

# CAR DIAGNOSTICS CHECKLIST

## Outside

AREA	WHAT TO CHECK FOR	POSSIBLE WARNING
<input type="checkbox"/> Body	sight along sides for ripples	wrecked
<input type="checkbox"/> Headlights, Trim, Underside	rust	cancer
<input type="checkbox"/> Windows	cracks, scratches	expensive repair
<input type="checkbox"/> Doors, Hood, Trunk Lid	sagging, ill fit	wrecked
<input type="checkbox"/> Body Joints	repainting, spot welds	wrecked, restored
<input type="checkbox"/> Underneath, Frame	bending, warping, spot welds	wrecked
<input type="checkbox"/> Tires	excessive wear	high mileage
<input type="checkbox"/> Tires--front	excessive wear	needs alignment or balancing
<input type="checkbox"/> Tires	cupped, very uneven wear	steering, suspension, shocks, brakes
<input type="checkbox"/> Tires	spare? jack included?	
<input type="checkbox"/> Tires	grab front tires and pull toward you—	
	clunking noise, lots of movement	worn wheel bearings
<input type="checkbox"/> Tires	rear tire off ground, jiggle it—	
	up and down movement	worn springs
	squeaks when you lean on fenders	worn suspension, needs lube
<input type="checkbox"/> Shock Absorbers	stand on bumpers, jump off—	
	excessive bouncing	worn shocks
<input type="checkbox"/> Oil Leaks	back car up—	
	soiled areas under car	leaky oil drain plug, crancase, rear seal, etc.
<input type="checkbox"/> Water Leaks	rusty water stain	bad radiator, leaky hoses
<input type="checkbox"/> Brake Fluid Leaks	lightweight fluid	master cylinder, brake lines, back of wheels
<input type="checkbox"/> Transmission Leaks	reddish lightweight fluid	transmission
<input type="checkbox"/> Gas Leaks	gasoline smell	fuel pump, carburetor, fuel lines, gas tank
<input type="checkbox"/> Verify Leaks	drive car and park elsewhere for 15 minutes	
<input type="checkbox"/> Tail Pipe	smoke—whitish water vapor (warm engine)	cracked block or cylinder head
<input type="checkbox"/>	smoke—black	too rich fuel/air mixture
<input type="checkbox"/>	smoke—bluish	burning oil, needs rings
<input type="checkbox"/>	smoke—light grey	burning transmission fluid

## Interior

<input type="checkbox"/> Rugs, Upholstery	wear, tears	
<input type="checkbox"/> Roof Lining	tears, disintegration	
<input type="checkbox"/> Seats	lumpy, broken down	
<input type="checkbox"/> Pedals	worn	high mileage
<input type="checkbox"/>	new in old car	cover-up for high mileage
<input type="checkbox"/> Steering Wheel	more than 2 inches play	bad steering
<input type="checkbox"/> Gauges	turn on key—do all gauges register?	
<input type="checkbox"/> Winshield Wipers		
<input type="checkbox"/> Clock		
<input type="checkbox"/> Radio		
<input type="checkbox"/> Headlights low/high beam		
<input type="checkbox"/> Brake Lights		
<input type="checkbox"/> Turn Signals--front/back		
<input type="checkbox"/> Heater		
<input type="checkbox"/> Air Conditioner		
<input type="checkbox"/> Brakes	sinking brake pedal	defective master cylinder
<input type="checkbox"/> Gears	run through each gear—rough shifting	worn gears, bad transmission

## Under Hood

<input type="checkbox"/> General Engine Area	leaks, stains	disrepair
<input type="checkbox"/> Radiator	rust, wetness, stains	leaky radiator
<input type="checkbox"/> Water Pump	leaks, stains	bad pump
<input type="checkbox"/> Battery	corrosion, low on water	dead soon
<input type="checkbox"/> Valve Cover	oil leaks, stains	bad gasket
<input type="checkbox"/> Core Plugs	leaks, stains, rust	need replacement
<input type="checkbox"/> Block	cracks, leaks, stains	run!
<input type="checkbox"/> Manifolds	cracks, leaks, stains	run!
<input type="checkbox"/> Oil	granular, black, sticky	worn unmaintained engine
	water droplets	blown head gasket, cracked block
<input type="checkbox"/> Hoses	soft, mushy, brittle, cracked, leaky	need replacement
<input type="checkbox"/> Air Cleaner	filthy	bad maintenance
<input type="checkbox"/> Carburetor	fuel leaking from bottom, gasket	needs rebuild
	open butterfly on cold car	sticky choke
	air cleaner off—choke doesn't open	sticky choke
<input type="checkbox"/> Throttle Linkage	fuel doesn't squirt in venturi	rebuild or cleaning
<input type="checkbox"/> Valves	remove oil filler cap—use stethoscope—	
	ticking	low oil
	rattling	valve job
	clunking	rod bearing
<input type="checkbox"/> Engine	shaking or vibrating	misfiring--loose connection, loose distributor
		cross-wiring, bad plugs, wrong gap, timing
	shaking on acceleration	carburetor adjustment, bad motor mounts
	back-firing	timing, carburetor adjustment
<input type="checkbox"/> Starter	remove coil wire—ground,	
	uneven cranking	bad starter, maybe flywheel teeth broken
<input type="checkbox"/> Distributor Cap	lots of play	timing will be off
<input type="checkbox"/> Spark Plugs	brown or grey-tan deposits	everything's fine
<input type="checkbox"/>	carbon-fouled—black fluffy soot	too rich fuel/air mixture, stuck choke,
<input type="checkbox"/>		dirty air filter, too much slow driving
<input type="checkbox"/>	wet black—oily	bad rings or valves--clean
<input type="checkbox"/>	red, white, brown, yellow—scavenger deposits	highly leaded gas--OK, clean
<input type="checkbox"/>	shiny yellow glaze	same as above--discard
<input type="checkbox"/>	blisters, burnt insulators	engine overheating, gap too wide, incorrect
		timing, worn or loose plugs, too lean air/fuel
<input type="checkbox"/>	severly eroded or worn	been in too long--replace
<input type="checkbox"/> Underside of Hood	oil stain, spray marks	blow-by--poor

		compression, faulty PVC valve
<input type="checkbox"/> Transmission--automatic	dark fluid, burned smell	worn transmission
	light grey smoke from tailpipe	defective vacuum modulator
	clunking, rough shifting	low fluid, band adjustment, worn tranny

## Road Test

<input type="checkbox"/> Brakes	pulls to one side squealing	leak or worn linings worn or missing linings
<input type="checkbox"/> Steering	pulls to one side, drifts with hands off wheel	bad steering linkage, misalignment
<input type="checkbox"/> Transmission	racing engine between shifting jerk, clunk, howls	slipping transmission low fluid, band adjustment, rebuild
<input type="checkbox"/> Clutch	slipping, grinding, chattering	adjustment, missing gear teeth
<input type="checkbox"/> Clutch	shift from low to high, then accelerate— car should stall and die	
<input type="checkbox"/>	if engine speeds up, but not the car	slipping--major repairs
<input type="checkbox"/> Alignment	shimmy at high speeds	misalignment or worn front end
<input type="checkbox"/> Engine Load	drive uphill--has no guts, pings	bad compression-- engine rebuild
<input type="checkbox"/> Pickup, Acceleration	easy acceleration?	
<input type="checkbox"/> Rear End	drive down alley w/windows down— clanking, grinding from rear of car	worn rear axel bearings
<input type="checkbox"/> Return and Check	check for leaks compression check	

# Specifications List

ITEM	CAR #1	CAR #2	CAR #3
Manufacturer			
Make			
Model			
Year			
Number of Cylinders			
Engine cc			
Engine Displacement			
Horsepower			
Automatic or Standard Transmission			
Type of Transmission Fluid/Grease			
Type of Power Steering Fluid			
Type of Carburetor/Fuel Injection			
Air Conditioning			
Smog Devices			
Standard/Electronic Ignition			
Idle Speed			
Contact Point Gap			
Dwell			
Spark Plug Gap			
Spark Plug Number			
Cylinder Firing Order			
Distributor Rotation—Timing			
Ignition Timing			
Oil Weight			
Oil Capacity			
Oil Filter Number			
Coolant Capacity (½ total capacity)			
Air Filter Number			
Fuel Filter Number			
Tire Size			
Min/Max Tire Pressure			
Disc/Drum Brakes			







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**IV. Parts Replacement**      **J**    **F**    **M**    **A**    **M**    **J**    **J**    **A**    **S**    **O**    **N**    **D**

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Part \_\_\_\_\_ Date and Details \_\_\_\_\_

Wiring (coil wire, ignition wires, spark plug boots, etc.)  
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\_\_\_\_\_  
\_\_\_\_\_

Hoses (top or bottom radiator hose, vacuum hoses, fuel lines, etc.)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Brakes (shoes, relined, drums turned, etc.)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Tires (which one?)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Starter  
\_\_\_\_\_

Alternator/Generator  
\_\_\_\_\_

Solenoid  
\_\_\_\_\_

Regulator  
\_\_\_\_\_

Carburetor  
\_\_\_\_\_

Gaskets (head, valve cover, rear seal, etc.)  
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Water Pump

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Radiator

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Fuel Pump

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Oil Pump

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Valves, Rings, Rods, Rod Bearings

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Crankshaft

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Cylinders (which ones?)

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Other

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