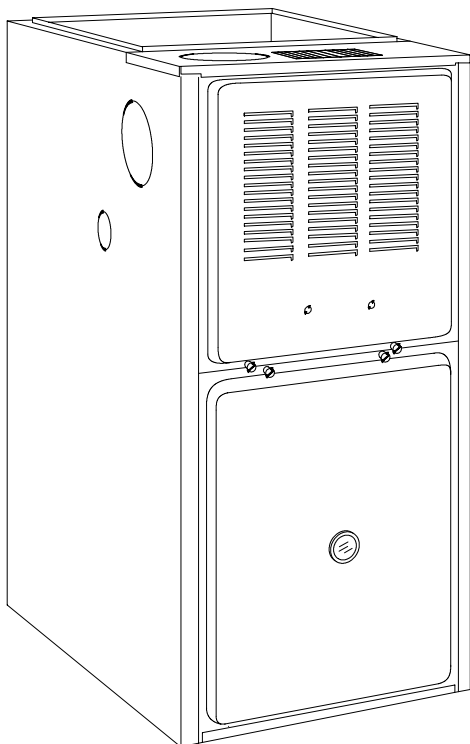


Technical Support Manual

Save This Manual For Future Reference



Models

H8UH5050B12C1
H8UH5075B12C1
H8UH5100F14C1
H8UH5125J20C1
H8UH5140J20C1

MUF050W3C1
MUF075W3C1
MUF100W3C1
MUF125W5C1
MUF140W5C1

HL12H3TRC1
HL18H3TRC1
HL25H3TRC1
HL31H4TRC1
HL34H5TRC1

International Comfort Products, LLC
Lewisburg, TN 37091
Fast Parts Division
866-380-3278



FAN ASSISTED COMBUSTION GAS FURNACES

Model Specifications

Manufacturers Number (Mfr No -See Rating Plate) ALL Models (H8UH5/MUF/HL)										
Specifications										
	H8UH5050B12C1 MUF050W3C1 HL12H3TRC1		H8UH5075B12C1 MUF075W3C1 HL18H3TRC1		H8UH5100F14C1 MUF100W3C1 HL25H3TRC1		H8UH5125J20C1 MUF125W5C1 HL31H4TRC1		H8UH5140J20C1 MUF140W5C1 HL34H5TRC1	
General										
Input (Btuh)	50,000		75,000		100,000		125,000		140,000	
Temp. Rise (°F)	30-60		35-65		35-65		35-65		45-75	
Electrical (Volts/Hz)	220/50		220/50		220/50		220/50		220/50	
Rating Plate .	6.1		6.1		6.1		11.5		11.5	
Gas Type	Nat	LP	Nat	LP	Nat	LP	Nat	LP	Nat	LP
Transformer Size (VA)	40	40	40	40	40	40	40	40	40	40
T'stat Heat Anticipator	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50
Gas & Ignition										
Std. Main Orifices (No/Size)	2/#42	2/#54	3/#42	3/#54	4/#42	4/#54	5/#42	5/#54	6/#42	6/#54
Gas Valve Honeywell Regulation Type	VR8205S SNAP									
Manifold Press. (Inch's WC)	3.5	10.0	3.5	10.0	3.5	10.0	3.5	10.0	3.5	10.0
Ignition Type/Series	Hot Surface									
Combustion										
Flue Outlet Size (Inches)	4		4		4		4		4	
Limits & Controls										
Thermal Sensor (°F)	300		300		300		300		300	
Limit Control	See Parts List		See Parts List		See Parts List		See Parts List		See Parts List	
Std. Pressure Sw. (Part No)	1014051		1014051		1014051		1014051		1014051	
Press (Close)	-0.57		-0.57		-0.57		-0.57		-0.57	
Press (Open)	-0.47		-0.47		-0.47		-0.47		-0.47	
Furnace Control (Type)	Intergrated									
Furnace Control On (Timed-secs)	30									
Furnace Control Off	72,120,168,216									
Blower Data										
Type & Size	11-8		11-8		11-10		11-10		12-12	
Motor Type/H.p.	PSC ¹ / ₂		PSC ¹ / ₂		PSC ¹ / ₂		PSC ³ / ₄		PSC ³ / ₄	
Cap. Mfd/Volts	7.5/370		7.5/370		7.5/370		10/370		10/370	
Filter Type (600 FPM)	Washable		Washable		Washable		Washable		Washable	
Filter Size (") less than 1600 CFM	14x25x1+		14x25x1+		16x25x1+		---		---	
	---		---		---					
1600 CFM and over*	---		---		---		16x25x1 (2)* side returns		16x25x1 (2)* side returns	
							20x25x1*+ bottom return		20x25x1*+ bottom return	
Min. Cool Cap. (Tons)	1.5		1.5		2		3		3	
Max. Cool Cap. (Tons)	3		3		3.5		5		5	
Nat to LP	NAHA001LP									
* Two side filter racks (left and right) required for upflow applications with 1600 CFM or greater. Side returns are not permitted with horizontal furnace applications.										
**Must be ordered from Service Parts.										
+ Supplied										

Replacement Parts - H8UH5, MUF, HL (Natural Gas)

Models - H8UH5050B12C1, H8UH5075B12C1, H8UH5100F14C1, H8UH5125J20C1, H8UH5140J20C1
MUF050W3C1, MUF075W3C1, MUF100W3C1, MUF125W5C1, MUF140W5C1
HL12H3TRC1, HL18H3TRC1, HL25H3TRC1, HL31H4TRC1, HL34H5TRC1

Replacement part supplied will be current active part. For parts not listed, consult place of purchase.

Key No.	Description Functional	Part Number	H8UH5050	H8UH5075	H8UH5100	H8UH5125	H8UH5140
			B12C1	B12C1	F14C1	J20C1	J20C1
			MUF050W3C1	MUF075W3C1	MUF100W3C1	MUF125W5C1	MUF140W5C1
			HL12H3TRC1	HL18H3TRC1	HL25H3TRC1	HL31H4TRC1	HL34H5TRC1
A	Panel, Top	1013982	1	1	-	-	-
		1013983	-	-	1	-	-
		1013984	-	-	-	1	1
B	Box, Junction	1172860	1	1	1	1	1
C	Cover, Junction box	1012350	1	1	1	1	1
D	Partition, Blower	1014009	1	1	-	-	-
		1014010	-	-	1	-	-
		1014011	-	-	-	1	-
		1014013	-	-	-	-	1
E	Housing, Blower	1172885	1	1	-	-	-
		1172969	-	-	1	1	-
		1172970	-	-	-	-	1
F	Hanger, Blower	1012328	2	2	2	2	2
G	Panel, Blower Cutoff	721020013	1	1	-	-	-
		721020008	-	-	1	1	-
		721020015	-	-	-	-	1
H	Clamp, Capacitor	1170643	1	1	1	1	1
J	Bracket, Control Mounting	1172845	1	1	1	1	1
L	Door, Blower	(H8UH5) 1173014	1	1	-	-	-
		(H8UH5) 1173015	-	-	1	-	-
		(H8UH5) 1173016	-	-	-	1	1
		(MUF) 1173011	1	1	-	-	-
		(MUF) 1173012	-	-	1	-	-
		(MUF) 1173013	-	-	-	1	1
		(HL) 1173008	1	1	-	-	-
		(HL) 1173009	-	-	1	-	-
		(HL) 1173010	-	-	-	1	1
M	Bracket, Door	1172231	1	1	-	-	-
		1172232	-	-	1	-	-
		1172233	-	-	-	1	-
		1172266	-	-	-	-	1
N	Door, Louver	(H8UH5) 1013609	1	1	-	-	-
		(H8UH5) 1013610	-	-	1	-	-
		(H8UH5) 1013611	-	-	-	1	1
		(MUF) 1173005	1	1	-	-	-
		(MUF) 1173006	-	-	1	-	-
		(MUF) 1173007	-	-	-	1	1
		(HL) 1173002	1	1	-	-	-
		(HL) 1173003	-	-	1	-	-
(HL) 1173004	-	-	-	1	1		
P	Manifold, Gas	1013478	1	-	-	-	-
		1013479	-	1	-	-	-
		1013480	-	-	1	-	-
		1013481	-	-	-	1	-
		1013482	-	-	-	-	1
S	Bracket, Manifold Support	1012377	2	2	2	2	2
T	Top, Burner Box	1013705	1	1	-	-	-
		1013015	-	-	1	-	-
		1013016	-	-	-	1	-
		1013859	-	-	-	-	1
U	Bracket, Burner Box Sides	1012532	2	2	2	2	2

Replacement Parts - H8UH5, MUF, HL (Natural Gas)

Models - H8UH5050B12C1, H8UH5075B12C1, H8UH5100F14C1, H8UH5125J20C1, H8UH5140J20C1
 MUF050W3C1, MUF075W3C1, MUF100W3C1, MUF125W5C1, MUF140W5C1
 HL12H3TRC1, HL18H3TRC1, HL25H3TRC1, HL31H4TRC1, HL34H5TRC1

Replacement part supplied will be current active part. For parts not listed, consult place of purchase.

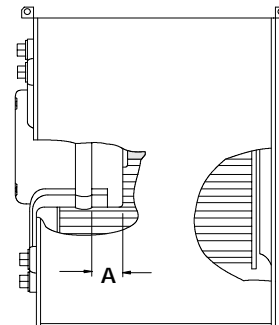
Key No.	Description Functional	Part Number	H8UH5050 B12C1	H8UH5075 B12C1	H8UH5100 F14C1	H8UH5125 J20C1	H8UH5140 J20C1
			MUF050W3C1	MUF075W3C1	MUF100W3C1	MUF125W5C1	MUF140W5C1
			HL12H3TRC1	HL18H3TRC1	HL25H3TRC1	HL31H4TRC1	HL34H5TRC1
1	Heat Exchanger	1013551	1	-	-	-	-
		1013519	-	1	-	-	-
		1013552	-	-	1	-	-
		1013554	-	-	-	1	-
		1013555	-	-	-	-	1
2	Switch, Pressure	1014051	1	1	1	1	1
3	Wheel, Blower	1013011	1	1	-	-	-
		1011420	-	-	1	1	-
		1011433	-	-	-	-	1
4	Mount, Motor kit*	1014824	1	1	-	-	-
		1014822	-	-	1	1	1
5	Mtr, Blr 1/115 1/2 CCW 1/115 3/4 CCW	1172492	1	1	1	-	-
		1172491	-	-	-	1	1
6	Capacitor	1171728	1	1	1	-	-
		1171729	-	-	-	1	1
7	Transformer, 220 to 24V	1173414	1	1	1	1	1
8	Furnace Control	1172550	1	1	1	1	1
9	Switch, Interlock	1171981	1	1	1	1	1
10	Burner Assembly	1172884	1	-	-	-	-
		1172965	-	1	-	-	-
		1172966	-	-	1	-	-
		1172967	-	-	-	1	-
		1172968	-	-	-	-	1
11	Flame Sensor	1172827	1	1	1	1	1
12	Ignitor	1172533	1	1	1	1	1
13	Transformer 220 to 115V	1173413	1	1	1	1	1
14	Orifice, Burner # 42	1011351	2	3	4	5	6
15	Valve, Gas	1172821	1	1	1	1	1
16	Switch, Limit (Rollout)	1013102	2	2	2	2	2
17	Switch, Limit (Main)	1320362	1	1	-	-	-
		1065294	-	-	1	1	-
		1320364	-	-	-	-	1
18	Blower, Combustion (Inducer)	1014384	1	1	1	1	1
19	Filter 14X25X1 16x25x1 20X25X1	1010364	1+ (bottom or side return)	1+ (bottom or side return)	-	-	-
		1010365	-	-	1+ (bottom or side return)	2 (side return)	2 (side return)
		1010366	-	-	-	1+ (bottom return)	1+ (bottom return)

See Installation Instructions for application requirements.

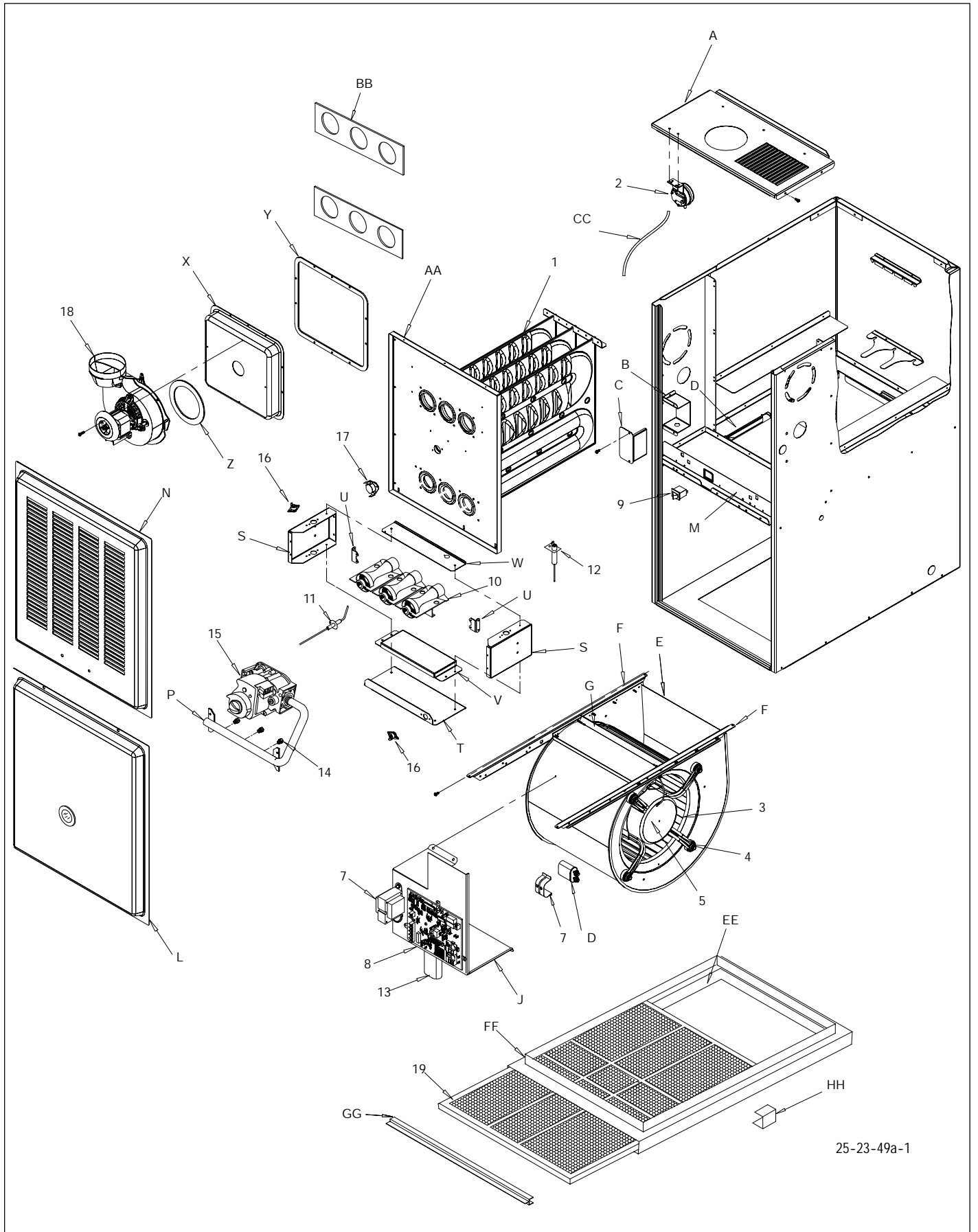
+ Filter Supplied

*See Table below for bellyband location on motor

Bellyband Location on Motor			Bellyband Location on Motor			Bellyband Location on Motor		
Model H8UH5	A(in.)	A(mm)	Model HL	A(in.)	A(mm)	Model MUF	A(in.)	A(mm)
050B12C1	1.81	46	12H3TRC1	1.81	46	050W3C1	1.81	46
075B12C1	1.81	46	18H3TRC1	1.81	46	075W3C1	1.81	46
100F14C1	1.06	27	25H3TRC1	1.06	27	100W3C1	1.06	27
125J20C1	1.06	27	31H4TRC1	1.06	27	125W5C1	1.06	27
140J20C1	2.64	67	34H5TRC1	2,64	67	140W5C1	2.64	67



Parts for H8UH5, MUF, HL



25-23-49a-1

H8UH5125J20, MUF125W5, HL31H4TR (1)

External Static Pressure Pa	Air Delivery in Liters Per Second (L/S) (Furnace Rated @124.5 Pa ESP)				
	TAP	LOW	MED L	MED H	HIGH
24.9	587	673	803	1050	
49.8	561	660	788	1033	
74.4	542	647	773	1021	
99.6	524	631	756	999	
124.5	510	614	741	983	
149.5	497	600	726	968	
174.3	470	579	707	948	
199.3	448	557	686	914	
224.1	420	535	661	888	
249	392	510	632	857	

H8UH5125J20, MUF125W5, HL31H4TR (1)

External Static Pressure Inches of W.C.	Air Delivery in CFM (Furnace Rated @ 0.5" W.C. ESP)				
	TAP	LOW	MED L	MED H	HIGH
0.1	1244	1426	1701	2225	
0.2	1189	1399	1670	2189	
0.3	1148	1371	1638	2163	
0.4	1110	1337	1602	2117	
0.5	1081	1301	1570	2083	
0.6	1053	1271	1539	2052	
0.7	996	1227	1498	2009	
0.8	949	1180	1454	1937	
0.9	890	1134	1401	1882	
1.0	831	1081	1339	1816	

H8UH5140J20, MUF140W5, HL34H5TR (2)(3)

External Static Pressure Pa	Air Delivery in Liters Per Second (L/S) (Furnace Rated @124.5 Pa ESP)				
	TAP	LOW	MED L	MED H	HIGH
24.9	607	688	804	1052	
49.8	580	664	788	1032	
74.4	552	641	768	1088	
99.6	524	615	741	983	
124.5	495	587	713	955	
149.5	465	557	686	927	
174.3	433	521	657	896	
199.3	406	488	625	869	
224.1	375	460	591	838	
249.0	349	429	557	804	

H8UH5140J20, MUF140W5, HL34H5TR (2)(3)

External Static Pressure Inches of W.C.	Air Delivery in CFM (Furnace Rated @ 0.5" W.C. ESP)				
	TAP	LOW	MED L	MED H	HIGH
0.1	1287	1457	1703	2230	
0.2	1228	1407	1669	2187	
0.3	1170	1359	1628	2136	
0.4	1111	1303	1571	2083	
0.5	1049	1243	1511	2024	
0.6	985	1180	1454	1964	
0.7	918	1103	1392	1899	
0.8	860	1035	1325	1842	
0.9	794	974	1253	1776	
1.0	739	909	1181	1703	

NOTE: (1) Data based on Bottom Only return.
 (2) Data based on Both Sides or Bottom Plus One Side.
 (3) Reduce Airflow by 5% if Bottom ONLY return.

Filter Size	CFM	L/S
14" X 25"	1400	661
16" X 25"	1600	755
20" X 25"	2000	944
24" X 25"	2500	1180
Max CFM based on 600 FPM		Max L/S based on 305 CM/s

Filter required for each return-air inlet. Airflow performance includes 1" washable (600 FPM max) filter media.

Circulation Air Blower Data

H8UH5050B12, MUF050W3, HL12H3TR (1)

External Static Pressure Pa	Air Delivery in Liters Per Second (L/S) (Furnace Rated @124.5 Pa ESP)				
	TAP	LOW	MED L	MED H	HIGH
	24.9	402	448	524	618
	49.8	383	433	508	600
	74.4	365	414	491	583
	99.6	345	396	473	565
	124.5	325	378	454	546
	149.5	312	358	437	526
	174.3	291	336	416	504
	199.3	274	316	397	482
224.1	251	295	377	462	
249.0	226	273	356	439	

H8UH5075B12, MUF075W3, HL18H3TR (1)

External Static Pressure Pa	Air Delivery in Liters Per Second (L/S) (Furnace Rated @124.5 Pa ESP)				
	TAP	LOW	MED L	MED H	HIGH
	24.9	424	463	545	663
	49.8	403	446	528	648
	74.4	384	427	510	631
	99.6	362	406	493	613
	124.5	340	385	472	593
	149.5	320	363	453	571
	174.3	298	342	431	550
	199.3	281	320	404	528
224.1	259	299	382	504	
249.0	235	276	366	482	

H8UH5100F14, MUF100W3, HL25H3TR (1)

External Static Pressure Pa	Air Delivery in Liters Per Second (L/S) (Furnace Rated @124.5 Pa ESP)				
	TAP	LOW	MED L	MED H	HIGH
	24.9	477	533	615	766
	49.8	444	508	593	744
	74.4	417	479	567	722
	99.6	388	454	540	700
	124.5	359	424	515	670
	149.5	324	395	487	643
	174.3	290	362	457	613
	199.3	264	328	427	587
224.1	236	293	392	552	
249.0	204	266	362	523	

- NOTE: (1) Data based on Bottom Only return.
 (2) Data based on Both Sides or Bottom Plus One Side.
 (3) Reduce Airflow by 5% if Bottom ONLY return.

Filter Size	CFM	L/S
14" X 25"	1400	661
16" X 25"	1600	755
20" X 25"	2000	944
24" X 25"	2500	1180
Max CFM based on 600 FPM		Max L/S based on 305 CM/s

Filter required for each return-air inlet. Airflow performance includes 1" washable (600 FPM max) filter media.

H8UH5050B12, MUF050W3, HL12H3TR (1)

External Static Pressure Inches of W.C.	Air Delivery in CFM (Furnace Rated @ 0.5" W.C. ESP)				
	TAP	LOW	MED L	MED H	HIGH
	0.1	852	949	1110	1309
	0.2	812	918	1076	1271
	0.3	773	877	1040	1235
	0.4	732	840	1003	1197
	0.5	689	801	962	1157
	0.6	662	758	925	1114
	0.7	617	712	881	1068
	0.8	580	669	841	1022
0.9	532	625	799	979	
1.0	479	578	754	930	

H8UH5075B12, MUF075W3, HL18H3TR (1)

External Static Pressure Inches of W.C.	Air Delivery in CFM (Furnace Rated @ 0.5" W.C. ESP)				
	TAP	LOW	MED L	MED H	HIGH
	0.1	898	981	1155	1405
	0.2	853	944	1119	1373
	0.3	814	905	1081	1337
	0.4	767	860	1045	1299
	0.5	720	816	1000	1257
	0.6	677	770	960	1210
	0.7	631	725	913	1165
	0.8	596	679	857	1119
0.9	549	634	809	1068	
1.0	498	585	776	1021	

H8UH5100F14, MUF100W3, HL25H3TR (1)

External Static Pressure Inches of W.C.	Air Delivery in CFM (Furnace Rated @ 0.5" W.C. ESP)				
	TAP	LOW	MED L	MED H	HIGH
	0.1	1011	1129	1303	1623
	0.2	941	1076	1256	1576
	0.3	884	1015	1201	1530
	0.4	823	962	1145	1483
	0.5	761	898	1091	1420
	0.6	687	836	1032	1363
	0.7	614	767	968	1299
	0.8	560	695	904	1243
0.9	500	621	831	1170	
1.0	432	564	767	1108	

Replacement Parts - H8UH5, MUF, HL (Natural Gas)

Models - H8UH5050B12C1, H8UH5075B12C1, H8UH5100F14C1, H8UH5125J20C1, H8UH5140J20C1
 MUF050W3C1, MUF075W3C1, MUF100W3C1, MUF125W5C1, MUF140W5C1
 HL12H3TRC1, HL18H3TRC1, HL25H3TRC1, HL31H4TRC1, HL34H5TRC1

Replacement part supplied will be current active part. For parts not listed, consult place of purchase.

Key No.	Description Functional	Part Number	H8UH5050 B12C1	H8UH5075 B12C1	H8UH5100 F14C1	H8UH5125 J20C1	H8UH5140 J20C1
			MUF050W3C1	MUF075W3C1	MUF100W3C1	MUF125W5C1	MUF140W5C1
			HL12H3TRC1	HL18H3TRC1	HL25H3TRC1	HL31H4TRC1	HL34H5TRC1
V	Baffle, Burner Box	1012338	1	1	-	-	-
		1012339	-	-	1	-	-
		1012340	-	-	-	1	-
		1013533	-	-	-	-	1
W	Bottom, Burner Box	1172847	1	-	-	-	-
		1172848	-	1	-	-	-
		1172849	-	-	1	-	-
		1172850	-	-	-	1	-
		1172851	-	-	-	-	1
X	Collector Box	1013483	1	-	-	-	-
		1014387	-	1	-	-	-
		1014388	-	-	1	-	-
		1014389	-	-	-	1	-
		1014390	-	-	-	-	1
Z	Gasket, Combustion Blower	1014385	1	1	1	1	1
AA	Partition, Front Ht Exchanger	1013543	1	-	-	-	-
		1013521	-	1	-	-	-
		1013546	-	-	1	-	-
		1013548	-	-	-	1	-
		1013549	-	-	-	-	1
BB	Gaskets, Heat Exchanger	1013991	2	-	-	-	-
		1013992	-	2	-	-	-
		1013993	-	-	2	-	-
		1013994	-	-	-	2	-
		1012546	-	-	-	-	2
CC	Tubing, Silicone	1172195	1	1	1	-	-
		1172196	-	-	-	1	1
EE	Wrapper, Filter Rack 14x25x1 16x25x1 20x25x1	741010042	1+ (bottom or side return)	1+ (bottom or side return)	-	-	-
		741010039	-	-	1+ (bottom or side return)	2 (side return)	2 (side return)
		7410110040	-	-	-	1+ (bottom return)	1+ (bottom return)
FF	Front, Filter Rack 14x25x1 16x25x1 20x25x1	741020004	1	1	-	-	-
		741020001	-	-	1	2 (side return)	2 (side return)
		741020002	-	-	-	1+ (bottom return)	1+ (bottom return)
GG	Front, Filter Plastic 14x25x1 16x25x1 20x25x1	2791042	1	1	-	-	-
		2791043	-	-	1	2 (side return)	2 (side return)
		2791044	-	-	-	1+ (bottom return)	1+ (bottom return)
HH	Clip, Filter	1008482	3	3	3	3	3
)	PART NOT ILLUSTRATED						
)	Fuse, 5 Amp	1083348	1	1	1	1	1
)	Harness, Wire	1173415	1	1	-	-	-
		1173416	-	-	1	1	1
)	Manual, Installation	44101500300	1	1	1	1	1
)	Manual, Users	44102500300	1	1	1	1	1

See Installation Instructions for application requirements.

+ Supplied