## **ROLLER KITS**

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 majority of scooters actually on the road are equiped with speed changers (CVT – Continuos Variable Transmissions). The CVT is essentially composed by an anterior semipulleys group, a posterior semi-pulleys group, and a driving belt. The CVT rollers are characterized for geometry and dimension. Acting on rollers' geometry and dimension the CVT performances can be modified considerably. Adige rollers are the result of great experience acquired in over 40 years of activity in the two-wheeler segment and they are available in a standard version and in a "High Ratio System" one, both covered by a composite material with carbonium base.

The "High Ratio System" rollers, patented worldwide, are characterized by a revolutionary profile and innovative features that still make them equalizable difficultly.

Ground and calibrated carbon fiber coating together with a shape-retaining antioxidant alloy structure assure highest precision, maximun durability and excellent technical features.

Using our "High Ratio System" rollers, early rollers' consumption is eliminated, and so consequent speed reduction, that arises punctually with the appearance of rollers' usury. The "High Ratio System" roller profile allows a 6-7% increase of the maximum speed ratio and a 2-3% reduction of the minimum speed ratio for better performance. The plans of CVT rollers influence the safety drive and vehicle performances and, so, the choice of CVT rollers has to consider the model of vehicle in which they will be mounted.

Use the type of roller kits defined from the applicability table that can be found in the catalogue, on the pages of Web Site, www.adler.it, or demand it by e-mail at the address *adige@adler.it*.

#### ASSEMBLING INSTRUCTIONS

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

The assembly of the roller kits is generally an enough simple operation, it needs few minutes and it does not need of complex operations of preliminary disassembling. The rollers' assembling and disassembling in the semi-pulleys group must be executed respecting all instructions and using all tools definited on the **Producer's Workshop Manual**. It is advised to apply to a specialized mechanic for the assembling of the rollers.

A wrong assembling of rollers can cause problems of drive safety besides a diminution of CVT performances and duration.

Before mounting the roller kits you have to verify the conditions of anterior CVT's semipulley group. When it is noticed an excessive usury, fissures or a bad general condition, it is advised to mount new items, verifying the availability in our catalogue, on the pages of Web Site, www.adler.it, or by email at the address <u>adige@adler.it</u>. An usured semipulleys group can cause problems of drive safety, performances reduction and excessive fuel consumption.

Before mounting the roller kits, you have to verify also the usury of driving belt. When it is noticed an excessive usury, fissures or a bad general condition, it is advised the replacement with a new homologated one. The use of an driving belt in bad conditions can cause problems of safety drive, performances reduction and CVT duration.

If in the roller kit's box there are some screws and/or a nut and fastening washers, follow accurately the specific assembling instructions contained in the box.

The lack of use of screws and/or a nut and fastening washers contained in the box can cause serious problems of drive safety and performances reduction and CVT duration.

If the original screws and/or a nut and the original fastening screws are in a bad condition, it must replace them with items approved by vehicle producer. The no-replacement of screw and/or a nut and fastening washers in bad conditions can cause serious problems of drive safety, performances reduction and CVT duration. CVT Rollers must be always replaced together in CVT anterior semi-pulleys group. The partial replacement of CVT rollers can cause

problems of drive safety, performances reduction and CVT duration.

CVT rollers are mechanical organs exposed to strong thermic and mechanical sollicitations. It is very important to verify the condition of the CVT rollers about every 5000 km or, however, every disassembling of CVT anterior semi-pulleys group. The presence of fissures and, in general, the bad condition of the CVT rollers can cause serious problems of drive safety, performances reduction and CVT duration

#### **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 clutch discs.

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 rollers, a wrong installation or the installation not in compliance with the prescribed instructions will automatically invalidate any product warranty. The roller kits are vehicle components for which homologation may be required according to the relevant laws in force. The roller kits are vehicle component subject to the approval of the vehicle manufacturer. After the installation of the roller kits the vehicle might require a new homologation.

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