



AUBURN • CHARLTON • DUDLEY • NORTH BROOKFIELD • OXFORD • PAXTON
 RUTLAND • SOUTHBRIDGE • SPENCER • WEBSTER
Southern Worcester County Regional Vocational School District
BAY PATH REGIONAL VOCATIONAL TECHNICAL HIGH SCHOOL
 57 OLD MUGGETT HILL ROAD
 CHARLTON, MASSACHUSETTS 01507-1331
 (508) 248-5971 - (508) 987-0326 ext. 1756
 FAX (508) 248-4747

Bethann G. Cormier
Curriculum Coordinator

VT.VAUTO.2.A.02.01	G:Wheels and Tires	Diagnose and repair tire and tire pressure monitoring systems (TPMS) components.
VT.VAUTO.2.A.02.02	G:Wheels and Tires	Inspect a tire for leaks and repair a tire puncture.
VT.VAUTO.2.A.03	G:Wheels and Tires	Remove and replace a valve stem.
VT.VAUTO.2.D.01	G:Wheels and Tires	Identify tire pressure monitoring system equipped vehicles.
VT.VAUTO.2.D.01.01	G:Wheels and Tires	Identify different types (direct and indirect) of TPMS systems and components.
VT.VAUTO.2.D.01.02	G:Wheels and Tires	Set up and use tire pressure monitoring system, service and resetting equipment.
VT.VAUTO.2.D.01.03	H:Suspension Systems	Inspect suspension system for noises, body sway and uneven riding height concerns.
VT.VAUTO.2.D.01.04	H:Suspension Systems	Inspect short and long arm suspension system for noises, body sway and uneven riding height concerns.
VT.VAUTO.2.D.02	H:Suspension Systems	Inspect strut suspension system for noises, body sway and uneven riding height concerns.
VT.VAUTO.2.D.02.01	H:Suspension Systems	Inspect leaf spring suspension system for noises, body sway and uneven riding height concerns.
VT.VAUTO.2.D.02.02	H:Suspension Systems	Lubricate suspension and steering systems.
VT.VAUTO.2.D.02.03	H:Suspension Systems	Lubricate suspension and steering systems per manufacturer's recommendations.
VT.VAUTO.2.H.01	H:Suspension Systems	Remove, inspect and install suspension components.
VT.VAUTO.2.H.01.01	H:Suspension Systems	Remove, inspect and install upper and lower control arms, bushings, shafts and rebound bumpers.
VT.VAUTO.2.H.01.02	H:Suspension Systems	Remove, inspect and install strut rods (compression/tension) and bushings.
VT.VAUTO.2.H.01.03	H:Suspension Systems	Remove, inspect and install upper and/or lower ball joints.
VT.VAUTO.2.H.02	H:Suspension Systems	Remove, inspect and install steering knuckle assemblies.
VT.VAUTO.2.H.02.01	H:Suspension Systems	Remove, inspect and install short and long arm suspension system coil springs and spring insulators.
VT.VAUTO.2.H.03	H:Suspension Systems	Remove, inspect and install and adjust suspension system torsion bars; inspect mounts.
VT.VAUTO.2.H.03.01	H:Suspension Systems	Remove, inspect and install stabilizer bar bushings, brackets and links.
VT.VAUTO.2.H.03.02	H:Suspension Systems	Remove, inspect and install strut cartridge or assembly, strut coil spring, insulators (silencers) and upper strut bearings/mounts.
VT.VAUTO.2.H.03.03	H:Suspension Systems	Remove, inspect and install coil springs and spring insulators.
VT.VAUTO.2.H.03.04	H:Suspension Systems	Remove, inspect and install transverse links, control arms, bushings and mounts.
VT.VAUTO.2.H.03.05	H:Suspension Systems	Remove, inspect and install leaf springs, leaf spring insulators (silencers), shackles, brackets, bushings and mounts.
VT.VAUTO.2.H.03.06	H:Suspension Systems	Inspect, remove and replace shock absorbers.
VT.VAUTO.2.H.03.07	I:Steering Systems	Identify and diagnose power steering concerns and perform necessary service.
VT.VAUTO.2.H.03.08	I:Steering Systems	Identify power steering gear (non-rack and pinion) binding, uneven turning effort, looseness, hard steering and fluid leakage.
VT.VAUTO.2.H.03.09	I:Steering Systems	Inspect power steering fluid levels and condition.
VT.VAUTO.2.H.03.10	I:Steering Systems	Flush, fill and bleed the power steering system.
VT.VAUTO.2.H.03.11	I:Steering Systems	Diagnose power steering fluid leakage; determine necessary action.
VT.VAUTO.2.H.03.12	I:Steering Systems	Remove, inspect, replace and adjust the power steering pump belt.
VT.VAUTO.2.I.01	I:Steering Systems	Remove and reinstall the power steering pump.
VT.VAUTO.2.I.01.01	I:Steering Systems	Inspect and replace power steering hoses and fittings.
VT.VAUTO.2.I.01.02	I:Steering Systems	Identify and diagnose mechanical steering concerns and perform necessary service.
VT.VAUTO.2.I.01.03	I:Steering Systems	Remove and replace manual or power rack and pinion steering gear; inspect mounting bushings and brackets.

VT.VAUTO.2.I.01.04	I:Steering Systems	Inspect and replace manual or power rack and pinion steering gear inner tie rod ends and bellows boot.
VT.VAUTO.2.I.01.05	I:Steering Systems	Inspect and replace pitman arm, center link/intermediate rod, idler arm, mountings and steering linkage dampener.
VT.VAUTO.2.I.01.06	I:Steering Systems	Inspect, replace and adjust the tie rod ends, tie rod sleeves and clamps on a linkage type steering system.
VT.VAUTO.2.I.01.07	I:Steering Systems	Identify and interpret steering column concerns and perform necessary service.
VT.VAUTO.2.I.02	I:Steering Systems	Disable and enable supplemental restraint system (SRS).
VT.VAUTO.2.I.02.01	I:Steering Systems	Remove and replace the steering wheel; align supplemental restraint system (SRS) coil (clock spring).
VT.VAUTO.2.I.02.02	I:Steering Systems	Identify steering column noises, excessive play and binding concerns (including tilt mechanism).
VT.VAUTO.2.I.02.03	J:Wheel Alignment	Conduct appropriate pre-alignment inspections.
VT.VAUTO.2.I.02.04	J:Wheel Alignment	Differentiate between steering and suspension concerns using principles of steering geometry (caster, camber, toe, etc.).
VT.VAUTO.2.I.03	J:Wheel Alignment	Inspect vehicle wander, drift, pull, hard steering, bump steer, memory steer, torque steer and steering return concerns.
VT.VAUTO.2.I.03.01	J:Wheel Alignment	Conduct appropriate set-up and measure alignments.
VT.VAUTO.2.I.03.02	J:Wheel Alignment	Measure vehicle riding height.
VT.VAUTO.2.I.03.03	J:Wheel Alignment	Mount alignment measuring equipment to vehicle.
VT.VAUTO.2.J.01	J:Wheel Alignment	Check and measure caster.
VT.VAUTO.2.J.01.01	J:Wheel Alignment	Check and measure front and rear wheel camber.
VT.VAUTO.2.J.01.02	J:Wheel Alignment	Check and measure front and rear wheel toe.
VT.VAUTO.2.J.02	J:Wheel Alignment	Check steering wheel centering.
VT.VAUTO.2.J.02.01	J:Wheel Alignment	Check and measure toe-out-on-turns (turning radius).
VT.VAUTO.2.J.02.02	J:Wheel Alignment	Check and measure steering axis inclination (SAI) and included angle.
VT.VAUTO.2.J.02.03	J:Wheel Alignment	Check and measure rear wheel thrust angle.
VT.VAUTO.2.J.02.04	J:Wheel Alignment	Perform alignment angle adjustments.
VT.VAUTO.2.J.02.05	J:Wheel Alignment	Adjust vehicle riding height.
VT.VAUTO.2.J.02.06	J:Wheel Alignment	Adjust front and rear wheel camber.
VT.VAUTO.2.J.02.07	J:Wheel Alignment	Adjust caster.
VT.VAUTO.2.J.02.08	J:Wheel Alignment	Adjust front and rear wheel toe.
VT.VAUTO.2.J.02.09	J:Wheel Alignment	Adjust center steering wheel.
VT.VAUTO.2.J.03	J:Wheel Alignment	Adjust and/or determine necessary action to correct toe-out-on-turns (turning radius).
VT.VAUTO.2.J.03.01	J:Wheel Alignment	Adjust and/or determine necessary action to correct steering axis inclination (SAI) and included angle.
VT.VAUTO.2.J.03.02	J:Wheel Alignment	Adjust and determine necessary action to correct rear wheel thrust angle.
VT.VAUTO.2.J.03.03	J:Wheel Alignment	Determine necessary action to correct front wheel setback.
VT.VAUTO.2.J.03.04	K:Automotive Basic Maintenance	Perform appropriate basic maintenance service skills.
VT.VAUTO.2.J.03.05	K:Automotive Basic Maintenance	Perform oil/filter change, check and fill all fluids.
VT.VAUTO.2.J.03.06	K:Automotive Basic Maintenance	Inspect air, cabin filters; determine necessary action.
VT.VAUTO.2.J.03.07	K:Automotive Basic Maintenance	Replace fuel filters.
VT.VAUTO.2.J.03.08	K:Automotive Basic Maintenance	Inspect exhaust system and undercarriage; determine necessary action.
VT.VAUTO.2.J.03.09	K:Automotive Basic Maintenance	Inspect transmission/transaxle, front and rear differential fluids; determine necessary action.
VT.VAUTO.2.T.01	K:Automotive Basic Maintenance	Inspect automotive drive belts and cooling system hoses; determine necessary action.
VT.VAUTO.2.T.01.01	L:Automotive Refrigerant Theory	Describe and perform appropriate automotive refrigerant handling according to current industry standards.
VT.VAUTO.2.T.01.02	L:Automotive Refrigerant Theory	Follow EPA regulations for refrigerant handling.
VT.VAUTO.2.T.01.03	L:Automotive Refrigerant Theory	Identify refrigerant.
VT.VAUTO.2.T.02	L:Automotive Refrigerant Theory	Reclaim and recharge refrigerant.
VT.VAUTO.2.T.02.01	L:Automotive Refrigerant Theory	Recycle, label and store refrigerant.
VT.VAUTO.2.T.02.02	M:Brake System Research and Service	Research brake system concerns and vehicle information.

VT.VAUTO.2.T.02.03	M:Brake System Research and Service	Identify and interpret brake system concern; determine necessary action.
VT.VAUTO.2.T.02.04	M:Brake System Research and Service	Research applicable vehicle and service information, such as brake system operation, vehicle service history, service precautions and technical service bulletins.
VT.VAUTO.2.T.02.05	M:Brake System Research and Service	Diagnose poor stopping, noise, pulling, grabbing, dragging or pedal pulsation concerns; determine necessary action.
VT.VAUTO.2.T.02.06	N:Hydraulic Brake Systems	Diagnose and identify pressure concerns in the brake system using hydraulic principles (Pascal's Law).
VT.VAUTO.2.T.02.07	N:Hydraulic Brake Systems	Measure brake pedal height; determine necessary action.
VT.VAUTO.2.T.03	N:Hydraulic Brake Systems	Check master cylinder for internal and external leaks and proper operations; determine necessary action.
VT.VAUTO.2.T.03.01	N:Hydraulic Brake Systems	Remove, bench bleed and reinstall master cylinder.
VT.VAUTO.2.T.03.02	N:Hydraulic Brake Systems	Identify poor stopping, pulling or dragging concerns caused by malfunctions in the hydraulic system; determine necessary action.
VT.VAUTO.2.T.03.03	N:Hydraulic Brake Systems	Inspect brake lines, flexible hoses and fittings for leaks, dents, kinks, rust cracks, bulging or wear; tighten loose fittings and supports; determine necessary action.
VT.VAUTO.2.T.03.04	N:Hydraulic Brake Systems	Perform appropriate maintenance and repair of hydraulic brake systems.
VT.VAUTO.2.U.01	N:Hydraulic Brake Systems	Fabricate and/or install brake lines (double flare and ISO types); replace hoses, fittings and supports, as needed.
VT.VAUTO.2.U.01.01	N:Hydraulic Brake Systems	Select, handle, store and fill brake fluids to proper level.
VT.VAUTO.2.U.01.02	N:Hydraulic Brake Systems	Inspect, test and/or replace components of brake warning light system.
VT.VAUTO.2.U.01.03	N:Hydraulic Brake Systems	Bleed (manual, pressure, vacuum or surge) brake system.
VT.VAUTO.2.U.01.04	N:Hydraulic Brake Systems	Flush hydraulic system.
VT.VAUTO.2.U.01.05	O:Drum Brake Systems	Remove and inspect brake drums; determine necessary action.
VT.VAUTO.2.U.01.06	O:Drum Brake Systems	Remove, clean, inspect and measure brake drums; determine necessary action.
VT.VAUTO.2.U.01.07	O:Drum Brake Systems	Refinish brake drum.
VT.VAUTO.2.V.01	O:Drum Brake Systems	Remove and inspect brake shoes and drum brake components; determine necessary action.
VT.VAUTO.2.V.01.01	O:Drum Brake Systems	Remove, clean and inspect brake shoes, springs, pins, clips, levers, adjusters/self-adjusters, other related brake hardware and backing support plates; lubricate and reassemble.
VT.VAUTO.2.V.01.02	O:Drum Brake Systems	Remove, inspect and install wheel cylinders.
VT.VAUTO.2.V.01.03	O:Drum Brake Systems	Pre-adjust brake shoes and parking brake before installing brake drums or drum/hub assemblies and wheel bearings.
VT.VAUTO.2.V.01.04	O:Drum Brake Systems	Install wheel, torque lug nuts and make final checks and adjustments.
VT.VAUTO.2.V.01.05	P:Disc Brake Systems	Remove and inspect brake caliper assembly; determine necessary action.
VT.VAUTO.2.V.01.06	P:Disc Brake Systems	Remove caliper assembly from mountings; clean and inspect for leaks and damage to caliper housing; determine necessary action.
VT.VAUTO.2.W.01	P:Disc Brake Systems	Clean and inspect caliper mounting and slides for wear and damage; determine necessary action.
VT.VAUTO.2.W.01.01	P:Disc Brake Systems	Remove, clean and inspect pads and retaining hardware; determine necessary action.
VT.VAUTO.2.W.01.02	P:Disc Brake Systems	Adjust calipers equipped with an integrated parking brake system.
VT.VAUTO.2.W.01.03	P:Disc Brake Systems	Reassemble, lubricate and reinstall caliper, pads and related hardware; seat pads and inspect for leaks.
VT.VAUTO.2.W.01.04	P:Disc Brake Systems	Install wheel, torque lug nuts and make final checks and adjustments.
VT.VAUTO.2.W.01.05	P:Disc Brake Systems	Remove and inspect brake rotors; determine necessary action.
VT.VAUTO.2.X.01	P:Disc Brake Systems	Inspect and measure rotor with a dial indicator and a micrometer and compare readings to manufacturer's specifications; determine necessary action.
VT.VAUTO.2.X.01.01	P:Disc Brake Systems	Remove and refinish rotor according to manufacturer's recommendations.
VT.VAUTO.2.X.01.02	P:Disc Brake Systems	Prep hub mating service and reinstall brake rotor.
VT.VAUTO.2.X.01.03	Q:Power Brake Systems	Identify and describe the operation of a vacuum brake assist unit.
VT.VAUTO.2.X.02	Q:Power Brake Systems	Test pedal free travel with and without engine running; check power assist operation.
VT.VAUTO.2.X.02.01	Q:Power Brake Systems	Check vacuum supply (manifold or auxiliary pump) to vacuum-type power booster.

VT.VAUTO.2.X.02.02	Q:Power Brake Systems	Inspect the vacuum-type power booster unit for vacuum leaks; inspect the check valve for proper operation; determine necessary action.
VT.VAUTO.2.X.03	Q:Power Brake Systems	Identify and describe the operation of a brake hydraulic assist unit.
VT.VAUTO.2.X.03.01	Q:Power Brake Systems	Test pedal free travel with and without engine running; check power assist operation.
VT.VAUTO.2.X.03.02	Q:Power Brake Systems	Inspect and test hydro-boost system and accumulator for leaks and proper operation; determine necessary action.
VT.VAUTO.2.X.03.03	R:Miscellaneous Brake Components and Systems	Diagnose and repair parking brake failures and concerns.
VT.VAUTO.2.X.04	R:Miscellaneous Brake Components and Systems	Check parking brake operation; determine necessary action.
VT.VAUTO.2.X.04.01	R:Miscellaneous Brake Components and Systems	Check parking brake cables and components for wear, rusting, binding and corrosion; clean, lubricate or replace as needed.
VT.VAUTO.2.X.04.02	R:Miscellaneous Brake Components and Systems	Diagnose and repair wheel bearing failures and concerns.
VT.VAUTO.2.X.04.03	R:Miscellaneous Brake Components and Systems	Diagnose wheel bearing noise, wheel shimmy and vibration concerns; determine necessary action.
VT.VAUTO.2.X.04.04	R:Miscellaneous Brake Components and Systems	Remove, clean, inspect, wheel bearings, seals, hub and spindle; determine necessary action.
VT.VAUTO.2.X.04.05	R:Miscellaneous Brake Components and Systems	Replace wheel bearing, race and seals.
VT.VAUTO.2.Y.01	R:Miscellaneous Brake Components and Systems	Repack and install wheel bearings, replace seals, install hub and adjust wheel bearings.
VT.VAUTO.2.Y.01.02	R:Miscellaneous Brake Components and Systems	Remove and reinstall sealed wheel bearing assembly.
VT.VAUTO.2.Y.01.04	R:Miscellaneous Brake Components and Systems	Diagnose and repair electrical brake circuit failures and concerns.
VT.VAUTO.2.Y.02.01	R:Miscellaneous Brake Components and Systems	Check operation of parking brake indicator light system.
VT.VAUTO.2.CC.02.01	R:Miscellaneous Brake Components and Systems	Check operation of brake stop light system; determine necessary action.
VT.VAUTO.2.CC.04.06	S:Antilock Brake System	Identify, inspect and diagnose antilock brake system (ABS) components.
VT.VAUTO.2.CC.04.07	S:Antilock Brake System	Diagnose antilock brake system (ABS) electronic control(s) and components using self-diagnosis and/or recommended test equipment.
VT.VAUTO.2.CC.05.03	S:Antilock Brake System	Service antilock brake system high pressure hydraulic system to manufacturer's specifications.