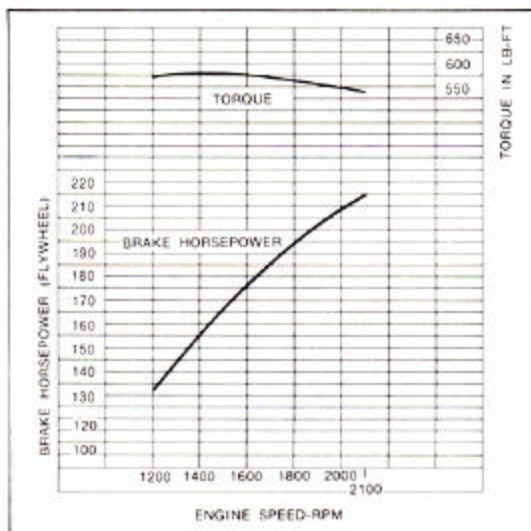




JD860-A SCRAPER



ENGINE PERFORMANCE



FEATURES

- 215 SAE net hp (228.5 DIN-PS)
- 15 cu. yd. (11.47 m³) heaped capacity
- Heavy-duty reversing elevator
- Positive hydraulic full-load ejection
- Self-loading
- Power Shift transmission and torque converter w/lock-up
- Differential lock
- Power steering
- Power brakes
- Air-suspension, shock-absorbing, fully-adjustable bucket seat
- Vandal protection
- Roll-over protective structure (ROPS) w/cab or canopy and seat belt

JD860-A SCRAPER SPECIFICATIONS

(Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with ICED and SAE Standards. Except where otherwise noted, these specifications are based on a unit equipped with 26.5-25, 24-ply-rating tires and standard equipment.)

Capacity (SAE heaped):

Volume 15 cu. yd. (11.47 m³)
 Total weight of payload
 @ 2500 lb./yd.³ (1483 kg/m³) 37,500 lb. (17 010 kg)

Power (@ 2100 engine rpm):

	SAE	DIN
Gross	228 hp (170.0 kW)*	
Net	215 hp (160.3 kW)	228.5 PS

Net engine flywheel power is for an engine equipped with fan, air cleaner, water pump, lubricating oil pump, fuel pump, alternator, and muffler. Gross engine power is without fan. Flywheel power ratings are under SAE standard conditions of 500-ft. altitude and 85° F. temperature and DIN 70 020 standard conditions of 760 mm Hg barometer (sea level) and 20° C temperature. Engine maintains rated horsepower up to 6000 feet (1829 m) altitude.

*In the International System of Units (SI), power is expressed in kilowatts (KW).

Engine: Detroit diesel 6-71N, 6-cylinder, 2-stroke cycle

Bore and stroke 4.25x5 in. (108x127 mm)
 Piston displacement 426 cu. in. (6981 cm³)
 Compression ratio 18.71 to 1
 Maximum torque @ 1400 rpm 580 lb-ft (786 Nm) (76.04 kg-m)
 NACC or AMA (U.S. Tax) horsepower 43.35
 Main bearings 7
 Lubrication Pressure system w/full-flow filter
 Cooling Pressurized w/thermostat and fixed bypass
 Fan Suction
 Air cleaner w/restriction indicator Dry
 Electrical system 24-volt w/alternator
 Batteries (two 12 volt) Reserve capacity: 310 minutes

Transmission:

Two-phase, single-stage torque converter with free-wheeling stator lockup clutch and Power Shift transmission (5 speeds forward -1 reverse). Stall ratio is 2.56 to 1.

Differential Lock Foot-operated, hydraulically actuated

Drive Axle Differential drive; over-all ratio 22.22 to 1; planetary final drives

Brakes: Hydraulic, power actuated. Tractor and scraper brakes are operated individually or simultaneously. Two accumulators provide several brake applications after engine is stopped.

Tractor Wet-disk between differential and planetaries. No adjustment needed.

Scraper Expanding shoe, in wheels.
 Parking Manually controlled, mechanical, on axle input shaft.

Power Steering: Position-responsive

Articulated frame hydraulically actuated by dual cylinders.
 ▲Turning circle (180 deg. turn) 32 ft. 5.4 in. (9.89 m)
 Articulation 180 deg.

Tractor Oscillation (total) 50 deg.

Hydraulic System: Open-center

System pressure 2000 psi (137.9 bar) (140.6 kg/cm²)
 for brakes and differential lock: 2250 psi (155.1 bar) (158.2 kg/cm²) for elevator and steering.
 Pumps (@ 2050 pump rpm):

Steering	34 gpm (129 l/min)
Brakes, differential, and differential lock	4.5 gpm (17 l/min)
Elevator and bowl	85 gpm (322 l/min)

Hydraulic Cylinders:

	Bore	Stroke
Lift (2)	5 in. (127 mm)	20 in. (508 mm)
Sliding floor (1)	5.25 in. (133 mm)	38.8 in. (986 mm)
Ejector gate (2)	3 in. (76 mm)	44.5 in. (1130 mm)
Steering (2)	4 in. (102 mm)	25.6 in. (650 mm)
Piston rods	Ground, heat-treated, chrome-plated, polished	
Lift and steering cylinders	2 in. (51 mm) dia.	
Sliding floor cylinder	2.5 in. (64 mm) dia.	
Ejector gate cylinders	1.75 in. (44 mm) dia.	

Elevator Heavy duty reversible, hydraulic pump-driven w/planetary gears and live driveshaft.

Number of flights 23
 Spacing of flights 12.52 in. (318 mm)
 Width of flights 6 ft. 6 in. (1.98 m)
 Speed (@ 2100 engine rpm) 200 fpm (61 m/min)
 Length (top to bottom) 12 ft. (3.66 m)

Bowl Heavy-gauge steel with reinforcing and box construction. Sliding floor rides on heat-treated rails. Cutting edge retracts. Independent axles are vertically adjustable.

Cutting Edge 8 ft. 9.9 in. (2.69 m) wide; 3 sections, reversible and replaceable, high-carbon steel. Each section is adjustable vertically 2 in. (51 mm).

Center section 1x13x77.9 in. (25x330x1979 mm)
 End sections 1x13x14 in. (25x330x356 mm)

▲Tires:

26.5-25, steel-cord radials
 26.5-25, 24-ply-rating, E2
 26.5-25, 24-ply-rating, E3

Capacities

	U.S.	Liters
Cooling system	15 gal.	56.8
Fuel tank	90 gal.	340.7
Engine lubrication, including filter	5 gal.	18.9
Transmission case and filter	12 gal.	45.4
Differential case, filter, and lines	15 gal.	56.8
Hydraulic reservoir	25 gal.	94.6
Elevator gear case	6 qt.	5.7

Additional Standard Equipment:

Tachometer	Hydraulic oil filter indicator
Hourmeter	Oil pressure gauge
Speedometer	Water temperature gauge
Bucket seat	Alternator indicator light
Foot throttle	Reverse warning horn
Differential lock	Low brake pressure warning system
Vandal protection	Independent, adjustable scraper axles
Vertical muffler	Parking brake warning light
Fuel gauge	Transmission pressure gauge
Fenders (tractor)	▲Transmission filter indicator
Cigarette lighter	Converter temperature gauge
Horn	Windshield w/wiper
Lights	▲Heavy-duty elevator
▲Transmission bottom guard	▲Ether starting aid

Weight Distribution:

	lb.	kg
Empty: Drive axle	30,974	14 049
Scraper axle	15,561	7058
Total	46,535	21 108
Loaded: Drive axle	42,894	19 457
Scraper axle	41,141	18 661
Total	84,035	38 118

Special Equipment:

Teeth for cutting edge
 Fenders and mud flaps for scraper wheels
 Lights (turn signal and flashing)
 ROPS cab or canopy and seat belt
 Quiet cab

JD860-A SCRAPER DIMENSIONS

