

Check Under The Hood!



Maintain HVAC & Related Equipment



Remember, planned preventative maintenance programs for HVAC and associated mechanical systems are key to ensuring occupant comfort, energy-efficient operation, and continued reliable equipment performance.

The Opportunity

Your school’s HVAC and related systems need to be properly maintained to ensure that they operate at peak efficiency levels. Poorly maintained equipment not only increases energy costs, but can also lead to employee and student discomfort and can drive up operational costs when equipment undergoes catastrophic failure.

Every month, the **NAME** school department’s facilities staff or outside HVAC technician should check the status of your air handlers, outside air dampers, filters, heat exchanger coils and the associated motors, belts, and pulleys. Dirty filters/coils, worn belts, or improperly calibrated discharge/return air temperature control sensors should be serviced by a trained technician at the earliest opportunity.

FOCUS AREAS FOR CHECKING UNDER THE HOOD	
Air Handlers	Check for extremely worn coils, or coils plugged with dirt.
Outside Air Dampers	Watch for dampers stuck open or closed, or dampers out of calibration.
Air Filters	Look for filters that are plugged with dirt and missing filters.
Motors, Belts, Pulleys	Watch and listen for loose or squeaking drive belts. Worn bearings on the drive section indicate motor issues and potential catastrophic failure.
Air-Cooled Condensers, Heat Transfer Coils	Note coil heating/cooling sections that are partially or fully plugged with dirt or construction debris. Inspect air-cooled condensers regularly for buildup of organic material & dirt (on underside); clean at least twice a year.

OVER to See Why You Need to Check Under the Hood



Check Under The Hood!

What's the Impact? – Implementing “Check Under the Hood” in just 1 **NAME** school building each year

FINANCIAL BENEFIT

Annual Cost Avoidance \$750 */facility/year

ENVIRONMENTAL BENEFIT

Reduced Power Plant Emissions 2.3 tons/facility/year

**Every dollar that you waste on energy is equivalent to one dollar of lost tax revenue or grant funds*

What You, The Manager, Can Do

- Hold a team meeting and introduce the Tip. Let all employees know that while this Tip is essentially FYI for non-maintenance staff, all employees need to understand the detrimental effect of an inefficient building on the environment.
- Make sure that maintenance staff knows where the most likely problem spots are, how often to check them, and when they require the assistance of an outside technician.
- Tell your employees to report squeaky air handler components, which are a sure sign of energy waste.
- Hang up the “Check Under the Hood!” theme posters in areas where your facilities crew will see them—in maintenance and storage areas, by the time clock, etc.

What Your Maintenance/Facilities Team Can Do

- Check air dampers, air handlers, filters, and internal components monthly.
- Evaluate drive belt condition and tension; consider using v-groove belts for improved operational efficiency.
- Report any worn or dirty components (coils, condensers) so management can schedule a cleaning.
- Use the enclosed maintenance checklist to be certain that maintenance and contract workers are checking all the equipment for potential areas of energy waste.