

Ignition advance		Without vacuum and basic timing	
Ignition advance checks		*Engine/rpm	0-3/1700
Ignition advance checks		*Engine/rpm	12-15/3100
Ignition advance checks		*Engine/rpm	19-23/6000
Vacuum check	+ = advance o = retard		+
Vacuum range		*Engine	11-13
Vacuum starts		mbar	106
Vacuum ends		mbar	480
Idle speed		rpm	800±50
Fast idle speed - MT/AT		rpm	3600±200
Oil temperature for CO test		*C	60-80
CO level at idle speed - tailpipe		Vol. % CO	1,5±0,5
HC level at idle speed		ppm	300
CO2 level at idle speed		Vol. % CO2	13-16
O2 level at idle speed		Vol. % O2	0,5-2,0

Spark plugs

Notes		Specified value	Measured value
Spark plugs	Original equipment	NGK	
Spark plug	Type	BPR5EY	
Electrode gap	mm	0,8	
Spark plugs	Make	Bosch	
Spark plug	Type	WR8DC	
Electrode gap	mm	0,8	
Spark plugs	Make	Champion	
Spark plug	Type	RN9YCC	
Electrode gap	mm	0,8	
Spark plugs	Make	NGK	
Spark plug	Type	BPR5EY	
Electrode gap	mm	0,8	

Fuel system

Notes		Specified value	Measured value
Fuel pump delivery pressure		bar	0,2-0,3

Service checks and adjustments

Notes		Specified value	Measured value
Valve clearance -INLET	mm	Hydraulic	
Valve clearance -EXHAUST	mm	Hydraulic	
Compression pressure	bar	8,8-12,4	
Radiator cap	bar	0,74-1,03	
Thermostat opens	*C	80-84	
Drive belt tension - alternator/PAS/AC	mm	7-11	

Lubricants and capacities

Notes		Specified value	Measured value
Engine oil grade - cold climate	SAE	5W/30	
Engine oil grade - moderate climate	SAE	10W/30	
Engine oil grade - hot climate	SAE	20W/50	
Engine oil classification	API/ACEA	SG/A2-96	
Engine oil grade - alternative - moderate climate	SAE	10W/40	

Engine oil classification - alternative - moderate climate	API/ACEA	SG/A2-96	
Engine with filter	litres	3,4	
Gearbox oil grade	SAE	80W/90	
Gearbox 4/5 speed	litres	1,9/2,2	
Differential oil grade - rear	SAE	90W	
Differential rear	litres	1,25	
Cooling system	litres	6,5	
Brake fluid	Type	DOT 3	
Power steering fluid	Type	Dexron II	
Power steering fluid	litres	0,8	

Tightening torques

Notes		Specified value	Measured value
	Cylinder head instructions		

Cylinder head

	Renew bolts	No	
Stage 1	Tighten	20 Nm	
Stage 2	Tighten	40 Nm	
Stage 3	Tighten	53-65 Nm	

Other tightening torques

Main bearings	Renew bolts/nuts	No	
Main bearings	Stage 1	27-33 Nm	
Main bearings	Stage 2	53-65 Nm	
Big end bearings	Renew bolts/nuts	No	
Big end bearings	Stage 1	20-25 Nm	
Big end bearings	Stage 2	39-51 Nm	
Sump bolts		5 Nm	
Flywheel/driveplate		54-66 Nm	
Clutch to flywheel		19 Nm	
Crankshaft pulley/damper		75-101 Nm	
Inlet manifold to cylinder head		25 Nm	
Exhaust manifold to cylinder head		25 Nm	
Spark plugs		15-21 Nm	
Steering track rod end		39 Nm	
Brake disc to hub	Front	88 Nm	
Brake caliper to carrier	Front	30 Nm	
27 Brake caliper carrier to hub	Front		
Road wheels		90-120 Nm	

Starting and charging

Notes		Specified value	Measured value
Battery	V/RC(Ah)	12/65 (45)	
Starter motor	Make	Denso	
Starter motor	Type	1,0 kW	
Maximum cranking amps	A	122-149	
Alternator/Regulator	Make	Nippon Denso	
Alternator/Regulator	Type	50A	
Alternator output at engine speed	AV/rpm	50/14/2000	
Regulated voltage	V	13,8-14,8	

Name:		Manufacturer:	Toyota
Address:		Model:	
		Year:	1991
		Registration:	
Tel - Private:		Mileage:	
Tel - Business:		Job number:	

Vehicle identification

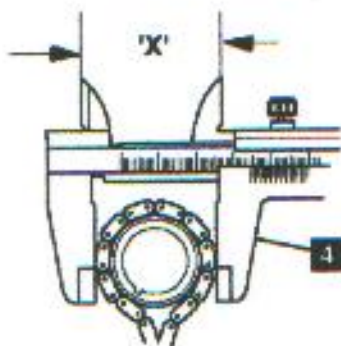
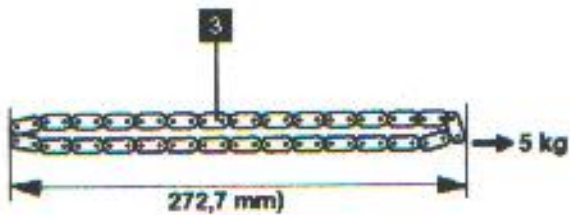
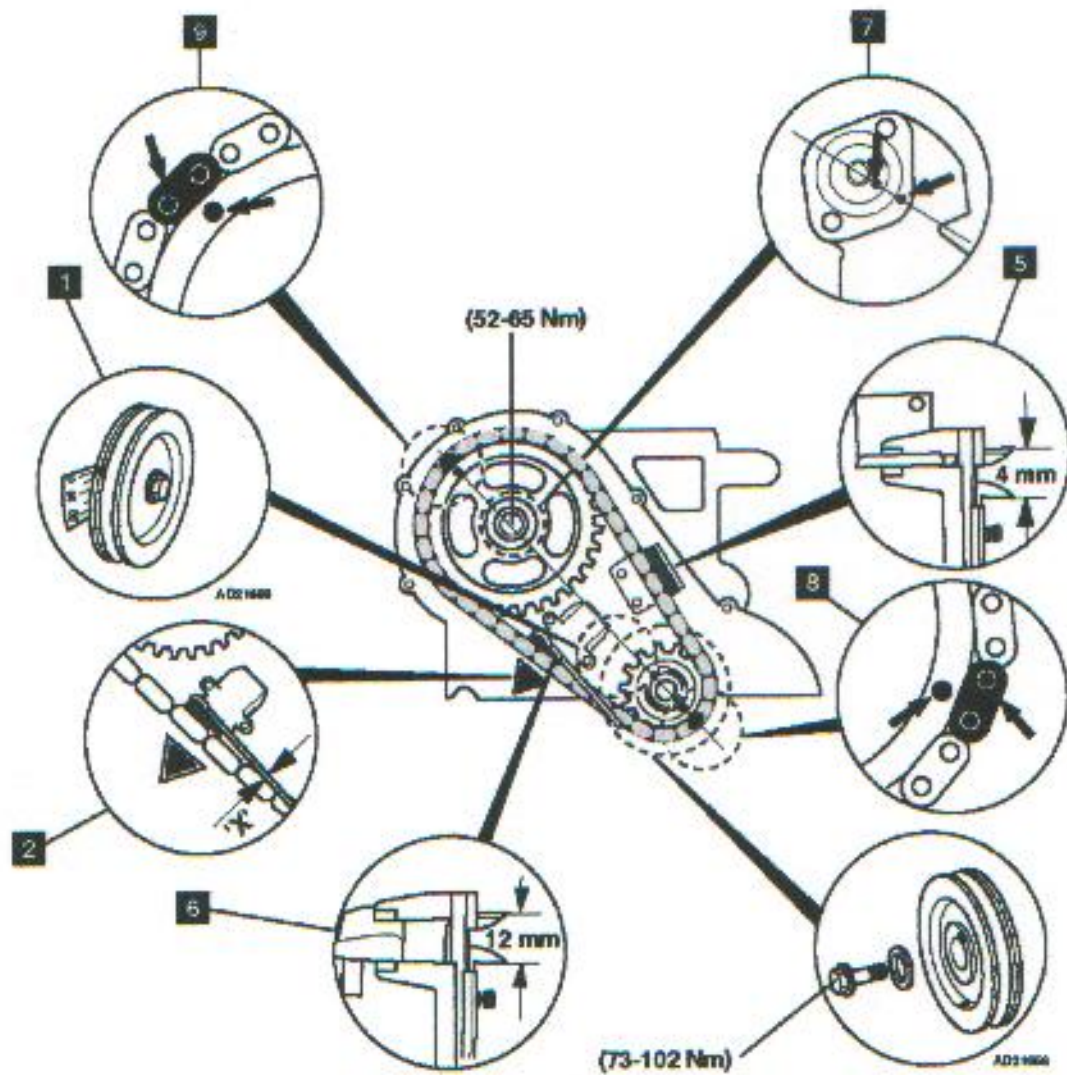
Notes		Specified value	Measured value
No. of cylinders	Type	4/OHV	
Capacity (Fiscal)	cc	1486 (1457)	
Compression ratio	:1	9,3	
Suitable for unleaded petrol		Yes	
Minimum octane rating	RON	91	
Ignition system	Type	TSZ-4	
Ignition system	Description	Trans-4	
Trigger location		Distributor	
Fuel system	Make	Aisan	
Fuel System	Description	Carb-2V	
Diagnostic socket		No	

Ignition system

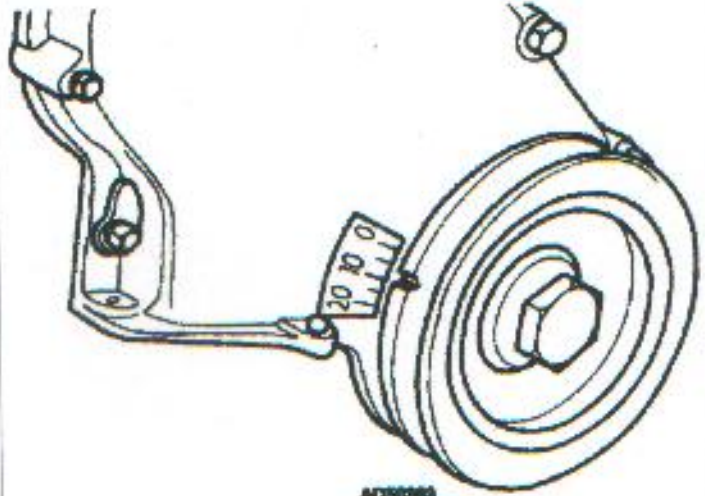
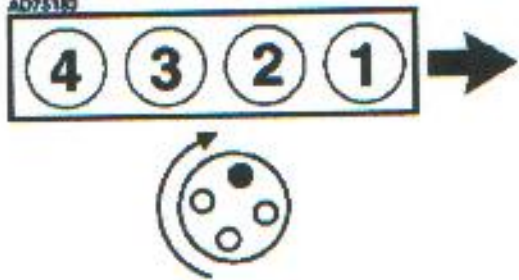
Notes		Specified value	Measured value
Ignition coil	Make	Denso	
Ignition coil supply voltage	+ with ballast V	11,0	
Primary resistance	Ohm	1,3-1,8	
Secondary resistance	Ohm	7700-10400	
Firing order		1-3-4-2	
Distributor (ECM)	Make	Denso	
Distributor (ECM)	No.	13080	
Contact breaker gap/trigger air gap	mm	0,2-0,4	

Tuning and emissions

Notes		Specified value	Measured value
Ignition timing	o = without + = with vacuum +		
Ignition timing - basic BTDC	°Engine/rpm	8±2/800	

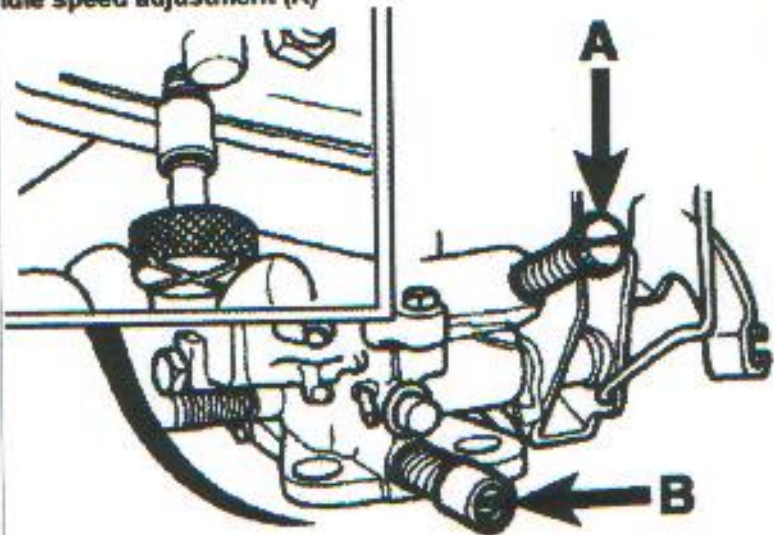


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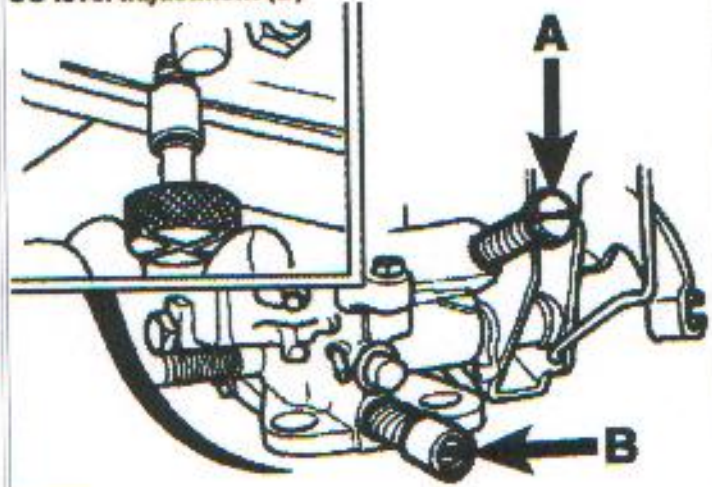
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Idle speed adjustment (A)



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CO level adjustment (B)



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Tightening sequence

