

#### **d) internal conservation**

- cleaning of soft upholster linings should be carried out with use of adequate foams destined for cleaning of upholster linings etc. Accessible at automotive accessories market,
- plastics should be cleaned with preparations with antistatic additives providing adequate gloss,
- window panels should be cleaned with preparations accessible in shops with car accessories.

It is prohibited to use preparations for household containing the abrasives or chlorine.

All such works, connected with current and periodical conservation of coach, carried out by ASO should be recorded in the guarantee book of coach. These records should include information about used agents and carried out actions.

In connection with that, 2 years guarantee for lacquer coatings should depend on above mentioned actions carried out by ASO. Obeying of these principles by user will be controlled by AUTOSAN SERVIS under the threat of guarantee loss.

It is prohibited for users of our coaches, to carry out independently, in the period of guarantee, repairs of anticorrosive protection without AUTOSAN SA permission and with use of technology and products, which are not accepted by our Company.

#### **Screw joint in AUTOSAN coaches**

Since end of 1997, screw joints, influencing directly safety of coach use, are screwed with use of LOCTITE 243 glue, that protects against their autogenous unscrew. Joints are marked in the following way:

- tightened with determined dynamometric torque and protected with use of LOCTITE 243 glue, marked with Autorenolak paint – red colour
- tightened without determining the value of dynamometric torque, but protected with use of LOCTITE 243 glue, will be marked with Autorenolak paint – blue colour

tightened with determined dynamometric torque without protection with glue, will be marked with Autorenolak paint – yellow colour.

**Joints protected with LOCTITE 243 glue should not be tightened, because glue connection will be broken.**

Additionally, attention should be paid to the shape connectors of: air system, cooling system, clutch control, servo steering wheel and air suction.

Connection of flexible and steel conduits is carried out with usage of colourless leak stopper **SILIKON SEALANT 14413** and threaded connections are screwed with usage of **LOCTITE 542** leak stopper.

**Remark:**

Considering above facts, during execution of periodical service operations, if it is necessary to tighten the screw connections or to replace the subassemblies, someone should make sure about method of protection of tightened bolts and nuts. Next, connection should be entirely unscrewed, the old glue should be removed. Next screw it all again with usage of above mentioned glue and adequate dynamometric torque. At end of this action, joint should be marked with determined colour.

**Conservation and service operation in relation to the additional equipment or driving unit of the coach, should be carried out in accordance with “Service manual” of manufacturer of given assembly or device. This manual is enclosed to the factory service manual of the coach.**

<b>LIST OF OILS AND FLUIDS USED IN AUTOSAN A1012T COACHES</b>			
No.	Name	Type	Volume [dm <sup>3</sup> ]
1	Engine	<b>API CF 4 – 4/SG SAE 15W 40</b>	19,0
2	Rear driving axle	<b>75W90 GL5</b>	16
3	Steering system	<b>Hipol ATF IIE</b>	11
4	Cooling system	<b>ES COMPLEAT</b>	92

**REMARK:**

**Never mix various types of engine oils, gear oils, greases or fluids in cooling systems and hydraulic systems.**

**Check periodically oil levels in engine, gearbox, rear axle and steering system. Check also fluids in cooling system and in clutch control system.**

**LIST OF BULBS USED IN THE A1012T COACH**

<b><u>External illumination</u></b>	<b>Bulb type (24V)</b>
Head-light of the upper beam	H1 24V 70W
Head-light of the passing beam	H1 24V 70W
Fog head-light	H3 24V 70W
Front position lamp	R5W BA15s
Front lamp of driving direction	PY21W BAU15s
Lamp of side direction indicator	P21W BA15s
Front upper position lamp	2PF 959 570 - 407
Rear upper position lamp	2TM 964 295 - 091
Rear lamp of driving direction	P21W BAY15d
Rear position and braking lamp	P21/5W BAY15d
Rear braking lamp	P21W BAY15d
Reverse motion lamp	P21W BA15s
Rear fog lamp	P21W BA15s
Lamp of number plate illumination	2KA 005 049 - 011
Side position lamp with reflection in Hapich lock	W3W 24V W2, 1 x 9,5d

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