

# **CLEANLINESS and CARE of OUTBOARD MOTOR**

A marine power product is a combination of many machined, honed, polished and lapped surfaces with tolerances that are measured in the ten thousands of an inch. When any product component is serviced, care and cleanliness are important. Throughout this manual, it should be understood that proper cleaning, and protection of machined surfaces and friction areas is a part of the repair procedure. This is considered standard shop practice even if not specifically stated.

Whenever components are removed for service, they should be retained in order. At the time of installation, they should be installed in the same locations and with the same mating surfaces as when removed.

Before raising or removing an outboard engine from a boat, the following precautions should be adhered to:

- (1) Check that flywheel is secured to end of crankshaft with a locknut and lifting eye is threaded into flywheel a minimum of 5 turns.
- (2) Connect a hoist of suitable strength to the lifting eye.

In addition, personnel should not work on or under an engine which is suspended. Engines should be attached to work stands, or lowered to ground as soon as possible.

We reserve the right to make changes to this manual without prior notification.

Refer to dealer service bulletins for other pertinent information concerning the products described in this manual.

# **SERVICE MANUAL OUTLINE**

## **SECTION 1 - General Information and Specifications**

### **SECTION 2 - Electrical and Ignition**

PART A - Ignition System

PART B - Battery, Charging System and Starting System

PART C - Timing, Synchronizing and Adjusting

PART D - Wiring

### **SECTION 3 - Fuel System and Carburetion**

### **SECTION 4 - Powerhead**

### **SECTION 5 - Lower Unit**

PART A - Mid Section

PART B - Gear Housing

PART C - Manual Tilt System

### **SECTION 6 - Power Trim**

PART A - Externally Mounted Trim Cylinders

PART B - Integral 3 Ram System

PART C - Integral 1 Ram System

### **SECTION 7 - Rewind Starter/Controls**

PART A - Ride Guide Steering - Throttle Shaft/  
Shift Cables & Electrical Connections

PART B - Tiller Handle & Co-Pilot

PART C - Rewind Starter

### **SECTION 8 - Auto Blend**

PART A - Design 1

PART B - Design 2