

Title	French Door Direct Cool Ice Maker Frozen		
Create Date	2017.05.24	Service Bulletin Number	ASC20170602002
Revision Date	2019.04.16	Model: Listed Below	2014 - 2018 Production Units
Symptom	No ice	Frozen Ice Room	Ice Bucket Stuck with Frost

Models:

RF22K9381*,RF22K95*,RF22KRED,RF22M95*,RF22NP**,RF23J9011,RF23M8070,RF23M8090,RF23M8960,RF23M8570,RF23M8590,RF23HCED,RF23HTED,RF24FSED,RF25HMED,RF26J7500,RF28HDED,RF28HFED,RF28HMED,RF28JBED,RF28K9070,RF28K9380,RF28K9580,RF28M9580,RF28N9780,RF28HDEDP,RF28HFEDT,RF28NHED,RF263BEAEB,RF263TEAES,RF265BEAE,RF30KMEDB

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The purpose of this bulletin is to provide servicers with instruction on how to resolve the direct cool ice maker frozen symptom with the Ice Maker Service Kit (IM SVC Kit). The IM SVC Kit comes with an Ice Maker, Y Clip Kit, Auger Drain, Zip Tie, and Main PCB. The IM SVC Kit for the particular model being serviced needs to be ordered.

NOTE: DO NOT order and replace the entire Auger Motor Assembly unless a true defect or failure is confirmed.

Part information begins on page 13 of this bulletin.

NOTE:

- Failure to properly follow ALL steps can result in a failed repair and return visit to the consumer. Please adhere to all steps as they are written and do not skip any steps or improvise any other solutions.
- Some steps indicate a part must be replaced (all parts are included in the IM SVC KIT) while other steps require the servicer to inspect and replace or apply if needed.

Visual Examples of frost condition



Service Preparation

1. Place the unit into Self Diagnostic mode to identify known fault codes.



Code	Item
14 C	Ice Maker(FF) Sensor Error
15 C	Ice Room Sensor Error
39 C	Ice Maker(FF) Function Error
40 C	Ice Room - FAN Error
61 C	Ice dDuct heater Error

2. Place the unit into forced defrost mode. This will loosen the ice and warm up the cooling loop in preparation for removal of the ice maker. While the unit is in forced defrost mode, move on to the next steps.



3. Remove the ice bucket. If the ice bucket cannot be removed, use your steamer to loosen the ice bucket.

NOTE: If the ice bucket is stuck, use a steamer to melt the ice until you can remove the bucket. Be sure to place a towel under the ice bucket to catch water as it drips down as shown.

NEVER use a heat gun or hair dryer to defrost the ice room.

NOTE:

Do not use a heat gun or hair dryer to defrost the ice room. This may cause the plastic liner to melt creating permanent damage.

Do not have the customer unplug the unit for 24 hours to remove ice. This is not effective enough to remove all ice from the ice room. Failure to remove all ice will result in a return visit.



① Service Steps – All Steps Must Be Followed

- Remove the ice bucket from the Ice Room.
- Check for cracks or fractures in the ice bucket.
- Check the gasket around the edge of the bucket making sure it is not ripped, cracked, rolled, or has become too rigid, preventing a proper seal.



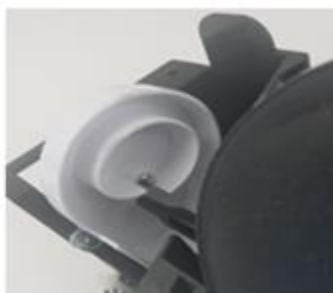
**If damage is noted,
replace the ice bucket**

② Inspect the Ice Route Flapper and Assembly for a proper seal

Add some water to the ice route for leakage testing.



Inspect the ice route flapper. Ensure the rubber is still soft and pliable, has no tears or rips, and that the flapper is in the fully closed position when out. Also inspect the ice dispensing opening for cleanliness. If build up has occurred, wipe clean before reinstalling the ice route assembly.



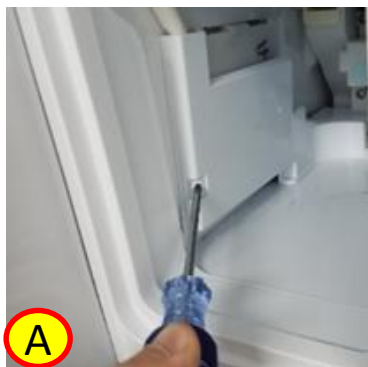
- 3 Remove the unit from force defrost mode and then **unplug the unit**. This will prevent the cooling loop from frosting up during service and prepare the unit for additional service steps.

You **MUST** remove **ALL** ice from the ice room and auger area using a **STEAMER**.



- 4 Disassemble the ice maker (See pictures below)

- Remove the left screw, and then open the harness cover.
- Disconnect the ice maker cable.
- Locate the Duct left hook (C1). Unlock the drain duct by removing the upper right screw (C2).
- Unlock the left hook, and then open the drain duct.
- Unlock the upper hook, and then pull out the ice maker from the opening of the drain duct.



5 Check for Icing Symptoms in the Ice Room

- Check for traces of water spray in the upper ice room area.
- Check for ice in the air flow path (L-Duct).
- Check for ice in the drain pipe of the auger motor.
- Check for ice on the ice room bottom.



Continue steaming the unit to remove all traces of ice and frost to allow for the safe removal of the auger motor assembly. Failure to remove all ice traces will result in a possible repeat visit to the customer.

6 Disassemble the Auger Motor

- Disconnect the cable of the auger motor.
- Push the bottom hook.
- Remove the auger motor.

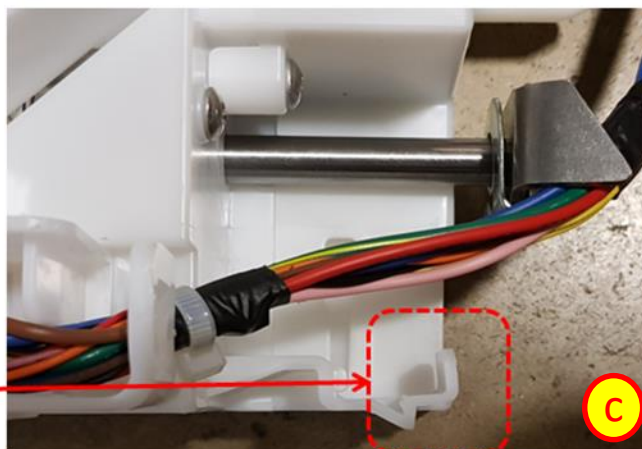
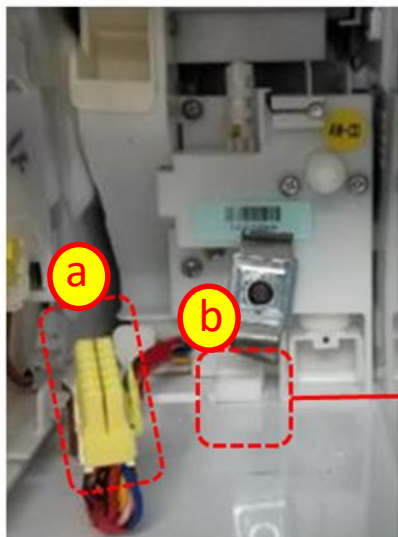
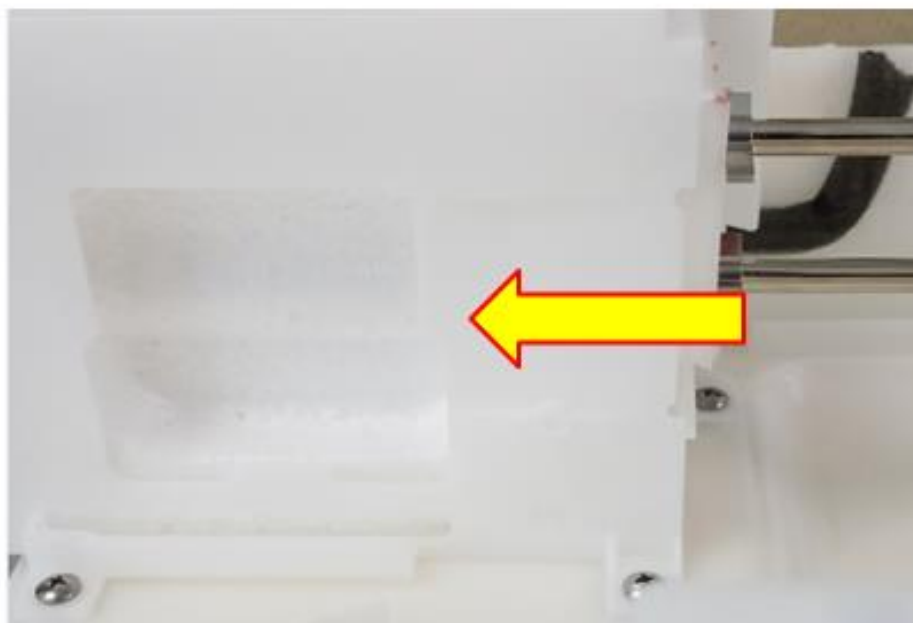


Illustration above: Auger motor removed. Bottom Hook highlighted.

- 7 Inspect the air channel above the auger assembly and remove all traces of ice from this area. Failure to do so will create new ice build up there and on the floor, side walls, and rear.



NOTE: It is very important to remove all accumulated ice anywhere in the ice room and auger. Don't miss any. Failure to remove all ice can result in a return visit.



- ⑧ With the auger motor assembly removed, inspect the drain of the ice room. Place your finger into the drain area to feel for any foam remnants or ice blockage, etc. Remove any and all found materials.



If ice is found, use a steamer to remove and ensure you have flow from the ice room to the drip pan in the rear. Drains must always remain open.



NOTE: Once you have confirmed all ice has been removed from the entire ice room area, towel the whole ice room dry including the cooling loop, side walls, floor, and ceiling of the ice room.

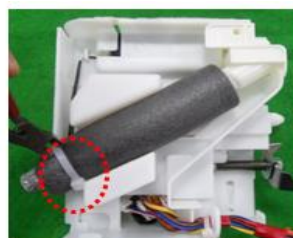
9

Disassemble the auger drain (DA97-19898A) and replace with drain component from your IM SVC Kit.

NOTE: Do not order an entire auger assembly unless you find a defect such as a damaged fan or motor or physical damage.



1. Remove the screw on the side of the drain line.



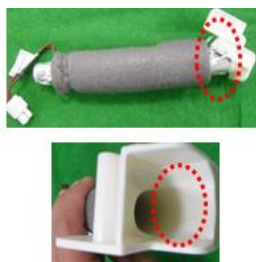
2. Cut and remove the zip tie.



3. Disassemble the Molex.



4. Remove the wire from the auger motor.
- Remove drain line.



5. Check the improved part: Heater tape to the top of the assembly and changed drain hole shape.



6. Insert zip tie into hole.



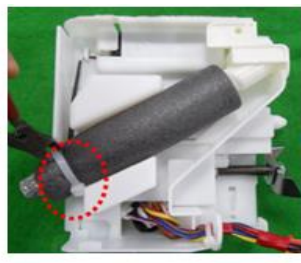
7. Assemble drain line.



8. Insert and tighten screw.



9. Secure zip tie while holding the wire out of the way.



10. Cut the rest of the cable tie and then rotate the tie.



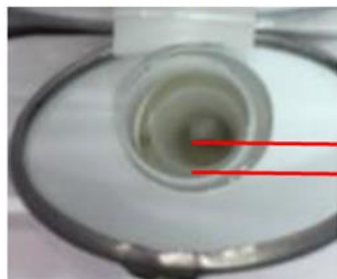
11. Connect the wire securely, and then push it into the housing.



12. Check the final assembly.

- ⑩ Check for any particles in the fill tube using a mirror. Remove all particles.
Check the gap between the water line outlet and the fill tube to prevent water spray.
If the gap between the water line outlet and the fill tube is less than 10mm, adjust the insertion length of the water line in the cabinet rear.

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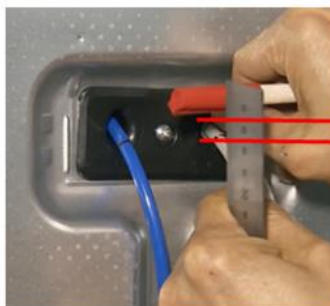
enough gap : 10mm↑

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small gap : 10mm↓

If the gap between water line limit marking and cabinet rear wall is below 15mm (ex. within 10mm), Adjust it to be about 15mm~20mm

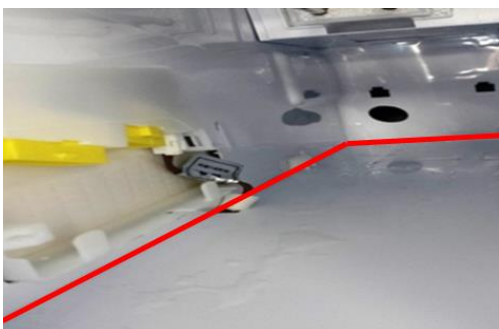


enough gap : 15mm~20mm

- ⑪ Sealing the ice room with RTV sealant. Seal any gaps that you find in the ice room sides and floor. If no gaps exist, omit this step.
NOTE: Only use Samsung provided RTV sealant. No substitutions or other products are authorized for use in this repair step.



Part number required:
DA81-05595A



Cut the applicator tip at a 45 degree angle, and then apply the sealant along the joints identified by the red line. This will help to provide a sealed ice room environment.

- 12 Re-install the auger motor assembly ensuring it is installed fully to the rear and locked into place with the lock tab. Reconnect the auger motor wire harness to the connection point on the left wall making sure to route the wiring properly.

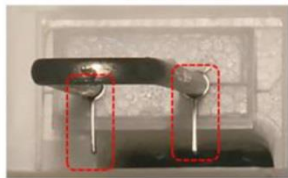


- 13 Remove the white plastic retainer around the cooling loop, install the new retainer, and then attach the Y-Clip (DA82-02367A) to the bottom of the cooling loop. Ensure that there is no gap between the clip and the rear wall retainer clip. The Y Clip and retainer come with your IM SVC Kit.

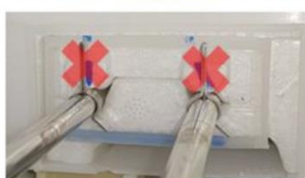


Install the Y-Clips pointing straight down. They must not be crooked or sideways. If they are, water will pool up on the surface and freeze.

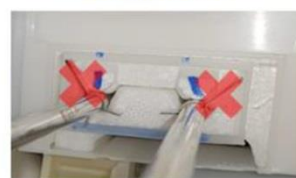
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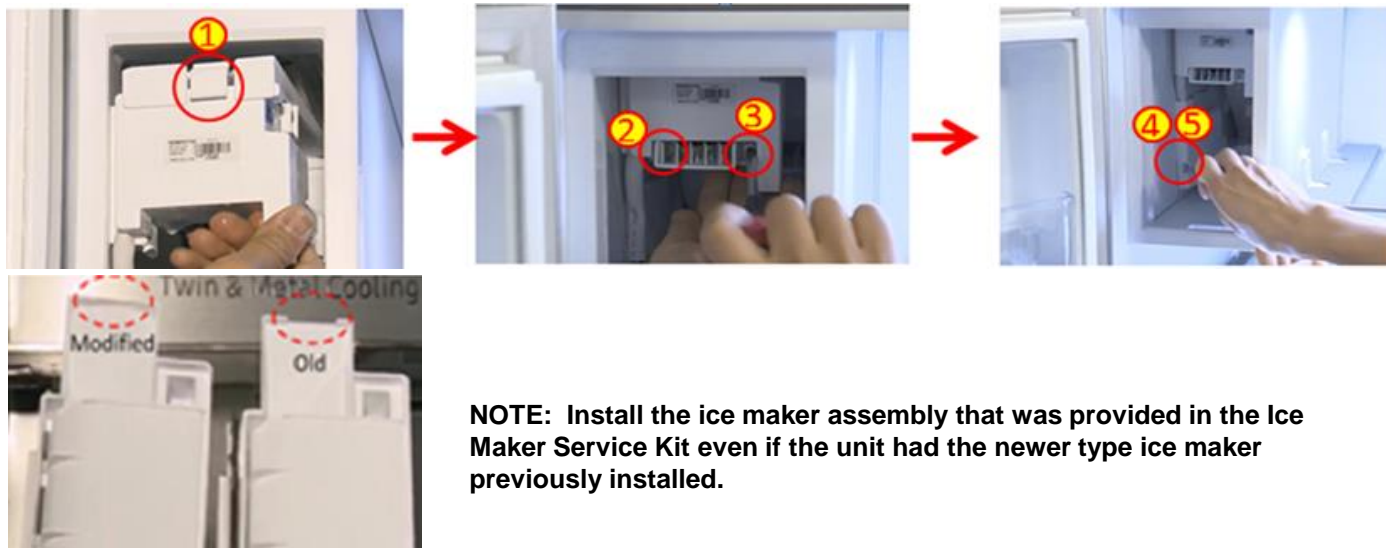
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- 14 Reassemble the ice maker

- Insert the ice maker into the opening of the drain duct. Lock the upper hook with 'click' sound.
- Lock the left hook with 'click' sound to close the drain duct.
- Insert and tighten the upper right screw to lock the drain duct.
- Connect the ice maker cable.
- Close the harness cover, and then screw in and tighten the left screw.

See the next page for illustrations.



NOTE: Install the ice maker assembly that was provided in the Ice Maker Service Kit even if the unit had the newer type ice maker previously installed.

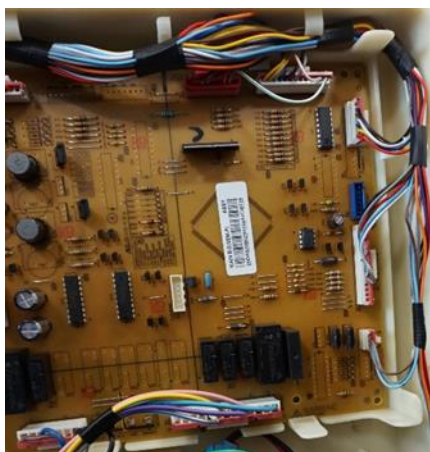
- 15 Install the new MAIN PCB included in your IM SVC Kit.

While the unit is still unplugged, remove all wire connections from the Main PCB.



WARNING: To prevent damage to the Main PCB, you must turn the power off before you connect or disconnect wires going to or coming from the it.

Once all wire connections are removed, remove and replace the Main PCB, and then re-install all connectors securely.

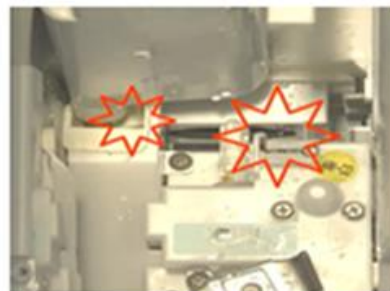


Plug the unit back in to restore power, and then move on to the operational checks on the following page.

Important Note: Whenever you replace a Main PCB, make sure you set the temperature settings for all compartments to the same settings the customer originally selected.

Operational Checks before Service Completion

Press "Test Mode" button and check for leaking water or functional failure



When pressing test, listen for the chime. This indicates the test function has begun. This process takes 6 minutes to complete and will produce a shortened fill at the very end of the process. Check for any leaking, spraying, or drips after the 6 minute test is completed.

Re-install the Ice Bucket.



To complete the repair, place the unit into Self Diagnosis mode to ensure the unit has no other error codes and is operating as it should.



Parts Listing – Counter Depth Models - IM Service Kit



MODEL	RF22KREDB**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
Original Production up to 7/2016 (H7)	DA97-13718C, DA97-19898A, DA82-02367A (No Main PCB)
Production Range 8/2016 to 12/2018 (H8 to KC)	IM SVC KIT - DA82-02671A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF22N9781**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
All Production up to 12/2018 (KC)	IM SVC KIT - DA82-02655A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF23HCEDB**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
Original Production up to 11/2015 (GB)	DA97-13718C, DA97-19898A , DA82-02367A. Main PCB # DA94-02274G
Production Range 12/2015 to 12/2018 (GC-KC)	IM SVC KIT - DA82-02698A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF23HTEDB**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
Original Production up to 11/2015 (GB)	DA97-13718C, DA97-19898A, DA82-02367A and Main PCB # DA94-02274H
Production Range 12/2015 to 12/2018 (GC-KC)	IM SVC KIT -DA82-02699A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF23J9011**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
Original Production up to serial 11/2017 (JB)	DA97-13718C, DA97-19898A, DA82-02367A and Main PCB # DA92-00606E
Production Range 12/2017 to 12/2018 (JC-KC)	IM SVC KIT - DA82-02642A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF24FSEDB**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
Original Production up to serial 7/2016 (H7)	DA97-13718C, DA97-19898A, DA82-02367A (No Main PCB)
Production Range 8/2016 to 12/2018 (H8-KC)	IM SVC KIT - DA82-02668A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

Parts Listing – Counter Depth Models Continued - IM Service Kit



MODEL	RF22K9381**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
All Production up to 12/2018 (KC)	IM SVC KIT - DA82-02645A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF22K9581** / RF22M9581**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
All Production up to 12/2018 (KC)	IM SVC KIT - DA82-02706A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF22NPEDB**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
All Production up to 12/2018 (KC)	IM SVC KIT - DA82-02663A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF23M8070** / RF23M8090** / RF23M8960**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
All Production up to 12/2018 (KC)	IM SVC KIT - DA82-02638A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF23M8570** / RF23M8590**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
All Production up to 12/2018 (KC)	IM SVC KIT - DA82-02640A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

NOTICE: Please order the parts that match the serial number range of the unit requiring service.

Failure to follow the parts directions listed in this document can create a new or separate service issue.

Parts Listing – Full Size Units - IM Service Kit



MODEL	RF25HMEDB**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
Original Production up to 6/2016 (H6)	DA97-15217D, DA97-19898A DA82-02367A and Main PCB # DA92-00592A
Production Range 7/2016 to 12/2018 (H7 - KC)	IM SVC KIT - DA82-02695A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF26J7500**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
Original Production up to 6/2016 (H6)	DA97-15217D, DA97-19898A DA82-02367A (No Main PCB)
Production Range 7/2016 to 12/2018 (H7 - KC)	IM SVC KIT - DA82-02701A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF263BEAE**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
Original Production up to 5/2015 (G5)	DA97-15217D, DA97-19898A DA82-02367A and Main PCB # DA92-00384B
Production Range 6/2015 to 12/2018 (G6-KC)	IM SVC KIT - DA82-02697A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF263TEAE**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
Original Production up to 5/2015 (G5)	DA97-15217D, DA97-19898A DA82-02367A and Main PCB # DA92-00384A
Production Range 6/2015 to 12/2018 (G6-KC)	IM SVC KIT - DA82-02714A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF265BEAE**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
All Production up to 12/2018 (KC)	IM SVC KIT -DA82-02696A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF28JBEDB**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
Original Production up to 1/2016 (H1)	DA97-15217D, DA97-19898A DA82-02367A (No Main PCB)
Production Range 2/2016 to 12/2018 (H2 - KC)	IM SVC KIT - DA82-02675A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

Parts Listing – Full Size Units Continued - IM Service Kit



MODEL	RF28HDEDB**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
Original Production up to 11/2015 (GB)	DA97-15217D, DA97-19898A DA82-02367A and Main PCB # DA94-02679J
Production Range 12/2015 to 12/2018 (GC-KC)	IM SVC KIT - DA82-02702A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF28HDEDP**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
Original Production up to 11/2015 (GB)	DA97-15217D, DA97-19898A DA82-02367A and Main PCB # DA94-02679J
Production Range 12/2015 to 12/2018 (GC-KC)	IM SVC KIT - DA82-02703A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF28HFEDB**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
Original Production up to 11/2015 (GB)	DA97-15217D, DA97-19898A DA82-02367A and Main PCB # DA94-02679G
Production Range 12/2015 to 12/2018 (GC-KC)	IM SVC KIT - DA82-02704A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF28HFEDT**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
Original Production up to 11/2015 (GB)	DA97-15217D, DA97-19898A DA82-02367A and Main PCB # DA94-02679F
Production Range 12/2015 to 12/2018 (GC-KC)	IM SVC KIT - DA82-02705A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF28HMEDB**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
Original Production up to 11/2015 (GB)	DA97-15217D, DA97-19898A DA82-02367A (No Main PCB)
Production Range 12/2015 to 12/2018 (GC-KC)	IM SVC KIT - DA82-02673A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

Parts Listing – Full Size Units Continued - IM Service Kit



MODEL	RF28K9070**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
All Production up to 12/2018 (KC)	IM SVC KIT - DA82-02649A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF28K9380**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
All Production up to 12/2018 (KC)	IM SVC KIT - DA82-02653A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF28K9580**/ RF28M9580**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
All Production up to 12/2018 (KC)	IM SVC KIT - DA82-02707A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF28N9780**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
All Production up to 12/2018 (KC)	IM SVC KIT - DA82-02656A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF28NHEDB**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
All Production up to 12/2018 (KC)	IM SVC KIT - DA82-02665A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

MODEL	RF30KMEDB**
Production Range (8 th & 9 th Digit of Serial Number)	Parts Needed
All Production up to KC (12/2018)	IM SVC KIT - DA82-02670A
All Production 1/2019 (M1) and newer	None. Please diagnose and troubleshoot.

NOTICE: Please order the parts that match the serial number range of the unit requiring service.

Failure to follow the parts directions listed in this document can create a new or separate service issue.