

Power Equipment Technology: Grades 9, 10, 11, 12

Adopted 2004

Applying safety practices on the job

A001. Identify the safe use of chemicals. A001

A002. Identify the safe use and maintenance of hand tools. A002

A003. Identify the safe use and maintenance of power tools. A003

A004. Identify the safe use and maintenance of specialized measuring tools. A004

A005. Identify the safe use of protective clothing and equipment. A005

A006. Identify the safe use of fire protection equipment. A006

A007. Identify the safe use of shop equipment. A007

A006. Follow Environmental Protection Agency (EPA), Occupational Safety and Health Act (OSHA), Material Safety Data Sheets (MSDS), safety standards and regulations. A006

Performing shop operations

B001. Read a shop manual. B001

B002. Maintain a time record for each shop job. B002

B003. Maintain a daily and weekly work schedule and assign individuals to job positions. B003

B004. Determine economic feasibility of repair. B004

B005. Write a service order. B005

B006. Calculate labor cost using a flat rate manual. B006

B007. Identify work performed on work orders. B007

B008. Interpret parts lists and schematics using associated manuals, microfiche, and computer. B008

B009. Prepare warranty reports. B009

	B010. Adhere to inventory controls B010
	B011. Maintain a clean and orderly work area. B011
Identifying fasteners and their uses	C001. Identify type and grade of fasteners. C001
	C002. Choose appropriate fastener for corresponding job. C002
	C003. Repair damaged thread using a tap and die set. C003
Diagnosing and repairing fuel system	D001. Diagnose and determine needed repair on fuel system. D001
	D002. Remove and replace the fuel tank and fuel lines. D002
	D003. Remove and replace the fuel filter systems. D003
	D004. Diagnose and determine needed repair on air cleaner system. D004
	D005. Service foam-type air cleaner. D005
	D006. Service dry element-type air cleaner. D006
	D007. Disassemble, clean, and inspect diaphragm-type carburetor. D007
	D008. Reassemble and adjust a diaphragm-type carburetor. D008
	D019. Disassemble, clean, and inspect a float-type carburetor. D019
	D010. Reassemble and adjust float-type carburetor. D010
	D011. Disassemble, clean, and inspect fuel pump. D011
	D012. Reassemble and install fuel pump. D012
	D013. Clean crankcase breather D013
Diagnosing and servicing general electrical system	E001. Read a multimeter. (VAO) E001
	E002. Apply electrical theory. E002
	E003. Service and repair DC electric starter/generator. E003
	E004. Troubleshoot the charging circuit using a manufacturer's guide. E004
	E005. Remove pulley and belt. E005
	E006. Replace starter/generator pulley assembly and belt. E006
	E007. Remove and inspect alternator. E007

	E008. Replace alternator components. E008
	E009. Test and charge the battery. E009
	E010. Repair and/or replace starter. E010
	E011. Troubleshoot and repair starting circuit. E011
Diagnosing and servicing manual starting system	F001. Diagnose and determine needed repair on manual starting system. F001
	F002. Replace starter spring. F002
	F003. Replace a starter clutch if needed. F003
	F004. Replace starter pawls. F004
	F005. Replace a worn or defective cup. F005
	F006. Replace starter rope. F006
Diagnosing and servicing ignition system	G001. Remove, inspect, adjust, and install sparkplugs. G001
	G002. Remove, inspect, and replace the flywheel. G002
	G003. Remove, inspect, and replace points and condenser system. G003
	G004. Adjust armature air gap. G004
	G005. Test and replace coil/magneto. G005
	G006. Test and replace ignition wires. G006
	G007. Test and replace safety switch. G007
Diagnosing and repair 2 and 4-Cycle engine	H001. Apply 2 and 4-cycle engine theory. H001
	H002. Diagnose and determine needed repair on 2 and 4-cycle engine components. H002
	H003. Disassemble 2 and 4-cycle engine. H003
	H004. Install piston. H004
	H005. Install piston rings. H005
	H006. Determine wear on internal engine parts using specialized tools. H006
	H007. Ridge ream top of cylinder. H007

	H008. Bore and deglaze cylinder. H008
	H009. Reassemble long block. H009
	H010. Replace cylinder and cylinder head on 2 and 4 cycle engines H010
Diagnosing and servicing lawn mower	I001. Adjust clutch controls (i.e., cables, rods, and springs). I001
	I002. Inspect and service mower decks. I002
	I003. Set height of cut. I003
	I004. Lubricate mower. I004
	I005. Grind and balance rotary blade. I005
	I006. Diagnose needed repair for self-propelled drive system on walk behind mower. I006
	I007. Inspect and service steering assembly. I007
	I008. Replace and adjust drive trans and PTO (power take-off) belts. I008
	I009. Replace and adjust throttle cable. I009
	I010. Inspect and/or replace brake pad. I010
	I011. Test the kill switch. I011
Diagnosing and servicing chain saw	K001. Diagnose needed repair on chain saw. K001
Troubleshoot cutter problem	K001. Sharpen and adjust or replace chain. K001
	K002. Set chain depth gauge. K002
	K003. Check and adjust chain oiler. K003
	K004. Lubricate bar nose sprocket. K004
	K005. Inspect and replace worn sprocket and clutch. K005
Diagnosing and servicing string trimmer	L001. Diagnose needed repair on string trimmer. L001
	L002. Conduct maintenance on shaft. L002
	L003. Wind and trim cutter head. L003

**Diagnosing and
servicing cooling
systems**

M001. Apply cooling system theory. M001

M002. Identify liquid cooling system components. M002

M003. Identify air-cooling system components. M003

**Diagnosing and
servicing cooling
systems**

N001. Apply governor system theory. N001

N002. Inspect, adjust, and replace pneumatic system N002

N003. Inspect, adjust, and replace mechanical system N003

**Diagnosing and
servicing exhaust
systems**

O001. Apply exhaust system theory 0001

O002. Diagnose common equipment problems in a damaged exhaust system, 2 & 4
cycle 0002

O003. Identify cleaning procedures for exhaust ports and spark arrestor screens, 2
cycle 0003