

## **TYRE LOCKS**



**It is lively recommended to carefully read this document in every part before beginning to work on the vehicle or the motor.**

### **GENERAL INFORMATIONS**

The wheels are essential safety elements of motorbikes and scooters and they have manifold functions.

Infact, they allow the vehicle's movement in very limited conditions of friction, to control the direction of vehicle, to transmit the braking couple in conditions of vehicle's braking.

The wheels are compounded by a wheel-hub on which the rim is fixed, on it the tyre is mounted. The rim can be fixed to hub by steel spokes or the hub and the rim can be made in a sole piece in alluminium alloy. The transmission of motive or braking couple between the rim and the tyre is obtained, generally, thanks to the friction of tyre's heel on its rim. In extreme applications, or in the case in which the use is with tyre at very low pression, for example on sand or soft grounds, the tyre locks are used in order to block the tyre on its rim. The tyre locks works as a wedge that, drawn by fastening nut, pushes the tyre's heels against lateral borders of rim. In this way, the tyre is kept on the rim thanks to the friction forces generated by tyre locks that pushes the tyre's heel on rim.

The tyre lock is made by a body in alluminium alloy coverei with rubber in order to avoid to damage the tyre or the pneumatic tire or the rim and it is equipped with a screw that has the function to block it by a nut in a hole obtained in the rim. Generally, the tyre locks are mounted as O.E.M. on the new off-road motorbikes. In the case in which the vehicle's wheels don't have tyre locks, their assembling need a hole in the rim. It is like the hole for pneumatic tire.

The plans of tyre locks influences the drive safety and the vehicle performances. The choice of tyre locks has to consider the model of vehicle in which they will be mounted.



**Use the type of tyre locks defined from the applicability table that can be found in the catalogue, on the pages of Web Site, [www.adler.it](http://www.adler.it), or demand it by e-mail at the address [adige@adler.it](mailto:adige@adler.it).**

### **ASSEMBLING INSTRUCTIONS**



**The fitting and maintenance operations must be done exclusively by an authorized workshop.**

The assembly of the tyre locks is generally an enough simple operation, it needs few minutes and it does not need of complex operations of preliminary disassembling.

The tyre locks' assembling and disassembling on the engine must be executed respecting all instructions and using all tools definiton on the **Producer's Workshop Manual**.

It is advised to apply to a specialized mechanic for the assembling of tyre locks.

A wrong assembling of the wheels, pneumatic and tyre lock can cause serious problems of drive safety.

The pneumatic and the rim of wheels must be in good conditions. The bad conditions of them can cause serious problems of drive safety.

If in the tyre locks' box there are some plates and/or fastening pivots, follow accurately the specific assembling instructions contained in the box.

The lack of use of plates and/or fastening pivots contained in the box can cause serious problems of drive safety.

If the original plates and/or the original fastening pivots are in a bad condition, it must replace them with items approved by vehicle producer. The non-replacement of plates and/or fastening pivots in a bad conditions can cause serious problems of drive safety.

The replacement of the tyre locks on wheels need, generally, disassembling og wheels from vehicle. During the assembling of wheel, tighten the fastening nuts of wheels to the clamping couple definiton on the **Producer's Workshop Manual**. The wrong clamping of the nut to a couple can cause serious problems of drive safety.

The replacement or the first assembling of tyre lock on wheel need, generally, a control of fastening nut's clamping after a first period of use, in according to the indications definiton on the **Producer's Workshop Manual**.

No control of it after this period can cause serious problems of drive safety.

The replacement or the first assembling of tyre lock on wheel need to inflate the pneumatic at the pression definiton by vehicle producer.

A wrong pression of pneumatic can cause serious problems of drive safety or an anomalous/ excessive usury of tyre.

### **GENERAL CAUTIONS**

Before starting any maintenance or servicing on the vehicle, always follow a few general rules.

Make sure that the working place is clean, well aerated and perfectly lit.

Always switch the engine off before starting to work on the vehicle. Particularly, the engine must be switched off when operating in closed places without any exhaust gas vent system.

Lift the vehicle with a suitable equipment above a flat hard floor.

Always work in a clean area, wearing working clothes and safety garments or devices as prescribed by law.

Keep off unauthorized persons, the young, particularly children.

Stop the engine, remove the key and wait for the engine and the exhaust system to cool to prevent burns. Pay attention to all engine or vehicle parts (i.e.: exhaust system, braking system) which may still be hot.

Pay the utmost attention to the presence of flames, heat sources or warm objects into the room: most of the liquids in the vehicle are generally highly inflammable.

Never swallow any vehicle or engine component or liquid. Particularly, liquids can be highly injurious or toxic.

Waste lubricant or components must be delivered only to the dedicated waste disposal centres; they must not be otherwise disposed of.

Always check that the packing is sealed and complete and there are no missing or damaged parts.

Always check the vehicle overall conditions before installing the tyre locks.

It is specially recommended to always follow the instructions carefully for safety reasons. Any and every liability for any damage or injury to persons and/or property arising out of a wrong or inaccurate installation is hereby rejected. An improper use or the modification of the tyre locks, a wrong installation or the installation not in compliance with the prescribed instructions will automatically invalidate any product warranty.

The tyre locks are vehicle components for which homologation may be required according to the relevant laws in force.

The tyre locks are vehicle component subject to the approval of the vehicle manufacturer.

After the installation of the tyre locks the vehicle might require a new homologation.

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