

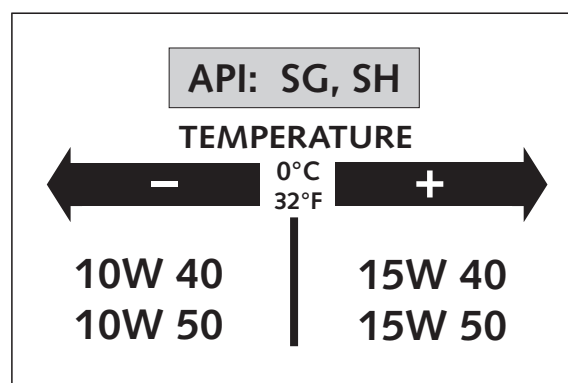
## TECHNICAL DATA – ENGINE 640 DUKE II 2003

Type	<b>640 LC4</b>
Design	Liquid-cooled single cylinder 4-stroke engine with balancer shaft and electric starter
Displacement	625 ccm
Bore / Stroke	101 / 78 mm
Ratio	11.5 : 1
Fuel	unleaded premium gasoline with a least RON 95
Valve timing	4 valves over rocker arm and 1 overhead camshaft, camshaft drive through single chain
Camshaft	584-V03/1
Valve diameter	Intake: 36 mm Exhaust: 32 mm
Valve clearance cold	Intake: 0.15 mm Exhaust: 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
Quantity of engine oil	see table
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 8E
Spark plug gap	0.9 mm
Cooling system	liquid cooled, permanent rotation of cooling liquid through mechanically driven water pump
Cooling liquid	1 liter, 40% antifreeze, 60% water, at least -25° C (-13° F)
Starting equipment	electric starter, kick starter

### BASIC CARBURETOR SETTING

	<b>640 DUKE</b> 40 kW
Carburetor	BST40-258
Main jet	145
Needle jet	689 X-6
Idling jet	45
Jet needle	6G5
Needle position from top	3 rd
Mixture.adju. screw open	2.25 turn

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### Engine oil

Use only synthetic oil brands (Motorex Power Synt 4T), that meet quality requirements of API-classes SG or SH (information on bottles) or higher.

**! CAUTION !**

POOR OIL QUALITY OR LOW QUANTITY CAUSE EARLY ENGINE WEAR.