55, 95, and 105 Combines

JOHN DEERE

OPERATORS MANUAL

55, 95, and 105
Combines

OMH63962 (01NOV66) English

John Deere Harvester Works
OMH63962 (01NOV66)

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. If your combine requires 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 of combining 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.

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

SERIAL NUMBERS

Your combine, feeder house, 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. For your convenience a space is provided below for recording these numbers.

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 above the starter on 55 and 95 Combines and under the alternator on 105 Combines.

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

The feeder house serial number is located on the right-hand side sheet.

The cutting platform serial number is located on the right-hand side sheet.

Combine Serial No. _____

Engine Serial No. _____

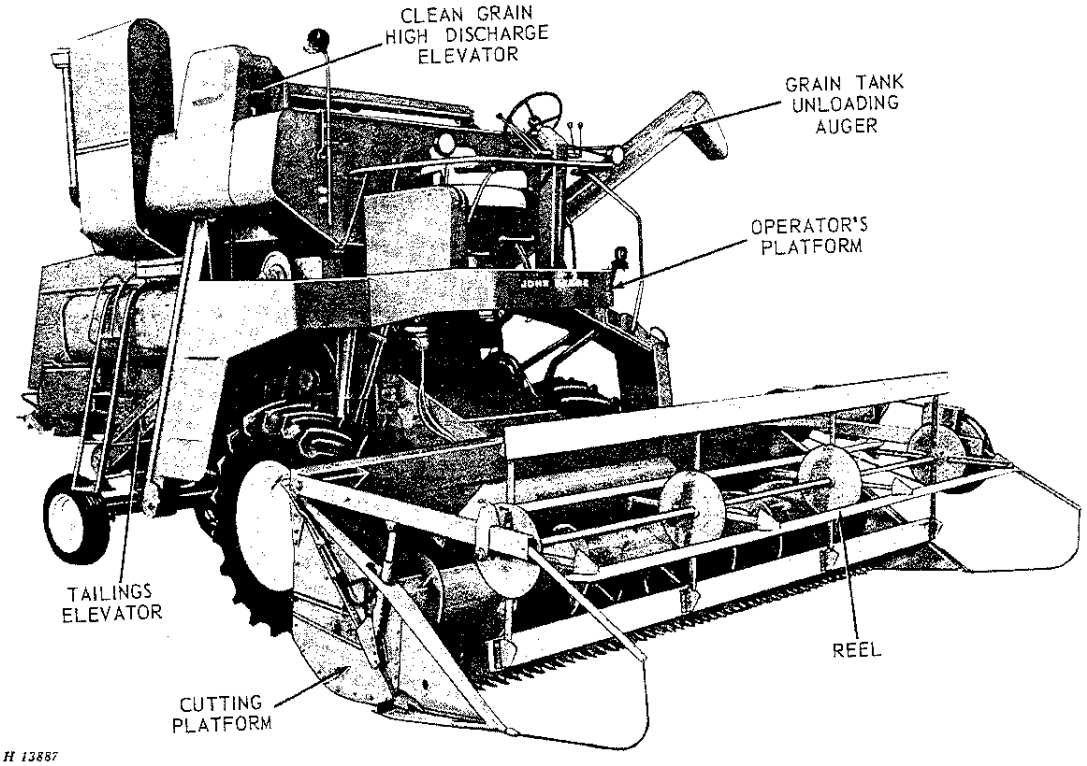
Axle Serial No. _____

Cutting Platform Serial No. _____

Feeder House Serial No. _____

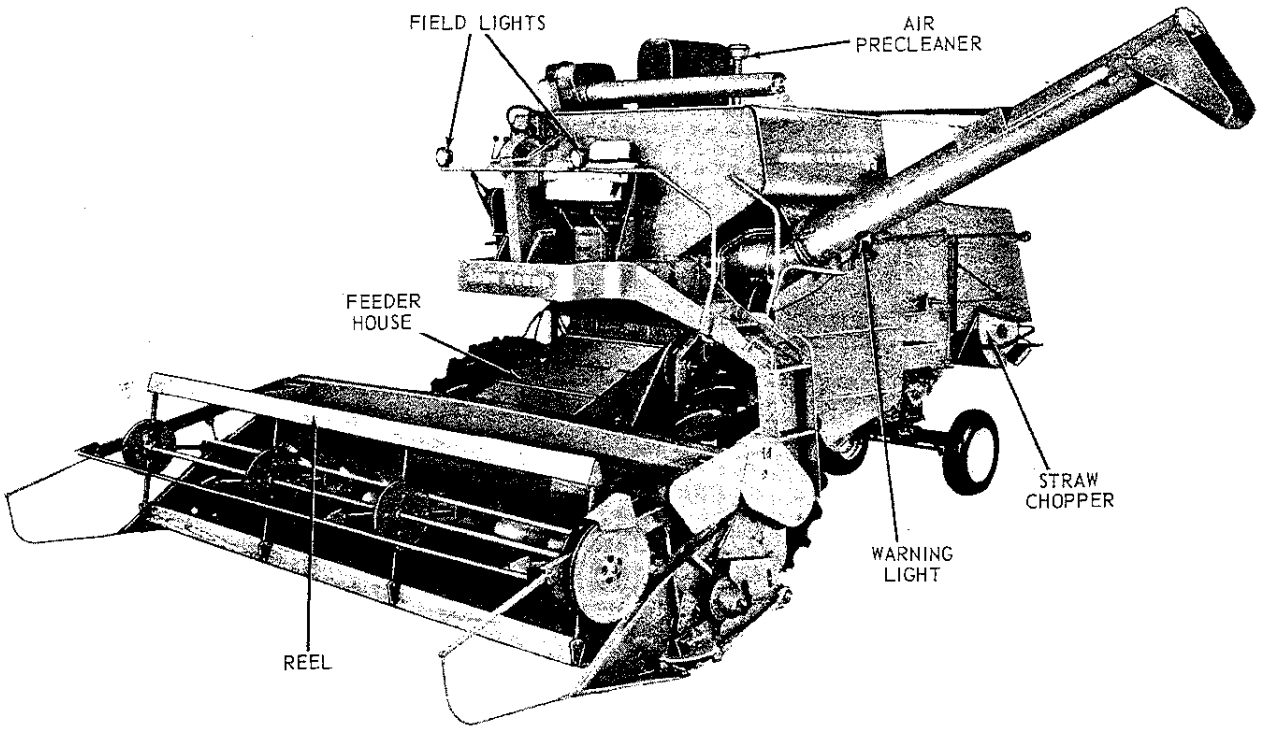
Date Purchased _____

CONTENTS



H 13887

John Deere 55 Combine



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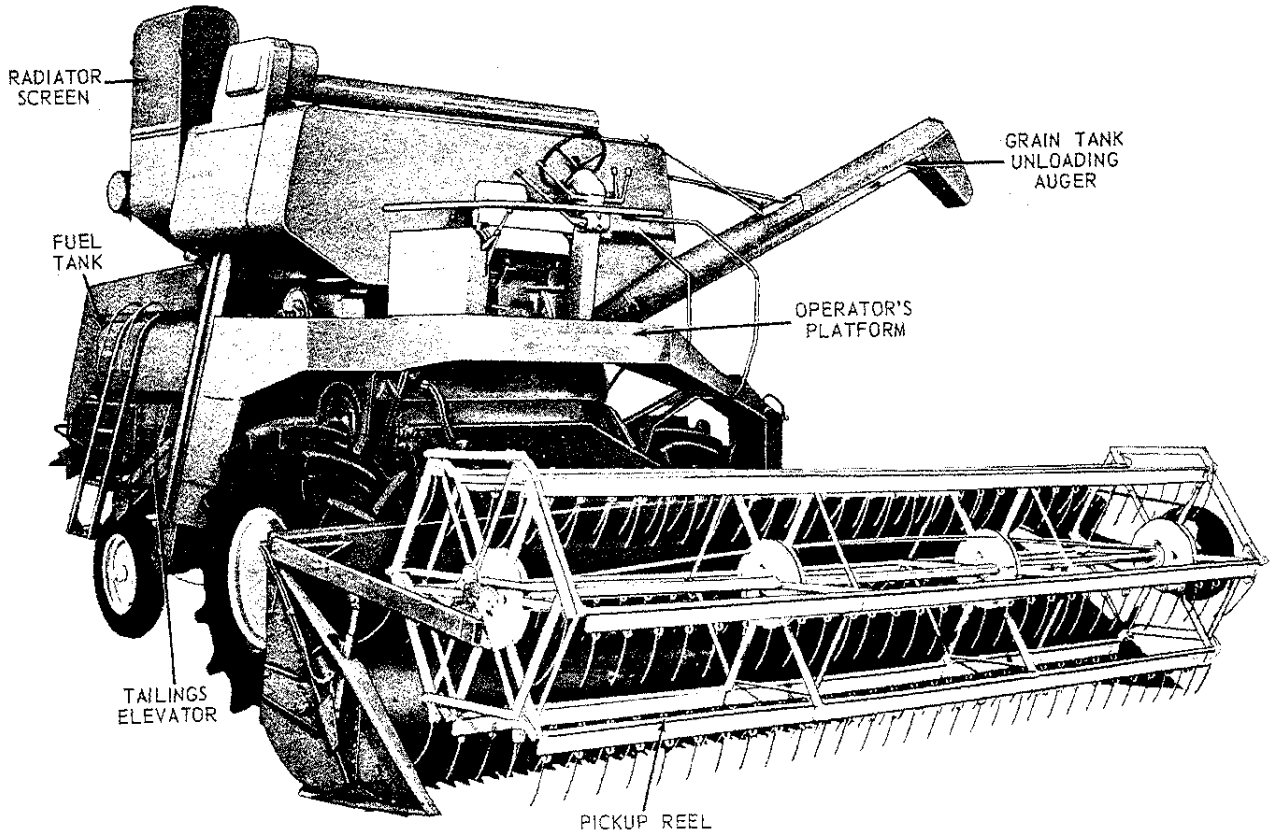
John Deere 95 Combine



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John Deere 105 Combine

SPECIFICATIONS

Description	55 Combine	95 Combine	105 Combine
CUTTER BAR			
Width of cut	12 ft., 13 ft., 14 ft. or 15 ft.	12 ft., 13 ft., 14 ft., 15 ft., 16 ft., 19 ft., or 20 ft.	12 ft., 13 ft., 14 ft., 15 ft., 16 ft., 19 ft., 20 ft., or 22 ft.
Length of cutter bar	6 inches less than width of cut	6 inches less than width of cut	6 inches less than width of cut
Type of knife sections	Heavy-duty over-serrated	Heavy-duty over-serrated	Heavy-duty over-serrated
REEL			
Drive	V-belt	V-belt	V-belt
Number of slats	4 regular; 3, 6 or 8 special	4 regular; 3, 6 or 8 special	4 regular; 3, 6 or 8 special
Diameter of reel	32 in. or 40 in.	32 in. or 40 in.	32 in. or 40 in.
Speed range	15.3 rpm to 56.9 rpm	15.8 rpm to 58.5 rpm	15.8 rpm to 58.5 rpm
Height control	Manual	Manual	Manual
CUTTING PLATFORM			
Type of feed	Auger	Auger	Auger
Cutting height range	2-7/8 inches below wheel level to 34-5/16 inches above	2-7/8 inches below wheel level to 34-5/16 inches above	2-7/8 inches below wheel level to 34-5/16 inches above
Height control	Hydraulic (2 cylinders)	Hydraulic (2 cylinders)	Hydraulic (2 cylinders)
CUTTING PLATFORM AUGER			
Diameter	20 in.	20 in.	20 in.
Type of auger fingers	Round retracting	Round retracting	Round retracting
BELT PICKUP PLATFORM			
Width	12 ft.	12 ft.	12 ft.
CYLINDER			
Type	Rasp bar or spike tooth	Rasp bar or spike tooth	Rasp bar or spike tooth
Width	30 in.	40 in.	49-1/2 in.
Diameter	22 in.	22 in.	22 in.
Number of bars	8-rasp bar or 10 spike tooth	8-rasp bar or 10 spike tooth	8-rasp bar or 10 spike tooth
Drive	Roller chain	Roller chain	Roller chain
Speed range	277 rpm to 1190 rpm	277 rpm to 1190 rpm	277 rpm to 1190 rpm
CONCAVE			
Type	12 bar open type or spike tooth type	12 bar open type or spike tooth type	12 bar open type or spike tooth type
Width	30 in.	40 in.	49-1/2 in.
BEATER			
Type	Wing (regular) Drum (optional	Drum	Drum
Width	30 in.	40 in.	49-1/2 in.
Diameter	12 in.	12 in.	12 in.
Speed	680 rpm	680 rpm	680 rpm

Description	55 Combine	95 Combine	105 Combine
SEPARATOR			
Type	Grain conveyor, straw walker	Grain conveyor, straw walker	Grain conveyor, straw walker
Width	30 in.	40 in.	50 in.
Length of separating surface	140 in. (straw walker pans extended)	140 in. (straw walker pans extended)	140 in. (straw walker pans extended)
Total separating area	4,200 sq. in.	5,600 sq. in.	6,930 sq. in.
GRAIN CONVEYOR			
Type	Slat	Slat	Channel Slat
Drive	Chain (CA 550 roller)	Chain (CA 550 roller)	Chain (CA 550 roller)
CLEANING FAN			
Type	5-bladed undershot	5-bladed undershot	5-bladed undershot
Drive	V-belt	V-belt	V-belt
Speed Range	602 rpm to 858 rpm	602 rpm to 858 rpm	550 rpm to 1050 rpm
CHAFFER			
Type	Adjustable	Adjustable	Adjustable
Width	28-1/2 in.	38-1/2 in.	48 in.
Length with extension	60-3/4 in.	60-3/4 in.	60-3/4 in.
Area	1,733 sq. in.	2,337 sq. in.	2,915 sq. in.
SIEVE			
Type	Adjustable	Adjustable	Adjustable
Width	28-1/2 in.	38-1/2 in.	48 in.
Length	45-1/4 in.	45 in.	45 in.
Area	1,291 sq. in.	1,734 sq. in.	2,163 sq. in.
CHAFFER EXTENSION			
Type	Adjustable	Adjustable	Adjustable
Width	28-1/2 in.	38-1/2 in.	48 in.
Length	12 in.	12 in.	12-5/16 in.
Area	342 sq. in.	462 sq. in.	591 sq. in.
TOTAL CLEANING AREA OF CHAFFER, SIEVE, AND CHAFFER EXTENSION	3,024 sq. in.	4,071 sq. in.	5,078 sq. in.
STRAW WALKERS			
Number	Three	Four	Five
Width	9-1/2 in.	9-1/2 in.	9-1/2 in.
Length with pans extended	123 in.	123 in.	123 in.
Area	3,690 sq. in.	4,920 sq. in.	6,089 sq. in.
Number of steps	Five	Five	Five
Drive	V-belt	V-belt	V-belt
Bearings	Oil-soaked maple	Oil-soaked maple	Oil-soaked maple
Extension pans	One on each walker	One on each walker	One on each walker
GRAIN TANK			
Capacity	65 bushel, approx.	80 bushel, approx.	100 bushel, approx.
Type of unloading	Hinged auger	Hinged auger	Hinged auger

Description	55 Combine	95 Combine	105 Combine
BRAKES Type	Individual, mechanical disk type	Individual, mechanical disk type	Individual, mechanical disk type
TRANSMISSION	Automotive - 4 speeds forward, 1 reverse	Automotive - 4 speeds forward, 1 reverse	Automotive - 4 speeds forward, 1 reverse
SHIPPING LENGTH	19 ft. 2 in.	19 ft. 2 in.	19 ft. 2 in.
SHIPPING WIDTH	9 ft. 2 in. (16.9-26 tires)	9 ft. 3 in. (18.4-26 tires)	9 ft. 11 in. (18.4-26 tires)
WEIGHT	9,800 lbs. with 14-ft. cutting platform	10,700 lbs. with 14-ft. cutting platform	12,100 lbs. with 16-ft. cutting platform
DIMENSIONS	See page 10	See page 10	See page 10

GROUND SPEED RANGE

55 COMBINE

14.9-26 Tires – Grain	(Min.)	(Max.)
1st GEAR	.7 to	1.6 mph
2nd GEAR	1.4 to	3.2 mph
3rd GEAR	2.9 to	6.4 mph
4th GEAR	5.8 to	12.9 mph
REVERSE	1.6 to	3.6 mph

16.9-26 Tires – Grain	(Min.)	(Max.)
1st GEAR	.7 to	1.7 mph
2nd GEAR	1.5 to	3.3 mph
3rd GEAR	3.0 to	6.7 mph
4th GEAR	6.0 to	13.4 mph
REVERSE	1.7 to	3.3 mph

18.4-26 Tires – Grain	(Min.)	(Max.)
1st GEAR	.8 to	1.8 mph
2nd GEAR	1.6 to	3.7 mph
3rd GEAR	3.3 to	7.3 mph
4th GEAR	6.5 to	14.7 mph
REVERSE	1.8 to	3.6 mph

18.4-26 Tires – Rice	(Min.)	(Max.)
1st GEAR	.7 to	1.6 mph
2nd GEAR	1.4 to	3.1 mph
3rd GEAR	2.8 to	6.3 mph
4th GEAR	5.6 to	12.7 mph
REVERSE	1.6 to	3.5 mph

23.1-26 Tires – Rice	(Min.)	(Max.)
1st GEAR	.7 to	1.8 mph
2nd GEAR	1.6 to	3.6 mph
3rd GEAR	3.2 to	7.2 mph
4th GEAR	6.4 to	14.4 mph
REVERSE	1.8 to	4.0 mph

Tracks – Rice	(Min.)	(Max.)
1st GEAR	.4 to	.9 mph
2nd GEAR	.8 to	1.8 mph
3rd GEAR	1.6 to	3.6 mph
4th GEAR	3.2 to	7.2 mph
REVERSE	.9 to	2.0 mph

GROUND SPEED RANGE

95 COMBINE

16.9-26 Tires – Grain	(Min.)		(Max.)
1st GEAR	.7	to	1.7 mph
2nd GEAR	1.5	to	3.3 mph
3rd GEAR	3.0	to	6.7 mph
4th GEAR	6.0	to	13.4 mph
REVERSE	1.7	to	3.3 mph

18.4-26 Tires – Grain	(Min.)		(Max.)
1st GEAR	.8	to	1.8 mph
2nd GEAR	1.6	to	3.7 mph
3rd GEAR	3.3	to	7.3 mph
4th GEAR	6.5	to	14.7 mph
REVERSE	1.8	to	3.6 mph

23.1-26 Tires – Grain	(Min.)		(Max.)
1st GEAR	.8	to	1.9 mph
2nd GEAR	1.7	to	3.8 mph
3rd GEAR	3.4	to	7.6 mph
4th GEAR	6.8	to	15.2 mph
REVERSE	1.9	to	3.8 mph

18.4-26 Tires – Rice	(Min.)		(Max.)
1st GEAR	.7	to	1.6 mph
2nd GEAR	1.4	to	3.1 mph
3rd GEAR	2.8	to	6.3 mph
4th GEAR	5.6	to	12.7 mph
REVERSE	1.6	to	3.5 mph

23.1-26 Tires – Rice	(Min.)		(Max.)
1st GEAR	.7	to	1.8 mph
2nd GEAR	1.6	to	3.6 mph
3rd GEAR	3.2	to	7.2 mph
4th GEAR	6.4	to	14.4 mph
REVERSE	1.8	to	4.0 mph

Tracks – Rice	(Min.)		(Max.)
1st GEAR	.4	to	.9 mph
2nd GEAR	.8	to	1.8 mph
3rd GEAR	1.6	to	3.6 mph
4th GEAR	3.2	to	7.2 mph
REVERSE	.9	to	2.0 mph

105 COMBINE

18.4-26 Tires – Grain	(Min.)		(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	1.4	to	3.1 mph

23.1-26 Tires – Grain	(Min.)		(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	1.4	to	3.3 mph

23.1-26 Tires – Rice	(Min.)		(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	1.5	to	3.6 mph

Tracks – Rice	(Min.)		(Max.)
1st GEAR	.4	to	.8 mph
2nd GEAR	.7	to	1.6 mph
3rd GEAR	1.4	to	3.2 mph
4th GEAR	2.8	to	6.4 mph
REVERSE	.8	to	1.8 mph

TIRE SIZES AND WHEEL TREAD DIMENSIONS

Drive Wheels

55 COMBINE

Combine	Tire Sizes	Center-to-Center Wheel Tread	
		Dished In	Dished Out
GRAIN	14.9-26 (8 ply) Cleat	78 in.	88 in.
	14.9-26 (6 ply) Low profile	78 in.	88 in.
	16.9-26 (8 ply) Cleat	80 in.	86 in.
	18.4-26 (6 ply) Cleat or low profile	80 in.	86 in.
	18.4-26 (6 ply) Cleat or low profile (16" wheel)	81 in.	. . . .
	23.1-26 (8 ply) Cleat (use with wide tread 7.50-18 tire)	90 in.	. . . .
RICE	18.4-26 (6 ply) Rice (16" rims)	81 in.	90 in.
	23.1-26 (8 ply) Rice (16" rims)	90 in.	. . . .
	23.1-26 (8 ply) Rice (20" rims)	94 in.	. . . .

95 COMBINE

GRAIN	16.9-26 (8 ply) Cleat (with H10135 Hub—optional)	84 in.	. . . .
	18.4-26 (10 ply) Cleat or low profile (use with 334 and 434 Corn Attachments) (with H10135 Hub)	85 in.	. . . .
	18.4-26 (6 ply) Cleat or low profile (with H10024 Hub—optional)	90 in.	. . . .
	23.1-26 (8 ply) Cleat or low profile	89 in.	. . . .
RICE	23.1-26 (8 ply) Rice	98 in.	. . . .

105 COMBINE

GRAIN	18.4-26 (10 ply) Cleat or low profile	97 in.	. . . .
	23.1-26 (8 ply) Cleat or low profile	101 in.	. . . .
RICE	23.1-26 (8 ply) Rice	108 in.	. . . .

Guide Wheels

55, 95 AND 105 COMBINES

Combine	Tire Sizes	Center-to-Center Wheel Tread	
		Narrow	Wide
GRAIN	6.00-16 (4 ply) Rib implement (55 and 95 only)	49 in.	66 in.
	6.50-16 (4 ply) Rib implement (55 and 95 only)	51 in.	68-1/2 in.
	7.50-16 (4 ply) Rib implement	51 in.	68-1/2 in.
	7.50-20 (4 ply) Rib implement (105 only)	48-1/2 in.	66 in.
	9.00-16 (4 ply) Low profile	53 in.	70 in.
RICE	7.50-18 (6 ply) Skid ring (55 and 95 only)	50 in.	67-1/2 in.
	7.50-20 (4 ply) Rib implement	48-1/2 in.	66 in.
	7.50-20 (6 ply) Skid ring (95 and 105 only)	48-1/2 in.	66 in.

See attachment section for information on drive wheel axle spacers.

CAPACITIES

Description	55 Combine	95 Combine	105 Combine
Fuel Tank	40 U.S. Gallons	40 U.S. Gallons	60 U.S. Gallons
Cooling System	8 U.S. Gallons	8 U.S. Gallons	8 U.S. Gallons
Engine Crankcase	10 U.S. Quarts	10 U.S. Quarts	9 U.S. Quarts
Transmission	14 U.S. Pints	14 U.S. Pints	14 U.S. Pints
Final Drives (2)	4-1/2 U.S. Pints each	4-1/2 U.S. Pints each	4-1/2 U.S. Pints each
Hydraulic Unit— (Including Lines and Cylinders)	12 U.S. Quarts	12 U.S. Quarts	12-1/2 U.S. Quarts

GASOLINE ENGINES

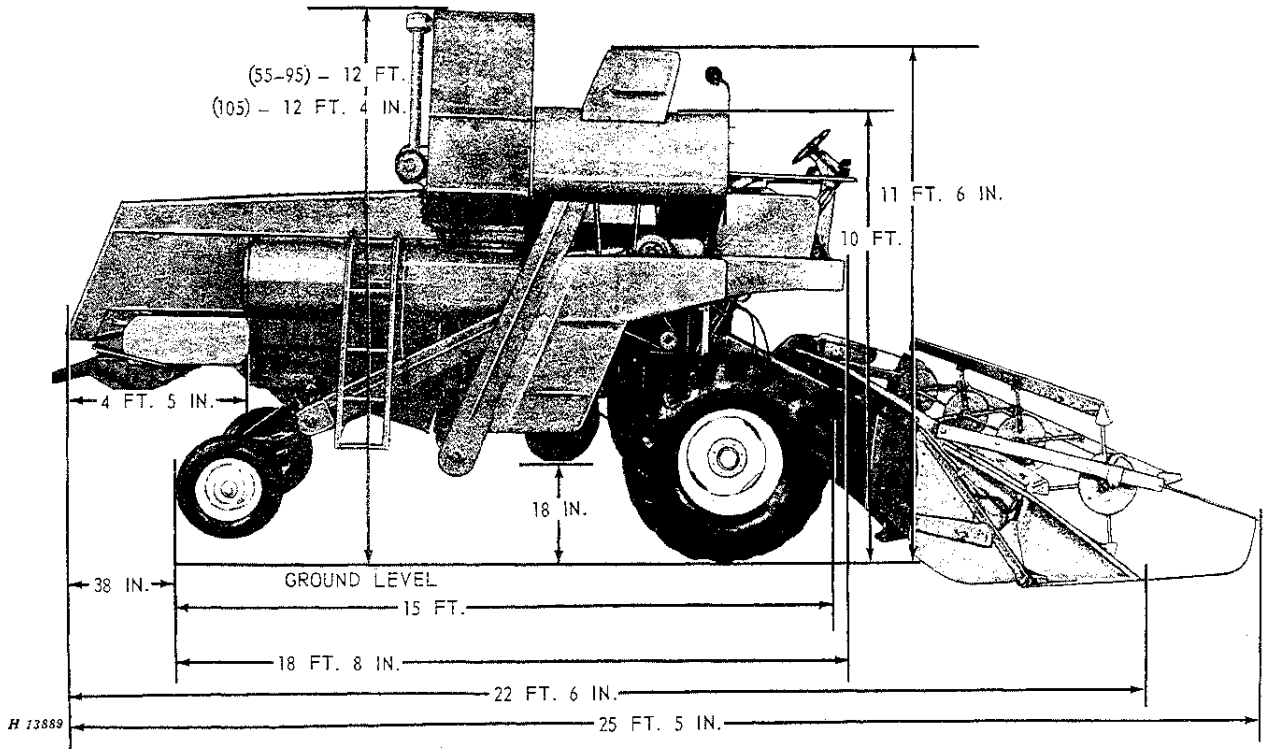
Description	55 Combine	95 Combine	105 Combine
Make and Model of Eng.	John Deere HB303G	John Deere HA303G	John Deere 341G 1H
Bore	3.86 In.	3.86 In.	4.25 In.
Stroke	4.33 In.	4.33 In.	4 In.
Brake Horsepower	72*	90*	100*
Number of Cylinders	6	6	6
Piston Displacement	303 Cu. In.	303 Cu. In.	341 Cu. In.
Maximum Load Speed	1900 rpm	2500 rpm	2200 rpm
Firing Order	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4
Crankcase	Cast Integral with Block	Cast Integral with Block	Cast Integral with Block
Type of Lubrication	Force Feed by Gear Pump	Force Feed by Gear Pump	Force Feed by Gear Pump
Valve Arrangement	Valve in Head	Valve in Head	Valve in Head
Valve Clearance:			
Intake	0.014 In.	0.014 In.	0.015 In. When Cold
Exhaust	0.022 In.	0.022 In.	0.028 In. When Cold
Make of Governor	John Deere	John Deere	Pierce
Make of Carburetor	Marvel-Schebler	Marvel-Schebler	Zenith
Air Cleaner	Dry Type	Dry Type	Dry Type
Spark Plug	Size: 14 mm-gap 0.025 in.	Size: 14 mm-gap 0.025 in.	Size: 18 mm-gap 0.025 in.
Electrical System	12 Volt	12 Volt	12 Volt
Cooling System	Water Pressure	Water Pressure	Water Pressure
Type of Fuel	Gasoline - Regular	Gasoline - Regular	Gasoline - Regular
Oil Filter	Full Flow	Full Flow	Full Flow
Type of Thermostat	180°F.	180°F.	160°F.

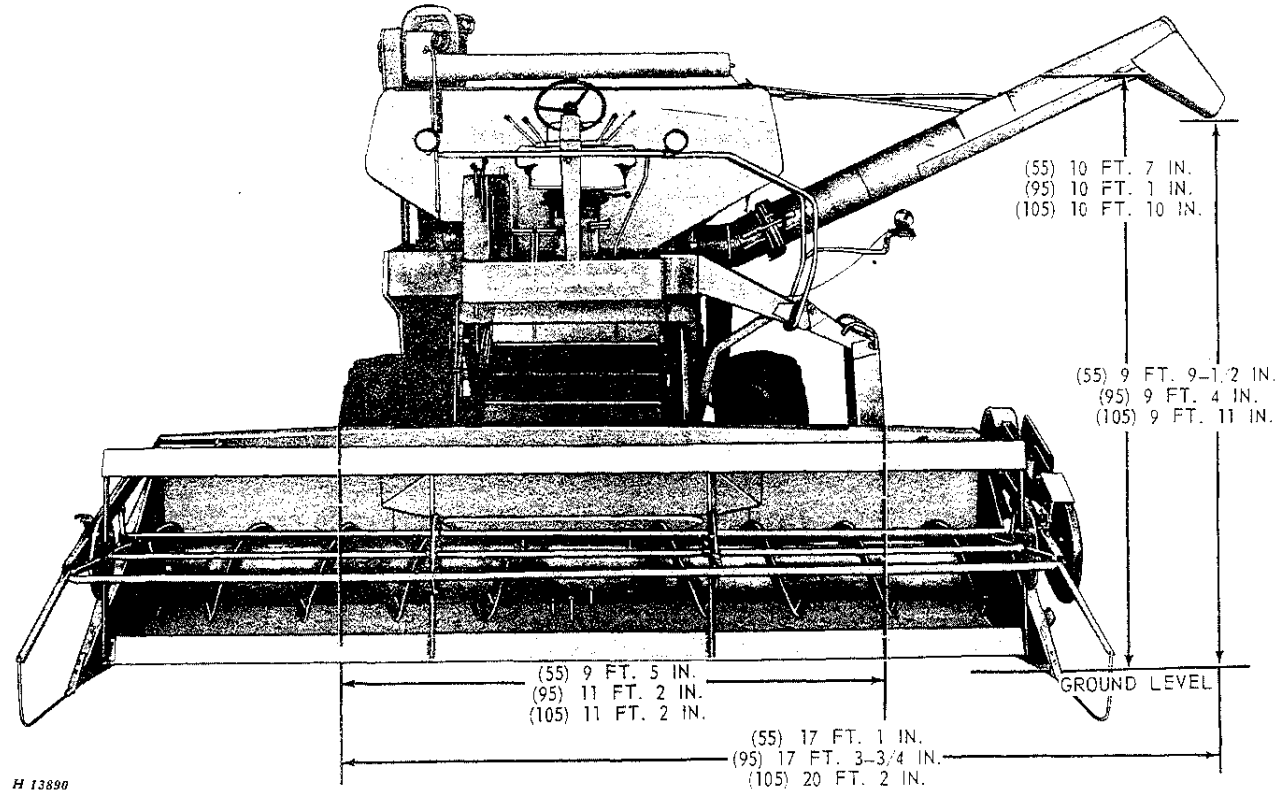
**Factory observed at 85°F. and 29.3 inches Hg. at 500 ft. above sea level.*

DIESEL ENGINES

Description	*55 Combine*	*95 Combine*	*105 Combines*
Make and Model of Engine	John Deere HB303D	John Deere HA303D	John Deere 404D-2H
Bore	3.86 In.	3.86 In.	4.25 In.
Stroke	4.33 In.	4.33 In.	4.75 In.
Brake Horsepower	72*	90*	100*
Number of Cylinders	6	6	6
Piston Displacement	303 Cu. In.	303 Cu. In.	404 Cu. In.
Maximum Load Speed	1900 rpm	2500 rpm	2200 rpm
Firing Order	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4
Crankcase	Cast Integral with Block	Cast Integral with Block	Cast Integral with Block
Type of Lubrication	Force Feed by Gear Pump	Force Feed by Gear Pump	Force Feed by Gear Pump
Valve Arrangement	Valve in Head	Valve in Head	Valve in Head
Valve Clearance:			
Intake	0.014 In.	0.014 In.	0.018 In. When Cold
Exhaust	0.018 In.	0.018 In.	0.018 In. When Cold
Make of Injection Pump	Roosa-Master	Roosa-Master	Roosa-Master
Make of Fuel Injection Nozzles	Roosa-Master	Roosa-Master	Roosa-Master
Air Cleaner	Dry Type	Dry Type	Dry Type
Electrical System	12 Volt	12 Volt	12 Volt
Cooling System	Water Pressure	Water Pressure	Water Pressure
Type of Fuel	No. 1-D or No. 2-D Diesel Fuel	No. 1-D or No. 2-D Diesel Fuel	No. 1-D or No. 2-D Diesel Fuel
Oil Filter	Full Flow	Full Flow	Full Flow
Type of Thermostat	190° F.	190° F.	180° F.

**Factory observed at 85° F. and 29.3 inches Hg. at 500 ft. above sea level.*

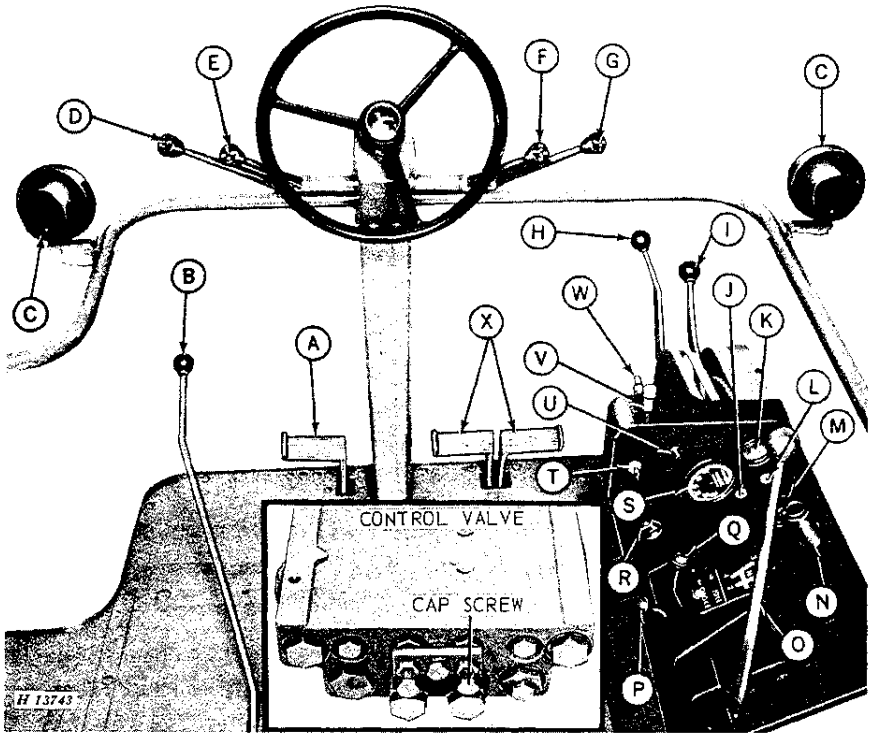




On combines equipped with operator's cab add approximately 24 inches to storage height.

CONTROLS AND INSTRUMENTS

Before attempting to operate your new combine, become familiar with the location and purpose of its controls and instruments. Study these pages carefully, regardless of your previous combine experience.



A – Clutch Pedal
B – Separator Throw-Out Lever
C – Field Light
D – Variable Speed Reel Control
E – Hydraulic Lift Reel Control
F – Cutting Platform Height Control
G – Selective Ground Speed Control
H – Grain Tank Unloading Lever
I – Concave Front Adjustment Lever
J – Parking Brake Warning Light
K – Temperature Gauge
L – Alternator Warning Light
M – Oil Pressure Gauge
N – Instrument Panel Light
O – Gearshift Lever
P – Choke–Gasoline Only
Q – Throttle
R – Light Switch
S – Tach-Hour Meter
T – Key Switch
U – Starter Button
V – Cutting Platform Throw-Out Switch
W – Parking Brake Lever
X – Brake Pedals

The combine controls are located on the operator's platform within easy reach of the operator. Those controls, whose purpose and function are obvious, will not be explained.

SEPARATOR THROW-OUT LEVER

Separator is engaged when lever is in forward position. To disengage, pull lever rearward.

CUTTING PLATFORM HEIGHT CONTROL

This lever controls the height of the platform. Move lever forward to lower platform; move lever rearward to raise platform. When released, the lever automatically returns to neutral position. As a safety measure, cutting platform height cannot be changed unless the engine is running.

The platform control valve has an adjustment to control speed of platform lowering. By turning in cap screw, located on the rear of the valve, the rate of lowering is decreased; by turning cap screw out, the rate of lowering is increased.

SELECTIVE GROUND SPEED CONTROL

To increase ground travel speed within a selected transmission range, move lever forward. The lever will automatically return to neutral position when released and speed will remain as selected.

GRAIN TANK UNLOADING LEVER

This lever engages the auger when pulled up. To disengage, move lever down. Grain tank unloading auger drive and separator drive are independent. If engine is running, separator can be stopped without affecting unloading of grain tank.

CONCAVE FRONT ADJUSTMENT LEVER

This lever controls the opening and closing of the front of the concave from the operator's platform. Move lever forward to open concave; move lever rearward to close concave.

TEMPERATURE GAUGE

This gauge indicates the coolant temperature in the cooling system—not the quantity. Normal operating temperature is 160° to 219° F. (indicated by green band on dial). If 219° F. or above (indicated by red band on dial) stop engine and determine cause.

ALTERNATOR WARNING LIGHT

This light indicates whether or not the alternator is charging. Should the light go on while the engine is running, alternator is not charging; stop engine and determine cause.

OIL PRESSURE GAUGE

This gauge indicates the pressure of the engine lubricating oil—not the amount of oil in the crankcase. Oil pressure will vary slightly with wear, but with recommended oil, it should read NORMAL at full governed speed (indicated by green band on dial). If oil pressure drops (indicated by red band on dial), stop immediately and determine cause.

GEARSHIFT LEVER

There are four speed ranges forward and one reverse range available. Positions of the gearshift lever for different transmission speed ranges are shown by diagram.

The clutch pedal must be fully depressed before gearshift lever can be shifted from one forward position to another.

Do not shift transmission into forward gear while machine is moving backward or possible damage will result in the shifting mechanism.

CAUTION: Make certain the gearshift lever is in neutral position and clutch pedal is fully depressed before starting engine.

CHOKE - GASOLINE ONLY

Move choke control all the way forward when starting engine. After engine is started, and for normal operation, move choke control all the way rearward.

THROTTLE

Move throttle one quarter forward when starting engine. Move throttle all the way forward for normal operation; move throttle all the way rearward for slow idle.

LIGHT SWITCH

This switch operates both the field and safety lights.

Turn switch to first detent right for field lights only. Turn switch to second detent right for both field and safety lights.

CUTTING PLATFORM THROW-OUT SWITCH

(Special - 55 and 95 Combines; regular 105 Combines)

This switch operates the electromagnetic throw-out clutch which permits instant stopping of the cutting platform and feeder while the separator continues to run.

Push switch down to disengage drive, then when trouble has been taken care of, push switch down again to engage drive.

PARKING BRAKE LEVER

The parking brake lever is used to lock the wheel brakes so the combine cannot move if left unattended. To engage, pull lever rearward. To disengage, push button in and move lever forward.

Never attempt to move combine with parking brake lever engaged.

Suggest:

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Thank you so much for reading

OPERATION

FUNDAMENTALS OF COMBINE HARVESTING

The most important factor in harvesting, is for the operator to have a thorough understanding of the fundamentals of combine operation.

These fundamentals in brief are:

Be sure crop is in condition to thresh—moisture content not too high—straw not too green, etc.

In making the first round of the field, keep the combine forward speed as slow as possible to reduce the volume of material entering the combine. Always run the engine at full throttle to keep the combine mechanism up to full speed, thus guarding against slugging and clogging. Use the selective ground speed drive to obtain slower speed or shift to a lower gear if necessary—but do not throttle down the engine.

Select a ground speed that will not overload the combine.

Engine should be in good condition—governor should be properly set and responsive enough to accelerate quickly if an overload occurs.

Keep the cylinder speed as low as possible and concave clearance as high as possible to remove the maximum amount of grain from head without breaking up the straw excessively. Maintain correct beater speed to guard against wrapping of straw on beater.

Cut the crop as high as possible without excessive loss of low grain heads. If the straw is down and tangled, it may be desirable to use lifting guards. Slow travel speed is imperative.

Adjust the reel position and speed for even feeding.

Regulate adjustable chaffer openings to pass the grain or seed to the lower sieve before it has passed over two-thirds the length of chaffer without admitting too much coarse material.

Close adjustable sieve as far as possible without carrying clean grain into the tailings auger.

If material loads up on front of chaffer, adjust upper windboard to throw air blast to front of shoe.

Use as much air as possible without blowing over clean seed. If the grain or seed is unusually light, it may be necessary to reduce the volume of air. In heavy seeds, increase the volume of air.

Keep amount of tailings as low as possible.

OPERATING SUGGESTIONS

Don't start combining until the crop is ripe.

Unless crop drying equipment is available, a crop should not be combined until it is dead ripe. If the threshed grain feels damp or is easily dented with the fingernail, the moisture content is usually too high for safe storage.

Grain crops containing 14 per cent moisture or less are usually considered dry enough for safe storage. A John Deere Moisture Meter for checking moisture content of grain and a portable Grain Dryer can be purchased from your John Deere dealer, or arrangements can usually be made at the local grain elevator for necessary moisture tests and drying if necessary.

OPERATION IN WEEDY CONDITIONS

Combining in fields where weeds are numerous is particularly troublesome as they tend to gum up the sieves. Also, the moisture in the seeds is imparted to the grain.

The following suggestions will help while operating in weedy conditions.

Cut the crop as high as possible to avoid weeds and undergrowth.

Check to see that the cylinder is operating at proper speed.

Use as much air blast on the shoe as possible without blowing over grain.

Lower rear end of chaffer.

HEIGHT AND WIDTH OF CUT

The cutting platform has a cutting height range from 2.9 inches below wheel level to 34.3 inches above wheel level on grain combines, and from 9.5 inches below wheel level to 33.5 inches above wheel level on rice combines. Cut just low enough to get all grain heads. Watch the height and condition of crop and continually raise and lower the cutting platform to meet conditions. If the crop is extremely heavy and badly down, it may be necessary to cut less than a full swath or reduce travel speed.