OWNER'S MANUAL 2026

READY TO RACE

1390 SUPER DUKE R EVO

ITEM NO.: 3240305EN



Dear KTM customer,

Congratulations on your decision to purchase a KTM motorcycle. You are now the owner of a state-of-the-art sports motorcycle that will give you enormous pleasure if you service and maintain it properly.

We wish you a lot of enjoyment in riding this vehicle!

You can enter the serial numbers of your vehicle below to find the serial numbers more quickly if required:

Vehicle identification number (p. 16)	Stamp of the contractual partner
Engine number (p. 16)	

The owner's manual contained the latest information for this model series at the time of publication. However, minor differences due to further developments in design cannot be ruled out completely.

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ISO 9001

KTM applies quality assurance processes that lead to the highest possible product quality as defined in the ISO 9001 international quality management standard.

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1.1 Conventions

1.1.1 Icons

✓	Indicates a desired result (e.g. of a work step or a function).
✗	Indicates an undesired result (e.g. of a work step or a function).
	All work marked with this symbol requires specialist knowledge and technical understanding. Ensure that this work is carried out or supervised by trained personnel from an authorized contractual partner, and that any special tools required are used.
	Indicates a page reference.
	Indicates information with more details.
	Indicates a tip, e.g. to simplify work.
»	Indicates the result from a test step.
	Indicates the end of an activity, including any rework.

1.1.2 Formatting

Proprietary name	Indicates a proprietary name.
Name ®	Indicates a protected name.
Brand ™	Indicates a brand available on the open market.
Underlined terms	Refer to technical details of the vehicle or indicate technical terms that are explained in the glossary.

1.1.3 Abbreviations

2–pc.	two-part
Part no.	Part number
or	respectively
approx.	circa
etc.	et cetera
poss.	possibly/possible
if necessary	if necessary
cmpl.	complete
min.	at least
no.	number
no fig.	no figure
s.	see
among others	among others/not limited to
and the like	and the like
etc.	et cetera
cf.	compare
e.g.	for example

2.1 Safety instructions

Function of the safety instruction

Safety instruction brings attention to dangers when handling the product. Hazards are classified, named, described, and supplemented with information on how to avoid them.

- If there is a safety instruction before a list of instructions, the danger exists throughout the entire activity.
- If there is a safety instruction immediately before an instruction, the next step presents a danger.

Safety instruction layout

All safety instructions are identified by a signal word and a warning symbol. The combination of signal word and warning symbol determines the degree of danger.



DANGER
Indicates an imminent danger that leads to serious injury or death.



WARNING
Indicates a potentially imminent danger that could lead to serious injury or death.



CAUTION
Indicates a potentially imminent danger that can lead to minor or slight injuries.



NOTE
Indicates a situation that can lead to damage to the product or the product environment.



NOTE
Indicates a situation that can lead to environmental damage.

2.2 Ban on tampering

No changes may be made to the noise control equipment and components.

Tampering that is prohibited

- Removing or disabling any devices or components used for noise control before the new vehicle is sold or delivered to the end customer.
- Removing or disabling any device or component used for noise control for purposes other than service, repair, or replacement during the service life of the vehicle.
- Use of the vehicle after a device or component used for noise control has been removed, disabled, or inadequately maintained.

Examples of prohibited tampering

- Removing or drilling through rear mufflers, baffle plates, manifolds, or other components that conduct exhaust gases.
- Removing or puncturing parts of the intake system.
- Replacing moving parts of the vehicle, or parts of the exhaust system or intake system, with parts other than those specified by the manufacturer.

2.3 Safe use

DANGER

Danger of accidents A rider who is not fit to ride poses a danger to themself and to others.

– Do not operate the vehicle if you are not fit to ride due to alcohol, drugs, or medication.
– Do not operate the vehicle if you are physically or mentally incapable of doing so.

DANGER

Danger of poisoning Exhaust gases are toxic and inhaling them may result in unconsciousness and death.

– Always ensure that there is sufficient ventilation when running the engine.
– Use suitable exhaust extraction when starting or running the engine in an enclosed space.

WARNING

Danger of burns Some vehicle components become hot when the vehicle is operated.

– Do not touch any parts such as the exhaust system, radiator, engine, damper, or brake system before the vehicle parts have cooled down.
– Allow the vehicle parts to cool down before performing any work on the vehicle.

The vehicle should only be used when it is in perfect technical condition, for its intended purpose, and in a safe and environmentally-friendly manner.

The vehicle must only be used by trained persons. An appropriate driver's license is needed to drive the vehicle on public roads.

Have any faults that impair safety immediately remedied by an authorized contractual partner.

Adhere to the information and warning labels on the vehicle.

2.4 Protective clothing

WARNING

Risk of injury Missing or inadequate protective clothing increases the risk of injury.

– Wear appropriate protective clothing such as helmet, boots, gloves as well as pants and a jacket with protectors on all rides.
– Always wear protective clothing that is in good condition and meets the legal regulations.

2.5 Work rules

Unless specified otherwise, the ignition must be switched off during all work (models with ignition lock, models with transponder key) or the engine must be at a standstill (models without ignition lock or transponder key).

Special tools are required for some work. The tools are not part of the vehicle, but can be ordered using the number in parentheses. Example: bearing puller (15112017000)

Unless otherwise noted, normal conditions apply to all tasks and descriptions.

Ambient temperature	20 °C (68.0 °F)
Ambient air pressure	1,013 mbar (14.69 psi)
Relative air humidity	60 ±5 %

During assembly, use new parts to replace parts which cannot be reused (e.g. self-locking screws and nuts, expansion screws, seals, sealing rings, O-rings, pins, and lock washers).

A thread lock (e.g. **Loctite®**) is required for some screw connections. Observe the manufacturer's specific instructions for use.

If thread lock (e.g. **Precote®**) has already been applied to a new part, do not apply any additional thread lock.

After disassembly, clean the parts that are to be reused and check them for damage and wear. Replace damaged or worn parts.

After completing a repair or service, check the operating safety of the vehicle.

2.6 Environment

Handling the vehicle responsibly reduces the risk of conflict with other road users and the surrounding area. The future of motorcycling also depends on using motorcycles legally, being environmentally conscious and respecting the rights of others.

When disposing of used oil, other operating and auxiliary fluids, and used components, the laws and regulations of the respective country must be observed.

As motorcycles are not subject to the EU regulations governing the disposal of end-of-life vehicles, there are no legal regulations that pertain to the disposal of an end-of-life motorcycle. More information is available from the authorized contractual partner.

2.7 Owner's manual

Read this owner's manual carefully and in full before riding off for the first time. The owner's manual contains information and tips on how to operate, handle, and service your vehicle, as well as advice on optimum tuning and how to avoid injuries.

Tip

Save this owner's manual on your smartphone, for example, so that you can access it at any time.

An authorized contractual partner will be happy to assist you if you are unsure.

The owner's manual is an important component of the vehicle. If the vehicle is sold, the owner's manual must be downloaded again by the new owner.

The owner's manual can be downloaded multiple times using the QR code or the link on the delivery certificate.

The owner's manual is also available for download from your authorized contractual partner and on the KTM website.

International KTM Website: https://www.ktm.com

A printed copy can be ordered from the following address.

Website for printed copy: https://print.ktm.com

2.8 Use definition – intended use

The vehicle is designed and constructed to withstand the usual demands of regular traffic and use on race courses. This vehicle is not suitable for offroad use.

Note

This vehicle is only authorized for operation on public roads in its homologated version.

2.9 Improper use

The vehicle may only be used as intended.

Improper use can result in danger to people, property and the environment.

Any use of the vehicle beyond the intended and defined use constitutes misuse.

Improper use includes the use of operating and auxiliary materials that do not meet the required specifications for the respective use.

3.1 Manufacturer's warranty, implied warranty

The work prescribed in the service schedule must only be carried out by an authorized contractual partner and then confirmed in the electronic proof of service, as otherwise all warranty claims will be void. Damage or secondary damage caused by tampering with and/or conversions on the vehicle are not covered by the manufacturer's warranty.

3.2 Auxiliary material, operating material

Use operating materials and auxiliary materials in accordance with the operating instructions and specifications.

3.3 Spare parts, accessories

For safety reasons, only spare parts and accessories approved by KTM may be used. They may only be installed by an authorized contractual partner. KTM accepts no liability for other products and any resulting damage or loss.

Certain spare parts and accessory products are specified in parentheses in the descriptions. Authorized contractual partners will be happy to help.

The current **KTM PowerParts** are listed for each vehicle on the KTM website.

International KTM Website: https://www.ktm.com

3.4 Service

A prerequisite for perfect operation and prevention of premature wear is that the service, care, and tuning work is properly carried out as described in the owner's manual. An incorrect suspension setting can lead to damage and breakage of chassis components.

Use of the vehicle under difficult conditions, such as dusty environments, heavy rain, high heat or with a heavy load, can lead to increased wear of components such as the air filter, powertrain, brake systems, or suspension components. For this reason, it may be necessary to inspect or replace components before the next scheduled service interval.

The prescribed running-in times and service intervals must be observed, otherwise the long-term durability of the vehicle will be severely impaired.

The relevant mileage or time interval is whichever occurs first.

3.5 Figures

Some of the figures in this document contain optional extras.

For clarity, some components may be shown disassembled or may not be shown at all. Disassembly is not always absolutely necessary in order to carry out the activities described. The textual information takes precedence.

3.6 Customer service

Authorized contractual partners will be happy to answer questions about the vehicle and KTM.

A list of authorized contractual partners can be found on the KTM website.

International KTM Website: https://www.ktm.com

3.7 Roadside Assistance

For peace of mind when traveling with your vehicle in Europe, we offer Roadside Assistance free of charge in selected countries (handled in cooperation with a contracting partner).

Each service at your authorized contractual partner extends your free Roadside Assistance until the next service or for a maximum of 12 months.

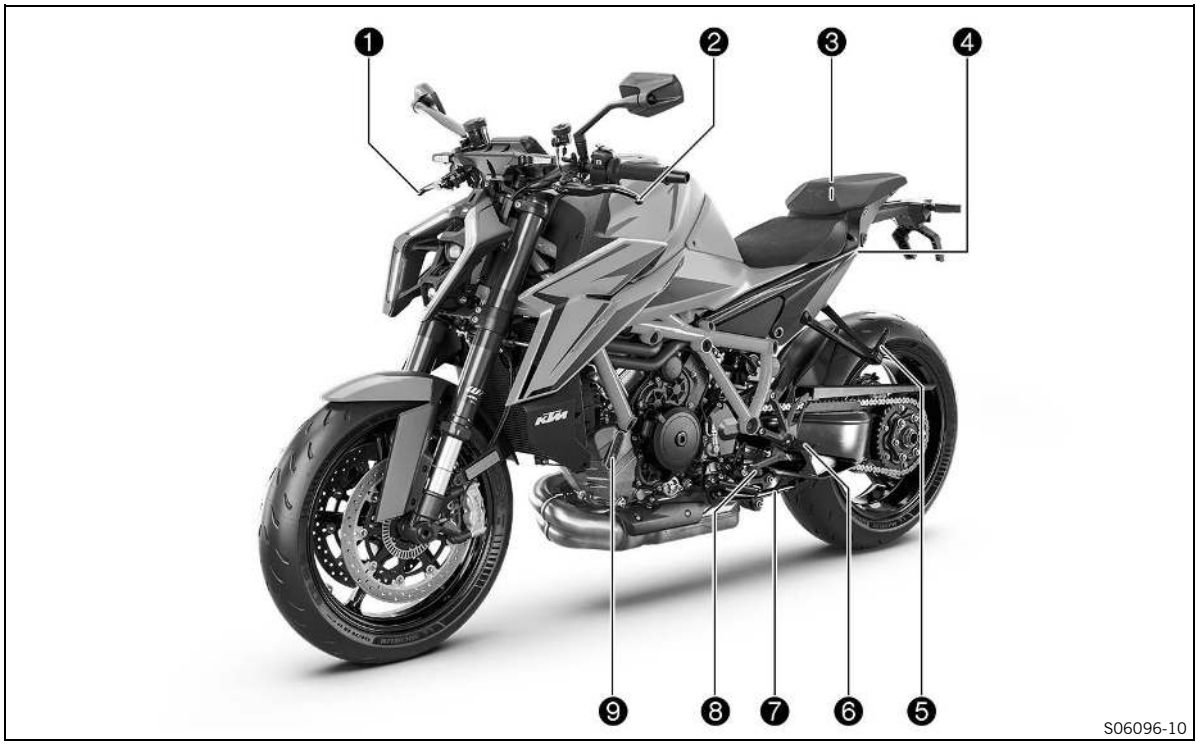
In the event of a breakdown, call the KTM Assistance Center hotline or contact them directly via the KTMconnect app.

The applicable conditions and benefits can be found on the KTM website:

International KTM Website: https://www.ktm.com

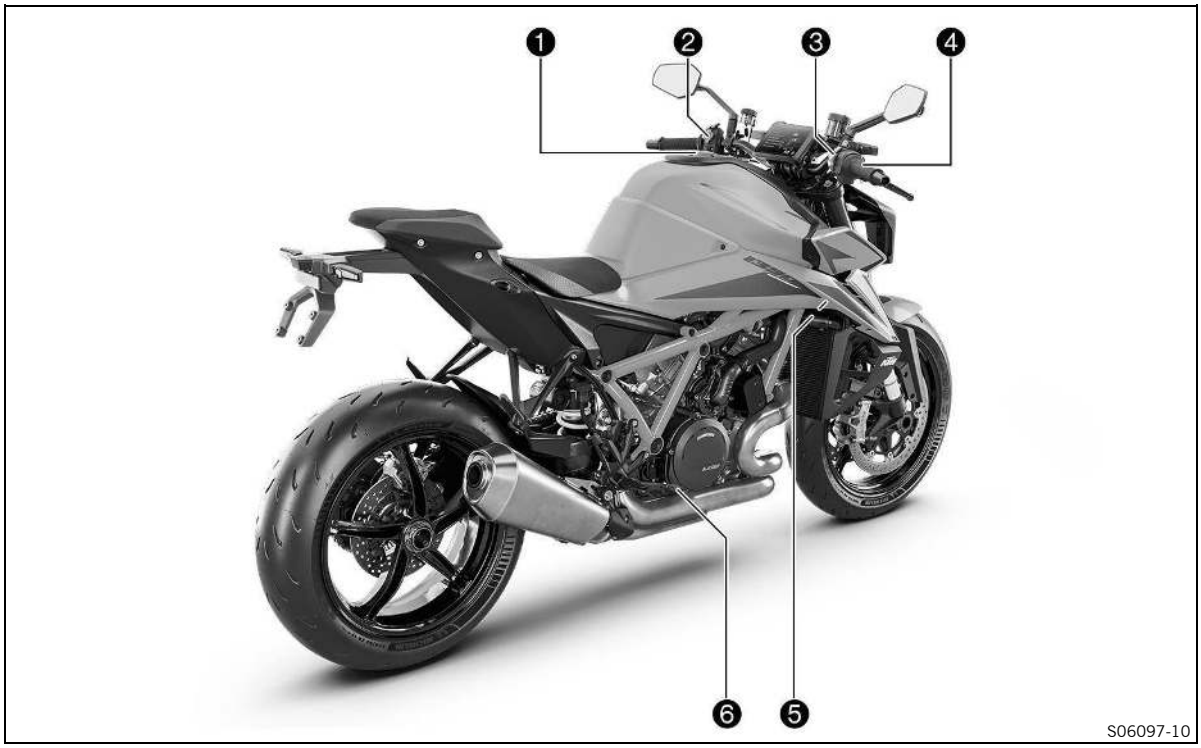
4 View of the vehicle

4.1 View of vehicle, front left (example)



1. Handbrake lever (p. 18)
2. Clutch lever (p. 18)
3. Passenger strap (p. 29)
3. On-board tool kit (p. 29)
4. Passenger seat unlocking (p. 28)
5. Passenger footpegs (p. 29)
6. Rider footrests
7. Side stand (p. 30)
8. Gear shift lever (p. 29)
9. Engine oil level viewer

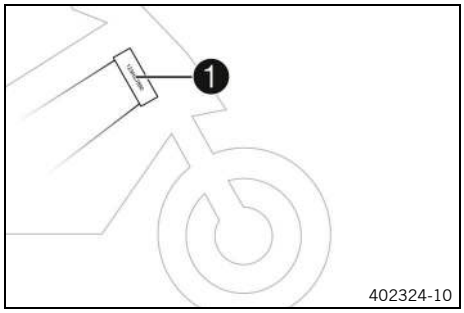
4.2 View of vehicle, rear right (example)



1. Fuel tank cap
2. Combination switch, left (p. 18)
3. Start button/kill switch (p. 23)
3. Lock button (p. 24)
3. Hazard warning flasher switch (p. 23)
3. C1 and C2 switch (p. 24)
4. Throttle grip (p. 18)
5. Cooling system compensating tank
6. Brake pedal (p. 30)

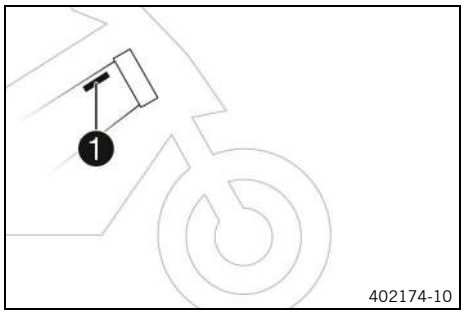
5 Serial number

5.1 Vehicle identification number



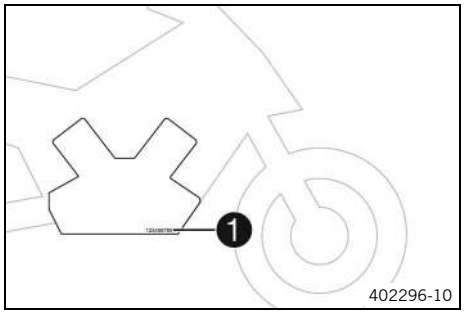
The vehicle identification number ❶ is stamped on the right-hand side of the steering head.
The vehicle identification number is also shown on the type label.

5.2 Type approval label



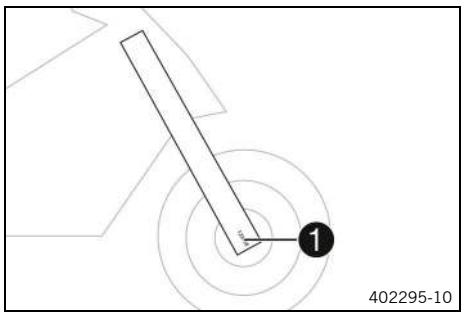
Type approval label ❶ is affixed on the upper right side of the frame tube.

5.3 Engine number



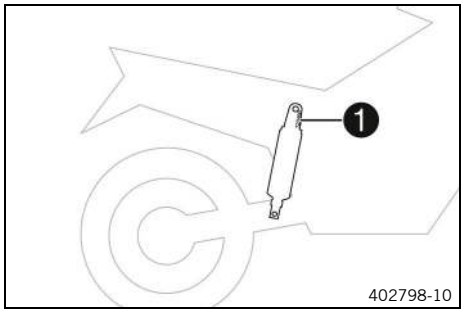
The engine number ❶ is stamped on the right side of the engine.

5.4 Fork part number



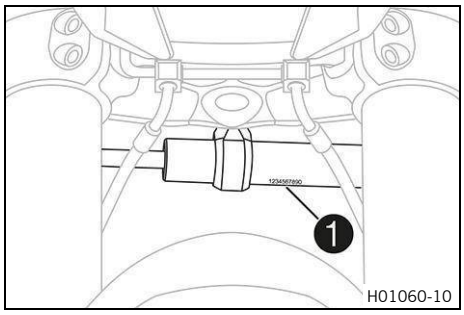
Fork part number ❶ is stamped on the inside of the fork shoe.

5.5 Shock absorber part number



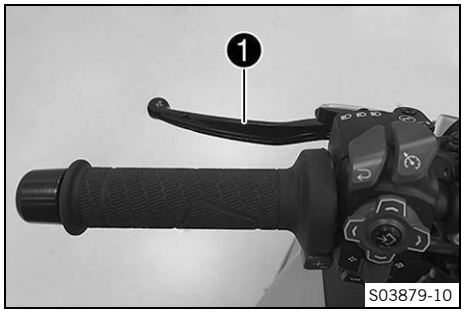
Shock absorber part number ❶ is stamped on the top of the shock absorber above the adjusting ring towards the engine side.

5.6 Steering damper article number



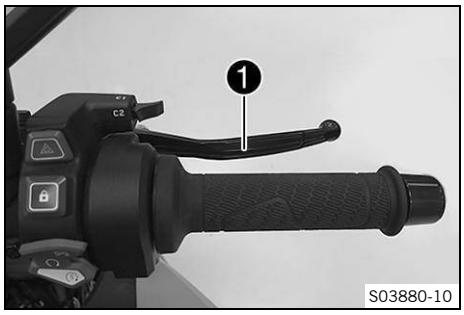
Steering damper article number ❶ is embossed on the underside of the steering damper.

6.1 Clutch lever



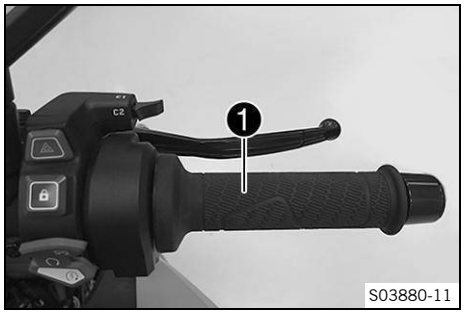
Clutch lever ❶ is fitted on the left side of the handlebar.
The clutch is activated hydraulically and adjusts itself automatically.

6.2 Handbrake lever



Hand brake lever ❶ is fitted on the right side of the handlebar.
The front brake is engaged using the hand brake lever.

6.3 Throttle grip

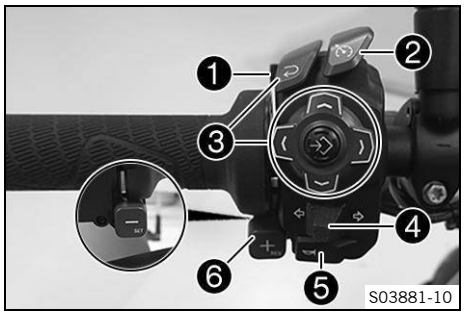


The throttle twist grip ❶ is fitted on the right side of the handlebar.

6.4 Combination switch, left

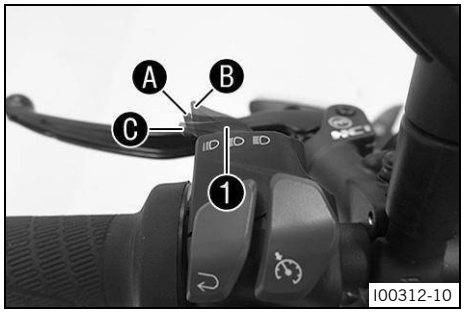
The left combination switch is fitted on the left side of the handlebar.

Overview of the left combination switch



❶ Light switch (p. 19)
❷ Cruise control buttons (p. 20)
❸ Menu buttons (p. 19)
❹ Turn signal switch (p. 20)
❺ Horn button (p. 20)
❻ +RES/-SET button (p. 22)

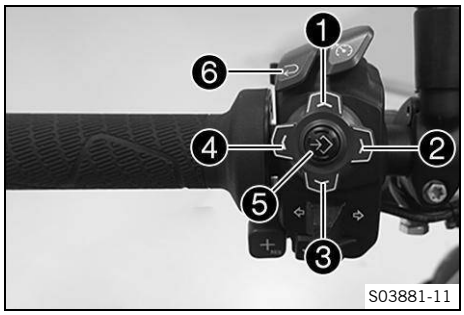
6.5 Light switch



The light switch ❶ is fitted on the combination switch on the left.

Condition		Meaning
	Light switch in position Ⓐ.	In this position, the low beam and the tail light are switched on.
	Light switch in position Ⓑ.	In this position, the high beam and the tail light are switched on.
	Light switch in position Ⓒ.	The headlight flasher is operated in this position. The light switch returns automatically to the position Ⓐ after use.

6.6 Menu buttons



The menu buttons are fitted in the middle of the left combination switch.

The menu buttons are used to control the display on the combination instrument.

Button ❶ is the **UP** button.

Button ❷ is the **RIGHT** button.

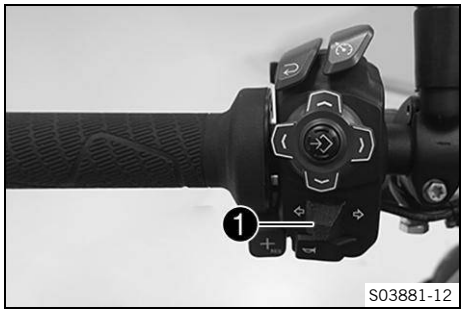
Button ❸ is the **DOWN** button.

Button ❹ is the **LEFT** button.

Button ❺ is the **SET** button.

Button ❻ is the **BACK** button.

6.7 Turn signal switch



Turn signal switch ❶ is fitted on the combination switch on the left.

Condition		Meaning
△	Turn signal switch pressed towards the switch housing	Turn signal off.
⇦	Turn signal switch pressed to the left	Left turn signal on.
⇨	Turn signal switch pressed to the right	Right turn signal on.

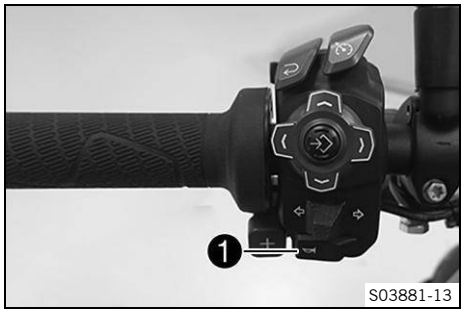
Note

If the iturn signal has been on for at least 10 seconds and the vehicle has travelled 150 metres, the turn signal is automatically switched off by a software function (**ATIR**).

If the vehicle is stationary, both counters are stopped.

If the turn signal switch is reactivated, both counters are reset.

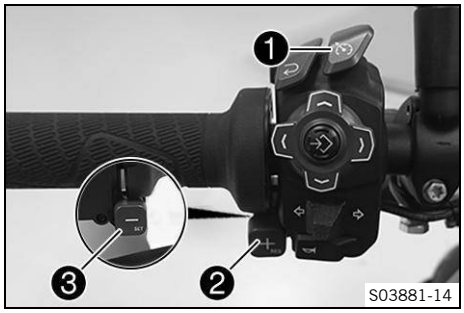
6.8 Horn button



Horn button ❶ is fitted on the left side of the handlebar.

Condition	Meaning
Horn button in the basic position.	No function
Horn button pressed.	The horn is operated in this position.

6.9 Cruise control buttons



Cruise control buttons ❶, ❷ and ❸ are located on the left side of the combination switch.

Condition	Meaning
Cruise control switch in the basic position.	No function.
The **+RES** button is pressed briefly.	The last saved speed is reapplied. Every subsequent brief pressing increases the target speed by 1 km/h or 1 mph.

Condition	Meaning
Button **+RES** is pressed and held.	The target speed increases in increments of 5 km/h or 5 mph.
Button **–SET** is pressed.	The cruise control function is activated and the current speed is maintained. Every subsequent brief press reduces the target speed by 1 km/h or 1 mph.
Button **–SET** is pressed and held.	The target speed decreases in increments of 5 km/h or 5 mph.

Note

After activating the cruise control function, the throttle grip can be turned back to the basic position. The selected speed will be maintained.

If no cruise speed has yet been saved, this can be saved once using the **+RES** button.

If the cruise speed is exceeded for less than 30 seconds by turning the throttle grip, the cruise control remains activated.

To switch off the cruise control system function press the cruise control system button again.

In addition, the cruise control system function is deactivated when one of the following events occurs:

- Operating the handbrake lever
- Operating the foot brake lever
- Operating the clutch lever
- Gear change without QUICKSHIFTER+
- Turning the throttle grip beyond the basic position
- Control of the motorcycle traction control (**MTC**)
- Slip at the rear wheel or lifting front wheel
- A malfunction occurring, which impairs the cruise control system function
- Exceeding the target speed for more than 30 seconds when overtaking

WARNING

Danger of accidents The cruise control system function is not suitable for all riding situations.

The selected cruise speed will not be reached if the engine power is not sufficient for a gradient.

The selected target speed will be exceeded if the engine braking effect is not sufficient on an incline.

– Do not use the cruise control systems function on winding roads.
– Do not use the cruise control systems on slippery road surfaces (e.g. rain, ice or snow), where there is poor visibility or on unpaved surfaces (e.g. sand, stones or gravel).

– Do not use the cruise control systems function if the traffic does not permit a constant speed.

The cruise control system function is only available when motorcycle traction control (**MTC**) is activated.

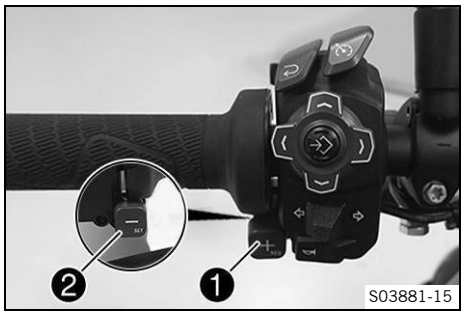
When motorcycle traction control (**MTC**) is switched off, the cruise control system function is also switched off.

The cruise control system function cannot be activated during rapid acceleration.

The cruise control system function can only be activated in third, fourth, fifth and sixth-gear.

The control range is from 40 to 200 km/h or from 25 to 125 mph.

6.10 +RES/-SET button



The **+RES** button ❶ is fitted on the handlebar, front left.

The **–SET** button ❷ is fitted on the handlebar, rear left.

Note

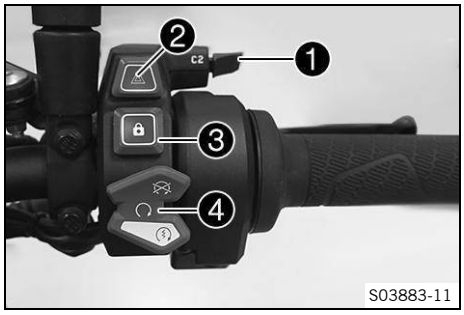
The **+RES** and **–SET** buttons are used to control the cruise control when the cruise control function is activated.

If the cruise control function is disabled and riding mode **Performance** or **Track** is set, the **+RES** and **–SET** buttons are used to adjust the **Slip Adjuster**.

6.11 Combination switch, right

The right combination switch is fitted on the right side of the handlebar.

Overview of the right combination switch



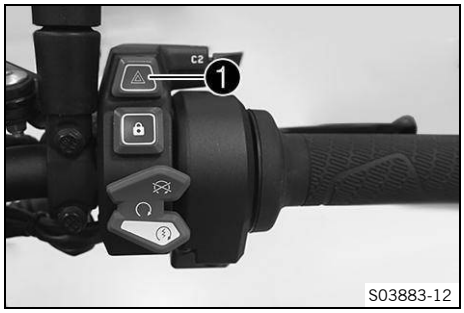
❶ C1 and C2 switch (p. 24)

❷ Hazard warning flasher switch (p. 23)

❸ Lock button (p. 24)

❹ Start button/kill switch (p. 23)

6.12 Hazard warning flasher switch



The hazard warning flasher switch ❶ is fitted on the right side of the combination switch.

The hazard warning flasher is used to indicate emergency situations.

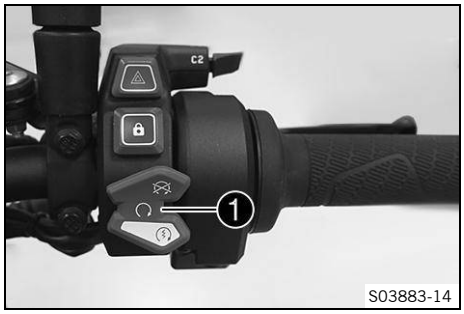
Note

The hazard warning flasher can be activated or deactivated while the ignition is switched on or up to 60 seconds after the ignition is switched off.

Only keep the hazard warning flasher activated as long as necessary as it depletes the 12-V battery.

Condition		Meaning
	Hazard warning flasher off	No function
	Hazard warning flasher on	All four turn signals and the indicator lamp for the hazard warning flasher in the combination instrument flash.

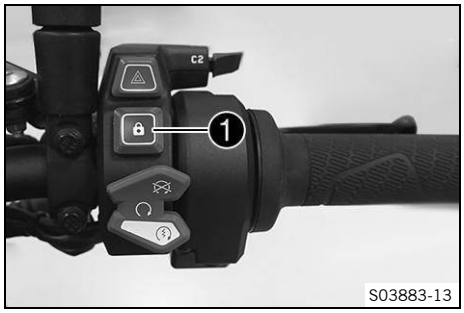
6.13 Start button/kill switch



The start button/emergency OFF switch ❶ is fitted on the right side of the combination switch.

Condition		Meaning
	Start button/kill switch off (upper position)	In this position, the ignition circuit is interrupted, a running engine stops, and cannot be started. A message appears on the display.
	Start button/kill switch on (middle position)	This position is required for operation; the ignition circuit is closed.
	Starter motor on (lower position)	In this position, the starter motor is actuated.

6.14 Lock button



Lock button 1 is located to the right of the combination switch.

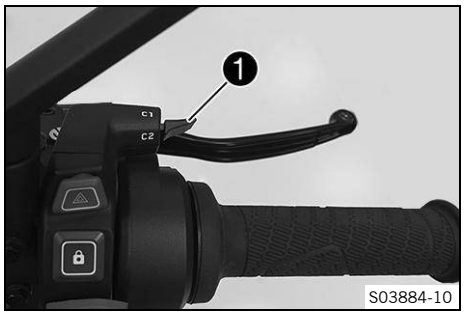
Note

Lock button acts as the ignition switch on this vehicle.

The steering can only be locked if the handlebar is turned to the left.

Condition	Meaning
Lock button in the basic position.	No function.
Lock button pressed briefly	Pressing briefly turns the ignition on and unlocks the steering, or turns the ignition off. The immobilizer indicator lamp lights up briefly once for confirmation.
Lock button pressed and held	Pressing and holding the button switches the ignition off and simultaneously locks the steering.

6.15 C1 and C2 switch



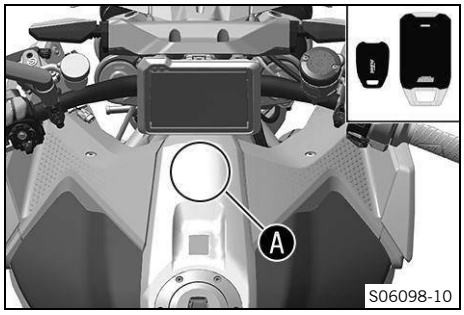
The C1 and C2 switch 1 is fitted on the right of the combination switch.

Note

The C1 and C2 switch enables quick access to various menus.

Custom Switches C1 and C2 can be freely configured.

6.16 Steering lock (antenna)



On this vehicle, the ignition and steering lock is replaced by a with transponder key (RACE ON key (p. 25)).

In order to activate the steering lock, the handlebar must be turned fully to the left.

The steering is locked and unlocked electromechanically via lock button .

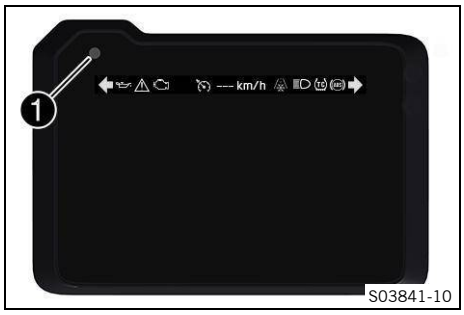
If the battery voltage of the RACE ON key is too low, hold the RACE ON key or the RACE ON chip in area Ⓐ on the motorcycle and repeat starting.

Note

As soon as the engine has been started, safely stow away the RACE ON key or the RACE ON chip again.

Condition	Meaning
Ignition off, steering locked	In this operating mode, the ignition circuit is interrupted and the steering locked.
Ignition off, steering unlocked	In this operating mode, the ignition circuit is interrupted and the steering unlocked.
Ignition on, steering unlocked	In this operating mode, the ignition circuit is closed and the steering unlocked.

6.17 immobilizer



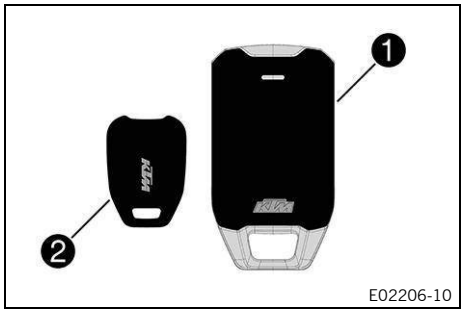
The electronic immobilizer secures the vehicle against unauthorized use.

As soon as the ignition is switched off using lock button, the immobilizer is activated and the engine is locked.

The immobilizer indicator lamp ❶ can indicate malfunctions by flashing.

If the optional alarm system is installed, immobilizer indicator lamp ❶ flashes when the ignition is switched off and the alarm system is switched on.

6.18 RACE ON key



On this vehicle, the **RACE ON key** ❶ performs all the functions of the conventional ignition key.

If the battery voltage of the RACE ON key is too low, the vehicle can be started by holding the RACE ON key directly to the vehicle antenna (p. 24).

The RACE ON chip ❷ is only intended for situations in which the RACE ON key is not available.

Like the RACE ON key, the RACE ON chip can be used to start the vehicle by holding the chip directly to the vehicle antenna (p. 24).

Note

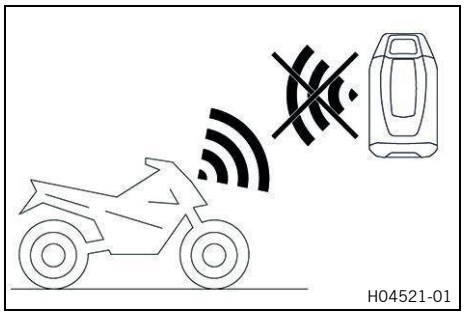
The ignition keys contain electronic components. Always maintain a distance of several centimeters to other devices with electronic components.

A lost ignition key must be deactivated by an authorized contractual partner to prevent unauthorized persons from operating the vehicle.

The ignition keys supplied are activated when delivered.

A total of up to four ignition keys can be activated by an authorized contractual partner.

6.19 anti-relay attack


H04521-01

The RACE ON key has the **Anti Relay Attack** function that increases security against theft.

The **Anti Relay Attack (ARA)** function can be activated or deactivated on the dashboard. If the function is activated, the remote response of the RACE ON key is deactivated five minutes after the ignition is switched off. The combination instrument displays whether anti-relay attack in the ignition key has been successfully activated when the ignition is switched off.

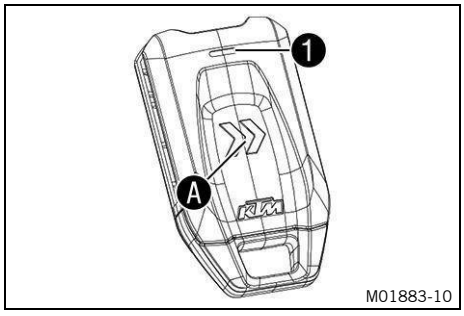
Even if the RACE ON key is within range, the vehicle cannot be contactlessly started with the RACE ON key after the period has expired. The same blink code on the combination instrument is displayed as if the RACE ON key were out of range.

This prevents another person from starting the vehicle at an extended range, although the owner and RACE ON key are not in the vicinity of the vehicle.

Note

If the RACE ON key battery has been replaced, anti-relay attack in the RACE ON key is also deactivated if the **Anti Relay Attack** function is activated in the combination instrument.

Anti-relay attack in the RACE ON key is not activated again until the next time the RACE ON key is in range when the ignition is switched off.



M01883-10

A button is located in the A area of the RACE ON key. When this button is pressed and the 1 LED flashes three times, the RACE ON key's anti-relay attack will be deactivated for 10 minutes, allowing the vehicle's contactless start.

Tip

This function can be used, for example, before the RACE ON key is placed in the rider's motorcycle clothing.

If no vehicle start occurs within this period, the RACE ON key's anti-relay attack is reactivated.

Regardless of anti-relay attack, the vehicle can always be started by holding the RACE ON key or the RACE ON chip directly to the vehicle antenna (p. 24).

Note

In this case, anti-relay attack will not be activated the next time the ignition is switched off.

The vehicle activates anti-relay attack when the ignition is switched off in only one RACE ON key each.

It is recommended to carry only one RACE ON key at a time, as it cannot be predicted in which RACE ON key anti-relay attack will be activated.

6.20 Opening the fuel tank cap

DANGER

Fire hazard Fuel is highly flammable.

The fuel in the fuel tank expands when warm and can escape if overfilled.

- Do not refuel the vehicle in the vicinity of open flames, glowing, or smoldering objects.
- Make sure that nobody smokes in the vicinity of the vehicle during the refueling process.
- Switch off the engine for refueling.
- Make sure that no fuel is spilled; particularly not on hot parts of the vehicle.
- If any fuel is spilled, wipe it up immediately.
- Do not overfill the fuel tank.

WARNING

Danger of poisoning Fuel is harmful to health.

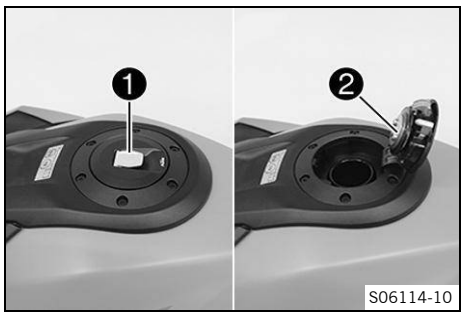
- Do not allow fuel to come into contact with skin, eyes, or clothing.
- Consult a doctor immediately if fuel has been ingested.
- Do not inhale fuel vapors.
- Rinse the affected area immediately with plenty of water in the event of contact with skin.
- Rinse eyes thoroughly with water and consult a doctor immediately if fuel comes into contact with eyes.
- If fuel spills on to your clothing, change the clothing.
- Store fuel properly in a suitable container and keep out of the reach of children.

NOTE

Environmental hazard Improper handling of fuel is dangerous to the environment.

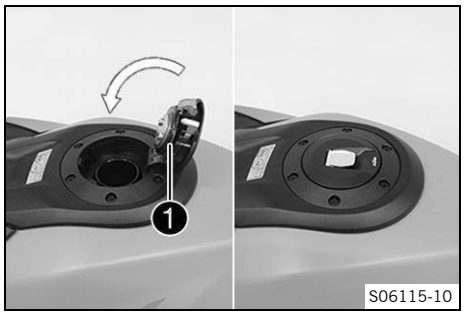
- Do not allow fuel to enter the groundwater, the soil, or the sewage system.

Condition: Motorcycle is stationary, Engine is off, Ignition is switched on or has been switched off for less than 1 minute



– Fold up cover ❶ slowly.
  ✓ The fuel tank filler cap is unlocked.
– Fold up fuel tank filler cap ❷.

6.21 Closing the fuel tank cap



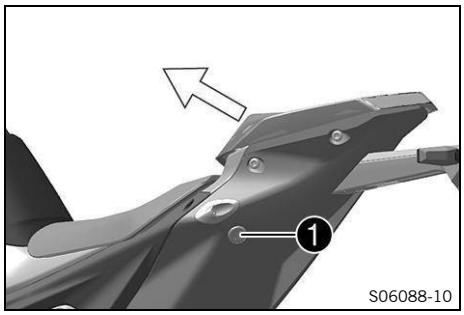
WARNING

Fire hazard Fuel is highly flammable and a health hazard.

– Check that the fuel tank filler cap is locked correctly after closing.
– If fuel spills on to your clothing, change the clothing.
– Rinse the affected area immediately with plenty of water in the event of contact with skin.

– Fold down fuel tank filler cap ❶ and push it down.
  ✓ The fuel tank filler cap locks audibly in place.

6.22 Passenger seat unlocking

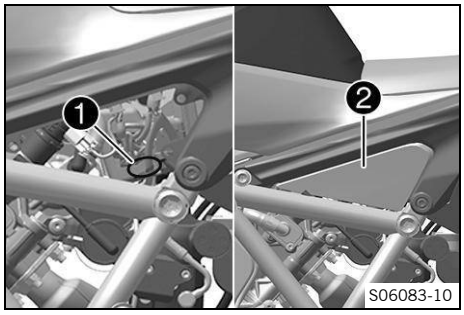


The ❶ tip switch of the passenger seat release is located on the left side of the vehicle below the passenger seat.

The passenger seat release tip switch only functions if the motorcycle is stationary, the engine is switched off and the ignition is switched on or switched off for less than 1 minute.

If the passenger seat release tip switch does not work, the passenger seat can be unlocked using the passenger seat emergency release (p. 28).

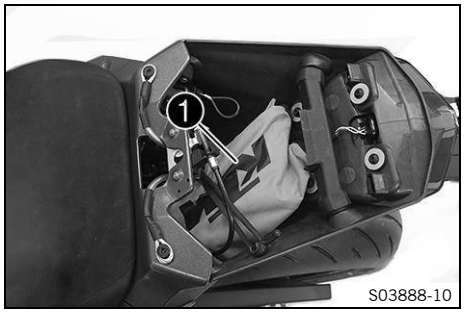
6.23 Passenger seat emergency release



The passenger seat emergency release ❶ is located on the left side of the vehicle below the ❷ cover.

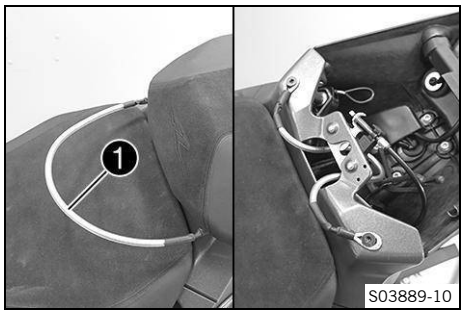
The emergency passenger seat release is used if the seat release tip switch does not work, e.g. because the 12 V battery is discharged.

6.24 On-board tool kit



The tool set ❶ is located under the passenger seat.

6.25 Passenger strap



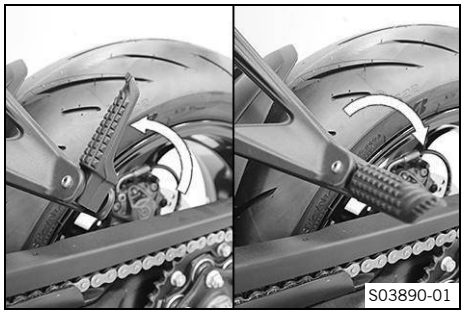
Supporting strap ❶ is attached underneath the passenger seat.

Note

If the supporting strap is not needed, it can be stowed underneath the pillion bench.

The passenger can hold onto the supporting strap ❶ during the trip.

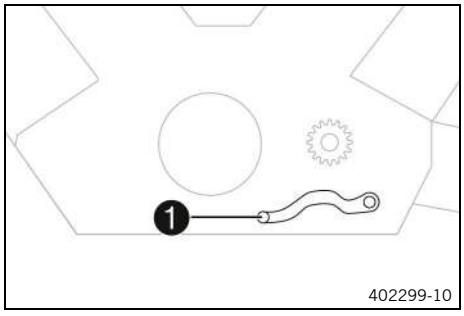
6.26 Passenger footpegs



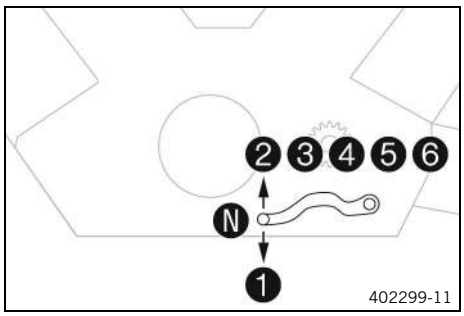
The passenger foot pegs can be folded up and down.

Condition	Meaning
Passenger foot pegs folded up	For operation without a passenger.
Passenger foot pegs folded down	For operation with a passenger.

6.27 Gear shift lever

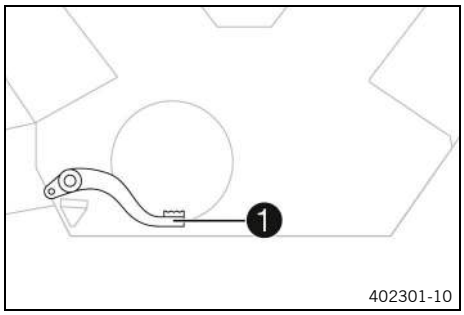


The shift lever ❶ is fitted on the left side of the engine.



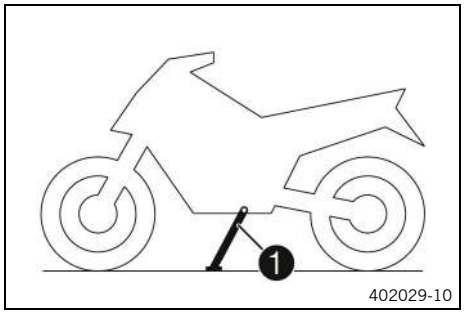
The gear positions can be seen in the figure.
The idle position is between first and second gears.

6.28 Brake pedal



Brake pedal ❶ is located in front of the right footpeg.
The rear brake is operated with the brake pedal.

6.29 Side stand



The side stand ❶ is located on the left of the vehicle.
The side stand is used for parking the motorcycle.

Note
The side stand must be folded up during motorcycle use.
The side stand is coupled with the safety starting system; see the instructions in the "Stopping, parking" chapter.

Condition	Meaning
Side stand folded out	The vehicle can be supported on the side stand. The safety starting system is active.
Side stand folded in	This position is mandatory when riding the motorcycle. The safety starting system is inactive.

7.1 Dashboard

The combination instrument is attached in front of the handlebar.



The combination instrument is divided into two function areas.

❶ indicator lamps (p. 33)

Display ❷

CAUTION

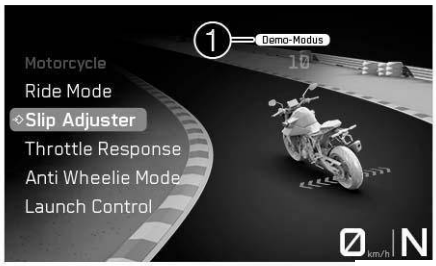
Danger of burns Parts of the combination instrument become hot in certain situations.

The display in particular can heat up considerably at ambient temperatures above 55 °C (131 °F) during long periods of inactivity, e.g. at traffic lights, or in direct sunlight.

– Do not touch the combination instrument with bare hands in the situations referred to.
– Where appropriate protective clothing.
– In the event of burns, rinse the area affected immediately with lukewarm water.

7.2 demo mode

7.2.1 Activation



I00748-10

Demo mode is activated in the factory and allows you to test optional software functions.

Once a distance has been covered, demo mode is automatically deactivated as soon as the ignition is turned off.

Distance until demo mode is deactivated	1,500 km (932.1 mi)

The demo modes are shown in area ❶ of the display.

Note

Notifications about the remaining distance until the demo mode is deactivated are displayed at regular intervals.

All optional software functions will be deactivated and no longer displayed when demo mode ends. The optional software functions are available from an authorized contractual partner.

Functions included in demo mode

- **TECH PACK** including riding mode **TRACK**, MTC+MSR, deactivatable **ABS** on the rear wheel, adjustable characteristics of the throttle response, adjustable motorcycle traction control
- **QUICKSHIFTER+**
- **ETTC**
- Cruise control

7.3 activation and testing

7.3.1 Activation



I00195-01

The combination instrument is activated when the ignition is switched on.

Note

The brightness of the displays is controlled by an ambient light sensor in the combination instrument.

7.3.2 Test

The welcome text appears on the display and all the indicator lights are briefly activated for a function check.

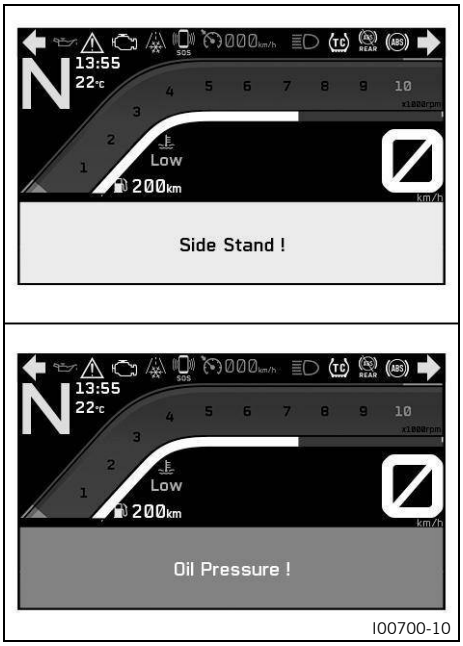
Note

The malfunction indicator lamp always lights up as long as the engine is not running. If the engine is running and the failure indicator light lights up, stop (taking care not to endanger yourself or other road users in the process) and contact an authorized dealer.

The oil pressure warning lamp always lights up as long as the engine is not running. If the engine is running and the oil pressure warning lamp lights up, stop immediately (taking care not to endanger yourself or other road users in the process) and switch off the engine.

The ABS warning lamp and TC indicator lamp light up until a speed of approx. 6 km/h (approx. 4 mph) or faster has been reached.

7.4 warnings



I00700-10

Warnings appear in the middle of the display; these are marked yellow or red depending on their relevance.

Yellow warnings indicate a malfunction or information which requires prompt intervention or an adjustment to the riding style.

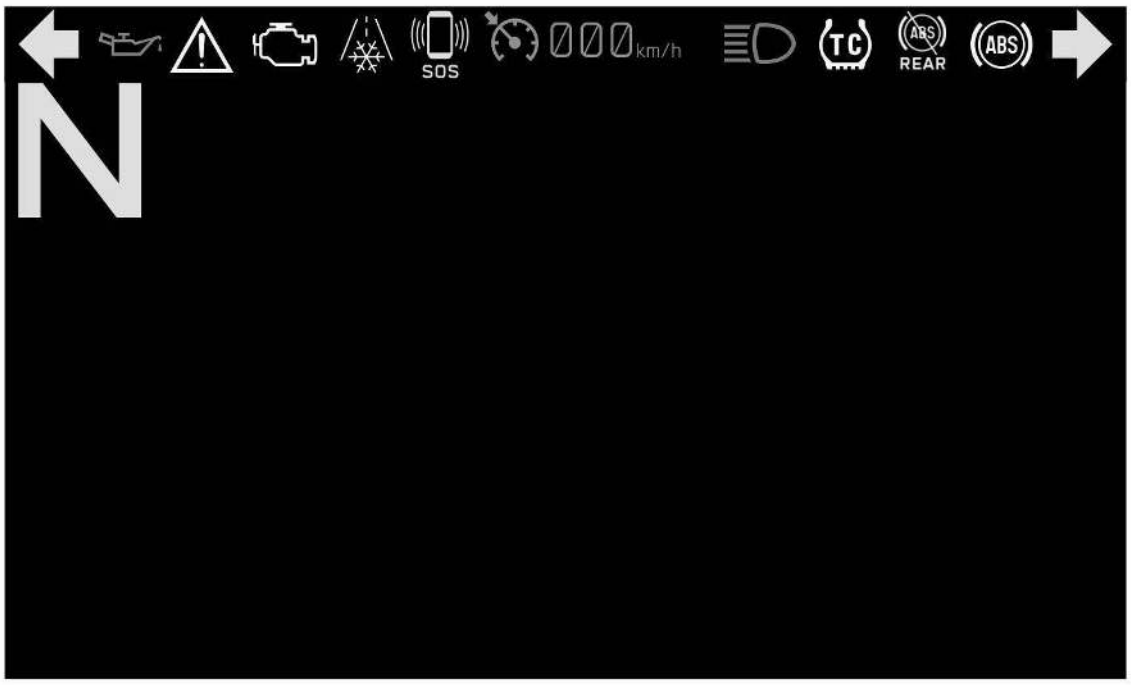
Red warnings indicate a malfunction or information which requires immediate intervention.

Note

Warnings can be hidden by pressing any button.

All the existing warnings are displayed in the **Warning** submenu until they are no longer active.

7.5 indicator lamps



I00701-10

The indicator lamps offer additional information about the operating state of the motorcycle.

When the ignition is switched on, all indicator lamps light up briefly, except for the TC indicator lamp .

Note

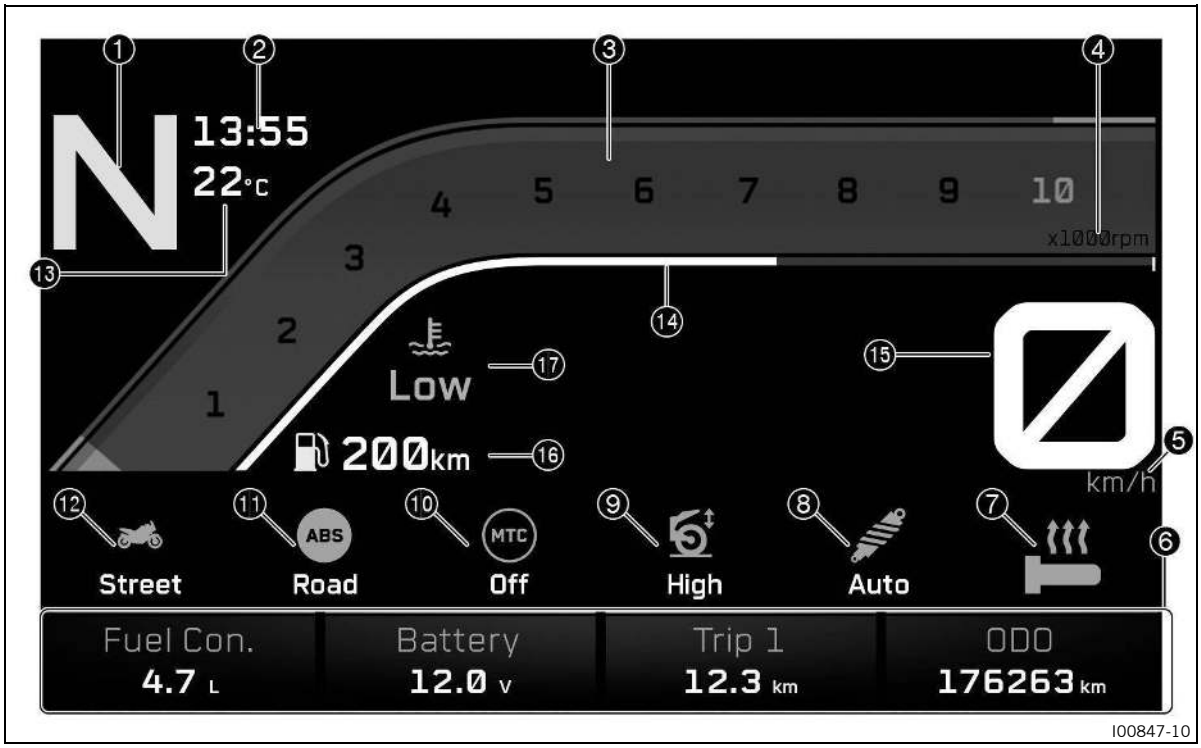
The malfunction indicator lamp always lights up as long as the engine is not running. If the engine is running and the failure indicator light lights up, stop (taking care not to endanger yourself or other road users in the process) and contact an authorized dealer.

The oil pressure warning lamp always lights up as long as the engine is not running. If the engine is running and the oil pressure warning lamp lights up, stop immediately (taking care not to endanger yourself or other road users in the process) and switch off the engine.

The ABS warning lamp and TC indicator lamp light up until a speed of approx. 6 km/h (approx. 4 mph) or faster has been reached.

Condition		Meaning
	The turn signal indicator light flashes green with a steady blinking interval	The turn signal is switched on.
	The malfunction indicator light lights up yellow	The **OBD** has detected a malfunction in the vehicle electronics. Come safely to a halt, and contact an authorized dealer.
	ABS warning light lights up yellow	Status or error messages relating to **ABS**.
	The ABS rear warning light lights up yellow	**ABS** is deactivated on the rear wheel.
	The idle indicator lamp lights up green	The transmission is in the neutral position.
	TC indicator lamp lights up/flashes yellow	**MTC** is not active or is currently regulating. The TC indicator lamp also lights up if a malfunction is detected. Contact an authorized contractual partner. The TC indicator lamp flashes if **MTC** makes an active intervention.
	The oil pressure warning light lights up red	The oil pressure is too low. Stop immediately, taking care not to endanger yourself or other road users in the process, and switch off the engine.
	The alarm system indicator lamp lights up or flashes red	Status or error message of the alarm system.
	The cruise control system indicator lamp (optional) lights up yellow	The cruise control system function is switched on, but cruise control is not activated.
	The cruise control system indicator lamp (optional) lights up green	The cruise control system function is switched on and cruise control is activated.
	The high beam indicator lamp lights up blue	The high beam is switched on.
	General warning light lights up yellow	A note/warning note on operating safety has been detected. This is also shown in the display.

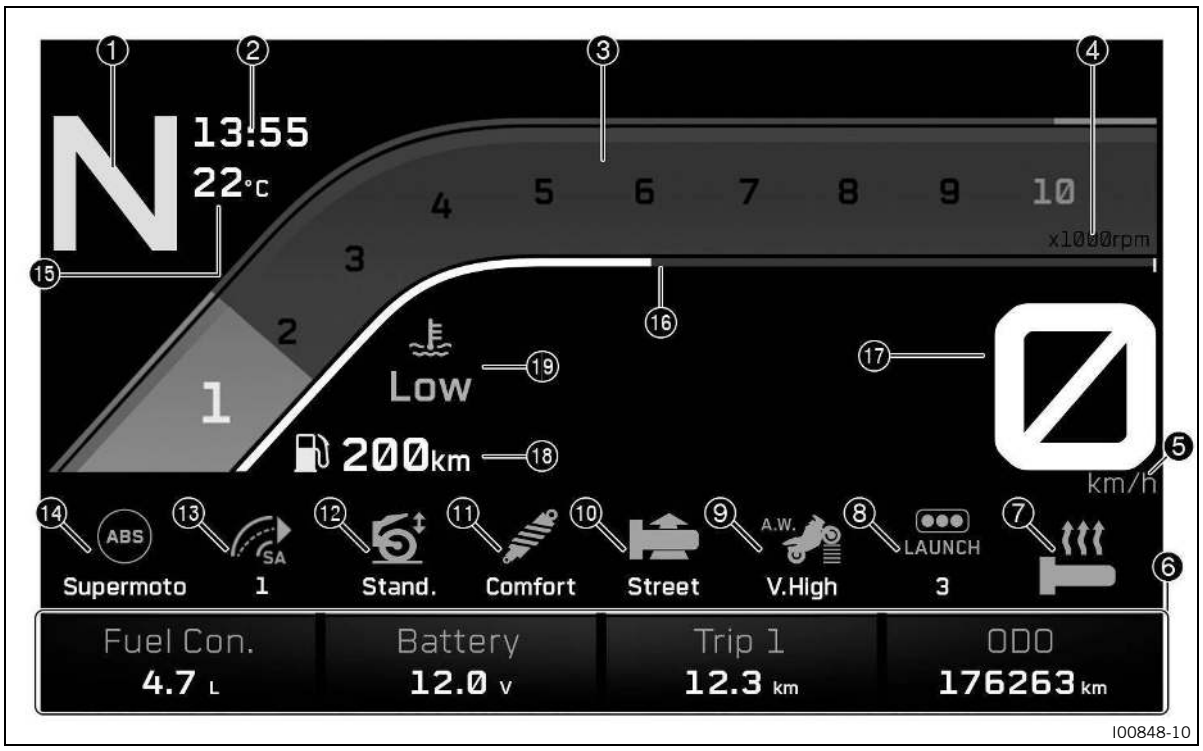
7.6 display



1. Gear display
2. time (p. 40)
3. speed (p. 38)
3. shift light (p. 39)
   The shift light is integrated in the rpm gauge display.
4. Unit for the engine speed display
5. Unit of speed
6. **Favorites** display (p. 42)
7. heated grip (optional) (p. 42)
8. **Damp** display (p. 43)
9. **Load** display (p. 43)
10. **MTC** display (p. 41)
11. **ABS** display (p. 41)
12. **Ride–Mode** display (p. 40)
13. ambient air temperature indicator (p. 40)
14. fuel level display (p. 42)
15. speed display (p. 39)
16. Fuel range display
17. coolant temperature indicator (p. 41)

7.7 Performance Display (optional)

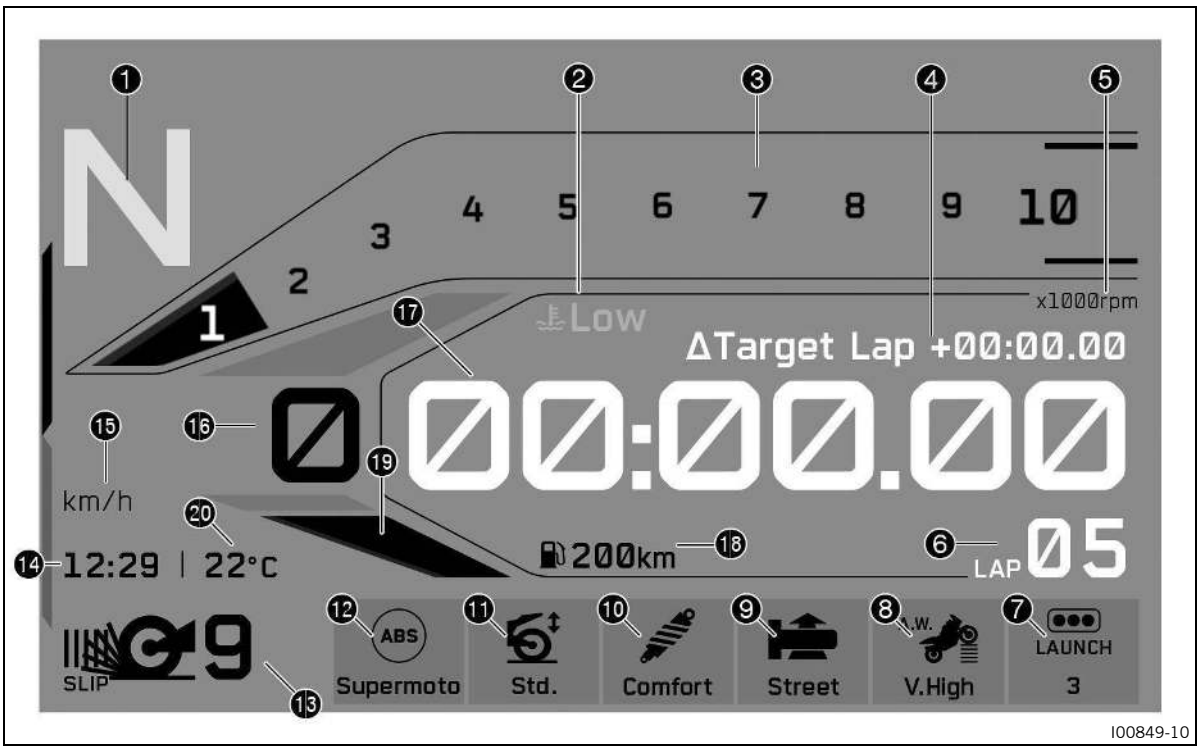
Note
The figure shows the start screen of the combination instrument in active riding mode **Performance** (optional). If the menu is open, the speed and the selected gear are still displayed.



1. Gear display
2. time (p. 40)
3. speed (p. 38)
3. shift light (p. 39)
   The shift light is integrated in the rpm gauge display.
4. Unit for the engine speed display
5. Unit of speed
6. **Favorites** display (p. 42)
7. heated grip (optional) (p. 42)
8. Launch control (optional)
9. Anti Wheelie Mode (optional)
10. Throttle Response (optional)
11. **Damp** display (p. 43)
12. **Load** display (p. 43)
13. Spin Adjuster (optional)
14. **ABS** display (p. 41)
15. ambient air temperature indicator (p. 40)
16. fuel level display (p. 42)
17. speed display (p. 39)
18. Fuel range display
19. coolant temperature indicator (p. 41)

7.8 Track display (optional)

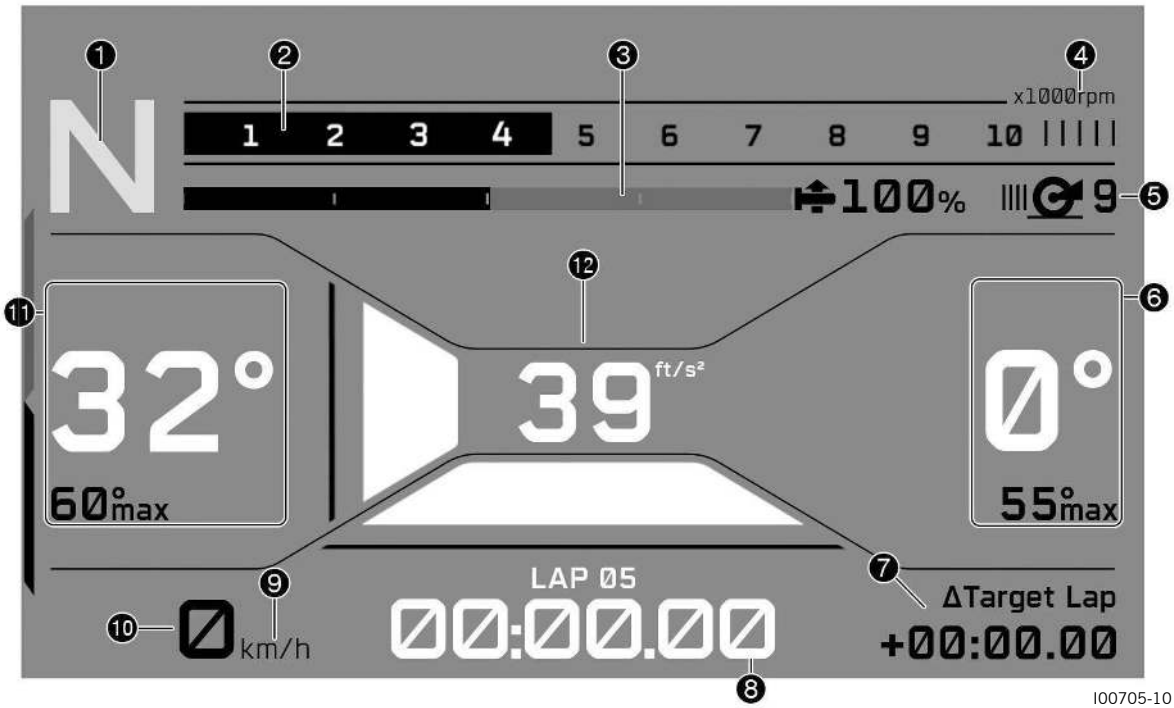
Note
The figure shows the start screen of the combination instrument in active riding mode **TRACK** (optional). If the menu is open, the speed and the selected gear are still displayed.



1. Gear display
2. coolant temperature indicator (p. 41)
3. speed (p. 38)
3. shift light (p. 39)
   The shift light is integrated in the rpm gauge display.
4. Delta for target lap, best lap or last lap
5. Unit for the engine speed display
6. Lap indicator
7. Launch control (optional)
8. Anti Wheelie Mode (optional)
9. Throttle Response (optional)
10. **Damp** display (p. 43)
11. **Load** display (p. 43)
12. **ABS** display (p. 41)
13. Spin Adjuster (optional)
14. time (p. 40)
15. Unit of speed
16. speed display (p. 39)
17. Lap Time (optional)
18. Fuel range display
19. fuel level display (p. 42)
20. ambient air temperature indicator (p. 40)

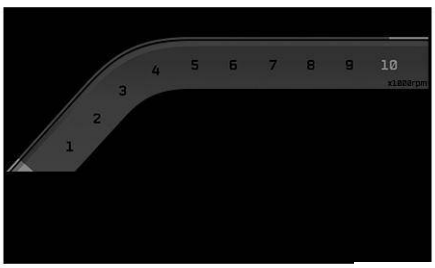
7.9 Telemetry Display (optional)

Note
The figure shows the start screen of the combination instrument in active riding mode **TRACK** (optional). If the menu is open, the speed and the selected gear are still displayed.

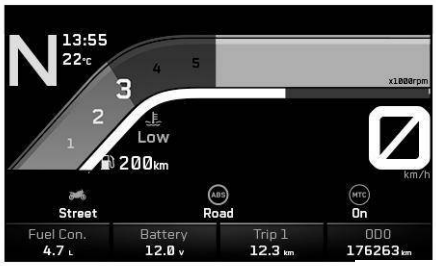


1. Gear display
2. speed (p. 38)
2. shift light (p. 39)
   The shift light is integrated in the rpm gauge display.
3. Throttle Response (optional)
4. Unit for the engine speed display
5. Spin Adjuster (optional)
6. Lean Angle Right (optional)
7. Delta for target lap, best lap or last lap
8. Lap Time (optional)
9. Unit of speed
10. speed display (p. 39)
11. Lean Angle Left (optional)
12. Acceleration Indicator (optional)

7.10 speed



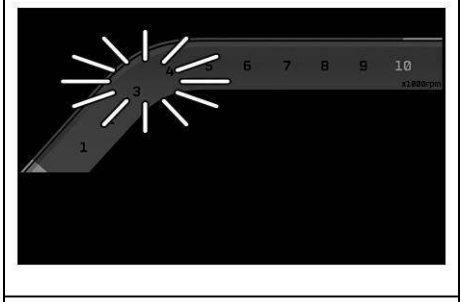
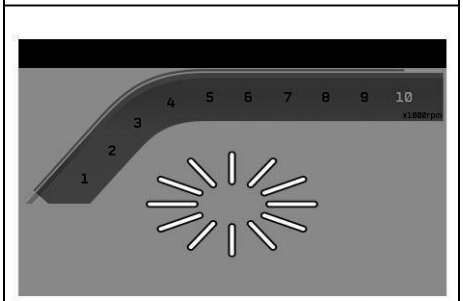
The engine speed is displayed in revolutions per minute.



I00832-10

While the motorcycle is not at operating temperature, the maximum engine speed is limited to 6500 rpm. On the combination instrument, the speed range after 6500 rpm has a blue background.

7.11 shift light



I00707-10

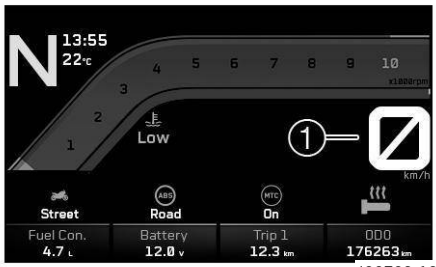
The shift warning light is integrated in the display.
In the **Shift Light** submenu, the engine speed for the shift warning light can be set. During the run-in time (up to 1000 km / 621 miles), the shift light is always active. The shift warning light can only be deactivated, and the values for **RPM1** and **RPM2** can only be adjusted after this. At **RPM1**, the engine speed display flashes and at **RPM2**, the display flashes.

Note
After the first service, the shift warning light is deactivated when the engine is warm and in sixth-gear.

Coolant temperature	≤ 35 °C (≤ 95.0 °F)
ODO	< 1,000 km (< 621.4 mi)
The shift warning light always flashes at	6,500 rpm (108.33 Hz)

Coolant temperature	> 35 °C (> 95.0 °F)
ODO	> 1,000 km (> 621.4 mi)
RPM1 shift warning light	Rpm bar flashes
RPM2 shift warning light	Display flashes

7.12 speed display



I00709-10

The speed is shown in area ❶ of the display.
Speed is shown in kilometers per hour **km/h** or in miles per hour **mph**.
The unit of speed can be configured in the **Distance** submenu.

7.13 cruise control indicator (optional)



I00710-10

The operating state of the active cruise control is shown in the area ❶ of the display.

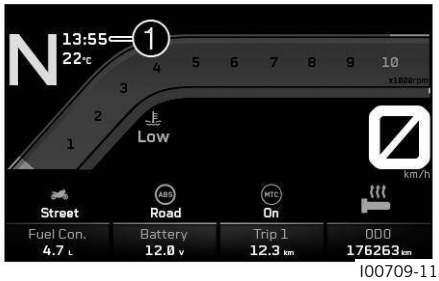
Cruise control is operated using the cruise control tip switch .

Note

If the cruise control system function is switched on but cruise control is not activated, the cruise control system indicator lamp lights up yellow.

If the cruise control system function is switched on and cruise control is activated, the cruise control system indicator lamp lights up green.

7.14 time



I00709-11

The time is shown in area ❶ of the display.

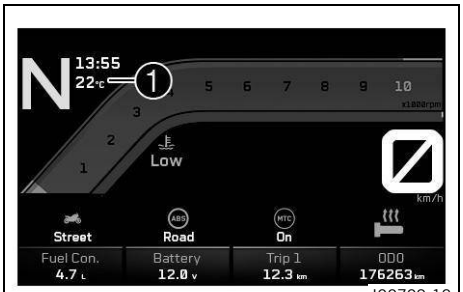
The time can be displayed in 24-hour format or 12-hour format in all languages.

The format of the time can be configured in sub-menu **Clock Format**.

Note

The time must be reset if the 12 V battery was disconnected from the vehicle or the fuse was removed.

7.15 ambient air temperature indicator



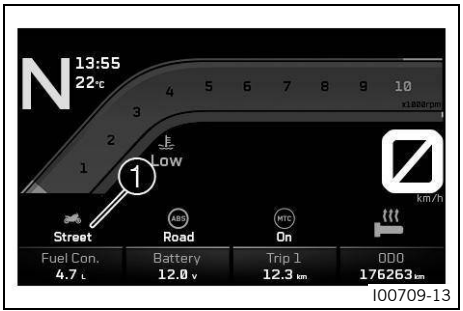
I00709-12

The ambient temperature is shown in area ❶ of the display.

The ambient air temperature is displayed in **°C** or **°F**.

The unit of the ambient air temperature can be configured in the **Temperature** submenu.

7.16 Ride–Mode display

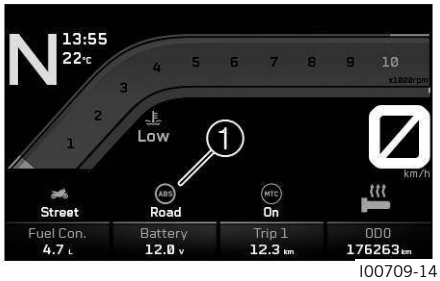


I00709-13

The **Ride Mode** (p. 142) setting is shown in area ❶ of the display.

The drive mode can be configured in the **Ride Mode** submenu.

7.17 ABS display



I00709-14

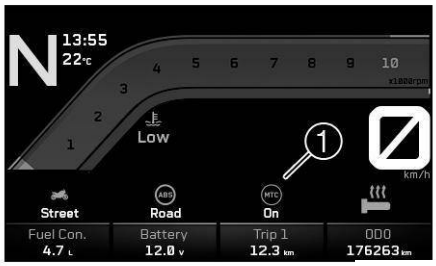
The ABS mode setting is shown in the ❶ area of the display.
ABS can be configured separately in the **ABS** submenu.

Note

When the ABS mode **Road** is active, ABS controls both wheels.

When the **Supermoto** ABS mode is active, ABS only controls the front wheel. The rear wheel is not controlled by ABS and may lock during braking maneuvers.

7.18 MTC display



I00709-15

The ❶ area of the display indicates whether **MTC** (p. 143) is switched on or off.
The motorcycle traction control can be switched on or off in the **MTC** submenu.

7.19 coolant temperature indicator



I00711-10

The coolant temperature is displayed by a symbol. The symbol changes between **LOW**, **OK** and **HOT** depending on the temperature.

NOTE

Engine failure Overheating damages the engine.

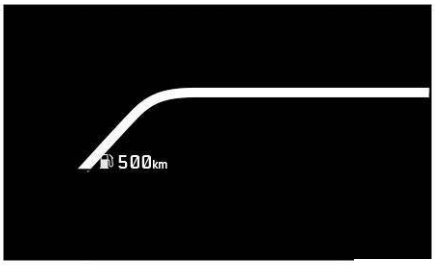
- If the coolant temperature warning is displayed, stop immediately and take care not to endanger yourself or other traffic participants in the process.
- Allow the engine and cooling system to cool down.
- Check and, if necessary, correct the coolant level on the cooling system while it is in a cooled state.

Note

If the coolant temperature indicator shows **HOT**, the display also starts to flash and a warning is displayed.

If the cooling system overheats, the maximum engine speed is limited.

7.20 fuel level display



I00712-10

The fuel level display consists of the fuel range display and a bar. The higher the bar is filled, the more fuel there is in the fuel tank.

Note

If the fuel level is getting low, the last segment flashes red and the following warning **LOW FUEL** also appears.

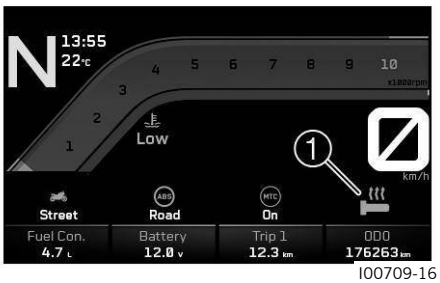
The fuel level is displayed with a slight delay to prevent the indicator from constantly moving while riding.

The fuel level display is not updated while the side stand is folded out or the emergency OFF switch is switched off.

Once the side stand is folded up and the kill switch is switched on, the fuel level display is next updated after 2 minutes.

The fuel level display flashes if the combination instrument does not receive a signal from the fuel level sensor.

7.21 heated grip (optional)

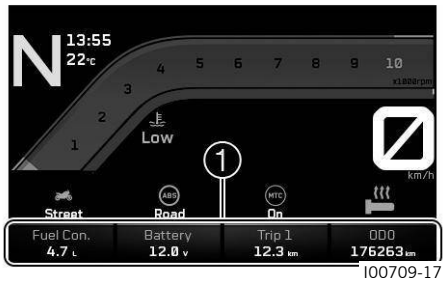


I00709-16

The status of the heated grip is shown in area ❶ of the display.

The grip heater can be configured in sub-menu **Heated Grips**.

7.22 Favorites display



I00709-17

Up to four items of information are displayed in the **Favorites** display ❶.

The **Favorites** display can be freely configured in the **Favorites** submenu.

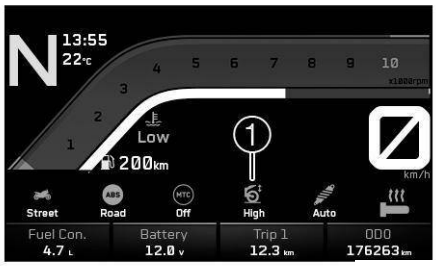
7.23 Damp display



I00850-10

The **Damping** mode setting is shown in the ❶ area of the display.
The damping can be configured in submenu **Suspension** under **Damping**.

7.24 Load display



I00850-11

The payload setting is shown in area ❶ of the display.
The load can be configured in submenu **Suspension** under **Preload Adj.**.
Only configure the payload in an unloaded state.

7.25 Custom Switch display



I00812-10

Pressing the **C1** or **C2** button calls up the configured menu.
Press the **BACK** button to close the **Custom Switch** display.

Note
The **Custom Switch** display can be configured in the **Settings** menu under **Custom Switch**. Any information can be selected.

7.26 Navigation display (optional)



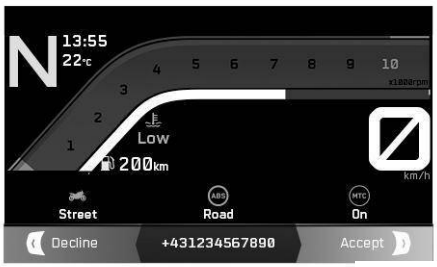
I00714-10

The **Navigation** indicator (optional) appears when the navigation function is activated.
In the **Navigation** display (optional), the direction arrow, the distance from the destination, the estimated arrival time of the cell phone, the distance to the next waypoint, and the street name are displayed.
The **Navigation** display (optional) can be switched on or off in the **Navigation** submenu (optional).

Conditions for use:

- The dashboard is connected to a suitable cell phone.
- The **KTMconnect** app (optional) is installed and connected on a suitable cell phone (Android devices from version 7.0, iOS devices from version 14).

7.27 Call display



I00844-10

WARNING

Danger of accidents Headphone volume which is too high distracts attention from traffic activity.

– Always select headphone volume which is low enough for you to still clearly hear acoustic signals.

The **Call** indicator appears for incoming or active calls.
Press the **RIGHT** button to accept an incoming call.
Press the **LEFT** button to reject an incoming call.
Press the **UP** button to increase the audio volume.
Press the **DOWN** button to reduce the audio volume.

Note

It is not possible to change the audio volume using the combination switch with every cell phone.

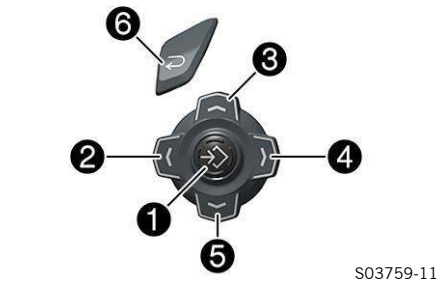
The call duration and contact are displayed. Depending on the cell phone settings, the contact is shown by name.

You cannot navigate in the menu during an active phone conversation.

Condition for use:

- The dashboard is connected to a suitable cell phone.

7.28 Menu



S03759-11

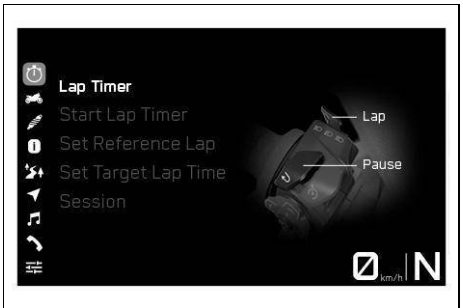
Note

To open the menu, press the **SET** button ❶ on the start screen.

Use the **LEFT** button ❷, the **UP** button ❸, the **RIGHT** button ❹ and the **DOWN** button ❺ to navigate in the menu.

Press the **BACK** button ❻ to close the current menu or the menu overview.

7.28.1 Lap timer

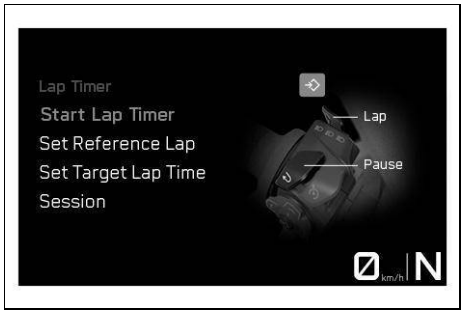


Condition: Ride mode **TRACK** activated

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Lap Timer** is highlighted. Press the **SET** button to open the submenu.

The timed laps can be displayed, and reference laps can be set in sub-menu **Lap Timer**.

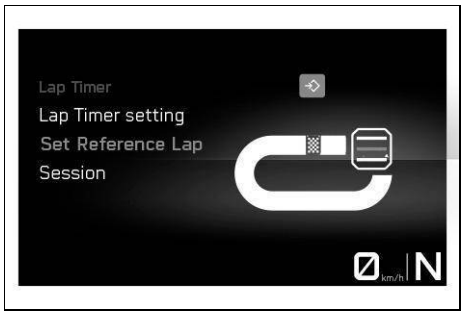
7.28.2 Lap Timer settings



Condition: Ride mode **TRACK** activated

- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until **Lap Timer** is highlighted. Press the **SET** button to open the submenu.
- Press the **UP** or **DOWN** button until **Lap Timer Settings** is highlighted. Press the **RIGHT** or **LEFT** button to switch **Lap Timer** on and off.

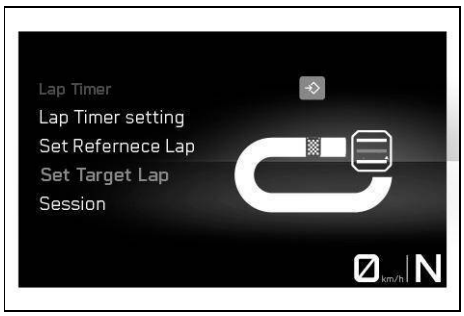
7.28.3 Set Reference Lap



Condition: Ride mode **TRACK** activated

- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until **Lap Timer** is highlighted. Press the **SET** button to open the submenu.
- Press the **UP** or **DOWN** button until **Set Reference Lap** is highlighted. A reference lap can be set.

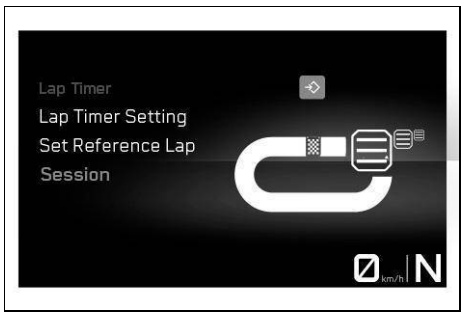
7.28.4 Set Target Lap Time



Condition: Ride mode **TRACK** activated

- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until **Lap Timer** is highlighted. Press the **SET** button to open the submenu.
- Press the **UP** or **DOWN** button until **Set Target Lap Time** is highlighted. A target lap can be set.

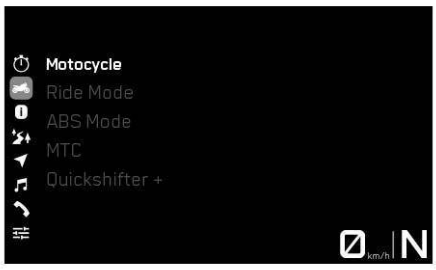
7.28.5 Session



Condition: Ride mode **TRACK** activated

- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until **Lap Timer** is highlighted. Press the **SET** button to open the submenu.
- Press the **UP** or **DOWN** button until **Session** is highlighted. All lap times are displayed here.

7.28.6 Motorcycle



– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Motorcycle** is highlighted. Press the **SET** button to open the submenu.

In **Motorcycle**, motorcycle-relevant settings can be found, such as the ride mode, ABS mode, Spin Adjuster and MTC.

7.28.7 Ride Mode



– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Motorcycle** is highlighted. Pressing the **SET** button opens the menu.

WARNING

Danger of accidents An incorrectly selected ride mode makes it more difficult to control the vehicle.

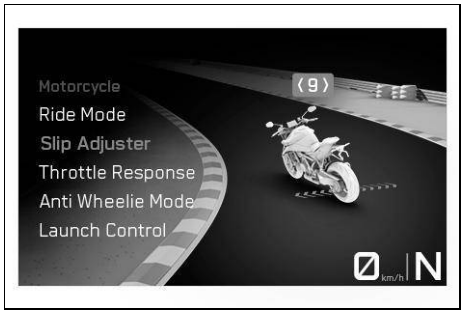
The riding modes are each only suitable for certain conditions.

– Always select a riding mode that suits the surface on which you are riding, the weather and the riding situation.

– Press the **UP** or **DOWN** button until **Ride Mode** is marked.
– Press the **RIGHT** or **LEFT** button to select the riding mode, which changes coordinated settings for the engine and motorcycle traction control.
  ✓ **Street** - Homologated performance with balanced response; the motorcycle traction control allows normal slip on the rear wheel.
  ✓ **Rain** - Reduced homologated performance for better ridability; the motorcycle traction control allows less slip on the rear wheel.
  ✓ **Sport** - Homologated performance with very direct response; the motorcycle traction control allows greater slip on the rear wheel.
  ✓ **Track** (optional) - Response and Motorcycle Traction Control can be adjusted individually.
  ✓ **Performance** (optional) - Response and Motorcycle Traction Control can be adjusted individually.

The ride mode can be configured in submenu **Ride Mode**.

7.28.8 Slip Adjuster (optional)



Condition: Ride mode **Track** (optional) or **Performance** (optional) is activated, **MTC+MSR** is activated

– Press the **SET** button when the menu is closed.

WARNING

Danger of accidents An incorrectly selected ride mode makes it more difficult to control the vehicle.

The riding modes are each only suitable for certain conditions.

– Always select a riding mode that suits the surface on which you are riding, the weather and the riding situation.

– Press the **UP** or **DOWN** button until **Motorcycle** is marked on the display. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Slip Adjuster** is highlighted.
– Press the **RIGHT** or **LEFT** button to set the maximum permitted slip of the motorcycle traction control.

Do not open the throttle during the selection.

The spin adjuster is a motorcycle traction control function.

The slip adjustment allows the motorcycle traction control to be tuned through nine levels to the desired characteristic map.

Level 0 allows maximum slip on the rear wheel, and level 9 allows the minimum.

If the cruise control function is deactivated, buttons **RIGHT** and **LEFT** or buttons **+RES** and **–SET** in the main display or in sub-menu **Slip Adjuster** can be used to set **Slip Adjuster**.

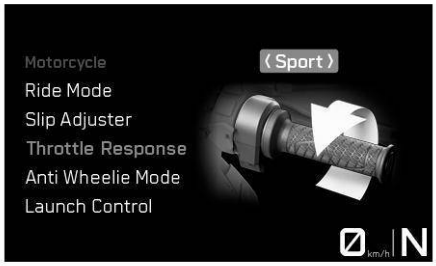
Note

The Spin Adjuster is only available in ride mode **Track** (optional) or **Performance** (optional).

The spin adjuster is only available when motorcycle traction control is activated.

– **LEFT** button or **–SET** button pressed for approximately 2 seconds.	Slip adjustment level 0 is activated.

7.28.9 Throttle Response (optional)



Condition: Ride mode **Track** (optional) or **Performance** (optional) is activated

– Press the **SET** button when the menu is closed.

WARNING

Danger of accidents An incorrectly selected ride mode makes it more difficult to control the vehicle.

The riding modes are each only suitable for certain conditions.

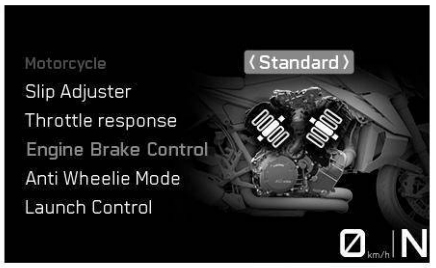
– Always select a riding mode that suits the surface on which you are riding, the weather and the riding situation.

– Press the **UP** or **DOWN** button until **Motorcycle** is marked on the display. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Throttle Response** is marked on the display.
– The characteristic map of the throttle response can be adjusted by pressing the **RIGHT** or **LEFT** button.

Do not open the throttle when adjusting the throttle response.

✓ Street – balanced response.
✓ Sport – extremely direct response.
✓ Track – very direct response.

7.28.10 Engine Brake Control (optional)



Condition: Ride mode **Track** (optional) or **Performance** (optional) is activated

– Press the **SET** button when the menu is closed.

WARNING

Danger of accidents An incorrectly selected ride mode makes it more difficult to control the vehicle.

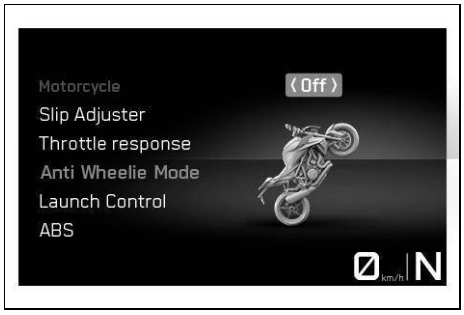
The riding modes are each only suitable for certain conditions.

– Always select a riding mode that suits the surface on which you are riding, the weather and the riding situation.

– Press the **UP** or **DOWN** button until **Motorcycle** is marked on the display. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Engine Brake Control** is marked.
– The **RIGHT** can be adjusted by pressing the **LEFT** or **Engine Brake Control** button.

Do not open the throttle when adjusting the throttle response.

7.28.11 Anti wheelie mode (optional)



Condition: Ride mode **Track** (optional) or **Performance** (optional) is activated

– Press the **SET** button when the menu is closed.

WARNING

Danger of accidents An incorrectly selected ride mode makes it more difficult to control the vehicle.

The riding modes are each only suitable for certain conditions.

– Always select a riding mode that suits the surface on which you are riding, the weather and the riding situation.

– Press the **UP** or **DOWN** button until **Motorcycle** is marked on the display. Pressing the **SET** button opens the menu.

WARNING

Danger of accidents Electronic driving aids can only influence the vehicle within the limits of its physical capabilities.

– Even when using electronic driving aids, always adapt your riding style to the road conditions, the traffic situation and your own ability.

– The **Anti Wheelie Mode** (optional) is a partial function of the traction control, which counteracts the lifting of the front wheel. The intervention time can be set in stages in the sub-menu. At a higher level with later intervention, the front wheel is more likely to lift.

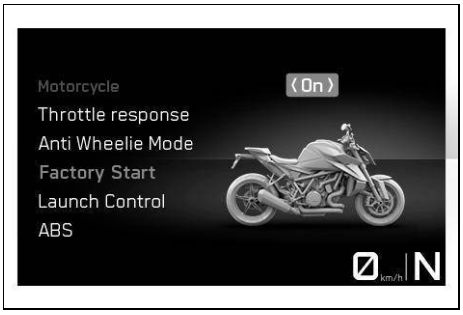
WARNING

Danger of accidents When Anti Wheelie Mode is disabled, the motorcycle traction control no longer counteracts the raising of the front wheel.

– Only switch off the Anti Wheelie Mode if you have the appropriate experience.

– Press the **UP** or **DOWN** button until **Anti Wheelie Mode** is highlighted.
– The **RIGHT** can be adjusted by pressing the **LEFT** or **Anti Wheelie Mode** button.

7.28.12 Factory Start (optional)



Condition: Ride mode **Track** (optional) or **Performance** (optional) is activated

– Press the **SET** button when the menu is closed.

WARNING

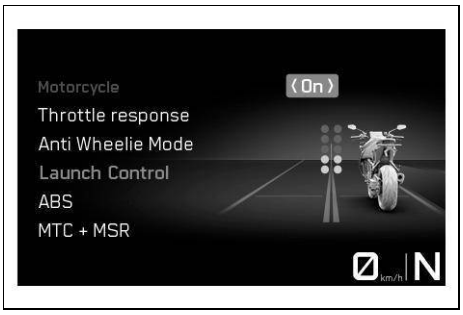
Danger of accidents An incorrectly selected ride mode makes it more difficult to control the vehicle.

The riding modes are each only suitable for certain conditions.

– Always select a riding mode that suits the surface on which you are riding, the weather and the riding situation.

– Press the **UP** or **DOWN** button until **Motorcycle** is marked on the display. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Factory Start** is highlighted.
– The **RIGHT** can be adjusted by pressing the **LEFT** or **Factory Start** button.

7.28.13 Launch Control (optional)



– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Motorcycle** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Launch Control** is highlighted.
– Use the **RIGHT** or **LEFT** button to switch **Launch Control** on or off.

7.28.14 ABS



– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Motorcycle** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **ABS** is highlighted.

WARNING

Danger of accidents An incorrectly selected ABS mode makes it more difficult to control the vehicle.

The ABS modes are each only suitable for certain conditions.

– Always select an ABS mode that suits the ground and the riding situation.

– Press the **RIGHT** or **LEFT** button to select the desired ABS mode.

Do not open the throttle during the selection.

Note

The ABS mode can be switched during the journey.

When the ABS mode **Road** is active, ABS controls both wheels.

When the **Supermoto** ABS mode is active, ABS only controls the front wheel. The rear wheel is no longer controlled by ABS and may lock during braking maneuvers. The indicator lamp **ABS REAR** lights up.

7.28.15 MTC



Condition: Speed control function deactivated

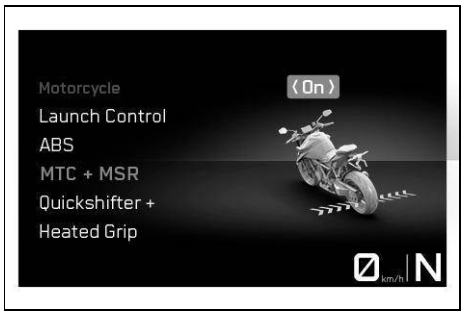
– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Motorcycle** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **MTC** is highlighted.
– Use the **RIGHT** or **LEFT** button to switch **MTC** on or off.

Do not open the throttle when switching on or off.
Press the **RIGHT** or **LEFT** button briefly when activating the motorcycle traction control.
Hold down the **RIGHT** or **LEFT** button when switching off the motorcycle traction control.

Note

After the ignition is switched on, motorcycle traction control is enabled again.

7.28.16 MTC+MSR (optional)



Condition: Model with **MTC+MSR**, Cruise control function (optional) deactivated

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Motorcycle** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **MTC+MSR** is highlighted.
– Use the **RIGHT** or **LEFT** button to switch **MTC+MSR** on or off.

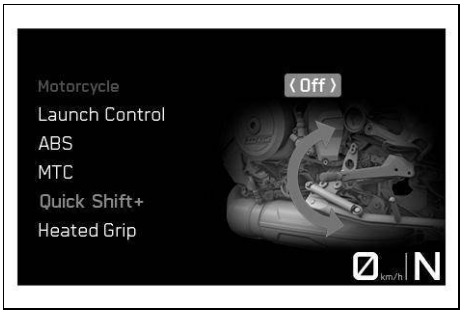
Do not open the throttle when switching on or off.
Press the **RIGHT** or **LEFT** button briefly when activating the motorcycle traction control and the motor slip regulation.
Hold down the **RIGHT** or **LEFT** button when switching off the motorcycle traction control and motor slip regulation.

Note

When ABS mode **Supermoto** is active, the **MSR** is not active.

After the ignition is switched on, the motorcycle traction control and engine traction torque control are enabled again.

7.28.17 QUICKSHIFTER+ (optional)



Condition: Model with QUICKSHIFTER+

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Motorcycle** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **QUICKSHIFTER+** is highlighted.
– Use the **RIGHT** or **LEFT** button to switch QUICKSHIFTER+ on or off.

7.28.18 Grip Heating (optional)



Condition: Model with grip heater, Menu **Heated Grip** (optional) enabled in settings

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Motorcycle** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Grip Heating** is highlighted.
– Press the **RIGHT** or **LEFT** button to select the heating level or to switch the heated grip on or off.

7.28.19 Suspension



– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Suspension** is highlighted. Press the **SET** button to open the submenu.

The suspension mode and other suspension settings can be configured in **Suspension**.

7.28.20 Damping



– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Suspension** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Damping** is highlighted.
– The **RIGHT** can be selected by pressing the **LEFT** or **Damping Mode** button.

Various settings for the damping of the suspension components can be selected in the **Damping** menu. Settings **Auto** (optional), **Rain** (optional), **Comfort**, **Street**, **Track 1** (optional), **Track 2** (optional), **Track 3** (optional), **Pro 1** (optional), **Pro 2** (optional) and **Pro 3** (optional) are available.

Note

The damping of the fork and shock absorber is automatically adjusted to the riding style of the rider in **Damping Mode Auto** (optional).

In **Damping Mode Track** (optional) and **Pro**, the damping of the fork and the shock absorber can be configured individually in the **Track** (optional) or **Pro** (optional) menu.

7.28.21 Preload adjuster



Condition: The rear wheel is under load.

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Suspension** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Preload Adjuster** is highlighted.
– The **RIGHT** can be selected by pressing the **LEFT** or **Preload Adjuster** button.

The spring preload can be adjusted to the load in submenu **Preload Adjuster**. 21 manual settings (0% to 100%) and 3 automatic settings **Low** (optional), **Standard** (optional) and **High** (optional) are available.

The rebound setting is automatically adapted to the payload detected by the system.

Note

The preload adjuster is only adjusted with the engine running.

In automatic settings **Low** (optional), **Standard** (optional) and **High** (optional) the spring preload is automatically adjusted to the load detected by the system during the journey.

In the **Low** (optional), **Standard** (optional) and **High** (optional) automatic settings, it is possible that no adjustment of the spring preload can be detected when stationary.

7.28.22 Anti Dive (optional)



Condition: Model with **Suspension Pro**

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Suspension** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Anti Dive** is highlighted.
– Press the **RIGHT** or **LEFT** button to select **Anti Dive** on or off.

When **Anti Dive** is activated, the damping is automatically adjusted during braking to prevent the fork dipping strongly.

7.28.23 Pro Options (optional)

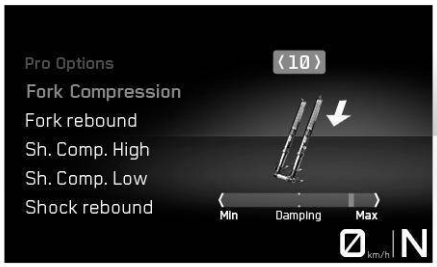


Condition: **Damping Mode Pro** (optional) is activated

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Suspension** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Pro Options** is highlighted.
  ✓ Press the **SET** button to open the submenu.

You can adjust the fork compression damping, fork rebound damping, low speed shock absorber compression damping, high speed shock absorber compression damping and shock absorber compression damping in submenu **Pro Options**.

7.28.24 fork compression (optional)

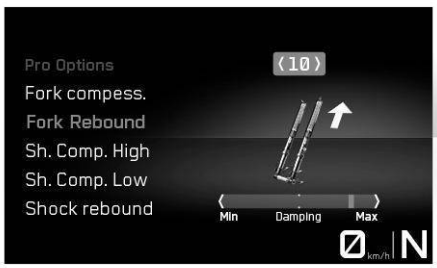


Condition: **Suspension Mode Pro** (optional) is activated

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Suspension** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Pro 1**, **Pro 2** or **Pro 3** is highlighted. Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button until fork compression (optional) is highlighted.
– Press the **RIGHT** or **LEFT** button to adjust the fork compression (optional).

The compression damping of the fork can be adjusted in the fork compression damping submenu (optional). 20 settings are possible.

7.28.25 fork rebound (optional)

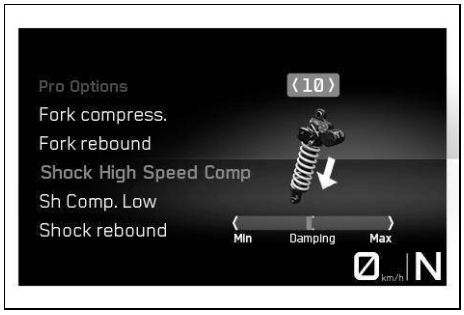


Condition: **Suspension Mode Pro** (optional) is activated

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Suspension** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Pro 1**, **Pro 2** or **Pro 3** is highlighted. Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button until fork rebound (optional) is highlighted.
– Press the **RIGHT** or **LEFT** button to adjust the fork rebound (optional).

The rebound of the fork can be adjusted in the fork rebound submenu (optional). 20 settings are possible.

7.28.26 high shock absorber compression (optional)

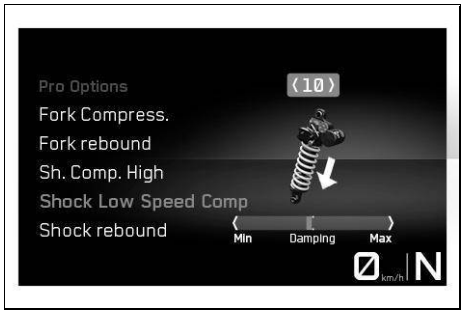


Condition: **Suspension Mode Pro** (optional) is activated

- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until **Suspension** is highlighted. Pressing the **SET** button opens the menu.
- Press the **UP** or **DOWN** button until **Pro 1**, **Pro 2** or **Pro 3** is highlighted. Press the **SET** button to open the submenu.
- Press the **UP** or **DOWN** button until high shock absorber compression damping (optional) is marked.
- Press the **RIGHT** or **LEFT** button to adjust the high shock absorber compression damping (optional).

The high compression of the shock absorber can be adjusted in the high shock absorber compression damping submenu (optional). 20 settings are possible.

7.28.27 low shock absorber compression (optional)

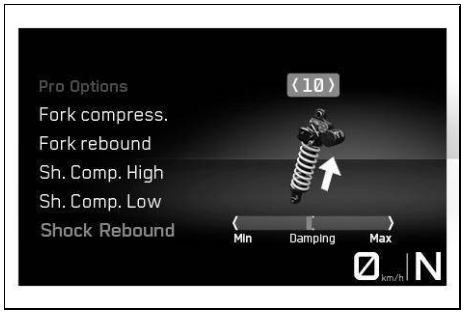


Condition: **Suspension Mode Pro** (optional) is activated

- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until **Suspension** is highlighted. Pressing the **SET** button opens the menu.
- Press the **UP** or **DOWN** button until **Pro 1**, **Pro 2** or **Pro 3** is highlighted. Press the **SET** button to open the submenu.
- Press the **UP** or **DOWN** button until low shock absorber compression damping (optional) is marked.
- Press the **RIGHT** or **LEFT** button to adjust the low shock absorber compression damping (optional).

The low compression of the shock absorber can be adjusted in the low shock absorber compression damping submenu (optional). 20 settings are possible.

7.28.28 Shock absorber rebound (optional)



Condition: **Suspension Mode Pro** (optional) is activated

- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until **Suspension** is highlighted. Pressing the **SET** button opens the menu.
- Press the **UP** or **DOWN** button until **Pro 1**, **Pro 2** or **Pro 3** is highlighted. Press the **SET** button to open the submenu.
- Press the **UP** or **DOWN** button until shock absorber rebound (optional) is marked.
- Press the **RIGHT** or **LEFT** button to adjust the shock absorber rebound (optional).

The rebound of the shock absorber can be adjusted in the shock absorber rebound submenu (optional). 20 settings are possible.

7.28.29 Track Options (optional)

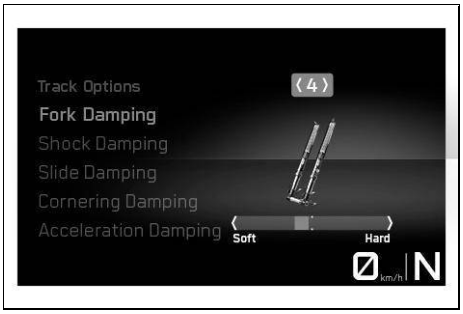


Condition: **Damping Mode Track** (optional) is activated

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Suspension** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Track 1 Options**, **Track 2 Options** or **Track 3 Options** is highlighted.
– Press the **SET** button to open the submenu.

You can adjust the fork damping, shock absorber damping **Slide Damping**, cornering damping and acceleration damping in submenu **Track Options**.

7.28.30 Fork damping (optional)

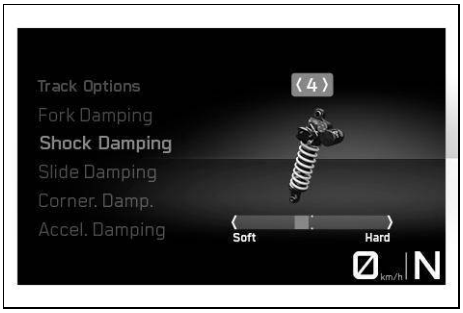


Condition: **Suspension Mode Track** (optional) is activated

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Suspension** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Track** is highlighted. Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button until fork damping (optional) is marked.
– Press the **RIGHT** or **LEFT** button to adjust the fork damping (optional).

The damping of the fork can be adjusted in the fork damping submenu (optional). 8 settings are possible from soft to hard.

7.28.31 Shock absorber damping (optional)



Condition: **Suspension Mode Track** (optional) is activated

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Suspension** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Track** is highlighted. Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button until shock absorber damping (optional) is marked.
– Press the **RIGHT** or **LEFT** button to adjust the shock absorber damping (optional).

The damping of the shock absorber can be adjusted in the shock absorber damping submenu (optional). 8 settings are possible from soft to hard.

7.28.32 Slide Damping (optional)



Condition: **Suspension Mode Track** (optional) is activated

- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until **Suspension** is highlighted. Pressing the **SET** button opens the menu.
- Press the **UP** or **DOWN** button until **Track** is highlighted. Press the **SET** button to open the submenu.
- Press the **UP** or **DOWN** button until **Slide Damping** (optional) is highlighted.
- Press the **RIGHT** or **LEFT** button to adjust **Slide Damping** (optional).

In submenu **Slide Damping** (optional), you can set how much rear wheel slip is permitted. 8 settings are possible from minimum to maximum slip.

7.28.33 Cornering damping (optional)



Condition: **Suspension Mode Track** (optional) is activated

- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until **Suspension** is highlighted. Pressing the **SET** button opens the menu.
- Press the **UP** or **DOWN** button until **Track** is highlighted. Press the **SET** button to open the submenu.
- Press the **UP** or **DOWN** button until cornering damping (optional) is marked.
- Press the **RIGHT** or **LEFT** button to adjust the cornering damping (optional).

The damping characteristics when cornering can be selected in the cornering damping menu (optional). 8 settings are possible from more grip to more stability.

7.28.34 Acceleration damping (optional)



Condition: **Suspension Mode Track** (optional) is activated

- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until **Suspension** is highlighted. Pressing the **SET** button opens the menu.
- Press the **UP** or **DOWN** button until **Track** is highlighted. Press the **SET** button to open the submenu.
- Press the **UP** or **DOWN** button until acceleration damping (optional) is marked.
- Press the **RIGHT** or **LEFT** button to adjust the acceleration damping (optional).

The damping characteristics when accelerating can be selected in the acceleration damping submenu (optional). 8 settings are possible from more grip to more stability.

7.28.35 Brake damping (optional)



Condition: **Suspension Mode Track** (optional) is activated

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Suspension** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Track** is highlighted. Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button until brake damping is highlighted.
– Press the **RIGHT** or **LEFT** button to adjust the brake damping (optional).

The damping characteristics when braking can be selected in the brake damping submenu (optional). 8 settings are possible from maximum to minimum **Dive**.

7.28.36 Bike info



– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Bike Info** is highlighted. Press the **SET** button to open the submenu.

General information and warnings that may be present can be called up in **Bike Info**.

7.28.37 Bike info



– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Bike Info** is highlighted. Press the **SET** button to open the submenu.

TPMS Front (optional) shows the current tire air pressure of the front tire.

TPMS Rear (optional) shows the current tire air pressure of the rear tire.

Note

The set reference value is displayed on the right of the current tire pressure in parentheses.

The tire pressure monitoring system display mode can be set in sub-menu **TPMS Mode** (optional).

Water displays the coolant temperature.

Oil Temperature displays the engine oil temperature.

Fuel Range indicates the possible fuel range you can cover with the fuel reserve.

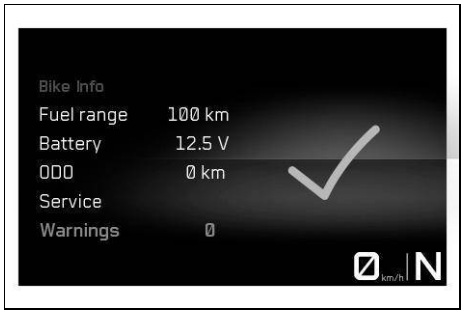
Battery displays the battery voltage.

Odometer displays the total mileage.

Service displays when the next service is due.

Warnings displays warnings that have occurred until they are no longer active.

7.28.38 Warning



Condition: Message or warning is present

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Bike Info** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Warning** is highlighted. Press the **SET** button to open the submenu.
– Use the **UP** or **DOWN** button to navigate through the warnings.

Note
The warnings that have occurred are saved in the display until they are no longer active.

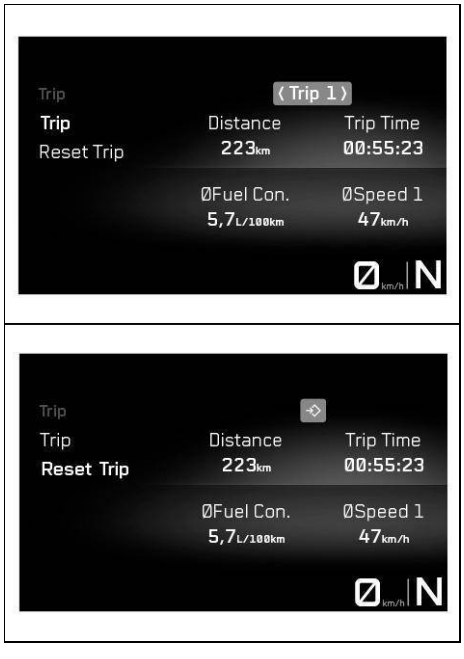
7.28.39 Trip info



– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Trip** is highlighted. Press the **SET** button to open the submenu.

General information on the distance traveled, trip time, average fuel consumption, and average speed can be accessed in menu **Trip**.

7.28.40 Trip 1



– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Trip** is highlighted. Press the **SET** button to open the submenu.
– Press the **RIGHT** or **LEFT** button until **Trip 1** is marked.

Information on **Trip 1** can be viewed in the **Trip 1** submenu.

Note
Trip displays the distance since the last reset, e.g. between two refueling stops. **Trip** runs along and counts to **9999**.
Trip Time shows the riding time on the basis of **Trip** and runs as soon as a speed signal is received.
ØConsump. indicates the average fuel consumption based on **Trip**.
ØSpeed indicates the average speed based on **Trip** and **Trip Time**.
Press **Reset Trip** to reset all entries in the **Trip 1** menu.

7.28.41 Trip 2





– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Trip** is highlighted. Press the **SET** button to open the submenu.
– Press the **RIGHT** or **LEFT** button until **Trip 2** is marked.

Information on **Trip 2** can be viewed in the **Trip 2** submenu.

Note

Trip displays the distance since the last reset, e.g. between two refueling stops. **Trip** runs along and counts to **9999**.

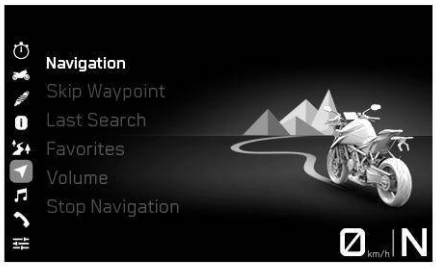
Trip Time shows the riding time on the basis of **Trip** and runs as soon as a speed signal is received.

ØConsump. indicates the average fuel consumption based on **Trip**.

ØSpeed indicates the average speed based on **Trip** and **Trip Time**.

Press **Reset Trip** to reset all entries in the **Trip 2** menu.

7.28.42 Navigation (optional)



Condition: Function **Bluetooth®** activated, The **KTMconnect** app (optional) is installed and connected on a suitable cell phone (Android devices from version 7.0, iOS devices from version 14), The dashboard is connected to a suitable cell phone, GPS function is activated on the connected cell phone, For voice navigation: the dashboard is connected to a suitable communication system and an appropriate language package has been downloaded in the **KTMconnect Navigation** app (optional)

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Navigation** is marked. Pressing the **SET** button opens the menu.

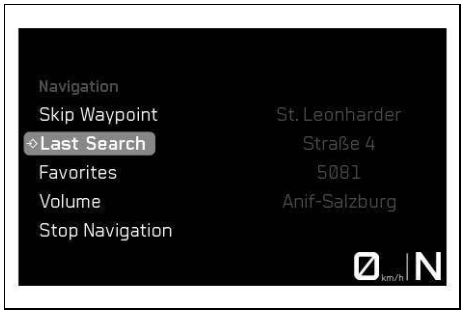
7.28.43 Skip Waypoint (optional)



Condition: Function **Bluetooth®** activated, **KTMconnect** app (optional) is installed and opened on a suitable cell phone, The dashboard is connected to a suitable cell phone, GPS function is activated on the connected cell phone, Navigation with at least one interim destination has been started in the **KTMconnect** app (optional)

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Navigation** is marked. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Skip Waypoint** is marked. Press the **SET** button to select the waypoint.
– Press the **SET** button again to confirm the selection and the waypoint is removed.

7.28.44 Last search (optional)

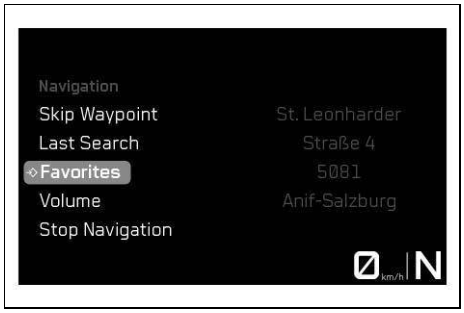


Condition: Function **Bluetooth®** activated, **KTMconnect** app (optional) is installed and opened on a suitable cell phone (Android devices from version 7.0, iOS devices from version 13), The dashboard is connected to a suitable cell phone, GPS function is activated on the connected cell phone

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Navigation** is marked. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Last Search** is marked. Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button to select an address.
– Press the **SET** button to confirm the selection and start navigation.

Note
The last 10 addresses searched for in the **Last Search** app (optional) are saved in **KTMconnect**.

7.28.45 Favorites (optional)



Condition: Function **Bluetooth®** activated, **KTMconnect** app (optional) is installed and opened on a suitable cell phone (Android devices from version 7.0, iOS devices from version 13), The dashboard is connected to a suitable cell phone, GPS function is activated on the connected cell phone, Favorites are saved in the **KTMconnect** app (optional)

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Navigation** is marked. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Favorites** is marked. Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button to select an address.
– Press the **SET** button to confirm the selection and start navigation.

Note
10 addresses in the **Favorites** app (optional) can be stored in **KTMconnect**.

7.28.46 Volume (optional)



Condition: The **KTMconnect** app (optional) is installed and connected on a suitable cell phone (Android devices from version 7.0, iOS devices from version 14), Dashboard is connected to a suitable cell phone, For voice navigation: the dashboard is connected to a suitable communication system and an appropriate language package has been downloaded in the **KTMconnect** app (optional)

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Navigation** is marked. Pressing the **SET** button opens the menu.



WARNING

Danger of accidents Headphone volume which is too high distracts attention from traffic activity.

– Always select headphone volume which is low enough for you to still clearly hear acoustic signals.

– Press the **UP** or **DOWN** button until **Volume** is marked. Press the **SET** button to open the submenu.
– Press the **UP** button to increase the volume of the activated voice navigation.
– Press the **DOWN** button to reduce the volume of the activated voice navigation.

7.28.47 Stop Navigation (optional)



Condition: Function **Bluetooth®** activated, **KTMconnect** app (optional) is installed and opened on a suitable cell phone (Android devices from version 7.0, iOS devices from version 13), The dashboard is connected to a suitable cell phone

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Navigation** is marked. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Stop Navigation** is marked. Press the **SET** button to confirm the selection.
– Press the **SET** button again to confirm the selection and end navigation.

7.28.48 Audio



Condition: Function **Bluetooth®** activated, The dashboard is connected to a suitable cell phone., The dashboard is connected to a suitable communication system or the **Headset Type Corded** is selected

– Press the **SET** button when the menu is closed.

WARNING

Danger of accidents Headphone volume which is too high distracts attention from traffic activity.

– Always select headphone volume which is low enough for you to still clearly hear acoustic signals.

– Press the **UP** or **DOWN** button until **Audio** is highlighted. Press **SET** button to open the menu.
– Press the **UP** button to increase the audio volume.
– Press the **DOWN** button to reduce the audio volume.
– Press the **RIGHT** button change to the next audio track.
– Depending on your cell phone, pressing the **LEFT** button will switch to the previous audio track or play the current audio track from the beginning.
– Press **SET** button to play or pause the audio track.

Note

With some cell phones, the cell phone audio player needs to be started before playback is possible.

The **Audio** function can be added to **C1** or **C2** for easier operation.

7.28.49 call



WARNING

Danger of accidents Headphone volume which is too high distracts attention from traffic activity.

– Always select headphone volume which is low enough for you to still clearly hear acoustic signals.

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Call** is highlighted. Pressing the **SET** button opens the menu.

Note

It is not possible to change the audio volume using the combination switch with every cell phone.

The call duration and contact are displayed. Depending on the cell phone settings, the contact is shown by name.

If necessary, accessing contacts must be enabled on the cell phone.

You cannot navigate in the menu during an active phone conversation.

– Press the **RIGHT** button to accept an incoming call.
– Press the **LEFT** button to reject an incoming call.
– Press and hold **UP** button to increase the audio volume.
– Press and hold **DOWN** button to reduce the audio volume.

The last calls and favorites can be called up in the **Call** menu.

7.28.50 Last Calls



WARNING

Danger of accidents Headphone volume which is too high distracts attention from traffic activity.

– Always select headphone volume which is low enough for you to still clearly hear acoustic signals.

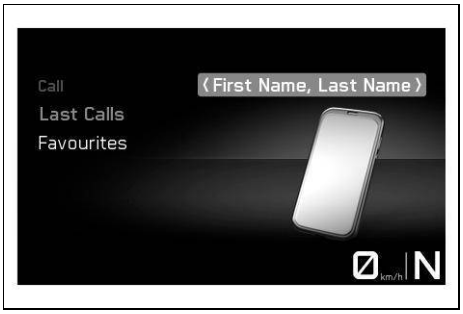
– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Call** is highlighted. Pressing the **SET** button opens the menu.

Note

It is not possible to change the audio volume using the combination switch with every cell phone.

The call duration and contact are displayed. Depending on the cell phone settings, the contact is shown by name.

If necessary, accessing contacts must be enabled on the cell phone.



You cannot navigate in the menu during an active phone conversation.

– Press the **UP** or **DOWN** button until **Last Calls** is highlighted. Press the **SET** button to open the submenu.
– Press the **RIGHT** or **LEFT** button until the desired person is highlighted. This person can be called by pressing the **SET** button.

7.28.51 favorites



WARNING

Danger of accidents Headphone volume which is too high distracts attention from traffic activity.

– Always select headphone volume which is low enough for you to still clearly hear acoustic signals.

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Call** is highlighted. Pressing the **SET** button opens the menu.

Note

It is not possible to change the audio volume using the combination switch with every cell phone.

The call duration and contact are displayed. Depending on the cell phone settings, the contact is shown by name.

If necessary, accessing contacts must be enabled on the cell phone.

You cannot navigate in the menu during an active phone conversation.

– Press the **UP** or **DOWN** button until **Favorites** is highlighted. Press the **SET** button to open the submenu.
– Press the **RIGHT** or **LEFT** button until the desired person is highlighted. This person can be called by pressing the **SET** button.

7.28.52 Settings



Condition: Motorcycle is stationary

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Pressing the **SET** button opens the menu.

In the **Settings** menu, favorites, quick selections, **Connectivity** (optional), and the shift warning light can be configured. Settings can be made for units or various values. Several functions can be enabled or disabled.

7.28.53 favorites

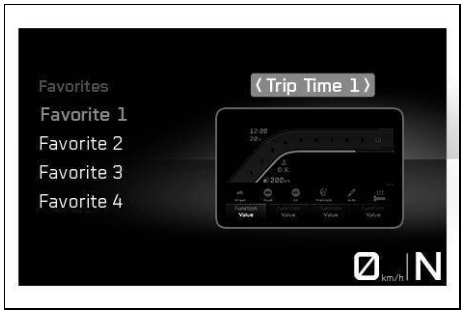


Condition: Motorcycle is stationary

- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until **Settings** is highlighted.
- Press the **SET** button to open the menu.
- Press the **UP** or **DOWN** button until “Favorites” is highlighted. Press the **SET** button to open the submenu.
- Use the **RIGHT** or **LEFT** button to select a menu item and add the selected information to the Favorites display.

Up to four sets of information can be selected in the **Favorites** menu.

7.28.54 Favorites–display 1–4



Condition: Motorcycle is stationary

- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until **Settings** is highlighted.
- Press the **SET** button to open the menu.
- Press the **UP** or **DOWN** button until **Favorites** is highlighted. Press the **SET** button to open the submenu.
- Press the **UP** or **DOWN** button to select **Favorite 1**, **Favorite 2**, **Favorite 3**, or **Favorite 4**.
- Press the **RIGHT** or **LEFT** button to select the desired information.

7.28.55 Custom Switch

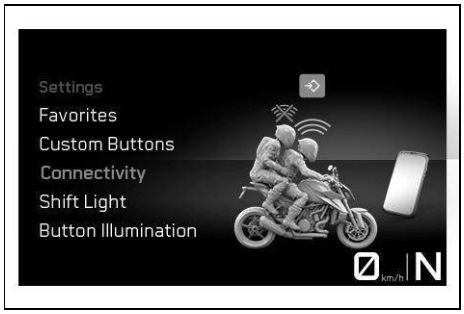


Condition: Motorcycle is stationary

- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until **Settings** is highlighted.
- Press the **SET** button to open the menu.
- Press the **UP** or **DOWN** button until **Custom Switch** is highlighted. Press the **SET** button to open the submenu.
- Press the **UP** or **DOWN** button until **C1** or **C2** is highlighted.
- Use the **RIGHT** or **LEFT** button to select a menu item to assign a function

Note
When the menu is closed, the submenu defined in **C1** is opened by pressing the **C2** or **Custom Switch** button.

7.28.56 connectivity



Condition: Motorcycle is stationary, Function **Bluetooth®** activated

- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until **Connectivity** is highlighted. Press the **SET** button to open the submenu.

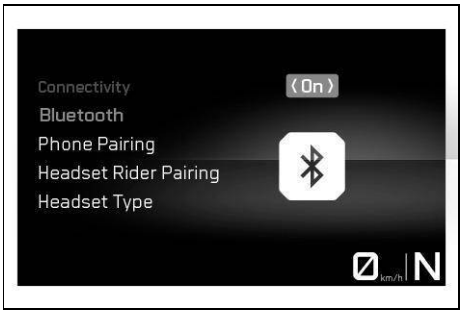
The standard **Bluetooth®** 4.0 must be supported.

In sub-menu **Connectivity**, a suitable cell phone or suitable communication system can be connected via **Bluetooth®** to the dashboard, allowing the audio and navigation functions to be configured.



Note
Not every cell phone and communication system is suitable for pairing with the dashboard.

7.28.57 Bluetooth



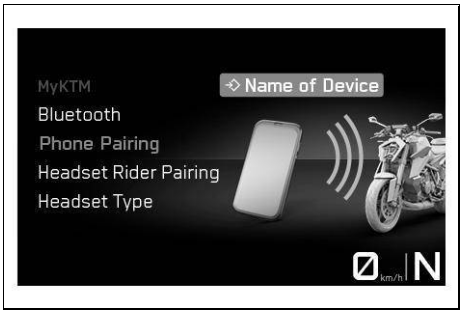
Condition: Motorcycle is stationary

- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until **Settings** is highlighted.
- Press the **SET** button to open the menu.
- Press the **UP** or **DOWN** button until **Connectivity** is highlighted. Press the **SET** button to open the submenu.
- Press the **UP** or **DOWN** button until **Bluetooth** is highlighted.
- Use the **RIGHT** or **LEFT** button to select a menu item to switch the **Bluetooth®** function on or off.

Function **Bluetooth®** must be activated in order to pair a suitable cell phone or communication system with the vehicle.

Note
Not every cell phone and communication system is suitable for pairing with the dashboard.

7.28.58 pairing a phone



Condition: Motorcycle is stationary, Function **Bluetooth®** activated, Function **Bluetooth®** also activated on the device that is to be paired

- Press the **SET** button when the menu is closed.
- Press the **UP** or **DOWN** button until **Settings** is highlighted. Press **SET** button to open the menu.
- Press the **UP** or **DOWN** button until **Connectivity** is highlighted. Press the **SET** button to open the submenu.
- Press the **UP** or **DOWN** button until “Pair phone” is highlighted. Press the **SET** button to open the submenu.

Note
Only one cell phone can be paired with the vehicle at a time.

- Press the **UP** or **DOWN** button until **New Pairing** is marked. Press the **SET** button to open the submenu.
- The vehicle starts the search for a suitable cell phone. If the search is successful, the name of the cell phone is displayed again in the pairing submenu. Press the **SET** button to start the pairing.

The cell phone must be visible via **Bluetooth®** in order for the cell phone to be found by the vehicle.

Note
Not every cell phone is suitable for pairing with the vehicle.

– A message appears on the combination instrument indicating that the vehicle is now ready for pairing. The pairing is successfully completed by confirming the **Passkey** on the cell phone and on the dashboard.

Note
Follow the instructions in the app when connecting with **KTMconnect**. Confirmation may be required on the combination instrument.

– Press the **UP** or **DOWN** button until “Delete pairing” is highlighted. The paired device can be deleted by pressing the **SET** button.
– Move the previously paired device into the range of the vehicle while the **Bluetooth®** function is active.

Make sure the end device is in the correct pairing mode for call management. If the end device is only paired for media playback, the call function may not work.

✓ The device is automatically connected with the vehicle.
✗ If the device is not automatically connected with the vehicle after approx. 30 seconds:
  – Switch on the vehicle again or repeat the **New Pairing** procedure.

In submenu **Phone Pairing**, a suitable cell phone can be paired with the dashboard via **Bluetooth®**.

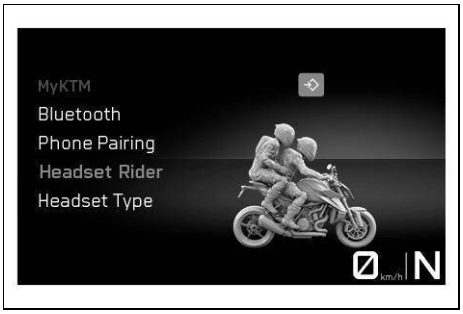
Note
Not every cell phone and communication system is suitable for pairing with the dashboard.

7.28.59 headset pairing



Condition: Motorcycle is stationary, Function **Bluetooth®** activated, Function **Bluetooth®** also activated on the device that is to be paired

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Press **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Connectivity** is highlighted. Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button until **Riders Headset** is highlighted. Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button until **New Pairing** is marked. Press the **SET** button to open the submenu.
– The vehicle starts searching for a suitable communication system. If the search was successful, the name of the rider's audio device is displayed in the **New Pairing** submenu. Press the **SET** button to start the pairing.



The communication system must be in pairing mode for the communication system to be found by the vehicle. Follow the instructions in the communication system owner's manual.

Note

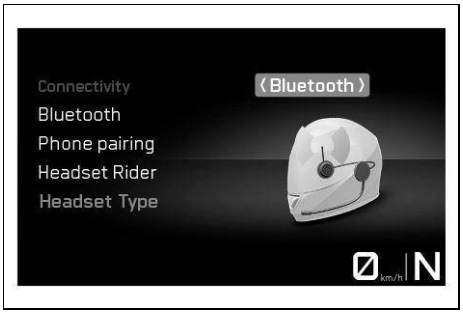
Press the **UP** or **DOWN** button until **Delete Pairing** is highlighted. The paired device can be deleted by pressing the **SET** button.

Not every communication system is suitable for pairing with the vehicle.

– Move the previously paired device into the range of the vehicle while the **Bluetooth®** function is active.
  ✓ The device is automatically connected with the vehicle.
  ✗ If the device is not automatically connected with the vehicle after approx. 30 seconds:
    – Switch on the vehicle again or repeat the **New Pairing** procedure.

In the **Riders Headset** submenu, a suitable rider communication system can be paired with the vehicle.

7.28.60 Type of audio device



Condition: Motorcycle is stationary

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Press **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Connectivity** is highlighted. Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button until **Headset Type** is highlighted.
– Use the **RIGHT** or **LEFT** button to select the menu item to change the type of rider headset.

The connection type of the rider's audio device can be selected in the **Headset Type** submenu.

The communication system is connected to the vehicle wirelessly via **Bluetooth Headset** in **Bluetooth®** display mode.

The communication system is connected directly to the smartphone in display mode **Corded Headset**.

Note

The **Riders Headset** menu item is only available in **Headset Type Bluetooth**.

7.28.61 Shift Light



Condition: Motorcycle is stationary, **ODO** > 1,000 km (621 miles)

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Press **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Shift Light** is highlighted.

The shift warning light can be configured in the **Shift Light** sub-menu.

Note
The rev limiter is dependent on the coolant temperature.

7.28.62 Shift light state



Condition: Motorcycle is stationary, **ODO** > 1,000 km (621 miles)

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Press **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Shift Light** is highlighted.
– Use the **RIGHT** or **LEFT** button to switch the shift warning light on or off.

7.28.63 RPM1



Condition: Motorcycle is stationary, **ODO** > 1,000 km (621 miles)

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Press **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Shift Light** is highlighted.
– Press the **UP** or **DOWN** button until **RPM1** is highlighted.
– Press the **RIGHT** or **LEFT** button to set the value for **RPM1**.

RPM1 must not be larger than **RPM2**.

Note
RPM1 can be set in intervals of 500 between 5,500 and 10,000 rpm.

If the engine speed reaches the set value **RPM1**, the engine speed display flashes as a shift warning light.

7.28.64 RPM2



Condition: Motorcycle is stationary, **ODO** > 1,000 km (621 miles)

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Press **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Shift Light** is highlighted.
– Press the **UP** or **DOWN** button until **RPM2** is highlighted.
– Press the **RIGHT** or **LEFT** button to set the value for **RPM2**.

RPM2 must not be smaller than **RPM1**.

Note

RPM2 can be set in intervals of 500 between 7,000 and 10,000 rpm.

If the engine speed reaches the set value **RPM2**, the screen flashes as a shift warning light.

7.28.65 Button Illumination



Condition: Motorcycle is stationary

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Button Illumination** is highlighted.
– Press the **RIGHT** or **LEFT** button to select the button illumination level or switch off the button illumination.

7.28.66 Coming Home Light



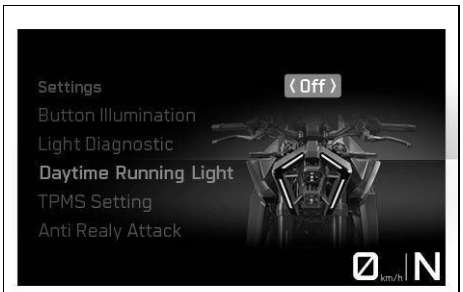
– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Coming Home Light** is highlighted.
– Press the **RIGHT** or **LEFT** button to adjust **Coming Home Light**. The setting options are off, short and long.

7.28.67 Light Diagnostic



– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Light Diagnostic** is highlighted.
– Press the **RIGHT** or **LEFT** button to activate or deactivate **Light Diagnostic**.

7.28.68 Daytime Running Light



– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Daytime Running Light** is marked.
– Press the **RIGHT** or **LEFT** button to activate or deactivate **Daytime Running Light**.

7.28.69 TPMS Settings (optional)



– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **TPMS Settings** (optional) is highlighted.
– Press the **RIGHT** or **LEFT** button to activate or deactivate the warnings from **TPMS Settings** (optional) or to set the customized pressure.

7.28.70 Anti Relay Attack

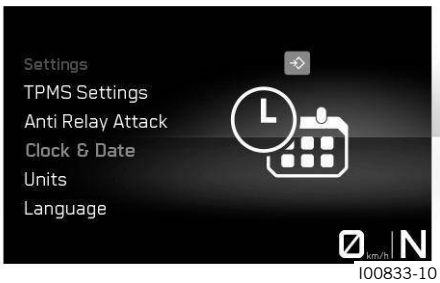


Condition: Motorcycle is stationary

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Pressing the **SET** button opens the menu.
– Press the **UP** or **DOWN** button until **Anti Relay Attack** is highlighted.
– Use the **RIGHT** or **LEFT** button to switch the **Anti Relay Attack** on or off.

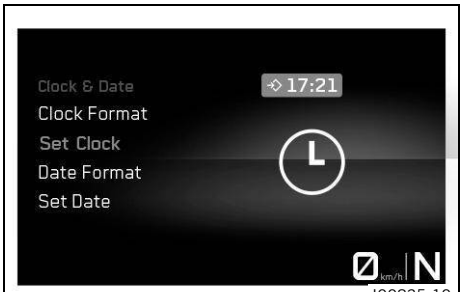
7.28.71 Setting the time and date

Condition: Motorcycle is stationary



I00833-10

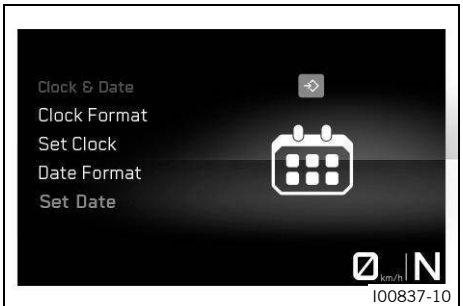
– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** appears.
– Press the **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Clock & Date** is highlighted.
– Press the **SET** button to open the submenu.



I00835-10

Setting the clock

– Press the **UP** or **DOWN** button until **Set Clock** is marked.
– Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button until hours or minutes is highlighted.
– Press the **RIGHT** or **LEFT** button to set the hours or minutes.
– Press the **BACK** button to exit the sub-menu.

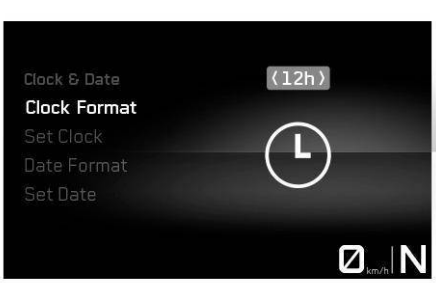


I00837-10

Setting the date

– Press the **UP** or **DOWN** button until **Set Date** is marked.
– Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button until the day, month or year is highlighted.
– Press the **RIGHT** or **LEFT** button to set the day, month or year.
– Press the **BACK** button to exit the submenu.

7.28.72 Clock format

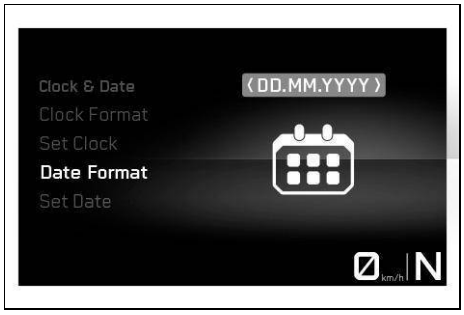


Condition: Motorcycle is stationary

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Press the **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Clock & Date** is highlighted. Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button until **Clock Format** is highlighted.
– Press the **RIGHT** or **LEFT** button to select the time format.

Note
The possible settings are 24h and 12h.

7.28.73 Date format

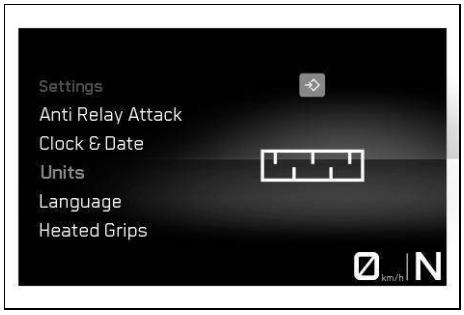


Condition: Motorcycle is stationary

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Press the **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Clock & Date** is highlighted. Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button until **Date Format** is highlighted.
– Press the **RIGHT** or **LEFT** button to select the date format.

Note
The possible settings are DD.MM.YYYY, MM.DD.YYYY and YYYY.MM.DD.

7.28.74 Units

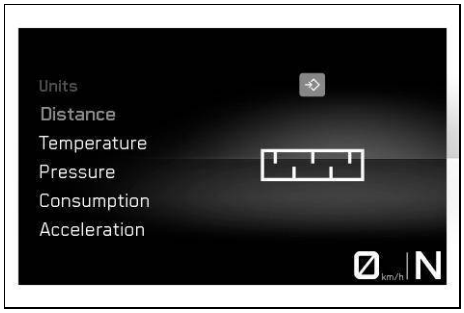


Condition: Motorcycle is stationary

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Press **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Units** is highlighted. Press the **SET** button to open the submenu.

The **Units** submenu allows settings to be made for units or various values.

7.28.75 Distance

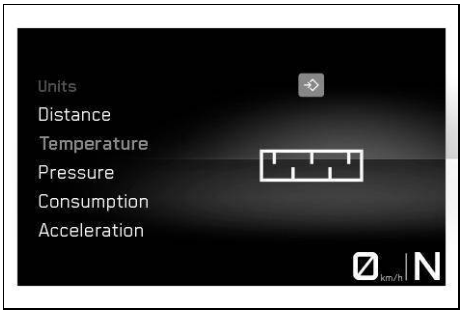


Condition: Motorcycle is stationary

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Press **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Units** is highlighted. Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button until **Distance** is marked.
– Use the **RIGHT** or **LEFT** button to select the menu item to confirm the desired unit.

Note
Kilometers and miles can be set.

7.28.76 Temperature

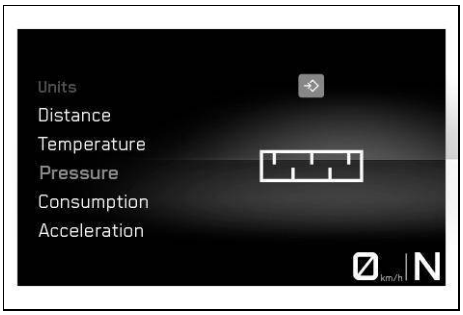


Condition: Motorcycle is stationary

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Press **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Units** is highlighted. Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button until **Temperature** is marked.
– Use the **RIGHT** or **LEFT** button to select the menu item to confirm the desired unit.

Note
Celsius and Fahrenheit can be set.

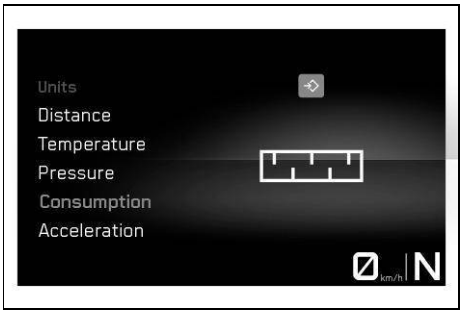
7.28.77 Pressure



Condition: Motorcycle is stationary

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Press **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Units** is highlighted. Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button until **Pressure** is marked.
– Use the **RIGHT** or **LEFT** button to select the menu item to confirm the desired unit.

7.28.78 Consumption

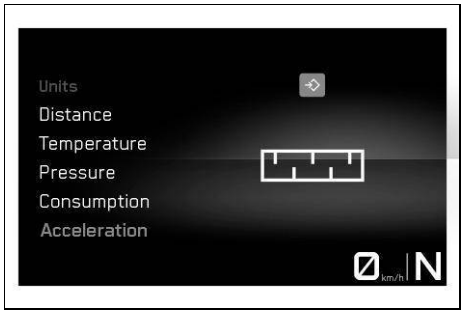


Condition: Motorcycle is stationary

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Press **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Units** is highlighted. Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button until **Consumption** is marked.
– Use the **RIGHT** or **LEFT** button to select the menu item to confirm the desired unit.

Note
The following can be set: l/100 km, km/l, USG/100 mi, mi/USG, malfunction indicator light, UKG/100 mi and mi/UKG.

7.28.79 Acceleration



Condition: Motorcycle is stationary

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Press **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Units** is highlighted. Press the **SET** button to open the submenu.
– Press the **UP** or **DOWN** button until acceleration is highlighted.
– Use the **RIGHT** or **LEFT** button to select the menu item to confirm the desired unit.

Note
m/s² and ft/s² settings can be adjusted.

7.28.80 Language

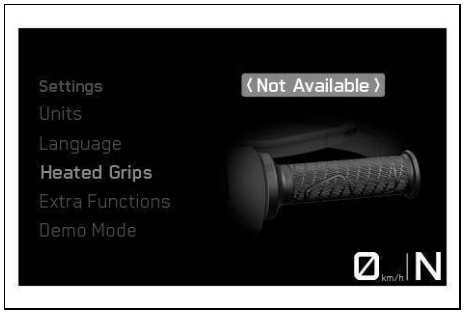


Condition: Motorcycle is stationary

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted.
– Press the **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Language** is highlighted.
– Use the **RIGHT** or **LEFT** button to select the menu item and the desired language.

Note
The menu languages are US English, UK English, German, Italian, French, and Spanish.

7.28.81 Heated Grips (optional)



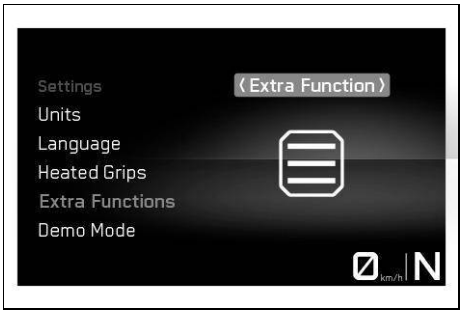
Condition: Motorcycle is stationary

– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted. Press **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Heated Grips** is highlighted.
– Press the **RIGHT** or **LEFT** button to activate or deactivate the **Heated Grips**.

The heated grip can be configured using **Heated Grips** and **RIGHT** in the **LEFT** submenu.

Note
In the **Settings** menu, the **Heating** submenu only controls the visibility of **Heated Grips** in the menu.

7.28.82 Extra Functions



Condition: Motorcycle is stationary, Motorcycle with optional supplementary function

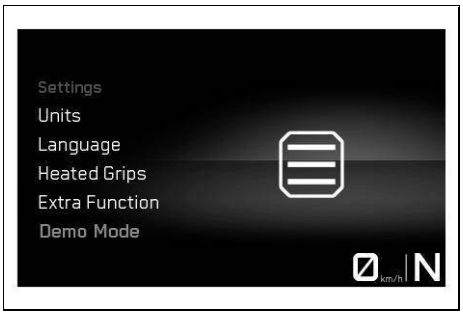
– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted.
– Press the **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Extra Functions** is highlighted. Press the **SET** button to open the submenu.
– Use the **UP** or **DOWN** button to navigate through the extra functions.

Note

The optional extra functions are listed.

The current **KTM PowerParts** and available software are listed on the KTM website.

7.28.83 Demo mode



Condition: Motorcycle is stationary, Motorcycle with demo mode

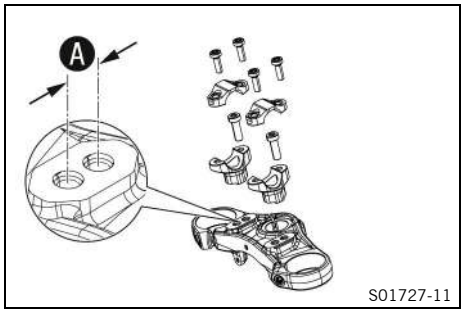
– Press the **SET** button when the menu is closed.
– Press the **UP** or **DOWN** button until **Settings** is highlighted.
– Press the **SET** button to open the menu.
– Press the **UP** or **DOWN** button until **Demo Mode** is highlighted. Press the **SET** button to open the submenu.
– Use the **UP** or **DOWN** button to navigate through the demo mode functions.

Note

The activated demo mode functions (p. 32) are listed.

Once the demo mode expires, the optional software functions are available from an authorized dealer.

8.1 Handlebar position



On the upper triple clamp there are two holes at a distance of Ⓐ apart.

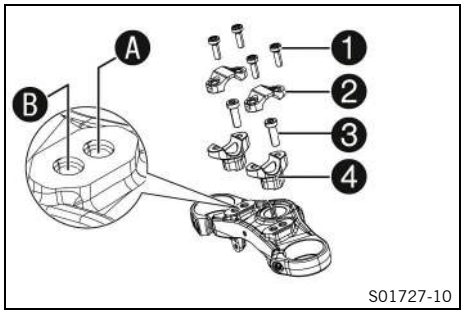
Hole distance Ⓐ	15 mm (0.59 in)

The handlebar can be mounted in two different positions. This allows the handlebar to be mounted in the most comfortable position for the rider.

Note
KTM recommends the front handlebar position when using the vehicle on a race track.

8.2 Adjusting the handlebar position

WARNING
Danger of accidents A repaired handlebar poses a safety risk.
If the handlebar is bent or straightened, the material becomes fatigued. The handlebar may break as a result.
– Change the handlebar if the handlebar is damaged or bent.



– Remove ❶ screws. Take off the handlebar clamps ❷. Position the handlebar so that screws ❸ are accessible.

Protect the components against damage by covering them.
Do not kink the cables or lines.

– Remove ❸ screws. Take off handlebar supports ❹.
– Move the handlebar supports into the desired position Ⓐ or Ⓑ. Mount and tighten screws ❸.

Mount the left and right handlebar supports in the same position.

Screw, handlebar mount	
M10	40 Nm (29.5 ft·lb$_f$) **Loctite® 243**

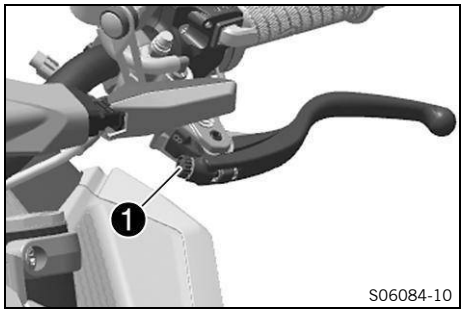
– Position the handlebar.

Make sure the cables and wiring are routed correctly.

– Position the handlebar clamp. Mount screws ❶ and tighten evenly.

Handlebar clamp screw	
M8	20 Nm (14.8 ft·lb$_f$)

8.3 Adjusting the basic position of the clutch lever



– Push clutch lever forward.
– Adjust the basic position of the clutch lever to your hand size by turning adjusting screw 1.

Only turn the adjusting screw by hand, and do not use force.
Do not make any adjustments while riding.

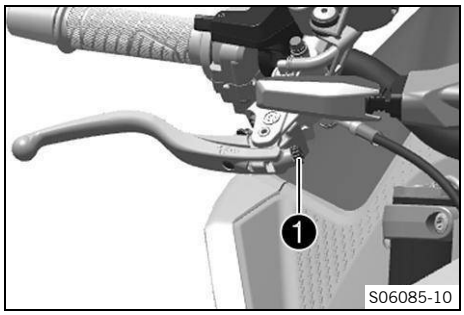
Note

When the adjusting screw is turned clockwise, the clutch lever moves away from the handlebar.

When the adjusting screw is turned counterclockwise, the clutch lever moves closer to the handlebar.

The range of adjustment is limited.

8.4 Adjusting the basic position of the hand brake lever



– Push hand brake lever forward.
– Adjust the basic position of the hand brake lever to your hand size by turning adjusting screw 1.

Only turn the adjusting screw by hand, and do not use force.
Do not make any adjustments while riding.

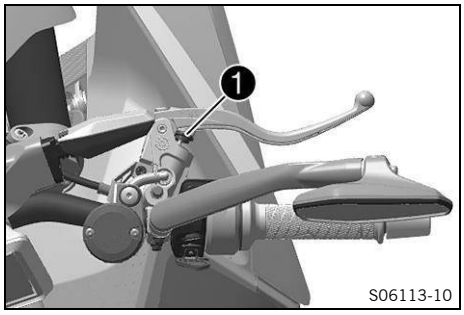
Note

Turn the adjusting screw clockwise to increase the distance between the hand brake lever and the handlebar.

Turn the adjusting screw counterclockwise to decrease the distance between the hand brake lever and the handlebar.

The range of adjustment is limited.

8.5 Adjusting the response of the hand brake lever



– Adjust the response of the hand brake lever with adjusting screw 1.

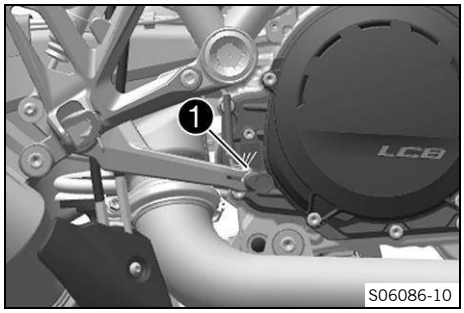
Only turn the adjusting screw by hand, and do not use force.
Do not make any adjustments while riding.

✓ 19 - Setting with large hand brake lever transmission ratio (soft response, more lever travel, less lever force).
✓ 20 - Setting with balanced hand brake lever response.
✓ 21 - Setting with small hand brake lever transmission ratio (hard response, less lever travel, more lever force).

Note

The transmission ratio and, therefore, the response of the hand brake lever can be changed.

8.6 Setting the step plate of the foot brake lever



– Loosen screw 1.
– Turn the step plate of the foot brake lever to the desired position.

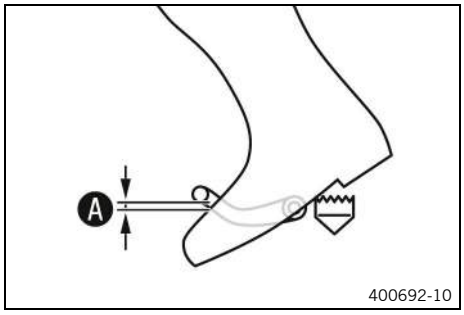
Standard	Step plate positioned to the front

Note
The step plate of the foot brake lever can be freely rotated through 360 °.
The basic position of the foot brake lever is set at the factory and does not need to be changed.

– Tighten screw 1.

Screw, step plate for foot brake lever	
M6	10 Nm (7.4 ft·lb$_f$)

8.7 Checking the basic position of the gear shift lever



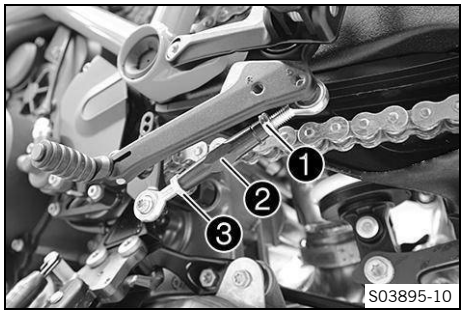
– Sit on the vehicle in the riding position and measure the distance A between the upper edge of your boot and the shift lever.

Distance A between the gear shift lever and upper edge of boot	10 mm ... 20 mm (0.39 in ... 0.79 in)
When driving, the gear shift lever must not touch the rider's boot when in the basic position.	

Note
If the shift lever is permanently touching the boot, the transmission will be subject to excessive load; this can cause a malfunction of the quickshifter.

» If the distance does not meet the specifications:
– Adjust the basic position of the gear shift lever. (p. 79)

8.8 Adjusting the basic position of the gear shift lever



– Loosen nut 1 while holding stud 2.

Note
Nut 1 has an LH thread.

– Loosen nut 3 while holding stud 2.
– Turn stud 2 to adjust the shift lever.

The gear shift lever must not come into contact with any other vehicle components during the shift procedure.

Note
The range of adjustment is limited.

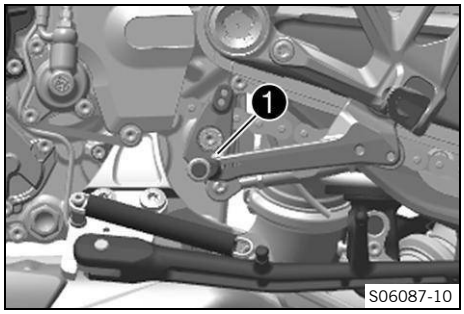
– Tighten nut ❸ while holding stud ❷.

Nut, shift rod	
M8	12 Nm (8.9 ft·lb$_f$)

– Tighten nut ❶ while holding stud ❷.

Nut, shift rod	
M8LH	12 Nm (8.9 ft·lb$_f$)

8.9 Setting the shift lever stub



– Loosen screw ❶.
– Turn the shift lever stub to the desired position.

Standard	Step plate positioned to the front

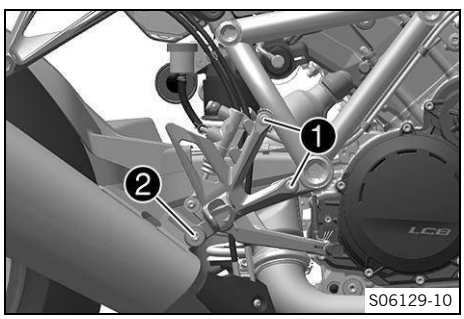
Note
The shift lever stub can be freely rotated through 360 °.
The shift lever stud is set at the factory and does not need to be changed.

– Tighten the screw.

Screw, shift lever stub	
M6	10 Nm (7.4 ft·lb$_f$)

8.10 Adjusting the footrests

Note
The adjustable footrest support allows a more comfortable lower footrest position (normal switching scheme) or a sporty upper footrest position (reverse switching scheme).
The footrest support position and switching scheme can only be changed together.

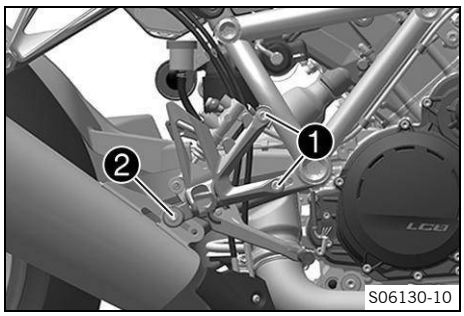


Main work

– Remove screws ❶ on the right footrest support.

Pay attention to the nut when removing the lower footrest support bolt.

– Loosen screw ❷.

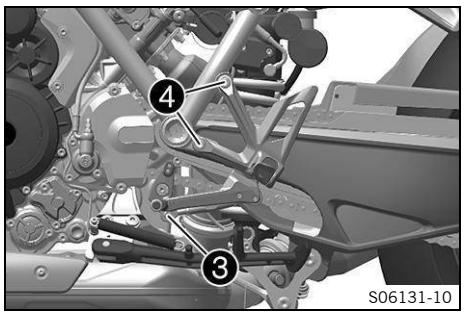


– Position the footrest support.
– Mount and tighten screws ❶.

Screw, front rider footrest bracket	
M8	25 Nm (18.4 ft·lb$_f$) **Loctite® 243**

– Tighten screw ❷.

Remaining screws on chassis	
M8	25 Nm (18.4 ft·lb$_f$)



– Remove screw ❸ of the shift linkage.
– Remove screws ❹ on the left footrest support and take off the footrest support.

Pay attention to the nut when removing the lower footrest support bolt.

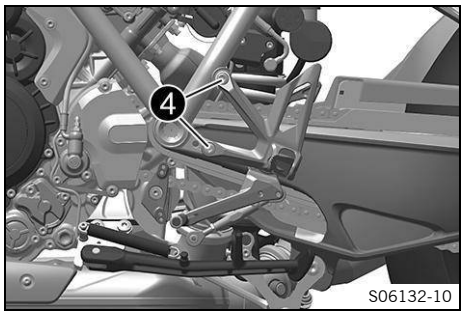


– Separate the shift linkage from the shift lever and mount in position **«R»**.

Screw, shift rod	
M6	5 Nm (3.7 ft·lb$_f$) **Loctite® 243**

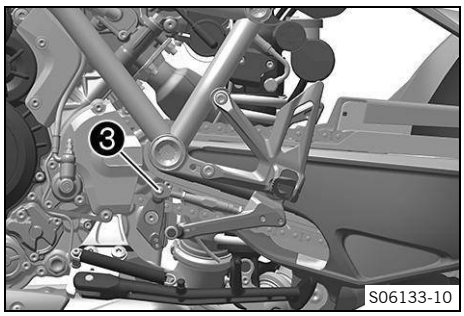
When the footrest support is returned to the standard position, the shift linkage on the shift lever must be mounted in position **«S»**.

Note
The shift linkage is set at the factory. It is not necessary to adjust the shift linkage.



– Position the footrest support.
– Mount and tighten screws ❹.

Screw, front rider footrest bracket	
M8	25 Nm (18.4 ft·lb$_f$) **Loctite® 243**



– Position the shift linkage at one of the upper positions of the shift shaft.

Outer position	Shift power low, long shift path
Inner position	Shift power high, short shift path
When the footrest support is returned to the standard position, one of the lower positions on the shift shaft must be used.	

– Mount and tighten screw 3.

Screw, shift rod	
M6	5 Nm (3.7 ft·lb$_f$) **Loctite® 243**

Note
The switching scheme is now reversed.

Reworking

– Check the basic position of the gear shift lever. (p. 79)
– Adjust the basic position of the gear shift lever. (p. 79)

9.1 Notes on preparing for first use

DANGER

Danger of accidents A rider who is not fit to ride poses a danger to themself and to others.

– Do not operate the vehicle if you are not fit to ride due to alcohol, drugs, or medication.
– Do not operate the vehicle if you are physically or mentally incapable of doing so.

WARNING

Danger of accidents The brake system fails in the event of overheating.

If the brake pedal is not released, the brake pads grind continuously.

– Take your foot off the brake pedal when you are not braking.

WARNING

Danger of accidents Non-approved or non-recommended tyres and wheels impact the handling characteristic.

– Only use tires and wheels approved and recommended by the vehicle manufacturer with the corresponding speed rating.

WARNING

Danger of accidents New tires have reduced road grip.

The contact surface on new tires is not yet roughened.

– Run in new tires with moderate riding and only gradually increase the lean angle.

Run-in distance	200 km (124.3 mi)

WARNING

Danger of accidents Different tire profiles on the front and rear wheels can make it more difficult to control the vehicle.

– Make sure that only tires of the same tread type are mounted to the front and rear wheel.

WARNING

Risk of injury Missing or inadequate protective clothing increases the risk of injury.

– Wear appropriate protective clothing such as helmet, boots, gloves as well as pants and a jacket with protectors on all rides.
– Always wear protective clothing that is in good condition and meets the legal regulations.

Note

When using the vehicle, remember that others may feel disturbed by excessive noise.

– Ensure that the pre–delivery inspection has been carried out by an authorized contractual partner.
  ✓ The delivery certificate is transferred upon vehicle handover.
– Read the entire owner's manual before riding for the first time.
– Get to know the controls.
– Adjust the motorcycle to suit your needs, as described in the Ergonomics chapter.
– Get used to the handling characteristics of the motorcycle on suitable terrain before undertaking a more challenging ride. Also, ride as slowly as possible to get a better feeling for the motorcycle.
– Hold the handlebar firmly with both hands and keep your feet on the footpegs when riding.
– Run in the engine. (p. 84)

9.2 Running in the engine

– During the running-in time, do not exceed the specified engine speed.

Maximum engine speed	
During the first: 1,000 km (621.4 mi)	6,500 rpm (108.33 Hz)
After the first: 1,000 km (621.4 mi)	10,250 rpm (170.83 Hz)

Avoid fully opening the throttle.

9.3 Loading the vehicle

WARNING
Fire hazard The hot exhaust system may burn luggage.
– Fasten your luggage in such a way that it cannot be burned or singed by the hot exhaust system.

WARNING
Danger of accidents A high payload alters the handling characteristic and increases the stopping distance.
– Adapt your speed to your payload.

WARNING
Danger of accidents Carrying luggage alters handling characteristics.
– Adapt your speed to your payload.
– Ride more slowly if your vehicle is loaded with cases or other luggage.

Maximum speed with luggage	130 km/h (80.8 mph)

WARNING
Danger of accidents Items of luggage that have slipped or are incorrectly fastened can obscure the lighting system.
– Check that your luggage is fixed properly at regular intervals.
– Make sure that the lighting system is not covered by luggage.

WARNING
Danger of accidents Total weight and axle loads influence the handling characteristic.
The total weight consists of: operational vehicle with a full tank, rider and, if applicable, a passenger with protective clothing and helmet, and, if applicable, mounted luggage.
– Do not exceed the maximum permissible total weight or the axle loads.

WARNING
Danger of accidents Improper mounting of cases, tank rucksacks or other luggage impairs the handling characteristics.
Luggage mounted incorrectly can slip while the vehicle is in motion.
– Mount and secure all luggage according to the manufacturer's instructions.
– Check that your luggage is fixed properly at regular intervals.

WARNING

Danger of accidents The baggage system will be damaged if it is overloaded.

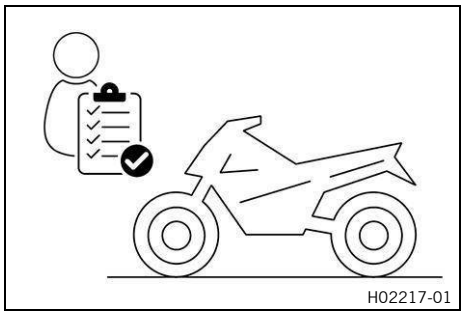
– Observe the manufacturer's specifications regarding the maximum load if you have mounted luggage bags on the vehicle.

– If luggage is carried, ensure it is fixed firmly as close as possible to the center of the vehicle and ensure even weight distribution between the front and rear wheels.

The maximum permissible total weight and the maximum permissible axle loads must not be exceeded.	
Maximum permissible total weight	425 kg (937.0 lb)
Maximum permissible front axle load	165 kg (363.8 lb)
Maximum permissible rear axle load	260 kg (573.2 lb)

10.1 Checks and maintenance measures when preparing for use

Note
Before every trip, check the condition of the vehicle and ensure that it is roadworthy.
The vehicle must be in perfect technical condition when it is being operated.


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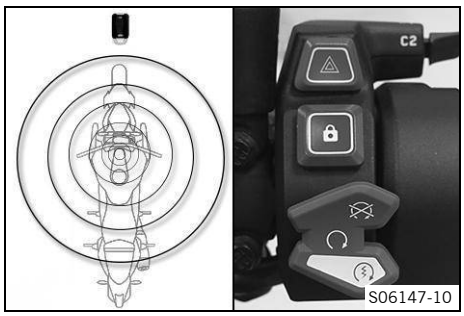
- Check the engine oil level. (p. 145)
- Check the brake fluid level for the front brake. (p. 117)
- Check the brake fluid level for the rear brake. (p. 119)
- Check that the brake pads of the front brake are secured. (p. 118)
- Check that the brake pads of the rear brake are secured. (p. 121)
- Check that the brake system is functioning properly.
- Check the coolant level in the compensating tank. (p. 140)
- Check the chain for dirt. (p. 109)
- Check the chain tension. (p. 110)
- Check the tire condition. (p. 125)
- Check the tire pressure. (p. 126)
- Check the settings of all controls and ensure that they can be operated smoothly.
- Check that the electrical equipment is functioning properly.
- Check that luggage is properly secured.
- Check the setting of the rear mirror.
- Check the fuel level.

10.2 Starting the vehicle

DANGER
Danger of poisoning Exhaust gases are toxic and inhaling them may result in unconsciousness and death.
- Always ensure that there is sufficient ventilation when running the engine.
- Use suitable exhaust extraction when starting or running the engine in an enclosed space.

WARNING
Danger of accidents Electronic components and safety devices will be damaged if the 12-V battery is discharged or missing.
If the 12-V battery is discharged or defective, malfunctions in the vehicle electronics can occur, especially when starting.
- Never operate the vehicle with a discharged 12-V battery or without a 12-V battery.

NOTE
Engine failure Running a cold engine at high engine speeds negatively impacts the service life of the engine.
- Always warm up the engine at low engine speeds.



– Take the motorcycle off the side stand and sit on the motorcycle.
– Move the RACE ON button within the range of the steering lock.
– Ensure that the RACE ON key stays in range while riding.

Maximum range of the RACE ON key around the steering lock	1.5 m (4 ft – 11.1 in)

Note

The range may be reduced by decreases in RACE ON key battery voltage and by interfering radio waves.

If the battery voltage of the RACE ON key is too low, one of the ignition keys must be placed in the area of the **steering lock** and must be safely stored again after starting.

– Make sure that the start button/kill switch is in the middle position.
– Switch on ignition; to do this, briefly press lock button (maximum of 1 second).

To avoid malfunctions in the control unit communication, do not switch the ignition off and on in rapid succession.

✓ The steering is unlocked.
✓ The function check of the combination instrument is run.
✓ The **ABS** warning lamp goes out when starting off.

Note

If the steering does not unlock, move the handlebar slightly.

– Shift the transmission into the neutral position.
✓ Neutral position **N** is displayed.



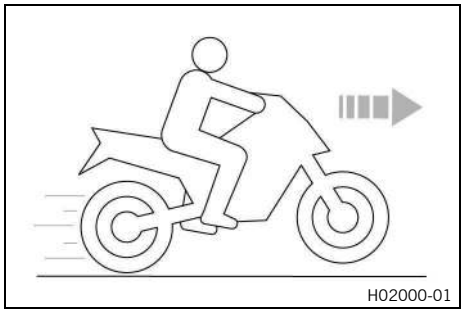
– Briefly press the start button/kill switch into the lower position.

Only press the start button/emergency OFF switch into the lower position when the combination instrument function control has been completed.
Do not open the throttle to start.
If the starting attempt is unsuccessful, wait for 15 seconds before making another attempt at starting.
After 6 unsuccessful starting attempts, do not try again, and check the vehicle for other malfunctions instead.

Note

This motorcycle is equipped with a safety starting system. You can only start the engine if the transmission is in neutral or if the clutch lever is pulled when a gear is engaged. If the side stand is folded out and you shift into gear, the engine stops.

10.3 Launch control (optional)



Launch control is an optional vehicle electronics function.

Launch control adjusts the engine speed in order to achieve the best possible acceleration.

Launch control can be used for starting off for a maximum of three times in succession. Launch control is temporarily deactivated after the third starting off in order to protect the engine, transmission and cooling system from overloading.

Launch control is also deactivated if all conditions for activation are no longer met.

Launch control is enabled again in the following cases: the engine runs for at least three minutes, the engine is switched off for 20 minutes or a distance of 1.5 km (0.93 mi) has been covered.

10.4 Starting off

– Pull the clutch lever, shift into first gear, release the clutch lever slowly and at the same time carefully open the throttle.

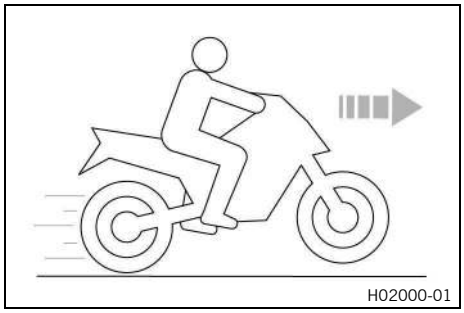
10.5 Starting off with launch control (optional)

WARNING

Danger of accidents Launch Control enables powerful acceleration which may overwhelm a novice rider. Public roads are neither a safe place nor a necessary environment for the use of Launch Control.

– Only use the launch control if you have the necessary experience.
– Do not use launch control on public roads.

Condition: Ride mode **TRACK** (optional) is activated, The vehicle is in first gear, TC indicator lamp does not light up, Coolant temperature: > 60 °C (> 140.0 °F), Total riding distance covered: > 1,000 km (> 621.4 mi)

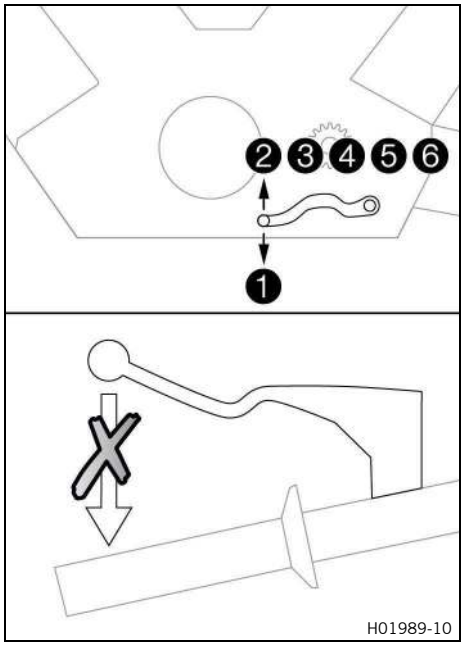


– Activate launch control in the combination instrument.
  ✓ The number of available starts is indicated on the start screen.
– Apply full throttle with the clutch lever pulled.
  ✓ The engine speed is adjusted.

6,500 rpm (108.33 Hz)

  ✓ The TC indicator lamp flashes quickly.
– Release clutch lever quickly but in a controlled manner.

10.6 Quickshifter+ (optional)



If the **QUICKSHIFTER+** (optional) is activated, you can shift up and down without actuating the clutch.

Because there is no need to close the throttle grip, uninterrupted gear shifts are possible.

The QUICKSHIFTER+ uses the shift shaft position to check whether or not a shift should be initiated, and sends a corresponding signal to the engine control unit.

If the QUICKSHIFTER+ is disabled in the combination instrument, the clutch needs to be actuated in the normal way for each shift.

10.7 Shifting, riding

WARNING

Risk of injury The passenger may fall from the vehicle if they act incorrectly.

– Ensure that the passenger sits correctly on the passenger seat, places his or her feet on the passenger foot pegs and holds on to the rider or the grab handles.

WARNING

Danger of accidents Not adapting the riding style constitutes a major risk.

– Comply with traffic regulations and ride defensively and with foresight to detect sources of danger as early as possible.

WARNING

Danger of accidents Total weight and axle loads influence the handling characteristic.

The total weight consists of: operational vehicle with a full tank, rider and, if applicable, a passenger with protective clothing and helmet, and, if applicable, mounted luggage.

– Do not exceed the maximum permissible total weight or the axle loads.

WARNING

Danger of accidents Improper mounting of cases, tank rucksacks or other luggage impairs the handling characteristics.

Luggage mounted incorrectly can slip while the vehicle is in motion.

– Mount and secure all luggage according to the manufacturer's instructions.
– Check that your luggage is fixed properly at regular intervals.

WARNING

Danger of accidents Adjustments to the vehicle distract attention from traffic activity.

– Make all adjustments when the vehicle is at a standstill.

WARNING

Danger of accidents Abrupt load alterations can cause the vehicle to become out of control.

– Avoid abrupt load alterations and sudden braking actions unless a hazardous situation arises.

WARNING

Danger of accidents Cold tires have reduced road grip.

– Ride the first miles carefully on every journey at moderate speed until the tires reach operating temperature.

WARNING

Danger of accidents New tires have reduced road grip.

The contact surface on new tires is not yet roughened.

– Run in new tires with moderate riding and only gradually increase the lean angle.

Run-in distance	200 km (124.3 mi)

WARNING

Danger of accidents A fall can damage the vehicle more seriously than it may first appear.

– Check the vehicle after a fall as you do when preparing for use.

WARNING

Danger of accidents If you downshift at high engine speed, the rear wheel blocks and the engine races.

– Do not downshift to a lower gear at high engine speeds.

NOTE

Engine failure Overheating damages the engine.

– If the coolant temperature warning is displayed, stop immediately and take care not to endanger yourself or other traffic participants in the process.
– Allow the engine and cooling system to cool down.
– Check and, if necessary, correct the coolant level on the cooling system while it is in a cooled state.

NOTE

Engine failure Unfiltered intake air has a negative effect on the service life of the engine.

Dust and dirt can enter the engine if there is no air filter or if the air filter is mounted incorrectly.

– Only operate the vehicle if an air filter is correctly fitted.

NOTE

Transmission damage Incorrect use of the QUICKSHIFTER+ will damage the transmission.

The QUICKSHIFTER+ can only be used if the function is enabled in the combination instrument.

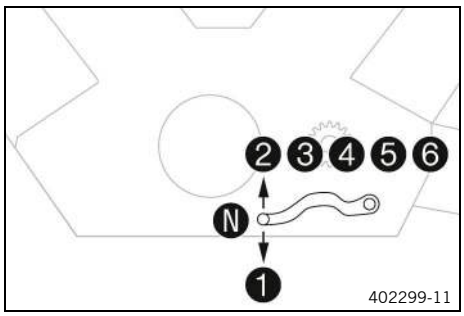
The QUICKSHIFTER+ is not active if you pull the clutch lever.

– Only use the QUICKSHIFTER+ in the permitted speed range shown.

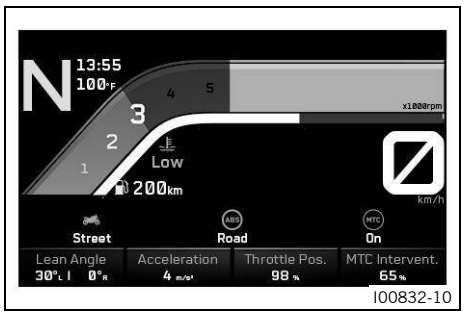
Note

If you hear unusual noises while riding, stop immediately, switch off the engine, and contact an authorized contractual partner.

All specifications regarding the switching direction refer to the standard switching scheme.



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– Shift into a higher gear when conditions allow (incline, road situation, etc.).
– Release the throttle while simultaneously pulling the clutch lever, shift into the next gear, release the clutch lever, and open the throttle.

Note
The gear positions can be seen in the figure. The idle position is between the first and second gears. First gear is used for starting off or for steep inclines.

– Accelerate as gently as possible while the motorcycle is still **not** at operating temperature.

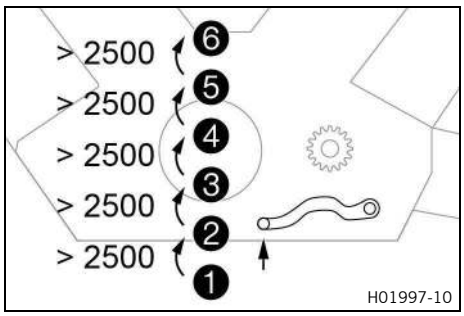
Note
While the motorcycle is **not** at operating temperature, the maximum engine speed is limited to 6500 rpm. On the combination instrument, the speed range after 6500 rpm has a blue background.

– After reaching maximum speed by fully opening the throttle twist grip, turn the throttle back so that it is ¾ open. This will reduce the speed slightly, but the fuel consumption will be considerably lower.
– Accelerate only up to a speed suitable for the road surface and weather conditions. In particular, you should not change gear on bends and should only accelerate very cautiously.
– Brake if necessary and close the throttle at the same time in order to shift down.
– Pull clutch lever and shift into a lower gear, release the clutch lever slowly, and open the throttle or shift again.
– If the engine stalls (e.g., at a crossroads), just pull clutch lever and press the start button/emergency OFF switch into the lower position. The transmission must not be shifted into neutral.
– Switch off the engine if you are likely to be running at idle speed or stationary for a long time.
– If the oil pressure warning lamp lights up during a trip, stop immediately and switch off the engine. Contact an authorized contractual partner.
– If malfunction indicator lamp lights up during a trip, please contact an authorized contractual partner as soon as possible.
– If the general warning light lights up during a trip, the display shows a message for 10 seconds.

Note
Very important messages are stored in the **Warning** menu.

– If the ice warning appears in the combination instrument, the roads may be icy. Adjust your speed to the road conditions.

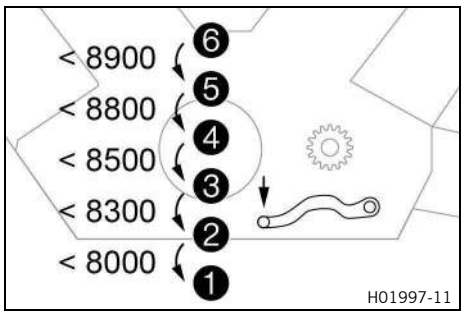
Condition: QUICKSHIFTER+ (optional) is enabled



– If the **QUICKSHIFTER+** is enabled in the combination instrument, one can shift up in the engine speed range shown without pulling the clutch lever.

Pull the shift lever to the stop quickly without changing the throttle twist grip position.

Note
The minimum engine speed in rpm before shifting up is shown in the figure.

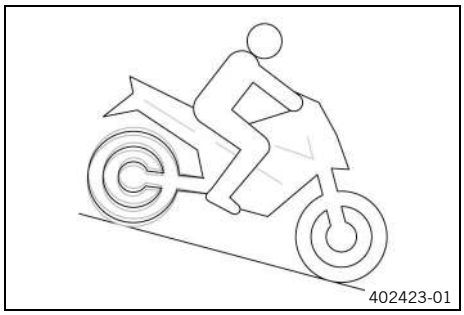


– If the QUICKSHIFTER+ is activated in the combination instrument, you can shift down in the engine speed range shown without pulling the clutch lever.

Press the shift lever to the stop quickly without changing the throttle twist grip position.

Note
The maximum engine speed in rpm before shifting down is shown in the figure.

10.8 MSR (optional)



The **MSR** is an optional auxiliary function of the engine control.
If the engine braking effect is too great, the **MSR** prevents the rear wheel from locking or sliding away on a sloping position.
To avoid slip of the rear wheel, the **MSR** only opens the throttle valve as far as absolutely necessary.
The **MSR** is applied on surfaces, where the friction coefficient is to low to open the slipper clutch.
To further increase ride safety, the **MSR** is slope dependent.

Note
If **ABS** is disabled, the **cornering MTC** is disabled or ABS Mode **Supermoto** is enabled, the **MSR** is not active.

10.9 Braking

WARNING
Danger of accidents A spongy pressure point on the front or rear brake reduces the brake action.
– Do not drive the vehicle if the brake system has a spongy pressure point.

WARNING
Danger of accidents The brake system fails in the event of overheating.
If the brake pedal is not released, the brake pads grind continuously.
– Take your foot off the brake pedal when you are not braking.

WARNING
Danger of accidents Braking with excessive force locks the wheels.
The ABS effectiveness is only ensured if it is switched on.
– Leave the ABS switched on in order to benefit from the protective effect.

WARNING
Danger of accidents Moisture and dirt impair the brake system.
– Brake carefully several times to dry out and remove dirt from the brake pads and the brake discs.

WARNING
Danger of accidents Salt on the roads impairs the brake system.
– Brake carefully several times to remove salt from the brake linings and the brake discs.

WARNING
Danger of accidents ABS may increase the stopping distance in certain situations.
– Adapt your braking to the riding situation and the road conditions.

WARNING
Danger of accidents Higher total weight increases the stopping distance.
– Take the longer stopping distance into account when carrying a passenger or luggage with you.

WARNING
Danger of accidents Driving aids can reduce the probability of a fall only within physical limits.
It is not always possible to compensate for certain riding situations, for example with luggage loaded with a high center of gravity, varying road surfaces, steep descents or full braking without disengaging the gear.
– Adapt your riding style to the road conditions and your driving ability.

– When braking, release the throttle and apply the front and rear brakes at the same time.

Note
When the **ABS** is enabled, you can achieve maximum braking power even on low grip surfaces such as sandy, wet, or slippery terrain without the danger of the wheels locking.

WARNING
Danger of accidents The rear wheel can lock due to the engine braking effect.
– Pull the clutch when performing emergency braking or braking on slippery surfaces.

WARNING
Danger of accidents Banked or laterally sloping ground reduces the maximum possible delay.
– If possible finish braking before going into a bend.

– Always finish braking before you go into a bend. Change down to a lower gear appropriate to your road speed.
– Use the braking effect of the engine on long downhill stretches. Change down one or two gears, but do not over-rev the engine. In this way, you have to brake far less and the brakes do not overheat.

10.10 Stop, park

WARNING
Risk of injury People who act without authorization endanger themselves and others.
If a valid transponder is in range, the vehicle can be started.
– Never leave the vehicle unattended while the engine is running.
– Never leave the vehicle unattended if a transponder is in the vicinity of the vehicle.
– Lock the steering if you leave the vehicle unattended.

WARNING

Danger of burns Some vehicle components become hot when the vehicle is operated.

– Do not touch any parts such as the exhaust system, radiator, engine, damper, or brake system before the vehicle parts have cooled down.
– Allow the vehicle parts to cool down before performing any work on the vehicle.

NOTE

Fire hazard Hot vehicle components pose a fire hazard and explosion risk.

– Do not park the vehicle near materials which are highly flammable or explosive.
– Allow the vehicle to cool down before covering it.

NOTE

Material damage The vehicle may be damaged if parked incorrectly.

Damage can occur if the vehicle rolls away or falls over.

The components for parking the vehicle are designed only for the weight of the vehicle.

– Park the vehicle on a firm and level surface.
– Make sure that nobody sits on the vehicle when it is parked on a stand.

– Brake the motorcycle.
– Shift the transmission into the neutral position.
– Switch off ignition – to do this, briefly press lock button (maximum of 1 second) with the ignition switched on.

Note

If the engine is switched off with the kill switch and the ignition remains switched on via lock button , the power supply to most electrical loads remains uninterrupted. This discharges the 12-V battery. You should therefore always switch off the engine with lock button – the kill switch is intended for emergencies only.

– Park the motorcycle on a firm surface.
– Swing side stand forward with your foot as far as it will go and lean the vehicle on it.
– Move handlebar to the left and press and hold lock button (for at least 2 seconds).

✓ The steering is locked.

Note

If the steering lock does not engage, move the handlebar slightly.

10.11 Transportation

NOTE

Fire hazard Hot vehicle components pose a fire hazard and explosion risk.

– Do not park the vehicle near materials which are highly flammable or explosive.
– Allow the vehicle to cool down before covering it.

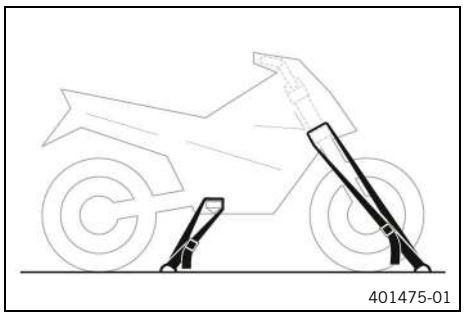
NOTE

Material damage The vehicle may be damaged if parked incorrectly.

Damage can occur if the vehicle rolls away or falls over.

The components for parking the vehicle are designed only for the weight of the vehicle.

– Park the vehicle on a firm and level surface.
– Make sure that nobody sits on the vehicle when it is parked on a stand.



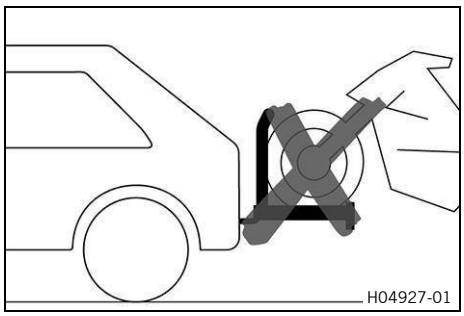
– Switch off the engine.
– Use tension belts or other suitable devices to secure the motorcycle against falling over or rolling away.

10.12 Towing in the event of a breakdown

NOTE

Danger of damage Damage to the powertrain and transmission can occur when towing with a towing vehicle.

– Do not use towing equipment where the wheels of the broken down vehicle remain on the road and rotate as it is towed.
– Always transport a broken down vehicle on a trailer or on the loading area of a transport vehicle.



– Ensure that the broken down vehicle is properly secured on the trailer or transport vehicle.
– Observe local regulations for the recovery of broken down vehicles.

10.13 Refueling

DANGER

Fire hazard Fuel is highly flammable.

The fuel in the fuel tank expands when warm and can escape if overfilled.

– Do not refuel the vehicle in the vicinity of open flames, glowing, or smoldering objects.
– Make sure that nobody smokes in the vicinity of the vehicle during the refueling process.
– Switch off the engine for refueling.
– Make sure that no fuel is spilled; particularly not on hot parts of the vehicle.
– If any fuel is spilled, wipe it up immediately.
– Do not overfill the fuel tank.

WARNING

Danger of poisoning Fuel is harmful to health.

– Do not allow fuel to come into contact with skin, eyes, or clothing.
– Consult a doctor immediately if fuel has been ingested.
– Do not inhale fuel vapors.
– Rinse the affected area immediately with plenty of water in the event of contact with skin.
– Rinse eyes thoroughly with water and consult a doctor immediately if fuel comes into contact with eyes.
– If fuel spills on to your clothing, change the clothing.
– Store fuel properly in a suitable container and keep out of the reach of children.

NOTE

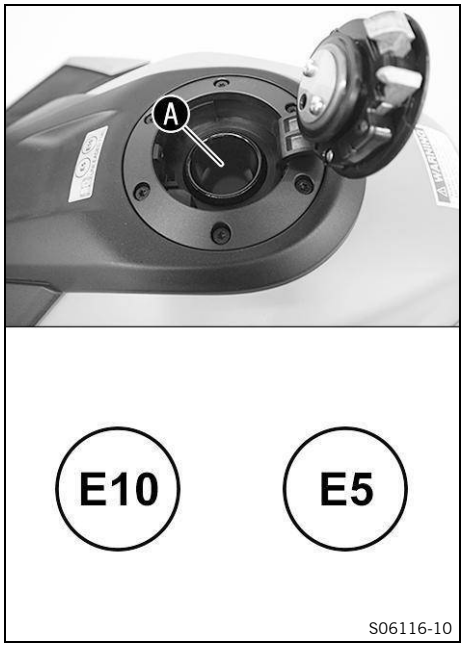
Material damage Inadequate fuel quality can lead to losses in performance and consequential damage.

– Refuel only with clean fuel that meets the specified standards.

NOTE

Environmental hazard Improper handling of fuel is dangerous to the environment.

– Do not allow fuel to enter the groundwater, the soil, or the sewage system.



– Switch off the engine.
– Open the fuel tank cap. (p. 27)
– Fill the fuel tank with fuel up to the lower edge Ⓐ of the filler neck.

Total fuel tank capacity, approx.	
Super unleaded (ROZ 95) (p. 178)	17.5 l (4.62 liq. gal_{US})

– Close the fuel tank cap. (p. 28)

11.1 Service work

Any further work that results from the service work must be ordered separately and invoiced separately.
Different service intervals may apply in your country, depending on the local operating conditions.
Individual service intervals and scopes may change in the course of technical developments. The most up-to-date service schedule is available for authorized contractual partners for the electronic proof of service. Your authorized contractual partner will be happy to advise you.

							Every 48 months
						Every 24 months	
					Every 12 months		
				Every 60,000 km (37,282.3 mi)			
			Every 30,000 km (18,641.1 mi)				
		Every 15,000 km (9,320.6 mi)					
	After 1,000 km (621.4 mi)						
Read out the fault memory using the diagnostics tool.	○	●	●	●	●	●	●
Check the exhaust flap control with the diagnostic tool.		●	●	●	●	●	●
Program the shift shaft sensor.	○	●	●	●	●	●	●
Check that the electrical equipment is functioning properly.	○	●	●	●	●	●	●
Check that the brake pads of the front brake are secured. (p. 118)	○	●	●	●	●	●	●
Check that the brake pads of the rear brake are secured. (p. 121)	○	●	●	●	●	●	●
Check the brake discs. (p. 116)	○	●	●	●	●	●	●
Check the brake lines for damage and tightness.	○	●	●	●	●	●	●
Check the brake fluid level for the front brake. (p. 117)	○	●	●	●	●		
Change the brake fluid for the front brake.						●	●
Check the brake fluid level for the rear brake. (p. 119)	○	●	●	●	●		
Change the brake fluid for the rear brake.						●	●
Check/correct the fluid level of the hydraulic clutch. (p. 114)		●	●	●	●		
Change the hydraulic clutch fluid.						●	●
Change the engine oil and the oil filter, clean the oil screens. (p. 145)	○	●	●	●	●	●	●
Check/clean the oil nozzle for clutch lubrication.	○	●	●	●			
Check all hoses (e.g. fuel, cooling, bleeder, drainage, etc.) and boots for cracking, leaks, and correct routing.		●	●	●	●	●	●
Empty the drainage hoses.	○	●	●	●	●	●	●
Check the cables for damage and routing without sharp bends (fuel tank removed).		●	●	●	●	●	●
Check the frame.			●	●			
Check the swingarm.			●	●			
Check the fork bearing.		●	●	●			
Check the shock absorber linkage for play.		●	●	●			
Check the steering head bearing play.	○	●	●	●			
Check the wheel bearings.		●					

	After 1,000 km (621.4 mi)	Every 15,000 km (9,320.6 mi)	Every 30,000 km (18,641.1 mi)	Every 60,000 km (37,282.3 mi)	Every 12 months	Every 24 months	Every 48 months
Check the shock absorber and fork for leaks. Perform a fork service and shock absorber service as needed, when possible and depending on how the vehicle is used.	○	●	●	●	●	●	●
Check the tire condition. (p. 125)	○	●	●	●	●	●	●
Check the tire pressure. (p. 126)	○	●	●	●	●	●	●
Check the chain, rear sprocket, engine sprocket, and chain guide. (p. 112)		●	●	●	●	●	●
Check the chain tension. (p. 110)	○	●	●	●	●	●	●
Measure the wheel bearing play and grease the rear hub.			●	●			
Check that the rear wheel nut (right side) is tightened to the specified torque.	○	●	●	●	●	●	●
Check the exhaust system for leaks.	○	●	●	●	●	●	●
Grease all moving parts (e.g. side stand, hand lever, chain, etc.) and check for smooth operation.	○	●	●	●	●	●	●
Change the spark plugs.			●	●			
Check the valve clearance (air filter and spark plugs removed).				●			
Change the SAS diaphragm valves.				●			
Change the air filter, clean the air filter box.		●	●	●			
Check the fuel pressure.		●	●	●	●	●	●
Check the headlight setting. (p. 137)	○	●	●	●			
Check the tightness of the safety-relevant screws and nuts which are easily accessible.	○	●	●	●	●	●	●
Clean the dust boots of the fork legs. (p. 102)		●	●	●			
Check the coolant level in the compensating tank. (p. 140)	○	●	●	●	●	●	
Checking the antifreeze.	○	●	●	●	●	●	
Change the coolant.							●
Check that the radiator fan is functioning properly.	○	●	●	●	●	●	●
Final check: Check the vehicle is roadworthy and take a test ride.	○	●	●	●	●	●	●
Read out the fault memory after the test ride using the diagnostics tool.	○	●	●	●	●	●	●
Reset service display with diagnostic tool.	○	●	●	●	●	●	●
Enter electronic proof of service.	○	●	●	●	●	●	●

○ One-time interval

● Periodic interval

12.1 Fork/shock absorber

Semi-active suspension **WP Semi–active Suspension** can be used to tune the suspension individually without the use of tools.

Electronic suspension setting **WP Semi–active Suspension** constantly regulates the damping behavior of the suspension taking into account various sensor data.

As a result, the electronic damping valves are matched to the current driving situation and terrain characteristics as well as the settings made by the rider in the **Preload Adjuster** and **Suspension Mode** menus.

Always adapt the suspension to your riding style and the payload.

In the **Preload Adjuster** menu, the suspension can be set to the loading condition.

In the **Suspension Mode** menu, the damping behavior of the suspension can be set.

12.2 Preload adjuster



I00853-10

Condition	Meaning
0%–20%	Setting for rides without luggage and a passenger and a rider's weight up to 75 kg.
30%	Setting for rides without luggage and a passenger and a rider's weight up to 85 kg.
40%	Setting for rides without luggage and a passenger and a rider's weight up to 95 kg.
50%–60%	Setting for rides with luggage, but without a passenger.
70%–80%	Setting for rides with a passenger, but without luggage.
90%–100%	Setting for rides with a passenger and luggage.
Low (optional)	Automatic adjustment of the spring preload for a lot of sag on the rear wheel and therefore a low seat height and low riding geometry.
Standard (optional)	Automatic adjustment of the spring preload, standard sag on the rear wheel and standard riding geometry.
High (optional)	Automatic adjustment of the spring preload for a little sag on the rear wheel and therefore a slightly higher seat height and sportier riding geometry.

Note

Only make adjustments on the preload adjuster if the rear wheel is loaded and the motorcycle is not jacked up on the center stand.

The spring preload can be adjusted to the load in the **Preload Adjuster** menu. 21 manual settings (0% to 100%) and 3 automatic settings **Low** (optional), **Standard** (optional) and **High** (optional) are available.

The rebound setting is automatically adapted to the payload detected by the system.

Note

Due to high electricity consumption, it is recommended that the preload adjuster is only set when the engine is running.

The manual settings given are guidelines and depend on the load.

High loads require a higher spring preload.

Low loads require a lower spring preload.

In automatic settings **Low** (optional), **Standard** (optional) and **High** (optional) the spring preload is automatically adjusted to the load detected by the system during the journey.

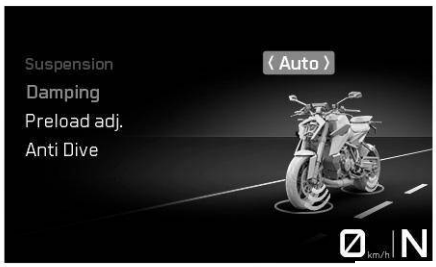
In the **Low** (optional), **Standard** (optional) and **High** (optional) automatic settings, it is possible that no adjustment of the spring preload can be detected when stationary.

The most recently selected rebound adjustment is shown on the display.

Note

The symbol of the last setting flashes until the new setting is adopted.

12.3 Suspension Mode



I00852-10

Condition	Meaning
Auto	Tuning of the suspension components is automatically adjusted to the riding style of the rider
Rain (optional)	Soft tuning of the suspension components with good feedback from the chassis
Sport	Tight tuning of the suspension components with very direct feedback from the chassis
Street	Normal tuning of the suspension components with direct feedback from the chassis
Comfort	Soft tuning of the suspension components with good feedback from the chassis
Track (optional)	Suspension components can be configured in the **Track 1**, **Track 2** or **Track 3** menu.
Pro (optional)	Suspension components can be configured in the **Pro 1**, **Pro 2** or **Pro 3** menu.

Various settings for the damping of the suspension components can be selected in the **Suspension Mode** menu. The settings **Sport**, **Street**, **Comfort**, **Auto**, **Rain** (optional), **Track** (optional) and **Pro** (optional) are available.

13.1 Raising the motorcycle with rear lifting gear

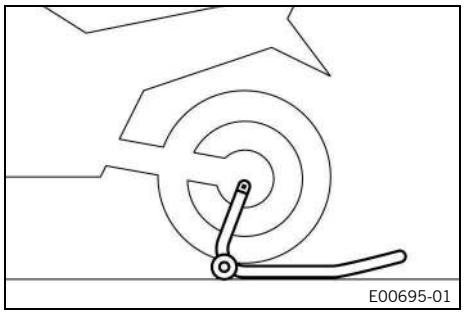
NOTE

Material damage The vehicle may be damaged if parked incorrectly.

Damage can occur if the vehicle rolls away or falls over.

The components for parking the vehicle are designed only for the weight of the vehicle.

– Park the vehicle on a firm and level surface.
– Make sure that nobody sits on the vehicle when it is parked on a stand.


E00695-01

– Insert the adapter in the rear lifting gear.

Rear wheel work stand for single-sided swing arm (61329955000)

– Position the motorcycle upright, place the lifting gear in the axle, and raise the motorcycle.

13.2 Removing the rear of the motorcycle from the lifting gear

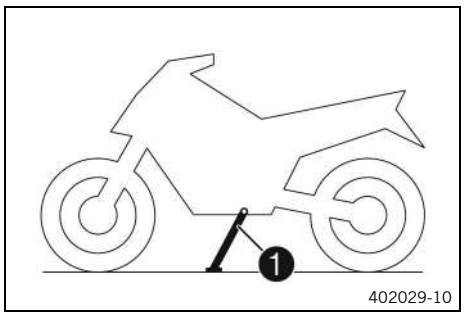
NOTE

Material damage The vehicle may be damaged if parked incorrectly.

Damage can occur if the vehicle rolls away or falls over.

The components for parking the vehicle are designed only for the weight of the vehicle.

– Park the vehicle on a firm and level surface.
– Make sure that nobody sits on the vehicle when it is parked on a stand.



402029-10

– Secure the motorcycle against falling over.
– Remove the rear lifting gear and lean the vehicle on side stand ❶.

13.3 Lifting the motorcycle with the front lifting gear

NOTE

Material damage The vehicle may be damaged if parked incorrectly.

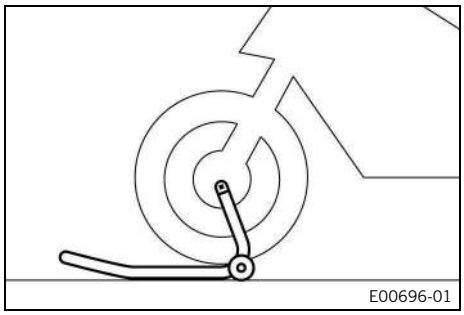
Damage can occur if the vehicle rolls away or falls over.

The components for parking the vehicle are designed only for the weight of the vehicle.

– Park the vehicle on a firm and level surface.
– Make sure that nobody sits on the vehicle when it is parked on a stand.

Preparatory work

– Raise the motorcycle with the rear lifting gear. (p. 101)


E00696-01

Main work

– Move the handlebar to the straight-ahead position. Align the front lifting gear with the fork legs.

Always raise the motorcycle at the rear first.

Front wheel work stand, small (61129965100)

– Lift the motorcycle at the front.

13.4 Taking the motorcycle off the front lifting gear

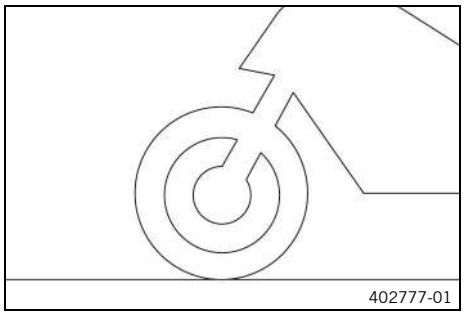
NOTE

Material damage The vehicle may be damaged if parked incorrectly.

Damage can occur if the vehicle rolls away or falls over.

The components for parking the vehicle are designed only for the weight of the vehicle.

– Park the vehicle on a firm and level surface.
– Make sure that nobody sits on the vehicle when it is parked on a stand.


402777-01

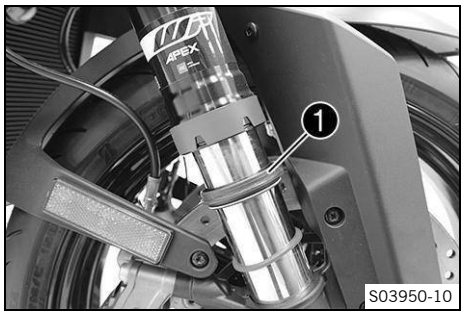
– Secure the motorcycle against falling over.
– Remove the front lifting gear.

13.5 Cleaning the dust boots of the fork legs

Preparatory work

– Raise the motorcycle with the rear lifting gear. (p. 101)
– Lift the motorcycle with the front lifting gear. (p. 101)

Main work



S03950-10

– Push dust boot ❶ downward on both fork legs.

Note

The dust boots should remove dust and coarse dirt particles from the inner fork tubes. Over time, dirt can accumulate behind the dust boots. If this dirt is not removed, the oil seals behind can start to leak.

WARNING

Danger of accidents Oil, grease or wax on the brake discs reduces the brake action.

– Always keep the brake discs free of oil, fat and wax.
– Clean the brake discs with brake cleaner when necessary.

– Clean and oil the dust boots and the inner fork tube of both fork legs.

Universal oil spray (p. 179)

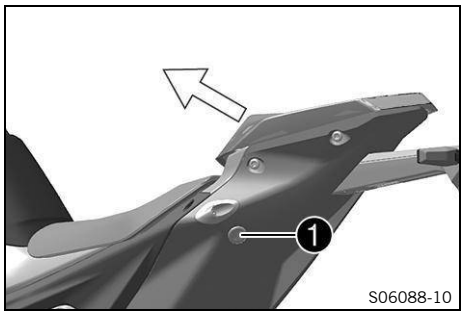
– Press the dust boots back into their installation position.
– Remove excess oil.

Reworking

– Take the motorcycle off the front lifting gear. (p. 102)
– Remove the rear of the motorcycle from the lifting gear. (p. 101)

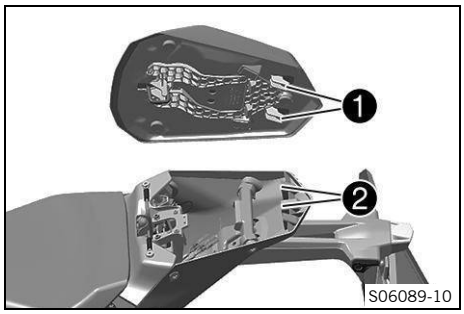
13.6 Removing the passenger seat

Condition: Motorcycle is stationary, Engine is off, Ignition is switched on or has been switched off for less than 1 minute



– Press seat release button ❶.
– Raise the front of the passenger seat, pull it toward the fuel tank and remove upward.

13.7 Mounting the passenger seat

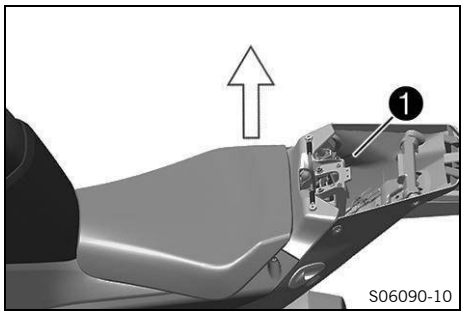


– Attach the hooks on passenger seat ❶ to holding lugs ❷ on the subframe.
– Lower the front of the passenger seat and push it toward the rear at the same time.
– Press the passenger seat down to the front until the locking pin engages with an audible click.
– Check that the passenger seat is mounted correctly.

13.8 Remove the front rider's seat

Preparatory work

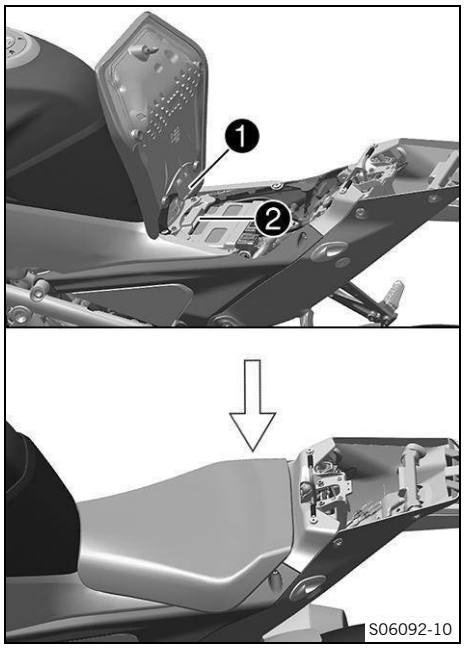
– Remove the passenger seat. (p. 103)



Main work

– Unlock the front rider's seat with loop ❶ underneath the passenger seat.
– Raise the front rider's seat at the rear and remove it.

13.9 Mounting the front rider's seat



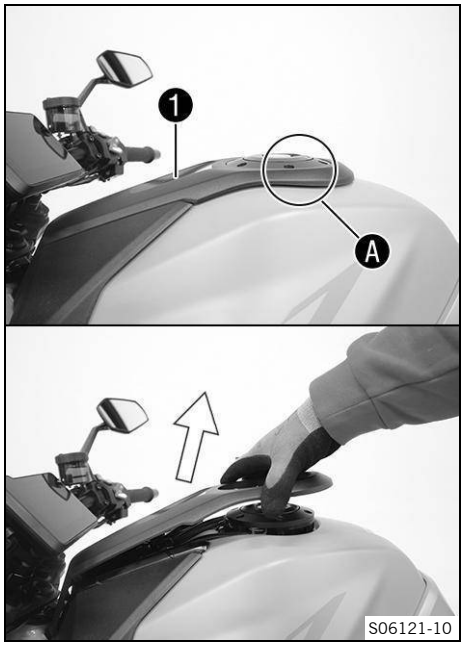
Main work

– Hook recess ❶ of the front rider's seat into guide ❷, lower it at the rear and push it forward.
– Position the locking pin in the lock housing and push down the passenger seat at the rear.
  ✓ The locking pin engages with an audible click.
– Check that the front rider's seat is mounted correctly.

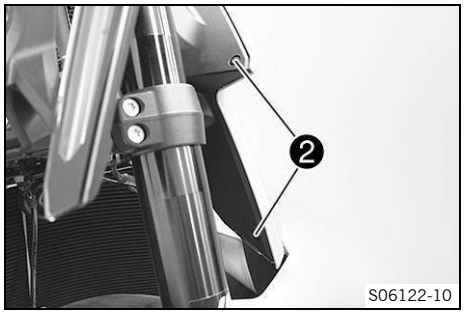
Reworking

– Mount the passenger seat. (p. 103)

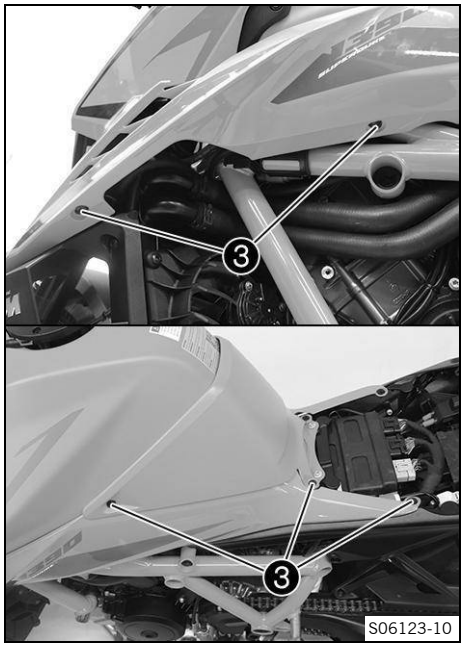
13.10 Removing left fuel tank spoiler



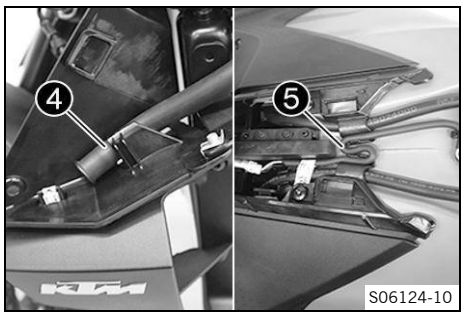
– Raise fuel tank cover ❶ in area Ⓐ and remove in the upward direction.



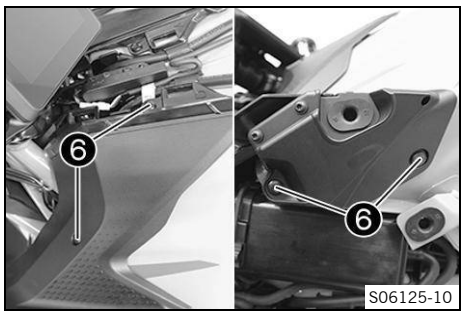
– Remove ❷ screws.



– Remove ❸ screws.
– Detach the left outer fuel tank spoiler and remove it to the side.

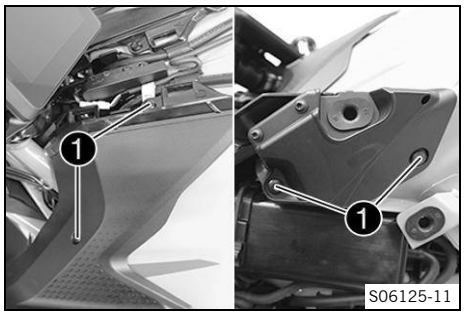


– Detach the hose ❹ and cable ❺.



– Remove screws ❻ and take off the inner fuel tank spoiler.

13.11 Installing the left fuel tank spoiler

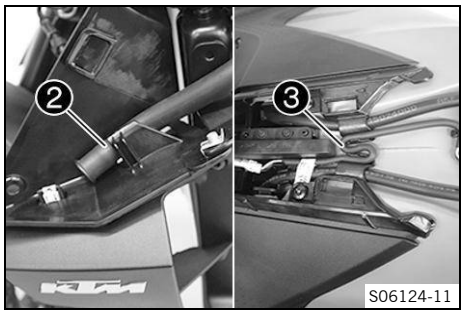


– Position the inner fuel tank spoiler.

Make sure the cables and hoses are routed correctly.

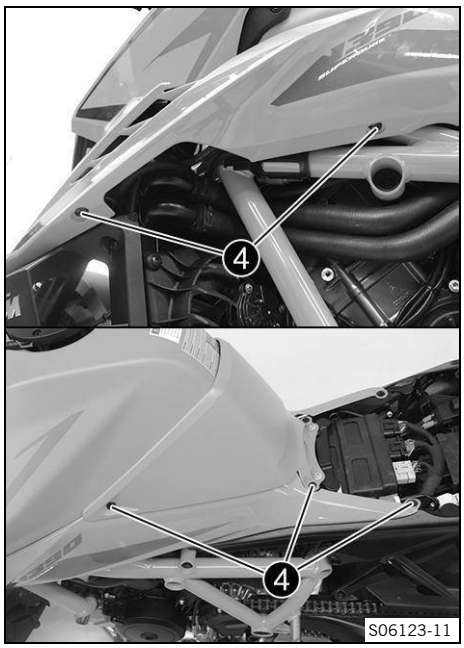
– Mount and tighten screws ❶.

Screw, trim	
M5	3.5 Nm (2.58 ft·lb$_f$)



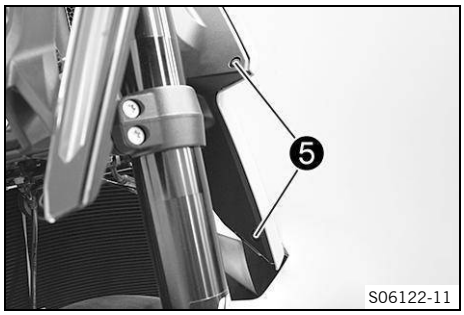
– Attach the hose ❷ and cable ❸.

Make sure the cables and hoses are routed correctly.



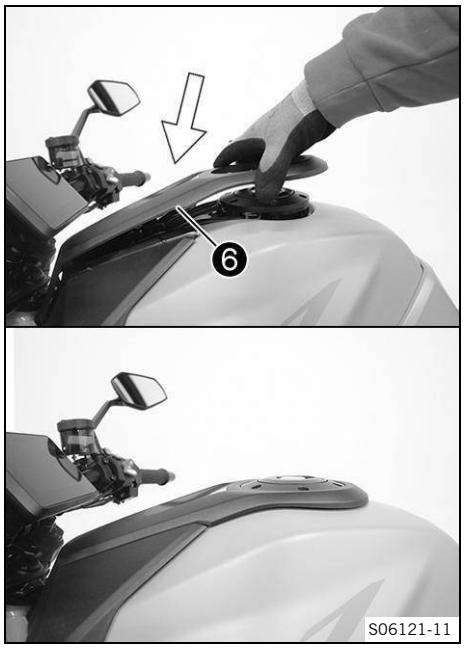
– Position and attach the outer fuel tank spoiler.
– Mount and tighten screws ❹.

Screw, trim	
M5	3.5 Nm (2.58 ft·lb$_f$)



– Mount and tighten screws ❺.

Screw, trim	
M5	3.5 Nm (2.58 ft·lb$_f$)



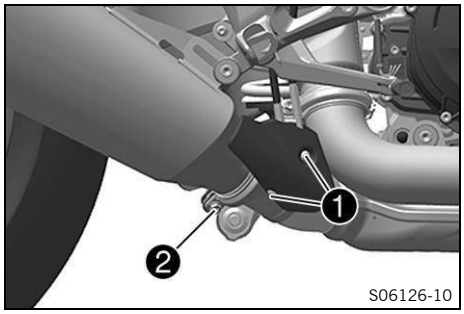
– Position fuel tank cover ❻ on the fuel tank cap and press it in from the front to the rear.

13.12 Removing the muffler

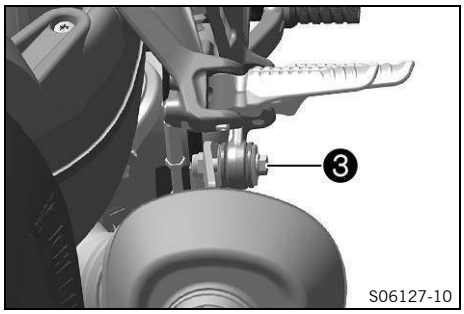
WARNING

Danger of burns The exhaust system gets hot when the vehicle is driven.

– Allow the exhaust system to cool down before performing any work on the vehicle.



– Remove screws ❶ and take off the cover.
– Remove screw ❷ and take off exhaust clamp.



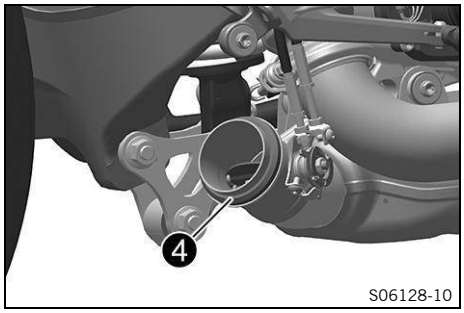
– Remove screw ❸ with the washer.

WARNING

Risk of injury Moving parts of the exhaust valve constitute a risk of injury.

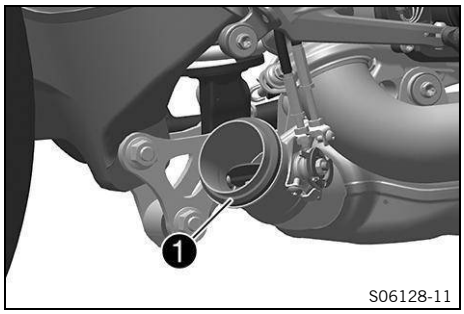
– Do not touch the exhaust valve if the main silencer has been removed.
– Make sure that nobody gets caught when the exhaust valve is actuated.

– Take off the main silencer.



– Remove seal ring ❹.

13.13 Installing muffler

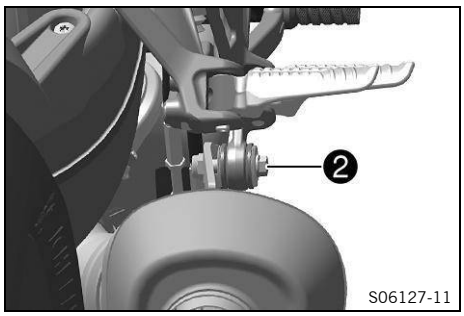


WARNING

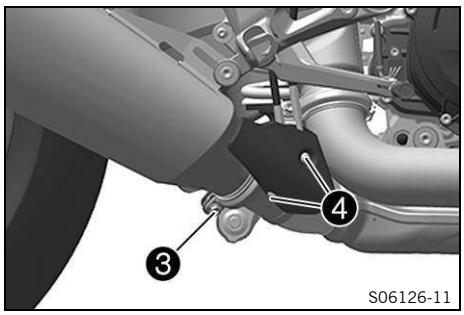
Risk of injury Moving parts of the exhaust valve constitute a risk of injury.

– Do not touch the exhaust valve if the main silencer has been removed.
– Make sure that nobody gets caught when the exhaust valve is actuated.

– Mount seal ring ❶.



– Position the main silencer.
– Mount screw ❷ with washer, but do not tighten yet.



– Position the exhaust clamp.
– Mount and tighten screw ❸.

Screw, exhaust clamp on main silencer	
M8	12 Nm (8.9 ft·lb$_f$)

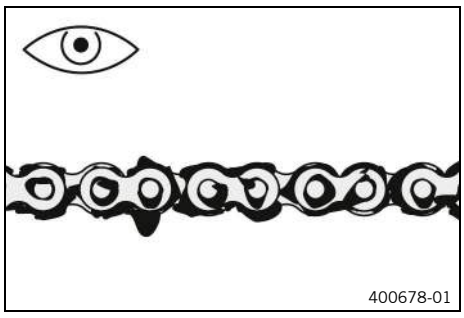
– Tighten screw ❷.

Remaining screws on chassis	
M8	25 Nm (18.4 ft·lb$_f$)

– Position the cover.
– Mount and tighten screws ❹.

Screw, heat protector on main silencer	
M5	4 Nm (3.0 ft·lb$_f$)

13.14 Checking the chain for dirt



– Check the chain for coarse dirt accumulation.
  » If the chain is very dirty:
    – Clean the chain. (p. 109)

13.15 Cleaning the chain

WARNING
Danger of accidents Oil, grease or wax on the brake discs reduces the brake action.
– Always keep the brake discs free of oil, fat and wax.
– Clean the brake discs with brake cleaner when necessary.

WARNING

Danger of accidents Lubricants on the tires reduces the road grip.

– Remove lubricants from the tires using a suitable cleaning agent.

NOTE

Environmental hazard Hazardous substances cause environmental damage.

– Dispose of oils, grease, filters, fuel, cleaning agents, brake fluid, etc. correctly and in accordance with the applicable regulations.

Note

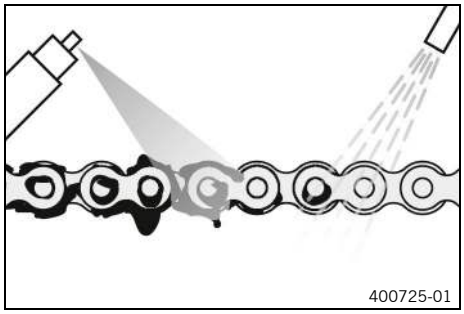
The service life of the chain depends largely on its maintenance.

Regular cleaning increases the service life of the chain.

Preparatory work

– Raise the motorcycle with the rear lifting gear. (p. 101)

Main work



– Rinse off the loose dirt with a gentle jet of water.
– Remove old grease residues with a chain cleaner.

Chain cleaner (p. 184)

– After drying, apply chain spray.

Street chain spray (p. 179)

Reworking

– Remove the rear of the motorcycle from the lifting gear. (p. 101)

13.16 Checking the chain tension

WARNING

Danger of accidents Incorrect chain tension can damage components and result in an accident.

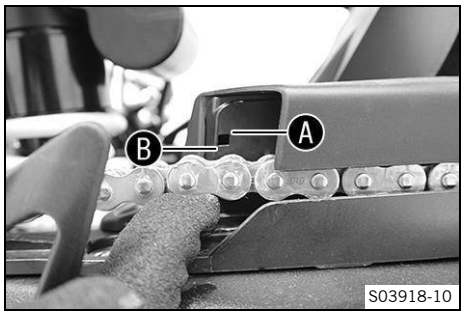
If the chain is tension is too high, the chain, front sprocket, rear sprocket, transmission, and rear wheel bearings wear more quickly. Some components may break if overloaded.

If the chain is too loose, the chain may fall off the front sprocket or the rear sprocket. This can damage the rear wheel or the engine.

– Check the chain tension regularly.
– Set the chain tension in accordance with the specification.

Preparatory work

– Raise the motorcycle with the rear lifting gear. (p. 101)

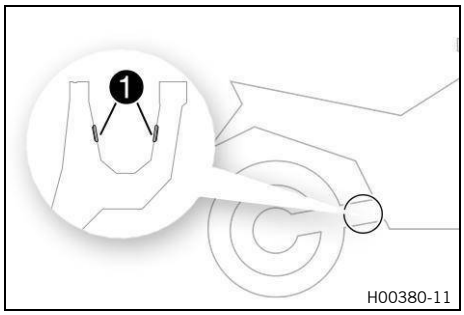


Main work

– Shift the transmission into the neutral position.
– At the chain sliding guard in the area of markings Ⓐ and Ⓑ, push the chain upward and determine the chain tension.

The upper edge of the chain is located between markings Ⓐ and Ⓑ.
The lower chain section must be taut.
Chain wear is not always even, so repeat this measurement at different positions on the chain.

» If the chain tension does not meet the specification:
– Adjust the chain tension. (p. 111)



– Check protection caps ❶ for damage and tightness.
» If the protection caps are damaged or loose:
– Replace the protection caps.

Link fork protection cap (61304041100)

Reworking

– Remove the rear of the motorcycle from the lifting gear. (p. 101)

13.17 Adjusting the chain tension

WARNING

Danger of accidents Incorrect chain tension can damage components and result in an accident.

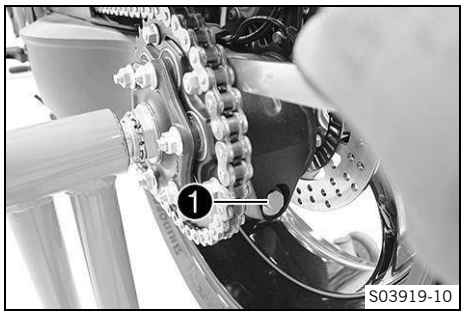
If the chain is tension is too high, the chain, front sprocket, rear sprocket, transmission, and rear wheel bearings wear more quickly. Some components may break if overloaded.

If the chain is too loose, the chain may fall off the front sprocket or the rear sprocket. This can damage the rear wheel or the engine.

– Check the chain tension regularly.
– Set the chain tension in accordance with the specification.

Preparatory work

– Raise the motorcycle with the rear lifting gear. (p. 101)
– Check the chain tension. (p. 110)



Main work

– Loosen screw 1.
– Set the chain tension by turning the hub housing.

Spanner wrench (61329085000)
Handle for holding wrench (60012060000)

Note
Turn clockwise to increase the chain tension; turn counterclockwise to reduce the chain tension.
The tool required is in the tool set.

– Check the chain tension. (p. 110)

Chain wear is not always even, so repeat this measurement at different positions on the chain.

– Tighten screw 1.

Screw, eccentric	
M16	70 Nm (51.6 ft·lb$_f$)

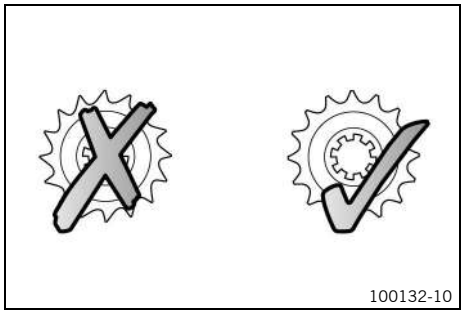
Reworking

– Remove the rear of the motorcycle from the lifting gear. (p. 101)

13.18 Checking the chain, rear sprocket, front sprocket, and chain guide

Preparatory work

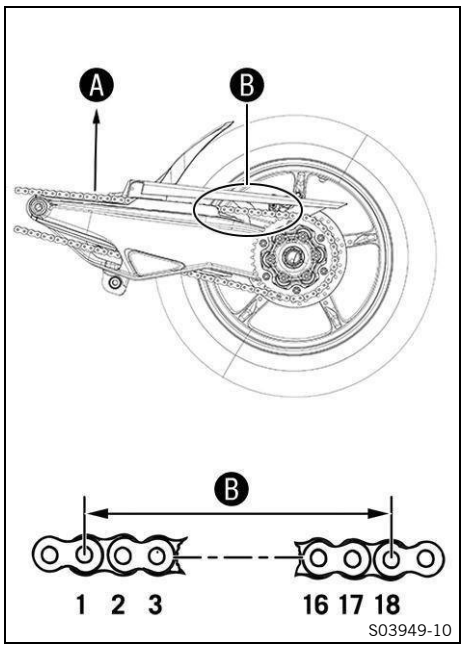
– Raise the motorcycle with the rear lifting gear. (p. 101)



Main work

– Check the chain, rear sprocket, and front sprocket for wear.
  » If the chain, rear sprocket, or front sprocket is worn:
    – Change the drivetrain kit.

The front sprocket, rear sprocket, and chain should always be replaced together.



– Shift the transmission into the neutral position.
– Pull on the top section of the chain with the specified weight A.

Weight, chain wear measurement	15 kg (33.1 lb)

– Measure distance B of 18 chain rollers in the upper chain section.

Maximum distance B of chain rollers at the longest chain section	272 mm (10.71 in)
Chain wear is not always even, so repeat this measurement at different positions on the chain.	

» If distance B is greater than the specified measurement:
– Change the drivetrain kit.

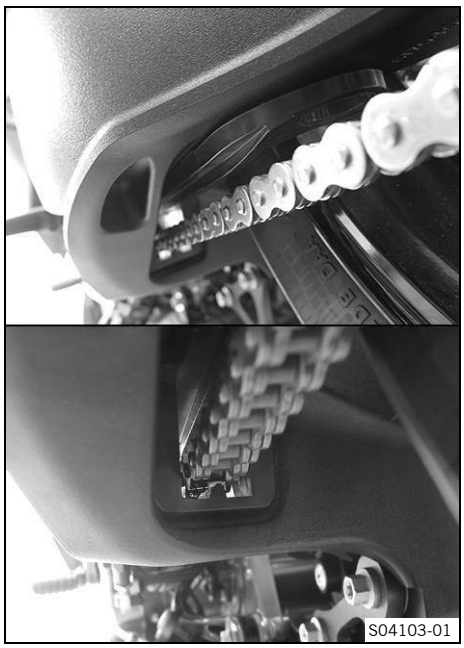
When you replace the chain, you should also replace the rear sprocket and front sprocket.

Note
New chains wear out faster on old, worn front or rear sprockets.
For safety reasons, the chain has no chain joint.



– Check the chain slider at the top for wear.
» If the chain sliding guard shows a lot of wear:
– Change the chain slider.
– Check that the chain slider is firmly seated.
» If the chain slider is loose:
– Tighten the screws of the chain slider.

Screw, chain slider guard	
M5	5 Nm (3.7 ft·lb$_f$)



– Check the chain slider for wear.
» If the lower edge of the chain is in line with or below the chain sliding piece:
– Change the chain slider.
– Check that the chain slider is firmly seated.
» If the chain slider is loose:
– Tighten the screws of the chain slider.

Remaining screws on chassis	
M8	25 Nm (18.4 ft·lb$_f$)

Reworking

– Remove the rear of the motorcycle from the lifting gear. (p. 101)

13.19 Checking/correcting the fluid level of hydraulic clutch

WARNING

Health hazard Brake fluid is a harmful substance.

– Keep brake fluid out of the reach of children.
– Wear suitable protective clothing and safety glasses.
– Do not allow brake fluid to come into contact with the skin, the eyes, or clothing.
– Consult a doctor immediately if brake fluid has been ingested.
– Rinse the affected area with plenty of water in the event of contact with the skin.
– Rinse eyes thoroughly with water immediately and consult a doctor if brake fluid comes into contact with the eyes.
– If brake fluid spills on to your clothing, change the clothing.

NOTE

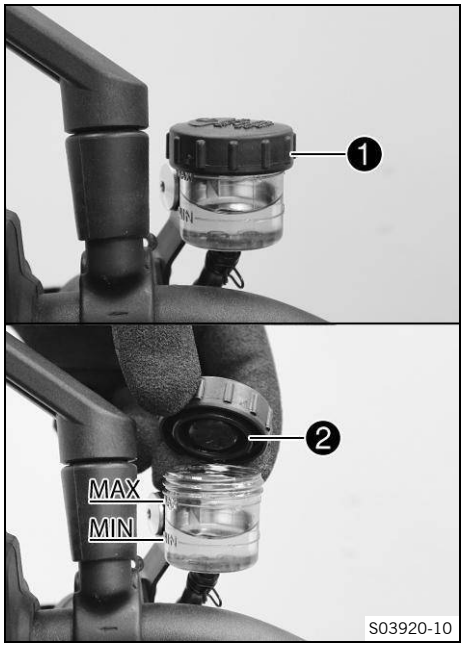
Environmental hazard Hazardous substances cause environmental damage.

– Dispose of oils, grease, filters, fuel, cleaning agents, brake fluid, etc. correctly and in accordance with the applicable regulations.

Note

The fluid level rises with increasing wear of the friction plates.

Avoid contact between brake fluid and painted parts. Brake fluid corrodes paint.



– Move the hydraulic clutch fluid reservoir mounted on the handlebar into a horizontal position.
– Check the fluid level.

The fluid level must be between the **MIN** and **MAX** markings.

» If the fluid level does not meet the specifications:

– Remove screw cap ❶ with membrane ❷ and the shim.
– Correct the fluid level of the hydraulic clutch.

Brake fluid DOT 5.1 (p. 180)

– Mount and tighten screw cap ❶ with membrane ❷ and the shim.

Immediately clean up any brake fluid that has overflowed or spilled using water.

14.1 Anti-lock braking system

WARNING

Danger of accidents Changes to the vehicle impair the function of the ABS.

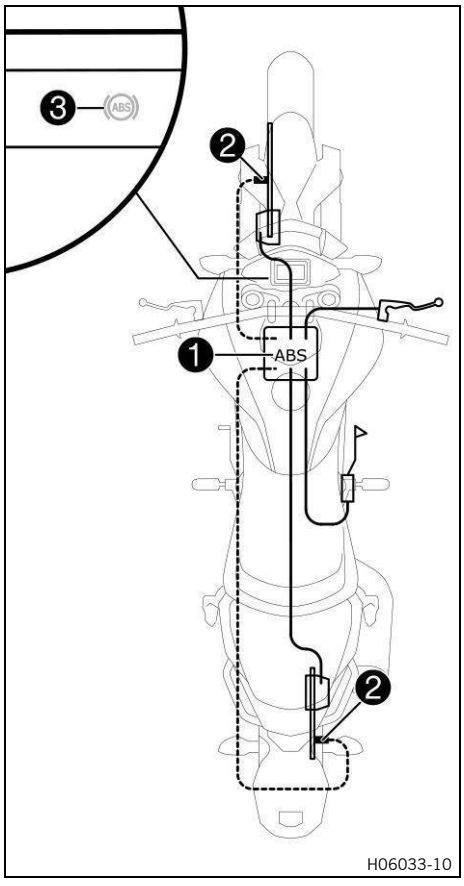
- Do not make any changes to the suspension travel.
- Only use spare parts on the brake system which have been approved and recommended by the vehicle manufacturer.
- Only use tires and wheels approved and recommended by the vehicle manufacturer with the corresponding speed rating.
- Maintain the specified tire pressure.
- Ensure that service work and repairs are performed professionally.

WARNING

Danger of accidents Driving aids can reduce the probability of a fall only within physical limits.

It is not always possible to compensate for certain riding situations, for example with luggage loaded with a high center of gravity, varying road surfaces, steep descents or full braking without disengaging the gear.

- Adapt your riding style to the road conditions and your driving ability.



The **ABS** is a safety system that prevents the wheels locking when driving straight ahead or when cornering (within the limits of physics).

WARNING

Danger of accidents An incorrectly selected ABS mode makes it more difficult to control the vehicle.

The ABS modes are each only suitable for certain conditions.

- Always select an ABS mode that suits the ground and the riding situation.

The **ABS** module ❶, which consists of a hydraulic unit, ABS control unit, and return pump, is installed under the fuel tank. One wheel speed sensor ❷ is located in each case on the front and the rear wheel.

The ABS control is dependent on the riding mode. ABS has two operating modes: the **Road** and **Supermoto** ABS modes.

In ABS mode **Road**, ABS controls both wheels.

In ABS mode **Supermoto**, there is no ABS control on the rear wheel.

Note

The curve dependent control is only active in ABS mode **Road**.

The ABS operates with two independent brake circuits (front and rear brakes). When the ABS control unit detects a locking tendency in a wheel, ABS begins regulating the brake pressure. The control function causes a slight pulsing of the hand and foot brake levers.

The ABS warning light ❸ must light up after the ignition is switched on and go out after starting off. If it does not go out after starting off or if it is lit while riding, this indicates a fault in the ABS. In this case, the ABS is no longer enabled and the wheels may lock during braking. The brake system itself stays functional; only ABS control is not available.

The ABS warning lamp may also light up if the rotating speeds of the front and rear wheels differ greatly under extreme riding conditions, for example when making "wheelies" or if the rear wheel spins. This causes the ABS to switch off.

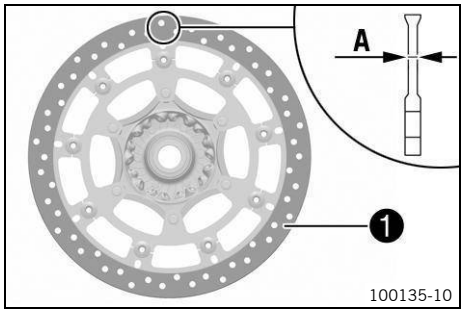
To reactivate the ABS, stop the vehicle and switch off the ignition. The ABS is reactivated when the vehicle is switched on again. The ABS warning light goes out after starting off.

14.2 Checking the brake discs

WARNING

Danger of accidents Worn-out brake discs reduce the braking action.

– Make sure that worn-out brake discs are replaced immediately.



– Check the brake disc thickness of the front and rear brake disc at several places on the disc to see if they conform to measurement Ⓐ.

Brake disc wear limit	
front	4.5 mm (0.177 in)
rear	4.5 mm (0.177 in)

Note

Wear will reduce the thickness of the brake disc at contact surface ❶ of the brake linings.

» If the brake disc thickness is less than the specified value:
  – Change the front brake discs.
  – Change the brake discs on the rear brake.

– Check the front and rear brake discs for damage, cracks, and deformation.

» If the brake disc shows signs of damage, cracks, or deformation:
  – Change the front brake discs.
  – Change the brake discs on the rear brake.

14.3 Checking the brake fluid level for the front brake

WARNING

Danger of accidents Brake fluid which is too old or of the wrong type impairs the function of the brake system.

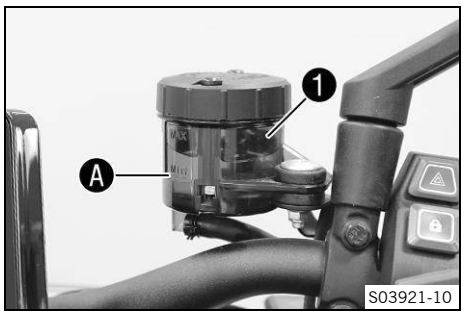
– Make sure that brake fluid for the front and rear brake is changed in accordance with the service schedule.
– Make sure that only clean, approved brake fluid from a tightly sealed container is used.

WARNING

Danger of accidents An insufficient brake fluid level will cause the brake system to fail.

If the brake fluid level drops below the specified marking or the specified value, the brake system has a leak or the brake pads are worn down.

– Have the brake system checked and make sure that the problem has been eliminated before the vehicle is used again.



– Move the brake reservoir mounted on the handlebar to a horizontal position.
– Check brake fluid level in brake fluid reservoir 1.
  » If the brake fluid level has dropped below **MIN** marking A:
    – Add brake fluid for the front brake. (p. 117)

14.4 Adding brake fluid for the front brake

WARNING

Danger of accidents Brake fluid which is too old or of the wrong type impairs the function of the brake system.

– Make sure that brake fluid for the front and rear brake is changed in accordance with the service schedule.
– Make sure that only clean, approved brake fluid from a tightly sealed container is used.

WARNING

Danger of accidents An insufficient brake fluid level will cause the brake system to fail.

If the brake fluid level drops below the specified marking or the specified value, the brake system has a leak or the brake pads are worn down.

– Have the brake system checked and make sure that the problem has been eliminated before the vehicle is used again.

WARNING

Health hazard Brake fluid is a harmful substance.

– Keep brake fluid out of the reach of children.
– Wear suitable protective clothing and safety glasses.
– Do not allow brake fluid to come into contact with the skin, the eyes, or clothing.
– Consult a doctor immediately if brake fluid has been ingested.
– Rinse the affected area with plenty of water in the event of contact with the skin.
– Rinse eyes thoroughly with water immediately and consult a doctor if brake fluid comes into contact with the eyes.
– If brake fluid spills on to your clothing, change the clothing.

NOTE

Environmental hazard Hazardous substances cause environmental damage.

– Dispose of oils, grease, filters, fuel, cleaning agents, brake fluid, etc. correctly and in accordance with the applicable regulations.

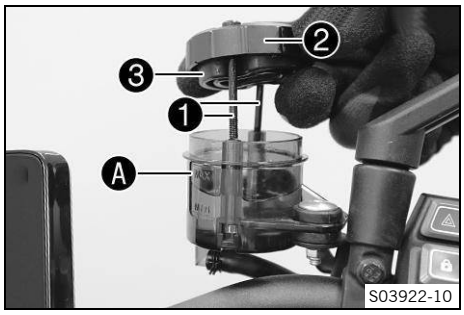
Note

Avoid contact between brake fluid and painted parts. Brake fluid corrodes paint.

Preparatory work

– Check that the brake pads of the front brake are secured. (p. 118)

Main work



– Move the brake reservoir mounted on the handlebar to a horizontal position.
– Remove 1 screws.
– Take off cover 2 with diaphragm 3.
– Add brake fluid up to the **MAX** marking A.

Brake fluid DOT 5.1 (p. 180)

– Position cover 2 with diaphragm 3.
– Mount and tighten screws 1.

Immediately clean up any brake fluid that has overflowed or spilled with water.

14.5 Checking that the brake pads of the front brake are secured

WARNING

Danger of accidents Worn brake pads reduce the brake action.

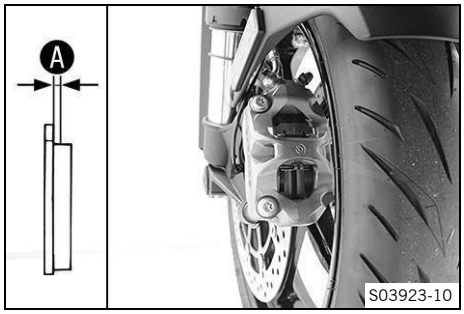
– Make sure that worn brake pads are replaced immediately.

WARNING

Danger of accidents Damaged brake discs reduce the braking action.

If the brake linings are not changed in time, the brake lining carriers grind against the brake disc. As a consequence, the brake action is greatly reduced and the brake discs are destroyed.

– Check the brake linings regularly.



– Check all brake linings on both brake calipers for their lining thickness A.

Minimum pad thickness A	≥ 1 mm (≥ 0.04 in)

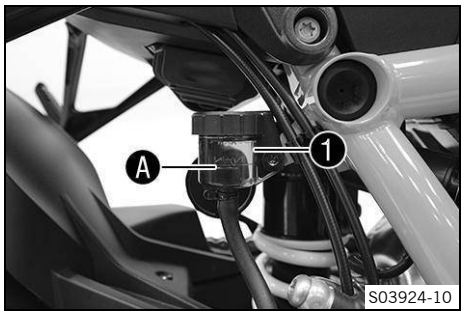
» If it is less than the minimum thickness:
  – Change the front brake pads.
– Check all the brake linings on both the brake calipers for damage and cracking.
» If there is damage or cracking:
  – Change the front brake pads.

– Check that the brake pads are secured.
  » If the brake pads are not secured correctly:
    – Secure brake pads, replace with new parts if necessary.

14.6 Checking the brake fluid level for the rear brake

WARNING
Danger of accidents Brake fluid which is too old or of the wrong type impairs the function of the brake system.
– Make sure that brake fluid for the front and rear brake is changed in accordance with the service schedule.
– Make sure that only clean, approved brake fluid from a tightly sealed container is used.

WARNING
Danger of accidents An insufficient brake fluid level will cause the brake system to fail.
If the brake fluid level drops below the specified marking or the specified value, the brake system has a leak or the brake pads are worn down.
– Have the brake system checked and make sure that the problem has been eliminated before the vehicle is used again.



– Stand the vehicle upright.
– Check brake fluid level in brake fluid reservoir 1.
  » If the fluid level reaches the **MIN** marking A:
    – Add brake fluid for the rear brake. (p. 119)

14.7 Adding brake fluid for the rear brake

WARNING
Danger of accidents Brake fluid which is too old or of the wrong type impairs the function of the brake system.
– Make sure that brake fluid for the front and rear brake is changed in accordance with the service schedule.
– Make sure that only clean, approved brake fluid from a tightly sealed container is used.

WARNING
Danger of accidents An insufficient brake fluid level will cause the brake system to fail.
If the brake fluid level drops below the specified marking or the specified value, the brake system has a leak or the brake pads are worn down.
– Have the brake system checked and make sure that the problem has been eliminated before the vehicle is used again.

WARNING

Health hazard Brake fluid is a harmful substance.

- Keep brake fluid out of the reach of children.
- Wear suitable protective clothing and safety glasses.
- Do not allow brake fluid to come into contact with the skin, the eyes, or clothing.
- Consult a doctor immediately if brake fluid has been ingested.
- Rinse the affected area with plenty of water in the event of contact with the skin.
- Rinse eyes thoroughly with water immediately and consult a doctor if brake fluid comes into contact with the eyes.
- If brake fluid spills on to your clothing, change the clothing.

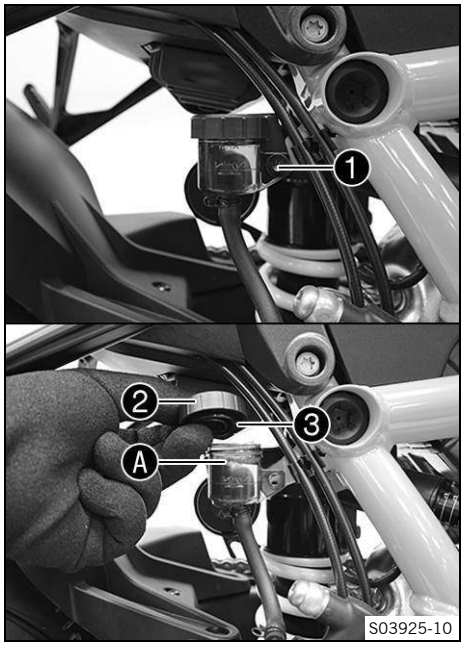
NOTE

Environmental hazard Hazardous substances cause environmental damage.

- Dispose of oils, grease, filters, fuel, cleaning agents, brake fluid, etc. correctly and in accordance with the applicable regulations.

Note

Avoid contact between brake fluid and painted parts. Brake fluid corrodes paint.



Preparatory work

- Check that the brake pads of the rear brake are secured. (p. 121)

Main work

- Stand the vehicle upright.
- Remove screw ❶ with the screw cap lock.

  Make sure that the reservoir stays vertical and no brake fluid runs out.
- Remove screw cap ❷ with the washer and membrane ❸.
- Add brake fluid up to the **MAX** marking Ⓐ.

  Brake fluid DOT 5.1 (p. 180)
- Mount and tighten screw cap ❷ with shim and membrane ❸.
- Position the screw cap lock and mount and tighten screw ❶.

Screw, brake reservoir, rear brake	
M5	3.5 Nm (2.58 ft·lb$_f$) **Loctite® 243**

Immediately clean up any brake fluid that has overflowed or spilled using water.

14.8 Checking that the brake pads of the rear brake are secured

WARNING

Danger of accidents Worn brake pads reduce the brake action.

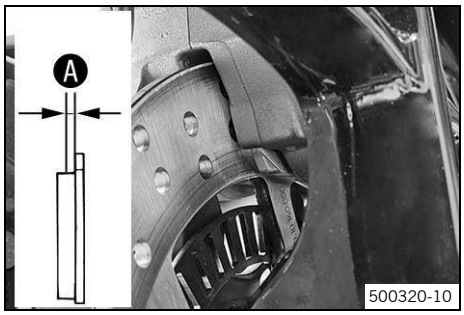
– Make sure that worn brake pads are replaced immediately.

WARNING

Danger of accidents Damaged brake discs reduce the braking action.

If the brake linings are not changed in time, the brake lining carriers grind against the brake disc. As a consequence, the brake action is greatly reduced and the brake discs are destroyed.

– Check the brake linings regularly.



– Check all brake pads on both brake calipers for their lining thickness Ⓐ.

Minimum pad thickness Ⓐ	≥ 1 mm (≥ 0.04 in)

» If it is less than the minimum thickness:

– Change the rear brake pads.

– Check the brake linings for damage and cracking.

» If there is damage or cracking:

– Change the rear brake pads.

– Check that the brake pads are secured.

» If the brake pads are not secured correctly:

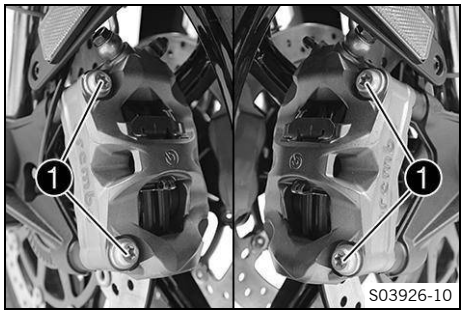
– Secure brake pads, replace with new parts if necessary.

15.1 Removing the front wheel

Preparatory work

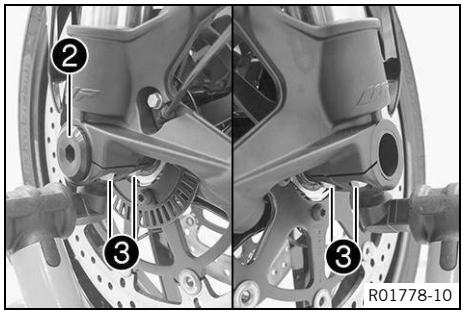
– Raise the motorcycle with the rear lifting gear. (p. 101)
– Lift the motorcycle with the front lifting gear. (p. 101)

Main work



– Remove screws ❶ from both brake calipers.
– Press back brake linings by slightly tilting the brake calipers laterally on the brake disc. Pull brake calipers carefully back from the brake discs and hang to the side.

Do not operate the hand brake lever if the brake calipers have been removed.



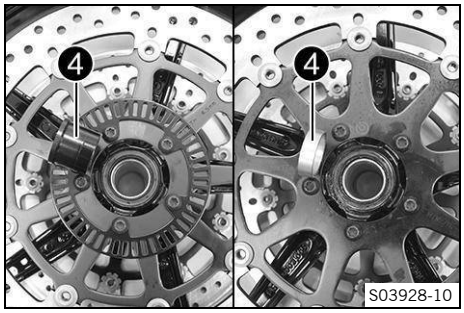
– Loosen screw ❷ and screws ❸.
– Using your hand, press on screw ❷ to push the wheel spindle out of the axle clamp. Remove screw ❷.

WARNING

Danger of accidents Damaged brake discs reduce the braking action.

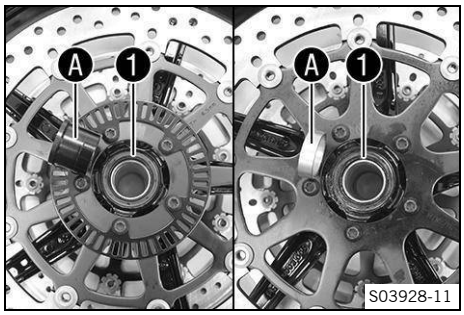
– Always lay the wheel down in such a way that the brake disc is not damaged.

– Hold front wheel and remove wheel spindle. Take the front wheel out of the fork.



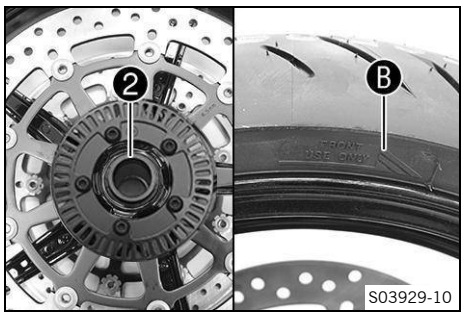
– Remove spacers ❹.

15.2 Installing the front wheel



– Check the wheel bearing for damage and wear.
  » If the wheel bearing is damaged or worn:
    – Change the front wheel bearing.
– Clean and grease radial shaft seal ❶ and contact surfaces Ⓐ on the spacers.

Long-life grease (p. 179)



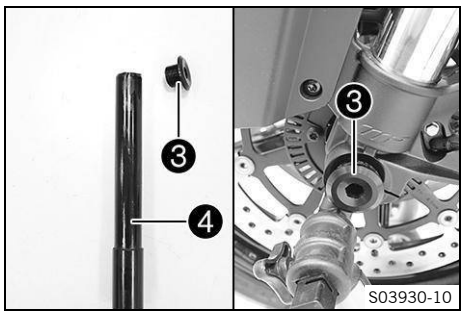
– Insert wide spacer ❷ on the left in the direction of travel.

Note

Arrow Ⓑ indicates the direction of travel of the front wheel.

The wheel speed sensor wheel is on the left viewed in the direction of travel.

– Insert the narrow spacer on the right in the direction of travel.



WARNING

Danger of accidents Oil, grease or wax on the brake discs reduces the brake action.

– Always keep the brake discs free of oil, fat and wax.
– Clean the brake discs with brake cleaner when necessary.

– Clean screw ❸ and wheel spindle ❹.
– Grease wheel spindle ❹ lightly.

Long-life grease (p. 179)

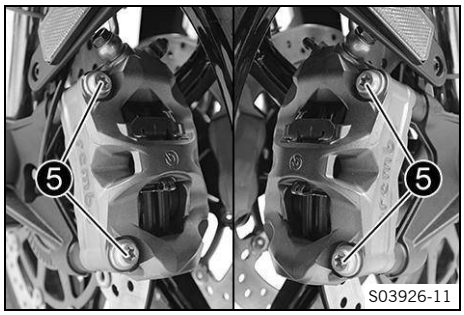
– Jack up the front wheel into the fork, position it, and insert the wheel spindle.
– Mount and tighten screw ❸.

Screw, wheel spindle, front	
M25×1.5	45 Nm (33.2 ft·lb$_f$) Long-life grease

Tip

Temporarily tighten one of the axle clamp screws so that the axle does not rotate with it.

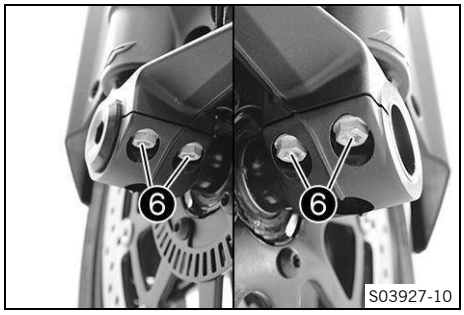
Loosen the axle clamp screw again before compression to allow the fork legs to align.



– Position brake calipers and check that the brake linings are seated correctly.
– Mount screws ❺ on both brake calipers, but do not tighten yet.
– Operate the hand brake lever repeatedly until the brake pads are in contact with the brake disc and a pressure point is reached. Secure the hand brake lever in the activated position.
  ✓ The brake calipers straighten.
– Tighten screws ❺ on both brake calipers.

Screw, front brake caliper	
M10	45 Nm (33.2 ft·lb$_f$) **Loctite® 243**

– Remove the locking piece of the hand brake lever.
– Take the motorcycle off the front lifting gear. (p. 102)
– Remove the rear of the motorcycle from the lifting gear. (p. 101)



– Operate the front brake and compress the fork a few times firmly.
  ✓ The fork legs straighten.
– Tighten screws 6.

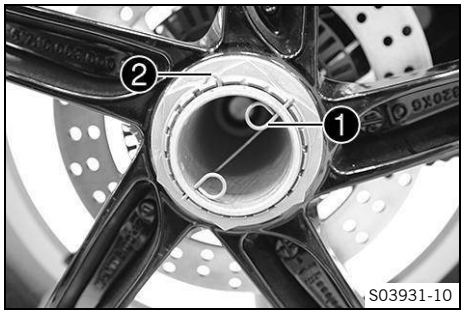
Screw, fork shoe	
M8	15 Nm (11.1 ft·lb$_f$)

15.3 Removing the rear wheel

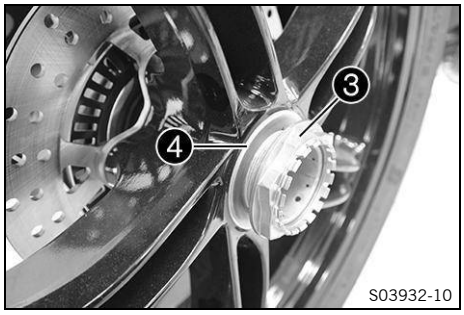
Preparatory work

– Raise the motorcycle with the rear lifting gear. (p. 101)
– Remove the muffler. (p. 108)

Main work



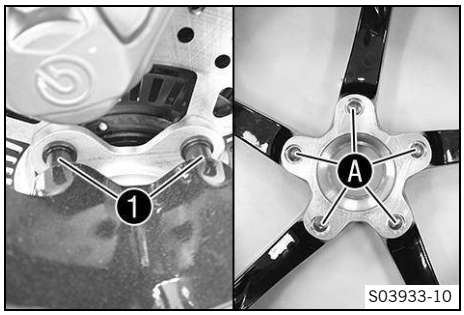
– Remove inside locking wire 1.
– Remove outside locking wire 2.



– Have an assistant operate the rear brake.
– Loosen nut 3 and remove it with washer 4.
– Take off the rear wheel.

15.4 Installing the rear wheel

WARNING
Danger of accidents Oil, grease or wax on the brake discs reduces the brake action.
– Always keep the brake discs free of oil, fat and wax.
– Clean the brake discs with brake cleaner when necessary.

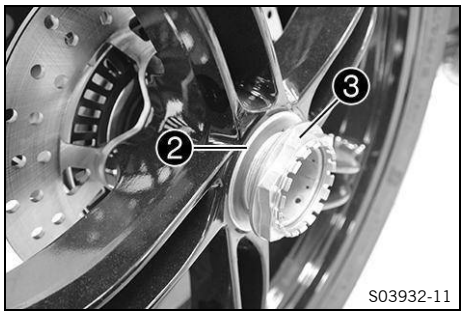


Main work

– Check the rear wheel bearing for damage and wear.
  » If the rear wheel bearing is damaged or worn:
    – Change the rear wheel bearing.
– Clean and grease the threads of the wheel axle and axle nut.

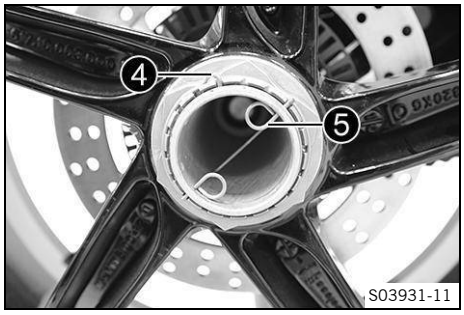
Long-life grease (p. 179)

– Slide the rear wheel onto the axle.
  ✓ Driving pins ❶ engage in drilled holes Ⓐ of the rim.



– Mount washer ❷ and nut ❸.
– Have an assistant operate the rear brake.
– Tighten nut ❸.

Nut, rear axle	
M50×1.5	250 Nm (184.4 ft·lb$_f$) Long-life grease Seal the safety wire with thread lock



– Mount outside locking wire ❹.
– Mount inside locking wire ❺.
  ✓ The pins of the locking wires engage in the drilled holes of the wheel axle.

Reworking

– Remove the rear of the motorcycle from the lifting gear. (p. 101)
– Install the muffler. (p. 108)

15.5 Checking the tire condition

WARNING

Danger of accidents If a tire bursts while riding, the vehicle becomes uncontrollable.

– Ensure that damaged or worn tires are replaced immediately.

WARNING

Danger of accidents Non-approved or non-recommended tyres and wheels impact the handling characteristic.

– Only use tires and wheels approved and recommended by the vehicle manufacturer with the corresponding speed rating.

WARNING

Danger of accidents New tires have reduced road grip.

The contact surface on new tires is not yet roughened.

– Run in new tires with moderate riding and only gradually increase the lean angle.

Run-in distance	200 km (124.3 mi)

WARNING

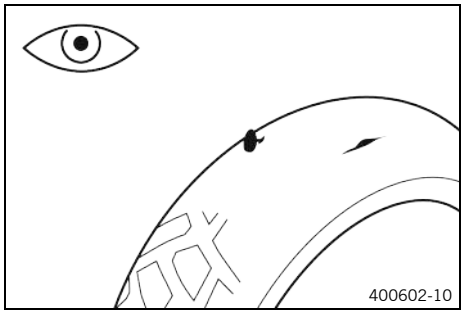
Danger of accidents Different tire profiles on the front and rear wheels can make it more difficult to control the vehicle.

– Make sure that only tires of the same tread type are mounted to the front and rear wheel.

Note

Tire type, tire condition, and tire pressure influence the braking and handling characteristics of the vehicle.

Worn tires are particularly unfavorable on wet surfaces.



– Check the front and rear tires for cuts, embedded objects, and other damage.

» If the tires have cuts, run-in objects, or other damage:

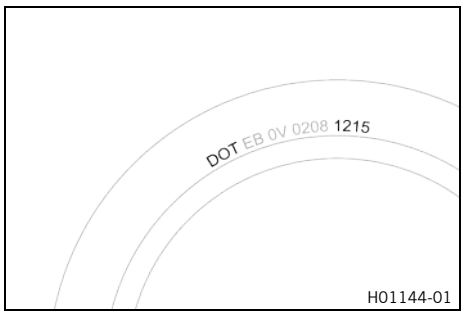
– Change the tires.

– Check the tread depth.

Minimum tread depth	≥ 2 mm (≥ 0.08 in)
Observe the minimum tread depth required by national law.	

» If the tread depth is less than the minimum tread depth:

– Change the tires.



– Check the tire age.

Note

The tire date of manufacture is usually contained in the tire label and is indicated by the last four digits of the **DOT** number. The first two digits indicate the week of manufacture and the last two digits the year of manufacture.

KTM recommends that the tires be changed after 5 years at the latest, regardless of the actual state of wear.

» If the tires are older than five years:

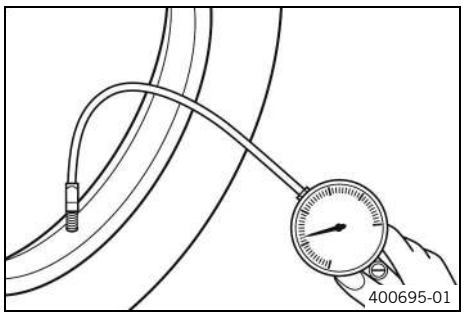
– Change the tires.

15.6 Checking the tire pressure

Note

Low tire pressure leads to abnormal wear and the tire overheating.

Correct tire pressure ensures optimal riding comfort and maximum tire service life.



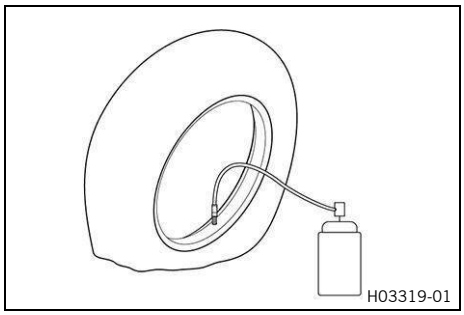
– Remove the protection cap.
– Check the tire pressure when the tires are cold.

Tire pressure when solo	
front: with cold tires	2.5 bar (36.3 psi)
rear: with cold tires	2.5 bar (36.3 psi)

Tire pressure with passenger / full payload	
front: with cold tires	2.5 bar (36.3 psi)
rear: with cold tires	2.9 bar (42.1 psi)

» If the tire pressure does not meet specifications:
  – Correct tire pressure.
– Mount the protection cap.

15.7 Using tire repair spray



WARNING

Danger of accidents Incorrect use of tire repair spray will result in the repaired tire losing pressure.

Tire repair spray cannot be used for all types of damage.

– Observe the instructions and specifications of the manufacturer of the tire repair spray.
– After repairing a tire with tire repair spray, ride slowly and carefully.
– Ride no further than the nearest authorized dealer and have the tire replaced.

Tire repair spray should only be used in an emergency.

We recommend transporting the broken down vehicle to the nearest workshop instead of using tire repair spray.

NOTE

Material damage Tire repair spray damages the tire pressure sensor.

– Note that after using tire repair spray, the tire pressure sensor may need to be replaced.

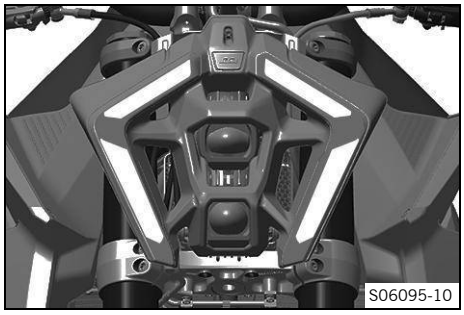
16.1 daytime running light

WARNING

Danger of accidents When visibility is poor, the daytime running light is not a substitute for the low beam.

Automatic switching between the daytime running light and low beam may only be partially available when visibility is impaired due to fog, snow or rain.

– Ensure that the appropriate type of lighting is always selected.
– If necessary switch off the daytime running lights using the menu before going on a ride or when stopped so that the low beam is switched on permanently.
– Make sure that the daytime running light is deactivated with the diagnostic tool when the menu item is not available, but the low beam is required.
– Note the legal regulations regarding the daytime running light.



The daytime running (**DRL**)/position light is integrated in the main headlight. The daytime running light is brighter than the position light.

The daytime running light must only be switched on when visibility conditions are good.

This is controlled by the ambient light sensor in the combination instrument. When visibility conditions are good, the low beam with position light is switched off and the daytime running light is switched on.

When the daytime running light is switched off, the low beam with position light lights up.

On high beam or headlight flasher, the daytime running light changes automatically to the position light.

16.2 Removing the 12 V battery

WARNING

Danger of accidents Electronic components and safety devices will be damaged if the 12-V battery is discharged or missing.

If the 12-V battery is discharged or defective, malfunctions in the vehicle electronics can occur, especially when starting.

– Never operate the vehicle with a discharged 12-V battery or without a 12-V battery.

WARNING

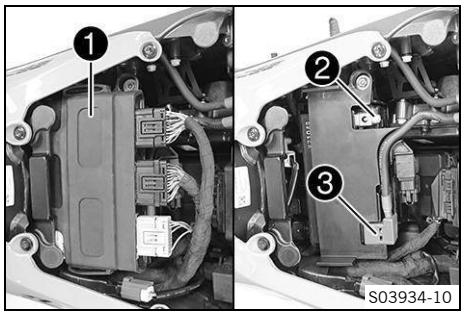
Risk of injury Battery acid and battery gases cause chemical burns.

– Keep 12–V batteries out of the reach of children.
– Wear suitable protective clothing and safety glasses.
– Avoid contact with battery acid and battery gases.
– Keep sparks or open flames away from the 12 V battery.
– Only charge 12 V batteries in well-ventilated rooms.
– Rinse the affected area immediately with plenty of water in the event of contact with skin.
– Rinse eyes with water for at least 15 minutes and consult a doctor immediately if battery acid and battery gases get into the eyes.

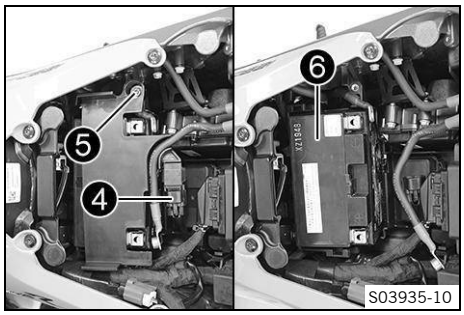
Preparatory work

– Remove the passenger seat. (p. 103)
– Remove the front rider's seat. (p. 103)

Main work



– Remove control unit ❶ and hang to the side.
– Disconnect negative cable ❷ from the 12 V battery.
– Remove positive terminal cover ❸ and disconnect the positive cable from the 12-V battery.



– Disconnect plug-in connector ❹.
– Remove screw ❺ and take off the battery cover.
– Take the 12-V battery ❻ out of the battery compartment.

16.3 Installing the 12 V battery

WARNING

Danger of accidents Electronic components and safety devices will be damaged if the 12-V battery is discharged or missing.

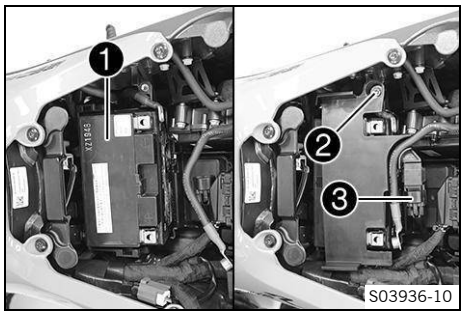
If the 12-V battery is discharged or defective, malfunctions in the vehicle electronics can occur, especially when starting.

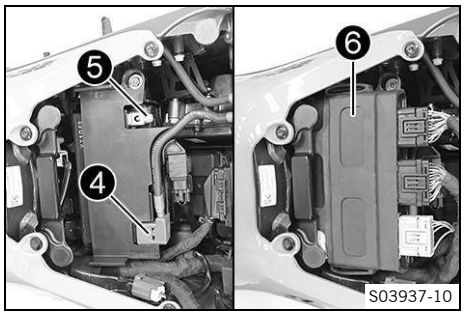
– Never operate the vehicle with a discharged 12-V battery or without a 12-V battery.

WARNING

Risk of injury Battery acid and battery gases cause chemical burns.

– Keep 12–V batteries out of the reach of children.
– Wear suitable protective clothing and safety glasses.
– Avoid contact with battery acid and battery gases.
– Keep sparks or open flames away from the 12 V battery.
– Only charge 12 V batteries in well-ventilated rooms.
– Rinse the affected area immediately with plenty of water in the event of contact with skin.
– Rinse eyes with water for at least 15 minutes and consult a doctor immediately if battery acid and battery gases get into the eyes.





Main work

– Insert 12-V battery ❶ into the battery compartment.

12 V battery (YTZ14S) (p. 181)

– Position the battery cover, mount screw ❷, and tighten.

Remaining screws on chassis	
M5	5 Nm (3.7 ft·lb$_f$)

– Join plug-in connector ❸.

– Position the positive cable and mount and tighten the screw.

Screw, battery terminal	
M6	4.5 Nm (3.32 ft·lb$_f$)

– Mount positive terminal cover ❹.

– Position negative cable ❺ and mount and tighten the screw.

Screw, battery terminal	
M6	4.5 Nm (3.32 ft·lb$_f$)

– Position control unit ❻.

Reworking

– Mount the front rider's seat. (p. 104)
– Mount the passenger seat. (p. 103)
– Set the time and date. (p. 72)

16.4 Charging the 12 V battery

WARNING

Risk of injury Battery acid and battery gases cause chemical burns.

– Keep 12–V batteries out of the reach of children.
– Wear suitable protective clothing and safety glasses.
– Avoid contact with battery acid and battery gases.
– Keep sparks or open flames away from the 12 V battery.
– Only charge 12 V batteries in well-ventilated rooms.
– Rinse the affected area immediately with plenty of water in the event of contact with skin.
– Rinse eyes with water for at least 15 minutes and consult a doctor immediately if battery acid and battery gases get into the eyes.

NOTE

Environmental hazard 12–V batteries contain environmentally-hazardous materials.

– Do not dispose of 12–V batteries as household waste.
– Dispose of 12–V batteries at a collection point for used batteries.

NOTE

Environmental hazard Hazardous substances cause environmental damage.

– Dispose of oils, grease, filters, fuel, cleaning agents, brake fluid, etc. correctly and in accordance with the applicable regulations.

Note

Even when there is no load on the 12 V battery, it discharges steadily each day.

The state of charge and the method of charging are very important for the service life of the 12 V battery.

Rapid recharging with a high charging current shortens the service life of the battery.

If the charging current, charging voltage, or charging time is exceeded, electrolyte escapes through the safety valves. This reduces the capacity of the 12-V battery.

If the 12 V battery is left in a discharged state for an extended period, it will become deeply discharged and sulfating occurs, thus destroying the battery.

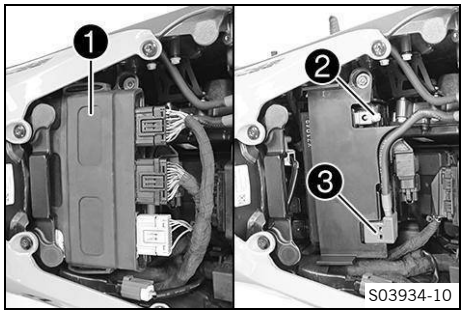
The 12 V battery is maintenance-free. The acid level does not have to be checked.

If the 12-V battery is not charged by the KTM battery charger, the 12-V battery must be removed for charging. Otherwise, overvoltage may damage electronic components. Charge the 12 V battery according to the specifications on the battery housing.

Preparatory work

– Remove the passenger seat. (p. 103)
– Remove the front rider's seat. (p. 103)

Main work



– Pull off engine control unit ❶ from the holder and hang to the side.
– Disconnect negative cable ❷ from the 12 V battery to avoid damaging the onboard electronics.
– Remove positive terminal cover ❸.



– Connect a charger to the 12 V battery. Connect the battery charger to the mains connection.

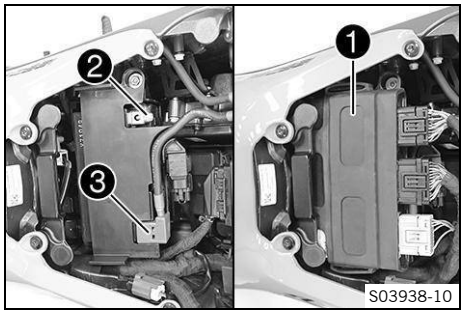
EU battery charger **TecMATE Optimate PRO** (A61029974044)
USA/CA battery charger **TecMATE Optimate PRO** (A61029974144)
Battery charger **TecMATE Optimate PRO** UK (A61029974244)

Note
After charging, the battery charger can remain on the vehicle, ensuring that the battery voltage is maintained during the maintenance charging cycle.

Note
It is impossible to overcharge the 12–V battery using this battery charger.

– Disconnect the battery charger from the mains connection and the 12-V battery after charging.

The charging current, charging voltage, and charging time must not be exceeded.	
If the 12 V battery is depleted from starting the vehicle repeatedly, the battery must be charged immediately.	
Recharge the 12 V battery regularly when the motorcycle is not being used.	3 months



– Mount positive terminal cover ❸.
– Position negative cable ❷ and mount and tighten the screw.

Screw, battery terminal	
M6	4.5 Nm (3.32 ft·lb$_f$)

– Position engine control unit ❶.

Reworking

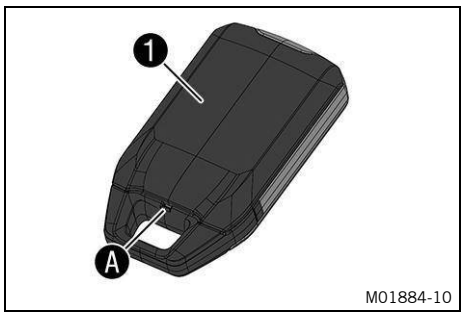
– Mount the front rider's seat. (p. 104)
– Mount the passenger seat. (p. 103)
– Set the time and date. (p. 72)

16.5 RACE ON key battery, changing

WARNING
Risk of injury Swallowing button cells can lead to chemical burning and may result in death in under 2 hours.
Button cells may burst if misused.
– Keep button cells and the RACE ON key out of the reach of children.
– Make sure the button cells are not swallowed or ingested.
– Seek medical attention immediately if button cells are swallowed or ingested.
– Do not expose button cells to extreme temperatures or mechanical loads.

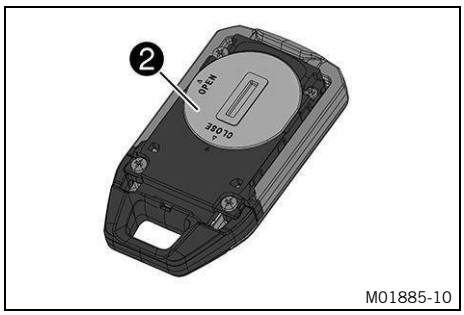
Permissible temperature	−20 °C ... 50 °C (−4.0 °F ... 122.0 °F)

– Do not damage the RACE ON key by e.g. cutting or squashing it.
– Do not use the RACE ON key if the RACE ON key is damaged or the battery compartment cannot be closed.
– Replace the RACE ON key battery with the type specified only.



M01884-10

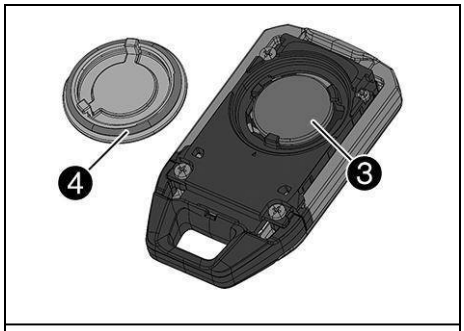
– To open cover ❶ of the RACE ON key, insert a small, blunt object into opening Ⓐ and carefully lift up the cover.

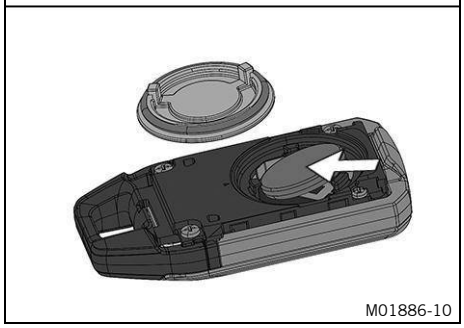


M01885-10

– Using a coin, turn battery cover ❷ counterclockwise and remove it.

Ensure that the O-ring remains in place.




M01886-10

– Remove RACE ON key battery ❸.
– Insert the new RACE ON key battery with label facing upward.

Button cell (CR 2032) (p. 181)

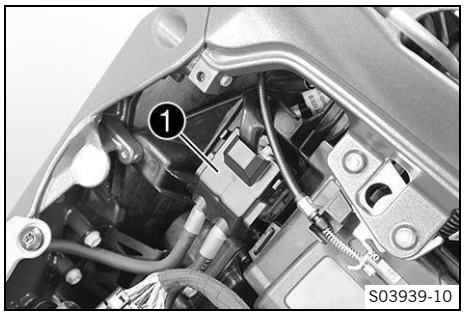
Note
The two smaller holding lugs are tapered so that the RACE ON key battery can be easily pushed into the bracket.

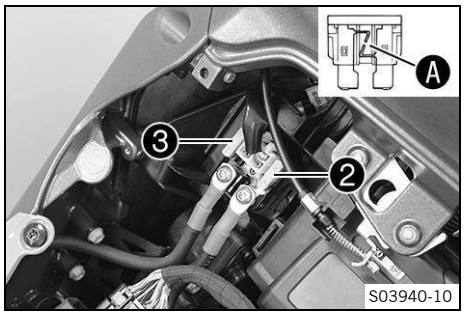
– Mount battery cover with O-ring ❹ and close it clockwise with a coin.
– Mount the cover of the RACE ON key and click into place.

16.6 Changing the main fuse

WARNING
Fire hazard Incorrect fuses overload the electrical system.
– Use only fuses with the prescribed amperage.
– Do not bypass or repair fuses.

Preparatory work
– Remove the passenger seat. (p. 103)
– Remove the front rider's seat. (p. 103)





Main work

– Remove protection cap ❶.

– Remove faulty main fuse ❷.

Note

A faulty fuse has a burned-out fuse wire Ⓐ.

A spare fuse ❸ is located in the starter relay.

The main fuse protects all electrical power loads of the vehicle.

– Insert the main fuse.

Fuse (58011109130) (p. 182)

– Check that the electrical equipment is functioning properly.
– Mount protection caps ❶.

Tip

Insert a new spare fuse into the starter relay to have it available when needed.

Reworking

– Mount the front rider's seat. (p. 104)
– Mount the passenger seat. (p. 103)
– Set the time and date. (p. 72)

16.7 Changing the fuses in the fuse box

WARNING

Fire hazard Incorrect fuses overload the electrical system.

– Use only fuses with the prescribed amperage.
– Do not bypass or repair fuses.

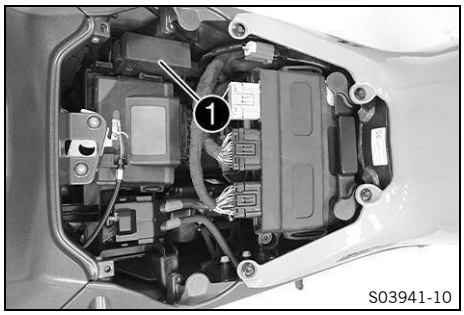
Note

The fuse box containing the fuses of individual electrical power consumers is located under the seat.

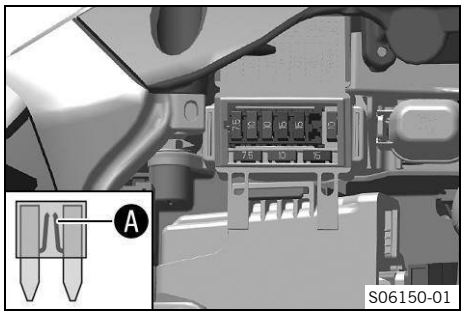
Preparatory work

– Remove the passenger seat. (p. 103)
– Remove the front rider's seat. (p. 103)

Main work



– Open fuse box cover ❶.



– Check the fuses.

Note
A faulty fuse has a burned-out fuse wire Ⓐ.

– Remove the faulty fuse.

Fuse **1** - 7.5 A - power supply for control units and components
Fuse **2** - 10 A - ACC1
Fuse **3** - 10 A - control unit, ignition, electronic fuel injection, lambda sensor
Fuse **4** - 15 A - ACC2, USB socket, HCU
Fuse **5** - 15 A - semi-active suspension
Fuse **6** - not assigned
Fuse **res** - 7.5 A - spare fuse
Fuse **res** - 10 A – spare fuses
Fuse **res** - 15 A - spare fuse

– Insert the spare fuse with the correct rating.

Fuse (75011088075) (p. 182)
Fuse (75011088010) (p. 182)
Fuse (75011088015) (p. 182)

Tip
Insert a new spare fuse so that it is available if needed.

– Check the function of the electrical power consumers.
– Close the fuse box cover ❶.

Reworking

– Mount the front rider's seat. (p. 104)
– Mount the passenger seat. (p. 103)

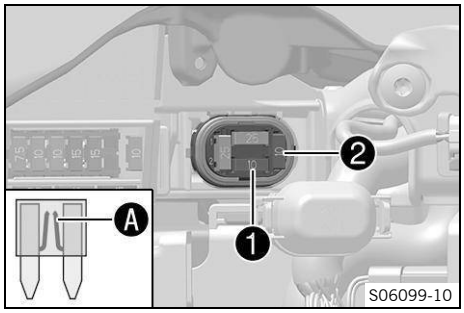
16.8 Changing the ABS fuses

WARNING
Fire hazard Incorrect fuses overload the electrical system.
– Use only fuses with the prescribed amperage.
– Do not bypass or repair fuses.

Note
Two fuses for the ABS are located under the seat. These fuses protect the return pump and the hydraulic unit of the ABS. The third fuse, which protects the ABS control unit, is located in the fuse box.

Preparatory work
– Remove the passenger seat. (p. 103)
– Remove the front rider's seat. (p. 103)

Main work



– Remove the protection cap and fuse ❶.

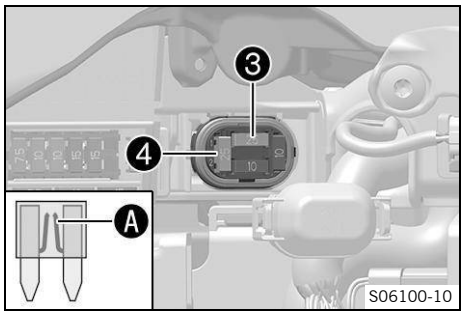
Note
A faulty fuse has a burned-out fuse wire Ⓐ.

– Insert the spare fuse with the correct rating.

Fuse (75011088010) (p. 182)

Tip
Insert spare fuse ❷ in the fuse box so that it is available if needed.

– Mount the protection cap.



– Remove the protection cap and fuse ❸.

Note
A faulty fuse has a burned-out fuse wire Ⓐ.

– Insert the spare fuse with the correct rating.

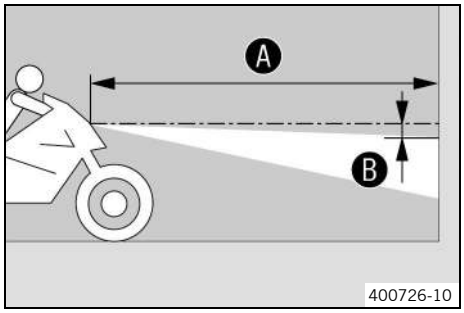
Fuse (75011088025) (p. 182)

Tip
Insert spare fuse ❹ in the fuse box so that it is available if needed.

– Mount the protection cap.

Reworking
– Mount the front rider's seat. (p. 104)
– Mount the passenger seat. (p. 103)

16.9 Checking the headlight setting



– Park the vehicle on a horizontal surface in front of a light-colored wall and make a mark at the height of the center of the low beam headlight.
– Make another mark at a distance Ⓑ under the first marking.

Distance Ⓑ	5 cm (2.0 in)

– Position the vehicle upright at distance Ⓐ from the wall and switch on the low beam.

Distance Ⓐ	5 m (16 ft – 5 in)

– Get on the motorcycle, together with any luggage or passenger.
– Check the headlight adjustment.

The light-dark boundary must lie exactly on the lower marking when the motorcycle is ready to operate with the rider mounted along with any luggage and a passenger if applicable.

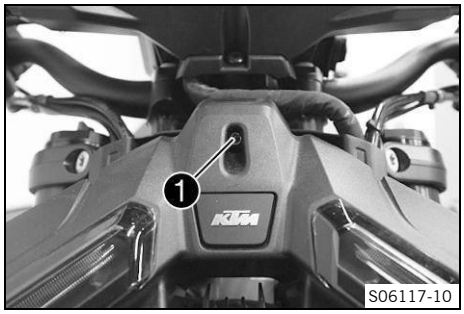
» If the boundary between light and dark does not meet specifications:
– Adjust headlight range. (p. 137)

16.10 Adjusting the headlight range

Preparatory work

– Check the headlight setting. (p. 137)

Main work



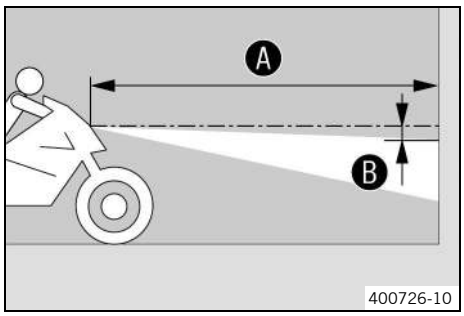
– Turn adjusting screw ❶ to adjust the headlight range.

Screw ❶ also secures the headlight. Ensure the screw is always screwed in far enough.

Note

Turn clockwise to increase the headlight range; turn counterclockwise to reduce the headlight range.

If you have a load, you may have to correct the headlight range.

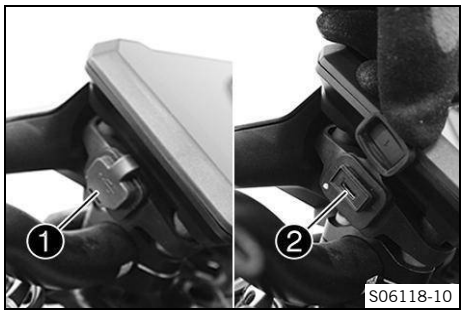


– Set the headlight to marking Ⓑ.

The light-dark boundary must lie exactly on lower marking Ⓑ when the motorcycle is ready to operate with the rider mounted along with any luggage and a passenger if applicable.

16.11 Connecting the USB cable

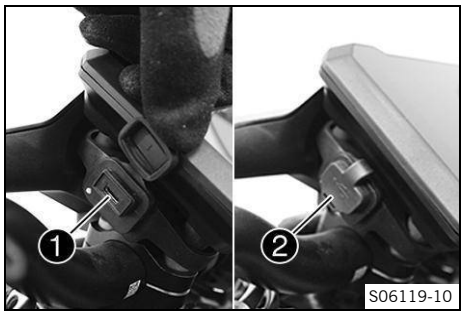
Note
The USB socket is located on the left of the combination instrument.



- Open USB socket cover ❶.
- Connect a suitable USB cable to the USB socket ❷.
- Connect the USB cable to the device.
- Route the cable on the handlebar and secure with the cable ties.

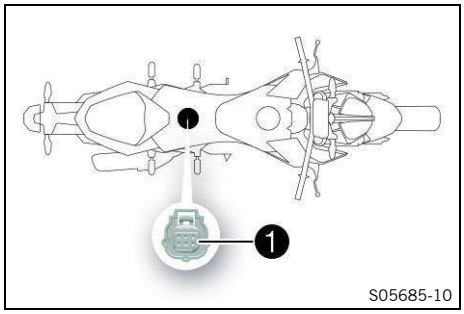
Use the shortest possible USB cable.
Always ensure that connected devices are also protected against moisture.
Route and secure the cable in such a way that it cannot be damaged.

16.12 Disconnecting the USB cable



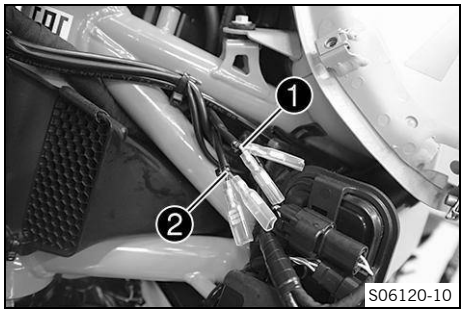
- Disconnect USB cable from the device.
- Disconnect USB cable from the USB socket ❶.
- Close USB socket cover ❷.

16.13 Diagnostic connector



Diagnostics connector ❶ is located under the front rider's seat.

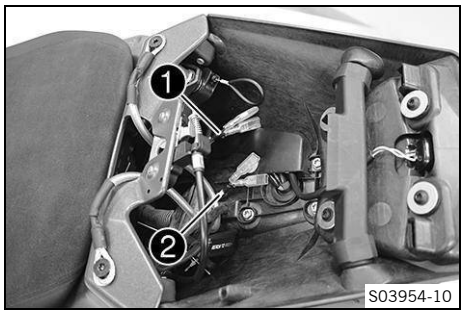
16.14 Front ACC1 and ACC2



Installation location

- Front power supplies ACC1 ❶ and ACC2 ❷ are located behind the fuel tank spoiler on the left between the triple clamps.

16.15 Rear ACC1 and ACC2



Installation location

- Power supplies ACC1 ❶ and ACC2 ❷ rear are located under the seat.

17.1 Checking the coolant level in the compensating tank

WARNING

Health hazard Coolant is harmful to health.

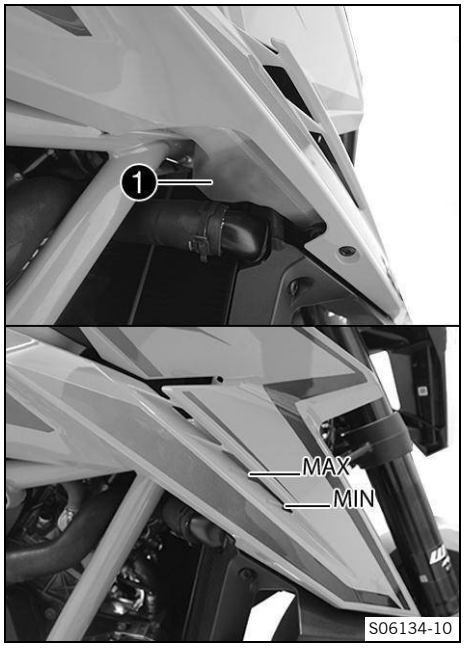
- Keep coolant out of the reach of children.
- Do not allow coolant to come into contact with skin, eyes, or clothing.
- Consult a doctor immediately if coolant has been ingested.
- Rinse the affected area immediately with plenty of water in the event of contact with skin.
- Rinse eyes thoroughly with water and consult a doctor immediately if coolant comes into contact with eyes.
- If coolant spills on to your clothing, change the clothing.
- Store coolant properly in a suitable container and keep out of the reach of children.

WARNING

Danger of scalding The coolant heats up and is under high pressure when the vehicle is operated.

- Do not open the radiator, the radiator hoses, or other cooling system components if the engine or the cooling system are at operating temperature.
- Allow the cooling system and the engine to cool down before you open the radiator, the radiator hoses, or other components of the cooling system.
- In the event of scalding, rinse the area affected immediately with lukewarm water.

Condition: The engine is cold, Radiator is completely full



- Park the motorcycle on a horizontal surface.
- Check the coolant level in compensating tank 1.

The coolant level must be between **MIN** and **MAX**.

» If there is no coolant in the compensating tank:
- Check the transmission and cooling system for leaks.

Do not start the motorcycle.

- Add the coolant/bleed the cooling system.

» If the coolant level in the reservoir is not correct, but the reservoir is not yet empty:
- Correct the coolant level in the compensating tank. (p. 141)

17.2 Correcting the coolant level in the compensating tank

WARNING

Health hazard Coolant is harmful to health.

- Keep coolant out of the reach of children.
- Do not allow coolant to come into contact with skin, eyes, or clothing.
- Consult a doctor immediately if coolant has been ingested.
- Rinse the affected area immediately with plenty of water in the event of contact with skin.
- Rinse eyes thoroughly with water and consult a doctor immediately if coolant comes into contact with eyes.
- If coolant spills on to your clothing, change the clothing.
- Store coolant properly in a suitable container and keep out of the reach of children.

WARNING

Danger of scalding The coolant heats up and is under high pressure when the vehicle is operated.

- Do not open the radiator, the radiator hoses, or other cooling system components if the engine or the cooling system are at operating temperature.
- Allow the cooling system and the engine to cool down before you open the radiator, the radiator hoses, or other components of the cooling system.
- In the event of scalding, rinse the area affected immediately with lukewarm water.

Condition: The engine is cold, Radiator is completely full

Preparatory work

- Check the coolant level in the compensating tank. (p. 140)

Main work



- Remove compensating tank cover ❶.
- Add coolant up to the **MAX** marking.

coolant	
Coolant (p. 180) Antifreeze protection to at least: −25 °C (−13.0 °F)	3.20 l (0.845 liq. gal_{US})

- Mount cover ❶ of the compensating tank.

18.1 Ride Mode



I00785-10

WARNING

Danger of accidents An incorrectly selected ride mode makes it more difficult to control the vehicle.

The riding modes are each only suitable for certain conditions.

– Always select a riding mode that suits the surface on which you are riding, the weather and the riding situation.

The following settings for the vehicle can be selected in the dashboard via sub-menu **Ride Mode**: **Street**, **Rain**, **Sport**, **Track** (optional) and **Performance** (optional).

The most recently selected ride mode appears on the display.

The riding mode can also be changed while riding with the throttle grip closed.

Condition	Meaning
Street	Homologated performance with balanced response; the motorcycle traction control allows normal slip on the rear wheel.
Rain	Reduced homologated performance for better ridability; the motorcycle traction control allows less slip on the rear wheel.
Sport	Homologated performance with very direct response; the motorcycle traction control allows greater slip on the rear wheel.
Track	Throttle response and motorcycle traction control can be adjusted individually.
Performance	Throttle response and motorcycle traction control can be adjusted individually.

18.2 Motorcycle traction control



I00793-10

The motorcycle traction control (**MTC**) lowers the engine torque in case of loss of traction in the rear wheel. Depending on the riding mode (p. 142), different amounts of slip are allowed when traction control is activated.

Note

When motorcycle traction control is switched off, the rear wheel may spin during strong acceleration and on surfaces with low grip, resulting in a risk of falling.

After the ignition is switched on, motorcycle traction control is enabled again.

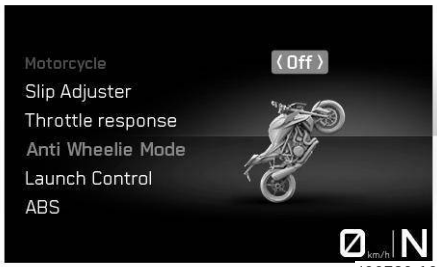
In the combination instrument, the motorcycle traction control can be switched on or off via the **MTC** submenu.

Note

When the motorcycle traction control is active, the TC indicator lamp flashes.

When motorcycle traction control is switched off, the TC indicator lamp lights up.

18.3 Anti wheelie mode (optional)

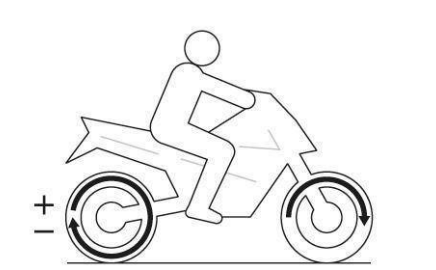


I00789-10

The **Anti Wheelie Mode** is an optional vehicle electronics function.

Anti-wheelie mode is intended to prevent the front wheel rising when accelerating.

18.4 slip adjustment (optional)



I00800-10

The spin adjuster is a motorcycle traction control function.

The slip adjustment allows the motorcycle traction control to be tuned through nine levels to the desired characteristic map.

Level 1 allows the maximum slip on the rear wheel, and level 9 the minimum.

The spin adjuster can be set while riding using button **+RES** or **–SET** when the menu is closed, or using button **RIGHT** or **LEFT** when the menu is open.

Note

The slip adjustment is only available in **TRACK** riding mode (optional).

18.5 Throttle Response (optional)



I00787-10

In the combination instrument the characteristics of the throttle response can be adjusted via the **Throttle Response** submenu.

The **Throttle Response** can also be set while riding with a closed throttle grip.

Note

Throttle Response is only available in riding mode **TRACK** (optional).

Condition	Meaning
TRACK	Extremely direct response
SPORT	Very direct response.
STREET	Balanced response.

19.1 Checking the engine oil level

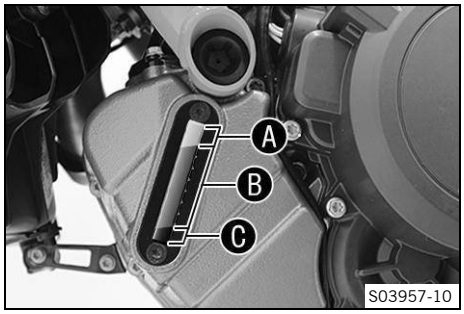
Note
Oil consumption depends on the riding style and the operating conditions.

Condition: The engine is at operating temperature

Preparatory work

– Stand the motorcycle upright on a level surface.

Main work



– Check the engine oil level in the engine oil level viewer.

The engine oil level should be in the upper area Ⓑ of the engine oil level viewer.
After switching off the engine, wait one minute before checking the level.

» When the engine oil level is in area Ⓐ of the engine oil level viewer:
  – Do not add engine oil.
» When the engine oil level is in area Ⓑ of the engine oil level viewer:
  – Engine oil can be added.
» When the engine oil level is in area Ⓒ of the engine oil level viewer:
  – Add engine oil. (p. 148)

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

WARNING
Danger of scalding Engine and gear oil heat up when the motorcycle is operated.
– Wear suitable protective clothing and safety gloves.
– In the event of scalding, rinse the area affected immediately with lukewarm water.

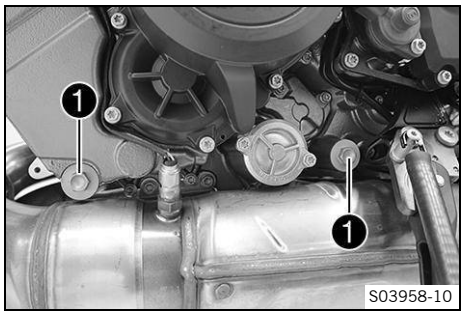
NOTE
Environmental hazard Hazardous substances cause environmental damage.
– Dispose of oils, grease, filters, fuel, cleaning agents, brake fluid, etc. correctly and in accordance with the applicable regulations.

Condition: The engine is at operating temperature

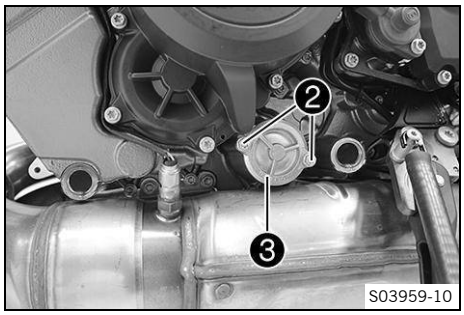
Preparatory work

– Stand the motorcycle on a level surface using the side stand.

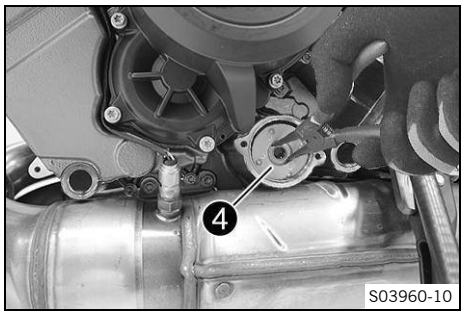
Main work



– Place an appropriate container under the engine.
– In order to prevent oil from running over the exhaust system, use a mouldable funnel if necessary.
– Remove oil drain plugs ❶ along with the magnets, the O-rings, and the oil screens.



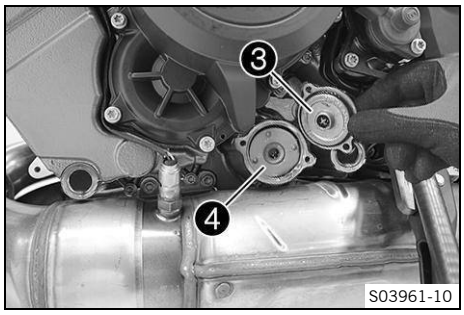
– Remove screws ❷. Take off oil filter cover ❸ with the O-ring.



– Pull oil filter ❹ out of the oil filter housing.

Lock ring plier (51012011000)

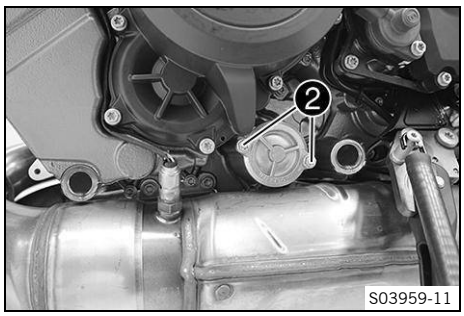
– Allow the engine oil to drain completely.
– Thoroughly clean the parts and the sealing surfaces.



– Insert new oil filter ❹.

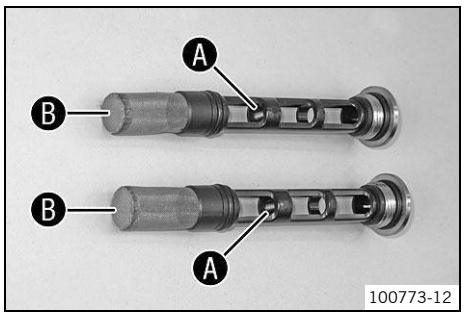
Only insert the oil filter by hand.

– Oil the O-ring of the oil filter cover. Mount oil filter cover ❸.

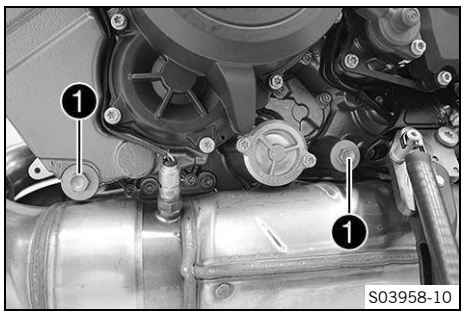


– Mount and tighten screws ❷.

Remaining screws for engine	
M5	6 Nm (4.4 ft·lb$_f$)

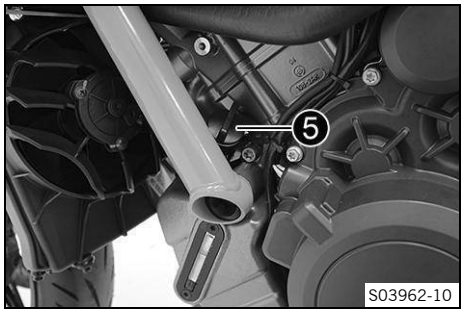


– Thoroughly clean magnets Ⓐ and oil screens Ⓑ of the oil drain plugs.



– Mount and tighten oil drain plugs ❶ with magnets, O-rings, and oil screens.

Oil drain plug	
M20×1.5	20 Nm (14.8 ft·lb$_f$)



– Have the entire filling quantity available.

engine oil	
Ambient temperature: ≥ 0 °C (≥ 32.0 °F) engine oil (SAE 10W/50) (p. 179) fully synthetic	3.50 l (0.925 liq. gal$_{US}$)
Ambient temperature: < 0 °C (< 32.0 °F) engine oil (SAE 5W/40) (p. 179) fully synthetic	

– Add the oil quantity in two steps.
– Remove filler plug ❺ with the O-ring, and fill up with the first partial quantity.

Engine oil (1st partial quantity) approx.	
Ambient temperature: ≥ 0 °C (≥ 32.0 °F) engine oil (SAE 10W/50) (p. 179) fully synthetic	3.0 l (0.79 liq. gal$_{US}$)
Ambient temperature: < 0 °C (< 32.0 °F) engine oil (SAE 5W/40) (p. 179) fully synthetic	

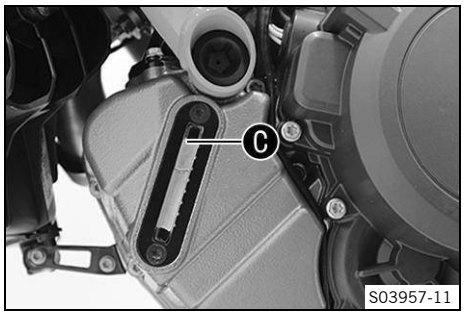
– Mount filler plug ❺ with the O-ring.

DANGER

Danger of poisoning Exhaust gases are toxic and inhaling them may result in unconsciousness and death.

– Always ensure that there is sufficient ventilation when running the engine.
– Use suitable exhaust extraction when starting or running the engine in an enclosed space.

– Start the engine and check it for leaks.
– Switch off the engine.



– Remove the filler plug with the O-ring and add the second partial quantity up to the upper marking C on the engine oil level viewer.

Engine oil (2nd partial quantity) approx.	
Ambient temperature: ≥ 0 °C (≥ 32.0 °F) engine oil (SAE 10W/50) (p. 179) fully synthetic	0.50 l (0.132 liq. gal_{US})
Ambient temperature: < 0 °C (< 32.0 °F) engine oil (SAE 5W/40) (p. 179) fully synthetic	

– Mount the filler plug with the O-ring.

DANGER

Danger of poisoning Exhaust gases are toxic and inhaling them may result in unconsciousness and death.

– Always ensure that there is sufficient ventilation when running the engine.
– Use suitable exhaust extraction when starting or running the engine in an enclosed space.

– Start the engine and check it for leaks.

Reworking

– Check the engine oil level. (p. 145)

19.3 Adding engine oil

Note

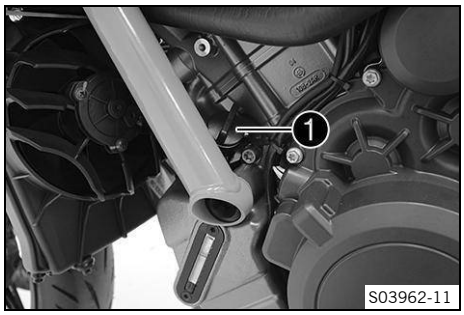
Too little engine oil or poor-quality engine oil results in premature wear to the engine.
The engine may be damaged if the engine oil level is too high.

Condition: The engine is at operating temperature

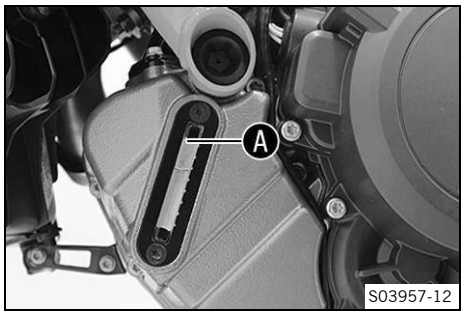
Preparatory work

– Stand the motorcycle upright on a level surface.
– Check the engine oil level. (p. 145)

Main work



– Remove oil plug 1 with O-ring.



– Add the engine oil to upper marking A on the engine oil level viewer.

Condition: Ambient temperature: ≥ 0 °C (≥ 32.0 °F)
engine oil (SAE 10W/50) (p. 179) fully synthetic
Condition: Ambient temperature: < 0 °C (< 32.0 °F)
engine oil (SAE 5W/40) (p. 179) fully synthetic

Note

In order to achieve optimal engine oil performance, it is not advisable to mix different engine oils.

KTM recommends changing the engine oil if necessary.

– Mount the filler plug with the O-ring.

DANGER

Danger of poisoning Exhaust gases are toxic and inhaling them may result in unconsciousness and death.

– Always ensure that there is sufficient ventilation when running the engine.
– Use suitable exhaust extraction when starting or running the engine in an enclosed space.

– Start the engine and check it for leaks.

Reworking

– Check the engine oil level. (p. 145)

20.1 Cleaning the motorcycle

NOTE

Material damage Components can be damaged or destroyed if a high-pressure cleaner is used incorrectly.

The high pressure forces water into the electrical components, socket connectors, clutch cables, and bearings, etc.

Too high a pressure can cause malfunctions and destroy components.

– Do not direct the water jet directly on to electrical components, socket connectors, clutch cables, or bearings.
– Maintain a minimum distance between the nozzle of the high-pressure cleaner and the component.

Minimum distance	60 cm (23.6 in)

NOTE

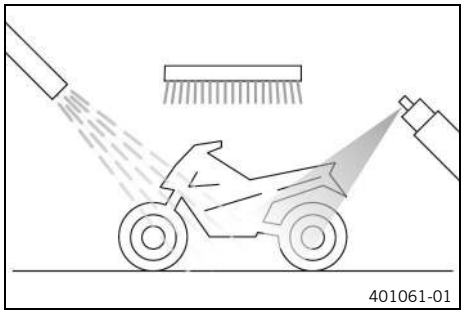
Environmental hazard Hazardous substances cause environmental damage.

– Dispose of oils, grease, filters, fuel, cleaning agents, brake fluid, etc. correctly and in accordance with the applicable regulations.

Note

Clean the motorcycle regularly to maintain its value and appearance over a long period.

Avoid direct sunshine when cleaning the motorcycle.



– Seal the exhaust system to prevent water from entering into it.
– Remove the coarse dirt particles with a gentle water jet.
– Spray the heavily soiled parts with a standard commercial motorcycle cleaner and clean using a brush.

Never apply motorcycle cleaner to a dry vehicle; always rinse the vehicle with water first.

Environmentally neutral universal cleaning agent (p. 184)

Note

Use warm water containing standard motorcycle cleaner and a soft sponge.

If the vehicle has been used on salted roads, use cold water for cleaning after riding. Warm water enhances the corrosive effects of salt.

– After rinsing the motorcycle with a gentle spray of water, allow it to dry thoroughly.
– Remove the cover from the exhaust system.

WARNING

Danger of accidents Moisture and dirt impair the brake system.

– Brake carefully several times to dry out and remove dirt from the brake pads and the brake discs.

– After cleaning, ride the vehicle a short distance until the engine warms up.

Note
The heat produced causes water to evaporate at inaccessible locations in the engine and on the brake system.

– After the motorcycle has cooled off, lubricate all moving parts and pivot points.
– Clean the chain. (p. 109)
– Treat bare metal (except for brake discs and the exhaust system) with an anticorrosive.

Preserving materials (p. 184)

– Treat the painted parts with a mild paint polish.

Do not polish parts that were matte when delivered as this would strongly impair the material quality.

Shine spray with beading effect (p. 184)

– Treat the plastic parts and powder-coated parts with a mild cleaning agent and care product.

Cleaning agents for plastics, glass, lacquers, metals, windshields and visors (p. 184)

– Oil steering lock and seat lock.

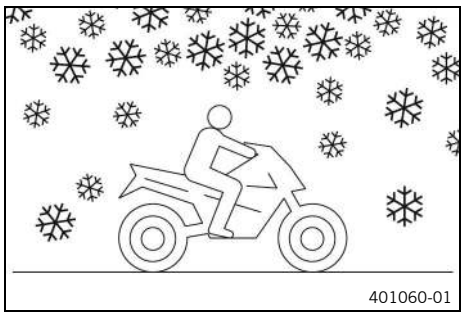
Universal oil spray (p. 179)

20.2 Checks and maintenance steps for winter operation

WARNING
Danger of accidents Salt on the roads impairs the brake system.
– Brake carefully several times to remove salt from the brake linings and the brake discs.

WARNING
Danger of accidents Oil, grease or wax on the brake discs reduces the brake action.
– Always keep the brake discs free of oil, fat and wax.
– Clean the brake discs with brake cleaner when necessary.

Note
If you use the motorcycle in winter, you must expect salt on the roads. You should therefore take precautions against aggressive road salt.
If the vehicle has been used on salted roads, use cold water for cleaning after riding. Warm water enhances the corrosive effects of salt.


401060-01

– Clean the motorcycle. (p. 150)
– Clean the brakes.

After **EVERY** trip on salted roads, thoroughly clean the brake calipers and brake linings, after they have cooled down and without removing them, with cold water and dry them carefully.
After riding on salted roads, thoroughly clean the motorcycle with cold water and dry it well.

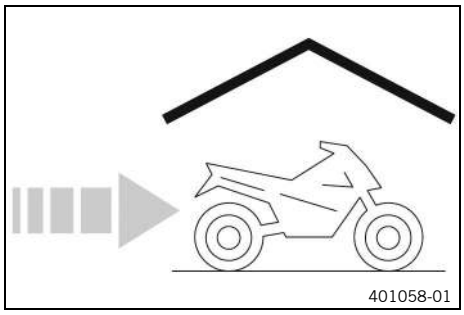
– Treat the engine, link fork, and all other bare or zinc-plated parts (except the brake discs) with a wax-based corrosion inhibitor.

Corrosion inhibitor must not come into contact with the brake discs. This would severely lower the braking effect.

– Clean the chain. (p. 109)

21.1 Storage

Note
If the vehicle will not be ridden for an extended period, additional steps are recommended.
Before storing the motorcycle, check all parts for function and wear. If service, repairs, or replacements are necessary, you should do this during the storage period (workshops less busy). This allows you to avoid long waiting periods when the next season starts.


401058-01

– When refueling for the last time before taking the motorcycle out of service, add fuel additive.

Fuel additive (p. 178)

– Refuel. (p. 95)

Tip
Fill the fuel tank completely as specified, using fuel with the lowest possible ethanol content.

– Clean the motorcycle. (p. 150)
– Change the engine oil and the oil filter, clean the oil screens. (p. 145)
– Check the coolant fill level and antifreeze.
– Check the tire pressure. (p. 126)
– Remove the 12 V battery. (p. 128)

Storage temperature of the 12 V battery without direct sunlight	0 °C ... 35 °C (32.0 °F ... 95.0 °F)

– Charge the 12 V battery. (p. 130)
– Store the vehicle in a dry location that is not subject to large fluctuations in temperature.

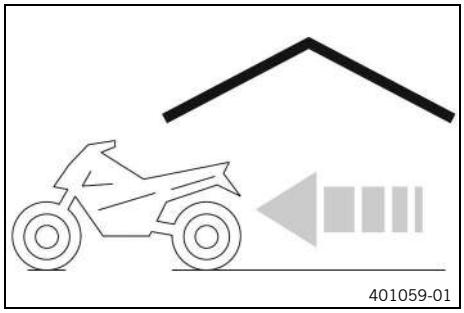
Note
KTM recommends jacking up the motorcycle.

– Raise the motorcycle with the rear lifting gear. (p. 101)
– Lift the motorcycle with the front lifting gear. (p. 101)

Cover the motorcycle with a tarp or cover that is permeable to air.
Do not use any non-porous materials, as moisture cannot escape and corrosion can occur.

Note
Avoid running the engine of a motorcycle in storage for a short time only. Since the engine cannot warm up properly, the water vapor produced during combustion condenses and causes valves and the exhaust system to rust.

21.2 Preparing for use after storage

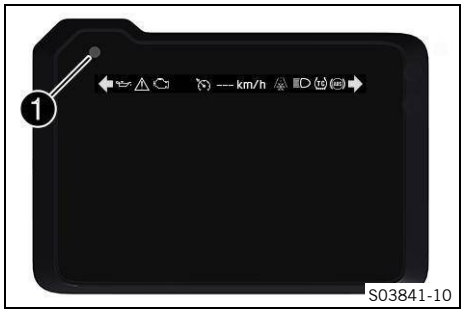


– Take the motorcycle off the front lifting gear. (p. 102)
– Remove the rear of the motorcycle from the lifting gear. (p. 101)
– Install the 12 V battery. (p. 129)

Note
If the 12 V battery was removed, the time and date must be reset.

– Perform checks and maintenance measures when preparing for use. (p. 86)
– Take a test ride.

22.1 immobilizer



The RACE-ON indicator lamp ❶ can indicate errors by flashing. These are indicated up to five seconds after the RACE ON button is actuated.

Note

Blink codes referring to **KTM RACE ON** are only displayed once and are not repeated.

22.2 troubleshooting

Cause	Finding	Remedy
No response if the unlock button is pressed	Unlock button faulty	– Check the unlock button for damage. – Check the cable and plug of the unlock button for damage.
Immobilizer indicator lamp flashes twice	No response signal from the RACE ON key	– Ensure that the RACE ON key is in range. – Remove other electronic devices from the vicinity of the RACE ON antenna. – Check the battery compartment in the RACE ON key for correct locking. – Check the battery compartment of the RACE ON key for corrosion. – Change the RACE ON key battery. (p. 132) – Use black ignition key.
Immobilizer indicator lamp flashes three times	12 V battery discharged	– Charge the 12 V battery. (p. 130) – Check the open-circuit current.
Immobilizer indicator lamp flashes four times	Steering lock bolt locked or tense	– Move handlebar slightly.
Immobilizer indicator lamp flashes five times	RACE ON antenna faulty	– Check the RACE-ON antenna for damage.
The dashboard shows nothing on the display	Fuse **1** blown Main fuse blown 12 V battery discharged	– Change the fuses in the fuse box. (p. 134) – Change the main fuse. (p. 133) – Charge the 12 V battery. (p. 130) – Check the open-circuit current.
Engine does not rotate if the start button/emergency OFF switch is pressed into the lower position	Operating error 12 V battery discharged Faulty safety starting system Electronic fault	– Carry out the starting procedure. (p. 86) – Charge the 12 V battery. (p. 130) – Check the open-circuit current. – Read out the fault memory using the diagnostics tool.

Cause	Finding	Remedy
		– Read out the fault memory using the diagnostics tool.
The engine only turns over if the clutch lever is pulled	The vehicle is in gear Faulty safety starting system	– Shift the transmission into the neutral position. – Read out the fault memory using the diagnostics tool.
The engine turns over although a gear is engaged	Faulty safety starting system	– Read out the fault memory using the diagnostics tool.
The engine turns but does not start	Quick-lock coupling not joined Malfunction in the electronic fuel injection The fuel quality is insufficient	– Join quick-lock couplings. – Read out the fault memory using the diagnostics tool. – Add suitable fuel.
The engine dies during the trip	Lack of fuel Malfunction in the electronic fuel injection	– Refuel. (p. 95) – Read out the fault memory using the diagnostics tool.
Malfunction indicator lamp lights up or flashes	Malfunction in the electronic fuel injection	– Read out the fault memory using the diagnostics tool.
The ABS warning light lights up	ABS fuse blown Large difference in wheel speeds of the front and rear wheels Malfunction in ABS	– Change the fuses in the fuse box. (p. 134) – Stop the vehicle, switch off the ignition, and start it again. – Read out the fault memory using the diagnostics tool.
High oil consumption	The engine oil level is too high The engine oil is too thin (low viscosity)	– Check the engine oil level. (p. 145) – Change the engine oil and the oil filter, clean the oil screens. (p. 145)
12 V battery discharged	The hazard warning flasher is switched on The 12-V battery is not being charged by the alternator Ignition was not switched off when vehicle was parked	– Switch off the hazard warning flasher. – Charge the 12 V battery. (p. 130) – Check the charging voltage. – Charge the 12 V battery. (p. 130)

23.1 Engine

23.1.1 Technical data - engine

Design	2-cylinder 4-stroke Otto engine, 75° V arrangement, water-cooled
Displacement	1,349.47 cm³ (82.3497 in³)
Stroke	71.00 mm (2.7953 in)
Bore	110.00 mm (4.3307 in)
Compression ratio	13.2:1
Idle speed	1,500 rpm ... 1,600 rpm (25.00 Hz ... 26.67 Hz)
Control	DOHC with cam lever, 4 valves per cylinder, chain-driven
Valve - valve plate diameter	
Intake	42 mm (1.65 in)
Exhaust	34 mm (1.34 in)
Valve clearance	
Intake at: 20 °C (68.0 °F)	0.10 mm ... 0.15 mm (0.0039 in ... 0.0059 in)
Exhaust at: 20 °C (68.0 °F)	0.25 mm ... 0.30 mm (0.0098 in ... 0.0118 in)
Crankshaft bearing	Plain bearing
Big (bottom) end bearing	Plain bearing
Wrist pin bearing	Connecting rod bushing
Piston	Forged light alloy
Piston ring	1 rectangular ring, 1 tapered compression piston ring, 1 oil control ring
Engine lubrication	Forced oil lubrication with three trochoidal pumps
Primary transmission	40:76
Clutch	Multi-disc wet clutch / hydraulically activated
Transmission	6 speed transmission, claw shift
Gear ratios	
1st gear	12:35
2nd gear	15:32
3rd gear	18:30
4th gear	20:27
5th gear	23:27
6th gear	26:27
Mixture formation	Electronic fuel injection, Keihin 60 mm
Ignition system	Contactless controlled fully electronic ignition with digital ignition adjustment

Alternator	• 14 V • 504 W (0.676 hp)
Spark plug	
Inside spark plug	NGK LKAR9DI-10
Outside spark plug	NGK LMAR7DI-10
Plug gap of spark plug	1 mm (0.04 in)
Cooling	Liquid cooling, permanent circulation of coolant by water pump
Starting aid	Starter motor

23.1.2 Capacities - engine

engine oil	
Ambient temperature: ≥ 0 °C (≥ 32.0 °F) engine oil (SAE 10W/50) (p. 179) fully synthetic	3.50 l (0.925 liq. gal_{US})
Ambient temperature: < 0 °C (< 32.0 °F) engine oil (SAE 5W/40) (p. 179) fully synthetic	
coolant	
Coolant (p. 180) Antifreeze protection to at least: −25 °C (−13.0 °F)	3.20 l (0.845 liq. gal_{US})

23.2 Chassis

23.2.1 Technical data - chassis

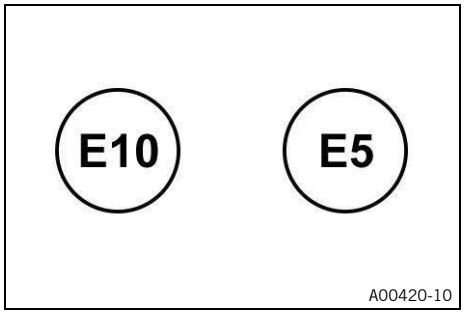
Frame	Lattice frame made of chrome molybdenum steel tubing, powder-coated
Suspension travel:	
front	125 mm (4.92 in)
rear	140 mm (5.51 in)
Brake system	
front	Double disc brake with radially mounted four-piston brake calipers, floating brake discs
rear	Single disc brake with dual-piston brake caliper, fixed brake disc
Brake discs - diameter	
front	320 mm (12.60 in)
rear	240 mm (9.45 in)
Brake disc wear limit	
front	4.5 mm (0.177 in)

rear	4.5 mm (0.177 in)
Tire pressure when solo	
front: with cold tires	2.5 bar (36.3 psi)
rear: with cold tires	2.5 bar (36.3 psi)
Final drive	17:38 **Note** Modifications to the transmission ratio are not permitted and can lead to malfunctions.
Chain	5/8 x 5/16" (525) X–ring
Steering head angle	65.3° (1.140 rad)
Wheelbase	1,491 mm (58.70 in)
Seat Height unloaded	834 mm (32.83 in)
Ground clearance unloaded	149 mm (5.87 in)
Weight without fuel approx.	200 kg (440.9 lb)
Maximum permissible front axle load	165 kg (363.8 lb)
Maximum permissible rear axle load	260 kg (573.2 lb)
Maximum permissible total weight	425 kg (937.0 lb)

23.2.2 Technical data - tires

Tire front	Rear tire
120/70 ZR 17 M/C 58W TL Michelin Power GP	**200/55 ZR 17 M/C 78W TL** Michelin Power GP
The tires specified represent one of the possible series production tires. For alternative manufacturers, if any, contact an authorized manufacturer or qualified tire dealership. If local road approval regulations apply, these and the respective technical specifications must be observed.	

23.2.3 Fuel



Please observe the labels on EU fuel pumps.

23.2.4 Capacities - vehicle

Total fuel tank capacity, approx.	
Super unleaded (ROZ 95) (p. 178)	17.5 l (4.62 liq. gal_{US})
Fuel reserve, approx.	
Super unleaded (ROZ 95) (p. 178)	3.5 l (0.92 liq. gal_{US})

23.3 Electrics

23.3.1 Electrics

12 V battery	YTZ14S	Battery voltage: 12 V Nominal capacity: 11.2 Ah Maintenance-free
Button cell	CR 2032	3 V

23.3.2 Fuses

Fuse	75011088075	7.5 A
Fuse	75011088010	10 A
Fuse	75011088015	15 A
Fuse	75011088025	25 A
Fuse	58011109130	30 A

23.3.3 Lamps

Low beam/high beam	LED
Daytime running light/position light	LED
Dashboard illumination and indicator lights	LED
Turn signal	LED
Tail light	LED
Brake light	LED
License plate lighting	LED

23.4 Fork

23.4.1 Technical data - fork

Fork part number	A624C122X407000

Fork	**WP Suspension Semi–active Suspension**
Spring length with preload spacer(s)	284 mm (11.18 in)
Spring rate	
Medium (standard)	19 N/mm (108.5 lb_f/in)
Fork length	752 mm (29.61 in)

23.4.2 Fork oil capacity

Fork oil, fork leg, left	
Fork oil (48601166S1) (SAE 4) (p. 179)	515 ml (17.41 fl. oz_{US})
Fork oil, fork leg, right	
Fork oil (48601166S1) (SAE 4) (p. 179)	640 ml (21.64 fl. oz_{US})

23.5 Shock absorber

23.5.1 Technical data - shock absorber

Shock absorber part number	A624C422X307000

Shock absorber	**WP Suspension Semi–active Suspension**
Spring rate	
Medium (standard)	85 N/mm (485.4 lb_f/in)
Spring length	197 mm (7.76 in)
Gas assisted	10 bar (145 psi)
Static sag	8.8 mm (0.346 in)
Installation position	356 mm (14.02 in)

23.5.2 Shock absorber capacity

Shock absorber oil	
Shock absorber oil (50180751S1) (SAE 2.5) (p. 180)	Fill to the maximum mark

23.6 Tightening torque

23.6.1 Engine tightening torques

Hose clip, intake flange M4	1.5 Nm (1.11 ft·lb$_f$)
Screw, gear position sensor M5	5 Nm (3.7 ft·lb$_f$) **Loctite® 243**
Screw, crankshaft position sensor M5	6 Nm (4.4 ft·lb$_f$) **Loctite® 243**
Screw, bearing retainer M5	5 Nm (3.7 ft·lb$_f$) **Loctite® 243**
Remaining screws for engine M5	6 Nm (4.4 ft·lb$_f$)
Screw, engine oil level viewer M5	4 Nm (3.0 ft·lb$_f$) **Loctite® 243**
Screw, oil filter cover M5	6 Nm (4.4 ft·lb$_f$)
Screw, shift shaft sensor M5	5 Nm (3.7 ft·lb$_f$) **Loctite® 243**
Piston jet 70 M5	2 Nm (1.5 ft·lb$_f$) **Loctite® 243**
Position sensor, valve cams M5	6 Nm (4.4 ft·lb$_f$)
Double pin actuator M5	5 Nm (3.7 ft·lb$_f$)
Cam lever shaft, lock screw M5	3 Nm (2.2 ft·lb$_f$)
Screw, swingarm sensor M5×12 – 8.8	5 Nm (3.7 ft·lb$_f$) **Loctite® 243**
Camshafts, oil spray jet M5	2 Nm (1.5 ft·lb$_f$) **Loctite® 243**
Screw, cable duct on the engine fixing arm M5	5 Nm (3.7 ft·lb$_f$)
Crankhouse ventilation nozzle 100 M6×0.75	3 Nm (2.2 ft·lb$_f$) **Loctite® 243**
Bleed screw, water pump cover M6	10 Nm (7.4 ft·lb$_f$)
Cylinder head bleed screw M6	6 Nm (4.4 ft·lb$_f$)

Nut, cylinder head M6	8 Nm (5.9 ft·lb$_f$)
Screw, oil filler hose M6	10 Nm (7.4 ft·lb$_f$) **Loctite® 243**
Screw, oil/water heat exchanger M6	10 Nm (7.4 ft·lb$_f$) **Loctite® 243**
Detent arm screw M6	10 Nm (7.4 ft·lb$_f$) **Loctite® 243**
Screw, kickstarter gear support M6	10 Nm (7.4 ft·lb$_f$) **Loctite® 243**
Screw, freewheel ring M6	15 Nm (11.1 ft·lb$_f$)
Stud, timing chain shaft M6	3 Nm (2.2 ft·lb$_f$)
Screw, coolant connection on the cylinder head M6	8 Nm (5.9 ft·lb$_f$) **Loctite® 243**
Screw, clutch cover M6	10 Nm (7.4 ft·lb$_f$)
Screw, clutch spring M6	12 Nm (8.9 ft·lb$_f$)
Screw, engine case M6×55	10 Nm (7.4 ft·lb$_f$)
Screw, engine case M6×70	10 Nm (7.4 ft·lb$_f$)
Screw, engine case M6×90	10 Nm (7.4 ft·lb$_f$)
Screw, camshaft bearing support M6	10 Nm (7.4 ft·lb$_f$)
Screw, oil pump cover M6	10 Nm (7.4 ft·lb$_f$) **Loctite® 243**
Shift star screw M6 – 12.9	15 Nm (11.1 ft·lb$_f$) **Loctite® 243**
Screw, shift lever M6	18 Nm (13.3 ft·lb$_f$)
Screw, secondary air system, cylinder head M6	10 Nm (7.4 ft·lb$_f$)
Screw, starter motor M6	10 Nm (7.4 ft·lb$_f$)
Stator screw M6	10 Nm (7.4 ft·lb$_f$) **Loctite® 243**

Screw, valve cover M6	10 Nm (7.4 ft·lb$_f$)
Screw, ignition cover M6	10 Nm (7.4 ft·lb$_f$)
Screw, retaining bracket, valve cover, rear **EJOT PT®** – M6×12	8 Nm (5.9 ft·lb$_f$)
Screw, water pump cover M6	10 Nm (7.4 ft·lb$_f$)
Screw, water pump impeller M6	10 Nm (7.4 ft·lb$_f$) **Loctite® 243**
Remaining screws for engine M6	10 Nm (7.4 ft·lb$_f$)
Screw, guide rail M6	10 Nm (7.4 ft·lb$_f$) **Loctite® 243**
Screw, tube for oil/water heat exchanger M6	10 Nm (7.4 ft·lb$_f$) **Loctite® 243**
Screw, ignition coil M6	8 Nm (5.9 ft·lb$_f$)
Oil nozzle for clutch lubrication M6×0.75	2 Nm (1.5 ft·lb$_f$)
Intake sleeve M6	10 Nm (7.4 ft·lb$_f$) **Loctite® 243**
Chain shaft screw M6	10 Nm (7.4 ft·lb$_f$)
Nut, starter cable M6	4 Nm (3.0 ft·lb$_f$)
Screw, camshaft bearing support M7×1	14 Nm (10.3 ft·lb$_f$)
Stud, exhaust flange M8	10 Nm (7.4 ft·lb$_f$)
Bearing bolt, slide bars M8	15 Nm (11.1 ft·lb$_f$) **Loctite® 243**
Crankshaft fixing screw M8	12 Nm (8.9 ft·lb$_f$)
Screw, engine case (expansion screw) M8	18 Nm (13.3 ft·lb$_f$)
Bearing bolt, slide rail M8	15 Nm (11.1 ft·lb$_f$) **Loctite® 243**
Screw plug, spreading transmission lock M10×1	12 Nm (8.9 ft·lb$_f$)
Screw, engine brace M10	45 Nm (33.2 ft·lb$_f$)

Oil pressure sensor M10×1		15 Nm (11.1 ft·lb$_f$)
Screw, release for timing chain tensioner M10×1		8 Nm (5.9 ft·lb$_f$)
Screw plug, clutch lubrication M10×1		8 Nm (5.9 ft·lb$_f$)
Screw, conrod bearing M10×1	1.	10 Nm (7.4 ft·lb$_f$)
	2.	15 Nm (11.1 ft·lb$_f$)
	3.	90° (1.57 rad)
Screw plug, cam lever shaft M10×1		12 Nm (8.9 ft·lb$_f$)
Coolant temperature sensor M10×1.25		12 Nm (8.9 ft·lb$_f$)
Spark plug (outside) M10×1		11 Nm (8.1 ft·lb$_f$)
Cylinder head screw M11×1.5 engine oil	1.	15 Nm (11.1 ft·lb$_f$)
	2.	30 Nm (22.1 ft·lb$_f$)
	3.	90° (1.57 rad)
	4.	90° (1.57 rad)
Screw, rotor M12×1.5		115 Nm (84.8 ft·lb$_f$)
Spark plug (central) M12×1.25		18 Nm (13.3 ft·lb$_f$)
Screw, shock absorber bell crank M12		80 Nm (59.0 ft·lb$_f$)
Oil drain plug M20×1.5		20 Nm (14.8 ft·lb$_f$)
Nut, engine sprocket M20×1.5		100 Nm (73.8 ft·lb$_f$) **Loctite® 243**
Nut, engine sprocket M20×1.5		100 Nm (73.8 ft·lb$_f$) **Loctite® 243**
Nut, inner clutch hub M22×1.5		150 Nm (110.6 ft·lb$_f$)
Screw plug, alternator cover M24×1.5		8 Nm (5.9 ft·lb$_f$)
Screw plug, timing chain tensioner M24×1.5		25 Nm (18.4 ft·lb$_f$)

Nut, primary gear wheel M33LH×1.5	130 Nm (95.9 ft·lb$_f$) **Loctite® 243**
Screw, secondary air system, air box lower part **EJOT DELTA PT®** – K50×16	2 Nm (1.5 ft·lb$_f$)
Screw, intake air temperature sensor **EJOT PT®** – K50×16	2 Nm (1.5 ft·lb$_f$)

23.6.2 Chassis tightening torques

Brake fluid reservoir for rear brake cover	3.5 Nm (2.58 ft·lb$_f$)
Brake fluid reservoir for front brake cover	1 Nm (0.7 ft·lb$_f$)
Screw, fixed grip, left M4	3 Nm (2.2 ft·lb$_f$)
Remaining nuts on chassis M5	5 Nm (3.7 ft·lb$_f$)
Remaining screws on chassis M5	5 Nm (3.7 ft·lb$_f$)
Screw, 6D sensor holder M5	2.7 Nm (1.99 ft·lb$_f$) **Loctite® 243**
Screw, intake trumpet M5	6 Nm (4.4 ft·lb$_f$)
Screw, heat protector on main silencer M5	4 Nm (3.0 ft·lb$_f$)
Screw, Denso throttle grip M5	3.5 Nm (2.58 ft·lb$_f$)
Screw, wiring harness holding bracket M5	5 Nm (3.7 ft·lb$_f$)
Screw, injection valve M5	4 Nm (3.0 ft·lb$_f$) **Loctite® 243**
Screw, cable channel M5	5 Nm (3.7 ft·lb$_f$)
Screw, chain slider guard M5	5 Nm (3.7 ft·lb$_f$)
Screw, combination switch, left M5	5 Nm (3.7 ft·lb$_f$)
Screw, combination switch, right M5	5 Nm (3.7 ft·lb$_f$)
Screw, fuel level sensor M5	3 Nm (2.2 ft·lb$_f$)
Screw, radiator fan cover M5	3.2 Nm (2.36 ft·lb$_f$)
Preload adjuster screw M5	5 Nm (3.7 ft·lb$_f$)

Screw, fuel tank spoiler M5	3.5 Nm (2.58 ft·lb$_f$)
Screw, fuel tank cap M5	3 Nm (2.2 ft·lb$_f$)
Screw, trim M5	3.5 Nm (2.58 ft·lb$_f$)
Screw, headlight locking cap M5	3.5 Nm (2.58 ft·lb$_f$)
Screw, front turn signal bracket M5	2 Nm (1.5 ft·lb$_f$)
Screw, rear turn signal bracket M5	2 Nm (1.5 ft·lb$_f$)
Screw, turn signal on turn signal bracket M5	2 Nm (1.5 ft·lb$_f$)
Screw, combination instrument M5	1 Nm (0.7 ft·lb$_f$)
screw, absorbing element, combination instrument M5	2 Nm (1.5 ft·lb$_f$) **Loctite® 243**
Ground fitting on frame M6	10 Nm (7.4 ft·lb$_f$)
Cable disk nut, exhaust valve control unit M6	14 Nm (10.3 ft·lb$_f$)
Nut, cable on starter motor M6	4 Nm (3.0 ft·lb$_f$)
Remaining nuts on chassis M6	10 Nm (7.4 ft·lb$_f$)
Remaining screws on chassis M6	10 Nm (7.4 ft·lb$_f$)
Screw, 6D sensor M6	6 Nm (4.4 ft·lb$_f$)
Screw, battery compartment M6	6 Nm (4.4 ft·lb$_f$)
Screw, battery terminal M6	4.5 Nm (3.32 ft·lb$_f$)
Screw, ball joint of push rod on brake cylinder M6	5 Nm (3.7 ft·lb$_f$) **Loctite® 243**
Screw, step plate for foot brake lever M6	10 Nm (7.4 ft·lb$_f$)
Screw, brake cylinder M6	10 Nm (7.4 ft·lb$_f$) **Loctite® 243**
Screw, cooler retaining bracket M6	7 Nm (5.2 ft·lb$_f$)
Screw, horn M6×15	5 Nm (3.7 ft·lb$_f$)

Screw, instrument support M6	2 Nm (1.5 ft·lb$_f$)
Screw, cable on starter relay M6	6 Nm (4.4 ft·lb$_f$)
Screw, license plate holder on lower rear panel M6	8 Nm (5.9 ft·lb$_f$)
Screw, front sprocket cover M6	8 Nm (5.9 ft·lb$_f$)
Screw, fuel pump M6	6 Nm (4.4 ft·lb$_f$)
Screw, radiator bracket M6	5 Nm (3.7 ft·lb$_f$)
Screw, clutch lever assembly M6	5 Nm (3.7 ft·lb$_f$) **Loctite® 243**
Screw, steering damper bracket on frame M6	8 Nm (5.9 ft·lb$_f$) **Loctite® 243**
Screw, rear wheel speed sensor M6	4 Nm (3.0 ft·lb$_f$)
Screw, front wheel speed sensor M6	4 Nm (3.0 ft·lb$_f$)
Screw, shift lever stub M6	10 Nm (7.4 ft·lb$_f$)
Screw, shift rod M6	5 Nm (3.7 ft·lb$_f$) **Loctite® 243**
Screw, shift shaft deflector on shift shaft M6	18 Nm (13.3 ft·lb$_f$) **Loctite® 243**
Screw, radiator hoses clip M6	3 Nm (2.2 ft·lb$_f$)
Screw, side stand sensor M6	8 Nm (5.9 ft·lb$_f$)
Screw, voltage regulator M6	6 Nm (4.4 ft·lb$_f$)
Fuel tank cover screw M6	5 Nm (3.7 ft·lb$_f$)
Screw, fuel tank bridge M6	8 Nm (5.9 ft·lb$_f$)
Screw, fuel tank spoiler M6	6 Nm (4.4 ft·lb$_f$)
Screw, front fuel tank M6	8 Nm (5.9 ft·lb$_f$)
Screw, ABS modulator fastening M6	8 Nm (5.9 ft·lb$_f$)
Screw, brake assembly M6	5 Nm (3.7 ft·lb$_f$)

Screw, fuse box support M6	6 Nm (4.4 ft·lb$_f$)
Nut, exhaust valve throttle cable M6×1	5 Nm (3.7 ft·lb$_f$)
Screw, rider seat lock M6	5 Nm (3.7 ft·lb$_f$) **Loctite® 243**
Screw, passenger seat lock M6	6.5 Nm (4.79 ft·lb$_f$) **Loctite® 243**
Screw, rear header M6	10 Nm (7.4 ft·lb$_f$) **Loctite® 243**
Screw, front header M6	7 Nm (5.2 ft·lb$_f$) **Loctite® 243**
Nut, rear sprocket M8	36 Nm (26.6 ft·lb$_f$) **Loctite® 243**
Nut, shift rod M8	12 Nm (8.9 ft·lb$_f$)
Remaining nuts on chassis M8	25 Nm (18.4 ft·lb$_f$)
Remaining screws on chassis M8	25 Nm (18.4 ft·lb$_f$)
Screw, exhaust clamp on main silencer M8	12 Nm (8.9 ft·lb$_f$)
Screw, rear brake disc M8	28 Nm (20.7 ft·lb$_f$) **Loctite® 243**
Screw, front brake disc M8	28 Nm (20.7 ft·lb$_f$) **Loctite® 2701**
Rear brake caliper screw M8	25 Nm (18.4 ft·lb$_f$) **Loctite® 2701**
Screw, foot brake lever M8	20 Nm (14.8 ft·lb$_f$) **Loctite® 243**
Passenger footrest support screw M8×25	25 Nm (18.4 ft·lb$_f$) **Loctite® 243**
Passenger footrest support screw M8×35	25 Nm (18.4 ft·lb$_f$) **Loctite® 243**
Screw, top triple clamp M8	18 Nm (13.3 ft·lb$_f$)

Screw, bottom triple clamp M8	15 Nm (11.1 ft·lb$_f$)
Screw, fork shoe M8	15 Nm (11.1 ft·lb$_f$)
Handlebar clamp screw M8	20 Nm (14.8 ft·lb$_f$)
Screw, steering damper on triple clamp M8	8 Nm (5.9 ft·lb$_f$) **Loctite® 243**
Screw, subframe metal flange M8	25 Nm (18.4 ft·lb$_f$) **Loctite® 243**
Screw, cross connector on lower rear panel M8	15 Nm (11.1 ft·lb$_f$) **Loctite® 243**
Screw, shift lever on footrest support M8	20 Nm (14.8 ft·lb$_f$) **Loctite® 243**
Screw, side stand spring M8	15 Nm (11.1 ft·lb$_f$) **Loctite® 2701**
Screw, side stand bracket M8	25 Nm (18.4 ft·lb$_f$) **Loctite® 243**
Screw, subframe brace M8	15 Nm (11.1 ft·lb$_f$) **Loctite® 243**
Screw, presilencer M8	25 Nm (18.4 ft·lb$_f$) **Loctite® 243**
Screw, ignition lock (tamper-proof screw) M8	25 Nm (18.4 ft·lb$_f$)
Screw, steering stem clamp M8	20 Nm (14.8 ft·lb$_f$) **Loctite® 243**
Nut, valve M8	6 Nm (4.4 ft·lb$_f$) **Loctite® 243**
Screw, front rider footrest bracket M8	25 Nm (18.4 ft·lb$_f$) **Loctite® 243**
Subframe screw M8	35 Nm (25.8 ft·lb$_f$) **Loctite® 243**
Cable disk nut, exhaust valve M8	7 Nm (5.2 ft·lb$_f$)
Screw, presilencer exhaust clamp M8	17 Nm (12.5 ft·lb$_f$)

Nut, rear hub shock absorber carrier M10×1.25	45 Nm (33.2 ft·lb$_f$) **Loctite® 243**
Remaining nuts on chassis M10	45 Nm (33.2 ft·lb$_f$)
Remaining screws on chassis M10	45 Nm (33.2 ft·lb$_f$)
Banjo bolt, brake line M10×1	25 Nm (18.4 ft·lb$_f$)
Banjo bolt, brake line, connecting piece, rear M10×1	25 Nm (18.4 ft·lb$_f$)
Screw, front brake caliper M10	45 Nm (33.2 ft·lb$_f$) **Loctite® 243**
Screw, engine brace M10	45 Nm (33.2 ft·lb$_f$) **Loctite® 243**
Screw, headlight bracket at bottom M10	5 Nm (3.7 ft·lb$_f$)
Screw, side stand M10	40 Nm (29.5 ft·lb$_f$) **Loctite® 243**
Screw, side stand bracket M10	55 Nm (40.6 ft·lb$_f$) **Loctite® 243**
Screw, handlebar mount M10	40 Nm (29.5 ft·lb$_f$) **Loctite® 243**
Oxygen sensor M12×1.25	24.5 Nm (18.07 ft·lb$_f$)
Screw, brake caliper support M12	28 Nm (20.7 ft·lb$_f$)
Screw, triangular lever on link fork M12	80 Nm (59.0 ft·lb$_f$) **Loctite® 243**
Top shock absorber screw M12	80 Nm (59.0 ft·lb$_f$) **Loctite® 243**
Bottom shock absorber screw M12	80 Nm (59.0 ft·lb$_f$) **Loctite® 243**
Screw, side stand bracket M12	80 Nm (59.0 ft·lb$_f$) **Loctite® 243**
Screw, eccentric M16	70 Nm (51.6 ft·lb$_f$)

Nut, swingarm pivot M19×1.5		130 Nm (95.9 ft·lb$_f$) Long-life grease
Bushing, shock absorber support M20LH×1.5		10 Nm (7.4 ft·lb$_f$) Long-life grease
Screw, shock absorber support M20×1.5		10 Nm (7.4 ft·lb$_f$) Long-life grease
Screw, top steering head M20×1.5		12 Nm (8.9 ft·lb$_f$)
Nut, seat lock M22×1.5		3 Nm (2.2 ft·lb$_f$)
Screw, wheel spindle, front M25×1.5		45 Nm (33.2 ft·lb$_f$) Long-life grease
Nut, rear axle, rear hub shock absorber side M35×1.5 **Loctite® 262**	Seal the safety wire with thread lock	200 Nm (147.5 ft·lb$_f$)
Screw, radiator fan cover **EJOT DELTA PT®** – 40×46/10		1 Nm (0.7 ft·lb$_f$)
Screw, fan hood on radiator MK40×46		2.2 Nm (1.62 ft·lb$_f$)
Remaining screws on chassis **EJOT DELTA PT®** – K40×12		1.2 Nm (0.89 ft·lb$_f$)
Remaining screws on chassis **EJOT PT®** – K45×12		1.2 Nm (0.89 ft·lb$_f$)
Nut, rear axle M50×1.5		250 Nm (184.4 ft·lb$_f$) Long-life grease Seal the safety wire with thread lock
Remaining screws on chassis **EJOT PT®** – K50×12		1.2 Nm (0.89 ft·lb$_f$)
Remaining screws on chassis **EJOT PT®** – K50×14		1.5 Nm (1.11 ft·lb$_f$)
Remaining screws on chassis **EJOT PT®** – K50×16		2.2 Nm (1.62 ft·lb$_f$)
Remaining screws on chassis **EJOT PT®** – K50×18		2.2 Nm (1.62 ft·lb$_f$)
Screw, intake air temperature sensor **EJOT PT®** – K50×16		2 Nm (1.5 ft·lb$_f$)
Screw, ball head holder on headlight **EJOT ALtracs®** – 50×12		7 Nm (5.2 ft·lb$_f$)
Screw, tail light **EJOT PT®** – K50×14		1.5 Nm (1.11 ft·lb$_f$)
Screw, SAS on air filter box **EJOT PT®** – K50×16		2 Nm (1.5 ft·lb$_f$)

Screw, air filter box cover **EJOT PT®** – K60×30	2.5 Nm (1.84 ft·lb$_f$)

24.1 Recycling



I02045-10

Further information is available at the following website.
Recycling information website: https://www.quefairedemesdechets.fr

25.1 Declarations of conformity

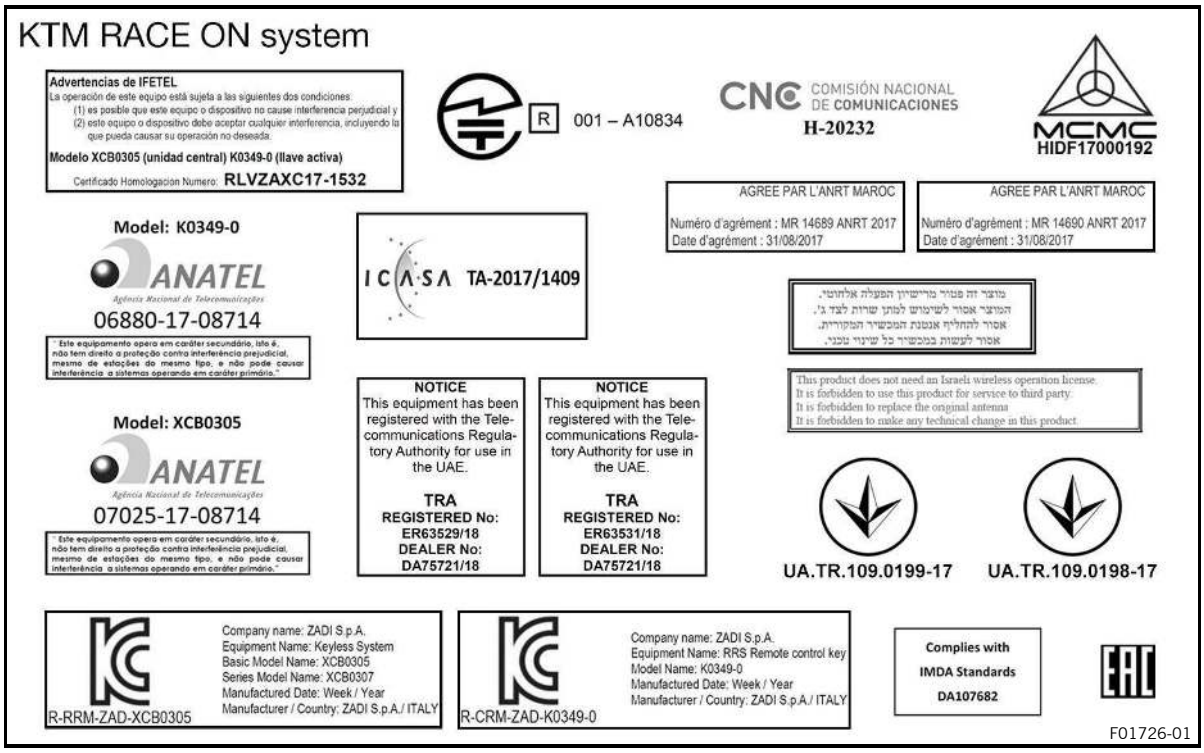
Note
The functional and equipment scope is model-dependent and may not include all wireless systems and application areas referred to.

Polaris hereby declares that the **Connectivity Control Unit "CCU–2"** wireless system conforms with the relevant guidelines. The full text of the Declaration of Conformity is available at the following Internet address.
Certification website: https://www.ktm.com/ccu-2

KTM AG hereby declares that the **KTM RACE ON system** wireless system conforms with the relevant guidelines. The full text of the Declaration of Conformity is available at the following Internet address.
Certification website: https://www.ktm.com/ktm-race-on-system

Schrader Electronics Ltd hereby declares that the **Tyre Pressure Monitoring System** wireless system conforms with the relevant guidelines. The full text of the Declaration of Conformity is available at the following Internet address.
Certification website: https://www.ktm.com/tpms

25.2 Country-specific declarations of conformity



25.3 Country-specific declarations of conformity



S05603-01

A Technical terms

ABS	Anti-lock braking system	Safety system that prevents locking of the wheels when riding straight ahead without the influence of lateral forces.
ARA	anti-relay attack	Safety system that deactivates the wireless response of the RACE ON key after a certain time and thus increases security against theft
ATIR	Automatic Turn Indicator Reset	Software, which automatically switches the turn signal off according to a time or travel distance counter.
DRL	Daytime Running Light	Light that increases the visibility of the vehicle during the day, but unlike the low beam is not focused and does not illuminate the road ahead.
	KTM RACE ON	System that releases the ignition, steering lock, and fuel tank filler cap via a remote key with a transponder
	KTMconnect	System for remote communication with suitable cell phones and communication systems for telephony and audio
	Launch control	Vehicles electronics functions for achieving the best possible acceleration from a standing position
MTC	Motorcycle Traction Control	Additional engine management function, where the engine torque is reduced in the event of rear wheel slip.
OBD	On-board diagnosis	Vehicle system that monitors the specified parameters of the vehicle electronics.
	QUICKSHIFTER+	Engine electronics function for shifting up and down without clutch actuation

B Fuels

Super unleaded

Standards

• ROZ 95	→ DIN EN 228

Fuel additive

Recommended supplier

MOTOREX®

- **FUEL STABILIZER**

C Operating supplies

Street chain spray

Recommended supplier

MOTOREX®

- **CHAINLUBE ROAD STRONG**

Fork oil

Order details

- 48601166S1

Standards

- SAE 4 → SAE

Universal oil spray

Recommended supplier

MOTOREX®

- **JOKER 440 SYNTHETIC**

Long-life grease

Recommended supplier

MOTOREX®

- **Bike Grease 2000**

engine oil

Recommended supplier

MOTOREX®

- **POWER SYNT 4T**

Standards

→ JASO T903 MA2

- SAE 10W/50 → SAE

Properties

- fully synthetic

engine oil

Recommended supplier

MOTOREX®

- **POWER SYNT 4T**

Standards	
→ JASO T903 MA2	
• SAE 5W/40	→ SAE
Properties	
• fully synthetic	

Seal the safety wire with thread lock

Shock absorber oil

Order details	
• 50180751S1	
Standards	
• SAE 2.5	→ SAE

Brake fluid DOT 5.1

Recommended supplier	
MOTOREX®	
• **BRAKE FLUID DOT 5.1**	
Standards	
→ DOT	

Coolant

Recommended supplier	
MOTOREX®	
• **COOLANT M3.0**	
Properties	
• Antifreeze protection to at least	−25 °C (−13.0 °F)

D Electrics

Low beam/high beam (LED)

Product code

- LED

Button cell (CR 2032)

Product code

- CR 2032

Properties

- 3 V

12 V battery (YTZ14S)

Product code

- YTZ14S

Properties

• Battery voltage	12 V
• Nominal capacity	11.2 Ah
• Maintenance-free	

Turn signal (LED)

Product code

- LED

Brake light (LED)

Product code

- LED

License plate lighting (LED)

Product code

- LED

Dashboard illumination and indicator lights (LED)

Product code

- LED

Tail light (LED)

Product code

- LED

Fuse (75011088010)

Product code

- 75011088010

Properties

- 10 A

Fuse (75011088015)

Product code

- 75011088015

Properties

- 15 A

Fuse (75011088025)

Product code

- 75011088025

Properties

- 25 A

Fuse (58011109130)

Product code

- 58011109130

Properties

- 30 A

Fuse (75011088075)

Product code

- 75011088075

Properties

- 7.5 A

Daytime running light/position light (LED)

Product code

- LED

E Cleaning agents

Shine spray with beading effect

Recommended supplier

MOTOREX®

- **MOTO SHINE MS1**

Chain cleaner

Recommended supplier

MOTOREX®

- **CHAIN CLEAN**

Preserving materials

Recommended supplier

MOTOREX®

- **MOTO PROTECT**

Cleaning agents for plastics, glass, lacquers, metals, windshields and visors

Recommended supplier

MOTOREX®

- **QUICK CLEANER**

Environmentally neutral universal cleaning agent

Recommended supplier

MOTOREX®

- **MOTO CLEAN UNIVERSAL**

F Icons

F.1 Symbol colors

F.1.1 Red symbols

Red symbols indicate a fault status that requires immediate intervention.

	The oil pressure warning light lights up red – The oil pressure is too low. Stop immediately, taking care not to endanger yourself or other road users in the process, and switch off the engine.
	The oil pressure warning light lights up red

F.1.2 Yellow and orange symbols

Yellow and orange symbols indicate a malfunction status that requires prompt intervention. Active driving aids are also represented by yellow or orange symbols.

	The malfunction indicator light lights up yellow – The **OBD** has detected a malfunction in the vehicle electronics.
	General warning light lights up yellow – A note/warning note on operating safety has been detected. This is also shown in the display.
	ABS warning light lights up yellow
	The ABS rear warning light lights up yellow
	The malfunction indicator light lights up yellow
	TC indicator lamp lights up/flashes yellow
	The cruise control system indicator lamp (optional) lights up yellow
	General warning light lights up yellow

F.1.3 Green and blue symbols

Green and blue symbols convey information.

	The turn signal indicator light flashes green with a steady blinking interval
	The high beam indicator lamp lights up blue
	The cruise control system indicator lamp (optional) lights up green
	The idle indicator lamp lights up green

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