



FORCE/3 HP2

Instruction Manual

Insulation blowing machine

Original Language – English

Intec —9251 Bruin BLVD— Frederick, CO 80504 USA

T: 303-833-6644

Web: www.inteccorp.com

Email: info@inteccorp.com

Rev Date: 2021614

Introduction

Thank you for purchasing an Intec insulation system. Since 1977, both professional contractors and do-it-yourself equipment users have looked to Intec as the industry leader in the design and manufacture of innovative portable insulation blowing equipment. We take pride in making your job as easy and profitable as possible.

The right system for your needs: Intec strives to provide you with the best combination of portability, functionality, and installation versatility to surpass your desired success.

- FORCE® BLOWING MACHINES – Powered by Gas or Electric: From lightweight polyethylene units with removable hoppers, to larger units with increased production rates and installation versatility, all of our durable systems are made to maximize your profit generating potential.
- VORTEC® VACUUMS – Powered by Gas or Electric: Engineered for High Productivity and Built to Last for High Value Generation, Intec's VORTEC high powered vacuums provide the highest value offered in today's marketplace. With various sizes and gas or electric power options, we have a vacuum that will enable you to profitably grow your business.

Best-in-class Customer Service: Total ease of use extends beyond your initial purchase of an Intec system to your evolving needs thru the entire lifecycle. Both before and after the sale service is important to keep you running at peak operating capabilities. Intec's technical team provides installation assistance in addition to maintenance suggestions and trouble-shooting support. In addition to blowing machines, Intec produces a range of accessories that will increase your productivity when dense packing, damp spraying, and installing net and blow.

Thank you for partnering with Intec. We appreciate the confidence and trust you have placed in us, and wish you many profit-generating opportunities!




A handwritten signature in black ink that reads "Ray".

Ray Lavallee
President, Intec

Table of Contents





INTRODUCTION	1
SYMBOLS.....	3
SAFETY FIRST	3
HOW THE SYSTEM WORKS.....	4
SYSTEM SET-UP:	8
SYSTEM OPERATION:.....	11
MAINTENANCE	13
TROUBLESHOOTING.....	14
SPECIFICATIONS	16
ELECTRICAL DRAWINGS	17
MAKING A CLAIM FOR DAMAGE OR LOSS	20
WARRANTY	21

Symbols






SYMBOL	SYMBOL	MEANING
	Danger	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
	Warning	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
	Caution	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.

Safety First



-  Disconnect all power cords prior to working on the equipment. Failure to do so could result in injury or death.
-  Never put hands into the hopper when machine is running.
-  Never operate equipment while standing in water as electrical shock may result.
-  Always use grounded extension cords when operating equipment.



-  When working with insulation, always wear a long sleeve shirt, gloves and a hat. Wear goggles or safety glasses for eye protection. Wear a mask for respiratory protection.
-  Keep tools and foreign objects out of the hopper.
-  Never leave the machine unattended during operation. Disconnect all power to the machine when unattended.
-  Never operate the equipment with the access panels off, possible injury may occur.
-  Prior to use, inspect power cord and remote cord prior to ensure no damage exists.



How the System Works

OVERVIEW: Cellulose, Fiberglass, or Stone Wool insulation is loaded into the hopper. The agitator breaks-up and starts the insulation conditioning process prior to insulation entering the airlock. The airlock transports the insulation into the airstream created by the blower system. Insulation is discharged from the airlock, through the machine outlet, and into the hose. The insulation is further conditioned as it travels through the hose.

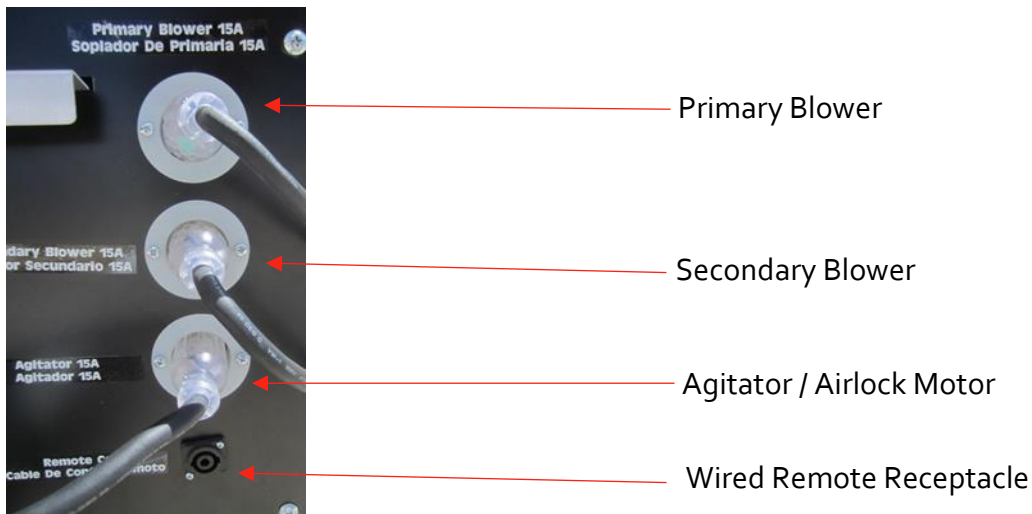
An introduction to key components of the system follows:



Air Inlet Filter: Filters the blower intake air to prevent foreign particles from entering blower housing to allow for a longer life blower motor. Clean regularly (i.e. clean prior to each use).

Agitator & Airlock Motor: This energy efficient motor powers both the agitator and airlock.

Hopper: The hopper contains the insulation being fed into the agitators.



Electrical Receptacles: The agitator / airlock motor & each blower motor require a dedicated 115 volt 15 amp circuit.

Wired Remote Receptacle: Twist lock receptacle to plug in the wired remote.

Control Panel: The electrical panel, combined with the remote (wired and/or wireless), provides operation of the machine.

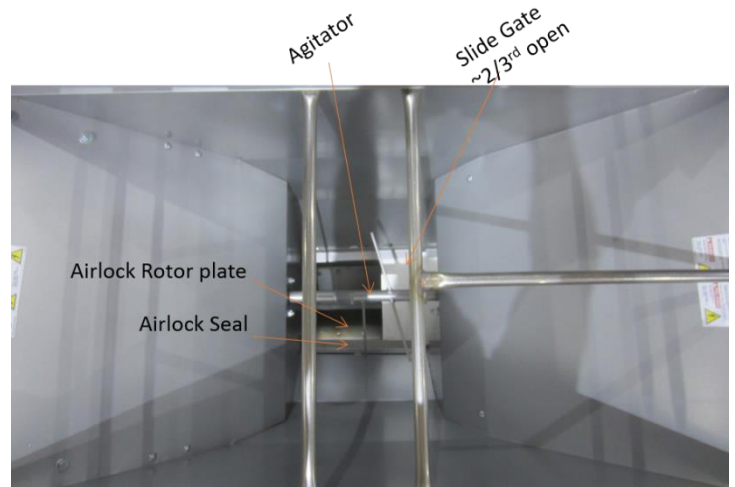


1. Agitator Circuit Breaker- push to reset if tripped.
2. Power ON Button- energizes the Control Panel.
3. Rotary Control Switch- selects operation mode: Wireless Remote Control when operating from GOWIRELESS Long Range Transmission wireless transmitter (optional), Wired Remote Control when operating from wired remote, Off, Blower & Blower / Agitator when desiring to operate machine from its control panel.
4. LRT Antenna- receives signal from Wireless LRT.
5. Learn Button- used in reprogramming transmitter/receiver.
6. Sync LED- indicates programming status of transmitter/receiver.
7. Blower #1 Circuit Breaker- push to reset if tripped.
8. Variable Speed Control- allows user to control output (*speed*) of Primary Blower.
9. Blower #2 Circuit Breaker- push to reset if tripped.
10. Blower #2 On/Off Switch- energizes Blower #2.

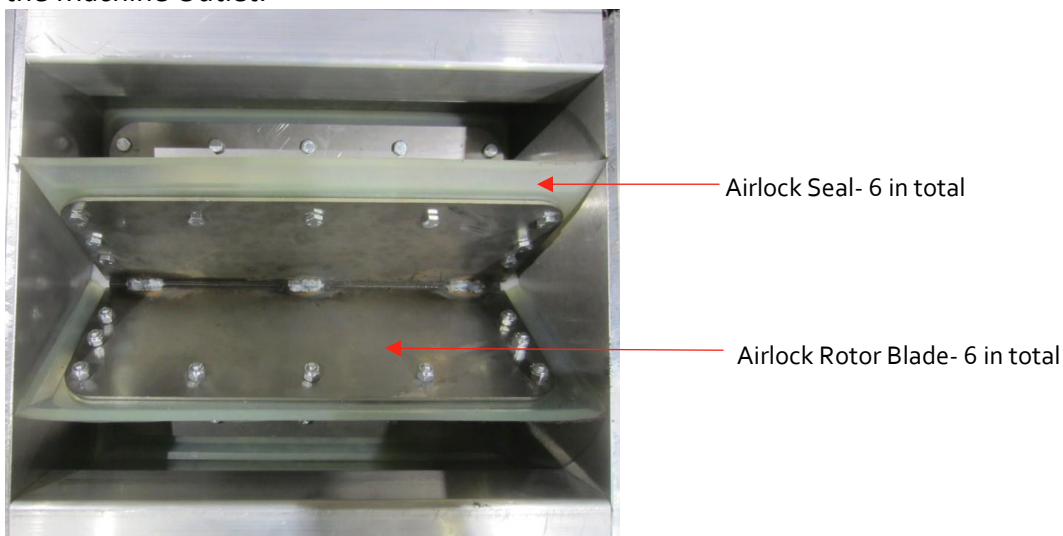
GOWIRELESS: The optional GOWIRELESS LRT (Long Range Transmission) system enables wireless use. The transmitter can be mounted on wrist, hose, belt clip, lanyard, or in pocket.

Agitator: The agitator is located in the bottom section of the hopper between the hopper and airlock. The configuration of the agitator enables high production rates and appropriate insulation conditioning.

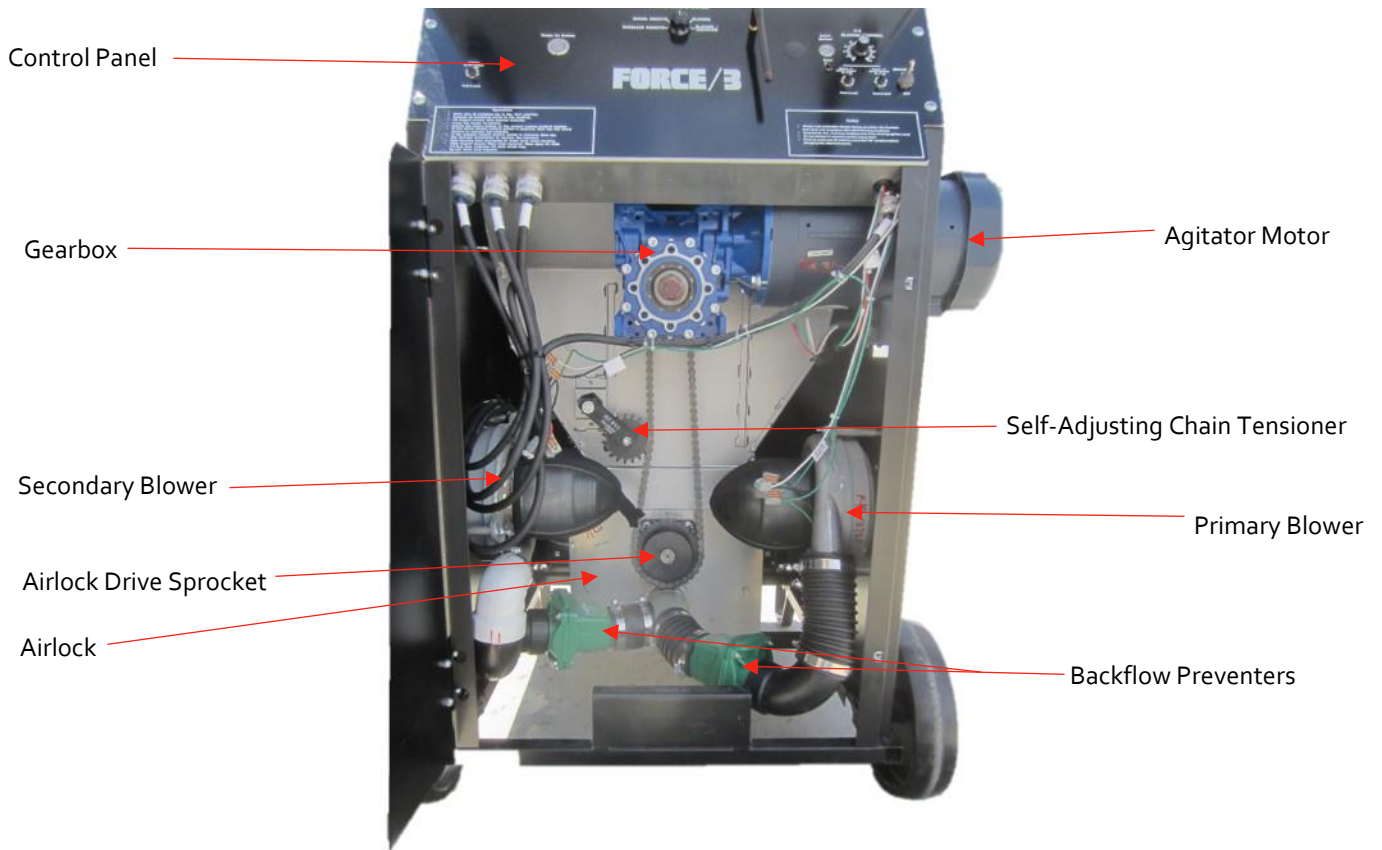
Slide Gate: The slide gate is between the agitator and the airlock. The slide gate allows the user to alter the volume of insulation being swept into the airlock over time. An open slide gate provides the maximum amount of insulation into the airlock over time; often this is the case when open blowing attics. Closing the slide gate provides more conditioning to the insulation. When the slide gate restricts insulation flow into the airlock the insulation comes into more contact with the agitator, resulting in increased conditioning of the insulation and more airflow vs. product flow ratio. The slide gate is typically used during wall fill applications where the user desired a higher ratio of air to product flow to pack the insulation densely into wall cavities.



Airlock: The airlock transfers the insulation from the agitation system into the airstream. Note insulation does not come into contact with the blower. Insulation is discharged from the airlock by way of the machine outlet into the hose. Hose is not shown in above diagram; hose is connected to the Machine Outlet.



Each Blade is welded to the Airlock Shaft for superior strength.



Backflow preventers: The backflow preventers (or one-way valves) are found in the base of the system positioned between the blower and airlock. The backflow preventers will keep insulation from flowing backwards through the airlock and into the blower which may happen when the pressure of product in the hose is more than that of the pressure in the line between the blower and airlock - examples include (i) hose moving straight up from machine to a second or third story, or (ii) during some dense pack operation. The back blow preventer prolongs the blower motor's life.

Set up and Operation



System Set-Up:

Set system on a dry, level surface.

1. Obtain appropriate protective equipment.
 - a. Recommendations: dust mask, eye protection, gloves, knife to cut insulation bags, and a hat.

2. Power Connections:

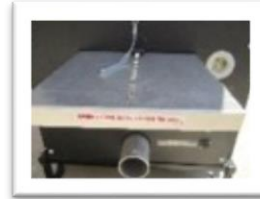


FORCE/3 HP2: Obtain three 12 gauge, heavy duty twist-lock power cords (note: when requiring over 100 feet per power cord, recommendation is to use 10 gauge in order to reduce the voltage drop and allow for appropriate operation of motors). Connect one power cord to each blower power receptacle, and one to the agitator & airlock power inlet. Note that each power source is required to be an independent 115V - 15 amp (or greater) circuit.

3. Attach 3" hose (100 feet minimum, 150 feet is recommended to provide for additional insulation conditioning) to machine outlet using a hose clamp. *Note: If you desire to wall fill, you may benefit from Intec's Machine Insert Tube which converts your machine's outlet to 2"; this is a recommended procedure when using cellulose (Intec's multi-reducer hose kit is recommended when using fiberglass). You can now use 2" hose from your machine's outlet with no need to use various size hoses and reducing couplers.*



4. Slide Gate - Open slide gate & place pin in



desired opening.

5. System Controls

Determine how you will operate the system. Choices are to control the system thru the:

- Control panel
- Wired remote
 - Connect the wired remote to the wired remote receptacle if you decide to utilize the wired remote.
- Wireless remote if you have the GOWIRELESS system
 - a. Power On system: Press the POWER ON BUTTON to provide power to the system. Note the following:

Inserting the wired remote to the receptacle. Match two bumps on insert to the bumps on the receptacle.



Wired remote plugged into receptacle



FORCE/3 wired remote connection



- i. When the system has power, the POWER ON BUTTON will glow green

When to use variable speed blower control: Most users consider utilizing the variable speed blower control when performing wall fill applications including blow behind netting, dense pack, or spray on. The variable speed blower control adjusts the speed for the primary blower only, the second blower is either 100% on or off; no variable speed for the second blower. By varying the speed of the primary blower, a user can adjust airflow to precisely meet their requirements. There is no button to turn on or off the Variable Speed function. It can be adjusted anytime by turning the control up or down as desired.

If power is interrupted to the system (ex: circuit breaker trips, power cord unplugged and then re-plugged in, etc.), the POWER ON BUTTON will no longer be lit. This is for SAFETY as the system will not re-start automatically when power is back to system. In order to re-start the system after a power interruption, the user will have to press the POWER ON BUTTON.

Example: If a house circuit breaker trips, the system will stop. Once the circuit breaker is re-set, the system will not automatically start. A user will have to press the POWER ON BUTTON to re-energize the FORCE/3.

- b. Position the System Selector switch to how you desire to control the system.
 - i. If you desire to operate by the control panel, then turn the rotary control switch to
 1. BLOWER for blower to come on, and
 2. BLOWER / AGITATOR for both the blower and agitator to operate.
 - ii. WIRED REMOTE if you desire to control the system thru the wired remote. Then utilize the urethane jacketed controls to operate the FORCE/3.



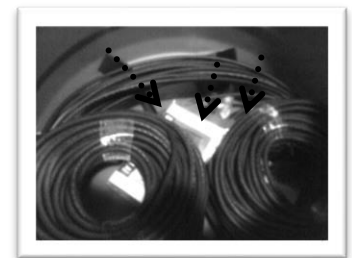
- c. WIRELESS REMOTE if desire to control the system with the GOWIRELESS controls.

Note: Place transmitter in jacket and mount on hose, wrist, or use lanyard to place around neck, or remove from jacket and use belt clip to fasten on belt, or carry in pocket.



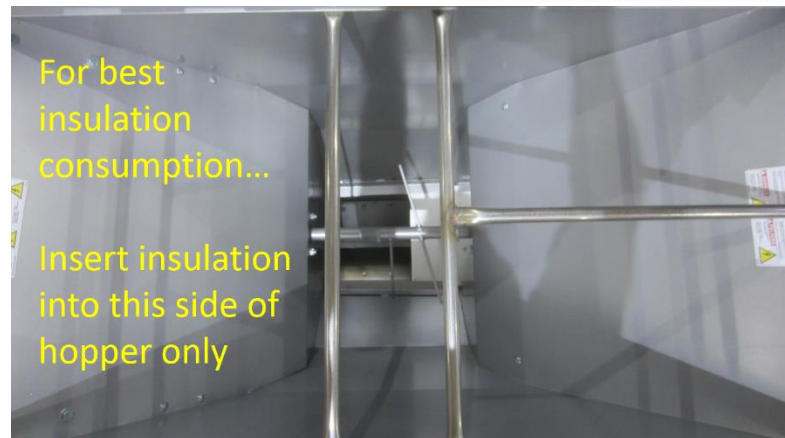
6. Ensure your system is located on a stable flat surface to maintain even loading and blowing.

NOTE: Prior to turning the system 'on', make sure the hopper is empty. Sometimes reducers, power cords, wired and/or wireless remotes, hose, and various other tools are left in the hopper. Starting the system with these items in the hopper can cause damage to the agitator, the airlock, and to the items left in the hopper.



System Operation:

Load Insulation -- Remove packaging and load insulation.



FORCE/3 Hopper

Video of interest: <https://www.youtube.com/watch?v=KeV6ZkIU87Y&feature=youtu.be>

* video and below photographs of loading procedures are of older FORCE 3 systems

Cellulose:

Set bag on edge of hopper & remove plastic wrapping.



Then insert *insulation only* into hopper. *Caution - Be sure no plastic goes into hopper.*



Fiberglass or Stone Wool:



1. Score bag in ½



2. Bend bag to break in ½



3. Place ½ bag on edge of hopper with open end facing towards operator or away from operator – do not have open end facing into the hopper.
 Slice wrapper in direction shown to allow product to expand into hopper.
Caution – Be sure no plastic goes into hopper.

Maintenance

Preventative maintenance will provide for many years of trouble-free use.

Cleaning

Clean:

- Blower inlet air filter prior to each use.
- Blower motor filter cover weekly.
- Interior and exterior of the machine weekly by wiping with a rag and/or blowing with compressed air; this will help maintain the longevity of the mechanical components in addition to the system's finish.



The machine has been designed to work in a dusty environment. However, without periodic cleaning and maintenance, the performance of the machine will decline potentially leading to failure.

Cords

Your 12 gauge power cords are subject to considerable wear and tear during normal operation. Inspect all cords prior to use to ensure safe operation. If any damage is observed, be sure to repair or replace before operating the machine to avoid personal injury. Note: Do not pull on power cords while plugged into machine as damage may occur.

Airlock and Seals

The airlock assembly is one of the most important items to keep in good condition. Foreign objects in the airlock can cause damage and reduce the machine's production. Seal failure is the most common airlock assembly failure. Seal failure prevents the airlock from holding the proper pressure. Seal failure will reduce the machine's production. A machine with seal failure will have air blow out of the airlock into the hopper, reducing the amount of air exiting the machine outlet. It is recommended to visually inspect seals each week to ensure proper running condition. Replace airlock seals if a cut or tear is evident. Airlock seals should be replaced approximately every 300 hours of operation, or once per year. Visit www.inteccorp.com or contact Intec for replacement instructions.

TroubleShooting

Problem	Likely Cause	Remedy
Machine does not turn on.	Power cord connection is loose.	Ensure appropriate power cord connection at machine. Ensure appropriate power cord connection at power source.
	POWER ON BUTTON not in on position.	Press POWER ON BUTTON in for it to light up green.
	ROTARY CONTROL SWITCH not in desired position.	Rotate ROTARY CONTROL SWITCH to the location you desire for system control. Then utilize appropriate remote is selected <i>wired</i> or <i>wireless</i> .
	Power cord not connected at machine or power source.	Connect power cord.
	Machine's circuit breaker has tripped.	Reset circuit breaker(s).
	Circuit breaker at power source has tripped.	Reset circuit breaker.
	Electrical system may have a loose wire.	Contact Intec Tech Support
	Wired remote cord & electrical panel switches need to be in 'ON' position for machine to turn on.	Place the electrical panel blower and agitator switches in the 'ON' position. Place the remote's blower switch in the 'ON' position; place the remote's agitator switch in the 'ON' position.
Blower does not run.	Blower's circuit breaker needs to be reset.	Reset blower circuit breaker.
	Faulty Blower motor	Contact Intec Tech Support
Problem	Likely Cause	Remedy
Agitator does not run.	Blower has to be on for agitator to come on.	Turn blower on.
	Agitator circuit breaker needs to be reset.	Ensure agitator circuit breaker is reset.
	Foreign material causing jam in hopper.	Remove power cords, clear jam, and restart system.

Machine is on, yet no material comes out of hose.	Slide gate is closed.	Open slide gate.
	Insulation blockage in hose.	Turn system off, remove hose and clear blockage.
	Air pocket in hopper is preventing insulation from feeding into agitators.	Disconnect electrical power. Redistribute insulation material inside hopper.
	Airlock seal is worn.	Inspect airlock seals for cuts and wear. Have a qualified technician replace airlock seals.
	Airlock has an obstruction preventing insulation from exiting.	Disconnect electrical power, remove obstruction.
Insulation exiting hose is dribbling out.	Heavy insulation material.	Push slide gate in 1-2 holes.
	Kink in hose.	Straighten hose.
	Airlock seal is worn.	Inspect airlock seals for cuts and wear. Have a qualified technician replace airlock seals.
Circuit breakers need resetting often.	Low voltage or low amperage.	System requires 115V / 15amp separate circuit for agitator and blower.
	Extension cord gauge is too small.	Use a 12/3 heavy duty (i.e. SJ300V) extension cord when length is 100' or less. Use a 10/3 heavy duty extension cord when length is over 100'.
	You are using a generator with high voltage oscillations.	Purchase a generator with low harmonic distortion.

Specifications

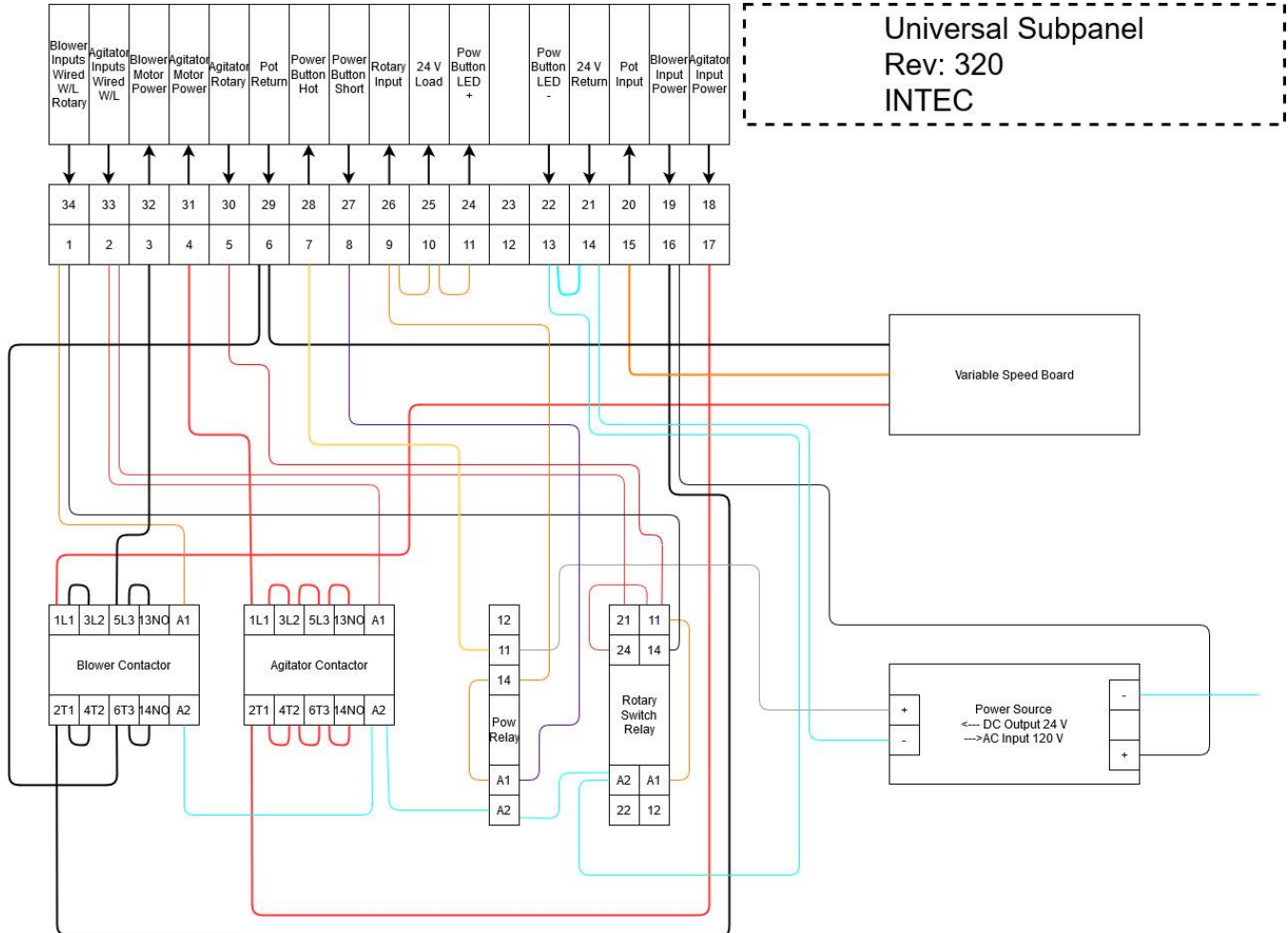
Weight	283 lbs 175 kg
Blower	Dual 115 VAC, two stage
Agitator Motor	1 ½ HP, 115VAC,
Power Requirements	3-115VAC, 15 amp circuits

For both configurations, you will require twist-lock 12/3 heavy duty power cords. If you are using over 100', then 10/3 heavy duty power cords are recommended / required.



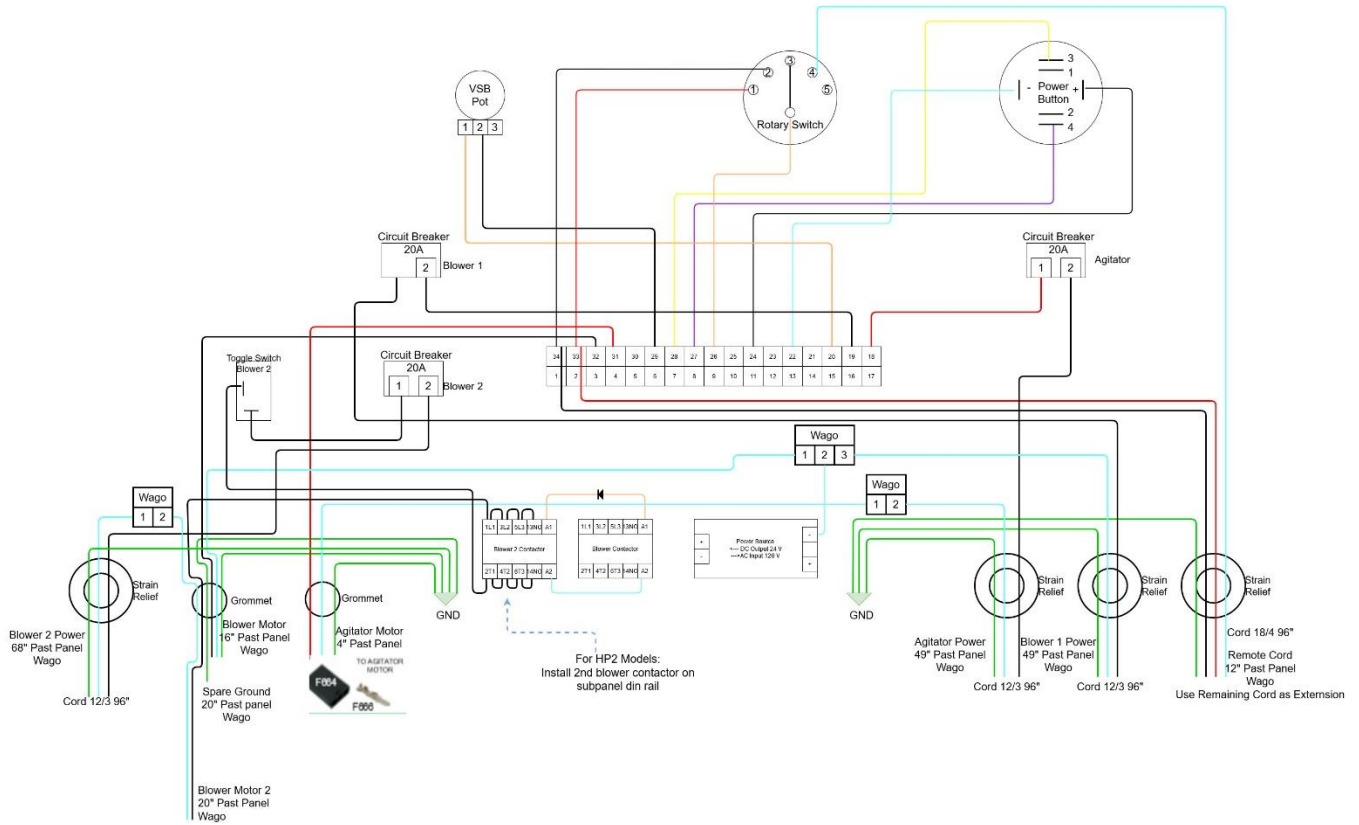
Electrical Drawings

FORCE/3 HP2 Universal Sub-panel



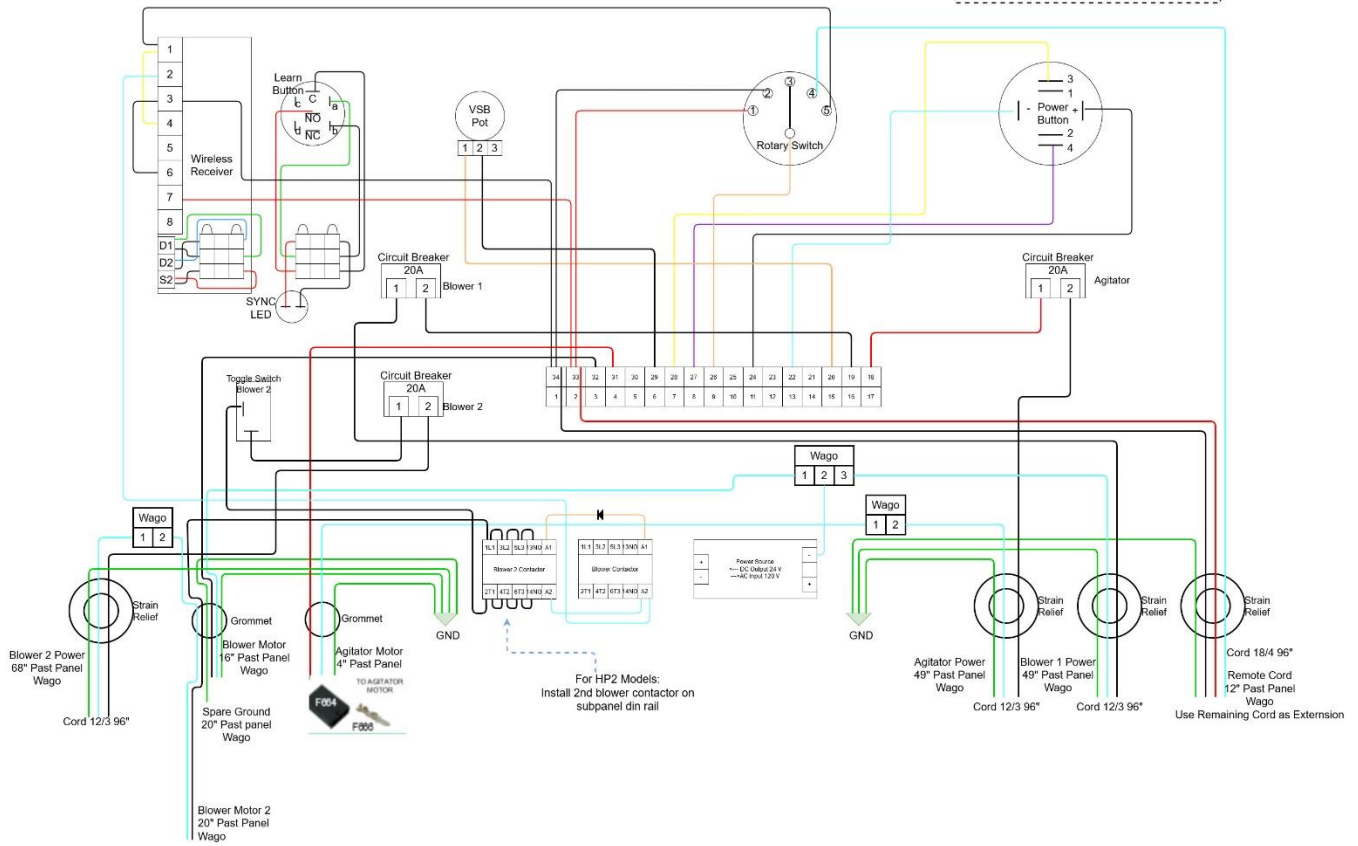
FORCE/3 HP2 – wired

Force 3 HP2 Standard
Rev: 320
INTEC



FORCE/3 HP2 – wireless

Force 3 HP2 Wireless
Rev: 320
INTEC



Making a Claim for Damage or Loss

Your Intec products were carefully packed and thoroughly inspected before leaving our factory. We understand that damage to or defects with your system may unfortunately occur. Please inspect your shipment carefully upon arrival and save the shipping containers and packaging materials in case of damage.

The following table provides you with appropriate actions to take when certain issues are realized.

ISSUE	Action to Take
<p>1 DAMAGE in Transit</p> <p>A Visible PRIOR to unpacking (Damage to carton or packing material).</p> <p>B Visible AFTER unpacking (Only apparent when unpacked).</p> <p>C Shortage (# containers does not agree to transportation bill).</p> <p>When items leave our warehouse, the shipper assumes responsibility. It is the responsibility of the consignee to file a claim. Proper documentation is necessary to support the claim. Please inspect all items properly prior to signing for them.</p>	<p>File Claim with appropriate freight carrier.</p> <p>File Claim with appropriate freight carrier.</p> <p>File Claim with appropriate freight carrier.</p>
<p>2 Items received not correct</p> <p>A Incorrect items received.</p> <p>B Incomplete order received (not backordered).</p>	<p>Contact Intec Customer Service</p> <p>Contact Intec Customer Service 303.833.6644 ext. 103 info@inteccorp.com</p>
<p>3 Issue within the warranty period</p> <p>A Troubleshooting (machine or part not operating as intended).</p> <p>B Replacement part(s).</p> <p>Intec can assist with troubleshooting your issue, and can get you back up and running. If warranty parts are required, a return material authorization (RMA) will be issued by technical service.</p>	<p>Contact Intec Customer Service</p> <p>Contact Intec Customer Service</p> <p>303.833.6644 ext. 105 or info@inteccorp.com</p>
<p>4 Issue outside of warranty period</p> <p>A Replacement part, troubleshooting.</p> <p>B Need assistance from a service center.</p>	<p>Contact Intec Customer Service</p> <p>Contact Intec Customer Service 303.833.6644 ext. 105</p>

Shipping Department
 Intec
 9251 Bruin BLVD
 Frederick, CO 80504

phone: 303-833-6644,
 fax: 303-833-6650
 email: info@inteccorp.com
 website: www.inteccorp.com

T: 303-833-6644

www.inteccorp.com

Warranty

It is expressly understood and agreed that no officer, agent, salesman or employee of the manufacturer Intec (MANUFACTURER) has the authority to obligate the MANUFACTURER by any terms, stipulations, or conditions not herein expressed; that all previous representations and agreements, either verbal or written, referring to the machinery and equipment, which is the subject of this Warranty, are hereby superseded and canceled, and that there are no promises or agreements outside of the Warranty agreement. Furthermore, the MANUFACTURER hereby disclaims any implied warranties of merchantability, or implied warranties of fitness for a particular purpose.

With the above understanding, the MANUFACTURER provides the following one (1) Year Limited Warranty, and no other, for its insulation blowing machines (MACHINES):

- a) MANUFACTURER warrants to the original purchaser that the MACHINE is well made, of good material and durable; but only if the MACHINE is operated and maintained in accordance with the Instruction Manual. This Warranty is void if the MACHINE is not so operated and maintained, or if the MACHINE is used for blowing materials other than those which are intended to be used with the MACHINE.
- b) MANUFACTURER guarantees the MACHINE to be free from manufacturing defects at the time of shipment, and to remain free from defects when operated under normal use, for a period of one (1) year from the date of factory shipment, with the exception of the blowers, electrical and air lock components, which are warranted for a period of ninety (90) days from date of factory shipment.
- c) This Warranty shall not apply to any MACHINE or component part which, in the opinion of the MANUFACTURER, has been altered, subject to misuse, negligence, accident or operated beyond factory rated capacity. All requested Warranty work should be performed at MANUFACTURER's factory or by an Authorized Factory Service Facility. Failure to have the Warranty work done at MANUFACTURER'S factory or by an Authorized Factory Service Facility will void this Warranty. MANUFACTURER will bear full responsibility to repair or replace, at its option, without charge to the original purchaser, any part that, in the MANUFACTURER'S opinion, is found to be defective.
- d) All parts claimed defective by original purchaser shall be returned, properly identified, to MANUFACTURER's factory or Authorized Factory Service facility, freight prepaid. All replacement, repaired or non-defective parts will be returned to purchaser, freight collect. MANUFACTURER will supply replacement parts prior to purchaser, freight collect. MANUFACTURER will supply replacement parts prior to receipt of any parts claimed defective, only with the understanding that such replacement parts will be shipped to purchaser at the then prevailing price of said part, C.O.D., freight collect. MANUFACTURER will reimburse cost of any such part only after receipt and inspection, and finding said part defective.
- e) MANUFACTURER's liability is expressly limited to the repair or replacement of defective parts set forth in this Warranty. All other damages and warranties, statutory or otherwise, being waived are original purchaser as a condition of sale and purchase of said machines. Furthermore, the MANUFACTURER shall not be liable for damages or delays caused by defective material or workmanship.