

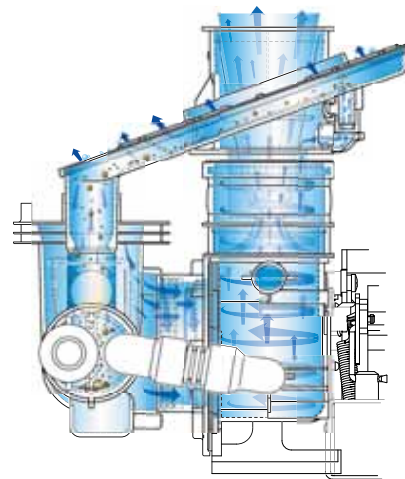
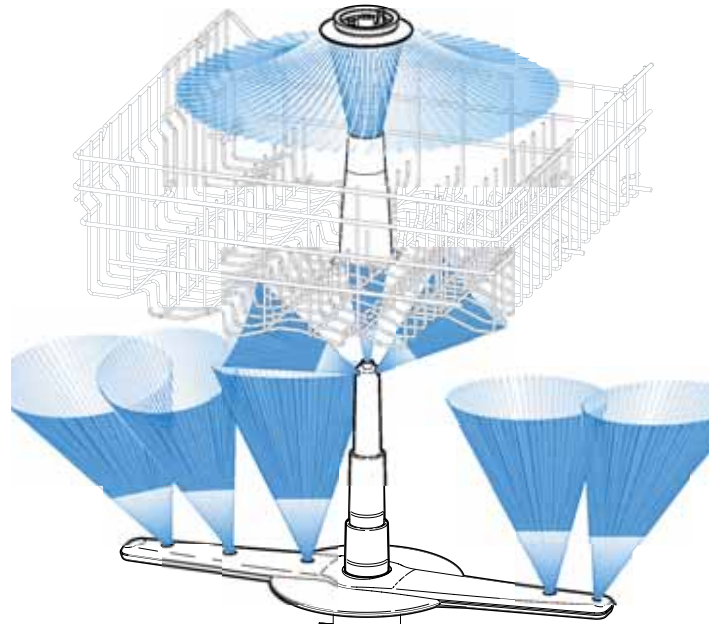
GE Consumer & Industrial

Technical Service Guide

July 2007

GE Dishwasher Water Distribution System

- Collection Chamber
- Spray Arm
- Pump Assembly



31-9155



GE Appliances
General Electric Company
Louisville, Kentucky 40225



IMPORTANT SAFETY NOTICE

The information in this service guide is intended for use by individuals possessing adequate backgrounds of electrical, electronic, and mechanical experience. Any attempt to repair a major 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.

WARNING

To avoid personal injury, disconnect power before servicing this product. If electrical power is required for diagnosis or test purposes, disconnect the power immediately after performing the necessary checks.

RECONNECT ALL GROUNDING DEVICES

If grounding wires, screws, straps, clips, nuts, or washers used to complete a path to ground are removed for service, they must be returned to their original position and properly fastened.

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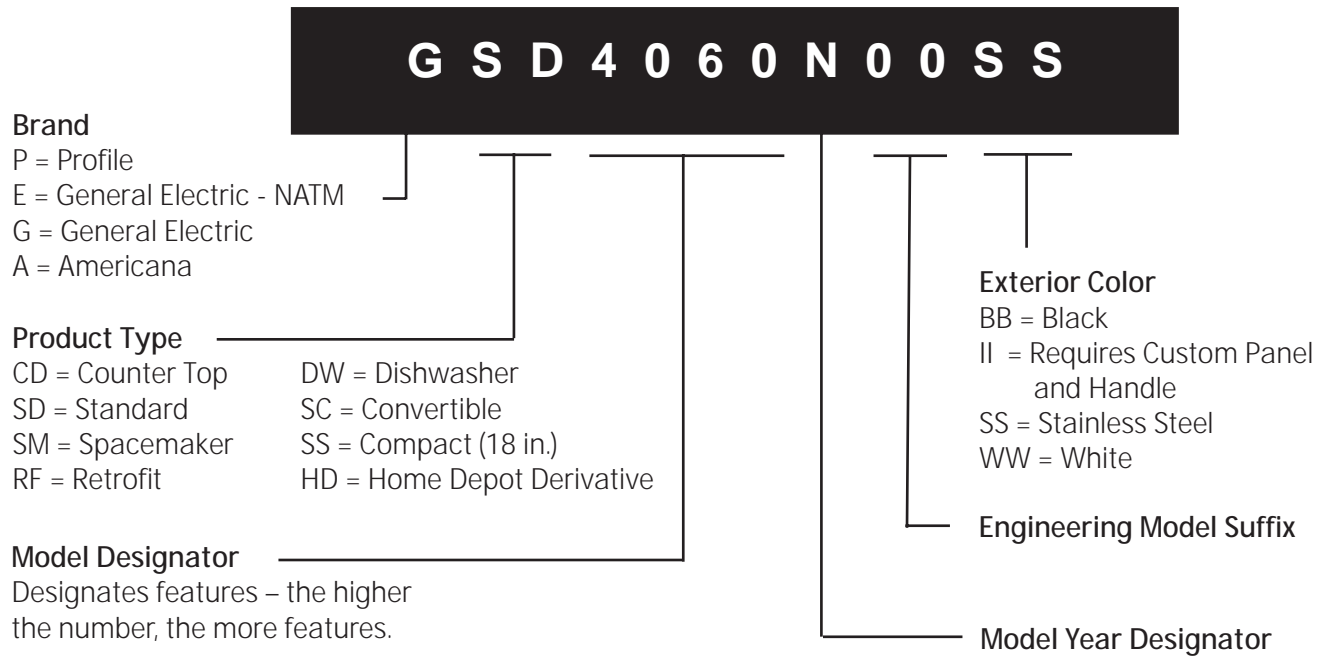
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Table of Contents

Calrod Element	14
Collection Chamber and Sump	13
Component Locator Views	9
Components	12
Filter and Drain System	16
High Drain Loop/Air Gap	15
Introduction	5
Main Motor	15
Motor-Pump Mechanism	12
Nomenclature	4
PowerScrub™ Wash Systems	8
Pump Assembly	6
Service Mode	15
Spray Arm and Fine Filter Assembly	12
Spray Arm Base	14
Troubleshooting	15
Warranty	17
Washability Complaints	16

Nomenclature

Model Number



Nomenclature



The serial plate of your dishwasher is located on the tub wall just inside the door jam.

The mini manual is located behind the toe plate.

Serial Number

The first two characters of the serial number identify the month and year of manufacture.
 Example: **AM**123456S = January, 2007

A - JAN	2007 - M
D - FEB	2006 - L
F - MAR	2005 - H
G - APR	2004 - G
H - MAY	2003 - F
L - JUN	2002 - D
M - JUL	2001 - A
R - AUG	2000 - Z
S - SEP	1999 - V
T - OCT	1998 - T
V - NOV	1997 - S
Z - DEC	1996 - R

The letter designating the year repeats every 12 years.

Example:

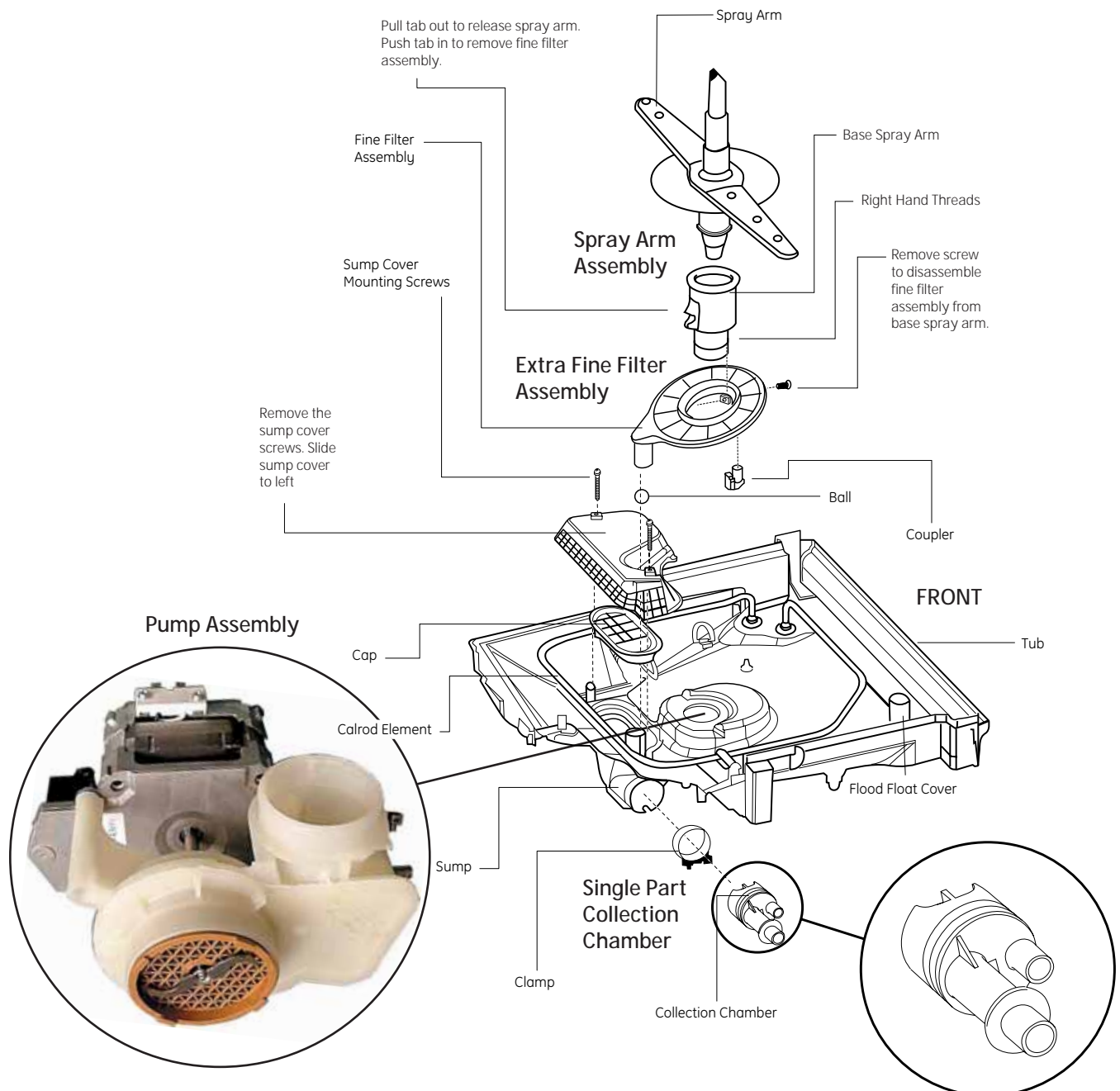
- T - 1974
- T - 1986
- T - 1998

Introduction

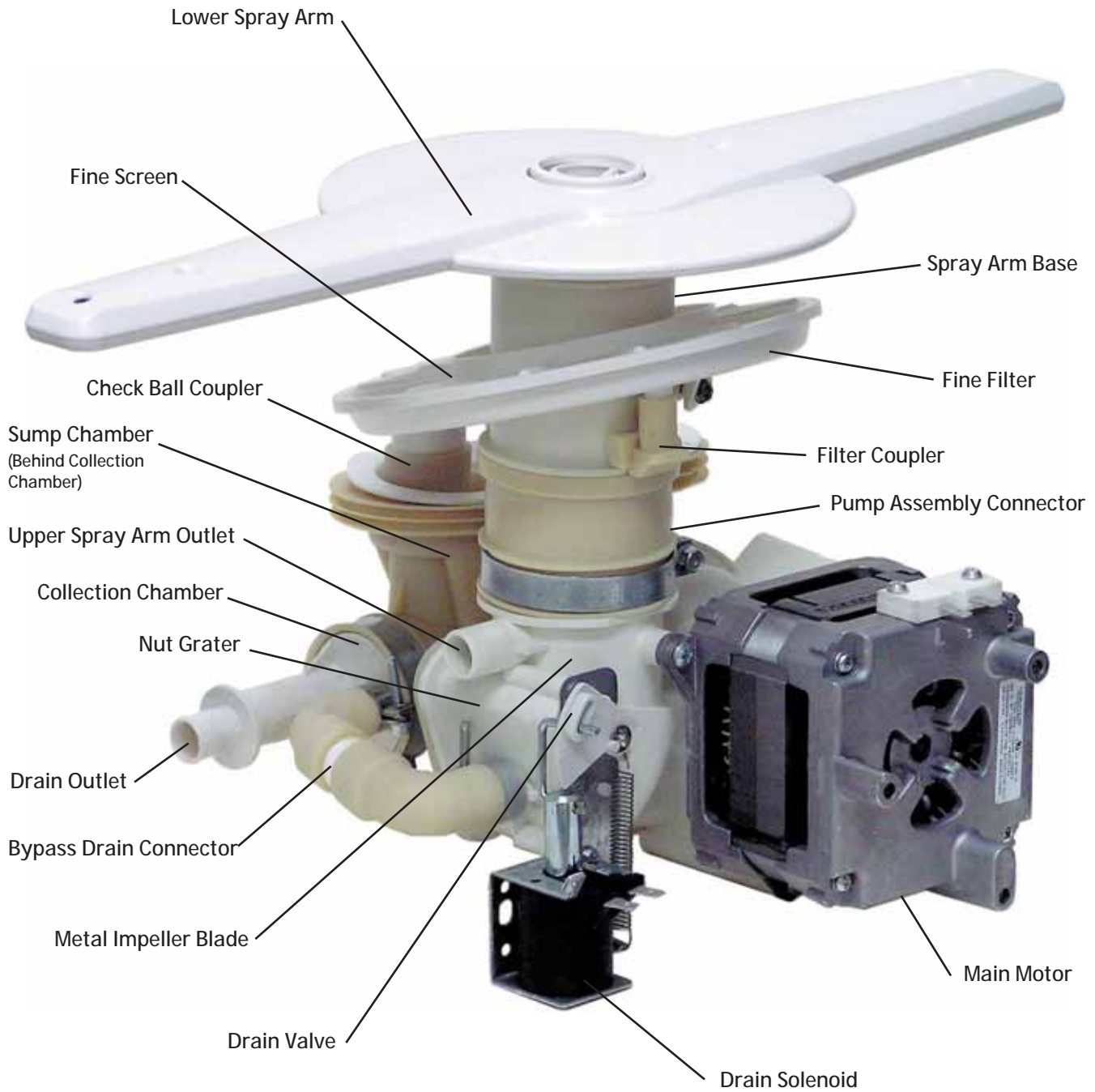
This technical service guide covers the changes in the standard line of dishwashers. The 2007 standard dishwashers include 39 models in 12 family groups.

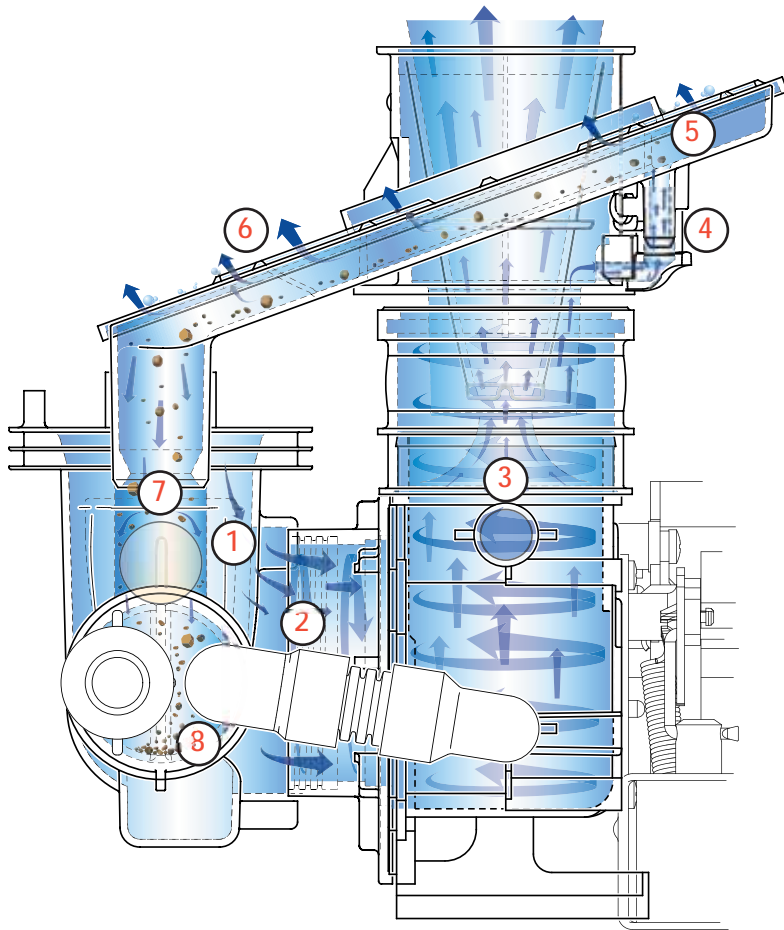
The most significant changes are in the new water distribution system. These changes include the following features:

- **New Spray Arm Assembly** - has a new spray arm base with locking ring and release tab for removal
- **New Extra Fine Filter Assembly** - filtration up to one-onehundredth of an inch, is self cleaning, and has 1 screw and a release tab for removal
- **New Pump Assembly** - has a low flow impeller, new grater nut, new arm valve, and a new disposer blade
- **New Single Part Collection Chamber** - with sump and check ball that works with the fine filter



Pump Assembly



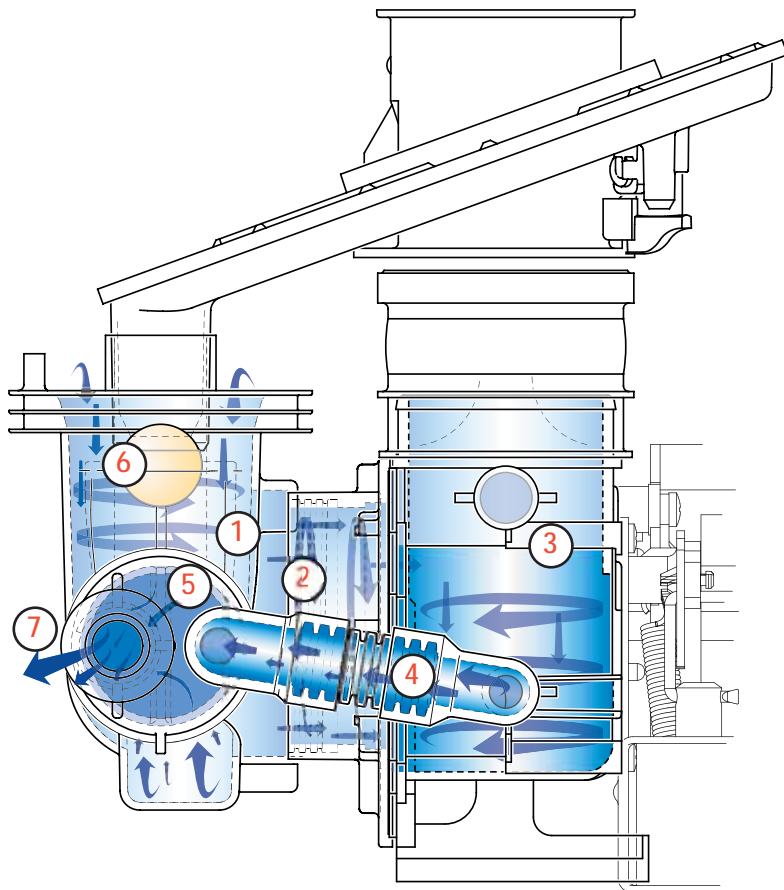


Wash Cycle

Water and debris flow from the tub, into the sump chamber (1). A metal impeller blade pulverizes the larger debris as it moves through the nut grater (2) and upward (3) towards the lower spray arm.

A portion of the water carrying debris is diverted from the spray-arm path and moves through the filter coupler (4), into the fine filter (5), and through the fine screen (6) which traps the debris.

The debris tumbles down the incline, passes through the check ball coupler (7) and settles at the bottom of the collection chamber (8).

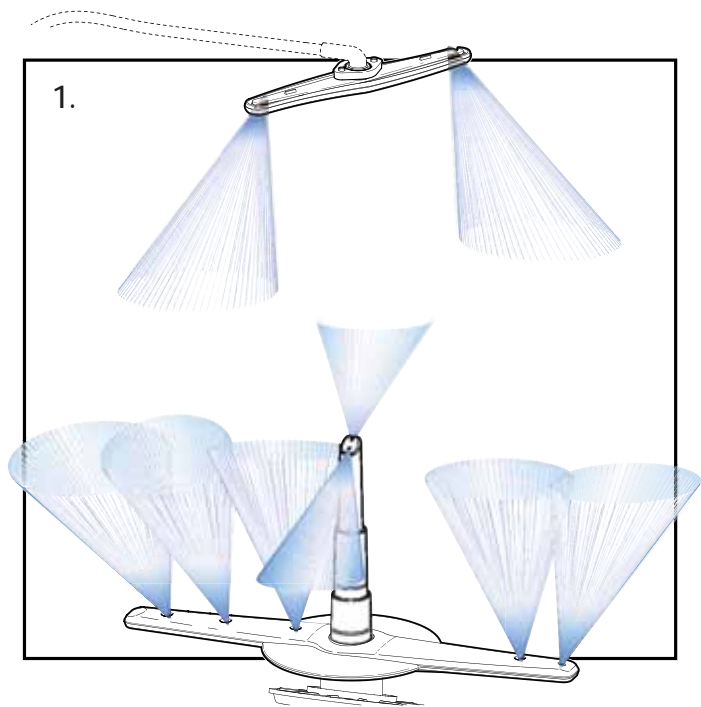


Drain Cycle

Water and debris flow from the tub into the sump chamber (1), through the metal impeller blade of the nut grater (2) and upward toward the lower spray arm.

2. The drain solenoid closes the drain valve (3). Water is directed into the bypass drain connector (4) and moves into the collection chamber (5). Water pressure pushes the filter check ball (6) upwards, closing off the passage to the fine filter.

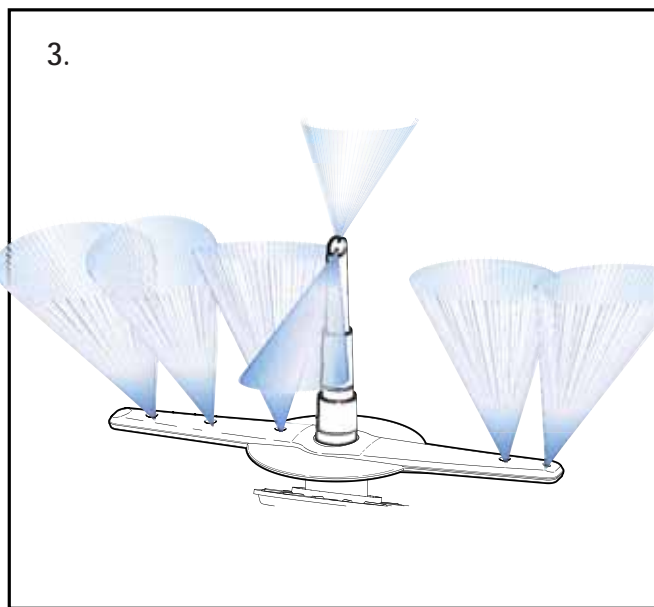
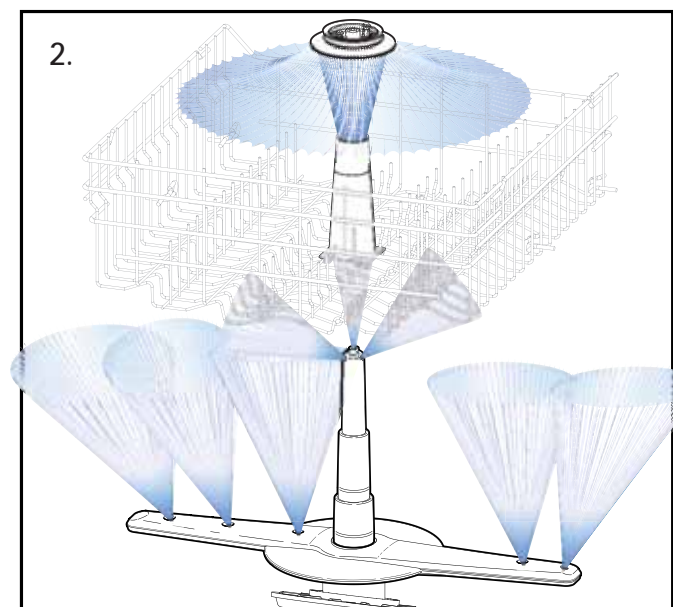
3. Water and collected debris pass through the drain hose connection (7) and are discharged through the drain hose.



1. **5-Level Wash** - Models containing an upper spray arm have 5 wash levels. These models include the PowerTower™ spray and the new lower spray arm.

2. **5-Level Wash** - Models containing PowerShower™ have 5 wash levels. These models include the PowerTower™ spray and the new lower spray arm.

3. **4-Level Wash** - The basic models have 4 wash levels. These models utilize the PowerTower™ spray and the new lower spray arm.

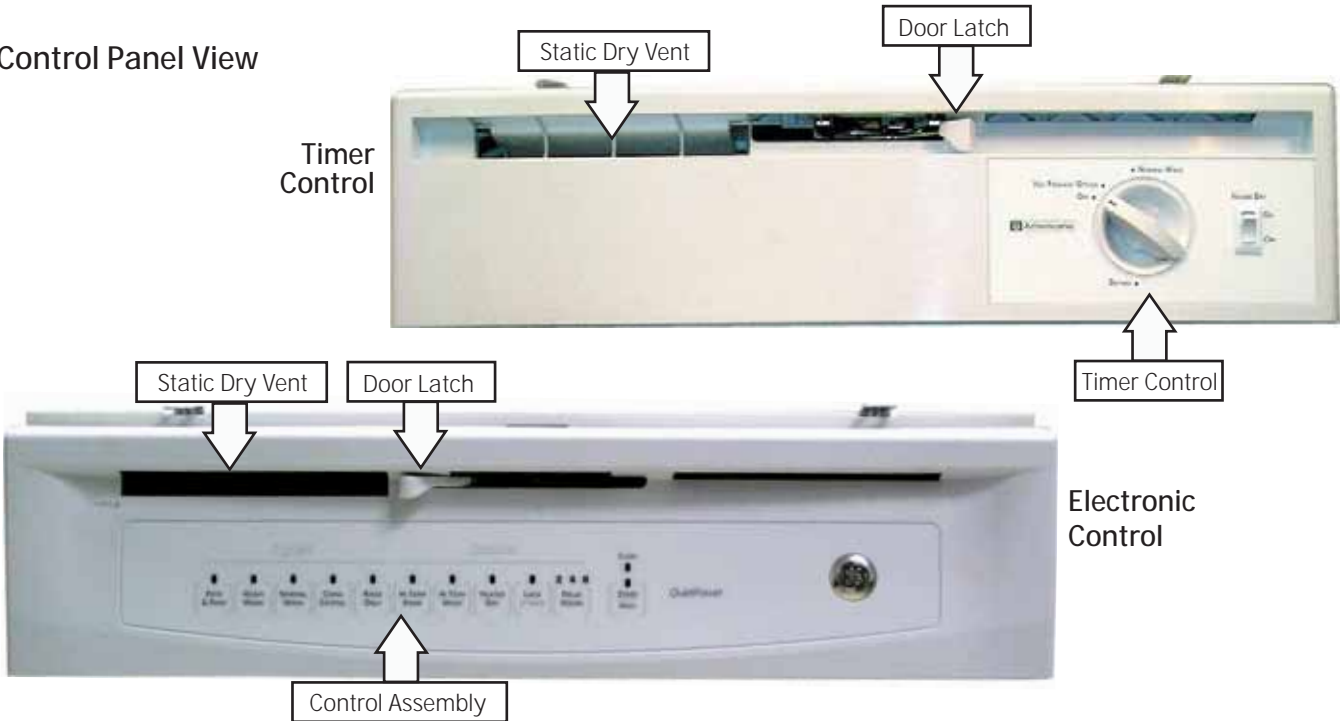


Component Locator Views

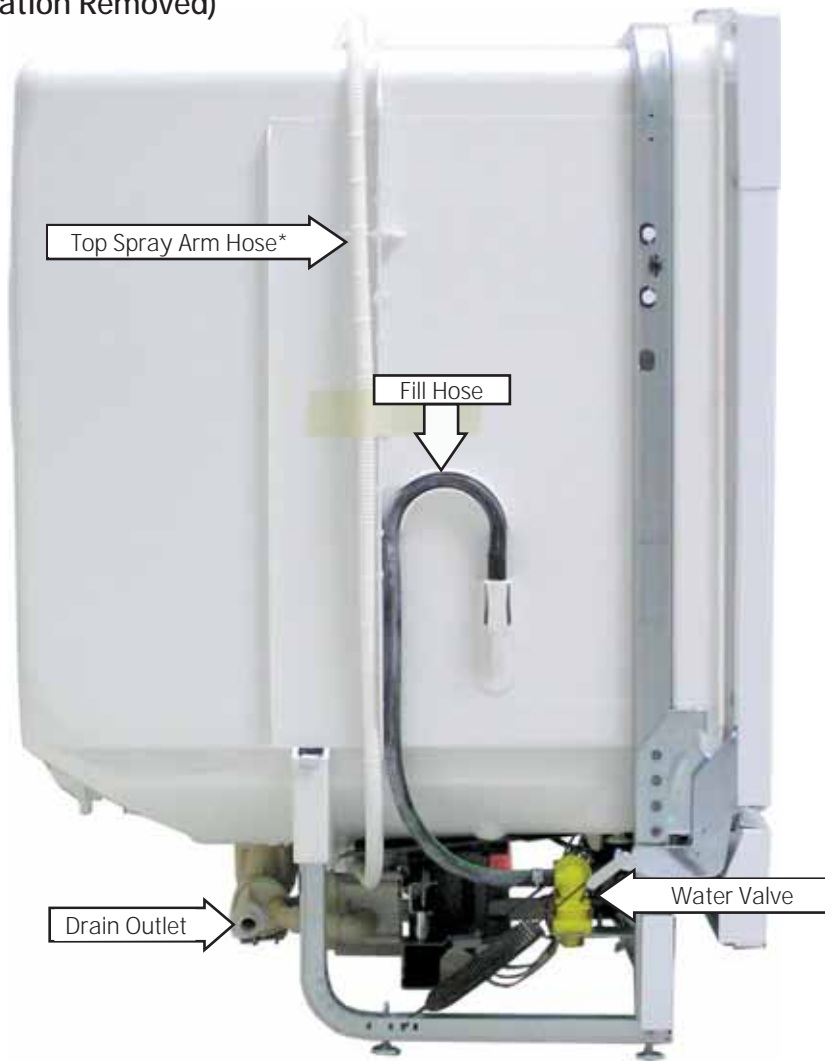
Front View



Control Panel View

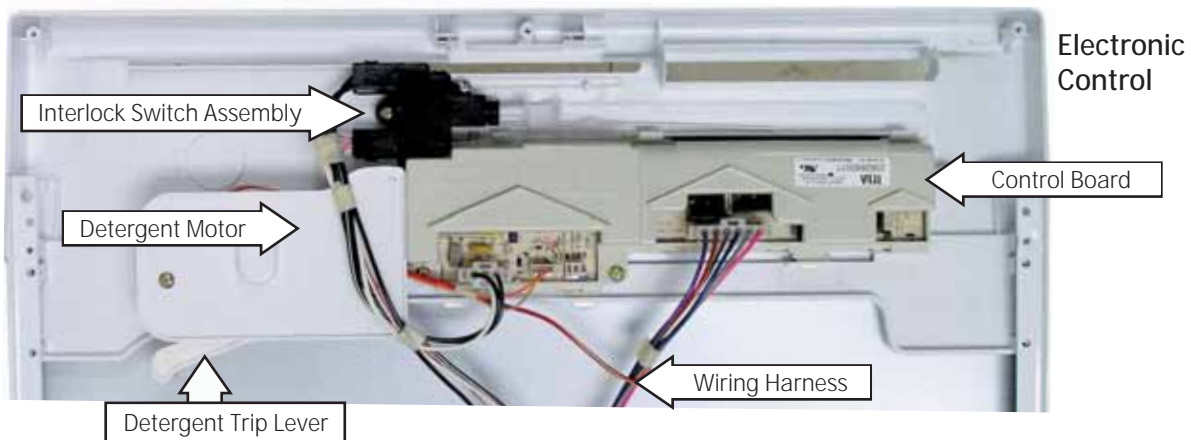
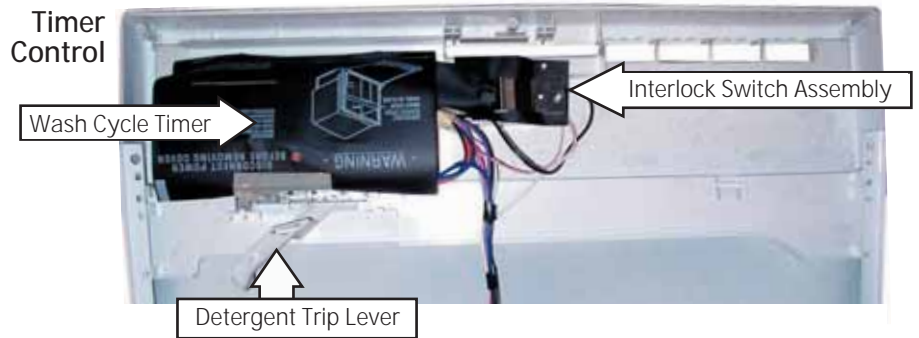


Left Side View (Insulation Removed)

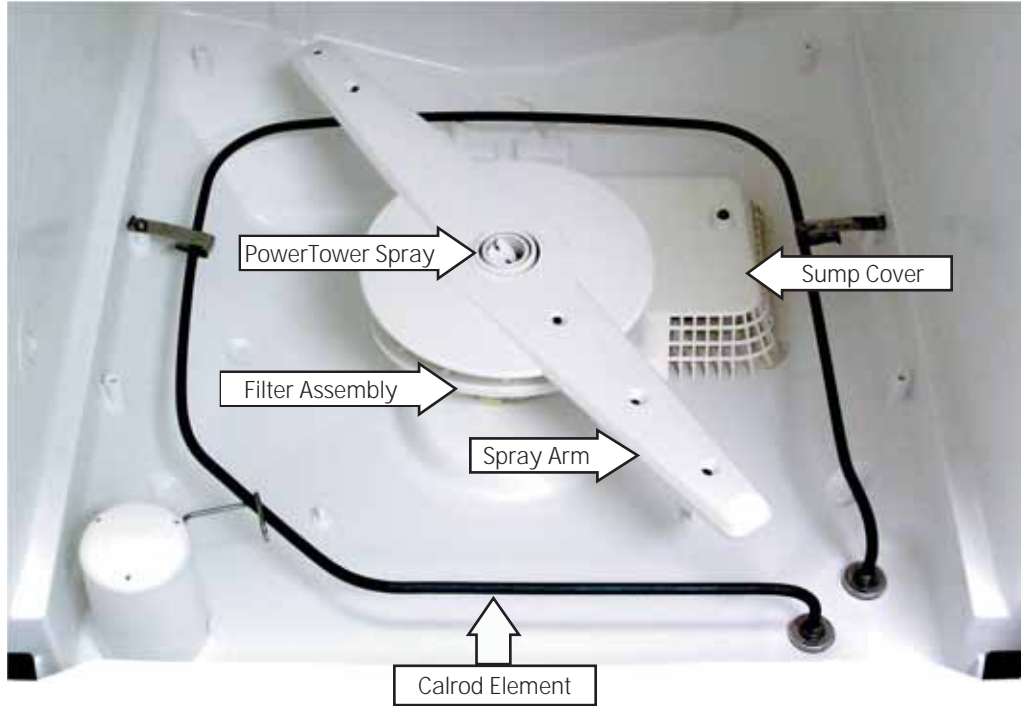


* On some models.

Inside Door Panel View

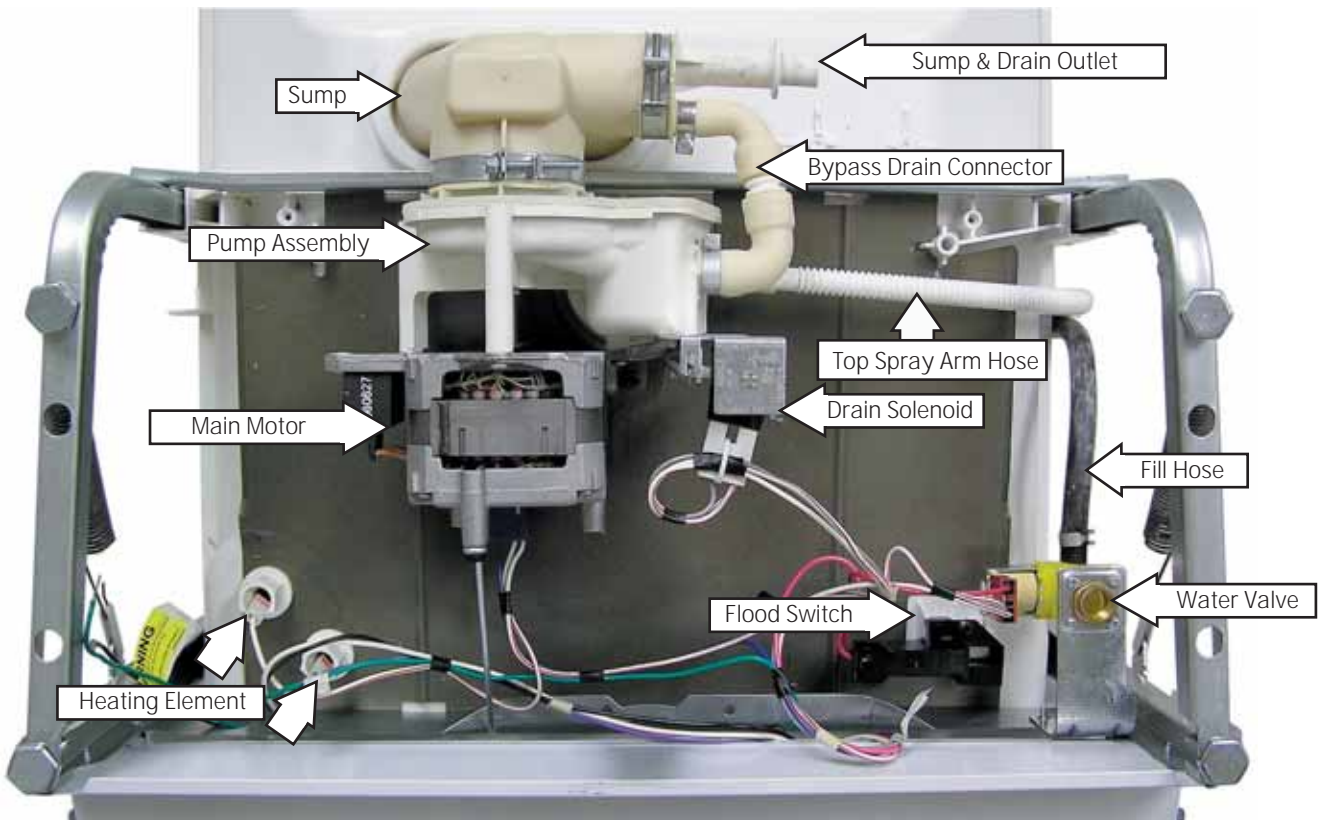


Front View



Bottom View

Rear of Dishwasher



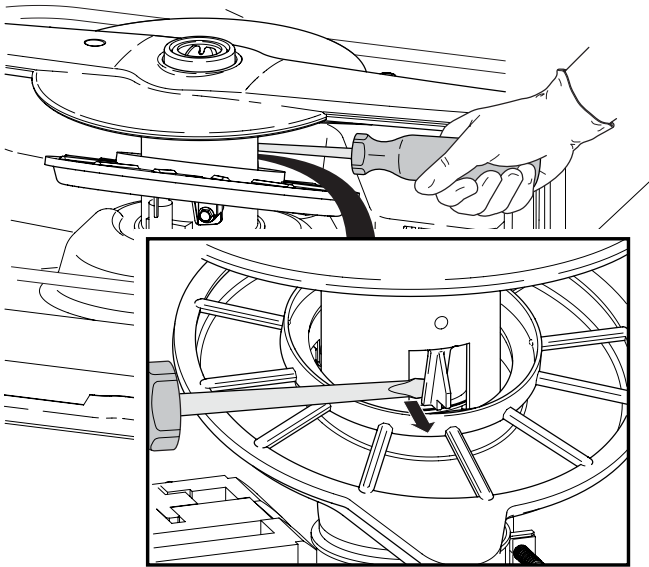
Front of Dishwasher

Components

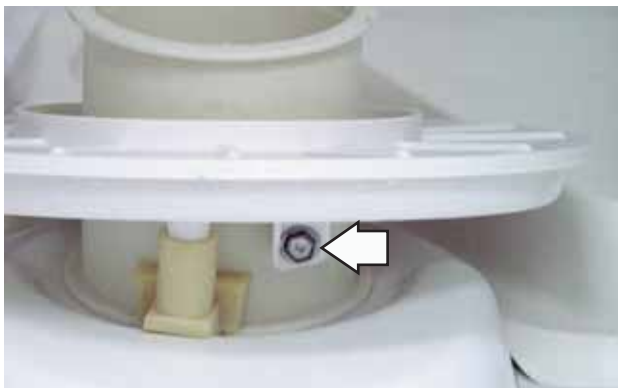
Spray Arm and Fine Filter Assembly

To Remove Spray Arm and Fine Filter Assembly:

1. Remove the lower rack from the dishwasher.
2. Gently pull the tab back on the base spray arm and lift the spray arm up and out.



3. Remove the 1/4-in. hex-head screw that connects the spray arm base to the fine filter assembly.



4. Gently push the same tab in to lift the fine filter assembly up and out. (See step 2.)
5. Clean fine filter screen if soil is present.

Note: Ensure that the check ball is clean and not blocked. It should move up and down freely.

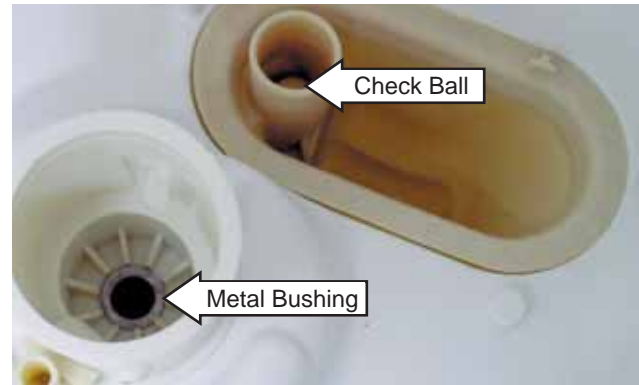
Note: When installing spray arm, make sure the metal bushing is in the spray arm base. (See photo below.)

Note: When installing fine filter, make sure the drain port of the fine filter is engaged to the vertical drain port of the sump with check ball in between. (See photo below.)

Motor-Pump Mechanism

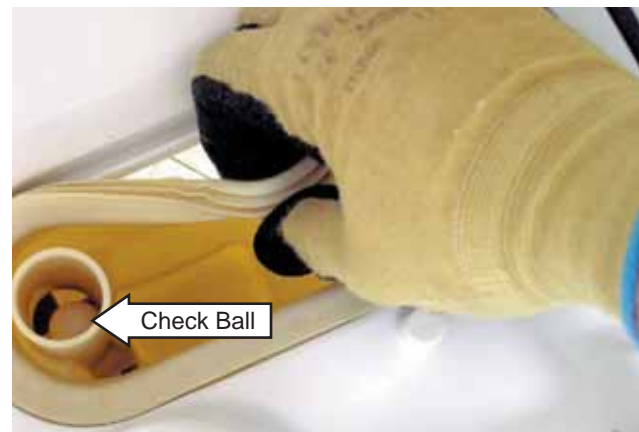
To Remove Motor-Pump Mechanism:

1. Remove the spray arm, fine filter, sump cover, and cap. Remove all water from sump with a syringe.



2. Lift up on the edges of the sump boot, squeeze inward, and push the sump through the opening in the tub floor.

Note: Use care not to lose the check ball from the collection chamber passage in the sump.

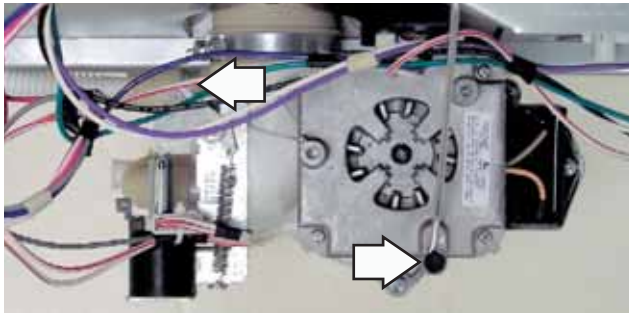


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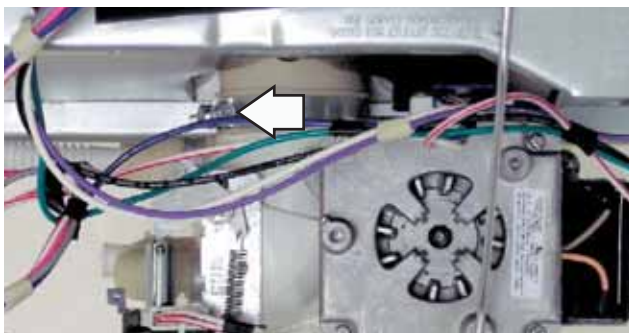
- To remove the access panel, remove two 1/4-in. hex-head screws from the bottom of the panel. Loosen the 2 Phillips-head screws at the top, slide the panel to the left, and pull toward you.



- From below the tub, loosen the 1/4 -in. hex-head clamp from the top spray arm hose (if applicable). Remove the electrical connections and remove the 5/16-in. hex-head screw from the hanger that holds the motor to the tub frame.



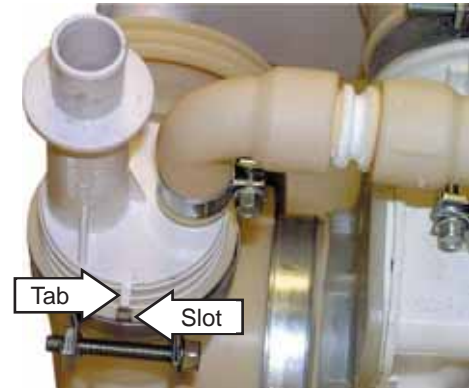
- Loosen the 5/16-in. hex-head clamp from the bottom spray arm hose. The motor-pump mechanism can now be removed from under the dishwasher.



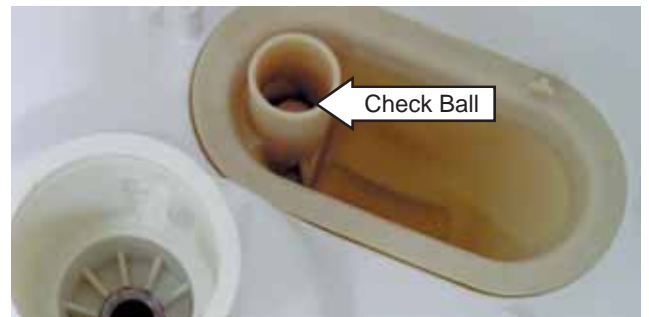
Collection Chamber and Sump

Note: If the collection chamber is removed from the sump, the check ball will fall out.

To assemble the collection chamber and sump, align the collection chamber tab with the slot in the sump. This will assure that the check ball will seat properly when the drain cycle is performed. If the collection chamber is not aligned properly, the check ball will not seat and the dishwasher will not drain.

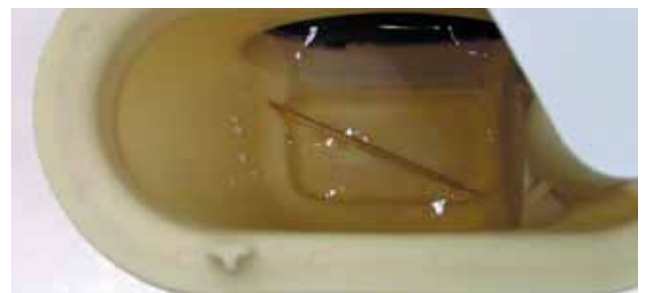


Note: After installing the collection chamber, drop the check ball into the sump tube from inside the tub before installing the fine filter.



WARNING: Sharp objects may be in the sump - use proper safety precautions.

A foreign object trapped between the food grater and the grater nut will cause noise to occur. Remove the spray arm and fine filter (see *Spray Arm and Fine Filter Assembly*) to access the sump.



(Continued next page)

Calrod Element

To Remove Calrod Element:

1. Disconnect the power to the dishwasher.
2. To remove the access panel, remove two 1/4-in. hex-head screws from the bottom of the panel. Loosen the 2 Phillips-head screws at the top, slide the panel to the left, and pull toward you.



3. Remove the Calrod terminals and unscrew the two 13/16-in. Calrod nuts counterclockwise.

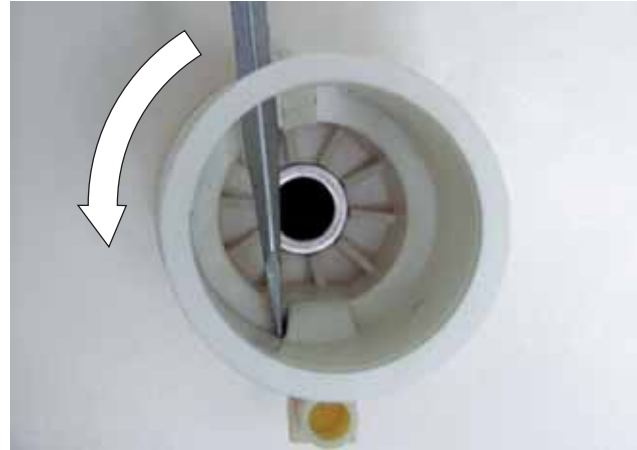


4. Remove the 3 Calrod supports.
5. Lift and remove the Calrod.

Spray Arm Base

To Remove the spray arm base:

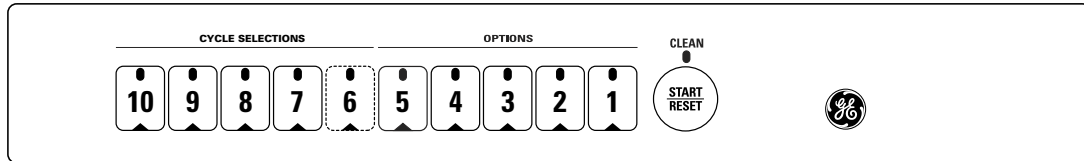
1. Remove the spray arm and fine filter assemblies.
2. Insert a large flat-blade screwdriver into the opening in the back of the spray arm base.
3. Engage the screwdriver blade with the molded filter coupler and turn the base counterclockwise.



Troubleshooting

Service Mode

THIS DISHWASHER IS PROGRAMMED WITH A SERVICE MODE TO AID THE TECHNICIAN IN TROUBLESHOOTING THE DISHWASHER. EACH COMPONENT MAY BE CYCLED TO DETECT IF IT IS FUNCTIONING CORRECTLY. COMPONENTS ARE CYCLED BY PRESSING KEYPADS TO THE LEFT OF THE START/RESET KEYPAD. USE THE MATRIX BELOW TO DETERMINE HOW TO CYCLE EACH COMPONENT.



NOTE: INDICATES KEYPAD USED ONLY ON SOME MODELS. WHILE THIS KEYPAD MAY NOT BE VISIBLE, THE INDICATED SPACE SHOULD ALWAYS BE USED AS A KEYPAD.

TO ENTER SERVICE MODE :
PRESS KEYPAD #9 AND KEYPAD #1 SIMULTANEOUSLY FOR 5 SECONDS.

TO EXIT SERVICE MODE :
PRESS THE START/RESET KEYPAD AT ANYTIME TO EXIT.

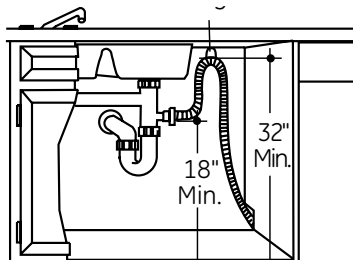
Service Mode Test Matrix*		
Keypad	Description	Time in Seconds**
10	Activates Main Pump	120
9	Activates Auxiliary Pump	60
	Activates Drain Solenoid	6
8	Activates Detergent Module	30
7	Activates Water Valve	60
6	Activates Heating Element	120
5	Activates Main Pump	120
START/RESET	Used to EXIT Service Mode	

***NOTE:** After 5 minutes of inactivity, the service mode will automatically turn off.

****NOTE:** When a component is activated in the SERVICE MODE, the output will continue to remain active (ON) until the Maximum time has expired or another keypad is pressed.

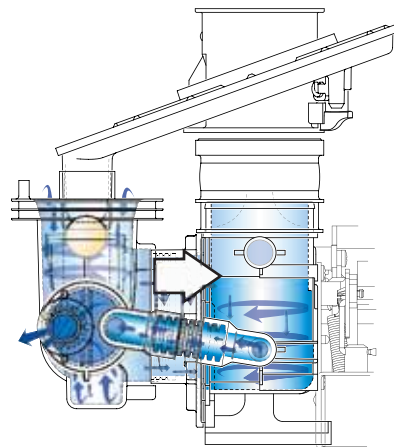
High Drain Loop/Air Gap

A high drain loop/air gap is necessary with the new water distribution system. Without a high drain loop /air gap, the dishwasher will drain during the wash cycle due to a small amount of pump pressure in the extra fine filter.



Main Motor

The pump motor on models with the new water distribution system starts and stops during the wash cycle. The pump motor stops to allow the drain valve to fully open at the end of a drain cycle.



Washability Complaints

Hot Water – Ample supply of water at 120°F minimum temperature is necessary. Do not use dishwasher soon after using clothes washer, or filling bathtub.

Loading – Consult Owner's Manual on loading procedures.

Amount of Water - Make certain dishwasher is level. Allow dishwasher to fill normally for the first fill and drain completely. Allow dishwasher to complete the second fill and check water level. Water should cover the bottom of the flood float cover. If water level is low, check for clogged screen in water valve, and check float switch.

Detergent Cup Leakage – Some moisture in cup is normal. It must not be soaking wet and oozing out and down the inner door panel. Refer to section on detergent cup if leaking.

Proper Amount of Detergent – Use full detergent cup of fresh detergent in hard water. Use only enough detergent to get good wash performance in soft water.

Rinse Agent – Use rinse agent if spotting is a problem.

Water Valve – Check valve for intermittent operation. Valve coil can be tested directly.

Spray Arm – Check to be sure spray arm spins freely and jets are not clogged.

Filter and Drain System

Will Not Pump Out

1. Check routing of hose system. It must be free from kinks.
2. Check for blocked or partially blocked drain line and air gap.
3. Check operation of check ball. Check ball should be up in drain and down in circulation.

Note: If the collection chamber is not alligned properly, the check ball will not seat and the dishwasher will not drain.

MOTOR-PUMP MECHANISM

Motor Stalled-Hums

1. Disconnect Power. Try to turn motor shaft clockwise to determine if seal is stuck and can be broken loose. If motor shaft cannot be turned, cutter blade may be bound up. Proceed to step 2.
2. On inside of dishwasher, remove sump cover. Remove the cap in sump and reach down into the sump. Check for blockages, such as bone, wire ties, etc. If it contains debris, clean thoroughly. If motor shaft cannot be turned, remove mechanism.

Warranty

Note: To verify the dishwasher warranty in effect, refer to the Use & Care publication for the model number being serviced.

GE Dishwasher Warranty



All warranty service provided by our Factory Service Centers, or an authorized Customer Care[®] technician. To schedule service, on-line, 24 hours a day, visit us at ge.com, or call 800.GE.CARES (800.432.2737). Please have serial number and model number available when calling for service.

Staple your receipt here.
Proof of the original purchase date is needed to obtain service under the warranty.

For The Period Of: GE Will Replace:

One Year

From the date of the original purchase

Any part of the dishwasher which fails due to a defect in materials or workmanship. During this **limited one-year warranty**, GE will also provide, **free of charge**, all labor and in-home service to replace the defective part.

What Is Not Covered:

- Service trips to your home to teach you how to use the product.
- Improper installation, delivery or maintenance.
- Failure of the product if it is abused, misused, or used for other than the intended purpose or used commercially.
- Replacement of house fuses or resetting of circuit breakers.
- Damage to the product caused by accident, fire, floods or acts of God.
- Incidental or consequential damage caused by possible defects with this appliance.
- Cleaning or servicing of the air gap device in the drain line.
- Damage caused after delivery.
- Product not accessible to provide required service.

EXCLUSION OF IMPLIED WARRANTIES—Your sole and exclusive remedy is product repair as provided in this Limited Warranty. Any implied warranties, including the implied warranties of merchantability or fitness for a particular purpose, are limited to one year or the shortest period allowed by law.

This warranty is extended to the original purchaser and any succeeding owner for products purchased for home use within the USA. If the product is located in an area where service by a GE Authorized Servicer is not available, you may be responsible for a trip charge or you may be required to bring the product to an Authorized GE Service location. In Alaska, the warranty excludes the cost of shipping or service calls to your home.

Some states do not allow the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. To know what your legal rights are, consult your local or state consumer affairs office or your state's Attorney General.

Warrantor: General Electric Company, Louisville, KY 40225