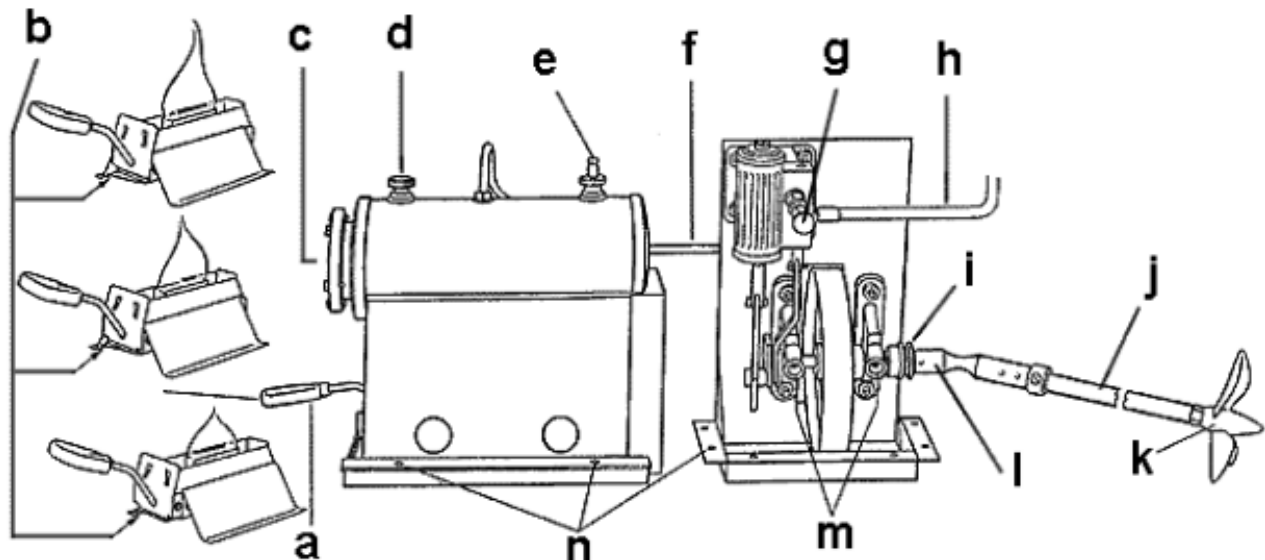


D 52



- | | | |
|------------------|-------------------------|-----------------------------------|
| a) Burner slide | f) Plastic tube | k) Propeller |
| b) Triangle mark | g) Oil cap | l) Coupling |
| c) Sight glass | h) Plastic exhaust tube | m) Lubricate |
| d) Filter cap | i) Grooved pulley | n) To be used for mounting screws |
| e) Safety valve | j) Propeller shaft tube | |

Important: Never operate the machine without safety valve! Only use Wileco steam engine oil. Only use Esbit fuel tablets.


Instructions for use Model D 52 Marine Engine


1. Remove filler cap or safety valve on boiler and insert funnel. Fill slowly with water, preferably preheated. The boiler should never be more than three quarters or less than one quarter full (between top and bottom end of water gauge).
2. Remove oil cap on cylinder and fill with a few drops of viscous oil. Rotate flywheel a few times while oiling. Replace cap. **Important:** Cylinder should be well lubricated at all times to prevent piston from jamming.
3. Lubricate all bearings and joints with light oil.
4. Heat boiler with preheated water if possible. If not use one ESBIT dry fuel tablet for heating boiler, for a period of ten minutes. Then add two additional tablets. In intermediate settings, the area of the exposed triangle mark on the adjustable burner slide corresponds to the heating effect obtained (see illustration).
Make sure that the fire is adequate at all times to ensure enough steam for top performance. When steam starts to develop, turn flywheel a few times by hand to allow condensation to escape from the tubing and cylinder. Engine will start to operate as soon as the condensed water is removed. The flywheel may be rotated in either direction.
Exhaust steam is led away by the plastic exhaust tube.
5. The tubing between the boiler and power unit must be made with the enclosed plastic tube in order to keep the connection flexible. The power unit may be inclined (wedge bottom) so that the axis of the flywheel and the shaft are in line to avoid unnecessary friction loss.
By turning the power unit at right angles, the engine may be used for steam boats with paddle wheels, to be powered by the grooved pulley.



Important reminders:

A. For safety reasons, children should only use the steam engine under adult supervision.

B.  Make sure that there is enough water in the boiler at all times. Do not heat without water otherwise irreparable boiler damage will be sustained. The boiler should never be filled less than one quarter full.

C.  **High temperatures:** The principles on which your steam engine operates mean that the burner tray, the boiler housing, the spring-loaded safety valve, the steam pipes etc. become very hot. Do not touch, in order to avoid the risk of burns!

D. Keep the engine properly lubricated.

E. The layer of soot on the underside of the boiler has to be removed from time to time.

F. After use engine must be cleaned each time. The cylinder must be oiled properly to prevent damage.

G. Propeller shaft and propeller shaft tube should be lubricated to ensure good running condition.

The engine will run for approximately fifteen minutes on one charge of two ESBIT fuel tablets.

Text & illustrations: Wilesco Wilhelm Schröder GmbH & Co., Germany