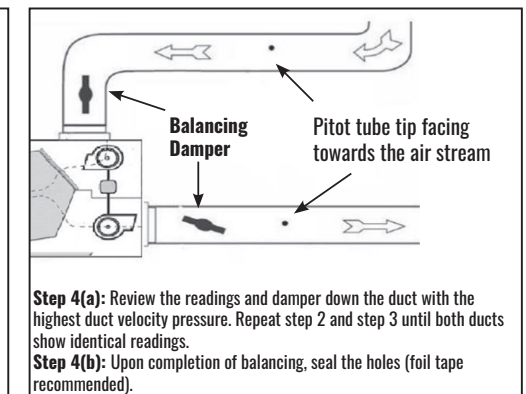
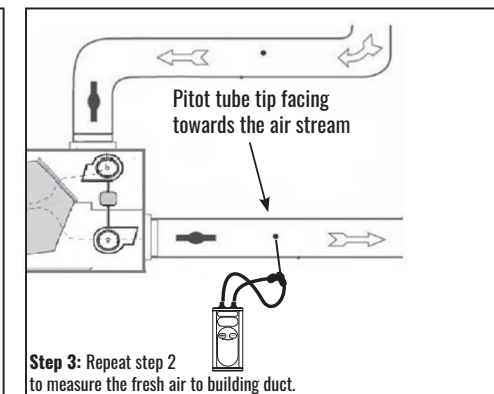
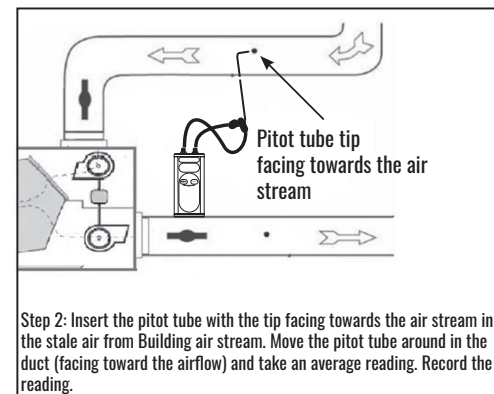
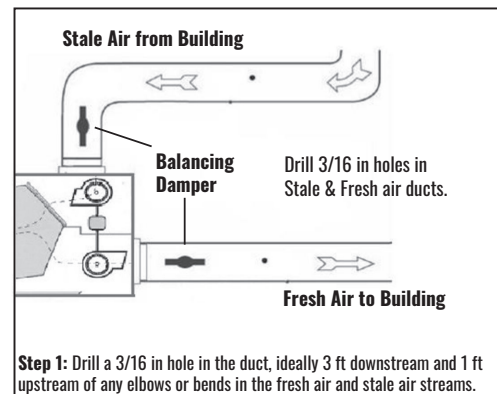


Balancing Preparation

Prior to performing the air balancing procedure, perform the following steps:

- Seal the ductwork.
- Confirm the installation and proper operation of all the components of the HRV.
- Fully open the balancing dampers.
- Turn off all household exhaust devices (range hood, clothes dryer, bathroom fans).
- Set the HRV at high speed.
- Prior to balancing the unit, first adjust airflows in the branch lines to specific areas of the house.
- If the outdoor temperature is below 0°C (32°F), ensure the unit is not running in defrost.
- If the system is a simplified or partially dedicated installation, operate the furnace/air handler at high speed.

Balancing the Airflow With a Pitot Tube



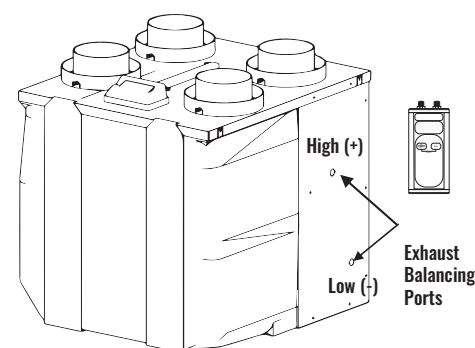
Balancing the Airflow using the Door Ports

Door balancing ports (not on all models) are designed to be used in the conjunction with a digital manometer to measure the stale and fresh airflows for balancing.

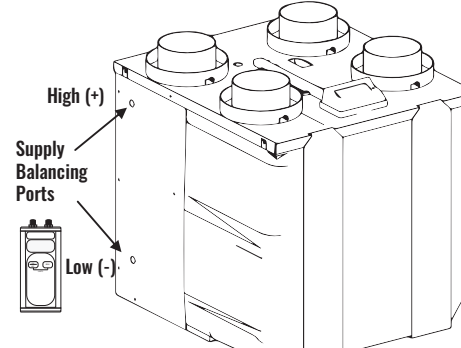
- Step 1:** Prepare the airflow measuring device by connecting the hoses to the low and high pressure side of the gauge.
- Step 2:** Insert the hoses into the rubber fittings from the optional door port adapter kit (part 99-182).
Use light pressure and rotate until fitting is snug. Do not extend the hose past the rubber fitting.
- Step 3:** Open the HRV door. Remove the 4 door port covers by carefully pushing them out from the back side of the door.
- Step 4:** Close the HRV door. Initiate power and operate the HRV on high speed. Operate the forced air system on high speed (if the HRV is connected to the forced air system).
- Step 5:** Insert the 2 rubber fittings from the gauge to the stale air balancing ports (see illustrations for port locations).
Seal the fresh air balancing ports with tape (see illustrations for port locations). Record your reading.
- Step 6:** Insert the 2 rubber fittings from the gauge to the fresh air balancing ports (see illustrations for port locations).
Seal the stale air balancing ports with tape (see illustrations for port locations). Record your reading.
- Step 7:** Refer to the "Airflow Reference Chart" for your model and determine the fresh air and stale airflow rates (see other side).
- Step 8:** Damper down the higher airflow and repeat Steps 5 to 7 as required until both airflows are identical (balanced).
- Step 9:** Remove the tape and rubber fittings and reinstall the 4 Door Port Covers.

Balancing Door Port Illustrations

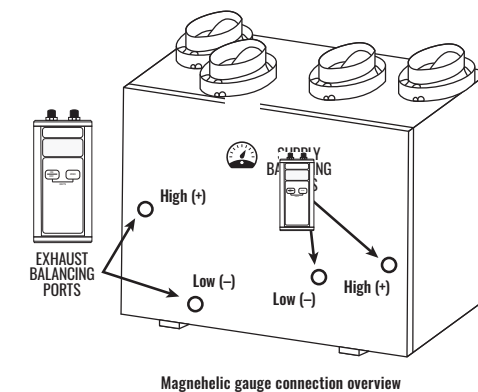
Balancing Ports for RNC4-TPD



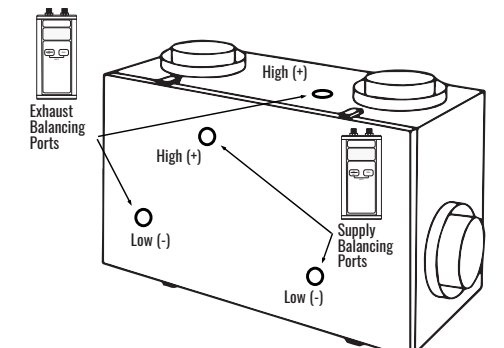
Balancing Ports for RNC4-TPF



Balancing Ports for RNC5-TPD/FD/ES
RNC5-E-TPD/TPF and RNC205 Models



Balancing Ports for RNC155 and 200 Models



Balancing Instructions

Airflow Reference Chart for RNC4-TPD

Hi 3			
Pressure Drop		Supply Airflow	Exhaust Airflow
(\"w.g.)	(Pa)	(cfm)	(cfm)
0.400	100	-	74
0.410	103	-	74
0.420	105	-	73
0.430	108	-	73
0.440	110	-	72
0.450	113	-	71
0.460	115	75	71
0.470	118	75	70
0.480	120	75	69
0.490	123	74	69
0.500	125	74	68
0.510	128	74	67
0.520	130	74	66
0.530	133	73	65
0.540	135	73	65
0.550	138	73	64
0.560	140	72	63
0.570	143	72	62
0.580	145	71	61
0.590	148	70	60
0.600	150	69	59
0.610	153	69	58
0.620	155	68	57
0.630	158	67	56
0.640	160	66	54
0.650	163	65	53
0.660	165	64	52
0.670	168	62	51
0.680	170	61	50
0.690	173	60	48
0.700	175	58	47
0.710	178	57	46
0.720	180	56	44
0.730	183	54	43
0.740	185	52	41
0.750	188	51	40
0.760	190	49	39
0.770	193	47	37
0.780	195	45	36
0.790	198	43	34
0.800	200	41	32
0.810	203	39	31
0.820	205	37	29
0.830	208	35	27
0.840	210	33	26
0.850	213	31	24
0.860	215	28	22
0.870	218	26	21
0.880	220	23	-
0.890	223	21	-

Airflow Reference Chart for RNC4-TPF

Hi 3			
Pressure Drop		Supply Airflow	Exhaust Airflow
(\"w.g.)	(Pa)	(cfm)	(cfm)
0.300	75	96	-
0.310	78	94	-
0.320	80	93	-
0.330	83	91	-
0.340	85	90	98
0.350	88	88	96
0.360	90	87	95
0.370	93	85	93
0.380	95	84	91
0.390	98	83	90
0.400	100	82	88
0.410	103	80	87
0.420	105	79	86
0.430	108	78	84
0.440	110	77	83
0.450	113	76	82
0.460	115	75	81
0.470	118	74	80
0.480	120	74	79
0.490	123	73	78
0.500	125	72	78
0.510	128	71	77
0.520	130	70	76
0.530	133	70	75
0.540	135	69	75
0.550	138	68	74
0.560	140	67	73
0.570	143	67	72
0.580	145	66	72
0.590	148	65	71
0.600	150	65	70
0.610	153	64	70
0.620	155	63	69
0.630	158	62	68
0.640	160	62	67
0.650	163	61	66
0.660	165	60	65
0.670	168	60	64
0.680	170	59	63
0.690	173	58	62
0.700	175	57	61
0.710	178	56	59
0.720	180	55	58
0.730	183	54	56
0.740	185	53	55
0.750	188	52	53
0.760	190	51	51
0.770	193	50	50
0.780	195	49	48
0.790	198	48	45
0.800	200	47	43
0.810	203	46	41
0.820	205	44	38
0.830	208	43	36
0.840	210	41	33
0.850	213	40	30
0.860	215	38	-
0.870	218	37	-
0.880	220	35	-
0.890	223	33	-
0.900	225	31	-

Airflow Reference Chart for RNC5-TPD/TPF

Hi 3			
Pressure Drop		Supply Airflow	Exhaust Airflow
(\"w.g.)	(Pa)	(cfm)	(cfm)
0.580	145	-	177
0.590	148	-	174
0.600	150	-	172
0.610	153	-	169
0.620	155	-	167
0.630	158	-	164
0.640	160	-	162
0.650	163	-	159
0.660	165	-	157
0.670	168	-	154
0.680	170	-	152
0.690	173	-	149
0.700	175	-	147
0.710	178	-	144
0.720	180	-	142
0.730	183	-	139
0.740	185	-	137
0.750	188	175	134
0.760	190	172	132
0.770	193	169	129
0.780	195	167	127
0.790	198	164	124
0.800	201	161	121
0.810	203	158	119
0.820	206	155	116
0.830	208	153	114
0.840	211	150	111
0.850	213	147	109
0.860	216	144	106
0.870	218	141	104
0.880	221	139	101
0.890	223	136	99
0.900	226	133	96
0.910	228	130	94
0.920	231	127	91
0.930	233	125	89
0.940	236	122	86
0.950	238	119	84
0.960	241	116	81
0.970	243	113	79
0.980	246	111	76
0.990	248	108	74
1.000	251	105	71
1.010	253	102	69
1.020	256	100	66
1.030	258	97	-
1.040	261	94	-
1.050	263	91	-
1.060	266	88	-
1.070	268	86	-
1.080	271	83	-
1.090	273	80	-
1.100	276	77	-
1.110	278	74	-

Airflow Reference Chart for RNC5-ES

Hi 3			
Pressure Drop		Supply Airflow	Exhaust Airflow
(\"w.g.)	(Pa)	(cfm)	(cfm)
0.70	174	-	158
0.71	177	-	155
0.72	179	-	152
0.73	182	-	149
0.74	184	-	146
0.75	187	-	143
0.76	189	-	140
0.77	192	-	137
0.78	194	-	134
0.79	197	-	131
0.80	199	-	128
0.81	202	-	125
0.82	204	-	122
0.83	207	-	119
0.84	209	-	116
0.85	212	-	113
0.86	214	-	110
0.87	217	155	107
0.88	219	149	104
0.89	222	144	101
0.90	224	139	98
0.91	227	134	95
0.92	229	129	92
0.93	232	125	89
0.94	234	120	87
0.95	237	115	84
0.96	239	111	81
0.97	242	106	78
0.98	244	102	75
0.99	247	98	72
1.00	249	94	69
1.01	252	90	66
1.02	254	86	63
1.03	257	82	60
1.04	259	78	57
1.05	262	75	54
1.06	264	71	51
1.07	267	68	48
1.08	269	64	45
1.09	272	61	42
1.10	274	58	-
1.11	277	55	-
1.12	279	52	-
1.13	282	49	-
1.14	284	46	-
1.15	287	44	-
1.16	289	41	-
1.17	292	39	-

Airflow Reference Chart for RNC5-HEX-TPD/TPF

Hi 3			
Pressure Drop		Supply Airflow	Exhaust Airflow
(\"w.g.)	(Pa)	(cfm)	(cfm)
0.200	50	113	108
0.210	52	113	108
0.220	55	112	107
0.230	57	112	107
0.240	60	111	106
0.250	62	110	106
0.260	65	110	106
0.270	67	109	105
0.280	70	108	105
0.290	72	108	104
0.300	75	107	103
0.310	77	106	103
0.320	80	105	102
0.330	82	105	102
0.340	85	104	101
0.350	87	103	100
0.360	90	102	100
0.370	92	101	99
0.380	95	100	98
0.390	97	99	97
0.400	100	98	97
0.410	102	97	96
0.420	105	96	95
0.430	107	95	94
0.440	110	94	93
0.450	112	93	93
0.460	115	92	92
0.470	117	91	91
0.480	120	90	90
0.490	122	89	89
0.500	125	88	88
0.510	127	87	87
0.520	129	85	86
0.530	132	84	85
0.540	134	83	84
0.550	137	82	83
0.560	139	80	81
0.570	142	79	80
0.580	144	78	79
0.590	147	76	78
0.600	149	75	77
0.610	152	73	75
0.620	154	72	74
0.630	157	71	73
0.640	159	69	72
0.650	162	68	70
0.660	164	66	69
0.670	167	65	68
0.680	169	63	66
0.690	172	62	65
0.700	174	60	63
0.710	177	58	62
0.720	179	57	61
0.730	182	55	59
0.740	184	53	58
0.750	187	52	56
0.760	189	50	54
0.770	192	48	53
0.780	194	46	51
0.790	197	45	50
0.800	199	43	48
0.810	202	41	46
0.820	204	-	45
0.830	207	-	43
0.840	209	-	41
0.850	212	-	40

Airflow Reference Chart for RNC155

Hi 3			
Pressure Drop		Supply Airflow	Exhaust Airflow
(\"w.g.)	(Pa)	(cfm)	(cfm)
0.000	0	-	40
0.005	1	-	45
0.010	3	-	50
0.015	4	-	54
0.020	5	-	59
0.025	6	-	63
0.030	8	-	68
0.035	9	-	72
0.040	10	-	76
0.045	11	-	81
0.050	13	39	85
0.055	14	43	89
0.060	15	46	93
0.065	16	49	97
0.070	18	53	101
0.075	19	56	105
0.080	20	59	109
0.085	21	62	113
0.090	23	65	117
0.095	24	68	120
0.100	25	71	124
0.105	26	74	128
0.110	28	76	131
0.115	29	79	135
0.120	30	81	138
0.125	31	84	141
0.130	33	86	145