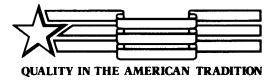


UTILITY BLADE L50, L54, K50, K54, J50, J54, UB44, UB54 Operator's Manual 9-50847







This Safety Alert Symbol Indicates Important Safety Messages In This Manual When You See This Symbol Carefully Read The Message That Follows and Be Alert To The Possibility Of Personal Injury Or Death

IF THIS MACHINE IS USED BY AN EMPLOYEE OR IS LOANED OR RENTED, MAKE ABSOLUTELY CERTAIN THAT THE OPERATOR(S), PRIOR TO OPERATING:

- 1. IS INSTRUCTED IN SAFE AND PROPER USE.
- 2. REVIEWS AND UNDERSTANDS THE MANUAL(S) PERTAINING TO THE MACHINE.

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BEFORE STARTING ENGINE

STUDY OPERATOR'S MANUAL SAFETY MESSAGES
READ ALL SAFETY SIGNS ON MACHINE
CLEAR THE AREA OF OTHER PERSONS

LEARN & PRACTICE SAFE USE OF CONTROLS BEFORE OPERATING

IT IS YOUR RESPONSIBILITY TO UNDERSTAND AND FOLLOW MANUFACTURER'S INSTRUCTIONS ON MACHINE OPERATION, SERVICE, AND TO OBSERVE PERTINENT LAWS AND REGULATIONS. OPERATOR AND SERVICE MANUALS MAY BE OBTAINED FROM YOUR EQUIPMENT DEALER.

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SAFETY MESSAGES



The Safety Messages contained in this manual are to be used together with the Safety Messages appearing in the tractor operator's manual. Be sure to review both carefully before operating the tractor - utility blade combination.



CAUTION: The trip lock pin must be removed for all operations except slow speed dirt or gravel movement operations.

If an obstruction is hit with the trip lock pin in place, a sudden jolt may occur causing loss of control or up-



CAUTION: Insert the trip lock pin to prevent the blade from partially tripping and causing injury during removal and installation.

CAUTION: Keep hands and feet clear of this area. This pin locks blade in fixed dozing position. Removing pin allows blade to tilt with spring trip action for snow removal use. Store pin in hole and secure with safety pin. See manual for complete instructions.

If blade trips, lift blade and back up several feet to allow blade to snap back into its normal operating position. DO NOT, under any circumstances, allow hands or feet to come between blade mould board and blade adapter when blade is in tripped position.



IMPORTANT: Always replace decals that are destroyed, lost, painted over or not acceptable. When parts are replaced that have decals attached, make sure a new decal is installed. Replacement decals are available from your factory authorized dealer.

INTRODUCTION

This operator's manual includes:

- a. Safety Rules
- b. Installation Procedure
- c. Operating Procedure
- d. Adjustments
- e. Maintenance

Read this manual before operating your Utility Blade.

See your factory authorized dealer for parts or repairs.

The words "Right, Left, Front and Rear" as used in this manual indicate directions when you are in the operator's seat in the normal operating position.

The Ingersoll Equipment Co., Inc. reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.

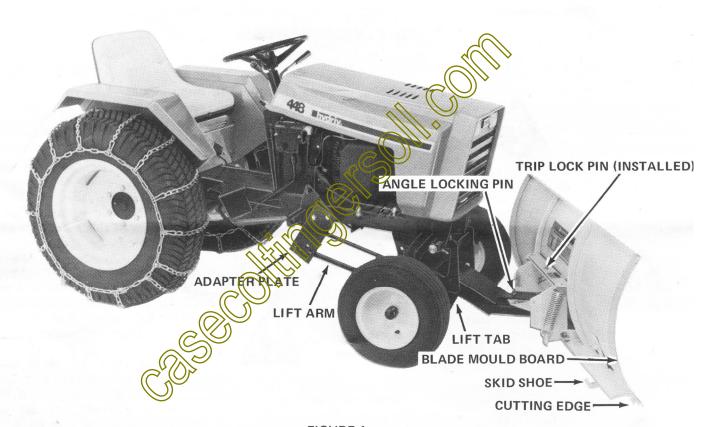


FIGURE 1

Tractor with Utility Blade and Tire Chains (Blade shown angled to left)

OPTIONAL EQUIPMENT

Tire chains and rear weights are required for correct utility blade operation.

- Tire Chains: Tire chains give better traction to the tractor.
- Wheel Weights: Wheel weights give better traction and better stability to the tractor. A weight box can be used instead of wheel weights.

3. Weight Box: A weight box gives better traction and better stability to the tractor.

Fill the weight box with:

- 135 pounds (62 Kg), for 200, 3000 and 3100 series.
- b. 150 pounds (68 Kg) for 400, 4000 and 4100 series.

Wheel weights can be used instead of a weight

CONTROLS

ATTACHMENT LIFT LEVER

The Utility Blade is raised and lowered with the attachment lift lever.

Put the attachment lift lever in the "FLOAT" position for most operations.

A tractor with a hydraulic attachment lift can put "down" pressure on the Utility Blade. "Down" pressure can be used when removing hard packed material from surfaces.

See your tractor operator's manual for correct use of your tractor controls.

ANGLE LOCKING PIN

The Utility Blade can be used straight or at right and left angles.

To adjust the blade angle use this procedure:

- 1. raise the blade into the "TRANSPORT" position
- 2. remove the angle locking pin
- 3. turn the blade to the needed angle
- align the hole in the mounting bracket with a hole in the blade adapter
- 5. install the angle locking pin

TRIP LOCK PIN

The utility Blade can be used in a rigid position or with spring action.

Install the trip lock pin to use the Utility Blade in a rigid position. See Figure 1.

2. Remove the trip lock pin to use the Utility Blade with spring action. The pin must be stored in the hole on the left side of the blade adapter.



CAUTION: The trip lock pin must be removed for all operations except slow speed dirt or gravel movement operations.

If an obstruction is hit with the trip lock pin in place, a sudden jolt may occur causing loss of control or upset.

SKID SHOE

The skid shoes control the cutting height of the blade.

- 1. lower the skid shoes to raise the cutting height
- 2. raise the skid shoes to lower the cutting height

OPERATION

- See the "CONTROLS" and "MAINTENANCE" sections of this manual before operating your utility blade.
- 2. Learn to operate the tractor and utility blade in an area clear of persons and obstructions.

3. SKID SHOES:

The skid shoes control the cutting height of the blade. For snow removal, set the skid shoes lower than the cutting edge of the blade. This will permit a small clearance between the cutting edge and the ground surface. Adjust the skid shoes according to the surface conditions.

For other operations adjust the skid shoes as needed. A position even with the cutting edge, or a small amount higher, will permit a lower cutting height.

4. TRIP LOCK PIN: (See Figures 2 and 4)

Always remove the trip lock pin during snow removal. This will permit blade movement if an obstruction is hit. There is a hole in the blade adapter for storage of this pin.

Only install the trip lock pin for slow speed operations, such as, dirt or gravel movement.

5. TRACTORS WITH HYDRAULIC LIFT

Use the lift to put "down pressure" on the blade, as needed. Use the "FLOAT" position to permit the blade to float freely during operation.

- 6. Use the utility blade to move snow, loose dirt, or gravel.
- 7. Utility blade operating conditions can be different.
 You must use the correct operating methods according to the following chart.

CONDITION METHOD

	<u>// () *</u>
Snow removal from a smooth surface	1. Remove trip lock pin.
	2. Adjust the angle of the blade as needed
	3. Raise the skid shoes to lower the cutting height as needed
	4. Use slow, even ground speed.
Snow removal from a rough surface	1. Remove trip lock pin.
	2. Adjust the angle of the blade as needed
	3. Lower the skid shoes to raise the cutting height as needed
	4. Use slow, even ground speed.
Loose dirt or gravel	1. Install trip lock pin.
	2. Adjust the angle of the blade as needed
	Raise the skid shoes to lower the cutting height as needed
	4. Use slow, even ground speed.

ASSEMBLY

Attach the mounting bracket to the blade. Use the pivot bolt and the lock nut.

Put the angle locking pin through the mounting bracket and the blade adapter.

NOTE: Do not completely tighten the lock nut on the pivot bolt. A small clearance between the mounting bracket and the adapter plate will permit easy movement while changing the angle of the blade.

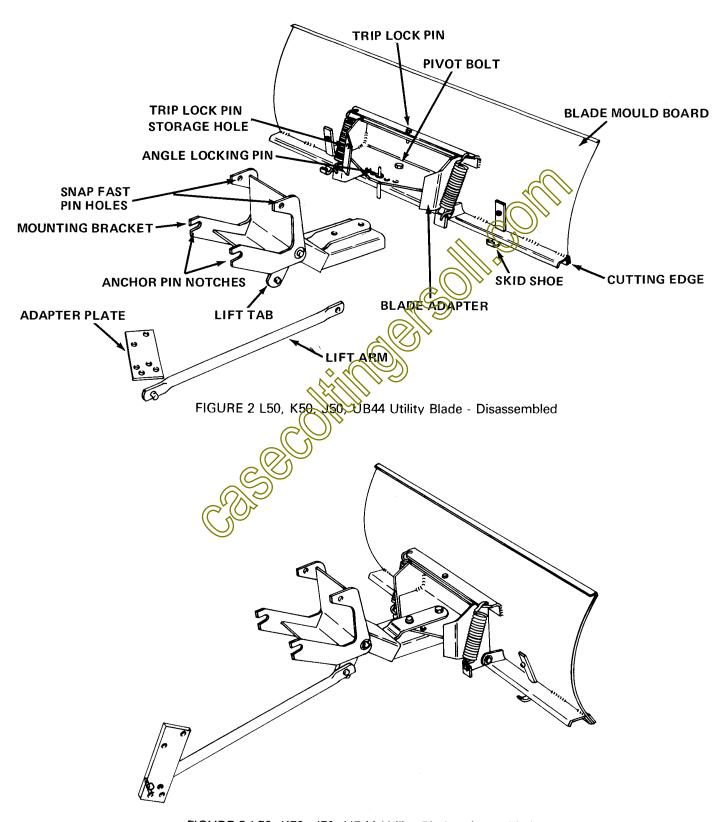


FIGURE 3 L50, K50, J50, UB44 Utility Blade - Assembled

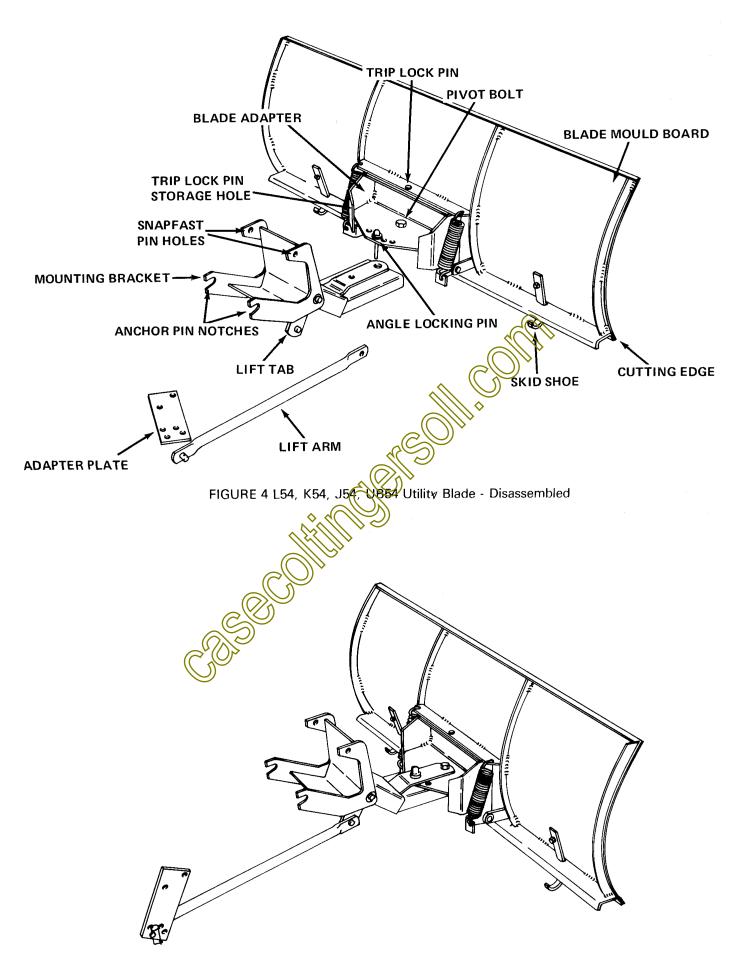


FIGURE 5 L54, K54, J54, UB54 Utility Blade - Assembled

INSTALLATION

- Put the tractor on a smooth surface.
- 2. Adjust the front tire pressure to 14 PSI (100 kPa).
- Move the tractor forward to the mounting bracket of the utility blade.
- 4. Lower the tractor lift lever.
- Set the parking brake to prevent tractor movement.



CAUTION: Insert the trip lock pin to prevent the blade from partially tripping and causing injury during removal and installation.

- 6. Fasten the adapter plate to the tractor lift lever with two bolts. See Figure 9.
- 7. Put the snap fast pins in the "OPEN" position.
- Align the anchor pins and snap fast pins with the holes in the mounting bracket.
- 9. Put the snap fast pins in the "CLOSED" position.
- Attach the front of the blade lift arm to the lift tab on the mounting bracket. Use the washer and cotter pin included.
- 11. The rear of the blade lift arm fastens to the adapter plate. Use the washer and safety pin included. See Figure 7. 8 or 9 for the correct adapter plate and mounting hoje.
- 12. Release the parking brake lock.

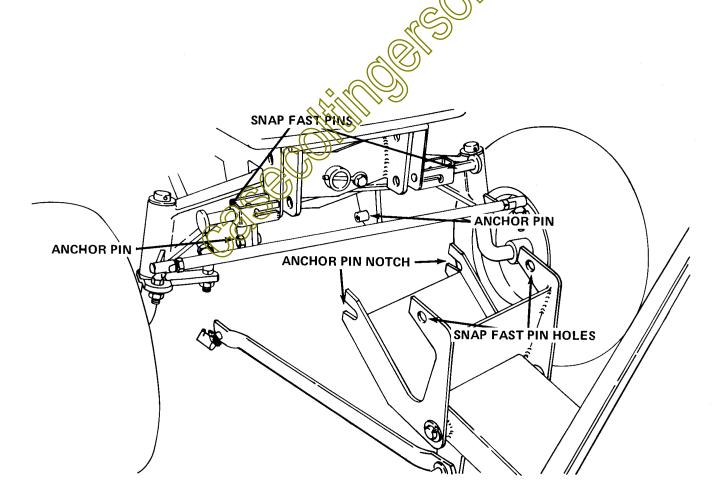


FIGURE 6 Mounting the Utility Blade

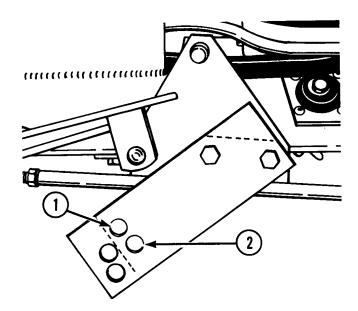


FIGURE 7 Adapter Plate (Early Production)
Use hole 1 for Models 210, 220, 222, 224

Use hole 2 for Models 442, 444, 446, 448

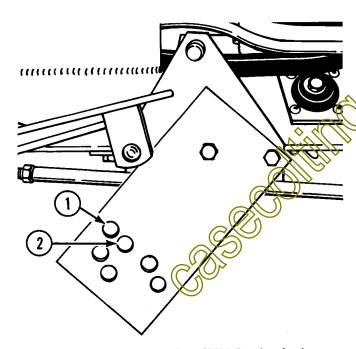


FIGURE 8 Adapter Plate (Mid Production)
Use hole 1 for Models 210, 220, 222, 224
Use hole 2 for Models 442, 444, 446, 448

MAINTENANCE

- 1. Apply oil to each pivot point before each use.
- 2. The cutting edge will wear. Check it before each use. The cutting edge is reversable and must be turned before wear begins in the moldboard.

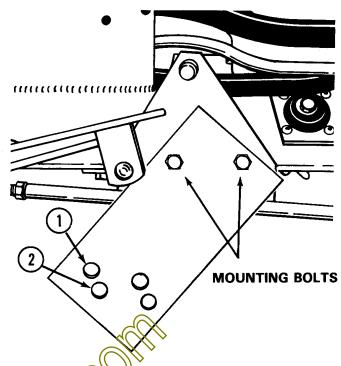


FIGURE 9 (Late Production)

Use Note 1 for Models 210, 220, 222, 224, 226, 3010, 3012, 3014, 3016, 3018

Use note 2 for Models 442, 444, 446, 448, 4014, 4016, 4018, 4020

Replace the cutting edge when both sides are worn

REMOVAL AND STORAGE

- Move the tractor onto a level, concrete surface.
 Set the parking brake lock.
- 2. Lower the blade to the ground. Disconnect the adapter plate from the tractor lift lever and put it on the ground.
- Pull out the snap fast pins and rotate to the open position.
- 4. Pull the mounting bracket free from the snap fast pins and anchor pins.
- 5. Release the parking brake lock. Move the tractor backward away from the utility blade.
- 6. The utility blade attachment can now be put into storage as a complete unit.
- 7. Keep the utility blade in a cool, dry place.
- Apply paint or oil to all metal surfaces not painted. This will prevent rust.