

**HYDROSTATIC  
TRENCHER**

**COMMANDER II**

**Vermeer**



**T655**



# COMMANDER® II

# T655

## HYDROSTATIC TRENCHER

### **Small Machine, Big Power.**

When tough working conditions demand trenching up to 8' (2.4 m) 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 trencher. A 250-hp (186 kw) John Deere 6081 emissionized engine delivers the power your crew needs to produce rock-solid results. With an 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 trencher presents other options for boosting job-site productivity. Consider the unparalleled ease of operation and control versatility the T655 offers with the exclusive Vermeer TEC 2000® trencher electronic control system. To find out more about how the T655 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 T655's large 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.*



#### ***Increase spoil removal with longer, wider conveyors.***

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



**Enhance productivity with  
the TEC 2000 system.**

*A Vermeer exclusive, the TEC 2000 system  
monitors operating conditions and informs  
the operator of real-time machine performance  
for increased productivity.*



### 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

Approx. weight: w/ 8' (2.4 m) boom, 4502 chain, ROPS, dirt drags, 24" (61 cm) rotary cutters and manual crumber: 52,200 lb (23,678 kg)  
Approx. weight w/ 6' (1.8 m) boom, 4501 chain, ROPS, dirt drags, 14" (36 cm) rotary cutters and manual crumber: 48,000 lb (21,773 kg)  
Transport length w/ 40" (102 cm) end idler and manual crumber:  
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: 12" (30 cm)  
Angle of approach: 16°  
Ground-bearing pressure:  
9.1 psi (.643 kg/cm<sup>2</sup>) at 52,200 lb (23,678 kg) w/ 21" (53 cm) grousers  
Split ROPS (rollover protective structure)

### Hydraulic System

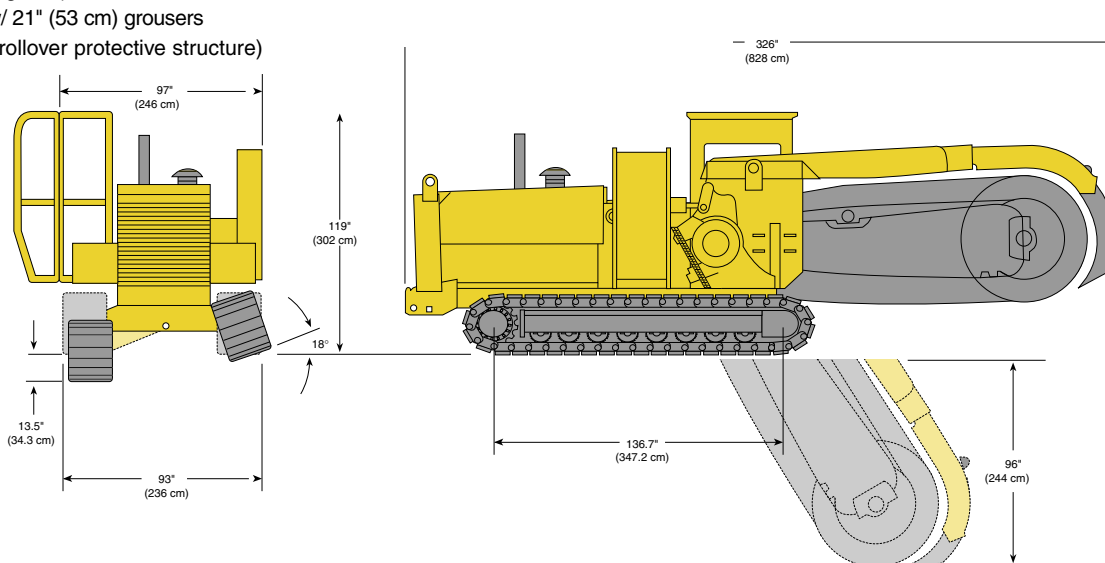
Type: Pressure- and flow-compensated (load sensing)  
Pump flow (max.): 25 gpm (95 L/min)  
Pressure setting: 2500 psi (172 bar)  
Oil tank capacity: 85 gal (322 L)  
Oil type: Vermeer HyPower 100 (optional)

### Options

Vantage Track 3- or 5-Year/  
3000- or 5000-Hour Extended-Care  
Service Program  
Dirt drags  
Enclosed climatized cab

### Engine

Model: John Deere 6081 HF070  
Aspiration: Turbocharged and charge air aftercooled  
Number of cylinders: 6  
Max. no-load RPM: 2350  
Gross hp: 250 hp (186 kw) @ 2200 RPM  
Cooling medium: Liquid  
Air cleaner: Dry type w/ exhaust aspiration  
Oil filter: Full flow  
Electrical system: 12-volt  
Fuel tank capacity: 110 gal (416 L)  
Fuel consumption @ full load:  
12.7 gpm (48 L/min)  
Operating range: 8.7 hours



# T655 Specifications



## Conveyor

*Open-center hydraulic pump and two motors w/ pressure-compensated flow control*

Belt speed: 0 fpm – 800 fpm  
(0 m/min – 243.8 m/min)  
Belt width: 24" (61 cm)  
Conveyor length: 8' (2.4 m) curved;  
12' (3.7 m) curved, folding (optional)  
Discharge height: 8' (2.4 m) = 44" (112 cm);  
12' (3.7 m) = 56" (142 cm)  
Shift travel: 8' (2.4 m) conv. — 12" (30 cm);  
12' (3.7 m) 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 w/ planetary transmission capable of full counter rotation*

Infinitely variable speed:  
Transport — 0 fpm – 295 fpm  
(0 m/min – 89.9 m/min);  
digging — 0 fpm – 148 fpm  
(0 m/min – 45.1 m/min)  
Max. tractive effort:  
48,288 lb (21,903 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" (17.2 cm)  
Track tilt: Digs vertical trench on 18.5  
percent slope, 10.5°; 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 hp  
Boom travel: Up — 10°; down — 60°  
Digging-chain tensile strength:  
4501 — 310,000 lb (140,616 kg)  
4502 — 620,000 lb (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 fpm – 848 fpm (0 m/min – 258.5 m/min)  
Boom top rollers: Optional  
Practical cutting speed range:  
594 fpm – 848 fpm  
(181.1 m/min – 258.5 m/min)  
Head shaft bearings:  
Oil-flushed w/ 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;  
4' x 26" (1.2 m x 66 cm)  
4501 double-chain rotary cutters;  
6' x 26" (1.8 m x 66 cm)  
4501 double-chain rotary cutters;  
8' x 26" (2.4 m x 66 cm)  
4501 double-chain rotary cutters



## VANTAGE TRACK

*Protect your trencher with our optional 3-Year/3000-Hour or 5-Year/5000-Hour Vantage Track Extended-Care Service Program — a Vermeer exclusive! Ask your dealer about it.*

## Worldwide Coverage With A Local Touch.

*Your independent, authorized Vermeer dealer knows your local conditions and is ready to provide expert sales, support, service and parts — wherever your job site.*



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