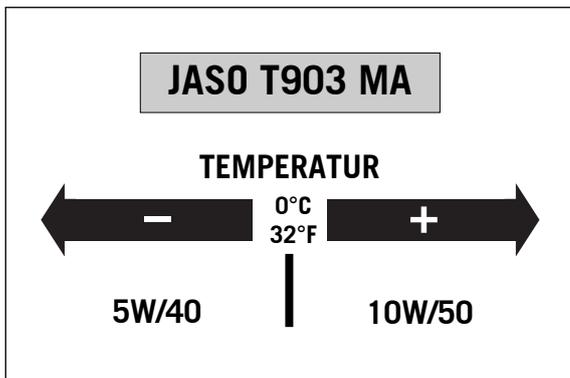


ENGINE	990 SUPER DUKE 2009	990 SUPER DUKE R 2009
Design	Liquid-cooled, 2-cylinder 4-stroke engine with 75° V arrangement with balancer shaft and electric starter	
Displacement	999 cc	
Bore / Stroke	101/62.4 mm	
Compression ratio	11.5:1	12.2:1
Fuel	unleaded fuel with at least RON 95 (USA: Premium RON 91) *	
Valve timing	4 valves controlled over bucket tappet and 2 camshafts, camshaft drive with gears/chain	
Valve diameter	Intake: 38 mm Exhaust: 33 mm	Intake: 41 mm Exhaust: 33 mm
Valve clearance, cold	Intake: 0.10 - 0.15 mm Exhaust: 0.25 - 0.30 mm	
Crankcase bearing	Friction bearings (2 main bearings / 1 supporting bearing)	
Conrod bearing	Friction bearing	
Piston pin bearing	Dual-fuel bearing	
Piston	Light alloy – forged	
Piston rings	1 compression ring, 1 taper face ring, 1 single-piece oil scraper ring with spiral-type expander	
Engine lubrication	Dry sump with 2 trochoidal pumps (pressure pump and suction pump)	
Engine oil	SAE 10W-50 (Motorex Power Synt 4T) #	
Quantity of engine oil	approx. 3 liters (0.8 USgal) during oil/filter change	
Primary drive	Straight-toothed spur wheels 35 : 67	
Clutch	Multi-disc clutch in oil bath	
Transmission	6-speed claw shifted	
Gear ratio	1 st gear 14:36 2 nd gear 16:30 3 rd gear 20:30 4 th gear 21:27 5 th gear 23:26 6 th gear 25:26	

ENGINE	990 SUPER DUKE 2009	990 SUPER DUKE R 2009
Ignition system	breakerless transistorized electronic ignition system with digital ignition advance	
Ignition timing	Map-controlled via TPS	
Map-controlled via TPS	12V 450W at 6000 rpm	
Spark plug	NGK IR KR8DI	NGK LKAR8AI-9
Electrode distance	0.8 mm	
Cooling system	liquid cooled, permanent circulation of cooling liquid through water pump	
Cooling liquid	2.1 liters (0.55 USgal), 50% antifreeze, 50% distilled water, at least -25° C	
Starting aid	electric starter	



#

* PON / CLC	RON / ROZ	MON
87	91	83
91 Premium	95	87

PON = Pump Octane Number
 CLC = Cost of Living Council
 RON = Research Octane Number
 ROZ = Research Oktan Zahl
 MON = Motor Octane Number

Engine oil

Only use fully synthetic engine oils that meet the JASO MA quality requirements (see information on the can).

KTM recommends Motorex Power Synt 4T in the 10W/50 viscosity (for temperatures over 0°C, 32°F) or 5W/40 (for temperatures under 0°C, 32°F).