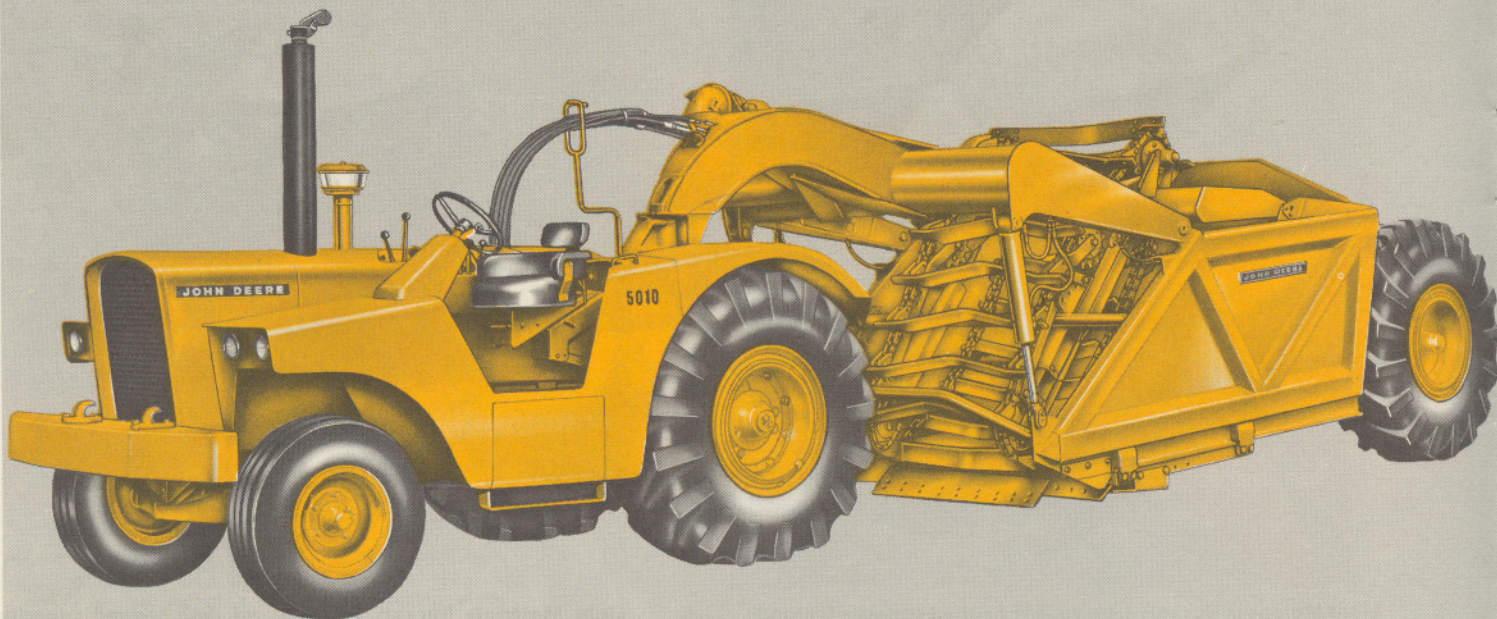
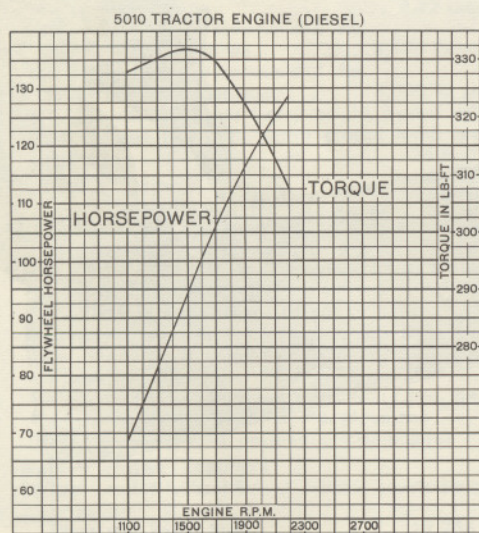




5010 SCRAPER



ENGINE PERFORMANCE



CURVES SHOWN ARE FOR A COMPLETE ENGINE DIRECT CONNECTED TO AN ELECTRIC DYNAMOMETER. DATA SHOWN ARE OBSERVED.

FEATURES

8 cu. yd. heaped capacity—Economical performance for road building, homesite development, land leveling, strip mining, earth-dam construction and many other earthmoving jobs.

129 flywheel horsepower—6-cylinder John Deere Diesel engine has excellent lugging characteristics both in the cut and on the haul road.

Foot clutch "shift-on-the-go" constant-mesh transmission—Speeds from 2.6 to 26 miles per hour.

Loads without the aid of a pusher.

Elevator flights cut and lift material for fast, smooth loading—pulverize material for even spreading—Elevator floats to accommodate various loading conditions.

Power steering—Free oscillation at front axle and in scraper mounting insures stability and operator comfort over rough terrain.

Hydraulic-power-actuated tractor and scraper brakes.

Positive complete ejection—hydraulically controlled sliding floor and ejector gate provide controlled, even spreading or fast dumping.

Interchangeable earthmover tires.

5010 Scraper

SPECIFICATIONS

(Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with I.E.M.C. Standards)

CAPACITY, SAE heaped: 8 cu. yd. or 20,000 lb.

HORSEPOWER (at 2,200 rpm):

Observed net engine flywheel..... 129

TRAVEL SPEEDS AND RIMPULLS (2200 engine rpm, 28.7 loaded radius):

Shift Lever Position	Travel Speed (MPH) w/18.00-25 Tires	Rimpull* (Lb.)
1st	2.6	15,410
2nd	4.1	9,777
3rd	5.4	7,420*
4th	6.9	5,800
5th	8.6	4,660
6th	11.3	3,540
7th	14.7	2,720
8th	23.9	1,680
8th - Engine fast idle - 2400 rpm	26.11	
Rev. 1	5.3	
Rev. 2	8.4	
Rev. 3	14.2	

*Rimpull—calculated for each ground speed using 82.8% of net engine flywheel horsepower. Actual pulls will be limited by weight and traction.

ENGINE: Vertical, 6 cylinder, valve-in-head, 4-stroke cycle, Diesel.

Bore and stroke.....	4-3/4 x 5
Piston displacement.....	531 cu. in.
Compression ratio.....	16 to 1
Governed speed range.....	600-2,200 rpm
Maximum torque.....	329 lb. ft.
Rpm at maximum torque.....	1,300
N.A.C.C. or A.M.A. horsepower rated for tax purpose.....	54.2
Lubrication.....	Full pressure, full flow with bypass relief valve, replaceable micron filter
Crankshaft.....	Induction-hardened, counterbalanced
Main and connecting rod bearings.....	Steel-backed, copper-lead-tin lined, removable.
Main bearings:	
Number.....	7
Diameter.....	3-3/4 in.
Length.....	1.875 in.
Cooling.....	Pressurized with water pump, thermostat and fixed bypass.
Governor.....	Integral with injection pump
Fuel injection pump.....	Opposed plunger, inlet metering, single cylinder distributor type
Air cleaner.....	Dry type with air restriction indicator
Electrical system.....	24-volt (four 6-volt batteries) with alternator; 12-volt accessories.
Starting.....	24-volt electric starter

ENGINE CLUTCH: Foot-operated, power assisted, spring-loaded, two 11-in. dry disks.

TRANSMISSION: Manual transmission, constant mesh with synchronizers, 8 forward and 3 reverse selections.

FINAL DRIVE: Planetary type.

Gear reduction ratio in first gear..... 147.3 to 1
Gear reduction ratio in high gear..... 15.7 to 1

BRAKES: Hydraulic-power actuated.

Tractor..... Foot-operated individually or simultaneously, wet-disk type.
Scraper..... Hand-lever operated, hydraulic-actuated shoe type.

STEERING: Power. Entirely hydraulic—actuated by the central hydraulic pump.

Number of turns, far left to far right..... 4-2/3

HYDRAULIC SYSTEM: A central hydraulic system, constant pressure. Oil supplied from transmission and differential. Variable displacement pump driven from front of engine; max. output at 2,200 rpm, 25.7 gpm at 2,000 psi.

HYDRAULIC CYLINDERS (ground, polished, hard-chromed piston rods; neoprene seals):

Lift cylinder.....	2, 4-in. dia. bore, 18-inch. stroke, 2-in. dia. piston rod.
Sliding floor.....	1, 4-1/2 in. dia. bore, 30-1/4 in. stroke, 2-in. dia. piston rod
Ejector gate.....	2, 2-1/2-in. dia. bore, 33-5/8-in. stroke, 1-1/2-in. dia. piston rod

CUTTING EDGE: 90 inches wide; 3 sections, reversible and replaceable, high-carbon steel. Each section is adjustable vertically 2 inches.

Center section.....	5/8-in. x 10-in. x 54-in.
Each end section.....	5/8-in. x 10-in. x 18-in.

EJECTION (Hydraulically controlled):

Sliding floor.....	Boxed, reinforced; steel rollers, sealed bearings.
Ejection tail gate.....	Reinforced steel plate.

ELEVATOR: PTO-driven

Elevator drive..... Powered by 1,000 rpm tractor PTO, through telescoping vertical and horizontal shaft; sealed gear boxes.

POWER TAKEOFF: Independent "Live," 1,000 rpm controlled by hydraulically actuated wet clutch.

CAPACITIES:

Cooling system.....	10 gal.
Fuel tank.....	49 gal.
Engine lubrication, including filter.....	12 qt.
Transmission-Hydraulic System.....	16 gal.

TIRES (Sizes and Plies):

Front: 11.00-16, 12-ply rib or 10.00-15, 12-ply HD Trailer.
Tractor rear and scraper (interchangeable): 18.00-25, 12-ply or 23.5-25, 12-ply-rating, tubeless earthmover.

WEIGHT DISTRIBUTION, lb.: 18.25-25 Tires 23.5-25 Tires

Empty:		
Front axle.....	5,850	5,850
Drive axle.....	13,400	13,625
Scraper axle.....	9,600	9,825
Total.....	28,850	29,300
Loaded:		
Front axle.....	6,000	6,000
Drive axle.....	20,400	20,625
Scraper axle.....	22,450	22,675
Total.....	48,850	49,300

DIMENSIONS:

	Bowl Up	Bowl Down
Over-all width.....	95-3/4 in.	95-3/4 in.
Over-all length.....	32 ft. 10-1/2 in.	33 ft. 7-1/2 in.
Scraper (to swivel).....	22 ft. 1 in.	22 ft. 1 in.
Tractor.....	13 ft. 1-1/8 in.	13 ft. 1-1/8 in.
Over-all height.....	8 ft. 8-1/2 in.	8 ft. 4-1/2 in.
	(9 ft. 3/8 in. to top of muffler)	

Clearance at cutting edge, max. with drop-center... 15-1/4 in.
Clearance under rear frame... 17-3/8 in. 13-1/2 in.

Wheelbase (tractor front wheel to scraper wheel)...	18 ft. 7-1/4 in.	19 ft. 4-1/4 in.
Tractor.....	96 in.	
Wheel tread, front.....	69 in.	
Drive wheels.....	72 in. (18.00-25 tires) 72-3/16 in. (23.5-25 tires)	
Scraper wheels.....	72 in. (18.00-25, 12-ply tires) 71-13/16 in. (23.5-25, 12-ply tires)	

STANDARD EQUIPMENT:

Power steering	Dry air cleaner with vertical air stack and cap
Deluxe seat	
Tachometer	Drawbar
Key ignition switch	Tow hooks (front and rear)

OPTIONAL EQUIPMENT:

Tires: Sizes, plies, and types as listed.

SPECIAL EQUIPMENT:

Cigarette lighter	Battery warmer
Electric hour meter	Oil heater element
Pre-cleaner	