

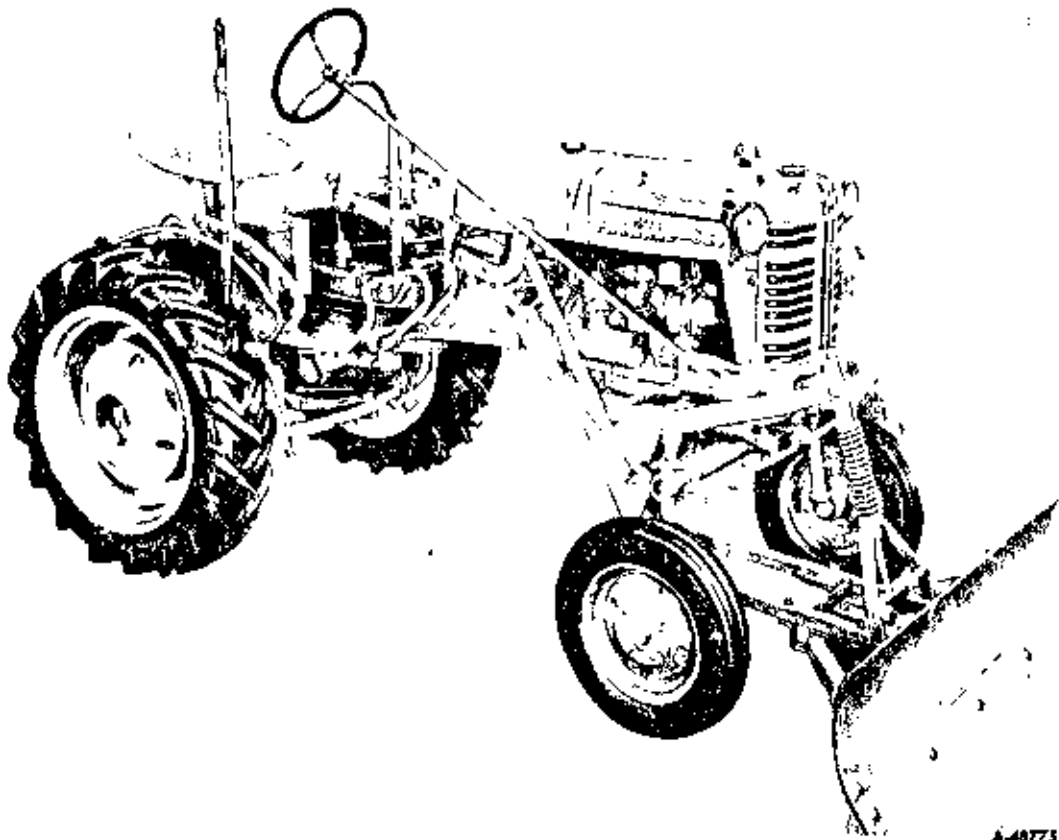


OPERATOR'S MANUAL

SETTING UP INSTRUCTIONS

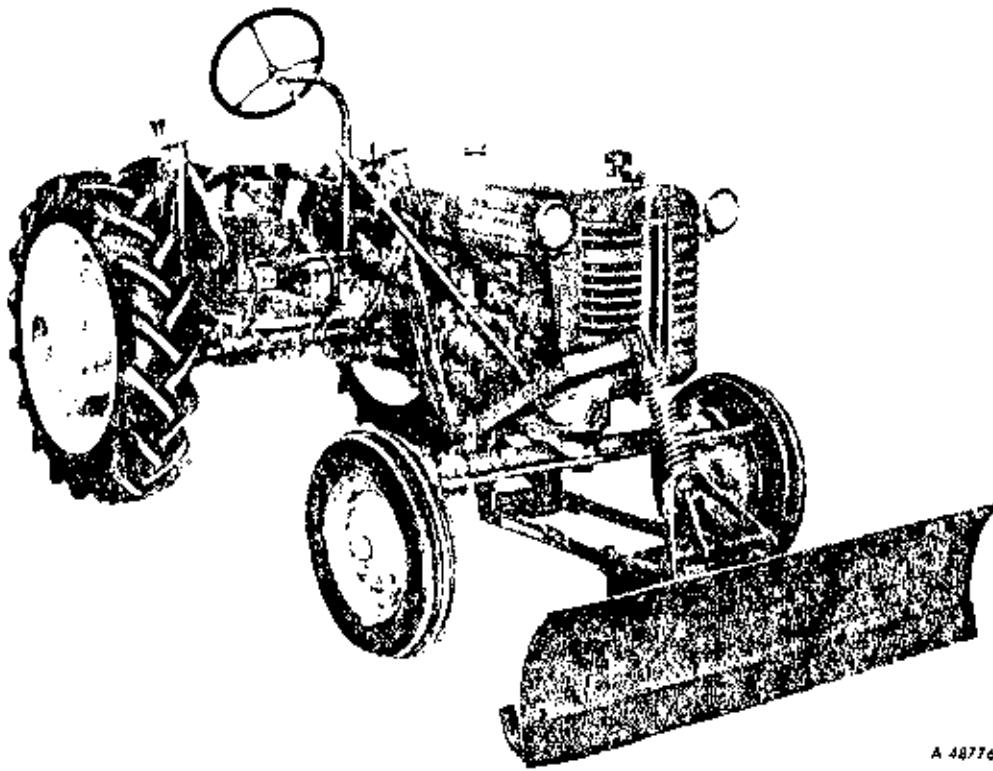
**OPERATION
MAINTENANCE
LUBRICATION**

INTERNATIONAL[®] **Cub-54A and L-54 Leveling and Grader Blades**



A-48773

Blade mounted on Farmall Cub Tractor.



A 48776

Blade mounted on International Cub Lo Boy Tractor.

INTRODUCTION

The Cub-54A Leveling and Grader Blade is designed to fit the Farmall Cub® Tractor with hydraulic Touch-Control or manual-control.

The L-54 Leveling and Grader Blade is designed to fit the International Cub® Lo-Boy® Tractor with hydraulic Touch-Control or manual-control.

The manual-control consists of a master control lever and a front rockshaft. These units are available on special order and are not supplied with the leveling and grader blade because the owner may already have them with some other implement. The master control lever is used with almost all direct-connected implements and the front rockshaft with mowers, cultivators and planters. This feature provides a common lever for each implement and, once you have them, they never need to be purchased again regardless of what implement is used on the tractor. The master control lever will not work on the Cub Lo-Boy Tractor with the wide, square-type seat.

Either of these lifting systems causes the blade to operate in the same manner. It is not necessary to add or rearrange any parts to have the blade assembly fit either lifting system.

The cutting edge is bolted to the blade, thus making this part replaceable. Since the cutting edge receives constant wear, it is made of high carbon steel.

A flexible clevis is incorporated in the front position for clearing snow and grading where the blade needs this flexibility. It is designed to be used with the blade wearing shoes where the blade must follow the contour of the surface being graded. This clevis is attached between the front lifting lever and the lifting straps by drilled pins.

The shock spring unit serves a dual purpose. As the spacing link, it controls the pitch of the blade; also, when the tractor is driven forward and the cutting edge strikes a solid object, the coil spring compresses, allowing the blade to pivot backward, thus absorbing the hammer-like blow. A rigid blade would soon break at some point if there were no escape from these shocks.

INSTRUCTIONS FOR ADJUSTING AND OPERATING

ANGLING THE BLADE

The blade can be angled in five positions: straight, or to the right or left 11 or 22 degrees. In the angled position the soil or snow is moved to one side of the tractor. To adjust

There are two positions for mounting the Cub-54A blade to the tractor; namely, forward of the front wheels or beneath the tractor engine between the front and rear wheels, whereas the L-54 blade is mounted only on the front of the tractor. The forward position is used primarily for snow plowing, cleaning feed lots, leveling piles of soft dirt or sand, and lightweight dozer jobs. It should be noted that when the blade is suspended in the front position and forced to dig below the common ground level, a correction or lift to the blade is necessary because the front wheels of the tractor will follow downward into the new cut; thus without a lifting action the blade would soon get stuck.

The Cub-54A blade in the rear position is used for controlled grading of all types. This stability and control over the depth of cut is due to the fact that the front wheels are always on the old grade level and the rear wheels follow on the new level; thus the blade is suspended evenly between the front and rear wheels.

For center mounting the Cub-54A blade on Farmall Cub Tractors not equipped with One-Point Fast-Hitch, drawbar 651 258 R1 is required and is available on special order.

The Snow Extension Plate Attachment (Special) is a lightweight plate that bolts to the upper edge of the blade to increase height so that the larger rolling mass of snow built up can be carried off to one side.

No special tractor wheel widths are required but the narrow rear wheel setting is preferred since in this position all wheels track within the path cleared by the blade.

It is the policy of International Harvester Company to improve its products whenever it is possible and practical to do so. We reserve the right to make changes or add improvements at any time without incurring any obligation to make such changes on products sold previously.

All illustrations and descriptive matter in this publication apply to the International Harvester products sold under the International, McCormick, McCormick-International, McCormick-Deering, or McCormick-Deering International trade name.

for these positions, the index bolt that ties the blade support angle to the five-hole adjusting angle in the lifting arm assembly is moved to the selected hole as the blade support unit is pivoted around the king bolt located in the pivot angle of the lifting arm assembly.

TILTING THE BLADE

The blade can be tilted to the right or to the left 5 or 10 degrees for terracing. To tilt the blade, place the pin (Ref. "9" in Illust. 6) in an adjusting hole higher on one side than on the opposite side.

PITCHING THE BLADE

There are three different pitching angles to change the slope of the blade as it enters the

ground to dig. These three selections give a range from a scooping action when the cutting edge is thrust forward to a spreading action when the cutting edge is drawn back to a vertical position. This pitch is controlled by the three-hole adjuster bar (See Ref. "A" in Illust. 6) which is part of the shock spring unit. This unit is located beneath the blade support angle and is bolted, in one of three holes, to the adjuster bar bracket welded to the blade support angle. The other end of the shock spring unit extends forward and is joined to the blade by means of a pin. Do not loosen or draw up the coil spring by means of the shock spring bolt and nut to give variations to the pitching of the blade; always use the three-hole selection for this purpose.

INSTRUCTIONS FOR SETTING UP

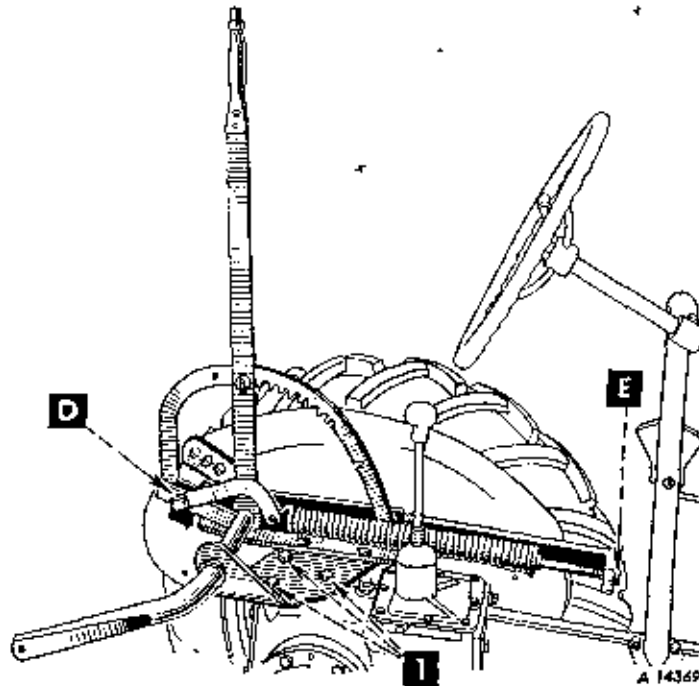
Remove all wires and arrange the parts conveniently.

Lubricate all moving parts as you proceed and see that they work freely.

Bolts and pins must be used in the holes in which they are found, or in the parts to which they are attached, unless otherwise shown.

Whenever the terms "left" and "right" are used, it should be understood to mean from a position behind and facing the machine.

MASTER CONTROL LEVER (Manual Control) (Special)



Illust. 1
Seat is removed to show parts clearly.

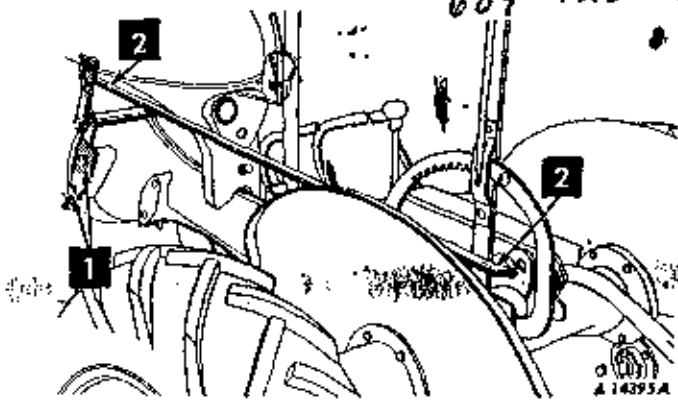
1. Bolt the lever unit to the transmission case with three cap screws.

For greater ease in lifting, set the bolt "D"

in the top of the slot in the lift arm.

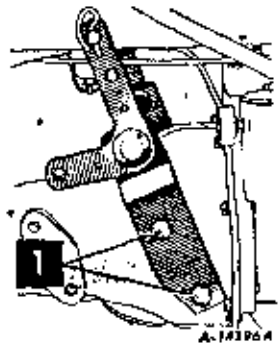
Balance the weight as desired by adjusting the spring tension at "E".

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Illust. 2

1. Bolt the rockshaft to the front attaching pad on the tractor clutch housing. Four special head cap screws are furnished for this purpose.

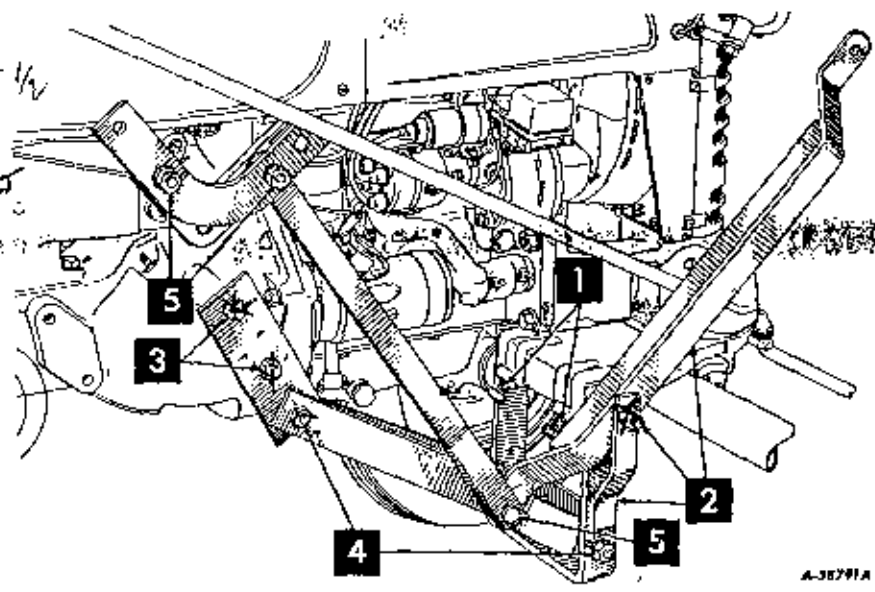


Illust. 3
Right side of tractor.

2. Attach the lift link to the lever and rockshaft as shown in Illust. 2.

MOUNTING THE BLADE IN THE FRONT POSITION

- ① 12" machine bolt 1/2"
- ② 4 5/8 x 1 3/4 machine bolts
- ③ 5/8 x 2 1/4 "
- ④ 5/8 x 1 3/4 "



Illust. 4

Assembly shown on tractor with hydraulic Touch-Control.

1. Insert an axle hanger bolt spacer into each end of the tractor mounting casting and secure them with the machine bolts located in the rear on each end of the casting.

2. Using the 12" machine bolt, attach the front axle hanger assembly and the lifting lever assembly. This is done by holding the front axle hanger in the position shown in Illust. 4 and inserting the 12" bolt through the left leg of the axle hanger, into the tractor casting, through the axle hanger bolt spacers, and through the right leg of the axle hanger. Then put the 1-19/32" lifting lever spacer bushing and lifting lever on the bolt; finish pushing the bolt all the way through, and secure with a flat washer, lock washer, and hex. nut.

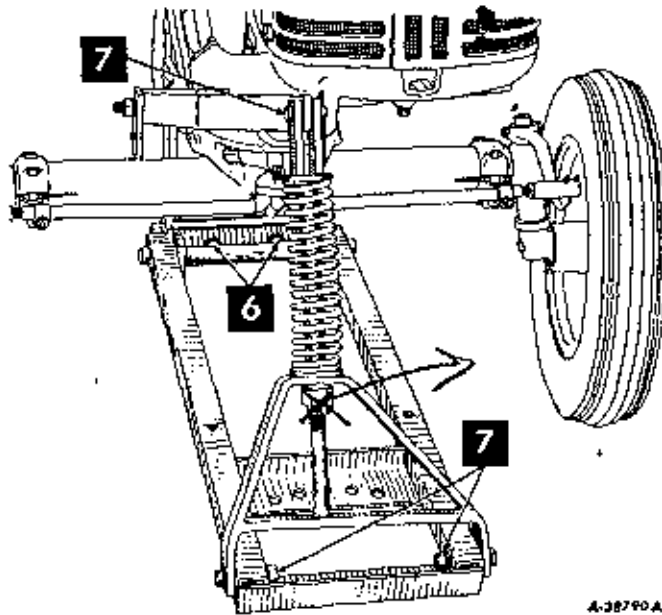
3. Bolt the axle brace support plate to the tractor mounting pads with 5/8 x 1-3/4" machine bolts.

④ Attach the axle braces, left and right, to the front axle hanger with 5/8 x 1-3/4" hex-hd. bolts and to the axle brace support plate with 5/8 x 2-1/4" hex-hd. bolts.

5. Attach the rear lifting rod to the lifting lever with a 5/8 x 1-3/4" drilled pin and cotter; then bolt the bellcrank extension assembly and the upper end of the rear lifting rod to the tractor hydraulic control rockshaft arm as shown or to the manual control rockshaft arm.

Continued on next page.

MOUNTING THE BLADE IN THE FRONT POSITION - Continued



Illustr 5

6. Attach the lifting arms assembly to the front axle hanger assembly by bolting the axle mounting bracket to the axle hanger with the 5/8 x 1-3/4" hex-hd. bolts provided in the bracket.

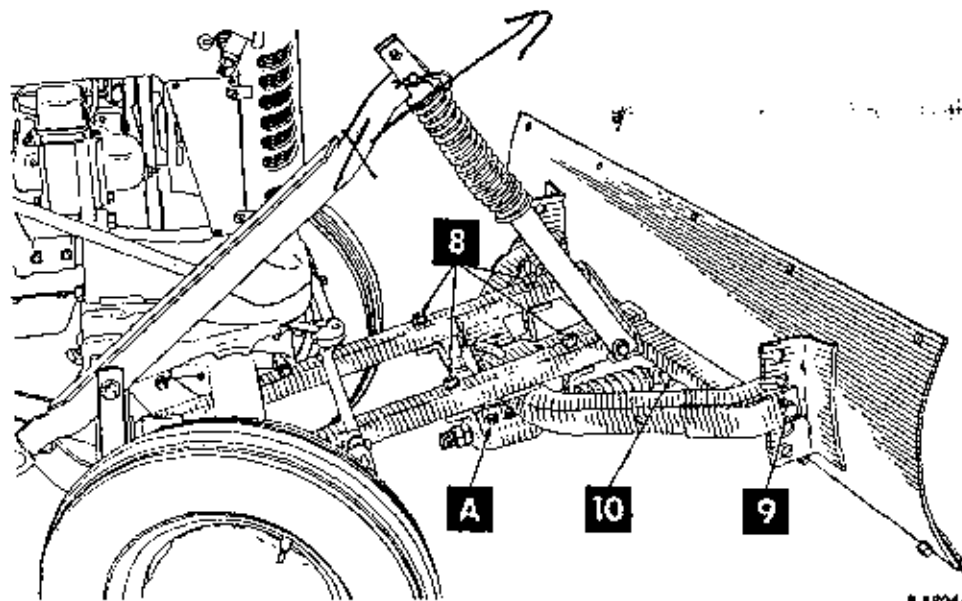
7. Attach the pressure spring lifting strap assembly to the lifting arms with 5/8 x 2-3/4" hex-hd. bolts and to the lifting lever with a 5/8 x 1-7/8" drilled pin and cotter.

8. Attach the blade support angle assembly to the lifting arm assembly by means of the two support angle guides.

9. Attach the blade to the blade support angle by means of the drilled pins provided. Spread all cotter pins.

10. Attach the spring support rod to the bracket on the blade and to the blade support angle.

A-38790A



Illustr 6

7/8
CASSAL
No

MOUNTING THE CJB-54A BLADE IN THE REAR POSITION ON TRACTORS WITHOUT FAST-HITCH

1. Bolt the drawbar adapter plate "F", the filler pad "G", and the filler plate "H" to the tractor pad on the right side. See Illustr. 7

2. Bolt the substitute drawbar to the tractor pad on the left side and to the drawbar adapter on the right side.

3. Attach the axle mounting bracket to the substitute drawbar, using two 5/8-11 NC x

1-3/4" hex-hd. machine bolts.

4. Fasten the bellcrank extension to the rear leg of the rockshaft, using 5/8 x 2-3/8" hex-hd. machine bolts. See Illustr. 8.

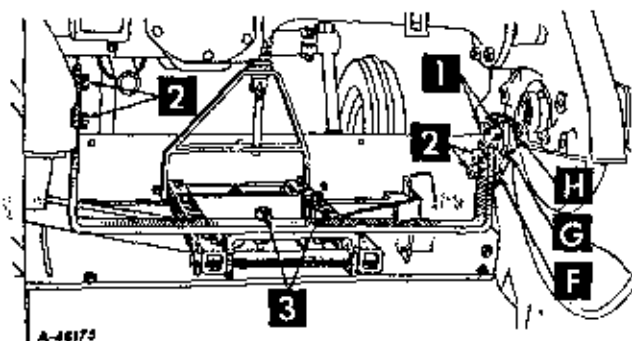
5. Attach the pressure spring lifting strap to the bellcrank extension with a pin and cotter. The blade is now ready to operate in the rear position.

MOUNTING THE CUB-54A BLADE IN THE REAR POSITION ON TRACTORS WITHOUT FAST-HITCH - Continued

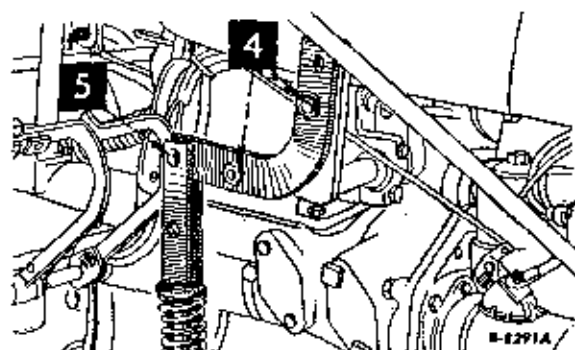
The lifting lever and front mounting mechanism need not be removed from the tractor when the blade is moved from the front to the rear position.

For safe operation, do not tilt the blade

for terracing when the blade is angled to the right or left and mounted underneath the body of the tractor. When the blade is in the straight position, use only the first hole off-center up or down.

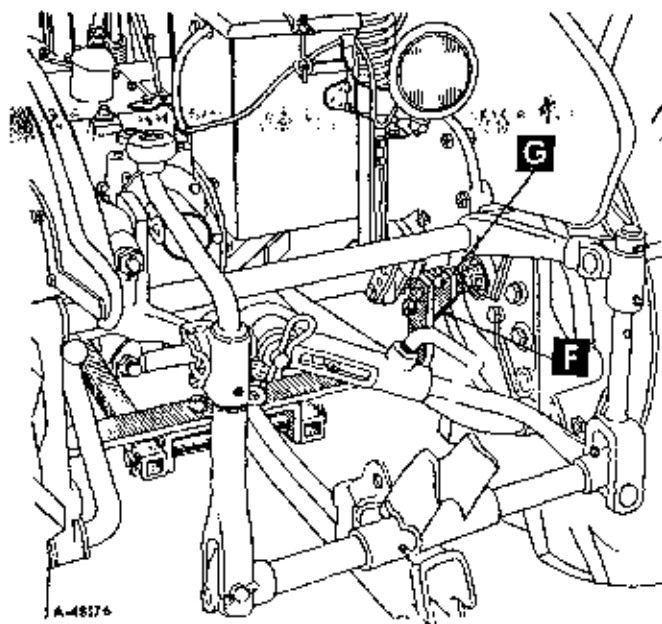


Illustr. 7

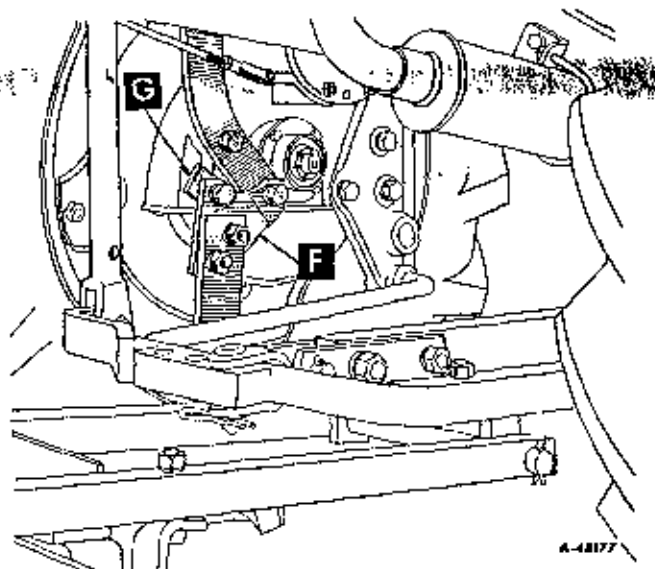


Illustr. 8

MOUNTING THE CUB-54A BLADE IN THE REAR POSITION ON TRACTORS WITH FAST-HITCH



Illustr. 9



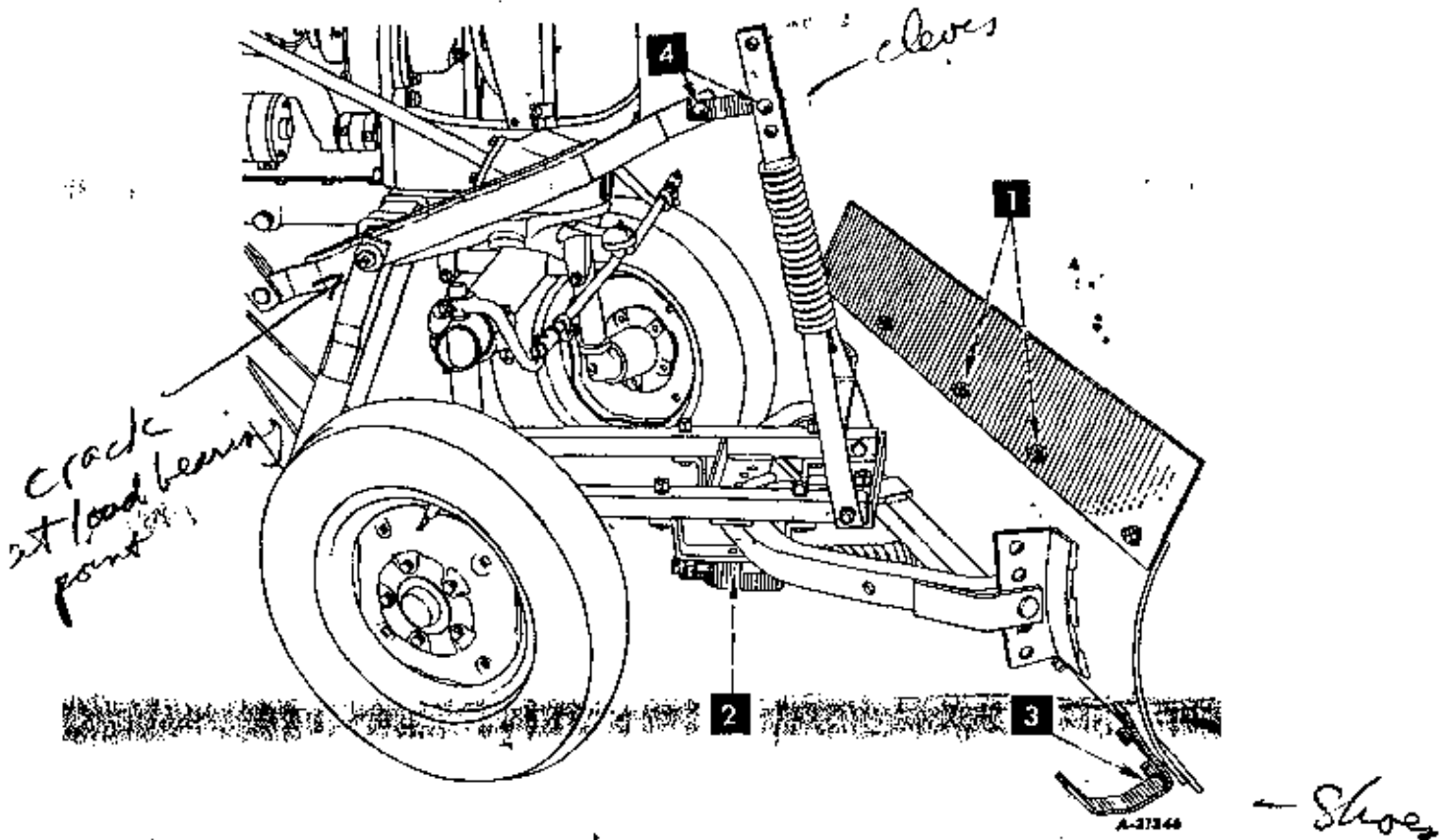
Illustr. 10

1. When the lever leveling type Fast-Hitch is used with the grader blade, remove the filler plate "H" shown in Illustr. 7 and insert the lever handle in the front hole position. The filler pad "G" is used in the rear hole position (Illustr. 9). When the screw leveling type Fast-Hitch is used, the filler pad "G" is in the front hole and the screw support arm is in

the rear hole (Illustr. 10). The filler plate "H" is not used in this application.

To complete setting up the grader blade, follow the instructions under "Mounting the Cub 54-A Blade in the Rear Position on Tractors Without Fast-Hitch" paragraphs "2" through "5" on page 6.

SNOW EXTENSION PLATE ATTACHMENT (Special)



Illust. 11

1. Bolt the extension plate to the blade as shown, using five $1/2 \times 1-1/4$ " carriage bolts, lock washer, and hex. nuts. Insert the bolts from the front.

2. For snow plowing, move the rear adjustment of the shock spring unit to the rear hole of the three adjustment holes. See "A" in Illust. 6. Thus, the cutting edge of the blade will be thrust forward, which in turn produces a better roll to the plowed snow.

3. Attach or adjust the wearing shoe so the shoe supports the blade and causes the cutting edge to clear the sidewalk or ground by 1" to 1-1/2". This helps to prevent snagging the blade in cracks or small obstacles hidden in the snow.

4. Attach the flexible clevis to the lifting lever and to the pressure spring lifting strap assembly with the two drilled pins and cotters provided. When the flexible clevis is not used, attach the lifting lever to the pressure spring lifting strap assembly with one drilled pin and cotter.

NOTE: The flexible clevis and blade wearing shoe are shown here with the Snow Extension Plate Attachment (Special). They are a regular part of the leveling and grader blade, but are designed primarily for snow removal, where the blade must follow the contour of the surface being graded or cleared. The flexible clevis is used only in the front position where the blade needs flexibility. It is suggested that the shoes be removed when using the blade for terracing and grading of soil.

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