

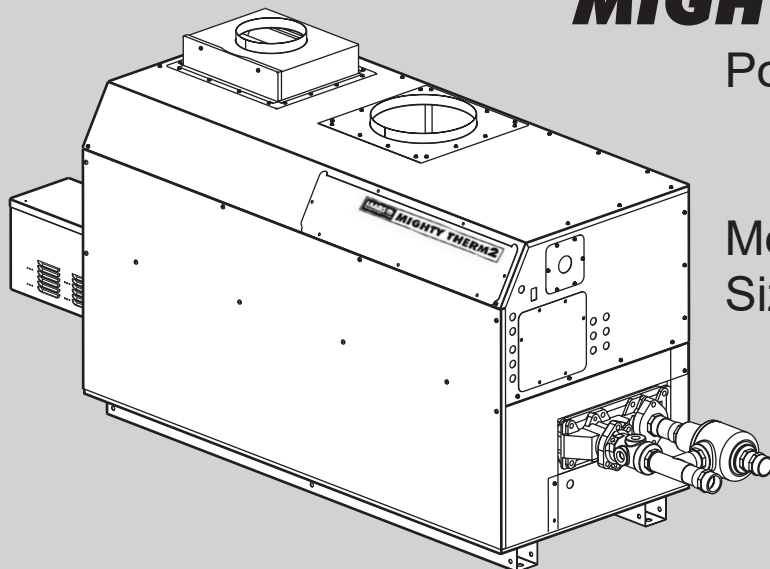
Installation and Operation Instructions for

MIGHTY THERM2[®]

Pool Heater

Model MT2P

Sizes 500–2000 MBTU/h



FOR YOUR SAFETY: This product must be installed and serviced by a professional service technician, qualified in hot water pool heater installation and maintenance. Improper installation and/or operation could create carbon monoxide gas in flue gases which could cause serious injury, property damage, or death. Improper installation and/or operation will void the warranty. For indoor installations, as an additional measure of safety, Laars strongly recommends installation of suitable Carbon Monoxide detectors in the vicinity of this appliance and in any adjacent occupied spaces.

⚠ WARNING

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a nearby phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

Installation and service must be performed by a qualified installer, service agency, or gas supplier.

⚠ AVERTISSEMENT

Assurez-vous de bien suivre les instructions données dans cette notice pour réduire au minimum le risque d'incendie ou d'explosion ou pour éviter tout dommage matériel, toute blessure ou la mort.

Ne pas entreposer ni utiliser d'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de tout autre appareil.

QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ:

- Ne pas tenter d'allumer d'appareils.
- Ne touchez à aucun interrupteur. Ne pas vous servir des téléphones dans le bâtiment où vous êtes.
- Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
- Si vous ne pouvez rejoindre le fournisseur de gaz, appelez le service des incendies.

L'installation et l'entretien doivent être assurés par un installateur ou un service d'entretien qualifié ou par le fournisseur de gaz.

SECTION 9 Replacement Parts

Only genuine OEM replacement parts should be used.

9.A General Information

To order or purchase parts for this unit, contact your nearest Manufacturers Representative or Distributor. See back cover for website.

9.B Parts List -

[illegible]

Item	Description	Size 500	Size 750	Size 1000	Size 1250	Size 1500	Size 1750	Size 2000
23	Assembly, Sight Glass	10956000	10956000	10956000	10956000	10956000	10956000	10956000
24	Panel, Side, Air Box	5F2015 (2)	5F2015 (2)	5F2015 (2)	5F2015 (2)	5F2015 (2)	5F2015 (2)	5F2015 (2)
26	Panel, Access, Air Box	5F2004	7F2004	10F2004	12F2004	15F2004	17F2004	20F2004
27	Cover, Access Panel, Air Box	5F2005 (1)	5F2005 (1)	5F2005 (1)	5F2005 (2)	5F2005 (2)	5F2005 (2)	5F2005 (2)
28	Divider, Chamber, Upper, Air Box				15F2005	15F2005		
29	Divider, Chamber, Lower, Air Box				15F2002	15F2002		
30	Divider, Front Chamber, Combustion Chamber						20F2002	20F2002
31	Assembly, Exhaust Stack	5F2027	7F2027	7F2027	12F2027	12F2027	12F2027	12F2027
32	Assembly, Copper Tube, Heat Exchanger	5C4000	7C4000	10C4000	12C4000	15C4000	17C4000	20C4000
	Assembly, Cupro-Nickel, Heat Exchanger	5C4020	7C4020	10C4020	12C4020	15C4020	17C4020	20C4020
33	Tile, Side (Left and Right)	T2015600 (2)	T2015600 (2)	T2015600 (2)	T2015600 (2)	T2015600 (2)	T2015600 (2)	T2015600 (2)
34	Tile, Front	T2017300 (1)						
35	Tile, Front, Left Side	T2016200 (1)	T2016800(1)	T2016800(1)	T2016800(1)	T2016800(1)	T2016800(1)	T2016800(1)
36	Tile, Front, Right Side		T2016300 (1)	T2017100 (1)	T2017900 (1)	T2017100 (1)	T2017900 (1)	T2017100 (1)
37	Tile, Front, Center				T2016900 (1)	T2016900 (1)	T2016900 (2)	T2016900 (2)
38	Tile, Rear	T2015700 (1)						
39	Tile, Rear, Left Side		T2017500 (1)	T2016600 (1)	T2016600 (1)	T2016600 (1)	T2016600 (1)	T2016600 (1)
40	Tile, Rear, Right Side		T2016600 (1)	T2016600 (1)	T2018100 (1)	T2016600 (1)	T2018100 (1)	T2016600 (1)
41	Tile, Rear, Center				T2017200 (1)	T2017200 (1)	T2017200 (2)	T2017200 (2)
42	Tile, Bottom	T2015500 (1)						
43	Tile, Bottom, Left Side		T2017400 (1)	T2017400 (1)	T2017400 (1)	T2017400 (1)	T2017400 (1)	T2017400 (1)
44	Tile, Bottom, Right Side		T2016500 (1)	T2017400 (1)	T2018000 (1)	T2017400 (1)	T2018000 (1)	T2017400 (1)
45	Tile, Bottom, Center				T2015900 (1)	T2015900 (1)	T2015900 (2)	T2015900 (2)
Gas Train Components - See Figure 17								
46	Blower	A2111900 (1)	A2111900 (1)	A2111900 (1)	A2111900 (2)	A2111900 (2)	A2111900 (2)	A2111900 (2)
47	Weldment, Blower Mount	5C5300 (1)	5C5300 (1)	5C5300 (1)	5C5300 (2)	5C5300 (2)	5C5300 (2)	5C5300 (2)
47A	Assembly, Blower Damper				15C5400 (2)	15C5400 (2)	15C5400 (2)	15C5400 (2)
48	Manifold, Gas Supply	5C6100	7C6100	10C6100	12C6100	15C6100	17C6100	20C6100
49	Valve, Ball, Manual Shutoff	V2003100	V2003100	V2003200	V2003300	V2003300	V2003300	V2003300
50	Valve, Gas, Combination	V2016000 (2)	V2016000 (3)	V2016000 (3)	V2016000 (5)	V2016000 (5)	V2016000 (6)	V2016000 (6)
51A	Weldment, Pipe, Gas Valve/Ball Valve	P2073600 (2)	P2073600 (3)	P2073600 (3)	P2073600 (5)	P2073600 (5)	P2073600 (6)	P2073600 (6)
51B	4" Nipple, black	P0014700 (2)	P0014700 (3)	P0014700 (3)	P0014700 (5)	P0014700 (5)	P0014700 (6)	P0014700 (6)
51C	Union	P0030400 (2)	P0030400 (3)	P0030400 (3)	P0030400 (5)	P0030400 (5)	P0030400 (6)	P0030400 (6)
52	Valve, Ball, Manual Shutoff, Secondary	V2000200 (2)	V2000200 (3)	V2000200 (3)	V2000200 (5)	V2000200 (5)	V2000200 (6)	V2000200 (6)
53	Manifold, 3 Burner/Orifice, Left	L2012800 (1)	L2012800 (2)		L2012800 (3)	L2012800 (1)	L2012800 (2)	

Quantity 1 unless otherwise indicated: (2)

Item	Description	Size	Size	Size	Size	Size	Size
		500	750	1000	1250	1500	1750
54	Manifold, 3 Burner/Orifice, Right	L2012900 (1)	L2012900 (1)		L2012900 (2)	L2012900 (1)	L2012900 (1)
	Manifold, 4 Burner/Orifice, Left			L2012600 (2)		L2012600 (2)	L2012600 (2)
	Manifold, 4 Burner/Orifice, Right			L2012700 (1)		L2012700 (1)	L2012700 (1)
	Assembly, 3 Burner	L2012200 (2)	L2012200 (3)		L2012200 (5)	L2012200 (2)	L2012200 (3)
	Assembly, 4 Burner			L2012500 (3)		L2012500 (3)	L2012500 (3)
	Orifice, Gas, Natural	L2013000 (6)	L2013000 (9)	L2013000 (12)	L2013000 (15)	L2013000 (18)	L2013000 (21)
55	Orifice, Gas, Propane	L2012400 (6)	L2012400 (9)	L2012400 (12)	L2012400 (15)	L2012400 (18)	L2012400 (21)
	Gasket, 3 Burner	S2012700 (2)	S2012700 (3)		S2012700 (5)	S2012700 (2)	S2012700 (3)
56	Gasket, 4 Burner			S2012500 (3)		S2012500 (3)	S2012500 (3)
	Ignitor, Hot Surface w/Gasket	2400-286 (1)	2400-286 (1)	2400-286 (2)	2400-286 (2)	2400-286 (2)	2400-286 (2)
57	Heat Exchanger Components - See Figure 18						
58	Flow Switch	E0013000	E0013000	E0013000	E0013000	E0013000	E0013000
	Low Water Cutoff (optional)	E2076500	E2076500	E2076500	E2076500	E2076500	E2076500
59	Gauge, Temperature/Pressure	A0079000	A0079000	A0079000	A0079000	A0079000	A0079000
60	Tee, Adapter, Outlet, Cast Iron	20130001	20130001	20130001	20130001	20130001	20130010
61	Tee, Adapter, Outlet, Bronze	20150302	20150302	20150302	20150302	20150302	20150313
62	Relief Valve, 75 PSI	RA2138800	RA2138800	RA2138801	RA2138801	RA2138802	RA2138802
63	Flange, Connection, Cast Iron	10391302	10391302	10391302	10391302	10391302	10391302
64	Flange, Connection, Bronze	20255401	20255401	20255401	20255401	20255401	20255401
	Gasket, Connection Flange	S0063700 (2)	S0063700 (2)	S0063700 (2)	S0063700 (2)	S0063700 (2)	S0063700 (2)
65	Cover, In/Out, Glass-Lined Cast Iron	10364504	10364504	10364504	10364504	10364504	10364504
66	Cover, In/Out, Bronze	10364501	10364501	10364501	10364501	10364501	10364501
	Gasket, Header/Cover	S0095100 (2)	S0095100 (2)	S0095100 (2)	S0095100 (2)	S0095100 (2)	S0095100 (2)
66A	Gasket (Bronze Headers)	S0024600	S0024600	S0024600	S0024600	S0024600	S0024600
67	Water Barrier, Inlet/Outlet	20230101	20230101	20230101	20230101	20230101	20230101
68	Baffle, Water Deflector, Inlet	10338300	10338300	10338300	10338300	10338300	10338300
69	Well, Immersion, Temperature Control	E2058300	E2058300	E2058300	E2058300	E2058300	E2058300
70	Cover, Return, Glass-Lined Cast Iron	10364300	10364300	10364300	10364300	10364300	10364300
71	Cover, Return, Bronze	10364301	10364301	10364301	10364301	10364301	10364301
	Pump Housing, Glass-Lined Cast Iron	S2056900	S2056900	S2056900	S2056900	S2056900	S2056900
72	Pump Housing, Bronze	S0024600	S0024600	S0024600	S0024600	S0024600	S0024600
	Baffle, Diffuser, Pump Housing Inlet	10338400	10338400	10338400	10338400	10338400	10338400
73	Mixing Valve	A2114601	A2114602	A2114602	A2114602	A2114603	A2114604
Electrical Components - See Figure 19							
75	DPDT Switch	E0109200	E0109200	E0109200	E0109200	E0109200	E0109200
75A	DPDT Switch	E2056300	E2056300	E2056300	E2056300	E2056300	E2056300

Item	Description	Size 500	Size 750	Size 1000	Size 1250	Size 1500	Size 1750	Size 2000
78	Control, Gas Ignition, Three Try (standard)	E2313900 (1)	E2313900 (1)	E2313900 (2)	E2313900 (2)	E2313900 (2)	E2313900 (2)	E2313900 (2)
	Control, Gas Ignition, Single Try (CSD-1 option)	E2107300 (1)	E2107300 (1)	E2107300 (2)	E2107300 (2)	E2107300 (2)	E2107300 (2)	E2107300 (2)
79	Terminal Block, 16 Position, Dual Row	E2327500	E2327500	E2327500	E2327500	E2327500	E2327500	E2327500
80	Switch, Hi-Limit Auto Reset (standard)	E2217700	E2217700	E2217700	E2217700	E2217700	E2217700	E2217700
	Switch, Hi-Limit, Manual Reset (CSD-1 option)	E2217800	E2217800	E2217800	E2217800	E2217800	E2217800	E2217800
81	Thermostat, On/Off Electronic, 60° to 105° F	E2103800	E2103800	E2103800	E2103800	E2103800	E2103800	E2103800
82	Sensor, Temperature	E2103700	E2103700	E2103700	E2103700	E2103700	E2103700	E2103700
82A	Well, Immersion, 1/2 NPT (not shown)	E2074000	E2074000	E2074000	E2074000	E2074000	E2074000	E2074000
83	Panel, Mounting, Limits/Ign Control	5F7001	5F7001	5F7001	5F7001	5F7001	5F7001	5F7001
84	Panel, Cover, High Limit/Ign Control	5F7003	5F7003	5F7003	5F7003	5F7003	5F7003	5F7003
85	Panel, Access, Terminal	5F7006	5F7006	5F7006	5F7006	5F7006	5F7006	5F7006
86	Switch, Rocker 30A, 120V	E2343300	E2343300	E2343300	E2343300	E23433700	E2343300	E2343300
87	Terminal Block, 6 Position, Dual Row (optional)	E2327700	E2327700	E2327700	E2327700	E2327700	E2327700	E2327700
88	Terminal Block, 12 Position, Dual Row	E2342500	E2342500	E2342500	E2342500	E2342500	E2342500	E2342500
89	Switch, Pressure, Diaphragm, Spdt	E0240900 (2)	E0240900 (2)	E0240900 (2)	E0240900 (3)	E0240900 (3)	E0240900 (3)	E0240900 (3)
90	Bracket, Pressure Switch	5F7007	5F7007	5F7007	5F7007	5F7007	5F7007	5F7007
91	Transformer, 150 Va, 120/24V	E2310400	E2310400	E2310400	E2310400	E2310400	E2310400	E2310400
92	Relay, Time Delay (24 Vac) Delay On Break, Adj.	E2077700	E2077700	E2077700	E2077700	E2077700	E2077700	E2077700
93	Relay, 24vac, DPDT	E2327800	E2327800	E2327800	E2327800 (2)	E2327800 (2)	E2327800 (2)	E2327800 (2)
94	Panel, Mounting, LWCO Switch (optional)	5F7005	5F7005	5F7005	5F7005	5F7005	5F7005	5F7005
95	Wire Harness #1, Fenwal (not shown)	E2328800	E2328800	E2328400	E2328400	E2328400	E2328400	E2328400
96	Wire Harness #2, Control Panel (not shown)	E2328900	E2328900	E2328500	E2330100	E2330100	E2330100	E2330100
97	Wire Harness #3, Main (not shown)	E2329000	E2329000	E2329100	E2328600	E2328600	E2328600	E2328600
98	Wire Harness, Pool Control (not shown)	E2330501	E2330501	E2330501	E2330501	E2330501	E2330501	E2330501
99	Switch, Hi-Limit, Auto Reset 135°F	E2104800	E2104800	E2104800	E2104800	E2104800	E2104800	E2104800
100	Panel, Mounting, High Limit Switch	5F7009	5F7009	5F7009	5F7009	5F7009	5F7009	5F7009

Quantity 1 unless otherwise indicated: (2)

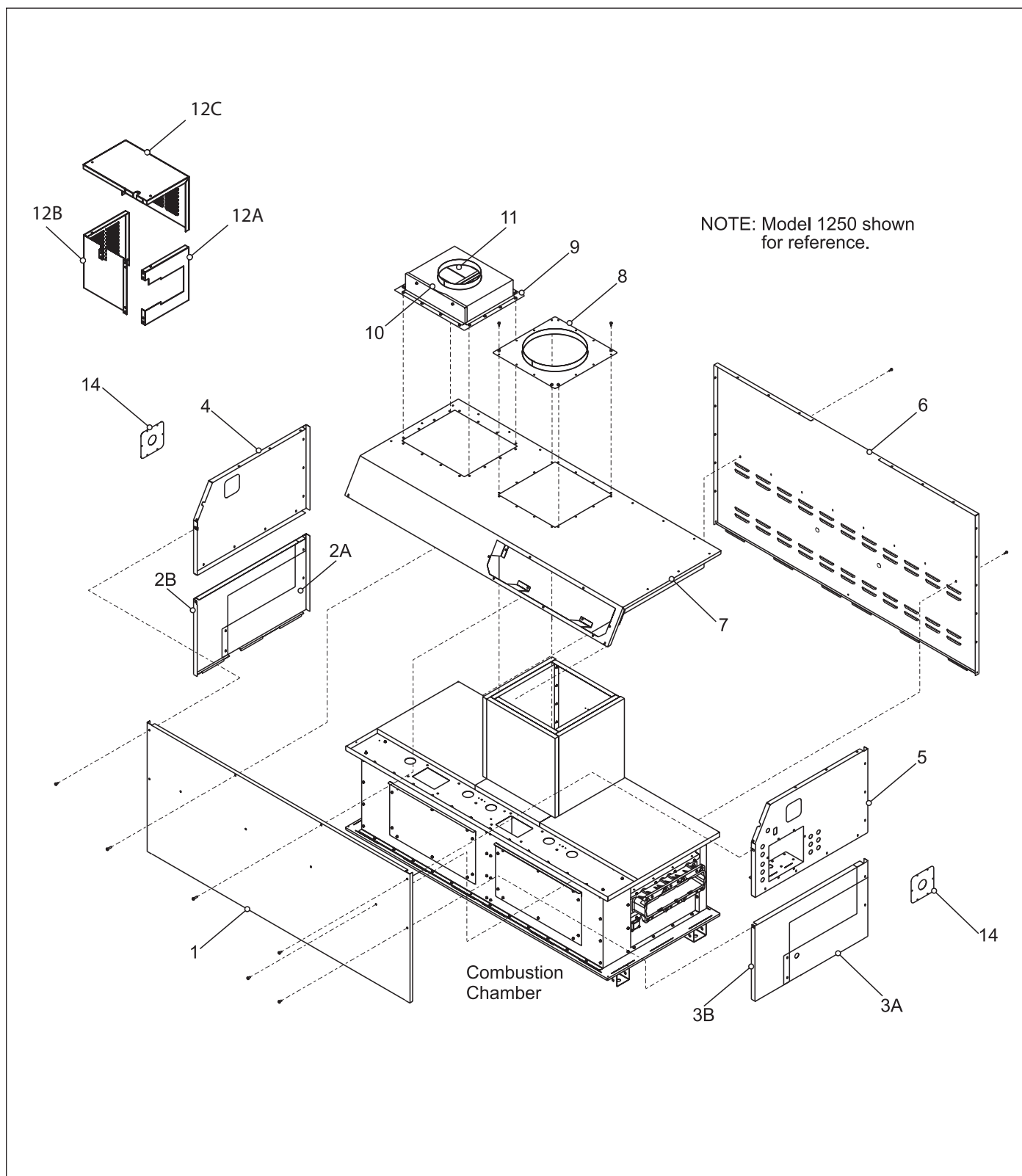
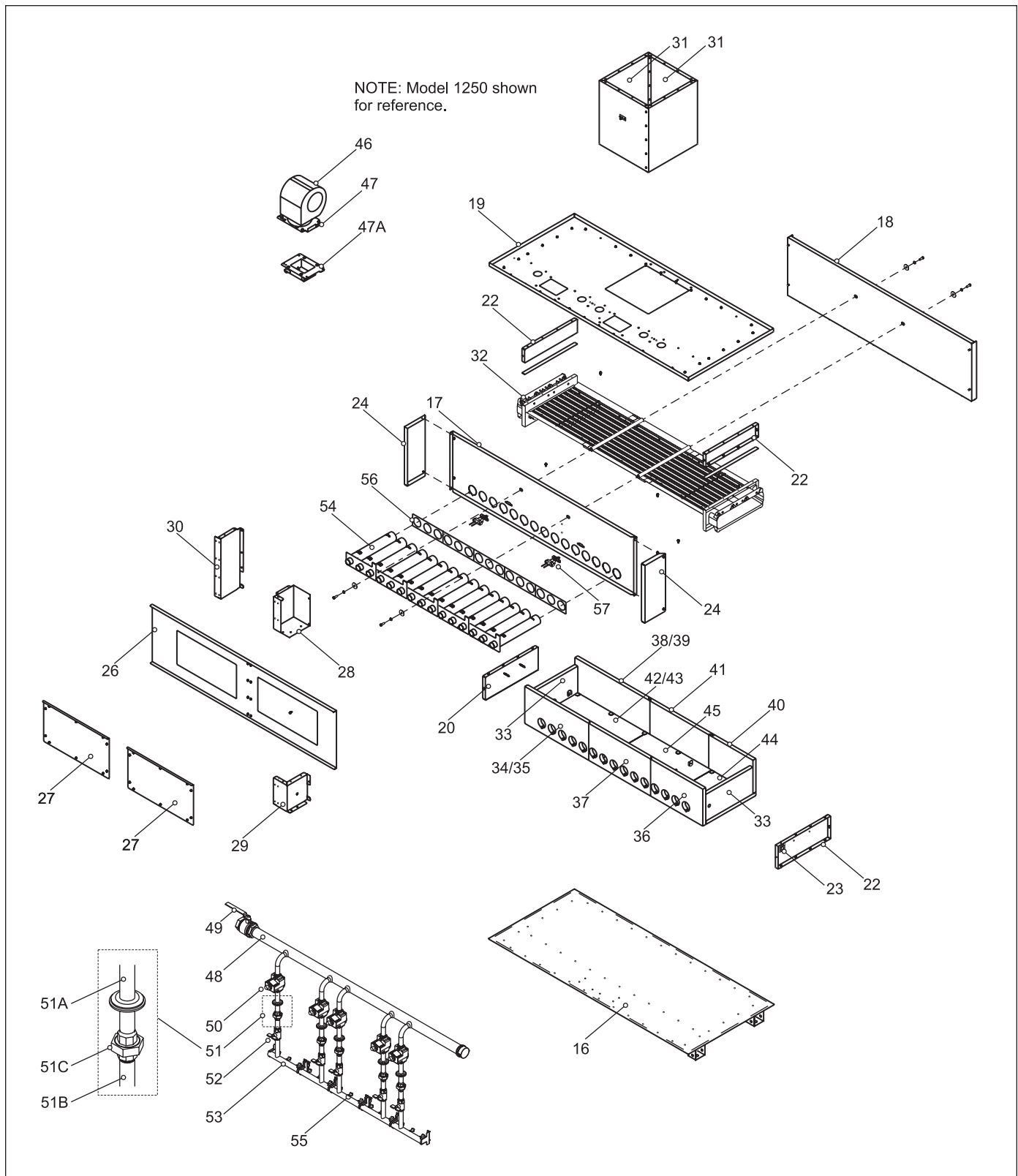


Figure 16. Sheet Metal Components.

**Figure 17. Internal Components.**

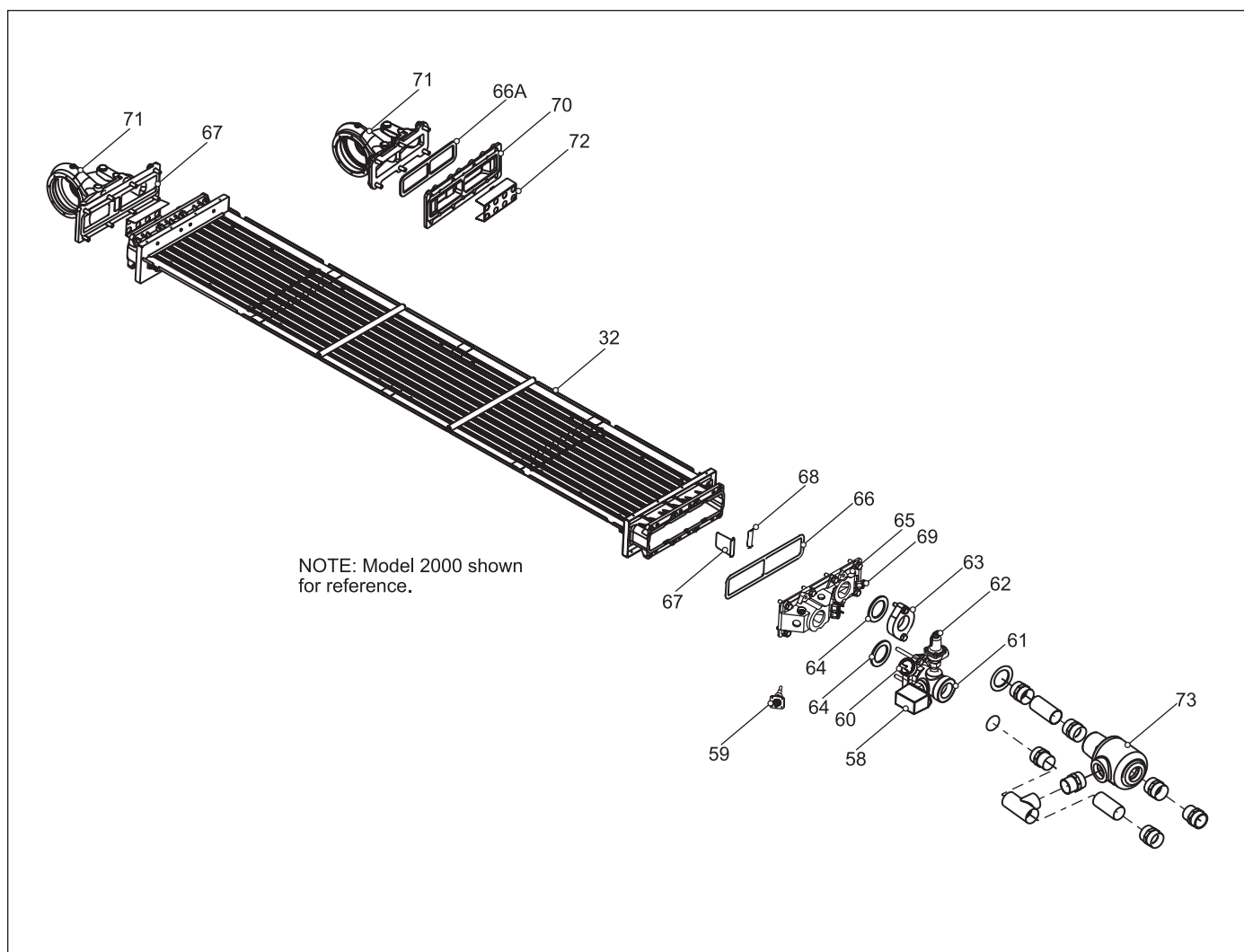


Figure 18. Heat Exchanger Components.

MIGHTY THERM2 Pool Heater

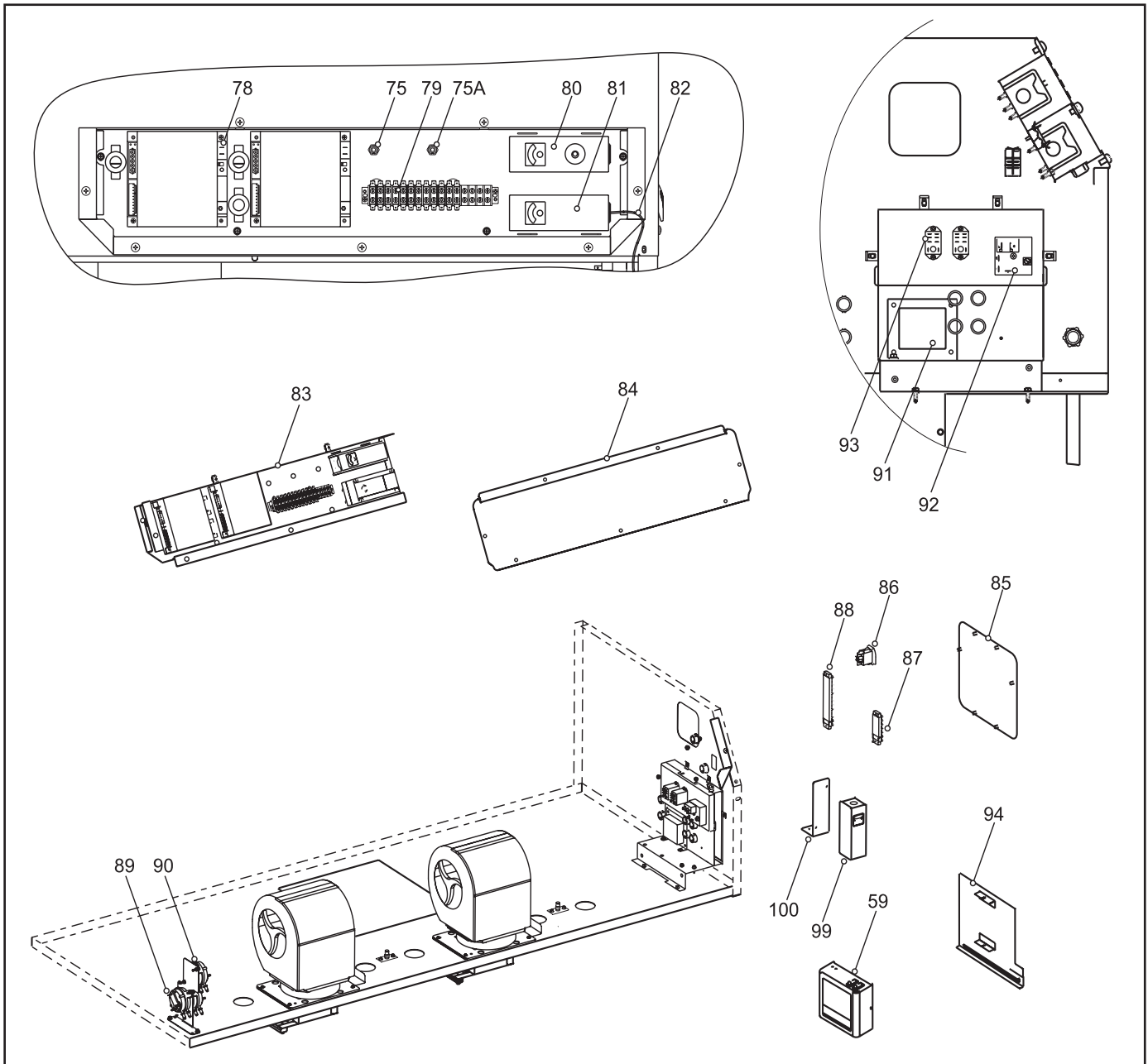


Figure 19. Electrical Components.



Laars Heating Systems Company reserves the right to change specifications, components, features, or to discontinue products without notice.



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