55 HI-LO COMBINES

JOHN DEERE

OPERATORS MANUAL

55 HI-LO
COMBINES

OMH90738 (01NOV62) English

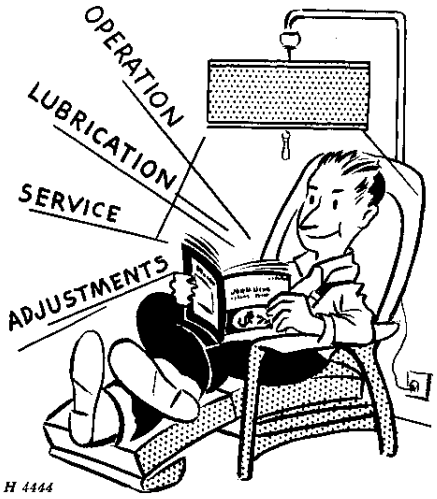
OMH90738 (01NOV62)

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. We are confident that you will receive years of dependable, economical service from your John Deere Self-Propelled Combine.

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.



Study This Manual Carefully, Keep it Handy, in a Safe Place, for Future Reference.

LOCATION REFERENCE

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

"Clockwise" refers to parts turning to the right like the hands of a clock. "Counter-clockwise" refers to parts turning to the left.

ENGINE REFERENCE ONLY

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

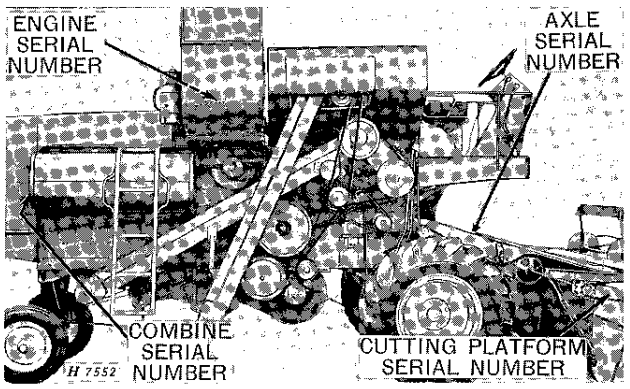
KEEP YOUR COMBINE A JOHN DEERE COMBINE

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.

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.



Record the serial numbers and date purchased in the spaces provided on this page.

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._____

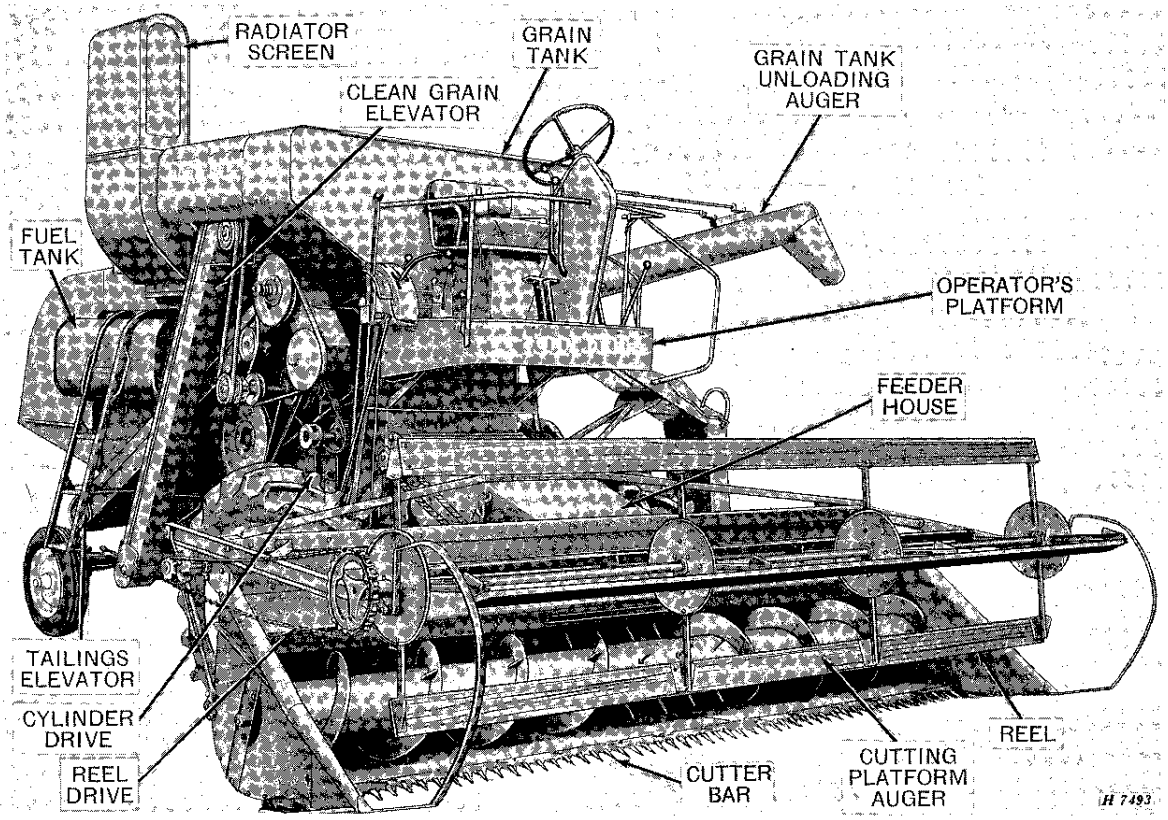
Engine Serial No._____

Axle Serial No._____

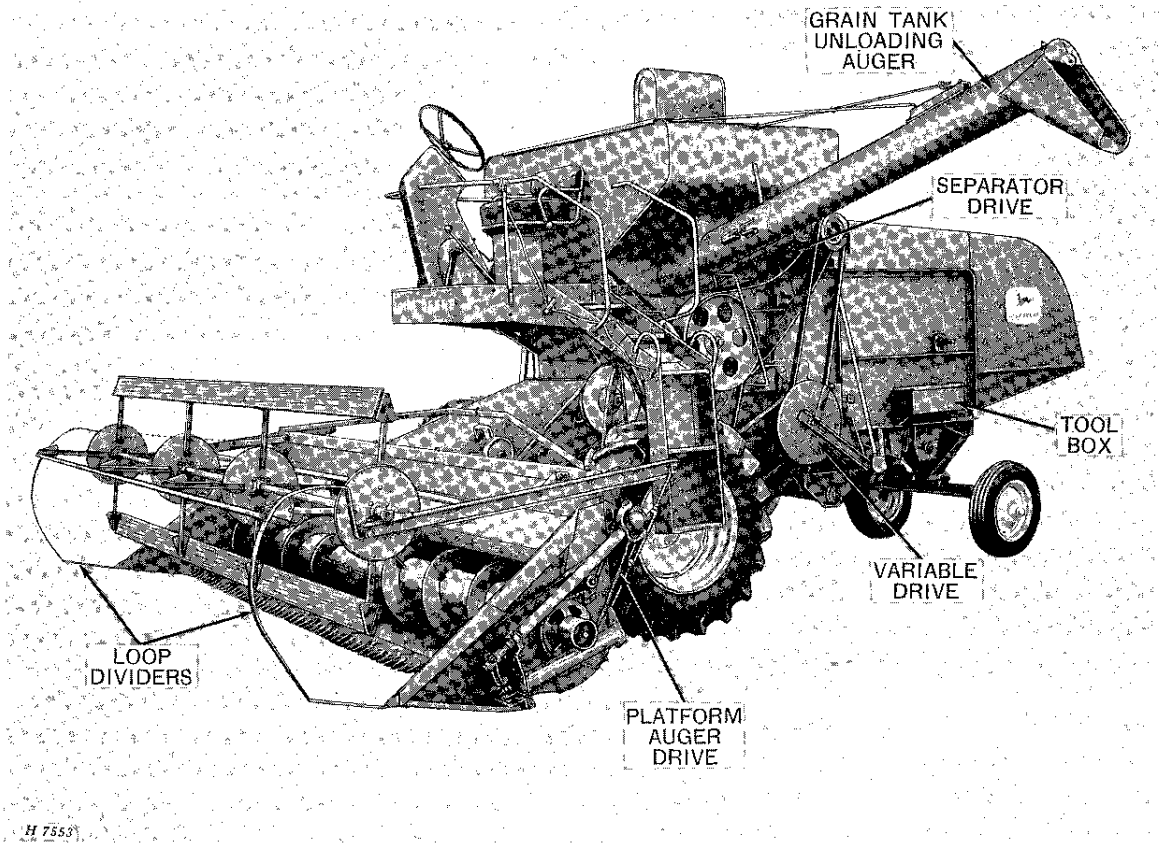
Cutting Platform Serial No._____

Date Purchased_____

Operator's Manual Price $



Right-Hand Front View—John Deere 55 Grain Tank Combine



Left-Hand Front View—John Deere 55 Grain Tank Combine

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SPECIFICATIONS

COMBINE

Cutter Bar
- Width of Cut.... 12 Ft. or 13 Ft., or 14 Ft.
- Length of Cutter Bar.... 11 Ft. 6 In. or 12 Ft. 6 In. or 13 Ft. 6 In.
- Type of Knife Sections. Heav-Duty Over-Serrated

Reel
- Drive..... Chain
- No.of Slats. 4 Regular; 3, 6, or 8 Special
- Dia. of Reel.... 32 In. or 40 In.
- Speed Range 18.5 rpm to 51.5 rpm

Cutting Platform
- Type of Feed... Auger
- Range of Cutting Height (Grain) (15-26 Tires).. 2-1/2 In. Below Wheel Level to 35 In. Above
- Range of Cutting Height (Rice) (18-26 Tires).. 2-1/2 In. Below Wheel Level to 38 In. Above
- Height Control. Hydraulic (2 Cylinders)

Cutting Platform Auger
- Diameter. 18 In.
- Dia. of Auger Tube. 10 In.
- Type of Auger Fingers. Round Retracting

Cylinder
- Type..... Rasp-Bar or Spike-Tooth
- Width.... 30 In.
- Diameter. 22 In.
- Number of Bars.... 8 Rasp-Bars or 10 Spike-Tooth Bars (5 Bars with 15 Teeth and 5 Bars with 14 Teeth)
- Drive..... Roller Chain
- Speed Range.. 196 rpm to 1190 rpm

Concave
- Type..... 12-Bar Open Type or Spike-Tooth Type
- Width.... 30 In.

Beater (Behind the Cylinder)
- Type..... Wing (Regular) Drum (Optional)
- Width.... 30 In.
- Diameter. 12 In.
- Speed.... 680 rpm

Separator
- Type..... Grain Conveyor, Straw Walker
- Width.... 30 In.
- Length of Separating Surface.... 140 In. (Straw Walker Pans Extended)
- Area of Separating Surface.... 4,200 Sq. In.

Grain Conveyor
- Type..... Slat
- Drive..... Chain

Cleaning Fan
- Type..... 5-Bladed Undershot
- Drive..... V-Belt
- Speed Range.. 602 rpm to 858 rpm

Chaffer
- Type..... Adjustable, No. 2, No Choke, Corn, or Petersen Adjustable
- Width.... 28-1/2 In.
- Length with Extension... 60-3/4 In.
- Area..... 1,733 Sq. In.

Sieve
- Type..... Adjustable
- Width.... 28-1/2 In.
- Length... 45-1/4 In.
- Area..... 1,291 Sq. In.

Chaffer Extension
- Type..... Adjustable
- Width.... 28-1/2 In.
- Length... 12 In.
- Area..... 342 Sq. In.

Total Cleaning Area of Chaffer, Sieve and Chaffer Extension.... 3,024 Sq. In.

Straw Walkers
- Number.. Three
- Width.... 9-1/2 In.
- Length with Pans Extended. 123 In.
- Area..... 3,690 Sq. In.
- Number of Steps... Five
- Drive..... V-Belt
- Bearings.. Oil-Soaked Maple
- Extension Pans... One on Each Walker

Grain Tank
- Capacity.. 55-Bushel, Approx. (Type and Condition of Crop Will Determine Actual Volume)
- Capacity with Grain Tank Extensions (Special Equipment).. 65-Bushel
- Type of Unloading..... Hinged Auger

Brakes
- Type..... Individual, Mechanical Disk-Type

Transmission..... Automotive—4 Speeds Forward, 1 Reverse

Weights
- Grain Combine with 12-Ft. Cutting Platform..... 8,700 Lbs. (Approx.)
- Rice Combine with 12-Ft. Cutting Platform..... 9,600 Lbs. (Approx.)

Dimensions .... See Pages 6–7

SELECTIVE GROUND SPEED CONTROL RANGE

14.9-26 (13-26) Tires—Grain Drive

	(Min.)	(Max.)
1st Gear	.65 to	1.46 mph
2nd Gear	1.31 to	2.94 mph
3rd Gear	2.62 to	5.88 mph
4th Gear	5.26 to	11.79 mph
Reverse	1.82 to	4.07 mph

16.9-26 (14-26) Tires—Grain Drive

	(Min.)	(Max.)
1st Gear	.70 to	1.50 mph
2nd Gear	1.34 to	3.01 mph
3rd Gear	2.69 to	6.03 mph
4th Gear	5.39 to	12.10 mph
Reverse	1.86 to	4.18 mph

18.4-26 (15-26) Tires—Grain Drive

	(Min.)	(Max.)
1st Gear	.71 to	1.60 mph
2nd Gear	1.43 to	3.21 mph
3rd Gear	2.87 to	6.43 mph
4th Gear	5.75 to	12.90 mph
Reverse	1.99 to	4.45 mph

18.4-26 (15-26) Tires—Rice Drive

	(Min.)	(Max.)
1st Gear	.61 to	1.38 mph
2nd Gear	1.23 to	2.81 mph
3rd Gear	2.46 to	5.53 mph
4th Gear	4.94 to	11.09 mph
Reverse	1.70 to	3.81 mph

23.1-26 (18-26) Tires—Rice Drive

	(Min.)	(Max.)
1st Gear	.70 to	1.57 mph
2nd Gear	1.40 to	3.15 mph
3rd Gear	2.81 to	6.31 mph
4th Gear	5.64 to	12.64 mph
Reverse	1.94 to	4.35 mph

Tracks—Rice Drive

	(Min.)	(Max.)
1st Gear	.31 to	.69 mph
2nd Gear	.62 to	1.39 mph
3rd Gear	1.24 to	2.77 mph
4th Gear	2.48 to	5.56 mph
Reverse	.85 to	1.91 mph

TIRE SIZES

Main Wheels

Grain	14.9-26 (13-26) 6 Ply Cleat or Low Profile
Grain	16.9-26 (14-26) 6 Ply Cleat or Low Profile
Grain	18.4-26 (15-26) 6 Ply Cleat or Low Profile (16″ Rims)
Rice and Bean	18.4-26 (15-26) 6 Ply Rice (16″ Rims)
Rice	23.1-26 (18-26) 8 Ply Cleat (Use with wide tread and 7.50-18 tires only)
Rice	23.1-26 (18-26) 8 Ply Rice (16″ Rims)
Rice	23.1-26 (18-26) 8 Ply Rice (20″ Rims)
Rice Crawler	16-Inch Tracks

Guide Wheels

(Grain and Bean)	6.00-16 Rib Implement
(Grain)	6.50-16 Rib Implement
(Grain)	7.50-16 Rib Implement
(Grain, Bean, and Rice)	7.50-18 Skid Ring
(Rice)	7.50-20 Rib Implement
(Rice Crawler)	7.50-20 Rib Implement

MAIN WHEEL TREAD

Combine	Tire Size	Spacers	Center-to-Center Drive Wheel Tread
55 Grain (Dished In)	13-26	No	76 Inches
55 Grain (Dished Out)	13-26	No	89-13/16 Inches
55 Bean (Dished In)	15-26 on 16″ Rim	Yes	82 Inches
55 Bean (Dished In)	15-26 on 16″ Rim	No	73 Inches
55 Bean (Dished Out)	15-26 on 16″ Rim	Yes	90 Inches
55 Bean (Dished Out)	15-26 on 16″ Rim	No	81 Inches
55 Rice (Dished Out)	18-26 on 16″ Rim	Yes	90 Inches
55 Rice (Dished Out)	18-26 on 20″ Rim	Yes	94 Inches
55 Rice Crawler	Tracks	...	114-11/16 Inches

CAPACITIES

(Approx.)

Fuel Tank	40 U.S. Gallons
Cooling System (Radiator)	6 U.S. Gallons
Engine Crankcase (Including Oil Filter)	7 U.S. Quarts
Air Cleaner	1 U.S. Quart
Hydraulic Unit (Including Hydraulic Oil Lines and Cylinders):	
Regular Steering	8 U.S. Quarts
Power Steering	11 U.S. Quarts
Transmission	14 U.S. Pints
Final Drive (2)	4-1/2 U.S. Pints (in each)

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—HE-217-G
Bore	3-5/8 In.
Stroke	3-1/2 In.
Brake Horsepower*	71
Number of Cylinders	6
Piston Displacement	217 Cu. In.
Max. Load Speed	2200 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	Marvel-Schebler
Spark Plug	Champion H-10 or Auto-Lite AL-7 or AC-45L Gap .025-In. Heat Range 1200° to 1500°F.
Electrical System	12-Volt (Two 6-Volt Batteries)
Cooling System	Water Pressure Type
Type of Fuel	Gasoline (Regular Grade)

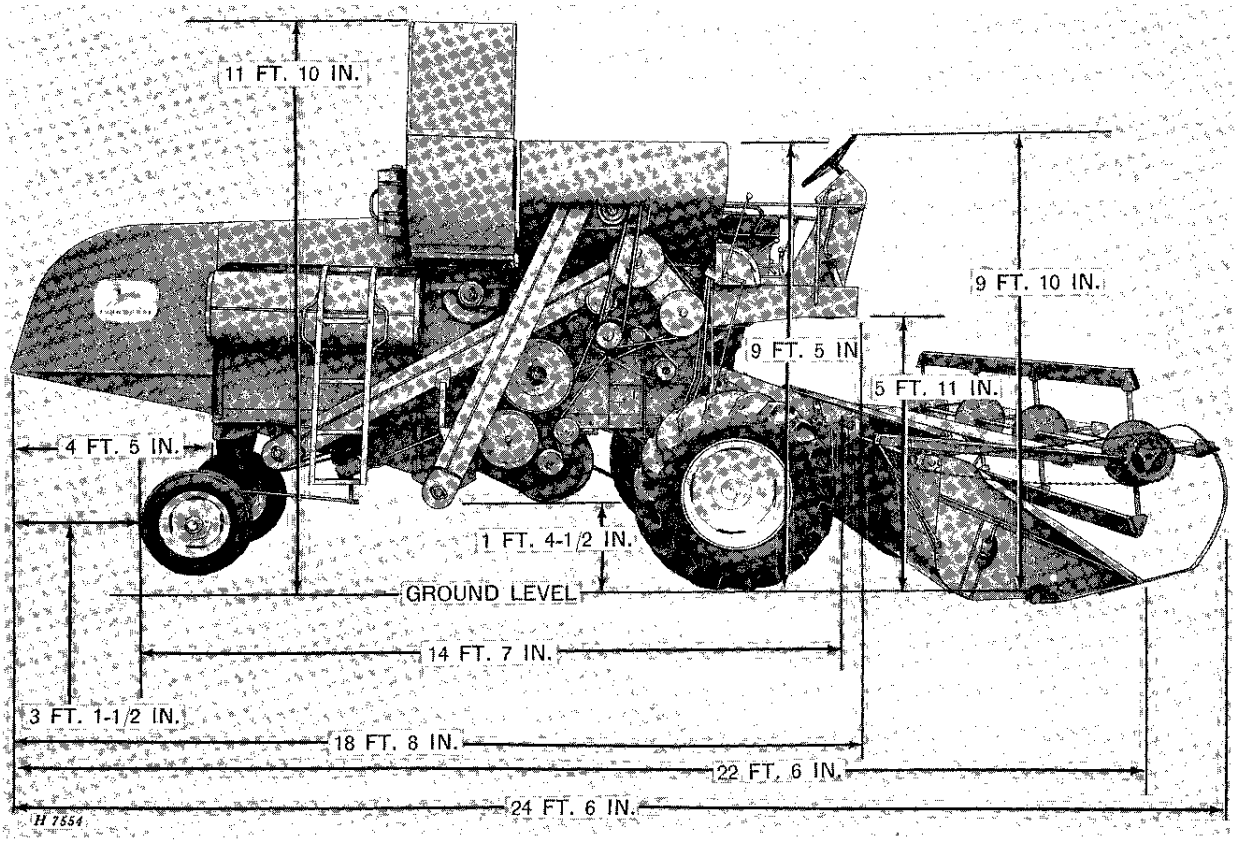
**Calculated at 60° F. and 29.92 inches Hg. at Sea Level.*

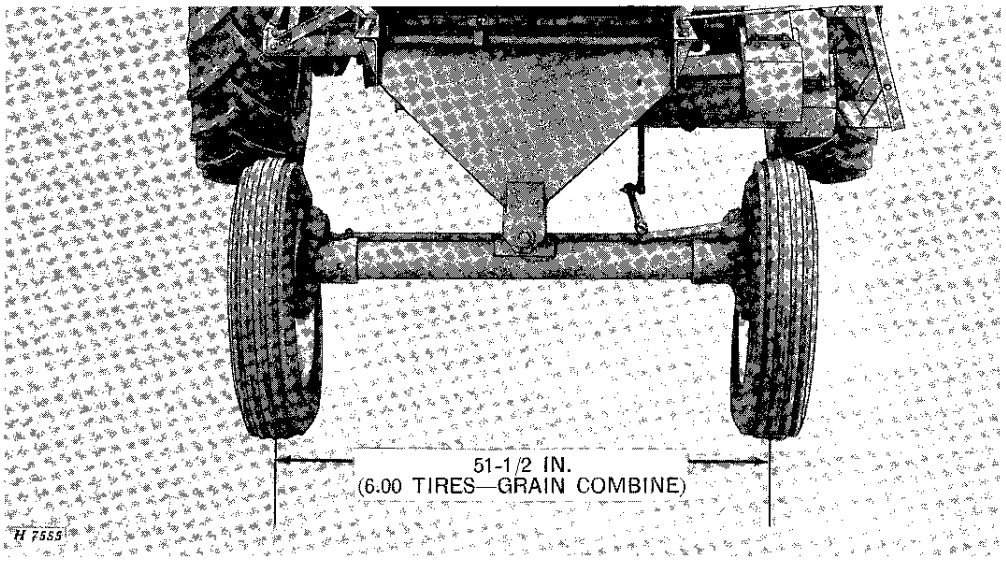
SPECIAL EQUIPMENT AVAILABLE

(Specifications and design subject to change without notice.)

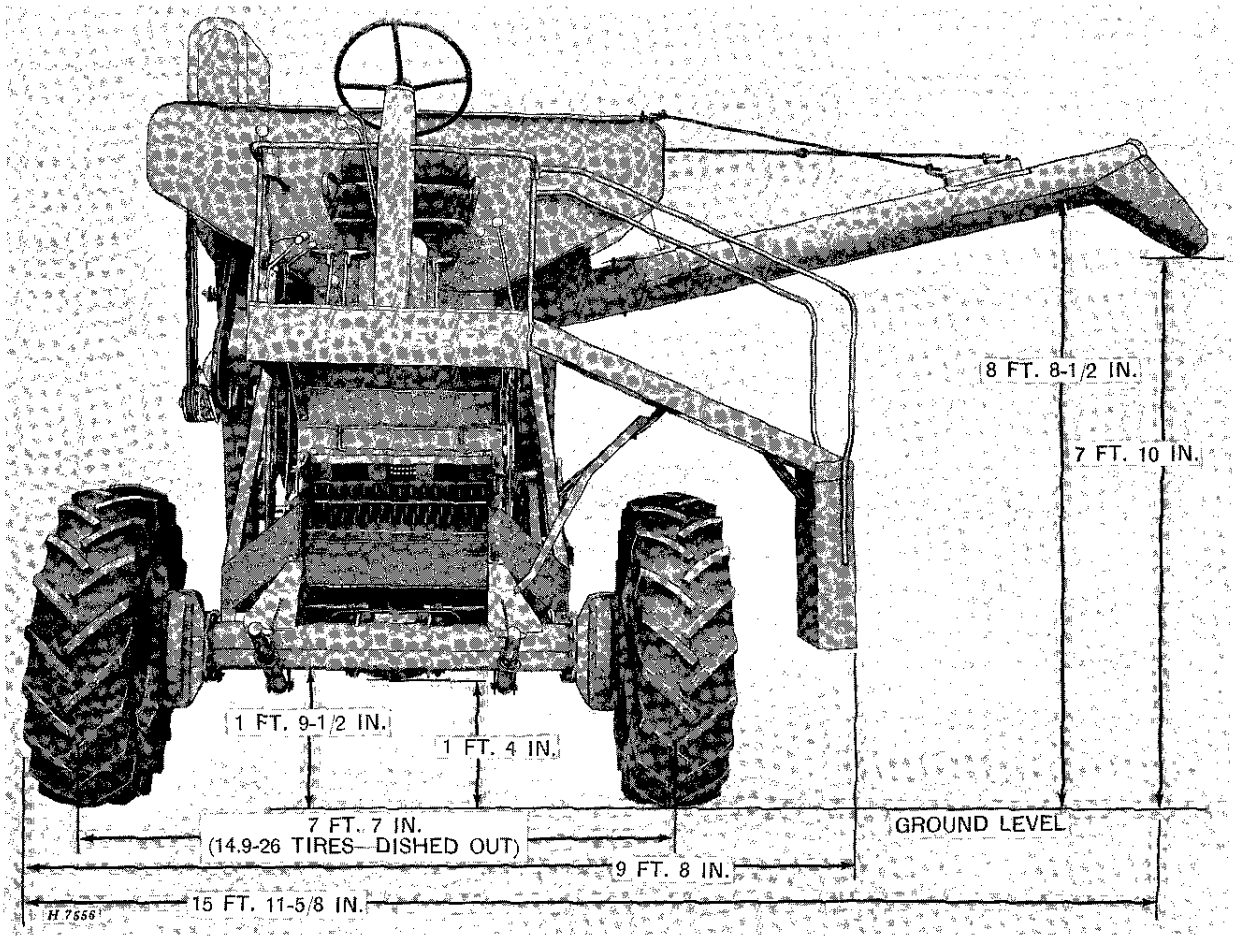
COMBINE DIMENSIONS—OVER-ALL

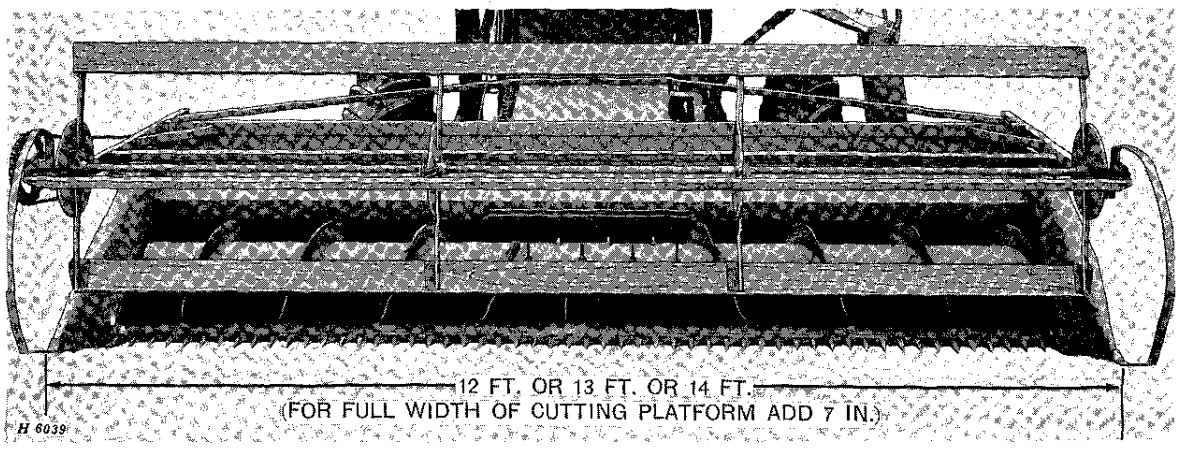
NOTE: Combine equipped with 14.9-26 (13-26) main wheel tires and 6.00-16 guide wheel tires for dimensions





COMBINE DIMENSIONS—OVER-ALL—Continued





OPERATION

KNOW YOUR COMBINE!

Before operating the combine, be sure to read this manual carefully. The Operation section will make you thoroughly acquainted with the function of all working units of the John Deere 55 Combine.

A cross-sectional view is provided on page 13, showing exactly what happens to the grain from the time it enters the cutting platform until it is delivered to the grain tank.

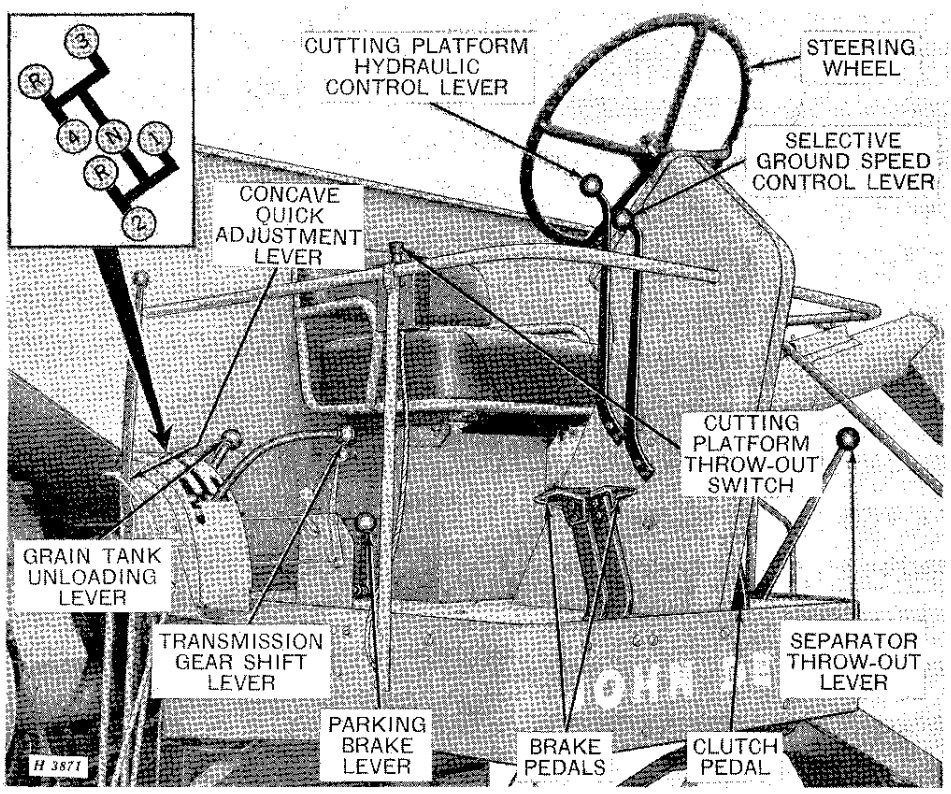
The Adjustments and Service section of this manual will help you to become familiar with the adjustments and service procedures necessary to obtain the best results.

Make this Operator's Manual your guide. Follow its recommendations, regardless of what may have been your practice with other combines.

Special attachments are described and illustrated throughout the manual. When an attachment requires operating and servicing instructions, these instructions will be furnished with the attachment.

Genuine John Deere parts for this combine can be obtained from your John Deere dealer. Always give him your combine serial number when ordering parts.

COMBINE CONTROLS



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.

TRANSMISSION GEARSHIFT LEVER

There are four speed ranges forward and one reverse range (with two positions). Positions of gearshift lever for different transmission speed ranges are shown by diagram.

CAUTION: Be certain the gearshift lever is in neutral position before starting engine.

GRAIN TANK UNLOADING LEVER

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

SEPARATOR THROW-OUT LEVER

This lever is disengaged when in forward position. To engage, pull lever rearward.

SELECTIVE GROUND SPEED CONTROL LEVER

To increase ground travel speed within a selected transmission range, move lever forward. It will automatically return to neutral position when released and speed will remain as selected. Ground travel speeds from .65 to 11.79 mph (14.9-26 tires) are available at governed engine speed. Separator speed remains constant.

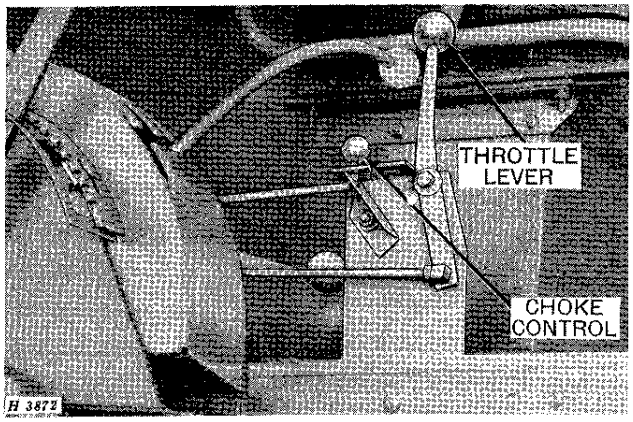
CUTTING PLATFORM HEIGHT CONTROL LEVER

This lever controls the height of the platform through a hydraulic mechanism. Platform height range is from 2-1/2 inches below wheel level to 35 inches above wheel level on grain combines, and from 2-1/2 inches below wheel level to 38 inches above wheel level on rice combines. Move lever forward to lower platform; pull lever rearward to raise platform. When released, lever automatically returns to neutral position and platform remains at selected position. As a safety measure, platform height cannot be changed unless engine is running.

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 disgage, move lever forward.

Never attempt to move combine with parking brake lever engaged.



THROTTLE CONTROL LEVER

Move lever one-quarter forward to start engine. Move lever all the way forward for normal operation (fast idle); all the way rearward for slow idle.

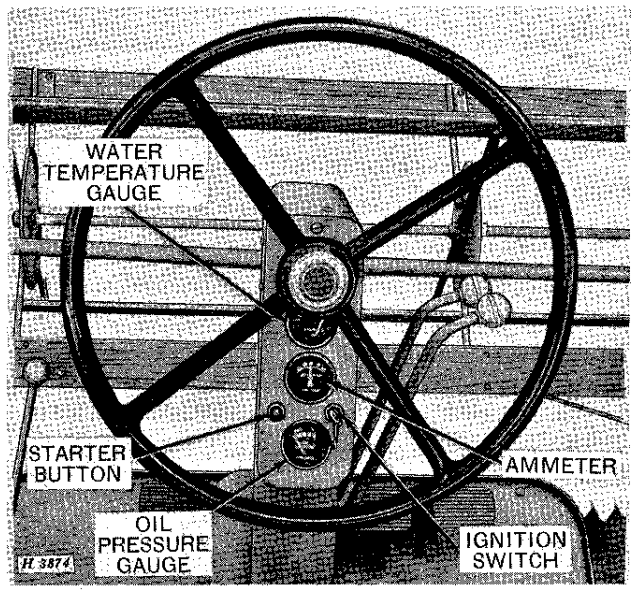
CHOKE CONTROL

Lift choke control to operate. Pull all the way forward to start engine. After engine is started, and for normal operation, push all the way rearward.

CUTTING PLATFORM THROW-OUT SWITCH (Optional Equipment)

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. When trouble has been taken care of, push switch down again to engage drive.



WATER TEMPERATURE GAUGE

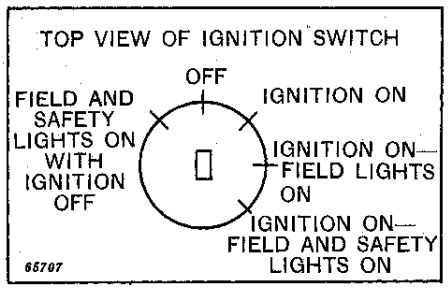
This gauge indicates the water temperature in the cooling system—not the quantity. Normal operating temperature is 160° to 200°F. (Indicated by green band on dial). If 200°F. or above (Indicated by red band on dial) stop engine and determine cause.

AMMETER

This gauge indicates the rate of charge or discharge of the batteries. If ammeter shows discharge for an extended period during normal operation, check for a ground, short circuit, or faulty regulator. If ammeter shows high charge continually, inspect for low batteries, faulty connections, low battery water, or bad regulator.

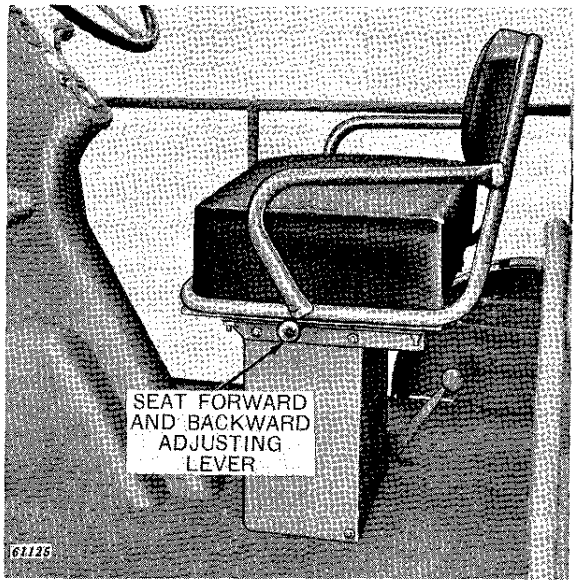
OIL PRESSURE GAUGE

This gauge indicates the pressure of engine lubricating oil. Oil pressure will vary slightly but with recommended oil it should read NORMAL at full governed speed. If oil pressure drops, **stop immediately and determine cause.**

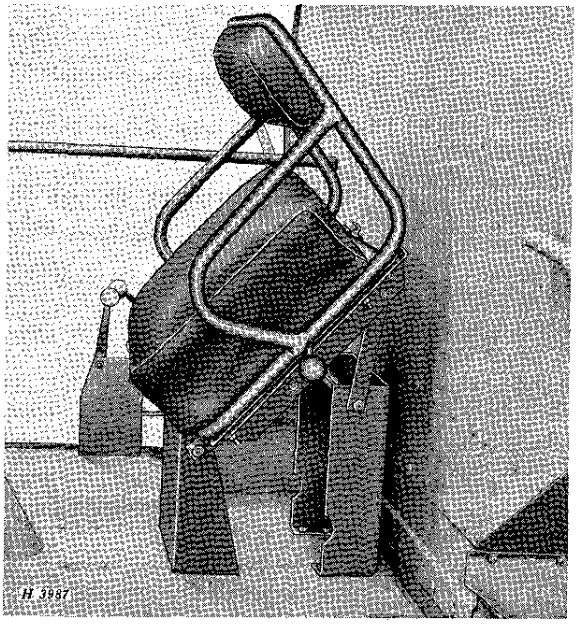


Top View of Ignition Switch

OPERATOR'S SEAT



Operator's Seat—Non-Fold-Up Type



Operator's Seat—Fold-Up Type

The John Deere 55 Combine can be equipped with a non-fold-up, or a fold-up type seat. The non-fold-up type can be moved forward or rearward by a slight touch on the adjusting lever conveniently located at the left-hand side of the seat. The operator can move the seat back against the grain tank if he desires to work in a standing position.

The fold-up type seat can be moved forward and rearward, and also can be folded back into a vertical position against the grain tank should the operator desire to work in a standing position.

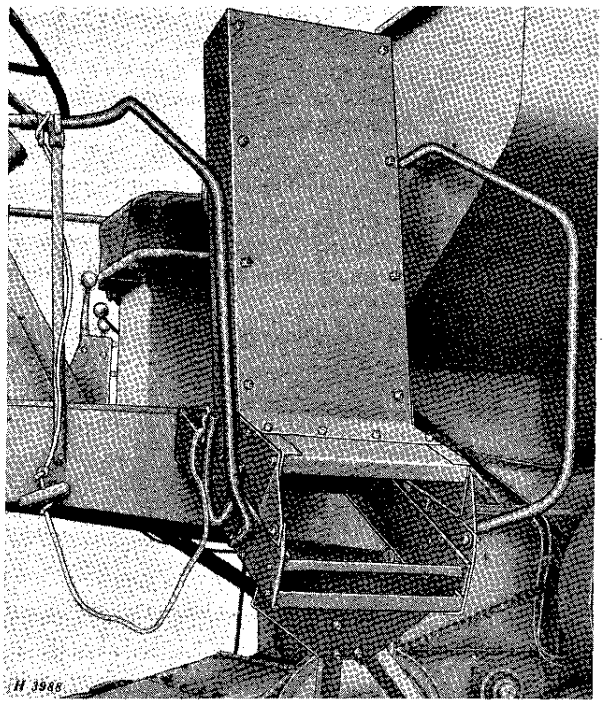
SEAT ARM CUSHIONS (Special Equipment)

Foam rubber seat arm cushions are available as special equipment designed to add to the riding comfort of your combine.

The seat arm cushions are held in place by U-shaped steel spring clips. Installation is accomplished by hand-pressing the clips over the seat arms—no holes to drill—no hardware necessary.

Order shipping package AA6022R, one pair of seat arm cushions from your John Deere dealer.

OPERATOR'S PLATFORM HINGED LADDER (Optional Equipment)



Hinged Ladder in Retracted Position

The hinged ladder must be installed when combining corn or castor beans.

IMPORTANT: When lowering the hinged ladder, always use the rope provided so the ladder may be lowered slowly. Do not allow the ladder to drop, as damage may result.

CAUTION: When lowering the hinged ladder, always be certain that no one is standing where he might be struck by the ladder.

COMBINE AND ENGINE BREAK-IN

COMBINE

Check all V-belt drives carefully for proper alignment and tension. Keep belts tight enough to prevent slippage. Belts can be ruined very quickly if allowed to slip in the grooves of a sheave for any length of time. Excessive heating of a sheave is a sign of belt slippage. New belts will stretch slightly after the first run-off. Check tension frequently.

Open the clean-out doors in the bottom of the clean grain and tailings elevators and check tension of elevator chains—see page 67 for adjustments. It is a good plan to check the chain tension every day of operation.

Be certain all shafts turn freely.

After 50 hours of operation, drain the oil from the transmission and final drives. Fill with oil as specified in the lubrication section of this manual.

Follow the lubrication instructions and charts closely.

ENGINE

Your new engine and hydraulic system was shipped from the factory with a special "breaking-in" oil in the crankcase and hydraulic reservoir.

Do not allow the engine to operate at slow idle for any prolonged period as part of a break-in procedure, as doing so does not permit good piston ring seating which may promote oil consumption in the future.

After 20 hours of operation, drain the special "breaking-in" oil from the crankcase and hydraulic system. Replace the engine oil filter and clean the hydraulic reservoir oil filter (if combine is equipped with power steering). Fill with the proper viscosity of oil as specified in the lubrication section of this manual.

An ounce of care can prevent a pound of cure—service your equipment at recommended intervals, using correct lubricant.

BEFORE-OPERATION CHECKS AND ADJUSTMENTS

Careful inspection and service of the combine before starting work each day will prevent needless delays and breakdowns in the field. Make the following checks and adjustments:

1. Lubricate combine according to the lubrication charts.

2. Fill gasoline tank with a good regular grade of gasoline (capacity of tank is 40 U.S. gallons).

CAUTION: Do not fill tank while engine is running or when near an open flame.

3. Check water level in radiator. Fill with rain water, if available. Do not use water containing alkali. Add water or anti-freeze slowly until level is 1-1/2 inches below filler neck. **CAUTION: If combine is being operated at temperatures below 32° F., refer to "Cold Weather Operation," page 18.**

4. Check tire inflation. See chart, page 81.

5. Service the air cleaner, see page 26.

6. Check oil level of hydraulic units, see page 26.

7. Check oil level of crankcase, see page 29.

8. Check tension drag adjustment for choke and throttle controls. See page 99.

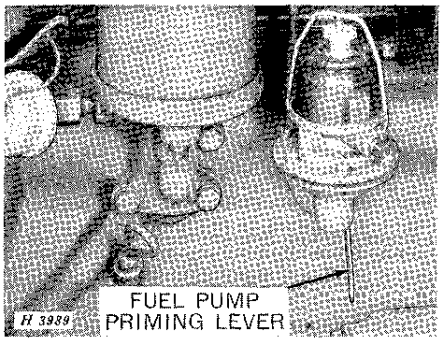
9. Open the doors at bottom of elevators and leave them open until combine is started.

10. Inspect belts and chains for proper tension and alignment. See that there are no loose bolts or missing cotter pins.

STARTING THE ENGINE

1. Make certain separator, cutting platform, and grain tank unloading auger throw-out levers are disengaged and transmission is in neutral.

2. If engine has not been operated for a period of time or the gasoline tank has run dry, prime fuel pump lever up and down to force gasoline into carburetor.



STARTING THE ENGINE—Continued

NOTE: After priming fuel pump, be sure the priming lever is in the "down" position. If the priming lever is left in the "up" position, the fuel pump is inoperative.

3. Turn ignition switch on. Move throttle lever one-quarter rearward. Move choke lever all the way forward; then press starter button. After engine operates a few revolutions, push choke control rearward. Set engine at slow idle speed by moving throttle lever all the way forward.

4. Check oil pressure gauge to see if it is registering pressure.

5. Do not place engine under load until it is properly warmed up.

STOPPING THE ENGINE

1. Set engine at slow idle speed and allow engine to operate at this speed for a few minutes before stopping. Turn off ignition.

STARTING THE COMBINE

1. Look around and make sure no one is standing near enough to the combine to touch any moving parts. Warn everyone to stand clear.

2. When engine is properly warmed up, pull separator throw-out lever rearward to engage the separator. Move throttle lever all the way forward.

3. Check the speed of beater behind the cylinder with a speed indicator. Beater should operate at 680 to 685 rpm with separator empty and not under load. If beater speed is not correct, adjust governor setting (see page 98).

4. Test operation of hydraulic control for adjusting cutting platform height.

5. Test operation of grain tank unloading auger.

6. Test operation of hydraulic selective ground speed control.

7. Check brakes to see if they are in proper working order.

8. Inspect entire combine again, making certain all units are working properly.

9. Disengage separator, then close doors at bottom of elevators.

SELECTING PROPER GROUND SPEED

Selecting the proper ground speed is one of the most important factors in combining. Too fast a ground speed causes overloading, resulting in loss of grain. Too slow a ground speed means the full capacity of the combine is not being used. Also, traveling over rough ground at high speed causes extra wear and possible damage to the combine.

The ground speed of the combine can be very closely controlled by using the selective ground speed drive in conjunction with different transmission speeds. The table on page 4 shows the range of speeds that can be obtained in each transmission range by means of selective ground speed control. Select the best transmission speed range; then, with the selective ground speed control lever, adjust the ground speed to meet field conditions exactly.

SPEED OF VARIOUS UNITS (Fast Idle—No Load)

Auger, Platform	213 rpm
Beater Behind Cylinder	680 to 685 rpm
Beater, Front of Feeder House	121 rpm
Cylinder:	
Regular	1,057 rpm
Rice (Rasp-Bar)	952 rpm
Rice (Spike-Tooth)	793 rpm
Bean	604 rpm
Cylinder (Extreme Low)	196 rpm
Cylinder (Extreme High)	1,190 rpm
Elevators	313 rpm
Engine	2,200 rpm
Fan (Normal Operating Speed)	750 rpm
Fan (Extreme Low)	602 rpm
Fan (Extreme High)	858 rpm
Feeder House Conveyor Drive Shaft	227 rpm
Grain Conveyor Under Cylinder:	
(With Regular 15-Tooth Sprocket)	170 rpm
(With Special 10-Tooth Sprocket)	255 rpm
Ground Travel Speeds	(See Page 4)
Reel	18.5 to 51.5 rpm
Shoe Crank	286 rpm
Straw Walker	213 rpm

Suggest:

If the above button click is invalid.

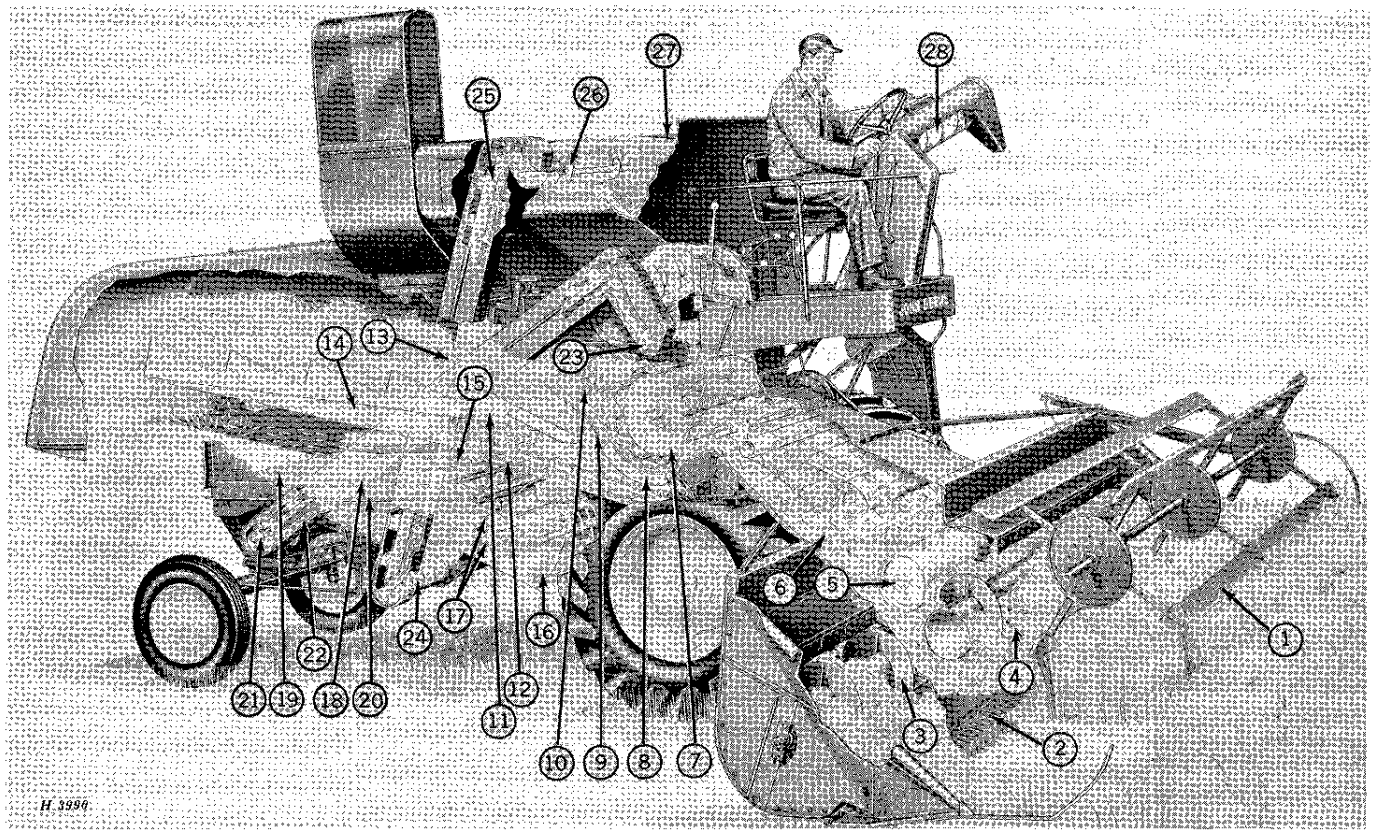
Please download this document

first, and then click the above link

to download the complete manual.

Thank you so much for reading

CROSS-SECTIONAL VIEW OF JOHN DEERE 55 COMBINE



This cutaway view shows how grain and straw are handled from cutter bar on through separator.

The reel (1), divides grain and holds it to cutter bar (2), until cut. The auger (3) carries grain from both ends of platform to center of auger (4). Retracting fingers in auger beater (4), take material and feed it to feeder beater (5). Feeder beater (5), moves grain to feeder conveyor chain (6). The chain (6), delivers grain to rasp-bar or spike-tooth cylinder (7).

As grain travels between cylinder (7), and concave (8), over grate fingers (9), and back against separating beater (10), the greater part of separating takes place. Separating beater (10) strips straw from the cylinder (7), deflects grain through finger grates (9), and passes straw onto the straw walkers (11).

Most of the grain falls through concave grate (8) and fingers (9) onto grain conveyor (12). Straw and remaining loose grain are passed along to the straw walkers (11). Curtain (13) keeps grain from being thrown over. On its outward movement, straw is agitated by straw walkers (11). The remaining grain falls through openings in walkers and flows back through straw walker grain return pans (14) onto auxiliary chaffer (15). Straw is dropped off end of the straw walkers and out separator. The straw can be spread by straw spreader (special equipment) or broken up by straw chopper (special equipment).

After grain and chaff leave conveyor, (12) a blast of air from fan (16), through adjustable windboards (17), is directed against auxiliary chaffer (15), chaffer (18), chaffer extension (19), and sieve (20). The air blast, with aid of sieve agitation, blows chaff away and moves tailings to tailings auger (21). The tailings auger (21) carries tailings to tailings elevator (22), which conveys them through cross-auger (23), to center of cylinder (7), for rethreshing.

Clean grain after dropping through auxiliary chaffer (15), chaffer (18), chaffer extension (19), and sieve (20), is carried by clean grain auger (24), to elevator (25). Elevator (25) delivers clean grain to tank loading auger (26). The loading auger (26) distributes grain evenly to grain tank (27). Grain tank unloading auger is (28).