol and riding are absolutely incompatible. Never exceed your personal limits while riding and always adhere to the prescribed speed limits. Fatigue and negligence can impair your ability to make correct judgments and ride safely.

## Keep your motorcycle in a safe condition

It is important to keep your motorcycle in good condition at all times; check your motorcycle before each ride and complete all recommended maintenance and servicing, do not modify your motorcycle or add accessories that would affect safety, and strictly prohibit overloading.

## Dealing with unexpected situation

Your personal safety is your first priority. If you or anyone else is injured, you should first carefully assess the severity of your injuries and determine whether it is safe to continue riding, and call for emergency assistance if necessary. When other people or vehicles are involved in a collision, you should also follow applicable local laws and regulations.

If you decide to continue riding, first turn the ignition to the "⊗" (OFF) position, then evaluate the condition of the motorcycle and check for oil leaks. Check that critical nuts and bolts are tightened, and check the steering, brakes and wheels to ensure that people and vehicles are safe and riding slowly and carefully.

Your motorcycle may have sustained damage that is not immediately apparent. Please take it to a special Kove repair shop or a qualified repair store for a thorough inspection as soon as possible.

## Carbon monoxide hazards

Exhaust fumes contain toxic carbon monoxide. Carbon monoxide is a colorless, odorless gas, and inhaling higher concentrations of carbon monoxide can cause a person to lose consciousness and may even be fatal. If you start your engine in a confined or semi-confined space, the air you inhale may contain dangerous amounts of carbon monoxide. Do not start your engine in a garage or other confined space.



- Running a motorcycle engine in an enclosed or semi-enclosed space can lead to a rapid build-up of toxic carbon monoxide gas.
- Inhaling this odorless and colorless gas can lead to rapid loss of consciousness and even death.
- Only start the motorcycle engine in well-ventilated outdoor areas.

## Safety precaution

- Be cautious while riding, keeping your hands on the handlebar and your feet on the footrests.
- Instruct the passenger to hold onto the rear handle or hold onto your waist tightly during the ride, and place their feet on the footrests.
- Always be attentive to the safety of the passenger and other drivers on the road.

## Protective clothing

Make sure that both you and any passengers are wearing certified motorcycle helmets, goggles, and high-visibility protective clothing, and ride cautiously according to the weather and road conditions.

### ■ Helmets

Ensure that the helmets and goggles are certified, highly visible, and properly sized to fit your head.

- The helmets must be secure and comfortable, with the chin strap properly fastened.
- Face shield or other certified goggles that do not obstruct vision.

### ■ Gloves

Highly durable full-finger leather gloves.

### ■ Boots or riding shoes

Sturdy and slip-resistant boots that provide ankle protection.

### ■ Clothing

Choose a long-sleeved, high-visibility shirt specifically designed for riding, featuring built-in protective elements. Pair it with durable, abrasion-resistant pants or consider opting for a complete riding protective suit.



- **Not wearing a helmet increases the risk of serious injury or fatalities in accidents.**
- **Make sure that both you and passenger are wearing certified motorcycle helmets and protective clothing.**



## Riding instructions

### Break-in period

During the initial 500 kilometers (310 miles) of riding, it is important to follow these guidelines to ensure the reliability and performance of the motorcycle in the long run:

- Avoid excessive throttle openings or rapid acceleration.
- Avoid hard braking, as well as rapid downshifting.
- Ride with caution.

### Applying the brakes

**Please follow the following guidelines:**

- Avoid excessive and sudden braking and downshifting.
  - ▶ Sudden braking can reduce the stability of the motorcycle.
  - ▶ Slow down before entering a turn to avoid the risk of sliding.
- Exercise caution while riding on wet and slippery surfaces.
  - ▶ Tires have reduced traction on such surfaces, requiring longer braking distances.
- Avoid continuous braking.
  - ▶ When riding downhill on a long and steep slope, repeated braking can cause the brakes to overheat, affecting their effectiveness. Utilize engine braking and intermittently apply the brakes to control speed.
- Utilize both the front and rear brakes simultaneously for optimal braking performance.

## ■ Anti-lock Braking System (ABS)

This model is equipped with an ABS system, which prevents tire lock-up during emergency braking.

- ABS does not function when the vehicle speed is below 10 km/h (6 mph).
- During braking, if ABS engages, it is normal to experience a slight pulsation or feedback on the brake lever or rear brake pedal.
- Always use the recommended tires to ensure proper functioning of the ABS system.

## ■ Engine braking

When you release the throttle, engine braking helps to slow down the motorcycle. If you want to slow down even further, you can downshift to a lower gear. When riding on long and steep downhill slopes, it is advisable to utilize engine braking and intermittently use the brakes to control your speed.

## ■ Wet and rainy conditions

In wet and rainy conditions, the road surface can become slippery, and damp brakes may result in reduced braking efficiency. It is important to exercise extra caution when braking. If the brakes are damp, you can intermittently apply the brakes while riding at low speeds. This helps to dry the brakes quickly.

## Stopping, parking

- Park on a solid and flat surface.
- If it is necessary to park on a slightly inclined or loose surface, ensure that the motorcycle is stable and cannot move or tip over.
- Make sure that hot components do not come into contact with flammable materials.
- Do not touch the engine, exhaust system, brake system, and other hot components until they have cooled down.
- To minimize the risk of theft, always lock the steering and remove the ignition key before leaving the unattended motorcycle.

## ■ Parking with side stand

1. Switch off the engine.
2. Swing the side stand forward with your foot as far as it will go.
3. Slowly lean the motorcycle to the left until its weight is centered on the side stand.
4. Turn the steering fully to the left.
  - ▶ Turning the steering to the right can reduce stability and potentially cause the motorcycle to tip over.
5. Turning the ignition key to the position "🔒" (locked). Remove the ignition key.

## Refueling/brake fluid and fuel guide

To protect your engine and catalytic converter, please follow the following guidelines:

- Only use unleaded gasoline 95# or higher.
- High octane gasoline is recommended; use of lower octane gasoline will reduce engine performance.
- Ethanol gasoline is not recommended; using ethanol gasoline can reduce engine performance.
- Do not use deteriorated or contaminated gasoline or gasoline-oil mixtures.
- Prevent dirt and water from entering the fuel tank.
- Brake fluid has corrosive properties. When adding brake fluid, be cautious to avoid splashing it into your eyes, sticking to your skin, or coming into contact with non-metallic parts of the vehicle.

## Spare parts, accessories and tampering

We strongly recommend that you do not add accessories to your motorcycle other than those designed specifically for your motorcycle by Kove, and do not modify the original design of your motorcycle, as doing so may render it unsafe. Unauthorized modifications to your motorcycle may also void your warranty and render your motorcycle illegal to drive on public roads and highways. When you decide to add accessories to your motorcycle, first determine which modifications are safe and legal.

It is prohibited to attach trailers or install sidecars on your motorcycle, as well as modify or install additional equipment on the engine mounting points. Your motorcycle is not designed for these accessories, and their use can significantly compromise the handling and safety of the motorcycle.



- **Inappropriate accessories or modifications may cause safety accidents, which could result in severe injuries or even endanger your life.**
- **Please follow all instructions in the Owner's Manual regarding accessories and modifications.**

## Loading guide

- Carrying additional weight will affect the maneuverability, braking, and stability of the motorcycle. When carrying a load, it is important to maintain a safe speed.
- Please ensure that you stay within the specified load limit. The maximum payload for the entire vehicle is 150kg (330 lb). Avoid overloading.
- Secure all luggage and place it evenly and stably near the center of the motorcycle.
- Do not place any items on the headlights or mufflers.



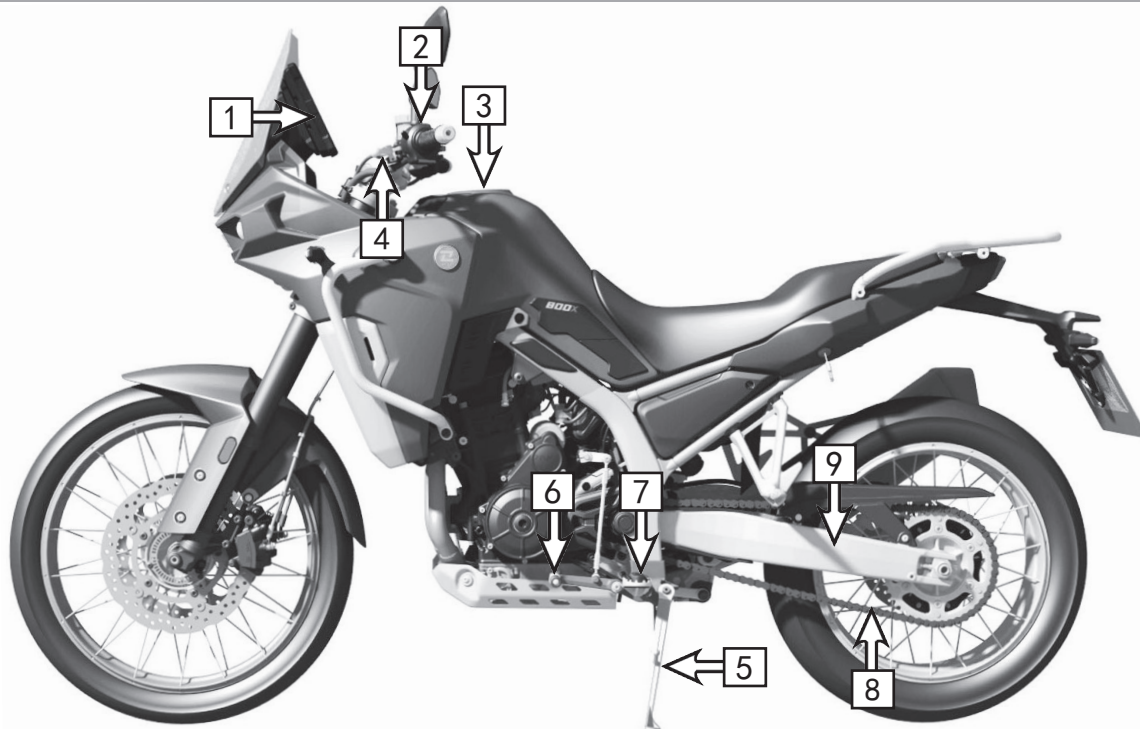
- **Overloading or improper loading can result in accidents that cause serious injuries or fatalities.**
- **Please follow the loading guidelines provided in the Owner's Manual.**

## CONTROLS

This section contains important information on the operation of motorcycle use, please read this section carefully.

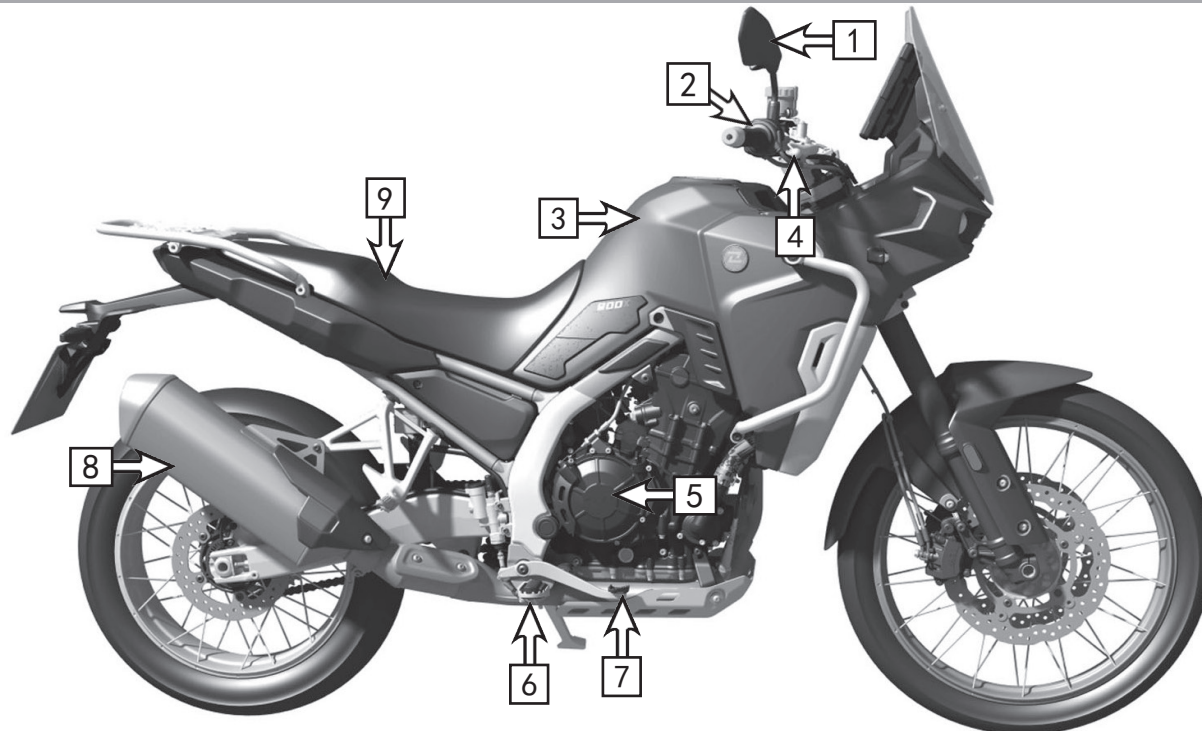
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View of vehicle, left (example) - ZF800GY



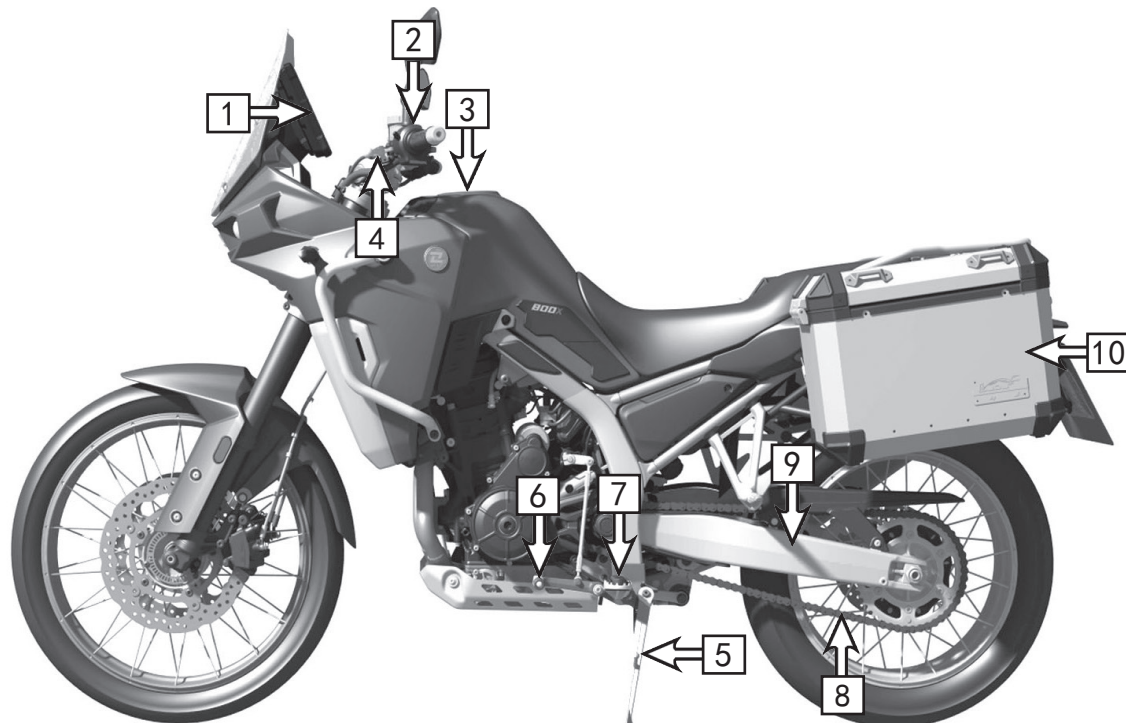
1. Instrument 2. Left combination switch 3. Fuel tank filler cap 4. Clutch lever 5. Side stand 6. Shift lever 7. Rider footrests  
8. Chain 9. Link fork

View of vehicle, right (example) - ZF800GY



1. Rearview mirror    2. Emergency OFF switch/electric starter button    3. Fuel tank    4. Hand brake lever    5. Engine  
 6. Rider footrests    7. Foot brake lever    8. Muffler    9. Seat

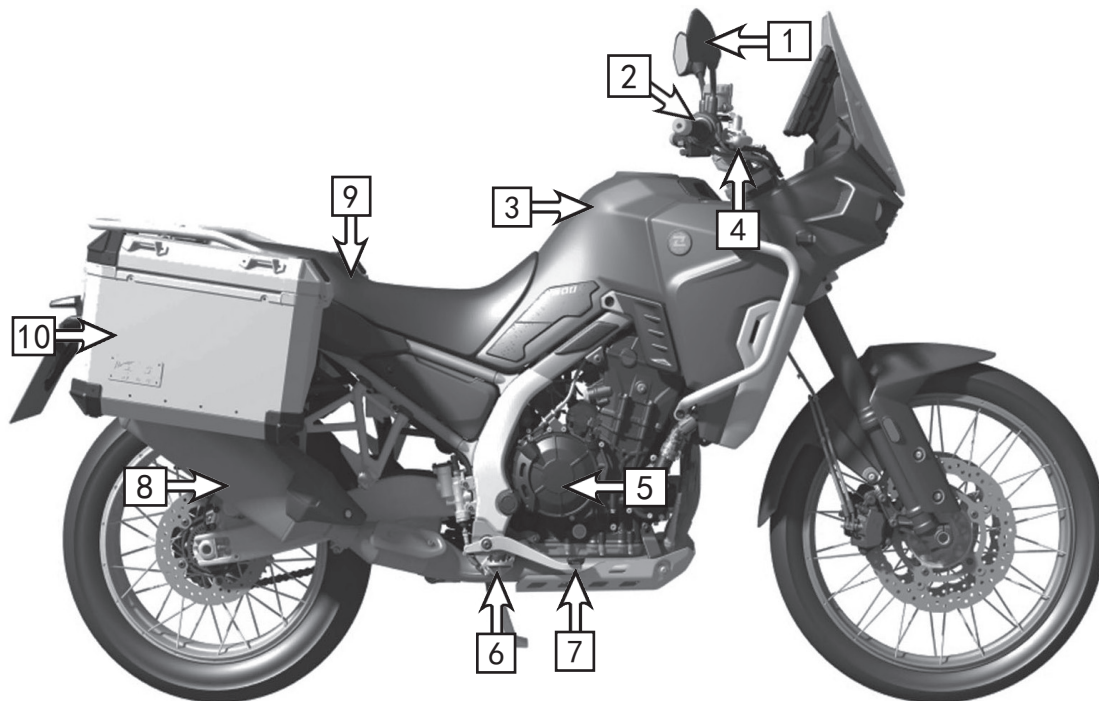
## View of vehicle, left (example) - ZF800GY-A



1. Instrument 2. Left combination switch 3. Fuel tank filler cap 4. Clutch lever 5. Side stand 6. Shift lever 7. Rider footrests  
8. Chain 9. Link fork 10. Case



## View of vehicle, right (example) - ZF800GY-A



1. Rearview mirror    2. Emergency OFF switch/electric starter button    3. Fuel tank    4. Hand brake lever    5. Engine  
6. Rider footrests    7. Foot brake lever    8. Muffler    9. Seat    10. Case

Instrument

Interface



Ambient light sensor

Simplified navigation display



Music display



Cellphone screen projection navigation display



Activation and test

When the ignition is switched to "O" (ON) position, the instrument displays a welcome animation, followed by a function check.

Simplified navigation display

For initial use, you need to scan the QR code on the interface and follow the prompts to download the app for your phone. This app will enable the connection between your phone and the instrument. Please ensure that you set up the app for the simple navigation display on your phone. For subsequent use, please keep the app connected to your device.

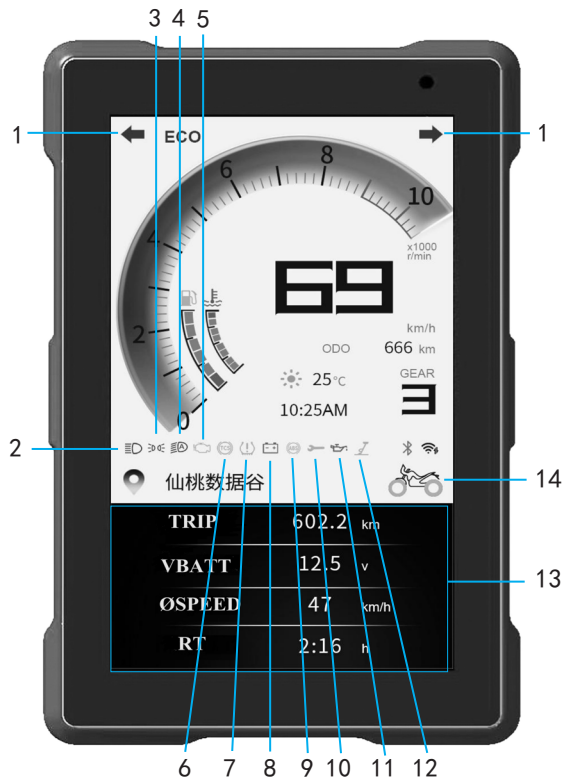
Trip data display

You can access trip data settings and reset display items as needed.

Cellphone screen projection navigation display

Once you have set up the navigation settings in the app, you can enable the cellphone screen projection navigation display.

Display-1



1	Turn signal	The turn signal indicator lamp flashes green simultaneously with the turn signal - the turn signal is switched on. When the hazard warning lights are on, both left and right turn signals will flash together.
2	High beam indicator	The indicator lights up blue - The high beam is switched on.
3	Position light	When the position light on, this light will also be on.
4	Automatic headlight	When the function on, this light will be on.
5	Malfunction indicator	When there is a malfunction in the electronic fuel injection system, this light illuminates (After the engine starts, the malfunction lights off).
6	TCS indicator	① When TCS function is enabled: indicator light off. ② When TCS function is disabled: indicator light on. ③ When TCS has a malfunction: indicator light on (in enabled state).
7	Tire pressure warning	When tire pressure data is abnormal, this light on.
8	Low volt indicator	When the battery voltage is too low, this light is on.
9	ABS indicator	① This light illuminates when there is a malfunction. ② After the vehicle is powered on, this light flashing (0.5 seconds on, 0.5 seconds off). When the vehicle speed is > 5 km/h, ABS indicator light turns off.
10	Maintenance indicator	When reaches the maintenance set conditions, this light is on.
11	Oil pressure indicator	When the oil pressure is insufficient, this light is on.
12	Side stand indicator	After the side stand fold up, the light off.
13	Trip data	Displays partial mileage, riding time, etc.
14	ABS display	① White outline displayed for both wheels: ABS activated. ② Yellow fill displayed for rear wheel: ABS for rear wheel is deactivated. ③ Yellow fill displayed for both wheels: ABS for both wheels is deactivated.

Display - 2



15	Tachometer display	Displays engine speed.
16	Water temperature indicator	<p>① When the water temperature indicator block shows red and the "water temperature warning light" is illuminated, it indicates that the water temperature is too high. Safely stop the vehicle, check, and continue driving after the water temperature drops.</p> <p>② When the water temperature data is abnormal, all water temperature blocks and icons will flash simultaneously (when the ignition switch is on but engine not start, flashing is a normal phenomenon).</p>
17	Fuel level display	<p>The following fuel level display is for reference only:</p> <ul style="list-style-type: none"> <li>- First bar: fuel volume <math>\leq</math> 3.2L (When the fuel level is at the last bar, please refill the fuel as soon as possible).</li> <li>- Second bar: 3.2-5.3L</li> <li>- Third bar: 5.3-7.3L</li> <li>- Fourth bar: 7.3-9.35L</li> <li>- Fifth bar: 9.35-11.1L</li> <li>- Sixth bar: fuel volume <math>\geq</math> 11.1L (Due to structural limitations of the fuel tank, the last bar contains more fuel than the other individual bars).</li> </ul>
18	Temperature	Displays ambient temperature and weather (requires connectivity with a smartphone).
19	Time	Displays current time
20	Current location	Displays current location (requires connectivity with a smartphone).
21	Bluetooth indicator	When successfully connected to Bluetooth, this light on.
22	WiFi indicator	When successfully connected to WiFi, this light on.
23	Gear display	Displays the current gear position.
24	Odometer	Displays total mileage.
25	Speedometer	Displays current vehicle speed.
26	Ride mode	Displays current ride mode.

## Menu - 1

1st-level menu	2nd-level menu	3rd-level menu	
Headlight	/	/	Press the ENT key to display the on/off status of the front headlights.
RIDE MODE	SPORT	/	Set the engine power output mode (Sport mode, Economy mode), and the Riding mode has a memory function.
	ECO	/	
ABS Switch	Open all	/	Set the ABS working status and the current ABS working status will be displayed through the instrument icon.
	Close rear	/	
	Close all	/	
TCS Switch	Standard Mode	/	Set the TCS working mode and disable this function.
	Rain Mode	/	
	Switch off	Once	
Forever			
MUSIC	/	/	In the music display interface, you can control the functions of previous track, next track, play, and stop using the buttons on the menu switch.
TPMS	Limits	F wheel settings	Set the tire pressure alarm value, which can be adjusted by the user. The default factory settings are: front tires trigger an alarm when the pressure is above 1.9 bar to 2.8 bar, and rear tires trigger an alarm when the pressure is above 2.0 bar to 2.9 bar. An alarm will also be triggered if the tire temperature exceeds 70 C .
		R wheel settings	
	Matching	/	Match the tire pressure sensors. This function is usually used when replacing tire pressure sensors.
	TPMS MAC	/	It displays the tire pressure sensor ID and tire pressure module version number.

## Menu - 2

1st-level menu	2nd-level menu	3rd-level menu	
TRIP DATA	TRIP DATA Settings		<p>Set the vehicle data display items, and prioritize the selected items to be displayed on the current driving information interface (if the number exceeds the display column limit, they will be automatically placed in the next position).</p> <p>Note:                      ① When the average speed is 0, display "--" for average speed.                      ② The calculation of average fuel consumption is affected by various factors such as vehicle conditions and riding habits. The displayed data is for reference only.</p>
	TRIP DATA (1, 2)		
SETTINGS	Connection	BT Connection	Set up the smartphone Bluetooth connection (To ensure successful connection, the dedicated app on the smartphone needs to be granted relevant permissions as prompted).
		WiFi Connection	Set up the smartphone WiFi connection (To ensure successful connection, the dedicated app on the smartphone needs to be granted relevant permissions as prompted).
		Reset	
	Screen Display	DisPlay MODE	The user can choose a preferred day/night UI mode that will be used continuously. The default factory setting is automatic.
		Brightness	The user can also choose a preferred screen brightness level that will be used continuously. The default factory setting is automatic.
	Headlight MODE	AUTO	When this function is selected, the instrument panel will automatically control the brightness of the headlights based on the ambient light.
		Always On	When this function is selected, the headlights will remain on in constant light mode after the engine starts.
		MAN	When this function is selected, the user enters the manual headlight switch interface, and pressing the ENT key in the first-level menu will toggle the headlight switch.
	Language		Switch between Chinese and English.

## Menu - 3

1st-level menu	2nd-level menu	3rd-level menu	
SETTINGS	Maintenance		<p>① Maintenance mileage or time setting and clearing: The first maintenance is at 500 km or one year, and the second maintenance is at 1500 km or one year. These default parameters cannot be modified. After that, users can set the maintenance reminder cycle based on actual conditions.</p> <p>② Method to clear maintenance reminders: On the maintenance service interface, press and hold the ENT key or select "Data Reset" to display the clear dialog box. Follow the prompts to perform the clearing operation.</p>
	Unit Settings	Unit	Set the unit conversion for speed, time format, tire pressure, and temperature.
		Time Mode	
		TP Unit	
		Temp Unit	
	Fault Information		Displays current fault information, historical fault information, system diagnosis.
	Diagnosis		Displays ECU and ABS diagnosis.
DeviceInfo		Displays (MCU), SOC, mobile phone connectivity software version, and UUID.	

## Instrument function operations:

### Menu switch:

Short press the ENT button to enter the menu settings; Long press the ENT button to enter the display settings. Short press the up and down buttons to scroll through pages.

### Function Settings:

Short press the ENT button to enter the instrument panel menu. Use the menu to set riding modes (SPORT or ECO), ABS mode, TCS mode, instrument panel brightness, riding data, automatic headlights (on or off), time, language, and other functions.

### Instrument and smartphone connectivity:

1. The navigation, message, weather, automatic time, altitude display, and other functions on the TFT instrument require connectivity with a smartphone via a APP.
2. Steps to install the smartphone app: ① Long press the ENT button to enter the display settings; ② Select "Simple Navigation" or "Phone Screen projection Navigation". ③ Scan the QR code on the screen, download, and install the APP based on your phone's operating system. ④ Enable Bluetooth/WIFI on your smartphone to establish a connection with the instrument panel. (For a better user experience, please refer to the relevant user manual when using the smartphone app.)
3. To disconnect the instrument from the phone, go to the PHONE's SETTING menu and select "Disconnect Bluetooth" or "Disconnect WIFI".

### Info

- To modify the ABS mode or TCS mode, it is necessary to do so while the vehicle is in a stationary position.



Switches on the handlebar

Switches on the left side of the handlebar



**Light switch:** The light switch is fitted on the combination switch on the left.

- ☰☐ Headlight flasher
- ☰☐ High beam on
- ☰☐ Low beam on

**Menu switch:** The menu buttons are used to control the display on the instrument.

▲▼: UP/DOWN button

ESC: BACK button

ENT: SET/MENU button

**Hazard warning light switch:**

⚠ In case of an emergency, pressing down will activate both left and right turn signals.

**Turn signal switch:**

⬅ Left turn signal, on: Turn signal switch pressed to the left. The turn signal switch returns to the center position after activation.

➡ Right turn signal, on: Turn signal switch pressed to the right. The turn signal switch returns to the center position after activation.

OFF: To switch off the turn signal, press the turn signal switch.

Switches on the right side of the handlebar



Emergency OFF switch/electric starter button

**Emergency OFF switch:**

Switch is in "START" position, the engine can be started;

Switch is in "⊗"(OFF) position, the engine cannot be started.

▶ In case of an emergency, switch to the "⊗" (OFF) position to shut down the engine.

**Electric starter button:**

When the emergency OFF switch is set to "START" position:

- ① The transmission is in neutral , pressing the "⚡" button will start the engine.
- ② If the transmission is not in neutral, ensure the side stand folded up and the clutch lever is pulled to the handlebar. Pressing the "⚡" button will also start the engine.

Info

· When the headlights are illuminated by the automatic headlight function, the headlight switch cannot turn off the headlights.

### Ignition and steering lock

When the key is in the "⊗" position, turn the handlebar to the far left, press the key, and rotate it counterclockwise to the "🔒" position to lock the steering. To unlock, rotate the key clockwise.



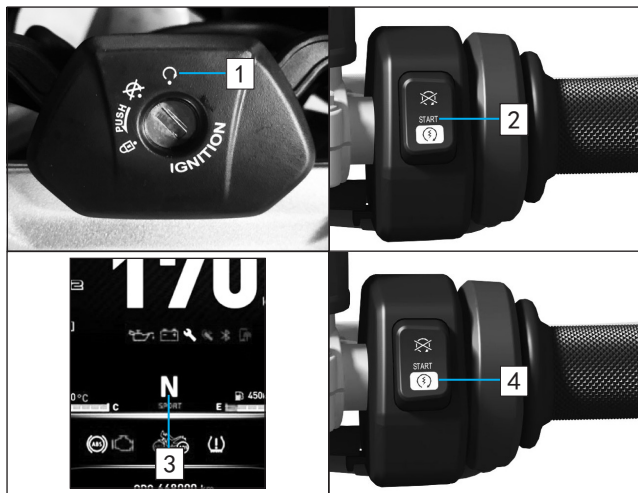
States	Description	Remark
⊗	Ignition off- In this position, the ignition circuit is interrupted, a running engine stops.	The ignition key can be removed
⦿	Ignition on- In this position, the ignition circuit is closed and the engine can be started.	The ignition key can not be removed
🔒	Steering locked- In this position, the steering is locked.	The ignition key can be removed

**⚠️ WARNING**

- When parking (including long-term parking), it is necessary to place the ignition switch in the "🔒" or "⊗" position to ensure vehicle safety and prevent battery discharge.
- Do not push the motorcycle while the steering mechanism is locked as it will result in loss of balance.

## Starting the vehicle

No matter whether the engine is cold or hot, please follow the instructions below to start the engine:



1. Turn the ignition key to the "ⓘ" (ON) position.
2. Ensure the emergency OFF switch is in the "START" position.
3. Shift the transmission into neutral to start the engine. If the gear is engaged, pull the clutch lever and ensure that the side stand is folded up.
4. With the throttle fully closed, press the "⚡" button.

### If the engine does not start:

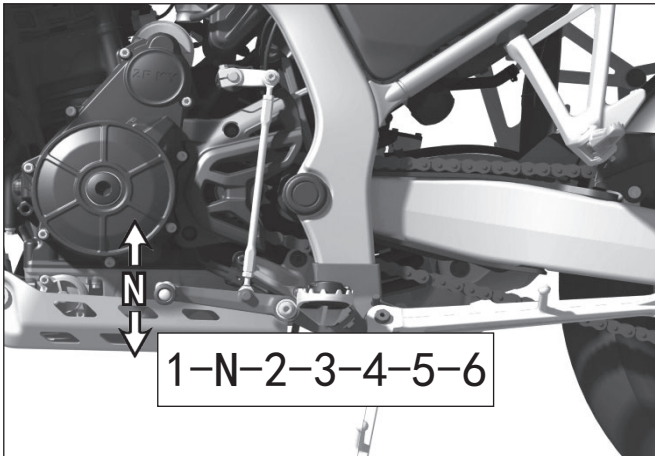
If the engine does not start within 3 seconds, wait for 10 seconds and repeat step 4.

### Info

- If the engine starts but idles unsteadily, give it a little throttle.
- Prolonged periods of high-rpm idling and revving can damage the engine and exhaust system.
- Rapidly opening the throttle or idling at high-rpm for more than 5 minutes may cause discoloration of the exhaust pipe.
- The engine will not start if the throttle is opened too much.

## Shifting

Your motorcycle has 6 forward gears and uses a 1-down, 5-up shifting pattern.



### Shifting method:

Warm up the engine to ensure it is running smoothly.

1. With the engine at idle, disengage the clutch and press down on the shift lever to shift into the first gear.
2. Gradually increase the engine rpm and slowly release the clutch lever, coordinating these two actions to ensure a smooth start.
3. Once the motorcycle reaches a balanced riding state, reduce the engine rpm, disengage the clutch, and shift up by lifting the shift lever to enter the second gear. Repeat this process for subsequent gears.

### Points to note while riding:

1. Avoid unnecessary engine revving and never allow the engine to idle at high rpms, as it can cause serious damage to the engine components.
2. Riding with the clutch partially engaged will quickly wear out the clutch plates.
3. When climbing a slope and feeling a lack of engine power, promptly shift to a lower gear.
4. In steep slopes, curves, or situations that may lead to loss of control, it is not allowed to use the front brake alone or coast in neutral. It is also prohibited to ride with hands off the handlebar.
5. When parking, reduce the throttle, disengage the clutch, and then apply the brakes.

## Quickshifter

In the 800X Pro model, there is a quickshift sensor that allows you to upshift without operating the clutch lever. This sensor enables uninterrupted shifting without the need to close the throttle grip.

- ▶ The functionality is disabled when the throttle is closed.
- ▶ The functionality is disabled when the clutch lever is operated.
- ▶ To ensure proper operation of the quickshift function, make sure the shift lever is in a free position during vehicle startup or when the vehicle is powered on. Avoid any foot or pedal operations that may cause the quickshift sensor to initialize incorrectly. In case the sensor's self-learning process malfunctions, rendering the quickshift function ineffective in all gear positions, you can switch off the ignition "⊗" (OFF) and then switch to "○" (ON) position to restore the functionality.
- ▶ To ensure optimal performance of the quickshift function, it is recommended to execute smooth and uninterrupted shifting actions when using this feature. Incomplete shifting operations may cause the ECU to exit torque control prematurely, resulting in failed shifts.
- ▶ If the quickshift sensor is not functioning properly, you can still perform shifting operations using the clutch lever.

## Info

- During regular maintenance, it is important to keep the quickshift sensor clean (free from stains, sand, metal debris, etc.) to ensure its proper function.
- During normal riding, it is advisable to develop good riding habits. After completing a shift, promptly move your foot to the footpeg and try to avoid resting your foot above or below the shift lever to prevent inadvertent shifting actions. Additionally, practice using this feature frequently to become familiar with its characteristics and fully utilize its performance.

## Traction control system (TCS)

This motorcycle is equipped with TCS (Traction Control System), which optimizes traction during riding. It effectively prevents rear wheel slip on slippery surfaces such as ice, rain, or mud during acceleration or starting, thereby improving stability and safety.

You can enable or disable the TCS function through the instrument panel settings. Unless there are specific circumstances, it is recommended to keep the TCS function enabled. When TCS is disabled and the rear wheel loses grip, the system will not reduce torque, which may result in skidding or loss of control. In such cases, the rider should adjust their riding technique accordingly.

On wet and slippery roads, TCS may not operate as the engine itself provides braking. Sudden deceleration or closing the throttle may lead to uncontrolled rear wheel slip. Avoid abrupt throttle changes, especially when riding on wet and slippery surfaces.

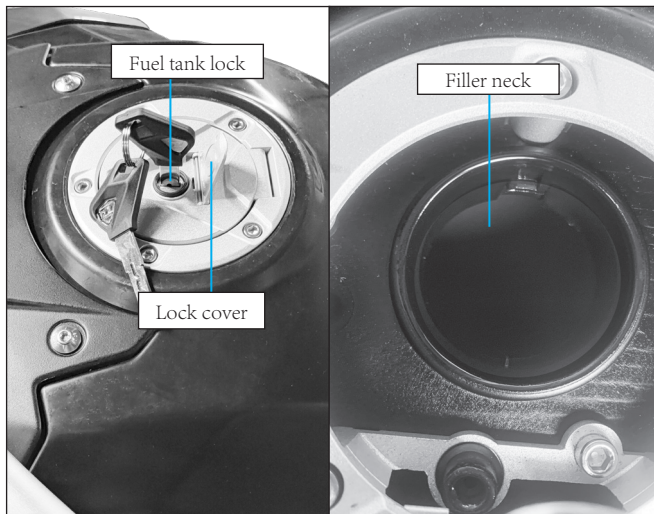
TCS may not be suitable for rapid throttle inputs on rough terrain. When opening the throttle, consider road and weather conditions, as well as your own riding skills and physical condition. If the motorcycle gets stuck in mud, snow, or sand, temporarily disabling TCS can help to free the motorcycle. Disabling TCS can assist in maintaining control and balance during off-road riding.

It is essential to use recommended tire specifications, wheel speed sensors, and sprockets to ensure proper operation of the TCS. When the TCS function is active, you may experience reduced power output, which is a normal behavior and does not require any other action.

### Info

During riding, when TCS is activated, the TCS warning light will flash with a 0.2-second on/off cycle. If the TCS indicator light stays continuously illuminated, it may indicate that you have disabled the TCS function or there is a malfunction. To resolve this, turn off the ignition switch, then turn it back on and place the right handle switch in the "START" position. If the indicator light still remains illuminated, it suggests a TCS system malfunction. It is advised to promptly seek assistance from an authorized KOVE motorcycle service center for troubleshooting and resolution.

## Refueling



**Note:**

Regularly inspect the drain pipe of the fuel tank lock to ensure it is clear and not blocked, preventing water accumulation and excessive water entering the fuel tank.

**⚠ WARNING**

- When refueling, please do so outdoors. Make sure to turn off the engine and keep a safe distance from heat sources, sparks, or open flames. If any fuel spills occur, immediately wipe them clean.

**Opening the fuel tank cap:**

Lift cover of the fuel tank filler cap and insert the ignition key into the lock, turn the ignition key clockwise, lift the fuel tank filler cap.

**Closing the fuel tank cap:**

1. After refueling, push down the fuel tank cap until the lock closes.
2. Remove the ignition key and close the cover. If the fuel tank lock is not properly locked, the key may not be removable.

**When refueling your motorcycle:**

Park the motorcycle on its side stand to ensure stability. Open the fuel tank cap, be cautious not to overfill the fuel tank. Pay attention to the fuel level as you add fuel. It is recommended not to exceed 90% of the total fuel tank capacity to allow for fuel expansion due to heat. The fuel tank capacity is 20L. It is recommended to use unleaded gasoline with an octane rating of 95 or higher. Once the fuel has been added, close the fuel tank cap securely and lock it in place.





## Important notes

### The importance of maintenance

It is crucial to keep your motorcycle in good maintenance for your safety, as well as to protect your investment, achieve optimal performance, prevent breakdowns, and reduce air pollution.

Maintenance is an important responsibility for motorcycle owners. Make sure to perform checks before every ride and follow the instructions outlined in the Maintenance Schedule for regular inspections.

#### Here are some guidelines to follow during maintenance:

- Turn off the engine and remove the key.
- Park the motorcycle on a sturdy and flat surface using the side stand or support it with a maintenance stand.
- Wait for the engine, exhaust system, brakes, and other high-temperature components to cool down before starting any operations to avoid burns.
- Start the engine only when necessary and in a well-ventilated area.



- Failure to perform regular maintenance or address malfunctions before riding can potentially lead to severe injuries or fatal accidents.
- Please follow the inspection, maintenance recommendations, and Maintenance Schedule provided in the Owner's Manual.

## MAINTENANCE SCHEDULE

The motorcycle should be serviced within the specified time, and for safety, it should only be serviced by the KOVE repair shop.

The symbols in the table have the following meanings:

I: Inspection, cleaning, adjustment R: Replacement A: Rdjustment L: Rubrication

Items		Maintenance Schedule					
		1,000-1,500 km	every 5,000 km	every 10,000 km	every 20,000 km	every 1 year	every 2 year
※	Throttle	I	I	I	I	I	I
	Air filter	I/R	I/R	I/R	R	R	R
※ ※	Valve clearance				I		
※	Engine oil	R	R	R	R	R	R
※	Oil filter	R	R	R	R	R	R
※	Timing chain tension	I	I	I	I	I	I
	Driving chain tension		I&L	I&L	I&L	I&L	I&L
	Brake pads wear	I	I	I	I	I	I
※	Brake system	I	I	I	I	I	I
※	Clutch	I	I	I	I	I	I
※	Fastener	I	I	I	I	I	I
※	Directional bearing	I	I	I	I	I	I
※ ※	Rear spoke bearing	I	I	I	I	I	I
※	wheels bearing	I	I	I	I	I	I
	Battery			I	I	I	I
※	Fuel pipe and filter			R	R	R	R
※	Spark plug			I	I	I	I
※	Swingarm bearing				I&L	I&L	I&L
※	Brake fluid					R	R
	Coolant	I	I	I	I	I	R

※ This task should be carried out by personnel from authorized KOVE motorcycle service centers. However, if users have specialized tools, repair parts, and repair skills, they can also perform the repairs themselves, with reference to this Owner's Manual.

※ ※ For safety reasons, this task should only be performed by personnel from authorized KOVE motorcycle service centers.

**Attention (when riding in dusty or heavily polluted areas):**

1. The air filter element needs to be cleaned daily.
2. The shock absorbers need to be cleaned daily.

## TORQUE PERIODIC INSPECTION CHECKLIST FOR CRITICAL POINT

No.	Tightening component name	Recommended inspection period
1	Tightening of front and rear axles.	Every maintenance cycle
2	Tightening of upper and lower bracket pinch bolts.	
3	Tightening of upper bracket and lower bracket.	
4	Tightening of steering stem nut.	
5	Tightening of handlebar supports.	
6	Tightening of engine sprocket.	
7	Tightening of engine mounting bolts.	
8	Tightening of shock absorber.	
9	Tightening of swingarm pivot	
10	Tightening of exhaust pipe nuts	
11	Tightening of front and rear brake calipers	
12	Tightening of rear brake fluid reservoir.	
13	Tightening of shift lever and adjusting rod end bearings	
14	Tightening of brake pedal and adjusting rod end bearings.	
15	Tightening of all vehicle brake hose	
16	Tightening of fuel rail	
17	Tightening of fuel pump	
18	Tightening of front and rear brake discs.	During each maintenance cycle inspection or replacement, maintenance should be performed according to specified torque and adhesive application methods.
19	ABS rings	

Note: For torque inspection items not mentioned in this manual, torque standards should be followed as per KOVE's "Service Manual."

## BEARING INSPECTION CHECKLIST

No.	Bearing components	Recommended inspection period	Recommended maintenance cycle
1	Steering head upper and lower bearings	Every maintenance cycle	10,000 km/ 1 year
2	Link fork bearings	Every maintenance cycle	20,000 km/ 1 year
3	Foot brake lever bearing	Check for any wobbling or sticking during every maintenance inspection. If any issues arise, disassemble and inspect the bearing. Replace the bearing if necessary.	
4	Shift shaft bearing		
5	Front wheel bearings		
6	Rear wheel bearings		
Note: When inspecting bearing components, the associated oil seals and spacers should also be inspected, maintained, or replaced accordingly.			

## PRE-RIDE INSPECTION

To ensure safety, it is your responsibility to conduct a pre-ride inspection and ensure that any issues you discover are addressed. The pre-ride inspection is necessary.

Items	Contents
Handlebar	Check for smooth rotation, no play, and tightness.
Break system	Inspect its operation, check the front and rear brake fluid levels, and brake pad wear.
Fuel level	Ensure you have enough fuel for your journey (refuel if necessary).
Throttle	Check if it opens smoothly and fully closes at all turning positions.
Clutch	Inspect its operation and adjust the free travel if necessary.
Wheels and tires	Check their condition and tire pressure, if necessary, please inflate the tires.
Chain	Check its condition and sag status, adjust and lubricate if necessary.
Lighting, horn	Check the performance of the lighting system and horn.
Engine oil level	Add engine oil if necessary and check for any leaks.
Instrument indicators	Check if all the indicator lights on the instrument are functioning properly.

## Replacing

## Battery

**Checking and replacing the battery**

1. Before installing the battery, if you notice any dirt or debris on the terminals, wipe them clean before installing. Poor contact due to dirt can cause functional failure.
2. If the battery shows signs of deformation, abnormal heating, or smoke during use, immediately stop using it and have it inspected by an authorized KOVE repair shop.
3. Prolonged exposure to high temperatures and humidity can lead to functional failure and reduced lifespan of the battery. Before using it again, ensure the battery's appearance and functionality are normal.
4. If the vehicle fails to start, check the battery for proper functioning. If the battery is damaged, replace it promptly.
5. When installing the battery, make sure to securely tighten the battery terminal bolts.

**When the battery is not in use for an extended period:**

- To prevent excessive discharge, charge the battery every two months.
- Store the battery in a cool, dry place and prevent short-circuiting between the positive and negative terminals.

## Info

- Improper handling of batteries can pose risks to the environment and human health. Please follow local environmental regulations for the proper disposal of waste batteries.
- Installing additional electrical components can lead to battery drain and even electrical system failures.

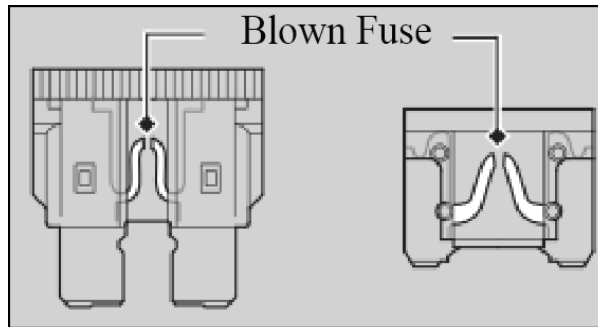
**Fuse**

Fuses serve as protection for the electrical circuits in your motorcycle. If certain electrical components of your motorcycle stop working, please check and replace any burned-out fuses.

**■ Checking and replacing fuses**

Turn the ignition switch to the "⊗" off position and remove it to inspect the fuse. If the fuse is burned-out, replace it with a fuse of the same specification as indicated in the "Technical Data" section. (p.91)

If the fuse consistently burned-out, there may be an underlying electrical issue. It is recommended to have your motorcycle inspected by an authorized KOVE motorcycle service center.



**Info**

- Always replace fuses with the same rating; using a higher-rated fuse increases the risk of damaging the electrical system and potential fire hazards.
- Installing non-KOVE electrical accessories can overload the electrical system, leading to battery discharge and system damage.



## Engine oil

The consumption of engine oil and the decrease in oil quality may vary depending on driving conditions and usage time. Higher operating speeds result in faster oil consumption rates. During prolonged periods of high-speed or high RPM operation, it is advisable to shorten the oil change interval. Regularly check the engine oil level and, if necessary, add the recommended engine oil.

When operating in extreme temperatures, the rate of oil degradation may increase. Additionally, dirty or excessively used oil should be replaced promptly.

### Selecting engine oil

For maintenance purposes, it is recommended to choose engine oil that meets the API classification of SN or higher. The AMSOIL's DB50 10W-50 oil is suggested.

## Info

- Brake fluid can damage plastic and painted surfaces. If it splashes, immediately wipe it off and thoroughly clean the affected area.
- Recommended brake fluid: DOT4 brake fluid or an equivalent product.
- Use coolant specifically designed for non-aluminum engine components. Regular tap water or mineral water can cause corrosion.

## Brake fluid

Unless it is an emergency situation, please refrain from adding or replacing brake fluid.

Only use brake fluid that is freshly obtained from a sealed container. If you have added brake fluid, please have the braking system inspected by an authorized KOVE motorcycle service center as soon as possible.

## Coolant

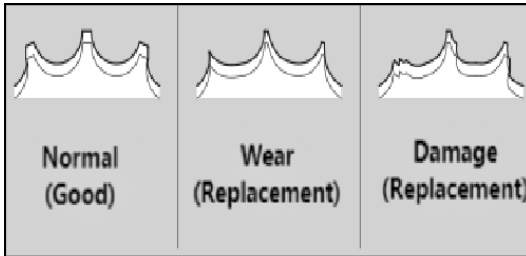
You should only use the original undiluted KOVE pre-mixed coolant. The original KOVE pre-mixed coolant is designed to provide excellent corrosion protection and prevent overheating. Please pay attention to the coolant level and add more coolant promptly if it falls below the minimum limit. The coolant has a freezing point of  $-38\text{ }^{\circ}\text{C}$  ( $-36.4\text{ }^{\circ}\text{F}$ ) and a boiling point of  $125\text{ }^{\circ}\text{C}$  ( $257\text{ }^{\circ}\text{F}$ ).

## Chain

Regularly inspect and lubricate the drive chain. If you frequently ride in poor road conditions, at high speeds, or engage in rapid acceleration, inspect the chain more often.

If the chain operates poorly, makes strange noises, has damaged rollers or loose pins, or if there are missing or bent seals, have it checked at an authorized KOVE motorcycle service center.

Also, check the engine sprocket and rear sprocket. If either shows wear or damaged teeth, have them replaced at an authorized KOVE motorcycle service center.



## Info

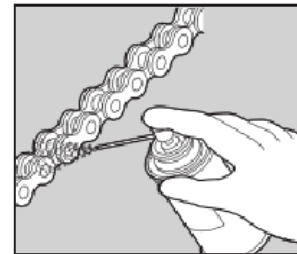
- Using a new chain on worn sprockets will accelerate chain wear, replace both the chain and sprockets simultaneously.
- Recommended lubricant: specialized lubricant for sealed chain.

## Cleaning and lubricate

After checking the sagging, clean the chain and sprockets while rotating the rear wheel. Use a dry cloth, chain-specific cleaner, or mild degreaser. If the chain is dirty, use a soft brush. After cleaning, dry it thoroughly and lubricate it with the recommended oil.

Do not use steam cleaners, high-pressure washer, wire brushes, volatile solvents like gasoline, degreasers, chain cleaners, or lubricants not specifically designed for sealed chains. They can damage the chain seals.

Avoid getting lubricating oil on the brakes or tires, and don't use excessive oil to prevent splattering on clothing or the motorcycle.



Tires (checking/changing)

**Tire information**

Front tire: 90/90-21

Rear tire: 150/70-R18

**Abnormal wear**

Inspect the contact surface of the tires for any signs of abnormal wear.

**Checking tread depth**

Check the Tire Wear Indicator (TWI) on the tires. If the wear reaches the indicator marks, replace the tires immediately.

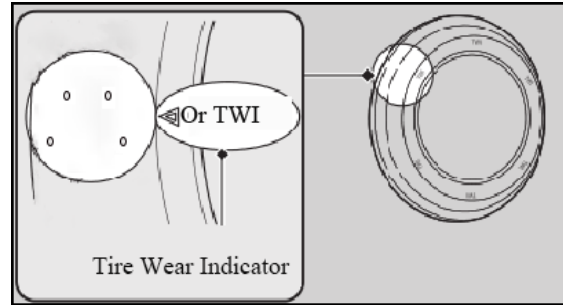
**Checking tire pressure**

When you feel the tire pressure is low, use a tire pressure gauge to check it. Measure the tire pressure when the tires are cold and perform monthly checks. Make sure the valve caps are tight and replace them if needed.

Tire pressure solo: front: 2.3 bar (33 psi); rear: 2.5 bar (36 psi)

**Inspect for any damages**

Inspect the tires for cuts, cracks, exposed fabric or tire cords, and embedded objects in the sidewall tread. Also, check for any abnormal bulges or swelling on the sidewall.



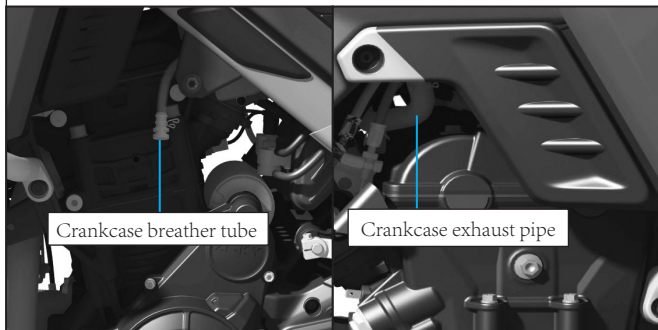
Whenever changing tires, please follow the following guidelines:

- Use recommended tires or equivalent products with the same size, structure, speed rating, and load capacity.
- After tire installation, use the KOVE original wheel balancer or equivalent equipment to balance the wheels.
- The wheel rim of this motorcycle is designed for tubeless tires. Do not install conventional tubes in the tires. Installing conventional tubes can cause friction between the conventional tube and the wheel rim during rapid acceleration or braking, leading to excessive heat and potential conventional tube failure.

 **WARNING**

- Using excessively worn or improperly inflated tires can lead to accidents and cause serious injuries. Please follow the relevant tire inflation and maintenance guidelines in the Owner's Manual.
- Installing tires that are not suitable can affect handling and stability, leading to accidents and even life-threatening situations.
- It is essential to use tires of the recommended size and type as stated in the Owner's Manual.

**Air filter**



**Tool**

The onboard tools are embedded in a rearward position beneath the seat cushion. You can use these tools for simple repairs, minor adjustments, and component replacements.

- Double-Ended Torx Wrench T25×T30

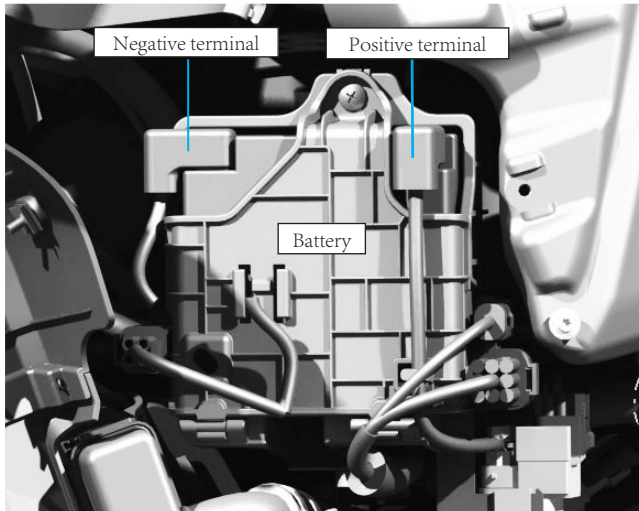
The air filter has a paper filter element that should not be serviced by yourself. It is recommended to have it cleaned or replaced by an authorized KOVE motorcycle service center.

The crankcase breather tube is located on the lower left side of the air filter. Check it every 3 months for water or oil accumulation. After washing the motorcycle or during heavy rain, inspect it promptly. If any accumulation is found, remove the tube, drain the liquid, and reinstall it after cleaning.

The crankcase exhaust pipe of the air filter is located on the upper right side of the engine. It vents pressure from the engine and prevents water or debris from entering. If the engine lacks power, check the exhaust pipe for blockages. If a blockage is present, remove the pipe, clear the blockage, and reinstall it after cleaning.

## Disassembling and installing body components

### Battery



#### ■ Disassembly

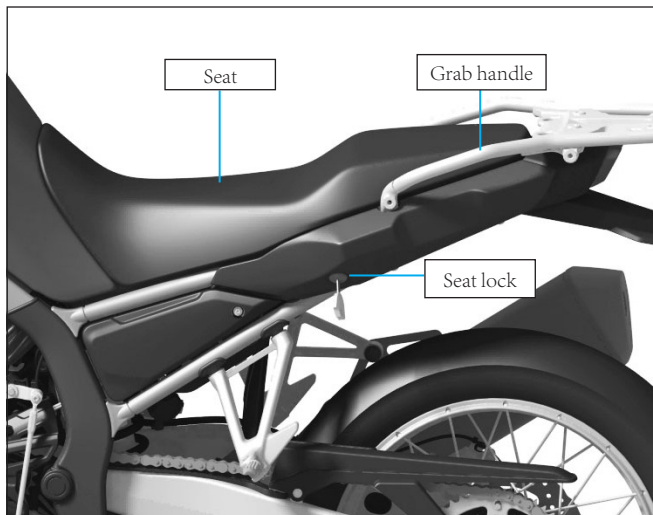
Ensure the ignition switch is turned to the "⊗" (OFF) position.

1. Remove the left side crash bar.
2. Remove the left side fuel tank cowling.
3. Remove the battery box cover.
4. Disconnect the negative (-) terminal of the battery.
5. Disconnect the positive (+) terminal of the battery.
6. Remove the battery, being careful not to lose any bolts or nuts.

#### ■ Installation

Follow the reverse order of disassembly to install each component. Make sure to connect the positive (+) terminal first and the negative (-) terminal last. Ensure that the bolts and nuts are tightened securely.

## Seat

**Removing the seat**

Insert the ignition key into the seat lock, turn it clockwise, lift the rear of the seat to detach it from the lock housing, pull it back to remove. Remove the ignition key.

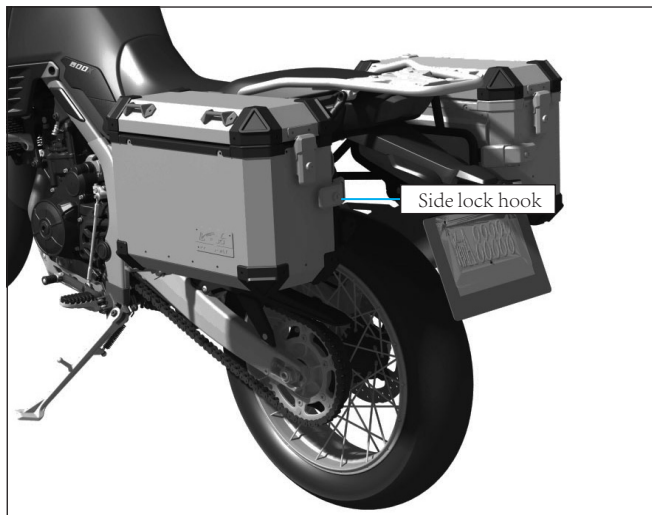
**Mounting the seat**

1. Insert the front hook of the seat into the slot on the fuel tank.
2. Align the seat locking pin with the lock housing, press down the rear of the seat, and the locking pin will engage with the seat lock housing. Give a slight upward tug to ensure the seat is locked into position.
3. When the seat is closed, the seat lock will automatically engage and lock.

## Info

- Please ensure that the seat hook is properly inserted into the slot. Failure to do so may result in the seat being unable to support your weight, potentially causing damage to the seat.

## Cases -ZF800GY-A

**Disassembly**

1. Use the key to unlock the side lock hook next to the case.
2. From the bottom, detach the four slots on the back of the case from the luggage rack.

**Installation**

1. Use the key to unlock the side lock hook next to the case.
2. Align the four slots on the back of the case with the luggage rack and slide the case slots into the racks from top to bottom.
3. Fasten the side lock hook onto the case mounting latch and lock it with the key.

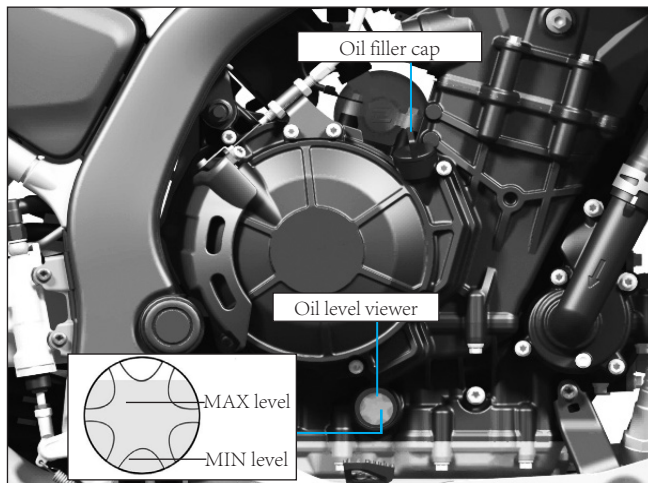
## Info

- The maximum weight for loading items in a single case should not exceed 5 kg (11 lb).
- When riding a motorcycle with luggage, maintain balance on both sides and do not exceed a maximum speed of 120 km/h (75 mph).



## Engine oil

### Check and add engine oil



### Info

- Avoid prolonged skin contact with the oil. If you come into contact with the oil, thoroughly wash it off.
- Overfilling or underfilling the oil can damage the engine. Do not mix different brands and grades of oil as this can affect lubrication and clutch operation.
- Used oil and containers are harmful to health and the environment. They should not be disposed of as regular household waste. Dispose of them in accordance with local environmental regulations.

### Checking the engine oil level

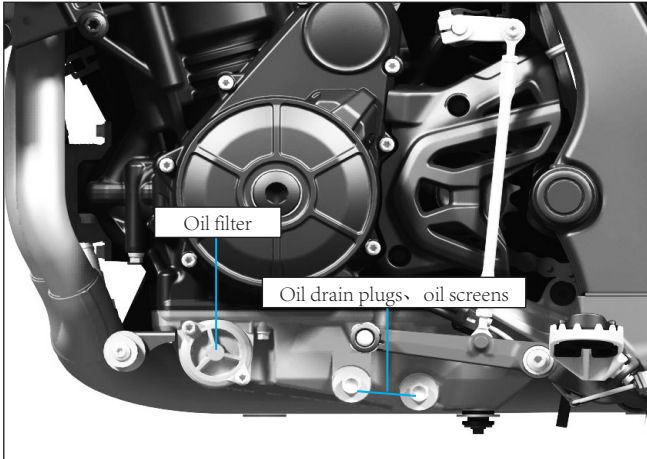
1. Start the engine, warm it up for 3-5 minutes, turn ignition switch to "⊗" (OFF) position, wait 2-3 minutes.
2. Stand the vehicle upright on a horizontal surface. The engine oil should be between the minimum level and maximum level of the oil level viewer.

### Add engine oil

If the engine oil level is below the minimum level mark, add the recommended engine oil to the proper level.

1. Remove the oil filler cap and add the recommended oil up to the MAX level mark. Do not exceed the max level mark and ensure that no foreign objects enter the oil filler opening. If any oil spills, immediately wipe it off.
2. Reinstall the oil filler cap and tighten it securely.

## Changing the engine oil and oil filter, cleaning the oil screens



Changing the engine oil and oil filter requires special tools. We recommend having it done by an authorized KOVE motorcycle service center. Please refer to the "Maintenance Schedule" for the recommended engine oil and oil filter replacement intervals.

Please use the specified original KOVE motorcycle engine oil and oil filter for your vehicle model.

1. If the engine is cold, idle it for 3-5 minutes, then turn the ignition switch to the "OFF" position and wait for 2-3 minutes.
2. Rest the motorcycle on its side stand on a horizontal surface.
3. Remove the engine guard and place an appropriate container under the engine.
4. Remove the oil filler cap, two oil drain plugs, and O-rings. Take out the oil screens and drain the oil until it drips.
5. Remove the oil filter cover and take out the oil filter, draining any remaining oil.
6. Insert a new oil filter and install the oil filter cover (torque:  $6 \pm 1$  Nm, 4.4 lbf ft).
7. Reinstall the cleaned oil filter screen into the housing.
8. Install a new seal rings on the oil drain plugs and tighten it (torque: 20 Nm, 14.7 lbf ft).
9. Fill up the recommended KOVE motorcycle engine oil to the engine. After filling, tighten the oil filler cap.

**When replacing the oil filter , the required oil quantity is 3 l (3.2 qt.)**

**When not replacing the oil filter, the required oil quantity is 2.8 l (3 qt.)**

**When rebuilding the engine after disassembly, the required oil quantity is 3.2 l (3.4 qt.)**

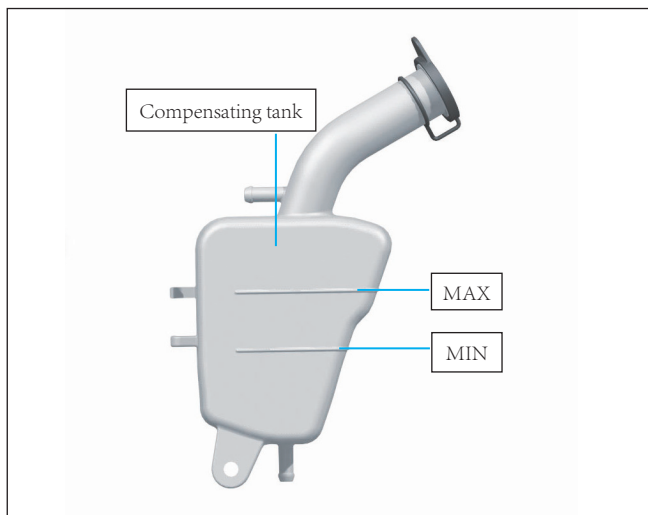
10. Check for any oil leaks.

When replacing the engine oil and oil filter, please take note of the following:

1. Using the wrong engine oil and oil filter can cause severe damage to the engine.
2. During each oil change, inspect and clean the oil screens. If any damage is detected, replace it.
3. When changing the oil, always replace the oil filter with a new one.
4. When installing the oil filter cover, replace the oil filter cover gasket and apply lubricant.
5. Used engine oil, oil filter and container are harmful to health and the environment. They should not be disposed of as regular household waste. Please follow local environmental regulations for proper disposal methods.

## Cooling System

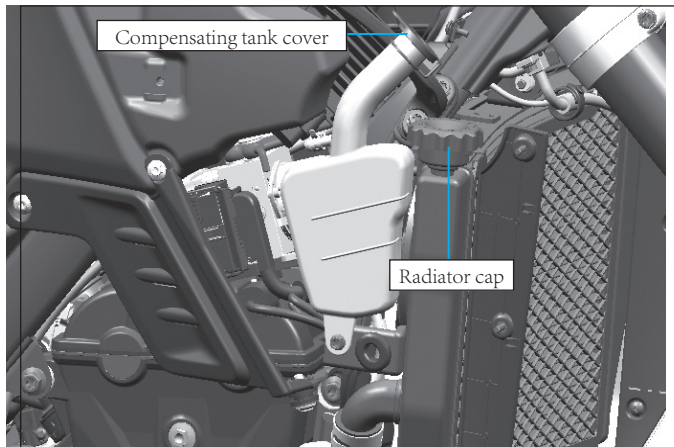
### Checking the coolant level in the compensating tank



When the engine is cold, check the coolant level in the compensating tank.

1. Park the motorcycle on a stable, horizontal surface.
2. Keep the motorcycle upright.
3. Regularly check if the coolant level in the compensating tank is between the MIN and MAX marks (at least once a month).
4. If the coolant level significantly drops or the tank is empty, it may indicate a serious leak. Please have it inspected by an authorized KOVE motorcycle service center.

### Correcting the coolant level in the compensating tank



If the coolant level is below the lower level mark, add the recommended coolant until reaches the MAX level.

When adding coolant, make sure the engine is cold, and open the radiator cap to release pressure. Then, open the cap of the compensating tank for adding coolant. During the process, ensure that no foreign objects enter and be careful not to exceed the upper level mark.

Once the addition is complete, mount the caps securely.

### Replace the coolant

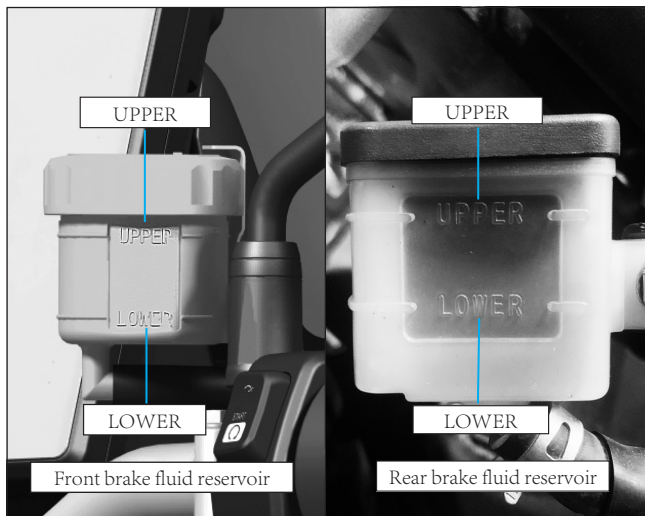
Unless you have the appropriate tools and qualified mechanical skills, please have the coolant replaced by an authorized KOVE motorcycle service center.



- Do not remove the radiator cap when the engine is still hot as it can cause the coolant to spray out, potentially causing burns.

Brake system

Checking the brake fluid level



1. Park the motorcycle on a firm and level surface upright.
2. Ensure the brake fluid reservoir at a horizontal position.
3. Check the brake fluid level in brake fluid reservoir. If the brake fluid level has dropped below LOWER marking, add the brake fluid.

If the fluid level in brake fluid reservoir is below the limit mark (LOWER) or if there is excessive free travel in the hand and foot brake lever, it is necessary to check if the brake linings are worn. If the brake linings are not worn, there may be a leakage issue. Please have it inspected and repaired by a authorized KOVE service center.

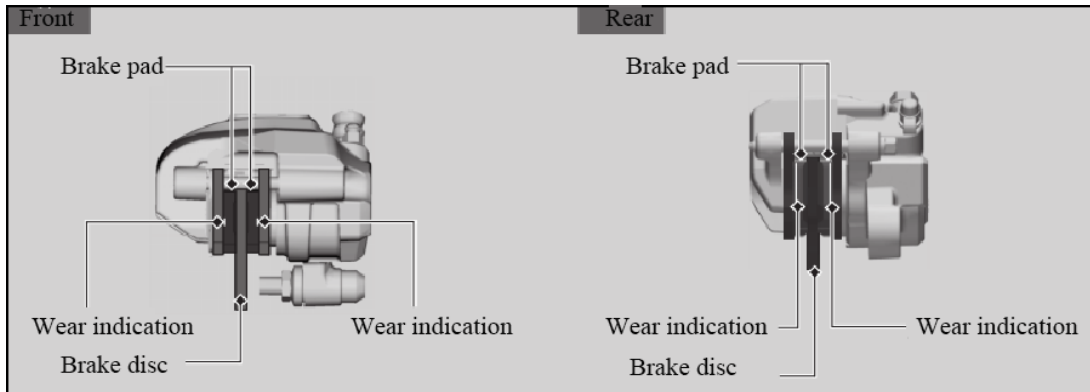
Checking the brake linings -Standard

Check the brake linings for minimum thickness. If the minimum thickness is less than specified, change the brake pads.

**Front** Inspect the brake linings from below the brake caliper.  
 Brake linings thickness: 6.5mm (0.26 in) indicated as wear limit.

**Rear** Inspect the brake pads from the right rear side of the brake caliper.  
 Brake linings thickness: 7mm (0.27 in) indicated as wear limit.

If necessary, please have the brake pads replaced by an authorized KOVE service center. When reaching the wear limit, both the left and right brake pads must be replaced simultaneously.



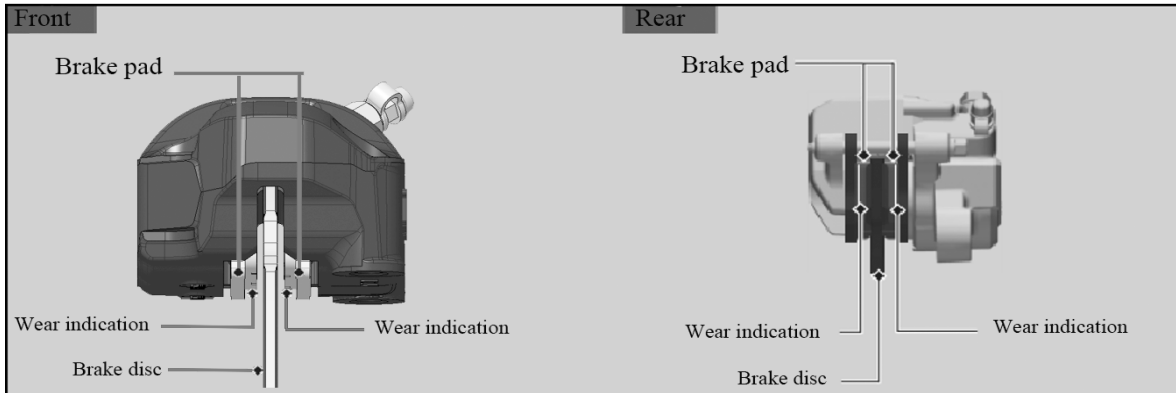
**Checking the brake linings -Pro**

Check the brake linings for minimum thickness. If the minimum thickness is less than specified, change the brake pads.

**Front** Inspect the brake linings from below the brake caliper.  
 Brake linings thickness: 3.5mm (0.14 in) indicated as wear limit.

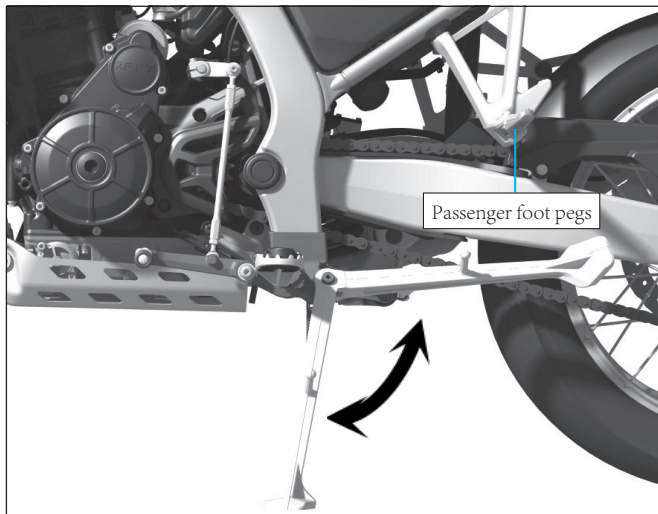
**Rear** Inspect the brake linings from the right rear side of the brake caliper.  
 Brake linings thickness: 7mm (0.28 in) indicated as wear limit.

If necessary, please have the brake pads replaced by an authorized KOVE service center. When reaching the wear limit, both the left and right brake pads must be replaced simultaneously.





## Side stand/passenger foot pegs



### Checking the side stand:

1. Check if the side stand operates smoothly. If the side stand feels stiff or makes a "creaking" sound, please clean the pivot area and lubricate the pivot bolt with clean grease.
2. Inspect the spring for any damage or loss of elasticity.

### After off road riding for an extended period, please perform the following checks on the passenger foot pegs:

1. If you experience any sticking or stiffness in the left or right passenger foot pegs, spray WD-40 or a similar lubricant with good lubricating properties into the rotating gap of the footpeg. Wait for about 1 minute to remove any internal debris and restore normal operation of the footpeg.
2. Check the torque of the connection between the left or right footpeg support and the frame. If the torque has decreased to below 16 Nm (11.8 lbf ft), please tighten it back to 22 Nm (16.2 lbf ft).

## Drive chain

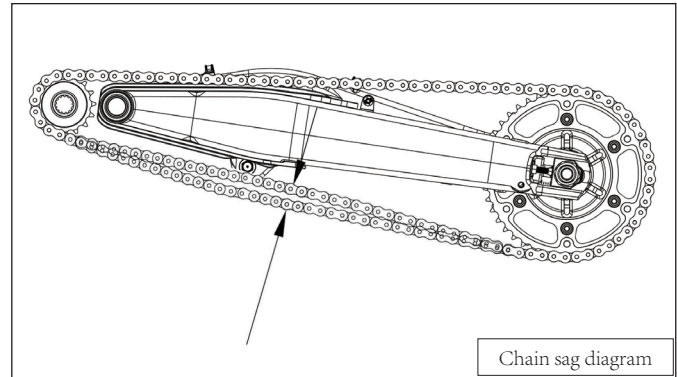
### Checking the chain tension

Chain wear is not always even. Repeat this measurement at different chain position, it is possible that some chain links may have become bent or twisted. In such cases, it is recommended to have the chain inspected by an authorized KOVE service center.

1. Shift the transmission into neutral, switch off the ignition.
2. Park the motorcycle on a firm and level surface upright.
3. Push the chain behind the chain sliding piece up and determine the chain sagging.
4. Rotate the rear wheel forward, ensure that the chain moves smoothly.
5. Checking the engine and rear sprockets.
6. Clean and lubricate the drive chain.

Distance of the chain sagging: 30-45mm (1.18-1.77 in)

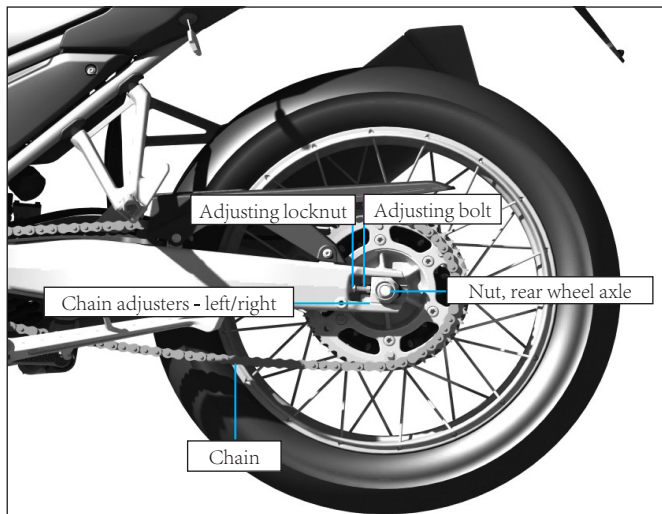
If the sag exceeds 45mm (1.77 in), you should not continue riding the motorcycle.



### Info

- When adjusting the chain tension, top chain section must be taut.

## Adjusting the chain tension



When adjusting the chain tension, follow these steps:

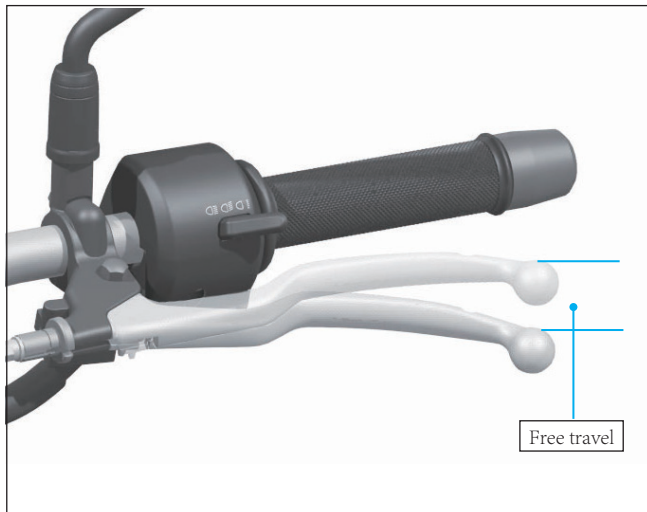
1. Shift the transmission into neutral, switch off the ignition.
2. Park the motorcycle on a firm and level surface upright.
3. Loosen rear wheel axle nut.
4. Loosen the adjusting locknuts and bolts using an open-end wrench.
5. Rotate the adjusting bolts to adjust the sag of the chain.  
The allowable range for chain sag adjustment is 30-45mm (refer to the chain sag diagram).
6. The reference marks on the link fork are in the same position.
7. Tighten adjusting locknut.
8. There should be no clearance between the chain adjusters and adjusting bolts, tighten the rear wheel axle nut to 128 Nm (94.4 lbf ft).

### Info

- When adjusting the chain tension, top chain section must be taut.

Clutch lever

Free travel of clutch lever: 10-15 mm (0.39-0.59 in)



- Check the clutch cable for any signs of bending or damage. If necessary, have it replaced by an authorized KOVE motorcycle repair shop.
- Lubricate the clutch cable with specialized cable lubricant to prevent premature wear and corrosion.

Info

- Incorrect adjustment of the clutch free travel can cause premature wear on the clutch.

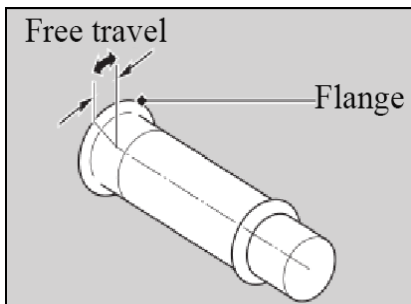
## Throttle / Hand brake lever

### Checking the throttle

When the engine is turned off, check if the throttle smoothly moves from fully closed to fully open in all handle positions and ensure that the free travel is correct and without any issues.

If the throttle operation is not smooth, automatically closes, or if the cable is damaged, please have it inspected by an authorized KOVE motorcycle service center.

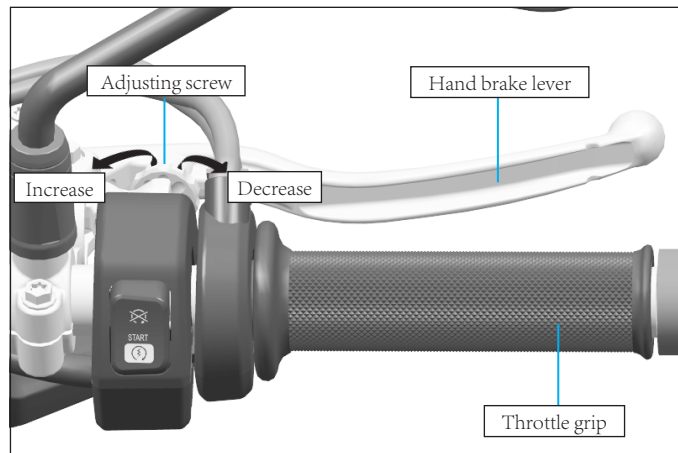
The free travel of the throttle handle flange: 2-6mm (0.08-0.24 in)



### Info

- Do not rotate the adjusting screw beyond its natural limit.

### Adjusting the hand brake lever



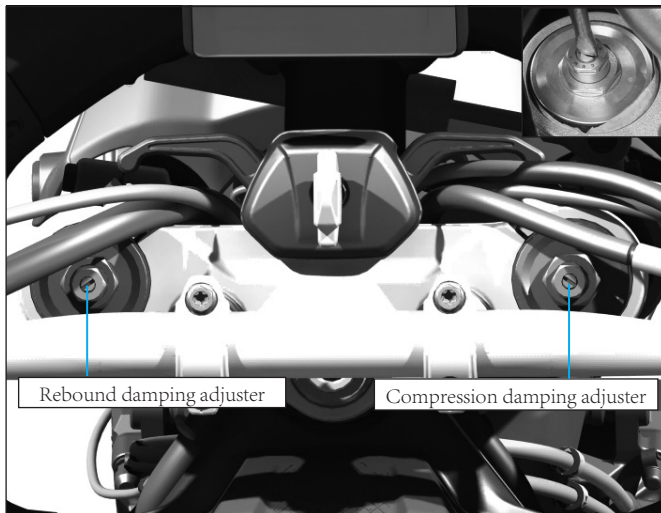
You can adjust the distance between the hand brake lever and the throttle grip

#### ■ Adjustment method

Push the brake lever outward to the desired position, and then rotate the adjusting screw. Clockwise rotation will decrease the distance to the throttle grip, counterclockwise rotation will increase the distance to the throttle grip. After adjustment, check if the brake lever operates correctly before riding.

## Adjusting the fork

### Adjusting the compression damping of the fork-Standard



The adjustment of compression damping will affect the compression speed of the fork suspension. The compression damping is located on the right fork leg marked "COMP". The adjustment is made by rotating the central screw.

The compression damping has  $24 \pm 2$  levels. Rotating the central screw clockwise (H) to increase damping and counterclockwise (s) to decrease damping.

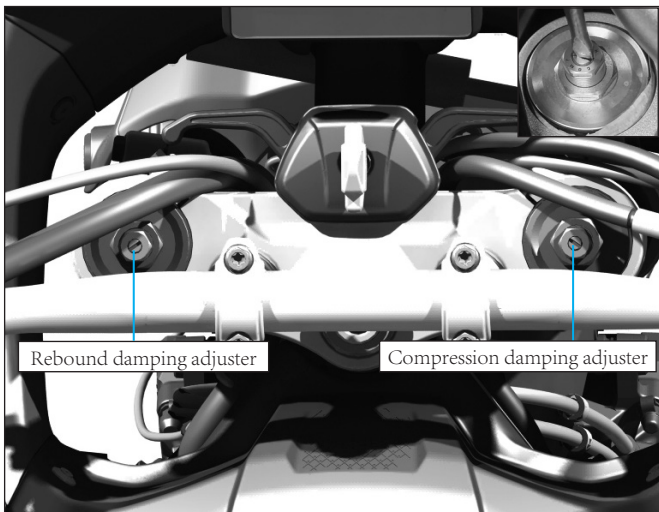
**To set the standard compression damping, follow these steps:**

1. Rotate the compression damping adjustment screw clockwise until it cannot be turned anymore.
2. Rotate the adjustment screw counterclockwise, the standard compression damping is achieved by rotating the screw counterclockwise 18 levels from the maximum position (where you hear a clicking sound).

#### Info

- Please avoid applying excessive force when rotating the adjustment screw to prevent damage to the adjustment mechanism. The recommended torque for adjustment is not more than 0.5 Nm (0.4lbf ft).

Adjusting the rebound damping of the fork-Standard



The adjustment of rebound damping will affect the rebound speed of the front suspension. The rebound damping adjuster for the front suspension is located on the left fork leg and is marked with "TEN". The adjustment is made by rotating the central screw.

The rebound damping has  $24 \pm 2$  levels. Rotating the central screw clockwise (H) to increase damping and counterclockwise (S) to decrease damping.

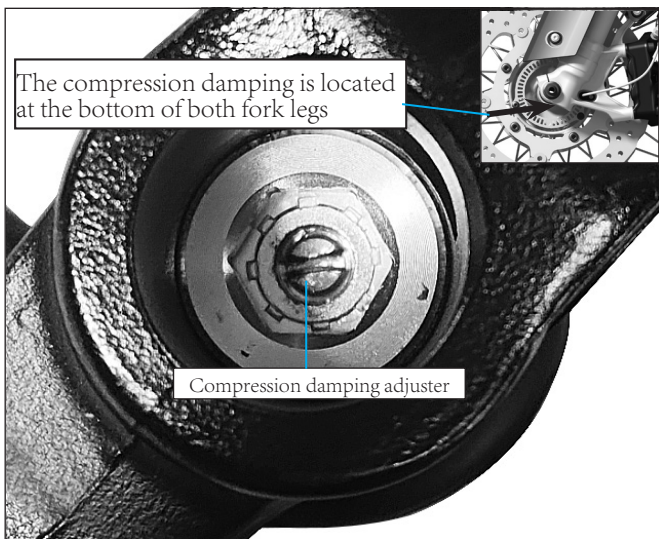
**To set the standard rebound damping, follow these steps:**

1. Rotate the rebound damping adjustment screw clockwise until it cannot be turned anymore.
2. Rotate the adjustment screw counterclockwise, The standard rebound damping is achieved by rotating the screw counterclockwise 18 levels from the maximum position (where you hear a clicking sound).

Info

- Please avoid applying excessive force when rotating the adjustment screw to prevent damage to the adjustment mechanism. The recommended torque for adjustment is not more than 0.5 Nm (0.4lbf ft).
- By rotating the adjustment screw clockwise, both compression damping and rebound damping can be increased.

Adjusting the compression damping of the fork-Pro



The adjustment of compression damping will affect the compression speed of the fork suspension. The compression dampings are located at the bottom of both fork legs. The adjustment is made by rotating the central screw.

The compression damping has  $23 \pm 2$  levels. Rotating the central screw clockwise (H) to increase damping and counterclockwise (S) to decrease damping.

**To set the standard compression damping, follow these steps:**

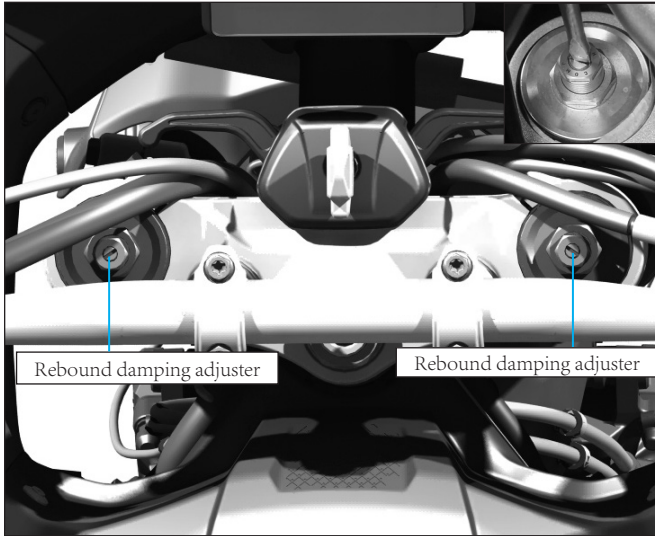
1. Rotate the compression damping adjustment screw clockwise until it cannot be turned anymore.
2. Rotate the adjustment screw counterclockwise, the standard compression damping is achieved by rotating the screw counterclockwise 12 levels from the maximum position (where you hear a clicking sound).

Info

- Please avoid applying excessive force when rotating the adjustment screw to prevent damage to the adjustment mechanism. The recommended torque for adjustment is not more than 0.5 Nm (0.4lbf ft).



Adjusting the rebound damping of the fork-Pro



The adjustment of rebound damping will affect the rebound speed of the front suspension. The rebound damping adjusters for the front suspension are located on the both fork legs and are marked with "TEN". The adjustment is made by rotating the central screw.

The rebound damping has  $24 \pm 2$  levels. Rotating the central screw clockwise (H) to increase damping and counterclockwise (S) to decrease damping.

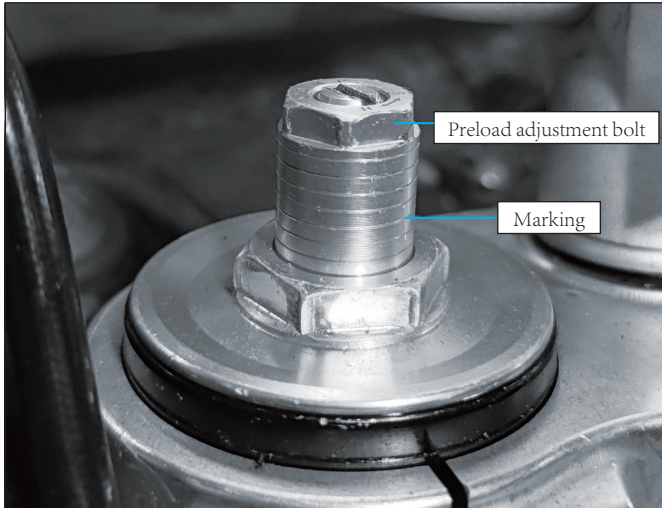
**To set the standard rebound damping, follow these steps:**

1. Rotate the rebound damping adjustment screw clockwise until it cannot be turned anymore.
2. Rotate the adjustment screw counterclockwise, The standard rebound damping is achieved by rotating the screw counterclockwise 18 levels from the maximum position (where you hear a clicking sound).

Info

- Please avoid applying excessive force when rotating the adjustment screw to prevent damage to the adjustment mechanism. The recommended torque for adjustment is not more than 0.5 Nm (0.4lbf ft).
- By rotating the adjustment screw clockwise, both compression damping and rebound damping can be increased.

## Adjusting the spring preload of the fork



The adjustment of spring preload affects the force required for the spring to compress. The higher the preload, the greater the force required to compress the spring by the same distance. Conversely, the lower the preload, the smaller the force required to compress the spring by the same distance. The adjustment for spring preload is done by rotating the hexagonal portion of the preload adjustment bolt.

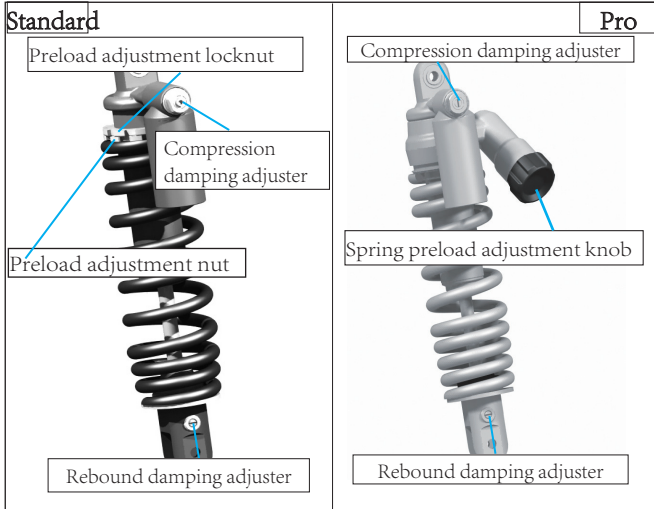
Turn clockwise to increase the spring preload; turn counterclockwise to reduce the spring preload.

Make the same adjustment, keep the same number of markings on both fork legs. Each marking represents 2 mm.

You can make adjustments based on your weight and riding conditions. Ensure that after each adjustment, the left and right preload adjustment bolts are set to the same position.

## Adjusting the shock absorber

### Shock absorber



The shock absorber is filled with highly compressed nitrogen. It is important not to attempt to disassemble, repair, or dispose of the device. Puncturing or exposing it to flames can result in an explosion and cause serious injury. Repairs or handling should be carried out by authorized KOVE motorcycle service centers.

### Adjusting the spring preload

#### Standard:

The spring preload adjustment should be performed when the engine is cool. Rotate the spring preload adjustment nut to adjust the spring preload.

Clockwise rotation increases the spring preload, while counterclockwise rotation decreases the spring preload.

#### Pro:

The spring preload adjustment should be performed when the engine is cool. Rotate the spring preload adjustment knob to adjust the spring preload.

Clockwise rotation increases the spring preload, while counterclockwise rotation decreases the spring preload.

## Adjusting the compression damping

The compression damping adjustment screw is located on the upper left side of the shock absorber. The compression damping has  $20 \pm 2$  levels. Clockwise rotation (H) increases the compression damping, while counterclockwise rotation (S) decreases the damping.

### To set the standard compression damping:

1. Rotate the compression damping adjustment screw clockwise (H) until it cannot be turned anymore.
2. From the hardest position, rotate the adjustment screw counterclockwise (S) 10 levels (where you hear a clicking sound).

## Adjusting the rebound damping

The rebound damping adjustment screw is located on the lower left end of the shock absorber. The rebound damping has  $23 \pm 2$  levels. Clockwise rotation (H) increases the rebound damping, while counterclockwise rotation (S) decreases the damping.

### To set the standard rebound damping:

1. Rotate the rebound damping adjustment screw clockwise (H) until it cannot be turned anymore.
2. From the hardest position, rotate the adjustment screw counterclockwise (S) 10 levels (where you hear a clicking sound).

## Info

- Please take care to make slight adjustments to the screws to avoid damaging the shock absorber.
- Use the appropriate-sized tools when adjusting the compression damping or rebound damping to avoid damaging the device.
- Ensure that the adjustment screws are securely positioned during each adjustment.
- The recommended torque for adjusting the compression damping or rebound damping is not more than 0.5 Nm (0.4lbf ft).

## Checking the suspension

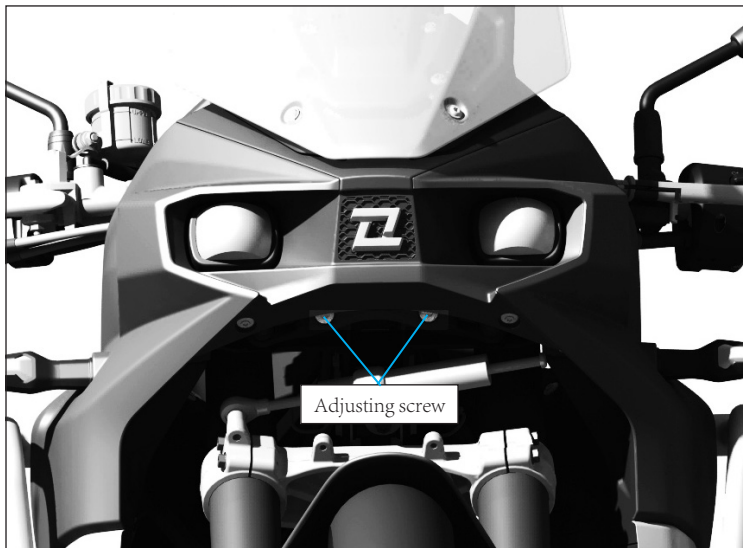
Regular inspection and cleaning of all components of the suspension is essential to ensure optimal performance :

1. Inspect the decorative parts and dust seals of the fork to ensure they are clean and free from mud and dirt.
2. Check if there are any oil stains beneath the dust seals of the fork. If there are signs of oil leakage, replace the damaged dust seals and oil seals.
3. Firmly grip the hand brake lever and press it down several times to check the smoothness of the rebound of the fork.
4. Press the seat several times to check the smooth operation of the shock.

## Headlight

### Adjusting the headlight range

Turn adjusting screw to adjust the headlight range. Turn clockwise to reduce the headlight range; turn counterclockwise to increase the headlight range. Please follow local laws and regulations.



## SERVICE

Please read the "Maintenance" and "Pre-ride inspection" carefully before performing any maintenance tasks. For repair data, please refer to the "Technical Data".

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The engine is unable to start

The starter motor is running, but the engine is not starting.

Here are the items to check:

- Verify if the correct engine starting sequence is being followed.
- Check if there is gasoline in the fuel tank.
- Verify if the battery voltage is low.

The starter motor is not working

Here are the items to check:

- Verify if the correct engine starting sequence is being followed.
- Ensure that the electric starter button is in the "○" (ON) position.
- Check the battery voltage to make sure it's not too low
- Inspect the fuses for any signs of being burned-out .
- Verify that the battery connections are secure and not loose.  
If the issue persists, it is recommended to take the vehicle to an authorized KOVE motorcycle service center for further diagnosis and repair.



## The warning indicator lights up or flash

### The oil pressure warning indicator

If the oil pressure warning indicator lights up, please push the motorcycle to a safe roadside and turn off the engine, and take the following steps:

1. Check the engine oil level and add oil if necessary.
2. Only continue riding when the warning indicator goes out.
3. Rapid acceleration when the oil level is at or near the minimum can cause the warning indicator lights up.
4. If the oil level is at a normal level and the warning indicator remains illuminated, please turn off the engine and contact an authorized KOVE motorcycle service center.
5. If the engine oil level drops rapidly, your motorcycle may have an oil leak or other serious issues. Please have it inspected by an authorized KOVE motorcycle service center.

### The malfunction indicator

If the malfunction indicator lights up while riding, it indicates a potentially serious issue with your electronic fuel injection (EFI) system. It is recommended to decelerate and promptly take your vehicle to a authorized KOVE motorcycle service center for inspection and repair.

### Info

- Continuing to ride in a low oil pressure state can cause severe damage to the engine.

**ABS warning indicator (Anti-lock braking system)**

If the ABS warning indicator appears under any of the following conditions, it indicates a fault in your ABS system. In such cases, the emergency braking system will not provide anti-lock functionality. It is recommended to promptly take your vehicle to an authorized KOVE motorcycle service center for inspection and repair.

- The ABS warning indicator lights up suddenly while riding.
- The indicator light remains illuminated when the speed exceeds 10 km/h (6 mph).

In the following situations, the ABS warning indicator may flash or remain constantly lit:

- When rotating the front wheel alone.
- When rotating the rear wheel alone.
- When the rear wheel is slipping.
- When riding on special road surfaces.

To reactivate the ABS, you can switch off the ignition "⊗" (OFF) and then switch to "○" (ON) position, the ABS is reactivated. Ensuring that the ABS warning indicator goes out.

**Info**

- Continuing to ride with an overheating engine can cause severe damage to the engine.
- Running the engine at high RPMs in neutral for an extended period of time can lead to high coolant temperature and trigger a warning.

**Overheating (Coolant temperature indicator flash)**

If you experience engine overheating accompanied by the coolant temperature indicator flash and sluggish acceleration, please follow these steps:

1. Turn the ignition key to "⊗" (OFF) position, then turn the ignition key to the "○" (ON) position.
2. Check if the radiator fan is operating properly.

**If the fan is not running: do not start the engine, transport your motorcycle to the KOVE service center.**

**If the fan is running: turn the ignition key to the "⊗" (OFF) position and wait for the engine to cool down.**

3. After the engine has cooled down, inspect the radiator hoses for any leaks.  
**If there are leaks: do not start the engine, transport your motorcycle to the KOVE service center.**
4. Check the coolant level in the compensating tank and add coolant if necessary.
5. If above 1-4 checks are normal, you can continue riding, but keep a close eye on the warning light.

## Punctured tire

Repairing a punctured tire or removing a wheel requires special tools and professional expertise. We recommend entrusting such repairs to an authorized KOVE motorcycle service center. If you have performed emergency tire repairs, it is essential to have the tire inspected or replaced by an authorized KOVE motorcycle service center.

### Performing emergency repairs with a tire repair kit:

If your tire has a minor puncture, you can use a tubeless tire repair kit for emergency repairs.

Follow the instructions provided with the tire repair kit for proper operation. Riding a motorcycle with a temporarily repaired tire can be dangerous, and your speed should not exceed 50 km/h (31 mph). Please visit an authorized KOVE motorcycle service center as soon as possible to have the tire replaced.

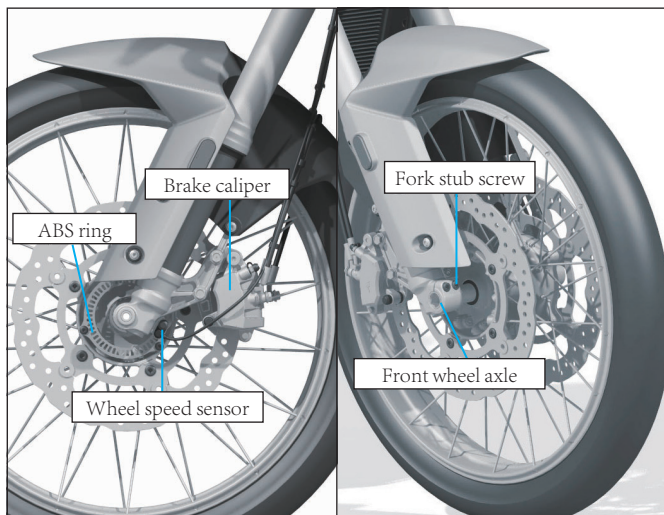


- Riding a motorcycle with a emergency repaired tire is very dangerous. If the emergency repair fails, it can lead to accidents and cause severe injuries or fatalities.
- If you must ride a motorcycle with a emergency repaired tire, exercise extreme caution and ride at a low speed, not exceeding 50 km/h (31 mph), until you can replace the tire with a new one.

## Removing/installing the wheel

### Front wheel -Standard

If you need to remove the wheel to repair a punctured tire, please follow these steps carefully to avoid damaging the wheel speed sensor and ABS ring:



### Removing:

1. Place the vehicle on a suitable stand so that the front wheel is elevated.
2. Pull the left and right brake caliper carefully back.
  - When supporting the brake calipers, make sure not to hang it on the brake hose and avoid twisting the brake hose.
  - Always keep the brake discs and brake pads free of oil and grease.
  - Do not operate the hand brake lever if the brake calipers have been removed.
  - Be careful to prevent the brake caliper from scratching the wheel when disassembling.
3. Loosen front wheel axle and fork stub screw.
4. Remove the wheel axle and front wheel.

## Installing

1. Place the front wheel in the middle of the front fork. Insert the wheel spacers (left and right) into the oil seal (the left spacer have a step).
2. Insert the front axle from right to left through the front wheel. Tighten the front axle (M16) with a torque of  $70 \pm 2 \text{ Nm}$  ( $51.6 \pm 1.5 \text{ lbf ft}$ )
3. Install the brake caliper and tighten the bolts to a torque of  $30 \text{ Nm}$  ( $22.1 \text{ lbf ft}$ ). To prevent scratching the wheel during caliper installation, please use new bolts.
4. Place the front wheel on the ground.
5. After operating the brake lever several times, apply the front brake, push down hard on the handlebar several times. Then install the two fork stub screws (M8) and tighten them to a torque of  $22 \text{ Nm}$  ( $16.2 \text{ lbf ft}$ ).
6. Lift the front wheel off the ground again. After releasing the brake lever, check if the wheel rotates smoothly.

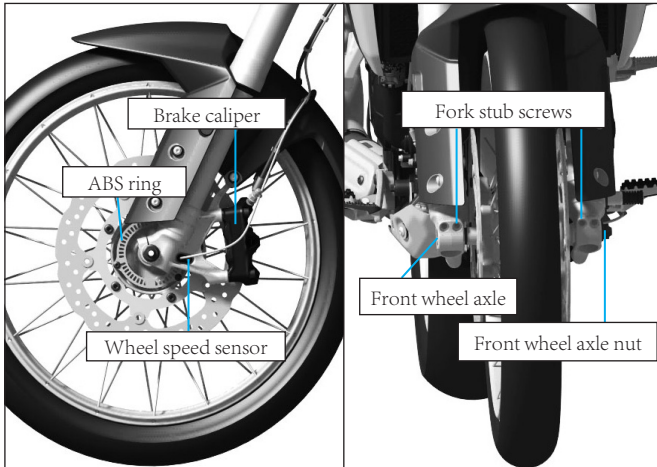
If a torque wrench was not used during the installation process, please take it to an authorized KOVE motorcycle service center as soon as possible. Improper installation can result in decreased braking performance.

### Info

- To prevent scratching, be careful when installing the brake discs between the brake pads when installing the wheel or caliper.
- When installing the front wheel, the front wheel axle must be tightened first, followed by tightening the fork stub screw. The order of these two steps should not be reversed.

## Front wheel -Pro

If you need to remove the wheel to repair a punctured tire, please follow these steps carefully to avoid damaging the wheel speed sensor and ABS ring:



### Removing:

1. Place the vehicle on a suitable stand so that the front wheel is elevated.
2. Pull the left and right brake caliper carefully back.
  - When supporting the brake calipers, make sure not to hang it on the brake hose and avoid twisting the brake hose.
  - Always keep the brake discs and brake pads free of oil and grease.
  - Do not operate the hand brake lever if the brake calipers have been removed.
  - Be careful to prevent the brake caliper from scratching the wheel when disassembling.
3. Loosen front wheel axle nut and fork stub screw.
4. Remove the wheel axle and front wheel.

## Installing

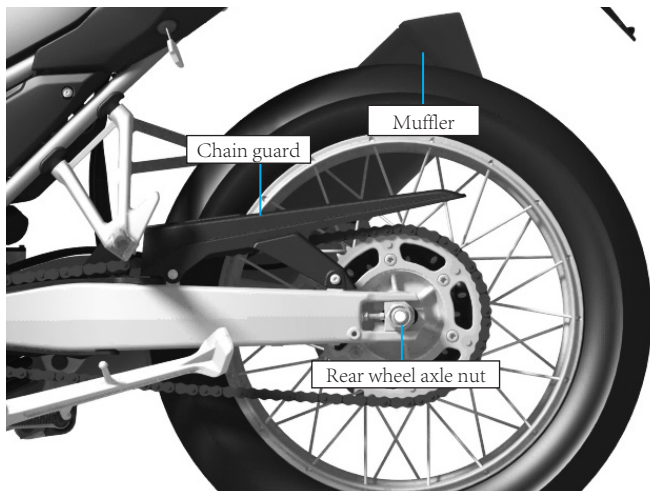
1. Place the front wheel in the middle of the front fork. Insert the wheel spacers (left and right) into the oil seal (the left spacer have a step).
2. Insert the front wheel axle (M16) from right to left through the front wheel. Tighten the front axle nut with a torque of 88 Nm (64.9 lbf ft).
3. Install the brake caliper and tighten the bolts to a torque of 45 Nm (33.2 lbf ft). To prevent scratching the wheel during caliper installation, please use new bolts.
4. Place the front wheel on the ground.
5. After operating the brake lever several times, apply the front brake, push down hard on the handlebar several times. Then install the 4 fork stub screws (M8) and tighten them to a torque of 22 Nm (16.2 lbf ft).
6. Lift the front wheel off the ground again. After releasing the brake lever, check if the wheel rotates smoothly.

If a torque wrench was not used during the installation process, please take it to an authorized KOVE motorcycle service center as soon as possible. Improper installation can result in decreased braking performance.

### Info

- To prevent scratching, be careful when installing the brake discs between the brake pads when installing the wheel or caliper.
- When installing the front wheel, the front wheel axle must be tightened first, followed by tightening the fork stub screws. The order of these two steps should not be reversed.

## Rear wheel



### Removing the rear wheel

1. Park the vehicle on a firm and level surface.
2. Securely support your motorcycle using a maintenance stand and lift the rear wheel off the ground.
3. Remove the muffler.
4. Remove the rear axle nut, rear axle, and rear wheel spacers.
5. Take off the rear wheel.

### Installing

1. To install the rear wheel, follow the reverse order of disassembly to prevent the brake caliper from scratching the wheel.
2. Align the holes on the rear wheel with the locating pin on the rear axle. First, insert the rear wheel spacers (apply grease to the spacers), and then insert the rear axle from left to right into the rear wheel assembly hole.
3. Tighten the rear wheel axle nut to a torque of 128 Nm (94.4 lbf ft).
4. Install the muffler.
5. Check the wheel to ensure it rotates freely.

If a torque wrench was not used during the installation process, please take your motorcycle to a KOVE authorized repair shop as soon as possible. Improper installation can result in decreased braking performance.

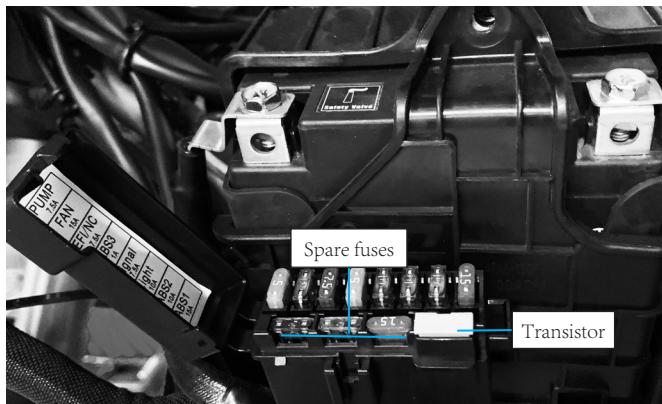
#### Info

- To prevent scratching, be careful when installing the brake discs between the brake pads when installing the wheel or caliper.



Electrical malfunction

Burned-out fuse wire



Drained battery

Please use a motorcycle lithium battery-specific charger to charge the battery. Before charging, remove the battery from the motorcycle. If the battery still does not recover after charging, please contact a KOVE authorized motorcycle repair shop.

Changing the fuse

1. Remove the left side fuel tank cowling.
2. Open fuse box cover, remove the fuse, check if the fuse is burned-out, and if it is, make sure to replace it with a spare fuse of the same number or symbol.
3. Close fuse box cover, install the left side fuel tank cowling.

Info

- Do not use a car battery charger or a motorcycle lead-acid battery charger to charge the battery, as this may cause damage to the battery or even lead to a fire.
- Before handling fuses, please refer to the "Checking and Replacing Fuses" instruction . (p. 39)



## Key

## Ignition keys



KOVE motorcycle comes with two ignition keys, which are used to start the engine, open the fuel tank lock and the seat lock.

- Avoid bending the key or subjecting it to excessive pressure.
- Avoid prolonged exposure to direct sunlight or high-temperature environments.
- Do not grind, drill, or alter its shape in any way.

## Info

- To prevent loss, please ensure that you store your keys securely. If you are concerned about losing them, it is advisable to make a duplicate key immediately.

## Additional information

### Ignition switch

1. In the parked state, please place the ignition switch in the "⊗" or "🔒" position to avoid unnecessary battery drain. Excessive battery drain can result in the inability to start the vehicle.
2. During riding, do not rotate the key.

### Emergency OFF switch

Unless in an emergency situation, do not use the emergency OFF switch. Doing so while riding can cause the engine to abruptly stop, resulting in unsafe riding conditions.

### Odometer

When the number exceeds 999,999, the display will be locked at 999,999.

### Trip meter (odometer for partial distance)

When the trip meter number exceeds 999.9, it will automatically reset to zero.

## Cleaning, care

Regular cleaning and polishing can ensure the longevity of your motorcycle. A clean motorcycle is also more likely to reveal potential issues. It is particularly important to note that the anti-icing seawater and salt spread on roads can accelerate corrosion. After riding on coastal areas or treated roads, it is crucial to thoroughly clean your motorcycle.

### Cleaning

Wait for the engine, silencer, brakes, and other high-temperature components to cool down before cleaning.

1. Thoroughly rinse the motorcycle with a low-pressure water to remove dirt.
2. If necessary, use a sponge or soft cloth dipped in a gentle cleaning agent to remove surface dirt.
3. Rinse the motorcycle thoroughly with plenty of clean water and dry it with a clean, soft cloth.
4. After drying the motorcycle, lubricate moving parts, ensuring that no lubricating oil splashes onto the brakes or tires. Braking performance can be significantly reduced by oil-contaminated brake discs, brake pads, brake drums, or brake shoes, which may lead to accidents.
5. After cleaning and drying the motorcycle, lubricate the chain immediately.
6. Waxing can help prevent corrosion.

Avoid using products that contain strong detergents or chemical solvents as they can damage the metal, paint, and plastic parts of the motorcycle. Do not wax the tires and brakes.

If your motorcycle has matte paint surfaces, do not wax those areas.

## Cleaning precautions:

- Do not use a high-pressure washer:
  - ▶ A high-pressure washer can damage moving parts and electrical components, rendering them irreparable.
  - ▶ Water entering the intake can be drawn into the throttle body or air filter.
- Do not directly wash the silencer with water:
  - ▶ Water entering the muffler can cause starting issues and rust.
- Dry the brakes:
  - ▶ Water reduces brake performance. After cleaning, intermittently use the brakes at low speeds, repeatedly lightly pressing the brake pedal to dry them using the heat generated by friction until brake performance is restored.
- Do not directly wash under the seat with water:
  - ▶ Water entering under the seat can damage electrical components.
- Do not directly wash the air filter with water:
  - ▶ If water enters the air filter, the engine may not start.
- Do not directly wash near the headlight:
  - ▶ After cleaning or riding in the rain, the internal lens of the headlight may temporarily fog up, which does not affect its functionality. However, if you notice significant water or ice buildup inside the lens, please have it inspected by an authorized KOVE motorcycle repair shop.
- Do not wax or polish matte paint surfaces:
  - ▶ Clean matte paint surfaces with an adequate amount of water and a mild cleaning agent, then dry them with a clean, soft cloth.

## Aluminum components

Aluminum is prone to corrosion when exposed to dirt, mud, or salt. Regularly clean aluminum components and follow the following guidelines to prevent scratching:

- Avoid using hard brushes, steel wool, or other abrasive cleaning products.
- Avoid riding over curbs or scraping against surfaces.

## Instrument

To prevent scratching and damage, please follow the following guidelines:

- Clean gently using a sponge and enough water.
- Use a diluted descaling agent, then rinse thoroughly with ample water to remove stubborn stains.
- Avoid contact between the instrument, lampshade, and corrosive liquids like gasoline or brake fluid.

## Muffler

The muffler is made of stainless steel, but it can also become dirty due to mud or dust. You can use a damp sponge dipped in a cleaning agent to remove the mud or dust, and then rinse it thoroughly with clean water. Afterward, you can use a chamois or a soft cloth to dry it. If necessary, you can use a commercially available compound with a fine texture to remove any burn marks, and then rinse it using the same method as removing mud and dust.

If the muffler is painted, use a neutral detergent to clean the paint surface of the exhaust pipe and muffler. If you are unsure whether the muffler has been painted, please contact a certified repair shop for KOVE motorcycles.

## Info

- Although the silencer is made of stainless steel, it can still rust. If you notice any rust, it is important to promptly remove all traces and dirt.

## Storage

If storing your motorcycle outdoors, consider using a full-body motorcycle cover. For long periods of non-riding, follow these guidelines:

- Clean and wax all painted surfaces (excluding matte finishes), and apply rust preventive oil on chrome parts.
- Lubricate the drive chain.
- Place the motorcycle on a maintenance stand with wooden blocks to elevate both tires off the ground.
- After rain, remove the cover and allow the motorcycle to dry in a well-ventilated area.
- Remove the battery to prevent discharge.

Fully charge the battery and store it in a cool, ventilated place. If keeping the battery in place, disconnect the negative terminal to prevent discharge. Before using the stored motorcycle again, perform all the necessary inspections as specified on the Service Schedule.

## Loading the vehicle

When transporting your motorcycle, it is recommended to use a motorcycle trailer, a loading ramp, or a flatbed truck with a lifting platform. Additionally, use motorcycle tie-down straps to secure the motorcycle. Never attempt to tow a motorcycle with its wheels on the ground.

### Info

- Towing a motorcycle with its wheels on the ground can cause severe damage to the transmission system.



## ENVIRONMENT

Owning and riding a motorcycle can be a great pleasure, but it is important to fulfill your responsibility to protect the environment.

### Select suitable cleaners

Use biodegradable degreasers when cleaning your motorcycle and avoid using aerosol sprays that contain chlorofluorocarbons (CFCs) as they can deplete the protective ozone layer in the atmosphere.

### Recycling

Properly dispose of used engine oil and other hazardous waste by placing them in approved containers and delivering them to a recycling center. You can contact your local National Public Affairs or Environmental Services Office for information on recycling centers in your area and instructions on how to dispose of non-recyclable waste. Do not pour used engine oil into trash bins, drains, or onto the ground, as used motor oil, gasoline, coolant, and cleaning solvents contain toxic substances that can harm sanitation workers and pollute drinking water, lakes, rivers, and oceans.

## Vehicle identification number, engine number, type label

The vehicle identification number and engine number are required for motorcycle registration, which are unique and used to identify your motorcycle and may be required when ordering replacement parts, please keep these numbers on record and keep them in a safe place.

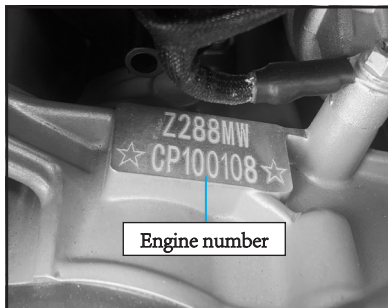
### Vehicle identification number

The vehicle identification number is stamped on the left side of the steering head.



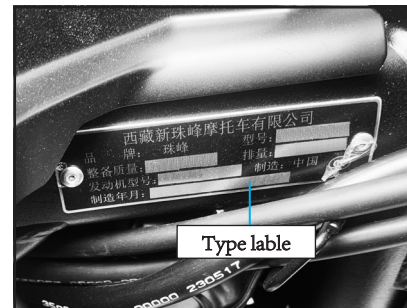
### Engine number

The engine number is stamped onto the right engine case at the top.



### Type label

The type label is located on the frame on the left.



## Catalytic converter

This motorcycle is equipped with a three-way catalytic converter. The catalytic converter contains precious metals as high-temperature chemical reaction catalysts, which convert hydrocarbons (HC), carbon monoxide (CO), and nitrogen oxides (NOx) in the exhaust gas into a compliant mixture according to regulations.

A faulty catalytic converter can pollute the air and reduce your engine's performance. When replacing it, be sure to use KOVE motorcycle parts.

Follow these guidelines to protect your motorcycle's catalytic converter:

- Use only unleaded gasoline. Leaded gasoline can damage the catalytic converter.
- Keep the engine in good running condition.
- If the engine fails to start, backfires, stalls, or exhibits any other abnormal operation, immediately stop riding and turn off the engine. Have the motorcycle inspected by an authorized KOVE service center.

# TECHNICAL DATA

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### Data sheet-1

Model	KY800X	Engine model	Z288MW
Length (mm)	STANDARD: 2240	Bore (mm) × stroke (mm)	88.0 × 65.7
Length (mm)	PRO: 2250		
Width (mm)	895	Compression ratio	13:1
Height (mm)	STANDARD: 1385	Max.net power (kW/r/min)	69.5/9000
Height (mm)	PRO: 1410		
Wheelbase (mm)	STANDARD: 1520	Max. torque (N · m/r/min)	79/7500
Wheelbase (mm)	PRO: 1530		
Track width (mm)	/	Idle speed (r/min)	1400 ± 100
Curb weight (kg)	190	Cylinder working volume (ml)	799
Curb weight (kg)	ZF800GY-A(with luggage): 202		
Preload (kg)	150	Spark plug	LMAR9AI-10
Front tire	90/90-21	Spark plug gap (mm)	0.9-1.0
Rear tire	150/70-R18	Valve clearance (mm)	Intake valve: 0.1-0.15
Max. speed (km/h)	210		Exhaust valve: 0.15-0.2

### Data sheet-2

Lubricating oil capacity (L)	3.2	Main fuse	30A
Gasoline capacity (L)	19 ± 0.2L	Instrument	7" TFT
Primary gear ratio	1.923	Headlights	LED
First gear	2.846	DRL	LED
Second gear	2.000	Rear position light/ brake light	LED
Third gear	1.550	Front turn signals	LED
Fourth gear	1.273	Rear turn signals	LED
Fifth gear	1.083	Rear license plate light	LED
Sixth gear	0.957	Ignition method	ECU Control ignition
Final gear ratio	2.812		
Battery	12V 6Ah (lithium)		

### Torque reference

Fastener type	Torque	Fastener type	Torque
5mm bolts and nuts	6 Nm (4.4 lbf ft)	6mm screws	8 Nm (5.9 lbf ft)
6mm bolts and nuts	12 Nm (8.9 lbf ft)	6mm flange bolts (8mm head; samll flange)	10 Nm (7.4 lbf ft)
8mm bolts and nuts	22 Nm (16.2 lbf ft)	6mm flange bolts (8mm head; Large flange)	12 Nm (8.9 lbf ft)
10mm bolts and nuts	60 Nm (44.3 lbf ft)	6mm flange bolts (10mm head) and nuts	12 Nm (8.9 lbf ft)
12mm bolts and nuts	80 Nm (59 lbf ft)	8mm flange bolts and nuts	22 Nm (16.2 lbf ft)
5mm screws	5 Nm (3.7 lbf ft)	/	/

#### Info

· This vehicle uses the standard torque values in the above table except for the specified torque.

## Chassis tightening torque

Item	Thread diameter(mm)	Torque	Remark
License plate light panel with rear fender bracket screw	ST3.5	1 Nm (0.7 lbf ft)	
License plate light panel with rear fender screw	ST4.2	1 Nm (0.7 lbf ft)	
Rear fender screw	ST4.2	1 Nm (0.7 lbf ft)	
Front side cowling inner panel screw (left, right)	ST4.2	1 Nm (0.7 lbf ft)	
Rear side cowling inner panel screw (left, right)	ST4.2	1 Nm (0.7 lbf ft)	
Front side cowling lower inner panel screw (left,right)	ST4.2	1 Nm (0.7 lbf ft)	
Fuel tank side cowling inner panel screw (left, right)	ST4.2	1 Nm (0.7 lbf ft)	
Fuel tank side cowling component screw (left, right)	ST4.2	1 Nm (0.7 lbf ft)	
OBD fixing screw	ST4.2	1 Nm (0.7 lbf ft)	
Magnetic holder on side stand screw	M3	1 Nm (0.7 lbf ft)	
Screw for throttle grip	M4	3 Nm (2.2 lbf ft)	
Side stand switch screw	M5	5 Nm (3.7 lbf ft)	
Fuel tank overflow hose screw	M5	5 Nm (3.7 lbf ft)	
Fuel pump screw	M5	3 Nm (2.2 lbf ft)	
Front ABS ring screw	M5	4 Nm (3 lbf ft)	Loctite®243 ™
Rear brake hose guide screw (link fork)	M5	6 Nm (4.4 lbf ft)	
Rear ABS ring screw	M5	4 Nm (3 lbf ft)	Loctite®243 ™
Rear break pedal screw	M5	3 Nm (2.2 lbf ft)	Loctite®243 ™
ECU fixing screw	M5	3 Nm (2.2 lbf ft)	
Fuel level sensor screw	M5	3 Nm (2.2 lbf ft)	
Fuel level sensor bracket screw	M5	3 Nm (2.2 lbf ft)	



Item	Thread diameter (mm)	Torque	Remark
Taillight unit assembly screw	M5	5 Nm (3.7 lbf ft)	
Rear fender inner panel screw (rear fender)	M5	5 Nm (3.7 lbf ft)	
Rear fender inner panel bracket screw	M5	6 Nm (4.4 lbf ft)	
Rear upper tail panel screw (rear fender)	M5	6 Nm (4.4 lbf ft)	
Rear wheel mudguard screw	M5	6 Nm (4.4 lbf ft)	
Fuel tank lower protector (left, right)	M5	6 Nm (4.4 lbf ft)	
Headlight cowling screw (left, right fuel tank cowling)	M5	6 Nm (4.4 lbf ft)	
Fuel tank side cowling screw (left, right fuel tank)	M5	6 Nm (4.4 lbf ft)	
Fuel tank protector screw (fuel tank)	M5	6 Nm (4.4 lbf ft)	
Fuel tank protector screw (left, right front panel)	M5	6 Nm (4.4 lbf ft)	
Front panel screw (left, right fuel tank)	M5	6 Nm (4.4 lbf ft)	
Upper bracket cable guide screw	M5	6 Nm (4.4 lbf ft)	
Battery support bracket cover screw	M5	6 Nm (4.4 lbf ft)	
Fuel tank side cowling screw (left, right front panel)	M5	6 Nm (4.4 lbf ft)	
Headlight cowling inner panel screw	M5	6 Nm (4.4 lbf ft)	
Headlight cowling screw	M5	6 Nm (4.4 lbf ft)	
Headlight bracket screw	M5	6 Nm (4.4 lbf ft)	
Headlight bracket cover screw	M5	6 Nm (4.4 lbf ft)	
Windshield assembly screw	M5	6 Nm (4.4 lbf ft)	
Instrument bracket screw	M5	6 Nm (4.4 lbf ft)	
Instrument bracket screw (front cowling)	M5	6 Nm (4.4 lbf ft)	

Item	Thread diameter (mm)	Torque	Remark
Top case rubber ring screw	M5	4 Nm (3 lbf ft)	
Side cover screw (left, right)	M6	6 Nm (4.4 lbf ft)	
Air cut-off valve bracket screw (frame)	M6	8 Nm (5.9 lbf ft)	
Seat lock screw	M6	8 Nm (5.9 lbf ft)	
Brake fluid reservoir for rear brake screw	M6	10 Nm (7.4 lbf ft)	
Fuel tank side cowling bracket screw (fuel tank)	M6	6 Nm (4.4 lbf ft)	
Seat fixing bracket screw (fuel tank)	M6	6 Nm (4.4 lbf ft)	
Seat bracket screw (fuel tank)	M6	6 Nm (4.4 lbf ft)	
Starter motor coupler bracket screw (fuel tank)	M6	6 Nm (4.4 lbf ft)	
ABS bracket screw (frame)	M6	10 Nm (7.4 lbf ft)	
ABS bracket (ABS)	M6	10 Nm (7.4 lbf ft)	
Fuel tank side cowling bracket screw (left, right)	M6	10 Nm (7.4 lbf ft)	
Muffler cover screw	M6	10 Nm (7.4 lbf ft)	
Coolant reservoir screw (radiator)	M6	10 Nm (7.4 lbf ft)	
Top radiator bracket screw	M6	10 Nm (7.4 lbf ft)	
Bottom radiator bracket screw	M6	10 Nm (7.4 lbf ft)	
Shift arm pinch screw	M6	10 Nm (7.4 lbf ft)	
Shift arm and rod screw	M6	10 Nm (7.4 lbf ft)	Loctite®243™
Shift rod locknut (shift arm side)	M6	6 Nm (4.4 lbf ft)	
Shift rod locknut (shift pedal side)	M6	6 Nm (4.4 lbf ft)	
Shift lever and rod screw	M6	6 Nm (4.4 lbf ft)	Loctite®243™

Item	Thread diameter (mm)	Torque	Remark
Fuel rail screw	M6	10 Nm (7.4 lbf ft)	
Charcoal canister screw	M6	10 Nm (7.4 lbf ft)	
Air filter screw	M6	10 Nm (7.4 lbf ft)	
Sliding guard screw	M6	6 Nm (4.4 lbf ft)	
Front brake hose fixing screw	M6	10 Nm (7.4 lbf ft)	
Ball joint of push rod on foot brake cylinder screw	M6	10 Nm (7.4 lbf ft)	
Front wheel speed sensor screw	M6	8 Nm (5.9 lbf ft)	
Rear wheel speed sensor screw	M6	8 Nm (5.9 lbf ft)	
Horn screw	M6	10 Nm (7.4 lbf ft)	
Rectifier screw	M6	10 Nm (7.4 lbf ft)	
Ground wire on frame screw	M6	10 Nm (7.4 lbf ft)	
Engine guard screw	M6	10 Nm (7.4 lbf ft)	
Engine guard screw	M6	10 Nm (7.4 lbf ft)	
Engine sprocket cover screw	M6	10 Nm (7.4 lbf ft)	
Chain guard screw	M6	10 Nm (7.4 lbf ft)	
Rear reflector nut	M6	8 Nm (5.9 lbf ft)	
Rear fender inner panel screw (rear fender bracket)	M6	10 Nm (7.4 lbf ft)	
Rear side cowling assembly screw (left, right)	M6	8 Nm (5.9 lbf ft)	
Rear upper tail panel screw (frame)	M6	8 Nm (5.9 lbf ft)	
Side panel screw (left, right frame)	M6	8 Nm (5.9 lbf ft)	
Rear fender screw ( frame)	M6	8 Nm (5.9 lbf ft)	

Item	Thread diameter (mm)	Torque	Remark
Rear fender cowling screw	M6	8 Nm (5.9 lbf ft)	
Rear fender cowling screw (frame)	M6	8 Nm (5.9 lbf ft)	
Front fender screw	M6	8 Nm (5.9 lbf ft)	
Fuel tank side and lower cowling screw	M6	8 Nm (5.9 lbf ft)	
Battery support bracket	M6	10 Nm (7.4 lbf ft)	
Front cowling screw (frame)	M6	10 Nm (7.4 lbf ft)	
Windshield bracket screw	M6	10 Nm (7.4 lbf ft)	
Top case bracket screw	M6	10 Nm (7.4 lbf ft)	
Saddlebag bracket screw (left)	M6	10 Nm (7.4 lbf ft)	
Saddlebag bracket screw (right)	M6	10 Nm (7.4 lbf ft)	
Front wheel disc screw	M7	20 Nm (14.8 lbf ft)	Loctite®243™
Ignition lock screw	M8	22 Nm (16.2 lbf ft)	
Foot brake lever screw	M8	25 Nm (18.4 lbf ft)	Loctite®243™
Crash bar bracket screw	M8	22 Nm (16.2 lbf ft)	Loctite®243™
Crash bar screw	M8	22 Nm (16.2 lbf ft)	
Fuel tank (Front and rear) screw	M8	22 Nm (16.2 lbf ft)	
Engine fixing arm linkage bracket left bottom screw (frame)	M8	22 Nm (16.2 lbf ft)	
Engine fixing arm linkage bracket left bottom screw (engine)	M8	22 Nm (16.2 lbf ft)	
Engine fixing arm linkage bracket right bottom screw (frame)	M8	22 Nm (16.2 lbf ft)	
Engine fixing arm linkage bracket right bottom screw (engine)	M8	22 Nm (16.2 lbf ft)	
Exhaust pipe screw	M8	22 Nm (16.2 lbf ft)	

Item	Thread diameter (mm)	Torque	Remark
Rear footrest bracket screw	M8	22 Nm (16.2 lbf ft)	
Grab handle front screw	M8	22 Nm (16.2 lbf ft)	
Grab handle rear screw	M8	22 Nm (16.2 lbf ft)	
Exhaust pipe nut	M8	18 Nm (13.3 lbf ft)	
Shift lever screw	M8	25 Nm (18.4 lbf ft)	Loctite®243™
Handlebar clamp screw	M8	22 Nm (16.2 lbf ft)	
Upper bracket pinch screw	M8	22 Nm (16.2 lbf ft)	
Steering damper screw	M8	22 Nm (16.2 lbf ft)	
Steering damper screw (on lower bracket)	M8	22 Nm (16.2 lbf ft)	
Top case rack screw	M8	22 Nm (16.2 lbf ft)	
Side case bracket nut	M8	22 Nm (16.2 lbf ft)	
Side case bracket screw (grab handle)	M8	22 Nm (16.2 lbf ft)	
Side case bracket screw (passenger footrest)	M8	22 Nm (16.2 lbf ft)	
Side case bracket screw	M8	22 Nm (16.2 lbf ft)	
Saddlebag bracket screw	M8	22 Nm (16.2 lbf ft)	
Lower bracket pinch screw	M8	22 Nm (16.2 lbf ft)	
Front caliper (HANGTE) screw (Standard)	M8	35 Nm (25.8 lbf ft)	Loctite®243™
Rear brake disc screw	M8	30 Nm (22.1 lbf ft)	Loctite®243™
Rear wheel sprocket screw	M8	37 Nm (27.3 lbf ft)	
Fork stub screw (Pro)	M8	22 Nm (16.2 lbf ft)	
Handlebar support screw	M8	22 Nm (16.2 lbf ft)	

Item	Thread diameter (mm)	Torque	Remark
Muffler assembly screw	M8	22 Nm (16.2 lbf ft)	
Front caliper (TAISKO) screw (Pro)	M10	45 Nm (33.2 lbf ft)	Loctite®243 ™
Engine mounting screw (rear)	M10	54 Nm (39.8 lbf ft)	
Engine mounting nut (rear)	M10	54 Nm (39.8 lbf ft)	
Engine mounting screw (left upper side)	M10	54 Nm (39.8 lbf ft)	Loctite®243 ™
Engine mounting screw (right upper side)	M10	54 Nm (39.8 lbf ft)	Loctite®243 ™
Engine mounting screw (front upper)	M10	54 Nm (39.8 lbf ft)	Loctite®243 ™
Engine mounting screw (front bottom)	M10	54 Nm (39.8 lbf ft)	Loctite®243 ™
Crash bar screw	M10	45 Nm (33.2 lbf ft)	
Engine bracket screw left	M10	44 Nm (32.5 lbf ft)	Loctite®243 ™
Engine bracket screw right	M10	44 Nm (32.5 lbf ft)	Loctite®243 ™
Top shock absorber screw	M10	44 Nm (32.5 lbf ft)	
Bottom shock absorber screw	M10	44 Nm (32.5 lbf ft)	
Front brake hose union screw (master cylinder side)	M10	22 Nm (16.2 lbf ft)	
Dedicated screw for side stand	M10	Tighten screw 2 Nm (1.5 lbf ft). secure the screw and fasten the nut 22 Nm (16.2 lbf ft).	Loctite®243 ™ , screw greased
Brake hose with ABS screw	M10	22 Nm (16.2 lbf ft)	
Front brake hose union screw (left brake caliper side)	M10	22 Nm (16.2 lbf ft)	
Front brake hose union screw (right brake caliper side)	M10	22 Nm (16.2 lbf ft)	

Item	Thread diameter (mm)	Torque	Remark
Rear brake hose union screw (brake caliper side)	M10	22 Nm (16.2 lbf ft)	
Handlebar support screw	M10	30 Nm (22.1 lbf ft)	
Front brake hose union screw (Pro)	M10	22 Nm (16.2 lbf ft)	
Front brake hose union screw (Pro)	M10	22 Nm (16.2 lbf ft)	
Suspension linkage screw (frame)	M12	60 Nm (44.3 lbf ft)	
Suspension linkage screw	M12	60 Nm (44.3 lbf ft)	
Suspension linkage screw (link fork)	M12	60 Nm (44.3 lbf ft)	
Front wheel axle nut (Pro)	M16	88 Nm (64.9 lbf ft)	
Link fork axle	M16	88 Nm (64.9 lbf ft)	
Rear wheel axle nut	M22	128 Nm (94.4 lbf ft)	
Steering stem nut	M24	108 Nm (79.7 lbf ft)	
Steering head ring nut	M25	The first stage: 40 Nm (29.5 lbf ft), loosening the nut in the second stage, tighten the nut to 10 Nm (7.4 lbf ft). , In the third stage, keep the steering head fixed and loosen it by 1/4 turn.	