

DISHWASHER SERVICE MANUAL

NOTE

READ THIS MANUAL CAREFULLY BEFORE SERVICING THE PRODUCT. FOLLOW THE MANUAL'S INSTRUCTIONS WHEN SERVICING THE PRODUCT.

For Authorized Service Technicians

MODEL : LUDP8997SN / LDT7797ST / LDP6797ST / LDP5676BD / LDT5665ST / LDF5545ST / LSDF9897** LDT7808** / LSDT9908** / LDT5678** / LDF5678**

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DISCONNECT POWER SUPPLY LINE BEFORE SERVICINGRECONNECT 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 cannot be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.

2. SPECIFICATIONS

ITEM	SPECIFICATION
Rated Voltage / Frequency	AC 120V/60Hz
Installation	Built-In
Place Settings	15
Product Dimension (in.)	23 ³ / ₄ (W) x 24 ⁵ / ₈ (D) x 33 ⁵ / ₈ (H)
Product Weight (lb.)	72-82
Door Color	White, Black, Stainless Steel, Black STS, Matte Black
Tub Material	Stainless Steel
Control	Electronics
Rated Power(Watt)	1,350
Heater Power(Watt)	1,200
Programs	10 (XD4&5 : 9)
Upper Rack Position	Adjustable
Lower Rack	Fold down
Water Consumption	9.4 ~ 20.5 (Normal)
Power Consumption (kWh/year)	258 (Nomal) (LUDP8997** : 269 (Normal))
Operating Time (min)	110 ~ 150 (Normal)
Fan Dry System	Yes
Delay Start Function	Yes
Auto-Off Power Switch	Yes
Process Monitor	Yes
Wash Level	5
Racks	Nylon Coating
Operating Water Pressure (Bar)	20-120 (140-830kPa)

3. FEATURES AND OPERATION

PRODUCT FEATURES

QuadWash[™] System

Multi-motion lower spray arm shoots water in various directions and at optimized intensities to reach every area of the tub. This system provides more powerful and complete cleaning coverage.

Inverter Direct Drive Motor

LG's experience in motor technology results in extraordinary functionality, with advanced features like the Dual Zone option, whisper-quiet operation, energy efficiency, and durability.

The simple design and high build quality of the motor make it so reliable that it's covered for 10 years under the warranty.

EasyRack Plus

This easy-to-use system of adjustable tines and rack height provides more flexibility and versatility when loading dishes of various shapes and sizes.

Hybrid Drying System

This efficient drying system does not use a heating element during the drying process resulting in superior energy efficiency and gentle care for dishes.

Smart ThinQ™

Download the new LG smart phone app to set options, self-diagnose and troubleshoot problems with the appliance, and other useful features. Some of these functions use Wi-Fi or NFC (Near Field Communication) technology and require an NFC-equipped smart phone.

Control Panel

For Non-Steam Models (LDT779#**, LDP679#**, LDP567#**, LDT566#**)





1 Power

- Press the **Power** button to turn power on and off.
- After the cycle is complete, the power automatically turns off for purposes of safety and economy.
- If there is a power surge, power outage, or disruption of any kind, power is automatically turned off for safety.
- When power is connected again, it will turn on automatically and resume the cycle.

2 Display

- 🔆 : Rinse Aid Icon
 - This icon illuminates when the rinse aid level is low. The LED automatically shuts off when the rinse aid is refilled or the level is set to 0.
- Refer to the Rinse Aid Dispenser Adjustment section.
- The digital display on the control panel shows the ESTIMATED cycle time. When the cycle and options are selected, the display shows the total estimated time to complete those selections. During operation, the display shows the remaining estimated operating time.

NOTE

- The estimated time shown on the display does not include delay times for heating water, etc.
- If **Delay Start** is selected, the display shows the delay time in hours.
- Cycle time may vary depending on the soil level of your load.

- \bigcirc , $\frac{1}{2}$: Control Lock
- The Control Lock feature helps prevent 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.
- While a cycle is running, press and hold **Half Load** and **Energy Saver** simultaneously for three seconds to activate or deactivate Control Lock.
- To start a new cycle, deactivate Control Lock.

• 🛜 : Wi-Fi

- When the appliance is connected to the internet through a home Wi-Fi network, this icon illuminates.
- Press and hold **Delay Start** for approximately three seconds to connect to the network.

3 Cancel

- The drain pump activates and the cycle cancels. Once the dishwasher finishes draining, the power turns off.
- Press and hold **Start** for three seconds to activate.

4 Start

- To operate the machine, either press **Start** and close the door within four seconds or close the door and press **Start**.
- If **Start** button is not pressed to start the cycle, an alert will sound.

Chime On/Off

• To activate or deactivate the button sounds, press and hold **Dual Zone** and **Energy Saver** simultaneously for three seconds. The error alert sound cannot be turned off.

Control Panel

For Non-Steam Models (LDF554#**) Before 705XX



1 Power

- Press the **Power** button to turn power on and off.
- After the cycle is complete, the power automatically turns off for purposes of safety and economy.
- If there is a power surge, power outage, or disruption of any kind, power is automatically turned off for safety.
- When power is connected again, it will turn on automatically and resume the cycle.

2 Display

• 💥 : Rinse Aid Icon

- This icon illuminates when the rinse aid level is low. The LED automatically shuts off when the rinse aid is refilled or the level is set to 0.
- Refer to the Rinse Aid Dispenser Adjustment section.
- The digital display on the control panel shows the ESTIMATED cycle time. When the cycle and options are selected, the display shows the total estimated time to complete those selections. During operation, the display shows the remaining estimated operating time.

NOTE

- The estimated time shown on the display does not include delay times for heating water, etc.
- If **Delay Start** is selected, the display shows the delay time in hours.
- Cycle time may vary depending on the soil level of your load.

• \bigcirc , $\frac{1}{2}$; Control Lock

- The Control Lock feature helps prevent 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.
- While a cycle is running, press and hold **Dual Zone** for three seconds to activate or deactivate Control Lock.
- To start a new cycle, deactivate Control Lock.

3 Cancel

- The drain pump activates and the cycle cancels. Once the dishwasher finishes draining, the power turns off.
- Press and hold **Start** for three seconds to activate.

4 Start

- To operate the machine, either press **Start** and close the door within four seconds or close the door and press **Start**.
- If **Start** button is not pressed to start the cycle, an alert will sound.

Chime On/Off

• To activate or deactivate the button sounds, press the **Half Load** button for three seconds. The error alert sound cannot be turned off.

Control Panel

For Non-Steam Models (LDF554#**) After 705XX



1 Power

- Press the **Power** button to turn power on and off.
- After the cycle is complete, the power automatically turns off for purposes of safety and economy.
- If there is a power surge, power outage, or disruption of any kind, power is automatically turned off for safety.
- When power is connected again, it will turn on automatically and resume the cycle.

2 Display

• 🔆 : Rinse Aid Icon

- This icon illuminates when the rinse aid level is low. The LED automatically shuts off when the rinse aid is refilled or the level is set to 0.
- Refer to the Rinse Aid Dispenser Adjustment section.
- The digital display on the control panel shows the ESTIMATED cycle time. When the cycle and options are selected, the display shows the total estimated time to complete those selections. During operation, the display shows the remaining estimated operating time.

NOTE

- The estimated time shown on the display does not include delay times for heating water, etc.
- If **Delay Start** is selected, the display shows the delay time in hours.
- Cycle time may vary depending on the soil level of your load.

• \bigcirc , $\frac{1}{2}$: Control Lock

- The Control Lock feature helps prevent 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.
- While a cycle is running, press and hold **Half Load** and **Energy Saver** simultaneously for three seconds to activate or deactivate Control Lock.
- To start a new cycle, deactivate Control Lock.

3 Cancel

- The drain pump activates and the cycle cancels. Once the dishwasher finishes draining, the power turns off.
- Press and hold **Start** for three seconds to activate.

4 Start

- To operate the machine, either press **Start** and close the door within four seconds or close the door and press **Start**.
- If **Start** button is not pressed to start the cycle, an alert will sound.

Chime On/Off

• To activate or deactivate the button sounds, press and hold **Dual Zone** and **Energy Saver** simultaneously for three seconds. The error alert sound cannot be turned off.

Cycles

Select your desired cycle.

Auto

This cycle senses the soil amount and soil toughness and is optimized to achieve the best cleaning.

• For steam models, this cycle has the added power of steam.

Heavy

This cycle is for heavily soiled dishes and dishes with hardened on soil. The Heavy cycle defaults to the strongest spray intensity and uses it to wash heavily soiled dishes.

• For steam models, this cycle has the added power of steam.

Delicate

Use this cycle to clean delicate items such as fine china and stemware.

• For steam models, this cycle has the added power of steam.

Refresh (Steam Models)

This cycle freshens up and warms dishes that have been unused for a long time.

• Do not use detergent when using this cycle.

Normal

This cycle is for moderately soiled, everyday loads. Select the **Night Dry** option if leaving dishes overnight. Press and hold **Extra Dry** for three seconds to activate Night Dry.

Turbo

This cycle will clean heavily soiled dishes in an hour using slightly more energy and water. Select the **Extra Dry** options for better drying.

Download Cycle

Use a dedicated cycle downloadable via Wi-Fi or NFC.

Machine Clean 🖶

This cycle is for cleaning the inside of the dishwasher. Use the cycle without dishes in the machine. It eliminates residual soils, odor, white spots, and other dirt. Add citric acid or another cleaning agent for more effective results.

• Press and hold **Heavy** for three seconds to activate.

NOTE

• The Machine Clean 🕀 icon flashes every 30 cycles. To activate or deactivate the icon, press the **Delicate** button for three seconds.

Rinse

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

• Press and hold **Normal** for three seconds to activate.

Express

This cycle will quickly clean lightly soiled dishes. (Time : 33 minutes) Select the **Extra Dry** option or another cycle for better drying.

• Press and hold Turbo for three seconds to activate.

NOTE

• Rinse, Turbo, and Express cycles do not have drying or have a shortened dry time. For better drying performance, open the door after these cycles or select a different cycle.

Options

Select the desired cycle button and then select the options for that cycle.

Dual Zone

This option automatically sets the spray intensity to soft for the upper spray arm and strong for the lower spray arm. Place heavily soiled dishes like plates and bowls in the lower rack and lightly soiled dishes like cups and small plates in the upper rack to get the best results.

Half Load

This option washes intensively by selecting the upper or lower racks. For small loads, use just the upper or lower rack to save energy and time. By pressing the **Half Load** button, the settings ..., ... and the cancellation of the Half Load option are available.

Energy Saver

This option saves energy by reducing the wash and rinse temperatures. Wash time is increased to maintain wash performance. Do not use this cycle with heavily soiled dishes.

Pre-Steam (Steam Models)

This option adds steam at the start of the cycle to improve wash performance.

High Temp

Raises the main wash temperature to improve cleaning.

Extra Dry

Select the **Extra Dry** option for better drying performance. This option adds 20 minutes of extra drying time to the cycle and raises the heated rinse temperature.

Night Dry

Dishes are often left in the dishwasher overnight after the cycle ends. This can result in the steam inside the tub condensing on dishes, leaving them wet. The Night Dry option runs the ventilation fan periodically to help vent the steam from the tub.

• Press and hold **Extra Dry** for three seconds to activate.

Delay Start

The Delay Start feature delays the start of a selected cycle. Each time the **Delay Start** button is pressed, the delay time increases by an hour. The delay time can be set from 1 to 12 hours, in one-hour increments.

Control Panel For Steam Models(LSDF9897**, LDT7808**, LSDT9908**)

Zone



Load

L*Control Lock

Saver

1 Power

- Press the Power button to turn power on and off.
- After the cycle is complete, the power automatically turns off for purposes of safety and economy.
- If there is a power surge, power outage, or disruption of any kind, power is automatically turned off for safety.
- When power is connected again, it will turn on automatically and resume the cycle.

2 Display

- The digital display on the control panel shows the ESTIMATED cycle time. When the cycle and options are selected, the display shows the total estimated time to complete those selections. During operation, the display shows the remaining estimated operating time.

NOTE

- The estimated time shown on the display does not include delay times for heating water, etc.
- If Delay Start is selected, the display shows the delay time in hours.
- Cycle time may vary depending on the soil level of your load.

• / / : Control Lock

- The Control Lock feature helps prevent 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.
- While a cycle is running, press and hold Half Load and Energy Saver simultaneously for three seconds to activate or deactivate Control Lock.
- To start a new cycle, deactivate Control Lock.

Rinse Aid Icon

Dry

*Night Dry

Start

Temp

- This icon illuminates when the rinse aid level is low. The LED automatically shuts off when the rinse aid is refilled or the level is set to 0.

* Cancel 3

• Refer to the Rinse Aid Dispenser Adjustment section.

• 🕀 : Machine Clean

- This cycle is for cleaning the inside of the dishwasher. Use the cycle without dishes in the machine. It eliminates residual soils, odor. white spots, and other dirt. Add citric acid or another cleaning agent for more effective results.
- Press and hold Heavy for three seconds to activate.

NOTE

• The Machine Clean + icon flashes every 30 cycles. To activate or deactivate the icon, press the Delicate button for three seconds.

• 🔶 : Wi-Fi

- When the appliance is connected to the internet through a home Wi-Fi network, this icon illuminates.
- Press and hold Delay Start for approximately three seconds to connect to the network.

3 Cancel

- The drain pump activates and the cycle cancels. Once the dishwasher finishes draining, the power turns off.
- Press and hold **Start** for three seconds to activate.

4 Start

- To operate the machine, either press **Start** and close the door within four seconds or close the door and press **Start**.
- If **Start** button is not pressed to start the cycle, an alert will sound.

Chime On/Off

• To activate or deactivate the button sounds, press and hold **Dual Zone** and **Energy Saver** simultaneously for three seconds. The error alert sound cannot be turned off.

Cycles

Select your desired cycle.

Auto

This cycle senses the soil amount and soil toughness and is optimized to achieve the best cleaning.

Heavy

This cycle is for heavily soiled dishes and dishes with hardened on soil. The Heavy cycle defaults to the strongest spray intensity and uses it to wash heavily soiled dishes.

• This cycle has the added power of steam.

Delicate

Use this cycle to clean delicate items such as fine china and stemware.

• This cycle has the added power of steam.

Refresh

This cycle freshens up and warms dishes that have been unused for a long time.

• Do not use detergent when using this cycle.

Normal

This cycle is for moderately soiled, everyday loads. Select the **Night Dry** option if leaving dishes overnight. Press and hold **Extra Dry** for three seconds to activate Night Dry.

• After the cycle ends, the fan runs for an hour to help vent the warm, moist air in the tub. You can stop the fan by opening the door after the cycle ends.

Turbo

This cycle will clean heavily soiled dishes in an hour using slightly more energy and water.

• This cycle does not have drying. Select the Extra Dry and Night Dry option or another cycle for better drying.

Download Cycle

Use a dedicated cycle downloadable via Wi-Fi or NFC.

NOTE

- Only the cycle code for the current Download cycle appears on the appliance. See the smartphone app for cycle codes, names, and more information about the available cycles.
- Default Cycle : P1. Pots & Pans

Rinse

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

- This cycle does not have drying.
- Press and hold **Normal** for three seconds to activate.

Express

This cycle will quickly clean lightly soiled dishes. (Time : 33 minutes)

- This cycle does not have drying. Select the **Extra Dry** and **Night Dry** option or another cycle for better drying.
- Press and hold Turbo for three seconds to activate.

Options

Select the desired cycle button and then select the options for that cycle.

Dual Zone

This option automatically sets the spray intensity to soft for the upper spray arm and strong for the lower spray arm. Place heavily soiled dishes like plates and bowls in the lower rack and lightly soiled dishes like cups and small plates in the upper rack to get the best results.

Half Load

This option washes intensively by selecting the upper or lower racks. For small loads, use just the upper or lower rack to save energy and time. By pressing the **Half Load** button, the settings ..., ... and the cancellation of the Half Load option are available.

Energy Saver

This option saves energy by reducing the wash and rinse temperatures. Wash time is increased to maintain wash performance. Do not use this cycle with heavily soiled dishes.

Steam

This option adds steam at the start of the cycle to improve wash performance.

High Temp

Raises the main wash temperature to improve cleaning.

Extra Dry

Select the **Extra Dry** option for better drying performance. This option adds extra drying time to the cycle and raises the heated rinse temperature.

• When the rinse aid is empty, the **Extra Dry** option is selected automatically.

Night Dry 걸

Dishes are often left in the dishwasher overnight after the cycle ends. This can result in the steam inside the tub condensing on dishes, leaving them wet. The Night Dry option runs the ventilation fan periodically to help vent the steam from the tub.

- Press and hold **Extra Dry** for three seconds to activate.
- The **Night Dry** option is selected by default on all cycles for which it is available, except the Normal cycle.
- To add the **Night Dry** option to the Normal cycle, press and hold **Extra Dry** for 3 seconds

Delay Start

The Delay Start feature delays the start of a selected cycle. Each time the **Delay Start** button is pressed, the delay time increases by an hour. The delay time can be set from 1 to 12 hours, in one-hour increments.

3-3. TEST MODE

CHECK PROGRAM

	Times	Tan	Load and Chee	cking points	Door		
BUTTON	button is pushed	Top Display	Load	LED lighting	open/ closed	Remark	
POWER +START	1 TIME	n35/U00/ D00 (version)		All LEDs are lit	Either	"nC" will be displayed when NFC or Wifi Module fails.	
POWER +AUTO +START (LDF5678** ,LDT5678**)	1 TIME	n**/U**/ D** (version)		All LEDs are lit	Either	"nC" will be displayed when NFC or Wifi Module fails.	
	1 TIME	Sump Temp(°C)	Dispenser	Power Button is lit Rinse aid	Closed	"EE" will be displayed when EEPROM is fails.	
	2 TIME	N02	Drying Fan Motor Drying Actuator		Closed		
	3 TIME	Soil Level	Soil Sensor		Closed		
	4 TIME	Drain Motor RPM	Drain Motor	Refill LED flashes (if rinse	Either		
Start	5 TIME	Frequency	Inlet Valve	aid needs refilling)	Closed		
	6 TIME	Washing Motor RPM	Washing Motor	other LED are turned	Closed		
	7 TIME	Washing Position	Washing Heater Vario Valve	Off	Closed	Un : Detecting Washing Position Lo : Detecting Complete "nE" will be displayed when Vario Valve fails.	
	8 TIME	-	Power Off	All LEDs are turned Off	Either		

4. PARTS

Exterior Parts



Interior Parts



- 1 Top Wash Impeller
- 2 Upper Spray Arm
- 3 Lower Spray Arm
- 4 Filtration System
- 5 Detergent and Rinse Aid Dispenser
- 6 Drying Vent Cover
- 7 Tub Light (some models)
- 8 Cutlery Rack (some models)
- 9 Upper Rack
- 10 Silverware Bask et
- [11] Lower Rack (appearance may vary)
- 12 Steam nozzle (some models)

5. PROGRAM CHARTS (SCHEMATIC DIAGRAMS)



Program Chart

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6. HOW TO DISASSEMBLE

1. Lower Cover



1) Remove the front 2 screws.



CAUTION



- % For models: LUDP8997** LDP6797** LDP5676** LDF5545**
- ① Open the door.

② Remove the 6 screws around front cover assembly.

- % For models: LDT7797** LDT5665** LSDF9897** LDT7808**, LSDT9908**
- (1) Open the door.

② Remove the 10 screws around front cover assembly.

CAUTION:

Take care when disassembling the front cover to avoid putting stress on the wire harness and dispenser actuator between the front cover and the dispenser.Doing so may disconnect the wire harness or dislodge or damage the dispenser actuator.

- Case 1: The wire harness becomes disconnected. \rightarrow Reconnect the wire harness
- Case 2: The dispenser actuator is rotated but not pulled out or damaged.
 - → Reposition the dispenser actuator properly and continue service.
- Case 3: The dispenser actuator is pulled out or damaged.

→ Replace the casing: asm (ABT73009401 / K110)

③ Remove the wire connection.④ Remove the Indicator PCB.

2-2. Control Panel Assembly



- % For models: LDP6797** LDP5676** LDF5545**
- ① Remove the 6 screws.
- ② Disconnect the wire connections.
- ③ Remove the handle..
- For Model: LUDP8997**
 Remove front cover screws, then follow steps 1-3 above.
- 2) Removing Handle
- Pull the handle forward to separate from hook.
- ② Push the 2 hooks. (Left & Right)
- ③ Remove the Handle.
- % For models: LDT7797** LDT5665** LSDF9897** LDT7808**, LSDT9908**
- Pull out the Control Panel Assembly from the inside of Front Cover.
- ② Remove the 2 screws for sub controller

2-3. Door Liner Assembly



Blower Assembly

- ① Remove the screw.
- ② Remove the vent from Fan motor.
- ③ Disconnect the connector.
- ④ Open the Door.
- ⑤ Remove the Blower cover
 - Insert flat head screwdriver in hole (A).
 - Rotate flat head screwdriver slowly.



6 Remove the screws shown.

CAUTION: Blower cover is easily damaged.

Dispenser Assembly



Using Dispenser Service Jig

- ① Close the Door.
- ② Disconnect Electrical wire connectors from dispenser.
- ③ Insert the two side pieces into the inside of the dispenser.
- ④ Insert the bottom piece.
- (5) After all three pieces have been inserted, open the door and pull the dispenser from the bottom up and pull out.

When pulling the dispenser out from the door, lift the bottom of the dispenser slightly from the inside, then remove the bottom jig piece.

CAUTION: Watch pinch points to avoid hand injuries.



Assembling New Dispenser

- ① Verify the status of the flanges on the inner door.
- ② Place the support jig then insert the new dispenser.
- ③ Make sure that all flanges fit properly into the dispenser hooks.
- * Keep fingers and hands away from pinch points to avoid injury.

2-4. Door Spring



2-5. Door Liner



Replacing Door Spring

- ① Pull the Rope and Spring.
- ② Remove the Rope from the Roller.
- ③ Remove the Spring from the Base.

Replacing Door Liner

- ① Open the door.
- ② Press the Rope Holder.③ Put Rope Holder into the Base.
- ④ Pull the Door Liner and remove it from the Hinge Supporter.
- * CAUTION: Door may drop.

3. Lower Frame



- ① Remove 2 screws.
- ② Press the holder hook as shown in figure.
- ③ Remove the Harness Holder.
- ④ Remove the Overflow Hose from the Lower Frame.
- % For LUDP8997** Model, Remove the insulation sheet, then follow steps 1 through 3 above.
- * Take care not to lose or damage the overflow hose.

4. Tub Assembly








- ※ Removing Gliding Upper Rack
- Insert a tool to widen the space between the hooks at the front of the rack while pulling up on the rack to disengage it.



- ② Grab the Rack and push it back to remove rack from 2 rear hooks.
- % For This Model Only (LUDP8997**, LDT7797**, LDP6797**, LSDF9897**, LDT7808**, LSDT9908**)
- ※ Reassembling Gliding Upper Rack
- ① Fully extend glide rails.
- ② Set rear of rack on rails and pull it forward.
- ③ Snap front of rack down into hooks.
- ④ Slide the Upper Rack backwards and forwards to check its ease of movement
- 2) Removing Nozzle & Water Guides
- Remove the 2 screws on the Lower Nozzle.
- ② Pull up the Lower Nozzle and remove.
- ③ Remove the screw and clip on the Water Guide.
- ④ Remove the Water Guide from the Tub Bracket (Top).
- (5) Remove the Water Guide from the Tub Bracket (Center).
- % Caution : Do not remove the lower water guide.



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- 7) Casing Assembly, Pump
- ① Lay the product down on the floor.
- X Lay down towels first to protect floors from leakage.
- ② Remove the Base Cover.
- ③ Remove the wire on the Motor.
- ④ Disconnect the connector.
- ⑤ Remove the Hose Clamp.
- 6 Remove the Rubber Holder.
- ⑦ Remove the Pump Assembly.
- (8) Remove the Earth screw.
- 8-1) Removing Hinge Supporter & Rail Assembly

For models LDP5676**, LDT5665**, and LDF5545** only

- ① Remove the Hinge Supporter screw.
- ② Remove the Hinge supporter from Base hook.
- ③ Slide a screwdriver into the gap between the stopper roller and the rail roller and twist the screwdriver to release the rail assembly.



Insert the blade of a screwdriver into the gap between the two rollers and rotate the blade.



- 8-2) Removing Hinge Supporter
- ① Remove the Hinge Supporter screw.
- ② Remove the Hinge Supporter from Base Hook

- 8-3) Removing Rail Assembly (all other models)
- Detach the Glide Rail from the Front Hook
- ② Push the Glide Rail slightly backwards
- ③ While pushing on the Rear Hook, hold the Glide Rail and slide rail backwards



- % Reassembling New Glide Rail
- % For This Model Only (LUDP8997**, LDT7797**, LDP6797**, LSDF9897**, LDT7808**, LSDT9908**)
- ① Align the Glide Rail holes and the Hooks
- 2 Pull on the Glide Rail to fully assemble it
- ③ Slide a flat-blade screwdriver into the gap between hook and tub and release the front and rear hooks.
- ④ Push the hook down.
- (5) Check point : Make sure that the Glide Rail is assembled tightly. (If it is not assembled properly it may come apart.)



- 9) Removing Sump & Base
- ① Remove the 7 screws on the sump cover.
- ② Remove the 2 screws on the base.
- ③ Remove the Roller.
- ④ Remove the Hinge supporter from Base hook.
- (5) Pull the top of the tub to remove it.
- ⑥ Take care not to pull the water guide and cause damage to the water guide tub bracket joints.



<Steam Model> 1. Sump Assembly





% Take care not to dislodge the cap while removing the hose or the ball bearings may be lost.





- 1) Removing Steam ball valve
- Remove 2 screws.
- ② Remove the Clamp.
- ③ Pull the Steam ball valve.

- 2) Removing Steam Nozzle Hose
- ① Remove the Front Cover.
- ② Remove the Duct.
- ③ Remove the Clamp of Steam Nozzle Hose and the Hose.
- ④ Remove the Lower Cover and Lower Frame.
- ⑤ Remove the Lower Nozzle and Sump Case.
- 6 Remove the Main PCB from the Base.
- ⑧ Pull out the Steam Nozzle Hose Between Tub and Sump.
- Remove the Cover from bottom of the Base.
 Base.
 Base.
 Base.
 Cover from bottom of the Base.
 Cover from bottom of the Base.
 Section 1999
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- Remove the Clamp and Steam Nozzle Hose from the Motor.
- ① Remove the Steam Nozzle Hose.
- Make sure the steam nozzle hose does not get caught between the tub and the harness clamp during reassembly.





<Steam Model> 2. Door Liner Assembly



- 1) Steam nozzle
- ① Remove the 4 Screws.
- ② Pull the Steam nozzle and Bracket.

7. TROUBLESHOOTING METHODS

7-1. TROUBLESHOOTING ACCORDING TO DISPLAYED ERROR MESSAGE

ERROR MESSAGE	POSSIBLE CAUSE FOR ERROR OCCURRENCE	REMEDY
INLET ERROR displayed Condition Doesn't reach the normal water level	 The Water Supply Tap is closed. Wiring connection is OK? The Inlet Hose is kinked. The Water Pressure is very low (below 10 psi) or high (above 120 psi). The filter of Inlet Valve is clogged by dirty water. Inlet Valve is OK? Wiring connection is OK? The Impeller of Air breaker is stuck. The Hall sensor is OK? The Controller is damaged. 	 Open the water supply tap. Check and reconnect the wire. Repair the Inlet Hose. Call plumber for service. Clean the filter of Inlet Valve. Check the electric resistance of Inlet Valve. (23~27Ω) Check and reconnect the wire. Replace the Air breaker. Check the electric resistance of Hall Sensor. Replace the Controller.
DRAIN ERROR displayed Condition Doesn't reach the normal water level	 The Filter assembly blocked. The Drain Hose kinked or blocked. The inner hole of drain case is blocked. The Air gap is clogged. The Knock out plug of garbage disposal not removed. The Washing Motor locked or defective. Wiring connection is OK? The Impeller of Drain motor is stuck. The Controller is damaged. 	 Clean the filter assembly. Remove the cause of kink or block. Repair or Replace the Drain Motor. Clean the Air Gap Remove knock out plug. Replace the Pump casing assembly. Check and reconnect the wire. Clean the drain motor Replace the Controller.
LEAKAGE ERROR displayed Condition Internal Leakage ConditionInternal Leakage	 The Door gasket came loose or fell off. The Float assembly is stuck. The Controller is damaged. The seal assembly is not connected properly to the sump. The unit is not leveled. Using wrong detergent. 	 Replace the door liner assembly. Replace the floater assembly. Replace the Controller. Reassemble the seal on the sump. Make a Level. Should install properly. Use dishwasher detergent. In case of AE, Should remove underneath of Floater switch(Safety switch)
BUBBLE ERROR	 Oversudsing caused by improper detergent. Failure to level dishwasher 	 Only use detergents which are designed for use in dishwashers. Make a level. Should install properly.

EXCESS ERROR displayed Condition Water fills above normal level(Automatically drainPump operated.)	 The Inlet Valve is damaged. The Controller is damaged. After Replace the PCB, still same Error code is displaying. 	 Replace the Inlet Valve. Replace the Controller. Replace the Hole Sensor.
THERMAL ERROR	 Wiring connection is OK? The Thermistor is OK? 	 Check and reconnect the wire. Check the electric resistance of Thermistor.
HEATER ERROR	 Wiring connection is OK? The Inlet Water Temperature is very high. 	 Check and reconnect the wire. Check the temperature. If the temperature is displayed, adjust the Inlet Water Temperature to 120°F .
Condition The water is not heated or the temperature in the Tub is overheated to over 194°F	 3) The Thermistor is damaged. 4) Heater is OK? 5) The Controller is damaged. 6) The Relay Circuit is OK? 	 3) Check the electric resistance of Thermistor. 4) Check the electric resistance of Heater. Replace the Pump casing assembly. 5) Replace the Controller. 6) Replace the Relay Circuit.
MOTOR ERROR displayed Condition The Motor is workingabnormally	 Wiring connection is OK? (Washing Motor and Controller) The Impeller of Washing Pump is locked. Is the Washing Motor is OK? The Controller is damaged. 	 Check and reconnect the wire. Replace the Pump Casing assembly. Check the electric resistance of Washing Motor. Replace the Controller.
VARIO ERROR displayed Condition The position of vario cam isnot properly	 Wiring connection is OK? Does the vario S/W assembled properly? Is the vario motor operated properly?(range is 12~15) 	 Check and reconnect the wire. Reassemble vario S/W. Replace the vario motor.



Only LDT5678**/LDF5678**



















No Power







Drying result is not satisfactory.











8. INSTALLATION INSTRUCTIONS

Preparing Cabinet Opening

This dishwasher is designed to fit a standard dishwasher opening. An opening may be needed on both sides to route plumbing and electrical connections.



- 1 Select a location as close to the sink as possible for easy connections to water and drain lines.
- 2 To ensure proper drainage, install the dishwasher no more than 12 ft. (3.65 m) from the sink.
- 3 If installing the dishwasher in a corner, leave a minimum of 2" (50 mm) between the dishwasher and the adjacent wall.
- **4** To allow for proper clearance of plumbing and electrical, use the template included with the literature to determine the clearance on the side of the cabinet where the cabinet meets the back wall. Using a $2 \frac{1}{2}$ " diameter hole saw, drill a hole in the target area as shown on the template.



• Don't use existing holes unless they are in the target area. Otherwise, the water supply and drain hose may be damaged by being crushed or kinked.

• Failure to properly locate the hole for the water and drain lines may prevent the dishwasher from installing flush with the cabinets and could result in kinked or damaged lines. Installation damage is not covered by the warranty, and leaks caused by improper installation may result in property damage.

For flush installations only, you may remove the cabinet brace inside the cabinet.



Preparing Electrical Wiring

- Operate this appliance with the correct voltage as shown in this manual and on the rating plate. Connect it to a dedicated, properly grounded branch circuit which is protected by a time delay fuse. Connect the appliance using 3-wires, including a ground wire.
- 2 If an outlet and another power connector is used, it should be in an accessible location adjacent to and not behind the dishwasher and within 4 ft (1.2 m) of the dishwasher's side.
- 3 The wiring must be grounded properly. If in doubt, have it checked by a qualified electrician. Do not connect any other appliance to the same outlet.
- A Route the wiring.



5 Make sure the electrical cable is oriented in the right side channel.

WARNING

- For personal safety, remove house fuse or open circuit breaker before installation.
- Do not use an extension cable or adapter plug with this dishwasher.

NOTE

- If you find any damage to the dishwasher, contact your retailer or contractor.
- The included wire nut in 16AWG should be used.

Preparing Water Supply Connection

Make sure the house water supply is turned off before connecting the dishwasher water lines.

- Connect the dishwasher to a hot water supply with a temperature range between 120 °F (49 °C) and 149 °F (65 °C). This temperature range provides the best washing results and shortest cycle time. To prevent damage to dishes, the temperature should not exceed 149 °F (65 °C).
- 2 When connecting the dishwasher water line, sealing tape or compound should be used on pipe threads to avoid leaks. Tape or compound should not be used on compression fittings.
- **3** The water supply tube must be located in the left side channel.



NOTE

• Use new hoses when connecting to the water supply. Do not reuse old hoses.

Preparing Dishwasher

Removing Rear Plastic Shipping Brace



NOTE

• Do not pull or lift the dishwasher using the handle; doing so can damage the door and hinges. Open the door and grab the body frame and the top front opening of the tub to move or lift the dishwasher.



NOTE

• Do not push the door of the dishwasher with knees.



Removing Lower Cover

- 1 Remove the two screws attaching the lower cover to the dishwasher.
- **2** Remove the lower cover from the base.
- **3** Remove the insulation pad from behind the access panel.



• If at any time the dishwasher is laid on its back, take care not to damage the drain hose.

NOTE

• Do not forget to replace the lower cover.

Attaching Mounting Hardware

For countertops made of wood or other material that will not be damaged by drilling, use the metal installation brackets.

1 Insert the installation brackets into the slots in the upper frame.



2 Bend the brackets to secure them to the dishwasher tub.



NOTE

• Installation brackets and screws can be found in the silverware basket.

For countertops made of granite, marble, or other materials that could be damaged by drilling, use the wood screws to attach the dishwasher to the cabinet. See installation instructions in Securing Dishwasher to Countertop.



Sliding Dishwasher into Cabinet

- 1 Slide the dishwasher carefully into the cabinet opening.
- 2 Make sure the drain hose inside the cabinet is not kinked or pinched.
- 3 Make sure the water supply line and electrical supply are routed through the channels under the dishwasher.
- 4 To avoid a kinked or pinched drain hose, be sure to pull on the drain hose while sliding the dishwasher into place. Do not allow any slack behind the dishwasher.



5 After leveling the dishwasher, do not leave the water supply line or power supply line under the base. This is a potential cause of water leaks. Place the water line and power supply line in the channel.



Leveling the Appliance

Check that dishwasher is level.

- Attach level on top front opening of tub from side to side.
- Attach level on front side of tub.



Make sure that the gap between the door and the tub is equal on both the left and right sides.



The water level should be checked after the initial fill on the Normal cycle. If the water level is not near the center of both tub lower indentations, the dishwasher may not be correctly leveled. The dishwasher may leak during operation if it is not correctly leveled.



Water level should be near the center of both tub lower indentations.

Adjusting the Legs

Adjusting the Front Legs

- Use a flat-blade screwdriver or a pliers to turn the front legs and adjust the front of the tub.
- Turn the front legs clockwise to raise the front of the tub and counter-clockwise to lower it.
- The adjustments work identically for both front legs.



Adjusting the Rear Legs

- Use a Phillips screwdriver to adjust the back legs and the rear of the tub using the center screw at the base of the appliance in the front.
- Turn the center screw clockwise to raise the rear of the tub and counter-clockwise to lower it.



NOTE

• To avoid damaging the screw, do not use an electric screwdriver.

Securing Dishwasher to Countertop

For countertops made of wood or other material that will not be damaged by drilling, use Method 1.

For countertops made of granite, marble, or other materials that could be damaged by drilling, use Method 2.

NOTE

- Cover the filter hole with towels to prevent screws from falling down into the pump.
- Use a magnetic screwdriver.

Method 1

Using the provided screws, secure the dishwasher to the countertop through the holes in the bracket.



Installation bracket

NOTE

 Installation brackets and screws can be found in the silverware basket. See Attaching Mounting Hardware section for more information on attaching installation brackets to dishwasher.

Method 2

- 1 Remove the plastic caps from the mounting bracket access holes.
- 2 Drive a wood screw through the mounting bracket and into the cabinet frame.
- 3 Reinstall the plastic caps.



Connecting Drain Hose



If the end of the drain hose does not fit the drain line, use a heat and detergent resistant adapter (not supplied). These may be obtained from a local plumbing supply store.

The two typical connections are shown. To prevent siphoning, one of the following connections should be used.



Drain Requirements

- Follow local codes and ordinances.
- Do not exceed 12 ft. (3.65 m) distance to drain.
- Do not connect drain lines from other devices to the dishwasher drain hose.
- If an extension drain hose is required, use ⁵/₈" or ⁷/₈" inside diameter, 2-3 ft. length hose and a coupler for connecting the two hose ends.



NOTE

• For drain hose installation, use the screw style clamp provided with this dishwasher in the silverware basket.

NOTE

• If the knockout plug has not been removed, the dishwasher will not be able to drain properly.

Connecting to Disposal with No Air Gap

1 Remove the knockout plug with a hammer and screwdriver.



2 Attach the drain hose to disposal with the hose clamp provided. Move into position and tighten the hose clamp.



Connecting Waste Tee with No Air Gap

1 Remove the knockout plug with a hammer and screwdriver.



2 Attach the drain hose to waste tee with the hose clamp provided. Move into position and tighten the hose clamp.



Connecting to Disposal or Waste Tee with Air Gap

- 1 Remove the knockout plug with a hammer and screwdriver.
- 2 Connect end of the drain hose to the air gap with hose clamp provided. This avoids water being siphoned from the tub.



3 Attach the rubber connector to disposal or waste tee with the hose clamp provided. Move into position and tighten the hose clamp.

Connecting without Air Gap

The height of the drain hose end must be at least 12" (305 mm) and within 40" (1016 mm) from the base of the appliance to avoid water being siphoned from the tub.



Drain pipe

Connecting Water Supply

- 1 Before connecting, turn off the water supply.
- 2 Slide the flexible stainless-steel water line or copper tube into the elbow.
- 3 Tighten the compression nut and make sure that the line is not kinked or pinched.



NOTE

• During the final installation check of the dishwasher, an IE error code may appear on the display. Make sure the water line is not kinked and the water supply for the dishwasher has been turned on before calling for service.

Connecting Power



NOTE

- The best location for the electrical conduit is on the right side of the back wall. Re-route the power cable before installation if the electrical conduit pipe is longer than 3" (76 mm) and is centered on the back wall.
- **1** Before beginning, turn off electrical power to the unit at the circuit breaker.
- 2 Remove the junction box cover and then install the strain relief.



3 Twist the wire nuts tightly onto the wires; then 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 ground wire to green ground wire.
- 5 Replace the junction box cover.

• Verify that the black wire is hot (120 V). If not, or if you are unsure of the power supply, have it checked by a licensed electrician.

• Do not leave stripped wire exposed. Trim stripped wire to fit completely inside wire nuts.

Final Check

- 1 Turn on electrical power.
- 2 Turn on house water supply.
- 3 Make sure the door opens and closes smoothly. If necessary, level the dishwasher again.
- 4 Run the dishwasher on a Turbo cycle to verify proper operation and check for leaks.

• Only install the lower cover provided with the machine. Do not install cabinet baseboard as it may cause noise and leakage.



Error Code	Possible Cause and Solution
	Drain hose kinked or pinched. Feed the drainage and supply
OE Error	hoses through the hole under the sink. Then gradually slide the dishwasher into the cabinet while pulling on the hoses under the sink to take up any slack. This helps avoid kinking the hoses or trapping them beneath the dishwasher.
	Drain hose connected to disposal.
	Remove knockout plug on disposal.
	Waste tee is clogged.
	Remove knockout plug on waste tee.
	Water supply line kinked under dishwasher.
IE Error	Feed the drainage and supply hoses through the hole under the sink. Then gradually slide the dishwasher into the cabinet while pulling on the hoses under the sink to take up any slack. This helps avoid kinking the hoses or trapping them beneath the dishwasher.
	House water supply not turned on.
	Turn water on.
9. EXPLODED VIEW

Exploded View



Exploded View



Exploded View



Tub Assembly



LDP5676**, LDT5678**, LDF5678**



Tub Assembly



Base Assembly



Base Assembly



Base Assembly











Water Guide Assembly



■ Water Guide Assembly













■ 3rd Rack Assembly



3rd Rack Assembly





Panel Assembly

Panel Assembly





Front Cover Assembly



Front Cover Assembly



Front Cover Assembly



Door Liner Assembly



Door Liner Assembly





Sump Assembly

Sump Assembly



10. WIRING DIAGRAM

10-1. WIRING DIAGRAM



LDT5678**/ LDF5678** Series



LUDP899#**/LDT779#** Series



LSDF989#**/LDT780#**/LSDT990#** Series





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10-2. MAIN PCB

10-3. DISPLAY PCB



10-4. MCU PCB

% For This Model Only
(LDT7797*,LDT5665**)

- case1



LSDF9897**,LDT7808**,LSDT9908**,LDT5678**







% For This Model Only (LUDP8997**)

