

Instructions for changing the impeller in the FlexPAK Unit

# Nederman MPROVING YOUR WORKSPAC 0 ).. 0 0 0 0 0 0

PART 1 & 3: FLEXPAK BLOWER EXTRACTION & RE-ASSEMBLY

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## IMPORTANT SAFETY INFORMATION

**NOTE!** Switch off power supply and ensure that no vacuum is present before comencing repairs.

**NOTE!** This manual must be read and fully understood in order to perform a safe service.

**NOTE!** These instructions shows a typical type of FlexPak. The pictures may vary somewhat depending on manufacturing year and version of the FlexPak.

**NOTE!** This service must only be performed by service technicians that are well familiar with the FlexPak. Pay special attention to the notes and warnings in this manual while carrying out the service.

**NOTE!** A basic set of tools and a lifting device (such as a fork lift) is required in order to perform the blower replacement.

NOTE! The FlexPak serial number and the blower serial number must be reported back to Nederman in order to recieve proper compensation.

# PART 1: FLEXPAK BLOWER EXTRACTION



1) Disconnect power and remove the exhaust pipe.



3) Remove the right panel.



2) Remove the top cover.

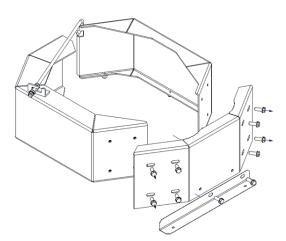


4) Remove the rear panel. Note! Unscrew the lower screw securing the panel to the base plate. Screw is located under the base plate and is accessed via the opening for the forklift.

NOTE! The sheet metal edges on the base plate might have sharp edges. Use long sleves and gloves when working close to the base plate.



5) Disconnect the contact from the pressure transducer



7) If the FlexPak is fitted with the FlexPAk upgrade kit, covering the blower, this has to be temporally removed in order to gain access to the blower.



9) Unscrew the gland nut and remove the PT100 sensor rod. Be careful not to damage the sensor rod.



6) Remove the flexible hose between the motor and inverter housing



8) Remove the vacuum valve cover, and disconnect the wires. NOTE! Mark the position of the wires for correct re-assembly.



10) Disconnect the blower mains cable from the blower motor.

NOTE! Mark the position of the wires for correct re-assembly.

NOTE! Cable shield is connected to the cable gland for proper EMC protection.



11). Depending on FlexPak manufactoring year, the vacuum valve cables, PT 100 cables and motor cable might be routed through the motor cover plate. Release all cables from the motor cover NOTE! Pay attention to how cables are routed



12). Loosen the hose clamp and disconnect the flexible hose from the inlet silencer.



13) Remove the two upper hose clamps between the adapters and silencer pipes.



14) Remove the two silencers (up and out).



15) Unscrew the three remaining sheet metal screws securing the blower cover and remove it so it does not interfere with the blower (tilt up and out).



16) Unscrew the nuts securing the blower to the base. Access via the fork lift entry. NOTE! Base plate might have sharp edges. Use gloves and long sleeves.



17) Carefully lift the blower out. Pay attention not to damage the vibration absorbers as they will be reused (NOTE! Blower weight: approx 130 Kg).

#### **18) END OF PART 1, BLOWER EXTRACTION**

TO CONTINUE THE WORK AND REPLACE THE IMPELLER INSIDE THE BLOWER, PLEASE REFER TO THE SEPARATE INSTRUCTION SN2920-4 (or later revision):

#### PART 2: IMPELLER CHANGE



Once impeller change is completed, continue with PART 3 of these instructions for the re-fitting of the blower.

# PART 3: FLEXPAK BLOWER RE-ASSEMBLY



20) Fit the refurbished blower into position.



22). Refit the blower cover.



24) Refit the flexible hose to the top of the intake silencer.



21) Secure the new blower to the base.



23) Refit the silencers and tighten the hose clamps.



25) Reconnect the pressure transducer.



26) Refit the PT100 sensor rod.



27) Refit the vacuum limit valve and connect wires to previous positions.



28) Fit the flexible hose to the bracket. Ensure that the hose is pushed flush against the motor grid/cover.



29) Re-connect the power supply to the motor. NOTE! Ensure that the cable gland have contact with the cable shielding.



30) Refit the rear panel. NOTE! Refit the lower corner screw.



31) Refit the side panel.



32) Fit the top cover.



33) Reconnect the exhaust piping and power supply.

# 34) Impeller shipping instructions

See FPZ return instructions for the impeller.

# Installation protocol

FlexPak Serial Number:	
Blower Serial Number:	
Service Date:	
Preformed by:	
Control points	Result
1. Checkpoints before startup	
All piping re-attached	
All wiring re-attached correctly as noted before disassembly	
Motor cable fitted correctly. NO shifting of phases!	
Impeller rotating freely	
FlexPak Upgrade kit re-fitted (if any)	
All hose clamps, bolts and screws securely tightened	
Units secured to floor/foundation	
2. Checkpoints during first test run	
No leaks (vacuum)	
No vibrations or un-usual noises	
Unit operating normally (Filter clean, idling etc.)	
3. Notes	