

TORO

Count on it.

TORO® DD4045 Horizontal Directional Drill



POWERFUL PERFORMANCE



Horizontal Directional Drill

Introducing the New Toro® DD4045 Horizontal Directional Drill.

With 40,000 lbs (18 Tonnes) of consistent thrust and pullback force, the DD4045 is designed for powerful performance, job after job.

Since 1914, The Toro Company has built its reputation on providing quality products and service to the professionals who create, maintain and preserve outdoor environments. Today, professionals and contractors around the world count on Toro products to stand up to the demands of heavy use, season after season.

As a leading manufacturer of turf maintenance equipment, precision irrigation solutions, concrete and compaction tools, and equipment for trenching, plowing, excavating and horizontal directional drilling, Toro products are aimed at allowing you to do your job more efficiently and profitably.

We value the trust professionals place in our people and products to meet their unique needs and deliver superior results. That's why the Toro DD4045 and every product that carries the Toro name also carries our commitment to quality and product excellence.

PERFORMANCE YOU CAN COUNT ON.
Cummins® QSB4.5 turbocharged diesel engine with 160 hp (119 kW) delivers 40,000 lbs (18 tonnes) of consistent thrust and pullback and 4,500 ft-lbs (6,101 Nm) of torque.

PRODUCTIVITY FOCUSED.
The two-speed floating carriage moves at 150 ft/min (46 m/min) to decrease cycle time when adding and removing pipe from the spindle.

EFFICIENT MUD MANAGEMENT.
On-board, infinitely variable drilling fluid pump allows the operator to control mud flow for a variety of bores – up to 70 gpm (265 L/min) for larger diameter bores.

MAXIMUM STABILITY.
Dual outriggers with unique reverse design ensure superior ground clearance when loading and unloading, while providing maximum stability during pullback - when it matters most.

SAFE AND SECURE.
Standard tethered ground drive control improves operator visibility and allows for safe unloading and transport. And, the exit side lock out and Zap Alert™ systems ensure crew safety at both the entry and exit sides for maximum safety while drilling.

SUPERIOR TRACTION.
Forward-mounted track drive motors with planetary gear reduction provide superior traction in all types of ground conditions.

DURABLE, ONE-PIECE FORGED PIPE.
Equipped standard with 52 pieces of 10' Hunting HIWS2 one-piece forged pipe for durability in a variety of conditions.

SMOOTH OPERATION.
Quad rack and pinion carriage design spreads the carriage load evenly for smooth and stable travel. In addition, the carriage gear track is welded, not bolted, to the frame for long-lasting durability.

MAXIMUM COMFORT.
Optional enclosed operator cab with climate control and excellent visibility keeps the operator comfortable no matter what the weather may bring.



FASTER CONNECTIONS AND BREAKOUTS.
Heavy-duty vice wrenches are open-top, providing excellent visibility of the tool joint to allow for faster connections and breakouts.

EQUIPPED FOR HARD ROCK CONDITIONS.
Optional air hammer is easily integrated for hard rock drilling applications. Operator can control all hard-rock hammer functions and monitor performance from the integrated LCD display.



YOU'RE IN CONTROL.
With the flexibility to choose either single or dual joystick operation while drilling, the option to use cruise control while back-reaming, and the ability to monitor the full range of system functions from the color LCD screen, operators are able to quickly and confidently operate the DD4045.



TORO® FM330 FLUID MIXER



EFFICIENT FLUID DELIVERY.
Toro's FM330 Drilling Fluid Mixing System uses a circulating pump that allows up to 330 gpm (113 l/m) of drilling fluid to pass through the Dual Shear Mixer for fast, efficient, and consistent fluid delivery. FM330 components are compact and modular, to allow for maximum flexibility for transportation and on the job site.

TORO® DD4045 DIRECTIONAL DRILL SPECIFICATIONS

DIMENSIONS

Length	257" (653 cm)	Height	86.25" (219 cm)
Width	85" (216 cm)	Weight (Without Drill Pipe)	17,460 lbs (7,920 kg)

POWER

Engine	Cummins® QSB4.5 Liquid Cooled, Diesel Engine
Manufacturer's Gross Power Rating	160 hp (119 kW)
Rated Speed	2,300 RPM
Injection	Direct
Cylinders	4
Displacement	272 cu. in. (4.5 L)
Engine Oil Capacity	11.6 qt. (11 L)
Fuel Tank Capacity	67 gal (254 L)
Hydraulic Reservoir	58 gal (220 L)

OPERATION

Rotary Speed (Maximum)	225 RPM
Rotary Torque	4,500 ft-lbs (6,101 N-m)
Carriage Travel Speed (Thrust/Pullback)	150 ft/min (46 m/min)
Thrust/Pullback Force	40,000 lbs (18 Tonnes)
Drill Entry Angle (Maximum)	16°
Ground Travel Speed (Maximum, Forward & Reverse)	3.25 mph (5.2 km/h)

DRILL PIPE

Length	10' (305 cm)
Pipe Outside Diameter	2.375" (61 mm)
Pipe Tool Joint Outside Diameter	2.75" (70 mm)
Minimum Bend Radius	108.2' (33 m)
Pipe Carrying Capacity (With first removeable drill pipe cartridge)	520' (159 m) (52 Pieces)

DRILLING FLUID PUMP

Maximum Flow	70 gpm (265 L/min)
Maximum Pressure	1,300 psi (90 Bar)

TORO® FM330 FLUID MIXING SYSTEM SPECIFICATIONS

SELECT ENGINE OPTION AND TANK SIZE (500 GAL OR 1,000 GAL)

Engine Options	Option 1: Honda® GX390, Gasoline Engine Electric Start	Option 2: Hatz® Air Cooled, Diesel Engine Recoil Start		
Gross Power Rating	13 hp (9.7 kW)	10 hp (7.4 hp)		
Fuel Capacity	1.72 Gal (6.5 L)	1.32 Gal (5 L)		
Oil Capacity	1.2 quarts (1.1 L)	1.6 quarts (1.5 L)		
Mix Hopper Dimensions:	Length 51.4" (131 cm) Width 18.6" (47 cm) Height 44.5" (113 cm) Weight 413 lbs (187 kg)	51.4" (131 cm) 18.6" (47 cm) 44.5" (113 cm) 413 lbs (187 kg)		
Tank Size Options	Option A: 500 Gal. (1,893 L)	Option B: 1,000 Gal. (3,785 L)	Option A: 500 Gal. (1,893 L)	Option B: 1,000 Gal. (3,785 L)
Tank Dimensions:	Length 80" (203 cm) Width 30.75" (78 cm) Height 73" (186 cm) Weight 470 lbs (213 kg)	102" (259 cm) 47.5" (121 cm) 78" (198 cm) 930 lbs (421 kg)	80" (203 cm) 30.75" (78 cm) 73" (186 cm) 470 lbs (213 kg)	102" (259 cm) 47.5" (121 cm) 78" (198 cm) 930 lbs (421 kg)

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