

SERVEL



AIR COOLED ABSORPTION WATER CHILLERS

ACF60 SERIES

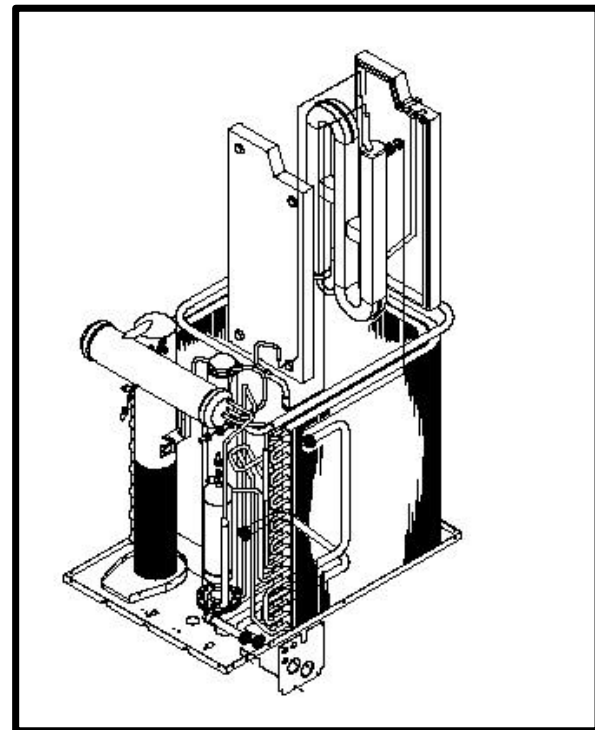
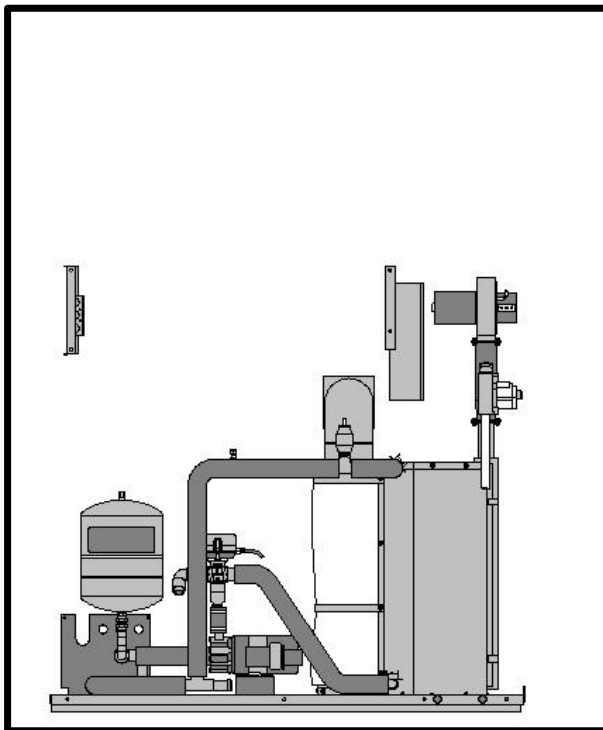
AYF60-165

Service Code

0 & 1

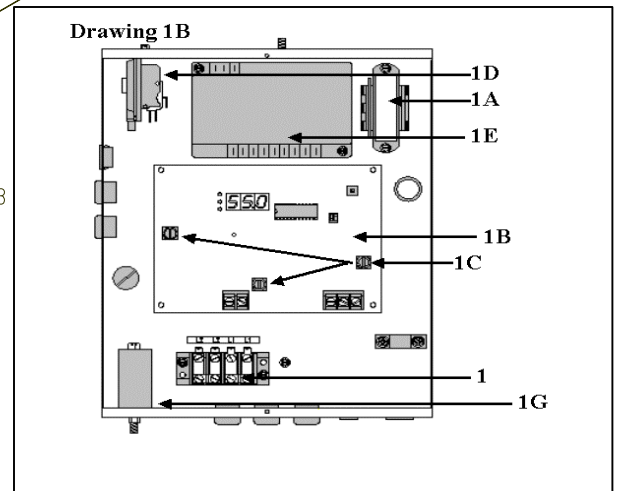
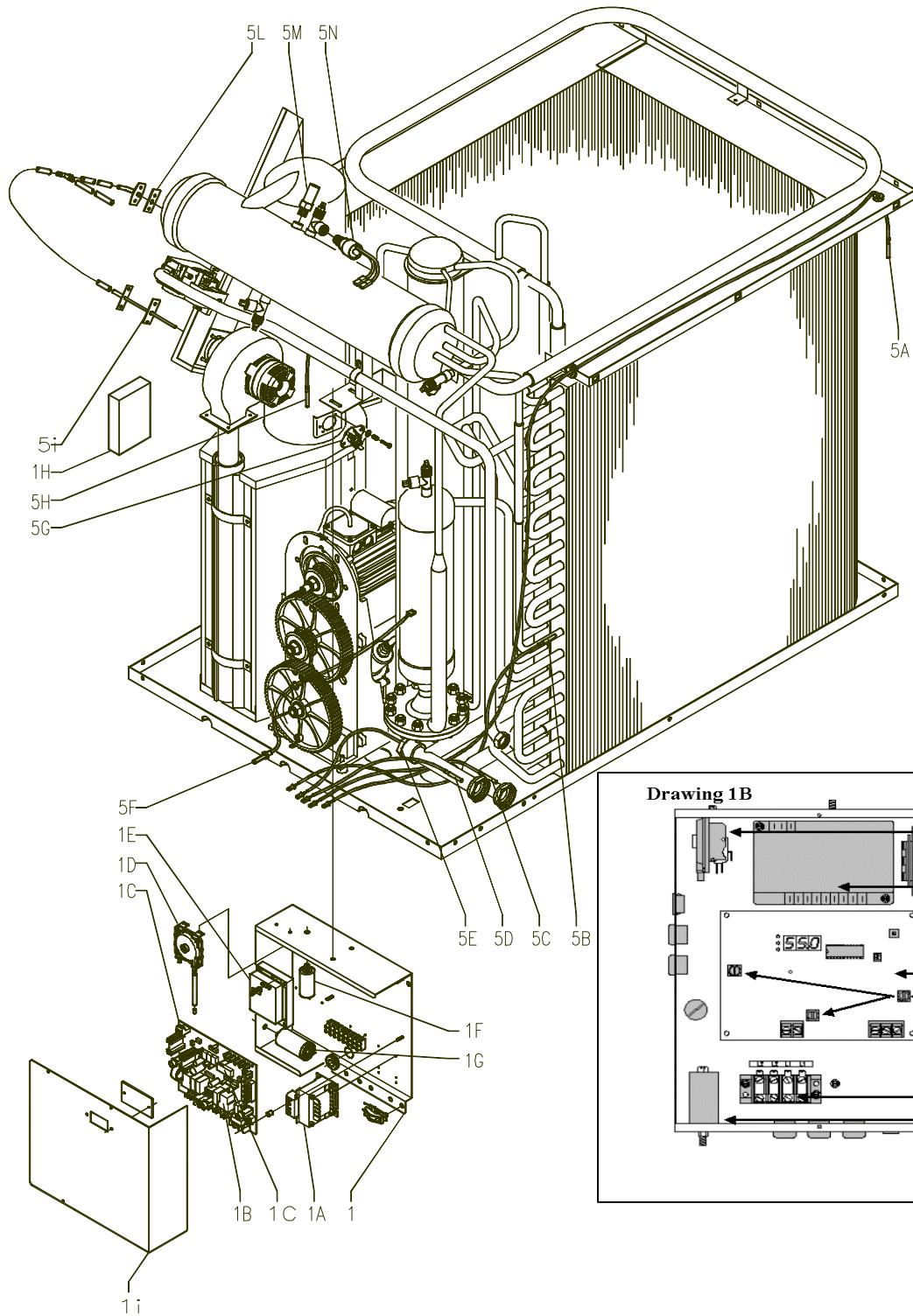
ACF36 SERIES

Parts List



All illustrations and specifications contained herein are based on the latest information available at the time of publication approval. Robur Corporation reserves the right to make changes at any time without notice, in materials, specifications, models or part numbers and discontinue models or parts.

Drawing 1



Service Parts For Drawing 1 and 1B

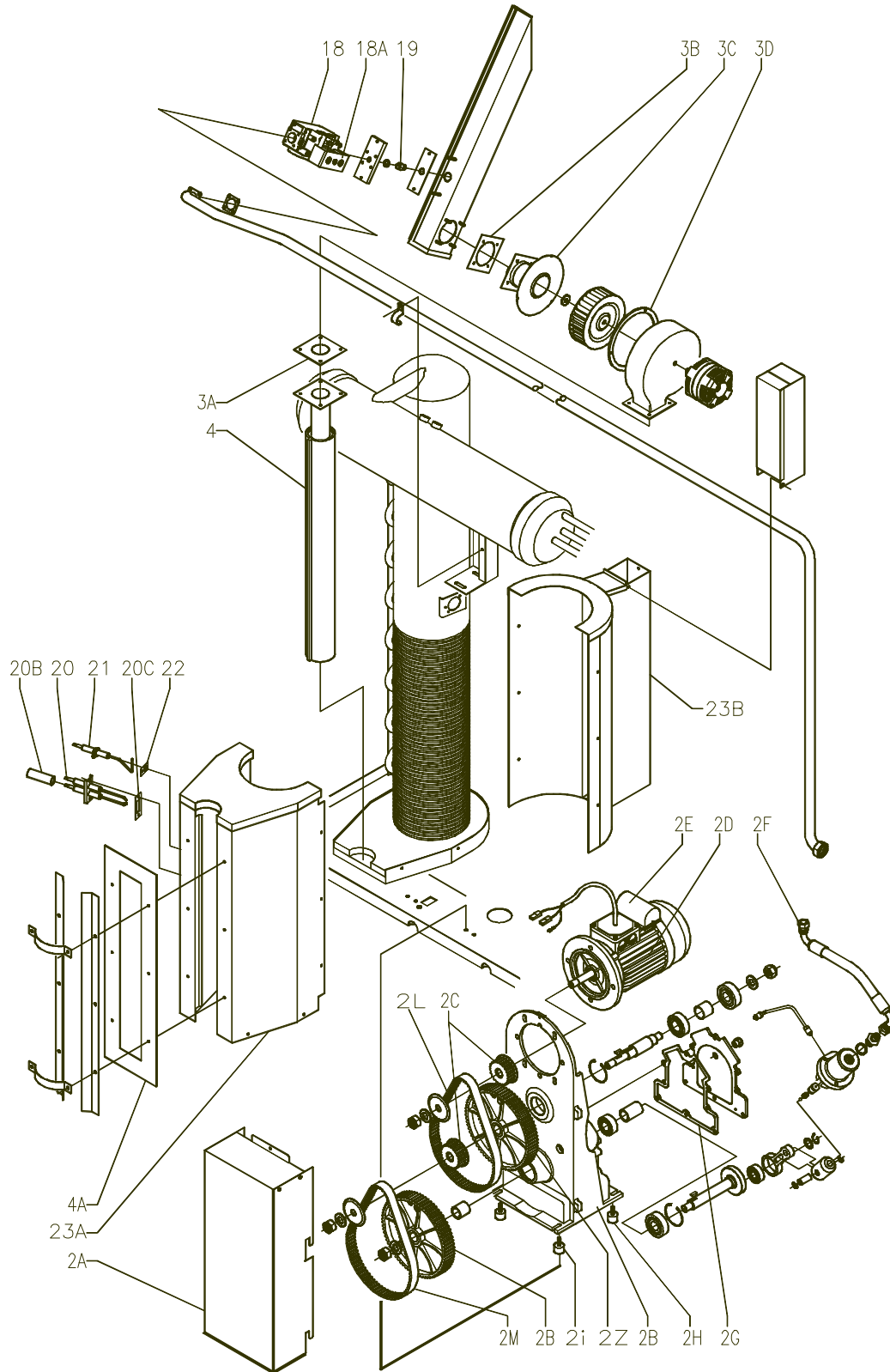
Item	Part Number	Kit Description
1	16009-734	High Voltage Terminal Block
1A	16009-637	208/230 24 Volt Transformer ACF60
	16009-381	115 24 Volt Transformer ACF36
1B	16009-735	ACF60 Electronic Control Board (S50 and S51)
	16009-785	ACF36 Electronic Control Board (S50 and S51)
	16009-740	ACF60 Micro Processor Chip
	16009-736	ACF36 Micro Processor Chip
1C	16009-757	2 Amp Fuse (5 fuses in kit) All Models (ACF60 & ACF36)
	16009-758	3.15 Amp Fuse (5 fuses in kit) All Models (ACF60 & ACF36)
	16009-759	10 Amp Fuse (5 fuses in kit) All Models (ACF60 & ACF36)
	16009-680	Wiring Harness for S50/S51 Board ACF60 (service code 0) **
	16009-733	Wiring Harness for S50/S51 Board ACF60 (service code 1)
1D	16009-732	Differential Air Pressure Switch ACF60 (service code 1)
	16009-634	Differential Air Pressure Switch (service code 0) * ACF60 & ACF36
1E	16009-706	Ignition Control Box (service code 1)
	16009-632	Ignition Control Box (service code 0) ** ACF60 & ACF36
1F	NA	50 Cycle Unit
1G	16009-707	Capacitor 12.5 MFD ACF60
	16009-787	Capacitor 7.5 MFD ACF36
1H	16009-715	Ignition Transformer (service code 1 Only)
1I	NA	Control Box Cover ACF60

* The air pressure switch on service code 0 is located on the air intake chute.

** Service code is on the serial plate, on service code 0 the box for the service code is blank.

Item	Part Number	Kit Description
5A	16009-640	Sensor-Ambient (TA) All Models (ACF60 & ACF36)
5B	16009-645	Sensor-Condenser (TCN) All Models (ACF60 & ACF36)
5C	16009-643	Sensor-Water Outlet (THM) All Models (ACF60 & ACF36)
5D	16009-644	Sensor-Water Inlet (THR) All Models (ACF60 & ACF36)
5E	16009-620	Flow Switch (FL) ACF60 Only
	16009-533	Flow Switch (FL) ACF36 Only
5F	16009-642	Sensor Hydraulic Pump (SRT) ACF 60 Only
5G	16009-400	High Limit Switch (M1) All Models (ACF60 & ACF36)
5H	16009-641	Sensor-Generator (TG) All Models (ACF60 & ACF36)
5I	16009-721	Inlet Air Tube Assembly (Service Code 1) ACF60
	16009-723	Inlet Air Chute (service code 1) ACF60
	16009-725	Pressure Switch Hose Kit (service code 1) ACF60
5L	16009-724	Pressure Tap Kit (service code 1) ACF60
5M	16009-635	Pressure Relief Valve (450 PSI) All Models (ACF60 & ACF36)
5N	16009-622	Manual Reset High Pressure Switch (NPH) (ACF60 & ACF36)

Drawing 2



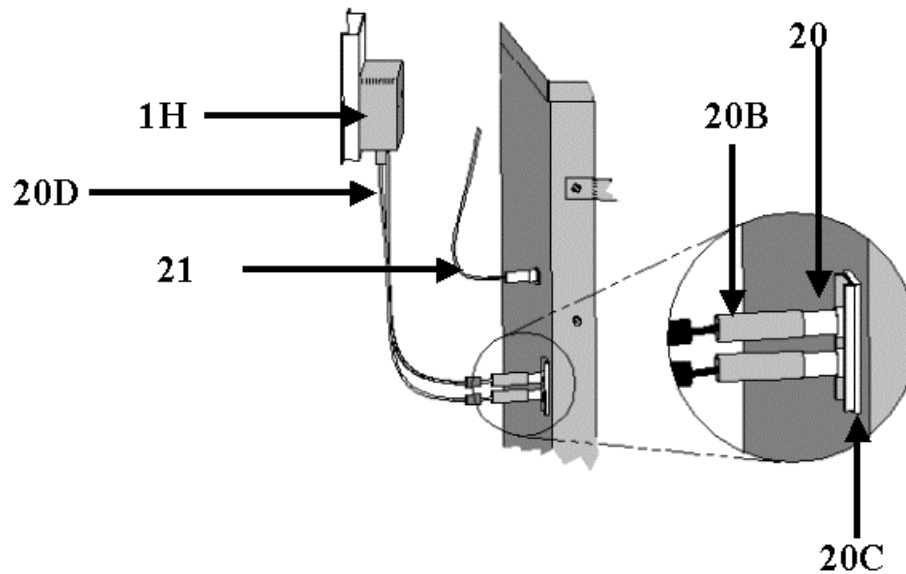
Service Parts For Drawing 2, Hydraulic Pump

Item	Part Number	Kit Description
2	16009-660	Hydraulic Pump Complete ACF 60
2A	NA	Front Cover ACF60
	16009-222	Hydraulic Oil (All Models)
2B	16009-668	Center and Lower Pulley, With Out Magnet (72 tooth gear) ACF60
2C	16009-838	Motor Pulley (18 tooth gear) ACF60
	16009-744	Center Pulley (22 tooth gear) ACF60
2D	16009-662	60 hz Hydraulic Pump Motor ACF60
2E	NA	
2F	16009-676	Hydraulic Pump Hose ACF60
2G	NA	Gasket Hydraulic Pump ACF60
2H	16009-663	Hydraulic Pump Mounting Kit (2 pcs front and 2 pcs back) ACF60
2I	16009-663	Same As Above ACF60
	16009-661	Top Belt and Motor Pulley (18 tooth pulley) ACF60
	16009-743	Bottom Belt and Center Pulley (22 tooth gear) ACF60
2L	16009-667	Belt Top or Bottom ACF60
2M	16009-667	Belt Top or Bottom ACF60
	16009-842	Repair Kit For Hydraulic Pump (new cylinder head and piston assy)
2Z	NA	Hydraulic Pump Bearing ACF60
	16009-468	Hydraulic Pump ACF36
	16009-216	Shaft Seal ACF36
	16009-374	Pump Drive Motor 115V 60hz ACF36
	16009-384	Belt ACF36, Length 1000mm X 7mm Width ACF36
	16009-211	Water Pump ACF36
	16009-385	Belt, Water Pump Removed ACF36
	16009-386	Belt, High Head Pump Kit ACF36
	16009-241	Seal Kit For Water Pump 16009-211 ACF36

Ignition parts for drawing two on page 6

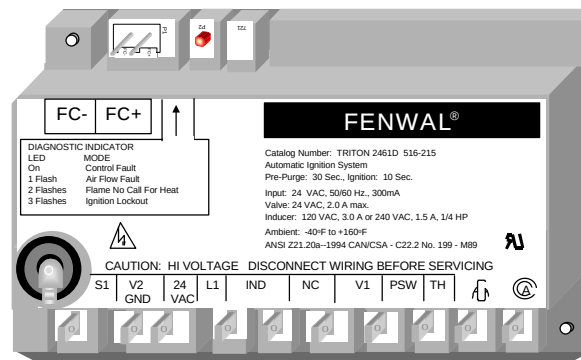
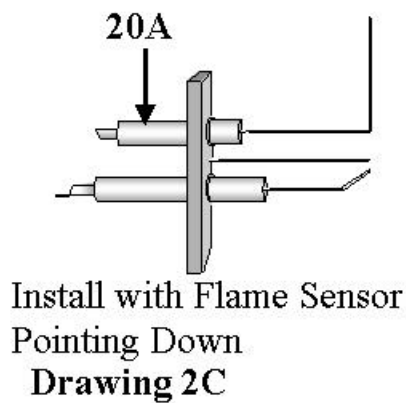
Ignition System ACF60 Service Code 1

Drawing 2B



Ignition Parts ACF36 and ACF60 Service Code 0

16009-629 ACF60 Service Code 0 & ACF36

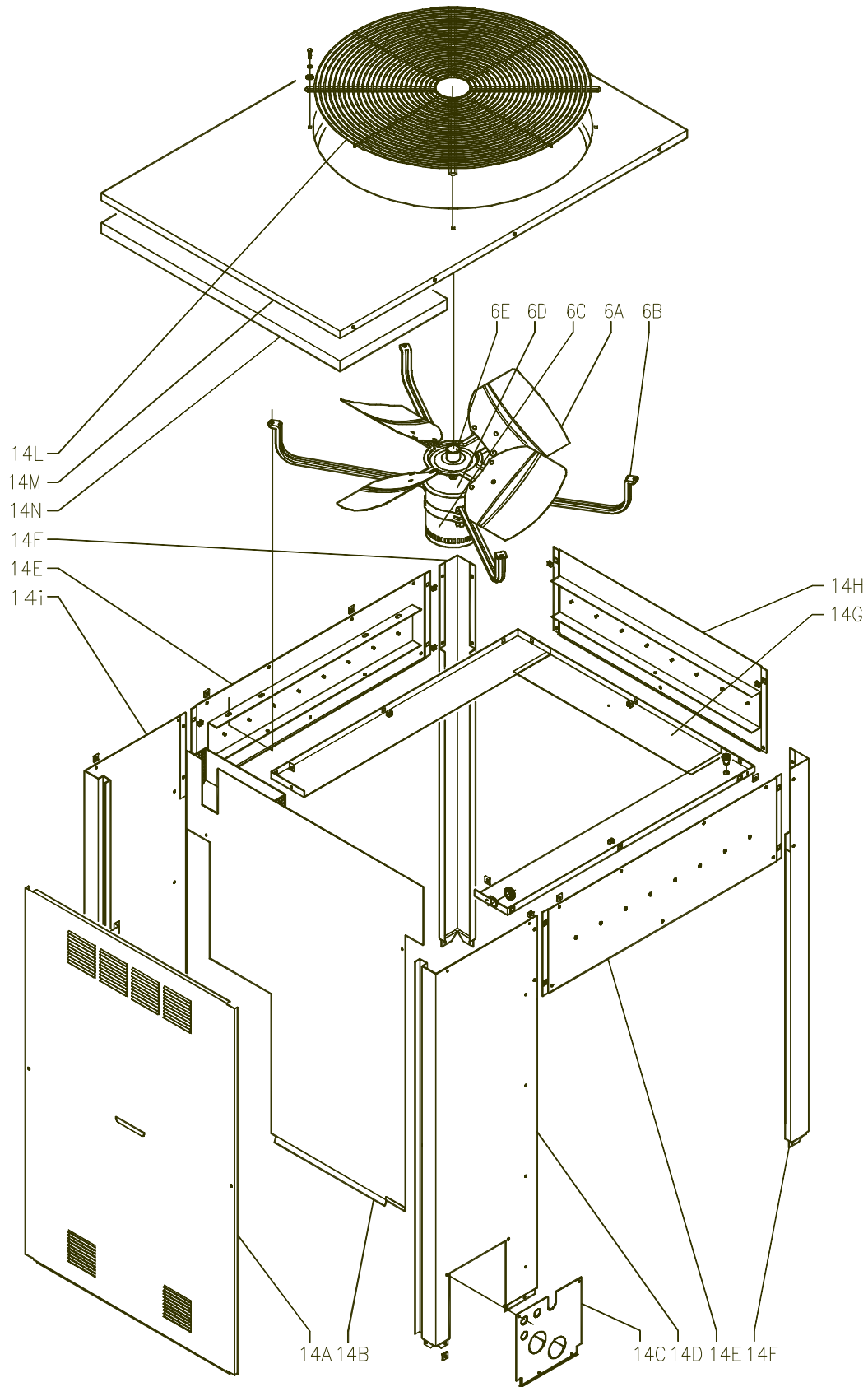


16009-632 ACF60 Service Code 0
ACF36

Service Parts Drawing 2 and 2B, Gas Burner System

Item	Part Number	Kit Description
3A	16009-716	Gasket, Burner Tube to Combustion Housing & Blower ACF60
3B	16009-717	Gasket Set, Combustion Blower to Air Intake Chute
3C	NA	Part of Blower Assembly
3D	NA	Part of Blower Assembly
	16009-719	Combustion Motor & Blower Assembly ACF60 (Service Code 1)
	16009-626	Combustion Motor & Blower Assembly ACF60 (Service Code 0)
	16009-689	Combustion Motor & Blower Assembly ACF36
18	16009-726	Gas Valve Natural Gas with LP Conversion (ACF60 & ACF36)
	16009-791	LP Conversion kit to convert natural gas unit to LP ACF60
	16009-728	Elbow Adapter Assembly, Gas Valve ACF60 (Service Code 1)
18A	16009-729	O-Ring Gas Valve to Orifice Holder ACF60 (Service Code 1)
	16009-730	Orifice Holder, Gas Valve ACF60 (Service Code 1)
19	16009-678	Gas Orifice, Natural Gas ACF60 (Service Code 1)
	16009-670	Gas Orifice, LP Gas ACF60 (Service Code 1)
	16009-688	Gas Burner ACF36
4	16009-621	Gas Burner, Natural or LP ACF60
4A	16009-716	Gasket Set, Burner Tube to Combustion Housing ACF60
	16009-765	Gasket Set, Burner Tube to Combustion Housing ACF36
23A	16009-646	Front Generator Housing ACF60
23B	16009-647	Rear Generator Housing ACF60
	16009-788	Front Generator Housing ACF36
	16009-766	Rear Generator Housing ACF36
1H	16009-715	Ignition Transformer ACF60 (Service Code 1 Only)
20B	16009-714	Anti Spark Insulators
20	16009-710	Igniter with Gasket ACF60 (Service Code 1 Only)
20A	16009-629	Electrode Assembly (Service Code 0) Igniter and Flame Sensor *
21	16009-711	Flame Sensor ACF60 (Service Code 1 Only)
20C	16009-712	Igniter Gasket
20D	16009-713	Ignition Cables
22	NA	
	16009-630	Igniter Wire ACF60 (Service Code 0)
	16009-631	Flame Sensor Wire ACF60 (Service Code 0)
	16009-633	Fenwal Ground Wire ACF60 (Service Code 0)
	16009-784	Igniter Wire ACF36
	16009-692	Flame Sensor Wire ACF36

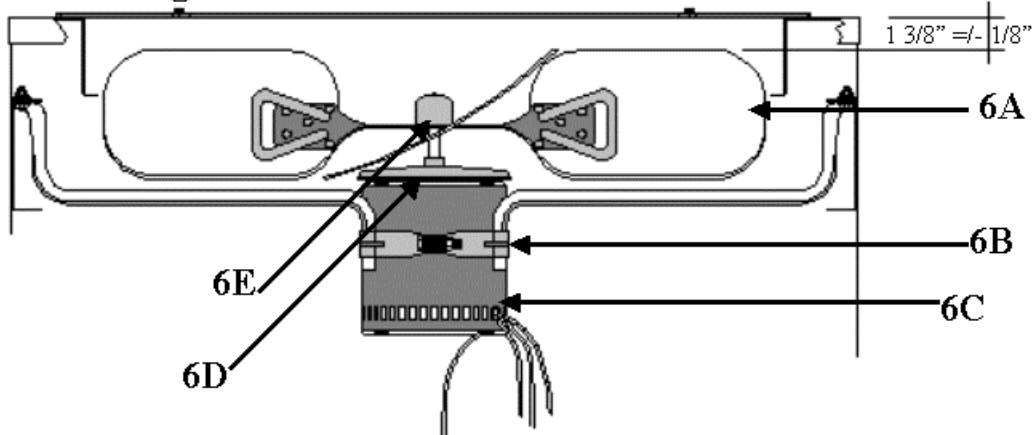
* Also used on ACF36



Service Parts For Drawing 3, Panel and Fan

Item	Part Number	Kit Description
6A	16009-418	Fan Blade Assembly (ACF60)
	16009-419	Fan Blade Assembly (ACF 36)
6B	16009-253	Fan Motor Mounting Kit (ACF60)
6C	16009-378	Fan Motor (ACF60)
	16009-686	Fan Motor (ACF36)
6D	16009-426	Fan Motor Rain Shield (All Models)
6E	Y-12206	Cap, Motor Shaft (All Models)
6B	16009-254	Fan Motor Mounting Kit (ACF36)
14A	16009-652	Front Door Panel (ACF60)
14B	NA	
14C	NA	
14D	16009-654	Right Front Panel (ACF60)
14E	16009-657	Right and Left Fan Bracket Mounting Panel (ACF60)
14F	16009-653	Back Corner Post (qty 2) (ACF60)
14G	NA	
14H	16009-656	Back Panel (ACF60)
14I	16009-655	Left Front Panel (ACF60)
14N	NA	
14M	16009-651	Top Panel (ACF60)
	16009-681	Top Panel Assembly with Fan Guard (ACF60)
14L	16009-673	Fan Guard Only (ACF60)

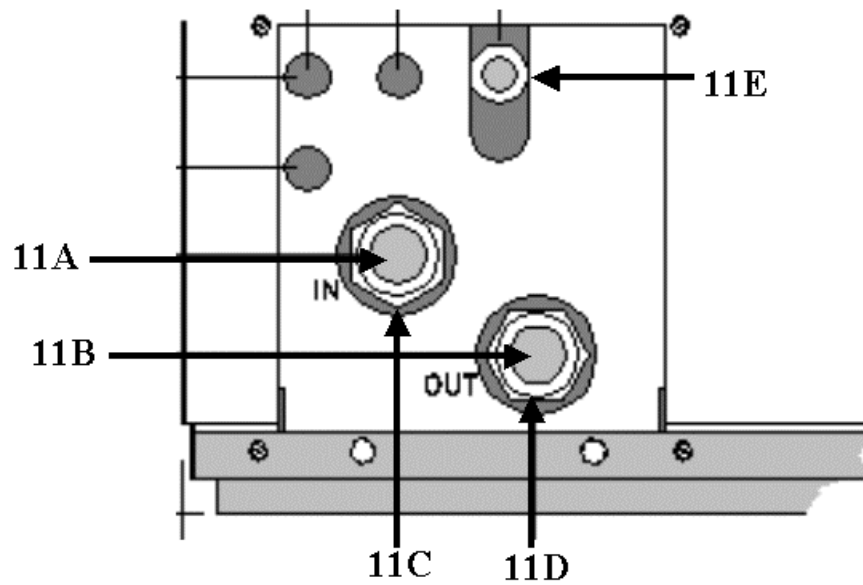
Drawing 3B



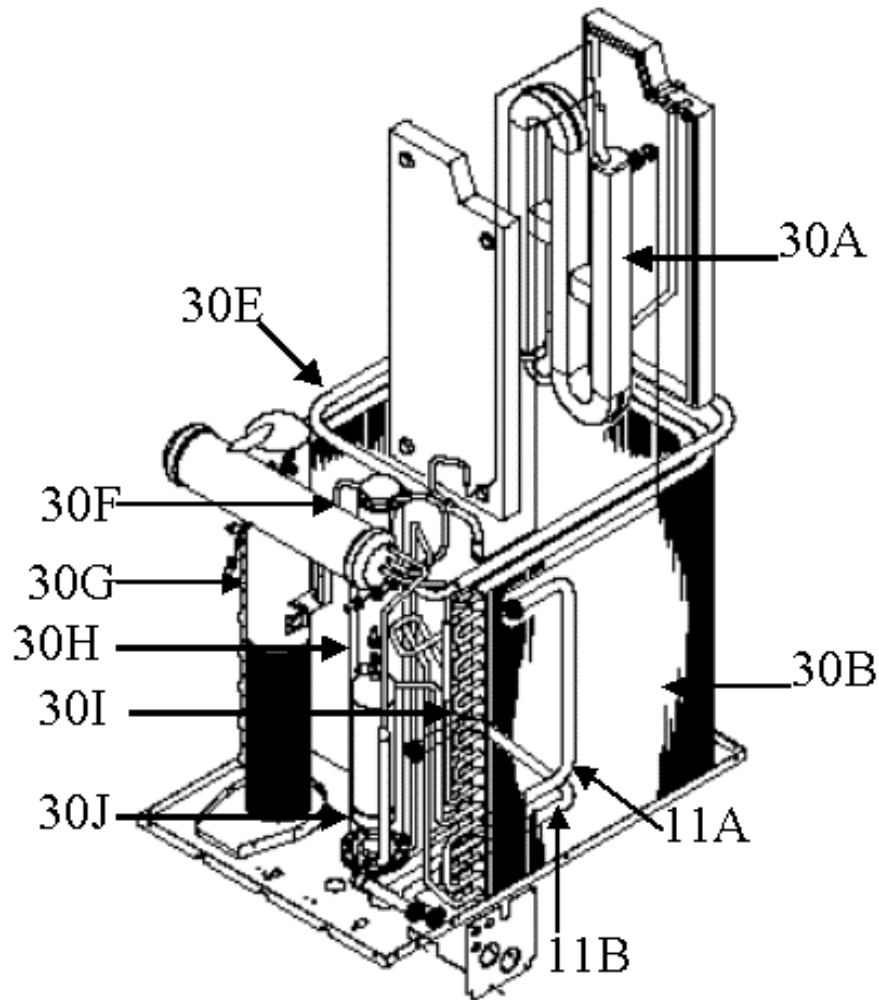
Service Parts For Drawing 1C ACF60 Parts Only

Item	Part Number	Kit Description
11A	16009-753	Inlet Water Line Assembly, Complete To Evaporator
11B	16009-754	Outlet Water Line Assembly, Complete To Evaporator
11C	16009-752	Adapter, Water Lines
11D	16009-751	Gasket, Water Lines
11E	16009-755	Gas Line

Drawing 1C



Sealed System Service Parts (ACF60 Only)



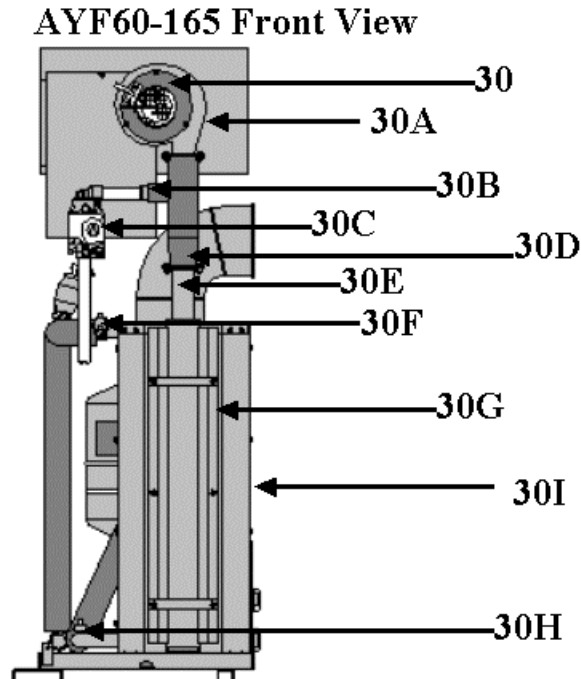
Item	Part Number	Kit Description
30A	19009-173	Evaporator Assembly
30B	19009-172	Condenser Absorber Assembly
	19009-175	Solution Pump Diaphragm Kit
	19009-166	Purge Valve Kit
30E	19009-171	Refrigerant Heat Exchanger
30F	19009-168	Solution Restrictor
30G	19009-167	Generator Assembly
30H	19009-170	Solution Cooled Absorber Assembly
30I	19009-174	Condenser Restrictor
30J	19009-165	Solution Pump Assembly
	19009-169	Evaporator Restrictor
	16009-153	Solution Inhibitor

Mechanical Connector Information

Part Number	Y-12266	Y-12271	Y-12270	
19009-173				
19009-172				
19009-175				
19009-166				
19009-171				
19009-168				
19009-167	4	1		
19009-170				
19009-174				
19009-165	1	1		
19009-169				

Y-12264 ($\frac{1}{4}$ to $\frac{1}{4}$)	Y-12265 ($\frac{1}{2}$ to $\frac{1}{2}$)	Y-12266 ($\frac{1}{4}$ to $\frac{1}{4}$)
Y-12267 ($\frac{3}{4}$ to $\frac{3}{4}$)	Y-12268 ($1\frac{1}{4}$ to $1\frac{1}{4}$)	Y-12269 ($\frac{1}{4}$ to $\frac{1}{4}$ elbow)
Y-12270 ($\frac{1}{2}$ to $\frac{1}{2}$)	Y-12271 ($\frac{1}{2}$ to $\frac{1}{2}$)	Y-12272 ($\frac{3}{4}$ to $\frac{1}{2}$)
Y-12273 ($\frac{1}{4}$ to $\frac{1}{4}$ elbow)	Y-12286 ($\frac{1}{2}$ to $\frac{1}{4}$)	Y-12426 ($\frac{1}{2}$ to $\frac{1}{2}$)

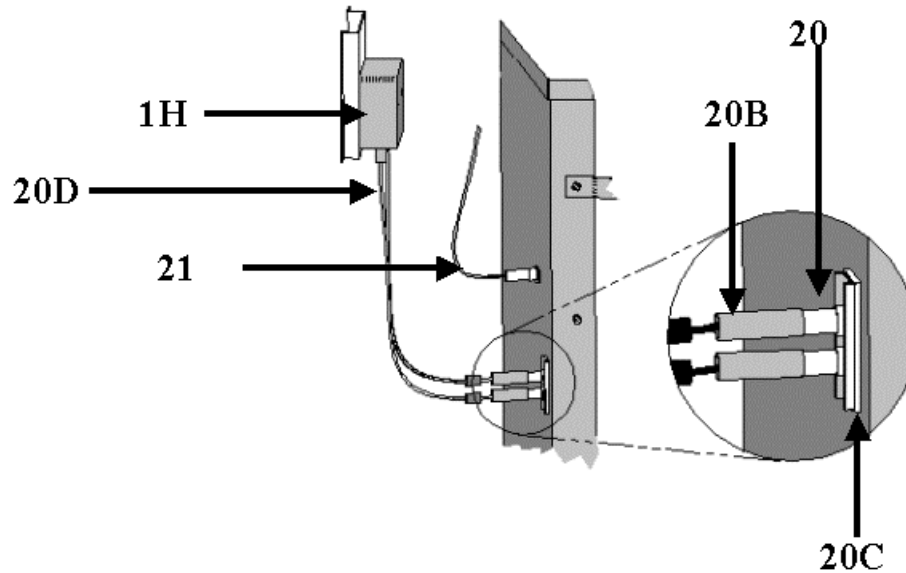
AYF 60-165 Heater Side Parts



Item	Part Number	Kit Description
30A	16009-719	Combustion Blower Assembly (same as chiller side service code 1)
30B	16009-799	Orifice Holder
	16009-803	Orifice, Natural Gas
	16009-802	Orifice, Propane (same as 16009-690 N gas orifice ACF36)
30C	16009-801	Gas Valve, Natural Gas (with kit to convert valve to propane)
30	16009-796	Air Inlet Assembly
	16009-728	Gas Valve Flange
30D	16009-800	Gas/Air Mixing Tube
30E	16009-798	Burner Tube
30F	16009-794	Hot Water Switch
30G	16009-797	Burner Gasket Set (burner to housing and burner to blower)
30H	16009-795	Hi Temperature Switch
30I	16009-810	Front Combustion Chamber
	16009-747	Gas Valve Conversion Kit (natural to propane)

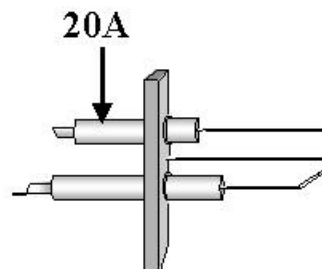
AYF60-165 Ignition Parts

Drawing 2B



1H	16009-715	Ignition Transformer ACF60 (Service Code 1 Only)
20B	16009-714	Anti Spark Insulators (2 per kit)
20	16009-710	Igniter ACF60 (Service Code 1 Only)
20A	16009-629	Electrode Assembly (Service Code 0) Igniter and Flame Sensor *
21	16009-711	Flame Sensor ACF60 (Service Code 1 Only)
20C	16009-712	Igniter Gasket
20D	16009-713	Ignition Cables

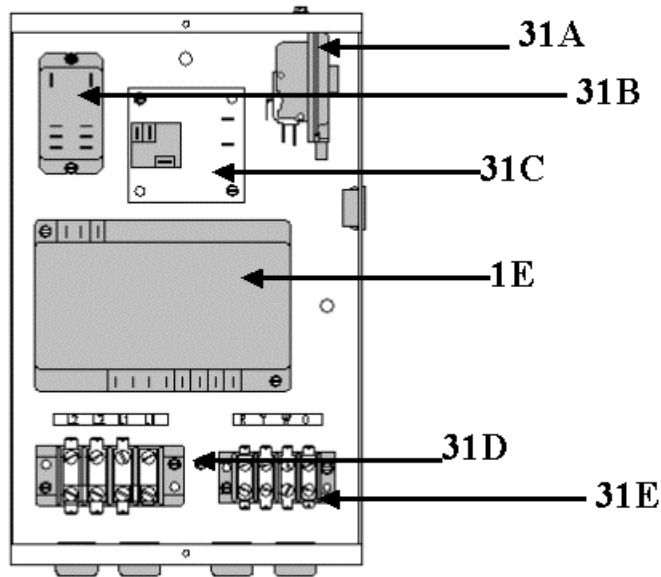
Electrode Assembly (Service Code 0)



Install with Flame Sensor
Pointing Down

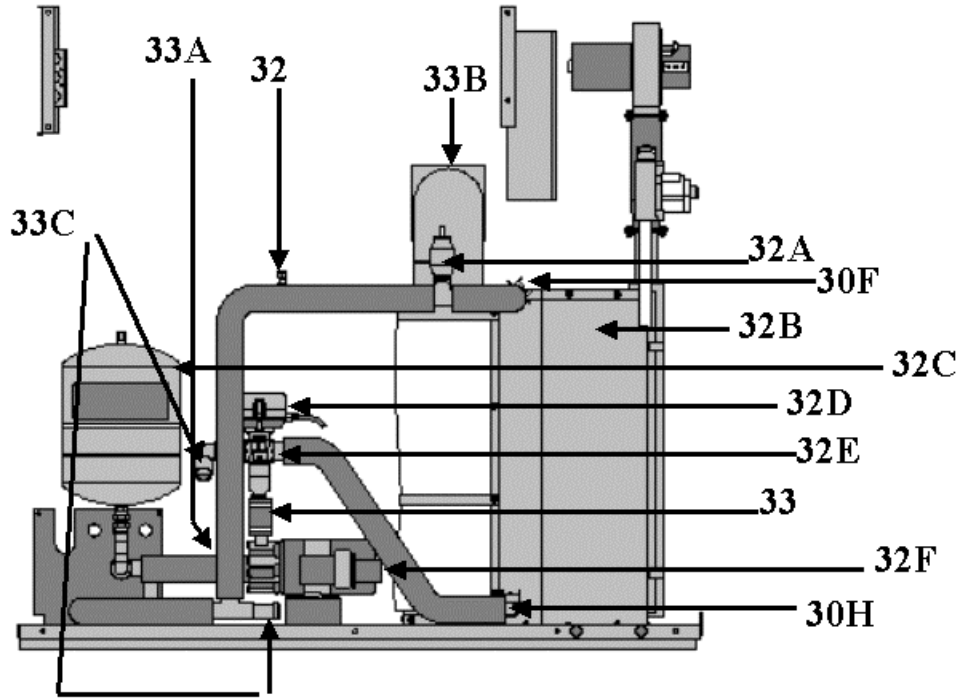
Drawing 2C

AYF60-165 Control Box Parts



Item	Part Number	Kit Description
31A	16009-804	Differential Air Pressure Switch
31B	16009-820	DPDT Control Relay
31C	16009-534	Time Delay (195 sec)
1E	16009-706	Ignition Control Box (same as the chiller side service code1)
31D	16009-805	High Voltage Terminal Block
31E	16009-806	Low Voltage Terminal Block
NS	16009-811	Heater Control Box Wire Harness
NS	16009-812	Chiller To Heater Wire Harness
NS	16009-813	Heater To Junction Box Wire Harness

AYF60 Parts



Item	Part Number	Kit Description
32	16009-819	Air Bleed Manual
32A	16009-462	Hot Water Pressure Relief Valve
30F	16009-794	Hot Water Switch
32B	19009-179	Hot Water Generator
32C	18010-367	Expansion Tank
32D	16009-792	3 Way Valve Actuator
32E	16009-793	3 Way Valve
32F	18010-364	Water Pump
33	16009-362	Pump Outlet Hose
30H	16009-795	High Temperature Limit Switch
33A	16009-364	Pump Inlet Hose
	16009-815	Pump Inlet Hose and Pump Outlet Hose
33B	16009-822	Flue Elbow Assembly Kit With Gasket
	16009-825	Exterior Flue Assembly Kit
33C	16009-814	Hose to Chiller, Inlet or Outlet (may need to trim to fit)