

# **Mini Soil Conditioner**

For

# Mini Skid Steer Loaders And Mini Track Loaders

## **Operator's Manual** Maintenance and Parts Information

Do not use or operate this machine until this manual has been read and understood.



Read the Operation & Maintenance Manual entirely. When you see this symbol, the subsequent instructions and warnings are serious D follow without exception. Your life and the lives of others depend on it!

### IMPORTANT

If this machine is used by an employee or is loaned or rented to others, make certain that the operator(s) prior to operating:

- Is instructed in safe and proper use.
- •Reviews and understands the operation and maintenance manual(s) pertaining to the machine.

Remember, the operator is responsible for the safe operation and maintenance of the machine. Most accidents can be prevented. Good safety practices not only protect you, but also the people around you.

**NOTE:** Spartan Equipment reserves the right to make improvements in design or changes in specifications at any time without notice and without incurring any obligations to install them on units previously sold.

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#### REFERENCE INFORMATION

Write the correct information for YOUR MINI SOIL CONDITIONER in the spaces below. Always use these numbers when referring to your MINI SOIL CONDITIONER.

MINI SOIL CONDITIONER Serial Number xxxxxxx.

#### FOREWORD

#### To The Owner/Operator:

#### DO NOT use or operate this machine until this manual has been read and understood. If you require additional information, contact your Dealer or Spartan Equipment.

Operation and Maintenance Manuals are written to give the owner/operator instructions on the safe operation and maintenance of the product. For your safety and the safety of other persons, you must not operate, service, inspect or otherwise handle this equipment before you have reviewed and understood the Operation and Maintenance Manual(s) pertaining to the Spartan Equipmen Mini Soil Conditioner (also referred to as attachment) and the mini skid steer loader/mini track loader (hereafter referred to as loader).

Throughout this manual reference may be made to the left hand (LH) or right hand (RH) side. These terms are used as viewed from the operator's station facing front.

In order to get the optimum performance and efficiency that has been designed into the attachment, read this manual thoroughly before setting-up, operating, or performing maintenance procedures on the machine.

It is the responsibility of the user to read the operator's manual and comply with the safety instructions, operating instructions and maintenance guidelines set forth in this manual.

The user is responsible for inspecting the loader and attachment daily, and for having parts repaired or replaced when continued use would cause damage, excessive wear to other parts or make continued operation unsafe.

The signal words **CAUTION**, **WARNING**, or **DANGER** are used to indicate degree of hazards and to warn against unsafe practices that may cause personal injury and are used with appropriate safety instructions. These signal words are not to be ignored; your safety is involved.



CAUTION: denotes a general reminder of good safety practices or directs attention to unsafe practices.

WARNING: intermediate CAUTION.

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DANGER: denotes the most serious

The word **NOTE** is used to convey information that is out of context with the manual text; special information such as specifications, techniques, reference information, and other information of a supplementary nature.

The word **IMPORTANT**, is used in the text when immediate damage will occur to the machine due to improper technique or operation. **IMPORTANT** will apply to the same information specified by **NOTE**, only of an immediate and urgent nature.

Spartan Equipment cannot anticipate every possible circumstance that might involve potential hazard. The safety messages found in this manual and on the machine are therefore not all inclusive. If an operating procedure, tool device, maintenance or work method not specifically recommended is used; you must satisfy yourself that it is safe for you and others. You must also ensure that the machine will not be damaged or made unsafe by the procedures you choose.

### SAFETY



### Whenever you see this symbol, it means Attention! Become Alert! Your Safety is involved. Failure to obey warnings or instructions can cause personal injury or death.

Operating instructions must be given to everyone before operating this machine and at least once a year thereafter in accordance with OSHA regulations.

#### **General Safety Instructions**

- Read the operators manual for the loader to become totally familiar with the controls and instruments. Know how to stop all equipment operation in case of emergency.
- Avoid the possibility of personal injury and/or machine damage. NEVER exceed the maximum recommended input power or speed specifications for the attachment.
- Check and be sure all operating controls are in neutral before starting the engine.
- Disengage hydraulic drive, lower the attachment to rest flat on the ground, stop engine, set park brake, and wait for all motion to stop before leaving the operator's station for any reason.



WARNING: Before adjusting, or servicing the unit, stop the engine and relieve all hydraulic pressure by opening the control valve.

- Keep all shields, guards, and covers in place.
- Stay clear of the attachment when unit is running.
- **NEVER** make adjustments, lubricate, or perform any service on the machine while it is running.
- Keep people at least 10 feet (3m) away from machine when machine is running.
- **NEVER** operate near embankments or terrain that is so steep that rollover could occur.
- NEVER allow children or untrained persons to operate.
- DO NOT permit riders on equipment.
- Use adequate safety warning lights and devices as required by local regulations.
- Obey all local laws and regulations regarding machine operation on public property.

- Do not modify equipment or add attachments that are not approved by Spartan Equipment.
- Remember, **YOU** are responsible for the safe operation and maintenance of the equipment. Most accidents can be prevented. Good safety practices not only protect you, but also the people around you.



#### Wear Protective Equipment

- Protective clothing and equipment should be worn.
- Wear clothing and equipment appropriate for the job. Avoid loose fitting clothing.
- Prolonged exposure to loud noise can cause hearing impairment or hearing loss. Wear suitable hearing protection such as earmuffs or earplugs.
- Operating equipment safely requires the full attention of the operator. Avoid wearing radio headphones while operating equipment.



#### Avoid High Pressure Fluids Hazard

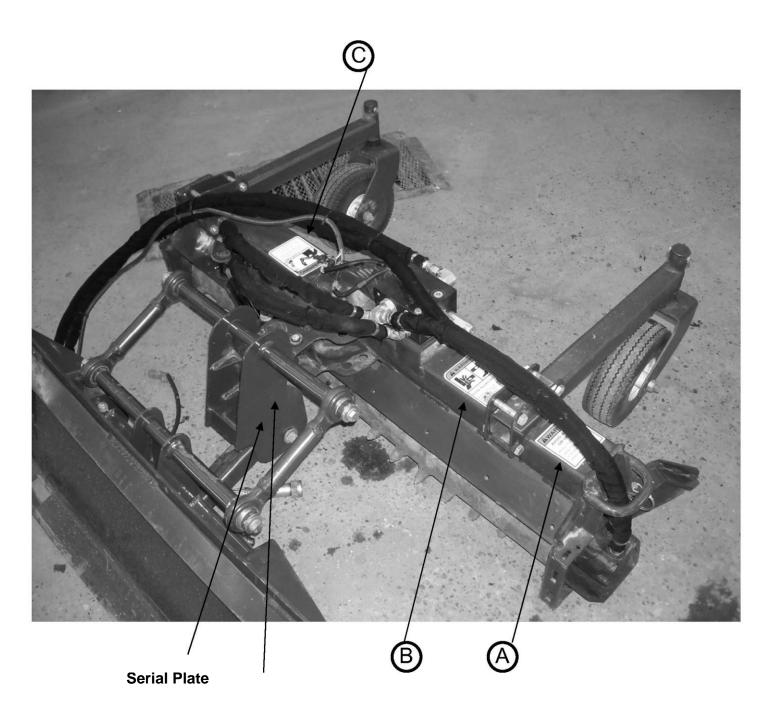
- Escaping fluid under pressure can penetrate the skin causing serious injury.
- Avoid the hazard by relieving the pressure before disconnecting hydraulic lines.
- Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks. Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
- If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result.



### SERIAL NUMBER AND SAFETY DECAL LOCATIONS

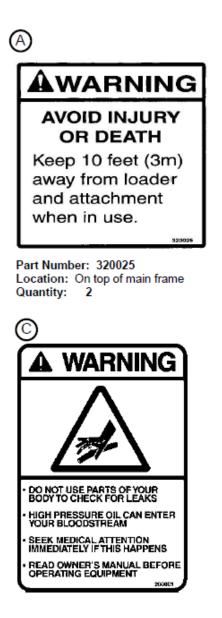
#### **Serial Number Location:**

It is important to refer to the serial number of the attachment when making repairs or ordering parts. Early or later models (identification made by serial number) may use different parts, or it may be necessary to use different procedures in doing a specific operation.



**Mini Brand Decal** 

### SERIAL NUMBER AND SAFETY DECAL LOCATIONS





Part Number: 203234 Location: On right top of main frame Quantity: 1

Mini Brand Decal Location: On each side of sub frame Quantity: 2

Part Number: 200001 Location: On left top of main frame Quantity: 1

Safety Decals Locations:

The locations of the safety decals are shown. If these decals are missing, damaged, or painted over they must be replaced. Call Spartan Equipment (1-888-888-1085) for replacement decals.

### **USER'S INSTRUCTIONS FOR MOUNTING THE MINI SOIL CONDITIONER**

After uncrating the attachment, use the following procedure to mount the attachment to the loader.

# Instructions for mounting to a ride-on mini skid loader:

- 1. Use the step, safety treads, and grab handles to get on and off the loader.
- 2. Sitting in the operator's seat, lower seat bar and fasten the seat belt and with the controls in a neutral position, start the engine.
- 3. Drive the loader to the rear of the attachment. Put the loader quick attach coupler into the attachment mounting bracket.
- 4. Tilt the loader coupler backward a small amount until it is fully engaged in the attachment mounting bracket.
- 5. Stop the engine and engage the park brake.
- 6. Exit the loader and secure the coupler locking mechanism that locks the attachment to the loader.



WARNING: Coupler wedges or pins must extend through the holes in the attachment mounting plate. Levers must be fully down and locked. Failure to secure wedges or pins can allow attachment to come off and cause injury or death.

#### Instructions for mounting to a walkbehind mini skid loader:

- 1. Standing at the operator's station with the controls in a neutral position, start the engine.
- 2. Drive the loader to the rear of the attachment. Put the loader quick attach coupler into the attachment mounting bracket.
- 3. Tilt the loader coupler backward a small amount until it is fully engaged in the attachment mounting bracket.
- 4. Stop the engine and engage the park brake.
- 5. Walk to the front of the loader and secure the coupler locking mechanism that locks the attachment to the loader.



WARNING: Coupler wedges or pins must extend through the holes in the attachment mounting plate. Levers must be fully down and locked. Failure to secure wedges or pins can

allow attachment to come off and cause injury or death.



### USER'S INSTRUCTIONS FOR MOUNTING THE MINI SOIL CONDITIONER

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**NOTE:** Attachment is shipped with BFJX (3/4[ Female JIG Swivel) fittings on the ends of the lead hoses.

 Connect the hydraulic quick couplers from the attachment to the loader. Be sure to thread the hoses through the hose holder on the loader. Bungee straps can be used as an alternate method of securing the hoses.

**NOTE:** *Make sure the quick couplers are fully engaged.* If the quick couplers do not fully engage, check to see that the couplers are the same size and brand. **Do not force the quick couplers together.** 

If the quick couplers will not connect together due to thermal expansion of the fluid in the hoses, stop the engine and activate the auxiliary hydraulic control to relieve the pressure.

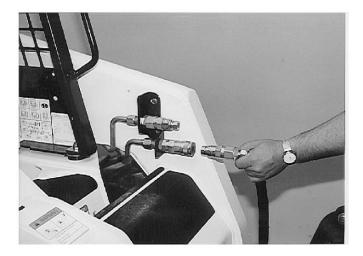
# **NOTE:** See the loader's operation and maintenance manual.

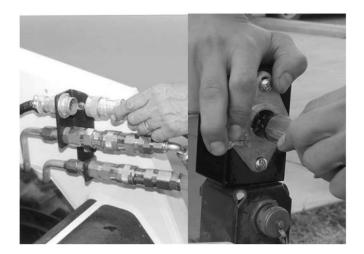
- 8. If equipped with the hydraulic angle option, connect the attachment wire harness to the loader wire harness receptacle.
- 9. Mounting is now complete and you are ready to use the Mini Soil Conditioner. Use reverse order of above instructions to dismount the attachment from the loader.

**NOTE:** *Make sure the hoses are properly routed* **to** *fit your specific loader.* If the hoses are not routed correctly, hoses may get pinched or rub on tires. Be sure to check the hose routing through the <u>full range</u> of intended motion of the attachment <u>before</u> operating it.

More than one routing may be acceptable depending on the loader. Pick the routing that best suits your loader.

PROPER HOSE ROUTING IS THE RESPONSIBILITY OF THE OWNER AND/OR OPERA TOR. PINCHED OR STRETCED HOSES ARE NOT COVERED UNDER WARRANTY.





### **OPERATING THE MINI SOIL CONDITIONER**



WARNING: DO NOT operate from any position other than from the operator's station. DO NOT permit riders.









The Mini Soil Conditioner is designed to be used for seedbed preparation by leveling and pulverizing the top layer of soil.

The Mini Soil Conditioner is not designed to be used as a deep soil tiller. It is recommended that the ground be broken up if the soil is very hard and/or compacted, before using the Mini Soil Conditioner.

With the operator at the operator's station, the seat belt fastened and the seat bar lowered (if so equipped), start the engine.



WARNING: AVOID INJURY OR DEATH. Keep people at least 10 feet (3m) away from machine when machine is running.

Using the loader's tilt function, tilt the mounting plate fully backward, toward from the loader. Raise the boom as needed to allow the rotor to clear the ground. This is the position that will fully raise the drum for transporting.



CAUTION: Do not operate the Mini Soil Conditioner at excessive ground speeds as this can cause excessive wear or damage.



WARNING: AVOID INJURY OR DEATH. Always call before you dig. When you call, you will be directed to a location in your state/city for information about buried lines (electric, telephone, cable TV, water, sewer, gas, etc.).



### **OPERATING THE MINI SOIL CONDITIONER**

#### **Normal operation**

Position the loader where the work is to be done. <u>Fully lower the loader's arms</u>, engage the hydraulic drive with the throttle set at idle. Increase the throttle to 100 for maximum power when ready to work.

#### Adjusting the tilling depth

Adjust the working depth by using the loader's tilt function. By tilting the mounting plate backward towards the loader, the rotor will till deeper. By tilting the mounting plate away from the loader, the rotor will till shallower.

#### Angling the rotor

The angle of the rotor is controlled by manual angle adjustment or the optional hydraulic cylinder (by utilizing the electric controls).

Manual angling is accomplished by removing the hitch pin and pushing one side of the rotor frame either forward or backward, depending on which direction is desired. Then, line up the hole at the desired position and replace the pin.

#### **Hydraulic Controls**

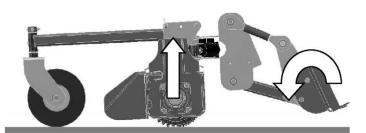
All functions can be activated by the steering lever switches in the loader (if loader is equipped), or with the generic control handle.

**NOTE:** Your loader must have the attachment control kit installed to make use of the lever switches.

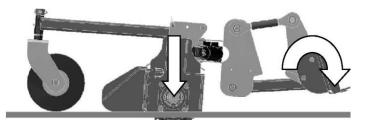
The generic control handle allows the operator to engage **all** functions.

**NOTE:** For steering lever functions, refer to your loader's operation and maintenance manual.

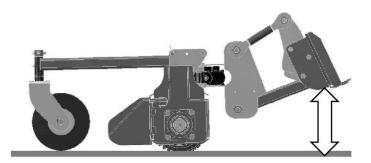
#### IMPORTANT: ALWAYS OPERATE THE ATTACHMENT WITH THE LOADER ARMS FULLY LOWERED. (SEE DIAGRAMS AT RIGHT)



CORRECT LOADER ARM POSITION (FULLY LOWERED) ROLLING PLATE FORWARD = LESS DEPTH



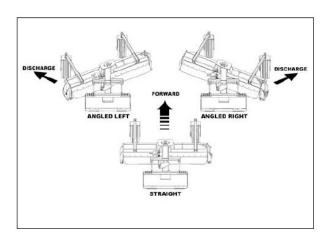
CORRECT LOADER ARM POSITION (FULLY LOWERED) ROLLING PLATE BACK = MORE DEPTH



INCORRECT LOADER ARM POSITION (RAISED) FLOAT LINKS WILL NOT OPERATE CORRECTLY

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### **OPERATING THE MINI SOIL CONDITIONER**



Before starting work in an area, be sure to survey the entire area carefully so that there aren't any obstructions that may interfere with the operation or damage the attachment.



CAUTION: Do not operate in soils with rocks larger than 60 as this can damage the rotor and teeth.

#### CLEARING

Usually, clearing an area of rocks is the final operation, except for areas that have abundant rocks. When clearing rocks, it is necessary to set the Mini Soil Conditioner at a very shallow depth, just touching the soil. Pick up the windrows before they become too large.

**NOTE:** Remove the windrow side wing when windrowing with the Mini Soil Conditioner.

#### TILLING

Tiling is the main operation of the Mini Soil Conditioner. The tilling depth should be 1 to 2 inches in order to loosen the soil. Rock jamming could occur if the rotor depth is too great. Deep tilling should only be done in an area that is rock free.

If the rotor stops turning due to hydraulic relief, the overload could be caused by a rock or root caught between the rotor and frame. In order to remove the obstruction, reverse the rotor. If this fails to remove the obstruction, disengage the hydraulics, shut off the loader, and remove the obstruction.

#### LEVELING

Leveling is done when tilling. Shallow settings give a smoother seedbed, while deeper settings level the ground better.

Experience will give the operator a better feel for the best settings to use in each situation.

**IMPORTANT:** When shutting down the Mini Soil Conditioner, always throttle down the loader before shutting off the auxiliary hydraulics. Failure to do this may damage the Mini Soil Conditioner.

### **ROUTINE MINI SOIL CONDITIONER MAINTENANCE**

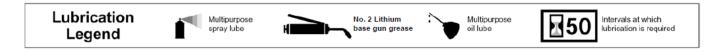
It is the operator's responsibility to make daily inspections of the loader and attachment for damage, loose bolts, fluid leaks, or anything else that could cause a potential service or safety problem. Preventive maintenance is the easiest and least expensive type of maintenance.

**IMPORTANT:** Bolts and set screws can loosen after initial usage. After the first hour of operation check al/ bolts and set screws.



WARNING: Lower the attachment to rest on the rotor/wheels, shut down the engine, relieve the hydraulic pressure to the attachment, wait for all motion to stop, and set park brake before leaving the operator's station to perform service of any kind.

### LUBRICATION



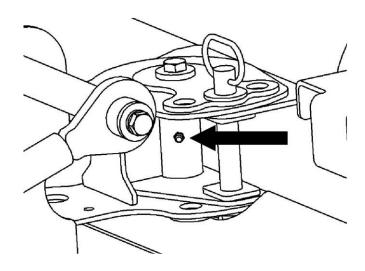
Use No. 2 lithium base gun grease when lubricating all Mini Soil Conditioner grease fittings.

Grease both caster wheel bushings after every **8** hours of operation.



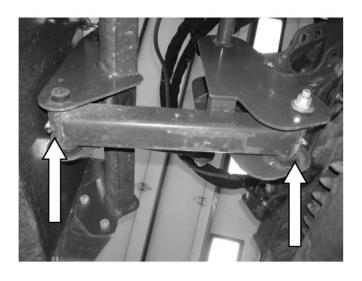
Grease the center pivot bushing after every 8 **hours** of operation.

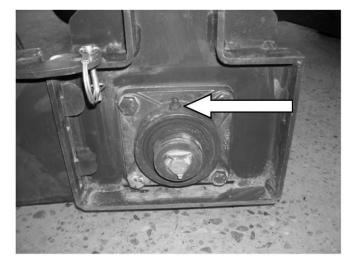




### **ROUTINE MINI SOIL CONDITIONER MAINTENANCE**

#### LUBRICATION (continued)



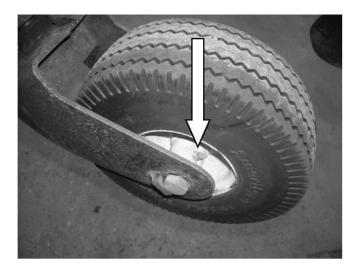


Grease both lower float arm pivot bushings after every **8 hours** of operation.



Grease the rotor bearing after every **8 hours** of operation.





Grease the wheel bearings after every **4 hours** of operation.

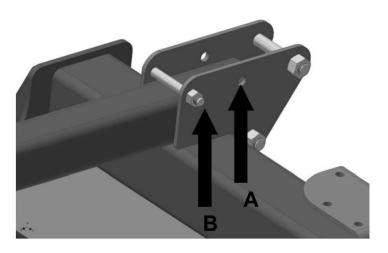


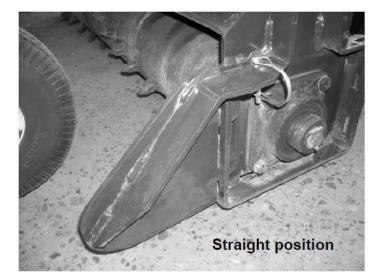


WARNING: These are requirements. It is the responsibility of the owner/operator to make sure the attachment is serviced on a daily basis. Improper maintenance can cause extensive damage to the attachment and/or your equipment.

### SET UP ASSEMBLY OF THE MINI SOIL CONDITIONER

The Mini Soil Conditioner is shipped with the caster wheel arms in the raised position. To place them in the working position, remove the bolt from hole A and lower wheel arm fully. Then install the bolt in hole **B**.

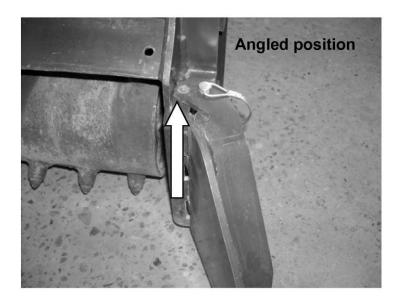




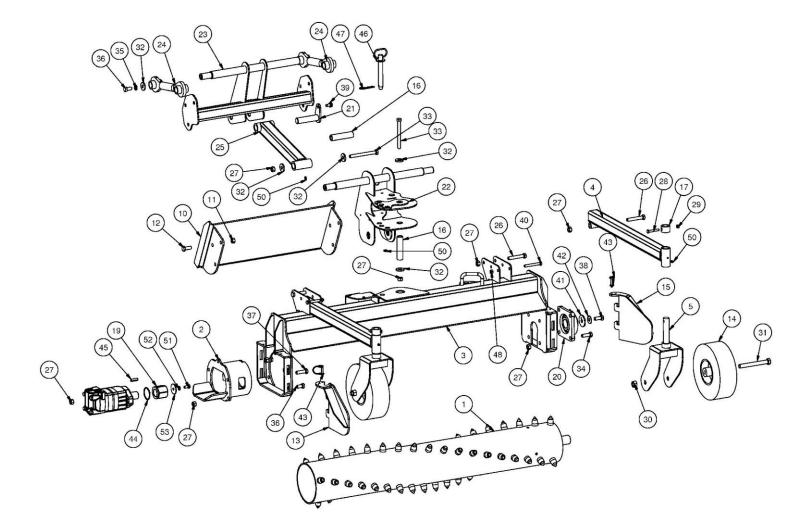
The side wings can be installed on the front side of the frame (for forward movement) or the back side (for backward movement) depending on the desired mode of work. To switch them from front to back, you will need to swap them end for end. (i.e. the right front wing will mount on the left rear).

The side wings have two holes for mounting in a straight position or an angled position. The angled position is convenient when windrowing material to either the right or left side. It is recommended that you remove the wing on the windrow side to prevent damaging it.

**NOTE:** The Mini Soil Conditioner can be operated with both wings removed if desired.

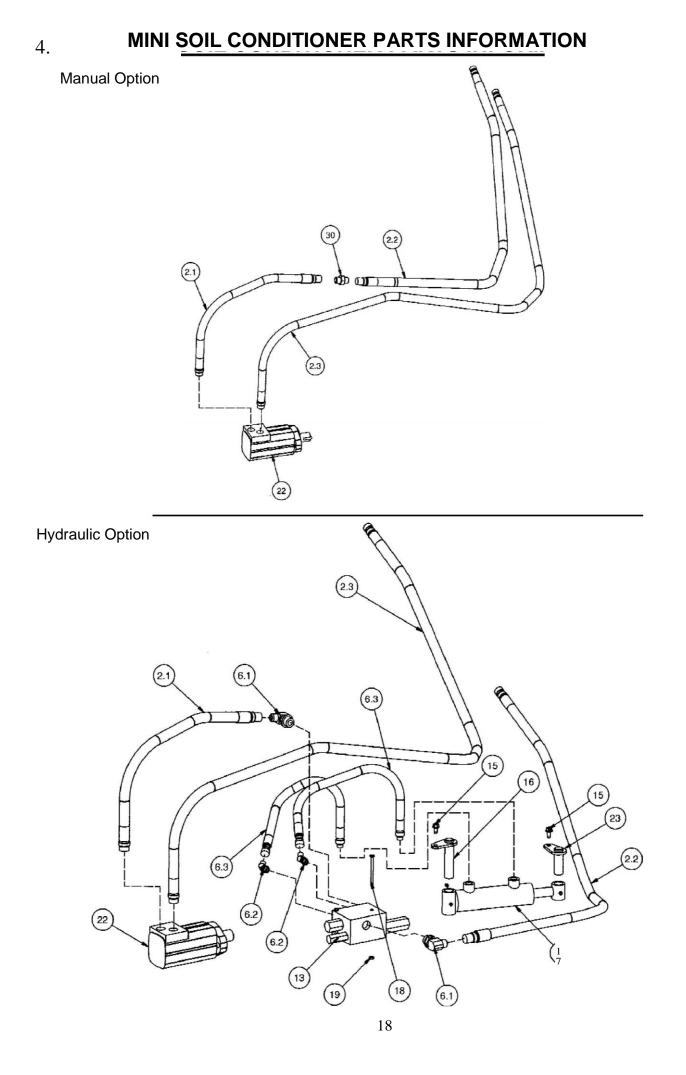


## MINI SOIL CONDITIONER PART SINFORMATION



### MINI SOIL CONDITIONER PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NUMBER
1	1	400201	DRUM W/A48	
2	1	400200	MOTOR MOUNT W/A	
3	1	400203	MAIN FRAME 48 W/A	
4	2	400204	TIRE ARM W/A	
5	2	400205	TIRE SPINDLE W/A	
10	1	400000	MOUNT FRAME TORO MINI W/A	OPTIONAL MOUNT PACKAGE
	1	400001	MOUNT FRAME ASV MINI W/A	OPTIONAL MOUNT PACKAGE
	1	400002	MOUNT FRAME BC MINI W/A	OPTIONAL MOUNT PACKAGE
	1	300283	MOUNT FRAME UNIV MINI W/A	OPTIONAL MOUNT PACKAGE
	1	330622	MOUNT FRAME AVANT MINI W/A	AVANT ADPT MNT PKG 330753
11	6	37214	NUT HEX -1/2 - UNC - GR 5 - REV LOCK	OPTIONAL MOUNT PACKAGE
12	6	13207	BOLT HEX - 1/2 X 1-1/4 - UNC - GR 5	OPTIONAL MOUNT PACKAGE
13	1	400209	WINGRHW/A	
14	2	400235	WHEEL ASSM 9.75	
15	1	400210	WING LH W/A	
16	2	400143	BUSHING SWIVEL	
17	2	400244	BUSHING SPINDLE STOP	
19	1	316032	DRIVE BLOCK HEX 1.25 BORE	
20	1	319085	BRG 1-1/2 F-BOLT FLG B-TYPE	
21	1	400041	PIN 1 X4 W/A	
22	1	400202	SWIVEL SUB FRAME W/A	
23	1	400206	MOUNT FRAME W/A	
24	2	400207	FLOAT ARM TOP W/A	
25	1	400208	FLOAT ARM W/A	
26	4	13215	BOLT HEX	1/2X3-UNC-GR5
27	17	37214	NUT HEX	1/2 - UNC - GR 5 - REV LOCK
28	2	13061	BOLT HEX	5/16 X 2 - UNC - GR 5
29	2	37211	NUT HEX	5/16 - UNC - GR 5 - REV LOCK
30	2	37216	NUT HEX	5/8 - UNC - GR 5 - REV LOCK
31	2	13324	BOLT HEX	5/8 X 5.5 - UNC - GR 5
32	8	313321	WASHER .531D X 1.3750D X .199	
33	2	13223	BOLT HEX	1/2X5-UNC-GR5
34	4	13209	BOLT HEX	1/2 X 1.5 - UNC - GR 5
35	4	33626	WASHER LOCK	0.5 - GR 5
36	9	13205	BOLT HEX	1/2X1-UNC-GR5
37	2	13210	BOLT HEX	1/2 X 1.75 - UNC - GR 5
38	1	13207	BOLT HEX	1/2 X 1.25 - UNC - GR 5
39	1	32467	BOL T FLG THRD RLNG	3/8 X 3/4 - UNC - GR 5
40	2	13115	BOLT HEX	3/8 X 3 NC GR 5
41	1	319124	WASHER SHAFT END PAINTED	
42	1	319125	WASHER BOLT LOCK PAINTED	
43	2	300285	PIN SNAPPER 1/4 X 1.38	
44	1	313333	RING SNAP EXT 2 X .063	
45	1	300419	KEY 5/16 X 1-1/4	
46	1	300284	PIN HITCH 3/4 X 5	MANUAL ANGLING (STANDARD)
47	1	200064	PIN CLIP #11 1/8 X 2 5/8	MANUAL ANGLING (STANDARD)
48	2	37212	NUT REV LOCK	3/8 NC
50	5	60105	ZERK GREASE 1/4-28 STR	
51	1	13103	BOLT	3/8 X 3/4 D UNC D GR 5
52	1	103880	WASHER LOCK	3/8 D GR 5
53	1	202830	WASHER LARGE HEAVY 3/8	



### MINI SOIL CONDITIONER PARTS INFORMATION

#### MANUAL OPTION

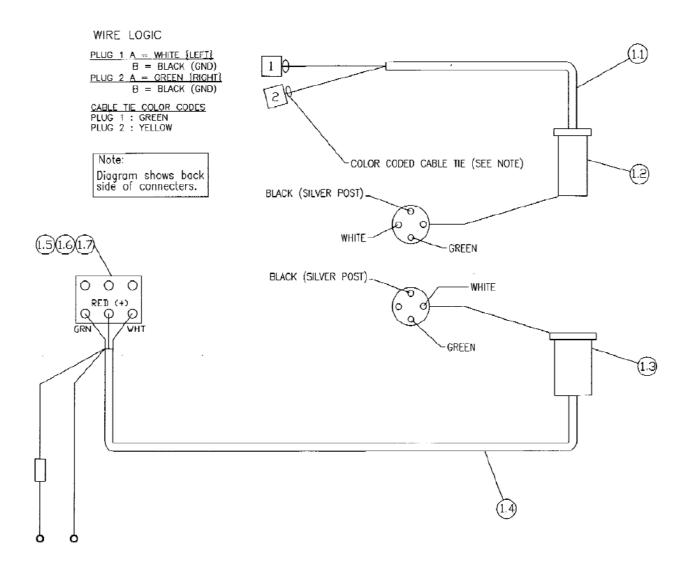
		PART		
ITEM	QTY	NUMBER	DESCRIPTION	STOCK NUMBER
2.1	1	400287	HOSE 1/2X32 10MB-10FJX	
2.2	1	400288	HOSE 1/2X80 10FJX-8FJX	
2.3	1	400289	HOSE 1/2X112 10MB-8FJX	
22	1	200170	MOTOR	
30	1	300214	ADPT NIPPLE 1 OMJ-1 OMJ	

#### **HYDRAULIC OPTION**

		PART		
ITEM	QTY	NUMBER	DESCRIPTION	STOCK NUMBER
2.1	1	400287	HOSE 1/2X32 10MB-10FJX	
2.2	1	400288	HOSE 1/2X80 10FJX-8FJX	
2.3	1	400289	HOSE 1/2X112 10MB-8FJX	
6.1	2	300215	ADPT ELB 12MB-10MJ-90	
6.2	2	320086	ADPT ELB 6MB-6MJ-90	
6.3	2	400286	HOSE 3/8 X 24 8MB-6FJX	
13	1	319104	VALVE ASSEMBLY	
15	2	32467	BOL T FLG THRD RLNG	3/8 X 3/4 - UNC - GR 5
16	1	400041	PIN 1 X4 <i>W/A</i>	
17	1	400074	CYLINDER 2 X 4 W/BUSHINGS	
18	2	13067	BOLT HEX	5/16 X 3.5 - UNC - GR 5
19	2	37211	NUT HEX	5/16- UNC - GR 5 - REV LOCK
22	1	200170	MOTOR	
23	1	313460	PIN 1 X 2.5	

### WIRE HARNESS PARTS INFORMATION

5.



REF.	PART NO.	DESCRIPTION	QTY.
1	300248	PKG WIRE HRN GENERIC MINI	1
1.1	300244	HRN WIRE LOWER MINI	1
1.2	200083	CONN 4-WAY TRAILER MALE	1
1.3	200079	CONN 4-WAY TRAILER FEMALE	1
1.4	300243	HRN WIRE UPPER MINI	1
1.5	102913	SWITCH DPDT	1
1.6	202040	SWITCH BOX W/BRACKET 1812	1
1.7	202039	SWITCH BOX COVER 1812/600FM	1
1.8	300247	BRKT WR HRN GEN MINI PAINTED	1

### SET UP ASSEMBLY OF THE GENERIC CONTROL HANDLE HARNESS

Mounting the generic control handle wire harness will vary from loader to loader. Use these instructions as a general guide. You may need to drill holes to mount pieces of this harness. Mounting hardware is not included.

- 1. Mount the wire harness receptacle to the loader arm near the hydraulic quick couplers.
- 2. Route the wiring harness back along the loader arms and fasten with cable ties.
- 3. Open the rear door to access the battery compartment. Pull the excess wiring harness into the engine compartment.
- 4. Connect the red fused wire to the positive (+) battery terminal or to a suitable accessory wire with a minimum rating of 5 amps.
- 5. Connect the black wire to the negative (-) battery terminal or to a frame ground.
- 6. Connect the control handle wiring harness connector to the main wiring harness connector.
- 7. Mount the control handle in a convenient location near the operator's station.

**NOTE:** Secure the wiring harness in place with plastic cable ties, making sure it is clear of extra hot areas or any moving parts on the engine or loader.

8. Close the rear door.

**NOTE:** Be sure the wiring harness is properly positioned to prevent pinching when closing the door.







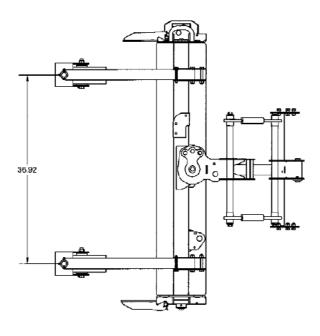
### MINI SOIL CONDITIONER GENERAL SPECIFICATIONS

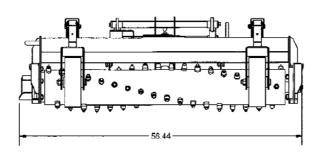
#### Model

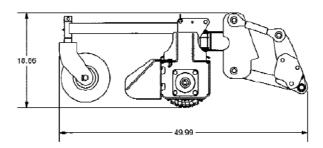
Working Width/Fully Angled Overall Height Overall Length Angling Hydraulic Angling Teeth Recommended Hydraulic Flow Weight

#### Mini Soil Conditioner

480/43.50 190 500 25° right and left Optional 54 Carbide tipped 90 15 GPM 470 pounds







All dimensions are in INCHES.

# LIMITED WARRANTY

Spartan Equipment warrants each new machine manufactured by us to be free from defects in material and workmanship for a period of twelve (12) months from date of delivery to the original purchaser.

Our obligation under this warranty is to replace free of charge, at our factory or authorized dealership, any part proven defective within the stated warranty time limit.

All parts must be returned freight prepaid and adequately packaged to prevent damage in transit.

This warranty does not cover:

- 1. New products which have been operated in excess of rated capacities or negligence
- 2. Misuse, abuse, accidents or damage due to improperly routed hoses
- 3. Machines which have been altered, modified or repaired in any manner not authorized by our company
- 4. Previously owned equipment
- 5. Any ground engaging tools in which natural wear is involved, i.e. tooth tips, cutting teeth, etc
- 6. Normal maintenance
- 7. Fork tines
- 8. Hydraulic motors that have been disassembled in any manner

In no event will the Sales Representative, Dealership, Spartan Equipment, or any other company affiliated with it or them be liable for incidental or consequential damages or injuries, including but not limited to the loss of profit, rental or substitute equipment or other commercial loss. Purchaser's sole and exclusive remedy being as provided here in above.

Spartan Equipment must receive immediate notification of defect and no allowance will be made for repairs without our consent or approval.

This warranty is in lieu of all other warranties, express or implied by law or otherwise, and there is no warranty of merchantability or fitness purpose.

No agent, employee, or representative of Spartan Equipment has any authority to bind Spartan Equipment to any warranty except as specifically set forth herein. Any of these limitations excluded by local law shall be deemed deleted from this warranty; all other terms apply.

This warranty may not be enlarged or modified in any manner except in writing signed by an executive officer of Spartan Equipment to improve its products whenever it is possible and practical to do so. Spartan Equipment reserves the right to make changes and or add improvements at any time without incurring any obligation to make such changes or add such improvements to products previously sold.

Spartan Equipment Joppa, MD 21085 Phone 1-888-888-1085



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