 Applied Turbine Technologies https://appliedturbinechnologies.com	Service Instruction		Release Date:	25-11-2018
			Revision:	01
			Author:	JF

Engineering change:

During the season 2018 Applied Turbine Technologies (ATT) introduced a new generation of industrial jet turbines used in the Zirocco road drying product line.

One of the important changes in the new turbine generation is the ability for the operator to change the turbine ignitor. It was earlier required to stop the operation and send the turbine back to ATT for service.



The ignitor is now placed accessible on the side of the jet turbine cover. If an ignitor needs to be changed, a spare ignitor is available on the machine and can be used instead. Changing the ignitor does not require special tools, it can be done by hand following the instructions stated in the products user manual.

Technical issue:

We have unfortunately experienced, that updating older turbines can give an unreliable ground connection through the aluminum cover to the turbines inner frame. The aluminum cover oxidizes over time and give rise to an extra resistance.

Solution:

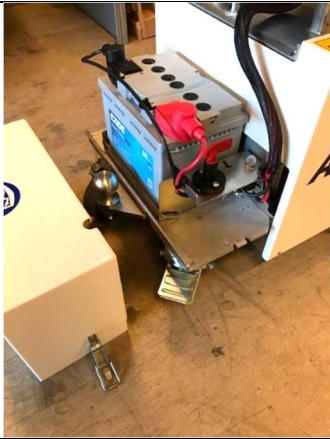
To overcome this problem a simple solution was developed using an extra ignitor grounding cable with two connectors placed on each end of the cable. There is a connection for the ignitor and a connection for one of the bolts positioning the aluminum cover to the turbine frame. The solution is simple since it only requires a torx 20 screwdriver to loosen and tightening the cover bolt again.





The following photo is showing the grounding cable positioned in the right place.










Procedure:

The following procedure should be followed to get the grounding cable mounted at the turbine:

			Remove the battery cover and disconnect the battery power by turning the red handle on the main electrical switch.	

			<p>Remove the cyclone, unlock the red machine cover and remove it to get access to the machines turbine box.</p>
			<p>Unlock the hood of the turbine box and remove both filters to get full access to the machines jet turbine</p>
			<p>Mark the electrical wire connection to ensure correct assembly later. Unclick the electrical wire by pressing on the sides of the connection. Unscrew afterwards the ignitor.</p> <p>Be careful to keep the flat O-ring sealing in place on the ignitor.</p>
			<p>Place the grounding cable directly on the ignitor and then the flat O-ring afterwards on the ignitor.</p>

		Mount the Ignitor and ground cable to the turbine cover and tighten it by hand without using tools		
		Unscrew the nearest bolt to the ignitor on the aluminum cover using a torx 20 screwdriver		
		Place the star washer on the screw and lead the screw through the ground cable before tightening it to the turbine cover again.		
		Tighten the screw to the turbine cover		

		Connect the ignitor wire again using the markings to ensure correct fit		
		After connecting the ignitor, both wires the ignitor and the grounding wire are stripped together in order to give better stability.		
		<p>Place filters in the turbine box and reassemble the</p> <ul style="list-style-type: none"> ○ Hood on the turbine box ○ Red machine cover ○ Cyclone <p>Finally reconnect the electrical main switch and get the machine ready for working again.</p>		

Please contact Zirocco support, if there are any questions regarding the ground cabling or exchange of ignitor.

Telephone: +45 29405023

e-mail: support@zirocco.dk