FANTIC WANTS TO THANK YOU

for choosing one of its products.

We recommend that you read this manual before driving your vehicle. It contains information, advice and warnings on the vehicle maintenance and use. The instructions in this manual have been prepared to give you a simple and clear guide for use. We are sure that taking it into consideration you will gain confidence with your new vehicle, which you can use for a long time and with full satisfaction.

| INTRODUCTION | 6 |
|----------------------------------|----|
| GENERAL INFORMATION | |
| Symbols used | |
| Changes made | |
| General warnings | |
| Vehicle identification | 13 |
| RULES OF USE | 15 |
| Behaviour and driving | 15 |
| Running-in rules | |
| Turning the vehicle on and off | |
| Starting and using the gearshift | |
| Safe braking | |
| Anti-lock Brake System (ABS) | |
| Parking | |
| Side kickstand | |
| Baggage | |
| SilencerClothing | |
| Accessories | |
| Transport | |
| Refuelling | |
| MAIN ELEMENTS AND DEVICES | |
| Controls | |
| | |
| DRIVING CONTROLS AND ADJUSTMENTS | 33 |

TABLE OF CONTENTS

| Ignition switch | 33 |
|--|----|
| Steering lock engagement | |
| Engine stop switch | 34 |
| Start button | 35 |
| Horn button | 35 |
| Turn signal switch | 36 |
| Low beam/high beam light switch | 36 |
| High beam flashing button | 37 |
| Suspensions | |
| Front brake lever adjustment ("Competition" version) | 43 |
| Headlights and turn signals | 44 |
| Rear-view mirrors | |
| DASHBOARD | 46 |
| Digital instrument | |
| Multifunctional display | |
| Riding mode selection | |
| Accessing the settings menu | |
| Engine stop warning | |
| ORDINARY MAINTENANCE OPERATIONS | |
| | |
| Importance of routine maintenance | |
| Safety rules for routine maintenance | |
| Engine oil | |
| Tires | |
| Coolant | |
| Braking system | |
| Drive chain | |

| Clutch lever clearance adjustment | 74 |
|---------------------------------------|-----|
| Throttle control clearance adjustment | 76 |
| Troubleshooting | 78 |
| Battery | 80 |
| Fuses and relays | 82 |
| Vehicle inactivity | 84 |
| Vehicle washing | 85 |
| Recommended products table | 87 |
| MAINTENANCE PLAN | 89 |
| Maintenance schedule | 89 |
| Scheduled maintenance plan | |
| Spark plug | 94 |
| Engine oil replacement | 96 |
| Air filter | 98 |
| TECHNICAL DATA | 102 |
| DECLARATION OF CONFORMITY | 107 |
| | |

INTRODUCTION

This manual is an integral part of the vehicle and if the vehicle should be resold, it must be delivered together with the vehicle. Fantic Motor reserves the right to modify and make changes, at any time and without notice, to the models described, specifications and design data, guaranteeing the essential characteristics described and illustrated herein. This publication, or part of it, cannot be reduced or translated without the company's approval. Reproduction of the contents used in this manual without the Manufacturer's permission is prohibited. Fantic Motor assumes no responsibility for printing errors and omissions. All rights reserved.

Read this manual carefully before starting the engine. Your safety and that of others does not depend only on your quickness of reflexes and agility, but also on your knowledge of the vehicle, its condition and the rules for safe driving. Therefore, it is recommended that you familiarise yourself with the vehicle so that you can handle all driving situations with mastery and confidence.

MANUFACTURER DATA AND EDITION

FANTIC MOTOR S.P.A.

www.fantic.com - info@fanticmotor.it

Edition: 00/2025. Code: V2375005.

SYMBOLS USED

In this manual you will find notes and warnings marked by the following symbols:

- Important safety regulations for the vehicle and the driver.
- $oxed{(i)}$ Information notes on the vehicle use and characteristics.
- M Tightening torque: note indicating one or more tightening torques values referred to the procedure described.
- Measurement data: note indicating the values of the measurements to be complied with or to verify for the procedure described.
- X Equipment: note warning the user of the need for specific tools for the described procedure.
- Consumable: note that illustrates the names, types and/or quantities of consumables (such as oil, fuel, sealants, additives, etc.) to be used for the procedure described.

CHANGES MADE

Any arbitrary changes made to the vehicle, including the removal of original parts, can impair its performance and lower its safety level, even making it illegal. It is recommended to always comply with all national and local laws and regulations regarding vehicle equipment. In particular, it is essential to avoid technical modifications intended to increase performance or alter the original characteristics of the vehicle.

Alterations to original parts are not only forbidden by law, but also make the vehicle non-compliant and dangerous for driving. Such changes invalidate the warranty and invalidate the type-approval.

Fantic Motor declines all responsibility for damage or injury to persons, animals or property resulting from arbitrary changes. The user is personally responsible for the choice of installation and use of accessories, and is strongly advised to use original accessories.

GENERAL INFORMATION

GENERAL WARNINGS

Hot components



Nome vehicle components, such as the engine, exhaust and radiators, can reach high temperatures and remain hot for some time even after the vehicle is switched off. It is therefore important to wear appropriate clothing and insulating gloves or wait for complete cooling before performing any work in their vicinity.

Carbon monoxide



Exhaust fumes contain, among other substances, carbon monoxide, a toxic gas that can cause death. Therefore, for certain operations, it is essential to ensure that the work is carried out in an open space or in a well-ventilated environment. If operating in enclosed spaces, use an evacuation system for the exhaust fumes.

Fuel



 \bigwedge The fuel used is extremely flammable and can become explosive under certain conditions; therefore, it is essential to carry out refuelling and maintenance operations in a well-ventilated area and with the vehicle switched off.



⚠ Do not smoke during refuelling and/or in the presence of fuel vapours; avoid contact with open flames, sparks and/or any other source that could cause ignition and/or explosion.



During maintenance operations, always wear suitable clothing, gloves and protective goggles.



The fuel used is harmful to health both if inhaled and ingested. Moreover, it is an irritant and can cause serious consequences if it comes into contact with the skin and/or eyes.



/!ackslash If swallowed, do not induce vomiting. Go urgently to a first aid centre, reporting the cause and how the accident occurred.



/ In case of contact with the skin, wash the affected parts immediately with plenty of clean water and soap, repeating the operation until all residues have been removed.

 \bigwedge In case of contact with the eyes, immediately rinse the affected parts with plenty of clean, fresh water and go to a first-aid centre as a matter of urgency, indicating the cause and how the accident occurred.



⚠ In case of contact with clothing, undress and wash with plenty of clean water and soap. Replace contaminated clothing and wash it specifically as soon as possible.



Keep out of the reach of children.



\(\bar{\cappa}\) Do not disperse in the environment.

Engine oil, brake oil and suspension oil



Noring maintenance operations, always wear suitable clothing, gloves and protective goggles.



The engine oil, brake oil and suspension oil used are harmful to health, both if inhaled and ingested. They are also irritating, brake fluid is also corrosive, and can cause serious consequences if they come into contact with the skin and/or eyes.



If swallowed, do not induce vomiting. Go urgently to a first aid centre, reporting the cause and how the accident occurred.



In case of contact with the skin, wash the affected parts immediately with plenty of clean water and soap, repeating the operation until all residues have been removed.



In case of contact with the eyes, immediately rinse the affected parts with plenty of clean, fresh water and go to a first-aid centre as a matter of urgency, indicating the cause and how the accident occurred.



In case of contact with clothing, undress and wash with plenty of clean water and soap. Replace contaminated clothing and wash it specifically as soon as possible.



Brake fluid may damage the painted surfaces and the plastic and/or rubber components of the vehicle. During maintenance, it is advisable to protect these components with a clean cloth.

GENERAL INFORMATION



Keep out of the reach of children.



 \bigwedge Exhausted engine oil, brake oil and suspension oil must be collected in a sealed container and delivered to the nearest workshop, waste oil collection point or ecological island, where authorised personnel will dispose of them.



Do not disperse in the environment.

Coolant



During maintenance operations, always wear suitable clothing, gloves and protective goggles.



 $/\!\! \mid \! \! \setminus$ When the engine is running, the coolant is under pressure. Therefore, it is important to wait for the hot vehicle components to cool completely before removing the radiator cap.



The ethylene glycol in the coolant may be flammable. Although the flame is not visible, it can still cause severe burns.



Take care not to spill coolant on hot vehicle components.



The coolant used is harmful to health, both if inhaled and ingested. Moreover, it is an irritant and can cause serious consequences if it comes into contact with the skin and/or eyes.



If swallowed, do not induce vomiting. Go urgently to a first aid centre, reporting the cause and how the accident occurred.



In case of contact with the skin, wash the affected parts immediately with plenty of clean water and soap, repeating the operation until all residues have been removed.



In case of contact with the eyes, immediately rinse the affected parts with plenty of clean, fresh water and go to a first-aid centre as a matter of urgency, indicating the cause and how the accident occurred.



 \bigwedge In case of contact with clothing, undress and wash with plenty of clean water and soap. Replace contaminated clothing and wash it specifically as soon as possible.



Keep out of the reach of children.



 \bigwedge Do not disperse in the environment .

Battery



 $({
m i}$) The type of battery installed is maintenance-free, so there is no need to check the electrolyte level or top up with distilled water.



It is important to ensure adequate ventilation during battery charging operations.



⚠ The battery can release explosive gases. Avoid contact with naked flames, sparks and any other source potentially capable of igniting or exploding.



The electrolyte in the battery may contain acids, such as sulphuric acid. This electrolyte is harmful to health, whether inhaled or ingested. In addition, it is irritating, corrosive and caustic, and can cause serious consequences if it comes into contact with the skin and/or eyes.



If swallowed, do not induce vomiting. Go urgently to a first aid centre, reporting the cause and how the accident occurred.



 $\dot{\mathbb{N}}$ In case of contact with the skin, wash the affected parts immediately with plenty of clean water and soap, repeating the operation until all residues have been removed.



In case of contact with the eyes, immediately rinse the affected parts with plenty of clean, fresh water and go to a first-aid centre as a matter of urgency, indicating the cause and how the accident occurred.



 $/
vert \setminus$ In case of contact with clothing, undress and wash with plenty of clean water and soap. Replace contaminated clothing and wash it specifically as soon as possible.

GENERAL INFORMATION



 \bigwedge Keep out of the reach of children.



♠ Dispose of the spent battery regularly.



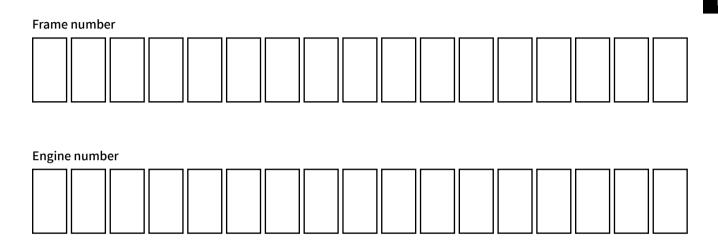
 \bigwedge Do not disperse in the environment .

Radiator and cooling fan



Neep hands and clothing away from the cooling fan as it starts automatically and without warning.

VEHICLE IDENTIFICATION



Fantic Motor vehicles are equipped with frame and engine identification numbers. It is advisable to write down the identification numbers in the spaces indicated above, in order to remind them in case of loss or damage.

 \triangle

Do not modify the identification data in order to avoid serious penal and administrative sanctions. In addition, the warranty for new vehicles will be invalidated if the frame identification number has been changed and can not be readily determined.

GENERAL INFORMATION

Frame number

The frame number is punched on the steering tube on the right side.

- $oxed{i}$ The image shown is for information only.
- (i) For the original spare parts supply this identification number to your dealer.



Engine number

The engine number is punched on the left side of the crankcase.

(i) The image shown is for information only.



BEHAVIOUR AND DRIVING

Some safety tips are given below to avoid damage to people and/or things and to use your vehicle with an easier and safer drive.

Vehicle use

To use the vehicle it is necessary to meet all the law requirements.

It is advisable, in order to acquire a good knowledge of the vehicle, to use it in areas without traffic or unpopulated stretches of road.

It is advisable to always respect the highway code while driving, to avoid sudden or dangerous manoeuvres keeping both hands on the handlebar and always keeping your feet on the appropriate footboards. Pay close attention while riding.



♠ Do not ride the vehicle while drunk, under the influence of drugs, after taking certain medicines or in a state of physical fatigue and drowsiness. Failure to comply with these rules is considered extremely dangerous and could cause serious damage to property and/or people.



Before driving, check the vehicle for fluid leaks such as engine oil, brake oil, suspension oil and coolant.

Evaluate and keep in consideration the conditions of the road surface, visibility and weather. In a situation not suitable for safe driving, reduce the speed and drive carefully.

The braking effect in wet roads without ever having applied the brakes is initially less; under these conditions it is advised to periodically operate the brakes.



 \bigwedge Although the vehicle is equipped with an ABS system, be careful when braking on low-grip surfaces, such as wet or unpaved roads.

If the vehicle is used on roads that are dirty with sand, mud or snow mixed with salt, it is recommended to check the brake discs and, if necessary, clean them with suitable non-aggressive detergents to remove any abrasive agglomerates inside the holes, which could cause premature wear of the brake pads.

The getting on and off from the vehicle must be in complete freedom of movement and without impediments. Go up and down only from the left side of the vehicle and with the side kickstand down to prevent unbalancing or loss of balance, causing falls or overturns.



 $\sqrt{100}$ The rider is always the first to go on and the last to go down as he/she has to govern the stability of the vehicle.

Getting on

Hold the handlebar correctly without putting your weight on the side kickstand and get on the vehicle. Keep your feet on the ground to support the vehicle in an upright position, ready to start.

- i The side kickstand is designed to support the weight of the vehicle and a minimum load, without rider and passenger.
- (i) If it is not possible to have both feet on the ground when getting on, keep only the right foot on the ground, as the left side of the vehicle is supported by the side kickstand, in case of imbalance or loss of balance.

The footboards must be extracted from the passenger and wait for him/her to get on the vehicle.

- (i) The rider must instruct the passenger on how to get on the vehicle. The passenger must climb with the utmost caution, avoiding to unbalance the rider and the vehicle.
- $oxed{i}$ The passenger must always get on from the left side of the vehicle, using the left footboard.

Use the left foot to retract the lateral kickstand.

Getting off

Stop the vehicle in an area suitable for stopping or parking, ensuring that the ground is stable and free of obstacles. Fully extend the side kickstand using the left foot.

(i) If it is not possible to have both feet on the ground when getting off, keep only the right foot on the ground, as the left side is supported by the side kickstand, in case of imbalance or loss of balance.

Keeping the vehicle in running position, wait for the passenger to get off the vehicle.

- $\widehat{f i}$ The passenger must always get off from the left side of the vehicle, using the left footboard.
- (i) The rider must instruct the passenger on how to get off the vehicle. The passenger must get off with the utmost caution, avoiding unbalancing the rider and the vehicle.
- Do not get off the vehicle jumping or by stretching the leg to touch the ground. The stability and balance of the vehicle would be compromised.

Tilt the vehicle making the side kickstand touch the ground. Get off the vehicle and turn the handlebar completely to the left.



 \bigwedge Make sure that the vehicle is stationary and stable.



↑ Do not lift the vehicle grasping the license plate holder frame, in order to avoid damage.

RUNNING-IN RULES

Engine

The period between 0 and 1000 km (600 mi) is the most important in the life of the engine. For this reason, it is essential to carefully follow the instructions below.

As the engine is new, it should not be subjected to excessive strain in the first 1000 km (600 mi). In this phase, the various engine parts wear and adapt to each other, creating the correct operating clearances. During this period, it is essential to avoid driving for long periods at full throttle or in conditions that could cause engine overheating.

0-500 km (0-300 mi)

- Avoid prolonged operation above 5000 rpm.
- After every hour of use, switch off the engine and allow it to cool down for 5-10 minutes.
- Vary the engine speed occasionally and do not constantly maintain the same throttle opening.

500-1000 km (300-600 mi)

- Avoid prolonged operation above 7500 rpm.
- Accelerate freely in the various gears, but never at full throttle.



 \bigwedge At 1000 km (600 mi), carry out the first service as indicated in the "Scheduled Maintenance Plan".

1000 km (600 mi) and beyond

- At this point, the vehicle can be used normally.



Always keep the engine speed outside the red zone of the tachometer.



 \bigwedge In case of malfunctions of the engine during the running-in period, immediately contact an authorised Fantic **Motor Service Centre.**

Braking system

Brake pads, being new, require a running-in period to achieve perfect contact with the discs. The brakes running-in requires approximately 200 km (125 mi) of urban driving. During this period, allow longer braking distances and apply more pressure on the brake lever. Avoid abrupt or prolonged braking.

TURNING THE VEHICLE ON AND OFF

Starting

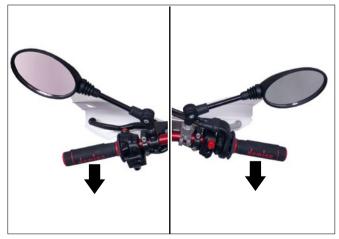
Release the steering lock turning the key clockwise and get on the vehicle assuming the correct posture, making sure that the side kickstand is completely retracted.



⚠ If the side kickstand is lowered, the vehicle can be started only with the gearshift in neutral. If you try to engage the gear the vehicle will switch off.



For safety reasons, it is necessary to apply the front and/or rear brake, pull the clutch lever and make sure the gearshift is in neutral before starting the engine.



Turn the key to (**ON**) and wait a few seconds to load the standard parameters on the digital dashboard.



Deactivate the engine stop function by pressing the "A" switch and then pressing the "B" start button once.

It is advisable to warm up the engine well, proceeding for the first kilometres at reduced speed. Do not start abruptly with the cold engine.



Engine stop



 \bigwedge Do not operate the engine stop switch while the vehicle is in motion, as this could cause the engine to suddenly switch off, resulting in mechanical damage and, above all, the risk of losing control of the vehicle.



\ Avoid releasing the clutch too quickly or abruptly. A sudden release could cause the engine to switch off or uncontrolled acceleration that could cause the front wheel to lift.



Avoid sudden stops or sudden vehicle slow-downs.

Gradually slow down until the vehicle comes to a complete standstill by simultaneously operating the clutch and using both brakes.

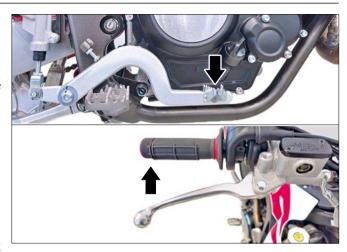
Keeping the clutch engaged, place the gearshift lever in neutral.

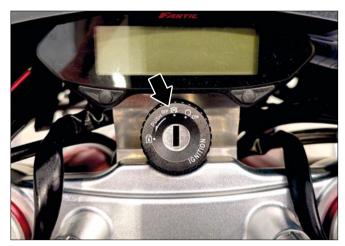
Then turn the key anti-clockwise to the (**OFF**) position and press the engine stop switch (see "Engine stop switch section").

Lower the side kickstand and step off the left side of the vehicle.

If necessary, engage the steering lock (see "Steering lock engagement" section).

(i) If you forget the key turned to "ON", the battery charge level will decrease until it is down and will need to be replaced.





STARTING AND USING THE GEARSHIFT

Starting

After starting the vehicle and warming the engine well, operate the clutch lever and engage the first gear pressing the gearshift pedal downwards. The neutral indicator light (\mathbf{N}) will go off on the dashboard.



Releasing the clutch slowly, gradually accelerate to allow the vehicle to move forward.



During the acceleration phase, take care not to exceed 11200 rpm (indicated by the tachometer in the "Digital dashboard" section), to avoid causing serious damage to the engine.



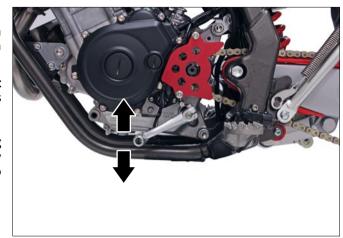
Gearshift use

To change gears, release the throttle grip, operate the clutch lever and lift the gearshift pedal up to shift up, or push down to shift down

i If you are new to driving the vehicle, it is important to familiarise yourself with the vehicle's controls and functions.

 \triangle

Shift one gear at a time. Upshifting or downshifting the gearshift more than a single gear at a time may cause the engine to run out of speed and risk to exceed the maximum speed allowed by it.



SAFE BRAKING

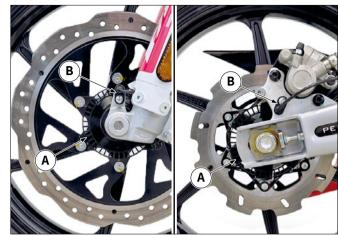
- (i) Reduce speed in time and downshift to use the engine brake, then apply gradual braking using both brakes (front and rear) in a balanced way.
- (i) Before the vehicle stops completely, actuate the clutch to prevent the engine from suddenly shutting down.
- Take particular care on wet, unpaved or slippery surfaces (such as gravel, leaves or ice), where grip is reduced; brake gently and avoid hard braking or excessive use of the front brake to prevent wheel lock-up and reduce the risk of a fall.

ANTI-LOCK BRAKE SYSTEM (ABS)

The vehicle is equipped with an ABS system that can intervene either on the front wheel only or on both wheels, depending on the riding mode selected. For more information, see the "Riding mode selection" section.

ABS consists of an electro-hydraulic device that regulates the pressure within the brake circuit during braking by detecting the locking tendency of the phonic wheels "A" via angular speed sensors "B".

This system improves vehicle stability when braking compared to a conventional braking system, thus reducing the risk of a crash.





⚠ Do not exceed the physical road holding limits of the vehicle. It is the rider's responsibility to keep an appropriate speeds, always evaluating the weather and road conditions. The ABS cannot compensate for errors in judgement and/or incorrect use of the vehicle.



/ In the event of a battery malfunction, the ABS system is deactivated.



↑ Up to a speed of 5 km/h (3 mi/h), the ABS system is not active. Take particular care when braking at low speeds, especially in low-grip conditions.



 \bigwedge The ABS system intervenes either only on the front wheel or completely on both wheels by receiving information from the phonic wheels. It is important to always check that the phonic wheels are clean and periodically check that the distance from the sensor is constant. For verification and adjustment, contact an authorized Fantic Motor Center.

PARKING

Choose the parking zone carefully and with attention. It is very important to respect the road signs and the indications given below.



Do not park the vehicle placing it against the walls or laying it on the ground. Make sure that the parking area is solid and level.



Make sure that parts subject to high temperatures (exhaust, engine, radiator, brake discs, etc.) are not dangerous for people and the surrounding environment.



Never leave the vehicle on and unattended with the key inserted.

Tips to prevent theft

Never leave the ignition key on and always use the steering lock. Park the vehicle in a safe place, possibly in a garage or in a monitored place. Check that the documents and the circulation tax are in order.

SIDE KICKSTAND



Before leaving make sure that the side kickstand is fully up. Do not load your weight or the passenger's weight on the side kickstand.

The side kickstand is located on the left side of the frame. Raise or lower the side kickstand with your left foot while holding the vehicle straight.

The side kickstand is equipped with an ignition circuit breaker system that has the following functions:

- Prevent starting when the gearshift is engaged and the side kickstand is raised, with the clutch lever not pulled.
- Prevent starting when the gearshift is engaged and the clutch lever is pulled, but with the side kickstand still down.
- Switch off the engine when the gearshift is engaged and with the side kickstand down.



The side kickstand switch is part of the ignition circuit breaker system, allowing the engine to be stopped.



 $/\!\! \mid \!\! \setminus$ It is recommended to regularly check the correct functioning of the side kickstand interruption system and the side kickstand itself. In the event of a malfunction, please visit an authorised Fantic Motor Center.

BAGGAGE

Adding luggage to the vehicle may impair its driving. It is advisable to keep the load close to the centre of gravity for balanced weight distribution and to anchor it firmly, avoiding handlebars, forks, mudguards and number plate holders. Poorly anchored loads reduce stability and handling, especially when cornering. Avoid overloading to avoid compromising stability and handling. Ensure that the luggage does not protrude and cover the acoustic and visual warning devices.

SILENCER

This component, with regard to exhaust gas, has the task of oxidizing carbon monoxide converting it into carbon dioxide, of transforming unburnt hydrocarbons into water vapour and reducing nitrogen oxides converting them into oxygen and nitrogen.



 $m{(i)}$ During the vehicle use, the part of the exhaust system corresponding to the catalytic element can take a bright red colour: this colour variation is absolutely normal and indicates a correct operation of the catalyst.



Avoid stopping or parking the vehicle near places where there is dry brushwood.



Avoid places accessible to children and/or people.



 $\dot{\mathbb{N}}$ The silencer reaches high temperatures, so avoid any kind of contact and pay the maximum attention until it has not completely cooled down.



 \bigwedge It is forbidden to modify, alter or tamper with the exhaust system in any way.



Do not use leaded petrol as it will ruin the catalyst.

Check that there are no holes and signs of rust or wear on the exhaust system.

Check that the exhaust system always works correctly.

In case of increased or abnormal noise, contact a Authorized Fantic Motor Center as soon as possible.



 \bigwedge For maintenance, repair or replacement work, contact an Authorized Fantic Motor Center.

CLOTHING

Always wear and fasten the helmet before starting to ride the vehicle. The helmet must be approved, intact and with the visor intact and clean. Wear appropriate protective clothing and no hanging accessories that could create problems when riding the vehicle. Prefer bright, reflective clothing to be more visible and protected in the event of a fall. Do not wear or carry sharp objects as they are potentially dangerous in the event of a fall.

 $oxed{i}$ All these recommendations also apply to the passenger.

ACCESSORIES

Fantic Motor recommends the use of original accessories available from authorised dealers.

If the installed accessories are not original, the user is responsible for their selection and correct installation.

The accessory absolutely must not:

- Damage to persons, property or the rider.
- Limit suspension travel.
- Cover, partially or totally, the acoustic and visual signalling devices.
- Limit the use of steering and controls (brakes, throttle, etc.).
- Reduce the steering angle.
- Prevent the vehicle from leaning when cornering.

Any large fairings and windshields fitted to the vehicle may reduce the stability of the vehicle.

Excluding specific Fantic Motor accessories, do not install or make any modifications to electrical equipment: this could result in a dangerous power failure necessary for the operation of acoustic and visual warning devices.

TRANSPORT

Before transporting the vehicle, the fuel tank must be completely emptied to prevent accidental spillage. Also check that all components are dry. The vehicle must be firmly secured, with first gear engaged and in a stable position, ready for transport.



⚠ In the event of failure, do not perform towing or unsafe and risky procedures that may endanger people and/or things. This would result in the risk of causing accidents or damage to the vehicle.

REFUELLING

During refuelling, it is forbidden to smoke, use open flames or electrical devices that can generate sparks. Failure to do so may result in fire or explosion, with serious risks to persons and property.



/N Do not add additives or other substances to the fuel during refuelling.



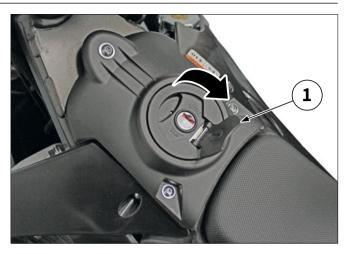
Avoid fuel leakage during refuelling. If a funnel or other instrument is used, make sure it is properly cleaned to avoid contaminating the fuel.

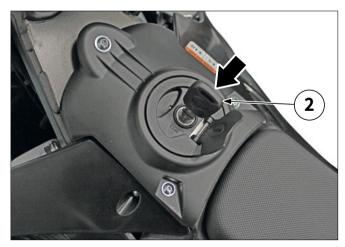


⚠ It is recommended to use only the type of fuel specified in the "Recommended Products Table" section. The use of different fuels could damage the fuel system and impair engine operation.

To refuel, lift the protective cover "1".

Insert the key "2" into the lock.





- Turn counter-clockwise.



- Remove the fuel tank cap "3".

Full level

When refuelling, do not exceed the "full level". A "full level" is defined as an air space of 20-25 mm.

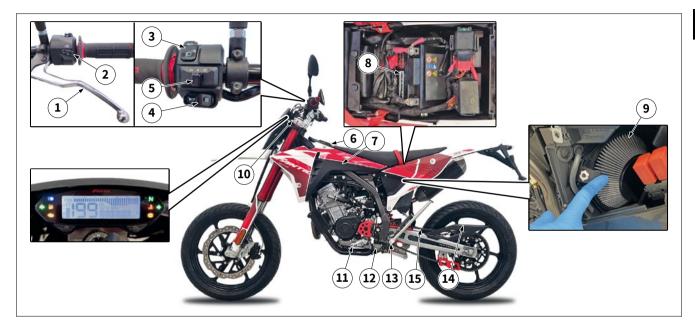
Refuel and close the tank cap "3".



Make sure that the tank cap is closed before starting the vehicle.



CONTROLS



- 1. Clutch control lever
- 2. Headlight flash button
- Low beam/high beam light switch
- Horn/Navigation Button
- 5. Turn signals switch
- 6. Fuel tank cap
- 7. Fuel tank
- 8. Battery
- 9. Air filter

- 10. Steering lock
- 11. Gearshift control pedal
- 12. Rider's left footboard
- 13. Side kickstand
- 14. Tire pressure and chain clearance indication label
- 15. Drive chain

MAIN ELEMENTS AND DEVICES



- 16. Spark plug
- 17. Front brake lever
- 18. Front brake fluid reservoir
- 19. Oil filter cap
- 20. Electric starter button
- 21. Engine stop switch
- 22. Throttle control grip
- 23. Coolant radiator
- 24. Rear brake master cylinder

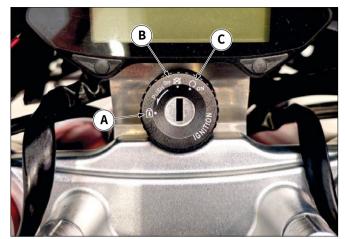
- 25. Radiator cap
- 26. Rider's right footboard
- 27. Rear brake control pedal
- 28. Oil level plug

IGNITION SWITCH

The ignition switch is located at the front of the vehicle near the dashboard.

The functions of the ignition switch are the following:

- A. The handlebar is locked and the vehicle cannot be started and the lights cannot be switched on. The key can be removed.
- B. The vehicle and the lights can not be operated and the key can be removed.
- C. The vehicle can be put into operation but the key can not be removed.



- (i) The vehicle is delivered with two keys, one of which is spare. Keep the spare key in a place other than the vehicle.
- (i) The lights switch off when the ignition switch is positioned on "B".
- $\widehat{f i}$ The key is used not only for the ignition switch, but also for the tank cap and the seat opening.
- (i) With the key in position (ON), the lights come on.

DRIVING CONTROLS AND ADJUSTMENTS

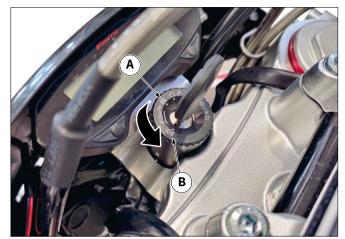
STEERING LOCK ENGAGEMENT

Turn the key to position (OFF) "A".

Operate the side kickstand with your left foot and step off the vehicle.

Press and turn the key anti-clockwise to position "B", slowly turning the handlebar to the right until the steering lock engages.

Release the key and remove it from the ignition switch.



ENGINE STOP SWITCH

Pressing it stops the engine. It has the function of a safety or emergency switch.



No not intervene on the switch when the vehicle is running, this would cause the engine to stop. This could result in loss of control of the vehicle. increasing the risk of accidents and damaging things and/or people.



DRIVING CONTROLS AND ADJUSTMENTS

START BUTTON

With the key inserted and set to (**ON**), the engine switch off, and the gearshift lever in neutral, the engine will start pressing the start button.



HORN BUTTON

Press to activate the horn.



DRIVING CONTROLS AND ADJUSTMENTS

TURN SIGNAL SWITCH

Position the switch to the left or right to indicate the turn.

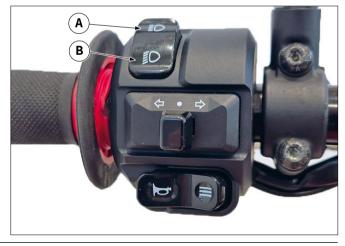
Position the switch to the center position to deactivate the indicators.



LOW BEAM/HIGH BEAM LIGHT SWITCH

Press the switch to position "A" to activate the high beam light.

Press the switch to position "B" to activate the low beam light.



HIGH BEAM FLASHING BUTTON

Pressing it activates the flashing of the high beam. It is usually used to indicate danger or emergency situations.

When the button is released, the high beam flashing is deactivated.



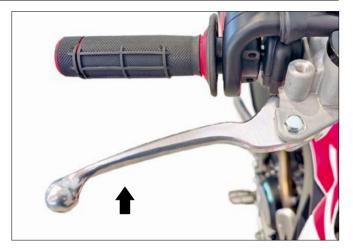
SUSPENSIONS

Front suspension



For the replacement of the front suspension oil, go to an authorized Fantic Motor Service Center.

For maintenance intervals, refer to the "Scheduled maintenance plan" section under "Fork".



Check

Apply the front brake lever, push repeatedly on the handlebars, making the fork compress. The stroke must be gentle and there should be no traces of oil on the fork stanchions.



/ In the event that malfunctions are noticed or specialized personnel need to be contacted, go to an authorized Fantic Motor Service Center.

Adjustment

This type of suspension does not require any type of adjustment. The basic setting of the suspension is done by Fantic Motor to suit ideal riding conditions [rider only (weight approx. 75 kg)].



Rear suspension (Competition models)

For maintenance intervals, please refer to the "Scheduled maintenance plan" section under "Rear shock absorber".

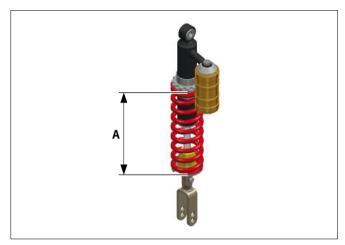
The rear wheel suspension is composed of a shock absorber + linkage unit connected in the upper part to the frame and in the lower part to the swingarm.

Shock absorber preload adjustment

The basic suspension setting (spring preload) "A" is adjusted by Fantic Motor:



4 202 mm (7.95 in).





⚠ If you do not have the necessary technical knowledge to carry out this adjustment, it is recommended that you contact an authorised Fantic Motor Center to avoid damage to the vehicle or compromising driving safety.



X To perform this procedure, it is necessary to use: No. 2 hook wrenches.

For special use requirements relating to the road surface or vehicle load, it is possible to adjust the spring preload, observing the following limits (dimension "A" measurement):



MINIMUM: 191 mm (7.52 in). MAXIMUM: 215 mm (8.46 in).



Make sure the engine is completely cold before adjusting.

- Using two hook wrenches, loosen the retaining ring nut "1" and turn the ring nut "2" until it reaches the desired position.
- Measure the preload dimension of spring "A", checking that it is within the specified limits.
- Tighten the retaining ring nut "1" again.



Nhen adjusting the adjustment ring nuts, take particular care when handling the hook wrenches, in order to avoid the risk of injuring yourself by hitting other parts of the vehicle.



Do not force the rotation of the adjusters beyond the limits set by Fantic Motor, to avoid possible damage.



Rear suspension (Performance models)

For maintenance intervals, please refer to the "Scheduled maintenance plan" section under "Rear shock absorber".

The rear wheel suspension is composed of a shock absorber + linkage unit connected in the upper part to the frame and in the lower part to the swingarm.

Shock absorber preload adjustment

The basic suspension setting (spring preload) "A" is adjusted by Fantic Motor:



224 mm (8.82 in).





 \bigwedge If you do not have the necessary technical knowledge to carry out this adjustment, it is recommended that you contact an authorised Fantic Motor Center to avoid damage to the vehicle or compromising driving safety.



X To perform this procedure, it is necessary to use: No. 2 hook wrenches.

For special use requirements relating to the road surface or vehicle load, it is possible to adjust the spring preload, observing the following limits (dimension "A" measurement):



MINIMUM: 212 mm (8.35 in). MAXIMUM: 236 mm (9.29 in).



Make sure the engine is completely cold before adjusting.

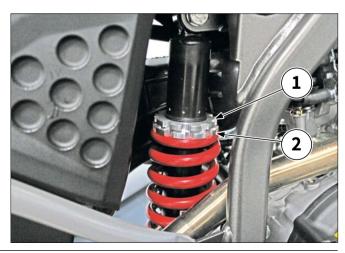
- Using two hook wrenches, loosen the retaining ring nut "1" and turn the ring nut "2" until it reaches the desired position.
- Measure the preload dimension of spring "A", checking that it is within the specified limits.
- Tighten the retaining ring nut "1" again.



 \bigwedge When adjusting the adjustment ring nuts, take particular care when handling the hook wrenches, in order to avoid the risk of injuring yourself by hitting other parts of the vehicle.



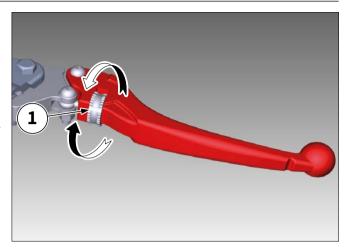
Do not force the rotation of the adjusters beyond the limits set by Fantic Motor, to avoid possible damage.



FRONT BRAKE LEVER ADJUSTMENT ("COMPETITION" VERSION)

Act on adjuster "1" to adjust the position of the front brake lever as desired:

- Turn adjuster "1" forwards to decrease the distance of the lever from the grip.
- Turn back adjuster "1" to increase the distance of the lever from the grip.



HEADLIGHTS AND TURN SIGNALS



To disassemble, check and/or replace the headlight, tail light, licence plate light and turn signals, contact an authorised Fantic Motor Centre

Headlight adjustment

To check the correct direction of the headlight beam, proceed as follows:

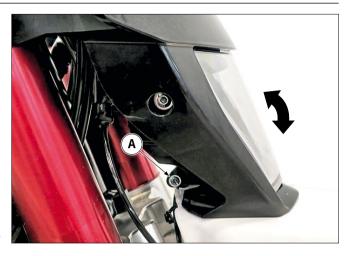
- Place the vehicle at 10 m (32.8 ft) away from a vertical wall. making sure that the ground is level.
- Turn on the low beam.
- Sit in the vehicle
- Check that the light beam projected onto the wall is slightly below the horizontal straight line of the projector (about 9/10 of the total height).

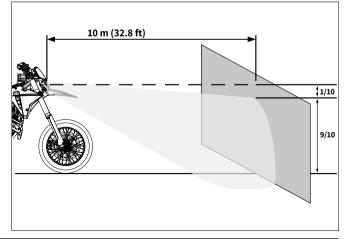
To carry out vertical adjustment of the light beam, proceed as follows:

- Place the vehicle in driving position.
- Loosen screw "A", only on the right side of the vehicle.
- Manually adjust the rotation of the headlight, turning it until the optimum beam position is reached.
- Tighten the screw "A".

M Headlight screw: 2 N·m (0.20 kgf·m, 0.45 lb·ft).

- Check again the correct orientation of the light beam.





REAR-VIEW MIRRORS

Rear-view mirror removal

Place the vehicle on the side kickstand making sure it is on a flat and stable surface.

Loosen the lock nut "A", turn the left-hand mirror counterclockwise to remove it, and the right-hand mirror clockwise to remove it.

(i) During reassembly, before tightening the nut, check that the mirror support rod is aligned with the handlebar.



Rear-view mirror adjustment

(i) The operations described below apply to both rearview mirrors.

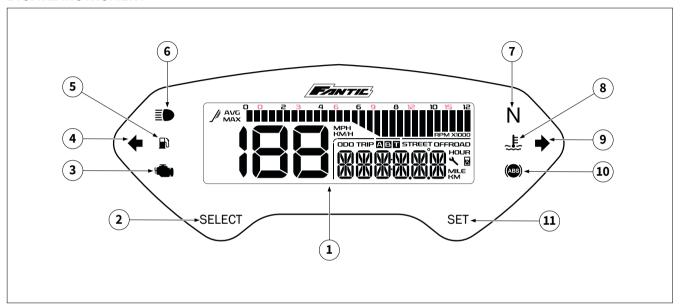
Sit in the vehicle in the driving position and adjust the mirror to suit your needs.

The inclination of the mirror support rod can also be adjusted. To do so, loosen screw "B", move the support rod sideways, then complete the adjustment and retighten screw "B".



DASHBOARD

DIGITAL INSTRUMENT



- 1. Multifunctional display
- 2. Selection button (SELECT)
- 3. Malfunction Indicator Light (MIL)
- 4. Left turn signal indicator light
- 5. Fuel reserve indicator light
- 6. High beam indicator light

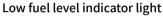
- 7. Neutral indicator light
- 8. High coolant temperature indicator light
- 9. Right turn signal indicator light
- 10. ABS (anti-lock brake system) indicator light
- 11. Setting button (SET)

Malfunction Indicator Light (MIL)

The Malfunction Indicator Light (MIL) comes on when the vehicle system detects a fault in the engine or electronic components. If the indicator light illuminates, it is advisable to have the motorcycle checked at an authorised Fantic Motor Center as soon as possible.

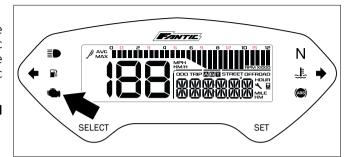
 \triangle

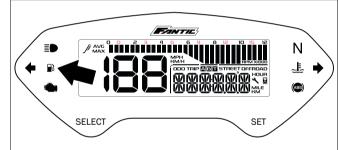
Continuing to drive with the indicator light on could damage the engine or increase emissions.



When the fuel level falls below the "low level" threshold, the corresponding indicator light comes on and remains on until the fuel level exceeds this threshold again.

We recommend refuelling as soon as possible.

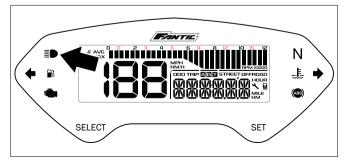




High beam indicator light

The high beam indicator light comes on when the motorcycle's high beam lights are on. This indicator serves to remind the driver that the headlights are set to illuminate the road at long distances, and not for use in heavy traffic conditions or when other vehicles are passing.

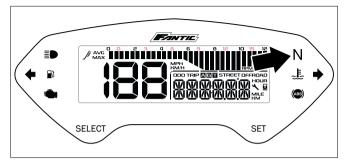
i It is important to switch off high beam headlights when they are not needed to avoid dazzling other drivers.



DASHBOARD

Neutral indicator light (N)

The neutral indicator light indicates that the gearshift is in neutral position. When illuminated, it indicates that the motorcycle is not in any gear, allowing the engine to be started safely without risk of accidental movement.



Coolant temperature indicator light

The coolant temperature indicator light comes on when the coolant temperature reaches:

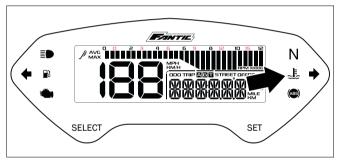
115 °C (239 °F)

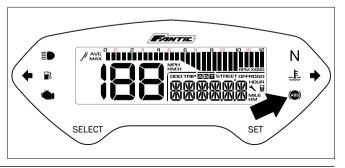
In this condition, it is necessary to stop immediately and switch off the engine to avoid damage. Check the coolant level and wait for the engine to cool down before resuming driving. If the problem persists, contact an authorised Fantic Motor Center.

Anti-lock Brake System (ABS) indicator light

The anti-lock brake system (ABS) indicator light indicates the operational status of the vehicle's ABS system.

When the vehicle is switched on, the ABS indicator light comes on to indicate that the speed sensor check is in progress. Once 5 km/h (3 mi/h) has been exceeded, the indicator light will assume the status described in the table in the chapter "Riding mode selection".







When the indicator light comes on with steady light (if ABS has not been disabled via ABS OFF riding mode), it indicates an ABS system failure and the vehicle maintains a conventional braking system. Reduce the speed and contact an authorized Fantic Motor Center.

Side kickstand indicator light

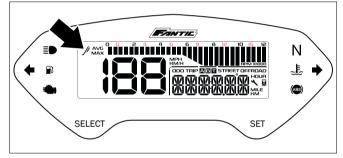
The side kickstand indicator light comes on when the side kickstand is down, or when it is down with a gear engaged. In this case, the engine is automatically switched off to prevent damage or accidents. If the motorcycle is in neutral, the engine does not switch off even if the side kickstand is down.

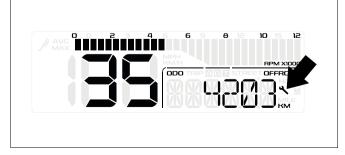
Raise the side kickstand before starting the engine and driving.

Maintenance Notice

The maintenance symbol comes on when there are less than 300 km (186 mi) to the next service.

To see in detail how many kilometres are left, enter the fourth settings menu.

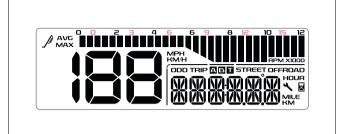




DASHBOARD

MULTIFUNCTIONAL DISPLAY

When the ignition switch is turned to the (On) position, all display segments and indicators are activated.



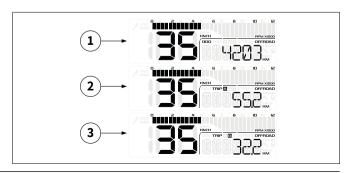
On the left-hand light stalk, the "A" button can be used to navigate through the multifunctional display.

With a short press (< 1 s) it is possible to move from one screen to another.

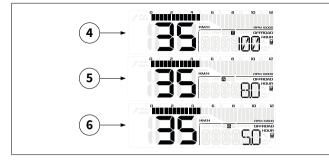
Pressing between 1 s and 3 s allows parameters to be reset. The various screens are shown below in order.



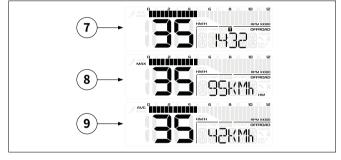
- 1. Total Odometer (ODO) Non-resettable
- 2. Partial odometer (TRIP A) Resettable
- 3. Partial odometer (TRIP B) Resettable



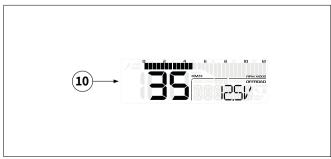
- 4. Engine hours: indicates the total operating hours of the engine. Non-resettable
- 5. Partial engine hours A: indicates engine operating hours since last RESET Resettable
- 6. Partial engine hours B: indicates engine operating hours since last RESET Resettable



- 7. Clock: settable function within the settings menu.
- 8. MAX: indicates the maximum speed reached by the motorcycle since the last RESET of the data
- 9. AVG: indicates the average speed, calculated since the last RESET of the data



10. Battery voltage



DASHBOARD

RIDING MODE SELECTION

The vehicle allows a choice of two or three riding modes depending on the version.

The default riding mode is STREET.

Changing the riding mode is only permitted when the vehicle is stationary and when in the standard menu.

Activation of the selected riding mode will be indicated by the ABS indicator light (10) as follows:

| Riding mode | ABS indicator light status | | |
|-------------|----------------------------|--|--|
| STREET | Off | | |
| RW OFF | Flashing on | | |
| ABS OFF | Steady on | | |

When the vehicle is switched on, a check of the speed sensors is carried out, above 5 km/h (3 mi/h) the ABS indicator light will assume the status described in the table according to the selected riding mode.

(i) When the vehicle is switched off and on again using the key, the default riding mode is automatically restored.

On the left-hand light stalk via button "A" with a long press between 5 s and 10 s you enter the riding mode selection sub-menu.

A short press on the "A" button switches between the proposed riding modes.

A long press on button "A" activates the selected mode.

(i) If no selections are made, after a timeout of 10 s, or if the speed of 3 km/h (2 mi/h) is exceeded with the vehicle, the system automatically exits the submenu, maintaining the current riding mode.

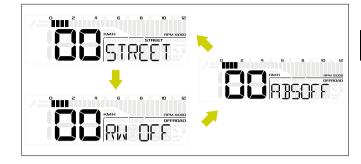


XEF version

STREET: ABS enabled on both wheels

RW OFF: ABS enabled on the front wheel only

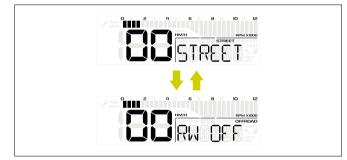
ABS OFF: ABS disabled on both wheels



XMF version

STREET: ABS enabled on both wheels

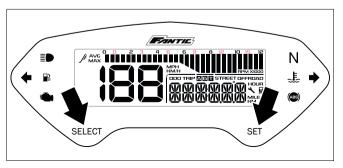
RW OFF: ABS enabled on the front wheel only



ACCESSING THE SETTINGS MENU

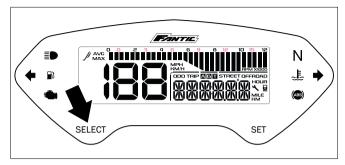
To access the settings menu, simultaneously press and hold for at least 5 s the SELECT and SET buttons

(i) The vehicle must be stationary to enter the settings menu. If you exceed 10 km/h (6 mi/h) you will automatically exit the menu.



DASHBOARD

Once in the settings menu, press the SELECT button to move through the various settings. Four menus are available. After 30 s of inactivity within the menu, it will automatically return to the normal display.



Setting the clock (TIME)

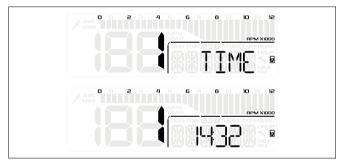
Press the SET button to start setting the clock. The hours will begin to flash.

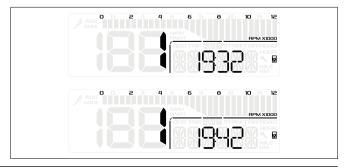
Press the SET button again to increase the value by 1 hour. Keeping the button pressed will automatically increase the hours.

To confirm the value and switch to minutes, press the SELECT button.

The first decimal value will start flashing. Press the SET button to change decimals 0 - 5. To confirm the value and move to the next value, press the SELECT button.

Press the SET button to change units 0 - 9. To confirm and exit, press the SELECT button.



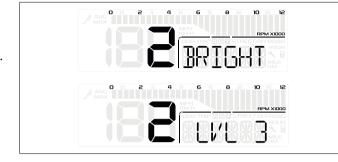


Brightness setting (BRIGHT)

Five brightness levels are available.

When in the BRIGHT menu, press the SET button.

Press the SET button again to change the brightness value. To confirm and exit, press the SELECT button.

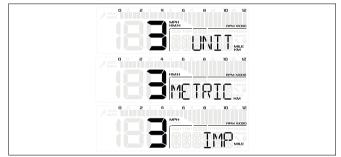


Unit of measurement setting (UNIT)

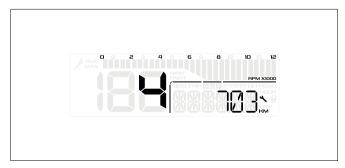
When in the unit of measurement menu (UNIT), press the SET button.

Press the SET button again to select the desired unit of measurement.

To confirm and exit, press the SELECT button.



The fourth menu is not editable and indicates the remaining km/miles before the next service.

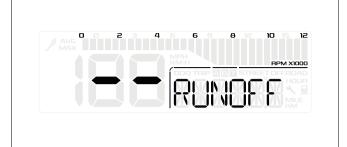


DASHBOARD

ENGINE STOP WARNING

(i) For engine stop, see the sections "Turning the vehicle on and off" and "Engine Stop Switch".

If the engine stop switch is pressed, or remains pressed, "RUNOFF" appears in the multifunctional display.



IMPORTANCE OF ROUTINE MAINTENANCE

Proper vehicle maintenance is essential to ensure safety, protect your investment, achieve optimum performance, prevent breakdowns and reduce air pollution. The customer is responsible for carrying out the following checks before each use of the vehicle, ensuring that no problems or malfunctions occur.



ALWAYS contact an Authorized Fantic Motor Center if malfunctions or anomalies are found.



 \bigwedge Improper maintenance or failure to fix a problem before riding can lead to accidents with serious injury or death. It is essential to follow the advice and maintenance schedules given in this manual, and to carry out inspections before starting to avoid damage to the vehicle and serious injury to the rider and passenger.



\fighthe user does not have the necessary technical skills or the appropriate tools to carry out routine maintenance, it is recommended to contact a Fantic Motor Authorised Center.



⚠ If technical advice or service is required, contact an authorised Fantic Motor Center.

SAFETY RULES FOR ROUTINE MAINTENANCE



 $oxed{(i)}$ Always read the instructions on routine maintenance before any inspection or work on the vehicle.

When carrying out maintenance work, the following guidelines must be observed:

- Switch off the engine and make sure the key is removed.
- Park the vehicle on a firm, level surface, supporting it with the side kickstand or a safety stand for maintenance.
- To avoid burns, allow the engine, silencer, brakes and other components subjected to high temperatures to cool down before servicing.



Failure to follow these procedures can result in serious injury to persons and to the vehicle.



It is recommended to contact an authorised Fantic Motor Center for the availability of genuine Fantic Motor parts, as these guarantee reliability and safety. The use of non-original components may cause damage to the vehicle and endanger the safety of the driver and passenger.

Verification operations to be carried out by the customer

(i) The proposed mileage intervals are purely indicative. In the case of heavy and/or special use, carry out visual and functional checks on the vehicle before further use.

| Component | Operation | | Before each use | Every 500 km | Every 1500 km | Before a long stop | After a prolonged stop |
|--|---|------|--------------------|-----------------|------------------|-----------------------|------------------------|
| Lights, turn signals, stop lights and horn | - Check the operation. | - | ✓ | | | | |
| Clutch lever | - Check the clearance. | p.74 | ✓ | | | | |
| Throttle control | - Check the clearance. | p.76 | ✓ | | | | |
| Braking system | - Check the brake fluid level. | p.66 | | ✓ | | | |
| | - Check the brake pad wear level. | p.68 | | | ✓ | | |
| | - Brake system check. | p.69 | ✓ | | | | |
| Engine oil | - Level check. | p.59 | | ✓ | | | |
| Coolant | – Level check. | p.64 | | ✓ | | | |
| Drive chain | Check the wear and tear condition.Check the clearance and elongation | p.70 | | ✓ | | | |
| | - Lubrication and cleaning. | p.72 | | ✓ | | | |
| Complete vehicle | - Cleaning. | p.85 | | ✓ | | ✓ | |
| Battery | Disconnect and re-establish the connection. | p.80 | | | | ✓ | ✓ |
| | - Terminals cleaning. | p.81 | | | | | ✓ |
| Tires | - Check the air pressure. | p.61 | | ✓ | | ✓ | ✓ |
| | - Check for damage and tread depth. | p.61 | | | ✓ | | |

ENGINE OIL



M Engine oil consumption and quality may deteriorate with riding conditions and over time. It is recommended to rely on an authorised Fantic Motor Center for engine oil and filter removal and change.



When checking and topping up oil, pay attention to hot components, such as the engine and exhaust system.



⚠ Do not mix oils of different grades and brands, as this can impair lubrication and clutch operation. Use exclusively the products recommended in the "Recommended products table" section.

Engine oil check and top up

To find out the mileage and/or time interval for carrying out this check, refer to the "Verification operations to be carried out by the customer" section.

If the engine is cold, let it idle for between 3 and 5 minutes. Turn the ignition switch to the (**OFF**) position and wait 2 to 3 minutes.

Place the vehicle upright on a firm, level surface. Completely unscrew the oil level plug/dipstick and clean it. Insert the cap/level dipstick again without screwing it in.



Remove the oil level plug/dipstick and check. The correct level is between the "MIN" (minimum) and "MAX" (maximum) marks



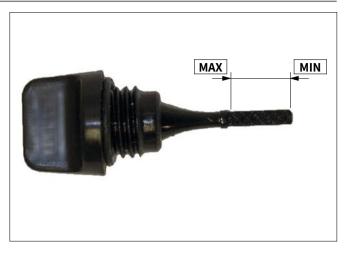
The oil level must not go beyond the "MAX" mark and must never be below the "MIN" mark, in order not to damage the engine.

If, after checking, the engine oil level is below the "MIN" (minimum) mark, add recommended engine oil, if it exceeds the "MAX" (maximum) mark, contact an authorised Fantic Motor Center.



 \bigwedge Avoid spilling oil when topping up. If a funnel or other instrument is used, make sure it is properly cleaned to avoid contaminating the engine oil.

Screw the oil level cap/dipstick back on firmly.



TIRES

For type and inflation pressure, refer to the "Technical Data" chapter.

(i) To find out the mileage and/or time interval for carrying out these checks, refer to the "Verification operations to be carried out by the customer" section.

Air pressure check

The tire pressure should be checked at room temperature, i.e. after at least three hours of parking or a maximum distance of **2 km (1 mi)**, as measurement with warm tires can be inaccurate.

(i) When checking the air pressure, be sure to use a correctly calibrated pressure gauge.

Check that the pressure valves are always fitted with protective caps and that they are properly closed to avoid sudden tire deflation.

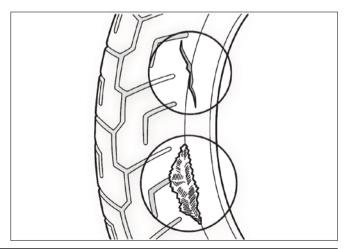
 \bigwedge Driving with tires with incorrect inflation pressure can lead to an accident resulting in serious or fatal injury.

Damage and tread depth check

Check whether the tires are:

- Cut.
- Slotted.
- Cracked so as to expose inner fabrics.
- Presence of nails or other foreign bodies embedded in the sides or tread.
- Presence of protuberances or bulges on the side walls of the tires.

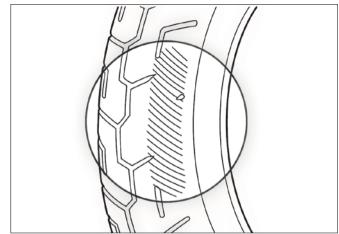
If one or more of these defects are found, the tires must be replaced immediately.



Check the tires for signs of abnormal wear on the contact surface.

If this defect is found, the tires must be replaced immediately.

Niding with damaged and/or excessively worn tires can lead to an accident resulting in serious or fatal injury.



Measure the minimum thickness "A" of the tread at the point of maximum wear, which must never be less than the minimum thickness and in any case comply with the requirements of local legislation.

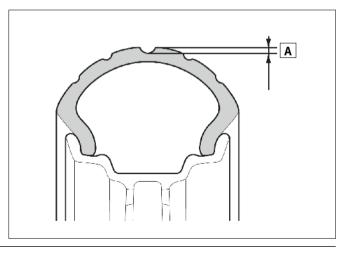


Minimum tread thickness: 1 mm (0.03 in).

If this is not the case, the tires must be replaced immediately.



Driving with tires with less than the prescribed minimum tread depth can lead to an accident resulting in serious or fatal injury.





Tire replacement, repair and maintenance must be carried out using appropriate tools and with the necessary experience. It is therefore recommended to contact an authorised Fantic Motor Center or a specialised tire dealer.



Use recommended tires or their equivalents with identical size, construction details and speed and load indices. The installation of incorrect tires on the vehicle can affect its control and stability, with the risk of causing an accident resulting in serious injury or death. Always use tires of the size and type recommended in this manual.



 \bigwedge If the tires are new, they can be covered with a slippery film. Drive carefully for the first few kilometres/miles. Do not grease the tires with unsuitable liquid. If the tires are old, even if not completely worn out, they can harden and do not guarantee road holding, therefore replace them.



The tires supplied are tubeless and are mounted on spoked rims together with inner tubes. On this type of rim, tubeless tires cannot be installed without the use of an inner tube.

COOLANT

(i) To find out the mileage and/or time interval for carrying out this check, refer to the "Verification operations to be carried out by the customer" section.

No not use the vehicle if the coolant level is below the minimum level.

Check the coolant level

Check the coolant level with the engine cold, off and with the vehicle resting on the side kickstand.

Check that the coolant is between the "MAX" (maximum) and "MIN" (minimum) levels.

Refilling the coolant

If the coolant level is at or below the "MIN" (minimum) level, proceed as follows:

- Remove the cap "1" from the coolant tank.



- Add the available coolant until the "MAX" (maximum) level is reached.

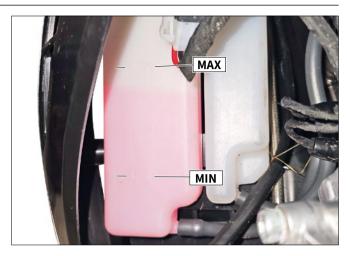


Recommended product: Antifreeze liquid based on ethylene glycol with organic additives.



⚠ In the event of lack of antifreeze fluid, add distilled water (or plain water if there is none) and visit a **Fantic Motor Authorised Center as soon as possible** to have the coolant checked and replaced.

- Press the rubber tubes several times to facilitate the release of any air bubbles.
- Close cap "1".
- Start the vehicle and keep it running for at least one minute then check the level again.





Repeat the procedure until the coolant level has settled.



To replace the coolant, contact an authorized Fantic Motor Service Center.



If the coolant level steadily decreases or the tank remains empty, there may be a significant leak in the system. Contact an authorised Fantic Motor Centre immediately.

BRAKING SYSTEM



To find out the mileage and/or time interval for carrying out these checks, refer to the "Verification operations to be carried out by the customer" section.

Check the front brake fluid level

To check the front brake fluid level, position the vehicle on the side kickstand and turn the handlebar, so that the liquid contained in the brake oil reservoir is parallel to the cap. Check that the liquid is over the "MIN" (minimum) mark.



⚠ If the fluid level does not reach at least the "MIN" (minimum) mark, it must be topped up.



Front brake fluid level top up



 \bigwedge Topping up the brake fluid is a complex operation for an inexperienced operator. In case of need, it is advisable to contact an Authorized Fantic Motor Center.

Use a Phillips screwdriver to unscrew the two screws on the tank cover, then remove both the cover and the gasket, placing them on a clean surface.

Top up with suitable brake fluid, without exceeding the "MAX" level in the reservoir.



⚠ If the fluid level does not reach at least the "MIN" (minimum) mark, it is recommended to contact an authorised **Fantic Motor Center.**

Replace the gasket in its housing, then replace the cover and tighten the two screws.



Tank cover screws: 2 N·m (0.20 kgf·m, 0.45 lb·ft).

Wipe surfaces with a cloth if they have become soiled.



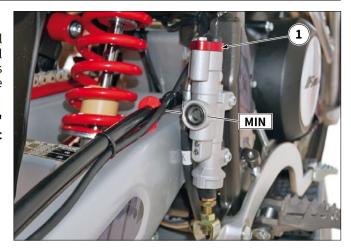
Check braking effectiveness and check the brake system for leaks. In case of malfunction, contact an Authorized **Fantic Motor Center.**

Check the rear brake fluid level

To check the rear brake fluid, keep the vehicle in vertical position, so that the liquid contained in the brake oil reservoir is parallel to the cap. Check that the liquid is between the "MIN" (minimum) mark and the top of the inspection window.



↑ If the fluid level does not reach at least the "MIN" (minimum) mark, contact an authorised Fantic Motor Center.



Rear brake fluid level top up



 \bigwedge Topping up the brake fluid is a complex operation for an inexperienced operator. In case of need, it is advisable to contact an Authorized Fantic Motor Center.

Remove cap "1" by unscrewing the two screws.

Remove the gasket.

Top up with suitable brake fluid until the level is between the 'MIN' (minimum) mark and the top of the inspection window.



/!\ If the fluid level does not reach at least the "MIN" (minimum) mark, it is recommended to contact an authorised **Fantic Motor Center.**

Reinsert the gasket and screw the tank cap back on by tightening the two screws.



\(\text{Cap screws: 2 N·m (0.20 kgf·m, 0.45 lb·ft).} \)



⚠ Check the effectiveness of the braking and if there are any leaks from the braking system; in the event of a malfunction, contact an authorised Fantic Motor Center.

Pads wear check

If there is a reduction in the vehicle's braking capacity, carry out an inspection of the brake pads.

(i) The disc brake pads wear depends on the use, the type of driving and the type of road.



Wear that goes beyond the limit of the friction material leads to contact of the pad metal shoe with the disk with consequent metallic noise and sparks flying from the calliper; braking efficiency, safety and completeness of the disk would be affected.

Front brake pads

Check the pads for wear through the opening between the half-callipers as follows:

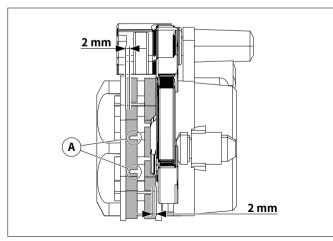
With inspection groove

- If either brake pad has a wear-limit groove "A", ensure that this is always visible.

Without inspection groove

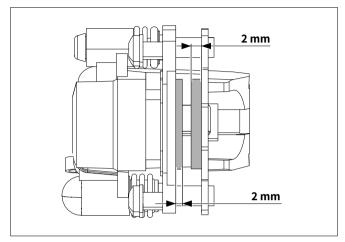
- Check that the thickness of the friction material is not less. than 2 mm (0.08 in).

In either case, replace both pads.



Rear brake pads

Check the pads for wear through the opening between the half-callipers. If the thickness of the friction material is less than 2 mm (0.08 in), replace both pads.



Braking System Check

Braking action at rest check:

- Check that there is no braking action when the brake lever and pedal are at rest.

Check no-load travel:

- Check that the lever and brake pedal travel is not excessive before encountering resistance.

Elasticity check:

- Check that the brake lever and pedal are not elastic during operation.



 \ln In the event of a negative outcome from these checks, it is recommended to contact an authorized Fantic Motor Center.

DRIVE CHAIN

(i) To find out the mileage and/or time interval for carrying out these checks, refer to the "Verification operations to be carried out by the customer" section.

Check the chain, sprocket and chainring wear

i It is recommended that these checks are carried out by an authorised Fantic Motor Center.

Perform the following checks:

Ensure that the wheel is not loose and that the axle "1", nut or adjusters are properly secured.

Check the wear condition of the chain "2", checking that there are no worn rollers and that the chain links are not:

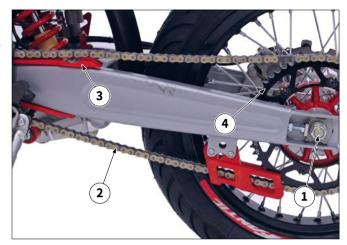
- Dry.
- Rustv.
- · Crushed.
- Seized (see example "B").

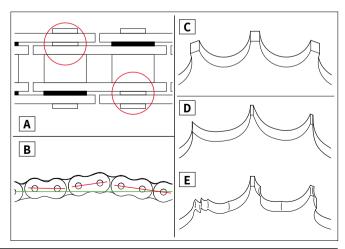
Also check the chain for missing sealing rings (see example "A").

Check the wear condition of the chain slide pad "3".

Check the wear condition of sprocket teeth and chainring "4":

- Teeth in good condition (see example "C").
- Excessively worn teeth (see example "D").
- Damaged teeth (see example "E").







⚠ If one or more of these components is damaged or excessively worn, contact an authorised Fantic Motor Center to request replacement of the entire chain assembly (sprocket, chain and chainring).



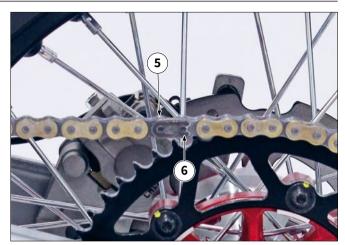
M Improper maintenance can cause premature chain wear and/or damage the sprocket and/or chainring.



The junction mesh "5" of the chain must be disassembled exclusively for the purpose of replacing the chain with a new one.



Make sure that the junction mesh "5" is always installed from the inside towards the outside of the vehicle, and that the pins are perfectly locked by the fork "6", to avoid loosing the chain: the closed end of fork "6" must be facing in the drive chain direction of rotation.



Cleaning and lubrication

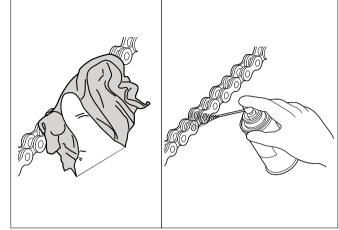


\ The chain must always be kept well cleaned and lubricated especially after riding off-road sections with mud or sand



⚠ Do not clean the chain with water jets, steam jets, high-pressure jets, wire brushes and highly flammable solvents.

If the chain should become dirty, clean it using a dry cloth and neutral detergent. If necessary, use a soft brush. After cleaning, dry and lubricate with the recommended lubricant.



- $m{(i)}$ If the right products are not available and if the user does not feel confident in cleaning and lubricating the chain, it is recommended to contact a Fantic Motor Authorised Centre.
- For recommended chain cleaning and lubrication products, refer to the "Recommended products table".

Chain clearance check



The Excessive loosening of the chain could make it lift. off from the sprocket, causing accidents and serious damage to the vehicle.



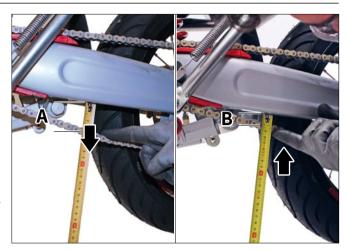
contact an authorized Fantic Motor Center only.



/\ If there is excessive clearance in some positions, this indicates crushed or seized links. In this case, it is recommended to contact an Authorized Fantic Motor Center.



To prevent the risk of seizing, correct and regular lubrication of the chain is recommended.



To check the chain clearance, follow the steps below:

- With the engine switched off, put the gearshift in neutral.
- Position the vehicle on a paddock stand.
- Rotate the rear wheel and, at the same time, press a finger (from bottom upwards) along the chain until you find the point where it is tightest.
- Then remove the kickstand and place the vehicle on the side kickstand, ensuring that it is not loaded.
- Pressing with a finger at the previously identified point of maximum tension, press the lower branch of the chain first downwards and then towards the other, measuring the distance from the edge of the swingarm.
- Check that the vertical oscillation, obtained as the difference between the highest value "A" and the lowest value "B", is between 25 mm (0.98 in) and 28 mm (1.10 in).
- Check the vertical movement of the chain also in other positions of the rear wheel: the clearance must never exceed the stated limits.

CLUTCH LEVER CLEARANCE ADJUSTMENT



If you do not have the necessary technical knowledge to carry out this adjustment, it is recommended that vou contact an authorised Fantic Motor Center to avoid damage to the vehicle and/or compromising driving safety.



The clutch lever clearance must comply with the value indicated by Fantic Motor in order to avoid malfunctions and permanent damage to the engine.



A lack of clutch lever clearance can cause permanent engine damage.

Upper adjustment

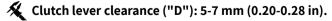
Perform the clutch lever clearance adjustment when the engine stops abnormally or the vehicle tends to move forward with the clutch lever and the gear engaged, or if the clutch "slips", causing an acceleration delay with respect to the engine rpm.



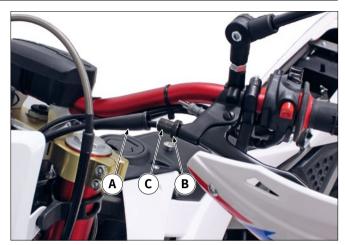
Carry out this adjustment only after checking that the engine is cold.

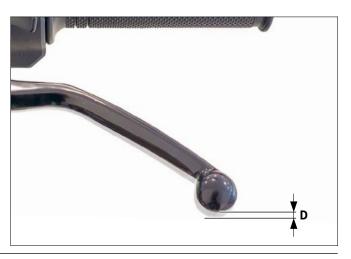
To make the adjustment:

- Remove protection cowl "A".
- Loosen the ring nut "B".
- Keep the handlebar straight when adjusting;
- Turn adjuster "C" to adjust the clutch lever clearance "D".



- Tighten the ring nut "B" keeping the adjuster "C" still.
- Reposition the protective cowl "A".





Lower adjustment

If the adjustment carried out at a higher level is not sufficient to guarantee the clearance required by Fantic Motor, it must be adjusted at a lower level.



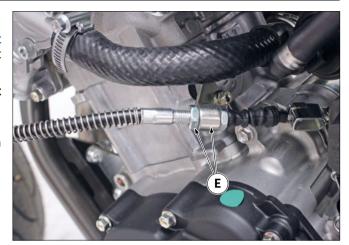
Carry out this adjustment only after checking that the engine is cold.

To make the adjustment:

- Act on adjusters "E" of the clutch control lever, located on the engine crankcase.
- Check the clutch lever clearance "D".



Clutch lever clearance ("D"): 5-7 mm (0.20-0.28 in).





/ Check the integrity of the clutch cable in its entire length; the sheath must not show cracks, cuts, crushing or wear, if only one of these defects is present, replace the clutch cable at an authorized Fantic Motor Center.



 \bigwedge If the adjustments made do not provide the required clearance, there is a risk of serious damage to the vehicle's engine and clutch. In this case, it is recommended to contact an authorised Fantic Motor Center.

THROTTLE CONTROL CLEARANCE ADJUSTMENT



to carry out this adjustment, it is recommended that you contact an authorised Fantic Motor Center to avoid damage to the vehicle or compromising driving safety.

Adjusting the throttle control clearance is necessary to ensure smooth and precise engine response. Too much clearance can cause acceleration delays, while too little clearance may cause unintended hard acceleration, impairing control and safety while driving.



Carry out this adjustment only after checking that the engine is cold.

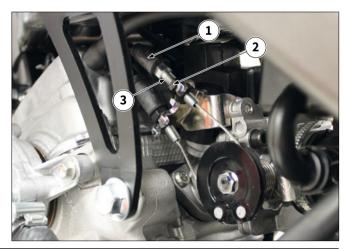


Throttle control free travel ("A"): 2-3 mm (0.08-0.12 in), measured at the edge of the control.

To make the adjustment:

- Position the vehicle on the side kickstand and operate on the throttle body adjuster.
- Remove the protective cowl "1".
- Loosen the locknut "2".
- Turn adjuster "3" to restore the prescribed value.





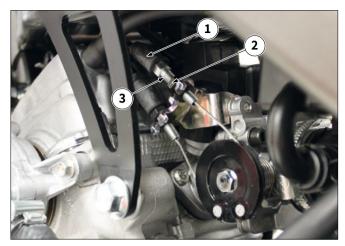
After the adjustment:

- Manually lock the adjuster rotation "3" and tighten the locknut "2".
- Check no-load travel "A".

If the outcome is positive:

- Reposition the protective cowl "1".

After completing the adjustment, check that turning the handlebars does not change the engine idle speed and that the throttle grip, once released, automatically returns to the idle position.



TROUBLESHOOTING

The following table provides a series of steps to check the type of fault preventing the vehicle from operating correctly, or information on the fault displayed on the digital dashboard.



The information in this section may not cover all possible faults and errors.



If the fault or anomaly detected is not among those listed, or if the procedure indicated does not resolve the problem, it is recommended to contact a Fantic Motor Authorized Center as soon as possible.



⚠ If a fuse or relay needs to be replaced, please inform a Fantic Motor Authorized Center in any case, as the solution may not be definitive and related to a broader vehicle problem.

| Symptom | Possible cause | Procedure to be performed |
|---|--|--|
| | "RUN/OFF" button in "OFF" position. | Check that the button position is correct. |
| The engine does not start. | The side kickstand is not raised. | Check the side kickstand position. |
| The engine does not start. | The front and/or rear brake is not applied correctly. | Check the correct procedure for starting the vehicle safely. |
| The engine does not start and an ignition attempt occurs. | The battery is partially or fully discharged, or needs to be replaced. | Recharge and/or replace the battery and contact an authorised Fantic Motor Center. |
| The engine does not start and not even an attempt to start it occurs. | The side kickstand is up, but the relevant sensor may not be functioning properly. | Do not use the vehicle, park it properly and contact an Authorized Fantic Motor Center. |
| The engine does not start and not even an attempt to start it occurs. | The starter motor is damaged and/or inoperative. | Do not use the vehicle, park it properly and contact an Authorized Fantic Motor Center. |
| The engine behaviour is not smooth. Presence of visible smoke coming out of the exhaust. Smell of pungent odours from the engine. | Poor and/or absent engine oil. | Check the engine oil level. Do not use the vehicle, park it properly and contact an Authorized Fantic Motor Center. |
| Engine indicator light on. | Engine and/or emission control system fault. | Do not use the vehicle, park it properly and contact an Authorized Fantic Motor Center. |

| Symptom | Possible cause | Procedure to be performed |
|--|---------------------------------|--|
| Increased braking distance. The braking pattern is smooth. | Worn pads and discs. | Check the wear condition of the brake pads and brake discs. Do not use the vehicle, park it properly and contact an Authorized Fantic Motor Center. |
| Significant increase in braking distance. The brake controls do not present a consistent resistance to pressure. | Poor and/or absent brake fluid. | Check the brake fluid level. Do not use the vehicle, park it properly and contact an Authorized Fantic Motor Center. |
| Increased braking distance. The braking pattern is not smooth. ABS error indicator light not on. | ABS control unit malfunction. | Do not use the vehicle, park it properly and contact an Authorized Fantic Motor Center. |
| | Blown fuse(s). | Check and replace fuse. |
| ABS error indicator light on. | ABS control unit malfunction. | Do not use the vehicle, park it properly and contact an Authorized Fantic Motor Center. |
| Overheated engine. | Poor and/or absent coolant. | Check the coolant level. |
| Temperature indicator light on. The cooling fan does not work. | Blown fuse. | Check and replace fuse. |
| Non-functioning headlight. | Blown fuse. | Check and replace fuse. |
| Turn signals not working. | Blown fuse. | Check and replace fuse. |
| Horn not working. | Blown fuse. | Check and replace fuse. |
| Position lights not working. | Blown fuse. | Check and replace fuse. |
| Brake lights not working. | Blown fuse. | Check and replace fuse. |

BATTERY

(i) To find out the mileage and/or time interval for carrying out this check, refer to the "Verification operations to be carried out by the customer" section.

The type of battery installed does not require maintenance. It is therefore not necessary to check the electrolyte level or top up with distilled water. Keep the battery terminals clean if they become dirty or corroded.

Battery removal



⚠ If you are not sure about this operation, it is recommended that you contact an authorised Fantic **Motor Center.**



If electrolyte (sulphuric acid) leaks from the battery, contact an authorised Fantic Motor Center.



Neep sparks or open flames away from the battery.

Place the vehicle on the side kickstand.

Set the ignition switch to (OFF) and remove the key from the ignition switch.

Unscrew and remove knob "A" along with the washer, located under the rear mudguard.

Lift up and remove the seat "B".





Disconnect the negative (black) terminal "C" by removing its screw.

Disconnect the positive (red) terminal "D" by removing its screw

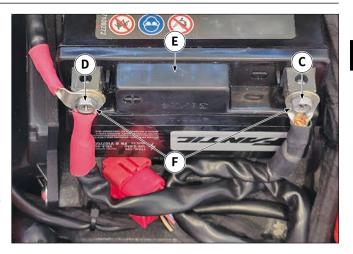
Remove the battery "E" from the vehicle.

Battery terminals cleaning



If you are not sure about this operation, it is recommended that you contact an authorised Fantic **Motor Center.**

(i) In the event of prolonged non-use of the vehicle, it is advisable to disconnect the battery terminals to prevent battery degradation.



If the "F" terminals begin to corrode and are coated with a whitish substance, they should be washed with warm water and cleaned. In case of heavy corrosion, clean and polish the terminals with a metal spatula or sandpaper, wearing protective goggles. These operations must be carried out with the battery removed from the vehicle.

Battery installation

Install components in the reverse order of removal.

Always connect the positive terminal first and then the negative terminal.

Before reassembling the seat make sure you have not left the key in the area under the seat.

Also check that the seat is properly secured before riding.



 \bigwedge Do not remove the protections and always install the battery respecting the polarities, protecting the terminals with vaseline grease.



 \bigwedge When installing a new battery, dispose of the spent battery at an authorised collection point, following local regulations, to ensure proper recycling and environmental protection.

FUSES AND RELAYS

Fuses protect the vehicle's electrical circuits. If an electrical component of the vehicle stops working, check and replace the blown fuses, if any,



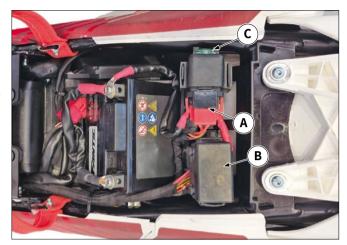
problem. It is therefore advisable to take the vehicle to an authorized Fantic Motor Centre for inspection.

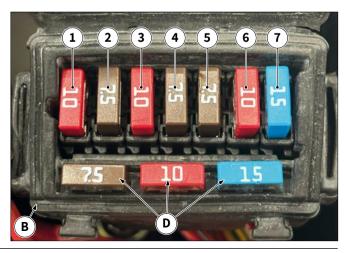


No not repair faulty fuses and never use a fuse of a different power rating than specified, it could cause a short circuit and consequently the risk of fire and related damage to the electrical system.

Fuses arrangement

- A. Main fuse (30 A)
- B. Fuse box
- 1. Engine control unit fuse (10 A)
- 2. Cooling fan fuse (7.5 A)
- 3. Electronic injection system and emission control system fuse (10 A)
- 4. Fuse dashboard, ABS, connectivity module, engine control unit and USB socket (7.5 A)
- 5. Headlight, tail light, license plate light, left and right light stalk, turn signals, position lights, brake light fuse (7.5 A)
- 6. ABS ECU fuse (10 A)
- 7. ABS hydraulic pump fuse (15 A)
- C. Main spare fuse (30 A)
- D. Reserve fuses (7.5 A. 10 A. 15 A)





Fuse removal



⚠ If you are not sure about this operation, it is recommended that you contact an authorised Fantic **Motor Center.**

Set the ignition switch to (OFF) and remove the key from the ignition switch.

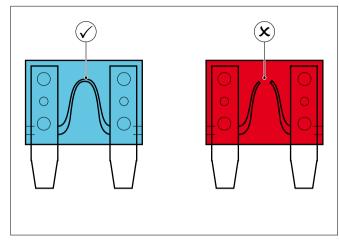
Remove the seat (see "Battery" section).

Remove the fuse box cover from the vehicle.

Remove one fuse at a time and check if the filament is broken.

Replace the fuse, if damaged, with a type of the same amperage.

Install the fuse box cover and the seat.



VEHICLE INACTIVITY

If the vehicle should remain inactive for months it is advisable to take some precautions:

- Empty the tank completely.
- Remove the battery and charge it with a suitable battery charger every two weeks.



The battery must be kept in a dry place and at a temperature between 5-35 °C (41-95 °F). Keep the battery out of reach of children.

- Position the vehicle with the tires raised off the ground using the appropriate supports and periodically check the tire pressure.
- Lubricate the chain.
- Cover the exhaust terminal with a well-tied bag to prevent moisture from entering inside.
- Cover the vehicle with an appropriate sheet (in breathable material) of a size sufficient to fully cover the vehicle.
- The vehicle must be placed in an unheated place with minimal temperature variations, free from humidity and protected from sunlight.

After the period of inactivity:

- Uncover and wash the vehicle.
- Check the battery status.
- Perform preliminary checks.



 \bigwedge Take a test drive for a few kilometres (miles) at moderate speed in an area away from traffic.

VEHICLE WASHING

It is good that the vehicle is washed periodically to keep its components in good condition.

If the vehicle is used under the following conditions, more frequent washing is recommended:

- Areas where humidity and salinity of the atmosphere are higher than normal.
- Roads or areas where salt or de-icing chemicals are used.
- Roads or areas with the presence of industrial dust or tar stains.
- Sport use and off-road driving.
- Presence on the vehicle body of dead insects, bird excrement, etc.

It is advisable not to stop or park the vehicle under plants or trees. Certain plants or trees release residues, resins, fruits or leaves containing substances harmful to the vehicle components and bodywork.



⚠ Fantic Motor recommends using quality products to clean the vehicle. The use of unsuitable products can damage vehicle components. For cleaning, do not use solvents or cleaning products that contain alcohol or gasoline. Fantic Motor recommends the use of environmentally friendly neutral liquid soap.



 $\sqrt{}$ The use of high-pressure washing systems (or steam cleaners) can damage the seals, the oil seals, brake system, electrical system, dashboard and seat. Fantic Motor does not recommend the use of steam or pressure washing systems to clean the vehicle.



Before washing the vehicle, switch off the ignition key and protect the seat with a suitable cover to prevent water penetration.

Do not wash in the sun, especially in summer, with the body still warm, as if the detergent dries before rinsing it could cause damage to the paintwork.

Do not use liquids at temperatures above 40 °C (104 °F) to clean plastic components.

Do not direct air jets, steam or water at high pressure on:

- Wheel hubs.
- Handlebars switches.
- Bearings.
- Brake oil master cylinder and tanks.
- Tools and indicators.
- Exhaust system fumes outlet hole.
- Steering lock.
- Fuel tank cap or similar.
- Headlight and tail light.
- Electrical components.
- Decals.

Use a jet of warm water at low pressure, rinse the vehicle thoroughly and in particular the dirtiest parts. With a soft sponge rub all parts of the vehicle.

Rinse the vehicle well and thoroughly using a low pressure jet. With a chamois leather cloth, proceed to dry the vehicle. It is possible that after the wash the braking efficiency is reduced, it is therefore recommended to dry the discs well and wait for the pads to dry.

If the vehicle is started, proceed with caution and operate the brakes repeatedly.

Only after a scrupulous and thorough washing it is possible to proceed with the polishing phase with silicone waxes.



Do not use abrasive pastes on the vehicle, they could damage the painted parts.



Do not apply protective wax on the parts of the braking system, it could compromise their operation.



Do not pass wax on the seat, it could damage it and make it slippery, reducing the stability of the rider's and/or passenger's seat thus increasing the risk of accidents and/or damage to things and/or people.

RECOMMENDED PRODUCTS TABLE

(i) Use lubricating and fluid products that meet the equivalent specifications, or higher than those prescribed. These same indications are also valid for topping up.

| Product | Characteristics | Remarks | |
|--|---|---------------------------|--|
| 4-stroke gearshift engine oil | SAE 10W40 | Do not use mineral oils. | |
| Grease for bearings, joints, articulations and linkage | Lithium grease | | |
| Coolant | Antifreeze liquid based on ethylene glycol with organic additives | Do not dilute with water. | |
| Fork oil | SAE 15W oil | | |
| Drive chain lubricant | Spray grease for drive chains | | |
| Brake oil | Dot 4 or 5.1 brake fluid | | |
| Cleaner for electrical contacts | Contact Cleaner | | |
| Fuel | 95 or 98 octane super lead-free petrol with 10 % maximum ethanol content | E5 E10 | |
| Safety lock medium tightening | Medium threadlocker | | |
| Safety lock strong tightening | Strong threadlocker | | |
| Lubricant for bolts unlocking | Unblocking protective lubricant | | |
| Anti-friction lubricant for screw tightening torques | Generic engine oil | | |
| Lubricant for rubber oil seals and OR parts | Lithium soap grease | | |

| Product | Characteristics | Remarks | |
|--|--|---|--|
| Battery terminals | White vaseline grease | | |
| Vehicle wash | Low pressure water at room temperature Ecological neutral liquid soap | Avoid aggressive detergents. | |
| External cleaning of the brake system (brake plates and seats) | Disc Brake Spray Cleaner | Do not use to clean brake pads and plastic parts. | |

MAINTENANCE SCHEDULE

- (i) The maintenance schedule indicates all the operations required to maintain top performance in terms of safety and reliability, as well as proper emission control of your Fantic Motor vehicle.
- Scheduled maintenance work (servicing) must be carried out according to the standards and specifications required by Fantic Motor.
- Contact an authorised Fantic Motor Service Centre and you will find properly trained technicians and a workshop equipped with all the necessary requirements.
- (i) Compliance with and performance of all maintenance services listed in this schedule ensures that the vehicle is constantly serviced correctly and optimally.
- Fantic Motor declines all civil and criminal liability for damage to the vehicle, property and/or persons due to maintenance operations performed by the user.
- Carry out maintenance operations more frequently if the vehicle is used in rainy, dusty areas, rough roads or in the case of fast riding.
- In the case of intensive and prolonged use or use of the vehicle in a harsh environment (dusty and sandy terrain), it is necessary to intensify vehicle checks and, if necessary, to carry out servicing earlier.
- It is essential to make the first inspection and servicing by the end of the first year of use of the vehicle even if the deadline of 1000 km (600 mi) has not been reached.
- $\widehat{f i})$ Timely servicing is necessary for proper use of the warranty.

MAINTENANCE PLAN

SCHEDULED MAINTENANCE PLAN

- (i) The following scheduled maintenance plan contains all the maintenance procedures planned and carried out at Fantic Motor authorised workshops.
- (i) Scheduled servicing for this Fantic Motor vehicle is a regular service interval of one service every 3000 km or 1800 miles (with the exception of the first service at 1000 km or 600 miles, scheduled at the end of the running-in period).

| | | Frequency (x 1000 km / 600 mi) | | | | | Specific | Specific |
|-------------------|---|--------------------------------|---|----------|---------------|--------------------------|------------|----------|
| Item | Item Operation | | 3 | 6 | 9 | 12 | period | distance |
| Fuel circuit | Check that the fuel pipes are not cracked or damaged. | | | √ | | ✓ | every year | |
| Mapping check | Check that the engine control unit is updated to the latest version. | ✓ | | ✓ | | ✓ | | |
| | – Clean. | | | ✓ | | | | |
| Air filter 1 | - Replace. | | | | | ✓ | | |
| Spark plug | - Check its status Clean and restore the electrode distance. | | | ✓ | | | | |
| | – Replace. | | | | | ✓ | | |
| Valves | - Check the valve clearance. - Adjust if necessary. | | | ✓ | | ✓ | | |
| Engine oil | - Check the oil level and the absence of oil leaks in the vehicle. | - | | | | every 500 km (300 mi) | | |
| | – Replace. | ✓ | ✓ | ✓ | ✓ | ✓ | every year | |
| Engine oil filter | - Replace. | ✓ | ✓ | √ | ✓ | ✓ | every year | |
| Cooling system | Check the coolant level and verify the absence of any leaks in the vehicle. | | | ✓ | | ✓ | every year | |
| | – Coolant change. | | - | | every 3 years | | | |
| Clutch | - Check its operation. - Adjust if necessary. | ~ | | ✓ | | ✓ | | |

| | | | Frequency (x 1000 km / 600 mi) | | | | Specific | Specific |
|---|--|----------|--------------------------------|----------|---|----------|---------------|--------------------------|
| Item | Operation | 1 | 3 | 6 | 9 | 12 | period | distance |
| Drive chain | - Lubrication and cleaning Check the clearance on the rear sprocket flexible coupling Adjust if necessary. | | | - | | | | every 500 km (300 mi) |
| | – Replace if necessary. | | | 2 | | | - | - |
| Battery | – Check the charge level. | | | ✓ | | ✓ | every year | |
| Braking system | – Check the brakes operation. | ✓ | | ✓ | | ✓ | every year | |
| Brake fluid | – Check the level. | ✓ | | ✓ | | ✓ | every year | |
| brake itulu | - Replace. | | | - | | • | every 2 years | |
| Brake pads | - Check for wear. - Replace if necessary. | ✓ | ✓ | | | | | |
| Brake discs | - Check for wear. - Replace if necessary. | ✓ ✓ ✓ | | | | | | |
| Braking system pipes | - Check for cracks or damage Check that the installation and tightening are correct. | | | ✓ | | ✓ | every year | |
| Pivot pin for the brake pedal and gear shift pedal | – Lubricate with lithium soap based grease. | ✓ | | ✓ | | ✓ | | |
| Throttle control | - Check its operation Check the grip clearance and adjust if necessary Lubricate the cable and throttle control body if necessary. | | | ✓ | | ✓ | | |
| - Check its operation Check the clutch lever play and adjust if necessary Lubricate the cable and clutch lever body if necessary. | | √ | | ✓ | | √ | | |
| Clutch lever pivot pin | – Lubricate with lithium soap based grease. | ✓ | ✓ ✓ ✓ ✓ | | | | | |
| Wheels and Tires | – Check the status and pressure. | | | ✓ | | ✓ | every year | |

MAINTENANCE PLAN

| | | | Frequency (x 1000 km / 600 mi) | | | | | Specific |
|---------------------------------------|---|----------|--------------------------------|----------|----------|----------|-----------------|------------------------------|
| Item | Operation | 1 | 3 | 6 9 | | 12 | Specific period | distance |
| Wheel bearings | Check that the bearings are not loose or damaged. | | | ✓ | | ✓ | | |
| Handlebar bearings | - Check the bearing clearance and the handlebar hardness. | | | ✓ | | √ | | |
| nanutebar bearings | – Lubricate with lithium soap based grease. | | | - | | | | every 24000 km (14000 mi) |
| | – Check its operation and the absence of oil leaks. | ✓ | | ✓ | | | | |
| Fork | – Replace oil. | | | | | ✓ | | |
| | – Oil seals replacement. | | | | | ✓ | | |
| Rear shock absorber | Check its operation and the absence of oil leaks in the shock absorber. | | | ✓ | | ✓ | every year | |
| | - Check the swing arm operation. | ✓ | | ✓ | | ✓ | | |
| Rear suspension rotation points | Check the junction arm operation. Lubricate the rotation points of the suspension with a non-washable anti-corrosion lubricant. | ✓ | ✓ ✓ ✓ | | ✓ | | | |
| Passenger footboards | - Check its condition and lubricate if necessary. | ✓ | | ✓ | | ✓ | every year | |
| Side kickstand | - Check its operation Lubricate with lithium soap based grease. | ✓ | | ✓ | | √ | every year | |
| Side kickstand switch | – Check its operation. | ✓ | | ✓ | | ✓ | | |
| Fastening elements and moving parts 3 | | | | ✓ | | ✓ | | |

Off-road vehicle use:

- Clean every 1000 km (600 mi).
- Replace every 6000 km (3600 mi).

2 Drive chain: replace only in the following cases:

- Worn and/or deformed chain.
- Difficulty or impossibility of adjusting the tension.
- Excessive elongation beyond the limit (more than 2% of the maximum permitted length).
- Lack of alignment between rim and sprocket.

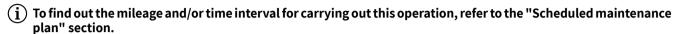
3 Fastening elements and moving parts: check the following components:

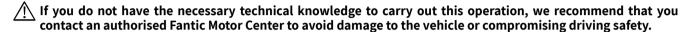
- Wheel fastening pins and nuts.
- Screws, nuts and bolts for fastening the rear suspension linkage.
- Swingarm pin.
- Steering system fastening ring nuts and bearings.
- Handlebar fastening bolts and nuts.
- Front fork stanchions fastening screws.
- Front and rear brake calliper fastening bolts.
- Headlight fastening screws.
- Handlebar controls fastening screws.
- Rear-view mirrors fastening screws and nuts.
- Driver's and passenger's footboards fastening pins and bolts.
- Seat fastening knob.

MAINTENANCE PLAN

SPARK PLUG

The spark plug is a fundamental component for the proper functioning of the engine. In order to ensure optimal performance, special care and maintenance is essential.





Before unscrewing the spark plug, the engine head must be cleaned with a jet of compressed air to prevent grains of sand, mud or other dirt deposited on it from entering the cylinder.

Spark plug disassembly



Remove spark plug cap "1" and unlock spark plug "2" using the spark plug spanner and unscrew it by hand until it comes out completely.

Clean it with a wire brush and check the distance between the electrodes.

Distance between the electrodes: 0.8-0.9 mm (0.031-0.035 in).



Then refit the spark plug by first screwing it in by hand, use the spanner only for final tightening.

Spark plug tightening torque: 12.5 N·m (1.25 kgf·m, 9.22 lb·ft).

Replace the spark plug cap "1", ensuring that it is inserted correctly.

When replacing the spark plug, check the pitch and length of the thread. If the threaded part is too short, carbon deposits will settle on the thread housing, risking damage to the engine when the correct one is reassembled.

Only use spark plugs of the recommended type (see "Technical data" section), otherwise engine performance and service life may be impaired.

MAINTENANCE PLAN

ENGINE OIL REPLACEMENT

To find out the mileage and/or time interval for carrying out this operation, refer to the "Scheduled maintenance plan" section.

↑ Changing the engine oil and filter is a complex operation for an inexperienced operator. In case of need, it is advisable to contact an Authorized Fantic Motor Center.

Start the engine, warm it up for a few minutes, then turn it off.

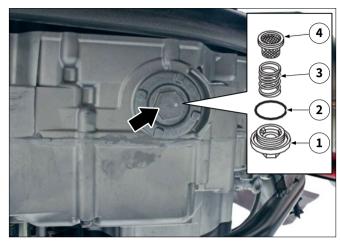
Place a container "A" under the oil drain bolt. Remove:

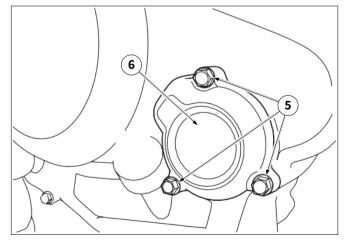
- Oil level inspection cap/dipstick.
- Engine oil drain plug "1", O-ring "2", spring "3" and engine oil filter "4".

Drain the engine oil completely from the crankcase.

If also the oil filter element must be replaced, perform the following procedure:

- Remove bolts "5" and the oil filter element cover "6".





- Remove and replace filter element "7" with a new one.
- Install a new O-ring "8".
- (i) Lubricate the O-ring with lithium soap based grease.
- (i) Ensure that the O-ring is seated correctly.
- Install the oil filter element cover "6".
- Install and tighten bolts "5".

Oil filter element cover bolt: 10 N·m (1.0 m·kgf, 7.2 ft·lbf)

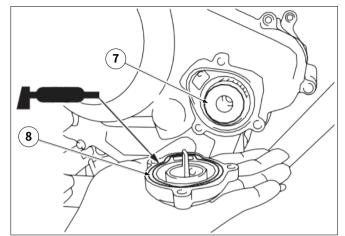
Ensure that the engine oil filter "4" is free of impurities; if not, proceed with cleaning.

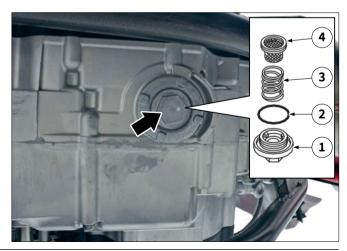
- Install:
 Engine oil filter "4".
- Spring "3".
- O-ring "2" (new).
- Engine oil drain plug "1".

Oil drain plug: 32 N·m (3.2 m·kgf, 23 ft·lbf)

Fill the crankcase with the recommended amount of engine oil (see "Technical data" section).

- Insert the oil level cap/dipstick back on.
- Start the engine, warm it up for a few minutes, then turn it off.
- Check the engine (for engine oil leaks). For the engine oil level, refer to "Engine oil level check".





MAINTENANCE PLAN

AIR FILTER

The filter element is washable.

(i) To find out the mileage and/or time interval for carrying out this operation, refer to the "Scheduled maintenance plan" section.

Do not use petrol or flammable solvents to wash the filter, to avoid possible fire or explosion.

For maintenance intervals, refer to the "Scheduled maintenance plan" section.



Removal

- Switch off the vehicle and operate the side kickstand.
- Working on the left side of the vehicle, unscrew screw "1".
- (i) Allen screw: M6x16 mm.
- Pull the left side panel "2" towards the outside of the air filter box, unhook it and remove it.



- Unscrew the two screws "3".
- Remove the air filter box cover "4" by pulling it upwards.



- Pull the closing flap "5" outwards.



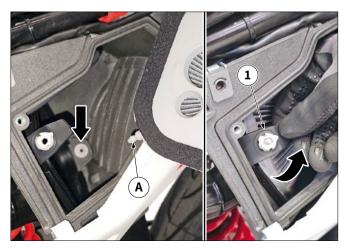
MAINTENANCE PLAN

- Remove air filter "6" by moving it towards the outside of the filter casing.
- (i) Clean the inside of the filter casing with a cloth before removing the filter to prevent dust and foreign bodies from entering the intake manifold.
- Clean the filter or replace it with a new one of the same type.



Installation

- Insert the air filter into the filter casing.
- Ensure that the pin "A" engages with the designated internal support within the filter box.
- Check that the filter adheres perfectly to the wall of the filter casing;
- Close closing flap "1" on the outer pin of the air filter.



 Install the air filter cover "2" and secure it with the two screws "3".

Filter box cover screw: 2 N·m (0.20 kgf·m, 0.45 lb·ft).



- Install left side panel "4".

Ensure that the three tabs on the side panel fit snugly against the rear fairing.

- Tighten the fastening screw on the left side panel.

Left side panel fastening screw: 2 N·m (0.20 kgf·m, 0.45 lb·ft).



TECHNICAL DATA

| | ENDURO PERFORMANCE | MOTARD PERFORMANCE | ENDURO COMPETITION | MOTARD COMPETITION | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|--|--|
| Length (mm) | 2120 | 2085 | 2120 | 2085 | | |
| Width (mm) | 815 | 815 | 865 | 865 | | |
| Height (mm) | 1240 | 1170 | 1240 | 1170 | | |
| Minimum ground clearance (mm) | 340 | 265 | 340 | 265 | | |
| Wheel base (mm) | 1420 | 1435 | 1420 | 1435 | | |
| Seat height (mm) | 910 | 870 | 910 | 870 | | |
| Dry weight (Kg) | 117 | 115 | 117 | 115 | | |
| Weight in running order (with 90% fuel) (Kg) | 127 | | | | | |
| Weight at full load (vehicle, rider, passenger and baggage) (Kg) | 270 | | | | | |
| Engine type | | 4-stroke sin | gle cylinder | | | |

| | ENDURO PERFORMANCE | MOTARD PERFORMANCE | ENDURO COMPETITION | MOTARD COMPETITION | | | | |
|-------------------|--|-----------------------------------|-----------------------|-----------------------|--|--|--|--|
| Cooling | | Liquid | | | | | | |
| Bore / Stroke | | 52.0 x 58.6 | | | | | | |
| Displacement | | 124.7 cm3 | | | | | | |
| Compression ratio | | 11.2 | 20:1 | | | | | |
| Engine idle rpm | 1750 ± 150 | | | | | | | |
| Gearshift | | 6-speed | | | | | | |
| Clutch | | Oil-bath multidisc slipper system | | | | | | |
| Ignition | | Elect | ronic | | | | | |
| Fuel system | Single point electronic injection, single point injector | | | | | | | |
| Spark plug | NGK R MR8E-9 | | | | | | | |
| Fuel supply | Super petrol (min. octane number 98) | | | | | | | |

TECHNICAL DATA

| | ENDURO PERFORMANCE | MOTARD PERFORMANCE | ENDURO COMPETITION | MOTARD COMPETITION | | |
|---|---|-----------------------|-----------------------|-----------------------|--|--|
| Total tank capacity / Reserve | | 7.5 L | /1L | | | |
| Cooling circuit capacity | | 750 cc (see lu | bricant table) | | | |
| Air filter | | Made of synthetic | material HAR 16A | | | |
| Engine oil | | See lubricants table | | | | |
| Total amount | | 1.0 | 5 L | | | |
| Without replacement of the oil filter element | | 0.8 | 5 L | | | |
| With replacement of the oil filter element | | 0.9 | 5 L | | | |
| Primary transmission | | 3.0 |)42 | | | |
| Final drive | Chain 428, (Z=14/63) Chain 428, (Z=14/57) Chain 428, (Z=14/63) Chain 428, (Z=14/63) | | | | | |
| Frame | CrMo steel perimeter | | | | | |
| Rear swingarm | Steel variable section Aluminium variable section | | | | | |

| | ENDURO PERFORMANCE | MOTARD PERFORMANCE | ENDURO COMPETITION | MOTARD COMPETITION | | | |
|-----------------------|---|--|---|--|--|--|--|
| Front suspension | | Hydraulic telescopic fork 265 mm travel | | | | | |
| Rear suspension | | monoshock 247 mm oke | Adjustable hydraulic monoshock 271 mm stroke | | | | |
| Front brake | Hydraulically actuated 260 mm disc | Hydraulically actuated 320 mm disc | Hydraulically actuated 260 mm disc | Hydraulically actuated 320 mm disc | | | |
| Rear brake | | Hydraulically actu | ated 220 mm disc | | | | |
| Wheels | Aluminium alloy with tangential front spokes 21x1.6" rear 18x1.85" | Six-spoke aluminium alloy front 17x2.5" rear 17x3.5 | Aluminium alloy with tangential front spokes 21x1.6" rear 18x1.85" | Aluminium alloy with tangential front spokes 17x2.5" rear 17x3.5" | | | |
| Front tire / Pressure | 90/90x21 asphalt 1.7 bar off- road 1.1 bar | 100/80x17 asphalt 2.3 bar | 90/90x21 asphalt 1.7 bar off- road 1.1 bar | 100/80x17 asphalt 2.3 bar | | | |
| Rear tire / Pressure | 120/90x18 asphalt 1.8 bar off- road 1.1 bar | 130/70x17 asphalt 2.3 bar | 120/90x18 asphalt 1.8 bar off- road 1.1 bar | 130/70x17 asphalt 2.3 bar | | | |
| Tire Type | Inner tube | Tubeless without inner tube | Inner tube | Tubeless with inner tube | | | |

TECHNICAL DATA

| | ENDURO PERFORMANCE | MOTARD PERFORMANCE | ENDURO COMPETITION | MOTARD COMPETITION | | | |
|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|--|--|
| High/low beam light | | LED | | | | | |
| Front position light | LED | | | | | | |
| Turn signals | | LE | ED | | | | |

EN

Declaration of conformity

EU Directive 2014/53/EU



Simplified EU conformity declaration:

Your vehicle is equipped with a range of radio equipment. The manufacturers of this radio equipment declare that these equipment complies with Directive 2014/53/EU where required by law. The complete text of the EU declaration of conformity is available at the following web address: www.Fantic.com/RED

Addresses of radio component manufacturers:

All radio components must carry the manufacturer's address according to the provisions of directive 2014/53/EU. For components that, due to their size or nature, cannot be furnished with a sticker, the respective manufacturers' addresses as required by law are listed in the table 2. Note Only skilled person can access and install the device.

TAB.1

| RADIO DEVICE INSTALLED ON THE VEHICLE | FREQUENCY BAND | RADIO TRASMISSION MAX POWER |
|---------------------------------------|----------------|-----------------------------|
| E-CONNECT MICRO | | |
| Bluetooth® | 2402-2480MHz | < 20 dBm e.i.r.p. |

TAB.2

| RADIO DEVICE INSTALLED ON THE VEHICLE | IMPORTER | |
|---------------------------------------|---|--|
| E-CONNECT MICRO | e-Shock - Via San Martino 12 (20122) Milan, Italy | |



Note:

Only skilled person can access and install the device.