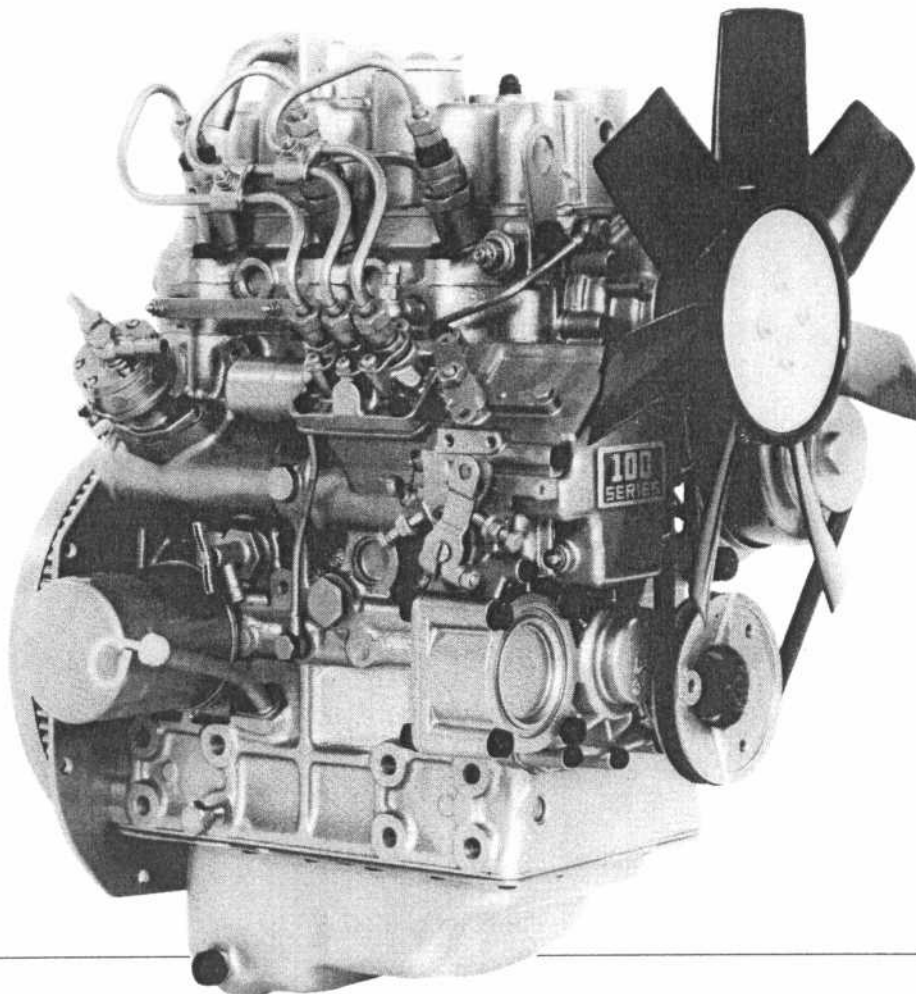


WORKSHOP MANUAL



Perkins 100 Series: 103-06/103-09/103-10

Perama: M25/M30

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Abbreviations and codes

Engine Build List (Parts List) Numbering System

The standard engine parts list numbering code system is defined as follows:

Code	1	II	111	IV	V
Example:	KC	30226	1	000001	M

Code I Engine Type

KB = 103.06

KC = 103.09/PERAMA M25 KD =
103.10/PERAMA M30

Code II Engine Parts List

Parts list increases numerically for both OEMS and distributors.

Code III Country of Manufacture

J = Made in Japan

Code IV Engine Serial Number

Individual engine serial number commencing with 000001 increasing numerically

Code V Year of Manufacture

M = 1985

• = 1986

• is Omitted

• = 1987 Q/S

= 1988

FOREWORD

This Workshop Manual has been compiled for use in conjunction with normal workshop practice. Mention of certain accepted practices, therefore, has been purposely omitted in order to avoid repetition.

Reference to renewing joints and cleaning off joint faces, has to a great extent been omitted from the text, it being understood that this will be carried out where applicable. Similarly, it is understood that in reassembly and inspection, all parts are to be thoroughly cleaned, and where present, burrs and scale are to be removed. It follows that any open ports of high precision components, e.g. fuel injection equipment, exposed by dismantling, will be blanked off until reassembled, to prevent the ingress of foreign matter.

When fitting setscrews into "through" holes into the interior of the engine, a suitable sealant should be used.

Throughout this manual, whenever the "left" or "right" hand side of the engine is referred to, it is that side of the engine when viewed from the flywheel end.

This publication is produced by the Compact Engines Division of Perkins Engines Ltd. and every endeavour is made to ensure that the information contained in this manual is correct at the date of publication, but due to continuous development, the manufacturers reserve the right to alter this specification without notice.



Safety Precautions



THESE SAFETY PRECAUTIONS ARE MOST IMPORTANT Reference must also be made to the local regulations in the country of operation.

Do not use these engines in marine applications (Except Perama versions).

Do not change the specification of the engine.

Do not smoke when you put fuel in the tank.

Clean away any fuel which has spilled and move material which has fuel contamination to a safe place.

Do not put fuel in the tank during engine operation (unless absolutely necessary).

Never clean, lubricate or adjust the engine during operation (unless you have had the correct training when extreme caution must be used to prevent injury).

Do not make any adjustments you do not understand.

Ensure the engine is not in a position to cause a concentration of toxic emissions. Persons in the area must be kept clear during engine and equipment or vehicle operation. Do not permit loose clothing or long hair near parts which move.

Keep away from parts which turn during operation. Note that fans cannot be seen clearly while the engine is running.

Do not run the engine with any safety guards removed.

Do not remove the radiator cap while the engine is hot and the coolant is under pressure as dangerous hot coolant can be discharged.

Do not use salt water in the fresh water cooling system or any other coolant which can cause corrosion.

Keep sparks or fire away from batteries (especially while during charge) or combustion can occur. The battery fluid can burn and is also dangerous to the skin and especially the eyes.

Disconnect the battery terminals before you make a repair to the electrical system.

Only one person must be in control of the engine.

Ensure the engine is only operated from the control panel or operators position.

If your skin comes into contact with high pressure fuel, get medical assistance immediately.

Diesel fuel and used engine oils can cause skin damage to some persons. Use protection on the hands (gloves or special skin protection solutions).

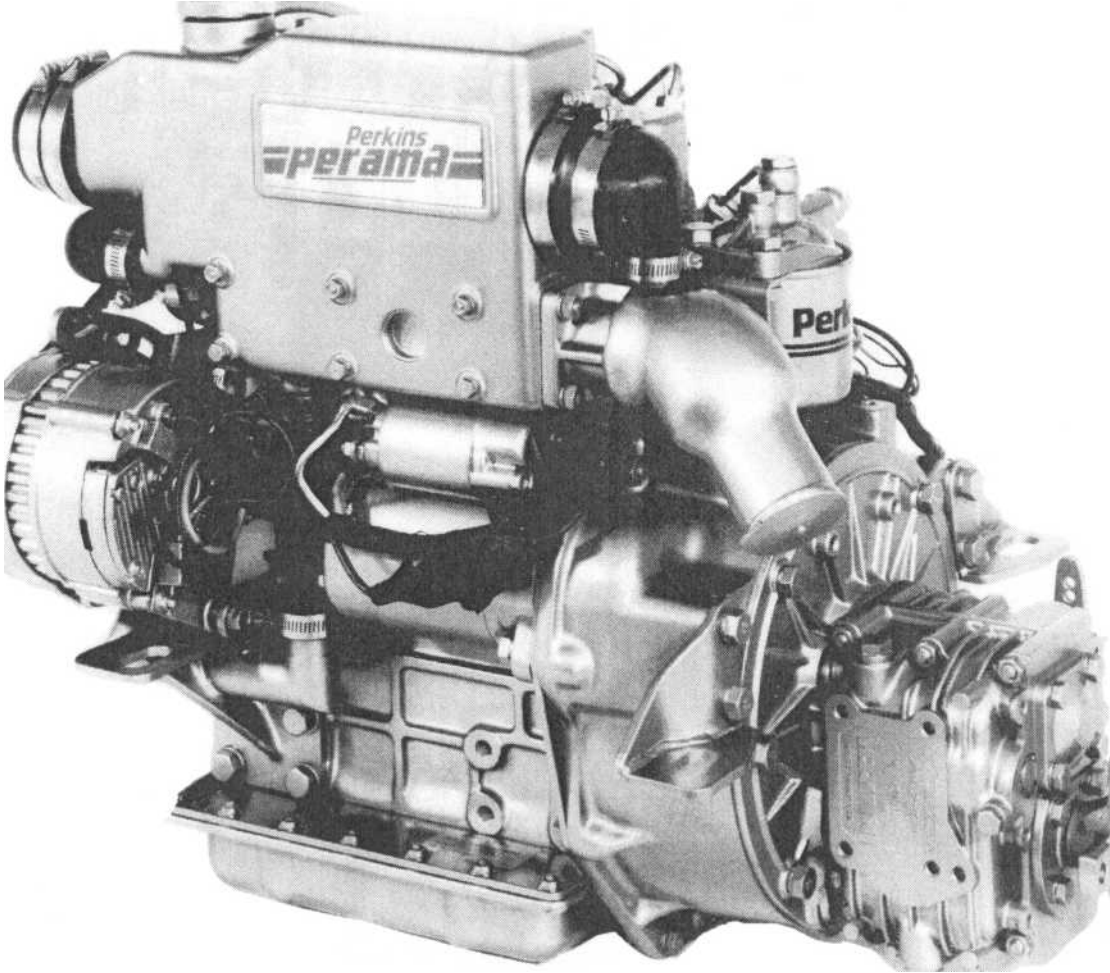
Do not move equipment unless the brakes are in good condition.

Ensure that the transmission drive control is in "Neutral" position before the engine is started.

Fit only genuine Perkins Parts.

Do not use ether to start these engines.

ENGINE DIAGRAMS



Engine cross sectional views

