

FAST FACT

# PIPELAYER- READY CRAWLERS

700L PL / 850L PL / 1050K PL



JOHN DEERE





## ***DEPENDABLE PARTNER IN THE TRENCHES.***

When you're battling tight deadlines and budgets, you need a reliable worker in the trenches with you. John Deere Pipelayer-Ready (PL) Crawlers are purpose built, making it easy to install your preferred sideboom. Pipelayer controls are seamlessly integrated with intuitive, low-effort Deere joystick controls. Dual-path hydrostatic transmission and Eco mode help empower precise, fuel-efficient operation. Plus the exceptional visibility, operating ease, and durability you've come to expect from Deere equipment are yours in a 700L PL, 850L PL, or 1050K PL.



### **GOOD TO GO**

Sideboom-ready PL platform and mounting plates simplify installation. Pin-up/bolt-on design speeds installation time and setup.



### **PRECISE, PREDICTABLE, & PRODUCTIVE**

Dual-path hydrostatic transmission delivers precise, predictable control along the trench without abrupt movements.





### LAY IT ON THE LINE

Purpose-built track configurations provide a stable pipelaying platform. The 700L PL40 boasts a wide, rigid stance while accepting both 22- and 30-inch track-shoe options to help conquer any terrain. Eight-roller, 130-inch undercarriage on the 850L PL100 puts even more track on the ground to distribute the weight. The 1050K PL170 and PL220 feature 12-inch-longer track than the standard 1050K.



### WASTE NOT

Fuel-conserving Eco mode and auto-idle are especially helpful in pipelayer applications where longer idle times occur.



### INTEGRATED CONTROLS

Pipelayer controls are seamlessly integrated into the low-effort electrohydraulic (EH) joysticks, with a thumb roller providing smooth, precise control and a quick-drop button for emergencies.



### EASY MAINTENANCE

Cab tilts up to 65 degrees in only minutes,\* for easy service access even with the sideboom installed.

*\*850L PL100 and 1050K PL170/PL220 models only.*



### PEAK A BOOM

Straight and centered seat position provides excellent all-around visibility, and a roof-viewing window affords a clear view of the sideboom.



### MORE WORK IN THE PIPELINE

Maximum lift capacity of the 700L is 40,000 pounds (PL40). The 850L PL delivers 100,000 pounds (PL100) of maximum lift capacity. The 1050K PL offers two configurations: 170,000 pounds (PL170) and 220,000 pounds (PL220) of maximum lift capacity.

## 700L PL

<b>Engine</b>	<b>700L PL40</b>
Manufacturer and Model	John Deere PowerTech™ PVS6068
Non-Road Emission Standard	EPA Final Tier 4/EU Stage V
Displacement	6.8 L (414 cu. in.)
SAE Net Rated Power	101 kW (135 hp) at 1,800 rpm
Aspiration	Turbocharged with charge-air cooler
Air Cleaner	Dual-stage dry tube with tangential unloader
<b>Cooling</b>	
Type	Variable-speed suction fan with automatic reversing feature
Engine Coolant Rating	-37 deg. C. (-34 deg. F)
Engine Radiator	10 fins per in.
<b>Powertrain</b>	
<b>Transmission</b>	Automatic, dual-path, hydrostatic (HST) drive; load-sensing feature automatically adjusts speed and power to match changing load conditions; each individually controlled track is powered by a variable-displacement piston pump and motor combination; ground-speed selection roller on single-lever steering and direction control; reverse speed ratio is fully operator customizable; decelerator pedal provides infinite speed control from full speed to complete stop
System Relief Pressure	47 574 kPa (6,900 psi)
Travel Speeds	
Forward and Reverse	8.9 km/h (5.5 mph)
Maximum (optional)	9.7 km/h (6.0 mph)
<b>Steering</b>	Single-lever steering, speed, direction control, and counter-rotation; full power turns and infinitely variable track speeds provide unlimited maneuverability and optimum control; HST steering eliminates steering clutches and brakes
<b>Final Drives</b>	Triple-reduction final drives mounted independently of track frames for isolation from shock loads
Total Ratio	33.59 to 1
<b>Drawbar Pull</b>	
Maximum	200 kN (45 050 lb.)
At 1.9 km/h (1.2 mph)	131 kN (29 500 lb.)
At 3.2 km/h (2.0 mph)	83 kN (18 600 lb.)
<b>Brakes</b>	
Service	HST (dynamic) braking stops machine whenever the direction/steering control lever is moved to neutral or the decelerator is depressed to the detent
Parking	Safety feature engages wet, multiple-disc brakes whenever the engine stops, the decelerator is depressed to the end of travel, or motion is detected while the transmission control is in neutral; machine cannot be driven with brake applied, minimizing wearout; spring applied, hydraulic release
<b>Hydraulics</b>	
Type	Closed-center load-sense hydraulic system with variable-displacement piston pump
Pump Displacement	63 cc
System Relief Pressure	22 063 kPa (3,200 psi)
Differential Pressure	1896 kPa (275 psi)
Maximum Flow at Unloaded High Idle	132 L/m (35 gpm)
Control	2-function EH joystick; pistol grip with proportional roller
<b>Electrical</b>	
Voltage	24 volts
Capacity	
Battery	950 CCA
Reserve	175 min.
Alternator Rating	
Cab	145 amp
Canopy	110 amp
Lights	
Halogen	Cab perimeter mounted (6) and engine compartment (1)
Premium LED	Cab perimeter mounted (6) and engine compartment (1)
<b>Undercarriage</b>	
<b>Tracks</b>	John Deere features large deep-heat-treated components; pins and bushings are sealed for life; rollers and idlers are permanently sealed and lubricated; sprockets are segmented; full-length track frame covers reduce material buildup and ease cleaning
Track Gauge	1981 mm (78 in.)
Chain	Sealed and lubricated
Shoes, Each Side	39
Track Rollers, Each Side	7
Track Length on Ground	2615 mm (103 in.)
Track Pitch	191 mm (7.5 in.)

## Undercarriage (continued) 700L PL40

Tracks (continued)		
Grouser Width	560 mm (22 in.)	760 mm (30 in.)
Ground Contact Area	32 569 cm <sup>2</sup> (5,048 sq. in.)	44 201 cm <sup>2</sup> (6,851 sq. in.)
Ground Pressure	38.6 kPa (5.6 psi)	29.6 kPa (4.3 psi)

## Operator Station

Rollover protective structure (ROPS) (ISO 3471 – 2008) and FOPS (ISO 3449 – 2005) Level II

## Serviceability

### Refill Capacities

Fuel Tank With Lockable Cap	262 L (69.2 gal.)	Engine Oil With Filter	28 L (7.4 gal.)
Diesel Exhaust Fluid (DEF) Tank	14.2 L (3.8 gal.)	Transmission/Hydraulic Reservoir and Filter	102 L (26.9 gal.)
Cooling System With Recovery Tank	31.4 L (8.3 gal.)	Final Drive	10.9 L (2.9 gal.)

## Operating Capacity

Lift Capacity at 1219-mm (4 ft.) Overhang	
Maximum	18 144 kg (40,000 lb.)
Rated	15 422 kg (34,000 lb.)

## Operating Weights

Base Weight (includes standard equipment, ROPS, 560-mm [22 in.] shoes, full fuel tank, and 79-kg [175 lb.] operator)

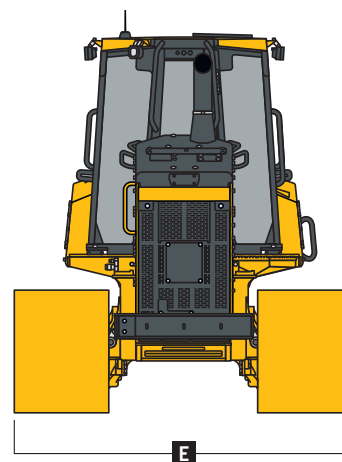
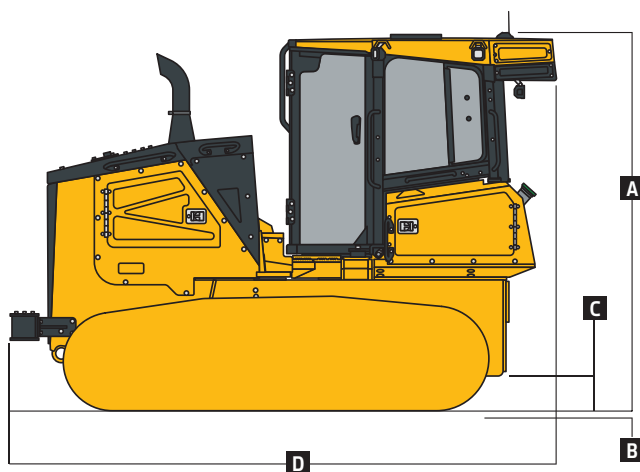
Operating Weight, Full Sideboom Installed	18 456–19 051 kg (40,688–42,000 lb.)
Transport Weight, Sideboom Removed	17 843–18 439 kg (39,338–40,650 lb.)
Pipelayer (PL)-Ready Tractor Only Weight	12 827 kg (28,278 lb.)

## Optional Components

Cab With Pressurizer and Heater/Air Conditioner	205 kg (452 lb.)	Drawbar, Extended Rigid	93 kg (205 lb.)
Rear Screen		Winch	652 kg (1,437 lb.)
ROPS Canopy	28 kg (62 lb.)	Fairlead, 4 Roller	85 kg (187 lb.)
Cab With Air Conditioner	49 kg (108 lb.)	Track Shoes	
Retrieval Hitch	31 kg (68 lb.)	560 mm (22 in.)	In base
		760 mm (30 in.)	507 kg (1,118 lb.)

## Machine Dimensions

<b>A</b> Overall Height (includes antenna base)	3047 mm (10 ft. 0 in.)	Overall Length With Winch and Fairlead	4952 mm (195 in.) (16 ft. 3 in.)
<b>B</b> Tread Depth With Single-Bar Grouser	56 mm (2.2 in.)	Rollers	
<b>C</b> Ground Clearance in Dirt	387 mm (15.2 in.)	Track Shoes	560 mm (22 in.) 760 mm (30 in.)
<b>D</b> Overall Length	4384 mm (173 in.) (14 ft. 5 in.)	<b>E</b> Overall Width (no boom or counterweight)	2545 mm (100 in.) 2741 mm (108 in.)
Overall Length With Extended Drawbar	4553 mm (179 in.) (14 ft. 11 in.)		(8 ft. 4 in.) (9 ft. 0 in.)



## Pipelayering Equipment 700L PL40

Reference individual supplier brochures for boom, drum, and counterweight specs.

# 850L PL

<b>Engine</b>		<b>850L PL100</b>
Manufacturer and Model	John Deere PowerTech™ PSS 6090	
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV	
Displacement	9.0 L (549 cu. in.)	
SAE Net Rated Power	168 kW (225 hp) at 1,700 rpm	
Net Peak Torque	1126 Nm (831 ft.-lb.) at 1,500 rpm	
Aspiration	Turbocharged and air-to-air aftercooled	
Air Cleaner	Dual-element dry canister with external rotary ejector precleaner	
<b>Cooling</b>		
Type	Variable-speed suction fan with automatic reversing	
Engine Coolant Rating	-37 deg. C. (-34 deg. F)	
Engine Radiator	7 fins per in.	
<b>Powertrain</b>		
<b>Transmission</b>	Automatic, dual-path, hydrostatic (HST) drive; load-sensing feature automatically adjusts speed and power to match changing load conditions; each individually controlled track is powered by a variable-displacement piston pump and motor combination; ground-speed selection roller on single-lever steering and direction control; reverse speed ratio is fully operator customizable; decelerator pedal provides infinite speed control from full speed to complete stop	
System Relief Pressure	47 574 kPa (6,900 psi)	
Travel Speeds		
Forward and Reverse	9.7 km/h (6.0 mph)	
Maximum (operator selectable)	11.0 km/h (6.8 mph)	
<b>Steering</b>	Single-lever steering, speed, direction control, and counter-rotation; full power turns and infinitely variable track speeds provide unlimited maneuverability and optimum control; HST steering eliminates steering clutches and brakes	
<b>Final Drives, Total Ratio</b>	Double-reduction, planetary final drives mounted independently of track frames for isolation from shock loads	
Total Ratio	44.75 to 1	
<b>Drawbar Pull</b>		
Maximum	365 kN (82,000 lb.)	
At 1.9 km/h (1.2 mph)	226 kN (50,700 lb.)	
At 3.2 km/h (2.0 mph)	143 kN (32,000 lb.)	
<b>Brakes</b>		
Service	HST (dynamic) braking stops machine whenever the direction/steering control lever is moved to neutral or the decelerator is depressed to the end of travel	
Parking	Safety feature engages wet, multiple-disc brakes whenever the engine stops, the decelerator is depressed to the end of travel, or motion is detected while the transmission control is in neutral; machine cannot be driven with brake applied, minimizing wearout; spring applied, hydraulic release	
<b>Hydraulics</b>		
Type	Open-center load-sense hydraulic system with variable-displacement piston pump	
Pump Displacement	145 cc	
System Relief Pressure	27 579 kPa (4,000 psi)	
Differential Pressure	1724 kPa (250 psi)	
Maximum Flow at Unloaded High Idle	288 L/m (76 gpm)	
Control	2-function EH joystick; pistol grip with proportional roller	
<b>Electrical</b>		
Voltage	24 volts	
Capacity		
Battery	950 CCA	
Reserve	190 min.	
Alternator Rating	130 amp	
Lights		
Standard LED	Front hood mounted (2), cab perimeter mounted (5), and engine compartment (1)	
Premium LED	Front hood mounted (2), cab perimeter mounted (7), and engine compartment (1)	
<b>Undercarriage</b>		
<b>Tracks</b>	Track frame with front and rear track guides and sprocket guard; John Deere Dura-Trax™ features deep-heat-treated, sealed, and lubricated track links and through-hardened, sealed, and lubricated rollers for maximum wear resistance; sprockets are segmented	
Track Gauge	2286 mm (90 in.)	
Chain	Sealed and lubricated	
Shoes, Each Side	45	
Track Rollers, Each Side	8	
Track Length on Ground	3302 mm (130 in.)	
Track Pitch	203 mm (8 in.)	



## Undercarriage (continued)

850L PL100

### Tracks (continued)

Grouser Width	760 mm (30 in.)	910 mm (36 in.)
Ground Contact Area	55 281 cm <sup>2</sup> (8,569 sq. in.)	66 337 cm <sup>2</sup> (10,282 sq. in.)
Ground Pressure	60.3 kPa (8.8 psi)	50.3 kPa (7.3 psi)

### Operator Station

Rollover protective structure (ROPS) (ISO 3471 – 2008)

### Serviceability

#### Refill Capacities

Fuel Tank With Lockable Cap	439 L (116 gal.)	Reservoir With Filter	
Cooling System With Recovery Tank	39.7 L (10.5 gal.)	Transmission	105 L (27.6 gal.)
Engine Oil With Filter	25 L (6.6 gal.)	Hydraulic	117 L (30.9 gal.)
		Diesel Exhaust Fluid (DEF) Reservoir	23.7 L (6.3 gal.)

### Operating Capacity

Lift Capacity at 1219-mm (4 ft.) Overhang

Maximum	45 359 kg (100,000 lb.)
Rated	38 555 kg (85,000 lb.)

### Operating Weights

Includes standard equipment, ROPS, 760-mm (30 in.) track shoes, rear drawbar hitch, full fuel tank, and 79-kg (175 lb.) operator

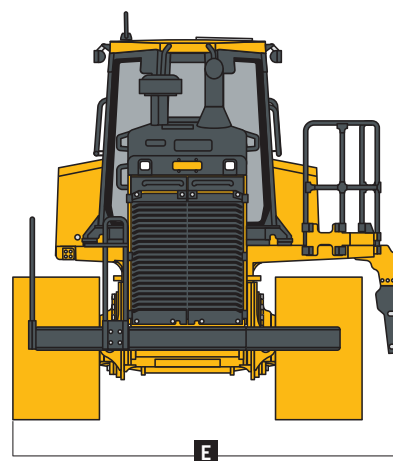
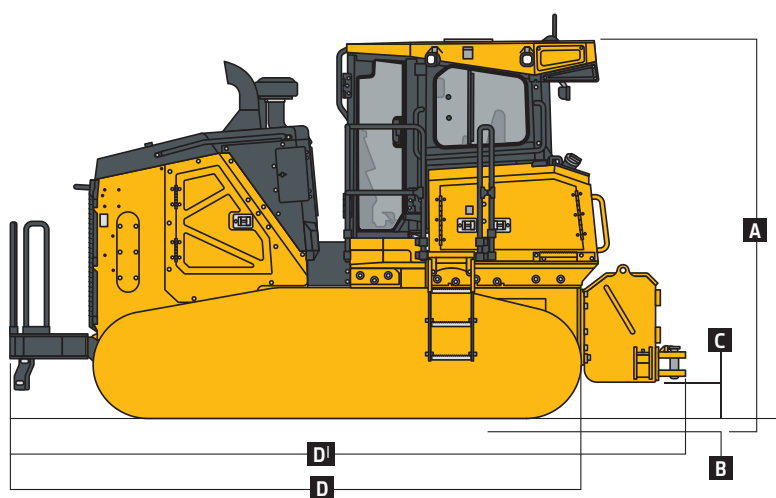
Operating Weight, Full Sideboom Installed	32 677–33 291 kg (72,040–73,395 lb.)
Transport Weight, Sideboom Removed	31 656–32 314 kg (69,790–71,241 lb.)
Transport Weight, Sideboom and Counterweight Removed	26 658–26 793 kg (58,770–59,068 lb.)
Pipelayer (PL)-Ready Tractor Only Weight	19 965 kg (44,015 lb.)

### Optional Components

Rear Screen	20 kg (44 lb.)	Track Shoes, Moderate Duty	
Winch With Fairlead	1778 kg (3,920 lb.)	760 mm (30 in.)	In base
Heating, Ventilating, and Air-Conditioning (HVAC) Powered Precleaner	3 kg (7 lb.)	910 mm (36 in.)	435 kg (959 lb.)

### Machine Dimensions

<b>A</b> Overall Height (includes antenna base and grouser height)	3344 mm (11 ft. 0 in.)*	<b>D</b> Overall Length With Drawbar (standard configuration)	5770 mm (227 in.) (18 ft. 11 in.)
<b>B</b> Tread Depth With Single-Bar, Moderate-Duty Grouser	66 mm (2.6 in.)	<b>D'</b> Overall Length With Winch and Fairlead Rollers	5986 mm (236 in.) (19 ft. 8 in.)
<b>C</b> Ground Clearance in Dirt	394 mm (15.5 in.)	Track Shoes, Moderate Duty	760 mm (30 in.) 910 mm (36 in.)
*With antenna whip removed.		<b>E</b> Overall Width (no boom or counterweight)	3048 mm (120 in.) 3200 mm (126 in.) (10 ft. 0 in.) (10 ft. 6 in.)



### Pipelayering Equipment

850L PL100

Reference individual supplier brochures for boom, drum, and counterweight specs.





**Operator Station** 1050K PL170 / 1050K PL220

Rollover protective structure (ROPS) (ISO 3471 – 2008) and falling object protective structure (FOPS) (ISO 3449 – 2005)

**Serviceability**

**Refill Capacities**

Fuel Tank With Lockable Cap	681 L (180 gal.)	Reservoir With Filter (oil volume of tank only)	
Diesel Exhaust Fluid (DEF) Tank	22.9 L (6.1 gal.)	Transmission	149 L (39.44 gal.)
Cooling System With Recovery Tank	73.5 L (19.4 gal.)	Hydraulic	87 L (23 gal.)
Engine Oil With Filter	43.5 L (11.5 gal.)		

**Operating Capacity** 1050K PL170 1050K PL220

Maximum Lift Capacity at 1219-mm (4 ft.) Overhang	77 110 kg (170,000 lb.)	99 790 kg (220,000 lb.)
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**Operating Weights**

Base Weight (includes standard equipment, ROPS, rear drawbar hitch\*, full fuel tank, and 79-kg [175 lb.] operator)

	With 760-mm (30 in.) track shoes	With 915-mm (36 in.) track shoes
Operating Weight, Full Sideboom Installed	52 784 kg (116,369 lb.)	58 356 kg (128,652 lb.)
Transport Weight, Sideboom and Counterweight Removed	42 082 kg (92,775 lb.)	43 768 kg (96,492 lb.)
Pipelayer (PL)-Ready Tractor Only Weight	35 489 kg (78,239 lb.)	36 639 kg (80,775 lb.)

**Optional Components**

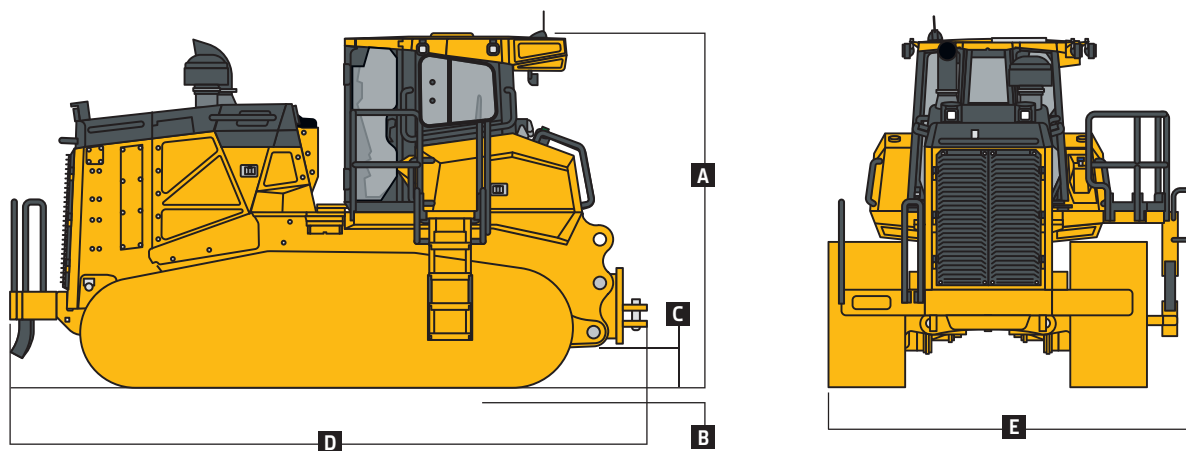
Winch With Fairlead	1905 kg (4,200 lb.)	1905 kg (4,200 lb.)
Mounting Plate	1115 kg (2,458 lb.)	1115 kg (2,458 lb.)
Heating, Ventilating, and Air-Conditioning (HVAC) Powered Precleaner	20 kg (44 lb.)	20 kg (44 lb.)
Moderate-Duty Track Shoes		
760 mm (30 in.)	In base	—
915 mm (36 in.)	Optional	In base

\*Included in base; weighs 603 kg (1,329 lb.) separately and needs to be removed for installation of other rear attachments.

**Machine Dimensions**

<b>A</b> Overall Height to Roof	3476 mm (11 ft. 5 in.)	3476 mm (11 ft. 5 in.)
<b>B</b> Tread Depth With Single-Bar, Moderate-Duty Grouser	71 mm (2.8 in.)	71 mm (2.8 in.)
<b>C</b> Ground Clearance in Dirt (includes grouser height)	523 mm (20.6 in.)	523 mm (20.6 in.)
<b>D</b> Overall Length With Drawbar (standard configuration)	6385 mm (251 in.) (20 ft. 11 in.)	6385 mm (251 in.) (20 ft. 11 in.)
Overall Length With Winch and Fairlead Rollers <sup>†</sup>	7174 mm (282 in.) (23 ft. 6 in.)	7174 mm (282 in.) (23 ft. 6 in.)
Overall Length With Rear Storage Compartment <sup>†</sup>	6386 mm (251 in.) (20 ft. 11 in.)	6386 mm (251 in.) (20 ft. 11 in.)
<b>E</b> Overall Width (no boom or counterweight)	3867 mm (152 in.) (12 ft. 8 in.)	3965 mm (156 in.) (13 ft. 0 in.)

<sup>†</sup>Overall length may vary for optional configurations.



**Pipelayering Equipment** 1050K PL170 / 1050K PL220

Reference individual supplier brochures for boom, drum, and counterweight specs.



# THE BOTTOM LINE...

Exceptional parts availability. Flexible financing options.  
Support that doesn't quit. And purpose-built machines that  
maximize uptime. More contractors like you are choosing  
John Deere because our offerings are shaped by your input.

**You tell us what you need. We make it happen.**



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DK1050KPL Litho in U.S.A. (20-09)