

Owner's Manual

Tornado Naked Tre 1130 - Tornado Naked Tre Sport Cafè 1130 Racer - Titanium https://www.motorcycle-manual.com/





2Safety information52.1Safety52.1.1Motorcycle modification and trim personalization52.1.2General safety regulations62.1.3Vehicle load82.1.4Use of the vehicle in competitions92.1.5Advices for safe riding92.1.6Protective clothing122.1.7Suggestions against theft132.2Safety - Visual and acoustic signals143Controls and instruments153.1Location of controls and instruments153.2Sidestand163.3Handlebar controls, left side173.4Handlebar controls, right side193.5Ignition switch and steering lock213.6Gear lever233.7Instruments and warning lights243.7.1Multifunction display25	1 1.1 1.2	General information1Symbols2Identification data3	
2.1Safety52.1.1Motorcycle modification and trim personalization52.1.2General safety regulations62.1.3Vehicle load82.1.4Use of the vehicle in competitions92.1.5Advices for safe riding92.1.6Protective clothing122.1.7Suggestions against theft132.2Safety -Visual and acoustic signals143Controls and instruments153.1Location of controls and instruments153.2Sidestand163.3Handlebar controls, left side173.4Handlebar controls, right side193.5Ignition switch and steering lock213.7Instruments and warning lights24			
2.1.1Motorcycle modification and trim personalization52.1.2General safety regulations62.1.3Vehicle load82.1.4Use of the vehicle in competitions92.1.5Advices for safe riding92.1.6Protective clothing122.1.7Suggestions against theft132.2Safety -Visual and acoustic signals143Controls and instruments153.1Location of controls and instruments153.2Sidestand163.3Handlebar controls, left side173.4Handlebar controls, right side193.5Ignition switch and steering lock213.7Instruments and warning lights24		•	
2.1.2General safety regulations62.1.3Vehicle load82.1.4Use of the vehicle in competitions92.1.5Advices for safe riding92.1.6Protective clothing122.1.7Suggestions against theft132.2Safety -Visual and acoustic signals143Controls and instruments153.1Location of controls and instruments153.2Sidestand163.3Handlebar controls, left side173.4Handlebar controls, right side193.5Ignition switch and steering lock213.7Instruments and warning lights24	2.1.1	Motorcycle modification and trim	
2.1.3Vehicle load82.1.4Use of the vehicle in competitions92.1.5Advices for safe riding92.1.6Protective clothing122.1.7Suggestions against theft132.2Safety -132.1Visual and acoustic signals143Controls and instruments153.1Location of controls and instruments153.2Sidestand163.3Handlebar controls, left side173.4Handlebar controls, right side193.5Ignition switch and steering lock213.6Gear lever233.7Instruments and warning lights24			
2.1.4Use of the vehicle in competitions			
2.1.5Advices for safe riding92.1.6Protective clothing122.1.7Suggestions against theft132.2Safety -13Visual and acoustic signals143Controls and instruments153.1Location of controls and instruments153.2Sidestand163.3Handlebar controls, left side173.4Handlebar controls, right side193.5Ignition switch and steering lock213.6Gear lever233.7Instruments and warning lights24			
2.1.6Protective clothing122.1.7Suggestions against theft132.2Safety -Visual and acoustic signals143Controls and instruments153.1Location of controls and instruments153.2Sidestand163.3Handlebar controls, left side173.4Handlebar controls, right side193.5Ignition switch and steering lock213.6Gear lever233.7Instruments and warning lights24	2.1.4	Use of the vehicle in competitions	
2.1.7Suggestions against theft132.2Safety -Visual and acoustic signals143Controls and instruments153.1Location of controls and instruments153.2Sidestand163.3Handlebar controls, left side173.4Handlebar controls, right side193.5Ignition switch and steering lock213.6Gear lever233.7Instruments and warning lights24	2.1.5	Advices for safe riding 9	
2.2Safety - Visual and acoustic signals143Controls and instruments153.1Location of controls and instruments153.2Sidestand163.3Handlebar controls, left side173.4Handlebar controls, right side193.5Ignition switch and steering lock213.6Gear lever233.7Instruments and warning lights24	2.1.6	Protective clothing12	
2.2Safety - Visual and acoustic signals143Controls and instruments153.1Location of controls and instruments153.2Sidestand163.3Handlebar controls, left side173.4Handlebar controls, right side193.5Ignition switch and steering lock213.6Gear lever233.7Instruments and warning lights24	2.1.7	Suggestions against theft13	
Visual and acoustic signals	2.2		
3Controls and instruments153.1Location of controls and instruments153.2Sidestand			
3.2Sidestand163.3Handlebar controls, left side173.4Handlebar controls, right side193.5Ignition switch and steering lock213.6Gear lever233.7Instruments and warning lights24	3		
3.2Sidestand163.3Handlebar controls, left side173.4Handlebar controls, right side193.5Ignition switch and steering lock213.6Gear lever233.7Instruments and warning lights24	3.1	Location of controls and instruments15	
 3.3 Handlebar controls, left side	3.2		
 3.4 Handlebar controls, right side	-		
 Ignition switch and steering lock21 Gear lever23 Instruments and warning lights24 			
3.6Gear lever			
3.7 Instruments and warning lights24			
÷ ÷			
3.7.1 Wultifunction display25	-		
	3.7.1	wuuuuncuon display25	

4	Operation2	6
4.1	Using the motorcycle2	6
4.2	Preriding checks2	7
4.3	Running-in2	9
4.4	Selecting the display functions	0
4.5	Adjusting the clock	3
4.6	Parking the motorcycle	
4.7	Saddle disassembly driver3	5
4.8	Saddle disassembly passenger3	5
4.9	Refuelling	6
4.10	Starting the engine	8
4.11	Improve our riding skills3	9
		~
5	Adjustments4	0
5 5.1	Adjustments4 List of adjustments4	
•	-	0
5.1	List of adjustments4	0 2
5.1 5.2	List of adjustments4 Recapitulatory table of adjustments4	0 2 3
5.1 5.2 5.3	List of adjustments4 Recapitulatory table of adjustments4 Adjustments that can be done by user4	0 2 3 3
5.1 5.2 5.3 5.3.1	List of adjustments4 Recapitulatory table of adjustments4 Adjustments that can be done by user4 Front brake lever adjustment4	0 2 3 3 3
5.1 5.2 5.3 5.3.1 5.3.2	List of adjustments4 Recapitulatory table of adjustments4 Adjustments that can be done by user4 Front brake lever adjustment4 Adjusting the rearview mirrors4	0 2 3 3 3 4
5.1 5.2 5.3 5.3.1 5.3.2 5.3.2 5.3.3	List of adjustments4 Recapitulatory table of adjustments4 Adjustments that can be done by user4 Front brake lever adjustment4 Adjusting the rearview mirrors4 Front projector regulation4	0 2 3 3 4 4
5.1 5.2 5.3 5.3.1 5.3.2 5.3.3 5.3.3 5.3.4	List of adjustments	0 2 3 3 4 4
5.1 5.2 5.3 5.3.1 5.3.2 5.3.3 5.3.4 5.3.5	List of adjustments	0 2 3 3 3 4 4 5
5.1 5.2 5.3 5.3.1 5.3.2 5.3.3 5.3.4 5.3.5	List of adjustments4 Recapitulatory table of adjustments4 Adjustments that can be done by user4 Front brake lever adjustment4 Adjusting the rearview mirrors4 Front projector regulation4 Adjustment of minimum engine rpm4 Front projector lamps replacement4 Adjustments that has to be done by a	0 2 3 3 3 4 4 5 6





5.5	Adjusting the rear suspension47
5.5.1	Adjusting rear suspension spring
	preload49
5.5.2	Adjusting rear suspension rebound
	damper hydraulic device49
6	Maintenance51
6.1	Tables of scheduled maintenance
	and checks51
6.2	Tools and accessories supplied60
6.3	Table of lubricants and fluids61
6.4	Checking the engine oil level62
6.4.1	Topping up the engine oil level63
6.5	Checking the coolant level65
6.5.1	Topping up the coolant level66
6.6	Checking the wear of the brake pads68
6.7	Checking the brake fluid level69
6.8	Checking the tires and rims71
6.8.1	Checking of the rims and the wheel rims73
6.9	Cleaning checking and lubricating
	the drive chain74
6.9.1	Cleaning75
6.9.2	Lubrification75
6.10	Checking the idle speed76







1 General information

Dear Customer,

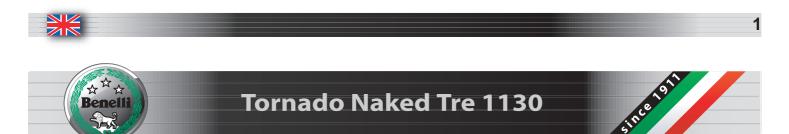
We invite you to read this Owner's Manual before using your new TORNADO NAKED TRE 1130.

It contains important information for a sefe use of the vehicle and to keep it in perfect working order. Keep it by putting it in the special papers-case compartment.

We remain you, however, that TORNADO NAKED TRE 1130 is a higt performance vehicle thet needs to be ride with attention and skill.

You better refrain from driving the vehicle out of bounds, if you are not sure of tour ability in managing it; however, when you ride on public street or open to the public, you have to scrupulously observe the Highway Code.

Always remember to use a homologated helmet, of your size, and always correctly laced up. We recommend you, besides, always to wear an appropriate protective wear.



1.1 Symbols

In order to make more simple and readibly the most important information, we have used the following symbols:



Danger – Warns you that there is a serious instrinsic danger that could cause personal injuries and deadly accidents in case you don't follow the supplied directions.



Warning – Warns you that there is a danger that could cause personal injuries and deadly accidents in case you don't follow the supplied directions.



Caution – Reminds you a safety practice you better follow or an unsafety activity you better avoid if you don't want to risk undergo personal injuries or to damage your vehicle.

Benelli Q.J. reserves the right to make any changes, whenever deemed, to its products and to this manual. Wherever you will find any dissimilarity between what is written on tihs Owner's Manual and the specific fitting-out of your vehicle, don't hesitate to download from the web site *www.benelli.com* the update version of the Owner's Manual, or contact the Customer Service Benelli Q.J. calling +39 0721.418740, which will arrange to send to you the new update version.





- 1. vehicle identification number
- 2. engine serial number
- 3. homologation data

We recommend writing down the main numbers in the spaces provided below.

FRAME No.	ZBN
ENGINE No.	
COLOR CODE	
KEY No.	



Tornado Naked Tre 1130

Identification motorcycle

The motorcycle is identified by the matriculation frame number.

Motorcycle key identification

The key, supplied in four copies, can be used both for starting the motorcycle and for operating all the locks. Keep the key copies in a safe place.

Knowing the key identification number is essential in case you need to ask for a duplicate of the key.

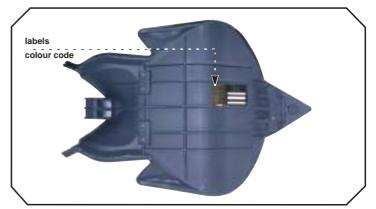
Identification of motorcycle colour combination

The colour code must be mentioned when ordering body spares. This code can be read on the labels placed under the saddle.

Spare parts order

If you need to order spare parts, beside the matriculation frame number, it can be necessary to mention the engine number, the colour code and the key identification number.











2 Safety information

2.1 Safety

2.1.1 Motorcycle modification and trim personalization



WARNING It is strictly frobidden to intervene on the vehicle by modifying the mechanical components or by replacing them with non genuine spare parts. All this activities make the vehicle homologation forfait rendering it unusable for public street use, and can also cause serious damages for the user and for the vehicle itself. Benelli Q.J. is not responsablefor any damage to persons or things caused by any modifications of the motorcycle original conditions.



It is possible to personalize the suspension trim by working on the special adjustments this activity is absolutely unwary unless the user is absolutely confident in his technical ability. The trim adjustment can compromise the motorcycle safe use and, therefore, it has to be done only by expert persons. Wherever you want to personalize the motorcycle trim in relation to your personal requirements, we suggest you to apply to a Benelli Q.J. Authorized Workshop. You can find the Benelli Q.J. Authorized Workshop list on Benelli Q.J. web site *www.benelli.com* or calling the Benelli Q.J. Customer Service dialling +39 0721.418740.





2.1.2 General safety regulations

Before you start riding make sure you keep in mind the controls, characteristics, working and limits of the motorcycle.

In order to guarantee the vehicul maximum efficiency and reliability it is essential that your Benelli Q.J. Authorized workshop does all the maintenance operations written on the "Maintenaquce" section of this Owner's Manual, following carefully all the directions and suggestions.

We advise you against having the maintenance operations and the repairs done by persons or workshop that don't belong to the Benelli Q.J. Authorized Workshop net. Especially we advise you against doing on your own the maintenance operations and the repairs on your *TORNADO NAKED TRE 1130!*

For any necessity or further information don't hesitate to apply to your Benelli Q.J. Distributor or to the nearest Benelli Q.J. Authorized Workshop. You can find the Benelli Q.J. Distributor and the Benelli Q.J. Authorized Workshop list on the web site **www.benelli.com** or calling the Benelli Q.J. Customer Service dialling +39 0721.418740.

The full control of this motorcycle is basic for a safe riding. Therefore it is necessary to start riding with a good concentration and in perfect physical conditions, apare from always assessing the street and atmospheric conditions.

In order to avoid compromising handling and stability of your motorcycle, you should obey the following warnings:

- do not attach any object to the vehicle;
- do not hook a sidecar, a tow or any other accessory to the motorcycle;
- do not remove any part and/or component;
- do not modify the vehicle in any way;
- do not wear garments that could adversely affect control and handling of the motorcycle.







Do not ride this motorcycle if you do not possess a regular driving licence. Failure to heed this warning constitutes a breach of the Highway Code, besides posing a serious hazard to the driver's and other people's safety. Always wear a helmet, even on short rides.

Always wear suitable clothes, especially when travelling by night (e.g. garments with fluorescent bands). When refuelling, switch off the engine and refrain from smoking.

Do not start the engine in closed places. Exhaust gases are toxic and can quickly saturate the air and cause fainting or even death.

While riding, always keep both hands on the handlebars.

Park the vehicle where it is unlikely to be bumped into or damaged. Even slight or involuntary bumps can cause the vehicle to topple over, with subsequent risk of serious harm to people or children.

To prevent the vehicle from tipping over, never park it on soft or uneven ground, nor on asphalt strongly heated by the sun.

Do not cover your motorcycle with a canvas soon afterwards riding. Before covering your motorcycle, wait until the engine and the exhaust pipes have thoroughly cooled.

If your motorcycle has been involved in an accident, check all levers, wires, hoses, brake calipers and other main parts for damage. Do not use the vehicle if you detect a damage that could adversely affect safety.

As soon as possible and, kowever, before using your motorcycle after an accident, even if there are not any visible damages, it is necessary to have it inspected by a Benelli Q.J. Authorized Workshop, in order to erify the absence of defects and/or damages that the owner could not be able to detect.



2.1.3 Vehicle load

The vehicle is designed for use by the rider with a passenger. To drive safely and under the highway code, never exceed the maximum allowed total gross weight of 400 kg (881.84 Lbs).

That is the sum of the motorcycle, driver, passenger and load weight, according to the EEC 92/61 directive.



WARNING

Since the load can strongly affect handling, braking, performance and safety characteristics of your motorcycle, you should always keep in mind the following warnings.

NEVER OVERLOAD YOUR MOTORCYCLE! Driving an overloaded motorcycle can cause damage to the tyres, loss of control of the vehicle and serious injury. Check that the total of driver and passenger weight, the burden weight and the vehicle gross weight never exceed the granted values.

Never carry any incorrectly fastened object on your motorcycle, because it could move from its position during riding.

Steadily fasten the heaviest objects near the center of the motorcycle, and equally divide the load on both sides of the vehicle.

Do not insert any object in the spaces on the frame trellis, in order to avoid interferring with the movable parts of the motorcycle.

Before riding, always check the wear and the pressure of the tyres.

Adjust the suspensions according to the load.

Even if the motorcycle is correctly loaded, drive with caution and never exceed 130 km/h (80.6 mph) when you carry a load.







2.1.4 Use of the vehicle in competitions

Your TORNADO NAKED TRE 1130 was projected for road use.

However, making some modifications, considering the high performances that the motorcycle can reach, it is possible to use it also in competitions.

However, you need to remember that once you transform the motorcycle for competitions use, it is nomore suitable for street traffic unless it is brought to its original conditions.

To meet the passionate drivers numerous requests, **Benelli Q.J.** has designed a number of special components for use in competitions and/or sporting events. The use of such components is strictly limited to areas closed to traffic. Failure to observe this restriction constitutes a breach of the Highway Code for which **Benelli Q.J.** cannot be held responsible.

For more information about **Benelli Q.J.** special components visit the web site *www.benelli.com* or call tghe Benelli Q.J. Customer Service dialling +39 0721.418740.

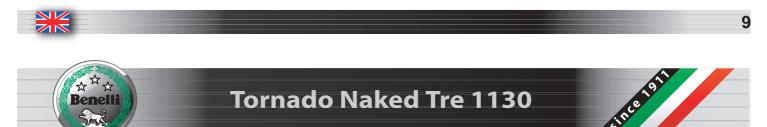


WARNING

Riding the vehicle in competitions requires considerable skill and experience as well as an accurate setup of the motorcycle which was to be made only by perticularly prepared persons.

2.1.5 Advices for safe riding

Besides being a means of transport, your motorcycle is a source of recreation and excitement. (and this is true, especially, when we talk about a *TORNADO NAKED TRE 1130!*).



However the nature itself of the vehicle involves, a certain amount of risk. To ensure maximum safety, in addition to scrupulously observing the warnings and instructions provided in the previous paragraphs, it is essential to take a few additional precautions.

In particular:

Before starting off

Follow all the directions given in the section "PRE-RIDING CHECKS". Conduct an overall check of all safety-related aspects of the motorcycle.

Familiarizing with the vehicle

The rider's ability and his mechanical skills form the basis of riding safety. It is advisable to practise riding in areas without traffic until you have become familiar with the vehicle and its controls.

Being aware of one's limits

When riding, never exceed your limits nor those imposed by law. Being aware of your limits and acting accordingly will help you avoid accidents.

Adverse weather conditions

Be very careful when riding in adverse weather conditions. On wet roads, for example, the braking distance increases as a result of reduced tyre traction. It is therefore necessary to travel at moderate speed and avoid abrupt braking and acceleration. Pay particular attention when riding on slippery surfaces such as road markings, manholes, level crossings, bridges, gratings, etc. Considering that a motorcycle cannot provide the same degree of shock protection as a motor vehicle, it is essential to adopt a "defensive" riding attitude, particularly in the adverse weather conditions described above.







When riding down long hills, reduce the speed of your motorcycle by closing the throttle and using a low gear ratio to take advantage of engine braking. Use the front and rear brakes as little as possible to maintain your speed, in order to prevent brake overheating and fade.

Special attention should be given to the braking system, which plays a key role in ensuring safety. When braking, always take account of the speed of the vehicle and the condition of the road surface.

The braking action should always be applied gently and gradually to both wheels.

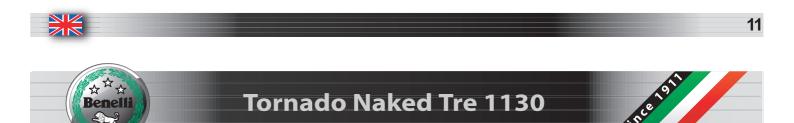
Performing this operation and, more in general, riding the vehicle always requires the utmost care. Therefore, caution should be exercised by all users, and in particular by inexperienced riders.

When you make a turn, avoid sudden braking. Failure to observe this warning could lead to the sliding of the wheels and the loss of control of the vehicle. Always operate the brakes before starting a turn.

When you are laterally blown by a sudden gust of wind (as it may happen when you're overtaken by a vehicle of great dimensions, when you come out of a tunnel or when you're driving in a hilly zone), you could lose control of the vehicle. While driving under the above mentioned conditions, reduce your speed and be careful to avoid sideways gusts of wind.

Maintain a safe distance behind vehicles in front of you and adjust your speed to the weather and traffic conditions. Remember that, as your bike picks up speed, stopping distances increase and the motorcycle becomes more difficult to control. In any case, never exceed the speed limits imposed by the Highway Code.

It is strictly forbidden to drink alcoholic beverages or take drugs before riding. Even very small amounts of these substances adversely affect the rider's ability to control the vehicle.



HELMET

Wearing the helmet when you ride a motorcycle in many countries, including Italy, is compulsory. However, wherever this obligation doesn't exist, it is absolutely advisable to wear a helmet, taking care of choosing a homologated and of the right size one. If the helmet has no visor take care of wearing appropriate protective glasses during your riding.

The helmet has to be always laced up. If you carry a passenger you better make sure that he wears correctly a homologated helmet. Never wear light helmet DGM (they can be used in Italy only for riding mopeds).

2.1.6 Protective clothing

Always wear suitable protective clothing.

In particular, the following items should be worn:

- A close fitting jacket, made of tough material and easy to fasten.
- Supple, reinforced gloves providing both sensitivity and protection.
- Strong, close-fitting trousers covering the legs completely.
- Soft, reinforced boots providing both sensitivity and protection.

In any case, the clothes must allow complete freedom of movement and not hamper the rider in any way. In addition, they must have no loose parts capable of catching in the control levers, the footrests, the wheels, the drive chain, etc., in order to avoid dangerous situations.









WARNING

Protective clothes do not afford complete protection against the risk of personal injury in the event of an accident. It is therefore essential not be deceived by the false sense of security that you might perceive by wearing protective clothing. When riding, always adopt a cautious attitude and follow the recommendations given in the previous paragraphs.

2.1.7 Suggestions against theft

Your TORNADO NAKED TRE 1130 is a precious property and, like that, it has to be protected.

- Every time you park your motorcycle, operate the steering lock and remove the ignition key.
- Park your motorcycle in a closed garage every time it is possible.
- Install a good quality anti-theft device on your vehicle.



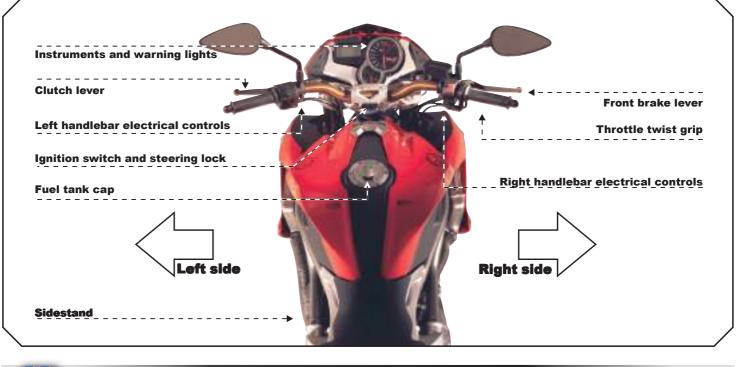




3 3.1

Controls and instruments

Location of controls and instruments





Tornado Naked Tre 1130



15

3.2 Sidestand

The sidestand is equipped with a safety switch that prevents the motorcycle from moving off while the stand is down.

In case of working engine, with gear engaged and clutch lever pulled, the switch automatically turns off the engine by cutting the current supply.

If the motorcycle is parked (sidestand down) and the gears are engaged, the switch prevents the engine from being started, thereby avoiding the risk of accidentally toppling the vehicle.



Check in any way the sidestand position before riding.

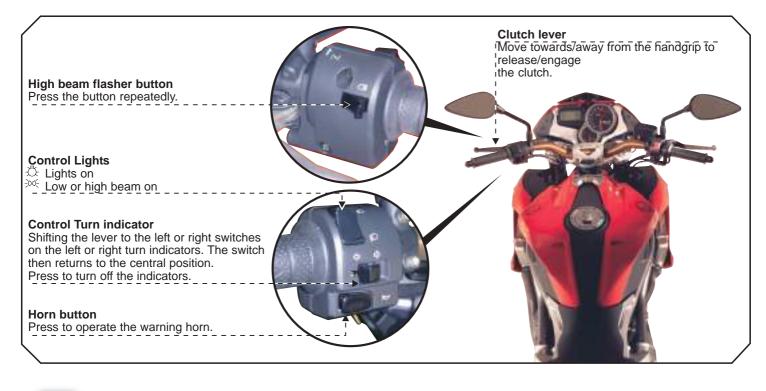








3.3 Handlebar controls, left side







Tornado Naked Tre 1130



17

Clutch lever

It is used to engage/disengage the clutch.

Control Lights

Pushing the switch you can turn the sidelights into the headlights or dipped headlights.

Low/high beam button

When the light switch is in the position, the low beam is on. The high beam can be switched on by pressing the button when allowed by the traffic and road conditions.

Control Turn indicator

It is used to show the rider's intention to change direction or lane.



WARNING: Failure to switch the turn indicators on or off at the right time may cause an accident. Always switch on the indicators before turning or changing lanes. Then be sure to switch off the indicators after completing the operation.

Horn button

It is used to attract the attention of other road users in case of danger.

High beam flasher button

It is used to attract the attention of other road users in case of danger. When the high beam is on, the function is inactive.

Start button

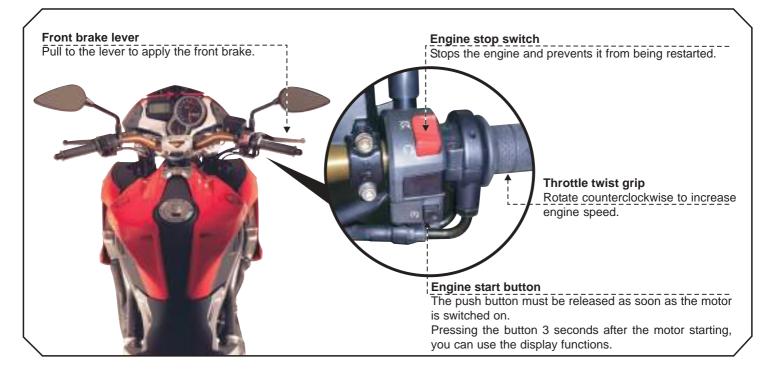
It is used to visualize all the functions of the LCD display.







3.4 Handlebar controls, right side







Engine stop switch

It is used to switch off the engine in an emergency. The ignition circuit is disabled, preventing the engine from being restarted. To be able to restart the engine, return the switch to the "ON" position.



Under normal conditions, do not use this switch to shut off the engine.

Front brake lever

It controls a hydraulic circuit that operates the front wheel braking system.

Throttle twist grip

It controls the fuel-air mixture supplied to the engine, which regulates engine speed. To increase engine speed, rotate the hand grip from its idle position counterclockwise.

Engine start button

center.

This device permits the motor starting, pushing the steering clutch, if it is used 3 seconds after the motor starting, you can use the display functions.



To avoid damaging the electrical equipment, be sure not to hold down the button for longer than 5 consecutive seconds. If, after some attempts, the engine does not start, contact your authorized Benelli Q.J. service





3.5 Ignition switch and steering lock



WARNING

Do not attach a ring or any other object to the ignition key as they may hinder the steering action. Never attempt to change the switch functions while riding, as you may lose control of the vehicle. Always check the absence of any restriction in the steering action befero you ride.

The ignition switch enables and disables the electrical circuit and the steering lock. The four positions of the switch are described below.

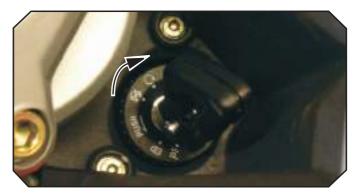
OFF position

All electrical circuits are deactivated. The key can be removed.

ON position

All electrical circuits are activated. The instruments and warning lights perform the self-diagnostic cycle. The engine can be started. The key cannot be removed.









Tornado Naked Tre 1130

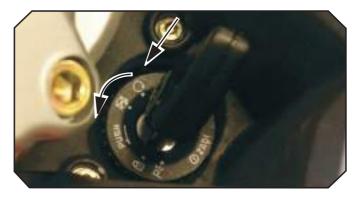


21

LOCK position

Turn the handlebar to the left. Press the key in gently while rotating it to the LOCK position.

All electrical circuits are deactivated and the steering is locked. The key can be removed.



"P" Position

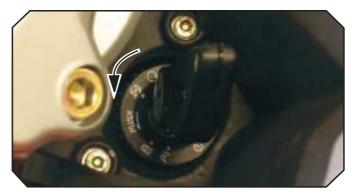


CAUTION

Do not leave the key on the P position for a long time, in order to avoid discharging the battery of your motorcycle.

Turn the key from the LOCK position to the P position (parking).

All electrical circuits are deactivated except the parking lights (position lights). The steering is locked. The key can be removed.







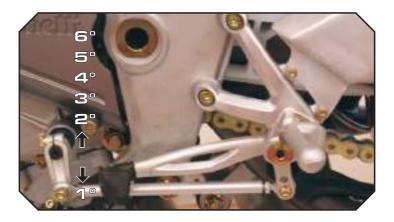
3.6 Gear lever



WARNING Only operate the change gear with the clutch lever fully pulled.

The N (neutral) position is indicated by the warning light on the instrument panel.

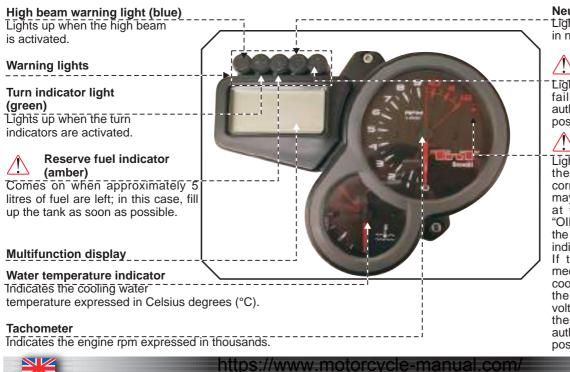
To change into first gear, push the lever down. To change into second gear, lift the lever up. Lifting the lever up repeatedly engages all the other gears in succession up to the sixth speed.





3.7 Instruments and warning lights

The instruments and warning lights are activated by turning the ignition switch to the ON position. After a preliminary check the displayed information reflects the current general condition of the motorcycle.



Neutral indicator (green)

Lights up when the gears are in neutral.

Injection warning light (orange)

Lights up in case of the injectors failure; in this case, contact an authorized service center as soon as possible.

Alarm led

Lights up when the oil pressure or the cooling water tempeare not correct (more than one anomalies may occur simultaneously);

at the same time, the writings "OIL", "H,O", "BAT" start flashing on the tachometer in place of the speed indication.

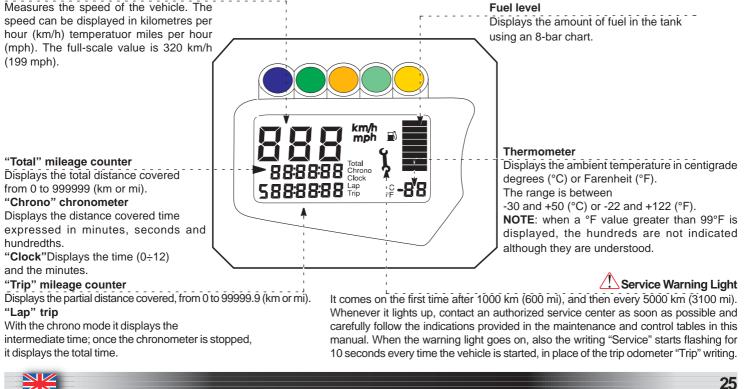
If the alarm led lights up, immediately stop the vehicle, allows it cool down for a few minutes, check the oil level rature or the battery voltage and top up if necessary. If the problem persists, contact an authorized service center as soon as possible.

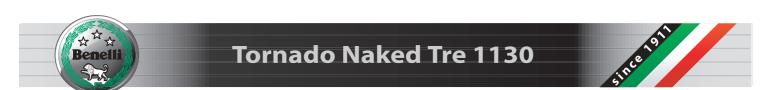




3.7.1 Multifunction display

Speedometer





4 **Operation**

4.1 Using the motorcycle

This section provides the basic information needed to correctly operate the motorcycle:

- Preriding checks
- Running-in
- · Selecting the display functions
- Adjusting the clock
- Parking the motorcycle
- Saddle disassembly
- Refuelling
- · Starting the engine
- Improve our riding skills



PROTECT THE ENVIRONMENT

Benelli Q.J., in order to protect the interests of the community, awakens the Customers and the Technical Assistance operators to use the vehicle and dispose of its replaced parts respecting the laws in force concerning environmental pollution and waste disposal and recycling.







4.2

Preriding checks

A motorcycle can be in good running order and then become unexpectedly unreliable even if unused (e.g. deflation of the tyres, battery discarge, and so on...). It is therefore important to carry out the checks described in the table below before each ride. A few moments taken to carry out these checks will help you maintain your motorcycle safe and in perfect working order. If any of the above-mentioned parts shows a failure during its operation, have it controlled and repaired by a Benelli Q.J. Authorized workshop before using the motorcycle.

Brakes	Check fluid level. Check for fluid leakage. Pull lever and press pedal to check brake operation.
Gear lever	Press pedal to check gear operation.
Clutch lever	Pull lever and check that it moves smoothly and gradually.
Engine start button/ stop switch	Check operation.
Throttle twist grip	Check that grip rotates smoothly and returns to closed position when released.





Tornado Naked Tre 1130



Steering system	Verify that the operation is smooth and uniform. Check for play and loosening.
Lights, visual and acoustic signals	Check operation.
Tyres	Check inflating pressure and wear.
Suspensions	Verify that the operation is smooth and uniform.
Frame fasteners	Check clearance or slackening.
Drive chain	Check clearance absence and lubrification presence.
Fuel	Check level. Refuel, if necessary. Check for fuel leakage.
Coolant	Check level. Check for leakage.
Engine oil	Check level. Check for leakage.







Running-in



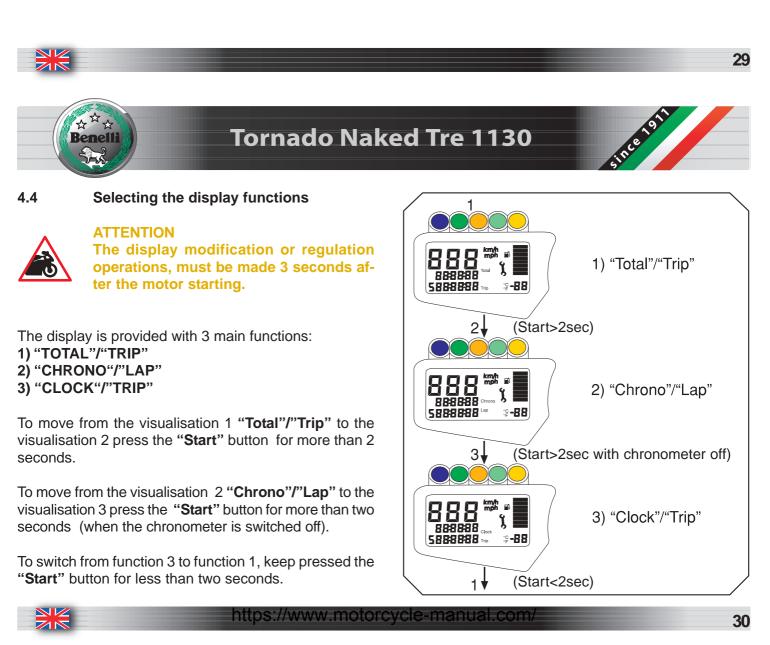
4.3

Failure to observe the indications provided below can reduce performance and shorten the life of the motorcycle.

Running-in is generally considered to apply only to the engine. In fact, it should be regarded as an essential phase for other important parts such as the tyres, the brakes and the drive chain. During the very first miles, adopt a relaxed riding style.

km	rpm max.	NOTE
0 to 500 Km (0 to 312.5 mi)	5000 rpm	New tyres must undergo a proper running-in period to reach their complete efficiency. Avoid abrupt acceleration, turning and braking
500 to 1000 Km (312.5 to 625 mi)	7500 rpm	 during the first 100 km (62,5 mi). Failure to observe these prescriptions can lead to the sliding of the wheels and the loss of control of the vehicle with subsequent risk of accidents
1000 to 2500 Km (625 to 1562.5 mi)	9000 rpm	

In particular, observe for the first 2500 km (1600 mi) the max revolutions number indicated in the table. After the running-in period, above 2500 km (1600 mi), the engine is "hot" and can be run to its maximum speed.







Resetting the trip mileage counters

The value of the "Trip" function can be reset pressing two times the START button.

NOTE:

The instrument panel has an integrated memory which retains all the parameters even when the engine is not running. Except for the clock, which is reset, all the parameters are retained even when the battery is disconnected.

Set "Chrono" / "Lap"

Move to the visualisation 2

To set the "Chrono" press the START button for less than one second.

To see the "Lap" from the "Chrono" position, press the START button for less than one second. Each time the START button will be pressed for less than one second , the "Lap" function will indicate the "Chrono time, in the specific moment.

To stop the "Chrono" press the START button for less than one second.

To stop the "Chrono" press the START button for 3 seconds at least.

To leave the "Chrono" position, press the START button for 3 seconds at least, moving to the 3 "Clock" / "Trip" visualisation.



Tornado Naked Tre 1130

Set "Clock" / "Trip"

Move to the visualisation 3.

To set the timer, push the **START** button for two seconds at least. The first number starts flashing.

Press continuously the **START** button for the number regulation until reaching the number you desire.

Repeat the same operation to set the second timer number, the first and the second minutes number. Press the **START** button for three seconds at least, to stop the selection and the flashing. To reset the **"Trip"** from the visualisation 3 press two times the start **START** button.

Set "Km" / "Mi"

From the 1 "Total" / "Trip" visualisation, when the motor is switched on, press the START button for at least ten seconds.

The Km or Mi symbol will start flashing, press the **START** button to move to Km or Mi, press for at least two seconds the **START** button, to select the measure unit you desire, moving automatically to the °C o °F selection, press the **START** button for less than one second to select the temperature unit you desire.

Press the START button for at least three seconds, to confirm and exit from the Set "Km" / "Mi" visualisation.







Set "Service"

When the first 1000 Km (600Mi) will be reached and every 5000Km (3100Mi) you will see the flashing **Service** pilot light on the display, instead of the partial "**Trip**"rip" for 10 seconds during the vehicle starting. To reset the **Service** pilot light, press the **START** button for at least ten seconds until the pilot light is switched off.

4.5 Adjusting the clock

Switch to function 3

Press the "Start" button (> 2 sec.); the first figure will start flashing.

Repeatedly press the "Start" button until the desired figure has been entered.

Press the "Start" button (> 2 sec.) to enter the following figure.

Repeat the above procedure to enter the second figure of the "hours", the first and second figure of the "minutes". Press the "Start" button (> 2 sec.) to confirm the time adjustment and to stop the selection (the flashing).





Tornado Naked Tre 1130

4.6 Parking the motorcycle

TORNADO NAKED TRE 1130 is equipped with the sidestand. It is possible to separately buy the central back stand.

Using the sidestand



Park the motorcycle safely on solid ground. On slopes, engage the first gear and park the vehicle so that the front wheel faces uphill. Remember to put the gear lever in the neutral position before restarting the engine.

Using your foot, lower the sidestand as far as it will go, and then slowly tip the motorcycle toward you to bring the stand supporting foot into contact with the ground's surface.



WARNING

Do not sit on the vehicle when it is parked on the sidestand, as your full weight would rest on the vehicle's only support.









4.7 Saddle disassembly driver

Insert the key.

Press the end part of the saddle and, at the same time, turn the key counterclockwise.

Slightly lift the saddle from the rear, slide it backwards and remove it.

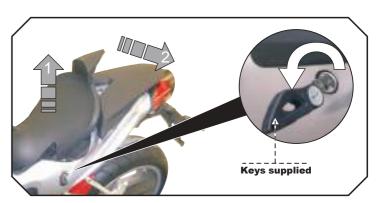
4.8 Saddle disassembly passenger and/or passenger seat cover*

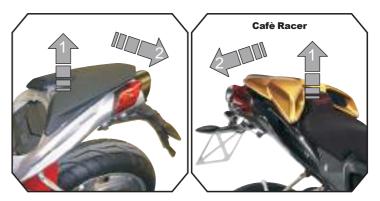
Insert the key.

Remove the pilot saddle.

Slightly lift the saddle from the rear, slide it backwards and remove it.

* for cafè racer model











4.9 Refuelling

Lift the dust cover.

Insert the key into the lock, rotate it clockwise and lift the tank cap.

After refuelling, press down the tank cap while rotating the key clockwise to facilitate the locking. Then release the key and remove it.









WARNING

Petrol and its fumes are highly toxic and flammable. Avoid contact and inhalation. When refuelling, switch off the engine, avoid smoking, and keep away from flames, sparks and heat sources. Perform refuelling in the open air or in a well ventilated area.

Overfilling the tank may cause the fuel to overflow as a result of the expansion due to the heat from the engine or to exposure to sunlight. Fuel spills can catch fire. The level of the fuel in the tank must never be higher than the base of the filler.

Verify that the tank filler cap is correctly closed before using the motorcycle.



Only use unleaded fuel with a R.O.N. octane rating of 95 or higher. Immediately wipe the overflown fuel with a clean cloth, to avoid damage to the painted or plastic surfaces.





Tornado Naked Tre 1130

4.10 Starting the engine

As you turn the ignition switch to the ON position, the instruments and the warning lights will go through the self-diagnostic cycle; during this phase, make sure that all the warning lights on the dashboard come on. One of the following conditions must be verified, in order that the ignition switch system allows engine starting:

The gears are in neutral.

The gears are engaged, the clutch lever is pulled and the side stand is up.

Press the start button without turning the throttle twist grip.

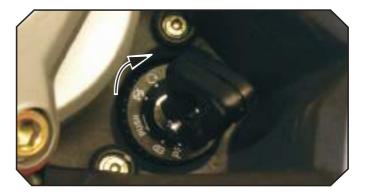
As soon as the engine starts, release the button.



• Do not press the start button for longer than 5 consecutive seconds.

• Avoid warming up the engine while the vehicle is stationary. It is advisable to bring the engine to the working temperature by riding at reduced speed.

• To ensure the maximum life of the engine, never speed up at full throttle when the engine is cold.











4.11 Improve our riding skills

Riding a motorcycle requires experience and concentration.

Inexperienced riders should undergo a period of training and attend an introductory course consisting of theoretical lessons as well as practical riding sessions in areas closed to traffic.

The instructor's advice will help the novice rider become familiar with the basics of riding safety.

Relying on the advice of persons other than a qualified riding instructor, even if possessing specific knowledge, may prove to be useless or even dangerous, especially if the practical training takes place in an area open to traffic.



5.1 List of adjustments

There are many adjustments that can significantly improve the ergonomics, geometry and safety of the motorcycle.



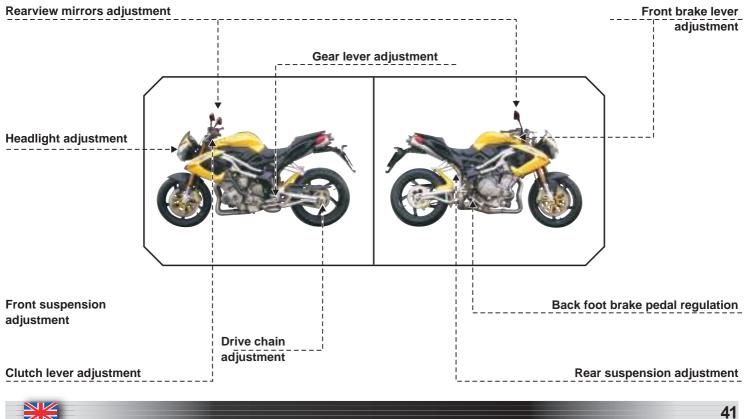
WARNING

To avoid losing control of the vehicle while riding, be sure to always keep both hands on the handlebars. All adjustments must be performed when the vehicle is stationary and, where not otherwise provided in this manual, they have to be done only by Benelli Q.J. Authorized Workshop; in fact, some of these operations can cause a danger for the user's safety if they are not properly done or if they are unappropriate.













Recapitulatory table of adjustments 5.2

TYPE OF ADJUSTMENT	COMPETENCE
Front brake lever adjustment	User
Clutch lever adjustment	User
Rearview mirrors adjustment	User
Front projector regulation	User
Back foot brake pedal regulation	Authorized Dealer

Adjusting rear suspension spring preload	Authorized Dealer
Adjustment of minimum engine rpm	User
Adjusting rear suspension compression damper hydraulic device	Authorized Dealer
Drive chain adjustment	Authorized Dealer
Gear lever adjustment	Authorized Dealer







5.3 Adjustments that can be done by user



WARNING Never perform the adjustment while riding.

5.3.1 Front brake lever adjustment

Push the lever forward to neutralize the spring thrust and, at the same time, adjust its position in one of the four possible directions by turning the ring nut clockwise or anticlockwise.

5.3.2 Adjusting the rearview mirrors

Move the wing mirror to regulate the position.







Tornado Naked Tre 1130

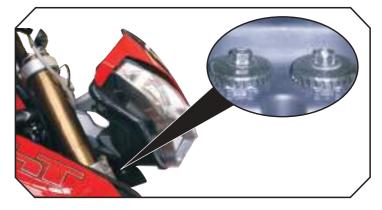
5.3.3 Front projector regulation

For the front projector regulation use the 2 right and left register screws under the projector.

The projector can regulate the right and left parable separately, unscrew to lower the light beam, screw to raise the light beam.

5.3.4 Adjustment of minimum engine rpm

Use the screw to adjust the minimum engine rpm Tightening it will increase the minimum rpm. Loosening it will decrease the minimum rpm.







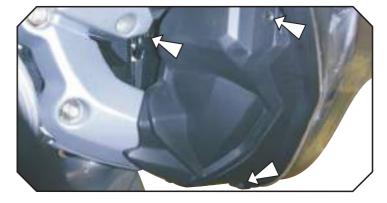




5.3.5 Front projector lamps replacement

For the front projector lamps replacement, remove the right and left inspection covers, of the parable, unscrewing the 3 fixing screws.

Remove the burned lamps.









Tornado Naked Tre 1130

5.4 Adjustments that has to be done by a Benelli Q.J. Authorized Workshop



WARNING – The following adjustments are reserved to the Benelli Q.J. Authorized Workshops. Never perform the adjustment while riding. B

5.4.1 Clutch lever play

Remove the adjustment cover cap. Unloose the ring nut (A) and reset the clutch lever play by turning the adjustment (B) clockwise or anticlockwise. Turn clockwise to decrease the play. Turn anticlockwise to increase the play.









- 5.5
- Adjusting the rear suspension Tornado Naked Tre 1130 and Cafè Racer









47



WARNING

The high temperature of the exhaust pipes can cause burns. Before adjusting the rear suspension, shut off the engine and wait until the exhaust pipes have thoroughly cooled.

The rear shock absorber contains highly compressed gas. Do not try to open or disassemble it in any way



When you estimate the rear suspension settings, never push or pull in any way on the exhaust muffler and on the tail. They would be certainly damaged.

Check the rear suspension settings in the position indicated by the arrow.

NOTE: At the moment of delivery of the motorcycle, the rear suspension is adjusted in the standard configuration, with damper spring length of 140 mm (5.55 in) [14 mm (0.55 in) of preload].











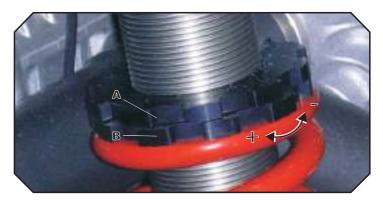
5.5.1 Adjusting rear suspension spring preload

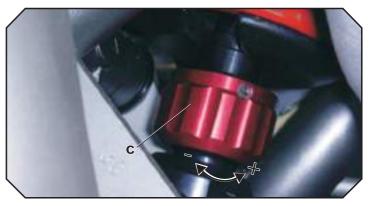
Adjust the spring preload by means of the two ring nuts (**A** and **B**) shown in the figure. Unloose the ring nut (**A**) and adjust the preload using the ring nut (**B**). Turn clockwise for a stiffer preload. Turn anticlockwise for a softer preload. Once the adjustment is over, tighten the ring nut (**A**).

5.5.2 Adjusting rear suspension rebound

damper hydraulic device

Adjusting of the rebound damper hydraulic device is made in jerks. Turn the rule (C) clockwise to increase the braking action, or turn anticlockwise to decrease it.









Tornado Naked Tre 1130

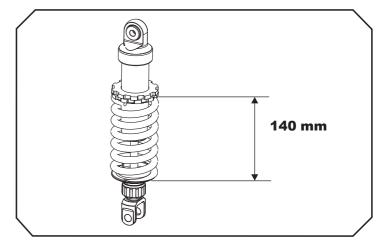
REAR SUSPENSION

	Standard configuration			
Spring length	140 mm (5.55 in)			
Rebound damper	12 clicks			
Spring Preloading	14 mm (0.55 in)			

NOTE:

Adjusting of the preload starts from the damper spring length of 140 mm (5.55 in).

The compression and rebound adjustment starts from the "all close" position (direction +).







Maintenance

6.1

6

Tables of scheduled maintenance and checks



WARNING

• Impropriety or lack of recommended maintenance operations can lead to an increase of the risk of accidents and damage to the motorcycle.

• Always use genuine Benelli Q.J. spare parts. Using non-genuine spare parts can accelerate the wear of your motorcycle and shorten its life.

• Failure to perform the recommended operations, as well as using non-genuine spare parts, can cause the unoperativeness of the legal guaranty.

To replace or top up the lubricants and fluids of your motorcycle, use only the suitable products.



PROTECT THE ENVIRONMENT

Benelli Q.J., in order to protect the interests of the community, awakens the Customers and the Technical Assistance operators to use the vehicle and dispose of its replaced parts respecting the laws in force concerning environmental pollution and waste disposal and recycling.

The main periodic checks and maintenance operations are shown in the following tables. These operations are necessary to keep the motorcycle safe and in perfect running order.



Benelli Since 1911

The intervals indicated in the periodic maintenance and lubrication tables must be intended as a general guide under normal riding conditions. It could be necessary to reduce these intervals according to the climate, the ground conditions, the geographic position and the conditions of use.

Some of the operations can be carried out by the user, providing he or she possesses the requisite skills and, however, only when explicitly scheduled in this Owner's Manual. In any other case have the operations performed by a Benelli Q.J. Authorized Workshop, whose list is available on the web site **www.benelli.com** or calling the Benelli Q.J. Coustomer Service dialling +39 0721.418740.



As a rule maintenance operations must be performed while the motorcycle is on the rear stand after switching off the engine and setting the start switch to OFF. On the contrary, while checking the fluid levels it is advisable to keep the motorcycle in an upright position without using the rear stand.

Tables of scheduled maintenance

NOTE: the table below describes all the scheduled maintenance operations. The column "COMPETENCE" indicates (**C**) who must carry out the operations described:

Legend:

"i" = inspection and adjustment, cleaning, lubrication or replacement according to requirements

- "R" = replacement
- "**T**" = tighten
- "O" = authorized dealer or personnel
- "U" = user







COMPONENTS		OPERATION	COVERED			
			0 km (0 mi) predeli- very	After 1000 km (600 mi) running-in	Every 5000 km (3000 mi)	Every 10000 km (6000 mi)
	U	Check / Restore level	i Every time vehicle is used			e is used
Engine oil	0	Replace		R	i	R
				At least o	nce a year	•
Engine oil filter	0	Replace		R	i	R
			Every time engine oil is changed			
	U	Check / Restore level	Every time vehicle is used			
Coolant	0	Check / Restore level	i	i	i	i
		Replace	At least every two years		ars	
Cooling system	0	Check for leakage	i	i	i	i
Electric fans	0	Check operation	i	i	i	i
Valves	0	Check / Adjust				i





COMPONENTS		OPERATION	COVERED			
			0 km (0 mi) predeli- very	After 1000 km (600 mi) running-in	Every 5000 km (3000 mi)	Every 10000 km (6000 mi)
Timing chain	0	Check				i
		Replace	Every 25000 km (15000 mi)			
		Check / Replace				i
Timing movable shoe	0	Replace	Every 25000 km (15000 mi)			
		Replace	Every t	ime timing	chain is r	eplaced
Timing chain stretcher	0	Check / Replace				i
Spark plugs	0	Check / Replace		i	i	i
Spark plugs		Replace				R
Fuel filter	0	Check / Replace				R
Air filter	0	Check / Replace		i	i	i
		Check		i	i	i
Front sprocket / Tab washer	0	Replace		i	i	i
			Every	time drive	chain is re	eplaced



53

ince 191





COMPONENTS			COVERED			
		OPERATION	0 km (0 mi) predeli- very	After 1000 km (600 mi) running-in	Every 5000 km (3000 mi)	Every 10000 km (6000 mi)
	U	Lubricate	Every 1000 km (600 mi) and after riding under the rain			
Drive chain		Check / Adjust	i	i	i	i
	0	Lubricate		i		
		Replace				R
		Check		i	i	i
Rear sprocket	0	Replace				R
			Every time drive chain is replaced			
Drive chain pads on swingarm	0	Check / Replace		i	i	i
Drive chain pads on frame plate	0	Check / Replace		i	i	i
Fuel lines and connections	0	Check for leakage		i	i	i
	0	Replace		At least ev	ery 3 year	S







			COVERED				
COMPONENTS	С	OPERATION	0 km (0 mi) predeli- very	After 1000 km (600 mi) running-in			
	U	Check level	Ev	ery time v	ehicle is u	sed	
Brakes fluid		Check level	i	i	i	i	
	0	Replace	Every 25000 km (15000 mi)				
			At least every two years				
Clutch control	0	Check		i	i	i	
Brakes / Clutch	U	U Check operation		Every time vehicle is used			
Drakes / Clutch	0	Check operation	i	i	i	i	
Brake pads		Check wear	Every 1000 km (600 mi)				
Diake paus	0	Check / Replace		i	i	i	
	U	Check operation	Every time vehicle is used			sed	
Throttle control	0	Check operation	i	i	i	i	
		Check / Adjust play	i	i	i	i	
Flexible controls and transmissions	0	Check / Adjust	i	i	i	i	



55

Ince 191





			COVERED					
COMPONENTS	С	OPERATION	0 km (0 mi) predeli- very	After 1000 km (600 mi) running-in	Every 5000 km (3000 mi)	Every 10000 km (6000 mi)		
Steering head tube ring	0	Check / Adjust		i	i	i		
		Check / Adjust		i	i	i		
Steering bearings	0	O Lubricate		Every 20000 km (12000 mi)				
	U	Check pressure	Every time vehicle is used; at least every 10 days					
Tyres		Check wear	Every t	ime vehicl every 500 l	e is used; km (300 m	at least ii)		
	0	Check pressure	i	i	i	i		
		Check wear		i	i	i		
Wheel rims	0	Inspect visually		i	i	i		
			Every time tyre is replaced					



Tornado Naked Tre 1130

			COVERED				
COMPONENTS	С	OPERATION	0 km (0 mi) predeli- very	After 1000 km (600 mi) running-in	Every 5000 km (3000 mi)	Every 10000 km (6000 mi)	
		Check			i	i	
Front/rear wheel bearings	0		Every time tyre is replaced				
			Every 50000 km (30000 mi)				
Sidestand	U	Check operation	Every time vehicle is used			ed	
	0	Check operation	i	i	i	i	
Side stand switch	U	Check operation	Every time vehicle is used				
	0	Check operation	i	i	i	i	
Swingarm bearings	0	Replace / Lubricate	Every 35000 km (21000 mi)) mi)		
Rear shock absorber	0	Check / Adjust		i	i	i	
Front fork oil	0	Replace	Every 20000 km (12000 mi)) mi)		
Battery connections	0	Check / Clean		i	i	i	
Electrical equipment	0	Check operation	i	i	i	i	



57

ince 19





		COVERED				
			0 km	After	Every	Every
COMPONENTS	C	OPERATION	(0 mi)	1000 km		10000 km
			predeli-	(600 mi)	(3000 mi)	(6000 mi)
			very	running-in		
Instrument panel	U	Check operation	Ev	ery time v	ehicle is u	sed
	0	Check operation	i	i	i	i
Lights / Visual signals	ights (Vieuel signals U Check operat		Ev	ery time v	ehicle is u	sed
Lights / Visual signals	0	Check operation	i	i	i	i
Horn	U	Check operation	Every time vehicle is used			
	0	Check operation	i	i	i	i
	U	Check operation	Every time vehicle is used			
Headlight	0	Check operation	i	i	i	i
		Adjust	Every time geometry is change			anged
Ignition owitch	U	Check operation	Every time vehicle is used			sed
Ignition switch	0	Check operation	i	i	i	i
Locks	U	U Check operation Every time v		ery time v	vehicle is used	
	0	Check operation	i	i	i	i
Screws and nuts	0	Check / Tighten	i	Т	Т	Т





☆[☆]☆ Benelli



Tornado Naked Tre 1130

.9
2
nc
5

			COVERED			
COMPONENTS	С	OPERATION	0 km (0 mi) predeli- very		Every 5000 km (3000 mi)	Every 10000 km (6000 mi)
Hose clamp	0	Check / Tighten	i	i	i	i
General lubrication	0		i	i	i	i
General test	0		i	i	i	i





6.3 Table of lubricants and fluids

Description	Recommended product
Engine lubrication oil *	15W/50 (Synthetic) JASO - MA CC MC G4
Coolant	READY FOR USE RADIATORS FLUID
Brake and clutch fluid	SPECIAL BRAKE FLUID DOT4
Drive chain lubrication oil	SPRAY GREASE SPECIFIC FOR CHAINS WITH
	O-RING

- *: For the availability of the suggested product, **Benelli Q.J.** suggests to directly apply to the Authorized Dealers or Workshops. If the above described lubricant is not available, **Benelli Q.J.** suggests to use a fully synthetic engine oil having characteristics equal or better than the ones prescribed in the following standards:
 - API SJ
 - ACEA A3
 - JASO MA CC MC G4



MIN



Do not start the engine if the oil level is below the MIN mark.



MAX

Oil sight glass





6.4.1 Topping up the engine oil level

To top up the engine oil level, remove the oil filler plug and pour an appropriate amount of engine oil of the recommended type. Never exceed the MAX level mark. At the end of the operation, place back the oil filler plug.



To avoid clutch sliding and damage to the engine, never add chemical additives to the engine oil, nor use an engine oil different from the one specified in the table lubricants and fluids.

Make sure that no foreign body gets in the crankcase while topping up the engine oil.



Oil filler plug



Tornado Naked Tre 1130

WARNING



New or exhaust engine oil can be dangerous. Engine oil is highly toxic for people and domestic animals. In the event of an engine oil ingestion, immediately call a doctor and do not cause vomiting, in order to avoid inhalation of engine oil in lungs. It has been proved that prolonged contact with engine oil can cause skin cancer on guinea pigs.

Even a brief contact with engine oil can cause skin irritation.

- Keep new or exhaust engine oil out of reach of children and domestic animals.
- While topping up the engine oil, wear a long-sleeved shirt and a pair of water-proof gloves to protect your skin.
- If the engine oil comes in touch with your skin, wash it away with soap and water.
- Correctly recycle or dispose of the exhaust engine oil, in order to avoid environmental pollution.







6.5 Checking the coolant level

Check the coolant level while the engine is off and cold. The check must be performed after placing the motorcycle in an upright position on a horizontal surface.

The level in the cup must be included between the MAX and MIN references

In the case the cooling liquid level is under the MIN reference, remove the cup plug and make a topping up, or bring the motorbike in the closest Benelli Q.J. authorized machine shop.



Do not start the engine if the coolant level is below the MIN mark.







Tornado Naked Tre 1130

6.5.1 Topping up the coolant level



This operation has to be performed only by a Benelli Q.J. Authorized Workshop. Perform the topping up of the coolant when the engine is off and cold. Never attempt to remove the coolant filler cap when the engine is hot, in order to avoid the risk of burns. The cooling system is under pressure!

Under certain conditions, ethylene glycol contained in the coolant can become flammable. When it is lighted, it produces an invisible flame.

Avoid spilling coolant on hot parts of the motorcycle, because the subsequent combustion of ethylene glycol could cause serious burns.

Coolant is a highly toxic fluid. Avoid contact and ingestion. Keep coolant out of reach of children and domestic animals. In the event of a coolant ingestion, immediately call a doctor and do not cause vomiting, in order to avoid inhalation of coolant in lungs. If the coolant comes in touch with your skin or eyes, immediately wash it away with water.







To gain access to the coolant filler cap, remove the passenger saddle.

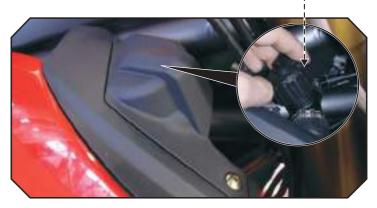
Remove the filler cap and top up using the coolant recommended in the lubricants and liquids table.

After the reset time, reassemble carefully the radiator cap and the closing cover.



Coolant can damage painted and plastic parts.

When you top up the coolant level, be careful not to spill coolant on any part of the motorcycle. If you do spill coolant on your motorcycle, immediately wipe it away using a clean cloth.



Coolant filler cap





Tornado Naked Tre 1130

6.6

DANGER

WARNING

If the brake pads are excessively worn out, the effectiveness of the braking system decreases, increasing the risk of accidents. Check frequently, from a Benelli Q.J. Authorized Workshop, the wear and tear of the linings and, wherever need, make them replaced. Ensure that the new pads are suitably broken in.

Limit of the wear and tear of the linings A: 3,5 mm (0.14 in).

Checking the wear of the brake pads







6.7 Checking the brake fluid level

WARNING

Lack of maintenance of the braking system can increase the risk of accidents. If you notice any anomaly in the working of the braking system, go immediately to a Benelli Q.J. Authorized Workshop. Wherever you suspect that can exsist a serious failure of the braking system, stop immediately the motorcycle and call the nearest Benelli Q.J. Authorized Workshop. Never use your motorcycle if the fluid level is below the MIN mark. The brakes may fail to properly operate, which could lead to an accident. If the brake fluid level is below the MIN mark, you must





The level of the brake fluid decreases as the brake pads wear down. Ensure that the fluid level is always between the MAX and MIN marks. If the level falls below the MIN mark, contact a Benelli Q.J. authorized service center and have the brake system overhauled.

Have the topping up of the brake fluid performed only by Benelli Q.J. authorized service center.

Brake fluid is highly toxic. Avoid contact and ingestion. Keep brake fluid out of reach of children and domestic animals. In the event of a brake fluid ingestion, immediately call a doctor and do not cause vomiting, in order to avoid inhalation of brake fluid in lungs. If the brake fluid comes in touch with your skin or eyes, immediately wash with water.

Use only the brake fluid specified in the table lubricants and fluids of this manual.

have it topped up by an authorized Benelli Q.J. dealer.

Mixing different brake fluids can cause a dangerous chemical reaction, as well as the decrease of the braking efficiency, with subsequent increase of the risk of accidents.

An insufficient amount of brake fluid may allow the introduction of air in the braking system. This could compromise the effectiveness of the braking system, with subsequent increase of the risk of accidents.

Presence of air in the braking system can be identified in the moment you feel a characteristic "spongy effect" while pushing the brake pedal. In this case, have a braking system bleeding performed by an authorized Benelli Q.J. dealer before riding your motorcycle again.







6.8 Checking the tires and rims



WARNING

Before using the motorcycle, always check the pressure and wear of the tyres. An incorrect inflating pressure can lead to dangerous situations during riding. An insufficiently inflated tyre can cause the sliding of the tyre on the wheel rim or its detachment; this may lead to the deflation of the tyre with subsequent loss of control of the vehicle.

Checking the inflating pressure of the tyres is an essential requirement to ensure driving safety. Insufficiently inflated tyres can reduce the handling of the motorcycle and wear themselves out very quickly.

On the other hand, an excessively high inflating pressure reduces the wideness of the surface in contact with the ground, and it can compromise the grip of the vehicle. Before riding your motorcycle, it is therefore necessary to measure the tyre pressure at room temperature. The vehicle must be parked since three hours at least.







Tornado Naked Tre 1130

130 since 19

Check the pressure according to the values indicated in the table below:

	Pressure
Front cool tyre	250 kPa [2,5 bar (36.25 psi)]
Back cool tyre	250 kPa [2,2 bar (31.9 psi)]

In the event of long travels, you can increase the face value of the tyre pressure of 0.2 bar.

It is extremely important to check the wear of the tyres before riding. In fact, a worn out tyre can be punctured more easily than a new one, and it can adversely affect handling and stability of the motorcycle.

Check that the depth of the tyre tread is not below the values prescribed by the Highway Code.

Verify the absence of crevices at the bottom of the tread design and fissures on the tyre sidewall. Moreover, verify the absence of nails and glass splinters in the tyre. If these conditions are not verified, have the tyre replaced by an authorized Benelli Q.J. dealer.



If a tyre is punctured it must be replaced, not repaired. A repaired tyre provides a restricted performance and lower safety levels than a new one. If you make a provisional or emergency repair to a tyre, you must ride at very low speed until you reach the nearest Benelli Q.J. authorized service center and have the tyre replaced. With a provisionally repaired tyre, never exceed 60 km/h (37.2 Mph). Tyre repairing must never be performed if the tyre is punctured on its sidewall, or if the diameter of the puncture on the tread is greater than 6 mm (0.23 in).









When it is necessary to replace the tyres, use only the type specified in the technical data table. Moreover, avoid using tyres of a different brand or type on the front and on the rear wheel at the same time. Using tyres different from those specified can adversely affect the handling and stability of the motorcycle, increasing the risk of accidents.

• The wheel rims of your motorcycle have been designed for use with tubeless tyres only. Do not assemble an air tube tyre on rims designed for tubeless tyres. Otherwise, the tyre bead could not properly settle down on the wheel rim, leading to the deflation of the tyre and the loss of control of the vehicle.

• Have the tyres replaced according to their direction of spin, which is highlighted by a small arrow on the tyre sidewall.

• New tyres should be run in for a short period before demanding their full performance.

In fact, during this period the tyres could have a reduced grip on some kind of roads. We suggest to ride at reduced speed and exercise extreme caution during the first 100 km (62.5 mi) after the replacement of a tyre.

6.8.1 Checking of the rims and the wheel rims

Before riding, always verify the absence of cracks, bending or buckling on the wheel rims.



WARNING

If you find that the wheel rim is damaged, have it replaced by a Benelli Q.J. authorized service center. Never attempt to repair the wheel rim, even in case of slight damage.

Every time you replace a tyre or a rim, you must have a wheel balancing performed.

Wheel unbalance can adversely affect performance and handling of the motorcycle, as well as shorten the life of the tyres.





Tornado Naked Tre 1130



6.9 Cleaning checking and lubricating the drive chain

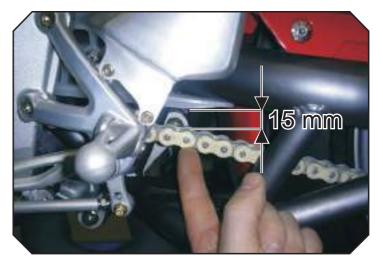
To perform this operation, you must put the motorcycle on the rear stand, upright on a horizontal surface and with the gear in neutral.



WARNING

Riding your motorcycle when the drive chain is in poor condition or improperly adjusted can lead to accidents. If you notice any anomaly in the working of the drive chain, like suspected noises or excessive loose of the chain, go immediately a Benelli Q.J. authorized service center. Wherever you suspect that can exist a serious failure of the drive chai, stop immediately the motorcycle and call the nearest Benelli Q.J. authorized service center.

Every time the chain is replaced, you must always replace the front and rear sprockets too. Never try to repair or replace a drive chain. It is a complex and particularly dangerous operation and, therefore, it has to be performed by the Benelli Q.J. authorized service centers.









6.9.1 Cleaning

The chain of *TORNADO NAKED TRE 1130* is of the O-ring type. To prevent it from damaging, never clean the chain with a steam or high pressure water jet, nor using gasoline or other solvents.

The chain must be cleaned using kerosene only.

Kerosene is highly toxic and flammable.

Avoid contact and inhalation.

Keep kerosene away from sparks and flames.

Keep kerosene out of reach of children and domestic animals.

Correctly dispose of exhaust kerosene, in order to avoid environmental pollution.

If you are not sure that you can use kerosene in complete safety, don't use it and, when you can go to a Benelli Q.J. authorized service center ask for the drive chain cleaning.

6.9.2 Lubrification

Chain lubrication has to be performed only by a Benelli Q.J. authorized service center according to the intervals specified in the tables of scheduled maintenance.

It is also necessary to perform this operation after riding under the rain and after cleaning the motorcycle. Riding your motorcycle when the drive chain is in poor condition or improperly adjusted can lead to accidents. To ensure proper operation, the drive chain needs to be properly lubricated.



Tornado Naked Tre 1130

6.10 Checking the idle speed

The idle speed should range from 1200 to 1300 rpm.

If a tune-up is necessary, contact an authorized service centre.









6.11 Replacing the fuses

The replacement of the fuses has to be performed only by a Benelli Q.J. authorized service center. Only in case of extreme urgency and if it is not possible to have a specialized technical assistance, the operation can be carried out by the owner according to the indications provided below.



Turn the ignition key on the "OFF" position before checking or replacing the fuses, in order to avoid a short circuit with subsequent damage to other electric parts of the motorcycle.

The recharge fuse is located on the left side of the motorcycle, in the position shown in the figure.

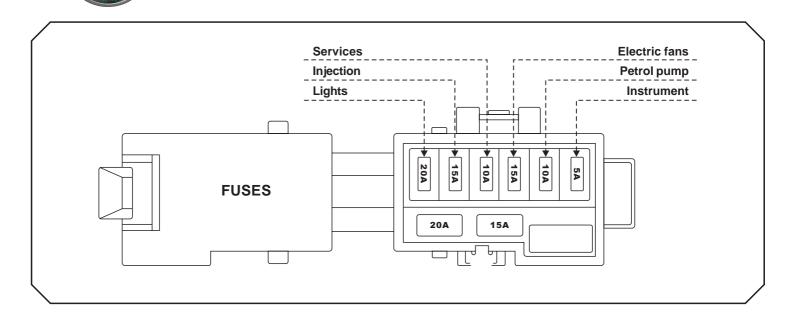
The service fuses are found under the passenger saddle; remove the saddle to gain access to the fuses.

Remove the glovebox.

Replace the blown fuse and refit the cover. The functions of the various fuses are given in the following legend.









WARNING

Never replace a fuse with a rating other than that precribed, in order to avoid damage to the electrical equipment of the motorcycle which could lead to a fire.







6.12 Battery

The battery is of the maintenance-free type and is installed under the saddles, between the driver saddle and the passenger saddle.

This battery does not require checking of the fluid level or adding of distilled water.

If the battery seems to be run-down (causing electrical problems or a difficult starting), have it recharged by an authorized Benelli Q.J. dealer as soon as possible. Remember that the battery runs down more quickly if your motorcycle is equipped with additive electrical accessories.

Always have the battery replaced by a Benelli Q.J. authorized service center.

WARNING



If the battery casing is damaged, there may be a leakage of sulphuric acid, a highly toxic and corrosive substance. Avoid any contact with your eyes, skin and clothes.

Always wear protective glasses when you have to work near the battery.

In the event of a contact with sulphuric acid, give the FIRST AID as described below:

• CONTACT WITH SKIN: Wash away with a great amount of water.

• INGESTION: Drink great amounts of water or milk, and immediately call a doctor.

• CONTACT WITH EYES: Wash away with water for about 15 minutes, and immediately call a doctor.

Furthermore, leakage of sulphuric acid can result in the formation of hydrogen gas which, if ignited by a spark or a flame, would cause an explosion.







The inversion of the battery wires can damage the battery and the recharging system. The red wires must be connected to the positive terminal (+), while the black wires must be connected to the negative terminal (-).

If the motorcycle is to remain unused for a long time (a month or longer), it is advisable to disconnect the battery cables or have the battery removed by skilled personnel. In case of prolonged inactivity, to avoid shortening the life of the battery, it is essential to have it recharged by a Benelli Q.J. authorized service center every 4-5 months, in order to guarantee its life in time.

6.13 Cleaning the motorcycle

Periodic careful cleaning is a key factor in preserving the value of the motorcycle, protecting its surface finish and checking for damages, wear and leakage of corrosive fluids.

Wash the motorcycle with water, a mild detergent and a sponge. Wipe the vehicle with a soft cloth. Use an air jet to dry difficult-to-reach areas.

Periodically treat the paintwork with high quality wax. After riding on roads treated with corrosive substances (salt), wash the vehicle as soon as possible with cold water. Do not use hot water as it enhances the corrosive action.









Do not wash your motorcycle soon afterwards riding. Attend a few minutes to allow the engine and the exhaust pipes to thoroughly cool.



Before washing the vehicle, stop up the exhaust pipes and protect the electrical parts. Never use washing systems involving steam or high pressure water jets. These systems could cause water infiltration and damage the internal parts of your motorcycle. Avoid cleaning the rims with fuel or solvents.

Avoid using clothes or sponges that have been in contact with strong or abrasive detergents, solvents or gasoline.

To avoid irreparable damage to the front fairing, never use alkaline or strongly acid detergents, petrol, brake fluid or other solvents. Clean the front fairing only with a soft cloth, warm water and a neutral detergent.



WARNING

Avoid smearing brakes or tyres with oil or wax.

The presence of water on the brakes can lead to a decrease of the braking effectiveness with subsequent risk of accidents. After completing the washing, run the engine for a few minutes and start off at reduced speed. Carefully apply the brakes a few times so as to dry the brake pads and discs.





6.14 Prolonged inactivity

If the motorcycle is not to be used for a long period, contact a Benelli Q.J. authorized service center to have the following operations carried out:

- Empty the fuel tank.
- Remove the battery and store it in a suitable place.

- Remove the spark plug caps and the spark plugs. Pour a teaspoonful of engine oil in every spark plug hole, then place back the spark plugs and the corresponding caps. Make the engine run idle for a few times.

- Lubricate all control cables and the joints of all pedals and levers.
- Clean the motorcycle and treat the paintwork with high quality wax.

- Park your motorcycle in a fresh, dry and dark place, with a temperature relatively constant and lower than 25° C (77°F). Avoid direct contact of the tyres with heating pipes or radiators, and prolonged contact with oil or gasoline. Avoid parking with the tyres near to electrical motors or devices capable to produce sparks or electric discharge. During the period of inactivity, place your motorcycle on the rear stand.

- Cover the vehicle with an adequate canvas cover Benelli Q.J. that can be bought as optional.



When the motorcycle is used the first time, carry out a general check and have it serviced at an authorized service center.





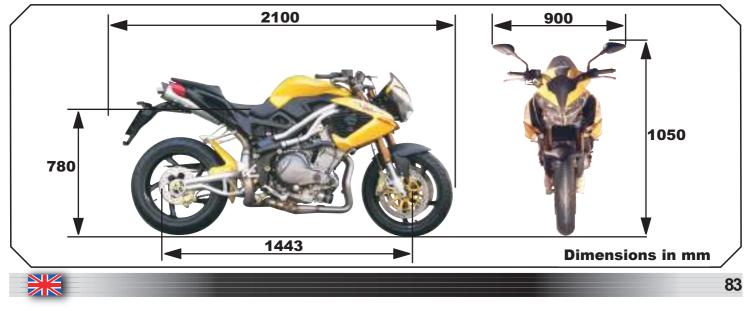


7 **Technical information**

Benelli Q.J. reserves the right to make any changes to its models on the purpose of constantly conform them to the technological advance.

Therefore the technical data that are shown below, can be different from those that can be checked on the vehicle. Moreover some data, like the performance, are susceptible of alteration in function of the specific recording conditions besides, of course, in function of the typical performance of every vehicle.

7.1 Specifications



Tornado Naked Tre 1130

DIMEN	SIONS	EN	GINE
Overall length	2100 mm (82.7 in)	Туре	four-stroke 12 valves
Max. width	900 mm (35.4 in)		DOHC
Max. height	1050 mm (41.4 in)	Displacement	1130 cc
Seat height	780 mm (30.7 in)	Number of cylinders	3
Wheelbase	1443 mm (56.8 in)	Cylinders position	aligned inclined by 15°
I			forward
		Bore stroke	88 x 62 mm
			(3.5 X 1.94 in)
		Compression ratio	11.2±0.5:1
		_ Idle speed	1350 rpm
WEI	GHT	Distribution	Double-overhead
Empty weight			camshaft
(without fuel)	205 kg (451.9 Lbs)	Starting	Electric starter
Weight with fuel		Clutch	Oil bath
_	215 kg (474 Lbs)	Lubrication	Wet sump
Maximum weight techni-	400 km (000 k km)	Cooling	With water radiator
cally acceptable with pilot,	400 kg (882 Lbs)		to air-cool oil
passenger and loading.		Filter oil	Polyurethan dry sponge







Maximum net power	101 KW (135CV)	IGNITION - PC	WER SUPPLY
Maximum net torque	to 9500 rpm 110 Nm to 7750 rpm	Туре	"VALBRO TDD" integrated ignition-injection
FU	IEL		system.Inductive
Recommended fuel	Lead-free premium petrol		discharge electronic ignition, "Multipoint"
Fuel tank capacity	16.5 lt (4.4 Gal)	Spark plug	electronic injection. CHAMPION RG4HC\
Reserve fuel	5 lt (1.3 Gal)	Spark gap	NGK CR9E 0,7 ÷ 0,8 mm (0.028 ÷ 0.032 in)
ENGI	NE OIL		
Recommended oil	API SJ 15W/50	TRASI	VISSIN
	(Synthetic)	Primary	
	JASO - MA CC MC G4	Number of teeth on	
Total	4 It (1 Gal)	crankshaft gear	Z = 44
		Number of teeth on	7 70
Quantity without oil filter cartridge replacement	3.8 lt (0.8 Gal)	clutch gear Transmission ratio	<u>Z = 79</u> 1.795





Tornado Naked Tre 1130



Secondary		Gear ratio in fourth	1.304 (6.000)
Number of teeth on front	Z = 16	(overall ratio)	
sprocket		Gear ratio in fifth	1.167 (5.367)
Number of teeth on rear	Z = 41	(overall ratio)	1.107 (0.007)
sprocket		Gear ratio in sixth	0.926 (4.260)
Transmission ratio	2.563	(overall ratio)	0.020 (4.200)

			FRAME
GEAR	SPEED	Turne	Steel-aluminium mixed
Туре	Removable, six-speed gearbox with	Туре	solution
	constantmesh gears	SU	ISPENSIONS
Gear ratio in first			Front
(overall ratio)	2.786 (12.816)		
Gear ratio in second (overall ratio)	1.994 (8.946)	Туре	"Upside down" telescopic hydraulic fork
Gear ratio in third (overall ratio)	1.524 (7.010)	Rod diameter	50 mm
		Travel range	120 mm (4.7 in)







	Rear		Rear
Туре	Progressive, with mono shock absorber which can be in extension regulated, spring-loaded.	Type Disc diameter Caliper Calipers, piston diameters	Single steel disc 240 mm (9.5 in) 2-piston 32 mm (1.3 in)
Swingarm	Steel trestle		RIMS Front
Wheel travel range	115 mm (4.5 in)	Type Material	Five spokes Radiator pincers
BF	RAKES	Dimensions	3,50" x 17"
	Front		Rear
Туре	Double steel floating disc	Type Material	Five spokes Radiator pincers
Disc diameter	320 mm (12.6 in)	Dimensions	6,00" x 17"
Disc flange	Aluminium alloy		
Pincers	2-piston		





Tornado Naked Tre 1130

TYRES		
Front		
Туре	Tubeless	
Dimensions	120/70 - ZR 17 (58 W)	
Maximum inflating	250 kPa	
pressure	2,8 bar	
Rear		
Туре	Tubeless	
Dimensions	190/55 - ZR 17 (73 W)	
Maximum inflating	2,8 bar	
pressure		

ELECTRICAL EQUIPMENT		
Equipment voltage	12V	
Low beam	12V - 55W	
High beam	12V - 55W	
Front light	12V - 5W	
Rear light - Brake light	12V - 21W	
Front turn indicators	12V - 3 x 5W	
Battery	12V - 12 Ah	
Alternator	480W to 5000 rpm	

Ince 191







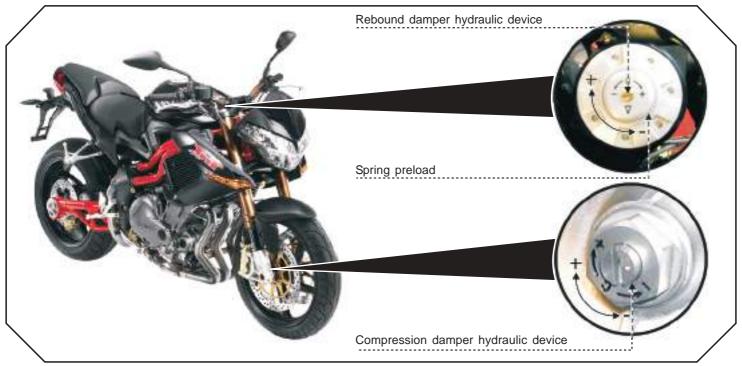
8 Variants

This section is dedicated to all the variants included in the Tornado Naked Tre Sport , Titanium and Cafè racer.





8.1 Adjusting the front suspension



Adjustments valid for models: SPORT - TITANIUM.





8.1.1 Adjusting front suspension spring preload

Adjusting of the spring preload is performed by counting the rule turns (A), either clockwise and anticlockwise. Turn clockwise for stiffer preload adjustment. Turn anticlockwise for softer preload adjustment.

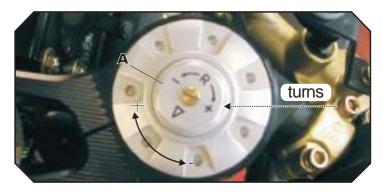


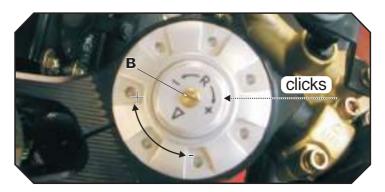
WARNING

It is essential that the adjusters of both fork rods are adjusted to the same position.

8.1.2 Adjusting front suspension rebound damper hydraulic device

Adjusting of the rebound damper hydraulic device is made in jerks. Turn the rule (B) clockwise to increase the braking action, or turn anticlockwise to decrease it.









Tornado Naked Tre 1130

8.1.3 Adjusting front suspension compression damper hydraulic device

Adjusting of the compression damper hydraulic device is made in jerks.Turn the rule (C) clockwise to increase the braking action, or turn anticlockwise to decrease it.

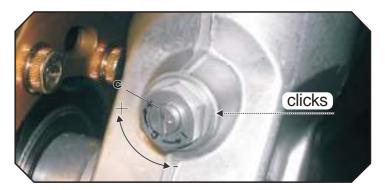
NOTE:

Start adjusting the preload from the "all open" position (direction -).

The compression and rebound adjusting starts rom the "all close" position (direction +).

SPORT - TITANIUM

FRONT SUSPENSION	Standard
Spring preload	7 turns
Rebound damper	3 turns
Compression damper	2 turns
FRONT SUBRENSION	Cracent
FRONT SUSPENSION	Sport
Spring preload	7 turns
	·



CAFE' RACER

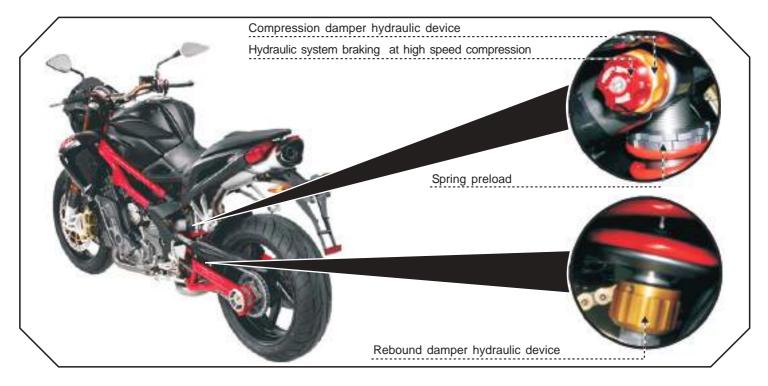
FRONT SUSPENSION	Standard
Spring preload	7,5 turns
Rebound damper	3,5 turns
Compression damper	2,5 turns
FRONT SUSPENSION	Sport
FRONT SUSPENSION Spring preload	Sport 7.5 turns
	•







8.2 Adjusting the rear suspension Tornado Naked Tre Sport / Titanium







Tornado Naked Tre 1130



WARNING

The high temperature of the exhaust pipes can cause burns. Before adjusting the rear suspension, shut off the engine and wait until the exhaust pipes have thoroughly cooled.

The rear shock absorber contains highly compressed gas. Do not try to open or disassemble it in any way.



When you estimate the rear suspension settings, never push or pull in any way on the exhaust muffler and on the tail. They would be certainly damaged.

Check the rear suspension settings in the position indicated by the arrow.

NOTE: At the moment of delivery of the motorcycle, the rear suspension is adjusted in the standard configuration, with damper spring length of 141 mm (5.55 in) [11 mm (0.43 in) of preload].









8.2.1 Adjusting rear suspension spring preload

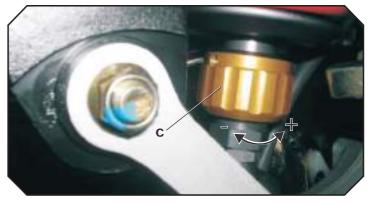
Adjust the spring preload by means of the two ring nuts (A and B) shown in the figure. Unloose the ring nut (A) and adjust the preload using the ring nut (B). Turn clockwise for a stiffer preload.

Turn anticlockwise for a softer preload. Once the adjustment is over, tighten the ring nut (A).

8.2.2 Adjusting rear suspension rebound damper hydraulic device

Adjusting of the rebound damper hydraulic device is made in jerks. Turn the rule (C) clockwise to increase the braking action, or turn anticlockwise to decrease it.









Tornado Naked Tre 1130

8.2.3 Adjusting rear suspension compression damper hydraulic device

Adjusting of the compression damper is made in jerks. Turn the rule (D) clockwise to increase the braking action, or turn anticlockwise to decrease it.

8.2.4 Hydraulic compression braking system at high-speed back - wheel suspension

Adjusting of the compression damper is made in jerks. Turn the rule (E) clockwise to increase the braking action, or turn anticlockwise to decrease it.









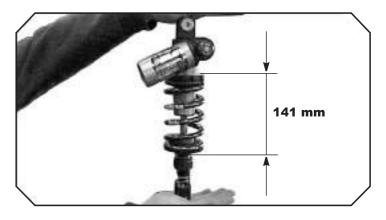
Tornado Naked Tre 1130



SPORT - TITANIUM

REAR SUSPENSION	Standard
Spring length	141 mm (5.55 in)
Rebound damper	24 clicks
Compression damper	17 clicks
High speed	12 clicks
compression braking	

REAR SUSPENSION	Sport
Spring length	141 mm (5.55 in)
Rebound damper	22 clicks
Compression damper	9 clicks
High speed	7 clicks
compression braking	



NOTE:

Adjusting of the preload starts from the damper spring length of 141mm (5.55 in).

The compression and rebound adjustment starts from the "all close" position (direction +).



9

Benelli

Power Control System







9.1 Power Control System Activation

This system allows to select two different settings of the tune:

STANDARD:

With botton in OFF position (light on) the engine performs 137hp (101 KW * **)

ECONOMY:

With button in ON position (light off) the engine performs 112 hp (82 KW*) allowing a more linear distribution, a decreased fuel consumption included between 10% and 20 % depending on the road. In particular way it allows an easier control of the bike in low grip condition of the road.



- * For counries having power limits standard tune 72 kW.
- ** Titatium version not reported









10 FOR UNITED STATES OF AMERICA VERSION ONLY

Reporting of safety defects

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA).

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer or Benelli America, LLC.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 366-0123 in Washington, D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from the Hotline.

Safety warnings

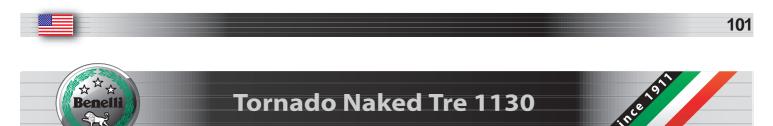
Traffic Rules vary from jurisdiction to jurisdiction. Know the regulations in your jurisdiction before riding this motorcycle.

Warning

This motorcycle is designed and intended for use on streets and other smooth, paved areas only. Do not use this motorcycle on unpaved surfaces. Such use could lead to upset or other accident.

Noise emission warranty

Benelli America, LLC warrants that this exhaust system, at the time of sale, meets all applicable U.S.EPA Federal noise standards. This warranty extends to the first person who buys this exhaust system for purposes other than resale, and to all subsequent buyers. Warranty claims should be directed to: Benelli America, LLC - Tel. +1 7245936208



Noise and exhaust emission control system information

Source of Emissions

The combustion process produces carbon monoxide and hydrocarbons. Control Of hydrocarbons is very important because under certain conditions, they react to form photochemical smog when subjected to sunlight. Carbon monoxide does not react in the same way, but is toxic.

Benelli Q.J. s.r.l. utilizes lean carburetor settings and other systems to reduce carbon monoxide and hydrocarbons.

Exhaust Emission Control System

The Exhaust Emission Control System is composed of lean carburetor settings. The Exhaust Emission Control System is separate from the crankcase emission control system.

Crankcase Emission Control System

The engine is equipped with a closed crankcase system to prevent discharging crankcase emissions into the atmosphere. Blow-by gas is returned to the combustion chamber through the air cleaner and the throttle body.

Evaporative Emission Control System

Motorcycles are equipped with an evaporative emission control system which consists of a charcoal canister and associated piping. This system prevents the escape of fuel vapors from the throttle body and fuel tank.

Tampering warning

Tampering with Noise Control System Prohibited. Federal Law prohibits the following acts or causing thereof: (1) the removal or rendering inoperative by any person, other than for purposes of maintenance, repair, or replace-





ment, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use; or

(2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

Among those acts presumed to constitute tampering are the acts listed below:

(1) Removal of, or puncturing the muffler, baffles, header pipes or any other component which conducts exhaust gases.

(2) Removal or puncturing of any part of the intake system.

(3) Lack of proper maintenance.

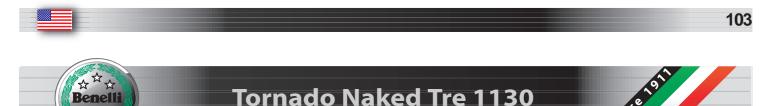
(4) Replacing any moving part of the vehicle, or parts of the exhaust or intake system, with parts other than those specified by the manufacturer.

This product should be checked for repair or replacement if the motorcycle noise has increased significantly through use. Otherwise, the owner may become subject to penalties under state and local ordinances.

Problems that may affect motorcycle emissions

If you are aware of any of the following symptoms, have the vehicle inspected and repaired by a Benelli's autorized centre. Symptoms:

- Hard starting or stalling after starting.
- Rough idle.
- Misfiring or backfiring during acceleration.
- After-burning (backfiring).
- Poor performance (driveability) and poor economy.



Riding safety

The points given below are applicable for every day motorcycle use and shoud be carefully observed for safe and effective vehicle operation.

A motorcycle does not provide the impact protection of an automobile, so defensive riding in addition to wearing protective apparel is extremely important. Do not let protective apparel give you a false sense of security.

Before changing lanes, look over your shoulder to make sure the way is clear. do not rely solely on the rear view mirror; you may misjudge a vehicle's distance and speed, or you may not see it at all.

When going up steep slopes, shift to a lower gear so that there is plenty of power to spare rather than overloading the engine.

When applying the brakes, use both the front and rear brakes. Applying only one brake for sudden braking may cause the motorcycle to skid and lose control.

When going down long slopes, control vehicle speed by closing the throttle. Use the front and rear brakes for auxiliary braking.

Riding at the proper rate of speed and avoiding unnecessarily fast acceleration are important not only for safety and low fuel consumption but also for long vehicle life and quieter operation.

When riding in wet conditions or on loose roadway surfaces, the ability to maneuver will be reduced. All of your actions should be smooth under these conditions.

Sudden acceleration, braking or turning may cause loss of control.

When the roadway is wet, rely more on the throttle to control vehicle speed and less on the front and rear brakes. The throttle should also be used judiciously to avoid skidding the rear wheel from too rapid acceleration or deceleration.

On rough roads, exercise caution, slow down, and grip the fuel tank with your kness for better stability. When quick acceleration is necessary as in passing, shift to a lower gear to obtain the necessary power.





Do not down shift at too higt an r.p.m. to avoid damage to the engine from overreving.

Avoiding unnecessary weaving is important to the safety of both the rider and other motorists.

Do not exceed the legal speed limit or drive too fast for existing conditions. High speed increases the influence of any condition affecting stability and the loss of control. Operate motorcycle only at moderate speed and out of traffic until you have become thoroughly familiar with its operation and handling characteristics under all conditions. This is a very high performance motorcycle, designed and intended for use by experienced careful riders only! A new motor-cycle must be operated according to a special break-in procedure see chapter number 4.3 (see Running in recommendations).

WARNING

Before starting engine, check for proper operation of brake, clutch, shifter, throttle controls, correct fuel and oil supply.

Gasoline is extremely flammable and is explosive under certain conditions. Refuell in a Well ventilated area with the engine stopped. Do not smoke or allow open flames or sparks when refuelling or servicing the fuel system. Always close the fuel petcock when the engine is not running to prevent flooding of the throttle body. Do not overfill fuel tank .

Do not inhale exhaust gases and never run the engine in a closed garage or confined area.

This motorcycle was not intended to be equipped with a sidecar or to be used to tow any trailer or other vehicle. Cannot predict the effects of such accessories on handling or stability, but can only warn that the effects will be adverse and any damage to motorcycle components caused by the use of such accessories will not be remedied under warranty.



WARNING

Do not ride the motorcycle with helmets attached to the hook; the helmets could cause an accident by distracting the operator or interfering with normal vehicle operation.

Protective apparel

Always wear a helmet. Most motorcycle accident fatalities are due to head injuries. For safety eye protection, gloves, and high top, sturdy boots should also be worn. The exhaust system becomes very hot during operation, never touch the exhaust system. Wear clothing that fully covers your legs. Do not wear loose clothing which could catch on the control levers, footrests, wheels, or chain. Any amount of alcohol will significantly interfere with your ability to safely operate your motorcycle. Don't drink and ride.

Vehicle identification number (VIN):

The vehicles identify by anumber (see chapter number 1.2)

ZBN	ΤN	ΤΝΤ	?	6-7	Р	000000
BENELLI	Vehicle type	Variants and versions	Check digit	Model year	Factory place	Frame number



Tornado Naked Tre 1130



Evaporation emission system

- This system consists of
- 1) Left intake manifold;
- 2) Jet;
- 3) Carbon canister;
- 4) Fuel tank;
- 5) Fuel tank bottom view

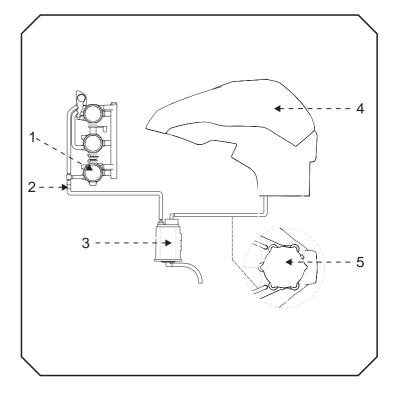
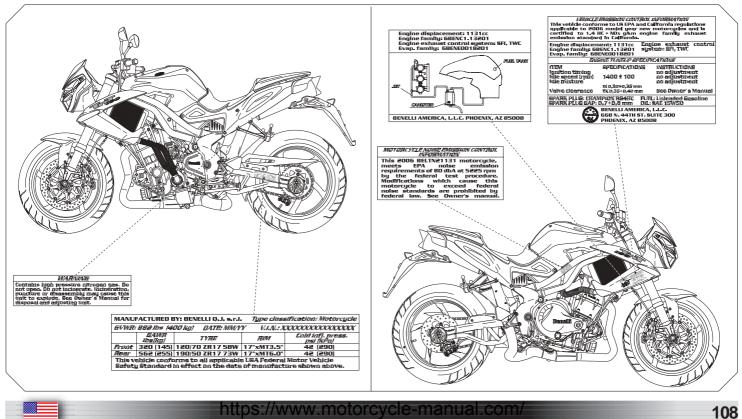




Image: Senelli Senell

TnT Labels USA







Important

In the event of fuel system malfunction contact Benelli's Autorized Service Centres

Warranty on emission control system

years from the date of initial retail delivery, whichever first occurs.

Benelli Q.J. s.r.l. - Strada della Fornace Vecchia s.n. - 61100 Pesaro - Italy warrants that each new 2005 and later Benelli motorcycle, that includes as standard equipment a headlight, tail-light and stoplight, and is street legal:
A) is designed, built and equipped so as to conform at the time of initial retail purchase with all applicable regulations of the United States Environmental Protection Agency, and the California Air Resources Board; and
B) is free from defects in material and workmanship which cause such motorcycle to fail to conform with applicable regulations of the United States Environmental Protection Agency or the California Air Resources Board for a period of use, depending on the engine displacement, of 12.000 kilometers (7,456 miles), if the motorcycle's engine displacement is less than 170 cubic centimeters; of 18.000 kilometers (11,185 miles), if the motorcycle's engine displacement is equal to or greater than 170 cubic centimeters but less than 280 cubic centimeters; or 5 (five)

I. Coverage

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

In the state of California only, emissions related warranted parts are specifically defined by that state's Emissions Warranty Parts List. These warranted parts are: carburetor and internal parts; intake manifold; fuel tank, fuel injec-



tion system; spark advance mechanism; crankcase breather; air custoff valves; fuel tank cap for evaporative emission controlled vehicles; oil filler cap; pressure control valve; fuel/vapor separator; canister; igniters; breaker governors; ignition coils; ignition wires; ignition points, condensers, and spark plugs it failure occors prior to the first scheduled replacement, and hoses, clamps, fittings and tubing used directly in these parts.

Since emission related parts may vary from model to model, certain models may not contain all of these parts and certain models may contain functionally equivalent parts.

In the state of California only, Emission Control System emergency repairs, as provided for in the California Administrative Code, may be performed by other than an Autorized Benelli Dealer.

An emergency situation occurs when an Autorized Benelli Dealer is not reasonably available, a part is not available within 30 days, or a Benelli will reimburse the owner for the expenses repair is not complete within 30 days. Any replacement part can be used in an emergency repair.

Including diagnosis, not to exceed retail price for all warranted parts replaced and labor charges based on Benelli's recommended time allowance for the warranty repair and the geographically appropriate hourly labor rate. The owner may be required to keep receipts and failed parts in order to receive compensation.

II: Limitations

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

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





- B. Inspections, replacement of parts and other services and adjustments required for routine maintenance.
- C. Any motorcycle on which odometer mileage has been changed so that actual mileage cannot be readily determined.

III: Limited liability

A. The liability of Benelli under this Emission Control System Warranty is limited solely to the remedying of defects in material or workmanship by an authorized Benelli motorcycle dealer at its place of business during customary business hours. This warranty does not cover inconvenience or loss of use of the motorcycle or transportation of the motorcycle to or from the Benelli dealer. Benelli shell not be liable for any other expenses, loss or damage, whether direct, incidental, consequential or exemplary arising in connection with the sale or use of or inability to use for any purpose.

Some states do not allow the exclusion or limitation of any incidental or consequential damages, so the above limitations may not apply to you.

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

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

C. No dealer is authorized to modify this Benelli Limited Emission Control Systems Warranty.

IV. Legal rights

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



V. This warranty is in addition to the Benelli Limited motorcycle warranty.

VI. Additional information

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





This Manual is property of **Benelli Q.J. s.r.l.** Any total or partial reproduction is forbidden.

Benelli Q.J. is continuously looking for advanced solutions to be used in product design and for the constant improvement of product quality.

Therefore, although this CD ROM contains the most updated information on and photos of the motorcycle available on the date of its publication, there could be slight discrepancies between the motorcycle and the CD ROM. If you require further clarifications on the contents of the CD ROM, please consult your Benelli dealership.



Version 2006 / 05 Benelli Q.J. s.r.l. Strada della Fornace Vecchia https://www.ferserocilTALY www.benevil.com/