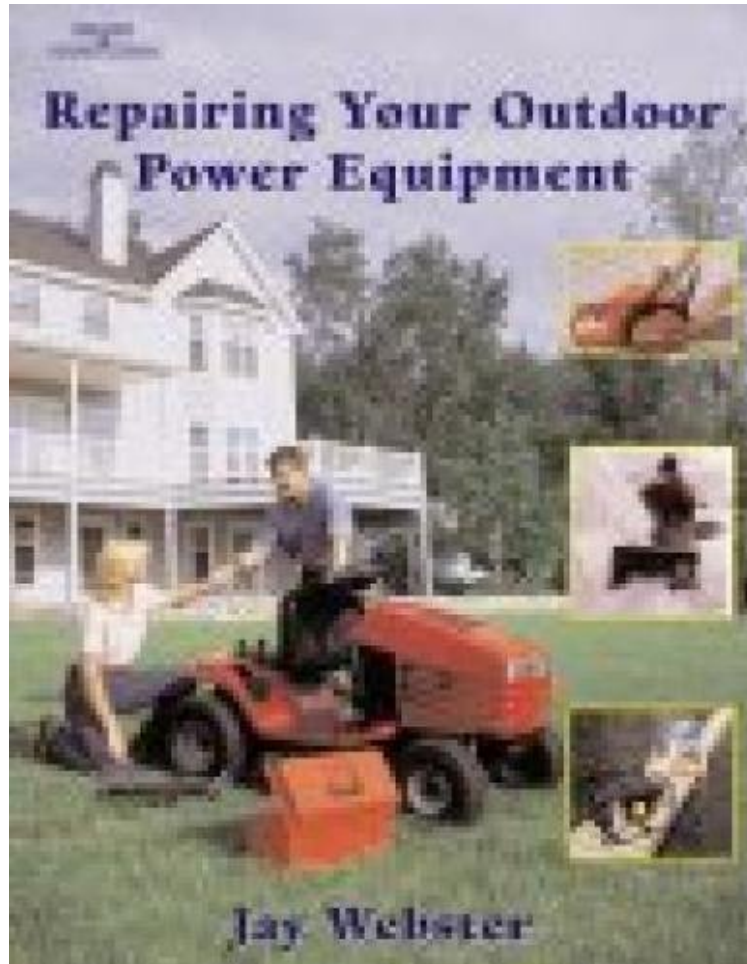


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Repairing Your Outdoor Power Equipment (Trade)

Jay Webster

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Jay Webster : Repairing Your Outdoor Power Equipment (Trade) before purchasing it in order to gage whether or not it would be worth my time, and all praised Repairing Your Outdoor Power Equipment (Trade):

13 of 13 people found the following review helpful. You won't regret buying this book.By Mark V.Last winter, when my snowblower engine began stalling and running erratically during successive 15" snowstorms, I finally got serious about learning how to do something when my power equipment acts up, other than drop it off at the repair shop. After looking at several books locally and on , I decided to try this one based on the reviews here. It has not disappointed.This book explains all of the basic functions and components of small engines clearly, and with many illustrations. While the book's layout and some of the illustrations appear a little dated, both older and newer technologies are covered--for example, mechanical and electronic ignition systems, and several newer types of carburetors. The book also offers troubleshooting guides and tips for preventive maintenance.I've not had a chance to read the entire book yet, but the chapters I've read have have been great. The explanation of two-cycle engine designs

and operation is the best I've ever seen, and cleared up some points I've been confused about for years. Highly recommended! 27 of 27 people found the following review helpful. great book for understanding gasoline engines!!! By tThis book starts out with the simplest 2-stroke engines, explaining different carburetor setups, and goes up through more complicated 4-stroke engines. This book would be a great basis for learning about gasoline engines in general... It also has advice on general maintenance and troubleshooting. Very informative book for learning HOW these things work so that you can fix them. 6 of 6 people found the following review helpful. excellent book By Joe Gennaro the book is every thing that it claimed to be. It is an excellent book for someone who has a basic knowledge of power equipment but wants to know some of the more intricate details of how everything works. Very good book.

Introducing a new resource which will show you how to successfully service and repair your favorite outdoor power equipment, including: lawnmowers and garden tractors, snow throwers, leaf blowers, chain saws, portable pumps, and more! Complete with step-by-step photo sequences, *Repairing Your Outdoor Power Equipment* will introduce you to the professional failure analysis and servicing techniques you need to keep your equipment in top condition, while highlighting the operation of basic two-stroke and four-stroke engines. Safety precautions and troubleshooting skills are emphasized in every chapter to ensure your success. There's even a full section in *Repairing Your Outdoor Power Equipment* which allows you to conduct a failure analysis and learn to rebuild a failed engine!

Part 1 SHOP INFORMATION AND SKILLS 1. Safety and Certification: Terms to Know, Introduction, Small Engines, Safe Work Area, Fire Safety, Personal Protective Equipment, Hand Tool Safety, Power Tool Safety, Cleaning Chemical Safety, Case Study, Engine Operation Safety, Hazard Communication, Small Engine Careers and Certification, Questions, Discussion Topics and Activities. 2. Tools: Terms to Know, Introduction, Wrenches, Torque Indicating Wrenches, Case Study, Power Wrenches, Pliers, Screwdrivers, Hammers, Punches, Chisels, Twist Drills, Reamers, Hacksaws, Files, Threading Tools, Pullers, Special Tool Sets, Questions, Discussion Topics and Activities. 3. Measuring Tools: Terms to Know, Inch Measuring System, Metric Measuring System, Converting Between Measuring systems, Rule, Feeler Gauge, Outside Micrometer, Case Study, Inside Micrometer, Telescoping Gauge, Small Hole Gauge, Dial Indicator, Questions, Discussion Topics and Activities. 4. Measuring Electricity, Pressure, and Vacuum: Terms to Know, Measuring Electricity, Case Study, Measuring Pressure, Measuring Vacuum, Questions, Discussion Topics and Activities. 5. Threaded Fasteners: Introduction, Threaded Fasteners, Thread Size and Designation, Fasteners Grade Markings, Case Study, Thread Identification, Thread Repair, Thread Compounds, Questions, Discussion Topics and Activities. PHOTO SEQUENCE P1- Using a Tap to Repair a Thread. 6. Non Threaded Fasteners: Terms to Know, Introduction, Keys, Pins, Snap rings, Case Study, Electrical Wire and Electrical Fasteners, Questions, Discussion Topics and Activities. 7. Service Information: Terms to Know, Engine Identification, Service Information, Customer Care, Case Study, Questions, Discussion Topics and Activities. PART 2 ENGINE OPERATION 8. Four Stroke Engine Operation and Cylinder Block Parts: Terms to Know, Basic Engine Principles, Four Stroke Cycle, Case Study, Multiple Cylinder Four Stroke Engines, Crankcase and Main Bearings, Cylinder and Block, Cylinder Head and Cylinder Head Gasket, Crankshaft, piston, Piston Rings, Connecting Rod, Connecting Rod Bearing, Piston pin, Questions, Discussion Topics and Activities. 9. Four Stroke Engine Valve System Parts: Terms to Know, Valve Systems, Valves, Valve Spring and Retainer, Valve Rotator, Valve Seat, Valve Guide, Camshaft, Valve Timing, Case Study, Valve Lifter (Tappet), Push Rod, and Rocker Arm, Valve Clearance, Questions, Discussion Topics and Activities. 10. Two Stroke Engine: Terms to Know, Introduction, Basic Parts and Operation, Two Stroke Cycle Engine Port Control, Case Study, Engine Parts, Questions, Discussion Topics and Activities. 11. Engine Specifications and Selection: Terms to Know, Internal Engine Size Specifications, Horsepower and Torque, Measuring Horsepower, Engine Efficiency, Engine Selection, Case Study, Questions, Discussion Topics and Activities. PART 3 ENGINE SYSTEMS 12. Ignition Systems/Magneto: Terms to Know, Introduction, Electricity, Magnetism, Induction, Armature and Coil, Magnet and Coil Operation, Breaker Point Triggered Magneto Systems, Case Study, Electronically Triggered Magneto Systems, Transistor Triggered Magneto Systems, Battery Ignition, Questions, Discussion Topics and Activities. 13. Ignition Systems/High Voltage Components: Terms To know, Spark Plug Wires, Spark Plug, Case Study, Kill (stop) Switch, Safety Interlocks, Questions, Discussion Topics and Activities. 14. Fuel System/Fuels, Tanks, and Pumps: Terms to Know, Introduction, Fuels, Case Study, Clean Air Standards, Fuel Tanks, Lines, and Fittings, Fuel Filters, Fuel Pumps, Questions, Discussion Topics and Activities. 15. Fuel System/Carburetors and Air Cleaners: Terms to Know, The Carburetor, Vacuum Carburetor, Float Carburetor, Case Study, Diaphragm Carburetor, Suction Feed Diaphragm Carburetor, Automatic Choke, Air Cleaner, Questions, Discussion Topics and Activities. 16. Governor and Throttle Control Systems: Terms to Know, Introduction, Manual Throttle Control, Case Study, Governor Throttle Control, Air Vane Governor, Centrifugal governor, Flywheel Brake, Questions, Discussion Topics and Activities. 17. Lubrication Systems: Terms to Know, Introduction, Reducing Friction, Engine Oil, Four Stroke Lubricating Systems, Low Oil Level Alert Systems, Crankcase Breather, Case Study, Questions, Discussion Topics and Activities. 18. Cooling and Exhaust Systems: Terms to Know, Air Cooling Systems, Liquid Cooling Systems, Exhaust Systems, Questions, Discussion Topics and Activities. 19. Manual Starting

Systems: Terms to Know, Introduction, Ball Rewind Starter, Case Study, Dog Rewind Starter, Ratchet Recoil Starter, Gear Starter, Windup Spring Starter, Compression Release, Manual Starter Troubleshooting and Service, Questions, Discussion Topics and Activities. PHOTO SEQUENCE P2- Removing and Replacing a Starter Rope and Starter Spring. 20. Electrical Starting and Charging Systems: Terms to Know, Electrical Starting Systems, Storage Battery, Starter Motor, Starter Drives, Solenoid, Starter Switch and Wiring, Case Study, Charging System, Questions, Discussion Topics and Activities. PART 4 TROUBLESHOOTING, MAINTENANCE, AND TUNE-UP 21. Troubleshooting: Terms to Know, Before You Troubleshoot, Troubleshooting Starting Problems, Case Study, Troubleshooting Engine Performance Problems, Troubleshooting Vibration Problems, Troubleshooting Engine Noises, Troubleshooting Engine Oil Consumption, Troubleshooting Overheating Problems, Questions, Discussion topics and Activities. PHOTO SEQUENCE P3 MEASURE ENGINE COMPRESSION 22. Preventative Maintenance: Terms to Know, Introduction, Maintenance Schedules, Engine Oil Maintenance, Cooling System Maintenance, Air Cleaner Maintenance, Valve Clearance Adjustment, Off Season Storage, Battery Maintenance, Case Study, Questions, Discussion Topics and Activities. PHOTO SEQUENCE P4 ADJUST OVERHEAD VALVES 23. Ignition Tune-Up: Terms to Know, Introduction, Ignition System Troubleshooting, Spark Plug Service, Flywheel, Magnets, Keys, and Keyway Service, Breaker Points and Condenser Service, Case Study, Timing Adjustment, Magneto Coil and Solid State Trigger Testing, Flywheel Installation and Armature Gap Setting, Questions, Discussion Topics and Activities. PHOTO SEQUENCE P5 REMOVE AND REPLACE A SPARK PLUG 24. 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Cylinder and Piston Service: Terms to Know, Introduction Four Stroke Cylinder Inspection and Measurement, Two Stroke Cylinder Inspection and Measurement, Ridge Removing, Glaze Breaking, Cylinder Resizing, Piston Inspection and Measurement, Fitting a Piston, Case Study, Questions, Discussion Topics and Activities. 29. Engine Assembly: Terms to Know, Introduction, Order New Parts, Clean Assembly Area, Installing Valves, Installing Piston on Connecting Rod, Installing Four Stroke Piston Rings, Installing Two Stroke Piston Rings, Installing Four Stroke Crankshaft and Piston Assembly, Case Study, Installing Four Stroke Connecting Rod Cap, Installing Two Stroke Piston, Connecting Rod, and Crankshaft, Installing Camshaft and Valve Lifters, Installing Crankshaft Cover, Final Assembly and Start-up, Questions, Discussion Topics and Activities. PART 6 EQUIPMENT OPERATION AND SERVICE 30. 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Chain Saws, String Trimmers, and Blowers: Terms to Know, Introduction, Chain saw, String Trimmer, and Blower Safety, Case Study, Chain Saws, String Trimmers, Blowers, Questions, Discussion Topics and Activities. PHOTO SEQUENCE P10 REMOVE, REPLACE AND TENSION A CHAIN SAW CHAIN 34. Portable Pumps and Generators: Terms to Know, Introduction, Pump and Generator Safety, Portable Pumps, Portable Generators, Case Study, Questions, Discussion Topics and Activities. Glossary.About the AuthorSeries Advisor