

# UD TRUCKS

# GW470

**Automated – Leaf Suspension**

**GVM 26,000kg\* GCM 70,000kg\*\* B-Double Rated Road Train Option**



## Specifications

### ENGINE

<b>Make and model:</b>	<b>NISSAN DIESEL GE13TD</b>
4 cycle, direct injection, overhead cam 4 valve, water cooled, in-line diesel engine with variable nozzle turbocharger and intercooler	
<b>Number of cylinders:</b>	6 cylinders
<b>Bore x stroke:</b>	136 mm x 150 mm
<b>Total piston displacement:</b>	13,074 cc
<b>Max. output (ECE Net):</b>	340 kw (460 PS) at 1,800 rpm
<b>Max. torque (ECE Net):</b>	2,255 Nm (230 kgm) at 1,200 rpm
<b>Max. governed speed:</b>	2,000 rpm
<b>Compression ratio:</b>	17.5 : 1
<b>Auxiliary brake:</b>	Exhaust + Engine compression brake (EE brake)

### Lubrication system:

Forced feed by gear pump, Flat tube type oil cooler, Full flow and by-pass oil filter with replaceable element, 42 litre capacity

### Air system:

Water cooled reciprocating type; Twin cylinder air compressor with oil mist separator and air dryer

### Cooling system:

Forced feed by centrifugal water pump; Wax pellet type thermostats incorporated with a by-pass; Aluminium corrugate fin type radiator with reserve tank and viscous coupling with 720mm dia 10 blade cooling fan

### FUEL AND INTAKE SYSTEM

Ultra high pressure unit injector fuel injection system  
Replaceable primary and secondary fuel filters  
400lt capacity aluminium fuel tank with lockable cap mounted on LHS  
Primary and secondary dry paper element air filters  
High mounted LHS air intake

### EXHAUST AND EMISSION CONTROL SYSTEM

Emission standard – ADR80/02 (JAPAN 05LT – Euro 5 emission levels)  
Primary – Selective catalytic reduction (SCR)  
55lt stainless steel AdBlue tank with lockable cap mounted on LHS  
Secondary – Electronic controlled selective cooled EGR  
LHS chassis mounted muffler/cat with horizontal exhaust discharge under truck

### ELECTRICAL

24 volt, negative ground system  
2 x 12 volt 150 Ah batteries mounted on the right hand side of frame  
24 volt – 60 amp. with built-in IC regulator  
24 volt trailer wiring supplied at rear of cab

### CLUTCH

Dry twin plate, hydraulically operated clutch release mechanism with air assistance and UD electro/pneumatic countershaft brake interfaced with AutoShift™ transmission

**Diameter of clutch disc:** 400mm

### TRANSMISSION

**Make and model:** Eaton Fuller AutoShift™ RTLO-18918A-AS3  
Fully automated shifting manual transmission (Autoshift™ – Gen3). Eighteen (18) forward and four (4) reverse gears, with constant mesh. Eaton Cobra Shift with dash mounted gear display. Integral oil pump and cooler with 13 litre oil capacity. PTO Openings - Bottom

<b>Gear ratios:</b>	<b>(Low)</b>	<b>Gear</b>	<b>(High)</b>	<b>(Low)</b>	<b>Gear</b>	<b>(High)</b>
	12.19	<b>Low</b>	10.39	2.28	<b>5th</b>	1.94
	8.51	<b>1st</b>	7.26	1.62	<b>6th</b>	1.38
	6.05	<b>2nd</b>	5.16	1.17	<b>7th</b>	1.00
	4.38	<b>3rd</b>	3.74	0.86	<b>8th</b>	0.73
	3.20	<b>4th</b>	2.73	15.06	<b>Rev. L</b>	4.03
				12.85	<b>Rev.H</b>	3.43

### BRAKES

Full WABCO electronic air brake system (EBS); dual air line system; aluminium air tanks; automatic adjusting; taper roller; internal expanding leading and trailing shoe type with 4 channel ABS and traction control (ASR)

<b>Air pressure:</b>	7.2 – 8.5 kg/cm <sup>2</sup>		
	<b>Front</b>	<b>Rear</b>	<b>Total</b>
<b>Drum diameter:</b>	410mm	410mm	
<b>Lining area:</b>	2,984cm <sup>2</sup>	7,296cm <sup>2</sup>	10,280cm <sup>2</sup>

Hand operated pneumatically controlled spring park brake acting on both drive axles  
Progressive trailer brake hand controller with rear of cab air connections

### STEERING

Recirculating ball screw type steering box with hydraulic power assist  
Adjustable, tilt and telescopic type column with steering lock – 460mm steering wheel  
**Steering gear ratio:** 22.42 : 1

### WHEELS AND TYRES

**Number and size of tyre:** **Front** – single 295 / 80R 22.5 152/148  
**Rear** – dual 11 R 22.5 – 16PR 148/145L  
Pressed steel disc type wheel, 1 piece rim, 8.25 x 22.5, offset 165mm, ISO 10 studs  
One spare wheel and tyre strapped to frame. Carrier (STC) supplied (see Options)

### AXLES

**FRONT** **NISSAN DIESEL FF85**  
Drop forged steel “I” section beam, reverse “ELLIOT” type  
**Front axle capacity:** 8,500kg \*Refer to Load Capacity Summary for max permissible load

**REAR** **NISSAN DIESEL RM1A**  
Fully floating pressed steel banjo type housing, in-line tandem type power divider with remote operated lock up  
**Final reduction gear:** Single reduction, hypoid gear  
**Final reduction gear ratio:** 4.625  
**Rear axle capacity:** 23,600kg \*Refer to Load Capacity Summary for max permissible load

### SUSPENSION

**FRONT**  
Long taper leaf spring with anchor at front and shackle at rear  
**Width x length:** 90 x 1,550mm  
**The number of leaves:** 3  
**Spring constant:** 364 N/mm (37.6 kg/mm)  
**Shock absorbers:** Telescopic double acting

**REAR**  
Trunnion-mounted semi-elliptic leaf springs with 6 torque rods  
**Width x length:** 90 x 1300 mm  
**Number of leaves:** 8  
**Spring constant:** 2672 N/mm (272.5 kg/mm)

### LOAD CAPACITY SUMMARY

	<b>Front (kg)</b>	<b>Rear (kg)</b>
<b>Axle capacity</b>	8,500	23,600
<b>Steering / Spring capacity</b>	6,000	23,600
<b>Tyre capacity</b>	7,100	23,200
<b>Max capacity (limit kg)*</b>	6,000	23,200

Note: Based on 295/80R 22.5 front and 11R 22.5 rear tyres and standard springs

# GW470 Automated – Leaf Suspension

## CAB

Forward control, full floating air suspension cab with shock absorbers  
 ECE – R29 compliant  
 Electric-Hydraulic cab tilt system with 65 deg tilt  
 Front opening inspection bonnet  
 3 piece air dam front bumper  
 90 deg opening doors

## Standard Equipment

Overhead centre console with driver and passenger sunvisor and overhead tray  
 24v cigarette lighter / power supply + 2 ash trays  
 Large centre console  
 Large fluorescent interior light  
 Driver and passenger On / Off / Door interior lights  
 Triple arm, 2-speed wipers with variable intermittent and integrated washers  
 Heated and electrically operated LH and RH main mirrors  
 Passenger side, rear and downward spot mirrors  
 Electric horn, reverse warning light and alarm  
 2 occupant seats with retractable seat belts  
 Multi adjustable air suspended driver's seat with auto height control  
 Flat folding assistant seat with lift up base  
 ADR42/04 compliant sleeper bunk with mattress (Suitable for "two up driving")  
 Full cab curtain rails with curtains (Covers all windows)  
 Power operated driver and passenger windows  
 Remote operated keyless central locking  
 Fully automatic electronic climate control air conditioning  
 Heated / cooled storage box and 2 centre drink holders  
 AM/FM radio with CD player  
 Tachograph (7 day)  
 Cruise control – stalk mounted  
 Rear facing work light mounted on rear of cab  
 Halogen multi reflector headlamps  
 2 bumper mounted fog lamps (ADR49/00)  
 Roof mounted clearance lights (ADR49/00)  
 2 door cup holders

## Standard Equipment *continued*

2 DIN sized compartments for accessory fitment  
 Tinted windows

## FRAME

Ladder, channel type chassis construction

**Width:** 840mm  
**Height x width x thickness:** 298 x 90 x 7 mm  
**Material:** Pressed carbon steel frame  
**Chassis data:** Tensile Yield Modulus  
**Strength:** 55kg/mm<sup>2</sup> 48kg/mm<sup>2</sup> Refer Body Manual  
 UD Trucks website  
**Turntable angles:** Fitted

## INSTRUMENTS

Dash design integrates an array of instruments and warning / informational lights  
 Individual warning tones  
 A Drivers Information System displaying useful vehicle data including date / time, oil pressure, voltmeter, trip information along with service intervals for engine, transmission and differentials

## FACTORY OPTIONAL EQUIPMENT (Indent order only)

Paint colours  
 4.875 diff ratio  
 80Amp alternator with built-in IC regulator  
 Heavy duty taper leaf front springs (43.8 kg/mm – 6,500kg capacity)  
 Front stabiliser bar  
 11R 22.5 16PR front tyres – 6,300kg capacity  
 Alcoa Aluminium wheels  
 400lt chassis mounted aux fuel tank with lockable fuel cap (RHS) – Replaces STC  
 Centre seat with seat belt (Replaces centre console)  
 Electronic engine governor control  
 Electronic transmission PTO control  
 Spare tyre fitment – Dealer Option  
 Road Train rating – Dealer Option

## PERFORMANCE (Calculated)

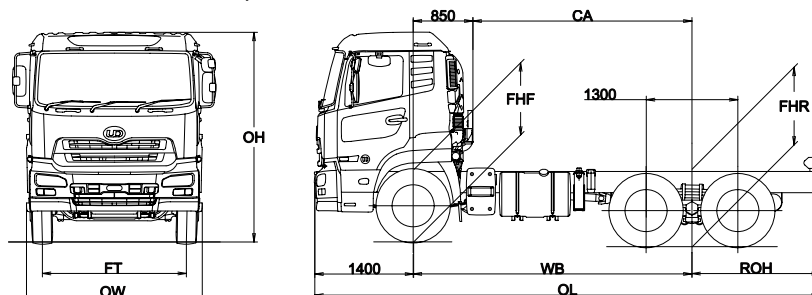
	4.625 diff ratio with 11R 22.5 tyres	4.875 diff ratio with 11R 22.5 tyres
<b>Max. speed:</b>	100km/h (speed limited – ADR65/00)	100km/h (speed limited – ADR65/00)
<b>Gradeability 1st gear (Calculated):</b>	32.5% @ (70,000kg)	34.4% @ (70,000kg)
<b>Gradeability 18th gear (Calculated):</b>	1.0% @ (70,000kg)	1.1% @ (70,000kg)
<b>Est. RPM @ 100km/h:</b>	1773rpm	1868rpm

## GENERAL SPECIFICATIONS (approx.)

Wheel Base	Weight (kg)					Dimensions (mm)											
	GVM*	GCM**	FA <sup>1</sup>	RA <sup>1</sup>	Total Tare <sup>1</sup>	WB	OL	OW	OH <sup>2</sup>	FT	RT	ROH	CA	GC <sup>2</sup>	FHF <sup>2</sup>	FHR <sup>2</sup>	Turn Radius <small>(left to right)</small>
H	26,000	70,000	4,545	3,605	8,150	3,950	7,185	2,490	2,990	2,040	1,840	1,810	3,100	260	1,000	1,090	6,900

<sup>1</sup>Weight estimated includes fluids (not fuel or AdBlue®) excludes tools, driver, STC and spare wheel. When fitted with factory alloy wheels, subtract 37kgs from front and 148kgs from rear tare weight.

<sup>2</sup>Based on vehicle with standard steel wheels with 295/80R 22.5 front and 11R 22.5 rear tyres.



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\*Rated GVM and axle capacities are subject to Federal, State and Territory legal requirements. \*\*Higher GCM on engineering application, see your UD Trucks dealer.

