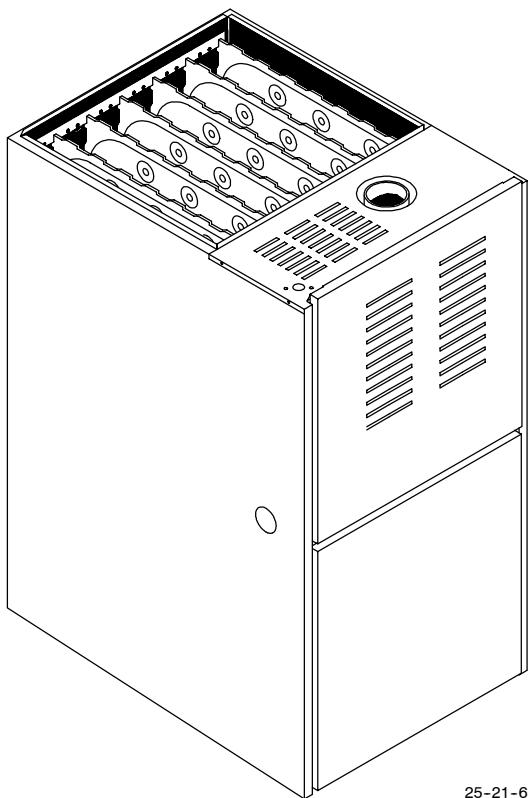


Technical Support Manual



25-21-65

Models

**MUF050W3A1
MUF075W3A1
MUF100W3A1
MUF125W5A1
MUF150W5A1**

*Carrier Corporation (USA)
Indianapolis, IN*

FAN ASSISTED COMBUSTION GAS FURNACES



Design Certified
by A.G.A.

Save This Manual For Future Reference

Manufacturers Number (Mfr No -See Rating Plate) ALL Models		
Specifications		
General		
Gas Type	Nat	LP
Transformer Size (VA) T'stat Heat Anticipator	40 .30	40 .30
Gas & Ignition		
Gas Valve	HW SV9501	HW SV9501
Regulation Type	SNAP	SNAP
Manifold Press. (Inch's WC)	3.5	10.0
Pilot Orifice Size	.018	.011
Ignition Type/Series Lock-Out Time	HW HSP NA	HW HSP NA
Combustion		
Flue Outlet Size (Inches) Std. Outlet Temp (°F)	3 <480	3 <480
Limits & Controls		
Fan Control (Type)	HW ST9150	HW ST9150
Fan Control (Timed-secs)	On Off	30/60 60,100,140,180
	30/60 60,100,140,180	30/60 60,100,140,180

Specifications										
	MUF050FW		MUF075FW		MUF100GW		MUF125KW		MUF150KW	
General										
Input (Btuh)	50,000		75,000		100,000		125,000		150,000	
Output (Btuh)	40,000		59,000		79,000		99,000		120,000	
Temp. Rise (°F)	35-65		35-65		45-75		40-70		45-75	
Electrical (Volts/Hz/FLA)	220/50/5.3		220/50/5.3		220/50/7.5		220/50/12.0		220/50/12.0	
Gas & Ignition										
Gas Type	Nat	LP	Nat	LP	Nat	LP	Nat	LP	Nat	
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
Limits & Controls										
Thermal Sensor (°F)	300		300		300		300		300	
Limit Control Setting (°F)	See Parts List		See Parts List		See Parts List		See Parts List		See Parts List	
Auxiliary Limit (°F)	130		130		130		130		130	
Std. Pressure Sw. (Part No)	1010896		1010896		1010896		1010945		1010945	
Press (Close)	-0.50		-0.50		-0.60		-0.75		-0.75	
Press (Open)	-0.40		-0.40		-0.50		-0.65		-0.65	
High Alt. Restrictor (Part No)	734020033		734020026		734020034		734020035		734020028	
Blower Data										
Type & Size	10-8		10-8		10-8		11-10		12-12	
Motor Amps/Rpm	6.5/1050		6.5/1050		8.0/1050		11.9/900		11.9/900	
Motor Type/H.p.	PSC ^{1/3}		PSC ^{1/3}		PSC ^{1/3}		PSC ^{3/4}		PSC ^{3/4}	
Cap. Mfd/Volts	7.5/370		7.5/370		7.5/440		10/370		10/370	
Filter Type	Washable		Washable		Washable		Washable		Washable	
Filter Size ('')	14x25x ^{1/2}		14x25x ^{1/2}		16x25x ^{1/2}		16x25x ^{1/2} (2)		16x25x ^{1/2} (2)	
Min. Cool Cap. (Tons)	1.5		1.5		1.5		1.5		1.5	
Max. Cool Cap. (Tons)	3		3		3		5		5	

CIRCULATION AIR BLOWER DATA

MUF050W3A1 & MUF075W3A1

External Static Pressure Inches of W.C.	Air Delivery in Cubic Feet per Minute (C.F.M.) (Furnace Rated @0.5" WC ESP)					
	TAP	LOW	MED L	MED	MED H	HIGH
.10	696	841	--	1056	1286	
.20	677	827	--	1026	1234	
.30	651	803	--	984	1241	
.40	622	778	--	960	1201	
.50	601	752	--	930	1163	
.60	--	719	--	896	1099	
.70	--	716	--	856	1062	

External Static Pressure Inches of W.C.	Air Delivery in Liters Per Second (L/S) (Furnace Rated @0.5" WC ESP)					
	TAP	LOW	MED L	MED	MED H	HIGH
.10	329	397	--	498	607	
.20	320	390	--	484	582	
.30	307	379	--	464	586	
.40	294	367	--	453	564	
.50	284	355	--	439	549	
.60	--	339	--	423	519	
.70	--	338	--	404	501	

MUF100W3A1

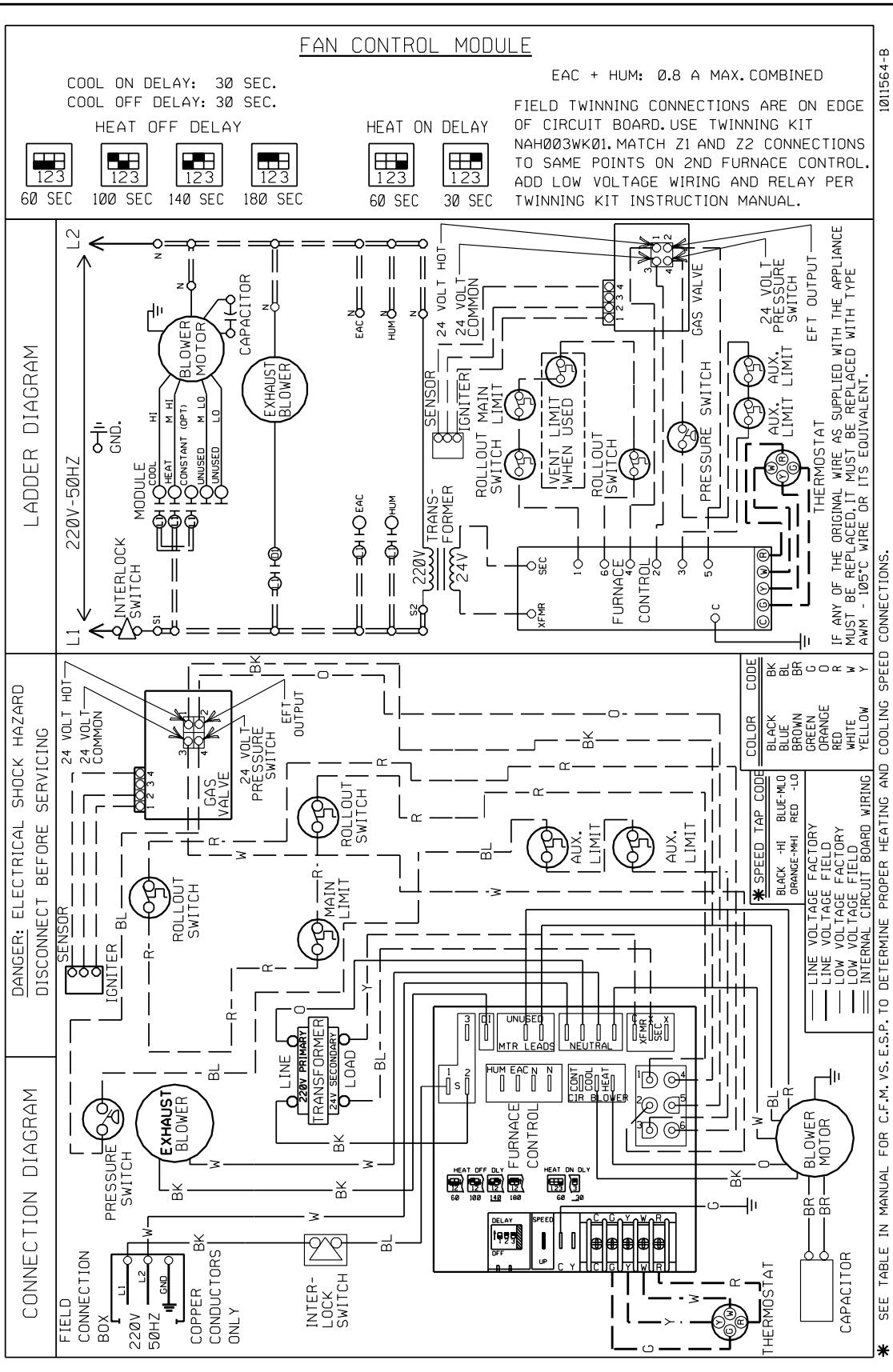
External Static Pressure Inches of W.C.	Air Delivery in Cubic Feet per Minute (C.F.M.) (Furnace Rated @0.5" WC ESP)					
	TAP	LOW	MED L	MED	MED H	HIGH
.10	1051	1148	--	1337	1616	
.20	1019	1106	--	1296	1578	
.30	1000	1073	--	1266	1573	
.40	966	1034	--	1228	1548	
.50	912	990	--	1191	1520	
.60	841	949	--	1151	1491	
.70	793	912	--	1094	1432	

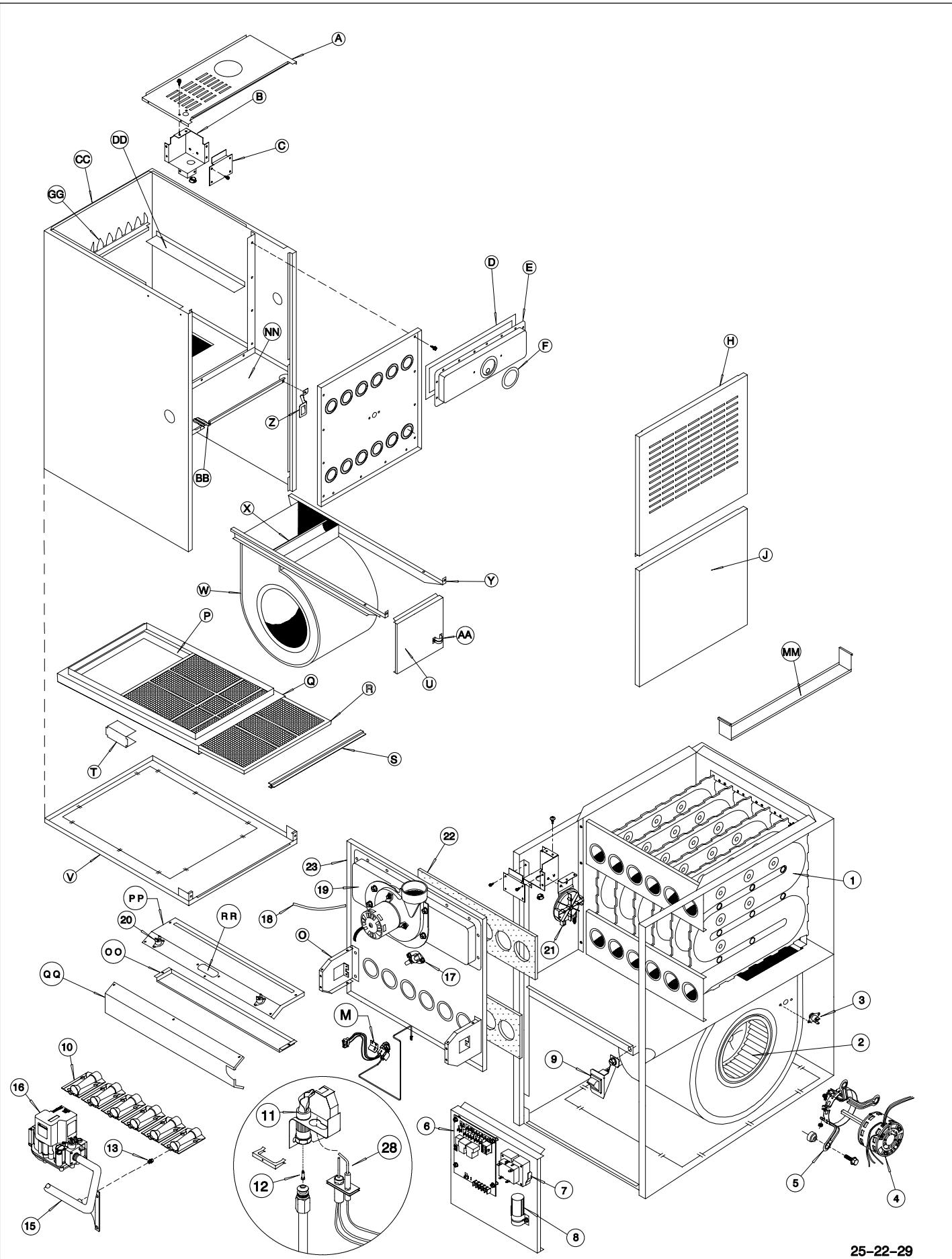
External Static Pressure Inches of W.C.	Air Delivery in Liters Per Second (L/S) (Furnace Rated @0.5" WC ESP)					
	TAP	LOW	MED L	MED	MED H	HIGH
.10	496	542	--	631	763	
.20	481	522	--	612	745	
.30	472	506	--	598	725	
.40	456	488	--	580	731	
.50	430	467	--	562	717	
.60	397	448	--	543	707	
.70	375	430	--	516	676	

MUF125W5A1 & MUF150W5A1

External Static Pressure Inches of W.C.	Air Delivery in Cubic Feet per Minute (C.F.M.) (Furnace Rated @0.5" WC ESP)					
	TAP	LOW	MED L	MED	MED H	HIGH
.10	1107	1278	--	1582	2017	
.20	1054	1244	--	1487	1963	
.30	1009	1212	--	1458	1919	
.40	979	1174	--	1432	1900	
.50	958	1148	--	1394	1861	
.60	931	1118	--	1356	1823	
.70	903	1090	--	1326	1778	

External Static Pressure Inches of W.C.	Air Delivery in Liters Per Second (L/S) (Furnace Rated @0.5" WC ESP)					
	TAP	LOW	MED L	MED	MED H	HIGH
.10	523	603	--	721	952	
.20	497	587	--	702	927	
.30	462	572	--	688	906	
.40	462	554	--	676	896	
.50	452	542	--	658	878	
.60	439	528	--	640	860	
.70	426	515	--	626	839	





25-22-29

Replacement Parts - MUF (Natural Gas)

Models - MUF050W3A1, MUF075W3A1, MUF100W3A1, MUF125W5A1, MUF150W5A1

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

Key No.	Functional Description	Part Number	MUF050W3A1	MUF075W3A1	MUF100W3A1	MUF125W5A1	MUF150W5A1
1	Heat Exchanger	1011544 1011364 1011366 1012406 1012408	1 - - 1 -	- - - - -	1 - - - 1	- - - - -	- - 1 - -
2	Blower Wheel	601210 600587 1011420 1011433	- 1 - -	- 1 - -	1 - - -	- 1 - -	- - 1 -
3	Switch, Auxiliary Limit	1000735	2	2	2	2	2
4	Blower Motor	1011566 1011567 1011568	1 - -	1 - -	- 1 -	- 1 1	- - 1
5	Motor Mount Kit	609227 522020024 1002804	1 -	1 -	1 -	- 1 -	- - 1
6	Control, Fan Timer	1012106	1	1	1	1	1
7	Transformer, 40VA	1011561	1	1	1	1	1
8	Capacitor 10mf 370V 7.5mf 370V	1094956 1094239	- 1	- 1	- 1	1 -	1 -
9	Switch Door	1010886	1	1	1	1	1
10	Burner Assembly	1008723 1008724 1008725 1008726 1009179	1 - - - -	- 1 - - -	- - 1 - -	- - - 1 -	- - - - 1
11	Pilot, Natural & LP	1008731	1	1	1	1	1
12	Pilot Orifice, NAT (.018) Pilot Orifice, LP (.011)	503211 1009136	1 1	1 1	1 1	1 1	1 1
13	Orifice, #42 NAT Orifice, #54 LP	1011351 1011376	2 2	3 3	4 4	5 5	6 6
14	Tube, Pilot	64930	1	1	1	1	1
15	Manifold	1011458 1011459 1011460 1011461 1011462	1 - - - -	- 1 - - -	- - 1 - -	- - 1 - 1	- - - - 1
16	Valve, Natural & LP	1011421	1	1	1	1	1
17	Switch, Limit 270°F 300°F 150°F 250°F 190°F	1320365 34333002 1320362 1009169 1008445	1 - - - -	- - - 1 -	1 - - - 1	- - - - -	- - 1 - -
18	Tubing, Silicone 24"	1149483	1	1	1	1	1
19	Combustion Blower Assembly	1011562	1	1	1	1	1
20	Rollout Switch, Limit	1005549	2	2	2	2	2
21	Switch, Pressure	1010896 1010945	1 -	1 -	- -	1 -	1 -
22	Heat Exchanger Gaskets	2480904 2480905 2480906 2480907 2480908	2 - - - -	- 2 - - -	- - 2 - -	- - - 2 -	- - - - 2
23	Heat Exchanger Front Partition	1008068 1008069 1008070 1008072 1008071 1008073 1008074 1012409 1012411	1 - - - - - - - 1	- - - - - - - - -	- - - - 1 - - - -	- - - - - - - - 1	- - - - - - - - -
28	Ignitor/Sensor with clip	1009524	1	1	1	1	1

Replacement Parts - MUF (Natural Gas)

Models - MUF050W3A1, MUF075W3A1, MUF100W3A1, MUF125W5A1, MUF150W5A1

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

Key No.	Functional Description	Part Number	MUF050W3A1	MUF075W3A1	MUF100W3A1	MUF125W5A1	MUF150W5A1
A	Top	1011534 1011535 1011536 1011537	1 - - -	1 - - -	- 1 - -	- 1 - 1	- - - -
B	Field Connect Box	1011941	1	1	1	1	1
C	Cover, Field Connect	1010360	1	1	1	1	1
D	Gasket, Collector	1093661 1093662 1093663	1 - -	1 - -	- 1 -	- 1 1	- - -
E	Collector	1011047 1011050 1011672 1011673 1011674	1 - - - -	- 1 - - -	- - 1 - -	- - - 1 1	- - - - -
F	Gasket, Combustion Blower	1011379	1	1	1	1	1
H	Door, Louvered	1011522 1011523 1011524	1 - -	1 - -	- 1 -	- 1 1	- - 1
J	Door, Blower	1010191 1010190 1010192	1 - -	1 - -	- 1 -	- - 1	- - 1
M	Bracket, Pilot	1010901	1	1	1	1	1
O	Manifold Support Bracket	1011450	2	2	2	2	2
P	Filter Rack Wrapper	741010042 741010039	1 -	1 -	- 1	- 2	- 2
Q	Filter Rack Front	741020004 741020001	1 -	1 -	- 1	- 2	- 2
R	Filter 14" x 25" x 1/2," 16" x 25" x 1/2"	1010364 1010365	1 -	1 -	- 1	- 2	- 2
S	Filter Cover Plastic	2791042 2791043	1 -	1 -	- 1	- 2	- 2
T	Clip, Filter	1008482	3	3	3	3	3
U	Fan Timer Bracket	1012183	1	1	1	1	1
V	Base	1010112 1010113 1010114	1 - -	1 - -	- 1 -	- 1 1	- - 1
W	Blower Housing	1011680 1011681 1010481 1011784	1 - - -	1 - - -	- 1 - -	- 1 1 -	- - - 1
X	Blower Cutoff	721020008 721020013 721020015	- 1 -	- 1 -	- - -	1 - -	- - 1
Y	Blower Hanger	1010690 1011921	2 -	2 -	2 -	2 -	- 2
AA	Strap Capacitor	1095020	1	1	1	1	1
BB	Rail, Blower Slide	57059	2	2	2	2	2
CC	Casing, Wrapper	1010610 1010611 1010612	1 - -	1 - -	- 1 -	- - 1	- - 1
DD	Baffle, Circulating Air	707010031	2	2	2	2	2
GG	Heat Exchanger Support	1011026 750010045 750010046 1010353 750010047	1 - - - -	- 1 - - -	- - - 1 -	- - - - 1	- - - - 1
MM	Baffle, Air Heat Exch.	738010022	-	-	-	-	3
NN	Partition, Blower	1010810 1010811 1011075 1010812	1 - - -	1 - - -	- 1 - -	- - 1 1	- - - 1
OO	Baffle, Burner Box	1011454 1011455 1011456 1011457	1 - - -	1 - - -	- 1 - -	- 1 - -	- - - 1
PP	Top, Burner Box	1011768 1011769 1011770 1011771	1 - - -	1 - - -	- 1 - -	- 1 - -	- - - 1

Replacement Parts - MUF (Natural Gas)

Models - MUF050W3A1, MUF075W3A1, MUF100W3A1, MUF125W5A1, MUF150W5A1

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

Key No.	Functional Description	Part Number	MUF050W3A1	MUF075W3A1	MUF100W3A1	MUF125W5A1	MUF150W5A1
QQ	Cover, Burner Box	1011469	1	1	-	-	-
		1011470	-	-	1	-	-
		1011471	-	-	-	1	-
		1011472	-	-	-	-	1
RR	Cover, Sightglass PART NOT ILLUSTRATED	1011781	1	1	1	1	1
		1011861	1	1	1	1	1
		44102400100	1	1	1	1	1
		44101400100	1	1	1	1	1
)(	Manual, Homeowners	44103400100	1	1	1	1	1
	Manual, Installation	44101400100	1	1	1	1	1
)(	Manual, Tech Support	44103400100	1	1	1	1	1