



MDP Multi-Directional "Folding-V" Snow Plow



Model Number: _____

Serial Number: _____

Rev. 03/14

Rylind Manufacturing, Inc.
2801 Youngfield St
Suite 250
Golden, CO 80401-2263

Business/Sales Offices: 303-979-3548
Manufacturing Plant: 970-522-2859
www.Rylind.com
Info@rylind.com

- Thank you for purchasing a Rybind Attachment. For proper installation and operation for your Rybind Attachment this book **SHOULD BE READ COMPLETELY BEFORE BEGINNING INSTALLATION OR OPERATION OF THE EQUIPMENT.**
- Your safety and the safety of others depend on the proper installation, operation, maintenance, and understanding in the use of this equipment.
- Some photographs and installations in this manual may show details of this attachment that may be slightly different from your unit.
- Continuing improvements and advancements of this product may occur at any time.
- Any unauthorized modification to this product or lack of maintenance, proper use, or unsafe operating techniques will not be covered under warranty, further more Rybind Manufacturing reserves the right to void the warranty on some or all the equipment installed on that unit.
- If any questions arise during installation or maintenance of your product please consult your dealer or contact Rybind Manufacturing's corporate offices.

Thank you for your business.

INDEX

	Page #
Plow Maintenance	4
Parts List	5
Exploded View	6
Split Valve Diagram	7
Warranty Information	8-9

Maintenance

Rylind MDP Multi-Directional “Folding-V” Plow must be maintained regularly during in season use. Inspection must be carried out every 8 hour of operation. Any damaged components, bends, cracked welds, or hydraulic leaks need to be fixed immediately. It is recommended to re-torque all bolts after the first 8 hours, and to regularly check for loose and/or missing fasteners. Replace any damaged or missing fasteners immediately.

Because of the environment that snow equipment operates in. Damage to hydraulic lines, fasteners, wearable and replaceable items may become damaged. These times must be inspected and replaced if necessary to avoid damage or personal injury.

Lubrication of moving parts is extremely important. Snow, Ice, salt, and road debris can and will wash away lubrication and it may be necessary to inspect and reapply more lubrication more than once a day.

Rylind Plows are not intended for use in the Wheel Loaders full dump position. DO NOT operate plow while in full dump for any reason. Center Nose Guard is not meant for ice or hard pack cutting, damage to center hinge and center hinge pin is possible if too much down pressure is applied during operation.

END OF SEASON MAINTENANCE

1. Replace any broken cutting edges, uneven or excessively worn down cutting edges, and any broken wear guards.
2. Replace broken or missing mushroom skid shoes or blade mounted skid shoes.
3. Replace any missing or broken bolts. Use Grade 8 plow bolts on steel cutting edges.
4. Plug or cap any QC Fittings or open hose ends, inspect hoses for any leaks or cracks, secure hoses to A-Frame when storing plow.
5. Check Cylinder for leaks or any damage to chrome rod ends. Lightly greasing exposed rod ends is recommended when storing plow.
6. Check pins, bushings, and pivot bolts on plow moldboard and a-frame. Replace any damaged or worn parts.
7. Check plow for any fatigue or cracked welds
8. **Replace all worn or broken parts found before storing plow.**

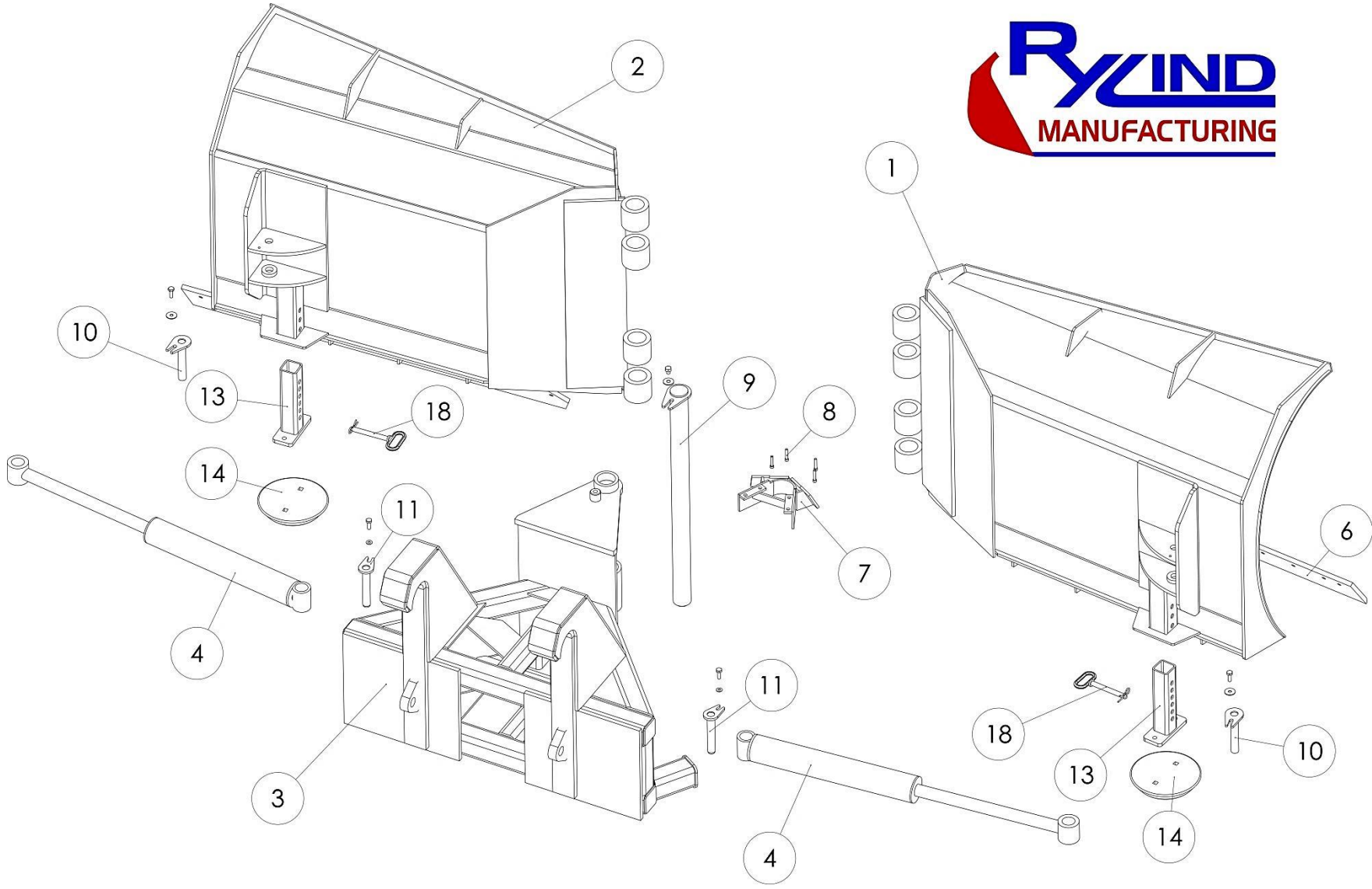
Parts List

#	# Required	Part Number	Description
1	1	MDP-R-__	Right Hand MDP Moldboard
2	1	MDP-L-__	Left Hand MDP Moldboard
3	1	-	MDP Plow A-Frame
4	2	ADV424M	4" x 24" Heavy Duty MDP Plow Cylinder
	2	30134	4" x 24" Seal Kit for ADV424M Cylinder
5	2	DWV-10-2500	2500 PSI Flow Control Valve
6	Varies	EKMDP-__	MDP Edge Kit
	Varies	DIS-06535	5/8" X 2-1/2" GR8 Scraper Bolts
	Varies	2063000021	5/8" Bolt
	Varies	3503000021	5/8" Lock Washer
7	1	10-103	Center Nose Guard (4-Cap Screws Req)
8	4	9002624460	Allen head Cap Screw 3/8-16X2 for 10-103
9	1	10-202	3" Center Hinge Pin
10	2	10-400	Cylinder Rod Pin
11	2	10-403	Cylinder Barrel End Pin
	-	60102	1/8" Grease Zert
	1	CHK3000	Accumulator Charging Kit *
	2	A2.531001L	2.5 GAL 3000 PSI Nitrogen Accumulator *
	2	A1-31003L	1 GAL 3000 PSI Nitrogen Accumulator *

__ (Designates Number in feet for Size of Plow) (* - Optional Equipment)

Mushroom Skid Shoe Parts (Per Side)

#	# Required	Part Number	Description
12	1	RS29-1	Skid Shoe Moldboard/Cylinder Mount
13	1	RS29-2	Skid Shoe Inner Adjusting Tube
14	1	BC-10MUSH	Mushroom Skid Shoe
15	2	DIS-06533	5/8"x2" GR8 Scraper Bolt
16	8	2063000021	5/8" Bolt
17	8	3503000021	5/8" Lock Washer
18	1	T3899760	Adjusting Hitch Pin

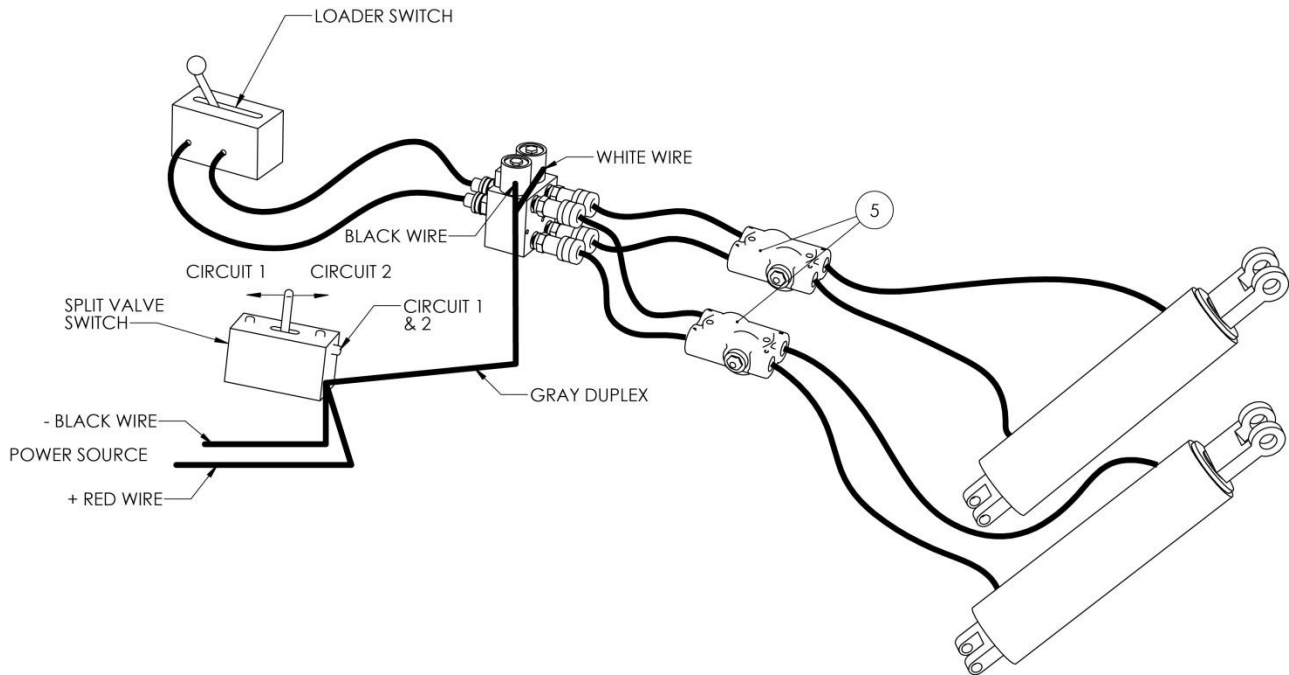


* Image may not reflect current design.



Manufacturer of Couplers, Buckets, Construction Forks, Scarifiers, Snow Wings, V-Plows and other Snow Removal, Construction, Forestry, & Mining Equipment for Wheel Loaders and Motor Graders.

Hydraulic/Electric Split Valve Diagram



Electrical Installation

Switchbox is mounted using the mounting bracket supplied with the box. Mount switch box wherever it will be easiest to reach while operating the plow. Route the wiring harness from the box to the valve and secure with cable ties. Valve and controls come in 12v and 24v configurations, MAKE SURE YOU HAVE THE PROPER VOLTAGE FOR YOUR MACHINE TO AVOID DAMAGING THE CONTROL BOX OR SOLENOIDS. Power should be taken from a source at the fuse panel or key switch that is only “hot” when engine is running. The Power Connection “Red Wire” must be fused (provided in kit) to protect the wiring in case of a short. Locate the fuse as close as possible to the power source. The black “ground” wire should be connected directly to the frame of the machine or the engine block. Clean paint off of the surface to insure a good connection.

Operation

The switchbox contains a toggle and push button switch. The toggle switch selects circuit 1 or 2. The push button combines the circuits to operate at the same time. In unmatched loads the lightest load will move first. Even if the remote lever is in the neutral position selecting two circuits at the same time can cause fluid to transfer between cylinders due to a pressure difference and cylinders can move.



Business Offices Only
2801 Youngfield St
Suite 250
Golden, CO 80401

P) 303-979-3548
F) 303-979-4730
www.Rylind.com
Info@rylind.com

LIMITED WARRANTY

Rylind Manufacturing Inc. is a company related to and having the responsibility for the manufacturing, marketing, and distribution of the product line known by the registered trade name "Rylind"

Rylind Manufacturing, Inc. warrants these products to be free of defects in material and/or workmanship for a period of one (1) year or 2,000 hours from the date of purchase under normal use and service providing that:

- A. All products and related components are installed properly according to instructions and that proper maintenance and greasing of movable parts is completed on a regular basis.
- B. The attachment products and related components are used only for the purpose for which they were intended as designated by the manufacturer and that the rated capacities are not exceeded.
- C. This is a "PARTS ONLY" warranty for defects in hydraulic components not typical maintenance parts (i.e. seal kits, hydraulic hoses, cylinders, or vendor supplied valves). This means the hydraulic part will be replaced freight prepaid from the factory. Travel time or labor to replace the defective component is "NOT" included in this warranty. Return of the defective parts for inspection may be requested.
- D. Hydraulic kits and components are warranted for one (1) year from invoice date. Cylinders must be returned in their entirety and not have been disassembled to be considered for warranty. After warranty replacement parts include cylinders, hydraulic valves, seal kits, electric components, and wear parts are warranted for 90 days from the date of purchase. Disassembly, modification or welding of any kind without the written permission of Rylind Manufacturing voids the warranty on the cylinder and seals. All warranty components must be packaged and sealed to avoid contaminants from entering during shipping. Improperly packaged components will not be considered for warranty. Hydraulic hoses are warranted against failure due to workmanship. Improper installation, ripping, cutting, or wear due to rubbing is not covered under warranty.
- E. Defects in materials and/or workmanship with respect to welding or structural failures will be paid at a rate not to exceed 70% of the advertised charge out rate. Repairs must be authorized by Rylind before work proceeds. Travel time or mileage is "NOT" included. All warranty work to be performed must be authorized by Rylind Manufacturing, Inc. Repair or replacement will be at our discretion. Estimates of the total costs involved must be given to us before proceeding with any work involving a Rylind product. No warranty will apply to products that have been modified or repaired without our authorization. Normal wear and tear will not be considered as a defect. Accidents, misuse or negligence does not justify warranty. This warranty does not include or cover purchased subassemblies including, but not limited to, teeth, fork tines, cylinders, wear plates, edges, etc... Such purchased subassemblies are covered only by the OEM's warranty, if any, of their respective manufacturer, and not Rylind Manufacturing.
- F. Limitations

- a. This limited warranty does not cover product, which in the opinion of Rybind, is damaged due to abuse, misuse, misapplication, prohibited operation, improper maintenance, alteration, unauthorized service, contamination by the base machine, or normal wear and tear. This warranty is null and void if the product is modified in any way without the written consent or instruction of Rybind.
 - b. This limited warranty is null and void if the product is used in a prohibited operation, or unauthorized adjustment/assembly/disassembly has occurred.
 - c. Dealers or Agents of Rybind have no authority to make any type of representation or warranties on behalf of Rybind Manufacturing beyond those expressly set forth in this document.
 - d. This warranty is in lieu of and excluding all other warranties preceding it including and without limitation to any implied warranties of merchantability or fitness for a particular purpose.
- G. In no event shall Rybind be liable to any party, including but not limited to buyer for any direct, incidental, consequential, punitive, or special damages, including but not limited to loss of profits, loss of productivity, in any way related to or arising, directly or indirectly from the product. The liability of Rybind for any and all losses and damage to buyer, its successors and assigns, resulting from any cause whatsoever, including the negligence of Rybind, irrespective of whether such defects are discoverable or latent, shall in no event exceed the purchase price of the product with respect to which such losses or damages are claimed.
- H. All returned products must be shipped to the following address to avoid any delay or expense in the warranty process:

Rybind Manufacturing, Inc.
Warranty/Service Department
16178 Front Ave
Atwood, CO 80722