



450/540 SXS RACING 2004

SUPPLEMENT ART. NO. 3.211.32 to Owner's Manual Art. No. 3.210.77

TECHNICAL DATA – ENGINE

Type	450 SXS	540 SXS
Design	Liquid-cooled single cylinder 4-stroke engine with balancer shaft	
Displacement	449 cc	534 cc
Bore/Stroke	95 / 63.4 mm (3.8 / 2.536 in)	100 / 68 mm (4 / 2.72 in)
Ratio	12 : 1	12 : 1
Fuel	unleaded fuel with at least RON 95	
Valve timing	4 valves over rocker arm and 1 overhead camshaft, camshaft drive through single chain	
Camshaft	55/21	8/06
Valve diameter Intake	35 mm (1.4 in) Titan	
Valve diameter Exhaust	30 mm (1.2 in) Titan	
Valve clearance cold Intake	0.12 mm (0.0048 in)	
Valve clearance cold Exhaust	0.12 mm (0.0048 in)	
Crank shaft bearing	2 cylinder roller bearing	
Connecting rod bearing	needle bearing	
Top end bearing	bronze bushing	
Piston	aluminium alloy forged	
Piston rings	1 compression ring, 1 oil scraper ring	
Engine lubrication	pressure circulation lubrication with two rotor pumps	
Engine oil	full synthetic oil (Motorex Power Synt 4T 10W/50)	
Quantity of engine oil	1.25 liters	
Primary ratio	straight geared spur wheels 33:76 t	
Clutch	multi disc clutch in oil bath	
Transmission claw shifted	6-speed	4-speed
1 st Gear	16:32	16:32
2 nd Gear	16:28	18:30
3 rd Gear	21:32	20:28
4 th Gear	22:29	22:26
5 th Gear	23:26	
6 th Gear	21:18	
Ignition system	contactless DC-CDI ignition with digital advanced system by KOKUSAN	
Generator	12V 40W	
Spark plug	NGK DCPR 8 E	
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° (-13° F)	

STANDARD ADJUSTMENT

FORK 450/540 SXS	WP4860MXMA 1418Y762
Compression adjuster	18
Rebound adjuster	20
Spring	4.6 N/mm
Spring preload	513mm (20.2in)*
Air chamber length	90 mm (3.6 in)
Fork oil	SAE 5

*Total length with spacers

STANDARD ADJUSTMENT

SHOCK ABSORBER 450/540 SXS	WP 5018 PDS BAVP 1218Y780
Compression adjuster	15 LS (low speed) 2 HS (high speed)
Rebound adjuster	24
Spring	87.5/240
Spring preload	7 mm (0.28 in)

BASIC CARBURATOR SETTING

	450 SXS	540 SXS
Type	Keihin FCR-MX 41	Keihin FCR-MX 41
Carburator-setting number	4122A	4125A
Main jet	185	190
Jet needle	OB DTP	OB DTP
Idling jet	40	42
Main air jet	200	200
Idling air jet	100	100
Needle position	4th from top	4th from top
Starting jet	85	85
Mixture control screw open	1	1,5
Slide	15	15
Performance restrictor	–	–
Stop pump membrane	858 / 2,15 mm	858 / 2,15 mm
Hot start device	2,2 mm	2,5 mm