



Using "Genuine Laars" parts will ensure accurate replacement and warranty coverage. Installation and Operation Manuals for current products are available on-line at [www.Laars.com](http://www.Laars.com)

### **Our Commitment**

We believe the availability of factory authorized replacement parts is an essential component of customer service. We strive to provide every opportunity for our customers to order and stock factory authorized replacement parts, including special incentive, pricing and freight programs. Contact your Laars representative or sales manager for more details.

### **Ordering**

Laars sells parts only through its normal distribution channels. The most commonly used parts are listed in this parts guide, and can be ordered through Laars stocking representatives or wholesalers. Call the Service Department for assistance in identifying parts not listed. Have the model and serial number of the unit before calling to assure accurate parts identification. Rush Orders: We make every effort to ship rush orders the same day at our regular prices, but cannot guarantee same day shipment. Express freight charged by carriers is not refundable regardless of ship date; please indicate alternate shipping choice if order cannot ship the same day. Some parts are subject to price changes and limited availability. Laars representatives or wholesalers should call the factory for price and lead time for non-current sheet metal parts, parts listed as "limited to stock on hand" and parts not listed in this document.

### **Terms and Conditions**

1. Standard terms will apply to all parts orders.
2. Special pricing is available for bulk quantity orders. Contact the Customer Service Department for pricing and specifics.
3. Expedite fee for non-stocked heat exchangers, 24 hour turnaround \$250.00 net.
4. Expedite fee for non-stocked sheet metal parts (7 working days) is \$250.00 per part.
5. Cancellation fee for custom product already in production: \$250
6. All parts are shipped FOB warehouse.
7. Any excise or sales tax will be charged to and paid by the buyer. Buyer is solely responsible for providing valid resale certificates.

### **Salable Returns / Unused Parts**

Parts in new condition with all original packaging will be considered for return within one year of date of purchase from Laars, subject to a 25% restocking charge *and* recovery of other discounts or incentives earned at time of purchase. Invoice number and date of purchase must be furnished. Refunds will be made to the original purchaser only, and will be made at the sole discretion of Laars. Return of parts may affect eligibility for other programs. Contact your Laars representative for more information.

### **Parts Limited Warranty**

Laars warrants all parts to be free from defects in materials and workmanship to the original retail purchaser for one year from date of retail purchase. Proof of purchase is required. This limited warranty applies only to parts purchased for use as an original equipment replacement part in Laars Heating Systems boilers and water heaters. At its option, Laars will repair or replace any part that fails under this limited warranty. Repair or replacement shall be the sole remedy, and Laars shall not be liable for any field labor, removal, transportation to/from the factory, reinstallation or any other such costs.

### **Return Under Warranty**

Parts should be returned to the place of purchase for warranty evaluation. If the original place of purchase is not known, contact your Laars wholesaler, factory representative or Contract Service Center. Wholesalers, factory representatives and Contract Service Centers returning parts for warranty consideration must obtain a RMA (Return Merchandise Authorization) number from the Customer Service Department. Each part must be tagged with the original purchase date, model and serial number of the boiler it was installed on, and a description of the failure. Parts must be returned freight prepaid and clearly marked with the RMA number. The RMA expires if not returned within 60 days of issuance. Contact your Laars representative or the Customer Service Department for more information on obtaining warranty coverage on large, heavy or bulky items.

Laars Heating Systems maintains a policy of continuous quality improvement.

*Laars Heating Systems Company reserves the right to change specifications, components, features, or to discontinue products without notice. While Laars will make every reasonable effort to provide advance notice of changes, supplier actions, changes in code requirements, and Laars' efforts to continuously upgrade products will sometimes require that changes be introduced with minimal or no advance notice.*

## SECTION 6.

### Conversion of VW from Indoor to Outdoor Models

Please read the following instructions with Figure 16.

Figure 17 shows the conversion completed.

Please follow the instructions in their numerical order, failure to do this will cause problems on assembly.

#### 6.1 Conversion Procedure

##### 6.1.1 SECTION I: (See Figure 16)

1. Remove top panel. (1)
2. Remove front and rear upper panels. (2)
3. Remove front and rear wings LH & RH. (3)
4. Remove diverter assembly. (4)
5. Remove outer screw from upper end panel at junction with lower end panel.
6. Remove and disconnect all probes and wires going to castings and gas train.
7. Remove control box assembly - front of heater (not shown).

##### 6.1.2 SECTION II: (See Figure 17)

1. Install front LH & RH extension panels (flush with top of upper end panel). (18)
2. Install rear LH & RH extension panels (flush with top of upper end panel). (15) (pick up holes provided into LB upper and lower end panels)
3. Install front bottom panel. (21)
4. Install rear bottom panel. (14)
5. Install front inner baffles (2) 4" from ends. (17)
6. Install rear inner baffle (1) 2" from ends. (16)
7. Install front LH & RH upper spacers. (27)
8. Install rear LH & RH upper spacers. (7)
9. Install front flue collector extension (screw onto flange of lower flue collector **only**). (28)
10. Install rear flue collector extension (screw onto flange of lower flue collector **only**). (8)
11. Install rear upper panel and remaining screws from flue collector extension. (12)
12. Install middle rear panel. (13)

13. Install front panel making sure opening for removable panel is **square**. (19)
14. Install front stiffener sizes 2450 and up.
15. Install remaining screws from flue collector extension.
16. Install rear top half panel. (5)
17. Install front top half panel. (6)
18. Install front wire (26) mesh using angle (24) at top and strap (25) at bottom (mesh to be inserted under angles of wind baffle stand offs).
19. Install rear mesh same as Step 18.
20. Install front LH & RH wind baffle stand off. (23)
21. Install rear LH & RH wind baffle stand off. (23)
22. Install front and rear wind baffles. (22)
23. Install middle rear baffle stand off. (11)
24. Install middle rear baffle. (10)
25. Install wires control box parts onto control panel. (200185)
26. Install control panel assembly using holes and bushings provided in RH extension panel for probes and wires (not shown).
27. Install removable panels. (20)

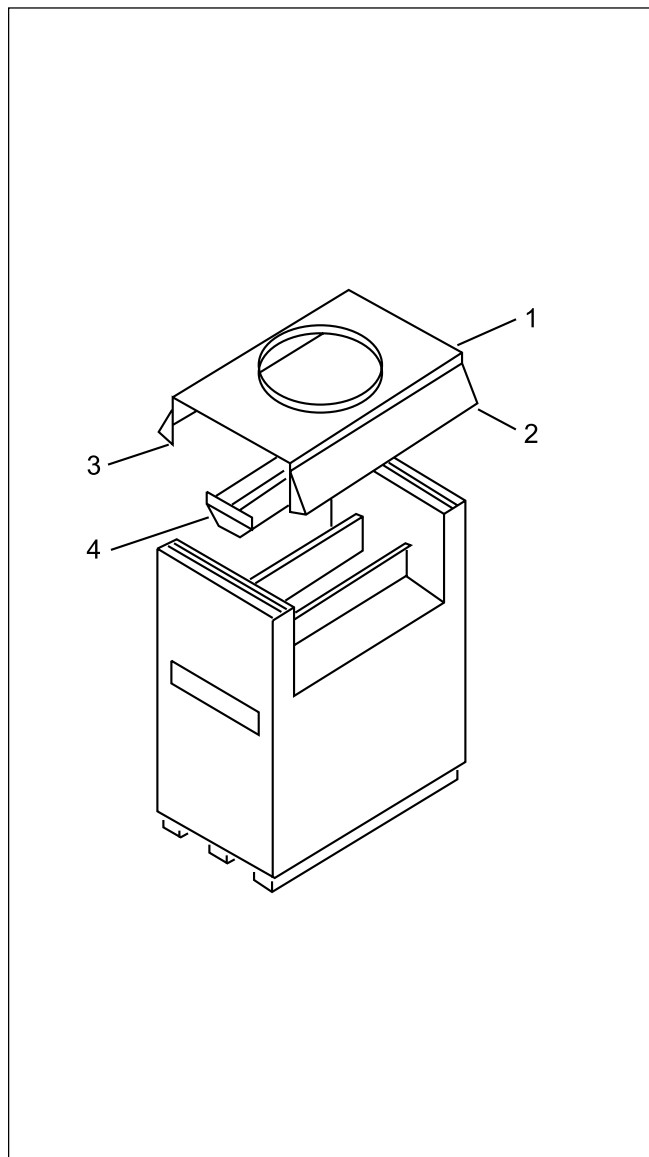


Figure 16. Removal of Indoor Parts.

**OUTDOOR KIT PARTS LIST (see Figure 17)**

Key No.	Part No.
5 .....	20017100
6 .....	20016900
7 .....	20015101
.....	20015102
8 .....	20016700
9 .....	20017200
10 .....	20017300
11 .....	20017700
12 .....	20016500
13 .....	20016600
14 .....	20016300
15 .....	20014301
.....	20014302
16 .....	20015200
17 .....	20015300
18 .....	20014601
.....	20014602
19 .....	20016100
20 .....	20018000
21 .....	20016200
22 .....	20017200
23 .....	20017600
24 .....	20018200
25 .....	20018300
26 .....	20018600
27 .....	20015001
.....	20015002
28 .....	20016800

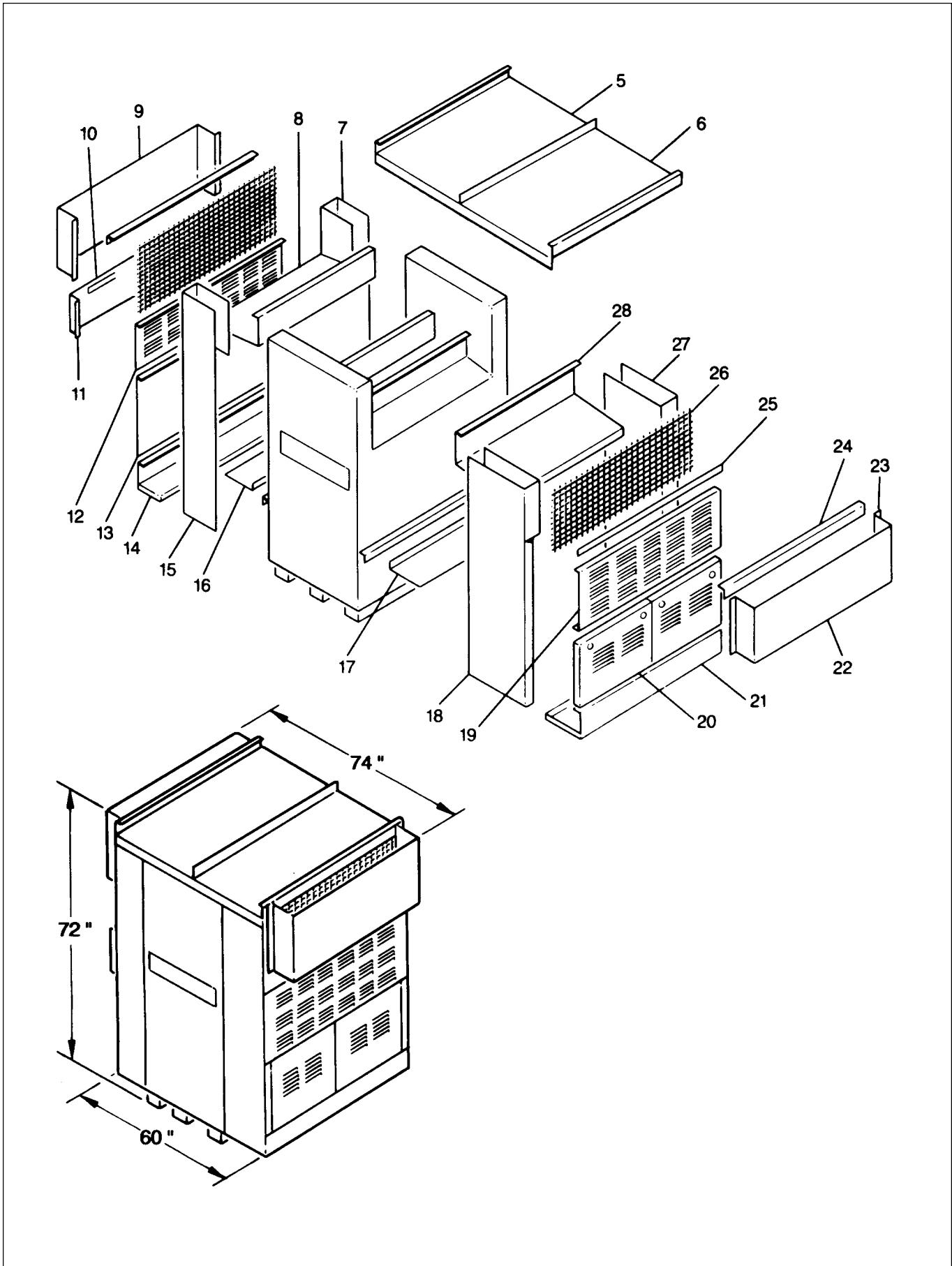


Figure 17. Outdoor Parts Identification.

## SECTION 7.

### Parts Description and Order Numbers

#### 7.1 General Information

To order or purchase parts for the Laars VW Volume Water Heaters, contact your nearest Laars wholesaler. If they cannot supply you with what you need, contact Customer Service, Laars (see back cover for address, telephone and fax information).

#### 7.2 Parts List

Key No.	Description	Size 2000 I	Size 2450 I 2200 E	Size 3050 I 2800 E	Size 3500 I 3200 E	Size 4050 I 3600 E	Size 4500 I 4000 E	Size 5000 I 4500 E
1.	Base Weldment Assembly	20067201	20067202	20067203	20067204	20067205	20067206	20067207
2.	Base Assembly	20011001	20011002	20011003	20011004	20011005	20011006	20011007
3.	Center Heat Shield Assembly	20005701	20005702	20005703	20005704	20005705	20005706 (2)	20005707 (2)
3a.	Center Heat Shield Panel	20005601	20005602	20005603	20005604	20005605	20005606 (2)	20005607 (2)
4.	End Tile Rail Support Assembly (left)	20011101	20011101	20011101	20011101	20011101	20011101	20011101
4a.	End Tile Rail Support Assembly (right)	20011102	20011102	20011102	20011102	20011102	20011102	20011102
5.	Manifold Assy. Single Manifold Assy. Split	20064301 20064302	20064201 20064202	20064401 20064402	20064501 20064502	20064600 20064600	20064700 20064700	20064800 20064800
6a.	Main Burner Assembly Pilot Burner Bracket	20012600	20012600	20012600 (2)	20012600 (2)	20012600 (2)	20012600 (2)	20012600 (2)
6b.	Main Burner (without pilot bracket)	L2005800 (22)	L2005800 (27)	L2005800 (32)	L2005800 (37)	L2005800 (44)	L2005800 (48)	L2005800 (54)
7.	Inner Shield	20002300 (2)	20002300 (2)	20002300 (2)	20002300 (2)	20002300 (2)	20002300 (2)	20002300 (2)
8.	End Tile Channel	20002600 (2)	20002600 (2)	20002600 (2)	20002600 (2)	20002600 (2)	20002600 (2)	20002600 (2)
9.	Front Lower Closure	20004301	20004302	20004303	20004304	20004305	20004306	20004307
10.	Rear Tile Rail Assembly	20011401	20011402	20011403	20011404	20011405	20011406	20011407
11.	Front Tile Rail Assembly	20011301	20011302	20011303	20011304	20011305	20011306	20011307
12.	Rear Closure Assembly	20012401	20012402	20012403	20012404	20012405	20012406	20012407
13.	Heat Shield Support Bracket	20003201 (2)	20003202 (2)	20003203 (2)	20003204 (2)	20003205 (2)	20003206 (2)	20003207 (2)
14.	Tile Heat Shield Assembly	20012101 (2)	20012102 (2)	20012103 (2)	20012104 (2)	20012105 (2)	20012106 (2)	20012107 (2)
15.	Lower Panel Assembly F & R	20011601 (2)	20011602 (2)	20011603 (2)	20011604 (2)	20011605 (2)	20011606 (2)	20011607 (2)
16.	Tile Cover	20005801 (2)	20005802 (2)	20005803 (2)	20005804 (2)	20005805 (2)	20005806 (2)	20005807 (2)
17.	Saddle Assembly End Tile	10533601 (2)	10533601 (2)	10533601 (2)	10533601 (2)	10533601 (2)	10533601 (2)	10533601 (2)
18-19.	Tile Assembly	See Tile Drawing on Page 20						
20.	Center Support Assembly	20004900	20004900	20004900	20004900	20004900	20004900	20004900
21.	Heat Exchanger Assembly single pass double pass	20012801 20001301	20012802 20001302	20012803 20001303	20012804 20001304	20012805 20001305	20012806 20001306	20012807 20001307
21a.	Gasket, Header	S0095300	S0095300	S0095300	S0095300	S0095300	S0095300	S0095300
21b.	Water Barrier	10397500	10397500	10397500	10397500	10397500	10397500	10397500

I=Indoor, E=Outdoor

Quantity is one unless otherwise indicated.

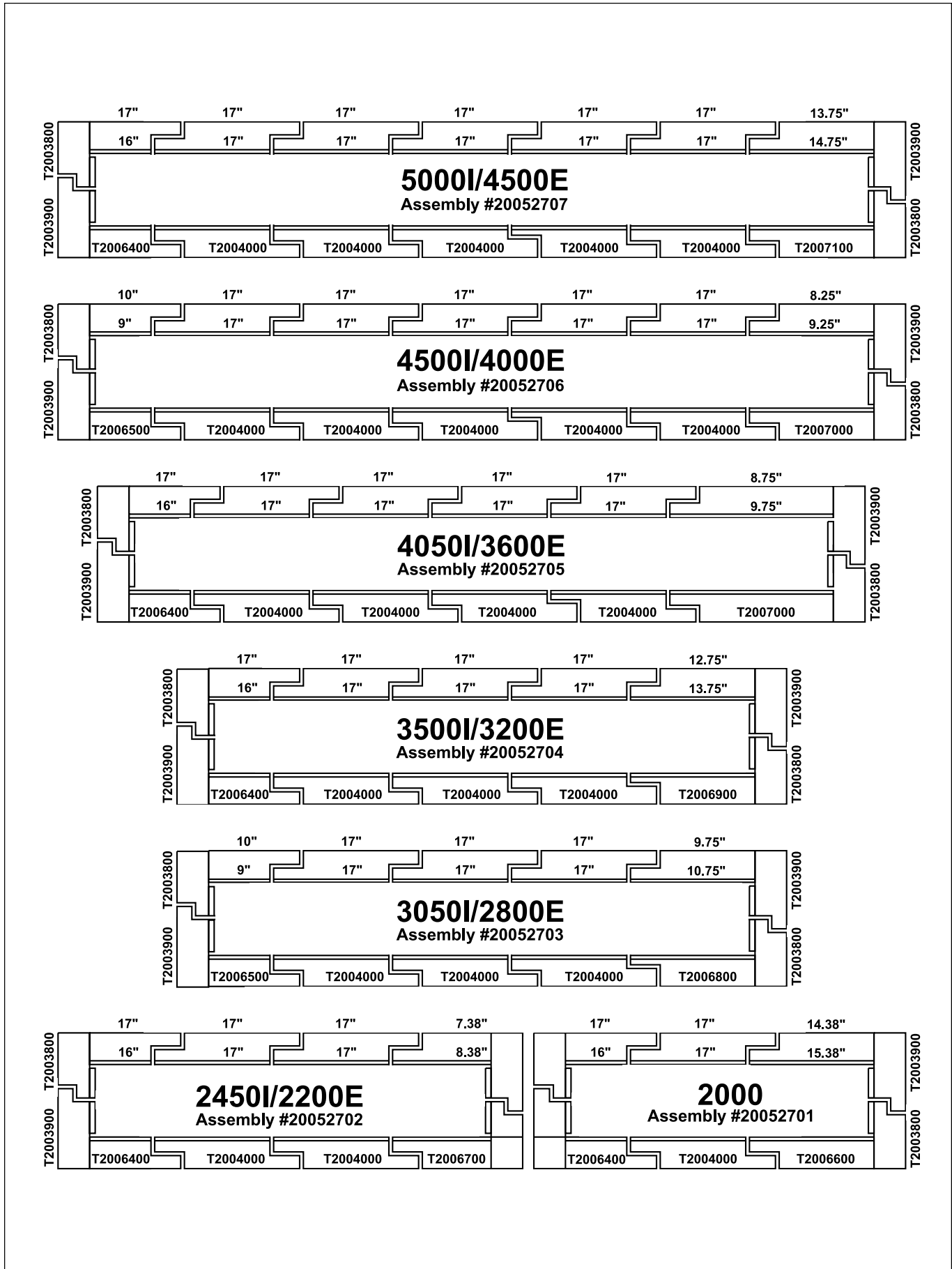
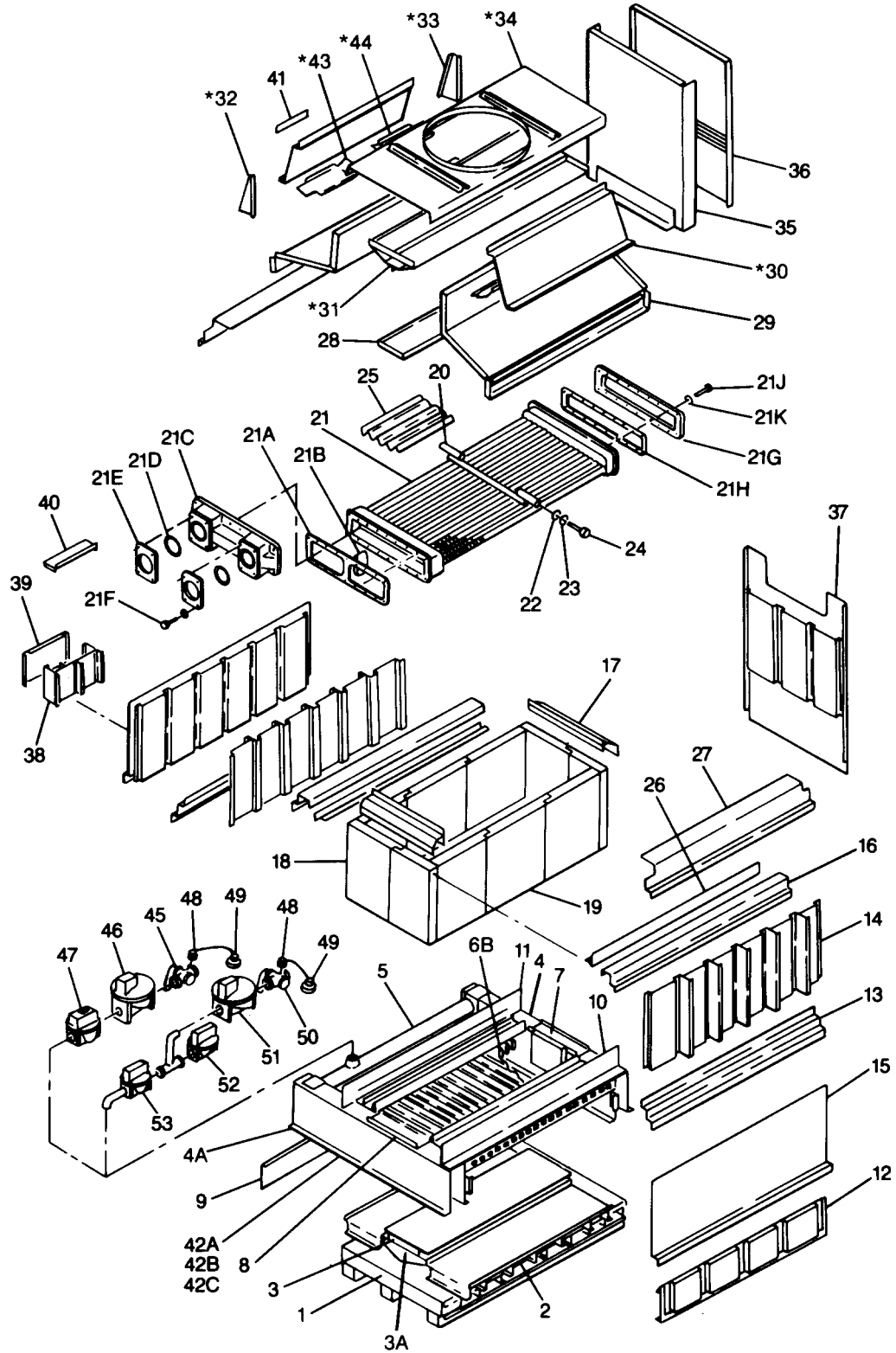


Figure 18. Tile Assemblies.

Key No.	Description	Size 2000 I	Size 2450 I 2200 E	Size 3050 I 2800 E	Size 3500 I 3200 E	Size 4050 I 3600 E	Size 4500 I 4000 E	Size 5000 I 4500 E
21c.	Double Pass Header	10416200	10416200	10416200	10416200	10416200	10416200	10416200
21d.	Gasket, Flange	S0095600 (2)	S0095600 (2)	S0095600 (2)	S0095600 (2)	S0095600 (2)	S0095600 (2)	S0095600 (2)
21e.	Flange	10417400 (2)	10417400 (2)	10417400 (2)	10417400 (2)	10417400 (2)	10417400 (2)	10417400 (2)
21f.	Cap Screw-Hex. Hd. 1/2" - 13UNC x 2"	F0024500 (8)	F0024500 (8)	F0024500 (8)	F0024500 (8)	F0024500 (8)	F0024500 (8)	F0024500 (8)
21g.	Return Header	10416100	10416100	10416100	10416100	10416100	10416100	10416100
21h.	Gasket, Header	S0095300	S0095300	S0095300	S0095300	S0095300	S0095300	S0095300
21j.	Cap Screw-Hex. Hd. 1/2" - 13UNC x 1 1/2"	F0013300 (36)	F0013300 (36)	F0013300 (36)	F0013300 (36)	F0013300 (36)	F0013300 (36)	F0013300 (36)
21k.	Washer - 1/2"	F0010300 (36)	F0010300 (36)	F0010300 (36)	F0010300 (36)	F0010300 (36)	F0010300 (36)	F0010300 (36)
22.	Lock Washer - 3/8"	F0010800 (2)	F0010800 (2)	F0010800 (2)	F0010800 (2)	F0010800 (2)	F0010800 (2)	F0010800 (2)
23.	Washer - 3/8"	F0011100 (2)	F0011100 (2)	F0011100 (2)	F0011100 (2)	F0011100 (2)	F0011100 (2)	F0011100 (2)
24.	Cap Screw 3/8" - 16UNC x 3/4"	F0015900 (2)	F0015900 (2)	F0015900 (2)	F0015900 (2)	F0015900 (2)	F0015900 (2)	F0015900 (2)
25.	Heat Exchanger Baffle Assembly	20010900 (68)	20010900 (68)	20010900 (68)	20010900 (102)	20010900 (102)	20010900 (102)	20010900 (102)
26.	Heat Exchanger Baffle F & R	10534310 (2)	10534311 (2)	10534312 (2)	10534313 (2)	10534314 (2)	10534315 (2)	10534316 (2)
27.	Front & Rear Closure	20006401 (2)	20006402 (2)	20006403 (2)	20006404 (2)	20006405 (2)	20006406 (2)	20006407 (2)
28.	Inside Baffle Assembly Indoor Outdoor	20012501 N/A	20012502 20012509	20012503 20012510	20012504 20012511	20012505 20012512	20012506 20012513	20012507 20012514
29.	Flue Panel Assembly F & R	20011501 (2)	20011502 (2)	20011503 (2)	20011504 (2)	20011505 (2)	20011506 (2)	20011507 (2)
30.	Upper Panel F & R (indoor only)	20011701 (2)	20011702 (2)	20011703 (2)	20011704 (2)	20011705 (2)	20011706 (2)	20011707 (2)
31.	Flue Diverter Assembly (indoor only)	20012201	20012202	20012203	20012204	20012205	20012206	20012207
32.	Upper Wing F & R, Left (indoor only)	20006301 (2)	20006301 (2)	20006301 (2)	20006301 (2)	20006301 (2)	20006301 (2)	20006301 (2)
33.	Upper Wing F & R, Right (indoor only)	20006302 (2)	20006302 (2)	20006302 (2)	20006302 (2)	20006302 (2)	20006302 (2)	20006302 (2)
34.	Top Panel Assembly (indoor only)	20012301	20012302	20012303	20012304	20012305	20012306	20012307
35.	Flue End Assembly	20012000 (2)	20012000 (2)	20012000 (2)	20012000 (2)	20012000 (2)	20012000 (2)	20012000 (2)
36.	Upper End Assembly	20011900 (2)	20011900 (2)	20011900 (2)	20011900 (2)	20011900 (2)	20011900 (2)	20011900 (2)
37.	Lower End Panel Assembly	20011800 (2)	20011800 (2)	20011800 (2)	20011800 (2)	20011800 (2)	20011800 (2)	20011800 (2)
38.	Control Mounting Panel	20013700	20013700	20013700	20013700	20013700	20013700	20013700
39.	Control Cover - Front	20018700	20018700	20018700	20018700	20018700	20018700	20018700
40.	Control Box Cover Top	20011200	20011200	20011200	20011200	20011200	20011200	20011200

I=Indoor, E=Outdoor

Quantity is one unless otherwise indicated.



\* Asterisk = indoor parts only.

Figure 19. Parts Identification.



Key No.	Description	Size 2000 I	Size 2450 I 2200 E	Size 3050 I 2800 E	Size 3500 I 3200 E	Size 4050 I 3600 E	Size 4500 I 4000 E	Size 5000 I 4500 E
41.	Logo Plate	H2000100	H2000100	H2000100	H2000100	H2000100	H2000100	H2000100
42.	Pilot	W0034500	W0034500	W0034500 (2)	W0034500 (2)	W0034500 (2)	W0034500 (2)	W0034500 (2)
42a.	Lead Insulator 23.5	10418817	10418817	10418817 (2)	10418817 (2)	10418817 (2)	10418817 (2)	10418817 (2)
42b.	Lead Insulator 24.5	10418818	10418818	10418818 (2)	10418818 (2)	10418818 (2)	10418818 (2)	10418818 (2)
42c.	Pilot Shield	20016400	20016400	20016400 (2)	20016400 (2)	20016400 (2)	20016400 (2)	20016400 (2)
43.	Draft Hood Relief Baffle - Right (indoor only)	20013801 (2)	20013801 (2)	20013801 (2)	20013801 (2)	20013802 (2)	20013803 (2)	20013804 (2)
44.	Draft Hood Relief Baffle - Right (indoor only)	20013805 (2)	20013805 (2)	20013805 (2)	20013805 (2)	20013806 (2)	20013807 (2)	20013808 (2)
45.	Manual Valve	V0001800	V0001800	V2013800	V2013800	V2013800	V2013900	V2013900
46.	Safety Valve	V0046800	V0046800	V0046900	V0046900	V0046900	V2000500	V2000500
47.	Operating Valve	V0051400	V0051400	V2001000	V0051400 (2)	V0051400 (2)	V0051400 (2)	V0051400 (2)
48.	Pilot Regulator	W0002000	W0002000	W0002000 (2)	W0002000 (2)	W0002000 (2)	W0002000 (2)	W0002000 (2)
49.	Pilot Valve	W0019300	W0019300	W0019300 (2)	W0019300 (2)	W0019300 (2)	W0019300 (2)	W0019300 (2)
50.	Manual Valve	V0059700	V0059700	V2013800	V2013800	V2013800	V2013900	V2013900
51.	Regulator	V0026700	V0026900	V0026900	V0026900	V0027000	V0027000	V0027000
52.	Safety Valve	V0046800	V0046900	V0046900	V0046900	V2000500	V2000500	V2000500
53.	Modulator Valve	V0048400	V0048400	V0048400	V0048400	V0048500	V0048500	V0048600

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



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