



Wolverine

SKID STEER ATTACHMENT

PRODUCT MANUAL

V2023.9.25

SICKLE BAR MOWER MANUAL

Model: SBM-12-72W



**FOR MORE INFO
SCAN HERE**



Content

I. Preface	1
II. Security statements	2
III. Warning labels	3
Warning Label Location:	3
IV. Technical Parameter	5
V. Installation	7
Manual-controlled Quick-change Device	7
WARNING:	9
Hydraulic connection:	9
VI. Operation	10
Basic operation:	10
Cautions:	10
VII. Maintenance	12
VIII. Hydraulic and Electric Control System	14
Electro-hydraulic Operation and Cable Installation	14

I. Preface

This product is carefully designed and manufactured to provide you with many years of reliable service. Only small maintenance (such as cleaning and lubrication) is required to keep it in top working condition. Be sure to follow all maintenance procedures and safety precautions in this manual, as well as any safety labels on the product.

This manual is designed to help you take your job better and more safely. Please read this manual carefully and familiarize yourself with its contents. Do not allow anyone to operate this device without reading this manual.

The illustrations and data used in this manual are up to date at the time of printing (based on the information available to us), but we reserve the right to redesign and change attachments if necessary without notice. Ensure that only trained personnel who have read and understood this manual are allowed to operate the equipment. If you do not understand this manual or features of this equipment, please contact your local authorized distributor or the manufacturer for further assistance. This manual is provided to new owners and operators for reference.

II. Security statements

Improper installation, operation or maintenance of the equipment can cause serious personal injury or even death.

This manual and all manuals related to this equipment and prime mover shall be carefully read by operators and maintenance personnel before starting installation, operation or maintenance. Follow all safety instructions in this manual and prime mover manual.

Read and understand all safety statements. Read the warning labels and safety statements in all manuals before operating or using this device.

Understand and comply with all regulations, local laws and other professional guidelines. Understand and follow good working practices when assembling, maintaining, repairing, installing, removing or operating the equipment.

Familiarize yourself with the performance, size of your device before operation.

Visually inspect the equipment before starting up. It is strictly prohibited to operate the equipment that is not functioning normally when all safety devices are in good condition. Check all the hardware to be tightened. Ensure that all locks, pins, and connections are properly installed and secured. Remove and replace any damaged or excessively worn parts. Ensure that all security decals are in place and legible. Keep warning labels clean and replace them if they are worn or difficult to read.

III. Warning labels

Warning Label Location:

The location of the warning labels used is shown in Figure 1-1. Warning labels are identified by their part number and instructions for using the warning labels are shown in 1-2. Use this information to order replacements for lost or damaged warning labels. Be sure to read all warning label before handling accessories. They contain the information you need to understand and the safety and life span of the product.

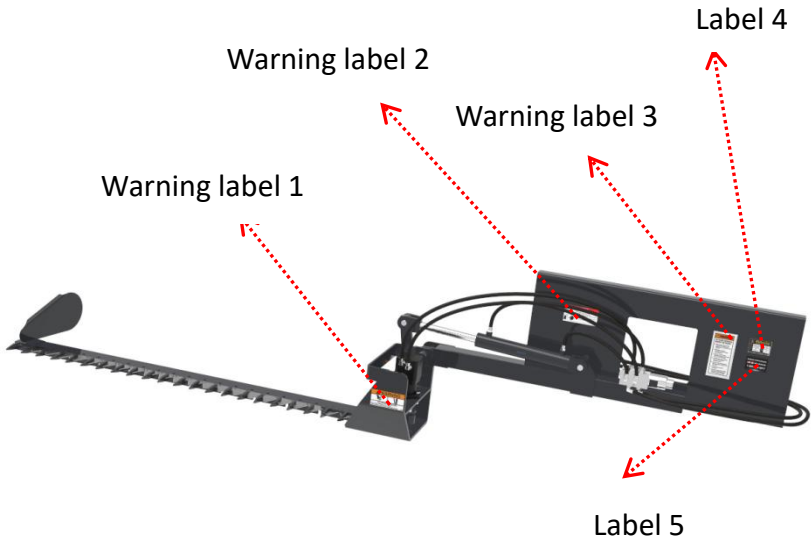
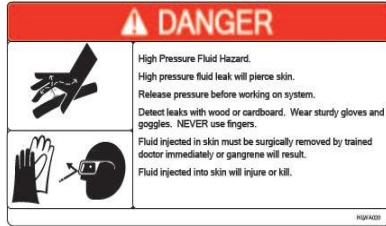


Figure 1-1

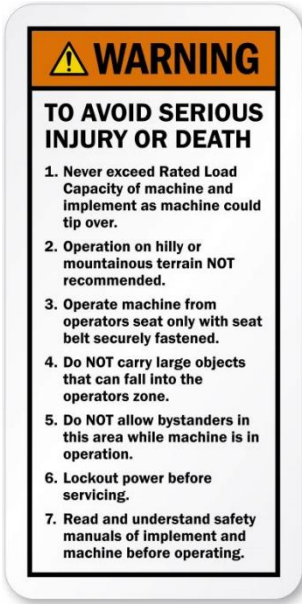
WOLVERINE INDUSTRY



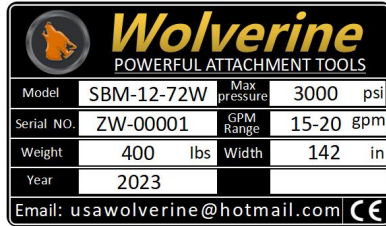
Warning Label 1
Falling Blade Hazard



Warning Label 2
High Pressure Fluid Hazard



Warning Label 3
To Avoid Serious Injury or Death



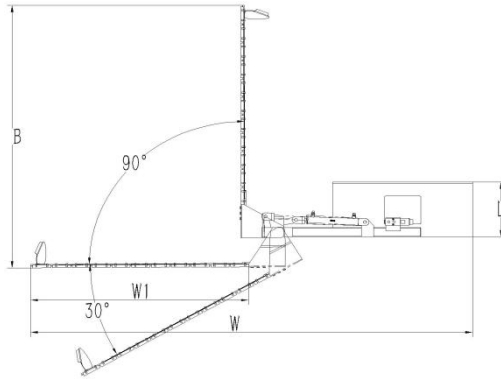
Label 4
Name Plate



Label 5
After-sales Hotline

Figure 1-2

IV. Technical Parameter



No.	Element	Parameters		Note
	Model	72"		
		British Parameter	Metric Parameter	
1	Total Weight	375lbs	170 Kg	
2	Working Pressure	3000psi	21Mpa	
3	Overall Width W	24"	610mm	
4	Height H	31"	790mm	
5	Length L	150"	3800mm	
6	Effective Mowing Size W1	72"	1830mm	
7	Swing Angle A		+90°,-30°	
8	Model of Motor		BM3Y-125	Flow:75L/min, Pressure:17.5MPa,R otation Speed:550r/min

WOLVERINE INDUSTRY

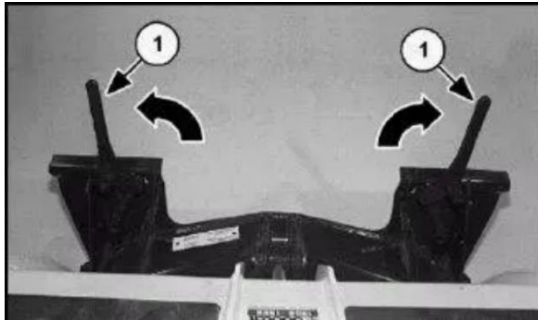
9	Back and Forth Speed of Crankshaft		
10	Cylinder	WCC2012	Cylinder Diameter:2.5",Distance:6", Rod Diameter:1.25"
11	Multi-tandem Valve	SVV06, Six-ways Bankable Flow Diverter	Rated Flow: 60L/min, Pressure: 21MPa, Voltage: DC12V
12	Suitable Loader	Skid Steer Loader	

V. Installation

Please check the quick-change device before installing the V-Snow Blade.

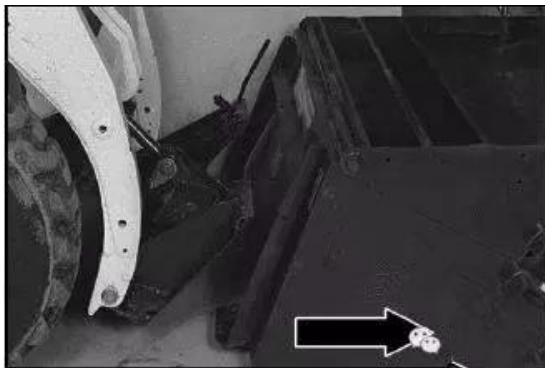
Manual-controlled Quick-change Device

Pull the lever of quick-change device completely open. (as shown below)



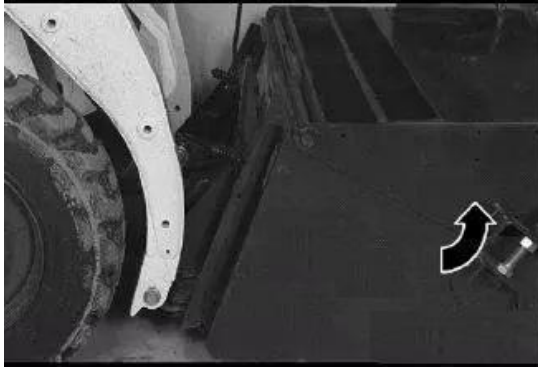
Get into the cab, fasten your seat belt, depress the safety bar, and start the engine. Loosen hand brake.

Tilt the quick-change unit towards the front. Slowly move the machine forward so that the top edge of the quick-change device is fully integrated into the mounting flange of the sickle bar mower. (as shown below)

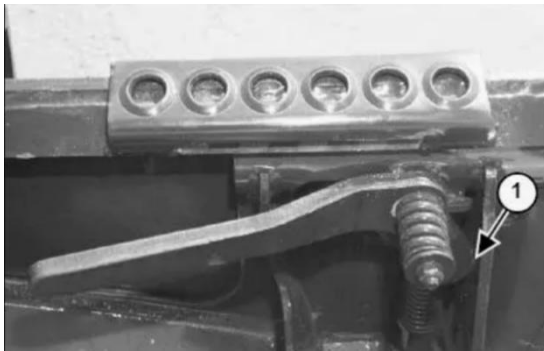


WOLVERINE INDUSTRY

Make sure that the pull rod of the quick-change device does not collide with the sickle bar mower. Retract the quick-change device until the mower is completely off the ground. (as shown below)



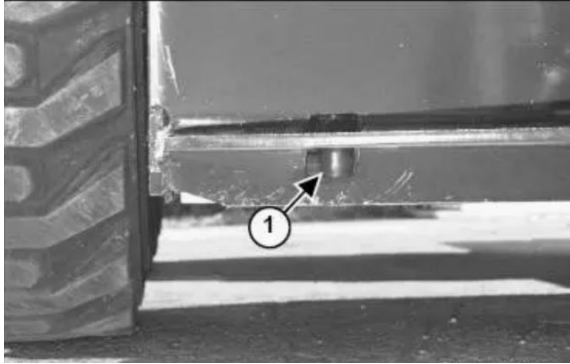
Turn off the engine and leave the cab. Depress the pull rod of the quick-change device until the locking pin is fully inserted into the pin hole of the mounting plate and locked. (as shown below)



The lock pin of the quick-change device is completely inserted into the pin hole of the mounting plate and locked, so that the sickle bar mower and the quick-change device are tightly

WOLVERINE INDUSTRY

combined. (as shown below)

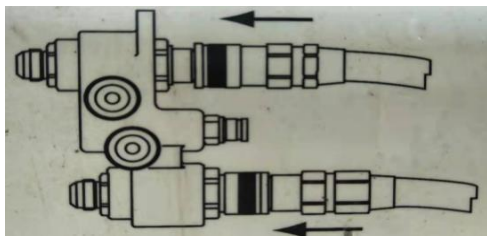


WARNING:

The lock pin of the quick-change device must be inserted into the pin hole of the attachment, and the pull rod must be fully depressed and locked. Otherwise, the sickle bar mower may fall off the support of the host, resulting in serious injury ,even death.

Hydraulic connection:

Connect the high pressure hose and oil-return hose to the auxiliary hydraulic plug on the skid steer loader. Push the joint toward the lock position after alignment and insertion. (as shown below)



VI. Operation

Basic operation:

- 1.The attachment should be raised to 50CM off the ground;
- 2.Drive the skid steer loader to stretch out and draw back the cylinder, open the reciprocating blades assembly to keep it parallel to the loader or at a suitable angle;
- 3.Idle and start the prime mover as well as the cutting blades. Lower the blades to the position where it needs to work on.
- 4.Increase the rotation speed of prime move to achieve the required speed for the current operation.
5. Start moving forward at a speed of 8 km/h (5 miles/h) or less.

Cautions:

- 1.Please read the instruction manual carefully before use to understand the performance and precautions of the attachment.
- 2.The purpose of the sickle bar mower is to trim hedges and shrubs in order to avoid accidents. Do not use it for other purposes.
- 3.The sickle bar mower is installed with a set of high-speed reciprocating cutting blades. If the operation is incorrect, it will be dangerous.
- 4.The gas from the engine contains harmful carbon monoxide. Therefore, do not operate the sickle bar mower indoors, in a greenhouse or in a tunnel where ventilation is not good.
- 5.Do not operate the mower in the following situations:
 - (1)When it is difficult to confirm the safety around the work site due to thick fog or night.
 - (2)When the weather is bad (rain, wind, thunder, etc.)

WOLVERINE INDUSTRY

6. When operating the mower for the first time, be sure to ask experienced people to guide the use of the sickle bar mower before starting the actual operation.

7. Excessive fatigue will reduce attention, which may cause accidents. Do not make the operation plan too intensive. Each continuous operation time can not exceed 60 minutes, and then leave 10 to 20 minutes of rest time.

8. The sickle bar mower should be turned on and off in the idle state (motor speed gradually increase or decrease), so as not to cause damage to the motor of the mower.

9. Minors are not allowed to operate the sickle bar mower.

VII. Maintenance

Regular maintenance is the key to extending life span of the equipment and safe operation. Maintenance requirements have been reduced to an absolute minimum. However, it is important that these maintenance functions are performed as described below.

No.	Item	Daily(Per 8 Hours)	Refer to manual for prime power
1	Check the wear of cutting blades.	✓	
2	Check if hydraulic system is leaking and tighten it if necessary. Inspect for damage and replace as needed.	✓	
3	Grease fittings	✓	
4	Check if the hydraulic system of prime mover has sufficient oil.	✓	
5	Check whether the hardware is missing or loose. Replace or tighten it if necessary.	✓	
6	Check for missing or damaged warning decals and replace them if necessary.	✓	
7	Clean the air filter for prime mover .		✓

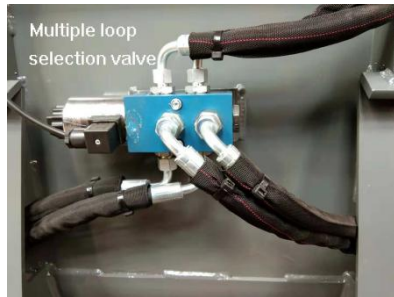
WOLVERINE INDUSTRY

Warning: Hydraulic oil/diesel oil spilled under pressure can penetrate the skin and cause serious injury. The liquid spilling from a tiny hole is almost invisible. Use a piece of cardboard or wood instead of your hands to look for a suspected leaking point.

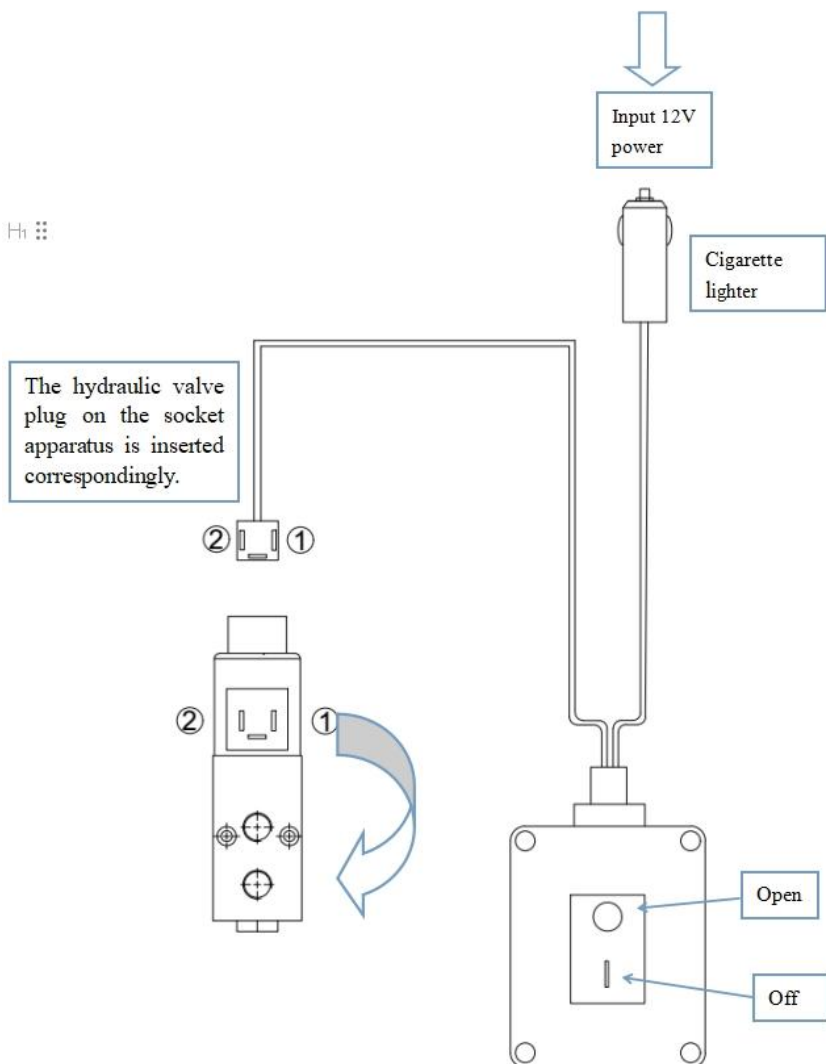
VIII. Hydraulic and Electric Control System

Electro-hydraulic Operation and Cable Installation

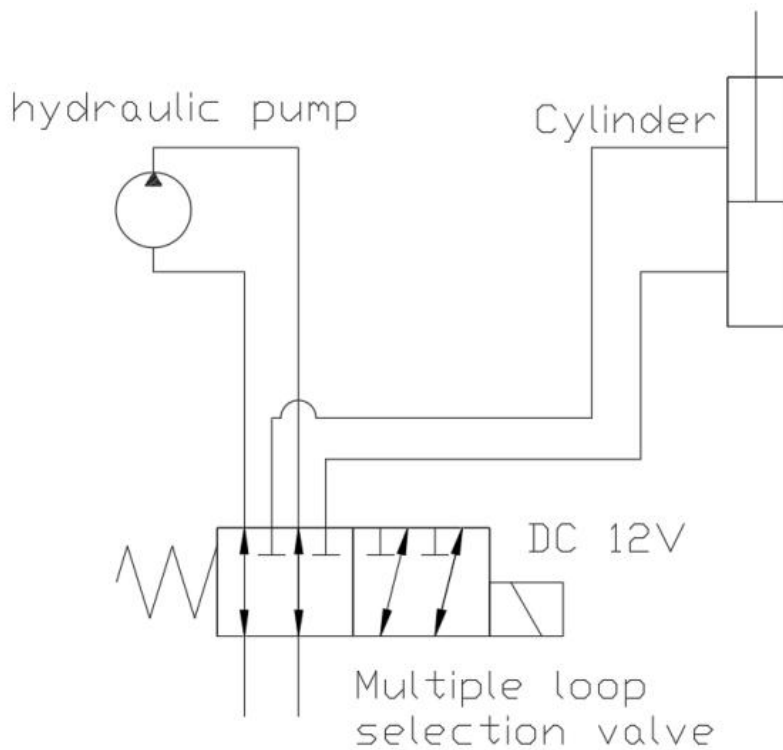
1. One end of the Sickle Bar Mower controller is a triangular socket (connected with the solenoid valve), and the other end is a cigarette lighter plug, which can be inserted into the cigarette lighter socket of skid steer loader (12V power supply).
2. The cable is secured to the mounting bracket of Sickle Bar Mower with cable ties to avoid damage to the pipeline caused by the mower.
3. Insert the plug connector (cigarette lighter plug) into the cigarette lighter slot in the cab of the loader (if there is no cigarette lighter plug, connect the wire sleeve marked +12V to the positive terminal of battery and that marked 0V to the negative terminal as shown below).
4. After the power is on, the up and down swing of working position on the reciprocating cutting blade can be controlled by the button on the handle of the selecting valve controller.



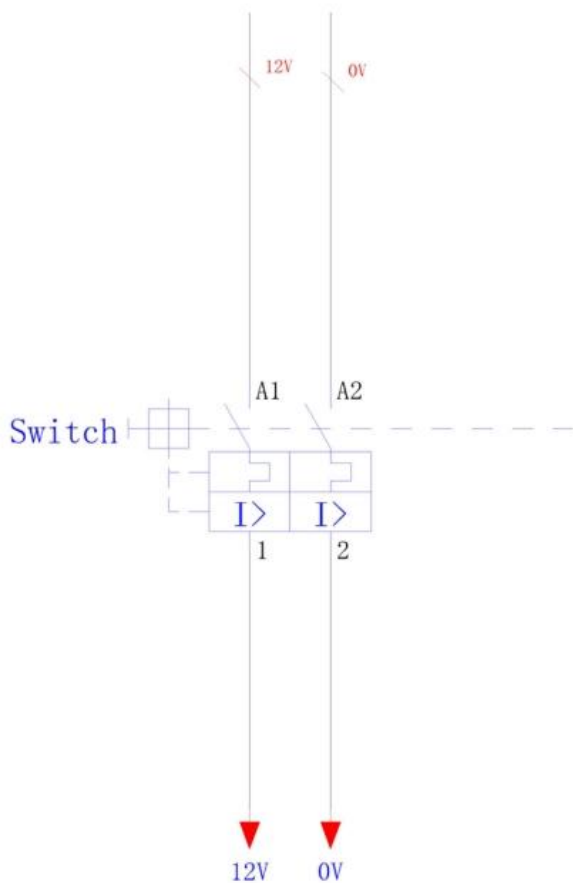
Hi ☺



Hydraulic Scheme



Electronic Scheme



Solenoid Valve



Wolverine

Tel: 1-800-649-8017

Business: sales@usawolverine.com

AS service: service@usawolverine.com

Website: www.usawolverine.com

WOLVERINE ATTACHMENT