

# User Manual

## TRRS ONE

RR ELECTRIC START

RR

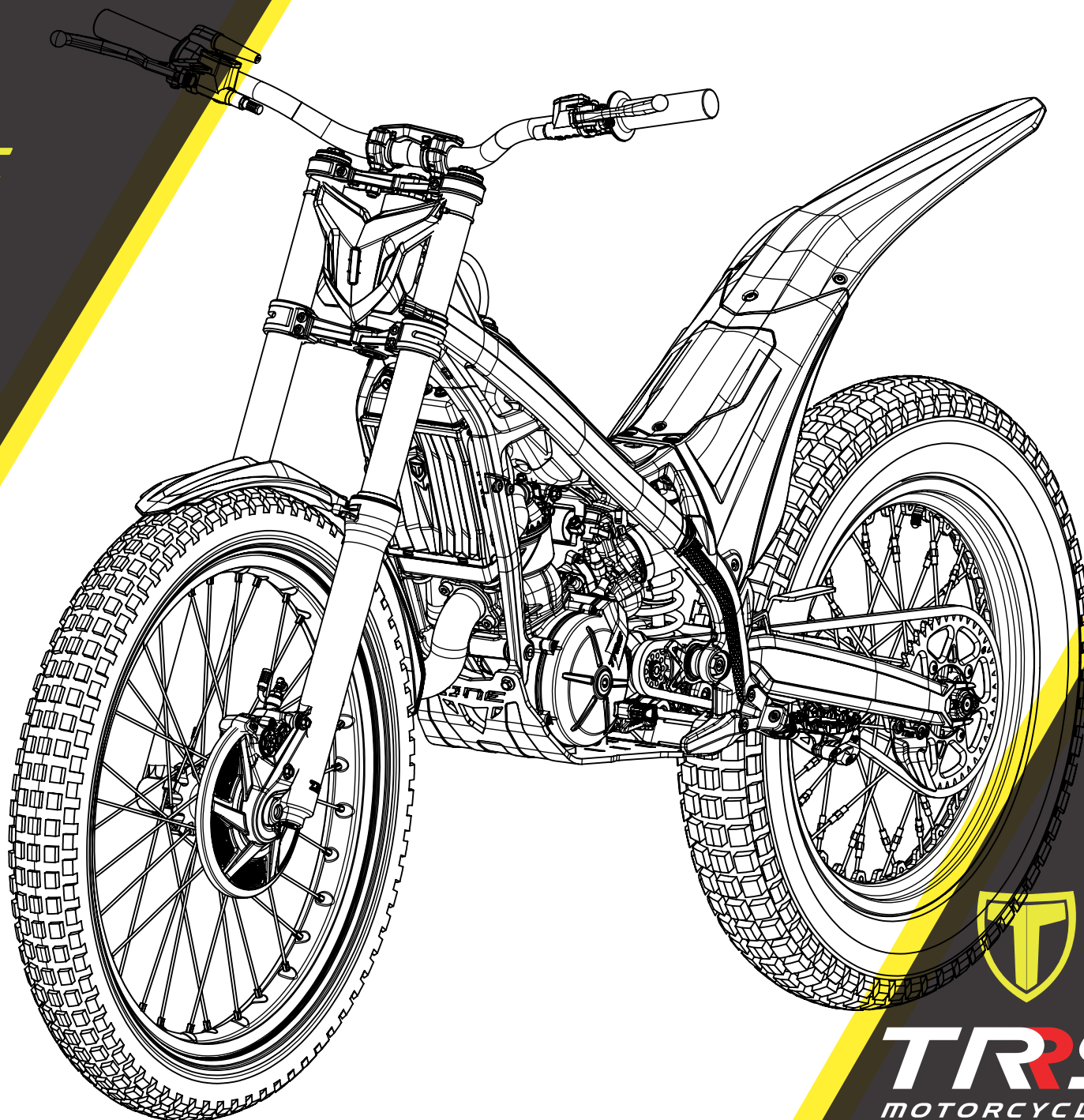
GOLD ELECTRIC START

GOLD

250 - 300

INJECTION

From model year 2026



TRRS  
MOTORCYCLES

Welcome to TRS



Dear customer,

Thank you for your confidence in us, and congratulations on the purchase of your new TRS One.

Because of our experience, professionalism and passion for trial bikes we are able to offer you an innovative, reliable and up-to-date motorcycle. It has a comprehensively checked technical performance that has been tried and tested both by our technicians and our high-level drivers worldwide.

The solutions we have used give the motorcycle an unmistakable character, combining simplicity, reliability and design. We pay attention to every last detail to give you a unique bike.

At the same time, this manual gives you all the information you need to use the motorcycle appropriately and safely. We recommend that you read it carefully before you use the motorcycle.

In addition, you will find tips and useful information for the maintenance and upkeep your new TRS One.

Yours faithfully,

*Jordi Jorjès*



*Picture shows an homologated version with regard to regulation (EU) N° 168/2013*



*Picture shows the competition version only and is not manufactured for, nor should it be used on public streets, roads or highways. The use of this kit should be limited to participation in sanctioned competition events upon a closed course.*



TRRS advises you:

Please read this user manual thoroughly before using your motorcycle. It details all the instructions for the correct handling of the motorcycle and for your safety, as well as helping towards the best possible maintenance and upkeep from day one.

Please pay special attention to the notes flagged up with the following symbols:



ATTENTION! This symbol refers to points which, if ignored, could lead to some kind of damage to your motorcycle. Non-observance of these warnings could render your motorcycle warranty void.



CAUTION! This symbol refers to points which, if ignored, could lead to physical danger for the user.



In addition to these specific warnings, the manual gives advice on the best use of your motorcycle, as well as better adjustment and control of its important features.

TRRS reserves the right to make changes to this manual.

TRRS Motorcycles is not responsible of any translation of this document into a different language, made by someone external to the company.

TRRS Motorcycles confirms that the unique and valid documents are those directly downloaded from the official internet site [www.trsmotorcycles.com](http://www.trsmotorcycles.com)



## TRS recommends:

If you have any doubts about adjustments to your motorcycle, refer to the manual and/or contact an authorised TRS dealer.

Please carefully read through the information in the user manual to familiarise yourself with the features of your motorcycle before driving it using the maximum power settings.

- A running-in period of at least 8-10 hours without driving at high speeds or full throttle is advised, in order to allow the engine to bed in. In these first hours, drive at a moderate speed only.

- Fuel is a highly inflammable liquid. Use caution when refuelling and always- turn off the engine first.

- Before running the engine at high speed, it is important to let it reach an optimum operating temperature, especially when starting up the motorcycle or in low temperature conditions.

- This motorcycle uses two-stroke synthetic oil mixed with 1% 98 octane fuel. Do not use any other kind of lubrication without previously checking with an authorised TRS mechanic.

- This motorcycle is designed to carry just one person, and it is not permitted to carry a passenger.

- For a long life of service, keep the motorcycle maintained as recommended- in this manual.

- This bike is designed to be safe when driving, provided that the driver is equipped with the appropriate safety equipment (helmet, protective clothing, etc.). Be careful and drive sensibly.



# Index

|                                                 |    |                                                     |    |
|-------------------------------------------------|----|-----------------------------------------------------|----|
| 1 - Description of parts                        | 7  | 25 - Throttle body                                  | 29 |
| 2 - Technical specifications TRS One - Engine   | 11 | 26 - Adjustment of the idle speed                   | 29 |
| 3 - Technical specifications TRS One - Frame    | 12 | 27 - 0-100 Throttle Position Sensor Calibration     | 30 |
| 4 - Manufacturer's plate (under the fuel tank)  | 13 | 28 - Front suspension                               | 31 |
| 5 - Unboxing, set up                            | 14 | 29 - Rear suspension                                | 31 |
| 6 - Starting and stopping the engine            | 15 | 30 - Damper Reiger 3 Ways (Gold)                    | 32 |
| 8 - Gearshift                                   | 17 | 31 - Drive chain                                    | 33 |
| 10 - Fuel tank                                  | 18 | 32 - Reed valve                                     | 34 |
| 11 - Tyres                                      | 19 | 33 - Swing arm                                      | 34 |
| 12 - Braking system                             | 20 | 34 - Rear brake pedal                               | 34 |
| 13 - Steering lock                              | 21 | 35 - Footrest                                       | 35 |
| 14 - Side stand                                 | 21 | 36 - Exhaust muffler                                | 35 |
| 15 - Handlebar and Instrument panel             | 22 | 37 - Tank clutch pump                               | 35 |
| 16 - Adjustment of the levers and the handlebar | 24 | 38 - Motorcycle maintenance                         | 36 |
| 17 - Changing the transmission oil              | 24 | 39 - Pares de Apriete                               | 36 |
| 18 - Spark plug                                 | 26 | 40 - Storage                                        | 37 |
| 19 - Air Filter                                 | 26 | 41 - Maintenance operations                         | 38 |
| 20 - Cooling system                             | 27 | 42 - Approval                                       | 40 |
| 21 - Draining of coolant                        | 27 | 44 - Troubleshooting and Frequently Asked Questions | 41 |
| 22 - Temperature switch                         | 27 | 45 - Recommended products                           | 45 |
| 23 - Filling with coolant                       | 28 |                                                     |    |
| 24 - Bleeding air in the cooling system         | 28 |                                                     |    |

## 1 - Description of parts

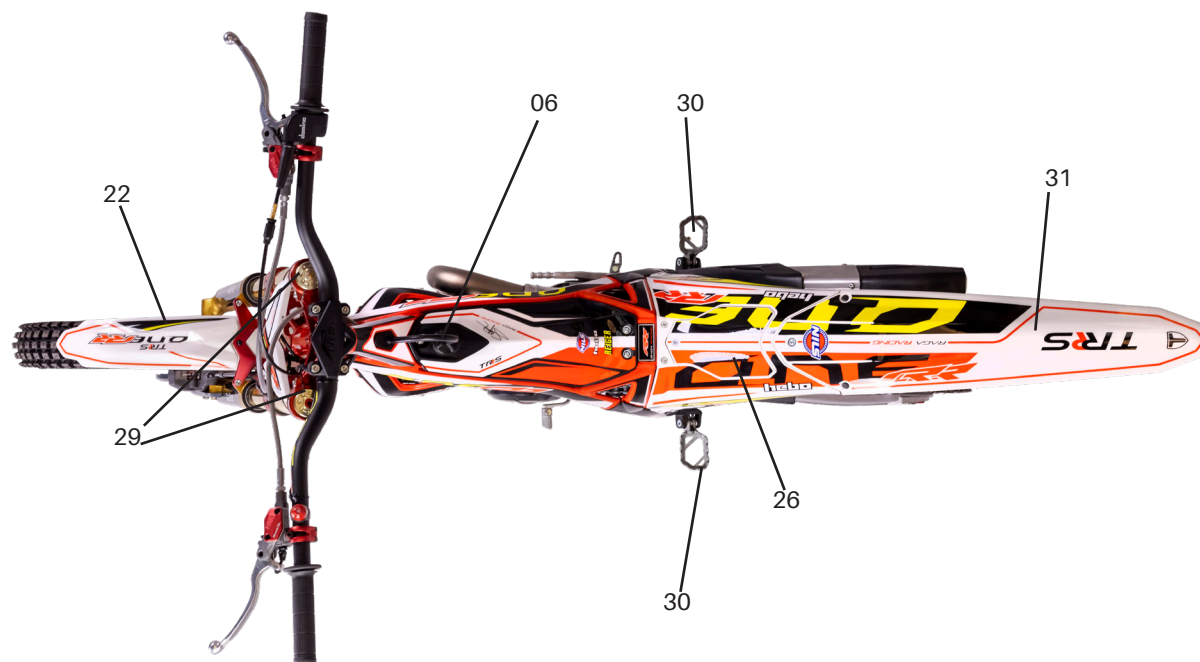


- 1- Clutch lever
- 2- Indicator, horn and stop buttons
- 3- Brake lever
- 4- Accelerator
- 5- Radiator cap
- 6 - Fuel tank cap

- 7- Kick-start
- 8- Fuel tap
- 9- Radiator
- 10- Radiator bleed screw
- 11- Rear brake pedal

- 12- Fuel tank breather
- 13- Reed valve
- 14- Drive chain
- 15- Gear change pedal





17- Front fork  
18- Spark plug  
19 - Exhaust muffler  
20- Swing arm  
21- Exhaust pipe

22- Water pump  
23- Front mudguard  
24 - Front brake calliper  
25- Ignition cover  
26 - Air filter cover

27- Carburettor  
28 - Rear Sprocket  
29 - Front suspension adjustment  
30- Footrests  
31- Rear mudguard

32- Drive sprocket  
33 - Drain plug oil engine

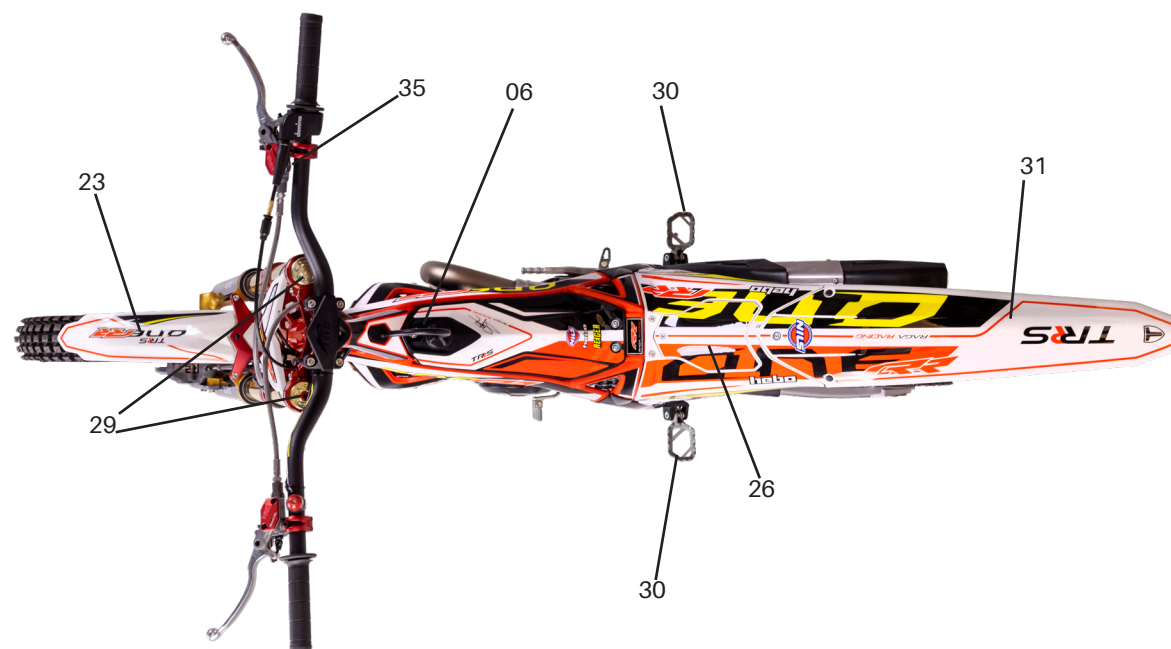
## 1 - Description of parts



- 1- Clutch lever
- 2- Indicator, horn and stop buttons
- 3- Brake lever
- 4- Accelerator
- 5- Radiator cap
- 6 - Fuel tank cap

- 7- Kick-start
- 8- Fuel tank
- 9- Radiator
- 10- Radiator bleed screw
- 11- Rear brake pedal

- 12- Fuel tank breather
- 13- Fuel tap
- 14- Reed valve
- 15- Drive chain
- 16- Gear change pedal



17- Front fork  
18- Spark plug  
19 - Exhaust muffler  
20- Swing arm  
21- Exhaust pipe

22 - Water pump  
23- Front mudguard  
24 - Front brake calliper  
25- Ignition cover  
26 - Air filter cover

27- Carburettor  
28 - Rear Sprocket  
29 - Front suspension adjustment  
30- Footrests  
31- Rear mudguard

32- Drive sprocket  
33 - Battery  
34 -Engine electric start  
35- Switch electric start  
36- Draining plug

## 2 - Technical specifications TRS One - Engine

### Technical Specifications TRS One - Engine

|                              |                                                                                                                       |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| ENGINE:                      | Single cylinder 2 stroke.                                                                                             |
| Displacement:                | 294,1cc - 272,2 cc - 247,7 cc- 125cc                                                                                  |
| Cooling system:              | Liquid cooled.                                                                                                        |
| Bore x stroke:               | 79x60 mm (300 cc) - 72,5x60 mm (250 cc)                                                                               |
| Ignition:                    | ATHENA CDI                                                                                                            |
| Clutch:                      | 3 disks diaphragm TRS hydraulic system.                                                                               |
| Gearbox:                     | 5 speeds.                                                                                                             |
| Engine oil capacity:         | 330 ml standard engine (refilled in 280ml) / 430 ml Electric start version (refilled in 380ml)<br>(Nils clutch trial) |
| Engine oil capacity (125cc): | 350cc (refilled 330cc) (Nils Clutch trial)                                                                            |
| Transmission:                | Chain.                                                                                                                |
| Fuel:                        | 2,5L Petrol unlead 98 2 stroke oil 1%                                                                                 |
| Throttle body:               | TRS throttle body                                                                                                     |
| Starting:                    | Kick start to primary transmission / Kick-start & Electric Start                                                      |
| Air filter:                  | Foam.                                                                                                                 |
| Spark:                       | (250-300)cc NGK-R BPMR6A                                                                                              |



### 3 - Technical specifications TRS One - Frame

#### Technical specifications TRS One - Frame

|                   |                                                                      |
|-------------------|----------------------------------------------------------------------|
| CHASSIS:          | Double cradle forged aluminum frame.                                 |
| Swing arm:        | Aluminium.                                                           |
| Front suspension: | Aluminium Tech, 39mm diameter, 175mm str.                            |
| Setting:          | Adjustable spring, preload, compression, extension.                  |
| Rear suspension:  | Reiger 2 ways                                                        |
| Setting:          | Spring preload and extension / Spring preload, compresion, extension |
| Stroke-travel:    | Rear wheel stroke 168mm.                                             |
| Wheel:            | Morad aluminium radiated wheel.                                      |
| Front-wheel tyre: | 1.6x21 Michelin X11 Trial 2.75x21.                                   |
| Rear-wheel tyre:  | 2.15x18 Michelin X11 Trial 4.00x18 TL.                               |
| Front brake:      | Disc 185mm clamp 4 pistons BRAKTEC.                                  |
| Rear brake:       | Disk 150mm clamp 2 pistons BRAKTEC.                                  |
| Net weight:       | Standard: 66 kg / Electric start: 68,5 Kg                            |
| Dimensions:       | Length x width x height: 2,015 x 830 x 1,125mm.                      |
| Seat height:      | 640mm                                                                |
| Engine Protector: | Aluminium 7075.                                                      |
| Foot rest:        | TRRS grip adjustables (+/-) 2,5 mm.                                  |

TRS Motorcycles recommend NILS lubricant.

## 4 - Manufacturer's plate (under the fuel tank)

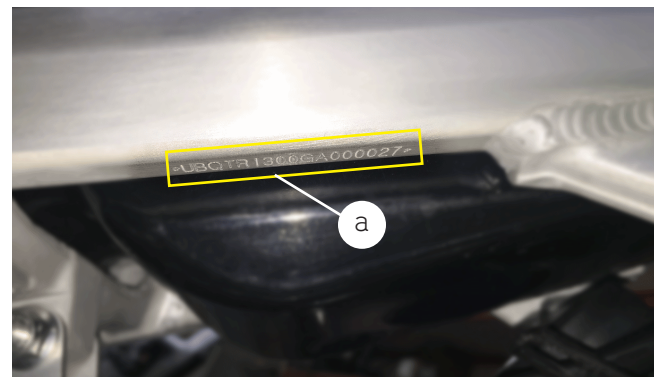
All motorcycles manufactured by TRS have an identification number stamped on the frame which also appears in the technical sheet of the documentation that will be supplied to the user. This number cannot be replaced or changed. It is stamped on the tube on the right hand side of the frame and may be required in any technical inspection.

### SERIAL NUMBER AND KEY CODE

These numbers are the ones that identify your motorcycle and the steering lock. Keep a note of them in your manual (e.g. to obtain a copy of the keys if they are lost).




We recommend that you keep a note of the serial number and the identification details of your motorcycle to use in the event of theft or to order spare parts.



*a) The position of the identification number, located on the tube on the right hand side of the frame.*



*b) The identification number engine, is located under of the exhaust pipe*

## 5 - Unboxing , set up

### SETUP BEFORE USING

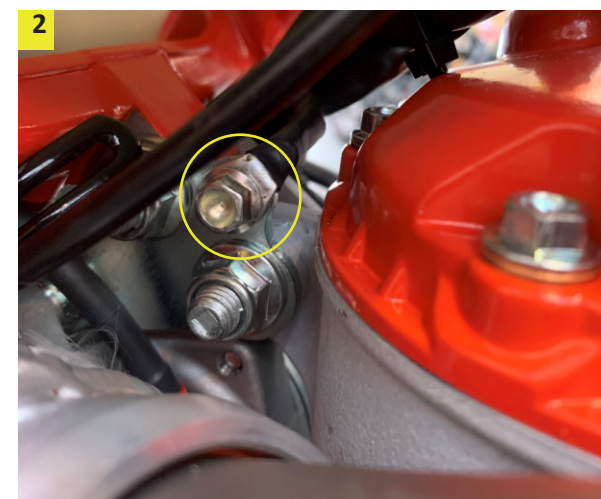


For safety reasons, motorcycles TRRS with Electric Start are delivered without fuel and oil (only when the transport is air and maritime transport) , and with the ground connector disconnected to prevent occurrence during transport. Follow the instructions below for setting up the motorcycle.

1. Location of the ground connector, protected with electrical tape. Then proceed to connect the ground connector to the chassis. Take off the tape of the ground connector.

2. Insert the ground connector with the bolt together and tighten with an 8 mm wrench to the plate support.

-430 ml Electric start version (refilled in 380ml)



**TRRS**  
MOTORCYCLES

recommends



## 6 - Starting and stopping the engine

### STARTING AND STOPPING THE ENGINE

#### KICK-START



*a) Start lever, on the right side of the TRS One*



*b) Stop button, to the left of the handlebar*



*c) Kill switch, to the right of the handlebar*

The Stop button is positioned on the left-hand side of the handlebar, close to your thumb for easy use.

It is a safety element, so that , in the event of the pilot falling, the motorcycle is disconnected. Make sure that the rider puts the elastic band on the left wrist and is firmly secured, before starting the motorcycle.



## 6 - Starting and stopping the engine

### STARTING AND STOPPING THE ENGINE

#### SWITCH ELECTRIC START

a



a) Electric start switch button, on the right side handlebar

#### NOTE:

- 1) Before starting the motorcycle, fold the side stand.
- 2) Hold the lever clutch
- 3) Make sure that the gear shift is in neutral.
- 4) Kill switch. If the motorcycle uses the kill switch device fig. d), check that it is correctly connected. Red part over the black holder.

5 a) Cold engine. Pull up the choke knob to the locked position (closed). Fig. F.). After few seconds starting the engine, return the knob to the lower position. This is the normal operating position.

5 b) Warmed engine. Check the choke knob is in the lower position (unlocked). Fig. F.) This is the normal operating position.

5 c) Engine flooded. After a fall or the motorcycle lying down due to transport, the engine can be flooded. To start the engine, be sure that choke knob is in the lower position. (Unlocked). Turn to full the throttle control. When the engine starts, release the throttle and let it run for a few minutes.



b) Stop button, to the left of the handlebar

The Stop button is positioned on the left-hand side of the handlebar, close to your thumb for easy use.



c) Kill switch, to the right of the handlebar

6) Press the electric start button to start the engine. Do not hold down the start button for more than 4 seconds. It is not recommended try more than 3 attempts in a period less than 15 minutes. Exceeding these guidelines could damage the battery or the starting system. If the engine has not started, try 3 times with the kick starter lever. In case the engine does not start, check at the end of this document the chapter "Troubleshooting and frequently asked questions" to find the solution.

## 8 - Gearshift

### GEARSHIFT

The gearshift is controlled by a pedal on the left-hand side of the vehicle. The sequence of gears is as shown in the diagram. You must hold down the clutch lever on the left while changing gear. Neutral position is located between first and second gear.

*You can find the first gear by pushing the lever downwards. For the other gears, push the lever upwards, moving up a gear each time you push it.*



a) Gear shift lever

## 10 - Fuel tank

### FUEL TANK

The tank has a capacity of 2.5 litres and should be filled with a mixture of unleaded petrol and oil. The tank cap is positioned at the top of the tank. Minimum octane rating of fuel: 98 octanes.



Important. Do not mix vegetable and mineral oil. Keep to the specified levels and proportions for correct combustion in the engine. To produce a uniform mixture, first pour the oil and part of the petrol into a container, shake and then add the rest of the petrol. It is more difficult to produce a good mixture at low temperatures and this should be avoided.

## TYRES



*Image of the rear wheel of the TRS*

### TYRES

Front wheel:  
**2,75x21" TRIAL**

Rear wheel:  
**4,00x18" TRIAL**

### RECOMMENDED TYRE PRESSURE:

Front wheel:  
**0,45bar (0,42bar for competition)**

Rear wheel:  
**0,35bar (0,3bar for competition)**

On low-grip terrain you can reduce the tyre pressure slightly to increase the grip and vice versa.



The condition of the tyres is a key factor in safety and guarantees better driving. Make sure your tyre pressure is always correct and check for wear. The pressure must be checked when the tyre is cold.

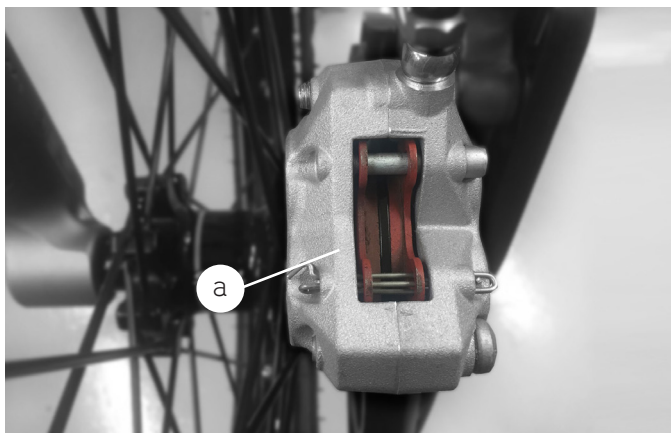


## 12 - Braking system

### BRAKE PADS

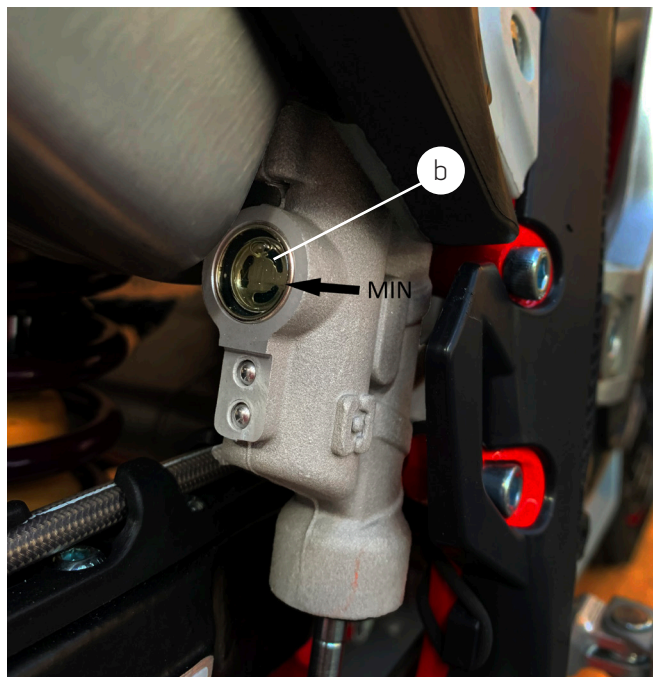
To ensure optimal braking you need to check the condition of the brake pads. Initially the pad indicator groove is normally around 3mm. If after use you find this has been reduced to below 2mm, they need to be replaced.

To replace them you need to remove the brake calliper from the fork tube, taking out the bolts and the wire clip that you can remove from underneath. For reassembly you will need to lever the pistons back with a screwdriver. Then make sure the bolts and the wire pin clip are tight.



*a) Brake pads*

### LEVEL OF REAR BRAKE FLUID



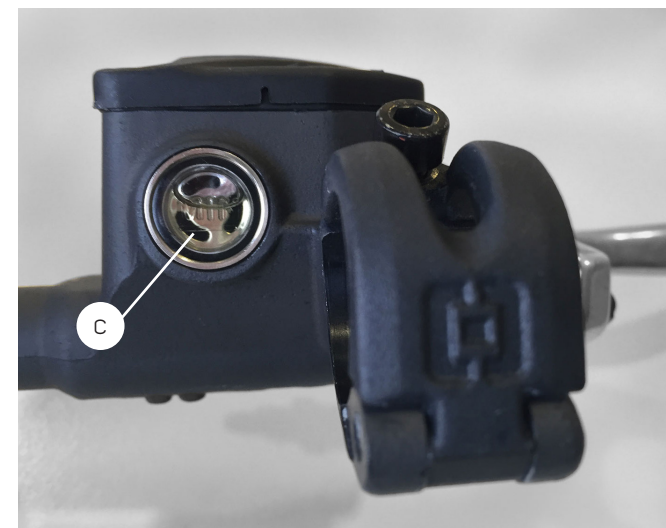
*b) Rear brake Pump*

To check the rear brake oil level, we can view from the rear side of the bike. We must keep the level above the indicator line.

The oil reservoir can be accessed by removing the exhaust and unscrew the bolts from cover reservoir, taking care not to spill brake fluid outside of it since it is very corrosive.

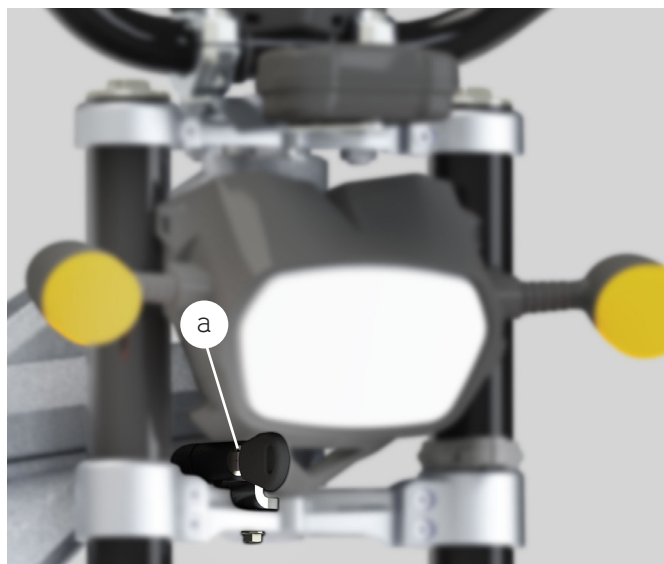
### LEVEL OF FRONT BRAKE FLUID

At the rear of the front brake pump you can check the fluid level, and replenish it to the correct level with brake fluid NILS DOT-4.



*c) Level of fluid in the front brake pump.*

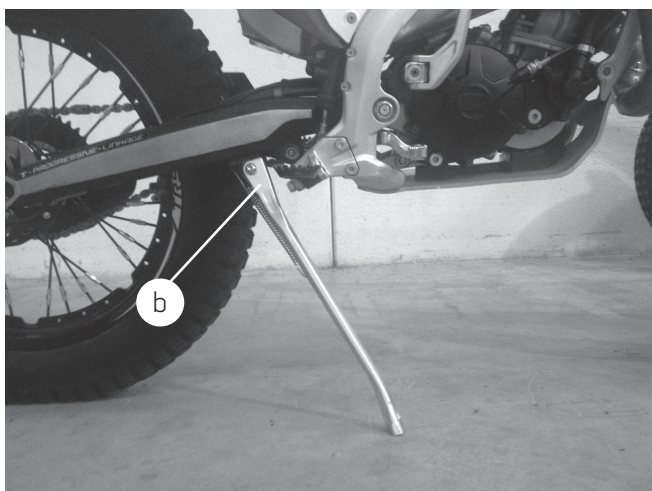
## STEERING LOCK SYSTEM



*a) The steering lock system is located under the headlight*

The anti-theft system located at the front of the motorcycle allows you to immobilise the steering. Turn the handlebars as far as they will go to the right and press the anti-theft system, turning the key until you feel it lock.

## SIDE STAND



*b) Side stand located on the right of the motorcycle*

The side stand is located on the right side of the vehicle, secured to the frame by a spring. Move the side stand out as far as it will go to rest the motorcycle on it when stationary.

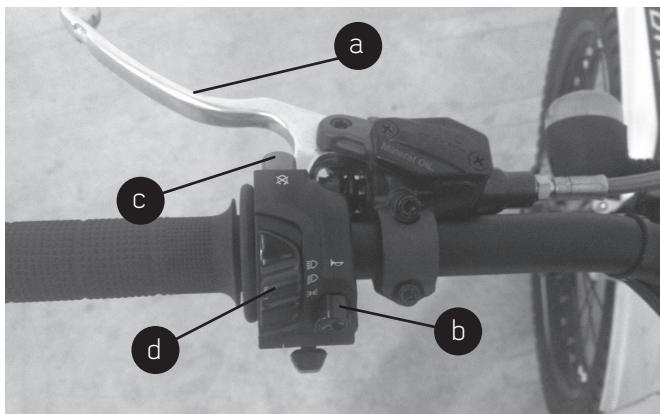


*c) Adjustment holes in the side stand*

At the base of the side stand there are two holes that you may use to change the way it folds up. If you put the spring in the forward setting in the direction of travel, the side stand will always stay open until you raise it. If you use this position, it is important to remember to manually lift it before starting off. Whereas if you put the spring into the rear setting, the stand will automatically fold up into position in order for you to drive.

## 15 - Handlebar and Instrument panel

### HANDLEBAR AND INSTRUMENT PANEL STANDARD



*Left-hand side of the handlebar.*

On the left side of the handlebar are:

- a) - Clutch lever.
- b) - Horn.
- c) - Engine stop button.
- d) - Main/dip beam switch, and indicators switch - (Motorcycle approval)



*Central part of the handlebar.*

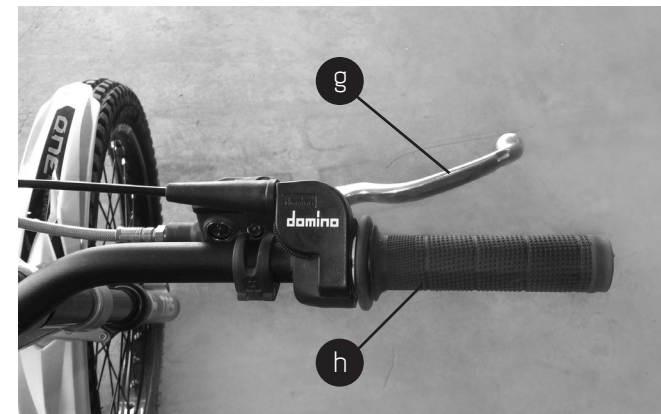
The instrument panel is in the centre of the handlebar (e). (More information and instructions for use are given in later sections of this manual).



*f) At the back of the headlight is the CDI map switch. Here, you can choose between the positions:*

**I: Wet or 0: Dry.**

**Note: Only in competition model**



*Right-hand side of the handlebar.*

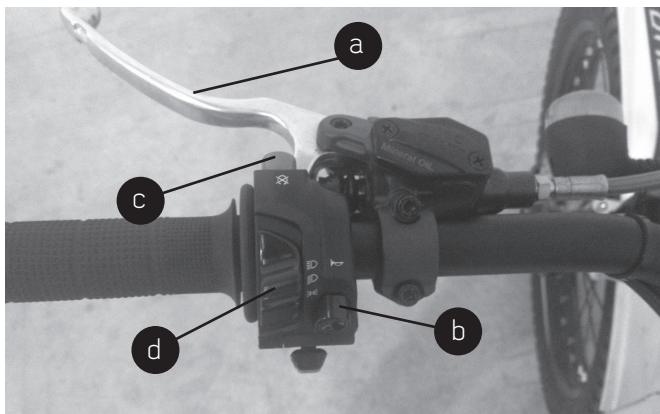
On the right-hand side of the handlebar you can find:

- g - Brake lever.
- h - Throttle.



## 15 - Handlebar and Instrument panel with electric start

### HANDLEBAR AND INSTRUMENT PANEL WITH ELECTRIC START



Left-hand side of the handlebar.

On the left side of the handlebar are:

- a) - Clutch lever.
- b) - Horn.
- c) - Engine stop button.
- d) - Main/dip beam switch, and indicator switch - (Motorcycle approval)



Central part of the handlebar.

The instrument panel is in the centre of the handlebar (e). (More information and instructions for use are given in later sections of this manual).



f) At the back of the headlight is the CDI map switch. Here, you can choose between the positions:

**I: Wet** or **O: Dry**.



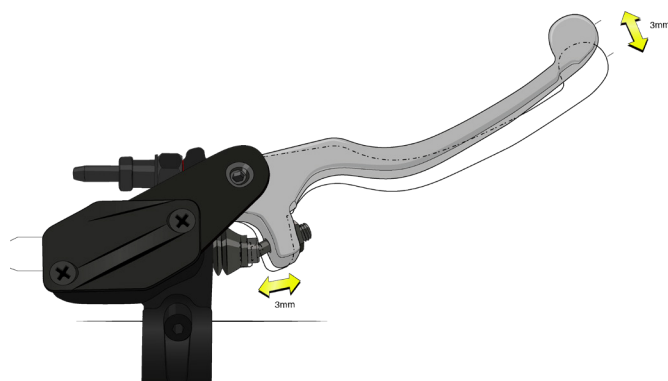
Right-hand side of the handlebar.

On the right-hand side of the handlebar you can find:

- g - Brake lever.
- h - Throttle.
- i - Electric start button



## ADJUSTMENT OF THE LEVERS

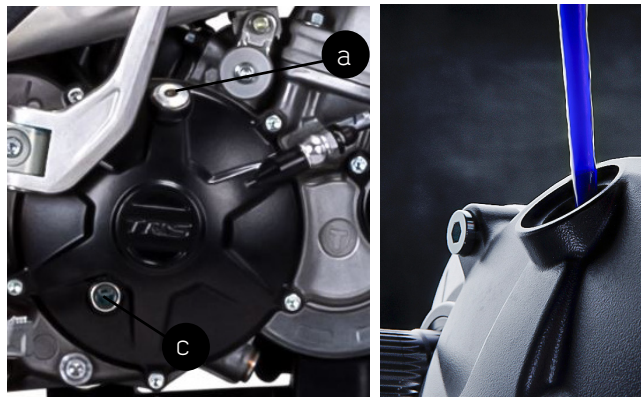


*Maximum initial free play of both levers of the handlebar.*

Both the clutch lever and the brake lever must have a maximum initial free play of 3mm. It is important that this free play exists and you should not disable it. To adjust, use the adjustment nuts on the levers.

To adapt the handlebar to different types of driving, you can change the angle by loosening the clamps that secure it to the fork. Once you have adjusted it as desired, tighten the bolts again, starting with those closest to the seat and moving on to those closest to the speedometer.

## CHANGING THE STANDARD TRANSMISSION OIL

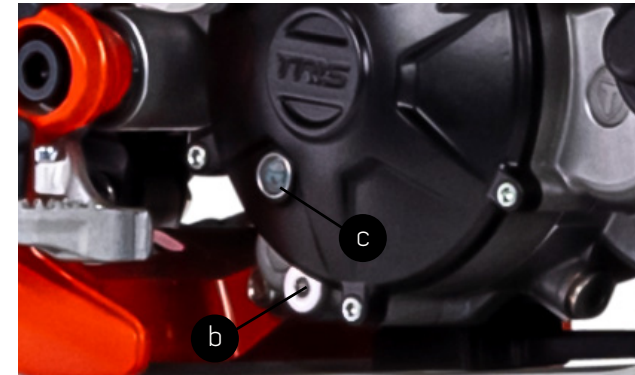


*a) Oil filler cap, in the upper part of the sump.*

The engine has a capacity of 330 cc of transmission oil.

**Do not mix different types of oil. Always refill using the same type. TRS recommends using oil such as NILS CLUTCH TRIAL.**

**There is a plug at the bottom of the sump to Drain the oil Fig (b) there is a cap on the top to refill Fig (a). To change the oil, if the engine is cold, we recommend starting the motorcycle and let it at idle for 5 minutes.**



*Fig (b): Oil drain plug at the bottom of the sump*

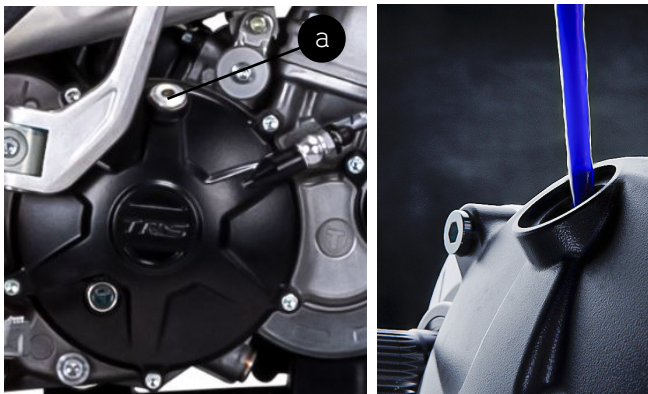
*Fig(c): Oil window sight*

This will warm up the oil to the proper temperature for the change. Lean the motorcycle on the unfolded side stand. Place a container under the drain plug and remove it. Let all the oil is drained and then clean the plug, removing the dirt fixed to the magnet. Once it is clean, check the copper washer and replace if it is necessary. Tighten the drain plug.

To refill the engine with oil, place the motorcycle slightly lean to the left (about 5°). Open the plug found in the clutch cover and add 280cc of clutch oil type NILS clutch Trial. Close the plug and check the level through the sight glass that it is located on the clutch cover. The correct levels when a bubble is visible at the top of the oil window sight (Fig(c)).

## 17 - Changing the transmission oil

### CHANGING THE TRANSMISSION OIL WITH THE ELECTRIC START



a): Oil filler cap, in the upper part of the crankcase.

The engine has a capacity of 430 cc of transmission oil.

**Do not mix different types of oil. Always top up using the same type. We recommend using oil such as NILS CLUTCH TRIAL.**

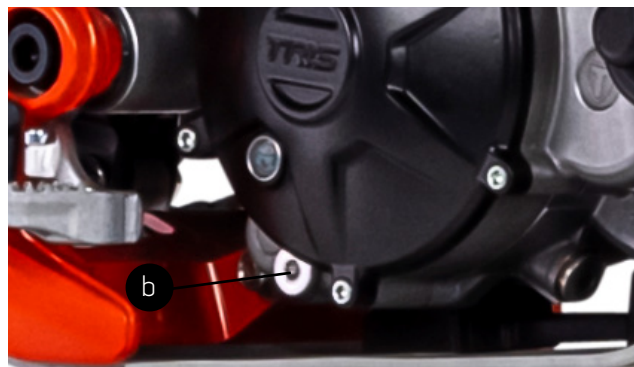


Fig (b): Oil drain plug, at the bottom of the crankcase

The electric start system is lubricated by the same oil engine. To change the oil, if the engine is cold, we recommend starting the motorcycle and let it run at idle speed for 5 minutes. This will warm up the oil to the right temperature for changing. Then place the motorcycle on the side stand unfold. Put a container below the right drain plug and remove. Let all of the oil drain out, and then clean the plug, removing any metal shavings fixed on the magnet provide. Once it is clean, check the copper washer and replace if it is necessary and tight the drain plug.

On the electric start engines, is necessary to drain out the remaining oil placed on the electric start cover. To carry out, lay down the motorcycle up to 5° on the left side and put a container below. Check the copper washer and replace if it is necessary and tight the drain plug.

To fill the engine with oil, position the motorcycle slightly inclined to the left (about 5°). Open the cap on the clutch cover and add 380 cc of NILS clutch Trial. Close the cap and check the level through the sight glass on the clutch cover. The proper level is when you see a bubble at the top of the sight glass.



Fig (c): Oil drain plug, remaining oil placed on the electric start cover.

It is recommended to change the engine oil, at least once a year.

Do not mix different types of oil. Always refill using the same type of oil. We recommend using oil such as NILS CLUTCH TRIAL.

### BATTERY

The battery gives the power to start the engine. It is placed behind the front light lamp. Maintenance is not required. The battery auto charges itself when the engine is running. It is not necessary to charge the battery from the outside with charger.

## SPARK PLUG



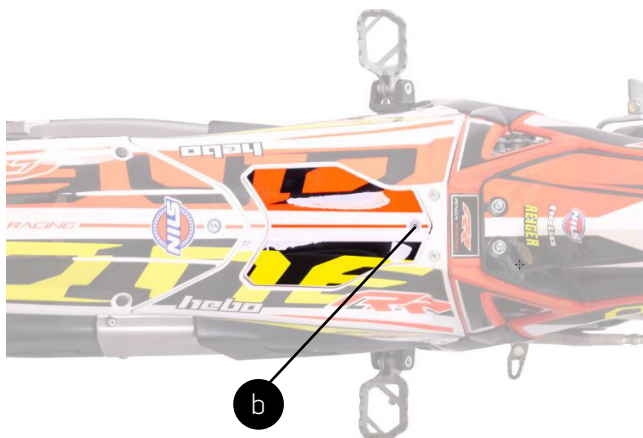
a) The plug that is factory-installed is defined in the technical specifications. Tighten to 11Nm.

It is important to maintain the gap stipulated by TRS of 1mm between the electrode and the arc to ensure optimum engine performance. Its colour tells you whether you are using the right carburettor setting:

Very white colour: very poor mixture.

Very black colour: too much fuel at mixture.

## AIR FILTER



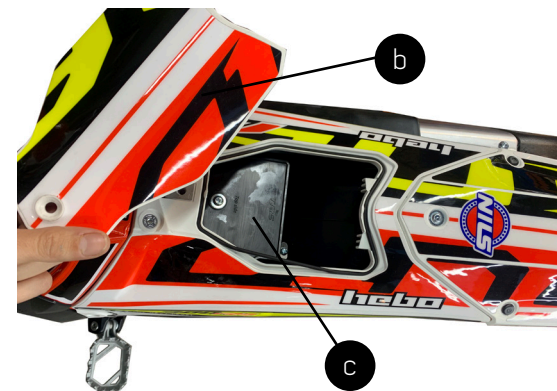
b) Top view of the cover of air filter case.

It is very important to check the air filter after every riding. Correct maintenance will allow you to achieve perfect operation, better engine performance and longer life of your motorcycle as well.

To access the air filter, you must remove the cover located on top of the filter box. Remove the counter-sunk screw located on the front. (Fig. B)

You will find the filter box baffle. This is piece Channel the air flow and reduce dirt in the air filter. Remove the allen screw to access the air filter. (Fig. C)

To remove the air filter (fig. D) move the spring back and remove the filter upwards.



b) Removing the cover, you can access the air box baffle;

c) Air box baffle.



Check if cleaning or replacement is necessary when you find cracks or damaged on foam. Before mounting, it is recommended to grease the filter with Air filter extra protection from Nils. This will help fix the smallest dust particles.

To insert the filter, slide through the center of the spring until it is fixed at the midpoint. The filter must stay in the center of the intake hose. Assemble the baffle and filter cover, in this order.



## COOLING SYSTEM

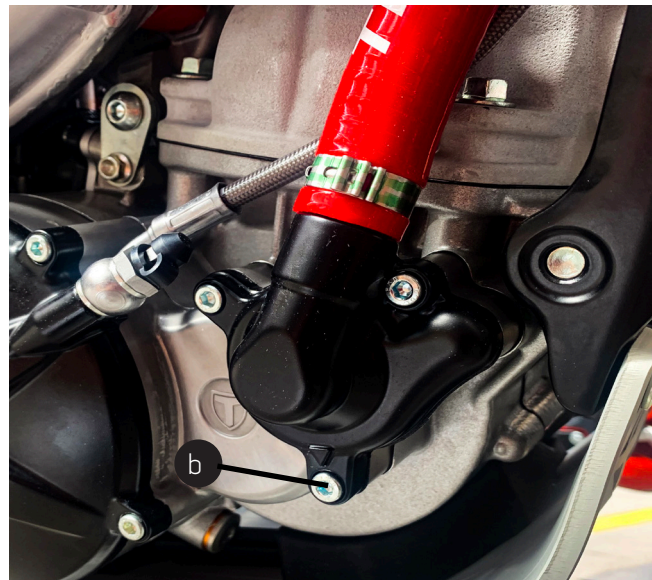


a) Radiator

Don't forget that the radiator can get very hot. When handling, be cautious and wait for it to cool down after stopping the engine. Always use coolant (-30°C) for light alloy engines to refill the radiator.

**The hoses in and out of the radiator should be regularly checked for impacts, cracks or leaks that could reduce the cooling system. For correct maintenance of the engine, make sure it has the right level of coolant. To refill the coolant, see the instructions on the next page.**

## DRAINING OF COOLANT



b) Coolant drain bolt located on the cover of the water pump.

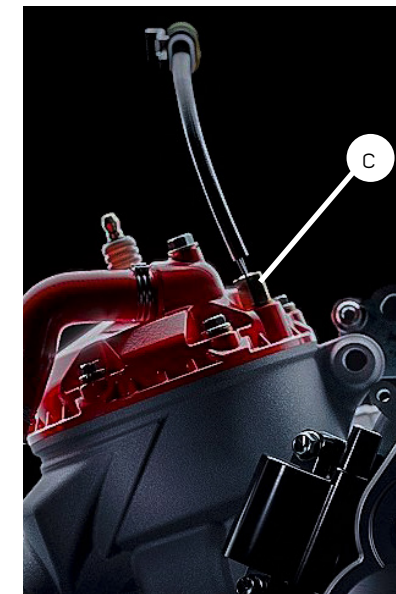
To drain the coolant follow the instructions:

First of all, before manipulating the cooling system, it is important to wait for the engine temperature is at room temperature. Otherwise the elevated temperature of the coolant can cause us burns or scald.

By loosening the coolant drain bolt at the bottom of the water pump you can drain the coolant circuit of the engine. Before removing the radiator cap.

It is important to wait until the engine is at ambient temperature to drain the radiator, to avoid any danger of burns or scald.

## TEMPERATURE SENSOR



c) Temperature sensor, screwed on the cylinder head cover.

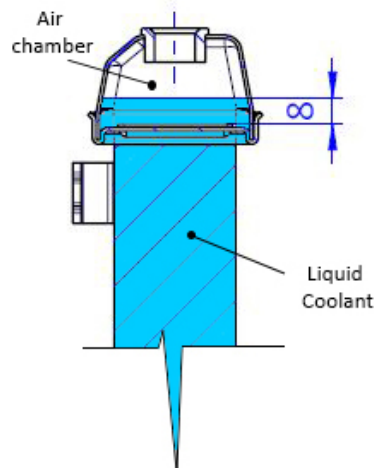
The temperature sensor measures the temperature of the engine and send the information to the CDI.

Following the preset parameters, the fan switch on and off to maintain an ideal temperature in the engine.



## FILLING WITH COOLANT

Remove the cap on the top of the radiator to fill it up with coolant, making sure you remove the air using the bleed screw on the cylinder head. For optimum functioning, do not fill the radiator right up to the top. We recommend using a suitable filling receptacle for greater control.



Radiator section detail, cover fins with 8mm of water. There should be an air chamber at the top.

**Avoid filling up at the top . It is recommend to leave a chamber of air 8mm approximately.**

**The factory-supplied coolant is a permanent-type antifreeze of ethylene glycol, diluted with 50% distilled water and containing anticorrosive additives.**

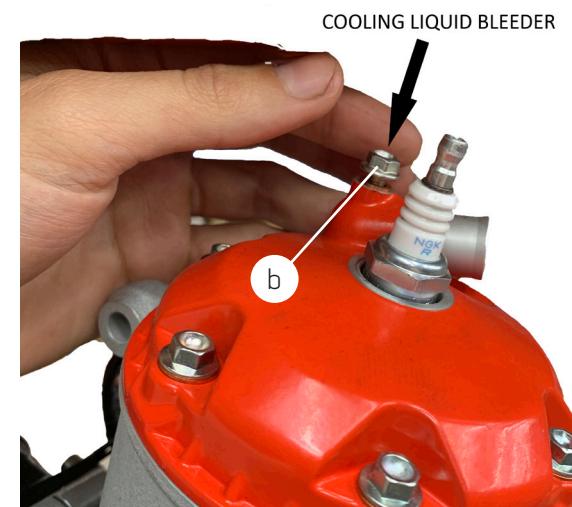
We recommend periodically bleeding the system and changing the coolant. Watch out for abnormal colour of the coolant: white stains (corroded aluminium), brown stains (corroded steel). To respect the environment, dispose of the used coolant in the designated places.

**Warning!:** Do not open the radiator cap when hot. It could scald you.



a) Filler cap located on the top of the radiator.

## BLEEDING AIR IN THE COOLING SYSTEM



b) Bleed screw for the coolant, located in the cylinder head.

In order to ensure that the cooling circuit is fully bled, when you are filling it with coolant, loosen the screw located at the top of the cylinder head until the air has been released, and tight it again. Then fill the radiator up to the correct level, not quite full, so that the air acts as an expansion vessel.

## 25 - Throttle body

When working on the motorbike, if the throttle body needs to be disassembled, the metal ties on both sides must be loosened and the body removed as an assembly.



*a) Throttle position sensor (TPS)*

*b) Injector*

## 26 - Adjustment of the idle speed

If ADJUSTING is needed, first counting the position of the screw the bike uses and write it down on a sheet the current settings. In order to avoid damage the cone screw, don't thigh strongly on the closed position.

The standard setting from the factory is  $\frac{1}{2}$  anticlockwise from the closed position (full clockwise).



*a) Idle speed screw adjuster*

Get the bike warmed up. With the engine runs turn the screw slightly (no more than 5 minutes) each time in the direction required:

- Clockwise: Increase the engine rpm.
- Anticlockwise: Decrease the engine rpm.

## 27 - 0-100 Throttle Position Sensor Calibration

The Throttle Position Sensor (TPS) is a key component that informs the ECU about the exact position of the throttle.

Proper calibration (0% closed throttle – 100% wide open throttle) ensures:

- Smooth throttle response
- Accurate fuel mapping
- Stable idle and consistent performance

This procedure describes how to perform a 0–100 TPS reset.

1. Make sure that the engine is stopped and the motorbike is fully assembled.
2. Connect the calibration bridge. Once you connect the bridge, you should listen the fuel pump active 1 second every 25 seconds approximately.
3. Set throttle to 0% (fully closed).
4. Disconnect the kill switch button.
5. Hold for a few seconds to allow the ECU record the closed position. You should listen the fuel pump.
6. Connect the kill switch button.
7. Rotate the throttle to 100% (fully open).
8. Disconnect the kill switch button.
9. Hold for a few seconds to allow the ECU to record the wide-open position. You should listen the fuel pump.
10. Connect the kill switch button.
11. Return throttle to 0% (closed).
12. Wait a few seconds for the ECU to confirm calibration.
13. Remove the calibration bridge.

The ECU now recognizes the correct 0–100 throttle range.



*a) Calibration bridge.*

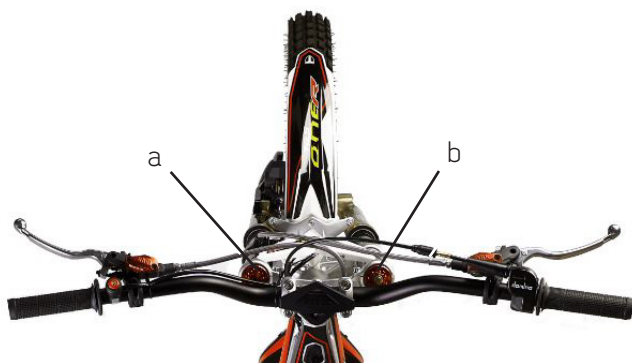


*b) Calibration bridge connected.*

**Be cautious: connect the bridge only during the calibration.  
Remember to disconnect it once the calibration is finished.**



## FRONT SUSPENSION



a) Spring preload; b) Compression adjustment



a) On the right-hand side of the suspension you can set compression adjustment.

The front fork can be adjusted with the screws at the top.

To adjust the preload, turn the screw on the left-hand fork tube, and to set the compression, turn the screw on the right-hand tube.

b) On the left-hand side of the suspension you can set the preload

### Factory default settings:

Clicks are from the closed position. Open anticlockwise direction.

### Screws on top:

- a) Spring preload: Left side (Allen key 6mm): 10.5 turns.
- b) Compression: Right side (Flat screwdriver): 30 Clicks.

### Screws on the bottom:

- Extension: Left and right side (Allen key 6mm) Both sides: 1 turn.

### Oil capacity:

- a) Spring fork (Left side): From the upper side of the tube, distance of level oil 110mm without spring.

- b) Compression fork (Right side): From the upper side of the tube, distance of level oil 55mm compressed.

Oil type: SAE 5 (suspension).

### SHOCK ABSORBER:

#### REIGER 2 WAYS (ONE RR & XTRACK RR):

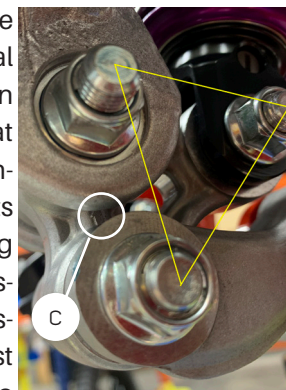
- Compression (Special spanner): Located on the top of the shock absorber: 15 clicks.
- Extension (Flat screwdriver): Located on the bottom of the shock absorber: 39 Clicks.

## REAR SUSPENSION

Periodic maintenance of the rocker-link system is essential to ensure a correct function and avoid premature wear that could cause excessive tolerance. Basic maintenance consists of disassembling connecting rod / rocker link bolts and bushings. Check seals state, bushings and ball joint. Replace just in case of lack of sealing or too much tolerance.

You also need to check the rocker link, connecting rod and bolts condition, replace if detected excessive tolerance or some fissure. Before riding, it is very important grease the bearings and bushings. TRRS recommends use NILS Performance grease blue grease.

During the assembly, pay special attention the position of the rocker link. To do this, use the images found in this document and pay attention on the arrow marked on the rocker-link, it must point up. fig c). Before finalizing, ensure the tightening torque of the screws. Will find a table at the end of this document.



d) It is possible to adjust the hydraulic brake of the shock absorber with a screw located in the lower part.



## 30 - Damper Reiger 3 Ways (Gold)

### DAMPER REIGER 3 WAYS

This damper is equipped on the model TRRS GOLD limited edition. This damper was developed and set by our rider 6 times world champion Adam Raga together with the TRRS technical crew.

All configurations start from the closed position. This position is placed when the adjuster is totally on clockwise position. When sets are adjusted to clockwise position, force done for the damper is maximized.

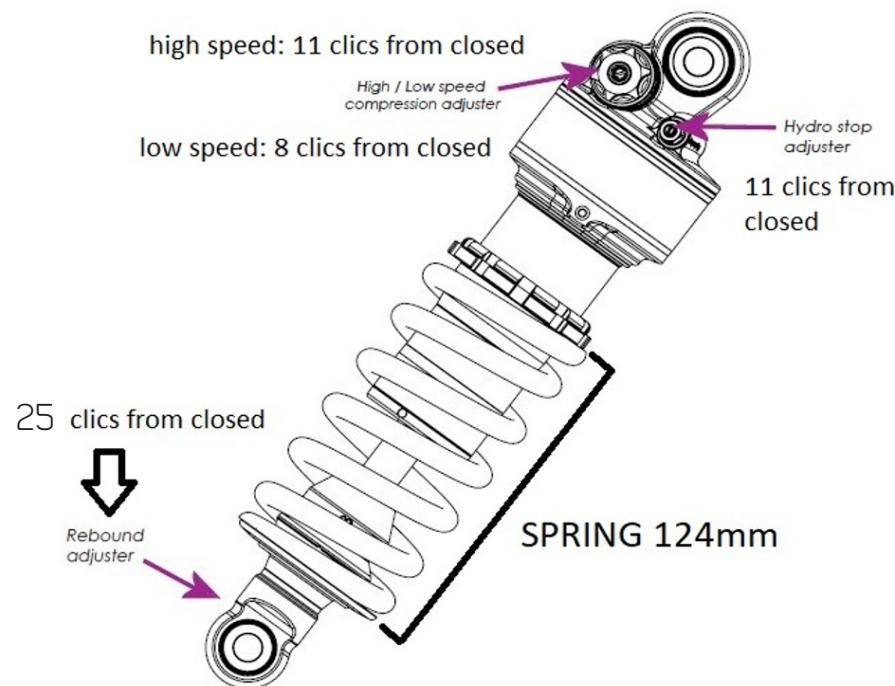
Racing adjustment:

- Compression: High speed (Purple knob): 11 clicks (Max. 15 clicks).
- Compression: Low speed (Screw inside the purple knob): 8 clicks (Max. 20 clicks).
- Rebound (Placed in bolt joint): 25 clicks (max. 25 clicks).
- Hydro stop (Screw placed next to the purple knob): 11 clicks (max. 11 clicks).
- Spring preload: 124mm.

Depending on the weight or rider skills could be necessary change the predetermined adjusts. Before the modification, it is recommendable check and take a note the initial configuration. Just in case if it is necessary go back to the initial adjustment.

• Compression: Turning counter clockwise will feel smooth and it will absorb small bumps very nice, but it will also be a bit less stable. If you like to do tricks like hopping on the rear wheel or so it is better to do this with a more closed adjuster.

• Rebound: This is responsible for traction and stability. Counting starts from closed, which is when you rotate the adjustment all the way to the right.



A close rebound adjustment means a 'slow' rebound damping: great for stability, but a little slow if you have lots of small bumps. When you open the rebound adjustment (rotate to the left) the damper gets quicker which gives more traction. The rebound adjustment allows you to adjust the rebound force with around 25 clicks. A stiffer damper will give a more stable feeling but will have less traction, so if you want to gain traction you should open the rebound adjuster. Another benefit of less rebound damping is that it is easier to pull up the rear wheel because the spring will help you to push up the chassis. The adjuster is located at the bottom end of the damper and adjustable with a small screwdriver.

• Hydrostop: Reduces the impact after big jumps, since it increases the hardness of the shock only in the final part of the travel of the shock. If maximum toughness is required, the fitting should be fully closed. On the other hand, fully open, it leaves the final part of the route uniform throughout the entire route.

Note: The maximum number of clicks should never be exceeded as it could damage the system.

## 31 - Drive chain

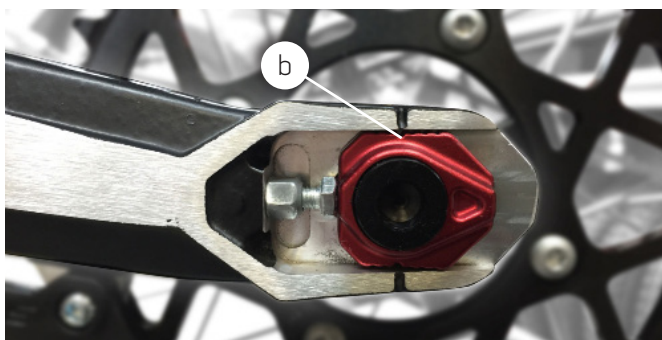
### DRIVE CHAIN



a) Drive chain.

d) Chain tensioner

The drive chain slack adjusting bolt is located on the sides of the swing arm. Using the adjusting bolt you can obtain the right chain slack, making sure to adjust both sides evenly for correct wheel alignment.



It is important to assemble the connecting link carefully. The closed end must point in the direction of chain rotation so that it doesn't fly off if the chain is hit by a stone. Also, keeping the chain clean and lubricated prolongs the life of the drive sprocket and rear sprocket. After the chain has been tightened multiple times, it will need to be replaced.



c) Chain Connecting link.

b) Once you have adjusted the chain to the right tension, tighten up the axle.

Tension of chain should allow a play of approximately 10-15mm in the area between the swing arm and the chain tensioner. fig d)

To tighten the chain, first loosen the rear axle nut and then adjust the chain with the drive chain slack adjusting bolt located on the swing arm. When adjusted, tighten the nut on the rear axle, making sure that the chain is aligned.

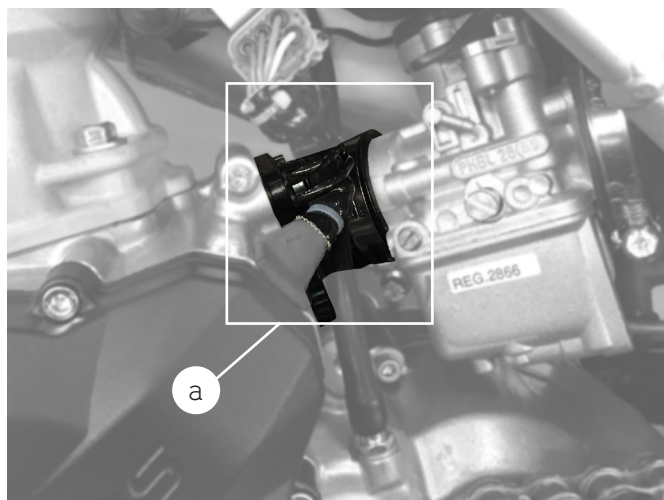


Be aware adjustment, a rear wheel axle misaligned or a screw not tightened sufficiently could cause an accident.

Keep the chain lubricated for smooth operation, preferably using off road chain from Nils for longer life. It is also important to lubricate the shaft and the nut. (fig b)

## REED VALVE

The inlet is through a reed valve and its condition has a significant influence on the performance of the engine. Whenever the carburettor is removed for cleaning, make sure the reed valves are not worn or broken and if so, replace the valve with a new one.



a) Reed valve, located between the carburettor and the engine.

## SWING ARM

For correct maintenance of the rear suspension system and swing arm, it needs to be regularly dismantled for cleaning, checking and lubricating the internal bearings, plus adjusting and lubricating of the chain. Make sure that all the parts are in perfect condition and replace any worn components as required.



b) **Important!** The swing arm and the rear suspension need to be regularly maintained.

## REAR BRAKE PEDAL

The screw for adjusting the brake pedal height in relation to the footrest is at the front of the lever.

At the rear there is a rod and lock nut that allow you to adjust the rear brake. It is very important that when it has been tightened there is a 2mm clearance gap at the front to ensure smooth operation.



c) Tensioner rod rear brake pedal; (d) Screw for height adjustment of the brake pedal. For correct performance, you need to leave a small clearance gap.



## FOOTRESTS

The footrests are adjustable. By swapping the washers you can move them forward or backwards from 2.5mm to 5.00mm.

This allows you to customise the motorcycle for greater efficiency and comfort, depending on your height or driving style.



*a) The footrests are adjustable, so that you can move them forwards or backwards by moving the washers 2.5mm to 5.00mm in either direction.*

## EXHAUST MUFFLER

The end of the muffler is detachable and allows you to easily replace the exhaust packing fibreglass in order to improve the performance of the motorcycle.



*b) ) **Important!** Remember that when the motorcycle is turned on, the exhaust gets very hot.*

## CLUTCH PUMP TANK

It is necessary to periodically check the oil level in the clutch pump tank. As is indicated on the lid, only mineral oil may be used, in order not to damage the o-rings.

We recommend NILS mineral oil. If you need to bleed the circuit, push down the lever repeatedly until you note it has been bled, and then fill with oil up to 2mm from the top.



*c) Clutch pump tank. Only mineral oil may be used, in order not to damage the o-rings*



## MOTORCYCLE MAINTENANCE

The greater the care given to the motorcycle, the longer its service life will be and the better it will perform. Check all the elements listed below and keep them clean and lubricated for optimum service:

·LEVER ARTICULATIONS

·REAR BRAKE PEDAL

·GEAR LEVER

·FOOTRESTS AND SIDE STAND

·STARTER PEDAL

·THROTTLE

·STEERING COLUMN

·DRIVE CHAIN AND SWING ARM ARTICULATIONS

·CHAIN TENSIONER

## TIGHTENING TORQUES

| TORQUE                               | Nm    |
|--------------------------------------|-------|
| Swinging arm-Chassis                 | 40-50 |
| Upper shock absorber fastener        | 40-50 |
| Lower shock absorber fastener        | 40-50 |
| Front wheel axle                     | 40-50 |
| Connecting rods                      | 40-50 |
| Handlebar                            | 25-30 |
| Front mudguard bridge                | 7-10  |
| Muffler                              | 10-15 |
| Rear wheel axle                      | 40-50 |
| Front brake calliper fasteners       | 25-30 |
| Exhaust pipe fasteners               | 10-15 |
| Engine fasteners                     | 30-35 |
| Rear brake master cylinder fasteners | 7-10  |
| Spark plug                           | 11    |
| Footrest screw                       | 25-30 |

| TORQUE                    | Nm    |
|---------------------------|-------|
| Ignition fasteners        | 7-8   |
| Clutch fasteners          | 20-25 |
| Cylinder stud fasteners   | 25    |
| Reed valve fasteners      | 7-8   |
| Clutch spring fasteners   | 3-4   |
| Sump fasteners            | 7-8   |
| Water pump cover fastener | 7-8   |
| Clutch cover fasteners    | 7-8   |
| Flywheel fasteners        | 40    |
| Ignition cover            | 7-8   |
| Sump drain plug           | 12    |
| Starter pedal bolt        | 12-13 |
| Gear change pedal bolt    | 7-8   |
| Cylinder head bolts       | 12-13 |
| Bolt primary gear         | 80    |

## STORAGE

If it is necessary to store the motorcycle for a long period of time, the following operations are recommended before storage:

- Clean the whole vehicle.
- Lubricate or grease the components that need it.
- Empty the fuel tank. (Take care with the fuel, which is inflammable and toxic)
- Empty the sump, removing the old transmission oil and refilling with new oil (If the engine is cold, it is recommended to start up and leave running for a few minutes to warm up the oil and assist draining).
- Cover the exhaust with a plastic bag, protecting it from the elements.
- Any unpainted metal parts that could get rusty should be coated with oil.
- Avoid the tyres touching the ground by placing a piece of cardboard or similar material under them.
- Protect the motorcycle as much as possible from dust and dirt by covering it with a plastic or canvas sheet.

### When putting the motorcycle back into service, first:

- *Remove the plastic covers used.*
- *Check the oil and lubrication of components.*
- *Check the spark plug.*
- *Adjust tyre pressure as recommended.*
- *Fill the petrol tank.*



## 41 - Maintenance operations

### MAINTENANCE WORK

(Note: Note that cleaning your motorcycle prior to maintenance will aid you in detecting any faults and wear on the vehicle)

| COMPONENT                          | CHECK           | ADJUST             | REPLACE               | CLEAN              | LUBRICATE       |
|------------------------------------|-----------------|--------------------|-----------------------|--------------------|-----------------|
| Rear shock absorber                | Annually        |                    | Every 2 years         |                    |                 |
| Front fork suspension oil          |                 |                    | 60 hours              |                    |                 |
| Transmission oil                   | 2 hours         |                    | 10 hours              |                    |                 |
| Brake adjustment                   | After every use | Whenever necessary |                       |                    |                 |
| Spark plug                         | 10 hours        | 30 hours           | 60 hours              | 15 hours           |                 |
| Swinging arm and connecting rods   | After every use |                    | If damaged            | After every use    | After each wash |
| Transmission chain                 | After every use | Whenever necessary | If damaged            | After every use    | After each wash |
| Throttle cable and twist grip      | After every use | Whenever necessary | If damaged            | Whenever necessary | After each wash |
| Reed valve box                     | 30 hours        |                    | If damaged            | After every use    |                 |
| Throttle body                      |                 | Whenever necessary | If damaged            | After every use    |                 |
| Chassis                            |                 |                    | If damaged            | After every use    |                 |
| Fuel injector                      |                 |                    | If damaged            |                    |                 |
| Steering bearing                   |                 |                    | If damaged            |                    |                 |
| Piston bearing                     |                 |                    | If damaged            |                    |                 |
| Wheel bearing                      |                 |                    | If damaged            |                    |                 |
| Engine bearings                    |                 |                    | If damaged            |                    |                 |
| Rear sprocket                      | 30 hours        | First 5 hours      | If damaged            |                    | After each wash |
| Cylinder head and cylinder         | 60 hours        |                    | Annually              |                    |                 |
| Brakes                             | After every use | Whenever necessary | If damaged            |                    |                 |
| Brake discs                        | After every use | First 5 hours      | If damaged            | Each two uses      |                 |
| Clutch plates                      |                 |                    | If damaged            |                    |                 |
| Clutch                             |                 |                    | If damaged            |                    |                 |
| Wheel-muffler clearance            | After every use |                    | If there are any fall |                    |                 |
| Exhaust                            |                 |                    | 500 hours             |                    |                 |
| Muffler exhaust packing fibreglass |                 |                    | 100 hours             |                    |                 |



| COMPONENT                                   | CHECK           | ADJUST             | REPLACE                | CLEAN           | LUBRICATE       |
|---------------------------------------------|-----------------|--------------------|------------------------|-----------------|-----------------|
| Air Filter                                  | After every use |                    | If damaged             | After every use | After each wash |
| Steering play                               | After every use | Whenever necessary |                        |                 |                 |
| Brake hoses                                 |                 | Whenever necessary | Every 2 years          |                 | After each wash |
| Coolant                                     |                 | Whenever necessary | Annually               |                 |                 |
| General lubrication                         | After every use |                    |                        | After every use | After each wash |
| Front and rear wheel                        |                 |                    | If damaged             | After every use |                 |
| Tyres                                       | After every use |                    | If damaged             | After every use |                 |
| Brake fluid level                           |                 | Whenever necessary |                        |                 |                 |
| Chain guide slipper                         |                 |                    | If damaged             |                 |                 |
| Starter pedal and gear change pedal         |                 |                    | If damaged             |                 | After each wash |
| Brake master cylinder piston and dust cover |                 |                    | If damaged             |                 |                 |
| Brake piston and dust cover                 |                 |                    | In the event of a fall |                 |                 |
| Piston and rings                            | 60 hours        |                    | Annually               |                 |                 |

|                                      |                 |                    |            |                 |  |
|--------------------------------------|-----------------|--------------------|------------|-----------------|--|
| Front and rear wheels                | 20 hours        |                    | If damaged | After every use |  |
| Fuel system                          | After every use |                    | If damaged |                 |  |
| Front suspension                     |                 | Whenever necessary | If damaged |                 |  |
| Exhaust seal                         |                 |                    | If damaged |                 |  |
| Nuts, bolts and other fasteners      |                 | Whenever necessary | If damaged |                 |  |
| Petrol tube                          | After every use | Whenever necessary | If damaged |                 |  |
| Radiator tube and joints             | After every use | Whenever necessary | If damaged |                 |  |
| Chassis protective adhesive elements |                 |                    | If damaged |                 |  |
| Sump protector                       |                 |                    | If damaged |                 |  |

## 42 - Approval

### APPROVAL

All the components fitted in this vehicle comply with legal approval requirements, including the identification marks on parts that require them. In particular, note that the following items are compulsory for using the motorcycle on public roads and must be present on the vehicle in order to pass the Vehicle Technical Inspection Test:

- Registration plate holder
- Speedometer
- Lighting system and reflectors
- Indicators
- Horn
- Rearview mirrors
- Steering lock
- Manufacturer's identification plate
- Air filter restrictor
- Exhaust system with catalyser
- Exhaust muffler
- Carburettor jets
- Side stand

**IMPORTANT NOTE:** The vehicle is also supplied with a RACING KIT containing additional components. Bear in mind that the modifications provided by this kit are NOT covered by the vehicle approval.



## 44 - Troubleshooting and Frequently Asked Questions

### TROUBLESHOOTING: FREQUENTLY ASKED QUESTIONS

(IMPORTANT NOTE: We recommend you go to an authorised garage to carry out any internal adjustments to the engine or parts that are not the result of normal wear. Please note that tampering with the motorcycle is potentially dangerous to you and/or may lead to possible cancellation of the warrantee)

Go to a specialized workshop to check the temperature sensor, faulty fan, regulator or installation.

| PROBLEM                                           | POSSIBLE CAUSES                                                                                                                                                                          | STEPS TO TAKE                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>The engine won't start</b>                     | <ul style="list-style-type: none"> <li>- Dirty spark plug.</li> <li>- Engine flooded.</li> <li>- Fuel badly mixed.</li> <li>- Battery without charge.</li> <li>- Blown fuse</li> </ul>   | <ul style="list-style-type: none"> <li>- Clean and dry the spark plug or change it. Check the electrode group, point 18.</li> <li>- Check for obstruction in the petrol tank tubes and air filter.</li> <li>- Start the engine with Kick-start and running during 10 min. Try again</li> <li>- Check the connections are properly assembled and make sure the contact.</li> <li>- Check fuse continuity</li> </ul> |
| <b>The engine starts correctly and then stops</b> | <ul style="list-style-type: none"> <li>- Incorrect air supply, engine flooded.</li> <li>- Insufficient fuel.</li> </ul>                                                                  | <ul style="list-style-type: none"> <li>- Close the choke, check the fuel pipes.</li> <li>- Fill the fuel tank.</li> </ul>                                                                                                                                                                                                                                                                                          |
| <b>Engine overheated</b>                          | <ul style="list-style-type: none"> <li>- Coolant running low.</li> <li>- Radiator dirty or obstructed.</li> <li>- Fan doesn't run</li> <li>- Water temperature sensor failure</li> </ul> | <ul style="list-style-type: none"> <li>- Add coolant, check for possible leaks.</li> <li>- Clean the radiator fins.</li> <li>- Check the water temperature switch function.</li> </ul>                                                                                                                                                                                                                             |

| PROBLEM                              | POSSIBLE CAUSES                                                                                                                                                                                                                                                                                                                                                                | STEPS TO TAKE                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Engine runs erratically</b>       | <ul style="list-style-type: none"> <li>- Problems with the spark plug and/or plug cap.</li> <li>- Fault in the ignition rotor.</li> <li>- Water in the fuel.</li> <li>- Low fuel pressure</li> <li>- Low battery voltage</li> <li>- Water temperature sensor</li> <li>- Intake sensor</li> <li>- Clogged injector</li> <li>- Throttle position sensor descalibrated</li> </ul> | <ul style="list-style-type: none"> <li>- Check the condition of both.</li> <li>- Change the rotor.</li> <li>- Empty the tank and refill with new petrol.</li> <li>- Check that the fuel pump reach at least 3.4-3.6.</li> <li>- Check battery voltage (12-13V with the engine stopped or 14V with running engine)</li> <li>- Check resistance on the water temperature</li> <li>- Clean injector</li> <li>- 0%-100% TPS calibration</li> </ul> |
| <b>Engine makes strange noises</b>   | <ul style="list-style-type: none"> <li>- Ignition problems.</li> <li>- Overheated engine.</li> </ul>                                                                                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>- Take the motorcycle to an authorised workshop.</li> <li>- Stop the engine and check the state of the cooling and exhaust systems.</li> </ul>                                                                                                                                                                                                                                                          |
| <b>Engine lacks power</b>            | <ul style="list-style-type: none"> <li>- Intake problems.</li> <li>- Exhaust system problems.</li> <li>- Damaged crankshaft bearings.</li> <li>- Clutch slipping.</li> </ul>                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>- Clean the fuel admission system and air filter.</li> <li>- Check for leaks in the system and clean or replace the exhaust packing fiberglass.</li> <li>- Replace the bearings.</li> <li>- Check its adjustments. Take bike to a specialist garage.</li> </ul>                                                                                                                                         |
| <b>Exhaust gives off white smoke</b> | <ul style="list-style-type: none"> <li>- Water is getting into the cylinder.</li> <li>- Accelerator cable incorrectly adjusted.</li> </ul>                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>- Change the cylinder head O-ring.</li> <li>- Check accelerator adjustment.</li> </ul>                                                                                                                                                                                                                                                                                                                  |
| <b>Exhaust gives off brown smoke</b> | <ul style="list-style-type: none"> <li>- Insufficient air in the mixture.</li> <li>- Main jet too high.</li> <li>- Leak of seal</li> </ul>                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>- Clean or change the air filter.</li> <li>- Check the main jet</li> <li>- Check or cange the seals of crank-shaft</li> </ul>                                                                                                                                                                                                                                                                           |



| PROBLEM                             | POSSIBLE CAUSES                                                                                                                                                                                                                                                                                                                                                                                                                                         | STEPS TO TAKE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Explosions in the exhaust</b>    | <ul style="list-style-type: none"> <li>- Carbon deposits in the combustion chamber.</li> <li>- Incorrect type of fuel.</li> <li>- Spark plug in bad condition or wrong type.</li> <li>- Exhaust system gaskets damaged.</li> </ul>                                                                                                                                                                                                                      | <ul style="list-style-type: none"> <li>- Clean the combustion chamber.</li> <li>- Empty fuel tank and refill with correct type of fuel.</li> <li>- Replace spark plug with correct type.</li> <li>- Check condition of gaskets and replace if necessary.</li> </ul>                                                                                                                                                                                                                                     |
| <b>Clutch not working correctly</b> | <ul style="list-style-type: none"> <li>- No play in the clutch lever.</li> <li>- Clutch worn.</li> <li>- Clutch springs broken or weak.</li> </ul>                                                                                                                                                                                                                                                                                                      | <ul style="list-style-type: none"> <li>- Take bike to a specialist work shop.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Gears engage badly</b>           | <ul style="list-style-type: none"> <li>- Problems in forks, gears or additional gearbox systems.</li> <li>- Clutch not working correctly.</li> </ul>                                                                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>- Take bike to a specialist garage.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Abnormal noises</b>              | <ul style="list-style-type: none"> <li>- Worn or badly adjusted chain</li> <li>- Rear sprocket teeth worn.</li> <li>- Chain needs lubrication.</li> <li>- Badly aligned rear wheel.</li> <li>- Lack of oil in the front fork.</li> <li>- Problems with the front fork springs.</li> <li>- Worn brake disc.</li> <li>- Brake pads glazed or badly fitted.</li> <li>- Exhaust system problems</li> <li>- Shock absorber linkage wear or damage</li> </ul> | <ul style="list-style-type: none"> <li>- Adjust or change chain.</li> <li>- Change rear sprocket.</li> <li>- Apply appropriate chain lubricant.</li> <li>- Take bike to a specialist garage.</li> <li>- Add fork oil to the specified level.</li> <li>- Replace front fork spring.</li> <li>- Replace brake disc.</li> <li>- Refit or replace pads.</li> <li>- Check and replace gaskets and seals on the exhaust if is necessary</li> <li>- Replace seals and bearing linkage and lubricate</li> </ul> |
| <b>Unstable ride</b>                | <ul style="list-style-type: none"> <li>- Steering shaft nut too tight.</li> <li>- Steering bearings worn or damaged.</li> <li>- Bent steering shaft.</li> </ul>                                                                                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>- Loosen the steering nut a little.</li> <li>- Replace bearings.</li> <li>- Take bike to a specialist garage.</li> </ul>                                                                                                                                                                                                                                                                                                                                         |

| PROBLEM                     | POSSIBLE CAUSES                                                                                                                                                                                                                               | STEPS TO TAKE                                                                                                                                                                                                                                                                                                                               |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Suspension too soft</b>  | <ul style="list-style-type: none"> <li>- Low oil level in fork.</li> <li>- Oil with excessively low density.</li> <li>- Rear shock absorber badly adjusted.</li> </ul>                                                                        | <ul style="list-style-type: none"> <li>- Add the right oil to the specified level.</li> <li>- Replace oil with correct density.</li> <li>- Adjust rear shock absorber.</li> </ul>                                                                                                                                                           |
| <b>Handlebar vibration</b>  | <ul style="list-style-type: none"> <li>- Worn tyre, swinging arm or bearings worn.</li> <li>- Rim off-centre.</li> <li>- Badly aligned wheel.</li> <li>- Steering shafts, handlebar supports or fasteners with play.</li> </ul>               | <ul style="list-style-type: none"> <li>- Take bike to a specialist garage.</li> <li>- Take bike to a specialist garage.</li> <li>- Take bike to a specialist garage.</li> <li>- Tighten nuts and fasteners to specified torque.</li> </ul>                                                                                                  |
| <b>Brakes working badly</b> | <ul style="list-style-type: none"> <li>- Pads worn</li> <li>- Discs worn.</li> <li>- Loss of brake fluid.</li> <li>- Brake fluid in bad condition.</li> <li>- Master cylinder piston worn.</li> <li>- System incorrectly adjusted.</li> </ul> | <ul style="list-style-type: none"> <li>- Change pads</li> <li>- Change discs.</li> <li>- Check circuits. Replace leaking parts and top up fluid to the correct level.</li> <li>- Remove brake fluid circuit and replace with fresh fluid of the right type.</li> <li>- Replace master cylinder piston.</li> <li>- Adjust brakes.</li> </ul> |
| <b>Fusing bulbs</b>         | <ul style="list-style-type: none"> <li>- Voltage regulator problems.</li> </ul>                                                                                                                                                               | <ul style="list-style-type: none"> <li>- Check the connections of all the bulbs and check the voltage regulator.</li> </ul>                                                                                                                                                                                                                 |

## 45 - Recommended products

### RECOMMENDED PRODUCTS

TRRS Motorcycles recommends the use of NILS lubricants and maintenance products.



## Warning Symbols

- 

**SAFETY/ATTENTION**  
This symbol refers to points which, if ignored, could lead to physical danger for the user.
- 

**VEHICLE PROPER ASSEMBLY**  
This symbol refers to points which, if ignored, could lead to some kind of damage to your motorcycle. Non-observance of these warnings could render your motorcycle warranty void.
- 

**DANGER DUE TO THE PRESENCE OF FLAMMABLE LIQUID**  
Carefully read the use and maintenance manual.
- 

**OBLIGATION TO USE PROTECTIVE CLOTHING AND ACCESSORIES**  
The use of the vehicle is subordinate to the employment of clothing and accessories of protection (safety shoes).  
To use the vehicle it is mandatory to wear protective clothing and accessories.
- 

**PROTECTIVE GLOVES MUST BE USED**  
To take the action described, the use of protective gloves is obligatory.
- 

**THE USE OF OPEN FIRES OR FORMS OF UNCONTROLLED SOURCES OF IGNITION IS PROHIBITED**
- 

**SMOKING IS PROHIBITED**
- 

**THE USE OF MOBILE PHONES IS PROHIBITED**
- 

**DANGER DUE TO THE PRESENCE OF CORROSIVE SUBSTANCES**  
The liquids marked with this symbol are very corrosive: Handle with extreme care.
- 

**DANGER OF POISONING**