



City of Grand Island

Tuesday, March 22, 2016

Council Session

Item G-13

#2016-65 - Approving Lease Purchase of a New Motor Grader for the Streets Division of the Public Works Department

Staff Contact: John Collins, P.E. - Public Works Director

Council Agenda Memo

From: Shannon Callahan, Street Superintendent

Meeting: March 22, 2016

Subject: Approving Lease Purchase of a New Motor Grader for the Streets Division of the Public Works Department

Presenter(s): John Collins PE, Public Works Director

Background

On January 15, 2016 a Request for Proposals (RFP) for a New Motor Grader with lease purchase financing for the Streets Division of the Public Works Department was advertised in the Grand Island Independent and sent to eight (8) potential proposers.

The Streets Division currently owns and uses four (4) motor graders that are used to grade gravel streets and alleys, grading detention cells, and snow removal. Offered as a trade-in is a 1975 CAT 120G Motor Grader (Unit 234) with approximately 12,000 hours and a repair cost to purchase price ratio of 1.20.

Discussion

Two (2) proposals were opened on February 24, 2016 and thoroughly reviewed by a committee comprised of five (5) staff from the Streets Division and Fleet Services Division. The proposals were evaluated on the following criteria:

CRITERIA	POINTS
Quality of product / services and ability to furnish the products and services required by the City	40
Warranty Offered	20
Ability to provide initial training and long-term training for City personnel	15
Costs associated with products and services	15
Value offered for Trade-In Equipment	10
TOTAL POINTS	100

Murphy Tractor of Grand Island, NE received the highest ranking by the committee based on the established criteria with their proposal of a 2016 John Deere 672G Motor Grader (brochure attached).

Equipment options and lease terms were negotiated for the purchase of the equipment. John Deere Finance was asked to give two amortization schedules, one using the FY 15-16 budgeted amount of \$25,000 for a down payment and one with no down payment (Attachment 2).

A total savings using the budgeted \$25,000 down payment is only \$1,756.90; therefore Public Works is recommending a zero down payment (see below) and using the \$25,000 budgeted funds to assist with the overage in the snow removal budget from the February 2016 blizzard.

Purchase Price:	\$233,600
Offered Trade-In Amount	\$20,000
Net Price:	\$213,600
Finance Company:	John Deere Finance
No. of Annual Payments	5 (60 month term)
Interest Rate	2.75
Down Payment:	\$0
Annual Payment	\$45,723.02 (1 st payment due November 10, 2017)
Interest	\$15,011.10
Total Repayment Amount	\$228,611.20

Annual payments will be budgeted each year for Council approval.

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

Recommendation

City Administration recommends that the Council approve the lease purchase of a New Motor Grader from Murphy Tractor of Grand Island, NE with a zero down payment financing provided by John Deere Finance.

Sample Motion

Move to approve the lease purchase of a New Motor Grader from Murphy Tractor of Grand Island, NE with a zero down payment financing provided by John Deere Finance.

G/GP-SERIES GRADERS

164–211 kW (220–283 hp)



JOHN DEERE





Choose the operating system that works for you — fingertip armrest or low-effort mechanical controls. Either way, levers are arranged in the familiar industry-standard pattern, and deliver smooth, predictable response.

Your choice of EPA Tier 2, 3, or Interim Tier 4 (EU Stage II, IIIA, and IIIB) fuel-efficient John Deere diesels deliver generous displacement, power, and lugging ability. (Tier 2/Stage II not available in the U.S. and Canada.)

Production-boosting GP features such as automated cross-slope control and push-button-activated return-to-straight make the most of a seasoned operator's skills. And help improve an inexperienced operator's game.

Long-term durability is bolstered by larger-than-usual articulation joint roller bearings, big-displacement wet-sleeve diesel engines, and heavy-duty transmissions, to list just a few.

Only our graders are available with John Deere WorkSight™. This easy-to-use comprehensive suite of technology increases uptime and productivity while lowering operating costs. JDLink™ machine monitoring provides real-time machine utilization and health data, plus location information. Fleet Care proactively suggests maintenance to correct problems early before they create costly downtime. Service ADVISOR™ Remote enables your dealer to read diagnostic codes, record performance data, and even update software without a trip to the jobsite. And grade-control options make it easy to add your preferred system.

Key specifications	670G/GP	672G/GP	770G/GP	772G/GP	870G/GP	872G/GP
Net power (IT4/Stage IIIB)	164 kW (220 hp)	175 kW (235 hp)	183 kW (245 hp)	198 kW (265 hp)	198 kW (265 hp)	211 kW (283 hp)
Net peak torque	1101 Nm (812 lb.-ft.)	1173 Nm (865 lb.-ft.)	1235 Nm (911 lb.-ft.)	1319 Nm (973 lb.-ft.)	1300 Nm (959 lb.-ft.)	1375 Nm (1,014 lb.-ft.)
Net torque rise	68%	62%	57%	50%	53%	51%
Typical operating weight	19 205 kg (42,340 lb.)	19 976 kg (44,040 lb.)	19 396 kg (42,760 lb.)	20 217 kg (44,570 lb.)	20 303 kg (44,760 lb.)	21 187 kg (46,710 lb.)
Blade pull	12 800 kg (28,220 lb.)	17 587 kg (38,773 lb.)	13 150 kg (28,990 lb.)	17 913 kg (39,491 lb.)	13 299 kg (29,320 lb.)	18 082 kg (39,864 lb.)

Seeing is believing.

It's easy to see why these graders are destined to become industry favorites. Visibility is clearly unsurpassed, with a large expanse of floor-to-ceiling tinted glass, narrow front console, and streamlined saddle arms giving way to a commanding view of the work at hand. What's more, the spacious walk-through cab's many amenities provide all of the fatigue-beating comfort and quiet an operator could ever want. So you can count on the kind of productivity you need.

Which grader's visibility is truly best-in-class? Depends on where you're looking. On ours, you have an unobstructed view of the things you need to see. Like the heel and toe, and back side of the blade. Even the area beneath the front axle is clearly visible, so you can see oncoming obstacles.

Storage is generous with numerous overhead compartments, plus a place for a beverage, cooler, cell phone, and other carryons.

Standard 15-amp converter (30-amp available) and two 12-volt outlets provide convenient power for cell phones and other electronic devices.

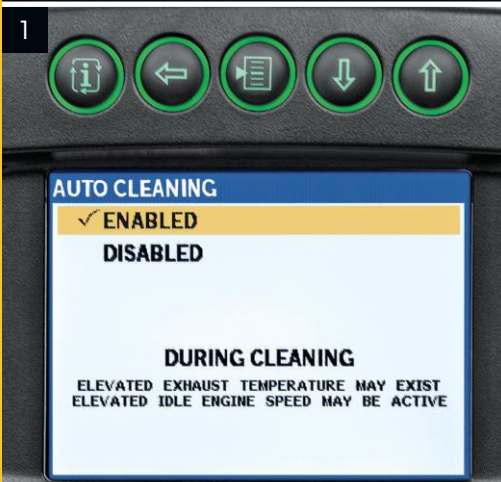
Narrow center console and streamlined saddle bring the blade and front tires within focus. On GP models (shown), control linkages have been eliminated and front windows lowered 114 mm (4 1/2 in.) to further enhance blade visibility.

Highly efficient HVAC system employs 13 directional vents for superior all-season comfort. Sliding side glass and available swing-out lower front windows add ventilation.

Push-button-activated cruise control helps reduce operator fatigue. Simply depress the brake or throttle pedals to return to manual operation.

Tinted glass, adjustable front and rear shades, and extended roofline help reduce glare. Standard front and rear intermittent wipers and rear window defogger also help keep the view clear.

We've got your back with large adjustable mirrors that give a clear view of the tandems and ripper. Heated mirrors are also available. If you need to see more, an optional camera displays the action behind you on the color LCD monitor in front of you.





1. Multi-language LCD monitor gives push-button access to a wealth of machine info including vital and general operating conditions, diagnostic codes, and even the activity behind you (when equipped with camera). On IT4 Stage IIIIB-equipped graders, exhaust filter operation and maintenance status are indicated with on-screen displays.

2. Sealed-switch module provides push-button control of 25 machine functions including keyless start. When enabled, keyless start requires a numeric pass code that helps prevent unauthorized machine operation.

3. Yet another example of doing things your way — an alternate mounting position on the right-side ROPS post makes it easy to relocate the monitor, giving way to a grade-control display.

The genius behind our grader controls.

Armed with input from the people who run them, we set out to design the ideal operating system for our next-generation graders. You talked, we listened, and that's why we offer a choice.

For unsurpassed productivity with a grade-control system, opt for a GP model. Eight armrest-mounted fingertip-actuated controls, including steering lever, are arranged in the industry-standard pattern on each side of the steering wheel. Unlike the joysticks used in other graders, your operator won't have to relearn the controls. Or be concerned about unintentionally actuating hydraulic functions when turning, backing up, working on a slope, or V-ditching.

No extra levers required for grade control. Instead, knob-integrated push buttons provide convenient, fingertip activation.

Beyond their predictable operator-friendly controls, GP models come equipped with cross-slope, return-to-straight, and IGC ready. These and numerous other value-added advantages quickly pay for themselves in increased productivity.





1. With high/wide-back and heated lower cushion, the GP grader's air-suspension seat provides exceptional daylong comfort.
2. Automated cross-slope simplifies holding a consistent slope by reducing operation to a single lever. An operator simply selects the desired slope and the side of the blade that will be manually controlled. Once set, the system automatically adjusts the opposite blade-lift cylinder to maintain the slope. It's a Grade Pro exclusive that helps veteran operators be their best and inexperienced operators get up-to-speed more quickly.
3. Cross-slope monitor can also be used as a slope meter. Colored bars on the LCD screen indicate the blade position in relation to the desired slope — to help stay on grade.
4. At the touch of a button, return-to-straight automatically straightens an articulated frame. For quicker work cycles.
5. Only John Deere offers you a choice of controls. Our G-Series models come standard equipped with conventional mechanical levers positioned in the industry-accepted pattern and deliver precise, predictable low-effort control.





Levels everything but the playing field.

The G-Series' taller mainframe lets these highly productive graders shoulder larger loads and navigate more easily over obstacles. Provides plenty of clearance for a mid-mount scarifier, and simplifies blade setup and operation, too. You won't find easier-running graders, either. Our exclusive Event-Based Shifting (EBS) transmission delivers smooth-as-silk gear and direction changes, for exceptional control and grading precision without extra effort. There's nothing else like them.



Best-in-class lever efforts are combined with Pressure-Compensated Load-Sensing (PCLS) hydraulics to ensure consistent, predictable, and precise response.

Automatic differential lock stays engaged when travelling straight, disengages in turns exceeding 10 degrees, and re-engages when returning to straight.

When engine-stall prevention senses an overload, the system automatically shifts the transmission to neutral and issues a visual alert. This John Deere exclusive helps prolong uptime and engine life.

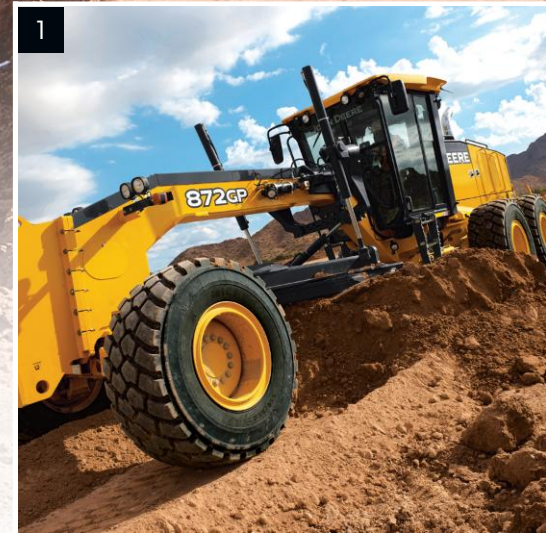
With five true working speeds below 16 km/h (10 mph) and a top speed of 45 km/h (28 mph), it's easy to match ground speed to the work. Autoshift option automatically shifts gears four through eight, for even easier operation.

Optimized moldboard curvature and generous circle torque help keep blades heaped and loads rolling.

Choose from front scarifier, mid-mount scarifier, or rear scarifier/ripper. There's also a front-lift option that simplifies adding a bulldozer blade or V-plow.

Our "open-architecture" design lets you employ your favorite brand of grade-control system. GP models come factory equipped with bulkhead connectors, sensor mounts, electrical wiring harnesses, integrated controls, and exclusive universal moldboard mast mounts. So adding *Topcon*, *Trimble*, *Leica* or other grade-control systems is neat, quick, and noninvasive. For the most seamless solution, choose the optional Topcon 3D-MC² grade-control system that's ready to go when you take delivery of your GP Motor Grader.

1. Generous throat clearance between the top of the blade and bottom of the circle provides smooth material flow across the blade. Plenty of blade clearance makes it easy to navigate over obstacles, too.
2. Jackscrew-adjusted side-shift wear inserts keep the moldboard tight and precise. Takes only minutes to return tolerances to factory spec.
3. Exclusive ball-and-socket draft-frame pivot and seven-position saddle provide best-in-class blade setup and improved ditch cutting, ditch cleaning, and reach outside the tires.



Nothing runs like a Deere, because nothing is built like one.

Downtime is lost time. Which is why we loaded-up these graders with durability-enhancing advantages that promise to deliver years of trouble-free service. Large-displacement heavy-duty wet-sleeve diesel engines. Larger-than-usual axle shafts, differential locks, hydraulic cylinders, and front axles. Biggest-in-class articulation joint roller bearings. And solid-state electronics and sealed-switch modules, to list just a few. When you know how they're built, you'll run a John Deere.

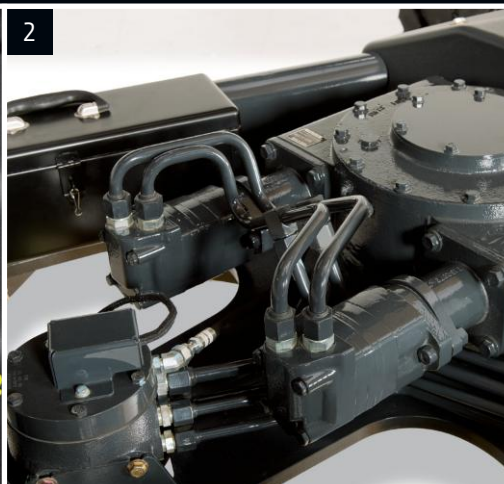
Variable-speed hydraulic reversing fan cycles to eject debris from the radiator and cooler cores only as needed, reducing fuel consumption while lowering sound levels and daily operating costs. Or choose your preferred cleaning cycles through the in-cab monitor.

Exclusive auto-shutdown turns off the engine after an operator-determined time of idling. Saves fuel and reduces wear on engine, transmission, and hydraulic components.

Self-adjusting wet-disc brakes are mounted inboard, where they run cool, clean, and unexposed to corrosive materials.

Purpose-built PowerShift™ transmission employs durable heavy-duty clutches and bearings, for reliable performance, shift after shift.

Separate transmission, hydraulic, and axle filtration and cooling systems prevent cross-contamination for longer component life.





1. Sealed-switch module (SSM) and electrical center employ circuit-board technology that reduces connections from 25 to one, and wires from 100 to four. Solid-state seals and switches keep out moisture and debris, and are proven reliable for more than two million cycles.
2. Exclusive heavy-duty twin-drive circle gearbox delivers significantly increased durability in heavy-loaded applications. Standard on 870G/GP and 872G/GP, it's optional on others.
3. Our IT4 Stage IIIB technology is simple, fuel efficient, fully integrated, and fully supported. It employs field-proven cooled exhaust gas recirculation (EGR) for reducing NO_x, and a diesel particulate filter (DPF) and diesel oxidation catalyst (DOC) to reduce particulate matter. Periodic active and passive regeneration automatically cleans the filter without impacting machine productivity.
4. High-strength circle and draft frame withstand high-impact loads. Available blade-impact system further protects structural components from damage caused by run-ins with obstructions.



From blue-topping to heavy dirt work, six-wheel-drive G-Series Motor Graders are more productive in all kinds of applications.

Exclusive power-management system balances the demand between the front and rear wheels, delivering smooth six-wheel power.

Six-wheel drive enables these graders to work across steep slopes, carry big loads through corners, and direct the front wheels while ditching without spinning out.

1. Steering system automatically adjusts the speed of the outside front tire while increasing pull to provide full-power turns.

2. If traction and speed are what you need, you get it with a John Deere. All three models deliver six-wheel drive through 7th gear and 32 km/h (20 mph).

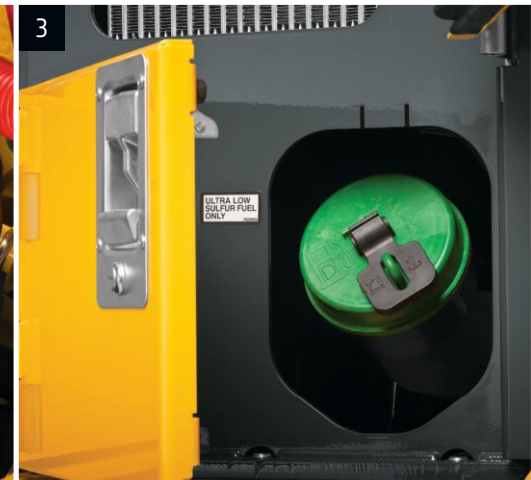
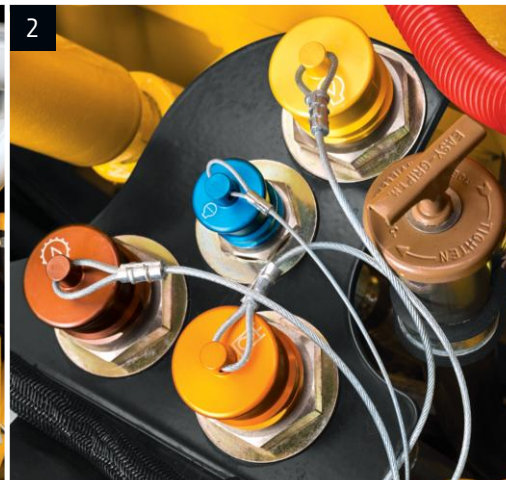
3. Power is nothing without control. On our six-wheel-drive graders, the front wheels engage smoothly and in sync with the rear tandems — making them highly adept at finishing.

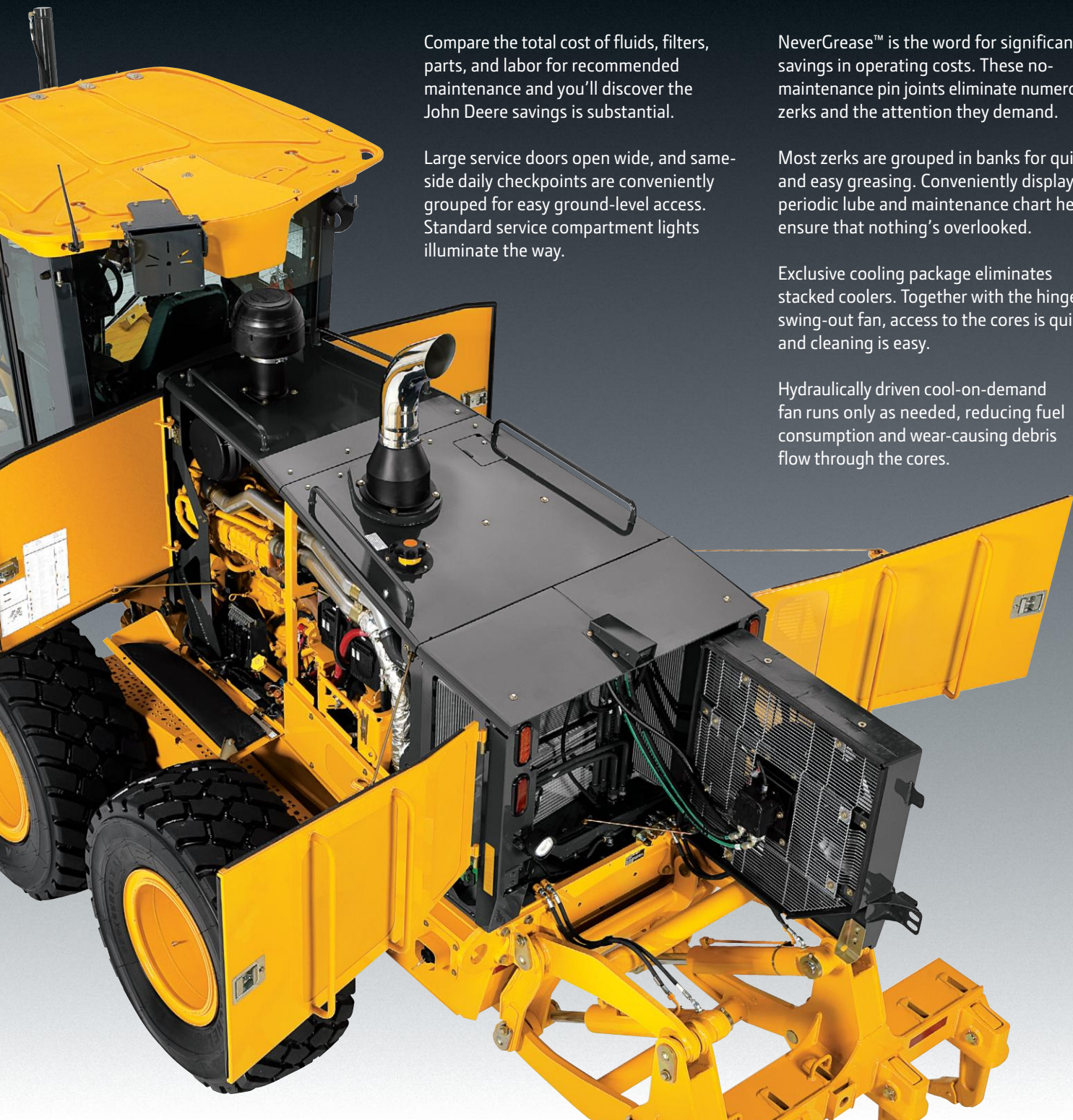


Open wide and be awed.

Unlatch the large side panels and you'll discover the many ways these graders minimize maintenance. And help keep daily operating costs low. Our exclusive slide-out coolers and hinged fan provide wide-open access to both sides of the cores for simplified clean-out. Grouped same-side service points make quick work of the daily routine. Easy-to-check sight gauges and fluid reservoirs. Quick-change filters. Convenient fluid-sample ports and advanced self-diagnostics — the G-Series are loaded with time- and money-saving features that help keep maintenance manageable.

1. Maintenance personnel will appreciate the unique easy-access hydraulic, transmission, and differential filter bank.
2. Available quick fluid-service ports help speed servicing to increase uptime. 500-hour engine oil/filter; 2,000-hour transmission, hydraulic, and axle filters; and 4,000-hour transmission, hydraulic, and axle oil-service intervals minimize maintenance.
3. Ground-level fueling and a fast-fill option get you back into the rat race more quickly.
4. Two-hour replaceable super-tough nylon or bronze draft frame and circle wear inserts minimize maintenance labor.
5. Should a problem arise, easy-to-navigate LCD monitor provides diagnostic info and even offers possible troubleshooting solutions to decrease downtime.
6. IT4 Stage IIIB diesel particulate filter is easily removed through the top of the engine compartment. Minimum service interval is 5,000 hours, and must be done by a John Deere dealer or other qualified service provider.





Compare the total cost of fluids, filters, parts, and labor for recommended maintenance and you'll discover the John Deere savings is substantial.

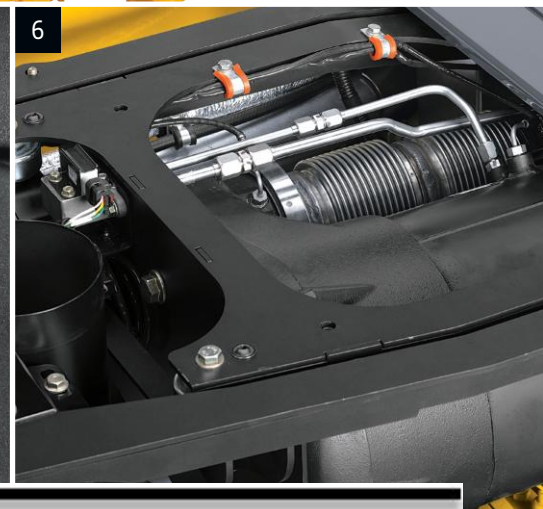
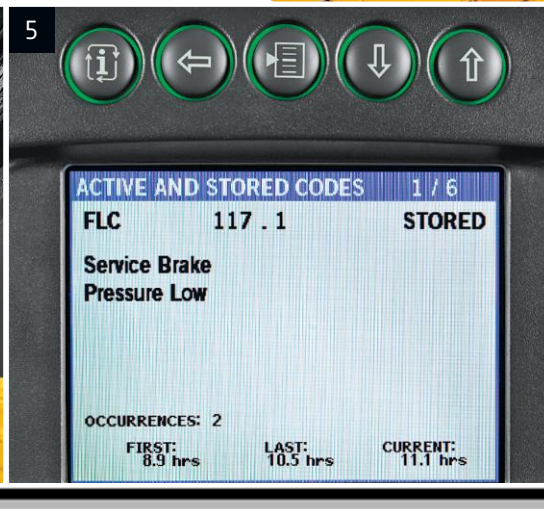
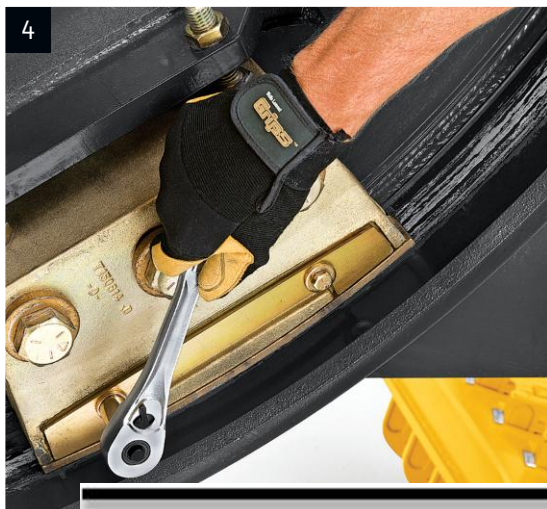
Large service doors open wide, and same-side daily checkpoints are conveniently grouped for easy ground-level access. Standard service compartment lights illuminate the way.

NeverGrease™ is the word for significant savings in operating costs. These no-maintenance pin joints eliminate numerous zerks and the attention they demand.

Most zerks are grouped in banks for quick and easy greasing. Conveniently displayed periodic lube and maintenance chart helps ensure that nothing's overlooked.

Exclusive cooling package eliminates stacked coolers. Together with the hinged swing-out fan, access to the cores is quick and cleaning is easy.

Hydraulically driven cool-on-demand fan runs only as needed, reducing fuel consumption and wear-causing debris flow through the cores.



AMORTIZATION SCHEDULE FOR NEW MOTOR GRADER					
Annual Payments	Down payment	Annual Payment	Interest*	Principal	Total
5	\$0.00	\$45,723.02	\$15,011.10	\$213,600.00	\$228,611.10
5	\$25,000.00	\$40,370.64	\$13,254.20	\$213,600.00	\$226,854.20
				Difference	\$1,756.90

*Interest rate of 2.75%, compounded monthly

RESOLUTION 2016-65

WHEREAS, the City of Grand Island invited proposals for a New Motor Grader, according to Request for Proposals on file with the Public Works Department; and

WHEREAS, on February 24, 2016 proposals were received, reviewed, and evaluated in accordance with established criteria; and

WHEREAS, Murphy Tractor of Grand Island, Nebraska submitted a proposal in accordance with the terms of the Request for Proposals and received the highest ranking based on the established criteria; and

WHEREAS, the options and lease purchase terms were negotiated for a net purchase price of \$213,600; and

WHEREAS, such amount will be financed by John Deere Finance for five (5) annual payments of \$45,723.02 with the first payment due on November 10, 2017; and

WHEREAS, the total repayment amount will be \$228,611.20.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the lease purchase of a New Motor Grader from Murphy Tractor of Grand Island, NE is hereby approved.

BE IT FURTHER RESOLVED, that the Mayor is hereby authorized and directed to execute such contract on behalf of the City of Grand Island.

Adopted by the City Council of the City of Grand Island, Nebraska, March 22, 2016

Jeremy L. Jensen, Mayor

Attest:

RaNae Edwards, City Clerk

Approved as to Form	☐ _____
March 18, 2016	☐ City Attorney