

## TROUBLE SHOOTING BLOWERS BORA

PROBLEMS	LIST OF POSSIBLE CAUSES
Vain or scarce performance, insufficient outlet pressure.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 17
Excessive performance, outlet pressure higher than expected.	3, 7, 13, 14
High power absorption.	1, 2, 3, 5, 7, 8, 9, 13, 14, 15, 16, 19
Raised noise and high vibrations.	3, 4, 11, 13, 14, 19, 20, 21, 22, 23, 24, 28
Overheating.	1, 2, 3, 5, 13, 14, 15, 16, 17, 18, 19
Nonfunctional seal system.	15, 25, 26, 27

	CAUSES	REMEDY	PERSONNEL
1	Too small diameter of piping.	Replace piping with larger diameter ones.	Qualified technician
2	Obstructed piping.	Remove the obstructions.	Operator
3	Not correctly adjusted valve.	Adjust the valve (see 5,2).	Qualified technician
4	No airtight machinery.	Look for the leaks and remove them.	Qualified technician
5	Intake filter clogged.	Clean or replace the filter (see 7.2.9).	Qualified technician
6	Speed of rotation lower than expected.	Check tension belts, if they are slack, regulate (see 7.2.10). Check their sizing, improve if they are undersized. Check the ratio of pulleys and correct, if it is wrong.	Qualified technician
7	Inappropriate Blower/booster sizing.	Check the machine selection and correct it.	Qualified technician
8	Electric motor improperly connected.	Check the electric connection and the rotation direction. If it is wrong, correct.	Qualified technician
9	Wrong supply voltage.	Check the electric motor supply. If it is wrong, correct.	Qualified technician
10	Damaged motor.	Check the motor operation. Replace, if it is damaged.	Qualified technician
11	V-belts degraded.	Check tension belts and correct it, if necessary. Replace belts if they are consumed.	Qualified technician
12	Speed of motor rotation is not sufficient.	Check direction and speed of rotation. Check the electrical connection and correct it, if necessary.	Qualified technician
13	Speed of rotation is higher than the target.	Check the ratio of pulleys and correct, if it is wrong.	Qualified technician
14	Speed of motor rotation is excessive.	Check the speed of rotation. Check the electrical connection and correct it, if necessary.	Qualified technician
15	Exceeding quantity of lubricant in the casing.	Drain any excess lubricant, restoring the correct level.	Qualified technician
16	Deformation caused by foot tightening.	Check the uniformity of the supporting surface of feet machinery (within 2 mm). If necessary, use some shims to correct it.	Qualified technician
17	Intaked gas temperature too high.	Check the suction conditions are within the established parameters (see 3,1,2). Correct, if necessary.	Qualified technician

18	Too high machine-room temperature.	Machine-room has to be appropriately ventilated to dissipate the produced heat. If ventilation is deficient, correct.	Operator
19	Frictions inside the blower/booster.	Stop the machine and rotate slowly by hand. If there is friction or contact between the parties, call assistance.	Assistance
20	Rotors out of phase after seizure.	Stop the machine and rotate slowly by hand. If there is friction or contact between the parties, call assistance.	Assistance
21	The contact of rotors is caused by fouling.	Stop the machine and rotate slowly by hand. If there is friction or contact between the parties, call assistance.	Assistance
22	The contact of rotors is caused by oxidation.	Stop the machine and rotate slowly by hand. If there is friction or contact between the parties, call assistance.	Assistance
23	Bearings or gears deterioration is caused by lack of lubricant.	Stop the machine and rotate slowly by hand. If there is friction or contact between the parties, call assistance.	Assistance
24	Blower/booster damage is caused by seizure.	Stop the machine and rotate slowly by hand. If there is friction or contact between the parties, call assistance.	Assistance
25	No airtight plugs or seals.	Pick out the damaged external tightness elements and replace them.	Qualified technician
26	Damaged internal tightness organs.	Stop the machine and call assistance.	Qualified technician
27	Clogged vent plugs.	Clean or replace vent plugs.	Qualified technician
28	Degraded silencers.	Replece the degraded silencer components.	Qualified technician