



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

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 Model AP Pool Boilers From Indoor to Outdoor Models

Please read the following instructions with Figure 11. Figure 12 shows the conversion completed. Please follow the instructions in their numerical order, failure to do this will cause problems on assembly.

6A. SECTION I (See Figure 11)

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 disconnect all probes and wires going to castings and gas train.
7. Remove control box assembly - front of boiler (not shown).

6B. SECTION II (See Figure 12)

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 (184) 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 (not shown).
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)

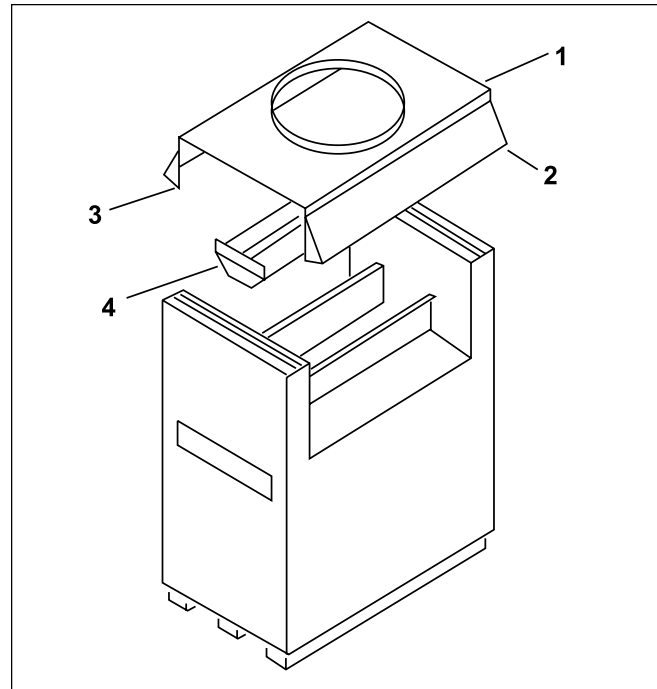


Figure 11. Removal of Indoor Parts.

PARTS LIST FOR CONVERSION KIT - INDOOR TO OUTDOOR (See Figure 12)

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
17A Left Front Baffle (Single Inlet Manifold)	20015300
17B Right Front Baffle (Single Inlet Manifold)	20022300
17C Left Front Baffle (Split Inlet Manifold)	20022000
17D Right Front Baffle (Split Inlet Manifold)	20022100
18	20014601
	20014602
19	20016100
20	20018000
21	20016200
22	20017200
23	20017600
24	20018200
25	20018300
26	20018600
27	20015001
	20015002
28	20016800

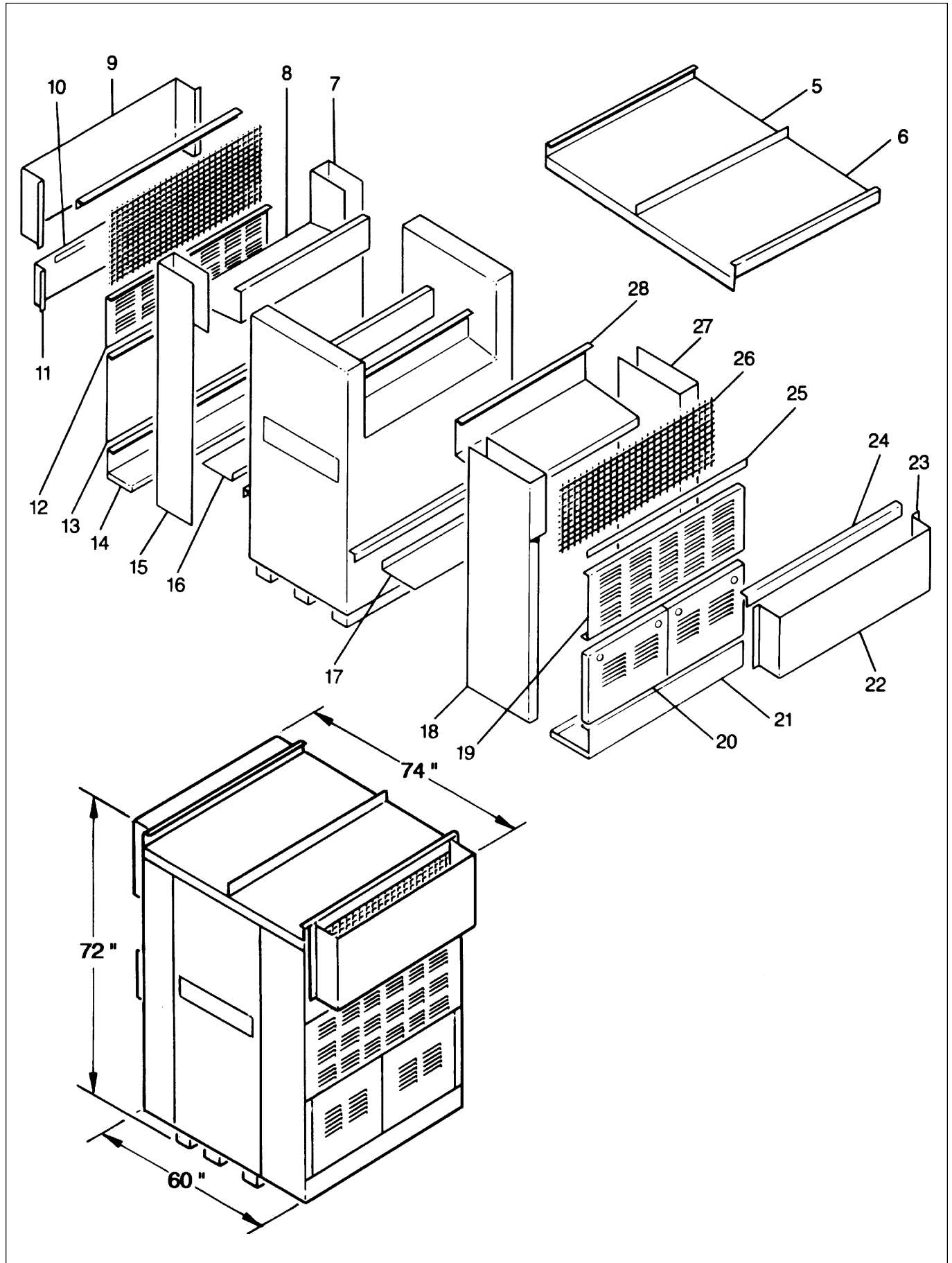


Figure 12. Outdoor Parts. Referenced on page 14.

SECTION 7.

Parts Description and Order Numbers

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	20005707
3a.	Center Heat Shield Panel	20005601	20005602	20005603	20005604	20005605	20005606 (2)	20005607 (2)
4.	End Tile Rail Support, Left	20011101	20011101	20011101	20011101	20011101	20011101	20011101
4a.	End Tile Rail Support, Right	20011102	20011102	20011102	20011102	20011102	20011102	20011102
5.	Manifold Assy., Single	20064301	20064201	20064401	20064501	20064600	20064700	20064800
	Manifold Assy., Split	20064302	20064202	20064402	20064502	20064600	20064700	20064800
6a.	Pilot Burner/Bracket Welder	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 17						
20.	Center Support Assembly	20004900	20004900	20004900	20004900	20004900	20004900	20004900
21.	Heat Exchanger Assembly	20001301	20001302	20001303	20001304	20001305	20001306	20001307
21a.	Gasket, Header	S0095300	S0095300	S0095300	S0095300	S0095300	S0095300	S0095300
21b.	Water Barrier	10397500	10397500	10397500	10397500	10397500	10397500	10397500
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. ½" - 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. ½" - 13UNC x 1½"	F0013300 (36)	F0013300 (36)	F0013300 (36)	F0013300 (36)	F0013300 (36)	F0013300 (36)	F0013300 (36)
21k.	Washer - ½"	F0010300 (36)	F0010300 (36)	F0010300 (36)	F0010300 (36)	F0010300 (36)	F0010300 (36)	F0010300 (36)

I=Indoor, E=Outdoor. Quantity is 1, unless otherwise noted.

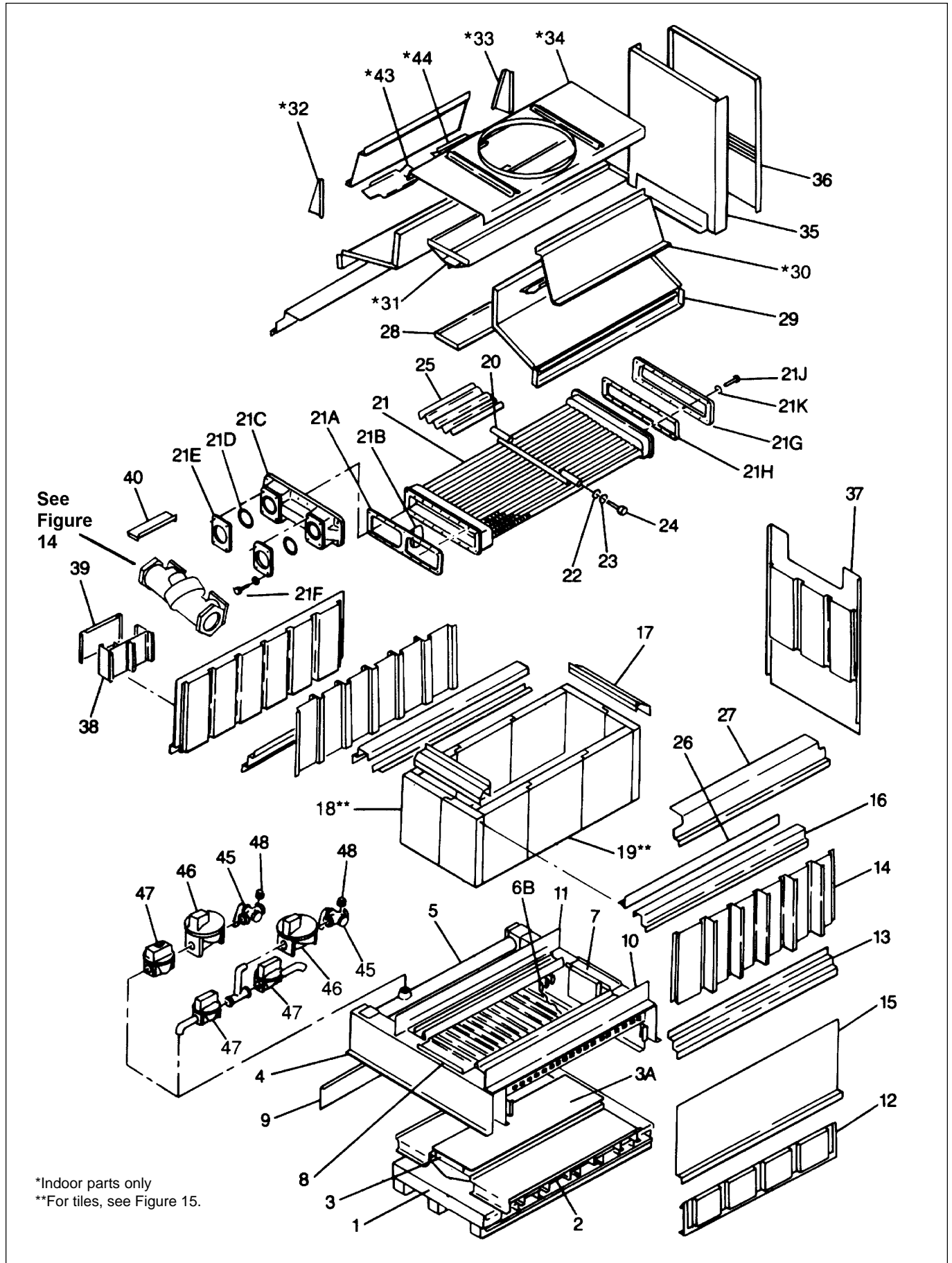


Figure 13. Parts Identification.

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	
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	
41.	Pilot Lead Assembly (Johnson) Standing Pilot, Nat/Propane	20035403	20035403	20035403 (2)	20035403 (2)	20035403 (2)	20035403 (2)	20035403 (2)	
	Pilot Lead Assembly (Honeywell) Standing Pilot, Nat/Propane	20035404	20035404	20035404 (2)	20035404 (2)	20035404 (2)	20035404 (2)	20035404 (2)	
	Pilot Lead Assembly (Johnson) IID Pilot, Nat	20035401	20035401	20035401 (2)	20035401 (2)	20035401 (2)	20035401 (2)	20035401 (2)	
	Pilot Lead Assembly (Honeywell) IID Pilot, Nat	20035402	20035402	20035402 (2)	20035402 (2)	20035402 (2)	20035402 (2)	20035402 (2)	
42.	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 (U.S.)	V0046800	V0046800	V0046900	V0046900	V0046900	V2000500	V2000500	
	Lubricated Plug Valve (Canada)	V0020500	V0020500	V0020600	V0020500 (2)	V0020500 (2)	V0020500 (2)	V0020500 (2)	
47.	Operating Valve	V0047800	V0047800	V0047900	V0047700 (2)	V0047800 (2)	V0047800 (2)	V0047800 (2)	

I=Indoor, E=Outdoor. Quantity is 1, unless otherwise noted.

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
48.	Manual Pilot Valve	W0002100	W0002100	W0002100 (2)	W0002100 (2)	W0002100 (2)	W0002100 (2)	W0002100 (2)
49(a).	Pilot Valve (I.I.D.) (not shown)	W0019300	W0019300	W0019300 (2)	W0019300 (2)	W0019300 (2)	W0019300 (2)	W0019300 (2)
49(b).	Pilot Relay (Standing Pilot) (not shown)	W003000	W003000	W003000 (2)	W003000 (2)	W003000 (2)	W003000 (2)	W003000 (2)
50.	Pilot Burner (Johnson) Standing Pilot, Nat	W0034700	W0034700	W0034700 (2)	W0034700 (2)	W0034700 (2)	W0034700 (2)	W0034700 (2)
	Pilot Burner (Honeywell) Standing Pilot, Nat	W0034800	W0034800	W0034800 (2)	W0034800 (2)	W0034800 (2)	W0034800 (2)	W0034800 (2)
51.	Pilot Burner (Johnson) Standing Pilot, Propane	W0034600	W0034600	W0034600 (2)	W0034600 (2)	W0034600 (2)	W0034600 (2)	W0034600 (2)
	Pilot burner (Honeywell) Standing Pilot, Propane	W0034400	W0034400	W0034400 (2)	W0034400 (2)	W0034400 (2)	W0034400 (2)	W0034400 (2)
52.	Pilot Burner (Johnson) IID Pilot, Nat	W0034500	W0034500	W0034500 (2)	W0034500 (2)	W0034500 (2)	W0034500 (2)	W0034500 (2)
	Pilot Burner (Honeywell) IID Pilot, Nat	W0034300	W0034300	W0034300 (2)	W0034300 (2)	W0034300 (2)	W0034300 (2)	W0034300 (2)

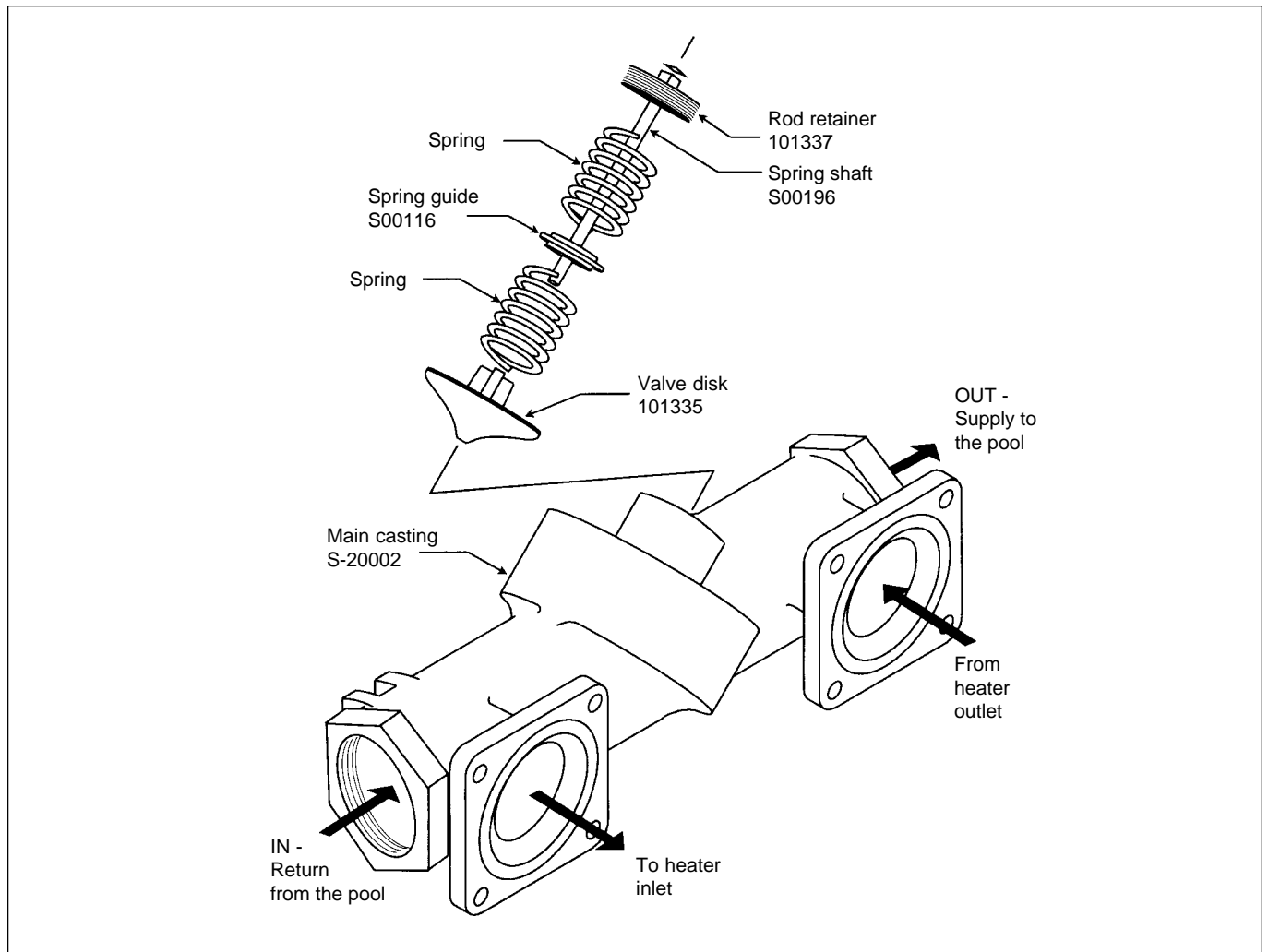


Figure 14. Built-in Automatic Control Valve.

Mighty Therm Commercial Pool Heating Boiler

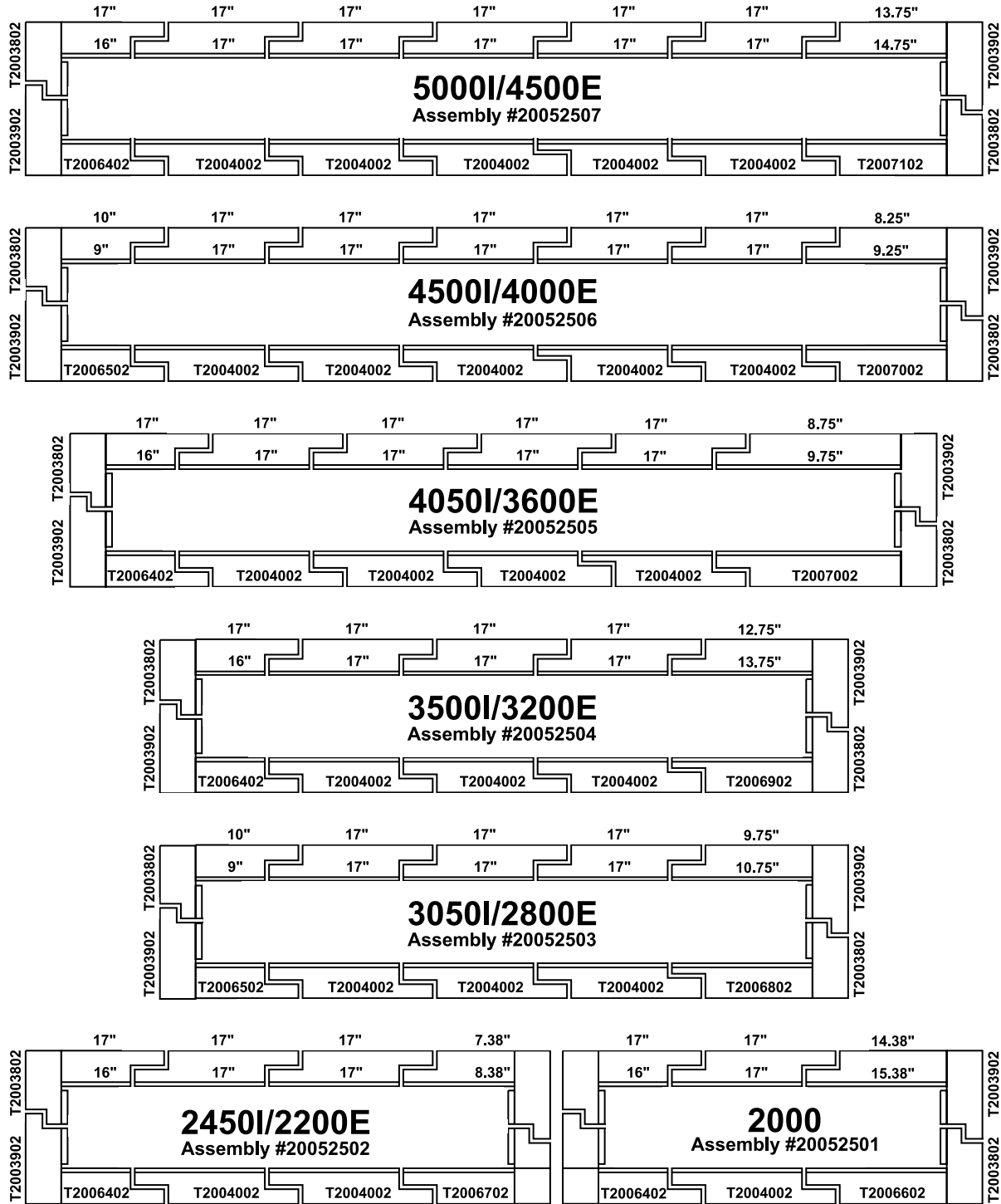


Figure 15. Tile Assembly.