

Setup info for PVP 252 Motor

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Important: Use only fuel supply system with, filter, vacuum pump, regulator & pressure gauge ["Click here"](#)

Specification

Cylinder and Piston

Bore: 54,02 maximum 54,035, Stroke: 54,5 mm	Piston /Cylinder Clearance: minimum 0.05 mm.	Mesure the squeeze with a 1 mm. solder wire it have to be abot 0.7 mm. You can change the squeeze by change the head insert, the no. on the insert de describes how deep the the insert go into the cylinder, for example 2.2 go 2.2 mm. down into the cylinder. If the cylinder have got new Nikasil, it is some time shorter after that, then check the Squeeze, it have to be minimum 0.65 mm.
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The motor is also approved with 113 mm. rod, you can use together with piston there have part no. 393, 394, 395, 396 and 397, and you can start with a cylinder diameter of 54.0 mm. this piston is cheaper, but this piston is 11 gram heavier than piston no. 3965 or 3975

The motor is also approved with 120 mm. rod, then you use a 5 mm. aluminum gasket under the cylinder, but it will only work good if you have the motor with the 2014 update, or if you have the motor model 2017

Ignition

Ignition unit: PVL	Ignition timing: 5.8 mm before T.D.C.	Spark plug: NGK B10EGP or NGK R7282-11
Spark plug connector for NGK B10EGP is: part no. 898	Spark plug connector for NGK R7282 is: part no. 899	
If you have problem with it burning a hole in the middle of the piston then reduce the ignition timing from 5.0 to 5.8 mm. before T.D.C.	If you have problem with detonation then increase the volume of the combustion camber, or use fuel with higher octane.	

Rotary valve

Rotary valve timing	Opens: 51.4 mm. before T.D.C.	Closes: 28.8 mm. after T.D.C.
Part no. 281, 282 or 283		

Primary drive

	clutch axle / rear crankshaft	Reduction
Primary reduction ratio:	58 : 26	2.2308

Recommended gear box for following races tracks

standard 1, 2, 3, 4, option 5, 6	Hockenheim, sprocket 24:31 Magny Cours,
standard 3, 4, option 1, 2, 5, 6	Dijon, sprocket 24:30
1: 12:31 3 and 4, standard 2, 5 and 6 option	Assen, sprocket 24:31

Gearbox

	Standard	Reduction	Part number	Rotax number on gear
1 st. gear low	32 : 12	2.6666	611 : 512	4949 . 467
1 st. gear medium	31 : 12	2,5833	613 . 512	5904 : 467
1 st. gear high	31 : 13	2.3846	615 : 514	4944 : 462
2 nd. gear low	29 : 15	1,9333	621 : 523	4964 : 4950
2 nd. gear high	28 : 15	1.8666	624 : 523	4080 : 4950
3 rd. gear	22 : 14	1.5714	632 : 542	5924 : 5910
4 th. gear	23 : 17	1.3529	642 : 542	5933 : 5910
5 th. gear	22 : 18	1.2222	654 : 554	5954 : 5940
6 th. gear low	23 : 20	1.15	663 : 564	5976 : 5966
6 th. gear high	21 : 19	1.1052	666 : 566	5975 : 5965

Gear box oil	In primary drive	In gear box
Castrol Syntrax 75-90 or ELF HTX 740	0.2 Liter	0.4 Liter

Important: Control the oil level in the gear box and primary drive before you start the races day, if the motor stand long time can some of the oil move from the gear box in to the primary drive, and then begin to pump oil out to the plastic bottle, because the level is to high in the primary drive.

Recommended sprocket for motor and rear axle

Motor: 22 T. 23 T. 24 T. 25 T. & 26 T	Rear axle: 29 T. 30 T. 31 T. 32 T & 33 T.
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Chain

To not overload the chain use minimum 22 T. on the motor and minimum 29 T. on the rear axle, for front and rear sprocket together have minimum 52 T, so you not overhead the chain.	For lubrication of the chain, use: Pro chain spray (PN. 4024)
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Fuel supply system

Fuel pump	Fuel pressure	Pressure Regulator	Fuel Filter
Mikuni pulse pump	0.15 to 0.18 Bar.	Part no. 4010	Part no. 4036

Torque for bolt and nuts

M6	M7	M8	M18x1,5	M22x1.5
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10 Newton	13 Newton	20 Newton	100 Newton	100 Newton
Plug screw				
20 Newton				

Petrol (Gasoline) & Oil

Petrol:	Oil: 4% mixture
Aral Octane 102 unleaded	Castrol XR 77
Elf: SK35	Elf. HTX 976.
Elf: LMS	PM Xeramic Castor Evolution 2T

Carburetor : PVP 42 mm.

Jet needle	Needle jet	Main jet	Needle jet	Air screw	Needle valve
K24 clip position 3 from top	DQ 270	210 to 220 on front and rear cylinder	120 with 44 pilot jet	about 1.5 round out	250
Motor with update clip 2 from top		Motor with update 215 to 220			

I will recommend you to change parts in the motor after this driving time.

Always Change oil then you open gear box or primary drive

After 750 km.

Description	Qty.	Part number
Piston, piston pin, c-clips & piston ring (for 115 mm. and 120 mm. rod) then you use PVL Ignition	2	3965 or 3975
If you use RTD ignition, then will recoment you to change the piston after 500 km. it will begin to crack and it will be very expensive if the piston collapse.		

After 3 races weekends or 1500 Km.

Description	Qty.	Part number
Main bearing	4	860
Big end needle bearing in rods	2	223
Oil seals between crankshaft and primary drive	2	812
Oil seal behind water impeller or if there come water out from the drain	1	806

Also change this after 6 races weekends or 3000 km.

Description	Qty.	Part number
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Rods, crankshaft pin	2	226 or 228 and 227
Side washer	4	222
Small end bearing for rod	2	390
Bearing for end of crank shaft	2	848
Oil seal behind ignition & inside oil seal with water pump	2	806
Oil seal for clutch drum	1	820
Bearing in gearbox 6304-C3 2-RS ϕ 20/52x15	1	852
Bearing in gearbox 6203-C3 2-RS ϕ 17/40x12	1	845
Bearing in gearbox 6203-C3 ϕ 17/40x12	1	844
Bearing in gearbox 6205-C3 ϕ 25/52x15	1	856
Oil seal on shift shaft	1	802