

UNDER CABINET RANGE HOODS USER INSTRUCTIONS



IMPORTANT SAFETY INSTRUCTIONS Carefully read the following important information regarding installation safety and maintenance. Keep these instructions for future reference.

Important Safety Notice

Read all Instructions before Installing and operating this appliance

- The installation in this manual is intended for qualified installers, service technicians or persons with similar qualified background experiences. Installation and electrical wiring must be done by qualified professionals in accordance with all applicable codes along with the standards including fire-rated construction.
- <u>DO NOT</u> attempt to install this appliance yourself. Injury could result from installing the unit due to lack of appropriate electrical and technical background.
- The range hood may have very sharp edges. Please wear protective gloves if necessary to remove any parts for installing, cleaning or servicing.
- Activating the switch ON mode before completing installation may cause ignition or an explosion.

• Due to the size and weight of this range hood, it's recommended to have two people set up the hood during installation.

To reduce the risk of fire, electric shock, or injury to persons:

- For general ventilating use only. <u>DO NOT</u> use to exhaust hazardous or explosive materials and vapors.
- The combustion air flow needed for safe operation of fuel-burning equipment may be affected by this unit's operation. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
- Before servicing or cleaning unit, switch power OFF at service panel and lock service panel to prevent power from being switched ON accidentally.
- Clean grease laden surfaces frequently. To reduce the risk of fire and to disperse air properly, make sure to vent the air outside. <u>DO NOT</u> vent exhaust into spaces between walls, crawl spaces, ceiling, attics or garages.
- Ducted fans MUST always be vented to the outdoors.
- Use only metal ductwork and this unit MUST be grounded.
- Sufficient air is needed for proper combustion and exhausting of gases through the duct to prevent back drafting.
- When cutting and drilling into wall or ceiling, be careful not to damage electrical wiring or other hidden utilities.
- All electrical wiring must be properly installed, insulated, and grounded.
- Old duct work should be cleaned or replaced if necessary to avoid the possibility of a grease fire.
- Check all joints on the duct work to ensure everything is properly connected and taped.
- Use this unit only in the manner intended by the manufacturer. If you have questions, contact the vendor.

To reduce the risk of a stove top grease fire:

- Keep all fan, baffle, spaces, filter, grease tunnel, oil container and grease-laden surfaces clean. Grease should not be allowed to accumulate on fan, baffle, spaces, filter, grease tunnel, and oil container.
- Always turn range hood ON when cooking at high heat or when cooking flaming foods.
- Use high settings on cooking range only when necessary.
- Never leave surface units unattended at high settings. Boil overs cause smoking and greasy spillovers that may ignite. Heat oils slowly on low or medium settings.

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- Clean ventilating fan frequently.
- Always use appropriate cookware and utensils size.
- Always use cookware appropriate for the size of the surface element.

To reduce the risk of injury to persons in the event of a stove top grease fire:

- SMOTHER FLAMES with a close-fitting lid, cookie sheet, or metal tray, then turn OFF the burner.
 BE CAREFUL TO PREVENT BURNS. NEVER PICK UP A FLAMING PAN—you may get burned. KEEP FLAMMABLE OR COMBUSTIBLE MATERIAL AWAY FROM FLAMES. If the flames DO NOT go out immediately, EVACUATE AND CALL THE FIRE DEPARTMENT or 911.
- DO NOT USE WATER, including wet dishcloths or towels a violent steam explosion will result.
- Use an extinguisher ONLY if:
 - You know you have a Class A, B, C extinguisher, and you already know how to operate it.
 - The fire is small and contained in the area where it is started.
 - The fire department is being called.
 - You can fight the fire with your back to an exit.

To reduce the risk of injury to persons in the event of a gas leaks:

- Extinguish any open flame.
- DO NOT turn on the lights or any type of appliance.
- Open all doors and windows to disperse the gas. If you still smell gas, call the gas company and fire department, or 911 immediately.

Your safety and the safety of others is very important. We have provided many important safety messages in this manual and on your appliance. Always read and obey all safety messages. All safety messages will tell you what the potential hazard is, how to reduce the chance of injury, and what can happen if the instructions are not followed correctly.



This is the safety alert symbol. This symbol alerts you to potential hazards that can hurt you and others. All safety messages will follow the safety alert symbol and the word "WARNING".

Tools needed:





Venting Requirements:

Height & Clearance:

- Vent system must terminate to the outside (roof or side wall).
- DO NOT terminate the vent system in an attic or other enclosed area.
- DO NOT use 4" (10.2 cm) laundry-type wall caps.
- Use metal/aluminum vent only. Rigid metal/ aluminum vent is recommended.
- DO NOT use plastic vent.
- Always keep the duct clean to ensure proper airflow.
- Calculate the following figures before installation:
 - 1. Distance from the floor to the ceiling.
 - 2. Distance between the floor to the countertop/stove
 - 3. Distance between the cooking surface to the range hood (recommend 24" to 30") minimum of 30" is required for gas stove top
 - 4. Height of hood and duct cover.

For the most efficient & quiet operation:

- A distance of 24" to 30" is recommended between stove top and the bottom of range hood. 30" minimum is required for gas stove tops
- It is recommended that the range hood is vented vertically through the roof through 7" (17.8 cm) or bigger round metal/aluminum vent work.
- The size of the vent should be uniform.
- Use no more than three 90° elbows.
- Make sure there is a minimum of 24" (61 cm) of straight vent between the elbows if more than one elbow is used.
- DO NOT install two elbows together.
- The length of vent system and number of elbows should be kept to a minimum to provide efficient performance.
- The vent system must have a damper. If roof or wall cap has a damper, DO NOT use damper (if supplied) on top of the range hood.
- Use silver tape or duct tape to seal all joints in the vent system.
- Use caulking to seal exterior wall or roof opening around the cap.



IMPORTANT:

- A minimum of 7" round (standard for this range hood) or 3-1/4 x 10" rectangular duct (purchased separately) must be used to maintain maximum airflow efficiency.
- Always use rigid type metal/aluminum ducts if available to maximize airflow when connecting to provided duct.
- Please use *Duct Run Calculation* below to compute total available duct run when using elbows, transitions and caps.
- ALWAYS, when possible, reduce the number of transitions and turns. If long duct run is required, increase duct size from 7" to 8" or 9". If a reducer is used, install a long reducer instead of a pancake reducer. Reducing duct size will restrict airflow and decrease airflow, thus reduce duct size as far away from opening as possible.
- If turns or transitions are required: Install as far away from the opening and as far apart between 2 as possible.
- Minimum mount height between stove top to hood bottom should be no less than 24-inch for electric cook tops and minimum of 30" for the stove tops and no higher than 30 inch for electric cook tops.
- 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 it's performance and efficiency.
- If available, also refer to stove top manufacturer's height clearance requirements and recommended hood mounting height above range.

Minimum Duct Size:

- Round 7" minimum
- Rectangular 3-1/4 x 10" minimum (requires a 7" to 3-1/4x10" adaptor, not supplied)

Calculating Vent System Lenght :

To calculate the length of the system you need, deduct the equivalent feet for each vent piece used in the system from the recommended maximum duct run.

Duct Run Calculation:	
Recommended maximum run	
7" or 3-1/4 x 10" duct	50 ft
Vent piec	ce deduction
Each 90° elbow used	9 ft
Each 45° elbow used	5 ft
Each 7" to 3/14 x 10" transition used	7 ft
Side wall cap with damper	0 ft
Roof cap	0 ft

Duct Run Calcuation example:

One roof cap, two 90° elbow, and one 45° elbow used:

 $Oft + 9ft + 9ft + 5ft = \underline{23ft}$ used.

Deduct 23ft from 50ft, <u>27ft</u> maximum available for straight duct run.

- This range hood is factory set for venting through the roof or wall.
- Vent work can terminate either through the roof or wall. To vent through a wall, a 90° elbow is needed.

IMPORTANT:

- 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/aluminum duct work only.
- Fasten all connections with sheet metal screws and tape all joints with certified Silver Tape or Duct Tape.
- Use caulking to seal exterior wall or roof opening around the cap.



Horizontal wall venting

Electrical Requirements:

IMPORTANT: Observe all governing codes and ordinances.

It is the customer's responsibility:

• To contact a qualified electrical installer.



A 120-Volt, 60 Hz, AC-only, fused electrical supply is required on a separate 15-amp circuit, fused on both sides of the line.

DO NOT ground to a gas pipe.

Check with a qualified electrician if you are not sure that the range hood is properly grounded.

DO NOT have a fuse in the neutral or ground circuit.

IMPORTANT: Save this Installation Guide for electrical inspector's use.

The range hood must be connected with copper wire/plug only.

The range hood should be connected directly to the fused disconnect (or circuit breaker) box through flexible armored or non-metallic sheathed copper cable. ETL. - listed strain relief must be provided at each end of the power supply cable.



Advanced Preparations:

- Be familiar with the controls of the range hood by reading through *Range Hood Operations*, Page 12.
- Place the range hood on a flat, stable surface. Connect the range hood to a designated standard outlet (120-Volt, 60Hz, AC only) and turn on the range hood. Verify all operations of the range hood by referring to *Range Hood Operations*, Page 13.



- Place all supplied parts and required hardware on a flat, stable surface and verify the existence of all supplied parts listed on Page 4.
- Carefully remove the white plastic protective coat from the range hood.

Preparations:

NOTE: To avoid damage to your hood, prevent debris from entering the vent opening.

- Decide the location of the venting pipe from the hood to the outside. Refer to *Venting Methods* on Page 7.
- A straight, short vent run will allow the hood to perform more efficiently.
- Try to avoid as many transitions, elbows, and long run as possible. This may reduce the performance of the hood.
- IMPORTANT: Peel white plastic protective coat off the hood if any.
- Use silver tape or duct tape to seal joints between pipe sections.
- For installing under the cabinet with recessed bottom, attach 4-inch wide wood filler strips (not provided) on each side. Refer to Figure 1.
- Using references in *Measurements and Diagrams* on Page 16, create access opening for electrical wires and hood exhaust under the cabinet.

CAUTION: If moving the cooking range is necessary to install the hood, turn OFF the power on an

electric range at the main electrical box. SHUT OFF THE GAS BEFORE MOVING A GAS RANGE.

- Puncture the knockout holes (for mounting under the cabinet) on the hood as shown in Figure 2.
- If necessary, attach two rubber stands with 3M adhesive tapes to the back corners of the hood.





Installation:

Installations (refer to Page 4 for parts):

- 1. Measure the distance between stove top and the bottom of range hood. A distance of 24" to 30" is recommended with a minimum of 30" for gas stove tops.
- 1. You have *two ways* (A or B) to mount this range hood:
 - A–1. Proceed if you would like to mount this range hood *without* using the hood-mounting bracket.
 - A-2. Using references in *Height & Clearance* on Page 5 and *Measurements and Diagrams* on Page 16, center the hood beneath the cabinet and flush with the front of the cabinet.
 - A–3. Draw electrical wires through cabinet access opening and center the hood beneath the cabinet.
 - A–4. From inside of the hood, place screws into the exact center of each knockout hole and secure to cabinet bottom. Finish tightening all screws until secure. Be careful when using electrical screwdriver, damage to the range hood may occur. Skip Part B below and proceed to Step 2.

CAUTION: Make certain the range hood is secure before releasing!

- B-1. Proceed if you would like to mount this range hood using the provided hood-mounting bracket.
- B-2. Using references in *Height & Clearance* on Page 5 and *Measurements and Diagrams* on Page 17, mark the leveling point of the hood. Position two mounting screws on the wall, leaving 1/8" space away from the wall. Mounting the hood on wall studs or lumbars is highly recommended.
- B-3. Attach the hood-mounting bracket to the back of the hood with six screws as shown in Figure 3.
- B–4. Puncture the knockout wire access hole at the back of the hood and draw the electrical wires through as shown in Figure 4.
- B–5. Align hood-mounting bracket to the screws on the wall and hook the hood into place as shown in Figure 5. Tighten screws to secure hood to the wall.

CAUTION: Make certain the range hood is secure before releasing!

- 2. For safety purposes, pre-drilled the mounting holes that are provided through the back of the hood. For a more secure installation, use as many mounting holes as needed to secure from the inside of hood.
- 3. Use 7" round steel pipe (follow building codes in your area) to connect the exhaust on the hood to the ductwork above. Use silver tape or duct tape to make all joints secure and air tight. Refer to Figure 6.

SAFETY WARNING: Risk of electrical shock. This range hood must be properly grounded. Make sure this is done by qualified electrician in accordance with all applicable national and local electrical codes. Before connecting wires, switch power off at service panel and lock service panel to prevent power from being switched on accidentally.

4. Connect the range hood to a designated standard outlet (120-Volt, 60Hz, AC only) or cut off the plug and

connect three wires (black, white and green) to house wires and cap with wire connectors. Connect according to colors (i.e. black to black, white to white, and green to green) as shown in Figure 7.





Installation (Continued):

- 5. Store excess wires in the wiring box.
- 6. Drop oil tunnel into recess support near rear of hood. Refer to Figure 8.
- 7. To install baffle filters and stainless spacer(s), refer to *Baffle Filters and Stainless Steel Spacers* on Page 18 for baffle filter and stainless spacer placement. Refer to Figure 9 for the following five steps:
 - ① Angle baffle filter toward back of hood.
 - ② Push baffle filter up until almost level.
 - ③ Slide forward into recess behind the front of hood.
 - ④ Lower baffle filter.
 - **(5)** Slide back until it fits into resting positions.
- 8. Repeat Step 7 to install all baffle filters and stainless spacers.
- 9. Turn power ON in control panel. Check all lights and fan operations.
- 10. Make sure to leave this Installation Guide for the homeowner.



CONTROL PANEL OPERATION:



• Lights:

 \circ Press the light button 3 to turn halogen lights on and off.

• Power settings:

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- \circ Press the \bigotimes button once and the motor starts to operate at Low speed.
- \circ Press the Solution button again and the motor will reach Medium speed.
- Press the low button once more and the motor will reach High speed.
 - Press the (button to turn the fan off.

Troubleshooting

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1. If the range hood or halogen light does not operate after installation:

- 2. The range hood vibrates when the blower is on:
- 3. The blower or fan seems weak:

- 4. The lights work but the blower is not spinning at all, is stuck or is rattling.
- 5. The hood is not venting out properly:

• Check if the range hood has been plugged in, make sure that all power has been turned back ON, fused not blown and all electrical wiring are properly connected.

Swap out light assembly to working ones to determine whether it is caused by defective bulbs. See *Replacing the light bulbs* on Page 22.

- The range hood might not have been secured properly on to the ceiling or wall.
- Check that the duct sized used is at least 7" or 3 1/4" x 10". Range hood WILL NOT function efficiently with insufficient duct size. For example: 8" duct over 7" hole and loosely secured.
- Check if duct is clogged or if damper unit (halfcircular flapper) is not installed correctly or opening properly. A tight mesh on a side wall cap unit might also cause restriction to the air flow.
- The blower might be jammed or scraping the bottom due to shipping damage. Please contact us immediately.
- Make sure the distance between the stove top and the bottom of the hood is within 24" and 30" in distance; with minimum 30" for gas stove top.
- Reduce the number of elbows and length of duct work. Check if all joints are properly connected, sealed, and taped.
- Make sure the power is on high speed for heavy cooking.

Use and Care Information:

Operations:

- Read and understand all instructions and warnings 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 the 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.
- NEVER cook on "open" flames under the range hood. Check deep-fryers during use: Superheated oil may be flammable.

Cleaning:

- The saturation of greasy residue in the blower and filters may cause increased inflammability. Keep unit clean 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* on Page 22). 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. Read to understand all instructions and warnings in this manual before proceeding.

Specifications ³ :		
Body Design	Seamless Stainless Steel, Satin Finish	
Power Rating	120V / 60Hz (USA & Canada standard)	
General Input Power	264/266W (260W + 2/3x2W)	
Motor Input Power	260 W (130W + 130W)	
Ampere	3 A	
Levels Of Speed Control	4 Levels	
Airflow ¹ (Q/L/M/H)	490CFM / 615CFM / 900CFM	
Noise Level ² (Q/L/M/H)	3.5Sone(58dB) / 5.3Sone(64dB) / 6.5Sone(67dB)	
Number Of Motors	2 Motors	
Motor Type	Single Chamber Ultra Quiet	
Fan Type	Centrifugal Squirrel Cage	
Control Type	Touch Sensitive Electronic Control Panel with LED Display	
Filtration Type	Stainless Steel Baffle Filter	
Illumination	2W 12V Maximum, Dual Intensity	
Venting Size	Top, 7 inches Round	
Interference Protection	Radio Frequency Interference Protected	

Specifications:

Measurements and diagrams:

- All measurements in parenthesis are in millimeter.
- All inch measurements are converted from millimeters, thus inch measurements are estimated.



Page 15



Hood-mounting Bracket:



Page 16

30" Range Hood

36" Range Hood







Page 17

Range Hood Assembly:

No.	Description	No.	Description
1	Screws (3/16" x 3/8")	12	Stainless Steel Spacer (Size Varies)
2	Hood Casing	13	Baffle Filter
3	Hood Mounting Bracket (Optional)	14	Baffle Handle
4	Screws (3/16" x 3/8") (Optional)	15	Electrical Assembly
5	Stainless Steel Grease/Oil Tunnel	16	Screws (3/16" x 3/8")
6	Blower Assembly	17	Wiring Box
7	Halogen Light Panel	18	Screws (3/16" x 3/8")
8	Gasket	19	Switch Assembly
9	Screws (3/16" x 3/8")	20	Screws (3/16" x 3/8")
10	Halogen Light	21	Board
11	Gasket	22	Screws (3/16" x 3/8")



Blower Assembly:

No.	Description	No.	Description
1	Air Chamber	8	Right Squirrel Cage
2	Screw Cap	9	Gasket
3	Left Squirrel Cage	10	Screws (3/16" x 3/8")
4	Left Locknut	11	Left Motor
5	Air Flow Grill	12	Right Motor
6	Screws (3/16" x 3/8")	13	Safety Screen
7	Right Locknut		



Electrical Assembly:

No.	Description	No.	Description
1	Electrical Box	7	Screws (3/16" x 3/8")
2	Screws (3/16" x 3/8")	8	Transformer
3	Processor Board	9	Screws (3/16" x 3/8")
4	Electrical Box Cover	10	Capacitor
5	Setup Board	11	Screws (3/16" x 3/8")
6	Gasket		



SAFETY WARNING: Never put your hand into the housing area while the fan is operating!

For optimal operation, clean range hood and all baffle/spacer/filter/grease tunnel/oil container regularly. Regular care will help preserve the appearance of the range hood.

Maintenance:

Cleaning Exterior surfaces:

Replacing the light bulb:

1 Remove baffle filter as per installation.

2 Make sure the hood is disconnected or close theircuit breaker. Reach into the range hood and disconnect power clip.

3 Reach into interior of range hood until touching both lateral clips located on the side of the puck light. Gently squeeze and push down until puck pops out from its location.



WARNING! Beware of Burns!

Light bulbs become extremely hot when turned on. DO NOT touch bulbs until switched off and cooled. Touching hot bulbs could cause serious burns.





4 To reinstall new puck light, follow instruction3 in reverse order.

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4 To reinstall new puck light, follow instruction3 in reverse order.

Manufacture's Limited Warranty

This Product has been manufactured by Duro Corporation 17018 EVERGREEN PLACE CITY OF INDUSTRY, CA 91745.

Duro Corporation disclaims all express warranties except for the following:

This warranty applies to products purchased and located in the United States. Products purchased or located outside these areas are excluded.

The warranty does not apply to damage resulting from abuse, accident, natural disaster, loss of electrical power to the product for any reason, alteration, outdoor use, improper installation, or improper operation.

Warranties and Duration

Full Warranty for Parts: 1 Year

Implied warranties terminate upon expiration of the limited warranty. Some states do not allow limitation on how long an implied warranty

lasts, so the above limitation may not apply to your implied warranty.

Duro will pay for:

All cost of replacement parts found to be defective due to materials and workmanship.

Duro will not pay for:

1. Service, damages, and repairs by an authorized or unauthorized agency.

a. Teaching you how to use the appliance.

b. Correcting the installation. You are responsible for providing electrical wiring and other connecting facilities.

c. Resetting the circuit breakers or replacing home fuses.

3. Damage caused from accident, alteration, misuse, abuse, improper installation or installation not in accordance with local electrical codes or plumbing codes, or improper storage of the appliance.

4. Repairs other than normal home use.

5. Travel or trip fees and associated charges incurred when the product is installed in a location with limited or restricted access. (i.e.airplane flights, ferry charges, isolated geographic regions).

The warranty to appliances purchased and used by consumers for personal, family, or household purposes only. It does not cover appliances used in commercial applications.

Duro is not responsible for incidental or consequential damages. Under no circumstances will Duro's liability exceed the cost that you paid for the product. Some provinces / states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights and you may also have other rights that wary from state to state. Whenever you contact our Customer Service at 1-888-909-8818 for technical information, parts, sales in The United States or to inquire service for your appliance, please have your complete model number and serial number ready. The model and serial number can be found on the product data plate. Please enter the information requested in the spaces provided below:

Model No	Serial No
Date Purchased	Date Installed
Purchased From	Address
Phone	

NOTE: You must provide proof of purchase or installation date for in-warranty parts.