

# **JOHN DEERE AT246 BEAN HARVESTER**



## **OPERATORS MANUAL JOHN DEERE AT246 BEAN HARVESTER**

OMN159030 E5    English

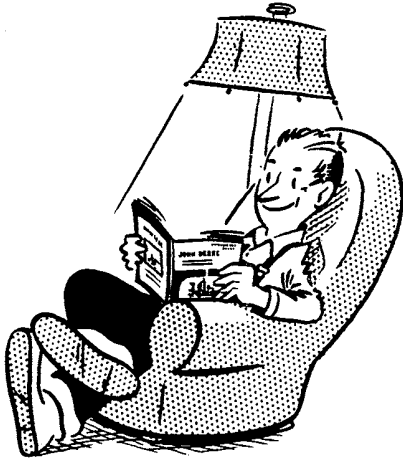
**JOHN DEERE DES MOINES WORKS  
OMN159030 E5**

LITHO IN THE U.S.A. (REVISED)  
ENGLISH



## TO THE PURCHASER

This operator's manual has been carefully prepared to provide the necessary information regarding assembly, operation, and adjustments so that you may obtain maximum service and satisfaction from your new bean harvester.



N 3211

Study this manual carefully and keep it handy in a safe place for future reference.

Right-hand and left-hand reference is determined by standing at the rear of the bean harvester and facing the direction of travel.

If you find you require information not covered in this manual, consult your John Deere dealer. He will be glad to answer any question that may arise regarding the operation of your bean harvester. Your John Deere dealer has trained mechanics who will render you prompt service if needed.

Occasionally, you may need new parts to replace worn parts. Furnish the dealer with the date you purchased the bean harvester (to be recorded below) so he can give you prompt and efficient parts service.

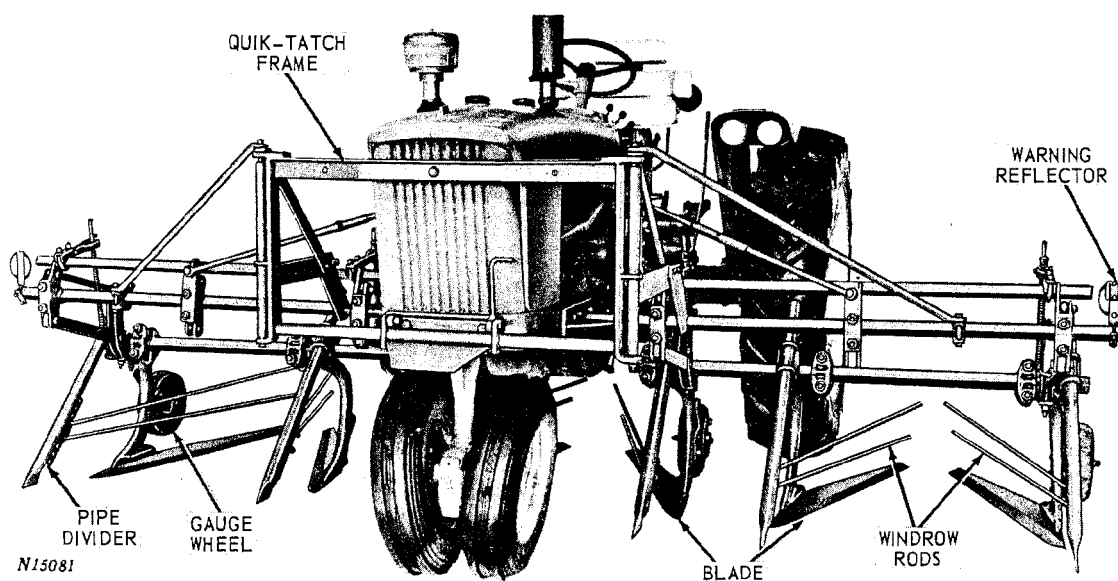
### John Deere AT246 Bean Harvester

Date Purchased . . . . . 19 . . .  
(To be filled in by purchaser)

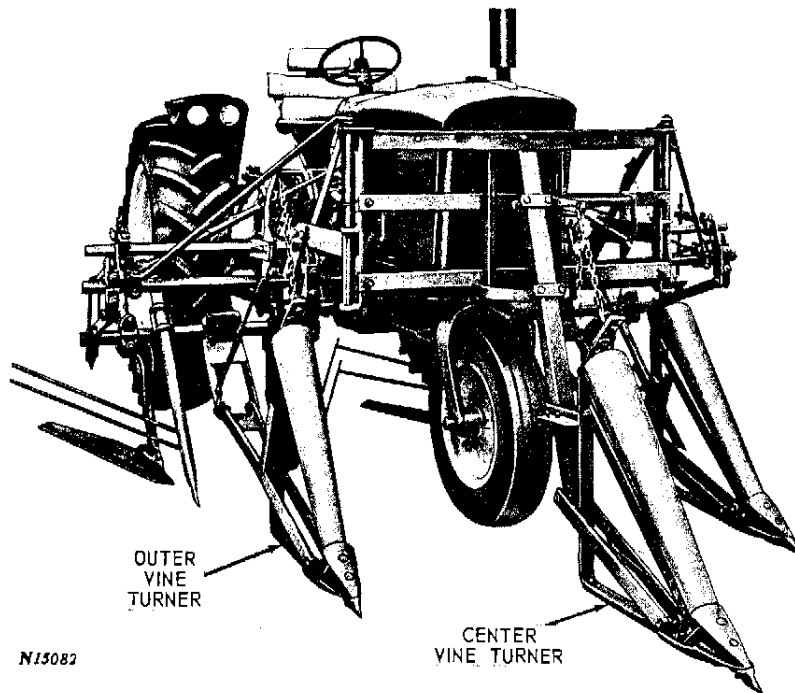


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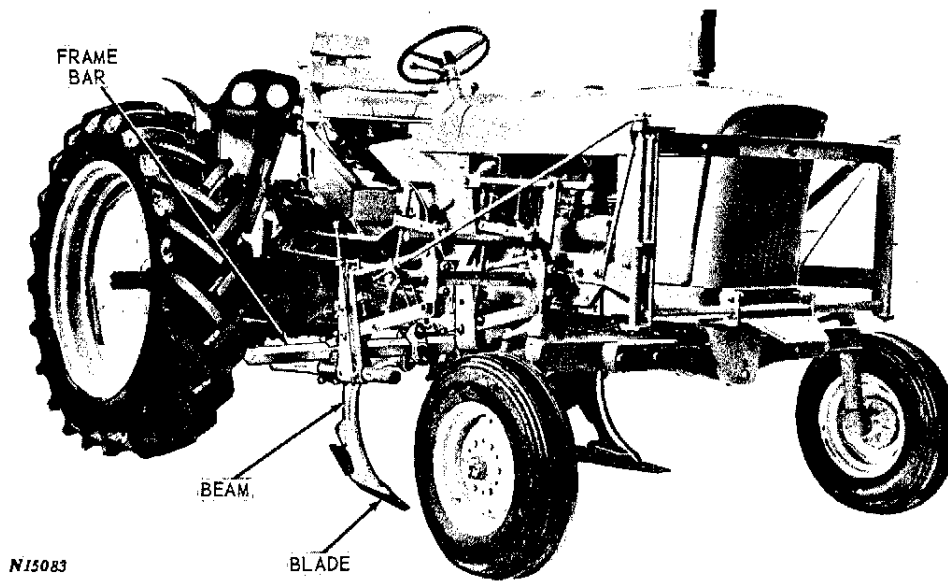
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AT246 Six-Row Bean Harvester on John Deere 2010 Tractor



*AT246 Four-Row Bean Harvester with 14C Vine Turner Attachment*



*96E Peanut Puller on AU2-A Cultivator*



# SPECIFICATIONS

## AT246 BEAN HARVESTER

### MODELS

AT246F - For front tractor rockshaft operation, independent or parallel lift.

AT246R - For rear tractor rockshaft operation.

### TRACTORS

John Deere 2010, 3010, 3020, 4010, and 4020 Row-Crop Tractors.

*NOTE: Only AT246F can be used on 2010 Tractor.*

### BEAN HARVESTER ATTACHMENTS

AB690E - Two-Row  
AB690F - Four-Row  
AB690G - Six-Row

AB690E, AB690F, or AB690G Bean Harvester Attachment required with AT246 Bean Harvester.

AB690E or AB690F available as special equipment for use on the following John Deere Cultivators:

A2	AT4-6BV	U2-A
T2	AU2-A	T21

AB690G available as special equipment for use on the following John Deere Cultivators:

A4	AU4-A	U4-A
T4		T41

### ROW SPACING

AB690E - 18 to 42-inch rows.  
AB690F - 18 to 34-inch rows.  
AB690G - 18 to 28-inch rows.

### CUTTER BLADES

46-inch, plain-faced blades.

## VINE TURNERS

### 12D VINE TURNER

One-roller vine turner for use with bean harvester attachment on T2 or T4 Cultivator.

### 12E VINE TURNER

One-roller vine turner for use with bean harvester attachment on AT246 Bean Harvester or A2, A4, AU2-A, AU4-A, or AT4-6BV Cultivator. For use only on tractors with single or double front wheels.

### 13B VINE TURNER

Two-roller vine turner for use with bean harvester attachment on AT246 Bean Harvester or A2, A4, or AT4-6BV Cultivator. For use only on John Deere Tractors with 48 to 80-inch adjustable tread front axle.

### 14B VINE TURNER

Three-roller vine turner for use with bean harvester attachment on T2 or T4 Cultivator.

### 14C VINE TURNER

Three-roller vine turner for use with bean harvester attachment on AT246 Bean Harvester or A2, A4, AU2-A, AU4-A, or AT4-6BV Cultivator. For use only on tractors with single or double front wheels.

## 96E PEANUT PULLER

The 96E Peanut Puller attaches to the rig pipes of A2, T2, AU2-A and T21 John Deere Cultivators:

### ROW SPACING

Two 28 to 42-inch rows.

### CUTTER BLADES

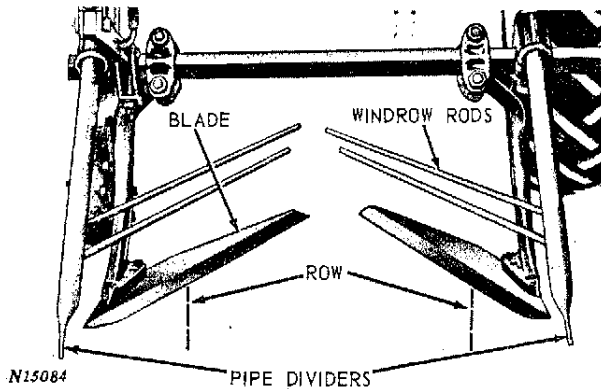
46 or 64-inch, plain-faced, hard-surfaced blades.

*(Specifications and design subject to change without notice)*



# OPERATION

## HOW BEAN HARVESTER FUNCTIONS



The pipe dividers separate vine growth between the rows. The blades cut the plants and the trailing rods windrow plants from two rows into one windrow.

In heavy vine growth, vine turners are used to divert vines ahead of the tractor wheels. See page 14.

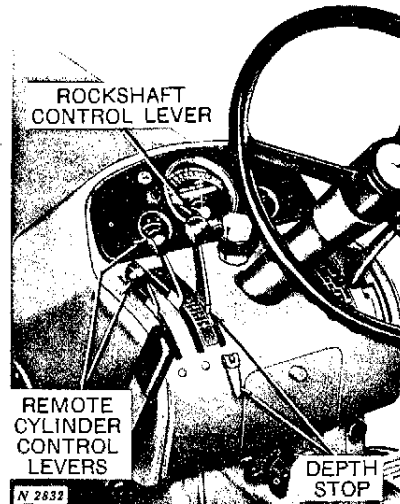
## CONTROLS

When bean harvester is operated by rear rockshaft lift on 3010, 3020, 4010 or 4020 tractor, use the rockshaft control lever to raise and lower the bean harvester blades and pipe dividers.

See tractor operator's manual to set working depth of blades with rockshaft lever depth stop.

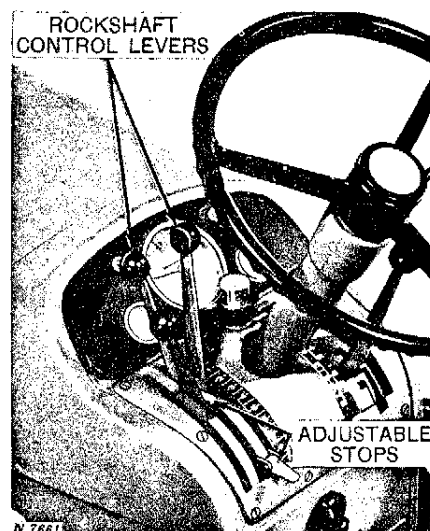
If bean harvester is operated by front rockshaft lift on 3010, 3020, 4010 or 4020 tractor, use the remote cylinder control levers to raise and lower the bean harvester.

See tractor operator's manual for hydraulic cylinder installation and remote cylinder control lever operation.



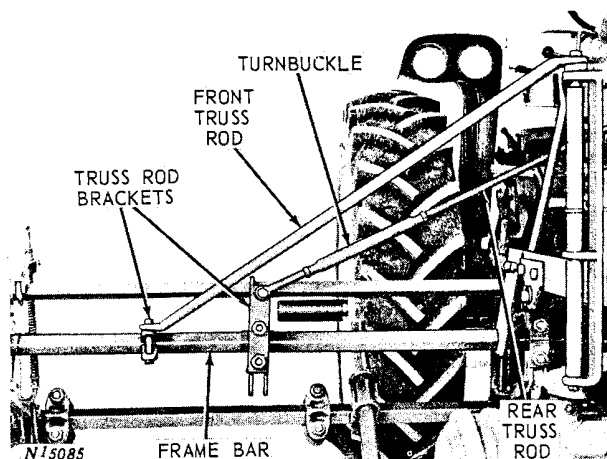
Controls on 3010, 3020, 4010  
and 4020 Tractors

On 2010 tractor, bean harvester is operate by front rockshaft. Raise and lower bean harvester with rockshaft control levers. If tractor has dual hydraulic system, operate bean harvester frames together or separately. See tractor operator's manual for front rockshaft lift operation and use of adjustable depth stops.



Controls on 2010 Tractor

## LEVELING FRAME BARS



To insure uniform cutting depth, the bean harvester frame bars must be level with the tractor rear axle. To determine if frames are level, stand in front of the tractor and sight over the bean harvester frame bar and under the tractor rear axle. Check both sides of the tractor.

Before leveling frame bar, make sure bean harvester frames are square with tractor. To position frames, loosen front truss rod bracket on frame bar. Slide bracket toward tractor to move frames to the rear; slide bracket away from tractor to move frames to the front. Tighten bracket securely after positioning frames.

To level the frame bar, adjust the turnbuckle on the rear truss rod until frame bar lines up with tractor rear axle.

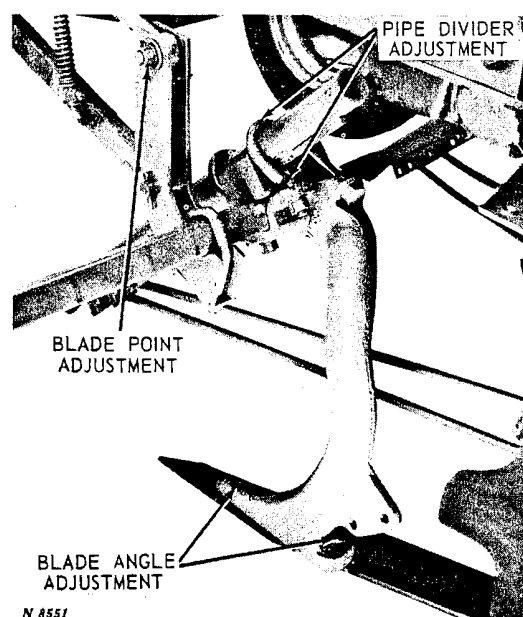
If this fails to level the frame bar, disconnect the upper end of the rear truss rod from the tractor and loosen the truss rod bracket on the frame bar.

Move the bracket toward the tractor to lower the frame bar; move the bracket away from the tractor to raise the frame bar.

Tighten the truss rod bracket and attach the rear truss rod to the tractor. Check frame bar position and adjust turnbuckle if necessary to level the frame.

*NOTE: If bean harvester is mounted on cultivator, level cultivator frames as instructed in cultivator operator's manual.*

## ADJUSTING BLADES AND PIPE DIVIDERS



## BLADES

Set bean harvester blades at an angle to penetrate soil easily and leave as little dirt as possible on the plants. For best results, blade points should penetrate soil one to two inches and heels should ride on the surface to one inch above the ground.

To position blade points, loosen top bolt in rig coupler plates. Tilt coupler plates forward or backward to obtain the desired angle. Be sure all blade points are set at the same angle before tightening the bolts.

Two holes are provided at the rear of the beam to change the angle of the blades to the rows. Set the blades so the points are at least five inches from the row.

To increase the slope of the blades, insert shims between the beam and the blade.

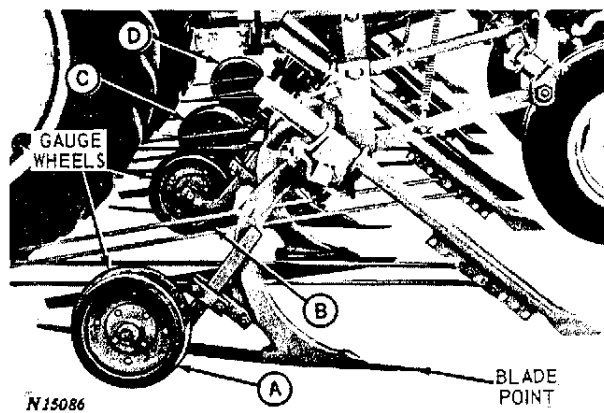
## PIPE DIVIDERS

Position the pipe dividers so the pipe tips are directly in front of the blades and barely touch the ground. To adjust the pipe dividers vertically or horizontally, loosen the two eye-bolts holding the pipe divider to the frame.

## 6 Operation

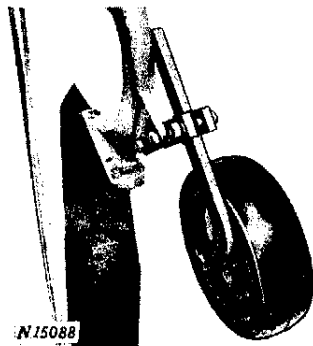
### SETTING DEPTH OF CUT

#### GAUGE WHEEL DEPTH CONTROL



If bean harvester is equipped with gauge wheels, set gauge wheels so blade points ride one to two inches in the ground when harvesting. Make sure all blades are adjusted to the same level.

To set gauge wheels lower than blades (to run in deep furrows, for example), switch gauge wheels ('A' with 'B,' 'C' with 'D') and install them on the beams as shown below.



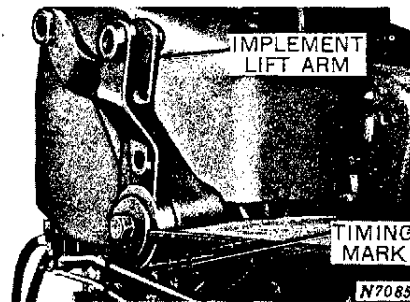
#### TRACTOR DEPTH CONTROL

After establishing the working depth of the blades, set the hydraulic cylinder depth stops or rockshaft lever depth stop for the particular tractor used.

On 3010, 3020, 4010 or 4020 tractor with rear rockshaft operation and 2010 tractor with front rockshaft operation, set depth stop on rockshaft control lever.

On 3010, 3020, 4010 or 4020 tractor with front rockshaft operation, set depth stops on hydraulic cylinders.

### TIMING IMPLEMENT LIFT ARM

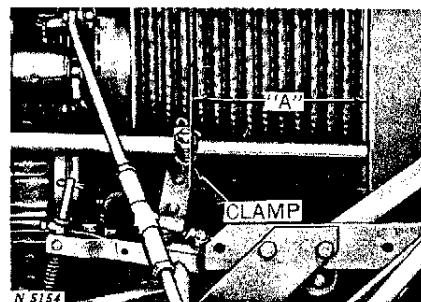


To insure proper bean harvester operation make sure implement lift arm is timed with rockshaft on tractor. The implement lift arm is properly timed when the timing mark on the arm is line with tractor rockshaft timing mark.

### ADJUSTING LIFT HEIGHT

Adjustments are provided on the tractor as AT246 Bean Harvester to obtain the desired lift height.

AT246R BEAN HARVESTER ON 3010, 3020, 4010 OR 4020 TRACTOR

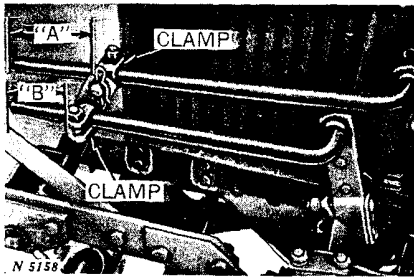


**86-1/2-INCH LIFT PIPE** — The distance "A" from the end of the lift pipe to the edge of the clamp (on both sides of tractor) should be 8 inches on the 3010 or 3020 Tractor, 7 inches on 4010 Tractor, and 6 inches on 4020 Tractor.

**84-1/2-INCH LIFT PIPE** — The distance "A" from the end of the lift pipe to the edge of the clamp (on both sides of tractor) should be 7 inches on 3010 or 3020 Tractor, 5 inches on 4010 Tractor, and 4 inches on 4020 Tractor.



### AT246F BEAN HARVESTER ON 3010, 3020, 4010 OR 4020 TRACTOR



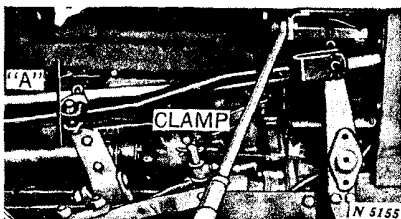
The distance "A" from the end of the lift rod to the edge of the clamp (on both sides of the tractor) should be 2 inches on 3010 or 3020 Tractor and 3 inches on 4010 or 4020 Tractor.

The distance "B" from the end of the second lift rod to the edge of the clamp (on both sides of tractor) should be 4 inches on 3010 or 3020 Tractor and one inch on 4010 or 4020 Tractor.



Set the hydraulic cylinder depth stop 1/2-inch away from the cylinder yoke unless the stop has been set to maintain working depth.

### AT246F BEAN HARVESTER ON 2010 TRACTOR



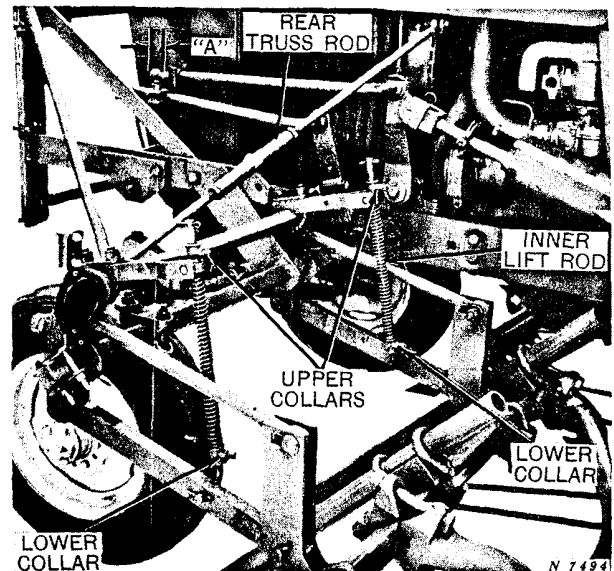
The distance "A" from the end of the lift rod to the edge of the clamp (on both sides of the tractor) should be 4-1/2 inches on 2010 Tractor.

### BEAN HARVESTER ATTACHMENTS ON CULTIVATORS

If AB690E, AB690F or AB690G Bean Harvester Attachment is used with a cultivator, see cultivator operator's manual for lift adjustments.

### RAISING BEAN HARVESTER

When raising bean harvester the first time, bring it up slowly. If the frames hit the tractor, lower the bean harvester and loosen the upper collars on the rig lift rods. Adjust the collars as instructed below.



### SETTING MAXIMUM LIFT HEIGHT

To set the bean harvester for maximum lift height, raise the frames as high as possible with the hydraulic system. Do not allow frames to hit the tractor. Set the upper collars on the rig lift rods against the lift arm swivels.

When raising the bean harvester, the inner rig lift rod may strike the rear truss rod. If this occurs, shorten the distance between the end of the lift pipe and the edge of the clamp until the lift rod misses the truss rod when the bean harvester is raised.

### ADJUSTING RIG DOWN PRESSURE

When soil conditions prevent blades from penetrating to the proper depth, increase down pressure on the blades by raising the lower collars on the rig lift rods. To obtain additional down pressure, retract hydraulic cylinders so rig lift arms depress the lift rod springs.

When down pressure is not needed, set lower collars so springs just touch the lift arm swivels; or allow collars to drop to the bottom of the rods. Face collar set screws away from rig links and tighten set screws.

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