



# DISHWASHER

# SERVICE MANUAL

## NOTE

BEFORE SERVICING THE UNIT, PLEASE READ THIS MANUAL CAREFULLY FOR SAFETY AND CORRECT SERVICES.

**For Authorized Service Technician**

**MODEL : LDS5540ST/WW/BB  
LDS5040ST/WW/BB  
LDS5560ST/WW/BB  
LDS4921ST/WW/BB**



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# CAUTION !

- DISCONNECT POWER CORD BEFORE SERVICING
- RECONNECT ALL GROUNDING DEVICES

## IMPORTANT SAFETY NOTICE !

This service information is intended for individuals possessing adequate backgrounds of electrical, electronic and mechanical experience.

Any attempt to repair this appliance may result in personal injury and property damage.

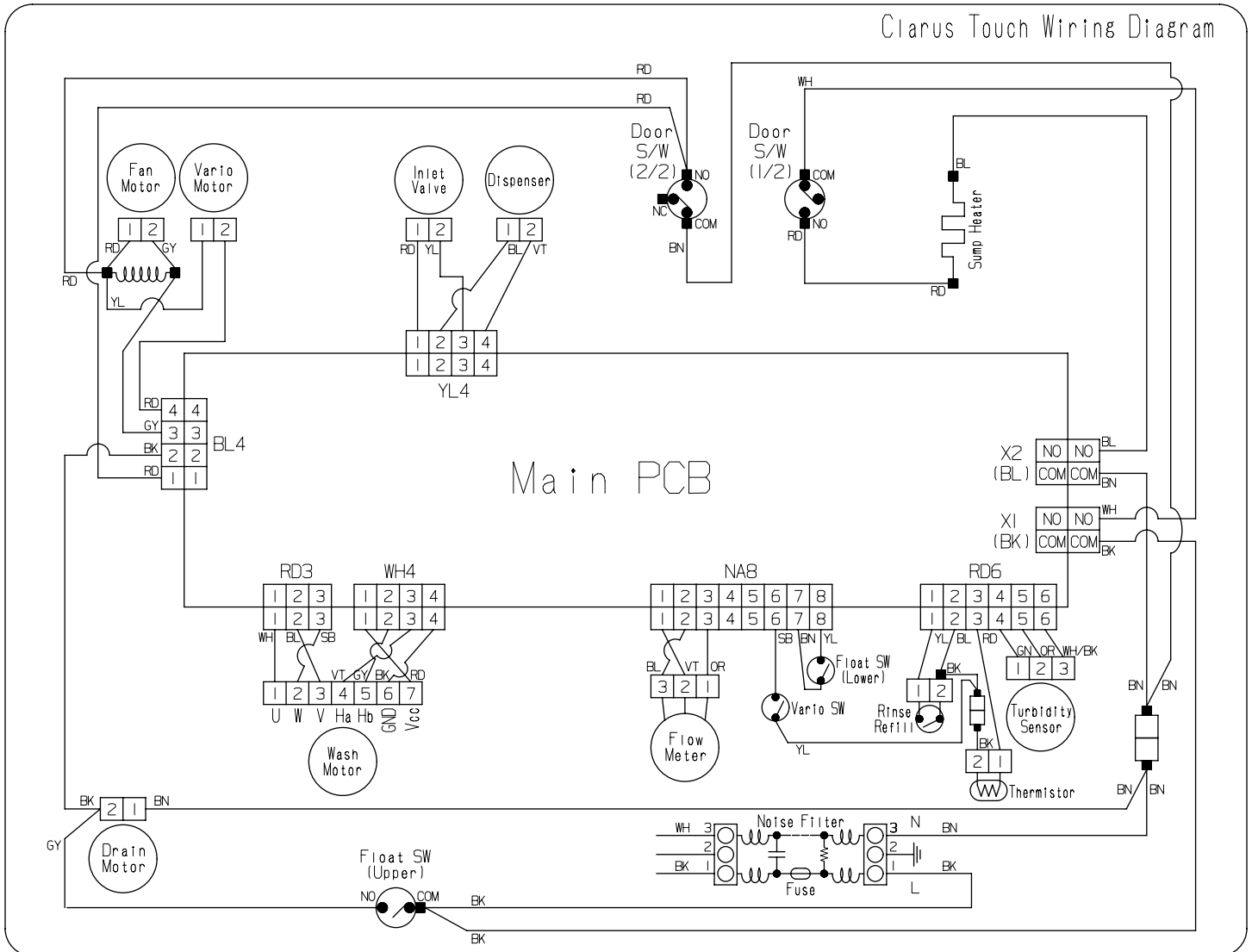
The manufacturer or seller can not be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.



## 2. SPECIFICATION

ITEM	SPECIFICATION
Rated Voltage / Frequency	AC 120 V / 60 Hz
Installation	Built-In
Place Settings	14
Product Dimension(in)	23 3/4" x 24 5/8" x 33 1/2"
Product Weight(lbs)	90.8lbs (for LDS5040, LDS4921 series) 90.8lbs (for LDS5540 series) 97.8lbs (for LDS5560 series)
Door Color	White, Black, Stainless
Tub Material	Stainless Steel
Control	Electronic
Rated Power(Watt)	1,300
Heater Power(Watt)	1,200
Programs	5 (for LDS5040, LDS5540, LDS4921 series) 7 (for LDS5560 series)
Upper Rack Position	Adjustable
Lower Rack	100% Fold down
Water Consumption(ℓ)	8 ~ 27 (Normal)
Power Consumption(kWh/year)	279 (Normal)
Operating Time(min)	106 ~ 141 (Normal)
Fan Dry System	Yes
Delay Start Function	Yes
Auto-Off Power Switch	Yes
Process Monitor	Yes
Wash Level	3
Racks	Nylon Coating
Operating Water Pressure(Bar)	0.5-8 (140-830 kPa)

# 3. WIRING DIAGRAM

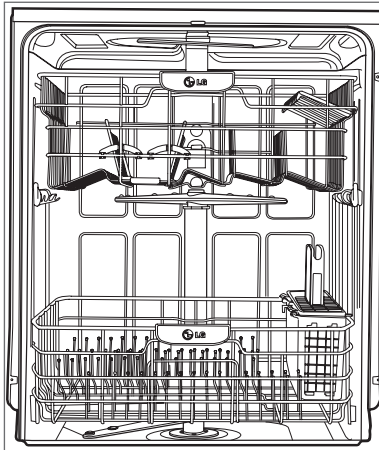


# 4. FEATURES & TECHNICAL EXPLANATION

## 4-1. Parts And Features

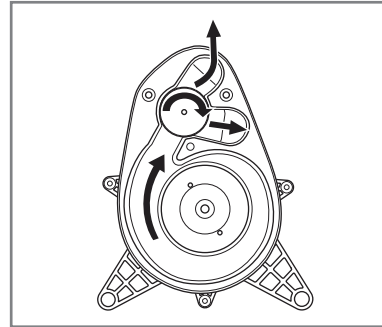
### FEATURES

#### LARGE CAPACITY



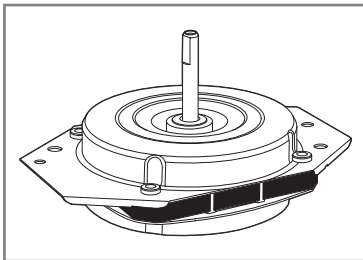
LG dishwashers allow you to load very large items in both the upper and lower racks. The tall tub provides extra overall capacity and the clearance to accommodate large dishes. Extra large items (max. 14 in.) may be loaded in the lower rack by raising the upper rack.

#### VARIO SPRAY SYSTEM



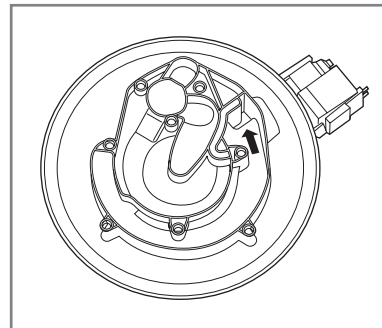
Because the water spray alternates between the upper and lower racks, all of the power from the motor is directed to one rack at a time. This concentrates all the cleaning power of the motor on each rack in turn.

#### SLIM DIRECT MOTOR™



The new Slim Direct Motor™ is inverter-controlled. Wash power is controlled based on cycle selection. It also offers high energy efficiency to minimize energy use.

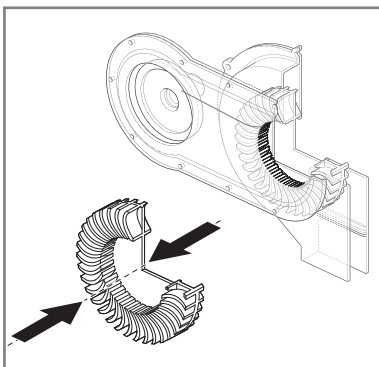
#### SOFT FOOD GRINDER AND SELF-CLEANING FILTER



For best wash results, your LG dishwasher has a built-in soft food grinder and a selfcleaning filter. The grinder grinds up soft food and residue into small particles that can be caught in the filter and washed down the drain. The self-cleaning filter system

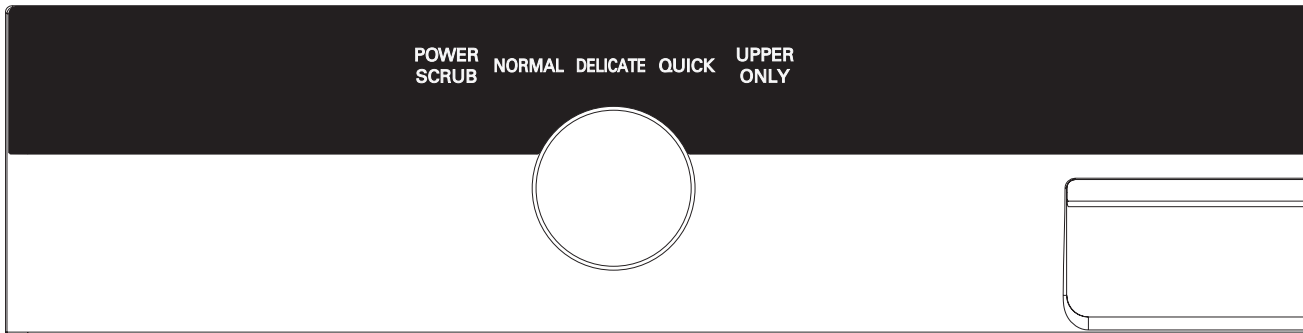
continuously cleans the wash water as it circulates to separate any residue from the wash water. All dirt and residue is easily washed down the drain.

#### HYBRID DRYING SYSTEM

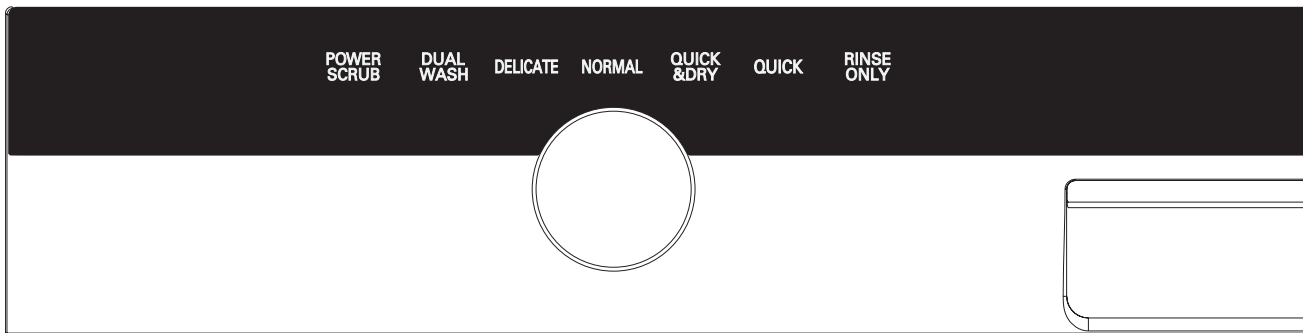


This system effectively dries dishes without the use of a heating element that would increase energy consumption.

## 4-2 Control Panel (for LDS5540, LDS5560 Series)



Display varies by model(LDS5540)



Display varies by model(LDS5560)

### Cycles

Select your desired cycle.

#### POWER SCRUB

This cycle is for heavily and hard soiled dishes. Power Scrub can also help reduce hard water spotting on dishes.

#### NORMAL

This cycle is for normally soiled, everyday loads.

#### DELICATE

The cycle is intended for effectively cleaning delicate items such as fine china and stemware.

#### QUICK(LDS5540), Quick&Dry(LDS5560)

This is a shortened cycle that is intended for washing and drying recently used dishes or lightly soiled loads.

#### QUICK (LDS5560)

This is a shortened cycle that is intended to wash recently used or lightly soiled loads, without drying.

#### RINSE ONLY

This cycle is a quick rinse for dishes that will not be washed immediately. This cycle will rinse dishes that have excess soil to soften dried on residue. Rinsing the dishes will help prevent odors in the dishwasher. No detergent should be

#### DUAL WASH

This cycle washes the upper and lower racks at different spray intensities. The default setting for this cycle washes the lower rack with strong spray intensity and the upper rack with soft spray intensity. This provides optimum cleaning performance for mixed loads, including fine china and stemware. If other combinations are desired, use the steps listed below to change the intensities or to use the HALF LOAD feature.

#### How To Use Dual Wash:

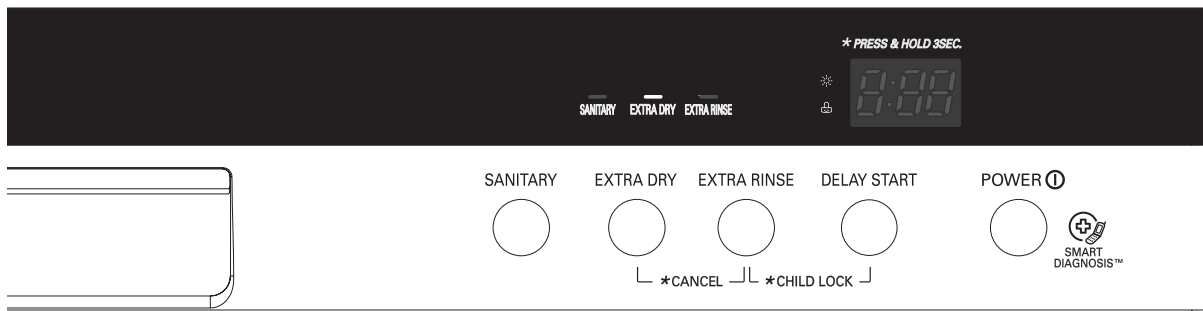
1. Select Dual Wash.
2. Press the Spray button to toggle between Soft, Medium and Strong for the upper spray arm.
3. After making your selection for the upper spray arm, press the Half Load button.
4. Press the Spray button to toggle between Soft, Medium and Strong for the lower spray arm.
5. Close the door to start the cycle.

#### UPPER ONLY

This cycle is only for washing items placed on the upper rack

#### CHIME ON/OFF

To enable or disable the chime, first, turn on the dishwasher. Press and hold the two – LDS5540 : Extra Dry and Delay Start, LDS5560 : Spray and Delay Start - buttons simultaneously for approximately three seconds.



Display varies by model(LDS5540)

## Cycle Options

Press the desired cycle and then select the options for that cycle.

### SANITARY

This high-temperature rinse sanitizes dishes and glassware in accordance with NSF/ANSI Standard 184 for residential dishwashers. Certified dishwashers are not intended for licensed food establishments.

### EXTRA DRY

Select the EXTRA DRY option for better drying performance. This option adds 60 minutes of extra drying time to the cycle.

### EXTRA RINSE

The Extra Rinse symbol indicates that an extra rinse has been added to the cycle.

### DELAY START

The Delay Start feature allows you to delay the start of a selected cycle. Each time the Delay Start button is pressed, the delay time will increase an hour. The delay start time can be set from 1 to 19 hours, in one-hour increments.

### CHILD LOCK

The Child Lock feature helps prevent your settings from being changed during a cycle. Selecting this feature locks all of the buttons, except for the Power button, on the control panel. This feature does not lock the door.

#### To activate the Child Lock:

1. Press the Power button.
2. Select the cycle (and desired options).
3. Press and hold the Extra Rinse and Delay Start buttons for three seconds. The Child Lock indicator will illuminate in the display once the Child Lock is activated.

### DIGITAL DISPLAY


The Digital Display on the control panel shows the ESTIMATED cycle time. When the dishwasher is powered up, the display will be blank. When the cycle and options are selected, the display will show the total estimated time to complete those selections. During operation, the display shows the remaining estimated operating time.

### TO CANCEL A CYCLE

To cancel a cycle, open the door and then press and hold the Extra Dry and Extra Rinse buttons simultaneously for approximately three seconds. The drain pump will activate and the cycle will cancel. The display will show "dr" and the dishwasher will drain the water. After the dishwasher is drained, the power will turn off.

If power is turned on and no cycle has been selected, the dishwasher will power off within four minutes.

### NOTE

- The estimated time shown in the display does not include delay times for heating water, etc.
- If Delay Wash is selected, the display shows the delay time in hours.
- Time may vary depending on the soil level of your load.
- The RINSE AID symbol  indicates that the rinse aid needs to be refilled.

### POWER

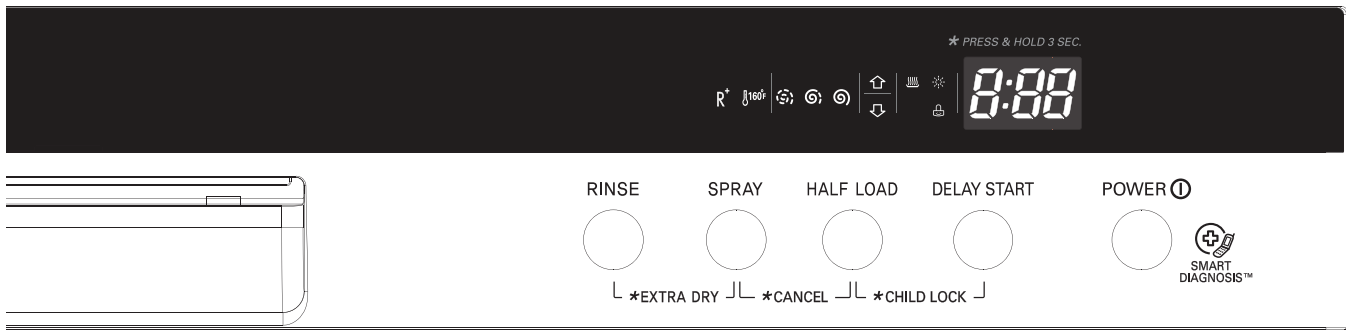
- Press the Power button to turn on the control panel. If no cycle is selected within four minutes, the dishwasher will power off.
- After the cycle is complete, the power automatically turns off for safety and to reduce energy consumption."
- If there is a power surge, power outage, or disruption of any kind, the PF indicator will display and power will be automatically turned off for safety. The cycle will need to be restarted.

### SMART DIAGNOSIS

Should you experience any problems with your dishwasher, it has the capability of transmitting data to your Smart Phone using the LG Smart Laundry & DW Application or via you telephone to the LG call center.

### NOTE

Smart Diagnosis is a troubleshooting feature designed to assist, not replace, the traditional method of troubleshooting through service calls. The effectiveness of this feature depends upon various factors, including, but not limited to, the reception of the cellular phone being used for transmission, any external noise that may be present during the transmission, and the acoustics of the room where the machine is located. Accordingly, LG does not guarantee that Smart Diagnosis would accurately troubleshoot any given issue.



Display varies by model(LDS5560)

## Cycle Options

(Refer to the control panel on the next page)

Press the desired cycle and then select the options for that cycle.

### EXTRA DRY ( )

Select the EXTRA DRY option for better drying performance. This option adds 60 minutes of extra drying time to the cycle. The EXTRA DRY button will illuminate when the option has been selected.

Press and hold the Rinse and Spray buttons for three seconds.

### RINSE

Repeated pressing of the Rinse button will select the desired Rinse option. The Sanitary, Extra Rinse, or Sanitary and Extra Rinse lights will show in the bottom left portion of the display.

### SANITARY ( )

This high-temperature rinse sanitizes dishes and glassware in accordance with NSF/ANSI Standard 184 for residential dishwashers. Certified dishwashers are not intended for licensed food establishments.

### EXTRA RINSE ( R<sup>+</sup> )

The Extra Rinse symbol indicates that an extra rinse has been added to the cycle. An extra rinse can help reduce hard water spotting on dishes. To add an extra rinse, press the Rinse button repeatedly until the Extra Rinse symbol appears in the display.




### TO CANCEL A CYCLE

To cancel a cycle, open the door and then press and hold the Extra Dry and Extra Rinse buttons simultaneously for approximately three seconds. The drain pump will activate and the cycle will cancel. The display will show "dr" and the dishwasher will drain the water. After the dishwasher is drained, the power will turn off.

If power is turned on and no cycle has been selected, the dishwasher will power off within four minutes.

### SPRAY (INTENSITY)

First, select the desired cycle. Press the Spray button repeatedly until the desired spray intensity is selected.

Soft (  ), Medium (  ), Strong (  )

### HALF LOAD ( )

For small loads, you may use just the upper or lower rack to save energy. Each press of the Half Load button cycles between upper rack only and lower rack only.

### DELAY START

The Delay Start feature allows you to delay the start of a selected cycle. Each time the Delay Start button is pressed, the delay time will increase an hour. The delay start time can be set from 1 to 19 hours, in one-hour increments.

### CHILD LOCK

The Child Lock feature helps prevent your settings from being changed during a cycle. Selecting this feature locks all of the buttons, except for the Power button, on the control panel. This feature does not lock the door.

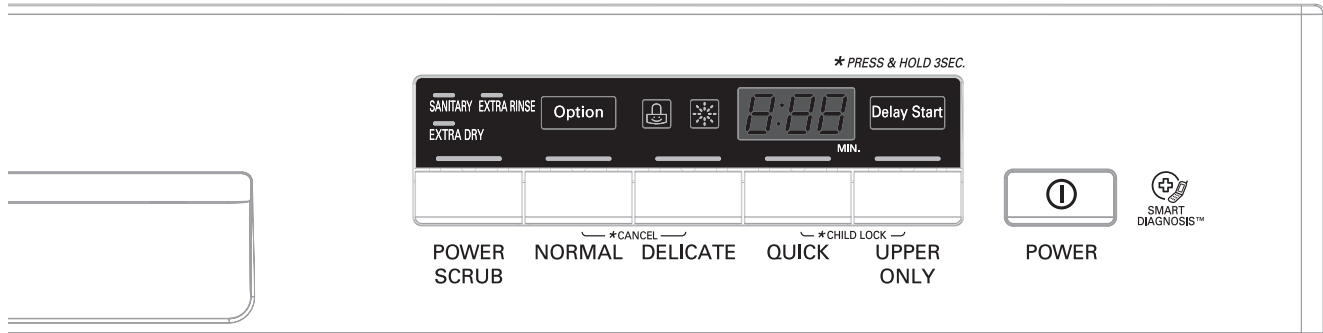
#### To activate the Child Lock:

1. Press the Power button.
2. Select the cycle (and desired options).
3. Press and hold the Half Load and Delay Start buttons for three seconds. The Child Lock indicator will illuminate in the display once the Child Lock is activated.
4. Close the door to begin the cycle.

### DIGITAL DISPLAY

The Digital Display on the control panel shows the ESTIMATED cycle time. When the dishwasher is powered up, the display will be blank. When the cycle and options are selected, the display will show the total estimated time to complete those selections. During operation, the display shows the remaining estimated operating time.

## 4-2 Control Panel (for LDS5040, LDS4921 series)



### Cycles

Select your desired cycle.

#### POWER SCRUB

This cycle is for heavily and hard soiled dishes. Power Scrub can also help reduce hard water spotting on dishes.

#### NORMAL

This cycle is for normally soiled, everyday loads.

#### DELICATE

The cycle is intended for effectively cleaning delicate items such as fine china and stemware.

#### QUICK

This is a shortened cycle that is intended for washing and drying recently used dishes or lightly soiled loads.

#### UPPER ONLY

This cycle is only for washing items placed on the upper rack.

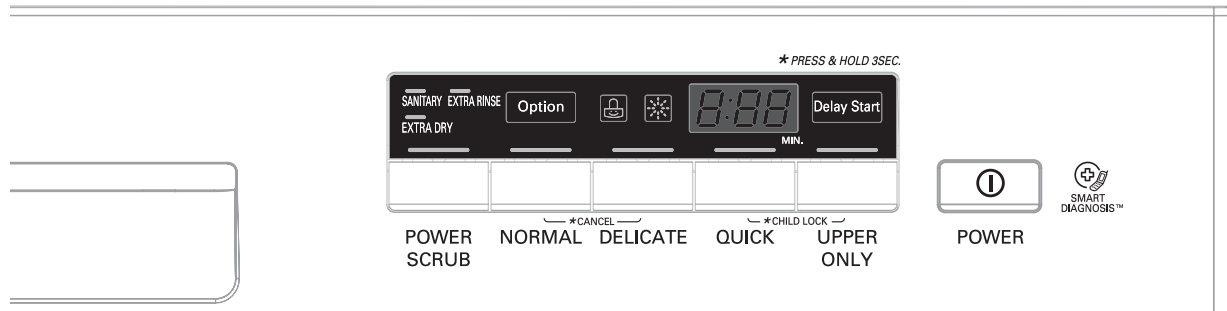
#### CHIME ON/OFF

To enable or disable the chime, first, turn on the dishwasher. Press and hold the Power Scrub and Upper Only buttons simultaneously for approximately three seconds.

#### TO CANCEL A CYCLE

To cancel a cycle, open the door and then press and hold the Normal and Delicate buttons simultaneously for approximately three seconds. The drain pump will activate and the cycle will cancel. The display will show "dr" and the dishwasher will drain the water. After the dishwasher is drained, the power will turn off.

If power is turned on and no cycle has been selected, the dishwasher will power off within four minutes.



## Cycle Options

Press the desired cycle and then select the options for that cycle.

### SANITARY

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### EXTRA DRY

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### EXTRA RINSE

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### DELAY START

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### CHILD LOCK

The Child Lock feature helps prevent your settings from being changed during a cycle. Selecting this feature locks all of the buttons, except for the Power button, on the control panel. This feature does not lock the door.


#### To activate the Child Lock:

1. Press the Power button.
2. Select the cycle (and desired options).
3. Press and hold the Quick and Upper Only buttons for three seconds. The Child Lock indicator will illuminate in the display once the Child Lock is activated.

## DIGITAL DISPLAY

The Digital Display on the control panel shows the ESTIMATED cycle time. When the dishwasher is powered up, the display will be blank. When the cycle and options are selected, the display will show the total estimated time to complete those selections. During operation, the display shows the remaining estimated operating time.

### ! NOTE

- The estimated time shown in the display does not include delay times for heating water, etc.
- If Delay Wash is selected, the display shows the delay time in hours.
- Time may vary depending on the soil level of your load.
- The RINSE AID symbol  indicates that the rinse aid needs to be refilled.

## POWER

- Press the Power button to turn on the control panel. If no cycle is selected within four minutes, the dishwasher will power off.
  - After the cycle is complete, the power automatically turns off for safety and to reduce energy consumption."
- If there is a power surge, power outage, or disruption of any kind, the PF indicator will display and power will be automatically turned off for safety. The cycle will need to be restarted.

## SMART DIAGNOSIS

Should you experience any problems with your dishwasher, it has the capability of transmitting data to your Smart Phone using the LG Smart Laundry & DW Application or via you telephone to the LG call center.

### ! NOTE

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4-3. Test Mode LDS5560 Series

CHECK PROGRAM

※ U00 : Main PGM Ver.  
 ※ d00 : Display PGM Ver.

Button	The number of pushing button	Top Display	Load	State of Door
Half Load + Delay Start + Power	1 time	n03U00/d00 (Version정보)	All LED's are lighting	Either
Delay Start	1 time	N01	Fan Motor	Closed
	2 time	N02	Dispenser	Closed
	3 time	Soil Level	Soil Sensor	Closed
	4 time	Sump Temp(°C)	Sump Thermistor	Closed
	5 time	N05	Drain Pump	Either
	6 time	Frequency	Inlet Valve	Closed
	7 time	Motor RPM	Washing Pump	Closed
	8 time	Un → Up → Lo	Vario valve	Closed
	9 time	-	Auto Off	Closed

### 4-3. Test Mode LDS5540 Series

#### CHECK PROGRAM

BUTTON	The number of pushing button	Top Display	Load	Door
Extra Rinse + Delay Start + Power	1 Time	n03U00/d00 (Version)	All LEDs are lighting	Either
Delay Start	1 Time	n01	Fan Motor	Closed
	2 Time	n02	Dispenser	Closed
	3 Time	Soil Level	Soil Sensor	Closed
	4 Time	Sump Temp(°C)	Sump Thermister	Closed
	5 Time	n05	Drain Pump	Either
	6 Time	Frequency	Inlet Valve	Closed
	7 Time	Motor RPM	Washing Pump	Closed
	8 Time	Un → Up → Lo	Vario Valve	Closed
	9 Time	-	Auto Off	Closed

※ U00 : Main PGM Ver.

※ d00 : Display PGM Ver.

### 4-3. Test Mode LDS5040, LDS4921 series

#### CHECK PROGRAM

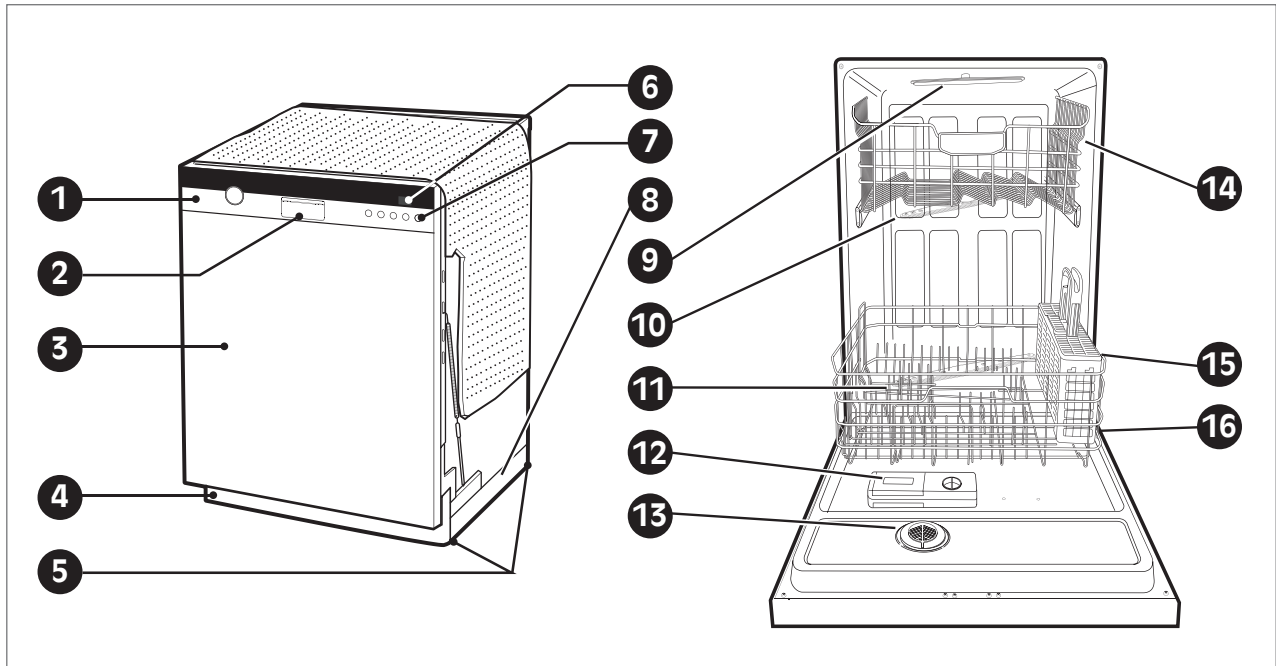
BUTTON	The number of pushing button	Top Display	Load	Door
Quick + Upper Only + Power	1 Time	n03U00/d00 (Version)	All LEDs are lighting	Either
Delay Start	1 Time	n01	Fan Motor	Closed
	2 Time	n02	Dispenser	Closed
	3 Time	Soil Level	Soil Sensor	Closed
	4 Time	Sump Temp(°C)	Sump Thermister	Closed
	5 Time	n05	Drain Pump	Either
	6 Time	Frequency	Inlet Valve	Closed
	7 Time	Motor RPM	Washing Pump	Closed
	8 Time	Un → Up → Lo	Vario Valve	Closed
	9 Time	-	Auto Off	Closed

※ U00 : Main PGM Ver.

※ d00 : Display PGM Ver.

# 5. PARTS NAME

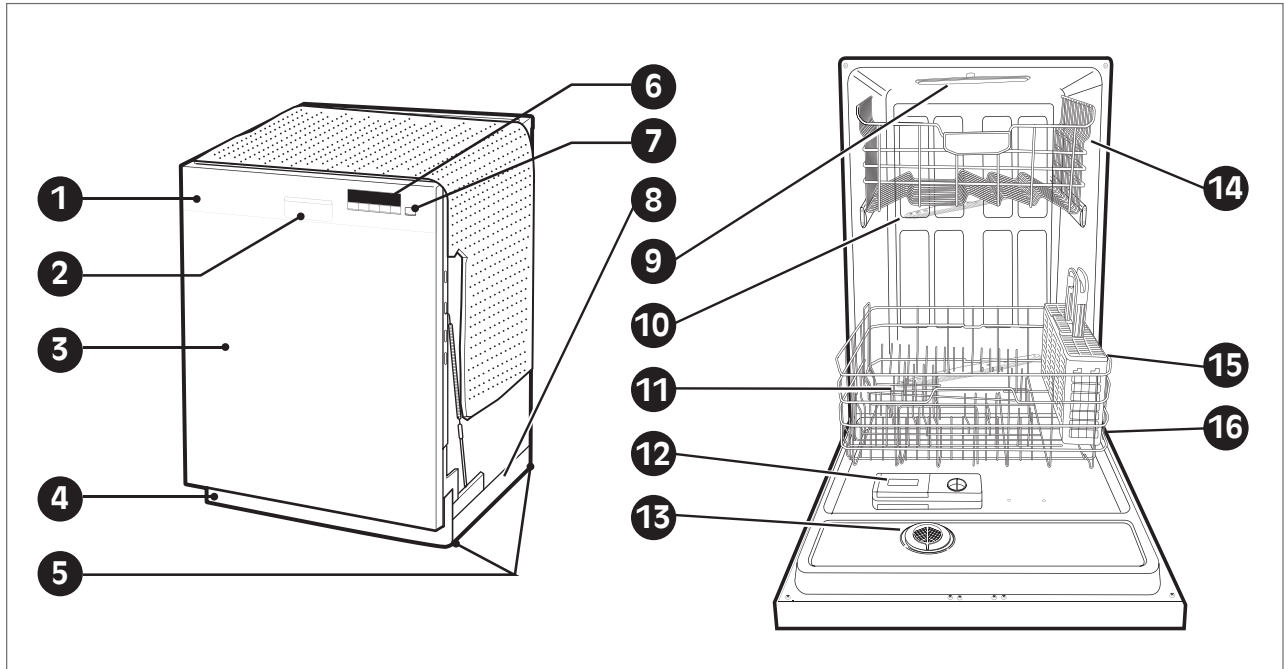
## 5-1 LDS5540, LDS5560 Series



- 1. CONTROL PANEL
- 2. DOOR HANDLE
- 3. FRONT COVER
- 4. LOWER COVER
- 5. LEVELING FEET
- 6. DISPLAY WINDOW
- 7. POWER BUTTON
- 8. BASE

- 9. TOP SPRAY ARM
- 10. UPPER SPRAY ARM
- 11. LOWER SPRAY ARM
- 12. DETERGENT AND RINSE AID DISPENSER
- 13. DRYING VENT COVER
- 14. UPPER RACK
- 15. SILVERWARE BASKET
- 16. LOWER RACK

5-2 LDS5040, LDS4921 Series



- 1. CONTROL PANEL
- 2. DOOR HANDLE
- 3. FRONT COVER
- 4. LOWER COVER
- 5. LEVELING FEET
- 6. DISPLAY WINDOW
- 7. POWER BUTTON
- 8. BASE
- 9. TOP SPRAY ARM

- 10. UPPER SPRAY ARM
- 11. LOWER SPRAY ARM
- 12. DETERGENT AND RINSE AID DISPENSER
- 13. DRYING VENT COVER
- 14. UPPER RACK
- 15. SILVERWARE BASKET
- 16. LOWER RACK

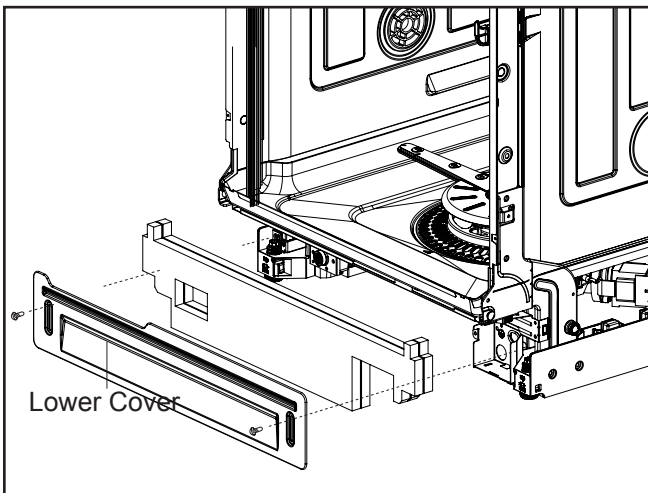


# 7. HOW TO DISASSEMBLE

## BEFORE DISASSEMBLING THE DISHWASHER ;

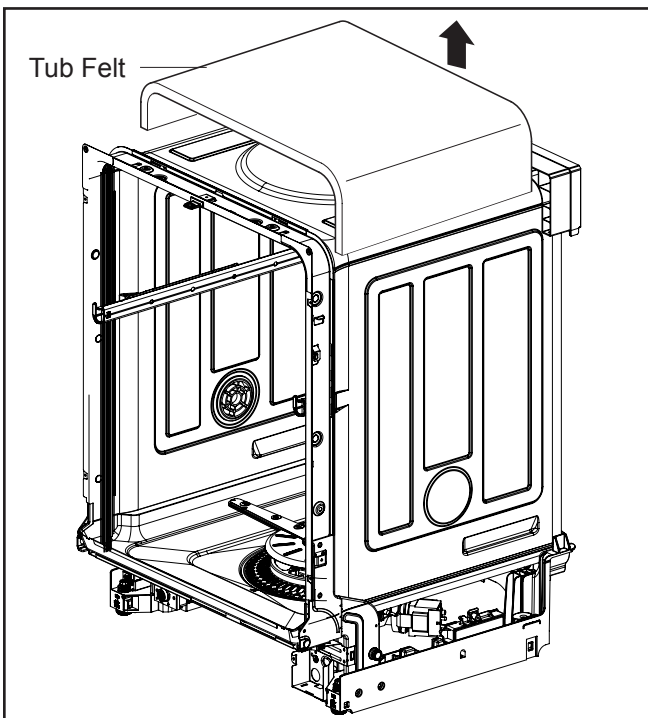
- 1) Remove the cord from electric outlet to avoid electric shock.
- 2) Close the Water Tap (faucet).
- 3) Remove all dishes and items in the dishwasher.
- 4) Remove the Lower Rack and the Upper Rack.
- 5) Remove the inlet hose and drain hose connection to avoid the hose damages.
- 6) Prepare some towels to avoid floor wet by the water left in the dishwasher.

## 7-1. FULL DISASSEMBLE



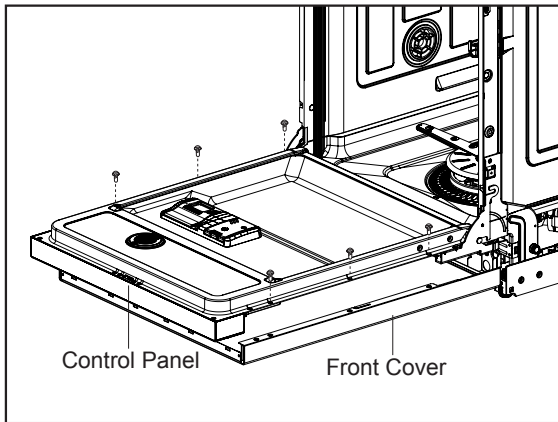
### 1. Lower Cover and Lower Felt

- 1) Remove the front 2 screws.
- 2) Remove the Inlet Hose and Power Supply Cable.



### 2. Tub Felt

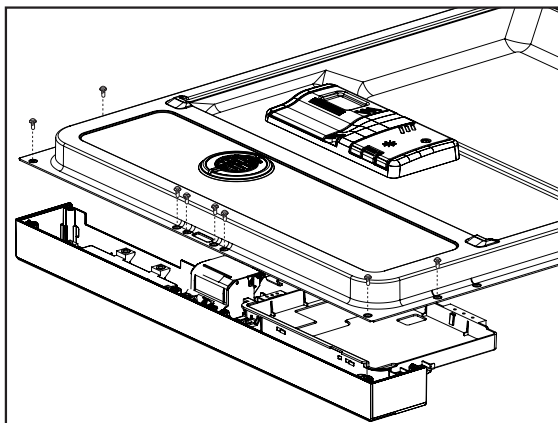
- 1) Tub Felt
  - ① Pull the tub felt.



### 3. Door Assembly

#### 1) Front Cover

- ① Open the door.
- ② Remove 6 screws(stainless).



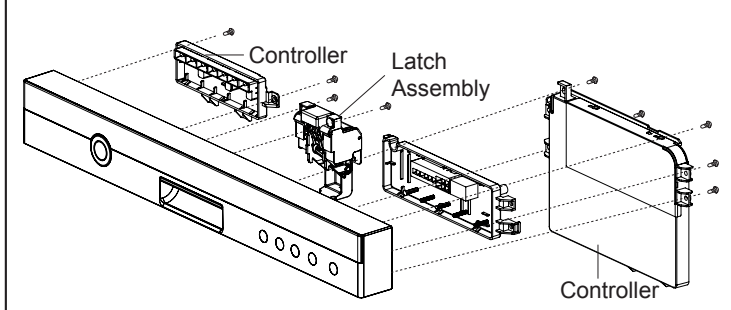
#### 2) Control Panel Assembly

- ① Remove 8 screws(Stainless).
- ② Remove the wire connections.

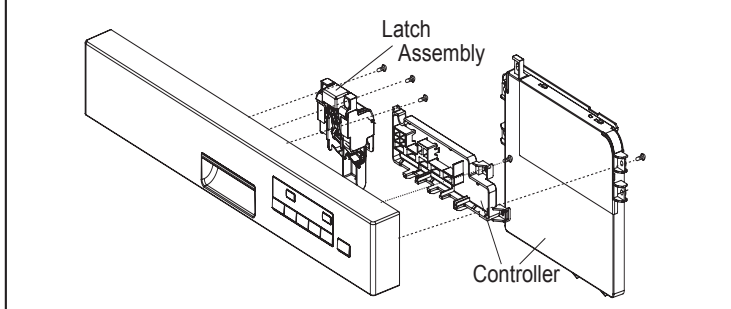
Be sure the wiring should not be changed in reassembling.

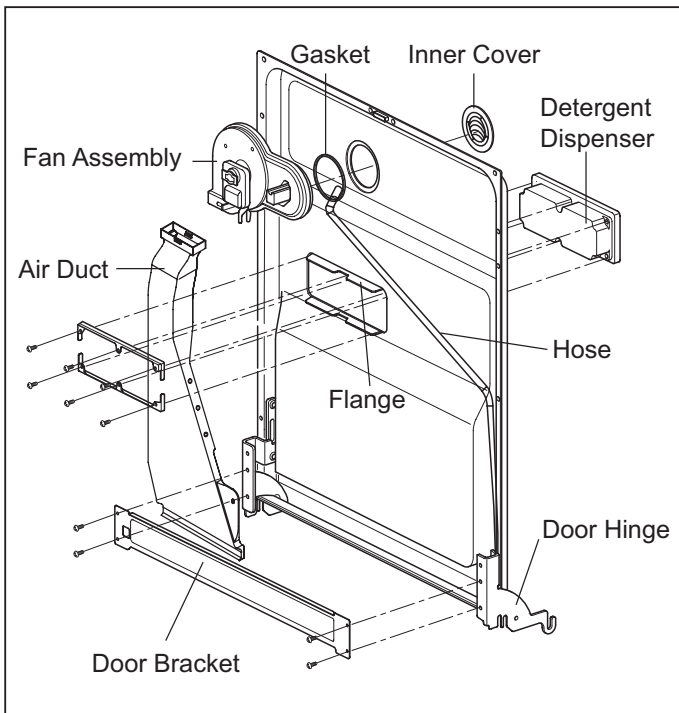
- ③ Remove the Latch assembly.
- ④ Remove the Front Display.
- ⑤ Remove 7 screws for Controller.  
(for LDS5540, LDS5560 series)  
Remove 3 screws for Controller.  
(for LDS5040, LDS4921 series)

(for LDS5540, LDS5560 series)



(for LDS5040, LDS4921 series)



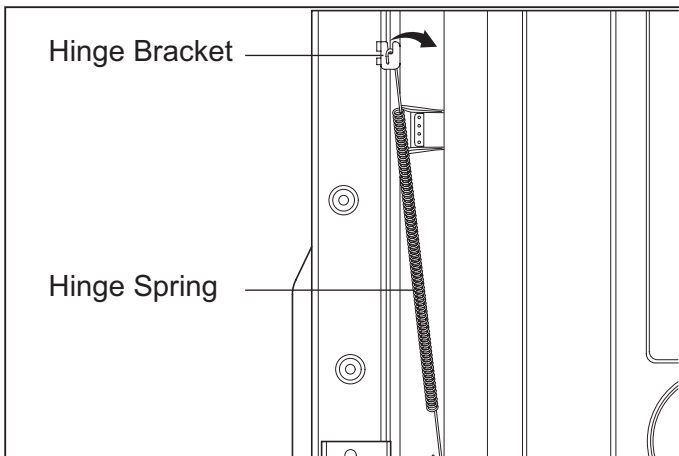


### 3) Fan Assembly

- ① Open the door.
- ② Remove 1 screw for air duct.
- ③ Remove 4 screws and a earth screw for Door Bracket.
- ④ Remove the wire connetions.
- ⑤ Remove the Air Duct.
- ⑥ Turn the Inner Cover counterclockwise.

### 4) Detergent Dispenser

- ① Close the door.
- ② Remove the wire connections.
- ③ Remove 6 screws with brackets.
- ④ Push the Detergent slowly.

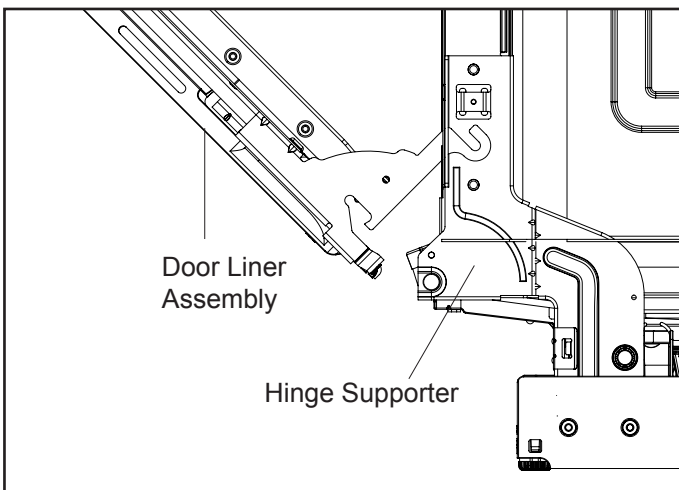


### 5) Door Spring (Right & Left)

- ① Push the Spring upwards and take it off from the Hinge Bracket.

Be careful not to be injured by the sharpedge of Tub.

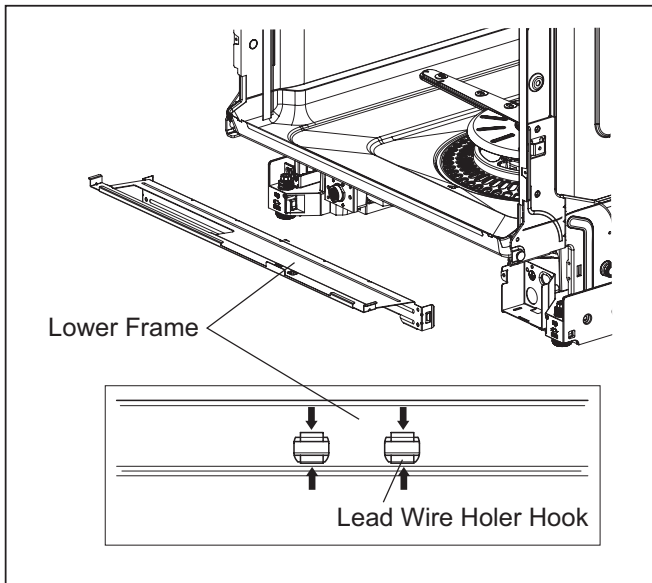
- ② Take off the Hinge Link from the Hinge.



### 6) Door Liner

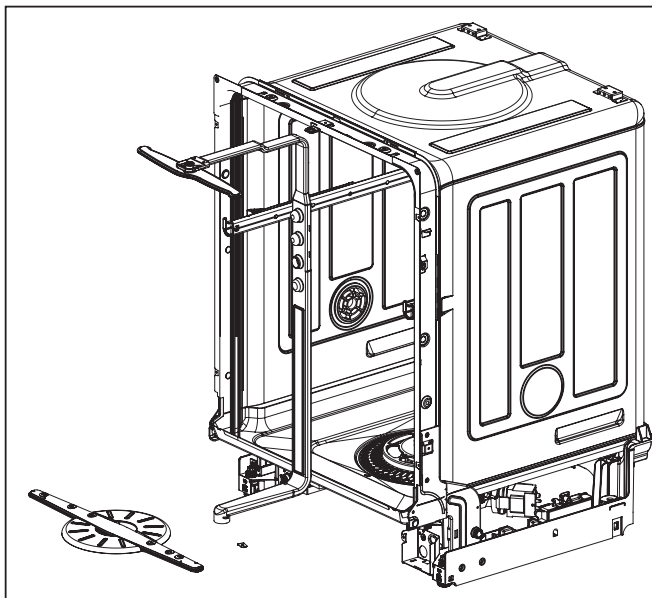
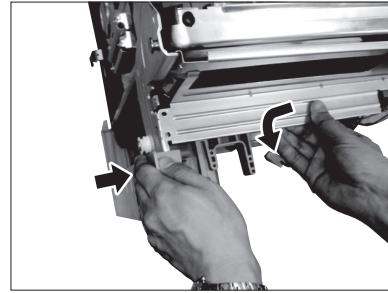
- ① Open the door.
- ② Pull the Door Liner and take it off from the Hinge Supporter.





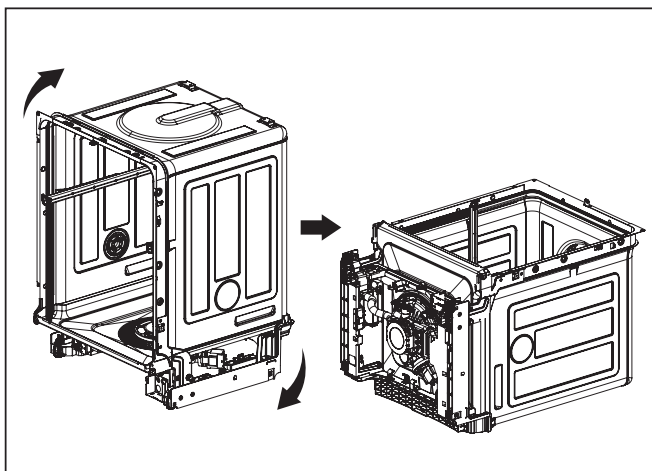
#### 4. Lower Frame

- 1) Press the holder hook as shown in figure.
- 2) Remove 4 screws.
- 3) Hold the lower frame by one hand.  
Push the base cabinet inside from other hand.  
Pull the lower frame out.

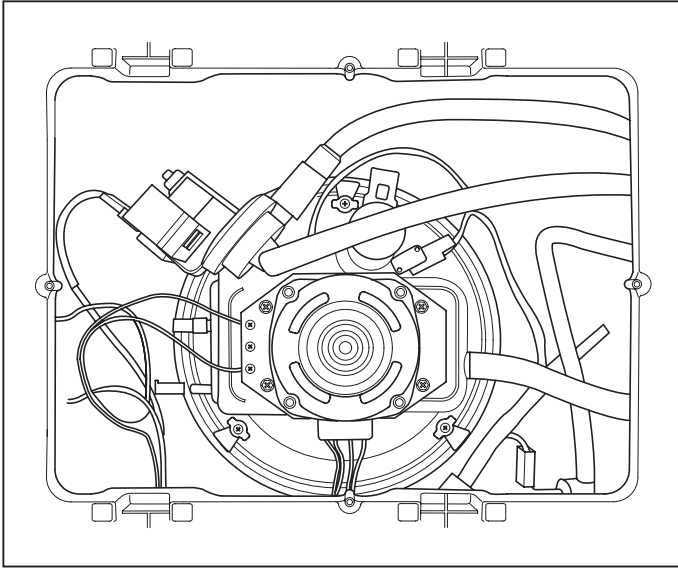


#### 5. Nozzle & Water Guide

- 1) Pull up the nozzle.
- 2) Remove 1 screw for air duct.
- 3) Remove the water guide from the tub bracket.  
(Top & Rear)



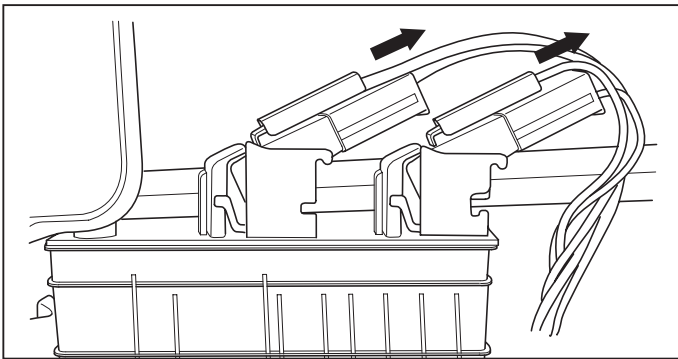
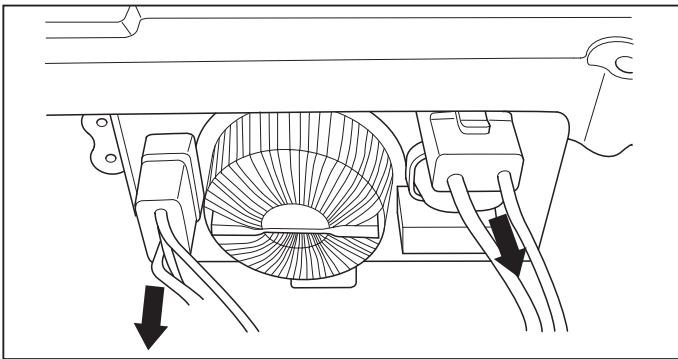
#### 6. Put the Dishwasher lean on or lay on

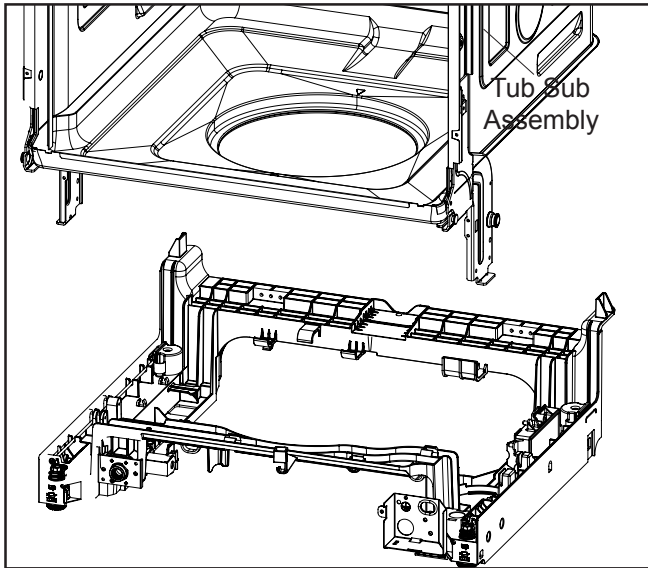


## 7. Harness & Hose Assembly

- 1) Remove the wiring connections.
- 2) Remove the Hose connections from Sump Assembly.

You can see the information of Wiring Diagram at the back of Lower Cover.

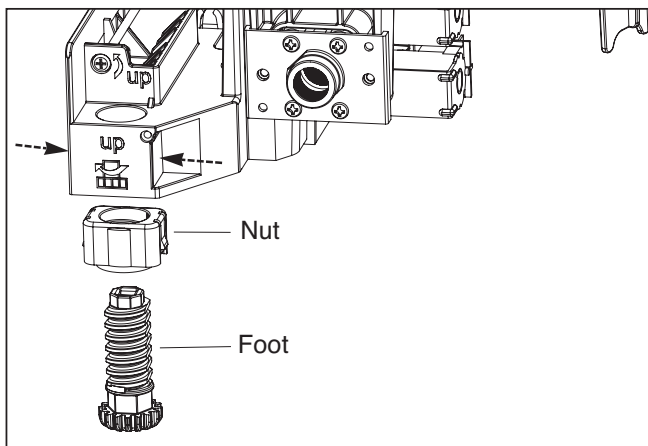




## 8. Tub Sub Assembly

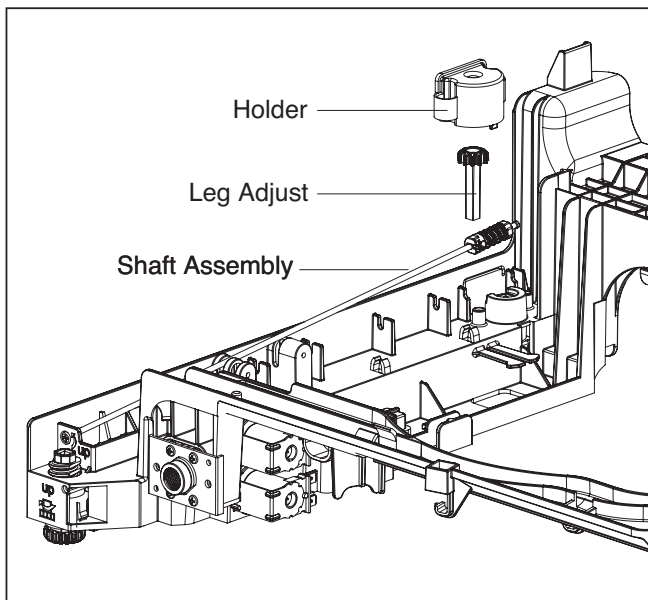
- 1) Remove side 4 screws.
- 2) Remove rear 4 screws.
- 3) Lift tub sub assembly upward.

Be careful not be injured or scratch floor by the sharp edge of tub.



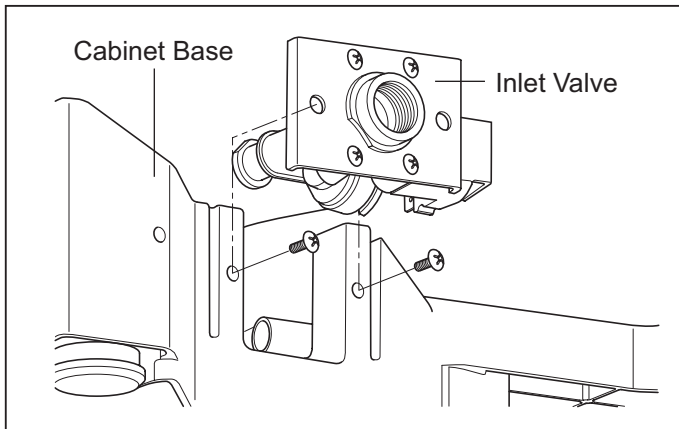
## 9. Foot & Nut

- 1) Pull the Foot twisting.
- 2) Pull the Nut pushing the hook.



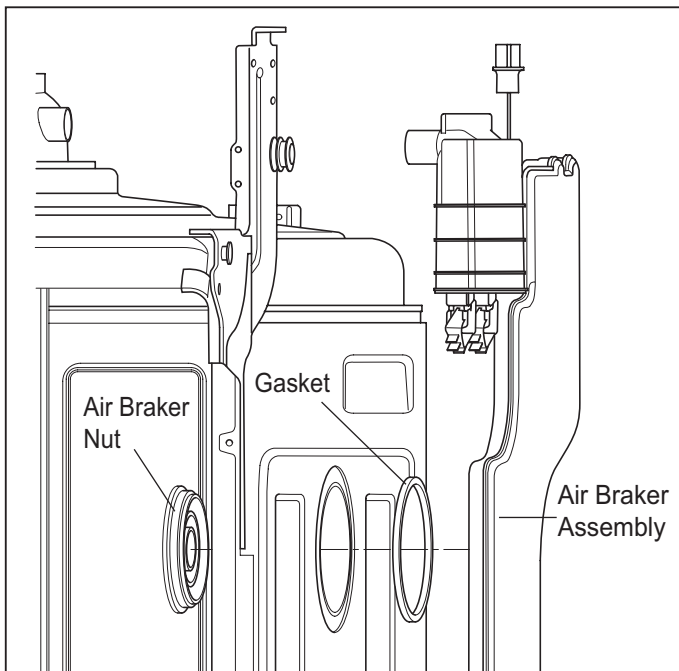
## 10. Rear Leg Adjustment System

- 1) Remove 2 screws.
- 2) Pull the Holder.
- 3) Pull the Leg Adjust.
- 4) Pull the Shaft Assembly



## 11. Inlet Valve

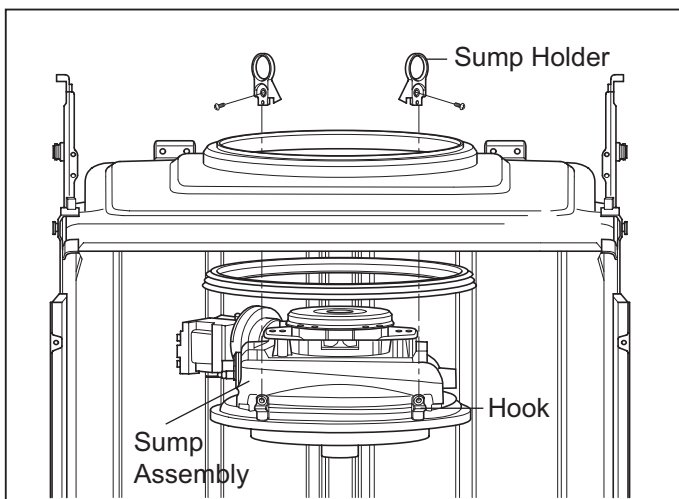
- 1) You can disassemble the Inlet Valve by removing the 2 screws.



## 12. Air Braker Assembly

- 1) Disconnect the 3 hoses assembly.
- 2) Turn the Air Braker Nut counterclockwise.

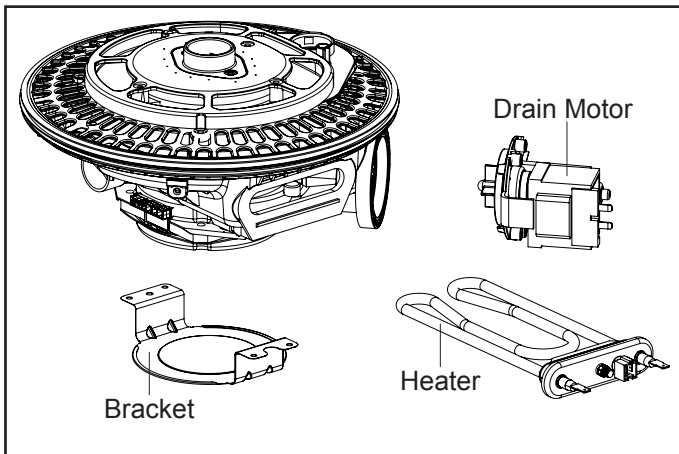
Be careful the o-ring should not be lost.



## 13. Sump Assembly

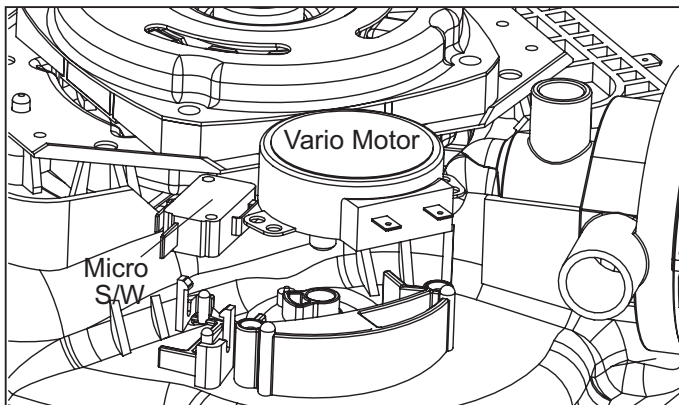
- ① Remove 2 screws.
- ② Remove the Sump Holder and push the Sump Assembly down with pulling aside Hook.

Be careful not to drop the Sump Assembly to the bottom.



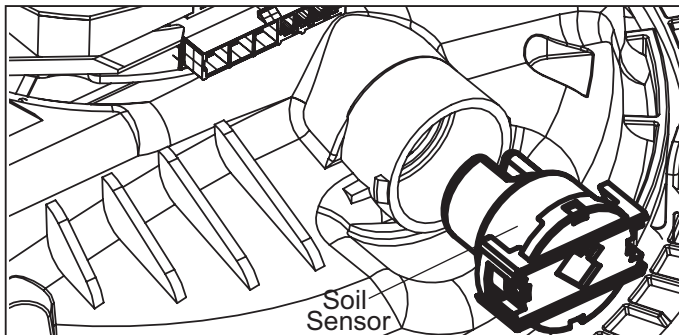
### 1) Heater, Drain Motor & Bracket

- ① Pull the Heater out of the Sump after releasing the nut.
- ② Remove 7 screws.



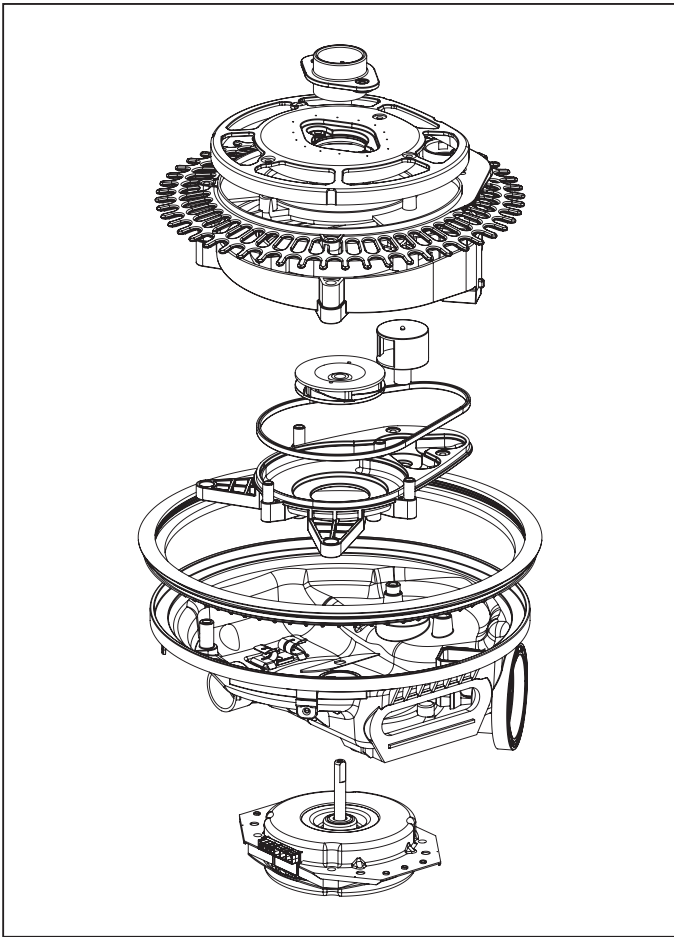
### 2) Vario Motor

- ① Remove 2 screws for Vario Motor.
- ② Pull the Vario Motor and Micro S/W.



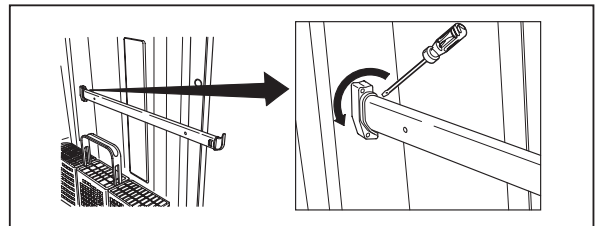
### 3) Soil Sensor

- ① Pull the Soil Sensor.



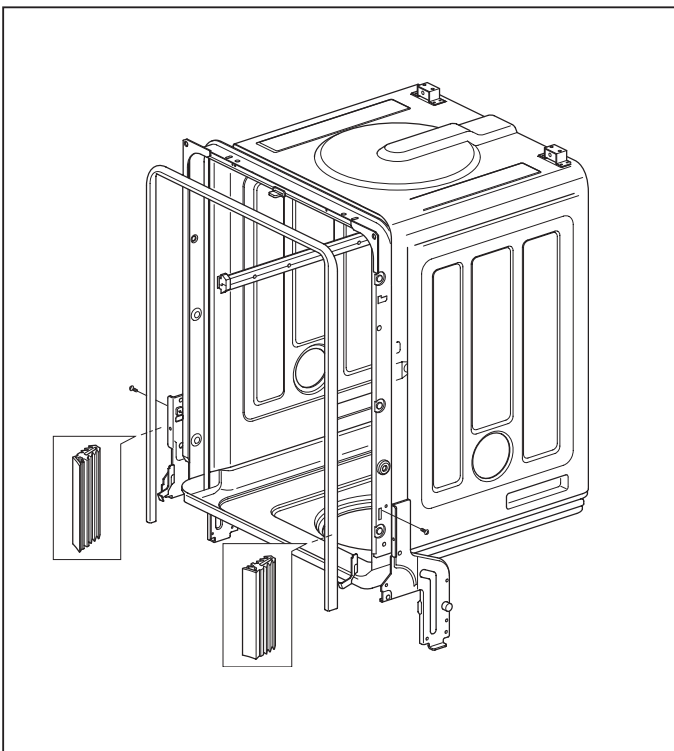
When you reassemble the Sump Assembly, be careful not to kink, tear and take off the seals.

### 1 14. Holder Supporter, Tub Packing and Hinge Supporter Assembly.





Rotate the screwdriver, after slide it into the gap between Stopper Roller and Rail Roller.





You must take off Stopper Roller(F117) by – screwdriver to change the Rail Assembly. (Stopper Roller could be broken while you are taking off. So you should be careful not to be hurt and have extra stopper rollers ready at servicing at all times)



# 8. TROUBLE SHOOTING METHODS

## A. TROUBLE SHOOTING ACCORDING TO DISPLAYED ERROR MESSAGE

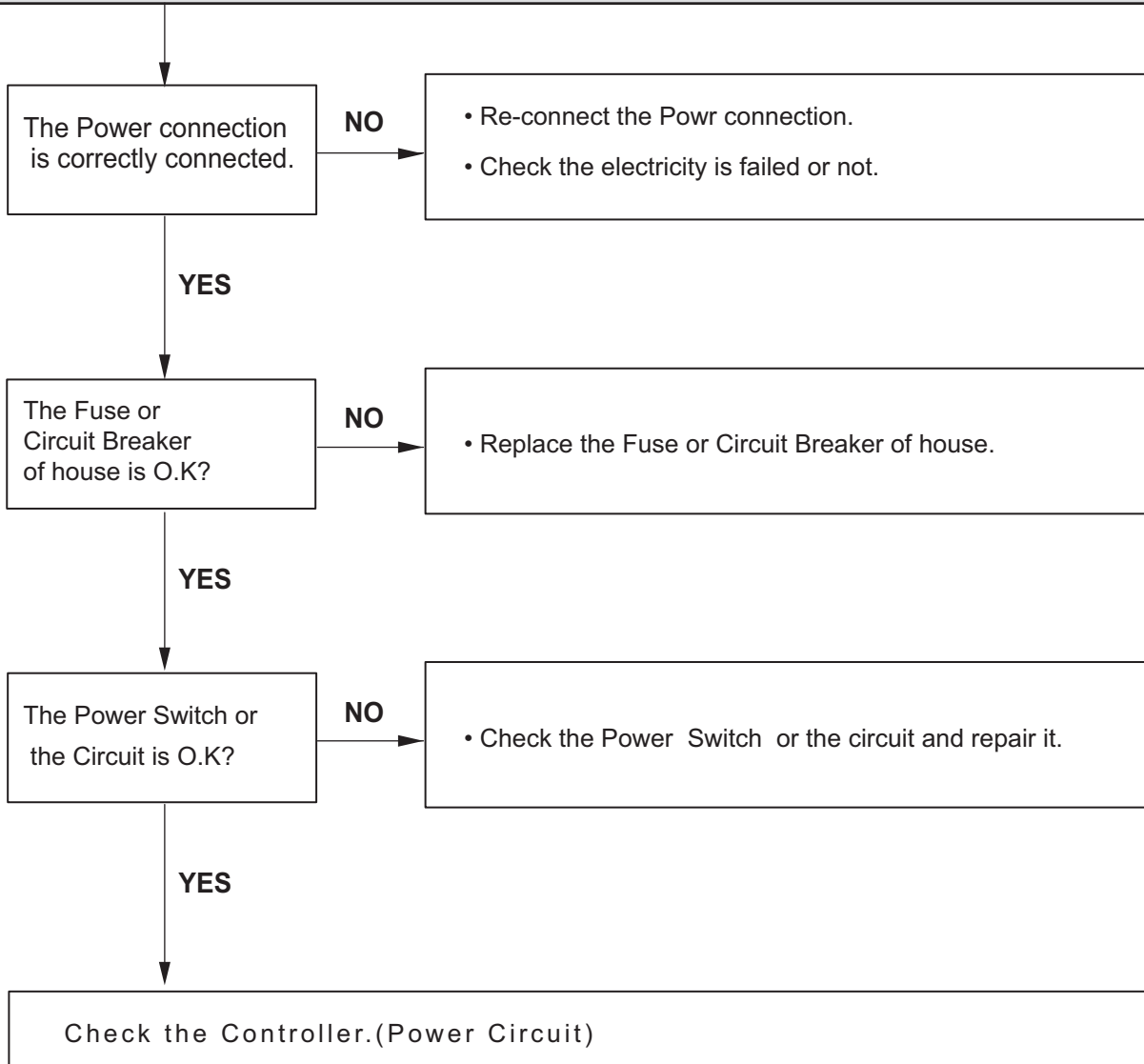
ERROR MESSAGE	POSSIBLE CAUSE FOR ERROR OCCURRENCE	REMEDY
<p><b>INLET ERROR</b></p>  <p>displayed</p> <p><b>Condition</b> Not reached to the normal water level in spite of 10 min. water supply</p>	<ul style="list-style-type: none"> <li>• The Water Supply Tap is closed.</li> <li>• The Water Supply is shut off.</li> <li>• The Inlet Hose is kinked.</li> <li>• The Water Pressure is very low. (below 10 psi)</li> <li>• Inlet Valve is OK?</li> <li>• The filter of Inlet Valve is clogged by impure water.</li> <li>• The Hall sensor is OK?</li> <li>• The Impeller of Air Guide is bound.</li> </ul>	<ul style="list-style-type: none"> <li>• Take action on Water Supply device.</li> <li>• Measure the electric resistance of Inlet Valve. (950-1300 Ω)</li> <li>• Clean the filter of Inlet Valve.</li> <li>• Check the frequency of Inlet Water by the Test Mode.</li> <li>• Replace the Air Braker.</li> </ul>
<p><b>DRAIN ERROR</b></p>  <p>displayed</p> <p><b>Condition</b> Not fully drained out in spite of 5 min. drain operation</p>	<ul style="list-style-type: none"> <li>• The Drain Hose kinked or blocked.</li> <li>• Wiring connection is OK?</li> <li>• The drain outlet of sump is blocked.</li> <li>• The Drain Pump/Motor or circuit is troubled.</li> </ul>	<ul style="list-style-type: none"> <li>• Remove the cause of kink or block.</li> <li>• Check the wiring connection.</li> <li>• Measure the electric resistance of Drain Motor. (20-40 Ω)</li> <li>• Replace the Drain Motor or repair the Circuit.</li> </ul>

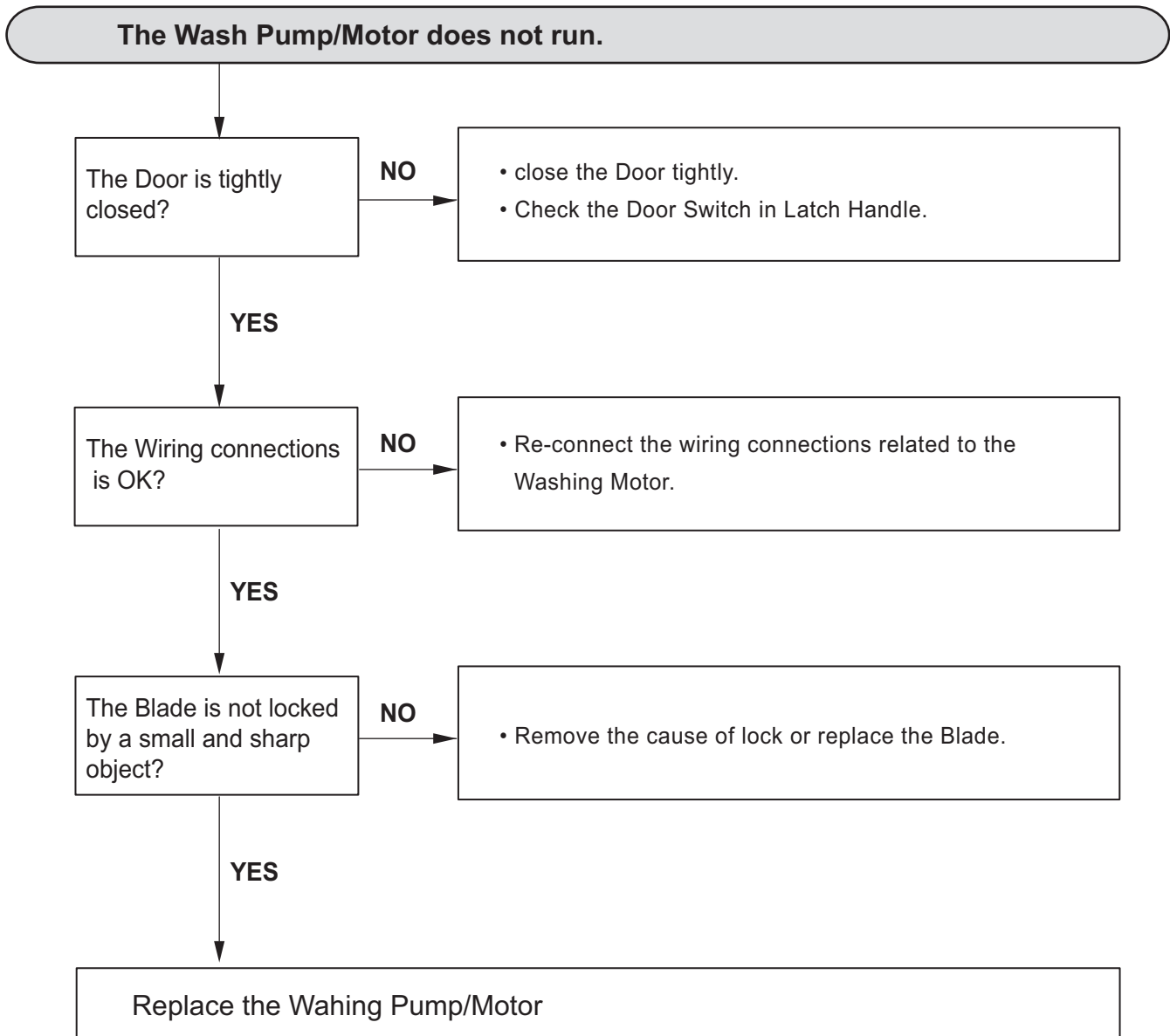
ERROR MESSAGE	POSSIBLE CAUSE FOR ERROR OCCURRENCE	REMEDY
<p><b>EXCESS ERROR</b></p>  <p>displayed</p> <p><b>Condition</b> Excessive water is supplied than normal water level.(Automatically drain Pump operated.)</p>	<ul style="list-style-type: none"> <li>• The Inlet Valve is troubled.</li> <li>• The Controller is troubled.</li> </ul>	<ul style="list-style-type: none"> <li>• Replace the Inlet Valve.</li> <li>• Repair or replace the Controller.</li> </ul>
<p><b>THERMAL ERROR</b></p>  <p>displayed</p> <p><b>Condition</b> The resistance of thermistor not normally out put.</p>	<ul style="list-style-type: none"> <li>• The Inlet Water Temperature is very high. (over 194 °F)</li> <li>• Wiring connection is OK?</li> <li>• The Thermistor is OK?</li> </ul>	<p>Check the temperature. (Test Mode)</p> <p>1) If the temperature is displayed,              ① adjust the Inlet Water Temperature to 120 °F.</p> <p>2) If the temperature is not displayed,              ① check the wiring connection.              ② check the electric resistance of Thermistor.                  (11~14kΩ at 77°F)              ③ Replace the PCB.</p>
<p><b>MOTOR ERROR</b></p>  <p>displayed</p> <p><b>Condition</b> The Motor is working abnormally.</p>	<ul style="list-style-type: none"> <li>• Wiring connection is OK?</li> <li>• The Impeller of Washing Pump is locked.</li> <li>• The rotor of Washing Motor is locked.</li> <li>• The Blade is locked.</li> </ul>	<ul style="list-style-type: none"> <li>• Check the wiring connection.</li> <li>• Replace the cause of restriction.</li> <li>• Replace the Washing Motor.</li> <li>• Replace the PCB.</li> </ul>
<p><b>HEATER ERROR</b></p>  <p>displayed</p> <p><b>Condition</b> The water is not heated or the temperature in the Tub is overheated to over 194°F.</p>	<ul style="list-style-type: none"> <li>• The Circuit of Heater is troubled.</li> <li>• The Thermistor is troubled.</li> <li>• The Heater is shorted.</li> <li>• The Relay Circuit is troubled.</li> </ul>	<ul style="list-style-type: none"> <li>• Repair the Circuit of Heater.</li> <li>• Replace the Thermistor.</li> <li>• Replace the Heater.</li> <li>• Repair the Relay Circuit..</li> </ul>



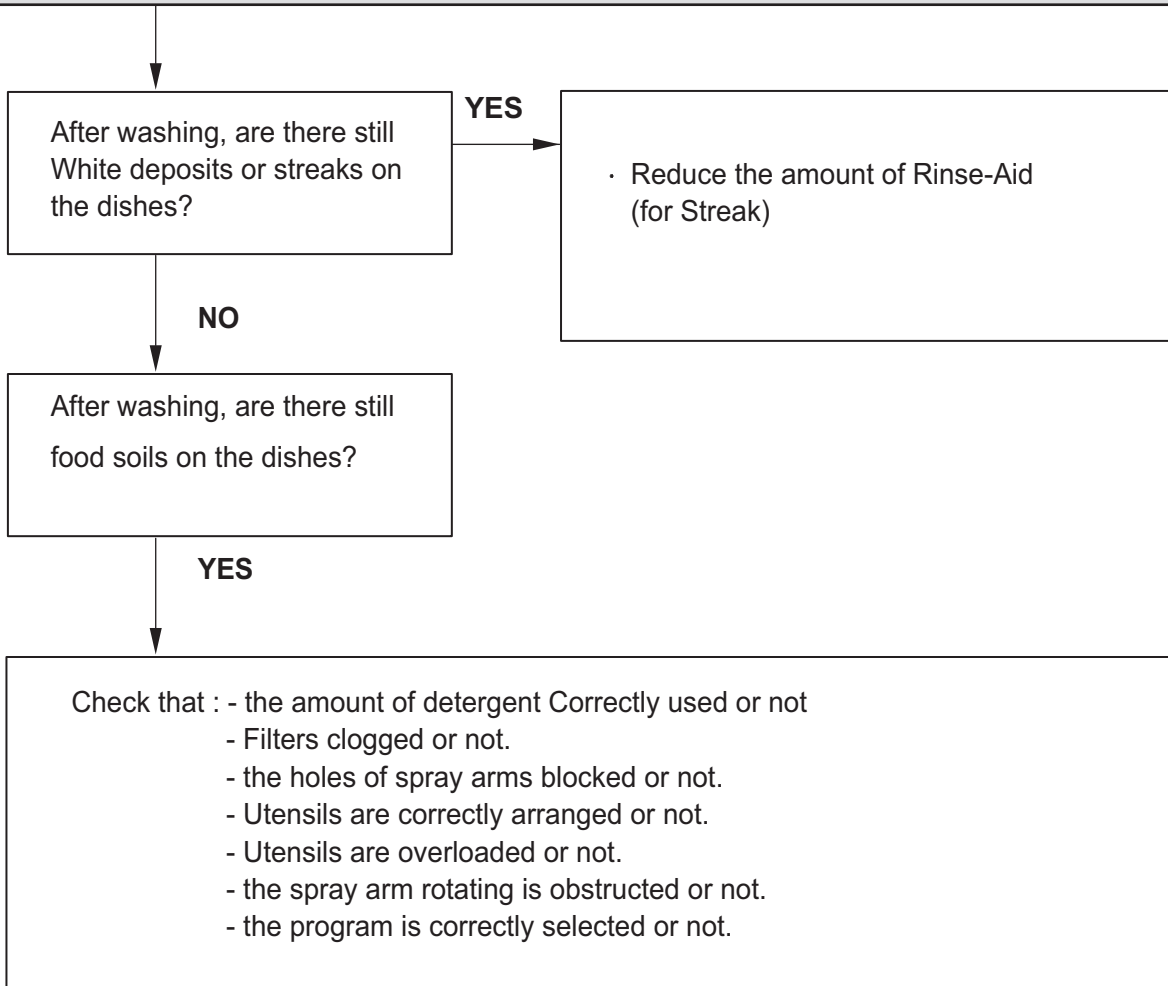
## B. TROUBLE DIAGNOSES AND REPAIR BY SYMPTOM

No Power on when the power button pressed.

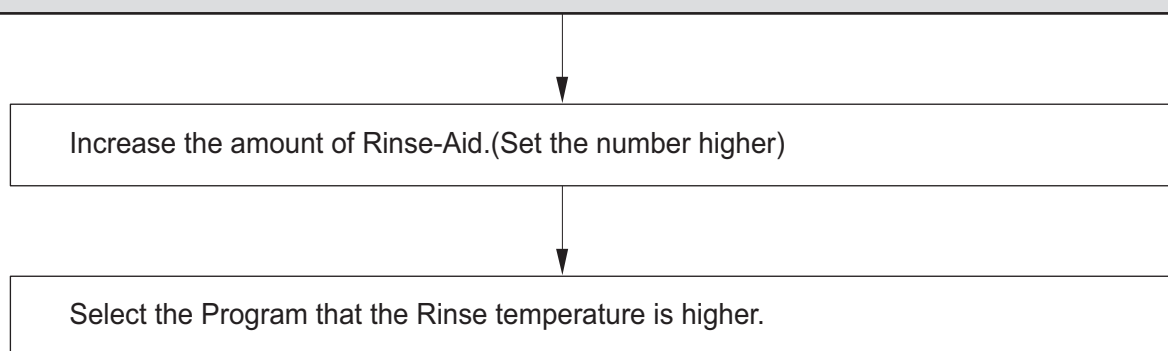




**Washing Results are not Satisfactory**



**Dry Results are not satisfactory**



**Power Button not automatically off after operation.**

Check the button is blocked by foreign materials.

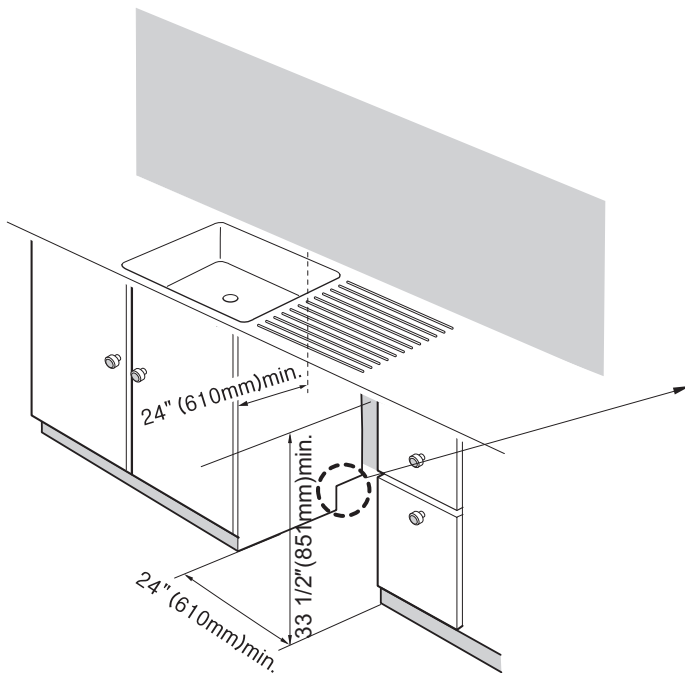
Check the Power Switch.(Replace it, if necessary.)

Check the Controller.(Replace it, if necessary.)

## 9. INSTALLATION INSTRUCTION

### Step 1: PREPARE CUPBOARD OPENING

1. This dishwasher is designed to fit a standard dishwasher opening as shown below.
2. Select a location as close to sink as possible for easy connections to water and drain lines.
3. The dishwasher should not be installed more than 10 ft. (3m) from the sink for proper drainage.
4. If dishwasher is to be installed in a corner, a minimum of 2 in. (50mm) is required between the dishwasher and an adjacent wall.



**If dishwasher will sit directly on subflooring, subfloor should be sealed with a waterproof paint or sealer to prevent damage from steam.**

Drill a 1-1/2" (38mm) dia hole or cut out for drain hose, inlet hose and electrical cables on either side.

approx. 4" (100mm, W) X 4" (100mm, H)

These openings must be within 4" (100mm) from the floor and 1-5/8" (40mm) from the back wall. If there is a floor in the cabinet under the sink, it will also be necessary to drill or cut through the floor to connect the water and drain under the sink.

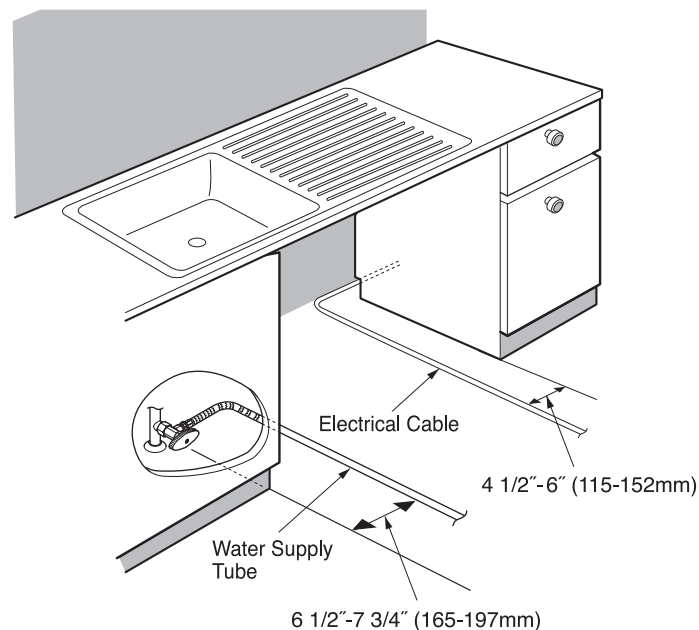
- Ensure the floor under the dishwasher is at the same level as the rest of the room to allow for any service requirements.

## Step 2: PREPARE THE ELECTRICAL WIRING

### **⚠ WARNING**

For personal safety, remove house fuse or open circuit breaker before installation. Do not use an extension cord or adapter plug with this dishwasher. Electrical and grounding connections must comply with the national electrical code/provincial and municipal code and/or other local codes.

1. This appliance must be operated with correct voltage as shown in this manual and on the rating plate, and connected to an individual, properly grounded branch circuit, protected by time delay fuse. Wiring must be 3 wires including ground.
2. The wiring or cord should be in an accessible location adjacent to, and not behind the dishwasher and within 4 ft. (1.2m) of the dishwasher side.
3. The wiring or cord must be grounded properly, if in doubt, have it checked by a qualified electrician. No other appliance shall be connected to the same outlet by a double adapter or similar plug.
4. The wiring or cord must be oriented as shown in Figure A below.
5. Check the dishwasher for any damage before trying to install it.
6. Make sure water line and Electrical line are oriented in the bottom channels as shown in the figure below.  
If you find any damage to the dishwasher, Please contact your dealer or builder immediately.



**Figure A**

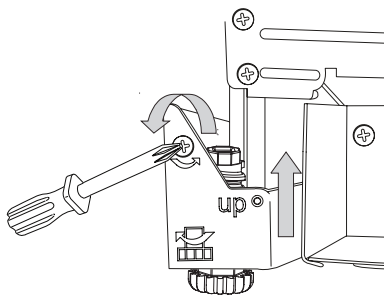
### Step 3: PREPARE THE WATER SUPPLY CONNECTION

1. This dishwasher may be connected to either hot or cold water. If the water can not be maintained below 149°F (65°C), the dishwasher must be connected to cold water.
2. When connecting the dishwasher water line, sealing tape or compound should be used to avoid leaks.
3. When connecting the dishwasher water line, the house supply should be shut off.
4. The Water Supply Tube must be oriented as shown in

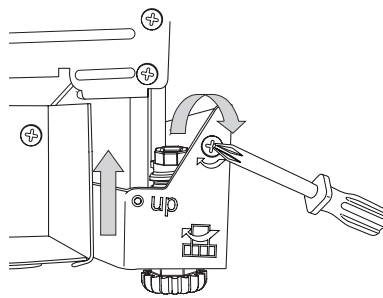
Figure A on page 34.

### Step 4: PREPARE DISHWASHER FOR INSTALLATION

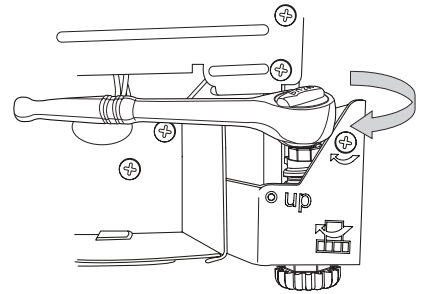
1. Adjust the legs to the required height to fit properly under the countertop as shown below.
2. Check the level of dishwasher by using level.



- Left side – turn the adjusting screw counterclockwise to lower the leg and raise the rear of the dishwasher.



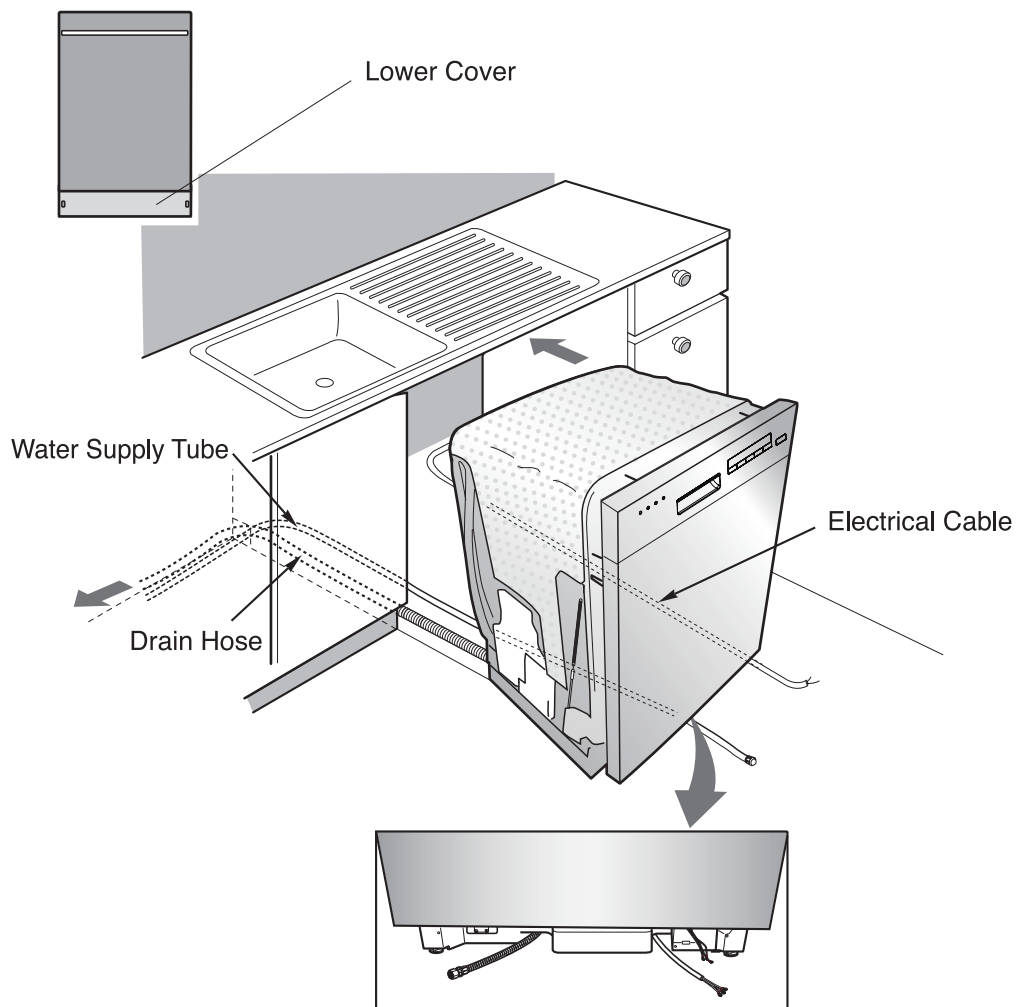
- Right side – turn the adjusting screw clockwise to lower the leg and raise the rear of the dishwasher.



- Front feet can be adjusted from the top using a 1/4" square drive wrench.

## Step 5: INSTALL THE DISHWASHER IN CUPBOARD

1. Remove the Lower Cover and orient dishwasher as shown below.
2. Before sliding the dishwasher into the cupboard opening, make all necessary height adjustments using the legs.
3. Slide the dishwasher into the cabinet opening carefully. Make sure that the drain hose inside the cabinet is not kinked.

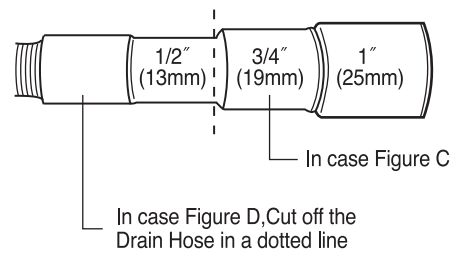
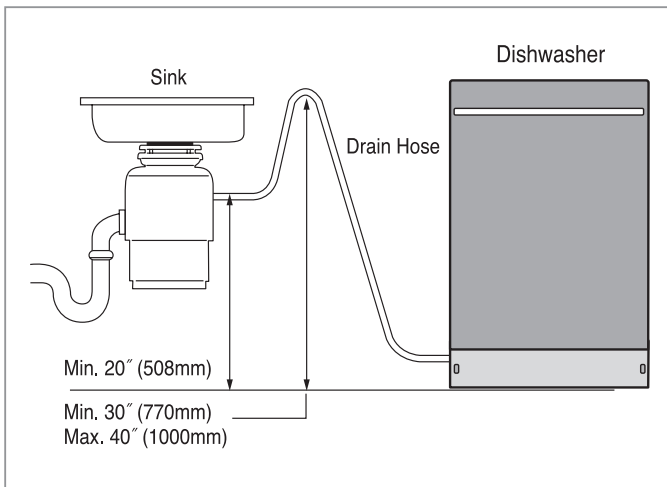




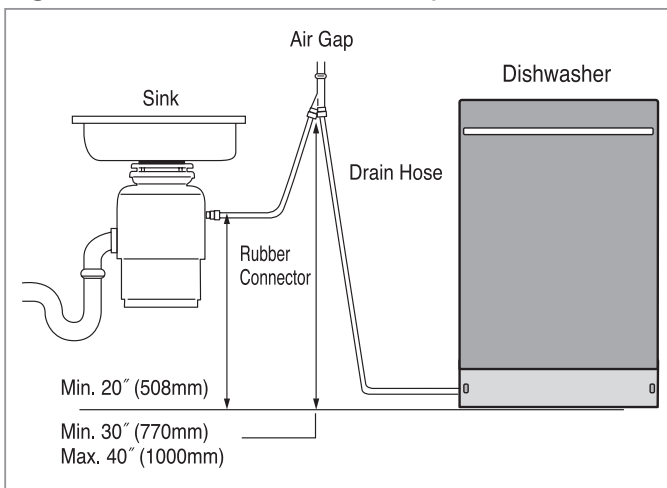
## Step 6: DRAIN LINE CONNECTION

1. If the end of the drain hose does not fit to the drain line, use an adapter (not supplied) that must be resistant to heat and detergent and may be obtained from a plumbing shop.
2. There are 2 typical connections as shown in Figures C & D.
  - ① There may be other options than shown here for connection the drain hose. The drain connection must meet local plumbing regulations.
  - ② The S trap spigot must be drilled out cleanly and free of obstruction to its maximum internal diameter, if used for drainage.
  - ③ To prevent syphoning, one of the following instruction methods must be followed:

**Figure C: Connection to Disposer or waste Tee.**



**Figure D: Connection to Air Gap.**

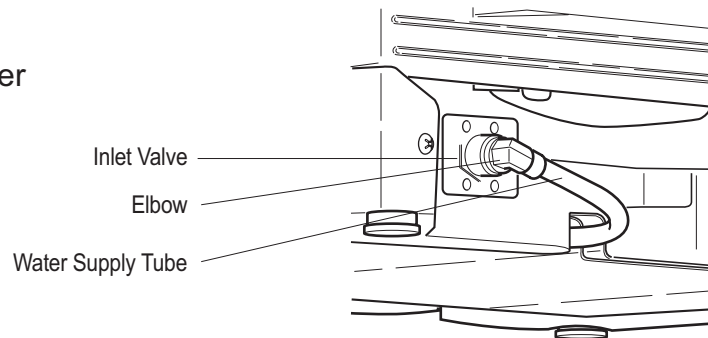


## Drain Requirements

- Follow local codes and ordinances.
- Do not exceed 10 ft. (3m) distance to drain.
- Do not connect drain lines from other devices to the dishwasher drain hose.

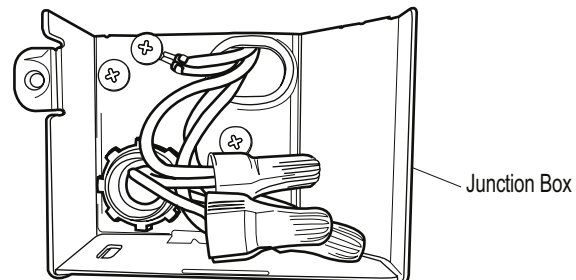
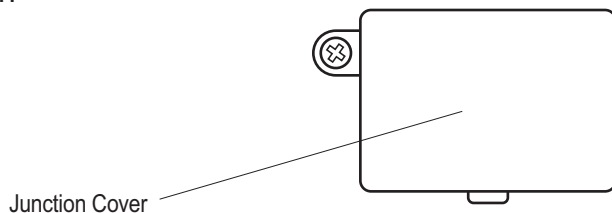
## Step 7: WATER SUPPLY CONNECTION

1. When connecting, sealing tape or sealing compound should be used to avoid water leaks.
2. Before connecting, turn off the water supply.
3. After fitting the Elbow into the Inlet Valve, slide the Flexible Stainless Tube or Copper Tube into the Elbow.
4. Tighten the nut and make sure that the line is not kinked or sharply bent.



## Step 8: ELECTRICAL POWER CONNECTION

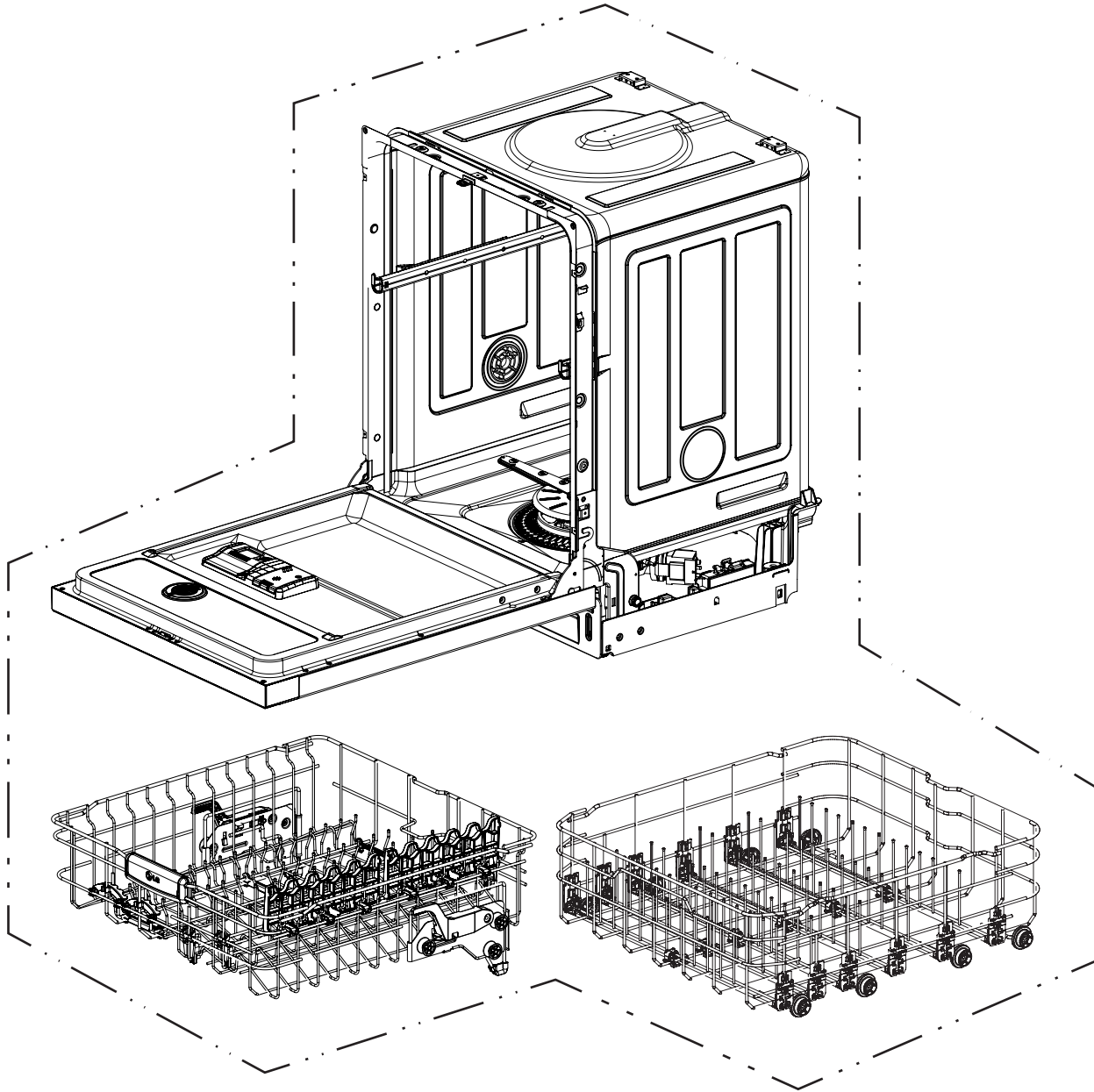
1. Before beginning, turn off electrical power to the unit at the circuit breaker.
2. Remove the Junction Cover and then Install the Strain Relief.
3. Twist Wire Connectors tightly on the wires. Wrap each connection with Electrical tape.
4. Check again and make sure that all wires are connected correctly, black to black, white to white, green to green (ground to ground).
5. Replace the Junction Cover.



## Step 9: FINAL CHECKS

1. Turn electrical power back on at the circuit breaker.
2. Turn house water supply back on.
3. Operate the dishwasher through one cycle (Quick cycle is recommended) to check for water leaks and operating conditions.
4. Replace the Lower Cover.

# 10. EXPLODED VIEW



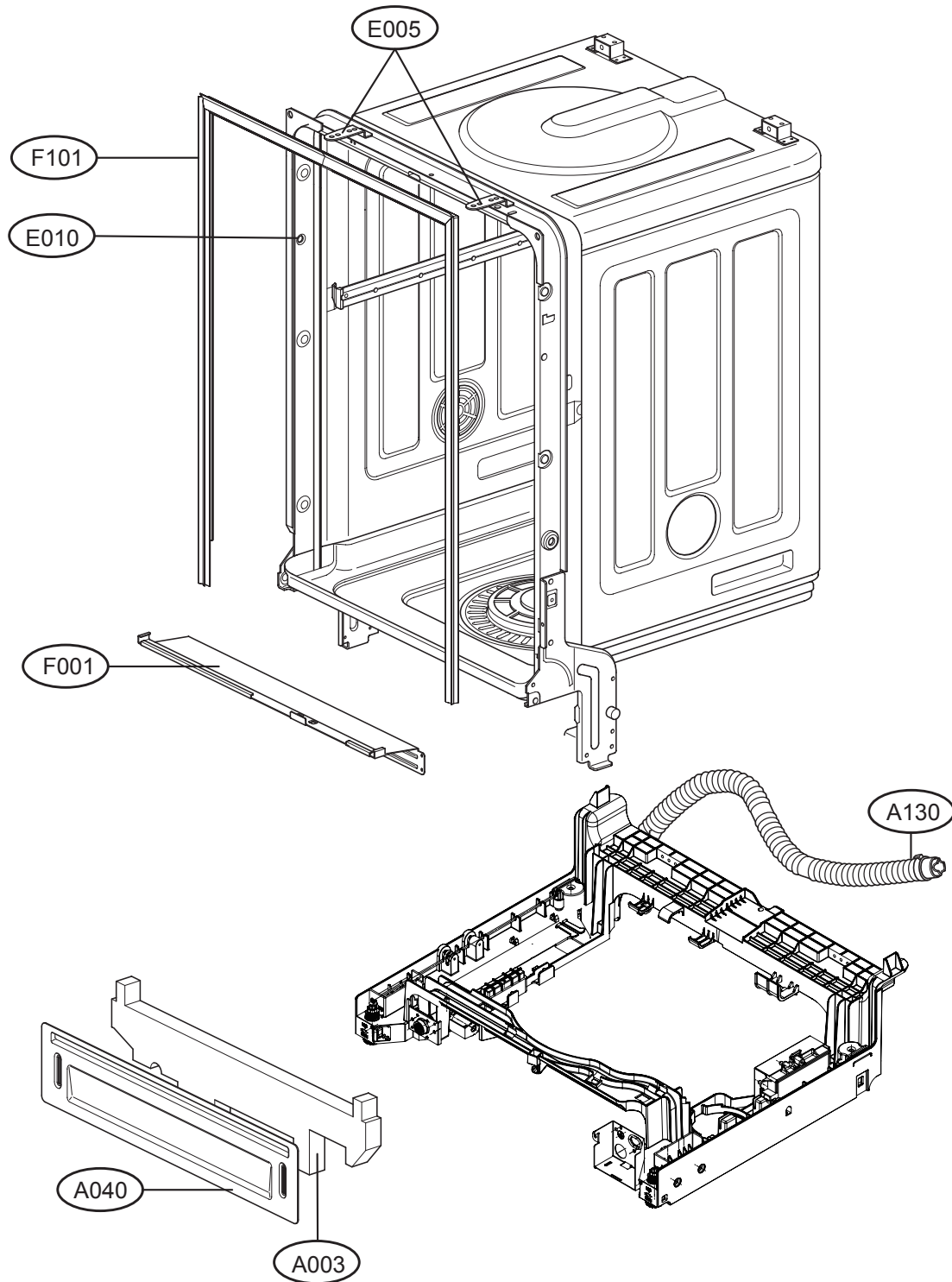
**"The following parts are not illustrated"**

	Description	Loc No.
<b>Printed materials</b>	*Owner's Manual	(G001)
	*Energy Label	(G002)
	*Service Manual	(G004)

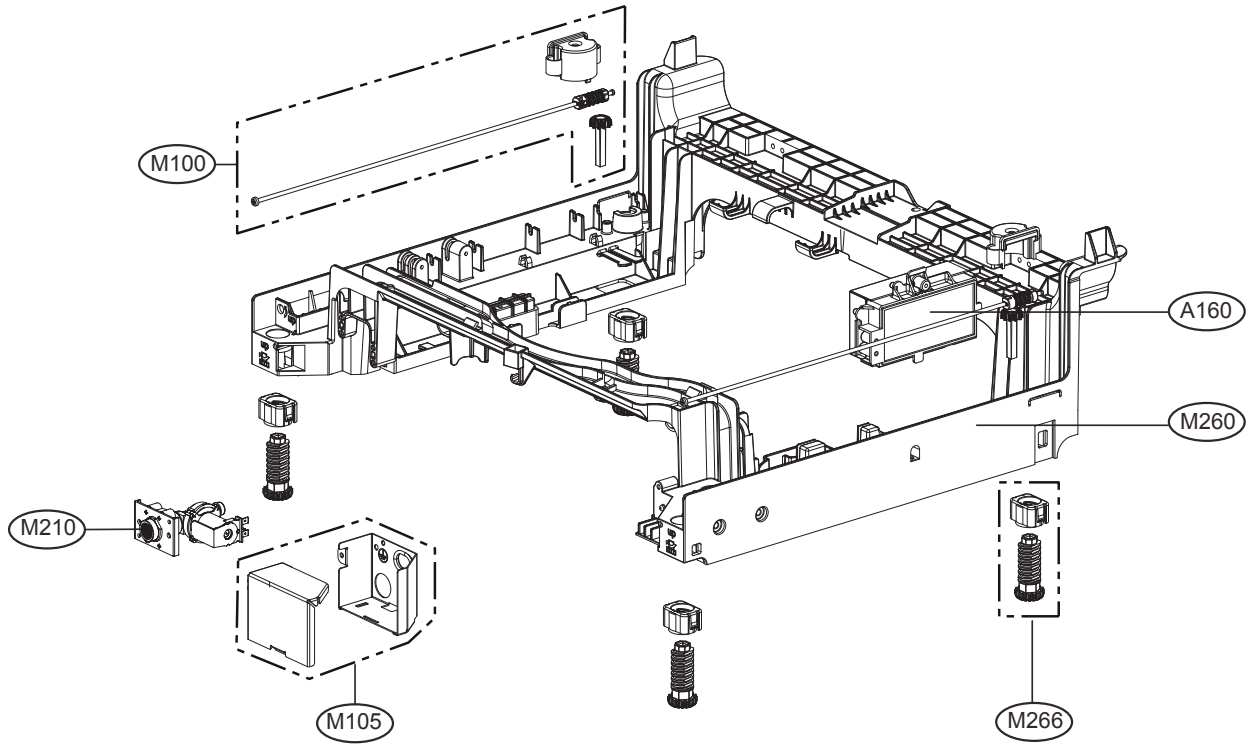


E005

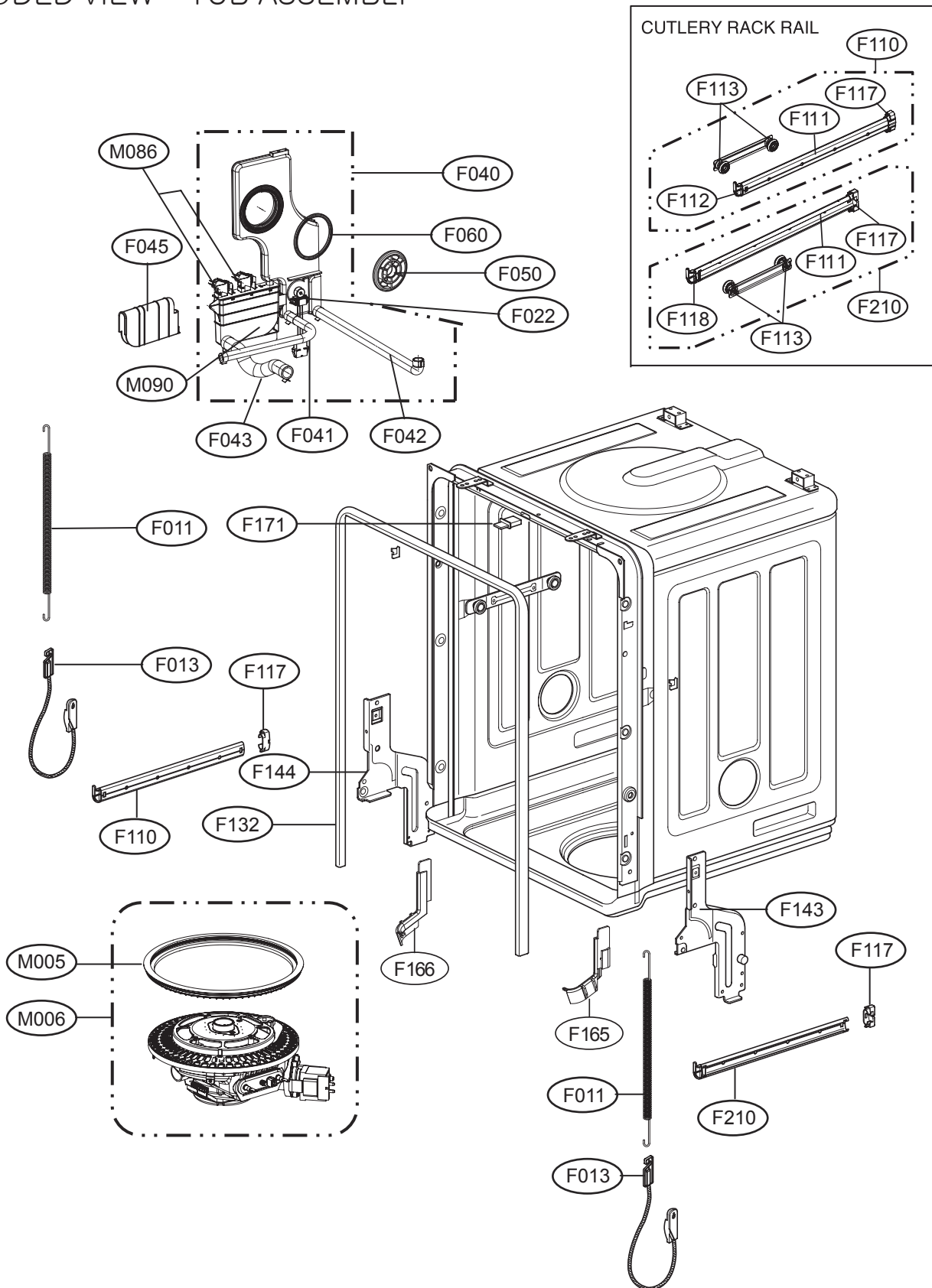
# EXPLODED VIEW



# EXPLODED VIEW - BASE ASSEMBLY

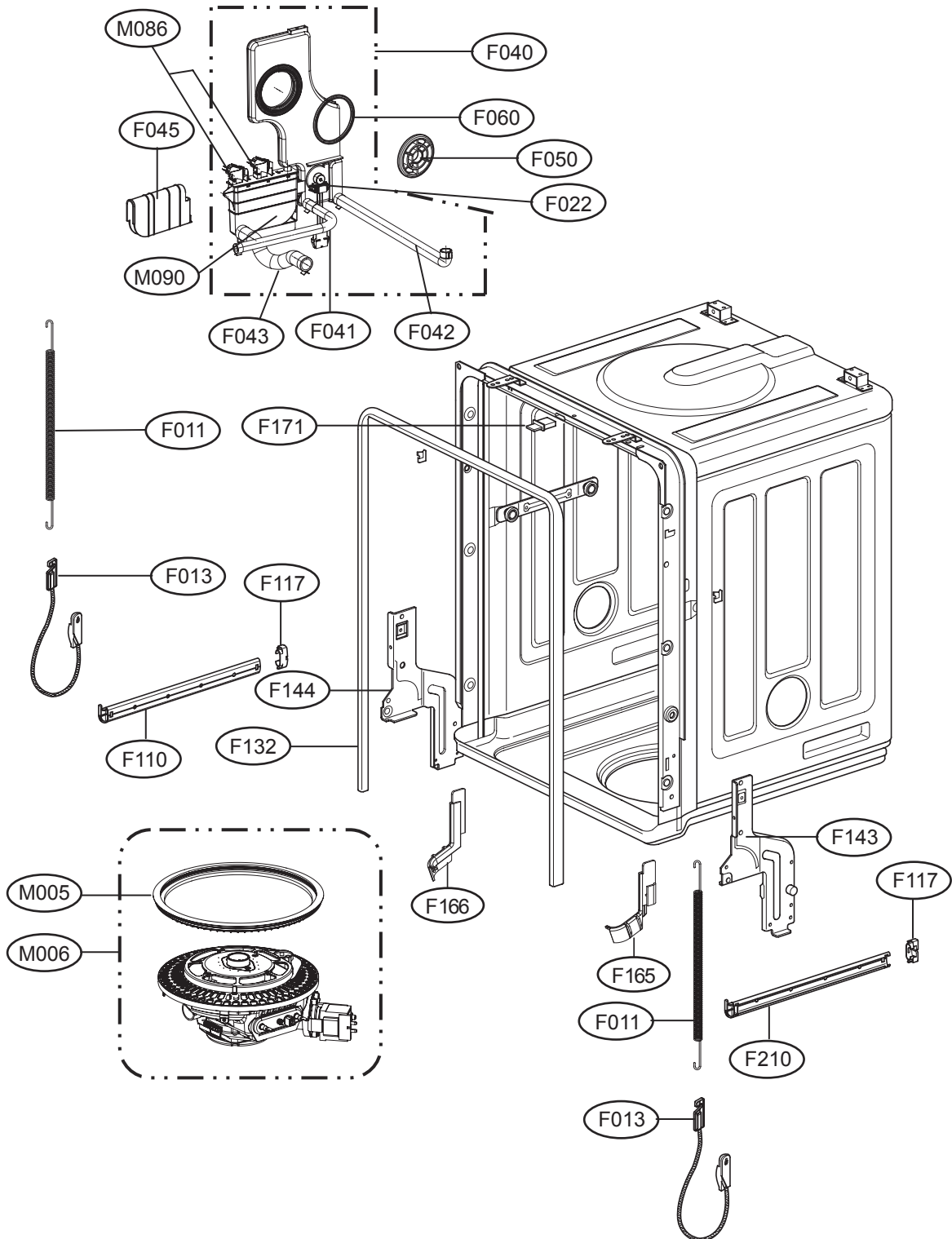


EXPLODED VIEW – TUB ASSEMBLY



# LDS5540 / LDS5040 / LDS4921 Series

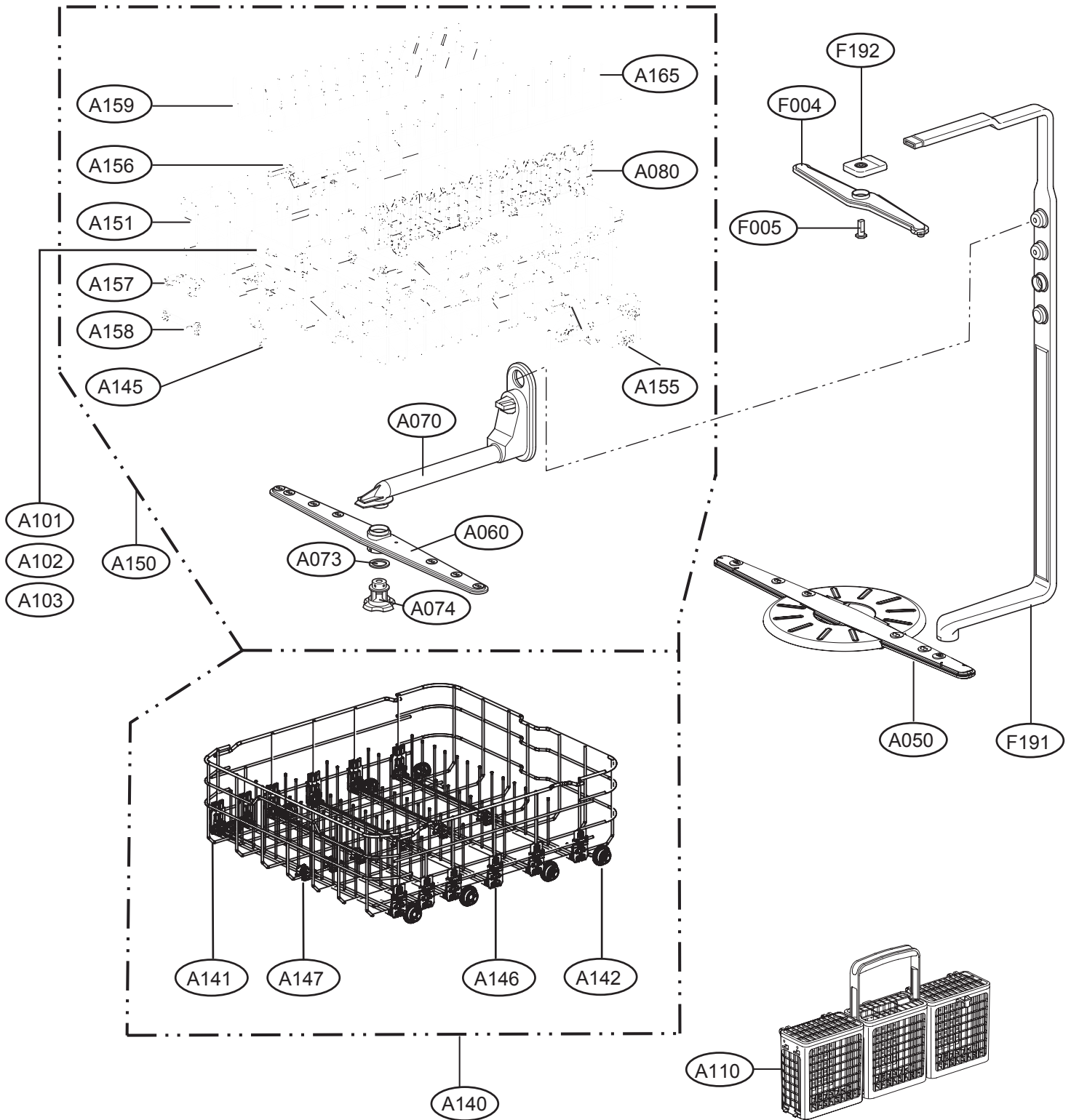
## EXPLODED VIEW - TUB ASSEMBLY



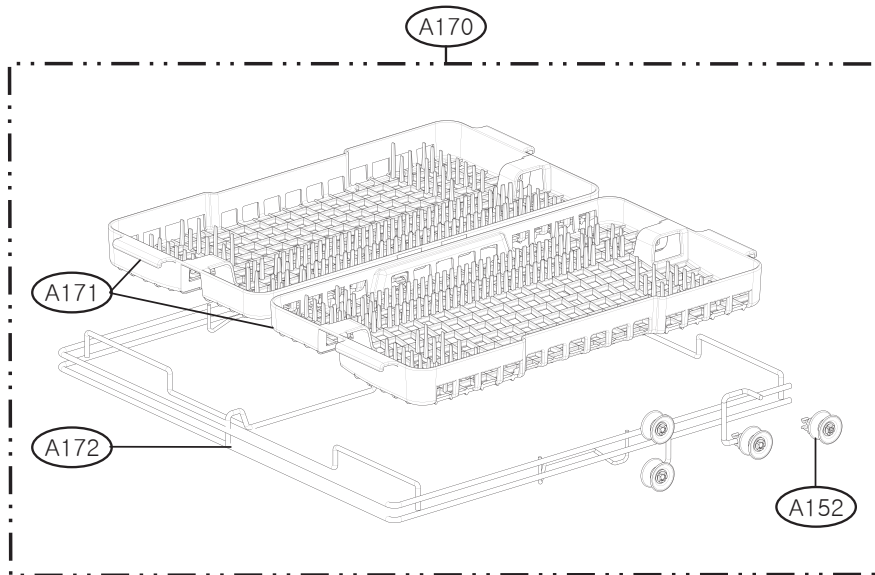


# LDS5540 / LDS5560 series

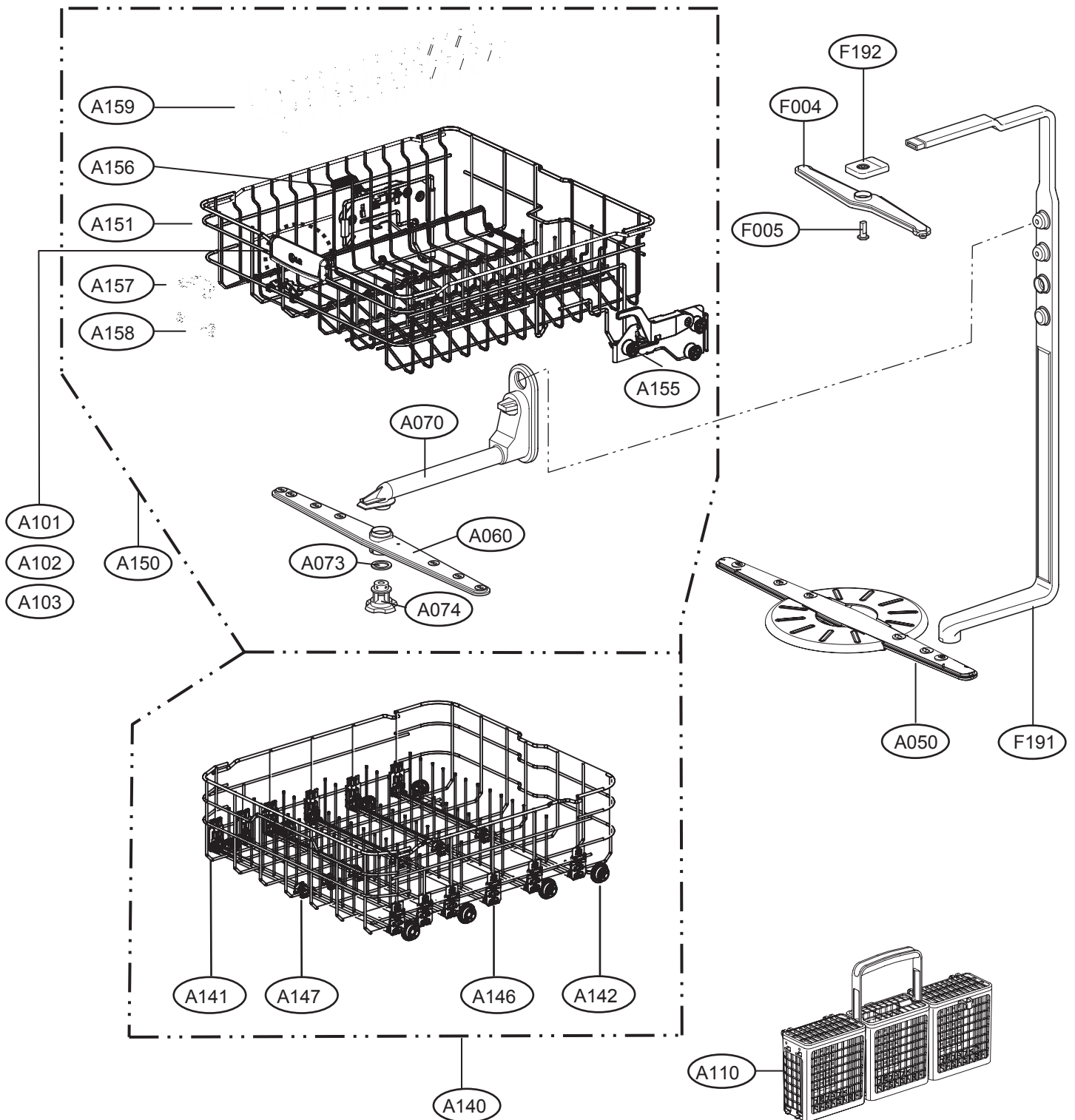
## EXPLODED VIEW - RACK ASSEMBLY



EXPLODED VIEW - CUTLERY RACK ASSEMBLY

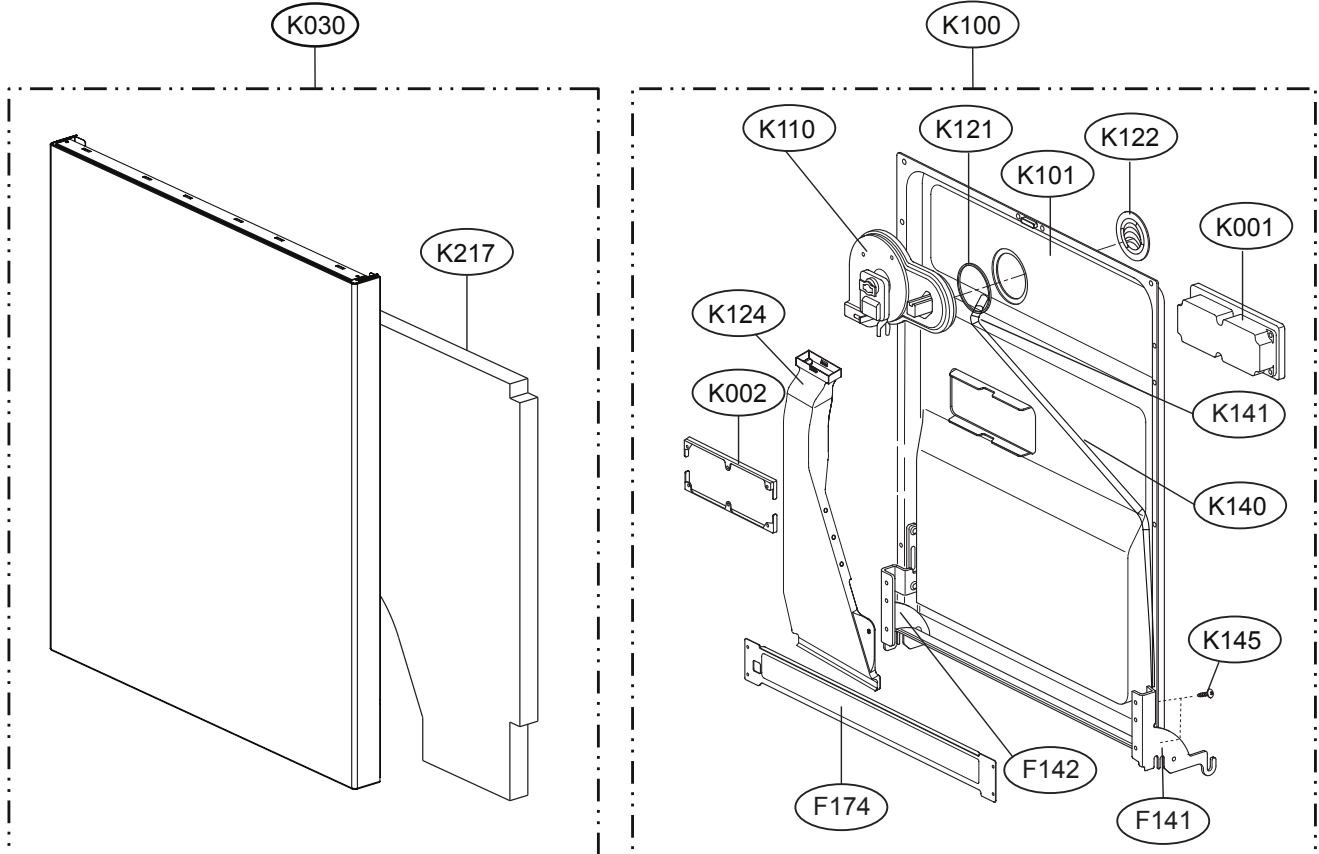
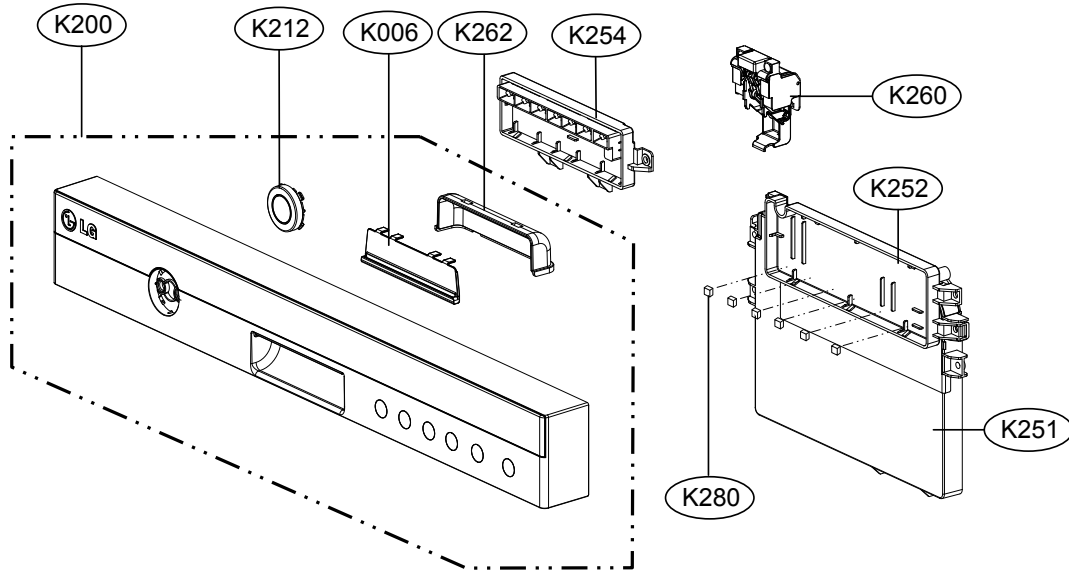


EXPLODED VIEW - RACK ASSEMBLY

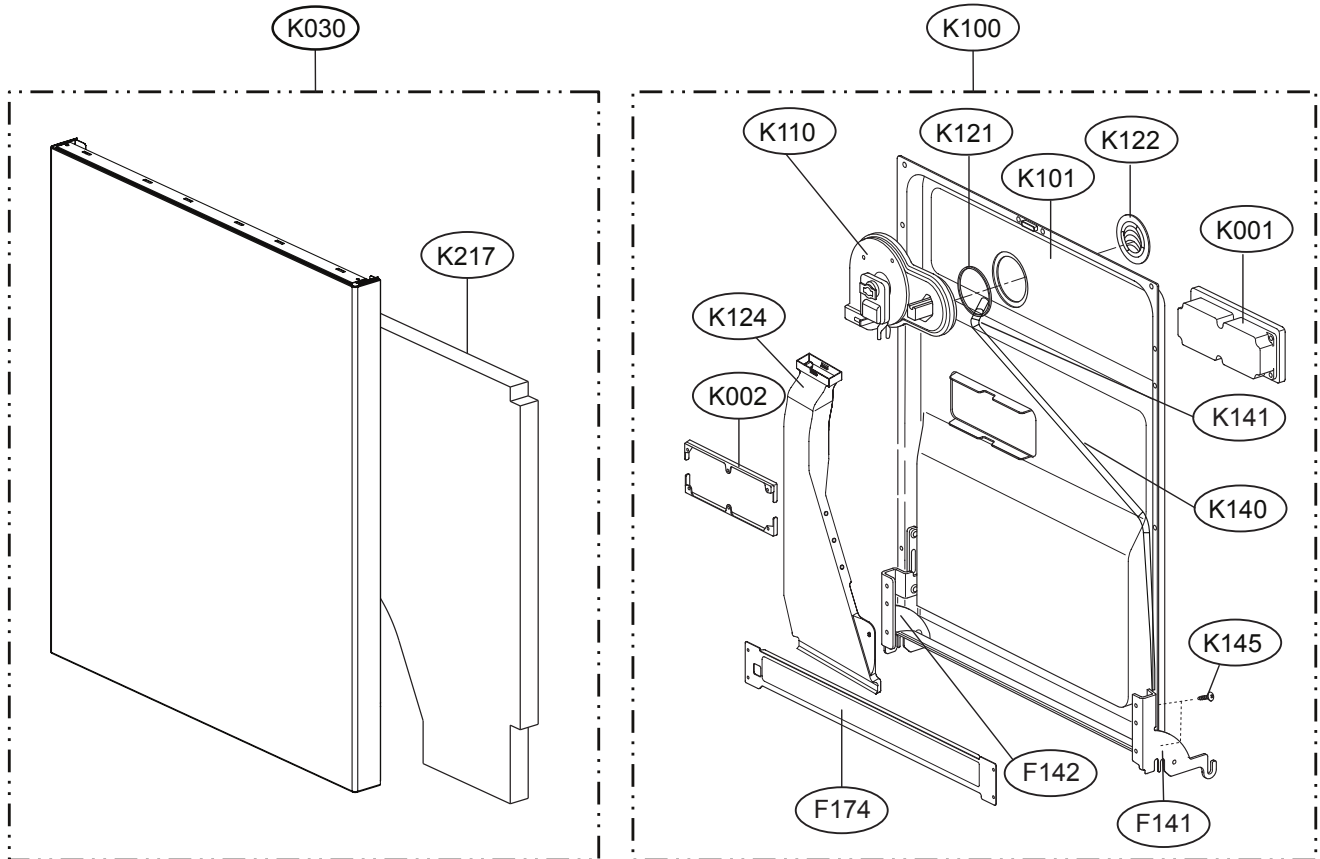
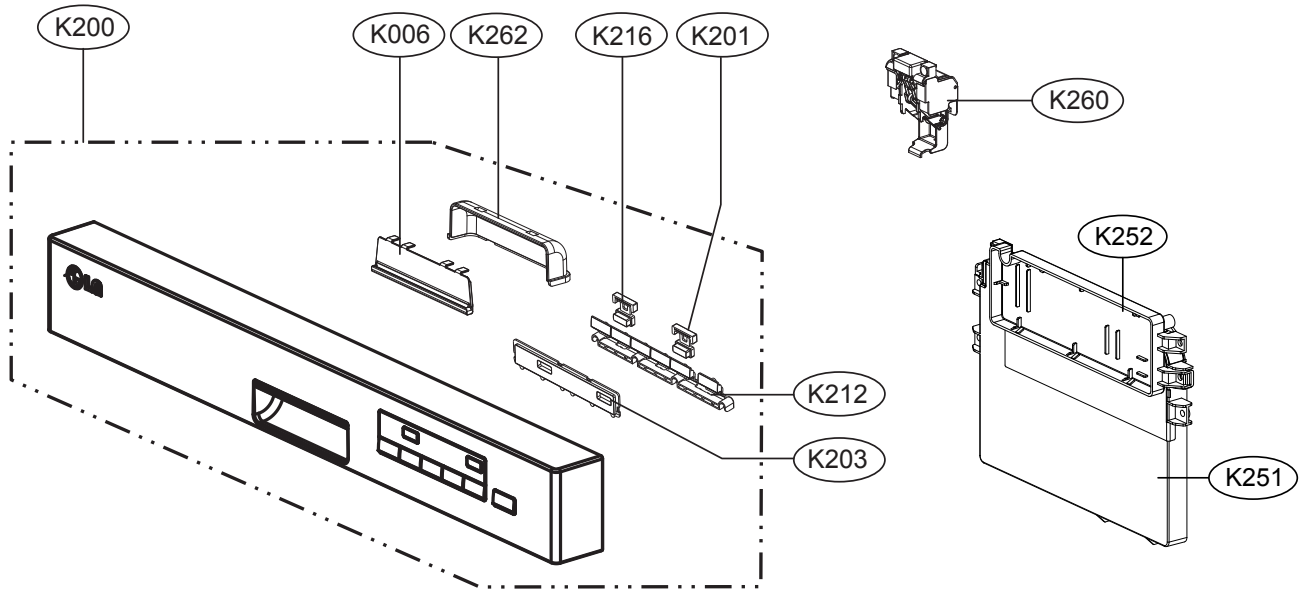


# LDS5540 / LDS5560 series

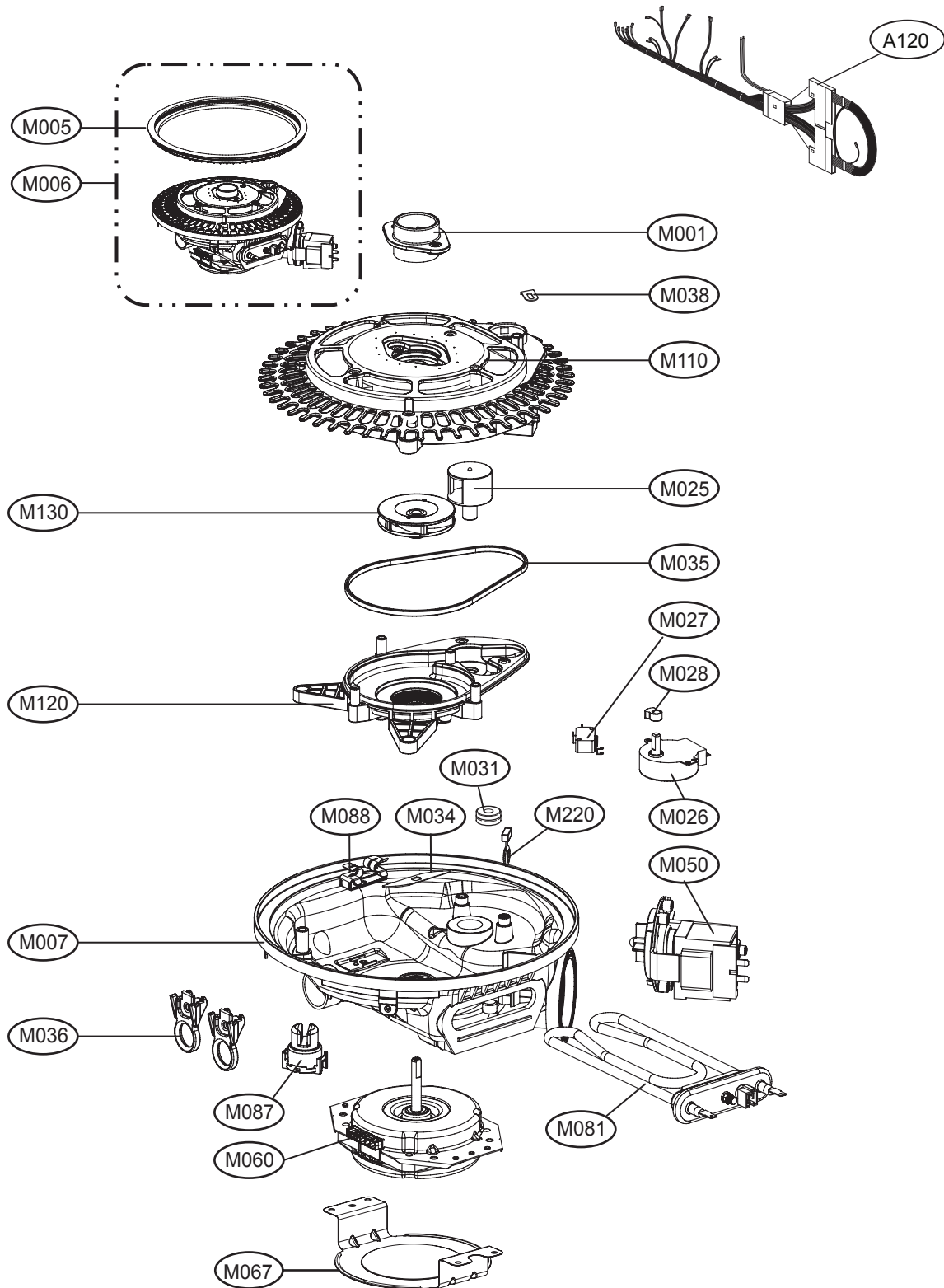
## EXPLODED VIEW – PANEL/DOOR ASSEMBLY



EXPLODED VIEW - PANEL/DOOR ASSEMBLY



# EXPLODED VIEW - SUMP ASSEMBLY







**LG Electronics Inc.**



P/No. : MFL37554811