

John Deere Forage Harvesters 7200, 7300, 7400, 7500, 7700 and 7800



John Deere 7500 - POWERTECH® 12.5 L engine

Model...	John Deere 6125HZ009
Type...	Inline 6-cylinder, wet liners, valve-in-head, turbocharged, air-to-air intercooled
Displacement...	12.5 L (763 cu.in.)
Bore...	127 mm (5.00 in.)
Stroke...	165 mm (6.50 in.)
Power (according to ECE-R24) at rated speed with viscous fan drive...	377 kW (513 hp)
At 1900 rpm...	420 kW (570 hp) (max. engine power)
Rated engine speed...	2100 rpm
Slow idle...	850 ± 50 rpm
Fast idle...	2280 ± 50 rpm
Fuel supply...	unit injectors
Air cleaner...	self-cleaning air prefilter

John Deere Forage Harvesters 7200, 7300, 7400, 7500, 7700 and 7800

Feeding System

Number of feed rolls...	4
Width of feeding chamber 7200 - 7500...	660 mm (26 in.)
Width of feeding chamber 7700 - 7800...	780 mm (30.7 in.)
Metal detector...	standard
Harvesting unit drive...	2 speeds
Length of Cut (IVLOC)	
Length of cut, 40-knife cutterhead 40 knives...	6 mm - 26 mm (0.24 in. - 1.02 in.) 1 mm (0.04 in.) steps
20 knives...	12 mm - 52 mm (0.47 in. - 2.05 in.)
Length of cut, 48-knife cutterhead 48 knives...	5 mm - 22 mm (0.19 in. - 0.87 in.) 1 mm (0.04 in.) steps
24 knives...	10 mm - 44 mm (0.39 in. - 1.73 in.)
Length of cut, 56-knife cutterhead...	4 mm - 19 mm (0.16 in. - 0.75 in.) 1 mm (0.04 in.) steps
Length of Cut (Four-Speed LOC)	
Length of cut, 40-knife cutterhead 40 knives...	6.3 mm - 8.8 mm - 13.3 mm - 18.8 mm (0.25 in. - 0.35 in. - 0.52 in. - 0.74 in.)
20 knives...	12.6 mm - 17.6 mm - 26.6 mm - 37.6 mm (0.5 in. - 0.69 in. - 1.05 in. - 1.48 in.)
Length of cut, 48-knife cutterhead 48 knives...	5.3 mm - 7.4 mm - 11.1 mm - 15.7 mm (0.21 in. - 0.29 in. - 0.44 in. - 0.62 in.)
24 knives...	10.5 mm - 14.8 mm - 22.3 mm - 31.4 mm (0.41 in. - 0.58 in. - 0.88 in. - 1.24 in.)
Length of cut, 56-knife cutterhead 56 knives...	4.5 mm - 6.3 mm - 9.6 mm - 13.5 mm (0.18 in. - 0.25 in. - 0.38 in. - 0.53 in.)

John Deere Forage Harvesters 7200, 7300, 7400, 7500, 7700 and 7800

28 knives... 9 mm - 12.5 mm - 19.2 mm - 26.9 mm
(0.35 in. - 0.50 in. - 0.76 in. - 1.06 in.)

Stationary Knife

Stationary knife adjustment from the cab... standard

Hard-faced... preferably for grass

Tungsten-carbide faced, at cutting edges... preferably for corn

Tungsten-carbide faced, at cutting edges and at the top... for corn

OUCC002,0002108 -19-08NOV05-1/6

Cutterhead

Chamber width 7200 - 7500... 710 mm (28 in.)
Chamber width 7700 - 7800... 830 mm (32.7 in.)

Diameter 7200 - 7500... 610 mm (24 in.)
Diameter 7700 - 7800... 660 mm (26 in.)

Speed 7200, 7300, 7400... 1000 / 1150 rpm

Speed 7500, 7700, 7800... 1150 rpm

Number of knives (40-knife cutterhead)... 4 x 10; 4 x 5

Number of knives (48-knife cutterhead)... 4 x 12; 4 x 6

Number of knives (56-knife cutterhead)... 4 x 14

Knives

Straight... for grass

Curved, wide... for corn

Angled (7200 - 7500 only)... for corn

Knife sharpening in reverse rotation... ·

Automatically controlled... optional

John Deere Forage Harvesters 7200, 7300, 7400, 7500, 7700 and 7800

Drive...	hydraulic motor
Speed...	350 rpm
Recirculating Screens	
Slot widths...	13 mm, 16 mm, 19 mm, 35 mm, 44 mm, 60 mm (0.5 in., 0.6 in., 0.7 in., 1.4 in., 1.7 in., 2.4 in.)
Power chute...	optional
Kernel Processor (Optional)	
Roll diameter 7200 - 7500...	216 mm (8.5 in.)
Roll diameter 7700 - 7800...	240 mm (9.45 in.)
Roll speed 7200 - 7500	
Upper...	3233 rpm
Lower...	2666 rpm
Roll speed 7700 - 7800	
Upper...	2933 rpm
Lower...	2419 rpm
Roll spacing...	1 to 30 mm (0.04 to 1.18 in.)
Roll spacing adjustable from the cab...	optional
Roll drive...	via belts from blower
Weight 7200 - 7500...	350 kg (772 lb)
Weight 7700 - 7800...	400 kg (881 lb)
	OUCC002,0002108 -19-08NOV05-2/6

Blower

Type...	blower system
Rotor diameter 7200 - 7500...	450 mm (17.7 in.)
Rotor diameter 7700 - 7800...	560 mm (22 in.)
Blower channel width 7200 - 7500...	506 mm (20.0 in.)

John Deere Forage Harvesters 7200, 7300, 7400, 7500, 7700 and 7800

Blower channel width 7700 - 7800...	632 mm (24.9 in.)
Speed 7200 - 7500...	1800 rpm (standard) 2000 rpm (standard in Germany) 2000 rpm (optional)
Speed 7700 - 7800...	1600 rpm (standard)
Number of paddles 7200 - 7500...	12
Number of paddles 7700 - 7800...	20
Wear plate...	8 mm (0.31 in.) Hardox
Discharge Spout	
Rotation...	200°
Hydraulic swing...	standard
Double cap (electrically controlled)...	standard
Spout extension ...	Attachment
Main Clutch	
Type...	hydraulically operated dry-type disk clutch
Number of disks...	6 internally splined, 5 externally splined
Hydraulic System	
Type...	open center
Pump...	fixed displacement, gear type
Relief pressure...	21 000 kPa (210 bar) (3045 psi) at 25 L/Min. (6.6 U.S. gpm)
Flow rate	
Header...	53 L/Min. (14 U.S. gpm)
Hydraulic functions (Spout, etc.)...	36 L/Min. (9.5 U.S. gpm)
Steering...	18 L/Min. (4.8 U.S. gpm)

John Deere Forage Harvesters 7200, 7300, 7400, 7500, 7700 and 7800

IVLOC... 26 L/Min. (6.9 U.S. gpm)

OUCC002,0002108 -19-08NOV05-3/6

Electrical System

Type... 12 V, one 150 A alternator

Brakes

Type... 305 mm (12 in.), hydraulically operated shoe-type, two brake circuits

Ground Speed Drive

Type... hydrostatic

Transmission

Type... three speed

Max. Ground Travel Speeds

20 km/h (12 mph) version... 6.9 km/h (4.3 mph) in 1st gear (2100 rpm)
13 km/h (8 mph) in 2nd gear (2100 rpm)
20 km/h (12.5 mph) in 3rd gear (1650 rpm)

25 km/h (15 mph) version... 8.6 km/h (5.3 mph) in 1st gear (2100 rpm)
19.6 km/h (12.2 mph) in 2nd gear (2100 rpm)
25 km/h (15.5 mph) in 3rd gear (1650 rpm)

Rear Axle

Non-adjustable (rigid)... 7200 - 7500

Adjustable... 7200 - 7800

Rear wheel drive (narrow)... 7200 - 7800

Rear wheel drive (wide)... 7200 - 7800

OUCC002,0002108 -19-08NOV05-4/6

John Deere Forage Harvesters 7200, 7300, 7400, 7500, 7700 and 7800

Capacities

Fuel tank:

7200...	700 L (185 U.S. gal) standard 1100 L (290 U.S. gal) optional
7300...	700 L (185 U.S. gal) standard 1100 L (290 U.S. gal) optional
7400...	1100 L (290 U.S. gal) standard
7500...	1100 L (290 U.S. gal) standard
7700...	1100 L (290 U.S. gal) standard
7800...	1100 L (290 U.S. gal) standard

Cooling system (complete):

7200...	56 L (14.8 U.S. gal)
7300 - Up to SN 508099...	60 L (15.9 U.S. gal)
7300 - From SN 508100...	71 L (18.7 U.S. gal)
7400, 7500, 7700...	71 L (18.7 U.S. gal)
7800...	98 L (25.8 U.S. gal)

Engine (with filter):

7200...	28.5 L (7.5 U.S. gal)
7300, 7400, 7500, 7700...	42 L (11.1 U.S. gal)
7800...	45 L (11.9 U.S. gal)

Transmission...

7 L (1.85 U.S. gal)

Final drives (each)...

8.5 L (2.24 U.S. gal)

Rear wheel drive rear axle:

Differential...	12 L (3.17 U.S. gal)
Reduction gear...	0.7 L (0.19 U.S. gal)

Hydraulic system:

Complete system...	90 L (23.8 U.S. gal)
Hydraulic tank...	46 L (12 U.S. gal)

IVLOC...

19 L (5.01 U.S. gal)

Brake system:

John Deere Forage Harvesters 7200, 7300, 7400, 7500, 7700 and 7800

Brake fluid... 1 L (0.26 U.S. gal)

AC system:

Refrigerant... 2350 g (82.9 oz.)

Operator's Cab

Air conditioning system... standard

Heater... standard

Passenger seat... standard

OUCC002,0002108 -19-08NOV05-5/6

Sound Level

Max. sound level at operator's ear in accordance with Directive 86/188/EEC. Measurement method in accordance with ISO5131 with cab closed (average value):

7200...	78 dB(A)
7300...	78 dB(A)
7400...	78 dB(A)
7500...	78 dB(A)
7700...	78 dB(A)
7800...	78 dB(A)

Vibrations at Operator's Position

Measured according to Directive VDI 2057, page 4.2, or DIN EN 1032

7200, 7300, 7400 and 7500

1. Max. acceleration value to which the feet of the operator are subjected... 0.74 m/s²
2. Max. acceleration value to which the seat surface is subjected... 1.20 m/s²
3. Max. acceleration value to which the body of the operator is subjected... 1.79 m/s²

John Deere Forage Harvesters 7200, 7300, 7400, 7500, 7700 and 7800

7700 and 7800

1. Max. acceleration value to which the feet of the operator are subjected... 1.11 m/s²
2. Max. acceleration value to which the seat surface is subjected... 1.09 m/s²
3. Max. acceleration value to which the body of the operator is subjected... 2.46 m/s²

Weight (Approx.)

With four wheel drive and kernel processor, without harvesting unit and rear weights, fuel tank 3/4 filled, without operator:

7200...	10 694 kg (23 576 lb) with front tires 1050/50 R 32 and rear tires 580/70 R 26
7300, 7400, 7500...	11 850 kg (26 125 lb) with front tires 1050/50 R 32 and rear tires 580/70 R 26
7700...	12 280 kg (27 073 lb) with front tires 1050/50 R 32 and rear tires 580/70 R 26
7800...	12 560 kg (27 690 lb) with front tires 1050/50 R 32 and rear tires 580/70 R 26