



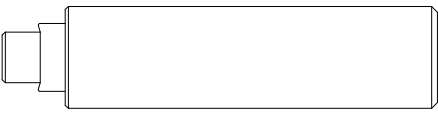
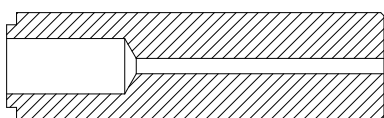
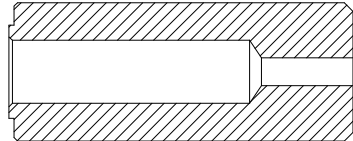
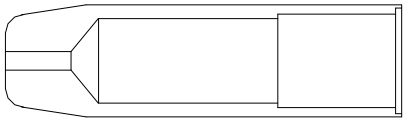
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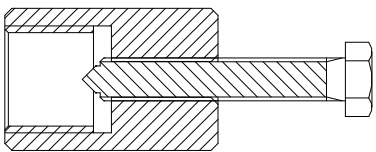
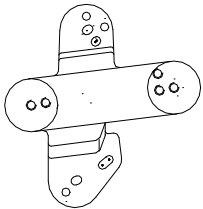
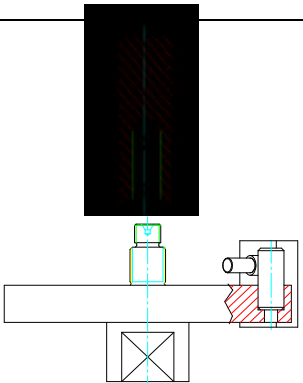
**TECNICAL SPECIFICATIONS****SPECIFICATIONS**

<b>CYCLE</b> .....	- 2 stroke
<b>Nr. of CYLINDERS</b> .....	- 1
<b>DISPLACEMENT</b> .....	- 49.908 cc.
<b>BORE AND STROKE</b> <b>mm.</b> .....	- 39 X 41.8
<b>CYLINDER MATERIAL</b> .....	- Aluminium with Ni / Si carbide coating
<b>COMPRESSION RATIO</b> .....	- (15.5 ±0.3) : 1
<b>SPARK PLUG</b> .....	- CHAMPION C53
<b>TIMING SYSTEM</b> .....	- Reed valve with 4 carbon fibre flaps
<b>MAX. R.P.M.</b> .....	- 14500 (rpm) MAX
<b>CARBURETOR</b> .....	- 12/14/19 mm diameter
<b>INTAKE MANIFOLD</b> .....	- Adjustable
<b>FUEL</b> .....	- <b>EURO UNLEADED NC 623/02 - R.O.N. 95</b>
<b>LUBRICATION OIL MIXER TYPE</b> .....	- 2% AGIP 2T CITY
<b>LUBRICATION WITH OIL PUMP</b> .....	- On request
<b>IGNITION</b> .....	- Electronic with microchip
<b>PRIMARY DRIVE GEAR</b> .....	- Straight-tooth gears Z 14/59
.....	with safety coupling
.....	Ratio 1:4,21
<b>SECONDARY DRIVE GEAR</b> .....	- Sprocket Z 10 or Z11
.....	Chain type 1/2 x 3/16 roller 7.75
<b>CLUTCH</b> .....	- Automatic centrifugal clutch in oil bath
.....	Adjustable
<b>TRANSMISSION GEAR OIL</b> .....	- SAE 20 W quantity 250 cc
<b>STARTER</b> .....	- Kick starter
<b>COOLING</b> .....	- With liquid pump

## SPECIAL TOOLS

Figure	Code	Description
	143176	BEARING INSTALLER output shaft
	143154	BEARING INSTALLER crankshaft
	143156	BEARING INSTALLER output shaft
	143179	OIL SEAL INSTALLER output shaft
	143180	OIL SEAL INSTALLER crankshaft (flywheel + clutch)
	143181	OIL SEAL MOUNTING PROTECTION crankshaft (flywheel + clutch)

## SPECIAL TOOLS

Figure	Code	Description
	143155	OIL PUMP SHAFT INSTALLER (pre-assembled)
	140558	FLYWHEEL REMOVER
	143162	CRANKCASE PULLER
	143294	SPECIAL CLUTCH ADJUSTMENT TOOL

## PERIODIC MAINTENANCE

### RUNNING-IN RECOMMENDATIONS:

During the running-in period, i.e. for approx. the first 500 km on the road, please note as follows:

- Do never run the engine at maximum revolutions.
- Do never keep the vehicle at maximum speed.
- Do not keep the engine at idle speed for longer time.

### FIRST MAINTENANCE SERVICE:

to be carried out after **500 - 600 km**.

- Replace the engine oil
- Check the carburation and adjust if necessary
- Check the tightness of nuts and bolts.

(See table "tightening torques" pag. 15)

**LUBRICANTS****N.B.**

*Use original MORINI FRANCO MOTORI spare parts only*

RECOMMENDED LUBRICANTS / ADHESIVES	
DESCRIPTION	CHARACTERISTICS
Transmission oil	AGIP RADULA 68 SAE 20W
Assembly of various parts	GR/SM2 GREASE
Special assembly	GRAPHITISED MOLYCOTE type GREASE
Thread-locking glue	LOXEAL 82-21
Clamping glue	LOXEAL 83-54


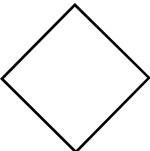

**N.B. TRANSMISSION OIL LEVEL CHECK**

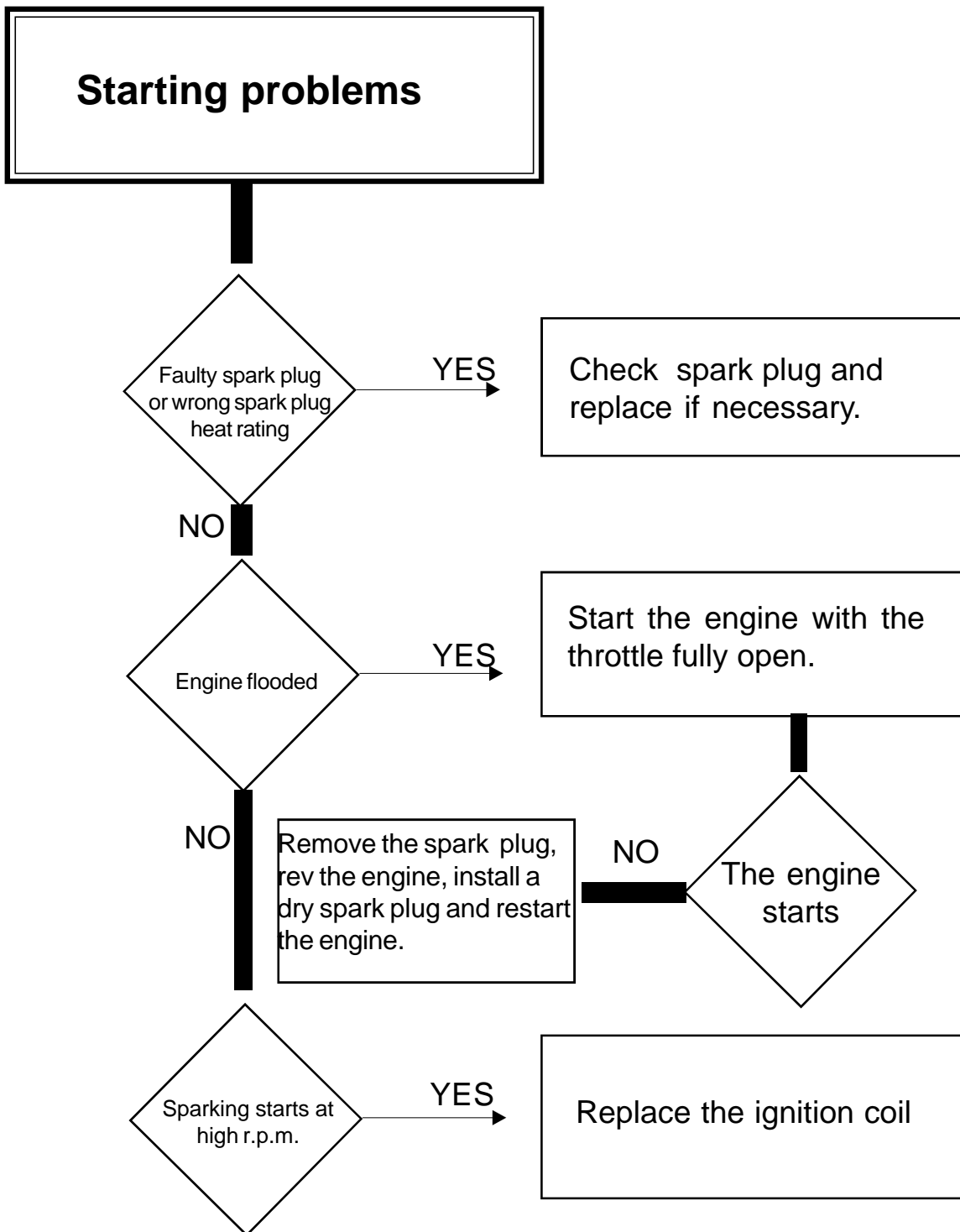
**Remove the oil filler cap on the clutch cover and check the transmission oil level through window.**

## TROUBLESHOOTING

The following flow charts give a general outline of the causes and effects when the engine is not running correctly.

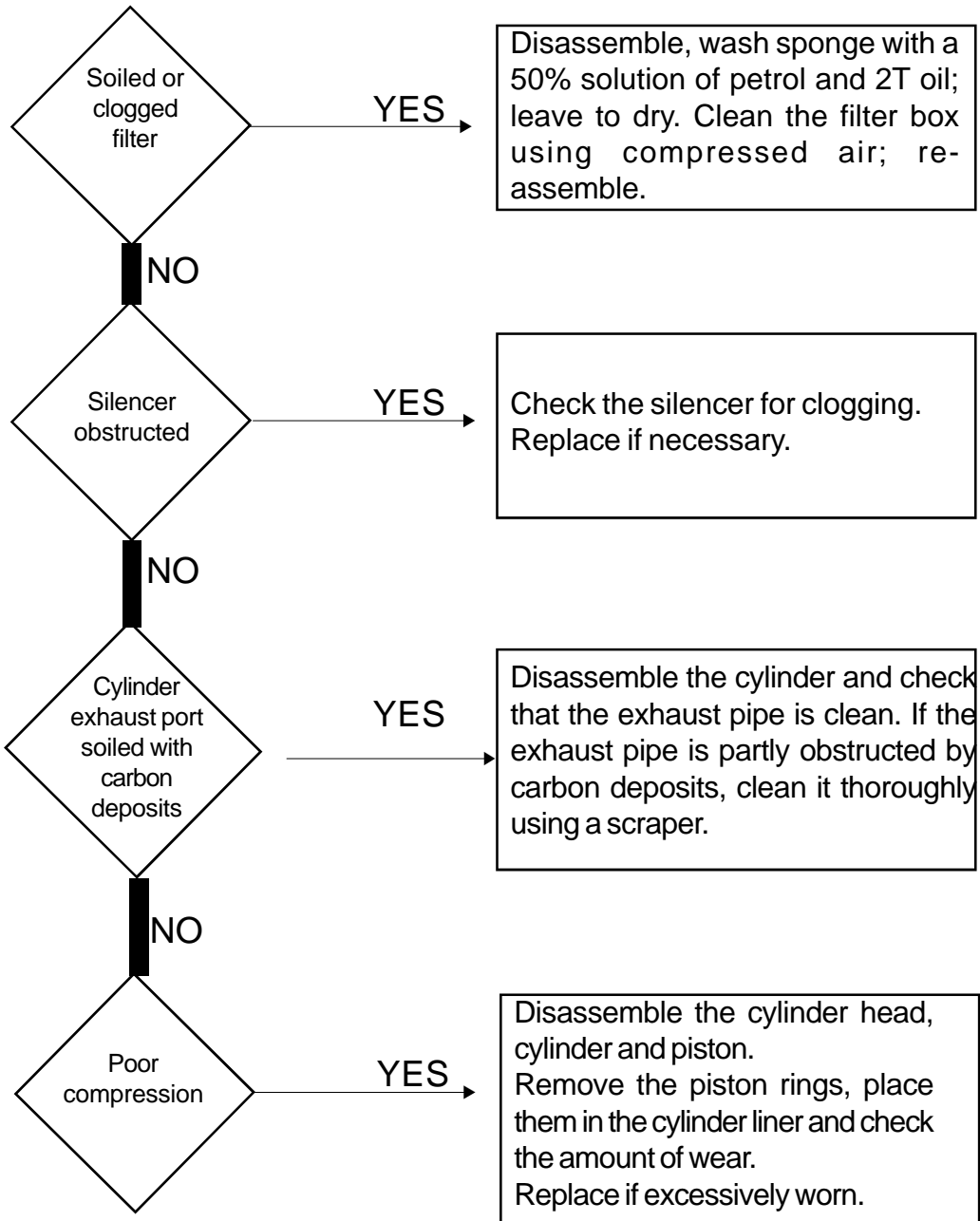
Descriptions of solutions for a specific cause are general; for more details the reader should consult the disassembly-reassembly manual.

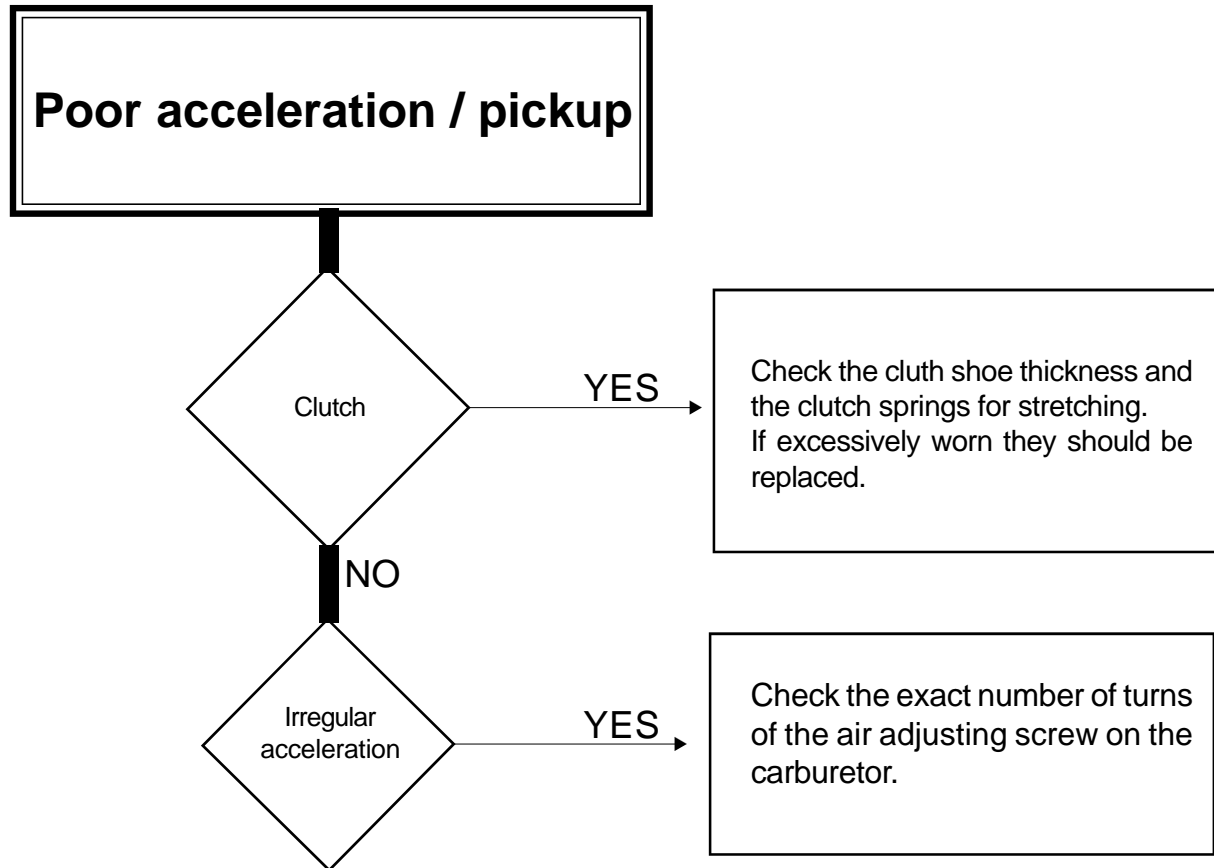
LEGEND OF SYMBOLS	
	<b>EFFECT</b> (fault noticed by the user)
	Possible <b>CAUSE</b> of the fault
	Possible general <b>SOLUTION</b> to the fault

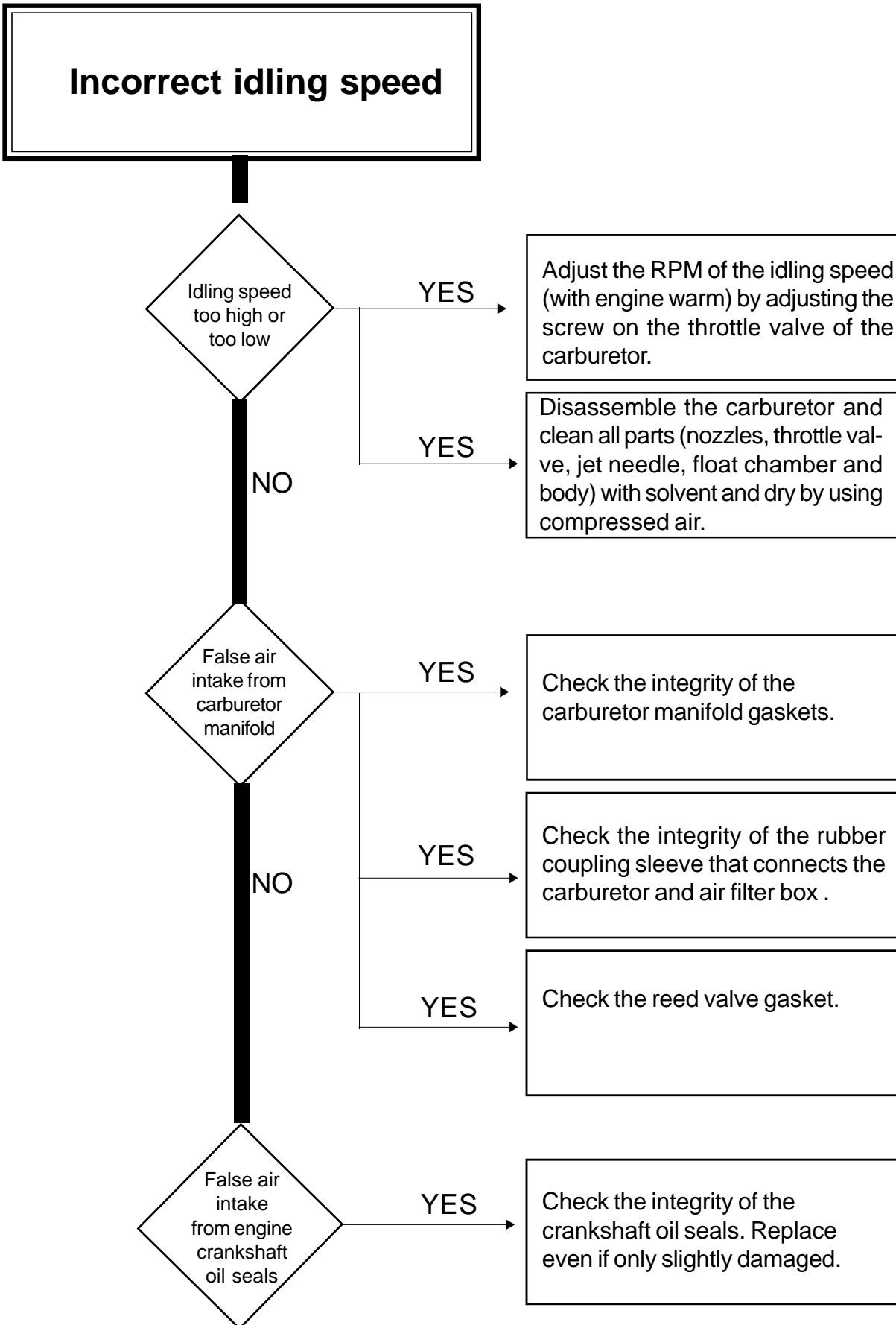


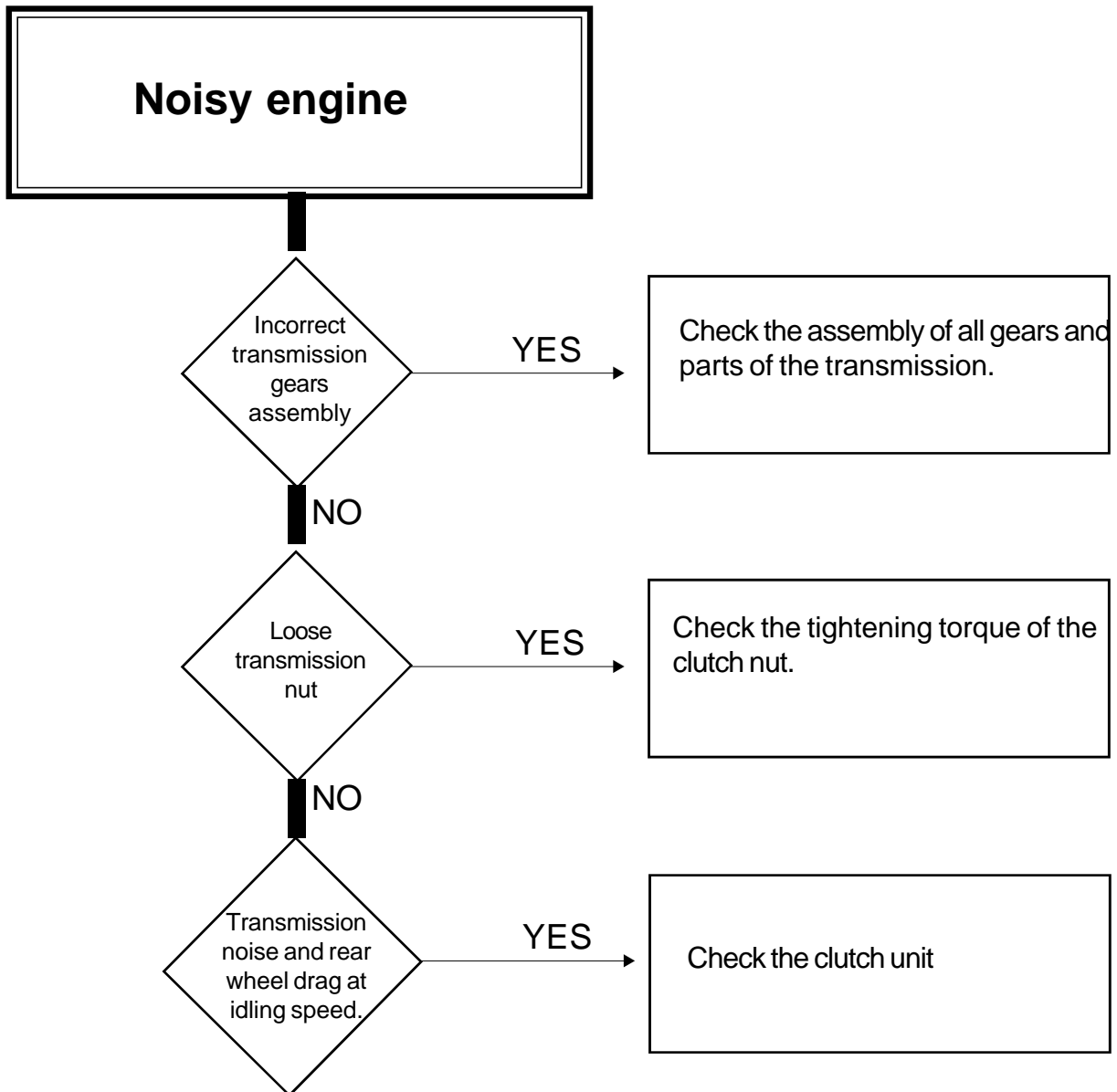


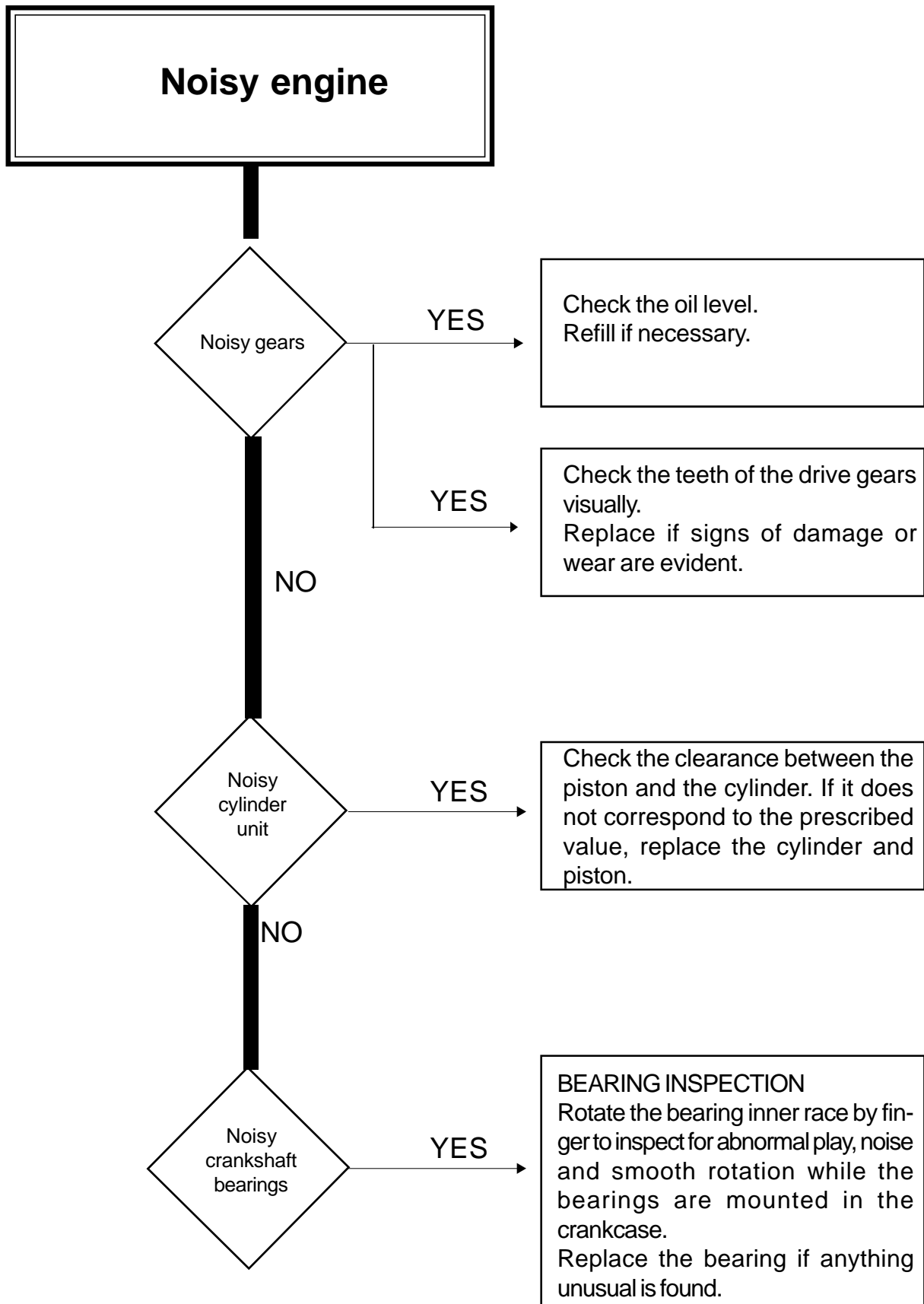
**Maximum indicated running speed cannot be reached**

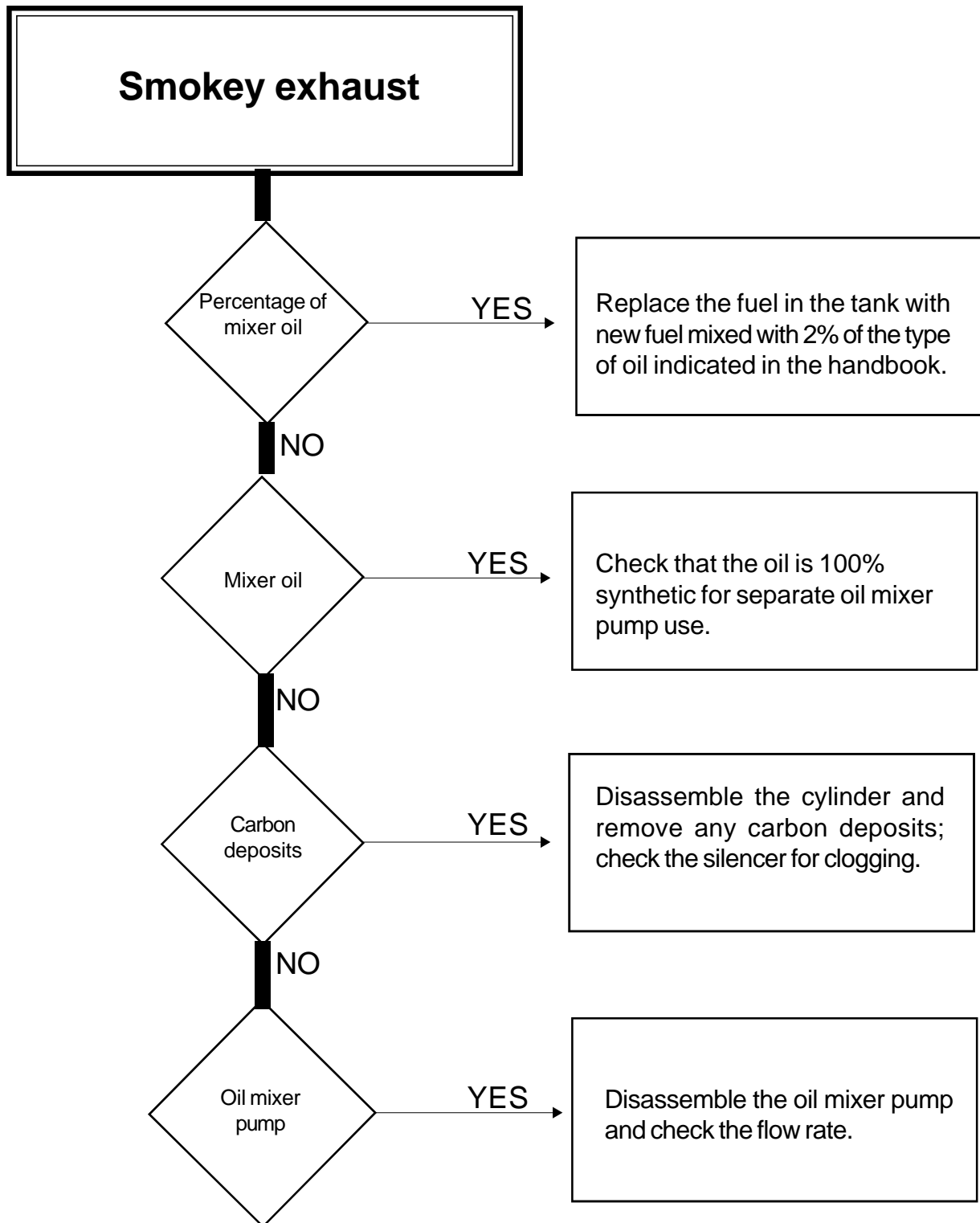












**TIGHTENING TORQUES**

<b>DENOMINATION</b>	<b>TORQUE (Nm)</b>
Crankcase bolts	10 - 12
Clutch cover bolts	10 - 12
Flywheel cover bolts	3 - 4
Carburetor manifold bolts	9 - 10
Stator clamping bolts	3 - 4
Oil pump clamping bolts	5 - 6
Carburetor clamping screw	3 - 4
Kick starter lever bolt	8 - 10
Oil drain plug	8 - 10
Clutch nut	50 - 55 + Loxeal 83-54
Flywheel nut	8 - 10 + Loxeal 83-54
Head nuts	12 - 14
Head clamping bolts	10 - 12
Pulley clamping bolts	3 - 4 + Loxeal 83-54
Water pump rotor	5 - 6 + Loxeal 83-54
Spark plug	20 - 25

