

Instruction Summary of Furnace Replacement

Subject: Certain 210RT travel trailer have a direct discharge furnace that will not produce adequate heat through ducts.

Vin Number Ranges:

210RT

Salem KY003227 through KY003292

Wildwood KY092693 through KY092780

Action Required: Removal of original furnace and replace with a ducted furnace. Add additional duct and return air grill.

Part Number #s:

F100099852 FURNACE, 19,000 BTU, SUBURBAN, NT-20SQ (#2450A)

60P16070A 4" Rotaire Grille (no damper) with NO Screw Holes, BLK

60P01844A FLEX HOSE, 4x25, FOR FURNACE DUCTING

F100097585 VENT, RETURN AIR, .5 X 17 X 25 SUEDE GREY, MDF

OR

F100103356 *VENT, RETURN AIR, .5 X 17 X 25 SUPREME ASHTON OAK, MDF*

Job Codes:

70-023500 R/R Suburban Furnace

****NOTE:** Pictures are required of the final repair for claim review. **

Flat rate Times: This job requires PAR for the 2.5 hours

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Tools required:

11/16" Wrench, 3/4" Wrench, 1/4 x 3/4 Butyl Tape, Clear Sealant, Putty Knife, 4" Hole Saw Flat Head Screwdriver, Thread Sealant, Screw gun or screwdrivers, Manometer

Installing NEW Furnace for 210RT FSX Units

⚠ WARNING: Lock out /Tag out 120V power cord and disconnect battery prior to repair.

⚠ WARNING: Disconnect propane tanks prior to starting repair.

Removing Existing Furnace

1. Remove grill from existing furnace.



2. Remove Access Panel to left of the furnace.



3. Remove (2) set screws holding furnace to base.



4. Using an 11/16" & 3/4" wrench, loosen and unhook gas line.



5. Pull furnace forward in hole.

6. While furnace is partially out, disconnect duct turning counter-clockwise.

7. Once furnace is out, disconnect wiring.

- a. Red = HOT
- b. Yellow = Neutral
- c. Blue/White = Thermostat
- d. Blue goes to white



8. Take furnace out of the opening.

NOTE: Be careful to not set the furnace down on linoleum due to the risk tearing the flooring!

9. Remove screws mounting existing vent to exterior wall.



10. Using Flat Head screwdriver, apply pressure working around vent to pry existing exhaust vent off of sidewall.

11. Use putty knife to remove old butyl tape and sealant still on the sidewall of unit.



Adding Second Heat Duct

- 1. Open the pantry door to the left of the furnace location.
- 2. Lift the bottom shelf to access the area below it.



3. Measure down from the top of the divider wall about 6" and mark it for where the divider shelf will be.
4. With some scrap cleat material and some scrap Luan make a shelf to divide the power cord and the converter from the heat duct.



5. With the use of a 4" hole saw drill the divider and carefully the wall between the pantry and furnace. Try to center the holes in from top to bottom. When cutting the hole for the outside wall over the converter please ensure you allow enough space for the ring around the rotaire.



6. Run Ductwork to furnace area.
 - a. Trim ducting to proper length.
 - b. Excess twists and turns will prohibit furnace output efficiency.



New Furnace Installation

1. Remove access panel from new furnace.



2. Locate gas fitting, set screws and (2) vent components included inside the rear of the furnace. Remove all parts shown from furnace unit.
3. Using Gas Rated thread sealer coat the threads of non-flared end of gas fitting.



4. Using an 11/16" wrench, tighten the fitting into the furnace gas line.
 - a. Ensure fitting is not tightened to cover the duct hole or interfere with the duct.



5. Slide furnace partially into mounting hole.
 - a. Make sure Furnace is turned with set screw mounting points facing down.
 - b. Pull wires & gas line forward and out of hole while sliding furnace into hole.



6. Using an 11/16" & 3/4" wrench, firmly tighten gas line onto furnace gas fitting.
7. Re-Connect wiring.
8. Slide furnace rest of the way into mounting hole.

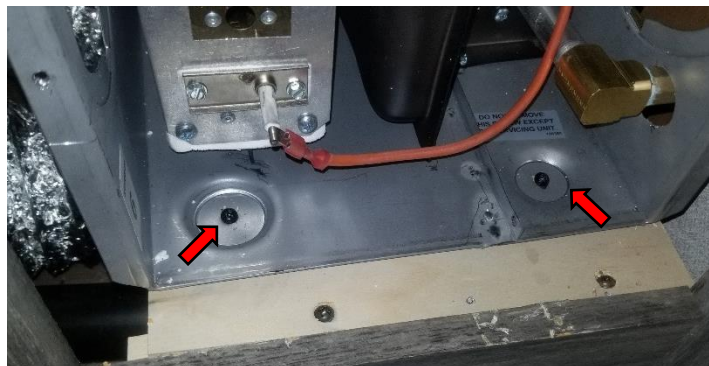
- a. Keep furnace pushed to left side of mounting hole to ensure that wires and gas line do not catch & disconnect.
 - b. Push furnace all the way to the back of the compartment against the wall.
9. Apply Butyl tape to back side of vent components.



10. Line up exhaust holes on rear of furnace with pre-existing holes in sidewall.



11. Using provided set screws, fasten furnace to platform in compartment.



12. Connect Ducts to the holes in the furnace turning fittings clockwise to secure.

- a. Attach bedroom duct to right-side furnace hole.

NOTE: Must have AT LEAST 1" between furnace and wall.

- b. Attach living area duct to left-side furnace hole.



13. Re-Attach face plate to furnace.



14. Place the return air grill over the top of the furnace opening and attach with screws.



Installing Exterior Exhaust Vent (NEW)

1. Insert Vent into pre-existing holes in wall.
 - a. Line up with furnace vent holes.
 - b. If adjustment is needed, use the handle of hammer to adjust the hole alignment. A rubber handle will prevent damaging the furnace or sidewall.
2. Slide vent fully into exhaust holes in rear of furnace.
3. Fasten with original mounting screws.
 - a. Avoid using existing screw holes as they may be stripped out.
4. Once all screws are placed, remove excess butyl tape that may be visible around outside of vent AND inside vent holes.
 - a. Use razor knife to make precise cuts while remove butyl tape.
 - b. Pull any visible butyl tape from vent holes by hand.



5. Use a rag and all-purpose cleaner to remove any excess sealants from the vent and unit sidewall.
6. Apply thick bead of clear sealant around entire exhaust vent.
7. Use all-purpose cleaner & rag to wipe excess Clear Sealant from the perimeter of the vent and sidewall.

Checking Gas System

NOTE: After unhooking any gas appliances, a systems leak drop test should be performed.

1. Re-connect propane tanks to the system.
2. Remove cooktop and attach Manometer to burner.



3. Turn burner to ON and leave ON for 10 minutes.
4. Gauge should remain at 8" of water column or above for the entire 10 minutes.
5. After the 10 minutes is up, remove Manometer and reinstall the burner and cooktop.
6. Reconnect the 120V power cord and battery.
7. Run gas through gas lines and start furnace.
8. Check ducts to ensure warm air is moving through them.
9. Reinstall interior access panel next to furnace.