

# The DRAGON

**Centrifugal Garage Fan**

**Dragon Models -100, 150, 200**



***Product Manual & Installation Guide***

***READ AND SAVE THESE INSTRUCTIONS***



**Tamarack**  
Technologies, Inc.

*Ventilation Solutions*

**www.tamtech.com**

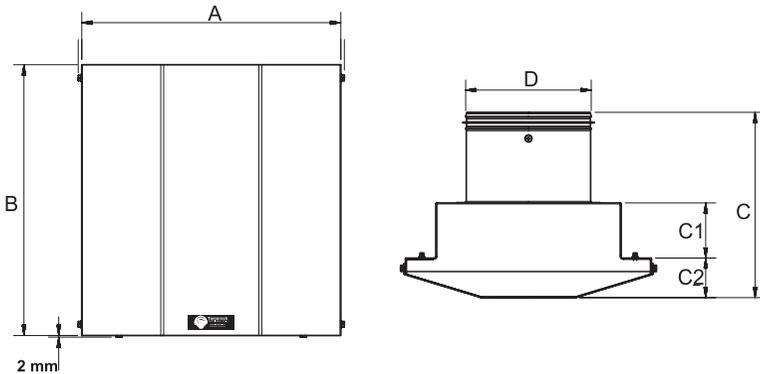
800-222-5932

320 Main Street  
Buzzards Bay, MA 02532

M – F 8 AM - 5 PM EST

Date of Purchase \_\_\_\_\_ Place of Purchase \_\_\_\_\_

## Dimensional Data



Model	A	B	C	C1	C2	D
Dragon-100	13 ¼ 337	13 ¼ 337	9 228	3 76	2 7/16 62	4 100
Dragon-150	15 ½ 394	13 ¼ 337	10 3/16 256	3 76	2 7/16 62	6 150
Dragon-200	15 ½ 394	16 1/16 408	11 7/16 290	3 3/8 87	2 7/16 62	8 200

## Fan Installation

**WARNING: TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR INJURY, OBSERVE THE FOLLOWING:**

- Use this unit only in the manner intended by the manufacturer. If you have any questions contact the manufacturer.
- Before servicing or cleaning the unit, switch the power off at the 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.
- Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes & standards including related construction.
- When cutting or drilling into wall or roof, do not damage electrical wiring and other hidden utilities.
- CAUTION: For General Ventilating Use Only. Do Not Use To Exhaust Hazardous Or Explosive Materials And Vapors.**
- DO NOT USE** with heated air in excess 140°F (60°C).

## **Select Fan Location**

When selecting a location to install the Dragon fan, take into consideration the application of the product, the locations of fresh air intakes, and sound generated by the Dragon unit. If ductwork is to be used, consider the path of the ducting material.

The fan should be located a minimum of 6 feet horizontally and 8 feet vertically from any fresh air intakes for HVAC systems, heat recovery systems, etc. to prevent exhaust air streams from being re-introduced into the occupied space. Doors or windows that are frequently opened during pleasant seasons may also be considered fresh air intakes so keep this in mind when selecting the location of the Dragon.

## **Locate Mounting and Through Holes**

Once the location on the exterior wall where the fan is to be mounted has been selected, mark all screw and hole locations utilizing the included template. Cut the holes through the wall for the duct connection and for the electrical conduit. Measure the thickness of the wall and the length of the duct flange that is part of the Dragon fan. Cut a length of duct (not supplied) so that once connected to the duct flange, it will eliminate air leakage into the wall cavity. Attach grille or fan guard (not supplied) to prevent objects from entering ductwork and fan.

If mounting the fan on a masonry wall, drill four holes and insert wall anchors. If mounting to wooden structure, you will utilize wood screws to secure the Dragon to the wall. If the fan is to be mounted on a wall surface which is not flush such as lapped siding, a mounting plate to provide for a flush fit needs to be made.

## **Mount the Fan**

Insert electrical supply through the wall. Attach the duct extension to the Dragon making sure that the connection is secure. Apply a generous amount of exterior silicone caulk (not supplied) to backplate of the fan to ensure an airtight/waterproof connection between the fan and the wall surface. If a mounting frame is used in conjunction with lapped siding, be certain to apply a generous amount of caulk between the frame and the wall as well as the fan backplate and the frame. Mount the fan to the wall.

**Note: Be certain to make an airtight seal around all interior wall penetrations before attaching duct work.**

## **Electrical Connection**

All Dragon series fans operate from a standard 120V 60Hz A.C. electrical supply. All wiring must be carried out in accordance with applicable state and local

buildings codes. **Note: A licensed Electrician may be needed. If unsure, consult with your local Electrical Inspector.**

## **WIRING INSTRUCTIONS**

**WARNING! Make sure that power supply is disconnected and locked to prevent accidental activation.**

1. Remove the screws securing the terminal box cover plate located on the fan motor mounting bracket. All fan motor and capacitor connections are pre-wired to the electrical terminal strip. A 3/8" romex type cable restraint connector will be needed to secure the wiring through the knockout provided on the side of the terminal box.
2. Bring incoming electrical service through the romex connector and the fan electrical service opening. Using a small regular screwdriver, tighten the neutral (white) wire of the incoming 115V power supply under the open terminal strip port opposing the motor Blue wire. Tighten the line (black) wire of the incoming supply under the open terminal opposing the motor Black wire. Now, secure the source ground to the open terminal strip opposing the Green/Yellow Wire.
3. Secure the romex connector to the terminal box. Secure the incoming supply using the romex connector. Replace the fan terminal box cover.
4. Apply a generous bead of silicone caulk around the electrical provision hole in the backplate of the fan to provide for a secure seal.

## **CONTROLS**

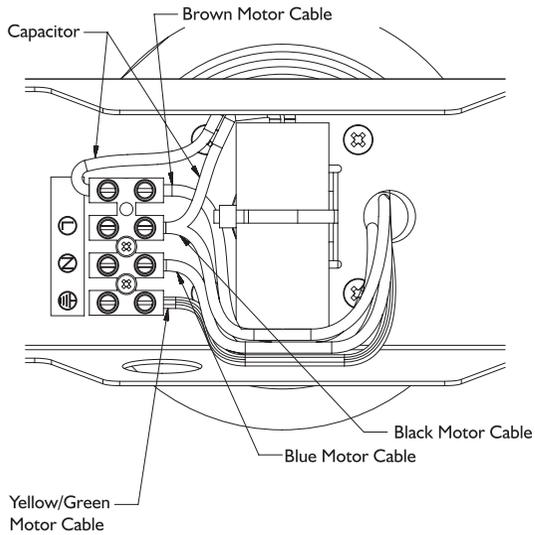
The Dragon can be controlled by several methods. A standard SPST wall switch or 2, 3-way "hallway" switches. There are many wall mounted crank timers with 2,4 or 6 hour setting available. Some automatic garage door openers will allow the Dragon to operate for a preset interval after the door opens or closes. Check with the manufacturer of your door opener about these options.

## **MAINTENANCE INSTRUCTIONS**

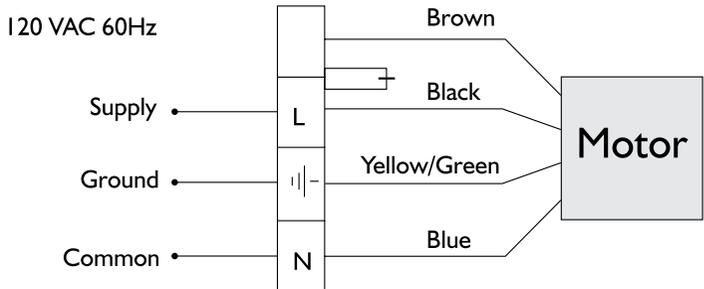
1. Since fan bearings are sealed and provided with an internal lubricating material, no additional lubrication is necessary.
2. It is recommended that the cover screen is checked on a regular basis to check for any obstructions and the cover is removed and the motor and wheel are inspected and cleaned as necessary.

**No other maintenance is necessary.**

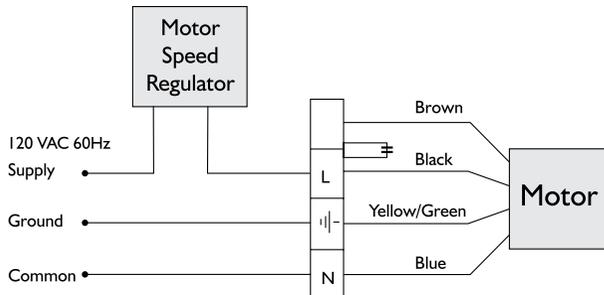
# WIRING DIAGRAMS



Motor without speed controller



Motor with speed controller



## **LIMITED WARRANTY**

If, within the period of three years from the date of purchase, the Dragon (the Product) is defective or malfunctions in normal home use, Tamarack Technologies, Inc. will repair or replace the Product at its discretion without charge for labor or materials. Customer is responsible for shipping charges.

Conditions, Exclusions, and Limitations-This Warranty is subject to the following conditions, exclusions and limitations:

**THIS WARRANTY DOES NOT COVER PROBLEMS RESULTING FROM INSTALLATION, OPERATION OR MAINTENANCE THAT HAS BEEN UNDERTAKEN OTHER THAN IN ACCORDANCE WITH THE INSTRUCTIONS. THIS WARRANTY DOES NOT COVER PROBLEMS RESULTING FROM DEFECTS IN OR CAUSED BY ASSOCIATED EQUIPMENT (FURNACES, SOLARIA, ETC.); FROM REPAIRS OR MODIFICATIONS ATTEMPTED BY PERSONS OTHER THAN TAMARACK TECHNOLOGIES, INC.; FROM ABUSE, ACCIDENTAL OR SHIPPING DAMAGE OR ACTS OF GOD. THIS WARRANTY DOES NOT APPLY TO THE PRODUCT USED OUTSIDE THE UNITED STATES, ITS TERRITORIAL POSSESSIONS, AND CANADA. EXCEPT AS SET FORTH ABOVE, NO EXPRESS OR IMPLIED WARRANTY IS GIVEN OR AUTHORIZED BY TAMARACK TECHNOLOGIES, INC. AND ALL OTHER SUCH WARRANTIES ARE EXPRESSLY DISCLAIMED. ANY WARRANTY OR MERCHANTABILITY OF FITNESS FOR ANY PARTICULAR PURPOSE SHALL BE LIMITED TO THE WARRANTY HEREUNDER. MOREOVER, ANY LIABILITY OF TAMARACK TECHNOLOGIES, INC. FOR THE PRODUCT SHALL BE LIMITED TO THE REPLACEMENT VALUE OF THE PRODUCT. IN NO EVENT SHALL TAMARACK TECHNOLOGIES, INC. BE LIABLE FOR ANY INCIDENTAL DAMAGES OR FOR ANY CONSEQUENTIAL PROPERTY OR COMMERCIAL DAMAGES, IRRESPECTIVE OF THE CAUSE THEREOF, OCCURRING EITHER DURING OR AFTER THE WARRANTY PERIOD, INCLUDING WITHOUT LIMITATION ANY DAMAGES TO ANY PART OF A BUILDING OR ITS CONTENTS.**

**NOTE: SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES AND SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.**



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