TABLE OF CONTENTS

INTRODUCTION 1-1 CLEANING, WAXING, & POLISHING 1-1 CONTROLLING CORROSION 1-2 PROPELLERS 1-2 LOADING 1-7 PROPELLERS 1-2 LOADING 1-7 PROSEPOWER 1-8 FLOTATION 1-8 ANCHORS 1-10 BOATING ACCIDENT REPORTS 1-10 INTRODUCTION 2-1 TUNING 2-1 INTRODUCTION 2-1 TUNE-UP SEQUENCE 2-1 COMPRESSION CHECK 2-3 SPARK PLUG INSPECTION 2-3 IMINING AND SYNCHRONIZING 2-4 ELECTRICAL POWER SUPPLY 2-5 CARBURETOR ADJUSTMENT 2-6 FUEL PUMPS 2-7 CARBURETOR ADJUSTMENT 2-6 FUEL PUMPS 2-7 CARBURETOR RESTRICE 2-9 ROPELLER 3-3 RINTRODUCTION 3-1 RINTRODUCTION 3-1 RINTRODUCTION 3-1 ROPE 3	1	SAFETY		4 FUEL	
CONTROLLING CORROSION 1-2 INFORMATION 4-1 PROPELLERS 1-2 FUEL SYSTEM 4-3 Loading 1-7 Leaded Gasoline & Gasohol 4-3 Removing Fuel From System 4-4 FLOTATION 1-8 FLOTATION 1-8 Removing Fuel From System 4-4 FLOTATION 1-8 BOATING ACCIDENT REPORTS 1-10 Fuel Pump Test 4-5 Fuel Line Test 4-7 Rough Engine Idle 4-7 Excessive Fuel Consumption 4-8 Fuel Pump Test 4-7 Rough Engine Idle 4-7 Excessive Fuel Consumption 4-8 Fuel Pump Test 4-7 Rough Engine Idle 4-7 Excessive Fuel Consumption 4-8 Fuel Pump Surge 4-8 Removal & Disassembling 4-10 IGNITION SYSTEM 2-3 Removal & Disassembling 4-10 IGNITION SYSTEM 2-3 Removal & Disassembling 4-10 INTERNAL PUMP SURPET 2-7 CARBURETOR ADJUSTMENT 2-6 Fuel L pump S 2-7 CARBURETOR ADJUSTMENT 2-6 Fuel L pump S 2-7 CARBURETOR BUSING 4-19 INTERNAL WIRING HARNESS 2-8 WATER PUMP CHECK 2-9 Assembling & Inspecting 4-23 INTERNAL WIRING HARNESS 2-8 LOWER UNIT 2-10 BOAT TESTING 2-10 CARBURETOR "C" 3 MAINTENANCE CARBURETOR "C" BUBRICATION - COMPLETE UNIT 3-3 Removal & Disassembling 4-27 Cleaning & Inspecting 4-37 Cleaning & Inspecting 4-37 PRE-SEASON PREPARATION 3-3 FIBERGLASS HULLS 3-6 BUBWERGED ENGINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-7 POPELLER SERVICE 3-8 Removal & Disassembling 4-39 Cleaning & Installation 4-39 Assembling & Installation 4-47 PAGENTAL PUMP CHECK 3-7 CARBURETOR "C" PROPELLER SERVICE 3-8 Removal & Disassembling 4-35 Cleaning & Installation 4-39 Assembling & Installation 4-39 Assembling & Installation 4-47 PAGENTAL PUMP CHECK 3-7 CARBURETOR "C" PROPELLER SERVICE 3-8 Removal & Disassembling & Installation 4-47 PAGENTAL PUMP CHECK 3-7 CARBURETOR "C" PROPELLER SERVICE 3-8 Removal & Disassembling & Installation 4-47 PAGENTAL PUMP CHECK 3-7 CARBURETOR "C" PROPELLER SERVICE 3-8 Removal & Disassembling & Installation 4-47 PAGENTAL PUMP CHEC					4-1
PROPELLERS					
LOADING					
HORSEPOWER					
FLOTATION ANCHORS ANCHORS BOATING ACCIDENT REPORTS 1-10 BOATING BOATING ACCIDENT REPORTS 1-10 BOATING BOATING ACCIDENT REPORTS 1-10 BOATING BOATING A-1-7 BOATING BOATING BEIGH BOATING A-1-7 BOATING BOAT			_		
ANCHORS 1-10 "Sour" Fuel 4-5 BOATING ACCIDENT REPORTS 1-10 Fuel Pump Test 4-5 4-5 Fuel Line Test 4-7 Rough Engine Idle 4-7 Excessive Fuel Consumption 4-8 Engine Surge 4-8 Fuel Line Test 4-7 Rough Engine Idle 4-7 Excessive Fuel Consumption 4-8 Engine Surge 4-8 Fuel Pump Test 4-5 Fuel Line Test 4-7 Rough Engine Idle 4-7 Excessive Fuel Consumption 4-8 Engine Surge 4-8 Fuel Pump Test 4-5 Fuel Line Test 4-7 Rough Engine Idle 4-7 Excessive Fuel Consumption 4-8 Excessive Fuel Consumption					4_4
BOATING ACCIDENT REPORTS 1-10 Puel Pump Test 4-5 Fuel Line Test 4-7 Rough Engine Idle 4-7 Excessive Fuel Consumption 4-8 Engine Surge 4-8 INTRODUCTION 2-1 COMPRESSION CHECK 2-3 SPARK PLUG INSPECTION 2-3 IGNITION SYSTEM 2-3 Cleaning & Inspecting 4-10 IGNITION SYNCHRONIZING 2-4 ELECTRICAL POWER SUPPLY 2-5 CARBURETOR ADJUSTMENT 2-6 FUEL PUMPS 2-7 CRANKING MOTOR TEST 2-8 WATER PUMP CHECK 2-9 PROPELLER 2-9 LOWER UNIT 2-10 BOAT TESTING 2-10 SMAINTENANCE 2-10 INTRODUCTION 3-1 OUTBOARD SERIAL NUMBERS 3-2 LUBRICATION - COMPLETE UNIT 3-3 PRE-SEASON PREPARATION 3-3 PRE-SEASON PREPARATION 3-3 PRE-SEASON PREPARATION 3-3 FIBERGLASS HULLS 3-6 SUBMERGED ENGINE SERVICE 3-7 PROPELLER SERVICE 3-8 SUBMERGED ENGINE SERVICE 3-7 PROPELLER SERVICE 3-8 INSIDE THE BOAT 3-9 Cleaning & Inspecting 4-35 Cleaning & Inspecting 4-37 PRE-SEASON PREPARATION 3-3 FIBERGLASS HULLS 3-6 SUBMERGED ENGINE SERVICE 3-7 PROPELLER SERVICE 3-8 SUBMERGED ENGINE SERVICE 3-8 INSIDE THE BOAT 3-9 Cleaning & Installation 4-47 CARBURETOR "D" FUEL PUMP Test 4-8 Fuel Line Test 4-7 Excessive Fuel Consumption 4-8 Engine Surge 4-8 CARBURETOR IDENTIFICATION 4-9 Excessive Fuel Consumption 4-8 FEACHS SHULLS 3-6 SUBMERGED ENGINE SERVICE 3-7 PROPELLER SERVICE 3-8 REMOVAL & DISASSEMBLING 4-43 INSIDE THE BOAT 3-9 Cleaning & Installation 4-47 CARBURETOR "D" CARBURET					
Fuel Line Test					
Rough Engine Idle		BOATING ACCIDENT REPORTS	1-10	*	
2 TUNING Excessive Fuel Consumption 4-8 Engine Surge 4-8					
INTRODUCTION 2-1 INTRODUCTION 2-1 TUNE-UP SEQUENCE 2-1 COMPRESSION CHECK 2-3 SPARK PLUG INSPECTION 2-3 IGNITION SYSTEM 2-3 IGNITION SYSTEM 2-3 IMMING AND SYNCHRONIZING 2-4 FUEL PUMPS 2-7 CARBURETOR "B" CARBURETOR WIRING HARNESS 2-8 WATER PUMP CHECK 2-9 PROPELLER 2-9 LOWER UNIT 2-10 BOAT TESTING 2-10 CARBURETOR "C" Removal & Disassembling 4-20 Cleaning & Inspecting 4-23 Adjustments 4-25 LOWER UNIT 2-10 CARBURETOR "C" Removal & Disassembling 4-27 Cleaning & Inspecting 4-30 Assembling & Inspecting 4-30 Assembling & Inspecting 4-30 Assembling & Inspecting 4-30 Assembling & Inspecting 4-36 Cleaning & Inspecting 4-37 Cleaning & Inspecting 4-37 Cleaning & Inspecting 4-37 Assembling & Installation 4-31 Cleaning & Inspecting 4-37 Cleaning & Inspecting 4-37 PRE-SEASON PREPARATION 3-3 PRE-SEASON PREPARATION 3-3 PIBERGLASS HULLS 3-6 SUBMERGED ENGINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-8 INSIDE THE BOAT 3-9 Cleaning & Inspecting 4-43 CARBURETOR "C" CARBURETOR "C" Removal & Disassembling 4-35 Cleaning & Inspecting 4-37 Assembling & Inspecting 4-37 Assembling & Inspecting 4-37 Cleaning & Inspecting 4-37 Cleaning & Inspecting 4-37 Assembling & Inspecting 4-37 Cleaning & Inspecting 4-43 Cleaning	7	TINING			
INTRODUCTION TUNE-UP SEQUENCE COMPRESSION CHECK SPARK PLUG INSPECTION IGNITION SYSTEM IGNITION SYSTEM 1 IGNITION SYSTEM 2 IGNITIO	Z.	TUNING			
TUNE-UP SEQUENCE COMPRESSION CHECK 2-3 SPARK PLUG INSPECTION 2-3 IGNITION SYSTEM 2-3 Cleaning & Inspecting 4-10 TIMING AND SYNCHRONIZING 2-4 TIMING AND SYNCHRONIZING 2-4 TIMING AND SYNCHRONIZING 2-4 CARBURETOR ADJUSTMENT ELECTRICAL POWER SUPPLY 2-5 CARBURETOR ADJUSTMENT CARBURETOR ADJUSTMENT CRANKING MOTOR TEST 2-8 INTERNAL WIRING HARNESS 2-8 WATER PUMP CHECK 2-9 ASSEMBLING & Inspecting 4-20 INTERNAL WIRING HARNESS 2-8 WATER PUMP CHECK 2-9 ASSEMBLING & Installation BOAT TESTING 2-10 BOAT TESTING 2-10 BOAT TESTING 2-10 INTRODUCTION 3-1 OUTBOARD SERIAL NUMBERS 3-2 LUBRICATION - COMPLETE UNIT CUTBOARD SERIAL NUMBERS 3-2 LUBRICATION - COMPLETE UNIT EMERGENCY TETHER 3-3 PRE-SEASON PREPARATION 3-3 PRE-SEASON PREPARATION 3-3 BELOW WATERLINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-7 CARBURETOR "D" Removal & Disassembling 4-37 Removal & Disassembling 4-37 Assembling & Installation 4-39 FIBERGLASS HULLS 3-6 Adjustments 4-49 CARBURETOR "D" CA		INTRODUCTION	2.1	CADRIDETOD IDENTIFICATION	
COMPRESSION CHECK SPARK PLUG INSPECTION 1 GINITION SYSTEM CARBURETOR "A" SPARK PLUG INSPECTION 2-3 IGNITION SYSTEM TIMING AND SYNCHRONIZING 2-4 ELECTRICAL POWER SUPPLY CARBURETOR ADJUSTMENT ELECTRICAL POWER SUPPLY CARBURETOR ADJUSTMENT CRANKING MOTOR TEST CARBURETOR "B" CARBURETOR "B" CARBURETOR "B" CARBURETOR "C" Removal & Disassembling & 1-20 Cleaning & Inspecting CLEANING & Inspect				CARBORETOR IDENTIFICATION	4-7
SPARK PLUG INSPECTION 2-3 Removal & Disassembling 4-10 IGNITION SYSTEM 2-3 Cleaning & Inspecting 4-14 TIMING AND SYNCHRONIZING 2-4 Assembling & Installation 4-15 ELECTRICAL POWER SUPPLY 2-5 Adjustments 4-19 CARBURETOR ADJUSTMENT 2-6 FUEL PUMPS 2-7 CARBURETOR "B" CRANKING MOTOR TEST 2-8 Removal & Disassembling 4-20 INTERNAL WIRING HARNESS 2-8 Cleaning & Installation 4-23 WATER PUMP CHECK 2-9 Assembling & Installation 4-23 PROPELLER 2-9 Adjustments 4-25 LOWER UNIT 2-10 BOAT TESTING 2-10 CARBURETOR "C" BOAT TESTING 2-10 CARBURETOR "C" Removal & Disassembling 4-27 Cleaning & Inspecting 4-30 Assembling & Installation 4-31 Adjustments 4-34 INTRODUCTION 3-1 CARBURETOR "D" LUBRICATION - COMPLETE UNIT 3-3 Removal & Disassembling 4-35 EMERGENCY TETHER 3-3 Cleaning & Inspecting 4-35 PRE-SEASON PREPARATION 3-3 Assembling & Installation 4-39 PIBERGLASS HULLS 3-6 Adjustments 4-42 BELOW WATERLINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-8 Removal & Disassembling 4-43 INSIDE THE BOAT 3-9 Cleaning & Inspecting 4-45 Cl				CARRIDETOR "A"	
IGNITION SYSTEM TIMING AND SYNCHRONIZING ELECTRICAL POWER SUPPLY CARBURETOR ADJUSTMENT ELECTRICAL POWER SUPPLY CARBURETOR ADJUSTMENT EFUEL PUMPS CRANKING MOTOR TEST CRANKING MOTOR TEST INTERNAL WIRING HARNESS WATER PUMP CHECK PROPELLER COWER UNIT COWER UNIT Cleaning & Installation CLEANINETOR "E" CARBURETOR "E CARBURETOR "C"					4_10
TIMING AND SYNCHRONIZING 2-4 Assembling & Installation 4-15 ELECTRICAL POWER SUPPLY 2-5 Adjustments 4-19 CARBURETOR ADJUSTMENT 2-6 FUEL PUMPS 2-7 CARBURETOR "B" CRANKING MOTOR TEST 2-8 Removal & Disassembling 4-20 INTERNAL WIRING HARNESS 2-8 Cleaning & Inspecting 4-23 WATER PUMP CHECK 2-9 Assembling & Installation 4-23 PROPELLER 2-9 Adjustments 4-25 LOWER UNIT 2-10 BOAT TESTING 2-10 CARBURETOR "C" Removal & Disassembling 4-27 Cleaning & Inspecting 4-30 Assembling & Installation 4-31 Adjustments 4-34 INTRODUCTION 3-1 CARBURETOR "D" LUBRICATION - COMPLETE UNIT 3-3 Removal & Disassembling 4-35 PRE-SEASON PREPARATION 3-3 Assembling & Installation 4-39 FIBERGLASS HULLS 3-6 Adjustments 4-37 PRE-SEASON PREPARATION 3-3 Assembling & Installation 4-39 FIBERGLASS HULLS 3-6 SUBMERGED ENGINE SERVICE 3-7 CARBURETOR "E" PROPELLER SERVICE 3-8 Removal & Disassembling 4-43 INSIDE THE BOAT 3-9 Cleaning & Inspecting 4-45 Cleaning & Inspectin					
ELECTRICAL POWER SUPPLY 2-5 Adjustments 4-19 CARBURETOR ADJUSTMENT 2-6 FUEL PUMPS 2-7 CARBURETOR "B" CRANKING MOTOR TEST 2-8 Removal & Disassembling 4-20 INTERNAL WIRING HARNESS 2-8 Cleaning & Inspecting 4-23 WATER PUMP CHECK 2-9 Assembling & Installation 4-23 PROPELLER 2-9 Adjustments 4-25 LOWER UNIT 2-10 BOAT TESTING 2-10 CARBURETOR "C" Removal & Disassembling 4-27 Cleaning & Inspecting 4-30 Adjustments 4-34 INTRODUCTION 3-1 OUTBOARD SERIAL NUMBERS 3-2 CARBURETOR "D" LUBRICATION - COMPLETE UNIT 3-3 Removal & Disassembling 4-35 EMERGENCY TETHER 3-3 Cleaning & Inspecting 4-37 PRE-SEASON PREPARATION 3-3 Assembling & Inspecting 4-37 PRE-SEASON PREPARATION 3-3 Assembling & Installation 4-39 FIBERGLASS HULLS 3-6 SUBMERGED ENGINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-8 INSIDE THE BOAT 3-9 Cleaning & Inspecting 4-43 LOWER UNIT 3-15 Assembling & Installation 4-47					
CARBURETOR ADJUSTMENT FUEL PUMPS CRANKING MOTOR TEST Cleaning & Inspecting Cleaning & Inspecting Cleaning & Inspecting Cleaning & Inspecting Cleaning & Installation CLEARBURETOR "C" Removal & Disassembling Cleaning & Installation CLEARBURETOR "D" CLEARBURETOR "D" CLEARBURETOR "D" CARBURETOR "E"				•	
FUEL PUMPS CRANKING MOTOR TEST Cleaning & Inspecting Cleaning & Installation Cleaning & Inspecting Cleaning & Installation Cleaning & Inspecting Cleaning & Installation Cleaning & Inspecting Cleaning & Installation CLEANURETOR "E" CARBURETOR "E CAR				,	
INTERNAL WIRING HARNESS 2-8 WATER PUMP CHECK 2-9 PROPELLER 2-9 LOWER UNIT 2-10 BOAT TESTING 2-10 MAINTENANCE MAINTENANCE Assembling & Installation 4-23 Removal & Disassembling 4-27 Cleaning & Inspecting 4-30 Assembling & Installation 4-31 Adjustments 4-31 Adjustments 4-34 INTRODUCTION OUTBOARD SERIAL NUMBERS 3-2 LUBRICATION - COMPLETE UNIT 3-3 EMERGENCY TETHER 3-3 PRE-SEASON PREPARATION 3-3 FIBERGLASS HULLS 3-6 BELOW WATERLINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-7 PROPELLER SERVICE 3-8 INSIDE THE BOAT 3-9 LOWER UNIT 3-15 Cleaning & Inspecting 4-37 CARBURETOR "D" CARBURETOR "C" PROPELLER SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-7 CARBURETOR "E" PROPELLER SERVICE 3-8 Removal & Disassembling 4-43 INSIDE THE BOAT 3-9 Cleaning & Inspecting 4-45 LOWER UNIT 3-15 CLEANING & Installation 4-47			2-7	CARBURETOR "B"	
INTERNAL WIRING HARNESS 2-8 WATER PUMP CHECK 2-9 PROPELLER 2-9 LOWER UNIT 2-10 BOAT TESTING 2-10 **Testing 4-27 **Testing 4-27 **Testing 4-28 **Testing 4-29 **Testing 4-29 **Testing 4-20 **Testing 4-20 **Testing 4-20 **Testing 4-20 **Testing 4-21 **Testing 4-21 **Testing 4-21 **Testing 4-22 **Testing 4-27 **Cleaning & Inspecting 4-27 **Cleaning & Inspecting 4-20 **Assembling & Inspecting 4-30 **Adjustments 4-31 **Adjustments 4-34 **INTRODUCTION 3-1 **OUTBOARD SERIAL NUMBERS 3-2 **LUBRICATION - COMPLETE UNIT 3-3 **Emergency Tether 3-3 **Emergency Tether 3-3 **PRE-SEASON PREPARATION 3-3 **FIBERGLASS HULLS 3-6 **SUBMERGED ENGINE SERVICE 3-6 **SUBMERGED ENGINE SERVICE 3-6 **SUBMERGED ENGINE SERVICE 3-6 **SUBMERGED ENGINE SERVICE 3-7 **PROPELLER SERVICE 3-8 **INSIDE THE BOAT 3-9 **LOWER UNIT 3-15 **Assembling & Installation 4-47 **Assembling & Installation 4-28 **Assembling & Installation 4-31 **Assembling & Installation 4-28 **Assembling & Inst		CRANKING MOTOR TEST	2-8	Removal & Disassembling	4-20
WATER PUMP CHECK 2-9 PROPELLER 2-9 LOWER UNIT 2-10 BOAT TESTING 2-10 **Testing 2-10 **Carburetor "C" Removal & Disassembling 4-27 Cleaning & Inspecting 4-30 **Assembling & Installation 4-31 Adjustments 4-34 **INTRODUCTION 3-1 OUTBOARD SERIAL NUMBERS 3-2 LUBRICATION - COMPLETE UNIT 3-3 EMERGENCY TETHER 3-3 PRE-SEASON PREPARATION 3-3 FIBERGLASS HULLS 3-6 SUBMERGED ENGINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-7 PROPELLER SERVICE 3-8 INSIDE THE BOAT 3-9 LOWER UNIT 3-15 Assembling & Installation 4-47 Assembling & Inspecting 4-43 Cleaning & Inspecting 4-45 Cleaning & Inspecting 4-45 Cleaning & Inspecting 4-45 Cleaning & Installation 4-47		INTERNAL WIRING HARNESS	2-8		4-23
PROPELLER LOWER UNIT BOAT TESTING 2-10 CARBURETOR "C" Removal & Disassembling 4-27 Cleaning & Inspecting 4-30 Assembling & Installation 4-31 Adjustments INTRODUCTION OUTBOARD SERIAL NUMBERS LUBRICATION - COMPLETE UNIT 3-3 EMERGENCY TETHER PRE-SEASON PREPARATION 3-3 PRE-SEASON PREPARATION 3-3 PRE-SEASON PREPARATION 3-3 PRE-SEASON PREPARATION 3-3 PREBERGLASS HULLS BELOW WATERLINE SERVICE SUBMERGED ENGINE SERVICE SUBMERGED ENGINE SERVICE SUBMERGED ENGINE SERVICE PROPELLER SERVICE SUBMERGED ENGINE SERVICE SUBMERGED EN		WATER PUMP CHECK	2-9		4-23
BOAT TESTING 2-10 CARBURETOR "C" Removal & Disassembling 4-27 Cleaning & Inspecting 4-30 Assembling & Installation 4-31 Adjustments 4-34 INTRODUCTION OUTBOARD SERIAL NUMBERS 3-2 LUBRICATION - COMPLETE UNIT 3-3 EMERGENCY TETHER 3-3 PRE-SEASON PREPARATION 3-3 PRE-SEASON PREPARATION 3-3 FIBERGLASS HULLS 3-6 SUBMERGED ENGINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-8 INSIDE THE BOAT 3-9 LOWER UNIT 3-15 Cleaning & Inspecting 4-43 Cleaning & Inspecting 4-43 Removal & Disassembling 4-43		PROPELLER			4-25
Removal & Disassembling 4-27 Cleaning & Inspecting 4-30 MAINTENANCE Assembling & Installation 4-31 Adjustments INTRODUCTION OUTBOARD SERIAL NUMBERS 3-2 LUBRICATION - COMPLETE UNIT 3-3 EMERGENCY TETHER 3-3 PRE-SEASON PREPARATION 3-3 FIBERGLASS HULLS 3-6 SUBMERGED ENGINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-8 INSIDE THE BOAT 3-9 LOWER UNIT 3-15 Removal & Disassembling 4-37 CARBURETOR "E" CARBURETOR "E" Removal & Disassembling 4-43 Inspecting 4-45 Assembling & Installation 4-47 Assembling & Inspecting 4-45 Assembling & Installation 4-47				·	
Cleaning & Inspecting 4-30 Assembling & Installation 4-31 Adjustments 4-34 INTRODUCTION 3-1 OUTBOARD SERIAL NUMBERS 3-2 CARBURETOR "D" LUBRICATION - COMPLETE UNIT 3-3 Removal & Disassembling 4-35 EMERGENCY TETHER 3-3 Cleaning & Inspecting 4-37 PRE-SEASON PREPARATION 3-3 Assembling & Installation 4-39 FIBERGLASS HULLS 3-6 SUBMERGED ENGINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-7 PROPELLER SERVICE 3-8 Removal & Disassembling 4-43 INSIDE THE BOAT 3-9 Cleaning & Installation 4-47 LOWER UNIT 3-15 Assembling & Installation 4-47		BOAT TESTING	2-10		
Assembling & Installation 4-31 Adjustments 4-34 INTRODUCTION 3-1 OUTBOARD SERIAL NUMBERS 3-2 CARBURETOR "D" LUBRICATION - COMPLETE UNIT 3-3 Removal & Disassembling 4-35 EMERGENCY TETHER 3-3 Cleaning & Inspecting 4-37 PRE-SEASON PREPARATION 3-3 Assembling & Installation 4-39 FIBERGLASS HULLS 3-6 SUBMERGED ENGINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-7 PROPELLER SERVICE 3-8 Removal & Disassembling 4-43 INSIDE THE BOAT 3-9 Cleaning & Inspecting 4-45 LOWER UNIT 3-15 Assembling & Installation 4-47					
INTRODUCTION 3-1 OUTBOARD SERIAL NUMBERS 3-2 CARBURETOR "D" LUBRICATION - COMPLETE UNIT 3-3 Removal & Disassembling 4-35 EMERGENCY TETHER 3-3 Cleaning & Inspecting 4-37 PRE-SEASON PREPARATION 3-3 Assembling & Installation 4-39 FIBERGLASS HULLS 3-6 Adjustments 4-42 BELOW WATERLINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-7 CARBURETOR "E" PROPELLER SERVICE 3-8 Removal & Disassembling 4-43 INSIDE THE BOAT 3-9 Cleaning & Inspecting 4-45 LOWER UNIT 3-15 Assembling & Installation 4-47	_				
INTRODUCTION OUTBOARD SERIAL NUMBERS 1-2 LUBRICATION - COMPLETE UNIT EMERGENCY TETHER 1-3 PRE-SEASON PREPARATION FIBERGLASS HULLS 1-6 SUBMERGED ENGINE SERVICE PROPELLER SERVICE 1NSIDE THE BOAT 1-3 CARBURETOR "D" CARB	3	MAINTENANCE			
OUTBOARD SERIAL NUMBERS 3-2 CARBURETOR "D" LUBRICATION - COMPLETE UNIT 3-3 Removal & Disassembling 4-35 EMERGENCY TETHER 3-3 Cleaning & Inspecting 4-37 PRE-SEASON PREPARATION 3-3 Assembling & Installation 4-39 FIBERGLASS HULLS 3-6 Adjustments 4-42 BELOW WATERLINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-7 CARBURETOR "E" PROPELLER SERVICE 3-8 Removal & Disassembling 4-43 INSIDE THE BOAT 3-9 Cleaning & Inspecting 4-45 LOWER UNIT 3-15 Assembling & Installation 4-47				Adjustments	4-34
LUBRICATION - COMPLETE UNIT 3-3 Removal & Disassembling 4-35 EMERGENCY TETHER 3-3 Cleaning & Inspecting 4-37 PRE-SEASON PREPARATION 3-3 Assembling & Installation 4-39 FIBERGLASS HULLS 3-6 Adjustments 4-42 BELOW WATERLINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-7 CARBURETOR "E" PROPELLER SERVICE 3-8 Removal & Disassembling 4-43 INSIDE THE BOAT 3-9 Cleaning & Inspecting 4-45 LOWER UNIT 3-15 Assembling & Installation 4-47					
EMERGENCY TETHER 3-3 Cleaning & Inspecting 4-37 PRE-SEASON PREPARATION 3-3 Assembling & Installation 4-39 FIBERGLASS HULLS 3-6 Adjustments 4-42 BELOW WATERLINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-7 CARBURETOR "E" PROPELLER SERVICE 3-8 Removal & Disassembling 4-43 INSIDE THE BOAT 3-9 Cleaning & Inspecting 4-45 LOWER UNIT 3-15 Assembling & Installation 4-47					
PRE-SEASON PREPARATION 3-3 Assembling & Installation 4-39 FIBERGLASS HULLS 3-6 Adjustments 4-42 BELOW WATERLINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-7 CARBURETOR "E" PROPELLER SERVICE 3-8 Removal & Disassembling 4-43 INSIDE THE BOAT 3-9 Cleaning & Inspecting 4-45 LOWER UNIT 3-15 Assembling & Installation 4-47					
FIBERGLASS HULLS 3-6 BELOW WATERLINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-7 PROPELLER SERVICE 3-8 INSIDE THE BOAT 3-9 LOWER UNIT 3-15 Adjustments 4-42 CARBURETOR "E" Removal & Disassembling 4-43 Cleaning & Inspecting 4-45 Assembling & Installation 4-47					
BELOW WATERLINE SERVICE 3-6 SUBMERGED ENGINE SERVICE 3-7 PROPELLER SERVICE 3-8 INSIDE THE BOAT 3-9 LOWER UNIT 3-15 CARBURETOR "E" Removal & Disassembling 4-43 Cleaning & Inspecting 4-45 Assembling & Installation 4-47					
SUBMERGED ENGINE SERVICE 3-7 CARBURETOR "E" PROPELLER SERVICE 3-8 Removal & Disassembling 4-43 INSIDE THE BOAT 3-9 Cleaning & Inspecting 4-45 LOWER UNIT 3-15 Assembling & Installation 4-47			_	Adjustments	4-42
PROPELLER SERVICE 3-8 Removal & Disassembling 4-43 INSIDE THE BOAT 3-9 Cleaning & Inspecting 4-45 LOWER UNIT 3-15 Assembling & Installation 4-47			_	CADDIDETOD HER	
INSIDE THE BOAT 3-9 Cleaning & Inspecting 4-45 LOWER UNIT 3-15 Assembling & Installation 4-47					11 112
LOWER UNIT 3-15 Assembling & Installation 4-47				Cleaning & Inspecting	
		WINTER STORAGE	3-16	Adjustments	4_49

4 FUEL (Continued)		SPARK PLUG EVALUATION POLARITY CHECK	5-2 5-4
CARBURETOR "F"			
Removal & Disassembling	4-50	TYPE I IGNITION SYSTEM - MAGN	
Cleaning & Inspecting	4-53	WITH BREAKER POINT SET	5_4
Assembling & Installation	4-56	Description & Operation	5-4
Adjustments	4-61	Troubleshooting	5-6
•		Disassembling	5-9
CARBURETOR "G"		Testing Components	5-12
Removal & Disassembling	4-61	Assembling & Installation	5-14
Cleaning & Inspecting	4-65	Breaker Point Adjustment	5-15
Assembling & Installation	4-66		
Adjustments	4-70	TYPE II IGNITION SYSTEM - CDI	- 17
		(CAPACITOR DISCHARGE)	5-17
CARBURETOR "H"		Description & Operation	5-17
Removal & Disassembling	4-71	Troubleshooting	5-18
Cleaning & Inspecting	4-73	Testing One-Cylinder	
Assembling & Installation	4-75	Components	<i>5</i> –20
Adjustments	4-77	Testing Two-Cylinder	
ŕ		Components	<i>5</i> –23
CARBURETOR "J"			
Removal & Disassembling	4-79	FLYWHEEL AND STATOR PLATE	
Cleaning & Inspecting	4-82	SERVICE	5-31
Assembling & Installation	4-84	"Pulling" the Flywheel	5-31
Adjustments	4-88	Stator Plate Removal	5-33
ŕ		Cleaning & Inspecting	5-34
CARBURETOR "K"		Assembling & Installation	5-35
Removal & Disassembling	4-89	<u>-</u>	
Cleaning & Inspecting	4-93		
Assembling & Installation	4-94	6 TIMING AND SYNCHRONIZING	
Adjustments	4-99		
•		INTRODUCTION	
CARBURETOR "L"		AND PREPARATION	6-1
Removal & Disassembling	4-100	Tachometer Connections	6-2
Cleaning & Inspecting	4-102	MODELS W/BREAKER POINT	
Assembling & Installation	4-104	TYPE IGNITION	6-4
Adjustments	4-107	MODEL 4HP & 5HP	6-5
,		MODEL 8C	6-7
FUEL PUMP		MODEL 9.9HP, 15HP, & ALL OTHE	R
Theory of Operation	4-108	8HP AFTER 1979	6-8
Pump Pressure Check	4-109	MODEL 20HP, 25HP, & 30HP	6-11
Pump Removal	4-110	MODEL 40HP /SINGLE CARB	6-14
Cleaning & Inspecting	4-110	MODEL 40HP /DUAL CARB	6-17
Assembling	4-111	MODEL 48HP, 55HP, & 60HP	6-21
INTRODUCTION	4-113	7 POWERHEAD	
AUTO BLEND			
Description	4-113	INTRODUCTION AND CHAPTER	
Operation	4-115	ORGANIZATION	7-1
Troubleshooting	4-115	TWO-STROKE POWERHEAD	
System Storage	4-117	DESCRIPTION & OPERATION	7-2
Preparation for Use	4-118		
•		SERVICING POWERHEAD "A"	
5 IGNITION		MODEL 2HP	7-3
		Removal & Disassembling	7-3
INTRODUCTION AND CHAPTER		Classif is the form and	7-67
COVERAGE	5-1	Cleaning & Inspecting Assembling & Installation	7-8

SERVICING POWERHEAD "B"		CRANKING MOTOR SERVICE	8-13
SINGLE-CYLINDER AIR-COC	DLED	Description	8-13
MODEL 3.5HP AND 5HP	7-13	Removal	8-14
Removal & Disassembling	7-13	Disassembling	8-14
Cleaning & Inspecting	7-67	Cleaning & Inspecting	8-17
Assembling & Installation	7-18	Testing Cranking Motor Parts	8-17
•		Assembling	8-19
SERVICING POWERHEAD "C"		Installation	8-21
SINGLE-CYLINDER		TESTING OTHER	
WATER-COOLED		ELECTRICAL PARTS	8-21
MODEL 4HP & 5HP	7-22		
Removal & Disassembling	7-22	9 LOWER UNIT	
Cleaning & Inspecting	7-67		
Assembling & Installation	7-26	DESCRIPTION	9-1
3		CHAPTER COVERAGE	9-1
SERVICING POWERHEAD "D"		TROUBLESHOOTING	9-2
TWO-CYLINDER,		PROPELLER REMOVAL	9-3
WATER-COOLED		PROPELLER INSTALLATION	9-5
MODEL 8HP, 9.9HP, 15HP, 20	HP.		
25HP, 28HP, 30HP, 40HP, 48H		LOWER UNIT TYPE "A"	
55HP, AND 60HP	7-33	NO REVERSE GEAR	9-6
Powerhead Preparation	7-33	Removal	9-6
Removal & Disassembling	7-36	Disassembling	9-7
Cleaning & Inspecting	7-67	Cleaning & Inspecting	9-11
Assembling & Installation	7-42	Assembling	9-13
Closing Tasks	7-66	Installation	9-18
CLEANING & INSPECTING	7-67	LOWER UNIT TYPE "B"	
Reed Block Service	7-67	FORWARD, NEUTRAL & REVI	ERSE.
Exhaust Cover	7-68	ONE-PIECE GEARCASE	9-20
Crankshaft Service	7-69	Description	9-20
Connecting Rod Service	7-72	Removal	9-21
Piston Service	7-73	Disassembling	9-23
Ring End Gap Clearance	7-74	Water Pump	9-23
Piston Ring Side Clearance	7-76	Cleaning & Inspecting	9-33
Oversize Pistons & Rings	7-76	Assembling	9-43
Cylinder Block Service	7-77	Pinion Gear Depth	9-49
Honing Cylinder Walls	7-79	Backlash Measurement	9-54
Block & Cylinder Head		Water Pump	9-58
Warpage	7-80	Installation	9-60
. a. page	,	Propeller Installation	9-63
		Trim Tab Adjustment	9-64
8 ELECTRICAL		Closing Tasks	9-64
		Lower Unit Capacities	9-64
INTRODUCTION	8-1		
BATTERIES	8-1	LOWER UNIT TYPE "C"	
Jumper Cables	8-5	FORWARD, NEUTRAL & REVE	ERSE.
Storage	8-6	TWO-PIECE GEARCASE	9-65
THERMOMELT STICKS	8-6	Description	9-65
TACHOMETER	8-6	Removal	9-65
ELECTRICAL SYSTEM		Disassembling	9-66
GENERAL INFORMATION	8-7	Water Pump	9-67
CHARGING CIRCUIT SERVICE	8-9	Cleaning & Inspecting	9-72
CRANKING MOTOR		Assembling	9-75
CIRCUIT SERVICE	8-9	Pinion Gear Depth	9-78
Motor Troubleshooting	8-10	Backlash Measurement	9-78
Relay Testing	8-11	Water Pump	9-79
-		•	

9 LOWER UNIT (Continued)		SERVICING TYPE "D"	
• • • • • • • • • • • • • • • • • • • •		Removal & Disassembling	11-19
LOWER UNIT TYPE "C" (Cont.)		Cleaning & Inspecting	11-20
Installation	9-80	Assembling & Installation	11-20
Propeller Installation	9-82	_	
Trim Tab Adjustment	9-82	SERVICING TYPE "E"	
Closing Tasks	9-82	Removal & Disassembling	11-22
Ü		Cleaning & Inspecting	11-24
		Assembling & Installation	11-24
10 REMOTE CONTROLS			
		SERVICING TYPE "F"	
INTRODUCTION	10-1	Removal & Disassembling	11-25
DISASSEMBLING	10-2	Cleaning & Inspecting	11-27
CLEANING & INSPECTING	10 -9	Assembling & Installation	11-28
ASSEMBLING	10-11		
		APPENDIX	
11 HAND REWIND STARTER		METRIC CONVERSION CHART	A-1
		ENGINE SPECIFICATIONS AND	
INTRODUCTION AND		TUNE-UP ADJUSTMENTS	A-2
CHAPTER COVERAGE	11-1	WIRING DIAGRAMS	
STARTER IDENTIFICATION	11-1	Model 2hp	A-10
		Model 3.5hp & 5hp	A-10
SERVICING TYPE "A"		(Air-Cooled)	
Removal & Disassembling	11-1	Model 4hp & 5hp	A-11
Cleaning & Inspecting	11-4	(Water-Cooled)	
Assembling & Installation	11-5	Model 8hp, 15hp, 20hp, & 28hp	A-12
G		(Breaker Point Ignition System)	
SERVICING TYPE "B"		Model 8hp, 15hp, & 20hp	A-13
Removal & Disassembling	11-8	(Electric Start System)	
Cleaning & Inspecting	11-9	Model 8hp, 9.9hp, & 15hp	A-14
Assembling & Installation	11-10	(CDI Ignition System)	
•		Model 20hp, 25hp, & 30hp	A-15
SERVICING TYPE "C"		(CDI Ignition System)	
Removal & Disassembling	11-11	Model 28hp	A-16
Cleaning & Inspecting	11-15	(Electric Start System)	
Assembling & İnstallation	11-15	Model 48hp, 55hp, & 60hp	A-18
-			