

Service Manual

Sentry System™ Refrigeration Monitor

For Models:
3SWCE, 6SWCE & 8SWCE Wine Cellars
3SBARE, 6SBARE & 8SBARE Beverage Centers
6ORDE & 8ORDE Refrigerated Drawers



life. luxury. marvel.

An AGA Company

SENTRY SYSTEM™ REFRIGERATION MONITOR

Table of Contents

<u>Section</u>	<u>Page</u>
Section 1: Introduction	
1.1 Unit Specifications	1
1.2 Serial Nameplate	1
1.3 Before Servicing	1
1.4 Basic Refrigeration Tools	2
1.5 Installation	2
1.6 Electrical Requirements	2
Section 2: Sealed System	
2.1 Introduction	3
2.2 Low Side Leaks	3
2.3 High Side Leaks	3
2.4 Restricted Capillary Tube	3
2.5 Access Valves	3
2.6 Evaporator Frost Pattern	4
2.7 Pressure and Temperature	4
2.8 Re-charging	5
Section 3: Sealed System Components	
3.1 Access to Mechanical Baseplate	6
3.2 Compressor	7
3.3 Condenser	9
3.4 Evaporator	10
Section 4: System Components	
4.1 Condenser Fan	11
4.2 Thermistors	12
Section 5: User Interface and Sentry System™ Refrigeration Monitor	
5.1 Introduction	14
5.2 Starting the Unit	14
5.3 Setting the Temperature Mode	14
5.4 Adjusting the Temperature Mode	14
5.5 Interior Light and Switch	14
5.6 Sabbath Mode	15
5.7 Warning Alarms	15
5.8 Resetting the Alarms	15
5.9 Show Room Mode	15
5.10 Error Code Detection	16
5.11 Service Diagnostics Mode	16
Section 6: Interior Components	
6.1 Lights	18
6.2 Interior Fan(s)	18
6.3 Racks (for Wine Cellars/Beverage Centers)	18
6.4 Drawers (for Refrigerated Drawers)	19
6.5 Glides (for Refrigerated Drawers)	19
6.6 Divider/Center Section (for Refrigerated Drawers)	19
6.7 Heater Strip (for Refrigerated Drawers)	19
Section 7: Wiring	20
Section 8: Ordering Parts	24
Section 9: Service Parts	25
Section 10: Troubleshooting Guide	74

Section 1: Introduction

1.1 Unit Specifications

The unit specifications will vary among the models listed in this service manual. Refer to Table A below for unit specifications related to the model that you are servicing.

Table A: Wine Cellar, Beverage Center & Refrigerated Drawers Unit Specifications

	Cabinet Dimensions (in)			Weight (lbs)	Electrical Requirements	Power Cord Length (ft)	Com-pressor	Refrigerant Charge (oz)	System Refrigerant Control	Temperature Control	Condenser Fan Motor	Evaporator Fan Motor
	Height	Width	Depth									
3SWCE	34 1/4	14 7/8	23 7/8	130	115VAC/ 60 Hz	7	Piston type	2.8	Capillary tube	Electronic Control with LED display, thermistor input, and Sentry System	2.3 W 1300 RPM	12VDC
3SBARE												
6SWCE	34	23 5/8	24 1/4	166								
6SBARE				172								
8SWCE		29 7/8	24 1/4	170								
8SBARE				195								
6ORDE		29 7/8	24 1/4	170								
8ORDE				195								

1.2 Serial Nameplate

The serial nameplate is located inside of the unit on the upper left hand wall. The serial number will need to be given when inquiring about the unit or ordering parts. See Figure 1.1 below for a sample serial tag with manufacturing date code logic.

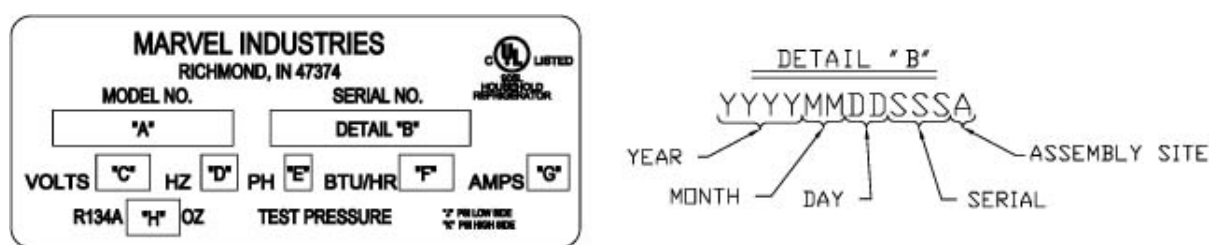


Figure 1.1

1.3 Before Servicing

- Always disconnect power to any Marvel product before attempting to service it. Always verify that power has been disconnected.
- If the unit has been running, use caution around the condenser and copper tubing. These areas may be very hot.
- Use caution around the condenser fins and baseplate edges. These areas are sharp.
- Refrigerant is under high pressure. Always evacuate any system before attempting to open it.
- Reasonable care and safe work methods should be practiced when working on any Marvel product. Never work with energized electrical equipment in wet or damp areas.
- Use an appropriate work area and location when performing repairs. You will find that it is easier to repair undercounter units if they are set on a raised platform or workbench.
- Always wear protective safety glasses and gloves when working on any Marvel product.
- Any refrigerant, whether CFC, HCFC, or HFC (R-12, R-22, or R-134a), must be recovered. Federal regulations prohibit the intentional venting or release of refrigerants during the service repair or disposal of an appliance.

SENTRY SYSTEM™ REFRIGERATION MONITOR

1.4 Basic Refrigeration Tools

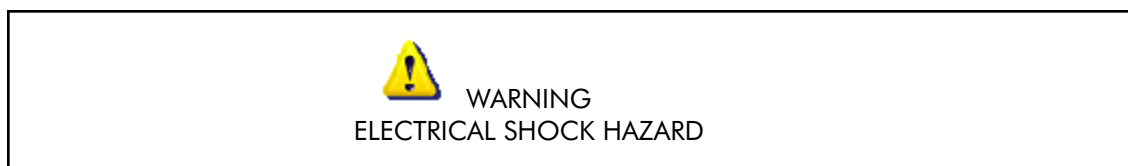
The following list contains some of the tools required for basic refrigeration repairs:

1. Hoses with R-134a couplers (must meet standards for handling R-134a refrigerant)
2. Approved and certified recovery system for R-134a
3. Manifold gage set for R-134a
4. Charging cylinder with R-134a
5. Weight scale (preferably in ounces to the nearest tenth of an ounce)
6. Access valves
7. Small and large tubing cutter
8. Brazing torch
9. Swaging tools
10. Multimeter
11. Leak detection equipment for detection of R-134a
12. Standard hand tools (assorted Phillips and standard screwdrivers, sockets, allen wrenches, adjustable wrenches, etc.)
13. Rivet gun and assorted rivets
14. Drill motor and assorted metal drills

1.5 Installation

- Unit can be installed freestanding or built-in. The front of the unit must be unobstructed for proper air circulation and operation at all times.
- Area should be ventilated and without extreme temperatures.
- Unit must be installed indoors and away from the elements of nature. The unit is not U.L. approved for outdoor use and doing so may void any warranties.
- Unit must be on a LEVEL surface capable of supporting the loaded weight of the unit.

1.6 Electrical Requirements



Failure to follow these requirements could result in personal injury, electrical shock, or fire.

- 115 VAC, 60 Hz., single phase power is needed
- Use an outlet with a 15 amp delayed action fuse or circuit breaker. **DO NOT PUT A FUSE ON THE NEUTRAL OR GROUND OF THE CIRCUIT.**
- Properly grounded outlet is required for this unit.
- It is recommended that a single circuit receptacle be used for this unit only. **DO NOT USE AN EXTENSION CORD.**

Section 2: Sealed System

2.1 Introduction

The following should always be practiced with any sealed system that has been opened. **ONLY OPEN THE SEALED SYSTEM AS A LAST RESORT AND AS A FINAL DIAGNOSIS.** Always check other areas of operation such as wiring, airflow, thermostat, etc. before opening up the sealed system. Many times these areas can resemble sealed system problems. The diagnosis of a sealed system can be determined by accurate pressure and temperature measurements. Also, checking the evaporator frost pattern is a great way to tell if a charge is adequate within a system.

1. Use a leak detection system that will detect R-134a refrigerant. Leaks need to be found on any leaking system **BEFORE** the repair takes place.
2. The drier must be replaced anytime the sealed system is opened. Always use a MARVEL drier. Failure to do so may cause repeated system failure in the future.
3. Limit time the system is opened. **DO NOT EXPOSE THE OPEN SYSTEM FOR MORE THAN 15 MINUTES.** This will result in sealed system failure. Leave replacement parts sealed and/or pressurized until ready to install.
4. The compressor must be replaced if there is a low side leak. Moisture has been drawn into the system if the unit has been running for an extended period of time. Be sure to flush the system with dry nitrogen gas and evacuate to 50 microns before re-charging (see Section 2.2, Low Side Leaks).
5. A new evaporator assembly must be ordered if the capillary tube is found to be plugged or severely restricted. Restrictions cannot be flushed out.
6. Be sure to purge the system with dry nitrogen gas after final brazing. This will flush out any air or moisture that may have entered the system before being absorbed into the ester oil.

2.2 Low Side leaks

Low side leaks consist of a break in the system at the evaporator, low side (suction) return line, or accumulator. If a leak is found in any of these areas, moisture has probably entered the system. The compressor and drier will have to be replaced and the system will need to be flushed thoroughly with nitrogen gas and evacuated to 50 microns before re-charging.

2.3 High Side Leaks

High side leaks consist of a break in the system at the condenser, high side tubing, drier, or capillary tube. If a leak is found in any of these areas, the system can be flushed with nitrogen gas, evacuated to 50 microns, and re-charged.

2.4 Restricted Capillary Tube

Moisture or other contaminants that enter the system can cause deposits in the system. These deposits will usually collect in the capillary tube and form a restriction that cannot be completely removed by flushing. If the capillary tube is found to be restricted, the evaporator, compressor, condenser, and drier should all be replaced.

2.5 Access Valves

A temporary access valve can be used to service or evaluate the system. From these access valves, you can evacuate, charge, and recover the system. The access valve can be installed on the compressor's process tube (this will also be a low pressure side). Be sure to cap off access valve while servicing. This will prevent contamination of the system and/or refrigerant from leaking. After servicing, the access valve should be removed. A pinch-off tool can be used to close the system to remove the access valve and then braze the hole for the access valve to seal the system. Be sure to leak check after brazing.

SENTRY SYSTEM™ REFRIGERATION MONITOR

2.6 Evaporator Frost Pattern

Checking the evaporator frost pattern is a good way to quickly diagnose simple sealed system problems. This can be done by allowing the unit to run (at least 10 minutes) with the door open for at least 5 minutes. This will help speed up the normal frosting of the evaporator plate. By visually inspecting the evaporator and feeling it with your hands, you will see and feel frost across the plate. It is absolutely necessary for the frost to cover the entire evaporator plate. This will ensure the system has been charged to its specified amount or does not have a leak. A partial frost pattern may lead to excessive run times or even 100% run mode. This is because the frost does not reach the area of the evaporator thermistor thus it does not sense the temperature required to cycle the unit off.

2.7 Pressure and Temperature

There are a couple of ways to measure temperature of the evaporator plate:

1. Use a thermocouple to measure the temperature of the evaporator plate. The thermocouple must be secured to the evaporator when taking the measurement.
2. If it has been determined that there is proper contact between the thermistor and evaporator plate, the thermistor resistance value can be corresponded to the temperature (see Table C in Section 4.2, Thermistors for values).

NOTE: The temperature and pressure reading must be taken while the unit is on and running. Use gage pressure readings from the compressor's process tube (low side) access valve.

Table B: Refrigeration Temperature-Pressure Chart for R-134a

Degrees F	Pressure (psi) R-134a	Degrees F	Pressure (psi) R-134a
-12	1.1	36	31.3
-8	2.8	38	33.2
-4	4.5	40	35.1
0	6.5	42	37.0
2	7.5	44	39.1
4	8.5	46	41.1
6	9.6	48	43.3
8	10.8	50	45.5
10	12.0	52	47.7
12	13.1	56	52.3
14	14.4	60	57.5
16	15.7	64	62.7
18	17.0	68	68.3
20	18.4	72	74.2
22	19.9	76	80.3
24	21.4	80	86.8
26	22.9	84	93.6
28	24.5	88	100.7
30	26.1	92	108.2
32	27.8	96	116.1
34	29.5	100	124.3

Pressure will vary depending upon the ambient temperature and current stage of operation for the unit. For example, the unit will have pressure between 0 and 5 psi just before entering the off cycle. Normal running pressures on the low side will average 5 to 10 lbs.

If low side pressure is below pressure in Table B, check for the following:

1. A system leak
2. Capillary tube is restricted
3. Insufficient compressor (does not pump properly)

If low side pressure is above pressure in Table B, check for the following:

1. Restricted air flow
2. Dirty condenser coil
3. Overcharged system
4. Low side leak

2.8 Re-charging

Re-charging of the unit should be done only after diagnosing and repairing the system. Be sure to flush the system with dry nitrogen gas and evacuate to 50 microns before re-charging.

The method for re-charging the unit is by weight using vapor refrigerant. Using manifold gage set-up, hook up charge hoses to the access valve on the compressor's process tube. If any access valve is attached to the high side process tube, remove it and then seal the tube by brazing before charging. Charge the unit to specified amount (see Section 1.1, Unit Specifications for charge specifications per model).

After re-charging the system, check pressures and refer to Table B for corresponding temperatures and pressures. If pressures are incorrect, check the sealed system, recover the charge, repair, evacuate, and then re-charge.

It is normal to have some condensation or slight frost on the suction line. Typically this will occur towards the end of a run cycle. If the frost continues down the suction line to the compressor, the system is overcharged. It is important that the insulation remains on the suction line and the capillary tube together after any repair and that it is sealed on both ends. Be sure to replace the refrigeration putty in the hole of the foam where the refrigerant lines go through the back of the unit. Spread the putty out evenly filling in the cracks to prevent air from leaking in and out.

SENTRY SYSTEM™ REFRIGERATION MONITOR

Section 3: Sealed System Components

3.1 Gaining Access to Mechanical Baseplate

The mechanical baseplate is located in the rear of the unit. Most major mechanical and electrical components on the unit mount directly to the baseplate. This creates easy access for servicing of the sealed system and mechanical/electrical components. To gain access to the mechanical baseplate, remove the screws that hold the lower shroud in place and then remove the shroud (see Figure 3.1). To facilitate working on any component mounted to the mechanical base, remove the screws that hold the baseplate to the chair frame and slide out the baseplate enough to allow working room required (see Figures 3.2 and 3.3).

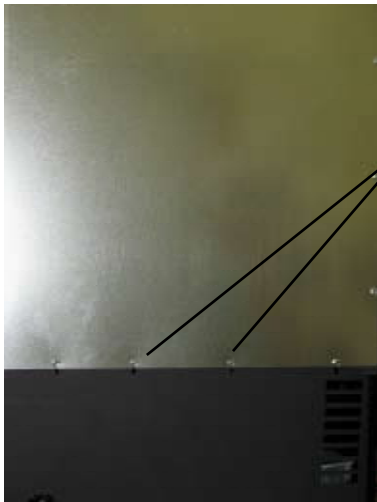


Figure 3.1

Remove screws.

Remove screws securing the mechanical baseplate.



Figure 3.2



Figure 3.3

Slide out the mechanical baseplate.

3.2 Compressor

The compressor is the heart of the refrigeration system (see Figure 3.4). However, it relies on other parts of the system to function. Make certain that the other parts of the system are functioning correctly before determining that the compressor is faulty.

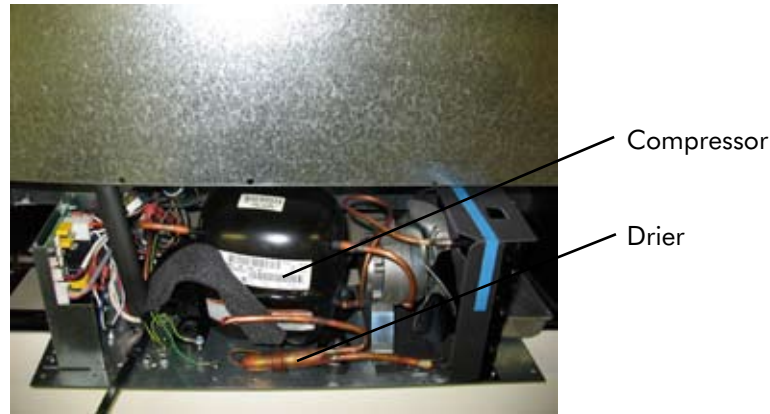


Figure 3.4

The following should be observed before concluding the compressor is faulty:

1. Low high side pressures, warm evaporator plate, cool condenser coil, or little or very low current draw from the unit will indicate a faulty compressor.
2. Check for continuity between the compressor terminals and the shell of the compressor. If continuity is found, the compressor is faulty and will need to be replaced.
3. Check for resistance between all compressor terminals. The resistance will vary from terminal to terminal and from compressor to compressor due to age and use. If no resistance is found, the compressor is faulty and will need to be replaced.

Removing the Compressor:

1. Disconnect power to the unit.
2. Remove the back panel and lower shroud (see Figure 3.1).
3. Remove the screws that hold the baseplate to the chair frame of the unit and slide out the mechanical baseplate (see Figures 3.2 and 3.3).
4. Install sealed system access valve(s) and recover refrigerant. After recovering, be sure to cap off the access valve(s) to prevent contamination of the system.
5. Remove the cap from the rear of the compressor to expose the starter and overload (see Figures 3.5 and 3.6).
6. Disconnect the PTC starter and overload from the compressor by pulling off. Disconnect the wires from the starter and overload.
7. Un-braze and remove capillary tube from drier assembly (see Figure 3.4).
8. Un-braze and remove suction line at compressor (see Figure 3.7).
9. Un-braze high side line from the compressor going to the condenser (see Figure 3.7).
10. Remove compressor by removing the three lock nuts on the mounting plate of the compressor (see Figure 3.7). Lift the compressor off of the carriage bolts.

SENTRY SYSTEM™ REFRIGERATION MONITOR

Installing the Compressor:

1. Install the four rubber grommets in the bottom of the new compressor and install the three sleeves where the carriage bolts will be located. Mount the new compressor and install the three washers and lock nuts and tighten to 45 in-lbs. **DO NOT REMOVE THE RUBBER PLUGS AT THE TUBE STUBS ON THE COMPRESSOR AT THIS TIME.**
2. Install and braze new drier assembly to condenser. Then install and braze capillary tube to drier. Remove the plug for the high side line to condenser. Install and braze the line to the compressor.
3. Remove the plug for the process tube on the compressor. Install and braze process tube. Be sure to cap off end to prevent any contamination.
4. Remove the plug for the suction line on the compressor. Install and braze the suction line from the evaporator. **BE SURE TO ALSO REINSTALL THE SUCTION LINE AND TUBING HARNESS INSULATION TUBES.**
5. Reinstall the PTC starter and overload and wire according to the wiring diagram (see Section 7, Wiring).
6. Reinstall the compressor cap.
7. Reinstall the screws that secure the baseplate to the chair frame of the unit. Be sure to fasten down the ground wire to the baseplate.
8. Charge the unit (see Section 2.8, Re-charging).
9. Reinstall back panel and lower shroud to complete installation.



Figure 3.5



Figure 3.6



Figure 3.7

3.3 Condenser

The condenser is a steel tube serpentine with copper alloy fins that removes heat from hot, high pressure vapor from the compressor (see Figure 3.8). The most common trouble is lack of airflow from either a restricted intake or exhaust opening in the front of the unit. Lint, dust, hair, and dirt build-up needs to be removed from the condenser periodically to allow the unit to perform properly.



Figure 3.8

It is possible that the condenser might need replaced because of an unrepairable leak or a restriction that cannot be flushed out. System high side pressures and temperatures will verify if this is the case.

Removing the Condenser:

1. Disconnect power to the unit.
2. Remove back panel and lower shroud (see Figure 3.1).
3. Remove the screws that hold the baseplate to the chair frame of the unit and slide out the mechanical baseplate (see Figures 3.2 and 3.3).
4. Install sealed system access valve(s) and recover refrigerant. After recovering, be sure to cap off the access valve(s) to prevent contamination of the system.
5. Remove the condenser fan by removing the four screws on the fan mounting bracket at the baseplate. The fan wire leads can be left connected. Set the fan assembly to the side out of the mechanical.
6. Remove the condenser fan shroud.
7. Un-braze capillary tube from drier assembly.
8. Un-braze high side tubing from the compressor.
9. Remove the condenser and drier assembly.

Installing the Condenser:

Reverse the removal procedure for installation (see above). Always install a new drier after opening the sealed system. Be sure to flush the system and evacuate to 50 microns before weight charging. If contamination was found or determined, the evaporator should also be replaced at this time.

SENTRY SYSTEM™ REFRIGERATION MONITOR

3.4 Evaporator

The evaporator uses evaporating refrigerant to remove heat from the inside of the unit ultimately making the interior cold. The shape and size of the evaporator may vary among the models covered by this service manual but the fundamentals are the same (see Figures 3.9, 3.10, and 3.11). The 3SWCE and 3SBARE use a vertical right angle evaporator plate. The 6SWCE also uses a vertical right angle evaporator plate, however, the 6SBARE uses a U-shaped plate. The 8SWCE, 8SBARE, 6ORDE, and 8ORDE all use a multi-purpose evaporator plate.

It is normal for the evaporator to frost up during its run cycle. This frost will dissipate once the unit reaches its “cut out” temperature and the compressor and fan stop. This condensate water will flow to the rear of the machine in a condensate pan where it will be evaporated from compressor and fan heat. It is very important that the evaporator frosts in a uniform pattern across the plate (see Section 2.6, Evaporator Frost Pattern). A partial frost pattern can lead to excessive run times and cooling issues.



Figure 3.9:
Multi-purpose evaporator plate used in the
8SWCE, 8SBARE, 6ORDE & 8ORDE



Figure 3.10:
U-shaped evaporator plate used in the 6SBARE
Typical low charge or system leak on this evaporator
style will have a frost pattern that is only on the left
hand side of the plate, not full across the plate.



Figure 3.11:
Vertical right angle evaporator plate used in the
3SWCE, 3SBARE & 6SWCE

Section 4: System Components

4.1 Condenser Fan

The condenser fan is used to force air over the condenser coil. The fan will cycle on and off with the compressor which means that when the compressor is running so is the fan and when the compressor is not running neither is the fan (see Figure 4.1).



Figure 4.1

To check the condenser fan:

- Make sure the motor shaft turns freely. This can be done by rotating the fan blade by hand and observing any excessive resistance.
- Check for resistance between terminals. If no resistance is found, replace the condenser fan.
- Check for continuity between terminals and fan casing. If continuity is found, replace the condenser fan.
- Check current draw. Typical current draw will be 0.15 amp without fan resistance. If current draw is 0.19 amp or more, check for resistance in air movement or objects touching the fan blade. If this is not found, replace the condenser fan.

Removing the Condenser Fan:

1. Disconnect power to the unit.
2. Remove access panel and rear panel.
3. Remove the grille by removing the screws and disconnecting the wires to the rocker switch. Be sure to mark where these wires go for reassembly.
4. Take out the screws that secure the top of the electrical bracket located in the front of the mechanical area.
5. Remove the screws that secure the baseplate to the cabinet on the bottom of the unit.
6. Gently slide the mechanical out the back of the unit to gain access to the condenser fan.
7. Disconnect the neutral white wire lead (black ribbed wire) and hot wire lead (black smooth wire) from the wire harness.
8. Remove the condenser fan.

Installing the Condenser Fan:

Reverse the removal procedure for installation (see above).

SENTRY SYSTEM™ REFRIGERATION MONITOR

4.2 Thermistors

The wine cellars, beverage centers, and refrigerated drawers utilize two thermistors: one is known as the evaporator thermistor and the other as the display thermistor. Each thermistor has a different function for input to the electronic control.

Evaporator thermistor (part number 41050057):

The evaporator thermistor turns the unit on and off. It is secured to the evaporator or cabinet liner.

Display thermistor (part number 41050058):

The display thermistor is connected to the LED display and displays the temperature inside the unit on the display panel.

The following will happen in the event of one or both thermistors fail:

1. If the evaporator thermistor fails, all loads will be shut off and the unit will not run.
2. If the evaporator thermistor senses temperature outside of 0-140 degrees F, all loads will be shut off and the unit will not run.
3. The display panel will flash E3 for an evaporator thermistor failure and E4 for a display thermistor failure. If both thermistors fail, the error codes will be displayed sequentially. An audible alarm will also sound six times every minute if either one or both thermistors fails.

The thermistor can be checked by use of a multimeter with the ability to read resistance. To check the thermistor:

1. Disconnect and remove thermistor from unit.
2. Use a reference temperature point that is known (such as an ice bath) and measure the resistance across the wire leads.
3. Compare the recorded resistance with Table C.

If measured resistance falls outside the resistance given in Table C within 4% of the value, the thermistor is bad and will need to be replaced.

Table C: Resistance versus Temperature Chart

Temperature (C)	Temperature (F)	Resistance (K-OHMS)
-15	5	11.350
-10	14	8.918
-5	23	6.700
0	32	5.630
5	41	4.520
10	50	3.652
15	59	2.970
20	68	2.430
25	77	2.000

If the thermistor has been tested and is found to be good, check the temperature of the evaporator plate and the resistance of the thermistor. If the temperature of the evaporator plate does not correspond to a proper resistance from the thermistor, check for a proper and secure connection of the thermistor to the evaporator plate bracket.

Removing the Evaporator Thermistor:

1. Disconnect power.
2. Remove back panel and lower shroud.
3. Disconnect the evaporator thermistor connector at the electronic controller.
4. Remove evaporator thermistor by removing the screw securing it.
5. Feed the thermistor wire out through the opening in the back of the unit.

Installing the Evaporator Thermistor:

Reverse the removal procedure for installation (see above).

SENTRY SYSTEM™ REFRIGERATION MONITOR

Section 5: User Interface Panel and Sentry System™ Refrigeration Monitor



Figure 5.1: Glass Door Models



Figure 5.2: Solid Door/Drawer Models

5.1 Introduction

Marvel's exclusive **Sentry System™** refrigeration monitor governs the intuitive user interface panel. The **Sentry System™** informs you if the unit is not working properly through both visual and audible alerts. The LED display panel displays a steady green light when the **Sentry System™** is enabled. See Figures 5.1 and 5.2 above for example user interfaces.

5.2 Starting the Unit

To start the unit, push and hold for five seconds the "ON/OFF" button located on the display panel. Upon turning the unit on, the display will read the actual temperature inside of the unit. If the interior temperature is greater than 99 degrees F, the display will flash 99 until the temperature drops to 99 degrees F.

5.3 Setting the Temperature Mode

The unit can display either Fahrenheit (F) or Celsius (C). To do so, press the "°F/C" button on the display panel.

5.4 Adjusting the Temperature Control

The temperature control is fully adjustable from the low 40s to the mid 60s in the wine cellars and beverage centers. The setpoint out of the factory is approximately 55 degrees F. The temperature control is adjustable from the low 30s to the high 40s in the refrigerated drawers. The setpoint out of the factory is approximately 38 degrees F. The range, whether it be for wine cellars and beverage centers or refrigerated drawers, allows flexibility of temperature preferences and provides the ideal wine aging or food storing temperatures. The temperature can be lowered or raised by first pressing the "SET" button on the display panel. A "SET" icon will be displayed. This icon will turn off 10 seconds after completing the adjustments. Pressing either the "WARMER" or "COLDER" buttons will raise or lower the set temperature by one (1) degree F or C (depending on the setting). NOTE: As with any refrigeration product, there is a slight temperature variance at different locations within the cabinet.

5.5 Interior Light and Switch

For Wine Cellars/Beverage Centers:

The light will automatically turn on when the door is opened and off when the door is closed. To engage the display light feature, press the "LIGHT" button on the display panel. The light will come on and stay on, even with the door closed, until the "LIGHT" button is pressed again.

For Refrigerated Drawers:

The light switch will automatically turn on the light when the drawer(s) is opened and off when the drawer(s) is closed. There are two light switches in each drawer unit: one on the top and one on the bottom. They are both located on the inside left hand of the drawers. In addition to turning the light on and off, the light switches also turn the display panel and interior fan(s) on and off.

5.6 Sabbath Mode

The unit is equipped with a Sabbath Mode of operation. When Sabbath Mode is enabled, the displays, audible alarms, lights, and all options are disabled. The user interface buttons remain enabled with audible key tones disabled.

Enabling Sabbath Mode:

Press and hold the "SET" button while pressing the "**F/C" button seven times within seven seconds. The display will flash "SA" seven times and then the unit will enter Sabbath Mode.

Disabling Sabbath Mode:

Press and hold the "SET" button while pressing the "**F/C" button seven times within seven seconds.

- Sabbath Mode automatically disables after 36 hours.
- A power outage will not disable Sabbath Mode. Disabling can only be accomplished by the automatic time-out or user.
- The display returns to operation prior to Sabbath Mode activation.

5.7 Warning Alarms

The **Sentry System™** refrigeration monitor will inform you if the unit is not functioning properly. It provides both visual and audible alerts if the temperature rises above or falls below the set temperature, if there is a power failure, or if the door is left ajar.

- **Door Ajar:** If the door is left open for more than five (5) minutes, an audible alarm will sound three (3) times every 30 seconds and the LED light will flash green. This will stop as soon as the door is closed.
- **High and Low Temperature:** If the unit reaches a temperature either above or below the set point temperature for more than one (1) hour, an audible alarm will sound six (6) times every minute and the LED will flash red. This will continue until the alarm is reset. The alarm may occur when changing set-points in excess of 10 degrees F and/or high usage which is normal.
- **Power Failure:** If the unit experiences a power failure, the LED will flash amber. This will continue until the alarm is reset. With a power failure, no audible signal is heard. The alarm may occur upon initial installation which is normal since the unit was run at the factory to verify quality.

5.8 Resetting the Alarms

Close door to reset Door Ajar alarm. Press the "ON/OFF" button for approximately one (1) second to reset all other audible and display alarms.

NOTE: Although pressing the "ON/OFF" button will reset the alarms, the alarm will resume if the "alarm condition" still exists.

SENTRY SYSTEM™ REFRIGERATION MONITOR

5.9 Show Room Mode

Show Room Mode is used mainly by salespersons and distributors. When the unit is in Show Room Mode, it will operate as if functioning normally; however, the internal components will not run.

Enabling Show Room Mode:

To enable Show Room Mode, press and hold the "ON/OFF" button while performing a "Power On Reset" (POR), i.e. - disconnect and reconnect the power supply to the unit. When Show Room Mode is enabled, the compressor, condenser fan, internal fan(s), heater, reverse gas solenoid, and alarms are disabled. The display will show the last set point entered.

Disabling Show Room Mode:

To exit Show Room Mode, initiate a "Power On Reset" (POR) only.

5.10 Error Code Detection

The microprocessor in the control continually monitors critical refrigeration system components for proper operation. If component parameters exceed normal operating specifications, an audible alarm will sound six times every minute and the display will automatically flash the respective error code. If multiple errors are noted with the unit, the error codes will be displayed sequentially. See Table D: Error Code Detection Reference for respective error codes descriptions and the potential causes of failure.

Table D: Error Code Detection Reference

Error Code	Error Code Reference	Potential Causes of Failure
E1	Compressor fault (high/low amps)	1. Compressor wires disconnected. 2. Faulty compressor. 3. Faulty control. 4. Faulty compressor overload. 5. Faulty compressor PTC starter.
E2	Condenser fan motor fault (high/low amps)	1. Condenser fan motor wires disconnected. 2. Faulty condenser fan motor. 3. Faulty control.
E3	Evaporator thermistor "sensor B" fault (out-of-range)	1. Disconnected wire causing open. 2. Shorted thermistor wires.
E4	Display thermistor "sensor A" fault (out-of-range)	3. Faulty thermistor.

Resetting Error Codes:

Error Codes can only be reset by disconnecting and reconnecting the power supply to the unit.

5.11 Service Diagnostics Mode

Service Diagnostics Mode allows you to identify the firmware and software versions, test status of "model specific" system components and sensors, and change state of components where applicable (i.e. - compressor on/off, etc...).

Enabling Service Mode:

To enable Service Mode, press and hold the "WARMER" button while pressing the "COLDER" button four times within five seconds.

- You cannot enable Service Mode while in Set Mode.
- All system functions will remain in their current state while in Service Mode.
- Alarms are disabled during Service Mode and reset after exiting Service Mode.
- Service Mode will automatically disable after five minutes of no keypad entry.

SENTRY SYSTEM™ REFRIGERATION MONITOR

After entering Service Mode, the first number that you will see indicates the software model number for the particular unit you are servicing. For example, if you are servicing a 24 inch wine cellar (6SWCE), the first number you will see is 11. See Table E: Software Model Number for corresponding model and software reference.

Table E: Software Model Number

Model	Description	Software Model Number
3SWCE	15 inch Wine Cellar	10
6SWCE	24 inch Wine Cellar	11
8SWCE	30 inch Wine Cellar	12
3SBARE	15 inch Beverage Center	13
6SBARE	24 inch Beverage Center	14
8SBARE	30 inch Beverage Center	15
6ORDE	24 inch Refrigerated Drawers	16
8ORDE	30 inch Refrigerated Drawers	17

The second number you will see indicates the software version release. For example, if you see 39 on the display panel it indicates software version 3.9 and 41 indicates software version 4.1.

Diagnostics:

While in Service Mode, press the “SET” button to step through Tests 0-9. The first digit of the display will show the test number. The second digit indicates the current state of each component under test and is displayed as “1” being ON, CLOSED, or SHORTED and “0” being OFF or OPEN. Tests 0 and 1 reveal an open or shorted condition detected at the sensor inputs. Tests 2 through 6 allow you to turn loads ON with the “WARMER” button and OFF with the “COLDER” button. Tests 7 through 9 verify state change of the door switches and/or magnetic reed sensor. The component tests available are described in Table F: Available Component Tests.

Table F: Available Component Tests

Test #	Component Description	Available Status Indicators		
		OK	Off/Open	On/Shorted
0	Temp Sensor A - Evaporator	0-	00	01
1	Temp Sensor B - Display	1-	10	11
2	Compressor	n/a	20	21
3	Interior/Ice Maker Fan	n/a	30	31
4	Reverse Gas Solenoid	n/a	40	41
5	Condenser Fan	n/a	50	51
6	Mullion Heater	n/a	60	61
7	Door A Sense	n/a	70	71
8	Door B Sense	n/a	80	81
9	Door C Sense	n/a	90	91

Note: Must use magnet to change state of Door C Sense

Disabling Service Mode:

To exit service mode, press and hold the “WARMER” button while pressing the “COLDER” button four times within five seconds.

- Service Mode will automatically disable after five minutes of no keypad entry.

SENTRY SYSTEM™ REFRIGERATION MONITOR

Section 6: Interior Components

6.1 Lights

For Wine Cellars and Beverage Centers:

The wine cellars and beverage centers are equipped with two lights located on the inside top of the cabinet.

Replacing the Lights:

1. Disconnect power to the unit.
2. Remove the bulb from the channel in which it sits. Each light is fit snugly into the channel so you might need to use a screwdriver or knife to help loosen it.
3. Once the bulb is out of the channel, unplug it from the connector and set it aside.
4. Plug the new bulb into the connector and press the bulb snugly into the channel. You might need to press or tap firmly to place the bulb back in the channel.
5. Plug the unit back into the power supply.

For Refrigerated Drawers:

The refrigerated drawers are equipped with two lights: one on the inside top of the drawer and one in the divider.

Replacing the Top Light:

1. Loosen the screws to the control housing. You do not need to remove them.
2. Pull the control housing forward out of the screw slots.
3. Look inside the control housing and remove the wire connector to the light.
4. Press down and out on the LED bulb and lens. You will need to press the release tab on the lens.
5. Remove old bulb and set aside.
6. Insert new bulb and reverse steps 1-4 to complete.

Replacing the Divider Light:

1. Remove screws to the divider section and pull the divider out from the unit.
2. Flip the divider over for easier access to the lens assembly. Be careful not to disturb other wiring inside the unit.
3. Press in on the lens release tabs while simultaneously prying the lens upward using a flat-blade screwdriver. The release tabs are located at the midpoint of the front and rear edge of the lens.
4. Unhook lens from wire connector and remove it from the divider. Discard the lens.
5. Attach wire connector to new lens and snap lens back into place.
6. Reattach divider section to the unit.

6.2 Interior Fan(s)

The interior fan(s) circulate air flow in the unit for heat transfer. The fan(s) turn on when the units are open and turn off when the units are closed. The 6ORDE has one interior fan and the 8ORDE has two interior fans.

6.3 Racks (for Wine Cellars and Beverage Centers)

The number of racks included in the wine cellars and beverage centers covered in this manual varies. Refer to Table G for unit specific rack information.

- DO NOT LEAN ON OR PRESS DOWN HEAVILY ON THE WINE SHELVES. Doing so may damage the shelves and the wine bottles stored on them.
- Pull the wine racks out gently and carefully to minimize unsettling of the wine collection.
- Avoid pulling out more than one rack at any time to maintain stability.

Table G: Unit Specific Rack Reference Table

Model	Width (in)	Number of Racks	Type of Racks
3SWCE	15	6	6 Glide-out Racks
3SBARE	15	4	3 Glide-out Glass Shelves, 1 Glide-out Wine Shelf
6SWCE	24	7	6 Glide-out Racks, 1 Fixed Rack
6SBARE	24	4	2 Glide-out Glass Shelves, 1 Glide-out Wine Shelf, 1 Stationary Wine Rack
8SWCE	30	7	6 Glide-out Racks, 1 Fixed Rack
8SBARE	30	4	2 Glide-out Glass Shelves, 1 Glide-out Wine Rack, 1 Stationary Wine Cradle

NOTE: The glide-out racks require a 90 degree door opening for full rack extension and may be pulled out approximately 14 inches.

6.4 Drawers (for Refrigerated Drawers)

Each drawer unit is equipped with two drawers: a top and a bottom. If necessary, the drawer fronts can be adjusted.

Adjusting the Drawer Fronts:

1. Loosen the screws along the inside perimeter of the drawer.
2. Position drawer as desired.
3. Retighten the screws along the inside perimeter of the drawer.

6.5 Glides (for Refrigerated Drawers)

Each drawer has its own glide that it slides upon when opened or closed. The glides cannot be adjusted and should not be greased or lubed. Each glide should be kept clean. If one or both glides were to become contaminated or dirty, they must be cleaned. Use soap and water to clean them.

6.6 Divider/Center Section (for Refrigerated Drawers)

The divider is the center section of the drawer unit. It separates the top drawer from the bottom drawer. If the divider develops condensation on it, the heater option can be turned on to prevent this from occurring (see Section 6.7, Heater Strip).

6.7 Heater Strip (for Refrigerated Drawers)

The refrigerated drawers ship from the factory with the heater strip unplugged. If the drawers develop condensation on the divider, the heater option can be turned on to stop this from happening.

Turning on the Heater Strip:

1. Remove the front grille.
2. Connect the red and orange wire connectors (in the lower right hand side) together.
3. Reinstall the front grille.

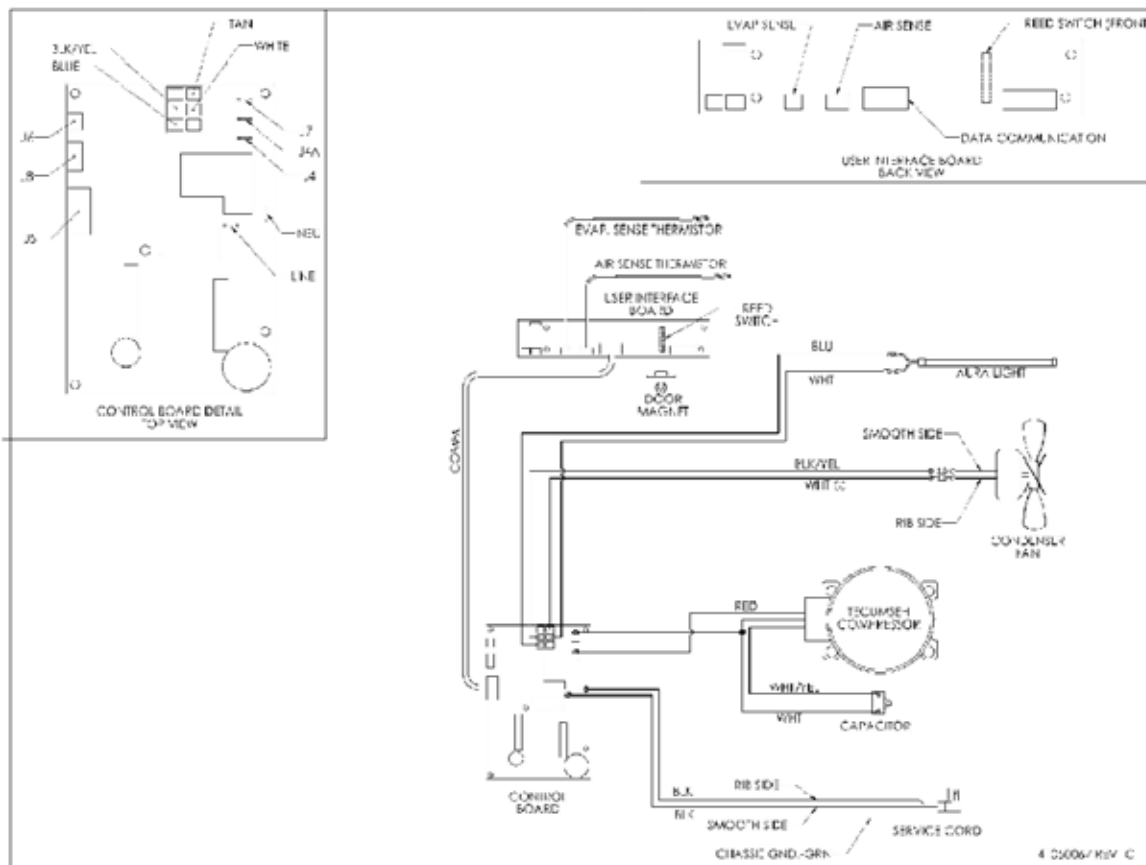
Turning off the Heater Strip:

Reverse the turn on procedure above to turn off the heater strip.

SENTRY SYSTEM™ REFRIGERATION MONITOR

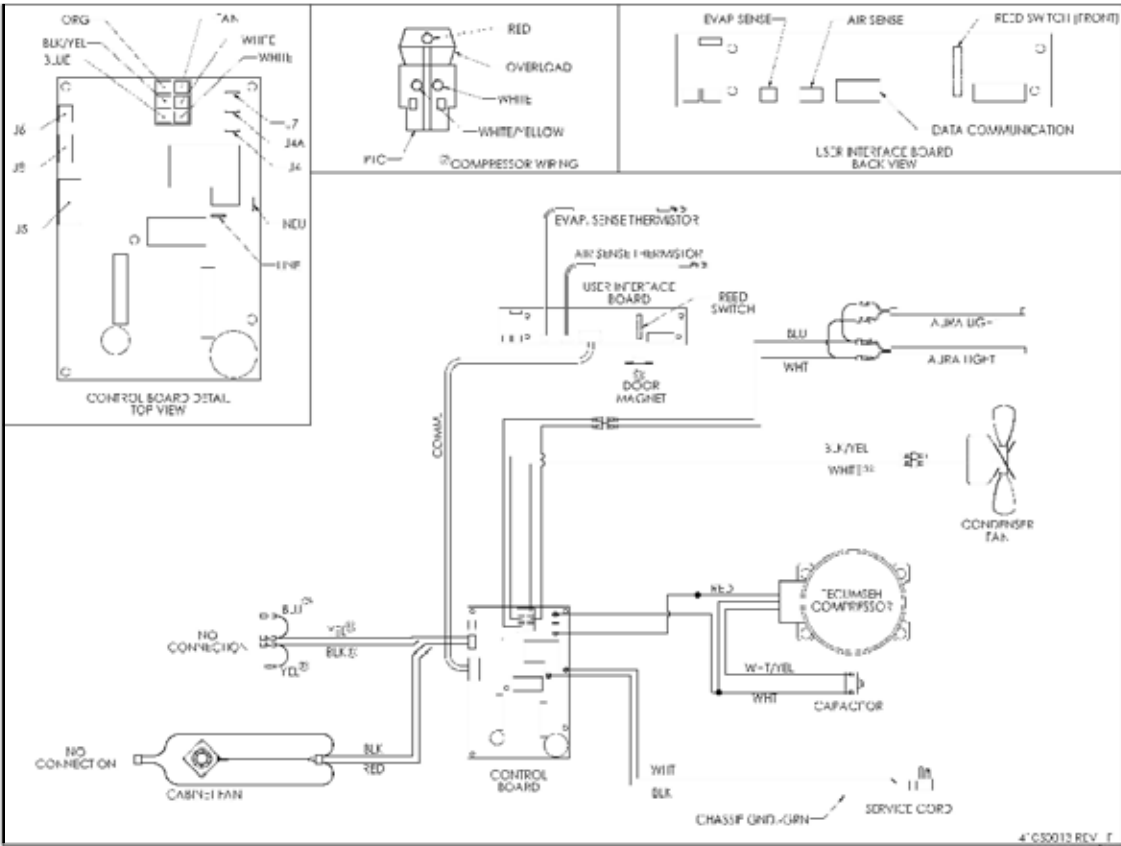
Section 7: Wiring

Figure 7.1 Wiring Diagram for 3SWCE and 3SBARE



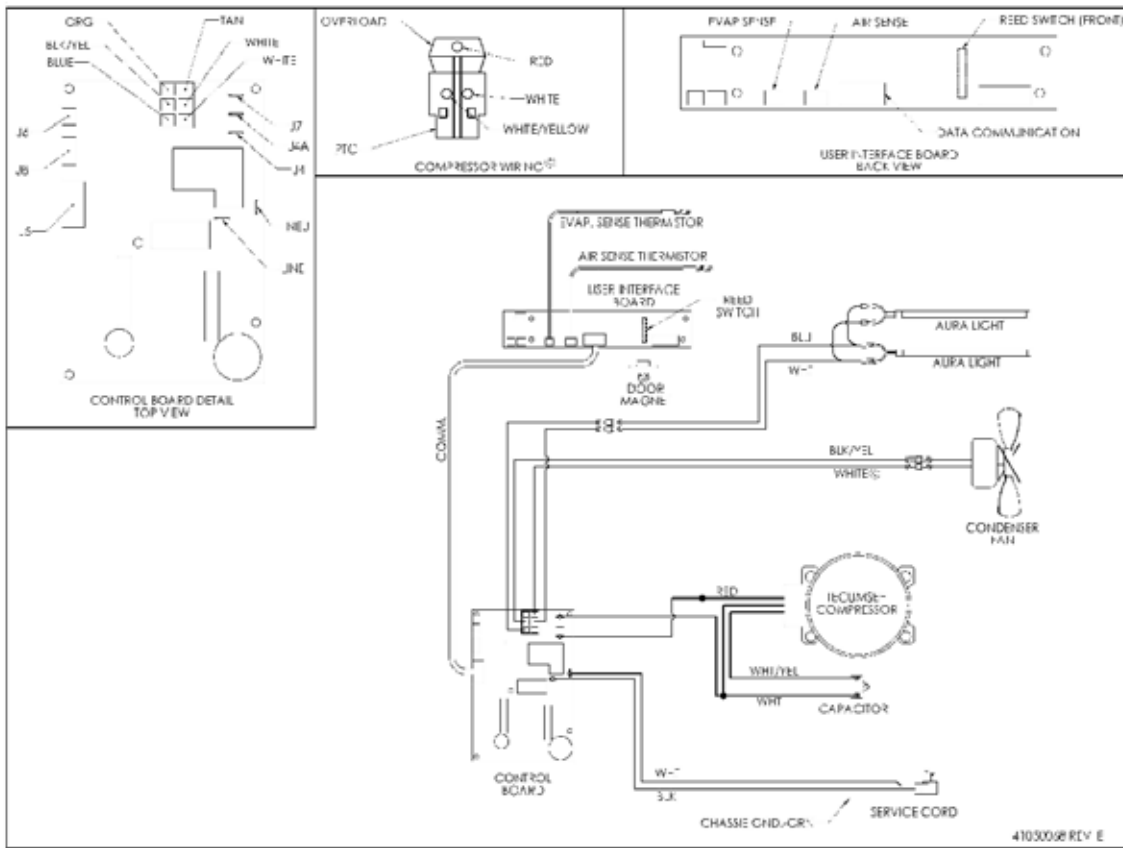
SENTRY SYSTEM™ REFRIGERATION MONITOR

Figure 7.2 Wiring Diagram for 6SWCE, 8SWCE and 8SBARE



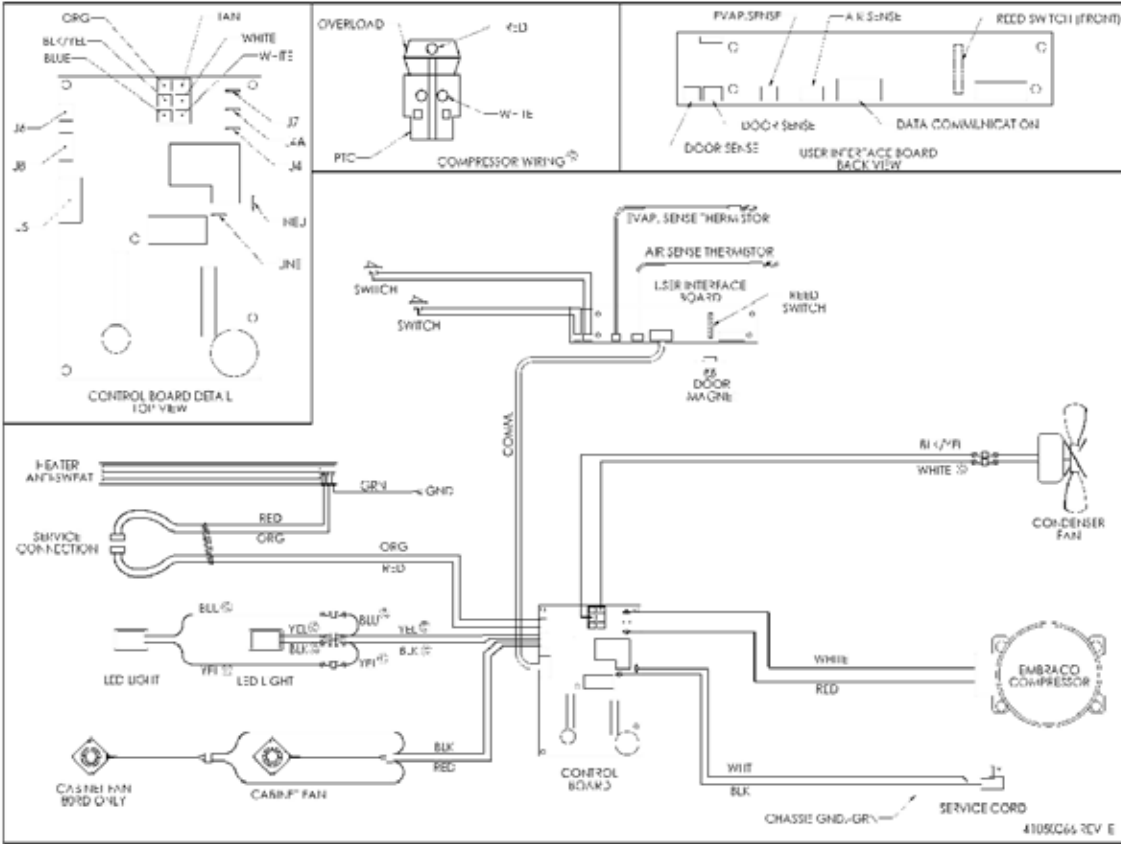
SENTRY SYSTEM™ REFRIGERATION MONITOR

Figure 7.3 Wiring Diagram for 6SBARE



SENTRY SYSTEM™ REFRIGERATION MONITOR

Figure 7.4 Wiring Diagram for 6ORDE and 8ORDE



SENTRY SYSTEM™ REFRIGERATION MONITOR

Section 8: Ordering Parts

The following information will need to be given when inquiring about service parts:

1. Model and serial number located on the serial nameplate (see Section 1.2, Serial Nameplate)
2. Color of the model
3. Metal or plastic grille
4. Type of door

To order parts, call or write:

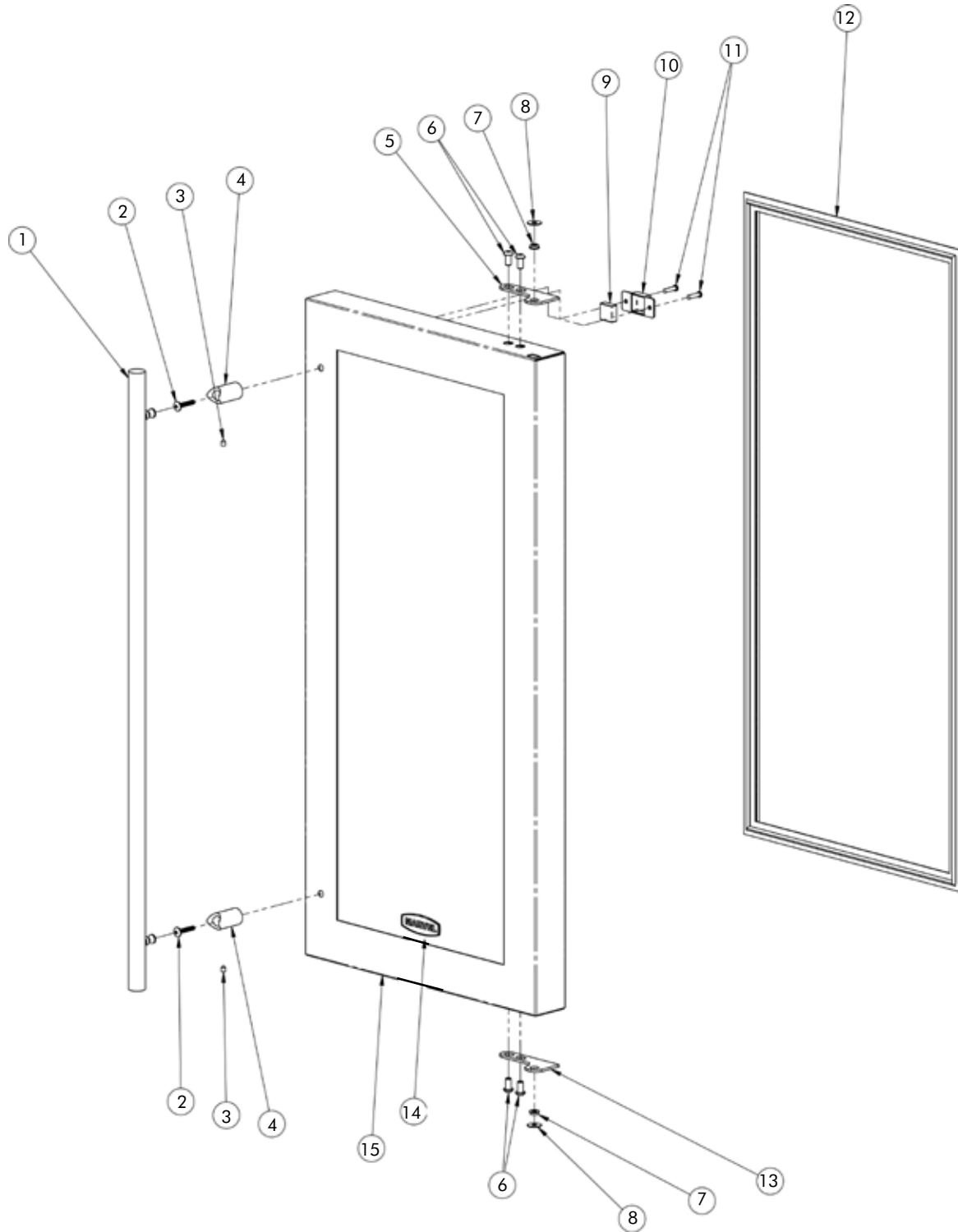
Marvel Industries
Customer Service
P.O. Box 997
Richmond, IN 47375
Phone: 800.428.6644
Fax: 765.962.2493
Website: www.lifeluxurymarvel.com
E-mail: marvel@marvelindustries.com

Section 9: Service Parts

<u>Model</u>	<u>Page</u>
3SWCE	
• Door	26
• Cabinet	28
• Mechanical	30
3SBARE	
• Door	32
• Cabinet	34
• Mechanical	36
6SWCE	
• Door	38
• Cabinet	40
• Mechanical	42
6SBARE	
• Door	44
• Cabinet	46
• Mechanical	48
8SWCE	
• Door	50
• Cabinet	52
• Mechanical	54
8SBARE	
• Door	56
• Cabinet	58
• Mechanical	60
60RDE	
• Door	62
• Cabinet	64
• Mechanical	66
80RDE	
• Door	68
• Cabinet	70
• Mechanical	72

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram One: 3SWCE Door



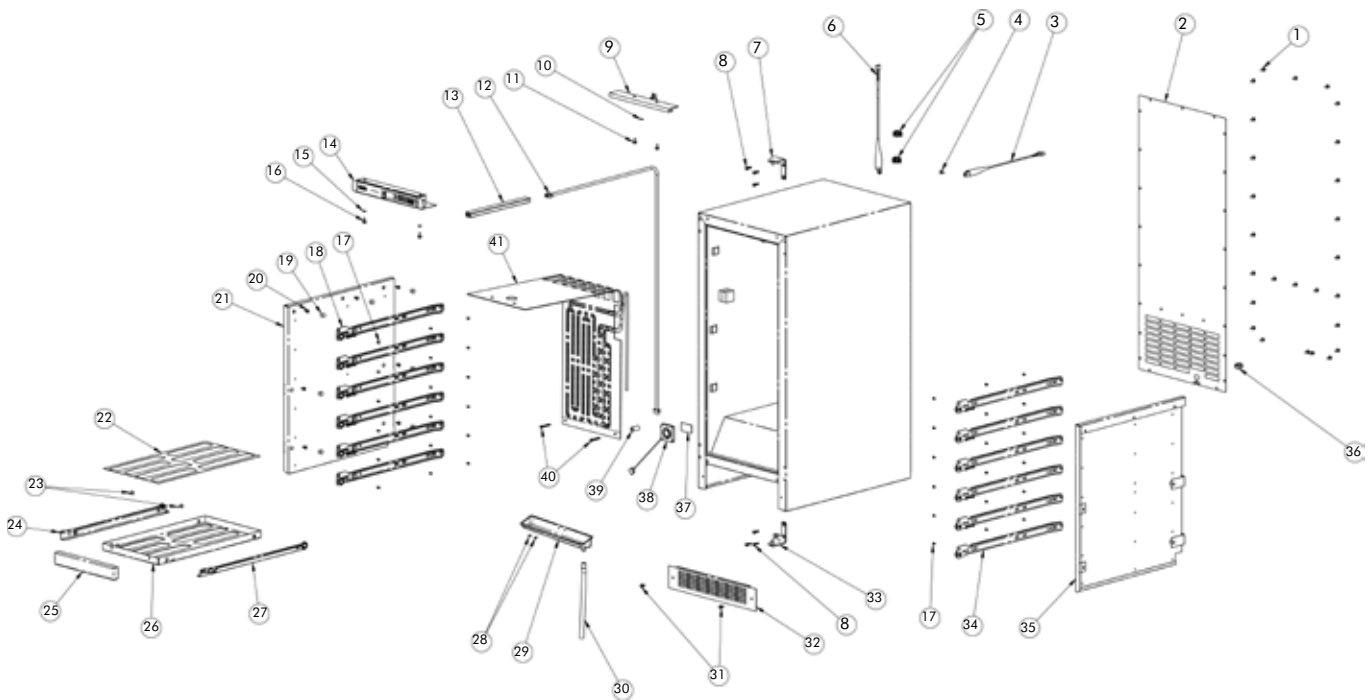
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List One: 3SWCE Door

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1A	Door Handle, ss	1	41005803	42242939
1B	Door Handle, black	1	41007392	42245084
2	#10-32 X 1.00 Pan HD Phil Screw, ss	2	08204920	
3	# 10-32 x 1/4" Cone Point Set Screw	2	41006026	
4A	Door Handle Standoff, ss	2	41005804	42245358
4B	Door Handle Standoff, black	2	41007390	42245356
5A	Hinge Adapter, ss, right, top	1	41007800	42244915
5B	Hinge Adapter, black, right top	1	41008152	42244914
6	Hinge Adapter Screw, ss	4	41009054	42244915
7	Bushing- Hinge	2	41007005	42244914 & 42244915
8	Nylon Washer .62 dia x .083 thk	2	41007003	42244915
9	Door Switch Magnet	1	44000563	42246541
10	Door Switch Magnet Retainer	1	44000562	42246541
11	# 8 x 3/4 PPH TEK, ss, black screw	2	41009947	
12	Door Gasket	1	41006834	42243908
13A	Hinge Adapter, ss, right, bottom	1	41007517	42244915
13B	Hinge Adapter, black, right, bottom	1	41007006	42244914
14	Household Nameplate, black	1	41004477	42243063
15A	Door Assembly, complete, ss	1	42036296	
15B	Door Assembly, complete, black	1	42036332	

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram Two: 3SWCE Cabinet



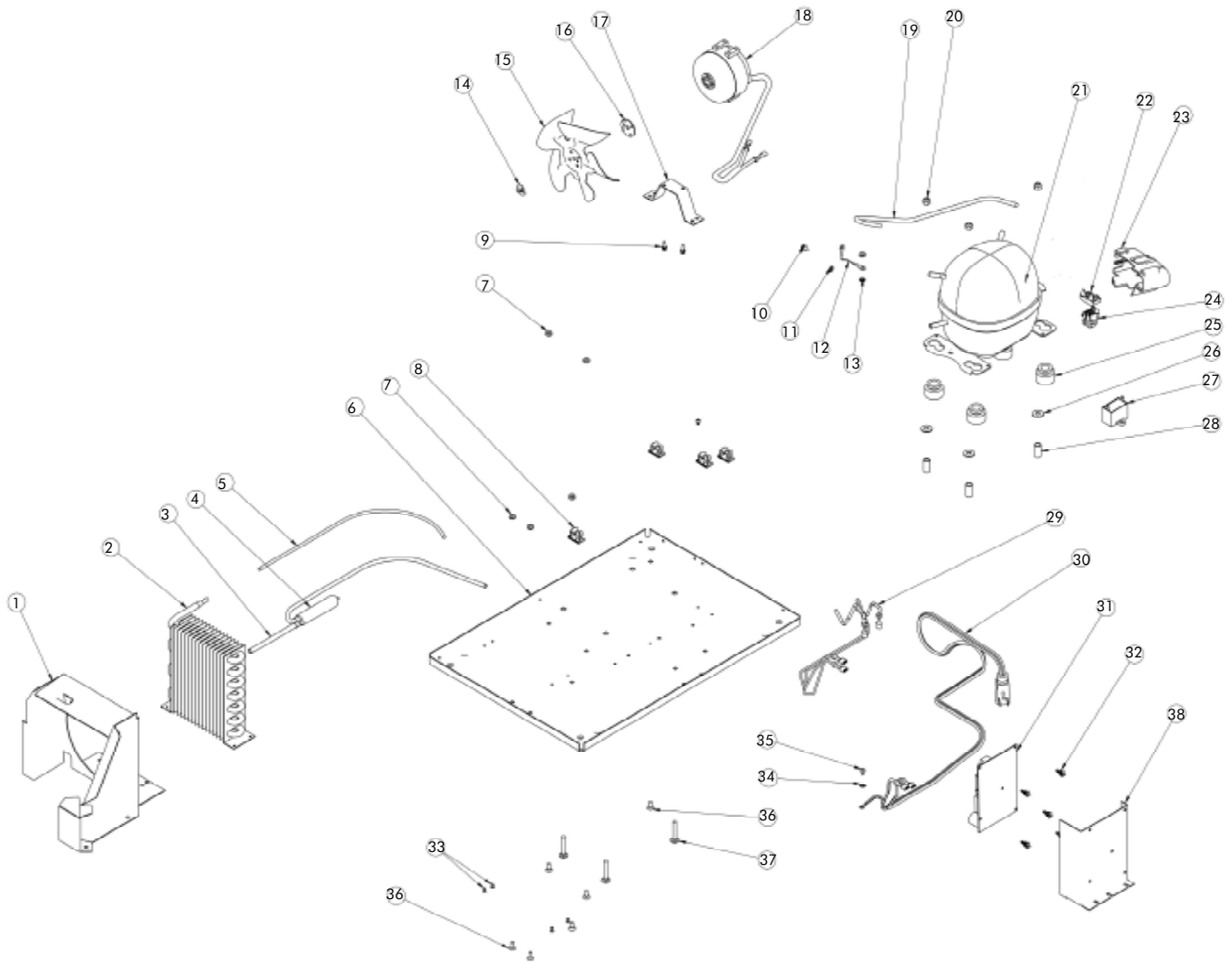
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List Two: 3SWCE Cabinet

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Screw	26	08204928	
2	Back Panel	1	41006763	42245283
3	Display Temp. Sensor	1	41050058	42246463
4	Screw	1	41009312	
5	Fastex Clamps	2	41003685	
6	Air Temp. Sensor	1	41050057	42246462
7	Hinge- right, top, black	1	41007481	
8	Hinge Screws	6	41007599	
9	Light	1	41007164	42245124
10	Washer	1	08205115	
11	Screw	2	08204928	
12	Communication Cable	1	41050010	
13	Wire Conduit	1	41010532	
14	User Interface Display Assembly	1	42416300	
15	User Interface Assembly Washers	2	41010640	
16	User Interface Assembly Screws	2	08204928	
17	Pop Rivets	36	41003962	
18	LH Slide- Bayonet Mount Cabinet, black	6	41009525	42246497
19	Hole Plugs	14	41008380	
20	Shield Screws	14	41006099	
21	LH Shield	1	44000573	
22	Vibration Neutralization Mat	6	44000556	
23	Shelf Screws	12	41010246	
24	LH Slide- Bayonet Mount Shelf, black	6	41009527	42246497
25	Maplewood Shelf Front	6	41008834	
26	Rack, 5th Generation Wine Shelf	6	44000598	
27	RH Slide- Bayonet Mount Shelf, black	6	41009528	42246497
28	Pop Rivets	2	08204930	
29	Drip Tray, black	1	41006858	42244610
30	Drain Tube, black	1	41007166	42244609
31	Grille Screws, black	2	41008206	
32	Grille, black	1	44000596	
33	Hinge- right, bottom, black	1	41007482	
34	RH Slide- Bayonet Mount Cabinet, black	6	41009526	42246497
35	RH Shield	1	44000574	42246497
36	Strain Relief	1	41002562	
37	Double-Sided Tape	1	41007431	42246459
38	Evaporator Fan	1	41050061	42246459
39	Evaporator Spacers	2	41007165	42244612
40	Evaporator Screws	2	44000264	
41	Evaporator	1	42053667	42244612

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram Three: 3SWCE Mechanical



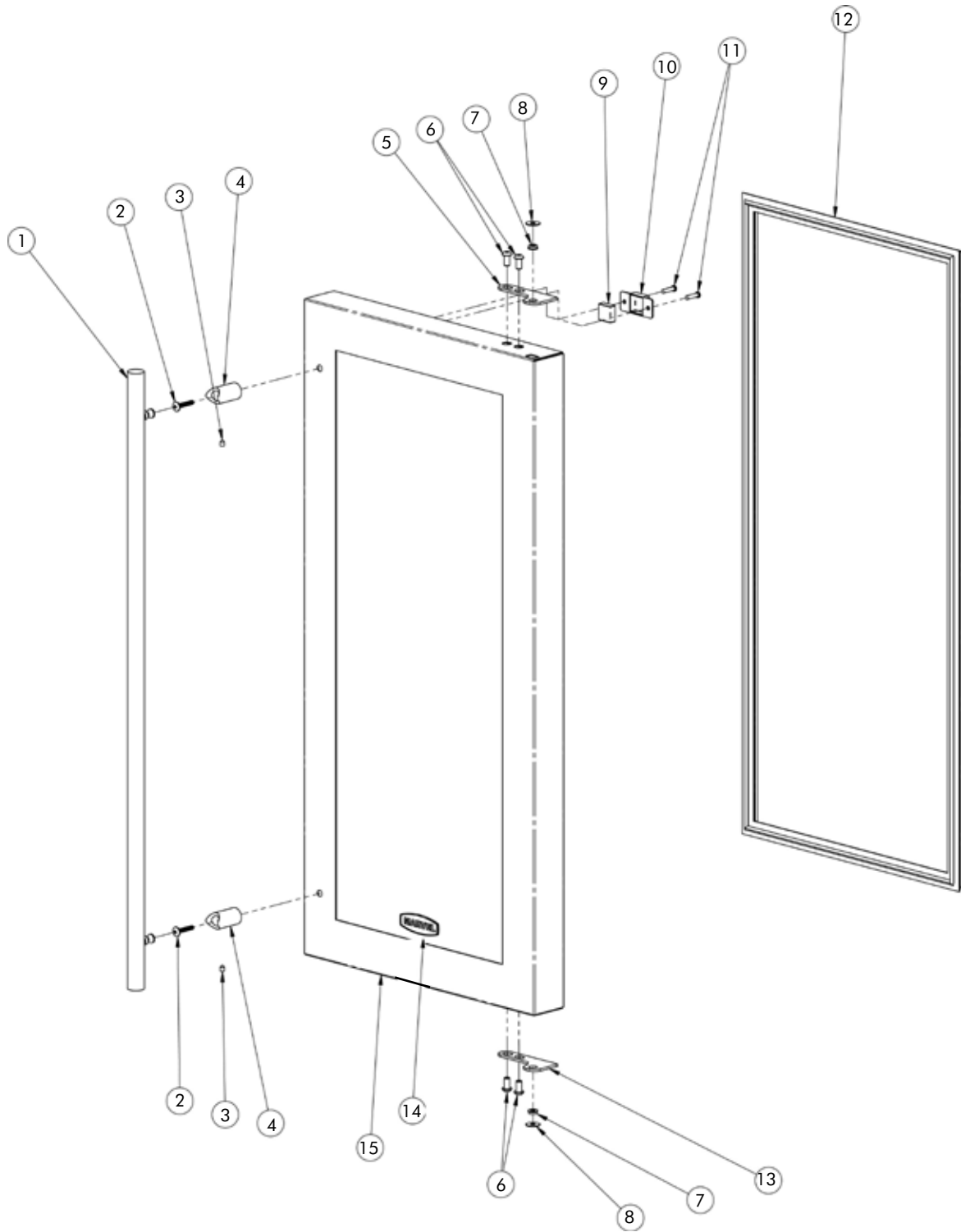
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List Three: 3SWCE Mechanical

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Fan Shroud	1	41005500	42242902
2	Condenser, R134a	1	41003609	42242082
3	Copper Tube	1	41003637	
4	Dryer	1	41001460	42243394
5	Discharge Tube	1	41003636	42244850
6	Mechanical Baseplate	1	41006681	
7	Hex Nuts	6	41006874	
8	Fastex Clamps	4	41003685	
9	Mounting Screws	2	41003221	
10	Screw	1	41005086	
11	Lock Washer	1	08205115	
12	Ground Wire	1	41001401	
13	Lock Washer	1	41005417	42243619
14	Tinnerman Nut	1	41000153	
15	Fan Blade, Morrill	1	41003616	42242015
16	Silencer	1	M000101A	
17	Fan Motor Bracket	1	1010002B	
18	Fan Motor	1	41006539	
19	Process Tube	1	41005794	42242896
20	Lock Nut	3	08205051	
21	Tecumseh Compressor, R134a	1	41007131	42242388
22	Overload	1	41007220	42245133
23	Terminal Cover	1	41007221	42245132
24	PTC Relay	1	41007219	42245131
25	Grommet	4	32014-000	
26	Flat Washer	3	08204877	
27	Run Capacitor	1	41007222	42245134
28	Sleeve	3	32015-000	
29	Wiring Harness	1	41010392	
30	Power Cord	1	1180006B	42241948
31	Main Control	1	41050004	
32	Stand-off	5	44000579	
33	Pop Rivets	4	41003962	
34	Lock Washer	1	08205115	
35	Screws	2	08205051	
36	Carriage Bolts	6	1130006A	
37	Compressor Carriage Bolts	3	44000227	
38	Control Mounting Bracket	1	44000570	

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram One: 3SBARE Door



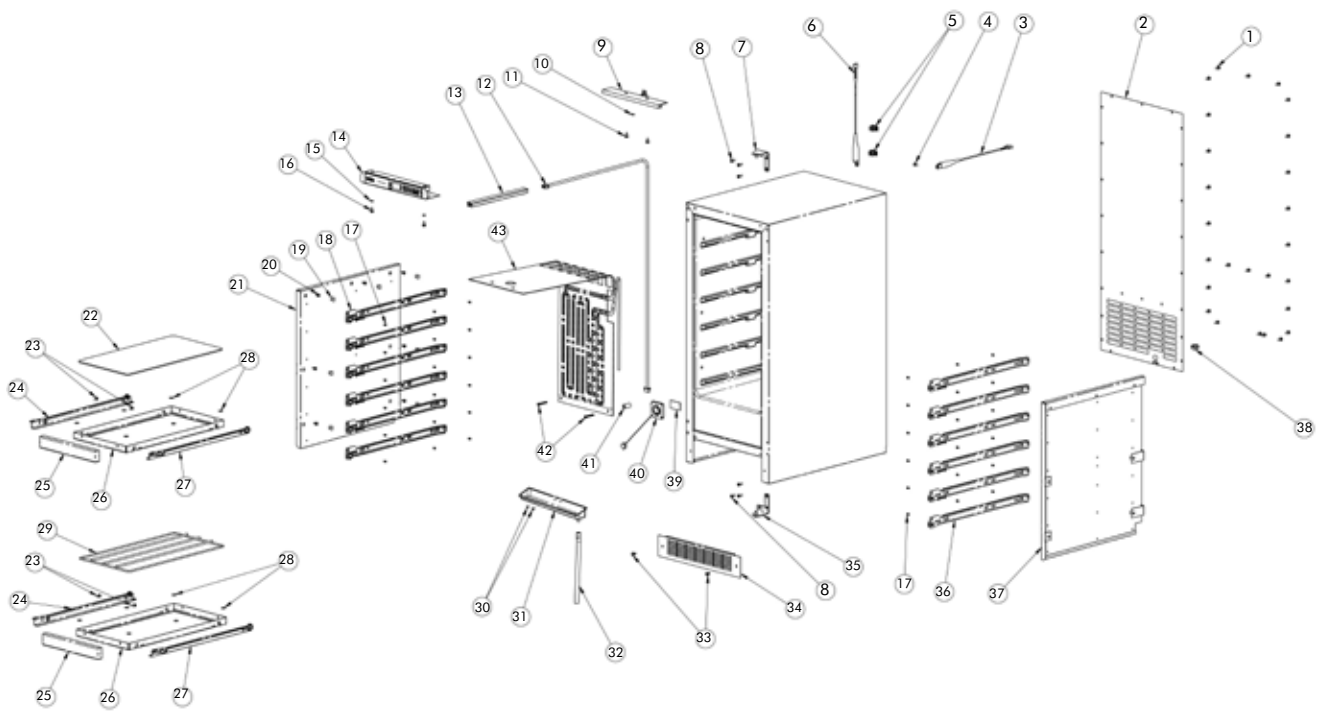
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List One: 3SBARE Door

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1A	Door Handle, ss	1	41005803	42242939
1B	Door Handle, black	1	41007392	42245084
2	#10-32 X 1.00 Pan HD Phil Screw, ss	2	08204920	
3	# 10-32 x 1/4" Cone Point Set Screw	2	41006026	
4A	Door Handle Standoff, ss	2	41005804	42245358
4B	Door Handle Standoff, black	2	41007390	42245356
5A	Hinge Adapter, ss, right, top	1	41007800	42244915
5B	Hinge Adapter, black, right top	1	41008152	42244914
6	Hinge Adapter Screw, ss	4	41009054	42244915
7	Bushing- Hinge	2	41007005	42244914 & 42244915
8	Nylon Washer .62 dia x .083 thk	2	41007003	42244915
9	Door Switch Magnet	1	44000563	42246541
10	Door Switch Magnet Retainer	1	44000562	42246541
11	# 8 x 3/4 PPH TEK, ss, black screw	2	41009947	
12	Door Gasket	1	41006834	42243908
13A	Hinge Adapter, ss, right, bottom	1	41007517	42244915
13B	Hinge Adapter, black, right, bottom	1	41007006	42244914
14	Household Nameplate, black	1	41004477	42243063
15A	Door Assembly, complete, ss	1	42036296	
15B	Door Assembly, complete, black	1	42036332	

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram Two: 3SBARE Cabinet



SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List Two: 3SBARE Cabinet

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Screw	26	08204928	
2	Back Panel	1	41006763	42245283
3	Display Temp. Sensor	1	41050058	42246463
4	Screw	1	41009312	
5	Fastex Clamps	2	41003685	
6	Air Temp. Sensor	1	41050057	42246462
7	Hinge- right, top, black	1	41007481	
8	Hinge Screws	6	41007599	
9	Light	1	41007164	42245124
10	Washer	1	08205115	
11	Screw	2	08204928	
12	Communication Cable	1	41050010	
13	Wire Conduit	1	41010532	
14	User Interface Display Assembly	1	42416300	
15	User Interface Assembly Washers	2	41010640	
16	User Interface Assembly Screws	2	08204928	
17	Pop Rivets	36	41003962	
18	LH Slide- Bayonet Mount Cabinet, black	6	41009525	42246497
19	Hole Plugs	14	41008380	
20	Shield Screws	14	41006099	
21	LH Shield	1	44000573	
22	Glass Insert	3	41009668	
23	Shelf Screws	12	41010246	
24	LH Slide- Bayonet Mount Shelf, black	6	41009527	42246497
25	Maplewood Shelf Front	6	41008834	
26	Rack, 5th Generation Wine Shelf	4	41009516	
27	RH Slide- Bayonet Mount Shelf, black	6	41009528	42246497
28	Square Clear Bumper	24	41009689	
29	Wine Insert	1	41009681	
30	Pop Rivets	2	08204930	
31	Drip Tray, black	1	41006858	42244610
32	Drain Tube, black	1	41007166	42244609
33	Grille Screws, black	2	41008206	
34	Grille, black	1	44000596	
35	Hinge- right, bottom, black	1	41007482	
36	RH Slide- Bayonet Mount Cabinet, black	6	41009526	42246497
37	RH Shield	1	44000574	42246497
38	Strain Relief	1	41002562	
39	Double-Sided Tape	1	41007431	42246459
40	Evaporator Fan	1	41050061	42246459
41	Evaporator Spacers	2	41007165	42244612
42	Evaporator Screws	2	44000264	
43	Evaporator	1	42053667	42244612

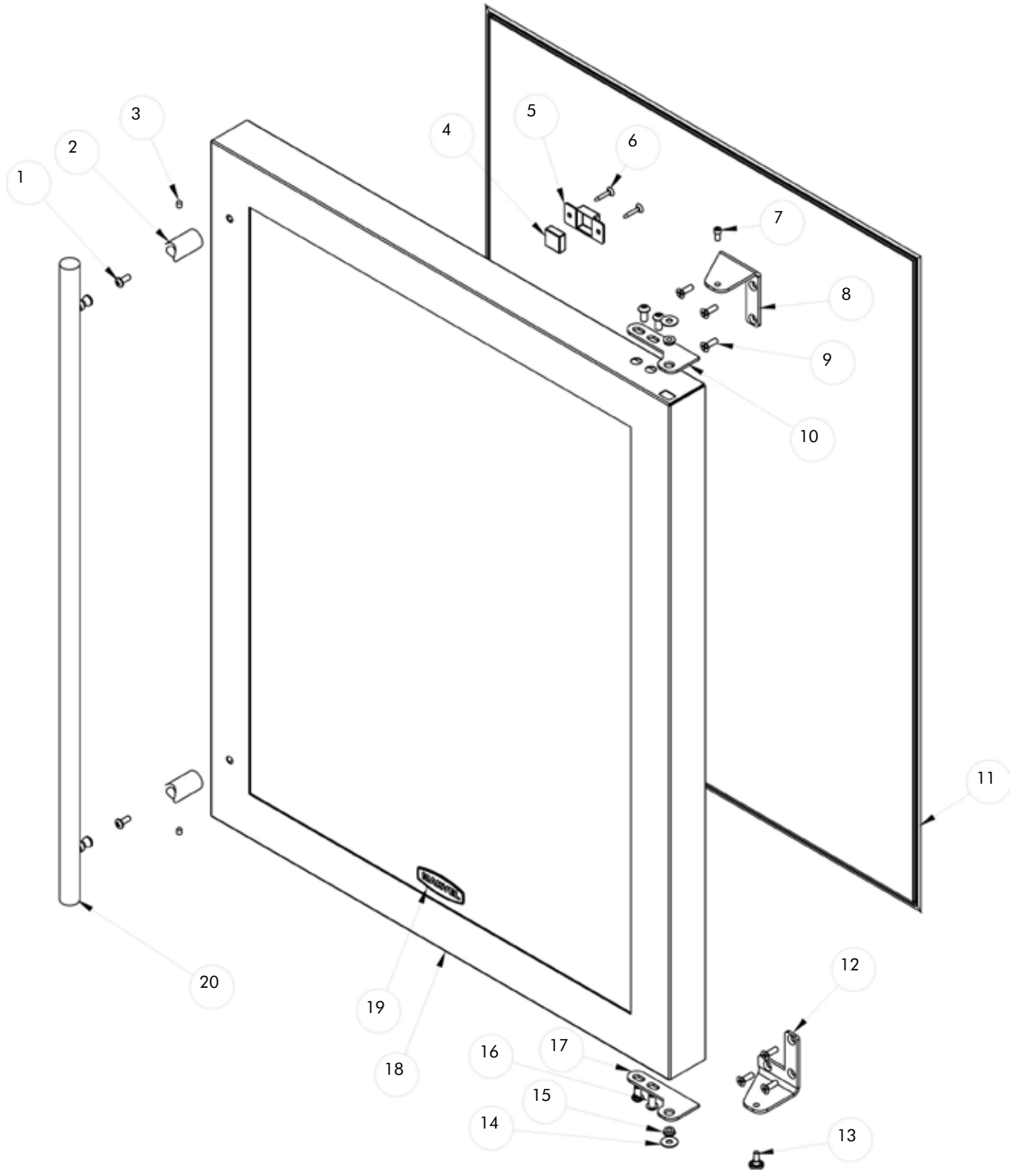
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List Three: 3SBARE Mechanical

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Fan Shroud	1	41005500	42242902
2	Condenser, R134a	1	41003609	42242082
3	Copper Tube	1	41003637	
4	Dryer	1	41001460	42243394
5	Discharge Tube	1	41003636	42244850
6	Mechanical Baseplate	1	41006681	
7	Hex Nuts	6	41006874	
8	Fastex Clamps	4	41003685	
9	Mounting Screws	2	41003221	
10	Screw	1	41005086	
11	Lock Washer	1	08205115	
12	Ground Wire	1	41001401	
13	Lock Washer	1	41005417	42243619
14	Tinnerman Nut	1	41000153	
15	Fan Blade, Morrill	1	41003616	42242015
16	Silencer	1	M000101A	
17	Fan Motor Bracket	1	1010002B	
18	Fan Motor	1	41006539	
19	Process Tube	1	41005794	42242896
20	Lock Nut	3	08205051	
21	Tecumseh Compressor, R134a	1	41007131	42242388
22	Overload	1	41007220	42245133
23	Terminal Cover	1	41007221	42245132
24	PTC Relay	1	41007219	42245131
25	Grommet	4	32014-000	
26	Flat Washer	3	08204877	
27	Run Capacitor	1	41007222	42245134
28	Sleeve	3	32015-000	
29	Wiring Harness	1	41010392	
30	Power Cord	1	1180006B	42241948
31	Main Control	1	41050004	
32	Stand-off	5	44000579	
33	Pop Rivets	4	41003962	
34	Lock Washer	1	08205115	
35	Screws	2	08205051	
36	Carriage Bolts	6	1130006A	
37	Compressor Carriage Bolts	3	44000227	
38	Control Mounting Bracket	1	44000570	

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram One: 6SWCE Door



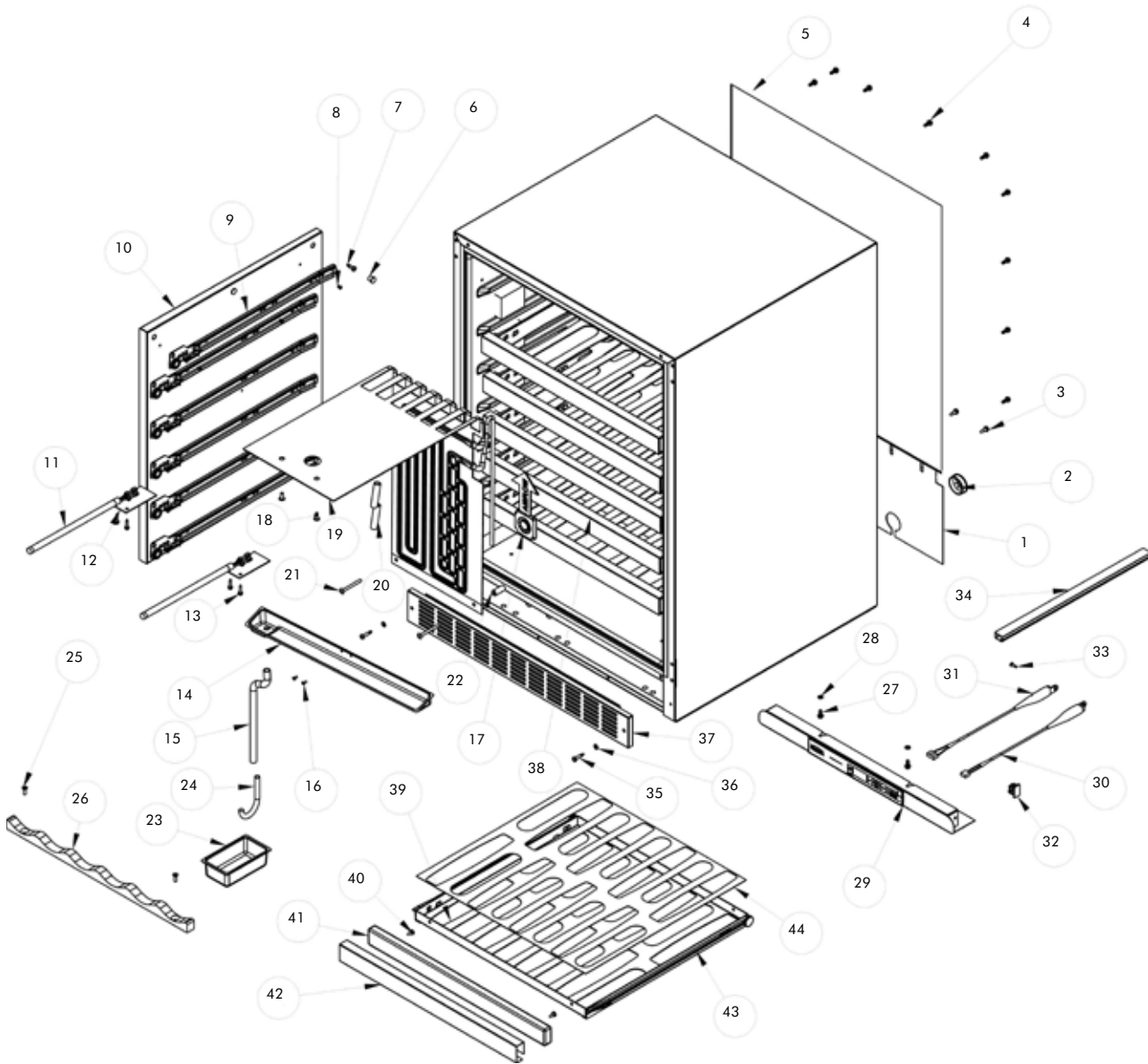
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List One: 6SWCE Door

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Screw	2	08204920	
2A	Standoff, black	2	41007390	
2B	Standoff, white	2	41007389	
2C	Standoff, ss	2	41005804	
3	Set Screw	2	41006026	
4	Magnet	1	44000563	
5A	Magnet Retainer, black	1	44000562	
5B	Magnet Retainer, white	1	41010551	
6A	Screw, black	2	41007520	
6B	Screw, white	2	41007521	
7	Hinge Pin, top	1	41004106	
8A	Standard Hinge, RT, black	1	41007481	
8B	Standard Hinge, RT, white	1	41007483	
8C	Standard Hinge, RT, chrome	1	41007433	
8D	Standard Hinge, RT, ss	1	1010045C	
9A	Hinge Screw, black	6	41007599	
9B	Hinge Screw, white	6	41007600	
9C	Hinge Screw, zinc	6	41007598	
9D	Hinge Screw, ss	6	41010417	
10A	Hinge Adapter, RT, black	1	41008152	
10B	Hinge Adapter, RT, white	1	41008153	
10C	Hinge Adapter, RT, ss	1	41007800	
11A	Gasket, black	1	41006386	
11B	Gasket, white	1	41001220	
12A	Standard Hinge, RB, black	1	41007482	
12B	Standard Hinge, RB, white	1	41007484	
12C	Standard Hinge, RB, chrome	1	41007434	
12D	Standard Hinge, RB, ss	1	1010046C	
13A	Hinge Pin, black	1	41007376	
13B	Hinge Pin, white	1	41007375	
13C	Hinge Pin, zinc	1	41001355	
14	Nylon Spacer	2	41007003	
15	Hinge Bushing	2	41007005	
16A	Hinge Adapter Screw, black	4	41009053	
16B	Hinge Adapter Screw, white	4	41009409	
16C	Hinge Adapter Screw, ss	4	41009054	
17A	Hinge Adapter, RB, black	1	41007006	
17B	Hinge Adapter, RB, white	1	41007515	
17C	Hinge Adapter, RB, ss	1	41007517	
18A	Door Assembly, black	1	42036360	
18B	Door Assembly, white	1	42036416	
18C	Door Assembly, ss	1	42036336	
19	Household Nameplate, black	1	41004477	42243063
20A	Handle, black	1	41007392	
20B	Handle, white	1	41007391	
20C	Handle, ss	1	41005803	

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram Two: 6SWCE Cabinet



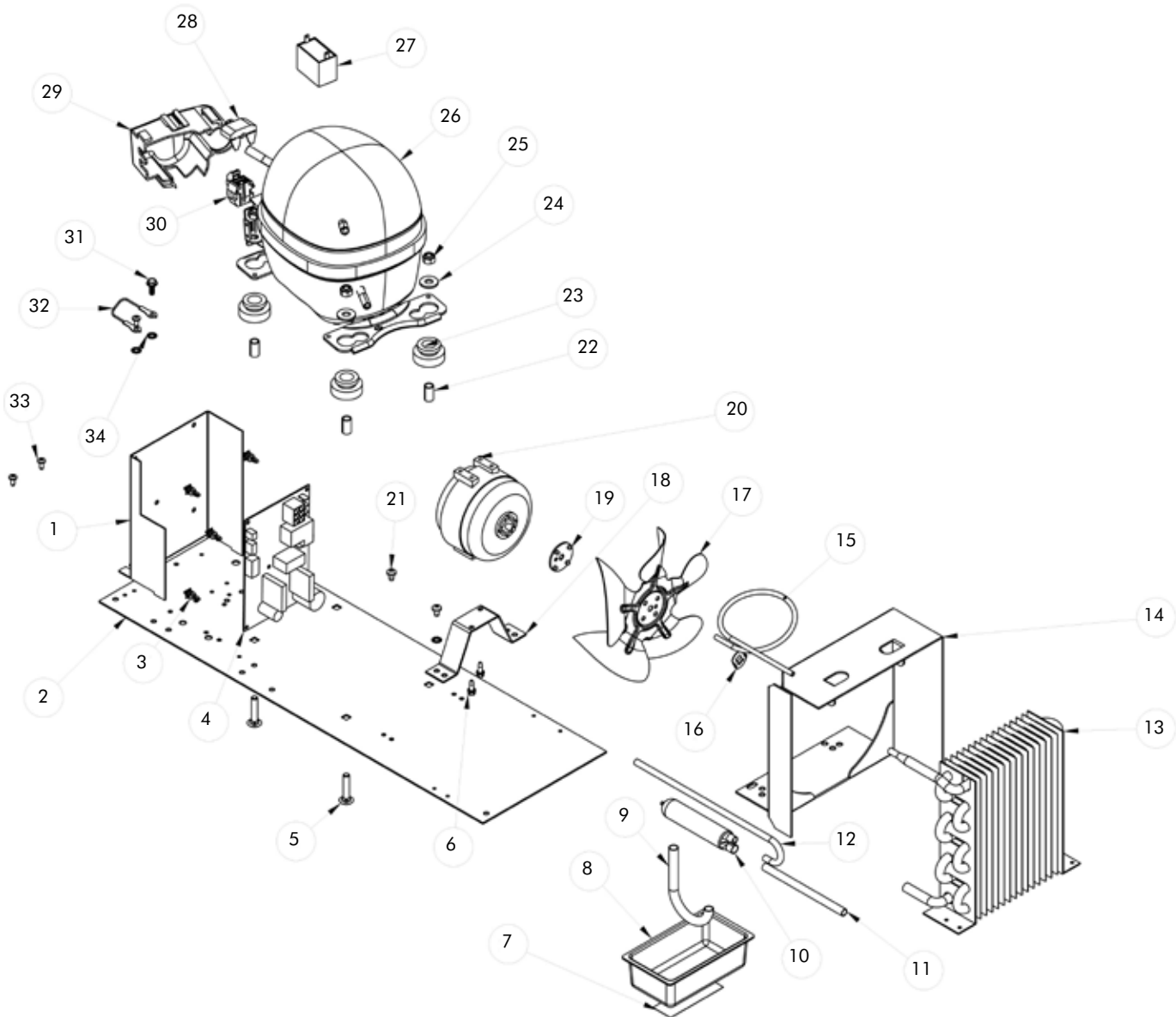
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List Two: 6SWCE Cabinet

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Back Shroud	1	41010587	
2	Bushing	1	41008532	
3	Screws	5	08204928	
4	Screws	12	08204928	
5	Back Panel	1	41000396	
6	Heyco #2618, black	4	41008380	
7	Screws	12	41009036	
8	Medium Long Steel Rivets	36	41003962	
9A	Bayonet Mount Slide, LH, black	6	41009525	
9B	Bayonet Mount Slide, RH, black	6	41009526	
10A	Liner Shield, LH, black	1	41010398	
10B	Liner Shield, RH, black	1	41010399	
11	Lights	2	41007501	
12	Light Cover, black	2	41008857	
13	Screws	4	41008858	
14	Drip Tray, black	1	41006402	
15	Drain Tube, black	1	41007166	
16	Pop Rivets	2	08204930	
17	Assembly Fan	1	41050061	
18	Machine Screws, ss	2	41004079	
19	Evaporator Assembly, black	1	4205338A	
20	Cap, black	2	41006405	
21	Machine Screws, ss	2	08204902	
22	Spacer, black	2	41007165	
23	Drip Pan	1	41003667	
24	"J" Trap	1	41003857	
25	Hinge Screws	2	41007598	
26	Bottle Cradle	1	41007590	
27	Screws	2	41007239	
28	Lock Washers, ss	2	41010640	
29	User Interface Assembly, black	1	42416301	
30	Air Temp. Sensor	1	41050057	42246462
31	Display Temp. Sensor	1	41050058	42246463
32	Fastex Clamps	2	41003685	
33	Screws, ss	1	41009312	
34	Conduit	1	41009292	
35A	Grille Screws, ss	2	41006801	
35B	Grille Screws, black	2	41008206	
36	Lock Washers, ss	2	41006775	
37A	Grille, ss	1	41010620	
37B	Grille, black	1	41005059	
38A	5th Generation Wine Rack Assembly, NSF, black	6	42136313	
38B	5th Generation Wine Rack Assembly, SSF, black	6	42136363	
39	5th Generation Wine Rack, black	1	41010402	
40	Screws	2	41010246	
41	Wine Rack Wood Front	1	41008275	
42	Wine Rack Front Cover, ss	1	41008276	
43A	Slide, RH, black	1	41009528	
43B	Slide, LH, black	1	41009527	
44	Wine Rack Mat, black	1	44000557	

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram Three: 6SWCE Mechanical



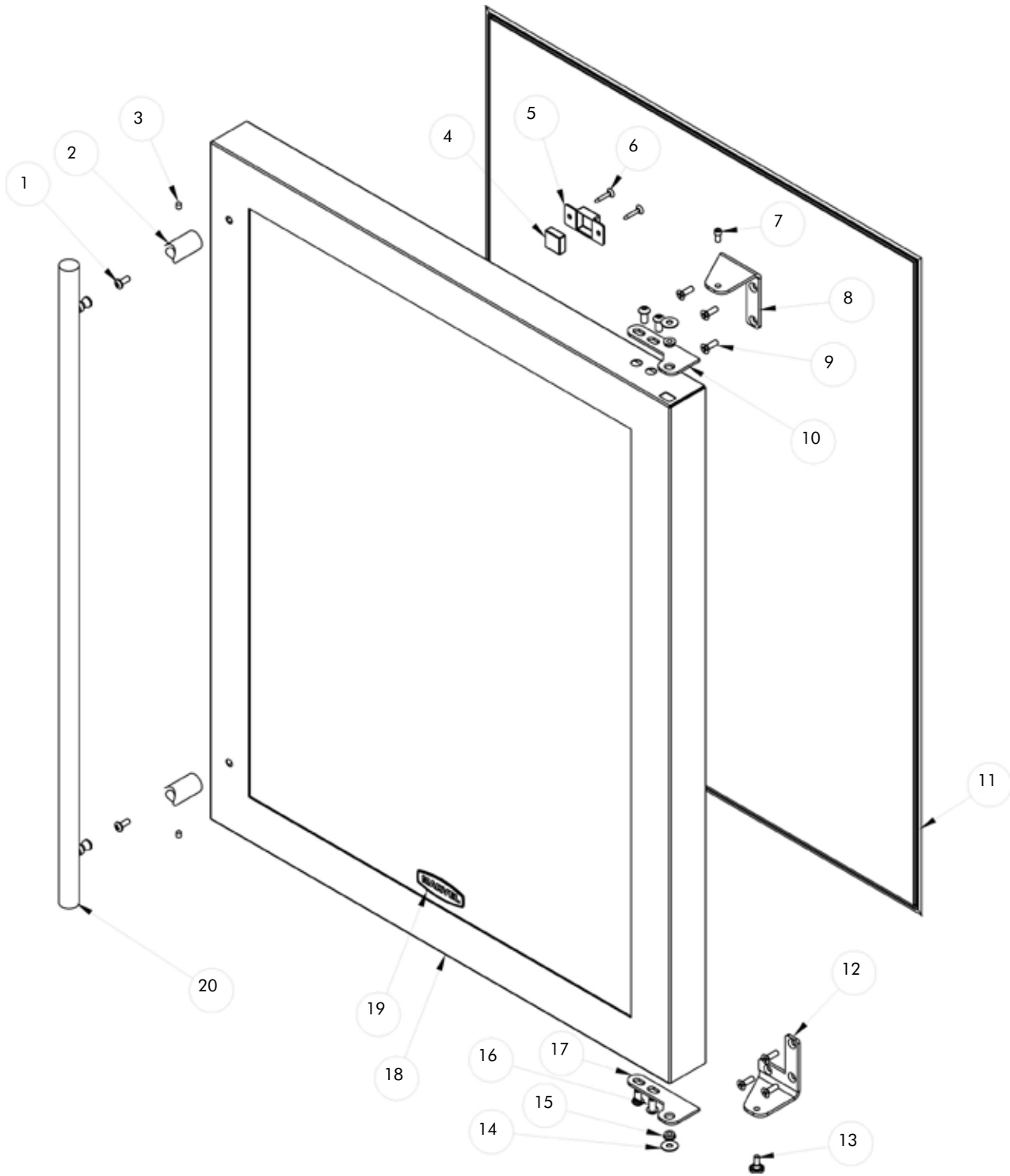
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List Three: 6SWCE Mechanical

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Alpha Control Mounting Bracket	1	44000570	
2	Base Plate	1	41005085	
3	Standoff	5	44000579	
4	Alpha Main Control	1	41050004	
5	Carriage Bolts	4	08205114	
6	Mounting Screws	2	41003221	
7	Tape	1	41003693	
8	Drip Pan	1	41003667	
9	"J" Trap	1	41003857	
10	Dryer	1	41001460	
11	Copper Tube	1	41003637	
12	Tubing Evacuation	1	41001466	
13	Condenser, R-134a	1	41003609	
14	Fan Shroud	1	41003626	
15	Tubing	1	41000445	
16	Tinnerman Nut (included with fan)	1	41000153	
17	Fan Blade, Morrill	1	41003616	
18	Fan Motor Bracket	1	1010002B	
19	Silencer	1	M000101A	
20	Fan Motor, 115V/60Hz	1	41006539	
21	Screws	4	41005089	
22	Sleeve	4	41007225	
23	Grommet	4	41007224	
24	Flat Washers	4	08204877	
25	Lock Nuts	4	08205051	
26	Compressor	1	41007131	
27	Run Capacitor	1	41007222	
28	Overload	1	41007220	
29	Compressor Cover	1	41007221	
30	PTC Relay	1	41007219	
31	Screw	1	41005022	
32	Ground Wire	1	41001401	
33	Screws	3	41005086	
34	Lock Washer	4	08205115	

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram One: 6SBARE Door



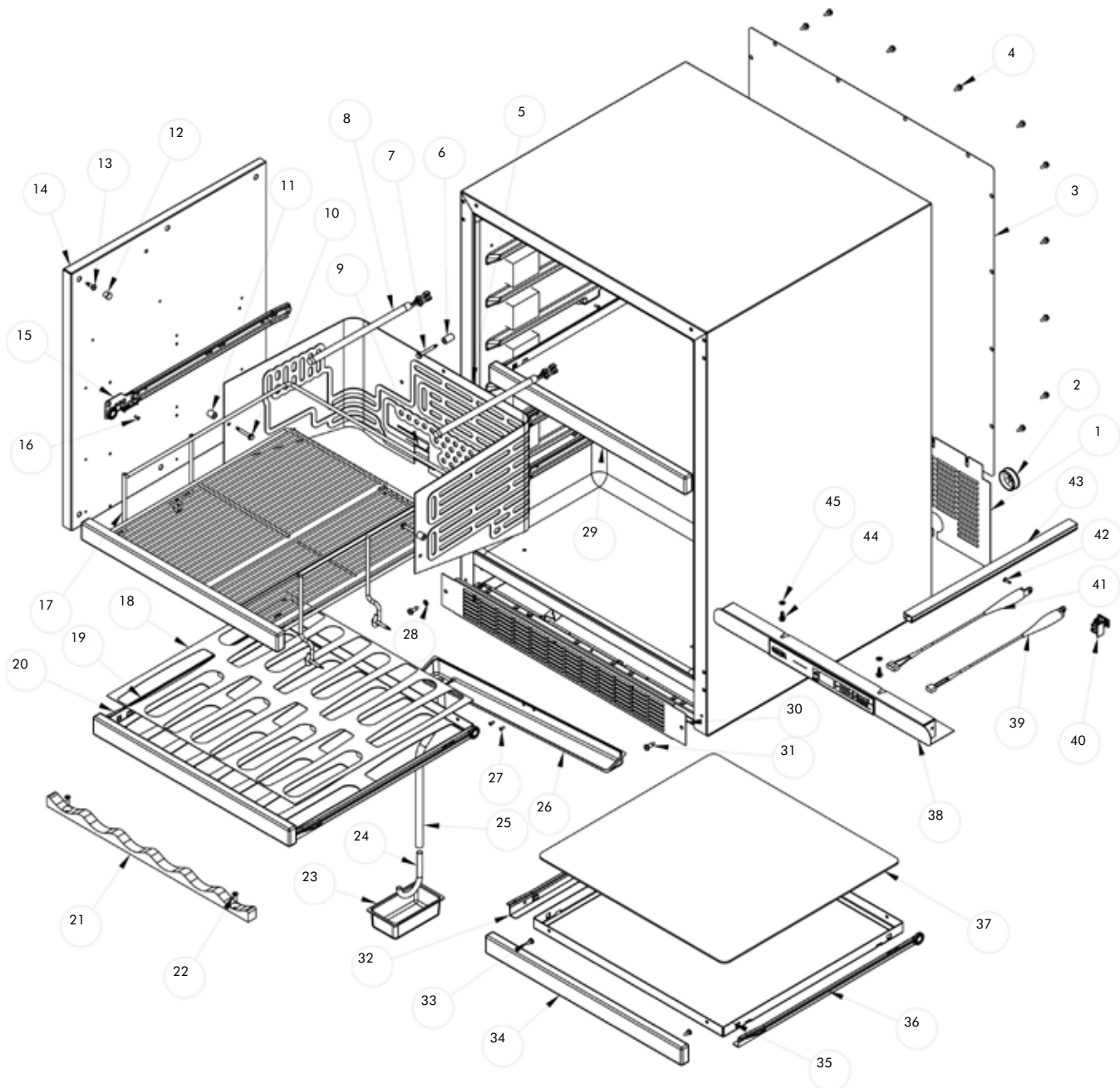
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List One: 6SBARE Door

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Screw	2	08204920	
2A	Standoff, black	2	41007390	
2B	Standoff, white	2	41007389	
2C	Standoff, ss	2	41005804	
3	Set Screw	2	41006026	
4	Magnet	1	44000563	
5A	Magnet Retainer, black	1	44000562	
5B	Magnet Retainer, white	1	41010551	
6A	Screw, black	2	41007520	
6B	Screw, white	2	41007521	
7	Hinge Pin, top	1	41004106	
8A	Standard Hinge, RT, black	1	41007481	
8B	Standard Hinge, RT, white	1	41007483	
8C	Standard Hinge, RT, chrome	1	41007433	
8D	Standard Hinge, RT, ss	1	1010045C	
9A	Hinge Screw, black	6	41007599	
9B	Hinge Screw, white	6	41007600	
9C	Hinge Screw, zinc	6	41007598	
9D	Hinge Screw, ss	6	41010417	
10A	Hinge Adapter, RT, black	1	41008152	
10B	Hinge Adapter, RT, white	1	41008153	
10C	Hinge Adapter, RT, ss	1	41007800	
11A	Gasket, black	1	41006386	
11B	Gasket, white	1	41001220	
12A	Standard Hinge, RB, black	1	41007482	
12B	Standard Hinge, RB, white	1	41007484	
12C	Standard Hinge, RB, chrome	1	41007434	
12D	Standard Hinge, RB, ss	1	1010046C	
13A	Hinge Pin, black	1	41007376	
13B	Hinge Pin, white	1	41007375	
13C	Hinge Pin, zinc	1	41001355	
14	Nylon Spacer	2	41007003	
15	Hinge Bushing	2	41007005	
16A	Hinge Adapter Screw, black	4	41009053	
16B	Hinge Adapter Screw, white	4	41009409	
16C	Hinge Adapter Screw, ss	4	41009054	
17A	Hinge Adapter, RB, black	1	41007006	
17B	Hinge Adapter, RB, white	1	41007515	
17C	Hinge Adapter, RB, ss	1	41007517	
18A	Door Assembly, black	1	42036360	
18B	Door Assembly, white	1	42036416	
18C	Door Assembly, ss	1	42036336	
19	Household Nameplate, black	1	41004477	42243063
20A	Handle, black	1	41007392	
20B	Handle, white	1	41007391	
20C	Handle, ss	1	41005803	

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram Two: 6SBARE Cabinet



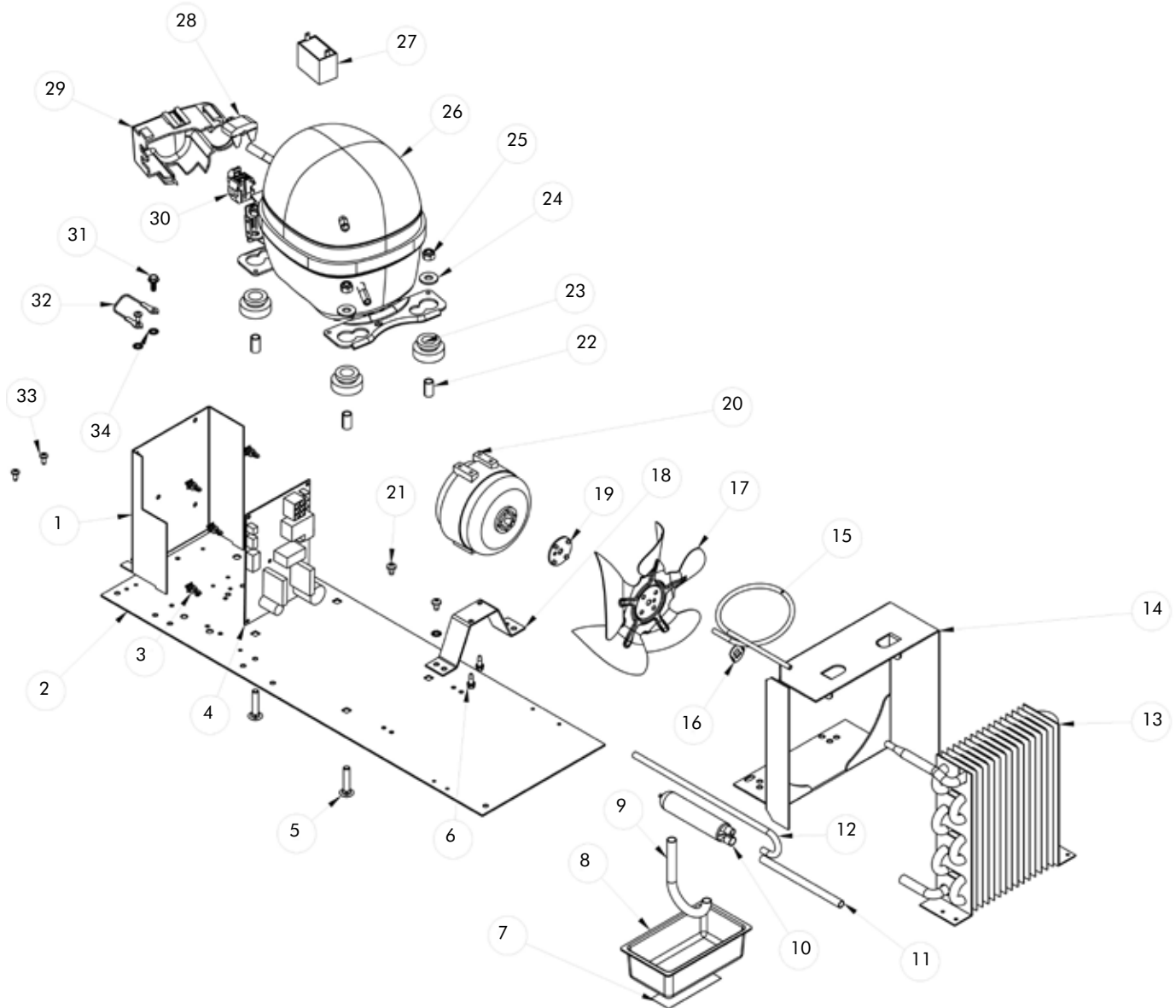
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List Two: 6SBARE Cabinet

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Back Shroud	1	41010587	
2	Bushing	1	41008532	
3	Back Panel	1	41000396	
4	# 10 x .5" Type AB Hex Washer Head Screw	17	08204928	
5	Evaporator Assembly, Black	1	42056355	
6	.75" Spacer, Black	1	41006403	
7	# 10 x 1.75" TEK Hex Washer Head Screw, Black	1	41008928	
8	Aura Light	2	41007501	
9	Cap	2	41006405	
10	# 10 x 1.5" TEK Hex Washer Head Screw, Black	6	41008903	
11	.50" Spacer, Black	2	41008902	
12	Heyco #2620 Glossy Black	1	41008380	
13	10 x 3/4" TEK Screw	12	41009036	
14	Liner Shield, LH, Black	1	41008905	
15	Bayonet Mount Slide, CL, B	3	41009525	
16	Pop Rivet, Steel	19	41003962	
17	Top Shelf, Black	1	42136356	
18	Vibration Neutralization Mat, Black	1	44000557	
19	5th Generation Wine Rack, Black	1	41010402	
20	5th Generation Wine Rack Assembly, Black	1	42136313	
21	Bottle Cradle	1	41007590	
22	Hinge Screw, Zinc Plated	2	41007598	
23	Drip Pan, Long-Stantion	1	41003667	
24	"J" Trap	1	41003857	
25	Drain Tube, Black	1	41008904	
26	Drip Tray, Black	1	41006402	
27	Pop Rivet # AD43ABS Aluminum	2	08204930	
28	# 10 External Tooth Lock Washer	1	08205115	
29	Sliding Shelf Assembly	2	42135568	
30	Grille, Black	1	41005059	
31	# 12 x 3/4 Type AB PH Screw, Black	2	41008206	
32	Bayonet Mount Slide, DL, B	1	41009527	
33	# 8 x 1/2" SMS PPH Screw	2	41006099	
34	Maplewood Wood Front	1	41008275	
35	3rd Generation Shelf, Black	1	41009518	
36	Bayonet Mount Slide, DR, B	1	41009528	
37	Glass Insert	2	41008890	
38	User Interface Display Assembly	1	42416301	
39	Air Temp. Sensor	1	41050057	
40	Fastex Clamp #8511-33-00, White	2	41003685	
41	Display Temp. Sensor	1	41050058	
42	# 6-20 x .75" Screw, SS	1	41009312	
43	Conduit	1	41009292	
44	Screw	2	41007239	
45	# 10 External Tooth Lock Washer, SS	2	41010640	

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram Three: 6SBARE Mechanical



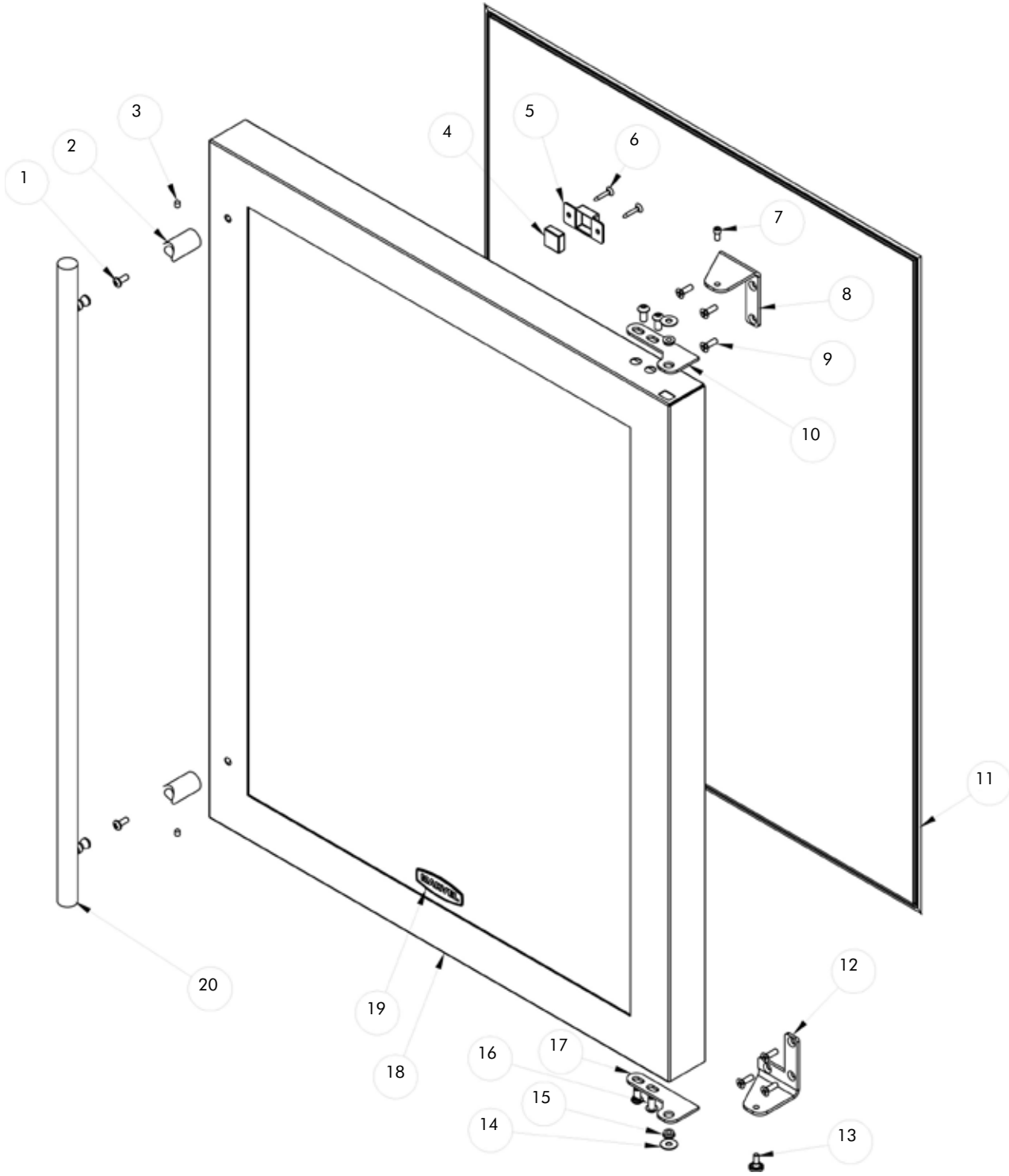
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List Three: 6SBARE Mechanical

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Alpha Control Mounting Bracket	1	44000570	
2	Base Plate	1	41005085	
3	Standoff	5	44000579	
4	Alpha Main Control	1	41050004	
5	Carriage Bolts	4	08205114	
6	Mounting Screws	2	41003221	
7	Tape	1	41003693	
8	Drip Pan	1	41003667	
9	"J" Trap	1	41003857	
10	Dryer	1	41001460	
11	Copper Tube	1	41003637	
12	Tubing Evacuation	1	41001466	
13	Condenser, R-134a	1	41003609	
14	Fan Shroud	1	41003626	
15	Tubing	1	41000445	
16	Tinnerman Nut (included with fan)	1	41000153	
17	Fan Blade, Morrill	1	41003616	
18	Fan Motor Bracket	1	1010002B	
19	Silencer	1	M000101A	
20	Fan Motor, 115V/60Hz	1	41006539	
21	Screws	4	41005089	
22	Sleeve	4	41007225	
23	Grommet	4	41007224	
24	Flat Washers	4	08204877	
25	Lock Nuts	4	08205051	
26	Compressor	1	41007131	
27	Run Capacitor	1	41007222	
28	Overload	1	41007220	
29	Compressor Cover	1	41007221	
30	PTC Relay	1	41007219	
31	Screw	1	41005022	
32	Ground Wire	1	41001401	
33	Screws	3	41005086	
34	Lock Washer	4	08205115	

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram One: 8SWCE Door



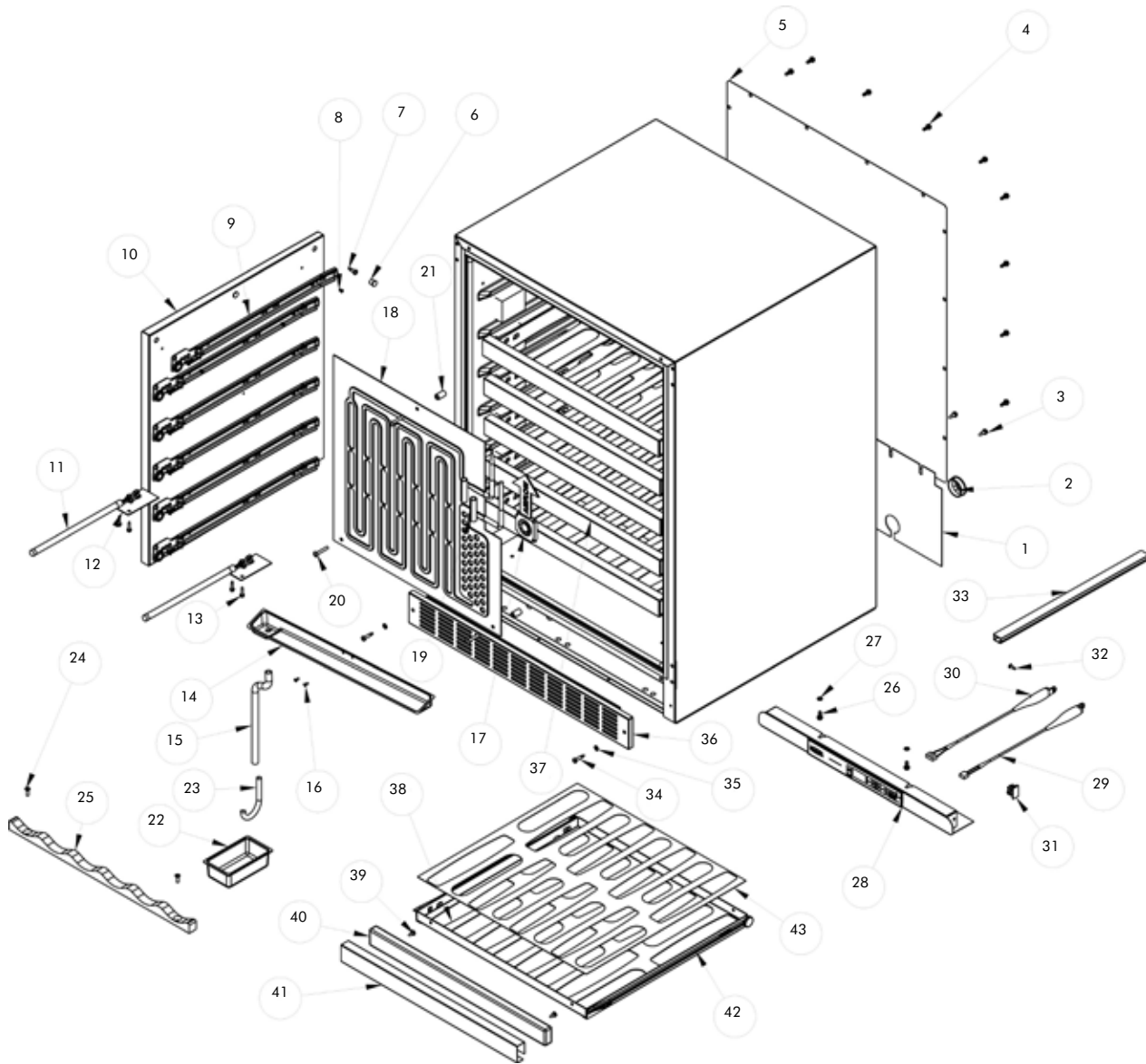
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List One: 8SWCE Door

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Screw	2	08204920	
2A	Standoff, black	2	41007390	
2B	Standoff, ss	2	41005804	
3	Set Screw	2	41006026	
4	Magnet	1	44000563	
5	Magnet Retainer, black	1	44000562	
6	Screw, black	2	41007520	
7	Hinge Pin, top	1	41004106	
8A	Standard Hinge, RT, black	1	41007481	
8B	Standard Hinge, RT, chrome	1	41007433	
8C	Standard Hinge, RT, ss	1	1010045C	
9A	Hinge Screw, black	6	41007599	
9B	Hinge Screw, zinc	6	41007598	
9C	Hinge Screw, ss	6	41010417	
10A	Hinge Adapter, RT, black	1	41008152	
10B	Hinge Adapter, RT, ss	1	41007800	
11	Gasket, black	1	41007510	
12A	Standard Hinge, RB, black	1	41007482	
12B	Standard Hinge, RB, chrome	1	41007434	
12C	Standard Hinge, RB, ss	1	1010046C	
13A	Hinge Pin, black	1	41007376	
13B	Hinge Pin, zinc	1	41001355	
14	Nylon Spacer	2	41007003	
15	Hinge Bushing	2	41007005	
16A	Hinge Adapter Screw, black	4	41009054	
16B	Hinge Adapter Screw, ss	4	41009054	
17A	Hinge Adapter, RB, black	1	41007006	
17B	Hinge Adapter, RB, ss	1	41007517	
18A	Door Assembly, black	1	42036393	
18B	Door Assembly, ss	1	42036392	
19	Household Nameplate, black	1	41004477	42243063
20A	Handle, black	1	41007392	
20B	Handle, ss	1	41005803	

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram Two: 8SWCE Cabinet



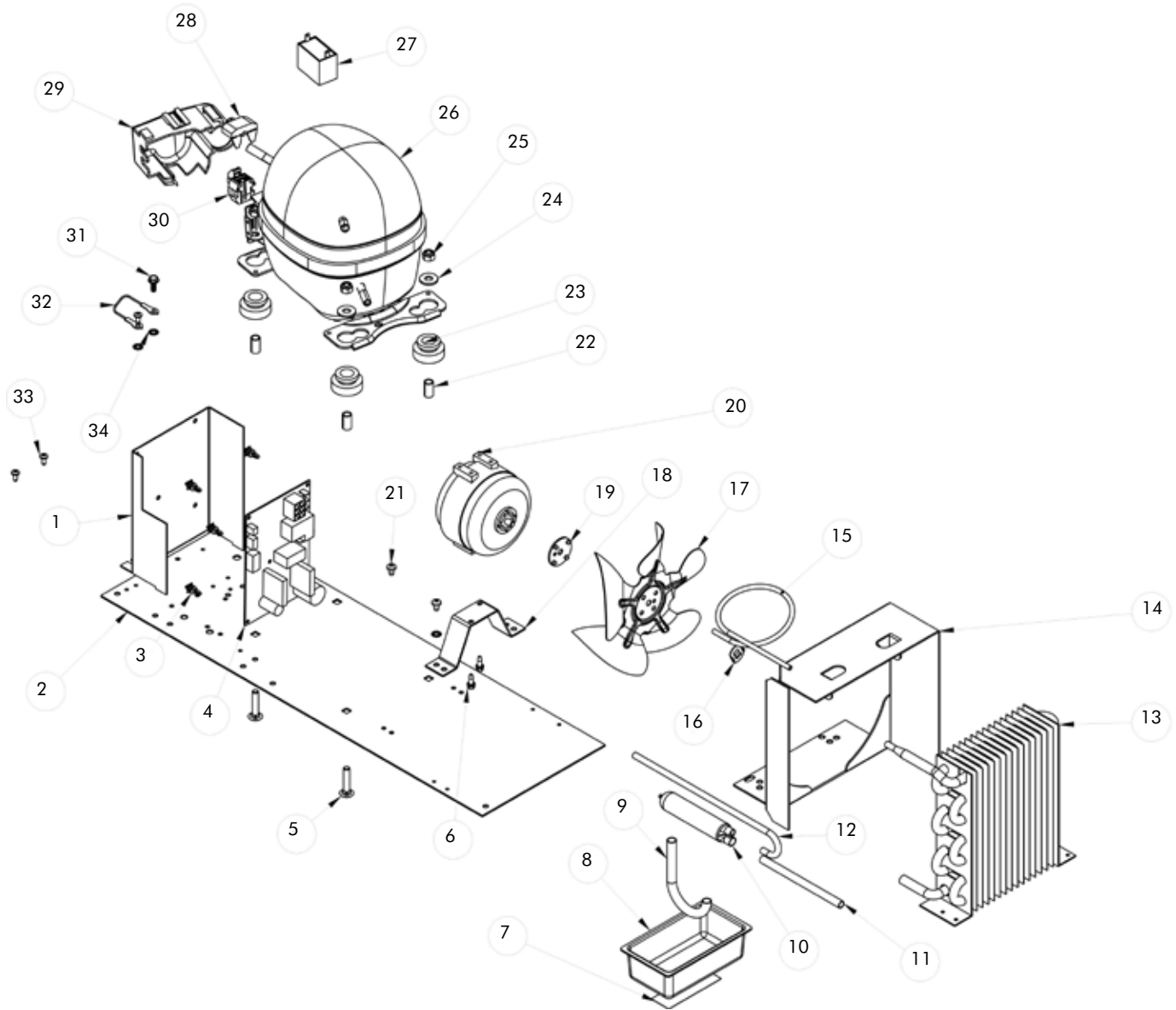
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List Two: 8SWCE Cabinet

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Back Shroud	1	41010588	
2	Bushing	1	41008532	
3	Screws	5	08204928	
4	Screws	12	08204928	
5	Back Panel	1	41003182	
6	Heyco #2618, black	4	41008380	
7	Screws	12	41009036	
8	Medium Long Steel Rivets	36	41003962	
9A	Bayonet Mount Slide, LH, black	6	41009525	
9B	Bayonet Mount Slide, RH, black	6	41009526	
10A	Liner Shield, LH, black	1	41010398	
10B	Liner Shield, RH, black	1	41010399	
11	Lights	2	41007501	
12	Light Cover, black	2	41008857	
13	Screws	4	41000183	
14	Drip Tray, black	1	41006402	
15	Drain Tube, black	1	41007166	
16	Pop Rivets	2	08204930	
17	Assembly Fan	1	41050061	
18	Evaporator Assembly, black	1	42055111	
19	Cap, black	2	41006405	
20	Machine Screws, ss	3	41005773	
21	Spacer, black	3	41006403	
22	Drip Pan	1	41003667	
23	"J" Trap	1	41003857	
24	Hinge Screws	2	41007598	
25	Bottle Cradle	1	41009001	
26	Screws	2	41007239	
27	Lock Washers, ss	2	41010640	
28	User Interface Assembly, black	1	42416302	
29	Air Temp. Sensor	1	41050057	42246462
30	Display Temp. Sensor	1	41050058	42246463
31	Fastex Clamps	2	41003685	
32	Screws, ss	1	41003912	
33	Conduit	1	41009292	
34	Grille Screws, black	2	41008206	
35	Lock Washers, ss	2	41006775	
36	Grille, black	1	41010410	
37A	5th Generation Wine Rack Assembly, NSF, black	6	42136390	
37B	5th Generation Wine Rack Assembly, SSF, black	6	42136363	
38	5th Generation Wine Rack, black	1	41010423	
39	Screws	2	41006099	
40	Wine Rack Wood Front	1	41008974	
41	Wine Rack Front Cover, ss	1	41009208	
42A	Slide, RH, black	1	41009528	
42B	Slide, LH, black	1	41009527	
43	Wine Rack Mat, black	1	44000558	

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram Three: 8SWCE Mechanical



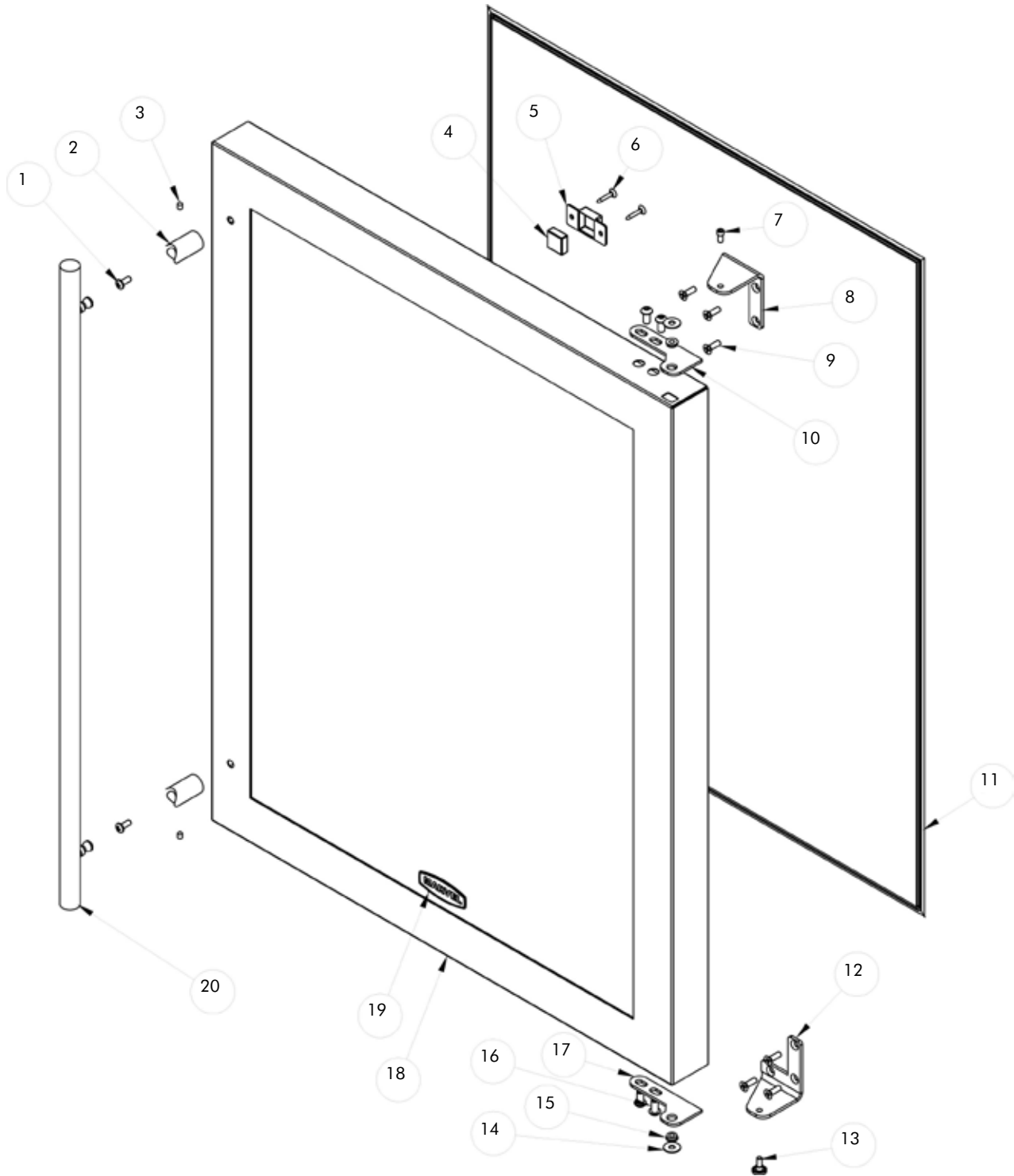
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List Three: 8SWCE Mechanical

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Alpha Control Mounting Bracket	1	44000570	
2	Base Plate	1	41005085	
3	Standoff	5	44000579	
4	Alpha Main Control	1	41050004	
5	Carriage Bolts	4	08205114	
6	Mounting Screws	2	41003221	
7	Tape	1	41003693	
8	Drip Pan	1	41003667	
9	"J" Trap	1	41003857	
10	Dryer	1	41001460	
11	Copper Tube	1	41003637	
12	Tubing Evacuation	1	41001466	
13	Condenser, R-134a	1	41003609	
14	Fan Shroud	1	41003626	
15	Tubing	1	41000445	
16	Tinnerman Nut (included with fan)	1	41000153	
17	Fan Blade, Morrill	1	41003616	
18	Fan Motor Bracket	1	1010002B	
19	Silencer	1	M000101A	
20	Fan Motor, 115V/60Hz	1	41006539	
21	Screws	4	41005089	
22	Sleeve	4	41007225	
23	Grommet	4	41007224	
24	Flat Washers	4	08204877	
25	Lock Nuts	4	08205051	
26	Compressor	1	41007131	
27	Run Capacitor	1	41007222	
28	Overload	1	41007220	
29	Compressor Cover	1	41007221	
30	PTC Relay	1	41007219	
31	Screw	1	41005022	
32	Ground Wire	1	41001401	
33	Screws	3	41005086	
34	Lock Washer	4	08205115	

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram One: 8SBARE Door



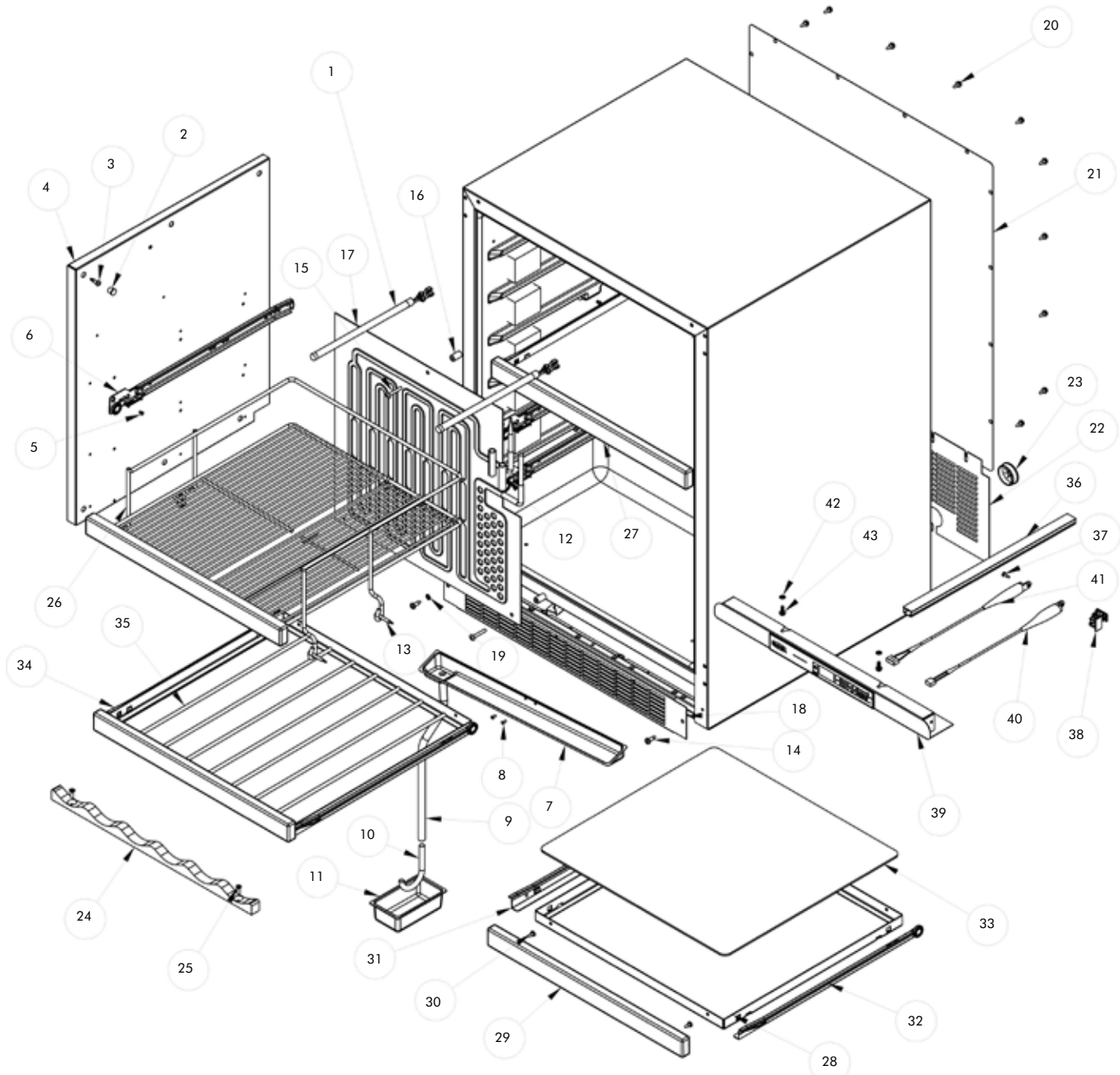
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List One: 8SBARE Door

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Screw	2	08204920	
2A	Standoff, black	2	41007390	
2B	Standoff, ss	2	41005804	
3	Set Screw	2	41006026	
4	Magnet	1	44000563	
5	Magnet Retainer, black	1	44000562	
6	Screw, black	2	41007520	
7	Hinge Pin, top	1	41004106	
8A	Standard Hinge, RT, black	1	41007481	
8B	Standard Hinge, RT, chrome	1	41007433	
8C	Standard Hinge, RT, ss	1	1010045C	
9A	Hinge Screw, black	6	41007599	
9B	Hinge Screw, zinc	6	41007598	
9C	Hinge Screw, ss	6	41010417	
10A	Hinge Adapter, RT, black	1	41008152	
10B	Hinge Adapter, RT, ss	1	41007800	
11	Gasket, black	1	41007510	
12A	Standard Hinge, RB, black	1	41007482	
12B	Standard Hinge, RB, chrome	1	41007434	
12C	Standard Hinge, RB, ss	1	1010046C	
13A	Hinge Pin, black	1	41007376	
13B	Hinge Pin, zinc	1	41001355	
14	Nylon Spacer	2	41007003	
15	Hinge Bushing	2	41007005	
16A	Hinge Adapter Screw, black	4	41009054	
16B	Hinge Adapter Screw, ss	4	41009054	
17A	Hinge Adapter, RB, black	1	41007006	
17B	Hinge Adapter, RB, ss	1	41007517	
18A	Door Assembly, black	1	42036393	
18B	Door Assembly, ss	1	42036392	
19	Household Nameplate, black	1	41004477	42243063
20A	Handle, black	1	41007392	
20B	Handle, ss	1	41005803	

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram Two: 8SBARE Cabinet



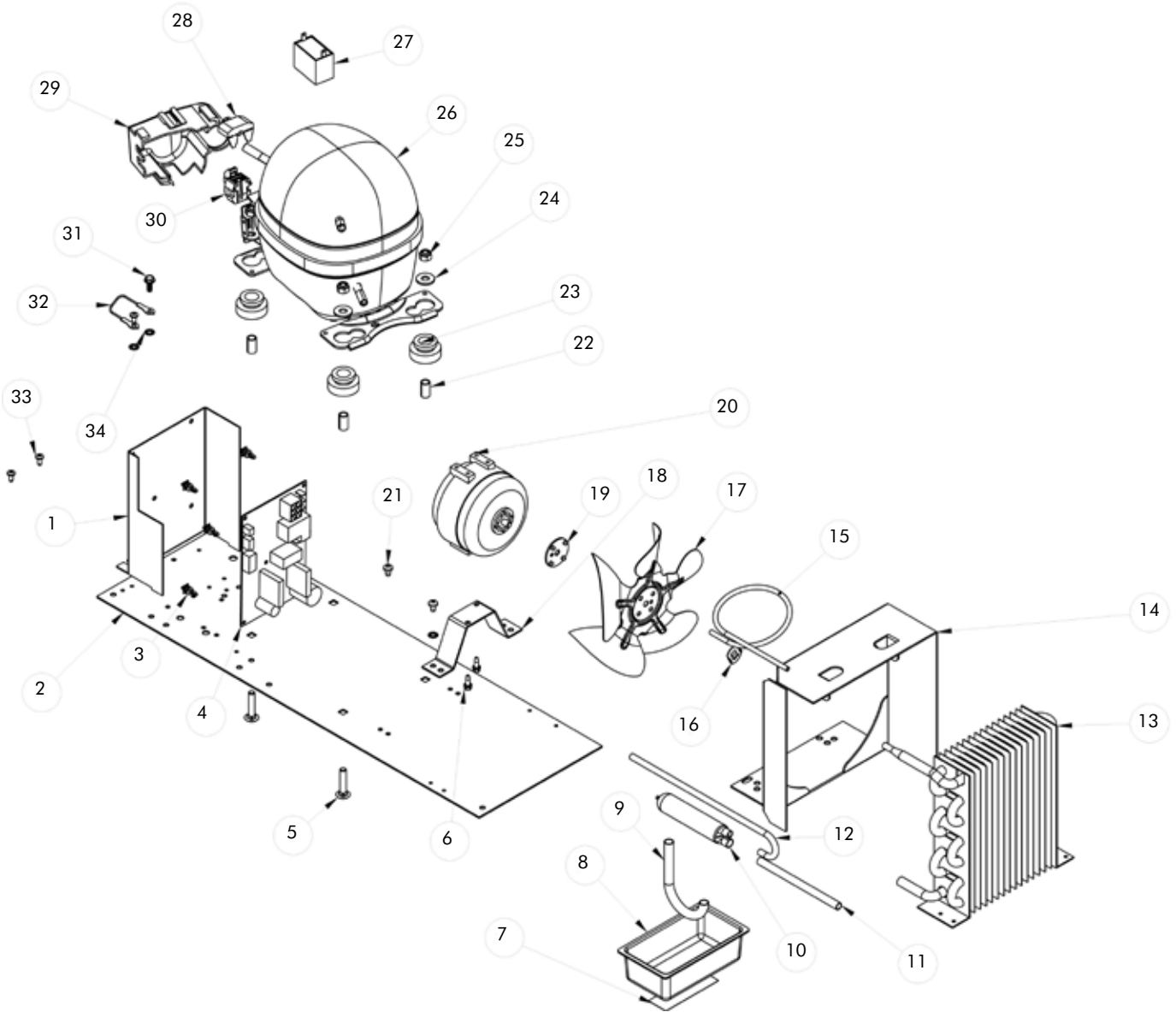
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List Two: 8SBARE Cabinet

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Lights	2	41007501	
2	Heyco #2620 Glossy Black	1	41008380	
3	Screws	12	41009036	
4	Liner Shield, LH, black	1	41008905	
5	Medium Long Steel Rivet	19	41003962	
6	Bayonet Mount Slide, CL, black	3	41009525	
7	Drip Tray, black	1	41006402	
8	Pop Rivets	2	08204930	
9	Drain Tube, black	1	41008904	
10	"J" Trap	1	41003857	
11	Drip Pan	1	41003667	
12	Cap	2	41006405	
13	Hex Head Screws, black	4	41008903	
14	Screws, black	2	41008206	
15	Screws	3	41005773	
16	Spacer, black	3	41006403	
17	Evaporator Assembly, black	1	42055111	
18	Grille, black	1	41005059	
19	Lock Washer	1	08205115	
20	Screws	17	08204928	
21	Back Panel	1	41003182	
22	Back Shroud	1	41010588	
23	Bushing	1	41008532	
24	Bottle Cradle	1	41009001	
25	Hinge Screws	2	41007598	
26	Top Shelf	1	42136391	
27	Sliding Shelf Assembly	2	42135571	
28	3rd Generation Shelf	1	41009520	
29	Wine Rack Wood Front	1	41008974	
30	Screws	2	41006099	
31	Bayonet Mount Slide, DL, black	1	41009527	
32	Bayonet Mount Slide, DR, black	1	41009528	
33	Glass Insert	2	41009670	
34	4th Generation Sliding Wine Rack, black	1	42136390	
35	4th Generation Wine Rack, black	1	41010423	
36	Conduit	1	41009292	
37	Screw, ss	1	41009312	
38	Fastex Clamps, white	2	41003685	
39	User Interface Display Assembly	1	42416302	
40	Air Temp. Sensor	1	41050057	
41	Display Temp. Sensor	1	41050058	
42	Lock Washers, ss	2	41010640	
43	Screws	2	41007239	

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram Three: 8SBARE Mechanical



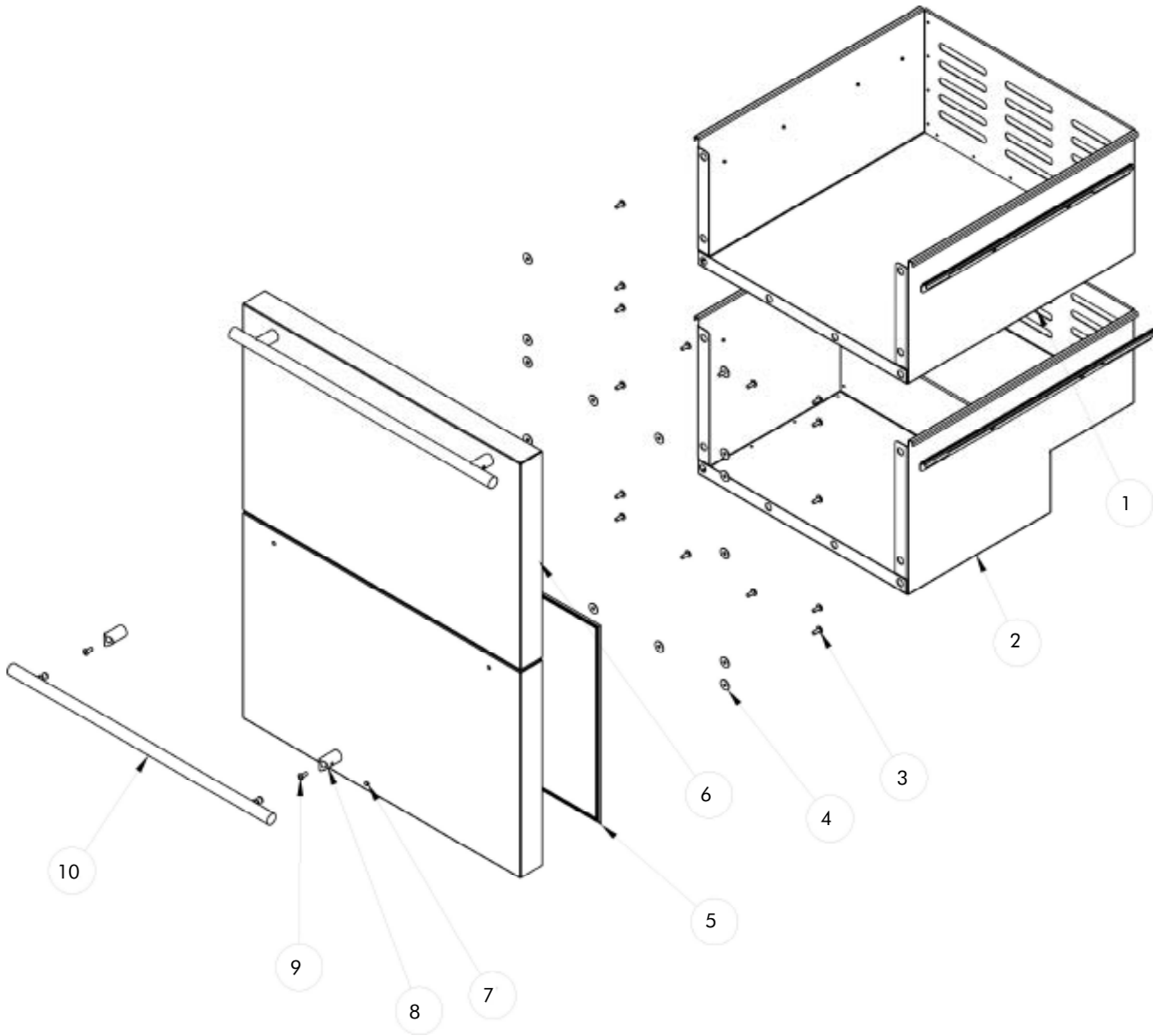
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List Three: 8SBARE Mechanical

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Alpha Control Mounting Bracket	1	44000570	
2	Base Plate	1	41005085	
3	Standoff	5	44000579	
4	Alpha Main Control	1	41050004	
5	Carriage Bolts	4	08205114	
6	Mounting Screws	2	41003221	
7	Tape	1	41003693	
8	Drip Pan	1	41003667	
9	"J" Trap	1	41003857	
10	Dryer	1	41001460	
11	Copper Tube	1	41003637	
12	Tubing Evacuation	1	41001466	
13	Condenser, R-134a	1	41003609	
14	Fan Shroud	1	41003626	
15	Tubing	1	41000445	
16	Tinnerman Nut (included with fan)	1	41000153	
17	Fan Blade, Morrill	1	41003616	
18	Fan Motor Bracket	1	1010002B	
19	Silencer	1	M000101A	
20	Fan Motor, 115V/60Hz	1	41006539	
21	Screws	4	41005089	
22	Sleeve	4	41007225	
23	Grommet	4	41007224	
24	Flat Washers	4	08204877	
25	Lock Nuts	4	08205051	
26	Compressor	1	41007131	
27	Run Capacitor	1	41007222	
28	Overload	1	41007220	
29	Compressor Cover	1	41007221	
30	PTC Relay	1	41007219	
31	Screw	1	41005022	
32	Ground Wire	1	41001401	
33	Screws	3	41005086	
34	Lock Washer	4	08205115	

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram One: 60RDE Door



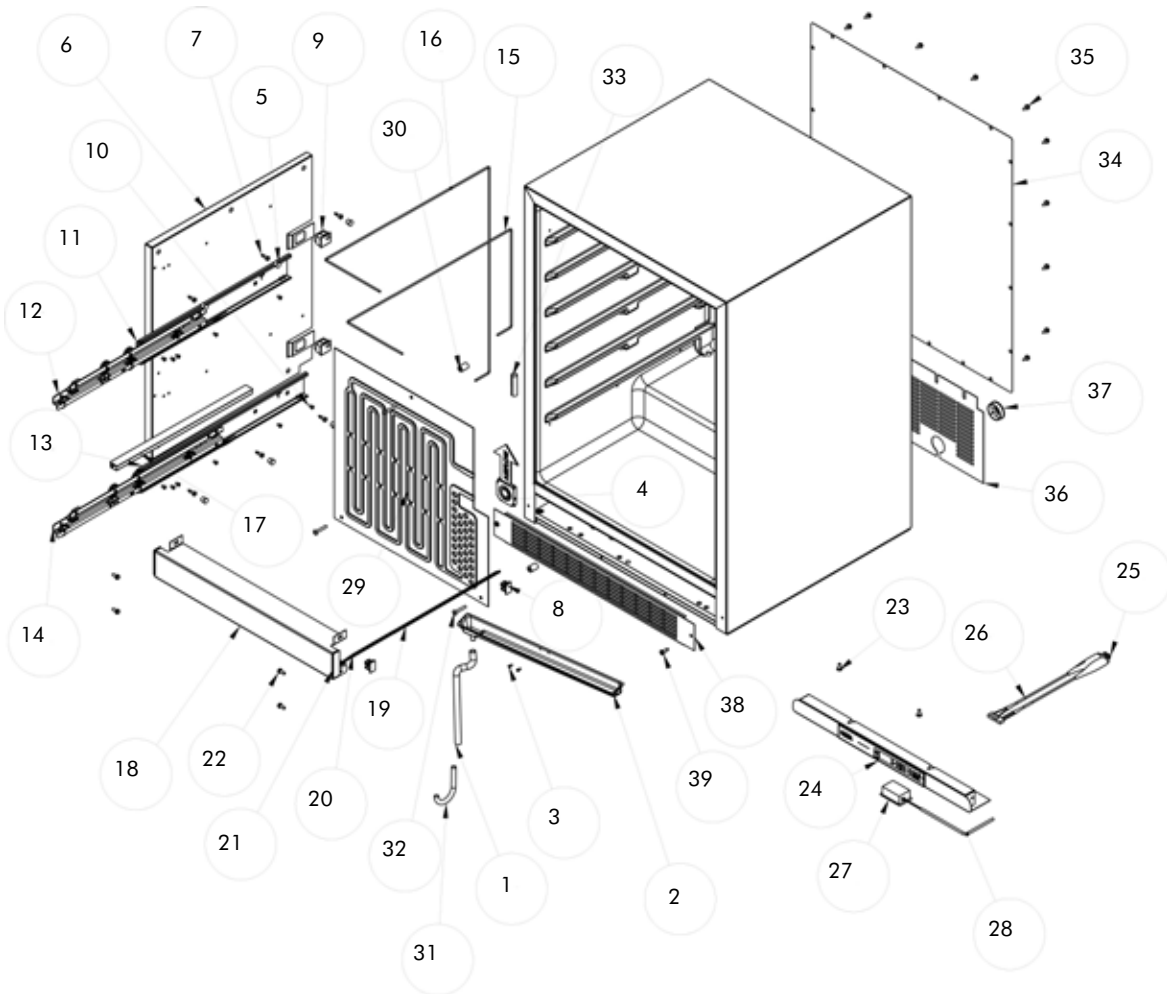
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List One: 60RDE Door

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Drawer, top, ss	1	41009100	42245681
2	Drawer, bottom, ss	1	41009101	42245682
3	Screw, ss	16	41004079	
4	Washer, ss	16	41009220	
5A	Door Gasket, white	2	41009171	
5B	Door Gasket, black	2	41009119	
6A	Drawer Front Assembly, white	2	42035229	42245794
6B	Drawer Front Assembly, black	2	42035228	42245795
6C	Drawer Front Assembly, ss	2	42035232	42245796
6D	Drawer Front Assy, overlay, white	2	42035231	42245798
6E	Drawer Front Assy, overlay, black	2	42035230	42245797
7	Set Screw	4	41006026	
8A	Stand-off, white	4	41007389	42245357
8B	Stand-off, black	4	41007390	42245356
8C	Stand-off, ss	4	41005804	42245358
9	Screw	4	08204920	
10A	Handle, white	2	41009159	42245821
10B	Handle, black	2	41009158	42245819
10C	Handle, ss	2	41009107	42245820
Not Shown	Marvel Nameplate, black	1	41004477	42243063

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram Two: 60RDE Cabinet



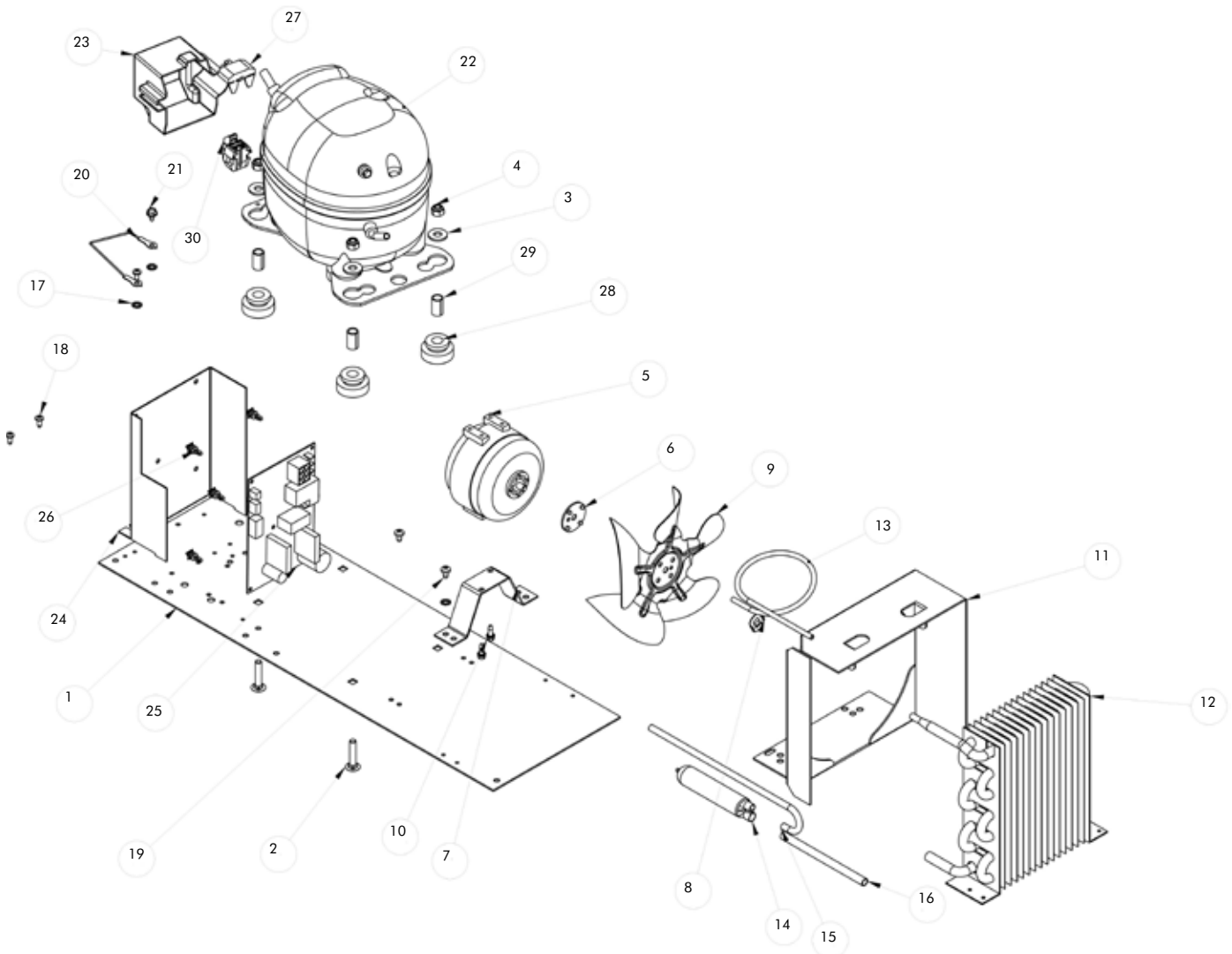
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List Two: 60RDE Cabinet

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Drain Tube, white	1	41005383	42242901
2	Drip Tray, white	1	41009363	42245769
3	Pop Rivets	2	08204930	
4	Fan	1	41050061	42246459
5	Heyco #2618, white	12	41008752	
6A	LH Shield	1	41009096	
6B	RH Shield	1	41009097	
7	Screw, 10 x 3/4 TEK	12	41009036	
8	Clamp	8	41003685	
9	Light Switch, white	2	41004651	42242994
10	Pop Rivet, countersunk	12	41003610	
11A	Drawer Slide, left, 450mm, white	1	41009453	42246171
12B	Drawer Slide, right, 500mm, white	1	41009457	42245759
14A	Drawer Slide, left, 450mm, white	1	41009460	42245760
11B	Drawer Slide, right, 450mm, white	1	41009458	42246171
12A	Drawer Slide, left, 450mm, white	1	41009454	42245758
14B	Drawer Slide, right, 500mm, white	1	41009463	42245761
13A	Drawer Slide, left, 500mm, white	1	41009459	42246172
13B	Drawer Slide, right, 500mm, white	1	41009464	42246172
15	Switch Harness	1	41050056	
16	Switch Harness	1	41050055	
17	Conduit	2	41009292	
18A	Cross Piece Assembly, white	1	42136373	
18B	Cross Piece Assembly, black	1	42136374	
18C	Cross Piece Assembly, ss	1	42136519	
19	Light Harness	1	41009137	
20	Cross Piece Heater	1	41050060	
21A	Cross Piece Seal, white	2	41009138	
21B	Cross Piece Seal, black	2	41009139	
22A	Hex Washer Head Screw, white	4	41007361	
22B	Hex Washer Head Screw, black	4	41007362	
22C	Hex Washer Head Screw, ss	4	41006863	
23	Screw, ss	2	41004079	
24	User Interface Display Assembly	1	42416375	42246642
25	Control Thermistor	1	41050057	42246462
26	Display Thermistor	1	41050058	42246463
27	LED Light	1	41009147	42245765
28	LED Light Harness	1	41009173	42245763
29	Evaporator Assembly	1	42055578	42245771
30	Spacer	3	41002929	
31	J Trap	1	41003857	42244921
32	Screw	3	41005773	
33	Cap	2	41001150	
34	Back Panel	1	41000396	42241648
35	Screw	17	08204928	
36	Back Shroud	1	41010587	
37	Bushing	1	41008532	
38A	Grille, black	1	41005059	
38B	Grille, white	1	41010410	
39A	Screw, black	2	41008206	
39B	Screw, white	2	41008207	
Not Shown	Communication Cable	1	41050010	

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram Three: 60RDE Mechanical



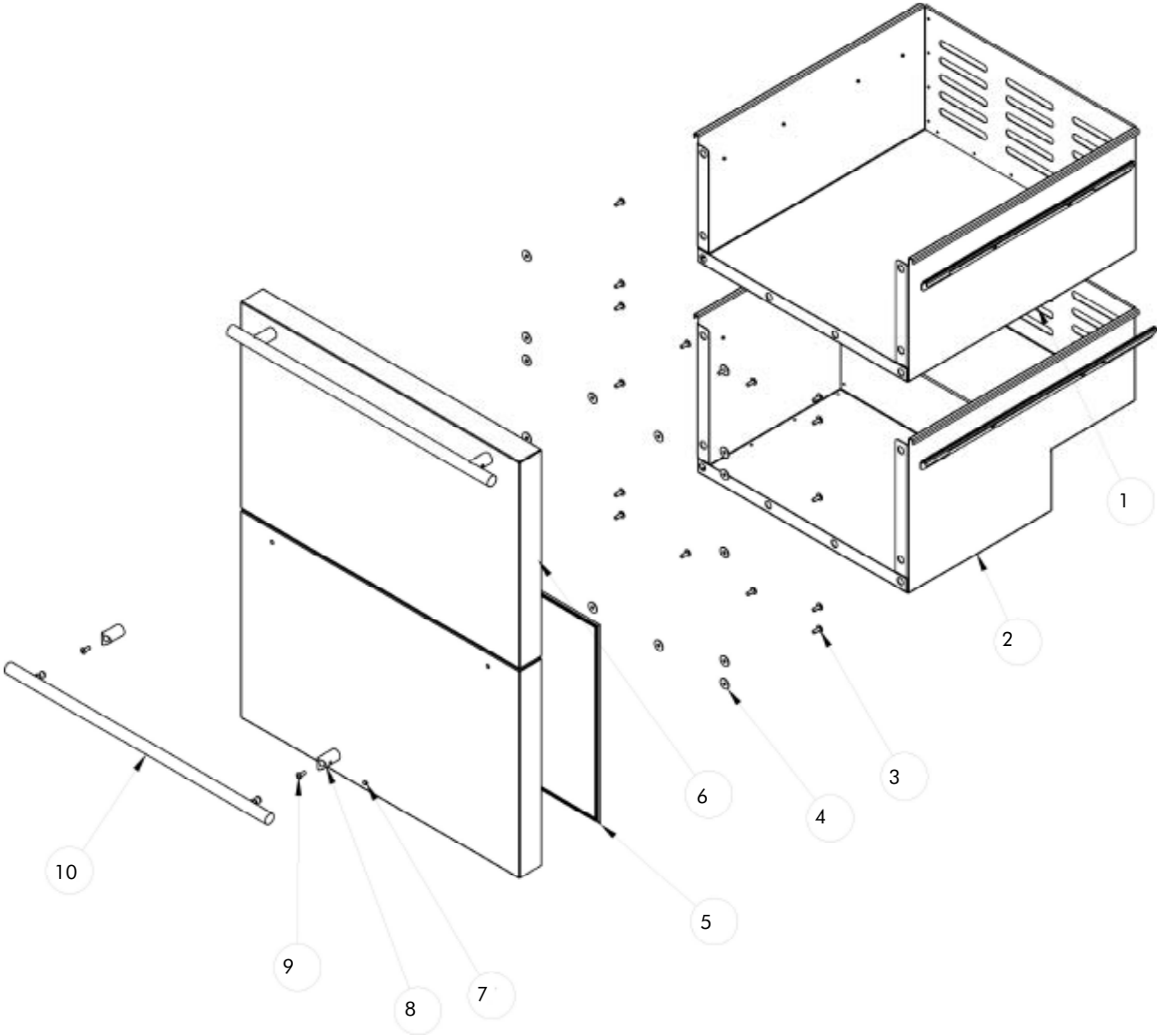
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List Three: 60RDE Mechanical

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Base Plate, R134a	1	41005085	42242579
2	Carriage Bolts	3	08205114	42245984
3	Flat Washers	3	08204877	42245984
4	Lock Nuts	3	08205051	42245984
5	Fan Motor, 115V/60Hz	1	41006539	42241318
6	Silencer	1	M000101A	42241318
7	Fan Motor Bracket	1	1010002B	42241318
8	Tinnerman Nut (included with Fan)	1	41000153	42241318
9	Fan Blade, Morrill #FV600CW30S38	1	41003616	42242015 & 42241318
10	Mounting Screws	2	41003221	42241318
11	Fan Shroud	1	41003626	42241349
12	Condenser, R134a	1	41003609	42242082
13	Tubing- 14 Long	1	41000445	42242082
14	Dryer	1	41001460	42243394 & 42242082
15	Tubing - Evacuation	1	41001466	42245984
16	Copper Tube	1	41003637	42245984
17	Lock Washer	4	08205115	42241318 & 42245984
18	Screws	4	41005089	42241318
19	Screws	3	41005086	42245984
20	Ground Wire	1	41001401	42245984
21	Screw	1	08205200	42245984
22	Embraco Compressor 115V/60Hz	1	41008182	42245984
23	Cover	1	41008197	42245984
24	Alpha Control Mounting Bracket	1	44000570	
25	Alpha Main Control	1	41050004	
26	Stand-off	5	44000579	
27	Overload	1	41008201	42245580 & 42245984
28	Grommet	4	41008198	42245984
29	Sleeve	4	41008199	42245984
30	PTC Relay	1	41008200	42246574 & 42245984

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram One: 80RDE Door



SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List One: 80RDE Door

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Drawer, top, ss	1	41009110	
2	Drawer, bottom, ss	1	41009111	
3	Screw, ss	16	41004079	
4	Washer, ss	16	41009220	
5A	Door Gasket, white	2	41009172	
5B	Door Gasket, black	2	41009120	
6A	Drawer Front Assembly, white	2	42035234	42245772
6B	Drawer Front Assembly, black	2	42035233	42245740
6C	Drawer Front Assembly, ss	2	42035237	42245741
6D	Drawer Front Assy, overlay, white	2	42035236	42245743
6E	Drawer Front Assy, overlay, black	2	42035235	42245742
7	Set Screw	4	41006026	
8A	Stand-off, white	4	41007389	42245357
8B	Stand-off, black	4	41007390	42245356
8C	Stand-off, ss	4	41005804	42245358
9	Screw	4	08204920	
10A	Handle, white	2	41007391	42245085
10B	Handle, black	2	41007392	42245084
10C	Handle, ss	2	41005803	42242939
Not Shown	Marvel Nameplate, black	1	41004477	42243063

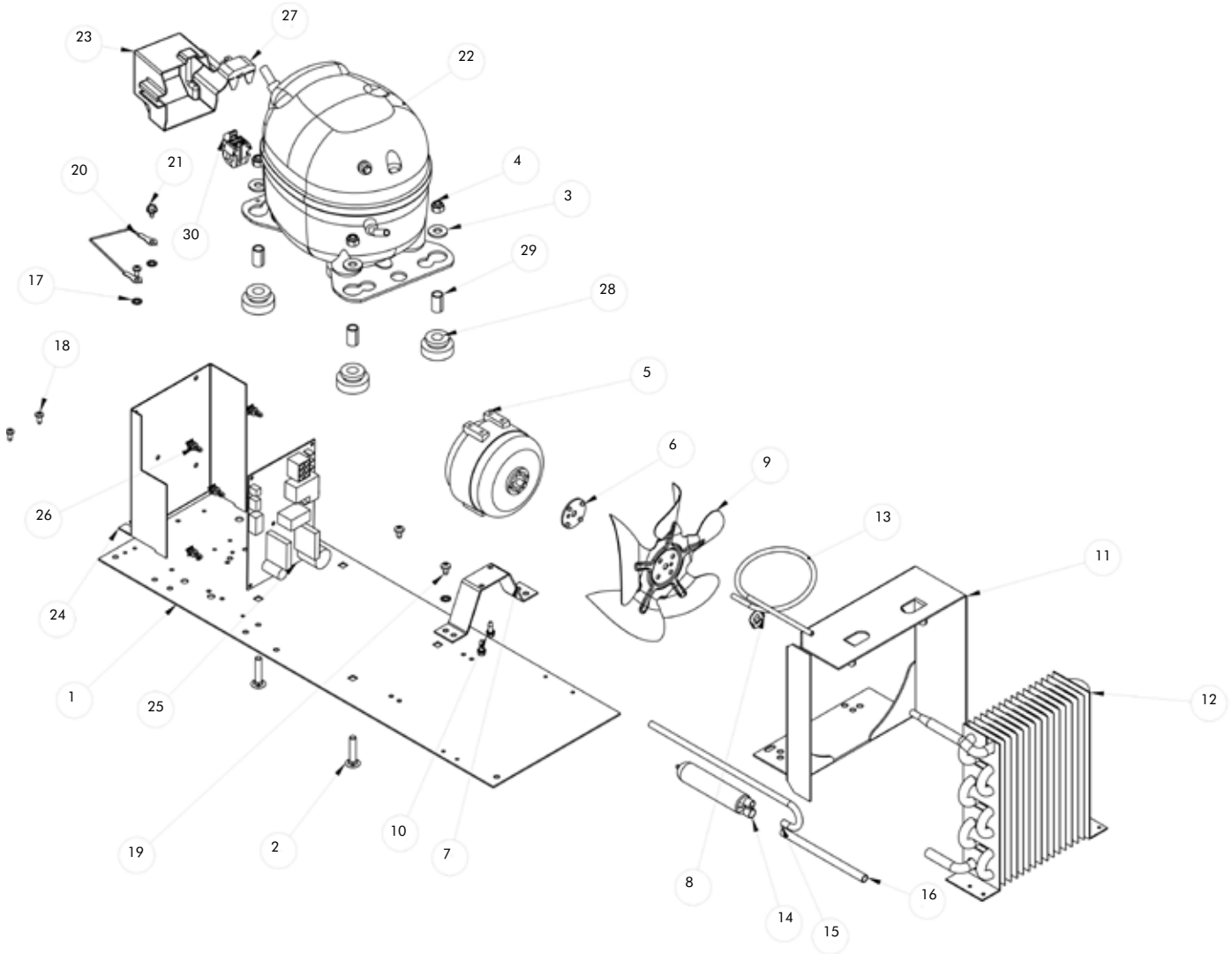
SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List Two: 80RDE Cabinet

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Drain Tube, white	1	41005383	42242901
2	Drip Tray, white	1	41009363	42245769
3	Pop Rivets	2	07104930	
4	Fan	1	41050061	42246459
5	Heyco #2618, white	12	41008752	
6A	LH Shield	1	41009096	42245762
6B	RH Shield	1	41009097	42245770
7	Screw, 10 x 3/4 TEK	12	41009036	
8	Clamp	8	41003685	
9	Light Switch, white	2	41004651	42242994
10	Pop Rivet, countersunk	12	41003610	
11A	Drawer Slide, left, 450mm, white	1	41009453	42246171
12B	Drawer Slide, right, 500mm, white	1	41009457	42245759
14A	Drawer Slide, left, 450mm, white	1	41009460	42245760
11B	Drawer Slide, right, 450mm, white	1	41009458	42246171
12A	Drawer Slide, left, 450mm, white	1	41009454	42245758
14B	Drawer Slide, right, 500mm, white	1	41009463	42245761
13A	Drawer Slide, left, 500mm, white	1	41009459	42246172
13B	Drawer Slide, right, 500mm, white	1	41009464	42246172
15	Switch Harness	1	41050056	
16	Switch Harness	1	41050055	
17	Conduit	2	41009292	
18A	Cross Piece Assembly, white	1	42136378	
18B	Cross Piece Assembly, black	1	42136379	
19	Light Harness	1	41009137	
20	Cross Piece Heater	1	41050063	
21A	Cross Piece Seal, white	2	41009138	
21B	Cross Piece Seal, black	2	41009139	
22A	Hex Washer Head Screw, white	4	41007361	
22B	Hex Washer Head Screw, black	4	41007362	
23	Screw, ss	2	41004079	
24	User Interface Display Assembly	1	42416380	
25	Control Thermistor	1	41050057	42246462
26	Display Thermistor	1	41050058	42246463
27	LED Light	1	41009147	42245765
28	LED Light Harness	1	41009173	42245763
29	Evaporator Assembly	1	42055578	42245771
30	Spacer	3	41002929	
31	J Trap	1	41003857	42244921
32	Screw	3	41005773	
33	Cap	2	41001150	
34	Back Panel	1	41009840	
35	Screw	17	08204928	
36	Back Shroud	1	41010588	
37	Bushing	1	41008532	
38A	Grille, black	1	41010415	
38B	Grille, white	1	41010414	
39A	Screw, black	2	41008206	
39B	Screw, white	2	41008207	
Not Shown	Communication Cable	1	41050010	42246469

SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts Diagram Three: 80RDE Mechanical



SENTRY SYSTEM™ REFRIGERATION MONITOR

Service Parts List Three: 80RDE Mechanical

Illus. No.	Description	Qty. Req.	Part No.	Service Assembly
1	Base Plate, R134a	1	41005085	42242579
2	Carriage Bolts	3	08205114	42245984
3	Flat Washers	3	08204877	42245984
4	Lock Nuts	3	08205051	42245984
5	Fan Motor, 115V/60Hz	1	41006539	42241318
6	Silencer	1	M000101A	42241318
7	Fan Motor Bracket	1	1010002B	42241318
8	Tinnerman Nut (included with Fan)	1	41000153	42241318
9	Fan Blade, Morrill #FV600CW30S38	1	41003616	42242015 & 42241318
10	Mounting Screws	2	41003221	42241318
11	Fan Shroud	1	41003626	42241349
12	Condenser, R134a	1	41003609	42242082
13	Tubing- 14 Long	1	41000445	42242082
14	Dryer	1	41001460	42243394 & 42242082
15	Tubing - Evacuation	1	41001466	42245984
16	Copper Tube	1	41003637	42245984
17	Lock Washer	4	08205115	42241318 & 42245984
18	Screws	4	41005089	42241318
19	Screws	3	41005086	42245984
20	Ground Wire	1	41001401	42245984
21	Screw	1	08205200	42245984
22	Embraco Compressor 115V/60Hz	1	41008182	42245984
23	Cover	1	41008197	42245984
24	Alpha Control Mounting Bracket	1	44000570	
25	Alpha Main Control	1	41050004	
26	Stand-off	5	44000579	
27	Overload	1	41008201	42245580 & 42245984
28	Grommet	4	41008198	42245984
29	Sleeve	4	41008199	42245984
30	PTC Relay	1	41008200	42246574 & 42245984

SENTRY SYSTEM™ REFRIGERATION MONITOR

Section 10: Troubleshooting Guide

PROBLEM	POSSIBLE CAUSE	CORRECTION
Unit does not operate.	1. The unit is unplugged.	Plug in the unit.
	2. Did not hold the "ON/OFF" button long enough on the display panel.	Press and hold the "ON/OFF" button for five seconds.
Unit does not display Celsius (C).	1. Did not press the "*F/C" button on the display panel.	Press the "*F/C" button to toggle between F and C.
Temperature controls are not raising or lowering the set temperature on the unit.	1. Did not press and hold the "SET" button on the display panel while pressing either the "WARMER" or "COLDER" button.	Press and hold the "SET" button and press either the "WARMER" or "COLDER" button. This will raise or lower the set temperature by one degree F or C (depending upon the setting).
Display light feature is not engaged.	1. Display light feature engaged (for Wine Cellars and Beverage Centers).	Press the "LIGHT" button. The light will come on and stay on with the door closed until the "LIGHT" button is pressed again.
	2. The light bulb is burned out.	Replace the light bulb and then press "LIGHT" button.
Door is closed but the light is still on inside of the unit.	1. Did not press the "LIGHT" button before the door was last closed.	Press "LIGHT" button to disengage light.
Sabbath Mode is not engaging.	1. Did not press the "*F/C" button on the display panel seven times within seven seconds.	Press and hold the "SET" button while pressing the "*F/C" button seven times within seven seconds. The display will flash "SA" seven times and the unit will enter Sabbath Mode.
Sabbath Mode automatically disabled.	1. Sabbath Mode automatically disables after 36 hours.	Restart Sabbath Mode by pressing and holding the "SET" button while pressing the "*F/C" button seven times within seven seconds.
Sabbath Mode is not disabling.	1. Did not press the "*F/C" button on the display panel seven times within seven seconds.	Press and hold the "SET" button while pressing the "*F/C" button seven times within seven seconds. NOTE: Sabbath Mode will automatically disable after 36 hours.
Audible alarm sounding three times every 30 seconds and LED light flashing green.	1. Door Ajar alarm.	Close the door.
Audible alarm sounding six times every minute and LED light flashing red.	1. High and Low Temperature alarm.	Press the "ON/OFF" button for approximately one second to reset audible and display alarms. NOTE: Although pressing the "ON/OFF" button will reset the alarms, the alarm will resume if alarm condition still exists.

SENTRY SYSTEM™ REFRIGERATION MONITOR

PROBLEM	POSSIBLE CAUSE	CORRECTION
LED light flashing amber and no audible signal heard.	1. Power Failure alarm. NOTE: This alarm will occur upon initial installation which is normal since the unit was run at the factory to verify quality.	Press the "ON/OFF" button for approximately one second to reset audible and display alarms. NOTE: Although pressing the "ON/OFF" button will reset the alarms, the alarm will resume if alarm condition still exists.
Want to give a customer demonstration but Show Room Mode is not enabling.	1. Did not perform a "Power On Reset" (POR).	To enable, press and hold the "ON/OFF" button on the display panel while performing a "Power On Reset" (POR), i.e. - disconnect and reconnect power supply to the unit.
Compressor, condenser fan, internal fan(s), heater, reverse gas solenoid, and alarms are not working but the display is functioning normally.	1. Show Room Mode enabled.	To exit, press and hold the "ON/OFF" button while performing a "Power On Reset" (POR), i.e. - disconnect and reconnect power supply to the unit.
E1 error code on display panel and audible alarm sounding six times every minute (Compressor fault - high/low amps).	1. Compressor wires disconnected.	Check wiring diagram on back of unit and reconnect wires.
	2. Faulty compressor.	Replace compressor.
	3. Faulty control.	Replace control.
	4. Faulty compressor overload.	Replace overload.
	5. Faulty compressor PTC starter.	Replace PTC starter.
E2 error code on display panel and audible alarm sounding six times every minute (Condenser fan motor fault - high/low amps).	1. Condenser fan motor wires disconnected.	Check wiring diagram on back of unit and reconnect wires.
	2. Faulty condenser fan motor.	Replace condenser fan motor.
	3. Faulty control.	Replace control.
E3 error code on display panel and audible alarm sounding six times every minute (Evaporator thermistor "sensor B" fault).	1. Disconnected wire causing open.	Check wiring diagram on back of unit and reconnect wires.
	2. Shorted thermistor wires.	Replace thermistor.
	3. Faulty thermistor.	Replace thermistor.
E4 error code on display panel and audible alarm sounding six times every minute (Display thermistor "sensor A" fault).	1. Disconnected wire causing open.	Check wiring diagram on back of unit and reconnect wires.
	2. Shorted thermistor wires.	Replace thermistor.
	3. Faulty thermistor.	Replace thermistor.
Service Mode is not engaging.	1. Did not press the "WARMER" and "COLDER" buttons the correct amount of times in the allotted time period.	To enable, press and hold the "WARMER" button while pressing the "COLDER" button four times within five seconds.
Service Mode disabled automatically.	1. After five minutes of no keypad entry, Service Mode will automatically disable.	To restart, press and hold the "WARMER" button while pressing the "COLDER" button four times within five seconds.
Service Mode is not disabling.	1. Did not press the "WARMER" and "COLDER" buttons the correct amount of times in the allotted time period.	To exit, press and hold the "WARMER" button while pressing the "COLDER" button four times within five seconds.

SENTRY SYSTEM™ REFRIGERATION MONITOR

PROBLEM	POSSIBLE CAUSE	CORRECTION
LED is not displaying a steady green light on the display panel.	1. Sentry System™ was disabled.	Press and hold the "SET" button for five seconds. NOTE: Steady green light on the LED indicates Sentry System™ engaged.
Sentry System™ will not disable.	1. Did not hold the "SET" button on the display panel long enough.	Press and hold the "SET" button for five seconds. NOTE: Steady amber light on the LED indicates Sentry System™ disabled.
Software model number does not match the unit purchased, i.e. - 11 should correspond to a 24 in. wine cellar.	1. Wrong unit software installed.	Call Marvel Customer Service to obtain new user interface.
Temperature range for the unit does not correspond to the temperature range given by Marvel (out-of-range).	1. Wrong unit software installed.	Call Marvel Customer Service to obtain new user interface.

NOTES



Marvel Industries
P.O. Box 997
Richmond, IN
47375-0997

800.428.6644

An AGA Company

41010769 Rev. C
12.12.07

www.lifeluxurymarvel.com

All specifications and product designs subject to change without notice. Such revisions do not entitle the buyer to corresponding changes, improvements, additions, replacements or compensation for previously purchased products.