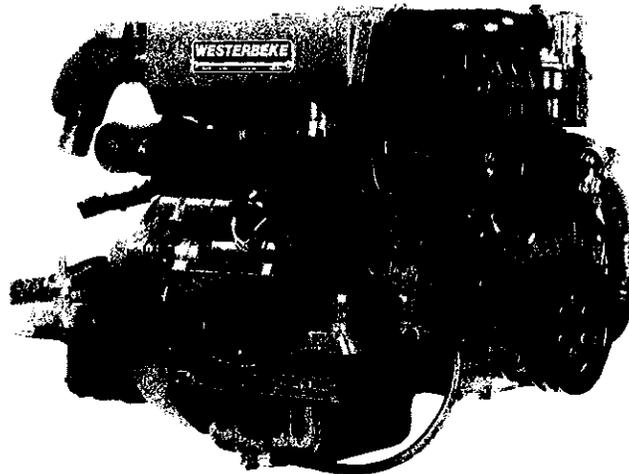


**NEW!**

# THE PERFECT POWER SOLUTION

For Auxiliary Sailboats in the 50' Class



## The New Westerbeke MODEL 82B FOUR MARINE DIESEL ENGINE

### IMPORTANT FEATURES ARE:

- FOUR OPTIONAL HIGH OUTPUT ALTERNATORS TO SELECT FROM. UP TO 190 AMPERES — ALL WITH DUAL BELT DRIVE.
- OPTIONAL PROVISION FOR A TOP MOUNTED, ROTARY, REFRIGERATION COMPRESSOR WITH DUAL BELT DRIVE.
- SELF BLEEDING FUEL SYSTEM.
- ONE SIDE SERVICING.
- OVERSIZED HEAT EXCHANGER.
- STANDARD TRANSMISSION WITH OIL COOLER.
- NATURALLY ASPIRATED FOR EXTRA LOW-END POWER, SIMPLICITY AND RELIABILITY.
- LOW PROFILE, NARROW AND LIGHT WEIGHT.
- CAPTIVE OVERSIZED VIBRATION MOUNTS.
- ELECTRIC ENGINE STOP.

**W** **WESTERBEKE**  
Marine Products

*Designed to meet the needs of the quality builder and the discerning yachtsman*



## NEW FOR 1991 — WESTERBEKE'S MODEL 82B FOUR DIESEL ENGINE

Having introduced the first small diesel engine for use in Auxiliary Sailboats in the late Fifties, Westerbeke's goal has been to design dependable products with the important standard and optional features needed by the customers. The new Model 82B Four is representative of that effort. Here's why:

### • OVERSIZED COMPONENTS •

The transmission, heat exchanger and engine vibration mounts are all oversized for high reliability.

### • SUPERIOR ENGINEERING •

The engine mounts are of the fail-safe type with the engine mounting bolt held captive so it cannot pull apart. Because of the heavier loads, a two belt system provides the power for the optional alternators and refrigeration compressor minimizing the chance of slippage and premature belt failure.

### • OUTSTANDING STANDARD FEATURES •

The 182 cubic inch engine is naturally aspirated which provides extra low end horsepower, makes it simpler and easier to install and adds to its reliability. The engine is more tolerant of exhaust back pressure and a smaller two inch exhaust hose can be used saving cost, space and the need for a large hole through the hull. Convenient domestic hot water heater connections are part of the cooling system and are provided on the engine. A self bleeding fuel system saves the owner the hassle of purging air from the engine fuel system when changing filters or when the engine is inadvertently run out of fuel. The engine oil cooler is built into the engine block for reliability and long life. Other features such as high coolant and low oil pressure alarms, reliable glow plug starting aide, electric engine shut-off, transmission oil cooler and much more are all included as standard. Most important is the "One Side Service" feature for ease in performing daily service checks and routine maintenance.

### • UNIQUE, FACTORY INSTALLED OPTIONS •

A choice of any one of four optional high output battery charging alternators are available in place of the standard 51 ampere alternator. A 90 ampere single output is one choice. The other three choices are a 135, a 165 or a 190 ampere alternator. These latter three alternators all feature dual outputs, capable of charging two banks of batteries without using a battery splitter. This means fewer connections and more efficient charging. Another important option is provisions for a rotary refrigeration compressor. Engine mounted, it adds less than three inches to the installed height. Factory engineered and factory installed, the owner and builder benefit from a complete and properly designed compressor drive.

### • INSTALLER FRIENDLY •

With the builder/installer in mind, Westerbeke has designed the mounting system to provide common bed widths and heights. The engine beds are in line with the propeller shaft allowing fore and aft engine positioning while still maintaining shaft alignment. The narrow profile (only 23.3 inches wide, above the beds) minimizes installation space. Exhaust and water connections for standard size hose are provided eliminating the need for additional fittings. Flexible fuel connections ending in standard pipe threads are also supplied. The smaller two inch exhaust hose permitted by the naturally aspirated engine is easy to install and saves space as well as cost. Important options are factory designed and installed and the engine comes as a complete package, ready to drop on the beds. The self bleeding fuel system saves time during testing and commissioning.

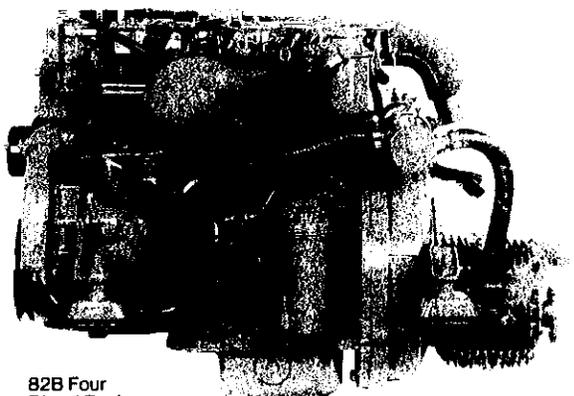
## Four cylinder, four cycle smoothness in a lightweight, compact engine

### Many features are standard equipment

The new Model 82B Four represents the latest engine design from Westerbeke. With a low and narrow profile it is lightweight and easily installed. The naturally aspirated design provides extra low-end power as well as simplicity and reliability. The standard transmission, fresh water cooling system and captive fail-safe mounts are all oversized for added dependability.

Engineered with a self bleeding fuel system, front mounted sea water pump, oil drain hose and one-side servicing, the product is easily maintained. A comprehensive list of factory designed and installed options allows you to custom tailor your engine to fit your individual requirements.

Parts and service are available worldwide. Westerbeke engines and generators can be serviced by over 600 authorized dealers strategically located in major navigable waterways in the United States and Canada, as well as in 22 countries overseas.

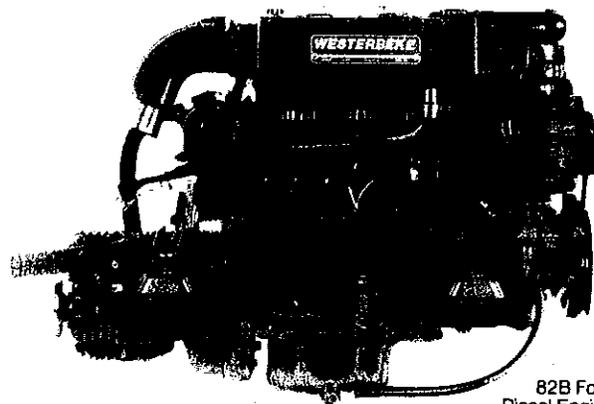


82B Four  
Diesel Engine

### Dimensions

Length	38.8" (985.8 mm)
Width	25.5" (647.7 mm)
Height	27.3" (694.0 mm)
Weight	678 lbs (307.5 kilos)

See other side for more dimension information



82B Four  
Diesel Engine

### A new generation of marine diesel engines

- Fresh water cooling
- Engine prewired to plug-in connector
- Self-bleeding fuel system
- 12 volt, 51 ampere alternator
- Domestic hot water connection
- Coolant recovery tank
- Throttle and shift control brackets
- Low oil pressure and high water temperature alarms
- Belt-driven sea water pump
- Standard marine transmission with 1.9:1 reduction
- Transmission oil cooler
- Glow plug cold starting aid
- Oversized four point adjustable flex mount
- Lube oil drain hose
- Fresh water lube oil cooler
- Flexible fuel supply and return connector
- Operator's Manual and Parts List
- Large list of factory engineered options

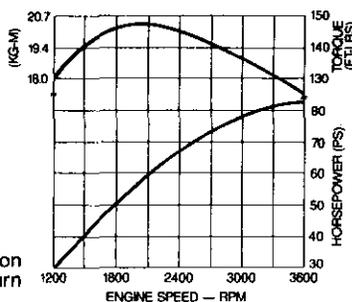
## Performance Data

Horsepower and rpm  
82 hp @ 3600 rpm

Maximum torque and rpm  
147 lbs (20.4 kg)/ft  
@ 2200 rpm

Typical fuel consumption is:  
1.6 US/GPH (6.1 liters/hr)  
at 2500 rpm with  
recommended propeller

Propeller recommendation:  
When underway and at full  
throttle, the propeller selection  
should allow the engine to turn  
3500 rpm minimum.



## Specifications

Number of cylinders	4 Cylinder vertical in-line
Cycles	4 Cycle
Displacement	162 cu. in. (2.977 liter)
Bore and stroke	3.74" x 4.13" (95 mm x 105 mm)
Compression ratio	21:1
Maximum angle of installation	Not to exceed 14°
Maximum angle of operation	Not to exceed 25°
Crankshaft, direction of rotation	Counterclockwise as viewed from flywheel end
Propeller shaft, direction of rotation	Right hand — std. trans.
Dry weight	678 lbs (307.5 kilos)
Combustion system	Swirl type
Aspiration	Naturally aspirated
Lubrication system	Forced lubrication by gear pump
Cooling system	13 quarts (12.3 liters)
Starting aid	12 volt sheathed type glow plug
Engine stop	Electric
Fuel injection pump	Bosch type
Governor	Centrifugal type
Injectors	Throttle type
Fuel filter	Full flow, spin-on element
Lube oil filter	Full flow, spin-on element
Lubricant capacity	6.5 quarts (6.2 liters)
Lube oil cooler	Fresh water cooled
Fuel transfer pump	Electrical
Fuel supply and return piping	1/4" ID (.635 mm) minimum 3/8" ID (.952 mm) maximum
Starting motor	12 volt, solenoid, actuated shift
Battery charging alternator	51 ampere (12 volts)
Cold cranking amps	250-300 amps
Electrical system	12 volts DC, negative ground

## Construction — Engine Components

Cylinder head	Cast iron
Cylinder block	Cast iron
Crankshaft	Forged crankshaft, five main bearings
Valves	Overhead valves, rotating type
Fuel system	Self bleeding
Intake system	Tuned intake silencer for maximum noise reduction
Cooling system	Fresh water-cooled with oversized tube and shell type heat exchanger
Exhaust manifold	Cast aluminum, fresh water-cooled with built-in expansion tank

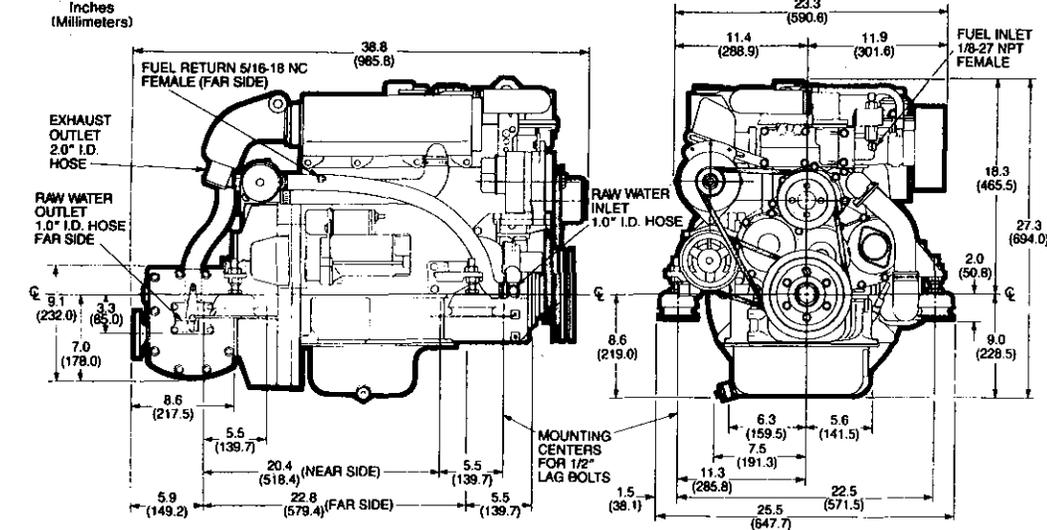
## Standard Equipment

Standard gear ratio	1.9:1
Mounting centers	22.5"
Flexible mounts	Oversized adjustable fail safe rubber type
Domestic hot water connection	
Coolant recovery tank	
Battery charging alternator	51 amp, 12 volt
Starting aid	
Control brackets	Throttle and shift
Prewired Engine	
Belt-driven sea water pump	
Lube oil cooler in fresh water system	
Lube oil drain hose	
Transmission oil cooler	
Oil fill	Top
Flexible fuel supply and return connection	
Operator's Manual and Parts List	

## Optional Equipment

Captain panel with alarm (tachometer with lights)	
Admiral panel with alarms (tachometer with gauges)	
Dual station senders	
Other gear ratios	Consult local Distributor
Hydraulic transmissions	Consult local Distributor
Remote expansion tank	
Provisions for refrigeration compressor	
Muffler and fittings	
"A" and "B" on board spare parts kits	
Alternators, 90 amp single output; 135, 165, 190 dual output	
Anti-siphon valve for overboard cooling discharge water	
Technical Manual	
Exhaust connection (water injected 70° elbow)	
Propeller shaft couplings (rigid/flexible) — available standard sizes	

## Dimensions



Authorized Dealer