



## **RANGE HOODS**

INSERT MOUNT  
INSTRUCTION MANUAL

**Range Hood is for domestic use only**

### **Model No.:**

PRO-INS24N1  
PRO-INS30N1  
PRO-INS36N1

**CROWN RANGE HOODS  
ALL FORWARD GROUP CORP.**

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Dear Customers,

If you follow the recommendations contained in this instruction Manual, our appliance will give you constant high performance and will remain efficient for many years to come.

All Forward Group Corporation declines all responsibility in the event of failure to observe the instructions given here for installation, maintenance and suitable use of the product.

All Forward Group Corporation further declines all responsibility for injury due to negligence and the warranty of the unit automatically expires due to improper maintenance.

### Product Specification & Technical Parameters

Model	PRO-INS24N1	PRO-INS30N1	PRO-INS36N1
Rated Voltage	110~120V	110~120V	110~120V
Frequency	60Hz	60Hz	60Hz
Light Power	2x2W LED	2x2W LED	2x2W LED
Motor Power	200W	200W	200W
Motor	1	1	1
Speed Control	3	3	3
Baffle Filter	1	2	2
Max Air Volume	800CFM	800CFM	800CFM
Sound Level	1.5-4.5 Sones	1.5-4.5 Sones	1.5-4.5 Sones
Outlet Diameter	6"(round)	6"(round)	6"(round)
Dimension(mm)	22 1/4"W x 12"D x 13"H	28 1/2"W x 14 3/4"D x 13"H	34 3/4"W x 12"D x 13"H

## **RECOMMENDATIONS AND SUGGESTIONS**

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### **CAUTION**



TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR INJURE TO PERSONS, PLEASE OBSERVE THE FOLLOWINGS:

1. Installation work and electric wiring (including switch location) must be done by the qualified person(s) in accordance with local applicable codes and standards, including fire-rated construction.
2. Do not vent exhaust air into spaces within walls or ceilings or into attics, crawl spaces, or garages.
3. This appliance is design to be operated by adults. Children were not allowed to temper with the controls or play with this appliance.
4. To reduce the risk of fire or electric shock, do not use this fan with any solid-state speed control device.
5. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
6. Before servicing or cleaning the hood, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.
7. Use this unit only in the manner intended by the manufacturer. If you have any questions contact the manufacturer.

TO REDUCE THE RISK OF A RANGE TOP GREASE FIRE:

1. Never leave surface units unattended at high settings. Boilovers cause smoking and greasy spillovers that may ignite. Heat oils slowly on low or medium settings.
2. Always turn hood ON when cooking at high heat or when flambeing food (i.e. Crepes Suzette, Cherries Jubilee, Peppercorn Beef Flambe).
3. Clean hood frequently. Grease should not be allowed to accumulate on fan or filter.
4. Use proper pan size. Always use cookware appropriate for the size of the surface element.

## **CHARACTERISTICS**

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INSERT Range Hood is designed for designer's kitchen with the range hood hidden inside the cabinet, special molding design and metal or copper hood. No more visual machine hanging under the cabinet. Provide you a continue face of cabinets in your kitchen but at the same time have the range hood hidden and provide you with the benefit of extracting the oil and smoke from your cooking.

Installation is simple. Please refer to the instruction below.

## **INSTALLATION & USE**

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**NOTE:** remove protective film (if any) from the exterior surfaces of the hood carefully prior to final installation.

## **DESCRIPTION / CONNECTION**

This appliance should be mounted to the bottom of a standard wall cabinet. Duct work can be installed vertically or horizontally.

1. Duct runs should be as short as possible.
2. Avoid the use of elbows.
3. Use duct tape at all joints.
4. Do not use duct smaller than the discharge on the hood.

## **LOCATION PREPARATION**

The installation in this manual is intended for qualified installers, service technicians or persons with similar qualified background.

**DO NOT** attempt to install this appliance yourself. Injury could result from installing the unit due to lack of appropriate electrical and technical background.

All electrical wiring must be properly installed, insulated and grounded. Overly accumulated grease in old duct work should be cleaned out or duct work should be replaced if necessary to avoid the possibility of a grease fire. Check all joints on duct work to insure proper connection and all joints should be properly taped.

Note 1: On stainless steel hoods, carefully remove the plastic protective film from all exterior surfaces of the hood and chimney prior to final installation.

Note 2: At least two people will be required to mount the hood.

## **MOUNT HEIGHTS & CLEARANCE**

Minimum mount height between range top to hood bottom should be no less than 25"

Maximum mount height should be no higher than 30"

It is important to install the hood at the proper mounting height. Hoods mounted too low could result in heat damage and fire hazard; while hoods mounted too high will be hard to reach and will lose its performance and efficiency.

If available, also refer range manufacturer's height clearance requirements and recommended hood mounting height above range.

## **Mounting the INSERT**

NOTE: The hood has to be installed, inside the cabinet, at minimum 1" from the rear wall cabinet and at 3" from the wall cabinet. The internal height of cabinet has to be minimum 16". The hood should be mounted centered over the cook top burners.

1. Cut a hole "D" by "L" in the bottom of the cabinet, using the dimensions shown (see fig. 1)
2. If cabinet frame work does not exist, you will need to install framing to secure the unit.
3. Install duct work & electrical (see fig 3)
4. Install the insert unit into the hole and secure in place using four screws (not included) (see fig 2)

## **Cutout Dimensions**

Model	INS24N1	INS30N1	INS36N1
Dimension D(mm)	11"	13" / 3/4"	11"
Dimension L(mm)	30 1/4"	26 1/2"	32 3/4"

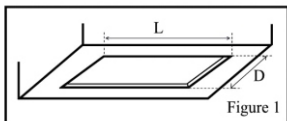


Figure 1

### Ducting (not provided)

NEVER exhaust air or terminate duct work into spaces between walls, crawl spaces, ceiling, attics or garages.

All exhaust must be ducted to the outside.

Use Metal duct work only.

Fasten all connections with sheet metal screws and tape all joints with certified Silver Tape or Duct Tape.

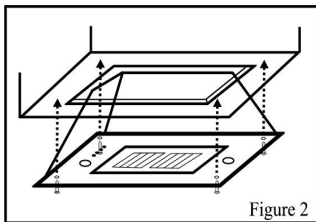


Figure 2

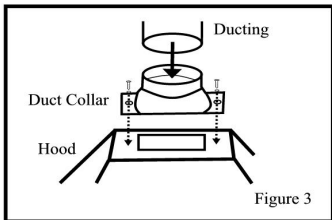


Figure 3

### Duct Run Calculation:

Maximum run 6" or 3-1/4" x 10" duct	100FT
Deduct:	
Each 90 Elbow used	15FT
Each 45 Elbow used	15FT
Each 6" to 3-1/4" x 10" transition used	1FT
Each 3-1/4" x 10" to 6" transition used	5FT
Side Wall Cap w/ damper	30FT
Roof Cap	30FT

e.g. – 1 roof cap, 2x90 elbows, 1x45 elbow = 30" + 30" + 9"=69" used, 31" available for straight duct runs

### **DUCT SIZE**

A minimum of 6" round duct must be used to maintain maximum airflow efficiency.

Flexible ducts are provided for convenience, always use rigid type metal ducts if available to maximizing airflow.

Also use calculation (on left) to compute total available duct run when using elbows, transitions and caps.

ALWAYS, when possible, reduce the number or transitions and turns. If a long duct required, increase duct size from 6" to 7 or 8".

If a reducer is used, install a long reducer instead of pancake reducer. Reduce duct size as far away from opening as possible.

If turns or transitions are required: Install as far away from opening and as far apart, between 2, as possible.

## OPERATIONS

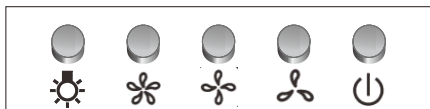
Read all instructions in this manual before operating the appliance. Save these instructions for future reference.

Always leave safety grills and filters in place. Without these components, operating blowers could catch on to hair, fingers and loose clothing.

NEVER dispose cigarette ashes, ignitable substances, or any foreign objects into blowers.

NEVER leave cooking unattended. When frying, oil in the pan can easily overheat and catch fire. The risk of self combustion is higher when the oil has been used several times.

This Crown hood is equipped with five buttons control:-



Light    High    Middle    Low    Power  
Speed    Speed    Speed

## MAINTENANCE & CLEANING

### Surface Maintenance:

Clean periodically with hot soapy water and clean cotton cloth. Do not use corrosive or abrasive detergent (e.g. comet powder scrub, EZ-Off oven cleaner), or steel wool/scoring pads which will scratch and damage surface.

For heavier soil use liquid degreaser such as 'Formula 409' or 'Fantastic' brand cleaner.

After cleaning, you may use non abrasive stainless steel polish/cleaners such as 3M or ZEP, to polish and buff out the stainless luster and grain.

Always scrub lightly, with clean cotton cloth, and with the grain

### Stainless Steel Filters:

The Metal Filters fitted by the factory are intended to filter out residue and grease from cooking. It need not be replaced on a regular basis but are required to be kept clean.

Filters should be cleaned after every 30 hours of use. There is a timer display on the panel indicating the hours of operation, and will alert you when the hood operates for 32 hours

Remove and clean by hand in a basin of hot soapy water. The filter is also dishwasher safe.

If heavily soiled, spray 'Formula 409' or equivalent degreasing detergent and leave to soak.

Dry filters and re-install before using hood.

Counter can be reset by continuous pressing the '+' button after turning off the range hood.

## **Hood Cleaning**

The saturation of greasy residue in the blower and filters may cause increased inflammability. Keep unit clean and free of grease and residue build-up at all times to prevent possible fires.

Filters must be cleaned periodically and free from accumulation of cooking residue (see cleaning instructions inside). Old and worn filters must be replaced immediately. Do not operate blowers when filters are removed. Never disassemble parts to clean without proper instructions. Disassembly is recommended to be performed by qualified personnel only. Call our service center for removal instructions.

Stainless steel is one of the easiest materials to keep clean. Occasional care will help preserve its fine appearance.

Cleaning tips:

- \* Hot water with soap or detergent is all that is usually needed.
- \* Rinse with clear water. Wipe dry with a clean, soft cloth to avoid water marks.
- \* For discolorations or deposits that persist, use a non-scratching household cleanser or stainless steel polishing powder with a little amount of water and a soft cloth.
- \* For stubborn stain, use a plastic scouring pad or soft bristle brush together with cleanser and water. Rub lightly in direction of polishing lines or "grain" of the stainless finish. Avoid using too much pressure that may mar the surface.
- \* Do not allow deposits to remain for long periods of time.
- \* Do not use ordinary steel wool or steel brushes. Small bits of steel may adhere to the surface causing rust.
- \* Do not allow salt solutions, disinfectants, bleaches, or cleaning compounds to remain in contact with stainless steel for extended periods. Many of these compounds contain chemicals that may be harmful. Rinse with water after exposure and wipe dry with a clean cloth.
- \* Painted surfaces should be cleaned with warm water and mild detergent only.



### **Preparing the range hood:**

1. Open the electrical knockout which is best for your wiring.
2. Fix the shutter to the range hood's vent; prevent the leakage of oil by taping the connection with aluminum metal adhesive tape, or duct tape.
3. Attach the rubber support to the back of the range hood.
4. Unscrew and remove the range hood's bottom cover.

## **Installation instructions**

### **Electrical power provision:**

1. The range hood comes with two locations for the wiring to pass through. Choose the location that is best suited for your wiring situation.
2. Confirm that the wiring does not affect the level nor the stability of the range hood.

### **Installation:**

1. Pass the wiring through the electrical knockout hole in the range hood.
2. Put the range hood onto the bottom of the cabinet. Make sure the rear side is close to the wall, and the hood is equally spaced on each side and that the top of the range hood is attached to the cabinet. On each side of the range hood, use 2pcs screws to fix the body to the cabinet.
3. Connect the green wire from power source to the green ground wire on the range hood. Make the electrical connection by fastening the white wire line to white and the black wire to black.

4. Reinstall the range hood's bottom cover and stainless steel baffle filters.
5. Reinstall the oil container.
6. Turn on the power and check the operation of the fans and light.

## Dismantling, Cleaning and Re-assembly

### NOTE

1. Whenever dismantling, re-installing or maintaining the range hood, always make sure that the power is off.
2. When dismantling, re-installing or cleaning the hood, always wear latex or rubber gloves for safety.
3. Never spill or spray water or any other liquid on or inside the motors.
4. If any or power cord is damaged, please contact the after sales service, distributors or qualified technicians for repair. DO NOT attempt to repair the range hood by yourself.
5. Before dismantling, cleaning and re-installing the hood, please make sure that you know the name, quantity and location of any dismantled parts, so as to avoid loss and mis-installation.

### Dismantling

1. First, take off the oil container and the stainless baffle filters
2. Unscrew then remove the bottom cover of the hood.
3. Turn counter-clockwise to loosen the three screws in the front right and left sides of the black base plate (oil pan), in order to remove the base plate (oil pan).
4. Remove the rubber seal.
5. Turn clockwise to remove the vane cap.
6. Pull off the vane cap.

## Cleaning

Put all the dismantled parts in water with neutral detergent to 30 minutes, and then wash with a nylon brush. Make sure that all parts are dry before reinstallation.

Note:

Dismantled parts are: oil container, base plate, vane and van cap, and stainless steel baffle filters.

## Re-Assembly

1. Re-assemble the vane (fan), and turn vane cap counter clockwise to fasten, The vane must be locked onto the motor's pin.
2. Put on the rubber seal and screw the base plate to the body.
3. Reinstall the bottom panel, grease container, and stainless baffle filters.

## Replacement of light

Caution:

1. Make sure all control switches are off and the range hood unplugged.
2. Use a flat head screwdriver to pop out LED light assembly.
3. Disconnect the lamp internal wires.
4. Take out the old LED light.
5. Replace with a new LED light assembly.
6. Reconnect the internal wires, then push the light assembly back into the lamp hole.
7. Re-plug the range hood and turn on the light switch to check all connections.

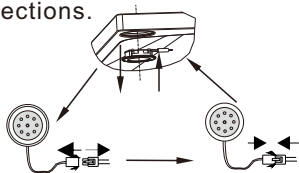


Fig 5

## Trouble shooting

**CAUTION:** Disconnect the power supply before servicing.

Status	Cause and Method of Repairing	Tools required
No power	Check circuit breakers If the power supply is damaged, please call for a qualified person	Philips Screwdriver
The motor does not run	a).The motor is broken, replace motor. b). The switch control is broken, replace switch. c). The capacitor is broken, replace capacitor.	Philips Screwdriver
Body vibration	a).The installation is not correct, check it and make sure the hood is level. b). The fan is broken, replace motor assembly. c). The fan motor was not properly installed, check and make sure it is firmly installed.	Philips Screwdriver
Noise vibration	Something dropped into the blower, check and clean blower.	Philips Screwdriver
Weak suction	a). The distance from the range hood to cooking surface is too far, make sure the distance between bottom of the hood to cooking surface is minimum 24" to maximum 27". b). Windows, doors and drafts can effect the performance of the range hood. c). There are other air conditions effecting the vent pipe, make sure lower vent pipe's exit is in a downward direction. d). The running rate of the motor slows down, replace the motor or capacitor. If the range hood is near the window, the best solution is to protect the back of the range hood from draft caused by a window or door.	Philips Screwdriver
Light does not work	Replace LED lamp.	Philips Screwdriver

**READ AND SAVE THESE INSTRUCTIONS**