

**Series 400  
6076AFM30 Marine  
Diesel Engines  
Serial Number (500000— )**

**Deere Power Systems Group  
OMRG23321 Issue E4**

LITHO IN U.S.A.  
ENGLISH

# To The Operator

THIS OPERATION AND SERVICE MANUAL (OMRG23321) outlines the detailed service procedures and recommended service intervals for 6076AFM30 Marine Diesel Engines, Serial Number (500000— ) to assure years of dependable and efficient performance. Each section is clearly identified so you can easily find the information you need—whether it is operation, lubrication, troubleshooting, or service.

SERVICE AND REPAIR/REPLACEMENT PROCEDURES outlined in this manual involve only the marine related components. For major internal engine repairs and externally accessible standard engine components (water pump, crankshaft oil seals, etc.), refer to CTM42—6076 Engine Component Technical Manual. Have your authorized servicing dealer or marine engine distributor perform necessary repairs.

READ THIS MANUAL CAREFULLY to learn how to operate and service your engine correctly. Failure to do so could result in personal injury or equipment damage.

THIS MANUAL SHOULD BE CONSIDERED a permanent part of your boat and should remain with the boat when you sell it.

MEASUREMENTS in this manual are given in both metric and customary U.S. unit equivalents. Use only correct replacement parts and specified grade (or higher grade) of fasteners. Metric and inch fasteners may require a specific metric or inch wrench.

RIGHT-HAND AND LEFT-HAND sides are determined by facing the flywheel end (rear) of the engine facing toward the front (water pump end) of engine.

WRITE PRODUCT IDENTIFICATION (SERIAL) NUMBERS and engine option codes in the spaces provided in the Specifications Section of this manual. Accurately record all the numbers to help in tracing the boat should it be stolen. Your dealer also needs these numbers when parts are ordered for servicing. Since this manual is to remain on-board the boat at all times, also file the identification numbers in a secure place away from the boat.

SETTING FUEL DELIVERY beyond published factory specifications or otherwise overpowering will result in loss of warranty protection for this engine.

CERTAIN ENGINE ACCESSORIES such as air cleaner and instruments are optional equipment on John Deere Engines. These accessories may be provided by the equipment manufacturer instead of John Deere. This operator's manual applies only to the engine and those options provided through the John Deere parts distribution network.

## • Engine Identification

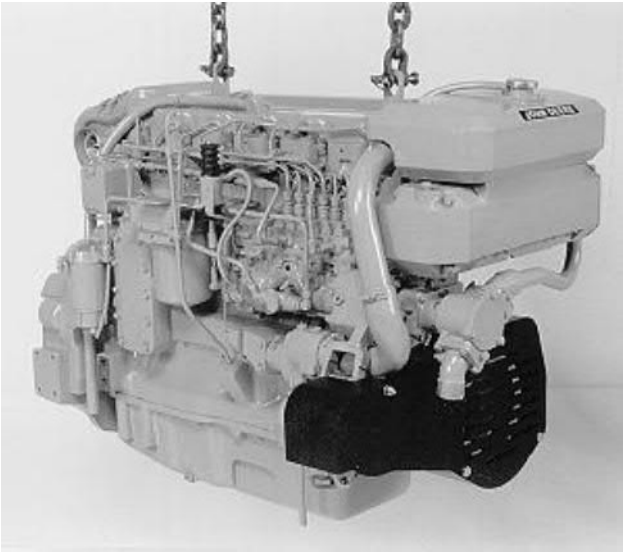
MARINE ENGINES COVERED in this manual may be identified by the model number designation 6076AFM30 which are a portion of the serial number:

- The first digit shown indicates the number of cylinders the engine has.
- The second, third, and fourth digits indicate displacement in liters.
- The fifth digit (letter) indicates engine aspiration:  
A—Turbocharged and Aftercooled
- The following digits (letters and digits) indicate the application:  
FM30—Marine

For example: 6076AFM30 designates a 6-cylinder marine engine that has 7.6 L (466 cu. in.) displacement and the engine is turbocharged and aftercooled.

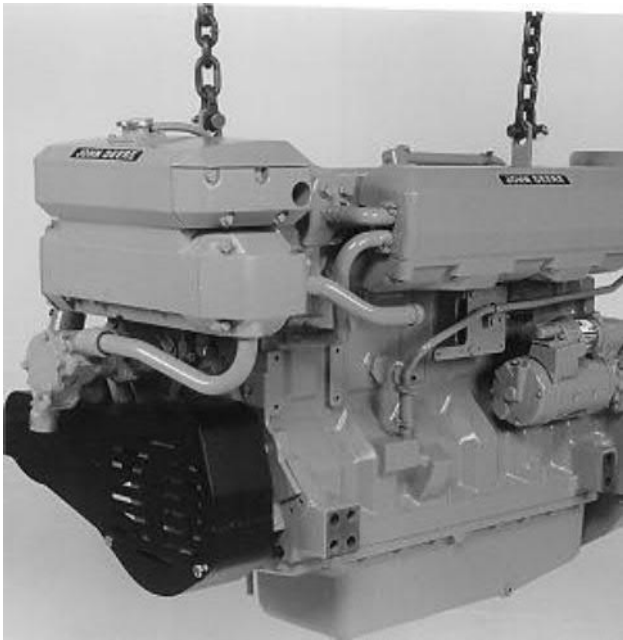
# Identification Views

## 6076AFM30 ENGINE—HEAT EXCHANGER VERSION



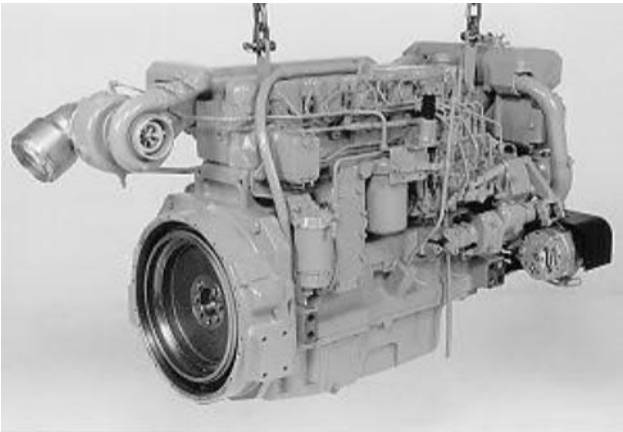
RG7196 -UN-13MAY94

*Right Front 3/4 View*



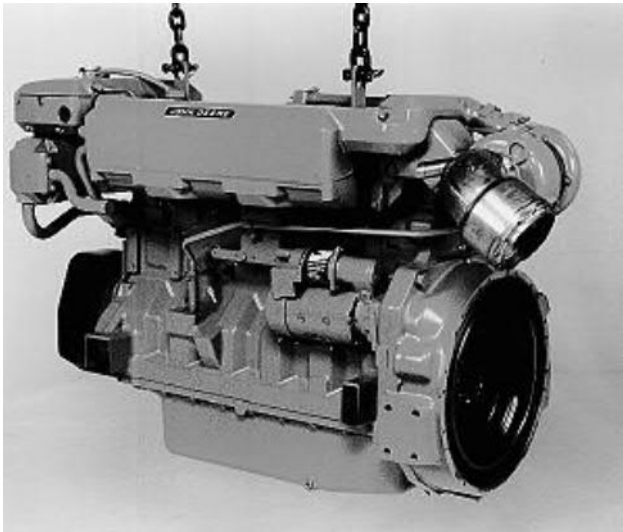
RG7198 -UN-10MAY94

*Left Front 3/4 View*



RG7197 -UN-13MAY94

*Right Rear 3/4 View*

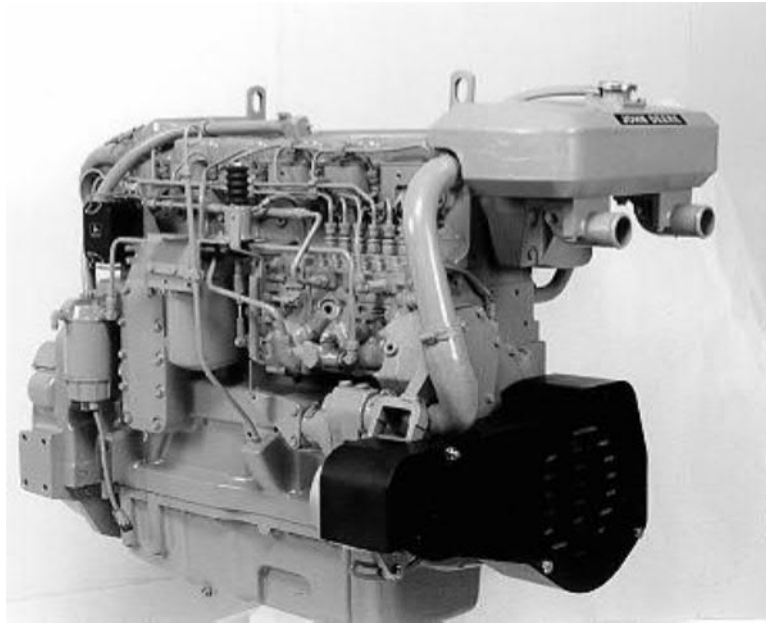


RG7199 -UN-13MAY94

*Left Rear 3/4 View*

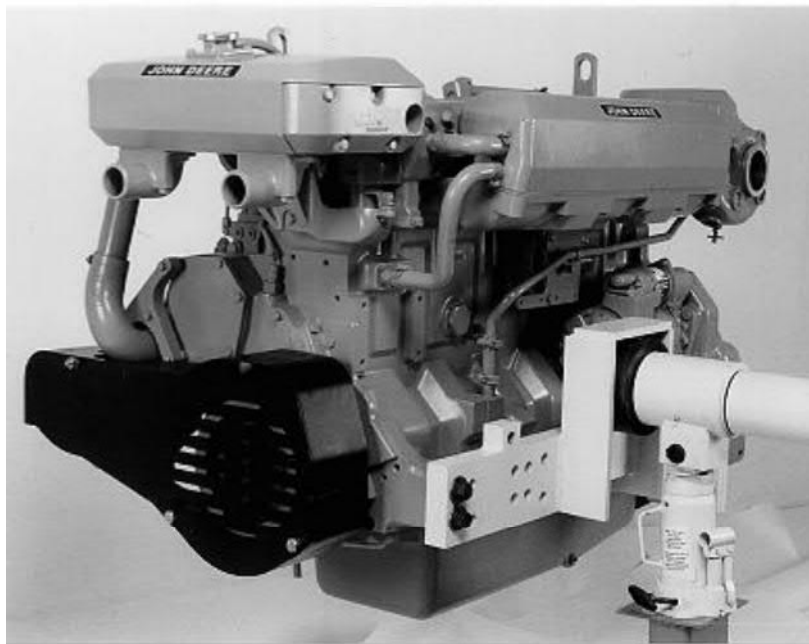
Identification Views

**6076AFM30 ENGINE—KEEL COOLED VERSION**



RG7200  
-UN-10MAY94

*Right Front 3/4 View*



RG7201  
-UN-10MAY94

*Left Front 3/4 View*

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*All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.*

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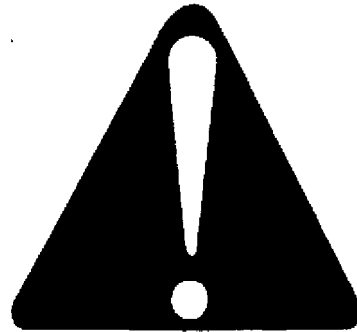
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# Safety

## RECOGNIZE SAFETY INFORMATION

This is the safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.



DX,ALERT -19-03MAR93

T81389 -UN-07DEC68

## UNDERSTAND SIGNAL WORDS

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards.

DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.



DX,SIGNAL -19-03MAR93

TS187 -19-30SEP88

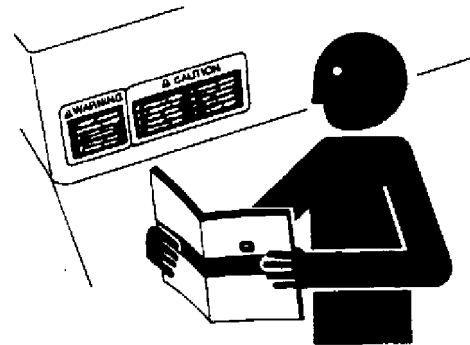
## FOLLOW SAFETY INSTRUCTIONS

Carefully read all safety messages in this manual and on your vessel safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your John Deere dealer or authorized engine distributor.

Learn how to operate the vessel and how to use the controls properly. Do not let anyone operate without instruction.

Keep your vessel in proper working condition. Unauthorized modifications to the engine may impair the function, safety, and engine life.

If you do not understand any part of this manual and need assistance, contact your John Deere dealer or authorized engine distributor.



RG20144,2 -19-03FEB92

TS201 -UN-23AUG88



## PREVENT STARTING IN GEAR

Avoid possible injury from starting in gear.

Do not start engine by shorting across starter terminal. Engine can start with marine gear engaged if normal circuitry is bypassed.

Start engine only from operator's control station, with PTO or marine gear disengaged (neutral).



RG20144.8 -19-29JAN92

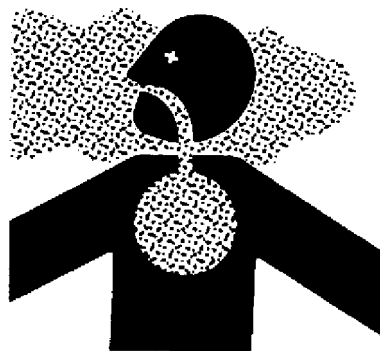
RG5419 -UN-28FEB89

## WORK IN VENTILATED AREA

Engine exhaust fumes can cause sickness or death. When operating engine in an enclosed engine room, be sure ventilation system is operating properly.

If engine room ventilation system is not operating properly, open the access door or engine room hatches to get outside air into the enclosed area.

Keep all engine exhaust connections securely tightened. Repair any leaky joints in the exhaust system immediately.



RG20144.6 -19-29JAN92

TSS20 -UN-23AUG88

## HANDLE FUEL SAFELY—AVOID FIRES

Handle fuel with care: it is highly flammable. Do not refuel the machine while smoking or when near open flame or sparks.

Always stop engine before refueling machine. Fill fuel tank outdoors.

Prevent fires by keeping machine clean of accumulated trash, grease, and debris. Always clean up spilled fuel.



DX,FIRE1 -19-03MAR93

TSS202 -UN-23AUG88





## HANDLE STARTING FLUID SAFELY

Starting fluid is highly flammable.

Keep all sparks and flame away when using it. Keep starting fluid away from batteries and cables.

To prevent accidental discharge when storing the pressurized can, keep the cap on the container, and store in a cool, protected location.

Do not incinerate or puncture a starting fluid container.



DX,FIRE3 -19-16APR92

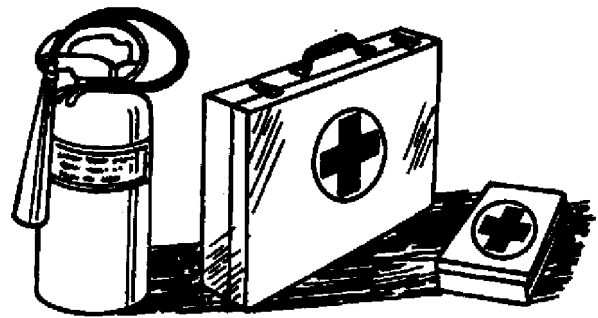
TSS356 -UN-18MAR92

## PREPARE FOR EMERGENCIES

Be prepared if a fire starts.

Always keep a first aid kit and fire extinguisher on hand and know how to use them. Inspect and service fire extinguisher as recommended by manufacturer.

Familiarize everyone aboard your vessel with emergency contact procedures. Keep a laminated copy of emergency contact information near your communication radio or telephone, if equipped.



RG20144.4 -19-12NOV91

TSS291 -UN-23AUG88

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