

# 3806D CONSTRUCTION SCRAPER TRACTOR



## *key features*

- **Gross Power** 290 kW (389 hp)
- **Gross Torque** 1 850 Nm (1,362 lbft)
- **Gross Weight** 18 882 kg (41,635 lbs)



**D SERIES**

## ENGINE

Configuration	Mercedes Benz OM501LA V-6
Aspiration	Turbocharged and intercooled
Cooling System	Liquid cooled with single pass radiator as well as charge air cooler
Gross power	290 kW (389 hp) @ 1 800 rpm SAE J1349
Net Power	283 kW (380 hp) @ 1 800 rpm
Gross torque	1 850 Nm (1,362 lbf) @ 1 080 rpm SAE J1349
Net Torque	1 824 Nm (1,343 lbf) @ 1 080 rpm
Displacement	11,95 litres (730 cu.in)
Fuel tank capacity	485 l (128 US gal)

## TRANSMISSION

Layout	Allison HD 4060 Engine mounted box with rear output
Gear layout	Constant meshing planetary gears, clutch operated
Gears	6 Forward, 1 Reverse
Clutch type	Hydraulically operated multi-disc
Control type	Electronic
Torque converter layout	Hydrodynamic, with lock-up in all gears
Vehicle speeds	1st 2nd 3rd 4th 5th 6th R
	km/h 7,5 13,8 18,4 26,3 35,7 39 5,5
	mph 4,66 8,6 11,4 16,4 22,2 24,2 3,42

## TRANSFER CASE

Layout	VGR 17000 Three in-line helical gears
Output differential	Interaxle differential, pneumatically lockable whilst stationary or on the move.

## AXLES

Differential type	Bell 25 tonne Spiral bevel type with Controlled Traction Differentials (CTD)
Final drive type	Outboard heavy duty planetary
Housing type	Steel fabricated

## BRAKING SYSTEM

SERVICE BRAKE	Dual circuit, full hydraulic actuation ventilated dry disc brakes
Maximum brake force	134 kN (30,124 lbf)
PARK & EMERGENCY	Spring applied, air released driveline-mounted disc.
Maximum brake force	440 kN (98,920 lbf)
Auxilliary Brake	Automatic exhaust brake and Engine Valve Brake (EVB)

## WHEELS

Tyre	Size	29.5R25
	Type	Radial Earthmover
Option	Size	30.5LX32
	Type	High flotation aggressive tread pattern Agricultural Tyre

## SUSPENSION

Front type	Semi-independent leading A-frame supported by nitrogen/oil struts
Rear type	Solid mounted

## HYDRAULIC SYSTEM

	Full load sensing system serving the prioritized steering, scraper and brake functions. A ground-driven, load sensing emergency steering pump is integrated into the main system
Pump Type	Variable displacement, loadsensing piston
Application	Steering, scraper operation, hydraulic brake charging and cooling fan drive
Flow:	300 l/min (79.26 US gal/min)
Pressure:	20 MPa (2,900 psi)
Filter:	10 micron

## HYDRAULIC SYSTEM

(continued)	
Scraper Configurations	2 Scrapers: 3 controls per scraper 3 Scrapers: 2 controls per scraper

Hydraulic Control Valve - Scrapers	The Control Valve is a stackable multi-section, load sensing, pressure compensated, proportional directional valve with port relief valves in the down ports. The valve consists of 6 sections. Coupling is done via 12 female quick couplers situated on the rear of the machine.
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Electro Hydr. controls - Scrapers	Parker Hydraulics IQAN System. Fully programmable. Hydraulic Flow Rates can be adjusted on Display Module.
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## PNEUMATIC SYSTEM

	Air drier with heater and integral unloader valve, serving park brake and auxiliary functions
System pressure	810 kPa (117 psi)

## ELECTRICAL SYSTEM

Voltage	24 V
Battery type	Two maintenance free permanently sealed
Battery capacity	2 x 105 Ah (optional 2 extra batteries)
Alternator rating	28 V 100 A

## STEERING SYSTEM

	Hydrostatically actuated by two double acting cylinders, with ground-driven emergency steering pump.
Angle	+ - 42 degrees
Lock to lock turns	4,7

## OPERATING WEIGHTS

Front	13 622 kg (30,036 lbs)
Rear	5 260 kg (11,598 lbs)
Gross Weight	18 882 kg (41,635 lbs)

## STANDARD EQUIPMENT

Cab	ROPS/FOPS certification • Handrails on fenders • Tilt cab for service access • Gas strut supported door • Tinted safety glass • Sliding windows • Rearview mirrors- regular and wide angle • Sun visor • Wiper/washer with intermittent control • Rear window wiper/washer • Tilt and telescoping steering wheel • Adjustable, air suspension seat with retractable seat belt, rotated by 15 degrees • Fold-away trainer seat with retractable seat belt • HVAC climate control system with filtered and ducted air • Air horn • Overhead console for FM and 2-way radio, compartments for storage, electrical relays and circuit breakers • Ashtray • Drinks holder • Cooled/heated lunchbox • Wheel spanner set
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**MDU Features** • Trip timer • Trip distance • Diagnostics • Intermittent wiper timing control • Speedo calibration for alternative tyre sizes • Metric /Imperial unit selection • Warning lights with audible buzzer

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## STANDARD EQUIPMENT

(continued)

**Analogue Gauges** • Engine coolant temperature • Engine oil pressure • System air pressure • Transmission oil temperature • Fuel • Speedometer

**LCD Display** • Transmission gear selection • Tachometer • Battery voltage • Hourmeter • Odometer

**Brakes** Vented dry disc calipers on front and rear axles  
Fully hydraulically actuated  
Spring applied air release park brake on rear driveshaft

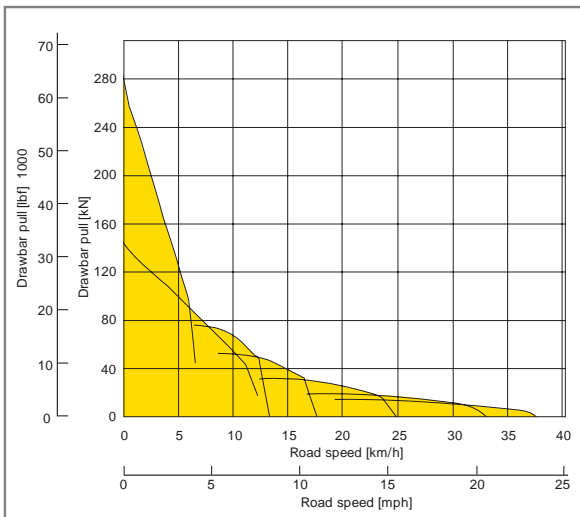
**Other** Ground driven emergency steering  
Tow recovery cable

## OPTIONAL EQUIPMENT

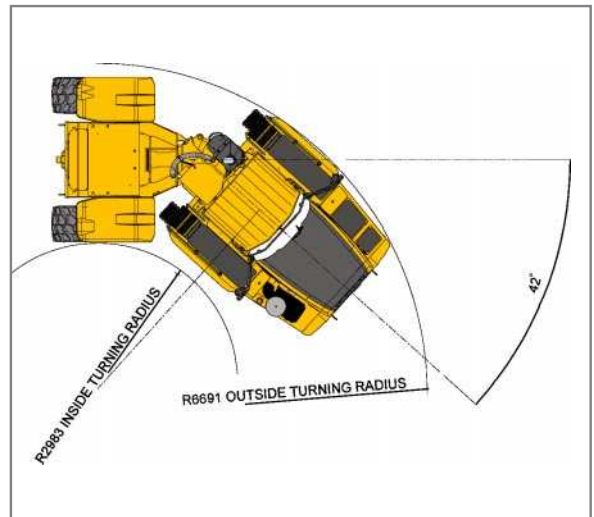
(Factory and field installed)  
30.5LX32 Agricultural Tyre  
High flotation aggressive tread pattern  
Groeneveld central lubrication system  
Flashing beacon  
Work lights  
Artic reverse light  
Electrical horn  
2 extra batteries  
Fuel filter heating element  
Electric adjust and heated mirrors (one per side)  
Counter Weights

Provision for: FM and 2-way radios  
Wiggins quick fueling system

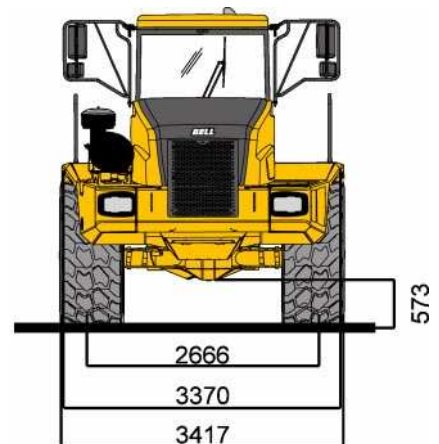
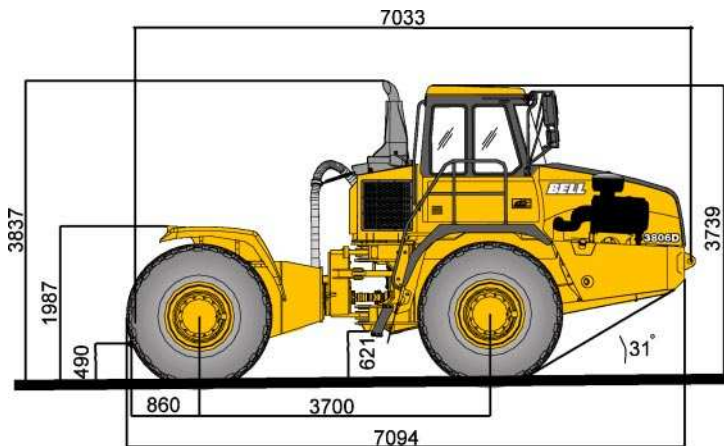
## DRAWBAR PULL GRAPH



## TURNING RADIUS



## TURNING RADIUS





# 3806D

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## What makes the 3806D the Ultimate Scraper Tractor...

- True construction machine heritage.
- Heavy duty drivetrain, transmission and axles designed for 50 ton + gross weight application.
- Supreme driver comfort from a nitrogen over oil strut semi independent suspension system.
- Programmable Hydraulic Control System permitting fine tuning of the Scraper controls.
- Torque converter drive with lock up clutch provides torque multiplication while reducing drivetrain shock loads.
- Lock up clutch provides direct drive economy.

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All dimensions are shown in millimetres, unless otherwise stated between brackets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. Photographs featured in this brochure may include optional equipment.

**Strong Reliable Machines  
Strong Reliable Support**



SPEC/232/09/02 - 3806D Scraper Tractor