

Automatic transfer switch (ATS) annual maintenance checklist

The annual automatic transfer switch service is the deep pass: the measurements, cleanings and tests a quarterly round doesn't reach. This checklist keeps the full service on record with the photos that make it defensible later. Work is commonly verified against NEC (NFPA 70), NFPA 110, manufacturer's published instructions. Confirm the edition your authority having jurisdiction has adopted.

Who runs it: The electrical service tech on the annual, with a plan for the momentary outage the on-load test creates. When: Once a year, scheduled when the served loads can ride through a real transfer and back, and when the switch can be opened de-energized afterward.

Live-load transfer

- ☐ **Full on-load transfer to the alternate source and back**
Actual building load transferred to the generator, run under load, then retransferred, transition timing observed against the settings. **2 photos required**

Heat and connections (thermography awareness)

- ☐ **Line and load connections scanned for heat under load**
Terminations checked with a thermal camera or infrared spot while loaded, any hot lug compared against its neighbors and flagged. **2 photos required**
- ☐ **Terminations re-torqued de-energized after the scan**
Switch locked out after the load test, power lugs torqued to the manufacturer's published values, heat-discolored hardware replaced. **1 photo required**

Mechanism and control power

- ☐ **Main contacts and mechanism inspected**
Contacts checked for pitting and burning where accessible, mechanism and arc structures inspected, lubrication per the manufacturer. **1 photo required**
- ☐ **Controller battery and control power verified**
Controller battery or control-power source tested, so the switch can still run its logic during an actual outage. **1 photo required**