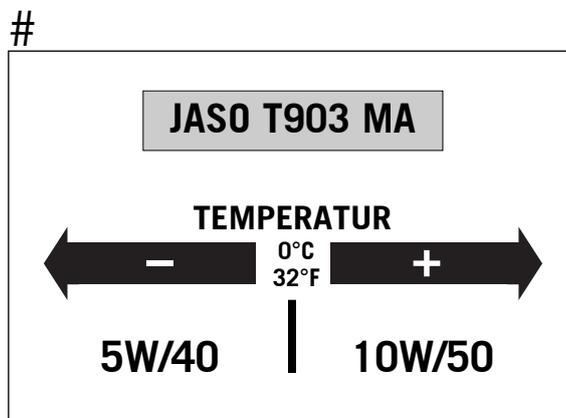


TECHNICAL SPECIFICATIONS – ENGINE »

ENGINE	640 DUKE II
Design	Liquid-cooled single cylinder 4-stroke engine with balancer shaft and electric starter
Displacement	625 ccm
Bore / Stroke	101 / 78 mm
Ratio	11,7 : 1
Fuel	unleaded premium gasoline with a least RON 95 (USA = Premium RON 91)
Valve timing	4 valves over rocker arm and 1 overhead camshaft, camshaft drive through single chain
Camshaft	249/1
Valve diameter	Intake: 36 mm, Exhaust: 32 mm
Valve clearance cold	0.12 - 0.15 mm
Crank shaft bearing	2 cylinder roller bearing
Connecting rod bearing	needle bearing
Top end bearing	bronze bushing
Piston	forged aluminium alloy
Piston rings	1 compression ring, 1 taper face ring, 1 oil scraper ring
Engine lubrication	2 Eaton-Oilpumps
Engine oil	see table #
Quantity of engine oil	2.1 liters including frame
Primary ratio	straight geared spur wheels 31 : 79 teeth
Clutch	multi-disc clutch in oil bath
Transmission	5-speed claw shifted
Gear ratio	1st 14:35 2nd 15:24 3rd 18:21 4th 20:19 5th 22:18
Ignition system	contactless DC- CDI ignition with digital advanced system type KOKUSAN
Ignition timing	adjustment to max. 38° BTDC at 6000 rpm
Generator	12V 200W
Spark plug	NGK DCPR 8 E
Spark plug gap	0.9 mm
Cooling system	liquid cooled, permanent rotation of cooling liquid through mechanically driven water pump
Cooling liquid	1 liter, 50% antifreeze, 50% distilled water, at least -25° C (-13° F)
Starting equipment	electric starter, kick starter

BASIC CARBURETOR SETTING	
	640 DUKE II
Carburetor	BST40-273
Main jet	165
Needle jet	X-6 689
Idling jet	45
Jet needle	6G5
Needle position from top	3 rd
Mixture adjusting screw open	2.25



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).