



# LAGUNA

## AFlux 12

### Air Filter

Operating Instructions



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151-AFlux12 LAGUNA Air Filter Manual EN v4.02.01 A4ob



## EC DECLARATION OF CONFORMITY

According to the following EC Directives  
- Machinery Directive: 2006/42/EC  
- Low Voltage Directive: 2014/35/EU



The applicant: **LAGUNA TOOLS, INC./ 744 Refuge Way, Suite 200, Grand Prairie, Texas 75050 USA**

Manufacturer: **SAN FORD MACHINERY CO., LTD./ No.169, Chung shan Rd., FengYuan Dist., Taichung City 420, Taiwan (R.O.C.), Taiwan, manufacturer, declares that the machine described hereafter:**

### DUST COLLECTOR MODEL:

**BFLUX1, CFLUX1, PFLUX1, CFLUX2, PFLUX2, CFLUX3, PFLUX3, TFLUX5, TFLUX10, XFLUX10, SFLUX10, AFLUX12, 820680, 821200**

Provided that it is used and maintained in accordance with the generally accepted codes of good practice and the recommendations of the instructions manual, meets the essential safety and health requirements of the Machinery Directive.

The person who compiles technical file established within the EU:

Name: IGM nastroje a stroje s.r.o.

Address: Ke Kopanine 560, Tuchomerice, CZ-252 67

Tel.: +420 220 950 910

Email: [sales@igmtools.com](mailto:sales@igmtools.com)

The TCF (No. SF-2024003-A1) is archived by **CEPROM S.A.** located in **Str. Fântânele f.n., 440240 Satu Mare, judetul Satu Mare, Romania.**

For the most specific risks of this machine, safety and compliance with the essential requirements of the Directive has been based on elements of:

- **EN ISO 12100:2010 / Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)**
- **EN 60204-1:2018 / Safety of machinery - Electrical equipment of machines- Part 1: General requirements- Industrial electrical device.**



Date: May 20, 2024

Authorized Signature:

Position: Chief Executive Officer

Place: Laguna Tools Inc.

744 Refuge Way, Suite 200, Grand Prairie, Texas 75050, USA

# EN - English

## Operating Instructions (Laguna Original)

Dear Woodworker,

Thank you for your purchase and welcome to the Laguna Tools group of discerning woodworkers. We understand that you have a choice of where to purchase your machines and appreciate the confidence you have in the Laguna Tools brand.

Every machine manufactured by Laguna Tools has been carefully designed and well thought through from a woodworker's perspective. Through hands-on experience, Laguna Tools is constantly working hard to make innovative, precision products. Products that inspire you to create works of art, are a joy to run and work on, and encourage your performance.

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#### 1. Declaration of Conformity

We declare that this product is in compliance with the Directives and Standards on page 10 of this manual.

##### 1.1 Warranty

IGM Tools & Machinery strives to always deliver high-quality machinery. The warranty is governed by the valid terms and conditions of IGM Tools & Machinery available at [www.igmtools.com](http://www.igmtools.com).

#### 2. Safety

Read and understand all warnings and operation instructions before using any tool or equipment. Always follow basic safety precautions to reduce the risk of personal injury. Improper operation, maintenance or modification of tools or equipment could result in serious injury and property damage. There are certain applications for which tools and equipment are designed. This product should NOT be modified and/or used for any application other than for which it was designed. It is important for you to read and understand this manual. The information it contains relates to protecting your safety and preventing problems.

##### 2.1 Safety Guidelines - Definitions

This manual contains information that is important for you to know and understand.

This information relates to protecting your safety and preventing equipment problems. To help you recognize this information, we use the symbols below. Please read the manual and pay attention to these sections. These could be information and recommendations on dangerous situations that may occur. These situations could result in death or serious injury. The instructions also contain some recommendations from our technicians.

##### 2.2 Important Safety Instructions

Read and understand all warnings and operating instructions before using this equipment. Failure to follow all instructions listed below, may result in electric shock, fire, and/or serious personal injury or property damage. Woodworking can be dangerous if safe and proper operating procedures are not followed. As with all machinery, there are certain hazards involved with the operation of the product. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result. Safety equipment such as guards, push sticks, hold-downs, feather boards, goggles, dust masks and hearing protection can reduce your potential for injury. But even the best guard won't make up for poor judgment, carelessness or inattention. Always use common sense and exercise caution in the workshop. If a procedure feels dangerous, don't try it. Figure out an alternative procedure that feels safer. **REMEMBER:** Your personal safety is your responsibility. This machine was designed for certain applications only. We strongly recommend that this machine not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, do not use the machine until you have first contacted the manufacturer to determine if it can or should be performed on the product. If you have any questions relative to its application do not use the product until you have contacted the manufacturer and we have advised you.

##### 2.3 General Safety Rules

Failure to follow these rules may result in serious personal injury. For your own safety, read and understand the instruction manual before operating the unit. Learn the unit's application and limitations as well as the specific hazards peculiar to it.

1. Approach your work with a safe attitude! Focus. Concentrate on what you're doing, and don't get distracted. Distraction causes injury
- Follow the proper safety procedures.
- Don't rush. Take the time to do things correctly and using the right guard or personal protective equipment (PPE). Is saving a few minutes worth a lifelong injury?
- Work responsibly.

• Don't gamble. A one-in-a-thousand risk is not worth the possible cost.

2. Give the work your undivided attention.

3. Wear safety glasses with side shields when the shop is in operation, wherever you are working, not just when you are using a machine yourself. Glasses should be ANSI Z87.1 rated.

4. Protect your hearing. Hearing protection is required in the CNC Shop area. However, it is a good idea to use hearing protection anytime when working in the shop. Consider using other personal protective equipment (PPE), such as a mask or respirator when working in dusty conditions.

5. Do not wear open-toed shoes, sandals, or flip-flops when working in the shop.

6. Ask for help. Unless you are sure that you know what you are doing and can handle it yourself, ask the foreman or another member for help.

7. If it's broken, don't use it. Replace all broken parts.

8. Tidy up after you set up. Clear the work area of any wrenches, chuck keys or other adjustment tools before turning on a machine.

9. Don't force it. If you need to use excessive force with any woodworking machine, something is wrong. Stop and consult the shop foreman.

10. Unplug it. Always disconnect the power before changing a blade or performing any other maintenance operation.

11. Use the correct guard. Before using any power tool, be sure all guards are in place and working properly.

12. Clean up. When you are through with any machine or hand tool, clean the work area with brush, broom and dustpan or vacuum, and put away whatever you took out.

##### 2.4 Air Cleaner Safety Rules

Do not use this unit to dissipate fumes or smoke. Explosions or fire can result. This dust collector is intended for use where only dry airborne dust is present. Its use should be limited to non- explosive, non-metallic atmospheres.

Failure to follow these rules may result in serious personal injury.

Do not use this unit to filter metal dust.

Combining wood and metal dust can create an explosion or fire hazard.

This unit is intended to filter non explosive atmospheres only.

1. Do not operate this unit until it is completely assembled and installed according to the instructions. A unit incorrectly assembled can cause injury.

2. Obtain advice from your supervisor, instructor, or another qualified person if you are not thoroughly familiar with the operation of this unit. Knowledge is safety.

3. Follow all wiring codes and recommended electrical connections to prevent electrical shock or electrocution.

4. Do not pull the machine by the power cord. Don't let that the power cord came in contact with the sharp tools or edges, hot surfaces or grease. On the power supply do not place any heavy objects on the cable. Damage the power cord may be injured electric current.
5. Support this unit or securely clamp it to the work surface when it is used in a portable application to eliminate potential injury and/or damage from falling.
6. Ensure that the intake and exhaust areas are clear prior to starting the unit. Clogged intakes or exhausts can cause an explosion and/or fire.
7. Keep arms, hands, and fingers away from the fan. Avoid all exposure to rotating parts to prevent injury.
8. Do not operate this unit without the dust filters in place and properly secured. Sawdust and other debris can provide the potential for fire and/or explosion and can also cause inhalation problems.
9. Maintain the unit in top condition. Clogged filters can increase the potential for fire or explosion. Follow all instructions for changing and cleaning filters.
10. Store this unit in a location that eliminates the potential for damage to the power cord. A damaged power cord can cause shock or electrocution. Safely store power cord on the unit to eliminate tripping hazards.
11. Turn the unit "off" and disconnect the unit from the power source before installing or removing accessories, before adjusting or changing set-ups, or when making repairs. An accidental start-up can cause serious injury.
12. Turn the unit "off", disconnect the unit from the power source, and clean the table/work area before leaving the area.

## 2.5 Electricity connection

We recommend connecting the machine to electrical circuit with fuse 16A. Before connect the machine to the mains to make sure they are switches in the "OFF" position. Do not expose or use the machine to rain in humid places.

## Noise Emissions

Given that there exists a relationship between noise level and exposure times, it is not precise enough to determine the need for supplementary precautions. The factors affecting the true level of exposure to operators are clearly the amount of time exposed, the characteristics of working environment other sources of dust and noise etc. For example, adjacent machines in other words the level of ambient noise. It is possible that exposure level limits will vary from country to country.

## Hazardous Dust Information

Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to <http://www.szu.cz/>.

## Save these instructions.

Refer to them often and use them to instruct others.

## 3. Specifications

### 3.1 Technical Data

Power requirements	230V / 50Hz / 1 Ph
Amperage	2.5 A
Dimensions W x L x H (610mm x 712mm x 305mm)	
Weight:	25.4 kg
Shipping weight:	28.6 kg

Motor:	150 W
Air flow	917, 1244, 2038 m³/h
Noise	55.6, 56.1, 59.6 dB
Filter cycle	room 6x6x2,5 m - 10, 14, 22x/h
Outer filter	washable, electrostatic, 5 microns 310x610x25 mm
Inner filter	fabric, polyester, 1 micron 310x610x310 mm
Timer settings	1/2, 1, 2, 4 hours
Control	On Board Panel & Remote Control
2x batteries	

## 4. Setup

3 Speed Ambient Air Cleaner with Electrostatic Filter is specifically designed to quietly circulate and filter non-metallic dust which is generated throughout the work area. The Air Cleaner is furnished with two filters: an outer filter which filters particles that are five microns and larger, and an inner disposable 3 bag filter that captures 91% of the dust particles that are one micron and larger (one micron = one millionth of a meter).

Because breathing microscopic particles can be a potential health hazard, filtering microscopic dust particles offers a cleaner and safer environment. This Air Cleaner will filter the air in a room measuring 6 x 6 x 2,5 m either 10, 14, or 22 times an hour, depending on the setting. If desired, multiple units can be used to filter larger areas. An occasional cleaning and/or replacement of filters is the only required maintenance.

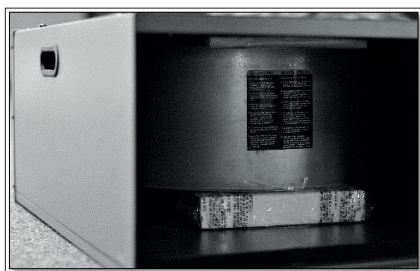
### 4.1 Content



Air Filtration Unit  
(4) Rubber Feet  
(4) Ceiling Mount O-Screws  
(4) Ceiling Mount nuts  
(2) Batteries for Remote, Remote

### 4.2 Unpacking

Do not lift the air cleaner by the power cord. The Air Cleaner is shipped complete in one shipping container. Carefully unpack the Air Cleaner and all loose items from the shipping container.



**Styrofoam blocks have been packed inside the unit for protection. Remove these blocks prior to use.**

### To Remove:

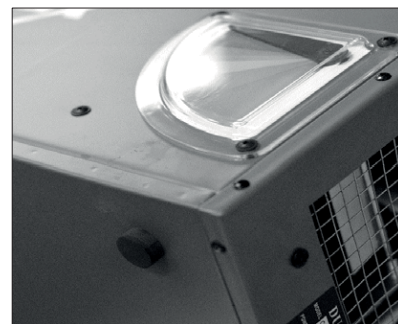
1. Disconnect unit from power source.
2. Remove outer filter by lifting on the bottom and pulling out.
3. Remove inner filter by lifting on the bottom and pulling out.
4. Remove Styrofoam blocks and replace filters.

### 4.3 Setup Options

For operator safety, clamp the unit to a work bench or position it securely on sawhorses. **IMPORTANT:** When determining where to mount the air cleaner, always select a location where the air flow is unrestricted. Do not locate the unit in a corner or near any heating or cooling vents.

Locate (4) rubber feet supplied with the unit. Carefully place the Air Cleaner on a firm supporting surface with access to the bottom of the cabinet. Apply a self-adhesive rubber foot to the bottom at each corner of the air cleaner cabinet. The rubber feet will help eliminate vibration and will prevent the possibility of the air cleaner "walking" across the floor or work surface.

The air cleaner cabinet has convenient lifting handles located on either side. To avoid damage to the air filters, carry the air cleaner with the filters positioned away from your body.



### Mounting air cleaner to the ceiling or overhead support

This unit weighs approximately 29 kg. When mounting overhead, be certain that the unit is securely fastened and supported. Never secure the air cleaner hardware to drywall, drop ceiling tile/frame, or other non-structural members.

Do not use rope, cable or power cord to suspend the unit from the ceiling. Use chain rated for a minimum of a 70 kg working load.

1. Locate the four eye bolts and the four flange nuts supplied with the unit.
  2. Use a flat blade screwdriver (not supplied) to remove the four screws from the top of air cleaner.
  3. Thread one flange nut on each bolt approximately 1 cm.
  4. Thread the eye-bolts into the four holes where the screws were removed in STEP 2. Be certain that the flange nuts are tightened against the surface of the air cleaner.
- When suspending the air cleaner from the ceiling or other overhead support, use steel s-hooks that are a minimum of 1 cm. Thread all lag hooks at least 4 cm into the supporting structural members.



## 5. Operation

The air cleaner may produce a slight odour for the first few hours of operation due to the protective coating which is applied to internal components. This odour will dissipate and should be disregarded. The 3 Speed Ambient Air Cleaner with Electrostatic Filter can be used in application where non-metallic dust is a factor.

### Onboard Control

To reduce the risk of fire or electric shock, do not use this unit with any solid-state speed control device.



**TIMER:** Displays the current timing setting

**SPEED:** Displays the current speed setting

**Manual – ON/OFF SPEED:** Toggles between on, low speed, medium speed, high speed, off.

**Manual – TIMER:** Toggles between 1/2h, 1h, 2h, 4h, off.

### Remote Control



**Timer:** Toggles between 1/2h, 1h, 2h, 4h, off.

**Speed:** Toggles between low speed, medium speed, high speed, off.

**ON/OFF:** Power

## 6. Maintenance

### 6.1. Changing and Cleaning Filters

When cleaned as directed, your electrostatic air filter will give you many years of trouble-free use. Failure to properly clean the filter may lessen filter effectiveness, and as with any air filter, it is possible for an excessive dirt buildup to cause air flow resistance enough to damage other ventilation components. Depending on your specific situation the filter should be cleaned every 4-6 weeks.

There is an "air flow" indicator located on the left side of the unit. To check the filters, turn the unit "ON". If the indicator points to "green", the filters are clean.



### 6.2 Cleaning Procedure

1. Turn the unit "OFF".
2. Remove the outer first stage filter by lifting and pulling out on the bottom of the filter.
3. Rinse thoroughly to remove remaining dirt.
4. Drain excess water, let air dry, and reinstall.
5. Replace the filter, turn the unit "ON", and check the air flow indicator again.
6. If the air flow indicator points to light area, the inner filter is still usable. If the indicator points to dark area, remove the outer filter, then remove the inner filter by lifting and pulling out on the bottom of the filter. DO NOT try to clean the inner filter. It is disposable and must be replaced.
7. After replacing the inner filter, reinstall the outer filter.

**NOTE:** The 3 bag filter is very durable. The material is multiple layers synthetic microfiber. The synthetic microfiber builds up in non-woven layers to ensure multi-layers buildup and eliminate fiber shedding.

**This inner 3 bag filter is not washable. Clean it up by compressed air periodically or by vacuum light brush (recommended once per month).**

Then you can repeat to use it till it is clogged up by the dusts and the air flow is reduced obviously.

## 7. Service

**To order spare parts, contact the store you purchased the goods from.**

### 7.1 Parts List

151-AFlux12-37

Black Pointer on Filter Indicator for AFlux12, pos. 37

151-Aflux12-3A

3A Relay for Aflux 12

151-Aflux12-CB

PCB Control Board for Aflux 12

151-Aflux12-Motor

Motor for Aflux 12

151-Aflux12-RC

Remote Control for Aflux 12

151-AFlux12-ScrewSet

Ceiling Mount O-Screws 4 pcs set for AFlux12

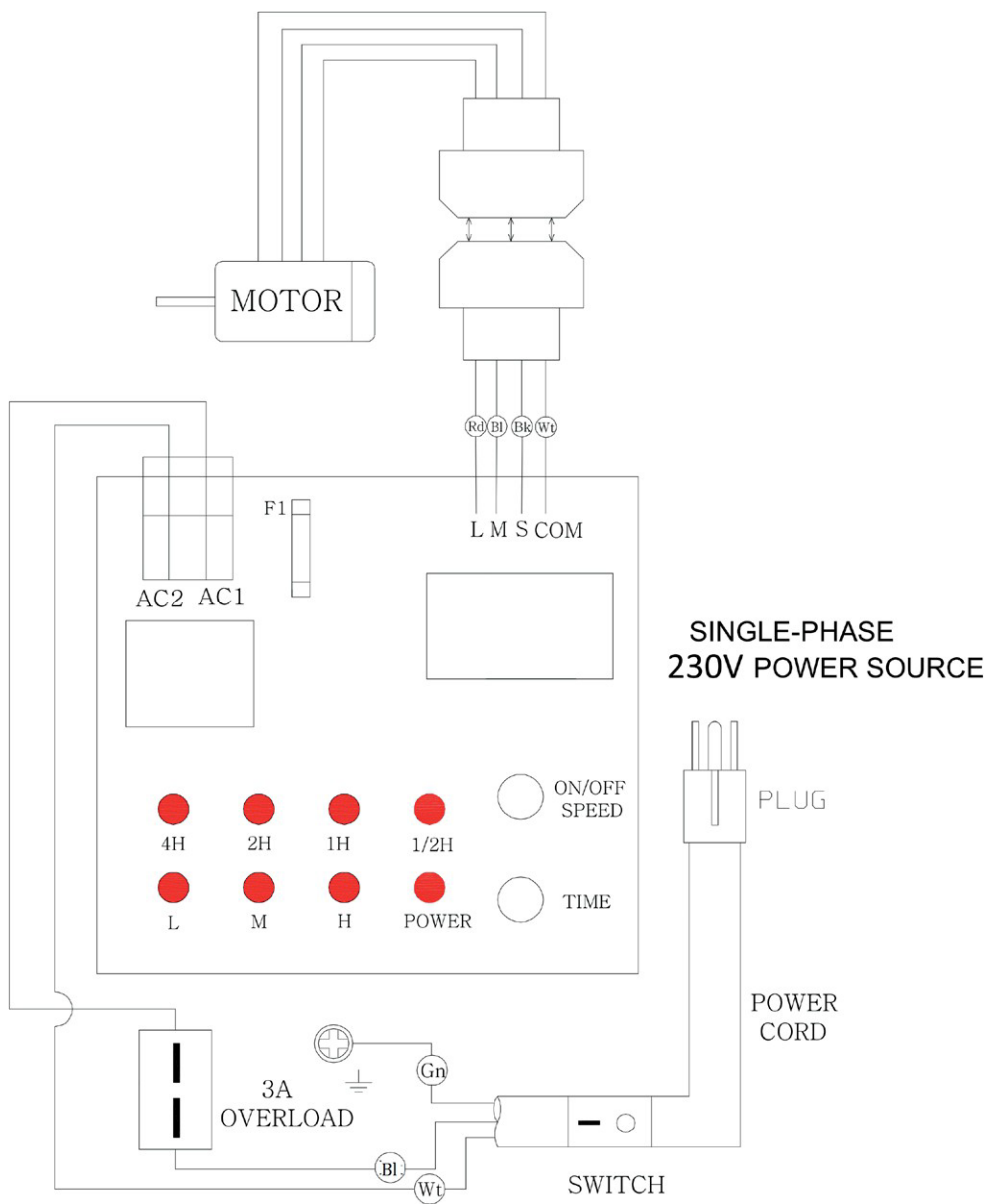
151-AFluxIF

IGM LAGUNA Replaceable Inner Filter for AFlux

151-AFluxOF

IGM LAGUNA Electrostatic Outer Filter for AFlux

## 7.2 POWER CONNECTIONS & WIRING DIAGRAMS



IGM nástroje a stroje s.r.o., Ke Kopanině 560,  
Tuchoměřice, 252 67, Czech Republic, EU  
**+420 220 950 910, [www.igmttools.com](http://www.igmttools.com)**