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MAXI KIT RACING 85 cc. for AM6

Part no. 9921450

**WARNING: INSTALL PART NO. 9921450 EXCLUSIVELY IF  
MATCHED TO CRANKSHAFT 9920410**

Dear Customer,

thank you for choosing one of the various items that "TOP PERFORMANCES" designed and manufactured for competitive purposes only.

This new "MAXI KIT" provides advanced technology and high performance for those who wish to upgrade engine power. It combines the Ø 49.5 cylinder-head unit featuring a split head with a special plain cap connecting rod kit featuring 44 mm stroke and dedicated balancing for a total piston displacement of 85 cc. The distinguishing feature of this kit is its torque output, up to 12.5 Nm at about 10,250 rpm, guaranteed to deliver superior acceleration, pick-up and driveability.

***WARNING: IT IS NECESSARY TO OPEN THE CRANKCASE TO FIT THIS KIT, IT IS THEREFORE RECOMMENDED TO HAVE QUALIFIED MECHANICS PERFORM THIS JOB TO AVOID OPERATION AND RELIABILITY PROBLEMS.***

Thank you for your purchase. We wish you a good ride!

## THE KIT CONSISTS OF:

no.	q.ty	Description
	<b>1</b>	<b>Ø 49.5 CYLINDER-HEAD UNIT FOR MAXI KIT part no. 9921760</b>
(1)	1	Cylinder Ø 49.5 mm in special "Minacrom" cast iron (added with chrome)
(2)	1	Piston Ø 49.5 mm with high silicon content
(3)	1	Piston ring, 1 mm thick, in chrome-plated steel
(4)	1	Gudgeon pin, Ø 12x42 mm
(5)	1	Gudgeon pin roller cage, Ø 12x15x15 mm
(6)	2	Gudgeon pin circlips
(7)	1	Combustion chamber
(8)	1	Combustion chamber cover
(9)	8	green viton O-rings, Ø 7.66x1.78
(10)	1	green viton O-ring, Ø 53.7x1.78
(11)	1	green viton O-ring, Ø 22.22x2.62
(12)	1	green viton O-ring, Ø 28.24x2.62
(13)	1	O-ring, Ø 104.37x3.54
(14)	1	Temperature sensor adapter
(15)	1	Plug, M14x1.25
(16)	1	Aluminium gasket for M14x1.25 plug
(17)	1	Cylinder foot gasket, 0.5 mm thick
(18)	1	Exhaust adapter bushing, Ø reduction: 28 to 25 mm
	<b>1</b>	<b>COMPLETE RACING CONNECTING ROD KIT, 44 mm STROKE part no. 9920410</b>
(1)	1	Racing connecting rod kit, 44 mm stroke
(2)	1	Special Woodruff key for magneto flywheel
(3)	1	Bearing, SKF 6204ETN9/C3H
(4)	1	Bearing, SKF 6303TN9/C3

## CYLINDER SPECIFICATIONS

Bore mm:	49,5	Stroke mm:	44
Displacement cc.:	85	Squish mm:	0,9±0,1
Timing diagram:	exhaust 191°	transfer ports: 132°	
Compression ratio:	geometric 14,7:1	actual: 8:1	
Recommended spark advance:		17° (1 mm before TDC)	

### **WARNING**

**WHEN THIS KIT IS INSTALLED, SPARK ADVANCE MUST BE SET TO 17-18° (1-1.2 mm before TDC) USING THE SUPPLIED WOODRUFF KEY.**

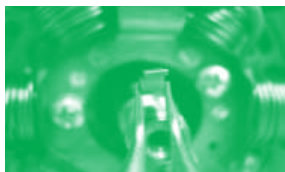
## HOW TO INSTALL THE WOODRUFF KEY:

The special Woodruff key supplied with the connecting rod kit sets spark advance to about 17° (1-1.2 mm before TDC).

This is indispensable, otherwise exceeding advance could lead to such problems as:

- OVERHEATING
- UNEXPECTED SEIZURE
- SEIZURE AND A PIERCED PISTON CROWN

To obtain the recommended spark advance, install the key with the protruding end pointing in the direction opposite to direction of rotation (clockwise).



## IMPORTANT NOTES:

The new crankshaft may only be used with the supplied bearings; make sure the oil seals are in good condition. However, we recommend fitting new oil seals.

Crankshaft Oil Seal Kit AM6:	K070090
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To reach top performance, we recommend using this kit in combination with special parts specifically designed to fully exploit the potential of this cylinder-piston unit. Among these parts you can find:

9918550	Spur gears clutch Z18/68
9920020	Gear selector Desmodromic in Ergal 55
9906500	Reed valve with blades in carbon fibre
9919080	6th speed gear on primary shaft Z 266
9920400	Complete Intake Kit Mikuni TM24
9921180	Set of Racing Clutch plates in cellulose/Kevla
SEE CATALOGUE	Racing exhaust

To restore heat rating, it is important to fit a spark plug of the type NGK BR 10 EG / EGV or other ones having the same heat rating.

Have the carburetion adjusted to the new cylinder-head unit by a professional mechanic.

It is also recommended to eliminate the automatic mixer and use mixture directly in the fuel tank. Mixture shall be prepared at 2% with top-grade fully synthetic oil.

## RUNNING-IN

Running-in is very important because it allows to all the new parts to gradually settle. Failure to follow the rules set for the running-in period could cause damages or strange deformations that would lead to a loss of power or likely seizure. We therefore recommend not using the vehicle to the maximum speed for about 300 km.

## SPARE PARTS FOR THE KIT

	Ø 49,5 standard	Ø 49,7 1st oversize
COMPLETE PISTON	9915780	9915781
PISTON RING	9915710	9915711
ROLLER CAGE		9921330
SET OF GASKETS		9921320
COMPLETE HEAD		9921460
PISTON-CYLINDER ASSY		9921760
COMPL. CON ROD KIT		9920410
EXHAUST ADAPTER BUSHING		9916750
WOODRUFF KEY		9921770
MAIN BEARINGS AND OIL SEAL KIT FOR AM6 RACING CRANKSHAFT		9924750

## WARRANTY

Warranty is limited to the replacement of parts recognised as faulty by Motorparts S.r.l.. Our products should never be fitted to a vehicle for which compatibility is not indicated.

Warranty does not cover:

- changes or tampering with the product;
- incorrect assembly or use;
- replacement of kit parts with parts not Top Performances;
- use of the product in non-standard conditions.

Pictures, data and specifications given in this manual are not binding. Motorparts S.r.l. reserves the right to make changes for any reason whatsoever, be it for update or improvement, even without notice.

## TIPS

To ensure the best engine performance, we recommend using high-quality lubricants.

- Store used engine oil in a vessel with sealing cap. Do not mix used oil with any other substance such as antifreeze or transmission fluids.
- Keep away from children and any heat source.
- Bring used oil to an authorised waste disposal company: most service stations, repair and quick-lubrication garages usually take in used oil for free.
- We recommend using hydrocarbon-resistant gloves.

**NOTE: THIS "TOP PERFORMANCES" ITEM IS DESIGNED AND MANUFACTURED FOR RACING USE ONLY. DO NOT USE ON PUBLIC ROADS.**

For more information  
visit our website  
[www.motorparts.it](http://www.motorparts.it)

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