GTiR SR20DET Specifications (c) copyright antrx.com 2004



Mechanical features

Engine model	**SR20DET**
Engine type	**Turbocharged, in line 4**
DOCH, 16 valves with intercooler	
Displacement	**1998 cc**
Max power output	**230/6400 PS/rpm**
Max torque	**27.2/4800 kgm/rpm**
Bore & stroke	**86 x 86 mm**
Compression ratio	**8.3**
Control system	**Electronic port injection**
Transmission type	**5-speed manual**
Transmission	**1st 3.285 2nd 1.850**
	3rd 1.272 4th 0.954
	5th 0.740 Rev 3.266
Final gear ratio	**4.125**

Service checks and adjustments

Spark plugs make	**NGK type PFR7B-9**
Electrode gap	**0.9 mm**
Valve clearance inlet	**0.30 mm COLD 0.35 mm HOT**
Exhaust	**0.30 mm COLD 0.35 mm HOT**
Compression pressure	**9.32 - 11.28 bar**
Oil pressure	**3.4 - 4.4 / 3200 bar/rpm**

Tuning and emissions

Ignition coil supply voltage	**12.0 Volt**
Primary resistance	**1.0 ohms**
Secondary resistance	**10000 ohms**
Firing order	**1-3-4-2**
Ignition timing BTDC Deg/rpm	**20 +/- 2 / 850**
Ignition advace checks	**ECM controlled**
Idle engine speed	**900+/-50 rpm**
Oil temp for CO test	**85 C°**
CO content at idle	**Tail pipe 0.5 % max**
CO2/O2 content ad idle	**14.5-16 % / 0.1-0.5 %**
HC content at idle	**100 ppm**
Increased idle speed for CO test	**2800 - 3200 rpm**
CO content at increased idle speed	**0.3 %**
Lambda at increased speed	**0.98-1.02**

Fuel system

System fuel pressure without vacuum	**2.94 bar**
Injector reistance	**1 - 3 ohm**
Fuel tank capacity	**50 litres**

Lubricants and capacities

Engine oil grade SAE	**10W/30**
Engine with filter	**3.4 litres**
Gearbox oil grade SAE	**80W/90**
5 speed gearbox capacity	**4.2 litres**
Transfer box capacity	**1.5 litres**
Diffrential oil grade SAE	**90W**
Front/rear capacity	**1.0/1.0 litres**

Coolant system

Coolant capacity	**5.7 litre**
Coolant temperatur sensor 300 - 330 ohm/80 C°	
Suggested anti-freeze percentage	**-15 C° 30%**
	-30 C° 50%

Air conditioning

Refrigerant type	**R12**
Quantity	**650 - 750 grams**
Oil type	**Suniso 5GS**
Quantity	**200 cm3**

Tightening torques

Spark plug	**20-29 NM**
Front hub	**196-275**
Rear hub	**196-275**
Steering track rod end	**29-39 NM**
Brake caliper to carrier front/rear	**59 NM / 27 NM**
Brake caliper carrier to hub front	**59 NM**
Road wheels	**98 - 118 nM**

Brake disc dimensions/tolerance

Brake disc diameter	**Front 260 mm**
	Rear 230 mm
Minimum disc thickness	**Front 24 mm**
	Rear 8 mm
Brake fluid (minimum spec,)	**Dot 3**

Turbo charging system

Turbo type	**T28**
Carret code	**T28**
Compressor wheel diameter/trim	**60 mm / 60**
Turbine wheel diameter/trim	**53 mm /79**
A/R housing	**0.86 inches**
Garret part no.	**465997 - 0004**
Engine cut switch operational pressure	**1.4 bar**