



# NORSWIFT 60cc – PULL START

**USER MANUAL**

MAN - 099 - EN

# FEEDING

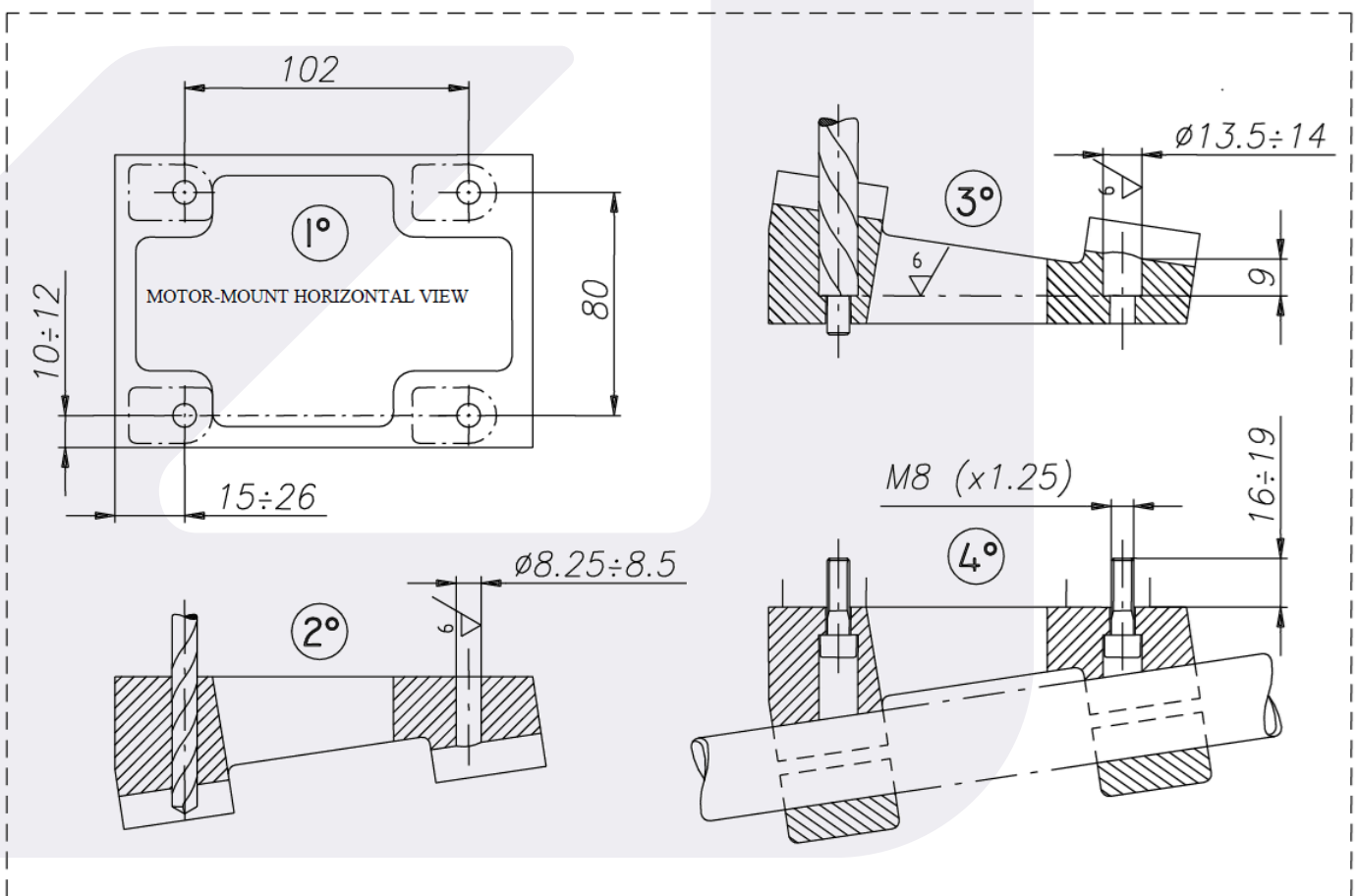
Fuel mixture 98 RON and 3% oil (33:1).

Our experience dictates use of oils, such as:

- WLADOIL K 2T;
- ELF HTX 909;
- ELF HTX 976;
- LEXOIL 996.

## ENGINE MOUNT PREPARATION

In case you are not provided with an engine mount previously prepared with holes at the distances as prescribed in the figure, drill 4 holes  $\text{Ø}8.25\div 8.5\text{mm}$  ( $\text{Ø}13.5\div 14\text{mm}$  counterbore) in the engine mount as described in the drawing.



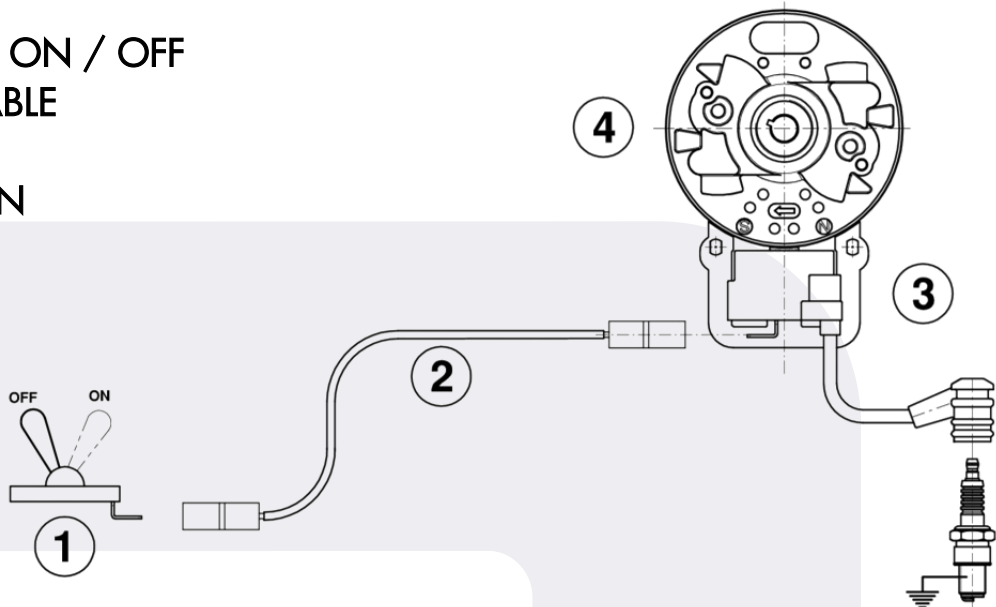
NOTE - All dimensions are in millimeters.

## ELECTRICAL PLANT

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The engine is equipped with an analogical ignition with fixed advance, normally set to 1.1mm (min0.8 max1.4mm) before TDC.

1. SWITCH ON / OFF
2. COIL CABLE
3. COIL
4. IGNITION



## WARNING ON THE EXHAUST PLANT

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Check that the muffler mounting springs are well hooked. In case of breaking, replace the broken spring. Do not use the engine if the springs are not correctly installed, as the muffler may vibrate more than the limit and could break.

It is recommended to remove the rear cup of the muffler every 10/15 hours and check that the counter-cup holes are not clogged with deposits.

## WARNING ON THE INLET SILENCER

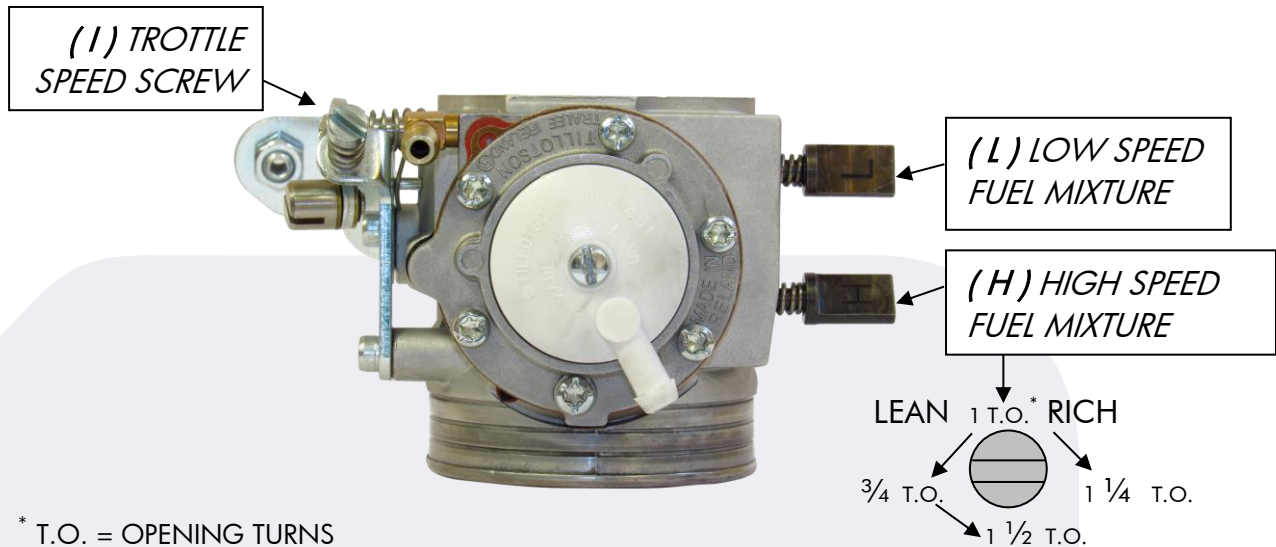
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Make sure that the inlet silencer is mounted with the inlet hole facing upwards and that it is not blocked in any way. Make sure the inlet silencer clamp on the carburetor is adequately tightened.

Periodically clean internally the intake silencer.

## CADETTI CLASS

### TILLOTSON HW-47A CARBURETTOR SETTING



The recommended base setup of the carburetor screws, after running-in, is as follows:

- L (from totally closed position, open): 1 turn+15' – 1 turn + 30'
- H (from totally closed position, open): 30'- 40'

According to different conditions, such as altitude and ambient temperature, it may be necessary to adjust the carburetor in order to optimize the engine performance.



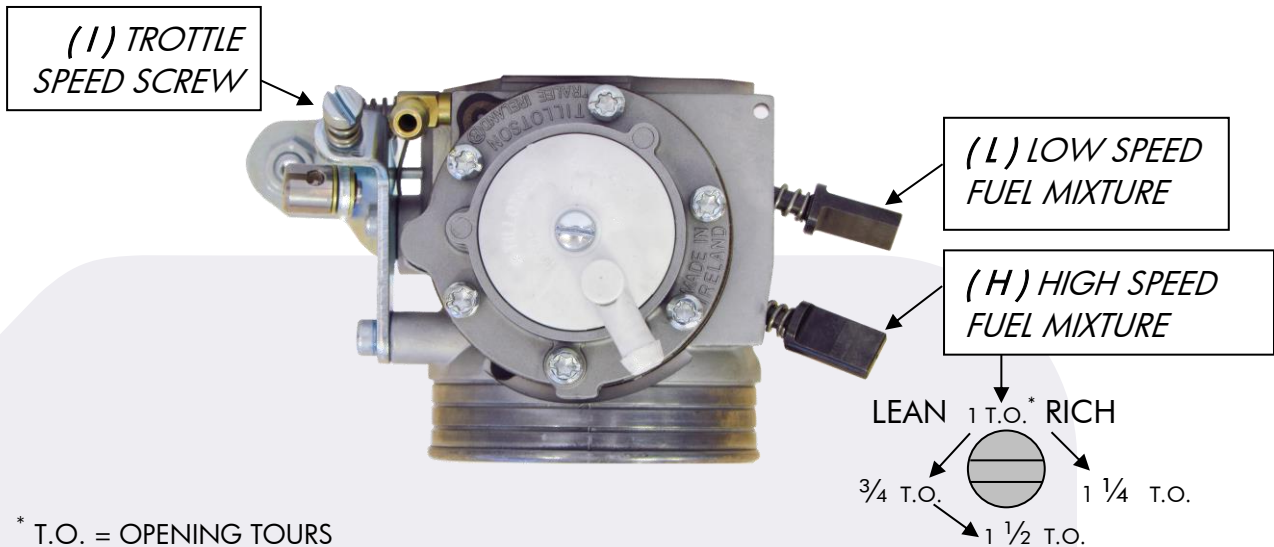
- Never lean excessively the mixture: risk of overheating and seizing.

- Never tighten the screws H and L forcefully, the screws seats may result damaged and the carburetor unrepairable.

- Carburetor adjustment must be performed with warmed up engine.

## MINI CLASS

### TILLOTSON HW-34B CARBURETTOR SETTING



The recommended base setup of the carburetor screws, after running-in, is as follows:

- L (from totally closed position, open): 1 turn+30' – 1 turn+40'
- H (from totally closed position, open): 40'– 50'

According to different conditions, such as altitude and ambient temperature, it may be necessary to adjust the carburetor in order to optimize the engine performance.



- Never lean excessively the mixture: risk of overheating and seizing.

- Never tighten the screws H and L forcefully, the screws seats may result damaged and the carburetor unrepairable.

- Carburetor adjustment must be performed with warmed up engine.

# MAIN COMPONENTS' PARAMETERS AND ESTIMATED LIFETIME

## *CYLINDER / PISTON PAIRING*

The piston must be replaced within certain intervals, expressed in consumed liters of mixture. Intervals may vary according to the use the engine, ex: professional (top performance required) or hobby (top durability).

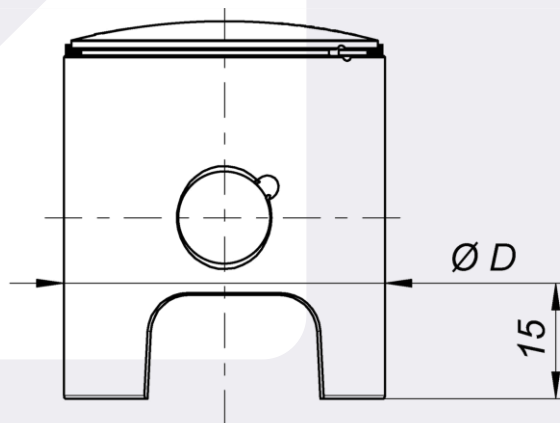
IAME recommends replacing the piston every **100 liters** of use, or earlier, if the cylinder/piston tolerance exceeds **0.11mm**.

If the marking on the piston crown indicates:

- a **GREEN** dot or with the letter **V**: the dimension indicated on the piston crown corresponds at dimension of the liner
- a **RED** dot or by letter **R**: add **0.01mm** to the measurement marked on the piston crown to match the liner.

The prescribed cylinder/piston clearance, when a brand new piston is mounted, is **0.07mm**.

The actual diameter of the piston can be checked at **15mm** from the base, perpendicular to the piston pin.



Moreover, the clearance between the tips of the piston ring (installed into the cylinder) must be between **0.10 and 0.20mm**. The clearance can be checked with a feeler gauge after placing the ring straight into the cylinder.

### *CON ROD SMALL END ROLLER CAGE*

Replacement is recommended after about 100 liters of use.

### *CRANKSHAFT, CON ROD BIG END CAGE, CRANK PIN, WASHERS*

Replacement is recommended after 200 liters of use.

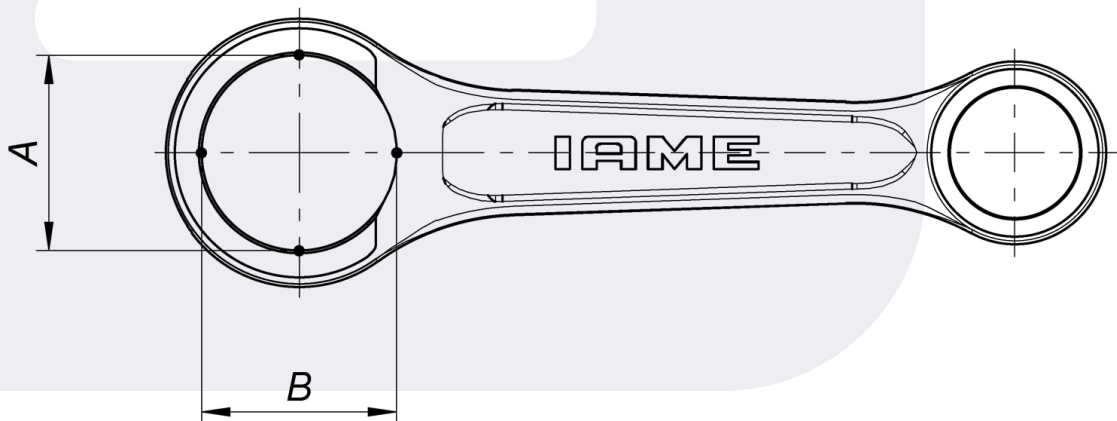
### *MAIN ROLLER BEARINGS*

Replacement is recommended after 200 liters of use.

### *CON ROD*

Replacement is recommended after 400 liters of use

The con rod must be replaced when the roundness of the big end hole exceeds 0.01mm. This value is given by the difference between the diameter measured at the positions indicated below "A" and "B".



## TECHNICAL DATA ENGINE SUMMARY TABLE

DESCRIPTION	DATA	NOTES
FUEL MIXTURE / FUEL	Min 3% OF OIL	98 RON Oil CIK homologated
TIMING ADVANCE	1.1mm (0.8÷1.4)mm from TDC	See fiche for how to read
CORRECT MEASURE TIPS PISTON RING	0.10 ÷ 0.20 mm	Installed in the cylinder
SPARKPLUG TYPE USE IN STANDARD WEATHER CONDITIONS	NGK BR 9 EG	
SPARKPLUG TYPE USE IN VERY COLD WEATHER CONDITIONS	NGK BR 8 EG	
SPARKPLUG TYPE USE IN HOT WEATHER CONDITIONS	NGK BR 10 EG	

Caution should be taken when installing the spark plug. Always clean and inspect the spark plug threads before installation. Always apply anti seize grease

**- NEVER INSTALL THE SPARK PLUG WITHOUT THREAD LUBRICATION -**

You should be able to freely turn the plug into the head using only your fingers to turn the plug. Do not force the plug with a tool, otherwise a possible damage can occur.  
Tighten at 20÷22 Nm.