

INSTRUCTIONS FOR
INSTALLING - OPERATING - ADJUSTING
THE
MODEL F40, F42 AND F44
ROTARY MOWERS
USED ON
CASE MODEL 220, 222, 442 AND 444
COMPACT TRACTORS

INTRODUCTION

The Model F40, 38" and Model F42, 44" Rotary Mowers are designed for use on Case Model 220 and 222 Compact Tractors. The Model F44, 44" Rotary Mower is engineered to operate on Case Models 442 and 444 compact tractors. These mowers are furnished as a complete package with all necessary attaching components. There is no requirement for additional mounting kits.

This manual covers recommended operating procedures, safety suggestions, adjustments, maintenance information, and installation instructions. Read this manual carefully before operating your rotary mower. Your J. I. Case Compact Tractor Dealer is well qualified to answer any further questions you might have concerning your rotary

mower. Also, if the need should arise, his Service Department with factory trained technicians, genuine Case replacement parts and the proper facilities is in a position to provide proper repairs in the shortest time possible.

The definitions "Right, Left, Front and Rear" as used throughout this manual relate to the tractor and rotary mower as the operator is seated facing forward in the normal operating position on the tractor.

Always make certain the tractor PTO (Power Take-Off) clutch is disengaged before starting the engine and when transporting the rotary mower.

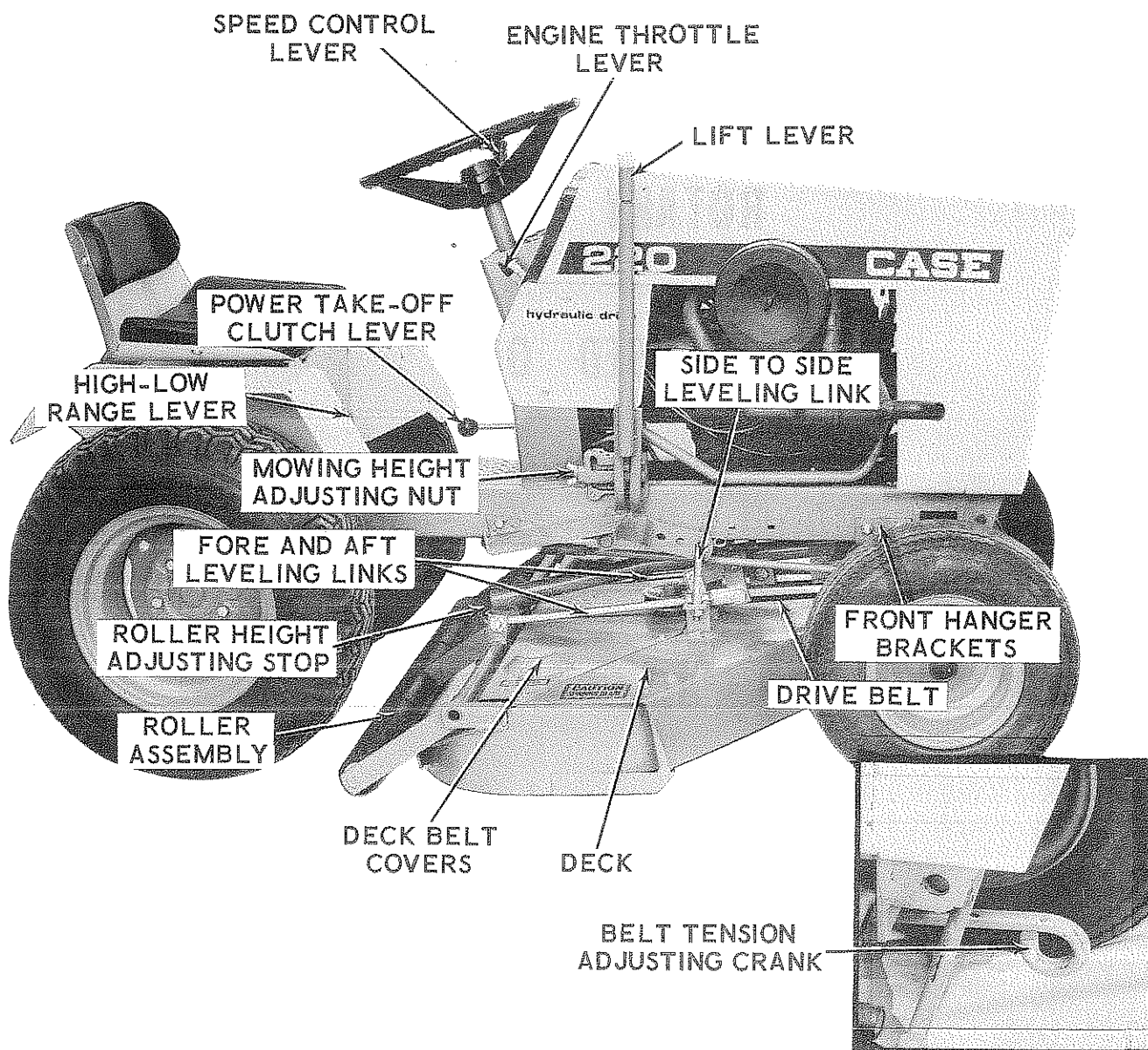


Figure 1. Identification of Principle Components and Controls

OPERATING CONTROLS

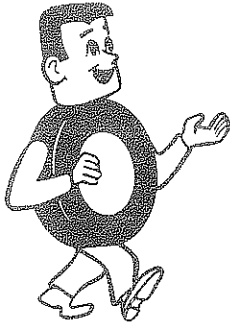
The principle components and controls of your rotary mower are identified in Figure 1 with the same description used throughout this manual.

All controls are conveniently located near the operator's position on the tractor. The mower blades are placed in motion by pulling outward on the tractor PTO (Power Take-Off) clutch lever. The desired mowing height

can be quickly adjusted by turning in or out on the wing nut near the base of the tractor lift lever.

Generally best performance is obtained with the transmission in "Low" range and the engine running between 3/4 and full governed RPM and by adjusting the tractor travel speed with the Speed Control lever according to your mowing conditions.

OPERATING SAFETY SUGGESTIONS



HI FOLKS!-I'm Sammy Safety.
Look for me to point out
important Safety Precautions

1. Regard your rotary mower as a piece of power equipment and be sure this manual is read and understood by all who operate it.
2. Clear the lawn or area to be mowed of sticks, stones or any hard objects which could come in contact with the blades and be hurled out the discharge opening.
3. Do not permit children or pets in the area while mowing.
4. **KEEP FEET AND HANDS AWAY FROM DISCHARGE OPENING AND MAKE NO REPAIRS UNLESS BOTH THE TRACTOR ENGINE AND PTO ARE SHUT OFF.**
5. Fill gas tank out of doors and avoid spilling gasoline. Do not fill tank with gasoline while smoking or while engine is running.
6. Never allow children or young teenagers to operate the tractor and rotary mower.
7. Maintain your tractor and rotary mower in top operating condition.
8. Never get on or off the tractor while mower is running.
9. Operate in "Low" range and use greater caution on steep slopes or inclines.
10. Be sure you know how to stop the tractor and mower at a moments notice.
11. Give complete and undivided attention to the job at hand.
12. Stop the engine and disengage PTO clutch when tractor is unattended.
13. Disengage PTO clutch when someone approaches.
14. Do not allow anyone other than the operator to ride on the tractor.
15. Never direct the mower discharge at people, pets, windows, or cars.
16. Disengage the PTO clutch when transporting.

OPERATING METHODS AND TIPS

1. Keep mower blades sharp and balanced as covered in Adjustments and Maintenance Section.
2. Operate engine between $3/4$ and full governed throttle, and regulate the ground speed with the tractor Speed Control Lever according to mowing conditions. Unless grass is unusually light always operate in "Low" speed range.
3. If grass is heavy and higher than normal, results can be improved by mowing twice. Make the first cut with the mower set higher than normal; then repeat with the mower set at desired finished cut height. When mowing heavy grass always discharge clippings away from the uncut area.
4. Figure 2 illustrates two systems for mowing. If the grass is high or heavy, always mow to throw the clippings away from the uncut area. If the grass is light and more thorough mulching is desired, discharge the clippings toward the center of the uncut area. When mowing in this manner, a final strip of mulched clippings about three to four feet wide will remain near the center of the lawn. This can be easily raked up to leave a well groomed appearance.
5. Trimming will be neater by using the right side of the mower since the clip-

pings will be discharged away from the object.

6. Do not step on the mower deck when getting on or off the tractor. If mounting the tractor from the right side, place your right foot on the right foot rest, your right hand on steering wheel and left hand on the seat back and step onto the tractor, swinging your left foot through between the steering wheel and seat.

When mounting from the left side, start with your left foot on the left foot rest, your left hand on steering wheel and right hand on seat back and step onto tractor swinging your right foot through between the steering wheel and seat.

Dismount the tractor using the reverse of the above procedures.

7. The tractor implement lever is used to raise or lower the mower and also hold the mower at any desired cutting height. The wing nut at the base should be turned in or out to set the mower at any desired cutting height above 1-1/2 inches. The lettered decal "A through F" provides a means of visual reference to the cutting height of the mower once the initial adjustment is made and the desired setting is established.

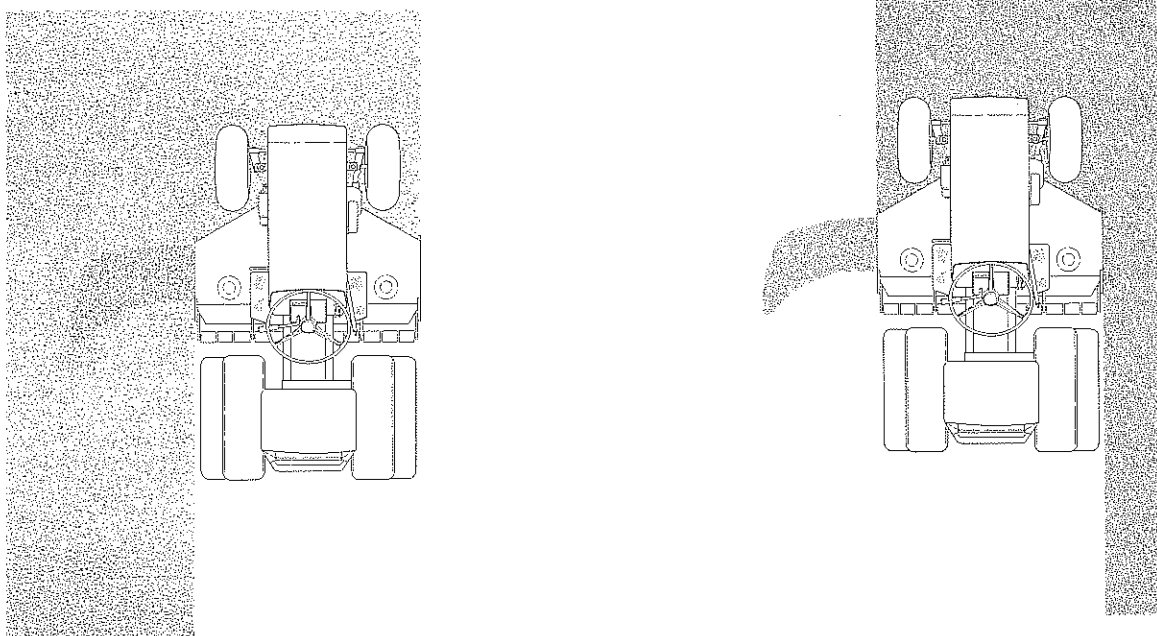
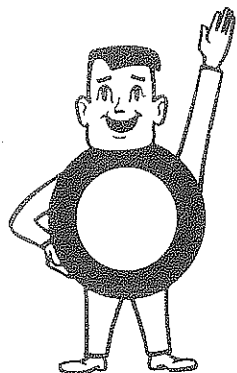


Figure 2

This mower is equipped with an anti-scalp roller that is located under the deck and just behind the center rotary blade. This roller is in a fixed position for a minimum cutting height at 1-1/2-inches. The implement lever wing nut should be adjusted at that same cutting height or at any desired height above 1-1/2-inches. A wing nut setting of less than 1-1/2-inches will allow the mower to "rock" on the anti-scalp roller, and will result in uneven mowing, excessive scalping, and shortened drive belt life.



"YES, MR DEALER, I'VE
STUDIED THE MANUAL"

8. When transporting the mower, pull the mechanical lift lever back until the catch engages. Depress the button at the top of the lift lever to release and lower the mower to the desired cutting height. A slight pulling pressure on the lever will permit the release button to be more easily depressed.

If your tractor is equipped with hydraulic lift, hold the lever back until the upward movement of the mower stops; then release the lever.

CAUTION If the tractor is equipped with Hydraulic Lift, make certain the "down pressure" pin is in the outer (float) position as shown in Figure 3 to allow the deck to glide over high spots without digging in and causing possible damage to the mower or turf.

9. Be certain whoever operates the mower has read and understands the preceding "Operating Safety Suggestions."

KEEP "DOWN PRESSURE"
PIN IN OUTER SETTING
WHEN MOWING

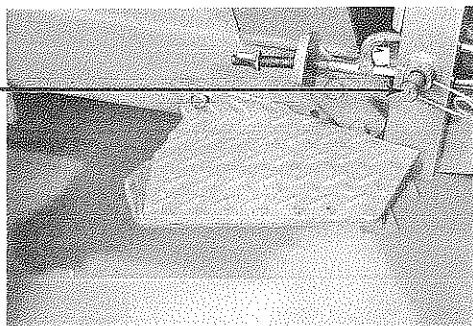


Figure 3

ADJUSTMENTS AND MAINTENANCE

1. Before operating the mower, check the cap screws holding the blades. THEY MUST BE TIGHT. After the first 8 hours operation, check them again. Whenever the blades are removed, it is a good practice to install new lockwashers under the cap screws and again check tightness after next 8 hours operation.

2. The mower is designed to provide a cutting height range from 1-1/2-inch to 3-1/2-inch with infinite adjustment available in between. To raise the cutting height, turn in the lift lever wing nut, Reference "A", Figure 4. To lower the cutting height, back off on the wing nut.

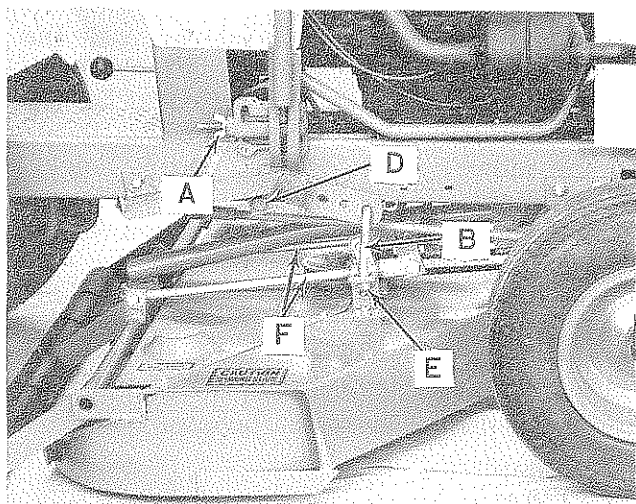


Figure 4

NOTE: When mounting mower on Model 220 or 222 Tractors install right and left hand hanger links, Ref B, Fig 4 to the "center" hole in tractor lift levers.

NOTE The mower should always be operated with the rollers on the ground and with the stop pin free to assure a level, uniform cut.

3. The mower deck must be level from side to side in order to obtain an even cut. To check for side to side levelness, the mower deck must be set at normal cutting height and be fully supported by the hanger links, Reference "B", Figure 4, and the rear roller assembly. The in-board, center mounted, anti-scalp roller should be just off the floor, and the rear roller adjustment stop, Reference "C", Figure 5, should not be touching the mower deck plate. Then measure the distance between the left end of the lift lever cross shaft, "D", Figure 4, and the mower deck. Take the same measurement at the right end of the shaft and adjust the

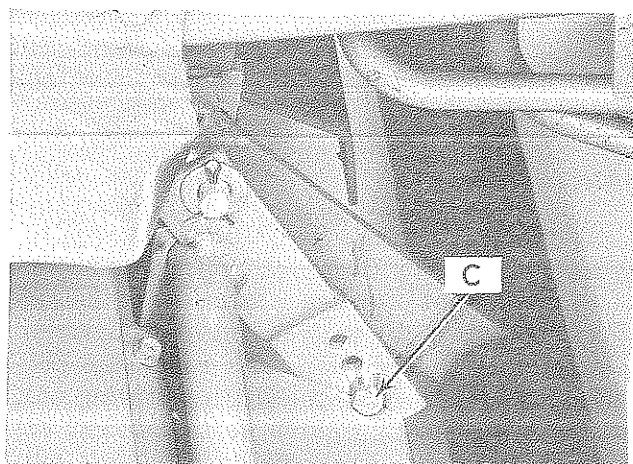


Figure 5

right hand hanger link locknut "E", Figure 4 until both shaft end to deck measurements are identical.

4. Your mower was adjusted at the factory to be level, fore and aft. Should re-adjustment be required, equally adjust the length of the leveling rods, "F", Figure 4.

To check for proper "level", the mower must be mounted on the tractor and set for desired cutting height. Tire pressures must be correct and equal. Take measurements between a level surface and the mower blades.

5. Check the mower drive belt tension after the initial 20 minutes operation. Check tension again after the next hour and five hours of mowing. The belt is properly tensioned when about 5 pounds of finger pressure midway between the two idler pulleys and the mower deck pulley will deflect the belt approximately 3/8-inch.

To increase the belt tension, turn the adjusting crank, Reference "G", Figure 6, in a counterclockwise direction while facing the front of the tractor. To decrease tension, turn the crank clockwise.

If a new drive belt is installed, follow the procedure outlined in the Installation Section and follow the tensioning instructions covered above.

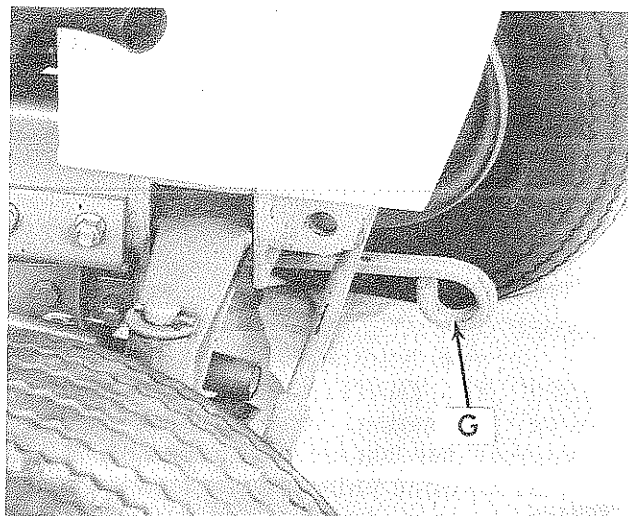


Figure 6

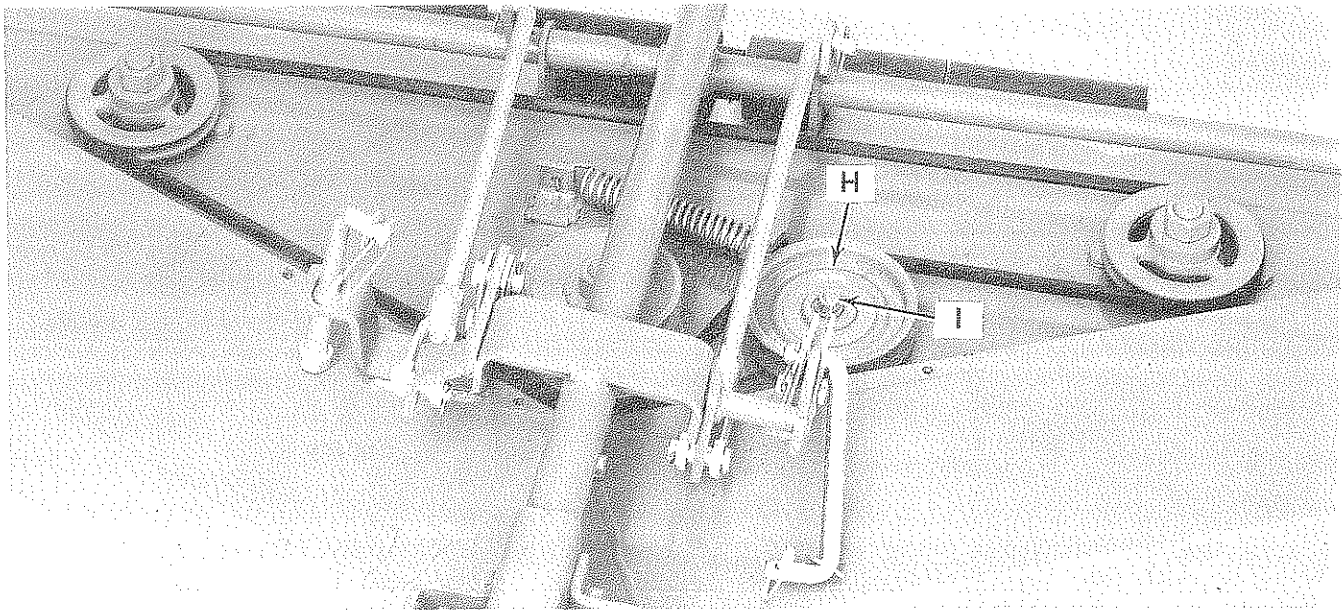


Figure 7

6. The deck belt is automatically tensioned by a spring loaded idler pulley, Reference "H", Figure 7 and adjustment is not required.

If a new belt is installed, place it around three spindle pulleys as illustrated. Place a 9/16-inch box wrench over the hex nut, Reference "I", Figure 7, on the idler pulley and pivot the idler pulley towards the front of the mower until the belt can be easily placed over the back side as shown. Check to make sure the belt is not twisted before replacing covers.

7. There are four rear roller height adjusting holes in the left roller pivot arm. The roller adjustment stop, Reference "C", Figure 5, is factory installed in the second from the bottom hole in the pivot arm. The implement lift lever wing nut, Reference "A", Figure 4, should be adjusted so the stop contacts the deck plate. This will provide a cutting height of up to 2-inches before the stop contacts the deck plate. Above this cutting height, the stop will come in contact with the deck plate and raise the roller assembly off the ground.

Backing off on the lift lever wing nut will reduce the cutting height to a minimum of 1-1/2-inches at which time the inboard, anti-scalp roller contacts the ground.

By installing the stop in the bottom hole, the roller assembly will begin to lift off the ground above 1-1/2-inches cutting height.

In the third hole, the roller assembly begins to lift off at 2-1/2-inches cutting height, and in the top hole the assembly begins to lift off the ground at 3-inches.

The greatest range of roller contact with the ground is achieved with the stop in the top hole. The greatest mower transport clearance is achieved with the stop in the bottom hole. Each user should select the setting most suitable for his purposes.

Although four hole settings are provided for the stop, only the upper three are used for normal mowing conditions. The factory setting at the second from the bottom hole will provide roller ground contact at most commonly used lawn mowing heights and also provide adequate ground clearance while in the transport position. The bottom hole setting is not intended to be used on mowers mounted on the Models 442 and 444 Compact Tractors.

NOTE The mower should always be operated with the rollers on the ground and with the stop pin free to assure a level, uniform cut.

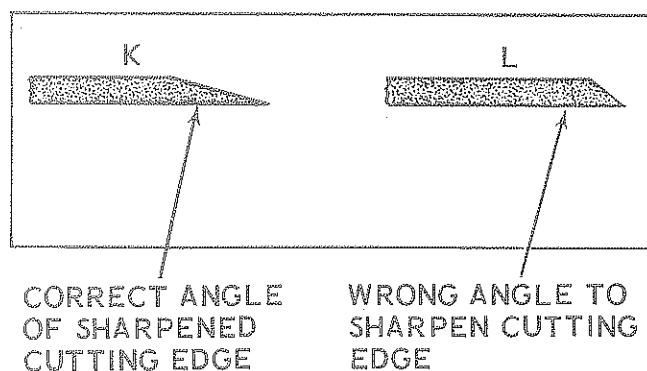


Figure 8

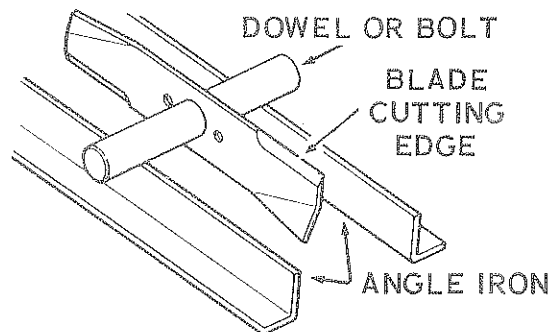


Figure 9

8. Check the mower blades periodically for nicks or dullness. Damaged or dull blades can cause a shattered rather than clean cut and brown areas may develop. Reference "K", Figure 8, illustrates the correct angle at which to resharpen the blade cutting edges. If the cutting edge is sharpened at a blunt angle, Reference "L", the grass may also be shattered rather than cleanly cut.

After a blade is sharpened, check it for balance by inserting a dowel or bolt in the center hole and place between two level edges as shown in Figure 9. A balanced blade will center itself so the cutting edges are parallel with the edges.

CAUTION Unbalanced blades are a hazard and will cause premature wear and failure of bearings and spindles. If the blades cannot be balanced by resharpening them, replace with new blades.

9. Check and clean out the inside of the deck housing periodically. Remove any grass wrappings between the blade mounting plates and the spindle housings. Grass wrappings, if allowed to accumulate, may work their way under the bearings and damage the seals. Excessive grass accumulation in the deck housing will waste engine horsepower and cause plugging and streaking as well as corrosion.

INSTALLATION

- A. Locate the tractor on a smooth and level surface. Check tires for equal and recommended pressures.
- B. Before mounting the mower, lay out the individual parts as illustrated in Figure 10. To simplify the original installation, all components are preassembled as far as practical and the attaching hardware is installed in its proper location.
- C. The following installation sequence is the same whether the tractor is equipped with hydraulic or mechanical lift.
- D. THE NUMERICAL REFERENCES ON THE ILLUSTRATION CORRESPOND TO THE INSTALLATION INSTRUCTION PARAGRAPH NUMBERS.

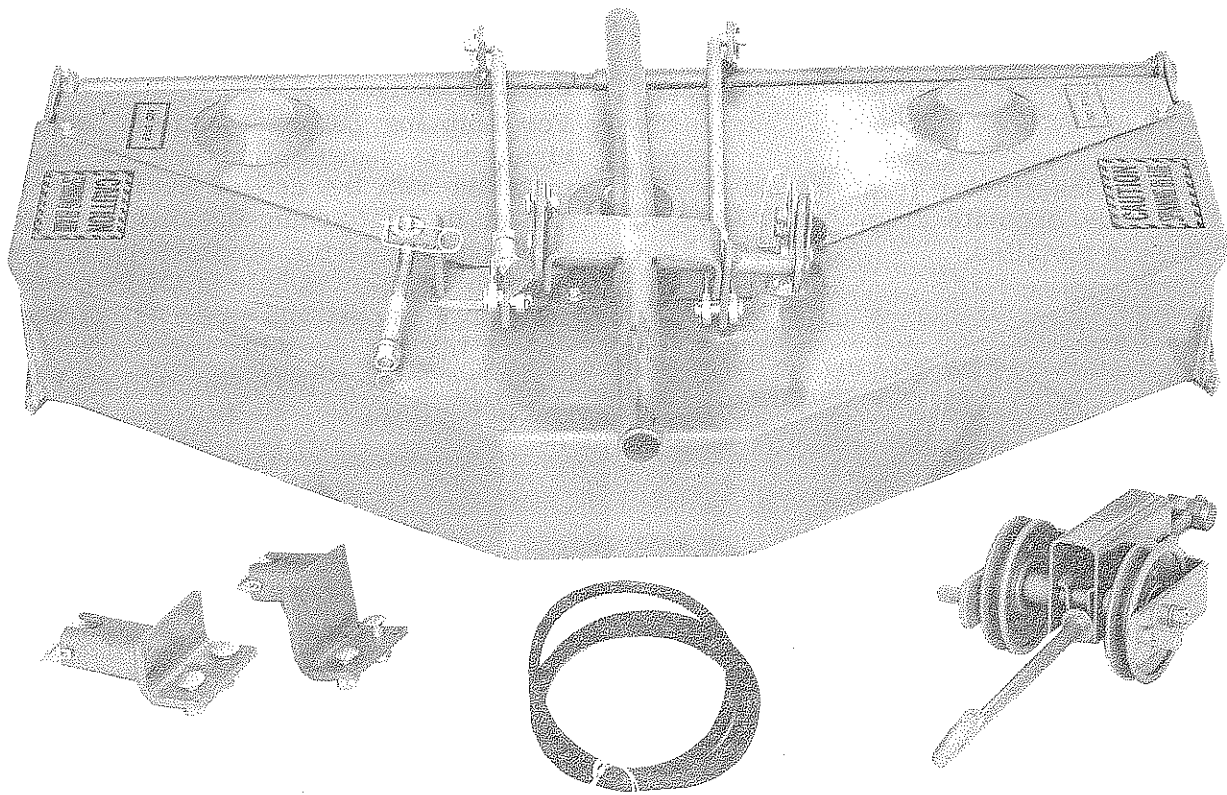


Figure 10. Mower Removed from Shipping Carton

1. Attach the two front hanger brackets, Figure 11, loosely to the forward set of square holes on each side of the tractor frame channels using the four square neck bolts, nuts and lockwashers. The bracket with the greater offset is attached to the right side of the tractor.

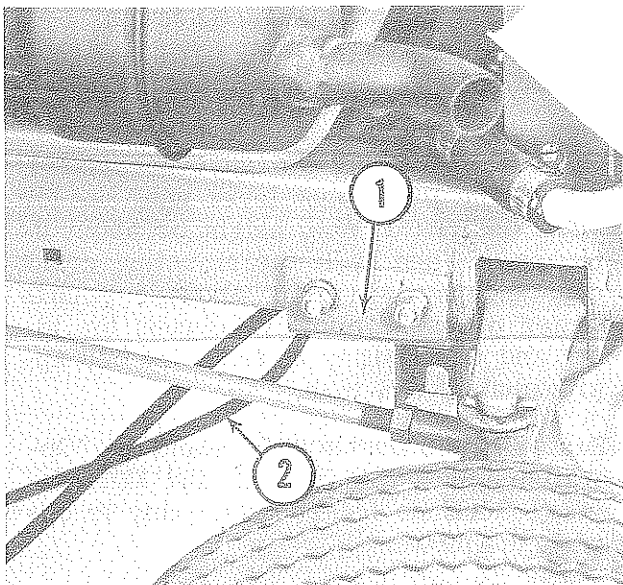


Figure 11. Installing the Front Mounting Brackets and Drive Belt

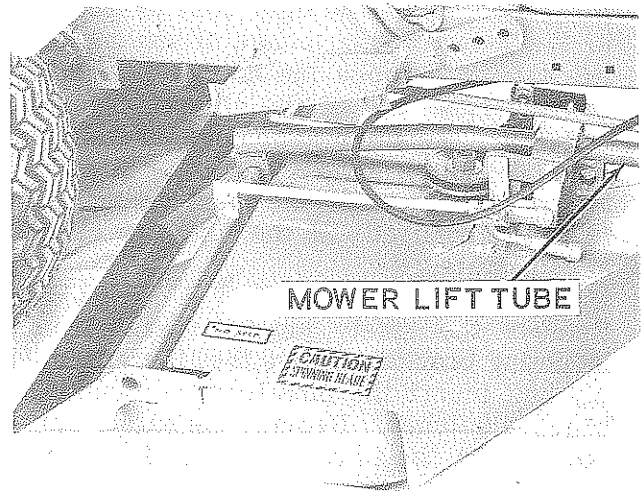


Figure 12. Mower Deck Slid Under Tractor

2. Pull the PTO lever out to the "ON" position. Carefully insert the drive belt up through the front end of the tractor frame channels, Figure 11, between the fan and heat exchanger and place over the clutch pulley. Push the PTO lever back in to the "OFF" position.

3. With the idler pulley assembly off the mower lift tube and the drive belt positioned over the drag link as shown in Figure 12, slide the deck sideways under the tractor.

NOTE Cramp the tractor front wheels to the side opposite from which the deck is installed.

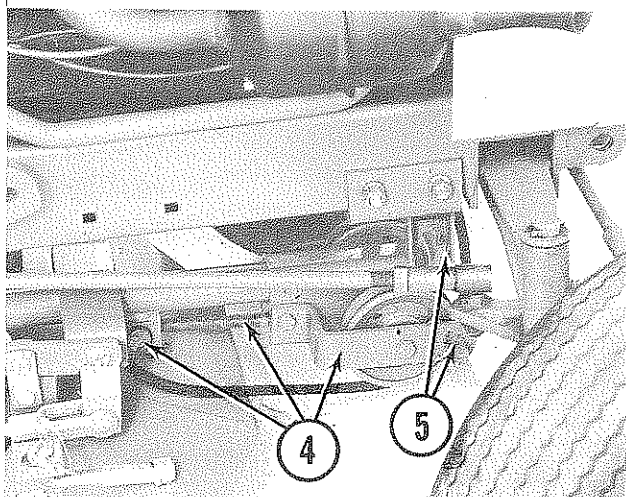


Figure 13. Connecting the Idler Assembly to Lift Tube

4. Position the drive belt under the mower lift tube. Apply a light coat of grease to the forward few inches of the mower lift tube. Remove the anchor pin from the threaded end of the adjusting crank and start the idler assembly on the lift tube as shown in Figure 13. Slip the anchor pin through the tabs on the lift tube and connect with the adjusting crank as illustrated.
5. Remove the safety pin from each front mounting bracket. Raise the idler assembly and insert the pins into the mounting bracket notches. Replace the safety pins and tighten the square neck bolts on each front mounting bracket.

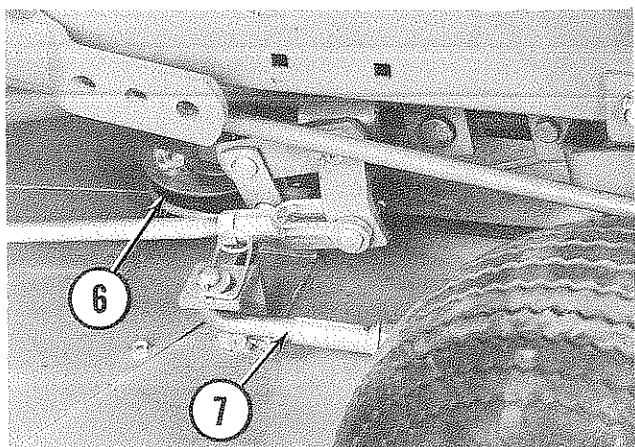


Figure 14. Installing Drive Belt and Right Hand Hanger Link

6. Turn the adjusting crank clockwise until the drive belt can be placed on to the mower deck pulley without stretching, Figure 14.
7. For shipping purposes the "L" shaped, right hand hanger link, Figure 14, is installed with the drilled end through the mower deck attaching bracket. Remove this rod, insert the shoulder bushing up through the slotted hole in the same deck attaching bracket and place the threaded end of the rod down through the bushing. Start the locknut part way on to hold the rod in position.

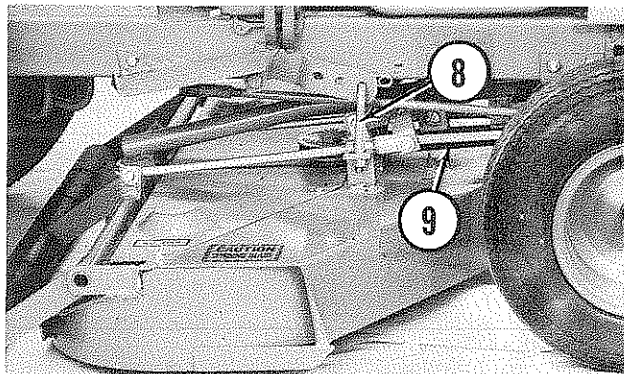


Figure 15. **NOTE:** When mounting mower on Model 220 or 222 Tractors install right and left hand hanger links. Ref. 8, Fig. 15 to the "center" hole in tractor lift levers.

8. Connect both Right and Left hand hanger links to the front hole in the tractor lift levers. Draw up the locknut, Figure 15, on the right hand link until the deck is level.

NOTE Suggested methods for checking deck level and all other mower adjustments are covered in the "Adjustment and Maintenance Section."

IMPORTANT "Level" the deck before tensioning the belt.

9. Check to make sure the belt is not twisted. Adjust the implement lever wing nut for your desired cutting height or about 2-inches. Then turn the adjusting crank counterclockwise until about 5 pounds finger pressure midway between the idler and deck pulley deflects the belt approximately 3/8-inch.
10. Read and thoroughly understand the "Operation" and "Adjustment and Maintenance" Sections before attempting to operate the mower.

NOTE

The J. I. Case Company 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.

**SUPPLEMENT TO INSTRUCTIONS FOR INSTALLING - OPERATING -
ADJUSTING THE CASE MODEL F40, F42 and F44 ROTARY MOWERS,
Win. Form 9-35221**

Model F40, serial number 49858 and above; F42, serial number 47117 and above; and Model F44 rotary mowers, serial number 48483 and above are equipped with a spring loaded idler pulley assembly that helps maintain proper drive belt tension.

Disregard the drive belt tension specifications as covered in paragraph 5 on page 6 and in paragraph 9 on page 10.

Follow the regular installation procedure as outlined in the instructions. The drive belt is properly tensioned when the left hand idler pulley mounting bolt lines up with the inspection hole. . . see reference J, figure 16.

Check the tension adjustment after the first 20 minutes of operation and re-adjust, if necessary, so the bolt head appears in the center of the inspection hole.

DO NOT OVER-TENSION THE BELT.

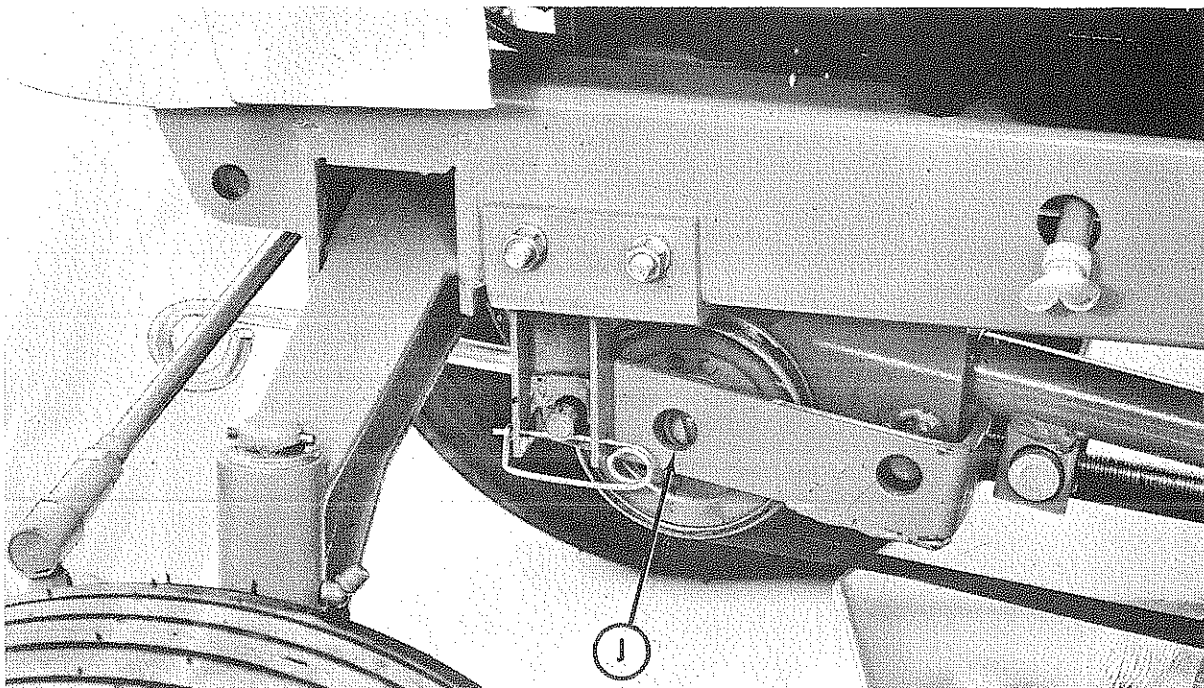


Figure 16. Drive Belt Properly Tensioned with Spring Loaded Idler Pulley