Hydraulic Boom

For

Skid Steer Loaders

Operator's Manual
Set-Up Assembly and Parts Information

Do not use or operate this machine until this manual has been read and understood.
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 attachment in the spaces below. Always use these numbers when referring to your attachment.

Serial Number: __________

YOUR ATTACHMENT DEALER

ADDRESS:

PHONE:

CONTACT:
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 attachment and the attachment carrier, 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 seat facing forward.

In order to get the optimum performance and efficiency that has been designed into this product, 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 machine daily, and for having parts repaired or replaced when continued use of the machine would cause damage, excessive wear to other parts or make the machine unsafe for continued operation.

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: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

DANGER: Indicates a potentially hazardous situation which, if not avoided, will result in death or serious injury.

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.
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 operator's manual for the “Skid Steer 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 skid shoes, stop engine, set park brake, and wait for all motion to stop before leaving the operator's seat 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 machine is running.
- NEVER make adjustments, lubricate, or perform any service on the machine while it is in operation.
- NEVER operate this attachment within 100 feet (30m) of people, or pets.
- 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.
- This attachment is designed for light duty hoisting of a variety of materials. NEVER use this attachment for purposes other than intended.
- NEVER 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 your 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.
SERIAL NUMBER AND SAFETY DECAL LOCATIONS

Part Number: 313391
Location: On top of mount plate support
Quantity: 1

Part Number: 200001
Location: On left side of mount plate support
Quantity: 1

Part Number: 314340
Location: On top of mount plate support
Quantity: 1

Part Number: 313393
Location: On top of mount plate support
Quantity: 1

Part Number: 320359
Location: On right side of main tube
Quantity: 1

Part Number: 203234
Location: On top of tube by hook
Quantity: 1
After the initial set-up assembly is completed use the following procedure to mount the attachment to the loader for user operation.

4. Use the step, safety treads, and grab handles to get on and off the loader and attachment.

2. Sitting in the operator's seat, lower seat bar and fasten the seat belt.

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 parking brake.

6. Secure the coupler locking mechanism that attaches the attachment to the loader.

**WARNING:** Coupler wedges or pins must extend through the holes in attachment. Levers must be fully down and locked. Failure to secure wedges or pins can allow attachment to come off and cause injury or death.
7. Connect the hydraulic quick couplers from the Hydraulic Boom to the loader.

**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 Operation and Maintenance Manual.

**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 full range of intended motion of the attachment before 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 OPERATOR. PINCHED OR STRETCHED HOSES ARE NOT COVERED UNDER WARRANTY**

8. Mounting is now complete and you are ready to use the attachment. Use reverse order of above instructions to dismount the attachment from the loader.
OPERATING INSTRUCTIONS

WARNING: DO NOT operate from any position except seated in the operator's seat with the seat belt fastened. DO NOT permit riders.

WARNING: AVOID INJURY OR DEATH. Do not allow any person to be directly under the attachment or load at any time.

With the operator in the loader seat, seat belt fastened and seat bar lowered (if so equipped), start the engine.

WARNING: AVOID INJURY OR DEATH. Never use Hydraulic Boom on an incline to prevent the loader from tipping over.

WARNING: AVOID INJURY OR DEATH. Carry the load as low as possible when moving the Hydraulic Boom.

Adjust the manual beam as needed on the ground and before you hook up to what will be hoisted.

Make sure the hair pin keeper is installed on both the manual beam pin and lift hook pin before operation.

Carry load low and close to the loader while moving the load into position.

When the loader is in position to raise the material, do slowly and carefully.

Use the loader's lift arms first and then the attachment cylinder for hoisting to the final desired position.

WARNING: AVOID INJURY OR DEATH. Be aware of your surroundings. Contact with electrical power lines can be fatal. Always use a spotter to help guide you when moving or lifting.
<table>
<thead>
<tr>
<th>REF.</th>
<th>PART NO.</th>
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GENERAL SPECIFICATIONS

Model | HB 18
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Hydraulic Cylinder | 2.5" Bore, 72" Stroke
Length Fully Extended | 256"
Rated Load Fully Extended (horizontal) | 350#
Rated Load Fully Contracted (horizontal) | 700#
Rated Load Fully Contracted @ 75° | 1000#
ROC of Skid Steer | 1750# Min.
Shipping Weight | 450#

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 manor

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.

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