

# **Meyer Power Box<sup>™</sup> 812**



Operation and Maintenance Manual



### Thank you...

Thank you for buying your Meyer Plow. As a new owner of hard-working, mechanical equipment, we strongly urge you to spend quality time with this owner's manual. It's easy to use and full of time-saving tips that will enhance your ownership experience. It includes suggestions for faster installation, safe operation and more productive plowing.

We also strongly urge you to register your new Meyer plow at meyerproducts.com. Registering will only take minutes and the benefits of doing so will last for years. When registered, you will receive timely and accurate communication on operation tips, maintenance, new products, and service bulletins. And in the unlikely event you need warranty work done, your local servicing dealer will be able to process your claim faster.

Thanks again for your business. You can now look forward to many years of reliable performance and keeping your driveway safer and easier to use. If you have any questions about your Meyer plow, contact us at: www.meyerproducts.com or call 216-486-1313.

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Andrew L. Outcalt *President, Meyer Products* 

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# **Safety Definitions & Warnings**

1	A DANGER	Never stand or ride on the Power Box assembly. Keep people and pets at least 25 feet away from the Power Box when in operation. Failure to comply will result in death or serious injury.
2		Always lower Power Box to the ground when Power Box is being serviced or when vehicle is not in use. Failure to comply could result in death or serious injury.
3		NEVER use the Meyer Power Box without first CAREFULLY reading the Owner's Manual. It is CRITICAL for your safety to ALWAYS obey EVERY warning in the manual and follow EVERY instruction EXPLICITLY. Failure to comply could result in death or serious injury.
4		The Meyer Power Box should be used by drivers with a valid operator's license. Keep all body parts inside the vehicle. Failure to comply could result in death or serious injury.
5		The Meyer Power Box should NEVER be used for ANY other purpose other than plowing snow or agricultural use, using the Meyer Power Box for other purposes could result in serious injury or death.
6		Inspect Power Box assembly and mounting components and fasteners for wear and damage before and after each use. Worn or damaged components or fasteners could allow the plow to drop unexpectedly. Failure to comply could result in death or serious injury.
7		Do not change Power Box position while traveling. You could suddenly lower the plow accidentally. Failure to comply could result in death or serious injury.
8		ALWAYS wear a seat belt when using the Power Box. Hidden obstructions can cause the vehicle to stop suddenly resulting in personal injury. Failure to comply could result in death or serious injury.
9		Do not mix different kinds of hydraulic fluid. Some fluids are not compatible and may cause performance problems and product damage Failure to comply could result in death or serious injury.
10		NEVER perform any repairs or maintenance with the vehicle turned on and the Power Box attached to the vehicle. Failure to comply could result in death or serious injury.
11		The vehicle must not be operated when overloaded. In all cases, the loaded vehicle weight, including the entire Power Box system, all aftermarket accessories, driver, passenger, options, nominal fluid levels, and cargo must not exceed the front/rear Gross Axle Weight Rating (GAWR), and total Gross Vehicle Weight Rating (GVWR). These weights ratings are specified on the safety compliance certification label on thevehicle. Failure to comply could result in death or serious injury.
12		Read the Meyer Power Box Owner's Manual before operating or servicing a snow plow. FOLLOW THESE INSTRUCTIONS EXPLICITLY. Failure to comply could result in death or serious injury.
13		SAFETY PRECAUTIONS should be used when Power Box is in OPERATION and plow is in a RAISED position. Lower plow to ground when vehicle is PARKED in case of hydraulic failure. Failure to comply could result in death or serious injury.
14	WARNING	Remove Power Box Assembly before placing vehicle on hoist/lift. Failure to comply could result in death or serious injury.
15		Do not exceed 20 mph transporting plow. Do not exceed 5 mph plowing snow. Know your road conditions at all times. Keep feet clear of Power Box at all times. Failure to comply could result in death or serious injury.

### SAFETY DEFINITIONS

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

### A DANGER

**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 an potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

### CAUTION

**CAUTION** used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, will result in property damage.

# **Safety Definitions & Warnings**

16		SAFETY PRECAUTIONS should be used when Powe Box is SERVICED. Hydraulic fluid under pressure can cause skin injection injury. If you are injured by hydraulic fluid, get medical attention immediately. Failure to comply could result in death or serious injury.
17		Vehicle exhaust contains lethal fumes. Breathing these fumes, even in low concentrations, can cause death. Never operate vehicle in an enclosed area without venting the exhaust to the outside. Failure to comply could result in death or serious injury.
18		Gasoline is highly flammable and gasoline vapor is explosive. Never smoke while working on vehicle. Keep all open flames away from gasoline tank and lines. Wipe up any spilled gasoline immediately. Failure to comply could result in death or serious injury.
19		Flag obstructions to prevent damage to product or property. Failure to comply may result in minor or moderate injury.
20	CAUTION	A ballast weight may be required to prevent front GAWR overloading. If required, ballast must be securely attached at least 24 inches behind the rear axle. Failure to comply will result in property damage.
21	CAUTION	Batteries normally produce explosive gases which can cause personal injury. Therefore, do not allow flames, sparks or lit tobacco to come near the battery. When charging or working near a battery, always cover your face and protect your eyes, and also provide ventilation. Batteries contain sulfuric acid which burns skin, eyes and clothing. Failure to comply will result in property damage.
22	CAUTION	See your Meyer Authorized Distributor/Web site for specific vehicle application recommendations before installation. Failure to comply will result in property damage.
23	CAUTION	Installation of a Power Box may affect your vehicle warranty. For more information consult your Vehicle Owner's Manual / Vehicle Dealer. Failure to comply will result in property damage.
24	CAUTION	Warranty does not apply to a Meyer plow product which has been negligently or improperly assembled or installed. Failure to comply will result in property damage.
25	CAUTION	CAUTION: DO NOT BURN holes or WELD vehicle frame. This may cause frame failure. Failure to comply will result in property damage.
26	CAUTION	A driver's first responsibility is the safe operation of the vehicle and Power Box. The most important thing you can do to prevent a crash is to avoid distractions and pay attention to the road. Wait until it is safe to operate mobile communication equipment such as cell phones, two way radios, etc. Failure to comply will result in property damage.



#### SAFETY DEFINITIONS



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

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Snow, despite the beauty it may impart to a bleak winter landscape, poses the dual threat of inconvenience and danger. The environmental conditions associated with snow, not to mention the health hazards and economic loss it may impose, seriously endanger thousands of lives annually. Business and industry suffer, and millions of snowbelt residents may be affected by a single snowstorm.

Meyer Products LLC has published this manual to help you get maximum performance from your Meyer Power Box and familiarize you with the features designed for efficiency and safety; be sure you recognize and understand them. Follow recommended operation and maintenance instructions, so when the storm hits, your Meyer Power Box will be ready and you will know how to plow like a pro.

### DO NOT EQUIP ANY VEHICLE WITH A SNOW PLOW WITHOUT CONSULTING MANUFACTURERS' RECOMMENDATIONS.

Machines with Meyer Power Box installed may be so equipped as to meet machine manufacturers' specifications and recommended options for snow plowing use. **Most machine manufacturers insist that machines which are to be used for snow plowing** 

#### be equipped with certain options and accessories, and it is so stated in machine manufacturer specifications for snow plow application.

Under the continuing Meyer Product Improvement Plan, Meyer Products LLC reserves the right to change design details and construction without prior notice and without incurring any obligation.



## **EC Declaration of Conformity**

#### **CE DECLARATION OF CONFORMITY**

The undersigned representing the manufacturer

and the authorized representative established within the community

Meyer Products LLC

18513 Euclid Ave

Cleveland, OH 44112

herewith declared that product: Drive Pro / Lot Pro / Road Pro / Diamond Edge / Super-V / Super-V / Path Pro / Path Pro 2 / Power Box

Model/Type ref:

is in conformity with the Essential requirements of the following EC Directives when subject to correct installation, maintenance, and use conforming to its (their) intended purpose, to the applicable regulations and standards, to our operation and maintenance manual.

2006/95/EC	EC Low Voltage Directive
2004/108/EC	EMC Directive
2006/42/EC	Machinery Directive

and that the Standards and/or technical specifications referenced below have been applied:

x BS EN 60204-1:2006/ IEC 60204-1:2005: Safety of machinery-Electrical equipment of machines-Part1 General requirements.

x EN ISO 12100-1:2003: Safety of Machinery-Basic Concepts, General Principles of Design Part 1: Basic Terminology and Methodology

x EN ISO 12100-2:2003: Safety of Machinery-Basic Concepts, General Principles of Design Part 2: Technical Principles

x EN 13021:2003+A1-Winter service machines- Safety requirements

x EN 61000-6-2:2005. Generic standards-Immunity for Industrial Environments.

x EN 61000-6-4:2005. Generic emission standard, Part 2: Industrial environment.

Year of CE Marking:

Manufacturer:

Authorized Representative in the community:

Signature. Position: Engineering Manager

Signature:

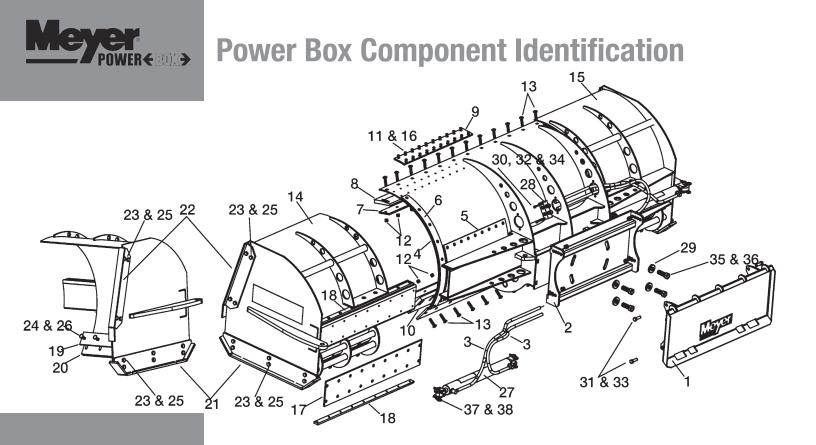
Position -

Date: 4-7-2016

Place: Cleveland, Ohio

Date:	
Place:	





# **Power Box Component Identification**



ITEM	Part No	QTY	DESCRIPTION
	53000	1	Power Box Assembly
1	16048	1	Bobcat Weldment
2	16049	1	Attachment Weldment
3	16062	4	Hydraulic Ram Hose
4	16065	1	Center Section
5	16077	2	Center Main Slide
6	16078	2	Center Outer Slide
7	16080	1	Center Back Drag Strap
8	16081	1	Rubber Back Drag Edge
9	16082	2	Center Upper Slide
10	16085	1	•• Bottom Rubber Cutting Edge
11	16086	88	•• Rivet .25 x .594
12	20307	35	•• Locknut 1/2-13
13	21655	35	•• Bolt C 1/2-13 x 2-1/2" Gr.5
14	16066	1	Left Wing Assembly
15	16067	1	Right Wing Assembly
16	16086	36	•• Rivet .25 x .594
17	16103	1	Vertical Slide
18	16104	2	Wing Slide Upper/Lower
19	16105	1	<ul> <li>Wing Cutting Edge Strap</li> </ul>
20	16106	1	<ul> <li>Wing Rubber Cutting Edge</li> </ul>
21	16111	1	<ul> <li>Wing Ski Weldment</li> </ul>
22	16117	1	<ul> <li>Back Drag Ski Weldment</li> </ul>
23	20140	10	•• Bolt H 5/8-11 x 1-3/4" Gr.5
24	20307	6	•• Locknut 1/2-13
25	20309	10	•• Locknut 5/8-11
26	21655	6	•• Bolt C 1/2-13 x 2-1/2" Gr.5

ITEM	Part No	QTY	DESCRIPTION
27	16068	2	Double Acting Cylinder
28	16069	1	Hydraulic Block
29	16084	8	Washer 1" x 3/8 thick
30	20034	2	• Bolt H 5/16-18 x 2-3/4" Gr.5
31	20141	4	• Bolt H 5/8-11 x 2 Gr.5
32	20304	2	Locknut 5/16-18
33	20309	4	Locknut 5/8-11
34	20352	2	<ul> <li>Flatwasher 5/16"</li> </ul>
35	21656	4	• Bolt H 1-8 x 3" Gr.5
36	22493	4	Locknut 1-8
37	22436	4	Cylinder Pin
38	20420	4	Cotter Pin

Items 16-26 are used on both the Left and Right Wing Assembly



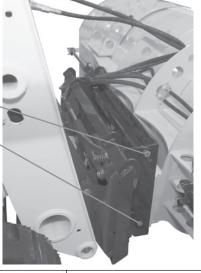
## **General Information**

What makes Power Box unique is its ability to widen (8'-12') to cover larger areas, and to narrow (8'-12") to fit into smaller areas. It is a perfect implement for use traveling down the road, moving in between vehicles in parking lots for snow removal, and through stalls and barn doors when doing farm waste management. The Power Box is attachable to a wide array of machines from tractors and pay loaders to skid steers. The Power box is hydraulically driven so you do not have to get out of your machine to expand or compress the wings of the material handling box. It is controlled by your machine's hydraulic control system. The Power Box is able to oscillate side to side at a twenty degree angle to allow for more of a flush contact with the ground. The Power Box has a built in back drag ability depending on the implement used.

Please consult your machine's owner's manual for information regarding your machine's bucket removal and accessory hook-up to the din plate.

Since machine manufacturers vary their din plate geometry, the Power Box mounting plate has 4 holes at the top and 3 holes at the bottom so the attack angle can be maximized to allow the Power Box to sit flat on the ground for both plowing forward and back dragging.

Since machine manufacturer's vary their hydraulic coupler types, the Power Box hoses do not have hydraulic couplers. These will need to be purchased from your vehicle manufacturer's distributor.



## **Troubleshooting Guide**



These charts are intended to be used as an aid in diagnosing Meyer Power Box. They are not a substitute for factory training and experience. Be certain to read the General Information section before attempting any troubleshooting. Additional detailed information may be found in "Support" section at www.MeverProducts.com.

CONDITION	POSSIBLE CAUSE	CORRECTION
Wings will not move	<ol> <li>Obstruction with wings</li> <li>Hose and coupler issue.</li> <li>Machine hydraulic system not operating</li> </ol>	<ol> <li>Clear obstruction</li> <li>Check to make sure couplers are properly connected and or replace as necessary.</li> <li>Check machine hydraulic system</li> </ol>

### **General Maintenance**

Inspect all fasteners, hoses, couplers and pins after each use.

Maintaining Cutting Edge and Mounting Bolts-Monitor the cutting edge of your plow for excessive wear and tear. Replace or adjust it as soon as it appears to have worn approximately 2". Replacing the cutting edge will prevent damage to the Power Box.

Monitoring the Condition of Your Hoses, Couplers and Rams- Check all hoses for bubbles or cuts and couplers for rust or leaks. A failure in a hose or coupler will result in a loss in oil pressure and cause power wing failure. Check rams for rust and leaks, either of these problems can introduce water into your hydraulic system which may damage your machine's hydraulic system. If you find any of these problems, replace the damaged parts with Meyer Genuine Parts available from your local authorized retailer.

Storing the Plow and Hydraulic Unit-Before you disconnect the Power Box from your machine, retract both wings and coat the exposed portions of the wing cylinder rods with light grease. Be sure to reconnect the guick couplers at the Power Wing Cylinders and plug in the weather plugs on the machine side connections to keep them clean and to prevent contamination of the system. Coat all pivot pins and other wear points with chassis lubricant.

For questions please contact www.meyerproducts.com, or call 216-486-1313.

**A** WARNING 9/10/12/13/14/16/17/18A CAUTION

## **Meyer® Snow Plows** Limited Warranty



What is Covered: Meyer Products, LLC, warrants to the original purchaser of Meyer® brand products that they will be free from defects in materials or workmanship, with the exceptions stated below. No person is authorized to change this warranty or to create any additional warranty on Meyer® products. How Long Coverage Lasts: This warranty runs for a period of two years from the date of purchase on any purchase of a complete Power Box Package. If the Package is registered online at www.meyerproducts.com within sixty (60) days of purchase, your warranty for the Package will be extended for a period of three years. In addition to the warranties covering a complete Power Box Package and Structural Steel, you will receive a warranty for a period of one year from the date of purchase on individual parts, components, or accessories. All foregoing warranties apply only to an original purchaser of the product if the product is installed by an authorized Distributor/Sub-Distributor and terminate if the product is sold or otherwise transferred. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

#### What is Not Covered: This warranty does not cover:

- Problems caused by failure to follow the product instructions, failure to maintain the product as described in the Operator's Manual, or failure to maintain proper levels of lubricants;
- Problems caused by contamination or restriction of lubricant systems, or damage resulting from rust, corrosion, freezing or overheating.
- Paint or expendable snowplow parts such as pins, runners, cutting edges, chrome plating, springs and markers.
- Damage to any machine to which the products are mounted, or the suitability of any product for machines which are not fitted with the appropriate heavy-duty snow plow service preparation parts.
- Damage caused by usage that is not in accordance with product instructions.
- Any snow plow, or any part, component, or assembly thereof, which has been modified or altered.
- Problems caused by using accessories, parts, or components not supplied by Meyer Products.
- Cost of tax, freight, transportation or storage charges, environmental charges, solvents, sealants, lubricants or any other normal shop supplies.
- Problems caused by collision, fire, theft, vandalism, riot, explosion, lightning, earthquake, windstorm, hail, water, flood, or any other Acts of God.
- Liability for damage to property, or injury to, or death of any person arising out of the operation, maintenance or use of the covered product.
- Products with missing or altered serial numbers.

# **Meyer<sup>®</sup> Snow Plows Limited Warranty**



The original purchaser's sole and exclusive remedy against Meyer Products and its Distributors and Sub-Distributors, and Meyer Products' sole obligation for any and all claims, whether for breach of contract, warranty, tort (including negligence) or otherwise shall be limited to providing, through its authorized Distributor/ Sub-Distributor network, all labor and/or parts necessary to correct such defects free of charge. Any cost incurred in returning the product to an authorized Meyer® Distributor/Sub-Distributor is the responsibility of the original purchaser. ALL EXPRESS AND IMPLIED WARRANTIES FOR THE PRODUCT, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN TIME TO THE TERM OF THE LIMITED WARRANTY PERIOD. NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THE LIMITED WARRANTY PERIOD HAS EXPIRED. Meyer Products disclaims liability beyond the remedies provided for in this limited warranty, and disclaims all liability for incidental, consequential, and special damages, including, without limitation, any liability for third-party claims against you for damages, for products not being available for use, or for lost profits. Meyer Products' liability will be no more than the amount you paid for the product that is the subject of a claim; this is the maximum amount for which we are responsible. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

What Meyer Products Will Do: Meyer Products will repair any product that proves to be defective in materials or workmanship. In the event repair is not possible or practical (as determined by Meyer Products in its sole discretion), Meyer Products will either replace the product with a new product of similar model and price, or refund the full purchase price, as determined by Meyer Products.

**Customer Responsibilities:** Customer must keep the complete Snow Plow Package serviced/maintained as recommended by Meyer Products. A written record of service must be maintained, along with receipts for maintenance materials purchased. A copy of the maintenance record and pertinent receipts may be requested in the event of a claim.

#### **MEYER PRODUCTS, LLC**

18513 Euclid Avenue Cleveland, OH 44112

# **STEP UP TO A 5-YEAR WARRANTY**



When you purchase and register\* any Meyer snow plow, it will be covered for a full five years. If you do not register the plow, it will be covered for two years.

\* Must register your complete plow system online to activate 5 year warranty.

### It pays to keep your Meyer ALL Meyer.

Meyer Genuine Parts are designed to fit properly and perform better and last longer – which means you save money by replacing fewer parts less often. In addition, all Meyer Genuine Parts:

- > Comply with Meyer specifications and technical standards
- > Maintains the warranty on your original equipment
- > Fit perfectly and reduces installation time
- > Guarantee original equipment quality

Look for the Meyer name on all your replacement parts.

For more information visit our web site

### www.meyerproducts.com





Meyer Snow Plows are protected by one or more of the following patents: 8006413, D0507999 S, D05179635, 8453358, 8695238, 7,918,042 B2, CA 2,677,509 C, D0517963 S, EP 1,989,402 B1, ES 2,346,587, 6138388, 7,591,087 B2, 7,661,211 B2, 7,793,440 B1, 8739437, 8793906, CA 2,604,085C, 6354024, 6276075, 6,318,975 B1, 6564479, 6256909, 6594923, 6618964, 7114270, 7117617, 7290359, D399326 S, CA 2,300,012 C, CA 2,314,772 C, CA 2,331,653 C, CA 2,370,925 C, CA 2,455,637 C, CA 2,653,801 C, CA 2,654,856, EP 1,010,809, 7353628, 6153975, 6273729, CA 2,260,509 C, CA 2,282,045 C, CA 2,293,858 C, CA 2,298,243 C, 6265829, 6015219, 6005300, 6163985, 8,887,413, 9,278,645.

### Meyer Products carries a full line of spreaders and other products including:



#### **Broadcast Spreaders**

If you are looking for a heavy-duty broadcast spreader for all-season use, look no further.

#### **Tailgate Spreaders**

With direct drive motors that help the auger to grind through large chunks of material, jams are a thing of the past.

#### Insert Hopper

Featuring an unprecedented ten-year warranty on the virtually indestructible polyethylene hopper, Meyer outlasts virtually every hopper on the market.



#### **Dump Truck**

Getting a good return on your dump truck is important. That's why we make the very best Under Tailgate Spreaders (UTG) and Replaceable Tailgate Spreaders (RTG) available.



#### The Big Yellow Box

The Big Yellow Box is perfect for storing rock salt, sand, chemicals, tools or anything you need to keep dry and secure.

Form#4-554

Part# 90886 0616

Meyer Products LLC 18513 Euclid Avenue Cleveland, OH 44112-1084 216-486-1313 www.meyerproducts.com

Dealer Information: