

# OWNER'S MANUAL

## ABF-24 JET FAN



### **Specifications:**

Model	: ABF-24
Weight	: 56 kg.
Hose size	: 1"
Air inlet	: 1"
Working pressure	: 3 bar / 8 bar
Max. pressure	: 8 bar
Mounting slot diameter	: 1"
Bolt circle diameter	: 69,85 – 76,85 cm



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# ABF-24 JET FAN

## 1.0 Disassemble

1. Remove both screens from housing (ABF-4).
2. Remove fan blade end cap and stationary housing end cap. (ABF-3).
3. Use ABF-22 (bear hug socket) to remove ABF-10 (bear hug nut). Use wood block to wedge between fan blade and guide vane strut of stationary housing in order to keep the fan blade from turning while removing bear hug nut.
4. After the bear hug nut has been removed, make sure the shaft threads are clean and that no burrs or extrusions exist on the shaft. this will ease in the removal of the fan blade.
5. Remove fan blade from shaft using a bearing puller. if a bearing puller is not available, a rubber mallet may be required to help extract fan blade from shaft. (From the reverse side, use a flat punch and rubber mallet with alternating blows).
6. Once the fan blade has been removed, the large snap ring (ABF-8) is exposed. Use large snap ring pliers to remove snap ring.
7. On the opposite side, use a smaller set of snap ring pliers to remove small snap ring (ABF-9).
8. Once the small snap ring has been removed, the locking safety shield (ABF-14) can be removed.
9. The shaft and bearings assembly can now be pressed out of the housing. Do not apply extreme pressure when pressing or stationary hub guide vanes may fracture.
10. Use a small punch to remove the air seal (ABF-6) from the stationary housing.
11. Remove bearing tolerance rings (ABF-20) from inside bearing housing and dispose.  
**Tolerance rings cannot be reused.**
12. Remove speedy sleeve (ABF-7) from shaft. Once removed, this part can not be reused.
13. Use bearing puller to remove bearings from shaft.
14. Clean all necessary parts for reassembly.

## 1.1 Reassemble

1. For best results, use jet fan repair kit (ABF-RK) to ensure original replacement parts and all components meet original standards.
2. Make sure end cap and fan hub gaskets (ABF-23) are smooth and free from nicks and tears.
3. Press one bearing (ABF-5) on the side of the shaft opposite the threaded end. **Do not press bearing on threaded end at this point.**
4. Position the large flange of the speedy sleeve (ABF-7) toward the bearing and place speedy sleeve over the shaft behind the first bearing. Use the sleeve tool to press the speedy sleeve into place. **The speedy sleeve should not touch the bearing.** Allow approximately 1/8" to 1/4" between the sleeve and the bearing and make sure the sleeve is smooth to the shaft.

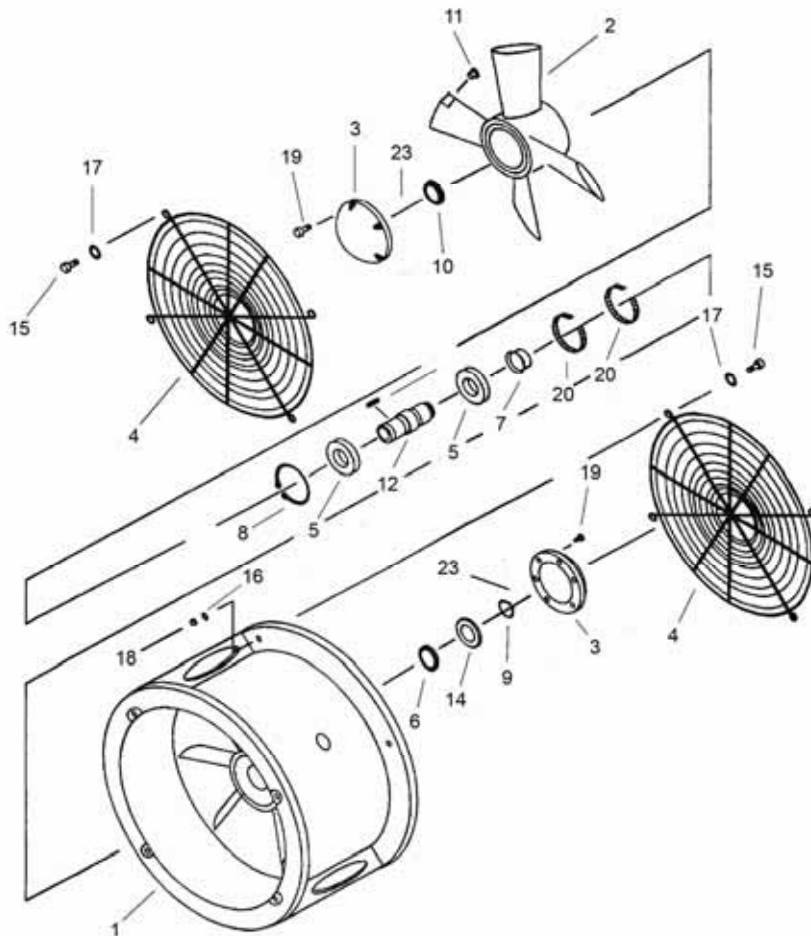
any nicks in the sleeve could cause damage to the air seal.

5. Insert one tolerance ring (ABF-20) into inner most groove of bearing housing. **Do not insert both tolerance rings at this point.**
6. Drop shaft containing one bearing and speedy sleeve into housing until it rests against the one installed tolerance ring.
7. The outer most tolerance ring can now be installed.
8. Drop second bearing over the shaft and start pressing into housing. both bearings are pressed into place almost simultaneously. **(Tolerance rings are designed for one pressing only. Never attempt to press inner bearing through outer tolerance ring).**
9. Secure shaft assembly in housing with large snap ring (ABF-8).
10. On the opposite side, insert air seal (ABF-6) into groove and seat firmly.
11. Place lock safety shield (ABF-14) over shaft.
12. Install small lock ring (ABF-9).
13. Place gasket (ABF-23) and end cap (ABF-3) onto housing and secure alternate tightening of bolts to insure proper air seal.
14. Place shaft key (ABF-13) into slot and slide fan blade over shaft.
15. Use rubber mallet to ensure that fan blade seats against bearing hub.
16. **Clean shaft threads before installing bear hug nut.** This is important because aluminium from the fan blade will usually be caught between the threads while placing fan blade onto shaft. if this material is not removed prior to installing the bear hug nut, it may cause galling of the nut and not allow for proper tightening. in addition, it may be necessary to cut the nut from the shaft which may also damage the shaft. Secure housing to assembly table with clamps to keep housing from turning during bear hug tightening process.
17. Tighten bear hug nut (ABF-10) onto shaft. Place a wood block between the fan blade and stationary housing to keep blade from rotating during this process. Make sure the nut is tight against the blade.
18. Install gasket (ABF-23) and end cap (ABF-3) onto blade. alternate tightening of bolts to insure proper air seal.
19. Remove wood block and check to see that fan blade turns freely.
20. Install both fan guard screens (ABF-4) and test.
21. Make sure grounding lug is affixed to one of the fan guard screen bolts. The grounding lug is used with ABF-21 (grounding clamp with 6' wire) to discharge static during hazardous or explosive atmosphere use.

# ABF-24 JET FAN

## 1.2 SPARE PARTS

ART.NR.	MODEL	DESCRIPTION	
01.	8850017	ABF-1	20" Jet fan housing
02.	8850027	ABF-2	Nozzle jet prop
03.	8850037	ABF-3	Inlet outlet cap
04.	8850047	ABF-4	20" Stainless steel fan guard
05.	8850057	ABF-5	Bearing
06.	8850067	ABF-6	Air seal
07.	8850077	ABF-7	Speedy seal
08.	8850087	ABF-8	Large snap ring
09.	8850097	ABF-9	Small snap ring
10.	8850107	ABF-10	Locking bear hug
11.	8850117	ABF-11	Nozzle jet
12.	8850127	ABF-12	Shaft
13.	8850137	ABF-13	Key
14.	8850147	ABF-14	Lock safety shield
15.	8850157	ABF-15	¼" – 20 x 1 ¼" Hex cap screw
16.	8850167	ABF-16	¼" – Lock washer
17.	8850177	ABF-17	¼" – Flat washer
18.	8850187	ABF-18	¼" – 20 Hex nut
19.	8850197	ABF-19	5/16" – 18 x ¾"
20.	8850207	ABF-20	Tolerance ring
21.	8850217	ABF-21	6" Grounding clamp
22.	8850227	ABF-22	Bear hug socket (removal tool)
23.	8850237	ABF-23	Inlet / outlet cap gasket



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