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TECHNICAL SPECIFICATIONS

SPECIFICATIONS CYCLE -2 stroke Nr. of CYLINDERS..... - 1 DISPLACEMENT - 49.908 cc. **BORE AND STROKE** mm. - 39 X 41.8 CYLINDER MATERIAL - Special cast iron COMPRESSION RATIO - (11 ±0.6): 1 SPARK PLUG - CHAMPION L78 C TIMING SYSTEM - Reed valve in crankcase with 3 metal flaps MAX. R.P.M. -9000 CARBURETOR - 12 mm diameter or equivalent INTAKE MANIFOLD - Fixed FUEL - EURO UNLEADED NC 623/02 - R.O.N. 95 plus 2% oil LUBRICATION MIXER OIL TYPE - AGIP 2T CITY LUBRICATION SYSTEM - automatic oil mixer pump (on request) GENERATOR - (on request) IGNITION - Inductive electronic PRIMARY DRIVE GEAR - Straight-tooth gears Z 14/59 with safety coupling SECONDARY DRIVE GEAR - Sprocket Z 10 or Z11 chain type 1/2 x 3/16 roller 7.75 CLUTCH - Automatic centrifugal 2-shoe clutch in oil bath TRANSMISSION GEAR OIL - AGIP RADULA 68 type SAE 20 W quantity 200 cc STARTER - Kick starter COOLING - Air cooled



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
00 . 00	143162	CRANKCASE PULLER



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" page 15)



LUBRICANTS

N.B.

<u>Use original MORINI FRANCO MOTORI spare parts only</u>

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

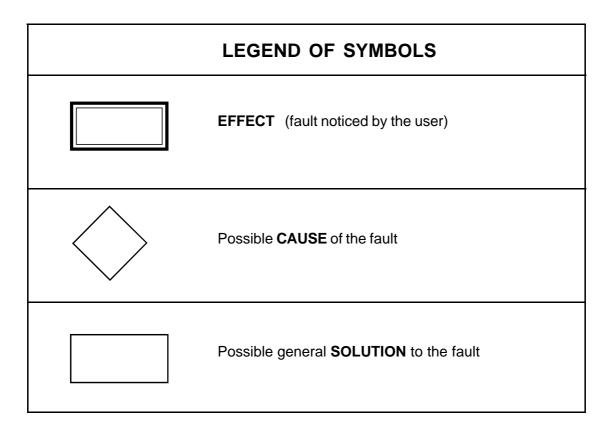
Remove the oil filler cap on the clutch cover and check the transmission oil level through window.



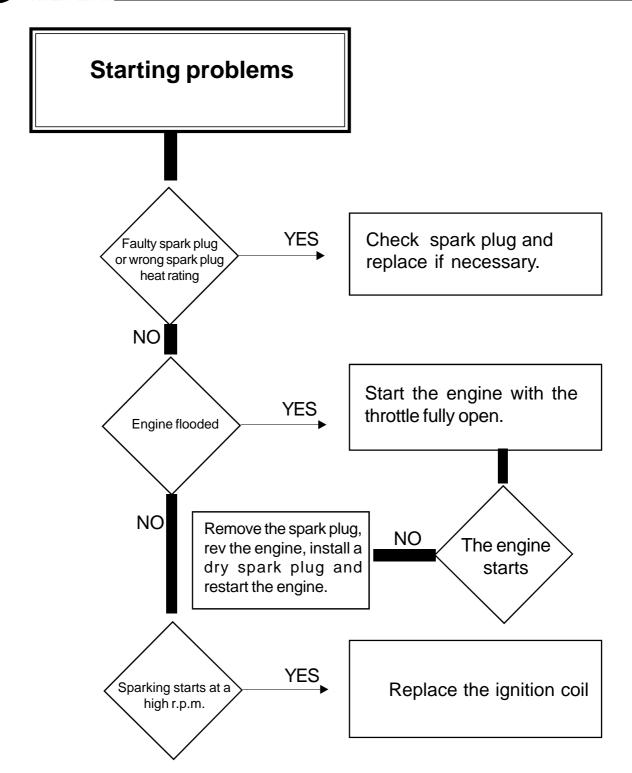
TROUBLESHOOTING

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

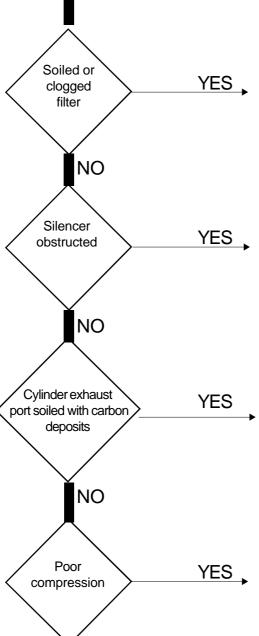
Descriptions of solutions for a specific cause are general; for more details the reader should consult the disassembly-reassembly manual.







Maximum indicated running speed cannot be reached



Disassemble, wash sponge with a 50:50 solution of petrol and 2T oil; leave to dry. Clean the filter box using compressed air; re-assemble.

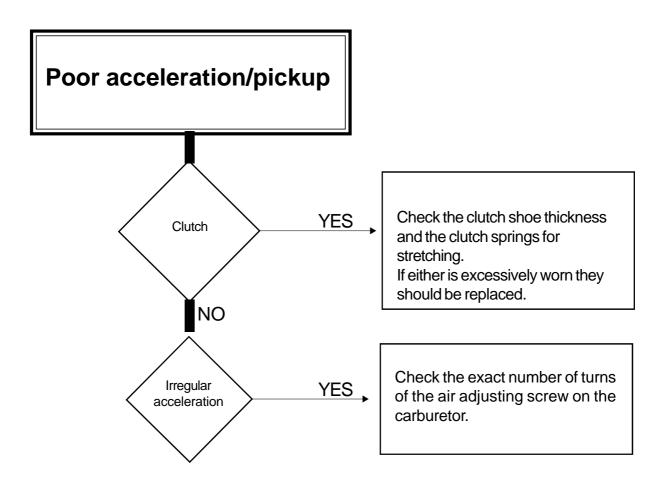
Check the silencer for clogging. Replace if necessary.

Disassemble the cylinder and check that the exhaust pipe is clean. If the exhaust pipe is partly obstructed by carbon deposits, clean it thoroughly using a scraper.

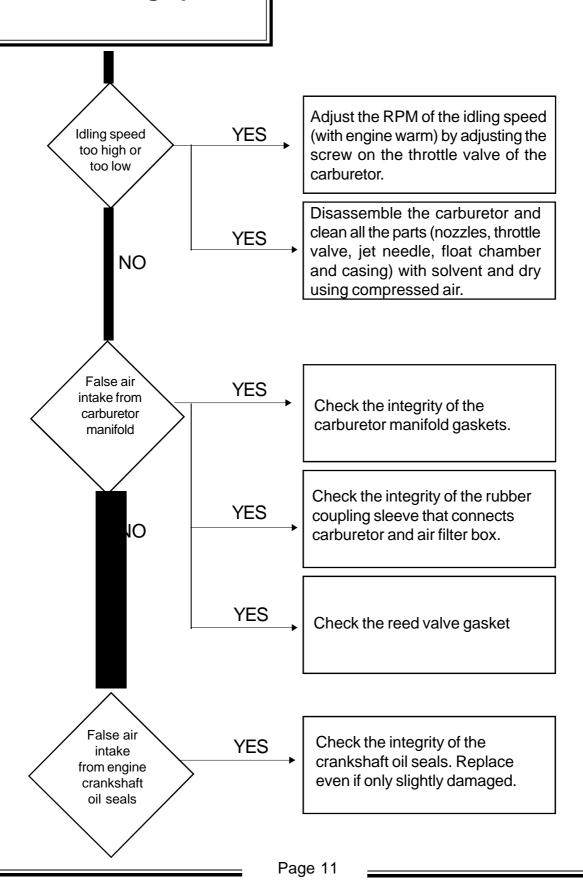
Disassemble the cylinder head, cylinder and piston.

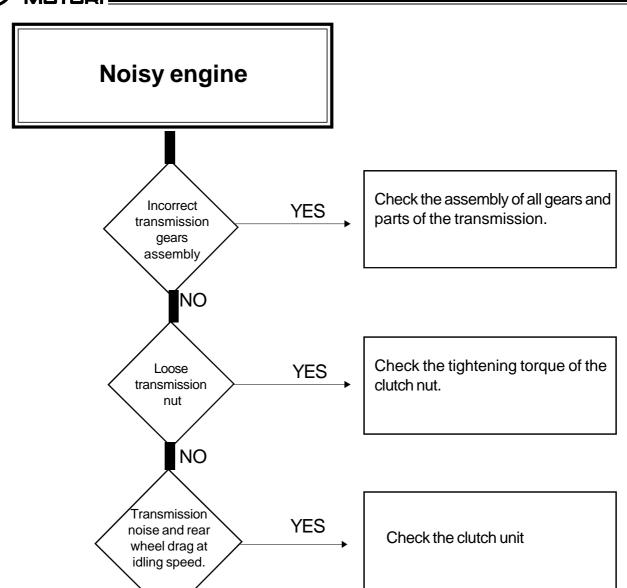
Remove the piston rings, place them in the cylinder liner and check the amount of wear.

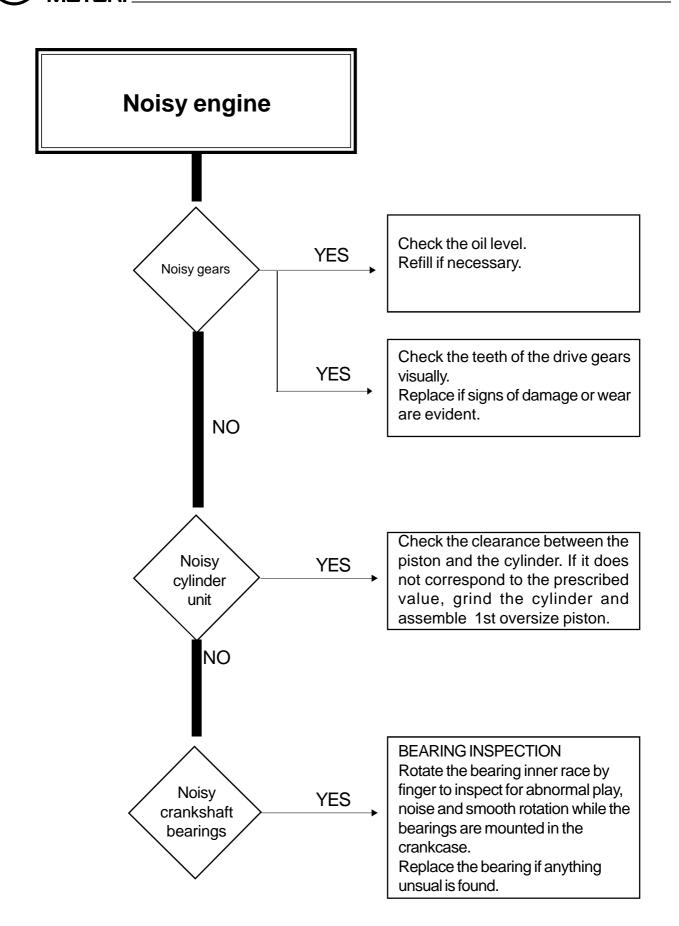
Replace if excessively worn.

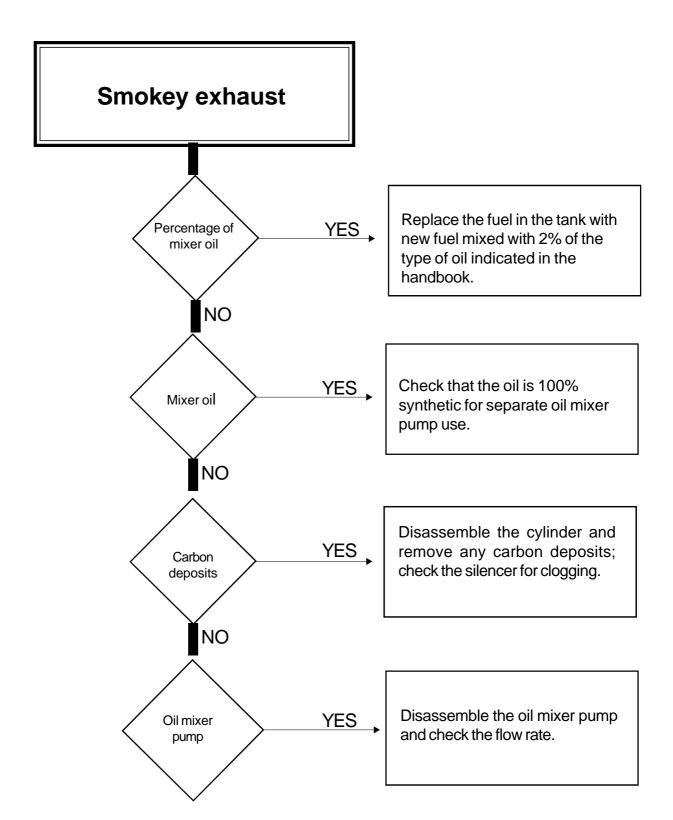


Incorrect idling speed











TIGHTENING TORQUE TABLE

DENOMINATION	TORQUE (Nm)
Crankcase bolts	10 - 12
Clutch cover bolts	10 - 12
Flywheel cover bolts	3 - 4
Carburetor manifold bolts	7 - 8
Ignition coil clamping screws	6 - 8
Oil mixer pump clamping screws (for model with mixer only)	5 - 6
Carburetor clamping screw	4 - 5
Starter lever bolt	8 - 10
Oil drain plug	8 - 10
Clutch nut	50 - 55
Flywheel nut	25 - 30
Head nuts	12 - 14
Spark plug	20 - 25