



**Euramco Safety**

**UB20  
12V DC**



# Owner's Manual



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## Preface

Thank you for purchasing the RAMFAN UB20 12V utility blower manufactured by Euramco Safety, Inc.

For more than 30 years Euramco Safety has been on the cutting edge of industrial, fire, and marine ventilation products. Each and every one of our blower/exhausters, smoke ejectors, PPV & LSV fans and accessories represent the finest technologies available. Every product is constructed to demanding and exact specifications for quality, performance, and reliability.

When human life depends on having a fan that can deliver clean, safe air, you have only one choice you can trust: **RAMFAN.**

Explore our website and online catalog at [www.EuramcoSafety.com](http://www.EuramcoSafety.com) and discover how RAMFAN can make a difference in the field!

This manual covers operation and maintenance procedures for the RAMFAN UB20 12V utility blower/exhauster.

*All product information in the publication is based on the most current information available at the time of printing. Euramco Safety, Inc. reserves the right to make changes at any time without notice.*



**READ MANUAL BEFORE STARTING FAN FOR FIRST TIME!**



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## 1 | Specifications/ Warnings

MODEL	UB20 12V
Part Number	ED9002
Airflow	862 cfm / 1465 m <sup>3</sup> /hr
Volts	12V DC
Amps	11.5A
Motor output max.	1/4 Hp / 0.19 kW
Protection class	IP55
Height x Width x Length	14 x 12 x 13 in / 36 x 31 x 33 cm
Weight	17 lbs / 8 kg
Sound level @ 3' / 1 m	74 dB(A) @ 3' / 1 m

\* Specifications are subject to change without notice. Some values are approximate.



**CAUTION!** This fan requires a 12VDC battery power source. Do NOT use a higher voltage battery than 12VDC.

The UB20 12VDC blower/exhauster is also available with RAMFAN's Battery Pak™ and charger system for up to 10 hours of operation.

## 2 | Features & Benefits

RAMFAN® combines high performance turbofan design with high strength polymers to create a line of rugged, portable turbo blowers. The UB-Line is ideal for general use, confined space ventilation and delivers the highest airflow in its class. The double-wall, polyethylene casing is light-weight, corrosion and chemical resistant and handles the bumps and falls of any job site.

The 8"/20 cm UB20 turbo blower is at the heart of the RAMFAN industrial ventilation systems that provide you with the complete solution for common confined space ventilation applications. The multi-purpose blower and exhauster delivers powerful airflow in a compact and lightweight package.

- Compact & Lightweight
- Integrated Duct Adapter
- Cord Strap
- 15'/4.6 m Extended Reach Jumper Cable
- Ultra-Quiet
- Easily attaches Quick-Couple™ Duct Canister for Exhaust/Suction



## 3 | Safety Precautions

### Before Operation

**Before starting for the first time:** DO NOT START fan if there are any signs of shipping damage, particularly to blade, guards, or housing. If ANY damage is suspected, STOP and call your dealer immediately.

**Keep children away:** Do not allow children to play with or around the unit, which could result in injury. Be sure the unit is inaccessible to children when not attended.

**Power Cable:** Only use power cable or jumper cable provided by Euramco Safety for use with RAMFAN UB20 12V.

**Handle with care:** Do not drop or throw the unit. Rough treatment can damage the components or wiring and create a hazardous condition.

**Run on stable surface:** Start only if blower is sitting in a stable and upright position. While on level surface and running at full speed, the blower should not move around. If unit is moving, check rubber feet for damage and replace if necessary.

**Secure during transport:** When transporting in a vehicle, secure the unit to prevent sliding and possible injury to vehicle occupants.

### During Operation

**Airflow Direction:** When using the blower, note the directional airflow indicator on the external housing.

**Keep out of water:** Never operate the unit in pooled or standing water, as this may create a risk of injury from electrical shock. Do not store outdoors. If electrical wiring or components become wet, thoroughly dry them before using the unit.

**Safety:** Proper ear and eye protection must be worn while blower is running. Keep fingers and hands clear of blade. Do not move blower while it is running.

**Keep air intakes clear:** Do not clog or block air intakes, this may occur if operated too close to loose lightweight objects such as clothing or leaves. This can cause the unit to overheat and result in a fire or electrical hazard.

**Keep away dust and dirt:** Do not allow dust, dirt, or other particles to be drawn into the air intakes. Dirt in the motor can cause it to overheat, resulting in a fire or electrical hazard. If the motor gets dirty, clean it using a compressed air hose.

**Allow repair only by qualified person:** Immediately stop the unit upon hearing excessive mechanical noise or vibration. Do not attempt to disassemble or repair the unit if you are not qualified to do so. You can perform regular maintenance or troubleshooting, however complex problems need to be repaired by an authorized service technician.

For information about authorized repair, call Euramco Safety Customer Service at +1 (619) 670-9590 or email us at [theteam@euramcosafety.com](mailto:theteam@euramcosafety.com).



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## 4 | Operation

1. Read the Owner's Manual completely before starting fan.
2. Wear both eye and ear protection.
3. Position the fan on a level surface.
4. Make sure the switch is in the "OFF" position before connecting a power source.
5. This blower is supplied with a 15ft jumper cable that plugs into the blower and is designed to clip to a 12V vehicle battery. The UB20 12V may be powered by any 12V source with sufficient capacity (See specs in table above). Battery life will depend on the capacity of the power source.
6. Check vehicle battery, clean terminals.
7. Connect jumper cable to the fan and clamp the ends to the appropriate terminals on a 12V vehicle battery. When the unit is properly connected to the power source, flip the toggle switch to the "ON" position.
8. Check for proper operation before leaving the unit unattended. Do not move or carry the blower while it is running.

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## 5 | Maintenance

**LOCK-OUT / TAG-OUT:** When performing any maintenance, always follow all additional safety precautions that your company may have for lock-out / tag-out procedures.

**POWER OFF:** Always turn the power **OFF** and unplug the unit before performing maintenance procedures. All the service procedures below are to be executed with the unit unplugged. Perform before each use or as needed.

**DO NOT DISSASSEMBLE** blower for maintenance reasons.

**INSPECT ELECTRICAL SYSTEM:** Inspect the electrical cord for damage at regular intervals. Periodically, inspect internal wiring for bare wires, insecure fasteners, and discoloration. Remove and repair any damaged wiring as needed. Failure to do so may lead to electrical shock or a fire hazard.

**CLEAN AIR INTAKES:** Clean off any accumulated lint or other materials from the finger guards. A build up will reduce the airflow and may cause the motor to overheat and become a fire hazard. NEVER operate fan with damaged or missing finger guards.

**CLEAN EXTERIOR:** Clean fan periodically to remove accumulated dust or particles using a commercially available biodegradable cleaning solution. DO NOT use solvents containing chlorinated hydrocarbons (i.e. MEK, Acetone)

**EXTERIOR INSPECTION:** Evaluate exterior components and make sure they are properly installed. Inspect the fan for loose fasteners at least once every 6 months depending on frequency of use. Tighten any loose fasteners immediately. DO NOT overtighten fasteners.



**LISTEN** to the unit for abnormal sounds. Check rubber feet for excessive wear or breakage. Contact Euramco Safety for replacement parts and installation instructions.

**DO NOT WET MOTOR OR WIRING:** To prevent damage to electrical components, do not use a duct or pressure washer to clean a blower. If electrical components do become wet, dry them immediately.

## 6 | Troubleshooting

**WARNING:** Execute all the service procedures below with the blower OFF and power cord unplugged.

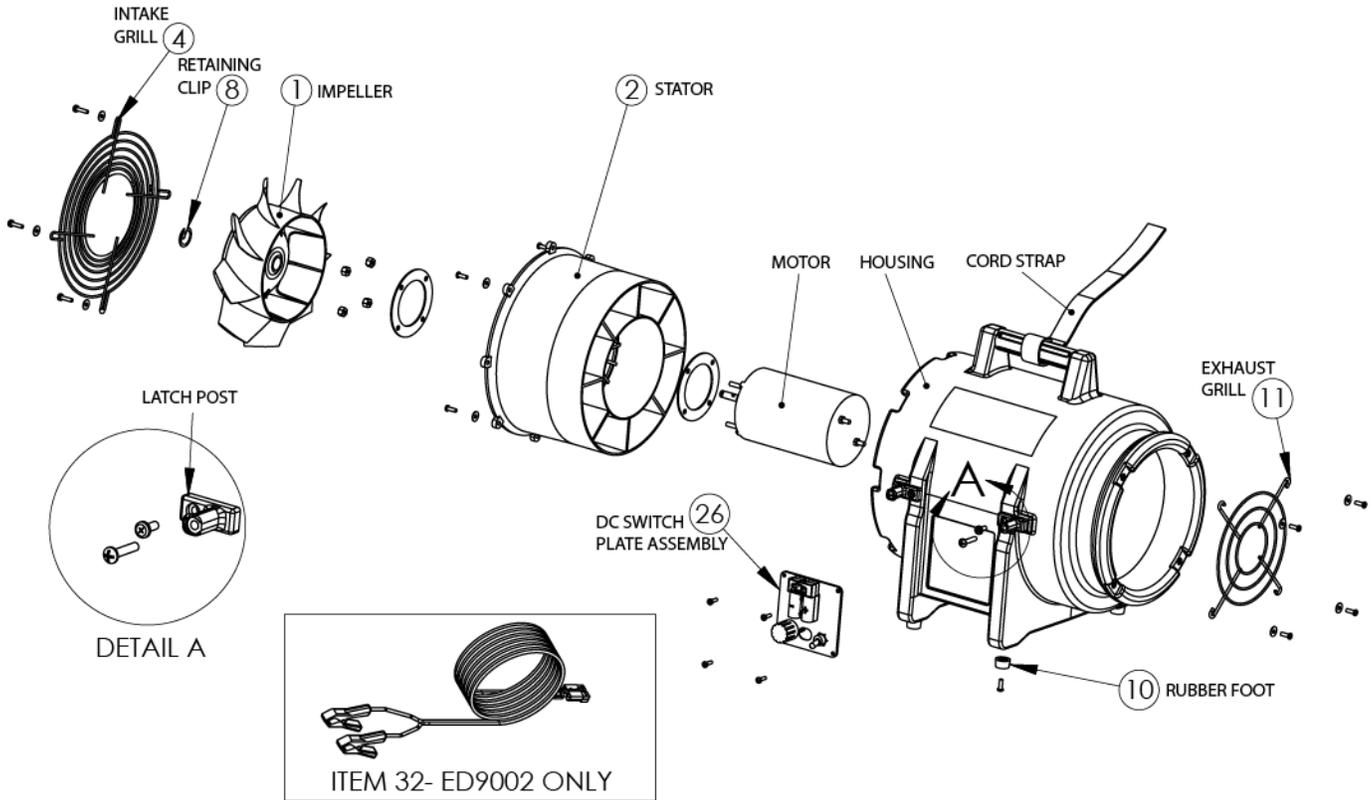
"FS" or Field Solutions can be handled by the technician in the field | "AST" or Authorized RAMFAN Service Technician

PROBLEM	CAUSE	See Above	SOLUTION
Motor won't run	No power to machine Switch not turned on Blower impeller jammed Intake or exhaust blocked <b>Switch is broken</b> <b>Loose wiring</b>	FS FS FS FS <b>AST</b> <b>AST</b>	Plug in the unit; check circuit breaker or fuse Turn on the switch Remove material jamming impeller Turn machine off and allow to cool, then remove blockage <b>Call distributor or Euramco for replacement switch</b> <b>Check wiring and tighten as needed</b>
Motor runs but impeller turns erratically or scrapes	<b>Severe jolt has caused motor mount to bend and impeller to rub</b>	<b>AST</b>	<b>Remove motor from housing, then replace or repair bent motor mount</b>
Unit vibrates excessively	Accumulation of soil on impeller <b>Blower impeller has lost balance</b> <b>Blower impeller has been bent</b> <b>Bent motor shaft</b>	FS <b>AST</b> <b>AST</b> <b>AST</b>	Clean blower impeller <b>Balance or replace blower impeller</b> <b>Replace blower impeller</b> <b>Replace motor</b>



## 7 | Spare Parts

Contact factory for replacement parts and installation instructions.



### Model UB20 12VDC

Corresponding Bubble No.	RAMFAN P/N	Description
1	BL011	Impeller
2	ST010	Stator
4	ED4001	Intake Grill
8	EZP80783007	Retaining Clip
10	FZ-9540K46	Rubber Foot w/washer (4)
11	ED4003	Exhaust Grill
26	ED0109DC2	UB20 DC Switch Plate Assembly w/SMH Connector

To order spare parts call Euramco Safety +1.619.670.9590 or email [theteam@euramcosafety.com](mailto:theteam@euramcosafety.com)