

E-FAN PLUS

PS 120-500 / PS 120-500 D

CONVERSION INSTRUCTIONS



PLEASE READ CAREFULLY BEFORE INITIAL OPERATION!



Version: 1.0 EN; item number: 00602-3-432

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1 ITEMS INCLUDED 04000-2-882



Figure 1

	Item number:	Designation:
A	00420-2-063	Motor module MM01, installed
B	04000-2-886	ABK bracket, motor module
C	04000-2-885	ABK fan EG-PLUS
D	04000-2-883	ABK tractor cable set MM01
E	04000-2-884	ABK voltage supply MM 5m



CAUTION!

Before beginning the conversion work, the control box must be switched off and the implement cable must be disconnected from the control box!

2 REMOVING THE DOUBLE FAN



Figure 2



Figure 3



Figure 4



Figure 5

- Remove the fan cover (Figure 2).
- Remove 2 bolts respectively on the left and right of the fan cover (Figure 3 and Figure 4).
- Then take off the fan cover towards the rear (Figure 5).



Figure 6



Figure 7



Figure 8



Figure 9

- Remove all 4 bolts/nuts from the gearbox motor cover (Figure 6).
- Then take off the gearbox motor cover (Figure 7).
- Disconnect the blue and the brown wire of the fan connection cable (Figure 8).
- Disconnect the fan connection cable on the double fan and pull out the cable (Figure 9).



Figure 10



Figure 11



Figure 12



Figure 13

- Remove 2 bolts each at the front and rear of the motor of the double fan (Figure 10 and Figure 11).
- Take off the double fan (Figure 12).
- The adhesive remaining on the frame must be carefully removed (Figure 13).

3 INSTALLATION OF THE E-FAN PLUS

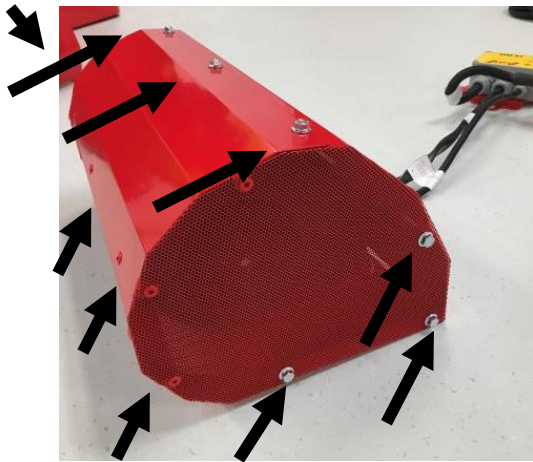


Figure 14

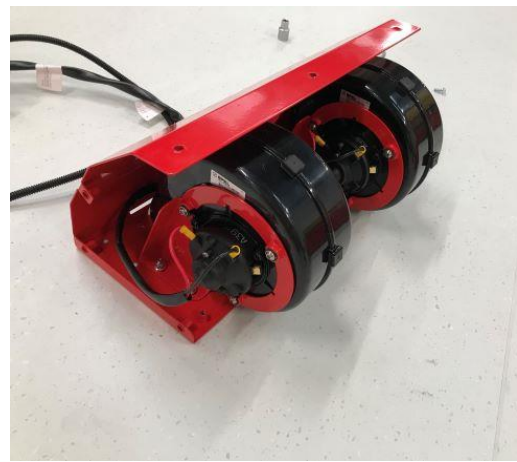


Figure 15

- Unscrew all 12 bolts for the intake screen and remove them (Figure 14 and Figure 15).

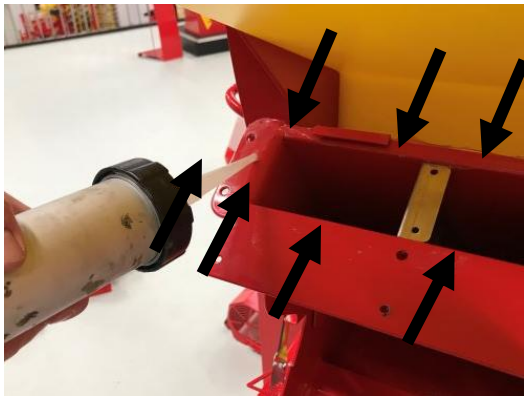


Figure 16

- On the PS near the docking site to the E-fan, apply sealant all around without gaps (Figure 16).



Figure 17



Figure 18

- Put the E-fan PLUS on the PS (Figure 17).
- Fasten the E-fan PLUS with two existing bolts on the left and right respectively (Figure 17 and Figure 18).

4 INSTALLATION OF THE MOTOR MODULE

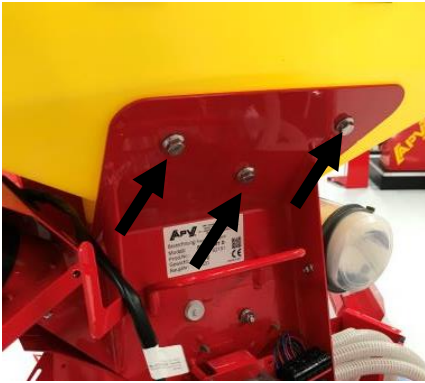


Figure 19



Figure 20

- On the gearbox motor side, remove the three hexagonal bolts for the hopper fastening (Figure 19 and Figure 20).

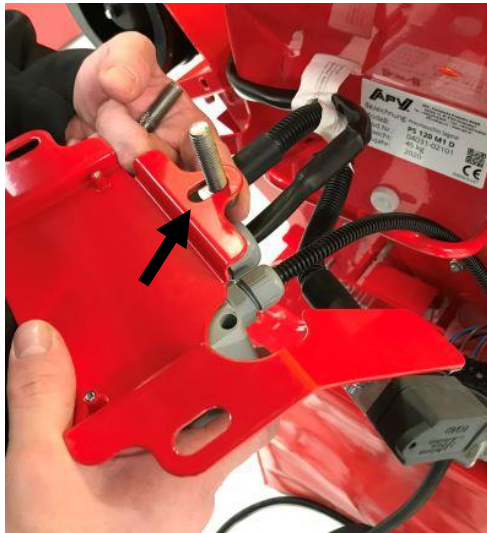


Figure 21



Figure 22



Figure 23



Figure 24

- Screw the motor module onto the hopper with the bolts provided – begin on the underside (Figure 21 to Figure 24).

5 CONNECTION TO THE TERMINAL BLOCK



Figure 25

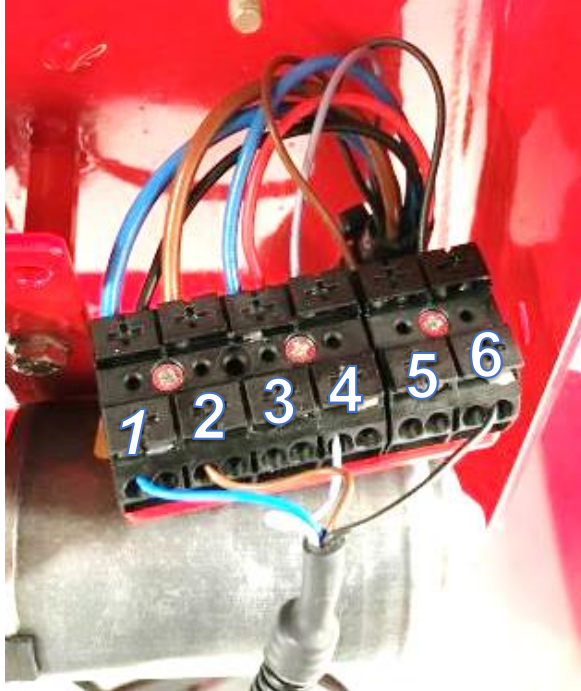


Figure 26

Using a crosshead screwdriver, press on the terminal block and insert the corresponding wire end of the connection cable into the opening (Figure 25).

- 1** - Blue 0.5 mm²
 - 2** - Brown 0.5 mm²
 - 4** - Grey 0.5 mm²
 - 6** - Black 0.5 mm²
- (Figure 26)

See connection diagram
Chapter 11; page 10

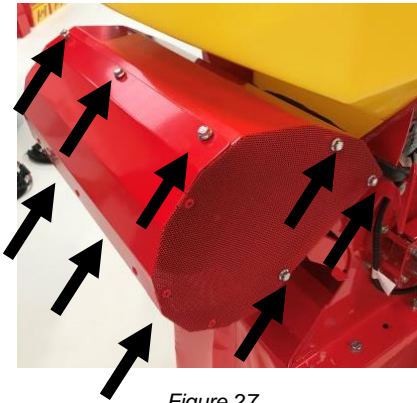


Figure 27

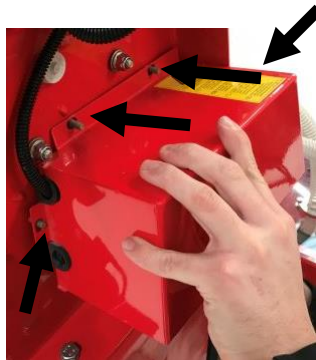


Figure 28

- Installation of the fan cover with 12 bolts (Figure 27).
- Installation of the gearbox motor cover with 4 nuts/bolts(Figure 28).

6 INSTALLATION OF THE TRACTOR CABLE SET ABK MM01



Figure 29

- On the tractor, the cable is laid directly from the battery to the rear end. The plug can be installed close to the rear hydraulic connections using the retaining plate (Figure 29).
- The red end of the cable with fuse holder is connected to the POSITIVE terminal of the battery, and the black end of the cable is connected to the NEGATIVE terminal of the battery (Figure 29).

7 CONTROL BOX 5.2 PROGRAMMING AND INITIAL OPERATION



Figure 30



Figure 31



Figure 32



Figure 33

- Requirements for Control Box 5.2: hardware - HW 14.2 / software - SW 1.28 (Figure 31).
- Using the voltage supply cable MM 5m, supply the fan PLUS directly with current (Figure 30).
- Connect the implement cable to Control Box 5.2.
- Connect Control Box 5.2 with the 3-pin power supply to the tractor.
- For programming, Control Box 5.2 must be connected but switched off.
- Press and hold the ON button for approx. 5 sec. until "0. Implement type" is shown on the display (Figure 31 and Figure 32).
- Press the right arrow button until "1. Fan motor." appears on the display (Figure 32).
- Press the PLUS or MINUS button until "Electric PLUS" appears (Figure 33).
- Now the programming can be completed by pressing on the OK button.
- Control Box 5.2 has saved all of the data and is automatically switched off – then the PS can be used with the new fan PLUS.
- For all other settings, refer to the operating instructions for the PS120 -500 and for Control Box 5.2.

8 DISPLAY ON THE MOTOR MODULE



Figure 34

No	Control lamp	Meaning
1	Fan overload	LED lights up red if the motor is running too long at its limits
2	Fan not connected	LED lights up red when the cabling is faulty or a fuse is defective
3	Fan status	LED lights up green when the voltage supply is established

9 TECHNICAL DATA FOR ELECTRIC FAN PLUS

Designation:	Value
Supply voltage:	12 V
Supply current:	40 A
Power consumption of the electric fan PLUS:	40 A when starting
Maximum spreading width:	12 m
Maximum metered quantity:	8 kg/min

10 POSSIBLE ERRORS AND THEIR CORRECTION

CAUTION!

For troubleshooting and maintenance work, the power supply should be disconnected!

- Switch off the control box.
- Pull out the power supply plug from the control box or pull out the implement cable plug from the control box.
- For the electric fan PLUS, also pull out the power supply plug for the motor modules from the seeder or tractor.

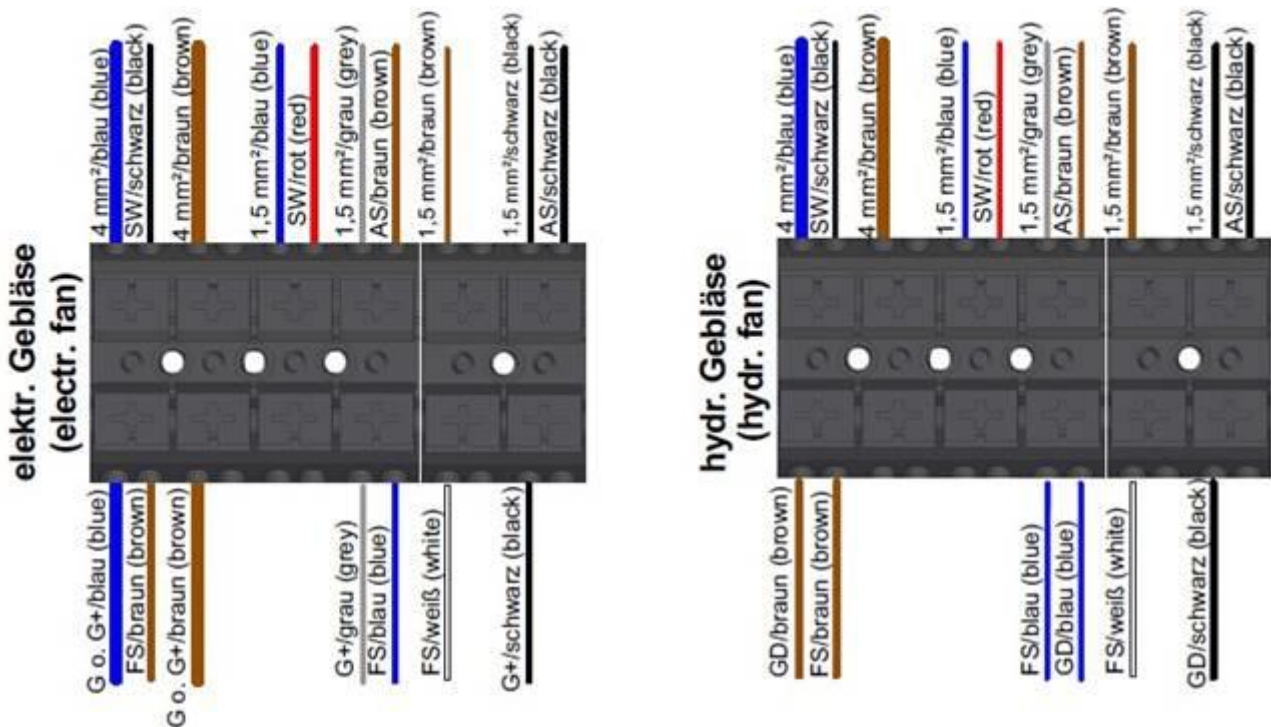
PLEASE NOTE!

If the error message "Error (fan)!" is shown on the control box when using an electric fan PLUS, the display on the motor module must be checked.

Correct the respective fault according to the instructions.

Display	Error description	Error correction
"Error (fan)!" on the display of Control Box 5.2, and the LED lights up red - E01 on the motor module (fan overload)	The motor has been strained too long at its limits	<ul style="list-style-type: none"> • Check or install the calibration lid. • Check whether all of the seeding hoses are installed. • Remove any foreign objects or similar from the fan. • Check the fan is running smoothly.
"Error (fan)!" on the display of Control Box 5.2, and the LED lights up red - E02 on the motor module (fan not connected)	Faulty cabling or defective fuse	<ul style="list-style-type: none"> • Check the cabling. • Check the fuse.

11 CONNECTION DIAGRAM



Stecker-PIN (plug-pin)	Geräte kabel (machine cable)	Gebläse (G) (fan)	Gebläse PLUS (G+) (fan PLUS)	Säwellenmotor (SW) (sowing shaft motor)	Füllstandsensor (FS) (fill level sensor)	Abdrehschalter (AS) (calibration button)	Gebläsedrehzahl-sensor (GD) (fan speed sensor)
1	4 mm ² / blau (blue)	4 mm ² / blau (blue)	0,5 mm ² / blau (blue)	1,5 mm ² / schwarz (black)	0,75 mm ² braun (brown)		0,75 mm ² braun (brown)
2	4 mm ² / braun (brown)	4 mm ² / braun (brown)	0,5 mm ² braun (brown)				
3	1,5 mm ² / blau (blue)			1,5 mm ² / rot (red)			
4	1,5 mm ² / grau (grey)		0,5 mm ² / grau (grey)		0,75 mm ² / blau (blue)	0,75 mm ² / braun (brown)	0,75 mm ² / blau (blue)
5	1,5 mm ² / braun (brown)				0,75 mm ² / weiß (white)		
6	1,5 mm ² / schwarz (black)		0,5 mm ² / schwarz (black)			0,75 mm ² / schwarz (black)	0,75 mm ² / schwarz (black)

Abisolierlänge 10mm! (stripping length 10mm!)

Figure 35



APV – Technische Produkte GmbH
Zentrale: Dallein 15
AT - 3753 Hötzelndorf

Tel.: +43 2913 8001
office@apv.at
www.apv.at

