



State of Ohio
Weatherization Program
Standards

Section	MOBILE HOME MECHANICAL SYSTEMS INSTALLATION
Subject	Electric Heat Pump/ Central Air Systems

TUNE-UPS AND REPAIRS 701-2.1

A tune-up involves a visual inspection, some testing procedures, cleaning and adjustments to improve the combustion and seasonal efficiency of the heating system.

tune-up
701-2.1a

Repairs involve the replacement or reconstruction of defective or unsafe parts for the purpose of ensuring the safe operation of the heating system.

repairs
701-2.1b

NON-OPERATIONAL UNITS 701-2.2

Repair or replace non-operational heating units.

repair/replace
701-2.2a

Replacements of heating units using weatherization funds must be cost justified using an approved mobile home audit.

cost-effectiveness
701-2.2b

Switching from the existing fuel source to a different fuel source for use by the heating unit is prohibited without the prior written approval of OEE. Requests for fuel switching must describe the technical reasons for the decision and include cost justification and written authorization from the party responsible for fuel payments.

fuel switching
701-2.2c

If the size of the replacement unit differs from the existing unit, the output rating must be sized according to Manual J or an authorized mobile home audit calculations. Documentation of sizing calculations shall be maintained in the customer file.

sizing
701-2.2d

All units shall carry a minimum one (1) year warranty on workmanship. Each customer shall receive all manufacturer's product warranty information, clear maintenance instructions, educational information as necessary and a local phone number of who to contact for warranty problems.

warranty
701-2.2e

All units shall be installed in conformance with manufacturer's instructions, local codes, and/or NFPA manuals as required.

local codes
701-2.2f

THERMAL FLUID LEAKAGE 701-2.3

thermal fluid leakage
701-2.3a

If there is a refrigerant leak in the central air conditioning system, promptly contact an EPA-certified technician to repair the leak(s).

ELECTRICAL POWER SUPPLY 701-2.4

main power safety
701-2.4a

Repair or replace the main electrical supply wiring to the unit if it is unsafe.

dedicated circuits
701-2.4b

Add a dedicated circuit that is properly sized and fused to a heat pump/AC unit that does not have one.

hazardous wiring
701-2.4c



Replace any unsafe wiring to the heat pump/AC unit.

UNIT CLEARANCES 701-2.5

unit clearances, indoors
701-2.5a

Move any unit or combustible material where clearances are not PMI.

unit clearances, outdoors
701-2.5b

Move any unit or obstruction that is not PMI. Clean the cooling fins if they are dirty.

BACK-UP SYSTEM 701-2.6

back-up system
701-2.6a

Address the back-up system based on fuel and unit type in accordance with the standards in 601-1.

AIR HANDLER 701-2.7

condensate drainage
701-2.7a

If the condensate drains improperly, make any changes necessary to ensure proper drainage.

a-coil
701-2.7b

If any holes or cracks are visible in the A-coil, have an EPA-certified technician make repairs.

fins/filters/ducts
701-2.7c

Clean the fins, filters, and ducts as needed. Remove any obstructions.

temperature rise/drop problem
701-2.7d

If the temperature rise/drop is out of the range specified by the manufacturer, determine what the problem is and remedy it. Consult Tables 701-2.7.i and 701-2.7.ii for some possibilities.

Table 701-2.7.i Typical Solutions for High Temperature Rise

PROBLEM:	CHECK FOR:	REMEDY:
High Temperature rise Rise[>70° PMI]	<ul style="list-style-type: none"> • Fan speed too slow • Obstruction in duct work • Inadequate returnsSupply ductwork • Blower belt/filter/AC coil defective or dirty • Dirty or defective blower 	<ul style="list-style-type: none"> • Set fan speed higher or replace motor • Remove obstruction • Install proper ductwork • Clean or replace belt/filter/AC coil • Clean or replace blower

Table 701-2.7.ii Typical Solutions for Low Temperature Rise

PROBLEM:	CHECK FOR:	REMEDY:
Low Temperature Rise [<40° PMI]	<ul style="list-style-type: none"> • Fan speed too fast • Excessive air flow from blower • Cycling on high limit 	<ul style="list-style-type: none"> • Set fan speed slower or replace fan • Adjust air flow or replace blower • Clean or replace blower, install more or larger duct work

CONTROLS 701-2.8

Clean the blower motor, belt, and fan, and/or replace parts, if needed. Lubricate the motor if it is needed.

blower
701-2.8a

Replace or reposition the thermostat, if needed.

thermostat
701-2.8b