



Parts of a Top-Load and Front-Load Washing Machine

Now:

While the anatomy of washers shares many similarities, certain components are exclusive to specific types.

For example, not all washers come equipped with an agitator, transmission, clutch, or timer.

The table below summarizes the major washing parts.

Part	Common to All	Top Load	Front-Load	Modern	Old models
Inner Tub	✓				
Outer Drum	✓				
Motor	✓				
Water Inlet Valve	✓				
Drain Pump	✓				
Control Panel	✓				
Door/Lid Lock	✓				
Water inlet hose and Drain hose)	✓				
Timer	✓				
Bearings	✓				
Pulsator		✓			
Transmission		✓			
Suspension Springs		✓			
Agitator/Impeller		✓			
Agitator Cam		✓			
Agitator Dogs		✓			
Agitator Cap		✓			



Water Level Pressure Switch		✓			
Motor Coupler		✓			
Clutch		✓			
Suspension Rods		✓			
Basket Drive		✓			
Tub Seal		✓			
Shift Actuator		✓			
Lid Switch		✓			
Drive belt		✓			
Belt Pulleys		✓			
Circulation Pump			✓		
Door Seal (Gasket)			✓		
Door Boot			✓		
Detergent Dispenser			✓		
Drum Paddle			✓		
Shock Absorbers			✓		
Rotor			✓		
Stator			✓		
WiFi Module				✓	
LED Display				✓	
Mechanical Timer					✓
Mechanical Knobs					✓

Let's now get a little bit technical and talk about these components in detail.



The Anatomy and Parts of a Washing Machine

1. Tub/Drum



Name	Inner Tub	Outer Drum
Found In	All models	All models
Function	Holds the clothes ; spins or agitates.	Surrounds the inner tub; holds water.
Design	Perforated for draining. May have paddles, an agitator, or a pulsator.	Usually solid. May have dampers or shock absorbers.
Common Issues	Build-up of detergent, mold, or odors.	Leaking, misalignment, buildup , shaking.
Maintenance	Regular cleaning with mild detergent.	Not user-serviceable.

 Whirlpool Top-Load Washer Outer Tub Replacement #W10371566



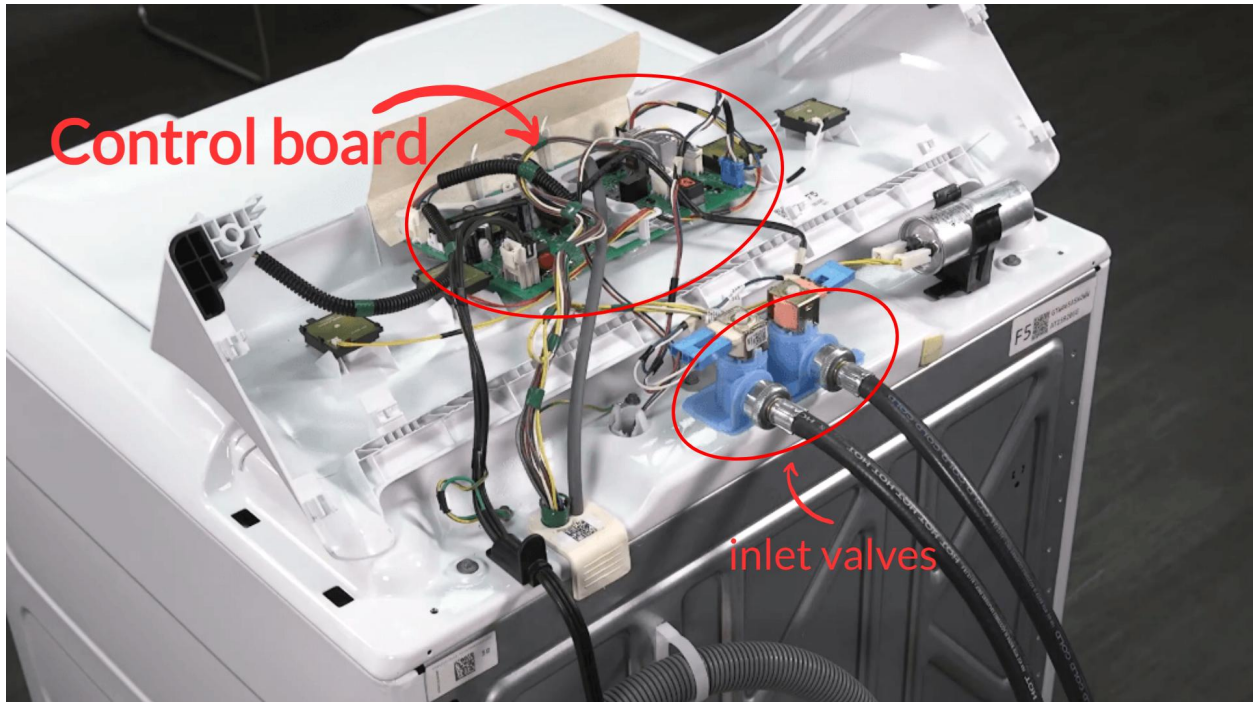
2. Control Panel/User Interface



Name	Control Panel, User Interface
Found On	All models
Location	Usually on the top front or top back for top-loaders; top or front for front-loaders.
Function	Houses the controls for wash cycles, temperature, spin speed, etc.
Maintenance	Regular cleaning with a soft, damp cloth.
Note	Modern models often feature LED or LCD displays and touch controls; older models may have mechanical knobs and dials. Some modern models have smartphone connectivity.



3. Control Board

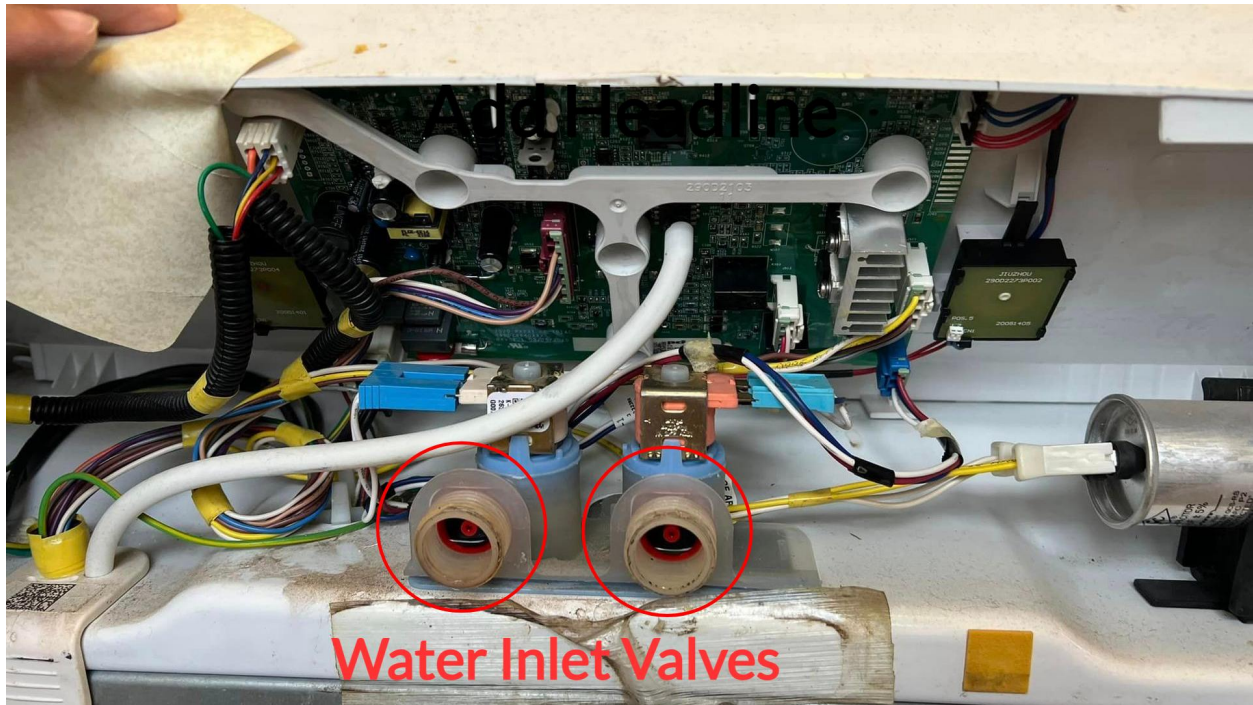


Name	Name
Found On	All modern models
Location	Typically located inside the control panel or at the rear of the machine, often encased to protect from moisture.
Function	Oversees and controls all operations, including cycle timing, water levels, temperature, and spin speeds.
Note	Advanced models may include features like WiFi connectivity, diagnostic capabilities, and software updates.

▶ Whirlpool Top Load Washer Replace Water Inlet Valve Part # W10683603



4. Water Inlet Valve



Name	Water Inlet Valve
Found On	All models
Location	Typically at the rear of the machine, where the water hoses connect.
Function	Controls the flow of hot and cold water into the machine based on selected wash settings.
Maintenance	Regular inspection for leaks or clogs.
Note	Failure can result in either no water entering the machine or continuous flow leading to overflows.



5. Door Or Lid



Name	Door or Lid
Found On	All models
Location	Front of the machine for front-loaders. Top of the machine for top-loaders.



Function	Provides a physical barrier to keep water and laundry inside during wash cycles. Often locks during operation.
Maintenance	Regular cleaning to prevent mold or mildew, especially the gasket/seal.
Note	Many modern models have safety locks that prevent opening during cycles.

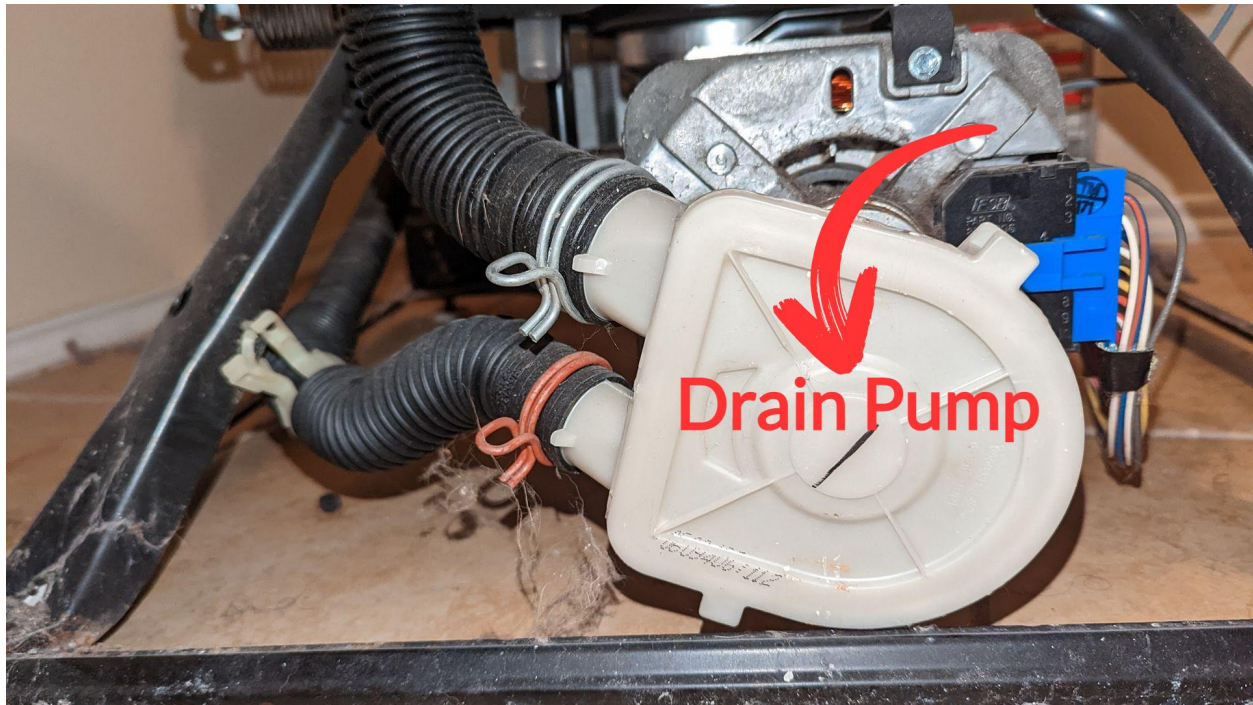
6. Lid Switch Or Door Lock



Name	Lid Switch or Door Lock
Found On	All modern models.
Location	Adjacent to the door/lid area, usually concealed.
Function	Locks the door or lid during wash cycles to ensure safety.
Note	A faulty lid switch or door lock can prevent the machine from starting or completing a cycle. Some modern models will display an error message if the lock is not properly engaged.



7. Pumps (Drain Pump and Circulation Pump)



▶ LG Washer Drain Pump Replacement AHA75853803

Name	Drain Pump	Circulation Pump
Found On	All models	Mostly modern and high-efficiency models.
Location	Usually at the bottom of the machine.	Varies, but often at the bottom.
Function	Removes water from the drum and expels it out of the drain hose.	Recirculates water during the wash cycle.
Associated Parts	Drain hose , wiring to the control board.	Wiring to the control board, water tubing.
Maintenance	Regular cleaning of the filter (if present); check for clogs or blockages.	Regular inspection for proper function.
Note	Malfunction can cause water to remain in the drum.	Enhances wash efficiency.



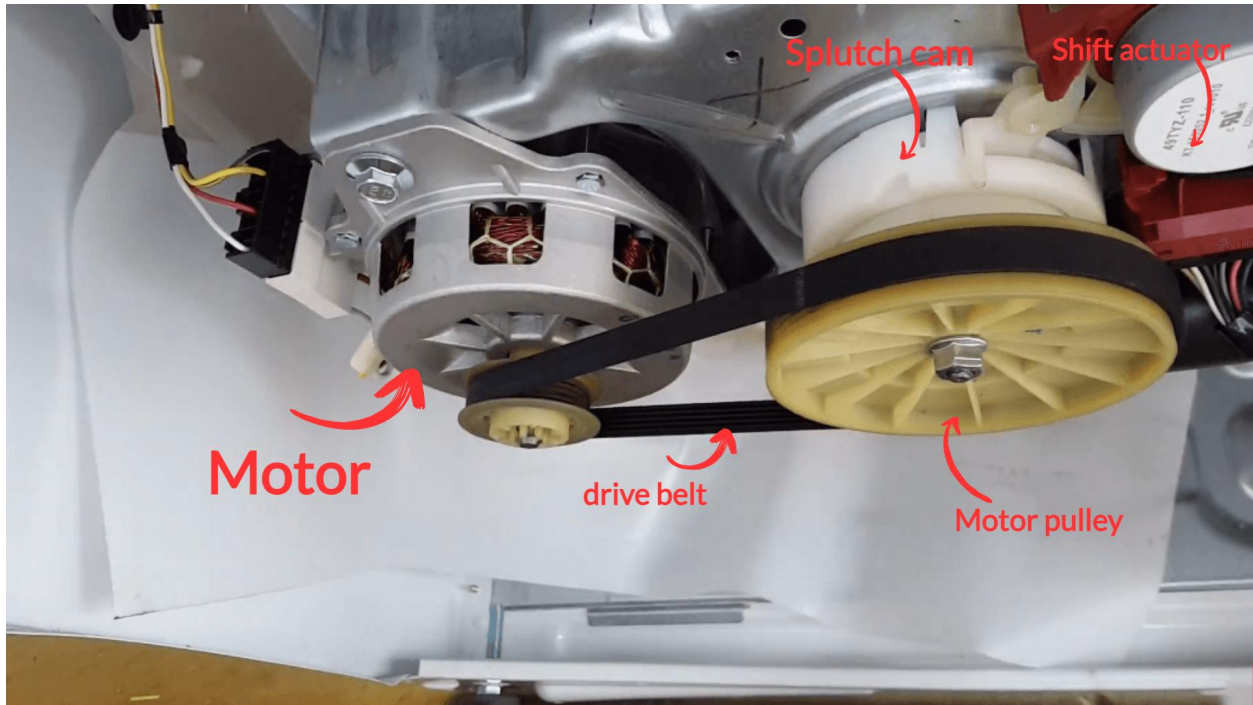
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▶ Washing Machine Circulation Pump Replacement #4681EA2002H



8. Motors



Name	Main Drive Motor	Drain Pump Motor	Circulation Pump Motor	Dispenser Motor	Agitator Motor
Found On	All models	All models	Mostly modern and high-efficiency models	Models with automatic detergent dispensers	Traditional top-loaders with agitators
Location	Usually at the bottom or rear of the machine.	Near the drain pump.	Near the circulation pump.	Near the detergent dispenser.	Near the agitator.
Function	Powers agitation, spinning , and other primary washing functions.	Drives the drain pump to remove water from the drum.	Drives the circulation pump for water recirculation.	Operates the automatic detergent and fabric softener dispensers.	Specifically drives the agitator.

 Whirlpool Top Load Washer Drive Motor Replacement #W10416666

Drain pump motor

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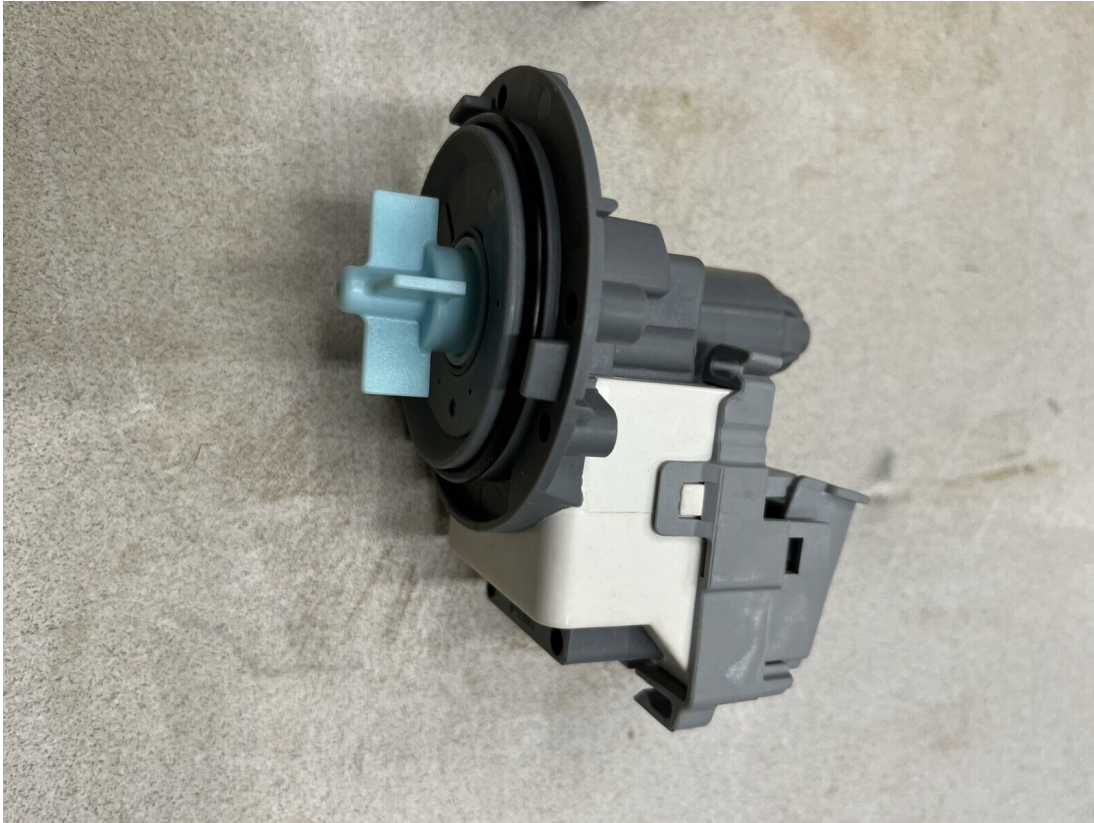
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Circulation pump motor



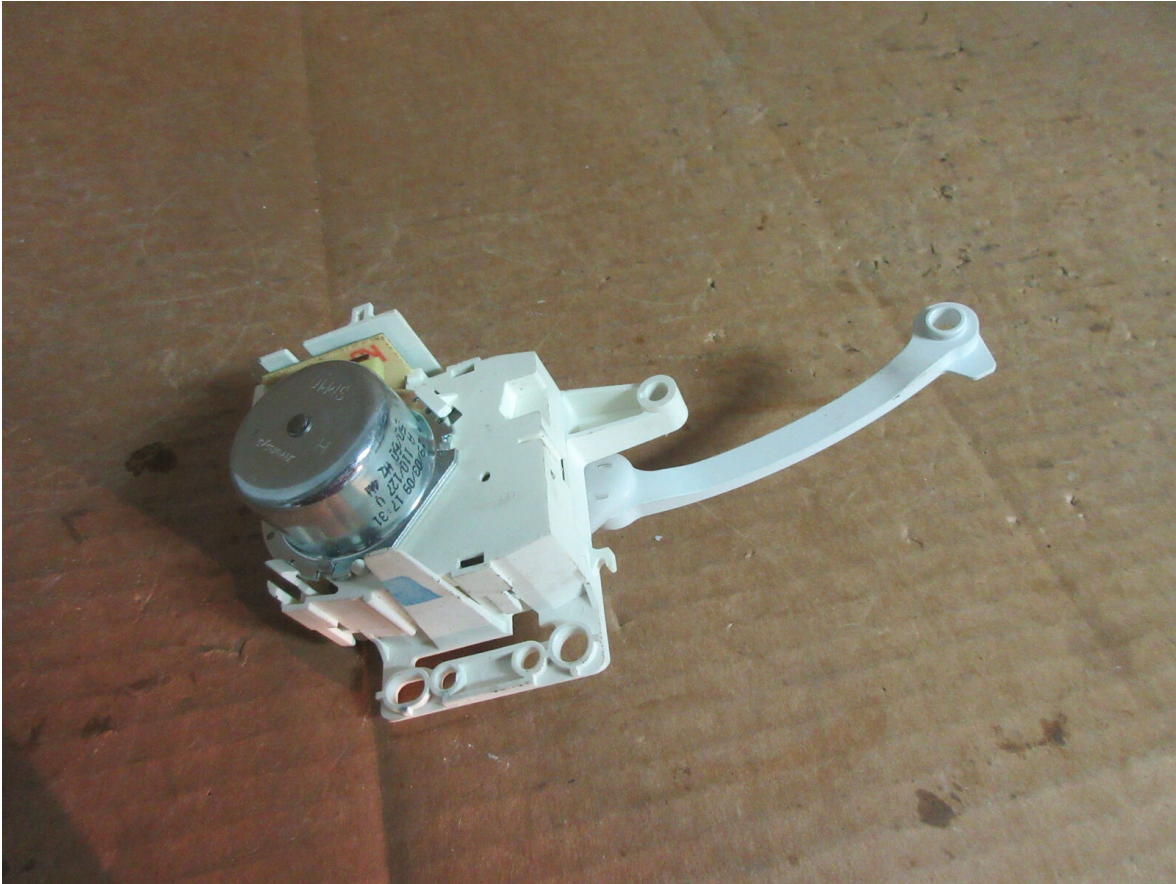
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 How To: LG/Kenmore Recirculation Pump Motor 4681EA2002H



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 How To: Whirlpool/KitchenAid/Maytag Dispenser Motor and Switch Assembly



9. Transmission

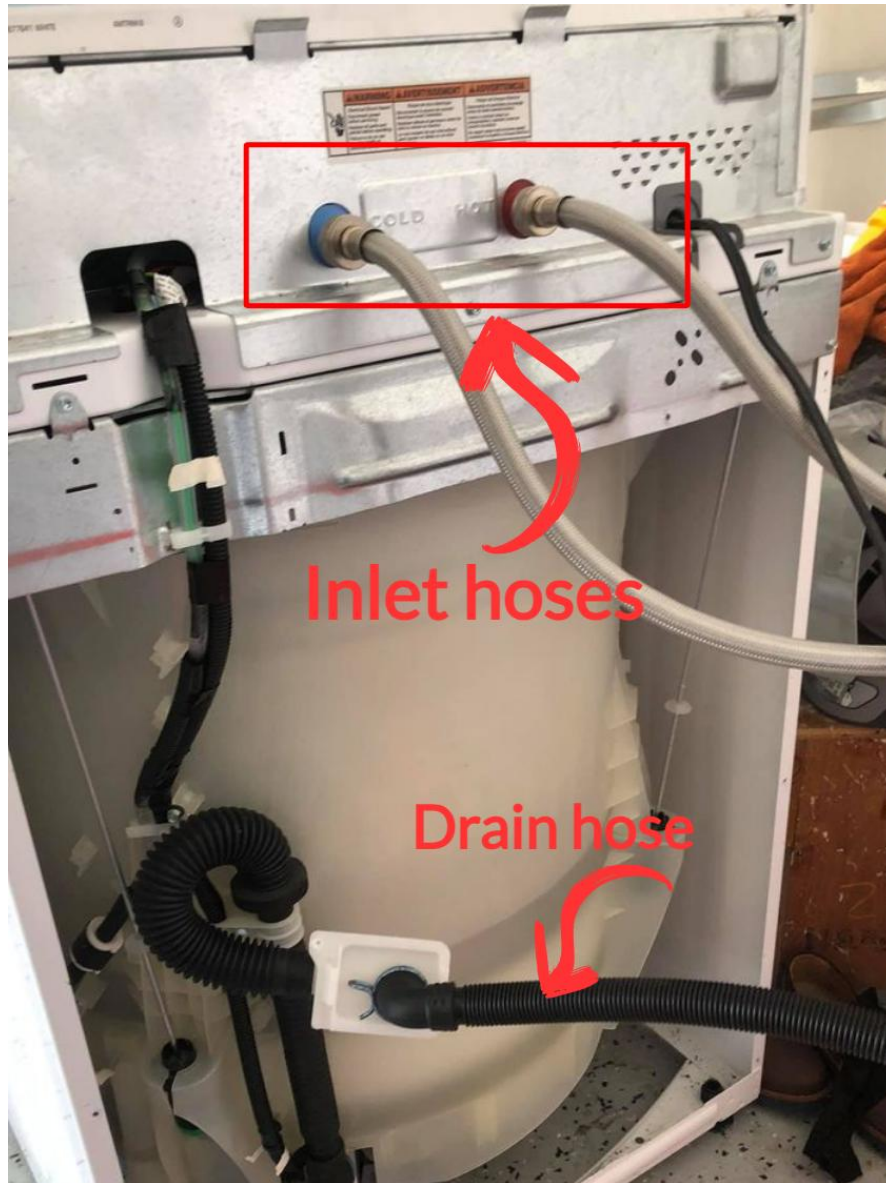


Name	Transmission
Found On	Mostly traditional top-loaders with agitators. Not common in modern front-loaders or high-efficiency top-loaders
Location	Usually located beneath the drum, connected to the main drive motor
Function	Converts the rotational energy from the motor into the movements required for both agitating and spinning the drum
Note	A faulty transmission can lead to problems with agitation, spinning, or both. Often expensive to replace.

 Whirlpool Top-Load Washer Transmission Replacement #W10473144



10. Hoses

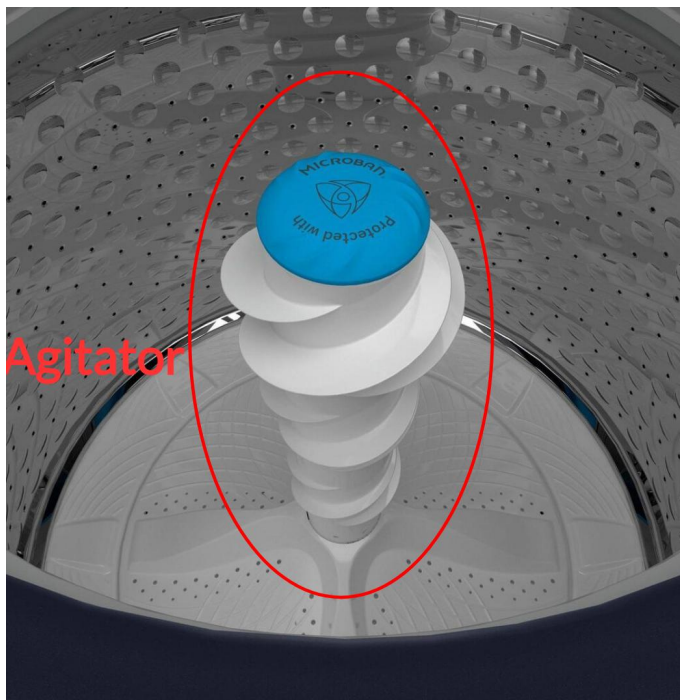


Name	Water Inlet Hoses	Drain Hose	Pressure Switch Hose	Overflow Hose	Detergent Dispenser Hose
Found On	All models	All models	All models	Mostly older models	Modern models with automatic



					detergent dispensers
Location	Connected to water supply valves at the rear of the machine.	Connected to the drain pump.	Usually connected to the water level switch.	Near the top of the drum.	Near the detergent dispenser unit.
Function	Supply water from the main supply to the drum.	Remove water from the drum and expel it to a drain.	Connects to the water level switch to sense the water level in the drum.	Serves as an emergency drain pathway.	Transfers detergent from dispenser to drum.
Maintenance	Check for cracks, leaks, and ensure secure connection.	Regular cleaning. Check for clogs or blockages.	Check for holes, clogs, and ensure proper connection.	Check for blockages.	Regular cleaning and inspection.


11. Agitator Or Pulsator





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Name	Agitator	Pulsator
Found On	Traditional top-loaders.	High-efficiency top-loaders.
Location	Center of the washing drum.	Bottom of the washing drum.
Function	Moves clothes in a dual-action, spiral manner to enhance detergent penetration.	Rotates more gently, moving water through clothes to reduce friction.
Maintenance	Check for wear and tear.	Check for wear and tear, and ensure proper attachment to the motor.
Advantage	More rigorous but may be tough on clothes.	Generally gentler on clothes.
Note	Front-loaders typically do not have either an agitator or pulsator, relying instead on drum movements.	

 [Washer Agitator Repair Kit, Medium Cam \(part #285811\) - How To Replace](#)



12. Clutch



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Name	Clutch
Found On	Mainly traditional top-loaders with agitators; less common in high-efficiency and front-loading models.
Location	Usually situated between the transmission and the tub, connected to the motor.
Function	Allows the transition from the agitate cycle to the spin cycle, enabling the inner tub to spin at varying speeds.
Note	A faulty clutch can result in a machine that won't spin properly or may not spin at all.



https://www.youtube.com/watch?v=tVc6SZ2DD4U&t=143s&ab_channel=RepairClinic.com

13. Suspension Rods

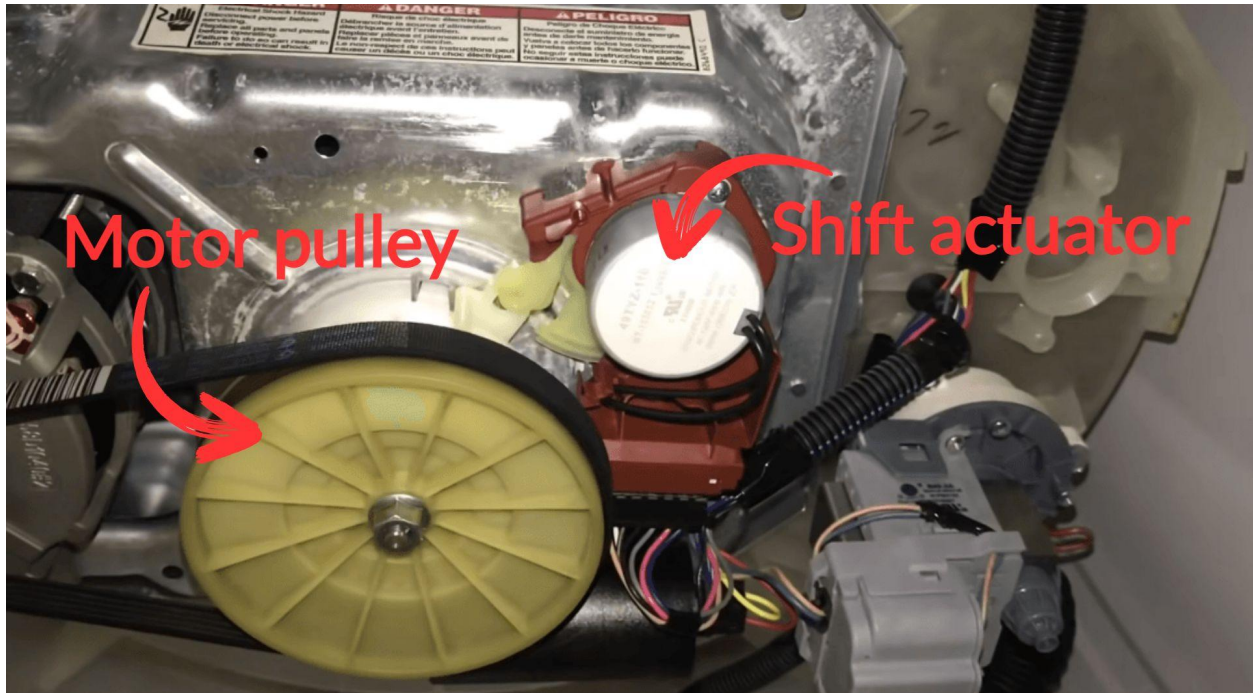


Name	Suspension Rods
Found On	All modern models, some traditional top-loaders.
Location	Top of the machine, connected to the tub.
Function	Provides stability and dampens movement of the tub.
Maintenance	Regular inspection for wear or detachment.
Note	Worn-out rods can cause imbalances.

https://www.youtube.com/watch?v=Lc3BVNFmrUQ&ab_channel=AppliancePartsPros



14. Shift Actuator

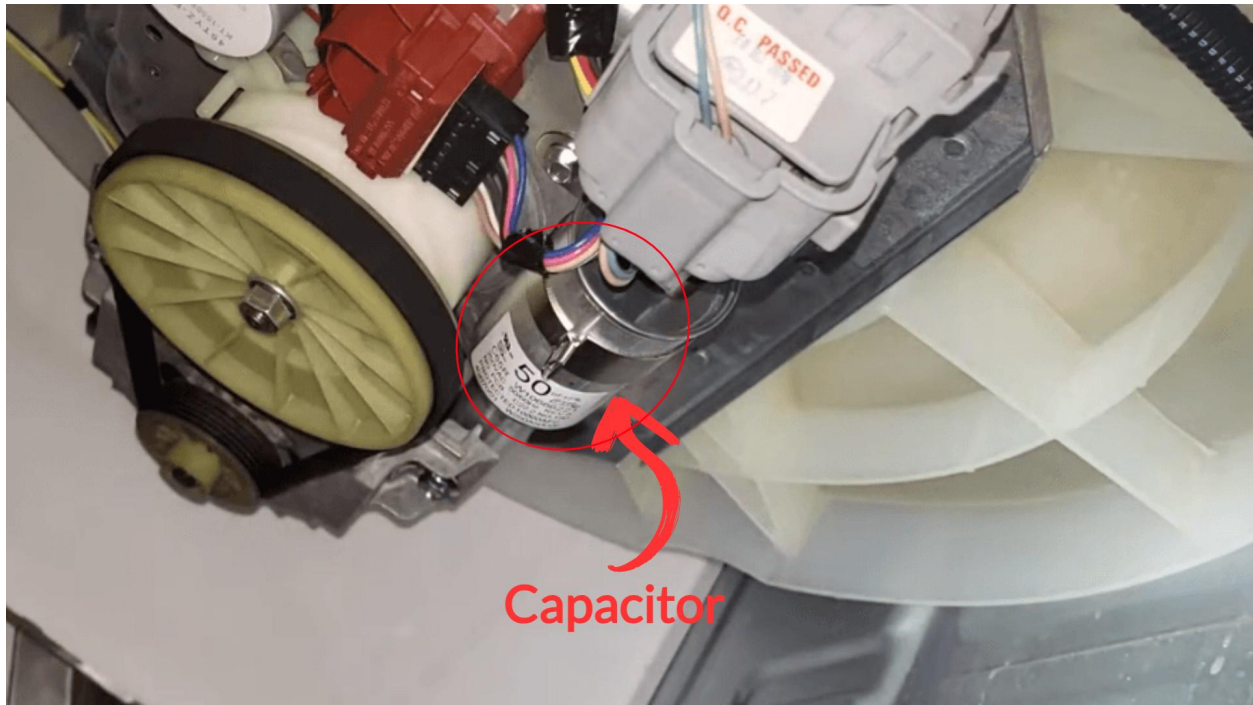


Name	Shift Actuator
Found On	Mainly in top-loaders.
Location	Below the washer.
Function	Facilitates shifting between agitation and spinning modes.


▶ [How To: Whirlpool/KitchenAid/Maytag Shift Actuator WPW1006355](#)



15. Capacitor



Name	Capacitor
Found On	Most models (both top-load and front-load).
Location	Typically near the motor.
Function	Stores electrical energy and helps the motor during start-up.
Note	A faulty capacitor can make it difficult for the motor to start.

 Whirlpool/Kenmore Washer Capacitor Replacement #482156



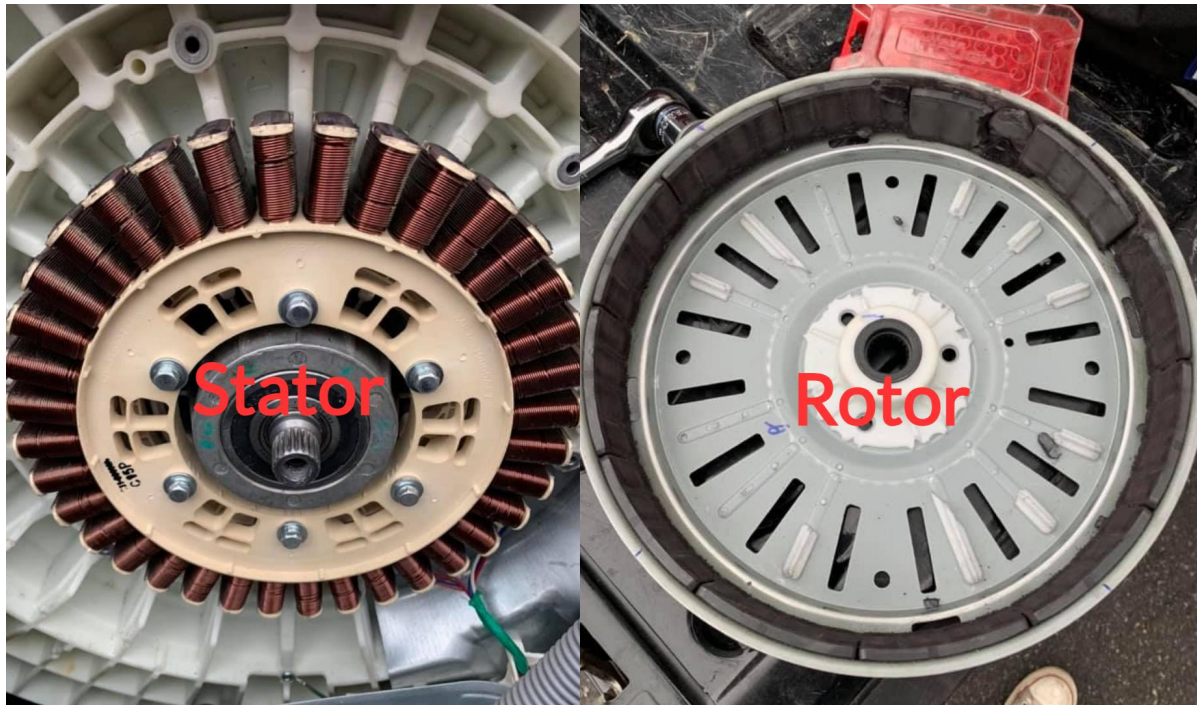
16. Detergent Dispenser



Name	Detergent Dispenser
Found On	Most modern models.
Location	Usually at the top or front, near the control panel.
Function	Holds and dispenses detergent and fabric softener.
Note	models vary with multiple compartments for pre-wash, main wash, and softeners.



17. Rotor and Stator

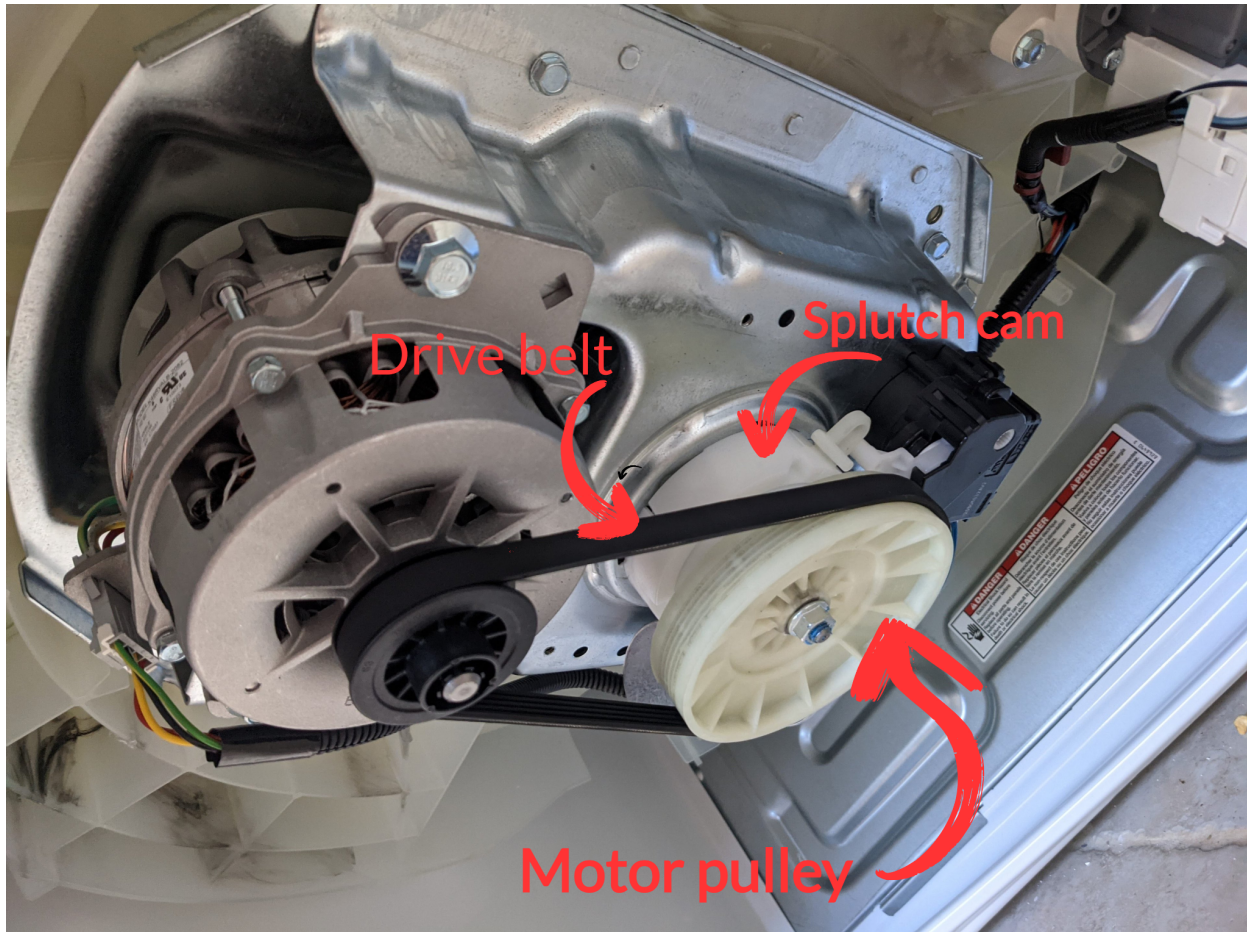


Name	Rotor and Stator
Found On	Direct-drive front and top load models.
Location	Back or bottom of the washer.
Function	The rotor rotates around the stator generating an electromagnetic field that moves the drum.

▶ [LG Washer Rotor Assembly Replacement AHL72914401](#)



18. Drive Belt and Belt Pulley



Name	Drive Belt	Splutch Cam
Found On	Traditional top-loaders, some older front-loaders.	Certain top-loading washers.
Location	Wraps around the motor and drum pulleys.	Below the motor pulley.
Function	Transmits motion from the motor to the drum.	Assists in the shift from agitation to spin cycle.
Note	Belt can wear out or lose tension.	The splutch cam can wear out or break.

▶ GE Washer Drive Belt Replacement WH01X24180



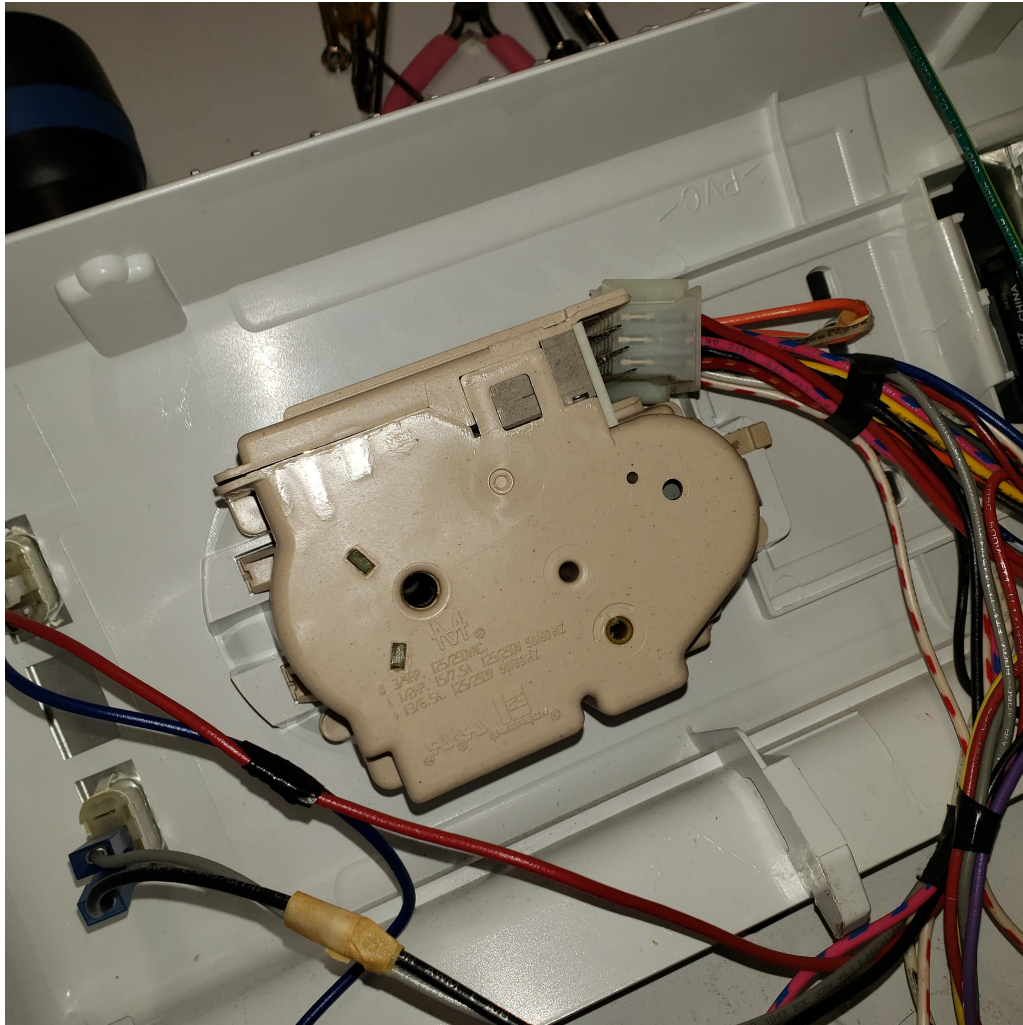
19. Drain Filter




Name	Drain Filter
Found On	Both top-loaders and front-loaders.
Location	Typically near the drain pump, at the bottom of the machine.
Function	Captures and prevents debris and lint from entering the drain system, protecting the drain pump and pipes.
Maintenance	Regular cleaning to remove trapped debris.
Note	A clogged filter can hinder the draining process .



20. Timer

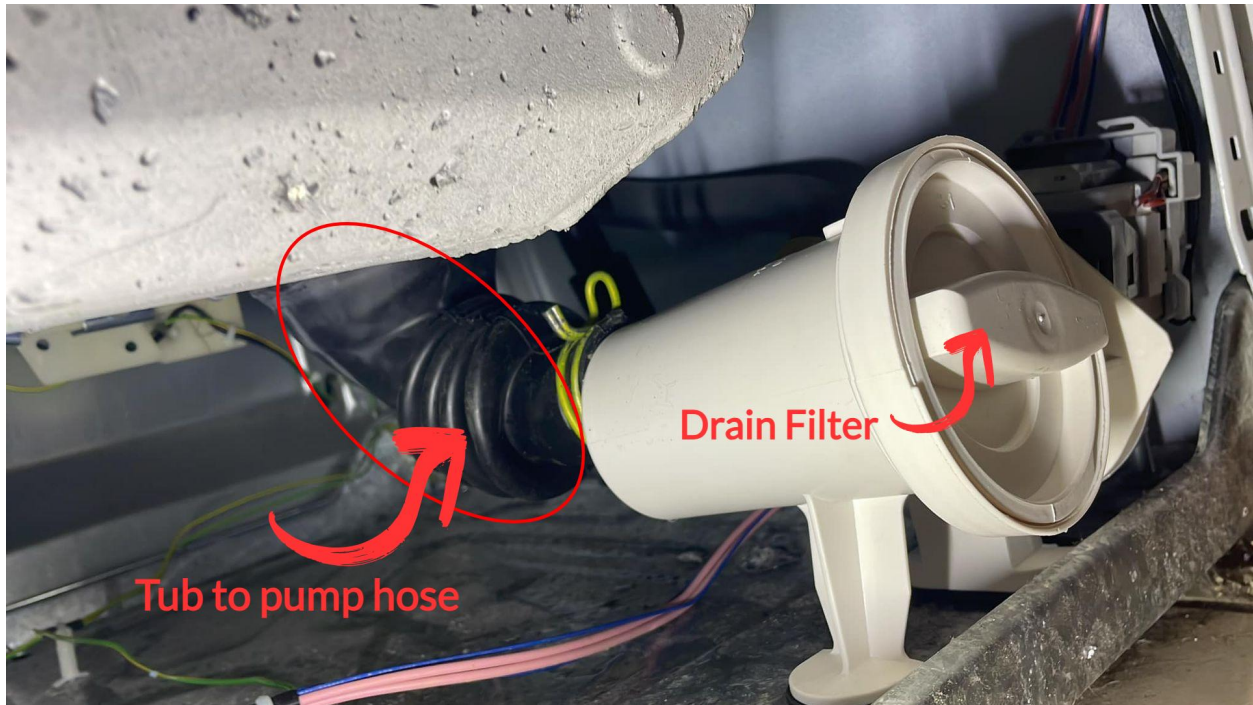


Name	Timer
Found On	Traditional washers.
Location	Usually on the control panel.
Function	Controls the duration and sequence of washing cycles, including wash, rinse, and spin.
Note	Many modern washers have replaced traditional timers with digital/electronic controls.

 [GE Washer Repair - How to Replace the Timer](#)



21. Tub To Pump Hose

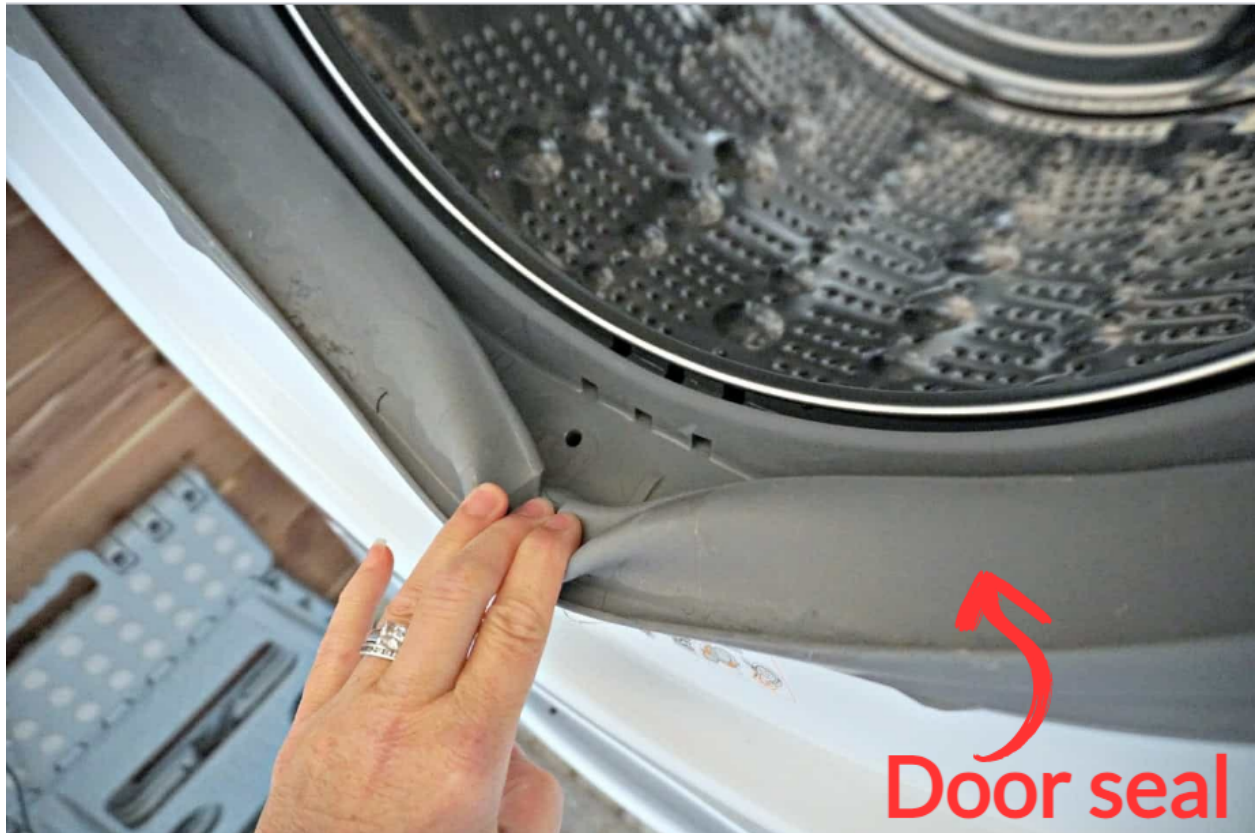


Name	Tub to drain hose
Found On	Both top-loaders and front-loaders.
Location	Connect the tub to the drain pump.
Function	Transports water from the tub to the drain pump.
Maintenance	Inspect regularly for leaks or blockages.

▶ LG Top Load Washer Tub to Pump Hose Replacement #AEM73213001



22. Door Seal



Name	Door seal
Found On	Primarily on front-loading washing machines.
Location	Around the door opening.
Function	Ensures a watertight seal when the door is closed to prevent leaks during operation.
Maintenance	Regularly inspect for wear, tear, or mold.
Note	Mold or mildew can form on the seal if not dried properly, leading to odors.