

Collector Car Storage and Garage Climate Control

Keep a stored collection dry and stable: aim for about 50 to 55% relative humidity, stay well below 75%, keep batteries on a smart charger, and have any car lift inspected every year.

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Moisture is the main risk to a stored car. Metal corrodes, leather and trim grow mould, and fuel and oil age. A good collection garage controls humidity first, then temperature.

Target humidity and temperature

Use these figures as a starting point. Ask your garage specialist to design to them.

- **Relative humidity (RH) of about 55%.** A Hagerty UK storage panel advises a dehumidifier "with the aim of reducing relative humidity levels to around 55%" ([Hagerty UK](#)).
- **50% RH and 15 to 25 °C for mixed collections.** The Canadian Conservation Institute (CCI) gives 50% RH and "a value between 15°C and 25°C" as the set point for mixed museum collections ([CCI](#)).
- **Never above 75% RH.** CCI says that for metals "above 75% RH all corrosion speeds up a lot". It also says salt from hands becomes a corrosive solution above 75% RH ([CCI](#)).
- **Mould starts lower.** CCI reports visible mould on sensitive materials after 100 days at 70% RH, and says "any intermittent period at less than 55% will stop growth" ([CCI](#)).
- **Do not over-dry.** CCI notes that a heated building with no humidifier can fall "as low as 5% RH" at 21 °C. Hagerty UK also warns that a dehumidifier set too high "can draw the moisture out of everything around it" ([Hagerty UK, Top 10 tips](#)).

Put a hygrometer in the garage. ENERGY STAR recommends a separate hygrometer near the dehumidifier so you can see the real RH ([ENERGY STAR](#)).

Dehumidifier or HVAC

- **Dehumidifier.** It removes moisture but does not hold temperature. The Hagerty UK panel suggests a unit that removes about 20 litres a day and drains continuously ([Hagerty UK](#)). ENERGY STAR says a certified dehumidifier uses 20% less energy than a similar conventional unit ([ENERGY STAR](#)).
- **HVAC with dehumidification.** It controls both temperature and RH. Use it where the garage sees large daily or seasonal swings. Temperature swings cause condensation on cold metal, which the Hagerty UK panel names as a main cause of damage.
- **Insulation and air sealing.** Hagerty UK lists insulating the garage, stopping draughts and fitting a dehumidifier as the three steps that control the space.

Long-term storage steps

1. Wash and dry the car fully before storage, including door jambs and seals ([Hagerty UK, Top 10 tips](#)).
2. Fit a self-monitoring battery charger (a "battery tender"). Hagerty UK says a battery runs down in storage even when disconnected, and recommends a charger that conditions the battery and matches its type.
3. Set tyres to the highest recommended pressure. Check them often. Roll the car from time to time so the tyres do not flat-spot. Set them back to normal pressure before you drive.
4. Plan the fuel. Experts disagree. One Hagerty UK panellist stores cars with very little fuel and adds fresh fuel before use. Follow your maker's handbook.
5. Fit a smoke or fire alarm. The Hagerty UK panel recommends one when a fuelled car sits on a charger.
6. Check oil, coolant and brake fluid before the car leaves storage.

Storage facility or home garage

A climate-controlled storage facility gives you a managed environment, security and staff checks. A home garage gives you access and control, but you own the risk. If you build at home, ask for a written climate design with RH and temperature targets, sensor locations and alarm outputs.

Routine garage maintenance

- **Car lift.** ANSI/ALI ALOIM:2020 requires a qualified lift inspector to inspect all lifts "at least annually". An inspection can cover up to 120 points ([ALI](#)). Use an ALI certified inspector.
- **Floor coating.** Follow the coating maker's care sheet. Clean spills of fuel, oil and brake fluid soon. Use the cleaner the maker names.
- **Dehumidifier and HVAC.** Clean filters and check drains on the schedule in the unit manual.
- **Sensors.** Compare your hygrometer with a second unit each season.

Sources

- [Hagerty UK, Expert tips for storing your car over winter](#), accessed 2026-10-29
- [Hagerty UK, Top 10 tips for storing your classic car over winter](#), accessed 2026-10-29
- [Canadian Conservation Institute, Agent of Deterioration: Incorrect Relative Humidity](#), accessed 2026-10-29
- [ENERGY STAR, Dehumidifiers](#), accessed 2026-10-29
- [Automotive Lift Institute, Annual Lift Inspections Provide Peace of Mind](#), accessed 2026-10-29

Frequently asked questions

What humidity should a collector car garage hold?

Hagerty UK quotes a target of about 55% relative humidity. The Canadian Conservation Institute uses 50% as the set point for mixed museum collections and says corrosion speeds up a lot above 75%.

Is a dehumidifier enough, or do I need HVAC?

A dehumidifier controls moisture. HVAC also controls temperature. A garage that holds 15 to 25 °C on its own may only need a dehumidifier. A garage with large swings in temperature needs both.

How often does a home car lift need an inspection?

ANSI/ALI ALOIM:2020 tells the lift owner to have a qualified lift inspector check every lift at least once a year. The Automotive Lift Institute lists certified inspectors.