# **BRANDYWINE HEATING AND AIR**

## **ELECTRIC OR GAS FURNACE TUNE-UP (19)**

- 1.Test ignition system for safe & proper operation furnace flame for proper burn mechanism
- 2. Brush, clean, and blow-out burner
- 3 Test safety and control circuits for proper operations
- 4.Test exhaust system for proper venting
- 5. Lubricate and clean blower motor air vents moving parts per manufacturer
- 6. Measure temperature differences-supply & return inspect all electrical wiring
- 7. Inspect and adjust fan belt tension (if applicable) natural gas leaks
- 8. Calibrate and level thermostat (if applicable)
- 9.Inspect for combustible material around furnace s
- 10. Measure and adjust gas pressure for peak efficiency
- 11 Test furnace flame for proper burn mechanism
- 12. Lubricate all moving parts per manufacturer
- 13. Test for natural gas leaks
- 14. Lubricate all moving parts per manufacturer
- 15. Brush, clean, and blow-out heat exchanger
- 16. Tighten and inspect all electrical wiring
- 17. Test for natural gas leaks
- 18.Clean furnace exterior
- 19.Clean upper and lower combustion vents

## **OIL FURNACE OR OIL BOILER TUNE-UP (19)**

- 1. Disconnect and Inspect flue piping from unit
- 2. Sweep out debris/flakes from equipment
- 3. Clean out flue collector
- 4.Clean area around the burner
- 5.Remove and replace oil filter
- 6.Remove and replace pump strainer, if applicable
- 7. Replace oil nozzle with OEMspecifiled replacement
- 8.Clean & Inspect electrodes for damaged
- 9. Set electrode spacing to OEM specifications
- 10.Clean the combustion head of all soot and and debris
- 11. Remove and clean flame detection device(CAD Cell)

### **GAS BOILER(21)**

- 1.Inspect system for general problems(water leakage,burnt wires, physical damage)
- 2. Cycle boiler from thermostat to verify unit is functioning
- 3. Verify appropriate supply of combustion air to boiler system
- 4. Inspect boiler circuits for presence of air in piping
- Check for accumulation of dirt or rust on vent piping or draft hood. Also verify there are no holes, sagging or pipe, or signs of damages for
- 6. Ensure flue is sealed at chimney base
- 7. Check boiler pressurization and add or remove pressure if needed
- 8 .Check condition and operation of all air elimination
- Inspect expansion tanks for evidence of leakage or air infiltration
- 10. Ensure that the safety relief valve pipe is 6" above the floor and that there are no leaks present
- 11.Check and document flue draft reading using a draft meter
- 12.Test low water cut-off devices for proper operation(if applicable)
- 13.Test operation of any and all safety devices
- 14. Cycle boiler from thermostat to verify unit is functioning
- 15.Check for appropriate gas pressure both from Meter to the manifold
- Verify there are no gas leaks on piping with leak detection solution and/or electronic leak detector
- 17. Verify proper operation of all circulator pumps, zone values, and relays
- 18. Check and inspect flame ignition and proving circuits

- 12.Inspect the ignition transformer any associated wiring Electrical connections
- 13. Clean the blower housing and air control of any lint or debris
- 14.Check all wiring for secure connections & overalls integrity
- 15.Inspect area for oil leaks
- 16.Inspect all oil lines and fittings for leaks & secure connections
- 17.0il motors, if applicable
- 18.Check for correct voltage supply to burner
- 19.Complete a thorough & proper heat exchanger safety inspection

### AC TUNE-UP(18)

- 1.Calibrate and level thermostat
- 2. Clean filters as needed
- 3.Monitor volts/amps on fan motor
- 4.Lubricate and inspect bearing for wear
- 5.Inspect condenser coil
- 6.Monitor operation pressure of refrigerant
- 7.Inspect safety devices for proper operation
- 8.Inspect disconnect bor for proper rating and installation
- 9. Tighten all electrical connections
- 10.Test/inspect contractor for burned,pitted contacts
- 11.Inspect electrical system for exposed wiring
- 12.Test and inspect capacitors
- 13.Inspect fan blade
- 14.Clean condenser coil and remove debris
- 15.Inspect service valves
- 18. Measure temperature difference-supply/return

- 19. Test for proper voltage to the boiler
- 20. Check and test boiler high limit aquastat control & settings
- 21. Verify integrity of all wiring/electrical connections