

# ISUZU NPR 400 CNG



**ISUZU**  
RELIABILITY IS EVERYTHING

## AT A GLANCE

GVM	8,000 kg
GCM	11,000 kg
Engine Type	Isuzu 4HF1-CNG
Displacement	4.3 L
Power	88 kW @ 3,400 rpm
Torque	323 Nm @ 1,500 rpm
Wheelbase	3,365 mm

## DRIVELINE & CHASSIS SPECIFICATIONS

### ENGINE: ISUZU 4HF1-CNG

Type: 4 cylinder, 4 stroke, overhead camshaft, naturally aspirated spark ignition CNG.

Displacement: 4,334 cc

Compression Ratio: 12.5:1

Bore x Stroke: 112 x 110 mm

Max power\*: 88 kW @ 3,400 RPM

Max torque\*: 323 Nm @ 1,500 RPM

Emissions Standard: ADR 80/00 (Japan 2003 CNG)

\*Engine performance to EEC 80/1269 (NET).

- Plate type oil cooler. 10.5 L oil capacity. Combined full flow main and bypass oil filter.
- Electronic coil over spark plug ignition system. Long life platinum/iridium spark plugs.

### COOLING SYSTEM

- 10 blade, 450 mm diameter cooling fan with thermostatically controlled viscous clutch. Dual drive belts and thermostats. Radiator frontal area: 2,791 cm<sup>2</sup>. 12 L coolant capacity.

### AIR INTAKE SYSTEM

- Chassis mounted under cab air intake. 170 x 185 mm air cleaner element.

### FUEL SYSTEM

- 2 x steel Natural Gas tanks with 130 L liquid capacity each. Operating pressure: 20 MPa/3,000 psi approx.
- NGV1 fill coupling. Fuel gauge in cab.
- 1/4 turn valves for quick shut-off.

### CLUTCH

- Self adjusting hydraulic control. Single plate 300 mm diameter.
- Asbestos free lining material.
- Total lining area: 847 cm<sup>2</sup>.

### TRANSMISSION

#### ISUZU MXA-6R 6 Speed manual

- 6 forward speeds including overdrive.
- Synchromesh on all forward gears.
- 4.0 L oil capacity.
- PTO provision on LHS of transmission case. PTO drive from counter gear.
- Gear ratios (: 1)
 

1st	2nd	3rd	4th	5th	6th	Rev
4.987	2.870	1.594	Direct	0.728	0.626	4.774

### AXLES

#### FRONT: ISUZU F031

- Reverse Elliot I-beam. 3,100 kg capacity.

#### REAR: ISUZU R060

- Full floating Banjo type. Four differential pinions. 6,000 kg capacity.
- Drive ratio: 6.142:1

### SUSPENSION

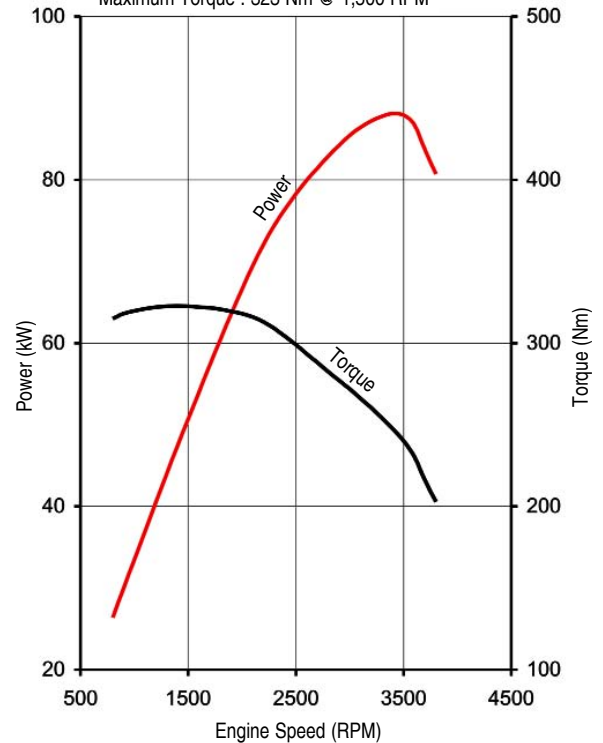
#### FRONT

- Single stage, alloy steel, taper-leaf springs.
- Nominal size: 1,140 x 70 mm
- Total spring capacity (at ground): 3,400 kg
- Double acting, hydraulic shock absorbers. Stabiliser bar.

4HF1-CNG

Maximum Power : 88 kW @ 3,400 RPM

Maximum Torque : 323 Nm @ 1,500 RPM



4HF1-CNG ENGINE PERFORMANCE CHART

### REAR

- Two stage, alloy steel, multi-leaf springs.
- Nominal size: 1,250 x 70 mm
- Total spring capacity (at ground): 5,000 kg
- Double acting, hydraulic shock absorbers. Stabiliser bar.

### BRAKES

- Front and rear drum brakes with dual circuit hydraulic control and auto slack adjusters. Vacuum assisted front/hydraulic pressure assisted rear. Load sensing proportioning valve.
- Front drum diameter: 320 mm
- Rear drum diameter: 320 mm
- Swept area: 4,021 cm<sup>2</sup>
- Asbestos free lining material.
- 190 mm diameter drum park brake mounted on rear of transmission.
- Hill Start Aid (HSA) system.

### AUXILIARY BRAKE

- Isuzu electromagnetic type driveline retarder with steering column mounted switch.

## **STEERING**

- Power assisted recirculating ball steering.
- Gear ratio: 20.9:1
- Turns lock to lock: 4.9
- 42.5° wheel cut angle (inside wheel).

## **WHEELS AND TYRES**

- 6.00J x 17.5 Six stud wheels.
- 205/75R 17.5 Michelin XZE1 Tubeless tyres.
- Maximum tyre rating: 1,600 kg per tyre (single tyres),  
1,500 kg per tyre (dual tyres).
- 1 frame mounted spare wheel and tyre assembly.

## **AXLE LOAD SUMMARY**

<b>NPR 400 CNG</b>	<b>FRONT</b>	<b>REAR</b>
Axle Capacity (kg):	3,100	6,000
Spring Capacity (kg):	3,400	5,000
Tyre Capacity (kg):	3,200	6,000
<b>Limit (kg):</b>	<b>3,100</b>	<b>5,000</b>

Note: Vehicle loading limit is determined by the combination of axle loading limit, GVM and GCM limit, and government regulatory requirements. Consult your Isuzu dealer to select the correct vehicle for your specific application.

## **CHASSIS FRAME**

- Cold riveted ladder frame. HT540A weldable steel.
- Frame dimensions  
Side rail (mm): 173 x 65 x 6.0  
Rear frame width (mm): 750

## **ELECTRICAL SYSTEM**

- 24 Volt electrical system.
- 24 Volt, 60 Amp alternator.
- 24 Volt, 4.5 kW starter motor.
- 2x 80D26R (582CCA) batteries connected in series.

# **CABIN SPECIFICATIONS AND APPOINTMENTS**

## **CAB EXTERIOR**

- All steel cab, side door impact protection beams. Outer body panels galvanised, corrosion resistant primer treated cab.
- Manual cab tilt to 45°.
- Access to fluid checkpoints without tilting cab.
- Silicone filled cab mountings.
- Body coloured impact resisting polycarbonate front bumper, steel backing frame.
- Heavy duty aluminium non slip entry steps.
- 90° opening internally reinforced door.
- Water spray suppression guards, front mudflaps.
- Laminated windscreen.
- 2 speed windscreen wiper system, intermittent wipe mode, triple washer jets.
- Single piece halogen headlamps incorporating turn signals.
- Combination brake, turn, reverse and marker lamps, registration plate illumination lamps. Extended wiring harness.
- Roof-mounted clearance lamps.
- 'West Coast' type rear view mirrors. Large flat mirror glass with additional, independently adjustable convex 'spot' mirror on both sides.

## **CAB INTERIOR**

- Wide contoured driver's bucket seat, lumbar support, reclining back, fore-aft adjustment. Two person passenger bench seat, folding seat back. Seat tilts for access to engine. Durable, fire resistant cloth seat facing.
- 3-point, lap sash seatbelts with emergency locking belt retractors in all outboard seating positions.
- Door and 'A' pillar entry assist grips.
- Full interior panel trim, padded roof lining, vinyl floor mats. Windscreen header storage shelf.

- Tilt/Telescopic adjustable steering column, soft feel urethane steering wheel
- Driver SRS airbag.
- Electric windows.
- Central locking with remote keyless entry.
- Twin cup holders. Cigarette lighter.
- Centre console box with storage tray. Fold down storage tray behind centre seat backrest.
- Heater/Demister with 4-speed fan and outlets for windscreen, side windows, face and floor.
- Standard fully integrated air conditioning.
- Fluorescent interior lamp with On/Door/Off switch activated by either door.
- Two speaker Eurovox Radio/CD player with digital anti skip memory.
- Optional 10 stack CD player.
- DIN sized compartment below radio for storage or for CB radio installation.

## **DRIVER CONTROLS**

- Key-operated engine start/stop and steering lock.
- Left side combination stalk: Windscreen wipers, washers and exhaust brake.
- Right side combination stalk: Turn signals and headlamps.
- HSA timer control

## **INSTRUMENTATION**

- Gauges: Electronically driven speedometer and tachometer. Digital odometer with integrated dual tripmeter. Engine coolant temperature and fuel level gauges.
- Warning lamps: Low battery charge, brake failure, low fuel level, glow plug/engine malfunction, low oil pressure, water separator.
- Indicator lamps: Turn signals, parking brake, high beam, retarder engaged.

