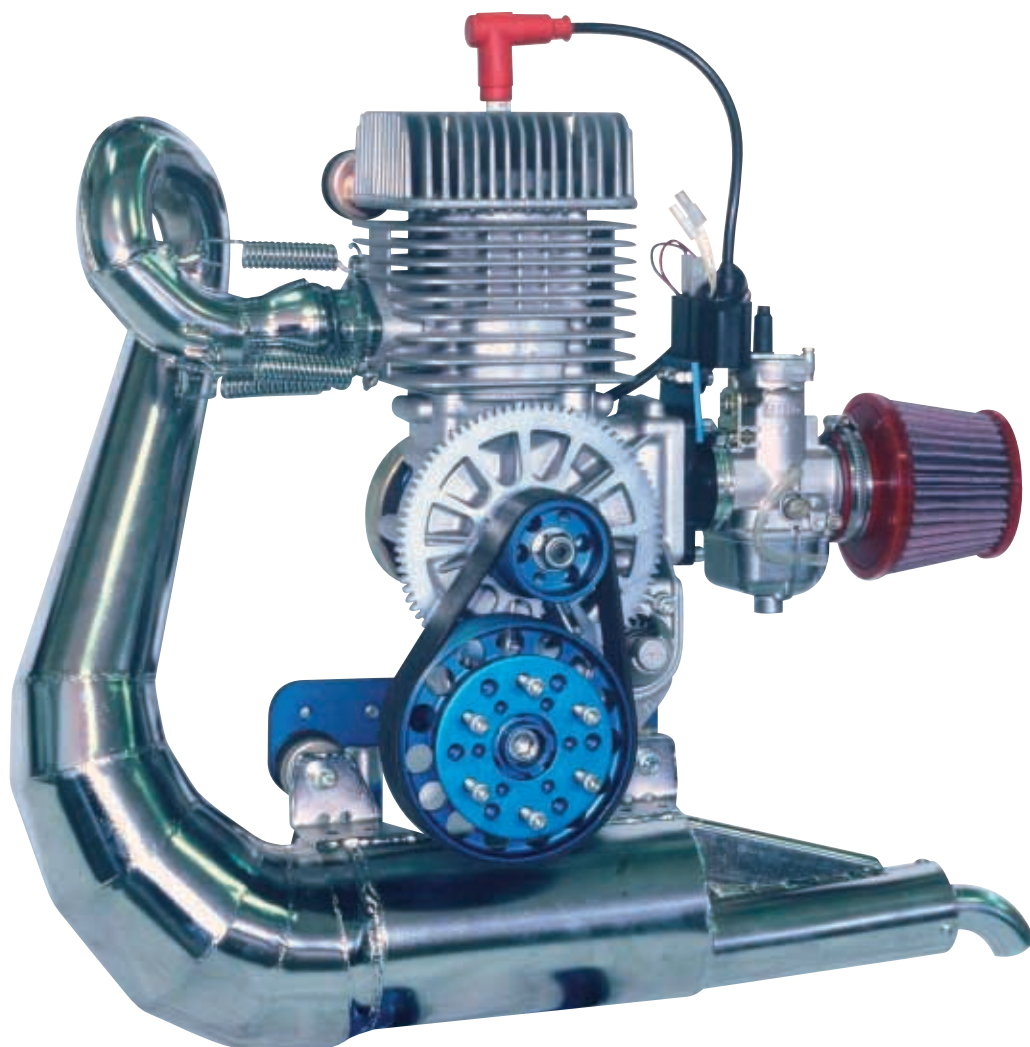




MINI 2 PLUS



This manual aims to inform you of the main technical, functional and maintenance specifications of your MINI 2 PLUS engine. Read the following pages carefully and you will be able to ensure the safety, reliability and good, long-lasting satisfaction of the engine. This manual is considered an integral part of the MINI 2 PLUS engine and in the case of transfer it must be handed over to the new owner.

All the information available at the time of going to print is shown in this manual. SIMONINI S.r.l. in any case reserves the right to make modifications or changes without prior notice.



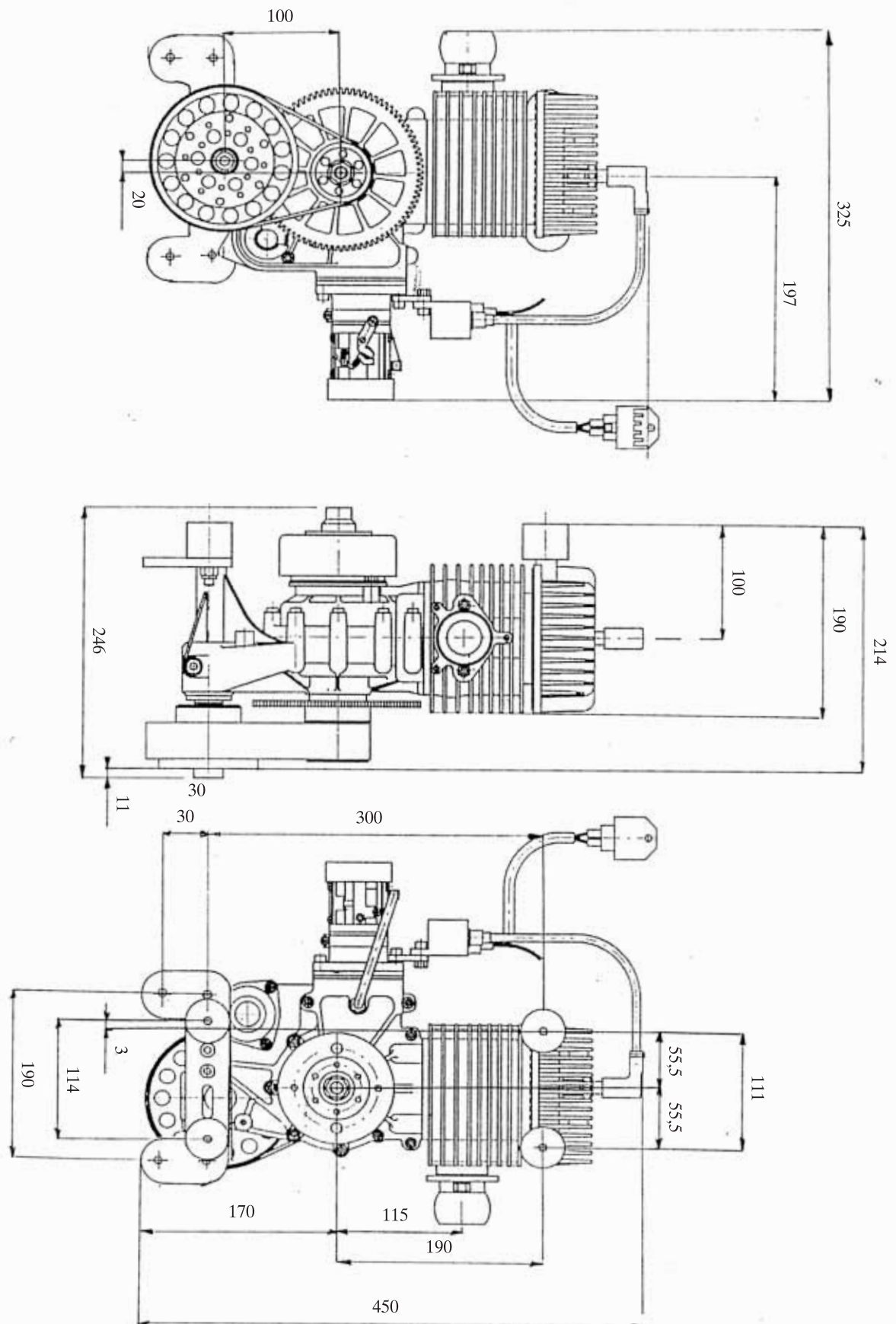
MINI 2 PLUS

owner's manual

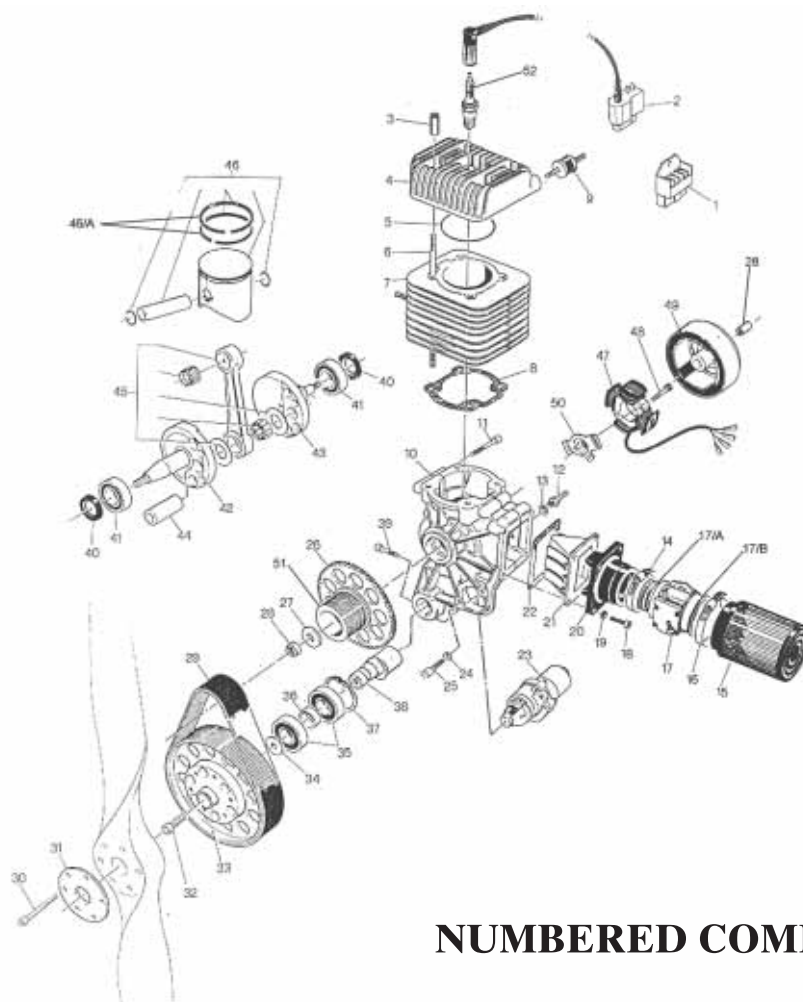
TECHNICAL SPECIFICATIONS

Technical Data		
Displacement	cm ³	202
Bore	mm	66,4
Stroke	mm	58
Compression Ratio		10,5/1
	Hp	26
Power	kW	19
	RPM	7.200
Weight of the engine	Kg	13
Weight of the exhaust	Kg	2,4
Lamellar intake with Walbro WB 32 carburettor		
Alluminium cilinder with Nikasil coating		
Air-cooling		
Exhaust resonance system. Poly-V belt reduction		
Electronic ignition with alternator for recharge battery in fly		
Electric starter		
Flying consumption at 5000 RPM, 2,2 liters/hours		
Premix two stroke oil gasoline, 3% oil by volume to unleaded fuel		
Reduction rations Available		
1:226 Crown gear 129 mm/Pinion 57 mm		
1:230 Crown gear 129 mm/Pinion 56 mm		
1:234 Crown gear 129 mm/Pinion 55 mm		
1:242 Crown gear 129 mm/Pinion 53,3 mm		

DRAWING WITH HEIGHTS



EXPLODED DIAGRAM



NUMBERED COMPONENTS

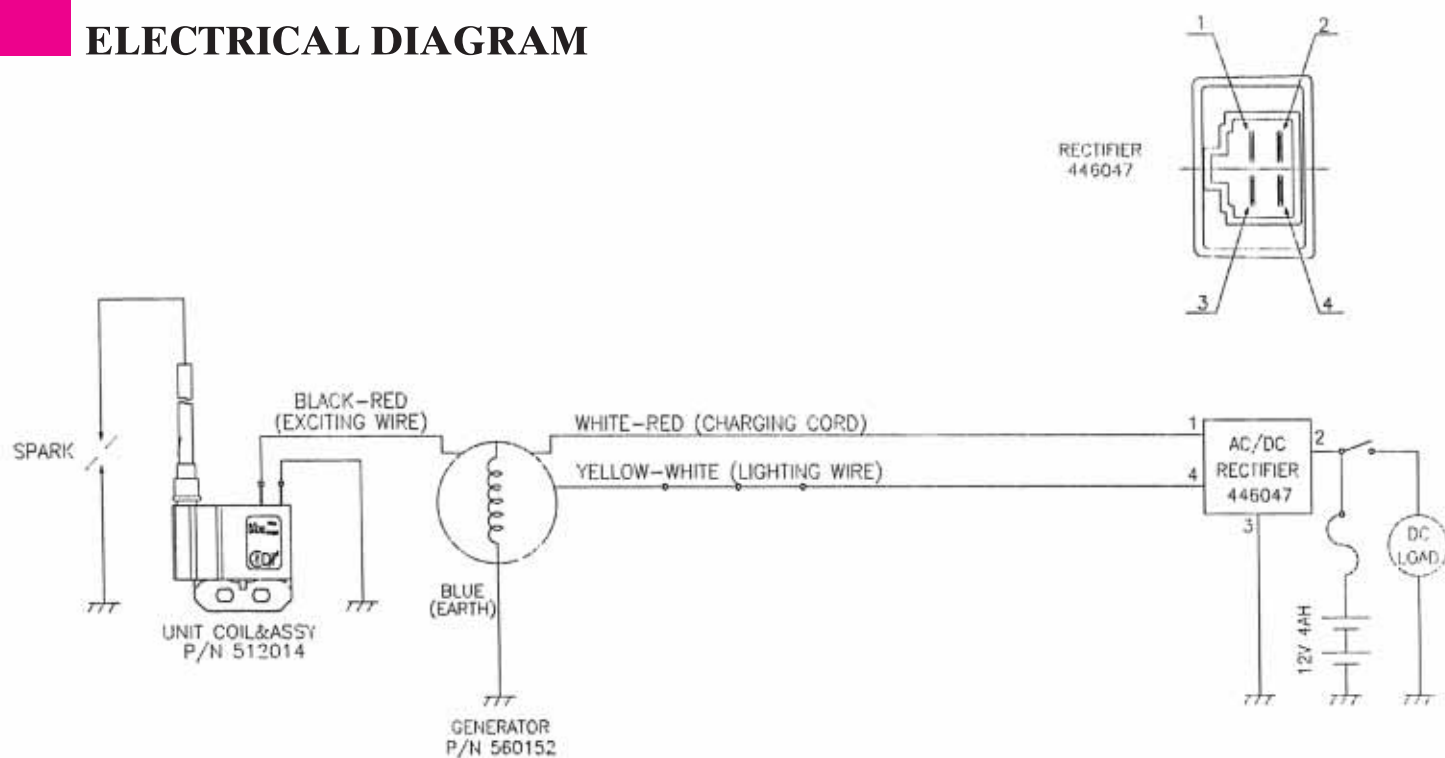
MINI2PLUS/01 RECTIFIER RE-CHARGE BATTERY
 MINI2PLUS/02 COIL
 MINI2PLUS/03 KIT SCREWS FOR HEAD (4)
 MINI2PLUS/04 CYLINDER HEAD
 MINI2PLUS/05 CYLINDER HEAD GASKET
 MINI2PLUS/06 KIT SCREWS FOR CYLINDER (4)
 MINI2PLUS/07 CYLINDER
 MINI2PLUS/08 CYLINDER GASKET
 MINI2PLUS/09 KIT SILENT-BLOCKS (4)
 MINI2PLUS/10 CRANK CASE
 MINI2PLUS/11 KIT ENGINE SCREWS
 MINI2PLUS/12 VACUUM-OPERATED SCREW
 MINI2PLUS/15 AIR FILTER
 MINI2PLUS/17 CARBURETTOR WALBRO WB 32
 MINI2PLUS/17A ALUMINIUM MANIFOLD
 MINI2PLUS/17B PLASTIC MANIFOLD
 MINI2PLUS/20 CARBURETTOR RUBBER MANIFOLD
 MINI2PLUS/21 REED VALVE
 MINI2PLUS/22 REED VALVE GASKET
 MINI2PLUS/23 ELECTRIC STARTER
 MINI2PLUS/26 CROWN GEAR
 MINI2PLUS/27 WASCHER FOR PINION
 MINI2PLUS/28 NUT FOR PINION AND FLY WHEEL
 MINI2PLUS/29 POLY- V BELT
 MINI2PLUS/31 ALUMINIUM PLATE FOR PROPELLER
 MINI2PLUS/32 SCREW FOR BIG PULLEY

MINI2PLUS/33 BIG PULLEY
 MINI2PLUS/34 PULLEY SPACER
 MINI2PLUS/35 KIT BEARINGS FOR BIG PULLEY (2)
 MINI2PLUS/36 BEARINGS SPACER
 MINI2PLUS/37 PULLEY SEEGER
 MINI2PLUS/38 ECCENTRIC PINION
 MINI2PLUS/40 KIT SEALS (2)
 MINI2PLUS/41 KIT BEARINGS FOR CRANKCASE (2)
 MINI2PLUS/42 COMPLETE CRANKSHAFT AND ROD
 MINI2PLUS/45 COMPLETE CONNECTING ROD
 MINI2PLUS/46 COMPLETE PISTON AND RINGS
 MINI2PLUS/46A TWO RINGS
 MINI2PLUS/47 STATOR
 MINI2PLUS/49 FLY- WHEEL
 MINI2PLUS/50 ALLUMINIUM PLATE FOR STATOR
 MINI2PLUS/51 LITTLE PINION FOR REDUCTION
 MINI2PLUS/52 SPARK PLUG
 MINI2PLUS/53 ALLUMINIUM PLATE FOR COIL
 MINI2PLUS/54 EXHAUST PIPE
 MINI2PLUS/55 ALLUMINIUM PLATE FOR SILENBLOCK
 MINI2PLUS/56 BING 84 CARBURETOR
 MINI2PLUS/57 BING 84 AIR FILTER
 MINI2PLUS/59 CONNECTING ROD CAGE
 MINI2PLUS/60 EXHAUST GASKET
 MINI2PLUS/61 COMPLETE SET OF GASKET

TIGHTENING TORQUES

Description	Special number in table	Tightening torque	Nm	Kgf/m
Head nut	3		22	2.2
6x40 Screws	11		12	1.2
Connector	12		10	1.0
6x30 Screws	18		12	1.2
6x25 Screws	25		10	1.0
12 Nuts	28		54	5.4
12x30 Screws	32		60	6.0
8x40 Screws	39		24	2.4
Spark plug	52		18	1.8

ELECTRICAL DIAGRAM



INSTALLATION

The MINI 2 PLUS engine must be fixed to the frame using the four elastic, radially assembled "silent block" supports provided. Two are positioned on the head and two on the blue ergal plate. The latter gives the possibility of two different fixing wheelbases.

Choose the most suitable between "Narrow" (114 mm) and "Wide" (190 mm), depending on the dimensions of the frame. If there are no structural obstacles, it is preferable to use the "wide" fixing, as it provides the engine with greater stability. During installation, some safety precautions must be made (we remind you that an engine generates vibrations, even if very small, they can cause the loosening and/or removal of screws or other objects). It is therefore necessary, to avoid any engine components, following accidental detachment, causing damage to people and/or things, to fasten them to the engine using a small steel cable. The components that must normally be "made safe" are:

- The filter and the carburetor, fastened to the engine
- The springs and the exhaust pipe, fastened to the engine
- The engine itself, fastened to the frame, bypassing the silent block (in this case use synthetic fibre "straps" that are particularly resistant to traction and tearing).

The spherical mouth of the exhaust pipe must be lubricated with grease that is resistant to high temperatures (e.g. copper grease), before being inserted into the exhaust induction.

We recommend taking maximum care when carrying out these operations. In any case, during the assembly phase the proper choices must be made by expert and qualified personnel.

FUEL

The MINI 2 PLUS engine is designed to function with a GASOLINE/OIL mixture.

We recommend using semi-synthetic based oils, as they remain mixed with the gasoline in the tank for longer periods, even if they are of a lower quality than pure synthetic oils. During the running-in stage, use an oil percentage of 3.5%, and then 3% once this stage has been completed. The gasoline must have an octane number that is not lower than 98, in order not to run into pre-ignition phenomena.

Carefully mix the gasoline with the oil in a suitable can. It is advisable, once they have been mixed, to use the mixture within a week.

Do not use vegetable or animal oil.

DO NOT MIX DIFFERENT TYPES OF OIL TOGETHER.

Simonini Racing S.r.l. don't recognize any guarantee if is used CASTROL TTS OIL.