

Burner Installation Instructions

Burner Installation Instructions LRF/LRFV Direct Vent

Installation Procedure

1. Beckett NX and Riello 40BF3 burners are factory equipped for 0.65 USGPH firing rate. Riello 40BF5 burner is factory equipped for 0.75 USGPH firing rate. If that is desired firing rate then nozzle installation is complete. Go to step 3.
2. Install nozzle for desired firing rate per charts below. Insure burner electrodes remain aligned per burner manufacturer's specification.
3. Place burner mounting gasket on burner mounting studs on furnace.
4. Place burner on burner mounting studs on furnace.
5. Install furnished 3/8"-16 flange nuts on studs.
6. Connect 6 pole burner wiring plug to 6 pole receptacle in furnace control wiring harness..
7. Connect intake air piping to burner per Direct Vent Supplemental Instructions provided with furnace.
8. Install blocked vent safety switch (pressure switch) and connect pressure switch tubing per Direct Vent Supplemental Instructions provided with furnace.
9. Connect unused yellow low voltage wires in furnace control harness to blocked vent safety switch (pressure switch) terminals.
10. Highlight installed model/firing rate on Alternate Input chart on furnace rating plate.
11. Burner installation is complete.
12. Follow start up and adjustment procedures in Installation, Operation and Maintenance manual provided with furnace.

Chart 1 - Beckett NX Oil Burner Setup (Pressure Switch Setpoint 0.65" WC)

Beckett NX Series Oil Burners (For use with direct vent units using outdoor combustion air only)							
Furnace Model	Output BTU/Hr	Burner Model	Delavan Nozzle	Pump Pressure [PSIG]	Flow Rate [USGPH]	Low Firing Rate Baffle	Air Setting
LRF65NXU LRFV65NXU	65,000	NX56LQ	0.50 / 60°W	140	0.55	Yes	3
LRF80NXU LRFV80NXU	76,000	NX56LQ	0.50 / 60°W	175	0.65	Yes	3.25
LRF90NXU LRFV90NXU	87,000	NX56LQ	0.60 / 60°W	175	0.75	No*	3.25
LRF100NXU LRFV100NXU	98,000	NX56LQ	0.65 / 60°W	175	0.85	No*	3.75

* Burner is factory equipped with low firing rate baffle. Remove for 0.75 and 0.85 USGPH firing rates.

Chart 2 - Riello 40BF Burner Set-Up (Pressure Switch Setpoint 0.42" WC)

Riello 40BF3/40BF5 Series Oil Burners (For use with direct vent units using outdoor combustion air only)							
Furnace Model	Output BTU/Hr	Burner Model	Delavan Nozzle	Pump Pressure [PSIG]	Flow Rate [USGPH]	Turbulator Setting	Air Setting
LRF65RBU LRFV65RBU	65,000	40BF3	0.50 / 90°B	125	0.55	0.0	4.25
LRF80RBU LRFV80RBU	76,000	40BF3	0.55 / 80°B	140	0.65	1.0	5.25
LRF90RBU LRFV90RBU	87,000	40BF5	0.65 / 80°B	140	0.75	0.0	3.75
LRF100RBU LRFV100RBU	98,000	40BF5	0.75 / 80°B	130	0.85	0.0	4.25

Note: Riello 40BF3 burner is required for 0.55 and 0.65 USGPH firing rates.
 Riello 40BF5 burner is required for 0.75 and 0.85 USGPH firing rates.

Above settings are preliminary settings only. Final adjustments must be made using combustion test instruments as outlined in the Installation, Operation, and Maintenance manual provided with furnace.