

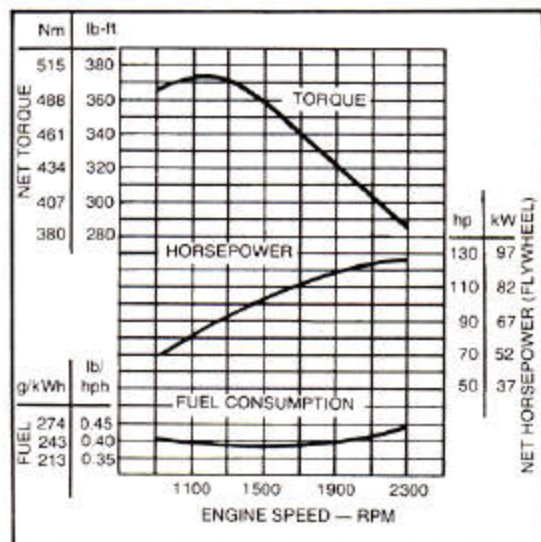


# 672A MOTOR GRADE



Model shown may include options

## ENGINE PERFORMANCE



## FEATURES

125 SAE net hp (93 kW)

12-ft. (3.65 m) moldboard w/ $\frac{1}{8}$  x 6 in. (16 x 152 mm) through-hardened Dura-Max<sup>®</sup> cutting edge guaranteed against breakage, standard; 13- and 14-ft. (3.95 and 4.25 m) moldboards and 2-ft. (610 mm) extensions available

Power shift transmission;  
8 speeds forward, 4 reverse

Articulated frame steering

Differential lock-unlock

All-wheel drive

22-ft. 6 in. (6.86 m) turning radius

All-hydraulic control of blade and machine functions

Closed-center hydraulic system with built-in positive hydraulic locks provides instant response without blade drift or creep

Hydraulically controlled, 7-position lift arms let you position blade for 90-degree bank cuts, left or right, in approximately one minute, without leaving the seat

Oscillating front axle and rear tandem

Hydraulic front-wheel lean

Roll-over protective structure (ROPS) w/cab

## ADD VERSATILITY WITH:

Scarifier

Rear-mounted ripper

Snow plow and wing

Bulldozer

Automatic blade control

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# 672A MOTOR GRADER 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 13.00-24, 12-PR, tubeless tires with 8 in. (203 mm) rims, 12-ft. (3.65 m) moldboard with 6-in. (152 mm) cutting edge, and standard equipment. Weights include lubricants, coolants, full fuel tank and 175-lb. (79 kg) operator.)

<b>Power</b> (@2300 engine rpm):	<b>SAE</b>	<b>DIN</b>
Gross	135 hp (101 kW)	
Net	125 hp (93 kW)	127 hp (93 kW)

Net engine/flywheel power is for an engine equipped with fan, air cleaner, water pump, lubricating oil pump, fuel pump, alternator, and muffler. The gross engine power is without fan. Flywheel power ratings are under SAE standard conditions of 500-ft. (150 m) altitude and 85°F (29.5°C) temperature, and DIN 70 020 conditions (non-corrected). No derating is required up to 10,000 ft. (3050 m) altitude.

**Engine:** John Deere turbocharged diesel, vertical 6-cylinder, valve-in-head, 4-stroke cycle

Bore and stroke	4.19×5 in. (106.5×127 mm)
Piston displacement	414 cu. in. (6.785 L)
Compression ratio	16.2 to 1
Maximum torque @ 1300 rpm	372 lb-ft (504 Nm) (51.4 kg-m)
NACC or AMA (U.S. Tax) horsepower	42.1
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 (2) 12-volt	Reserve capacity: 180 minutes
Alternator	42 amps
<b>Transmission</b>	Direct drive, full power shift with planetary gear reductions. Foot inching pedal.

**Travel Speeds** (2300 engine rpm, no tire slip):

Shift Lever Position	Forward		Reverse	
	mph	km/h	mph	km/h
1	2.3	3.6	2.8	4.5
2	3.2	5.1	3.9	6.3
3	4.8	7.8	5.9	9.5
4	6.3	10.1	7.6	12.3
5	8.2	13.2		
6	10.5	17.0		
7	14.1	22.8		
8	23.9	38.4		

**Differential Lock** ..... Foot-operated, hydraulically actuated

**Rear Drive** ..... Inboard planetary final drives with heat-treated, splined steel torque shafts. Oscillating welded construction tandems; nodular cast sprockets driving 2 in. (51 mm) pitch roller chain in oil bath.

**Front Drive:**  
A 5.43 cu. in. (89 cm<sup>3</sup>) variable displacement pump driving a 2.03 cu. in. (33 cm<sup>3</sup>) reversible motor in each wheel. Optimum traction provided by a flow divider. Free wheeling in gears 5 through 8. Switch controlled for two modes of operation.

**Front Axle:** Fabricated steel box frame with planetary drives  
Total oscillation ..... 30 deg.  
Wheel lean range (either direction) ..... 20 deg.

**Steering:**  
Front ..... Full hydraulic power system. Steering capabilities without engine power

Rear ..... Hydraulically articulated frame steering (25 deg. left or right)

Minimum turning radius ..... 22 ft. 6 in. (6.86 m)

**Brakes:**  
Service ..... Foot-operated, hydraulically actuated, wet-disk, effective on 4 tandem wheels

Parking ..... Foot-operated, mechanical, dry-disk, effective on 4 tandem wheels

**Hydraulic System:** Closed-center  
Pressure controlled 4.0 cu. in. (65 cm<sup>3</sup>) variable displacement pump ..... 37.6 gpm (2.4 L/s), standard  
Pressure controlled 6.0 cu. in. (98 cm<sup>3</sup>) variable displacement pump ..... 52.4 gpm (3.3 L/s), optional

**Moldboard** ..... Wear-resistant high-carbon steel  
Length ..... 12 ft. (3.65 m)  
Height ..... 24 in. (610 mm)  
Thickness ..... 0.88 in. (22 mm)

**Cutting Edge:** Dura-Max® through-hardened curved steel  
Thickness and width ..... 5/8×6 in. (16×152 mm)

**Blade Range:**  
Lift above ground ..... 16.1 in. (409 mm)  
Blade side shift:  
Right or left ..... 26.9 in. (683 mm)  
Shoulder reach outside wheels (frame straight):  
Right ..... 84.6 in. (215 m)  
Left ..... 87.6 in. (223 m)  
Pitch at ground line ..... 44 deg. forward  
10 deg. back

**Blade Lifting Mechanism:**  
Control ..... Dual-lever, hydraulic w/float position

**Lift Arms:** Nodular cast  
Positions ..... 7  
Control ..... Hydraulic, foot operated

**Circle:** Fabricated steel angle construction  
Circle diameter ..... 58 in. (1.47 m)  
Rotation ..... 360 deg.  
Drive ..... Hydraulic motor and worm gear w/positive position lock

Sideshift, right ..... 30.0 in. (762 mm)  
left ..... 34.4 in. (874 mm)

**Drawbar** ..... Welded box section, 3.5×7×0.375 in. (89×178×9.5 mm) wall w/ball and socket draft connection

**Frame:**  
Rear mainframe ..... Welded box section from articulation joint to mainframe arch

Width, minimum ..... 9.57 in. (243 mm)  
Height, minimum ..... 14.04 in. (357 mm)  
Thickness, sides ..... 0.63 in. (16 mm)  
top ..... 0.79 in. (20 mm)  
bottom (min.) ..... 0.87 in. (22 mm)

Weight per ft., minimum ..... 119 lb. (177 kg/m)  
Minimum vertical section modulus ..... 125 inches cubed (2050 cm cubed)

Front mainframe ..... Welded box section from mainframe arch to front hood

Width ..... 10 in. (254 mm)  
Height, minimum ..... 13 in. (330 mm)  
Thickness, minimum ..... 0.63 in. (16 mm)  
Weight per ft., minimum ..... 110 lb. (164 kg/m)  
Minimum vertical section modulus ..... 118 inches cubed (1935 cm cubed)

**Tires:**  
13.00-24, 12 PR, G2, standard  
14.00-24, 12 PR, G2  
17.5-25, 12 PR, L2

**Dimensions:**

Tire Size	Wheel Tread		Width		Ground Clearance (Front Axle)
	Front	Rear	Front	Rear	
13.00-24 8" rim (203 mm)	76.15 in. (1.93 m)	79.61 in. (2.02 m)	7 ft. 9.5 in. (2.37 m)	7 ft. 10 in. (2.39 m)	22 in. (569 mm)
14.00-24 10" rim (254 mm)	76.15 in. (1.93 m)	79.61 in. (2.02 m)	7 ft. 11.5 in. (2.43 m)	8 ft. (2.44 m)	22.5 in. (572 mm)
17.5-25 in. 14" rim (356 mm)	76.40 in. (1.99 m)	82.97 in. (2.09 m)	8 ft. 5 in. (2.57 m)	8 ft. 6 in. (2.59 m)	23.2 in. (589 mm)

Height to top of steering wheel ..... 7 ft. 4.4 in. (2.25 m)

Capacities	U.S.	Liters
Fuel tank	.60 gal.	227.0
Cooling system	7 gal.	26.5
Engine lubrication, including filter	20 qt.	18.9
Transmission and hydraulic system	38 gal.	143.8
Tandem housings (each)	5 gal.	18.9
Worm gearbox	3 qt.	2.8

**Scarifier** (Special Equipment):  
V-type for 4 ft. (1.22 m) cut with 3 manual pitch positions and hydraulic float  
Number of teeth (9 possible) ..... 5  
Lift above ground ..... 24.0 in. (610 mm)  
Penetration ..... 13.7 in. (350 mm)  
Shank size ..... 1×3 in. (25×76 mm)

**Ripper** (Special Equipment): 8 ft. (2.44 m) cut width, parallelogram linkage, 2 manual shank vertical positions  
Number of shank pockets ..... 5  
Number of shanks ..... 3  
Lift above ground ..... 14.5 in. (368 mm)  
Penetration ..... 14 in. (356 mm)  
Shank size ..... 2×5 in. (51×127 mm)  
Lift above ground (shank in upper position) ..... 23.5 in. (597 mm)

**Additional Standard Equipment:**

Gauges:  
 Air filter indicator  
 Engine oil pressure  
 Front-wheel-drive return filter indicator  
 Front-wheel-drive charge pressure  
 Fuel level  
 Transmission clutch pressure  
 Transmission filter indicator  
 Transmission lube pressure  
 Transmission temperature  
 Water temperature  
 Horn  
 Hourmeter  
 Hydraulic pump, 4.0 cu. in. (65 cm<sup>3</sup>)  
 Moldboard float  
 Lights, stop and tail  
 Lights, driving  
 Precleaner  
 ROPS cab w/seat belt, front wiper and dome light  
 Seat, cushioned vinyl  
 Transistorized voltage regulator

SAE Operating Weight	On Front Wheels	On Rear Wheels	Total
Standard equipment . . . . .	8702 lb. (3947 kg)	18,650 lb. (8460 kg)	27,352 lb. (12 407 kg)
Standard equipment and scarifier . . . . .	9816 lb. (4453 kg)	18,477 lb. (8381 kg)	28,293 lb. (12 834 kg)
Standard equipment, scarifier and ripper . . . . .	9128 lb. (4140 kg)	21,726 lb. (9855 kg)	30,854 lb. (13 995 kg)

**Optional or Special Equipment with Weights:**

(Add these weights to SAE Standard Equipment operating weights to obtain total operating weights.)

	lb.	kg		lb.	kg
Accelerator-decelerator	4	2	Scarifier, regular w/five teeth 1×3 in. (25×76 mm)	986	447
Air conditioner w/heavy-duty alternator	177	80	Scarifier, heavy-duty w/five teeth 1½×4 in. (32×102 mm)	1283	582
Automatic blade control	355	161	Seat, bench	44	20
Articulation indicator	5	2	Seat belt, 3-in. (76 mm)	3	1
Blade, front bulldozer	1489	675	Seat, deluxe suspension, cloth covered	111	50
Bottom guard, heavy-duty w/rear hitch	665	302	Seat, deluxe suspension, vinyl covered	49	22
Bottom guard, regular	170	77	Sound suppression package (includes bottom guard)	761	345
Cold-weather starting aid	10	5	Sound suppression package (for use w/ripper)	248	112
Dura-Max® through-hardened cutting edge, ¾×8 in. (19×203 mm)	8.5 lb/ft	(13 kg/m)	Tires: 14.00-24, 12 PR, G2 (6)	210	95
Engine disconnect	27	12	17.5-25, 12 PR, L2	468	212
Engine side shields	46	21	Toolbox	12	5
Fan, defroster	4	2	Turn signals	4	2
Heater, coolant	1	.5			
Heater, cab, 19,000 BTU	16	7			
Heater, cab, 38,000 BTU	31	14			
Heater, cab, 40,000 BTU	31	14			
Heater, roof-mounted, 25,000 BTU (add to air conditioner)	17	8			
Hydraulic pump, 6.0 cu. in. (98 cm <sup>3</sup> ), 52.4 gpm (3.3 L/s)	44	20			
Lights, blade	4	2			
Lights, work, 2 front/2 rear floods	12	5			
Mat, floor	12	5			
Mirror, outside rear view, one side	6	3			
Mirrors, outside rear view, both sides	12	5			
Moldboard, 13-ft. (3.96 m) w/¾×6 in. (16×152 mm) through-hardened Dura-Max® cutting edge	59	27			
Moldboard, 14-ft. (4.27m) with ¾×6 in. (16×152 mm) through-hardened Dura-Max® cutting edge	145	66			
Moldboard extensions, 2-ft. (610 mm), right or left (less cutting edge)	220	100			
Overlay end bits (1 pair), 6 in. (152 mm)	62	28			
Overlay end bits (1 pair), 8 in. (203 mm)	77	35			
Rear hitch	67	30			
Rear mounted ripper w/hitch	2516	1141			
Rear windshield wipers	4	2			
Reverse warning alarm	6	3			
Rims: 10 in. (254 mm) for 13.00-24 or 14.00-24 tires	452	205			
14 in. (356 mm) for 17.5-25 tires	645	293			
ROPS canopy w/seat belt and instrument panel cover	-442	-200			

