

02 Maintenance

By Richard Stern



Preventive maintenance can help avoid untimely and inconvenient breakdowns, when you least expect it, so it's always worth spending a bit of time checking your classic BMW over, especially before any long journey or planned trip.

Mileages were based on a daily used car, so now being a "classic" and likely not to be doing high mileages, it is better to replace the service intervals with monthly and annual checks.

Worth keeping battery on a conditioner, failing that replace every three years (subject to warrantee) a good battery is key to a reliable classic and operation of all electrical components.

Every 250 miles;

Steering - Check tyre pressures, including spare. Check steering for slack

Brakes – Check reservoir fluid, brake pedal travel, handbrake efficiency

Electrical – All lights, windscreen washers and their efficiency

Engine – Engine oil, coolant level and radiator cap, coolant hose condition

Every 5,000 miles (six months);

Steering – Check linkages, ball-joints and bushes for wear, front hubs, steering box oil, steering box mounting bolts, check wheel nuts/bolts.

Brakes – Pads for wear, adjust rear brakes (incl handbrake), brake lines for corrosion (wire brush and protect where possible).

Suspension – Check all mountings, pivots, bushes for wear. Check hydraulic shock absorbers for signs of leakage.

Engine – Change engine oil and replace oil filter, check distributor points and gap adjust if necessary.

Transmission and Drive – Check levels and top up as necessary. Grease driveshafts and inner UJ joints.

Body – Lubricate all locks and door mechanisms

Every 10,000 miles (annually);

Steering – Check front wheel alignment, re-balance wheels

Clutch – Check for pedal movement and wear, adjust where applicable

Engine – Check carburettors for wear and adjust, fan belt tension, cylinder head bolts and valve clearances, replace air filter and fuel filter, replace spark plugs, replace points (0.016 in) and condenser.

Static Ignition timing – all models except Ti, Tii and Turbo; 3 degrees BTDC. Ti, Tii and Turbo TDC

Dynamic Ignition timing;

All models except below	25 degrees BTDC @ 1400 RPM
1502	25 degrees BTDC @ 1900 RPM
2002 Ti	25 degrees BTDC @ 2200 RPM
2002 Tii and Turbo	25 degrees BTDC @ 2400 RPM

Every 20,000 miles (three years approx.);

Engine – Clean system pipes, check compression and engine condition and performance.

Transmission – Check propshaft and guibo for wear, replace gearbox oil, check exhaust mounting rubbers.

Check and replace rubber seals, CV boots, Universal steering joints, Ball joints and bushes for play.

Every 40,000 miles;

Engine – Tii replace fuel line main filter (adjacent to radiator)

Brakes – Drain and replace brake fluid (ideally every two years)

Hubs – dismantle and repack bearings with grease (Castrol LM or equivalent high-temp grease)

Additional; Check heater operation and ensure controls between hot and cold. Check fan operation. Every two years drain and flush to cooling system and refill with antifreeze mixture.

Cleaning; Examine bodywork inside and out, check chassis and body frame for rust, protect where possible to prevent structural damage.

Exhaust system; Should be leak proof and at an acceptable noise level. With more stringent MOT and UK Road Laws ensure your car is legal and meets these requirements at all times.

Fluids;

	Imp	Litre	Type
Engine Oil (incl filter)	7.5 Imp pints	4.25 Litres	Castrol GTX or 20W/50 typically classic oil (not synthetic)
Cooling system	12.3 Imp pints	7 Litres	Antifreeze coolant 25% for up to -26C
Gearbox;			
Manual 4 & 5 Speed	2.52 Imp pints	1.4 Litres	Castrol EP 90
Automatic	8.2 Imp pints	4.65 Litres	Castrol TQF
Differential (standard)	1.6 Imp pints	0.9 Litres	Castrol EP 90
Steering box			Castrol EP 90
Brake and Clutch			Universal DOT 4 or 5 (higher op temp)
Wheel Bearings			Castrol BNS grease
Linkages and Cables			Castrol LM grease

Useful Torque settings

Component	NM
Water pump securing bolts	28
Cylinder Head bolts	75
Main bearing caps	62
Chain tensioner plug	39
Distributor housing bolts (small)	11
Distributor housing bolts (large)	25
Rocker cover screws/bolts	11
Timing cover bolts (small)	8
Timing cover bolts (large)	25
Engine mounting bracket to crankcase	47
Engine mounting centre bolts	25
Gearbox outer flange nut	149
Prop shaft front coupling nuts and output shaft	47
Spark Plugs	30
Wheel nuts	90