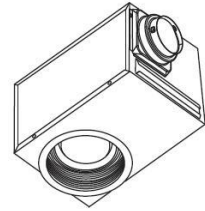


## RECESSED FAN LIGHT



MODEL: AP80-RVL  
AP80H-RVL



### WARNING

**TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, PLEASE READ THE FOLLOWING:**

1. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer at the address or telephone number listed in the warranty. 2. Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switching on accidentally. If the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel. 3. Installation work and electrical wiring must be done by a licensed person(s) in accordance with all applicable codes and standards, including fire-rated construction codes and standards. 4. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdraft. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities. 5. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities. 6. Ducted fans must always be vented to the outdoors. 7. Acceptable for use over a tub or shower when connected to a GFCI (Ground Fault Circuit Interrupter) - protected branch circuit. 8. This unit must be grounded. 9. Never place a switch where it can be reached from a tub or shower. 10. **WARNING:** To reduce the risk of fire or electric shock, do not use this fan with any solid-state speed control device. 11. The fan must not be installed in a ceiling thermally insulated to a value greater than R40.

### CAUTION

1. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.  
2. This product is designed for installation in ceilings up to a 12/12 pitch (45 degree angle). Duct connector must point up for wall application.  
3. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall and construction dust away of motor unit.  
4. Please read specification label on product for further information and requirements.

### CLEANING & MAINTENANCE

For quiet and efficient operation, long life, and attractive appearance, lower or remove grille and vacuum interior of unit with the dusting brush attachment.

The motor is permanently lubricated and never needs oiling.

### OPERATION

Use an on/off switch to operate this fan. See "Connect Wiring" for details.

The humidity control and fan can be operated separately. Can be used with a dual "stacked" switch for fan / light control. Do not use a dimmer switch to operate the humidity control or light. See "Connect Wiring" for details.

#### For AP80H-RVL

#### SENSOR OPERATION

The humidity-sensing fan uses a sophisticated humidity sensor that responds to: (a) rapid to moderate (user-adjustable) increases in humidity or (b) humidity rate above a user-adjustable set-point (50%-100% relative humidity). The humidity sensor may occasionally turn the fan ON when environmental conditions change. If the fan continuously responds to changing environmental conditions, adjustment may be required. The fan is factory-set for 75% (with a ambient temperature of 77 degree F)

#### SENSITIVITY ADJUSTMENT (H)

The "H" has been factory set for most shower applications. However, if the fan is in a tub area or is being used for dampness control, the "H" may need to be increased toward maximum "+". If the control is responding too often to changing environmental conditions, movement toward less "-" "H" may be required. To adjust the "H":

1. Disconnect power at service entrance.
2. Through the grille, locate the slot marked "H".
3. Carefully rotate the "H" adjustment toward "+" or "-".
4. Turn on power and check operation by turning on the shower or other humidity source until the fan turns on.
5. Repeat above steps if necessary.

When the ambient temperature changes, the humidity sensor values will deviate slightly.

#### TIMER ADJUSTMENT (T)

The "T" on the control panel will adjust the time delay from 5 to 60 minutes (factory pre-set at 20 minutes). This "T" controls the length of time that the fan remains ON after the sensor has stopped sensing a rise in humidity and the humidity level is below the user-adjustable set-point. To adjust the "T":

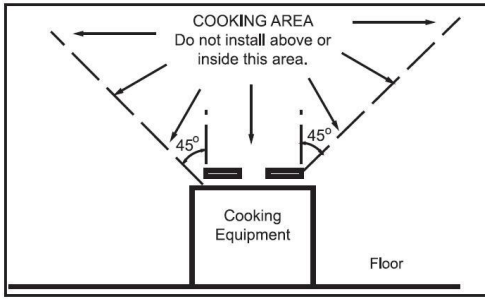
1. Disconnect power at service entrance;
2. Through the grille, locate the slot marked "T";
3. Carefully rotate the "T" adjustment to desired setting (from 5 to 60 minutes).
4. Check operation by turning on a humidity source until the fan turns on.
5. Turn humidity source off and time the unit.
6. Repeat above steps if necessary.

**READ AND SAVE THESE INSTRUCTIONS**  
**Installer: Leave this manual with the homeowner**

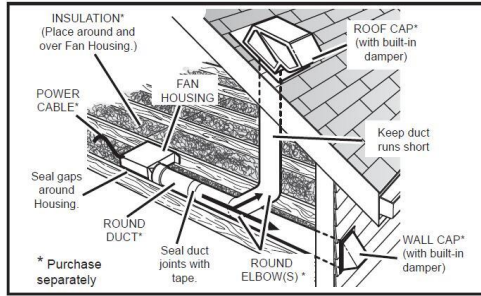
AP80-RVL, AP80H-RVL

# PLAN THE INSTALLATION

1. Do not use in a cooking area.



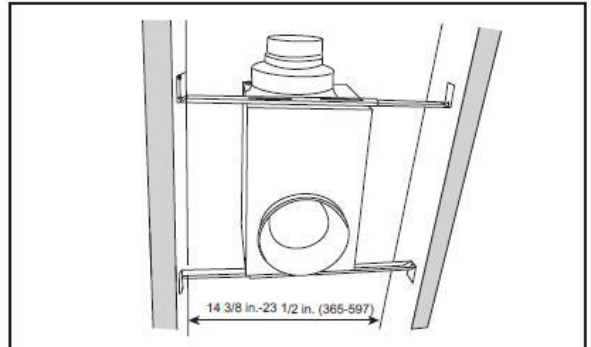
2. Two ways to connect ductwork to a factory-shipped unit



## ASSEMBLY INSTRUCTIONS

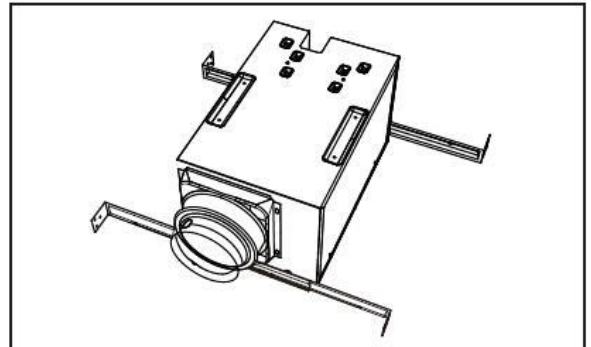
1. Before installation, you need to know:

- |                   |  |            |
|-------------------|--|------------|
| Screw A           |  | ST4.2*1/2" |
| Screw B           |  | ST4.2*1"   |
| Hanger bar (long) |  | 13 3/8"    |



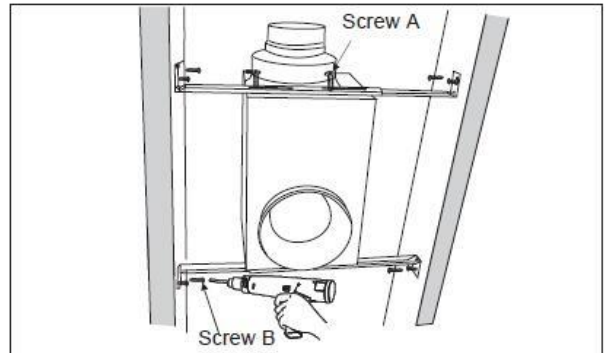
### 1. MOUNT WITH HANGER BARS

1a. Sliding hanger bars have been provided, which allow the housing to be positioned accurately anywhere between the framing. The bars may be used on all types of framing: I-joint, standard joist, and truss construction. Slide hanger bars onto housing and adjust as needed to fit between framing.



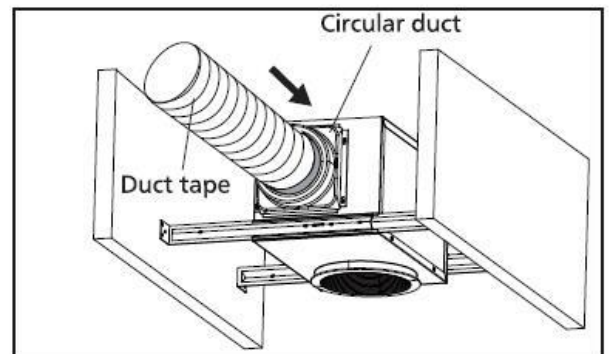
1b. Extend the hanger bars to the width of the framing. Position the fan with the hanger bar tabs aligned with the bottom edge of the framing, holding the ventilator in place.

Secure hanger bars to framing using one screw on each end of hanger bar. Attach set screws to lock bar hangers in place.



### 2. INSTALL ROUND DUCTWORK

Connect the round ductwork (not included) to the damper/duct connector, and run the ductwork to a roof or wall cap (not included). Using duct tape (not included), secure all the ductwork connections so that they are air tight. Insulated flexible duct is recommended for the quietest possible installation. If rigid duct is used, a short (1-3 feet) section of insulated flexible duct will ensure quiet operation

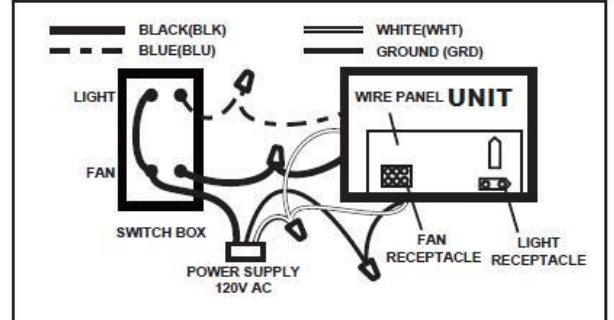
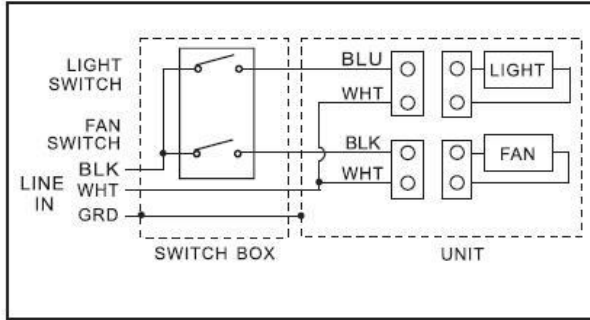


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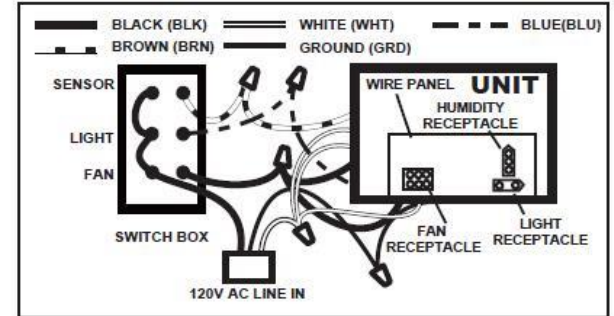
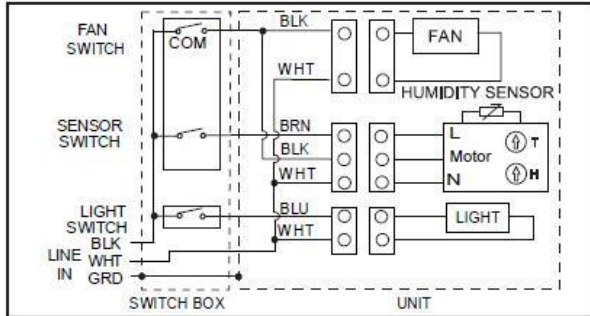
# CONNECT ELECTRICAL WIRING

Run 120 Volts AC house wiring to the fan. Use only UL-approved connectors (not included) to attach the house wiring to the wiring plate. Refer to the wiring diagram, and connect the wires as shown.

AP80-RVL

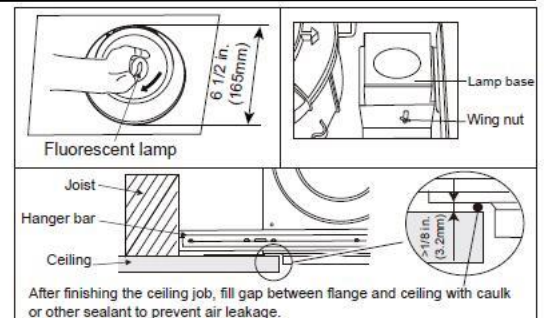


AP80H-RVL



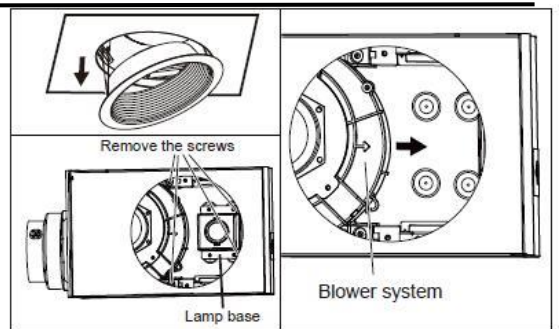
## FINISH CEILING WORK

1. A round ceiling hole 6 1/2 inches (165mm) diameter should be cut. Seal any gap between the hole in the drywall and the fan with sealant .
2. Install the the compact florescent bulb or LED bulb. Bulb not included.
3. The bulb housing can adjust up or down to accommodate different bulbs. Unit is qualified with use of GU24 adaptor and use of a GU24 bulb.



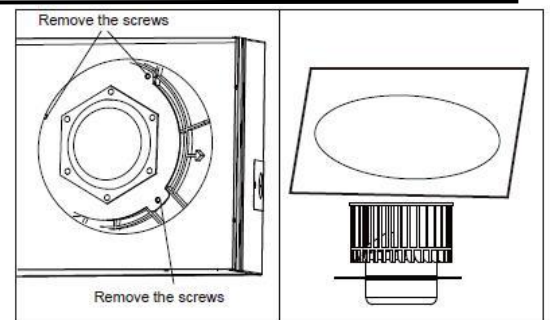
## REPLACEMENT INSTA LLATION

1. Remove the trim ring by detaching the springs.
2. Remove the screws as shown in the right.
3. Remove the lamp base.
4. Pull the duct system, so that you can see the blower system.



## REPLACEMENT INSTALLATION

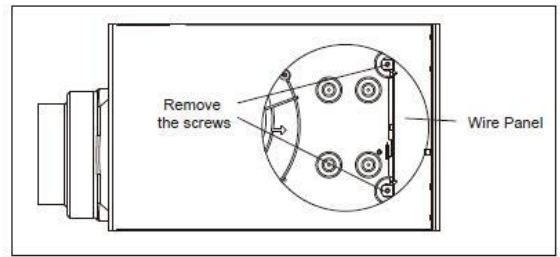
5. Remove the screws as shown in the right.
6. Remove the blower system from of the housing.
7. Replace the broken parts.



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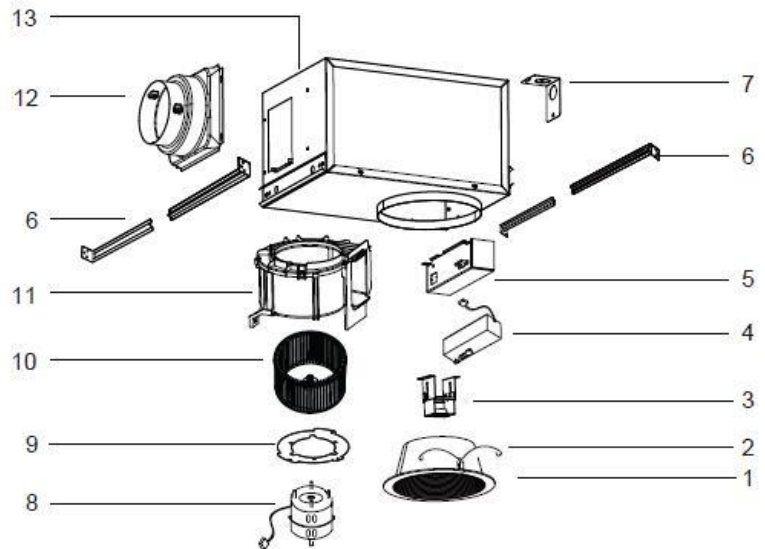
## REPLACEMENT INSTALLATION

8. To replace the capacitance you will need to remove the wire panel, and then replace the capacitance.



## SERVICE PARTS

PART	PART NAME	Qty.
1	Trim Ring	1
2	Grille Spring	2
3	Lamp base	1
4	Humidity Sensor System (for AP80H-RVL)	1
5	Wire Panel / Harness Assembly	1
6	Hanger Bars	4
7	Wiring plate	1
8	Motor	1
9	Motor plate	1
10	Blower Wheel	1
11	Blower housing	1
12	Duct	1
13	Housing	1



## WARRANTY

This warranty covers all defects in workmanship or materials for:

The mechanical and electrical parts contained in this product for a period of 72 months from the date of purchase. You must keep and be able to provide your original sales receipt as proof of date of purchase. This warranty is covered to the original retail purchaser of this product only. The manufacturer will replace any mechanical or electrical part that proves defective in normal household use for a period of 72 months.

**THIS WARRANTY DOES NOT COVER:**

- Damages from improper installation.
- Damages from shipping.
- Damages from misuse, abuse, accident, alteration, lack of proper care and maintenance.
- Damages from service by persons other than a licensed electrician.
- Does not cover any labor or transportation charges related to the repair of this product.

This warranty does not extend to fluorescent lamp starters and tubes.

**THIS LIMITED WARRANTY IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

The remedy provided in this warranty is exclusive and is granted in lieu of all other remedies. This warranty does not cover incidental or consequential damages. Some states do not allow the exclusion of incidental or consequential damages, so this limitation may not apply to you.

Some states do not allow limitations on how long an implied warranty lasts, so this limitation may not apply to you. This warranty gives you specific legal rights; you may also have other rights, which vary from state to state.

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