CONTENTS

QUICK REFERENCE DATA ..... **IX**

CHAPTER ONE
GENERAL INFORMATION **1**

Safety
Notes, cautions and warnings
Service hints
Special tools
Basic hand tools
Test equipment
Precision measuring tools
Fasteners
Sealants, cements and cleaners
Lubricants

CHAPTER TWO
ENGINE FUNDAMENTALS **21**

Operating principles
Major engine components
Fuel system
Ignition system
Electrical system

CHAPTER THREE
GENERAL ENGINE INFORMATION **44**

Fuel
Oil
Engine identification
Basic engine specifications
Purchasing parts

CHAPTER FOUR
TROUBLESHOOTING **50**

Operating requirements
Troubleshooting

CHAPTER FIVE
LUBRICATION AND MAINTENANCE 59

Lubrication
Maintenance
Carburetor
Combustion chamber

CHAPTER SIX
FUEL AND GOVERNOR SYSTEMS 83

Operating linkage
Carburetors
Governor system

CHAPTER SEVEN
IGNITION SYSTEM AND FLYWHEEL BRAKE 122

Ignition coil
Ignition module
Stop switch
Flywheel brake

CHAPTER EIGHT
REWIND STARTERS 127

Rewind starters mounted on blower housing (except quantum engines)
Vertical-pull rewind starter
Quantum 100000 series rewind starter
Quantum 121000, 122000, 124000 and 126000 series rewind starters

CHAPTER NINE
ELECTRICAL SYSTEM 142

Testing
Battery
Charging/lighting system
Electric starter system
Electric starter motors

CHAPTER TEN
GENERAL INSPECTION AND REPAIR TECHNIQUES 170

Failure analysis
Precision measurements
Repair techniques

CHAPTER ELEVEN
ENGINE OVERHAUL 179

Muffler
Crankcase breather
Flywheel (all models except Quantum model series 100700, 121000, 122000, 124000 and 126000)
Flywheel (Quantum model series 100700)
Flywheel (Quantum model series 121000, 122000, 124000 and 126000)
Cylinder head
Valve system
Oil seals (service with crankshaft installed)
Internal engine components
Engine disassembly
Piston, piston rings and piston pin
Connecting rod
Camshaft and tappets
Governor
Crankshaft and main bearings
Cylinder
Oil seals
Oscillating balancer
Rotating counterbalance system
Breaker-point plunger hole
Engine reassembly

CHAPTER TWELVE
BRIGGS & STRATTON TOOLS 236

INDEX 237