



**Perkins  
engines**

4.108

4.107

4.99

**SHOP MANUAL  
FOR  
MARINE ENGINES**

# **workshop manual for 4.108 4.107 and 4.99 marine engines**

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 **Perkins engines**

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# Unified Threads and Engine No. Location

## Unified Threads

All threads used on 4.99, 4.107 and 4.108 Marine engines, except on proprietary equipment are Unified Series and American Pipe Series.

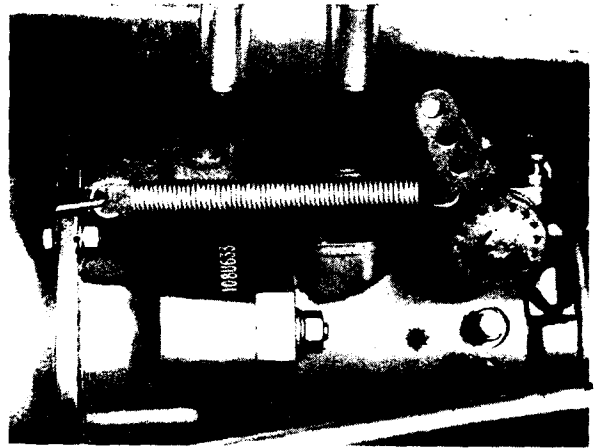
## Engine Number

The engine number is stamped vertically on the right hand side of the cylinder block on the rear of the tappet inspection cover face or on later engines, on the top edge of the facing on the cylinder block to which the fuel injection pump is secured as shown in the three accompanying diagrams. The number should be quoted when requesting information or ordering Parts.

Engine types can be identified by the engine number. With current engines, an engine number commencing with the figures 99 denotes a 4.99 engine, a number commencing with the figures 107 is a 4.107 engine and commencing with the figures 108 is a 4.108 engine.

With earlier engines, the 4.99 engine number commenced with the figure 7 and 4.107 engines commenced with the figures 71.

Throughout this manual where it is con- necessary to use abbreviations, they are in ac- ance with those recommended by the B. Standards Institute. A Glossary of terms for reference purposes is included at the back of this publication.



Engine Number Location on 4.108 Engines

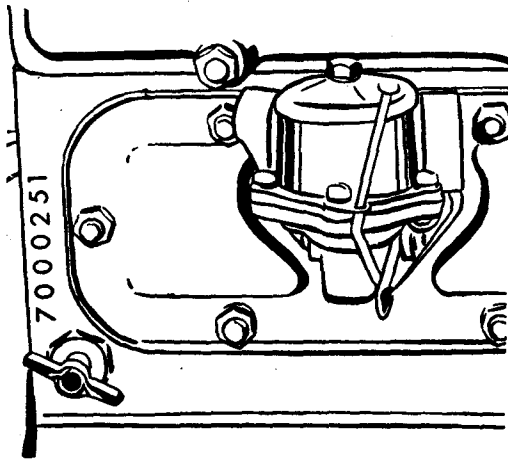


Diagram showing location of Engine No. on earlier 4.99 Engines.

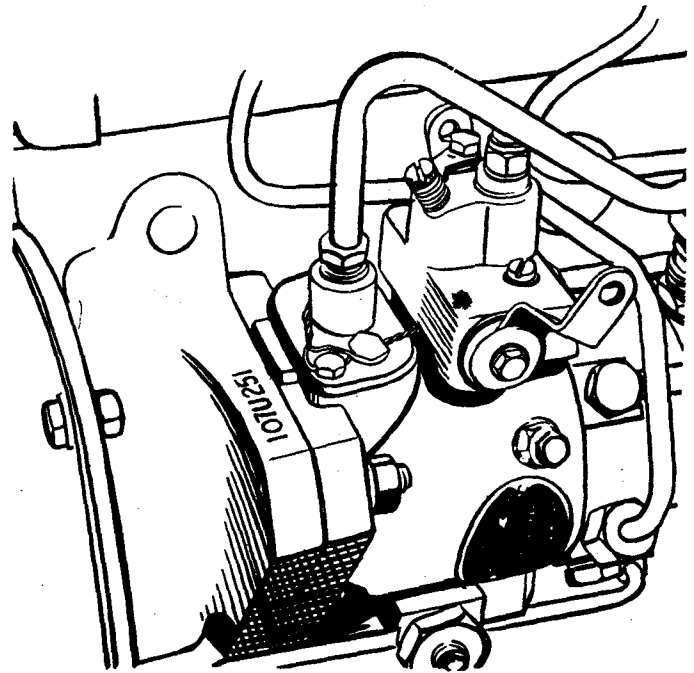


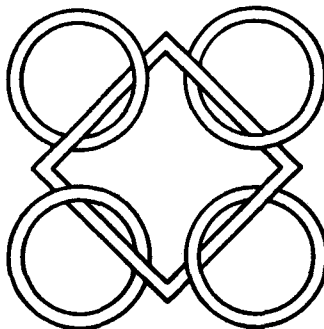
Diagram showing location of Engine No. on 4.107 and later 4.99 Engines.

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## **PERKINS PARTS**



## **for PERKINS PRODUCTS**

**To ensure you obtain the best results from your engine and to safeguard your own guarantee, fit only genuine Perkins Parts. These are readily obtainable throughout the world.**

# 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.

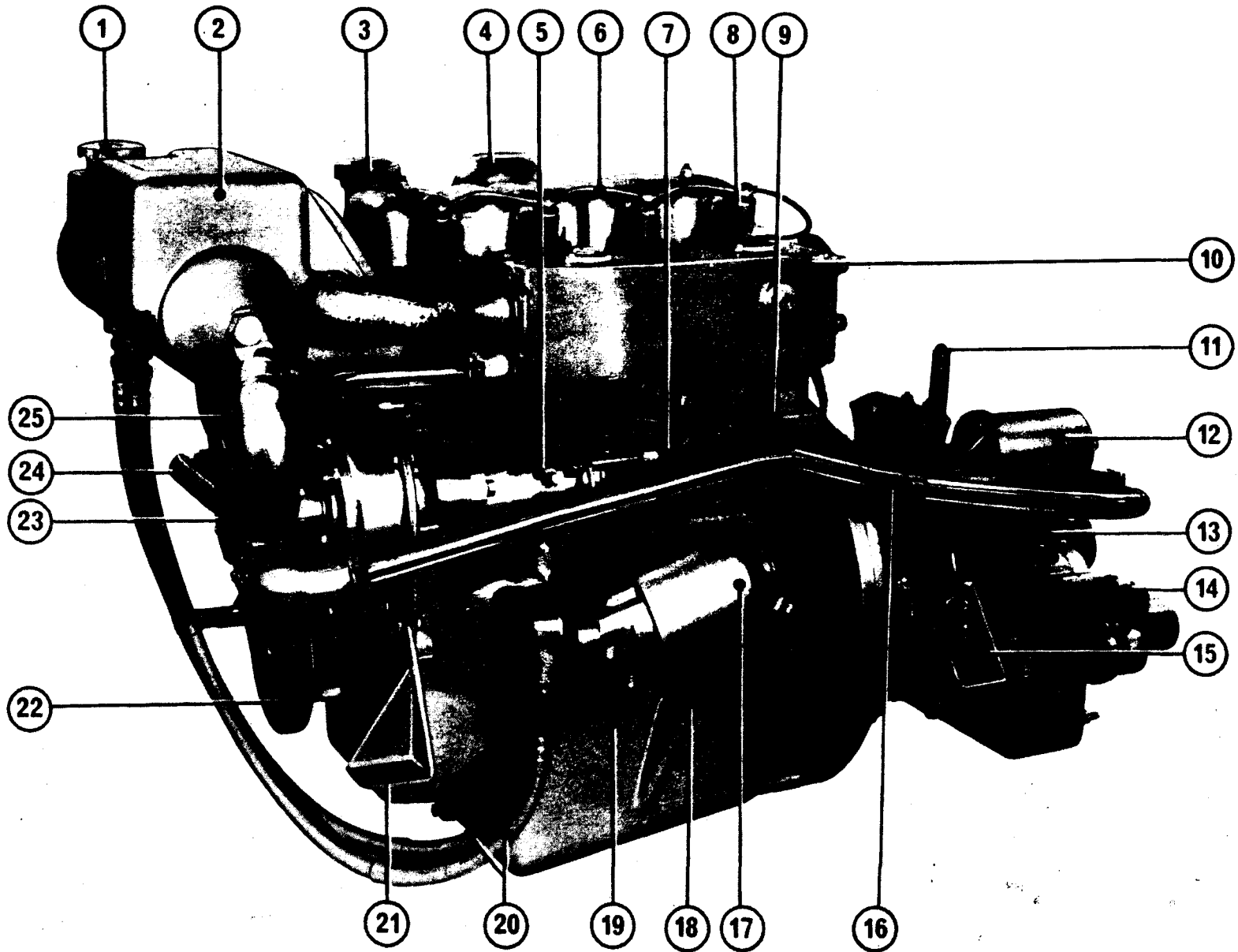
Similarly, it is understood that in reassembly and inspection, all parts are to be thoroughly cleaned, and where present, burrs and scale are to be removed.

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.

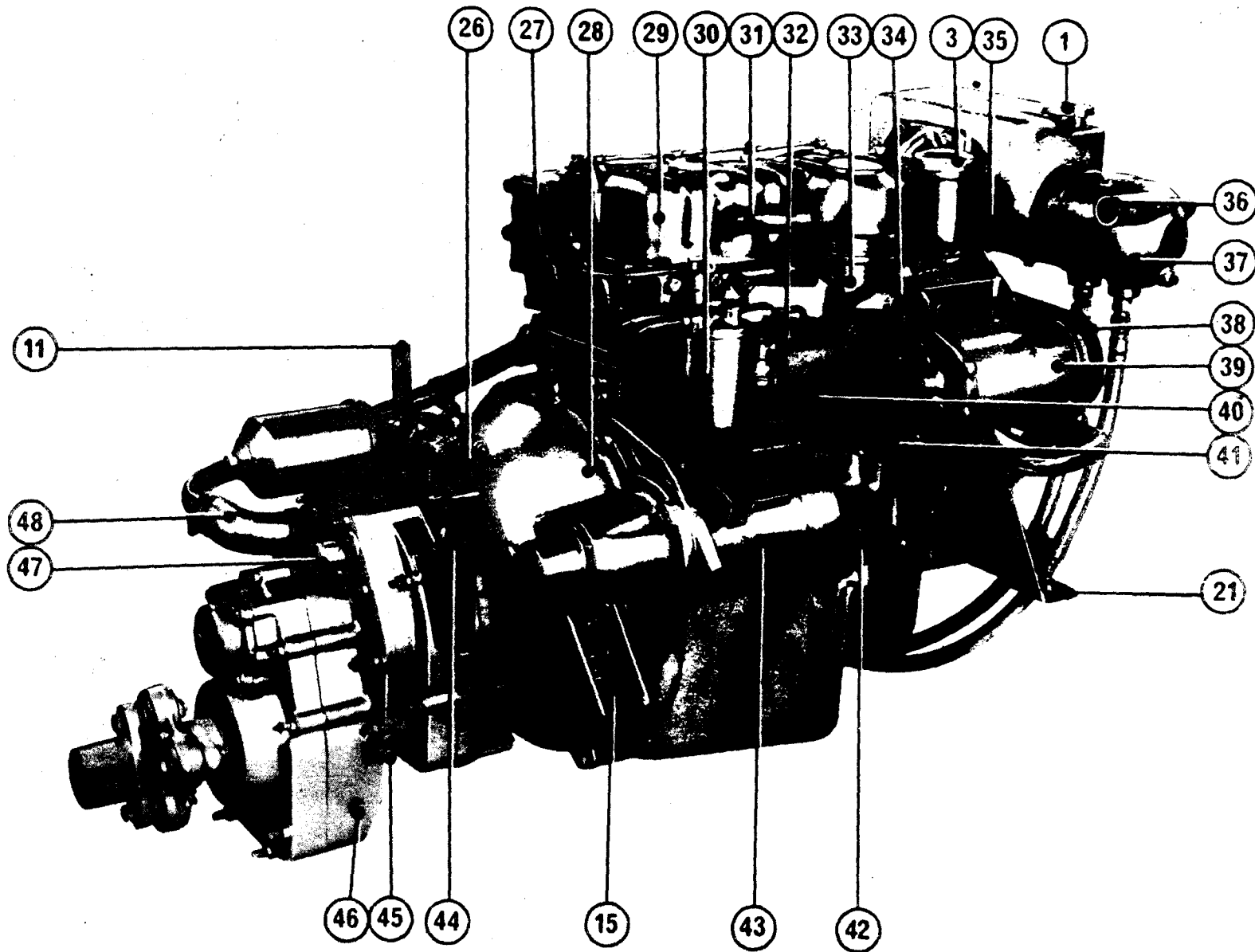
# Index to Engine Photographs

1. Fresh Water Filler Cap.
2. Header Tank.
3. Oil Filler.
4. Air Filter.
5. Fuel Injection Pump.
6. Atomiser Leak off Pipe.
7. Pressure pipes, Injection Pump to Atomisers.
8. Atomiser.
9. Fuel Pipes, Filter to Injection Pump.
10. Exhaust Manifold.
11. Ahead and Astern Engagement Lever.
- \*12. Gearbox Oil Filter.
13. Reduction Gearbox Oil Filler.
14. Output Flange.
15. Rear Engine Support.
16. Water Pipe, Gearbox to Sea Water Pump.
17. Lubricating Oil Filter.
18. Connection for Oil Sump Pump.\*  
\*Where a "Z" Drive Transom unit is fitted, the sump drain pump is connected to the dipstick tube.
19. Sump.
20. Oil Cooler Pipes.
21. Front Engine Support.
22. Crankshaft Pulley.
23. Sea Water Pump.
24. Water Pipe Exhaust Manifold to Cylinder Block.
25. Fresh Water Pump.
26. Gearbox Pressure Gauge Connection.
27. Rear Lifting Eye.
28. Flywheel Housing.
29. Cylinder Head Cover.
30. Fuel Filter.
31. Breather Pipe.
32. Fuel Lift Pump.
33. Induction Manifold.
34. Cold Starting Aid.
35. Front Lifting Eye.
36. Sea Water Outlet Connection.
37. Engine Oil Cooler.
38. Dynamo Driving Belt.
39. Dynamo.
40. Tappet Inspection Cover.
41. Tachometer Drive.
42. Dipstick.
43. Starter Motor.
44. Gearbox Dipstick.
45. Gearbox Water Drain Plug.
46. Reduction Gearbox Oil Level Plug.
47. Gearbox Water Inlet Connection.
48. Gearbox Water Outlet Connection.
49. Heat Exchanger.
50. Alternator.
51. Sump Drain Pump.





View of Fuel Pump side of Engine.



View of Camshaft side of Engine.