### **Questions?**

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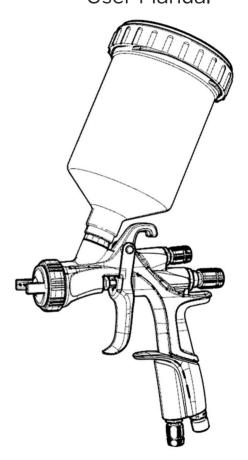
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### LVLP AIR SPRAY GUN User Manual



Please read and understand the instruction manual before use and retain it for reference.



### **CONTENTS**

<b>SYMBOLS</b>
SAFETY INSTRUCTIONS 4
FIRE AND EXPLOSION · · · · 4
TOXIC FLUID OR FUMES HAZARD· · · · · 4
PROTECTION OF HUMAN BODY 4
IMPROPER USE 4
INTRODUCTION
PRODUCT INFORMATION5
TECHNICAL DATA · · · · · 6
KNOW YOUR SPRAY GUN
NOZZLE SIZE RECOMMENDATION
NOZZLE SET REPLACEMENT 8
ASSEMBLY 8
<b>START UP</b>
<b>TEST SPRAY</b>
<b>SPRAY</b>
<b>CLEAN UP</b>
ACCESSORIES INSTRUCTIONS 13
AIR PRESSURE REGULATOR
OIL-WATER SEPARATOR
EXPLODED VIEW14
PARTS LIST 15
TROUBLE SHOOTING
INOKRAFT STANDARD WARRANTY21

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		SYMBOLS
<b>⚠ WARNINGS</b>	<b>⚠</b> CAUTION	<b>⚠ NOTE</b>
Hazards or unsafe practices which could result in severe personal injury, death or substantial property damage.	Hazards or unsafe practices which could result in minor personal injury, product or property damage.	Important installation, operation or mainte- nance information.

### **SAFETY INSTRUCTIONS**

### FIRE AND EXPLOSION



- Never use the following HALOGENATED HYDROCARBON SOLVENTTS:
   which can cause cracks or dissolution of gun body (aluminium) due to chemical reaction.
   UNSUITABLE SOLVENTS: methyl chloride, dichloronnethane, 1.2-dichloroethane, carbon
   tetrachloride, trichloroethylene, 1.1.1-trichloroethane
- Sparks and open flames are strictly prohibited. Paints can behighly flammable and can cause fire. Do not expose to open flames, electrical goods, cigarettes etc.
- Securely ground spray gun using conductive air hose. (Less than11MΩ) Always ensure that the spray gun is earthed correctly.

### **TOXIC FLUID OR FUMES HAZARD**



Toxic fluids or fumes can cause serious injury or death if splashedin the eyes or on skin, inhaled, or swallowed.

- Read Safety Data Sheets (SDSs) to know the specific hazards of the fluids you are using.
- Store hazardous fluid in approved containers, and dispose of it according to applicable quidelines.

### **PROTECTION OF HUMAN BODY**







- Use in a well-ventilated site, using a spray booth.
- Poor ventilation can cause organic solvent poisoning and fire.
- Always wear protective gear (safety glasses, mask, gloves) to avoid inflammation of eyes and skin.

In case of any physical discomfort, immediately seek medical advice.

- Wear earplugs if necessary.
- Noise level can exceed 85 dB(A), depending on operating conditions and painting site.
- Pulling the trigger many times during operation, may cause carpall tunnel syndrome. Always rest, in case of tiredness.

### **IMPROPER USE**



- Never point gun towards people or animals.
- Never exceed maximum working pressure or maximum operating temperature.
- Always release air and fluid pressure before cleaning, disassembling or servicing. Otherwise, remaining pressure can cause bodily injury due to improper operation or scattering of cleaning liquid.
- Tip of fluid needle set has a sharp point. Do not touch the tip during maintenance to avoid accidents.
- Never use this gun to spray foods or chemicals. Otherwise, foreign substance, could cause corrosion of fluid passages which could adverssely affect health.
- Never alter this spray gun, to avoid insufficient performance and damage.
- If something goes wrong, immediately stop operation and find the cause. Do not use again, until you have solved the problem.
- Do not enter working areas, where robots, reciprocators, etc. are used,until they have been turned off. Otherwise, they could cause injury.

### INTRODUCTION

InoKraft DRIZZLE D1 Low Volume Low Pressure gravity feed spray gun is designed for precise spraying. The spray gun body is marked with different scales and labels to facilitate quick operation. You could mark your best spraying experience with the test record cards included!

The D1 LVLP spray gun can atomize the topcoat perfectly, without any runs or drips, which saves paint and reduces environmental pollution. If you have any questions about the product or usage, please contact us at **support@inokraft.com**.

Applications: automotive painting and refinish painting, carpentry, decoration painting. Suitable for water-based paint spraying.

### **PRODUCT INFORMATION**

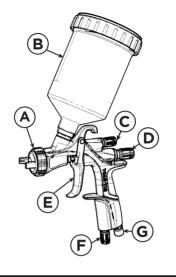
Part Number	Product Description	Includes
IK01201001	D1 LVLP spray gun premium kit	<ul> <li>D1 LVLP spray gun</li> <li>Paint cup</li> <li>1.3/1.5/1.7mm nozzle set</li> <li>Air pressure regulator</li> <li>Oil-water separator</li> <li>Paint cup adaptor</li> <li>Air hose connector</li> <li>Filter</li> <li>Tools and cleaning kit</li> <li>User manual</li> <li>Quick start-up guide</li> </ul>
IK01201002	D1 LVLP spray gun basic kit	<ul> <li>D1 LVLP spray gun with 1.3mm nozzle set</li> <li>Paint cup</li> <li>Paint cup adaptor</li> <li>Air hose connector</li> <li>Filter</li> <li>Tools and cleaning kit</li> <li>User manual</li> <li>Quick start-up guide</li> </ul>

Paint inlet thread size

KNOW	YOUR	<b>SPRAY</b>	GUN
------	------	--------------	-----

Feed type	Gravity		
Recommended air pressure	2.0-3.0bar	29-43psi	
Maximum pressure air	3.5bar	50psi	
Air consumption	9.7-10.2CFM	275-288l/min	
Recommended spraying distance	200mm	7.9"	
Maximum material temperature	50°C	122°F	
Compressed air connection/Air inlet	6mm	1/4"	
Cup capacity	600cc	20oz	
Nozzle size	1.3/1.5/1.7mm	0.05"/0.06"/0.07"	
Patten width			
Nozzle size 1.3mm	190-220mm	7.5"-8.7"	
Nozzle size 1.5mm	190-220mm	7.5"-8.7"	
Nozzle size 1.7mm	230-270mm	9.1''-10.6''	
Material Flow Rate			
Nozzle size 1.3mm	240-300ml/min		
Nozzle size 1.5mm	360-420ml/min		
Nozzle size 1.7mm	370-440ml/min		

M16X1.5



А	Air Cap Set
В	Paint Cup
С	Pattern Adjustment Knob
D	Fluid Adjustment Knob
Е	Gun Trigger
F	Air Adjustment Knob
G	Compressed Air Inlet Connector

### NOZZLE SIZE RECOMMENDATION

Please refer to Paint Manufacturer's recommendations.

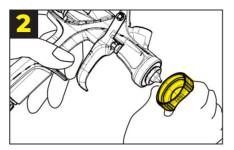
	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.5
Sealant							+			<b>→</b>
Primer			<b>←</b>				<b>→</b>			
Intermediate Coat		<b>←</b>			<b>→</b>					
Clear Coat	<b>←</b>		<b>→</b>							
Base Coat			<b>←</b>				<b>→</b>			
Latex Paint							<b>←</b>			<b>→</b>
Premium Paint		<b>—</b>			<b>→</b>					

### **NOZZLE SET REPLACEMENT**

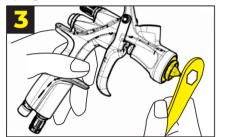
### 1. Disassembly of nozzle set



Turn the Fluid Adjustment Knob(D) counterclockwise to remove Fluid Needle and Needle Spring.



Remove the Air Cap Set(A).



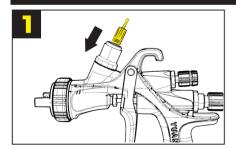
2. Reverse for assembly and remember to tighten the Fluid Nozzle to prevent fluid leak.

#### NOTE:

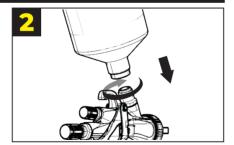
Replace the whole set of Air Cap, Nozzle, Fluid Needle at the same time.

Unscrew the Fluid Nozzle with Adjustment Wrench.

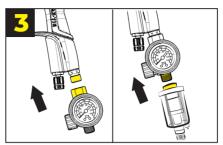
### **ASSEMBLY**



Install the Filter.

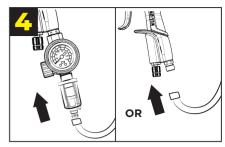


Screw the Paint Cup(B) clockwise. **NOTE:** If you are using other paint cups, please choose a compatible adapter. The paint cup inlet thread size is M16X1.5.(An adapter for 3M PPS Series 2.0 is included.)



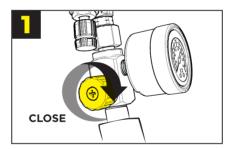
Optional

Connect the Air Pressure Regulator to the Inlet Connector(G) and then Oil-Water Separator.

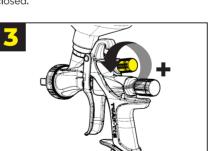


Use a 1/4" air hose to connect with the Oil-Water Separator or connect directly to the Inlet Connector(G).

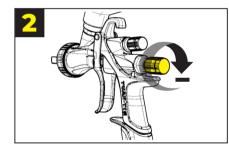
### **START UP**



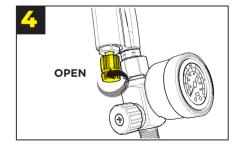
Turn the Air Pressure Regulator Knob clockwise to make sure the air inlet is closed.



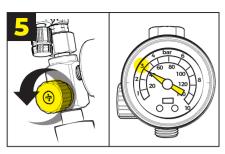
Turn the Pattern Adjustment Knob(C) counterclockwise to fully open the fan.



Turn the Fluid Adjustment Knob(D) clockwise to the minimum to prevent the needle from moving.



Turn the Air Adjustment Knob(F) counter-clockwise to fully open it.

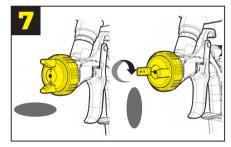


Hold the Gun Trigger(E). Then turn the Air Pressure Regulator Knob counterclockwise to raise the air pressure up to 3.0 bar.

# 6

Turn the Fluid Adjustment Knob(D) to gauge #2.

### WARNING: MAX 3.5bar, 50psi.



Change the spray pattern at vertical or horizontal by rotating the Air Cap at 90°.

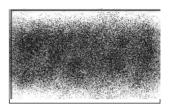


Mix coating material by Manufacturers' instructions and pour into the Paint Cup,

### **TEST SPRAY**

### 1. Test the static and dynamic spraying effect on the test paper.





### 2. Adjust knobs to get the right coating result and pattern.

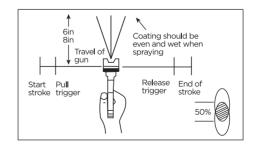
- a. If the finish is too dry, turn the Air Adjustment Knob(F) clockwise to reduce the inlet air pressure.
- b. If the finish is too wet, turn the Fluid Adjustment Knob(D) clockwise to reduce the fluid flow.
- C. If the atomized particles are too coarse, turn the Air Adjustment Knob(F) counterclockwise to increase the inlet air pressure.
- d. If the atomized particles are too fine, turn the Air Adjustment Knob(F) clockwise to reduce the inlet air pressure.
- e. If the spray pattern is too large, turn the Pattern Adjustment Knob(C) clockwise to reduce the size.

#### NOTE:

Refer to the Trouble Shooting for more information.

### 3. Record relevant data on the test card for next use (optional).

### **SPRAY**



- Maintain a distance of 6-8 inch between the spray gun and the object surface. Keep the spray gun perpendicular to the surface during movement. Bending or tilting the spray gun will cause uneven spraying.
- Slightly press the trigger to start stroke, then press hard, to get a smooth gun activation and save paint. (Practice makes perfect!)

- 3. To stop spraying, slightly release the trigger to end stroke, then release the trigger completely.
- 4. The speed of moving the spray gun is recommended to be about 12-15 inch per second.
- 5. When spraying large areas, it is recommended to use a reciprocating method. The overlap area of the spray width is about 50%.
- 6. After using the spray gun, be sure to turn off the air source. Then hold the trigger to release the air pressure.

### **CLEAN UP**



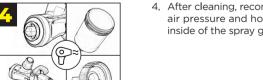


2. Pour in neutral cleaning solution (pH 6 to 8), shake lightly and spray it out. Repeat multiple times until the mist coming out is clean.

NOTE: Do not immerse the spray gun completely in any solvent or cleaning solution, as this will damage the spray gun lubricant and shorten its lifespan.



- Disconnect the air hose, disassemble the Paint Cup(B), Air Cap Set(A) and Fluid Adjustment Knob(D). Use cleaning kit and accessories to completely clean the gun.
- a. Clean the air cap, nozzle and fluid needle by brushing the outer surface.
- b. Clean the air cap hole with a toothpick. (if necessary) NOTE: If using metal wire or hard tools, be careful not to scratch the air cap hole to become fuzzy, resulting in deformation of the spray pattern.
- Clean the Paint Cup and Gun Body by wiping the surface with a damp cloth.



 After cleaning, reconnect to the air hose, turn up inlet air pressure and hold the Gun Trigger(E) to dry the inside of the spray gun.

### **ACCESSORIES INSTRUCTIONS**

### Air Pressure Regulator Set Up

Connect the air outlet end (upper side) to the gun and tighten the joint with a wrench.

### **Adjustment**

Turn the Air Pressure Regulator Knob clockwise to reduce the air inlet or counterclockwise to raise the air pressure.

#### CAUTION:

The air source should not exceed the pressure gauge range to prevent damage to the pressure gauge, which may cause the pointer to deviate and not return to zero.

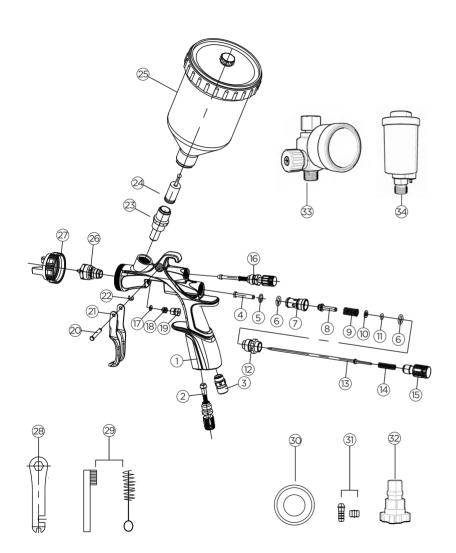
## Oil-Water Separator Set Up

Connect the air outlet end (upper side) to the Air Pressure Regulator.

#### **WARNING:**

This product can expose you to chemicals including Di (2-ethylhexyl) phthalate, lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to

### www.P65Warnings.ca.gov



### **PARTS LIST**

No.	Description	Qty.	No.	Description	Qty.
1	Gun Body	1	24	Filter	2
2	Air Adjustment Set	1	25	Paint Cup	1
3	Air Nipple	1	26	* Fluid Nozzle	1
4	Air Valve Shaft	1	27	* Air Cap Set	1
5	O Ring(8.5*1.2)	1	28	Adjustment Wrench	1
6	O Ring(8.7*1.85)	2	29	Cleaning Brush	1
7	Air Valve Seat	1	30	Teflon Tape	1
8	Air Valve	1	31	Air Hose Connector	1
9	Air Valve Spring	1	32	Paint Cup Adapter	1
10	Flat Washer	1	33	* Air Pressure Regulator	1
11	O Ring(4*1.8)	1	34	* Oil-water Separator	1
12	Fluid Adjustment Guide	1			
13	* Fluid Needle	1			
14	Fluid Needle Spring	1			
15	Fluid Adjustment Knob	1			
16	Pattern Adjustment Set	1			
17	Foam Gasket	1			
18	Y Sealing Washer	1			
19	Needle Packing Seat	1			
20	Trigger Stud	1			
21	Trigger	1			
22	E Stopper	1			
23	Fluid Nipple	1			

### CAUTION:

DO NOT REMOVE AIR ADJUSTMENT SET(2), AIR NIPPLE(3), FLUID ADJUSTMENT GUIDE(12), PATTERN ADJUSTMENT SET(16) AND FLUID NIPPLE(23) FROM GUN BODY IF NOT NECESSARY! Any malfunctions resulted by the removal of the above parts will not be covered by the warranty.

### NOTE:

 $\bigstar$  Marked accessories and maintenance parts are available on  ${\bf amazon.com}$  and other authorized distributors.

If any parts are missing or damaged upon opening the package, please contact us at **support@inokraft.com.** 

### **TROUBLE SHOOTING**

What's the current situation? Please find yours in the below possible problems.

	Α.	Gun does not spray.
В.		Material leaks from Paint Cup and gun conjunction.
Mechanical Performance	C.	Material leak from nozzle.
renomiance	D.	Paint build-up on gun head.
	E.	Air leak.
	F.	Fluttering/spitting spray fan
	G.	Heavy top or bottom pattern.
Cana.	H.	Heavy right or left side pattern.
Spray Performance	I.	Heavy center pattern.
remainee	J.	Split spray pattern.
	K.	Runs and sags.
	L.	Orange peel or dryness.

### NOTES:

How to determine if the obstruction is on the Air Cap or Nozzle?

- 1. Make a test spray pattern.
- 2. Rotate the air cap one-half turn and spray another pattern.
- 3. If the defect is inverted, the obstruction is on the air cap. Then clean the air cap thoroughly with water or solvent.
- 4. If the defect is not inverted, the obstruction is on the nozzle. Then clean the nozzle or replace with a new one if problem persists.

# **Mechanical Performance PROBLEM A**

Gun does not spray.

Potential Causes	Solution
1. No air pressure on gun.	Check air supply and airline.
2. Fluid flow is not open enough.	Open Fluid Adjustment Knob(15).
3. Tip hole of Fluid Nozzle(26) is obstructed.	Check and clean.
4. Paint Filter(24) is obstructed.	Clean or replace.
5. The material is too thick.	Thin to manufacturer's recommendations.
6. Out of paint.	Refill the Paint Cup.

### **PROBLEM B**

Material leaks from Paint Cup and gun conjunction.

Potential Causes	Solution
1. Paint Cup cap is not secure.	Tighten the cap.
2. Paint Cup is not tight on gun body.	Tighten the Paint Cup.
3. Leaking from cap vent hole.	Hold gun upright do not tilt.

### **TROUBLE SHOOTING**

### **PROBLEM C**

Material leak from nozzle.



Potential Causes	Solution
1. Fluid Needle(13) and Nozzle(26) do not match	Check the size marks on the Fluid Needle and Nozzle.
2. Fluid Nozzle(26) or Air Cap Set (27) is loose.	Tighten. (A torque of 18-20N.m is recommended. )
3. Excessive Needle Spring(14) wear.	Replace.
4. Excessive Fluid Nozzle(26) wear.	Replace.
5. Excessive Fluid Needle(13) wear.	Replace.
6. Excessive air pressure.	Reduce pressure by Air Adjustment Knob(2) or Air Pressure Regulator Knob(33).
7. Dirt, damage, wear on Needle Packing Seat(19).	Clean or replace.
8. Fluid Nozzle(26) is damaged.	Replace the damaged part.

### **PROBLEM D**

Paint build-up on gun head.

Potential Causes	Solution
1. Dirt or build-up inside the Air Cap Set(27).	Clean.
2. Air cap(27) holes are damaged.	Replace.

### **PROBLEM E**

Air leak.

Potential Causes	Solution
1. Seal inside the Air Adjustment Set(2) damaged or missing.	Replace.
2. Dirt or damage on the seat inside the Air Adjustment Set(2).	Clean or replace.

### **TROUBLE SHOOTING**

## Spray Performance PROBLEM F

Fluttering/spitting spray fan.





Potential Causes	Solution
1. Fluid Nozzle(26) is loose.	Tighten with Adjustment Wrench(28).
2. Fluid Nozzle(26) or Filter(24) is obstructed.	Clean.
3. Material level is too low.	Add material.

### PROBLEM G

Heavy top or bottom pattern.



Potential Causes	Solution
1. Air Cap(27) holes are obstructed.	Clear holes.
2. Build-up on top or bottom of Fluid Nozzle(26).	Clean
3. Fluid Nozzle(26) or Air Cap Set(27) is dirty or damaged.	Clean or replace the set.

### **PROBLEM H**

Heavy right or left side pattern.



Potential Causes	Solution
1. Left or right side holes of Air Cap(27) are plugged.	Clear holes.
2. Dirt or damage on left or right side of Fluid Nozzle(26).	Clean or replace.

### **PROBLEM I**

Heavy center pattern.



Potential Causes	Solution
1. Spray pattern is too narrow.	Turn counterclockwise Pattern Adjustment Knob(16).
2. Too much fluid flow.	Turn clockwise the Fluid Adjustment Knob(15) or change a smaller Nozzle size set.
3. The material is too thick.	Thin material.
4. Air pressure is too low.	Turn counterclockwise Air Adjustment Knob(2) to increase the inlet air pressure.

### **TROUBLE SHOOTING**

### **PROBLEM J**Split spray pattern.



Potential Causes	Solution
1. Fluid flow is too low	Turn counterclockwise Fluid Adjustment Knob(15) or change a larger Nozzle size set.
2. Spray pattern is too wide.	Turn clockwise Pattern Adjustment Knob(16).
3. Air pressure is too high.	Turn clockwise Air Adjustment Knob(2) to reduce air pressure.

### **PROBLEM K**Runs and sags.



Potential Causes	Solution
1. Too much fluid flow.	Turn clockwise Fluid Adjustment Knob(15) or change a smaller nozzle size set.
2. The material is too thin.	Remix material or turn clockwise Fluid Adjustment Knob(15) to reduce fluid flow.
3. Too close to surface.	Recommended distance 6-8 inches.

### **PROBLEM L**

Orange peel or dryness,



Potential Causes	Solution
1. Too far from surface.	Recommended distance 6-8 inches.
2. Air pressure is too high.	Turn clockwise Air Adjustment Knob(2) to reduce air pressure.
3. Fluid flow is too low.	Turn counterclockwise Fluid Adjustment Knob(15) or change a larger nozzle size set.

### **INOKRAFT STANDARD LIMITED WARRANTY**

InoKraft warrants all equipment referenced in this document which is manufactured by InoKraft and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by InoKraft, InoKraft will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by InoKraft to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with InoKraft's written recommendations.

This warranty does not cover, and InoKraft shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-InoKraft component parts. Nor shall InoKraft be liable for malfunction, damage or wear caused by the incompatibility of equipment with structures, accessories, equipment or materials not supplied by InoKraft, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by InoKraft.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized InoKraft distributor for verification of the claimed defect. If the claimed defect is verified, InoKraft will repair or replace with free of charge for any defective parts. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

# THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

InoKraft's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

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BY InoKraft. These items sold, but not manufactured by InoKraft (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. InoKraft will provide purchasers with reasonable assistance in making any claim for breach of these warranties. In no event will InoKraft be liable for indirect, incidental, special or consequential damages resulting from InoKraft supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of InoKraft, or otherwise.