



# BROAN LIGHT DUTY SERIES- EXHAUST FAN INSTALLATION GUIDE

## BROAN<sup>®</sup> LOSONE SELECT<sup>®</sup> VENTILATORS Ceiling/Wall Mount

### READ AND SAVE THESE INSTRUCTIONS

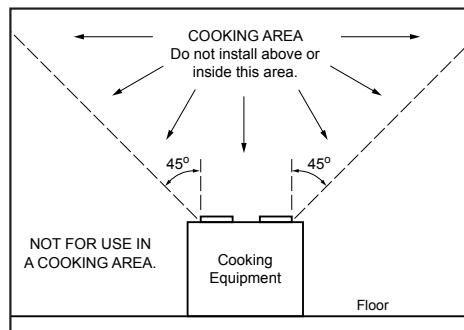
#### WARNING

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE 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 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.
3. Installation work and electrical wiring must be done by a qualified 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 backdrafting. 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. To reduce the risk of fire, use only metal ductwork.
8. Models L100, L150, L200, L250, and L300 only: If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and be connected to a GFCI (Ground Fault Interrupter) - protected branch circuit.
9. Never place a switch where it can be reached from a tub or shower.
10. This unit must be grounded.

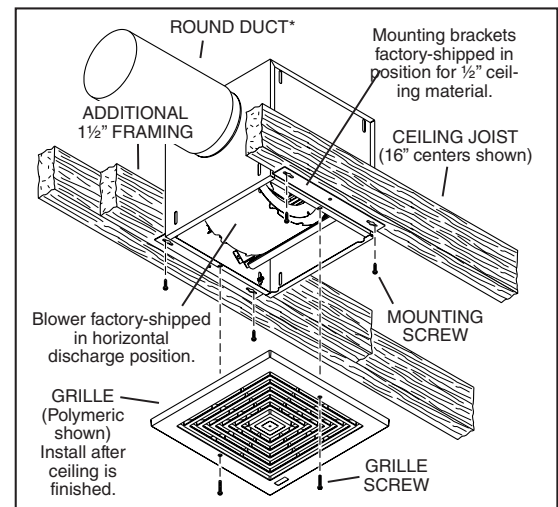
#### CAUTION

1. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
2. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
3. Please read specification label on product for further information and requirements.



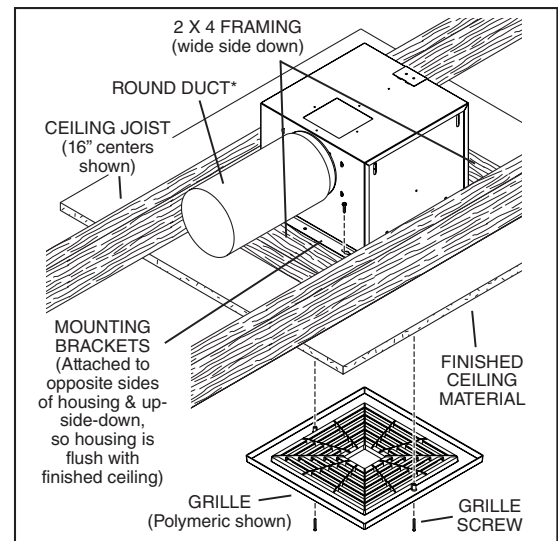
#### TYPICAL INSTALLATION

##### MOUNTING (New Frame Construction)



Factory-shipped unit installed in new construction.

##### MOUNTING (Existing Frame Construction)



Factory-shipped unit installed in existing construction.

\* L100 & L150 Series uses 6" Round Duct.

1 L200, L250, & L300 Series uses 8" Round Duct.

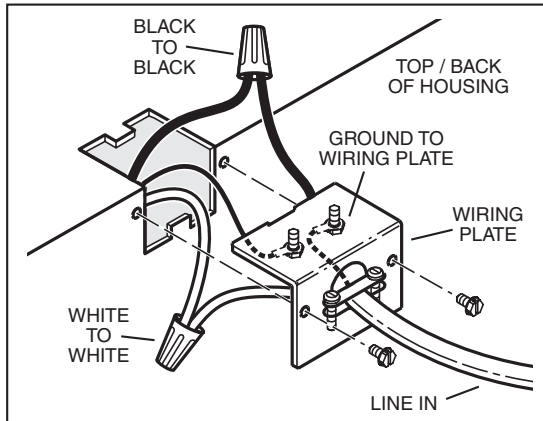




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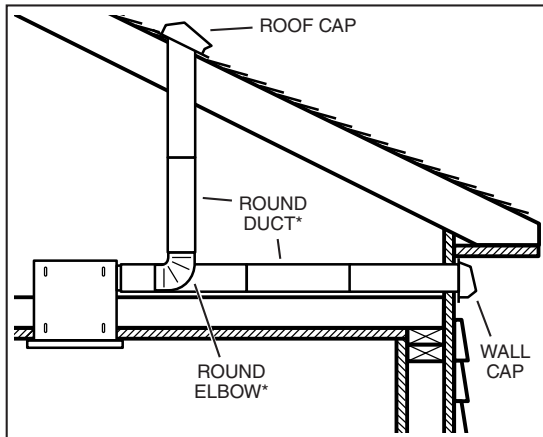
## TYPICAL INSTALLATION

### WIRING



Ventilator can be wired from outside of housing.  
Use UL approved connectors to wire per local codes.

### DUCTING (Horizontal blower discharge)



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

\* L100 & L150 Series uses 6" Round Duct.  
L200, L250, & L300 Series uses 8" Round Duct.

### IMPORTANT:

#### Remove shipping tape from damper

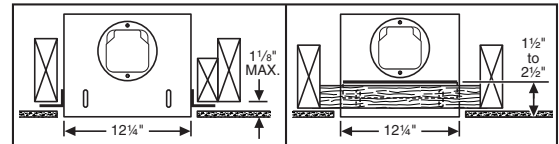
Remove the shipping tape from the damper flap and make sure that damper flap opens and closes freely inside the ductwork. Use duct tape to make ductwork connections secure and air-tight.

#### Remove shipping ring from blower inlet

Remove the shipping ring from the blower inlet before operating the ventilator.

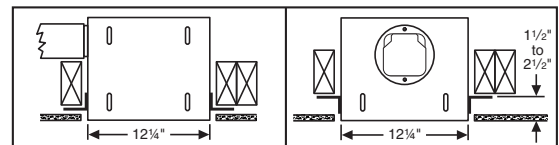
## MOUNTING OPTIONS

1/4-20 hex nuts secure mounting brackets to housing. Loosen and re-tighten or remove and replace nuts as necessary for desired mounting bracket position.



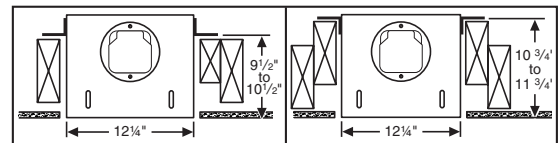
Mounting brackets in factory-shipped position.  
(Outlet parallel to joists.)  
(New construction)

Mounting brackets flipped over and mounted to outlet sides of housing.  
(Outlet parallel to joists.)  
(Existing construction)



Mounting brackets mounted to outlet sides of housing.  
(Outlet perpendicular to joists.)  
(New construction)

Mounting brackets flipped over to give approx. 1" more clearance.  
(Outlet parallel to joists.)  
(New construction)

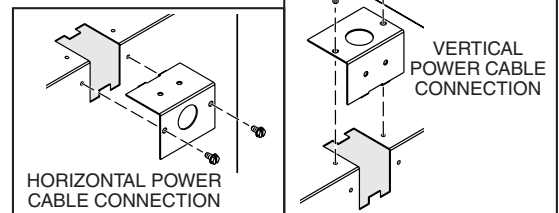


Mounting brackets mounted to top of sides of housing.  
(Outlet parallel to joists.)  
(New or existing construction)

Mounting brackets flipped over and mounted to top of sides of housing.  
(Outlet parallel to joists.)  
(New or existing construction)

## WIRING OPTIONS

### WIRING PLATE POSITION



Wiring plate mounts to side or top of housing.

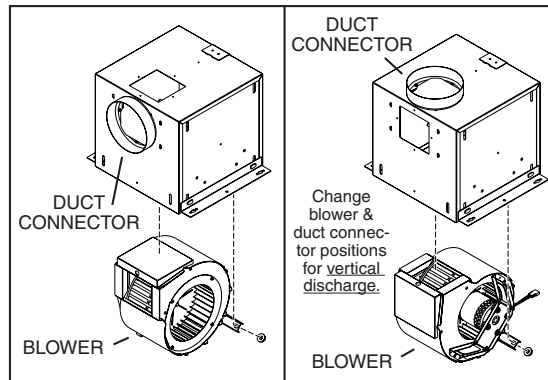




# BROAN LIGHT DUTY SERIES- EXHAUST FAN INSTALLATION GUIDE

## DUCTING OPTIONS

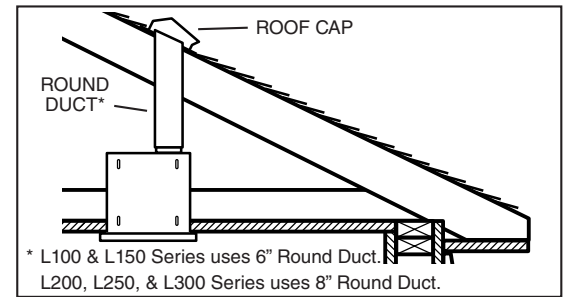
### BLOWER DISCHARGE POSITIONS



*Blower and duct connector in horizontal discharge position. (Factory shipped)*

*Blower and duct connector in vertical discharge position.*

### DUCTING (Vertical blower discharge)



*Typical ductwork connection to a ventilator converted to vertical discharge.*

## USE AND CARE

Ventilator is designed for continuous operation. If desired, it may be controlled using an on/off switch or a solid-state, variable speed control. Follow wiring instructions packed with control, and adhere to all local and state codes, and the National Electrical Code.

**⚡ WARNING: To reduce the risk of electric shock, disconnect from power supply before servicing.**

**To clean grille:** Use appropriate vacuum attachment or remove grille and clean with a soft cloth and mild soap or detergent. Dry grille thoroughly before reinstalling.

**To clean blower assembly:** Remove grille, unplug blower from housing, remove blower mounting nuts, and carefully remove blower from housing. Use appropriate vacuum attachment or a soft cloth and mild soap or detergent to clean blower discharge area and wheel. **DO NOT ALLOW WATER TO ENTER MOTOR.** Make sure blower assembly is completely dry before reinstalling.

Motor is permanently lubricated. Do not oil or disassemble motor.

## BROAN® VENTILADORES LOSONE SELECT® Para montaje en cielo raso/pared

### LEA Y CONSERVE ESTAS INSTRUCCIONES

#### ADVERTENCIA

**PARA REDUCIR EL RIESGO DE INCENDIO, GOLPE ELÉCTRICO, O LESIÓN A PERSONAS, OBSERVE LO SIGUIENTE:**

1. Use esta unidad solamente de la manera indicada por el fabricante. Si tiene preguntas, póngase en contacto con el fabricante a la dirección o teléfono que aparecen en la garantía.
2. Antes de limpiar o de poner en servicio la unidad, apague el interruptor en el panel de servicio, y asegure el panel de servicio para evitar que se encienda accidentalmente. Cuando el dispositivo para desconectar el servicio eléctrico no puede ser cerrado con algún tipo de traba, sujete fuertemente al panel de servicio, una etiqueta de advertencia prominente.
3. El trabajo de instalación y cableado eléctrico deben estar hechos por personal capacitado de acuerdo con todos los códigos y estándares aplicables, incluyendo códigos y estándares de construcción a prueba de incendios.

4. Se necesita suficiente aire para la combustión y extracción de gases por la chimenea del equipo que quema combustible para evitar la retrogresión de las llamas. Siga las directrices del fabricante y estándares de seguridad como los publicados por la Asociación Nacional de Protección Contra Incendios (o por sus siglas en inglés NFPA), y la Sociedad Americana de Ingenieros de Calefacción, Refrigeración, y Aire Acondicionado (o por sus siglas en inglés ASHRAE), y los códigos de las autoridades locales.
5. Cuando corte o taladre en una pared o cielo raso, no dañe cableado eléctrico o instalaciones no visibles.
6. Ventiladores con conductos siempre deben extraer hacia el exterior.
7. Para reducir el riesgo de incendio, use sólo ductos de metal.
8. Modelos L100, L150, L200, L250, y L300 solamente: Si esta unidad va a instalarse sobre una bañera o ducha, debe marcarse como correcta para dicha aplicación y debe conectarse a un protegido GFCI (Cortacircuito Accidental a Tierra).
9. Nunca instale un interruptor donde se pueda alcanzar desde una bañera o ducha.

3 10. Esta unidad se debe conectar a tierra.



#2 Chootoo Road, South Aranguez, San Juan, Trinidad



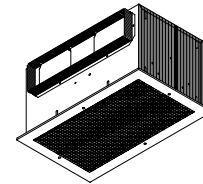


# BROAN LIGHT DUTY SERIES- EXHAUST FAN INSTALLATION GUIDE

## BROAN®

LOSONE SELECT®  
L400 SERIES • L500 SERIES • L700 SERIES

### LOSONE SELECT® VENTILATORS Ceiling/Wall Mount



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2. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
3. Please read specification label on product for further information and requirements.

#### Limited Warranty

**Warranty Period and Exclusions:** Broan-NuTone LLC (the "Company") warrants to the original consumer purchaser of its product ("you") that the product (the "Product") will be free from material defects in the Product or its workmanship for a period of one (1) year from the date of original purchase.

The limited warranty period for any replacement parts provided by the Company and for any Products repaired or replaced under this limited warranty shall be the remainder of the original warranty period.

This warranty does not cover speed controls, fluorescent lamp starters, tubes, halogen and incandescent bulbs, fuses, filters, ducts, roof caps, wall caps and other accessories for ducting that may be purchased separately and installed with the Product. This warranty also does not cover (a) normal maintenance and service, (b) normal wear and tear, (c) any Products or parts which have been subject to misuse, abuse, abnormal usage, negligence, accident, improper or insufficient maintenance, storage or repair (other than repair by the Company), (d) damage caused by faulty installation, or installation or use contrary to recommendations or instructions, (e) any Product that has been moved from its original point of installation, (f) damage caused by environmental or natural elements, (g) damage in transit, (h) natural wear of finish, (i) Products in commercial or nonresidential use, or (j) damage caused by fire, flood or other act of God. This warranty covers only Products sold to original consumers in the United States by the Company or U.S. distributors authorized by the Company.

This warranty supersedes all prior warranties and is not transferable from the original consumer purchaser.

**No Other Warranties:** This Limited Warranty contains the Company's sole obligation and your sole remedy for defective products. The foregoing warranties are exclusive and in lieu of any other warranties, express or implied. THE COMPANY DISCLAIMS AND EXCLUDES ALL OTHER EXPRESS WARRANTIES, AND DISCLAIMS AND EXCLUDES ALL WARRANTIES IMPLIED BY LAW, INCLUDING WITHOUT LIMITATION THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. To the extent that applicable law prohibits the exclusion of implied warranties, the duration of any applicable implied warranty is limited to the period specified for the express warranty above. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Any oral or written description of the Product is for the sole purpose of identifying it and shall not be construed as an express warranty.

Whenever possible, each provision of this Limited Warranty shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision is held to be prohibited or invalid, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the other remaining provisions of the Limited Warranty.

**Remedy:** During the applicable limited warranty period, the Company will, at its option, provide replacement parts for, or repair or replace, without charge, any Product or part thereof, to the extent the Company finds it to be covered by and in breach of this limited warranty under normal use and service. The Company will ship the repaired or replaced Product or replacement parts to you at no charge. You are responsible for all costs for removal, reinstallation and shipping, insurance or other freight charges incurred in the shipment of the Product or part to the Company. If you must send the Product or part to the Company, as instructed by the Company, you must properly pack the Product or part—the Company is not responsible for damage in transit. The Company reserves the right to utilize reconditioned, refurbished, repaired or remanufactured Products or parts in the warranty repair or replacement process. Such Products and parts will be comparable in function and performance to an original Product or part and warranted for the remainder of the original warranty period.

**Exclusion of Damages:** THE COMPANY'S OBLIGATION TO PROVIDE REPLACEMENT PARTS, OR REPAIR OR REPLACE, AT THE COMPANY'S OPTION, SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY UNDER THIS LIMITED WARRANTY AND THE COMPANY'S SOLE AND EXCLUSIVE OBLIGATION. THE COMPANY SHALL NOT BE LIABLE FOR INCIDENTAL, INDIRECT, CONSEQUENTIAL OR SPECIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE PRODUCT, ITS USE OR PERFORMANCE.

Some 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, which vary from state to state.

This warranty covers only replacement or repair of defective Products or parts thereof at the Company's main facility and does not include the cost of field service travel and living expenses.

Any assistance the Company provides to you outside the terms, limitations or exclusions of this limited warranty will not constitute a waiver of such terms, limitations or exclusions, nor will such assistance extend or revive the warranty.

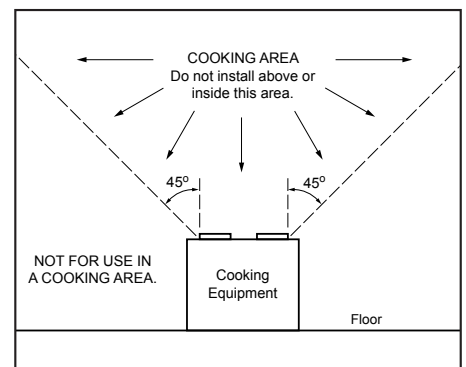
The Company will not reimburse you for any expenses incurred by you in repairing or replacing any defective Product, except for those incurred with the Company's prior written permission.

**How to Obtain Warranty Service:** To qualify for warranty service, you must (a) notify the Company at the address or telephone number stated below within seven (7) days of discovering the covered defect, (b) give the model number and part identification and (c) describe the nature of any defect in the Product or part. At the time of requesting warranty service, you must present evidence of the original purchase date. If you cannot provide a copy of the original written limited warranty, then the terms of the Company's most current written limited warranty for your particular product will control. The most current limited written warranties for the Company's products can be found at [www.broan.com](http://www.broan.com).

Broan-NuTone LLC 926 West State Street, Hartford, WI 53027 [www.broan.com](http://www.broan.com) 800-637-1453

**Installer: Leave this manual with the homeowner.**

**Homeowner: Use and Care information on page 3.**



#2 Chootoo Road, South Aranguez, San Juan, Trinidad





# BROAN LIGHT DUTY SERIES- EXHAUST FAN INSTALLATION GUIDE

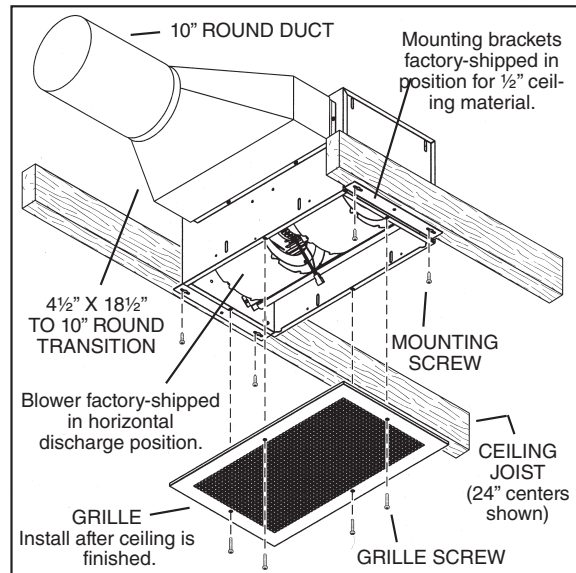
**BROAN**

LOSONE SELECT®  
L400 SERIES • L500 SERIES • L700 SERIES

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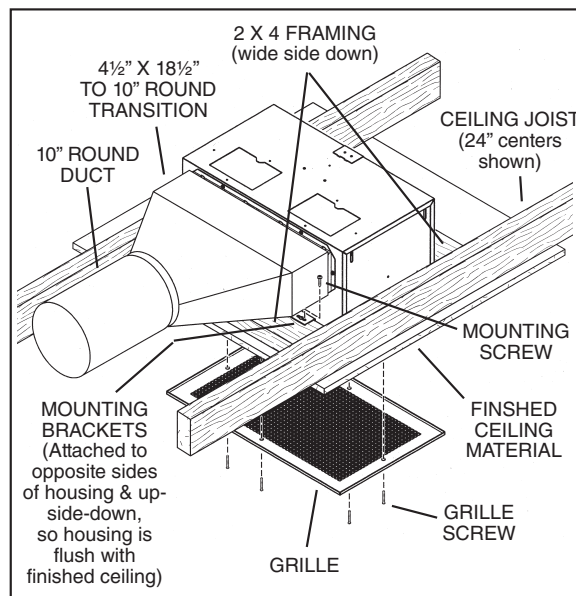
## TYPICAL INSTALLATION

### MOUNTING (*New Frame Construction*)



Factory-shipped unit installed in *new* construction.

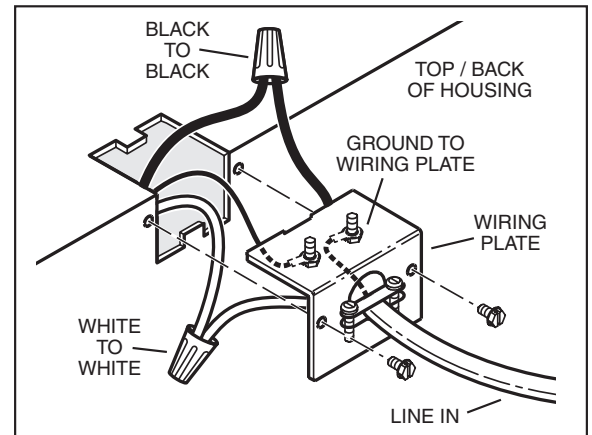
### MOUNTING (*Existing Frame Construction*)



Factory-shipped unit installed in *existing* construction.

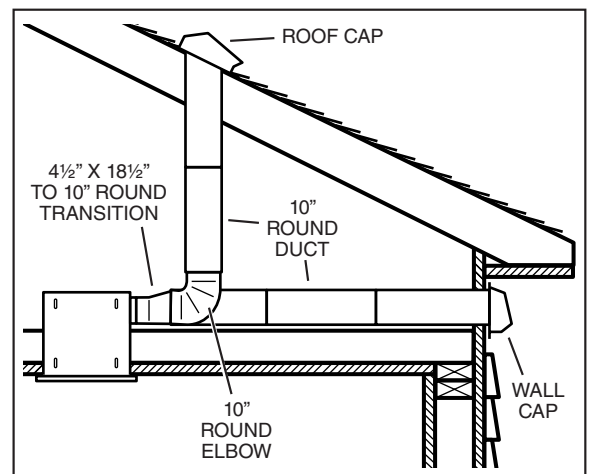
## TYPICAL INSTALLATION

### WIRING



Ventilator can be wired from outside of housing. Use UL approved connectors to wire per local codes.

### DUCTING (*Horizontal blower discharge*)



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

NOTE: Make sure the shipping tape is removed from the damper flap and that damper flap opens and closes freely inside the ductwork. Use duct tape to make ductwork connections secure and air-tight.



#2 Chootoo Road, South Aranguez, San Juan, Trinidad





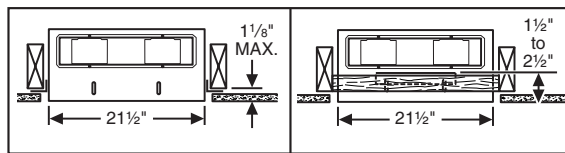
# BROAN LIGHT DUTY SERIES- EXHAUST FAN INSTALLATION GUIDE



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L400 SERIES • L500 SERIES • L700 SERIES

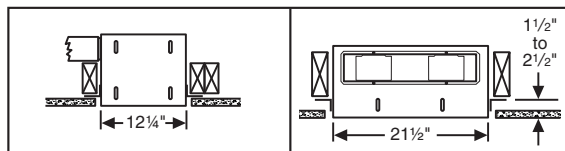
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1/4-20 hex nuts secure mounting brackets to housing. Loosen and re-tighten or remove and replace nuts as necessary for desired mounting bracket position.



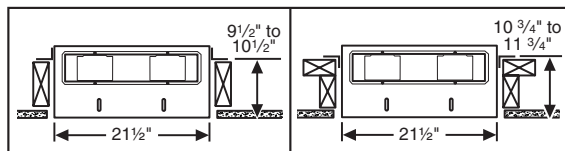
Mounting brackets in factory-shipped position. (Outlet parallel to joists.) (New construction)

Mounting brackets flipped over and mounted to outlet sides of housing. (Outlet parallel to joists.) (Existing construction)



Mounting brackets mounted to outlet sides of housing. (Outlet perpendicular to joists.) (New construction)

Mounting brackets flipped over to give approx. 1" more clearance. (Outlet parallel to joists.) (New construction)

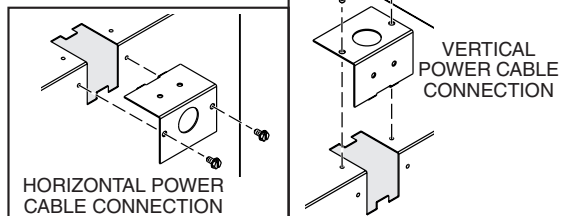


Mounting brackets mounted to top of sides of housing. (Outlet parallel to joists.) (New or existing construction)

Mounting brackets flipped over and mounted to top of sides of housing. (Outlet parallel to joists.) (New or existing construction)

## WIRING OPTIONS

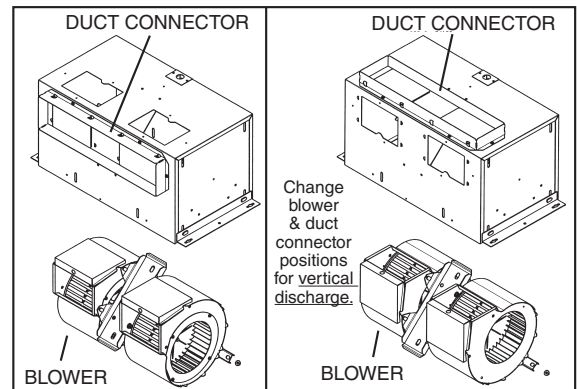
### WIRING PLATE POSITION



Wiring plate mounts to side or top of housing.

## DUCTING OPTIONS

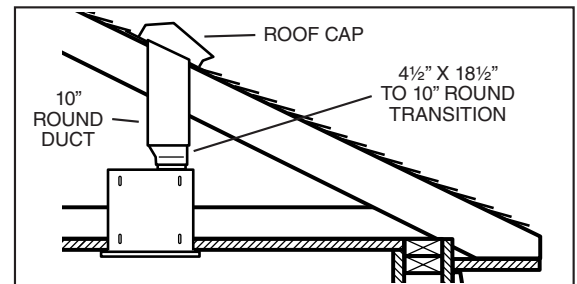
### BLOWER DISCHARGE POSITIONS



Blower and duct connector in horizontal discharge position. (Factory shipped)

Blower and duct connector in vertical discharge position.

### DUCTING (Vertical blower discharge)



Typical ductwork connection to a ventilator converted to vertical discharge.

## USE AND CARE

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**To clean grille:** Use appropriate vacuum attachment or remove grille and clean with a soft cloth and mild soap or detergent. Dry grille thoroughly before reinstalling.

**To clean blower assembly:** Remove grille, unplug blower from housing, remove blower mounting nuts, and carefully remove blower from housing. Use appropriate vacuum attachment or a soft cloth and mild soap or detergent to clean blower discharge area and wheel. DO NOT ALLOW WATER TO ENTER MOTOR. Make sure blower assembly is completely dry before reinstalling.

Motor is permanently lubricated. Do not oil or disassemble motor.





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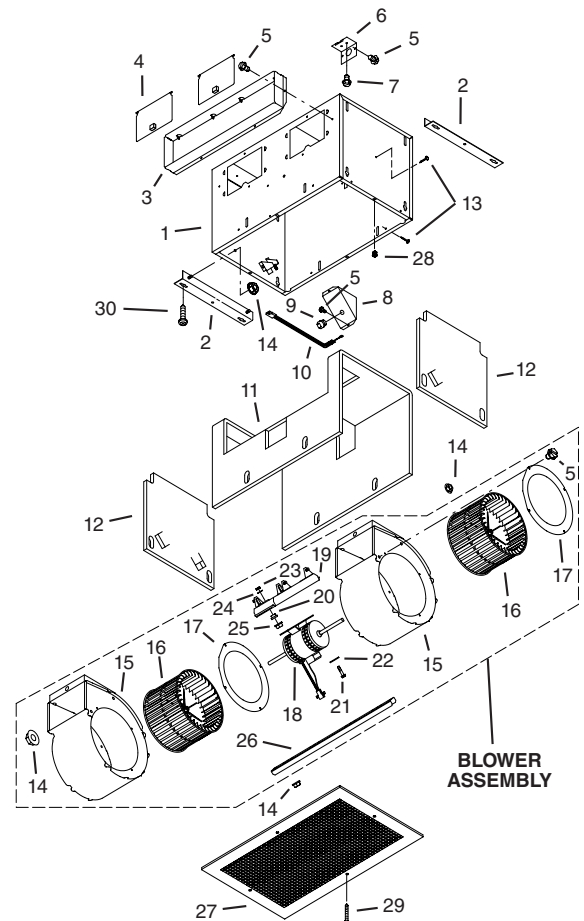
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## SERVICE PARTS

## SERVICE PARTS

KEY NO.	PART NO.	DESCRIPTION
1	97014744	Housing Assembly
2	97014728	Mounting Bracket (2 req.)
3	98009449	Duct Connector
4	97014822	Damper Flap Assembly (2 req.)
5	99150415	Screw, 8-18 x 1/4 (18 req.)*
6	98005512	Wiring Plate
7	99150471	Ground Screw, 10-32 x 1/2 (2 req.)
8	98005513	Wire Box Cover
9	99400035	Strain Relief Bushing
10	97006039	Wire Harness
11	99500392	Wrapper Insulation
12	99500391	Side Insulation (2 req.)
13	99420466	Insulation Mounting Clip (6 req.)
14	99260477	Nut, 1/4-20 (12 req.)*
15	97014745	Scroll Assembly (2 req.)
16	99110805	Blower Wheel (2 req.)
17	98009399	Inlet Ring (2 req.)
18	99080486	Motor (L400)
	99080487	Motor (L500)
	99080488	Motor (L700)
	99080498	Motor (L400C)
	99080499	Motor (L500C)
	99080500	Motor (L700C)
	99080508	Motor (L400EX)
	99080509	Motor (L500EX)
	99080510	Motor (L700EX)
19	97014794	Motor Mounting Bracket
20	99100497	Rubber Isolator (4 req.)
21	99160380	Screw, 10-24 x 7/8 (4 req.)*
22	99250399	Washer (4 req.)*
23	99260306	Nut, Hex 10-24 (4 req.)*
24	99250254	Washer (4 req.)*
25	93260456	Nut, Hex Flange 3/8-16
26	98009461	Scroll Mounting Channel
5, 14-26		Blower Assembly, Complete (Includes Key Nos. 5 & 14-26)
	97014817	(L400)
	97014819	(L500)
	97014821	(L700)
	97014883	(L400C)
	97014884	(L500C)
	97014885	(L700C)
	97014893	(L400EX)
	97014894	(L500EX)
	97014895	(L700EX)
27	98009463	Grille
28	99420470	Grille Nut (4 req.)
29	99150472	Grille Mounting Screw (4 req.)
30	99150591	Screw, 10-16 x 7/8 (4 req.)



Order replacement parts by PART NO. - not by KEY NO.  
\* Standard hardware - may be purchased locally.

99042811C



#2 Chootoo Road, South Aranguez, San Juan, Trinidad



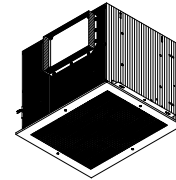


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## BROAN®

LOSONE SELECT®  
L900 SERIES • L1500 SERIES

### LOSONE SELECT® VENTILATORS Ceiling / Wall Mount



Page 1

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2. Before servicing or cleaning unit, 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.
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4. Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent backdrafting. 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. To reduce the risk of fire, use only metal ductwork.
8. If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and be connected to a GFCI (Ground Fault Interrupter) - protected branch circuit.
9. Never place a switch where it can be reached from a tub or shower.
10. This unit must be grounded.

### CAUTION

1. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
2. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
3. Please read specification label on product for further information and requirements.

#### Limited Warranty

**Warranty Period and Exclusions:** Broan-NuTone LLC (the "Company") warrants to the original consumer purchaser of its product ("you") that the product (the "Product") will be free from material defects in the Product or its workmanship for a period of one (1) year from the date of original purchase.

The limited warranty period for any replacement parts provided by the Company and for any Products repaired or replaced under this limited warranty shall be the remainder of the original warranty period.

This warranty does not cover speed controls, fluorescent lamp starters, tubes, halogen and incandescent bulbs, fuses, filters, ducts, roof caps, wall caps and other accessories for ducting that may be purchased separately and installed with the Product. This warranty also does not cover (a) normal maintenance and service, (b) normal wear and tear, (c) any Products or parts which have been subject to misuse, abuse, abnormal usage, negligence, accident, improper or insufficient maintenance, storage or repair (other than repair by the Company), (d) damage caused by faulty installation, or installation or use contrary to recommendations or instructions, (e) any Product that has been moved from its original point of installation, (f) damage caused by environmental or natural elements, (g) damage in transit, (h) natural wear of finish, (i) Products in commercial or nonresidential use, or (j) damage caused by fire, flood or other act of God. This warranty covers only Products sold to original consumers in the United States by the Company or U.S. distributors authorized by the Company.

This warranty supersedes all prior warranties and is not transferable from the original consumer purchaser.

**No Other Warranties:** This Limited Warranty contains the Company's sole obligation and your sole remedy for defective products. The foregoing warranties are exclusive and in lieu of any other warranties, express or implied. THE COMPANY DISCLAIMS AND EXCLUDES ALL OTHER EXPRESS WARRANTIES, AND DISCLAIMS AND EXCLUDES ALL WARRANTIES IMPLIED BY LAW, INCLUDING WITHOUT LIMITATION THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. To the extent that applicable law prohibits the exclusion of implied warranties, the duration of any applicable implied warranty is limited to the period specified for the express warranty above. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Any oral or written description of the Product is for the sole purpose of identifying it and shall not be construed as an express warranty.

Whenever possible, each provision of this Limited Warranty shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision is held to be prohibited or invalid, such provision shall be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the other remaining provisions of the Limited Warranty.

**Remedy:** During the applicable limited warranty period, the Company will, at its option, provide replacement parts for, or repair or replace, without charge, any Product or part thereof, to the extent the Company finds it to be covered by and in breach of this limited warranty under normal use and service. The Company will ship the repaired or replaced Product or replacement parts to you at no charge. You are responsible for all costs for removal, reinstallation and shipping, insurance or other freight charges incurred in the shipment of the Product or part to the Company. If you must send the Product or part to the Company, as instructed by the Company, you must properly pack the Product or part—the Company is not responsible for damage in transit. The Company reserves the right to utilize reconditioned, refurbished, repaired or remanufactured Products or parts in the warranty repair or replacement process. Such Products and parts will be comparable in function and performance to an original Product or part and warranted for the remainder of the original warranty period.

**Exclusion of Damages:** THE COMPANY'S OBLIGATION TO PROVIDE REPLACEMENT PARTS, OR REPAIR OR REPLACE, AT THE COMPANY'S OPTION, SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY UNDER THIS LIMITED WARRANTY AND THE COMPANY'S SOLE AND EXCLUSIVE OBLIGATION. THE COMPANY SHALL NOT BE LIABLE FOR INCIDENTAL, INDIRECT, CONSEQUENTIAL OR SPECIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE PRODUCT, ITS USE OR PERFORMANCE.

Some 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, which vary from state to state.

This warranty covers only replacement or repair of defective Products or parts thereof at the Company's main facility and does not include the cost of field service travel and living expenses.

Any assistance the Company provides to or procures for you outside the terms, limitations or exclusions of this limited warranty will not constitute a waiver of such terms, limitations or exclusions, nor will such assistance extend or revive the warranty.

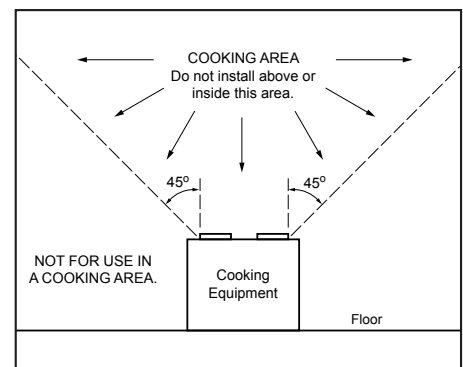
The Company will not reimburse you for any expenses incurred by you in repairing or replacing any defective Product, except for those incurred with the Company's prior written permission.

**How to Obtain Warranty Service:** To qualify for warranty service, you must (a) notify the Company at the address or telephone number stated below within seven (7) days of discovering the covered defect, (b) give the model number and part identification and (c) describe the nature of any defect in the Product or part. At the time of requesting warranty service, you must present evidence of the original purchase date. If you cannot provide a copy of the original written limited warranty, then the terms of the Company's most current written limited warranty for your particular product will control. The most current limited written warranties for the Company's products can be found at [www.broan.com](http://www.broan.com).

Broan-NuTone LLC 926 West State Street, Hartford, WI 53027 [www.broan.com](http://www.broan.com) 800-637-1453

**Installer: Leave this manual with the homeowner.**

**Homeowner: Use and Care information on page 3.**



#2 Chootoo Road, South Aranguéz, San Juan, Trinidad







# BROAN LIGHT DUTY SERIES- EXHAUST FAN INSTALLATION GUIDE

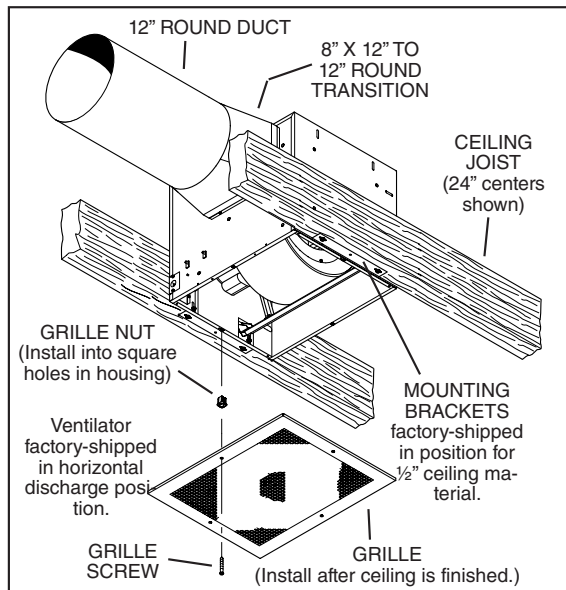
**BROAN**

LOSONE SELECT®  
L900 SERIES • L1500 SERIES

Page 2

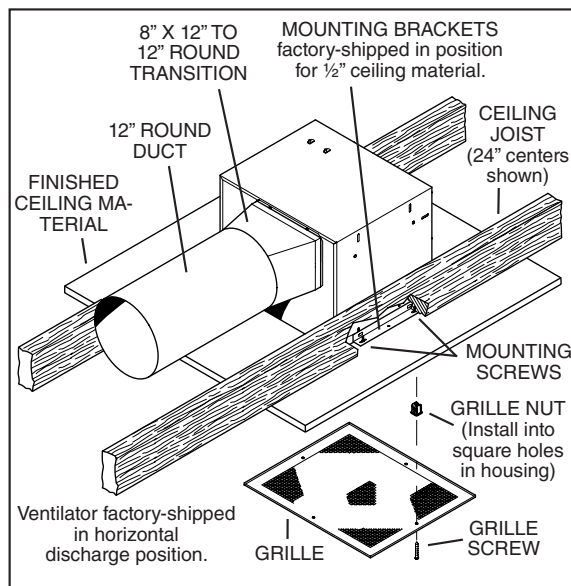
## TYPICAL INSTALLATION

### MOUNTING (New Frame Construction)



Factory-shipped unit installed in new construction.

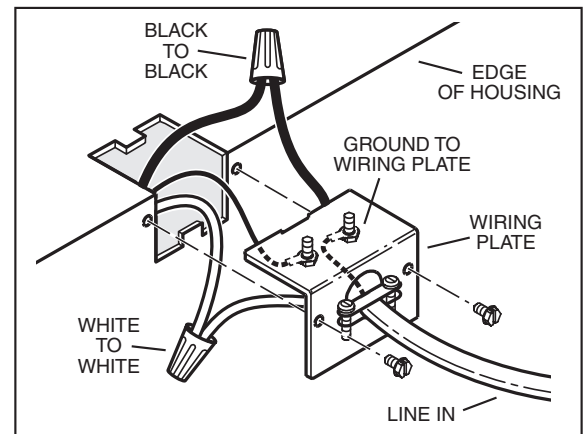
### MOUNTING (Existing Frame Construction)



Factory-shipped unit installed in existing construction.

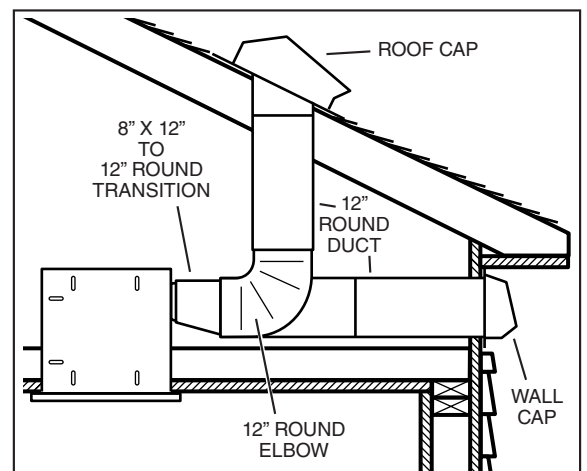
## TYPICAL INSTALLATION

### WIRING



Ventilator can be wired from outside of housing. Use UL approved connectors to wire per local codes.

### DUCTING (Horizontal blower discharge)



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

### IMPORTANT:

#### Remove shipping tape from damper

Remove the shipping tape from the damper flap and make sure that damper flap opens and closes freely inside the ductwork. Use duct tape to make ductwork connections secure and air-tight.



#2 Chootoo Road, South Aranguz, San Juan, Trinidad





# BROAN LIGHT DUTY SERIES- EXHAUST FAN INSTALLATION GUIDE

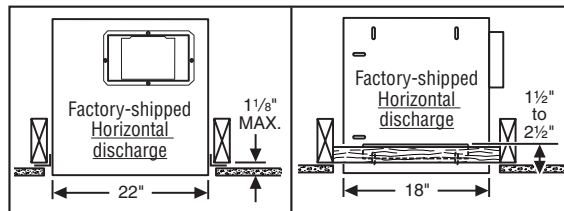


LOSONE SELECT®  
L900 SERIES • L1500 SERIES

Page 3

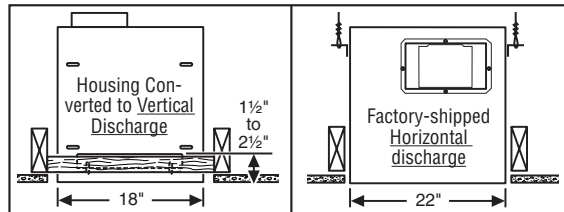
## MOUNTING OPTIONS

1/4-20 hex nuts secure mounting brackets to housing. Loosen and re-tighten or remove and replace nuts as necessary for desired mounting bracket position.



Mounting brackets in factory-shipped position - mounted directly to joists. (Outlet parallel to joists.) (New construction)

Mounting brackets flipped over and mounted to additional framing. (Outlet perpendicular to joists.) (New or Existing construction)

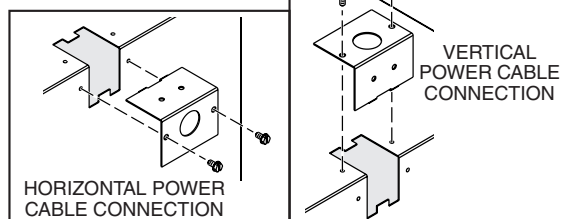


Mounting brackets flipped over and mounted to additional framing. (Outlet vertical.) (New or Existing construction)

Mounting brackets flipped over and mounted to top of housing. Housing secured with cables. (Outlet parallel to joists.) (New or Existing construction)

## WIRING OPTIONS

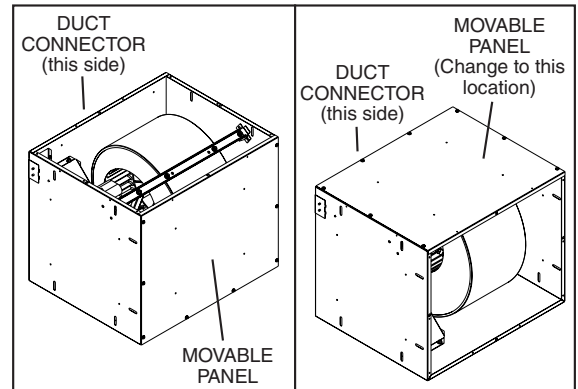
### WIRING PLATE POSITION



Wiring plate mounts to side or top of housing.

## DUCTING OPTIONS

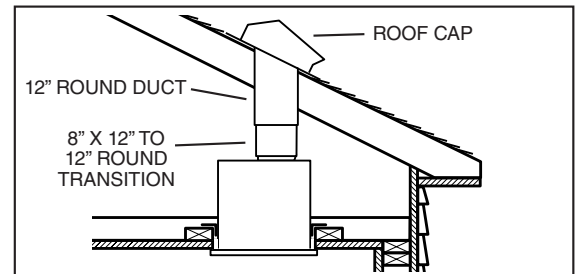
### BLOWER DISCHARGE POSITIONS



Ventilator shown in horizontal discharge position. (Factory shipped)

Ventilator shown in vertical discharge position. (Change movable panel to new location as shown.)

### DUCTING (Vertical blower discharge)



Typical ductwork connection to a ventilator converted to vertical discharge.

## USE AND CARE

Ventilator is designed for continuous operation. If desired, it may be controlled using an on/off switch or a solid-state, variable speed control. Follow wiring instructions packed with control, and adhere to all local and state codes, and the National Electrical Code.

**WARNING:** To reduce the risk of electric shock, disconnect from power supply before servicing.

**To clean grille:** Use appropriate vacuum attachment or remove grille and clean with a soft cloth and mild soap or detergent. Dry grille thoroughly before reinstalling.

**To clean blower assembly:** Remove grille, unplug blower from housing, remove blower mounting nuts, and carefully remove blower from housing. Use appropriate vacuum attachment or a soft cloth and mild soap or detergent to clean blower discharge area and wheel. **DO NOT ALLOW WATER TO ENTER MOTOR.** Make sure blower assembly is completely dry before reinstalling.

Motor is permanently lubricated. Do not oil or disassemble motor.



#2 Chootoo Road, South Aranguez, San Juan, Trinidad





# BROAN LIGHT DUTY SERIES- EXHAUST FAN INSTALLATION GUIDE

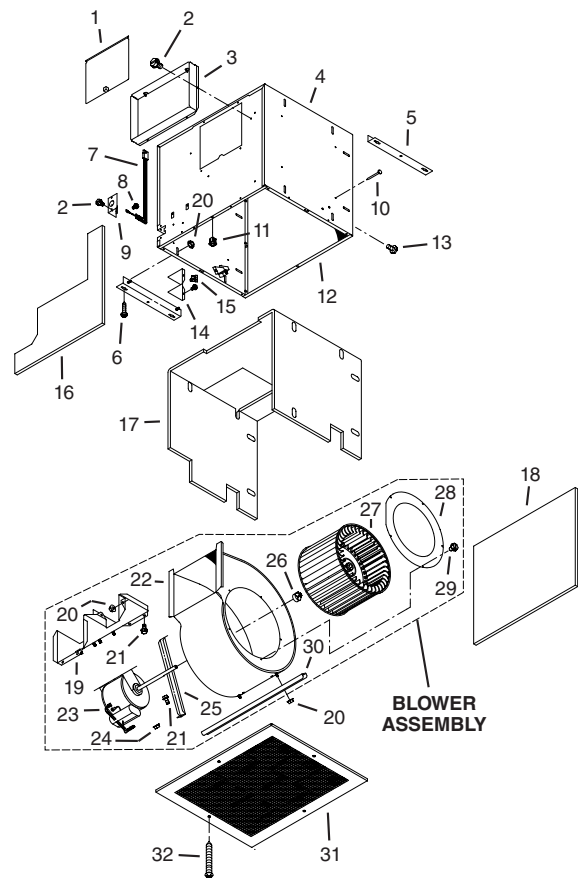


LOSONE SELECT®  
L900 SERIES • L1500 SERIES

## SERVICE PARTS

KEY NO.	PART NO.	DESCRIPTION
1	97014853	Damper Flap
2	99150415	Screw, #8B x 1/4" (10 req.)
3	98009520	Duct Connector
4	97014784	Housing Assembly
5	97014728	Mounting Bracket (2 req.)
6	99150591	Mounting Screw, #10-12 x .625 (4 req.)
7	97006142	Wiring Harness
8	99150471	Ground Screw, #10-32 x 1/2" (2 req.)
9	98005512	Wiring Adapter Plate
10	99420466	Insulation Mounting Clip (16 req.)
11	99420470	Grille Nut (4 req.)
12	98009518	Movable Housing Panel
13	93150487	Screw, #10-24 x .375* (8 req.)
14	98005513	Outlet Box Cover
15	99400035	Strain Relief Bushing
16	99500394	Insulation, Front
17	99500393	Insulation, Base
18	99500395	Insulation, Back
19	97014788	Motor Bracket
20	99260477	Whiz Nut, 1/4"-20* (11 req.)
21	99200202	Screw, 1/4"-20 x 1/2" (5 req.)
22	97014785	Blower Scroll
23	99080490	Motor (L900)
	99080491	Motor (L1500)
	99080501	Motor (L900C)
	99080502	Motor (L1500C)
	99080511	Motor (L900EX)
	99080512	Motor (L1500EX)
24	93260447	Nut, Hex Flange 5/16-18* (5 req.)
25	98009516	Support Bracket
26	99680019	Wheel Clamp
27	99020274	Blower Wheel (includes Key No. 26)
28	98009514	Inlet Ring
29	99150417	Screw, #8-18 x 1/4" (5 req.)
30	98009513	Scroll Support Channel
19-30		Blower Assembly Complete (Includes Key Nos. 19 thru 30)
	97014848	(L900)
	97014849	(L1500)
	97014886	(L900C)
	97014887	(L1500C)
	97014896	(L900EX)
	97014897	(L1500EX)
31	98009522	Grille
32	99150472	Grille Screw (4 req.)

## SERVICE PARTS



Order replacement parts by PART NO. - not by KEY NO.  
\* Standard hardware - may be purchased locally.



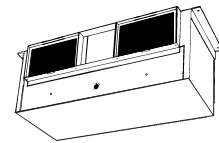


# BROAN LIGHT DUTY SERIES- EXHAUST FAN INSTALLATION GUIDE

## BROAN

MODELS L2000L • L3500EXL

## LOSONE SELECT® IN-LINE CABINET VENTILATORS



Page 1

### READ AND SAVE THESE INSTRUCTIONS

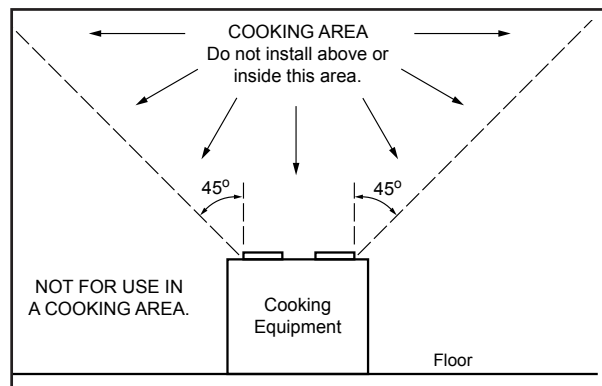
#### WARNING

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE 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 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.
3. Installation work and electrical wiring must be done by a qualified 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 backdrafting. 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. This unit must be grounded.

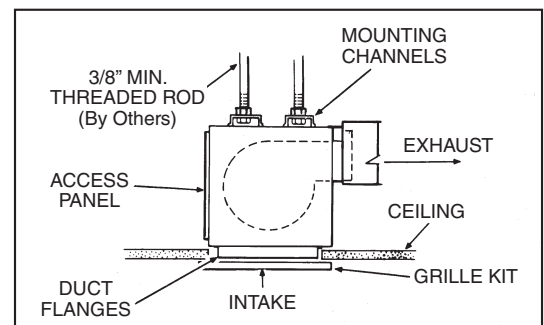
#### CAUTION

1. For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors.
2. To avoid motor bearing damage and noisy and/or unbalanced impellers, keep drywall spray, construction dust, etc. off power unit.
3. Please read specification label on product for further information and requirements.



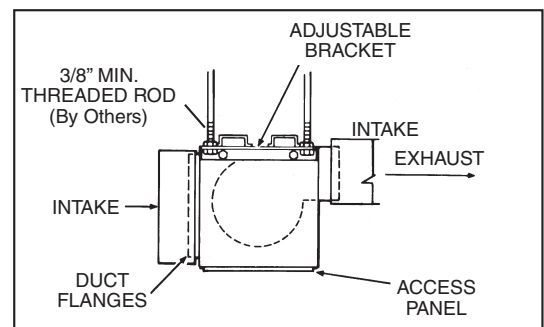
#### PLAN INSTALLATION

##### MOUNTING (*Right-angle Discharge*)



*Factory shipped ready to be installed as a ceiling ventilator with right-angle discharge.*

##### MOUNTING (*In-line Configuration*)



*Converted for in-line applications.*

**Installer: Leave this manual with the homeowner.**

**Homeowner: Use and Care information on page 3.**





# BROAN LIGHT DUTY SERIES- EXHAUST FAN INSTALLATION GUIDE

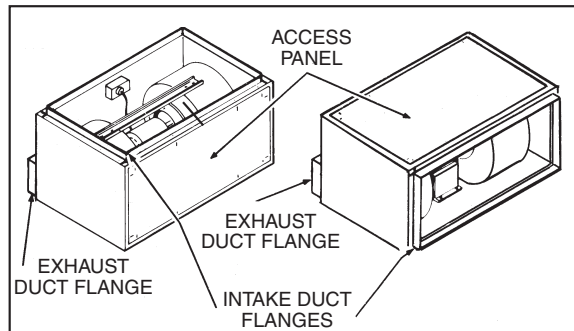
**BROAN**

MODELS L2000L • L3500EXL

Page 2

## PLAN INSTALLATION (cont.)

### CONVERTING FROM RIGHT-ANGLE TO IN-LINE



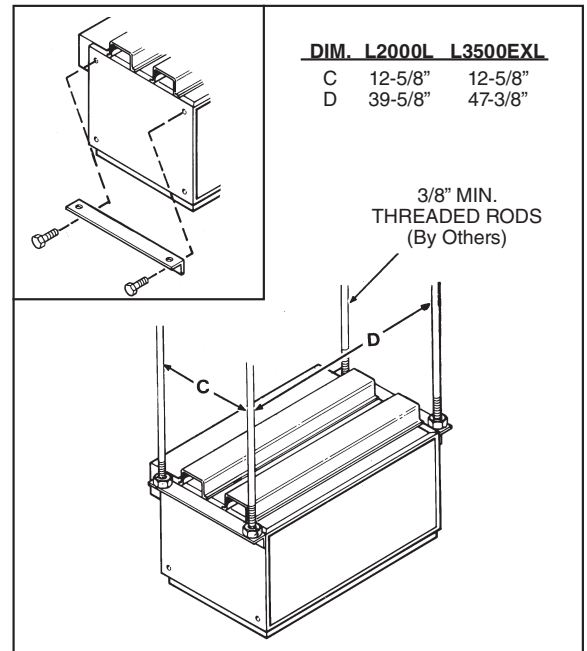
Remove and reverse duct flanges and access panel positions on housing.

For correct intake and exhaust duct size, see Table 1.

TABLE 1

MODEL	INTAKE DUCT SIZE	EXHAUST DUCT SIZE
L2000L	12-3/8" x 35-3/4"	7-3/4" x 33-3/4"
L3500EXL	14-1/2" x 43-1/2"	9-3/4" x 41-3/8"

## MOUNTING OPTIONS

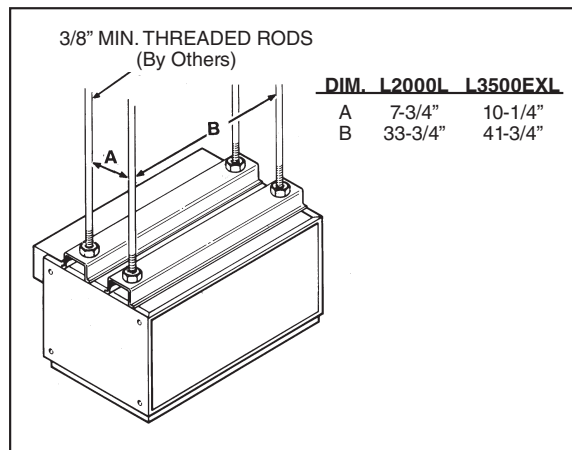


Mounting with threaded rod through adjustable mounting brackets located at top of housing.

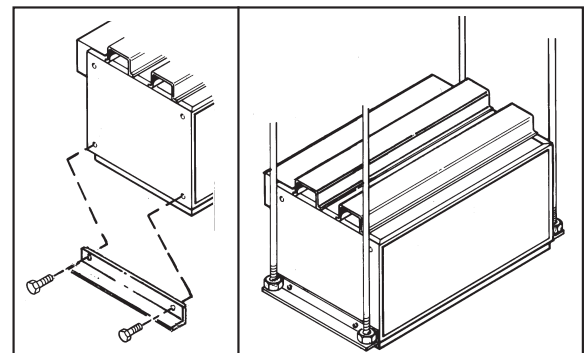
## MOUNTING OPTIONS

Provide solid support to minimize sound levels. There are two basic mounting methods for these units.

Mounting brackets can be bolted to housing ends in a variety of configurations. Use screws and nuts provided in parts bag.



Typical mounting with threaded rod through mounting channels on top of housing.



Mounting with threaded rods through adjustable mounting brackets located at bottom of housing.

If installing unit as a ceiling ventilator, make sure that either duct flanges or housing will be flush with finished ceiling. Duct flanges may be removed and discarded if they interfere with a ceiling installation.





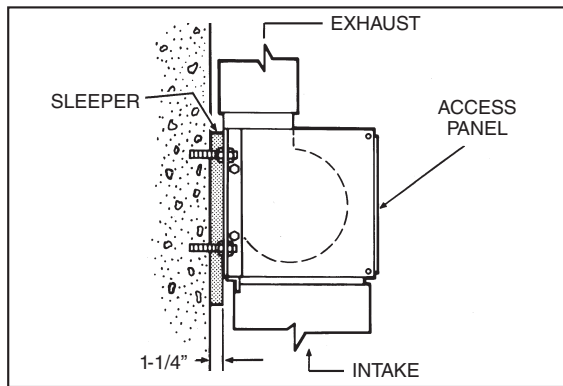
# BROAN LIGHT DUTY SERIES- EXHAUST FAN INSTALLATION GUIDE

**BROAN**

MODELS L2000L • L3500EXL

Page 3

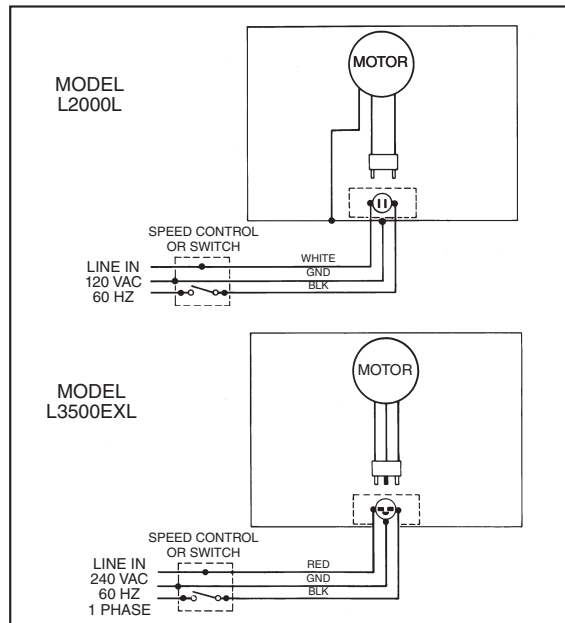
## MOUNTING OPTIONS



Typical wall mounting with 3/8" threaded fasteners (by others) through mounting brackets.

## ELECTRICAL CONNECTIONS

Connect electrical power cable to housing with proper connector for type of cable used. Provide 6" leads inside wiring box.

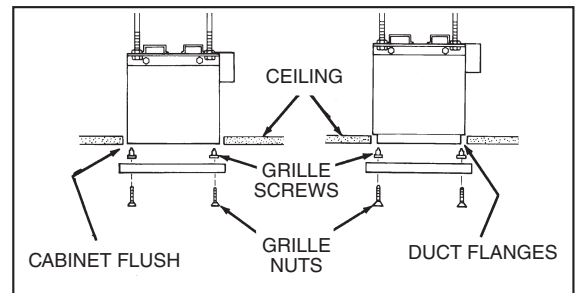


## ACCESSORIES

DAMPER MODEL	GRILLE KIT	SPEED KIT	VIBRATION CONTROL	HANGER
L2000L	D100	G102	72V / 72W	V104
L3500EXL	D101	G103	75V	V104

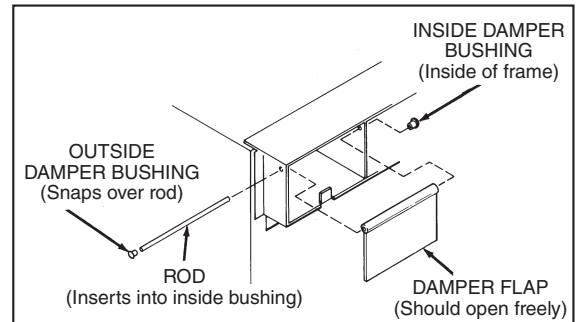
## ACCESSORY INSTALLATIONS

If ventilator will discharge directly outside, install a damper kit to prevent backdrafts. A grille kit is available for applications where ventilator is installed with direct or remote room air intake.



Snap screw bushings into square openings around intake opening. Install grille with screws provided.

**NOTE:** If duct flanges around intake opening interfere with installation, remove them. Make sure that housing is flush with finished ceiling when ventilator is mounted.



Install damper flap using rod provided.

## USE AND CARE

Ventilator is designed for continuous operation. If desired, it may be controlled using an on/off switch or a solid-state, variable speed control. Follow wiring instructions packed with control, and adhere to all local and state codes, and the National Electrical Code.

**⚡ WARNING:** To reduce the risk of electric shock, disconnect from power supply before servicing.

**To clean grille:** Use appropriate vacuum attachment or remove grille and clean with a soft cloth and mild soap or detergent. Dry grille thoroughly before reinstalling.

**To clean blower assembly:** Remove either access panel or ceiling grille. Unplug blower assembly. Provide safe support for blower assembly. Remove blower mounting screws and lift blower assembly out of housing. Gently vacuum housing and blower motor. Vacuum or gently wash blower wheels and housings. **DO NOT ALLOW WATER TO ENTER MOTOR.** Make sure blower assembly is completely dry before reinstalling. Replace blower assembly in housing and plug assembly in. Replace grille and/or access panel.

Motor is permanently lubricated. Do not oil or disassemble motor.



#2 Chootoo Road, South Aranguez, San Juan, Trinidad





# BROAN LIGHT DUTY SERIES- EXHAUST FAN INSTALLATION GUIDE

## BROAN®

MODELS L2000L • L3500EXL

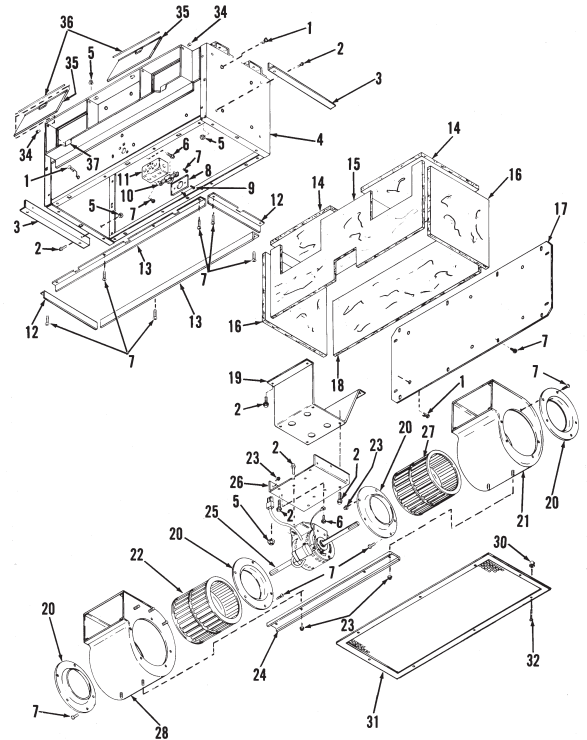
Page 4

### SERVICE PARTS

KEY NO.	MODEL L2000L PART NO.	QTY.	MODEL L3500EXL PART NO.	QTY.	DESCRIPTION
1	99420466	27	99420466	27	Insulation Clip
2	99170261	16	99170261	18	#5/16 - 18 x 1/2 Ser- rated Hex Head Screw
3	98006462	2	98006462	2	Mounting Bracket
4	97008107	1	97008108	1	Cabinet Body
5	93260447	12	93260447	14	#5/16 - 18 Lock Nut
6	99150471	2	----	--	#10-32 x 1/2 Green Ground Screw
7	99150490	42	99150490	44	#10B x 3/8 Ser- rated Pan Head Screw
8	99270658	1	99270658	1	Outlet Box Cover
9	99160319	2	99160319	2	#6-32 x 3/8 Ma- chine Screw
10	99270656	1	99270657	1	Receptacle
11	99270659	1	99270659	1	Outlet Box
12	98006364	2	98006376	2	Duct Inlet Flange - short
13	98006363	2	98006375	2	Duct Inlet Flange - long
14	99500335	2	99500339	2	Bottom Panel Insulation
15	99500333	1	99500337	1	Back Panel Insula- tion
16	99500334	2	99500338	2	End Panel Insula- tion
17	98006699	1	98006700	1	Access Panel
18	99500336	1	99500340	1	Access Panel Insulation
19	97007450	1	97007451	1	Blower Platform
20	98006475	4	98006476	4	Venturi Ring
21	97007453	1	97007455	1	Right Hand Scroll
22	99020172	1	99020174	1	Blower Wheel - clockwise
23	99260477	10	99260477	12	1/4-20 Lock Nut
24	98006365	1	98006377	1	Blower Support Channel
25	99080194	1	99080195	1	Motor
26	98006381	1	98006382	1	Motor Platform
27	99020173	1	99020175	1	Blower Wheel - counter-clockwise
28	97007452	1	97007454	1	Left Hand Scroll
29	G-102	1	G-103	1	Grille Kit (contains Key Nos. 30, 31 & 32)
30	99420470	8	99420470	8	Grille Nut
31	98006477	1	98006478	1	Grille
32	99150472	8	99150472	8	#8-18 x 1 1/4 Grille Screw
33	D-100	1	D-101	1	Damper Kit (con- tains Key Nos. 34, 35, 36 & 37)
34	99100379	4	99100379	4	Damper Bushing
35	98006479	2	98006480	2	Damper Flap
36	98006481	2	98006472	2	Damper Rod
37	99760002	2	99760002	2	Damper Flap Mag- net
**	97007448	1	97007448	1	Parts Bag (con- tains 4 ea. of Key Nos. 2 & 5)

Order replacement parts by PART NO. - not by KEY NO.  
\*\* Not Shown

### SERVICE PARTS



### WARRANTY

#### BROAN ONE YEAR LIMITED WARRANTY

Broan warrants to the original consumer purchaser of its products that such products will be free from defects in materials or workmanship for a period of one year from the date of original purchase. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

During this one-year period, Broan will, at its option, repair or replace, without charge, any product or part which is found to be defective under normal use and service.

THIS WARRANTY DOES NOT EXTEND TO FLUORESCENT LAMP STARTERS AND TUBES. This warranty does not cover (a) normal maintenance and service or (b) any products or parts which have been subject to misuse, negligence, accident, improper maintenance or repair (other than by Broan), faulty installation or installation contrary to recommended installation instructions.

The duration of an implied warranty is limited to the one-year period as specified for the express warranty. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

BROAN'S OBLIGATION TO REPAIR OR REPLACE, AT BROAN'S OPTION, SHALL BE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY. BROAN SHALL NOT BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH PRODUCT USE OR PERFORMANCE. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. This warranty supersedes all prior warranties.

To qualify for warranty service, you must (a) notify Broan at the address stated below or telephone: 1-800-637-1453, (b) give the model number and part identification and (c) describe the nature of any defect in the product or part. At the time of requesting warranty service, you must present evidence of the original purchase date.

In the U.S., contact: **Broan-NuTone LLC**, 926 West State Street, Hartford, WI 53027 (1-800-637-1453)

In Canada, contact: **Broan-NuTone Canada**, 1140 Tristar Drive Mississauga, Ontario L5T 1H9 (1-888-882-7626)

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