

# 45 Combines



## OPERATORS MANUAL

45  
Combines

OMH91055 K4    English

**John Deere Harvester Works**  
**OMH91055 K4**

LITHO IN U.S.A.  
ENGLISH



## TO THE PURCHASER

The combine you have purchased has been carefully designed and manufactured to provide years of dependable, economical service.

To further insure trouble-free service we recommend that you follow closely all instructions concerning operation, lubrication, adjustments and service. Preventive maintenance has proved to be much more economical than corrective maintenance. Should you require information not covered in this manual, consult your John Deere dealer.

### KEEP YOUR COMBINE A JOHN DEERE COMBINE

Genuine John Deere Parts fit properly and insure satisfactory service because they are made from the original patterns and from the same materials as used in new machines. Should your combine require replacement parts, go to your John Deere dealer where you can obtain Genuine John Deere Parts—accept no substitutes.

### ATTACHMENTS

In addition to the equipment furnished with your combine, there are attachments available to help you do a better job in a special crop or condition. These attachments, illustrated and described in the attachment section, are available from your John Deere dealer.

### LOCATION REFERENCE

"Right-hand" and "left-hand" sides are determined by facing in the direction the combine will travel when in use.

Timing gear end of the engine is referred to as the "front," flywheel end as the "rear."

### SERIAL NUMBERS

Your combine, cutting platform, axle, and engine have serial numbers.

When ordering parts, always bring with you the model and serial numbers as given on the serial number plates. By doing so, you will assist your John Deere dealer in giving you prompt, efficient service.

The combine serial number is on a plate located on the support bracket at the rear of the fuel tank.

The engine serial number is on a plate located on top of the flywheel housing.

The axle serial number is on the top, left-hand end of the axle tube.

The cutting platform serial number is on a plate located on the outside of the right-hand platform divider.

Record these Serial Numbers in the space provided below.

Combine serial no. \_\_\_\_\_

Engine serial no. \_\_\_\_\_

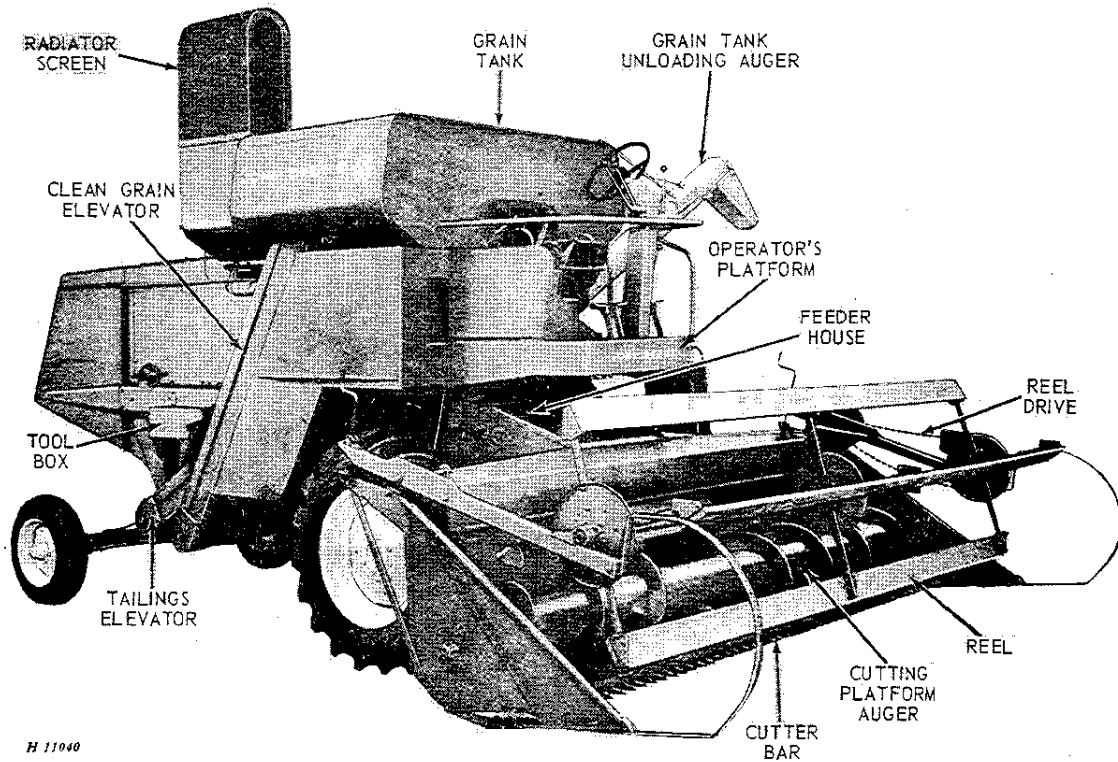
Axle serial no. \_\_\_\_\_

Cutting platform serial no. \_\_\_\_\_

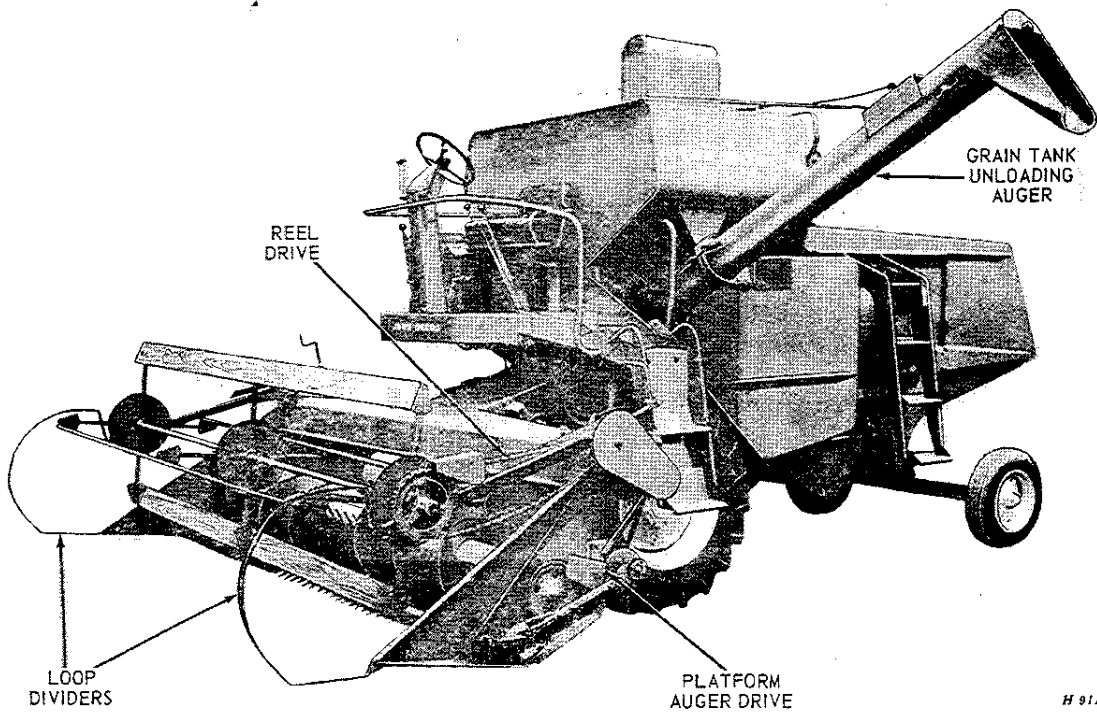
Date purchased \_\_\_\_\_

## CONTENTS

|   |           |
|---|-----------|
| <i>Specifications . . . . .</i>                   | <i>2</i>  |
| <i>Controls and instruments . . . . .</i>         | <i>5</i>  |
| <i>Operation . . . . .</i>                        | <i>7</i>  |
| <i>Safety suggestions . . . . .</i>               | <i>17</i> |
| <i>Lubrication and periodic service . . . . .</i> | <i>18</i> |
| <i>Adjustments and service . . . . .</i>          | <i>30</i> |
| <i>Trouble shooting . . . . .</i>                 | <i>55</i> |
| <i>Engine service . . . . .</i>                   | <i>62</i> |
| <i>Attachments . . . . .</i>                      | <i>72</i> |
| <i>Index . . . . .</i>                            | <i>81</i> |



*Right-Hand Front View - John Deere 45 Grain Tank Combine*



*Left-Hand Front View - John Deere 45 Grain Tank Combine*



# SPECIFICATIONS

## COMBINE

### CUTTER BAR

Width of cut . . . . . 8-ft. 6-in., 10-ft. 6-in.,  
or 12-ft. 6-in.  
Length of cutter bar . . . 8 ft., 10-ft., or 12-ft.  
Type of knife sections . . . . . Heavy-duty  
overserrated

### REEL

Drive . . . . . Chain  
Number of slats . . . 4 regular; 3, 6, or 8 special  
Diameter of reel . . . . . 32-in. to 40-in.  
Speed range . . . . . 13 rpm to 45 rpm

### CUTTING PLATFORM

Type of feed . . . . . Auger  
Range of cutting height:  
Grain . . . . . 2-in. below wheel level  
to 31-3/8-in. above  
Rice . . . . . 3-in. below wheel level  
to 30-3/8-in. above  
Height control . . . . . 2 hydraulic cylinders

### CUTTING PLATFORM AUGER

Diameter . . . . . 18-in.  
Diameter of auger tube . . . . . 10-in.  
Type of auger fingers . . . Round retracting

### CYLINDER

Type . . . . . Rasp-bar or spike-tooth  
Width . . . . . 26-in.  
Diameter . . . . . 22-in.  
Number of bars . . . 8 Rasp-bars or 10 spike-  
tooth bars (five 12-tooth  
bars and five 13-tooth  
bars)

Drive . . . . . Roller chain  
Speed range . . . . . 175 rpm to 1095 rpm

### CONCAVE

Type . . . 12-bar open type or spike-tooth type  
Width . . . . . 26-in.

### BEATER (Behind the cylinder)

Type . . . . . Wing  
Width . . . . . 26-in.  
Diameter . . . . . 12-in.  
Speed . . . . . 650 rpm

### SEPARATOR

Type . . . . . Grain conveyor, straw walker  
Width . . . . . 26-in.  
Length of separating surface . . . . . 130-in.  
(Straw walker pans extended)  
Area of separating surface . . . . . 3380 sq. in.

### GRAIN CONVEYOR

Type . . . . . Slat  
Drive . . . . . Chain

### CLEANING FAN

Type . . . . . 5-bladed undershot  
Drive . . . . . V-belt  
Speed range . . . . . 593 rpm to 810 rpm

### CHAFFER

Type . . . . . Adjustable  
Width . . . . . 22-3/4-in.  
Length—with tailings finger bar . . . 54-3/4-in.  
Area . . . . . 1246 sq. in.

### SIEVE

Type . . . . . Adjustable  
Width . . . . . 22-3/4-in.  
Length . . . . . 43-7/8-in.  
Area . . . . . 1000 sq. in.

TOTAL CLEANING AREA . . . . . 2246 sq. in.

### STRAW WALKERS

Number . . . . . Three  
Width . . . . . 7-7/8-in.  
Length—with pans extended . . . . . 113 in.  
Area . . . . . 2938 sq. in.  
Number of steps . . . . . Five  
Drive . . . . . V-belt  
Bearings . . . . . Oil-soaked maple  
Extension pans . . . . . One on each walker

### GRAIN TANK

Capacity . . . . . 50-bushel, approx. (Type and  
condition of crop will de-  
termine actual volume)

### BRAKES

Type . . . . . Individual, mechanical disk-type

TRANSMISSION . . . Automotive—3 speeds for-  
ward, 1 reverse

STEERING . . . . . Power  
WEIGHTS

Grain combine with 10-foot cutting  
platform . . . . . 7050 lbs. (approx.)  
Rice combine with 10-foot cutting  
platform . . . . . 7350 lbs. (approx.)

## TIRE SIZES AND WHEEL TREAD DIMENSIONS

| Main Wheel<br>Tire Sizes | Center-to-Center<br>Wheel Tread |            | Guide Wheel<br>Tire Sizes | Center-to-Center<br>Wheel Tread |            |            |
|--------------------------|---------------------------------|------------|---------------------------|---------------------------------|------------|------------|
|                          | Regular Axle                    | Wide Axle  |                           | Regular<br>Axle                 | Wide Axle  | Wide Axle  |
| 13.6-26 (6-ply)          | 72 in.                          | 84 in.     | 5.50-16 (4 ply)           | 42 in.                          | 59 in.     | 73 in.     |
| 14.9-26 (6-ply)          | 73 in.                          | 83 in.     | 6.00-16 (4 ply)           | 44 in.                          | 61 in.     | 75 in.     |
| 16.9-26 (6-ply)          | 75 in.                          | 81 in.     | 6.50-16 (4 ply)           | 44 in.                          | 61 in.     | 75 in.     |
| 18.4-26 (6-ply)          | 76-1/2 in.                      | 79-1/2 in. | 7.50-16 (4 ply)           | 44 in.                          | 61 in.     | 75 in.     |
|                          |                                 |            | 7.50-18 (4 ply)           | 43 in.                          | 60-1/4 in. | 74-1/4 in. |

NOTE: Guide wheels may be interchanged on the various rear axles.

## SELECTIVE GROUND SPEED CONTROL RANGE

| 13.6-26 (12-26) Tires—Grain Drive |        |          | 18.4-26 (15-26) Tires—Rice Drive |        |          |
|-----------------------------------|--------|----------|----------------------------------|--------|----------|
|                                   | (Min.) | (Max.)   |                                  | (Min.) | (Max.)   |
| 1st Gear . . . . .                | 0.69   | 1.78 mph | 1st Gear . . . . .               | 0.65   | 1.69 mph |
| 2nd Gear . . . . .                | 1.50   | 3.88 mph | 2nd Gear . . . . .               | 1.42   | 3.69 mph |
| 3rd Gear . . . . .                | 3.54   | 9.16 mph | 3rd Gear . . . . .               | 3.36   | 8.71 mph |
| Reverse . . . . .                 | 1.56   | 4.04 mph | Reverse . . . . .                | 1.48   | 3.84 mph |
| 14.9-26 (13-26) Tires—Optional    |        |          | 16.9-26 (14-26) Tires—Optional   |        |          |
|                                   | (Min.) | (Max.)   |                                  | (Min.) | (Max.)   |
| 1st Gear . . . . .                | 0.71   | 1.85 mph | 1st Gear . . . . .               | 0.73   | 1.89 mph |
| 2nd Gear . . . . .                | 1.55   | 4.02 mph | 2nd Gear . . . . .               | 1.59   | 4.12 mph |
| 3rd Gear . . . . .                | 3.66   | 9.48 mph | 3rd Gear . . . . .               | 3.75   | 9.72 mph |
| Reverse . . . . .                 | 1.62   | 4.18 mph | Reverse . . . . .                | 1.66   | 4.29 mph |

## ENGINE

NOTE: For LP-gas or diesel engine specifications, see operator's manual furnished with LP-gas or diesel combine.

Make of engine . . . . . John Deere HA-165 G  
 Bore . . . . . 3-7/8 in.  
 Stroke . . . . . 3-1/2-in.  
 Brake horsepower . . . . . 58\*  
 Number of cylinders . . . . . 4  
 Piston displacement . . . . . 165 cu. in.  
 Maximum load speed . . . . . 2500 rpm  
 Firing order . . . . . 1-3-4-2  
 Crankcase . . . . . Cast integral with block  
 Type of lubrication . . . . . Force-feed by gear pump  
 to all connecting rods,  
 main bearings, governor,  
 oil pump drive. Oil  
 strainer in bottom of pan

Valve arrangement . . . . . Valve-in-head  
 Valve clearance:

Intake . . . . . 0.12-in. (cold)

Exhaust . . . . . 0.18-in. (cold)

Make of governor . . . . . Pierce

Make of carburetor . . . . . Marvel-Schebler

Air cleaner . . . . . Dry type

Spark plug:

Type . . . . . Champion H-10, Auto-Lite AL-7, or  
 AC-45L

Gap . . . . . 0.025-in.

Heat range . . . . . 1200° to 1500° F.

Electrical system . . . . . 12-volt

Cooling system . . . . . Water pressure type

Type of fuel . . . . . Gasoline (regular grade)

\* Calculated at 60°F. and 29.92 inches Hg. at sea-level.

## CAPACITIES (Approx.)

Fuel tank . . . . . 25 U.S. gallons  
 Cooling system (Radiator) . . . . . 14 U.S. quarts  
 Engine crankcase (with filter) . . . . . 7 U.S. quarts

Hydraulic unit (including hydraulic oil  
 lines and cylinders) . . . . . 11-1/2 U.S. quarts

(Specifications and design subject to change without notice.)

Thank you so much for reading.  
Please click the “Buy Now!”  
button below to download the  
complete manual.



After you pay.

You can download the most  
perfect and complete manual in  
the world immediately.

Our support email:

[ebooklibonline@outlook.com](mailto:ebooklibonline@outlook.com)