Automotive Technical DATA BOOK

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MENU HELP

## Engine and cooling system — 300 ZX Turbo CAT (Z32) 1990 to 1995

| | | |
|---|---|---|
| Type | | VG30DETT. DOHC 2x turbo 207kW |
| Capacity (cm³) / number of cylinders | | 2960 / 6 |
| Compression ratio / pressure | bar | 8.5 / ≥9.8 |
| Oil pressure | bar | [3.5 to 4.5] |
| Oil temperature | ºC | 80 |
| Valve clearance - inlet | mm | 0: Hyd. |
| Valve clearance - exhaust | mm | 0: Hyd. |
| Firing order | | 1-2-3-4-5-6 |
| No 1 cylinder position | | FR |
| Thermostat opening temperature | ºC | 76.5 |
| Radiator cap pressure | bar | 0.78 to 0.98 |

## Fuel system — 300 ZX Turbo CAT (Z32) 1990 to 1995

| | | |
|---|---|---|
| Idle speed - manual [auto] | rpm | 750±50 |
| Fast idle speed - manual [auto] | rpm | _ |
| CO @ idle speed [3000 rpm] - see page VI | % | 0.2 to 8.0 N/A |
| HC @ idle speed [3000 rpm] - see page VI | ppm | ≤200 |
| CO2 @ idle speed [3000 rpm] - see page VI | % | _ |
| O2 @ idle speed [3000 rpm] - see page VI | % | _ |
| Carburettor / fuel injection | | Nissan |
| Type / ref | | ECCS (EFi) MPI + Turbo |
| Main jet / needle | | _ |
| Injection pressure | bar | 2.5 |
| Pump pressure | bar | 3.0 |
| Octane rating | RON | 95[U] |

## Ignition system — 300 ZX Turbo CAT (Z32) 1990 to 1995

| | | |
|---|---|---|
| Type | | Direct electronic |
| Ignition coil | | 6x Hitachi, Hanshin |
| Primary resistance | ohms | 0.7 |
| Ballast resistor | ohms | _ |
| Voltage - Tmnl 15(+) to earth | V | 12.0 |
| Distributor | | Hitachi/Mitsubishi |
| Points gap (air gap) | mm | [0.30 to 0.50] |
| Dwell angle | º (%) | _ |
| Condenser capacity | µF | _ |
| Rotation | | Anticlockwise |
| Ignition timing - basic [static | º Crankshaft @ rpm | 15±2 BTDC @ idle |
| V = Vacuum NV = No Vacuum | | _ |
| Total ignition advance | º Crankshaft @ rpm | _ |
| | º Crankshaft @ rpm | _ |
| | º Crankshaft @ rpm | _ |
| Centrifugal check. | º Crankshaft @ rpm | Computer control |
| | º Crankshaft @ rpm | _ |
| | º Crankshaft @ rpm | _ |
| Vacuum range check | mbar | Computer control |
| Maximum vacuum advance | º Crankshaft | _ |
| Spark plugs | | NGK/Champion |
| Type | | PFRB-11C / RC7YCC |
| Electrode gap | mm | 1.00 to 1.10 N/A |

## Electrical system — 300 ZX Turbo CAT (Z32) 1990 to 1995

| | | |
|---|---|---|
| Battery | V / CC / RC | 12 / 195 / 65Ah |
| Alternator voltage / full load current / engine rpm | | 14.1 to 14.7 / 90 / 2500 |
| Starter motor current / voltage - cranking | A / V | 70 / 11.0 |
| - locked | A / V | _ |

## Running gear — 300 ZX Turbo CAT (Z32) 1990 to 1995

| | | |
|---|---|---|
| **Brakes** - | | |
| Front (min. friction material thickness) | mm | 2.0 |
| Rear (min. friction material thickness) | mm | 2.0 |
| **Tyres** | | |
| Saloon | Size | 225/50x16: 245/45x16 |
| Estate / Van | Size | _ |
| Pressure - front / rear - Saloon | bar | Refer to decal on car |
| - Estate / Van | bar | _ |
| **Front suspension / wheel alignment** | | |
| Toe-in (+) / Toe-out (–) | mm [º] | 0 to +2.0[3] |
| Camber | | -1°35' to -5'[4] |
| Castor | | +9° to 10°30'[5] |
| King pin inclination | | +12°10' to 13°40' N/A[6] |
| **Rear suspension / wheel alignment** | | |
| Toe-in (+) / Toe-out (–) | mm [º] | 0 to +4.0 |
| Camber | | -1°35' to -35' |

## Torque wrench settings — 300 ZX Turbo CAT (Z32) 1990 to 1995

| | | |
|---|---|---|
| Cylinder head - stage 1 | Nm | 39[1] |
| - stage 2 | Nm | 123, then loosen bolts |
| Cylinder head - stage 3 | Nm | 34 to 44 |
| - stage 4 | Nm | + 65 to 75°[2] |
| Big-end bearings | Nm | 15 + 60 to 65° |
| Main bearings | Nm | 90 to 100 |
| Clutch cover | Nm | 34 to 44 |
| Flywheel [driveplate] | Nm | 83 to 93 |
| Front hubs | Nm | 206 to 284 |
| Rear hubs | Nm | 206 to 275 |
| Wheel nuts / bolts | Nm | 98 to 118 |
| Spark plugs | Nm | 20 to 29 |

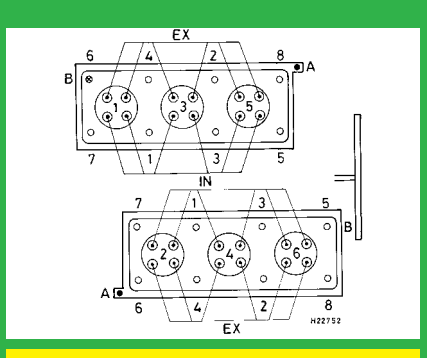
## Capacities — 300 ZX Turbo CAT (Z32) 1990 to 1995

| | | |
|---|---|---|
| Engine oil & filter | litres | 3.4. Cooler: 3.7 |
| Gearbox - 4-speed [5-speed] | litres | 3.1 |
| Automatic transmission - refill | litres | 8.7 |
| Final drive | litres | 2.1 |
| Cooling system | litres | 10.0 |
| Fuel tank | litres | 72 |

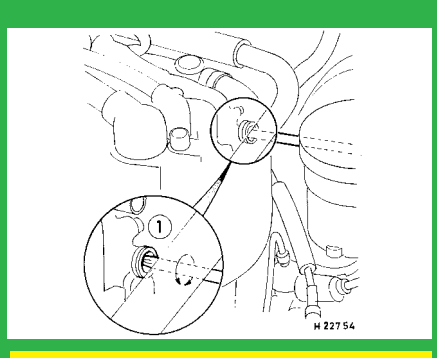
## Notes and Illustrations

[1]**Bolts A: 10 to 12, no further retightening**
[2]**Bolts B: + 60 to 70° only**
[3]**94 ▶: 1.0 to 3.0**
[4]**94 ▶: -1°30' to 0**
[5]**94 ▶: 8°55' to 10°25'**
[6]**94 ▶: 12°05' to 13°35'**

1: Idle speed 2: CO / Mixture




**2960 cm³, 24V**

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