INSTALLATION INSTRUCTIONS

Fixed Speed High Efficiency Blower Kit for Gas Furnace Applications

IMPORTANT SAFETY INFORMATION

INSTALLER: Please read all instructions before servicing this equipment. Pay attention to all safety warnings and any other special notes highlighted in the manual. Safety markings are used frequently throughout this manual to designate a degree or level of seriousness and should not be ignored. **WARNING** indicates a potentially hazardous situation that if not avoided, could result in personal injury or death. **CAUTION** indicates a potentially hazardous situation that if not avoided, may result in minor or moderate injury or property damage.

⚠ WARNING:

ELECTRICAL SHOCK, FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in serious injury or property damage.

Improper servicing could result in dangerous operation, serious injury, death or property damage.

- **Before servicing, disconnect all electrical power to furnace.**
- **When servicing controls, label all wires prior to disconnecting. Reconnect wires correctly.**
- **Verify proper operation after servicing.**

⚠ WARNING:

The safety information listed below must be followed during the installation, service, and operation of this it. Unqualified individuals should not attempt to interpret these instructions or install this equipment. Failure to follow safety recommendations could result in possible damage to the equipment, serious personal injury or death.

- Follow all precautions in the literature, on tags and labels provided with the equipment. Read and thoroughly understand the instructions provided with the equipment prior to performing the installation and operational checkout of the equipment.
- Unless noted otherwise in these instructions, only factory authorized parts or accessory kits may be used with this product. Improper installation, service, adjustment, or maintenance may cause fire, electrical shock or other hazardous conditions which may result in personal injury or property damage.
- Use caution when handling this equipment or removing components. Personal injury can occur from sharp metal edges present in all sheet metal constructed equipmen

ABOUT THE FSHE BLOWER KIT

The fixed speed blower kit is designed for installation in G7 gas furnaces.

- Part number 904872 is for “A” cabinet models and may be field-configured for air conditioning/heat pump airflows from 1-1/2 to 3 tons.
- Part number 904873 is for “B” cabinet models and may be field-configured for air conditioning/heat pump airflows from 2 to 3-1/2 tons.
- Part number 904874 is for “C” cabinet models, and may be field-configured for air conditioning/heat pump airflows from 3 to 5 tons.
- Part number 904875 is for “D” cabinet models and may be field-configured for air conditioning/heat pump airflows from 4 to 5 tons.

GENERAL INFORMATION

After unpacking, inspect the kit thoroughly for concealed damage. If damage is found, notify the transportation company immediately and file a concealed damage claim. All installations shall be made as described in the installation instructions and in accordance with applicable national and local codes including the requirements of local utilities.

Harness Descriptions for Upflow Furnaces

- 2A1371 or 634699 – Female 9-pin AMP mate-n-lok to 6-pin power connector, blue wire with female QC, black wire with female QC, and white wire with female QC.

Harness Descriptions for Downflow Furnaces

- 631706 – Female 9-pin AMP mate-n-lok to female 8-pin JST connector, 2 blue wires with female QC, black wire with female QC, and white wire with female QC.
- 634702 – Male 9-pin AMP mate-n-lok to female 8-pin JST connector, 2 blue wires with female QC, black wire with male QC, and white wire with male QC.
- 2A1401 or 634703 – 6-pin power connector to 6-pin power connector.

UPFLOW INSTALLATIONS

1. Disconnect electrical power to the furnace.
2. Remove the upper and lower access doors from the furnace.
3. Remove or back-out the 2 ground screws from the top of the blower deck to allow the blower to slide out of the furnace.
4. Unplug the existing electrical connector containing the blower wires from the receptacle located on the right side of the blower deck.
5. Remove the blower assembly from the furnace by removing the screws attaching the blower to the blower deck and sliding the blower assembly out of the furnace.
6. Remove the existing upper wire harness containing the blower power wires from the blower deck and the furnace control board, including the wires in the harness which go to the limits (supply air limit and either the vent limit, on select models, or the flame roll-out limit).

⚠ CAUTION:

Failure to remove the existing high voltage harness in this step may damage new motor or control board if FSHE kit is connected.

7. Remove the other blue limit wire from the supply air limit, cut off the connector, wire nut the blue wire (from pin 8 of the furnace control board 9-pin control harness), and leave dead.
8. Attach the blower mounting brackets to the blower assembly (if needed). **NOTE:** These brackets may be already attached to the new blower, or they may be taken from the old blower.
9. Slide the blower assembly into the furnace. **NOTE:** Make sure the sides of the blower are captured by all of the blower mounting tabs in the blower deck. Secure with the screws removed in step 5.
10. Replace the ground screws attaching the ground wires to the blower deck removed in step 3.
11. Install the 2A1371 or 634699 wire harness included in kit.
    – Attach the female 9-pin AMP panel connector to the blower deck.
    – Attach the 6-pin power connector to the Expansion Port connector on the furnace control board.
    – Attach the black wire to L1A on the furnace control board.
    – Attach the white wire to an open Neutral on the furnace control board.
    – Attach the limit wire to the supply air limit (terminal open from step 7).
12. Install the blue jumper wire (included in kit) from the supply air limit to the flame roll-out limit or, on select models, the vent limit (open terminals from step 6).
13. Attach the electrical plug of the new blower assembly to the receptacle installed in the blower deck in step 11.
14. Verify all wires are connected to the furnace according to the wiring diagram. See Figure 1 (page 4) & Fgure 2 (page 5). Verify all wires which are factory connected and tighten as necessary.
15. Using wire ties, secure the wires away from moving parts, burner area, and to keep wires organized.
16. Refer to the Configuring the Blower section. If necessary to gain access to the motor control board, remove the cover of the motor control board mounting bracket. Replace when finished configuring the blower.
17. Replace current wiring diagram with new wiring diagram for the application which is included in the kit.
18. Reinstall the doors and restore power to the furnace.

DOWNFLOW INSTALLATIONS

For downflow installations, the motor control board and power choke (applicable with ¾ and 1 hp motors) will be mounted separately from the blower.

Preparing the Blower Kit

1. Remove the wiring harness which was pre-installed on the kit, the motor control board, and the choke (if applicable) from the motor control mounting bracket, disconnecting any wiring to allow these parts to be removed.
2. Remove the motor control mounting bracket by removing the 4 screws attaching it to the blower.
3. Install the new 634702 wiring harness (loose harness included in kit) by attaching the 8-pin female connector to the motor low voltage 8-pin plug.
4. Attach the black wire to the motor black power wire, and the white wire to the motor white power wire.
5. Attach the longer of the blue limit wires to the limit on the opposite side of the blower wrapper, and the shorter blue limit wire to the limit on the same side of the blower wrapper as the motor. Leave the blue jumper wire attaching the 2 blower limits on either side of the blower housing
6. Reattach the green motor ground wire to the blower wrapper side. If applicable, remove the blower mounting brackets from either side of the blower housing.

Installing the New Modified Blower Assembly

1. Disconnect electrical power to the furnace.
2. Remove the upper and lower access doors from the furnace.
3. Remove the flue pipe from in front of the inner blower access door.
4. Remove the inner blower access door and unplug the receptacle containing the blower wires from the blower access door support column.
5. Remove the screws securing the blower assembly and slide the entire blower assembly out of the furnace.

⚠ CAUTION:

Failure to remove the existing high voltage harness in this step may damage new motor or control board if FSHE kit is connected.

6. Remove the existing wire harness containing the blower power wires from the inner blower access door support column and the furnace control board, including the wires in the harness which go to the limits (supply air limit and either the vent limit, on select models, or the flame roll-out limit).
7. Install the new modified blower assembly into the furnace, making sure that the sides of the blower are captured by all of the blower mounting tabs in the blower deck. Secure the blower with the screws removed in step 5.
8. Install one end of the new 634747 wiring harness (loose harness included in kit) by attaching the female 9-pin AMP panel connector to the inner blower access door.
9. Install the plug of the blower wires harness into the receptacle inner blower access door.
10. Reinstall the inner blower access door.
11. Mount the motor control board to the mounting bracket (included in kit). Then mount the mounting bracket onto inside wall of the furnace using the 2 mounting holes on the right furnace side wall.
12. Mount the power choke (applicable with ¾ and 1hp motors only) onto the inner blower access door using the 4 mounting holes provided.
13. Attach the other leads of the 634747 wiring harness from the inner blower access support column (in step 8). Connect the 8-pin plug onto the motor control board Blower Motor receptacle.
    – Connect the 2 blue limit wires of the harness to the supply air limit and either the vent limit (on select models) or the flame roll-out limit (the limits that had the harness removed from in Step 6).
    – Attach the white wire of the harness to any open Neutral connector on the furnace control board.
    – Attach the black wire of the wire harness to the L1A terminal on the furnace control board.
    – On 3/4 or 1 hp motor units, attach the black wire of the harness to the motor choke male quick-connect terminal, then use the long, black extra wire included in the kit to connect the other lead of the choke to the L1A terminal of the furnace control board.
14. Attach the 2A1401 or 634703 harness (included in kit) from the furnace control board Expansion Port to the motor control board Expansion Port.
15. Verify all wires are connected to the furnace according to the wiring diagram. See Figure 1 (page 4) & Fgure 2 (page 5).Verify all wires which are factory connected and tighten as necessary.
16. Use wire ties to secure wires away from moving parts, burner area, and to keep wires organized.
17. Refer to the Configuring the Blower section.
18. Replace current wiring diagram with new wiring diagram for the application which is included in the kit.
19. Reinstall the doors and restore power to the furnace.

CONFIGURING THE BLOWER

IMPORTANT NOTE:

The fixed speed high efficiency blower kit is designed to give the installer maximum flexibility to optimize system performance, efficiency, and comfort. Because there are so many ways to configure the kit, it is important to read and follow these instructions carefully.

The fixed speed high efficiency blower kit is equipped with a microprocessor control which is designed to provide a variety of system airflows and comfort options. Before operation, the fixed speed high efficiency blower must be configured to match the unit with the system, system options, and climate conditions. The blower is configured by setting the 8 switches located on the motor control board as described below.

Selecting the (Gas) Heating Torque

The motor torque during heating is selected by setting switches 1 through 4 (also marked as HEAT) on the motor control board. Refer to Table 2 (page 6 & page 7) and Table 3 (page 8 & page 9) and select an airflow to allow the furnace to reach an appropriate heat rise as shown on the unit rating plate. To reduce the heat rise, select a higher airflow; to increase the heat rise, select a lower airflow. Be sure that the selected rise is within the specification of the furnace as shown on the furnace rating label.

Determining Nominal System Capacity (A/C & HP)

In order to select the appropriate airflow for the AC and HP operation, the nominal system capacity must be known. The nominal system capacity is ALWAYS the nominal capacity of the outdoor unit. In some cases, the nominal system capacity is not the same as the nominal capacity of the indoor coil.

Selecting the Cooling/Heat Pump Torque

The motor torque during cooling/heat pump is selected by setting switches 5 through 8 (also marked as COOL) on the motor control board. All motor torques for other modes of operation, except for gas heat, are determined by this setting. Refer to the Airflow Settings graph and select an airflow in the range recommended for the nominal system capacity.

For maximum capacity and energy efficiency, generally a selection at or near the top of the CFM range for that nominal system capacity is best. For maximum dehumidification, select an airflow near the middle or bottom of the CFM range for that nominal system capacity.

NOTE: If coil icing is observed, the cooling/heat pump airflow may be set too low. Double-check to be sure the setting selected is within the range shown. Also, check to be sure the system is properly charged (see outdoor unit installation instructions). If icing continues to occur, raise the selected torque one or two steps.

SYSTEM OPERATION

Gas Heating Mode

When the thermostat calls for heating, the circuit between R and W is completed. The furnace control board initiates the ignition sequence. Approximately 30 seconds after the gas flame has proven, the blower motor will slowly ramp up to the selected motor torque. The blower will continue to operate after the call for heat has been removed for a selectable (switch on furnace control board) number of seconds. **NOTE:** All on- and off-delays for heating continue to be controlled by the furnace control board.

Cooling or Heat Pump Mode

When the thermostat calls for cooling or heat pump heating, the circuit between R, G, and Y (O is ignored by the blower) is completed. The blower slowly ramps up to the selected cooling motor torque. If there is a humidistat connected to the motor control board calling for humidity control, the motor will operate at 70% of the torque setting. Or, if the system is installed where humidity control is desired but a humidistat is not available, the DEHUM and R terminals on the motor control board may be jumpered. In this case, the blower will operate at 60% torque for the first 10 minutes of the cycle and then return to normal torque for the remainder of the cooling cycle. After the call for cooling or heat pump is satisfied, the blower continues to operate for 60 seconds at half of the selected torque.

Manual Fan

When the manual fan switch on the thermostat is on, energizing G only, the blower will ramp up to 50% of the selected cooling/heat pump motor torque.

FAULT CONDITIONS

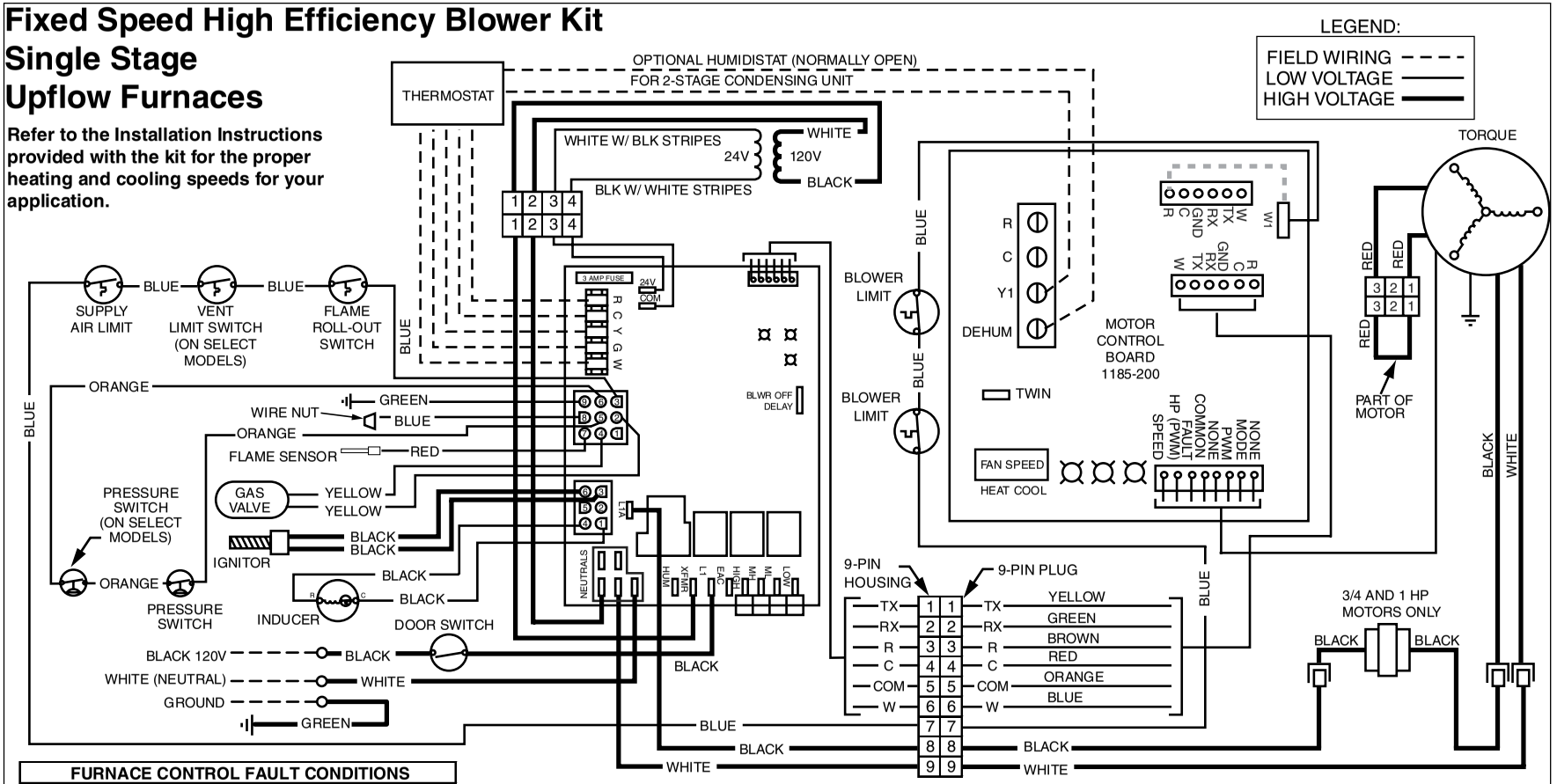
There is a green and a red LED labeled “Status” on the motor control board to provide system faults. See Table 1 below.

Diagnostic Description	Red LED (AN1)	Green LED (AN2)
Control Fault (No Power)	Off	Off
Normal Operation	On	On
Motor Fault	On	Flash
Twin Fault (no motor fault)	Flash	On
Communications Fault	Flash	Flash

Table 1. Fault Conditions

Fixed Speed High Efficiency Blower Kit
Single Stage
Upflow Furnaces

Refer to the Installation Instructions provided with the kit for the proper heating and cooling speeds for your application.



FURNACE CONTROL FAULT CONDITIONS		
Diagnostic Description	**Green LED**	**Red LED**
Control Fault (No Power)	Off	Off
L1 / Neutral Polarity Fault	Flash	Flash
1 Hour Lockout	Alternating Flash	
Normal Operation	On	On
Pressure Switch Closed Fault	On	Flash
Pressure Switch Open Fault	Flash	On
Open Limit Switch Fault	Flash	Off
Motor Fault	On	Off
Diagnostic Description	**Yellow LED**	
Low Flame Sensor Signal	Continuous Flash	
Flame Present	On	

MOTOR CONTROL FAULT CONDITIONS		
Diagnostic Description	**Red LED**	**Green LED**
Control Fault (No Power)	Off	Off
Normal Operation	On	On
Motor Fault	On	Flash
No Motor Fault	Flash	On
Communications Fault	Flash	Flash

If any of the original wire as supplied with the furnace must be replaced, it must be replaced with wiring material having a temperature rating of at least 105° C.

Use copper conductors only.

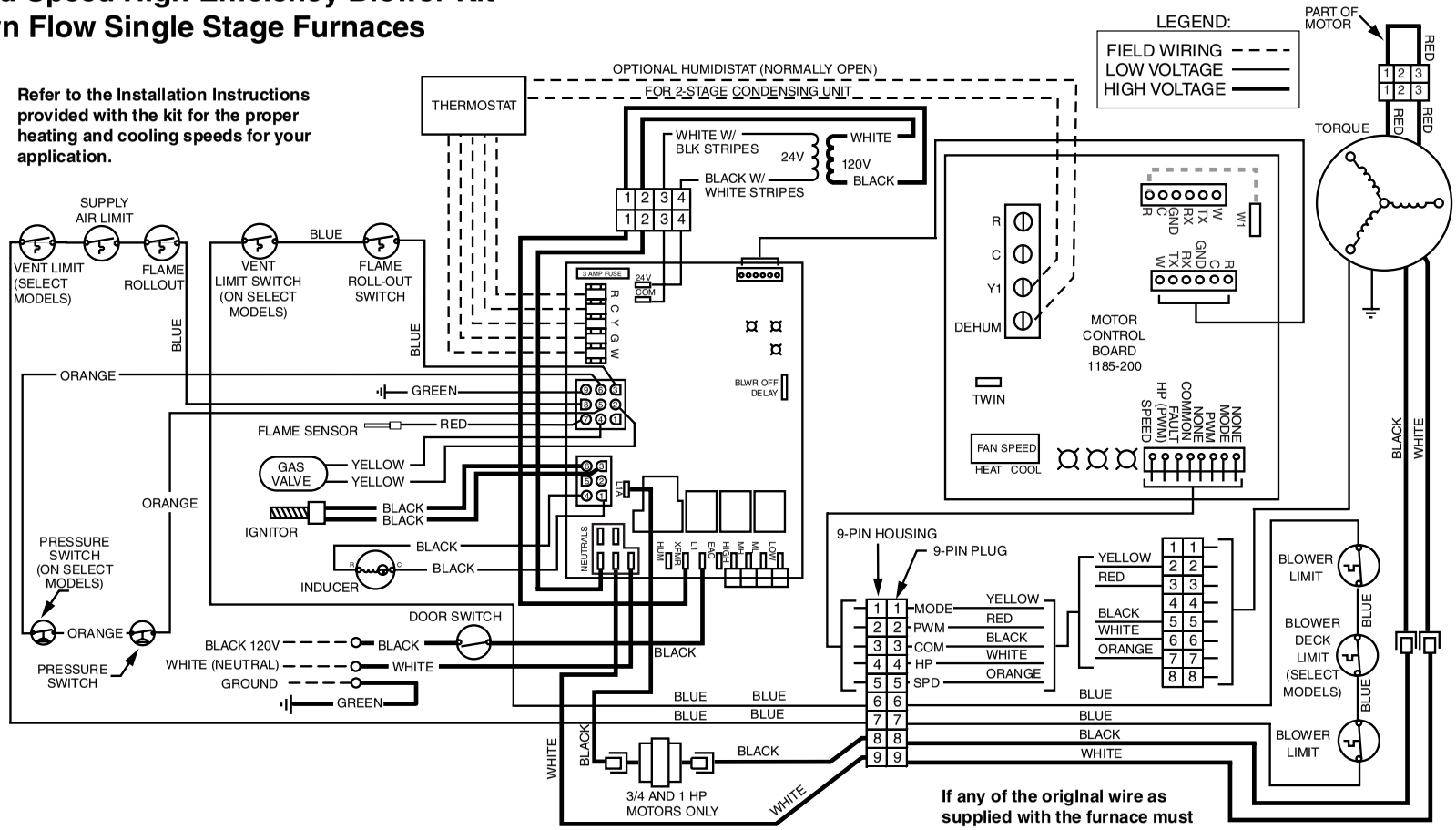
7109220

Figure 1. Wiring Diagram for Upflow Furnaces

WIRING DIAGRAM

Fixed Speed High Efficiency Blower Kit
Down Flow Single Stage Furnaces

Refer to the Installation Instructions provided with the kit for the proper heating and cooling speeds for your application.



If any of the orIginal wire as supplied with the furnace must be replaced, it must be replaced with wiring material having a temperature rating of at least 105° C.

Use copper conductors only.

FURNACE CONTROL FAULT CONDITIONS		
Diagnostic Description	**Green LED**	**Red LED**
Control Fault (No Power)	Off	Off
L1 / Neutral Polarity Fault	Flash	Flash
1 Hour Lockout	Alternating Flash	
Normal Operation	On	On
Pressure Switch Closed Fault	On	Flash
Pressure Switch Open Fault	Flash	On
Open Limit Switch Fault	Flash	Off
Motor Fault	On	Off
Diagnostic Description	**Yellow LED**	
Low Flame Sensor Signal	Continuous Flash	
Flame Present	On	

MOTOR CONTROL FAULT CONDITIONS		
Diagnostic Description	**Red LED**	**Green LED**
Control Fault (No Power)	Off	Off
Normal Operation	On	On
Motor Fault	On	Flash
Twin Fault (no motor fault)	Flash	On
Communications Fault	Flash	Flash

LEGEND:
FIELD WIRING
LOW VOLTAGE
HIGH VOLTAGE

710924A
(Replaces 7109240)
0315

Figure 2. Wiring Diagram for Downflow Furnaces

G7SA/SK - 80% AFUE, Single Stage Gas Furnace																					
Model Number	Heating Input (Btuh)	Motor Switch Setting				External Static Pressure (in.w.c.)															
						0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
		1/5	2/6	3/7	4/8	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise
*SA-045(‡)-*A	45,000	0	0	0	0	410	81	350	95	290	115	230	145								
		1	0	0	0	525	64	475	71	420	79	370	90	320	104						
		0	1	0	0	600	56	555	60	510	65	465	72	420	79	375	89				
		1	1	0	0	705	47	670	50	635	53	600	56	560	59	525	63	490	68		
		0	0	1	0	775	43	740	45	705	47	665	50	630	53	590	56	555	60	520	64
		1	0	1	0	900	37	870	38	835	40	800	42	765	44	730	46	695	48	660	51
		0	1	1	0	950	35	920	36	890	38	855	39	825	40	795	42	765	44	730	46
		1	1	1	0	1000	33	970	34	940	35	910	37	880	38	850	39	820	41	790	42
		0	0	0	1	1075	31	1045	32	1015	33	985	34	960	35	925	36	900	37	870	38
		1	0	0	1	1110	30	1080	31	1055	32	1025	32	1000	33	975	34	945	35	920	36
		0	1	0	1	1170	29	1140	29	1115	30	1090	31	1060	31	1035	32	1010	33	985	34
		1	1	0	1	1210	28	1185	28	1160	29	1130	29	1105	30	1080	31	1055	32	1025	32
		0	0	1	1	1520	27	1225	27	1200	28	1175	28	1150	29	1120	30	1095	30	1070	31
		1	0	1	1	1305	26	1280	26	1255	27	1230	27	1205	28	1180	28	1155	29	1130	30
		0	1	1	1	1350	25	1230	25	1305	26	1285	26	1260	26	1240	27	1215	27	1195	28
		1	1	1	1	1440	23	1400	24	1365	24	1230	25	1295	26	1255	27	1220	27	1185	28
*SA/SK-054(‡)-*A	54,000	0	0	0	0	410	97	350	114	290	138	230	174								
		1	0	0	0	525	76	475	85	420	95	370	108	320	125						
		0	1	0	0	600	67	555	72	510	78	465	86	420	95	375	107				
		1	1	0	0	705	57	670	60	635	63	600	67	560	71	525	76	490	82		
		0	0	1	0	775	51	740	54	705	57	665	60	630	64	590	68	555	72	520	77
		1	0	1	0	900	44	870	46	835	48	800	50	765	52	730	55	695	58	660	61
		0	1	1	0	950	42	920	44	890	45	855	47	725	48	795	50	765	52	730	55
		1	1	1	0	1000	40	970	41	940	43	910	44	880	45	850	47	820	49	790	51
		0	0	0	1	1075	37	1045	38	1015	39	985	41	960	42	925	43	900	45	870	46
		1	0	0	1	1110	36	1080	37	1055	38	1025	39	1000	40	975	41	945	42	920	44
		0	1	0	1	1170	34	1140	35	1115	36	1090	37	1060	38	1035	39	1010	40	985	41
		1	1	0	1	1210	33	1185	34	1160	35	1130	35	1105	36	1080	37	1055	38	1025	39
		0	0	1	1	1520	32	1225	33	1200	33	1175	34	1150	35	1120	36	1095	36	1070	37
		1	0	1	1	1305	31	1280	31	1255	32	1230	33	1205	33	1180	34	1155	35	1130	35
		0	1	1	1	1350	30	1230	30	1305	31	1285	31	1260	32	1240	32	1215	33	1195	34
		1	1	1	1	1440	28	1400	29	1365	29	1230	30	1295	31	1255	32	1220	33	1185	34
*SA/SK-072(‡)-*B	72,000	0	0	0	0	445	120	300	178	155	343										
		1	0	0	0	515	104	455	118	395	136	335	160	275	196	215	251	150	350	90	579
		0	1	0	0	610	88	545	98	480	111	415	128	355	151	290	184	225	236	160	329
		1	1	0	0	725	74	670	80	615	87	555	96	500	106	445	120	390	137	335	160
		0	0	1	0	810	66	755	70	705	76	650	82	600	89	545	98	490	108	440	121
		1	0	1	0	940	57	890	60	845	63	795	67	750	71	700	76	655	82	605	88
		0	1	1	0	990	54	945	56	905	59	860	62	820	65	775	69	735	73	690	77
		1	1	1	0	1055	51	1015	53	970	55	930	57	890	60	845	63	805	66	760	70
		0	0	0	1	1135	47	1095	49	1055	51	1010	53	790	55	930	57	890	60	850	63
		1	0	0	1	1185	45	1145	47	1105	48	1065	50	1030	52	990	54	950	56	910	59
		0	1	0	1	1250	43	1210	44	1170	46	1135	47	1095	49	1055	50	1020	52	980	54
		1	1	0	1	1290	41	1255	43	1220	44	1180	45	1145	46	1110	48	1075	50	1040	51
		0	0	1	1	1315	41	1275	42	1240	43	1200	44	1160	46	1120	48	1085	49	1045	51
		1	0	1	1	1350	40	1315	41	1280	42	1245	43	1205	44	1170	46	1135	47	1100	49
		0	1	1	1	1390	38	1350	39	1315	41	1275	42	1240	43	1200	44	1160	46	1125	47
		1	1	1	1	1420	38	1380	39	1345	40	1310	41	1270	42	1235	43	1200	44	1160	46
*SA/SK-090(‡)-*B	90,000	0	0	0	0	445	150	300	222	155	429										
		1	0	0	0	515	130	455	147	395	170	335	200	275	244	215	314	150	438	90	724
		0	1	0	0	610	110	545	122	480	139	415	160	355	189	290	230	225	295	160	411
		1	1	0	0	725	92	670	100	615	109	555	120	500	133	445	150	390	171	335	200
		0	0	1	0	810	82	755	88	705	95	650	102	600	112	545	122	490	136	440	152
		1	0	1	0	940	71	890	75	845	79	795	84	750	89	700	95	655	102	605	110
		0	1	1	0	990	67	945	70	905	74	860	77	820	81	775	86	735	91	690	96
		1	1	1	0	1055	63	1015	66	970	69	930	72	890	75	845	79	805	83	760	88
		0	0	0	1	1135	59	1095	61	1055	63	1010	66	790	69	930	72	890	75	850	78
		1	0	0	1	1185	56	1145	58	1105	60	1065	62	1030	65	990	67	950	70	910	73
		0	1	0	1	1250	53	1210	55	1170	57	1135	59	1095	61	1055	63	1020	65	980	68
		1	1	0	1	1290	52	1255	53	1220	55	1180	56	1145	58	1110	60	1075	62	1040	64
		0	0	1	1	1315	51	1275	52	1240	54	1200	56	1160	57	1120	59	1085	61	1045	64
		1	0	1	1	1350	49	1315	51	1280	52	1245	54	1205	55	1170	57	1135	59	1100	61
		0	1	1	1	1390	48	1350	49	1315	51	1275	52	1240	54	1200	56	1160	57	1125	59
		1	1	1	1	1420	47	1380	48	1345	50	1310	51	1270	52	1235	54	1200	56	1160	57
*SA-072(‡)-*C	72,000	0	0	0	0	1125	47	1040	51	960	56	880	61	795	67	715	75	630	84	550	97
		1	0	0	0	1205	44	1120	48	1040	51	960	56	875	61	795	67	715	75	630	84
		0	1	0	0	1305	41	1225	43	1150	46	1070	50	995	54	915	58	840	64	760	70
		1	1	0	0	1430	37	1350	40	1270	42	1190	45	1110	48	1030	52	950	56	865	61
		0	0	1	0	1525	35	1450	37	1375	39	1300	41	1225	44	1150	46	1075	50	1000	53
		1	0	1	0	1620	33	1540	35	1465	36	1390	38	1315	41	1240	43	1165	46	1090	49
		0	1	1	0	1695	31	1620	33	1545	35	1465	36	1390	38	1315	41	1235	43	1160	46
		1	1	1	0	1770	30	1700	31	1630	33	1555	34	1485	36	1410	38	1340	40	1265	42
		0	0	0	1	1875	28	1805	30	1730	31	1655	32	1580	34	1510	35	1435	37	1340	39
		1	0	0	1	1905	28	1840	29	1775	30	1710	31	1640	32	1575	34	1510	35	1445	37
		0	1	0	1	1980	27	1910	28	1845	29	1780	30	1715	31	1650	32	1580	34	1515	35
		1	1	0	1	2025	26	1960	27	1895	28	1830	29	1765	30	1700	31	1635	33	1570	34
		0	0	1	1	2085	26	2025	26	1960	27	1900	28	1840	29	1775	30	1715	31	1655	32
		1	0	1	1	2135	25	2070	26	2010	27	1945	27	1880	28	1815	29	1750	30	1685	32
		0	1	1	1	2200	24	2145	25	2090	26	2035	26	1980	27	1925	28	1870	28	1820	29
		1	1	1	1	2280	23	2225	24	2170	25	2115	25	2065	26	2010	27	1955	27	1900	28

Table 2. G7SA/SK - 80% AFUE Blower Data

G7SA/SK - 80% AFUE, single Stage Gas Furnace																					
Model Number	Heating Input (Btuh)	Motor Switch Setting				External Static Pressure (in. w.c.)															
						0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
		1/5	2/6	3/7	4/8	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise
*SA-090(‡)-*C	90,000	0	0	0	0	1125	59	1040	64	960	69	880	76	795	84	715	93	630	105	550	121
		1	0	0	0	1205	55	1120	59	1040	64	960	70	875	76	795	84	715	93	630	106
		0	1	0	0	1305	51	1225	54	1150	58	1070	62	995	67	915	73	840	80	760	88
		1	1	0	0	1430	47	1350	49	1270	53	1190	56	1110	60	1030	65	950	70	865	77
		0	0	1	0	1525	44	1450	46	1375	48	1300	51	1225	54	1150	58	1075	62	1000	67
		1	0	1	0	1620	41	1540	43	1465	45	1390	48	1315	51	1240	54	1165	57	1090	61
		0	1	1	0	1695	39	1620	41	1545	43	1465	45	1390	48	1315	51	1235	54	1160	57
		1	1	1	0	1770	38	1700	39	1630	41	1555	43	1485	45	1410	47	1340	50	1265	53
		0	0	0	1	1875	36	1805	37	1730	39	1655	40	1580	42	1510	44	1435	47	1340	49
		1	0	0	1	1905	35	1840	36	1775	38	1710	39	1640	41	1575	42	1510	44	1445	46
		0	1	0	1	1980	34	1910	35	1845	36	1780	37	1715	39	1650	40	1580	42	1515	44
		1	1	0	1	2025	33	1960	34	1895	35	1830	36	1765	38	1700	39	1635	41	1570	42
		0	0	1	1	2085	32	2025	33	1960	34	1900	35	1840	36	1775	38	1715	39	1655	40
		1	0	1	1	2135	31	2070	32	2010	33	1945	34	1880	35	1815	37	1750	38	1685	40
		0	1	1	1	2200	30	2145	31	2090	32	2035	33	1980	34	1925	35	1870	36	1820	37
		1	1	1	1	2280	29	2225	30	2170	31	2115	31	2065	32	2010	33	1955	34	1900	35
*SA/SK-108(‡)-*C	108,000	0	0	0	0	1125	71	1040	77	960	83	880	91	795	101	715	112	630	127	550	145
		1	0	0	0	1205	66	1120	71	1040	77	960	83	875	91	795	101	715	112	630	127
		0	1	0	0	1305	61	1225	65	1150	70	1070	75	995	81	915	87	840	95	760	105
		1	1	0	0	1430	56	1350	59	1270	63	1190	67	1110	72	1030	78	950	84	865	92
		0	0	1	0	1525	52	1450	55	1375	58	1300	62	1225	65	1150	70	1075	75	1000	80
		1	0	1	0	1620	49	1540	52	1465	55	1390	57	1315	61	1240	64	1165	69	1090	73
		0	1	1	0	1695	47	1620	49	1545	52	1465	55	1390	58	1315	61	1235	65	1160	69
		1	1	1	0	1770	45	1700	47	1630	49	1555	51	1485	54	1410	57	1340	60	1265	63
		0	0	0	1	1875	43	1805	44	1730	46	1655	48	1580	51	1510	53	1435	56	1340	59
		1	0	0	1	1905	42	1840	43	1775	45	1710	47	1640	49	1575	51	1510	53	1445	55
		0	1	0	1	1980	40	1910	42	1845	43	1780	45	1715	47	1650	49	1580	51	1515	53
		1	1	0	1	2025	40	1960	41	1895	42	1830	44	1765	45	1700	47	1635	49	1570	51
		0	0	1	1	2085	38	2025	40	1960	41	1900	42	1840	44	1775	45	1715	47	1655	48
		1	0	1	1	2135	37	2070	39	2010	40	1945	41	1880	43	1815	44	1750	46	1685	48
		0	1	1	1	2200	36	2145	37	2090	38	2035	39	1980	40	1925	42	1870	43	1820	44
		1	1	1	1	2280	35	2225	36	2170	37	2115	38	2065	39	2010	40	1955	41	1900	42
*SA/SK-126(‡)-*D	126,000	0	0	0	0	1395	67	1350	69	1305	72	1260	74	1210	77	1165	80	1120	83	1075	87
		1	0	0	0	1465	64	1420	66	1375	68	1330	70	1290	72	1245	75	1200	78	1155	81
		0	1	0	0	1555	60	1510	62	1470	64	1425	66	1380	68	1340	70	1295	72	1250	75
		1	1	0	0	1625	57	1585	59	1540	61	1500	62	1460	64	1415	66	1375	68	1335	70
		0	0	1	0	1690	55	1650	57	1610	58	1570	60	1530	61	1485	63	1445	64	1405	66
		1	0	1	0	1760	53	1715	54	1670	56	1625	58	1575	59	1530	61	1485	63	1440	65
		0	1	1	0	1835	51	1790	52	1745	54	1695	55	1650	57	1605	58	1555	60	1510	62
		1	1	1	0	1885	50	1840	51	1790	52	1745	53	1700	55	1655	56	1610	58	1565	60
		0	0	0	1	1945	48	1900	49	1850	50	1805	52	1760	53	1710	55	1665	56	1620	58
		1	0	0	1	1950	48	1905	49	1860	50	1820	51	1775	53	1735	54	1690	55	1650	57
		0	1	0	1	2075	45	2030	46	1990	47	1945	48	1900	49	1855	50	1810	52	1770	53
		1	1	0	1	2125	44	2085	45	2040	46	2000	47	1955	48	1910	49	1870	50	1825	51
		0	0	1	1	2170	43	2130	44	2090	45	2045	46	2005	47	1965	48	1925	49	1880	50
		1	0	1	1	2215	42	2180	43	2140	44	2105	44	2070	45	2035	46	2000	47	1965	48
		0	1	1	1									2225	42	2165	43	2100	44	2040	46
		1	1	1	1											2170	43	2120	44	2065	45

NOTES:
(‡) Can be C or N
1. Motor Switch Settings are for heating speeds using HEAT switches 1, 2, 3, & 4 and cooling speeds using COOL switches 5, 6, 7, & 8.
2. Two openings are recommended for airflows above 1600 CFM if the filter(s) is (are) adjacent to the furnace.
3. Data is shown without filter - add .08in.w.c for filter.
4. Temperature rises in the table are approximate. Actual temperature rises may vary.
5. Temperature rises that are shaded in grey are for reference only. These conditions are not recommended.

Table 2. G7SA/SK - 80% AFUE Blower Data (continued)

G7SC/SL - 92.1% AFUE, Single Stage Gas Furnace																					
Model Number	Heating Input (Btuh)	Motor Switch Setting				External Static Pressure (in.w.c.)															
						0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
		1/5	2/6	3/7	4/8	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise
*SC-038D-*A	40,000	0	0	0	0	410	83	350	97	290	117	230	149								
		1	0	0	0	525	65	475	72	420	81	370	92	320	107						
		0	1	0	0	600	57	555	61	510	67	465	73	420	81	375	91				
		1	1	0	0	705	48	670	51	635	54	600	57	560	61	525	65	490	70		
		0	0	1	0	775	44	740	46	705	48	665	51	630	54	590	58	555	61	520	66
		1	0	1	0	900	38	870	39	835	41	800	43	765	45	730	47	695	49	660	52
		0	1	1	0	950	36	920	37	890	38	855	40	725	41	795	43	765	45	730	47
		1	1	1	0	1000	34	970	35	940	36	910	37	880	39	850	40	820	42	790	43
		0	0	0	1	1075	32	1045	33	1015	34	985	35	960	36	925	37	900	38	870	39
		1	0	0	1	1110	31	1080	32	1055	32	1025	33	1000	34	975	35	945	36	920	37
		0	1	0	1	1170	29	1140	30	1115	31	1090	31	1060	32	1035	33	1010	34	985	35
		1	1	0	1	1210	28	1185	29	1160	29	1130	30	1105	31	1080	32	1055	32	1025	33
		0	0	1	1	1520	27	1225	28	1200	28	1175	29	1150	30	1120	30	1095	31	1070	32
		1	0	1	1	1305	26	1280	27	1255	27	1230	28	1205	28	1180	29	1155	30	1130	30
		0	1	1	1	1350	25	1230	26	1305	26	1285	27	1260	27	1240	28	1215	28	1195	29
		1	1	1	1	1440	24	1400	24	1365	25	1230	26	1295	26	1255	27	1220	28	1185	29
*SC-054D-*B	54,000	0	0	0	0	445	103	300	153	155	296										
		1	0	0	0	515	90	455	102	395	117	335	138	275	169	215	217	150	302	90	500
		0	1	0	0	610	76	545	85	480	96	415	110	355	130	290	159	225	204	160	284
		1	1	0	0	725	64	670	69	615	75	555	83	500	92	445	103	390	118	335	138
		0	0	1	0	810	57	755	61	705	65	650	71	600	77	545	85	490	94	440	105
		1	0	1	0	940	49	890	52	845	55	795	58	750	62	700	66	655	70	605	76
		0	1	1	0	990	47	945	49	905	51	860	53	820	56	775	59	735	63	690	67
		1	1	1	0	1055	44	1015	45	970	47	930	50	890	52	845	54	805	57	760	60
		0	0	0	1	1135	41	1095	42	1055	44	1010	45	970	47	930	49	890	52	850	54
		1	0	0	1	1185	39	1145	40	1105	42	1065	43	1030	45	990	47	950	49	940	51
		0	1	0	1	1250	37	1210	38	1170	39	1135	41	1095	42	1055	44	1020	45	980	47
		1	1	0	1	1290	36	1255	37	1250	38	1180	39	1145	40	1110	41	1075	43	1040	44
		0	0	1	1	1315	35	1275	36	1240	37	1200	38	1160	40	1125	41	1085	42	1045	44
		1	0	1	1	1350	34	1315	35	1280	36	1245	37	1205	38	1170	39	1135	41	1100	42
		0	1	1	1	1390	33	1350	34	1315	35	1275	36	1240	37	1200	38	1160	40	1125	41
		1	1	1	1	1415	32	1380	33	1345	34	1310	35	1270	36	1235	37	1200	38	1160	40
*SC/SL-072D-*B	72,000	0	0	0	0	445	138	300	204	155	395										
		1	0	0	0	515	120	455	135	395	156	335	184	275	225	215	289	150	403	90	667
		0	1	0	0	610	101	545	113	480	128	415	147	355	174	290	212	225	272	160	378
		1	1	0	0	725	85	670	92	615	100	555	110	500	123	445	138	390	158	335	184
		0	0	1	0	810	76	755	81	705	87	650	94	600	103	545	113	490	125	440	140
		1	0	1	0	940	65	890	69	845	73	795	77	750	82	700	88	655	94	605	101
		0	1	1	0	990	62	945	65	905	68	860	71	820	75	775	79	735	84	690	89
		1	1	1	0	1055	58	1015	61	970	63	930	66	890	69	845	73	805	76	760	81
		0	0	0	1	1135	54	1095	56	1055	58	1010	61	970	63	930	66	890	69	850	72
		1	0	0	1	1185	52	1145	54	1105	56	1065	58	1030	60	990	62	950	65	940	67
		0	1	0	1	1250	49	1210	51	1170	52	1135	54	1095	56	1055	58	1020	60	980	63
		1	1	0	1	1290	48	1255	49	1250	50	1180	52	1145	54	1110	55	1075	57	1040	59
		0	0	1	1	1315	47	1275	48	1240	50	1200	51	1160	53	1125	55	1085	57	1045	59
		1	0	1	1	1350	45	1315	47	1280	48	1245	49	1205	51	1170	52	1135	54	1100	56
		0	1	1	1	1390	44	1350	45	1315	47	1275	48	1240	50	1200	51	1160	53	1125	55
		1	1	1	1	1415	43	1380	44	1345	46	1310	47	1270	48	1235	50	1200	51	1160	53
*SC-072D-*C	72,000	0	0	0	0	1125	55	1040	59	960	64	880	70	795	77	715	86	630	97	550	112
		1	0	0	0	1205	51	1120	55	1040	59	960	64	875	70	795	77	715	86	630	97
		0	1	0	0	1305	47	1225	50	1150	53	1070	57	995	62	915	67	840	73	760	81
		1	1	0	0	1430	43	1350	45	1270	48	1190	52	1110	55	1030	60	950	65	865	71
		0	0	1	0	1525	40	1450	42	1375	45	1300	47	1225	50	1150	53	1075	57	1000	62
		1	0	1	0	1615	38	1540	40	1465	42	1390	44	1315	47	1240	49	1165	53	1090	56
		0	1	1	0	1695	36	1620	38	1545	40	1465	42	1390	44	1315	47	1235	50	1160	53
		1	1	1	0	1770	35	1700	36	1630	38	1555	39	1485	41	1410	44	1340	46	1265	48
		0	0	0	1	1875	33	1805	34	1730	36	1655	37	1580	39	1505	41	1435	43	1360	45
		1	0	0	1	1905	32	1840	33	1775	35	1710	36	1640	37	1575	39	1510	41	1445	43
		0	1	0	1	1980	31	1910	32	1845	33	1780	34	1715	36	1645	37	1580	39	1515	41
		1	1	0	1	2025	30	1960	31	1895	32	1830	34	1765	35	1700	36	1635	38	1570	39
		0	0	1	1	2085	29	2025	30	1960	31	1900	32	1840	33	1775	35	1715	36	1655	37
		1	0	1	1	2135	29	2070	30	2010	31	1945	32	1880	33	1815	34	1750	35	1685	36
		0	1	1	1	2200	28	2145	29	2090	29	2035	30	1980	31	1925	32	1870	33	1815	34
		1	1	1	1	2280	27	2225	28	2170	28	2120	29	2065	30	2010	31	1955	31	1900	32

Table 3. G7SC/SL - 92.1% AFUE Blower Data

G7SC/SL - 92.1% AFUE, Single Stage Gas Furnace																					
Model Number	Heating Input (Btuh)	Motor Switch Setting				External Static Pressure (in. w.c.)															
						0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
		1/5	2/6	3/7	4/8	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise
*SC/SL-090D-*C	90,000	0	0	0	0	1125	68	1040	74	960	80	880	87	795	96	715	107	630	121	550	139
		1	0	0	0	1205	64	1120	68	1040	74	960	80	875	88	795	97	715	108	630	122
		0	1	0	0	1305	59	1225	63	1150	67	1070	72	995	77	915	84	840	92	760	101
		1	1	0	0	1430	54	1350	57	1270	60	1190	65	1110	69	1030	75	950	81	865	88
		0	0	1	0	1525	50	1450	53	1375	56	1300	59	1225	63	1150	67	1075	72	1000	77
		1	0	1	0	1615	47	1540	50	1465	52	1390	55	1315	58	1240	62	1165	66	1090	70
		0	1	1	0	1695	45	1620	47	1545	50	1465	52	1390	55	1315	58	1235	62	1160	66
		1	1	1	0	1770	43	1700	45	1630	47	1555	49	1485	52	1410	54	1340	57	1265	61
		0	0	0	1	1875	41	1805	43	1730	44	1655	46	1580	49	1505	51	1435	54	1360	56
		1	0	0	1	1905	40	1840	42	1775	43	1710	45	1640	47	1575	49	1510	51	1445	53
		0	1	0	1	1980	39	1910	40	1845	42	1780	43	1715	45	1645	47	1580	49	1515	51
		1	1	0	1	2025	38	1960	39	1895	41	1830	42	1765	43	1700	45	1635	47	1570	49
		0	0	1	1	2085	37	2025	38	1960	39	1900	40	1840	42	1775	43	1715	45	1655	46
		1	0	1	1	2135	36	2070	37	2010	38	1945	40	1880	41	1815	42	1750	44	1685	46
		0	1	1	1	2200	35	2145	36	2090	37	2035	38	1980	39	1925	40	1870	41	1815	42
		1	1	1	1	2280	34	2225	34	2170	35	2120	36	2065	37	2010	38	1955	39	1900	40
*SC-108D-*D	108,000	0	0	0	0	1395	66	1350	68	1305	71	1260	73	1210	76	1165	79	1120	82	1075	86
		1	0	0	0	1465	63	1420	65	1375	67	1330	69	1290	72	1245	74	1200	77	1155	80
		0	1	0	0	1555	59	1510	61	1470	63	1425	65	1380	67	1340	69	1295	71	1250	74
		1	1	0	0	1625	57	1585	58	1540	60	1500	61	1460	63	1415	65	1375	67	1335	69
		0	0	1	0	1690	55	1650	56	1610	57	1570	59	1530	60	1485	62	1445	64	1405	65
		1	0	1	0	1760	52	1715	54	1670	55	1625	57	1575	58	1530	60	1485	62	1440	64
		0	1	1	0	1835	50	1790	51	1745	53	1695	54	1650	56	1605	57	1555	59	1510	61
		1	1	1	0	1885	49	1840	50	1790	51	1745	53	1700	54	1655	56	1610	57	1565	59
		0	0	0	1	1945	47	1900	49	1850	50	1805	51	1760	52	1710	54	1665	55	1620	57
		1	0	0	1	1950	47	1905	48	1860	50	1820	51	1775	52	1735	53	1690	54	1650	56
		0	1	0	1	2075	44	2030	45	1990	46	1945	47	1900	48	1855	50	1810	51	1770	52
		1	1	0	1	2125	43	2085	44	2040	45	2000	46	1955	47	1910	48	1870	49	1825	50
		0	0	1	1	2170	42	2130	43	2090	44	2045	45	2005	46	1965	47	1925	48	1880	49
		1	0	1	1	2215	42	2180	42	2140	43	2105	44	2070	44	2035	45	2000	46	1965	47
		0	1	1	1									2225	41	2165	43	2100	44	2040	45
		1	1	1	1											2170	42	2120	43	2065	45
*SC/SL-120D-*D	120,000	0	0	0	0	1395	73	1350	76	1305	78	1260	81	1210	84	1165	88	1120	91	1075	95
		1	0	0	0	1465	70	1420	72	1375	74	1330	77	1290	79	1245	82	1200	85	1155	89
		0	1	0	0	1555	66	1510	68	1470	70	1425	72	1380	74	1340	76	1295	79	1250	82
		1	1	0	0	1625	63	1585	65	1540	66	1500	68	1460	70	1415	72	1375	74	1335	77
		0	0	1	0	1690	61	1650	62	1610	64	1570	65	1530	67	1485	69	1445	71	1405	73
		1	0	1	0	1760	58	1715	60	1670	61	1625	63	1575	65	1530	67	1485	69	1440	71
		0	1	1	0	1835	56	1790	57	1745	59	1695	60	1650	62	1605	64	1555	66	1510	68
		1	1	1	0	1885	54	1840	56	1790	57	1745	59	1700	60	1655	62	1610	64	1565	65
		0	0	0	1	1945	53	1900	54	1850	55	1805	57	1760	58	1710	60	1665	61	1620	63
		1	0	0	1	1950	53	1905	54	1860	55	1820	56	1775	58	1735	59	1690	61	1650	62
		0	1	0	1	2075	49	2030	50	1990	51	1945	53	1900	54	1855	55	1810	56	1770	58
		1	1	0	1	2125	48	2085	49	2040	50	2000	51	1955	52	1910	54	1870	55	1825	56
		0	0	1	1	2170	47	2130	48	2090	49	2045	50	2005	51	1965	52	1925	53	1880	54
		1	0	1	1	2215	46	2180	47	2140	48	2105	49	2070	49	2035	50	2000	51	1965	52
		0	1	1	1									2225	46	2165	47	2100	49	2040	50
		1	1	1	1											2170	47	2120	48	2065	50

NOTES:
1. Motor Switch Settings are for heating speeds using HEAT switches 1, 2, 3, & 4 and cooling speeds using COOL switches 5, 6, 7, & 8.
2. Two openings are recommended for airflows above 1600 CFM if the filter(s) is (are) adjacent to the furnace.
3. Data is shown without filter - add .08in.w.c for filter.
4. Temperature rises in the table are approximate. Actual temperature rises may vary.
5. Temperature rises that are shaded in grey are for reference only. These conditions are not recommended.

G7SC/SL - 92.1% AFUE Blower Data - Continued

708884D
(Replaces 708884C)