

Operation Manual and Safety Information for users and first-time buyers

Intended use

The reservoirs (or “air tank”) are only for use in air braking systems and auxiliary systems on motor vehicles and their trailers. They are to contain only air and are designed for static operation. The vehicle manufacturer selects the reservoir size to provide an adequate amount of air for use by the braking system and control devices. Gnotec reservoirs are built in accordance with SAE J10 specifications and are certified to comply with Subpart B of the Federal Motor Vehicle Safety Standards, 49 CFR §571.121 *et seq.* as required by 49 U.S.C. §30115.

Attention:

Usage under frequent internal pressure alternations exceeding 20% of maximum operating pressure may significantly reduce service life. In this case there is a risk for fatigue failure of the air tanks. When operation under increased mechanical, climatic and/or chemical stresses is expected, the individual user must assess fitness for use.

Due to the variety of possible applications and installation options for the air tank, Gnotec cannot make a final safety assessment for each application. If there is uncertainty about the suitability for a specific application, the user is obligated to ensure fitness for use before bringing into service.

Labeling

For identification purposes the air tanks are marked at minimum with manufacturer, the rated working pressure, the Date of manufacture and Certification of compliance with applicable Federal Motor Vehicle Safety Standards and SAE J10 plus latest revision

Assembly

No welding, heat treatment or any other procedure may be carried out on any part of the air tanks. The air tanks are to be mounted on the vehicle using straps or the welded brackets fitted on the air tanks themselves. For welded brackets all fixation points and elongated holes must be used for fastening.

The air tanks are to be mounted in such a way that the drainage valve is at the lowest point of the air tanks.

The following rules shall be adhered to for assembly of air tanks with welded brackets, that are not customer-specific:		
	L-Shaped Console on Shell	U-Shaped console on Bottom
Screw	Screw M12–8.8 ISO 4017 or ISO 4762	Screw M10–10.9 ISO 4017 or ISO 4762
Nut	Nut M12–8.8 ISO 4032 or ISO 4035	Nut M10–10.9 ISO 4032 or ISO 4035
Washer	Washer ISO 7089 or ISO 7090 underneath Screw head and Nut	
Torque moment	Steel air tanks: 96±3 Nm Aluminum air tanks: 75±3 Nm	
Additional Assembly instructions	For diameter 396 mm the minimum distance between furthest fixation points on one bracket must be min. 215 mm, for diameter 310 mm the minimum distance must be 190 mm. Minimum wall thickness of adjacent construction 4,0 mm	Suspension on fixed and floating bearing to enable axial adjustment of the air tank. Minimum wall thickness of adjacent construction 4,0 mm
<p>Attention: Air tanks cannot be subjected to stresses, that impair their safety. The introduction of external loads from distortion of the adjacent construction or from impeded elongation through double sided fixed bearing of air tanks with welded U-panels on their bottoms must be avoided. Other kinds of fixation of the air tanks e.g. fastening on the welded connections or parts assembled therein are not permitted. The mounting straps must not come into contact with the air tank end welds. Where accessories are fastened directly to the threaded bosses of the air tanks a maximum moment of force of 110 Nmm is permissible. This dimension refers to the effective center-of-gravity distance of the accessory to the end face of the threaded boss. In addition, the mounting instructions of the accessory manufacturers must be observed. Material pairings must be chosen in such a way, that no corrosion can take place between them. If necessary, these materials shall be separated using elastic and solvent-resistant material.</p> <p>Operating instructions: The interior of the steel air tanks is corrosion protected. Until they are mounted on the vehicles, the air tanks must be stored in a dry place. From the moment the air tanks are delivered, the vehicle manufacturer is responsible for the corrosion protection of the air tanks. The final top-coat applied by the vehicle manufacturer must guarantee the corrosion protection of the contact surfaces of the threaded mounting bosses and of the mounting accessories. The interior of the air tanks can be inspected through the boss openings. To prevent the build-up of condensate, the air tanks must be drained off daily, if the vehicle manufacturer does not specify another drainage interval. If all the requirements with regard to mounting and drainage are adhered to, the air tanks are maintenance-free. To clean the air tanks, only alkali-free detergents may be used. With regard to the commissioning and continuing operation in particular the intervals for periodic inspections, federal regulations may have to be observed for the above-mentioned air tanks.</p>		
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