

This appliance has been retired.  
For current replacement part numbers, please refer to the  
individual service parts list located on the brand  
websites or contact your local dealer for part availability.

FOR REFERENCE ONLY



## Primary Air System Replacement - Encore 2N1 Installation Instructions For Wood Stove Model Encore 2040

These instructions are to be used if replacing any part of the primary air system including the thermostat, thermostat wire and primary air valve for the Encore 2N1 wood stove.

**Tools required:** Phillips Screwdriver,  $\frac{7}{16}$ " socket driver;  $\frac{3}{16}$ " Allen key,  $\frac{1}{8}$ " Allen key, vice grips, masking tape.

**Parts required:** If needed—control cable, 3 oval sleeves, primary air frame gasket,  $\frac{3}{8}$ " adhesive gasket, thermostat assembly etc.

**CAUTION:** Allow the unit to completely cool down before beginning the procedure.

### Complete Instructions

Essentially you are going to disassemble the part of the primary air system needed for your repair and replace any gaskets damaged during the repair.

1. Locate the two hex head bolts holding the primary air manifold in the right and left ends. Remove the bolts with a  $\frac{7}{16}$ " socket and slide the manifold down and out of the opening.



2. Remove the right interior side brick held in by a bracket on the top of the brick. Take out the hex head bolt and remove the bracket and slide the brick out.



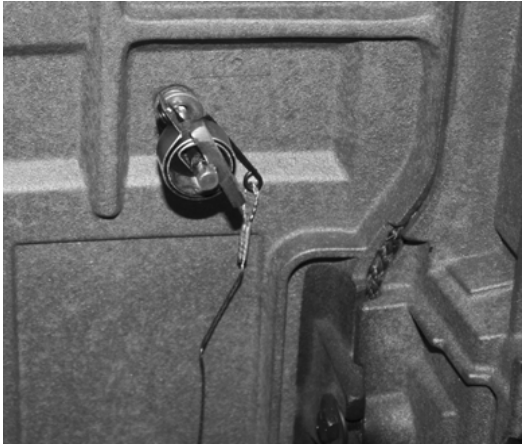
3. Remove the right air manifold held on by two  $\frac{1}{4}$ -20 x  $1\frac{1}{2}$ " hex head cap screws in the top and bottom of the manifold. The right air manifold is just inside the door opening on the right side. See below showing removal after the bolts have been taken out.



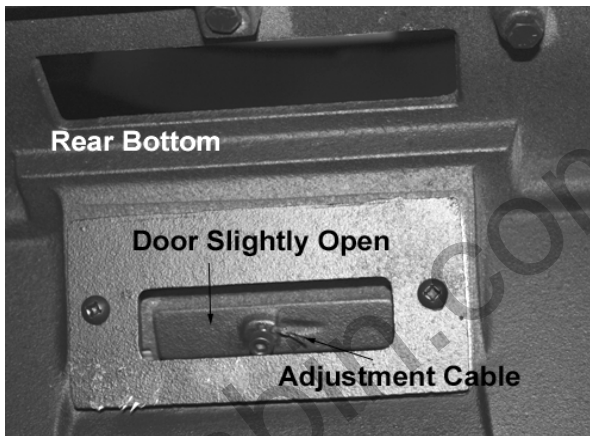
4. Remove the primary air control thermostat assembly. With an  $\frac{1}{8}$ " Allen key wrench, back off the screw and slide the primary air control handle assembly off the shaft of the thermostat assembly.



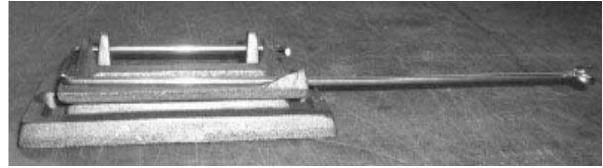
- Slide the primary air thermostat assembly out of the right side and lay it down on the bottom of the stove connected to the cable. Be careful not to lose the spring and washer.



- Locate the primary air frame and valve in the rear bottom of the stove. It is oriented on a 45° angle.



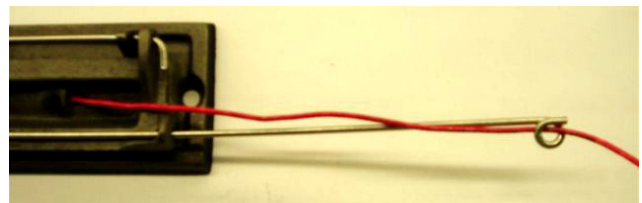
- With a Phillips screwdriver, remove the two bolts holding the frame and gasket in place and slide the assembly from left to right to clear the air rod just enough to lay the assembly on the hearth. **Take care not to pull the primary air thermostat assembly down into the bottom of the stove.**
- Note the length of cable visible after the set screw in the valve. There should be about 1" of available adjustment in the cable.
- With the  $\frac{3}{16}$ " Allen key, back off the cable adjustment set screw and slide the cable out of the valve assembly. Remove the set screw completely. Lay the assembly on the hearth so the door may opens up. See photo in next column.



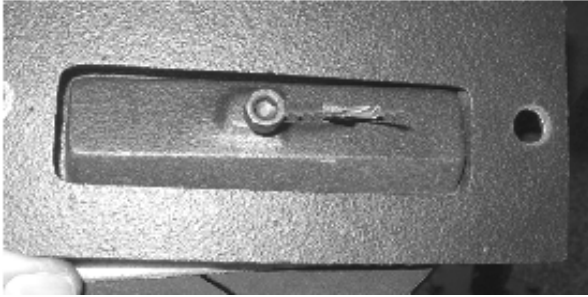
- The system is now completely disassembled with the air valve assembly, thermostat assembly with wire and thermostat handle removed.
- If replacing the primary air cable**, cut the old looped cable from the primary air assembly. Slide **two** of the copper sleeves onto the end of the new cable. Insert the end of the cable through the loop in the wireform of the thermostat assembly. Make a small loop and slide the end into the **two** sleeves and squeeze with vice grips or equivalent. Two sleeves are used in the procedure to ensure the loop does not fail. Make sure the loop is not too big (see photo below).



- Tape the other end of the new cable to the old cable and fish the new cable through the air frame opening in the bottom. Slide the end of the cable through the air rod loop as shown in the photo below. Wire is red for clarity.



13. Slide the cable through formed gasket and feed it through the air valve and reinsert the socket set screw.
14. Insert the other sleeve as shown in the photo below and tighten the sleeve close to the end. Tighten the socket set screw with the sleeve a little back (aprox 1") from the screw leaving room for adjustment.



15. Slide the air rod into the opening on the left side of the valve and reinstall the frame. **Please make sure the gasket is in place and sealing** after tightening the two Phillips head bolts. If damaged, replace the gasket.
16. **If replacing the primary air thermostat assembly**, slide the washer then the compression spring onto the new thermostat stem in that order. Slide the stem into the opening in the right side making sure the wire form on the thermostat assembly is pointing toward the front of the stove. See the photo below.



17. Install the thermostat assembly handle. Adjust the handle so it is pointing down to the ground (half open).

18. Notice the indent, stop and hole on the inside of the right air plate for guiding the primary air assembly and preventing over rotation. See photo below.



19. Install the right air plate. Check the gasket on the back of the air plate and replace if damaged before installing. At this time, test the thermostat assembly to make sure when it is rotated to the fully closed position (pointing back), the air valve in the bottom is just closed. If not, loosen or tighten the set screw on the air valve and adjust the door so that it is just closed in the thermostat fully closed position.
20. Ensure the valve also opens when the thermostat lever is rotated all the way open.
21. Replace the side brick.
22. Replace the air manifold. Make sure it is all the way forward and sealed to both air plates with the attached gasket.
23. Test to make sure all bolts were securely tightened.