

Engine & Cooling

Fuel

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Electrical

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Automotive Technical
DATA BOOK

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Engine and cooling systemAlto FX & GLA1984 to 1992

Type		OHC
Capacity (cm ³) / number of cylinders		796 / 3
Compression ratio / pressure	bar	8.7 / ≥9.8
Oil pressure	bar	[2.9 to 4.4]
Oil temperature	°C	85
Valve clearance - inlet	mm	0.13 to 0.18
- exhaust	mm	0.13 to 0.18
Firing order		1-3-2
No 1 cylinder position		TBE
Thermostat opening temperature	°C	82
Radiator cap pressure	bar	0.90

Fuel systemAlto FX & GLA1984 to 1992

Idle speed - manual [auto]	rpm	900±50
Fast idle speed - manual [auto]	rpm	—
CO @ idle speed [3000 rpm] - see page VI	%	1.5±0.5
HC @ idle speed [3000 rpm] - see page VI	ppm	≤1200
CO2 @ idle speed [3000 rpm] - see page VI	%	—
O2 @ idle speed [3000 rpm] - see page VI	%	—
Carburettor / fuel injection		Mikuni
Type / ref		DIDS 2430 (Solex type)
Main jet / needle		92.5, 165
Injection pressure	bar	—
Pump pressure	bar	0.20 to 0.30
Octane rating	RON	91[E 91 RON]

Ignition systemAlto FX & GLA1984 to 1992

Type		Contact breaker - CIS
Ignition coil		—
Primary resistance	ohms	2.1
Ballast resistor	ohms	1.30
Voltage - Tmnl 15(+) to earth	V	—
Distributor		Nippon Denso
Points gap (air gap)	mm	0.40 to 0.50
Dwell angle	° (%)	62±3
Condenser capacity	µF	0.25
Rotation		Clockwise
Ignition timing - basic [static	° Crankshaft @ rpm	7 BTDC @ 900
V = Vacuum NV = No Vacuum		—
Total ignition advance	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Centrifugal check.	° Crankshaft @ rpm	0 @ 1500 to 1800
	° Crankshaft @ rpm	12 to 16 @ 3000
	° Crankshaft @ rpm	20 to 24 @ 3700
Vacuum range check	mbar	107 to 373
Maximum vacuum advance	° Crankshaft	14 to 18
Spark plugs		NGK/Champion
Type		BPR5ES / RN9YC
Electrode gap	mm	0.70 to 0.80

Electrical systemAlto FX & GLA1984 to 1992

Battery	V / CC / RC	12 / 150 / 55
Alternator voltage / full load current / engine rpm		13.5 / _ / 2500
Starter motor current / voltage - cranking	A / V	230 [AT: 270] / 9.5
- locked	A / V	450 / 8.5 [600 / 7.7, AT]

Running gearAlto FX & GLA1984 to 1992

Brakes -		
Front (min. friction material thickness)	mm	6.5 with backing
Rear (min. friction material thickness)	mm	2.6

Tyres		
Saloon	Size	145/70x12
Estate / Van	Size	—
Pressure - front / rear - Saloon	bar	1.9 / 1.9
- Estate / Van	bar	—

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	+1.0±2.0
Camber		+30'±1°
Castor		+3°30'±1°
King pin inclination		+12°20'±45'

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	—
Camber		—

Torque wrench settingsAlto FX & GLA1984 to 1992

Cylinder head - stage 1	Nm	55 to 60
- stage 2	Nm	—
- stage 3	Nm	—
- stage 4	Nm	—
Big-end bearings	Nm	28 to 32
Main bearings	Nm	43 to 48
Clutch cover	Nm	—
Flywheel [driveplate]	Nm	40 to 45
Front hubs	Nm	150 to 270
Rear hubs	Nm	80 to 120
Wheel nuts / bolts	Nm	50 to 70
Spark plugs	Nm	20 to 30

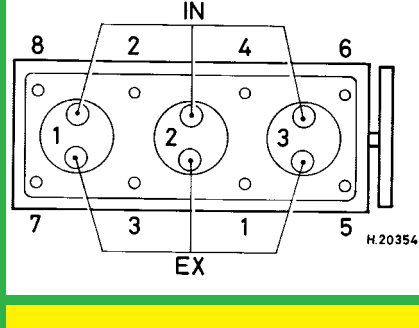
CapacitiesAlto FX & GLA1984 to 1992

Engine oil & filter	litres	2.5
Gearbox - 4-speed [5-speed]	litres	2.0
Automatic transmission - refill	litres	3.8
Final drive	litres	WT
Cooling system	litres	3.6
Fuel tank	litres	30

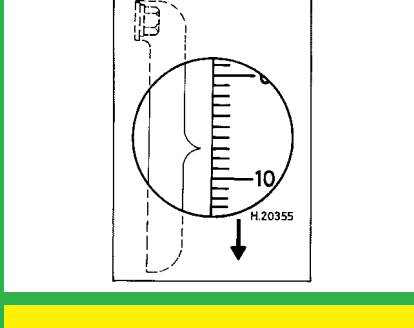
Notes and Illustrations



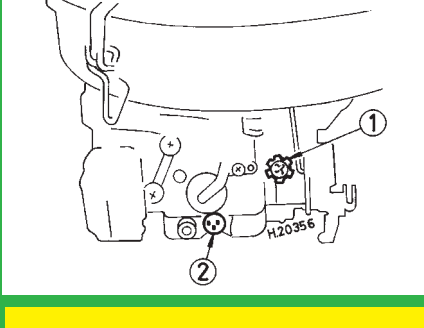
1: Idle speed 2: CO / Mixture



769 cm³



769 cm³



Mikuni DIDS