

Series 550 Meyer Insulation Blower

INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS



Read this manual carefully before installing, operating, or maintaining this equipment. Failure to do so could result in serious injury or death. Save this manual



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TABLE OF CONTENTS

Safety Precautions	2
Application and Models	8
Receiving and Inspection	8
Specifications and Installation	9
Machine Operating Instructions	11
Maintenance	12
Troubleshooting	14



TO THE OWNER, AND INSTALLATION, OPERATION AND MAINTENANCE PERSONNEL

The safety of the operator and those people that may come into contact with the equipment is of great importance to Wm. W. Meyer & Sons, Inc. ("Meyer" "factory"). The decals, shields, guards, and other protective features designed, furnished, or recommended for this machine are there for your protection. This machine is designed for use with loose fill insulation only. Other material could cause serious injury and will void the warranty. The machine is powered by an internal combustion engine which produces Carbon Monoxide Gas; it must be operated in a well-ventilated area. BEFORE attempting to operate or perform maintenance on this equipment READ carefully and UNDERSTAND all safety instructions contained in this set of **Instructions**. Failure to do so could result in serious injury or death.

Equipment owner responsibilities

Equipment owners are responsible for understanding the contents of this document and compliance with applicable government laws and regulations and appropriate industry standards. The owner should also contact any associations affiliated with their market for any training, certification, and/ or proper procedures (suggested or required), for their particular business. Appropriate safety and equipment training is the responsibility of the owner. The owner/operator is responsible for any hazards related to the material that is being handled by the machines and for ensuring that the users of the equipment have and use the proper Personnel Protective Equipment (PPE). In addition, the owner must create a Lockout/ Tagout procedure for personnel to follow before performing any maintenance on this equipment. This manual is intended to assist the owner in the creation of safety procedures and in the training process. The operation and maintenance of this equipment should be restricted to those trained in its use and possess the expert knowledge to perform maintenance.

Operation and Maintenance personnel responsibilities

Personnel that are operating or maintaining this equipment must READ carefully and UNDERSTAND the sections of this **Instruction Manual** relevant to the work they are performing. The various precautions and recommendations detailed within this manual are not necessarily all-inclusive. These instructions are intended to provide general safety and operational guidance relating to typical uses with which Meyer is familiar. If you have any safety or operational questions pertaining to the design or application of the equipment, we encourage you to contact Meyer at (847) 918-0111.

SIGNAL WORD DEFINITIONS

DANGER Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

Indicates information that is important, which if not followed, may cause damage to the equipment.

IMPORTANT SAFETY INFORMATION

To reduce the risk of serious injury or death:

Be Qualified.

- Operation of this equipment must be limited to those that are properly trained in its use.
- Servicing or maintaining this equipment must be performed by trained maintenance personnel only.

Read all safety information.

- **Obey** all **safety labels** on the equipment. Do not remove any safety labels. If the equipment is missing any labels (see "Safety Labeling" section), contact Meyer immediately and before putting the equipment into service.
- Read and understand all the **safety related information contained in this manual** and the **Engine manual** prior to attempting to perform any work with or on this equipment.

Heavy - handle safely. The weight of this equipment and its component parts could cause serious injury if dropped or mishandled during installation, service, or maintenance. Always use safe handling and rigging methods.

Operate in a well-ventilated area. The carbon monoxide from the engine exhaust is an odorless, colorless, poison gas. If inhaled can lead to carbon monoxide poisoning resulting in serious injury or death.

When using the machine, make sure the truck or trailer is parked outside and never in a building or garage.

Engine exhaust must be piped outside the machine trailer or truck and directed away from the interior.

Doors of the truck or trailer must be open during operation to allow for the movement of outside air through and to provide ventilation for the operator and the air-cooled engine.

Guard and avoid dangerous parts. There are moving parts of this equipment that will crush and cut any body part that they contact, resulting in serious injury or death. **Never** operate the machine without all guards properly installed.

Hopper Opening must only have material loaded into it. Hands, arms, and other body parts should never enter the hopper opening.

Never open access covers/door or reach inside the equipment for any reason while it is in operation.

Any accessory or auxiliary components installed with this equipment must have protective guarding correctly installed and permanently fastened in place.

Be Aware that the equipment can be started remotely, without warning.

Always have (1) person at the machine while it is running. They **must** be trained in its proper use, able to maintain control over people interacting with the equipment, and be close enough to turn it off in case of an emergency.

Never blow insulation on or near sources of heat, flame, sparks, or static discharge.

Follow Machine Safety Shutdown Instructions before removing any guards, performing maintenance, or making any adjustments, clearing material, investigating a malfunction, or cleaning the equipment.

Keep hands, feet, or other body parts, loose clothing, jewelry, etc., **clear** of the hopper inlet and material discharge. **Never** disconnect the material hose while the machine is running or **direct** discharged materials at others.

Lockout/Tagout all sources of **energy** before installing, servicing, or maintaining this equipment. Potential sources of energy include but are not limited to: motors, switches, cylinders, and solenoids. Also consider:

- Equipment may start remotely, without warning, if energized.
- Hazardous voltage presents the risk of electrical shock.
- Equipment surfaces may be hot; allow them to cool before performing any work.

Secure the portable fuel tank before transporting the machine. In addition, the fuel tank must not be stored in an enclosed container such as a truck body or trailer. Fuel vapors can build up leading to a hazardous situation.

Push the E-Stop button if something unforeseen occurs. This will completely stop the machine and illuminate the Red Panel Light. Before restarting the machine close the slide gate and turn the Remote Control panel switch to "OFF".

Wear the proper PPE (Personal Protective Equipment) Personnel using the machine must always wear appropriate clothing and equipment for the work environment as defined by local, state, and federal safety requirements, including but not limited to:

- Hearing Protection
- Eye Protection (goggles or safety glasses)

- Breathing Protection (respirator, filter mask)
- Skin Protection (long sleeved shirts, pants, and gloves) or protective suit

Contact the loose fill insulation manufacturer for any addition PPE requirements.

HAZARD IDENTIFICATION

Principle of operation

The insulation blowing machines that Meyer & Sons manufacturers and sells are machines that have rotating shafts with paddles, pins and vanes designed to break up and move compressed material (cellulose and fiberglass) from an open hopper into a pneumatic conveying line. Once in that line or hose, the material is propelled through the hose and exits into an open space (building attic) or an enclosed space (sidewall). Because of the way in which material is loaded into the machine, the hopper must be open and therefore moving parts are accessible. The machine likewise has moving drive train components which must always remain guarded.

Amputation hazard

The insulation blowing machine shafts are driven by an engine/motor at a relatively high speed. The shafts are connected to the engine or motor via roller chains or transmission belts. The spinning shafts and connected drive train components present a serious personal injury hazard, including but not limited to amputation. If any human body part comes in contact with these parts and an immovable object, such as the machine hopper wall, that body part could be cut off.

Exposure to hazards

In order for the insulation machine to function, material must be able to be placed in an open and accessible hopper. It is designed such that material can be put into the hopper without personnel coming into contact with rotating parts. The discharge of the machine is designed to have a hose attached in order for the insulation to be blown where it is required. The discharge of the hose must never be covered by a human hand or other body part and must only be directed to areas where it cannot come in contact with people and/or human body parts. The drive train components are guarded and must remain so when the machine is in operation. There are no adjustments that can be made to the components while the machine is running.

Training

The owner bears the responsibility to ensure that personnel who may be working on/or operating the insulation machine are properly trained. Personnel **must** be aware that: (1) anything coming into contact with the moving parts in the machine hopper could be cut off/amputated; (2) if body parts come in contact with the rotating vanes in the feeder, they **will** be cut off/amputated; (3) before working on, cleaning, repairing or maintaining a machine, Lockout/Tagout procedures **must** be strictly followed; and (4) the machine **must not** be operated without guarding in place. Before interacting with the insulation machines, personnel must read the Operator's Manual.

Safety Labels





SECTION II APPLICATION & MODELS

The MEYER Model 551 INSULATION BLOWING MACHINE is designed to process and blow all of the currently available loose-fill insulations on the market today.

This equipment must be used only for the purpose for which it was intended. Any other use could cause serious injury, costly damage to the equipment and will void

the warranty.

INFORMATION FOR SAFETY AND SERVICE

Type/Size_

Serial Number_____

Date of Installation_____



SECTION III RECEIVING AND INSPECTION

Upon receipt of equipment and material from Meyer, the following basic steps should be taken. The equipment is heavy and proper handling procedures should be used (See the "**Heavy - handle safely**" information in the "IMPORTANT SAFETY INFORMATION" section.)

- 1. Use the packing list to determine that all the items shipped have been received. Your equipment was carefully crated for safe shipment when given to the carrier. If Items are missing, contact Meyer per contact information at the end of this section.
- 2. Check for damage. Damage in transit is the responsibility of the carrier. Title to your equipment and all other items in the shipment were transferred to you as soon as the shipment left our dock, thus it is your responsibility to handle any claim. In the event damage has occurred:
 - Be sure to have the driver sign a copy of the freight bill with a notation about any damage and contact their office before the driver leaves your premises.
 - Contact the carrier to arrange for an independent inspector to come out to inspect the damage and prepare the inspection report. It is imperative that this inspection is done before you start to unpack or use any of the equipment.
 - If there are any visible problems with your unit or any other items in the shipment, you or the driver must note in detail the damage on all copies of the freight bill before signing for the shipment. Then immediately call Meyer.
 - Photographic records of the damage are helpful to communicate the extent and type of damage as well as provide a clear record.

- In addition to inspecting damaged equipment, you should also check the condition of the safety labels to ensure they have not been damaged or come off. If they have, contact Meyer for replacements prior to installation.
- Concealed Damage: If Equipment or goods are discovered to be damaged in shipment at a later date, contact the carrier and Meyer immediately.
- In all cases of damage in transit, contact Meyer for assistance in determining whether or not this damage may, in any way, affect safety or proper operation. Please contact us so that we can assist you with replacement parts or with any questions about the claim process, using the following contact information:

Wm. W. Meyer & Sons, Inc. 1700 Franklin Blvd. Libertyville, IL 60048

sales@wmwmeyer.com 847-918-0111



SECTION IV SPECIFICATIONS AND INSTALLATION

EQUIPMENT SPECIFICATIONS

WIDTH:	63"
DEPTH:	42 1/2"
HEIGHT:	59″
WEIGHT:	APPROX. 1,100 LBS.

Machine Installation

The size of the truck is dictated by the size of the machine, crew, and the number of bags of insulation transported. Typically, this is a truck with an 8' wide X 20' long box (or longer) and a gross vehicle weight rating (GVWR) of 21,000 lbs. The recommended minimum is a truck with a 7' X 14' box and a GVWR of 16,000 lbs. In addition, there should be a door on either side of the body and a full width rear door. This is to provide: proper air flow to allow to aid in the removal of fuel vapors, ventilation for the air-cooled engine, fresh air for the operator, and help prevent any buildup of dangerous engine exhaust.

Tools and material needed for installation:

- Drill and drill bits
- 3/8" bolts or lag screws
- Exhaust pipe fittings from the machine to underneath the truck (2 1/2" dia.)
- Forklift or other safe means to lift the machine
- Pry bar(s)
- Screwdriver, socket and ratchet, saw (hole or saber)



- 1. Move the machine into position noting that you will need to have access to the rear and left side of the machine. With the machine in position; mark the truck floor where the engine exhaust (on the left side) will go through the floor and mark the base's mounting hole locations.
- 2. The machine can be left in place or moved to provide better access to the areas that need to be drilled/cut. Using an 1/8" bit, drill pilot holes to determine if there is anything under the truck floor that would interfere with the mounting fasteners or the engine exhaust pipe. If there is; move the holes accordingly.
- 3. Cut a 3" hole in the floor for the exhaust pipe. Install the flashing (included), center it in the hole and tack it down.
- 4. Drill holes for the machine mounting bolts. The size depends on what type and size of fasteners you are using. Secure the machine to the truck floor.

WARNING The engine and exhaust piping could be extremely hot and could cause burns or ignite a fire. Due to the variability of installations, Meyer cannot provide a guard for the engine exhaust piping. The installer of the equipment must take the necessary steps to guard this surface against contact by people or flammable materials.

WARNING Engine exhaust piping must be routed away from the side doors to help prevent the exhaust from entering the truck body or trailer. In addition, it should be routed away from any flammable materials such as the truck fuel tanks. Ensure that the proper fittings and piping are used and installed correctly. Failure to do so could lead to serious injury or death.

5. Install the exhaust pipe and fittings (not included). Be sure to securely attach both ends of the exhaust extension.

SECTION V MACHINE OPERATING INSTRUCTIONS

Prior to use, the operator must read and understand the entire manual and all the **WARNING** safety related information including all the warnings and guarding instructions. This includes but is not limited to reading and understanding the "IMPORTANT SAFETY INFORMATION" and "HAZARD IDENTIFICATION" Sections. Verify that all guarding is in place and the area is clear of all nonessential personnel. Failure to do so could lead to serious injury or death.

Engine exhaust contains carbon monoxide, a poisonous gas that will kill you in DANGER minutes. You CANNOT see it, smell it or taste it. Even if you do not smell exhaust fumes, you could still be exposed to carbon monoxide gas. Operate only in well ventilated areas. If you start to feel sick, dizzy, or weak while using this machine, shut it off and get to fresh air immediately. Seek medical attention immediately. You may have carbon monoxide poisoning.

The surfaces of the engine and exhaust can be extremely hot. Do not touch or allow **WARNING** anything to come in contact with the hot parts.

Ventilate fuel vapors to reduce the risk of fires and explosion. Open all doors on the WARNING truck body/trailer and wait 10 minutes before starting the engine. Leave all doors

open throughout use.

FUEL SAFELY

Fuel is highly flammable. Avoid spills, heat, and buildup of static electricity. Never fully fill the fuel tank, allow room for the expansion of the fuel so that when it expands it does not overflow. Fill the tank away from the engine and other sources of heat or open flames. Always fill the tank on the ground, never in the back of a truck or other vehicle. The tank must be in constant contact with the ground and the pump nozzle must be in constant contact with the tank during the filling process. This will lessen the chance of static electricity buildup. Failure to follow these instructions could lead to serious injury or death.

PRE-START CHECKS

- 1. The operation of this machine must be limited to people that have read and understood this manual, the equipment labels, and the proper handling of the insulation material being installed.
- 2. Only people involved in the machine operation are in the vicinity.
- 3. Check that no foreign material is in the hopper.
- 4. The doors to the truck body / trailer must be open to provide adequate ventilation for operator and machine.
- 5. Check that all guards are in place.
- 6. The blowing hose is attached to the machine and the person manning the hose is in position.
- 7. Check that the switch on the Remote Control Cord is in the OFF position and connected to the control panel.

NOTICE

Starting the machine with Remote Control Cord Switch in either the AIR or AIR/ MATERIAL position will overload the clutch and the engine.

MACHINE STARTUP INSTRUCTIONS

- 1. Doors to the truck/trailer must be open and no fuel vapor present.
- 2. Close the slide gate.
- 3. Set the Remote Control Switch to OFF.
- 4. Attach the fuel line to the engine and open the vent on the fuel tank.
- 5. Turn engine ignition key to ON. This powers the panel. Push green START button. Button will remain lit.
- 6. Follow starting instructions in engine Operator's Manual to start engine.
- 7. The engine speed is set via the throttle lever. Move the lever to the "Fast" position. Let the engine warm up before operating the machine.
- 8. Open the slide gate and set it based on your blowing material.

MACHINE SHUTDOWN INSTRUCTIONS

- 1. Close the slide gate.
- 2. Set the Remote Control Switch to Air to clear the hose of material. When the hose is clear of material, switch the Remote Control to OFF and disconnect it from the control panel.
- 3. Reduce the engine speed to idle. Let it run at idle to cool down before shutting down.
- 4. Turn the engine ignition key to the OFF position. Remove the key.

MACHINE SAFETY SHUTDOWN INSTRUCTIONS

Before removing guards, servicing, or performing maintenance, reaching into the hopper, making adjustments, or clearing material jams:

- 1. Follow the MACHINE SHUTDOWN INSTRUCTIONS.
- 2. Disconnect the fuel tank and close the vent on the tank.
- 3. Disconnect the negative battery terminal and secure it using the lockout box.



SECTION VI MAINTENANCE

Maintenance must be performed by qualified personnel possessing the appropriate expert knowledge for the specific task.

WARNING Lockout/Tagout the machine before performing any service or maintenance including removing any guards. Failure to do so could lead to serious injury or death.

For engine service or maintenance see the engine Operator's Manual.

Your Meyer 551 Insulation Blowing Machine is designed to be used with minimal maintenance for all its components. The following is only a guide; experience is the best guide for the right maintenance schedule for your machine.

DESCRIPTION	EACH SHIFT	20 HOURS	100 HOURS	250 HOURS	500 HOURS
INSPECT ALL DRIVES	Х				
CHECK GUARDS	Х				
DRIVE ALIGNMENT & TENSION		X			
CHECK ENGINE EXHAUST PIPE	Х				
GREASE BLOWER BEARINGS					Х
GREASE HOPPER BEARINGS					Х
CHANGE ENGINE OIL FILTER			Х		
CHANGE BLOWER OIL					Х
CHANGE GEAR BOX OIL					Х
CLEAN INLET SCREEN	Х				
CHANGE SEALSTRIPS					Х
OIL DRIVE CHAINS					Х
CHECK ALL DRIVE SET SCREWS					Х
ENGINE AIR FILTER			Х		

ALL BEARINGS	NLGI grade #2 LITHIUM GREASE
DRIVE CHAIN	30W NON DETERGENT MOTOR OIL
BLOWER	OIL: AEON NLGI grade #2 LITHIUM GREASE
ENGINE	SAE 10W30 MOTOR OIL
REDUCER GEARBOX	AGMA #8 GEAR OIL

In order to perform any service or maintenance on the drive train the drive guards must be removed.

- 1. Follow the MACHINE SAFETY SHUTDOWN INSTRUCTIONS.
- 2. Remove the two bolts that hold the left and right side guards down.
- 3. Remove the left side guard first and then the right side.
- 4. Replace the guards after completing the service or maintenance and before operation.

When replacing or tightening drive belts or chain it is imperative that the drive components – sprockets or sheaves are in line with each other. Use a straight edge of sufficient length to make the determination.

Replace the drive belts if there are signs of cracking or wear. If belts are slipping or squealing during operation adjust them by moving the drive/driven components in the appropriate direction to restore proper tension.

Check the tension on the chain drives when they are lubricated. On the hopper chain drives if there is more than 3/4" deflection or play measured equidistant between the sprockets, the chain needs to be replaced. The feeder drive chain tension can be adjusted via the base mounted tensioner.



SECTION VII TROUBLESHOOTING



Lockout/Tagout the machine before performing any service including removing guards. Failure to do so could lead to serious injury or death.

Machine is running but no material is discharging from hose.

- Slide gate is in the closed position.
- Clutch is in **OFF** position.
- Feeder shear pin is broken.
- Remote Control wire or panel connector is broken or damaged.
- Remote Control wire board connections loose.
- Faulty clutch relay on circuit board or faulty circuit board.
- Drive belt is slipping or broken.
- Feeder chain is off the sprocket or broken.
- Hopper chains are off their sprockets or broken.
- Material jam in machine or hose.
- Hose is bent or closed off from machine to attic.
- Worn out sealstrips in feeder allowing blowback.

Low material output.

- Check slide gate position.
- Partial obstruction in hopper or hose.
- Hose is kinked or damaged.
- Clutch is slipping.
- Machine speed is too low.
- Blower inlet is clogged.
- Blower outlet tubing to feeder has slipped off its connection.
- Bleed valve assembly is in the open position.
- Operator is overfilling hopper resulting in material top pressure which can lead to material bridging above the feed reel.
- Material is sticking to agitator or feed reel from forcing too much material into the hopper, this practice causes less material to be conveyed through the system due to build up on surfaces.

Machine or engine seems sluggish while blowing material.

- Engine is overheating due to low RPM.
- Engine is overheating due to cooling shrouds clogged with insulation.
- Material is wet inside hopper.

- Too much material forced into hopper.
- Clutch slipping during operation.
- Too many hose reductions.
- Obstruction at blower inlet.
- Drive belts may be slipping.
- Gear Box oil is low or empty.
- Loose drive components.

Engine runs but sometimes misfires while blowing material.

- Poor fuel in tank.
- Dirt or water in the fuel system.
- Spark plug wire is loose.
- Oil sentry wires connectors are loose.
- Loose wires or connections at circuit board behind control panel.
- Faulty circuit board.
- Faulty engine ignition module.
- Engine overheating.

Unusual sounds coming from machine during operation.

- High pitched squeal near perforated guards Check for loose drive belts.
- Metal scraping sound when shutting down machine Clutch plate is rubbing.
- Banging sound from hopper area Loose object has fallen into hopper.
- Constant air leaking sound while machine is in operation Bleed valve is open or loose tubing between the blower and feeder.



SAFETY SUPPLEMENT

Effective 1-4-2016

ATTENTION INSTALLERS/OPERATORS FOR YOUR PROTECTION:

- 1. Read and understand the Operating Manual accompanying this equipment before performing any work.
- 2. Additional safety label kits are available from Meyer upon request at no charge. This is part of our effort to ensure this equipment is installed, operated and maintained in the safest possible manner. Affix these labels in locations to achieve maximum visibility and thereby alert any personnel that may ever be on-site that a potential for injury could occur.
- 3. Under no circumstances should this equipment be installed or operated in a manner that permits access to the interior of the insulation blowing machine.
- 4. Outlet connections must always have a hose attached.
- 5. *Always power OFF the machine* before performing any work.
- 6. Always keep loose clothing, hands, feet or any parts of your body, tools and/or any foreign objects away from the interior of hopper and hose.
- 7. Never remove the discharge hose that is attached to the machine without first powering OFF the machine.
- 8. Consult the Meyer factory if you have any questions regarding the proper installation, operation and maintenance of this equipment.

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File # 292-M-001

SAFETY LABELS

Locate all of the safety labels on your equipment and know their meaning before operating your Insulation Blowing Machine.



e-mail: sales@meyerinsulation.com · websites: http://www.meyerinsulation.com or www.wmwmeyer.com



SERIES 550 INSULATION BLOWING MACHINE SAFETY PRECAUTIONS



MACHINE SHUTDOWN INSTRUCTIONS

- 1. Close the slide gate.
- 2. Set the Remote Control Switch to Air to clear the hose of material. When the hose is clear, switch the Remote Control to off and disconnect it from the control panel.
- 3. Reduce engine speed to idle. Let it run at idle to cool down before shutting down.
- 4. Turn the engine ignition key to the OFF position. Remove the key.

NEVER OPERATE THE MACHINE WITHOUT HOSE ATTACHED TO THE DISCHARGE TUBE

NEVER OPERATE THE MACHINE WITHOUT GUARDS IN PLACE

MACHINE SAFETY SHUTDOWN INSTRUCTIONS

Before service, maintenance, or reaching into the machine for any reason follow these steps to ensure the machine cannot be started.

- 1. Follow the Machine Shutdown Instructions.
- Disconnect the fuel tank and close the vent on the tank.
- 3. Disconnect the negative battery terminal and secure it using the lockout box.
- Follow your employer's Lockout/Tagout procedures.

