

JD CONSTRUCTION EQUIPMENT

ODEL NO.

1050C

DOZERS







MODEL NO.

1050C

DOZERS

It's not just its size that will make the 42<sup>1</sup>/<sub>2</sub> ton, 324 horsepower 1050C such a significant addition to your equipment fleet. With full-featured hydrostatic drivetrain, John Deere's biggest dozer ever delivers power turns, infinite speed control, counterrotation, and numerous other production-boosting advantages you don't get with other crawlers in its class. Backed by an extensive dealer network and exclusive StructurAll® and worldwide warranties, the 1050C Dozer stands tall on a wide variety of jobsites. To learn more, turn the page.

#### **DRIVETRAIN**

## Go beyond the limits of other dozers

With their conventional torque converter transmissions and clutch/brake or differential steering systems, other dozers just can't match the 1050C's combination of operating ease and flexibility.

Read on and you'll see what we mean.

Instead of a limited gear selection, the 1050C provides an infinitely variable range from 0 to 6.8 mph, giving an operator the freedom to choose the right ground speed for the job.

Power management system takes both the guess and work out of efficient operation. Just set the maximum desired ground speed and the dozer does the rest. As loads change, the drivetrain responds, automatically powering up or down to maintain peak engine rpm and efficiency.



## Harness the power

Automatic park brake, slipresistant floormat, and convenient grab bars help keep your operator out of harm's way.

Decelerator lets you further finetune ground speed. Depressing it slows travel while maintaining engine rpm, allowing the 1050C to literally crawl with no loss in hydraulic power. Fully engaging the pedal applies the brakes. Spacious and quiet walkthrough air-conditioned cab is standard. With plenty of tinted glass, all-around visibility is virtually unobstructed.

#### **OPERATOR STATION**

Sun in your eyes? Use the roll shade to block it out or to help keep the cab cooler. Wide rearview mirror is also standard.





Load-sensing hydraulic system delivers precise, low-effort metering to the single lever pilot-operated control. Second lever operates the ripper.

Ground speeds are infinitely variable from 0 to 6.8 mph. A switch on the handle enables an operator to select a specific speed range from a choice of three. 100 percent of available power is always applied regardless of the selected range.



Pilot-operated single lever gives intuitive, low-effort control of steering, forward/reverse travel, and ground speed. The farther you push it ahead or pull it back, the faster you go in that direction.

Deluxe suspension armchair seat fully adjusts for daylong support and comfort. Air suspension power-adjustable seat also available.

Electronic monitor in the right-side console keeps a vigilant watch on machine functions, with warnings you can see and hear. Includes illuminated gauges for engine coolant temperature, engine oil pressure, fuel, and hourmeter.





#### **UNDERCARRIAGE**

# How the 1050C's DuraTrax undercarriage helps elevate profits

86 inch gauge and 125 inch track length provide solid stability on slopes, ground-gripping traction, and balanced bladework.

Cast steel-alloy segmented sprockets have deep-hardened wear surfaces. Unique tooth profile also helps extend sprocket and bushing life.

No track whipping or chain bunching with the 1050C. What's more, its oval design has only one wear-causing forward-travel flex point. Compared to the three flex points found on elevated sprocket undercarriage, which do you think will last longer?





#### **BLADES/RIPPERS**

Whether you're stripping overburden, ripping rock, or muscling through whatever, the 1050C Dozer is up to the task. Both the 12.5 cubic yard semi-U or 15.3 cubic yard U-blades can be armed with hydraulic tilt and power pitch adjustment, plus numerous heavy-duty cutting edges, side cutters, push plates, blade liners, and end bits.

Regardless of which blade you choose, the 1050C's dedicated 89 gpm variable displacement piston pump with load-sensing proportional flow delivers precise metering to the low-effort pilot-operated single lever control.

Rear attachments include single and multi-shank parallelogram rippers with hydraulic pitch adjustment. The single shank rippers' optional pin-puller enables the operator to change shank length at the push of a button from the comfort and safety of the cab.

L-shape push beams ensure maximum strength and rigid durability.

Blade pitch is fully adjustable and easily adaptable for top performance in a wide variety of applications and materials.

Heavy-duty sidecutters, steep cutting edge angle, and mold-board curvature get materials rolling to help build and carry big loads. Hardened cutting edges in a variety of thicknesses are available.

#### **SERVICE**

## Big dozer, minimal maintenance

Lockable service doors provide wide-open access to dipsticks, sight gauges, fill tubes, and filters. Daily drivetrain service can be accomplished on the right side.

Your oilers and service technicians won't have to crawl all over this crawler to maintain it. Like all Deere dozers, daily and periodic service points are conveniently grouped, with many protected behind hinged sideshields that open wide, simplifying fluid and filter checks, additions, and changes.

Master electrical disconnect switch, batteries, and periodic maintenance chart are conveniently located behind the left-side panel.





Hydraulically driven cooling fan reduces the load on drive belts for long life.

Sight gauges allow a quick visual check of hydraulic/ transmission and final drive fluid levels.





Five fin-per-inch radiator core provides efficient cooling, resists plugging, and cleans easily.

Bolt-on rod guides are easy to remove, should cylinder repair ever become necessary.





Turbocharged V-6 diesel delivers 324 hp at a slow 1,800 rpm for enhanced longevity and optimum fuel economy. Wet-type cylinder liners dissipate heat for reduced ring wear and oil breakdown.

Final drives incorporate a unique oil-filled double seal. If a failure occurs, the oil escapes, setting off an indicator light on the control panel inside the cab. It's an early-warning system that can help avoid major final drive failures.





Remote diagnostic ports allow quick checks of transmission system and charge pressures for easier troubleshooting.

Cab can be tilted in minutes for easier access to the hydrostatic drive motors and the engine. Think of the savings that will make on flat-rate repair costs.





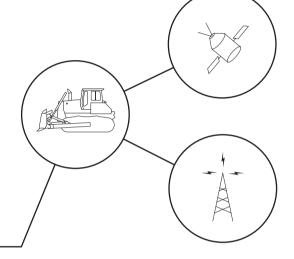
Easily replaced half-shell bearings within the dozer push beams help avoid more costly repairs.

# On-site or online, we're at your service On-site service options and preventive maintenance contracts let you lock-in costs and help avoid downtime by ensuring that critical maintenance work gets done on time, and at your convenience.

#### **CUSTOMER PERSONAL SERVICE**



Deere CPS allows you to order parts and gain access to a wealth of technical information and training via the internet.



Got a large equipment fleet? The DeereTrax™ tracking system employs satellite technology to quickly and accurately pinpoint the location of your machines and monitors its hours of operation. It's a valuable maintenance and anti-theft tool that's available for any brand of equipment and your on-highway vehicles, too.

Gone are the days of "one size fits all" parts and service. Instead, John Deere Customer Personal Service (CPS) delivers a new level of customized support.

Under the CPS umbrella is a comprehensive line-up of programs and tools created to serve you and your operation. Employing the internet, satellite, and other state-of-the-art technologies, these initiatives provide split-second answers to technical problems, access to John Deere dealership parts inventories, and even help you keep track of the machines in your fleet.

But CPS isn't just about information. We can also put personnel on your jobsites to handle a wide variety of support needs – from on-site warranty administration, to after-hours fuel and lube, to 24/7 service and maintenance expertise. You tell us how and where we can help make your job easier and we'll put together a plan to make it happen.

### 1050C



Engine	1050C
Type	Liebherr D 9406 TI-E intercooled and turbocharged diesel
Engine power per ISO 9249	324 SAE net hp (242 kW) @ 1,800 rpm
Cylinders (wet sleeve)	V6
Displacement	793 cu. in. (13 L)
Fuel consumption, typical	7.7 to 13.2 gal./hr. (29 to 50 L/h)
Maximum net torque	
Lubrication	pressure system with full-flow spin-on filter and integrated oil-to-water cooler
Air cleaner	dual stage dry type with safety element and aspirated precleaner, with dash-mounted restriction indicator
Electrical system	24 volt with 55-amp alternator
Cooling fan	blower-type, hydrostatically driven, thermostatically controlled
Cold-starting aid	flame-glow intake air heater

#### Transmission

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Dual-path, electronic-controlled, closed-loop hydrostatic drive; load-sensing feature automatically adjusts speed and power to match changing load conditions; each individual track is powered by a variable displacement pump and motor combination; single lever controls speed and direction; ground speed (forward and reverse) infinite to 6.8 mph (11 km/h); decelerator pedal permits speed reduction from 6.8 mph (11 km/h) to holding; three working ranges; maximum speed-range control switch located in single-lever handle; maximum speed in range is selected by F-N-R lever position

Travel speeds (infinitely variable)

Forward and reverse speed ranges

1st speed range	0 to 2.5 mph (0 to 4.0 km/h)
2nd speed range	0 to 4.0 mph (0 to 6.5 km/h)
3rd speed range	0 to 6.8 mph (0 to 11.0 km/h

#### Final Drives

Heavy-duty, combination spur gear with double-reduction planetary final drives mounted independent of track frame and dozer push frame for isolation from shock loads; the hydraulic drive motors are mounted to the mainframe; final drives are double sealed with electronic seal-integrity indicator

#### Steering

Fully modulated, infinitely variable, single-lever steering allows for full power turns and counterrotation; infinitely variable track speeds provide unlimited maneuverability and optimum control; hydrostatic steering eliminates steering clutches and brakes

#### Brakes

Hydrostatic (dynamic) braking stops the machine whenever the direction-control lever is moved to neutral or whenever the combined decelerator/brake pedal is fully depressed

#### Automatic Park Brake

Exclusive park brake feature engages wet, multiple-disc brakes whenever the engine stops, whenever the combined decelerator/brake pedal is fully depressed, whenever the park lock lever is placed in the start position, whenever the park brake button is pushed on the dash, whenever the F-N-R control is in the neutral position for more than seven seconds, or whenever machine motion is sensed with F-N-R in neutral position; machine cannot be driven with brake applied, reducing wear out or need for adjustment

#### Hydraulic System

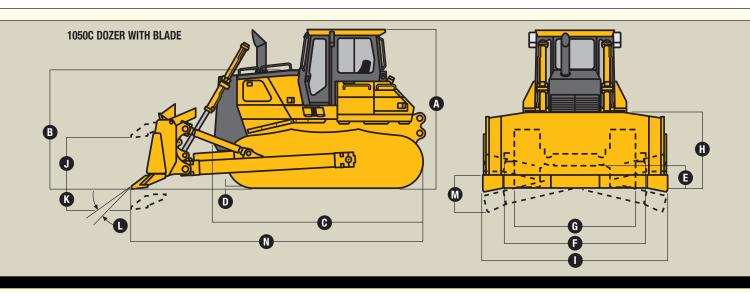
System type	load sensing
Pressure, system relief	2,900 psi (20 000 kPa)
Pump type	variable-displacement piston pump with load-sensing proportional pump flow control
Flow	89 gpm (336 L/min.) @ 1,900 rpm
Filter, return oil	20 micron and 5 micron with magnetic particle attractors
Control	single joystick lever
Cylinders	heat-treated, chrome-plated, polished cylinder rods with hardened steel pivot pins, replaceable bushings, and
	bolted rod guides
Hydraulic/transmission cooling fan	oil-to-air heat exchanger with hydrostatically driven, thermostatically controlled cooling fan

#### Capacities (U.S.)

Fuel tank with lockable cap (12-hr. typical usage)	161 gal. (610 L)
Cooling system with recovery tank	18 gal. (68 L)
Engine oil with spin-on filter	6.3 gal. (24 L)
Final drive (each)	5.5 gal. (21 L)
Hydraulic/hydrostatic reservoir with filter	55 gal. (210 L)
Splitter drive	6.3 qt. (6 L)
All nower train and hydraulic systems allow for up to A	15-degree maximum operation

All power train and hydraulic systems allow for up to 45-degree maximum operation.

Indercarriage	1050C		
Seven-roller track frame with front and rear track guides through-hardened, sealed, and lubricated rollers for r	and sprocket guard; John Deere Dura-TraxTN		nd lubricated track links and
Sprocket		es for severe applications	
Chain	•		
Track shoes, each side			
,	44		
Ground contact area			
22-in. (560 mm) grouser width (extreme duty single bar)	5,510 sq. in. (35 550 cm²)		
24-in. (610 mm) grouser width (extreme duty	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
single bar)	6 000 sq. in. (38 700 cm <sup>2</sup> )		
28-in. (711 mm) grouser width (extreme duty			
single bar)	6 000 cg in (45 100 cm <sup>2</sup> )		
Ground clearance, minimum with single-bar grouser	0,990 Sq. III. (45 100 CIII )		
,	OF in (605 mm)		
(excluding grouser height)			
Length of track on ground			
Track gauge, standard			
Oscillation at front idler	, ,		
Track rollers, each side			
Carrier rollers, each side			
Track pitch	8.5 in. (215 mm)		
Ground Pressures			
	semi-U dozer blade with power tilt	U blade with power tilt and	
	and mechanical pitch adjustment	mechanical pitch adjustment	
With standard equipment, full fuel tank, and 175-lb.	, ,	, ,	
(79 kg) operator			
With 22-in. (560 mm) extreme-duty single-bar			
grouser shoes	13 / nei (03 kPa)	13.7 psi (95 kPa)	
With 24-in. (610 mm) extreme-duty single-bar	10.4 psi (35 ki a)	13.7 psi (33 ki a)	
grouser shoes	12.4 pci (96.l/Pa)	12.7 psi (88 kPa)	
With 28-in. (711 mm) extreme-duty single-bar	12.4 psi (00 KFa)	12.7 psi (00 KFa)	
grouser shoesgrouser shoes	10.8 psi (74 kPa)	11.0 psi (76 kPa)	
AE Operating Weights			
	semi-U dozer blade with power tilt	U blade with power tilt and	tractor shipping weight
	and mechanical pitch adjustment	mechanical pitch adjustment	without blade or attachment
With standard equipment, full fuel tank, and 175-lb.	and moonamout piton adjustment	moonamour phon adjustmont	Without blade of attachment
(79 kg) operator			
With 22-in. (560 mm) extreme-duty single-bar			
	72 005 lb (22 560 kg)	75 705 lb (24 240 kg)	60 E00 lb (27 400 kg)
grouser shoes	73,965 ID. (33 560 Kg)	75,705 lb. (34 340 kg)	60,580 lb. (27 480 kg)
With 24-in. (610 mm) extreme-duty single-bar	74.545.11. (00.000.1)	70.005    (0.4.500   )	00 440 !! (07 700 ! )
grouser shoes	74,515 lb. (33 800 kg)	76,235 lb. (34 580 kg)	62,110 lb. (27 720 kg)
With 28-in. (711 mm) extreme-duty single-bar grouser shoes	75.525 lb. (34 260 kg)	77,245 lb. (35 040 kg)	62,120 lb. (28 180 kg)
9		,= (== =	, ()
Optional or Special Equipment			
Add (+) or deduct (-) lb. (kg) as indicated to base			
weight for units with			
Additional front lights (2)	29 lb. (13 kg)		
Auxiliary hydraulics for rear attachment			
Full-length rock guards	·		
Heavy-duty cutting edges★	, -,		
Pin puller for single-shank ripper			
Power-pitch push arms with dual-tilt cylinders with			
hydraulics	650 lh (295 kg)		
Rear counterweight			
Rigid heavy-duty drawbar			
Rippers			
ROPS canopy	850 Id. (– 386 Kg)		
<b>★</b> Dealer installed.			

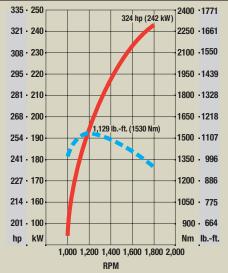


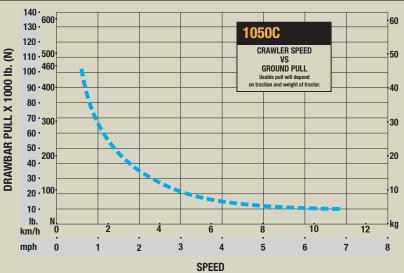
Dim	ensions	1050C
Α	Height over cab (including grousers)	143 in. (3640 mm)
В	Height over engine cover	107 in. (2725 mm)
C	Overall length (without blade)	192 in. (4885 mm)
D	Height of grousers	3.3 in. (84 mm)
Ε	Ground clearance	25 in. (625 mm)
F	Total width over blade-mounting trunnions	124 in. (3145 mm)
G	Overall width	
	With 22-in. (560 mm) extreme-duty single-bar grouser shoes	108 in. (2740 mm)
	With 24-in. (610 mm) extreme-duty single-bar grouser shoes	110 in. (2790 mm)
	With 28-in. (711 mm) extreme-duty single-bar grouser shoes	114 in. (2891 mm)

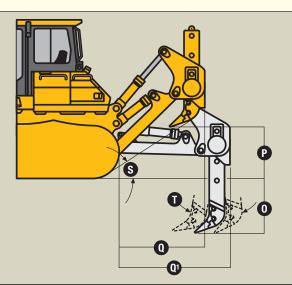
#### Blades

U blade with power tilt and mechanical pitch adjustment

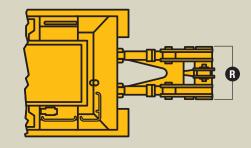
15,123 lb. (6860 kg) 15.3 cu. yd. (11.7 m³) 65 in. (1650 mm) 170 in. (4325 mm) 55 in. (1400 mm) 22 in. (570 mm) 10 degrees 40 in. (1025 mm) 272 in. (6915 mm)

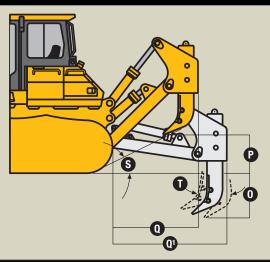




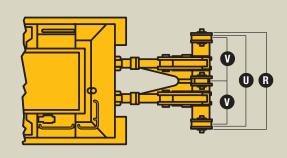


#### 1050C DOZER WITH SINGLE-SHANK PARALLELOGRAM RIPPER





#### 1050C DOZER WITH MULTI-SHANK (3) PARALLELOGRAM RIPPER



#### Parallelogram Ripper with Hydraulic Pitch Adjustment and ESCO Ripper Tips

#### 1050C

	are tropped to the second		
	Majaht	single-shank*	multi-shank (3)
	Weight	9,390 lb. (4260 kg)	11,800 lb. (5352 kg
0	Maximum penetration	47 in. (1200 mm)	34 in. (855 mm)
P	Maximum clearance under tip	45 in. (1150 mm)	36 in. (920 mm)
Q	Overall length, raised position	74 in. (1880 mm)	74 in. (1880 mm)
Q1	Overall length, lowered position	94 in. (2390 mm)	94 in. (2390 mm)
R	Overall beam width	52 in. (1330 mm)	96 in. (2435 mm)
S	Slope angle (full raise)	33 degrees	21 or 29 degrees
T	Shank adjustment range	30 degrees	30 degrees
U	Ripping width		90 in. (2280 mm)
V	Distance between shanks		43 in. (1100 mm)
	<b>★</b> With hydraulic pin puller.		

**Key:** ● Standard equipment ▲ Optional or special equipment

#### ★ See your John Deere dealer for further information.

- 324-hp (242 kW) Liebherr D 9406 TI-E direct-injection, intercooled, turbocharged V6-cylinder diesel (meets EPA off-road emission certification)
- Blower-type cooling fan with hydrostatic
- Deep engine oil pan allows up to 45-degree operation
- Dual-element dry-type aspirated air cleaner with automatic dust ejector
- Electric fuel pump
- Enclosed secondary fan guard (conforms to **SAE J1308)**
- Engine coolant to -34°F (-37°C)
- Fuel system with prefilter, water separator, and microfilters
- Heavy-duty five-fin-per-in. radiator
- Hydraulic engine retarder
- Intake air heater cold-starting aid
- Under-hood muffler with vertical exhaust stack
- Oil-to-water engine oil cooler
- Spin-on full-flow oil filter, with anti-drain back valve
- Starter motor, 8.85 hp (6.6 kW)
- Turbocharger provides spark arresting
- Cooling fan reverser valve
- Radiator sand screen

#### **Power Train**

- Dual-path hydrostatic transmission: Dynamic braking / Electronically controlled with power management and AutoTrac / Infinite speed control / Inline F-N-R direction control / Single-lever steer with full power turn and counterrotation
- Automatic spring-applied, hydraulic released parking brake
- Hydraulic/transmission oil-to-air cooler, independent of radiator with hydrostatically driven cooling fan
- Park brake button: Neutralizes transmission and activates parking brake
- Three-speed transmission maximum speed control with dash-mounted indicator light
- Transmission system diagnostic test ports

#### **Electrical**

- 24-volt system
- Alternator, 55 amp
- Batteries (2), heavy-duty cold start, 1,000 CCA
- Positive battery terminal covers
- Electrically activated battery master dis-
- Breaker protected circuits
- Working lights, cab mounted, front (4) and rear (2)
- Additional grille or cylinder-mounted front lights (2)
- 🛕 Additional rear lights (2)

#### **Hydraulic System**

- 89-gpm (336 L/min.) load-sensing variabledisplacement pump
- Blade quick-drop valve
- Circuit relief valve protection
- Hydraulic functions disabled with park lock
- Hydraulic/hydrostatic oil reservoir with sight glass
- Hydraulic system diagnostic test port
- "0"-ring seal connectors
- Replaceable filter, 20/5 micron with magnetic particle attractors
- Single-lever control
- Tank shutoff valves for service
- Two-function single-lever dozer-control valve
- Hydraulic controls for dual tilt and power pitch
- Hydraulic controls for rear attachments

#### **Undercarriage**

- 86-in. (2180 mm) gauge standard track frame
- Center track guides
- Front idler and sprocket chain guides
- Hydraulic track adjusters with dirt cover
- Oscillating track frames
- Integral track frame covers
- Isolation-mounted pivot shafts and equalizer bar
- Maintenance-free track components, sealed and lubricated rollers, idlers, and sprockets
- Sealed and lubricated track chain
- Segmented bolt-on sprockets
- 22-in. (560 mm) extreme-duty single-bar grouser shoes
- 24-in. (610 mm) extreme-duty single-bar grouser shoes
- 28-in. (711 mm) extreme-duty single-bar arouser shoes
- Full-length bolt-on rock guards

#### **Operator's Station**

- Modular cab with integrated ROPS/FOPS (conforms to SAE J1040, ISO 3471/3449): Hydraulically tiltable rearward 40 degrees / Isolation mounted / Air conditioner/heater/ defroster/pressurizer with filtered fresh air intake and three-speed blower / Ashtray / Dome light / Fabric seat cushions / Lockable doors (open and closed position) / Pull-down sunshade / Radio-installation provision / Rearview mirror / Sliding lefthand window / Tinted glass / Windshield wipers, front and rear, with washers
- Modular ROPS/FOPS canopy, isolation mounted, vinyl seat cushions (conforms to SAE J1040, ISO 3471/3449)
- Left and right access
- Built-in operator's manual storage compartment and operator's manual
- Rubber floormat
- Deluxe mechanical suspension seat: Adjustable armrests, backrest, height/weight, and fore-aft / Seat cushion tilt

#### Operator's Station (continued)

- ▲ Deluxe air suspension power-adjustable seat (cab only): Adjustable armrests, backrest, height/weight, and fore-aft / Fabric seat cushions / Seat cushion tilt
- Seat belt, 2-in. (50 mm), retractable (conforms to SAE J386)
- Seat belt, 3-in. (76 mm), retractable with CRS (conforms to SAE J386)★
- 15-degree seat angle
- Electronic monitor system with audible and visual warnings: Engine air filter restriction / Final drive seal integrity / Hydraulic/hydrostatic filter restriction / Hydrostatic transmission pressure / Low alternator voltage / Park brake
- Gauges, electric, illuminated: Engine coolant temperature / Engine oil pressure / Fuel / Hourmeter
- Horn, electric
- Key start switch with electric fuel shutoff
- 24-volt power port
- Lever-controlled throttle
- Slip-resistant steps and ergonomically located handholds
- Radio AM/FM\*

#### **Attachments**

- ▲ 165-in. (4191 mm) semi-U blade, 12.5-cu. yd. (9.5 m<sup>3</sup>), with standard cutting edges
- 🛕 170-in. (4318 mm) U-blade, 15.3-cu. yd. (11.7 m<sup>3</sup>), with standard cutting edges
- ▲ 198-in. (5030 mm) mechanical-angle blade, 8.2-cu. yd. (6.3 m³), with standard cutting edges\*
- ▲ Heavy-duty cutting edges≭
- Push beam for semi-U or U-blade with hydraulic tilt and manual pitch adjustment
- Push beam for semi-U or U-blade with two tilt cylinders for dual tilt and power pitch
- ▲ Push plates, blade liners, and end bits\*
- Single-shank parallelogram ripper
- ▲ Multi-shank (3) parallelogram ripper
- Hydraulic pin puller for single-shank ripper
- A Rear counterweight, 9,240 lb. (4200 kg), with drawbar (cannot be used with rippers)
- Rigid heavy-duty drawbar (cannot be used with rear counterweight or rippers)

#### Overall Vehicle

- 161-gal. (610 L) fuel tank with wide-mouth filler cap
- Hinged reinforced radiator guard
- Lifting lugs
- Lockable vandal protection: Battery compartment / Engine access doors / Fuel tank / Hydraulic and transmission access door / Instrument panel (canopy only) / Storage compartments (2)
- One-piece unitized mainframe
- Rear retrieval hitch
- Reinforced engine bottom quards
- Reverse warning alarm (conforms to SAE J994, J1446)
- Tool kit with brake-release towing kit



Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at standard conditions per SAE J1349 and DIN 6270B, using No. 2-D fuel at 35 API gravity. No derating is required up to 10,000-ft. (3050 m) altitude.

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 modular ROPS/cab with air conditioning, 165-in. (4191 mm) semi-U blade with standard cutting edges, full fuel tank, 175-lb. (79 kg) operator, and standard equipment.

