

CDX Plus GS Menu Topic List

Category	Topic Area	Topic Group	Topic
Safety & Information	Occupational Safety & Health	Hazards & emergencies	Legislation • Basic safety introduction • Identifying hazards • Evacuating in an emergency • Fuel fires • Using a fire extinguisher • Using an MSDS • Removing toxic dust • Lifting equipment • Moving & road testing vehicles • Running engines • Used engine oil • Vehicle valeting hazards • Electrical safety
		Personal & property safety	Personal protection • Basic injury prevention • Basic first aid & CPR • Property security
		Occupational safety & health tasksheets	C451 • C452 • C455 • C456 • C457 • C458 • C459 • C460 • C461 • C462 • C463 • C465 • C504 • C523 • C533
	Vehicle Information	Information procedures	Locating vehicle information • Decoding a VIN • Obtaining & interpreting scan tool data • Using a repair manual • Using a shop manual • Using an owner's manual • Using a labor guide • Using a parts program • Using a service information program
		Vehicle information tasksheets	C002 • C003 • C058 • C059 • C102 • C103 • C166 • C167 • C230 • C231 • C286 • C287 • C338 • C339 • C342 • C343 • C387 • C388 • C405 • C408 • C470 • C471 • C472 • C475 • C531 • C544 • C548 • C549 • C554 • C557
	Vehicle Configurations	Body designs	Sedan • Station wagon • Coupe • Hatch-back • Pick-up/utility • Light vehicle vans • General goods transport vehicles • Buses & coaches • Vehicle closures
		Drive configurations	Engine & transmission configurations • Transmissions & final drives • Transmission components • Chassis configurations • Identifying engines
		Vehicle inspection procedures	Carrying out a visual inspection • Inspecting under body components • Measuring a wheelbase • Checking windshield washer liquid • Checking & replacing wiper blades • Checking a security system • Checking door hinges • Checking a seat belt • Checking interior trim • Checking driver's seat fabric • Vehicle valet service • Routine vehicle checks
		Vehicle configurations tasksheets	C337 • C473 • C476 • C481 • C482 • C502 • C534 • C538
Tools & Equipment	Hand & Power Tools	Tools & equipment fundamentals	Cleaning tools & equipment • Identifying defective equipment • Compressed air equipment • Rolling road & brake testing equipment • Batteries & chargers • Vehicle inspection pits • Wheel & tire safety
		Power tools	Drills & drill bits • Power grinder • Air tools
		Using electric power tools	Using an angle grinder • Using a bench grinder • Using pressure washers & cleaners

		Using air power tools	Using an air drill • Using an air impact wrench • Using an air blow gun • Using an air chisel
		Common workshop tools	Basic hand tools • Repairing an external thread • Repairing an internal thread • Removing a stud • Using a screw extractor • Using a gear puller
		Using measuring tools	Using a torque wrench & an angle gauge • Using a thread pitch gauge • Using a vacuum gauge • Using a dial indicator • Using a feeler gauge • Using a micrometer • Using a tire pressure gauge
		Hand & power tools tasksheets	C031 • C466 • C467 • C468 • C469 • C532 • C537 • C542 • C572
	Workshop Equipment	Using workshop equipment	Using a two-post hoist • Using a four-post hoist • Using an engine hoist • Using a floor jack • Setting up an oxyacetylene torch • Using an oxyacetylene torch
		Workshop equipment tasksheets	C453 • C454 • C521 • C522 • C574
Engines	Motive Power Types	Engine fundamentals	Basic 4-stroke principles • 4-stroke engine cycle • 2-stroke engine cycle • Basic principles of the rotary engine • Basic 4-stroke diesel principles • Basic diesel engine components • Engine blocks & pistons
		Motive power types tasksheets	C004
Engines	Engine Components	Valves & valve trains	Valves • Valve seats • Valve trains
		Camshafts & drives	Camshafts & drives • Overhead camshaft • Cam lobes • Timing belts & chains
		Pistons	Pistons • Piston rings
		Crankshaft assemblies	Flywheel • Crankshaft & bearings • Valve train overview
		Engines procedures	Testing cylinder compression • Checking idle speed • Obtaining & interpreting scan tool data • Removing & replacing a cam belt • Inspecting & adjusting an engine drive belt • Replacing an engine drive belt
		Engine components tasksheets	C009 • C015 • C017 • C025 • C047 • C389 • C394 • C448 • C586
Engines	Engine Cooling	Cooling fundamentals	Cooling systems • Vehicle coolant
		Cooling systems	Air cooling • Liquid cooling
		Cooling system components	Basic cooling system components • Radiator • Coolant hoses • Water pump • Cooling system thermostat • Cooling fans • Temperature indicators • Radiator pressure cap • Recovery system
		Cooling system procedures	Checking & adjusting coolant • Draining & refilling coolant • Checking & replacing a coolant hose • Testing cooling system pressure • Removing & replacing a radiator • Removing & replacing a thermostat • Inspecting & adjusting an engine drive belt • Replacing an engine drive belt
		Engine cooling tasksheets	C046 • C048 • C049 • C050 • C052 • C053 • C363 • C364 • C365 • C366 • C367 • C368 • C369 • C398 • C399 • C449 • C450 • C478 • C568 • C578

	Engine Lubrication	Oil	Functions of oil • Viscosity • Oil additives
		Lubrication systems	The lubrication system • Pressure system • 2-stroke engine premix fuel systems • 2-stroke engine oil injection systems • Corrosion/noise reduction
		Lubrication system components	Sump • Oil pump • Oil filters • Oil indicators
		Lubrication procedures	Checking engine oil • Draining engine oil • Replacing an oil filter • Refilling engine oil
		Engine lubrication tasksheets	C045 • C056 • C477 • C573
Fuel Systems	Intake & Exhaust	Intake & exhaust systems	Carbureted systems • Exhaust systems • Electronic fuel injection systems
		Intake & exhaust system components	Intake system components • Air cleaners • Carburetor air cleaners • EFI air cleaners • Volumetric efficiency • Forced induction • Exhaust system components
		Intake system procedure	Checking & changing an air filter
		Intake & exhaust tasksheets	C428 • C429 • C430 • C439 • C486
	Fuels & Fuel Supply	Fuel system principles	Gasoline fuel • Diesel fuel • Carburation
		Carbureted system components	Mechanical fuel pumps • Electric fuel pumps • Tanks & lines • Fuel lines • Carburetor filters
		EFI fuel supply system - principles	EFI principles • Basic EFI principles
		EFI fuel supply system - components	Fuel filters • Tachometric relay • EFI sensors
		Fuel system procedures	Replacing a fuel filter
		Fuels & fuel supply tasksheets	C422 • C426
	Emission Control	Creation of emissions	Sources of emission • Combustion
		Types of emissions	Hydrocarbons • Hydrocarbons in exhaust gases • Oxides of nitrogen • Particulates • Carbon monoxide • Carbon dioxide
		Emission control	Evaporation emission control • Catalytic conversion • Crankcase emission control
On-board diagnostics		OBD systems • Diagnostic trouble codes • Monitoring emissions	
Emissions procedures		Checking & cleaning a PCV valve • Obtaining & interpreting scan tool data	
Emission control tasksheets		C396 • C401 • C402 • C407 • C431 • C432 • C446 • C520	
Steering & Suspension	Steering Systems	Steering principles	Steering systems • Principles of steering • Rack-and-pinion steering • Rack-and-pinion steering system • Recirculating ball & nut steering system • Four-wheel steering systems
		Steering boxes & columns	Rack-and-pinion gearbox • Power steering • Flow-control valve
		Steering arms & components	Steering linkages • Joints • Bushes/bushings
		Steering system procedures	Checking & adjusting power steering fluid • Pressure testing a power steering system • Flushing a power steering system • Inspecting & adjusting an engine drive belt • Servicing a steering system • Servicing wheel bearings
		Steering systems tasksheets	C177 • C178 • C186 • C203 • C479 • C485

Suspension Systems	Suspension fundamental principles	Principles of suspension • Wheel unit location • Hydraulic shock absorbers • Arms & linkages	
	Types of suspension	Suspension systems • Dead axle • Rear independent suspension	
	Types of springs	Coil springs • Rubber springs	
	Front suspension types & components	Strut suspension • Short/long arm suspension • Torsion bar suspension	
	Rear suspension types & components	Rigid axle leaf spring suspension • Rigid axle coil spring suspension • Independent type suspension • Rigid non-drive suspension	
	Suspension system procedures	Checking shock absorbers • Changing shock absorbers • Lubricating a suspension system • Servicing a suspension system	
	Suspension systems tasksheets	C190 • C196 • C198 • C201 • C202 • C204	
Wheels & Tires	Tire types & characteristics	Tires • Radial ply tires • Radial ply tire sidewalls	
	Tire construction	Tire materials • Tire sizes & designations • Tire information	
	Wheel alignment fundamentals	Basic principles of wheel alignment • Caster • Camber • Scrub radius • Steering axis inclination • Toe-in & toe out • Toe-out on turns • Turning radius	
	Wheels & tires procedures	Using a tire pressure gauge • Checking & adjusting tire pressure • Checking for tire wear patterns • Rotating tires • Removing a tire • Fitting a tire • Dynamic balancing a tire	
	Wheels & tires tasksheets	C220 • C222 • C225 • C226 • C227 • C580	
Brakes	Braking Systems	Braking fundamentals	Principles of braking • Drum & disc brakes • Coefficient of friction • Parking brakes
		Braking system components	Park brake system • Brake pedal • Brake lines • Brake fluid • Power booster or brake unit • Brake light switch
		Drum brakes & components	Drum brake system • Brake linings & shoes • Backing plate • Wheel cylinders
		Disc brakes & components	Disc brake system • Disc brake operation • Disc brake rotors • Disc brake pads • Disc brake calipers • Proportioning valves • Proportioning valve operation
		Antilock braking system & components	ABS brake system • Antilock braking system operation • Principles of ABS braking
		Brakes procedures	Checking & adjusting brake fluid • Replacing brake fluid • Checking brake pads • Replacing brake pads • Removing & replacing a rotor • Checking wheel cylinders • Replacing brake linings • Adjusting a park brake cable
		Braking systems tasksheets	C237 • C239 • C243 • C244 • C246 • C247 • C248 • C249 • C250 • C251 • C253 • C254 • C255 • C259 • C262 • C263 • C269 • C270 • C276 • C480
Transmissions	Clutches & Manual Transmissions	Clutches	Clutch principles • Single-plate clutches • Multi-plate clutches • Operating mechanisms
		Gearbox layout & operation	Gearbox layouts • Transaxle designs
		Clutches & manual transmissions procedures	Checking gearbox oil • Changing manual gearbox oil • Checking & adjusting a clutch
		Clutches & manual transmissions tasksheets	C483 • C484 • C490

Automatic Transmissions	Automatic transmission fundamentals	Torque converter principles • Planetary gears • Simple planetary gearsets • Compound planetary gearsets		
	Automatic transmissions procedures	Checking automatic transmission fluid • Changing transmission fluid & filter		
	Automatic transmissions tasksheets	C068 • C075		
	Final Drive & Drive Shafts	Basic layouts	Front-wheel drive layouts • Rear-wheel drive layout • Four-wheel drive layout • All-wheel drive layout	
		Front-wheel drive	Front-wheel drive shafts • Front-wheel final drives	
		Rear-wheel drive	Rear-wheel drive shafts • Universal joints • Rear-wheel final drive	
		Final drives procedures	Checking free play • Checking drive shaft joints • Checking manual transaxle/differential oil	
		Final drive & drive shafts tasksheets	C491	
	Electrics & Electronics	Electrical Principles	Electrical fundamentals	Basic electricity • Free electrons • Basic electronic principles • Semi-conductors • Ohm's law calculations • Power equation
Sources of electricity			Electrostatic energy • Thermo-electric energy • Electrochemical energy • Photo-voltaic energy • Piezo-electric energy • Electromagnetic induction • Electromagnetic components	
Effects of electricity			Heating effects • Chemical effects • Magnetic effects	
Circuits & measurement			Ohm's law • Electrical power • Electrical measurement • Series circuits • Parallel circuits • Parallel circuit resistance • Series-parallel circuits	
Wires & connectors procedures			Stripping wire insulation • Installing a solderless terminal • Soldering wires & connectors	
Electrical testing procedures			Using a non-powered test light • Using a lead light • Using a DVOM to measure continuity • Using a DVOM to measure voltage	
Electrical components			Capacitors • Conductors & insulators • Wires • Shielding • Wire sizes • Length vs. resistance • Fuses & circuit breakers • Relays • Lamps • Resistors • Resistor ratings • Variable resistors • Thermistors	
Batteries			Lead-acid batteries • Batteries & cells • Battery charging	
Battery maintenance procedures			Inspecting & testing a battery • Cleaning & replacing a battery • Charging a battery	
Electrical principles tasksheets			C285 • C290 • C291 • C292 • C294 • C298 • C300 • C301 • C302 • C303 • C304 • C305 • C306 • C307 • C308 • C324 • C524 • C526 • C527 • C558 • C582	
Ignition Systems			Ignition systems	Basic ignition • Ignition principles • Ignition components • Vacuum & centrifugal units • Spark timing
			Contact breaker components	Ignition switches • Contact breaker • Capacitor/condensator • Distributors • Distributor types • High-tension leads • Spark plugs • Advance & retard mechanisms
			Distributorless systems	Distributorless ignition systems • Insulated coils

		Ignition procedures	Checking ignition timing • Checking & changing a spark plug • Removing & replacing contact points
		Ignition systems tasksheets	C412 • C416
Charging, Starting & Lighting		Charging & starting	Alternator principles • Starter motor principles
		Charging procedures	Checking a charging system • Removing & replacing an alternator • Inspecting & adjusting an engine drive belt • Replacing an engine drive belt
		Starting procedures	Checking a starting system • Jump-starting a vehicle
		Lighting	Light bulbs • Bulb information
		Types of lights	Stop lights • Reverse lights • Indicators • Headlights
		Lighting circuits	Park & tail light circuits • Headlight & dip circuits • Circuit diagrams
		Lighting procedures	Checking lighting & peripheral systems • Checking & changing an exterior light bulb • Checking & changing a headlight bulb • Aiming headlights
		Charging, starting & lighting tasksheets	C271 • C272 • C310 • C314 • C315 • C316 • C317 • C318 • C319 • C320 • C321 • C485 • C525 • C587
HVAC	Heating & Air-conditioning	HVAC basic principles	HVAC legislation • Vehicle heating & ventilation systems • Basic air-conditioning principles • Air-conditioning capacity
		Air-conditioning components	Lines & hoses • Refrigerants • Heating elements
		Climate control	Air-conditioning ECU • Ventilation systems
		HVAC procedures	Checking an A/C system • Checking a heating system • Inspecting & adjusting an engine drive belt • Replacing an engine drive belt
		Heating & air-conditioning tasksheets	C341 • C344 • C346 • C351 • C379 • C493 • C494 • C495
Associated Studies	Communication		A day with Henry
		Active listening	I am listening • I am with you
		Art of speaking	You know what I mean? • May I ask a question? • On the phone
		People skills	The other half • Good team player • How may I help you?
		Effective reading	Practice makes perfect
		Writing at work	Yours sincerely • Job sheet • Inspection report • Equipment defect report • Accident report
		Researching	How to go about it • Where to look • Another day with Henry
		Communication tasksheets	C513 • C540 • C549 • C554 • C557 • C565 • C569
Info & Help	Information & Help		About CDX Global • Contacts • Know-See-Do-Prove • Navigation help