

# ***BOLT 3***

## **OPERATION MANUAL**



**PARTS - SERVICE - ACCESSORIES**

**863.294.3206 / 800.237.7841**

**[www.certainteedmachineworks.com](http://www.certainteedmachineworks.com)**

**PLEASE READ THIS MANUAL BEFORE PLACING YOUR NEW  
BOLT 3 INSULATION BLOWING MACHINE INTO SERVICE**

## Contents

Introduction .....	1
Specifications .....	1
Accessory Kit .....	1
Optional Equipment.....	2
Safety .....	3
Main Components .....	5
Machine Operation.....	8
Preventive .....	9
Electrical Schematic .....	15
Troubleshooting .....	13
Warranty.....	16

## Figure Index

<b>Figure</b>	<b>Page</b>	<b>Description</b>
1	6	Base and Mechanical Components
2	7	Control Panel
3	11	Air Lock Feeder
4	12	Machine Side and Air Lock Feeder
5	12	Inside View of Air Lock Feeder
6	12	Rotor Assembly and Seal Installation
7	13	Rotor Assembly Installation
8	15	Electrical Schematic

## Introduction

CertainTeed Machine Works **BOLT 3** Insulation Blowing Machine is designed for use by professional contractors, new insulation contractors, renovators and remodelers. The **BOLT 3** machine has a two-piece design, a 25 ft<sup>3</sup> capacity hopper, dual-blowers for a better blowing arc, and a removable electrical panel for ease of maintenance. The **BOLT 3** high-performance blowing machine is an industry leading insulating machine offering superior material conditioning, long-lasting dependability, and ease of use.

Please read this manual thoroughly before operating the **BOLT 3**.

## Specifications

Model: **BOLT 3** Insulation Blowing Machine (SKU # 646238)

Height: 69 inches

Length: 32 inches

Width: 47 inches

Weight: 475 pounds

Electric Motor: 3/4 hp, 120V, Single-phase

Hopper Capacity: 25 ft<sup>3</sup>

Standard Hose Size: 3" diameter

Standard Hose Length: 100 feet

## Accessory Kit

Your new **BOLT 3** machine is equipped with:

- Two 50' Heavy Duty Power Cords (SKU # 163738)
- One 100' Remote Control Cord (SKU # 211324)
- One Air Filter (SKU # 211793)

## Optional Equipment

- Wireless Remote (SKU # 163606)
- 150' Wired Remote Cord (SKU # 212344)
- 100' Hose Package (SKU #212217)

SKU #	Quantity	Description
162885	2	Mark II Clear Hose 3.0" X 50'
210991	1	Hose Sleeve, 3.0"
162483	4	3.0" SS Hose Clamp

- 150' Hose Package (SKU #212343)

SKU #	Quantity	Description
162885	3	Mark II Clear Hose 3.0" X 50'
210991	2	Hose Sleeve, 3.0"
162483	5	3.0" SS Hose Clamp

## Safety

The **BOLT 3** insulation blowing machine has full mechanical guarding and electrical disconnects for your safety. When using the **BOLT 3** machine the following precautions should always be followed:

1. Read all the instructions before using the insulation blowing machine.
2. Never operate the machine without all guards in place.
3. Never operate the machine without the hopper in place.
4. Never attempt to override safety devices.
5. Never operate the machine near children or pets.
6. Never reach into hopper or make contact with moving parts.
7. Never operate this equipment if the operator or equipment is standing in water, snow or rain.
8. Always unplug both power cords before removing the hopper or any guards.
9. Always unplug both power cords before servicing or cleaning the machine.
10. Do not operate the insulation blowing machine with a damaged cord or plug.
11. Store insulation blowing machine indoors when not in use.
12. Use of Power Cords
  - The machine requires the use of two power cords, rated for at least 15 amps
  - The power cord shall be a grounded, 3-wire cord
  - The power cords shall be rated for outdoor use
  - Connect to properly grounded outlets only

**Warning!!** If any foreign object should enter the machine; push the emergency stop button in (off), turn off the disconnect switch and unplug the power cords before retrieving the object. **Never reach into the machine while it is operating.**

Before you start the **BOLT 3** insulation blowing machine, make sure the machine hopper is securely attached to the base, the hopper is free of foreign objects, all guards are in place, the slide gate is not completely closed and the hose is attached firmly to the outlet port.

During machine operation, never stand on the **BOLT 3** machine. You may lose balance and fall onto the machine causing great bodily harm or death. Avoid placing foreign objects such as screws, nails, pieces of wood, etc., into the machine as they will damage the unit and may cause serious injury as the objects exits the machine. **Never** leave the machine unattended during operation.

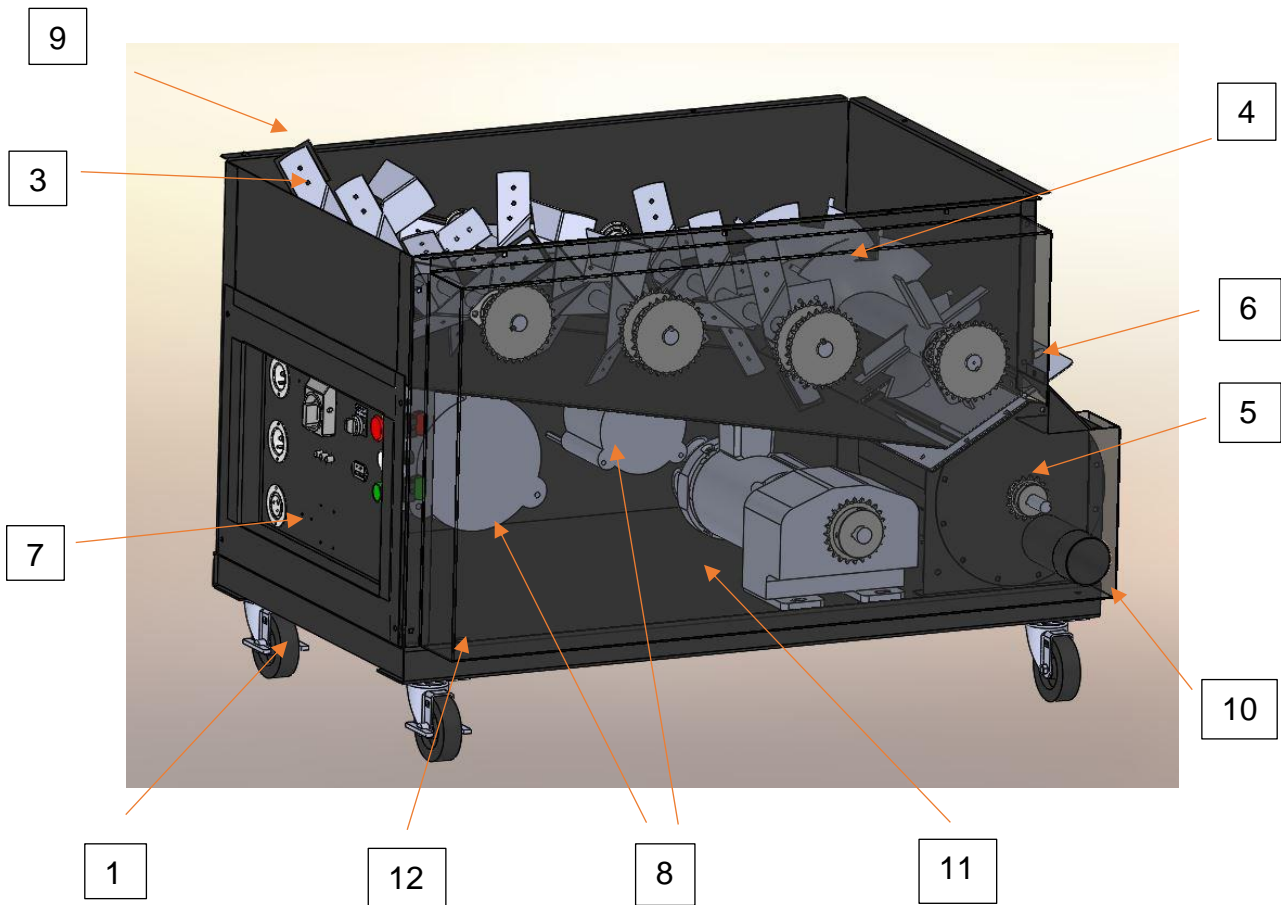
Dust masks or respirators, gloves, and safety shoes or boots should be worn while operating the equipment. Safety features are incorporated into the **BOLT 3** machine to protect operators from serious injury. Operate your machine according to the outlined instructions in this manual with all safety features in place and working properly. Operating the machine in an unsafe manner can result in serious injury or death.

## Main Components

Before using the **BOLT 3** insulation blowing machine this machine, familiarize yourself with the main components, operating features and safety requirements. Do not let familiarity with this machine make you careless.

1. **Base:** Bottom of the machine that is a reinforced steel base that houses the electric motor, speed reducer, caster wheels, airlock feeder, and blowers.
2. **Hopper:** Top part of the machine that has a hinged loading door.
3. **Agitator Assemblies:** Three agitator assemblies within the base of the machine rotate at a moderate speed to condition the material.
4. **Auger:** The patented spiked auger\* within the base of the machine rotates at a moderate speed to condition and drive insulation towards the airlock feeder.
5. **Airlock Feeder:** Located at the bottom of the base, the feeder meters the amount of conditioned insulation into the air stream of the blowing hose.
6. **Slide Gate:** Located above the airlock feeder is used to control the amount of conditioned insulation going into the airlock feeder.
7. **Control Panel:** The panel mounted to the base houses the switches and controls for the machine.
8. **Dual-Blowers:** The blowers are mounted to the base to provide the necessary air flow to move conditioned insulation through the blowing hose.
9. **Interlock Switch:** This switch is located on the back side of the machine as part of the safety system.
10. **Blowing Hose Outlet:** This outlet is located on the end of the airlock feeder with an attachment point for a 3.0" blowing hose.
11. **Electric Motor/Speed Reducer:** The drive motor is located on the bottom of the base to drive the agitator assemblies, auger, and airlock feeder.
12. **Front Guard:** Protects the machine mechanics and electrical assemblies

\*Patent nos. US8556200B2, US9592482B2, US10603672B2 and CA2726583C

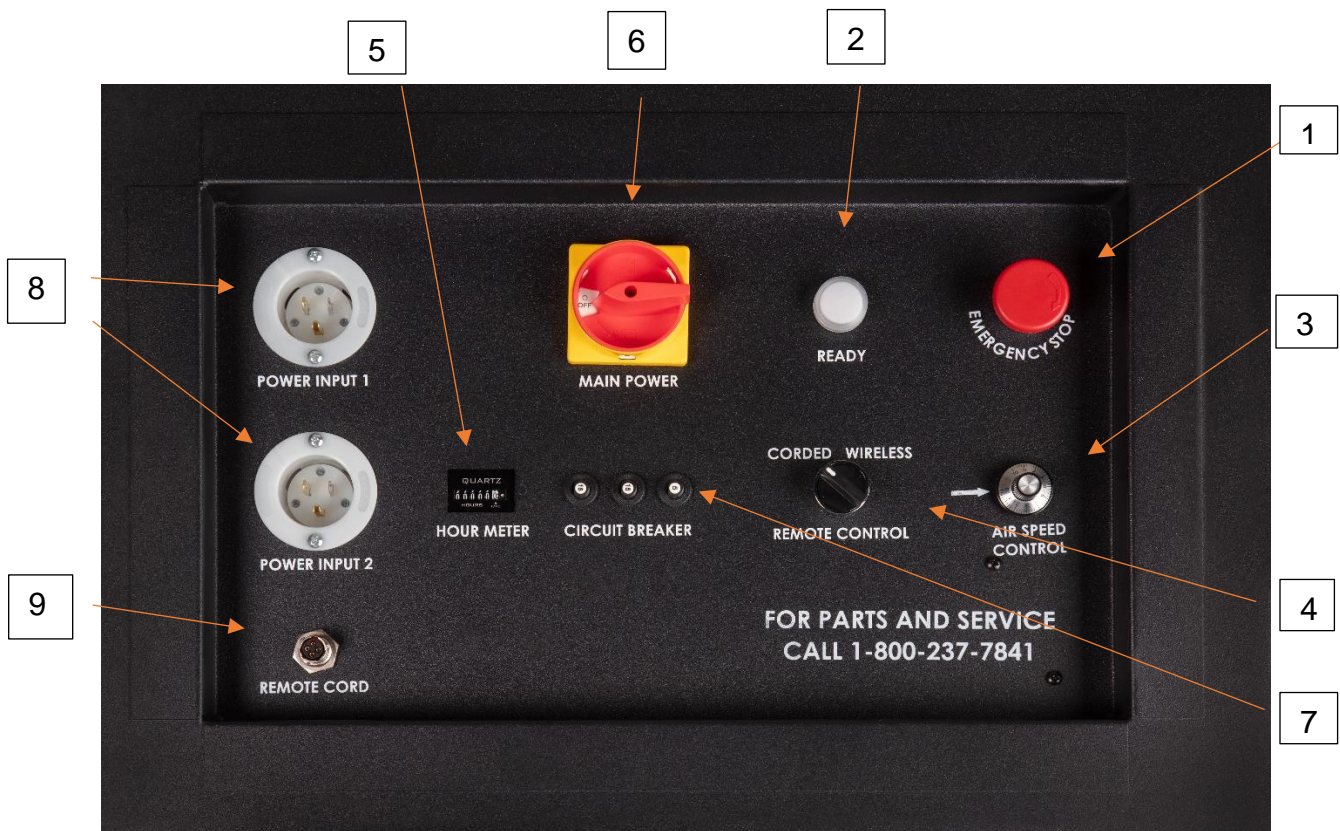


**Figure 1**



**Control Panel Components:**

1. **Emergency Stop:** Depress to stop the machine; turn and pull to release
2. **Ready Light:** The white light indicates the machine has satisfied all safety constraints and is ready for use
3. **Air Speed Control:** Used air flow adjustment
4. **Remote Control Selector Switch:** Positioned for the corded remote or wireless remote to control the machine
5. **Hour meter:** Displays the total number of hours the machine has run.
6. **Main Power Switch:** Used to supply or disconnect power to the machine
7. **Circuit Breakers:** Protect the machine's electrical system from power surges
8. **Power Input 1/2:** Plug connectors for the power cords
9. **Remote Cord:** Connector to plug in supplied remote control cord



**Figure 2**

## Machine Operation

1. Engage locks on casters.
2. Install Hopper onto machine base.
3. Set slide gate to proper position; Position #4 for most open blow fiberglass applications; Position #5 for cellulose
4. Install 3.0" diameter blow hose onto Airlock Feeder outlet port; 100' recommended
5. Plug machine in using two approved/supplied power cords. Two independent power circuits are required
6. Plug in corded remote cord (if applicable)
7. Disengage Emergency Stop
8. Position the Selector Switch to "Corded Remote" or "Wireless Remote".
9. Turn the Main Power switch to the "On" position.
  - a. The white "Ready Light" should come on unless the following unsafe conditions have been met:
    - Emergency Stop is engaged.
    - The hopper interlock switch is not depressed, indicating the hopper is installed incorrectly.
10. After all safety conditions are met and you are ready to begin the blowing process. Depress the toggle switch to "Air/Material" on the Corded Remote Cord or the "Air/Material" button on the Wireless Remote Control to begin the blowing process.
11. The Air Speed Control can be used to increase or decrease air flow from the main blower. For the best open blow performance adjust the knob clockwise to maximum output.

### Upon completion of the job:

1. Make sure blowing hose is empty by letting air only pass through
2. Turn electric motor off by moving the disconnect switch to the off position
3. Wait for machine to completely stop rotating
4. Unplug extension cords and store properly

5. Remove blowing hose, empty hopper (if necessary), and store properly

## Preventive Maintenance

Periodic preventative maintenance will keep your **BOLT 3** in good operating condition and reduce downtime. Keep the machine clean by preventing material from collecting on the vent holes and install a clean filter in the machine during operation.

**Airlock Feeder:** Worn or torn seals can greatly affect the **BOLT 3** performance allowing insulation and air to escape the feeder, producing a slow feed rate and lower coverage. CTMW recommends that the seals be changed every 250 hours of operation for optimal performance. Follow the directions on 'Seals Replacement' section to change seals.

**Casters:** Keep the casters clean of debris and dirt.

**Filter:** Replace filter when it becomes clogged or dark in color. Having a new filter in the machine will greatly increase performance and efficiency.

**Bearings:** Bearings are self-aligning, pre-lubricated, and double sealed. If the bearings seem noisy or damaged, replace the bearings.

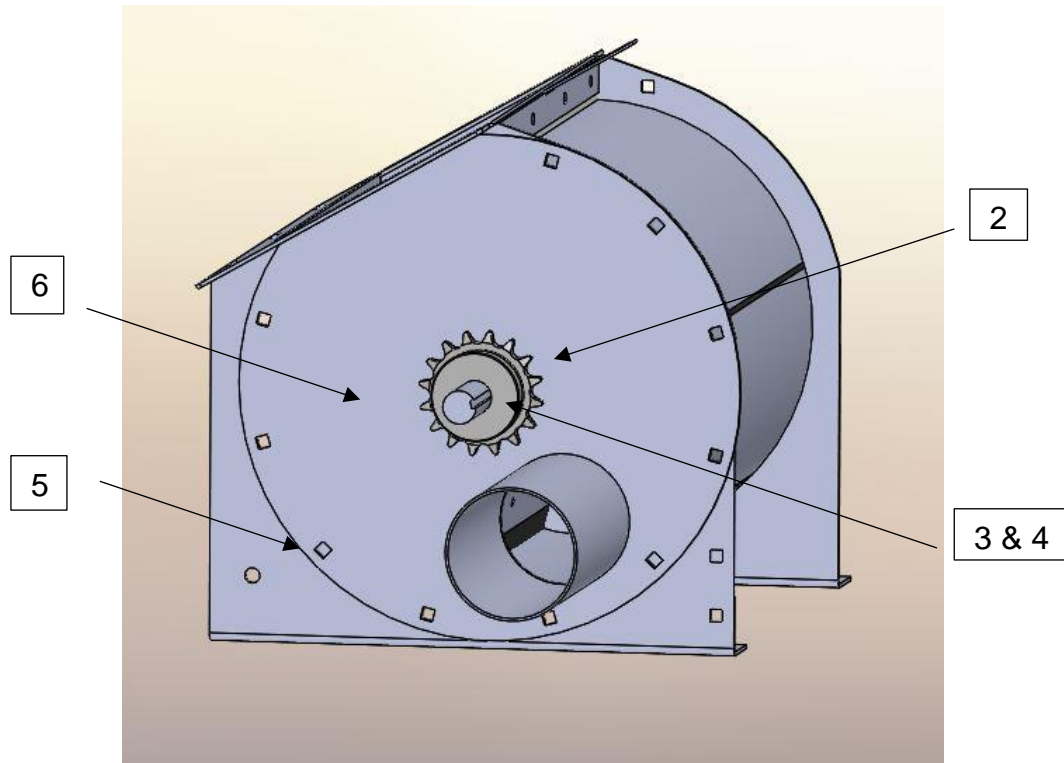
**Chain:** Lubrication is not to be used as this can cause the chain to collect material and wear the chain and sprockets prematurely. The chains should be taught but not overtightened. A loose chain should be replaced.

**Electric Motor/Speed Reducer:** The electric motor and speed reducer should run smoothly without interruption. Bad bearings, low voltage, or improper power supply could cause motor failure. If the motor will not run refer to the troubleshooting section.

**Agitators & Auger shaft assemblies:** The auger and steel agitators require no maintenance. Once extreme wear is noticeable on the metal agitators, auger, or shaft assembly they will each have to be replaced as a single unit.

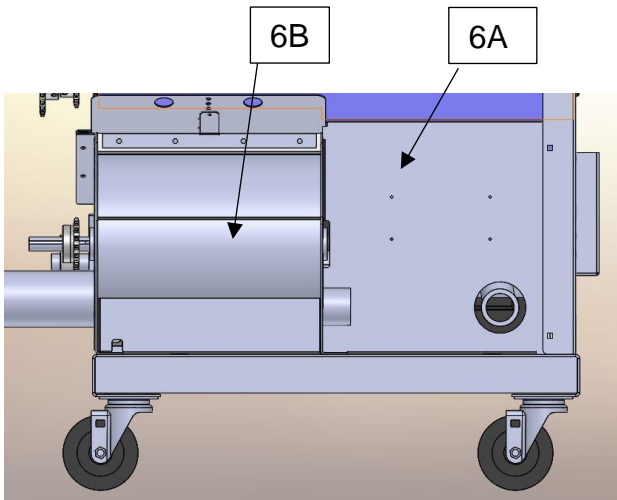
**Blower Motors:** If the blower produces noises or does not start refer to the troubleshooting section of this manual.

## Seal Replacement

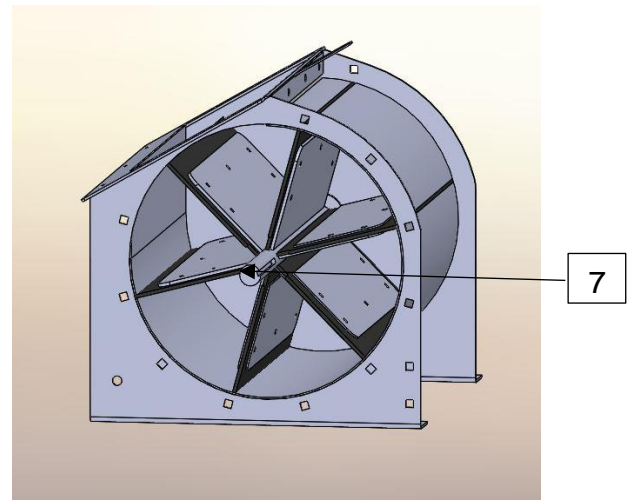


**Figure 3**

1. Remove the front guard to gain access to the Feeder
2. Remove the drive chain from the sprockets.
3. Remove the set screws securing the 16T sprocket to the airlock feeder shaft.
4. Remove the sprocket and shaft key.
5. Remove 10, ¼-20 carriage bolts securing the airlock feeder's front cover.
6. Remove the airlock feeder front cover by slowly pulling it forward.

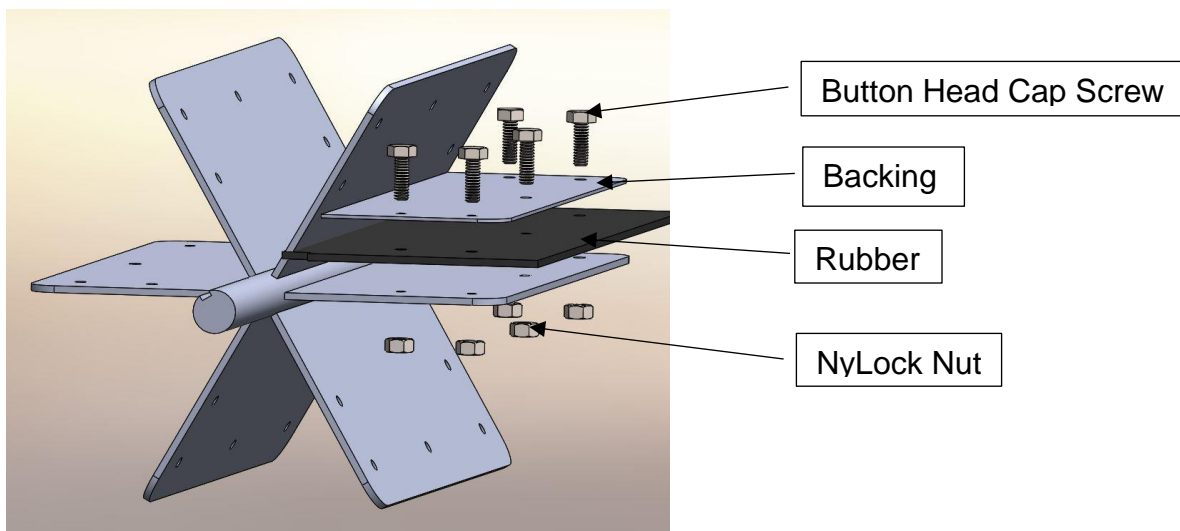


**Figure 4**



**Figure 5**

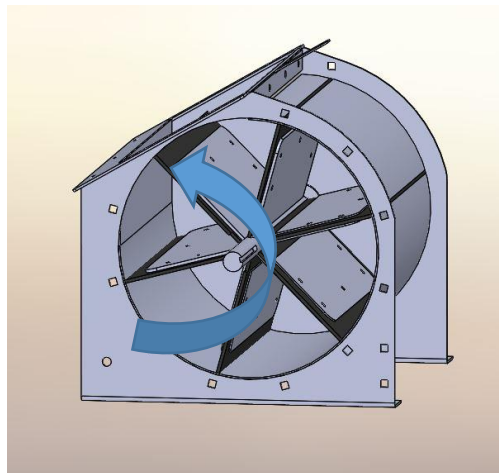
7. If you have trouble pulling the rotor assembly out of the housing remove the rear cover “6A” and lightly pushing on the back of the shaft “6B” to loosen the shaft from the housing.
8. Pull the rotor assembly out towards the front of the housing to remove. It may be necessary to pull and rotate the assembly counter-clockwise to free it from the housing. Be sure to collect HDMW bearings from the feeder.
9. Place the rotor assembly onto a flat work bench to perform the seal change.
10. Remove #10-32 Button Head Cap Screws (BHCS), Nylock Nuts, Seals, and Backing Plate from Rotor assembly.



**Figure 6**

11. Re-assemble with new seals in the reverse order of disassembly. Be sure to place the cutout in rubber seal towards the shaft!
12. To install the Rotor Assembly back into the housing be sure to push and rotate **counter-clockwise** to insure that the rubber seals are seated into the housing.  
**IMPORTANT: DO NOT ROTATE CLOCKWISE TO RE-INSTALL.** The machine's rotation is counter clockwise and failure to seat the new seals in the correct position will cause damage and/or produce poor machine performance.

**Bolts not  
shown**



**Figure 7**

13. Continue re-assembly by reversing steps 1-6



## Troubleshooting

Before performing any work outlined in this section please read through it thoroughly. CTMW recommends that only Certified Mechanics and Certified Electricians perform the steps outlined below. Failure to do so can result in serious bodily injury or even death. If after exhausting the steps outlined below your machine is still not functioning properly please call our technical department at **1-800-237-7841** for further assistance.

### 1. **Machine will not Start/No Ready Light:**

- a. Check power cords for proper connection.
- b. Make sure the Disconnect Switch is in the “On” position.
- c. Make sure Emergency Stop Button is pulled out.
- d. Check if Selector Switch is turned to the controls you are using, either Corded Remote Control or Wireless Remote Control.
- e. Check Remote Control Cord for broken connections.
- f. Check that the circuit breakers are not tripped on the control panel.
- g. Check that the Hopper Interlock Switch is depressed and in working condition.
- h. Check batteries in Radio Remote (if applicable).
- i. Check that the antenna on the radio receiver is connected and clear of signal blockage (if applicable).
- j. Check that there is adequate shore power or power from the generator.

### 2. **Blowers not working:**

- a. Check electrical connections to make sure nothing has been disconnected.
- b. With power on and all safety requirements in place, look at the back of the blowers to see if they are spinning, if not replace.

### 3. **Insufficient air:**

- a. Check to see if blowers are operating properly
- b. Check to see if material hose is clogged or restricted
- c. Check air stream hose connections for blockage

**4. No material flow:**

- a. No material in hopper
- b. Unplug power supply. Check for material bridging in the hopper or if any jams have occurred
- c. Object restricting flow in the machine or too much material in hopper has stopped the machine
- d. Chains are loose or disconnected

**5. Poor machine performance:**

- a. Low voltage. Check electrical connections
- b. Open the slide gate to increase output
- c. Unplug power supply, check for material bridging in hopper
- d. Unplug power supply, check for worn or damaged seals



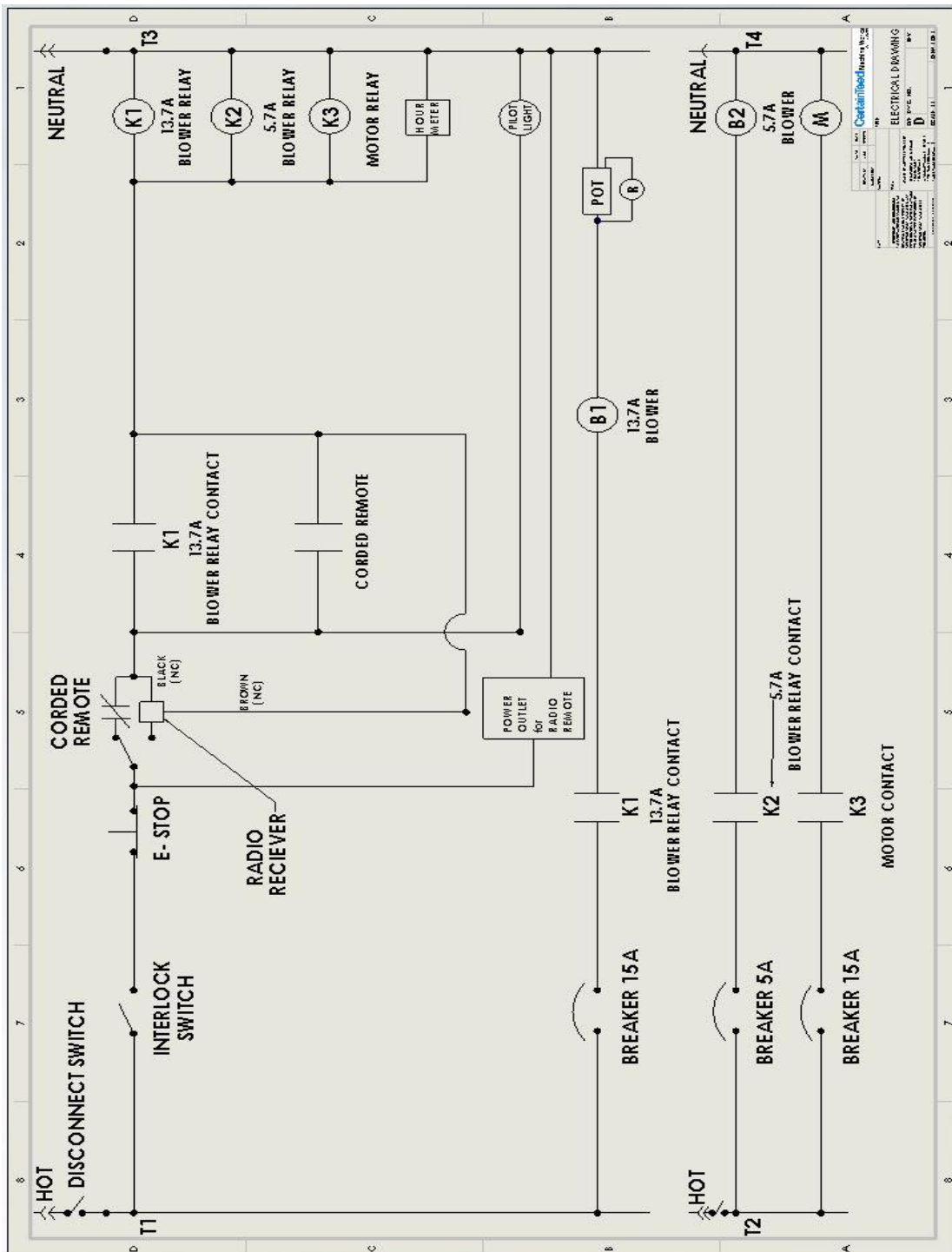


Figure 8

# Preventive Maintenance Record

Date

Job Description

Performed By


Warranty

**CERTAINTEED MACHINE WORKS BLOWING EQUIPMENT**  
**LIMITED TWO-YEAR WARRANTY**

CertainTeed Machine Works (the Company) warrants to each original purchaser (the Buyer) of its blowing equipment that such products will be free of manufacturing defects for a period of two years from the date of shipment to the Buyer, except that no warranty is made with respect to:

1. Components or accessories manufactured and warranted by others. Warranties for component parts, including but not limited to the engine, blower, gearbox, and transmission, if furnished by the manufacturer of the component, are on file at the Company's main office and copies will be furnished with the blowing equipment when sold. In no event shall the Company provide service on any such component.
2. Any defect caused by alteration performed without the express written authorization of the Company.
3. Repairs made or attempted or adjustments undertaken by unauthorized persons.
4. Any machine that has not been operated and/or maintained in accordance with normal industry practice and the written recommendations of the Company, such as a machine operated with an improperly sized, worn or damaged hose.
5. Damage or breakage due to carelessness, accidents, or improper use.
6. The results of any application or use of the blowing equipment.

This limited warranty does not extend to component parts that need to be replaced on a regular basis due to normal wear and usage, including but not limited to seals, feeder, shredder, auger, fuses, switches, clutches, hoses, shaft seals, chains, belts, sprockets, pulleys, bearings, cables, and batteries.

The Company's obligation under this warranty is limited to repairing or replacing (at its option) any part that is determined by the Company to have a manufacturing defect. The Company or an authorized repair facility will provide any required parts and labor to the Buyer. If the equipment must be returned to the Company for repair, all transportation costs shall be the Buyer's responsibility. The Buyer must obtain a Return Material Authorization (RMA) number from the Company before returning the equipment for repair.

THIS LIMITED WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER GUARANTEES AND/OR WARRANTIES, ORAL OR WRITTEN, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTY OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. THE COMPANY SHALL NOT UNDER ANY CIRCUMSTANCES BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, OR ECONOMIC LOSS, INCLUDING DAMAGES TO ANY BUILDING OR ITS CONTENTS, OR INJURY TO ANY PERSONS THEREIN, LOSS OF PROFITS, REVENUE, OR LOSS OF EQUIPMENT USE, EVEN IF THE COMPANY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR LOSS, OR FOR ANY CLAIM AGAINST THE BUYER BY ANY OTHER PARTY.

This warranty is not transferable.

Any claimed defect for which the Company does not receive notice within the two-year warranty period is not covered by this warranty.



**Machine Works**

101 Hatfield Rd, Winter Haven, FL 33880

**800-237-7841**

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