

## Marine Diesel Engine for Leisure Craft and Commercial Craft Applications



Naturally Aspirated

4 cylinder

Maximum Power: 86 HP (64 kW) @ 2400 RPM

The Perkins Sabre M92B engine is the successor to the very successful M92. It has been inspired by and led by the future requirements of our customers to meet the needs of the marine industry.

Built to the most demanding standards, the M92B engine meets all the requirements of both EC Stage 2 and USA EPA Tier 2 off-highway emissions legislation from 2004 and brings significant improvements over the M92 highly successful predecessor.

The M92B is a quiet 4.4 litre unit delivering improved performance and reduced operating costs in an efficient package ideal for a range of marine applications.

### **Class leading performance**

- The M92B provides an increase in torque capability over its highly successful predecessor. Improvements have also been made to the torque curve of the engine to give up to 12% more low speed torque with torque back up, increasing to 26%.

### **Cleaner and quieter**

- The M92B operates with smoke levels barely visible to the naked eye. Improvements of up to 3dBA have also been made to bare engine noise over its predecessor. Concentrating on reduced noise levels throughout the complete operating range of the engine from idle through to full load rated speed. This has been achieved through numerous individual product developments, including a new cylinder block design and developments to the front end gear train.

### **Quality by design**

- Product design and manufacturing process improvements have been implemented from the concept to enhance both engine reliability and durability. Perkins Sabre have also taken the opportunity to improve the 'design for assembly' through simplified sub-assemblies and improved joint and sealing technologies.

## Ease of installation

- The changeover for existing M90/M92 to EC Stage 2 and USA EPA Tier 2 product is made easy through the carryover of existing envelope size and mounting points therefore minimising installation issues in repowering projects.

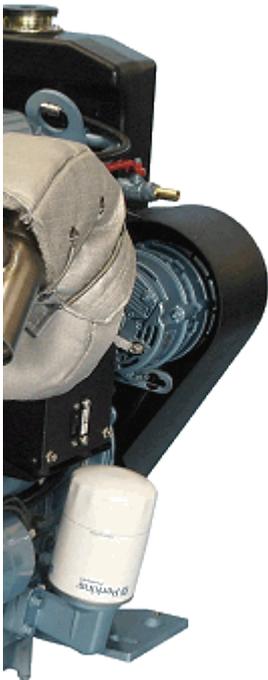
## Lower operating costs

- Service intervals are now set at 500 hours as standard and the warranty period has been extended to 2 years with 3 years on majors. In addition, fuel economy has improved by as much as 6%.

## Product support

- Total worldwide service continues to be provided through a network of 4000 distributors and dealers. This is enhanced by the introduction of TIPSS (The Integrated Parts and Service System) which represents a step change in diesel engine support. TIPSS enables customers to electronically specify and order parts as well as service electronic and mechanical engine with online guides and service tools.

## Specifications - M92B



**Engine Configuration:** 4 cylinder, in-line vertical, 4 stroke, water cooled

**Aspiration:** Naturally aspirated

**Bore / Stroke:** 105 mm (4.13 in) x 127 mm (5.00 in)

**Displacement:** 4.4 litre (269 cu.in.)

**Combustion system:** Direct injection

**Compression ratio:** 18.23:1

**Engine Rotation:** Anti-clockwise viewed from rear.

**Fuel Injection Equipment:** Delphi rotary with electric stop.

**Continuous Engine Operating Angles:** 20 ° front up

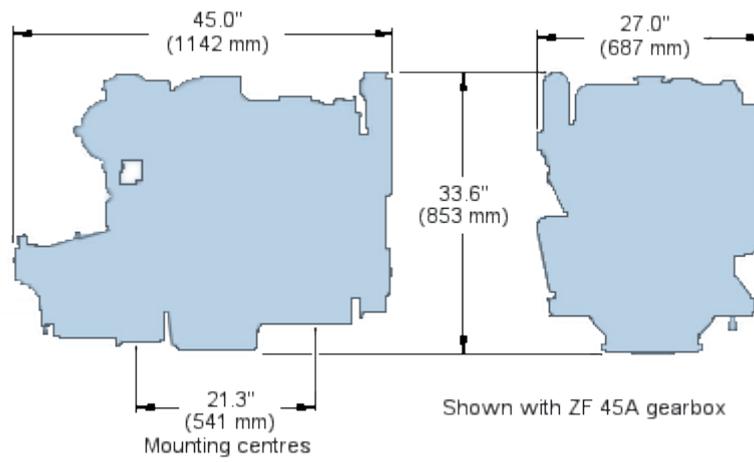
25 ° sideways (35° sideways intermittent)

**Power Take Off** Available from front end drive (for drive limitations refer to Sabre Engines Ltd).

**Weight (Wet):**

- 423 kg (933 lb) engine only
- 460 kg (1014 lb) with ZF 45A reverse gearbox
- 504 kg (1111 lb) with Newage PRM500D reverse gearbox

## Basic Dimensions



## Performance - M92B

