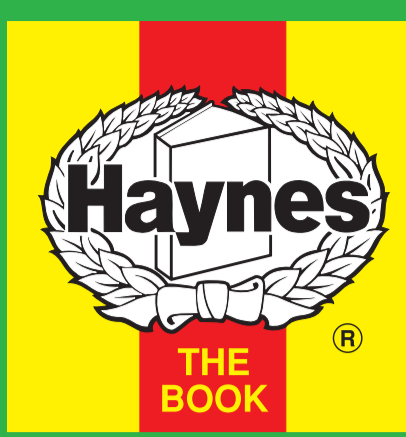


Engine & Cooling	Fuel	Ignition	Electrical	Running gear	Torque settings	Capacities	Notes & Illustrations
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## Automotive Technical DATA BOOK

Click on one of the buttons above to view data for this car. To return to this screen and make another choice, click anywhere on the data screen.

MENU

HELP

### Engine and cooling system Hi-Lux 2.2 4x4 (YN67) 1986 to 1989

Type		4Y
Capacity (cm <sup>3</sup> ) / number of cylinders		2237 / 4
Compression ratio / pressure	bar	8.8 / ≥8.8
Oil pressure	bar	[2.5 to 4.9]
Oil temperature	°C	–
Valve clearance - inlet	mm	0: Hyd.
- exhaust	mm	0: Hyd.
Firing order		1-3-4-2
No 1 cylinder position		TCE
Thermostat opening temperature	°C	80 to 84
Radiator cap pressure	bar	0.70 to 1.00

### Fuel system Hi-Lux 2.2 4x4 (YN67) 1986 to 1989

Idle speed - manual [auto]	rpm	700±50
Fast idle speed - manual [auto]	rpm	2600±100
CO @ idle speed [3000 rpm] - see page VI	%	1.5±0.5
HC @ idle speed [3000 rpm] - see page VI	ppm	≤1200
CO <sub>2</sub> @ idle speed [3000 rpm] - see page VI	%	–
O <sub>2</sub> @ idle speed [3000 rpm] - see page VI	%	–
Carburettor / fuel injection		Aisan
Type / ref		2V
Main jet / needle		–
Injection pressure	bar	–
Pump pressure	bar	–
Octane rating	RON	91[E 95 RON]

### Ignition system Hi-Lux 2.2 4x4 (YN67) 1986 to 1989

Type		Electronic
Ignition coil		–
Primary resistance	ohms	1.3 to 1.6
Ballast resistor	ohms	–
Voltage - Tmnl 15(+) to earth	V	–
Distributor		Toyo Denso
Points gap (air gap)	mm	[0.20 to 0.40]
Dwell angle	° (%)	–
Condenser capacity	µF	–
Rotation		–
Ignition timing - basic [static	° Crankshaft @ rpm	4 BTDC @ idle
V = Vacuum  NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	–
° Crankshaft @ rpm		–
° Crankshaft @ rpm		–
Centrifugal check.	° Crankshaft @ rpm	0 @ 1400
° Crankshaft @ rpm		10 @ 2400
° Crankshaft @ rpm		22 @ 4800
Vacuum range check	mbar	160 to 413
Maximum vacuum advance	° Crankshaft	19
Spark plugs		NGK/Champion
Type		BPR5EY / RN9YC
Electrode gap	mm	0.80

### Electrical system Hi-Lux 2.2 4x4 (YN67) 1986 to 1989

Battery	V / CC / RC	12 / 60Ah
Alternator voltage / full load current / engine rpm		13.8 to 14.8 / _ / 3000
Starter motor current / voltage - cranking	A / V	90 / 11.5 (no load)
- locked	A / V	–

### Running gear Hi-Lux 2.2 4x4 (YN67) 1986 to 1989

<b>Brakes -</b>		
Front (min. friction material thickness)	mm	1.0
Rear (min. friction material thickness)	mm	1.0
<b>Tyres</b>		
Saloon	Size	–
Estate / Van	Size	205x16
Pressure - front / rear - Saloon	bar	–
- Estate / Van	bar	1.7 / 2.4
<b>Front suspension / wheel alignment</b>		
Toe-in (+) / Toe-out (–)	mm [°]	+1.0±1.0
Camber		+1°±45'
Castor		+1°30'±45'
King pin inclination		+9°30'±45'
<b>Rear suspension / wheel alignment</b>		
Toe-in (+) / Toe-out (–)	mm [°]	–
Camber		–

### Torque wrench settings Hi-Lux 2.2 4x4 (YN67) 1986 to 1989

Cylinder head - stage 1	Nm	12mm bolt: 19
- stage 2	Nm	14mm bolt: 88
- stage 3	Nm	–
- stage 4	Nm	–
Big-end bearings	Nm	49
Main bearings	Nm	78
Clutch cover	Nm	19
Flywheel [driveplate]	Nm	83
Front hubs	Nm	WSM
Rear hubs	Nm	–
Wheel nuts / bolts	Nm	89 to 117
Spark plugs	Nm	18

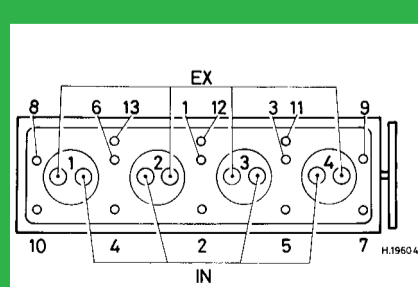
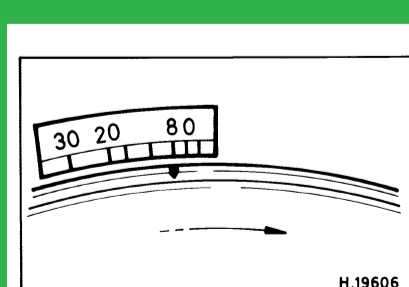
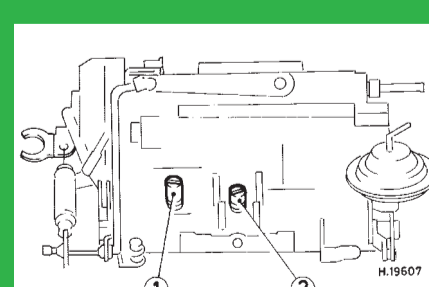
### Capacities Hi-Lux 2.2 4x4 (YN67) 1986 to 1989

Engine oil & filter	litres	4.0
Gearbox - 4-speed [5-speed]	litres	3.9 <sup>1</sup>
Automatic transmission - refill	litres	–
Final drive	litres	Front: 2.3 <sup>2</sup>
Cooling system	litres	7.4
Fuel tank	litres	65

### Notes and Illustrations

<sup>1</sup>Transfer box: 1.6<sup>2</sup>Rear: 2.2

1: Idle speed    2: CO / Mixture

2237 cm<sup>3</sup>2237 cm<sup>3</sup>

Aisan 2V