

# UD TRUCKS

# GW400

## Leaf Suspension

**GVM 26,000kg\* GCM 50,000kg**



### Specifications

#### ENGINE

<b>Make and model:</b>	<b>NISSAN DIESEL GE13TB</b>
4 cycle, direct injection, overhead cam 4 valve, water cooled, in-line diesel engine with 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>	287 kw (390 PS) at 1,800 rpm
<b>Max. torque (ECE Net):</b>	1,716 N.m (175 kgm) at 1,100 rpm
<b>Max. governed speed:</b>	1.800 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 (add 3 litres for RE-PTO)

#### 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 9 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 & Secondary dry paper element air filters  
 High mounted LHS air intake

#### EXHAUST AND EMISSION CONTROL

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  
**Diameter of clutch disc:** 400mm

#### TRANSMISSION

**Make and model:** Eaton Fuller RTLO-14913A  
 Thirteen forward speeds and two reverse, with constant mesh and synchromesh on range shift. Mechanical remote control operated shift. Integrated oil pump and cooler with 13 litre oil capacity. PTO Openings – Top RHS and bottom

<b>Gear ratios:</b>	<b>(Low)</b>	<b>Gear</b>	<b>(Low)</b>	<b>Gear</b>	<b>(High)</b>
	12.31	<b>Low</b>	2.29	<b>5th</b>	1.95
	8.64	<b>1st</b>	1.62	<b>6th</b>	1.38
	6.11	<b>2nd</b>	1.17	<b>7th</b>	1.00
	4.33	<b>3rd</b>	0.86	<b>8th</b>	0.73
	3.23	<b>4th</b>	13.22	<b>Rev. L</b>	3.50

#### 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 22.5 152/148M  
**Rear** – dual 11 R 22.5 – 16PR 148/145L  
 Pressed steel disc type wheel, 1 piece rim, 8.25 x 22.5, offset 165 mm, 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 (37.1 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  
**The 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

# GW400 Leaf Suspension

## CAB

Forward control, full floating air suspension cab with shock absorbers  
 Electric-Hydraulic cab tilt system with 65° tilt  
 Front opening inspection bonnet  
 3 piece high ground clearance front bumper  
 90° opening doors

## Standard Equipment

Overhead centre console with driver and passenger sunvisor and overhead tray  
 24v Cigarette lighter / power supply + 2 ash trays  
 Centre seat with seat belt  
 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  
 3 occupant seats with seat belts (outer seats retractable 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 (7day)  
 Cruise control – Stalk mounted  
 Rear facing work light mounted on rear of cab  
 Halogen multi reflector headlamps  
 Roof mounted clearance lights (ADR49/00)  
 2 door cup holders  
 2 DIN sized compartments for accessory fitment  
 Tinted windows

## FRAME

Ladder, Channel type chassis construction

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

**Turntable angles:** None – Holes provided in chassis for fitment

## INSTRUMENTS

Dash design integrates an array of instruments and warning / informational lights  
 Individual audible 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  
 80Amp alternator with built-in IC regulator  
 Heavy duty taper leaf front springs (43.8 kg/mm – 6500kg capacity)  
 Front stabilizer bar  
 11R 22.5 16PR Front tyres  
 Alcoa Aluminium wheels  
 400lt chassis mounted aux fuel tank with lockable fuel cap (RH) – Replaces STC  
 Large centre console (Replaces centre seat)  
 Electronic engine governor control  
 Electronic transmission PTO control  
 Rear engine PTO (441Nm torque capacity @ 100% engine speed)  
 Air dam front bumper  
 Spare tyre fitment (Dealer fit Option)

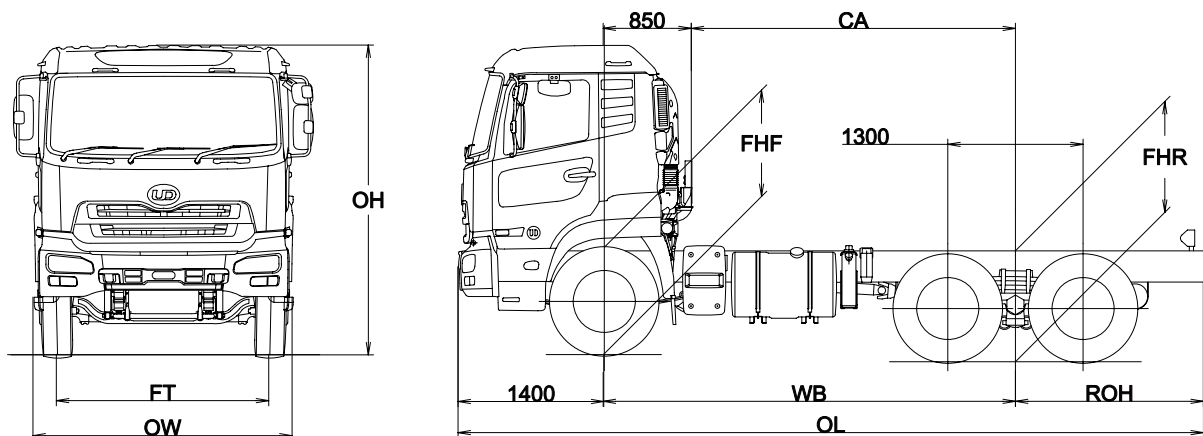
## PERFORMANCE (Calculated)

**4.625 diff ratio with 11R 22.5 Tyres**  
**Max. speed:** 100km/h (speed limited – ADR65/00)  
**Gradeability 1st gear (Calculated):** 35.1% @ GCM (50,000kg)  
**Gradeability 13th gear (Calculated):** 1.1% @ GCM (50,000kg)  
**Estimated RPM @ 100km/h:** 1773rpm

## 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 <sup>3</sup>	OL	OW	OH <sup>2</sup>	FT	RT	ROH	CA	GC <sup>2</sup>	FHF <sup>2</sup>	FHR <sup>2</sup>	FHR <sup>2</sup>	Turn Radius <small>Ref to Kerb</small>
H	26,000	50,000	4,470	3,575	8,045	3,950	7,185	2,490	2,990	2,040	1,840	1,810	3,100	260	1,000	1,000	1,100	6,900

<sup>1</sup>Weight estimated includes fluids (not fuel or AdBlue<sup>®</sup>) excludes tools, 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.

