

ARIZONA CTE CAREER PREPARATION STANDARDS & MEASUREMENT CRITERIA

AUTOMOTIVE TECHNOLOGIES, 47.0600.2	
STANDARD 1.0—EVALUATE PERFORMANCE AND IMPLEMENT BRAKE REPAIR	
1.1	Identify and interpret brake system concern; determine necessary action.
1.2	Research applicable vehicle and service information, such as brake system operation, vehicle service history, service precautions, and technical service bulletins.
1.3	Locate and interpret vehicle and major component identification numbers (VIN, vehicle certification labels, calibration decals).
1.4	Diagnose pressure concerns in the brake system using hydraulic principles (Paschal's Law).
1.5	Measure brake pedal height; determine necessary action.
1.6	Check master cylinder for internal and external leaks and proper operation; determine necessary action.
1.7	Remove, bench bleed, and reinstall master cylinder.
1.8	Diagnose poor stopping, pulling or dragging concerns caused by malfunctions in the hydraulic system; determine necessary action.
1.9	Inspect brake lines, flexible hoses, and fittings for leaks, dents, kinks, rust, cracks, bulging or wear; tighten loose fittings and supports; determine necessary action.
1.10	Fabricate and/or install brake lines (double flare and ISO types); replace hoses, fittings, and supports as needed.
1.11	Select, handle, store, and fill brake fluids to proper level.
1.12	Inspect, test, and/or replace metering (hold-off), proportioning (balance), pressure differential, and combination valves.
1.13	Inspect, test, and adjust height (load) sensing proportioning valve.
1.14	Inspect, test, and/or replace components of brake warning light system.
1.15	Bleed (manual, pressure, vacuum or surge) brake system.
1.16	Flush hydraulic system.
1.17	Diagnose and determine action on poor stopping, noise, pulling, grabbing, dragging or pedal pulsation concerns.
1.18	Remove, clean (using proper safety procedures), inspect, and measure brake drums; determine necessary action.
1.19	Refinish brake drum.
1.20	Remove, clean, and inspect brake shoes, springs, pins, clips, levers, adjusters/self-adjusters, other related brake hardware, and backing support plates; lubricate and reassemble.
1.21	Remove, inspect, and install wheel cylinders.
1.22	Pre-adjust brake shoes and parking brake before installing brake drums or drum/hub assemblies and wheel bearings.

These technical knowledge and skill standards were validated by a Skill Standards Validation Committee on October 11, 2007, and used in the adaptation, adoption, and development of test items for pilot testing in Spring 2008.

ARIZONA CTE CAREER PREPARATION STANDARDS & MEASUREMENT CRITERIA

1.23	Install, check, and adjust wheel, torque lug nuts.
1.24	Diagnose poor stopping, noise, pulling, grabbing, dragging or pedal pulsation concerns; determine necessary action.
1.25	Remove caliper assembly from mountings; clean and inspect for leaks and damage to caliper housing; determine necessary action.
1.26	Clean and inspect caliper mounting and slides for wear and damage; determine necessary action.
1.27	Remove, clean, and inspect pads and retaining hardware; determine necessary action.
1.28	Disassemble and clean caliper assembly; inspect parts for wear, rust, scoring, and damage; replace seal, boot, and damaged or worn parts.
1.29	Reassemble, lubricate, and reinstall caliper, pads, and related hardware; seat pads, and inspect for leaks.
1.30	Clean, inspect, and measure rotor with a dial indicator and a micrometer; follow manufacturer's recommendations in determining need to machine or replace.
1.31	Remove and reinstall rotor.
1.32	Refinish rotor on and off vehicle.
1.33	Adjust calipers equipped with an integrated parking brake system.
1.34	Install wheel, torque lug nuts, and make final checks and adjustments.
1.35	Test pedal free travel with and without engine running; check power assist operation.
1.36	Check vacuum supply (manifold or auxiliary pump) to vacuum-type power booster.
1.37	Inspect the vacuum-type power booster unit for vacuum leaks; inspect the check valve for proper operation; determine necessary action.
1.38	Inspect and test hydraulically assisted power brake systems for leaks and proper operation; determine necessary action.
1.39	Measure and adjust master cylinder pushrod length.
1.40	Diagnose wheel bearing noises, wheel shimmy, and vibration concerns; determine necessary action.
1.41	Remove, clean, inspect, repack, and install wheel bearings and replace seals; install hub and adjust wheel bearings.
1.42	Check parking brake cables and components for wear, rusting, binding, and corrosion; clean, lubricate, or replace as needed.
1.43	Check parking brake operation; determine necessary action.
1.44	Check operation of parking brake indicator light system.
1.45	Check operation of brake stop light system; determine necessary action.
1.46	Replace wheel bearing and race.
1.47	Inspect and replace wheel studs.

These technical knowledge and skill standards were validated by a Skill Standards Validation Committee on October 11, 2007, and used in the adaptation, adoption, and development of test items for pilot testing in Spring 2008.

ARIZONA CTE CAREER PREPARATION STANDARDS & MEASUREMENT CRITERIA

1.48	Remove and reinstall sealed wheel bearing assembly.
1.49	Identify and inspect antilock brake system (ABS) components; determine necessary action.
1.50	Diagnose poor stopping, wheel lock-up, abnormal pedal feel or pulsation, and noise concerns caused by the antilock brake system (ABS); determine necessary action.
1.51	Diagnose antilock brake system (ABS) electronic control(s) and components using self-diagnosis and/or recommended test equipment; determine necessary action.
1.52	Depressurize high-pressure components of the antilock brake system (ABS).
1.53	Bleed the antilock brake system's (ABS) front and rear hydraulic circuits.
1.54	Remove and install antilock brake system (ABS) electrical/electronic and hydraulic components.
1.55	Test, diagnose and service ABS speed sensors, toothed ring (tone wheel), and circuits using a graphing multimeter (GMM)/digital storage oscilloscope (DSO) (includes output signal, resistance, shorts to voltage/ground, and frequency data).
1.56	Diagnose antilock brake system (ABS) braking concerns caused by vehicle modifications (tire size, curb height, final drive ratio, etc.).
1.57	Identify traction control/vehicle stability control system components.
STANDARD 2.0—EVALUATE AND IMPLEMENT REPAIRS TO ELECTRICAL/ELECTRONIC SYSTEMS	
2.1	Identify and interpret electrical/electronic system concern; determine necessary action.
2.2	Research applicable vehicle and service information, such as electrical/electronic system operation, vehicle service history, service precautions, and technical service bulletins.
2.3	Locate and interpret vehicle and major component identification numbers (VIN, vehicle certification labels, and calibration decals).
2.4	Diagnose electrical/electronic integrity for series, parallel and series-parallel circuits using principles of electricity (Ohm's Law).
2.5	Use wiring diagrams during diagnosis of electrical circuit problems. P- 1
2.6	Demonstrate the proper use of a digital multimeter (DMM) during diagnosis of electrical circuit problems.
2.7	Check electrical circuits with a test light; determine necessary action.
2.8	Measure source voltage and perform voltage drop tests in electrical/electronic circuits using a voltmeter; determine necessary action.
2.9	Measure current flow in electrical/electronic circuits and components using an ammeter; determine necessary action.
2.10	Check continuity and measure resistance in electrical/electronic circuits and components using an ohmmeter; determine necessary action.
2.11	Check electrical circuits using fused jumper wires; determine necessary action.
2.12	Locate shorts, grounds, opens, and resistance problems in electrical/electronic circuits; determine necessary action.
2.13	Measure and diagnose the cause(s) of excessive key-off battery drain (parasitic draw); determine necessary action.

ARIZONA CTE CAREER PREPARATION STANDARDS & MEASUREMENT CRITERIA

2.14	Inspect and test fusible links, circuit breakers, and fuses; determine necessary action.
2.15	Inspect and test switches, connectors, relays, solid state devices, and wires of electrical/electronic circuits; perform necessary action.
2.16	Remove and replace terminal end from connector.
2.17	Repair connectors and terminal ends.
2.18	Repair wiring harnesses and connectors (including CAN/BUS systems).
2.19	Perform solder repair of electrical wiring.
2.20	Identify location of hybrid vehicle high voltage circuit disconnect (service plug) location and safety procedures.
2.21	Perform battery state-of-charge test; determine necessary action.
2.22	Perform battery capacity test; confirm proper battery capacity for vehicle application; determine necessary action.
2.23	Maintain or restore electronic memory functions.
2.24	Inspect, clean, fill, and replace battery.
2.25	Perform slow/fast battery charge.
2.26	Inspect and clean battery cables, connectors, clamps, and hold-downs; repair or replace as needed.
2.27	Start a vehicle using jumper cables and a battery or auxiliary power supply.
2.28	Identify high voltage circuits of electric or hybrid electric vehicles and related safety precautions.
2.29	Identify electronic modules, security systems and/or radios that require reinitialization or code entry following battery disconnect.
2.30	Identify hybrid vehicle auxiliary (12v) battery service, repair and test procedures.
2.31	Perform starter current draw tests; determine necessary action.
2.32	Perform starter circuit voltage drop tests; determine necessary action.
2.33	Inspect and test starter relays and solenoids; determine necessary action.
2.34	Remove and install starter in a vehicle.
2.35	Inspect and test switches, connectors, and wires of starter control circuits; perform necessary action.
2.36	Differentiate between electrical and engine mechanical problems that cause a slow-crank or no-crank condition.
2.37	Perform charging system output test; determine necessary action.
2.38	Diagnose charging system for the cause of undercharge, no-charge, and overcharge conditions.

These technical knowledge and skill standards were validated by a Skill Standards Validation Committee on October 11, 2007, and used in the adaptation, adoption, and development of test items for pilot testing in Spring 2008.

ARIZONA CTE CAREER PREPARATION STANDARDS & MEASUREMENT CRITERIA

2.39	Inspect, adjust, or replace generator, alternator.
2.40	Remove, inspect, and install generator (alternator).
2.41	Perform charging circuit voltage drop tests; determine necessary action.
2.42	Diagnose the cause of brighter than normal, intermittent, dim, or no light operation; determine necessary action.
2.43	Inspect, replace, and aim headlights and bulbs.
2.44	Inspect and diagnose incorrect turn signal or hazard light operation; perform necessary action.
2.45	Identify system voltage and safety precautions associated with high intensity discharge headlights.
2.46	Inspect and test gauges and gauge sending units for cause of intermittent, high, low, or no gauge readings; determine necessary action.
2.47	Inspect and test connectors, wires, and printed circuit boards of gauge circuits; determine necessary action.
2.48	Diagnose the cause of incorrect operation of warning devices and other driver information systems; determine necessary action.
2.49	Inspect and test sensors, connectors, and wires of electronic instrument circuits; determine necessary action.
2.50	Diagnose incorrect horn operation; perform necessary action.
2.51	Diagnose incorrect wiper operation; diagnose wiper speed control and park problems; perform necessary action.
2.52	Diagnose incorrect washer operation; perform necessary action.
2.53	Diagnose incorrect operation of motor-driven accessory circuits; determine necessary action.
2.54	Diagnose incorrect heated glass, mirror and seat operation; determine necessary action.
2.55	Diagnose incorrect electric lock operation; determine necessary action.
2.56	Diagnose incorrect operation of cruise control systems; determine necessary action.
2.57	Diagnose supplemental restraint system (SRS) concerns; determine necessary action. (Note: Follow manufacturer's safety procedures to prevent accidental deployment.)
2.58	Disarm and enable the airbag system for vehicle service.
2.59	Diagnose radio static and weak, intermittent, or no radio reception; determine necessary action.
2.60	Remove and reinstall door panel.
2.61	Diagnose body electronic system circuits using a scan tool; determine necessary action.
2.62	Check for module communication (including CAN/BUS systems) errors using a scan tool.
2.63	Diagnose the cause of false, intermittent, or no operation of anti-theft system.

These technical knowledge and skill standards were validated by a Skill Standards Validation Committee on October 11, 2007, and used in the adaptation, adoption, and development of test items for pilot testing in Spring 2008.

ARIZONA CTE CAREER PREPARATION STANDARDS & MEASUREMENT CRITERIA

STANDARD 3.0—PERFORM REPAIRS TO STEERING AND SUSPENSION SYSTEMS	
3.1	Identify and interpret suspension and steering concern; determine necessary action.
3.2	Research applicable vehicle and service information, such as suspension and steering system operation, vehicle service history, service precautions, and technical service bulletins.
3.3	Locate and interpret vehicle and major component identification numbers (VIN, vehicle certification labels, calibration decals).
3.4	Disable and enable supplemental restraint system (SRS).
3.5	Remove and replace steering wheel; center/time supplemental restraint system (SRS) coil (clock spring).
3.6	Diagnose steering column noises, looseness, and binding concerns (including tilt mechanisms); determine necessary action.
3.7	Diagnose power steering gear (non-rack and pinion) binding, uneven turning effort, looseness, hard steering, and fluid leakage concerns; determine necessary action.
3.8	Diagnose power steering gear (rack and pinion) binding, uneven turning effort, looseness, hard steering, and fluid leakage concerns; determine necessary action.
3.9	Inspect steering shaft universal-joint(s), flexible coupling(s), collapsible column, lock cylinder mechanism, and steering wheel; perform necessary action.
3.10	Adjust manual power non-rack and pinion worm bearing preload and sector lash.
3.11	Remove and replace manual or power rack and pinion steering gear; inspect mounting bushings and brackets.
3.12	Inspect and replace manual or power rack and pinion steering gear inner tie rod ends (sockets) and bellows boots.
3.13	Determine proper steering fluid type; inspect power steering fluid levels and condition.
3.14	Flush, fill, and bleed power steering system.
3.15	Diagnose power steering fluid leakage; determine necessary action.
3.16	Remove, inspect, replace, and adjust power steering pump belt.
3.17	Remove and reinstall power steering pump.
3.18	Remove and reinstall power steering pump pulley; check pulley and belt alignment.
3.19	Inspect and replace power steering hoses and fittings.
3.20	Inspect and replace pitman arm, relay (centerlink/intermediate) rod, idler arm and mountings, and steering linkage damper.
3.21	Inspect, replace, and adjust tie rod ends (sockets), tie rod sleeves, and clamps.
3.22	Test and diagnose components of electronically controlled steering systems using a scan tool; determine necessary action.
3.23	Inspect and test non-hydraulic electric power assist steering.
3.24	Identify hybrid vehicle power steering system electrical circuits, service and safety precautions.

These technical knowledge and skill standards were validated by a Skill Standards Validation Committee on October 11, 2007, and used in the adaptation, adoption, and development of test items for pilot testing in Spring 2008.

ARIZONA CTE CAREER PREPARATION STANDARDS & MEASUREMENT CRITERIA

3.25	Diagnose short and long arm suspension system noises, body sway, and uneven riding height concerns; determine necessary action.
3.26	Diagnose strut suspension system noises, body sway, and uneven riding height concerns; determine necessary action.
3.27	Remove, inspect, and install upper and lower control arms, bushings, shafts, and rebound bumpers.
3.28	Remove, inspect and install strut rods (compression/tension) and bushings.
3.29	Remove, inspect, and install upper and/or lower ball joints.
3.30	Remove, inspect, and install steering knuckle assemblies.
3.31	Remove, inspect, and install short and long arm suspension system coil springs and spring insulators.
3.32	Remove, inspect, install, and adjust suspension system torsion bars; inspect mounts.
3.33	Remove, inspect, and install stabilizer bar bushings, brackets, and links.
3.34	Remove, inspect, and install strut cartridge or assembly, strut coil spring, insulators (silencers), and upper strut bearing mount.
3.35	Lubricate suspension and steering systems.
3.36	Remove, inspect, and install coil springs and spring insulators.
3.37	Remove, inspect, and install transverse links, control arms, bushings, and mounts.
3.38	Remove, inspect, and install strut cartridge or assembly, strut coil spring, and insulators (silencers).
3.39	Inspect, remove, and replace shock absorbers.
3.40	Remove, inspect, and service or replace front and rear wheel bearings.
3.41	Test and diagnose components of electronically controlled suspension systems using a scan tool; determine necessary action.
3.42	Differentiate between steering and suspension concerns using principles of steering geometry (caster, camber, toe, etc).
3.43	Diagnose vehicle wander, drift, pull, hard steering, bump steer, memory steer, torque steer, and steering return concerns; determine necessary action.
3.44	Perform prealignment inspection; perform necessary action.
3.45	Measure vehicle riding height; determine necessary action.
3.46	Check and adjust front and rear wheel camber; perform necessary action.
3.47	Check and adjust caster; perform necessary action.
3.48	Check and adjust front wheel toe; adjust as needed and center steering wheel.
3.49	Check toe-out-on-turns (turning radius); determine necessary action.

These technical knowledge and skill standards were validated by a Skill Standards Validation Committee on October 11, 2007, and used in the adaptation, adoption, and development of test items for pilot testing in Spring 2008.

ARIZONA CTE CAREER PREPARATION STANDARDS & MEASUREMENT CRITERIA

3.50	Check SAI (steering axis inclination) and included angle; determine necessary action.
3.51	Check and adjust rear wheel toe.
3.52	Check rear wheel thrust angle; determine necessary action.
3.53	Check for front wheel setback; determine necessary action.
3.54	Check front cradle (subframe) alignment; determine necessary action.
3.55	Diagnose tire wear patterns; determine necessary action.
3.56	Inspect tires; check and adjust air pressure.
3.57	Diagnose wheel/tire vibration, shimmy, and noise; determine necessary action.
3.58	Rotate tires according to manufacturer's recommendations.
3.59	Measure wheel, tire, axle, and hub runout; determine necessary action.
3.60	Diagnose tire pull (lead) problem; determine necessary action.
3.61	Balance wheel and tire assembly (static and dynamic).
3.62	Dismount, inspect, repair, and remount tire on wheel.
3.63	Dismount, inspect, and remount tire on wheel equipped with tire pressure sensor.
3.64	Reinstall wheel; torque lug nuts.
3.65	Inspect tire and wheel assembly for air loss; perform necessary action.
3.66	Repair tire using internal patch.
3.67	Inspect, diagnose, and calibrate tire pressure monitoring system.
STANDARD 4.0—IMPLEMENT GENERAL ENGINE PERFORMANCE DIAGNOSIS AND REPAIR	
4.1	Identify and interpret engine performance concern; determine necessary action.
4.2	Research applicable vehicle and service information, such as engine management system operation, vehicle service history, service precautions, and technical service bulletins.
4.3	Locate and interpret vehicle and major component identification numbers (VIN, vehicle certification labels, and calibration decals).
4.4	Inspect engine assembly for fuel, oil, coolant, and other leaks; determine necessary action.
4.5	Diagnose abnormal engine noise or vibration concerns; determine necessary action.
4.6	Diagnose abnormal exhaust color, odor, and sound; determine necessary action.

These technical knowledge and skill standards were validated by a Skill Standards Validation Committee on October 11, 2007, and used in the adaptation, adoption, and development of test items for pilot testing in Spring 2008.

ARIZONA CTE CAREER PREPARATION STANDARDS & MEASUREMENT CRITERIA

4.7	Perform engine absolute (vacuum/boost) manifold pressure tests; determine necessary action.
4.8	Perform cylinder power balance test; determine necessary action.
4.9	9 Perform cylinder cranking compression tests; determine necessary action.
4.10	Perform engine running compression test; determine necessary action.
4.11	Perform cylinder leakage test; determine necessary action.
4.12	Diagnose engine mechanical, electrical, electronic, fuel, and ignition concerns with an oscilloscope and/or engine diagnostic equipment; determine necessary action.
4.13	Prepare 4 or 5 gas analyzer; inspect and prepare vehicle for test, and obtain exhaust readings; interpret readings, and determine necessary action.
4.14	Verify engine operating temperature; determine necessary action.
4.15	Perform cooling system pressure tests; check coolant condition; inspect and test radiator, pressure cap, coolant recovery tank, and hoses; perform necessary action.
4.16	Verify correct camshaft timing.
4.17	Retrieve and record stored OBD I diagnostic trouble codes; clear codes.
4.18	Retrieve and record stored OBD II diagnostic trouble codes; clear codes when applicable.
4.19	Diagnose the causes of emissions or drivability concerns resulting from malfunctions in the computerized engine control system with stored diagnostic trouble codes.
4.20	Diagnose emissions or drivability concerns resulting from malfunctions in the computerized engine control system with no stored diagnostic trouble codes; determine necessary action.
4.21	Check for module communication (including CAN/BUS systems) errors using a scan tool.
4.22	Inspect and test computerized engine control system sensors, powertrain control module (PCM), actuators, and circuits using a graphing multimeter (GMM)/digital storage oscilloscope (DSO); perform necessary action.
4.23	Obtain and interpret scan tool data.
4.24	Access and use service information to perform step-by-step diagnosis.
4.25	Diagnose drivability and emissions problems resulting from malfunctions of interrelated systems (cruise control, security alarms, suspension controls, traction controls, A/C, automatic transmissions, non-OEM-installed accessories, or similar systems); determine necessary action.
4.26	Perform active tests of actuators using scan tool; determine necessary action.
4.27	Diagnose ignition system related problems such as no-starting, hard starting, engine misfire, poor drivability, spark knock, power loss, poor mileage, and emissions concerns on vehicles with electronic ignition (distributorless) systems; determine necessary action.
4.28	Diagnose ignition system related problems such as no-starting, hard starting, engine misfire, poor drivability, spark knock, power loss, poor mileage, and emissions concerns on vehicles with distributor ignition (DI) systems; determine necessary action.
4.29	Inspect and test ignition primary circuit wiring and solid state components; perform necessary action.

ARIZONA CTE CAREER PREPARATION STANDARDS & MEASUREMENT CRITERIA

4.30	Inspect, test and service distributor.
4.31	Inspect and test ignition system secondary circuit wiring and components; perform necessary action.
4.32	Inspect and test ignition coil(s); perform necessary action.
4.33	Check and adjust ignition system timing and timing advance/retard (where applicable).
4.34	Inspect and test ignition system pick-up sensor or triggering devices; perform necessary action
4.35	Diagnose hot or cold no-starting, hard starting, poor drivability, incorrect idle speed, poor idle, flooding, hesitation, surging, engine misfire, power loss, stalling, poor mileage, dieseling, and emissions problems on vehicles with injection-type fuel systems; determine necessary action.
4.36	Check fuel for contaminants and quality; determine necessary action.
4.37	Inspect and test fuel pumps and pump control systems for pressure, regulation and volume; perform necessary action.
4.38	Replace fuel filters.
4.39	Inspect and test cold enrichment system and components; perform necessary action.
4.40	Inspect throttle body, air induction system, intake manifold and gaskets for vacuum leaks and/or unmetered air.
4.41	Inspect and test fuel injectors.
4.42	Check idle speed.
4.43	Inspect the integrity of the exhaust manifold, exhaust pipes, muffler(s), catalytic converter(s), resonator(s), tail pipe(s), and heat shield(s); perform necessary action.
4.44	Perform exhaust system back-pressure test; determine necessary action.
4.45	Test the operation of turbocharger/supercharger systems; determine necessary action
4.46	Diagnose oil leaks, emissions, and drivability problems resulting from malfunctions in the positive crankcase ventilation (PCV) system; determine necessary action.
4.47	Inspect, test and service positive crankcase ventilation (PCV) filter/breather cap, valve, tubes, orifices, and hoses; perform necessary action.
4.48	Diagnose emissions and drivability problems caused by malfunctions in the exhaust gas recirculation (EGR) system; determine necessary action.
4.49	Inspect, test, service and replace components of the EGR system, including EGR tubing, exhaust passages, vacuum/pressure controls, filters and hoses; perform necessary action.
4.50	Inspect and test electrical/electronic sensors, controls, and wiring of exhaust gas recirculation (EGR) systems; perform necessary action.
4.51	Diagnose emissions and drivability problems resulting from malfunctions in the secondary air injection and catalytic converter systems; determine necessary action.
4.52	Inspect and test mechanical components of secondary air injection systems; perform necessary action.
4.53	Inspect and test electrical/electronically-operated components and circuits of air injection systems; perform necessary action.

ARIZONA CTE CAREER PREPARATION STANDARDS & MEASUREMENT CRITERIA

4.54	Inspect and test catalytic converter performance.
4.55	Diagnose emissions and drivability problems resulting from malfunctions in the evaporative emissions control system; determine necessary action.
4.56	Inspect and test components and hoses of evaporative emissions control system; perform necessary action.
4.57	Interpret evaporative emission related diagnostic trouble codes (DTCs); determine necessary action.
4.58	Adjust valves on engines with mechanical or hydraulic lifters.
4.59	Remove and replace timing belt; verify correct camshaft timing.
4.60	Remove and replace thermostat.
4.61	Inspect and test mechanical/electrical fans, fan clutch, fan shroud/ducting, air dams, and fan control devices; perform necessary action.
4.62	Perform common fastener and thread repairs to include: remove broken bolt, restore internal and external threads, and repair internal threads with thread insert.
4.63	Perform oil and filter change.
4.64	Identify hybrid vehicle internal combustion engine service precautions.