



Crusader Crusader Crusader

**MARINE
ENGINES**



ALARM SYSTEM

Audio alarm systems for engine oil pressure, water temperature and transmission oil temperature are standard on all Crusader engines.

ADJUSTABLE ENGINE MOUNT



The industry's finest fully adjustable (5-way) engine mounts are rubber cushioned. They provide maximum dampening for smoothness in addition to simplifying engine alignment.

TRANSMISSION OIL COOLER

Ensures long, trouble-free performance under constant load requirements.

WATER COOLED EXHAUST SYSTEM



Header style exhaust manifolds are standard on all Crusader Marine engines. This design provides reduced exhaust back pressure resulting in improved engine performance as compared to log style manifolds used on other marine engines.

TWO-PUMP COOLING

All Crusader engines are equipped with two-pump cooling. The circulating pump provides high volume, high flow for water within the engine and is controlled by thermostatic pressure control metering. The sea water pump primes the system full and continuously makes up for water which is dumped overboard via the thermostat or pressure relief.

PRE-WIRED ENGINE HARNESS

All Crusader engines are equipped with a Pre-wired Ignition and Alarm Harness, providing an eight prong terminal block for simple connection to the instrument panel extension harness. Wires are color coded to industry standards. Harness extension and pre-wired sending units are also optionally available.

Crusader...the marine industry's finest line of inboard engines. Rugged. Reliable. Economical and efficient. Unique in design features...from the super-efficient Pressure Relief Engine Cooling Systems...to the finest six-way adjustable engine mounts in the business. Designed to meet every engine need, whatever the boat size and cruising requirement. So, when considering power, look to the line that sets marine industry standards. Crusader.



Crusader V-6

Powerful and economical...compact and lightweight. This perfect balance of power, economy and size...along with the performance and reliability that made Crusader the standard of the inboard industry...make the new V-6 the choice best suited for the economy-minded boatman. And its unique, dimensionally-perfect size gives you more efficiency of space. Crusader V-6. Truly the power of tomorrow...available today...only from Crusader.



Crusader 220

If you're looking for power plus economy...look no further. Our Crusader 220 represents the happy medium between normal operation and high torque performance on call thanks to a 4-barrel carb. Ideal for all new boats and repowering situations in small to medium craft, the 220's rugged construction was designed for smooth performance and minimum maintenance. Economy plus is Crusader 220.

Crusader Crusader Crusader

Specifications subject to change without prior notice.

V-6

Displacement	3.8 Liter (235 cu. in.)
Cylinders	V-6
RPM	4300
Compression	8.5:1
Bore	94.3 mm (3.71 in.)
Stroke	95.4 mm (3.76 in.)
Weight	230 lbs.



220

Displacement	5.0 Liter (305 cu. in.)
Cylinders	V-6
RPM	4300
Compression	8.4:1
Bore	94.3 mm (3.71 in.)
Stroke	95.2 mm (3.75 in.)
Weight	280 lbs.



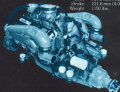
270

Displacement 5.7 Liter (344 cu. in.)
Cylinders V-8
RPM 4000
Compression 8.9:1
Bore 101.8 mm (4.01 in.)
Stroke 86.4 mm (3.40 in.)
Weight 850 lbs.



350

Displacement 7.4 Liter (454 cu. in.)
Cylinders V-8
RPM 4800
Compression 8.6:1
Bore 107.3 mm (4.22 in.)
Stroke 101.8 mm (4.01 in.)
Weight 1150 lbs.



**9.0 LITER
DIESEL**

Displacement 9.0 Liter (551.1 cu. in.)
Cylinders V-8
Compression 16.1:1
Bore 114.6 mm (4.51 in.)
Stroke 103.5 mm (4.07 in.)





Crusader 270

To skipper the finest mid-range inboard engine in the industry, you need only spec the Crusader 270. For power, reliability and dependability, the 270 is the hands-down favorite for intermediate size cruisers and houseboats. Its 4-barrel carburation provides a full power range... capable of economy or all-out performance... at command. Crusader 270. The Captain's choice.



Crusader 350

Top of the line for power and performance is the big bore Crusader 350. Its 4-barrel carb provides optimum torque on command... yet it operates efficiently and provides good performance on two barrels for normal cruising. Rugged construction (both inside and out) provides long, dependable service for big cruisers, houseboats and high performance craft. Crusader 350... the ultimate in power from Thermo Electron.



Crusader 9.0 LITER DIESEL

With quick response at low torque ranges and incredible fuel efficiency at cruising speeds, the 9.0 Liter promises to be the choice of the 80's. Add to that low maintenance and outstanding reliability, and you have a sound investment that will maintain value for years to come. Crusader 9.0 Liter Diesel. The power plant engineered for today.

All Crusader engines embody the latest basic engineering developments designed to produce a high level of performance and efficiency. They combine rugged construction with inherent smoothness for long, dependable service. These are the reasons the finest boats in the world are powered by Crusader. Reasons enough to select from the range of Crusader engines for your new boat specifications or for repowering.

Standard Equipment — All Models

Alarm System For Engine Oil, Transmission Oil, and Water Temperature — 5-Way Adjustable Rubber Engine Mounts — Full Flow Oil Filter — 12 Volt Electrical System — 50 AMP Alternator — Coast Guard Approved Dual Discharge Fuel Pump and Flame Arrestor — Replacement Element Fuel Filter — Throttle and Clutch Control Bracket — 14F Thermostat — Positive Crankcase Ventilation — Water Cooled Exhaust Elbow — Two-Pump-Cooling System — Pressure-Engine Harness — Chocolate Primer — Exhaust Flap — Engine Skid — Hydraulic Transmission and Transmission Oil Cooler — Neutral Safety Switch — Propeller Shaft Coupling — Starter and Relay — 50 AMP Circuit Breaker

Optional Equipment

Exhaust "T" Connector — Exhaust Crossover "T" Connector — Exhaust "S" Risers, 4" and 6" — Fresh Water Cooling — Instrumentation — Wire Harnesses — Remote Oil Filter — Reverse Manifolds for "V" Drive — Low Profile Intake Manifold (220 and 230 only) — Optional Transmission Notice Available

Crusader V-DRIVE



Our V-Drive design combines quiet operation with rugged, lightweight construction. Placement of the unit puts the engine in the stern, allowing more cockpit room. And optional gear ratios give you a reduction gear at no added cost. (Proper reduction ratios provide propeller efficiency for maximum economy.)

Basic Crusader	—1.25:1, 1.71:1 —490 Series, Shaft-Driven, 12"
Water	—Detuned, 12"
Water	—Detuned, 20"

Olley Carburetor
JUL 12 1984



The Engine Division of Thermo Electron Corporation, located in Sterling Heights, Michigan, is one of the most modern and complete marine engine facilities in the industry. Crusader engines are constructed to exacting specifications throughout the



assembly process. Predelivery includes thorough testing of each engine as a final quality control step.

SERVICE/SALES

Crusader engines are backed by factory-trained, experienced personnel and more than 200 dealer/distributors throughout the nation. They represent the finest service/sales team in the industry... a reputation we intend on maintaining and building upon.

**Thermo
Electron**
CORPORATION

Engine Division

7100 E. 15 Mile Road
Sterling Heights, Michigan 48077
(313) 264-1200

What Makes A Crusader So Special?

What makes Crusader marine engines so special? The same qualities that make them "Number 1 By Choice" for ease and enjoyment. From the advanced design quality of cooling and lubrication components, the 4 stroke of the engine, from the sophisticated fuel and air systems that make it efficient, adapting fully to the unique demands of the marine environment. They add to an engine engine designed for quality, dependability, and performance.



Cylinder Head & Valve Assembly

1. All gaskets and gaskets used fittings are used for leaks and needs for corrosion resistance.
2. Bronze steel head gaskets for water salt water corrosion.
3. Special valves, springs, stems and adjust parts to handle the corrosion leading in marine service.

Exhaust System

1. Cast iron alloy exhaust manifolds for salt water corrosion resistance.
2. Exhaust manifolds of bronze design, aluminum parts for reduced exhaust back pressure and improved engine performance.
3. Use of brass and stainless steel shaft and one piece for increased durability.
4. Modular design of exhaust outlets to accommodate boat hull exhaust systems.

Electrical System

1. Marine approved marine wires connected to the rig position for easy accessibility and corrosion resistance to salt water.
2. Marine approved aluminum wire (1) plug output wiring and proper linkage regulator as standard. (2) and optional.
3. Marine approved diode pack distributor with roller regulator wire and spark plug.
4. Right size quick-disconnect plug for easy electrical servicing.

Fuel System

1. Marine approved fuel pump with stainless steel fuel line.
2. Large capacity water-separating fuel filter mounted on engine.
3. Self-cleaning linkage carburetor jets for corrosion resistance.
4. Large capacity marine approved float chamber with water valve.

Cooling System

1. Revolutionary large capacity brass plate water pump for maximum circulation and easy maintenance at sea.
2. Heavy duty rubber hose water pump impeller.
3. Brass impeller used in engine circulating pump.
4. Stainless steel water pump shaft.
5. Replacement of rubber standard on all models.
6. Engine oil cooler standard on 800 and 1000 cubic models.
7. High water flow cooling available as an option to prevent engine overheating and reduce headroom from hull side exhaust.

Engine Suspension System

1. Single and dual shock height adjustments.
2. Complete stainless forged steel support eye.
3. Stainless floor plate suspension.
4. Stainless steel and Zynel components.



Crusader NUMBER 1 BY CHOICE

CRUSADER MARINE, INC.
1700 N. W. 56th AVE.
MIRAGE, FLORIDA 33151
305 252 5511

The Long, Strong Line.



502
CUBIC INCHES
DISPLACEMENT

The 502's long-stroke, 90-degree, air-cooled V8 engine, with optional fuel-injection, has been only one of the reasons why Ford trucks are the most popular pickup trucks in America. The 502's long-stroke, 90-degree, air-cooled V8 engine provides the most torque, the most power, and the most fun.



454
CUBIC INCHES
DISPLACEMENT

Members of the Ford's line, the big 454's torque and power exceed the power, torque, stability and performance requirements and standards of the big 4-cylinder pickup engines. Super on demand, for superior efficiency in use, fuel, or maintenance.



350
CUBIC INCHES
DISPLACEMENT

When it's made in a mid-size package, the 350's torque and power are exceptional. And, the 350's torque and power are only one of the reasons why a Ford pickup is the most popular pickup truck in America. ... Super on demand, for superior efficiency in use, fuel, or maintenance.



305
CUBIC INCHES
DISPLACEMENT

For better or for worse, nothing in performance, the 305's torque and power are only one of the reasons why a Ford pickup is the most popular pickup truck in America. ... Super on demand, for superior efficiency in use, fuel, or maintenance.



262
CUBIC INCHES
DISPLACEMENT

Big performance for small work, in a 262 engine that has low maintenance for fuel efficiency and reliability. Based on a Ford pickup, you'll get more than just an engine, you'll get the best of what Ford's has to offer.

OPTIONAL EQUIPMENT

Cylinders	8
Idle	500-550 RPM @ 1200
Stroke	11.0" (280 mm)
Displacement	4.7 liter (287 cu in)
Compression	10.5:1
Operating System	Carburetor
Engine System	Carburetor
Ignition	12V
Maximum Speed (MPH)	110
Top Gear (MPH @ 1000 RPM)	50
Weight (lbs) (incl. fuel tank)	450
Weight (lbs) (incl. fuel tank)	450
Weight (lbs) (incl. fuel tank)	450

OPTIONAL EQUIPMENT

Cylinders	8
Idle	500-550 RPM @ 1200
Stroke	11.0" (280 mm)
Displacement	7.4 liter (454 cu in)
Compression	10.5:1
Operating System	Carburetor
Engine System	Carburetor
Ignition	12V
Maximum Speed (MPH)	110
Top Gear (MPH @ 1000 RPM)	50
Weight (lbs) (incl. fuel tank)	450
Weight (lbs) (incl. fuel tank)	450
Weight (lbs) (incl. fuel tank)	450

OPTIONAL EQUIPMENT

Cylinders	8
Idle	500-550 RPM @ 1200
Stroke	11.0" (280 mm)
Displacement	5.8 liter (350 cu in)
Compression	10.5:1
Operating System	Carburetor
Engine System	Carburetor
Ignition	12V
Maximum Speed (MPH)	110
Top Gear (MPH @ 1000 RPM)	50
Weight (lbs) (incl. fuel tank)	450
Weight (lbs) (incl. fuel tank)	450
Weight (lbs) (incl. fuel tank)	450

OPTIONAL EQUIPMENT

Cylinders	8
Idle	500-550 RPM @ 1200
Stroke	11.0" (280 mm)
Displacement	5.0 liter (305 cu in)
Compression	10.5:1
Operating System	Carburetor
Engine System	Carburetor
Ignition	12V
Maximum Speed (MPH)	110
Top Gear (MPH @ 1000 RPM)	50
Weight (lbs) (incl. fuel tank)	450
Weight (lbs) (incl. fuel tank)	450
Weight (lbs) (incl. fuel tank)	450

OPTIONAL EQUIPMENT

Cylinders	8
Idle	500-550 RPM @ 1200
Stroke	11.0" (280 mm)
Displacement	4.3 liter (262 cu in)
Compression	10.5:1
Operating System	Carburetor
Engine System	Carburetor
Ignition	12V
Maximum Speed (MPH)	110
Top Gear (MPH @ 1000 RPM)	50
Weight (lbs) (incl. fuel tank)	450
Weight (lbs) (incl. fuel tank)	450
Weight (lbs) (incl. fuel tank)	450