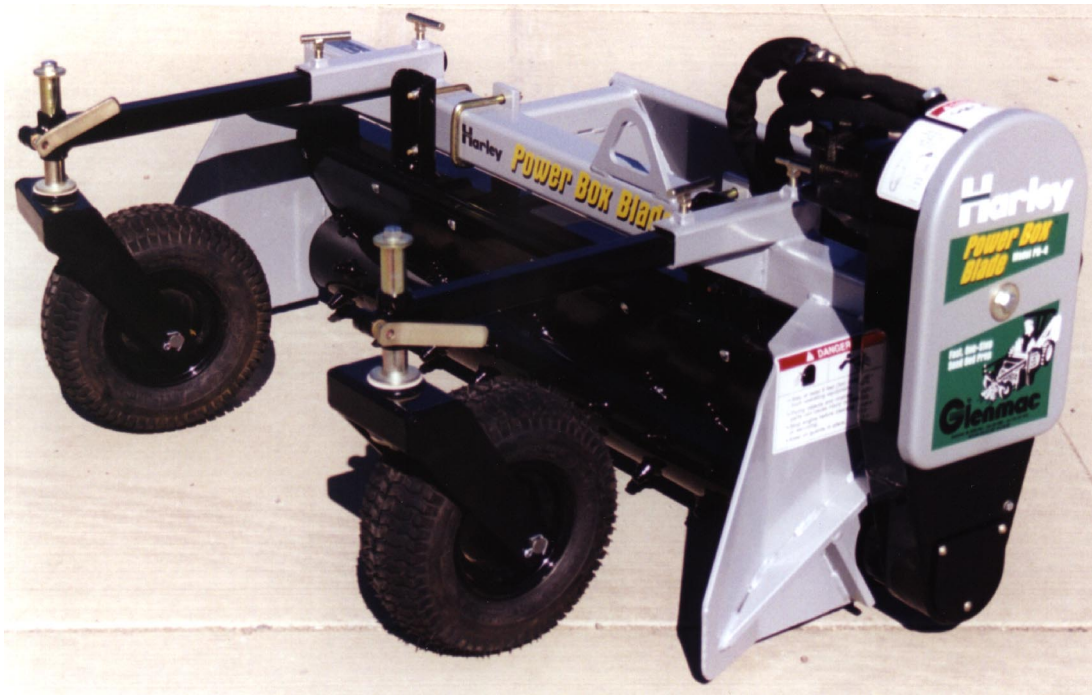


# Harley

## POWER BOX BLADE MODEL PB.4



# OPERATOR'S MANUAL

DATE PURCHASED

SERIAL NUMBER

PN-P972100 (12/1999 Rev.)

**Glenmac**  
INC

# INTRODUCTION

GLENMAC, INC., based in Jamestown, North Dakota, along with your authorized Harley dealer, are proud that you chose to purchase a Harley Power Box Blade. Equipment under the Harley name has been built and sold worldwide for over 35 years. GLENMAC, INC. specializes in the manufacturing of construction and landscape attachments designed to make your job more efficient, cleaner, and easier regardless of the complexity of the job. The Harley Power Box Blade brings state-of-the-art design, ruggedness, and maneuverability to jobs such as: landscaping, seedbed preparation, site development, rock raking and picking, golf course construction, ball field renovation and maintenance, liner installation, horse track screening, sod farm ground work, beach cleaning - and the job for which you purchased your Harley.

This manual will provide you, the operator, with instructions for proper safety, assembly, and operation procedures so you can benefit from the equipment's optimum level of performance. Successful operation and long-life of your Harley Power Box Blade depends on you. As owner and operator of your new Harley, it is your responsibility to become familiar with the proper operation and care required to operate it safely and efficiently and to maintain the equipment in top condition.

To keep your Harley equipment at peak performance, please READ THIS MANUAL CAREFULLY several times and follow the directions as specified for each operation. Correct operation and maintenance will save you time and expense.

REMINDER: Fill in the warranty card and mail within 10 days of your purchase date. While filling in the card with the correct information, put the date purchased and serial number on the front cover of this manual. Should you need to call your dealer or GLENMAC, INC., this information will help them to more quickly provide accurate service for you.

Thank you for purchasing a Harley Power Box Blade.

For more information, contact your local Harley dealer or call:

## GLENMAC INC.

PO Box 2135

Jamestown, ND 58402-2135 U.S.A.

TEL: 1/800/437-9779

TEL: 1/701/252-9300

FAX: 1/701/252-1978



This Safety-Alert Symbol indicates a hazard and means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



### DANGER

Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.



### WARNING

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed.



### CAUTION

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

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## SPECIFICATIONS

Blading Width .....	48 Inches
Roller Type .....	Tooth Roller Standard 7" Diameter
Gap (Tube to Barrier) .....	1-1/8" - 2" Adjustable
Skid-steer Lift Capacity Requirement .....	SAE Lift Capacity 500 lbs
Skid-steer Hydraulic Requirement .....	8 GPM @ 2300 psi (min.)
Tires .....	13 x 5.00
Tire Pressure .....	20 psi
Weight .....	380 lbs
Oil Capacity of Chain Case .....	Approximately 1.5 Pints

# OWNER ASSISTANCE

GLENMAC, INC. and your authorized Harley Dealer want you to be completely satisfied with your investment. Sometimes, however, misunderstandings can occur. To resolve any problem that may occur, please follow the instructions below.

1. If you did not purchase your blade from an authorized Harley Dealer, go to number 2 below.
  - A. Contact the Service Manager of the dealership, explain the problem, and request assistance. If additional assistance is needed, your dealer has direct access to our home office.
  - B. If your problem has not been handled to your satisfaction, contact:

CUSTOMER SERVICE (8:00 am - 5:00 P.M. CT)  
GLENMAC, INC.  
PO BOX 2135  
JAMESTOWN ND 58402-2135  
701/252-9300  
800/437-9779

- C. Please be prepared to provide the following information:

- Your name, address, and telephone number,
- Machine model and SERIAL NUMBER,
- Dealership name and address,
- Machine purchase date,
- Nature of problem.

Your problem will likely be resolved in the dealership using the dealer's facilities, equipment, and personnel. Therefore, it is important that your initial contact be with the dealer.

2. If you did not purchase your equipment from an authorized dealer, call GLENMAC, INC., (see "B" above). There may be a new dealer in your area since you purchased your Harley Power Box Blade. If there is no dealer in your area, our Customer Services Department can and will help you obtain the parts and information you may need. Please be prepared to provide the information requested under "C" above.

# GENERAL INFORMATION

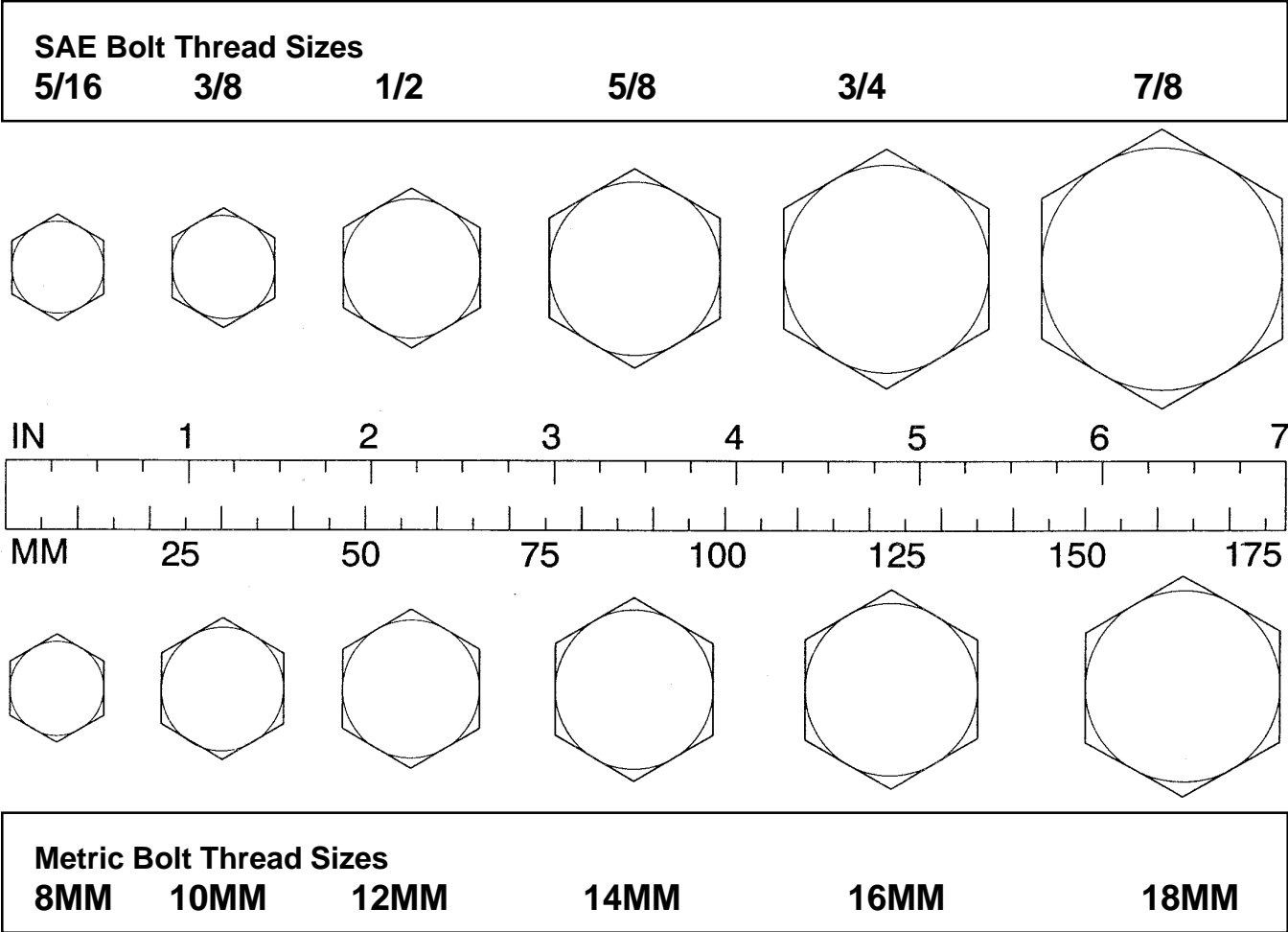
The purpose of this manual is to assist you in operating and maintaining your Power Box Blade. Read it carefully. It furnishes information and instructions that will help you achieve years of dependable performance. These instructions have been compiled from extensive field experience and engineering data. Some information may be general in nature due to unknown and varying operating conditions. However, through experience and these instructions, you should be able to develop procedures suitable to your particular situation.

The illustrations and data used in this manual were current at the time of printing, but due to possible in-line production changes, your machine may vary slightly in detail. We reserve the right to redesign and change the machines as may be necessary without notification.

Throughout this manual, references are made to front, back, right and left directions. These are determined by sitting in the operator's seat of the skid-steer.

# BOLT SIZE CHART

**NOTE:** Chart shows bolt thread sizes and corresponding head (wrench) sizes for standard SAE and Metric Bolts.



# BOLT TORQUE CHART

After every ten (10) hours of operation, check all hardware and tighten where required.

## SAE Series Torque Chart

DO NOT use these values if a different torque value or tightening procedure is listed for a specific application. Torque values listed are for general use only.

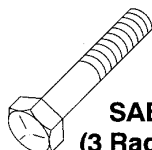
Fasteners should be replaced with the same grade.

Make sure fastener threads are clean and you properly start thread engagement. This will prevent them from failing when tightening.

### SAE Bolt Head Identification



**SAE Grade 2  
(No Dashes)**



**SAE Grade 5  
(3 Radial Dashes)**



**SAE Grade 8  
(6 Radial Dashes)**

Bolt Diameter "A"	Wrench Size	MARKING ON HEAD					
		SAE 2		SAE 5		SAE 8	
		Lbs.-Ft.	(N-m)	Lbs.-Ft.	(N-m)	Lbs.-Ft.	(N-m)
1/4"	7/16"	6	(8)	11	(15)	14	(19)
5/16"	1/2"	13	(18)	21	(28)	25	(34)
3/8"	9/16"	23	(31)	38	(52)	55	(75)
7/16"	5/8"	37	(50)	55	(75)	80	(110)
1/2"	3/4"	57	(77)	85	(115)	120	(165)
9/16"	13/16"	82	(111)	125	(170)	180	(245)
5/8"	15/16"	111	(150)	175	(240)	230	(310)
3/4"	1-1/8"	200	(270)	300	(410)	440	(600)
7/8"	1-5/16"	280	(380)	450	(610)	720	(975)
1"	1-1/2"	350	(475)	680	(925)	1035	(1400)
1-1/8"	1-11/16"	450	(610)	885	(1200)	<p>Bolt Diameter</p>	
1-1/4"	1-7/8"	600	(815)	1255	(1700)		
1-3/8"	2-1/16"	675	(915)	1620	(2200)		
1-1/2"	2-1/4"	920	(1250)	2200	(2900)		

# BOLT TORQUE CHART

## Metric Series Torque Chart

Use only metric tools on metric hardware. Other tools may not fit properly. They may slip and cause injury.

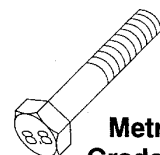
DO NOT use these values if a different torque value or tightening procedure is listed for a specific application. Torque values listed are for general use only.

Fasteners should be replaced with the same grade.

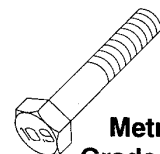
Make sure fastener threads are clean and you properly start thread engagement. This will prevent them from failing when tightening.

Bolt Diameter "A"	Wrench Size	MARKING ON HEAD			
		8.8		10.9	
		N-m	(Lbs.-Ft.)	N-m	(Lbs.-Ft.)
5 mm	8 mm	6	(4.5)	9	(6.5)
6 mm	10 mm	10	(7.5)	15	(11)
8 mm	13 mm	25	(18)	35	(26)
10 mm	16 mm	50	(37)	75	(55)
12 mm	18 mm	85	(63)	130	(97)
14 mm	21 mm	110	(80)	150	(110)
16 mm	24 mm	215	(159)	315	(232)
20 mm	30 mm	435	(321)	620	(457)
24 mm	36 mm	750	(553)	1070	(789)
30 mm	46 mm	1495	(1103)	2130	(1571)

### Metric Bolt Head Identification



Metric Grade 8.8



Metric Grade 10.9

After every ten (10) hours of operation, check all hardware and tighten where required.

## SAFETY RULES\*



**ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



*Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by a single careless act of an operator. In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment. It has been said, "The best safety device is an informed, careful operator." We ask you to be that kind of operator.*

The designed and tested safety of this equipment depends on it being operated within the limitations as explained in this manual.

\*The Harley Model PB.4 Power Box Blade was designed for use on smaller standard skid-steer loaders and stand-on skid-steer power units. For clarity, in this manual all power units will be referred to as a skid-steer. Safety precautions for all units must be followed.

### TRAINING

- Safety instructions are important! Read all attachment and power unit manuals; follow all safety rules and safety decal information. (Replacement manuals are available from dealer or, in the United States and Canada, call 1-800-437-9779.) Failure to follow instructions or safety rules can result in serious injury or death.
- If you do not understand any part of this manual and need assistance, see your dealer.
- Know your controls and how to stop engine and attachment quickly in an emergency.
- Operators must be instructed in and be capable of the safe operation of the equipment, its attachments and all controls. Do not allow anyone to operate this equipment without proper instructions.

# SAFETY RULES



## ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



- Keep hands and body away from pressurized lines. Use paper or cardboard, not body parts to check for leaks. Wear safety goggles. Hydraulic fluid under pressure can easily penetrate skin and will cause serious injury or death.
- Make sure that all operating and service personnel know that in the event hydraulic fluid penetrates skin, it must be surgically removed as soon as possible by a doctor familiar with this form of injury, or gangrene, serious injury or death will result. **CONTACT A PHYSICIAN IMMEDIATELY IF FLUID ENTERS SKIN OR EYES. DO NOT DELAY.**
- Do not allow children or untrained persons to operate equipment.
- Ensure implement is properly attached, adjusted and in good operating condition. Skid-steer coupler lock-pins must be fully extended and properly engaged into attachment retaining slots.
- Skid-steer must be equipped with ROPS and seat belt/operator restraint. Keep seatbelt/operator restraint securely fastened/engaged. Falling off skid-steer can result in death from being run over or crushed. Keep ROPS systems in place at all times.
- Ensure all safety decals are installed. Replace if damaged. (See **Safety Decals** section for location.)
- Ensure shields and guards are properly installed and in good condition. Replace if damaged.

### PREPARATION

- Always check with your skid-steer manual or dealer for counter weight ballast that may be required for machine stability.
- Air in hydraulic systems can cause erratic operation and allows loads or equipment components to drop unexpectedly. Before operating or allowing anyone to approach the equipment, purge any air in the system by operating all hydraulic functions several times after connecting equipment, connecting hoses, or doing any hydraulic maintenance.
- After connecting hoses, check that all control lever positions function as instructed in the Operator's Manual. Do not operate until control lever and equipment movements are correct.
- Make sure all hydraulic hoses, fittings and valves are in good condition and not leaking before starting power unit or using equipment. Check and route hoses carefully to prevent damage. Hoses must not be twisted, bent sharply, kinked, frayed, pinched, or come into contact with any moving parts. Operate moveable components through full operational range to check clearances. Replace any damaged hoses immediately.
- Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing and head.

### OPERATIONAL SAFETY

- Improper operation can cause the machine to tip or roll over and cause injury or death.
  - Keep skid-steer lift arms and attachment as low as possible.
  - Do not travel or turn with skid-steer lift arms and attachment raised.
  - Turn on level ground.
  - Go up and down slopes, not across them.
  - Keep the heavy end of the machine uphill.
  - Do not overload the machine.
- Never use the skid-steer attachment to carry loads that exceed skid-steer rated operating capacity or other skid-steer specifications. Check your skid-steer manual or with your dealer for skid-steer rated operating capacity. Exceeding this capacity can cause machine to tip or roll over and cause injury or death.
- Use of a front safety door on the skid-steer is recommended for operation of the Power Box Blade.
- Do not allow other people in the area when operating, attaching, removing, and assembling or servicing equipment.
- Only engage power when equipment is at ground operating level. Always disengage power when equipment is raised off the ground.
- Do not disconnect hydraulic lines until all system pressure is relieved. Lower unit to ground, stop engine, and operate all hydraulic control levers.



# SAFETY RULES



## ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



- Keep bystanders away from equipment while it is in operation.
- Never go underneath equipment lowered to the ground or raised. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak down, hydraulic system failures, mechanical failures or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death.
- Service work does not require going underneath.
- Read Operator's Manual for service instructions or have done by a qualified dealer.
- Never direct discharge toward people, animals or property.
- Do not operate equipment while under the influence of alcohol or drugs.
- Operate only in the daylight or good artificial light.
- Keep hands, feet, hair and clothing away from equipment while engine is running. Stay clear of all moving parts.
- Always comply with all state and local lighting and marking requirements.
- Do not allow riders. Do not lift or carry anybody on the skid-steer or attachments.
- Always sit in skid-steer seat when operating controls or starting engine. Securely fasten seat belt/operator restraint, place transmission in park or neutral, engage brake and ensure all other controls are disengage before starting skid-steer engine.
- Look down and to the rear and make sure area is clear before operating in reverse.
- Use extreme care when working close to fences, ditches, other obstructions, or on hillsides.
- Do not operate on steep slopes.
- Do not stop, start or change directions suddenly on slopes.
- Use extreme care and reduce ground speed on slopes and rough terrain.
- Watch for hidden hazards on the terrain during operation.
- Stop skid-steer and implement immediately upon striking an obstruction. Dismount skid-steer using proper procedure. Inspect and repair any damage before resuming operation.

- Before leaving skid-steer operator's seat, follow skid-steer manual instructions. Lower skid-steer lift arms and put attachment on the ground. Stop engine, remove key, engage brake, and remove seat belt/operator restraint.

## MAINTENANCE SAFETY

- Your dealer can supply original equipment hydraulic accessories and repair parts. Substitute parts may not meet original equipment specifications and may be dangerous.
- Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing and head.
- Do not allow other people in the area when operating, attaching, removing, and assembling or servicing equipment.
- Never go underneath equipment lowered to the ground or raised. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak down, hydraulic system failures, mechanical failures or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death. Service work does not require going underneath equipment. Read Operator's Manual for service instructions or have done by a qualified dealer.
- Avoid electrical system hazards. Never work on the electrical system unless you are qualified and thoroughly familiar with system details and the special handling requirements. Disconnect battery before working on electrical system. Remove "ground" cable first. When reconnecting battery, connect "ground" cable last.
- Ensure implement is properly attached, adjusted and in good operating condition. Skid-steer coupler lock-pins must be fully extended and properly engaged into attachment retaining slots.
- Never perform service or maintenance with engine running.
- Keep all persons away from operator control area while performing adjustments, service or maintenance.

# SAFETY RULES



**ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



- Tighten all bolts, nuts and screws, and check that all cotter pins are installed securely to ensure equipment is in a safe condition before operating.
- Ensure all safety decals are installed. Replace if damaged. (See **Safety Decals** section for location.)
- Ensure shields and guards are properly installed and in good condition. Replace if damaged.
- Before leaving skid-steer operator's seat, follow skid-steer manual instructions. Lower skid-steer lift arms and put attachment on the ground. Stop engine, remove key, engage brake, and remove seat belt/operator restraint.
- Do not disconnect hydraulic lines until all system pressure is relieved. Lower unit to ground, stop engine, and operate all hydraulic control levers.

## STORAGE

- Follow manual instructions for storage.
- Keep children and bystanders away from storage area.



*Review the video included with your Blade for safety tips!*

# SAFETY DECALS



**ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



*Replace Immediately If Damaged!*

## **WARNING**

**Do not allow anyone to operate the Power Box Blade or skid steer loader who has not been properly trained in its safe operation and has not read and understood the operator's manuals.**

**Before attaching check skid steer loader lift capacity to insure its ability to safely handle the weight.**

**Do not operate without guards/shields in place and in good working order.**

**Stop all moving parts including skid steer loader engine before cleaning, unplugging, adjusting and/or performing maintenance.**

**Keep bystanders 9 feet from Power Box Blade when in operation.**

**Failure to follow the above safety suggestions and those in the operator's manual can result in serious injury or death.**

P970020

#1 - PN: P970020

## **DANGER**



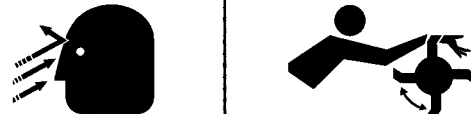
### ROTATING PART HAZARD

- KEEP HANDS, HAIR AND CLOTHING AWAY FROM MOVING PARTS.
- CLOSE AND SECURE ALL SHIELDS BEFORE OPERATING.

**FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY OR DEATH**

#2 - PN: P970300

## **DANGER**



- Stay at least 9 feet (3m) away from operating equipment.
- Flying objects and rotating parts can cause injury or death.
- Stop engine before cleaning or servicing.
- Keep all guards in place.

P970250

#3 - PN: P970250

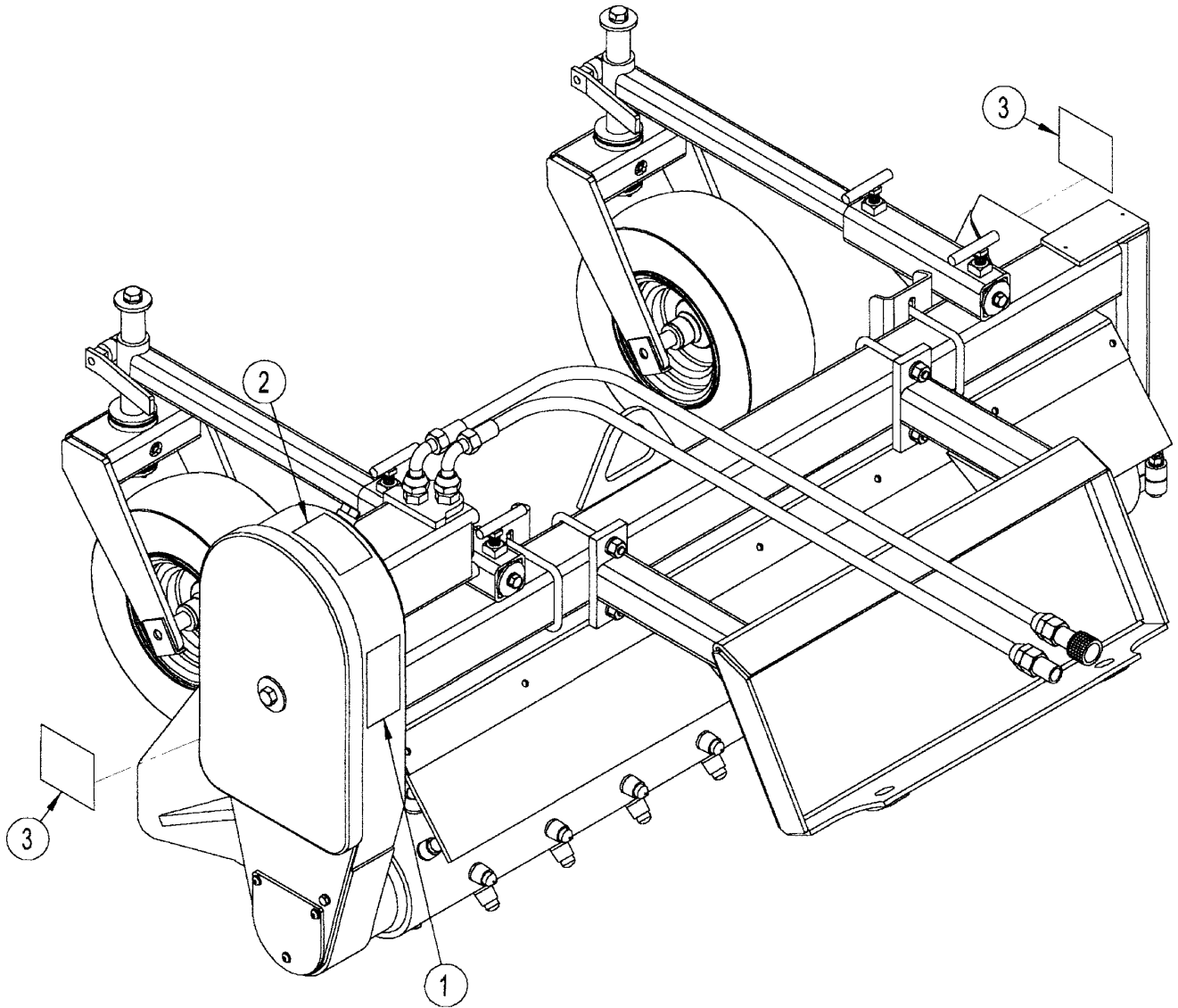
# SAFETY DECALS



**ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



*Replace Immediately If Damaged!*



**Figure 1.** Safety Decals

# OPERATION

Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by a single careless act of an operator.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of equipment.

It has been said, *“The best safety device is an informed, careful operator.”* We ask you to be that kind of an operator.

The operator is responsible for the safe operation of this equipment. Operators must be instructed in and be capable of the safe operation of the equipment, its attachments, and all controls. Do not allow anyone to operate this equipment without proper instructions.

The Power Box Blade is designed for pulverizing hard packed ground, removing rock and small debris, and for thatching. Skid-steers must be equipped with an auxiliary hydraulic system capable of supplying continuous flow for hydraulic motor operation. This manual contains information for the PB.4 model. Refer to the information in this manual for specifications, parts, assemblies, and adjustments.



## WARNING

- **Safety instructions are important! Read all attachment and power unit manuals; follow all safety rules and safety decal information. (Replacement manuals are available from dealer or, in the United States and Canada, call 1-800-437-9779.) Failure to follow instructions or safety rules can result in serious injury or death.**
- **Do not allow children or untrained persons to operate equipment.**
- **Skid-steer must be equipped with ROPS and seat belt/operator restraint. Keep seat belt/operator restraint securely fastened/engaged. Falling off skid-steer can result in death from being run over or crushed. Keep ROPS systems in place at all times.**
- **Do not allow other people in the area when operating, attaching, removing, assembling, or servicing equipment.**
- **Never go underneath equipment lowered to the ground or raised. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic**

**system leak down, hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death.**

- **Service work does not require going underneath.**
- **Read Operator’s Manual for service instructions or have done by a qualified dealer.**
- **Before leaving skid-steer operator’s seat, follow skid-steer manual instructions. Lower skid-steer lift arms and put attachment on the ground. Stop engine, remove key, engage brake, and remove seat belt/operator restraint.**

## ATTACHING POWER BLADE TO SKID-STEER

Read the skid-steer Operator’s Manual connecting and removing instruction.

Position hydraulic hoses so they will not be pinched when connecting the power blade.

The skid-steer coupler handles should be in the unlocked position and the lockpins retracted.

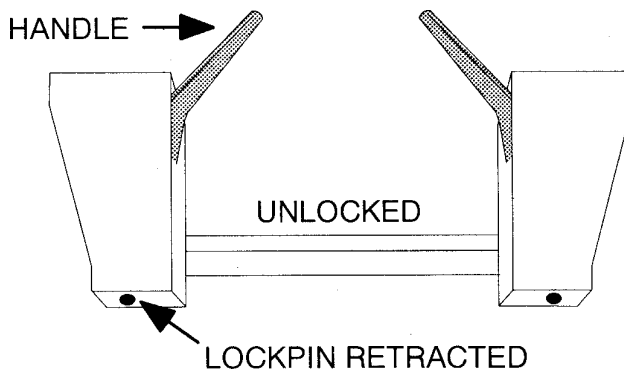


Figure 2. Skid-Steer Coupler Handles - Unlocked

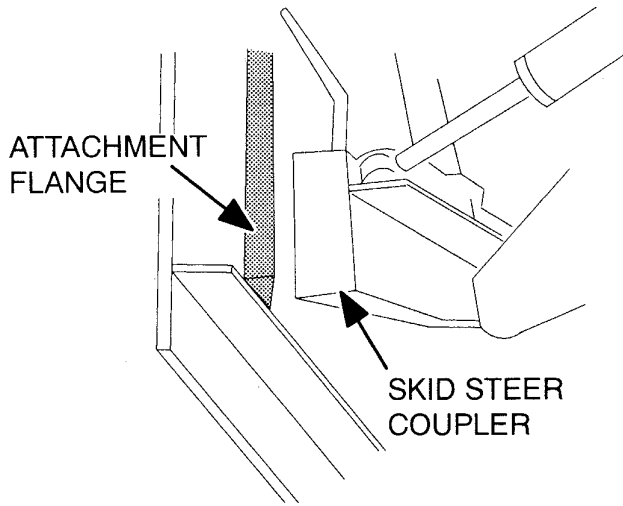
Move to the skid-steer operator seat and start engine.

Lower skid-steer lift arms to their lowest position.

Carefully move and align the skid-steer to the power blade. The top of the skid-steer coupler must index into the power blade flange, **Figure 3.**

Roll the skid-steer coupler into the power blade so the coupler handles can be engaged.

# OPERATION

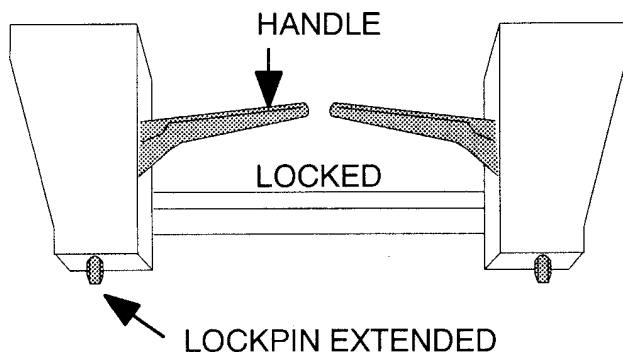


**Figure 3.** Attaching Power Blade to Skid-Steer

Shut off the engine, set brake, and remove key. Dismount the skid-steer.

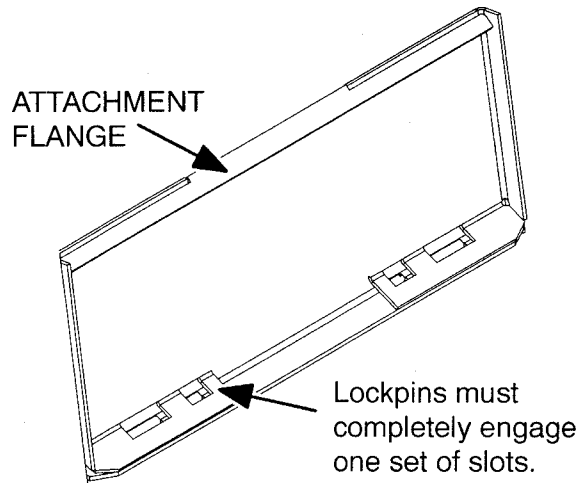
Move the skid-steer coupler handles to the locked position. The lockpins must be completely extended and secured into the slots provided on the power blade, **Figure 4** and **Figure 5**.

Connect hydraulic hoses to skid-steer auxiliary quick couplers.



**Figure 4.** Skid-Steer Coupler Handles - Locked

## Back View of Attachment



**Figure 5.** Back of Attachment - Slot Locations

## POWER BLADE FUNCTION

The power blade hydraulic motor drives the roller, which digs into the ground, cultivating and pulling up rocks, roots, and debris.

The clean soil goes between the roller and barrier, while the rocks, roots, and debris is collected in front of roller.

Material can be moved along, filling in the low spots or collected in a pile.

## PRE-OPERATION CHECK LIST (OWNER'S RESPONSIBILITY)

- \_\_\_ Review and follow all safety rules and safety decal instructions on pages 6 through 11.
- \_\_\_ Check that all safety decals are installed and in good condition. Replace if damaged.
- \_\_\_ Check that all shields and guards are properly installed and in good condition. Replace if damaged.
- \_\_\_ Check that all hardware and cotter pins are properly installed and secured.
- \_\_\_ Check that equipment is properly and securely attached to skid-steer.
- \_\_\_ Do not allow riders.

# OPERATION

- Check and keep all bystanders away from equipment working area.
- Check all lubrication points and grease as instructed in the **Maintenance** section starting on page 17.
- Check that all hydraulic hoses and fittings are in good condition and not leaking before starting skid-steer. Check that hoses are not twisted, bent sharply, kinked, frayed, or pulled tight. Replace any damaged hoses immediately.
- Make sure skid-steer ROPS and seat belt are in good condition. Keep seat belt securely fastened during operation.

## OPERATING INSTRUCTIONS

Read and understand the power box blade and skid-steer Operator's Manuals before operating the power blade. Failure to do so may result in death, serious personal injury, or property damage.

Never raise the power blade more than a few inches off the ground when traveling from job site to job site.

Shut off the engine, set brake, remove key, remove seat belt, and release operator restraint. Dismount the skid-steer.



### WARNING

- **Improper operation can cause the machine to tip or roll over and cause injury or death.**
  - **Keep skid-steer lift arms and attachment as low as possible.**
  - **Do not travel or turn with skid-steer lift arms and attachment raised.**
  - **Turn on level ground.**
  - **Go up and down slopes, not across them.**
  - **Keep the heavy end of the machine uphill.**
  - **Do not overload the machine.**
- **Look down and to the rear and make sure area is clear before operating in reverse.**
- **Never direct discharge toward people, animals, or property.**
- **Only engage power when equipment is at ground operating level. Always disengage power when equipment is raised off the ground.**

## Start-up Sequence



### WARNING

- **Only engage power when equipment is at ground operating level. Always disengage power when equipment is raised off the ground.**

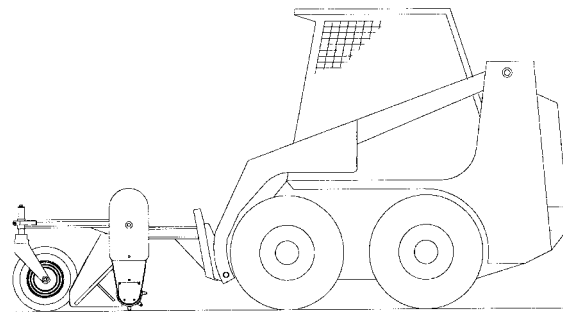
Start skid-steer engine.

Lower power blade slowly to the ground.

Engage hydraulic control lever for auxiliary implements.

Increase engine rpm to give desired rpm at the roller. Normal operating speed is approximately 270 rpm. If operating in heavy rock, reduce the speed slightly.

Move the skid-steer forward or backward as desired. For the roller to operate effectively, it must rotate in the opposite direction of the skid-steer wheels (see **Figure 6**). Roller rotation direction is controlled by skid-steer hydraulic controls.



ROLLER ROTATION	TRAVEL DIRECTION

**Figure 6.** Roller Rotation

## Ground Speed

Ground speed should be between 3 and 5 mph under normal conditions. In heavy rock, reduce the ground speed to 1 to 3 mph.

# OPERATION

## Hydraulic Drive Motor

The hydraulic drive motor runs off the auxiliary circuit of the skid-steer. The power blade should be run at 30% power for one hour for proper motor break-in.

## Power Roller

To allow the roller to penetrate deeper into the ground, loosen the handle and raise the gauge wheels. To achieve the opposite, lower the gauge wheels.

During operation, further depth control can be achieved by tilting the blade forward on gauge wheels to raise roller, or by tilting the blade back to raise gauge wheels and allow more roller penetration.

Be sure to check the air pressure in each tire regularly so that an even, consistent grade will be maintained.

The normal gap between the roller and barrier for average conditions is about 1-1/4". This gap can be adjusted either wider or narrower by loosening the U-bolt that holds the barrier mount and sliding it up or down. A wider opening will allow more dirt and rock to pass through. For finer blading, reduce the gap. (Be careful not to let roller hit barrier.) The gap should be the same all the way across. Barrier adjustment is shown in **Figure 7**.

The roller on the power blade is **bi-rotational**. You can operate the roller in both directions - clockwise and counter-clockwise. The roller operates most efficiently when it rotates in the opposite direction of the skid-steer wheels.

## Operating Depth

When power blading, the depth will determine how much dirt is carried ahead of the roller. The ideal depth will vary with conditions and can be anywhere from skimming the surface to about 3" deep. See instructions in **Power Roller** above to set roller depth.

## Operator Production

Successful operation of the power blade will come with operator experience. The blade's performance also depends on the type and size of the skid-steer it's mounted on.

An operator that masters the technique of adjusting the angle of attack of the roller against the soil will also find ideal settings under various conditions to give the desired results.

## IMPORTANT

- **Do not drop power blade to the ground with the roller turning. Sudden high speed jolts multiply stress to the driveline and can cause extreme damage.**

## Shutting Down

Stop engine.

Lower the lift arms and power blade to the ground.

Purge any air in the system. Hydraulic system leak down, hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly.

Shut off engine, set brake, remove key, remove seat belt, and release operator restraint before leaving the skid-steer operator's seat.

### WARNING



- **Do not disconnect hydraulic lines until all system pressure is relieved. Lower unit to ground, stop engine, and operate all hydraulic control levers.**

## REMOVING POWER BLADE FROM SKID-STEER



### WARNING

- **Do not allow other people in the area when operating, attaching, removing, assembling, or servicing equipment.**

On a hard level surface, lower attachment to the ground.

Shut off engine, set brake, remove key, remove seat belt, and release operator restraint before leaving the skid-steer operator's seat.



### WARNING

- **Do not disconnect hydraulic lines until all system pressure is relieved. Lower unit to ground, stop engine, and operate all hydraulic control levers.**

Move attachment coupler latches to the unlocked position (lockpins must be disengaged).

Disconnect hydraulic hoses from quick couplers. Install dust plugs and couple hoses together for storage. Disconnect direction control switch from skid-steer power cord and remove switch.

Move to skid-steer seat and start engine. Release brake and roll attachment coupler until it is disengaged from the attachment. The attachment should rest in a stable position for storage.



# OPERATION

## STORAGE

Make sure the disconnected power blade is stored on a hard, level surface.

### WARNING

- Block equipment securely for storage.

### CAUTION

- Keep children and bystanders away from storage area.

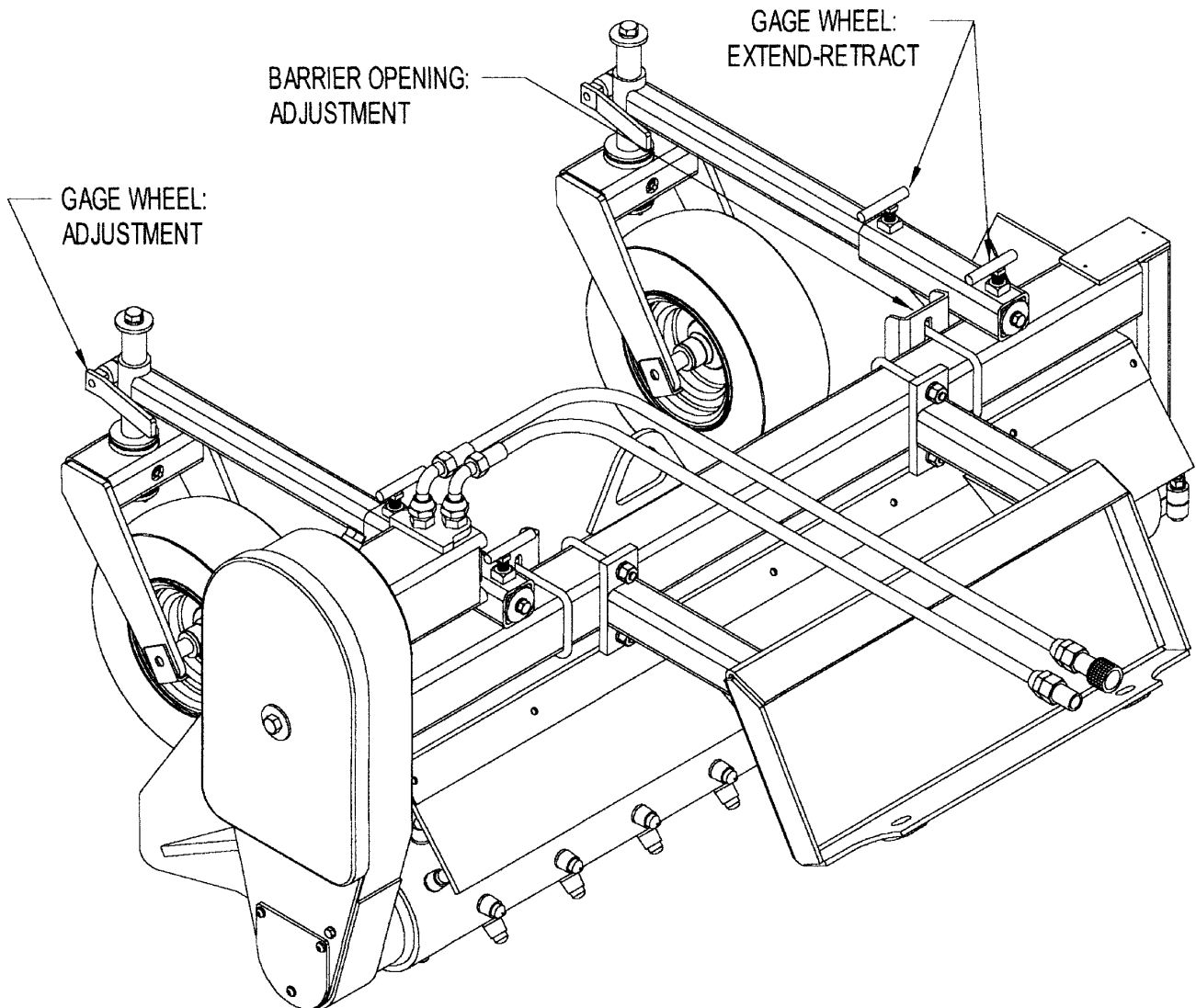


Figure 7. Adjustments

# MAINTENANCE

The information in this section is written for operators who possess basic mechanical skills. Should you need help, your dealer has trained service technicians available. For your protection, read and follow all safety information in this manual.

Regular preventive maintenance and immediate repair of broken or worn parts will ensure maximum efficiency and long life.

Because of the nature of the jobs the power blade does, such as site preparation and rock blading, the power blade is constantly vibrating and shaking. Parts may loosen up as it is used. One of the most important functions an operator can perform is observing and inspecting the equipment for loose or worn parts to prevent further damage or excessive downtime.

## WARNING

- **Never go underneath equipment lowered to the ground or raised. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak down, hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death.**
  - **Service work does not require going underneath.**
  - **Read Operator's Manual for service instructions or have done by a qualified dealer.**
- **Before leaving skid-steer operator's seat, follow skid-steer manual instructions. Lower skid-steer lift arms and put attachment on the ground. Stop engine, remove key, engage brake, and remove seat belt/operator restraint.**
- **Do not allow other people in the area when operating, attaching, removing, assembling, or servicing equipment.**
- **Never perform service or maintenance with engine running.**
- **Ensure shields and guards are properly installed and in good condition. Replace if damaged.**
- **Keep hands and body away from pressurized lines. Use paper or cardboard, not body parts, to check for leaks. Wear safety goggles. Hydraulic fluid under pressure can easily penetrate skin and will cause serious injury or death.**
- **Make sure that all operating and service personnel know that in the event hydraulic fluid**

**penetrates skin, it must be surgically removed as soon as possible by a doctor familiar with this form of injury or gangrene, serious injury or death will result. CONTACT A PHYSICIAN IMMEDIATELY IF FLUID ENTERS SKIN OR EYES. DO NOT DELAY.**

- **Make sure all hydraulic hoses, fittings, and valves are in good condition and not leaking before starting power unit or using equipment. Check and route hoses carefully to prevent damage. Hoses must not be twisted, bent sharply, kinked, frayed, pinched, or come into contact with any moving parts. Operate moveable components through full operational range to check clearances. Replace any damaged hoses immediately.**

## CAUTION

- **Your dealer can supply original equipment hydraulic accessories and repair parts. Substitute parts may not meet original equipment specifications and may be dangerous.**
- **Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head.**

## WARNING

- **Do not modify or alter, or permit anyone else to modify or alter, the equipment or any of its components in any way.**
- **Ensure all safety decals are installed. Replace if damaged. (See Safety Decals section for location.)**

## DAILY MAINTENANCE

When operating the power blade, check the skid-steer hydraulic system to be sure the level of hydraulic oil is adequate. If necessary, add hydraulic oil as recommended in your skid-steer Operator's Manual.

Repair hydraulic oil leaks promptly to avoid loss of oil and serious personal injury from escaping oil.

After every 10 hours of operation, check all hardware and tighten where required.

Lightly lubricate bearing at each end of roller.

Check oil level in chain case.

# MAINTENANCE

## WEEKLY MAINTENANCE

Lubricate all pivot points.

Inspect drive chain.

Check tire pressure. Maintain 20 psi cold.

## MONTHLY MAINTENANCE

Inspect and clean safety decals. Replace if damaged. (See **Safety Decals** section for location.)

## QUARTERLY MAINTENANCE

Change oil in chain case and add 1.5 pints of EP 85W 140 wt. lube.

## PRELIMINARY CHECK

The best maintenance is regular preventive checks, particularly when the machine is new. Check that all nuts and bolts are tight.

## CHAIN MAINTENANCE

The drive chain should be inspected weekly. New chain has a tendency to stretch, so it is necessary to check the chain tension to prevent flopping around, thus causing potential problems.

Chain tension is preset with the extension spring. If the chain becomes excessively loose, it may be necessary to remove one link (two pitches). If unable to reassemble, add an offset link to lengthen the chain.

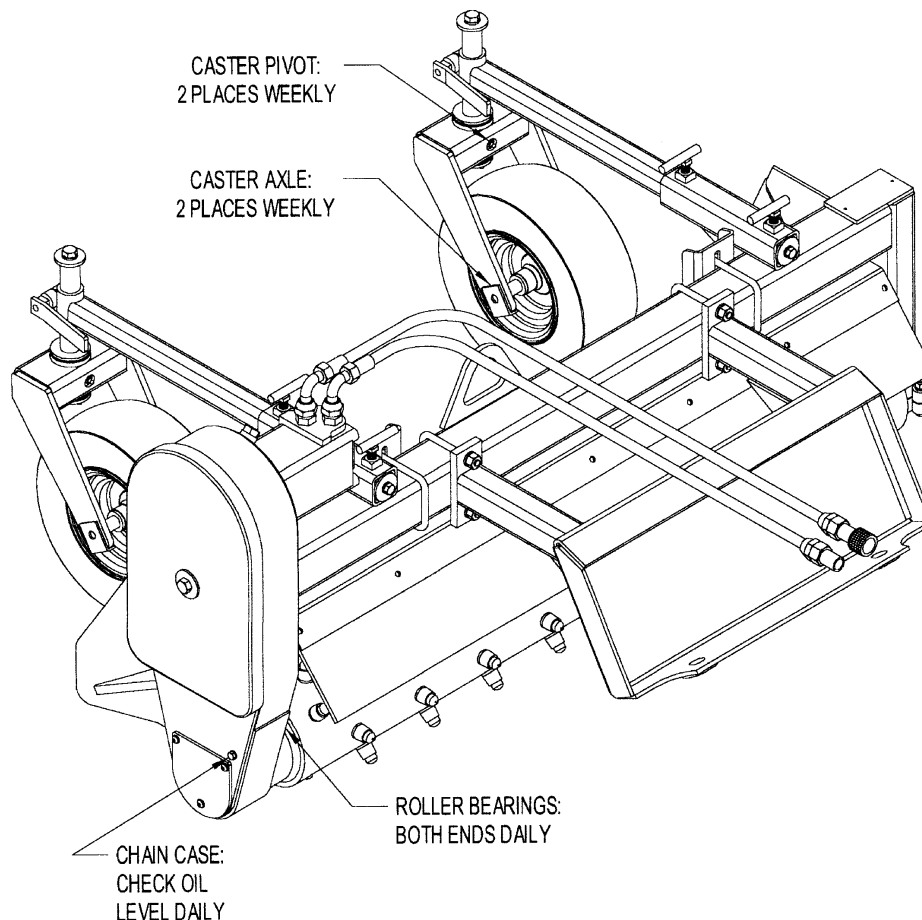
## IMPORTANT

- **Replacement chain should be only high quality original equipment chain for longer life.**

When being stored for a long period or at end of season, change the oil, adding EP 85W 140 wt. oil, and rotate the roller several times allowing the chain to be coated with oil, enhancing chain life. Rotate the roller periodically to maintain lubrication. In order to rotate the roller and chain you must hook the two hydraulic hoses together.

## SPROCKETS

Sprockets should be checked to be sure slotted hex nut or hex bolt is tight, the cotter pin is in place, and the sprocket cannot move on shaft.



**Figure 8.** Lubrication Maintenance

# TROUBLE SHOOTING

Problem	Possible Cause	Solution
Roller will not turn	Hydraulic valve on skid-steer not engaged	See skid-steer Operator's Manual for auxiliary hydraulic operation procedure.
	Relief valve setting on skid-steer not properly adjusted	Have skid-steer dealer set relief valve at correct pressure.
	Worn, damaged, insufficient, or inadequate pump	Repair or replace hydraulic pump.
	Insufficient oil in system	Service the skid-steer hydraulic reservoir.
	Hose ends not completely engaged	Check hose coupling and engage properly.
	Air in hydraulic lines	Cycle skid-steer auxiliary system several times to remove air from lines.
	Obstruction in hydraulic lines	Replace obstructed or damaged line.
	Obstruction between roller and barrier	Reverse roller to clear obstruction.
	Chain off	Repair or replace chain.
	Oil leaks	Worn or damaged seal
Loose or damaged hoses		Replace damaged hoses and secure loose hoses.
Loose or damaged connections		Replace damaged hose connections and tighten loose fittings.
Worn or damaged housing		Replace damaged housing.
Roller out of position		Loosen bearing collars on both ends of roller. Pry roller toward chain case and tighten bearing collar bolts.

# MAINTENANCE

The information in this section is written for dealer service personnel. The repair described herein requires special skills and tools. If your shop is not properly trained in this type of repair, you may be time and money ahead to replace complete assemblies.



## WARNING

- **Never go underneath equipment lowered to the ground or raised. Never place any part of the body underneath equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak down, hydraulic system failures, mechanical failures, or movement of control levers can cause equipment to drop or rotate unexpectedly and cause severe injury or death.**
  - **Service work does not require going underneath.**
  - **Read Operator's Manual for service instructions or have done by a qualified dealer.**



## CAUTION

- **Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head.**
- **Do not allow other people in the area when operating, attaching, removing, assembling, or servicing equipment.**
- **Do not modify or alter, or permit anyone else to modify or alter, the equipment or any of its components in any way.**
- **Do not disconnect hydraulic lines until all system pressure is relieved. Lower unit to ground, stop engine, and operate all hydraulic control levers.**
- **Ensure implement is properly attached, adjusted, and in good operating condition.**
- **Ensure all safety decals are installed. Replace if damaged. (See Safety Decals section for location.)**

- **Ensure shields and guards are properly installed and in good condition. Replace if damaged.**

## HYDRAULIC MOTOR

### Removal

Remove chain from top sprocket. Then remove top sprocket by removing the hex bolt and washers. Slide collar and snap ring off motor shaft.

### Reassembly

Apply a liberal amount of silicone sealer to inside of flange. Attach hydraulic motor to chain case with two bolts, lock washers, and nuts. Open snap ring and slide it over motor shaft. Place collar over shaft with groove toward snap ring. Insert snap ring into groove. Slide top sprocket, sprocket teeth first, onto shaft. Use machine bushings on the inside or outside of sprocket for proper alignment.

## BEARINGS

Highest quality bearings are used on the power blade. Only triple-seal bearings are used on the roller which operates down in the dirt. Lubrication of bearings will vary considerably with conditions. As a rule, bearings should be under-lubricated rather than over-lubricated. Over-lubrication can cause seals to blow out.

## IMPORTANT

- **Replacement bearings should be only high quality original equipment bearings for longer life.**

Install new complete bearing housing if needed or just replace the bearing insert.

# MAINTENANCE

## Protective Collars

The special protective collars protect bearings from vine and wire wrap, and dirt buildup next to the bearing seal. The bearing protector is sandwiched onto the shaft which rotates within a close clearance from the outer race of the bearing. Grease coming from the bearing oozes into the protecting collar, keeping dust and particles from entering the seal area, increasing the bearing life.

## Left Roller Bearing

Remove drive chain. Then remove lower sprocket by removing cotter pin, slotted hex nut, and washers.

Remove the two bolts holding the chain case to the frame.

**NOTE:** Have roller blocked up or supported and slide chain case and bearing off roller shaft.

Loosen bolt on the bearing tube that holds cartridge bearing in place. Remove bearing and O-ring.

To replace, reverse the procedure. Be sure all parts and wear surfaces are thoroughly clean and in good condition. Be sure O-ring is also in good condition.

When replacing bearing, first put O-ring on bearing. Apply a coat of grease on O-ring. Slide bearing in and apply moderate pressure on bearing so the O-ring will seat and spread slightly, thus keeping the oil in the chain case from escaping through the bearing.

## Right Roller Bearing

Remove the hex bolt and bearing cap from outside of the bearing.

Loosen bolt on the bearing tube that holds cartridge bearing in place. Pry bearing tube apart to free bearing assembly.

**NOTE:** Have roller blocked up or supported. Pry bearing off of shaft and out of bearing holder.

To replace, reverse the procedure. Be sure all parts and wear surfaces are thoroughly clean and in good condition.

## ROLLER REPLACEMENT

It will be necessary to have a lifting device or additional help while removing and replacing the roller. The roller weighs approximately 80 lbs.

Remove upper and lower chain case covers.

Remove tension spring and drive chain. Then remove lower sprocket by removing cotter pin, slotted nut, and washers. Remove the sleeve behind the sprocket you just removed.

**NOTE:** Have the roller blocked up or supported.

Remove the two bolts holding chain case to frame and slide chain case, with hydraulic motor attached, off of roller shaft. The roller bearing will stay in the chain case.

**NOTE:** If chain case bearing is also being replaced, see **Left Roller Bearing** above.

Loosen the bolt on the bearing tube of the non-drive end, sliding roller and bearing out of frame.

Remove hex bolt, bearing cap, bearing, and protective collar from roller. On roller to be installed, place protective collar against endplate of roller. Place bearing and bearing cap on roller. Clamp in place with hex bolt and lockwasher into end of roller shaft.

Slide roller and bearing into bearing tube on non-drive end of frame. Do **not** tighten bearing tube at this time.

Place spacer and protective collar from splined end of removed roller onto replacement roller. Apply sealant to bearing area of shaft. Slide chain case back onto roller and bolt to frame.

Replace sleeves, sprocket, and washers on driveshaft. Clamp solid with the 1" slotted jam nut. Check that roller clears frame on both ends. Adjust if required.

Now, tighten 3/8" bolt in bearing tube on non-drive end of frame.

Reinstall chain and tension spring.

Replace lower cover, being careful not to pinch the O-ring. Fill the chain case with 1.5 pints of 85W 140 wt. gear oil. Replace upper cover.

Run power blade and watch for any interference between roller and frame.

# ASSEMBLY



## CAUTION

- Always wear relatively tight and belted clothing to avoid entanglement in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head.



## WARNING

- Keep hands and body away from pressurized lines. Use paper or cardboard, not body parts, to check for leaks. Wear safety goggles. Hydraulic fluid under pressure can easily penetrate skin and will cause serious injury or death.
- Make sure that all operating and service personnel know that in the event hydraulic fluid penetrates the skin, it must be surgically removed as soon as possible by a doctor familiar with this form of injury or gangrene, serious injury, or death will result. **CONTACT A PHYSICIAN IMMEDIATELY IF FLUID ENTERS SKIN OR EYES. DO NOT DELAY.**
- Route hydraulic hoses carefully to prevent damage. Hoses must not be twisted, bent sharply, kinked, frayed, pinched, or come into contact with any moving parts. Operate moveable components through full operational range to check clearances. Replace any damaged hose immediately.
- Do not allow other people in the area when operating, attaching, removing, assembling, or servicing equipment.
- Do not modify or alter, or permit anyone else to modify or alter, the equipment or any of its components in any way.

## SET-UP INSTRUCTIONS

The power blade is shipped fully assembled. Caster wheel arms will need to be extended prior to using the Power Box Blade.

### Unpacking Crate

Be careful of nails in boards when uncrating.

Remove top, sides, and ends of crate.

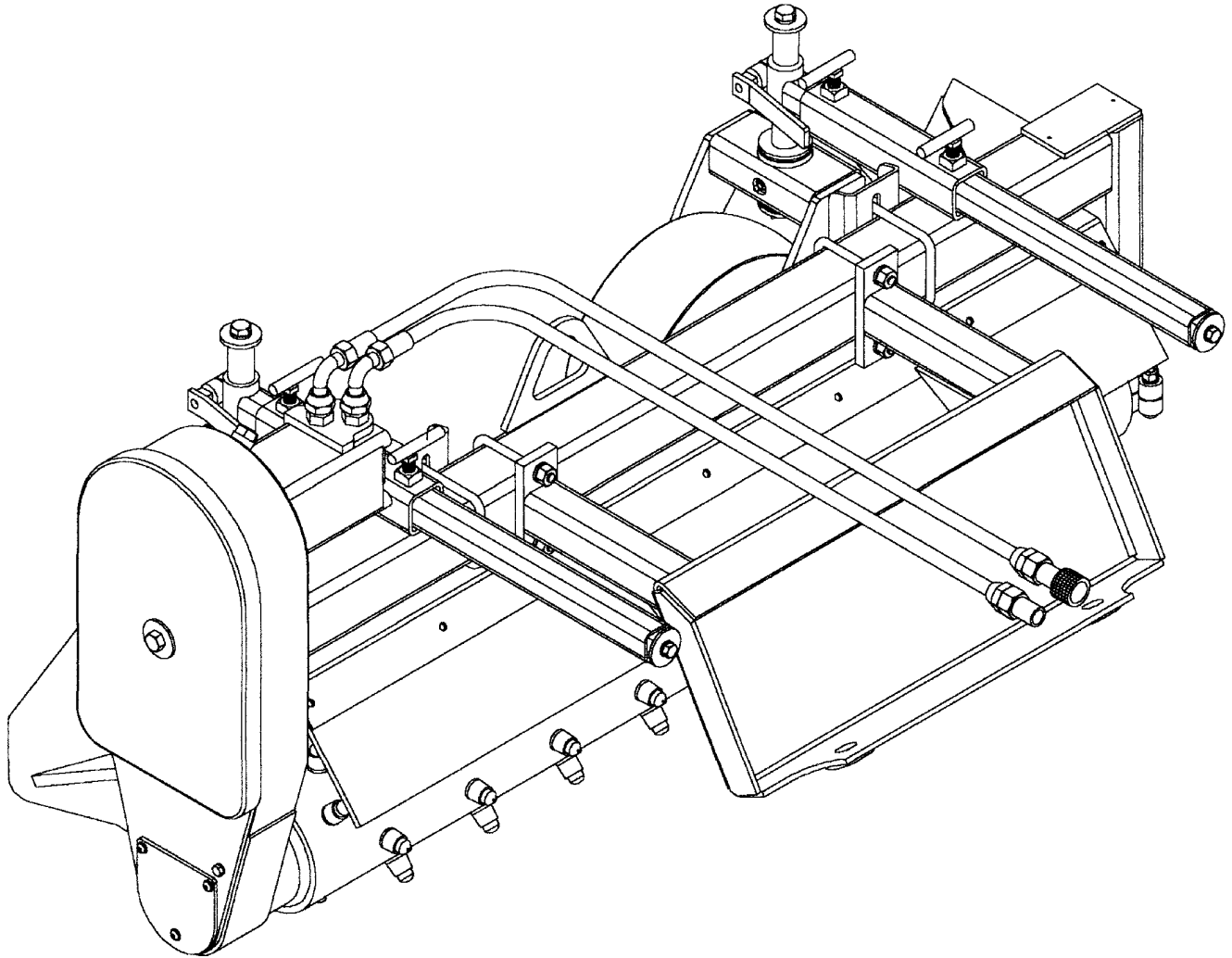
Remove power blade from crate. Remove loose nails from boards and dispose of crate according to local codes.

# ASSEMBLY



## WARNING

- Do not allow other people in the area when operating, attaching, removing, assembling, or servicing equipment.



**Figure 10.** Power Blade Assembly



# ASSEMBLY

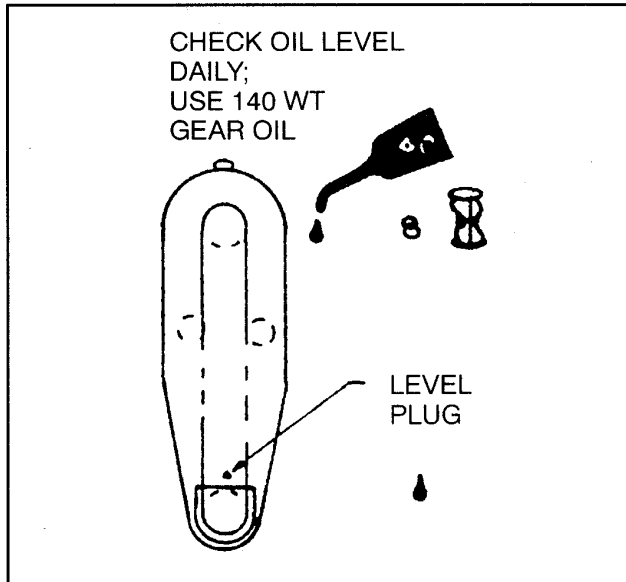
Check the oil level in the chain case. If needed, add 85W 140 wt. gear oil. See instructions near fill/vent plug, **Figure 11**.



## WARNING

Make sure all hydraulic hoses, fittings, and valves are in good condition and not leaking before starting power unit or using equipment. Check and route hoses carefully to prevent damage. Hoses must not be twisted, bent sharply, kinked, frayed, pinched, or come into contact with any moving parts. Operate moveable components through full operational range to check clearances. Replace any damaged hoses immediately.

Check that shields and guards are properly installed and in good condition. Replace if damaged.



**Figure 11.** Chain Case Oil Level

# NOTES

# GENERAL ASSEMBLY

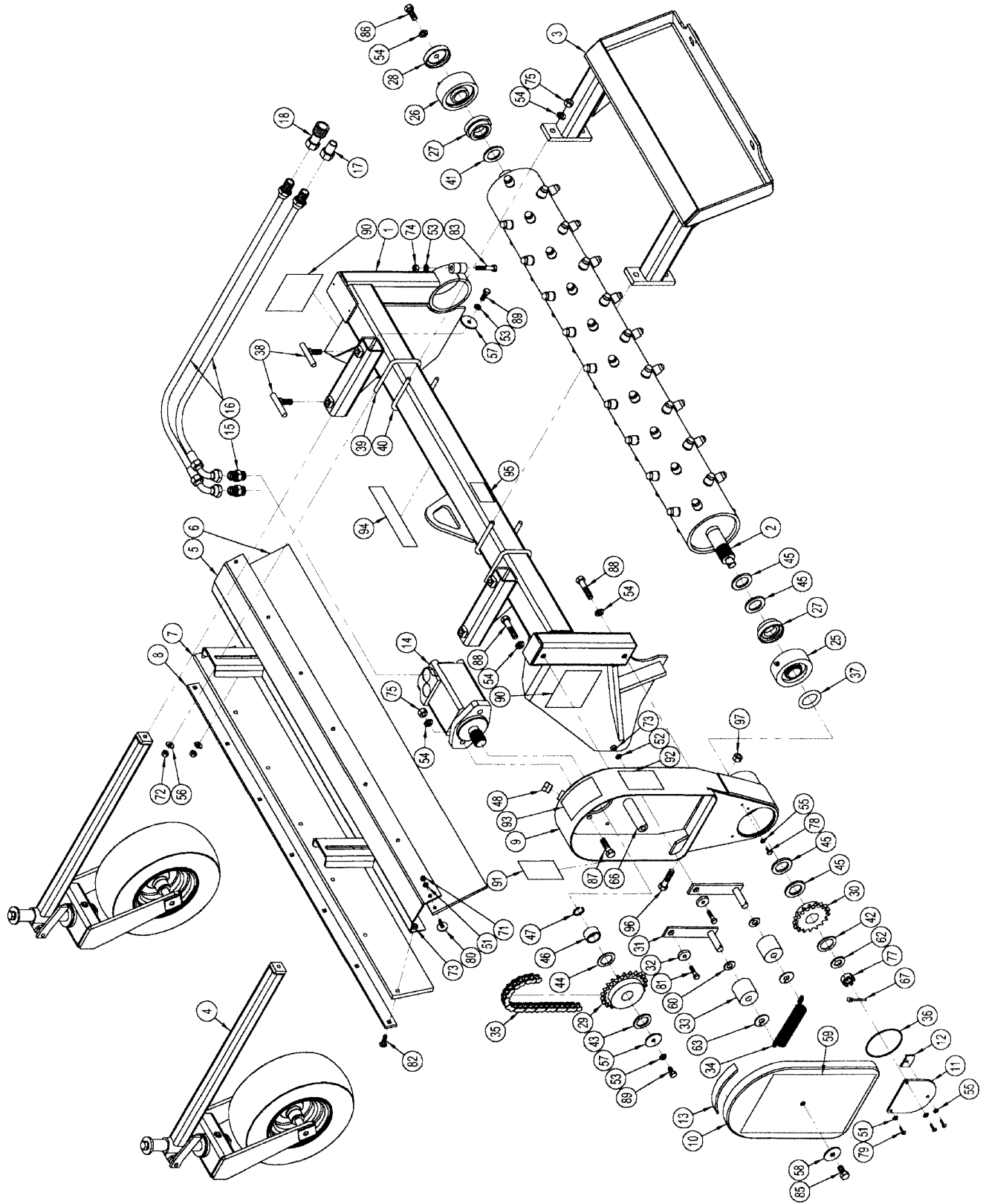


Figure 13. General Assembly

# CASTER WHEEL

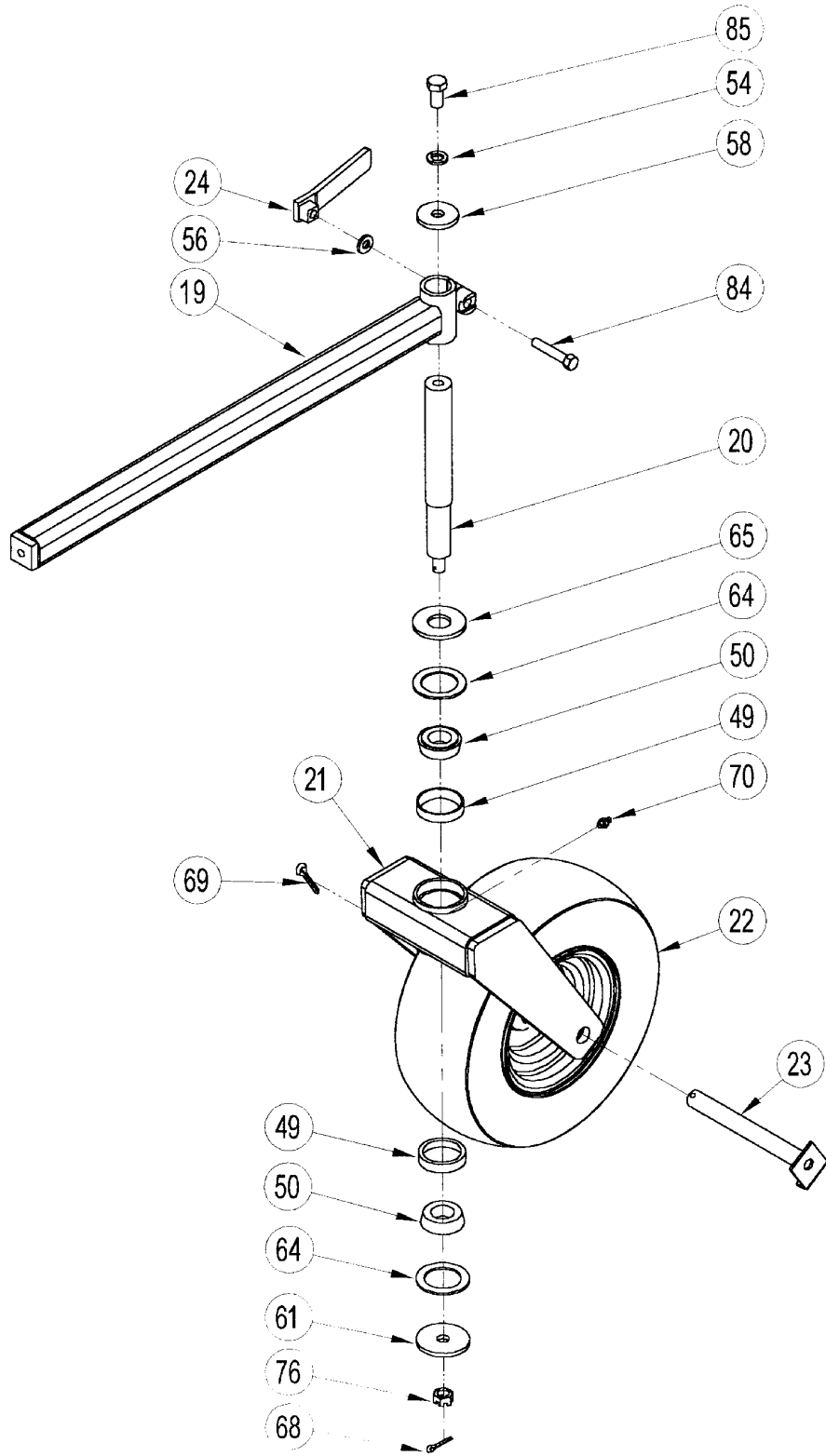


Figure 14. Caster Wheel Assembly

# PARTS LIST

ITEM	QTY	PART NO	DESCRIPTION	ITEM	QTY	PART NO	DESCRIPTION
1	1	M14001	MAIN FRAME	68	2	P116204	1/8" X 1" COTTER PIN
2	1	M4453	CARBIDE TOOTH ROLLER	69	2	P116306	3/16" X 1-1/2" COTTER PIN
3	1	M14012	TORO/DINGO ATTACHMENT PLATE	70	2	P620200	1/4"-28 STR GREASE FITTING
	1	M14026	ASV ATTACHMENT PLATE	71	7	P150400	1/4" HEX NUT
	1	M14020	GEHL ATTACHMENT PLATE	72	4	P158007	3/8" ELASTIC STOP NUT
	1	M14022	KANGA ATTACHMENT PLATE	73	9	P155350	5/16" CENTER LOCK NUT
4	2	M14016	CASTER WHEEL ASSEMBLY	74	1	P150600	3/8" HEX NUT
5	1	M14004	BARRIER MOUNT	75	6	P150800	1/2" HEX NUT
6	1	M14013	DISCHARGE DEFLECTOR	76	2	P158006	1/2" SLOTTED HEX NUT
7	1	M14025	BARRIER	77	1	P158000	3/4"-16 SLOTTED HEX NUT
8	1	M4429	BARRIER STRAP	78	1	P100402	1/4" X 1/2" HEX BOLT
9	1	M4410	CHAIN CASE	79	3	P110901	1/4" X 3/4" BUTTON HEAD SCREW
10	1	M4416	COVER	80	7	P112403	1/4" X 3/4" ELEVATOR BOLT
11	1	M6240	LOWER COVER	81	2	P100505	5/16" X 1-1/4" HEX BOLT
12	1	M6243	COVER TAB	82	7	P104505	5/16" X 1-1/4" CARRIAGE BOLT
13	1	M4418	COVER SEAL	83	1	P100608	3/8" X 2" HEX BOLT
14	1	P350500	HYDRAULIC MOTOR (2000, 104-1031)	84	2	P102608	3/8" X 2" FINE THD HEX BOLT
15	2	P276200	ADAPTER 10MB-10MJ	85	3	P100804	1/2" X 1" HEX BOLT
16	2	P252772	-10MB-10FIJX90 HOSE X 72.00	86	1	P102805	1/2" X 1-1/4" FINE THD HEX BOLT
17	1	P272661	MALE COUPLER	87	2	P100807	1/2" X 1-3/4" HEX BOLT
18	1	P272660	FEMALE COUPLER	88	2	P100812	1/2" X 3" HEX BOLT
19	2	M14015	CASTER SUPPORT ARM	89	3	P100603	3/8" X 3/4" HEX BOLT
20	2	M5450	CASTER SHAFT	90	2	P970250	DECAL: WARNING ROLLER
21	2	M5447	CASTER FORK	91	1	P970003	DECAL: LUBRICATION
22	2	P752100	13" X 5" WHEEL AND TIRE	92	1	P970020	DECAL: WARNING LIFT
23	2	M5455	CASTER AXLE	93	1	P970300	DECAL: WARNING CHAIN
24	2	M5454	HANDLE	94	1	P975930	DECAL: HARLEY BLADE LOGO
25	1	M5440	BEARING ASSEMBLY DRIVE	95	1	P976500	DECAL: LIFT HOOK
26	1	M5441	BEARING ASSEMBLY IDLE	96	1	P102808	1/2" X 2" FINE THD HEX BOLT
		P009500	1-3/8" FAFNIR INSERT	97	1	P155852	1/2-20 LOCK NUT
		P015209	1-3/8" CYLINDRICAL HOUSING				
27	2	M20192	1-3/8" BEARING COLLAR				
28	1	P015310	1-3/8" BEARING CAP				
29	1	P652202	SPROCKET 22 TOOTH #50-1-1/4				
30	1	P651700	SPROCKET 17 TOOTH #50-1-3/8				
31	2	M6629	TENSION ARM				
32	2	M6630	PIVOT BUSHING				
33	2	M6628	TENSION ROLLER				
34	1	P604605	EXTENSION SPRING				
35	1	M4450	DRIVE CHAIN #50 75P W\CONN				
36	1	P500200	O-RING 3/32" X 3-3/4"				
37	1	P500201	O-RING 3/8" X 2-3/8"				
38	4	M6448	T-HANDLE				
39	2	P128393	U-BOLT 3/8" X 3" X 4"				
40	2	P128318	U-BOLT 1/2" X 3" X 4-1/4"				
41	1	P855122	1-3/8" 10 GA MACHINE BUSHING				
42	1	P855322	1-3/8" 14 GA MACHINE BUSHING				
43	1	P855120	1-1/4" 10 GA MACHINE BUSHING				
44	1	P855320	1-1/4" 14 GA MACHINE BUSHING				
45	4	M5463	BEARING SPACER				
46	1	M4409	COLLAR				
47	1	P952251	1-3/16" SNAP RING				
48	1	P278001	VENT PLUG				
49	4	P762100	BEARING CUP				
50	4	P762200	BEARING CONE				
51	9	P851104	1/4" LOCK WASHER				
52	2	P851105	5/16" LOCK WASHER				
53	4	P851106	3/8" LOCK WASHER				
54	11	P851108	1/2" LOCK WASHER				
55	2	P500300	1/4" O-RING WASHER				
56	6	P851606	3/8" HEAVY WASHER				
57	3	M5009-2	3/8" WASHER				
58	3	M5009-4	1/2" X 1-3/4" WASHER				
59	1	P975926	DECAL: POWER BOX BLADE				
60	2	P850609	9/16" FLAT WASHER				
61	2	M5462	2-1/4" OD X 17/32" ID WASHER				
62	1	P850612	3/4" WASHER				
63	2	M6756	PINNED WASHER				
64	4	P852300	FELT WASHER				
65	2	M5464	2 1/4" OD X 1" ID WASHER				
66	1	M4449	COVER SPACER				
67	1	P116256	5/32" X 1-1/2" COTTER PIN				

# LIMITED WARRANTY

GLENMAC, INC. warrants, to the original purchaser of the HARLEY POWER BOX BLADE, that it will repair or replace any manufactured parts thereof found to be, under normal use, defective in factory material or workmanship for six (6) months from the date of purchase.

This warranty shall become void if in the judgment of GLENMAC, INC., the equipment has been subject to misuse, negligence, alteration, damaged by accident or lack of required maintenance, or if the product has been used for a purpose for which it was not intended. Wear items such as, but not limited to, rollers and chain cases will not be covered under warranty.

This warranty does not apply to hydraulic motor, electric actuator, tires, bearing, sprockets, or any other trade accessories not manufactured by GLENMAC, INC. Buyer must rely solely on the existing warranty, if any, of these respective manufacturers.

This warranty will become void if a valid warranty registration card is not received by GLENMAC, INC. at its JAMESTOWN, ND office within ten (10) days of original purchase.

Certain of our HARLEY dealers provide Limited Warranty replacement service. We would suggest that you contact your selling dealer and attempt to resolve your warranty service problem locally prior to contacting our home office. Any questions concerning warranty service can be directed to our Customer Service Department at PO Box 2135 Jamestown, ND, 58402, or call (701) 252-9300.

THERE IS NO OTHER EXPRESSED OR IMPLIED WARRANTY ON THIS PRODUCT OR ON ITS MERCHANTABILITY OR ON ITS FITNESS. TO THE EXTENT ALLOWED BY LAW, NEITHER GLENMAC, INC. NOR THE SELLING HARLEY DEALER SHALL HAVE ANY RESPONSIBILITY FOR LOSS OF USE OF THE PRODUCT, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS OR CONSEQUENTIAL DAMAGES.

Some states do not allow limitations on the exclusion or limitation of incidental or consequential damages, therefore the above limitations may not apply to you.

This warranty gives you specific legal rights that vary from state to state.

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Please enter information below and **SAVE FOR FUTURE REFERENCE.**

Date Purchased: \_\_\_\_\_ From (Dealer): \_\_\_\_\_

Model Number: \_\_\_\_\_ PB.4 \_\_\_\_\_ Serial Number: \_\_\_\_\_

**Glenmac, Inc.**

1805 2nd Avenue SW  
Jamestown, ND 58401

701-252-9300 tel

701-252-1978 fax

701-251-9259 parts fax

# Harley

by

# Glenmac<sup>INC</sup>

**Glenmac, Inc.**

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701-251-9259 parts fax

SN: PB40A001

PN-P972100 (12/1999 Rev)