



 meyer  
a brand of aebi schmidt

# Plowing Tips Guide



Meyer Products began building snowplows in 1926 on a farm in Newburgh, New York. It was then and there Meyer became the innovator, pioneer and leader of what would become an industry that makes winter-time mobility safer and more convenient for people around the world.



## Over 90 Years of Innovation

As the inventors of automotive-based snowplows, Meyer is constantly striving to improve its products and services. In recent years, Meyer has pumped millions of dollars into its manufacturing facility, totally re-vamped its manufacturing processes, instituted higher-quality specifications to all its suppliers and has redesigned nearly all of its product lines.

### Reliable Over-time Construction

Like the customers we serve, the new Meyer is all about performing reliably when the pressure is on. Reliable Over-time Construction (ROC) is the name of Meyer's new way of manufacturing and it consists of state-of-the-art manufacturing technology and rigorous quality control procedures. But it's more than just the way Meyer makes snowplows that has evolved; it's also Meyer's attitude and philosophy.



### The Industry's Best Warranty Protection

Meyer knows that in the snowplowing business, downtime is not an option. And we are so confident that our new equipment will meet all the challenges you and Mother Nature will throw at it, Meyer is backing our equipment with the industry's best warranty: **up to 5 years of complete coverage with an online registration\***.

As Meyer heads into another challenging winter, we invite you to experience our new and re-invigorated dedication to making reliable equipment that won't let you down when the pressure is on.

\* Register your plow online at [meyerproducts.com](http://meyerproducts.com) to activate years three through five.

Meyer Products LLC has published this Plowing Tips Guide to provide an over-view of the best practices when plowing in various situations.

Make sure to reference your Meyer Snowplow Owners Manual for complete safety, operation and maintenance information of your Meyer Plow.

## How to choose the right plow

Choosing the right **Meyer® Snowplow** for the job is extremely important to ensure performance and satisfaction. Use the information below as your quick-guide to choosing the correct plow. All Meyer Snowplows are custom-designed to fit exact vehicle frame and weight specifications as well as usage applications. Call your authorized dealer to match your vehicle specifications or check out Meyer's configuration tool. It's the fast and easy way to find the right Meyer plow for your vehicle. Simply visit: [www.meyerproducts.com/configure-purchase](http://www.meyerproducts.com/configure-purchase).

PLOW TYPE	PERSONAL PLOWS	CONTRACTOR PLOWS	MUNICIPAL PLOWS
VEHICLE TYPE	<ul style="list-style-type: none"> <li>• Mid/Full-Size SUVs</li> <li>• 1/2 Ton Pickups (0-8,500 GVW)</li> </ul>	<ul style="list-style-type: none"> <li>• 3/4- &amp; 1-Ton Trucks (8,600 to 19,500 GVW)</li> </ul>	<ul style="list-style-type: none"> <li>• Medium Duty Municipal &amp; Contractor (21,000-33,000 GVW)</li> </ul>
APPLICATION	<ul style="list-style-type: none"> <li>• Home &amp; Residential</li> <li>• Light Commercial</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial</li> <li>• Retail</li> <li>• Institutional</li> <li>• Residential</li> </ul>	<ul style="list-style-type: none"> <li>• Commercial</li> <li>• Retail</li> <li>• Institutional</li> <li>• City Streets</li> </ul>



Personal



Municipal



Contractor

# Before the snow flies – always perform pre-season maintenance on your Meyer Snowplow.

## MEYER SNOWPLOW PRE-SEASON MAINTENANCE CHECK LIST:

- ① Trip Spring Adjustment.** Adjust trip spring eye bolts until the trip spring coils just begin to separate. Then tighten the adjustment bolt an additional 4 turns.
- ② Pivot Pins/King Bolt.** Grease all zerk fittings used on pivot pins and king bolts.
- ③ Cutting Edge.** Check cutting edge is 4 to 6 inches in height. If less than 4 inches then it will need to be replaced. Check cutting edge mounting bolts for tightness.
- ④ Runners.** Adjust runner height to allow the cutting edge to be 1/2" above the ground.
- ⑤ Mounting.** Inspect for cracks in material and welds. Check mounting bolts for tightness.
- ⑥ Couplers, Hoses, Lift and Angle Rams.** Check for leaks and condition.

**Hydraulic Unit.** Flush out complete hydraulic system (unit, angle rams and hoses) using the Meyer M-2 Flush Fluid and refill with the Meyer M-1 Hydraulic Fluid.

- ⑦ Electrical.** Inspect and clean all electrical connections at battery, all plugs and lights. Add dielectric grease to all connections. Check operation of plow lights.
- ⑧ Hydraulic System.** Check for plow operation (up, down, left, right and mount/dismount if applicable).
- ⑨ Drop Speed.** If applicable adjust the drop speed of the plow to your preference.

### **Storing the Plow and Hydraulic Unit**

After you have disconnected the plow from your vehicle, extend the lift cylinder to end of the stroke and coat the lift rod with light grease. This fills the cylinder with hydraulic fluid and protects the interior and exterior from rust and corrosion. Also coat the exposed portions of the power angling cylinder rods with light grease. Be sure to reconnect the quick couplers at the power angling rams and plug in the weather plugs on hydraulic unit to keep them clean and to prevent contamination of the system. Coat all pivot pins and other wear points with chassis lubricant. Unplug all electrical connections at the power unit. Coat all connections with a dielectric compound to prevent corrosion and plug them into their corresponding weather plugs. Unplug the plow lights, tape or use dielectric compound at light connections to prevent corrosion. **WARNING:** THE LIFT ARM EXTENDS BEYOND THE BUMPER OF THE VEHICLE. TO MINIMIZE DAMAGE IN A FRONT END COLLISION, THE LIFT ARM SHOULD BE REMOVED FROM THE VEHICLE WHEN YOUR SNOWPLOW IS REMOVED. Meyer M-2 Hydra-Flush should be used to flush contaminants from the system. It should also be used for off-season storage.



## TIP #3

### **Efficient Snow Clearance Starts with Planning**

#### **PREPARING AREAS, USE OF GUIDE MARKERS**

Every area to be plowed should be inspected before snowfall for potential hazards. Holes should be repaired, raised manhole covers leveled or noted and obstructions noted to prevent damage to the plow mounting or vehicle undercarriage.

Markers or stakes with reflectors should be in position to indicate boundaries of areas to be plowed, location of shutoff valves, catch basins and other hazards. Markers should be at least three feet above the ground; higher in areas of deeper snowfall. The first step in organizing an efficient plan is to prepare a map or procure a blueprint of the area. **Locate and mark all utilities, outlets, shutoffs, catch basins and possible emergency equipment that must be reached from outside.** Figure the square footage of each area and the total area. Especially note areas from which snow will have to be carried, call “trapped” areas. Although hauling is expensive, it is necessary where piled snow would limit access. Indicate clearing priorities on your map. This may aid you in preparing a priority plan for your clearance operation.

## Plow with the Storm

### KEEP SNOW UNDER CONTROL

Deep or heavy, wet snow, because of its increased weight, calls for more skillful and powerful plowing than light powder snow. Always plow in low gear and keep plowing. Heavy snow may also require clearing a path or a work area to provide you room to move snow to another area.



*Remember that wet snow weighs about 12 pounds per cubic foot. As it piles up in front of a snowplow blade, the weight can quickly increase to several tons.*

Where packed snow or ice must be plowed, it is sometimes necessary to lower the cutting blade to rest directly on the road surface. In that situation, plow in lowest gear for greatest power to the cutting edge. This method also prevents the plow from “climbing over” the icy surface. If plowing very deep snow, 12 inches or more, you may have to plow with the blade partially raised to shear off successive layers of snow until a working area is clear. Then work small “bites” into the edge. The “bite” depth should be inversely proportional to the snow depth. A rule of thumb: 6-inch snow may be plowed with the entire blade width; 9-inch snow with 3/4 of the blade width; and 12-inch snow with only 1/2 of the width. Experience will show what work can be done without stalling or getting stuck.

*It is of utmost importance to remember one basic rule — Always plow with the storm.*

Start plowing when snow is 1 to 4 inches deep, depending upon traffic or other limitations. Heavy wet snow can be very hazardous when just 1 inch is on the ground. Accumulations of more than 4 inches can be very difficult to clear.

## Angle Moldboard for Optimum Results.

You will not be able to plow snow of any significant depth straight ahead for more than a short distance. Set the moldboard at the best angle for rolling snow sideways in the desired direction. The snowplow path, in the angled position, should exceed the tire track by at least six inches on either side.

Be sure to have enough slack in the lift chain while plowing so the cutting edge of the moldboard can follow the ground contour. Use the adjustable runner shoes to set the bottom edge of the plow just above the ground for best operation.



It's important to recognize the significance of even a few inches of snow. Besides being slippery, especially when wet, snow can be extraordinarily heavy, and make auto travel impossible. Snowfall of just 1 to 3 inches will produce hazardous traffic and roadway conditions even for experienced drivers. Snow is heaviest when wet and most difficult to handle. The National Weather Service reports that a 6-inch, average weight snowfall on a 200 x 200 foot parking lot weighs 62 tons. Heavy, wet snow for the same area might weigh as much as 248 tons. If the heavy snow had to be hauled away, you'd need 74 full loads on a 10-yard truck. Obviously, the only way to assure clear traffic areas is to be prepared with the proper equipment and expertise to open arteries and areas to traffic. Remember to keep current with accurate snowfall information from local weather bureaus via radio, television and internet.

## TIP #6



## Establish Snow Clearance Plans

These two snow plowing techniques have been time and operation tested. Use them as guidelines for most snow plowing strategies. Plan I is for smaller areas of 50,000 sq.ft. or less. Plan II is for larger establishments having more than 50,000 sq.ft. to be cleared.

### **PLAN I** (*less than 50,000 sq. ft.*)

**Recommended equipment:** A four wheel drive vehicle; Lot Pro™ snowplow; snow shovels; and ice control equipment.

**Recommended procedure:** **PLOW WITH THE STORM.** Begin plowing at the suggested accumulation for your type of establishment (i.e., 1" for commercial and institutional areas; 2" for industrial establishments; 3" for municipal and residential areas.) Continue until snow has been cleared. Don't forget - snowfall often surpasses weather forecasts. A well planned clearing schedule will help prevent the necessity for expensive emergency action.

### **A typical small-area strategy:**

- ① Keep in touch with local weather forecasts for preparatory measures.
- ② Notify scheduled personnel.
- ③ Have vehicles and equipment inspected, fueled and ready.
- ④ Clear area by pushing snow first to sides of drives, around perimeters of parking areas and away from loading docks and platforms. It is often true that the smaller the establishment, the greater the proportion of "trapped" areas which will require snow to be hauled away. Always deposit snow as far back as possible for greatest use of dumping areas.
- ⑤ Use snow shovels to clear walks, gates and doorways.
- ⑥ Treat with snow-melting materials as needed.

## **PLAN II** (over 50,000 sq.ft.)

**Recommended equipment:** Table 1 below shows the recommended usage based on vehicle type and plow size.

**Recommended procedure:** As always, PLOW WITH THE STORM.

Begin plowing at the suggested accumulation for the area and continue as required. Actual snowfall frequently exceeds forecasted conditions.

Well-planned snow clearance strategy reduces the chances for expensive emergency action.

**TABLE 1** Based on straight blades.

### Average Hourly Snow Clearing Capacities\*

	<b>Snow Plow Size</b>	<b>Open Area</b> (sq. ft.)	<b>Trapped Area</b> (sq. ft.)	<b>Straight Line</b> (no. of miles of roadway cleared in 2 passes)
<b>TRACTOR/TRUCK</b>				
<b>Tractor</b>	6½ ft.	33,000	25,000	2 ½ miles
<b>4 Wheel Drive Utility Vehicles</b>	7 ft.	53,000	21,500	5 miles
<b>TRUCKS ½ – 1 ton</b>				
<b>2 Wheel Drive</b>	7 – 7½ ft.	38,000	19,000	4 miles
<b>4 Wheel Drive</b>	7 – 8 ft.	88,000	42,000	6 miles
<b>LARGE TRUCKS</b>				
<b>1½ – 2 ton</b>	8½ – 9 ft.	67,500	30,000	7½ miles**
<b>2½ – 3 ton</b>	10 ft.	67,500	~	10 miles**

\* 6" snowfall cleared by operators with average ability.

Based on regional interviews with knowledgeable contractors.

\*\* Based upon recommended maximum plowing speed of 20 mph.

~ Not recommended for use in trapped areas.



## TIP #7



### Snow Plowing Tips from the Pros

#### SNOW PLOWING OPEN AREAS

Open areas such as parking lots require a more serious approach to planning, where to begin, and where snow can be stacked at the edges. The following will help in making a plan, thus turning out a neat, professional job.

Always turn on warning flashers and/or use yellow warning beacon or strobe light when plowing. Then make a single pass down the center on the longest dimension. Angle plow the snow toward the long sides with continuous passes until the area is cleared and snow is all stacked around the outside edges.

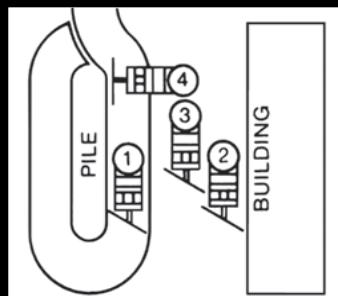
For larger areas, efficient plowing calls for clearing the area immediately in front of buildings and working away from buildings toward the outer limits of the area. When snow is quite deep, it might be necessary to push the excess into piles out of main traffic lanes for later handling. Areas 100,000 sq.ft. or more – once the main artery is clear, it is usually most efficient to plow at right angles to the artery, piling up windrows by back and forth passes in alternate lanes. The windrows can later be pushed out of the way or left as is depending upon conditions.

To clean up remaining snow, put the blade in the straight position. Buck piles from either side to stack snow. The blade will automatically “ride” up the pile to make stacking easier.

On a dirt or slag surface, drop the moldboard to the ground in a straight position, then raise one inch or adjust runners for desired clearance. Under extreme surface conditions it may be necessary to plow with the moldboard in a suspended position.

#### PARKING LOTS

- ❶ Always turn on warning flashers and/or use yellow warning beacon or strobe light when plowing.
- ❷ Make first pass to clear area into which you will later push more snow.
- ❸ Clear front in straight position and clean up remaining snow.
- ➔ Buck the piles from either side to stack snow. Blade will automatically “ride” up the pile to aid in stacking.



## Straight line snow plowing.

This method is most efficient for drives, streets, roads and walkways. Snowplows mounted on utility vehicles or service trucks are best for such an operation. Set the moldboard at an angle so that the snow is rolled to the shoulder or curb. Single lane walks, roads and aisles can often be cleared with one pass.

When the road is more than twice the moldboard's width, plow a center lane for the first full pass. Then, in follow-up passes, work the snow to the sides. Corner clearing is almost automatic when clearing intersecting streets. When snow is heavy, a little "stop over" snow may have to be removed from intersections by additional short passes. The diagram on the following page illustrates plowing sequence for a typical 20-foot road.

*We recommend a speed of 5 to 15 MPH for this kind of plowing. Of course, road surface, weather conditions and equipment will influence your speed. Plow with the storm.*



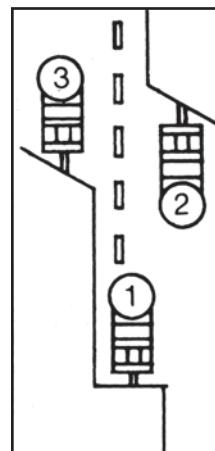


## TYPICAL ROADWAY

- ① Make one pass down center with blade in straight position.
- ② Push snow to side with moldboard angled.
- ③ Do the same on either side.

## BACK DRAGGING

**WARNING:** Use caution when back dragging. Runners can catch on objects causing damage to the equipment or the plowing surface. To reduce the risk of damage, remove or raise runners when back dragging.



## CLEARING TRAPPED AREAS

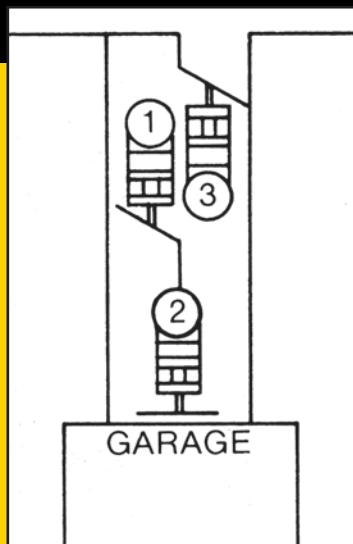
Areas where there is little or no space for stacking cleared snow are considered "trapped." An example is an area requiring full access from surrounding buildings. Snow plowing techniques are the same as for any other space of comparable size, but heavy accumulations must be piled for removal by truck.

## CLEARING RESIDENTIAL AREAS

Driveways and aprons are most efficiently cleared by maneuverable four wheel drive vehicles. Recommended procedure is to enter the driveway rolling snow away from the residence. Stop about two-thirds of the way in, set the blade in bucking position, lift as high as possible, then drive through the snow to the garage. Drop the blade and back drag to the street. Turn around, back into the cleared path to the garage, reset the blade angle and continue rolling snow away from the house. Complete as many passes as necessary to clear the snow.

## DRIVEWAYS

- ① Plow toward garage pushing snow to one side.
- ② Set blade to straight position, lift it as high as possible and drive through snow to garage. Drop blade and back drag to street.
- ③ Back into driveway and angle blade again. Use as many passes as necessary to clear drive.





## The Meyer® Drive Pro™

**Designed to meet contractor or homeowner plowing needs.**

### FOR CONTRACTORS

It's a lightweight rugged commercial plow that is uniquely designed to make it easier for contractors to plow driveways, condos or anywhere there is a limited amount of space. Coupled with smaller vehicles like SUVs or light pick-ups, the Drive Pro provides snow professionals optimal maneuverability in tight residential and commercial settings.

### FOR HOMEOWNERS

Stay warm in your cab because the Drive Pro is a rugged and easy-to-use steel snowplow that allows a homeowner to clear a long driveway in under 10 minutes.



## Stacking

When snow clearance conditions are perfect, snow can be merely pushed out of the way to unused areas. The first storm of the season, plow back from the drive area to allow space to pile future snowfall. It is usually necessary to pile snow up to considerable heights. In that case, push the snow forward and upward by raising the snowplow as you move into the pile. The vehicle's momentum will carry the plow into the pile, avoiding equipment damage. The pile should slope outward, so later snows can be pushed upward.

### **WARNING:**

Stacking snow or pushing up into high snow piles with the plow in lower/float or angled position can cause damage to the snowplow components or the vehicle that will not be covered under the Meyer Products Warranty Program. Such damage may include, without limitation, twisting the A-frame, the moldboard hitting the lift arm, or the plow markers striking the vehicle.

## Minerals and Chemicals for Snow and Ice

Except in very light snow, ice melting materials should never be used in place of snow plowing. However, in combination with trained personnel and equipment, ice melting materials play an important part in controlling ice and snow. Whenever possible, apply ice melting materials before a snowfall. You'll use less, and it will be less damaging for the environment. You may have to increase the use of ice melting materials at night and as temperatures fall.

Experts agree a mixture of two parts mixed ice melting materials (1:3 calcium chloride to salt, by weight) mixed with one part abrasive (cinder, sand or slag) is more effective than rock salt in melting snow and ice below 30°F. One hundred fifty pounds of such mixture with abrasives will treat a 50,000 sq.ft. surface. It is imperative to treat priority areas such as hills, heavy traffic areas, bridges and intersections first, especially where snow may compact and adhere to the road surface, causing icy road conditions. When slush begins to stiffen and refreeze, it will be necessary to plow again and reapply ice melting materials.



## The Meyer® Blaster™ Spreader

**More power. Greater reliability.**

When you need to quickly spread ice melting material, so you can move onto the next job, get a **Blaster Spreader** from **Meyer**. This poly tailgate spreader, available in four models, spreads salt or a 50/50 blend of salt & sand. What makes this spreader unique is its ½ horsepower direct drive motor. It's the most powerful spreader motor available. The motor's Fast Blast feature can produce up to 70 amps of surge power to grind through chunks of salt or sand. The 750- and 350-pound hoppers are made of extended life polyethylene and are backed by Meyer's exclusive ROC Solid Warranty\*.

\* Register your Blaster Spreader online at [meyerproducts.com](http://meyerproducts.com) to activate years three through five.

**Mounts  
available  
to fit most  
vehicles.**

- **Dump Trucks**
- **Fixed Mount**
- **Hinged Mount**
- **Flat Bed**
- **Receiver Mount**
- **3-Point Mount Adapter**
- **Flat Bed Utility Adapter**



## The Meyer® Lot Pro™

### The All-New Contractor Plow from Meyer.

**The Meyer Lot Pro** features the tallest and most aggressive moldboard in the industry. Its 75-degree attack angle and totally redesigned “black iron” means that you will get better snow clearing and more reliable performance in less time. And the Lot Pro is backed by the industry’s best warranty protection, five full years with an online registration.\*

The NEW Meyer Lot Pro, because in snowplowing, downtime is not an option.

\* Register your plow online at [meyerproducts.com](http://meyerproducts.com) to activate years three through five.

# Meyer® Snowplow Pre-Season Maintenance Check List:

- Adjust trip spring
- Grease pivot pins/king bolt
- Check mounting bolts – cutting edge
- Adjust runners
- Inspect mounting (cracks and tightness)
- Check for leaks (couplers, hoses, lift & angle rams)
- Flush hydraulic unit
- Inspect & clean electrical connections
- Check operation of plow lights
- Check plow operation
- Check drop speed – adjust if needed



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