

105 HI LOW COMBINE



JOHN DEERE

OPERATORS MANUAL

105 HI LOW
COMBINE

OMH91006 A3 English

JOHN DEERE
OMH91006 A3

LITHO IN THE U.S.A.
ENGLISH



To the purchaser

The self-propelled combine you have just purchased was designed and manufactured to the traditionally high quality standards of all John Deere Farm Equipment. Your combine has been thoroughly inspected and tested, not only at the factory, but at your dealer's by a trained John Deere Serviceman. With proper care, it will give years of dependable, economical service.

If you should find that you require information not covered in this manual, consult your John Deere dealer. He will be glad to answer any questions that may arise regarding the operation and service of the combine. He has trained mechanics who are kept informed on the best methods of John Deere Combine servicing, and can give you prompt know-how service in the field or in his shop.

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.

Special equipment

In addition to the equipment furnished with your combine, there is special equipment available to help you do a better job of combining in a special crop or condition. This special equipment, which is illustrated and described throughout this manual, is 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 end 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.

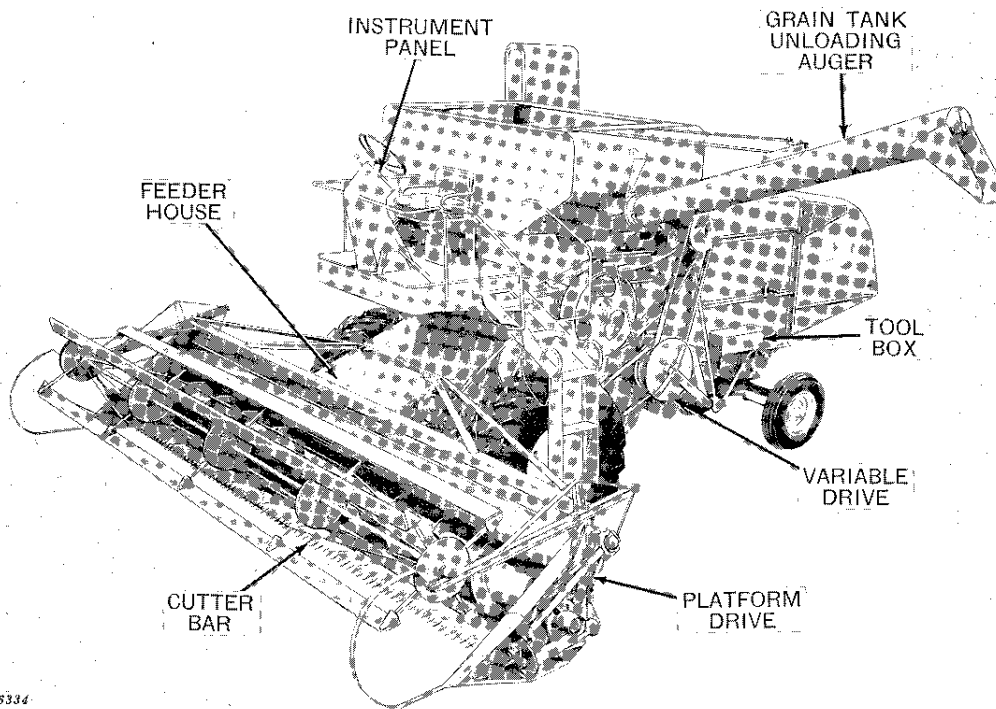
Combine serial no. _____
Engine serial no. _____
Axle serial no. _____
Cutting platform serial no. _____
Date purchased _____

Contents

Specifications	2
Controls and instruments	5
Operation	7
Safety suggestions	17
Lubrication and periodic service	18
Adjustments and service	34
Trouble shooting	77
Engine service	84
Index	97

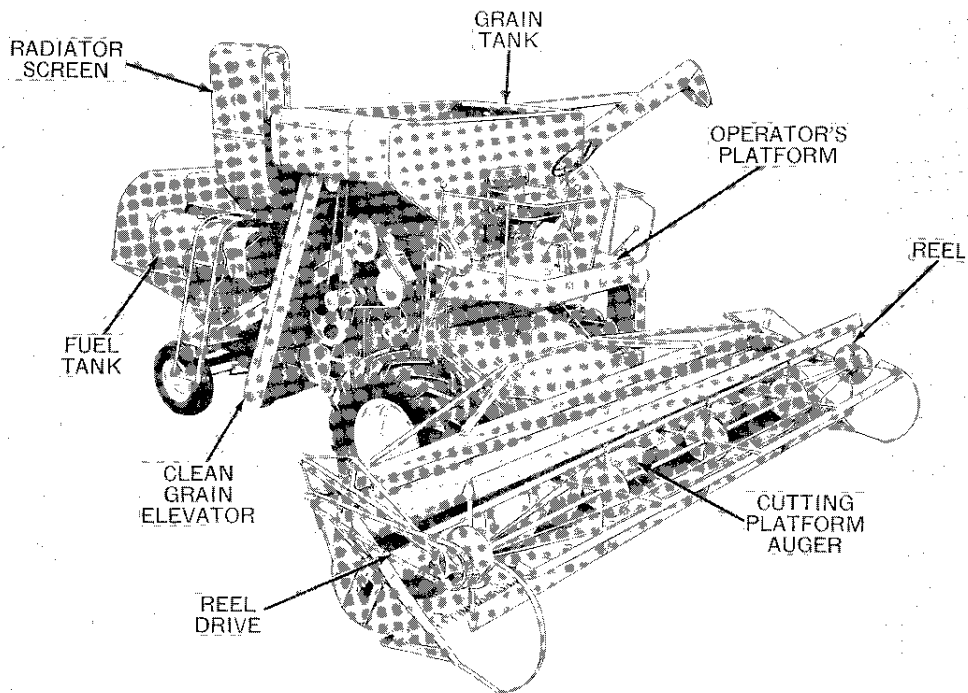
Study this manual carefully, keep it handy, in a safe place, for future reference.

Operator's Manual Price \$3.30



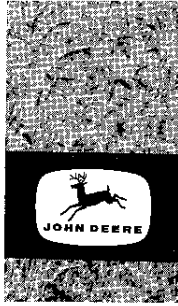
H 6334

Left-hand front view—John Deere 105 Combine



H 6335

Right-hand front view—John Deere 105 Combine



specifications

CUTTER BAR

Width of cut . . . 14-ft., or 16-ft. (rice) 14-ft., 16-ft., 18-ft., 20-ft., or 22-ft. (grain)

Length of cutter

bar 13-ft., 6-in. or 15-ft., 6-in. (rice) 13-ft. 6-in., 15-ft. 6-in., 17-ft. 6-in., 19-ft. 6-in., or 21-ft. 6-in. (grain)

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. or 40-in.

Speed range 18.5 rpm to 51.5 rpm

Height control Manual

CUTTING PLATFORM

Type of feed Auger

Cutting height

range (18.4-26 tires) 2-1/2-in. below wheel level to 35-in. above

Cutting height

range (23.1-26 tires) 2-1/2-in. below wheel level to 38-in. above

Height Control Hydraulic (2 cylinders)

CUTTING PLATFORM AUGER

Diameter 18-in.

Diameter of auger tube 10-in.

Type of auger fingers Round retracting

BELT PICKUP PLATFORM

Width 12-ft., or 22-ft.

CYLINDER

Type Rasp-bar or spike-tooth

Width 49-1/2-in.

Diameter 22-in.

Number of bars 8 rasp-bars or 10 spike tooth bars with 14 teeth)

Drive Roller Chain

Speed range 227 rpm to 1190 rpm

CONCAVE

Type 12-bar open type or spike-tooth type

Width 49-1/2-in.

BEATER (Behind the cylinder)

Type Drum

Width 49-1/2-in.

Diameter 12-in.

Speed 680 rpm

SEPARATOR

Type Grain conveyor, straw walker

Width 50-in.

Length of separating

surface 140-in. (Straw walker pans extended)

Total separating area 6,930 sq. in.

GRAIN CONVEYOR

Type Channel slat

Drive Chain

CLEANING FAN

Type 5-bladed undershot

Drive V-belt

Speed range 550 rpm to 1050 rpm

CHAFFER

Type Adjustable

Width 48-in.

Length with extension 60-3/4-in.

Area 2,915 sq. in.

SIEVE

Type Adjustable

Width 48-in.

Length 45-in.

Area 2163 sq. in.

CHAFFER EXTENSION

Type Adjustable

Width 48-in.

Length 12-5/16-in.

Area 591 sq. in.

TOTAL CLEANING AREA OF CHAFFER, SIEVE, AND CHAFFER EXTENSION 5,078 sq. in.

STRAW WALKERS

Number Five

Width 9-1/2-in.

Length with pans extended 123-in.

Area 6,089 sq. in.

Number of steps Five

Drive V-belt

Bearings Oil-soaked maple

Extension pans One on each walker

GRAIN TANK

Capacity 75 Bushel, approx. (Type and condition of crop will determine actual volume)

Type of unloading Hinged auger

BRAKES

Type Individual, mechanical disk-type

TRANSMISSION Automotive type—4 speeds forward, 1 reverse

WEIGHT

Combine with 16-ft. cutting

platform 12,200 lbs. (Approx.)

DIMENSIONS See page 4

Tire sizes and wheel tread dimensions

Combine	Tire sizes	Center-to-center wheel tread
Grain	18.4-26 (10-ply) cleat or low profile with spacers	97 in. 104 in.
	23.1-26 (8-ply) cleat or low profile	101 in.
	7.50-16 (4-ply) rib implement	48 in.
	7.50-20 (4-ply) rib implement	45-5/8 in.
	9.00-16 (4-ply) low profile	50 in.
Rice	23.1-26 (8-ply) rice	108 in.
	7.50-20 (4-ply) rib implement	45-1/2 in.
	7.50-20 (6-ply) skid ring	45-1/2 in.

Capacities (approx.)

Fuel tank	60 U.S. gals.
Cooling system (radiator)	6 U.S. qts.
Engine crankcase (including oil filter)	7 U.S. qts.
Air cleaner (oil bath)	3 U.S. pts.
Reduction gear	2 U.S. qts.
Transmission	14 U.S. pts.
Final drives (2)	4-1/2 U.S. pts. (in each)
Cutting platform lift, variable speed hydraulic unit, and power steering (Including hydraulic oil lines and cylinders)	13 U.S. qts.

Selective ground speed control range

18.4-26 Tires - grain drive			
	(Min.)	to	(Max.)
1st Gear	.6	to	1.4 mph
2nd Gear	1.2	to	2.8 mph
3rd Gear	2.5	to	5.6 mph
4th Gear	5.0	to	11.1 mph
Reverse	1.7	to	3.8 mph
23.1-26 Tires - rice drive			
	(Min.)	to	(Max.)
1st Gear	.7	to	1.5 mph
2nd Gear	1.3	to	2.9 mph
3rd Gear	2.6	to	5.9 mph
4th Gear	5.2	to	11.8 mph
Reverse	1.8	to	5.0 mph

23.1-26 Tires - grain drive			
	(Min.)	to	(Max.)
1st Gear	.7	to	1.6 mph
2nd Gear	1.4	to	3.2 mph
3rd Gear	2.8	to	6.3 mph
4th Gear	5.6	to	12.7 mph
Reverse	1.9	to	4.4 mph
Tracks - rice crawler			
	(Min.)	to	(Max.)
1st Gear	.3	to	.7 mph
2nd Gear	.6	to	1.4 mph
3rd Gear	1.2	to	2.8 mph
4th Gear	2.5	to	5.6 mph
Reverse	.9	to	1.9 mph

Engine

Make of engine	John Deere HA-248-G
Bore	3-7/8-in.
Stroke	3-1/2-in.
Brake horsepower	105*
Number of cylinders	6
Piston displacement	247.67 cu. in.
Maximum load speed	3000 rpm
Firing order	1-5-3-6-2-4
Crankcase	Cast integral with block
Type of lubrication	Force feed by gear pump to all connecting rods, main bearings, governor, and oil pump drive. Oil strainer in bottom of pan.

Valve arrangement	Valve-in-Head (rotators on exhaust valves)
Valve clearance	
Intake	.012-in. (When cold)
Exhaust	.018-in. (When cold)
Make of governor	Pierce
Make of carburetor	Zenith (Dual down draft type)
Air cleaner: Oil bath	(-105-1800)
	Dry type (105-1801-)
Spark plug	Size - 14mm Gap .025 in.
Electrical system	12-volt (Two 6-volt batteries)
Cooling system	Water pressure type
Type of fuel	Gasoline (Regular grade)

*Calculated at 60°F. and 29.92 inches hg. at sea level.

(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