HOMEOWNER CHECKLIST · 2026 EDITION

AC Summer Failure Prevention Checklist for Alabama

A five-page pre-summer maintenance checklist for Birmingham-area homeowners. Catch failing components before the first 95°F day — avoid the 2 AM service call, cut utility bills, extend equipment life.

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Before You Start — Why This Matters

Alabama AC systems run 15 to 18 hours per day during July and August. Components that would last 10 years in a Minnesota climate fail in 5 to 7 years here. Per ACCA (Air Conditioning Contractors of America), 80 percent of summer emergency service calls trace back to a maintenance item that was ignored during spring. This checklist covers every one of them.

Section 1 — Pre-Summer Tune-Up (Complete by May 1)

- ☐ Schedule a licensed-technician tune-up (coil wash, pressure check, electrical tightening, refrigerant verification). Industry standard is annually for central AC, twice yearly for heat pumps (per ACCA Quality Installation standard).
- ☐ Verify outdoor unit has 2–3 feet of clearance on all sides. Trim back any vegetation that grew in during the off-season.
- ☐ Remove any debris, leaves, or nesting material from inside the condenser cabinet (after breaker is off at the disconnect).
- ☐ Check that the outdoor unit is level. A unit tilted more than 10 degrees stresses the compressor.
- ☐ Confirm the electrical disconnect cover is intact and weatherproof.
- ☐ Inspect refrigerant line insulation — replace any that is cracked, sun-damaged, or missing.

Section 2 — Air Filter Schedule

Dirty filters are the number-one cause of summer AC failures. A restricted filter reduces airflow, causes evaporator coil freeze-up, and forces the compressor to work harder. The result: premature capacitor failure, compressor wear, or complete system shutdown on a 95°F afternoon.

Filter Type	Replacement Interval	Peak Season (May–Sept)
1-inch fiberglass	30 days	Every 30 days, check at 2 weeks
1-inch pleated (MERV 8–11)	60–90 days	Every 45 days
4-inch media cabinet (MERV 11–13)	6–12 months	Inspect monthly, replace as needed
HEPA (whole-home system)	12 months	Per manufacturer spec

> Shortcut: if you cannot see the clean side of the filter pattern clearly through the dust, replace it. Do not try to vacuum and reuse a disposable filter.

Section 3 — Condenser Coil Cleaning

The outdoor condenser coil pulls heat out of your home's refrigerant and rejects it to the air. A dirty coil forces the system to run longer and hotter to achieve the same cooling output. This is a direct cause of compressor burnout in Alabama.

- ☐ Turn off power at the outdoor disconnect switch.
- ☐ Remove the top grille (usually 4–8 screws).
- ☐ Gently vacuum loose debris from inside the cabinet. Do not touch the coil fins with the vacuum.
- ☐ Spray the coil from the inside out with a garden hose on low pressure. Never use a pressure washer — it bends the aluminum fins.
- ☐ Reinstall the grille. Wait 15 minutes for water to drain, then restore power.
- ☐ Do this once in spring, once in late July if pollen or cottonwood is heavy in your area.

Section 4 — Condensate Drain Maintenance

Alabama humidity makes the condensate drain a critical maintenance item. Every hour of cooling produces water that has to drain somewhere. When the drain clogs, the overflow pan fills, the safety float switch trips, and the entire AC system shuts down — often during the worst heat of July.

- ☐ Locate the condensate drain line (typically a PVC pipe exiting the indoor air handler).
- ☐ Find the T-fitting or access cap on the line.
- ☐ Pour 1 cup of plain white vinegar down the access every 60 days during cooling season. This kills the biofilm that causes clogs.

- ☐ Check the exterior drain outlet every 30 days. Water should drip steadily when the AC is running. No drip = clogged drain.
- ☐ If the drain is clogged, use a wet-vac on the exterior outlet to pull the blockage out. Do not push compressed air in — it can damage the evaporator coil.
- ☐ Confirm the float switch is present and functional. This is the safety that shuts the system down before an overflow floods the air handler.

Section 5 — Refrigerant Check Triggers

Homeowners cannot check refrigerant themselves — EPA Section 608 federal law requires certified technician handling. But homeowners can recognize the symptoms that trigger a professional refrigerant check.

Symptom	Likely Cause	Action
System runs continuously, never reaches setpoint	Low refrigerant charge or coil freeze	Call for diagnostic
Ice on refrigerant lines outside	Low refrigerant or restricted airflow	Turn system to fan-only; let thaw 2–3 hours; call
Hissing or bubbling near outdoor unit	Refrigerant leak at service valves or coil	Call immediately
Cooling capacity dropped 20%+ year over year	Slow refrigerant leak	Schedule leak search + recharge
Utility bill spike with no usage change	System working harder due to low charge or dirty coil	Schedule full diagnostic

Per EPA Section 608, it is a federal violation for a homeowner to add or recover refrigerant. Only certified technicians may handle refrigerants in any HVAC system.

Section 6 — Monthly Quick-Check (May through September)

- ☐ Check air filter. Replace if dirty.
- ☐ Walk outside, look at the condenser — is it running? Is the fan blade spinning when it should be?
- ☐ Listen for grinding, screeching, or rattling. Any of these = call before it fails.
- ☐ Check condensate drain exterior outlet — water dripping steadily during cooling?
- ☐ Feel the supply registers — air should feel 15–20°F cooler than return air.

- [ ] Check thermostat — fresh batteries if battery-powered.

Section 7 — Red Flags (Call Immediately)

> - **Burning smell** from any register or the outdoor unit — electrical fault. Turn off at breaker. Call.
> - **Grinding or screeching** from the indoor blower or outdoor condenser — bearing failure in progress.
> - **Repeated breaker trips** — short circuit somewhere. Do not keep resetting.
> - **Ice on lines** that returns within 24 hours of thawing — refrigerant or airflow problem.
> - **Water damage** near air handler — condensate drain failure.
> - **System runs but air is warm** after filter is clean and thermostat is set correctly — refrigerant or compressor.

Section 8 — When to Call vs When to Wait

Per Energy.gov, the "when to call" triggers for Alabama homeowners are:

- Heat index above 105°F and system cannot hold setpoint within 4°F — call same day, especially if elderly residents or small children are in the home.
- Any electrical symptom (burning smell, tripped breaker, buzzing) — call immediately, do not continue operation.
- Any mechanical noise not present before (grinding, screeching, hissing) — call before running the system again.
- Utility bill doubled without usage change — schedule a diagnostic, not an emergency call.

Annual Maintenance Budget Reference

Task	Frequency	Industry-Benchmark Range
Professional tune-up (full)	Annual	$75–$200 (per HomeGuide 2024)
Filter replacement (1-inch pleated)	6–12 per year	$60–$150 total
Condensate drain vinegar treatment	6 per year	Under $10/year
Coil cleaning (DIY)	1–2 per year	Free (hose + time)
Refrigerant recharge (leak-dependent)	As needed	$250–$600 (per HomeGuide 2024)

Ranges cited from HomeGuide, Angi, Energy.gov 2024 national averages. Local Birmingham rates may differ.

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This checklist is informational. It is not a substitute for a licensed HVAC contractor evaluating your specific equipment. Sources: ACCA, Energy.gov, EPA Section 608, HomeGuide, Angi.