

**HYDROSTATIC
TRENCHER**

COMMANDER™

Vermeer



T655



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TRENCHER

Small machine, big power

When tough working conditions demand trenching up to eight feet of solid rock, performance is the name of the game. That's why you need a reliable machine with the strength of the Vermeer® T655 Commander. A 200-HP (149 kw) Cat 3116 emissionized engine delivers the power your crew needs to produce rock-solid results. Like the impressive work you'll accomplish using the Commander's 8' (2.4 m) boom option and 40" (102 cm) end idler. You get big power from a small machine.

Work smarter, not harder

The Commander presents other options for boosting job-site productivity. Consider the unparalleled ease of operation and control versatility the Commander offers with Vermeer's exclusive TEC 2000™ Trencher Electronic Control System. To find out more about how the T655 Commander can help you work smarter, visit your local Vermeer dealer.

Command Rock-Solid Performance



Improve cutting operations with a low-speed, high-torque motor

Because the Commander's larger Rotary Power headshaft motor and splined headshaft produce lower speed and higher torque, you're assured of greater production as cutting teeth penetrate rock better and minimize chain wear.



Enhance productivity with TEC 2000™

A Vermeer exclusive, TEC 2000 monitors operating conditions and informs the operator of real-time machine performance for increased productivity. An electric stroke limiter increases engine control and eliminates operator error from the most abusive aspect of trenching.



Increase spoil removal with longer, wider conveyors

The T655 Commander's optional 8' (2.4 m) and 12' (3.7 m) conveyors with their 24"-wide (61-cm wide) belts allow operators to pull more spoil from the ditch and throw it farther from the machine when using larger boom/cutter combinations.

Operator platform with ROPS

The T655 offers an operator platform positioned between the boom and conveyor. The platform improves boom visibility — both in and out of the trench — enabling operators to oversee the conveyor and watch tooth wear without leaving the seat. The Rollover Protective Structure (ROPS) is standard for added operator safety.



T655 Primary Specifications

General

Approximate weight:

8' (2.4 m) boom, 4502 chain, ROPS, dirt drags, 24" (61 cm) rotary cutters and manual cumber: 52,200 lbs. (23,678 kg)

6' (1.8 m) boom, 4501 chain, ROPS, dirt drags, 14" (36 cm) rotary cutters and manual cumber: 48,000 lbs. (21,773 kg)

Transport length with 40" (102 cm) end idler and manual cumber:

4' (1.2 m) boom — 271" (688 cm)

6' (1.8 m) boom — 298" (757 cm)

8' (2.4 m) boom — 326" (828 cm)

Transport height: 119" (302 cm)

Transport width: 97" (246 cm)

Ground clearance: 11.5" (29.2 cm)

Angle of approach: 25°

Ground-bearing pressure: 8.6 psi (.605 kg/cm²)

Split ROPS (Rollover Protective Structure)

Hydraulic System

Type: Pressure and flow compensated (load sensing)

Pump flow (maximum): 25.8 gpm (97.7 Lpm)

Pressure setting: 2500 psi (172 bar)

Oil tank capacity: 85 gal. (322 L)

Oil type: Vermeer HyPower 68

Options

Vantage Track: 3-year/3000-hour

Extended Care Service Program

Dirt Drags

Enclosed climatized cab

Engine

Model: Caterpillar 3116 DITA

Aspiration: Turbocharged

Number of cylinders: 6

Maximum no-load RPM: 2575

Gross horsepower:

200 HP (149 kw) at 2400 RPM

Cooling medium: Liquid

Air cleaner: Dry type

Oil filter: Full flow

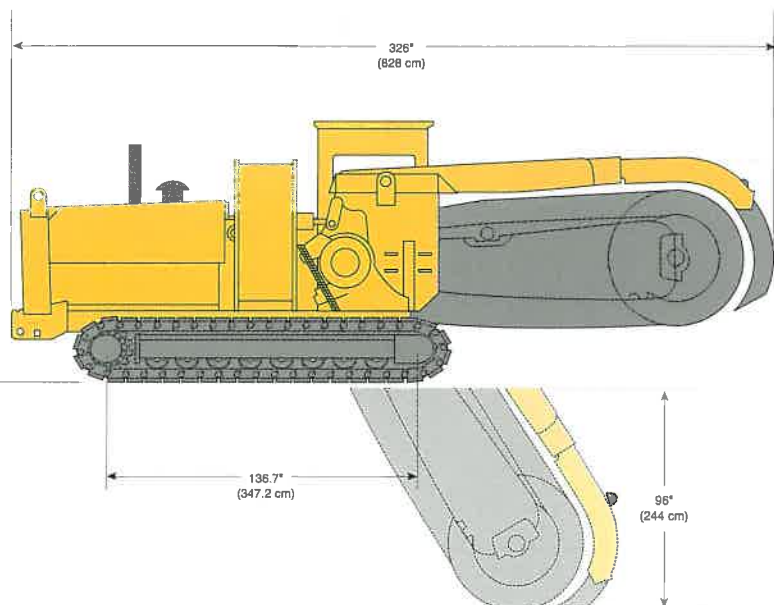
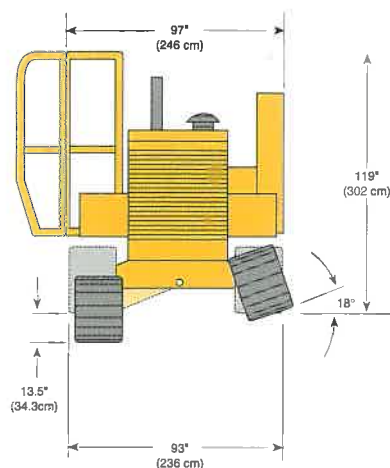
Electrical system: 12-volt

Fuel tank capacity: 107 gal. (405 L)

Fuel consumption at full load:

10.8 gpm (41 Lpm)

Operating range: 10 hours



T655 Specifications



Conveyor

Open-center hydraulic pump and two motors with pressure-compensated flow control

Belt speed: 0 – 880 fpm (0 – 268 mpm)

Belt width: 24" (61 cm)

Conveyor length: 8' (2.4 m) curved
12' (3.6 m) curved, folding (optional)

Discharge height: 8' = 44" (112 cm)
12' = 56" (142 cm)

Shift travel: 8' conv. — 12" (30 cm),
12' conv. — 48" (122 cm)

Discharge direction: Left or right

Drive pulleys: Wing-type, self-cleaning

Belt: Cleat-type

Controls

TEC 2000 Trencher Electronic Control

LCD digital display

Straight tracking

Load control

Self-diagnostics

Operator presence

Neutral-start indicator

Ground-speed tracking



Tracks

Dual-path hydrostatic drive with planetary transmission capable of full counter rotation

Infinitely variable speed:

Transport — 0 – 276 fpm (0 – 84 mpm)

Digging — 0 – 138 fpm (0 – 42 mpm)

Maximum tractive effort:

45,600 lbs. (20,684 kg)

Service brakes: Hydrostatic

Parking and emergency brakes:

Spring-applied, hydraulic-release
wet-disc brakes

Track-pad quantity: 51 per track

Track-pad width:

21" (53 cm) double grouser

Overall width: 93" (236 cm)

Track-chain type: D4

Track-chain pitch: 6.75" (17.15 cm)

Track tilt: Digs vertical trench on 18.5 percent slope, 10.5 degrees; either track can be raised 12.9" (32.8 cm) higher than the opposite track

Rigid tracks: Optional



Trencher

Hydrostatic: Two pumps and one motor capable of transmitting full engine horsepower

Boom travel: Up — 10°

Down — 60°

Digging-chain tensile strength:

4501 — 310,000 lbs. (140,616 kg)

4502 — 620,000 lbs. (281,232 kg)

Cutters: Rotary carbide-tipped

Cup, single-edged, hard-surfaced
removable (4501 only)

End-idler diameter:

40" (102 cm)

20" (51 cm)

Digging-chain drive sprocket:

Split-type, hardened, bolt on

Digging-chain speed:

0 – 683 fpm (208 mpm)

Boom top rollers: Optional

Practical cutting speed range:

400 – 683 fpm (122 – 208 mpm)

Head shaft bearings:

Oil-filled with Duo-Cone face seals

Pull-ring assembly: Integral to main frame,
bolt on

Boom options:

4' x 14" to 24" (1.2 m x 36 to 61 cm)

4501 cup cutters

5' x 12" to 24" (1.5 m x 30 to 61 cm)

4501 cup cutters

6' x 14" to 24" (1.8 m x 36 to 61 cm)

4501 cup cutters

8' x 14" to 24" (2.4 m x 36 to 61 cm)

4501 cup cutters

4' x 10.5" to 18" (1.2 m x 27 to 46 cm)

4501 rotary cutters

5' x 10.5" to 18" (1.5 m x 27 to 46 cm)

4501 rotary cutters

6' x 10.5" to 18" (1.8 m x 27 to 46 cm)

4501 rotary cutters

8' x 14" to 24" (2.4 m x 36 to 61 cm)

4501 rotary cutters

6' x 16" to 24" (1.8 m x 41 to 61 cm)

4502 rotary cutters

8' x 16" to 24" (2.4 m x 41 to 61 cm)

4502 rotary cutters



VANTAGE TRACK

Protect your trencher with our optional three-year/3,000-hour Extended Care Service Program — a Vermeer exclusive! Ask your dealer about it.

Worldwide Coverage With A Local Touch

Your Vermeer dealer is independent and authorized to be a Vermeer specialist who knows your local conditions and is ready to provide expert support, service and parts, wherever your job site.