772A MOTOR GRADER

Model shown may include options

**FEATURES**

- 150 SAE net hp (112 kW)
- 12-ft. (3.65 m) moldboard with 0.62 x 6 in. (16 x 152 mm) through-hardened Dura-Max® cutting edge; 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, standard system to 6.7 mph (10.8 km/h), optional system to 11.5 mph (18.5 km/h), switch-controlled for two modes of operation
- 22-ft. 6 in. (6.86 m) turning radius
- All-hydraulic control of blade and machine functions
- Closed-center hydraulic system with operational no-leak, drift-free poppet valves
- Pushbutton control
- 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
- Rollover protective structure (ROPS) w/cab

**ADD VERSATILITY WITH:**

- Scarifier
- Rear-mounted ripper
- Snow plow and wings
- Bulldozer
- Automatic blade control

**ENGINE PERFORMANCE**

<table>
<thead>
<tr>
<th>Nm</th>
<th>lb-ft</th>
<th>kW</th>
<th>hp</th>
<th>g/kWh</th>
<th>hph</th>
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<tbody>
<tr>
<td>651</td>
<td>480</td>
<td>460</td>
<td>150</td>
<td>112</td>
<td>85</td>
</tr>
<tr>
<td>597</td>
<td>440</td>
<td>420</td>
<td>140</td>
<td>104</td>
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<tr>
<td>542</td>
<td>400</td>
<td>400</td>
<td>120</td>
<td>69</td>
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<tr>
<td>498</td>
<td>360</td>
<td>360</td>
<td>100</td>
<td>50</td>
<td>45</td>
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</tbody>
</table>

**FUEL CONSUMPTION**

<table>
<thead>
<tr>
<th>ENGINE SPEED—RPM</th>
<th>FUEL CONSUMPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>45</td>
</tr>
<tr>
<td>1400</td>
<td>40</td>
</tr>
<tr>
<td>1800</td>
<td>35</td>
</tr>
<tr>
<td>2300</td>
<td>30</td>
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</tr>
<tr>
<td>2300</td>
<td>30</td>
</tr>
</tbody>
</table>
Rated Power @2300 rpm: SAE DIN 70 020
Net Gross
150 hp (112 kW) 160 hp (119 kW)
112 kW 119 kW
Net engine power is with standard equipment including air cleaner, exhaust system, after-
nator, and cooling fan, at standard conditions per SAE J1949 and DIN 70 020, using No. 2-
D fuel @35 API gravity. No derating is required up to 10,000 ft. (3050 m) altitude. Gross power
is without cooling fan.

Engine: John Deere 6-466A
Type 4-stroke cycle, turbocharged and intercooled diesel
Bore and stroke 4.56 x 4.75 in. (116 x 121 mm)
No. of cylinders 6
Displacement 466 cu. in. (7636 L)
Compression ratio 14.9 to 1
Maximum net torque @1300 rpm 305 lb-ft (414 Nm) (44 kg-m)
Lubrication Pressure system w/full-flow filter
Cooling fan Suction type
Aspirated air cleaner w/ prefilter indicator Dry
Electrical system 24 volt w/42 amp alternator

Transmission
Direct drive, full power shift with planetary gear reductions. Foot inching pedal.

Travel Speeds (2200 engine rpm, no tire slip, 14.00-24 tires):
Shift Lever Position Forward Reverse
mph km/h mph km/h
1 2.3 3.7 3.0 4.8
2 3.3 5.3 4.2 6.8
3 5.2 8.9 6.6 10.6
4 6.7 10.8 8.6 13.9
5 8.8 14.2-
6 11.5 18.5-
7 14.6 23.6-
8 25.1 40.4-

Differential Lock Foot-operated, hydraulically actuated

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

Front Drive Standard and optional systems are available to match different applications. Both use a variable-displacement
pump, a reversible motor in each wheel, and a flow divider to assure
front wheel traction. System has two operational modes and free-
capabilities without engine power
Rear Full hydraulic power system. Steering
Hydraulically articulated frame steering (25 deg. left or right)
Minimum turning radius 22 ft. 6 in. (0.66 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 w/pressure controlled 4.0 cu. in. (65 cm³) variable-displacement pump 36 gpm (2.27 L/s) @2200 engine rpm
Moldboard Wear-resistant high-carbon steel Length 160 hp (119 kW) 12 ft. (3.66 m)
Height 24 in. (610 mm)
Thickness 0.98 in. (22 mm)
Cutting Edge: Dura-Max® through-hardened curved steel Thickness and width 0.62 x 6 in. (16 x 152 mm)
Blade Range:
Lift above ground 17 in. (432 mm)
Blade side shift: Right or left 26.9 in. (683 mm)
Shoulder reach outside wheels (frame straight):
Right 88.4 in. (22.5 m)
Left 28.5 in. (725 mm)
Pitch at ground line 44 deg. forward 10 deg. back

Blade Lift Mechanism:
Control Dual-lever, hydraulic
Lift Arms: Nodular cast iron
Positions 7
Control Hydraulic, foot operated
Circle: Fabricated steel angle construction
Circle diameter 60 in. (1.5 m)
Rotation 360 deg.
Drive Hydraulic motor and worm gear w/position lock
Sideshift, right 32.0 in. (813 mm)
left 33.5 in. (851 mm)

Drawbar: Welded box section, 3.5 x 7 x 0.5 in. (89 x 178 x 13 mm) wall w-ball and socket draft connection

Frame:
Rear mainframe Welded deck section from articulation joint to mainframe arch
Width, minimum 10 in. (254 mm)
Height, minimum 13 in. (330 mm)
Thickess, minimum 0.63 in. (16 mm)
Weight per ft. minimum 110 lb. (164 kg/m)
Minimum vertical section modulus 118 in³ (1935 cm³)

Front mainframe Welded deck section from mainframe arch to front hood
Width 7 ft. 6 in. (2.29 m)
Height, minimum 14 in. (368 mm)
Thickess, minimum 0.87 in. (22 mm)
Weight per ft. minimum 118 lb. (164 kg/m)
Minimum vertical section modulus 118 in³ (1935 cm³)

Tires:
13.00-24, 12-PR, G2, standard 150 hp (112 kW)
17.5-25, 12-PR, L2 112 kW

Dimensions:
Height to top of steering wheel 7 ft. 6 in. (2.29 m)

Capacities:
U.S. Liters
Fuel tank 70 gal. 265.0
Cooling system 7 gal. 26.5
Engine lubrication, including filter 20 qt. 18.9
Transmission and hydraulic system 41 gal. 155.2
Tandem housings (each) 5 gal. 18.9
Worm gearbox 4 qt. 3.8

Scarifier (Special Equipment): V-type for 4 ft. (1.22 m) cut with 3 manual pitch positions
Number of teeth 5 standard, 9 optional
Height above ground 24.0 in. (610 mm)
Penetration 13.7 in. (348 mm)
Shank size 1 x 3 in. (25 x 76 mm)

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

772A MOTOR GRADER SPECIFICATIONS
(Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE Standards. Except where otherwise noted, these specifications are based on a unit with 13.00-24, 12-PR, tubeless tires on 8 in. (203 mm) rims, 14.00-24 tires in oil bath, and standard equipment. Weights include lubricants, coolants, full fuel tank and 175 lb. (79 kg) operator.)
772A MOTOR GRADER SPECIFICATIONS

Additional Standard Equipment:
Gauges:
- Air filter indicator
- Engine oil pressure
- Front-wheel-drive return filter indicator
- Front-wheel-drive charge pressure
- Fuel level
- Hydraulic function return filter indicator
- Transmission clutch pressure
- Transmission filter indicator
- Transmission lube pressure
- Water temperature

Horns:
- Hourmeter
- Lights, stop and tail
- Lights, driving indicator
- Precleaner
- Reverse warning alarm

Optional or Special Equipment with Weights:
(Add these weights to SAE Standard Equipment operating weights to obtain total operating weights.)

<table>
<thead>
<tr>
<th>Description</th>
<th>lb.</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerator-decelerator</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Air conditioner w/ heavy-duty alternator</td>
<td>187</td>
<td>85</td>
</tr>
<tr>
<td>Automatic blade control</td>
<td>350</td>
<td>159</td>
</tr>
<tr>
<td>Articulation indicator</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Batteries, heavy-duty w/ 820-minute reserve capacity</td>
<td>101</td>
<td>46</td>
</tr>
<tr>
<td>Blade, front bulldozer w/ float control</td>
<td>1618</td>
<td>734</td>
</tr>
<tr>
<td>Bottom guard, heavy-duty w/ rear hitch</td>
<td>459</td>
<td>208</td>
</tr>
<tr>
<td>Bottom guard, regular</td>
<td>160</td>
<td>73</td>
</tr>
<tr>
<td>Cold-weather starting aid</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Dura-Max through-hardened cutting edge, 5 x 8 in. (19 x 203 mm)</td>
<td>8.5</td>
<td>3.7</td>
</tr>
<tr>
<td>Engine disconnect, cold weather</td>
<td>30</td>
<td>14</td>
</tr>
<tr>
<td>Engine side shields</td>
<td>60</td>
<td>27</td>
</tr>
<tr>
<td>Fan, defroster</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Front wheel drive in 1st through 6th gears, 11.5 mph (19 km/h), free wheeling in 7th and 8th gears, 6 cu. in. (98 cm³)</td>
<td>34</td>
<td>15</td>
</tr>
<tr>
<td>variable displacement pump</td>
<td>34</td>
<td>15</td>
</tr>
<tr>
<td>Heater, cab, 19,000 BTU (5.6 kW)</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td>Heater, cab, 38,000 BTU (11.1 kW)</td>
<td>31</td>
<td>14</td>
</tr>
<tr>
<td>Heater, cab, 40,000 BTU (11.7 kW)</td>
<td>31</td>
<td>14</td>
</tr>
<tr>
<td>Heater coolant</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Heater, roof-mounted, 25,000 BTU (7.3 kW) (add to air conditioner)</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>Hydraulic pump, pressure controlled, variable displacement, 6.0 cu. in. (98 cm³), 52.4 gpm (3.3 L/s)</td>
<td>50</td>
<td>23</td>
</tr>
<tr>
<td>Lights, blade</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Lights, work, 2 front/2 rear floods</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Mat, floor</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Mirror, outside rear view, convex, outside</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Mirror, outside rear view, convex, both sides</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Mirror, outside rear view, flat, one side</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Mirror, outside rear view, flat, both sides</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Moldboards:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-ft. (3.66 m) w/ 3/4 x 8 in</td>
<td>106</td>
<td>48</td>
</tr>
<tr>
<td>Dura-Max cutting edge</td>
<td>106</td>
<td>48</td>
</tr>
<tr>
<td>13-ft. (3.96 m) w/ 4 x 6 in</td>
<td>60</td>
<td>27</td>
</tr>
<tr>
<td>Dura-Max cutting edge</td>
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<td>27</td>
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<tr>
<td>13-ft. (3.96 m) w/ 3/4 x 8 in</td>
<td>116</td>
<td>53</td>
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<tr>
<td>Dura-Max cutting edge</td>
<td>116</td>
<td>53</td>
</tr>
<tr>
<td>14-ft. (4.27 m) w/ 3/4 x 6 in</td>
<td>146</td>
<td>66</td>
</tr>
<tr>
<td>Dura-Max cutting edge</td>
<td>146</td>
<td>66</td>
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</tbody>
</table>

SAE Operating Weight

<table>
<thead>
<tr>
<th>Description</th>
<th>On Front Wheels</th>
<th>On Rear Wheels</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard equipment</td>
<td>9237 lb.</td>
<td>21,666 lb.</td>
<td>30,903 lb.</td>
</tr>
<tr>
<td>and scarifier</td>
<td>(4190 kg)</td>
<td>(9827 kg)</td>
<td>(14,017 kg)</td>
</tr>
<tr>
<td>Standard equipment, scarifier and ripper</td>
<td>9780 lb.</td>
<td>24,712 lb.</td>
<td>34,492 lb.</td>
</tr>
<tr>
<td></td>
<td>(4436 kg)</td>
<td>(11,209 kg)</td>
<td>(15,645 kg)</td>
</tr>
</tbody>
</table>

Moldboard extensions, 2-ft. (610 mm), right or left (less cutting edge) 220 lb. 100 kg
Moldboard float 14 lb. 6 kg
Overlay end bits (1 pair), 6 in. (152 mm) 62 lb. 28 kg
Overlay end bits (1 pair), 8 in. (203 mm) 77 lb. 35 kg
Rear hitch 61 lb. 28 kg
Rims: 10 in. (254 mm) for 14.00-24 tires 452 lb. 205 kg
14 in. (356 mm) for 17.50-25 tires 645 lb. 293 kg
Ripper, rear mounted with hitch 2474 lb. 1123 kg

canopy w/ seat belt and instrument panel cover 447 lb. 203 kg

Scarfiera, regular w/ five teeth 1115 lb. 506 kg

Seat, deluxe suspension, cloth covered 111 lb. 50 kg
Seat, deluxe suspension, vinyl covered 58 lb. 26 kg

Sound suppression package (for use with whipper) 295 lb. 134 kg

Tires: 14.00-24, 12 PR, G2 210 lb. 95 kg
17.5-25, 12 PR, L2 468 lb. 213 kg

Toolbox 11 lb. 5 kg

Winter door cam for cab 4 lb. 2 kg

Wiper, rear windshield 4 lb. 2 kg

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772A MOTOR GRADER DIMENSIONS

10 ft. 6 in. (3.20 m)
5 ft. 0.71 in. (1.54 m)
19 ft. 7 in. (5.97 m)
8 ft. 11 in. (2.72 m)
27 ft. 9.5 in. (8.47 m)
30 ft. 2 in. (9.20 m)
32 ft. 6 in. (9.90 m)

9 ft. 7 in. (2.92 m)