TECHNICAL DATA			
Engine	**250 SXS-F**	**450 SXS**	**540 SXS**
Design	Liquid-cooled single cylinder 4-stroke engine with balancer shaft		
Displacement	249,51 ccm	449,39 ccm	534 ccm
Bore/Stroke	76 / 55 mm	95 / 63.4 mm	100 / 68 mm
Ratio	12,8 : 1	12.5 : 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	05	55/32	8/06
Valve diameter Intake	30,9 mm	35 mm Titan	
Valve diameter Exhaust	26,5 mm	30 mm Titan	
Valve clearence cold Intake	0,10 – 0,20 mm	0,12 mm	
Valve clearence cold Exhaust	0,12 – 0,22 mm	0,12 mm	
Crank shaft bearing	2 cylinder roller bearing		
Connecting rod bearing	needle bearing		
Top end bearing	bronze bushing		
Piston	alluminium 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	1.1 liters	1.25 liters	
Transmission claw shifted	6-speed	5-speed	4-speed
1st Gear	13:32	16:32	16:32
2nd Gear	15:30	18:30	18:30
3rd Gear	17:28	20:28	20:28
4th Gear	19:26	22:26	22:26
5th Gear	21:25	24:24	
6th Gear	22:24		
Ignition system	contactless DC-CDI ignition with digital advanced system by KOKUSAN		
Generator	no generator		
Spark plug	NGK CR 9 EKB	NGK DCPR 8 E	
Cooling system	liquid cooled, permanent rotation of cooling liquid through mechanically driven water pump		
Cooling liquid	1.2 liter, 50% antifreeze, 50% distilled water, at least -25° (-13° F)		

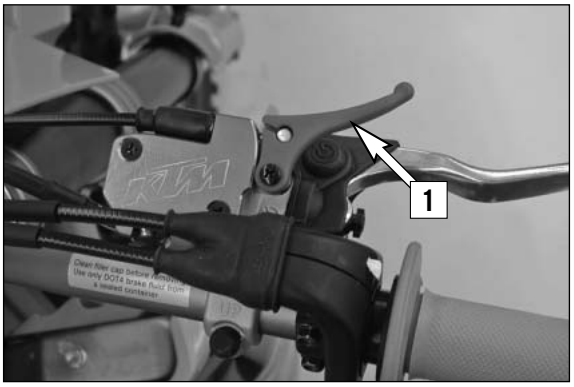
BASIC CARBURATOR SETTING			
	250 SXS-F	**450 SXS**	**540 SXS**
Type	Keihin FCR-MX 39	Keihin FCR-MX 41	Keihin FCR-MX 41
Carburator-setting number	3925D	4122B	4125F
Main jet	180	190	190
Jet needle	OBETP	OBDTP	OBDTP
Idling jet	40	40	42
Main air jet	200	200	200
Idling air jet	100	100	100
Needle position	5th from top	4th from top	5th from top
Starting jet	85	85	85
Mixture control screw open	1,25	1.5	1.5
Slide	15	15	15
Performance restrictor	–	–	–
Stop pump membrane	858 / 2,15 mm	858 / 2.15 mm	858 / 2.15 mm
Hot start device	2,5 mm	2.2 mm	2.5 mm

STANDARD ADJUSTMENT FORK	
250 SXS-F	WP 4860 MXMA 14187B15
Compression adjuster	22
Rebound adjuster	24
Spring	4.4 N/mm
Spring preload	5.5 mm
Fork oil	SAE 5

STANDARD ADJUSTMENT FORK	
450/540 SXS	WP 4860 MXMA 14187B16
Compression adjuster	22
Rebound adjuster	24
Spring	4.6 N/mm
Spring preload	5.5 mm
Fork oil	SAE 5

STANDARD ADJUSTMENT SHOCK ABSORBER	
250 SXS-F	WP 5018 PDS 12187B11
Compression adjuster	12 (low speed) 2 (high speed)
Rebound adjuster	25
Spring	84-250
Spring preload	5 mm

STANDARD ADJUSTMENT SHOCK ABSORBER	
450/540 SXS	WP 5018 PDS 12187A12
Compression adjuster	12 (low speed) 2 (high speed)
Rebound adjuster	25
Spring	88-250
Spring preload	5 mm

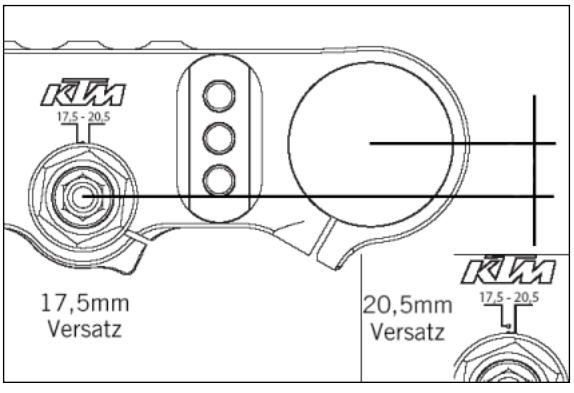


Hot start lever

If you pull the hot start lever **[1]** during the starting procedure backward, a bore in the carburetor will be opened through which the engine may take in additional air. The result is a „lean“ fuel-air mixture of the type needed for hot starts.

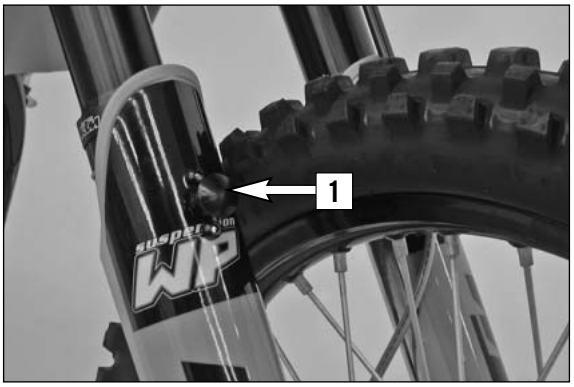
Progressive Handlebar Damping System (PHDS)

see **„Information Hard Equipment“** (included)



Changing the fork offset (caster) *

see **„Information Hard Equipment“** (included)



Factory Start

Sitting on the motorcycle, lean forward over the handlebar, reach for the rim and compress the fork, press the latch button **[1]** and slowly rebound until the latch button engages in the latch ring. Let go of the latch button. The latch button will automatically be released from the latch ring when you compress for the first time while driving.

Anti-Hopping-Clutch

Tuning and service:
see **„Information Hard Equipment“** (included)