

## **POWER MODULE**

### **DIESEL POWER OPTIONS**

#### **DETROIT DIESEL ENGINE**

**Tier One** 

Model	16V Series 2000	16V Series 2000
Type	4-cycle turbocharged	4-cycle turbocharged
Rated Power	1050 HP	1050 HP
	(783 kW) @ 1900 rpm	(783 kW) @ 1800 rpm
Bore and Stroke	5.12 in x 5.91 in	5.12 in x 5.91 in
	(130 mm x 150 mm)	(130 mm x 150 mm)
Displacement	1944 cu in (31.86 l)	1944 cu in (31.86 l)

Tier Two

#### **CUMMINS DIESEL ENGINE**

	Tier One	Tier Two
Standard Model	QST 30	QST 30
Type	4-Cycle turbocharged	4-Cycle turbocharged
Rated Power	1050 HP	1050 HP
	(783 kW) @ 1900 rpm	(783 kW) @ 1800 rpm
Bore and Stroke	5.51 in x 6.5 in	5.51 in x 6.5 in
	(140 mm x 165 mm)	(140 mm x 165 mm)
Displacement	1861 cu in (30.5 l)	1861 cu in (30.5 l)

#### RADIATOR/OIL COOLER MODULE

- Split flow side by side
- · Thermostatically controlled
- · Independent hydraulic motor-driven, radiator-mounted fan
- Variable speed fan

### **AIR FILTRATION**

 LeTourneau, Self Cleaning, KLENZ™ System 99.9% Efficiency removing +0.3 microns

Supply filtered air for:

- · Engine air
- · Drive system cooling
- Pressurized cab
- · Longest filter maintenance interval in industry

#### **EXHAUST SYSTEM**

Dual low restriction muf ers with top, MID hood discharge

## CONTROL SYSTEM-LINCS™

## LeTourneau Integrated Network Control System-LINCS™

Microprocessor Based Full Digital Control and Monitoring

### Hydraulics • Electrics • Engine • Traction Drive

- Modular design
- Built-in diagnostics
- Dash display and keypad

### **PROPULSION SYSTEM**

### Switched Reluctance (SR) Propulsion System

- · Solid-state controlled traction drive
- SR drive advantages include:

No contactors or power switch gear

No commutator or brushes on traction motors

### **TRAVEL SPEED**

INFINITELY VARIABLE Forward and reverse 0-15 mph (0-24.1 kph)

### **GENERATOR**

- · LeTourneau 6-R generator
- Alternating-current, 3-phase, 4-pole
- Solid-state controlled

### **TRACTION MOTORS**

- LeTourneau B40
- · SR all wheel drive

## DRIVE GEARING LeTourneau 35A

- In-line gear train mounted within the rim of the tire, transmitting power from the traction motor to the tire/rim assembly
- Each drive unit consists of a planetary gear train
- Total reduction 95.6:1

## PRIMARY BRAKING SYSTEM

Electric braking (retarding) is designed as the primary braking system which can be controlled from the accelerator or retard/brake pedal. This solid-state, non-wearing braking system will bring the dozer to a full stop without application of the air operated disc brakes.

### **SECONDARY AND PARKING BRAKE SYSTEM**

Motor speed disc brakes, air applied/spring-released automatic actuation on all four wheels in the event of pressure loss.

## **FRAME**

The unique LeTourneau frames are fabricated from high strength, low-alloy steel with excellent weld characteristics and low temperature properties. The front axle is an integral, fixed part of the frame. The rear axle oscillates a total of  $\pm$ 11 degrees.

The independent power module mounting system is cradled within the rear frame by a three-point isolation system.

### **STEERING**

Articulating frame, joystick controlled power steering. The LeTourneau dozer, with its constant-rated engine RPM, provides full steering response regardless of vehicle speed.

• Operating pressure 2500 PSI (17,238 kPa)

Articulation angle
 Rear axle oscillation
 42°
 +/- 11°

• Turning radius 32 ft 5 in (9.88 m)

## **HYDRAULIC SYSTEM**

#### **HPD GEAR BOX**

- Wet spline design with pressurized, cooled, and filtered lubrication
- Ratio 1:1

#### **PUMPS**

Main Pumps	(2) Piston Pump	250 GPM	(946 l/min)
Steering	Vane Pump	90 GPM	(340 l/min)
Fan/Blower Drive	Tandom Piston Pump	45/45 GPM	(170/170 l/min)
Cooling System Circulating	Vane	110 GPM	(416 l/min)
Gearbox Lube		17 GPM	(64 l/min)

### **VALVES**

Main	Relief Pressure	3000 PSI (26,200 kPa)
Steering	Relief Pressure	2500 PSI (17,238 kPa)

#### **CYLINDERS**

Double-acting, single-stage, diameter and stroke, (standard and high lift)

Hoist 6 in x 46 in (152 mm x 1143 mm)
 Tilt & pitch Tilt 6 in x 14 in (152 mm x 355 mm)

Pitch 6 in x 11 in (152 mm x 279 mm)

• Steering 7.5 in x 30 in (190 mm x 762 mm)

### **FILTERS**

Full system, return-flow
Gearbox
10 Micron Absolute
10 Micron Absolute
Piston pump (case drain)
10 Micron Absolute

### **GENERAL SERVICE DATA**

### **FLUID CAPACITIES**

Fuel tank	565 gals	(2,138 l)	
<ul> <li>Hydraulic tank</li> </ul>	260 gals	(984 l)	
<ul> <li>Crankcase (includes filters)</li> </ul>			
Cummins	35 gals	(132 l)	
Detroit Diesel	25 gals	(94 l)	
<ul> <li>Gearbox</li> </ul>	5 gals	(19 l)	
<ul> <li>Drivers (each)</li> </ul>	6.1 gals	(23 I)	

## STANDARD FEATURES

### TIRES/RIMS

- Tires 45/65-45 Bias Ply 46 PR L-5 Tread
- Rims 36-45

### **GAUGES AND INDICATORS**

- Engine Coolant Temperature Gauge
- Engine Lube-Oil Pressure Gauge
- · Fuel Level Gauge
- Hour Meter
- Speedometer
- · System Air Pressure Gauge

### INDICATOR LIGHTS AND AUDIBLE ALARMS

The operator is informed of a potential problem by audible alarm and text messages on an in-dash display. The digital display provides repair technicians with operational data and fault messages in the event of mechanical, electrical or electronic malfunction.

Three warning lights immediately advise the operator of the severity/condition of various engine, hydraulic, electrical and electronic systems of the dozer. (RED, AMBER and BLUE).

### **STANDARD EQUIPMENT**

- Access Ladder Light
- · Air Clean-Out Hose In Cab
- · Air Conditioning / Heater-defroster Filtered And Pressurized
- · Air Dryer System
- · Air Horn
- · Air Tank Bleed System
- · Automatic Blade Leveling Control
- Automatic Electrical Cabinet Lights
- Automatic Lubrication System
- · Back-up Alarm, Audible
- Battery Disconnect Switch
- · Blade Liner for Rock Blade
- · Brake Lights
- · Cab Exit Window
- · Cigar / Cigarette Lighter
- Cruise Control
- Door Interlock on Electrical Cabinet
- · Drawbar with Tow Hitch
- · Emergency Stop Buttons Cab and Remote Mounted
- Engine Compartment Light
- Fire Extinguisher, Manual, 21 lbs (9.53 kgs)
- FOPS, Falling Object Protection System
- Ground Fault Electrics
- HID Headlights
- High, Low Idle Control Switch
- Idle Timer

- · Illuminated Instrument Panel
- Interior Lights
- Joystick Hoist and Blade Controls
- Joystick Steering
- Ladder Walkway Rear Access
- LINCS- LeTourneau Integrated Network Control System & Full Vehicle Monitoring
- · Maintenance Lock-Out Switch
- Mirrors, Rearview (Parabolic)
- Operator Seat 9-Way Adjustable With Retractable Seat Belt
- Overspeed Alarm
- · Parking Brake
- Rear Vehicle Access
- · ROPS, Rollover Protective Structure
- Sun Visor
- Tinted Safety Glass Throughout (Thermopane)
- Tow Hitch, Rear
- Turn Signals
- Twelve (12) Volt Power Supply
- · Windshield Washer Reservoir (5 gallons)
- · Windshield Wiper and Washer, Front & Rear
- Work Lights, 110 Volt 500 Watt (4) Front (2) Rear

### **OPTIONAL FEATURES**

- · Video Camera, Rear Mounted
- · Auxiliary Steering
- · Central Service with Fast Fuel
- Engine Heating System, Oil and Water
- Fast Fuel
- Fluid Sampling Kit
- Grease Reservoir Heater
- · Hydraulic Tank and Battery Heater
- · Jump Start Kit
- · L&M Mesabi Radiator
- Manual Fire Detection and Suppression System
- Remote Monitoring System
- · Tires -45/65-R45 Radial Tire

## **BLADE OPTIONS**

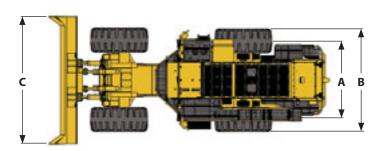
COAL BLADE

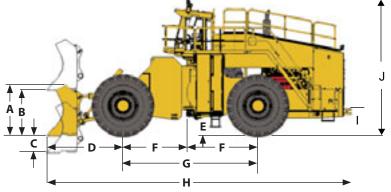
Up to 70 cu yd (53.51 cu m)

# **OPERATING CAPACITIES, WEIGHTS AND DIMENSIONS**

	STANDARD PUSH BEAM		<u>OPTIONAL PUSH BEAM</u>	
Blade Capacity	35 yd <sup>3</sup>	(26.76 m <sup>3</sup> )	35 yd <sup>3</sup>	(26.76 m <sup>3</sup> )
Blade Width	20 ft 7 in	(6.27 m)	20 ft 7 in	(6.27 m)
Blade Tilt	3 ft 10 in	(1.17 m)	3 ft 10 in	(1.17 m)
Blade Pitch	0 ft 11 in	(0.28 m)	1 ft 2 in	(0.36 m)
Digging Depth	1 ft 6 in	(.45 m)	1 ft 6 in	(0.45 m)
Ground Clearance	1 ft 6 in	(.45 m)	1 ft 6 in	(0.45 m)
Overall Length Blade Down	44 ft 1 in	(13.43 m)	46 ft 1 in	(14.04 m)
Wheelbase	19 ft 6 in	(5.94 m)	19 ft 6 in	(5.94 m)
Tread Width	12 ft 3 in	(3.73 m)	12 ft 3 in	(3.73 m)
Width Outside Tires	16 ft 5 in	(5.00 m)	16 ft 5 in	(5.00 m)
Height Over Cab	19 ft 6 in	(5.94 m)	19 ft 6 in	(5.94 m)
Rimpull	163,000 lbs	(73,936 kgs)	163,000 lbs	(73,936 kgs)
Operating Weight	230,000 lbs	(104,326 kgs)	230,000 lbs	(104,326 kgs)

## **STANDARD CONFIGURATION**





TOP VIEW		<b>SIDE VIEW</b>	<b>STANDARI</b>	D PUSH BEAM	OPTIONAL PUSH BEAM		
(A)	12 ft 3 in	(3.73 m)	Blade	35 yd <sup>3</sup>	(26.76 m <sup>3</sup> )	35 yd <sup>3</sup>	(26.76 m <sup>3</sup> )
(B)	16 ft 5 in	(5.00 m)	(A)	7 ft 4 in	(2.22 m)	7 ft 4 in	(2.22 m)
(C)	20 ft 7 in	(6.27 m)	(B)	5 ft 0 in	(1.52 m)	6 ft 3 in	(1.92 m)
			(C)	1 ft 6 in	(0.45 m)	1 ft 6 in	(0.41 m)
			(D)	11 ft 1 in	(3.38 m)	13 ft 1 in	(3.98 m)
			(E)	1 ft 6 in	(0.45 m)	1 ft 6 in	(0.45 m)
			(F)	9 ft 9 in	(2.97 m)	9 ft 9 in	(2.97 m)
			(G)	19 ft 6 in	(5.94 m)	19 ft 6 in	(5.94 m)
			(H)	44 ft 1 in	(13.43 m)	46 ft 1 in	(14.04 m)
			(1)	3 ft 3 in	(1.00 m)	3 ft 3 in	(1.00 m)
			(1)	19 ft 6 in	(5 94 m)	19 ft 6 in	(5 94 m)



P.O. Box 2307 • Longview, TX 75606 • (903) 236-6598 • fax (903) 236-6552 • www.letourneautechnologies.com

### Meets the following MSHA, SAE and ISO Safety Standards:

Brake Performance Test SAE J1473 / ISO 3450 • Capacity Rating - Loader Bucket SAE J742 • Exterior Sound Level SAE J88 • FOPS SAE J231 / ISO 3449 Interior Sound Level SAE J919 • Rated Operating Load for Loaders SAE J818 • ROPS SAE J1040 / ISO 3471 • Steering Test SAE J1511 / ISO 5010

Please Note: Standard/Optional Equipment, Features and Performance conform to U.S. and International Codes as Required. LeTourneau Technologies, Inc. has made every effort to make these specifications as accurate as possible at the time of printing. However, we reserve the right to make changes and improvements at any time without notice, in equipment, materials and specifications. To ensure the most current information, please contact your dealer representative.

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